



Peace AirShed Zone Association

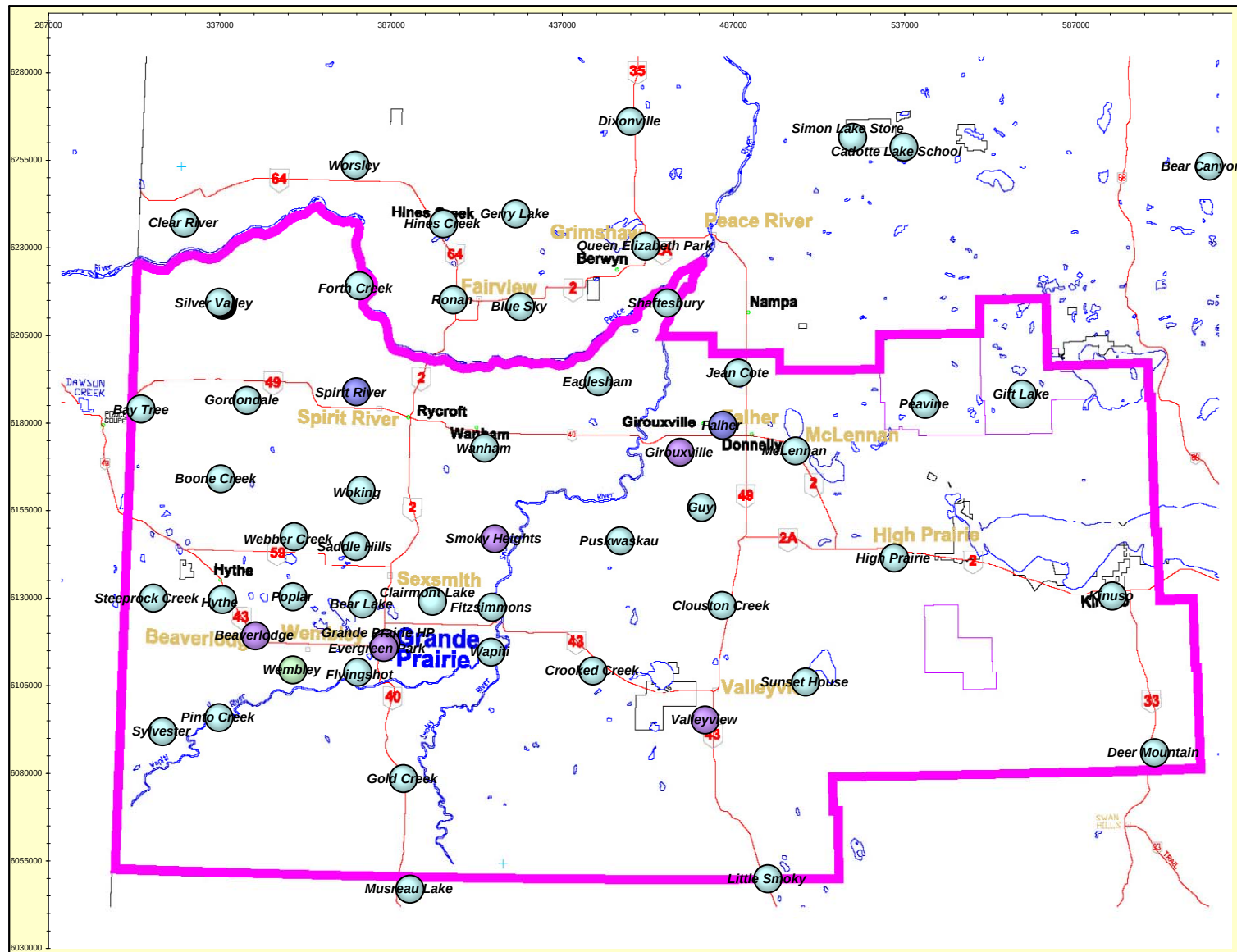
Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
January 2009**

Operations and Reporting



Location of PASZA Continuous and Passive Monitoring Stations





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March 1, 2009

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RE: Peace Airshed Zone Association (PASZA) – January 2009 Ambient Air Report

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **January 2009**.

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.

During the month of January the following events were noted:

Henry Pirker Station:

- ◆ The measured ambient air quality was within the Alberta Ambient Air Quality Objectives (AAAQO) for the Henry Pirker station.
- ◆ The SO₂, NO_x, O₃, CO, TRS, THC, solar radiation, wind speed and wind direction analyzers and sensors at the Henry Pirker station had an operational uptime greater than 90% for the month of January.
- ◆ The TEOM (PM_{2.5}) was down during the month, for a total of two hundred and nineteen hours – due to a failed motherboard - **Alberta Environment reference #211441**. The temperature and relative humidity sensors - **Alberta Environment reference #209512**. The gauges were sent back to factory for repair, and have been out of service since November 6th.

Evergreen Park Station:

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

Smoky Heights Station:

- ◆ The measured ambient air quality was within the AAAQO for the Smoky Heights station, just a note that the TRS had a maximum value of 12.5 on January 10th.
- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of January.

Beaverlodge Station:

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

Portable – Spirit River Station:

- ◆ The measured ambient air quality was within the AAAQO for the Spirit River station, just a note that the TRS had a maximum value of 11.9 on January 23rd.
- ◆ All analyzers / sensors at the Spirit River station had an operational uptime greater than 90% for the month of January.

Valleyview Station:

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

Passive Monitoring - 54 Stations throughout the PASZA zone:

There were seven duplicate sites sampled in the month of January: Gordondale, Wapiti, Crooked Lake, High Prairie, Peavine, Little Smoky and Grande Prairie HP. The passive sample analyses were performed by MAXXAM Analytics Inc.

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

- Monthly average concentrations for SO₂ passives ranged from 0.2 ppb to 1.0 ppb, with a mean of 0.6 ppb.
- Monthly average concentrations for NO₂ passives ranged from 1.3 ppb to 17.8 ppb, with a mean of 3.6 ppb.
- Monthly average concentrations for O₃ passives ranged from 24.8 ppb to 45.7 ppb, with a mean of 36.5 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

Jan-2009 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	0.5	0	0	2.8	Jan-07 10:00	1.5	Jan-18	100.0%
SO ₂ (ppb)	172	57	Evergreen Park	0.5	0	0	2.0	Jan-05 10:00	1.1	Jan-07	100.0%
SO ₂ (ppb)	172	57	Smoky Heights	1.0	0	0	8.7	Jan-10 09:00	2.1	Jan-09	100.0%
SO ₂ (ppb)	172	57	Beaverlodge	0.7	0	0	3.2	Jan-26 03:00	1.7	Jan-08	96.6%
SO ₂ (ppb)	172	57	Portable-Spirit River	0.9	0	0	5.5	Jan-16 09:00	2.5	Jan-02	92.3%
SO ₂ (ppb)	172	57	Valleyview	0.5	0	0	17.1	Jan-13 02:00	2.6	Jan-31	99.2%
NO (ppb)			Henry Pirker	21.3	-	-	260.1	Jan-15 09:00	78.3	Jan-19	99.9%
NO ₂ (ppb)	212	106	Henry Pirker	21.2	0	0	62.8	Jan-19 17:00	42.1	Jan-19	99.9%
NO _x (ppb)			Henry Pirker	52.6	-	-	319.7	Jan-15 09:00	120.3	Jan-19	99.9%
NO (ppb)			Beaverlodge	1.5	-	-	32.2	Jan-23 12:00	7.2	Jan-23	96.6%
NO ₂ (ppb)	212	106	Beaverlodge	7.2	0	0	33.0	Jan-23 19:00	19.8	Jan-09	96.6%
NO _x (ppb)			Beaverlodge	8.6	-	-	55.8	Jan-23 12:00	26.6	Jan-09	96.6%
NO (ppb)			Portable-Spirit River	0.8	-	-	16.8	Jan-31 23:00	1.9	Jan-02	92.3%
NO ₂ (ppb)	212	106	Portable-Spirit River	5.0	0	0	21.1	Jan-02 19:00	9.5	Jan-02	92.3%
NO _x (ppb)			Portable-Spirit River	5.7	-	-	32.8	Jan-31 23:00	11.4	Jan-02	92.3%
O ₃ (ppb)	82		Henry Pirker	14.7	0	-	41.7	Jan-30 05:00	36.3	Jan-31	99.9%
O ₃ (ppb) - 8-hr	65		Henry Pirker		0				37.8	Jan-31	
O ₃ (ppb)	82		Beaverlodge	27.9	0	-	45.3	Jan-30 03:00	42.4	Jan-30	96.6%
O ₃ (ppb) - 8-hr	65		Beaverlodge		0				43.6	Jan-30	
O ₃ (ppb)	82		Portable-Spirit River	27.4	0	-	42.7	Jan-15 19:00	40.6	Jan-30	92.3%
O ₃ (ppb) - 8-hr	65		Portable-Spirit River		0				41.9	Jan-16	
CO (ppm)	13		Henry Pirker	0.30	0	-	1.8	Jan-15 09:00	0.7	Jan-19	100.0%
CO (ppm) - 8-hr	5		Henry Pirker		0				1.0	Jan-25	
THC (ppm)			Henry Pirker	2.51	-	-	4.0	Jan-19 00:00	3.1	Jan-26	90.3%
TRS (ppb)			Henry Pirker	0.4	-	-	1.7	Jan-15 09:00	0.7	Jan-18	100.0%
TRS (ppb)			Evergreen Park	0.8	-	-	2.4	Jan-26 11:00	1.5	Jan-26	100.0%
TRS (ppb)			Smoky Heights	0.4	-	-	12.5	Jan-10 01:00	1.1	Jan-10	100.0%
TRS (ppb)			Portable-Spirit River	0.8	-	-	11.9	Jan-23 23:00	1.9	Jan-23	92.3%
H ₂ S (ppb)	10	3	Valleyview	0.2	0	0	2.7	Jan-13 04:00	0.5	Jan-13	99.2%
PM _{2.5} (µg/m ³)	80	30	Henry Pirker	3.5	0	0	17.6	Jan-04 12:00	7.9	Jan-09	70.6%
PM _{2.5} (µg/m ³)	80	30	Evergreen Park	3.5	0	0	26.2	Jan-26 11:00	10.6	Jan-26	99.7%
PM _{2.5} (µg/m ³)	80	30	Smoky Heights	3.0	0	0	77.1	Jan-12 03:00	9.6	Jan-12	98.9%
PM _{2.5} (µg/m ³)	80	30	Beaverlodge	2.3	0	0	13.3	Jan-23 22:00	6.0	Jan-23	95.7%

PASZA Monthly Continuous Data Summary - continued

Jan-2009 Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
RH (%)			Henry Pirker		-	-		-		-	-
RH (%)			Beaverlodge	63.1	-	-	94.6	Jan-29 05:00	79.1	Jan-18	96.6%
RH (%)			Portable-Spirit River	66.6	-	-	94.1	Jan-27 21:00	85.3	Jan-27	92.3%
RH (%)			Valleyview	70.4	-	-	95.7	Jan-29 19:00	83.5	Jan-14	99.2%
SR (W/m²)			Henry Pirker	24.2	-	-	219.7	Jan-28 14:00	41.6	Jan-25	99.6%
Temp (°C)			Henry Pirker		-	-		-		-	-
Temp (°C)			Evergreen Park	-12.6	-	-	11.9	Jan-17 17:00	6.8	Jan-30	100.0%
Temp (°C)			Smoky Heights	-14.3	-	-	7.2	Jan-18 16:00	3.7	Jan-30	100.0%
Temp (°C)			Beaverlodge	-10.6	-	-	15.4	Jan-18 16:00	7.8	Jan-18	96.6%
Temp (°C)			Portable-Spirit River	-13.3	-	-	10.4	Jan-18 16:00	5.8	Jan-18	92.2%
Temp (°C)			Valleyview	-13.3	-	-	10.9	Jan-30 15:00	7.4	Jan-30	99.2%
WSPD s (km/hr)			Henry Pirker	9.3	-	-	39.0	Jan-30 19:00	29.5	Jan-31	100.0%
WSPD s (km/hr)			Evergreen Park	6.7	-	-	33.0	Jan-31 12:00	25.1	Jan-31	97.3%
WSPD s (km/hr)			Smoky Heights	13.0	-	-	56.0	Jan-30 18:00	35.8	Jan-31	100.0%
WSPD s (km/hr)			Beaverlodge	8.8	-	-	41.0	Jan-30 18:00	31.3	Jan-31	96.6%
WSPD s (km/hr)			Portable-Spirit River	6.4	-	-	37.0	Jan-30 14:00	22.4	Jan-30	92.1%
WSPD s (km/hr)			Valleyview	6.4	-	-	36.0	Jan-31 15:00	25.6	Jan-31	99.2%
WSPD v (km/hr)			Henry Pirker	5.7	-	-	39.0	Jan-30 19:00	29.3	Jan-31	100.0%
WSPD v (km/hr)			Evergreen Park	4.5	-	-	32.0	Jan-31 12:00	24.8	Jan-31	97.3%
WSPD v (km/hr)			Smoky Heights	7.1	-	-	55.0	Jan-30 18:00	35.7	Jan-31	100.0%
WSPD v (km/hr)			Beaverlodge	5.3	-	-	40.0	Jan-30 18:00	30.9	Jan-31	96.6%
WSPD v (km/hr)			Portable-Spirit River	2.8	-	-	37.0	Jan-30 14:00	21.4	Jan-30	92.1%
WSPD v (km/hr)			Valleyview	2.6	-	-	35.0	Jan-31 15:00	25.3	Jan-31	99.2%
WDIR (deg)			Henry Pirker	W	-	-	-	-	-	-	100.0%
WDIR (deg)			Evergreen Park	W	-	-	-	-	-	-	97.3%
WDIR (deg)			Smoky Heights	WSW	-	-	-	-	-	-	100.0%
WDIR (deg)			Beaverlodge	W	-	-	-	-	-	-	96.6%
WDIR (deg)			Portable-Spirit River	W	-	-	-	-	-	-	92.1%
WDIR (deg)			Valleyview	WNW	-	-	-	-	-	-	99.2%

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on January 13th (SO₂, NO_x, O₃ & TRS) and January 14th (CO & THC).

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
NO _x /NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	From Jan 1 to 14 th , 24 th , 25 th & 26 th spans outside of target range – reason undetermined – technician to look into during February calibration.
CO	TEI	48C	No operational issues observed.
THC	TEI	51-CLT	A power bump on January 19 th resulted in flame going out – relit on January 22 nd .
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	The motherboard on the TEOM failed – parts ordered and repaired January 26 th . AE reference #211411.
RH	Met One	083D	Relative humidity sensor is out of service – sent back to factory for repair. AE reference #209512.
ET	Met One	083D	Temperature sensor is out of service – sent back to factory for repair. AE reference #209512.
SR	Met One	096-1	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on January 27th (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	Two (2) hours were flagged for excessive baseline drift.
ET	Met One/Gill	083D	No operational issues observed.
WS	Met One/ Gill	010C	Twenty (20) hours were flagged invalid due to intermittent spiking (fog & /or snow).
WD	Met One/ Gill	020C	Twenty (20) hours were flagged invalid due to intermittent spiking (fog & /or snow).

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on January 16th (TRS & SO₂).

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	Spans on Jan 4 th , 5 th , 10 th , 13 th , 16 th & 17 th were outside target range – reason undetermined.
PM _{2.5}	R&P	1400AB	Eight (8) hours were flagged for excessive baseline drift.
ET	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 January 19th (SO₂, O₃ & NO_x). Power failure on January 26th resulted in several hours of invalid data for all parameters. On January 27th DAS failed – it was reconfigured on January 28th - resulting in fifteen hours of invalid data for all parameters.

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure.
NO _x /NO/NO ₂	TEI	42C	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure.
O ₃	TEI	49C	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure.
PM _{2.5}	R&P	1400AB	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure. Seven (7) hours flagged invalid due to excessive baseline drift.
ET	n/a	n/a	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure.
RH	n/a	n/a	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure.
WS	Blue Sky	857	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure.
WD	Blue Sky	857	Ten (10) hours flagged invalid for power failure & fifteen (15) hours flagged invalid due to DAS failure.

PASZA – Spirit River (Portable) Station

General Station Issues

Routine monthly calibrations were performed on January 15th (SO₂, O₃, TRS & NO_x). A total of fifty-seven (57) hours were flagged invalid during January – due to power failure.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	Fifty-seven (57) hours flagged invalid for power failure.
NOx/NO/NO ₂	TEI	42i	Fifty-seven (57) hours flagged invalid for power failure.
TRS	TEI	43C	Fifty-seven (57) hours flagged invalid for power failure.
O ₃	TEI	49C	Fifty-seven (57) hours flagged invalid for power failure.
ET	Gill	Met Pak 3	Fifty-seven (57) hours flagged invalid for power failure.
RH	Gill	Met Pak 3	Fifty-seven (57) hours flagged invalid for power failure.
WS	Met One		Fifty-seven (57) hours flagged invalid for power failure. Two hours were flagged invalid due to intermittent spiking (fog & / or snow).
WD	Met One		Fifty-seven (57) hours flagged invalid for power failure. Two hours were flagged invalid due to intermittent spiking (fog & / or snow).

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on January 17nd (SO₂ & H₂S). Power failure on January 29th.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	Power failure on January 29 th resulted in six (6) hours of invalid data.
H ₂ S	TEI	43A	Power failure on January 29 th resulted in six (6) hours of invalid data.
ET	Gill	Met Pak 3	Power failure on January 29 th resulted in six (6) hours of invalid data.
RH	Gill	Met Pak 3	Power failure on January 29 th resulted in six (6) hours of invalid data.
WS	Gill	Met Pak 3	Power failure on January 29 th resulted in six (6) hours of invalid data.
WD	Gill	Met Pak 3	Power failure on January 29 th resulted in six (6) hours of invalid data.

PASZA

Henry Pirker Station

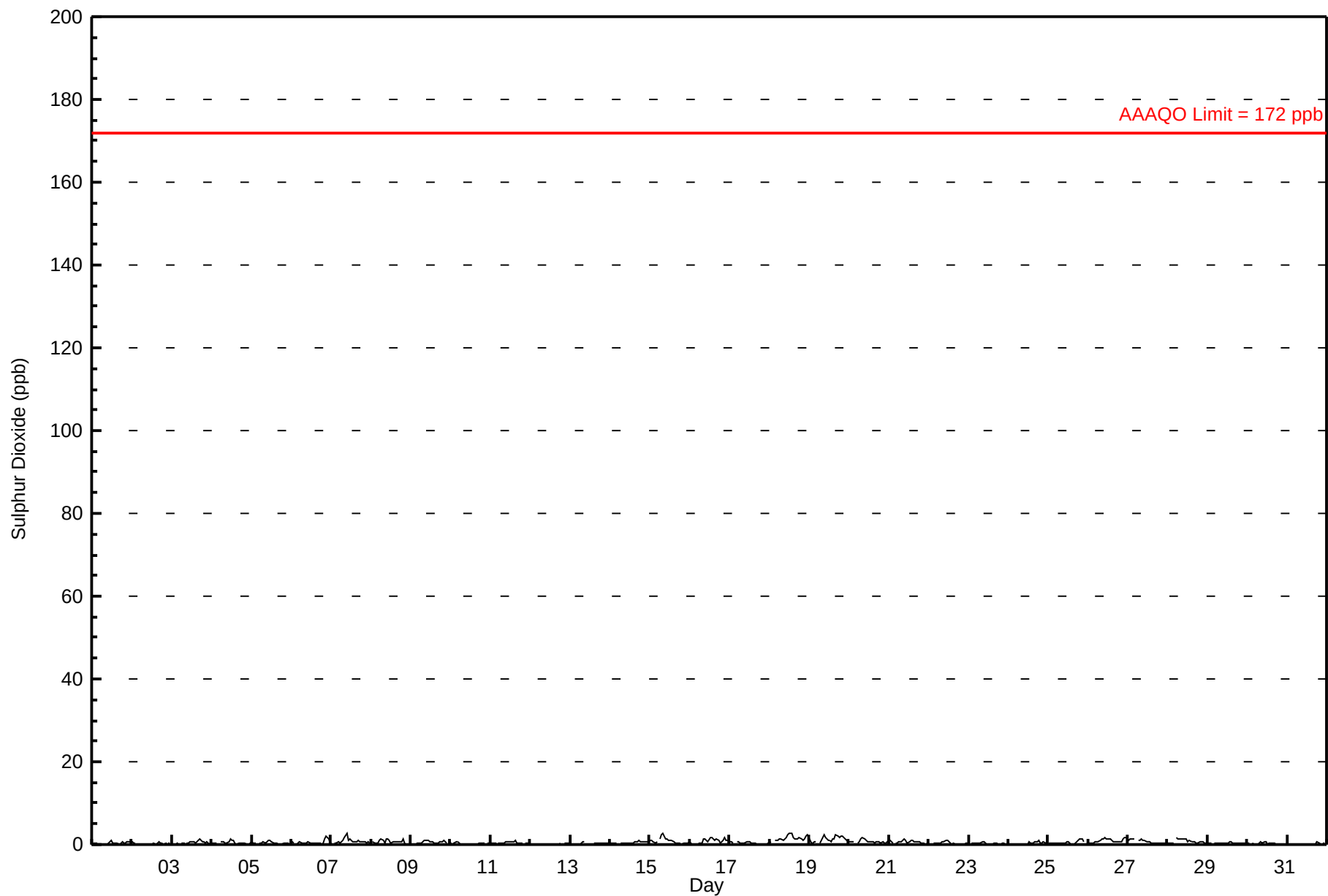
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.8 ppb on Jan 7 10:00 Maximum Daily Average: 1.5 ppb on Jan 18																				Hours in Service: 744 Hours of Data: 708																														
Minimum Value: 0 ppb on Jan 1 07:00 Maximum Diurnal Average: 0.8 ppb at hour 10 Monthly Average: 0.54 ppb										Minimum Daily Average: 0.1 ppb on Jan 12 Minimum Diurnal Average: 0.3 ppb at hour 3 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.2 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 1.2 P ₉₉ = 2.2										Hours of Missing Data: 36 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-Jan	0	0	0		A	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	1	1	1	0.3	1.0																								
2-Jan	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.6																								
3-Jan	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0	1	1	1	1	1	0	1	0	0	0.4	1.3																								
4-Jan	0	0	0	1	A	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.4																								
5-Jan	1	0	0	A	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0																								
6-Jan	1	0	A	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	1	0	0.6	2.1																								
7-Jan	0	A	0	1	1	0	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	2.8																								
8-Jan	A	1	0	0	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	A	0.7	1.3																								
9-Jan	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	A	1	0.6	1.0																								
10-Jan	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.6																								
11-Jan	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0.4	0.9																								
12-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0.1	0.5																								
13-Jan	0	0	0	0	0	0	0	1	1	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.3	0.6																								
14-Jan	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.6	1.0																								
15-Jan	1	1	1	0	1	A	2	2	3	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.8	2.7																								
16-Jan	1	0	0	0	A	0	0	0	1	1	1	1	2	2	1	1	1	1	0	1	1	2	1	1	0.9	1.8																								
17-Jan	1	1	0	A	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8																								
18-Jan	0	1	A	1	1	1	1	1	1	1	2	2	3	3	2	1	1	1	2	1	1	1	2	2	1.5	2.8																								
19-Jan	1	0	0	1	1	A	0	1	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	1.2	2.3																								
20-Jan	1	1	1	1	A	0	1	2	2	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1	0.7	1.6																								
21-Jan	1	1	0	A	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0.7	1.3																								
22-Jan	0	0	A	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9																								
23-Jan	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8																								
24-Jan	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	1	0	A	0.3	0.9																								
25-Jan	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	A	0	0.5	1.3																								
26-Jan	0	0	0	0	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	0.9	1.8																								
27-Jan	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.8	1.4																								
28-Jan	0	0	0	0	A	2	2	1	1	1	2	1	1	1	1	1	1	0	0	1	1	1	0	0	0.8	1.5																								
29-Jan	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0.4	0.6																								
30-Jan	0	0	A	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7																								
31-Jan	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1	0.7																								
																									0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	Daily Average		
																									1.2	1.3	1.2	1.4	1.3	1.5	1.5	2.2	2.7	2.8	1.8	2.2	2.7	2.8	1.8	1.5	2.3	1.9	1.7	2.1	2.2	2.1	1.9	2.3	Daily Maximum	
C - Calibration A - Automated Daily Zero Span																																																		
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																																																		

Hourly Averages for SO₂ at Henry Pirker January 2009

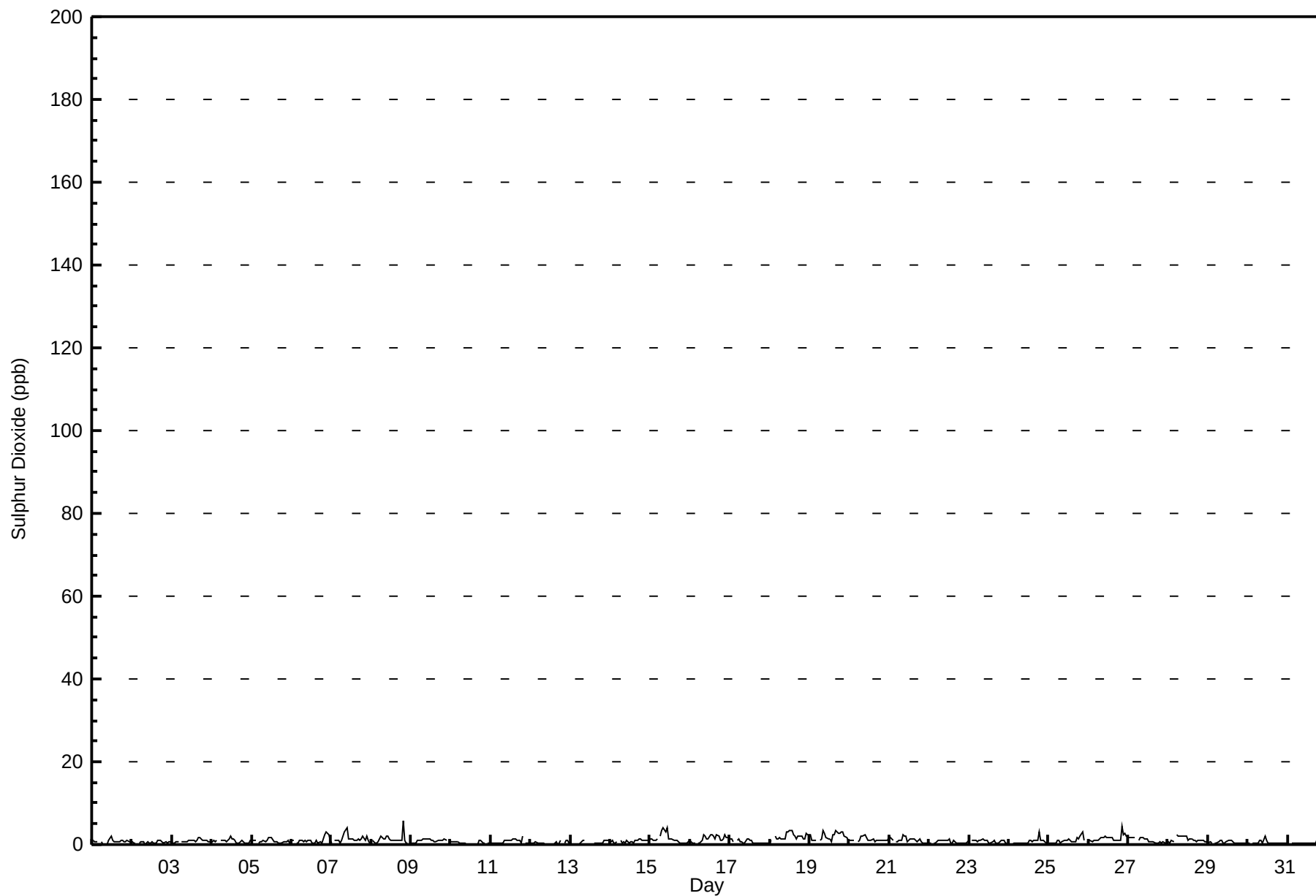


**Peace Airshed Zone Association
Summary of Hourly Maximums**

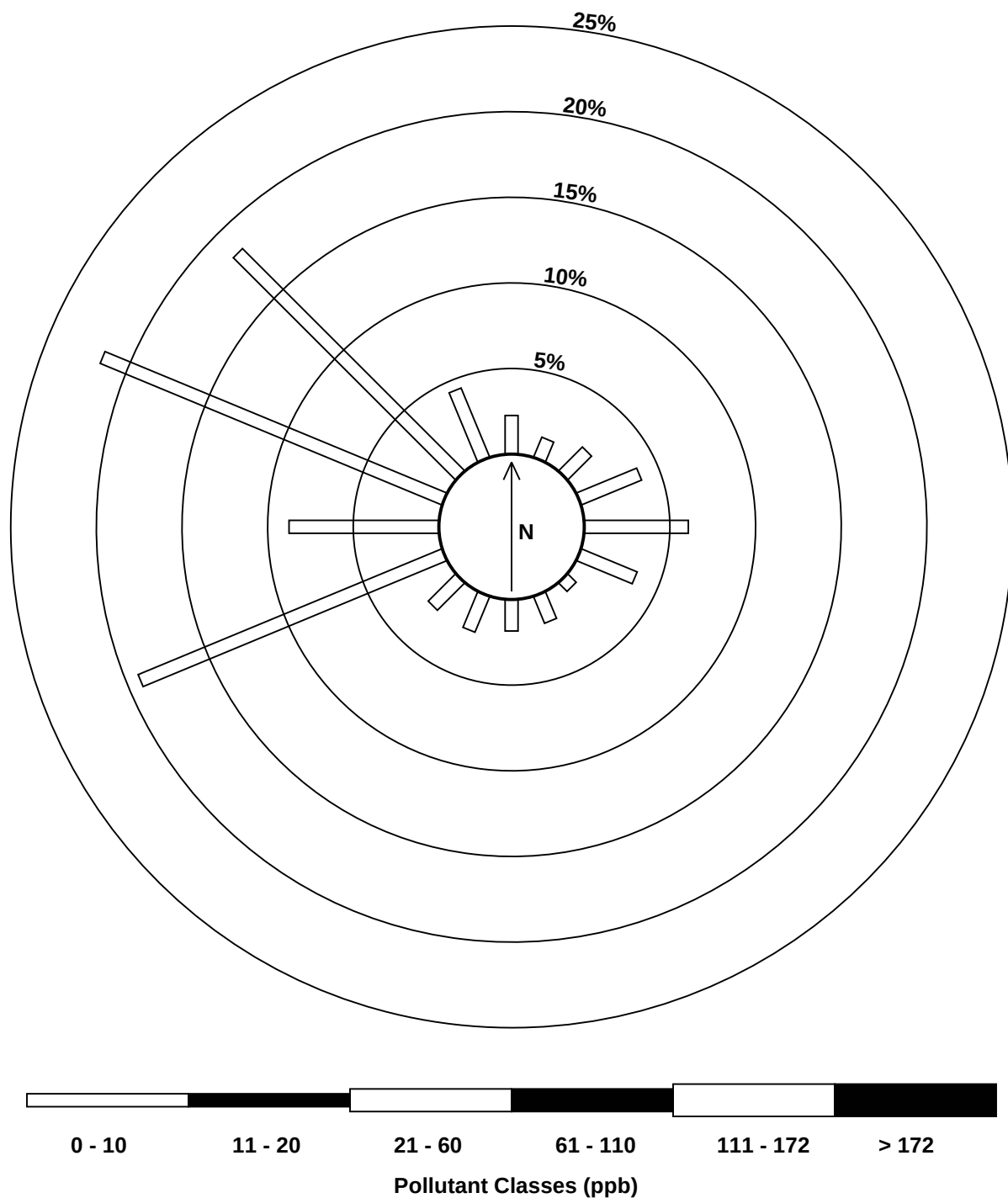
**Henry Pirker - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 5.8 ppb on Jan 8 20:00																				Maximum Daily Average: 2.0 ppb on Jan 18					Hours in Service: 744		
Minimum Value: 0 ppb on Jan 10 11:00																				Minimum Daily Average: 0.4 ppb on Jan 10					Hours of Data: 708		
Maximum Diurnal Average: 1.3 ppb at hour 11																				Minimum Diurnal Average: 0.6 ppb at hour 3					Hours of Missing Data: 36		
Monthly Average: 0.96 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.9 Q ₃ = 1.1 P ₉₀ = 1.9 P ₉₉ = 3.5					Hours of Calibration: 36		
																				Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	1	1	1	1	A	1	0	0	0	0	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.7	2.1	
2-Jan	1	0	0	A	0	1	1	1	0	1	0	0	1	0	0	1	1	1	1	1	0	1	0	1	1	0.5	0.9
3-Jan	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	0.8	1.5	
4-Jan	1	1	1	1	A	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	0	0	1	0.9	2.0	
5-Jan	1	1	1	A	0	1	1	1	1	1	2	2	2	1	1	1	1	0	0	1	1	1	1	0	0.8	1.7	
6-Jan	1	1	A	0	0	1	1	1	1	1	1	1	0	0	0	1	0	1	0	1	2	3	2	1	1.0	3.0	
7-Jan	0	A	1	1	1	0	1	2	3	4	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1.4	4.0	
8-Jan	A	1	0	1	1	1	2	1	1	2	2	1	1	1	1	1	1	1	1	6	1	0	0	A	1.3	5.8	
9-Jan	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	A	1	1.0	1.5	
10-Jan	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0.4	1.2	
11-Jan	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	2	A	0	0	0	0.7	1.9	
12-Jan	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	A	0	1	1	0	0.4	1.0	
13-Jan	0	0	0	0	0	0	0	1	1	C	C	C	C	A	0	0	0	0	0	0	1	1	1	1	0.5	1.1	
14-Jan	1	1	0	0	1	A	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
15-Jan	1	1	1	1	1	A	2	3	4	3	4	1	1	1	1	1	1	1	0	0	0	0	0	1	1.5	4.0	
16-Jan	1	0	0	0	A	0	0	1	2	2	1	1	2	2	2	1	2	2	1	1	1	2	2	2	1.4	2.4	
17-Jan	1	1	1	A	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.7	1.4	
18-Jan	0	1	A	2	1	1	2	1	1	1	3	3	3	3	2	2	1	2	2	2	1	1	3	2	2.0	3.5	
19-Jan	2	1	1	1	1	A	1	1	3	3	2	1	1	1	2	2	3	3	3	3	3	2	2	1	1.9	3.4	
20-Jan	1	1	1	1	A	1	1	2	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.5	
21-Jan	2	1	1	A	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	0	0	0	0	1.1	2.3	
22-Jan	0	0	A	0	0	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0.7	1.4	
23-Jan	1	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0	1	1	1	0	0	0.7	1.2	
24-Jan	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	3	1	1	1	0	A	0.7	2.9	
25-Jan	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	2	2	2	3	1	A	1	0.9	3.0	
26-Jan	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	4	2	3	2	1.5	4.4	
27-Jan	2	2	2	2	2	A	1	2	2	2	1	1	1	1	1	1	0	0	0	1	0	1	0	0	1.0	1.7	
28-Jan	1	0	1	1	A	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.5	
29-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.6	1.0	
30-Jan	0	0	A	0	0	0	0	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.0	
31-Jan	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.6	1.5	
0.8 0.7 0.6 0.7 0.7 0.8 0.9 1.1 1.3 1.2 1.3 1.1 1.1 1.0 0.9 0.9 0.9 0.9 1.0 1.2 1.1 1.0 0.9 0.8																								Diurnal Average			
2.3 1.6 1.6 1.9 1.6 2.5 2.0 3.5 4.0 4.0 4.0 3.0 3.5 3.5 2.5 2.2 3.2 2.6 2.9 5.8 4.4 3.0 2.6 2.4																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											

Hourly Maximums for SO₂ at Henry Pirker January 2009



Pollutant Rose for SO₂ at Henry Pirker January 2009

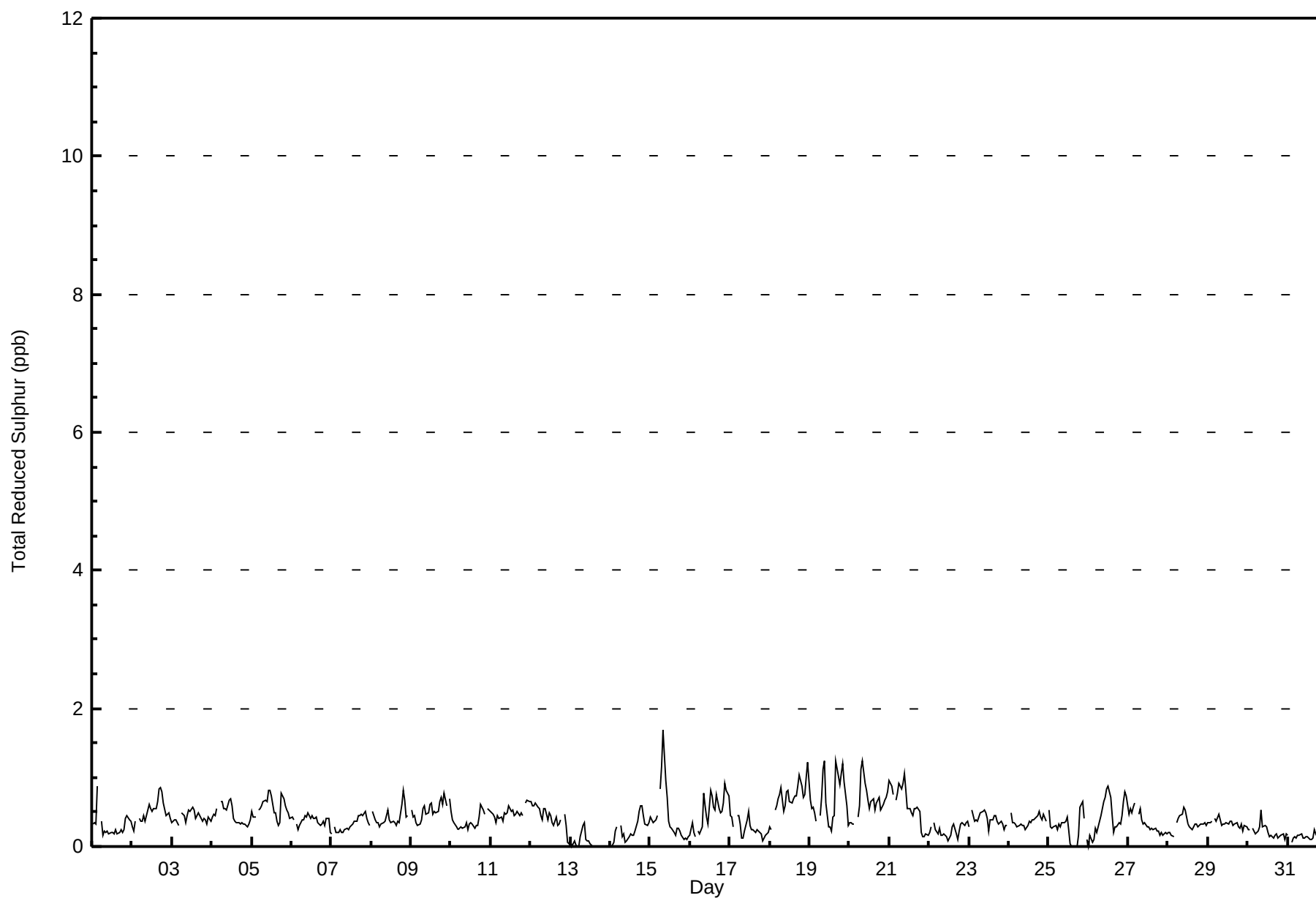


Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.7 ppb on Jan 15 09:00 Maximum Daily Average: 0.7 ppb on Jan 18																				Hours in Service: 744						
Minimum Value: 0 ppb on Jan 13 02:00 Maximum Diurnal Average: 0.5 ppb at hour 9 Monthly Average: 0.40 ppb																				Hours of Data: 710						
																				Hours of Missing Data: 34						
Minimum Daily Average: 0.1 ppb on Jan 13 Minimum Diurnal Average: 0.3 ppb at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.7 P ₉₉ = 1.1																				Hours of Calibration: 34						
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
2-Jan	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	0.8
3-Jan	0	0	0	0	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6
4-Jan	0	0	0	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7
5-Jan	1	0	0	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	0	0	0.6	0.8
6-Jan	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
7-Jan	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.3	0.5
8-Jan	A	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	A	0.4	0.8
9-Jan	1	0	0	0	0	0	0	1	1	0	0	1	1	0	1	0	0	1	1	1	1	1	A	1	0.5	0.8
10-Jan	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	1	1	0.4	0.6
11-Jan	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	A	1	1	1	0.5	0.7
12-Jan	1	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.6
13-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0.1	0.3
14-Jan	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.2	0.6
15-Jan	0	0	0	0	0	A	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
16-Jan	0	0	0	0	A	0	0	0	1	1	0	0	1	1	1	1	1	1	0	1	1	1	1	1	0.5	0.9
17-Jan	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
18-Jan	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
19-Jan	1	1	1	0	0	A	0	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	0	0.7	1.2
20-Jan	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.2
21-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0.6	1.1
22-Jan	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
23-Jan	0	A	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
24-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0.4	0.5
25-Jan	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0.3	0.7
26-Jan	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	0.4	0.9
27-Jan	0	1	0	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
28-Jan	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
29-Jan	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
30-Jan	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
31-Jan	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
0.4 0.4 0.3 0.3 0.4 0.4 0.4 0.4 0.5 0.5 0.5 0.4 0.4 0.4 0.4 0.3 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4																								Diurnal Average		
1.0 0.9 0.7 0.9 0.7 0.8 0.9 1.2 1.7 1.2 0.8 0.8 0.9 0.7 0.7 0.7 1.2 1.0 1.0 1.1 1.2 0.9 1.0 1.2																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages for TRS at Henry Pirker January 2009

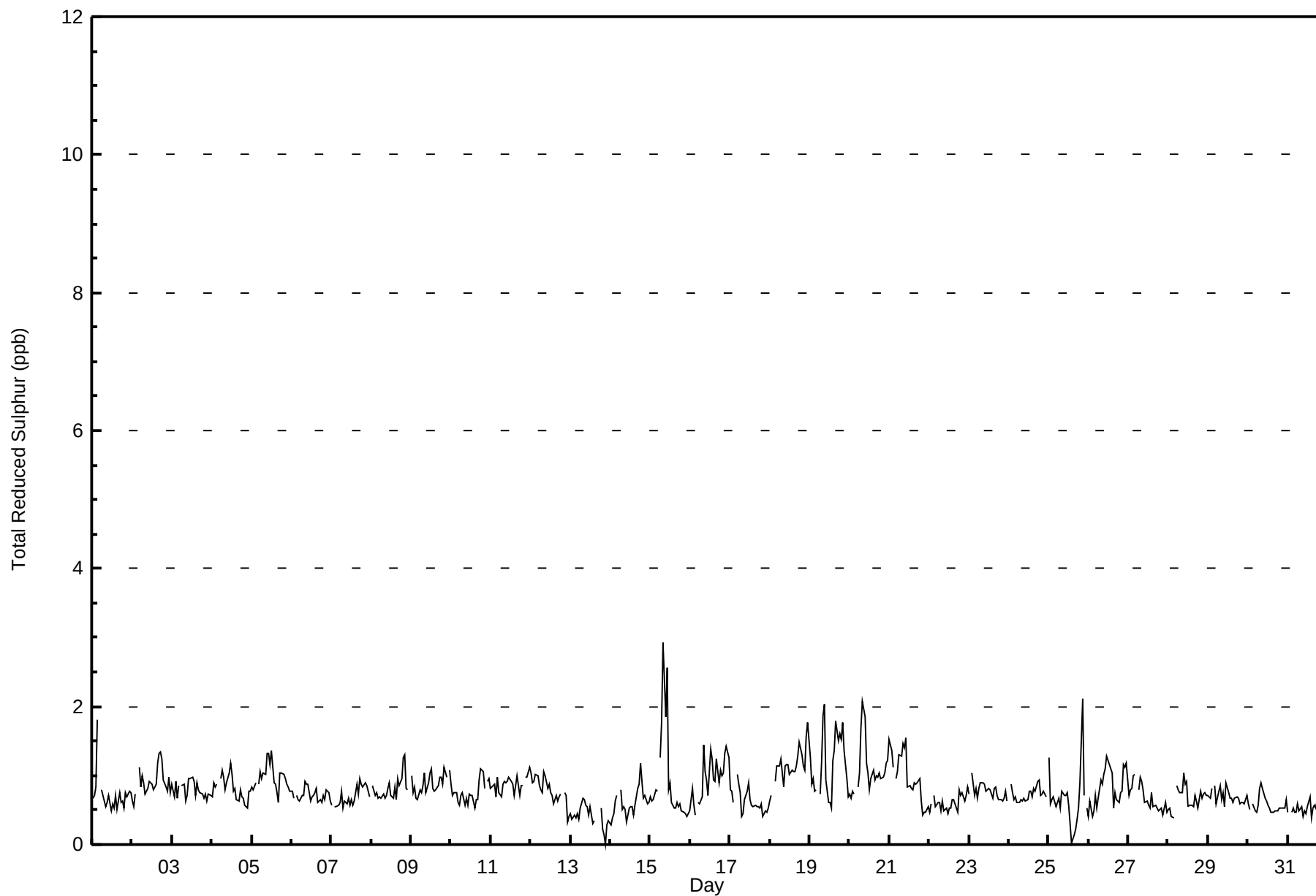


**Peace Airshed Zone Association
Summary of Hourly Maximums**

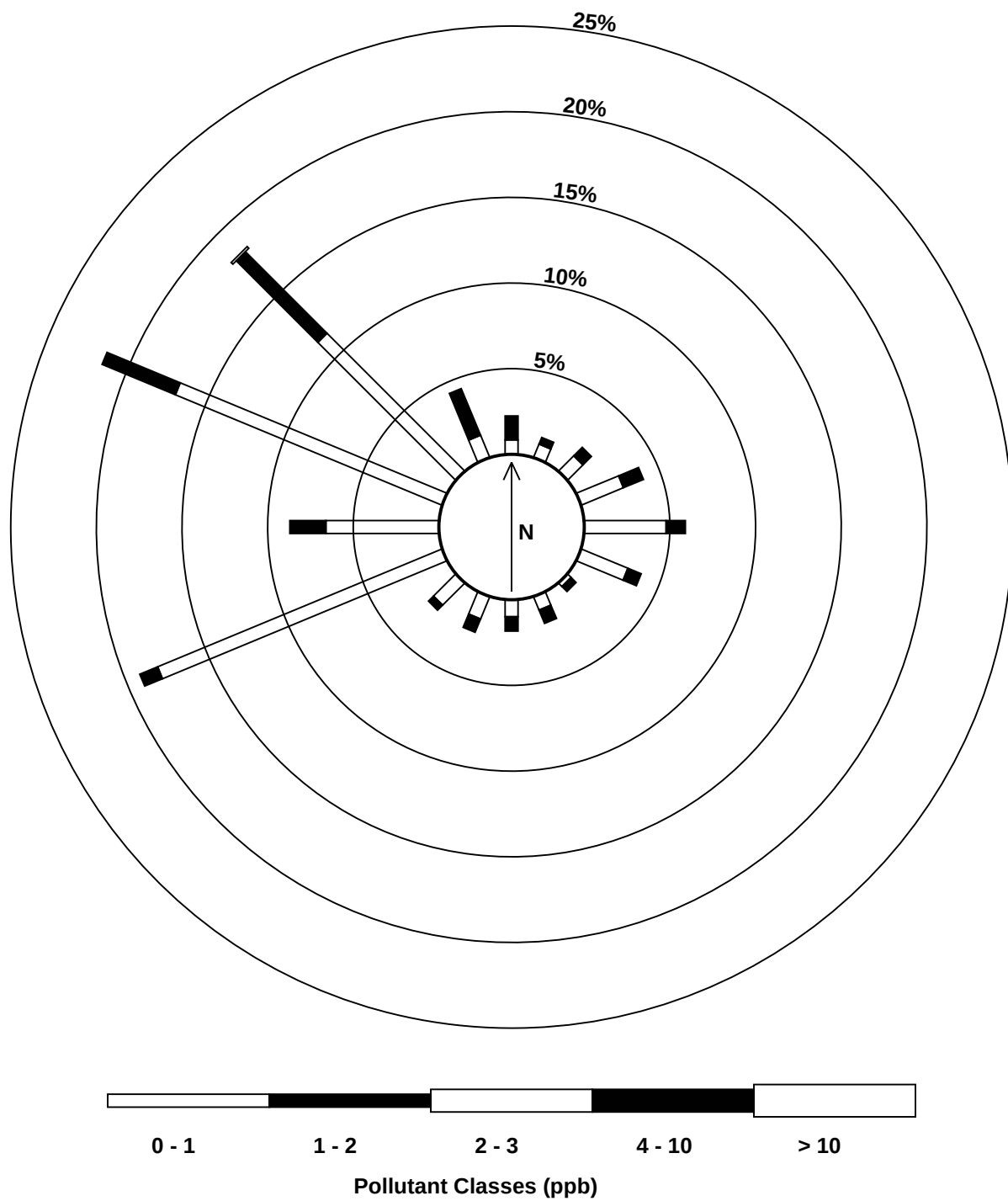
**Henry Pirker - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 2.9 ppb on Jan 15 09:00																				Maximum Daily Average: 1.2 ppb on Jan 19					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 13 22:00																				Minimum Daily Average: 0.4 ppb on Jan 13					Hours of Data: 710	
Maximum Diurnal Average: 0.9 ppb at hour 9																				Minimum Diurnal Average: 0.7 ppb at hour 15					Hours of Missing Data: 34	
Monthly Average: 0.79 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.9 P ₉₀ = 1.1 P ₉₉ = 1.9					Hours of Calibration: 34	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	1	1	1	2	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.8
2-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
3-Jan	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
4-Jan	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
5-Jan	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
6-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
7-Jan	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
8-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.3
9-Jan	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	1.1
10-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.1
11-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.1
12-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	0.8	1.1
13-Jan	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	C	C	A	1	0	0	0	0	0	0.4	0.7
14-Jan	0	0	0	1	1	A	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0.6	1.2
15-Jan	1	1	1	1	1	A	1	2	3	2	3	1	1	1	1	1	1	1	1	0	0	0	0	0	0.9	2.9
16-Jan	0	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
17-Jan	1	1	1	A	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0.6	1.0
18-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1.1	1.8
19-Jan	1	1	1	1	1	A	1	1	2	2	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1.2	2.0
20-Jan	1	1	1	1	A	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.1
21-Jan	2	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	0	0	1	1.0	1.5
22-Jan	0	1	A	1	1	1	1	0	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0.6	0.8
23-Jan	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
24-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.9
25-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	2	1	A	1	0.6	2.1
26-Jan	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
27-Jan	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0	0.7	1.0
28-Jan	1	1	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
29-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
30-Jan	1	1	A	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0.6	0.9
31-Jan	0	A	0	1	0	0	1	0	1	0	0	0	1	1	0	1	1	1	1	1	0	0	1	1	0.5	0.7
																									Diurnal Average	
																									Diurnal Maximum	
C - Calibration																										
A - Automated Daily Zero Span																										

Hourly Maximums for TRS at Henry Pirker January 2009



Pollutant Rose for TRS at Henry Pirker January 2009

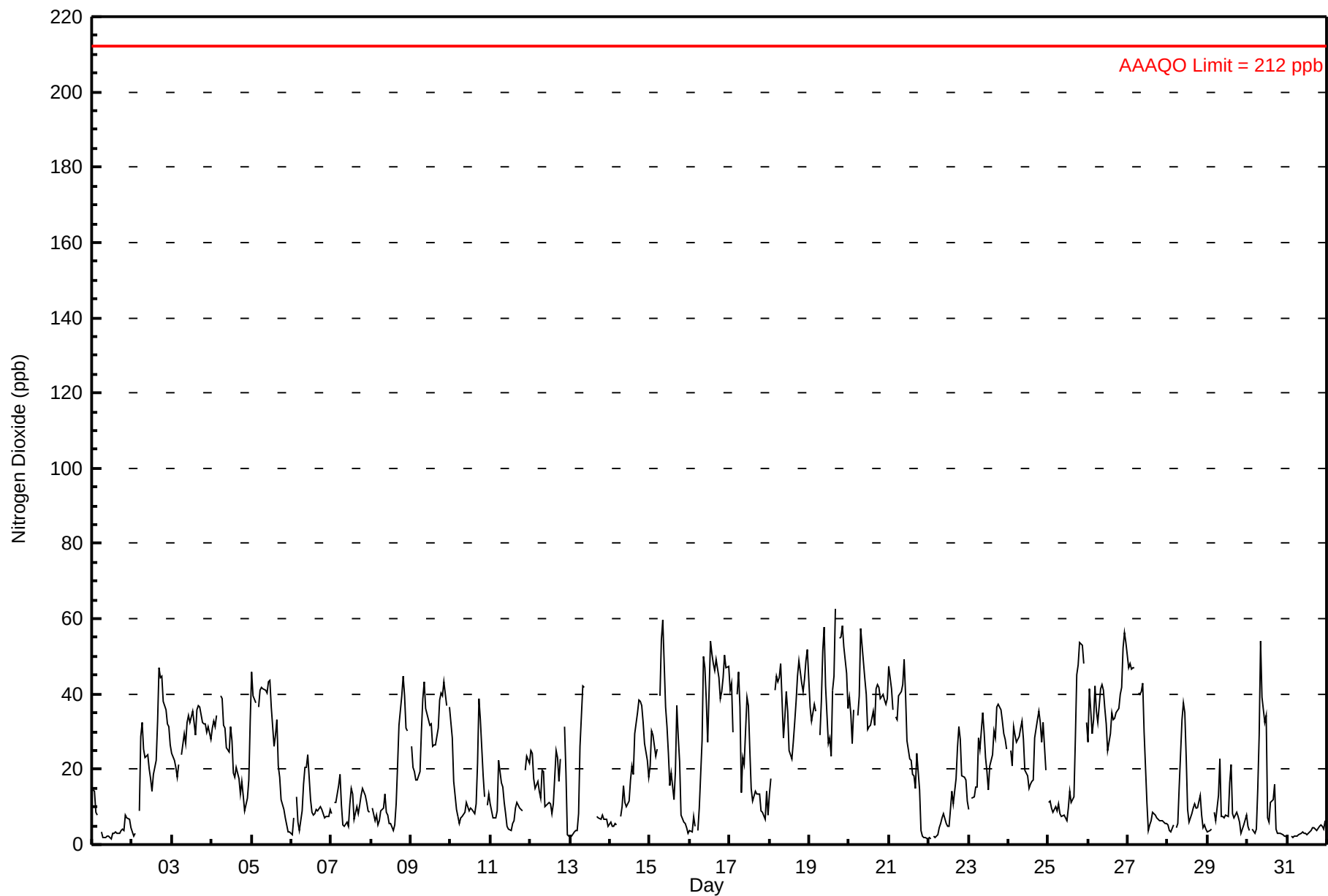


Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Nitrogen Dioxide (NO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 62.8 ppb on Jan 19 17:00 Maximum Daily Average: 42.1 ppb on Jan 19																				Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 38 Percent Operational Time: 99.9						
Minimum Value: 1 ppb on Jan 22 02:00 Maximum Diurnal Average: 28.1 ppb at hour 9 Monthly Average: 21.18 ppb										Minimum Daily Average: 3.5 ppb on Jan 31 Minimum Diurnal Average: 16.8 ppb at hour 4 Percentiles: P ₁ = 1.9 P ₁₀ = 3.8 Q ₁ = 7.7 Median = 18.0 Q ₃ = 33.2 P ₉₀ = 41.9 P ₉₉ = 54.7																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	15	14	9	8	A	3	2	2	2	2	2	3	3	3	3	3	3	4	4	4	8	7	7	4	4.9	14.7
2-Jan	3	2	3	A	9	29	32	25	23	24	20	18	14	19	22	33	47	44	45	38	36	32	31	26	25.1	46.9
3-Jan	24	22	21	18	21	A	24	30	27	33	34	32	35	32	29	36	37	36	32	32	32	30	31	28	29.5	37.0
4-Jan	31	33	31	34	A	39	39	32	31	26	25	31	28	19	18	21	18	14	17	13	9	12	17	33	24.7	39.4
5-Jan	46	40	38	A	37	41	42	41	41	40	43	44	37	26	29	33	21	18	12	9	7	5	3	3	28.5	45.8
6-Jan	3	7	A	13	6	4	9	16	21	20	24	12	9	8	8	9	9	10	9	8	7	7	7	9	10.3	23.9
7-Jan	8	A	11	11	15	19	11	5	5	6	5	11	15	13	7	10	8	10	13	15	13	11	9	9	10.5	18.7
8-Jan	A	10	6	8	5	6	9	10	13	9	8	5	5	4	5	11	21	32	39	45	40	31	30	A	16.0	44.8
9-Jan	26	20	19	17	17	20	30	39	43	36	33	32	32	26	27	27	31	38	40	40	43	37	A	37	30.9	43.4
10-Jan	32	28	17	9	8	5	7	7	8	11	10	9	10	9	8	11	22	39	33	18	13	A	10	14	14.7	38.8
11-Jan	11	7	7	7	9	22	16	15	11	8	5	4	4	5	6	10	11	10	10	9	A	20	23	22	11.0	23.3
12-Jan	25	24	18	15	17	14	12	20	19	10	11	11	11	8	11	25	23	17	23	A	31	19	3	2	16.0	31.5
13-Jan	2	2	3	4	4	8	26	42	42	C	C	C	C	C	C	A	7	7	7	8	7	7	7	5	--	42.2
14-Jan	6	5	5	5	5	A	8	10	16	11	10	12	17	21	19	29	35	38	38	37	32	27	22	18	18.5	38.4
15-Jan	21	30	29	24	25	A	40	55	60	37	31	24	16	19	12	19	37	29	22	8	6	6	5	3	24.1	59.5
16-Jan	4	3	8	5	A	4	10	28	50	47	39	27	54	51	48	46	49	44	39	41	44	50	47	47	34.1	54.1
17-Jan	41	43	30	A	40	46	36	14	23	21	39	37	25	15	11	14	13	14	14	9	9	7	14	8	22.8	46.0
18-Jan	13	17	A	41	45	43	44	48	28	34	41	35	25	23	27	32	38	45	49	43	41	44	49	52	37.3	51.8
19-Jan	37	33	35	37	35	A	29	38	51	58	42	27	28	23	41	45	63	P	55	55	58	52	46	36	42.1	62.8
20-Jan	39	35	27	36	A	34	40	58	53	44	40	30	31	32	35	32	41	43	42	39	40	39	37	39	38.5	57.6
21-Jan	47	41	36	A	34	33	39	41	42	49	40	28	23	22	19	18	15	24	15	4	2	2	2	1	25.1	49.3
22-Jan	2	1	A	2	2	2	4	5	7	8	6	5	5	9	14	11	18	26	31	28	18	18	17	12	11.0	31.2
23-Jan	9	A	12	13	15	15	28	25	35	30	23	19	14	21	24	30	28	37	37	36	33	30	28	25	24.8	37.3
24-Jan	A	25	21	31	29	27	29	31	33	28	20	18	15	16	17	17	28	33	35	33	27	32	20	A	25.7	35.3
25-Jan	11	12	10	9	10	9	11	8	7	8	7	6	10	14	11	13	28	45	48	54	53	48	A	32	20.1	53.7
26-Jan	27	41	30	33	42	36	33	41	43	41	36	32	25	29	35	33	33	35	36	40	42	52	56	54	37.7	56.2
27-Jan	47	48	46	47	47	A	40	40	41	43	30	11	4	5	7	9	8	7	7	6	6	6	6	5	22.5	48.2
28-Jan	5	4	3	5	A	5	5	15	33	38	35	23	9	6	8	10	11	10	10	13	8	4	5	4	11.8	37.8
29-Jan	3	4	4	A	9	7	13	23	7	8	7	8	7	16	21	8	7	9	7	6	3	4	5	8	8.4	22.7
30-Jan	5	4	A	4	3	4	15	29	54	39	32	34	7	6	11	12	16	4	3	3	3	3	2	2	12.9	54.1
31-Jan	2	A	2	2	2	2	2	3	3	3	3	3	3	3	4	5	4	4	4	5	5	5	4	6	3.5	6.4
18.8 19.9 17.8 16.8 18.9 18.4 22.1 25.7 28.1 25.8 23.4 19.7 17.3 16.9 17.9 20.3 23.6 24.1 25.0 23.2 22.6 21.6 18.8 18.8																									Diurnal Average	
47.3 48.2 46.5 47.1 47.1 46.0 44.4 57.6 59.5 57.9 43.3 43.5 54.1 50.7 48.0 46.3 62.8 45.2 54.7 55.2 58.1 52.4 56.2 53.9																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb																										

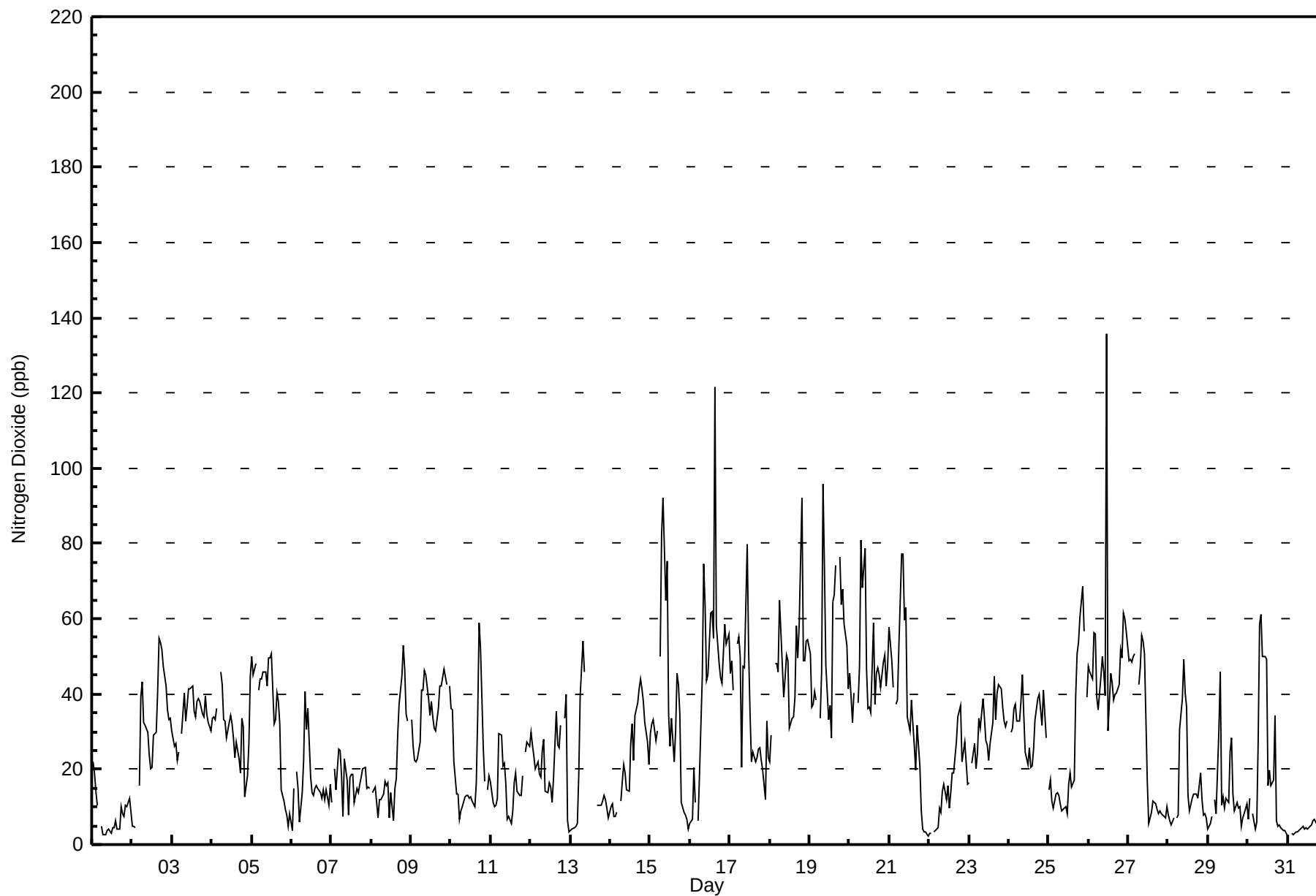
Hourly Averages for NO₂ at Henry Pirker January 2009



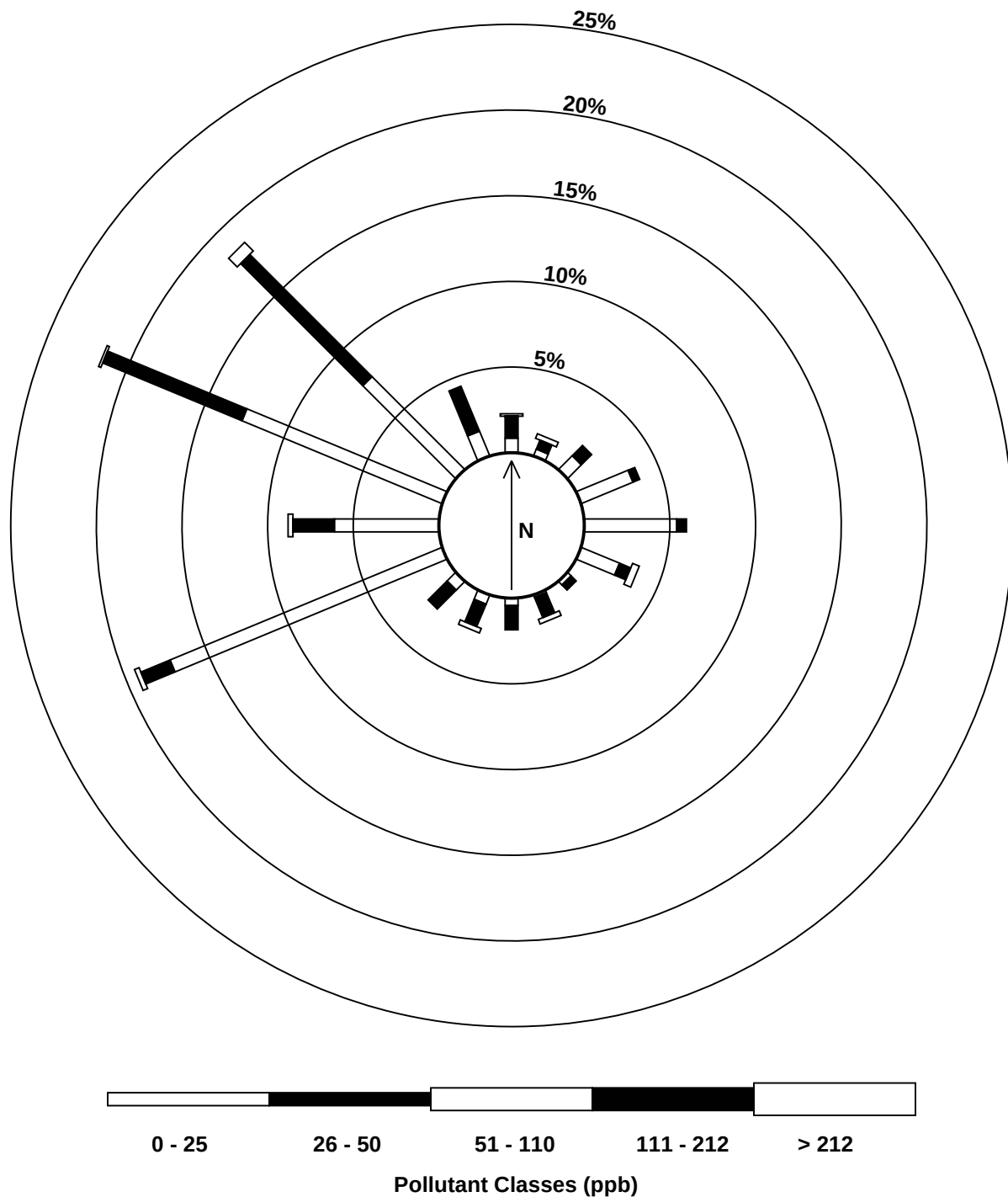
Henry Pirker - Nitrogen Dioxide (NO₂) - ppb
January 1, 2009 to February 1, 2009

19 of 280

Hourly Maximums for NO₂ at Henry Pirker January 2009



Pollutant Rose for NO₂ at Henry Pirker January 2009



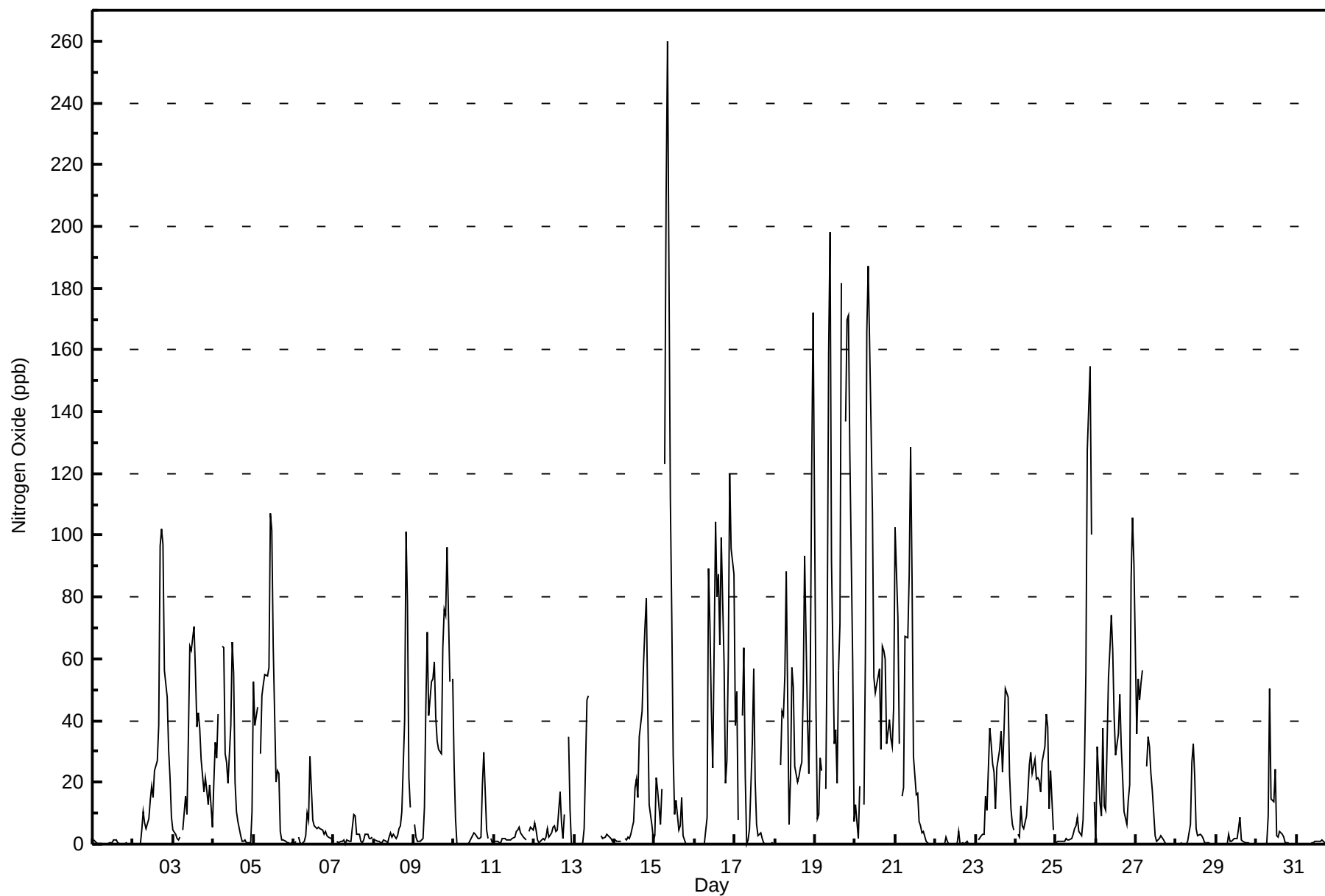
Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Nitrogen Oxide (NO) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 260.1 ppb on Jan 15 09:00																				Maximum Daily Average: 78.3 ppb on Jan 19										Hours in Service: 744	
Minimum Value: 0 ppb on Jan 1 06:00																				Minimum Daily Average: 0.4 ppb on Jan 22										Hours of Data: 705	
Maximum Diurnal Average: 40.0 ppb at hour 9																				Minimum Diurnal Average: 7.9 ppb at hour 4										Hours of Missing Data: 39	
Monthly Average: 21.29 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.8 Median = 4.6 Q ₃ = 29.2 P ₉₀ = 62.7 P ₉₉ = 171.0										Hours of Calibration: 38	
																				Percent Operational Time: 99.9											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	2	1	0	0	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.4	1.5					
2-Jan	0	0	0	A	0	4	10	7	5	8	14	19	15	24	27	38	97	102	97	56	48	31	22	9	27.5	102.2					
3-Jan	5	3	2	1	2	A	5	15	10	35	64	63	70	55	38	42	37	27	17	22	18	13	19	6	24.7	70.5					
4-Jan	20	33	28	42	A	64	64	29	27	20	38	65	55	20	11	7	3	1	1	1	0	0	0	11	23.5	65.5					
5-Jan	53	38	45	A	29	48	52	55	54	57	107	102	64	20	24	23	4	1	1	1	1	0	0	0	33.9	106.9					
6-Jan	0	1	A	2	0	0	1	3	10	8	28	8	6	5	5	6	5	5	3	4	3	2	2	1	4.7	28.3					
7-Jan	1	A	1	1	1	1	1	0	1	1	1	5	9	9	3	3	1	1	1	3	3	2	2	2	2.4	9.5					
8-Jan	A	1	1	1	0	1	1	1	1	2	3	2	3	2	3	5	6	10	40	101	78	21	12	A	13.5	101.1					
9-Jan	7	3	1	1	1	2	12	45	68	42	53	54	59	41	33	30	29	64	76	74	96	53	A	54	39.0	96.2					
10-Jan	26	8	0	0	0	0	0	0	0	1	2	3	4	3	2	2	2	19	30	4	2	A	2	0	4.8	29.9					
11-Jan	1	1	1	0	0	2	2	2	2	1	1	2	2	4	5	6	4	2	2	1	A	4	6	4	2.4	5.7					
12-Jan	7	4	1	1	1	2	1	2	5	2	4	6	6	4	5	17	7	2	10	A	35	12	0	0	5.8	34.6					
13-Jan	0	0	0	0	0	0	5	47	48	C	C	C	C	C	C	A	3	2	2	3	3	2	2	1	--	47.9					
14-Jan	1	1	1	1	1	A	2	1	2	2	3	7	18	21	15	35	43	58	70	80	45	13	6	2	18.6	79.6					
15-Jan	3	22	18	6	18	A	123	209	260	112	74	29	10	14	5	6	15	3	1	0	0	0	0	0	40.3	260.1					
16-Jan	0	0	0	0	A	0	0	9	89	71	44	25	104	80	88	64	99	59	20	27	60	120	96	88	49.6	120.0					
17-Jan	38	49	8	A	42	64	22	0	1	5	33	57	21	6	3	4	2	0	0	0	0	0	0	0	15.5	63.7					
18-Jan	0	0	A	25	43	42	55	88	6	21	57	51	25	20	22	25	27	50	94	41	23	55	121	172	46.2	171.9					
19-Jan	46	8	10	28	24	A	18	70	159	198	92	32	37	20	56	71	182	P	137	170	171	126	60	7	78.3	198.2					
20-Jan	13	7	2	19	A	13	61	166	187	135	107	54	49	52	57	31	64	63	60	32	40	34	31	45	57.5	187.0					
21-Jan	103	73	32	A	16	18	67	67	87	129	87	29	16	16	7	6	4	4	1	0	0	0	0	0	33.1	128.7					
22-Jan	0	0	A	0	0	0	2	1	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0.4	4.3					
23-Jan	0	A	2	3	3	3	16	11	38	32	26	24	12	25	31	37	23	36	50	48	22	12	6	5	20.1	50.3					
24-Jan	A	3	2	12	6	5	9	17	26	30	23	27	21	21	21	17	26	32	42	38	11	24	5	A	19.0	42.0					
25-Jan	1	1	1	1	1	1	2	1	1	2	3	5	6	9	4	3	8	26	55	128	155	100	A	14	22.9	154.6					
26-Jan	0	32	13	9	38	12	11	54	63	74	63	41	29	36	49	32	21	10	6	14	19	86	106	91	37.9	105.7					
27-Jan	36	54	47	52	56	A	25	35	32	23	18	3	1	1	2	3	1	0	0	0	0	0	0	0	16.9	56.4					
28-Jan	0	0	0	0	A	0	0	1	6	26	33	22	5	3	3	3	2	1	0	1	0	0	0	0	4.6	32.5					
29-Jan	0	0	0	A	0	0	0	3	1	1	1	2	2	5	9	1	1	0	1	0	0	0	0	0	1.2	8.9					
30-Jan	0	0	A	0	0	0	0	9	50	15	14	24	3	2	4	3	2	0	0	0	0	0	0	0	5.6	50.1					
31-Jan	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.3					
Diurnal Average																															
Diurnal Maximum																															
C - Calibration P - Power Failure A - Automated Daily Zero Span																															

Hourly Averages for NO at Henry Pirker

January 2009



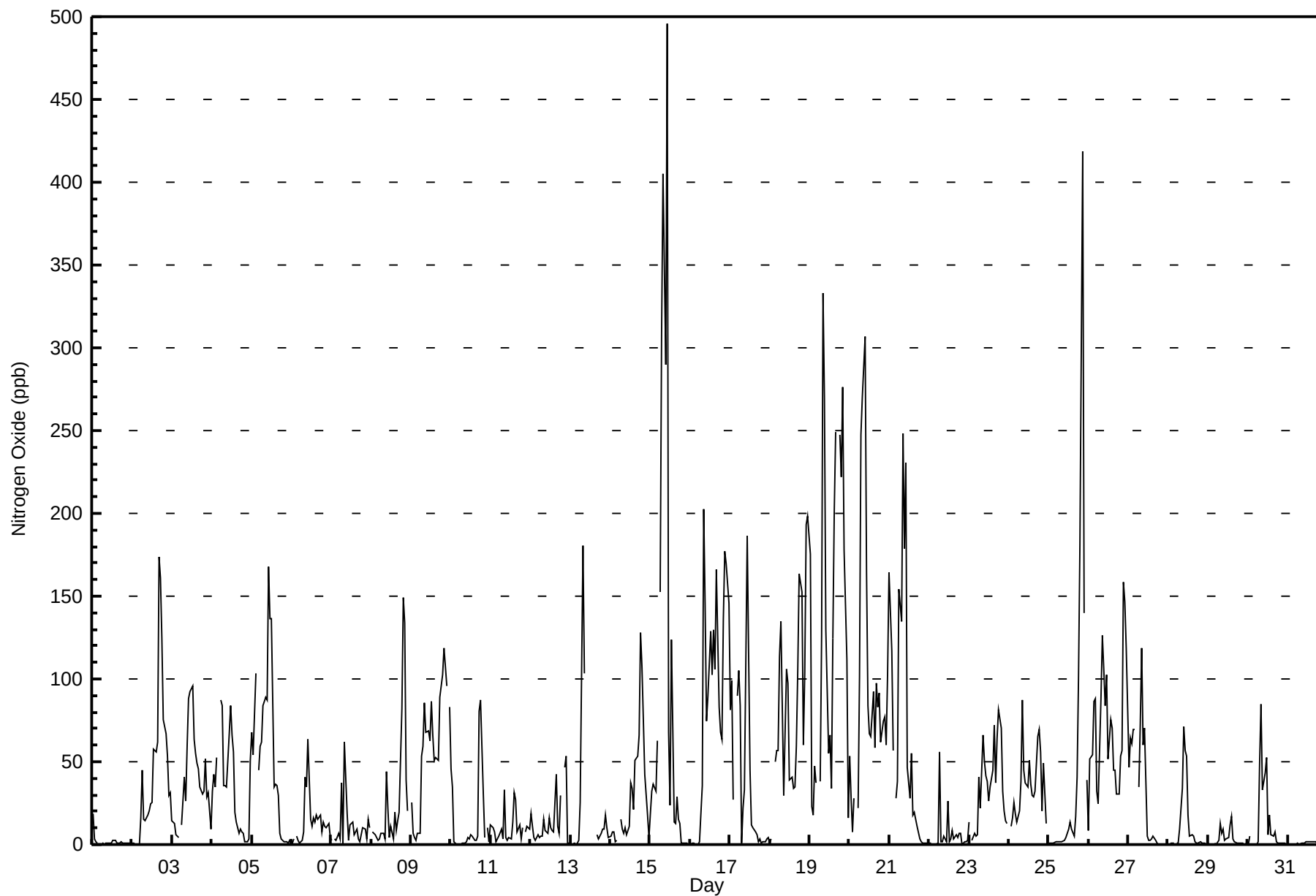
Peace Airshed Zone Association
Summary of Hourly Maximums

Henry Pirker - Nitrogen Oxide (NO) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 496.0 ppb on Jan 15 11:00																				Maximum Daily Average: 135.4 ppb on Jan 19										Hours in Service: 744	
Minimum Value: 0 ppb on Jan 22 21:00																				Minimum Daily Average: 0.9 ppb on Jan 31										Hours of Data: 705	
Maximum Diurnal Average: 82.4 ppb at hour 9																				Minimum Diurnal Average: 16.4 ppb at hour 4										Hours of Missing Data: 39	
Monthly Average: 40.06 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.5 Q ₁ = 2.5 Median = 14.0 Q ₃ = 56.2 P ₉₀ = 105.3 P ₉₉ = 280.3										Hours of Calibration: 38	
																				Percent Operational Time: 99.9											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	18	3	2	1	A	0	0	0	0	1	1	1	2	3	2	1	1	1	1	0	1	1	1	1	1.9	18.4					
2-Jan	1	0	0	A	0	16	45	15	14	18	21	25	25	57	56	61	174	161	125	76	67	54	29	31	46.6	173.9					
3-Jan	14	12	6	5	5	A	12	40	26	60	88	92	96	64	55	49	45	35	30	32	52	28	31	9	38.5	95.5					
4-Jan	32	42	35	52	A	87	84	36	35	34	67	84	67	56	19	13	7	9	8	7	2	2	3	51	36.1	87.0					
5-Jan	68	54	103	A	45	60	61	84	89	87	168	137	136	34	37	36	30	7	3	2	2	2	1	2	54.3	167.8					
6-Jan	1	3	A	5	3	1	2	8	40	35	63	15	11	16	14	18	15	18	7	14	11	10	13	4	14.2	63.2					
7-Jan	2	A	3	2	6	3	37	0	62	19	3	12	13	14	6	9	3	2	6	11	9	3	15	10	10.9	61.6					
8-Jan	A	8	6	5	2	3	7	7	4	44	22	4	11	4	19	9	15	19	83	149	134	39	20	A	27.8	149.4					
9-Jan	25	7	4	2	6	6	53	59	86	67	68	63	86	66	51	52	51	89	96	102	119	96	A	83	58.3	118.7					
10-Jan	46	34	1	0	0	0	0	1	1	2	4	4	6	5	2	3	5	81	88	31	4	A	10	2	14.3	87.7					
11-Jan	12	10	8	2	4	5	9	4	33	4	2	4	4	14	31	27	8	12	4	11	A	7	11	10	10.2	32.9					
12-Jan	18	11	4	3	6	4	5	5	15	9	7	16	10	9	8	42	11	7	30	A	47	54	1	0	14.0	53.6					
13-Jan	0	0	0	0	1	2	25	181	104	C	C	C	C	C	C	A	6	4	7	9	9	18	10	5	--	180.9					
14-Jan	5	7	8	2	3	A	15	9	7	10	6	11	38	34	22	51	54	66	128	108	76	43	17	4	31.4	128.0					
15-Jan	19	32	37	32	62	A	153	308	405	290	496	68	23	124	13	13	29	15	13	1	1	1	1	0	92.8	496.0					
16-Jan	0	0	1	0	A	0	2	35	203	145	74	90	129	103	130	106	167	83	68	63	136	177	170	145	88.1	202.8					
17-Jan	82	99	27	A	90	105	84	1	22	33	186	114	45	12	10	7	6	2	3	1	2	2	4	5	40.9	186.3					
18-Jan	1	3	A	50	57	57	114	135	30	69	106	97	39	41	34	35	60	105	163	152	60	105	193	198	82.7	198.4					
19-Jan	175	23	18	48	38	A	38	126	333	269	130	55	66	34	124	200	249	P	247	222	277	178	112	16	135.4	333.1					
20-Jan	53	28	8	28	A	22	102	247	270	306	165	84	67	65	93	59	98	83	92	62	75	77	60	103	97.6	306.4					
21-Jan	165	117	57	A	28	38	154	135	248	179	231	47	28	55	18	20	15	11	4	1	1	1	0	1	67.5	248.5					
22-Jan	0	0	A	0	0	1	56	2	2	5	2	26	1	3	9	3	6	5	7	7	0	2	2	2	6.1	56.3					
23-Jan	14	A	2	7	5	6	41	22	66	50	42	39	26	34	45	72	37	64	81	70	32	20	15	12	35.0	81.4					
24-Jan	A	11	16	25	19	14	20	38	88	45	37	35	51	37	29	29	32	66	70	56	21	49	13	A	36.3	87.5					
25-Jan	1	1	1	1	1	2	2	2	2	3	4	6	9	14	9	5	17	41	100	181	419	140	A	39	43.5	419.0					
26-Jan	8	52	55	86	88	32	25	88	126	106	84	103	52	75	71	45	45	30	30	53	57	159	147	118	72.3	158.8					
27-Jan	47	64	61	69	69	A	35	72	119	60	71	5	2	2	4	5	3	1	0	0	0	0	0	0	30.0	118.7					
28-Jan	0	0	0	1	A	1	1	9	34	71	56	54	18	5	6	5	2	1	1	2	1	0	0	0	11.7	71.1					
29-Jan	1	0	0	A	1	0	2	12	7	9	3	4	4	12	17	4	1	1	1	1	1	1	0	1	3.5	16.6					
30-Jan	0	5	A	0	0	0	2	49	85	33	43	53	6	18	6	5	7	2	1	1	1	1	1	0	13.8	85.0					
31-Jan	0	A	0	0	0	0	1	0	1	1	1	2	2	2	2	2	2	1	1	1	1	1	0	1	0.9	2.1					
27.9 22.5 17.2 16.4 20.7 17.9 38.3 55.9 82.4 68.8 75.0 45.0 35.8 33.7 31.4 32.9 38.7 34.0 48.2 47.5 53.8 42.3 30.3 29.5																									Diurnal Average						
175.5 116.6 103.4 86.4 89.8 105.3 154.0 308.3 404.7 306.4 496.0 136.7 136.4 123.8 130.0 200.5 249.5 160.7 247.0 222.2 419.0 178.3 193.2 198.4																									Diurnal Maximum						
C - Calibration P - Power Failure A - Automated Daily Zero Span																															

Hourly Maximums for NO at Henry Pirker

January 2009



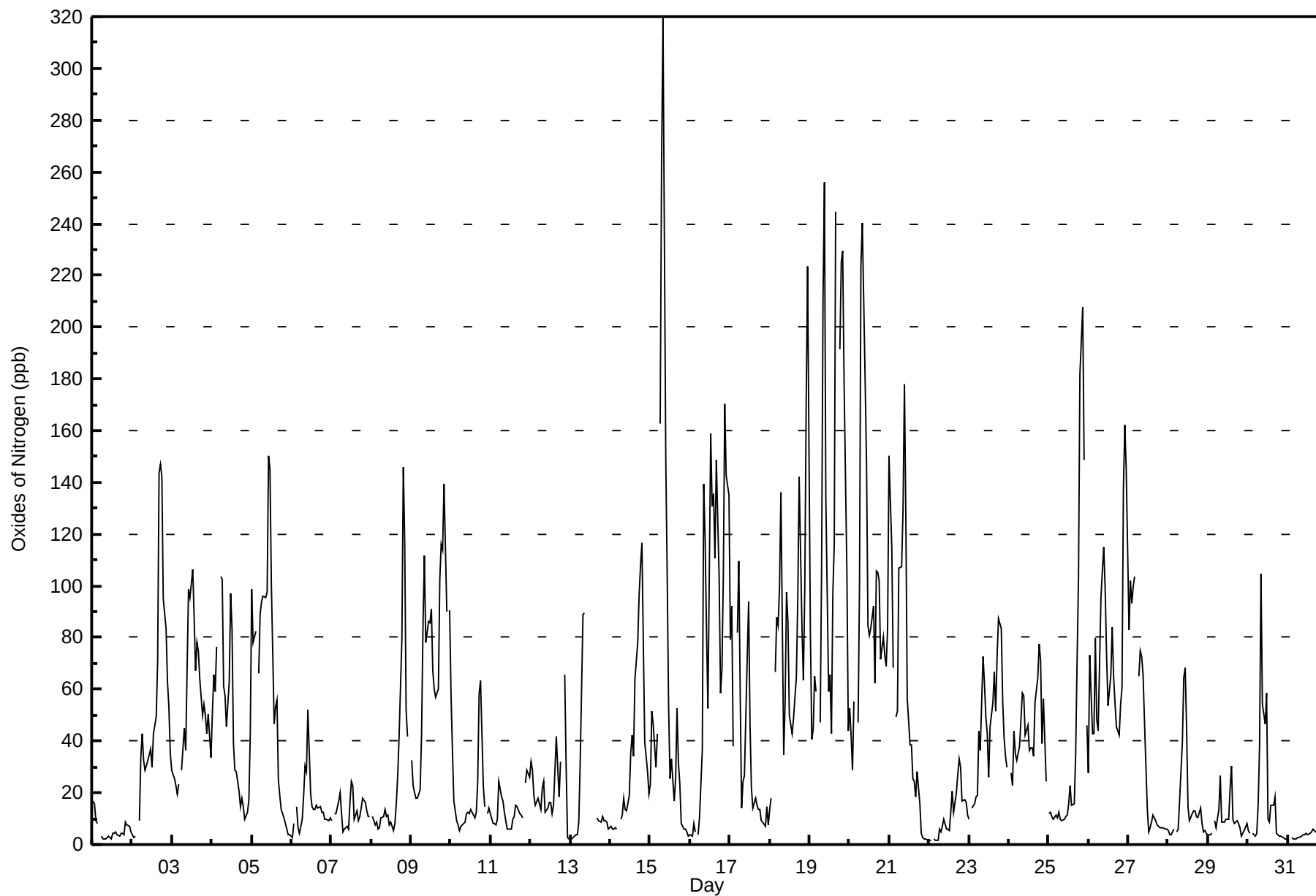
Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Oxides of Nitrogen (NO_x) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 319.7 ppb on Jan 15 09:00																				Maximum Daily Average: 120.3 ppb on Jan 19										Hours in Service: 744	
Minimum Value: 1 ppb on Jan 22 02:00																				Minimum Daily Average: 3.9 ppb on Jan 31										Hours of Data: 705	
Maximum Diurnal Average: 68.3 ppb at hour 9																				Minimum Diurnal Average: 24.8 ppb at hour 4										Hours of Missing Data: 39	
Monthly Average: 42.57 ppb																				Percentiles: P ₁ = 1.8 P ₁₀ = 4.4 Q ₁ = 9.1 Median = 23.4 Q ₃ = 63.1 P ₉₀ = 103.2 P ₉₉ = 222.4										Hours of Calibration: 38	
																				Percent Operational Time: 99.9											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	17	16	9	8	A	3	2	2	2	3	3	2	4	4	5	4	3	4	4	4	8	8	7	5	5.6	16.6					
2-Jan	4	3	3	A	9	33	43	33	29	32	35	37	30	43	49	71	144	147	142	95	84	63	53	35	52.9	146.9					
3-Jan	29	26	23	20	24	A	29	45	36	68	99	95	106	88	67	78	75	64	50	54	50	43	51	34	54.4	106.1					
4-Jan	51	66	59	76	A	104	103	61	58	45	63	97	83	39	29	28	21	15	18	15	10	13	17	43	48.4	103.5					
5-Jan	99	78	82	A	66	89	94	96	95	98	150	145	101	47	53	56	25	19	13	10	8	6	4	4	62.6	150.4					
6-Jan	3	8	A	15	6	4	10	19	31	28	52	20	15	13	13	15	14	15	13	12	10	10	9	10	15.0	52.3					
7-Jan	9	A	12	12	17	20	12	5	6	7	6	16	24	23	10	13	9	11	14	18	16	13	11	11	12.8	24.5					
8-Jan	A	11	7	9	6	7	10	11	14	11	11	8	9	5	8	15	26	42	79	146	117	52	42	A	29.4	145.8					
9-Jan	33	23	20	18	18	21	42	84	112	78	86	85	91	67	60	57	60	102	116	114	140	90	A	91	69.9	139.6					
10-Jan	58	36	17	9	7	5	7	8	9	12	12	12	14	13	10	13	24	58	63	23	15	A	12	14	19.6	63.3					
11-Jan	12	8	8	7	10	24	19	17	13	9	6	6	6	10	11	15	15	12	11	10	A	24	29	26	13.4	29.0					
12-Jan	32	29	19	15	18	16	14	22	24	12	14	16	16	12	15	42	30	18	32	A	66	30	2	2	21.6	65.8					
13-Jan	2	2	3	4	4	9	31	89	90	C	C	C	C	C	C	A	10	9	9	11	9	9	8	6	--	89.6					
14-Jan	7	6	6	6	6	A	10	11	18	13	13	19	35	42	34	64	78	97	108	116	77	39	28	19	37.1	116.5					
15-Jan	23	51	46	30	43	A	163	264	320	148	104	53	25	33	17	25	52	32	24	8	6	6	5	3	64.4	319.7					
16-Jan	4	3	8	5	A	4	10	36	139	118	82	52	159	131	136	111	149	103	58	68	104	170	142	135	83.9	170.4					
17-Jan	79	92	38	A	82	110	58	14	24	27	72	94	46	21	14	18	15	14	14	9	9	7	15	8	38.2	109.6					
18-Jan	13	18	A	67	88	85	99	136	35	55	98	86	50	43	49	57	64	95	142	84	63	98	170	224	83.4	223.6					
19-Jan	82	41	44	65	59	A	47	108	210	256	134	59	66	43	97	116	245	P	192	225	229	179	105	44	120.3	256.0					
20-Jan	52	42	29	55	A	47	101	224	240	180	147	85	81	84	92	62	106	105	102	71	80	73	69	83	96.1	240.1					
21-Jan	150	115	68	A	49	51	107	107	130	178	126	56	39	39	26	24	19	28	16	4	3	2	2	1	58.3	178.1					
22-Jan	2	1	A	2	1	2	6	5	7	10	6	6	6	12	21	13	20	27	33	30	17	17	17	11	11.8	33.1					
23-Jan	10	A	14	15	19	19	44	36	73	62	49	43	26	46	55	67	52	72	88	83	55	41	34	30	44.9	87.5					
24-Jan	A	28	23	44	35	32	38	48	58	58	43	46	36	37	38	34	55	65	78	71	39	57	24	A	44.8	77.6					
25-Jan	12	13	11	9	11	11	13	10	9	10	11	11	16	23	15	16	36	71	103	182	208	149	A	46	43.2	207.8					
26-Jan	28	73	43	43	80	48	44	95	106	115	99	73	54	65	84	65	55	45	43	54	61	138	162	145	75.8	162.0					
27-Jan	83	102	93	100	104	A	65	75	73	66	48	14	5	7	9	11	9	8	7	7	7	7	6	6	39.5	103.5					
28-Jan	6	4	4	6	A	5	6	17	40	65	68	45	15	9	12	13	13	11	10	14	8	5	6	5	16.7	68.1					
29-Jan	4	4	5	A	9	7	13	26	9	9	9	10	10	22	31	10	8	9	8	7	3	4	5	8	9.9	30.5					
30-Jan	5	4	A	4	3	4	16	38	104	54	46	59	10	8	15	15	18	5	4	3	3	3	2	2	18.6	104.4					
31-Jan	2	A	3	2	2	2	3	3	3	4	4	4	4	4	5	6	5	5	4	5	6	5	4	7	3.9	6.6					
31.4 32.3 25.9 24.8 29.8 29.3 40.5 56.3 68.3 61.0 56.6 45.2 39.3 34.5 36.0 37.8 46.9 43.6 51.5 51.8 50.4 45.3 35.9 36.5																								Diurnal Average							
150.1 114.7 93.4 99.5 103.5 109.6 162.6 264.0 319.7 256.0 150.4 145.4 158.8 131.0 135.8 116.1 244.8 146.9 191.5 224.9 229.5 178.9 169.5 223.6																								Diurnal Maximum							
C - Calibration P - Power Failure A - Automated Daily Zero Span																															

Hourly Averages for NO_x at Henry Pirker

January 2009

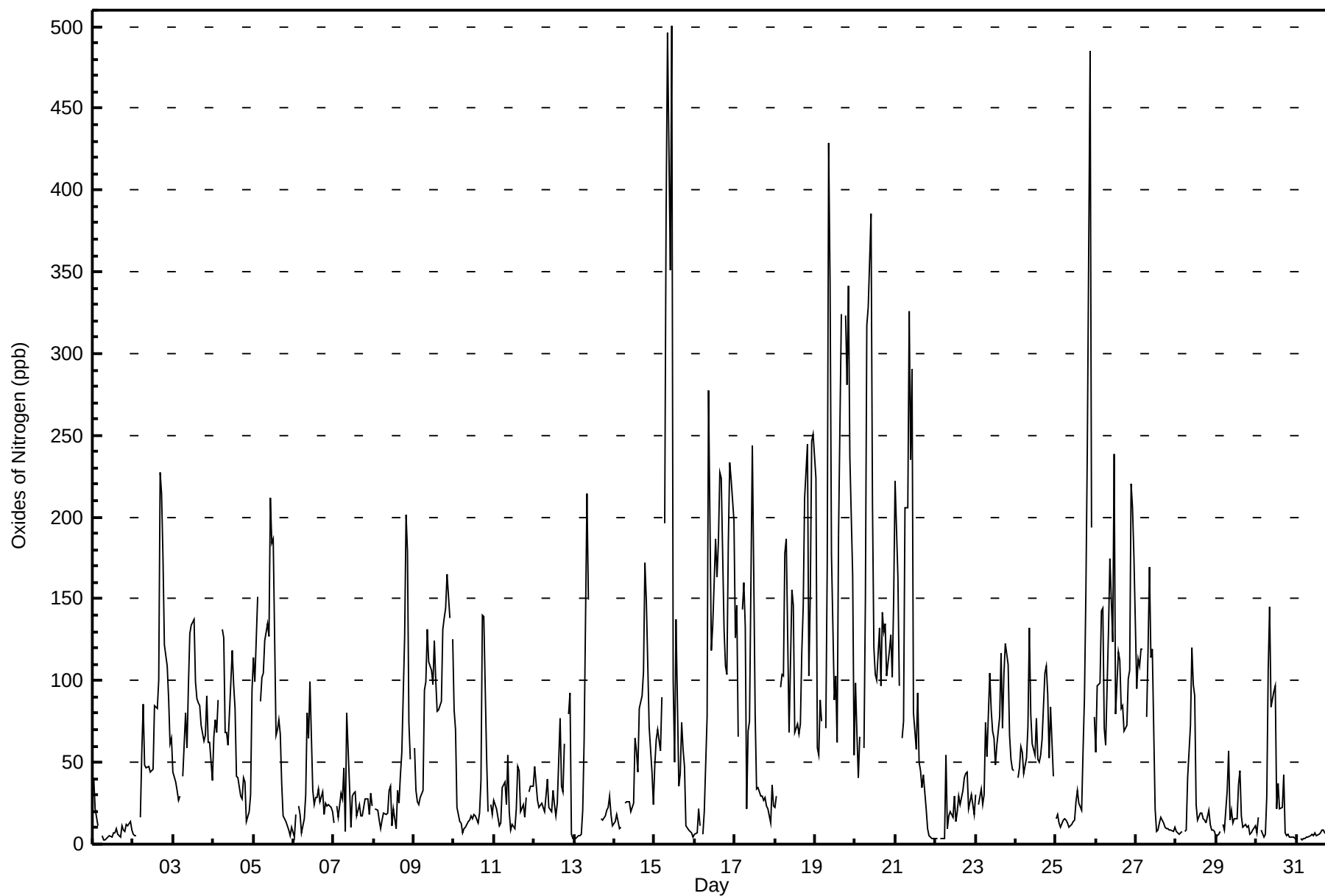


Peace Airshed Zone Association
Summary of Hourly Maximums

Henry Pirker - Oxides of Nitrogen (NO_x) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 500.9 ppb on Jan 15 11:00																				Maximum Daily Average: 187.1 ppb on Jan 19										Hours in Service: 744	
Minimum Value: 3 ppb on Jan 1 08:00																				Minimum Daily Average: 5.8 ppb on Jan 31										Hours of Data: 705	
Maximum Diurnal Average: 120.9 ppb at hour 9																				Minimum Diurnal Average: 37.4 ppb at hour 4										Hours of Missing Data: 39	
Monthly Average: 67.07 ppb																				Percentiles: P ₁ = 3.2 P ₁₀ = 7.1 Q ₁ = 15.9 Median = 40.2 Q ₃ = 96.6 P ₉₀ = 154.0 P ₉₉ = 332.6										Hours of Calibration: 38	
																				Percent Operational Time: 99.9											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	41	22	16	11	A	5	3	3	4	4	5	4	7	7	10	6	5	12	9	8	12	11	14	9	9.8	40.8					
2-Jan	6	5	5	A	16	55	86	48	46	48	44	45	46	84	83	100	227	215	175	122	109	89	62	65	77.5	227.5					
3-Jan	44	38	32	27	29	A	41	81	59	97	129	134	137	99	89	86	84	73	63	66	91	63	62	39	72.3	137.3					
4-Jan	66	76	68	89	A	132	126	69	68	60	98	119	98	83	41	41	30	28	41	38	14	20	30	95	66.5	131.8					
5-Jan	114	99	151	A	87	102	105	125	135	127	212	184	187	66	70	76	68	37	17	14	11	9	5	11	87.5	211.9					
6-Jan	4	18	A	24	18	7	15	30	81	65	99	33	25	28	28	34	26	32	18	25	23	25	22	20	30.4	99.3					
7-Jan	13	A	23	17	31	28	47	8	80	35	11	30	31	32	17	24	17	17	22	28	28	18	31	24	26.6	80.2					
8-Jan	A	21	20	15	9	15	19	18	19	33	36	11	22	10	33	25	42	56	127	201	179	74	52	A	47.2	201.4					
9-Jan	59	33	26	24	28	33	94	99	132	111	107	98	124	100	82	82	87	131	138	144	165	138	A	125	94.0	165.3					
10-Jan	82	70	22	14	13	7	9	10	13	15	18	16	19	17	13	19	39	140	139	52	20	A	24	19	34.4	139.9					
11-Jan	27	22	17	11	13	35	38	25	55	20	9	12	9	21	47	45	20	24	16	29	A	32	35	35	25.9	54.6					
12-Jan	48	37	27	23	25	22	20	29	40	22	20	32	24	17	25	77	36	32	62	A	79	93	6	3	34.8	92.8					
13-Jan	4	4	5	5	6	21	64	215	149	C	C	C	C	C	C	A	15	14	17	21	22	29	19	11	--	214.8					
14-Jan	13	18	14	9	10	A	25	26	26	26	20	25	65	57	44	83	91	105	172	149	111	72	44	24	53.4	172.2					
15-Jan	48	64	70	57	90	A	196	386	496	351	501	101	50	137	35	43	75	58	47	11	9	8	7	4	123.7	500.9					
16-Jan	6	7	21	12	A	6	20	78	277	199	118	134	186	163	185	227	224	131	109	104	183	233	223	198	132.4	277.3					
17-Jan	126	146	66	A	143	160	133	21	69	75	244	165	80	34	34	30	29	27	29	23	22	13	36	24	75.1	243.7					
18-Jan	22	29	A	96	103	103	178	187	68	110	156	146	69	74	68	74	117	145	212	245	103	152	246	250	128.4	250.4					
19-Jan	224	59	55	88	75	A	71	172	429	343	177	88	103	62	189	257	324	P	323	281	342	237	165	55	187.1	428.7					
20-Jan	99	67	40	65	A	59	149	318	328	385	209	120	104	100	132	97	142	130	135	103	119	128	102	150	142.5	385.1					
21-Jan	223	163	97	A	65	75	206	206	326	235	291	81	58	93	50	45	35	43	22	10	5	4	4	4	101.6	325.6					
22-Jan	3	3	A	3	3	4	55	9	17	20	16	30	14	20	30	24	33	40	43	44	22	30	24	18	22.0	54.9					
23-Jan	31	A	24	34	24	30	74	53	105	82	69	65	48	60	78	117	71	104	122	110	67	52	46	45	65.7	122.3					
24-Jan	A	40	47	60	56	43	52	72	132	79	61	55	77	52	50	55	64	104	109	91	53	84	42	A	67.3	132.1					
25-Jan	16	19	13	11	15	16	15	13	11	12	14	15	26	32	25	21	57	90	154	240	485	194	A	78	68.3	485.3					
26-Jan	56	97	99	142	144	71	61	130	175	150	124	239	80	118	112	83	85	69	73	101	106	221	206	175	121.5	238.5					
27-Jan	95	113	109	119	120	A	78	120	170	114	119	22	7	9	13	17	13	10	9	9	8	9	8	10	56.5	169.7					
28-Jan	8	7	6	8	A	7	9	40	72	120	97	91	24	15	19	19	15	15	13	21	13	8	9	7	28.0	120.2					
29-Jan	5	6	8	A	12	9	33	57	15	21	13	16	15	37	45	17	11	12	11	12	6	7	8	11	16.7	56.8					
30-Jan	7	16	A	9	4	6	29	107	146	84	93	97	22	38	22	22	42	7	5	6	5	4	4	3	33.8	145.6					
31-Jan	3	A	3	3	3	3	4	4	5	6	5	7	5	6	7	9	9	7	6	7	7	8	6	10	5.8	10.0					
51.4 46.5 40.1 37.4 44.0 40.6 66.3 88.9 120.9 101.7 103.8 73.7 58.7 55.8 55.8 61.8 68.8 63.6 78.7 77.2 80.6 68.8 53.1 52.5																									Diurnal Average						
224.1 163.1 151.3 142.3 144.4 160.3 206.1 386.2 496.4 385.1 500.9 238.5 187.0 163.4 188.9 257.3 324.0 214.8 323.4 280.9 485.3 236.6 246.4 250.4																									Diurnal Maximum						
C - Calibration P - Power Failure A - Automated Daily Zero Span																															

Hourly Maximums for NO_x at Henry Pirker January 2009

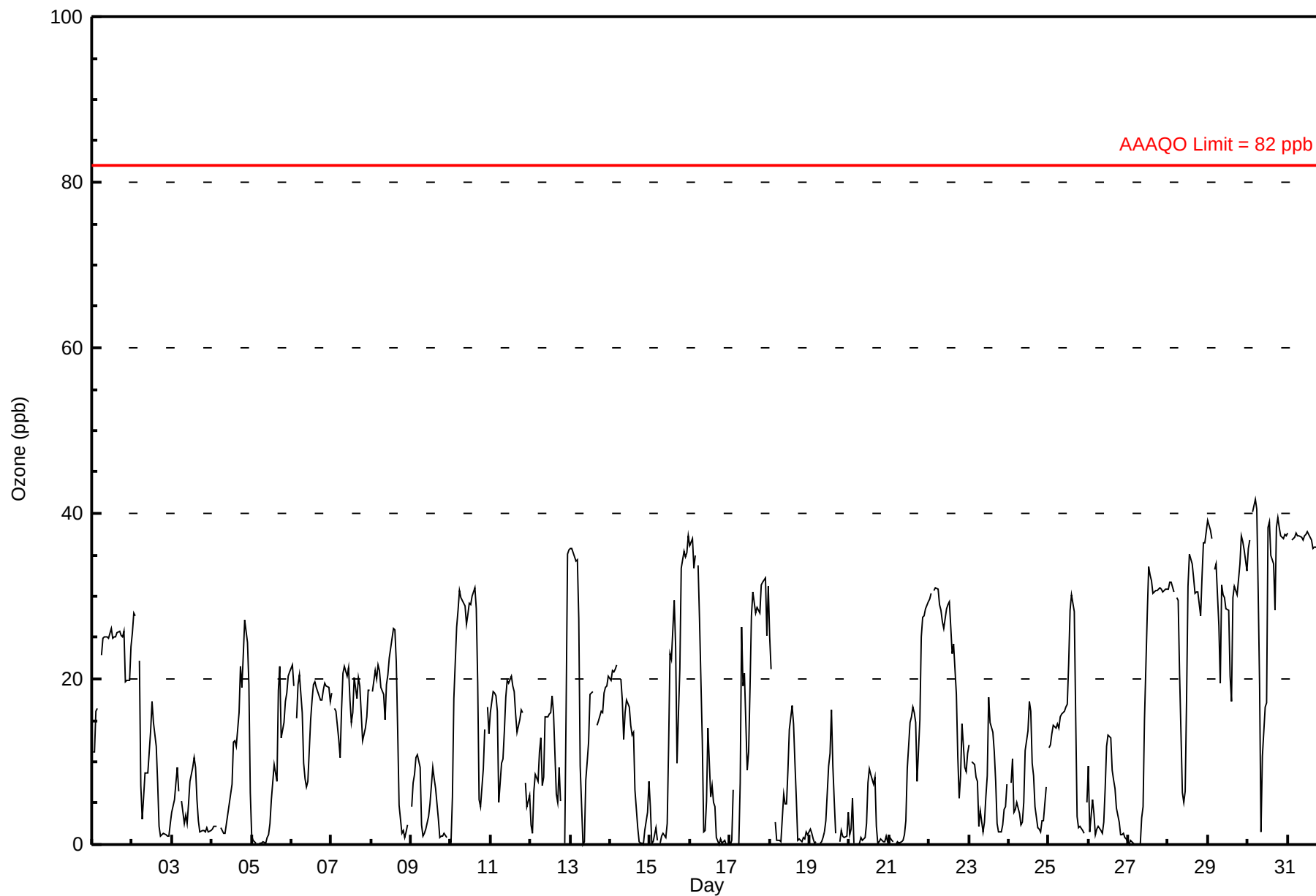


Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 41.7 ppb on Jan 30 05:00 Maximum Daily Average: 36.3 ppb on Jan 31																					Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 33 Percent Operational Time: 99.9					
Minimum Value: 0 ppb on Jan 5 05:00 Maximum Diurnal Average: 19.9 ppb at hour 14 Monthly Average: 14.68 ppb										Minimum Daily Average: 2.6 ppb on Jan 20 Minimum Diurnal Average: 9.9 ppb at hour 9 Percentiles: P ₁ = 0.0 P ₁₀ = 0.8 Q ₁ = 2.9 Median = 13.5 Q ₃ = 24.9 P ₉₀ = 33.1 P ₉₉ = 37.9																
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-Jan	11	11	16	16	A	23	25	25	25	25	25	26	25	25	25	26	26	25	25	26	20	20	20	24	22.4	26.0
2-Jan	26	28	28	A	22	7	3	6	9	9	11	14	17	15	12	7	2	1	1	1	1	1	1	3	9.8	27.9
3-Jan	4	5	7	9	6	A	5	3	4	3	5	8	9	11	9	5	3	2	2	2	2	2	2	2	4.7	10.6
4-Jan	2	2	2	2	A	2	2	1	1	3	5	6	7	12	13	12	16	22	19	23	27	24	19	6	10.0	27.1
5-Jan	1	0	0	A	0	0	0	0	0	1	1	3	5	10	9	8	19	22	13	15	17	18	20	21	8.0	21.6
6-Jan	22	19	A	15	19	21	16	10	8	7	8	15	17	19	20	19	18	17	17	19	20	19	19	17	16.6	21.8
7-Jan	18	A	16	16	13	10	16	21	22	20	21	17	15	16	20	18	20	19	16	13	14	15	19	19	17.2	21.5
8-Jan	A	18	21	20	22	21	19	18	15	19	20	23	24	26	26	22	14	5	1	2	1	1	2	A	15.5	26.1
9-Jan	5	8	8	11	11	9	2	1	1	2	3	5	7	9	8	7	3	1	1	1	1	1	A	1	4.6	10.8
10-Jan	0	6	18	26	28	31	30	29	29	27	28	29	29	30	31	28	20	5	4	9	14	A	17	13	21.0	31.0
11-Jan	16	18	18	18	16	5	10	10	14	18	20	20	20	19	18	16	14	15	16	16	A	7	5	6	14.6	20.4
12-Jan	2	1	7	8	8	11	13	7	8	15	15	16	16	18	16	6	5	9	5	A	0	17	35	36	12.0	35.6
13-Jan	36	36	35	34	34	27	10	0	0	8	10	12	18	18	C	C	14	15	16	16	18	19	19	20	19.0	35.8
14-Jan	20	21	21	21	22	A	20	17	13	16	17	17	14	13	14	7	2	0	0	0	0	2	4	8	11.7	21.8
15-Jan	5	0	0	2	0	A	0	1	1	1	3	12	23	22	29	24	10	16	21	33	35	35	35	37	15.1	37.3
16-Jan	36	37	33	35	A	34	27	12	1	2	5	14	6	7	5	5	1	0	1	0	0	1	0	0	11.4	37.0
17-Jan	0	0	7	A	0	0	7	26	19	21	9	11	19	28	31	28	29	28	28	31	32	32	25	31	19.2	32.3
18-Jan	25	21	A	3	0	1	1	0	6	5	5	9	14	17	15	10	5	0	1	0	1	1	2	1	6.2	25.1
19-Jan	2	1	1	0	0	A	0	0	1	2	3	10	11	16	9	5	1	P	0	2	1	1	1	4	3.3	16.2
20-Jan	1	2	6	0	A	0	0	1	1	1	2	7	9	8	7	8	2	0	0	1	0	0	1	0	2.6	9.1
21-Jan	1	0	0	A	0	0	0	0	0	1	3	9	15	15	17	16	15	8	15	25	27	28	28	29	11.1	29.3
22-Jan	30	30	A	31	31	31	29	28	27	26	29	29	29	26	23	24	18	11	6	8	15	9	9	11	22.2	31.1
23-Jan	12	A	10	10	8	8	2	4	2	3	6	8	18	15	14	11	8	2	1	1	2	4	5	7	7.0	17.9
24-Jan	A	7	10	4	4	5	4	2	3	5	11	14	17	16	10	8	5	2	2	1	3	3	7	A	6.6	17.3
25-Jan	12	12	13	14	14	15	14	15	16	16	17	17	22	28	30	28	16	3	2	2	2	1	A	5	13.7	30.2
26-Jan	10	2	5	4	1	2	2	2	1	3	7	12	13	13	9	8	7	4	3	1	1	1	1	1	4.7	13.3
27-Jan	0	0	0	0	0	A	0	0	3	5	15	28	33	33	32	30	31	31	31	31	31	30	31	31	18.5	33.5
28-Jan	31	32	32	31	A	30	29	21	6	5	6	18	31	35	34	32	30	31	31	28	32	36	36	38	27.6	37.8
29-Jan	39	38	37	A	33	34	26	20	31	30	30	28	28	20	17	30	31	30	32	34	37	37	36	33	31.0	39.1
30-Jan	36	37	A	40	42	41	31	19	2	11	17	17	38	39	35	34	28	38	40	38	37	37	37	37	31.8	41.7
31-Jan	38	A	37	37	37	38	37	37	37	37	37	37	38	37	37	36	36	36	36	34	34	34	35	33	36.3	37.7
15.1 14.1 14.4 15.7 14.3 15.6 12.3 11.0 9.9 11.1 12.7 15.8 19.1 19.9 19.1 17.3 14.4 13.3 12.5 13.8 14.2 14.6 16.2 16.3																								Diurnal Average		
39.1 37.9 37.0 40.2 41.7 40.6 37.3 37.3 37.1 36.8 37.3 37.4 38.3 39.0 36.7 35.8 36.0 38.2 39.6 38.3 37.3 37.0 37.5 37.8																								Diurnal Maximum		
C - Calibration P - Power Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																										

Hourly Averages for O₃ at Henry Pirker January 2009



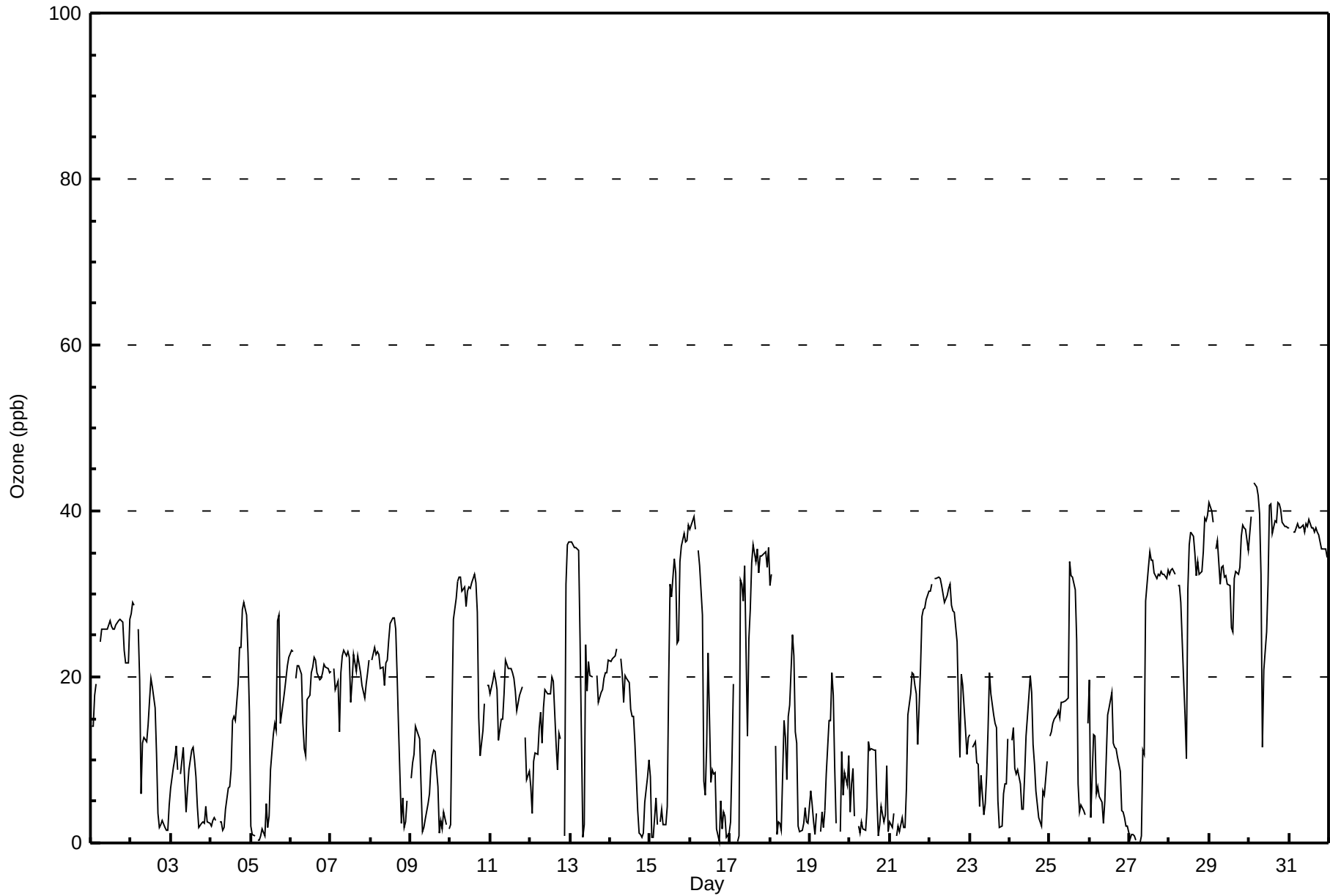
Peace Airshed Zone Association
Summary of Hourly Maximums

Henry Pirker - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009

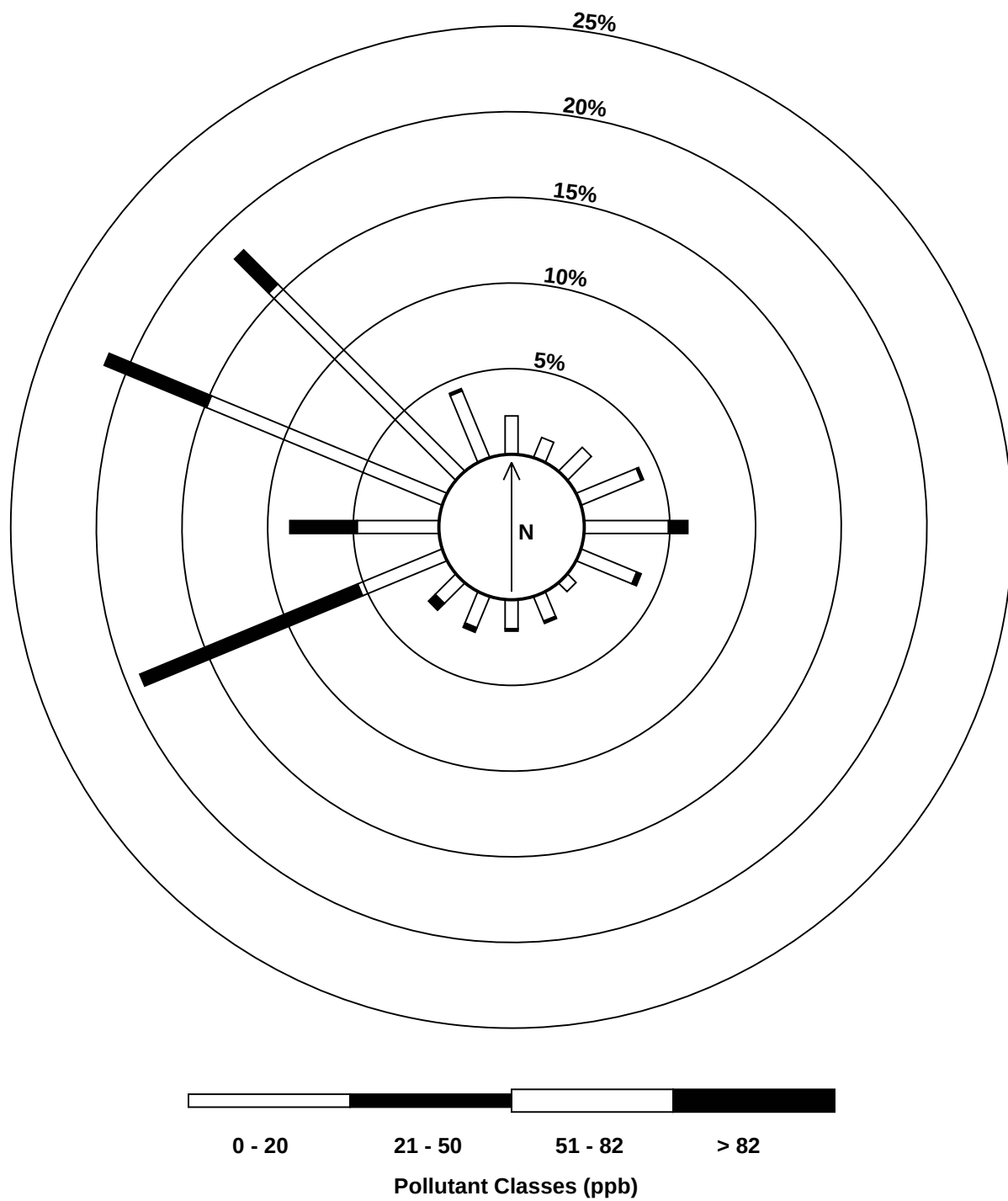
Maximum Value: 43.4 ppb on Jan 30 04:00																				Maximum Daily Average: 37.3 ppb on Jan 31					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 27 07:00																				Minimum Daily Average: 5.3 ppb on Jan 20					Hours of Data: 710	
Maximum Diurnal Average: 22.9 ppb at hour 14																				Minimum Diurnal Average: 13.5 ppb at hour 9					Hours of Missing Data: 34	
Monthly Average: 17.82 ppb																				Percentiles: P ₁ = 0.7 P ₁₀ = 2.2 Q ₁ = 6.9 Median = 17.7 Q ₃ = 28.2 P ₉₀ = 35.4 P ₉₉ = 40.8					Hours of Calibration: 33	
																				Percent Operational Time: 99.9						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	14	14	18	19	A	24	26	26	26	26	26	27	26	26	26	26	27	27	27	27	23	22	22	27	23.9	26.9
2-Jan	28	29	29	A	26	20	6	12	13	12	14	17	20	19	16	11	4	2	2	3	2	1	1	5	12.6	29.1
3-Jan	7	9	10	12	9	A	8	12	7	4	7	9	11	11	10	8	4	2	2	2	2	4	3	2	6.8	11.8
4-Jan	2	3	3	3	A	3	3	1	2	4	7	7	9	15	15	15	19	24	24	28	29	28	23	16	12.2	29.0
5-Jan	2	1	1	A	0	0	1	2	1	5	2	3	9	13	14	14	27	27	14	17	18	20	21	22	10.2	27.4
6-Jan	23	23	A	20	21	21	20	14	11	10	17	18	20	21	22	22	20	20	20	20	22	21	21	20	19.6	23.2
7-Jan	21	A	21	18	20	13	20	23	23	23	23	22	17	19	23	21	23	22	20	19	17	19	20	22	20.4	23.2
8-Jan	A	22	24	23	23	23	21	21	19	22	22	24	26	27	27	26	20	14	2	5	2	3	5	A	18.2	27.1
9-Jan	8	10	11	14	14	13	7	1	2	3	5	6	9	10	11	11	7	1	3	2	4	2	A	2	6.7	14.1
10-Jan	2	16	27	29	32	32	32	30	31	28	30	31	31	31	32	31	28	15	10	14	17	A	19	19	24.7	32.3
11-Jan	18	20	21	20	18	12	15	15	18	22	21	21	21	21	20	18	16	18	18	19	A	13	8	9	17.4	22.0
12-Jan	7	4	10	11	11	14	16	12	16	18	18	18	18	20	19	12	9	13	12	A	1	31	36	36	15.7	36.2
13-Jan	36	36	36	36	35	35	25	1	2	24	18	22	20	20	C	C	20	17	18	18	20	21	21	22	22.9	36.2
14-Jan	22	22	22	23	23	A	22	20	17	20	20	19	16	15	15	12	4	1	1	1	1	5	8	10	14.0	23.5
15-Jan	8	1	1	5	2	A	3	4	2	2	4	19	31	30	34	33	24	24	34	36	37	36	36	38	19.4	38.4
16-Jan	38	39	39	38	A	35	33	27	8	6	12	23	7	9	8	9	2	0	5	2	4	3	1	1	15.1	39.4
17-Jan	2	10	19	A	0	1	32	31	29	33	13	25	28	34	36	34	35	33	34	35	35	35	33	36	26.2	35.9
18-Jan	31	32	A	12	1	2	2	2	15	13	8	15	17	25	23	13	12	2	1	1	2	4	3	2	10.4	32.4
19-Jan	6	5	2	1	4	A	1	4	2	4	8	15	15	20	18	9	2	P	1	11	6	8	7	11	7.3	20.5
20-Jan	4	7	9	3	A	2	1	3	2	2	4	12	11	11	11	11	5	1	2	4	2	3	9	1	5.3	12.1
21-Jan	2	2	3	A	1	2	1	3	2	2	7	15	18	21	20	19	18	12	21	27	28	28	29	30	13.6	30.3
22-Jan	30	31	A	32	32	32	32	31	30	29	30	31	31	29	28	28	24	17	10	20	19	14	11	13	25.3	32.0
23-Jan	13	A	12	12	10	10	4	8	3	5	8	14	21	18	15	14	14	5	2	2	6	7	7	13	9.7	20.5
24-Jan	A	12	14	9	8	9	7	4	4	8	13	18	20	18	12	10	6	3	3	2	6	6	10	A	9.2	20.2
25-Jan	13	13	14	15	15	16	15	17	17	17	17	17	34	32	32	31	24	7	4	5	4	3	A	14	16.4	33.8
26-Jan	20	3	13	13	6	7	6	5	2	5	10	15	16	18	12	12	11	10	9	4	4	3	2	2	8.7	19.6
27-Jan	0	1	1	1	0	A	0	1	11	11	29	33	35	34	34	33	32	32	32	33	32	32	32	33	21.0	35.0
28-Jan	32	33	33	32	A	31	31	29	20	15	10	30	36	37	37	35	32	34	32	33	35	39	39	39	31.6	39.4
29-Jan	41	40	39	A	35	36	31	33	33	32	32	31	31	26	25	32	33	32	33	37	38	38	38	35	34.1	41.0
30-Jan	37	39	A	43	43	42	40	32	12	21	26	31	41	41	37	39	39	41	41	40	39	38	38	38	36.4	43.4
31-Jan	38	A	37	37	38	38	38	38	38	37	38	38	39	38	38	37	38	37	37	35	35	35	35	34	37.3	39.0
17.4 17.0 17.3 18.5 16.5 18.2 16.1 14.9 13.5 14.9 16.1 20.2 22.1 22.9 22.4 20.8 18.7 16.5 15.4 16.7 16.4 17.5 18.5 19.1																									Diurnal Average	
41.0 39.9 39.4 43.4 42.9 41.8 39.7 38.0 38.3 37.4 38.5 38.1 40.7 40.9 37.9 38.8 38.7 41.0 40.8 40.3 38.7 39.1 38.8 39.4																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

Hourly Maximums for O₃ at Henry Pirker

January 2009



Pollutant Rose for O₃ at Henry Pirker January 2009



Peace Airshed Zone Association
Summary of Eight Hour Running Averages

Henry Pirker - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009

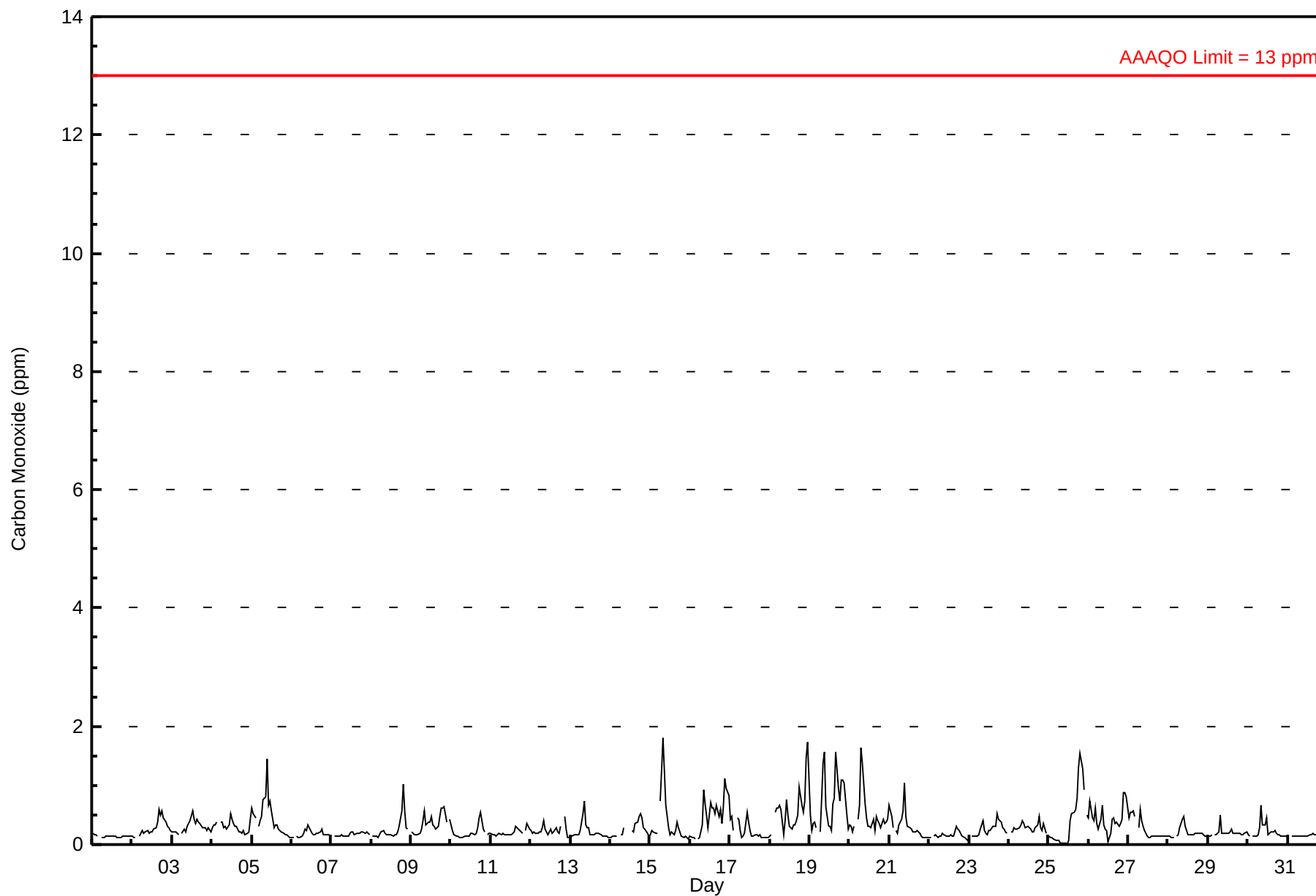
Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 37.8 ppb on Jan 31 01:00																				Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0					
Minimum Value: 0.0 ppb on Jan 27 08:00																									
Percentiles: P ₁ = 0.3 P ₁₀ = 1.9 Q ₁ = 5.1 Median = 12.9 Q ₃ = 21.7 P ₉₀ = 30.8 P ₉₉ = 37.2																									
Day	Hourly Period Ending At (MST)																							Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jan	13	12	11	11	11	13	16	18	20	22	24	25	25	25	25	25	25	25	25	25	25	24	23	23	25.3
2-Jan	23	23	24	23	24	22	20	17	15	12	10	10	9	10	11	12	11	10	9	7	5	3	2	1	23.8
3-Jan	2	2	3	4	5	5	6	6	6	5	5	5	5	6	6	7	7	6	6	5	4	3	2	2	6.7
4-Jan	2	2	2	2	2	2	2	2	2	2	2	3	3	5	6	7	9	12	13	15	18	19	20	20	20.3
5-Jan	18	15	13	11	7	4	1	0	0	0	0	1	1	3	4	5	7	9	11	12	14	15	16	18	18.1
6-Jan	18	18	19	19	19	20	19	17	15	14	13	13	13	13	13	14	15	17	18	18	19	19	19	18	19.6
7-Jan	18	18	18	18	17	16	15	16	16	17	17	18	18	19	19	19	18	18	18	17	17	17	17	17	19.0
8-Jan	16	16	17	18	19	20	20	20	19	19	19	20	20	21	21	22	22	20	18	15	12	9	6	4	21.9
9-Jan	2	3	4	5	7	8	8	7	6	6	5	4	4	4	5	5	6	5	5	5	4	3	2	1	7.7
10-Jan	1	2	4	8	11	16	17	21	25	27	28	29	29	29	29	29	28	25	22	20	18	16	14	12	29.0
11-Jan	11	13	15	16	17	15	14	14	14	14	14	14	15	16	17	18	18	18	17	17	16	15	13	11	18.1
12-Jan	10	8	6	5	6	6	7	7	8	10	11	12	13	14	14	14	13	13	11	11	9	8	11	15	15.3
13-Jan	20	23	28	28	33	34	31	26	22	19	15	13	11	10	10	11	14	15	16	16	16	16	17	17	34.1
14-Jan	18	19	19	20	20	21	21	20	19	19	18	17	16	16	15	14	12	11	8	6	5	3	2	2	20.7
15-Jan	2	2	2	3	3	3	2	1	1	1	1	3	6	8	12	14	15	17	20	22	24	25	26	28	27.8
16-Jan	31	34	35	36	36	35	34	31	26	21	17	14	13	9	7	6	6	5	5	3	2	2	1	0	35.5
17-Jan	0	0	1	1	1	1	2	6	8	11	12	12	14	18	20	21	22	23	25	28	29	30	29	30	29.8
18-Jan	29	28	28	24	20	15	12	7	5	2	3	3	5	7	9	10	10	9	9	8	6	4	2	1	29.1
19-Jan	1	1	1	1	1	1	1	1	1	1	1	2	4	5	7	7	7	8	8	6	5	3	2	1	8.0
20-Jan	1	1	2	2	2	2	2	1	1	1	1	2	3	4	5	6	6	6	5	5	3	2	2	1	5.7
21-Jan	1	1	1	1	1	1	0	0	0	0	1	2	4	6	8	10	11	12	14	16	17	19	20	22	21.9
22-Jan	24	27	28	29	30	30	30	30	30	29	29	29	29	28	27	27	26	24	21	18	16	14	12	11	30.1
23-Jan	10	10	11	11	10	10	9	8	6	6	5	5	6	7	9	9	10	10	10	9	7	6	4	4	10.8
24-Jan	3	4	5	6	6	6	6	5	5	5	5	6	8	9	10	11	11	10	9	8	6	4	4	3	10.8
25-Jan	4	6	7	9	11	12	13	14	14	15	15	15	16	18	20	22	22	20	18	16	14	11	8	4	21.7
26-Jan	4	3	4	4	4	4	4	3	2	3	3	4	5	7	7	8	9	9	9	7	6	4	3	2	9.1
27-Jan	2	1	1	1	0	0	0	0	0	1	3	7	12	15	19	22	26	29	31	31	31	31	31	31	31.4
28-Jan	31	31	31	31	31	31	31	29	26	22	18	16	18	19	20	21	24	27	30	31	32	32	32	33	32.8
29-Jan	34	35	36	37	37	36	35	32	31	30	29	29	29	27	26	27	27	27	27	28	29	31	33	34	36.8
30-Jan	34	35	36	36	37	38	37	35	30	26	25	22	22	22	22	24	27	31	34	36	36	36	36	37	37.7
31-Jan	38	38	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	36	36	35	35	35	37.8
37.8 37.8 37.4 37.2 37.2 37.7 37.2 37.3 37.2 37.1 37.2 37.2 37.3 37.3 37.2 37.0 36.9 36.7 36.6 36.3 36.2 35.9 36.3 36.7																									
Diurnal Maximums																									
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb																									

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

**Henry Pirker - Carbon Monoxide (CO) - ppm
January 1, 2009 to February 1, 2009**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.79 ppm on Jan 15 09:00 Maximum Daily Average: 0.69 ppm on Jan 19																					Hours in Service: 744					
Minimum Value: 0.0 ppm on Jan 25 12:00 Minimum Daily Average: 0.14 ppm on Jan 1 Maximum Diurnal Average: 0.47 ppm at hour 9 Minimum Diurnal Average: 0.22 ppm at hour 3 Monthly Average: 0.302 ppm Percentiles: P ₁ = 0.07 P ₁₀ = 0.13 Q ₁ = 0.15 Median = 0.21 Q ₃ = 0.35 P ₉₀ = 0.57 P ₉₉ = 1.41																					Hours of Data: 709					
																					Hours of Missing Data: 35					
																					Hours of Calibration: 35					
																					Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	0.2	0.2	0.2	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.19
2-Jan	0.1	0.1	0.1	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.6	0.5	0.6	0.5	0.4	0.3	0.3	0.2	0.28	0.60
3-Jan	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.3	0.4	0.4	0.6	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.30	0.57
4-Jan	0.3	0.3	0.3	0.4	A	0.4	0.4	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.31	0.52
5-Jan	0.6	0.5	0.5	A	0.3	0.4	0.5	0.8	0.8	1.4	0.7	0.7	0.6	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.44	1.44
6-Jan	0.1	0.1	A	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.19	0.34
7-Jan	0.2	A	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.22
8-Jan	A	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	1.0	0.6	0.3	0.3	A	0.26	1.01
9-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.3	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.6	0.4	A	0.4	0.36	0.64
10-Jan	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.3	0.2	A	0.2	0.2	0.21	0.54
11-Jan	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	A	0.2	0.4	0.3	0.20	0.36
12-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	A	0.5	0.3	0.1	0.1	0.24	0.48
13-Jan	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.22	0.72
14-Jan	0.1	0.1	0.1	0.1	0.1	A	0.2	0.2	0.3	C	C	C	A	0.2	0.2	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.2	0.1	0.25	0.51
15-Jan	0.2	0.2	0.2	0.2	0.2	A	0.7	1.3	1.8	0.7	0.5	0.3	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.37	1.79
16-Jan	0.1	0.1	0.1	0.1	A	0.1	0.1	0.3	0.9	0.7	0.5	0.3	0.7	0.6	0.6	0.5	0.7	0.5	0.6	0.4	0.6	1.1	0.9	0.8	0.50	1.11
17-Jan	0.4	0.5	0.2	A	0.4	0.4	0.2	0.1	0.2	0.2	0.5	0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.23	0.55
18-Jan	0.1	0.2	A	0.5	0.6	0.6	0.7	0.6	0.2	0.4	0.8	0.5	0.3	0.3	0.3	0.3	0.4	0.5	1.0	0.7	0.5	0.7	1.5	1.7	0.59	1.74
19-Jan	0.5	0.2	0.3	0.4	0.3	A	0.2	0.8	1.4	1.6	0.6	0.3	0.3	0.2	0.7	0.8	1.6	0.9	0.7	1.1	1.1	1.0	0.5	0.3	0.69	1.56
20-Jan	0.3	0.3	0.2	0.3	A	0.4	0.7	1.6	1.4	0.7	0.4	0.3	0.3	0.3	0.4	0.2	0.5	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.48	1.64
21-Jan	0.7	0.5	0.3	A	0.2	0.2	0.3	0.4	0.6	1.0	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.31	1.04
22-Jan	0.1	0.1	A	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.16	0.30
23-Jan	0.1	A	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.25	0.53
24-Jan	A	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.5	0.3	0.2	0.3	0.2	A	0.29	0.47
25-Jan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.5	0.6	0.8	1.3	1.5	1.3	0.9	A	0.5	0.41	1.54
26-Jan	0.5	0.7	0.5	0.4	0.6	0.3	0.3	0.4	0.7	0.3	0.3	0.2	0.1	0.2	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.9	0.9	0.8	0.44	0.88
27-Jan	0.5	0.5	0.5	0.6	0.5	A	0.3	0.6	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.27	0.59
28-Jan	0.1	0.1	0.1	0.1	A	0.1	0.2	0.3	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.48
29-Jan	0.2	0.2	0.2	A	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.50
30-Jan	0.2	0.1	A	0.1	0.1	0.1	0.2	0.3	0.7	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.22	0.67
31-Jan	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.15	0.18
0.25 0.25 0.22 0.22 0.23 0.22 0.26 0.39 0.47 0.40 0.32 0.27 0.26 0.24 0.27 0.28 0.34 0.33 0.37 0.36 0.34 0.33 0.29 0.30																								Diurnal Average		
0.68 0.73 0.54 0.56 0.62 0.62 0.74 1.64 1.79 1.56 0.76 0.73 0.72 0.61 0.69 0.78 1.56 0.94 1.31 1.54 1.29 1.11 1.46 1.74																								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 January 2009

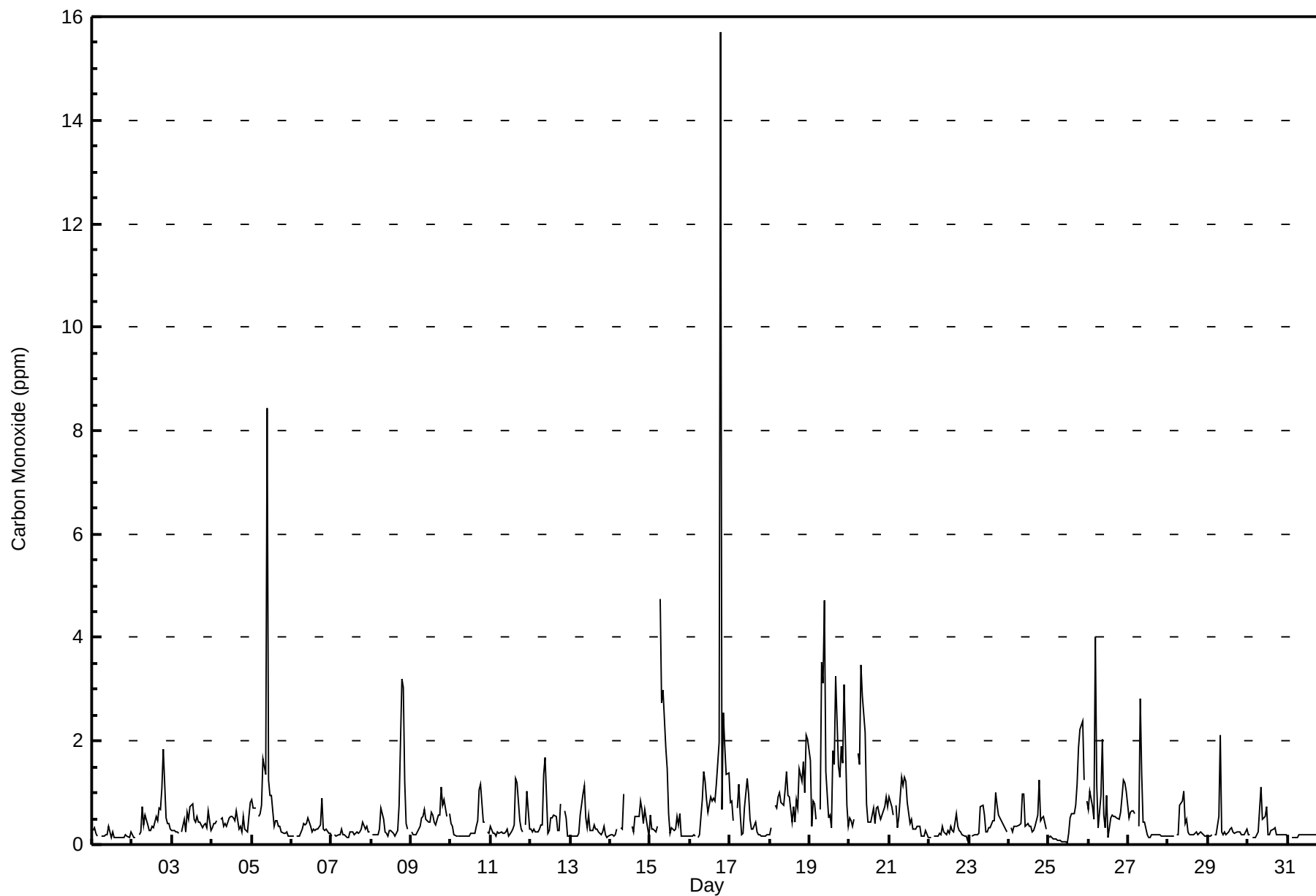


Peace Airshed Zone Association
Summary of Hourly Maximums

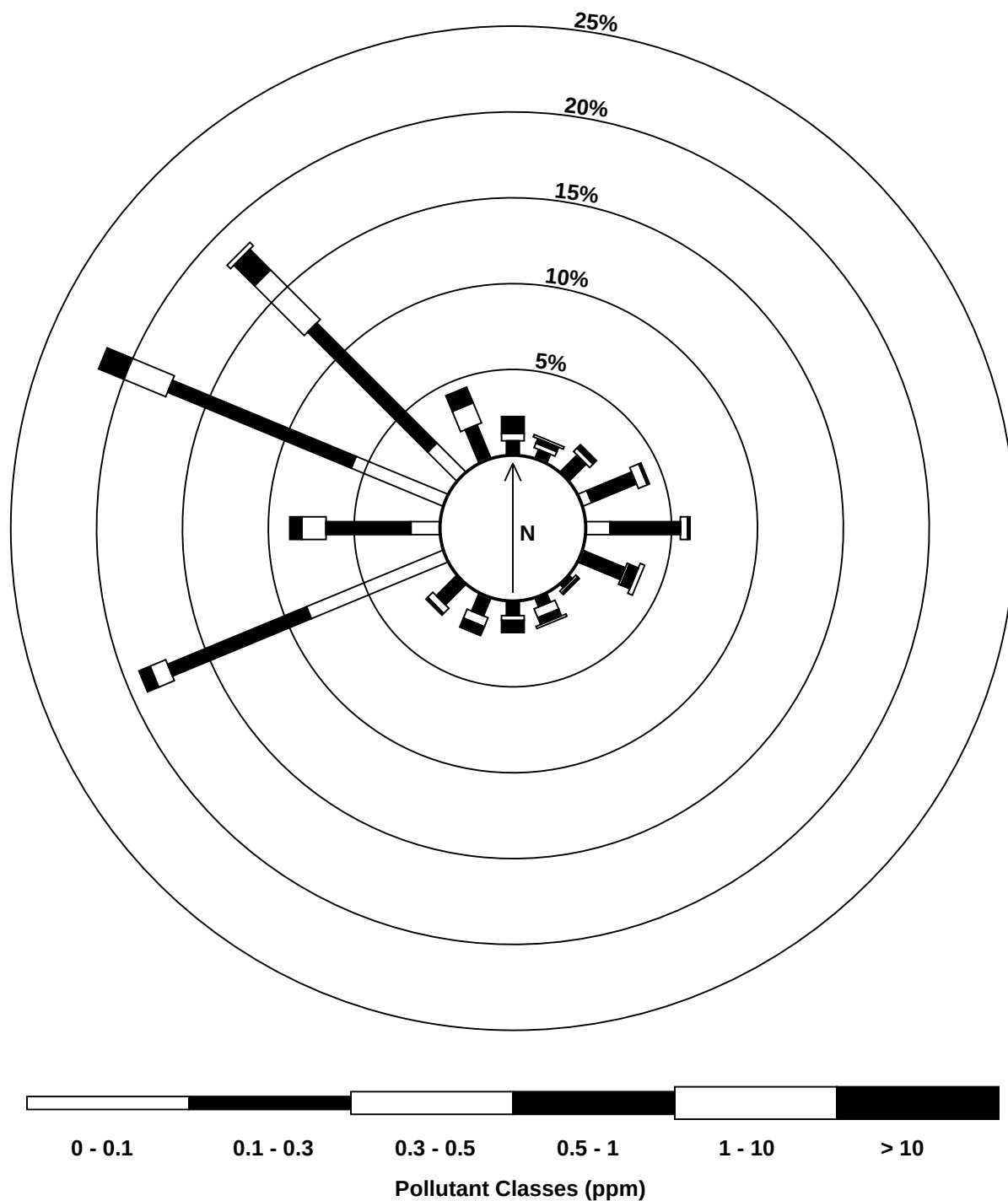
Henry Pirker - Carbon Monoxide (CO) - ppm
January 1, 2009 to February 1, 2009

Maximum Value: 15.70 ppm on Jan 16 19:00																					Maximum Daily Average: 1.57 ppm on Jan 16				Hours in Service: 744	
Minimum Value: 0.0 ppm on Jan 25 12:00																					Minimum Daily Average: 0.17 ppm on Jan 31				Hours of Data: 709	
Maximum Diurnal Average: 1.18 ppm at hour 19																					Minimum Diurnal Average: 0.28 ppm at hour 4				Hours of Missing Data: 35	
Monthly Average: 0.556 ppm																					Percentiles: P ₁ = 0.09 P ₁₀ = 0.15 Q ₁ = 0.20 Median = 0.32 Q ₃ = 0.58 P ₉₀ = 1.14 P ₉₉ = 3.44				Hours of Calibration: 35	
																					Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.19	0.34
2-Jan	0.2	0.1	0.1	A	0.2	0.3	0.7	0.4	0.6	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.7	0.7	1.1	1.8	0.5	0.4	0.4	0.3	0.48	1.84
3-Jan	0.3	0.3	0.3	0.3	0.2	A	0.2	0.5	0.2	0.6	0.5	0.7	0.8	0.5	0.4	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.7	0.3	0.42	0.79
4-Jan	0.3	0.4	0.4	0.5	A	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.6	0.5	0.5	0.7	0.3	0.4	0.3	0.5	0.3	0.2	0.5	0.8	0.45	0.81
5-Jan	0.9	0.7	0.7	A	0.6	0.6	0.7	1.7	1.4	8.4	1.2	1.0	1.0	0.4	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.95	8.43
6-Jan	0.2	0.2	A	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.9	0.3	0.3	0.3	0.2	0.2	0.31	0.90
7-Jan	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.2	0.2	0.23	0.42
8-Jan	A	0.2	0.2	0.2	0.2	0.3	0.7	0.5	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.8	3.2	3.0	1.2	0.4	0.3	A	0.60	3.20
9-Jan	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.7	0.5	0.4	0.4	0.6	0.6	0.4	0.4	0.6	0.6	1.1	0.8	0.9	0.6	A	0.6	0.50	1.12
10-Jan	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	1.1	1.2	0.4	0.4	A	0.2	0.2	0.32	1.16
11-Jan	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.4	1.3	1.2	0.5	0.3	0.3	A	0.4	1.0	0.3	0.39	1.26
12-Jan	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.4	1.4	1.7	0.2	0.3	0.5	0.5	0.6	0.5	0.3	0.3	0.8	A	0.6	0.5	0.2	0.2	0.47	1.68
13-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.6	1.0	1.1	0.5	0.3	0.6	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.34	1.14
14-Jan	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	1.0	C	C	C	A	0.3	0.3	0.5	0.5	0.5	0.8	0.7	0.4	0.7	0.3	0.2	0.42	0.98
15-Jan	0.6	0.3	0.3	0.2	0.4	A	4.8	2.8	3.0	1.9	1.5	0.6	0.2	0.3	0.3	0.3	0.5	0.4	0.6	0.2	0.2	0.2	0.2	0.2	0.85	4.75
16-Jan	0.2	0.2	0.2	0.2	A	0.1	0.2	0.9	1.4	1.2	0.9	0.6	0.9	0.8	0.9	0.8	1.2	2.0	15.7	0.7	2.6	1.9	1.3	1.4	1.57	15.70
17-Jan	0.8	0.9	0.4	A	0.7	1.2	0.6	0.2	0.2	0.7	1.3	1.0	0.5	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.48	1.26
18-Jan	0.2	0.3	A	0.7	0.7	0.9	1.0	0.8	0.7	1.0	1.4	0.9	0.9	0.4	0.7	0.4	0.9	0.7	1.5	1.2	1.6	1.0	2.1	2.0	0.97	2.11
19-Jan	1.6	0.3	0.8	0.8	0.5	A	0.7	3.5	3.1	4.7	1.4	0.5	0.6	0.3	1.8	1.6	3.3	1.5	1.3	1.9	1.6	3.1	0.8	0.4	1.57	4.71
20-Jan	0.5	0.5	0.3	0.5	A	1.8	1.6	3.5	2.9	2.2	0.8	0.4	0.4	0.4	0.7	0.4	0.7	0.7	0.6	0.5	0.6	0.7	0.9	0.7	0.97	3.47
21-Jan	0.9	0.7	0.6	A	0.7	0.3	0.5	1.3	1.1	1.3	1.2	0.8	0.4	0.5	0.3	0.3	0.3	0.4	0.4	0.2	0.2	0.2	0.3	0.1	0.57	1.29
22-Jan	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.23	0.59
23-Jan	0.2	A	0.2	0.2	0.2	0.2	0.2	0.7	0.8	0.6	0.3	0.2	0.3	0.3	0.5	0.5	1.0	0.8	0.6	0.5	0.4	0.3	0.3	0.2	0.41	1.00
24-Jan	A	0.3	0.2	0.4	0.4	0.4	0.4	0.4	1.0	1.0	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.6	1.2	0.5	0.5	0.6	0.3	A	0.47	1.24
25-Jan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.5	0.6	0.6	0.8	1.2	1.9	2.2	2.4	1.2	A	0.8	0.59	2.38
26-Jan	0.7	1.0	0.7	0.5	4.0	1.1	0.3	0.9	2.0	0.6	0.3	0.9	0.1	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.9	1.3	1.2	1.0	0.90	4.01
27-Jan	0.5	0.6	0.7	0.7	0.6	A	0.3	2.8	1.4	0.4	0.4	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.47	2.83
28-Jan	0.2	0.2	0.2	0.2	A	0.2	0.2	0.7	0.8	1.0	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.30	1.02
29-Jan	0.2	0.2	0.2	A	0.2	0.2	0.5	2.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.32	2.11
30-Jan	0.2	0.2	A	0.1	0.1	0.2	0.2	0.7	1.1	0.5	0.5	0.7	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31	1.12
31-Jan	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.19
0.38 0.34 0.31 0.28 0.45 0.40 0.58 0.92 0.92 1.05 0.55 0.46 0.39 0.36 0.43 0.45 0.56 0.54 1.18 0.64 0.61 0.55 0.45 0.41																									Diurnal Average	
1.64 1.02 0.85 0.80 4.01 1.76 4.75 3.53 3.13 8.43 1.48 0.98 0.96 0.83 1.81 1.56 3.25 1.99 15.70 3.05 2.56 3.09 2.11 2.04																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums for CO at Henry Pirker January 2009



Pollutant Rose for CO at Henry Pirker January 2009



Peace Airshed Zone Association
Summary of Eight Hour Running Averages

Henry Pirker - Carbon Monoxide (CO) - ppm
January 1, 2009 to February 1, 2009

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 1.00 ppm on Jan 25 23:00																				Hours in Service: 744 Hours of Data: 736 Hours of Missing Data: 8 Hours of Calibration: 8 Percent Operational Time: 100.0					
Minimum Value: 0.04 ppm on Jan 25 13:00 Percentiles: P ₁ = 0.10 P ₁₀ = 0.14 Q ₁ = 0.17 Median = 0.24 Q ₃ = 0.37 P ₉₀ = 0.57 P ₉₉ = 0.92																									
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-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.24
2-Jan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.43
3-Jan	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.41
4-Jan	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.36
5-Jan	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.73
6-Jan	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
7-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
8-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.46
9-Jan	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.49
10-Jan	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.49
11-Jan	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.29
12-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.28
13-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34
14-Jan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	N	N	N	N	N	N	N	N	0.4	0.4	0.4	0.4	0.4	0.3	0.38
15-Jan	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.7	0.8	0.8	0.8	0.7	0.6	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.78
16-Jan	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.70
17-Jan	0.7	0.7	0.6	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.67
18-Jan	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.9	0.88
19-Jan	0.9	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.9	1.0	1.0	0.9	0.99
20-Jan	0.7	0.7	0.6	0.5	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.80
21-Jan	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.47
22-Jan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
23-Jan	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.36
24-Jan	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
25-Jan	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.9	0.9	1.0	1.0	1.00
26-Jan	1.0	1.0	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.98
27-Jan	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.64
28-Jan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.29
29-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
30-Jan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
31-Jan	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17
0.98 0.97 0.84 0.74 0.71 0.71 0.53 0.56 0.71 0.77 0.80 0.80 0.77 0.72 0.74 0.74 0.76 0.68 0.69 0.79 0.89 0.99 1.00 0.99 Diurnal Maximums																									
N - Not Valid Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																									

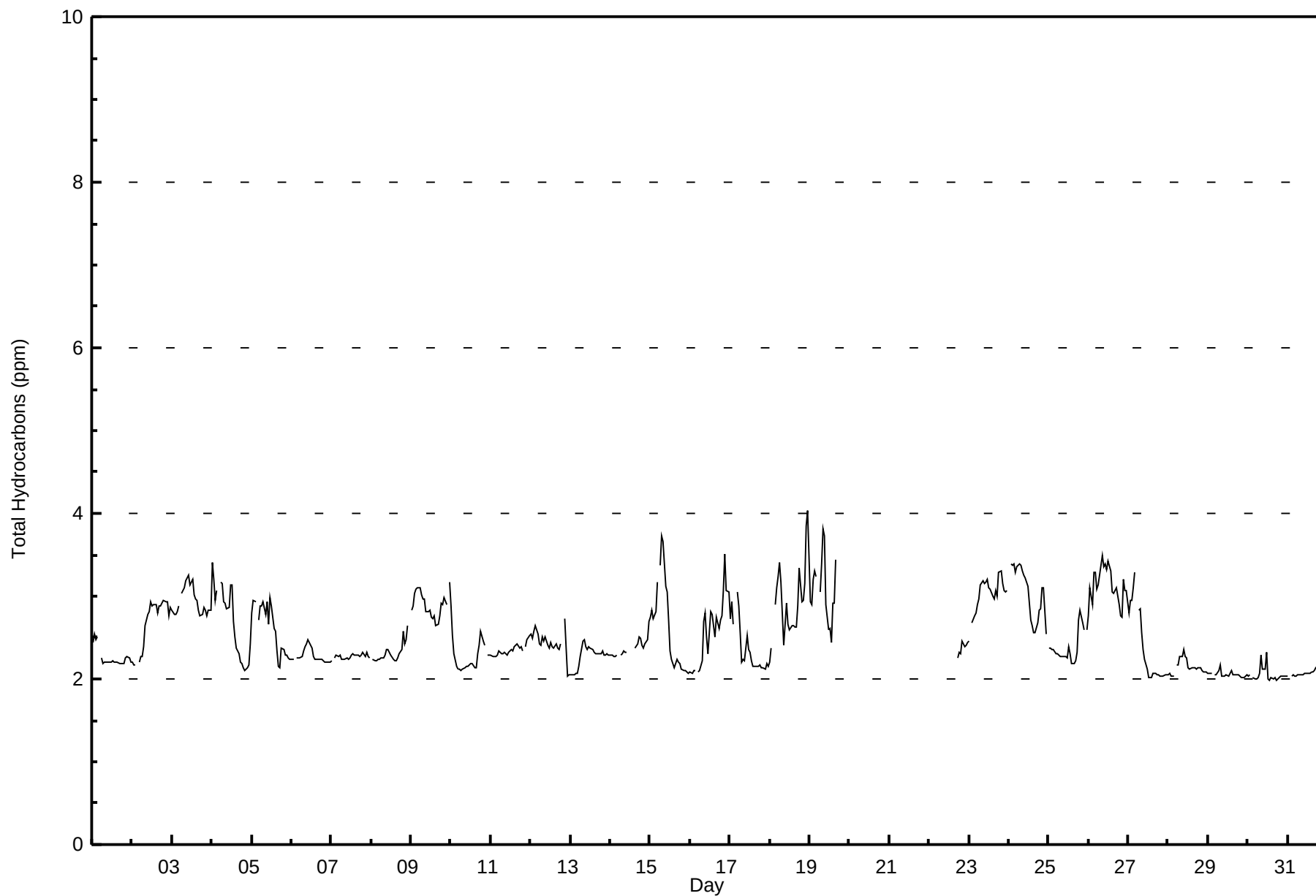
Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Total Hydrocarbons (THC) - ppm
January 1, 2009 to February 1, 2009

Maximum Value: 4.03 ppm on Jan 19 00:00																				Maximum Daily Average: 3.13 ppm on Jan 26					Hours in Service: 744			
Minimum Value: 2.0 ppm on Jan 30 14:00																				Minimum Daily Average: 2.05 ppm on Jan 30					Hours of Data: 640			
Maximum Diurnal Average: 2.63 ppm at hour 9																				Minimum Diurnal Average: 2.40 ppm at hour 16					Hours of Missing Data: 104			
Monthly Average: 2.510 ppm																				Percentiles: P ₁ = 2.00 P ₁₀ = 2.07 Q ₁ = 2.20 Median = 2.36 Q ₃ = 2.83 P ₉₀ = 3.11 P ₉₉ = 3.59					Hours of Calibration: 32			
																									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-Jan	2.4	2.5	2.5	2.5	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.26	2.54		
2-Jan	2.2	2.2	2.2	A	2.2	2.3	2.3	2.4	2.6	2.8	2.8	2.9	2.9	2.9	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.9	2.67	2.95		
3-Jan	2.8	2.8	2.8	2.8	2.9	A	3.0	3.1	3.2	3.2	3.2	3.1	3.2	3.0	3.0	2.9	2.8	2.8	2.8	2.9	2.8	2.8	2.8	2.8	2.94	3.25		
4-Jan	3.4	3.2	3.0	3.1	A	3.2	3.1	2.9	2.9	2.8	2.9	3.1	3.1	2.7	2.5	2.4	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.4	2.70	3.40		
5-Jan	2.8	3.0	2.9	A	2.7	2.9	2.9	2.9	2.8	2.9	2.7	3.0	2.9	2.6	2.6	2.3	2.1	2.1	2.4	2.4	2.3	2.3	2.3	2.2	2.61	2.98		
6-Jan	2.2	2.2	A	2.3	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.28	2.47		
7-Jan	2.2	A	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.27	2.33		
8-Jan	A	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.4	2.6	2.4	2.5	2.6	A	2.32	2.64		
9-Jan	2.8	2.9	3.0	3.1	3.1	3.1	3.0	3.0	3.0	2.8	2.8	2.8	2.7	2.7	2.8	2.7	2.7	2.8	2.9	2.9	3.0	2.9	A	3.2	2.90	3.18		
10-Jan	2.9	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.3	2.4	2.6	2.5	2.4	A	2.3	2.3	2.27	2.89		
11-Jan	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	A	2.4	2.5	2.5	2.35	2.53		
12-Jan	2.5	2.5	2.6	2.6	2.5	2.4	2.4	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	A	2.7	2.4	2.0	2.0	2.43	2.72		
13-Jan	2.0	2.0	2.1	2.1	2.1	2.1	2.3	2.5	2.5	2.4	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.27	2.48		
14-Jan	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.3	2.3	2.3	C	C	C	A	2.4	2.4	2.5	2.5	2.4	2.4	2.4	2.5	2.7	2.37	2.69		
15-Jan	2.7	2.8	2.7	2.8	3.2	A	3.4	3.7	3.7	3.1	3.1	2.7	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.61	3.73		
16-Jan	2.1	2.1	2.1	2.1	A	2.1	2.1	2.2	2.7	2.8	2.5	2.3	2.8	2.8	2.6	2.5	2.7	2.6	2.7	2.8	3.1	3.5	3.1	3.0	2.58	3.52		
17-Jan	2.7	2.9	2.7	A	3.0	2.9	2.6	2.2	2.2	2.2	2.5	2.3	2.3	2.2	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.36	3.04		
18-Jan	2.2	2.4	A	2.9	3.1	3.2	3.4	3.2	2.4	2.7	2.9	2.7	2.6	2.6	2.6	2.6	2.6	2.9	3.3	2.9	2.9	3.2	3.9	4.0	2.92	4.03		
19-Jan	2.9	2.9	3.2	3.3	3.2	A	3.1	3.4	3.8	3.7	2.9	2.6	2.6	2.4	2.9	2.9	3.4	P	P	P	P	P	P	P	--	3.81		
20-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--		
21-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--		
22-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2.3	2.3	2.3	2.5	2.4	2.4	2.4	--	2.46
23-Jan	2.5	A	2.7	2.8	2.8	2.9	3.0	3.1	3.2	3.2	3.2	3.2	3.1	3.1	3.0	3.0	3.1	3.0	3.3	3.3	3.2	3.1	3.0	3.1	3.02	3.30		
24-Jan	A	3.4	3.4	3.4	3.3	3.4	3.4	3.4	3.3	3.3	3.2	3.1	2.9	2.7	2.6	2.6	2.6	2.7	2.8	2.8	3.1	3.1	2.5	A	3.04	3.39		
25-Jan	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.2	2.2	2.2	2.3	2.7	2.8	2.7	2.6	A	2.6	2.38	2.83		
26-Jan	2.8	3.1	2.9	3.3	3.3	3.1	3.1	3.4	3.5	3.4	3.4	3.3	3.4	3.3	3.1	3.0	3.1	3.1	2.9	2.8	2.7	3.2	3.1	3.1	3.13	3.50		
27-Jan	2.8	2.9	3.0	3.1	3.3	A	2.8	2.9	2.6	2.4	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.37	3.29		
28-Jan	2.1	2.1	2.0	2.0	A	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.15	2.35		
29-Jan	2.1	2.1	2.1	A	2.0	2.1	2.1	2.2	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.17		
30-Jan	2.0	2.1	A	2.0	2.0	2.0	2.0	2.1	2.3	2.1	2.1	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.05	2.33		
31-Jan	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.08	2.16		
																									Diurnal Average			
																									Diurnal Maximum			
2.47 2.55 2.54 2.57 2.61 2.50 2.58 2.62 2.63 2.61 2.57 2.55 2.52 2.45 2.43 2.40 2.43 2.40 2.47 2.46 2.47 2.49 2.45 2.50																												
3.40 3.38 3.36 3.39 3.29 3.36 3.40 3.73 3.81 3.74 3.38 3.32 3.42 3.30 3.05 3.04 3.44 3.10 3.34 3.30 3.15 3.52 3.85 4.03																												
C - Calibration P - Power Failure A - Automated Daily Zero Span																												

Hourly Averages for THC at Henry Pirker

January 2009

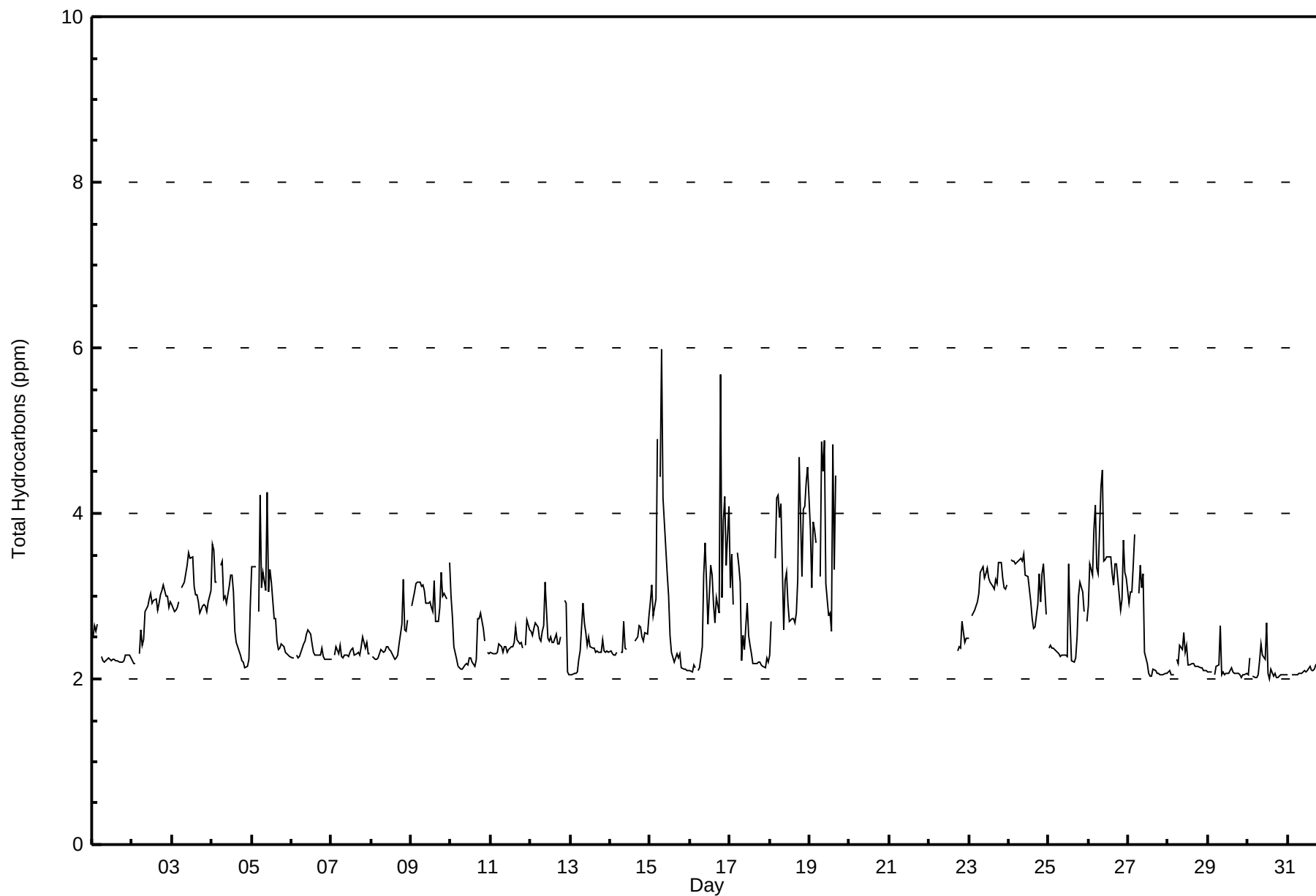


Peace Airshed Zone Association
Summary of Hourly Maximums

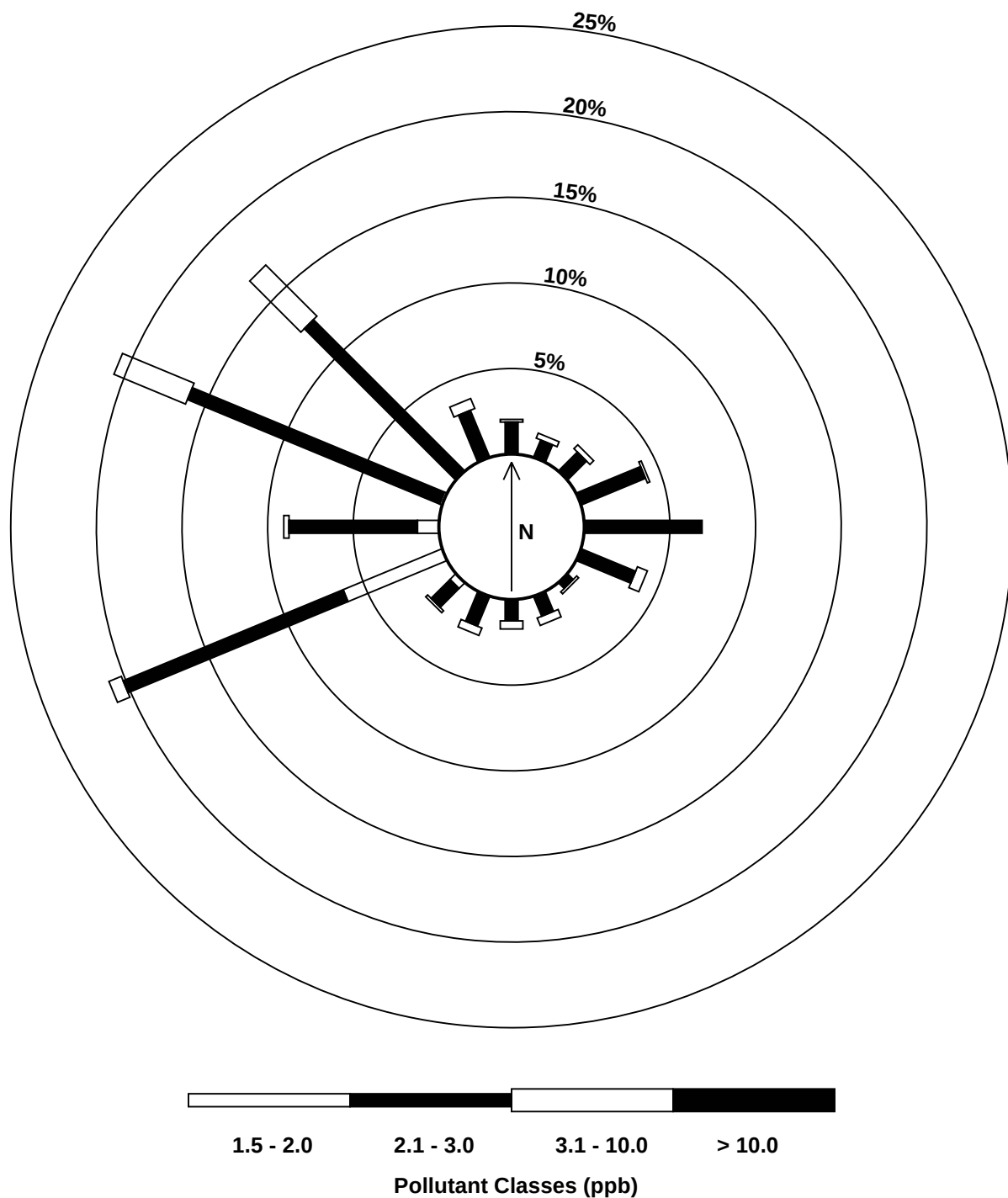
Henry Pirker - Total Hydrocarbons (THC) - ppm
January 1, 2009 to February 1, 2009

Maximum Value: 5.98 ppm on Jan 15 08:00																				Maximum Daily Average: 3.43 ppm on Jan 26					Hours in Service: 744			
Minimum Value: 2.0 ppm on Jan 30 14:00																				Minimum Daily Average: 2.10 ppm on Jan 29					Hours of Data: 640			
Maximum Diurnal Average: 2.93 ppm at hour 8																				Minimum Diurnal Average: 2.48 ppm at hour 16					Hours of Missing Data: 104			
Monthly Average: 2.669 ppm																				Percentiles: P ₁ = 2.03 P ₁₀ = 2.09 Q ₁ = 2.24 Median = 2.45 Q ₃ = 3.02 P ₉₀ = 3.39 P ₉₉ = 4.81					Hours of Calibration: 32			
																				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-Jan	2.5	2.6	2.6	2.7	A	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.30	2.67		
2-Jan	2.2	2.2	2.2	A	2.9	2.6	2.4	2.5	2.8	2.9	3.0	3.0	2.9	3.0	3.0	2.8	2.9	3.0	3.1	3.1	3.0	3.0	2.9	2.9	2.77	3.13		
3-Jan	2.9	2.8	2.8	2.9	2.9	A	3.1	3.2	3.3	3.4	3.5	3.5	3.5	3.1	3.0	3.0	2.9	2.8	2.9	2.9	2.9	2.8	2.9	3.1	3.05	3.52		
4-Jan	3.6	3.6	3.2	3.2	A	3.4	3.4	3.0	3.0	2.9	3.1	3.3	3.3	3.1	2.6	2.4	2.3	2.3	2.2	2.2	2.1	2.2	2.2	2.9	2.84	3.62		
5-Jan	3.4	3.4	3.4	A	2.8	4.2	3.1	3.3	3.1	4.3	3.0	3.3	3.2	2.7	2.7	2.5	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.91	4.25		
6-Jan	2.3	2.3	A	2.3	2.3	2.3	2.4	2.4	2.5	2.6	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.2	2.2	2.2	2.2	2.34	2.60		
7-Jan	2.2	A	2.3	2.4	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.4	2.5	2.4	2.4	2.3	2.3	2.33	2.51		
8-Jan	A	2.3	2.2	2.2	2.2	2.3	2.4	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.2	2.3	2.3	2.4	2.7	3.2	2.6	2.6	2.7	A	2.41	3.20		
9-Jan	2.9	3.0	3.1	3.2	3.2	3.2	3.1	3.1	3.1	2.9	2.9	2.9	2.9	2.8	3.2	2.7	2.7	2.9	3.3	3.0	3.0	3.0	A	3.4	3.01	3.41		
10-Jan	3.0	2.7	2.4	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.7	2.7	2.8	2.6	2.5	A	2.3	2.3	2.37	3.01		
11-Jan	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.4	2.4	2.3	2.4	2.4	2.4	2.4	2.6	2.5	2.4	2.4	2.4	A	2.4	2.7	2.6	2.41	2.71		
12-Jan	2.6	2.5	2.6	2.7	2.6	2.5	2.5	2.6	2.6	3.2	2.5	2.5	2.5	2.4	2.4	2.5	2.4	2.4	2.5	A	2.9	2.9	2.1	2.1	2.55	3.17		
13-Jan	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.9	2.7	2.6	2.4	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.5	2.3	2.3	2.3	2.3	2.34	2.92		
14-Jan	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.7	2.4	2.4	C	C	C	A	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.5	2.8	2.46	2.77		
15-Jan	2.9	3.1	2.8	3.0	4.9	A	4.4	6.0	4.2	3.6	3.3	3.0	2.5	2.3	2.2	2.3	2.3	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.95	5.98		
16-Jan	2.1	2.1	2.2	2.1	A	2.1	2.1	2.4	3.3	3.6	3.2	2.7	3.4	3.2	2.9	2.7	3.0	2.8	5.7	3.0	3.9	4.2	3.4	4.1	3.05	5.68		
17-Jan	3.1	3.5	2.9	A	3.5	3.4	3.2	2.2	2.5	2.4	2.9	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.3	2.2	2.55	3.52		
18-Jan	2.3	2.7	A	3.5	4.2	4.2	3.9	4.1	2.6	3.2	3.3	2.9	2.7	2.7	2.7	2.7	2.8	3.2	4.7	3.2	4.0	4.1	4.4	4.6	3.42	4.68		
19-Jan	3.8	3.1	3.9	3.8	3.6	A	3.2	4.9	4.5	4.9	3.1	2.8	2.8	2.6	4.8	3.3	4.5	P	P	P	P	P	P	P	--	4.88		
20-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--		
21-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--		
22-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2.3	2.4	2.4	2.7	2.4	2.5	2.5	--	2.69
23-Jan	2.5	A	2.8	2.8	2.9	2.9	3.0	3.3	3.4	3.2	3.3	3.3	3.2	3.2	3.1	3.1	3.2	3.2	3.4	3.4	3.2	3.1	3.1	3.1	3.12	3.40		
24-Jan	A	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.4	3.5	3.3	3.2	3.1	2.9	2.7	2.6	2.6	2.9	3.3	2.9	3.3	3.4	2.8	A	3.18	3.51		
25-Jan	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.4	2.7	2.2	2.2	2.2	2.5	3.0	3.2	3.0	2.8	A	2.7	2.52	3.39		
26-Jan	2.9	3.4	3.3	3.8	4.1	3.3	3.3	4.3	4.5	3.4	3.4	3.5	3.5	3.5	3.3	3.1	3.4	3.4	3.0	2.8	3.0	3.7	3.3	3.2	3.43	4.52		
27-Jan	2.9	3.1	3.1	3.4	3.8	A	3.0	3.4	3.1	3.3	2.3	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.53	3.75		
28-Jan	2.1	2.1	2.1	2.1	A	2.2	2.2	2.4	2.4	2.6	2.3	2.4	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.19	2.57		
29-Jan	2.1	2.1	2.1	A	2.1	2.2	2.2	2.6	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.10	2.64		
30-Jan	2.1	2.2	A	2.0	2.0	2.0	2.0	2.2	2.4	2.3	2.2	2.7	2.1	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.12	2.68		
31-Jan	2.1	A	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.10	2.19		
																									Diurnal Average			
																									Diurnal Maximum			
C - Calibration																												
P - Power Failure																												
A - Automated Daily Zero Span																												

Hourly Maximums for THC at Henry Pirker January 2009



Pollutant Rose for THC at Henry Pirker
January 2009

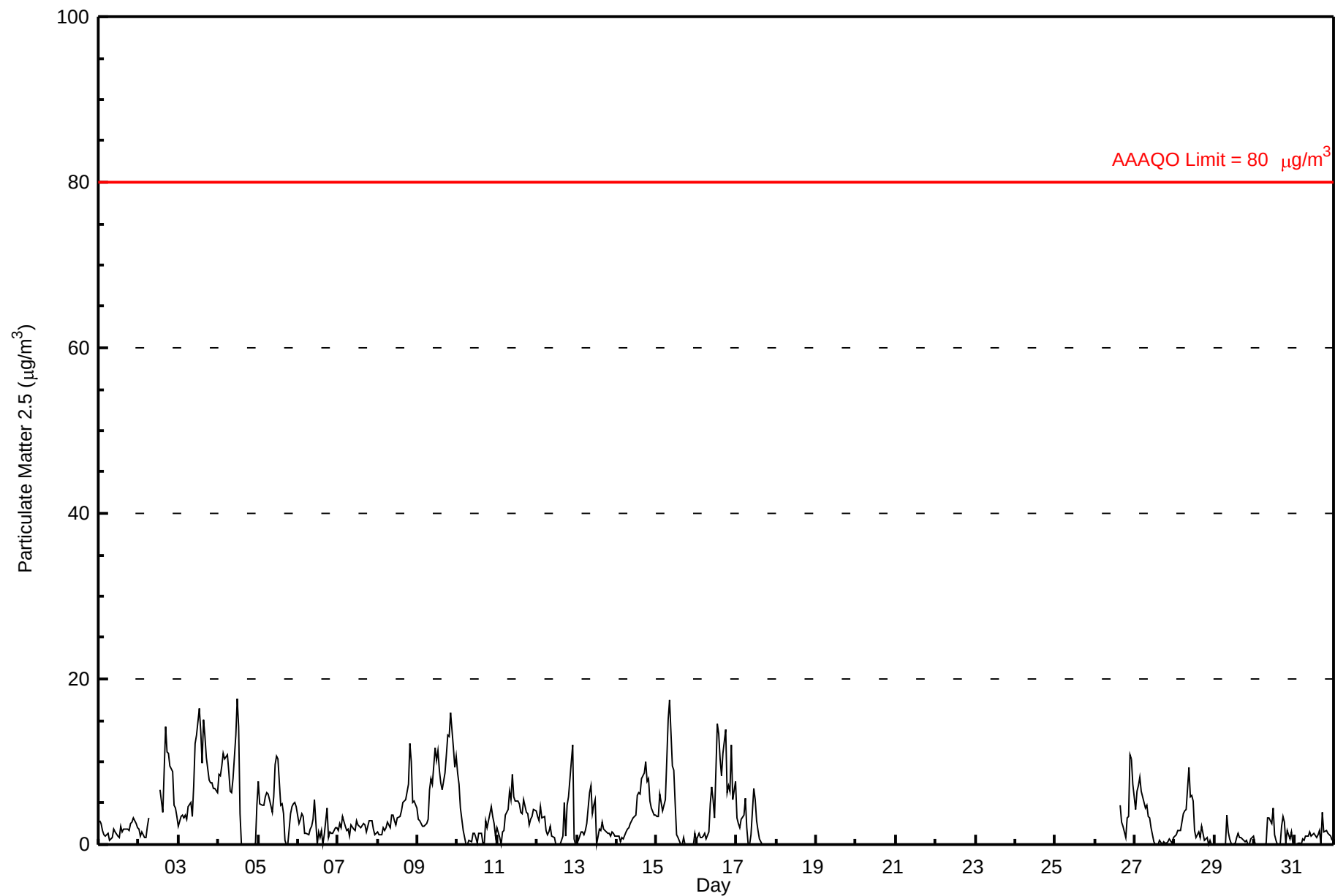


Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 17.6 µg/m³ on Jan 4 12:00 Minimum Value: 0 µg/m³ on Jan 4 15:00 Maximum Diurnal Average: 5.1 µg/m³ at hour 11 Monthly Average: 3.53 µg/m³																					Hours in Service: 744 Hours of Data: 524 Hours of Missing Data: 220 Hours of Calibration: 1 Percent Operational Time: 70.6						
Maximum Daily Average: 7.9 µg/m³ on Jan 9 Minimum Daily Average: 0.5 µg/m³ on Jan 29 Minimum Diurnal Average: 2.5 µg/m³ at hour 5 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.9 Median = 2.3 Q ₃ = 5.0 P ₉₀ = 8.9 P ₉₉ = 14.4																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	3	2	2	1	1	1	0	1	1	2	1	1	1	2	2	2	2	2	2	2	3	3	2	2	1.7	3.2	
2-Jan	2	1	1	1	1	2	3	N	N	N	N	M	C	7	4	9	14	11	11	10	9	5	4	3	5.5	14.2	
3-Jan	2	3	4	3	4	3	5	5	3	7	12	13	16	14	10	15	13	11	8	7	7	7	7	6	7.7	16.4	
4-Jan	8	8	10	11	10	11	9	6	6	8	13	18	14	4	0	0	0	0	0	0	0	0	0	5	5.9	17.6	
5-Jan	8	5	5	5	6	6	6	5	4	6	10	11	10	5	5	4	1	0	0	4	5	5	5	5	5.1	10.8	
6-Jan	3	3	4	3	1	1	1	2	2	3	5	0	2	1	2	0	1	4	1	2	1	1	2	2	2.0	5.5	
7-Jan	2	3	2	3	2	2	2	1	2	2	2	3	2	2	2	3	2	2	2	3	3	2	1	1	2.1	3.4	
8-Jan	2	1	1	2	2	2	3	2	4	4	3	2	3	3	4	5	5	5	7	12	10	5	5	4	4.1	12.2	
9-Jan	3	3	3	2	2	2	3	7	8	7	12	10	11	9	7	7	9	11	13	13	16	12	9	11	7.9	16.0	
10-Jan	9	7	4	2	1	0	0	1	0	1	1	1	0	1	1	0	0	3	2	4	5	3	3	1	2.1	8.6	
11-Jan	2	1	0	1	2	4	4	6	5	8	6	5	5	5	4	4	6	4	4	2	3	3	4	4	3.9	8.4	
12-Jan	3	3	5	3	3	2	1	2	2	1	1	0	0	0	0	1	5	1	5	6	10	12	1	0	2.8	12.0	
13-Jan	0	0	2	2	1	2	3	6	7	4	5	5	0	2	2	3	2	2	1	1	1	2	1	1	2.2	7.2	
14-Jan	1	1	0	1	1	1	2	2	3	3	3	3	6	6	6	8	9	10	8	8	5	4	4	4	4.1	10.0	
15-Jan	3	3	6	4	5	5	10	15	18	10	9	5	1	1	0	0	1	0	0	0	0	0	0	1	4.1	17.5	
16-Jan	0	1	1	1	1	1	1	2	5	7	5	3	15	13	10	8	11	14	6	7	6	12	5	8	6.1	14.5	
17-Jan	3	3	2	3	4	6	2	0	0	1	7	5	3	2	1	0	0	N	N	N	N	N	N	N	--	6.7	
18-Jan	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	--	--
19-Jan	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	--	--
20-Jan	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	--	--
21-Jan	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	--	--
22-Jan	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	--	--
23-Jan	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	--	--
24-Jan	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	--	--
25-Jan	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	--	--
26-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	3	2	1	3	3	11	10	7	--	10.9	
27-Jan	4	7	7	8	6	5	4	5	3	3	2	0	0	0	0	1	0	0	0	0	0	1	0	1	2.4	8.1	
28-Jan	1	1	2	2	3	4	4	4	9	6	6	5	2	1	1	1	2	1	0	1	0	1	0	0	2.4	9.3	
29-Jan	0	0	0	0	0	0	0	4	2	1	0	0	0	1	1	1	1	0	0	0	0	0	1	1	0.5	3.6	
30-Jan	0	0	0	0	0	0	0	0	3	3	3	4	1	0	0	0	2	3	3	0	2	1	1	0	1.2	4.4	
31-Jan	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	0	4	2	2	1	1	1	1	1.0	4.0	
2.7 2.6 2.7 2.7 2.5 2.8 2.9 3.6 4.2 4.2 5.1 4.7 4.5 3.6 2.9 3.3 3.8 4.1 3.4 4.0 4.1 4.1 3.1 3.1																								Diurnal Average			
8.6 8.3 9.5 11.1 10.3 10.9 10.1 15.1 17.5 9.5 13.2 17.6 16.4 13.7 10.3 15.0 14.2 13.9 13.2 13.1 16.0 12.0 10.4 10.7																								Diurnal Maximum			
C - Calibration M - Maintenance N - Not Valid Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 µg/m³ 24-hr 30 µg/m³																											

Hourly Averages for PM_{2.5} at Henry Pirker January 2009

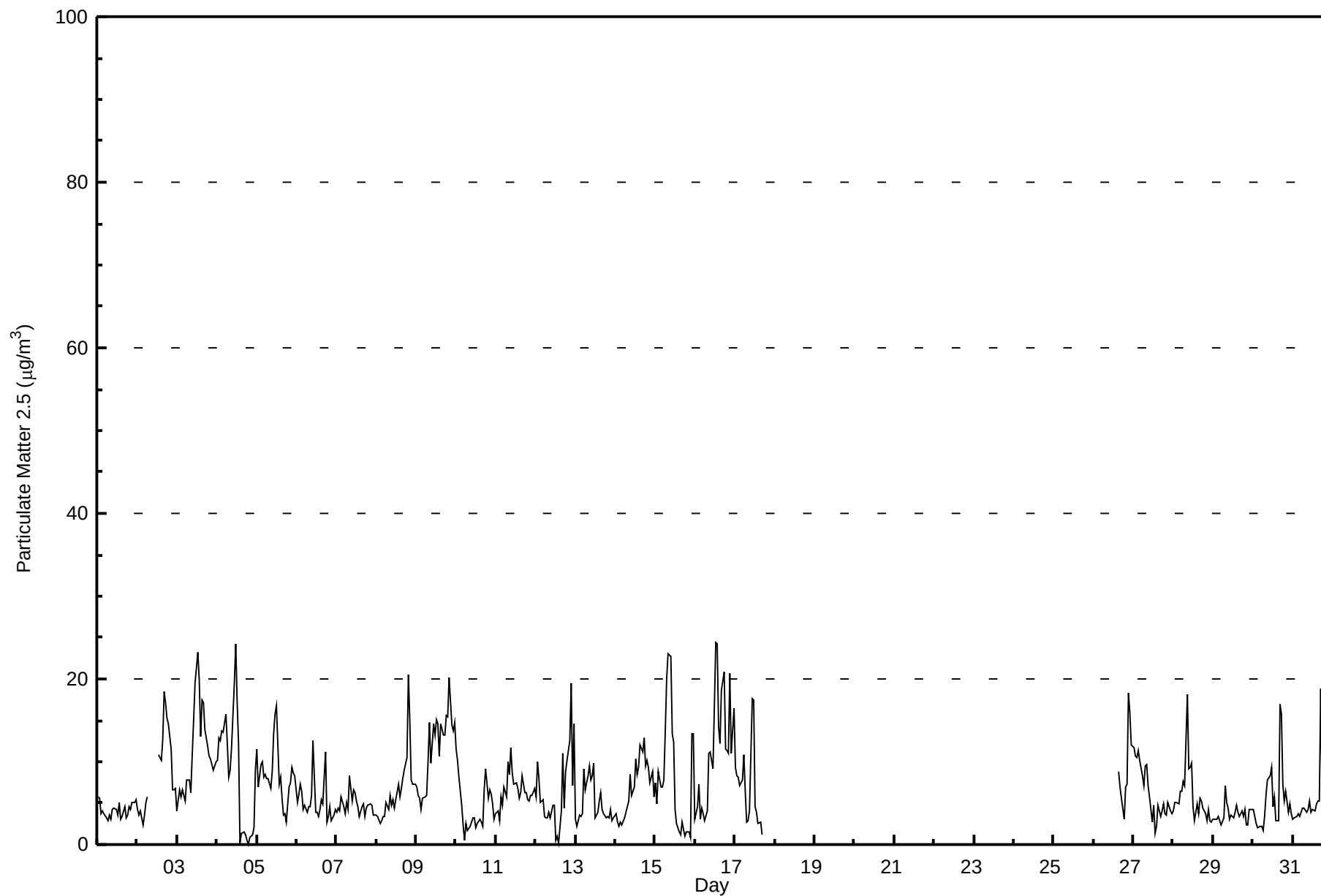


Peace Airshed Zone Association
Summary of Hourly Maximums

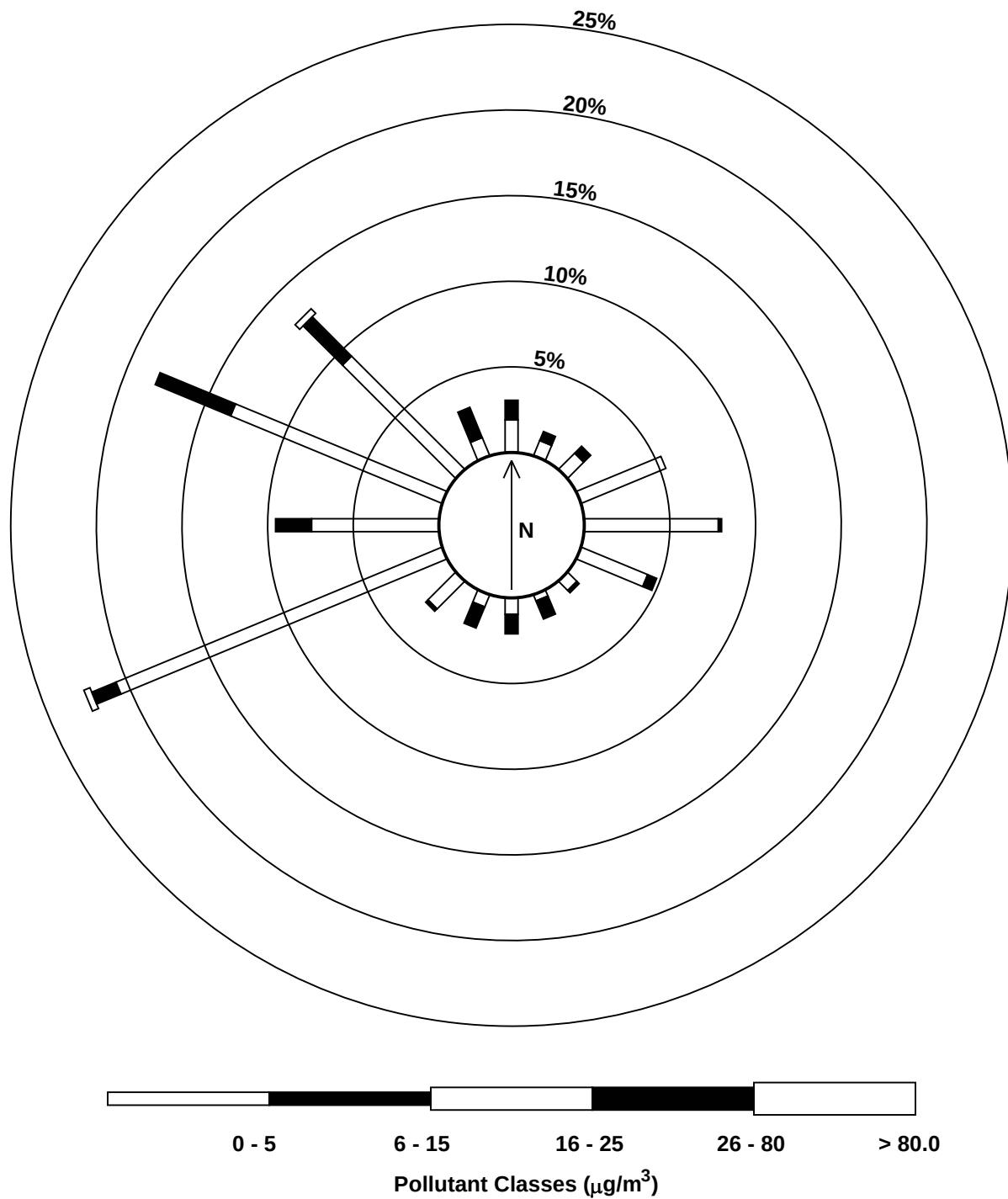
Henry Pirker - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

Maximum Value: 24.4 μg/m ³ on Jan 16 13:00																				Maximum Daily Average: 11.6 μg/m ³ on Jan 9										Hours in Service: 744	
Minimum Value: 0 μg/m ³ on Jan 4 20:00																				Minimum Daily Average: 3.7 μg/m ³ on Jan 29										Hours of Data: 524	
Maximum Diurnal Average: 9.3 μg/m ³ at hour 11																				Minimum Diurnal Average: 5.3 μg/m ³ at hour 5										Hours of Missing Data: 220	
Monthly Average: 6.91 μg/m ³																				Percentiles: P ₁ = 0.4 P ₁₀ = 2.7 Q ₁ = 3.6 Median = 5.3 Q ₃ = 9.1 P ₉₀ = 13.5 P ₉₉ = 23.0										Hours of Calibration: 1	
																				Percent Operational Time: 70.6											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	6	6	4	4	4	3	3	4	3	4	4	4	3	5	3	3	5	3	4	5	4	5	5	5	4.1	5.8					
2-Jan	4	4	4	2	4	5	6	N	N	N	N	M	C	11	10	13	19	17	15	15	12	7	7	7	8.9	18.6					
3-Jan	4	7	6	7	6	5	8	8	6	11	15	19	23	20	13	18	17	14	12	11	10	10	9	10	11.1	23.2					
4-Jan	10	13	13	14	14	16	12	8	9	12	19	24	17	12	0	1	2	1	1	0	1	1	2	9	8.8	24.2					
5-Jan	11	7	10	10	8	9	8	8	7	9	13	16	17	7	8	6	3	4	3	7	7	9	9	8	8.5	16.8					
6-Jan	5	6	7	6	4	5	4	5	5	6	12	4	4	3	4	5	5	11	3	3	4	3	4	4	5.2	12.5					
7-Jan	4	4	4	6	5	4	5	4	8	5	7	6	5	5	3	5	5	3	4	5	5	5	4	4	4.8	8.3					
8-Jan	4	3	2	3	3	3	5	4	6	5	5	4	5	7	6	7	8	9	11	20	15	8	7	7	6.6	20.5					
9-Jan	7	6	6	4	6	6	6	10	15	10	15	13	15	15	11	15	13	13	16	15	20	14	14	15	11.6	20.2					
10-Jan	12	10	8	5	2	1	3	2	2	3	3	3	2	3	3	3	2	7	9	6	7	6	5	3	4.5	11.6					
11-Jan	4	4	3	6	5	7	6	10	8	12	9	7	7	7	6	6	8	6	6	5	5	6	6	7	6.5	11.6					
12-Jan	6	10	8	5	5	3	3	3	4	3	5	5	0	1	0	4	11	4	9	10	12	19	7	15	6.4	19.5					
13-Jan	3	2	3	3	4	9	7	8	9	8	8	10	3	4	5	6	4	4	3	3	3	4	3	3	5.1	9.9					
14-Jan	4	3	2	3	2	3	4	5	5	8	6	7	10	9	9	12	11	13	9	10	9	7	9	6	7.0	12.9					
15-Jan	7	5	9	7	7	8	14	20	23	23	13	12	4	3	2	1	3	2	1	2	1	1	13	13	8.1	23.1					
16-Jan	3	4	7	3	4	4	3	4	11	11	10	9	24	24	14	12	19	21	12	11	11	21	11	16	11.3	24.4					
17-Jan	9	8	8	7	8	11	6	3	3	4	18	17	5	4	2	3	1	N	N	N	N	N	N	N	--	17.6					
18-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
19-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
20-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
21-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
22-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
23-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
24-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
25-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--					
26-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	9	7	6	3	7	7	18	16	12	--	18.3					
27-Jan	12	11	10	11	10	8	7	9	10	7	6	3	5	1	2	5	3	4	5	4	3	5	4	4	6.2	11.6					
28-Jan	4	5	5	5	7	7	8	7	18	9	9	10	5	3	5	4	6	5	4	4	3	4	3	3	5.9	18.2					
29-Jan	3	3	3	3	3	2	3	7	5	4	3	4	3	4	5	4	3	4	3	4	2	2	4	4	3.7	7.2					
30-Jan	4	3	3	2	2	2	2	3	6	8	8	9	5	6	3	3	17	16	7	5	6	4	5	4	5.6	17.0					
31-Jan	3	3	3	4	3	4	4	4	4	4	5	4	4	4	5	5	5	19	5	5	5	4	4	3	4.8	18.8					
5.9 5.8 5.9 5.5 5.3 5.7 5.7 6.5 8.0 7.9 9.3 9.1 8.0 7.1 5.4 6.5 7.7 8.4 6.6 7.1 7.1 7.5 6.8 7.4																									Diurnal Average						
11.6 13.0 12.6 13.7 13.5 15.8 13.6 20.1 23.1 22.7 19.5 24.2 24.4 24.2 14.2 17.5 18.7 20.9 15.6 20.5 20.2 20.6 16.0 16.4																									Diurnal Maximum						
C - Calibration M - Maintenance N - Not Valid																															

Hourly Maximums for PM_{2.5} at Henry Pirker January 2009



Pollutant Rose for PM_{2.5} at Henry Pirker **January 2009**



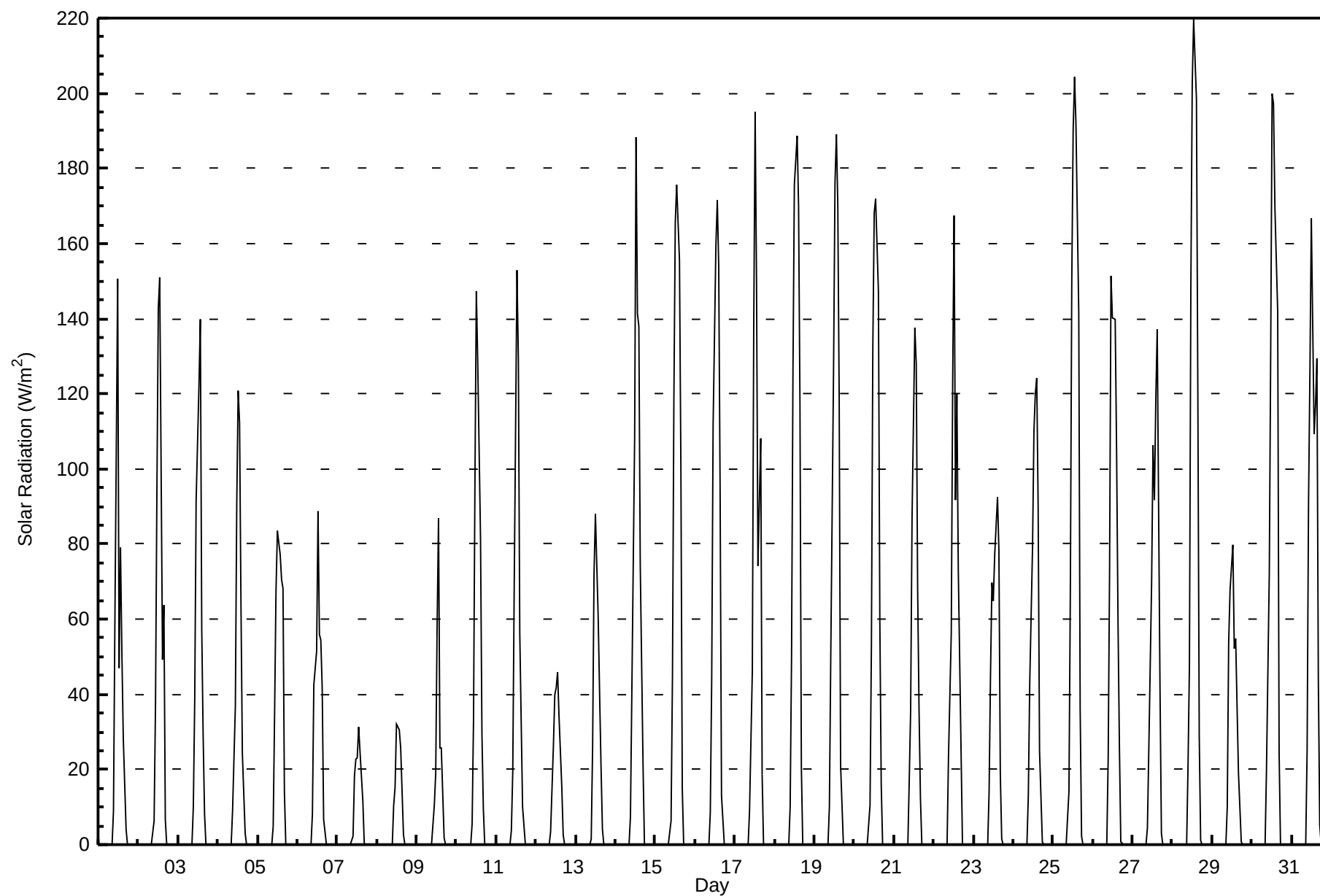
Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Solar Radiation (SR) - W/m²
January 1, 2009 to February 1, 2009

Maximum Value: 219.7 W/m ² on Jan 28 14:00																				Maximum Daily Average: 41.6 W/m ² on Jan 25					Hours in Service: 744	
Minimum Value: 0 W/m ² on Jan 1 01:00																				Minimum Daily Average: 5.5 W/m ² on Jan 8					Hours of Data: 741	
Maximum Diurnal Average: 127.1 W/m ² at hour 13																				Minimum Diurnal Average: 0.0 W/m ² at hour 1					Hours of Missing Data: 3	
Monthly Average: 24.18 W/m ²																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 23.1 P ₉₀ = 108.0 P ₉₉ = 192.8					Hours of Calibration: 0	
																									Percent Operational Time: 99.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	0	0	0	0	0	0	0	0	0	9	59	151	47	79	51	28	4	0	0	0	0	0	0	0	17.8	150.6
2-Jan	0	0	0	0	0	0	0	0	0	6	37	94	143	151	49	64	7	0	0	0	0	0	0	0	23.0	151.0
3-Jan	0	0	0	0	0	0	0	0	0	10	39	92	122	140	57	29	8	0	0	0	0	0	0	0	20.7	139.8
4-Jan	0	0	0	0	0	0	0	0	0	9	37	91	121	112	64	24	3	0	0	0	0	0	0	0	19.2	121.0
5-Jan	0	0	0	0	0	0	0	0	0	5	35	68	84	77	71	68	14	0	0	0	0	0	0	0	17.5	83.5
6-Jan	0	0	0	0	0	0	0	0	0	8	43	51	89	56	54	41	7	0	0	0	0	0	0	0	14.5	88.6
7-Jan	0	0	0	0	0	0	0	0	0	2	18	23	23	31	25	12	1	0	0	0	0	0	0	0	5.6	31.3
8-Jan	0	0	0	0	0	0	0	0	0	0	10	15	32	31	26	14	3	0	0	0	0	0	0	0	5.5	32.3
9-Jan	0	0	0	0	0	0	0	0	0	0	10	19	58	87	26	26	2	0	0	0	0	0	0	0	9.5	86.8
10-Jan	0	0	0	0	0	0	0	0	0	6	33	96	147	128	81	29	10	0	0	0	0	0	0	0	22.1	147.5
11-Jan	0	0	0	0	0	0	0	0	0	4	19	67	153	129	56	33	10	0	0	0	0	0	0	0	19.6	152.7
12-Jan	0	0	0	0	0	0	0	0	0	3	26	40	42	46	34	15	3	0	0	0	0	0	0	0	8.7	45.7
13-Jan	0	0	0	0	0	0	0	0	0	2	26	72	88	60	40	21	4	0	0	0	0	0	0	0	13.0	88.1
14-Jan	0	0	0	0	0	0	0	0	0	8	41	109	188	141	138	74	21	0	0	0	0	0	0	0	30.0	188.1
15-Jan	0	0	0	0	0	0	0	0	0	6	45	118	166	176	156	101	15	0	0	0	0	0	0	0	32.6	175.5
16-Jan	0	0	0	0	0	0	0	0	0	9	44	112	160	172	154	94	13	0	0	0	0	0	0	0	31.5	171.6
17-Jan	0	0	0	0	0	0	0	0	0	9	46	138	195	150	74	108	19	0	0	0	0	0	0	0	30.8	194.9
18-Jan	0	0	0	0	0	0	0	0	0	10	50	126	176	189	170	117	20	0	0	0	0	0	0	0	35.8	188.8
19-Jan	0	0	0	0	0	0	0	0	0	10	51	127	176	189	170	118	21	0	0	0	0	0	0	0	36.0	189.1
20-Jan	0	0	0	0	0	0	0	0	0	10	53	132	168	172	147	60	16	0	0	0	0	0	0	0	31.6	172.0
21-Jan	0	0	0	0	0	0	0	0	0	17	36	87	138	128	68	36	12	0	0	0	0	0	0	0	21.7	137.7
22-Jan	0	0	0	0	0	0	0	0	0	23	56	123	167	92	120	74	24	0	0	N	N	N	0	0	32.4	167.3
23-Jan	0	0	0	0	0	0	0	0	0	14	45	70	65	77	92	78	19	2	0	0	0	0	0	0	19.3	92.4
24-Jan	0	0	0	0	0	0	0	0	0	13	43	79	110	120	124	90	25	1	0	0	0	0	0	0	25.2	124.3
25-Jan	0	0	0	0	0	0	0	0	0	14	68	149	190	204	192	141	36	2	0	0	0	0	0	0	41.6	204.4
26-Jan	0	0	0	0	0	0	0	0	0	23	73	152	140	140	105	60	26	1	0	0	0	0	0	0	30.0	151.5
27-Jan	0	0	0	0	0	0	0	0	0	5	25	70	106	92	119	137	41	3	0	0	0	0	0	0	24.9	137.1
28-Jan	0	0	0	0	0	0	0	0	0	21	48	148	202	220	198	120	29	1	0	0	0	0	0	0	41.1	219.7
29-Jan	0	0	0	0	0	0	0	0	0	10	54	68	80	52	55	36	19	1	0	0	0	0	0	0	15.6	79.6
30-Jan	0	0	0	0	0	0	0	0	0	20	72	131	200	197	170	142	25	0	0	0	0	0	0	0	39.9	199.8
31-Jan	0	0	0	0	0	0	0	0	0	25	91	126	167	109	117	129	44	5	0	0	0	0	0	0	33.9	166.7
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 10.1 43.1 94.9 127.1 120.9 96.9 68.5 16.1 0.5 0.0 0.0 0.0 0.0 0.0 0.0																									Diurnal Average	
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 25.4 90.6 151.5 202.5 219.7 198.2 141.7 43.8 5.0 0.0 0.0 0.0 0.0 0.0																									Diurnal Maximum	
N - Not Valid																										

Hourly Averages for Solar Radiation at Henry Pirker

January 2009



Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker
 January 1, 2009 to February 1, 2009
 WS (km/h), WD (deg)

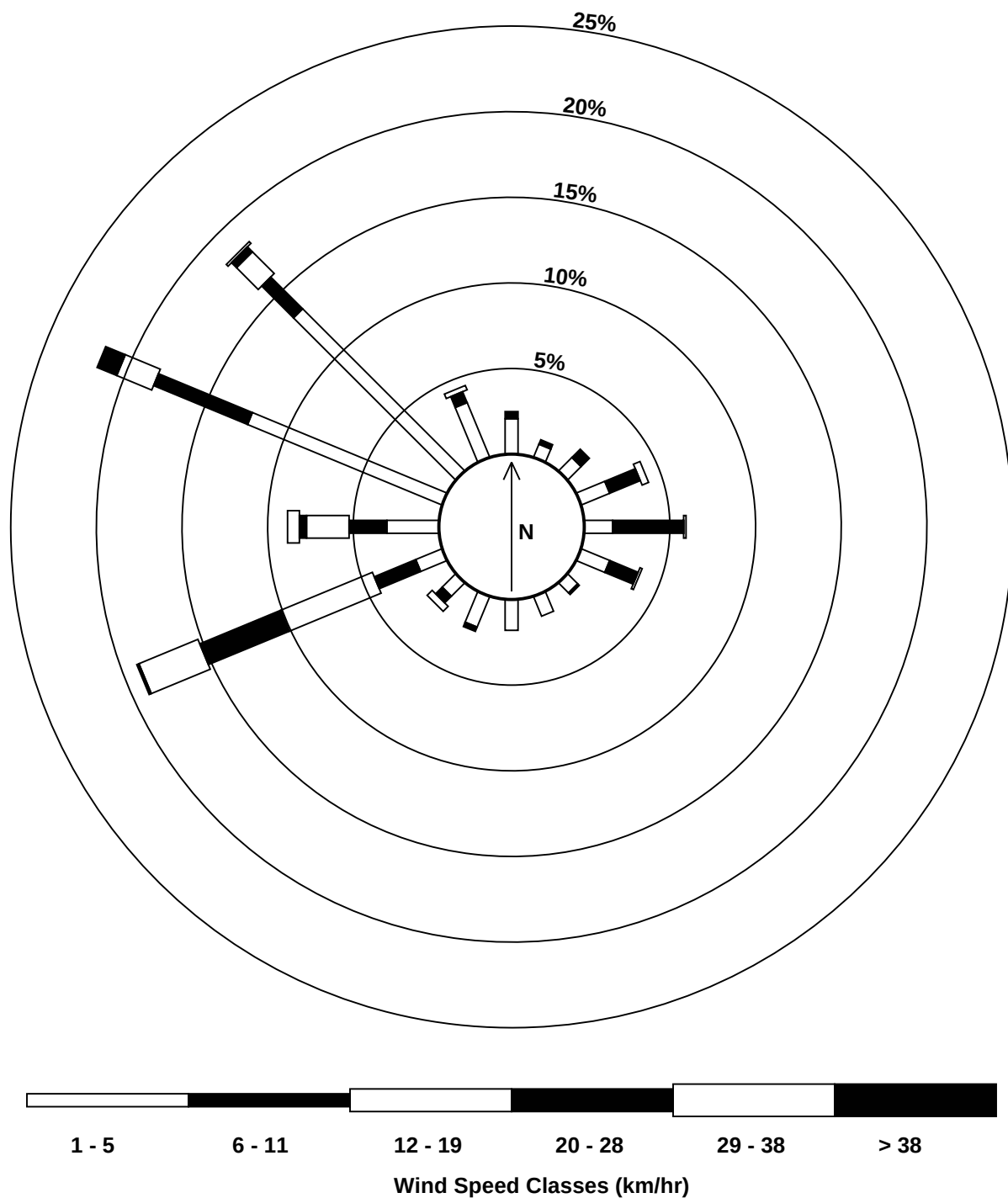
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	7	8	10	7	9	12	15	16	13	11	11	12	11	12	10	13	13	12	11	10	8	8	8	9	10.3	15.5
Dir	314	308	311	287	296	300	298	302	306	303	303	304	296	292	290	287	288	287	286	289	243	250	269	313	293.9	301.9
2 Spd	9	7	4	2	3	4	3	5	6	5	5	5	4	4	4	5	4	2	2	3	3	4	3	4	3.6	9.5
Dir	322	304	308	320	191	231	311	295	313	331	291	302	280	283	294	320	357	43	347	315	303	317	309	309	307.3	322.5
3 Spd	4	3	3	4	3	3	4	3	3	2	1	2	3	4	6	3	3	5	4	4	2	4	2	3	2.6	5.7
Dir	293	311	315	307	328	292	319	302	293	161	223	245	238	281	282	310	273	297	298	310	296	303	166	171	290.4	282.2
4 Spd	0	3	1	3	2	0	4	4	3	3	1	2	1	6	6	7	11	12	8	11	11	8	4	2	2.9	12.0
Dir	35	124	111	302	261	301	308	334	318	313	265	242	252	108	103	114	109	105	115	94	96	104	117	31	99.1	104.7
5 Spd	2	2	2	1	2	1	0	2	2	2	2	2	5	11	9	9	14	15	14	15	18	21	22	20	5.7	22.4
Dir	44	150	231	349	282	353	15	104	123	173	285	179	186	227	240	234	247	249	332	325	306	306	301	283	281.4	301.4
6 Spd	21	17	12	10	14	12	7	5	6	3	4	8	10	9	10	9	10	8	8	9	9	8	7	8	3.8	20.9
Dir	288	276	267	271	282	293	302	315	351	336	87	96	95	74	65	50	63	62	48	51	42	41	30	22	358.4	288.2
7 Spd	8	9	5	5	4	5	3	4	6	5	4	2	3	3	4	4	6	4	2	6	8	6	6	6	2.4	9.5
Dir	4	352	14	5	0	356	322	296	288	285	278	239	190	261	286	304	311	320	43	87	82	80	79	80	353.8	351.7
8 Spd	5	5	5	4	4	4	4	4	2	9	8	8	11	11	11	9	5	3	1	2	4	4	5	4	3.0	11.0
Dir	71	84	81	96	81	78	71	86	270	310	300	289	290	295	298	298	300	316	276	338	336	306	310	311	319.0	298.4
9 Spd	5	5	3	4	4	4	1	3	2	3	3	3	3	3	3	4	2	2	0	0	3	5	4	4	2.3	5.4
Dir	307	303	282	297	304	294	292	279	274	301	185	195	263	203	277	285	303	156	238	149	306	299	292	189	277.5	303.1
10 Spd	3	6	7	6	11	19	23	19	20	16	17	17	18	20	19	17	7	1	7	7	7	5	6	4	8.5	22.9
Dir	205	295	314	278	243	239	244	244	247	241	242	240	245	248	255	259	276	307	61	92	101	68	70	124	247.3	243.9
11 Spd	4	5	6	7	2	1	8	8	7	14	12	11	7	5	8	8	8	10	9	9	6	6	4	3	2.2	14.2
Dir	87	73	77	123	78	195	240	264	298	329	310	300	329	51	79	91	84	87	96	110	108	113	74	58	57.0	329.0
12 Spd	4	4	4	4	2	4	5	4	6	8	7	7	8	8	6	2	8	8	2	6	4	17	35	38	1.9	37.5
Dir	356	310	317	314	57	89	104	114	75	88	104	91	89	87	108	219	293	299	106	135	156	241	253	248	235.5	248.2
13 Spd	34	30	28	27	24	8	4	3	3	6	4	6	14	15	13	14	11	11	11	9	10	9	7	9	0.5	33.7
Dir	251	255	249	248	251	296	32	244	16	120	123	90	74	74	79	91	78	90	79	63	63	63	72	83	172.2	250.5
14 Spd	7	8	9	9	8	7	5	4	3	5	5	2	2	6	3	2	4	2	1	4	4	3	7	6	2.0	9.2
Dir	85	82	89	93	88	81	73	91	69	88	112	136	254	287	291	347	328	348	2	317	305	290	308	314	55.2	93.3
15 Spd	3	4	4	5	2	1	0	1	3	4	5	10	10	6	15	11	11	10	11	17	25	30	32	31	9.6	32.1
Dir	260	229	281	298	181	356	316	315	325	287	327	317	291	287	277	266	269	257	250	255	256	248	249	245	262.2	248.9
16 Spd	18	17	13	11	20	18	14	4	5	4	5	2	2	3	3	4	4	5	3	2	3	2	2	3	5.9	19.6
Dir	239	265	277	287	268	284	282	323	353	1	344	232	210	206	292	300	312	309	319	323	315	4	345	297	283.1	268.2
17 Spd	3	4	1	3	1	3	8	11	8	9	2	5	8	12	9	10	15	15	15	13	16	15	10	10	7.9	15.7
Dir	286	314	284	133	322	237	264	272	248	293	355	290	289	286	294	293	260	252	254	284	272	273	284	288	275.3	271.9
18 Spd	6	4	0	3	2	3	2	4	5	3	0	5	3	5	4	2	3	4	5	3	1	2	1	1	1.8	5.8
Dir	310	325	266	97	144	160	177	308	309	337	230	313	302	287	319	319	279	312	337	331	145	295	78	108	311.7	310.5
19 Spd	4	4	1	2	3	5	4	2	0	2	3	3	6	5	3	2	1	3	3	2	2	2	5	4	1.5	5.6
Dir	302	330	44	326	322	291	319	296	167	308	310	292	203	203	56	91	17	284	326	261	351	253	219	204	286.7	202.7
20 Spd	4	5	4	2	5	2	1	1	1	4	3	4	3	4	4	5	4	4	5	4	2	4	2	3	2.2	5.3
Dir	186	174	165	222	321	302	293	101	284	305	315	281	304	311	314	289	329	319	317	283	315	300	284	42	294.5	174.1
21 Spd	2	2	3	3	3	3	4	3	3	2	4	5	5	6	2	7	5	6	9	24	30	28	27	27	7.7	29.5
Dir	3	343	299	308	319	280	325	275	330	8	301	339	330	336	50	76	63	345	305	304	308	308	296	297	312.1	308.4
22 Spd	24	22	22	22	18	19	16	14	12	13	14	12	12	8	6	7	6	6	4	5	7	6	5	7	11.7	24.4
Dir	297	296	296	300	301	307	313	309	302	309	310	308	315	332	317	299	323	315	310	292	299	304	317	326	305.7	297.1

Peace Airshed Zone Association Summary of Hourly Averages

Henry Pirker
January 1, 2009 to February 1, 2009
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	7	5	4	6	5	5	4	6	4	4	5	5	5	5	4	6	4	4	4	4	5	5	4	4	4.6	7.5				
Dir	334	331	315	286	303	303	300	289	306	320	305	282	300	279	297	291	293	321	319	308	321	327	304	299	305.6	333.9				
24 Spd	4	4	4	3	3	4	3	4	4	4	3	4	5	5	7	8	7	5	5	4	5	7	12	10	4.8	12.0				
Dir	306	325	300	295	306	298	300	303	300	304	305	307	290	253	250	244	267	282	307	309	295	299	262	251	283.1	262.4				
25 Spd	13	13	15	19	18	17	20	18	22	22	21	18	11	9	11	11	6	3	1	1	2	2	3	5	11.4	22.3				
Dir	252	258	255	253	253	252	253	252	252	251	249	250	265	277	253	250	254	264	193	164	314	282	309	298	254.8	251.6				
26 Spd	1	2	4	1	2	3	4	1	3	4	3	3	4	2	5	3	4	5	3	3	1	1	4	3	2.0	4.8				
Dir	93	112	312	198	303	318	298	321	309	315	320	287	292	269	309	305	301	320	289	306	72	248	29	112	310.4	319.8				
27 Spd	0	4	1	2	3	2	3	3	8	7	9	17	29	26	21	17	24	25	21	21	19	16	17	16	12.2	29.3				
Dir	94	147	267	197	204	171	137	185	208	223	253	259	263	256	257	265	250	248	248	248	256	252	249	249	249.2	262.9				
28 Spd	17	17	18	18	16	13	11	1	3	3	2	7	14	22	17	17	19	22	19	15	17	25	19	23	13.9	25.0				
Dir	248	248	255	263	303	305	305	187	300	334	312	291	272	268	257	255	250	251	247	245	249	249	245	247	260.0	249.2				
29 Spd	28	21	12	16	11	3	5	10	21	18	16	14	9	7	9	22	22	21	24	27	28	20	12	10	15.4	28.3				
Dir	247	244	230	245	244	203	153	261	269	264	265	280	295	273	265	253	254	253	247	247	252	256	250	222	252.8	252.4				
30 Spd	4	2	8	15	18	21	14	9	6	7	3	5	26	29	18	17	19	36	39	36	35	35	35	34	19.4	38.8				
Dir	250	248	254	247	245	240	251	256	266	254	316	289	254	247	235	233	267	255	254	260	256	249	248	248	251.6	254.0				
31 Spd	36	33	29	33	30	37	32	33	35	34	37	33	31	29	28	24	30	31	30	23	20	20	22	16	29.3	36.9				
Dir	247	246	244	245	244	248	251	248	249	249	247	250	254	254	252	252	266	264	263	249	250	247	246	254	250.8	248.2				
Spd	6.5	5.8	5.4	5.9	5.9	5.6	5.1	5.0	5.4	5.0	4.8	5.3	6.1	6.1	5.4	5.4	5.8	6.0	5.2	5.2	5.8	7.0	7.4	7.1	Diurnal Average					
Dir	270.9	271.4	271.0	265.8	269.6	272.5	274.8	271.8	277.0	281.1	275.4	274.8	271.7	267.1	270.9	267.1	273.1	269.0	272.4	274.6	275.5	271.1	267.9	264.1	Diurnal Maximum					
Spd	36.0	32.5	29.3	33.1	30.3	36.9	32.4	33.1	34.5	34.4	36.7	33.3	31.5	29.1	27.6	23.7	29.9	36.5	38.8	35.9	35.1	34.8	35.0	37.5						
Dir	247.3	246.4	244.1	244.8	244.3	248.2	250.7	248.0	248.9	248.6	247.2	250.1	254.3	254.3	252.5	251.9	266.2	255.4	254.0	260.3	256.4	248.6	253.4	248.2						
Maximum Speed Value: 39 km/h on Jan 30 19:00																			Minimum Speed Value: 0 km/h on Jan 9 20:00							Hours in Service:				744
Maximum Daily Speed Average: 29.3 km/h on Jan 31																			Minimum Daily Speed Average: 0.5 km/h on Jan 26							Hours of Data:				744
Maximum Diurnal Speed Average: 7.4 km/h at hour 23																			Minimum Diurnal Speed Average: 4.8 km/h at hour 11							Hours of Missing Data:				0
Monthly Average Velocity: 5.74 km/h 271.41 deg																			Speed Percentiles: P ₁ = 0.4 P ₁₀ = 2.0 Q ₁ = 3.4 Median = 5.3 Q ₃ = 11.4 P ₉₀ = 20.9 P ₉₉ = 35.7							Percent Operational Time:				100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																														
Percentage Frequency Distribution																														
Speed Range (km/h)																														
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total																	
North	3.36		1.08		0.00		0.00		0.00		0.00		4.44																	
NorthEast	2.02		1.75		0.00		0.00		0.00		0.00		3.76																	
East	4.17		5.91		1.21		0.00		0.00		0.00		11.29																	
SouthEast	2.28		0.81		0.00		0.00		0.00		0.00		3.09																	
South	3.36		0.13		0.00		0.00		0.00		0.00		3.49																	
SouthWest	3.23		1.34		2.15		1.88		1.08		0.00		9.68																	
West	8.20		6.72		7.66		4.30		3.36		0.13		30.38																	
NorthWest	21.51		7.66		3.23		1.34		0.13		0.00		33.87																	
Total	48.12		25.40		14.25		7.53		4.57		0.13		100.00																	

Wind Rose for WS at Henry Pirker January 2009



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

Henry Pirker - Wind Speed (WS) - km/h
January 1, 2009 to February 1, 2009

Maximum Speed: 39 km/h on Jan 30 19:00																		Maximum Daily Speed Average: 29.5 km/h on Jan 31										Hours in Service: 744	
Minimum Speed: 2 km/h on Jan 26 01:00																		Minimum Daily Speed Average: 3.7 km/h on Jan 3										Hours of Data: 744	
Maximum Diurnal Speed Average: 11.2 km/h at hour 23																		Minimum Diurnal Speed Average: 7.4 km/h at hour 8										Hours of Missing Data: 0	
Monthly Average Speed: 9.28 km/h																		Percentiles: P ₁ = 2.2 P ₁₀ = 3.1 Q ₁ = 4.0 Median = 5.6 Q ₃ = 11.8 P ₉₀ = 21.0 P ₉₉ = 36.0										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-Jan	7	8	10	8	9	12	15	16	13	11	11	12	11	12	11	13	13	12	11	10	8	8	8	10	10.8	15.7			
2-Jan	10	7	4	2	4	5	4	5	6	6	5	5	4	4	4	5	4	3	3	3	4	4	3	4	4.5	9.6			
3-Jan	4	4	4	5	3	4	4	4	3	2	2	2	5	4	6	4	3	5	4	4	3	4	3	4	3.7	5.8			
4-Jan	2	4	3	4	3	5	4	5	4	3	2	3	3	6	7	7	11	12	8	11	11	8	5	3	5.6	12.0			
5-Jan	3	2	2	2	3	4	2	3	3	3	3	4	5	11	9	10	14	16	14	15	18	21	23	20	8.8	22.6			
6-Jan	21	18	12	11	14	12	7	5	6	4	5	8	10	10	10	10	10	8	9	9	9	8	8	8	9.7	21.1			
7-Jan	9	10	6	5	5	5	4	4	6	5	4	2	4	4	4	4	6	5	4	7	8	6	7	6	5.4	9.6			
8-Jan	5	5	5	5	5	4	4	4	4	9	8	9	11	11	11	9	5	3	3	3	4	5	5	4	5.8	11.1			
9-Jan	5	5	4	4	4	4	2	4	3	4	4	4	4	5	5	4	3	3	3	2	4	5	5	5	3.9	5.5			
10-Jan	5	7	7	7	12	19	23	19	20	16	17	17	18	20	19	17	9	5	7	8	8	5	6	4	12.3	23.0			
11-Jan	4	6	7	7	4	3	8	9	9	15	14	11	8	6	8	8	8	10	9	9	7	6	4	3	7.6	14.7			
12-Jan	4	4	4	4	3	5	5	4	6	8	7	7	8	8	6	4	8	8	3	6	4	18	35	38	8.6	37.6			
13-Jan	34	30	28	27	24	14	5	3	5	6	5	7	14	15	14	14	12	12	11	9	10	9	7	9	13.4	33.8			
14-Jan	7	8	9	9	9	7	6	4	4	5	5	3	3	6	4	3	4	3	2	4	4	5	7	6	5.3	9.3			
15-Jan	3	4	5	5	3	2	2	4	4	4	6	10	10	7	15	11	12	11	11	18	25	30	32	31	11.1	32.1			
16-Jan	18	18	14	11	20	19	14	5	6	5	6	3	3	3	3	4	4	5	4	3	4	3	4	4	7.7	19.9			
17-Jan	4	5	3	4	3	4	9	11	9	10	3	5	8	12	10	10	15	15	15	14	16	15	10	10	9.1	16.1			
18-Jan	6	5	4	4	3	4	3	4	5	4	4	5	4	5	5	3	4	5	5	3	4	4	2	2	4.1	6.2			
19-Jan	5	5	2	3	4	6	5	4	3	3	3	3	6	6	4	3	3	5	4	2	5	4	5	4	4.1	6.1			
20-Jan	4	6	4	4	5	3	2	2	3	5	4	5	3	4	4	5	4	4	5	4	4	5	4	4	4.1	5.6			
21-Jan	3	3	4	4	4	4	4	4	4	3	5	5	5	6	4	8	5	6	9	24	30	28	27	28	9.5	29.6			
22-Jan	24	22	22	22	18	19	16	14	12	13	14	12	12	8	7	7	6	6	4	5	7	6	5	7	12.0	24.4			
23-Jan	8	5	5	6	6	5	4	6	5	4	5	5	5	5	5	6	5	4	4	4	6	5	4	4	5.0	7.6			
24-Jan	4	4	4	3	4	4	4	4	5	4	3	4	5	6	8	8	7	5	5	5	5	7	12	10	5.5	12.1			
25-Jan	13	13	16	19	18	17	20	18	22	22	21	18	11	9	11	11	6	3	2	3	2	3	3	5	11.9	22.3			
26-Jan	2	3	5	4	3	4	4	3	3	4	4	3	4	3	5	4	5	5	3	4	3	4	5	5	3.7	5.0			
27-Jan	3	4	3	2	4	3	3	4	9	8	9	17	29	26	21	17	24	25	21	21	19	16	17	17	13.4	29.5			
28-Jan	17	17	19	18	17	13	11	3	3	3	3	7	14	22	17	17	19	22	19	15	17	25	19	23	15.1	25.1			
29-Jan	28	21	13	16	11	4	5	12	21	18	16	14	9	7	9	22	23	21	24	27	28	21	12	10	16.4	28.4			
30-Jan	5	4	8	15	18	21	14	9	6	7	6	7	27	29	18	18	20	37	39	36	35	35	35	34	20.2	39.1			
31-Jan	36	33	29	33	30	37	33	33	35	34	37	33	32	29	28	24	30	31	30	23	20	20	22	16	29.5	37.0			
9.8 9.3 8.5 8.9 8.7 8.7 7.9 7.4 8.0 8.0 7.7 8.1 9.5 10.0 9.4 9.3 9.7 10.2 9.7 10.0 10.7 11.1 11.2 10.9																										Diurnal Average			
36.1 32.6 29.4 33.1 30.3 37.0 32.5 33.2 34.6 34.5 36.8 33.4 31.6 29.2 27.7 23.8 30.0 36.7 39.1 36.0 35.5 34.9 35.1 37.6																										Diurnal Maximum			
All monthly, daily, and diurnal averages have been calculated using scalar methods																													

Peace Airshed Zone Association
Summary of Hourly Standard Deviations

Henry Pirker - Wind Direction (WD) - deg
January 1, 2009 to February 1, 2009

Maximum Value: 95.4 deg on Jan 4 01:00																				Hours in Service: 744					
Minimum Value: 2.5 deg on Jan 13 04:00																				Hours of Data: 744					
																				Hours of Missing Data: 0					
Percentiles: P ₁ = 3.0 P ₁₀ = 4.6 Q ₁ = 8.8 Median = 16.4 Q ₃ = 37.4 P ₉₀ = 62.5 P ₉₉ = 90.0																				Hours of Calibration: 0					
																				Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jan	13	14	11	12	9	8	6	7	6	7	9	9	5	5	7	6	6	7	7	7	12	9	14	19	18.9
2-Jan	11	9	18	46	46	20	56	19	18	16	24	17	19	13	7	11	17	45	54	34	31	14	19	20	56.4
3-Jan	19	27	21	15	29	21	33	38	40	26	60	53	59	10	13	40	28	11	18	35	42	21	73	24	73.1
4-Jan	95	39	76	38	53	93	37	27	44	19	59	57	84	12	16	16	7	4	18	8	8	8	54	48	95.4
5-Jan	49	57	42	66	69	94	94	65	38	35	49	72	40	13	17	11	7	23	8	17	13	6	8	8	94.1
6-Jan	6	7	12	10	9	9	10	18	14	39	41	20	15	13	11	15	12	17	19	13	14	15	21	14	41.3
7-Jan	17	10	18	24	21	18	29	19	9	7	25	44	30	36	26	19	13	12	67	14	9	10	11	15	67.3
8-Jan	17	25	16	24	24	19	21	21	69	8	10	9	13	11	7	6	6	28	63	77	16	15	16	23	76.8
9-Jan	12	11	18	16	17	28	65	30	71	48	46	61	31	53	47	28	57	55	87	94	45	13	40	19	94.2
10-Jan	67	27	15	25	10	4	4	4	4	5	5	4	4	3	5	6	48	91	25	21	15	25	21	29	91.2
11-Jan	20	20	22	19	71	76	15	25	30	17	65	18	21	41	10	12	10	9	13	12	12	13	19	22	76.3
12-Jan	17	26	10	12	61	20	16	25	19	13	11	15	10	11	20	62	10	17	69	24	26	15	5	3	68.6
13-Jan	5	4	3	3	4	60	42	33	58	16	40	42	10	10	10	7	10	9	13	11	10	16	13	11	60.2
14-Jan	13	11	10	10	11	13	15	35	40	28	24	69	67	9	22	49	29	67	75	13	37	54	14	12	74.7
15-Jan	40	29	30	20	73	95	81	87	44	31	33	15	14	25	11	10	7	39	35	6	5	4	5	5	95.3
16-Jan	8	19	17	12	11	10	10	48	33	33	33	41	59	22	22	29	20	16	57	55	42	43	87	56	86.9
17-Jan	41	47	92	57	90	83	34	10	24	21	48	15	12	11	19	15	10	11	10	7	14	17	11	13	91.6
18-Jan	28	46	88	38	57	26	63	51	19	71	89	24	44	23	45	32	49	35	19	43	77	54	74	65	89.1
19-Jan	49	46	66	86	31	22	48	66	90	67	45	47	21	41	35	43	77	66	63	55	90	66	31	28	90.1
20-Jan	19	19	42	65	27	61	89	82	72	16	64	23	15	14	10	18	26	29	23	13	71	35	56	50	88.6
21-Jan	79	53	35	29	32	40	28	38	55	78	27	26	59	18	76	14	28	32	6	5	5	4	3	3	79.1
22-Jan	3	3	3	4	3	4	4	6	5	5	5	5	10	12	27	9	13	11	12	9	4	6	8	7	27.1
23-Jan	9	8	30	12	11	19	20	14	17	6	14	10	15	9	14	11	17	13	8	13	13	11	18	11	30.4
24-Jan	11	11	8	16	18	11	16	16	16	13	14	13	10	22	24	13	11	11	12	22	15	14	9	6	23.8
25-Jan	7	6	6	5	6	4	3	8	3	3	3	4	12	5	7	4	15	36	57	90	15	52	22	17	89.7
26-Jan	77	35	57	71	66	67	24	68	40	18	23	31	12	63	14	34	20	17	30	53	75	87	42	51	86.9
27-Jan	91	15	77	54	51	60	32	45	16	22	9	10	7	7	6	7	4	3	3	4	5	4	4	5	90.6
28-Jan	5	5	5	5	22	5	11	86	49	24	22	19	14	5	7	7	5	5	3	4	3	4	5	4	85.7
29-Jan	4	6	13	10	12	54	25	81	4	5	5	5	11	10	7	7	5	4	4	4	6	14	14	8	81.0
30-Jan	40	65	24	7	5	4	8	15	12	29	76	58	13	5	8	8	20	6	7	5	8	3	3	3	76.1
31-Jan	3	4	5	4	4	3	5	4	4	3	3	5	4	5	6	7	4	5	5	5	5	4	3	7	7.0
95.4 65.4 91.6 85.8 90.4 95.3 93.9 87.2 90.1 77.8 89.1 72.2 83.6 62.6 75.8 61.9 76.8 91.2 86.7 94.2 90.1 86.9 86.9 64.7																									

PASZA

Evergreen Park Station

Monthly Summary Tables, Graphs and Roses

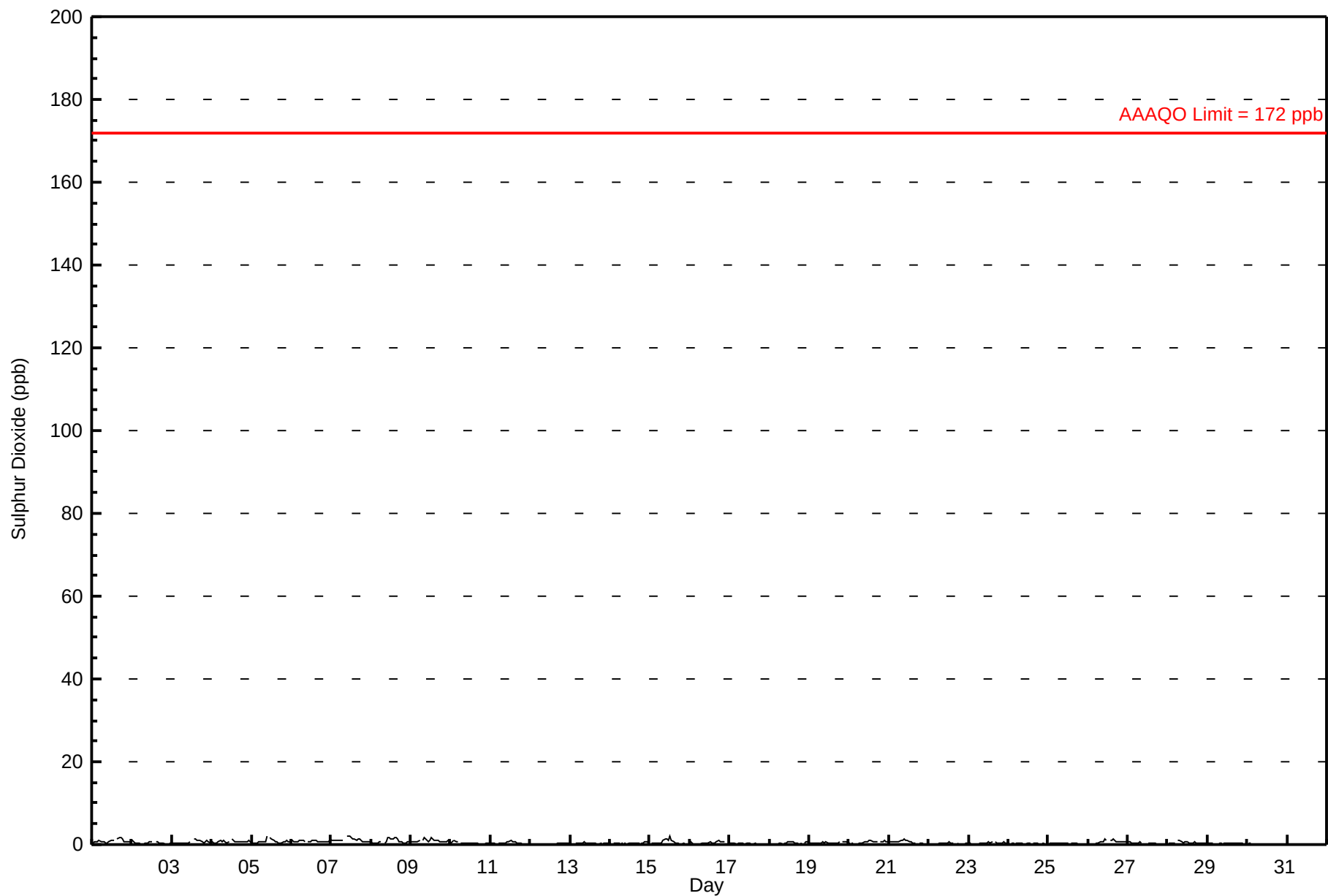
Peace Airshed Zone Association
Summary of Hourly Averages

Evergreen Park - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.0 ppb on Jan 5 10:00 Maximum Daily Average: 1.1 ppb on Jan 7																			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 Jan 11 22:00 Maximum Diurnal Average: 0.7 ppb at hour 13 Monthly Average: 0.46 ppb										Minimum Daily Average: 0.0 ppb on Jan 31 Minimum Diurnal Average: 0.3 ppb at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.7 P ₉₀ = 1.0 P ₉₉ = 1.7																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	0	1	1	1	1	1	1	1	0	0	1	1	1	1	A	2	2	2	1	1	1	1	1	1	0.9	1.7
2-Jan	1	1	0	0	0	0	0	0	0	0	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0.4	0.9
3-Jan	0	0	0	0	1	0	1	0	0	0	0	1	A	1	1	1	1	1	1	0	1	1	1	0	0.7	1.5
4-Jan	1	0	0	0	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3
5-Jan	0	0	0	0	1	1	1	1	1	2	A	2	1	1	1	1	1	0	0	1	1	1	1	1	0.8	2.0
6-Jan	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
7-Jan	1	1	1	1	1	1	1	1	A	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9
8-Jan	1	0	0	0	0	1	1	A	0	1	2	2	1	1	2	2	1	1	1	0	0	0	1	1	0.8	1.7
9-Jan	1	1	1	1	1	1	A	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
10-Jan	0	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
11-Jan	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	0.9
12-Jan	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
13-Jan	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
14-Jan	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.3	0.7
15-Jan	A	0	0	0	0	0	0	0	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0	A	0.5	1.9
16-Jan	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	1	1	A	0	0.5	1.1
17-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.4
18-Jan	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	A	0	1	1	0.3	0.7
19-Jan	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	A	1	1	1	0	0.4	0.8
20-Jan	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.5	0.9
21-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	1	0	0	0	0	0	0.6	1.2
22-Jan	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0.2	0.5
23-Jan	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	A	1	0	0	0	0	1	0	0	0.3	0.6
24-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3
25-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.4
26-Jan	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.3
27-Jan	1	1	0	0	0	0	0	1	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
28-Jan	0	0	0	0	0	A	1	1	1	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0.5	1.1
29-Jan	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
30-Jan	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
31-Jan	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
0.4 0.4 0.3 0.3 0.4 0.4 0.4 0.4 0.5 0.5 0.6 0.7 0.7 0.6 0.6 0.6 0.5 0.5 0.4 0.3 0.4 0.4 0.4 0.4																								Diurnal Average		
1.1 1.0 1.1 1.1 1.0 0.9 1.1 1.1 1.7 2.0 1.9 1.9 1.9 1.5 1.6 1.6 1.6 1.6 1.7 1.4 0.8 0.8 0.9 1.0 1.3																								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

January 2009



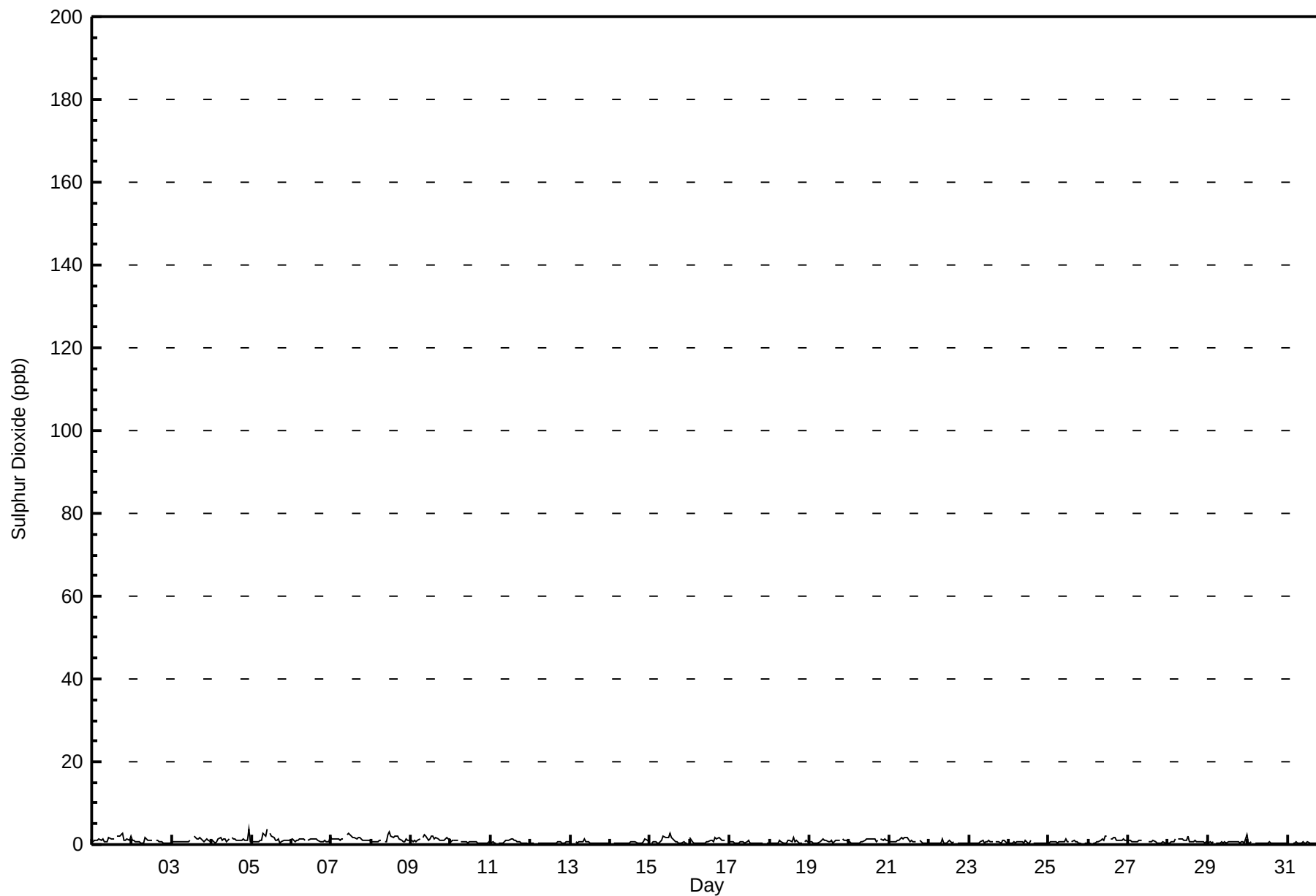
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Evergreen Park - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009**

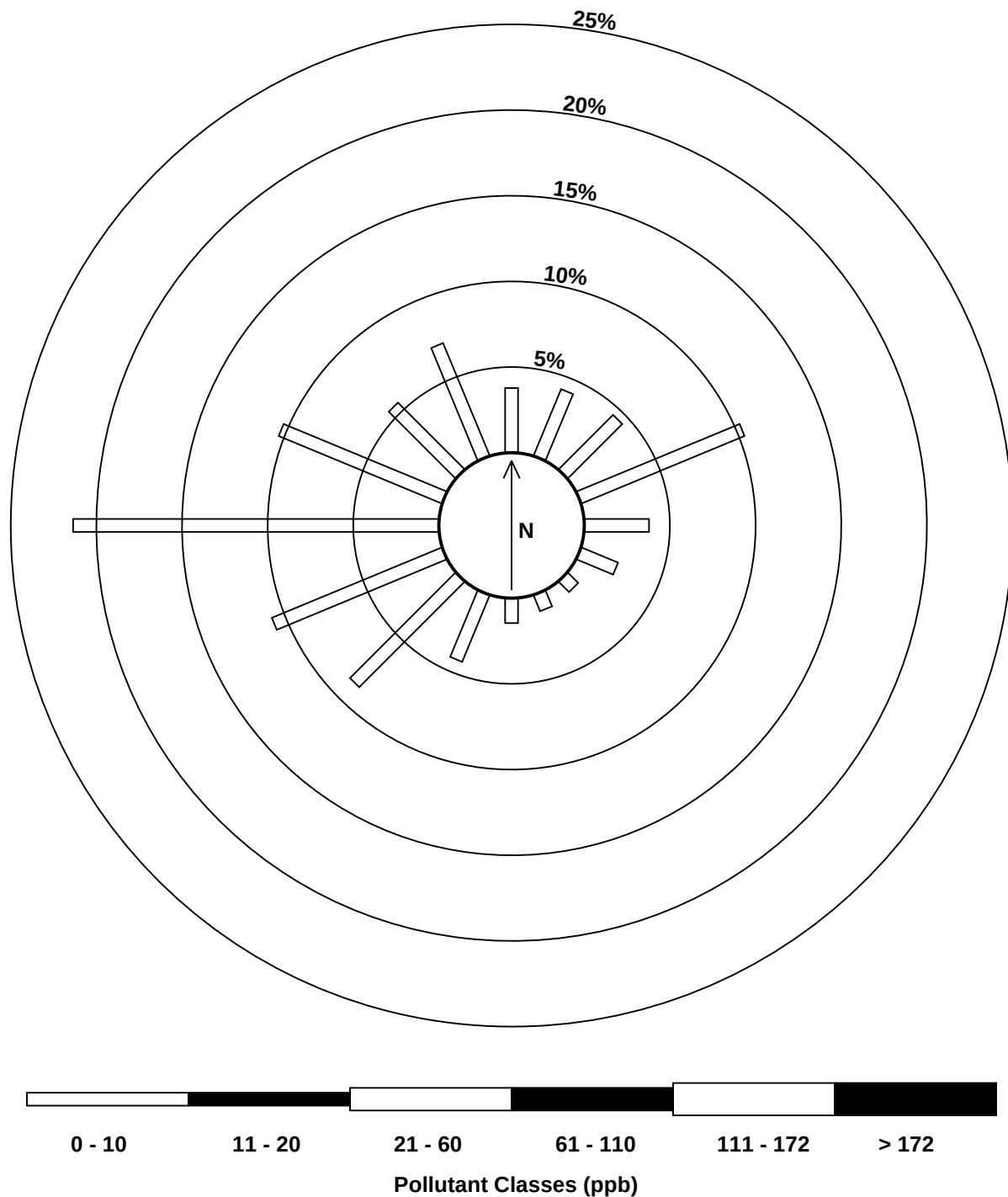
Maximum Value: 3.7 ppb on Jan 5 10:00																			Maximum Daily Average: 1.5 ppb on Jan 7							Hours in Service: 744	
Minimum Value: 0 ppb on Jan 12 00:00																			Minimum Daily Average: 0.3 ppb on Jan 31							Hours of Data: 710	
Maximum Diurnal Average: 1.1 ppb at hour 13																			Minimum Diurnal Average: 0.6 ppb at hour 3							Hours of Missing Data: 34	
Monthly Average: 0.83 ppb																			Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.5 Median = 0.7 Q ₃ = 1.1 P ₉₀ = 1.4 P ₉₉ = 2.5							Hours of Calibration: 34	
																			Percent Operational Time: 100.0								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	1	1	1	1	1	1	1	1	1	1	2	1	1	1	A	2	2	2	3	1	1	1	1	2	1.4	2.6	
2-Jan	1	1	1	1	1	0	0	0	2	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0.8	1.6	
3-Jan	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	1	1	2	1	1	1	1	1	1	1.0	1.9	
4-Jan	1	1	0	1	1	2	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	4	1	1.2	3.6	
5-Jan	1	1	1	1	1	1	1	3	2	4	A	3	2	2	1	1	1	0	1	1	1	1	1	1	1.3	3.7	
6-Jan	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.1	2.0	
7-Jan	1	1	1	1	1	1	1	1	A	2	3	2	2	2	2	1	2	2	1	1	1	1	1	1	1.5	2.6	
8-Jan	1	1	1	1	1	1	1	A	1	1	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1.3	3.1	
9-Jan	1	1	1	1	1	1	A	2	2	2	1	1	2	2	1	2	1	1	1	1	1	2	1	1	1.3	2.2	
10-Jan	1	1	1	1	1	A	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	1	0.6	1.2	
11-Jan	0	1	0	1	A	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.6	1.2	
12-Jan	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	0.4	0.8	
13-Jan	1	1	A	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.4	
14-Jan	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0.6	1.5	
15-Jan	A	0	1	1	0	0	1	1	2	2	2	2	3	2	1	1	1	0	0	0	1	0	0	A	1.0	2.5	
16-Jan	2	1	0	0	0	0	0	0	0	0	1	1	1	1	1	2	1	2	1	1	1	1	A	1	0.9	1.7	
17-Jan	1	1	1	0	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0.5	1.1	
18-Jan	0	0	0	0	0	0	1	1	1	0	0	1	1	1	2	1	1	1	0	0	A	1	1	1	0.7	1.7	
19-Jan	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	0	0.8	1.4	
20-Jan	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.4	
21-Jan	1	1	1	1	1	1	1	2	1	2	2	2	1	1	1	1	1	A	1	1	0	0	0	0	1.0	1.9	
22-Jan	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	1	A	1	0	0	0	0	0	0	0.5	1.3	
23-Jan	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	A	1	1	1	0	1	1	1	1	0.7	1.1	
24-Jan	0	0	0	1	0	1	1	1	1	0	1	0	0	1	A	0	0	0	0	0	0	0	0	0	0.5	1.0	
25-Jan	0	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0.5	1.2	
26-Jan	0	0	0	0	0	1	1	1	1	1	2	2	A	1	1	2	2	1	1	1	1	1	1	1	1.0	1.9	
27-Jan	1	1	1	1	1	1	1	1	1	C	C	A	1	1	1	1	1	0	0	0	0	1	0	0	0.7	1.1	
28-Jan	0	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0.9	2.1	
29-Jan	1	1	1	1	A	0	0	0	1	0	1	0	1	1	1	1	1	1	1	0	1	1	0	2	0.6	2.4	
30-Jan	0	0	1	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
31-Jan	0	0	A	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0.3	0.5	
0.7 0.7 0.6 0.6 0.7 0.7 0.7 0.9 1.0 0.9 1.0 1.1 1.1 1.0 0.9 0.9 0.9 0.8 0.7 0.7 0.7 0.8 0.8 0.8																									Diurnal Average		
1.7 1.4 1.4 1.3 1.4 1.6 1.4 2.5 2.2 3.7 2.6 3.1 2.5 1.9 2.0 2.0 2.0 2.3 2.6 1.4 1.3 1.6 3.6 2.4																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											

Hourly Maximums for SO₂ at Evergreen Park

January 2009



Pollutant Rose for SO₂ at Evergreen Park January 2009



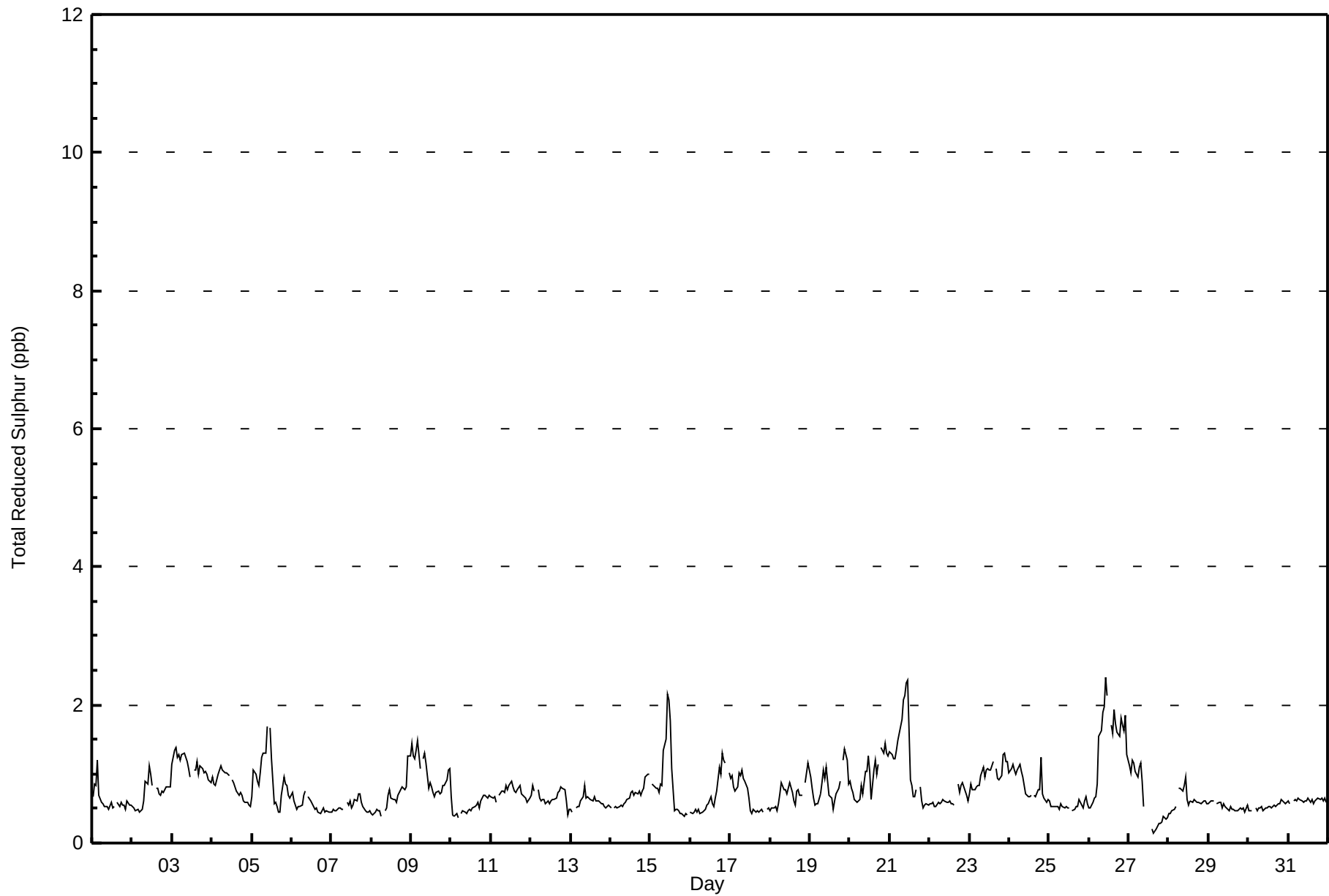
Peace Airshed Zone Association
Summary of Hourly Averages

Evergreen Park - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.4 ppb on Jan 26 11:00 Maximum Daily Average: 1.5 ppb on Jan 26																				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 Jan 27 16:00 Maximum Diurnal Average: 0.9 ppb at hour 11 Monthly Average: 0.76 ppb										Minimum Daily Average: 0.5 ppb on Jan 30 Minimum Diurnal Average: 0.7 ppb at hour 15 Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 0.7 Q ₃ = 0.9 P ₉₀ = 1.2 P ₉₉ = 2.0																
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-Jan	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	0	1	1	1	0.6	1.2
2-Jan	1	1	0	0	0	0	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.1
3-Jan	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	1.4
4-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
5-Jan	1	1	1	1	1	1	1	1	1	2	A	2	1	1	1	1	0	0	1	1	1	1	1	1	0.9	1.7
6-Jan	1	1	1	0	1	1	1	1	1	A	1	1	1	1	0	1	0	0	0	1	0	0	0	0	0.5	0.7
7-Jan	0	0	0	0	1	1	0	0	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	0.7
8-Jan	0	0	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3
9-Jan	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5
10-Jan	1	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0.5	0.7
11-Jan	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
12-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.7	0.8
13-Jan	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
14-Jan	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
15-Jan	A	1	1	1	1	1	1	1	1	2	2	2	2	1	0	0	0	0	0	0	0	0	0	A	0.9	2.2
16-Jan	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.3
17-Jan	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	1	0.7	1.0
18-Jan	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	1.2
19-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	0.8	1.4
20-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	1.4
21-Jan	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	A	1	1	0	1	1	1	1.2	2.4
22-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.9
23-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	1.3
24-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.2
25-Jan	1	1	1	1	1	1	0	1	1	1	1	1	1	A	0	0	1	1	1	1	1	1	1	1	0.5	0.7
26-Jan	1	1	1	1	1	1	2	2	2	2	2	2	A	2	2	2	2	2	2	2	2	2	2	1	1.5	2.4
27-Jan	1	1	1	1	1	1	1	1	1	1	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.6	1.2
28-Jan	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
29-Jan	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1	0	1	0	1	0.5	0.6
30-Jan	0	0	0	A	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.6
31-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
0.7 0.7 0.7 0.7 0.7 0.7 0.8 0.8 0.9 0.9 0.9 0.9 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.8 0.8 0.8 0.8 0.7																								Diurnal Average		
1.4 1.3 1.4 1.3 1.5 1.5 1.6 1.8 2.1 2.1 2.4 2.4 1.8 1.7 1.6 1.9 1.7 1.6 1.5 1.8 1.7 1.6 1.8 1.3																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages for TRS at Evergreen Park

January 2009

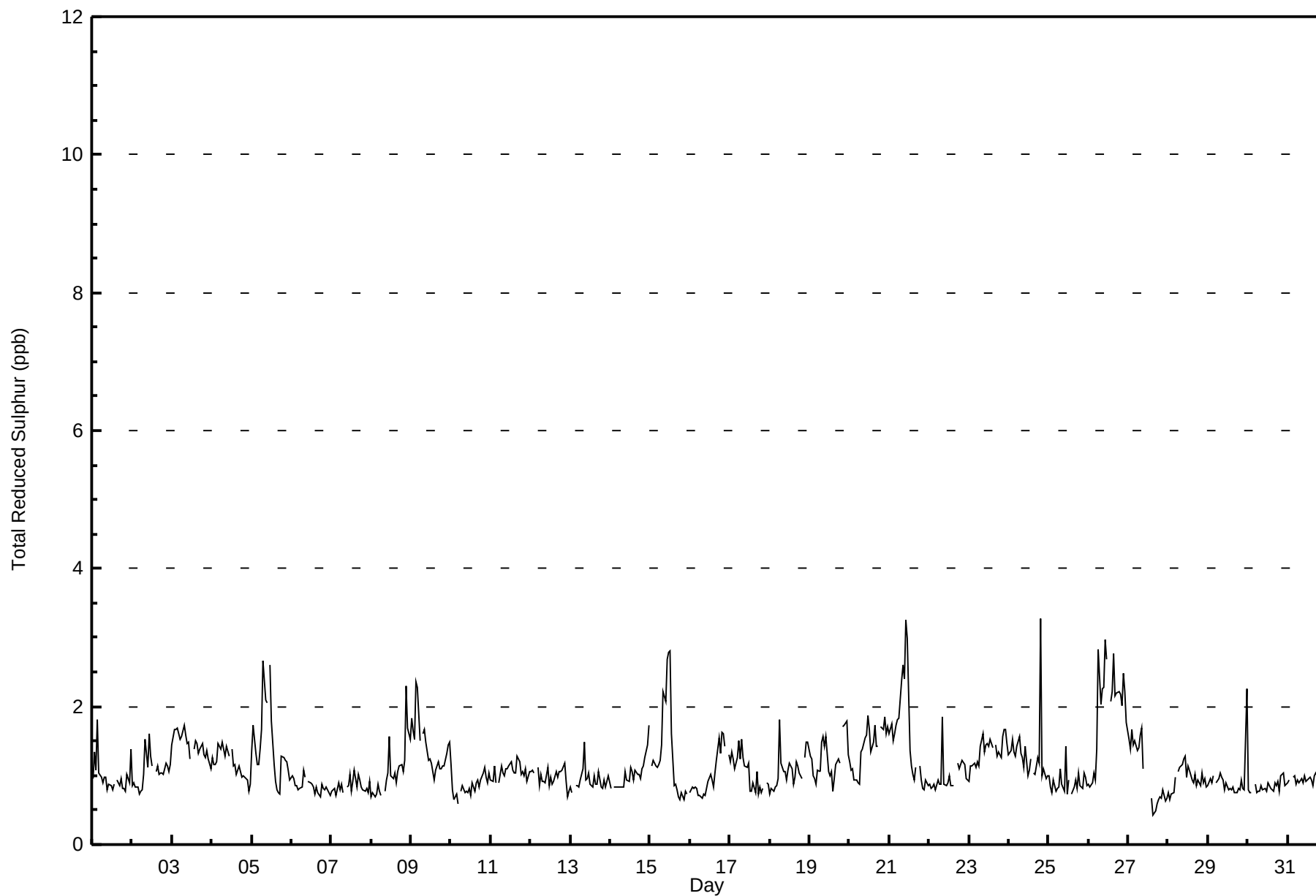


Peace Airshed Zone Association
Summary of Hourly Maximums

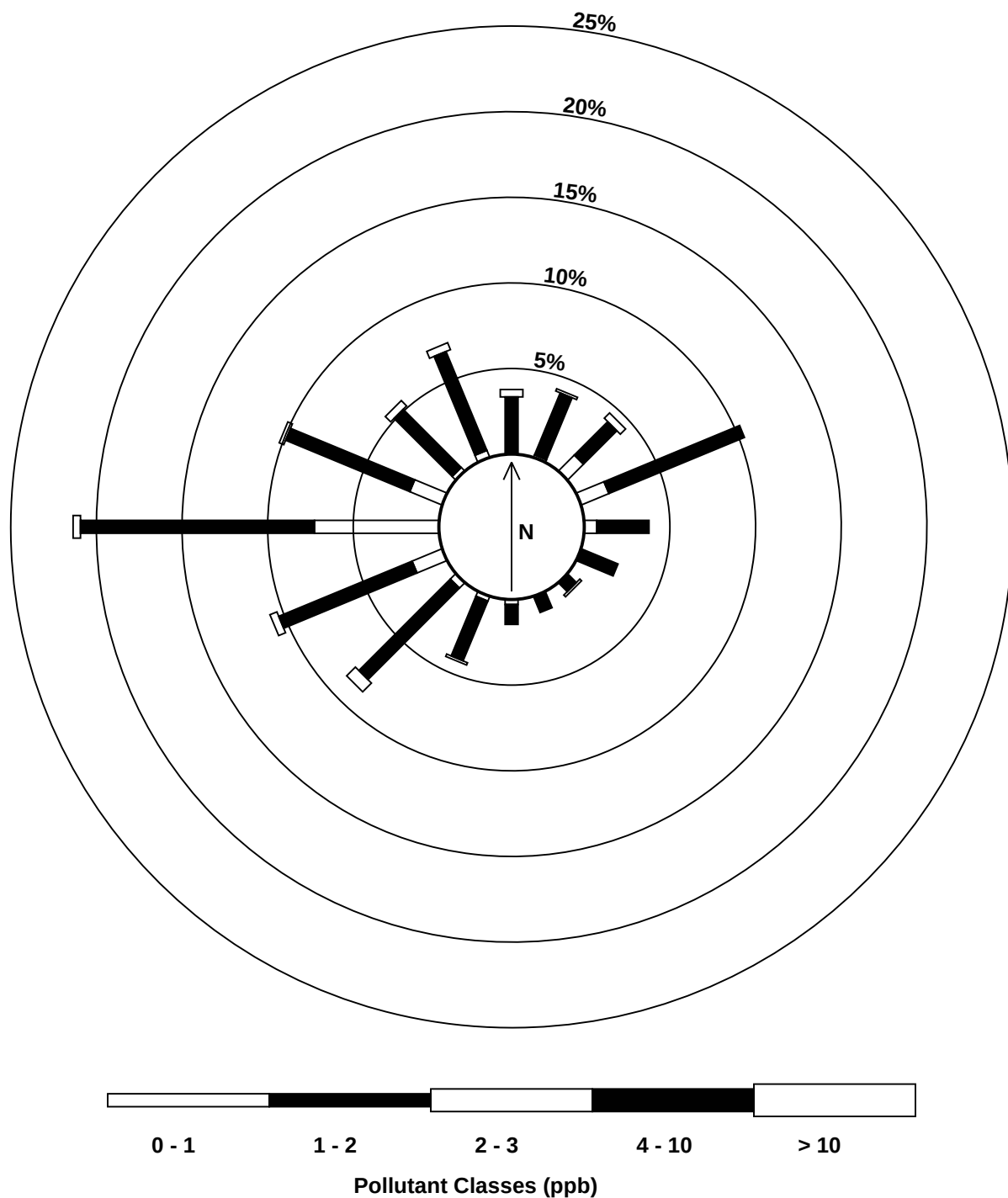
Evergreen Park - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 3.3 ppb on Jan 24 20:00																				Maximum Daily Average: 2.0 ppb on Jan 26					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 27 16:00																				Minimum Daily Average: 0.8 ppb on Jan 30					Hours of Data: 709	
Maximum Diurnal Average: 1.3 ppb at hour 9																				Minimum Diurnal Average: 1.0 ppb at hour 15					Hours of Missing Data: 35	
Monthly Average: 1.13 ppb																				Percentiles: P ₁ = 0.7 P ₁₀ = 0.8 Q ₁ = 0.9 Median = 1.0 Q ₃ = 1.3 P ₉₀ = 1.6 P ₉₉ = 2.8					Hours of Calibration: 35	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	1.8
2-Jan	1	1	1	1	1	1	1	1	2	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1.1	1.6
3-Jan	1	2	2	2	2	2	2	2	2	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1.5	1.7
4-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.5
5-Jan	1	2	1	1	1	1	2	3	2	2	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1.4	2.7
6-Jan	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
7-Jan	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
8-Jan	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	2	2	2	1.1	2.3
9-Jan	2	2	2	2	2	2	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	2.4
10-Jan	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
11-Jan	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	1.3
12-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
13-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5
14-Jan	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	1.7
15-Jan	A	1	1	1	1	1	1	1	2	2	3	3	3	2	1	1	1	1	1	1	1	1	1	A	1.3	2.8
16-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	1	A	1	1.0	1.6
17-Jan	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.5
18-Jan	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.1	1.8
19-Jan	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	A	2	2	2	1	1.2	1.8
20-Jan	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	2	1	1	A	2	2	2	2	2	1.4	1.9
21-Jan	2	2	2	2	2	2	2	2	3	2	3	3	1	1	1	1	1	A	1	1	1	1	1	1	1.6	3.3
22-Jan	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.8
23-Jan	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	A	1	1	1	1	2	2	2	1	1.4	1.7
24-Jan	1	1	2	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	3	1	1	1	1	1.3	3.3
25-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.4
26-Jan	1	1	1	1	1	1	3	2	2	2	3	3	A	2	2	3	2	2	2	2	2	2	2	2	2.0	3.0
27-Jan	2	1	2	1	2	1	1	2	2	1	C	C	C	A	1	0	0	1	1	1	1	1	1	1	1.0	1.7
28-Jan	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
29-Jan	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.9	2.3	
30-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
31-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
1.1 1.1 1.1 1.1 1.1 1.1 1.2 1.3 1.3 1.2 1.3 1.3 1.1 1.1 1.0 1.0 1.1 1.1 1.1 1.1 1.2 1.1 1.2																									Diurnal Average Diurnal Maximum	
1.8 1.7 1.7 2.4 2.3 1.8 2.8 2.7 2.6 2.4 3.3 3.0 2.8 2.1 2.2 2.8 2.2 2.2 2.2 3.3 2.0 2.5 2.2 2.3																										
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums for TRS at Evergreen Park January 2009



Pollutant Rose for TRS at Evergreen Park January 2009



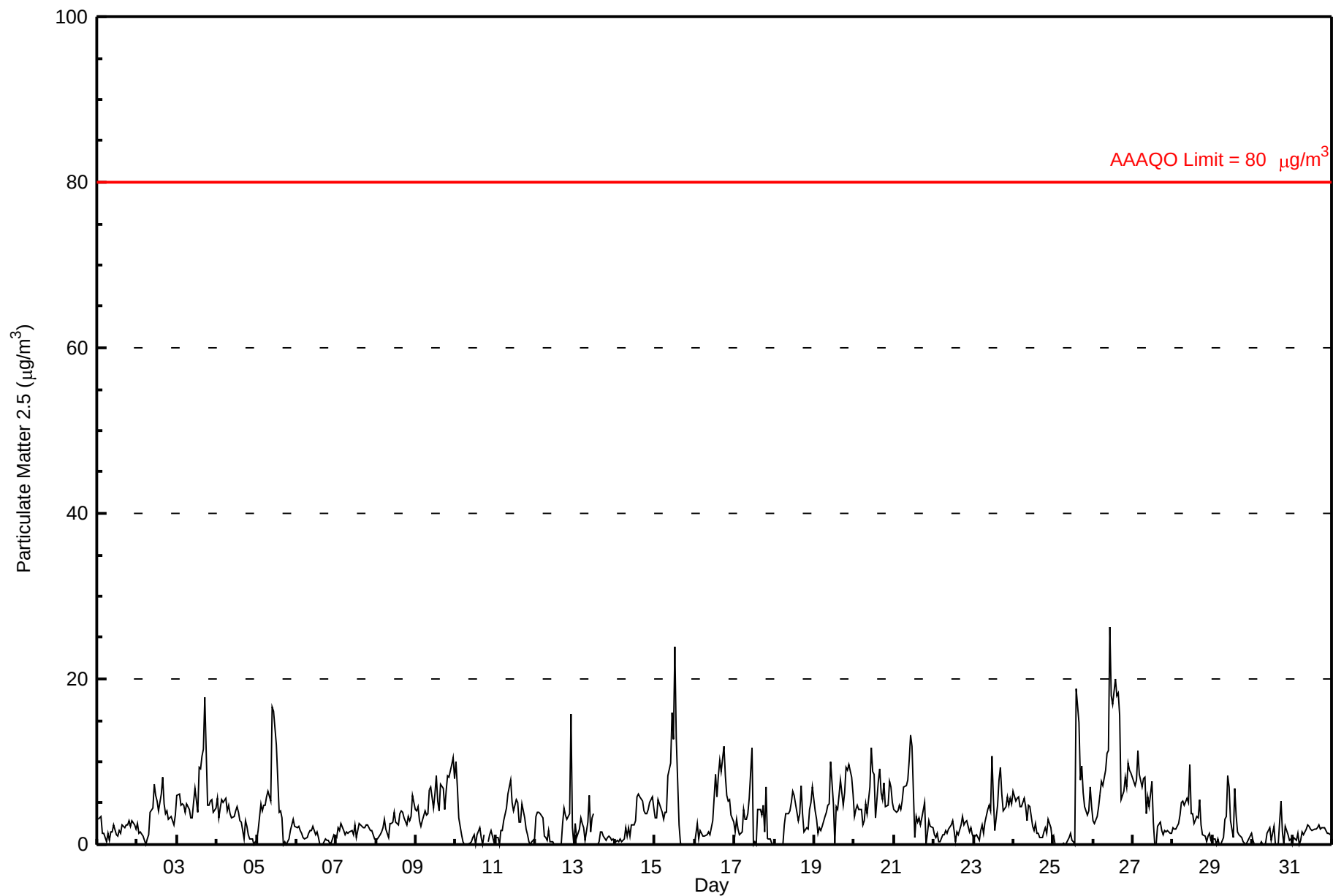
Peace Airshed Zone Association
Summary of Hourly Averages

Evergreen Park - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAO): 1-hr: 0 24-hr: 0 Maximum Value: 26.2 µg/m³ on Jan 26 11:00 Maximum Daily Average: 10.6 µg/m³ on Jan 26																					Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7					
Minimum Value: 0 µg/m³ on Jan 2 06:00 Maximum Diurnal Average: 6.1 µg/m³ at hour 11 Monthly Average: 3.49 µg/m³										Minimum Daily Average: 0.9 µg/m³ on Jan 30 Minimum Diurnal Average: 2.4 µg/m³ at hour 5 Percentiles: P ₁ = 0.0 P ₁₀ = 0.3 Q ₁ = 1.1 Median = 2.6 Q ₃ = 4.8 P ₉₀ = 7.7 P ₉₉ = 17.8																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	3	3	3	1	1	0	1	1	1	2	2	1	1	2	1	2	2	2	2	3	2	3	2	2	2.0	3.4
2-Jan	3	1	2	1	1	0	1	1	4	4	7	6	5	4	6	8	5	4	4	3	3	3	2	4	3.4	8.2
3-Jan	6	6	5	5	5	4	5	4	3	3	5	7	4	9	9	11	12	18	5	5	5	5	4	4	6.2	17.8
4-Jan	6	3	4	5	5	6	4	5	4	3	3	4	5	4	3	3	1	3	2	1	1	1	0	0	3.1	5.6
5-Jan	0	2	5	4	5	5	6	6	5	17	16	14	12	4	4	3	0	0	0	1	2	2	3	2	4.9	16.5
6-Jan	2	2	2	1	1	1	1	1	2	2	2	1	2	1	0	0	0	1	1	1	0	0	1	1	1.0	2.2
7-Jan	1	2	2	2	2	1	1	1	2	2	1	2	1	2	3	2	2	2	2	2	2	2	1	1	1.7	2.6
8-Jan	1	1	1	2	2	3	2	1	3	3	3	4	3	2	4	4	4	3	2	3	3	3	6	4	2.7	5.9
9-Jan	4	5	3	2	3	4	4	4	7	7	4	6	8	5	4	7	7	4	6	8	8	10	10	8	5.8	10.4
10-Jan	10	7	3	1	0	0	0	0	0	0	1	1	0	1	2	1	0	1	BD	0	1	2	1	0	1.5	10.0
11-Jan	1	1	0	2	2	3	4	6	7	8	5	4	5	5	3	3	5	3	2	1	0	0	0	1	3.0	7.7
12-Jan	3	4	4	4	3	1	1	1	2	0	0	0	0	0	0	0	3	4	4	3	4	16	2	0	2.4	15.8
13-Jan	2	1	2	3	3	2	1	3	6	2	3	4	BD	0	0	1	1	1	1	1	1	1	1	1	1.7	6.0
14-Jan	0	1	0	1	0	1	2	1	2	1	2	2	3	6	6	6	5	4	4	4	4	5	6	4	2.9	6.2
15-Jan	3	3	5	4	4	3	4	4	8	10	16	13	24	13	2	0	0	0	0	0	0	0	0	0	4.9	23.9
16-Jan	0	3	1	2	1	1	1	1	2	1	2	3	9	6	8	10	9	12	8	6	5	5	4	3	4.2	11.8
17-Jan	2	3	2	1	1	4	3	3	4	6	12	0	0	0	4	4	4	5	2	7	1	1	0	0	2.8	11.6
18-Jan	0	0	0	0	0	0	2	4	4	4	5	6	6	4	3	4	7	4	1	2	2	4	5	7	3.1	7.2
19-Jan	4	3	1	2	2	2	3	4	5	5	10	5	0	5	4	6	8	5	6	9	9	10	8	6	5.1	9.9
20-Jan	3	4	5	4	4	2	3	5	4	7	12	9	8	3	8	9	6	5	8	5	5	8	7	5	5.8	11.6
21-Jan	4	4	4	5	4	5	7	7	8	10	13	12	1	3	3	3	2	3	5	0	1	3	2	2	4.7	13.2
22-Jan	1	1	1	0	0	1	1	2	1	2	2	3	2	0	1	1	2	3	2	3	3	2	2	1	1.7	3.5
23-Jan	1	1	1	0	2	2	1	3	4	5	4	11	6	2	5	8	9	6	4	5	6	5	6	5	4.2	10.6
24-Jan	6	5	6	6	5	5	6	5	3	5	5	2	2	3	1	1	1	1	1	2	1	3	2	1	3.2	6.4
25-Jan	1	0	0	0	0	0	0	0	0	1	1	1	0	0	19	15	8	9	6	4	4	4	7	5	3.6	18.9
26-Jan	3	3	3	5	6	8	7	9	11	11	26	18	17	20	18	18	16	5	7	8	7	10	9	9	10.6	26.2
27-Jan	8	7	8	11	9	7	8	8	4	6	5	8	3	0	0	2	3	2	1	2	1	2	1	1	4.4	11.3
28-Jan	2	2	2	3	4	5	5	5	6	5	10	4	4	2	3	3	5	2	1	1	0	1	1	1	3.2	9.6
29-Jan	1	1	0	1	0	0	1	3	3	8	7	3	1	7	4	2	1	1	0	0	0	0	1	1	1.9	8.3
30-Jan	1	0	0	0	0	0	0	0	0	1	2	1	1	2	0	0	3	5	1	0	2	1	1	1	0.9	5.3
31-Jan	0	1	1	1	0	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1.5	2.5
																									Diurnal Average	
																									Diurnal Maximum	
BD - Baseline Drift Alberta Ambient Air Quality Objectives (AAAO): 1-hr 80 µg/m³ 24-hr 30 µg/m³																										

Hourly Averages for PM_{2.5} at Evergreen Park

January 2009



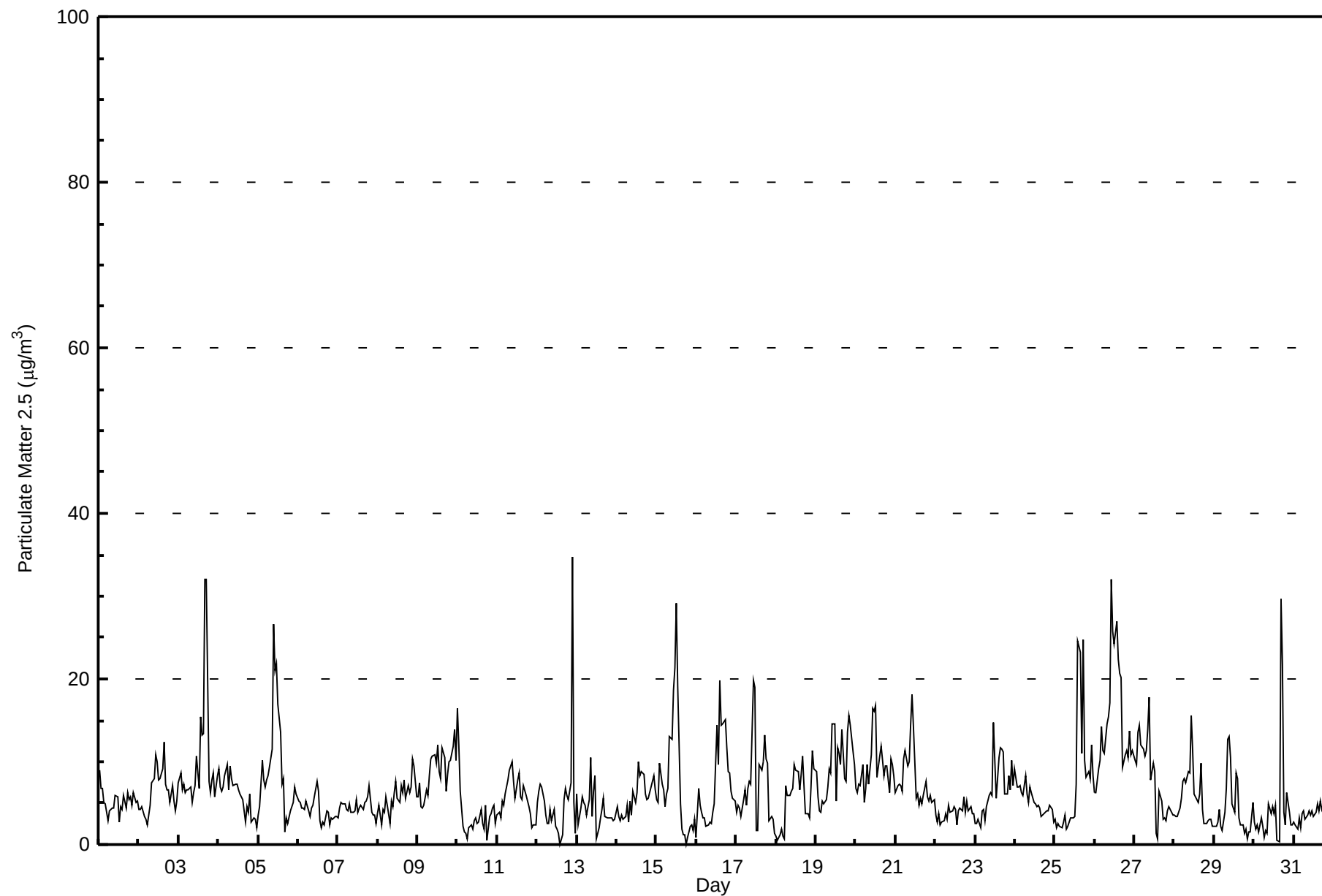
Peace Airshed Zone Association
Summary of Hourly Maximums

Evergreen Park - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

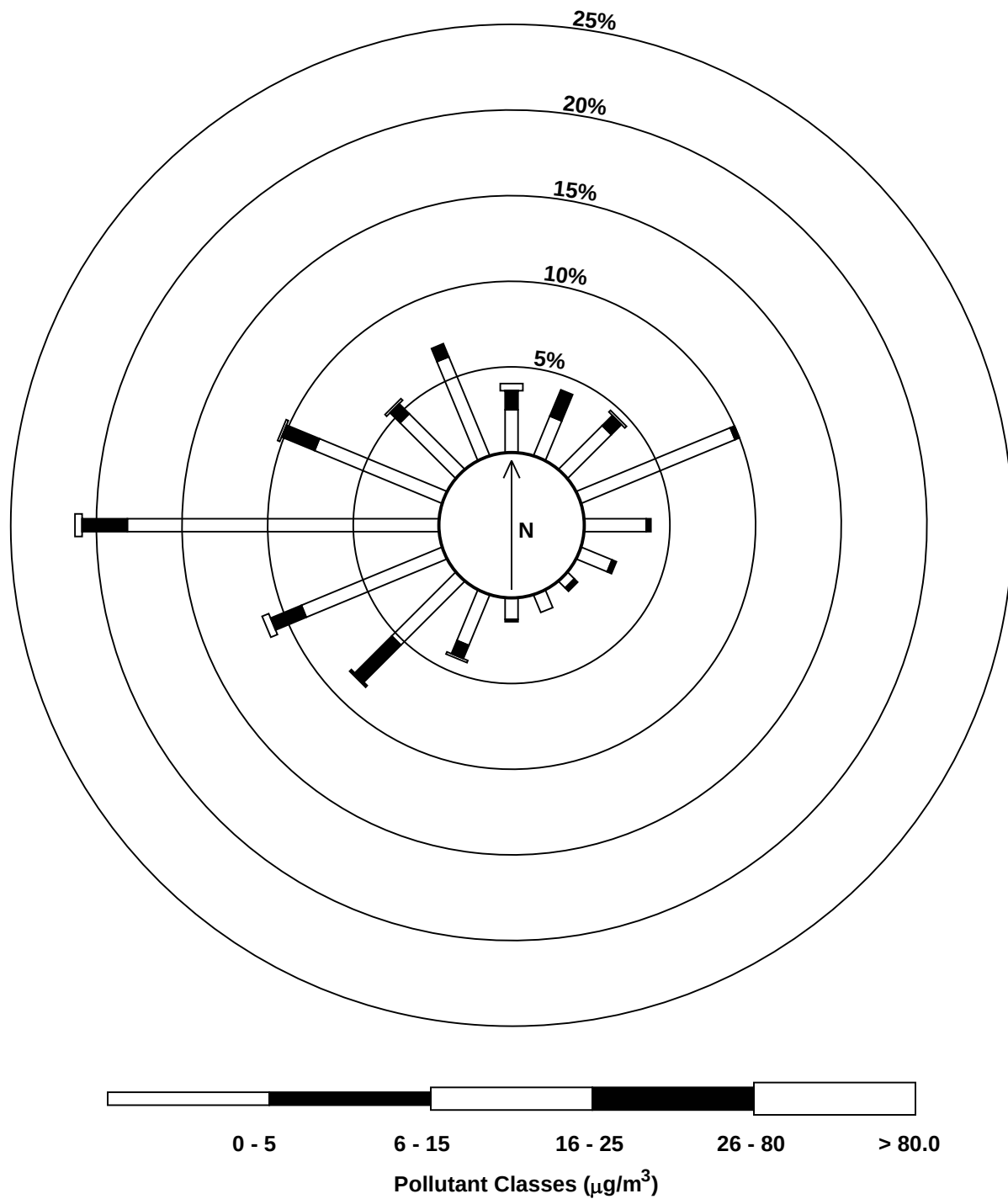
Maximum Value: 34.8 μg/m ³ on Jan 12 22:00																				Maximum Daily Average: 15.2 μg/m ³ on Jan 26					Hours in Service: 744	
Minimum Value: 0 μg/m ³ on Jan 12 15:00																				Minimum Daily Average: 3.7 μg/m ³ on Jan 31					Hours of Data: 744	
Maximum Diurnal Average: 9.6 μg/m ³ at hour 12																				Minimum Diurnal Average: 5.1 μg/m ³ at hour 24					Hours of Missing Data: 0	
Monthly Average: 6.61 μg/m ³																				Percentiles: P ₁ = 0.7 P ₁₀ = 2.4 Q ₁ = 3.6 Median = 5.4 Q ₃ = 8.3 P ₉₀ = 11.6 P ₉₉ = 24.8					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-Jan	9	7	7	5	5	3	4	4	4	4	6	6	3	5	4	6	4	6	5	6	5	6	5	5	5.2	8.9
2-Jan	4	4	5	3	3	2	4	5	8	8	11	10	8	8	9	12	7	7	7	5	7	5	4	5	6.3	12.3
3-Jan	7	9	7	7	6	7	7	7	5	6	7	11	7	15	13	13	32	32	8	6	8	9	6	8	10.1	32.0
4-Jan	9	7	6	7	8	10	7	9	8	7	7	7	7	6	6	5	3	5	4	6	3	3	3	2	6.0	9.7
5-Jan	4	5	10	8	7	8	8	9	12	27	21	22	17	14	7	8	2	3	3	4	5	5	7	6	9.1	26.5
6-Jan	5	5	4	4	4	5	4	3	4	5	6	8	7	3	2	3	2	4	4	2	3	3	3	3	4.1	7.6
7-Jan	3	4	5	5	5	4	4	5	4	4	4	5	4	4	5	4	5	5	6	7	4	4	4	3	4.4	7.1
8-Jan	4	5	2	4	4	6	5	3	5	5	6	8	6	5	7	6	8	6	7	6	7	10	10	6	5.8	10.3
9-Jan	6	7	5	4	5	7	6	8	10	11	11	10	12	9	8	12	10	6	8	10	10	12	14	10	8.8	14.0
10-Jan	16	12	6	2	2	1	1	2	2	2	3	3	2	3	4	2	2	5	0	3	4	4	5	3	3.8	16.4
11-Jan	3	4	3	5	5	6	8	9	10	10	8	6	8	9	6	5	7	6	5	5	4	2	2	2	5.7	10.1
12-Jan	5	6	7	7	5	4	3	3	4	3	4	2	2	1	0	1	5	7	6	5	7	35	5	1	5.4	34.8
13-Jan	6	2	4	6	5	5	4	5	10	3	6	8	1	2	3	4	6	3	3	3	3	3	3	3	4.3	10.4
14-Jan	5	3	3	3	3	3	5	3	5	4	6	5	6	10	8	9	8	6	5	6	6	7	8	7	5.6	10.0
15-Jan	5	5	10	7	7	5	6	7	13	13	19	21	29	19	5	2	1	1	0	1	2	2	2	3	7.7	29.1
16-Jan	1	7	5	4	3	3	2	2	3	3	4	5	14	10	20	14	15	15	12	9	9	6	6	5	7.3	19.9
17-Jan	4	5	4	3	5	7	5	7	8	7	20	19	2	2	10	9	10	13	10	10	3	3	3	1	7.1	19.8
18-Jan	1	1	1	2	1	1	7	6	6	6	7	10	9	9	7	8	11	7	4	4	3	7	11	9	5.7	11.3
19-Jan	9	6	4	4	5	5	5	7	9	9	15	15	5	12	11	10	14	8	8	14	16	14	11	10	9.3	15.6
20-Jan	7	6	7	7	10	5	7	10	7	11	16	16	17	8	11	12	10	8	9	9	6	10	10	8	9.5	16.7
21-Jan	6	7	7	7	6	10	11	10	10	14	18	14	6	6	5	6	5	6	8	6	5	6	5	5	7.9	18.2
22-Jan	4	3	4	2	3	3	4	3	5	4	4	5	4	2	4	4	4	6	4	5	4	5	4	4	3.8	5.8
23-Jan	3	2	3	2	4	4	3	5	6	6	6	15	10	6	10	12	12	11	6	6	8	7	10	7	6.8	14.7
24-Jan	9	7	7	7	6	6	8	6	5	7	6	5	5	5	5	4	3	4	4	4	4	5	4	3	5.4	9.2
25-Jan	3	2	3	2	2	3	4	2	2	3	3	3	3	7	25	23	11	25	10	8	9	8	12	8	7.6	24.8
26-Jan	6	6	9	10	14	11	11	15	15	17	32	26	24	27	22	21	20	9	11	11	10	14	11	11	15.2	32.0
27-Jan	10	10	14	14	12	11	11	11	14	18	8	10	9	1	1	6	5	3	3	3	4	5	4	4	7.9	17.7
28-Jan	4	3	3	4	6	8	8	7	9	9	16	11	6	6	5	6	10	4	3	3	3	3	3	2	5.9	15.7
29-Jan	2	2	3	4	2	2	4	7	13	13	11	5	4	9	8	3	2	2	1	2	1	2	1	5	4.5	13.0
30-Jan	3	2	2	2	3	2	1	2	1	5	4	5	4	5	1	0	30	22	4	2	6	4	2	2	4.7	29.6
31-Jan	3	2	2	3	2	4	4	3	4	4	4	4	3	4	5	4	5	4	5	5	4	3	3	4	3.7	5.2
5.4 5.1 5.3 5.1 5.1 5.1 5.4 5.9 7.1 8.0 9.6 9.6 7.8 7.4 7.6 7.7 8.7 8.1 5.6 5.7 5.6 6.9 5.8 5.1																								Diurnal Average		
16.4 12.0 13.6 14.3 14.2 11.4 11.3 14.6 15.4 26.5 32.0 25.8 29.1 26.9 24.6 23.2 32.0 32.0 11.7 13.6 15.6 34.8 14.0 11.4																								Diurnal Maximum		

Hourly Maximums for PM_{2.5} at Evergreen Park

January 2009



Pollutant Rose for PM_{2.5} at Evergreen Park January 2009



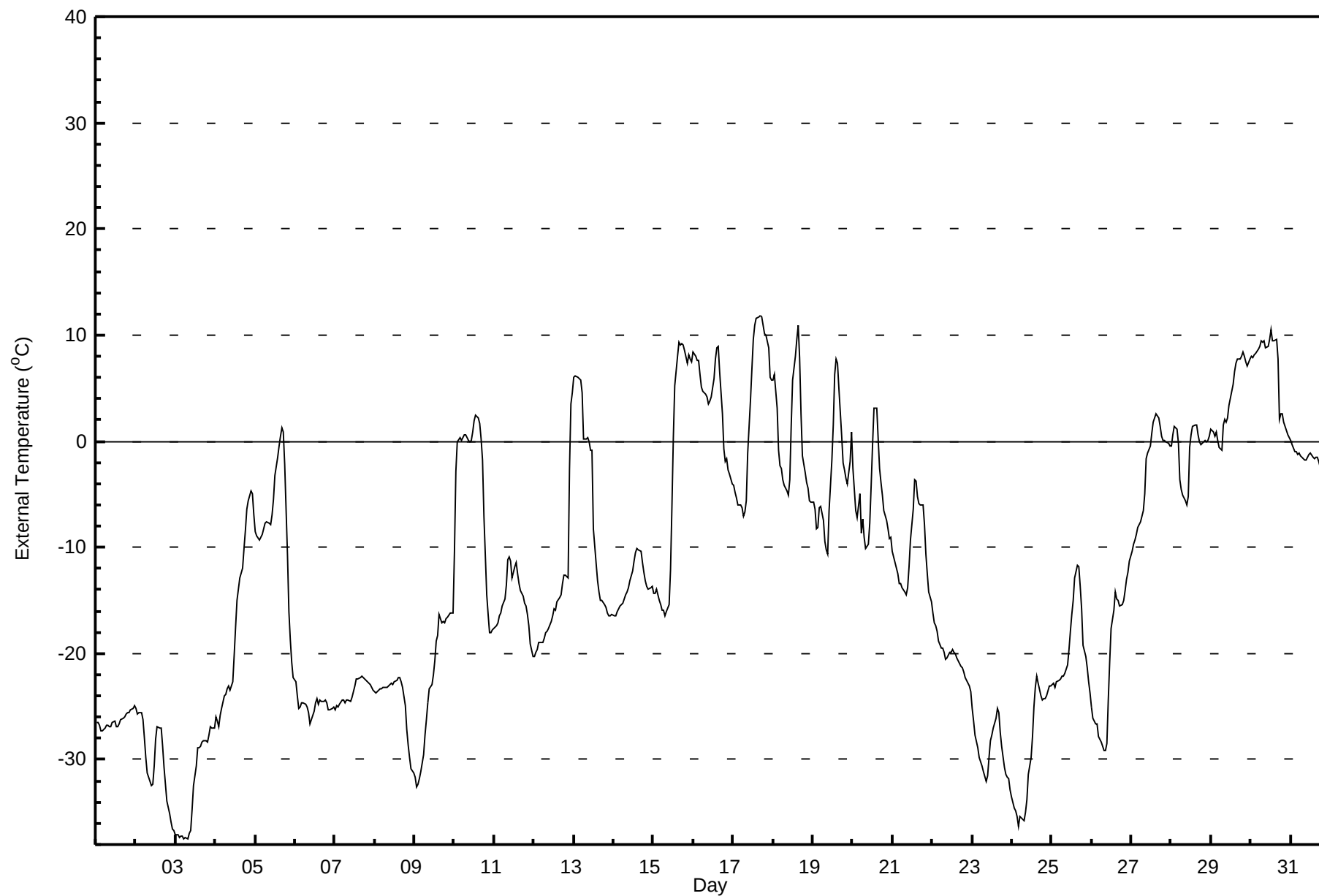
Peace Airshed Zone Association
Summary of Hourly Averages

Evergreen Park - External Temperature (ET) - °C
January 1, 2009 to February 1, 2009

Maximum Value: 11.9 °C on Jan 17 17:00																				Maximum Daily Average: 6.8 °C on Jan 30					Hours in Service: 744	
Minimum Value: -37 °C on Jan 3 06:00																				Minimum Daily Average: -32.4 °C on Jan 3					Hours of Data: 744	
Maximum Diurnal Average: -8.5 °C at hour 16																				Minimum Diurnal Average: -15.0 °C at hour 8					Hours of Missing Data: 0	
Monthly Average: -12.55 °C																				Percentiles: P ₁ = -37.0 P ₁₀ = -28.2 Q ₁ = -23.5 Median = -13.8 Q ₃ = -1.1 P ₉₀ = 5.7 P ₉₉ = 10.8					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-Jan	-26	-27	-27	-27	-27	-27	-27	-27	-27	-27	-26	-26	-27	-27	-27	-26	-26	-26	-26	-26	-26	-25	-25	-25	-26.3	-24.9
2-Jan	-25	-26	-26	-26	-26	-28	-30	-31	-32	-32	-32	-31	-28	-27	-27	-27	-29	-31	-32	-34	-35	-36	-37	-37	-30.1	-25.2
3-Jan	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-35	-32	-31	-29	-29	-29	-28	-28	-28	-28	-28	-27	-27	-27	-32.4	-26.9
4-Jan	-26	-26	-27	-26	-25	-24	-24	-23	-23	-23	-23	-20	-18	-15	-14	-13	-12	-10	-8	-6	-6	-5	-5	-7	-17.0	-4.7
5-Jan	-8	-9	-9	-9	-9	-8	-8	-8	-8	-8	-7	-5	-3	-1	0	0	1	1	-2	-11	-16	-19	-21	-22	-7.9	1.3
6-Jan	-23	-24	-25	-25	-25	-25	-25	-25	-26	-27	-26	-25	-25	-24	-25	-24	-24	-25	-24	-25	-25	-25	-25	-25	-24.9	-22.7
7-Jan	-25	-25	-25	-25	-24	-24	-25	-24	-24	-24	-24	-24	-23	-22	-22	-22	-22	-22	-22	-23	-23	-23	-23	-23	-23.6	-22.2
8-Jan	-24	-24	-24	-23	-23	-23	-23	-23	-23	-23	-23	-23	-23	-23	-22	-22	-23	-23	-25	-27	-29	-30	-31	-31	-24.5	-22.3
9-Jan	-32	-33	-32	-32	-31	-30	-28	-26	-25	-23	-23	-22	-21	-19	-18	-16	-17	-17	-17	-17	-17	-16	-16	-16	-22.6	-16.1
10-Jan	-10	-3	0	0	0	0	1	1	0	0	0	1	2	2	2	2	0	-2	-7	-14	-16	-18	-18	-18	-4.0	2.5
11-Jan	-18	-17	-17	-16	-16	-16	-15	-13	-11	-11	-11	-13	-12	-11	-12	-13	-14	-15	-15	-16	-16	-17	-19	-20	-14.9	-10.9
12-Jan	-20	-20	-20	-19	-19	-19	-19	-18	-18	-18	-17	-16	-16	-16	-15	-15	-14	-13	-13	-13	-13	-3	4	5	-14.3	4.6
13-Jan	6	6	6	6	6	5	0	0	0	0	-1	-1	-8	-12	-13	-14	-15	-15	-15	-16	-16	-16	-16	-16	-5.8	6.2
14-Jan	-16	-16	-16	-16	-16	-15	-15	-15	-14	-14	-13	-12	-11	-11	-10	-10	-10	-11	-12	-13	-14	-14	-14	-14	-13.5	-10.2
15-Jan	-14	-14	-14	-15	-15	-16	-16	-16	-16	-16	-15	-12	-6	0	5	8	9	9	9	9	7	8	8	7	-3.4	9.3
16-Jan	8	8	8	8	6	5	5	4	4	4	4	4	6	8	9	9	7	3	-1	-2	-2	-3	-3	-4	3.9	9.0
17-Jan	-4	-5	-5	-6	-6	-6	-7	-7	-6	-1	4	7	10	11	12	12	12	12	11	10	10	9	6	6	3.2	11.9
18-Jan	6	6	3	-1	-2	-3	-4	-4	-5	-5	-4	1	6	8	10	11	8	3	-1	-3	-4	-4	-6	-6	0.4	11.0
19-Jan	-6	-6	-8	-8	-6	-6	-7	-9	-10	-11	-7	-2	2	6	8	7	5	0	-2	-3	-4	-4	-2	1	-3.0	7.8
20-Jan	-3	-5	-7	-7	-5	-9	-7	-9	-10	-10	-8	-4	0	3	3	0	-3	-4	-5	-7	-7	-8	-9	-9	-5.4	3.1
21-Jan	-10	-11	-12	-12	-13	-13	-14	-14	-14	-14	-12	-9	-6	-4	-4	-5	-6	-6	-6	-8	-11	-12	-14	-15	-10.3	-3.6
22-Jan	-16	-17	-17	-18	-19	-19	-20	-20	-21	-20	-20	-20	-20	-20	-20	-20	-21	-21	-21	-22	-22	-23	-23	-24	-20.2	-16.2
23-Jan	-25	-26	-28	-29	-30	-30	-31	-31	-32	-32	-30	-28	-28	-27	-26	-25	-26	-27	-29	-31	-31	-32	-32	-33	-29.1	-25.1
24-Jan	-33	-35	-35	-35	-36	-35	-36	-36	-35	-34	-31	-30	-28	-25	-23	-22	-23	-24	-24	-24	-24	-24	-23	-23	-29.1	-22.2
25-Jan	-23	-23	-23	-23	-22	-22	-22	-22	-22	-21	-20	-18	-16	-15	-13	-12	-12	-14	-16	-19	-20	-21	-23	-24	-19.4	-11.7
26-Jan	-25	-26	-27	-27	-28	-28	-28	-29	-29	-28	-24	-21	-18	-16	-14	-15	-15	-15	-15	-15	-14	-13	-12	-11	-20.6	-11.3
27-Jan	-10	-10	-9	-9	-8	-8	-7	-7	-5	-2	-1	0	1	2	2	3	2	1	1	0	0	0	0	0	-2.7	2.5
28-Jan	-1	1	1	1	0	-4	-4	-5	-6	-6	-5	-1	1	1	2	1	1	0	0	0	0	0	0	0	-0.9	1.6
29-Jan	1	1	0	1	0	-1	-1	2	2	2	2	3	5	5	7	7	8	8	8	8	8	8	7	8	4.1	8.4
30-Jan	8	8	8	8	9	9	9	9	9	9	9	10	11	9	9	10	8	2	3	3	2	1	1	0	6.8	10.6
31-Jan	0	0	-1	-1	-1	-1	-1	-2	-2	-2	-2	-1	-1	-1	-2	-2	-1	-2	-2	-3	-3	-4	-3	-4	-1.8	0.0
-14.0 -14.0 -14.3 -14.4 -14.5 -14.8 -15.0 -15.0 -14.9 -14.6 -13.5 -11.8 -10.3 -9.1 -8.6 -8.5 -9.1 -10.1 -11.0 -12.1 -12.7 -12.8 -13.0 -13.1																										
8.4 8.0 8.1 8.3 8.7 9.0 9.4 9.4 9.4 8.8 9.0 9.5 10.6 11.0 11.6 11.7 11.9 11.7 10.9 10.1 10.1 8.7 7.7 7.8																										
Diurnal Average																										
Diurnal Maximum																										

Hourly Averages for External Temperature at Evergreen Park

January 2009



Peace Airshed Zone Association
Summary of Hourly Averages

Evergreen Park
 January 1, 2009 to February 1, 2009
 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	2	3	5	5	6	7	9	8	6	6	6	6	8	7	5	5	7	6	5	4	3	3	3	5.0	9.4
Dir	300	318	320	335	333	329	328	331	337	324	339	322	326	328	315	292	312	286	291	286	262	290	237	287	315.0	331.4
2 Spd	6	7	3	0	2	2	0	1	2	2	2	1	1	1	3	2	2	1	1	0	1	0	N	N	1.2	7.0
Dir	352	346	340	179	195	220	170	324	331	336	297	243	278	258	357	28	60	22	21	60	23	60	N	N	342.8	346.5
3 Spd	N	N	N	N	N	N	N	N	N	N	1	0	2	1	2	2	2	3	1	0	1	2	2	0	--	2.7
Dir	N	N	N	N	N	N	N	N	N	N	207	241	250	282	356	299	282	271	275	230	165	223	195	119	--	270.9
4 Spd	1	1	1	1	1	1	0	1	1	1	2	2	3	4	3	3	3	3	1	3	2	1	1	1	1.4	4.1
Dir	130	76	28	53	216	81	45	90	66	75	62	55	54	69	67	59	57	57	106	85	69	139	194	356	67.7	68.9
5 Spd	0	0	1	0	0	0	0	0	1	1	1	2	1	7	4	7	14	16	8	10	11	12	16	11	3.6	16.3
Dir	287	250	253	28	332	68	213	44	226	240	244	230	204	251	255	247	255	264	295	360	358	348	340	315	302.6	263.7
6 Spd	10	9	9	6	6	6	5	3	2	1	1	3	3	5	7	6	6	5	5	5	6	4	5	4	2.6	9.6
Dir	323	300	282	314	310	322	330	330	14	62	108	109	116	76	63	71	74	73	65	70	58	55	51	40	18.9	323.1
7 Spd	5	3	3	1	1	0	2	1	3	2	2	1	2	1	2	2	1	1	1	2	2	1	2	2	0.6	4.9
Dir	43	45	48	27	170	68	47	85	316	318	297	252	230	224	249	232	250	315	88	102	77	84	77	74	36.1	43.0
8 Spd	2	2	3	1	2	1	1	1	1	1	3	3	4	4	5	5	2	0	1	0	1	1	0	N	0.9	5.0
Dir	69	34	35	74	76	87	93	100	82	57	338	320	294	290	288	275	280	204	211	103	46	30	317	N	330.0	275.4
9 Spd	N	N	N	1	1	1	0	0	1	0	2	1	2	2	1	1	0	1	2	1	0	1	2	4	0.6	3.7
Dir	N	N	N	315	323	295	63	352	270	218	205	211	258	245	224	340	352	79	72	48	64	250	244	226	250.3	226.0
10 Spd	9	12	15	14	16	20	21	18	15	15	17	16	15	16	15	12	5	3	6	5	5	5	4	4	9.0	21.3
Dir	217	254	265	261	255	259	258	256	251	255	259	259	266	271	270	271	258	68	60	77	72	76	91	91	259.6	258.1
11 Spd	3	5	5	1	2	2	6	4	6	7	10	6	2	2	5	4	4	4	4	2	2	1	1	1	1.8	10.3
Dir	73	62	77	137	3	297	251	287	297	25	353	338	356	3	70	70	71	83	104	130	112	114	63	47	30.5	353.2
12 Spd	1	1	1	1	2	2	1	1	3	3	2	3	2	3	1	2	4	3	1	2	1	15	21	20	1.6	21.2
Dir	11	277	24	41	77	77	91	61	72	81	94	77	97	56	91	223	326	330	86	185	177	252	254	256	257.6	253.7
13 Spd	24	25	22	19	20	8	4	1	1	2	3	3	10	10	9	8	7	6	6	6	6	5	4	3	1.7	25.4
Dir	270	273	274	268	263	282	54	244	88	143	200	81	69	79	79	76	74	79	72	71	72	75	76	72	299.7	272.9
14 Spd	4	4	3	4	4	3	3	1	2	2	1	1	3	2	3	2	2	1	1	1	1	2	3	1	1.2	4.4
Dir	77	70	85	90	70	65	61	47	54	112	159	287	267	322	355	14	38	33	23	33	220	227	337	256	50.9	89.5
15 Spd	4	3	1	2	1	0	1	1	1	0	0	1	1	1	7	9	6	15	19	17	14	23	22	16	6.4	23.1
Dir	213	234	1	194	209	18	226	226	271	340	41	134	200	17	287	285	286	267	264	263	268	269	266	263	265.7	268.9
16 Spd	23	16	11	14	14	6	11	10	5	5	2	1	2	3	4	3	1	1	1	2	2	1	0	1	5.2	22.8
Dir	262	276	299	293	277	289	279	287	301	324	342	317	263	236	278	298	274	274	30	252	204	71	167	218	281.5	261.8
17 Spd	1	0	1	0	1	1	2	1	0	1	1	7	8	10	14	13	13	16	13	11	14	7	6	6	5.7	15.7
Dir	182	168	161	16	211	217	53	112	193	23	260	294	289	288	273	281	279	273	270	283	279	294	293	286	280.5	273.2
18 Spd	5	5	3	1	1	2	1	2	1	1	0	3	1	2	4	5	1	0	0	0	0	1	0	1	1.2	5.0
Dir	304	308	220	87	192	205	253	221	226	188	254	235	295	262	259	265	38	242	62	69	87	238	166	219	257.2	265.1
19 Spd	2	1	1	2	2	2	1	0	2	2	2	1	2	1	3	2	1	1	1	1	1	3	4	4	0.7	4.1
Dir	228	259	226	236	243	247	303	31	217	48	24	356	284	230	68	40	28	218	243	226	7	220	214	259	248.0	213.6
20 Spd	1	1	0	3	6	2	2	0	1	2	1	1	5	3	3	2	1	2	1	1	0	2	2	0	1.2	5.9
Dir	255	204	176	208	210	228	222	147	112	215	281	295	218	214	353	291	280	360	262	253	236	229	244	122	237.0	209.5
21 Spd	1	1	1	1	1	0	1	1	0	0	1	1	2	3	5	5	2	3	3	15	22	16	18	16	4.1	21.7
Dir	68	52	229	237	29	249	220	220	253	309	341	19	352	6	60	68	60	31	328	337	343	335	324	326	342.0	342.7
22 Spd	16	13	13	15	13	11	13	8	8	6	9	10	9	6	4	4	3	2	2	1	2	3	2	3	7.0	16.2
Dir	332	326	333	334	333	338	340	329	325	313	342	343	350	33	40	341	336	340	328	236	298	314	326	332	336.0	332.1

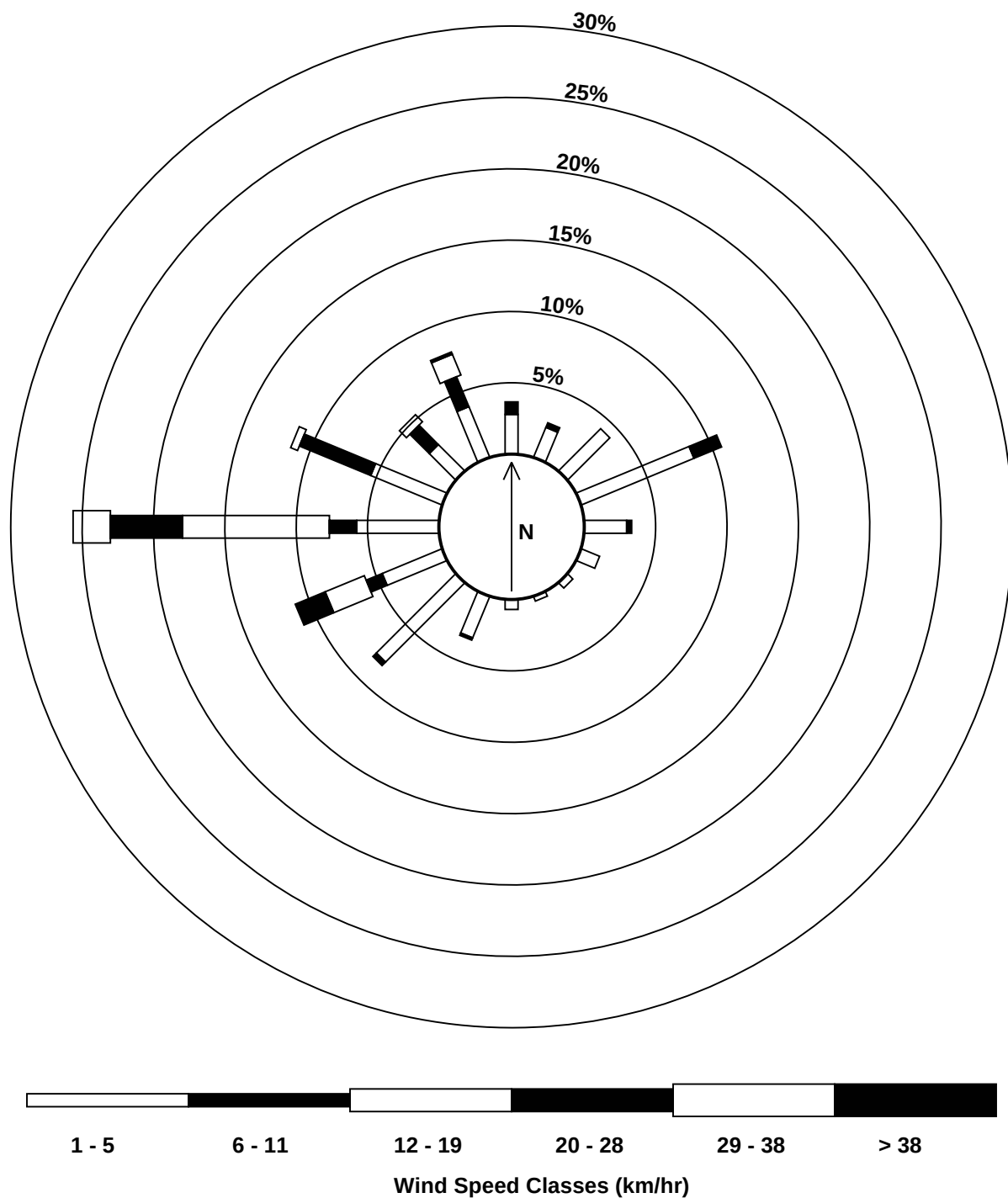
Peace Airshed Zone Association
Summary of Hourly Averages

Evergreen Park
 January 1, 2009 to February 1, 2009
 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	2	1	1	1	1	2	1	0	1	2	3	1	2	3	2	2	1	0	1	1	1	1	1.0	2.7	
Dir	329	293	265	287	271	282	332	231	231	252	337	244	309	302	279	353	23	13	315	4	250	290	295	284	301.4	353.0	
24 Spd	1	0	2	N	N	1	N	N	1	3	5	6	8	5	6	5	4	3	4	4	5	6	10	10	4.4	9.7	
Dir	239	312	229	N	N	278	N	N	280	263	273	275	282	289	289	288	285	273	260	256	258	258	276	273	273.0	276.3	
25 Spd	8	8	10	11	11	9	12	10	12	13	14	11	11	9	10	8	4	3	1	1	1	2	2	3	7.5	14.3	
Dir	270	282	278	284	280	284	280	277	276	275	278	280	286	288	280	278	274	264	198	208	209	224	225	223	276.7	277.7	
26 Spd	1	1	0	1	1	0	1	0	1	0	1	2	1	1	2	2	2	2	1	1	1	1	2	2	0.4	2.2	
Dir	222	215	257	189	315	325	235	349	280	360	220	7	357	291	357	280	304	315	263	290	41	243	50	119	304.4	279.6	
27 Spd	1	2	4	0	2	1	1	1	1	3	2	2	17	24	24	21	23	22	19	18	14	13	15	14	9.8	24.1	
Dir	347	187	217	228	208	18	235	215	206	260	263	279	283	274	270	275	273	273	268	267	276	270	269	263	269.8	269.6	
28 Spd	13	15	19	19	12	10	5	3	1	1	1	16	17	18	17	13	18	17	16	17	16	13	10	14	11.6	18.8	
Dir	263	267	273	274	311	347	338	353	112	54	233	275	275	280	281	274	272	269	264	268	262	251	256	254	274.1	273.9	
29 Spd	19	19	12	21	12	3	3	14	21	16	11	8	7	10	16	24	25	22	24	25	17	8	7	14	14.4	25.3	
Dir	255	259	255	259	253	206	162	278	276	280	287	290	302	283	278	271	271	270	266	270	267	250	255	255	267.8	271.1	
30 Spd	16	15	20	26	26	25	23	18	16	10	3	17	27	23	23	20	19	30	29	30	29	30	30	31	22.0	31.2	
Dir	262	261	255	257	257	256	256	256	251	230	286	285	273	270	255	244	246	270	270	278	267	269	266	266	262.7	265.8	
31 Spd	30	28	22	26	25	32	28	29	28	30	31	32	32	30	27	26	21	21	18	18	17	16	15	15	24.8	32.4	
Dir	264	263	256	258	261	265	270	272	271	270	272	273	274	274	276	276	280	280	276	272	273	267	269	266	269.9	273.1	
Spd	5.3	5.3	5.0	5.4	5.1	3.9	3.7	3.9	3.6	3.0	3.2	4.2	5.0	5.0	5.0	5.1	4.6	5.1	4.4	4.4	3.9	4.4	4.9	5.4	Diurnal Average		
Dir	274.9	278.1	275.1	273.2	272.0	279.2	279.7	278.7	278.9	279.1	287.5	286.4	284.3	283.9	284.2	279.6	279.4	278.3	275.0	282.1	287.0	276.4	277.4	272.4	Diurnal Maximum		
Spd	30.1	27.9	22.4	26.0	25.8	31.6	27.7	28.9	27.9	30.3	31.0	32.4	32.3	30.3	27.2	26.5	25.3	30.0	29.0	29.8	29.1	30.2	30.2	31.2	Diurnal Maximum		
Dir	264.3	262.6	256.1	256.7	257.0	264.8	270.3	271.6	270.6	270.5	272.4	273.1	274.0	274.0	275.9	276.2	271.1	270.4	269.9	278.3	267.5	269.0	265.8	265.8			
Maximum Speed Value: 32 km/h on Jan 31 12:00																									Minimum Speed Value: 0 km/h on Jan 18 21:00		
Maximum Daily Speed Average: 24.8 km/h on Jan 31																									Minimum Daily Speed Average: 0.4 km/h on Jan 26		
Maximum Diurnal Speed Average: 5.4 km/h at hour 4																									Minimum Diurnal Speed Average: 3.0 km/h at hour 10		
Monthly Average Velocity: 4.52 km/h 279.08 deg																									Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.6 Q ₁ = 1.2 Median = 2.8 Q ₃ = 9.4 P ₉₀ = 17.9 P ₉₉ = 30.2		
All monthly, daily, and diurnal averages have been calculated using vector methods																									Percent Operational Time: 97.3		
N - Not Valid																											
Frequency Distribution																											
Direction		0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total													
North		45		10		5		1		0		0		61													
NorthEast		71		7		0		0		0		0		78													
East		73		15		0		0		0		0		88													
SouthEast		12		0		0		0		0		0		12													
South		26		0		0		0		0		0		26													
SouthWest		98		4		0		2		0		0		104													
West		82		39		80		44		15		0		260													
NorthWest		55		28		12		0		0		0		95													
Total		462		103		97		47		15		0		724													

Wind Rose for WS at Evergreen Park

January 2009



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

Evergreen Park - Wind Speed (WS) - km/h
January 1, 2009 to February 1, 2009

Maximum Speed: 33 km/h on Jan 31 12:00																			Maximum Daily Speed Average: 25.1 km/h on Jan 31																			Hours in Service: 744											
Minimum Speed: 1 km/h on Jan 23 20:00																			Minimum Daily Speed Average: 1.7 km/h on Jan 23																			Hours of Data: 724											
Maximum Diurnal Speed Average: 7.9 km/h at hour 15																			Minimum Diurnal Speed Average: 5.0 km/h at hour 11																			Hours of Missing Data: 20											
Monthly Average Speed: 6.72 km/h																			Percentiles: P ₁ = 0.8 P ₁₀ = 1.2 Q ₁ = 1.8 Median = 3.1 Q ₃ = 9.6 P ₉₀ = 18.0 P ₉₉ = 30.4																			Percent Operational Time: 97.3											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Jan	2	3	3	5	6	7	7	10	9	6	6	7	6	9	8	5	6	7	6	5	5	3	3	3	5.7	9.9																							
2-Jan	6	7	3	2	2	2	1	1	2	2	2	2	1	2	3	3	2	1	1	1	1	1	N	N	2.1	7.1																							
3-Jan	N	N	N	N	N	N	N	N	N	N	1	1	2	2	2	3	2	3	1	1	1	2	2	1	--	2.9																							
4-Jan	1	2	1	1	2	2	1	1	1	1	2	2	3	4	3	3	3	3	2	3	2	2	1	2	2.0	4.2																							
5-Jan	2	1	2	1	1	3	2	1	1	2	1	2	1	7	4	7	14	16	12	11	11	13	16	12	6.0	16.4																							
6-Jan	10	9	9	7	7	7	5	3	3	1	1	3	4	5	7	7	6	5	6	6	7	5	5	4	5.4	10.1																							
7-Jan	5	3	3	1	1	1	2	1	3	3	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2.0	5.0																							
8-Jan	2	3	4	1	2	1	1	1	1	1	3	4	5	5	6	5	2	1	1	1	1	1	1	N	2.3	5.5																							
9-Jan	N	N	N	2	1	1	1	1	1	1	3	3	3	2	2	2	1	1	2	2	1	1	3	4	1.9	4.0																							
10-Jan	9	12	15	14	16	20	21	18	15	15	17	16	16	16	15	12	6	3	6	5	5	6	5	5	12.0	21.4																							
11-Jan	4	5	5	2	3	3	6	6	8	8	11	7	3	3	5	5	4	4	4	2	2	2	1	1	4.3	10.5																							
12-Jan	1	1	1	1	2	2	1	1	3	3	3	3	2	3	2	3	4	3	2	2	2	15	21	20	4.3	21.4																							
13-Jan	24	25	22	19	21	11	5	2	3	2	3	4	10	10	9	8	7	6	6	6	6	5	4	4	9.3	25.5																							
14-Jan	4	4	3	5	4	4	3	2	2	3	2	2	3	3	3	2	2	1	1	1	1	2	3	2	2.6	4.6																							
15-Jan	4	3	2	3	2	1	2	2	1	1	1	1	1	2	7	9	6	15	19	17	14	23	22	16	7.3	23.1																							
16-Jan	23	18	12	14	14	7	11	10	6	5	2	2	2	3	4	3	2	2	2	2	3	2	1	2	6.3	22.9																							
17-Jan	3	2	2	1	1	2	2	2	1	2	2	7	8	10	14	14	13	16	13	11	14	8	6	6	6.7	15.8																							
18-Jan	5	5	3	2	2	2	1	2	2	2	2	3	3	3	5	5	1	2	1	1	1	2	1	2	2.4	5.1																							
19-Jan	2	1	2	2	2	2	2	1	2	2	2	2	3	2	3	2	1	2	1	2	3	4	5	4	2.3	4.7																							
20-Jan	2	1	2	3	6	2	3	2	2	2	2	1	5	3	3	3	2	2	2	2	2	2	3	2	2.5	6.0																							
21-Jan	2	2	1	1	1	1	2	2	2	1	2	2	2	4	5	5	2	3	4	15	22	17	18	16	5.5	21.8																							
22-Jan	17	13	14	15	13	11	13	9	8	6	9	11	10	6	4	5	3	2	2	1	2	3	2	3	7.6	16.5																							
23-Jan	3	2	2	2	1	1	1	2	1	1	1	2	3	2	2	3	2	2	1	1	1	1	1	1	1.7	3.3																							
24-Jan	1	1	2	N	N	2	N	N	2	3	6	6	8	5	6	5	4	3	4	4	5	7	10	10	4.7	9.8																							
25-Jan	8	8	11	11	11	9	12	10	12	13	14	11	11	10	10	8	4	3	1	1	1	2	2	3	7.9	14.4																							
26-Jan	1	1	1	1	2	1	2	1	2	1	2	2	1	2	2	3	2	2	2	2	3	3	3	2	1.9	3.1																							
27-Jan	2	2	4	1	2	2	2	2	3	4	2	2	18	24	24	21	23	22	19	18	14	13	15	14	10.6	24.3																							
28-Jan	13	15	19	19	15	10	5	3	1	2	1	16	17	18	17	13	18	18	16	17	16	13	11	14	12.8	18.9																							
29-Jan	19	19	12	21	12	5	4	14	21	16	12	9	7	10	16	24	25	22	24	25	17	8	7	14	15.2	25.4																							
30-Jan	17	15	20	26	26	25	24	18	16	10	6	19	27	23	23	20	21	30	29	30	29	30	30	31	22.7	31.3																							
31-Jan	30	28	23	26	26	32	28	29	28	30	31	33	33	31	27	27	21	21	18	18	17	16	15	15	25.1	32.7																							
																									7.6	7.4	7.0	7.3	7.0	6.0	5.9	5.4	5.4	5.0	5.0	5.9	7.1	7.4	7.9	7.6	6.9	7.1	6.8	7.0	6.8	6.8	7.4	7.5	Diurnal Average
																									30.2	28.0	22.5	26.2	26.0	31.8	27.9	29.1	28.0	30.5	31.2	32.7	32.5	30.5	27.4	26.6	25.4	30.2	29.2	29.9	29.2	30.3	30.4	31.3	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

Evergreen Park - Wind Direction (WD) - deg
January 1, 2009 to February 1, 2009

Maximum Value: 97.3 deg on Jan 26 06:00																					Hours in Service: 744				
Minimum Value: 3.2 deg on Jan 15 19:00																					Hours of Data: 724				
																					Hours of Missing Data: 20				
Percentiles: P ₁ = 4.4 P ₁₀ = 6.3 Q ₁ = 11.9 Median = 25.6 Q ₃ = 58.6 P ₉₀ = 79.2 P ₉₉ = 91.1																					Hours of Calibration: 0				
																					Percent Operational Time: 97.3				
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-Jan	32	37	27	12	13	15	19	18	16	14	17	22	15	17	27	19	17	16	18	24	15	28	12	30	36.7
2-Jan	18	11	19	84	18	18	72	71	24	27	29	32	50	36	22	23	15	17	49	76	46	76	N	N	84.4
3-Jan	N	N	N	N	N	N	N	N	N	N	60	91	19	55	39	40	25	20	45	92	61	40	59	80	92.2
4-Jan	76	55	66	70	71	78	81	48	50	52	19	20	13	10	10	20	21	30	82	16	20	42	70	46	82.1
5-Jan	90	92	61	74	92	90	88	78	86	79	65	28	90	26	45	17	6	8	60	21	12	14	8	17	91.7
6-Jan	19	16	15	18	20	19	20	25	35	44	71	41	33	29	12	17	16	17	13	15	13	18	16	14	71.2
7-Jan	19	24	16	69	52	87	20	60	25	18	39	33	51	41	26	32	44	59	32	25	27	25	20	23	86.5
8-Jan	18	48	45	65	28	25	25	26	36	33	31	29	24	25	33	13	42	88	71	80	72	63	71	N	87.8
9-Jan	N	N	N	47	42	46	91	84	62	96	29	74	38	37	58	64	91	61	38	80	89	66	49	22	95.9
10-Jan	10	10	6	6	7	3	4	5	7	6	4	4	6	4	5	6	16	31	12	21	16	17	20	22	30.6
11-Jan	24	15	21	73	57	61	15	45	51	21	15	32	48	59	14	18	14	20	19	26	17	29	63	56	73.3
12-Jan	31	66	57	56	20	23	53	40	25	25	28	26	28	21	80	51	30	27	59	55	62	35	8	5	80.1
13-Jan	7	5	5	6	5	63	41	58	91	29	36	59	16	17	18	18	14	15	20	17	14	18	22	23	91.1
14-Jan	23	15	24	21	19	17	23	40	39	39	58	62	18	50	25	25	22	82	51	68	67	67	36	65	82.4
15-Jan	16	42	74	61	86	92	75	40	66	85	97	61	71	51	15	11	13	5	3	7	6	4	4	6	97.1
16-Jan	6	34	22	19	11	49	15	11	24	31	38	65	34	24	12	32	74	59	51	41	57	63	74	83	83.4
17-Jan	91	71	75	89	81	78	47	71	81	71	71	20	11	12	5	7	9	6	8	7	8	32	30	10	91.2
18-Jan	19	17	66	79	64	66	47	47	76	52	84	18	59	54	16	9	66	91	82	83	94	65	73	74	93.7
19-Jan	53	70	41	24	47	31	73	91	63	58	75	81	76	91	58	30	53	82	80	62	89	86	49	24	90.7
20-Jan	57	74	91	33	6	41	85	86	72	25	69	49	36	57	15	32	44	29	41	44	91	49	63	78	91.3
21-Jan	90	82	88	62	74	83	86	81	95	78	75	61	36	23	20	18	35	23	35	11	7	13	11	12	95.4
22-Jan	11	13	11	11	10	10	9	14	14	14	11	11	17	26	15	37	24	23	36	41	23	13	18	16	40.9
23-Jan	25	31	24	75	45	56	58	66	80	80	39	19	38	60	38	28	15	28	45	67	69	47	47	39	80.3
24-Jan	79	89	21	N	N	66	N	N	60	18	10	11	11	14	11	11	9	25	9	7	8	10	8	8	88.7
25-Jan	9	10	7	7	7	9	7	7	7	6	6	9	8	9	8	9	16	17	47	69	32	45	26	12	68.8
26-Jan	29	61	75	67	79	97	77	82	77	95	85	33	35	61	45	45	44	53	61	74	78	88	56	59	97.3
27-Jan	70	61	16	92	15	90	80	55	85	38	34	36	9	8	6	6	6	5	5	5	8	7	5	4	92.2
28-Jan	5	5	5	5	33	11	28	28	60	82	78	12	6	6	7	7	6	6	5	6	7	8	8	9	81.8
29-Jan	8	7	10	7	9	49	50	23	7	8	12	13	17	12	9	5	6	6	5	6	7	18	14	7	49.7
30-Jan	7	7	5	5	6	5	6	7	15	8	53	38	7	8	7	7	20	7	6	5	6	6	6	6	52.9
31-Jan	5	6	6	6	6	6	6	6	5	6	7	7	7	7	7	6	9	8	7	6	5	5	6	6	9.0
91.2 91.7 91.3 92.2 91.6 97.3 90.7 90.6 95.4 95.9 97.1 91.5 90.3 90.7 80.1 64.2 91.4 91.0 82.4 92.2 93.7 88.5 73.8 83.4																									
N - Not Valid																									

PASZA

Smoky Heights Station

Monthly Summary Tables, Graphs and Roses

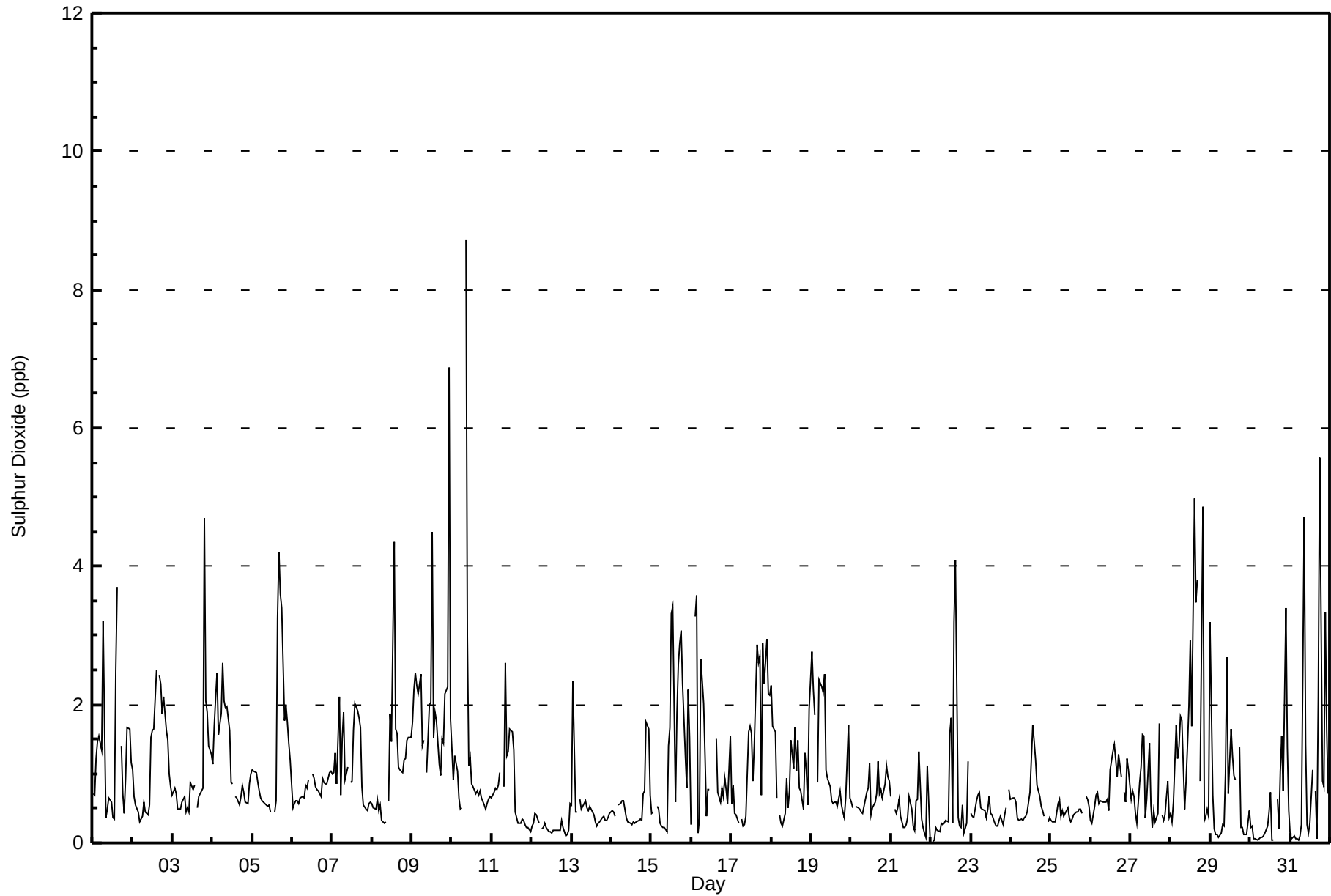
Peace Airshed Zone Association
Summary of Hourly Averages

Smoky Heights - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 8.7 ppb on Jan 10 09:00 Maximum Daily Average: 2.1 ppb on Jan 9																			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 Jan 22 02:00 Maximum Diurnal Average: 1.3 ppb at hour 16 Monthly Average: 0.96 ppb																			Minimum Daily Average: 0.2 ppb on Jan 12 Minimum Diurnal Average: 0.7 ppb at hour 5 Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.4 Median = 0.6 Q ₃ = 1.3 P ₉₀ = 2.1 P ₉₉ = 4.7							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	1	1	1	1	2	1	3	2	0	0	1	1	0	0	2	4	A	1	1	0	1	2	2	1	1.3	3.7
2-Jan	1	1	1	0	0	0	0	1	0	0	1	2	2	2	3	A	2	2	2	2	2	1	1	1	1.2	2.5
3-Jan	1	1	1	0	0	0	1	1	0	1	0	1	1	1	A	1	1	1	1	5	2	2	1	1	1.0	4.7
4-Jan	1	2	2	2	2	2	3	2	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1.3	2.6
5-Jan	1	1	1	1	1	1	1	1	1	1	1	0	A	0	1	3	4	4	3	2	2	2	1	1	1.4	4.2
6-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
7-Jan	1	1	1	1	2	1	2	2	1	1	A	1	1	2	2	2	2	2	1	1	0	0	1	1	1.2	2.1
8-Jan	1	1	0	1	0	1	0	0	0	A	1	2	1	4	2	2	1	1	1	1	1	1	2	2	1.1	4.4
9-Jan	2	2	2	2	2	2	1	1	A	1	2	2	5	2	2	2	1	1	2	1	2	2	7	2	2.1	6.9
10-Jan	1	1	1	1	1	0	1	A	9	3	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1.2	8.7
11-Jan	1	1	1	1	1	1	A	1	3	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0.8	2.6
12-Jan	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.6
13-Jan	1	2	0	0	A	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.3
14-Jan	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	1	0.6	1.8
15-Jan	0	0	A	1	0	0	0	0	0	0	1	2	3	3	1	2	3	3	3	2	1	1	2	2	1.4	3.4
16-Jan	0	A	3	4	0	0	3	2	1	0	1	1	C	C	A	2	1	1	1	1	1	1	2	1.2	3.6	
17-Jan	1	1	0	0	0	A	0	0	0	0	2	2	2	1	1	3	3	3	1	3	2	3	2	2	1.4	3.0
18-Jan	2	2	2	1	A	0	0	0	0	1	1	1	1	1	2	1	1	1	1	0	1	1	1	2	1.0	2.3
19-Jan	3	2	2	A	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	1	2	1	1.2	2.8
20-Jan	1	1	A	1	1	0	0	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0.7	1.2
21-Jan	1	A	0	0	1	1	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	1	0	0.4	1.3
22-Jan	A	0	0	0	0	0	0	0	0	0	0	2	2	0	3	4	0	0	0	1	0	0	1	A	0.7	4.1
23-Jan	0	0	0	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	A	1	0.5	0.8
24-Jan	1	1	1	1	0	0	0	0	0	0	0	1	1	2	1	1	1	1	1	0	0	A	0	0	0.7	1.7
25-Jan	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	1	1	1	0.4	0.7
26-Jan	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.4
27-Jan	1	1	1	0	0	1	1	2	2	0	1	1	1	0	0	0	0	2	A	0	0	0	1	0	0.7	1.7
28-Jan	0	0	1	2	1	1	2	2	0	1	1	2	3	2	5	3	4	A	1	5	0	0	0	0	1.7	5.0
29-Jan	3	1	0	0	0	0	0	0	0	1	3	1	2	1	1	1	A	1	0	0	0	0	0	0	0.7	3.2
30-Jan	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	1	0	1	2	1	3	1	0	0.5	3.4
31-Jan	0	0	0	0	0	0	0	0	5	1	0	0	0	1	A	1	0	2	6	1	1	3	2	1	1.1	5.6
Diurnal Average																										
Diurnal Maximum																										
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																										

Hourly Averages for SO₂ at Smoky Heights

January 2009



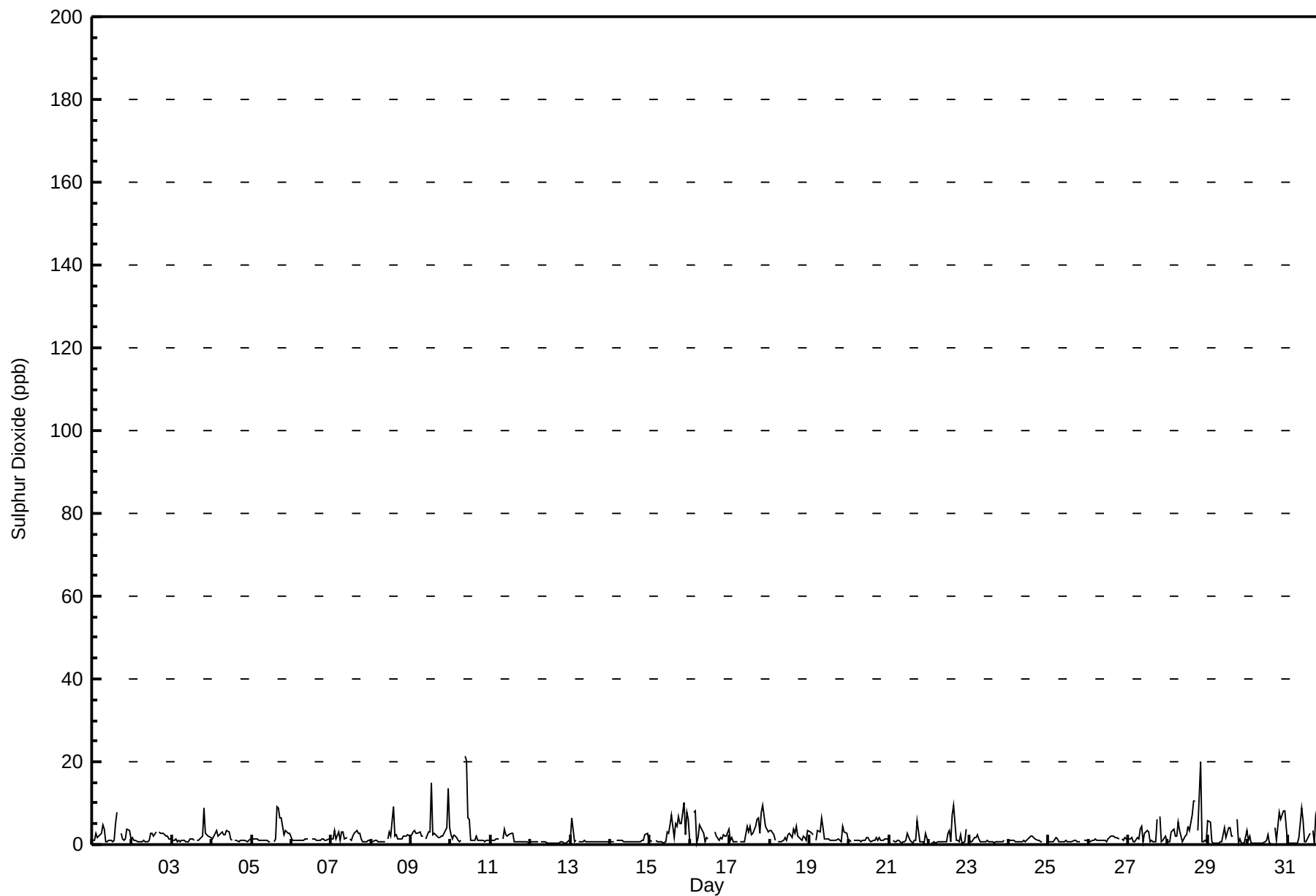
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Smoky Heights - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009**

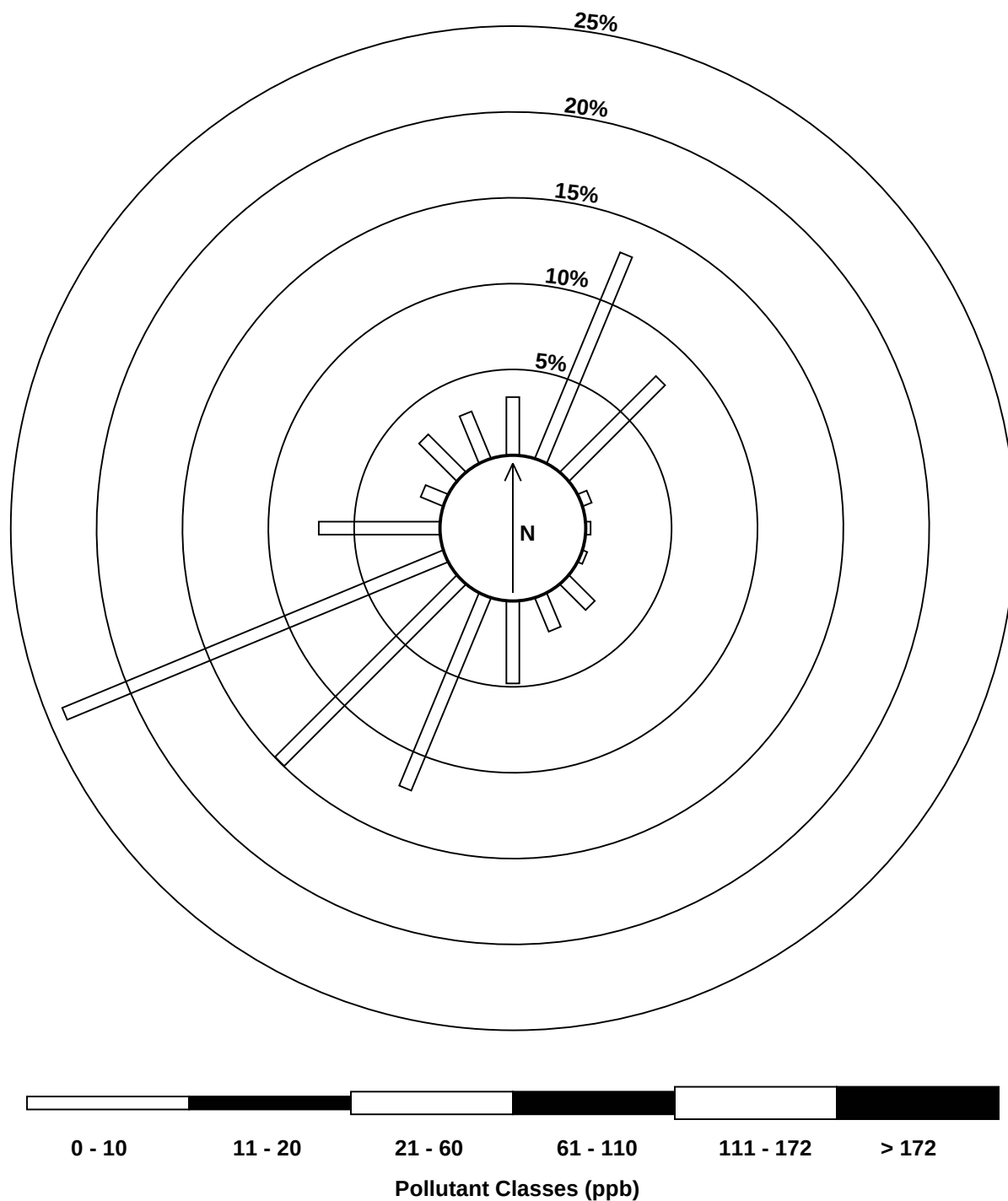
Maximum Value: 21.2 ppb on Jan 10 09:00																				Maximum Daily Average: 3.9 ppb on Jan 28					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 31 06:00																				Minimum Daily Average: 0.6 ppb on Jan 12					Hours of Data: 709	
Maximum Diurnal Average: 2.9 ppb at hour 20																				Minimum Diurnal Average: 1.1 ppb at hour 5					Hours of Missing Data: 35	
Monthly Average: 1.94 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.6 Q ₁ = 0.8 Median = 1.1 Q ₃ = 2.4 P ₉₀ = 4.0 P ₉₉ = 10.5					Hours of Calibration: 35	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	1	1	3	2	2	3	5	4	1	1	1	1	1	1	5	8	A	3	1	1	1	4	3	2	2.3	7.8
2-Jan	2	1	1	1	1	1	1	1	1	1	1	3	3	2	3	A	3	3	3	3	2	2	1	1	1.7	3.1
3-Jan	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	2	9	3	2	2	2	1.6	8.8
4-Jan	2	2	3	3	2	3	3	3	2	3	3	1	1	A	1	1	1	1	1	1	1	1	1	1	1.8	3.4
5-Jan	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	9	9	6	6	2	3	3	3	3	2.6	9.2
6-Jan	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	1.5
7-Jan	1	1	3	1	3	1	3	3	1	2	A	1	1	2	3	3	3	3	1	1	1	1	1	1	1.8	3.5
8-Jan	1	1	1	1	1	1	1	1	1	A	1	3	2	9	2	2	1	1	1	2	2	2	2	2	1.8	9.3
9-Jan	2	3	3	3	3	3	2	2	A	1	3	3	15	2	3	2	2	2	2	2	3	4	13	4	3.6	15.0
10-Jan	2	1	2	2	1	1	1	A	21	20	6	6	1	1	1	2	1	1	1	1	1	1	1	1	3.3	21.2
11-Jan	1	1	1	1	1	1	A	1	4	2	2	2	3	3	1	1	1	1	1	1	1	1	1	1	1.3	3.9
12-Jan	1	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0.6	1.0
13-Jan	1	6	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	6.3
14-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1	0.9	2.8
15-Jan	1	1	A	1	1	1	1	1	0	1	3	3	5	7	2	5	4	7	5	5	10	2	8	6	3.4	10.3
16-Jan	1	A	8	8	0	2	5	3	3	1	2	1	C	C	A	3	2	1	2	1	2	2	2	4	2.6	8.3
17-Jan	1	2	1	1	1	A	1	1	1	1	4	3	4	2	3	4	6	6	3	8	10	4	4	3	3.2	9.6
18-Jan	3	4	2	1	A	1	1	1	1	2	1	2	3	2	4	3	5	2	2	1	2	2	1	4	2.0	4.5
19-Jan	3	3	2	A	1	3	3	6	4	1	1	1	1	1	1	1	1	1	1	1	5	3	3	1	2.1	6.5
20-Jan	1	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	2	1	2	1	1	1	1	1	1.1	1.8
21-Jan	1	A	1	1	1	1	1	0	1	1	1	3	1	1	0	1	1	6	1	1	0	3	0	1.2	5.8	
22-Jan	A	0	0	1	0	1	1	1	1	1	1	3	3	1	7	10	1	1	1	2	0	1	4	A	1.7	9.6
23-Jan	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1.0	2.4
24-Jan	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	A	1	1	1.0	2.1
25-Jan	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.6
26-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	A	1	1	2	1	1.2	2.0
27-Jan	1	1	2	1	1	2	2	4	4	1	3	3	3	1	1	1	1	6	A	7	1	1	2	1	2.1	6.9
28-Jan	1	1	3	4	2	2	6	3	1	1	2	2	4	3	7	11	11	A	3	20	1	1	1	1	3.9	20.2
29-Jan	6	5	1	0	0	0	0	1	1	2	4	2	4	4	2	2	A	6	0	1	0	0	0	3	2.1	6.0
30-Jan	1	2	0	0	0	0	0	0	0	0	1	1	3	0	0	A	4	1	4	8	6	8	8	4	2.4	8.1
31-Jan	0	0	0	0	0	0	0	2	9	6	1	1	1	3	A	4	0	7	9	4	6	6	3	2	2.8	8.8
1.4 1.6 1.6 1.4 1.1 1.3 1.5 1.5 2.2 1.9 1.7 1.8 2.4 2.0 2.0 2.8 2.3 2.4 2.0 2.9 2.3 2.0 2.6 1.8																									Diurnal Average	
5.7 6.3 8.0 8.3 3.0 3.4 5.5 6.5 21.2 20.2 6.5 6.0 15.0 9.3 7.1 10.5 10.6 7.1 8.8 20.2 10.3 8.1 13.5 6.3																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums for SO₂ at Smoky Heights

January 2009



Pollutant Rose for SO₂ at Smoky Heights January 2009



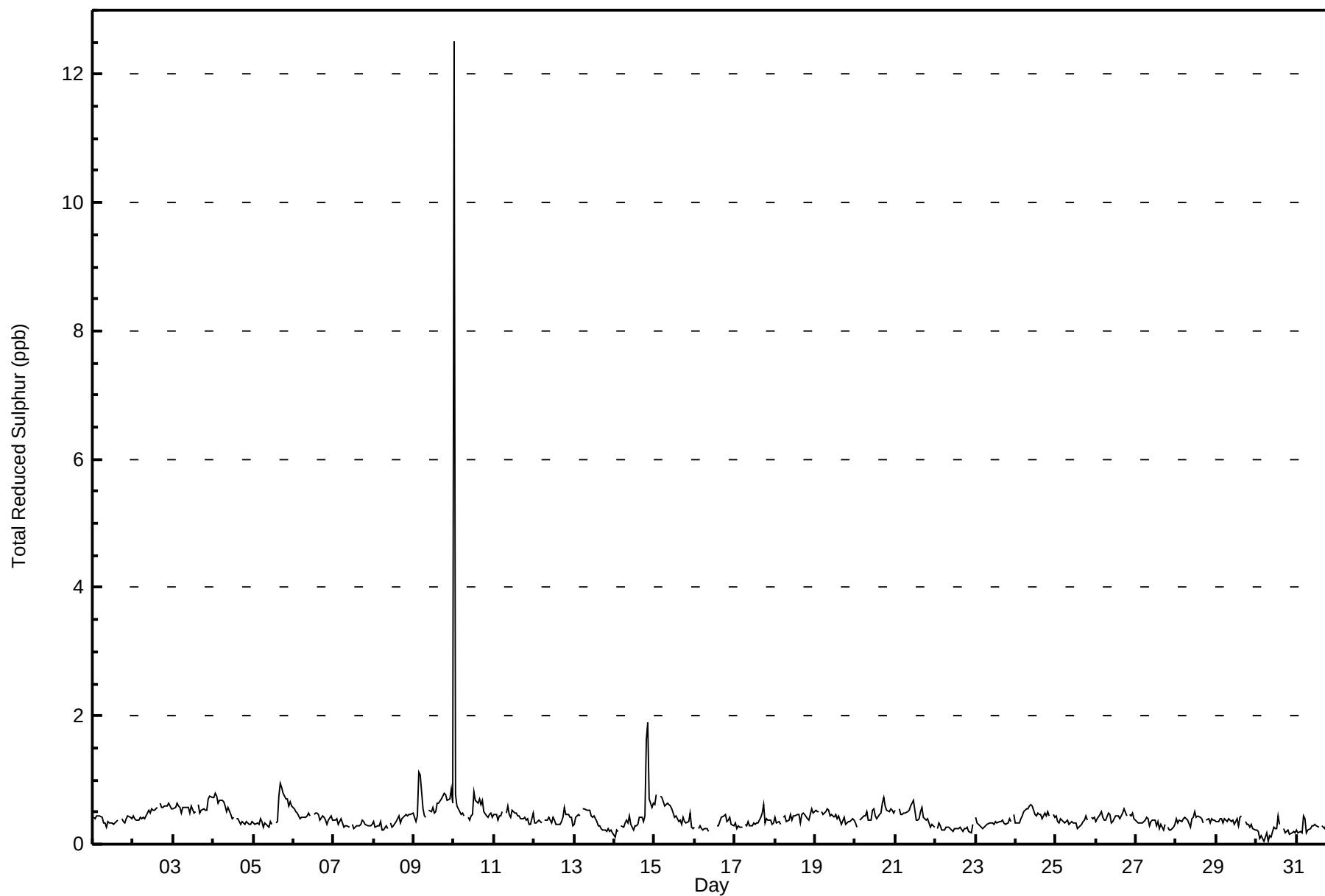
**Peace Airshed Zone Association
Summary of Hourly Averages**

**Smoky Heights - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009**

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 0 Maximum Value: 12.5 ppb on Jan 10 01:00 Maximum Daily Average: 1.1 ppb on Jan 10																			Hours in Service: 744							
Minimum Value: 0 ppb on Jan 30 08:00 Maximum Diurnal Average: 0.8 ppb at hour 1 Monthly Average: 0.43 ppb																			Hours of Data: 708							
																			Hours of Missing Data: 36							
																			Hours of Calibration: 36							
Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 0.8																			Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.4
2-Jan	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	0.5	0.6
3-Jan	1	1	1	1	1	0	1	1	1	1	0	1	0	1	A	1	0	1	1	1	1	1	1	1	0.6	0.7
4-Jan	1	1	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.5	0.8
5-Jan	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	0.5	0.9
6-Jan	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
7-Jan	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
8-Jan	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
9-Jan	0	0	0	1	1	1	0	0	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1
10-Jan	13	1	1	1	0	0	0	A	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	1.1	12.5
11-Jan	0	0	0	0	0	1	A	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
12-Jan	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.6
13-Jan	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
14-Jan	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	1	0.5	1.9
15-Jan	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8
16-Jan	0	A	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
17-Jan	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.6
18-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.5
19-Jan	1	1	1	A	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
20-Jan	0	0	A	0	0	0	0	1	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	0	0.5	0.7
21-Jan	1	A	1	0	0	0	0	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0.5	0.7
22-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.3
23-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.5
24-Jan	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	A	0	0	0.5	0.6
25-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.4
26-Jan	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0.4	0.6
27-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4
28-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5
29-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4
30-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.4
31-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
0.8 0.4																									Diurnal Average	
12.5 0.8 0.8 1.1 1.1 0.7 0.7 0.6 0.6 0.6 0.6 0.7 0.8 0.7 0.6 0.7 0.9 0.9 0.8 1.6 1.9 0.7 0.9 0.7																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages for TRS at Smoky Heights

January 2009

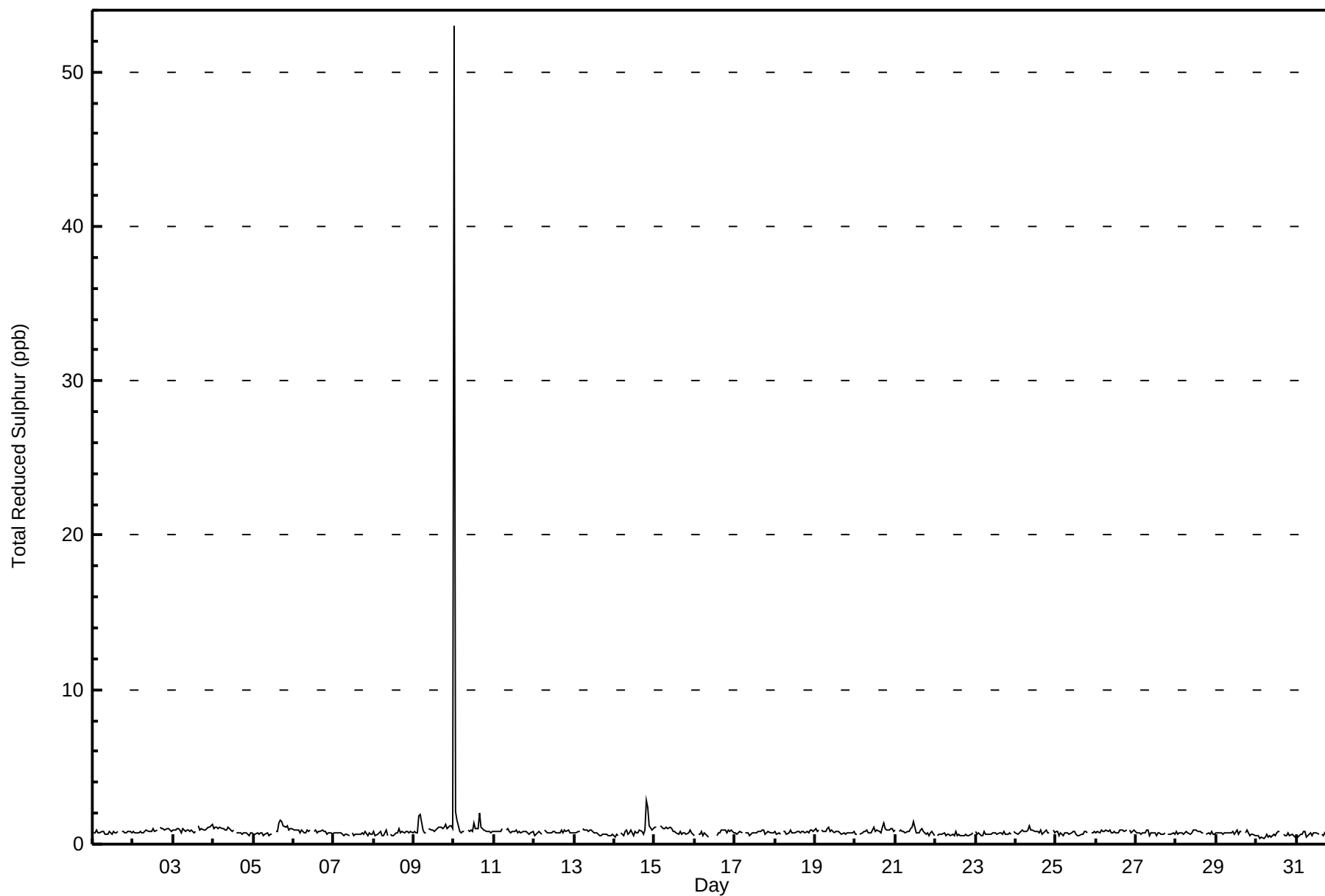


**Peace Airshed Zone Association
Summary of Hourly Maximums**

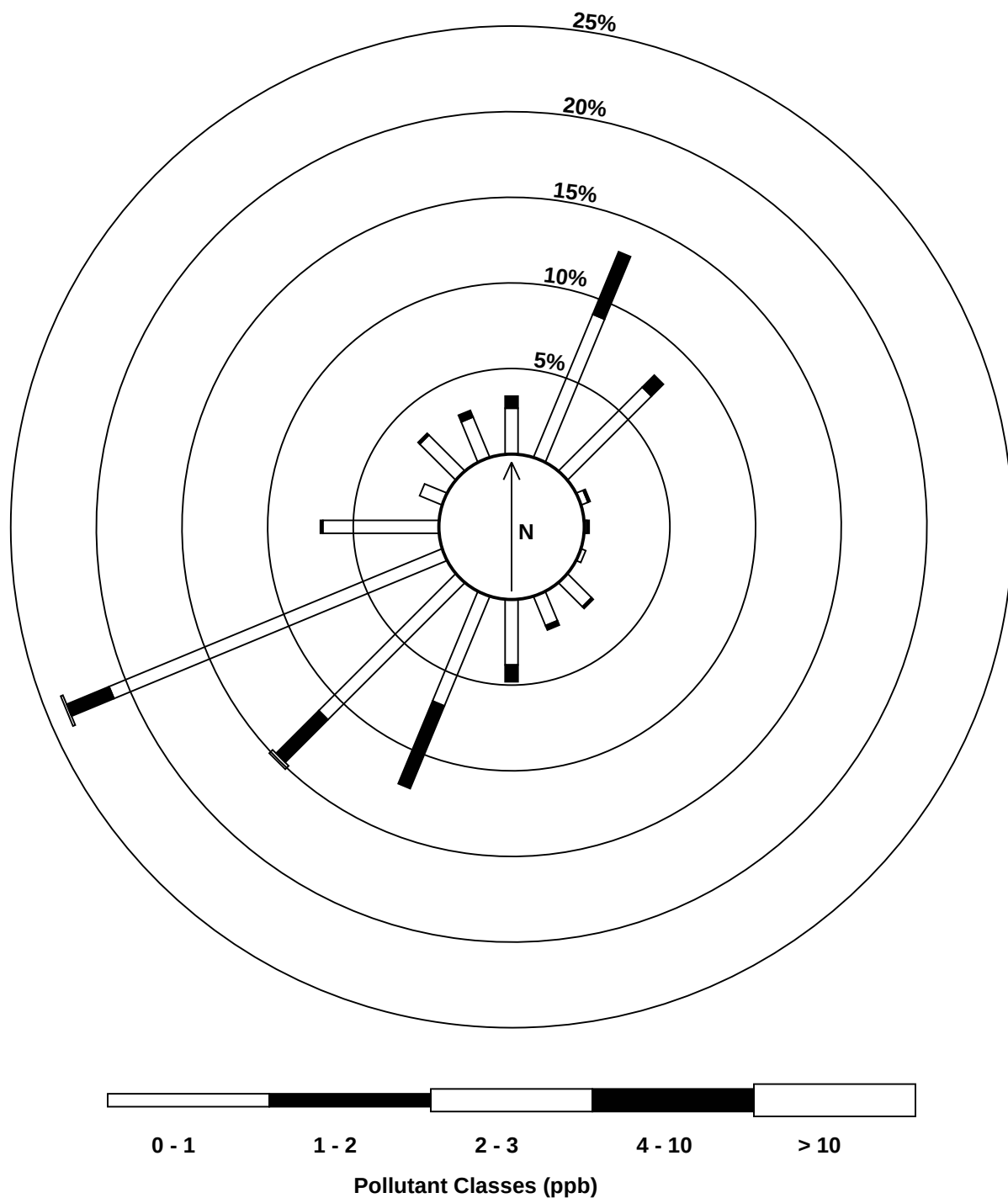
**Smoky Heights - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 53.0 ppb on Jan 10 01:00																				Maximum Daily Average: 3.3 ppb on Jan 10					Hours in Service: 744		
Minimum Value: 0 ppb on Jan 30 03:00																				Minimum Daily Average: 0.6 ppb on Jan 30					Hours of Data: 708		
Maximum Diurnal Average: 2.5 ppb at hour 1																				Minimum Diurnal Average: 0.8 ppb at hour 14					Hours of Missing Data: 36		
Monthly Average: 0.87 ppb																				Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 0.9 P ₉₀ = 1.0 P ₉₉ = 1.8					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-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	0.9	
2-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.1	
3-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.3	
4-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
5-Jan	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	0.9	1.6	
6-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9	
7-Jan	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8	
8-Jan	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
9-Jan	1	1	1	2	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.9	
10-Jan	53	2	2	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	3.3	53.0	
11-Jan	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
12-Jan	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9	
13-Jan	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	
14-Jan	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	0.9	2.8	
15-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
16-Jan	1	A	1	1	1	1	1	1	0	C	C	C	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
17-Jan	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
18-Jan	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	0.9	
19-Jan	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
20-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
21-Jan	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
22-Jan	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	0.8	
23-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.8	
24-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.2	
25-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	0.8	
26-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.0	
27-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	0.9	
28-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9	
29-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	0.9	
30-Jan	1	1	0	0	0	0	1	0	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.6	0.8	
31-Jan	1	0	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.6	0.9	
2.5 0.8																									Diurnal Average		
53.0 2.1 1.6 1.8 1.9 1.0 1.0 1.1 1.2 1.1 1.1 1.5 1.4 1.0 1.0 2.0 1.6 1.4 1.2 2.8 2.4 1.2 1.2 1.3																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											

Hourly Maximums for TRS at Smoky Heights January 2009



Pollutant Rose for TRS at Smoky Heights January 2009

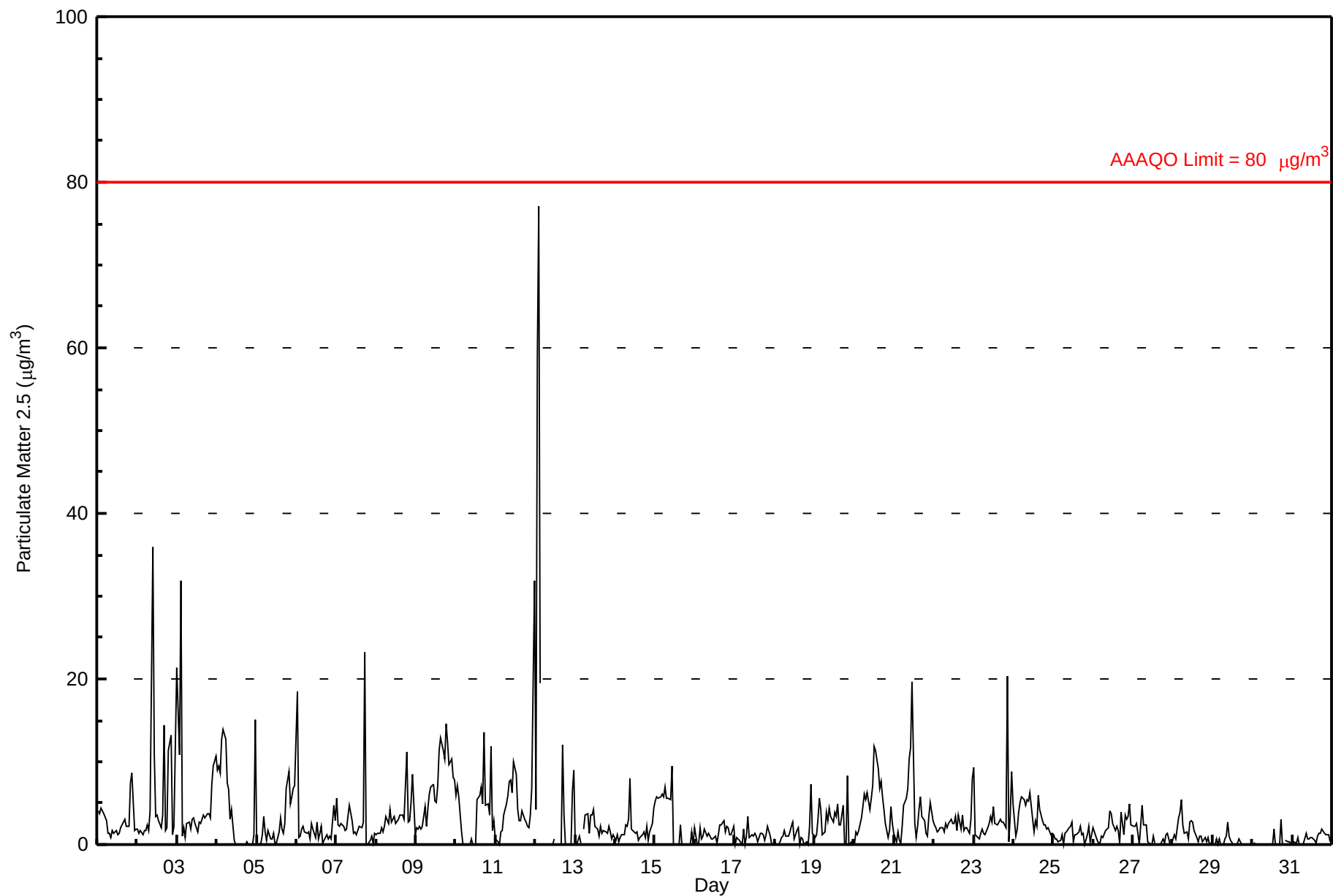


Peace Airshed Zone Association
Summary of Hourly Averages

Smoky Heights - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAO): 1-hr: 0 24-hr: 0 Maximum Value: 77.1 µg/m³ on Jan 12 03:00 Maximum Daily Average: 9.6 µg/m³ on Jan 12																					Hours in Service: 744 Hours of Data: 736 Hours of Missing Data: 8 Hours of Calibration: 0 Percent Operational Time: 98.9					
Minimum Value: 0 µg/m³ on Jan 4 12:00 Maximum Diurnal Average: 5.1 µg/m³ at hour 3 Monthly Average: 3.01 µg/m³										Minimum Daily Average: 0.3 µg/m³ on Jan 30 Minimum Diurnal Average: 2.2 µg/m³ at hour 14 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.7 Median = 1.8 Q ₃ = 3.4 P ₉₀ = 6.8 P ₉₉ = 19.8																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	4	4	4	4	4	3	1	1	1	2	1	2	1	1	2	2	3	2	2	2	7	9	2	2	2.8	8.7
2-Jan	2	1	2	1	2	2	2	2	4	36	11	3	4	3	2	4	14	2	2	11	13	1	2	12	5.7	35.9
3-Jan	21	11	32	1	2	1	2	3	2	3	3	3	2	3	2	3	4	3	4	4	3	7	9	11	5.8	31.9
4-Jan	9	9	9	13	14	13	7	7	3	4	1	0	0	0	BD	0	0	0	0	0	0	0	1	15	4.6	15.1
5-Jan	0	0	0	1	3	2	1	2	1	1	1	0	0	1	3	2	1	2	7	9	5	6	7	7	2.6	8.9
6-Jan	18	1	1	2	2	2	1	2	1	3	2	1	3	1	1	2	0	1	1	1	1	1	5	3	2.2	18.5
7-Jan	6	2	2	3	2	2	2	3	5	3	1	2	1	2	2	2	3	23	0	0	1	1	0	1	2.9	23.3
8-Jan	1	1	1	2	1	2	3	2	4	3	3	3	3	3	4	4	3	3	11	3	3	5	9	1	3.3	11.3
9-Jan	2	2	2	2	2	5	2	4	6	7	7	5	5	7	11	13	11	10	15	12	10	10	8	8	7.0	14.6
10-Jan	6	7	6	2	0	0	0	0	0	1	0	0	0	5	6	7	5	14	5	5	4	12	2	3	3.6	13.6
11-Jan	1	0	0	1	2	4	5	6	8	8	6	10	8	4	3	3	4	3	3	2	2	4	7	32	5.2	31.8
12-Jan	4	59	77	19	BD	BD	BD	0	0	0	0	1	BD	0	0	0	12	4	0	0	0	0	7	9	9.6	77.1
13-Jan	0	0	1	0	BD	2	4	4	1	4	4	4	2	2	1	2	1	2	2	1	2	1	1	1	1.8	4.2
14-Jan	1	1	0	1	1	1	2	2	3	8	2	1	1	1	1	1	1	2	1	2	1	1	3	4	1.8	8.0
15-Jan	5	6	6	6	6	6	7	6	6	5	9	0	0	0	0	2	0	0	0	0	0	0	2	0	3.0	9.4
16-Jan	2	0	0	2	1	1	2	1	1	1	1	1	1	0	1	2	2	3	2	2	2	1	1	2	1.4	2.9
17-Jan	0	1	1	0	0	2	0	1	3	1	1	1	1	1	0	1	1	1	0	1	2	1	0	0	1.0	3.3
18-Jan	1	0	0	0	1	1	2	1	1	2	2	3	1	2	2	0	1	1	0	0	0	2	7	1	1.3	7.3
19-Jan	1	1	3	6	4	1	1	4	3	4	3	3	4	3	5	2	2	5	0	0	8	0	0	0	2.7	8.4
20-Jan	0	2	1	2	3	5	6	5	6	4	6	7	12	11	9	7	8	6	4	3	1	2	5	3	4.8	11.8
21-Jan	1	0	1	1	0	2	5	6	7	10	12	20	3	1	2	4	6	3	3	1	1	3	5	3	4.2	19.6
22-Jan	2	2	2	2	2	2	1	3	2	2	3	3	3	3	2	4	2	3	2	2	2	1	3	8	2.5	7.9
23-Jan	9	1	1	1	1	2	1	1	2	2	3	3	4	3	2	3	3	3	3	2	20	0	3	9	3.5	20.3
24-Jan	5	1	2	4	5	6	5	5	5	5	6	3	1	3	2	6	4	3	2	2	2	2	1	1	3.5	6.3
25-Jan	1	1	1	0	1	1	0	1	2	2	2	3	0	1	1	1	2	1	1	0	1	2	0	1	1.2	2.7
26-Jan	2	2	1	0	0	1	1	2	2	2	4	4	3	2	2	2	0	4	1	4	3	3	5	2	2.1	5.0
27-Jan	2	2	3	1	0	5	2	2	2	0	0	0	1	0	BD	0	0	0	1	0	1	1	0	0	1.1	4.8
28-Jan	1	1	1	3	4	5	2	1	1	1	3	3	3	2	1	0	1	1	0	1	0	1	0	0	1.5	5.5
29-Jan	0	0	1	0	1	0	0	1	1	3	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	2.6
30-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	BD	1	0	0	0	0.3	3.1
31-Jan	0	0	0	1	0	0	0	0	1	1	1	1	1	1	0	1	1	1	2	1	1	1	1	0	0.7	1.9
3.5 3.9 5.1 2.6 2.2 2.5 2.4 2.5 2.7 4.1 3.3 2.8 2.3 2.2 2.4 2.6 3.2 3.5 2.3 2.4 3.1 2.6 3.1 4.5																								Diurnal Average		
21.4 59.0 77.1 19.4 13.9 12.8 7.4 6.6 7.6 35.9 11.8 19.6 11.8 11.3 11.4 13.0 14.5 23.3 14.6 12.3 20.3 11.8 9.5 31.8																								Diurnal Maximum		
BD - Baseline Drift Alberta Ambient Air Quality Objectives (AAAO): 1-hr 80 µg/m³ 24-hr 30 µg/m³																										

Hourly Averages for PM_{2.5} at Smoky Heights January 2009

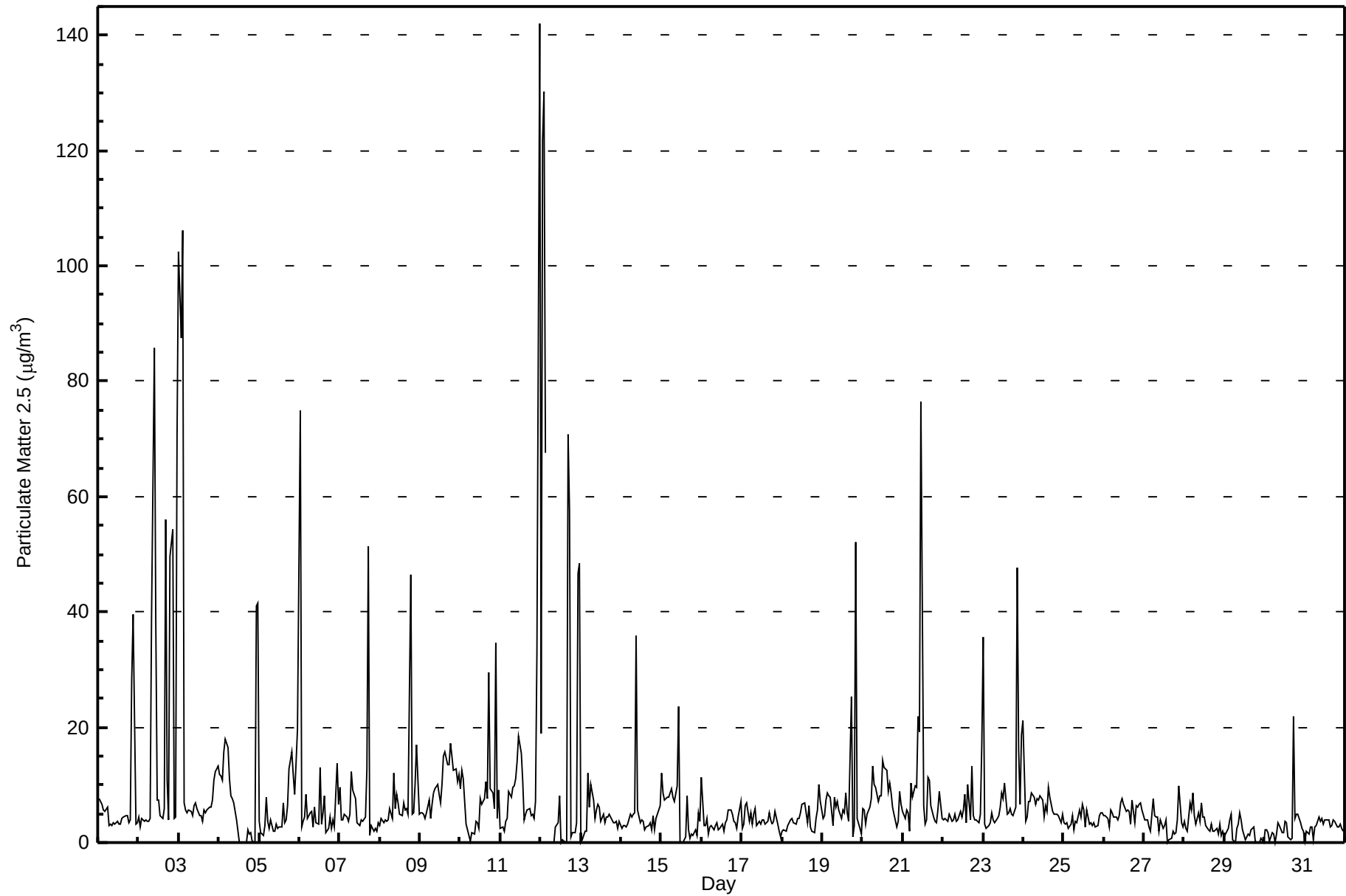


Peace Airshed Zone Association
Summary of Hourly Maximums

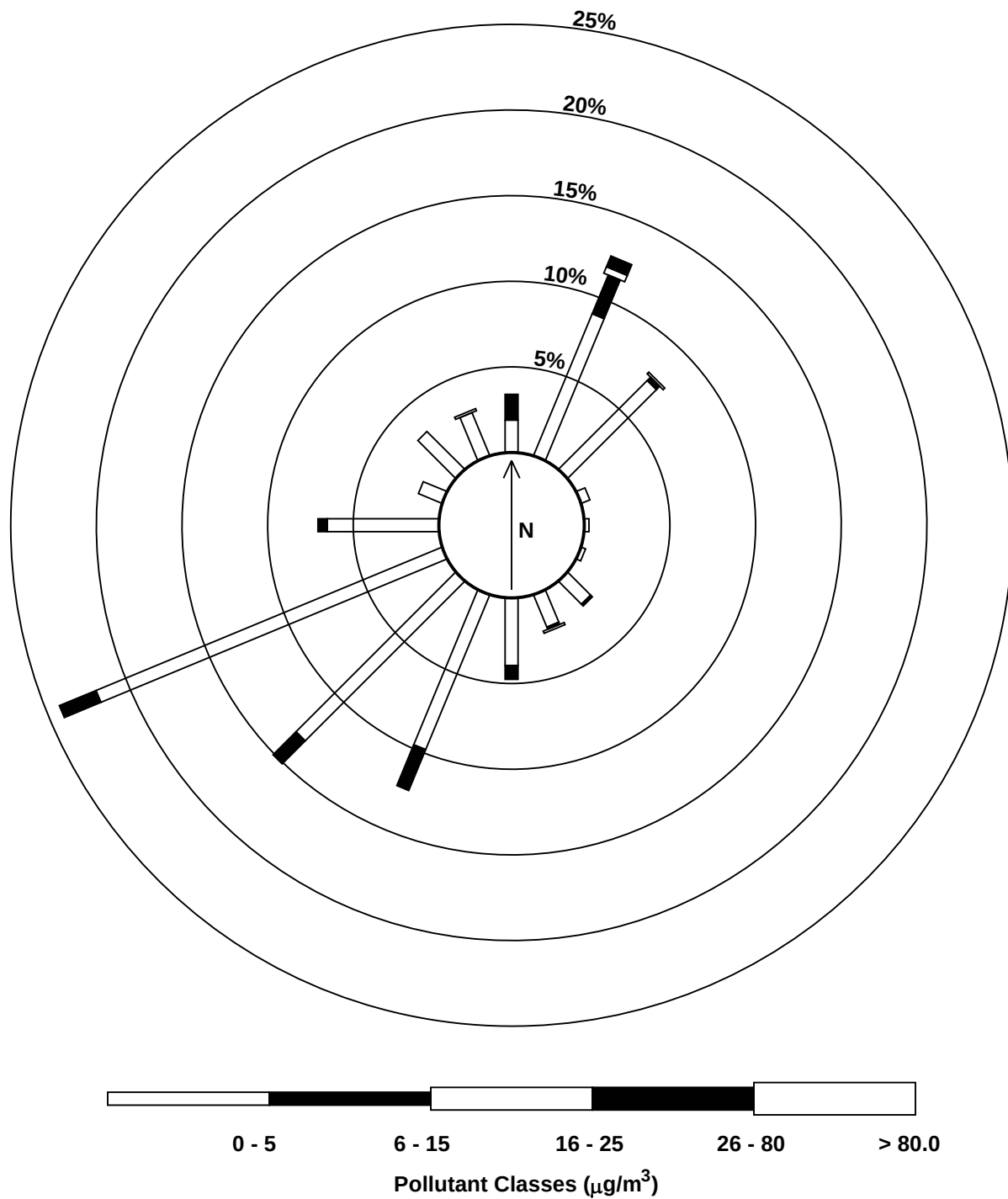
Smoky Heights - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

Maximum Value: 142.1 μg/m ³ on Jan 12 00:00																				Maximum Daily Average: 25.4 μg/m ³ on Jan 12										Hours in Service: 744	
Minimum Value: 0 μg/m ³ on Jan 4 13:00																				Minimum Daily Average: 1.7 μg/m ³ on Jan 29										Hours of Data: 743	
Maximum Diurnal Average: 15.4 μg/m ³ at hour 24																				Minimum Diurnal Average: 4.5 μg/m ³ at hour 15										Hours of Missing Data: 1	
Monthly Average: 7.68 μg/m ³																				Percentiles: P ₁ = 0.0 P ₁₀ = 1.8 Q ₁ = 3.0 Median = 4.4 Q ₃ = 7.0 P ₉₀ = 12.1 P ₉₉ = 84.1										Hours of Calibration: 0	
																														Percent Operational Time: 99.9	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
1-Jan	8	7	7	6	5	6	3	3	3	3	3	4	3	3	4	4	5	5	4	4	28	40	3	3	6.9	39.6					
2-Jan	5	3	4	4	4	4	4	4	39	86	38	7	7	5	4	6	56	11	4	50	54	4	5	70	19.9	85.8					
3-Jan	102	88	106	7	6	5	6	5	5	6	7	6	5	5	4	6	5	6	6	6	7	11	12	13	18.1	106.1					
4-Jan	12	12	11	16	18	17	11	8	8	7	4	2	0	0	0	0	0	2	2	2	0	0	41	41	8.9	41.4					
5-Jan	4	2	1	3	8	4	3	4	2	2	3	2	3	3	7	3	4	6	13	16	12	8	14	20	6.0	19.8					
6-Jan	75	3	4	4	8	4	5	5	3	6	4	3	13	3	5	8	2	2	4	2	4	3	14	7	8.0	75.0					
7-Jan	10	4	4	5	4	4	5	12	9	8	3	3	3	4	4	4	13	51	1	3	2	2	2	3	6.8	51.4					
8-Jan	3	4	3	4	4	4	6	4	12	6	8	7	5	5	7	6	6	5	46	5	5	10	17	5	7.8	46.4					
9-Jan	5	5	5	4	5	7	4	7	9	9	10	8	7	10	15	16	13	14	17	15	13	13	11	12	9.7	17.2					
10-Jan	9	12	11	3	2	1	0	2	2	4	4	3	8	7	8	11	8	30	9	9	6	35	4	9	8.1	34.8					
11-Jan	2	3	2	4	4	9	8	10	10	11	14	18	15	11	4	5	6	6	5	5	4	7	33	142	14.0	142.1					
12-Jan	19	122	130	68	BD	0	0	0	0	3	3	8	0	0	0	0	71	57	1	2	2	3	47	48	25.4	130.3					
13-Jan	0	0	2	2	12	6	10	7	4	6	7	6	4	5	3	4	4	5	4	3	3	4	3	4	4.5	12.0					
14-Jan	3	3	3	3	3	5	4	5	5	36	6	4	4	4	2	3	3	3	2	5	2	4	6	6	5.1	35.8					
15-Jan	12	8	7	8	8	9	9	8	7	10	24	0	0	0	1	8	2	1	1	1	2	1	5	4	5.7	23.6					
16-Jan	11	3	3	4	2	3	3	2	3	3	2	2	3	2	3	4	6	6	5	4	3	2	4	7	3.8	11.2					
17-Jan	2	3	6	7	4	5	3	5	6	3	4	3	4	4	3	4	5	4	3	4	5	3	2	1	3.9	7.0					
18-Jan	2	2	2	3	4	4	4	3	3	4	4	5	7	7	5	4	6	3	2	2	4	6	10	7	4.3	10.1					
19-Jan	4	5	7	9	8	8	3	8	6	7	6	4	6	5	9	5	4	25	1	3	52	4	2	2	8.0	52.0					
20-Jan	6	6	3	5	6	8	13	10	10	7	8	8	14	13	13	9	10	9	6	5	3	4	9	7	7.9	14.1					
21-Jan	5	4	6	5	2	10	8	10	10	22	19	76	6	3	4	11	11	6	4	4	3	6	9	4	10.4	76.4					
22-Jan	4	4	4	4	5	4	4	5	4	4	5	4	6	8	3	10	4	13	5	4	4	4	5	17	5.6	17.3					
23-Jan	36	3	2	3	3	5	4	3	4	5	6	8	8	10	5	5	6	5	5	6	48	16	7	19	9.2	47.7					
24-Jan	21	4	5	7	7	9	8	7	8	7	8	7	4	6	5	10	8	5	5	5	5	5	3	5	6.8	21.2					
25-Jan	4	3	3	2	3	5	2	4	3	6	4	7	6	3	6	3	3	3	4	3	3	5	5	5	3.9	6.6					
26-Jan	5	5	4	3	6	5	4	4	4	5	7	8	7	6	6	5	3	7	3	6	6	7	7	6	5.3	7.7					
27-Jan	4	4	4	3	2	8	5	5	4	2	4	3	3	4	0	0	1	2	2	2	4	10	3	3	3.3	9.9					
28-Jan	4	3	2	7	6	9	5	3	5	4	7	4	4	3	2	2	3	2	2	3	2	3	1	2	3.6	8.6					
29-Jan	1	2	2	4	5	0	0	3	3	5	4	2	1	1	1	1	2	3	0	0	0	0	1	0	1.7	5.2					
30-Jan	2	2	2	0	2	1	0	1	3	3	2	2	4	4	1	1	1	22	4	5	5	4	2	2	3.1	21.8					
31-Jan	0	2	1	3	3	1	3	3	5	4	4	3	4	4	4	3	3	4	4	3	3	3	2	2	2.9	4.5					
12.2 10.6 11.6 6.7 5.3 5.4 4.7 5.2 6.4 9.4 7.5 7.4 5.2 4.7 4.5 5.2 8.8 10.4 5.6 5.9 9.5 7.3 9.3 15.4																									Diurnal Average						
102.5 121.9 130.3 67.5 18.0 16.5 13.2 12.2 39.2 85.8 38.2 76.4 15.4 12.9 15.0 15.6 70.7 57.5 46.4 49.7 54.2 39.6 46.6 142.1																									Diurnal Maximum						
BD - Baseline Drift																															

Hourly Maximums for PM_{2.5} at Smoky Heights January 2009



Pollutant Rose for PM_{2.5} at Smoky Heights January 2009



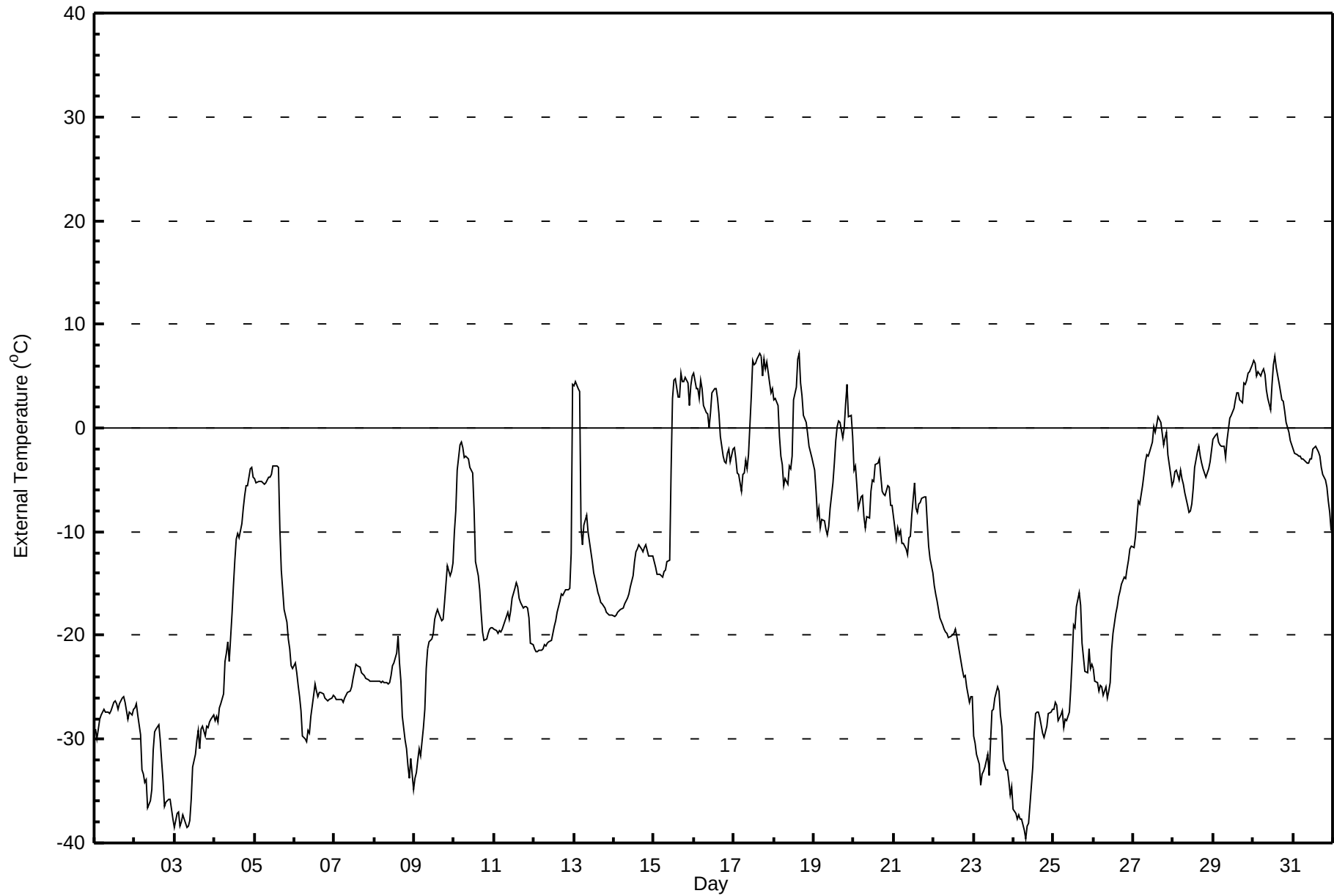
Peace Airshed Zone Association
Summary of Hourly Averages

Smoky Heights - External Temperature (ET) - °C
January 1, 2009 to February 1, 2009

Maximum Value: 7.2 °C on Jan 18 16:00																									Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0	
Maximum Daily Average: 3.7 °C on Jan 30																										
Minimum Value: -40 °C on Jan 24 08:00 Maximum Diurnal Average: -11.4 °C at hour 15 Monthly Average: -14.34 °C																									Minimum Daily Average: -33.2 °C on Jan 3 Minimum Diurnal Average: -16.4 °C at hour 7 Percentiles: P ₁ = -38.2 P ₁₀ = -29.8 Q ₁ = -25.2 Median = -15.1 Q ₃ = -3.5 P ₉₀ = 2.7 P ₉₉ = 6.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	-29	-30	-29	-28	-28	-27	-27	-27	-27	-27	-27	-26	-26	-27	-27	-27	-26	-26	-26	-27	-28	-27	-28	-27	-27.4	-25.9
2-Jan	-27	-27	-28	-30	-33	-33	-34	-34	-37	-36	-35	-31	-29	-29	-29	-30	-32	-34	-36	-36	-36	-36	-37	-38	-32.7	-26.6
3-Jan	-39	-37	-37	-38	-38	-37	-38	-39	-38	-38	-36	-33	-31	-30	-29	-31	-29	-29	-30	-29	-29	-28	-28	-28	-33.2	-27.7
4-Jan	-28	-28	-28	-27	-27	-26	-23	-22	-21	-22	-18	-15	-13	-11	-10	-11	-9	-8	-7	-6	-6	-4	-4	-5	-15.6	-3.7
5-Jan	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4	-4	-4	-4	-4	-10	-14	-16	-18	-19	-20	-21	-23	-23	-9.7	-3.6
6-Jan	-23	-24	-25	-26	-27	-30	-30	-30	-29	-29	-28	-26	-25	-25	-26	-26	-25	-26	-26	-26	-26	-26	-26	-26	-26.5	-22.7
7-Jan	-26	-26	-26	-26	-26	-26	-26	-26	-26	-25	-25	-24	-23	-23	-23	-23	-24	-24	-24	-24	-24	-24	-24	-24	-24.7	-22.8
8-Jan	-24	-24	-24	-24	-24	-24	-24	-25	-25	-25	-24	-23	-23	-22	-20	-23	-24	-28	-30	-31	-32	-34	-32	-35	-26.0	-20.1
9-Jan	-34	-33	-32	-31	-32	-29	-27	-23	-21	-21	-20	-20	-18	-18	-17	-18	-19	-18	-17	-15	-13	-14	-14	-13	-21.6	-13.0
10-Jan	-10	-8	-4	-2	-1	-2	-3	-3	-3	-4	-4	-4	-8	-13	-14	-16	-18	-20	-20	-20	-20	-19	-19	-19	-10.6	-1.4
11-Jan	-19	-20	-20	-20	-20	-19	-19	-18	-18	-18	-18	-16	-15	-15	-15	-16	-17	-17	-17	-17	-17	-18	-21	-21	-18.0	-14.9
12-Jan	-21	-22	-22	-21	-21	-21	-21	-21	-21	-21	-20	-20	-19	-19	-18	-17	-16	-16	-16	-16	-16	-15	-12	4	-17.8	4.2
13-Jan	4	4	4	4	-10	-11	-9	-8	-10	-11	-12	-13	-14	-15	-16	-16	-17	-17	-17	-18	-18	-18	-18	-18	-11.3	4.4
14-Jan	-18	-18	-18	-18	-18	-17	-17	-17	-16	-16	-15	-14	-13	-12	-12	-11	-12	-12	-12	-11	-12	-12	-12	-12	-14.4	-11.3
15-Jan	-13	-13	-14	-14	-14	-14	-14	-14	-13	-13	-4	3	5	5	3	3	5	4	4	5	4	2	4	5	-3.6	5.3
16-Jan	5	4	4	3	5	4	2	1	1	0	1	3	4	4	3	1	-1	-3	-3	-3	-3	-2	-3	-2	1.1	5.2
17-Jan	-2	-3	-4	-4	-6	-4	-4	-3	-4	-3	3	7	6	6	7	7	7	5	7	6	6	4	3	4	1.7	7.2
18-Jan	3	3	2	-1	-3	-4	-6	-5	-5	-4	-4	-3	3	4	7	7	4	3	1	1	-1	-2	-2	-3	-0.1	7.2
19-Jan	-4	-6	-9	-8	-10	-9	-9	-10	-10	-10	-8	-5	-3	-1	0	1	1	-1	0	2	4	1	1	-1	-3.8	4.3
20-Jan	-4	-4	-6	-8	-7	-7	-9	-10	-9	-9	-6	-5	-5	-3	-3	-3	-5	-6	-6	-7	-5	-6	-7	-7	-6.1	-2.9
21-Jan	-8	-11	-10	-10	-10	-11	-11	-12	-12	-11	-10	-8	-5	-8	-8	-7	-7	-7	-7	-7	-9	-11	-13	-14	-9.5	-5.2
22-Jan	-15	-16	-17	-18	-18	-19	-19	-20	-20	-20	-20	-20	-20	-19	-20	-21	-22	-23	-24	-24	-25	-26	-26	-26	-20.8	-15.2
23-Jan	-30	-30	-31	-32	-34	-33	-33	-33	-32	-33	-30	-27	-27	-26	-25	-25	-28	-29	-32	-33	-33	-34	-35	-35	-30.9	-24.9
24-Jan	-37	-37	-38	-37	-38	-38	-39	-40	-38	-38	-36	-33	-29	-27	-27	-27	-28	-29	-30	-29	-29	-28	-27	-27	-32.8	-27.1
25-Jan	-27	-26	-27	-28	-28	-27	-29	-28	-28	-27	-25	-22	-19	-19	-17	-16	-17	-21	-22	-24	-24	-21	-23	-23	-23.7	-15.8
26-Jan	-23	-24	-25	-25	-25	-25	-26	-25	-26	-25	-24	-21	-20	-18	-17	-16	-16	-15	-14	-15	-14	-13	-12	-11	-19.8	-11.4
27-Jan	-12	-10	-9	-7	-7	-5	-4	-3	-3	-3	-2	-1	0	0	0	1	1	-1	-2	-1	0	-3	-4	-6	-3.4	1.1
28-Jan	-5	-4	-4	-5	-4	-5	-5	-6	-7	-8	-8	-7	-6	-4	-2	-2	-3	-3	-4	-5	-4	-4	-3	-2	-4.7	-1.7
29-Jan	-1	-1	-1	-1	-2	-2	-2	-3	-1	0	1	1	2	3	3	3	3	2	4	4	5	5	5	6	1.5	6.1
30-Jan	7	6	5	5	5	5	6	5	4	3	2	4	6	7	6	4	4	3	3	2	1	0	-1	-2	3.7	6.9
31-Jan	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-3	-4	-4	-5	-6	-7	-8	-10	-3.7	-1.8
-15.1 -15.3 -15.4 -15.7 -16.4 -16.3 -16.4 -16.3 -16.2 -16.2 -14.9 -13.2 -12.0 -11.6 -11.4 -11.8 -12.5 -13.3 -13.7 -13.8 -13.8 -14.3 -14.5 -14.1																									Diurnal Average	
6.5 6.2 5.0 5.4 5.0 5.4 5.7 5.1 3.7 2.8 3.1 6.5 6.2 6.9 6.7 7.2 6.9 5.1 6.7 5.7 6.4 5.2 5.4 6.1																									Diurnal Maximum	

Hourly Averages for External Temperature at Smoky Heights

January 2009



Peace Airshed Zone Association
Summary of Hourly Averages

Smoky Heights
 January 1, 2009 to February 1, 2009
 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	7	7	7	3	2	5	9	6	7	11	11	12	12	8	9	11	5	4	6	5	4	2	2	4	3.9	11.8
Dir	262	249	275	258	244	18	11	358	323	317	306	296	293	278	247	263	251	47	53	48	50	34	95	171	302.9	296.3
2 Spd	3	7	4	4	4	4	2	5	4	4	3	4	3	2	2	2	3	4	3	5	6	5	4	3	2.1	6.5
Dir	272	275	250	312	270	293	350	321	46	23	5	25	91	145	203	281	359	336	6	33	27	9	12	39	347.0	275.0
3 Spd	5	7	4	5	4	1	3	0	2	0	3	8	5	9	7	4	3	7	9	11	13	12	10	11	3.2	12.8
Dir	29	31	12	35	19	62	30	156	199	174	220	229	219	249	257	157	179	169	206	226	223	223	202	213	219.4	223.5
4 Spd	11	13	14	13	12	15	10	11	6	7	11	11	10	9	3	4	7	6	9	12	8	11	10	2	7.0	15.3
Dir	215	251	257	244	237	259	241	238	218	237	242	238	233	210	211	195	152	156	147	158	131	145	144	132	215.0	258.9
5 Spd	4	5	3	0	1	5	3	1	5	7	7	6	7	7	4	16	20	21	22	21	18	16	17	10	5.4	22.4
Dir	177	154	142	245	35	282	51	312	249	248	258	189	196	220	3	14	25	27	23	6	19	16	19	16	12.4	23.5
6 Spd	11	14	11	14	2	4	3	2	2	4	3	1	5	9	9	12	17	16	19	19	20	20	20	16	8.0	20.3
Dir	339	315	307	297	347	224	254	230	264	236	286	163	39	37	20	28	37	36	32	30	28	31	26	26	12.8	31.1
7 Spd	14	13	13	11	8	7	5	4	4	2	4	4	4	2	3	3	7	8	7	8	7	6	6	6	4.9	13.7
Dir	11	3	8	2	349	347	16	14	24	162	161	155	125	178	115	44	16	23	44	46	41	44	41	53	25.1	11.1
8 Spd	6	5	7	6	5	5	5	4	5	4	3	2	6	5	2	7	5	9	6	9	4	1	5	5	1.9	9.4
Dir	35	36	48	46	33	41	42	46	28	52	39	142	242	249	285	252	257	269	273	282	323	184	278	269	328.3	269.1
9 Spd	6	8	5	6	5	7	11	10	12	12	10	10	12	11	9	9	9	9	7	7	8	7	17	19	8.8	18.6
Dir	233	254	226	221	201	198	244	253	234	228	212	202	229	196	220	217	180	205	248	254	235	188	222	248	224.2	248.0
10 Spd	16	22	19	24	27	27	23	23	25	23	23	23	9	15	13	12	16	14	12	12	13	9	10	8	8.5	26.9
Dir	239	241	253	244	244	247	255	259	260	261	258	268	334	32	33	33	29	23	26	25	29	23	30	28	282.9	247.0
11 Spd	8	10	10	10	12	9	2	3	17	19	16	10	14	13	11	13	10	8	4	4	1	1	5	9	8.5	18.7
Dir	30	32	29	32	37	28	30	166	22	31	4	17	3	3	21	31	42	46	49	51	114	19	358	28	25.6	31.3
12 Spd	11	10	9	9	10	8	8	10	10	12	11	11	9	10	10	6	5	9	4	8	8	7	8	36	4.8	35.7
Dir	22	19	18	18	23	23	31	34	34	35	30	25	29	26	27	15	25	40	38	216	222	196	241	244	13.0	243.6
13 Spd	30	37	33	29	17	4	6	7	14	14	17	18	18	16	15	14	14	12	12	10	10	11	11	9	6.4	36.6
Dir	243	255	265	262	31	236	73	43	41	37	42	40	42	42	45	37	35	48	57	32	33	36	41	38	11.6	254.9
14 Spd	10	11	10	10	11	11	13	11	13	10	10	7	7	6	5	2	1	3	7	10	14	15	16	11	3.0	16.3
Dir	34	30	34	32	28	28	23	24	28	27	32	32	35	25	20	294	275	217	233	231	226	227	207	225	11.0	207.0
15 Spd	12	14	14	12	7	9	10	17	15	20	21	27	26	23	19	22	32	30	31	36	26	22	38	39	20.1	38.8
Dir	206	189	194	199	204	200	213	202	207	198	230	249	242	236	211	232	258	256	255	258	244	218	253	250	234.1	250.4
16 Spd	38	20	29	25	32	30	22	20	15	20	21	15	12	13	16	14	13	14	10	14	16	19	14	13	18.6	38.0
Dir	252	255	256	248	266	263	253	263	272	263	247	244	226	231	242	259	268	262	261	257	256	248	259	222	254.2	251.8
17 Spd	15	12	14	7	10	11	15	16	10	16	20	13	14	17	27	32	21	19	27	28	29	24	21	17	16.9	31.7
Dir	228	243	215	215	202	208	199	182	162	199	242	243	248	240	241	252	244	226	239	244	249	230	215	212	229.4	252.3
18 Spd	10	19	14	10	9	13	7	9	13	12	12	20	12	7	8	15	10	21	17	12	13	13	10	11	10.7	20.9
Dir	210	238	226	170	173	191	179	171	189	191	182	203	187	178	256	256	257	256	259	251	223	208	213	232	216.5	256.3
19 Spd	13	10	7	9	11	11	10	5	8	13	11	11	13	12	3	8	16	14	20	17	4	11	8	13	9.3	19.9
Dir	219	203	196	204	202	213	196	197	195	196	196	203	195	179	133	201	229	268	262	276	268	255	187	218	217.4	262.5
20 Spd	10	9	15	14	8	11	10	8	11	13	10	12	11	11	9	9	9	9	10	11	8	8	7	11	9.5	15.5
Dir	211	237	263	255	236	210	204	231	253	248	222	216	186	183	236	231	236	240	220	205	222	215	188	228	225.5	263.0
21 Spd	13	13	12	10	11	6	3	4	3	1	5	7	11	14	12	10	9	13	12	18	25	25	20	23	6.1	25.2
Dir	247	224	223	220	206	213	223	173	213	209	17	39	39	34	30	16	3	324	331	327	335	338	345	334	329.0	335.1
22 Spd	19	18	21	22	21	21	24	20	18	17	14	14	12	11	11	9	8	7	6	8	5	0	7	7	12.3	24.3
Dir	322	313	315	309	305	307	315	321	328	334	336	342	347	352	347	354	336	341	256	267	261	231	29	9	323.6	314.5

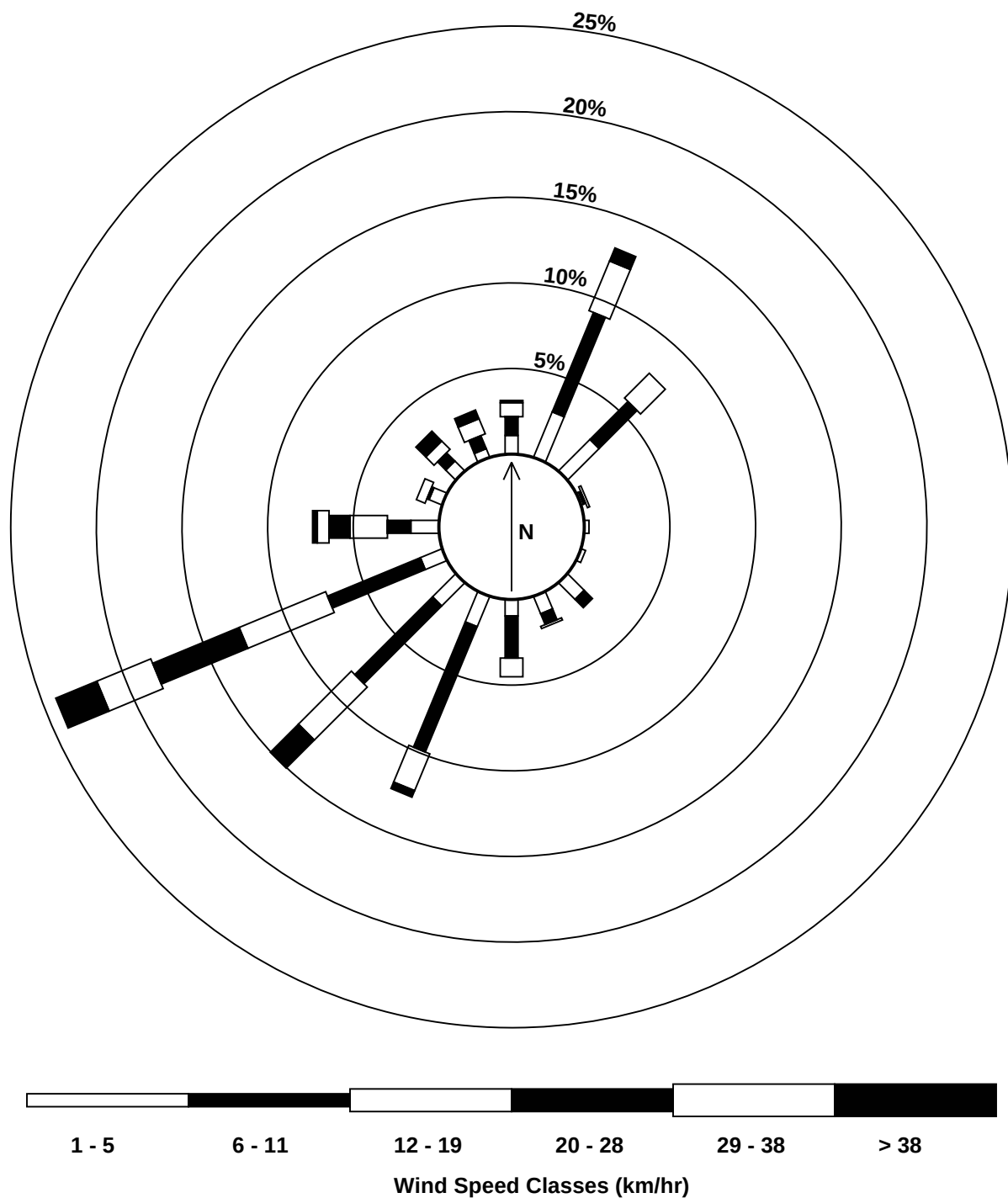
Peace Airshed Zone Association
Summary of Hourly Averages

Smoky Heights
 January 1, 2009 to February 1, 2009
 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	4	4	2	3	3	2	3	4	4	3	3	3	3	3	1	3	4	2	0	1	3	2	0	1.0	4.2	
Dir	0	314	343	309	261	325	125	226	258	232	211	162	191	156	131	78	229	264	338	351	162	268	33	8	257.3	313.5	
24 Spd	3	3	4	5	7	7	7	7	7	7	8	8	11	12	17	16	17	11	15	11	12	12	13	15	8.9	16.6	
Dir	230	207	209	198	193	194	192	196	194	200	202	227	238	238	232	232	231	247	251	255	262	246	255	250	231.3	230.7	
25 Spd	11	11	9	9	10	7	8	10	9	9	8	9	6	8	7	5	3	8	9	12	10	9	9	10	7.6	12.5	
Dir	246	240	240	227	224	220	230	213	190	204	202	173	154	141	139	142	177	207	218	210	219	225	225	214	209.6	209.5	
26 Spd	10	11	10	9	10	10	11	12	11	10	11	10	10	9	7	7	9	10	9	8	5	2	6	3	8.1	11.7	
Dir	212	214	219	250	213	221	249	231	212	211	200	200	187	186	198	238	221	204	204	203	172	30	246	140	212.8	230.7	
27 Spd	5	11	12	15	13	16	20	19	20	11	7	11	29	28	22	19	16	10	10	14	18	4	7	12	13.2	29.2	
Dir	193	193	214	218	201	239	235	238	240	200	217	219	266	269	277	265	264	252	268	264	275	276	220	245	245.7	266.2	
28 Spd	10	10	10	12	19	11	10	5	6	7	13	17	20	23	20	19	19	20	20	14	14	16	17	17	12.9	23.2	
Dir	244	256	256	295	314	324	352	238	214	229	240	237	247	245	240	244	253	255	258	252	237	233	223	230	251.7	244.9	
29 Spd	21	24	31	22	28	26	20	15	19	22	21	21	21	19	22	17	13	9	26	25	30	33	32	39	22.8	39.2	
Dir	233	239	244	234	228	216	210	211	234	245	248	239	242	242	244	243	240	238	248	243	243	243	242	253	238.6	252.5	
30 Spd	49	42	27	27	22	27	27	20	12	5	6	10	11	26	26	17	18	55	47	52	44	43	39	41	27.8	55.2	
Dir	248	248	221	216	217	230	233	231	218	236	174	216	250	241	243	261	261	263	256	264	254	254	248	248	245.4	263.1	
31 Spd	40	40	38	39	37	37	39	40	39	38	38	36	38	41	43	44	41	32	32	30	28	27	23	20	35.7	44.1	
Dir	249	252	246	243	244	245	248	251	255	253	250	246	250	251	254	256	255	249	248	252	249	244	245	243	249.5	256.4	
Spd	9.1	9.7	9.1	8.2	6.5	7.6	6.2	6.3	5.4	5.8	6.3	6.7	6.3	6.1	6.0	6.6	5.9	6.9	7.7	8.7	7.6	6.7	6.7	9.0	Diurnal Average		
Dir	250.0	253.1	253.1	250.6	247.9	245.5	246.2	241.5	248.2	243.7	247.1	240.2	247.3	245.3	255.3	263.4	266.4	267.0	261.6	263.2	259.9	248.8	247.2	249.7	Diurnal Maximum		
Spd	49.2	42.2	38.0	38.6	37.1	37.0	38.6	39.6	38.6	38.2	37.9	36.1	37.8	41.3	43.2	44.1	40.8	55.2	46.8	52.3	43.8	42.8	38.7	41.4	Diurnal Maximum		
Dir	248.1	247.7	246.5	243.3	243.9	244.8	247.5	250.7	254.8	253.0	250.0	246.1	250.5	251.0	254.0	256.4	254.7	263.1	255.6	264.1	254.1	253.9	248.0	248.2			
Maximum Speed Value: 55 km/h on Jan 30 18:00							Minimum Speed Value: 0 km/h on Jan 23 20:00													Hours in Service:				744			
Maximum Daily Speed Average: 35.7 km/h on Jan 31							Minimum Daily Speed Average: 1.0 km/h on Jan 23													Hours of Data:				744			
Maximum Diurnal Speed Average: 9.7 km/h at hour 2							Minimum Diurnal Speed Average: 5.4 km/h at hour 9													Hours of Missing Data:				0			
Monthly Average Velocity: 7.06 km/h 251.98 deg							Speed Percentiles: P ₁ = 0.9 P ₁₀ = 3.4 Q ₁ = 6.5 Median = 10.5 Q ₃ = 16.4 P ₉₀ = 25.2 P ₉₉ = 42.6													Percent Operational Time:				100.0			
All monthly, daily, and diurnal averages have been calculated using vector methods																											
Frequency Distribution																											
Speed Range (km/h)																											
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total														
North	20		22		17		3		0		0		62														
NorthEast	24		61		37		8		0		0		130														
East	3		1		0		0		0		0		4														
SouthEast	17		8		1		0		0		0		26														
South	20		44		22		1		0		0		87														
SouthWest	23		87		72		50		10		1		243														
West	21		34		34		22		20		22		153														
NorthWest	10		5		15		9		0		0		39														
Total	138		262		198		93		30		23		744														

Wind Rose for WS at Smoky Heights

January 2009



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

Smoky Heights - Wind Speed (WS) - km/h
January 1, 2009 to February 1, 2009

Maximum Speed: 56 km/h on Jan 30 18:00																				Maximum Daily Speed Average: 35.8 km/h on Jan 31										Hours in Service: 744	
Minimum Speed: 1 km/h on Jan 23 20:00																				Minimum Daily Speed Average: 3.1 km/h on Jan 23										Hours of Data: 744	
Maximum Diurnal Speed Average: 14.7 km/h at hour 20																				Minimum Diurnal Speed Average: 11.2 km/h at hour 8										Hours of Missing Data: 0	
Monthly Average Speed: 12.99 km/h																				Percentiles: P ₁ = 2.0 P ₁₀ = 4.1 Q ₁ = 6.9 Median = 10.8 Q ₃ = 16.5 P ₉₀ = 25.3 P ₉₉ = 42.6										Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	7	7	8	4	2	5	9	7	8	11	11	12	12	9	9	11	5	5	6	6	5	3	3	5	7.1	12.1					
2-Jan	5	7	4	5	5	4	4	5	4	4	4	4	3	3	3	3	4	4	4	5	6	5	4	4	4.3	6.8					
3-Jan	5	7	5	5	4	3	3	2	3	2	4	8	5	9	8	5	4	8	9	11	13	12	10	11	6.5	12.9					
4-Jan	11	13	14	13	12	15	11	12	7	8	11	11	11	9	4	4	7	6	9	13	9	12	12	4	9.9	15.4					
5-Jan	5	5	4	2	3	5	5	3	5	8	7	7	7	7	5	16	20	21	22	22	18	16	17	11	10.1	22.5					
6-Jan	12	14	11	15	5	5	4	3	2	4	3	3	6	9	10	13	17	17	19	19	20	20	20	16	11.2	20.3					
7-Jan	14	14	13	11	8	7	5	5	5	4	4	4	4	2	3	4	7	8	7	8	7	6	6	6	6.7	13.8					
8-Jan	6	5	7	6	5	5	5	4	5	4	3	2	6	5	2	7	5	9	6	9	5	2	5	6	5.3	9.5					
9-Jan	6	8	5	6	6	7	11	10	12	12	10	10	12	11	10	10	9	10	8	7	8	8	17	19	9.7	18.7					
10-Jan	17	22	20	24	27	27	23	23	25	23	23	23	17	15	13	12	16	14	12	12	13	9	10	8	17.9	26.9					
11-Jan	8	10	10	10	12	10	4	8	17	19	18	10	14	13	11	13	10	8	4	4	2	2	5	9	9.6	18.9					
12-Jan	11	10	9	9	10	9	8	10	10	12	11	11	9	10	10	6	5	10	5	8	8	7	10	36	10.1	35.8					
13-Jan	30	37	33	29	20	5	7	8	14	14	17	18	18	16	15	14	14	12	12	10	10	11	11	9	16.0	36.6					
14-Jan	10	11	10	10	11	11	13	11	13	10	10	7	7	6	5	2	2	3	7	11	14	15	16	11	9.4	16.4					
15-Jan	12	15	14	12	7	9	10	17	15	20	22	27	26	23	19	24	32	30	31	36	27	23	38	39	22.0	38.8					
16-Jan	38	20	29	25	32	30	22	20	16	20	21	15	13	13	16	14	13	14	10	14	16	19	14	14	19.1	38.2					
17-Jan	16	12	14	7	10	12	15	17	11	17	20	13	14	18	27	32	21	19	28	28	29	24	21	18	18.4	31.8					
18-Jan	10	20	15	11	9	13	8	10	13	13	12	20	15	8	9	15	10	21	17	12	13	13	10	11	12.9	21.0					
19-Jan	13	11	7	9	11	11	10	6	9	13	11	11	13	13	9	9	17	15	20	18	6	11	8	13	11.5	20.0					
20-Jan	10	10	16	14	8	11	10	8	12	13	10	12	11	11	10	9	10	9	10	11	9	9	8	11	10.5	15.5					
21-Jan	13	13	12	11	11	6	3	4	4	2	5	7	11	14	12	10	10	13	12	18	25	25	21	23	11.9	25.4					
22-Jan	19	19	21	22	21	21	24	20	18	17	15	14	12	11	12	9	8	8	6	8	5	2	7	7	13.6	24.4					
23-Jan	3	4	4	3	3	4	3	3	4	5	3	3	3	3	3	2	3	4	2	1	2	4	2	2	3.1	4.6					
24-Jan	3	3	4	5	7	7	7	7	7	7	8	8	11	12	17	16	17	11	15	11	12	12	13	15	9.7	16.7					
25-Jan	12	11	9	9	10	9	8	10	9	10	9	9	6	8	7	5	3	8	9	13	11	9	9	10	8.9	12.7					
26-Jan	10	11	11	9	10	11	11	12	11	10	11	10	10	9	8	7	10	10	10	8	6	6	7	4	9.3	12.1					
27-Jan	6	11	13	15	13	16	20	19	20	11	8	11	29	29	22	19	16	10	10	14	19	6	7	12	15.0	29.5					
28-Jan	11	10	11	16	19	12	10	7	6	8	13	17	20	23	20	19	19	20	20	14	14	16	17	17	15.0	23.3					
29-Jan	21	25	31	22	28	26	20	15	19	22	21	21	21	19	22	18	13	9	26	25	30	33	32	39	23.3	39.2					
30-Jan	49	42	28	27	22	27	27	20	12	6	6	11	11	26	26	17	18	56	47	52	44	43	39	41	29.1	56.1					
31-Jan	40	40	38	39	37	37	39	40	39	38	38	36	38	41	43	44	41	32	32	30	28	27	23	20	35.8	44.2					
14.0 14.4 13.8 13.1 12.6 12.3 11.6 11.2 11.5 11.8 11.9 12.1 12.9 13.2 12.5 12.5 12.4 13.7 14.1 14.7 14.0 13.2 13.6 14.6																								Diurnal Average							
49.2 42.3 38.1 38.7 37.1 37.1 38.6 39.7 38.7 38.3 38.0 36.2 37.8 41.3 43.2 44.2 40.8 56.1 47.1 52.4 43.9 42.8 38.8 41.5																								Diurnal Maximum							
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Peace Airshed Zone Association
Summary of Hourly Standard Deviations

Smoky Heights - Wind Direction (WD) - deg
January 1, 2009 to February 1, 2009

Maximum Value: 93.1 deg on Jan 5 04:00																				Hours in Service: 744					
Minimum Value: 1.7 deg on Jan 13 04:00																				Hours of Data: 744					
																				Hours of Missing Data: 0					
Percentiles: P ₁ = 2.2 P ₁₀ = 3.7 Q ₁ = 5.5 Median = 9.6 Q ₃ = 19.6 P ₉₀ = 41.0 P ₉₉ = 81.0																				Hours of Calibration: 0					
																				Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jan	10	7	28	34	58	22	8	29	15	9	10	12	6	32	14	7	15	61	9	15	32	43	77	69	76.6
2-Jan	63	20	9	34	64	10	68	18	21	26	38	20	29	53	42	56	22	15	22	13	11	8	31	43	68.1
3-Jan	16	8	23	17	29	76	35	79	59	85	49	13	20	14	33	43	38	11	19	6	5	4	9	6	84.6
4-Jan	17	12	5	11	8	6	19	13	28	35	8	10	17	13	27	26	11	29	10	13	23	13	52	65	65.0
5-Jan	48	28	39	93	60	18	64	68	30	22	23	28	18	29	63	8	5	4	4	12	8	7	11	25	93.1
6-Jan	22	9	11	22	71	42	46	56	31	19	49	73	47	8	11	5	5	5	5	4	4	4	7	6	73.1
7-Jan	7	8	7	9	11	9	11	22	26	63	23	21	15	52	22	47	13	8	7	5	6	8	11	9	63.2
8-Jan	7	7	8	6	9	8	9	10	10	13	14	51	24	16	25	9	10	8	29	17	48	67	14	17	66.7
9-Jan	13	10	20	18	26	9	20	11	6	7	9	9	7	13	23	24	4	23	12	9	17	22	9	6	26.3
10-Jan	13	5	9	3	3	2	3	5	2	5	2	4	57	3	4	3	4	4	3	4	4	5	4	6	56.5
11-Jan	5	4	5	6	7	18	79	70	9	8	26	18	16	15	10	6	6	9	15	10	54	84	24	6	83.9
12-Jan	3	4	5	5	4	5	8	5	8	5	5	6	7	6	9	17	20	8	65	8	12	15	58	2	64.7
13-Jan	3	4	2	2	37	50	48	47	4	4	6	6	6	6	7	9	11	8	10	5	5	5	6	8	49.7
14-Jan	6	5	5	4	5	4	4	6	5	7	7	10	7	9	10	43	58	51	9	10	3	12	7	4	57.7
15-Jan	12	4	4	6	10	13	6	5	10	4	15	3	3	4	13	26	2	3	6	5	17	16	5	3	26.1
16-Jan	5	10	4	7	4	3	6	4	9	4	8	16	8	14	9	10	6	4	11	4	5	6	4	31	30.5
17-Jan	20	11	9	25	14	14	9	9	36	23	6	10	7	4	5	4	10	13	7	5	5	6	7	6	36.3
18-Jan	12	18	30	29	13	7	25	22	10	17	16	12	36	39	23	9	17	5	4	9	9	6	8	12	39.0
19-Jan	10	26	12	9	20	12	8	30	8	7	11	10	8	31	82	27	25	32	2	19	66	59	39	7	82.4
20-Jan	12	23	4	4	13	12	14	12	23	6	16	11	6	6	27	10	9	9	9	6	18	25	21	9	26.8
21-Jan	12	11	13	15	8	33	51	61	33	69	36	12	6	5	4	13	22	7	7	5	7	8	13	8	69.5
22-Jan	10	8	6	7	6	5	5	6	6	5	5	6	9	10	10	10	10	14	20	9	24	86	10	7	86.4
23-Jan	17	10	12	42	33	47	63	25	7	28	10	37	10	27	14	63	36	25	41	90	61	49	38	88	89.6
24-Jan	43	13	8	14	3	3	7	4	7	8	6	8	6	5	7	4	3	7	7	6	4	6	4	4	42.7
25-Jan	13	4	13	10	19	32	15	19	10	12	26	3	14	7	7	13	36	10	7	11	9	12	10	8	35.7
26-Jan	4	7	13	10	18	20	11	16	6	10	7	5	6	4	20	18	13	16	17	37	54	71	31	50	71.1
27-Jan	35	15	11	8	9	10	4	5	14	9	23	14	9	8	4	8	8	13	15	5	16	73	21	4	73.1
28-Jan	10	26	7	40	8	21	13	49	14	14	7	3	4	3	4	7	6	7	6	10	5	4	4	3	48.6
29-Jan	4	10	4	6	7	5	4	4	11	3	3	5	7	9	11	5	4	8	2	3	2	2	4	4	11.3
30-Jan	2	4	11	5	5	4	3	3	15	23	34	26	8	10	11	4	5	10	6	4	4	3	4	3	34.1
31-Jan	3	3	3	2	3	3	2	3	2	3	3	3	3	3	3	3	2	3	2	4	3	3	4	2	4.4
62.9 28.3 39.0 93.1 70.9 76.0 79.1 78.6 59.5 84.6 48.7 73.1 56.5 53.2 82.4 62.8 57.7 61.5 64.7 89.6 66.0 86.4 76.6 88.2																									

PASZA

Beaverlodge Station

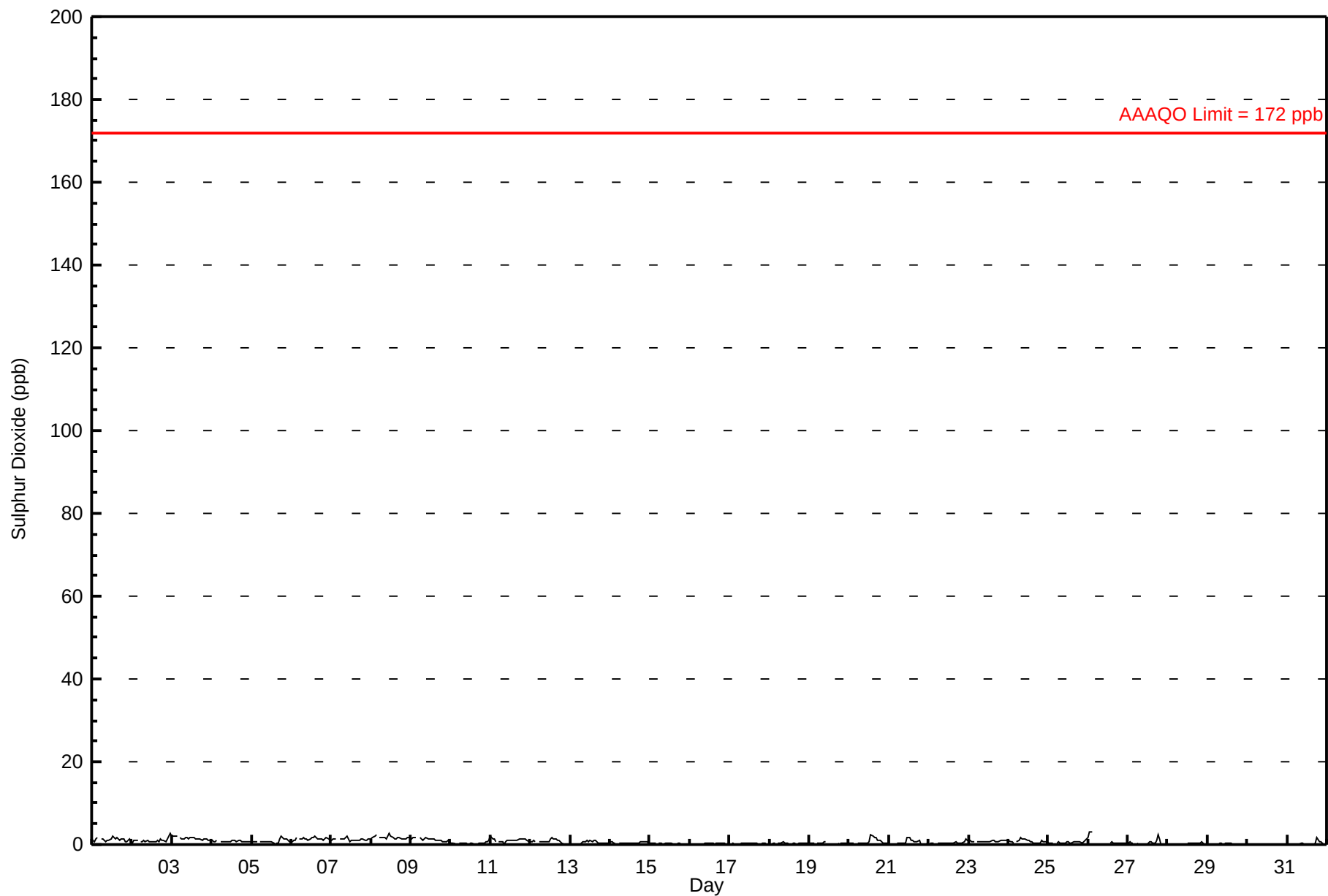
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.2 ppb on Jan 26 03:00 Maximum Daily Average: 1.7 ppb on Jan 8																				Hours in Service: 744 Hours of Data: 684 Hours of Missing Data: 60 Hours of Calibration: 35 Percent Operational Time: 96.6						
Minimum Value: 0 ppb on Jan 30 21:00 Maximum Diurnal Average: 0.8 ppb at hour 14 Monthly Average: 0.67 ppb										Minimum Daily Average: 0.1 ppb on Jan 30 Minimum Diurnal Average: 0.6 ppb at hour 21 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.5 Q ₃ = 1.0 P ₉₀ = 1.5 P ₉₉ = 2.3																
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-Jan	1	1	1	2	A	1	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1.2	1.9
2-Jan	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1.0	2.6
3-Jan	2	2	2	2	A	2	1	2	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1.5	2.2
4-Jan	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
5-Jan	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	0	1	2	1	1	1	1	1	0.7	1.9
6-Jan	1	1	1	2	A	2	2	2	1	1	1	1	2	2	2	2	1	1	1	1	1	2	1	1	1.4	1.9
7-Jan	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.0
8-Jan	1	2	2	2	A	2	2	2	2	1	2	3	2	2	1	1	2	2	1	1	1	1	2	2	1.7	2.6
9-Jan	2	2	2	2	A	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6
10-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.3	1.0
11-Jan	2	1	1	1	A	1	1	1	0	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1.0	1.9
12-Jan	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0.7	1.8
13-Jan	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.2
14-Jan	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0.4	0.7
15-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
16-Jan	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
17-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
18-Jan	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
19-Jan	0	0	0	0	A	0	0	0	0	1	1	C	C	C	C	C	C	0	0	0	0	0	0	0	--	0.5
20-Jan	0	0	0	0	A	0	0	0	0	0	0	0	1	2	2	2	2	1	1	1	0	0	0	0	0.7	2.4
21-Jan	0	0	0	0	A	0	0	0	0	0	0	2	2	1	1	1	1	1	1	0	0	0	0	0	0.5	1.7
22-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0.4	1.2
23-Jan	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
24-Jan	1	1	1	1	A	1	1	2	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	0.8	1.7
25-Jan	0	0	0	0	A	0	1	1	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0.6	1.4
26-Jan	2	3	3	P	P	P	P	P	P	P	P	P	P	0	1	0	0	0	0	0	0	0	0	0	--	3.2
27-Jan	0	1	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	1	2	1	0	D	D	D	0.5	2.5
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	D	0	0	0	0	0	0	0	1	0	0	0	--	0.5
29-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
30-Jan	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-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0.2	1.6
0.7 0.7 0.7 0.6 -- 0.6 0.6 0.6 0.6 0.7 0.6 0.7 0.8 0.8 0.7 0.7 0.7 0.7 0.8 0.6 0.6 0.6 0.7 0.7 2.2 2.9 3.2 2.4 -- 1.6 1.6 1.7 1.7 2.0 1.9 2.6 2.0 2.4 2.1 1.7 1.6 1.7 2.5 1.5 1.5 1.6 2.1 2.6																										
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																										

Hourly Averages for SO₂ at Beaverlodge January 2009



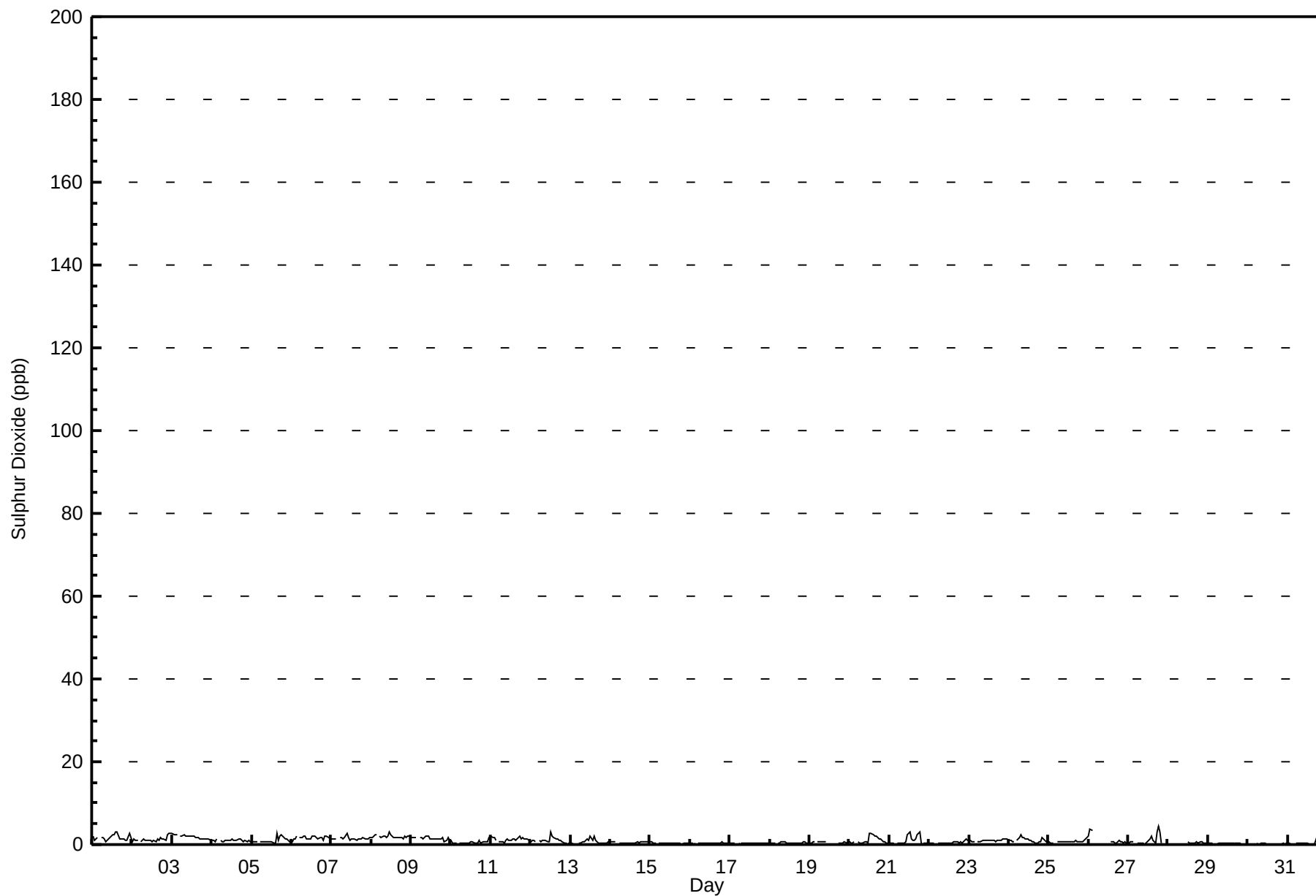
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Beaverlodge - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009**

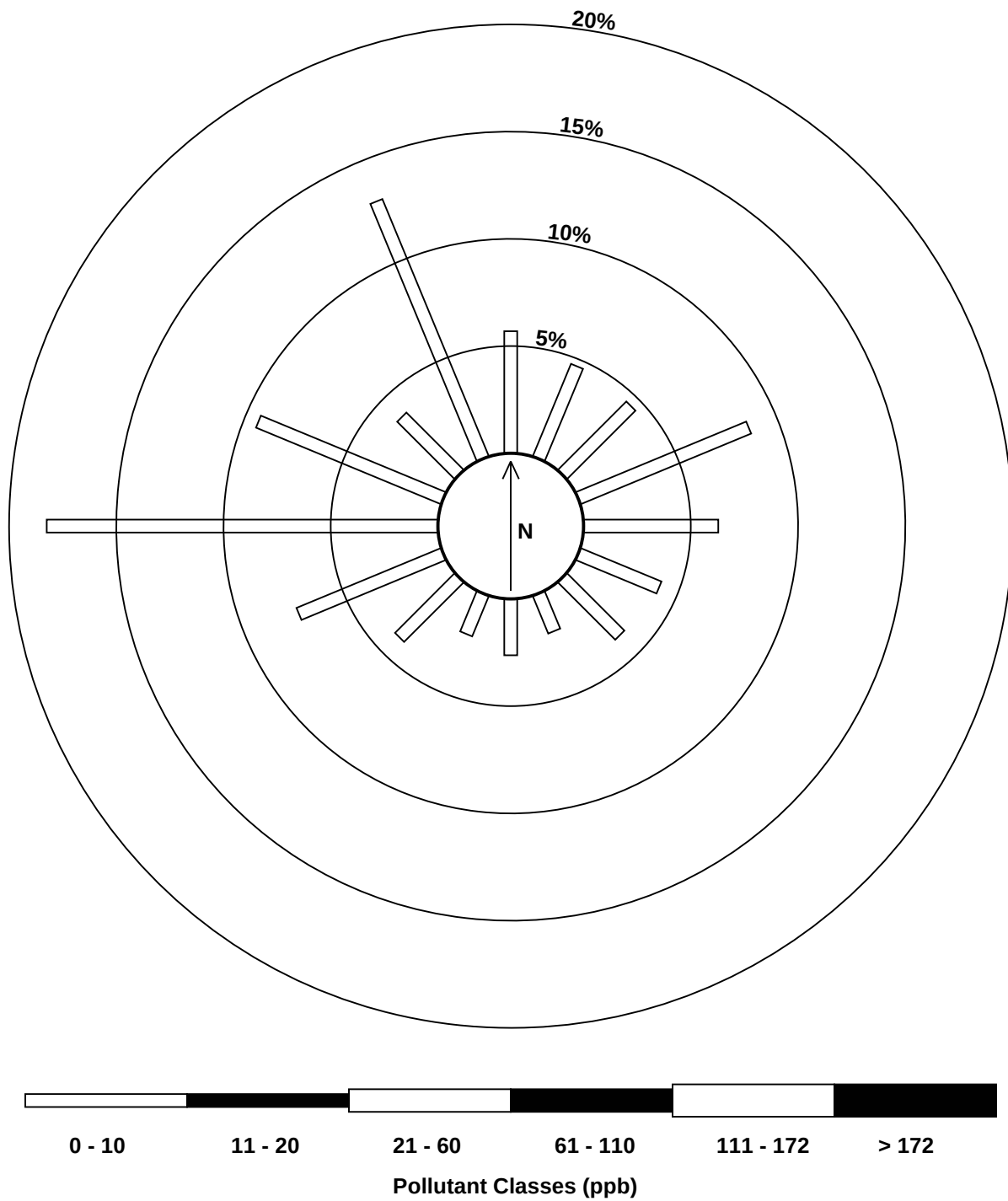
Maximum Value: 4.3 ppb on Jan 27 19:00																			Maximum Daily Average: 1.9 ppb on Jan 8							Hours in Service: 744	
Minimum Value: 0 ppb on Jan 30 15:00																			Minimum Daily Average: 0.2 ppb on Jan 30							Hours of Data: 684	
Maximum Diurnal Average: 1.1 ppb at hour 13																			Minimum Diurnal Average: 0.8 ppb at hour 7							Hours of Missing Data: 60	
Monthly Average: 0.90 ppb																			Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.4 Median = 0.7 Q ₃ = 1.3 P ₉₀ = 1.9 P ₉₉ = 3.1							Hours of Calibration: 35	
																										Percent Operational Time: 96.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	2	1	1	2	A	2	2	1	1	1	1	2	2	2	3	3	1	1	1	1	1	1	3	2	1.7	3.1	
2-Jan	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	3	3	1.3	2.9	
3-Jan	3	2	3	2	A	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1.8	2.6	
4-Jan	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	1.3	
5-Jan	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	3	1	2	2	2	1	1	1	1	1.0	2.8	
6-Jan	1	1	1	2	A	2	2	2	2	1	1	1	2	2	2	2	2	2	2	1	2	2	2	1	1.7	2.2	
7-Jan	1	1	2	1	A	2	2	1	2	3	2	1	1	1	1	1	1	1	1	2	1	1	1	2	1.4	2.6	
8-Jan	2	2	2	2	A	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	1.9	3.1	
9-Jan	2	2	2	2	A	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2	1	1	2	1	1.5	2.1	
10-Jan	1	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	1	0	1	1	1	1	2	0.5	1.6	
11-Jan	2	2	2	1	A	1	1	1	0	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1.2	2.1	
12-Jan	1	1	1	1	A	1	1	1	1	1	1	1	3	2	2	1	1	1	1	1	0	0	0	0	1.0	3.1	
13-Jan	0	0	0	0	A	0	0	1	1	1	2	1	2	1	2	1	1	0	0	0	0	0	0	1	0.7	2.0	
14-Jan	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	0.6	0.8	
15-Jan	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
16-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	0.8	
17-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
18-Jan	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4	0.8	
19-Jan	0	0	1	1	A	1	1	1	1	1	1	C	C	C	C	C	C	0	0	0	0	1	0	1	--	0.7	
20-Jan	1	0	0	1	A	1	1	0	0	1	1	0	3	3	2	2	2	2	1	1	1	1	0	0	1.0	2.6	
21-Jan	0	0	0	0	A	0	0	0	0	0	1	2	3	1	1	1	1	2	3	0	0	0	0	0	0.9	3.0	
22-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	1	1	0.5	1.3	
23-Jan	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	
24-Jan	1	1	1	1	A	1	2	2	2	2	1	1	1	1	1	1	0	0	1	1	2	1	1	1	1.1	2.3	
25-Jan	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.7	1.6	
26-Jan	2	4	3	P	P	P	P	P	P	P	P	P	P	1	1	1	0	0	1	1	1	0	1	0	--	3.7	
27-Jan	0	1	1	1	A	0	0	0	0	0	0	1	1	1	2	1	0	3	4	3	0	D	D	D	1.0	4.3	
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	1	1	0	0	0	1	0	1	1	0	0	0	--	0.7	
29-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
30-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
31-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	1	1	0	0	0.4	2.1	
																									Diurnal Average		
																									Diurnal Maximum		
C - Calibration					P - Power Failure					D - DAS Failure					A - Automated Daily Zero Span												

Hourly Maximums for SO₂ at Beaverlodge

January 2009



Pollutant Rose for SO₂ at Beaverlodge **January 2009**

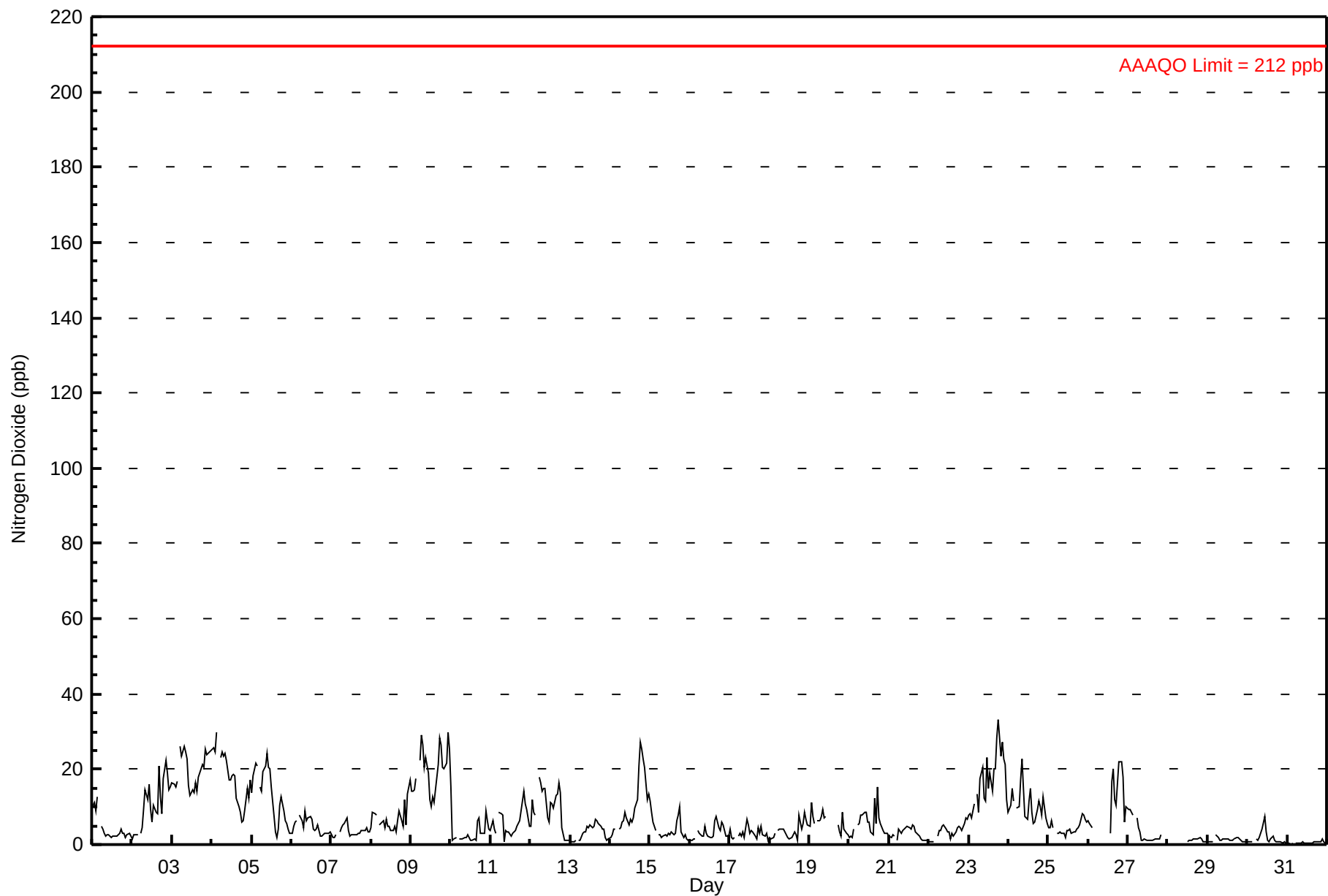


Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - Nitrogen Dioxide (NO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 33.0 ppb on Jan 23 19:00 Maximum Daily Average: 19.8 ppb on Jan 9																				Hours in Service: 744 Hours of Data: 684						
Minimum Value: 0 ppb on Jan 31 03:00 Maximum Diurnal Average: 8.6 ppb at hour 19 Monthly Average: 7.06 ppb																				Minimum Daily Average: 0.5 ppb on Jan 31 Minimum Diurnal Average: 5.5 ppb at hour 15 Percentiles: P ₁ = 0.4 P ₁₀ = 1.1 Q ₁ = 2.2 Median = 4.3 Q ₃ = 9.4 P ₉₀ = 18.1 P ₉₉ = 26.8		Hours of Missing Data: 60 Hours of Calibration: 35 Percent Operational Time: 96.6				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	10	11	9	13	A	5	4	3	2	2	3	2	2	2	2	2	3	4	3	3	2	2	3	2	4.2	12.6
2-Jan	2	3	3	3	A	3	5	9	14	12	16	9	6	11	8	8	21	13	8	18	22	19	14	15	10.5	22.3
3-Jan	16	16	15	17	A	26	24	26	25	23	16	13	15	14	16	14	18	19	21	21	25	24	24	25	19.7	26.1
4-Jan	25	26	25	30	A	23	24	24	24	22	17	17	18	19	18	12	10	8	6	6	9	15	12	17	17.8	29.8
5-Jan	14	18	22	21	A	15	14	19	21	24	20	20	15	8	3	2	4	10	13	9	6	6	4	3	12.7	24.3
6-Jan	3	5	6	6	A	8	6	5	9	6	7	8	7	4	4	4	5	2	2	2	3	3	3	3	4.8	8.8
7-Jan	3	2	2	3	A	3	4	5	5	7	4	2	3	2	3	3	3	3	4	4	4	4	4	3	3.5	7.1
8-Jan	5	8	8	8	A	5	6	6	5	7	5	5	4	4	5	3	6	9	6	5	12	5	13	17	6.8	17.2
9-Jan	14	14	15	17	A	22	29	26	20	23	19	12	10	13	11	14	21	28	26	21	20	22	30	25	19.8	29.7
10-Jan	15	1	2	2	A	2	1	1	2	2	3	2	1	1	1	1	6	7	3	3	3	9	6	4	3.4	15.3
11-Jan	4	6	4	3	A	9	8	8	1	4	3	3	2	3	3	4	5	6	9	11	14	11	9	5	5.9	14.3
12-Jan	5	12	9	8	A	18	16	14	15	15	7	6	11	11	10	13	13	16	14	4	1	1	1	1	9.6	17.7
13-Jan	1	1	1	1	A	1	1	3	3	3	5	5	5	5	5	7	6	6	5	4	4	2	1	1	3.3	6.8
14-Jan	2	3	4	4	A	4	5	6	6	9	7	5	7	6	7	10	12	21	27	25	23	20	12	13	10.4	27.0
15-Jan	11	9	6	4	A	2	3	2	2	3	2	3	3	3	3	3	6	8	10	3	2	3	1	1	4.1	11.5
16-Jan	1	1	1	2	A	4	3	2	2	5	3	2	2	2	2	6	8	4	4	6	5	4	2	2	3.2	7.5
17-Jan	4	2	2	2	A	2	3	2	3	2	7	5	3	4	3	2	2	4	3	5	3	2	3	1	3.0	6.7
18-Jan	2	1	2	3	A	4	4	4	4	3	3	2	2	2	3	3	3	1	8	4	6	9	7	5	3.6	8.6
19-Jan	5	11	7	6	A	6	6	7	9	7	7	C	C	C	C	C	C	5	3	2	9	4	3	3	--	11.1
20-Jan	2	2	2	4	A	5	6	8	8	9	8	6	6	3	3	12	6	15	7	6	4	3	3	3	5.7	15.4
21-Jan	2	2	3	2	A	1	4	3	4	4	4	5	4	4	5	5	3	3	2	2	1	1	1	1	2.9	5.2
22-Jan	1	1	1	1	A	2	4	4	5	5	4	4	3	1	3	2	4	5	5	5	4	6	7	7	3.5	7.1
23-Jan	8	8	7	11	A	13	9	17	21	12	12	23	15	19	14	20	20	28	33	23	27	23	21	12	17.3	33.0
24-Jan	9	10	15	12	A	10	10	17	23	15	7	7	11	15	9	6	6	9	12	10	8	13	7	6	10.7	22.6
25-Jan	4	5	6	4	A	3	3	3	3	3	2	4	4	4	3	3	3	4	5	5	8	8	7	6	4.4	8.3
26-Jan	7	5	5	P	P	P	P	P	P	P	P	P	P	3	17	20	12	10	22	22	22	18	6	10	--	22.2
27-Jan	9	9	9	8	A	7	5	3	1	1	1	1	1	1	1	1	2	1	2	1	2	D	D	D	3.3	9.4
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	D	1	1	1	1	2	1	2	1	1	1	1	--	1.7
29-Jan	1	1	1	1	A	3	2	1	1	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1.3	2.8
30-Jan	1	1	1	1	A	1	1	2	3	4	7	3	1	1	2	2	1	1	1	1	1	0	1	1	1.6	7.5
31-Jan	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0.5	1.3
6.2 6.5 6.3 6.7 -- 7.2 7.2 8.1 8.4 8.1 7.0 6.3 5.6 5.6 5.5 6.3 7.1 8.3 8.6 7.6 8.2 8.0 7.0 6.5 25.3 25.8 24.7 29.8 -- 26.0 28.9 26.3 24.7 24.3 20.5 23.2 18.4 19.0 18.1 20.2 21.2 28.4 33.0 25.5 27.2 23.9 29.7 25.3																										Diurnal Average
																										Diurnal Maximum
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb																										

Hourly Averages for NO₂ at Beaverlodge January 2009

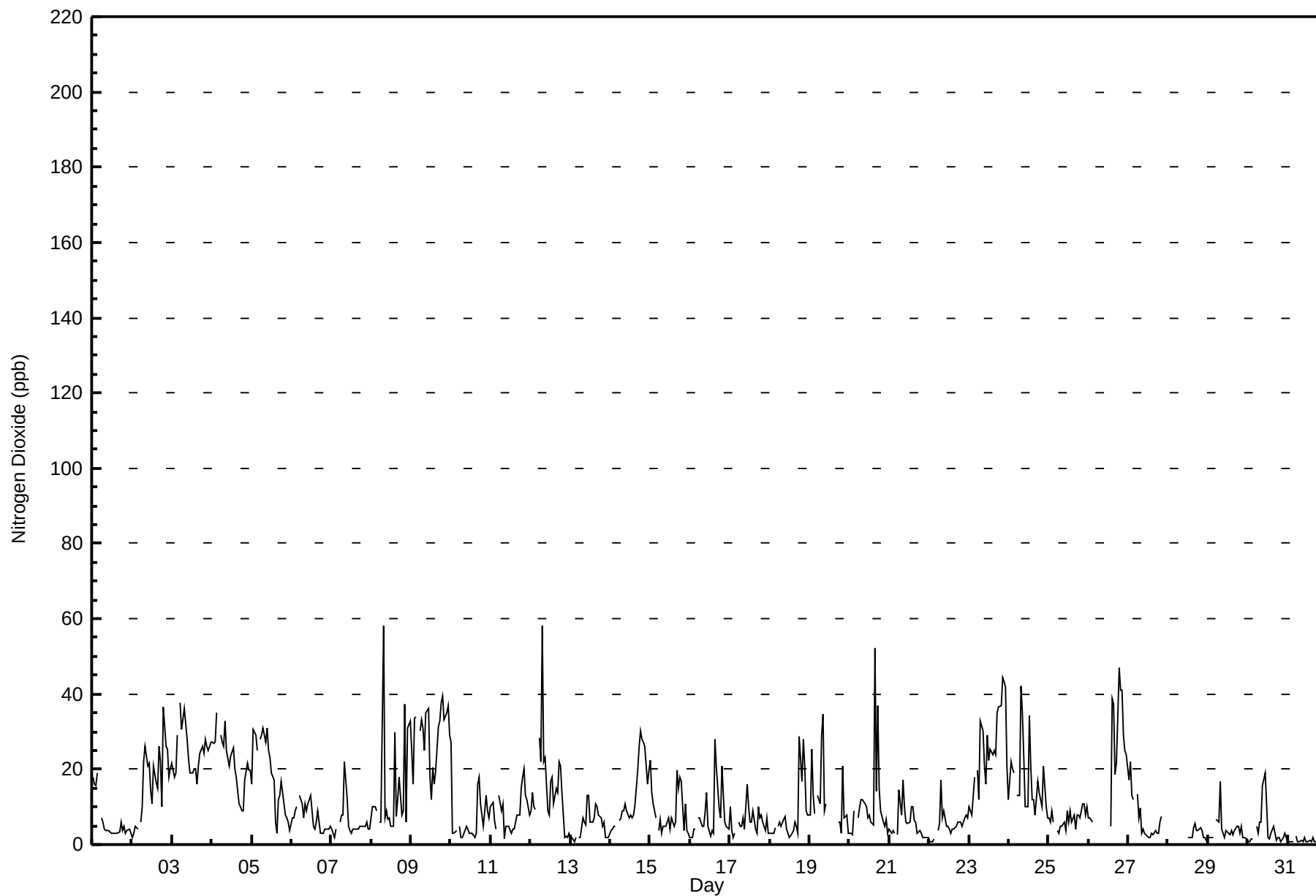


**Peace Airshed Zone Association
Summary of Hourly Maximums**

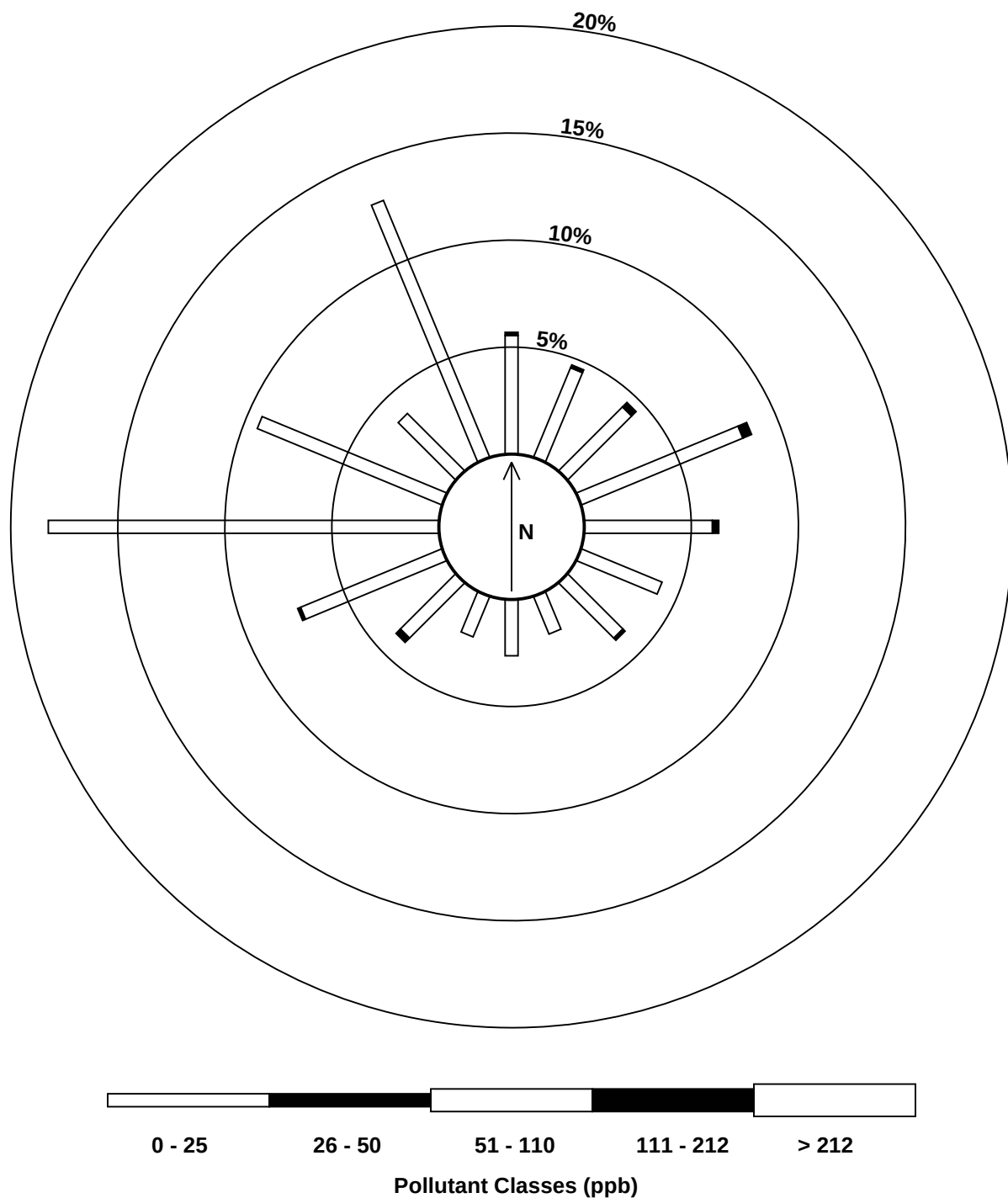
**Beaverlodge - Nitrogen Dioxide (NO₂) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 58.3 ppb on Jan 8 08:00																				Maximum Daily Average: 28.7 ppb on Jan 9										Hours in Service: 744	
Minimum Value: 1 ppb on Jan 22 02:00																				Minimum Daily Average: 1.3 ppb on Jan 31										Hours of Data: 684	
Maximum Diurnal Average: 17.5 ppb at hour 8																				Minimum Diurnal Average: 8.5 ppb at hour 13										Hours of Missing Data: 60	
Monthly Average: 11.35 ppb																				Percentiles: P ₁ = 0.9 P ₁₀ = 1.9 Q ₁ = 3.9 Median = 7.0 Q ₃ = 17.0 P ₉₀ = 26.9 P ₉₉ = 41.8										Hours of Calibration: 35	
																				Percent Operational Time: 96.6											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	18	16	16	19	A	7	6	4	4	4	4	3	3	3	3	3	4	6	4	5	3	4	4	3	6.2	19.0					
2-Jan	2	3	5	4	A	6	10	22	26	21	22	15	11	21	16	15	26	22	10	37	26	25	18	20	16.6	36.6					
3-Jan	22	18	19	29	A	38	31	36	32	28	23	19	19	20	20	16	21	24	26	24	28	26	25	27	24.8	37.6					
4-Jan	27	27	27	35	A	29	27	26	33	25	21	23	25	26	20	18	11	10	9	9	17	22	20	20	22.0	35.1					
5-Jan	16	30	29	25	A	28	29	31	27	31	25	23	19	17	6	3	12	13	17	11	8	7	6	4	18.1	31.1					
6-Jan	7	7	9	10	A	13	11	7	11	9	11	13	9	5	4	6	9	3	3	3	4	4	4	5	7.2	13.0					
7-Jan	4	3	2	4	A	6	8	8	22	12	5	4	3	4	4	4	4	5	5	5	5	6	4	4	5.6	21.9					
8-Jan	7	10	10	9	A	6	6	58	7	9	7	7	5	5	30	7	12	18	8	9	37	6	31	33	14.6	58.3					
9-Jan	25	16	33	34	A	30	33	31	25	35	36	18	12	20	16	19	31	33	37	39	33	35	37	29	28.7	39.4					
10-Jan	27	3	3	4	A	5	2	2	4	5	4	3	3	3	2	3	16	18	11	5	9	13	9	7	6.9	27.1					
11-Jan	10	11	7	4	A	13	9	11	2	5	5	5	3	4	4	6	8	8	15	18	20	13	12	8	8.7	20.0					
12-Jan	9	14	10	9	A	28	22	58	22	23	9	8	17	18	11	15	14	22	21	14	2	2	2	3	15.3	58.2					
13-Jan	2	2	1	2	A	2	2	7	6	5	13	13	6	6	7	11	10	8	7	5	6	2	2	2	5.5	13.0					
14-Jan	4	4	5	5	A	6	7	9	9	11	9	7	8	7	8	10	20	26	30	28	27	26	16	20	13.1	30.0					
15-Jan	22	14	11	7	A	4	7	3	5	5	6	7	4	7	5	6	20	15	18	17	4	11	4	3	8.8	22.3					
16-Jan	2	2	4	4	A	7	7	5	5	9	14	5	2	4	3	28	21	10	7	21	13	6	5	4	8.1	28.0					
17-Jan	10	4	2	3	A	6	5	5	7	4	16	10	6	6	9	4	3	10	7	8	6	4	7	3	6.2	16.0					
18-Jan	3	3	3	4	A	5	6	5	7	7	4	3	2	3	4	6	5	3	29	17	28	20	9	8	8.0	28.9					
19-Jan	8	25	13	8	A	13	11	29	35	9	11	C	C	C	C	C	C	6	6	3	21	7	8	3	--	34.7					
20-Jan	3	3	3	9	A	7	10	12	12	11	10	7	8	6	5	52	14	37	15	9	6	5	7	3	11.0	52.2					
21-Jan	4	3	4	3	A	2	15	8	17	10	6	6	6	10	10	6	6	3	4	3	2	2	2	2	5.8	17.0					
22-Jan	1	1	1	1	A	4	6	17	7	9	5	5	4	3	4	4	5	6	6	6	5	7	8	7	5.3	17.1					
23-Jan	10	9	8	18	A	20	12	33	30	21	16	29	22	25	24	25	24	35	37	37	44	43	42	21	25.4	44.3					
24-Jan	12	22	20	19	A	13	13	42	35	24	10	10	34	21	12	12	8	17	14	12	10	21	10	7	17.2	42.2					
25-Jan	7	6	9	6	A	4	3	5	5	6	4	9	6	9	6	8	4	8	8	7	11	11	8	10	6.9	10.9					
26-Jan	7	7	6	P	P	P	P	P	P	P	P	P	P	5	39	37	19	21	47	41	41	29	25	24	--	47.0					
27-Jan	17	22	13	12	A	13	7	10	3	4	3	2	2	2	3	3	4	3	3	6	8	D	D	D	6.9	21.9					
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	2	2	2	5	6	4	4	5	4	2	2	1	--	5.6					
29-Jan	2	2	2	2	A	7	6	17	4	3	2	4	3	3	4	3	4	5	5	3	5	2	2	2	3.8	16.7					
30-Jan	1	1	1	2	A	5	3	6	6	16	19	11	2	2	3	5	3	1	2	2	1	2	3	2	4.2	18.9					
31-Jan	1	1	1	1	A	2	1	1	1	1	2	1	1	1	1	2	1	1	1	2	2	3	2	2	1.3	2.8					
9.6 9.6 9.2 10.1 -- 11.3 10.8 17.5 14.0 12.4 11.0 9.6 8.5 8.9 9.4 11.4 11.4 12.9 13.4 13.2 14.0 12.2 11.1 9.5																										Diurnal Average					
27.1 30.4 33.4 35.1 -- 37.6 33.1 58.3 35.0 35.1 36.1 29.0 34.2 25.6 38.7 52.2 31.5 36.9 47.0 41.0 44.3 43.3 41.8 32.8																										Diurnal Maximum					
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span																															

Hourly Maximums for NO₂ at Beaverlodge January 2009



Pollutant Rose for NO₂ at Beaverlodge **January 2009**



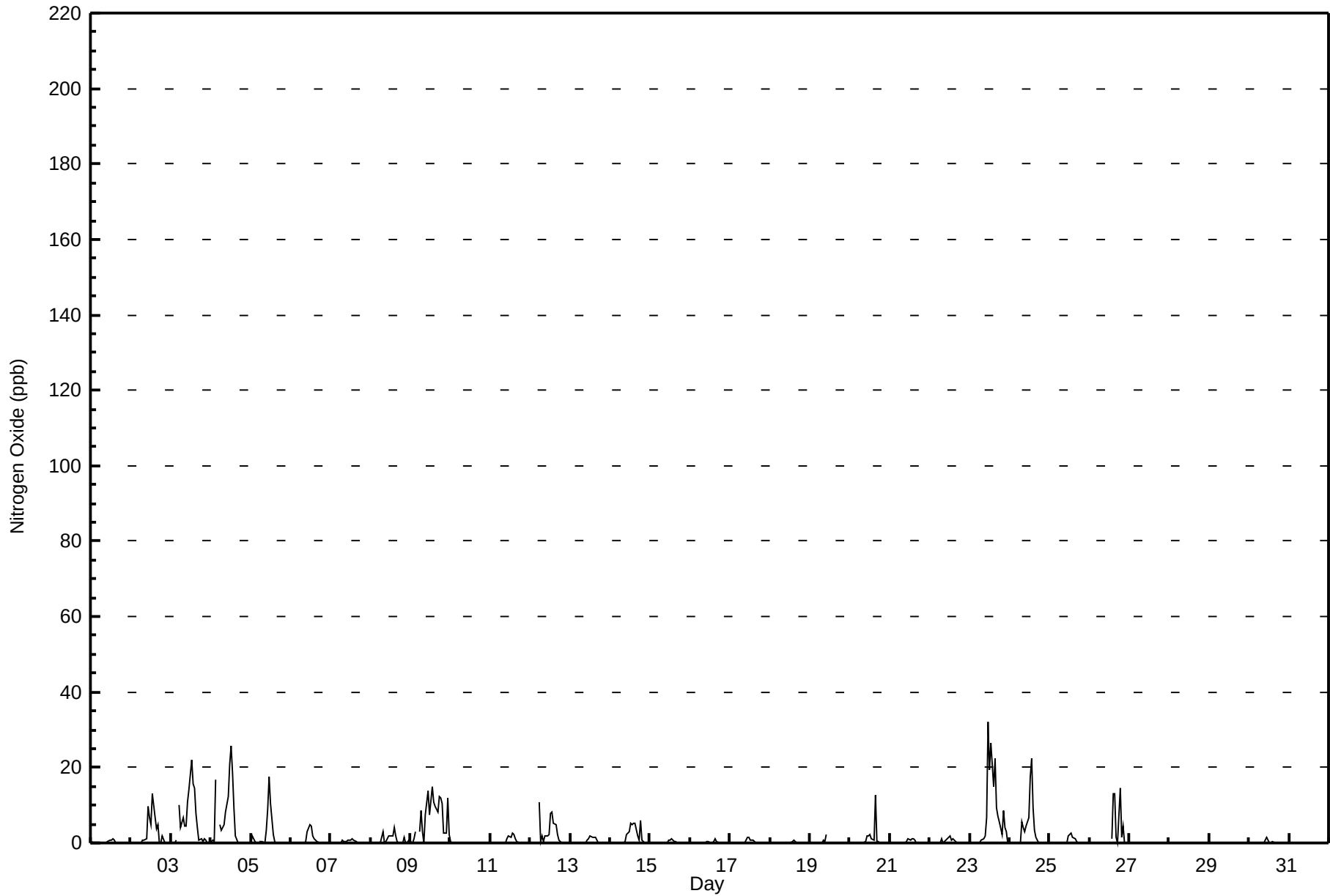
Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - Nitrogen Oxide (NO) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 32.2 ppb on Jan 23 12:00																				Maximum Daily Average: 7.2 ppb on Jan 23					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 1 06:00																				Minimum Daily Average: 0.0 ppb on Jan 27					Hours of Data: 684	
Maximum Diurnal Average: 5.0 ppb at hour 13																				Minimum Diurnal Average: 0.0 ppb at hour 1					Hours of Missing Data: 60	
Monthly Average: 1.49 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.8 P ₉₀ = 4.7 P ₉₉ = 20.4					Hours of Calibration: 35	
																				Percent Operational Time: 96.6						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.2	0.9
2-Jan	0	0	0	0	A	0	0	1	1	1	10	7	5	13	7	4	5	0	0	2	0	0	0	0	2.3	12.9
3-Jan	0	0	0	1	A	10	4	7	4	5	11	14	22	16	15	8	4	1	1	1	1	1	0	0	5.4	22.0
4-Jan	0	1	1	17	A	5	3	4	5	8	12	21	26	19	9	2	0	0	0	0	0	0	0	0	5.7	25.9
5-Jan	0	2	0	0	A	0	0	0	0	4	9	17	10	2	0	0	0	0	0	0	0	0	0	0	2.0	17.5
6-Jan	0	0	0	0	A	0	0	0	0	0	3	5	5	2	1	1	0	0	0	0	0	0	0	0	0.7	4.8
7-Jan	0	0	0	0	A	0	0	1	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	1.0
8-Jan	0	0	0	0	A	0	0	3	0	0	1	2	2	2	4	2	0	0	0	0	1	0	0	1	0.8	3.9
9-Jan	0	0	1	3	A	3	8	3	0	7	14	7	11	15	11	10	8	12	12	10	2	3	12	2	6.8	14.8
10-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
11-Jan	0	0	0	0	A	0	0	0	0	0	1	2	2	2	2	1	0	0	0	0	0	0	0	0	0.5	2.4
12-Jan	0	0	0	0	A	11	1	2	0	2	2	2	8	8	5	5	2	1	0	0	0	0	0	0	2.1	10.7
13-Jan	0	0	0	0	A	0	0	0	0	0	1	1	2	2	1	2	1	0	0	0	0	0	0	0	0.4	1.9
14-Jan	0	0	0	0	A	0	0	0	0	0	2	3	5	5	5	5	2	1	6	1	0	0	0	0	1.6	6.0
15-Jan	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.2	1.1
16-Jan	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.1	1.2
17-Jan	0	0	0	0	A	0	0	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0.2	1.6
18-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.6
19-Jan	0	0	0	0	A	0	0	0	1	0	2	C	C	C	C	C	C	0	0	0	0	0	0	0	--	2.1
20-Jan	0	0	0	0	A	0	0	0	0	0	2	2	2	1	1	13	0	0	0	0	0	0	0	0	0.9	12.7
21-Jan	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	1.2
22-Jan	0	0	0	0	A	0	0	1	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0.4	1.8
23-Jan	0	0	0	0	A	0	0	1	1	2	7	32	19	26	15	22	9	7	6	2	9	4	3	0	7.2	32.2
24-Jan	0	0	0	0	A	0	0	6	4	3	5	7	17	22	9	4	1	0	0	0	0	0	0	0	3.4	22.5
25-Jan	0	0	0	0	A	0	0	0	0	0	0	2	2	3	1	1	0	0	0	0	0	0	0	0	0.4	2.6
26-Jan	0	0	0	P	P	P	P	P	P	P	P	P	P	1	13	13	1	0	15	2	4	0	0	0	--	14.7
27-Jan	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	D	D	D	0.0	0.0
28-Jan	D	D	D	D	A	D	D	D	D	D	D	D	D	0	0	0	0	0	0	0	0	0	0	0	--	0.0
29-Jan	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
30-Jan	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.5
31-Jan	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 0.1 0.1 0.7 -- 1.0 0.6 1.0 0.6 1.2 3.0 4.7 5.0 4.8 3.6 3.2 1.2 0.7 1.3 0.6 0.6 0.3 0.5 0.1																								Diurnal Average		
0.4 1.7 1.1 16.7 -- 10.7 8.5 6.6 4.9 8.1 14.0 32.2 25.9 26.4 15.0 22.2 9.2 12.5 14.7 10.3 8.6 4.0 12.0 2.3																								Diurnal Maximum		
C - Calibration				P - Power Failure				D - DAS Failure				A - Automated Daily Zero Span														

Hourly Averages for NO at Beaverlodge

January 2009



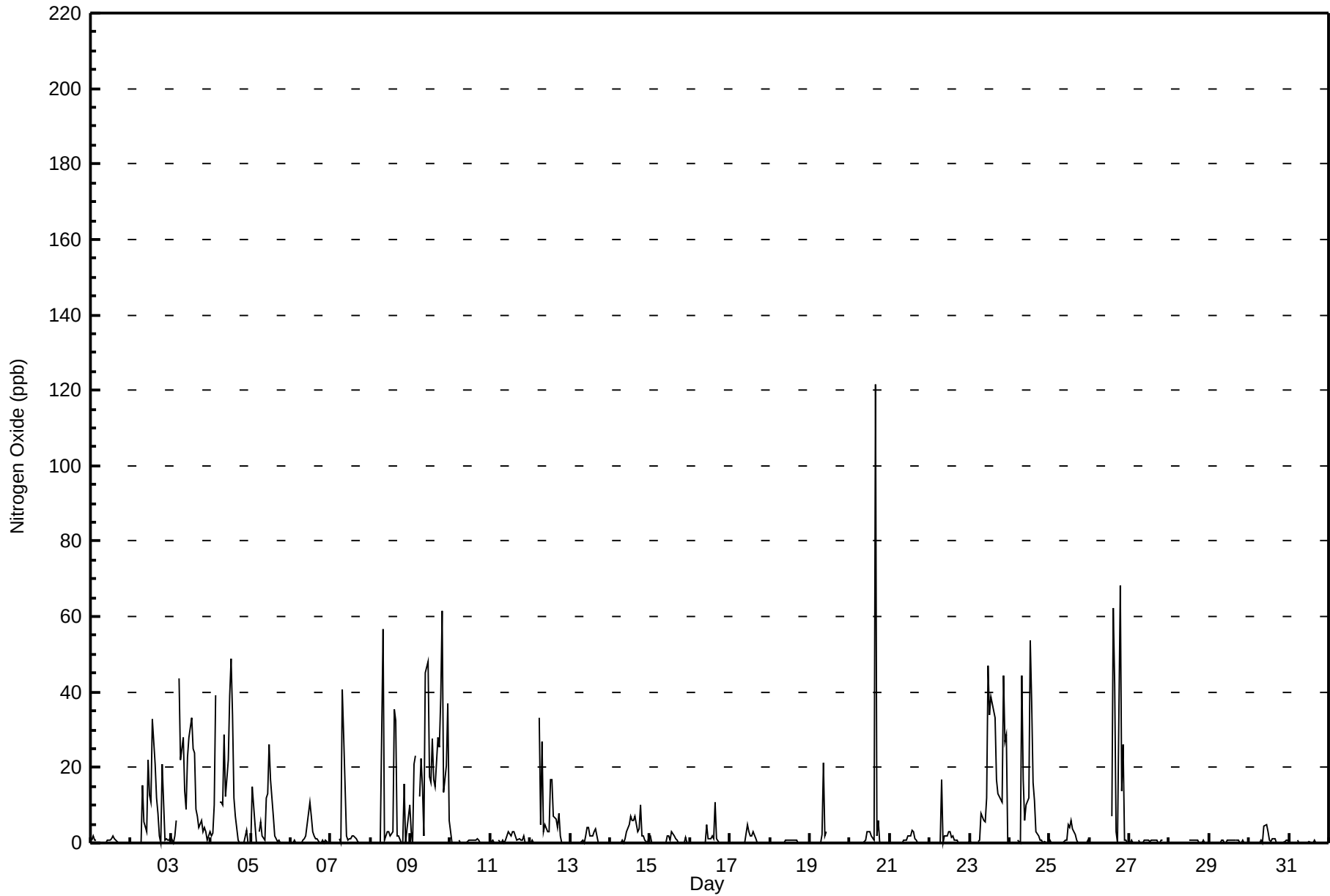
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Beaverlodge - Nitrogen Oxide (NO) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 121.6 ppb on Jan 20 16:00																			Maximum Daily Average: 22.4 ppb on Jan 9							Hours in Service: 744	
Minimum Value: 0 ppb on Jan 1 06:00																			Minimum Daily Average: 0.1 ppb on Jan 31							Hours of Data: 684	
Maximum Diurnal Average: 11.0 ppb at hour 16																			Minimum Diurnal Average: 0.5 ppb at hour 1							Hours of Missing Data: 60	
Monthly Average: 4.53 ppb																			Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.9 Q ₃ = 2.9 P ₉₀ = 14.7 P ₉₉ = 47.1							Hours of Calibration: 35	
																										Percent Operational Time: 96.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	1	2	1	1	A	0	0	0	0	0	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0.5	1.9	
2-Jan	0	0	0	0	A	0	0	15	6	3	22	13	11	33	21	12	8	2	0	21	1	1	1	1	7.4	32.8	
3-Jan	2	0	2	6	A	43	22	28	14	9	23	28	33	25	24	9	7	4	6	3	4	3	1	3	13.0	43.5	
4-Jan	2	3	10	39	A	11	11	10	29	12	22	39	49	34	12	7	1	0	0	0	0	3	0	0	12.7	48.8	
5-Jan	0	15	5	0	A	3	6	2	1	12	13	26	17	7	2	1	0	1	0	0	0	0	0	0	4.8	26.0	
6-Jan	0	0	1	0	A	0	0	1	1	2	5	11	7	3	2	1	1	0	0	1	0	1	0	0	1.5	10.9	
7-Jan	0	0	0	0	A	1	0	41	28	2	1	1	1	2	2	1	0	0	0	0	0	0	0	0	3.5	40.7	
8-Jan	0	0	0	0	A	0	0	57	1	2	3	3	2	3	35	32	2	2	0	0	16	0	4	10	7.4	56.5	
9-Jan	3	0	21	23	A	12	22	15	2	45	48	18	16	28	17	15	28	25	38	61	13	21	37	6	22.4	61.5	
10-Jan	3	0	0	0	A	1	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	2.9	
11-Jan	0	1	0	0	A	1	0	1	0	1	2	3	2	3	3	2	1	1	1	1	2	0	0	0	1.0	2.9	
12-Jan	0	1	0	0	A	33	5	27	3	5	3	3	17	17	7	6	4	8	2	0	0	0	0	0	6.1	33.0	
13-Jan	0	0	0	0	A	0	0	1	0	2	4	4	2	2	3	4	2	0	0	0	0	0	0	0	1.0	4.0	
14-Jan	0	0	0	0	A	0	0	1	0	1	3	5	7	6	6	7	3	4	10	2	2	1	0	2	2.6	9.9	
15-Jan	2	0	0	0	A	0	0	0	0	0	2	2	1	3	2	1	1	0	0	0	0	2	0	0	0.7	2.9	
16-Jan	0	0	0	0	A	0	0	0	0	0	5	1	1	2	1	11	1	0	0	0	0	0	0	0	0.9	10.7	
17-Jan	0	0	0	0	A	0	0	0	0	0	5	3	2	2	3	1	0	0	0	0	0	0	0	0	0.7	5.0	
18-Jan	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.3	0.9	
19-Jan	0	0	0	0	A	0	0	2	21	2	3	C	C	C	C	C	C	0	0	0	0	0	0	0	--	21.4	
20-Jan	0	0	0	0	A	0	0	0	0	1	3	3	3	2	1	122	2	6	0	0	0	0	0	0	6.2	121.6	
21-Jan	0	0	0	0	A	0	0	0	1	1	1	2	2	3	3	1	1	0	0	0	0	0	0	0	0.6	3.3	
22-Jan	0	0	0	0	A	0	0	17	0	2	2	3	3	1	2	1	1	0	0	0	0	0	0	0	1.4	16.9	
23-Jan	1	0	0	0	A	0	1	8	6	6	12	47	34	39	35	33	17	13	12	11	44	27	29	0	16.3	47.0	
24-Jan	0	0	0	0	A	1	0	44	17	6	10	12	54	37	16	11	3	2	1	1	0	0	0	0	9.3	53.7	
25-Jan	1	0	0	0	A	0	0	0	0	1	1	5	4	6	4	2	1	0	0	0	0	0	0	1	1.1	5.9	
26-Jan	0	0	0	P	P	P	P	P	P	P	P	P	P	7	62	42	3	0	68	14	26	1	1	0	--	68.2	
27-Jan	0	1	0	0	A	1	0	0	0	1	1	1	0	1	1	1	1	0	0	1	1	D	D	D	0.5	0.9	
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	1	1	1	1	1	1	0	0	1	0	0	0	--	0.9	
29-Jan	0	0	0	0	A	0	0	1	1	0	0	1	1	1	1	1	1	1	0	0	1	0	0	0	0.4	0.9	
30-Jan	0	0	0	0	A	0	0	1	0	4	5	3	1	0	1	1	0	0	0	0	0	0	1	1	0.8	4.9	
31-Jan	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.9	
0.5 0.7 1.3 2.4 -- 3.7 2.3 9.4 4.5 4.1 6.9 8.5 9.4 9.0 9.0 11.0 3.0 2.3 4.5 3.7 3.6 2.0 2.4 0.8																									Diurnal Average		
2.9 15.0 20.7 39.3 -- 43.5 22.3 56.5 28.7 45.1 48.1 47.0 53.7 38.7 62.1 121.6 27.8 25.5 68.2 61.5 44.4 26.9 37.1 10.2																									Diurnal Maximum		
C - Calibration					P - Power Failure					D - DAS Failure					A - Automated Daily Zero Span												

Hourly Maximums for NO at Beaverlodge

January 2009



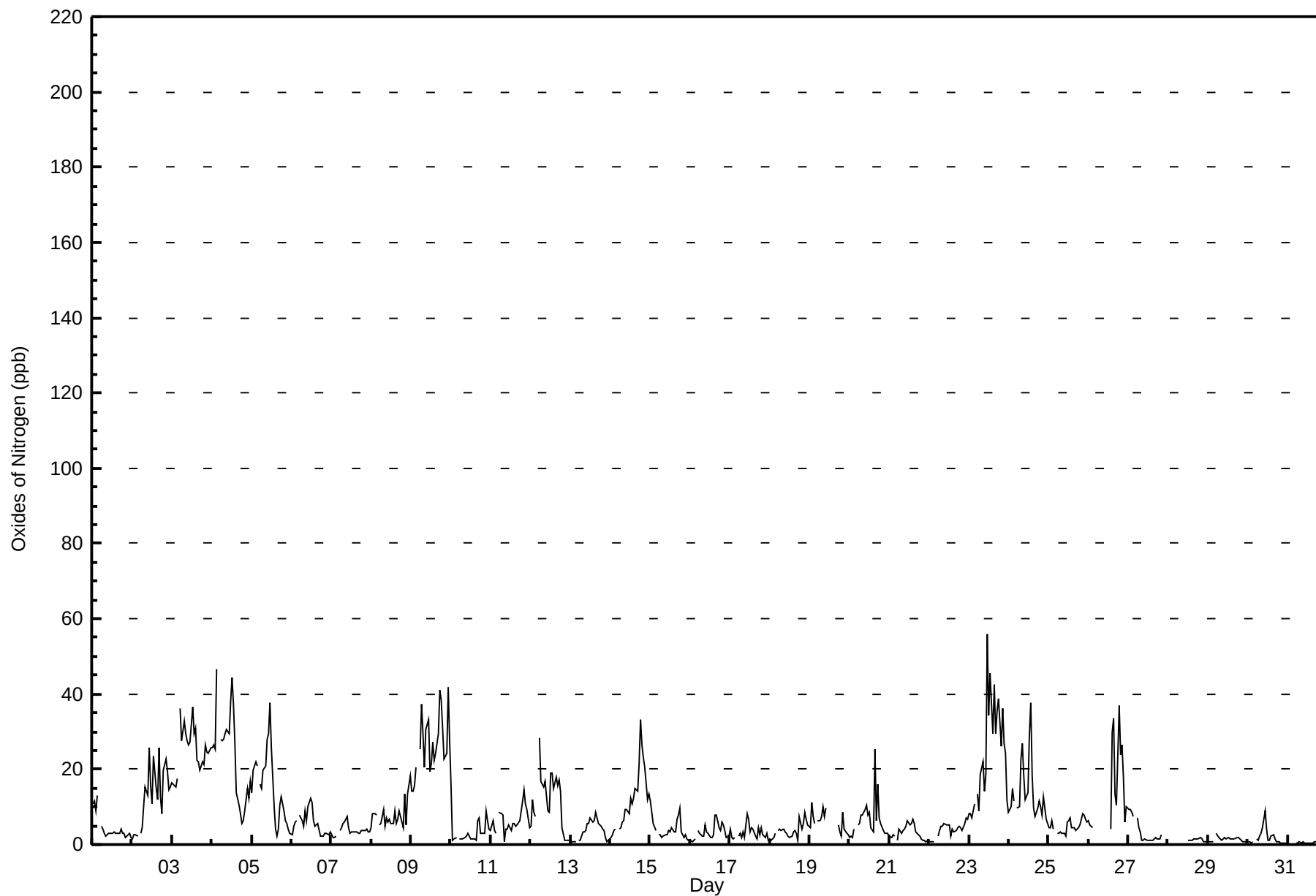
**Peace Airshed Zone Association
Summary of Hourly Averages**

**Beaverlodge - Oxides of Nitrogen (NO_x) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 55.8 ppb on Jan 23 12:00																				Maximum Daily Average: 26.6 ppb on Jan 9					Hours in Service: 744		
Minimum Value: 0 ppb on Jan 31 03:00																				Minimum Daily Average: 0.5 ppb on Jan 31					Hours of Data: 684		
Maximum Diurnal Average: 11.1 ppb at hour 12																				Minimum Diurnal Average: 6.2 ppb at hour 1					Hours of Missing Data: 60		
Monthly Average: 8.57 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 1.1 Q ₁ = 2.3 Median = 4.7 Q ₃ = 10.7 P ₉₀ = 24.3 P ₉₉ = 40.6					Hours of Calibration: 35		
																				Percent Operational Time: 96.6							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	11	12	9	13	A	5	4	3	2	3	3	3	3	3	3	3	3	4	3	3	2	2	3	2	4.4	13.0	
2-Jan	1	2	3	2	A	3	5	10	15	13	26	16	11	24	15	12	26	13	8	20	23	19	14	15	12.9	25.9	
3-Jan	16	16	15	18	A	36	28	33	29	27	26	27	37	30	31	22	22	20	22	21	26	24	24	26	25.1	36.6	
4-Jan	26	26	25	46	A	28	28	28	29	30	30	38	44	37	27	14	10	8	6	6	9	15	12	17	23.5	46.5	
5-Jan	14	20	22	21	A	16	15	20	21	28	29	38	26	10	4	2	4	11	13	9	6	6	4	3	14.8	37.6	
6-Jan	3	5	6	6	A	8	7	5	9	6	10	12	11	6	5	5	5	2	2	2	3	3	3	3	5.6	12.5	
7-Jan	3	2	2	2	A	4	4	6	6	8	4	3	3	3	4	3	3	3	4	4	4	4	3	3	3.7	7.5	
8-Jan	4	8	8	8	A	5	5	9	5	7	6	7	6	6	9	5	7	9	6	5	13	5	13	18	7.6	18.3	
9-Jan	14	14	16	21	A	25	37	30	21	31	33	19	22	27	22	24	29	41	38	31	23	24	42	28	26.6	41.7	
10-Jan	16	1	1	2	A	2	1	1	2	2	3	2	1	2	1	1	6	7	3	3	3	9	6	4	3.5	15.6	
11-Jan	4	6	4	3	A	9	8	8	1	4	4	5	4	6	5	5	5	6	9	11	15	11	9	5	6.4	14.6	
12-Jan	5	12	9	8	A	28	17	16	15	17	9	8	19	19	15	18	16	17	14	4	1	1	1	1	11.8	28.4	
13-Jan	1	1	1	1	A	1	1	3	3	4	6	6	7	6	6	8	7	5	5	4	4	2	1	1	3.7	8.4	
14-Jan	2	3	4	4	A	4	5	6	6	9	9	8	12	11	12	15	14	22	33	26	23	21	12	13	11.9	33.1	
15-Jan	12	9	6	4	A	2	3	2	2	3	3	4	3	5	3	3	7	8	10	3	2	3	1	1	4.2	11.5	
16-Jan	1	1	1	2	A	4	3	2	2	5	3	3	2	2	3	8	8	4	4	6	5	4	2	2	3.3	7.9	
17-Jan	4	2	1	2	A	2	3	2	3	2	8	7	4	4	4	2	2	4	3	5	3	2	3	1	3.2	8.1	
18-Jan	2	1	2	3	A	4	4	4	4	3	3	2	2	2	3	4	3	1	8	4	6	9	7	5	3.7	8.5	
19-Jan	5	11	7	6	A	6	6	7	10	8	10	C	C	C	C	C	C	5	3	2	9	4	3	3	--	11.0	
20-Jan	2	2	2	4	A	5	6	8	8	9	10	8	8	5	3	25	6	16	7	5	4	3	3	3	6.7	25.3	
21-Jan	2	2	2	2	A	1	4	3	4	4	5	6	5	6	7	6	3	3	2	2	1	1	1	1	3.2	6.5	
22-Jan	1	1	1	1	A	2	4	5	5	6	5	5	5	2	4	3	4	5	5	4	4	6	7	7	3.9	7.0	
23-Jan	8	8	7	11	A	13	9	18	22	14	19	56	34	46	29	43	29	36	39	26	36	27	24	12	24.6	55.8	
24-Jan	9	10	15	12	A	10	10	23	27	18	12	14	29	38	18	10	8	10	12	10	8	13	7	6	14.1	37.6	
25-Jan	4	4	6	4	A	3	3	3	3	3	2	6	6	7	4	5	4	4	4	5	8	8	7	6	4.8	8.2	
26-Jan	6	5	5	P	P	P	P	P	P	P	P	P	P	4	30	33	14	11	37	24	27	18	6	10	--	36.9	
27-Jan	9	9	9	8	A	7	5	3	1	1	1	1	1	1	1	1	2	1	1	1	2	D	D	D	3.4	9.5	
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	D	1	1	1	2	2	1	2	1	1	1	1	--	1.7	
29-Jan	1	1	1	1	A	3	2	1	1	2	2	2	2	1	1	2	2	2	2	1	1	1	1	1	1.4	2.8	
30-Jan	1	1	0	1	A	1	1	2	3	4	9	4	1	1	2	3	1	1	1	1	0	0	0	0	1.8	9.1	
31-Jan	0	0	0	0	A	0	0	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	0	0.5	1.3	
6.2 6.5 6.3 7.3 -- 8.2 7.8 9.0 9.0 9.4 10.0 11.1 10.7 10.5 9.2 9.6 8.4 9.1 9.9 8.1 8.8 8.2 7.4 6.6																									Diurnal Average		
25.8 26.4 25.3 46.5 -- 36.2 37.4 32.7 29.3 30.5 33.1 55.8 44.3 45.6 31.0 42.7 29.5 40.9 38.9 31.0 36.0 27.0 41.7 27.6																									Diurnal Maximum		
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span																											

Hourly Averages for NO_x at Beaverlodge

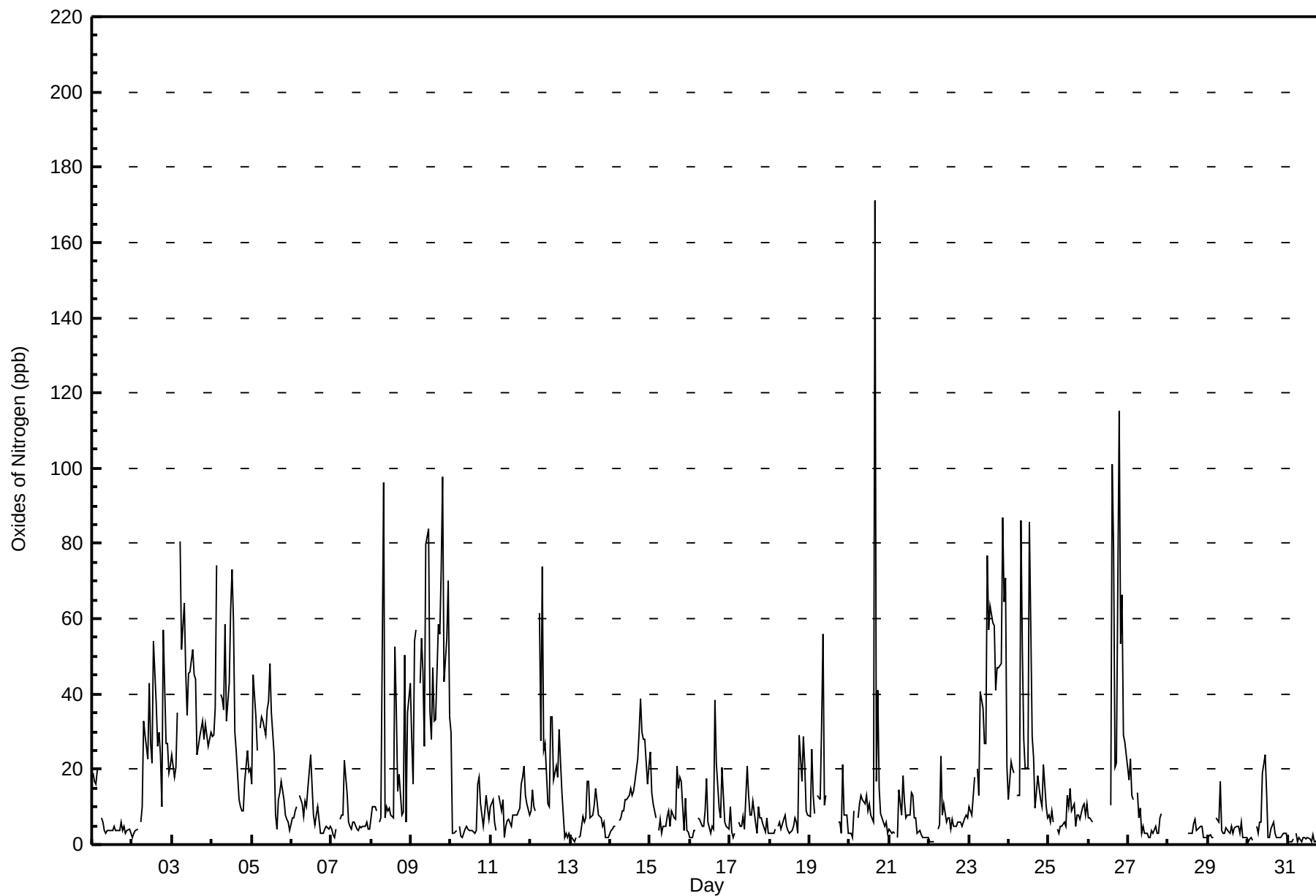
January 2009



Beaverlodge - Oxides of Nitrogen (NO_x) - ppb
January 1, 2009 to February 1, 2009

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Hourly Maximums for NO_x at Beaverlodge January 2009

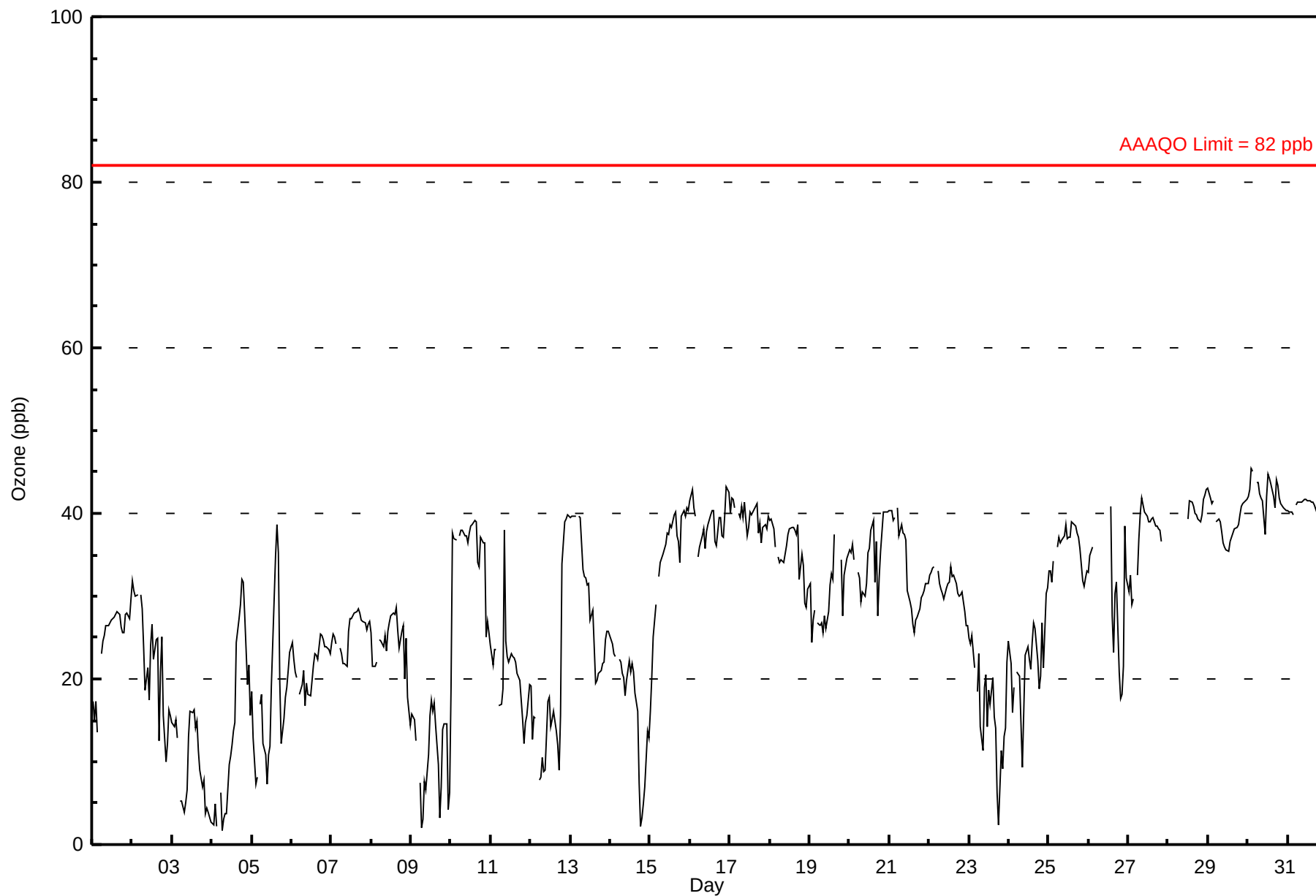


Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 45.3 ppb on Jan 30 03:00 Maximum Daily Average: 42.4 ppb on Jan 30																					Hours in Service: 744 Hours of Data: 687						
Minimum Value: 2 ppb on Jan 4 07:00 Maximum Diurnal Average: 30.3 ppb at hour 14 Monthly Average: 27.91 ppb										Minimum Daily Average: 9.7 ppb on Jan 3 Minimum Diurnal Average: 26.2 ppb at hour 8 Percentiles: P ₁ = 2.6 P ₁₀ = 12.9 Q ₁ = 20.2 Median = 28.4 Q ₃ = 37.9 P ₉₀ = 40.3 P ₉₉ = 43.7											Hours of Missing Data: 57 Hours of Calibration: 32 Percent Operational Time: 96.6						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	17	15	17	13	A	23	25	25	26	27	26	27	27	27	28	28	28	26	26	26	28	28	27	30	24.8	29.7	
2-Jan	32	31	30	30	A	30	28	24	19	21	17	24	27	22	25	25	13	21	25	16	10	12	16	16	22.3	31.9	
3-Jan	15	14	15	13	A	5	5	4	5	7	13	16	16	16	14	15	11	9	7	8	4	4	4	3	9.7	16.2	
4-Jan	3	2	5	2	A	6	2	3	4	4	10	11	12	14	15	24	27	29	32	32	28	19	22	16	13.9	32.1	
5-Jan	18	13	7	8	A	17	18	12	11	7	11	12	19	30	35	39	35	20	12	15	18	19	21	23	18.3	38.6	
6-Jan	24	22	21	20	A	18	19	21	17	19	18	18	20	22	23	23	22	25	25	25	24	24	24	23	21.7	25.4	
7-Jan	24	25	25	24	A	24	23	22	22	21	26	27	27	28	28	28	28	28	27	27	27	26	27	27	25.7	28.4	
8-Jan	26	22	22	22	A	25	25	24	25	23	26	27	28	28	28	29	26	24	26	26	20	25	18	14	24.2	28.6	
9-Jan	16	15	15	13	A	7	2	3	8	7	11	16	17	16	17	14	10	3	7	14	15	15	4	6	10.9	17.4	
10-Jan	19	38	37	37	A	37	38	38	37	37	36	38	38	39	39	39	34	33	37	37	36	25	27	26	34.9	39.2	
11-Jan	24	22	24	24	A	17	17	19	38	25	23	22	23	23	22	22	21	20	17	15	12	15	16	19	20.8	38.0	
12-Jan	19	13	15	15	A	8	8	11	9	9	17	18	14	15	16	14	12	9	16	34	39	39	40	40	18.7	39.8	
13-Jan	40	40	40	40	A	40	39	33	32	32	31	32	27	28	24	19	20	21	21	22	22	25	26	26	29.5	39.7	
14-Jan	25	24	23	23	A	22	22	21	20	18	20	22	21	22	21	18	16	7	2	3	5	7	14	13	16.9	24.7	
15-Jan	16	20	25	29	A	32	34	35	35	36	38	38	39	38	40	40	37	37	34	40	40	40	41	40	34.9	40.6	
16-Jan	42	43	41	40	A	35	36	37	38	36	38	39	40	40	40	37	36	39	39	37	37	40	43	42	38.9	43.2	
17-Jan	40	42	42	41	A	40	39	41	39	41	37	38	40	40	40	41	41	38	39	36	38	39	38	40	39.6	41.9	
18-Jan	39	39	38	36	A	35	34	34	34	35	36	37	38	38	38	38	38	39	32	35	34	29	29	31	35.5	39.3	
19-Jan	32	24	27	28	A	27	27	27	26	28	26	28	31	33	32	37	C	C	A	34	28	33	35	35	29.8	37.4	
20-Jan	36	35	36	34	A	33	32	29	31	30	32	35	36	38	39	32	37	28	32	35	40	40	40	40	34.8	40.2	
21-Jan	40	40	39	40	A	41	37	39	38	38	37	31	29	28	27	26	27	27	29	30	30	31	32	31	33.3	40.7	
22-Jan	33	33	33	34	A	33	32	31	30	30	31	32	32	34	32	33	32	30	30	30	30	28	26	27	31.1	33.6	
23-Jan	25	24	25	21	A	19	23	14	11	19	21	14	19	17	20	15	14	6	2	11	9	13	14	22	16.5	25.2	
24-Jan	25	22	16	19	A	21	20	15	9	16	23	24	22	21	24	27	26	22	19	20	27	21	30	31	21.8	31.1	
25-Jan	33	33	32	34	A	36	37	36	37	37	39	37	37	37	39	39	38	38	37	36	32	31	32	33	35.7	39.0	
26-Jan	33	35	36	P	P	P	P	P	P	P	P	P	P	41	28	23	30	32	21	18	18	21	38	32	--	40.8	
27-Jan	31	33	29	30	A	33	37	40	42	41	40	40	39	39	39	39	38	38	38	38	37	D	D	D	37.0	41.8	
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	D	39	42	41	41	40	40	39	39	40	42	42	43	--	42.8
29-Jan	43	42	41	42	A	39	39	39	38	36	36	36	35	37	37	38	38	38	39	40	41	41	41	42	39.0	43.1	
30-Jan	42	43	45	45	A	44	44	42	42	41	38	42	45	44	44	42	41	44	43	42	41	41	40	40	42.4	45.3	
31-Jan	40	40	40	40	A	41	41	41	41	42	42	42	42	41	41	41	41	41	40	40	40	39	40	40	40.7	41.7	
28.3 28.1 28.1 27.5 -- 27.1 27.0 26.2 26.4 26.3 27.5 28.3 29.3 30.3 30.2 29.9 28.6 27.1 26.4 27.8 27.4 27.1 28.2 28.4																									Diurnal Average		
43.1 43.0 45.3 45.2 -- 43.7 43.7 42.4 41.9 41.6 41.7 42.1 44.7 44.2 43.6 42.1 41.2 44.1 43.3 41.8 41.1 41.8 43.2 42.8																									Diurnal Maximum		
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																											

Hourly Averages for O₃ at Beaverlodge January 2009

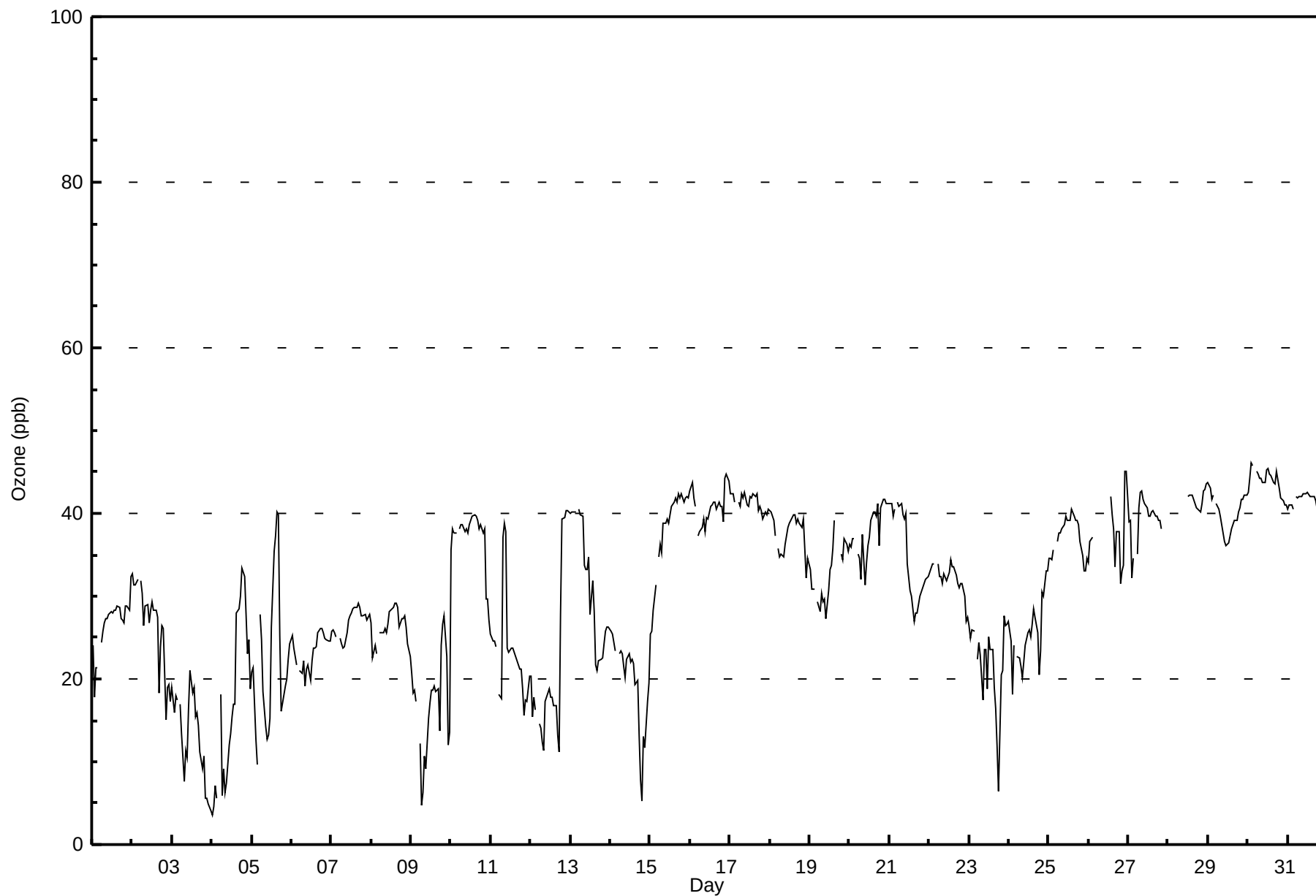


**Peace Airshed Zone Association
Summary of Hourly Maximums**

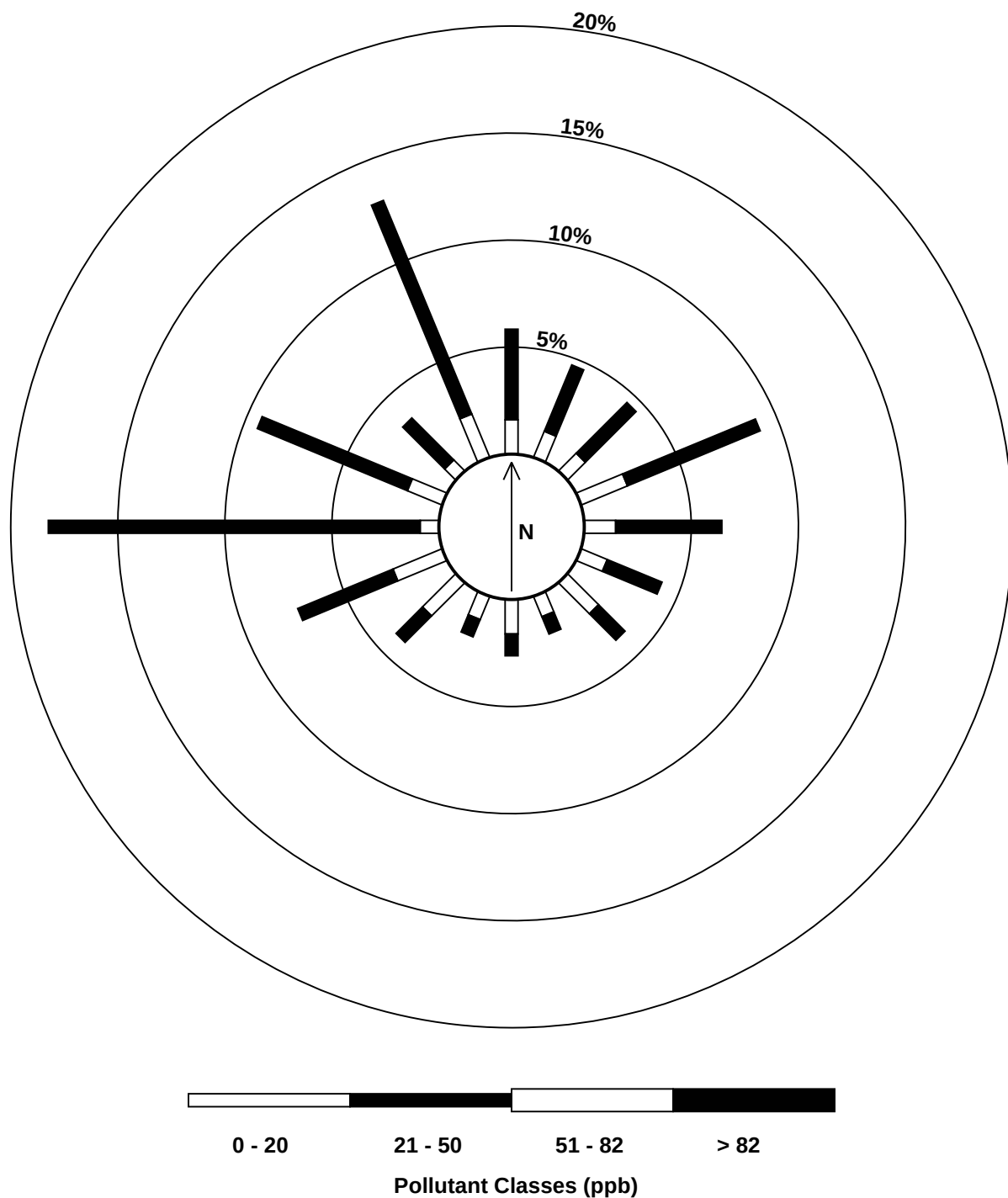
**Beaverlodge - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 46.1 ppb on Jan 30 03:00																				Maximum Daily Average: 43.9 ppb on Jan 30										Hours in Service: 744	
Minimum Value: 4 ppb on Jan 4 01:00																				Minimum Daily Average: 13.1 ppb on Jan 3										Hours of Data: 687	
Maximum Diurnal Average: 32.2 ppb at hour 14																				Minimum Diurnal Average: 29.2 ppb at hour 7										Hours of Missing Data: 57	
Monthly Average: 30.49 ppb																				Percentiles: P ₁ = 5.4 P ₁₀ = 17.3 Q ₁ = 23.6 Median = 31.5 Q ₃ = 39.6 P ₉₀ = 41.8 P ₉₉ = 45.1										Hours of Calibration: 32	
																				Percent Operational Time: 96.6											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Jan	24	18	21	21	A	24	26	27	27	27	28	28	28	28	28	29	29	27	27	27	29	29	28	32	26.7	32.3					
2-Jan	33	31	31	32	A	32	30	26	29	29	27	28	29	28	28	27	18	24	26	26	15	19	19	17	26.4	32.8					
3-Jan	19	16	18	17	A	17	13	8	11	10	16	21	18	19	15	16	14	11	9	11	6	6	5	4	13.1	21.0					
4-Jan	4	5	7	6	A	18	6	9	6	7	12	13	15	17	17	28	28	30	33	33	32	23	25	19	17.1	33.4					
5-Jan	21	21	13	10	A	28	25	18	14	13	13	15	26	35	37	40	40	25	16	18	19	20	22	24	22.4	40.1					
6-Jan	25	24	23	22	A	21	21	22	19	21	22	20	22	24	24	24	26	26	26	26	25	25	25	25	23.2	26.2					
7-Jan	26	26	26	25	A	25	24	24	24	26	27	28	28	29	29	29	29	29	28	28	28	27	27	28	26.8	29.2					
8-Jan	27	23	24	23	A	26	26	26	26	26	27	28	28	29	29	29	29	26	27	27	28	26	24	23	26.3	29.2					
9-Jan	21	18	19	17	A	12	5	6	11	9	15	17	19	19	19	19	19	14	24	27	28	23	12	14	16.7	27.6					
10-Jan	36	38	38	38	A	38	39	39	38	38	38	39	39	40	40	40	39	38	39	38	38	30	30	27	37.1	39.8					
11-Jan	25	25	25	24	A	18	18	37	39	38	24	23	24	24	23	23	22	21	21	19	16	18	17	20	23.6	38.7					
12-Jan	20	15	18	16	A	15	14	12	11	17	18	19	18	18	17	17	13	11	28	39	40	40	40	40	21.6	40.3					
13-Jan	40	40	40	40	A	41	40	40	34	33	33	35	28	32	28	22	21	22	22	22	24	26	26	26	31.1	40.5					
14-Jan	26	25	24	23	A	23	23	23	22	20	22	23	22	22	22	19	20	13	8	5	13	12	17	19	19.5	25.8					
15-Jan	25	26	28	31	A	35	36	35	39	39	39	39	40	41	41	42	41	42	42	42	41	42	42	42	37.9	42.3					
16-Jan	43	44	42	41	A	37	38	38	39	38	39	39	41	41	41	41	41	41	41	41	39	44	45	44	40.8	44.8					
17-Jan	42	42	42	41	A	41	41	42	42	43	41	41	42	42	42	42	42	40	41	40	39	40	40	40	41.3	42.6					
18-Jan	40	40	39	37	A	36	35	35	35	36	37	38	39	39	40	40	39	39	39	38	39	36	32	34	37.6	40.3					
19-Jan	33	31	31	31	A	29	28	30	29	30	27	31	33	34	36	39	C	C	A	35	34	37	36	35	32.5	39.2					
20-Jan	36	36	37	37	A	35	35	32	37	31	34	36	37	39	40	40	40	41	36	41	42	42	41	41	37.7	41.7					
21-Jan	41	41	40	40	A	41	41	41	40	39	40	34	31	30	28	27	28	28	30	30	31	31	32	32	34.7	41.4					
22-Jan	33	33	34	34	A	34	32	32	32	33	32	32	33	34	34	33	32	31	31	31	32	30	27	27	32.1	34.4					
23-Jan	26	25	26	26	A	22	24	23	17	24	24	19	25	24	24	19	16	12	6	21	21	28	27	27	21.9	27.6					
24-Jan	27	25	18	24	A	23	23	22	20	22	24	26	26	25	27	29	27	26	20	23	31	30	33	33	25.3	33.1					
25-Jan	35	35	34	36	A	37	38	38	38	39	40	39	39	39	41	40	39	39	39	37	35	33	33	35	37.1	40.6					
26-Jan	34	37	37	P	P	P	P	P	P	P	P	P	P	42	40	38	34	38	38	31	33	34	45	45	--	45.2					
27-Jan	39	39	32	35	A	35	41	43	43	42	41	41	40	40	40	40	40	40	39	39	38	D	D	D	39.2	42.6					
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	42	42	42	42	41	41	41	40	41	43	43	44	--	43.6					
29-Jan	44	43	42	42	A	41	41	40	39	38	37	36	37	37	38	39	39	39	40	41	42	42	42	42	40.0	43.8					
30-Jan	43	44	46	46	A	45	45	44	44	44	44	45	45	45	45	44	44	45	44	43	42	42	41	41	43.9	46.1					
31-Jan	41	41	41	40	A	42	42	42	42	42	42	42	42	42	42	42	42	41	40	40	40	40	41	41	41.4	42.5					
30.9 30.2 29.9 29.5 -- 30.0 29.2 29.5 29.2 29.4 29.8 30.2 31.2 32.2 32.2 32.2 32.2 31.1 30.1 30.1 31.0 31.0 30.5 30.6 30.8																									Diurnal Average						
43.8 44.2 46.1 45.8 -- 45.1 44.7 44.2 44.2 43.7 43.7 45.2 45.3 44.7 44.7 43.8 43.6 45.1 44.1 43.1 41.9 44.2 45.2 45.2																									Diurnal Maximum						
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span																															

Hourly Maximums for O₃ at Beaverlodge January 2009



Pollutant Rose for O₃ at Beaverlodge January 2009



Peace Airshed Zone Association
Summary of Eight Hour Running Averages

Beaverlodge - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009

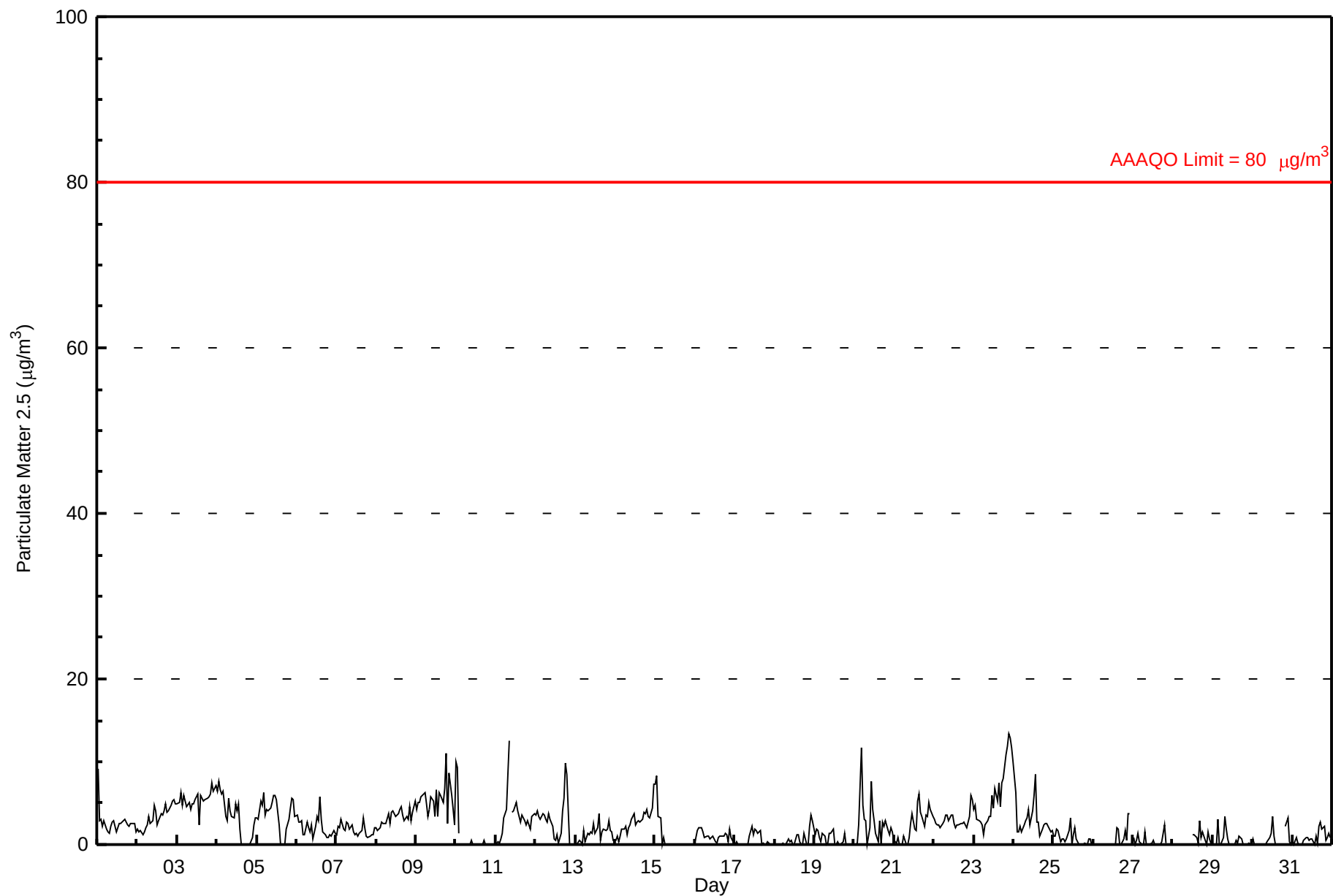
Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 43.6 ppb on Jan 30 08:00																					Hours in Service: 744					
Minimum Value: 3.3 ppb on Jan 4 07:00																					Hours of Data: 707					
																					Hours of Missing Data: 37					
Percentiles: P ₁ = 4.0 P ₁₀ = 13.0 Q ₁ = 20.5 Median = 27.4 Q ₃ = 37.3 P ₉₀ = 40.2 P ₉₉ = 43.0																					Hours of Calibration: 6					
																					Percent Operational Time: 95.8					
Day	Hourly Period Ending At (MST)																								Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	19	18	18	17	17	18	19	19	21	22	24	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27.3
2-Jan	28	28	29	29	30	30	30	29	27	26	24	23	24	23	22	23	22	22	23	22	20	18	17	16	16	30.2
3-Jan	16	15	14	14	14	13	12	10	9	8	7	8	9	10	11	13	14	14	13	12	11	9	8	6	6	16.3
4-Jan	5	4	4	3	3	4	3	3	3	4	4	5	6	7	9	12	15	18	20	23	25	26	27	26	6	26.7
5-Jan	24	22	19	16	15	14	14	13	12	12	12	13	13	15	17	20	23	25	25	26	25	24	22	20	20	25.6
6-Jan	19	19	20	21	22	21	21	21	20	19	19	19	19	19	20	20	21	21	22	23	24	24	24	24	24	24.0
7-Jan	24	24	24	24	24	24	24	24	24	23	23	24	24	25	25	26	27	28	28	28	28	27	27	27	27	27.7
8-Jan	27	26	25	25	24	24	24	23	23	24	24	25	25	26	26	27	27	27	27	27	26	25	24	22	22	26.8
9-Jan	21	20	19	17	17	14	12	10	9	8	7	8	9	10	12	13	13	13	13	12	12	12	10	9	9	21.1
10-Jan	10	15	18	21	22	25	30	35	37	37	37	37	38	38	38	38	38	37	37	37	37	35	34	32	32	38.0
11-Jan	31	29	27	26	24	23	22	21	23	23	23	23	23	24	24	25	23	22	21	20	19	18	17	17	17	30.6
12-Jan	17	16	16	16	16	15	14	13	11	11	11	11	12	13	14	14	14	14	14	16	19	22	25	29	29	28.5
13-Jan	32	36	39	40	40	40	40	39	38	37	35	34	33	32	30	28	27	25	24	23	22	22	22	23	23	39.7
14-Jan	23	24	24	24	24	24	24	23	22	21	21	21	21	21	21	20	20	18	16	14	12	10	9	8	8	24.4
15-Jan	8	10	13	16	18	21	24	27	30	32	34	35	36	37	37	38	38	38	38	38	38	38	39	39	39	38.6
16-Jan	39	40	41	41	41	40	39	39	38	37	37	37	37	38	39	38	38	39	39	39	38	38	39	39	39	40.7
17-Jan	40	40	40	41	41	41	41	41	41	41	40	40	40	40	40	40	40	39	40	39	39	39	39	39	39	41.4
18-Jan	38	39	38	38	38	38	37	37	36	35	35	35	36	36	36	37	37	38	37	37	36	35	34	33	33	38.6
19-Jan	32	31	30	29	29	28	28	27	27	27	27	27	27	28	29	30	31	31	N	N	N	N	N	N	N	32.4
20-Jan	33	34	34	34	35	35	35	34	33	32	32	32	32	33	34	34	35	34	35	35	35	35	35	37	37	36.6
21-Jan	37	39	39	40	40	40	40	39	39	39	38	37	36	35	33	32	30	29	28	28	28	28	29	30	30	40.1
22-Jan	30	31	32	32	32	33	33	33	32	32	31	31	31	31	31	32	32	32	32	32	31	31	30	29	29	32.6
23-Jan	28	28	27	26	25	24	23	22	20	19	18	17	17	17	17	17	17	16	14	13	12	12	11	12	12	28.4
24-Jan	13	15	17	17	19	20	21	20	17	17	18	18	19	19	19	21	23	24	23	23	23	23	24	25	25	24.6
25-Jan	25	27	28	30	31	33	34	35	35	36	37	37	37	37	37	38	38	38	38	38	37	36	35	35	35	37.9
26-Jan	34	34	33	33	33	N	N	N	N	N	N	N	N	N	N	N	N	N	29	27	26	24	25	26	26	33.9
27-Jan	26	26	28	29	31	32	32	33	35	36	37	39	39	40	40	40	40	39	39	39	38	38	38	N	40.0	
28-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	40	40	40	40	40	40	41	40.6
29-Jan	41	41	41	42	42	42	41	41	40	39	38	38	37	37	37	37	37	37	37	38	38	39	39	40	40	42.1
30-Jan	40	41	42	43	43	43	44	44	44	43	42	42	42	42	42	42	42	42	43	43	43	42	42	42	42	43.6
31-Jan	42	41	41	40	40	40	40	41	41	41	41	41	41	42	42	42	41	41	41	41	41	40	40	40	40	41.5
41.5 41.2 41.9 42.6 42.8 43.2 43.5 43.6 43.6 43.4 42.3 41.8 42.2 42.2 42.2 42.2 42.0 42.4 43.1 43.1 42.6 42.2 41.8 41.6																										
Diurnal Maximums																										
N - Not Valid																										
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb																										

Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 13.3 µg/m³ on Jan 23 22:00 Minimum Value: 0 µg/m³ on Jan 4 16:00 Maximum Diurnal Average: 2.7 µg/m³ at hour 23 Monthly Average: 2.25 µg/m³																				Hours in Service: 744 Hours of Data: 712 Hours of Missing Data: 32 Hours of Calibration: 0 Percent Operational Time: 95.7						
Maximum Daily Average: 6.0 µg/m³ on Jan 23 Minimum Daily Average: 0.5 µg/m³ on Jan 27 Minimum Diurnal Average: 1.8 µg/m³ at hour 7 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.3 Median = 1.8 Q ₃ = 3.4 P ₉₀ = 5.3 P ₉₉ = 10.5																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	9	3	3	2	3	2	2	1	2	3	3	2	2	3	2	3	3	3	2	2	3	2	3	1	2.6	9.1
2-Jan	2	1	2	1	2	2	2	3	3	3	5	4	2	3	4	4	4	5	4	4	5	5	5	5	3.3	5.4
3-Jan	5	5	6	5	6	5	5	5	4	5	5	5	6	2	6	6	5	5	6	6	6	7	6	7	5.4	7.5
4-Jan	7	8	7	6	6	3	3	6	4	3	3	5	4	5	2	0	0	0	0	0	0	1	2	3	3.3	7.7
5-Jan	3	3	5	5	6	4	4	4	4	5	6	6	5	2	0	0	0	0	2	3	4	6	5	3	3.6	6.3
6-Jan	4	3	3	3	1	1	3	2	2	2	1	2	3	3	6	3	2	1	1	1	1	1	2	1	2.1	5.8
7-Jan	1	2	2	3	2	2	3	3	2	2	2	1	1	1	1	2	3	2	1	1	1	1	1	2	1.8	3.2
8-Jan	2	2	2	3	3	3	3	4	3	4	4	4	3	4	4	5	4	3	3	3	5	3	4	5	3.3	5.3
9-Jan	4	5	5	6	6	6	5	3	4	6	5	3	7	3	6	6	5	7	11	3	9	6	4	2	5.3	11.0
10-Jan	10	9	1	BD	BD	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	BD	1.0	10.0
11-Jan	0	0	0	1	1	3	4	8	13	BD	4	4	5	4	3	3	4	3	2	3	2	2	3	4	3.4	12.5
12-Jan	4	4	3	3	4	4	3	3	4	3	2	1	0	1	0	1	4	6	10	9	0	0	0	0	2.8	9.9
13-Jan	0	0	1	0	0	2	0	1	1	1	1	3	1	2	4	1	1	2	2	2	3	2	1	1	1.3	3.8
14-Jan	1	1	0	1	2	2	2	1	2	2	3	4	2	3	3	3	3	4	4	4	3	3	4	7	2.7	7.3
15-Jan	7	8	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	8.3
16-Jan	0	2	2	2	2	2	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	2	1	0	1.0	2.0
17-Jan	0	0	0	0	0	0	0	0	0	1	2	1	2	2	1	2	0	0	0	0	0	0	0	0	0.5	2.3
18-Jan	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	1	0	0	2	3	3	0.6	3.5
19-Jan	1	2	2	1	0	1	1	0	0	1	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0.6	1.9
20-Jan	0	0	0	2	12	5	3	3	0	2	8	4	3	1	0	3	0	3	2	3	2	1	2	2	2.5	11.7
21-Jan	1	0	1	0	0	0	1	0	0	1	3	4	2	2	5	6	4	3	2	4	3	5	4	3	2.2	6.1
22-Jan	3	3	2	2	2	3	3	3	4	3	4	4	2	2	2	2	3	3	3	2	2	3	6	5	3.0	6.0
23-Jan	4	5	3	3	3	2	1	2	3	3	3	6	4	7	5	8	5	8	8	11	12	13	13	12	6.0	13.3
24-Jan	10	6	2	2	2	2	2	3	3	4	2	4	6	8	3	3	1	2	2	2	3	2	2	2	3.3	9.9
25-Jan	1	1	2	2	0	1	1	0	1	2	3	0	1	2	1	0	0	0	0	0	0	1	1	0	0.8	3.3
26-Jan	0	0	0	P	P	P	P	P	P	P	P	P	P	0	2	2	0	0	1	2	1	4	4	BD	--	3.7
27-Jan	1	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	2	0	D	D	D	0.5	2.3
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	1	1	1	0	3	1	1	1	0	2	1	0	--	2.9
29-Jan	0	0	0	3	0	0	1	3	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.5	3.4
30-Jan	1	0	0	0	0	0	0	0	0	0	1	1	3	1	0	BD	0	0	0	BD	2	3	0	0	0.6	3.4
31-Jan	1	0	1	0	0	0	0	1	1	1	0	1	1	0	1	0	2	3	2	2	0	1	1	1	0.8	2.7
2.7 2.5 2.0 2.1 2.3 1.9 1.8 2.2 2.1 2.2 2.5 2.5 2.4 2.1 2.2 2.0 1.9 2.1 2.4 2.3 2.2 2.6 2.7 2.5																									Diurnal Average	
10.0 9.4 6.6 6.2 11.7 6.3 4.9 8.4 12.5 5.7 7.6 5.9 6.7 8.5 6.2 7.5 5.2 7.5 11.0 10.8 11.8 13.3 13.0 11.8																									Diurnal Maximum	
P - Power Failure D - DAS Failure BD - Baseline Drift																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 µg/m³ 24-hr 30 µg/m³																										

Hourly Averages for PM_{2.5} at Beaverlodge January 2009

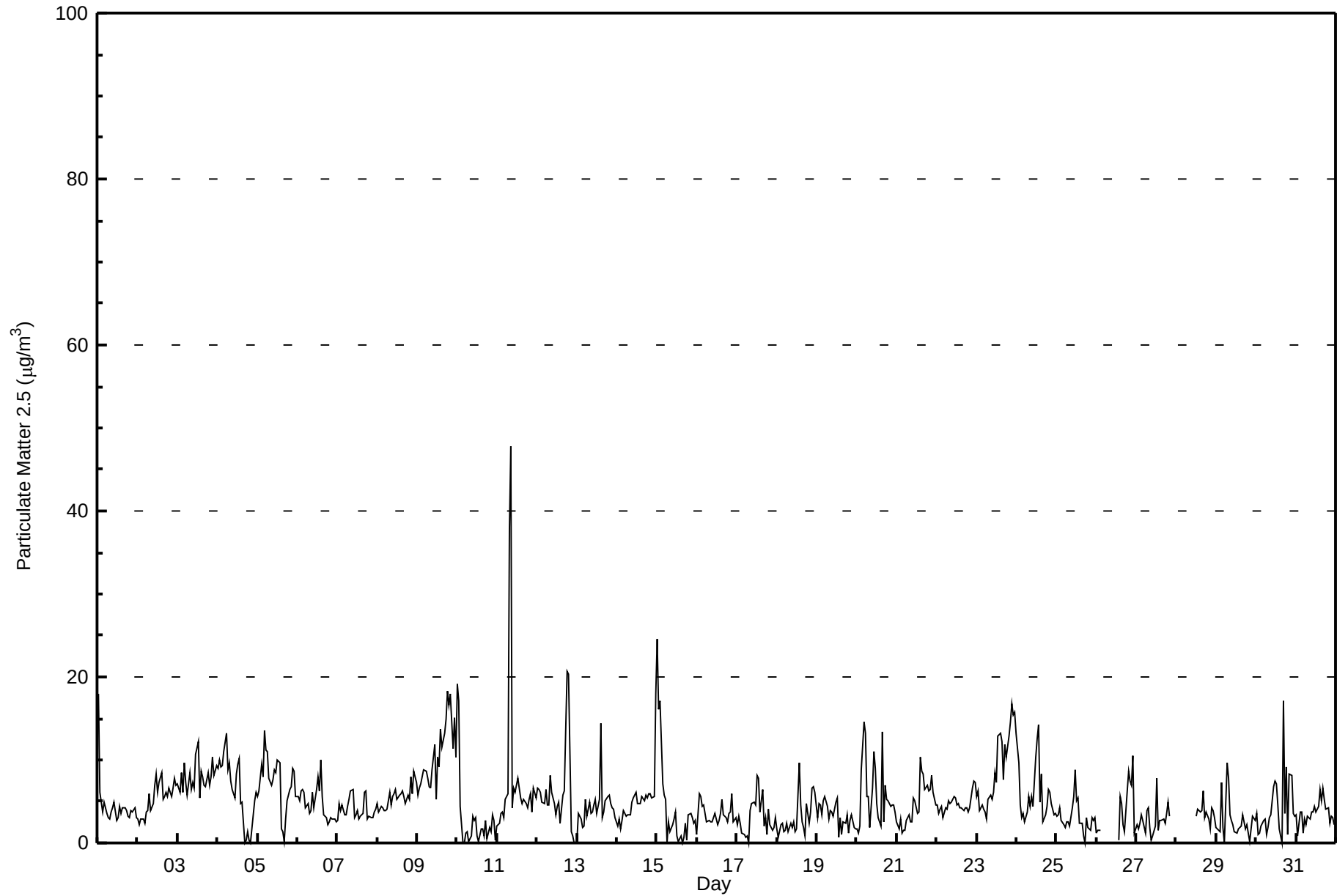


Peace Airshed Zone Association Summary of Hourly Maximums

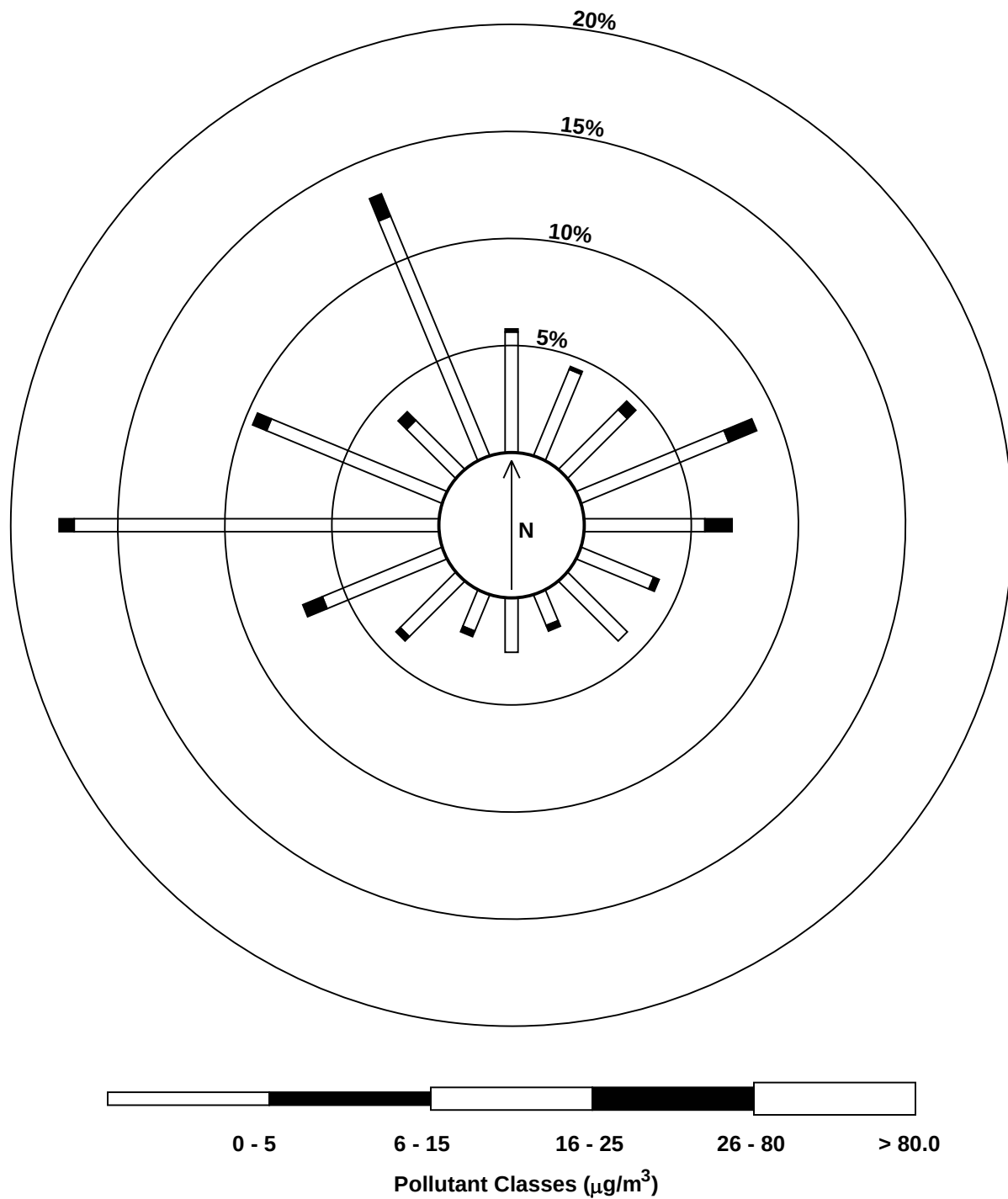
Beaverlodge - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
January 1, 2009 to February 1, 2009

Maximum Value: 47.7 μg/m³ on Jan 11 09:00															Maximum Daily Average: 10.6 μg/m³ on Jan 9										Hours in Service: 744	
Minimum Value: 0 μg/m³ on Jan 4 17:00															Minimum Daily Average: 2.7 μg/m³ on Jan 29										Hours of Data: 719	
Maximum Diurnal Average: 5.7 μg/m³ at hour 12															Minimum Diurnal Average: 4.2 μg/m³ at hour 7										Hours of Missing Data: 25	
Monthly Average: 5.04 μg/m³															Percentiles: P ₁ = 0.0 P ₁₀ = 1.5 Q ₁ = 2.7 Median = 4.2 Q ₃ = 6.2 P ₉₀ = 8.9 P ₉₉ = 17.7										Hours of Calibration: 0	
															Percent Operational Time: 96.6											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	18	6	5	4	5	4	3	3	4	4	5	3	3	4	4	4	4	3	3	4	4	4	3	4.4	17.9	
2-Jan	3	2	3	3	2	4	4	6	4	5	7	8	6	7	9	5	6	6	6	7	6	7	8	7	5.4	8.5
3-Jan	7	6	8	6	10	7	6	8	6	7	7	11	12	5	9	8	7	7	8	7	8	10	8	9	7.9	12.3
4-Jan	9	10	9	9	11	13	9	10	8	6	5	8	9	10	5	5	0	0	1	0	0	3	5	6	6.4	13.2
5-Jan	6	6	9	8	14	11	11	8	7	8	9	8	10	10	2	1	0	3	5	6	7	9	9	6	7.2	13.5
6-Jan	6	5	6	6	6	4	5	4	4	6	4	6	8	6	10	6	3	3	2	2	3	3	3	3	4.8	10.0
7-Jan	3	5	4	5	3	3	4	5	6	6	3	3	4	3	3	4	6	6	3	3	3	3	4	4	4.1	6.4
8-Jan	5	4	4	4	4	4	4	6	5	6	6	7	5	6	6	6	5	6	5	8	6	6	9	7	5.5	8.6
9-Jan	6	7	7	8	9	9	8	7	7	9	12	5	10	9	14	12	13	15	18	17	18	11	15	10	10.6	18.3
10-Jan	19	17	4	0	0	1	1	0	1	3	3	3	1	0	2	2	1	3	0	2	1	3	3	0	3.0	19.2
11-Jan	2	2	3	4	3	5	6	38	48	4	7	6	8	7	5	5	5	5	4	5	6	4	7	5	8.1	47.7
12-Jan	7	6	6	5	5	6	5	5	8	6	5	3	4	5	2	6	6	14	21	20	1	1	0	0	6.1	20.6
13-Jan	0	4	3	2	2	5	3	5	4	4	5	5	4	5	14	3	4	5	6	6	5	4	4	3	4.3	14.4
14-Jan	2	3	2	3	4	3	3	3	3	5	5	6	5	5	5	6	5	6	5	6	6	5	6	18	5.0	17.9
15-Jan	25	16	17	7	6	5	0	3	1	2	3	4	1	0	1	0	1	2	0	3	4	3	2	3	4.5	24.6
16-Jan	1	6	6	4	5	3	3	3	2	3	3	4	2	3	4	5	3	3	3	3	4	6	3	3	3.5	5.9
17-Jan	2	3	2	1	1	1	1	0	4	5	5	5	8	8	4	7	2	3	1	4	2	2	2	3	3.1	8.1
18-Jan	2	1	2	2	1	2	2	1	2	2	3	1	2	10	5	3	2	1	5	2	4	7	7	6	3.1	9.7
19-Jan	3	5	5	3	5	6	4	3	4	4	3	5	5	1	3	1	3	2	3	1	3	3	2	2	3.3	5.6
20-Jan	2	1	2	9	15	13	6	6	2	7	11	9	5	3	2	13	3	7	5	5	4	5	5	4	5.9	14.6
21-Jan	2	2	3	1	2	2	3	3	3	3	5	5	4	4	10	9	8	7	7	6	6	8	6	5	4.7	10.3
22-Jan	5	4	4	4	3	4	4	5	5	5	6	5	5	5	4	4	4	4	4	4	4	7	7	7	4.7	7.5
23-Jan	6	6	4	5	4	4	3	5	6	5	6	9	7	13	13	12	8	12	10	13	15	17	15	16	8.9	16.8
24-Jan	13	10	5	3	4	3	4	6	4	6	4	10	13	14	5	8	2	3	4	6	6	5	3	4	6.0	14.2
25-Jan	3	3	4	3	2	2	3	3	2	4	6	9	5	5	2	2	1	0	3	2	2	3	3	3	3.1	8.9
26-Jan	1	2	1	P	P	P	P	P	P	P	P	P	P	0	6	5	2	1	6	9	7	7	11	1	--	10.5
27-Jan	2	2	2	3	3	1	4	4	2	0	1	2	8	2	3	3	3	2	4	5	3	D	D	D	2.8	7.7
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	3	4	4	4	6	3	4	3	2	4	4	3	--	6.2
29-Jan	2	2	1	7	2	0	10	8	3	3	2	1	1	2	2	2	3	2	2	1	0	2	3	3	2.7	9.7
30-Jan	4	1	1	2	3	3	1	2	3	3	7	8	7	5	2	0	17	4	9	1	8	8	4	3	4.4	17.1
31-Jan	3	1	4	4	1	3	2	3	3	4	4	4	4	4	6	5	7	5	4	4	2	3	3	2	3.6	6.6
																									Diurnal Average	
																									Diurnal Maximum	
P - Power Failure D - DAS Failure																										

Hourly Maximums for PM_{2.5} at Beaverlodge January 2009



Pollutant Rose for PM_{2.5} at Beaverlodge **January 2009**



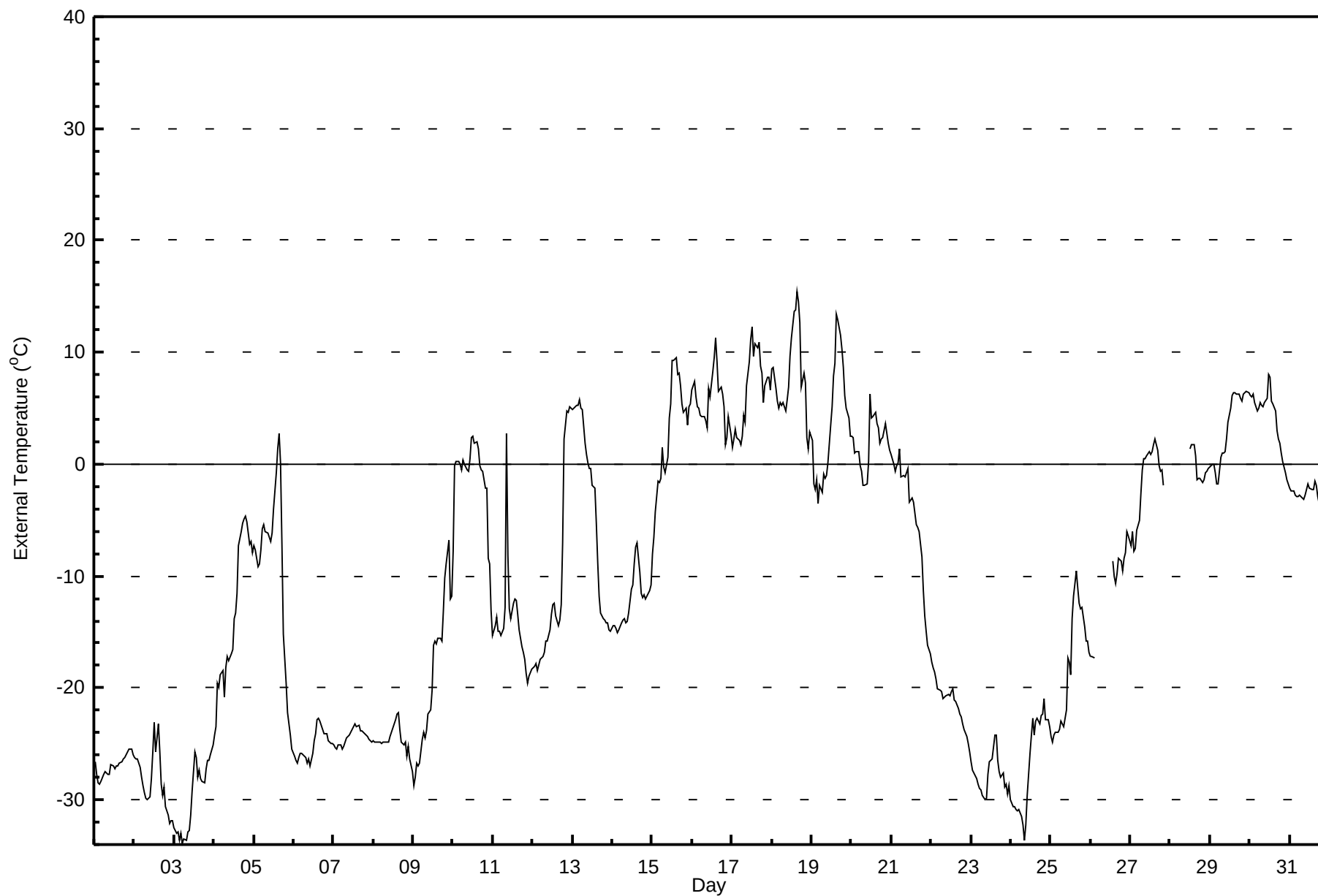
Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - External Temperature (ET) - °C
January 1, 2009 to February 1, 2009

Maximum Value: 15.4 °C on Jan 18 16:00																				Maximum Daily Average: 7.8 °C on Jan 18					Hours in Service: 744	
Minimum Value: -34 °C on Jan 3 06:00																				Minimum Daily Average: -29.8 °C on Jan 3					Hours of Data: 719	
Maximum Diurnal Average: -7.5 °C at hour 16																				Minimum Diurnal Average: -12.6 °C at hour 1					Hours of Missing Data: 25	
Monthly Average: -10.60 °C																				Percentiles: P ₁ = -32.9 P ₁₀ = -27.2 Q ₁ = -24.0 Median = -10.1 Q ₃ = 1.1 P ₉₀ = 5.7 P ₉₉ = 12.6					Hours of Calibration: 0	
																				Percent Operational Time: 96.6						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Jan	-27	-28	-29	-29	-28	-28	-27	-28	-28	-28	-27	-27	-27	-27	-27	-27	-26	-26	-26	-26	-26	-25	-25	-26	-27.0	-25.4
2-Jan	-26	-26	-26	-27	-28	-29	-29	-30	-30	-30	-28	-26	-23	-26	-23	-26	-29	-30	-29	-31	-31	-32	-32	-32	-28.2	-23.1
3-Jan	-32	-33	-33	-34	-33	-34	-34	-34	-33	-33	-31	-29	-26	-26	-28	-27	-28	-28	-28	-27	-26	-26	-26	-25	-29.8	-25.1
4-Jan	-24	-23	-20	-20	-19	-18	-21	-18	-17	-18	-17	-17	-14	-13	-12	-7	-6	-5	-5	-5	-5	-7	-7	-8	-13.6	-4.7
5-Jan	-7	-8	-9	-9	-8	-6	-5	-6	-6	-7	-7	-6	-4	-1	1	3	0	-7	-15	-20	-22	-23	-24	-25	-9.2	2.7
6-Jan	-26	-27	-27	-26	-26	-26	-26	-26	-27	-26	-27	-26	-25	-24	-23	-23	-23	-24	-24	-24	-24	-25	-25	-25	-25.2	-22.7
7-Jan	-25	-25	-25	-25	-25	-26	-25	-25	-25	-24	-24	-24	-23	-23	-23	-23	-24	-24	-24	-24	-24	-25	-25	-25	-24.4	-23.3
8-Jan	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-24	-24	-24	-23	-22	-22	-24	-25	-25	-25	-26	-25	-26	-27	-24.6	-22.2
9-Jan	-29	-28	-27	-27	-27	-25	-24	-24	-24	-22	-22	-20	-16	-16	-16	-16	-16	-16	-13	-10	-9	-7	-12	-12	-19.0	-6.8
10-Jan	-8	0	0	0	0	-1	0	0	0	-1	0	2	2	2	2	1	0	0	-1	-2	-2	-8	-9	-13	-1.4	2.4
11-Jan	-15	-14	-14	-15	-15	-15	-15	-13	3	-8	-13	-14	-12	-12	-12	-13	-15	-16	-17	-17	-19	-20	-19	-18	-14.1	2.8
12-Jan	-18	-18	-18	-18	-17	-17	-17	-17	-16	-16	-15	-13	-13	-12	-14	-14	-14	-13	-7	2	5	5	5	5	-11.1	5.2
13-Jan	5	5	5	5	6	5	5	2	1	0	0	0	-2	-2	-5	-9	-12	-13	-14	-14	-14	-14	-15	-15	-3.8	5.7
14-Jan	-14	-14	-15	-15	-15	-14	-14	-14	-14	-14	-13	-11	-11	-9	-7	-7	-10	-12	-12	-12	-12	-12	-11	-11	-12.2	-7.0
15-Jan	-8	-7	-4	-2	-2	-1	1	0	-1	1	4	5	9	9	10	8	8	7	5	5	5	4	5	5	2.8	9.6
16-Jan	7	7	6	5	5	4	4	4	4	3	7	6	8	9	11	9	7	7	6	5	2	2	4	3	5.7	11.3
17-Jan	2	2	3	2	2	2	2	4	4	7	9	11	12	10	11	10	11	9	8	5	7	8	8	7	6.5	12.3
18-Jan	8	9	7	6	5	5	5	5	5	6	7	10	11	14	14	15	15	13	7	8	7	2	1	3	7.8	15.4
19-Jan	2	-2	-2	-1	-4	-2	-3	-1	-1	-1	0	4	5	8	9	13	13	12	10	9	6	5	4	2	3.6	13.4
20-Jan	2	2	1	1	1	0	-1	-2	-2	-2	0	6	4	4	5	4	3	2	2	2	4	3	2	1	1.8	6.2
21-Jan	1	0	-1	0	0	1	-1	-1	-1	-1	0	-3	-3	-3	-4	-5	-6	-6	-8	-11	-14	-15	-16	-17	-4.8	1.3
22-Jan	-18	-18	-19	-19	-20	-20	-20	-21	-21	-21	-21	-21	-20	-20	-21	-21	-22	-22	-23	-23	-24	-24	-25	-26	-21.2	-17.7
23-Jan	-27	-27	-28	-28	-29	-29	-29	-30	-30	-30	-28	-27	-27	-26	-24	-24	-26	-28	-28	-28	-29	-29	-30	-29	-27.8	-24.2
24-Jan	-30	-31	-31	-31	-31	-31	-31	-32	-34	-32	-30	-26	-24	-23	-24	-23	-23	-23	-22	-22	-21	-23	-23	-24	-26.8	-21.0
25-Jan	-24	-25	-24	-24	-24	-24	-23	-23	-23	-22	-17	-18	-19	-14	-12	-9	-11	-12	-13	-13	-15	-16	-16	-17	-18.2	-9.5
26-Jan	-17	-17	-17	P	P	P	P	P	P	P	P	P	P	-9	-10	-11	-10	-8	-9	-10	-8	-8	-6	-6	--	-6.0
27-Jan	-7	-6	-8	-8	-6	-5	-3	-1	1	1	1	1	1	1	2	2	1	0	-1	0	-2	D	D	D	-1.7	2.3
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	D	1	2	2	1	-1	-1	-1	-2	-1	-1	0	--	1.8
29-Jan	0	0	0	-1	-2	-2	1	1	1	1	2	4	5	6	6	6	6	6	6	6	6	6	7	6	3.3	6.5
30-Jan	6	6	6	6	5	5	6	5	5	5	6	8	8	6	5	5	3	2	2	1	0	-1	-1	-2	4.0	8.0
31-Jan	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-3	-3	-4	-4	-4	-4	-5	-2.9	-1.5
																									Diurnal Average	
																									Diurnal Maximum	
P - Power Failure D - DAS Failure																										

Hourly Averages for External Temperature at Beaverlodge

January 2009

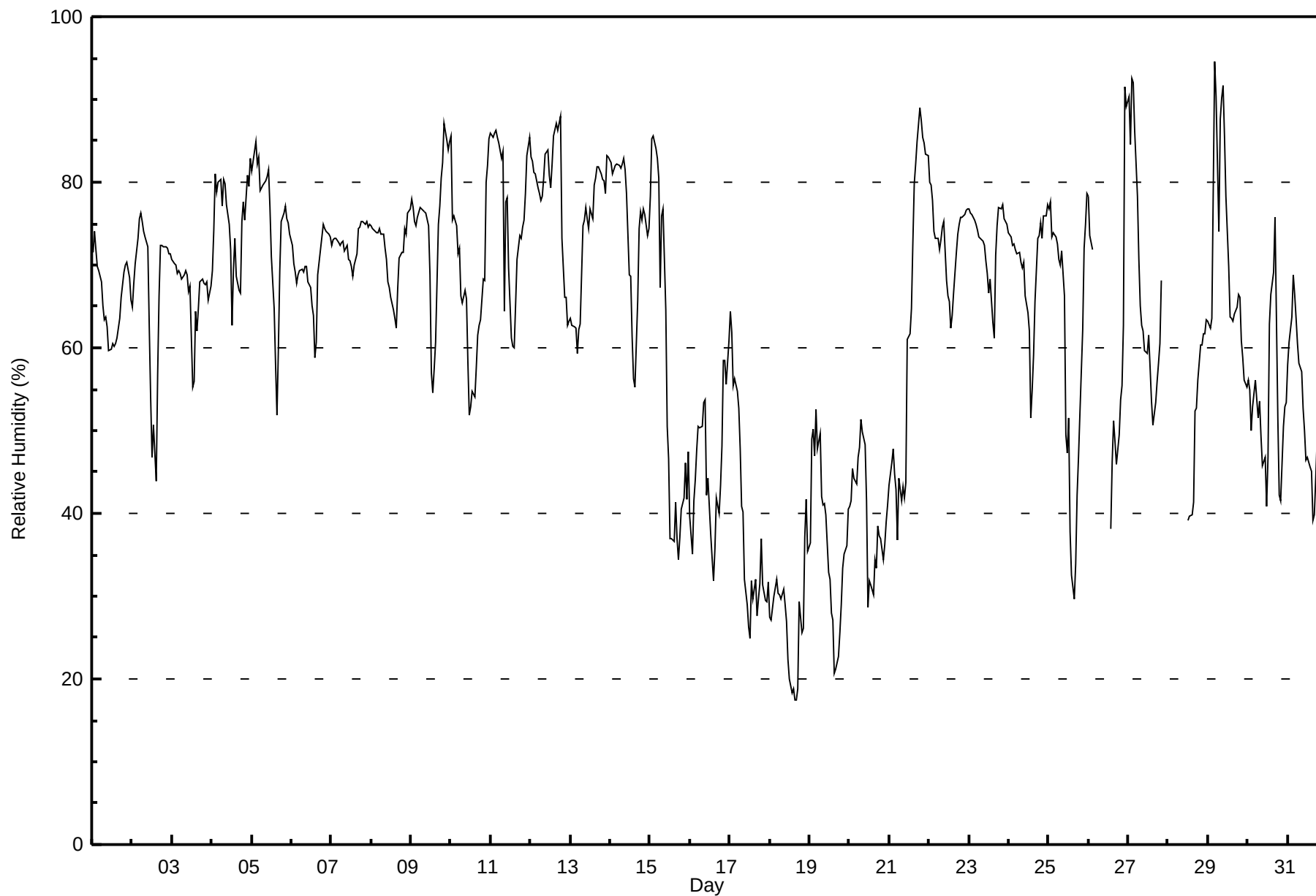


Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - Relative Humidity (RH) - %
January 1, 2009 to February 1, 2009

Maximum Value: 94.6 % on Jan 29 05:00																			Maximum Daily Average: 79.1 % on Jan 12							Hours in Service: 744	
Minimum Value: 17 % on Jan 18 16:00																			Minimum Daily Average: 27.2 % on Jan 18							Hours of Data: 719	
Maximum Diurnal Average: 68.9 % at hour 5																			Minimum Diurnal Average: 53.6 % at hour 14							Hours of Missing Data: 25	
Monthly Average: 63.12 %																			Percentiles: P ₁ = 20.8 P ₁₀ = 37.2 Q ₁ = 51.8 Median = 67.9 Q ₃ = 75.2 P ₉₀ = 81.5 P ₉₉ = 90.3							Hours of Calibration: 0	
																										Percent Operational Time: 96.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	72	74	72	70	69	68	65	63	64	63	60	60	61	60	61	61	63	66	68	69	70	70	68	66	65.9	74.0	
2-Jan	65	68	70	73	76	76	75	74	73	72	63	54	47	51	44	57	66	72	72	72	72	72	71	71	67.0	76.3	
3-Jan	71	70	70	69	69	69	68	69	69	69	67	67	55	56	64	62	65	68	68	68	68	68	66	67	66.8	70.7	
4-Jan	69	74	81	79	80	80	77	80	80	77	75	72	63	69	73	69	67	67	75	78	75	81	79	83	75.2	82.9	
5-Jan	81	82	85	82	83	79	79	80	80	81	82	77	71	65	58	52	60	69	75	76	77	76	75	74	75.0	84.8	
6-Jan	72	70	69	68	69	69	70	69	70	70	68	67	65	64	59	61	69	72	73	75	74	74	74	73	69.3	75.0	
7-Jan	72	73	73	73	73	72	73	73	72	72	71	71	70	69	70	71	74	75	75	75	75	75	74	75	72.8	75.3	
8-Jan	75	74	74	74	74	74	74	74	72	71	68	67	66	65	64	62	67	71	71	71	74	74	76	77	71.2	76.8	
9-Jan	78	77	75	75	76	77	77	77	76	76	75	69	57	55	58	61	75	77	81	82	87	85	84	85	74.7	87.2	
10-Jan	86	75	76	75	71	72	66	65	67	66	58	52	53	55	54	58	62	63	63	68	68	80	82	85	67.5	85.5	
11-Jan	86	85	86	86	86	85	83	84	64	78	78	70	61	60	60	65	71	74	73	75	75	79	83	85	76.3	86.2	
12-Jan	83	82	81	81	79	79	78	78	80	83	84	81	79	82	86	87	86	87	88	73	66	66	63	63	79.1	88.0	
13-Jan	64	63	62	62	59	62	63	75	75	77	76	74	77	76	80	81	82	82	81	80	80	79	83	83	74.0	83.2	
14-Jan	82	81	82	82	82	82	82	82	83	81	79	69	69	61	56	55	66	74	76	75	77	76	74	74	75.0	82.8	
15-Jan	78	85	86	84	83	80	67	76	77	65	50	47	37	37	37	41	37	34	37	41	42	46	42	47	56.5	85.7	
16-Jan	40	35	42	44	48	50	50	51	53	54	42	44	37	35	32	36	42	40	43	48	58	59	56	61	45.8	60.8	
17-Jan	64	62	55	56	55	53	48	41	40	32	29	26	25	32	30	32	28	30	32	37	31	30	29	32	38.6	64.4	
18-Jan	27	27	30	31	32	30	30	30	31	29	27	22	20	18	19	17	17	19	29	26	26	37	42	35	27.2	41.6	
19-Jan	36	49	50	47	53	48	50	42	41	41	40	33	32	28	27	21	21	23	26	29	33	35	36	41	36.7	52.6	
20-Jan	41	42	45	44	44	47	48	51	50	48	41	29	32	31	30	34	33	38	37	37	34	36	39	41	39.8	51.4	
21-Jan	43	46	48	45	43	37	44	42	43	42	44	61	62	65	73	80	82	85	89	87	85	85	83	83	62.4	88.9	
22-Jan	80	80	78	74	73	73	72	73	75	75	68	66	66	62	64	67	72	74	75	76	76	76	77	77	72.8	80.1	
23-Jan	77	76	76	76	75	74	73	73	73	72	71	69	67	68	63	61	71	75	77	77	77	76	75	75	72.8	77.3	
24-Jan	74	73	72	73	72	71	71	70	70	70	66	64	62	52	55	59	66	73	74	75	73	76	76	77	69.4	77.2	
25-Jan	77	78	73	74	73	73	71	70	72	66	50	47	51	38	33	30	34	42	47	52	62	72	75	79	59.9	78.6	
26-Jan	78	74	72	P	P	P	P	P	P	P	P	P	P	38	46	51	49	46	49	54	55	63	92	89	--	91.5	
27-Jan	90	85	93	92	86	78	71	65	63	62	60	59	61	58	54	51	53	56	58	61	68	D	D	D	67.8	92.6	
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	39	40	40	41	52	53	56	60	60	62	62	63	--	63.3	
29-Jan	63	62	64	79	95	90	74	88	90	92	86	78	70	64	64	63	64	65	66	66	61	59	56	55	71.4	94.6	
30-Jan	56	55	50	53	56	54	52	54	49	46	47	41	47	63	66	69	76	64	51	42	42	51	53	53	53.7	75.8	
31-Jan	58	61	64	69	66	64	60	58	57	53	50	46	47	46	45	39	40	44	49	55	53	49	49	53	53.1	68.9	
68.0 68.0 68.5 68.6 68.9 67.9 65.9 66.4 65.8 64.9 61.1 58.0 54.9 53.6 53.6 54.6 58.4 60.5 62.5 63.3 63.8 65.5 66.5 67.5																									Diurnal Average		
90.3 85.4 92.6 92.1 94.6 90.4 82.9 87.6 90.2 91.6 85.6 80.9 79.3 82.1 85.5 87.0 86.3 87.1 88.9 87.4 87.2 85.0 91.5 89.1																									Diurnal Maximum		
P - Power Failure D - DAS Failure																											

Hourly Averages for Relative Humidity at Beaverlodge January 2009



Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge
January 1, 2009 to February 1, 2009
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	4	6	8	10	9	10	9	9	9	9	8	8	7	8	10	7	6	4	3	3	4	3	6	8	6.5	10.4
Dir	332	356	351	346	343	343	348	347	333	336	334	333	317	327	329	332	322	310	244	246	249	294	343	340	333.2	342.6
2 Spd	5	3	1	1	0	1	1	3	6	6	1	2	1	1	1	3	3	5	5	2	3	1	1	3	0.5	6.5
Dir	342	301	232	214	96	260	322	3	357	352	144	318	36	50	85	104	157	90	81	206	200	146	219	234	17.4	352.3
3 Spd	1	1	0	0	1	2	0	2	2	2	2	0	2	1	3	2	2	3	2	2	2	2	1	3	0.2	3.4
Dir	294	19	325	26	274	13	140	1	48	281	62	255	251	292	265	224	209	186	96	65	263	258	155	79	311.8	78.5
4 Spd	2	4	2	1	1	1	2	1	1	1	3	1	1	2	6	12	14	13	14	12	6	3	0	3	3.3	14.3
Dir	90	74	61	95	98	182	191	205	250	76	257	289	255	185	139	127	127	131	122	132	143	288	294	54	128.7	122.0
5 Spd	1	1	2	1	0	2	1	1	1	2	3	2	8	9	10	24	20	13	15	16	21	19	15	17	5.7	23.9
Dir	79	131	221	191	92	102	114	184	175	237	246	113	238	255	256	267	274	331	351	349	344	347	347	331	312.6	266.8
6 Spd	12	7	6	6	4	3	4	5	6	4	4	4	3	4	2	1	2	4	8	8	8	8	9	6	3.4	12.5
Dir	326	301	301	316	320	321	353	18	33	34	83	145	127	24	118	217	78	111	46	45	39	33	38	17	16.9	326.4
7 Spd	7	7	7	5	6	5	4	4	4	6	6	5	5	6	5	5	6	5	4	4	4	5	6	5	4.7	7.0
Dir	21	37	47	18	358	4	335	311	318	311	345	7	3	7	359	4	49	39	29	25	13	6	18	3	8.3	21.0
8 Spd	5	7	6	6	7	7	7	6	8	7	7	9	9	6	4	2	3	3	5	3	2	3	0	0	4.3	8.9
Dir	356	341	348	349	338	338	338	334	337	343	330	318	322	325	337	13	62	80	73	63	59	67	97	249	347.4	321.9
9 Spd	0	0	0	0	0	0	0	1	1	1	3	1	2	1	3	3	0	1	3	1	1	5	1	9	0.4	8.6
Dir	259	126	107	152	293	21	227	220	221	317	229	185	234	174	82	76	136	73	74	117	99	294	90	215	189.0	214.8
10 Spd	8	30	27	21	19	18	24	19	16	13	2	12	20	23	23	19	11	7	4	4	4	7	5	6	12.4	30.2
Dir	253	258	264	261	261	254	268	270	277	267	118	275	271	271	278	281	290	296	332	76	75	122	178	255	267.8	257.5
11 Spd	8	6	7	8	5	4	2	2	35	18	16	14	8	8	7	8	9	7	3	2	4	0	3	4	4.5	35.0
Dir	294	336	235	192	203	227	77	327	283	8	349	343	1	353	21	6	12	30	351	333	353	248	103	117	333.7	283.3
12 Spd	1	2	2	2	0	1	2	0	1	4	5	1	3	5	6	7	2	0	7	20	32	35	31	29	7.3	35.0
Dir	156	254	278	67	135	211	249	303	46	234	161	155	288	278	217	200	201	191	237	272	266	262	270	269	259.7	262.4
13 Spd	26	28	25	26	32	23	20	11	7	8	8	9	9	8	5	6	10	12	10	10	10	10	9	9	4.7	32.5
Dir	272	278	283	283	284	280	285	21	20	2	345	341	339	6	80	151	137	131	118	120	119	127	119	110	293.0	283.9
14 Spd	7	7	7	9	9	7	7	5	3	1	1	1	4	3	1	1	0	0	2	1	1	1	1	2	2.3	8.9
Dir	146	142	142	137	125	163	156	202	227	235	170	212	259	267	225	172	141	131	125	269	102	128	26	356	158.3	125.0
15 Spd	3	3	3	2	3	2	4	1	2	1	0	4	8	10	12	13	11	7	6	16	15	14	15	16	6.6	16.1
Dir	289	297	307	64	242	317	271	190	274	57	162	274	274	257	267	254	274	263	248	268	263	252	243	251	261.9	268.3
16 Spd	9	16	18	14	16	11	9	8	12	2	3	3	3	3	1	4	3	6	4	4	2	2	4	1	5.1	17.9
Dir	214	296	295	286	282	295	296	302	281	295	276	65	89	103	93	271	289	280	319	281	101	29	254	219	287.5	295.1
17 Spd	3	2	3	1	1	2	3	6	3	11	9	5	7	2	7	12	9	10	13	2	5	8	13	3	5.1	13.4
Dir	214	235	251	170	95	82	171	277	267	277	297	300	264	237	257	271	277	276	280	219	249	286	287	289	272.4	279.7
18 Spd	12	8	2	0	0	1	2	2	1	3	2	3	3	2	2	3	4	5	0	2	1	3	2	2	0.7	12.2
Dir	294	262	228	123	89	127	106	81	96	72	85	81	73	17	117	64	349	353	324	331	251	172	357	41	352.1	293.9
19 Spd	1	1	2	4	0	0	1	1	1	3	5	2	3	4	5	1	2	9	10	8	3	1	1	3	1.8	10.1
Dir	311	52	19	30	291	74	87	18	100	88	70	82	64	73	63	5	333	320	326	330	274	321	148	61	12.2	325.7
20 Spd	2	3	4	4	3	1	2	4	3	3	4	2	4	3	4	0	4	0	2	1	4	2	2	3	1.7	4.5
Dir	250	247	74	70	92	104	97	68	78	98	77	98	87	77	60	78	70	153	249	290	265	66	80	83	79.6	70.2
21 Spd	3	4	4	1	2	5	1	2	3	2	8	13	7	8	10	11	8	10	15	16	20	22	22	18	7.7	21.6
Dir	78	71	58	296	285	276	232	75	71	42	13	23	4	344	338	346	348	355	338	335	334	338	331	330	345.6	330.8
22 Spd	15	13	15	12	11	11	11	8	8	8	8	10	9	8	8	9	8	9	8	8	8	8	10	9	9.6	14.8
Dir	339	336	332	331	333	344	341	331	336	338	341	346	338	353	332	333	329	330	333	336	341	339	342	343	337.2	332.1

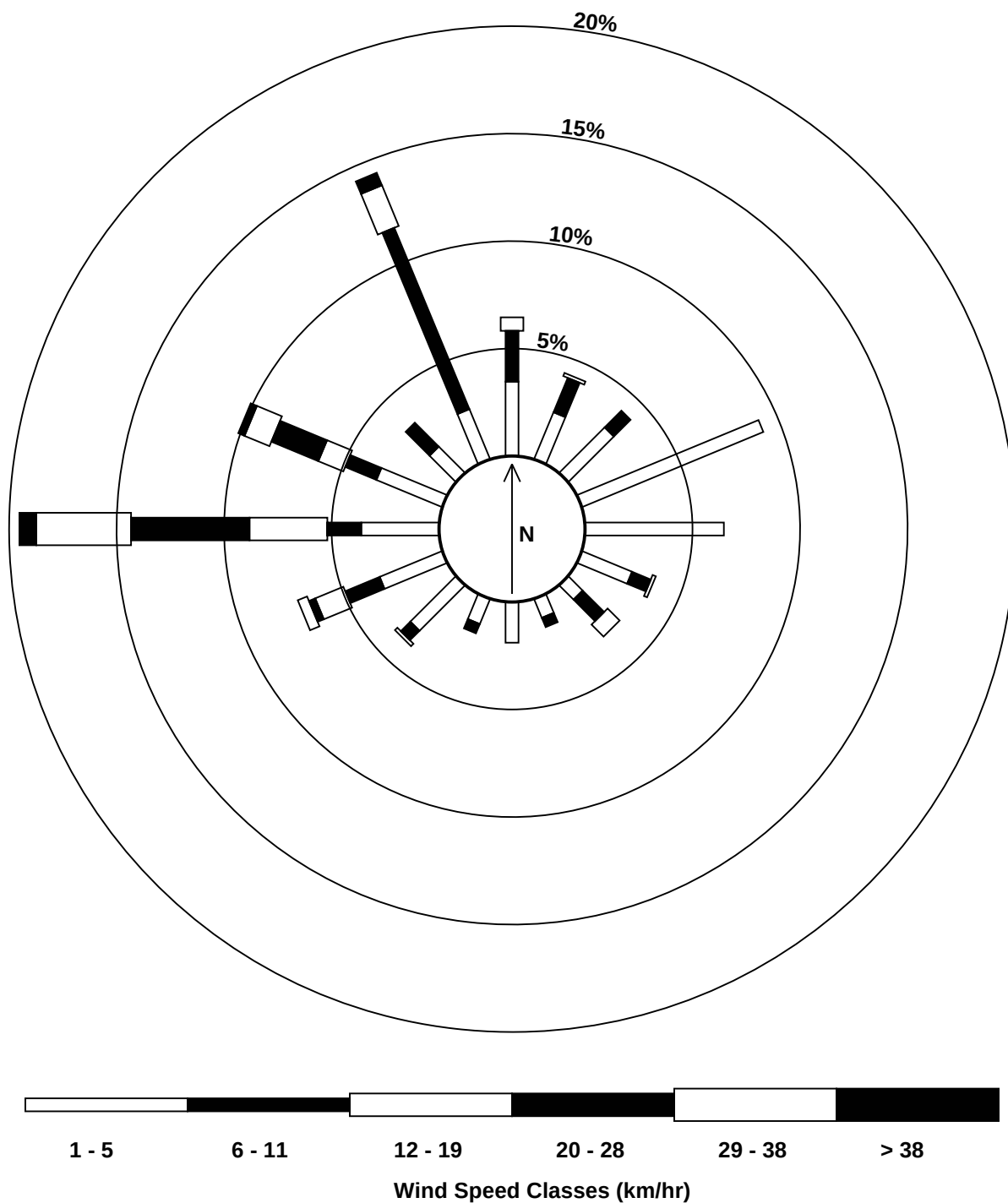
Peace Airshed Zone Association

Summary of Hourly Averages

Beaverlodge
January 1, 2009 to February 1, 2009
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	9	11	11	10	10	9	5	2	3	3	2	2	3	1	0	1	2	1	1	2	0	0	0	0	3.4	11.5	
Dir	343	339	338	340	339	339	4	299	349	18	348	323	46	340	327	334	61	243	48	45	47	57	40	318	346.6	337.8	
24 Spd	0	1	2	4	3	1	1	0	1	4	2	1	0	0	3	3	4	3	3	1	4	1	2	1	1.1	4.3	
Dir	56	346	344	347	46	351	344	257	76	63	66	75	259	97	54	50	54	50	283	11	301	274	289	191	18.8	347.0	
25 Spd	2	1	4	4	1	1	3	2	2	2	1	2	5	3	3	3	3	2	4	4	2	1	2	2	1.3	4.6	
Dir	94	36	262	262	1	39	266	242	54	54	90	90	60	57	60	66	62	56	71	72	80	148	97	100	65.1	59.6	
26 Spd	2	1	4	P	P	P	P	P	P	P	P	P	P	3	1	1	1	1	2	2	2	3	5	2	--	5.0	
Dir	113	120	94	P	P	P	P	P	P	P	P	P	P	94	100	118	39	17	271	91	120	235	351	85	--	350.8	
27 Spd	1	2	6	2	4	3	2	12	23	22	18	23	33	30	28	28	21	23	21	21	13	D	D	D	14.9	33.3	
Dir	173	199	241	78	67	61	266	274	276	278	278	276	282	277	276	277	270	277	279	275	263	D	D	D	275.8	281.8	
28 Spd	D	D	D	D	D	D	D	D	D	D	D	D	D	24	25	26	21	19	21	19	16	18	25	29	31	--	30.8
Dir	D	D	D	D	D	D	D	D	D	D	D	D	D	287	288	288	288	267	270	274	266	262	265	262	263	--	263.5
29 Spd	27	21	18	21	12	6	16	27	22	18	20	21	20	28	28	26	25	21	17	18	23	27	32	40	21.6	39.7	
Dir	266	274	261	257	235	199	270	281	282	284	284	283	282	280	277	274	274	277	264	255	261	264	268	266	270.5	266.3	
30 Spd	40	35	32	24	15	18	20	18	7	1	9	21	37	33	29	17	34	40	40	39	35	33	30	30	25.9	40.3	
Dir	264	268	270	259	247	241	254	261	247	355	304	266	262	254	242	252	273	278	278	283	278	264	264	264	265.7	278.4	
31 Spd	31	30	33	32	33	31	35	36	34	34	37	40	38	37	33	39	36	34	30	21	20	21	21	17	30.9	39.9	
Dir	260	261	267	265	261	268	274	276	275	278	279	279	279	284	283	286	291	288	287	282	284	287	285	280	277.2	279.1	
Spd	5.5	6.1	6.0	4.9	4.5	3.9	4.8	4.8	5.6	4.4	4.1	5.0	6.9	6.6	5.9	6.0	5.3	5.1	4.8	4.8	5.5	5.6	5.8	5.8	Diurnal Average		
Dir	281.2	284.5	284.0	283.2	281.7	283.5	283.0	291.9	293.7	310.4	309.3	302.3	289.1	290.1	283.9	282.2	287.0	293.2	296.9	292.6	285.5	283.9	287.0	281.8	Diurnal Maximum		
Spd	39.8	35.1	32.6	31.7	33.0	31.3	34.9	36.2	35.0	34.3	36.7	39.9	37.9	36.6	32.9	38.5	36.4	40.3	39.9	39.1	35.4	35.0	31.5	39.7	Diurnal Maximum		
Dir	263.8	267.9	266.6	264.6	260.5	268.0	273.6	275.7	283.3	278.4	279.3	279.1	279.4	283.6	283.1	285.8	290.5	278.4	278.1	283.4	278.3	262.4	268.2	266.3			
Maximum Speed Value: 40 km/h on Jan 30 18:00								Minimum Speed Value: 0 km/h on Jan 9 06:00												Hours in Service: 744							
Maximum Daily Speed Average: 30.9 km/h on Jan 31								Minimum Daily Speed Average: 0.2 km/h on Jan 9												Hours of Data: 719							
Maximum Diurnal Speed Average: 6.9 km/h at hour 13								Minimum Diurnal Speed Average: 3.9 km/h at hour 6												Hours of Missing Data: 25							
Monthly Average Velocity: 5.29 km/h 288.70 deg								Speed Percentiles: P ₁ = 0.0 P ₁₀ = 0.9 Q ₁ = 1.9 Median = 4.4 Q ₃ = 10.4 P ₉₀ = 22.7 P ₉₉ = 38.1												Percent Operational Time: 96.6							
All monthly, daily, and diurnal averages have been calculated using vector methods																											
P - Power Failure		D - DAS Failure																									
Frequency Distribution																											
		Speed Range (km/h)																									
Direction		0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North		37	63	12	3	0	0	115																			
NorthEast		62	11	1	0	0	0	74																			
East		91	2	0	0	0	0	93																			
SouthEast		34	16	6	0	0	0	56																			
South		24	5	0	0	0	0	29																			
SouthWest		38	9	4	0	1	0	52																			
West		56	20	32	54	39	7	208																			
NorthWest		40	38	12	2	0	0	92																			
Total		382	164	67	59	40	7	719																			

Wind Rose for WS at Beaverlodge January 2009



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

Beaverlodge - Wind Speed (WS) - km/h
January 1, 2009 to February 1, 2009

Maximum Speed: 41 km/h on Jan 30 18:00																		Maximum Daily Speed Average: 31.3 km/h on Jan 31										Hours in Service: 744	
Minimum Speed: 0 km/h on Jan 24 00:00																		Minimum Daily Speed Average: 2.2 km/h on Jan 3										Hours of Data: 719	
Maximum Diurnal Speed Average: 9.9 km/h at hour 23																		Minimum Diurnal Speed Average: 6.9 km/h at hour 6										Hours of Missing Data: 25	
Monthly Average Speed: 8.79 km/h																		Percentiles: P ₁ = 0.0 P ₁₀ = 1.7 Q ₁ = 2.8 Median = 5.0 Q ₃ = 10.5 P ₉₀ = 22.8 P ₉₉ = 38.2										Percent Operational Time: 96.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Jan	4	6	9	10	9	11	9	9	9	9	8	8	7	9	10	7	6	4	3	3	4	3	6	8	7.1	10.5			
2-Jan	5	3	2	1	1	1	1	4	6	7	2	3	1	3	2	3	3	5	5	3	4	3	2	3	3.0	6.6			
3-Jan	3	2	2	1	2	3	1	4	2	2	2	1	2	1	3	2	2	3	2	2	2	2	2	4	2.2	4.3			
4-Jan	2	4	3	3	3	4	2	2	2	2	3	3	1	3	6	12	14	13	14	12	7	4	2	3	5.1	14.4			
5-Jan	2	2	2	2	1	3	2	2	2	2	4	3	9	9	10	24	21	13	16	16	21	19	16	17	9.1	24.1			
6-Jan	13	7	7	6	4	3	4	5	6	4	5	4	4	5	2	1	2	5	8	8	9	8	9	6	5.6	12.7			
7-Jan	7	7	7	5	6	5	5	4	4	7	6	5	5	6	5	5	6	5	4	4	5	5	6	5	5.4	7.1			
8-Jan	5	7	6	6	7	7	7	7	9	7	7	9	9	6	4	3	3	3	5	4	3	3	1	0	5.3	8.9			
9-Jan	0	0	0	0	0	0	0	1	2	2	4	1	2	2	3	3	2	3	4	5	3	5	5	9	2.3	8.7			
10-Jan	10	30	27	21	19	18	24	19	16	13	3	12	20	23	23	19	11	7	4	4	6	8	5	6	14.5	30.3			
11-Jan	8	7	9	8	6	4	3	7	35	18	16	14	8	8	7	8	9	7	4	4	4	2	3	4	8.5	35.1			
12-Jan	1	2	2	2	1	1	3	2	2	4	5	2	3	5	7	7	2	5	8	21	32	35	31	29	8.8	35.0			
13-Jan	26	28	25	26	33	24	20	13	8	8	8	10	9	9	8	7	10	12	10	10	10	10	9	9	14.1	32.5			
14-Jan	7	7	7	9	9	7	7	5	3	1	2	1	4	3	1	1	0	0	2	1	1	2	3	4	3.7	8.9			
15-Jan	6	5	5	3	3	4	5	2	3	3	3	6	8	10	12	13	11	7	7	16	15	14	16	16	8.0	16.3			
16-Jan	10	17	18	14	16	11	9	8	12	3	5	4	3	3	2	5	6	6	5	5	2	4	4	3	7.2	18.2			
17-Jan	4	2	4	3	2	3	3	6	6	11	9	6	7	4	7	12	9	10	13	4	5	9	13	4	6.5	13.4			
18-Jan	12	8	3	2	1	2	2	2	2	4	4	3	3	3	2	3	5	5	2	4	1	3	4	3	3.6	12.2			
19-Jan	2	2	4	5	3	2	2	2	3	3	5	3	4	4	5	3	3	10	10	8	4	4	4	4	4.1	10.5			
20-Jan	2	3	4	5	3	2	3	5	4	3	4	2	4	4	4	1	4	3	2	3	4	3	3	3	3.2	5.3			
21-Jan	3	4	4	3	3	5	2	2	3	3	8	13	7	9	11	11	8	10	16	16	20	22	22	18	9.2	21.7			
22-Jan	15	13	15	12	11	11	11	9	8	8	8	10	9	8	8	9	8	9	8	8	8	8	10	9	9.7	14.9			
23-Jan	9	11	12	11	10	9	5	3	3	3	3	3	4	3	3	2	2	1	3	2	1	0	0	0	4.3	11.5			
24-Jan	0	1	3	6	3	1	1	1	1	4	2	1	2	2	3	3	4	3	3	3	4	2	2	2	2.3	5.6			
25-Jan	3	3	4	4	3	2	3	2	2	3	2	2	5	3	3	3	4	2	4	4	3	2	2	2	2.8	4.7			
26-Jan	3	3	4	P	P	P	P	P	P	P	P	P	P	3	1	2	1	3	3	3	3	3	6	3	--	5.6			
27-Jan	1	2	7	3	4	3	3	12	23	22	18	23	33	30	28	28	21	23	21	21	13	D	D	D	16.0	33.4			
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	24	25	26	21	20	21	19	16	18	25	29	31	--	30.9			
29-Jan	27	21	18	21	12	7	17	27	22	18	20	21	20	28	28	26	25	21	17	18	23	27	32	40	22.2	39.8			
30-Jan	40	35	32	24	16	18	21	18	8	3	9	21	37	33	29	17	34	41	40	39	36	33	30	30	26.9	40.5			
31-Jan	31	30	33	32	33	31	35	36	34	34	37	40	38	37	33	39	36	34	30	21	20	21	21	17	31.3	39.9			
8.7 9.1 9.2 8.4 7.7 6.9 7.3 7.6 8.2 7.3 7.2 8.0 9.7 9.6 9.5 9.7 9.4 9.5 9.4 9.3 9.4 9.6 9.9 9.7																									Diurnal Average				
39.8 35.2 32.7 31.8 33.0 31.4 35.0 36.3 35.1 34.3 36.8 39.9 38.0 36.7 32.9 38.6 36.4 40.5 40.1 39.2 35.5 35.0 31.6 39.8																									Diurnal Maximum				
P - Power Failure D - DAS Failure																													
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
January 1, 2009 to February 1, 2009

Maximum Value: 99.1 deg on Jan 19 05:00																			Hours in Service: 744						
Minimum Value: 1.9 deg on Jan 10 02:00																			Hours of Data: 719						
Percentiles: P ₁ = 2.4 P ₁₀ = 3.8 Q ₁ = 7.3 Median = 17.4 Q ₃ = 52.3 P ₉₀ = 74.2 P ₉₉ = 91.0																			Hours of Missing Data: 25						
																			Hours of Calibration: 0						
																			Percent Operational Time: 96.6						
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jan	15	10	8	5	10	8	11	15	8	9	14	12	9	9	8	9	11	23	10	11	7	26	12	13	26.4
2-Jan	15	13	33	26	91	79	64	48	22	8	77	50	49	81	63	34	21	7	5	44	18	58	62	24	91.0
3-Jan	71	60	78	75	86	56	65	56	53	17	35	89	13	31	69	31	24	29	50	30	33	34	62	22	89.0
4-Jan	24	20	47	78	82	79	64	65	52	82	20	83	88	52	11	4	5	6	7	7	44	25	82	16	88.1
5-Jan	23	51	29	56	85	52	56	59	55	66	34	36	62	12	15	7	22	8	23	18	6	7	12	6	85.3
6-Jan	12	14	14	21	24	23	20	10	8	9	39	25	50	28	32	54	69	33	5	7	14	7	6	18	69.0
7-Jan	11	9	4	16	13	12	18	20	12	23	16	14	13	14	15	18	8	7	13	8	9	11	7	10	22.9
8-Jan	12	6	12	10	9	7	7	13	11	10	7	7	7	15	13	32	19	16	6	20	63	11	89	25	88.9
9-Jan	29	73	32	67	67	84	49	32	91	80	43	74	56	54	66	18	74	78	59	75	83	46	88	11	90.8
10-Jan	84	2	3	3	5	3	3	4	4	6	71	66	3	4	2	4	5	7	17	57	44	27	28	22	83.9
11-Jan	20	37	62	15	22	14	64	71	6	9	9	7	14	11	12	14	14	9	26	74	41	82	24	9	82.1
12-Jan	54	11	31	11	56	32	21	87	77	20	33	42	31	16	36	14	39	84	39	26	5	3	3	2	87.4
13-Jan	3	5	3	2	3	3	4	31	24	13	13	8	12	24	50	22	6	6	8	7	6	6	9	7	50.4
14-Jan	19	8	13	5	7	13	12	10	17	67	58	69	11	14	33	28	75	20	18	70	84	35	81	78	83.5
15-Jan	86	71	72	76	69	61	57	66	74	71	76	77	9	5	5	7	11	13	21	12	10	10	12	7	85.5
16-Jan	31	19	11	11	7	6	8	6	14	73	58	22	14	28	78	44	68	23	18	38	60	73	21	70	77.8
17-Jan	39	54	55	63	64	42	45	22	75	10	4	58	25	84	11	6	5	9	3	66	12	23	4	49	83.7
18-Jan	7	18	56	92	95	75	42	47	66	66	77	11	21	63	53	44	46	15	77	86	91	23	68	81	94.7
19-Jan	80	93	82	56	99	94	71	91	58	22	11	19	44	14	13	60	50	9	19	21	39	73	67	64	99.1
20-Jan	55	23	11	8	15	57	39	53	56	18	22	30	19	19	7	61	11	81	30	84	21	56	46	25	83.8
21-Jan	21	8	13	74	80	15	82	46	50	37	16	6	18	14	9	7	14	10	13	8	5	6	5	6	82.2
22-Jan	7	7	5	8	6	9	8	7	7	7	8	8	8	11	7	5	5	6	5	5	4	3	3	4	10.9
23-Jan	5	3	4	3	6	7	21	79	56	27	55	43	42	66	77	65	10	84	76	51	73	78	74	55	83.8
24-Jan	91	37	41	47	14	45	65	71	70	6	10	19	86	82	30	40	8	35	53	63	9	81	44	45	90.8
25-Jan	55	84	55	74	65	64	15	48	43	43	42	38	9	23	15	13	8	18	6	7	16	47	16	16	84.1
26-Jan	27	64	15	P	P	P	P	P	P	P	P	P	P	17	38	48	78	77	48	50	45	53	28	63	78.1
27-Jan	61	49	15	48	14	13	80	6	4	3	4	4	5	4	6	6	4	4	2	5	3	D	D	D	79.7
28-Jan	D	D	D	D	D	D	D	D	D	D	D	D	13	3	4	5	8	3	6	4	4	4	2	4	12.9
29-Jan	5	5	8	7	9	13	21	3	3	4	3	3	3	3	3	4	5	3	9	3	4	4	3	3	21.4
30-Jan	2	4	4	6	13	9	12	7	39	73	27	18	4	5	4	8	10	5	5	4	5	4	3	4	73.2
31-Jan	3	3	4	3	3	4	4	3	3	3	3	3	4	4	3	4	4	3	3	3	2	2	3	2	4.0
90.8 93.4 81.6 92.0 99.1 94.4 82.2 91.2 90.8 82.1 76.8 89.0 88.1 83.7 77.8 65.4 78.1 84.2 77.0 86.3 91.1 82.1 88.9 81.1																									
P - Power Failure D - DAS Failure																									

PASZA

Portable – Spirit River Station

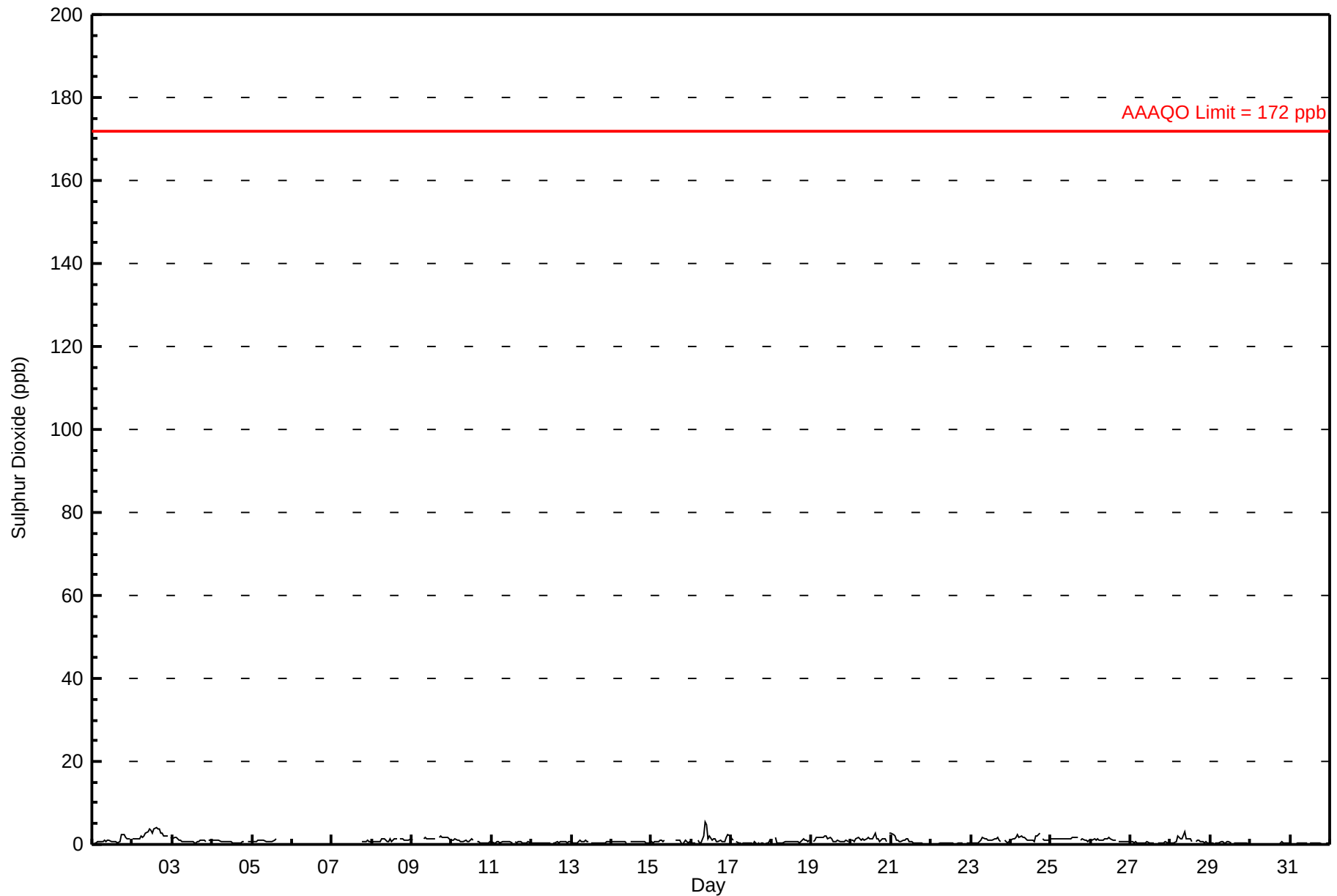
Monthly Summary Tables, Graphs and Roses

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

**Portable-Spirit River - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 5.5 ppb on Jan 16 09:00 Maximum Daily Average: 2.5 ppb on Jan 2																				Hours in Service: 744 Hours of Data: 653						
Minimum Value: 0 ppb on Jan 21 20:00 Minimum Daily Average: 0.1 ppb on Jan 30 Maximum Diurnal Average: 1.2 ppb at hour 9 Minimum Diurnal Average: 0.7 ppb at hour 23 Monthly Average: 0.86 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.4 Median = 0.7 Q ₃ = 1.2 P ₉₀ = 1.6 P ₉₉ = 3.6																				Hours of Missing Data: 91 Hours of Calibration: 34 Percent Operational Time: 92.3						
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-Jan	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	2	2	2	2	1	1	A	1.0	2.4
2-Jan	2	1	2	1	2	2	2	2	3	3	4	4	3	4	4	4	4	3	3	2	2	2	A	2	2.5	3.9
3-Jan	1	2	2	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	A	1	1	0.9	1.8
4-Jan	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	A	1	1	1	0.6	1.2
5-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	P	P	P	P	P	P	P	P	P	--	1.5
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	1	1	1	1	1	1	--	1.1
8-Jan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1.0	1.5
9-Jan	1	P	P	P	P	P	P	P	2	2	1	1	1	1	1	A	2	2	2	2	2	2	1	1	--	1.9
10-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	0	0	0	1	0.8	1.2
11-Jan	1	0	0	1	1	1	1	1	1	1	1	1	0	A	1	0	1	1	0	0	0	0	1	0	0.5	0.7
12-Jan	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	1	1	1	1	0	1	1	0.4	0.7
13-Jan	1	0	0	0	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	1	1	1	0.5	1.1
14-Jan	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	0.8
15-Jan	1	0	1	1	1	1	1	1	1	A	C	C	C	A	1	1	1	1	0	0	1	1	1	1	0.8	1.1
16-Jan	0	0	0	A	1	0	0	2	5	5	2	2	1	1	1	1	1	1	1	1	1	2	2	2	1.4	5.5
17-Jan	1	1	A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.4	1.4
18-Jan	0	A	2	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.7	1.5
19-Jan	A	1	1	2	2	2	2	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1.2	2.2
20-Jan	1	1	1	1	2	1	1	1	1	1	2	1	1	1	3	1	1	1	1	1	1	1	A	3	1.3	2.6
21-Jan	3	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0.8	2.6
22-Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.4
23-Jan	0	0	0	0	0	1	1	2	1	1	1	1	1	1	1	1	2	1	1	A	1	1	0	1	0.9	1.8
24-Jan	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	2	2	3	A	1	1	1	1	1	1.5	2.7
25-Jan	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	A	1	1	1	1	1	1	1	1.3	1.8
26-Jan	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1.1	1.8
27-Jan	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	1	0	0	0.4	0.7
28-Jan	0	0	0	1	2	2	1	1	3	1	1	2	1	1	A	1	1	1	1	1	0	1	0	0	1.0	3.0
29-Jan	0	0	0	0	0	0	1	1	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0.4	0.7
30-Jan	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0.1	0.7
31-Jan	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
0.8 0.7 0.8 0.8 0.9 0.8 0.8 1.0 1.2 1.1 1.0 1.0 0.9 0.9 0.9 0.8 0.9 0.9 0.9 0.8 0.8 0.8 0.8 0.7 0.8																									Diurnal Average	
2.6 2.3 2.1 1.7 2.4 1.9 1.9 2.2 5.5 4.9 3.8 3.5 2.7 3.8 3.9 3.6 3.6 2.7 2.7 2.7 2.3 2.0 1.9 2.3 2.6																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																										

Hourly Averages for SO₂ at Portable-Spirit River January 2009



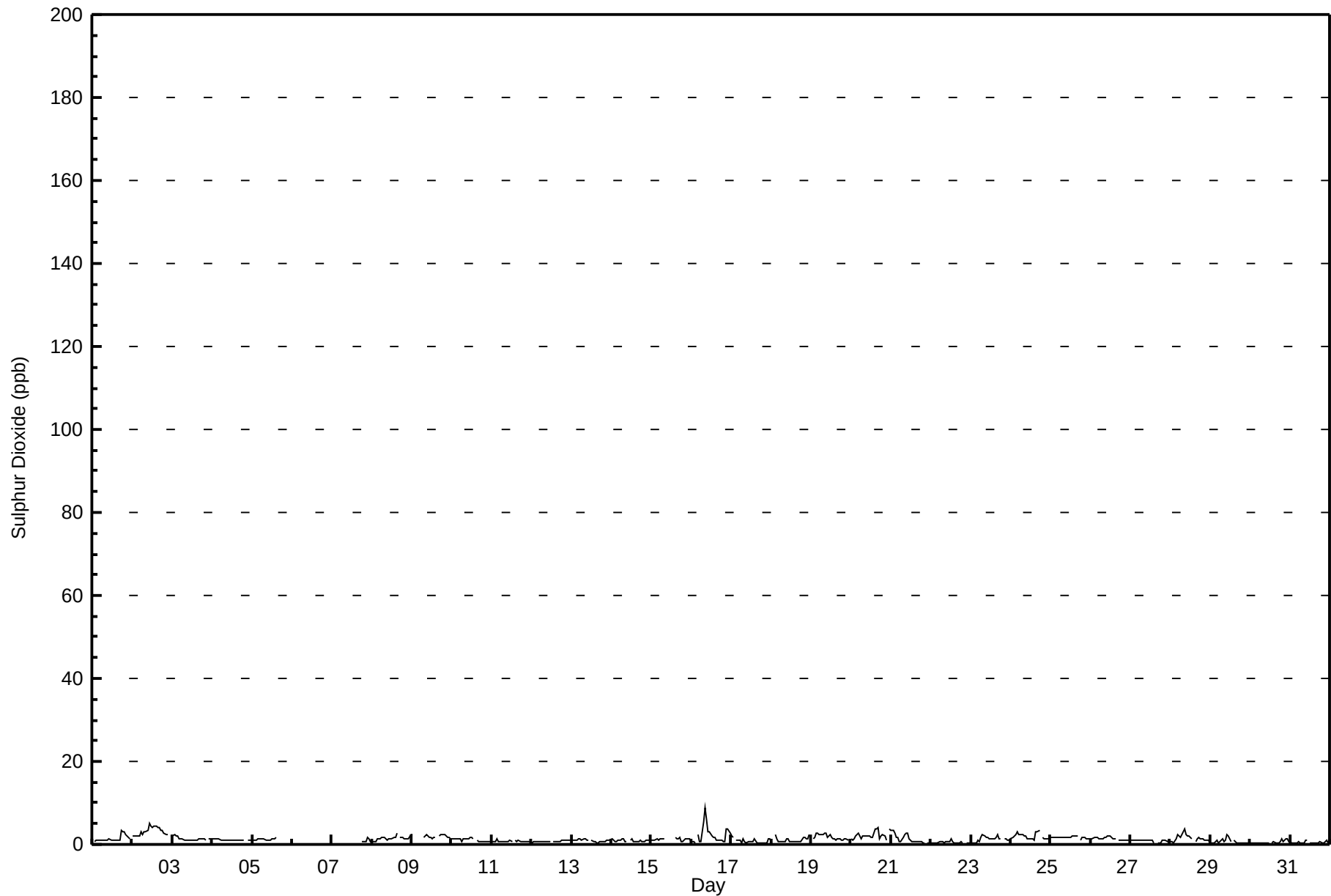
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009**

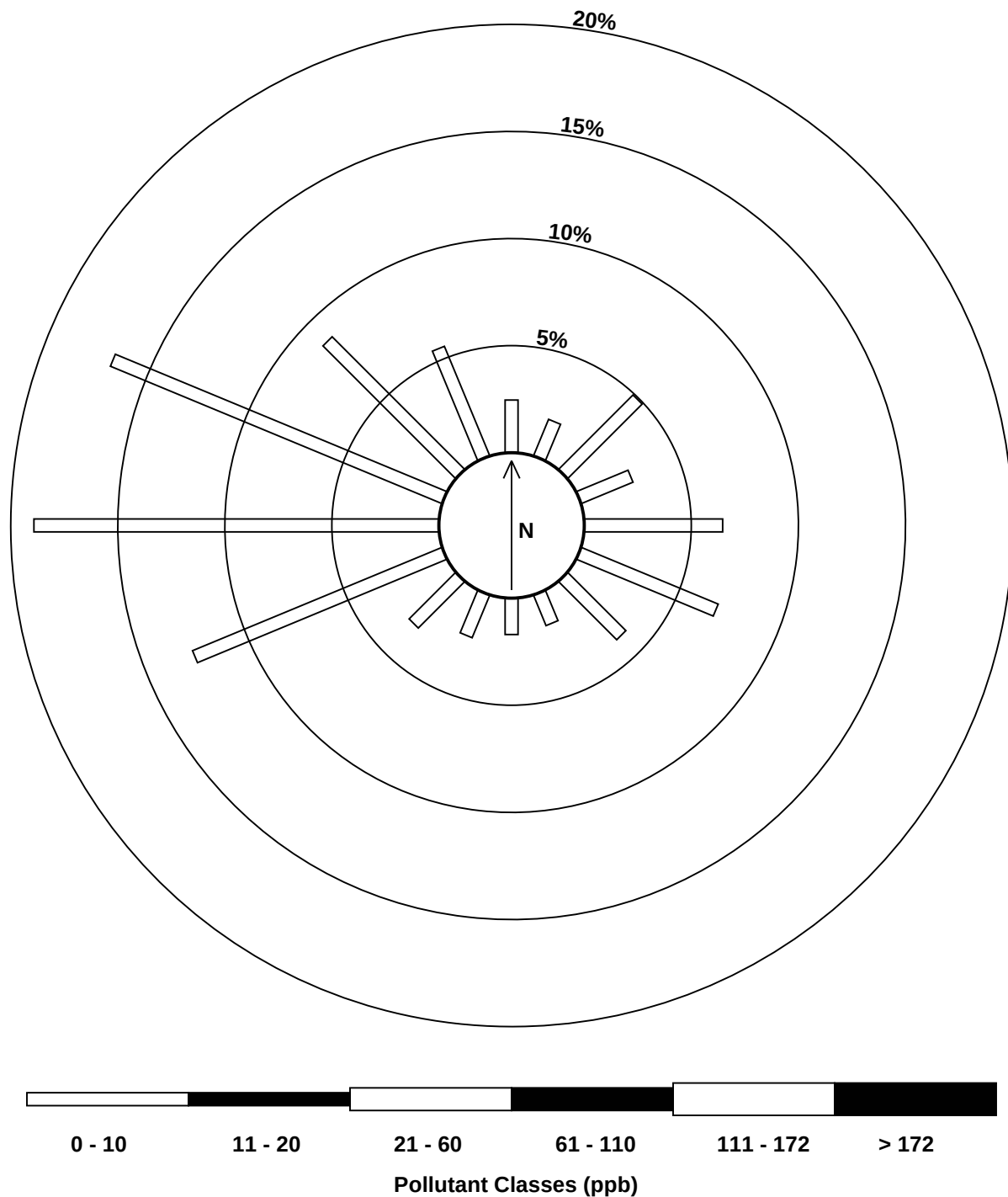
Maximum Value: 8.7 ppb on Jan 16 09:00																			Maximum Daily Average: 3.1 ppb on Jan 2										Hours in Service: 744	
Minimum Value: 0 ppb on Jan 17 07:00																			Minimum Daily Average: 0.5 ppb on Jan 22										Hours of Data: 653	
Maximum Diurnal Average: 1.7 ppb at hour 9																			Minimum Diurnal Average: 1.1 ppb at hour 2										Hours of Missing Data: 91	
Monthly Average: 1.29 ppb																			Percentiles: P ₁ = 0.2 P ₁₀ = 0.4 Q ₁ = 0.8 Median = 1.0 Q ₃ = 1.7 P ₉₀ = 2.3 P ₉₉ = 4.4										Hours of Calibration: 34	
																			Percent Operational Time: 92.3											
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-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	2	2	2	A	1.4	3.3				
2-Jan	2	2	2	2	2	3	2	3	3	3	5	4	4	4	4	4	4	3	3	3	2	2	A	2	3.1	4.9				
3-Jan	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.3	2.4				
4-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.0	1.4				
5-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	P	P	P	P	P	P	P	P	P	--	1.8				
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--				
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	1	1	1	2	1	1	--	1.7			
8-Jan	1	1	1	1	1	1	2	2	1	1	1	1	1	2	2	3	A	2	2	1	1	1	1	2	1.5	2.8				
9-Jan	2	P	P	P	P	P	P	P	2	2	2	2	1	2	2	A	2	2	2	2	2	2	2	1	--	2.4				
10-Jan	1	1	1	1	1	1	1	1	1	1	1	2	2	1	A	1	1	1	1	1	1	1	1	1	1.1	1.7				
11-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.2				
12-Jan	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9				
13-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	1	1	1	1	1	1	1	0.9	1.4				
14-Jan	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3				
15-Jan	1	1	1	1	1	1	1	1	1	A	C	C	C	A	2	1	1	2	1	1	1	1	1	1	1.2	1.7				
16-Jan	1	1	0	A	2	1	1	6	9	6	3	3	2	2	2	1	1	1	1	1	1	4	4	3	2.4	8.7				
17-Jan	2	2	A	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	1	1	0.8	1.9				
18-Jan	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	2	1.1	2.5				
19-Jan	A	1	2	3	3	2	2	2	3	3	2	2	2	1	1	1	1	1	1	1	1	1	1	A	1.8	2.8				
20-Jan	1	1	1	2	3	2	1	2	2	2	2	2	2	2	4	4	4	1	2	2	2	1	A	4	2.1	4.2				
21-Jan	3	3	3	2	2	1	1	2	2	3	3	1	1	1	1	1	1	1	1	0	0	A	0	0	1.4	3.4				
22-Jan	0	0	0	0	0	1	1	1	0	1	1	1	1	1	0	0	0	0	1	0	A	0	0	0	0.5	1.3				
23-Jan	0	0	0	0	1	1	2	2	2	2	2	1	1	1	1	2	2	2	1	A	1	1	1	1	1.3	2.4				
24-Jan	1	2	2	2	3	2	2	2	2	2	1	1	1	1	1	3	3	3	A	2	1	1	1	2	1.9	3.4				
25-Jan	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	A	1	2	2	1	1	1	1.7	2.2				
26-Jan	1	1	2	2	2	1	1	1	2	2	2	2	2	1	1	1	A	1	1	1	1	1	1	1	1.4	2.1				
27-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	0	0	1	1	1	1	1	0.8	1.0				
28-Jan	1	1	0	2	2	2	2	2	4	2	2	2	2	1	A	1	1	2	1	1	1	1	1	1	1.5	3.8				
29-Jan	0	0	0	1	1	0	1	1	1	1	2	2	1	A	1	1	0	1	0	0	0	0	0	0	0.7	2.5				
30-Jan	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	1	1	1	1	1	1	0.5	1.3				
31-Jan	1	0	0	0	0	1	0	0	0	1	1	A	0	0	0	0	0	0	1	0	0	1	1	0	0.5	0.9				
																								Diurnal Average						
																								Diurnal Maximum						
C - Calibration				P - Power Failure				A - Automated Daily Zero Span																						

Hourly Maximums for SO₂ at Portable-Spirit River

January 2009



Pollutant Rose for SO₂ at Portable-Spirit River January 2009

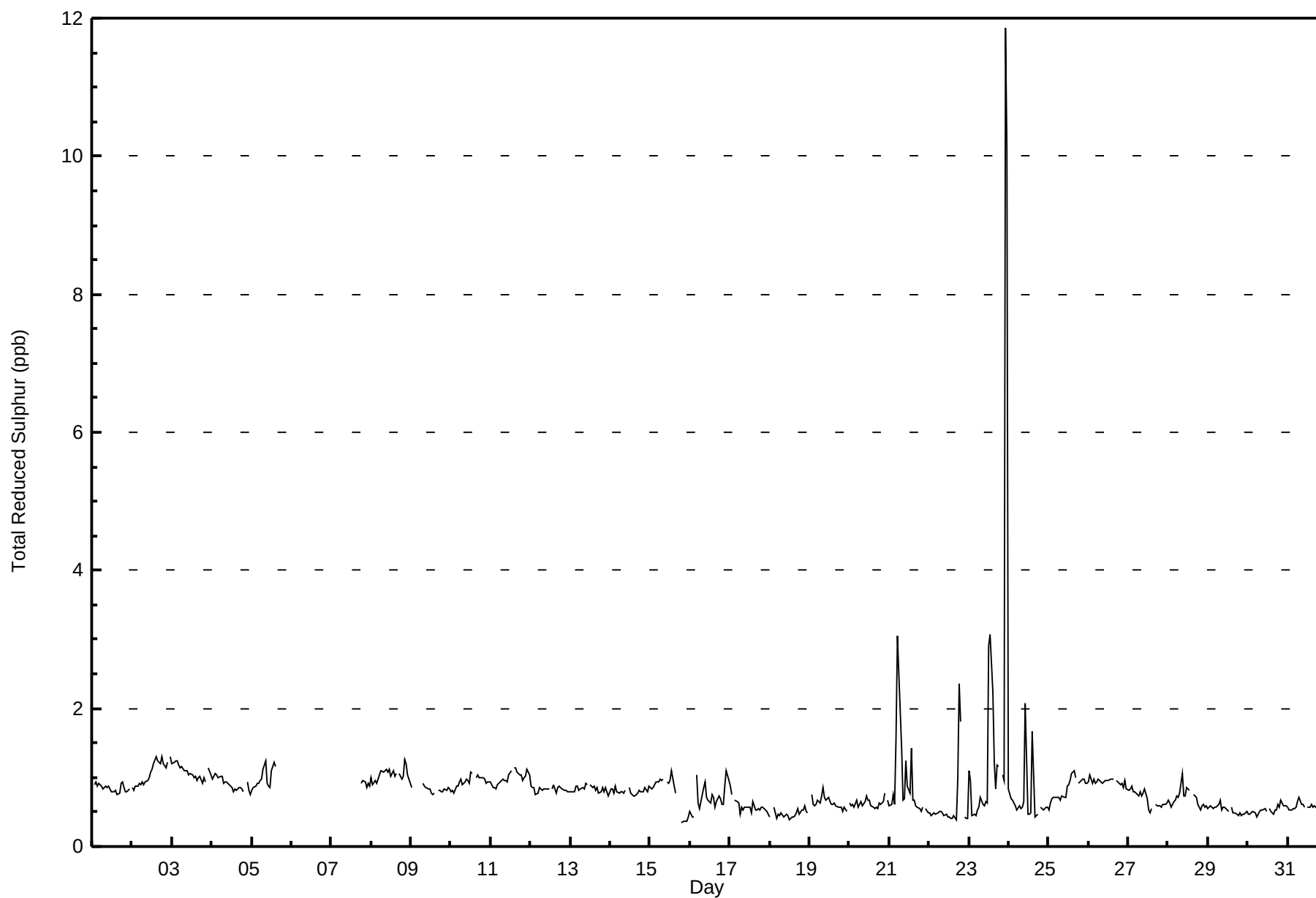


Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 2 24-hr: 0 Maximum Value: 11.9 ppb on Jan 23 23:00 Maximum Daily Average: 1.9 ppb on Jan 23																				Hours in Service: 744						
Minimum Value: 0 ppb on Jan 15 20:00 Maximum Diurnal Average: 1.2 ppb at hour 23 Monthly Average: 0.83 ppb																				Hours of Data: 654						
Minimum Daily Average: 0.5 ppb on Jan 18 Minimum Diurnal Average: 0.7 ppb at hour 17 Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.8 Q ₃ = 0.9 P ₉₀ = 1.1 P ₉₉ = 2.3																				Hours of Missing Data: 90						
																				Hours of Calibration: 33						
																				Percent Operational Time: 92.3						
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-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	0.9
2-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.1	1.3
3-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.2
4-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.1
5-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	P	P	P	P	P	P	P	P	P	--	1.2
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	1	1	1	1	1	1	--	1.0
8-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.3
9-Jan	1	P	P	P	P	P	P	P	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	--	0.9
10-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.1
11-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	1.1
12-Jan	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
13-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
14-Jan	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
15-Jan	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	C	C	A	0	0	0	0	0	0.8	1.1
16-Jan	1	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
17-Jan	1	1	A	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0.6	0.9
18-Jan	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0.5	0.6
19-Jan	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	0.9
20-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.8
21-Jan	1	1	1	1	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1.0	3.1
22-Jan	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	2	2	A	0	0	0	0.6	2.4
23-Jan	1	1	0	0	0	1	1	1	1	1	1	1	3	3	2	1	1	1	1	A	1	1	12	10	1.9	11.9
24-Jan	1	1	1	1	1	1	1	1	1	1	2	0	0	0	2	1	0	0	A	1	1	1	1	1	0.7	2.1
25-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.1
26-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.0
27-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	0.7	0.9
28-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.0
29-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	1	0.5	0.7
30-Jan	0	0	0	1	0	0	0	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	0.5	0.7
31-Jan	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
0.8 0.8 0.7 0.7 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.9 0.9 0.9 0.8 0.7 0.8 0.8 0.8 0.8 0.8 1.2 1.1																								Diurnal Average		
1.2 1.2 1.2 1.2 1.6 3.1 2.5 1.4 1.2 1.1 2.1 1.1 2.9 3.1 2.2 1.2 1.2 1.2 2.4 1.8 1.3 1.2 11.9 10.1																								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 Portable-Spirit River January 2009

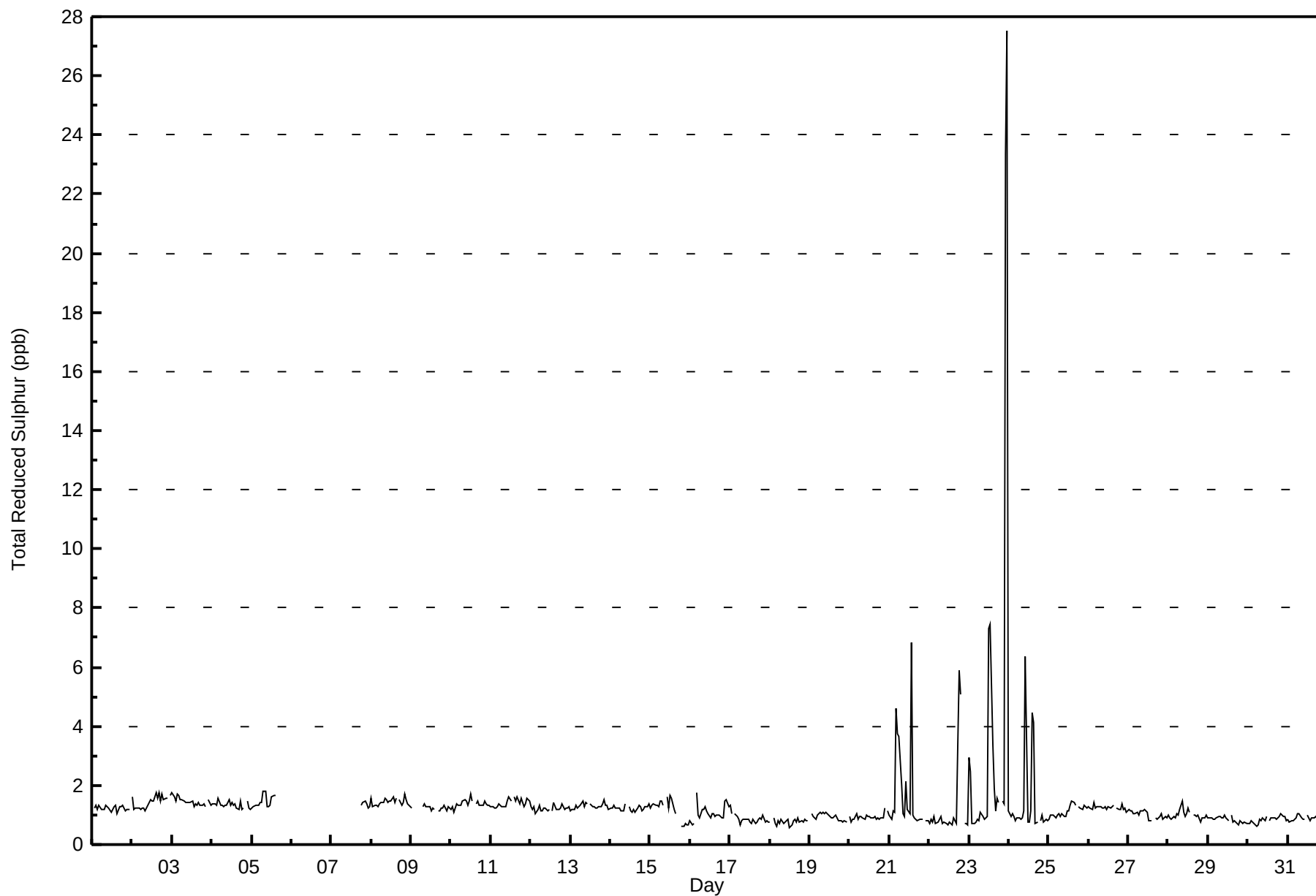


**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Total Reduced Sulphur (TRS) - ppb
January 1, 2009 to February 1, 2009**

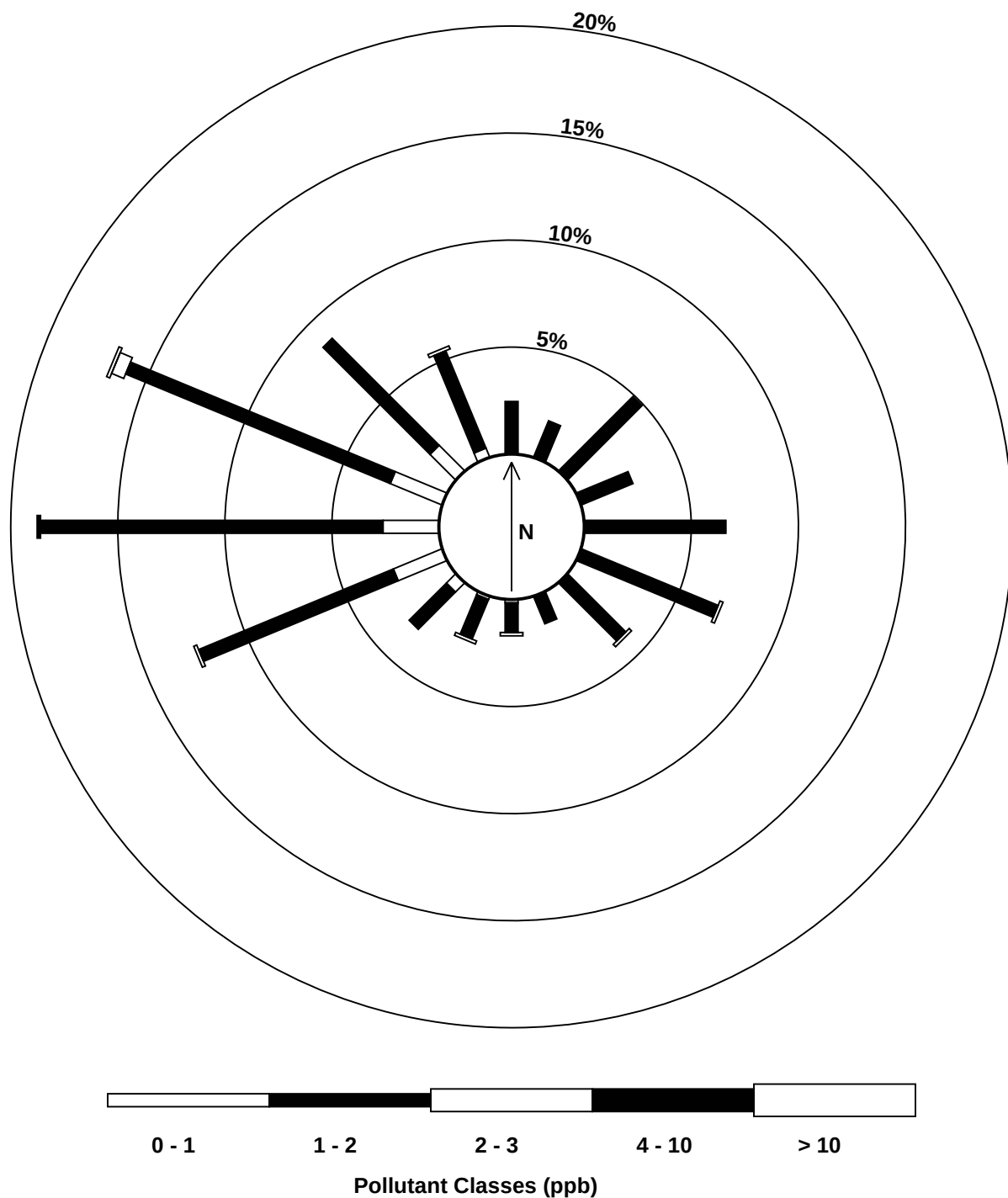
Maximum Value: 27.5 ppb on Jan 24 00:00																				Maximum Daily Average: 4.0 ppb on Jan 23				Hours in Service: 744		
Minimum Value: 1 ppb on Jan 18 13:00																				Minimum Daily Average: 0.8 ppb on Jan 18				Hours of Data: 654		
Maximum Diurnal Average: 2.1 ppb at hour 24																				Minimum Diurnal Average: 1.1 ppb at hour 17				Hours of Missing Data: 90		
Monthly Average: 1.29 ppb																				Percentiles: P ₁ = 0.7 P ₁₀ = 0.8 Q ₁ = 0.9 Median = 1.2 Q ₃ = 1.3 P ₉₀ = 1.5 P ₉₉ = 5.8				Hours of Calibration: 33		
																				Percent Operational Time: 92.3						
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-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.2	1.3
2-Jan	2	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	2	1	2	2	2	2	A	2	1.4	1.8
3-Jan	2	2	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1.5	1.7
4-Jan	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1.3	1.6
5-Jan	1	1	1	1	1	1	1	2	2	1	1	1	2	2	2	P	P	P	P	P	P	P	P	P	--	1.8
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	1	1	1	1	1	1	--	1.5
8-Jan	2	1	1	1	1	1	1	1	2	2	1	1	1	2	1	2	A	2	1	1	2	1	1	1	1.4	1.7
9-Jan	1	P	P	P	P	P	P	P	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	--	1.4
10-Jan	1	1	1	1	1	1	1	1	2	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1	1.4	1.7
11-Jan	1	1	1	1	1	1	1	1	1	1	1	2	1	A	2	1	2	1	2	1	1	1	2	1	1.4	1.6
12-Jan	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.2	1.4
13-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1.3	1.5
14-Jan	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.4
15-Jan	1	1	1	1	1	1	1	1	1	A	2	1	2	2	1	1	C	C	A	1	1	1	1	1	1.2	1.7
16-Jan	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.1	1.7
17-Jan	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
18-Jan	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
19-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.1
20-Jan	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
21-Jan	1	1	1	1	5	4	4	2	1	1	2	1	1	7	1	1	1	1	1	1	1	A	1	1	1.7	6.8
22-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	6	5	A	1	1	1	1.3	5.9
23-Jan	3	2	1	1	1	1	1	1	1	1	1	1	7	7	3	2	1	2	1	A	1	1	23	28	4.0	27.5
24-Jan	1	1	1	1	1	1	1	1	1	1	6	1	1	1	4	4	1	1	A	1	1	1	1	1	1.4	6.4
25-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.1	1.5
26-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.3	1.4
27-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	1.2
28-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	1.5
29-Jan	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.0
30-Jan	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
31-Jan	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
1.2 1.1 1.1 1.1 1.2 1.2 1.2 1.2 1.2 1.1 1.4 1.1 1.4 1.6 1.4 1.3 1.1 1.2 1.3 1.2 1.1 1.1 1.9 2.1																								Diurnal Average		
3.0 2.5 1.5 1.7 4.6 3.7 3.7 2.1 1.8 1.5 6.4 1.6 7.3 7.5 4.5 4.1 1.8 3.4 5.9 5.1 1.7 1.6 23.4 27.5																								Diurnal Maximum		
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

Hourly Maximums for TRS at Portable-Spirit River January 2009



Pollutant Rose for TRS at Portable-Spirit River

January 2009

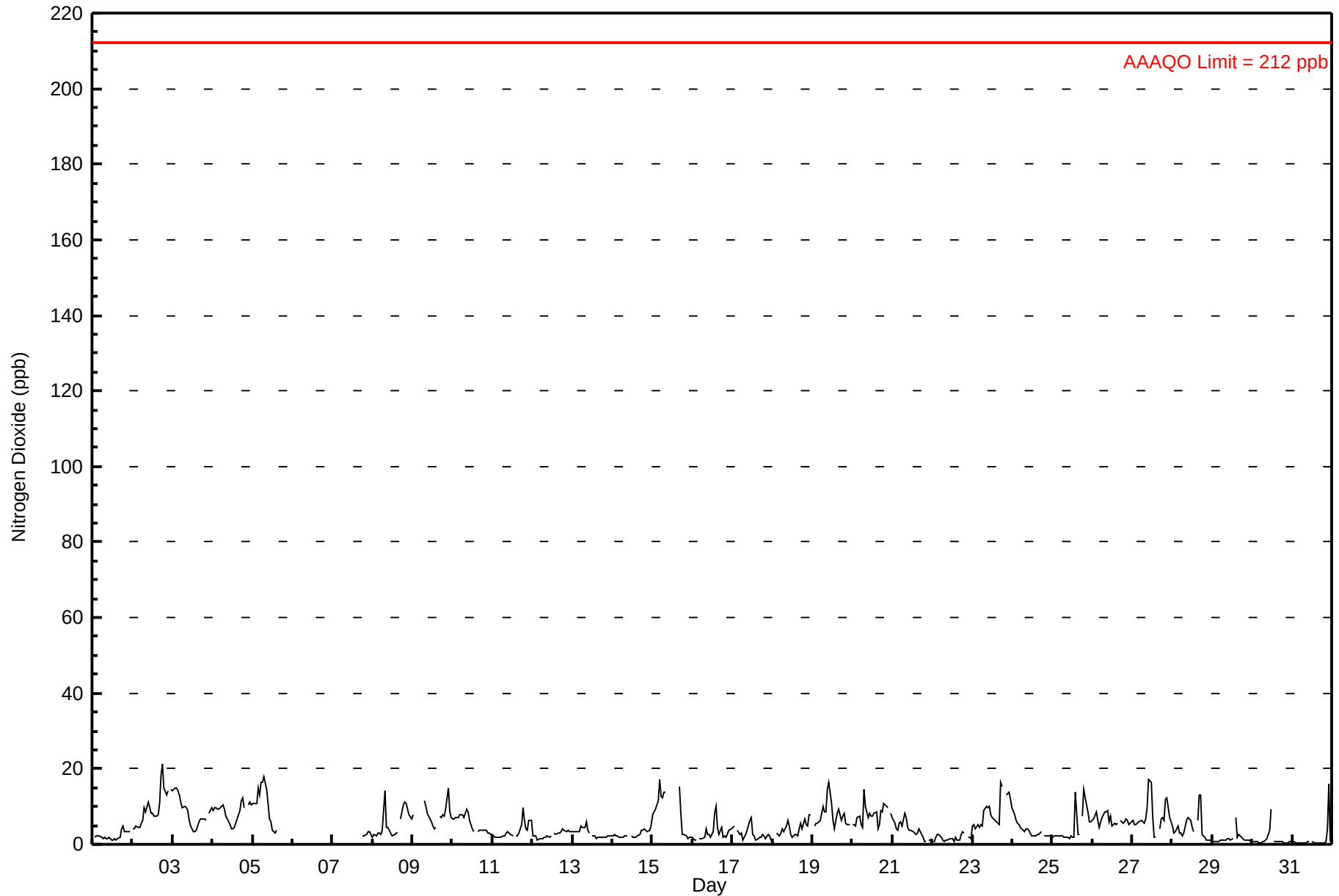


Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - Nitrogen Dioxide (NO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 21.1 ppb on Jan 2 19:00 Maximum Daily Average: 9.5 ppb on Jan 2																				Hours in Service: 744 Hours of Data: 651 Hours of Missing Data: 93 Hours of Calibration: 36 Percent Operational Time: 92.3						
Minimum Value: 0 ppb on Jan 31 08:00 Maximum Diurnal Average: 6.2 ppb at hour 8 Monthly Average: 4.95 ppb										Minimum Daily Average: 1.2 ppb on Jan 30 Minimum Diurnal Average: 3.4 ppb at hour 14 Percentiles: P ₁ = 0.5 P ₁₀ = 1.1 Q ₁ = 2.1 Median = 3.7 Q ₃ = 6.9 P ₉₀ = 10.1 P ₉₉ = 16.5																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	A	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1	2	4	5	3	3	3	3	A	2.2	4.7
2-Jan	4	4	5	4	5	6	6	10	9	11	10	8	8	8	7	8	11	18	21	15	13	14	A	14	9.5	21.1
3-Jan	14	15	15	14	13	11	10	10	10	9	6	5	3	3	4	5	6	7	7	7	6	A	8	10	8.6	15.0
4-Jan	9	10	10	9	9	10	10	9	8	7	5	4	4	5	6	7	9	11	12	10	A	11	11	11	8.5	12.3
5-Jan	11	11	11	15	13	16	16	18	14	11	7	6	4	3	4	P	P	P	P	P	P	P	P	P	--	18.0
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2	2	3	3	3	3	--	3.5
8-Jan	2	3	2	3	3	3	4	14	4	5	4	3	2	3	3	3	A	7	10	11	11	9	8	7	5.4	14.1
9-Jan	8	P	P	P	P	P	P	12	10	8	7	6	5	4	4	A	7	7	8	8	9	15	9	7	--	14.9
10-Jan	7	7	7	7	8	8	8	7	9	9	6	5	4	3	A	3	4	4	4	4	4	3	3	3	5.5	9.1
11-Jan	3	2	2	2	2	2	2	2	3	3	3	2	2	A	2	2	3	5	10	6	4	4	6	6	3.5	9.9
12-Jan	2	2	2	1	1	1	2	2	2	2	2	2	A	3	3	3	3	3	4	4	3	4	3	4	2.6	4.0
13-Jan	3	3	3	3	3	5	5	5	6	4	3	A	2	2	2	2	2	2	2	2	2	2	2	2	2.9	5.9
14-Jan	2	2	2	2	2	2	2	2	2	2	A	2	2	2	2	2	2	4	4	4	4	3	4	5	2.6	5.4
15-Jan	8	9	9	11	17	13	12	14	14	A	C	C	C	C	C	A	15	8	3	3	2	2	2	2	--	17.2
16-Jan	2	1	1	A	2	2	1	2	4	2	2	2	3	8	10	5	3	4	2	2	2	3	4	4	3.1	10.0
17-Jan	4	5	A	4	3	3	1	2	3	4	6	7	3	2	1	2	2	2	3	2	2	2	2	1	2.8	7.1
18-Jan	1	A	3	2	2	3	4	3	5	6	5	3	2	3	3	2	4	6	4	7	5	5	8	8	4.1	7.8
19-Jan	A	5	6	5	6	6	10	9	9	14	17	11	6	4	6	8	9	6	7	8	6	5	5	A	7.7	16.5
20-Jan	5	5	5	7	7	5	4	14	10	7	8	7	7	8	9	4	5	9	9	11	10	10	A	8	7.7	14.5
21-Jan	7	5	4	4	6	6	5	8	7	5	4	4	3	3	3	3	4	3	2	1	1	A	1	1	3.9	8.1
22-Jan	1	1	2	3	3	2	1	1	1	1	2	2	2	1	2	1	1	2	4	3	A	2	2	1	1.7	3.5
23-Jan	5	5	4	5	5	5	5	9	10	10	10	8	7	7	6	6	5	16	15	A	13	13	14	12	8.5	16.5
24-Jan	10	8	6	6	5	4	4	3	4	4	4	2	2	2	2	3	3	3	A	2	2	2	2	2	3.7	9.8
25-Jan	2	2	2	2	2	2	2	2	2	2	2	2	2	2	14	3	3	A	8	15	11	9	6	6	4.4	14.6
26-Jan	6	7	8	6	4	6	7	8	8	9	6	8	5	5	5	5	A	6	6	6	7	6	5	6	6.4	8.9
27-Jan	6	5	5	6	6	6	6	5	7	10	17	16	7	2	2	A	4	7	7	6	12	12	7	6	7.3	17.1
28-Jan	5	3	3	5	3	3	2	3	6	7	7	6	5	4	A	6	13	13	3	2	1	1	1	1	4.5	13.2
29-Jan	1	1	1	1	1	1	1	1	1	2	1	1	2	A	7	2	2	2	1	1	1	1	1	1	1.5	6.9
30-Jan	1	1	1	1	1	0	1	1	1	1	4	9	A	1	1	1	1	1	1	0	0	0	1	1	1.2	9.2
31-Jan	1	1	1	1	0	1	0	0	0	1	1	A	1	0	0	0	0	1	1	1	1	4	16	1	1.4	16.0
4.8 4.6 4.6 4.9 4.8 4.8 4.7 6.2 5.9 5.6 5.5 5.1 3.6 3.4 4.2 3.5 4.8 6.0 5.8 5.2 5.1 5.6 5.1 4.8																								Diurnal Average		
14.3 14.8 15.0 15.0 17.2 16.3 16.2 18.0 14.4 14.4 17.1 16.5 8.1 8.4 13.8 8.2 15.3 18.2 21.1 14.8 13.2 14.9 16.0 14.5																								Diurnal Maximum		
C - Calibration P - Power Failure 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 January 2009

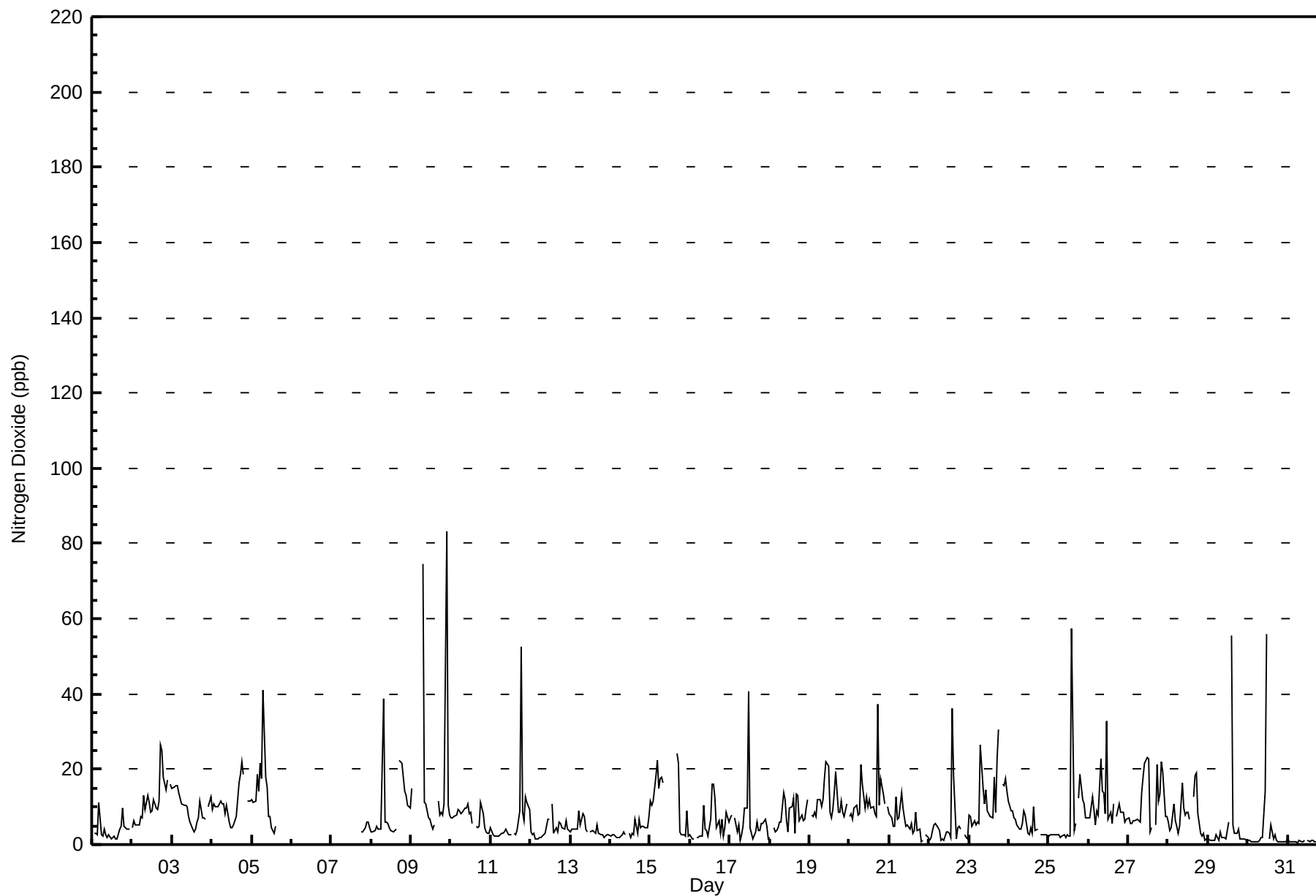


**Peace Airshed Zone Association
Summary of Hourly Maximums**

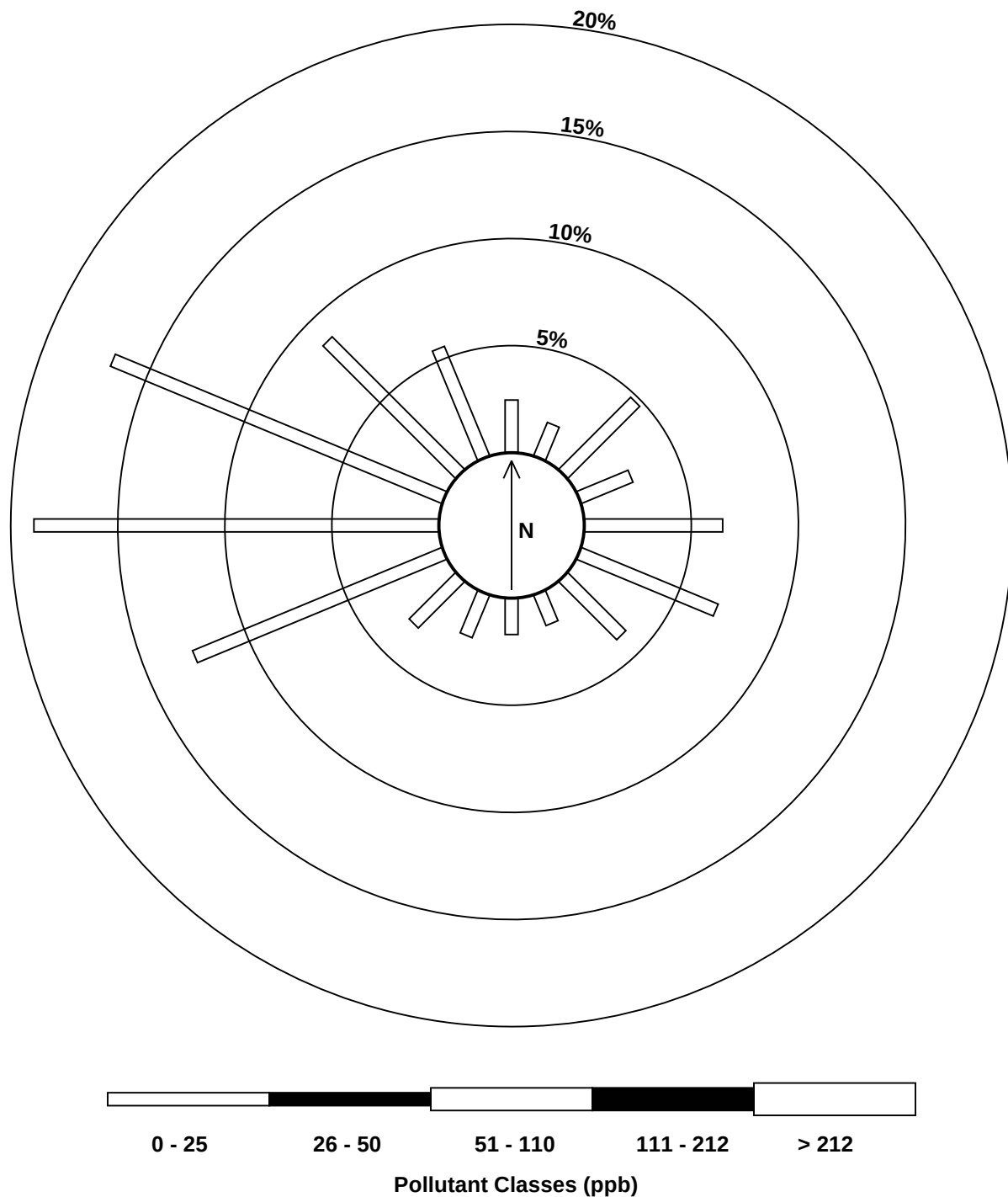
**Portable-Spirit River - Nitrogen Dioxide (NO₂) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 83.0 ppb on Jan 9 22:00																				Maximum Daily Average: 12.4 ppb on Jan 23										Hours in Service: 744	
Minimum Value: 1 ppb on Jan 31 07:00																				Minimum Daily Average: 3.6 ppb on Jan 14										Hours of Data: 651	
Maximum Diurnal Average: 12.6 ppb at hour 8																				Minimum Diurnal Average: 5.6 ppb at hour 3										Hours of Missing Data: 93	
Monthly Average: 7.89 ppb																				Percentiles: P ₁ = 0.6 P ₁₀ = 1.7 Q ₁ = 2.9 Median = 5.8 Q ₃ = 10.1 P ₉₀ = 15.8 P ₉₉ = 52.7										Hours of Calibration: 36	
																				Percent Operational Time: 92.3											
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-Jan	A	3	3	3	11	3	2	4	3	2	3	2	2	2	2	2	4	5	10	5	4	4	4	A	3.7	11.2					
2-Jan	4	6	5	5	5	8	7	13	9	13	11	9	9	12	10	9	12	27	25	18	15	17	A	16	11.6	26.6					
3-Jan	15	15	16	16	14	12	11	11	10	10	7	6	4	4	4	6	7	11	7	7	7	A	10	13	9.7	15.8					
4-Jan	9	11	10	10	10	12	11	11	8	11	6	4	4	5	6	7	16	19	22	19	A	12	12	11	10.7	22.2					
5-Jan	12	11	11	19	14	21	17	41	18	15	8	7	5	3	5	P	P	P	P	P	P	P	P	P	--	41.0					
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--					
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	3	3	5	6	6	4	--	5.9					
8-Jan	3	3	4	5	4	4	4	39	6	6	6	4	4	3	4	4	A	22	22	18	14	13	10	10	9.2	38.6					
9-Jan	15	P	P	P	P	P	P	P	75	11	11	7	7	5	4	5	A	12	8	9	8	11	83	11	8	--	83.0				
10-Jan	7	7	7	8	9	9	8	8	10	10	11	8	9	5	A	5	4	5	11	8	4	3	3	3	7.2	11.1					
11-Jan	5	2	2	2	2	2	3	3	3	4	3	3	2	A	3	2	4	9	53	9	6	13	11	9	6.8	52.7					
12-Jan	3	3	3	2	2	2	2	2	3	3	7	7	A	11	3	5	4	6	5	5	4	6	4	4	4.0	10.9					
13-Jan	3	4	4	4	4	9	5	8	8	4	4	A	3	4	3	3	5	3	3	2	2	2	3	3	4.1	9.1					
14-Jan	2	3	2	2	2	2	2	2	3	2	A	3	2	3	3	7	3	7	5	5	5	4	5	7	3.6	7.3					
15-Jan	11	11	11	18	22	15	17	18	16	A	C	C	C	C	C	A	24	22	4	3	2	2	9	2	--	24.1					
16-Jan	2	2	2	A	2	2	2	2	11	4	4	2	7	16	16	12	5	6	3	7	2	5	8	6	5.5	16.2					
17-Jan	7	8	A	7	3	5	1	3	5	10	10	41	5	3	1	3	6	4	4	6	5	7	5	2	6.5	40.6					
18-Jan	2	A	4	3	4	4	6	6	14	12	6	3	10	10	12	3	13	13	6	8	6	7	10	12	7.6	13.9					
19-Jan	A	8	8	9	7	12	12	10	12	18	22	21	9	7	9	14	19	9	8	11	9	7	11	A	11.4	21.8					
20-Jan	7	8	7	10	10	8	8	21	16	10	13	10	12	10	10	8	8	37	11	17	13	11	A	10	12.0	37.3					
21-Jan	8	7	5	5	13	7	7	14	10	7	5	5	4	6	3	4	8	4	4	1	1	A	3	2	5.7	13.9					
22-Jan	1	2	4	5	5	4	4	1	1	1	3	3	3	2	36	18	2	4	5	4	A	3	2	2	5.1	36.4					
23-Jan	8	7	5	6	5	6	5	27	15	11	14	9	8	8	7	18	8	23	31	A	16	16	17	14	12.4	30.6					
24-Jan	12	9	9	7	7	5	4	4	5	9	8	3	2	4	3	10	4	4	A	2	3	3	2	2	5.3	11.6					
25-Jan	2	3	3	3	3	3	3	2	2	3	2	3	2	2	58	4	5	A	12	19	12	11	7	7	7.3	57.6					
26-Jan	7	7	13	9	5	9	8	23	14	14	8	33	7	9	6	11	A	8	11	9	9	8	6	7	10.3	32.7					
27-Jan	7	6	6	6	6	7	6	6	14	18	22	23	23	3	4	A	5	21	12	14	22	20	8	8	11.5	23.3					
28-Jan	6	4	5	11	6	5	3	5	17	10	8	9	8	7	A	13	18	19	8	3	2	3	1	1	7.4	19.1					
29-Jan	2	1	1	1	1	3	1	4	2	2	2	1	6	A	56	5	3	3	4	2	1	1	1	1	4.5	55.6					
30-Jan	1	1	1	1	1	1	1	1	2	2	14	56	A	1	5	1	2	1	1	1	1	1	1	1	4.2	55.8					
31-Jan	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	3	31	57	1	4.7	57.2					
6.1 5.6 5.6 6.6 6.4 6.4 5.8 12.6 8.6 7.9 7.9 10.8 6.0 5.6 10.6 7.0 7.8 11.1 10.6 7.6 6.8 11.0 8.4 6.1																								Diurnal Average							
15.1 15.4 15.8 18.8 22.5 21.5 17.4 74.5 17.8 17.9 21.8 55.8 22.6 16.2 57.6 18.4 24.1 37.3 52.7 18.6 22.0 83.0 57.2 16.2																								Diurnal Maximum							
C - Calibration P - Power Failure A - Automated Daily Zero Span																															

Hourly Maximums for NO₂ at Portable-Spirit River January 2009



Pollutant Rose for NO₂ at Portable-Spirit River January 2009



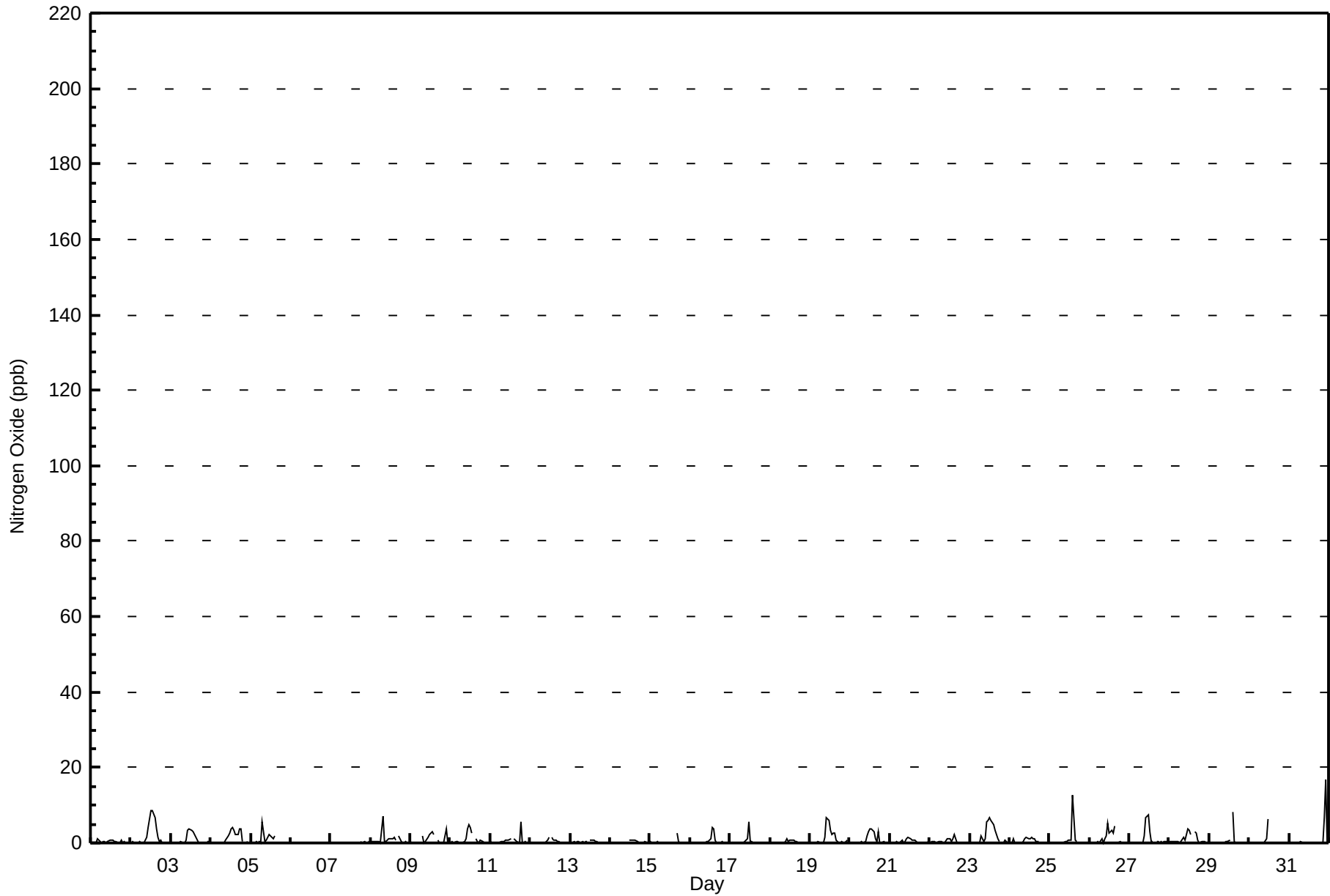
Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - Nitrogen Oxide (NO) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 16.8 ppb on Jan 31 23:00																				Maximum Daily Average: 1.9 ppb on Jan 2					Hours in Service: 744		
Minimum Value: 0 ppb on Jan 11 18:00																				Minimum Daily Average: 0.2 ppb on Jan 18					Hours of Data: 651		
Maximum Diurnal Average: 2.9 ppb at hour 12																				Minimum Diurnal Average: 0.1 ppb at hour 7					Hours of Missing Data: 93		
Monthly Average: 0.76 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.6 P ₉₀ = 2.4 P ₉₉ = 7.2					Hours of Calibration: 36		
																				Percent Operational Time: 92.3							
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-Jan	A	0	0	0	1	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	A	0.3	1.0	
2-Jan	0	0	0	0	0	0	0	0	0	1	4	6	9	9	7	4	1	0	1	0	0	0	A	A	0	1.9	8.7
3-Jan	0	0	0	0	0	0	0	0	0	1	3	4	3	3	2	2	1	0	0	0	0	A	0	0	0.9	3.9	
4-Jan	0	0	0	0	0	0	0	0	0	1	2	3	4	4	3	2	2	4	4	1	A	0	0	0	1.3	4.0	
5-Jan	0	0	0	0	0	0	0	6	0	1	2	2	2	1	2	P	P	P	P	P	P	P	P	P	--	5.7	
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--	
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0	0	0	0	0	0	--	0.4	
8-Jan	1	0	0	0	0	0	0	7	0	0	1	1	1	1	1	1	A	2	0	0	0	1	0	0	0.9	7.2	
9-Jan	0	P	P	P	P	P	P	2	0	0	1	2	2	3	2	A	1	0	0	0	0	4	0	0	--	3.8	
10-Jan	0	0	0	0	0	0	0	0	0	1	4	5	4	3	A	1	0	0	1	0	0	0	0	0	0.9	5.0	
11-Jan	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	1	0	0	6	0	0	0	0	0	0.6	5.7	
12-Jan	0	0	0	0	0	0	0	0	0	0	1	1	A	2	1	1	0	0	0	0	0	0	0	0	0.3	1.5	
13-Jan	0	0	0	0	0	0	0	0	0	0	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0.3	0.9	
14-Jan	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0.2	0.8	
15-Jan	0	0	0	0	0	0	0	0	0	A	C	C	C	C	C	A	3	0	0	0	0	0	0	0	--	2.6	
16-Jan	0	0	0	A	0	0	0	0	0	0	0	0	1	4	4	1	0	0	0	0	0	0	0	0	0.5	3.9	
17-Jan	0	0	A	0	0	0	0	0	0	0	1	6	1	0	0	0	0	0	0	0	0	0	0	0	0.4	5.7	
18-Jan	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.2	1.0	
19-Jan	A	0	0	0	0	0	0	0	0	1	7	6	3	2	3	3	1	0	0	0	0	0	1	A	1.3	6.8	
20-Jan	0	0	0	0	0	0	0	0	0	1	2	3	4	4	3	1	0	3	0	0	0	0	A	0	0.9	3.7	
21-Jan	0	0	0	0	0	0	0	1	0	0	1	2	1	1	1	1	0	0	0	0	0	A	0	0	0.4	1.5	
22-Jan	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	2	0	0	0	0	A	0	0	0	0.4	2.4	
23-Jan	0	0	0	0	0	0	0	2	0	1	6	6	7	6	5	3	2	1	0	A	0	1	0	0	1.8	6.8	
24-Jan	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0.5	1.4	
25-Jan	0	0	0	0	0	0	0	0	0	0	0	1	1	1	13	1	0	A	0	0	0	0	0	0	0.8	12.6	
26-Jan	0	0	0	0	0	0	0	1	0	1	2	5	3	3	3	4	A	0	0	0	0	0	0	0	1.0	5.2	
27-Jan	0	0	0	0	0	0	0	0	0	2	7	8	3	0	0	A	0	0	0	0	0	0	0	0	1.0	7.5	
28-Jan	0	0	0	0	0	0	0	0	1	1	2	4	3	2	A	3	3	1	0	0	0	0	0	0	1.0	3.8	
29-Jan	0	0	0	0	0	0	0	0	0	0	0	0	1	A	8	0	0	0	0	0	0	0	0	0	0.5	8.1	
30-Jan	0	0	0	0	0	0	0	0	0	0	1	6	A	0	0	0	0	0	0	0	0	0	0	0	0.4	6.4	
31-Jan	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	7	17	0	1.1	16.8	
0.1 0.1 0.1 0.1 0.2 0.2 0.1 0.8 0.2 0.6 1.9 2.9 2.2 2.1 2.4 1.3 0.7 0.5 0.5 0.1 0.1 0.6 0.7 0.1																									Diurnal Average		
0.5 0.5 0.9 0.3 1.0 0.5 0.4 7.2 1.3 1.8 6.8 7.5 8.7 8.6 12.6 4.3 2.7 3.6 5.7 0.5 0.4 6.9 16.8 0.3																									Diurnal Maximum		
C - Calibration P - Power Failure A - Automated Daily Zero Span																											

Hourly Averages for NO at Portable-Spirit River

January 2009



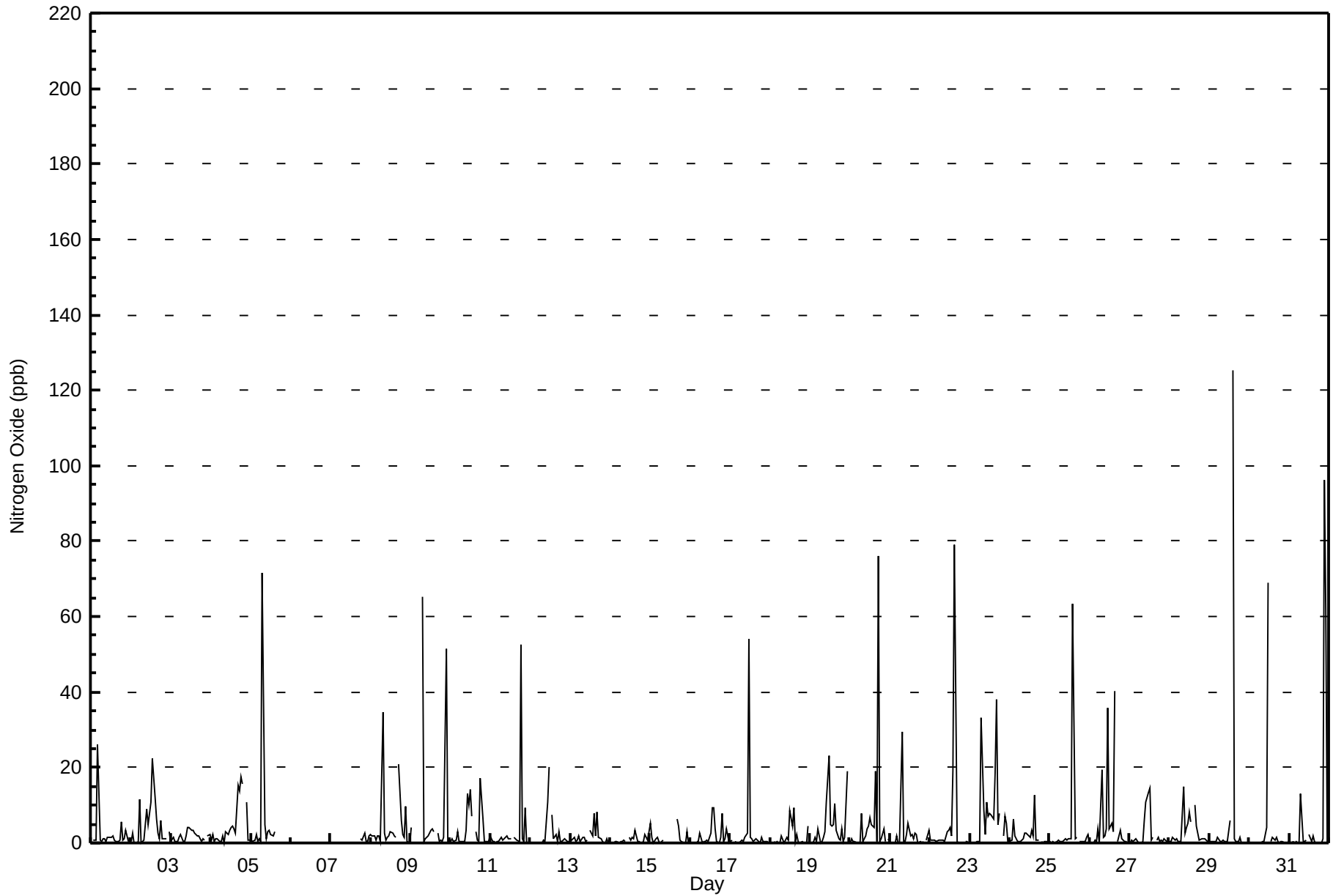
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Nitrogen Oxide (NO) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 125.2 ppb on Jan 29 15:00																				Maximum Daily Average: 7.9 ppb on Jan 31					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 14 00:00																				Minimum Daily Average: 0.8 ppb on Jan 14					Hours of Data: 651	
Maximum Diurnal Average: 11.2 ppb at hour 15																				Minimum Diurnal Average: 0.5 ppb at hour 7					Hours of Missing Data: 93	
Monthly Average: 3.76 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.8 Q ₃ = 2.5 P ₉₀ = 7.7 P ₉₉ = 65.0					Hours of Calibration: 36	
																				Percent Operational Time: 92.3						
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-Jan	A	1	1	1	26	1	0	1	1	0	1	2	1	2	1	1	0	1	6	1	1	3	0	A	2.3	25.9
2-Jan	0	3	0	0	0	12	0	0	1	9	5	8	11	23	12	6	3	1	6	1	1	1	A	3	4.6	22.5
3-Jan	0	1	0	0	0	2	2	0	1	2	4	4	4	3	3	2	2	2	0	1	1	A	2	2	1.7	4.3
4-Jan	1	2	0	1	1	0	0	2	0	3	2	3	4	4	4	3	15	14	17	15	A	11	1	1	4.6	17.4
5-Jan	1	0	1	2	0	1	0	72	5	1	3	3	2	2	3	P	P	P	P	P	P	P	P	P	--	71.6
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	1	1	3	0	0	2	--	2.5
8-Jan	2	2	2	1	2	2	0	35	3	1	1	2	3	3	2	1	A	21	6	2	2	10	0	0	4.4	34.6
9-Jan	4	P	P	P	P	P	P	65	0	1	2	2	3	4	3	A	2	1	1	0	1	51	1	0	--	65.1
10-Jan	1	1	1	1	3	0	0	0	0	3	13	10	14	7	A	3	1	1	17	6	0	0	0	0	3.7	17.0
11-Jan	2	0	0	0	0	0	1	1	1	1	2	1	1	A	2	1	1	0	52	1	0	9	0	0	3.5	52.5
12-Jan	0	0	0	0	0	0	0	0	1	0	11	20	A	8	1	2	0	3	0	0	1	1	0	0	2.2	20.0
13-Jan	0	1	1	0	1	2	0	1	1	0	1	A	3	2	8	2	8	2	1	0	0	0	1	0	1.6	8.1
14-Jan	0	0	0	0	0	0	0	0	1	0	A	1	1	2	1	3	0	0	0	0	0	2	1	3	0.8	3.5
15-Jan	5	2	0	1	1	0	0	0	1	A	C	C	C	C	C	A	6	4	1	0	0	0	3	0	--	6.2
16-Jan	0	0	0	A	0	0	2	0	0	0	1	0	3	9	9	4	0	0	1	8	0	1	4	0	1.9	9.3
17-Jan	0	1	A	0	0	0	0	1	0	2	2	54	1	1	0	1	1	1	0	1	0	1	0	0	3.0	54.0
18-Jan	0	A	0	0	0	0	0	2	0	1	1	1	9	4	9	0	2	0	0	0	0	0	0	5	1.6	9.5
19-Jan	A	0	0	2	0	4	0	0	1	3	11	23	5	5	5	10	3	1	1	4	0	1	19	A	4.5	23.3
20-Jan	0	1	0	0	0	0	0	8	0	2	4	4	7	5	4	19	0	76	0	1	4	0	A	1	6.0	75.9
21-Jan	0	0	0	0	2	0	0	29	0	0	2	5	2	2	1	2	2	0	0	0	0	A	1	3	2.4	29.3
22-Jan	1	1	1	1	0	1	1	1	1	0	3	4	4	2	20	79	0	0	0	0	A	0	0	0	5.2	79.2
23-Jan	0	0	0	0	0	0	0	33	9	2	11	7	8	8	6	18	38	5	8	A	2	7	5	0	7.4	38.0
24-Jan	0	1	6	2	1	0	0	1	1	3	3	2	2	3	2	13	1	1	A	0	0	0	0	0	1.9	12.9
25-Jan	0	0	0	0	0	1	0	0	0	1	1	1	1	1	63	1	2	A	0	0	0	0	2	2	3.4	63.2
26-Jan	0	0	0	1	0	4	0	19	1	2	4	36	4	5	3	40	A	1	3	1	1	1	0	0	5.5	40.4
27-Jan	0	1	0	1	1	0	0	0	0	6	11	13	15	1	1	A	1	1	0	1	0	1	0	0	2.4	14.6
28-Jan	0	0	1	1	1	0	0	0	15	3	4	5	8	5	A	10	4	3	1	1	1	1	1	0	2.9	14.8
29-Jan	0	0	0	0	0	1	0	0	1	0	0	0	6	A	125	1	0	0	1	0	0	0	0	0	6.1	125.2
30-Jan	0	0	0	0	0	0	0	0	0	0	4	69	A	0	2	1	1	0	0	0	0	0	0	0	3.5	69.1
31-Jan	1	0	0	0	0	0	0	13	0	0	1	A	2	0	2	0	0	0	0	0	1	96	62	0	7.9	96.0
0.7 0.7 0.6 0.6 1.6 1.2 0.5 9.9 1.6 1.7 4.0 10.9 4.7 4.3 11.2 9.1 3.7 5.1 4.5 1.8 0.8 7.4 3.8 1.0																									Diurnal Average	
5.1 2.8 6.5 2.1 25.9 11.6 2.5 71.6 14.8 8.8 13.0 69.1 14.6 22.5 125.2 79.2 38.0 75.9 52.5 15.5 3.8 96.0 61.7 4.6																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

Hourly Maximums for NO at Portable-Spirit River

January 2009

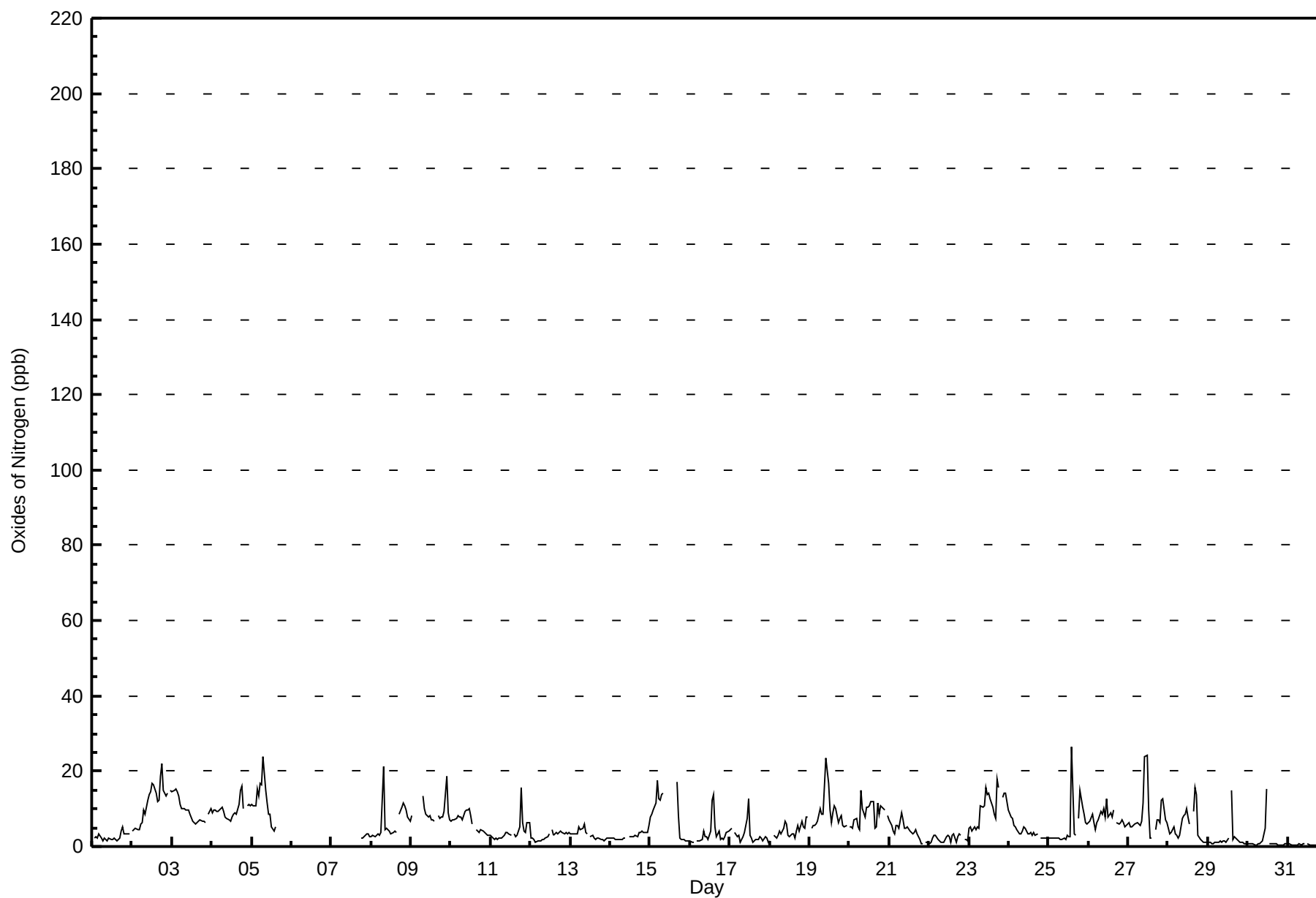


Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - Oxides of Nitrogen (NO_x) - ppb
January 1, 2009 to February 1, 2009

Maximum Value: 32.8 ppb on Jan 31 23:00																				Maximum Daily Average: 11.4 ppb on Jan 2					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 31 16:00																				Minimum Daily Average: 1.5 ppb on Jan 30					Hours of Data: 651	
Maximum Diurnal Average: 8.0 ppb at hour 12																				Minimum Diurnal Average: 4.6 ppb at hour 3					Hours of Missing Data: 93	
Monthly Average: 5.66 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 1.2 Q ₁ = 2.2 Median = 4.2 Q ₃ = 8.0 P ₉₀ = 12.0 P ₉₉ = 22.0					Hours of Calibration: 36	
																				Percent Operational Time: 92.3						
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-Jan	A	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	4	5	3	3	3	3	A	2.5	5.2
2-Jan	4	4	5	4	5	6	6	10	9	12	14	14	17	16	14	12	12	19	22	15	13	14	A	15	11.4	22.0
3-Jan	14	15	15	14	13	11	10	10	10	10	10	9	7	6	6	6	7	7	7	7	6	A	8	10	9.5	15.1
4-Jan	9	10	10	9	9	10	10	9	8	7	7	7	8	9	9	9	11	15	16	10	A	11	11	11	9.8	16.1
5-Jan	11	11	11	15	13	17	16	24	15	11	8	8	5	4	5	P	P	P	P	P	P	P	P	P	--	23.8
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2	2	3	3	3	3	--	3.5
8-Jan	2	3	2	3	3	3	4	21	5	5	4	4	4	4	4	4	A	9	11	12	11	10	8	7	6.2	21.2
9-Jan	8	P	P	P	P	P	P	14	10	9	8	8	7	7	7	A	8	7	8	8	9	19	9	7	--	18.6
10-Jan	7	7	7	7	8	8	8	7	9	10	10	10	8	6	A	4	4	4	4	4	4	3	3	3	6.4	10.2
11-Jan	3	2	2	2	2	2	2	3	3	4	4	3	3	A	3	3	3	5	16	6	4	4	6	6	4.0	15.6
12-Jan	2	2	2	1	1	1	2	2	2	2	3	4	A	4	3	4	3	4	4	4	4	4	4	4	2.8	4.4
13-Jan	3	3	3	3	3	5	5	5	6	4	4	A	3	3	2	2	2	2	2	2	2	2	2	2	3.1	6.1
14-Jan	2	2	2	2	2	2	2	2	2	2	A	3	2	3	3	3	3	4	4	4	4	4	4	5	2.8	5.5
15-Jan	8	9	10	11	18	13	12	14	14	A	C	C	C	C	C	A	17	8	2	2	2	1	2	1	--	17.7
16-Jan	2	1	1	A	2	2	1	2	4	3	3	2	4	12	14	5	2	4	2	2	2	3	4	4	3.5	13.8
17-Jan	4	5	A	4	3	3	1	2	3	4	7	13	3	2	1	2	2	2	3	2	2	2	2	1	3.1	12.7
18-Jan	1	A	3	2	2	3	4	3	5	7	6	3	3	3	3	2	4	6	4	7	5	5	8	8	4.3	8.0
19-Jan	A	5	6	5	6	7	10	9	9	16	23	17	10	6	9	11	10	6	7	8	6	5	6	A	8.9	23.4
20-Jan	5	5	5	7	7	5	4	15	10	8	10	10	11	12	12	5	5	12	9	11	10	10	A	8	8.5	14.8
21-Jan	7	5	4	4	6	6	5	9	7	5	5	5	4	4	3	4	5	3	2	1	1	A	1	1	4.2	8.8
22-Jan	1	1	2	3	3	2	1	1	1	1	3	3	3	1	3	3	1	2	3	3	A	2	2	1	2.1	3.5
23-Jan	5	5	4	5	5	5	5	11	10	11	16	14	14	13	11	9	7	18	16	A	13	14	14	12	10.3	17.7
24-Jan	10	8	7	6	5	4	4	3	4	5	5	3	3	4	3	4	3	4	A	2	2	2	2	2	4.1	9.8
25-Jan	2	2	2	2	2	2	2	2	2	2	2	3	3	3	26	3	3	A	8	15	11	9	6	6	5.1	26.3
26-Jan	6	7	8	7	4	6	7	9	9	10	8	13	8	9	8	10	A	6	6	6	7	6	5	6	7.5	12.8
27-Jan	6	5	5	6	6	6	6	5	7	12	24	24	10	2	2	A	4	7	7	6	12	13	7	6	8.2	24.1
28-Jan	5	3	4	5	3	3	2	3	8	8	9	10	8	6	A	9	16	14	3	2	1	1	1	1	5.4	15.7
29-Jan	1	1	1	1	1	1	1	1	1	2	2	1	2	A	15	2	2	2	1	1	1	1	1	1	1.9	15.0
30-Jan	1	1	1	1	0	0	1	1	1	1	5	15	A	1	1	1	1	1	1	0	0	1	1	1	1.5	15.5
31-Jan	1	1	1	1	1	1	0	1	1	1	1	A	1	0	0	0	0	0	1	1	1	11	33	1	2.4	32.8
4.9 4.7 4.6 5.0 4.9 4.9 4.8 6.9 6.0 6.1 7.4 8.0 5.8 5.5 6.5 4.7 5.4 6.4 6.2 5.2 5.1 6.1 5.8 4.9																									Diurnal Average	
14.5 15.1 15.1 15.3 17.7 16.7 16.5 23.8 14.8 16.0 23.7 24.1 16.8 16.3 26.3 11.8 17.3 18.6 22.0 15.0 13.4 18.6 32.8 14.8																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

Hourly Averages for NO_x at Portable-Spirit River January 2009

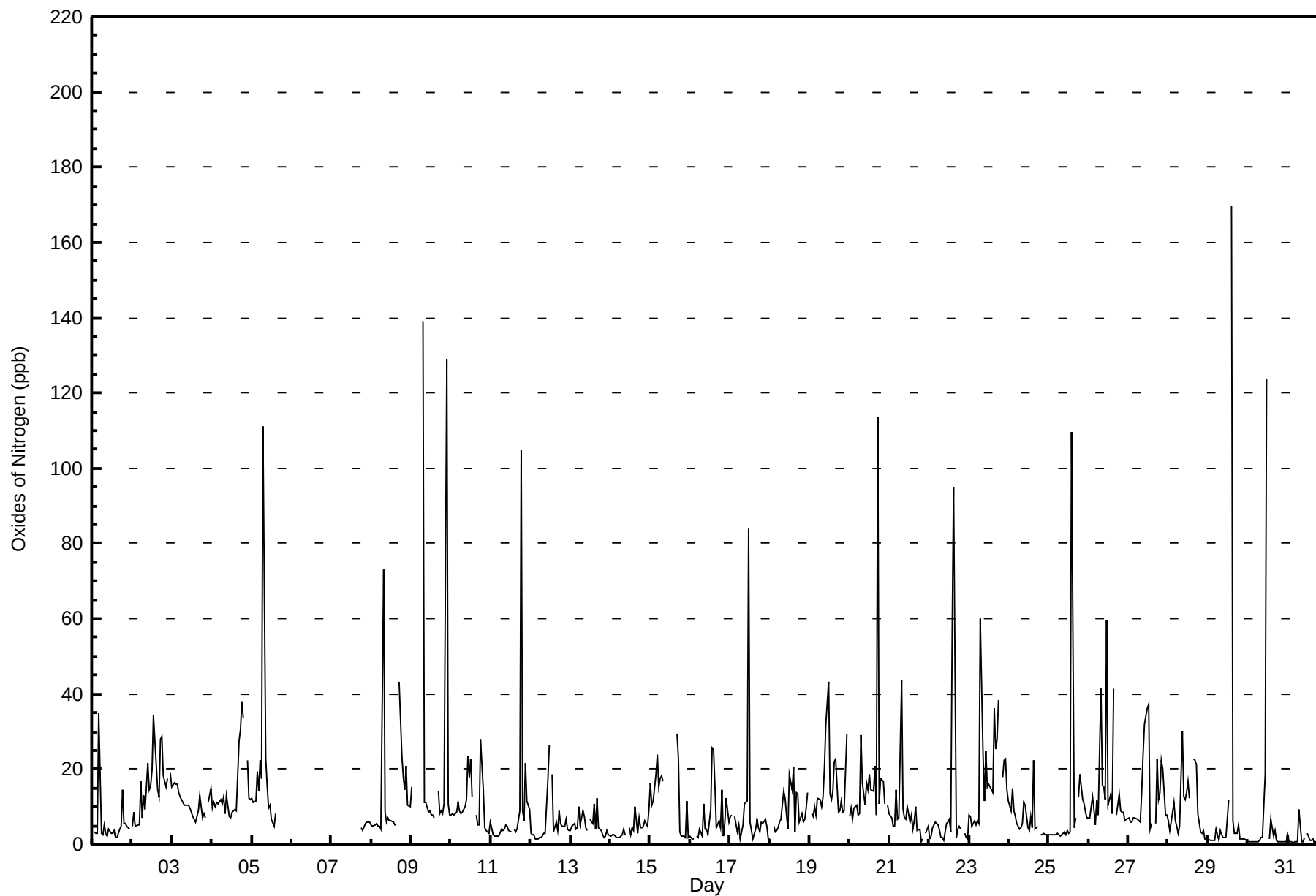


**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Oxides of Nitrogen (NO_x) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 169.6 ppb on Jan 29 15:00																					Maximum Daily Average: 18.7 ppb on Jan 23					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 31 17:00																					Minimum Daily Average: 4.1 ppb on Jan 14					Hours of Data: 651	
Maximum Diurnal Average: 22.0 ppb at hour 8																					Minimum Diurnal Average: 6.0 ppb at hour 7					Hours of Missing Data: 93	
Monthly Average: 11.13 ppb																					Percentiles: P ₁ = 0.7 P ₁₀ = 1.8 Q ₁ = 3.6 Median = 6.7 Q ₃ = 12.1 P ₉₀ = 21.8 P ₉₉ = 111.2					Hours of Calibration: 36	
																					Percent Operational Time: 92.3						
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-Jan	A	3	3	3	35	3	3	5	3	2	4	3	3	4	2	2	4	5	15	6	5	5	4	A	5.5	34.9	
2-Jan	5	9	5	5	5	17	7	13	9	22	15	16	20	34	21	15	13	28	29	18	15	18	A	19	15.5	34.2	
3-Jan	15	16	16	16	14	13	12	11	10	11	10	10	7	7	6	7	9	13	7	8	7	A	11	15	11.0	16.4	
4-Jan	10	11	10	11	11	12	11	13	8	13	7	7	8	9	9	9	28	30	38	34	A	22	12	12	14.6	38.2	
5-Jan	12	11	12	19	14	23	18	111	23	16	10	10	7	5	8	P	P	P	P	P	P	P	P	P	--	111.2	
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--	
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	4	4	6	6	6	6	--	5.9	
8-Jan	5	5	5	6	5	5	4	73	9	6	7	6	6	6	5	5	A	43	23	18	15	21	10	10	13.0	73.1	
9-Jan	15	P	P	P	P	P	P	139	11	11	9	9	8	8	7	A	A	14	8	9	8	11	129	11	8	--	139.0
10-Jan	8	8	8	8	11	9	8	9	10	12	24	18	23	13	A	8	5	5	28	15	5	4	3	3	10.6	28.0	
11-Jan	6	3	2	2	2	2	4	4	4	5	5	4	3	A	4	3	4	9	105	9	6	22	11	9	10.0	104.8	
12-Jan	3	3	3	2	2	2	2	2	3	3	17	27	A	18	4	6	4	9	5	5	5	7	4	4	6.0	26.6	
13-Jan	4	5	5	4	4	10	5	9	8	4	4	A	7	6	11	4	12	5	4	3	2	2	4	3	5.3	12.1	
14-Jan	2	3	2	2	2	2	2	2	4	3	A	4	3	5	4	10	3	7	4	5	5	6	5	9	4.1	9.9	
15-Jan	16	11	11	19	24	15	18	18	17	A	C	C	C	C	C	A	29	23	3	2	2	2	12	2	--	29.4	
16-Jan	2	2	2	A	2	2	4	2	11	4	4	2	9	26	25	16	5	6	4	14	2	6	12	6	7.3	25.7	
17-Jan	8	8	A	8	3	5	1	3	5	11	12	84	6	4	1	4	7	4	4	6	5	7	5	2	8.8	83.9	
18-Jan	2	A	5	3	4	4	6	7	14	12	8	4	18	15	21	3	14	13	6	8	6	7	10	14	8.8	20.6	
19-Jan	A	8	8	10	8	12	12	10	13	20	32	43	14	12	14	22	23	9	9	11	9	9	30	A	15.3	43.1	
20-Jan	7	10	7	10	10	8	8	29	16	10	16	15	19	14	14	21	8	114	11	18	17	11	A	10	17.5	113.7	
21-Jan	8	7	5	5	14	7	7	43	9	7	7	10	6	8	4	6	10	4	4	1	2	A	3	5	7.9	43.5	
22-Jan	2	2	4	5	6	5	4	2	2	1	5	6	7	3	56	95	2	4	5	4	A	3	2	2	9.9	95.1	
23-Jan	8	7	5	6	5	6	5	60	24	12	25	15	16	15	14	36	25	28	39	A	18	22	23	14	18.7	59.9	
24-Jan	12	9	15	9	8	6	4	5	6	11	11	4	4	8	5	22	4	5	A	3	2	3	3	3	6.9	22.3	
25-Jan	2	3	3	3	3	3	3	2	2	3	2	4	3	3	110	5	7	A	13	19	12	11	9	7	10.0	109.6	
26-Jan	7	7	13	9	5	12	8	42	16	15	12	60	10	13	8	41	A	8	13	9	8	8	6	7	14.7	59.6	
27-Jan	7	6	6	7	7	7	6	6	14	24	32	36	37	4	6	A	6	23	12	14	22	20	8	8	13.8	37.3	
28-Jan	6	4	6	11	6	5	3	5	30	13	12	14	17	12	A	23	22	21	8	3	3	4	1	1	10.1	30.2	
29-Jan	2	1	1	1	1	4	1	4	2	2	2	2	12	A	170	6	3	3	5	2	1	1	1	1	9.9	169.6	
30-Jan	1	1	1	1	1	1	1	1	2	2	19	124	A	2	7	2	4	1	1	1	1	1	1	1	7.5	124.0	
31-Jan	2	1	1	1	1	1	1	9	1	1	2	A	3	1	1	1	0	1	1	1	3	115	110	1	11.2	114.8	
6.6 6.0 6.0 6.9 7.6 7.1 6.0 22.0 9.9 9.2 11.5 20.6 10.6 9.7 20.6 15.0 10.2 15.9 14.6 8.8 7.3 17.4 11.7 6.7																									Diurnal Average		
16.4 16.4 15.9 19.3 34.9 22.5 17.7 139.0 30.2 23.7 32.2 124.0 37.3 34.2 169.6 95.1 29.4 113.7 104.8 33.6 22.3 128.9 109.7 18.9																									Diurnal Maximum		
C - Calibration P - Power Failure A - Automated Daily Zero Span																											

Hourly Maximums for NO_x at Portable-Spirit River January 2009

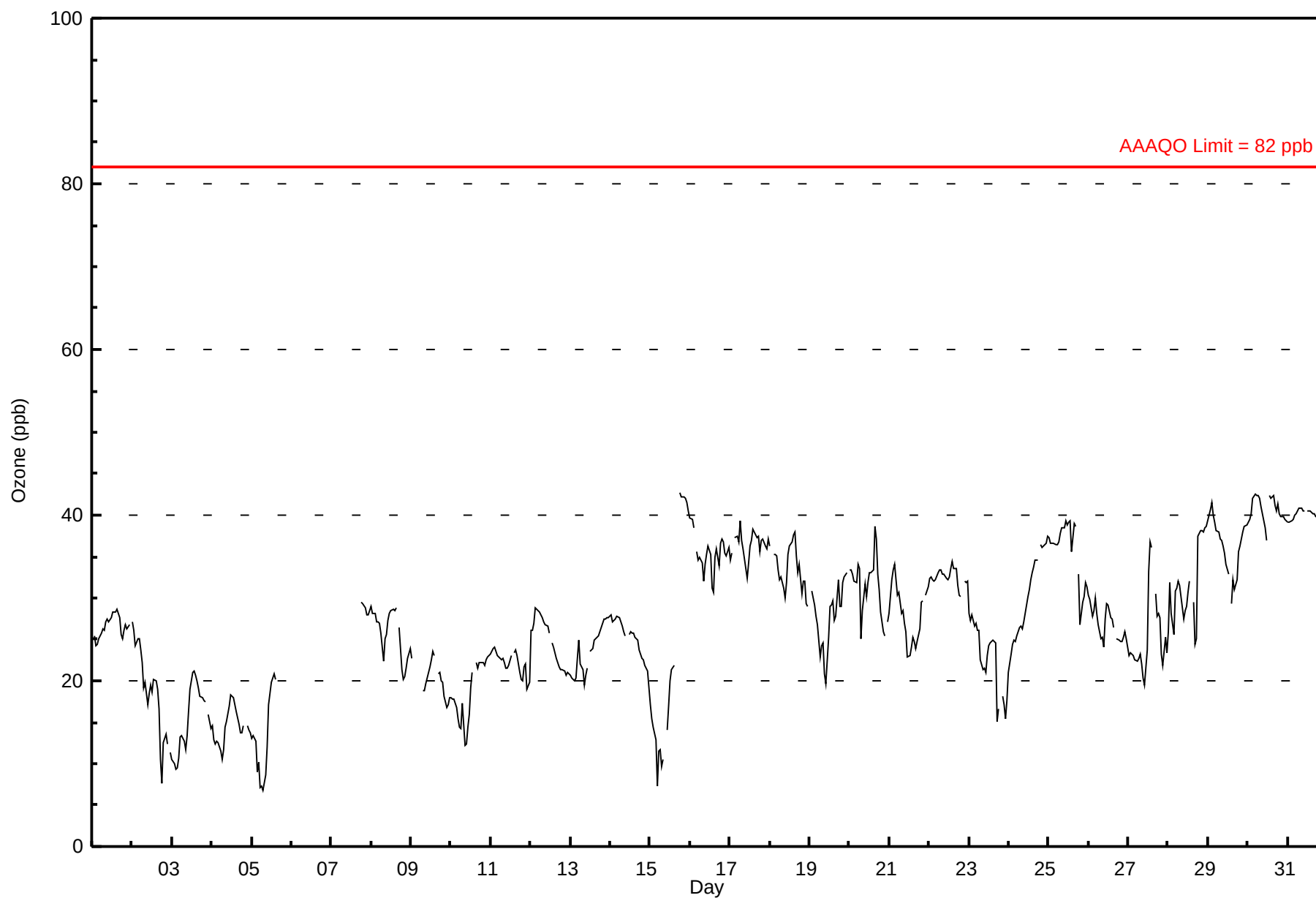


Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 42.7 ppb on Jan 15 19:00 Maximum Daily Average: 40.6 ppb on Jan 30																				Hours in Service: 744 Hours of Data: 654 Hours of Missing Data: 90 Hours of Calibration: 33 Percent Operational Time: 92.3						
Minimum Value: 7 ppb on Jan 5 08:00 Maximum Diurnal Average: 29.4 ppb at hour 16 Monthly Average: 27.35 ppb										Minimum Daily Average: 14.4 ppb on Jan 4 Minimum Diurnal Average: 25.4 ppb at hour 9 Percentiles: P ₁ = 9.0 P ₁₀ = 16.6 Q ₁ = 21.9 Median = 27.2 Q ₃ = 33.5 P ₉₀ = 38.6 P ₉₉ = 42.3																
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-Jan	A	25	24	24	25	26	26	26	27	27	27	28	28	28	28	29	28	26	25	26	27	26	27	A	26.6	28.6
2-Jan	27	26	24	25	25	24	22	19	20	17	19	19	19	20	20	19	17	11	8	12	14	12	A	11	18.7	27.1
3-Jan	11	10	9	10	11	13	13	13	12	13	16	19	21	21	21	20	19	18	18	18	17	A	16	14	15.4	21.1
4-Jan	15	13	12	13	13	12	10	12	14	15	17	18	18	18	17	16	15	14	14	15	A	15	14	14	14.4	18.3
5-Jan	13	13	13	9	10	7	7	7	9	12	17	18	20	21	20	P	P	P	P	P	P	P	P	P	--	20.9
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	29	29	28	28	29	--	29.5
8-Jan	29	28	28	27	27	27	26	22	25	26	27	28	28	29	29	29	A	26	21	20	21	21	23	24	25.7	28.9
9-Jan	23	P	P	P	P	P	P	19	19	20	21	22	23	24	23	A	21	21	20	20	18	17	17	18	--	23.6
10-Jan	18	18	18	17	15	14	14	17	12	12	14	16	19	21	A	22	22	22	22	22	22	22	23	23	18.6	23.1
11-Jan	23	24	24	23	23	23	23	23	22	22	22	22	23	A	23	24	23	21	20	20	22	22	19	20	22.2	24.1
12-Jan	26	26	27	29	29	28	28	28	27	27	27	26	A	25	24	23	22	22	21	21	21	21	21	21	24.7	28.8
13-Jan	21	20	20	20	23	25	22	21	19	21	22	A	24	24	25	25	25	25	26	27	28	27	28	28	23.7	27.7
14-Jan	28	27	27	27	28	28	27	27	26	25	A	26	26	26	26	25	25	24	23	23	23	22	21	19	25.1	27.9
15-Jan	17	15	14	13	7	11	12	10	10	A	14	17	20	21	22	C	C	A	43	42	42	42	42	40	22.8	42.7
16-Jan	40	39	39	A	36	35	35	34	32	34	35	36	35	31	31	35	36	34	37	37	37	35	35	36	35.4	39.6
17-Jan	35	35	A	37	38	37	39	37	36	35	32	34	36	37	38	38	37	37	36	37	37	36	36	37	36.4	39.4
18-Jan	36	A	35	35	35	33	32	32	31	30	32	35	36	37	38	38	35	33	34	31	32	32	29	29	33.6	38.0
19-Jan	A	31	30	29	28	27	23	24	25	21	20	25	29	29	30	27	28	32	29	29	32	33	33	A	27.8	33.1
20-Jan	33	33	33	32	32	34	34	25	29	32	30	32	33	33	33	39	37	33	31	28	26	25	A	27	31.5	38.6
21-Jan	28	32	33	34	32	30	31	28	28	27	26	23	23	24	25	25	24	25	26	29	30	A	30	31	28.1	34.1
22-Jan	32	33	32	32	32	33	33	33	33	33	32	32	33	34	34	34	34	32	30	30	A	32	32	32	32.5	34.3
23-Jan	28	27	28	27	27	26	26	23	21	22	21	23	24	25	25	25	25	15	17	A	18	17	15	18	22.7	28.2
24-Jan	21	23	24	25	25	25	26	27	26	27	28	30	31	32	33	34	35	35	A	37	36	36	37	37	30.0	37.5
25-Jan	37	37	37	37	37	36	37	38	38	39	39	39	39	39	36	39	39	A	33	27	29	30	32	31	35.8	39.4
26-Jan	30	30	28	29	30	28	27	25	25	24	27	29	29	28	27	26	A	25	25	25	25	25	26	25	26.9	30.4
27-Jan	23	23	23	23	23	22	23	23	22	20	20	24	33	37	36	A	31	28	28	28	23	22	25	23	25.4	36.8
28-Jan	26	32	28	26	31	31	32	32	29	28	29	29	31	32	A	29	24	25	37	38	38	38	38	39	31.4	38.7
29-Jan	39	41	42	40	39	38	38	37	37	36	35	34	33	A	29	32	31	32	36	36	37	38	39	39	36.5	41.6
30-Jan	39	40	40	42	43	42	42	42	41	40	38	37	A	42	42	42	41	41	41	40	40	40	39	39	40.6	42.5
31-Jan	39	39	39	40	40	40	41	41	41	40	41	A	41	40	40	40	40	40	40	40	39	36	33	38	39.5	40.8
27.3 27.5 27.1 26.8 27.2 27.1 26.8 25.7 25.4 25.9 26.0 26.7 27.9 28.8 28.7 29.4 28.5 26.7 27.5 28.1 28.2 27.9 28.1 27.5																								Diurnal Average		
39.6 40.8 41.6 42.0 42.5 42.3 42.4 42.0 40.9 40.4 40.5 38.9 40.6 42.4 42.0 42.4 41.1 40.6 42.7 42.3 42.1 42.1 41.6 40.4																								Diurnal Maximum		
C - Calibration P - Power Failure 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 January 2009

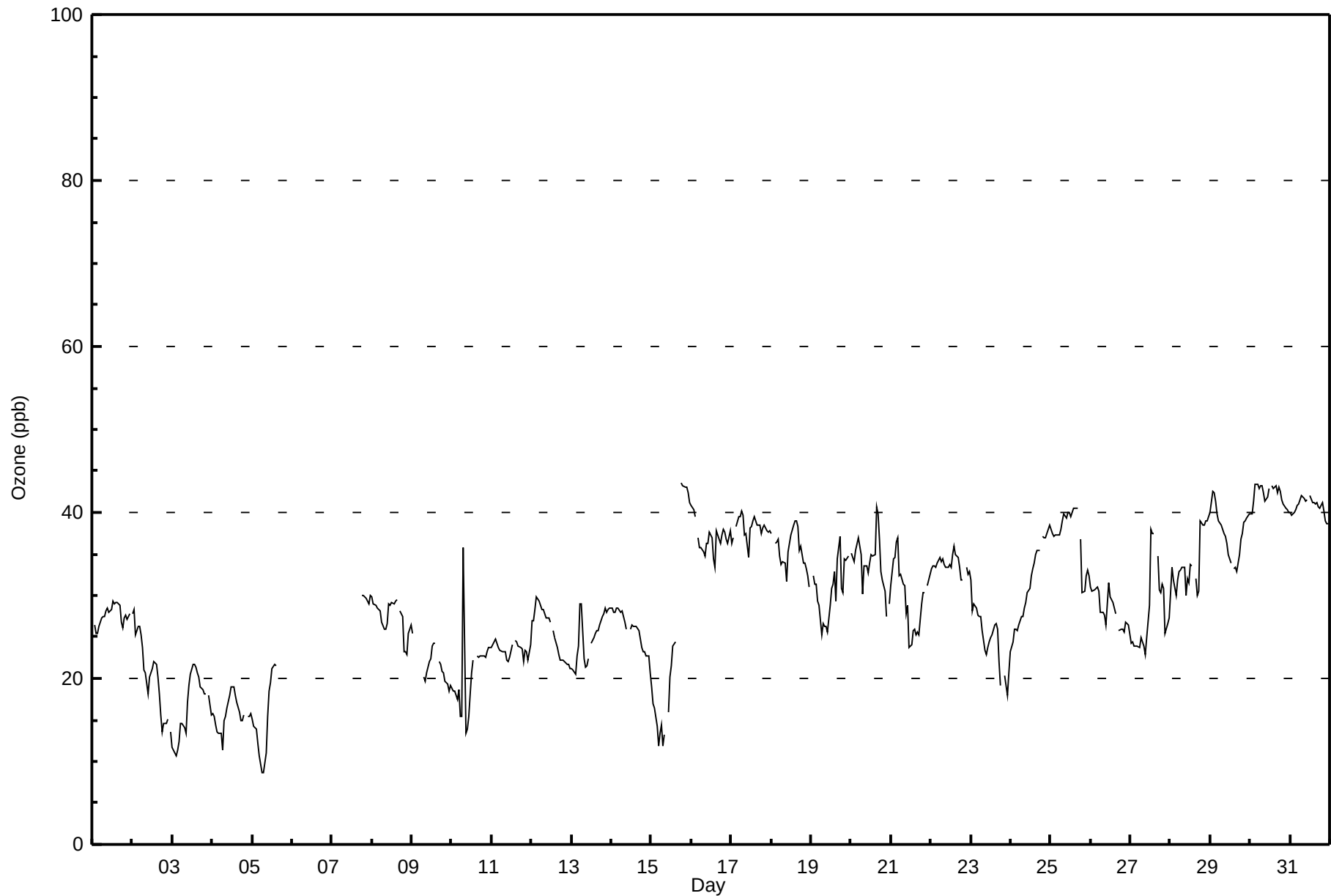


**Peace Airshed Zone Association
Summary of Hourly Maximums**

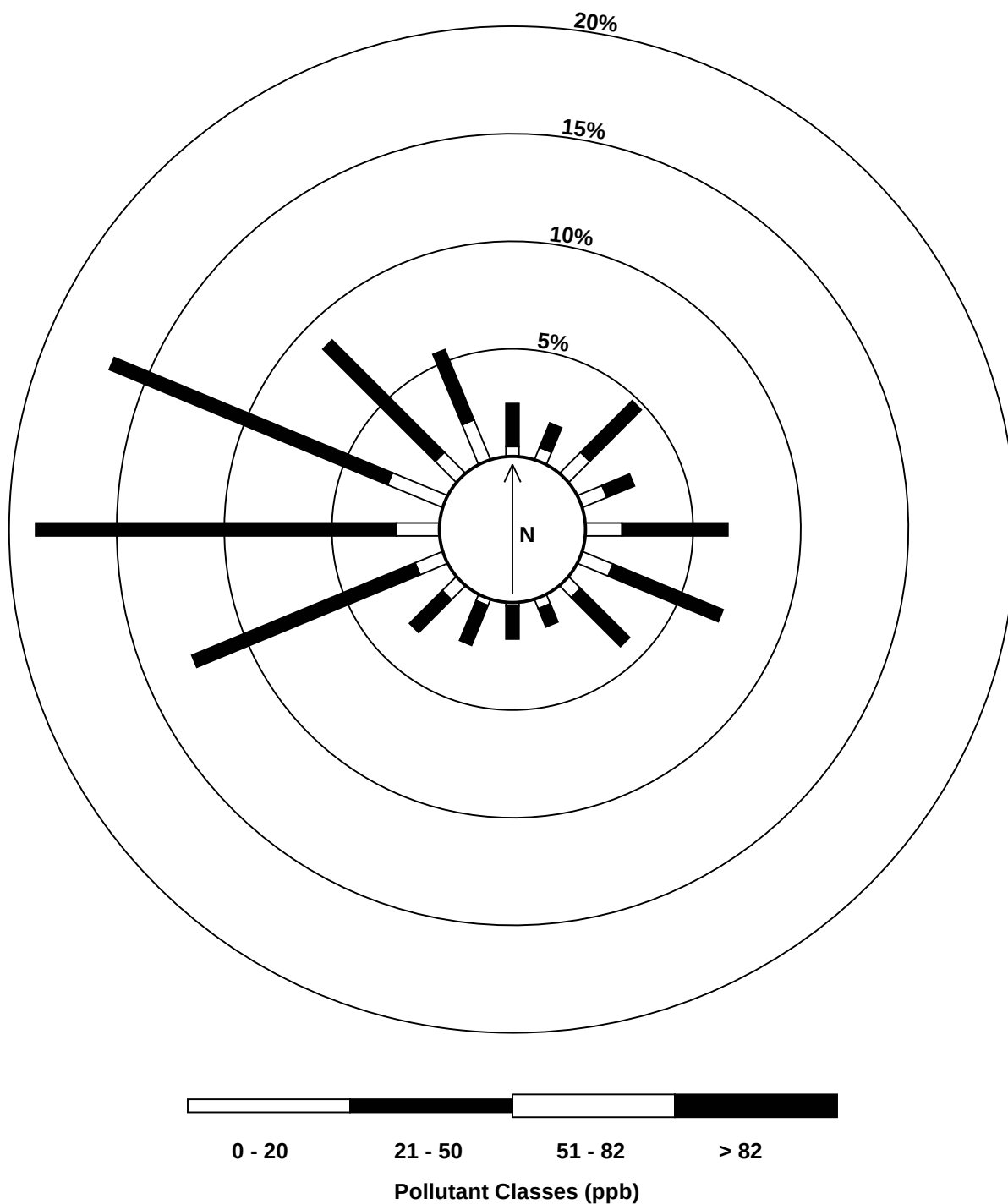
**Portable-Spirit River - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009**

Maximum Value: 43.6 ppb on Jan 15 19:00																				Maximum Daily Average: 42.0 ppb on Jan 30				Hours in Service: 744		
Minimum Value: 9 ppb on Jan 5 07:00																				Minimum Daily Average: 15.7 ppb on Jan 4				Hours of Data: 654		
Maximum Diurnal Average: 30.6 ppb at hour 16																				Minimum Diurnal Average: 27.2 ppb at hour 9				Hours of Missing Data: 90		
Monthly Average: 28.94 ppb																				Percentiles: P ₁ = 11.2 P ₁₀ = 18.1 Q ₁ = 23.3 Median = 28.8 Q ₃ = 35.4 P ₉₀ = 39.8 P ₉₉ = 43.2				Hours of Calibration: 33		
																								Percent Operational Time: 92.3		
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-Jan	A	26	25	25	26	27	27	27	28	28	28	28	29	29	29	29	27	26	27	28	27	28	A		27.6	29.3
2-Jan	28	28	25	26	26	25	24	21	21	18	20	21	21	22	22	20	18	16	14	15	15	A	14		20.6	28.3
3-Jan	12	11	11	11	12	15	15	14	13	17	19	20	22	22	21	21	20	19	19	18	18	A	18	16	16.7	21.7
4-Jan	16	15	14	14	13	13	11	15	15	16	18	19	19	19	18	17	16	15	15	16	A	15	15	16	15.7	19.0
5-Jan	15	14	14	12	11	10	9	9	11	15	19	19	21	22	21	P	P	P	P	P	P	P	P	P	--	21.6
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	30	30	29	29	30	--	30.0
8-Jan	30	29	29	28	28	28	27	26	26	27	29	29	29	29	29	30	A	28	27	23	23	23	25	26	27.4	29.9
9-Jan	25	P	P	P	P	P	P	20	20	21	22	22	24	24	24	A	22	22	21	21	20	19	18	19	--	25.4
10-Jan	19	19	19	17	19	15	15	36	13	14	15	18	21	22	A	23	23	23	23	23	23	23	24	24	20.4	35.7
11-Jan	24	24	25	24	24	23	23	23	23	22	22	23	24	A	25	24	24	24	24	22	23	23	22	24	23.5	24.7
12-Jan	27	27	28	30	29	29	28	28	28	27	27	27	A	26	25	24	23	22	22	22	22	22	22	21	25.5	29.9
13-Jan	21	21	21	23	24	29	29	22	21	22	22	A	24	25	25	26	26	26	27	28	28	28	28	28	25.1	29.1
14-Jan	28	28	28	28	28	28	28	27	27	26	A	26	27	26	26	26	26	25	24	23	23	23	23	21	25.9	28.5
15-Jan	19	17	17	14	12	13	14	12	13	A	16	20	22	24	24	C	C	A	44	43	43	43	42	41	24.7	43.6
16-Jan	41	40	40	A	37	36	36	35	35	36	36	38	37	34	33	38	37	36	37	38	38	37	36	38	36.9	40.9
17-Jan	36	37	A	38	39	40	40	40	37	37	35	38	38	39	39	38	38	38	37	38	38	38	38	38	38.1	40.2
18-Jan	37	A	36	36	37	35	34	34	34	32	35	36	37	39	39	39	38	35	36	34	34	33	32	31	35.4	39.1
19-Jan	A	32	31	31	29	29	25	27	26	26	26	29	31	31	33	29	34	37	31	30	34	34	35	A	30.6	37.0
20-Jan	35	35	34	35	37	36	35	30	34	33	33	34	35	35	35	41	40	37	33	32	30	27	A	29	34.1	40.6
21-Jan	31	34	35	36	37	32	33	31	31	28	29	24	24	26	26	25	26	25	29	30	30	A	31	33	29.9	36.9
22-Jan	33	33	33	33	34	35	34	34	34	33	33	34	33	35	36	35	35	33	32	32	A	33	32	33	33.6	35.9
23-Jan	32	28	29	28	28	27	27	26	23	23	24	24	25	25	27	27	26	22	19	A	20	19	18	21	24.7	31.9
24-Jan	23	24	26	26	26	26	27	27	28	29	30	31	32	33	34	35	35	35	A	37	37	37	38	38	31.2	38.4
25-Jan	38	37	37	37	37	37	38	39	40	39	40	40	40	40	41	40	41	A	37	30	30	32	33	32	37.3	40.5
26-Jan	31	31	31	31	31	31	28	28	28	27	29	32	30	29	28	28	A	26	26	26	26	27	27	26	28.4	31.5
27-Jan	24	24	24	24	24	24	25	24	24	23	25	29	38	37	37	A	35	31	30	31	31	25	27	27	28.0	37.9
28-Jan	30	33	32	30	32	33	33	33	33	30	32	32	34	33	A	32	30	30	39	38	38	39	39	39	33.8	39.5
29-Jan	40	42	42	41	40	39	38	38	37	37	36	35	34	A	33	33	33	35	37	37	39	39	39	40	37.7	42.5
30-Jan	40	40	41	43	43	43	43	43	42	41	42	43	A	43	43	43	42	43	42	42	41	41	40	40	42.0	43.4
31-Jan	40	40	40	40	41	41	41	42	42	41	41	A	42	41	41	41	41	41	41	41	40	39	39	39	40.7	42.1
28.7 28.6 28.4 28.4 28.8 28.6 28.2 28.1 27.2 27.5 28.0 28.5 29.4 30.0 30.2 30.6 30.3 28.9 29.3 29.6 29.7 29.3 29.6 29.0																									Diurnal Average	
40.9 42.5 42.3 43.4 43.4 42.9 43.3 43.2 42.4 41.4 41.9 42.9 42.0 43.2 43.0 43.2 42.5 43.0 43.6 43.3 43.1 43.0 42.4 41.2																									Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

Hourly Maximums for O₃ at Portable-Spirit River January 2009



Pollutant Rose for O₃ at Portable-Spirit River **January 2009**



Peace Airshed Zone Association
Summary of Eight Hour Running Averages

Portable-Spirit River - Ozone (O₃) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 41.9 ppb on Jan 16 00:00																					Hours in Service: 744 Hours of Data: 674 Hours of Missing Data: 70 Hours of Calibration: 7 Percent Operational Time: 91.5				
Minimum Value: 9.2 ppb on Jan 5 10:00 Percentiles: P ₁ = 10.9 P ₁₀ = 16.1 Q ₁ = 22.1 Median = 27.1 Q ₃ = 33.2 P ₉₀ = 38.2 P ₉₉ = 41.2																									
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jan	25	25	25	25	25	25	25	25	26	26	26	27	27	27	28	28	28	28	27	27	27	27	27	26	27.9
2-Jan	26	26	26	26	26	25	25	24	23	22	21	21	20	19	19	19	19	18	17	16	15	14	13	12	26.3
3-Jan	11	11	11	11	11	11	11	11	11	12	13	14	15	16	17	18	19	19	20	19	19	19	18	17	19.6
4-Jan	17	16	15	14	14	13	13	12	12	13	13	14	15	15	16	17	17	17	16	16	15	15	15	14	16.8
5-Jan	14	14	14	13	13	12	11	10	9	9	10	11	12	14	15	17	18	N	N	N	N	N	N	N	18.1
6-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
7-Jan	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	29	28.7
8-Jan	29	29	28	28	28	28	28	27	26	26	26	26	26	27	28	28	28	28	27	26	25	24	23	22	28.7
9-Jan	22	22	22	N	N	N	N	N	N	N	N	N	20	21	21	21	22	22	22	22	21	20	19	19	22.4
10-Jan	19	18	18	18	17	17	17	16	16	15	15	15	15	16	16	17	18	19	21	21	22	22	22	22	22.3
11-Jan	23	23	23	23	23	23	23	23	23	23	23	22	22	22	22	22	23	23	22	22	22	22	21	21	23.3
12-Jan	21	22	23	24	25	25	27	28	28	28	28	27	27	27	26	25	25	24	23	23	22	22	22	21	27.8
13-Jan	21	21	21	21	21	21	21	22	21	21	22	22	22	22	22	23	24	24	25	25	26	26	26	27	26.8
14-Jan	27	27	27	28	28	28	27	27	27	27	27	27	26	26	26	26	26	25	25	25	24	24	23	22	27.6
15-Jan	21	20	19	18	16	15	14	12	12	11	11	12	13	15	16	17	N	N	N	N	N	N	N	42	41.9
16-Jan	42	41	41	41	40	39	38	37	36	35	34	35	35	34	34	34	34	34	34	34	35	35	36	36	41.5
17-Jan	36	36	36	36	36	36	37	37	37	37	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37.2
18-Jan	37	36	36	36	36	35	35	34	34	33	33	33	33	33	34	35	35	35	36	35	35	34	33	32	36.6
19-Jan	31	31	31	30	30	29	28	27	27	26	25	24	24	24	25	26	26	27	29	29	29	30	30	31	31.4
20-Jan	32	32	32	33	33	33	33	32	31	31	31	31	31	31	31	33	34	34	34	33	33	32	31	30	33.8
21-Jan	28	28	29	29	30	31	31	31	31	31	30	28	27	26	26	25	25	24	24	25	26	26	27	28	31.2
22-Jan	29	30	31	31	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	33.2
23-Jan	31	30	30	29	29	28	28	26	26	25	24	24	23	23	23	23	24	23	22	22	21	20	19	18	30.9
24-Jan	17	18	20	20	21	22	23	25	25	26	26	27	28	28	29	30	31	32	33	34	34	35	36	36	36.0
25-Jan	36	37	37	37	37	37	37	37	37	37	38	38	38	39	38	39	39	39	38	36	35	33	33	32	38.6
26-Jan	30	30	30	30	30	30	29	28	28	27	27	27	27	27	27	27	27	28	27	26	26	26	25	25	30.4
27-Jan	25	25	24	24	24	24	23	23	23	22	22	22	23	25	27	27	29	30	31	31	30	28	26	26	31.5
28-Jan	25	26	26	26	27	28	29	30	30	29	30	30	30	30	30	29	29	28	30	31	32	33	34	35	34.8
29-Jan	37	39	39	39	40	40	39	39	39	38	38	37	36	36	35	34	33	32	32	33	33	34	35	36	39.5
30-Jan	37	38	38	39	40	40	41	41	41	42	41	41	40	40	40	40	40	41	41	41	41	41	41	40	41.6
31-Jan	40	40	40	39	39	39	40	40	40	40	40	40	41	41	41	40	40	40	40	40	40	39	39	38	40.6
41.5 41.3 40.7 40.5 39.9 40.4 40.9 41.2 41.5 41.6 41.3 40.7 40.6 40.6 40.6 40.5 40.5 40.5 41.0 41.4 41.3 40.9 40.6 41.9																									
Diurnal Maximums																									
N - Not Valid																									
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb																									

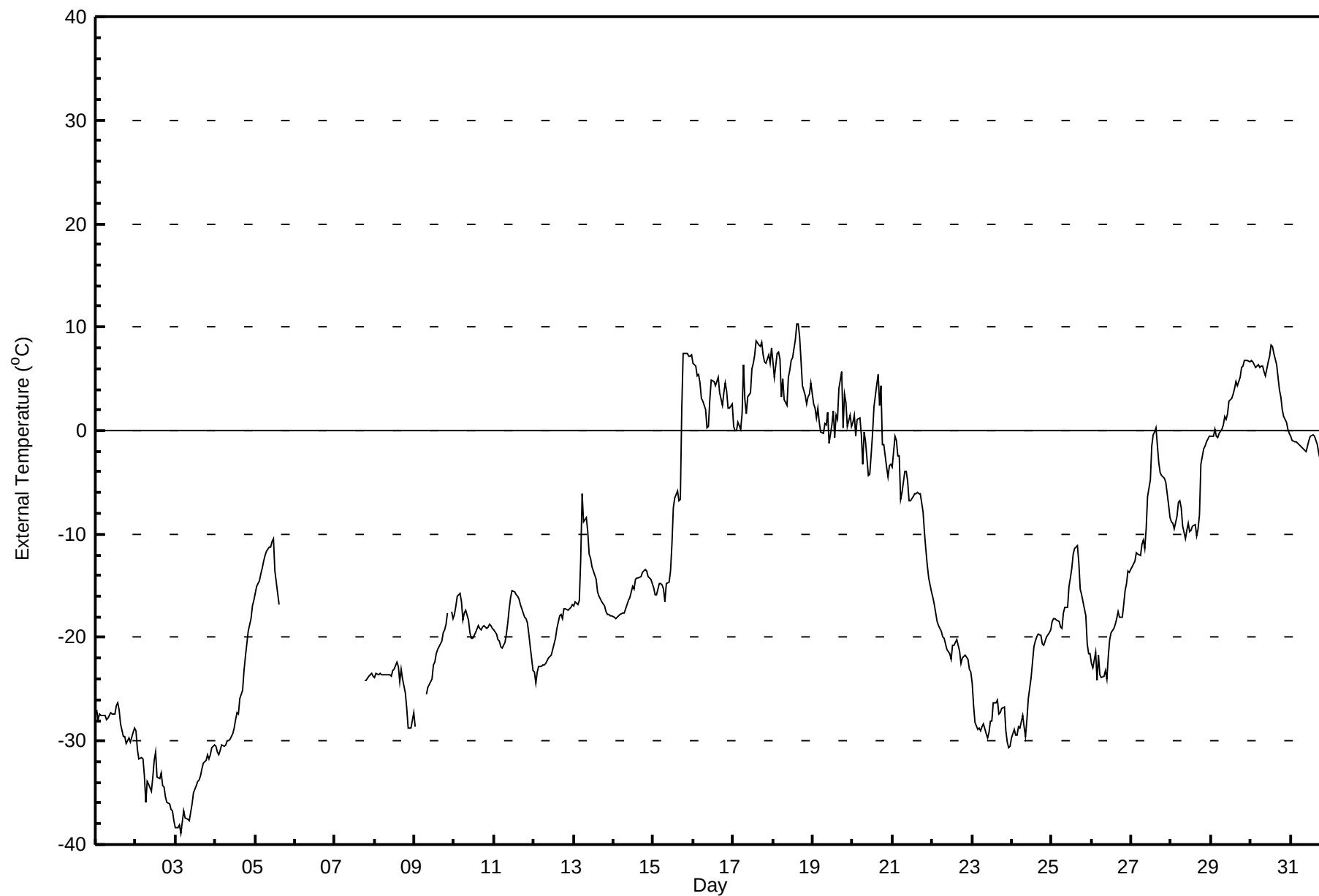
Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - External Temperature (ET) - °C
January 1, 2009 to February 1, 2009

Maximum Value: 10.4 °C on Jan 18 16:00																				Maximum Daily Average: 5.8 °C on Jan 18				Hours in Service: 744		
Minimum Value: -39 °C on Jan 3 04:00																				Minimum Daily Average: -34.9 °C on Jan 3				Hours of Data: 686		
Maximum Diurnal Average: -11.7 °C at hour 16																				Minimum Diurnal Average: -14.7 °C at hour 9				Hours of Missing Data: 58		
Monthly Average: -13.31 °C																				Percentiles: P ₁ = -37.7 P ₁₀ = -29.5 Q ₁ = -22.9 Median = -16.0 Q ₃ = -0.7 P ₉₀ = 4.7 P ₉₉ = 8.2				Hours of Calibration: 0		
																								Percent Operational Time: 92.2		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	-27	-28	-27	-28	-27	-28	-28	-28	-28	-27	-27	-27	-27	-26	-27	-28	-30	-30	-30	-30	-30	-30	-29	-29	-28.1	-26.3
2-Jan	-29	-31	-32	-32	-32	-33	-36	-34	-34	-35	-33	-32	-31	-33	-34	-33	-34	-34	-35	-36	-36	-37	-37	-38	-33.8	-29.0
3-Jan	-38	-38	-38	-39	-38	-37	-37	-38	-38	-37	-36	-35	-34	-34	-34	-33	-33	-32	-32	-31	-32	-31	-31	-30	-34.9	-30.4
4-Jan	-30	-31	-31	-31	-30	-30	-30	-30	-30	-30	-29	-29	-28	-27	-27	-26	-25	-23	-22	-21	-19	-18	-17	-16	-26.4	-16.4
5-Jan	-16	-15	-15	-14	-13	-13	-12	-12	-11	-11	-11	-10	-14	-16	-17	P	P	P	P	P	P	P	P	P	--	-10.4
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	-23.5
8-Jan	-24	-23	-24	-23	-24	-24	-24	-24	-24	-24	-24	-23	-23	-22	-23	-24	-23	-24	-25	-27	-29	-29	-29	-27	-24.5	-22.4
9-Jan	-29	P	P	P	P	P	P	-25	-25	-25	-24	-23	-22	-22	-21	-21	-20	-20	-19	-19	-18	N	-17	-18	--	-17.4
10-Jan	-18	-17	-16	-16	-17	-18	-18	-17	-18	-20	-20	-20	-20	-20	-19	-19	-19	-19	-19	-19	-19	-19	-19	-19	-18.5	-15.7
11-Jan	-19	-20	-20	-20	-21	-21	-20	-20	-19	-17	-16	-15	-16	-16	-16	-16	-17	-18	-18	-18	-19	-20	-21	-23	-18.6	-15.4
12-Jan	-23	-24	-23	-23	-23	-23	-23	-23	-22	-22	-22	-21	-21	-20	-19	-18	-18	-18	-17	-17	-17	-17	-17	-17	-20.3	-16.8
13-Jan	-17	-17	-17	-16	-12	-6	-9	-8	-10	-12	-12	-13	-14	-14	-16	-16	-16	-17	-17	-18	-18	-18	-18	-18	-14.5	-6.1
14-Jan	-18	-18	-18	-18	-18	-18	-18	-17	-17	-16	-16	-15	-15	-14	-14	-14	-14	-14	-13	-13	-14	-14	-14	-15	-15.7	-13.4
15-Jan	-15	-16	-16	-15	-15	-15	-15	-17	-15	-15	-14	-11	-8	-7	-6	-7	-7	2	7	7	7	7	7	7	-6.9	7.5
16-Jan	7	6	5	5	5	3	3	2	0	0	3	5	5	4	5	5	4	2	4	5	4	2	2	3	3.7	6.5
17-Jan	0	0	0	1	0	2	6	3	2	3	4	6	6	7	9	8	8	9	7	7	7	7	7	8	4.9	8.7
18-Jan	7	5	7	8	7	3	5	3	2	5	6	7	7	9	10	10	9	7	4	3	3	3	4	5	5.8	10.4
19-Jan	3	2	1	2	1	0	0	1	1	2	-1	1	2	-1	2	1	4	6	0	4	3	0	1	0	1.4	5.6
20-Jan	1	2	-1	1	1	0	-3	0	-1	-4	-4	-2	0	2	4	5	2	4	-1	-1	-4	-5	-3	-3	-0.4	5.4
21-Jan	-3	-1	-1	-2	-2	-7	-6	-4	-4	-5	-7	-7	-6	-6	-6	-6	-6	-6	-8	-10	-11	-13	-14	-16	-6.6	-0.6
22-Jan	-16	-17	-18	-18	-19	-19	-20	-20	-21	-21	-22	-22	-21	-21	-20	-20	-21	-23	-22	-22	-22	-22	-23	-23	-20.5	-16.2
23-Jan	-24	-27	-28	-29	-29	-29	-29	-28	-29	-30	-29	-28	-28	-26	-26	-26	-27	-27	-27	-27	-29	-30	-31	-30	-28.1	-24.4
24-Jan	-30	-29	-29	-29	-29	-29	-28	-29	-30	-28	-26	-24	-22	-21	-20	-20	-20	-20	-21	-21	-20	-20	-20	-19	-24.2	-19.2
25-Jan	-18	-18	-18	-18	-18	-19	-19	-18	-17	-17	-15	-14	-13	-12	-11	-11	-13	-15	-16	-17	-18	-21	-22	-22	-16.7	-11.1
26-Jan	-23	-23	-21	-24	-22	-24	-24	-24	-23	-24	-22	-20	-20	-19	-19	-18	-17	-18	-18	-17	-16	-15	-14	-14	-19.9	-13.6
27-Jan	-13	-13	-13	-12	-12	-12	-11	-11	-11	-10	-6	-5	-2	0	0	0	-3	-4	-4	-4	-5	-5	-7	-8	-7.1	0.3
28-Jan	-9	-9	-10	-8	-7	-7	-8	-9	-10	-10	-9	-10	-10	-9	-9	-10	-9	-8	-3	-2	-1	-1	-1	-1	-7.1	-0.6
29-Jan	-1	-1	0	0	-1	0	0	1	1	1	2	3	3	3	4	5	4	5	6	6	7	7	7	7	2.9	6.8
30-Jan	7	7	6	6	6	6	6	6	6	5	7	7	8	8	7	6	5	4	3	2	1	1	0	0	5.1	8.3
31-Jan	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-1	0	0	-1	-1	-1	-2	-3	-3	-4	-4	-5	-6	-1.9	-0.5
																									Diurnal Average	
																									Diurnal Maximum	
P - Power Failure N - Not Valid																										

Hourly Averages for External Temperature at Portable-Spirit River

January 2009



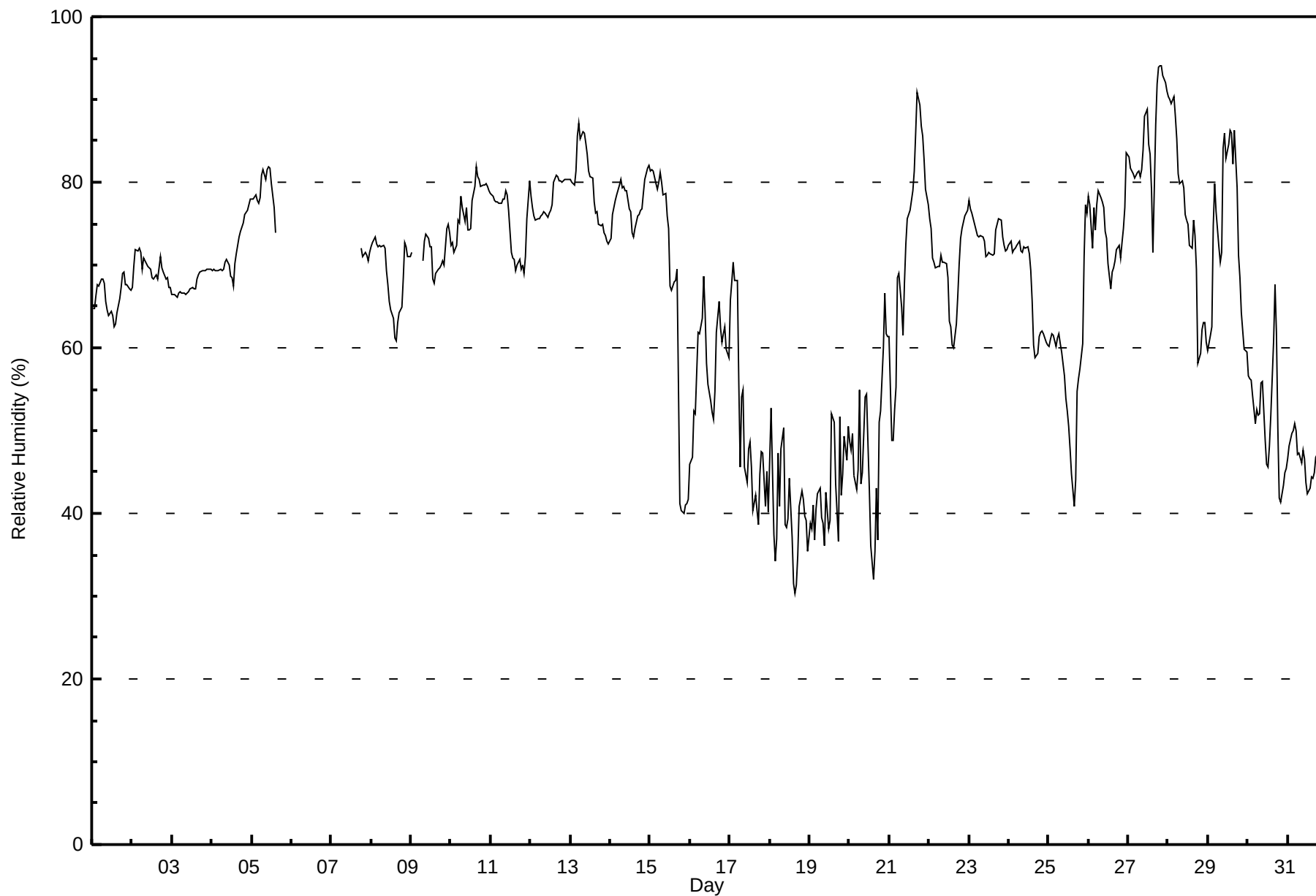
Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - Relative Humidity (RH) - %
January 1, 2009 to February 1, 2009

Maximum Value: 94.1 % on Jan 27 21:00																				Maximum Daily Average: 85.3 % on Jan 27					Hours in Service: 744	
Minimum Value: 30 % on Jan 18 16:00																				Minimum Daily Average: 40.0 % on Jan 18					Hours of Data: 687	
Maximum Diurnal Average: 68.7 % at hour 6																				Minimum Diurnal Average: 63.7 % at hour 16					Hours of Missing Data: 57	
Monthly Average: 66.60 %																				Percentiles: P ₁ = 35.0 P ₁₀ = 44.7 Q ₁ = 59.4 Median = 69.9 Q ₃ = 76.3 P ₉₀ = 80.6 P ₉₉ = 90.7					Hours of Calibration: 0	
																				Percent Operational Time: 92.3						
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-Jan	65	65	66	68	68	68	68	68	66	65	64	64	64	63	63	64	66	67	69	69	68	68	67	67	66.2	69.2
2-Jan	67	70	72	72	72	71	69	71	71	70	70	69	69	68	69	68	70	71	70	69	68	68	67	67	69.5	72.0
3-Jan	66	66	66	66	67	67	67	67	66	67	67	67	67	67	67	68	69	69	69	69	69	69	69	70	67.6	69.5
4-Jan	69	70	69	69	69	70	69	69	70	71	70	69	68	68	70	71	73	74	75	75	76	77	77	78	71.6	77.9
5-Jan	78	78	78	78	78	78	81	82	80	82	82	82	80	77	74	P	P	P	P	P	P	P	P	P	--	81.8
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	72	71	72	71	71	71	--	72.0
8-Jan	72	73	73	73	72	72	72	72	72	69	68	66	65	64	61	61	63	64	65	69	73	72	71	71	68.8	73.3
9-Jan	71	P	P	P	P	P	P	71	73	74	73	72	72	68	68	69	70	70	70	71	70	74	75	74	71.3	74.9
10-Jan	72	73	71	72	75	75	78	77	75	77	74	74	74	78	79	82	81	80	80	80	80	80	79	79	77.0	81.9
11-Jan	79	78	78	78	78	78	77	78	78	79	79	77	72	71	71	69	70	71	70	70	69	71	76	80	74.7	80.2
12-Jan	78	77	76	75	76	76	76	76	76	76	76	76	77	77	80	81	81	80	80	80	80	80	80	80	78.0	80.8
13-Jan	80	80	80	81	86	87	85	86	86	85	83	81	81	81	78	76	76	75	75	75	74	74	73	73	79.6	87.1
14-Jan	73	76	77	78	78	80	80	79	79	79	79	77	76	74	73	74	76	76	77	77	79	80	82	82	77.6	82.0
15-Jan	81	82	81	80	79	80	81	80	78	79	76	74	68	67	68	68	69	56	41	40	40	41	41	42	66.4	81.6
16-Jan	46	47	52	52	57	62	62	64	69	64	58	56	54	52	51	55	62	66	62	61	62	63	60	59	58.0	68.6
17-Jan	66	68	70	68	68	56	46	54	55	46	44	48	49	46	40	42	40	39	45	48	47	41	45	40	50.4	70.4
18-Jan	46	53	37	34	37	47	41	48	50	39	38	39	44	37	31	30	31	35	41	43	42	40	39	35	40.0	52.6
19-Jan	39	38	41	37	40	42	43	39	39	36	43	38	39	52	52	51	44	37	52	42	45	49	46	50	43.1	52.0
20-Jan	49	48	50	45	43	45	55	44	45	54	54	48	43	36	32	35	43	37	51	52	60	67	62	61	48.3	66.6
21-Jan	61	49	49	53	55	69	69	65	61	68	73	76	77	78	79	81	86	91	89	87	86	83	79	77	72.5	90.9
22-Jan	76	74	71	70	70	70	70	71	70	70	70	68	63	63	60	60	63	66	70	73	74	76	76	77	69.7	76.6
23-Jan	78	77	76	75	74	74	73	74	73	73	71	71	72	71	71	71	74	75	76	75	73	72	72	72	73.5	77.9
24-Jan	72	73	72	72	72	72	73	72	71	72	72	72	71	69	66	60	59	59	61	62	62	62	61	60	67.4	72.9
25-Jan	60	61	62	62	60	61	62	60	60	57	54	52	51	48	45	41	44	55	56	57	61	71	77	76	58.0	77.2
26-Jan	78	77	72	77	74	77	79	78	78	77	74	73	70	67	69	70	71	72	72	71	73	74	77	84	74.3	83.6
27-Jan	83	82	81	81	80	81	81	81	82	84	88	89	85	83	79	72	87	92	94	94	94	93	92	91	85.3	94.1
28-Jan	90	90	89	90	88	85	81	80	80	79	76	75	75	72	72	75	74	69	58	59	62	63	63	61	75.4	90.4
29-Jan	60	62	63	75	80	77	72	70	71	84	86	83	85	86	86	82	86	79	71	69	64	62	60	59	73.8	86.4
30-Jan	57	56	56	54	51	53	52	52	56	56	49	46	46	48	52	61	68	62	50	42	41	43	45	45	51.7	67.6
31-Jan	47	48	50	50	51	50	47	47	46	48	47	44	42	43	44	44	45	47	47	47	49	49	51	52	47.3	52.0
67.6 67.4 67.1 67.3 67.8 68.7 68.3 68.1 68.2 68.2 67.4 66.5 65.4 64.6 63.8 63.7 65.7 65.5 65.8 65.4 65.9 66.7 66.7 66.7																									Diurnal Average	
90.4 90.1 89.5 90.4 88.1 87.1 85.2 86.0 85.9 84.8 88.0 88.8 84.6 86.4 86.0 82.2 86.9 91.8 93.9 94.0 94.1 92.8 92.0 91.0																									Diurnal Maximum	
P - Power Failure																										

Hourly Averages for Relative Humidity at Portable-Spirit River

January 2009



Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River
 January 1, 2009 to February 1, 2009
 WS (km/h), WD (deg)

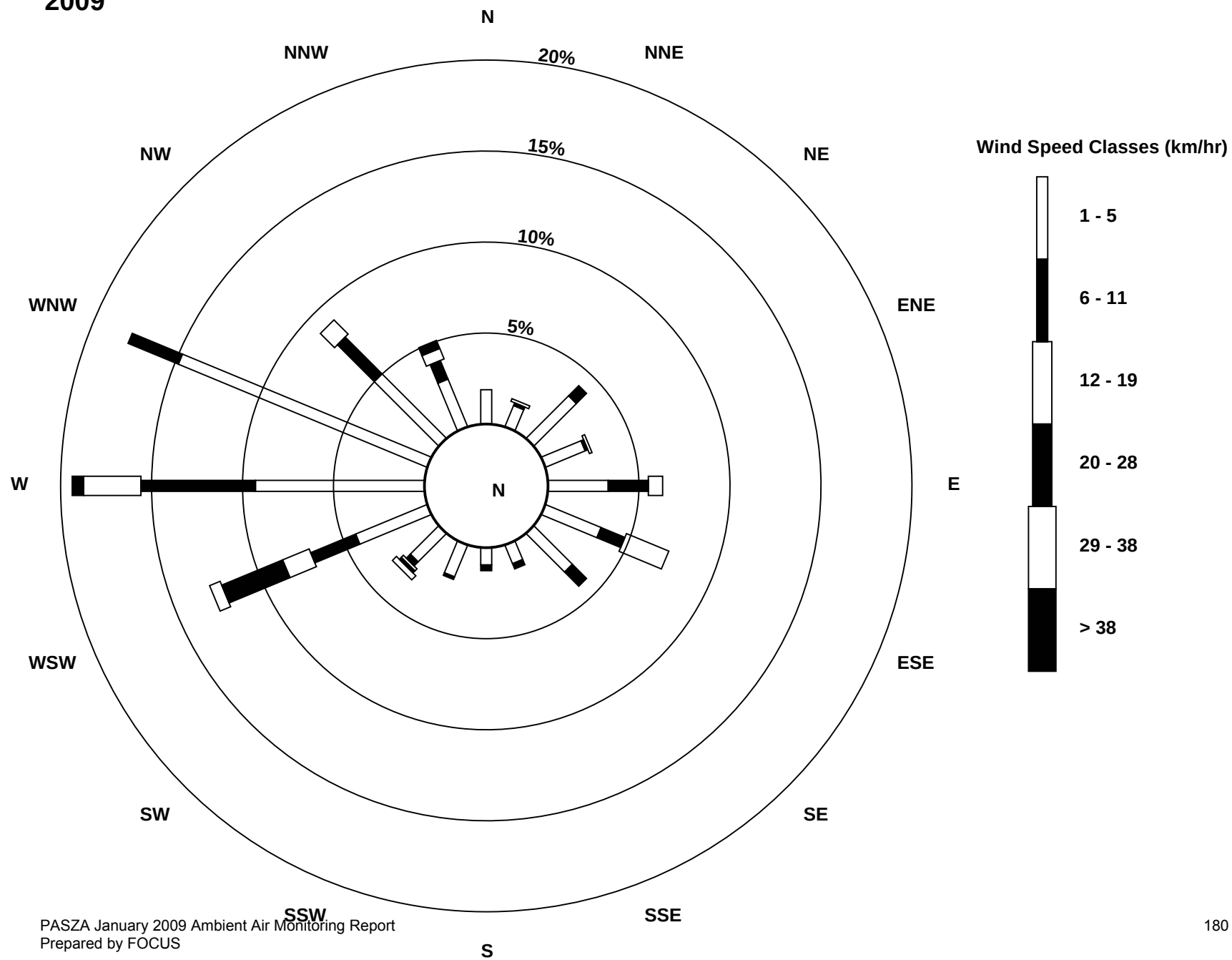
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	3	3	4	4	4	3	3	5	5	4	7	7	4	2	3	4	2	5	3	7	5	4	4	2	3.8	6.7
Dir	289	293	292	293	295	295	298	307	302	290	318	317	310	301	271	268	294	337	299	253	270	283	283	285	294.4	318.0
2 Spd	2	0	3	1	1	3	2	4	4	5	3	1	1	2	2	1	3	3	N	2	1	2	1	3	0.6	4.6
Dir	280	64	133	259	245	298	250	284	277	262	259	287	343	119	93	71	140	155	N	71	45	309	325	332	263.3	261.6
3 Spd	2	2	3	N	3	1	1	2	2	0	2	1	1	1	1	1	2	1	2	0	2	1	2	2	0.9	2.8
Dir	295	297	285	N	292	347	326	244	302	265	251	354	51	346	183	344	123	87	83	22	331	274	292	329	307.0	291.9
4 Spd	0	3	5	3	1	1	0	1	1	3	3	3	3	1	2	0	1	2	2	1	1	1	1	2	0.1	4.6
Dir	340	262	251	259	300	225	181	7	72	92	74	88	77	100	97	40	260	305	264	217	93	214	291	290	251.6	250.7
5 Spd	1	1	2	2	0	1	1	1	1	2	2	6	12	13	6	P	P	P	P	P	P	P	P	P	--	12.9
Dir	243	113	284	330	135	269	55	328	295	294	303	321	329	324	305	P	P	P	P	P	P	P	P	P	--	324.0
6 Spd	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
Dir	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--
7 Spd	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	6	6	2	1	1	4	--	6.0
Dir	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	327	328	314	295	290	327	--	327.6
8 Spd	4	1	2	1	2	2	1	1	2	2	3	3	3	3	3	3	2	2	6	7	5	2	6	4	2.6	7.0
Dir	322	310	323	304	305	311	278	285	283	284	272	273	275	272	280	277	287	285	246	262	258	298	237	219	272.0	261.9
9 Spd	2	P	P	P	P	P	P	1	2	4	2	2	3	3	1	1	1	1	2	1	3	0	7	2	1.3	7.2
Dir	317	P	P	P	P	P	P	117	54	18	18	35	31	340	247	131	293	52	103	46	236	163	34	39	25.1	34.5
10 Spd	1	1	1	2	7	7	6	4	5	4	6	9	11	7	3	4	4	6	6	8	4	5	3	2	3.7	11.0
Dir	338	319	7	57	11	63	38	49	57	108	99	116	117	131	139	119	129	147	134	108	118	105	146	123	99.4	117.1
11 Spd	1	4	5	3	7	7	2	6	11	4	5	12	21	17	14	7	3	3	2	1	1	1	2	6	3.6	21.4
Dir	102	89	90	92	96	101	49	319	321	313	326	336	334	333	330	322	295	286	298	287	313	209	130	115	343.5	333.6
12 Spd	7	4	1	3	4	3	6	7	8	10	9	11	14	13	14	11	8	6	1	4	1	0	1	2	5.4	14.3
Dir	125	93	61	72	86	84	90	92	91	106	114	108	102	103	105	88	44	35	177	18	327	350	179	358	92.4	104.6
13 Spd	3	1	2	12	5	3	3	4	9	13	13	14	11	15	17	14	14	15	18	18	17	14	15	15	9.2	17.9
Dir	342	312	333	19	206	309	79	101	84	93	88	76	90	118	121	113	121	119	106	114	112	115	114	112	103.8	106.3
14 Spd	14	13	14	14	12	10	8	9	8	7	4	1	4	1	2	2	2	1	1	2	3	2	3	4	4.8	13.8
Dir	97	98	108	104	94	83	92	89	82	100	67	50	35	56	127	50	36	103	50	132	70	307	293	261	90.4	104.3
15 Spd	3	3	5	4	2	2	2	1	2	6	5	4	1	2	1	3	5	6	23	20	20	19	15	18	5.2	22.6
Dir	246	312	254	232	268	207	332	258	142	130	114	135	79	201	26	54	165	272	258	257	260	262	263	262	252.7	258.2
16 Spd	19	9	8	9	6	6	7	6	4	5	9	4	2	7	5	3	3	3	6	6	4	3	3	4	4.9	18.7
Dir	258	269	277	271	280	276	276	279	290	274	262	281	353	143	146	291	291	288	280	281	278	275	268	273	270.2	258.3
17 Spd	2	2	5	4	0	3	7	2	2	2	1	5	4	3	5	2	5	7	4	4	5	7	6	10	3.2	9.6
Dir	3	161	217	261	79	351	269	5	105	8	6	290	293	287	280	294	272	302	292	292	292	314	288	274	289.3	274.4
18 Spd	7	4	3	3	3	2	3	4	3	5	2	5	6	4	4	4	3	6	6	2	3	2	2	3	2.7	7.5
Dir	278	282	32	270	293	284	180	285	237	214	198	264	284	312	241	260	248	262	273	281	96	97	178	215	262.1	278.3
19 Spd	6	3	1	4	3	3	3	3	3	3	3	4	6	7	4	2	6	1	1	7	5	2	2	4	1.3	7.2
Dir	248	201	257	277	308	294	233	224	267	146	98	112	35	187	85	126	213	260	245	169	228	327	124	102	196.2	168.6
20 Spd	4	2	3	5	3	3	2	5	6	4	3	2	2	0	2	7	6	8	1	4	3	4	3	1	2.8	7.9
Dir	171	223	265	256	280	274	141	213	254	256	291	153	180	205	210	254	254	246	47	239	313	248	264	270	245.9	246.2
21 Spd	3	4	7	8	4	1	2	3	9	5	11	5	3	8	10	6	6	13	19	27	20	14	11	13	7.4	27.3
Dir	250	236	253	261	334	107	200	207	246	267	334	320	319	323	330	327	310	322	325	349	332	312	307	309	313.9	348.5
22 Spd	13	12	10	7	7	8	9	9	9	11	7	4	4	10	7	2	2	3	3	2	4	5	2	2	6.2	13.0
Dir	310	309	306	302	303	307	309	310	316	324	322	317	318	336	334	298	285	297	282	302	320	332	301	287	313.1	310.4

Peace Airshed Zone Association Summary of Hourly Averages

Portable-Spirit River
January 1, 2009 to February 1, 2009
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	5	9	9	9	6	5	5	5	7	6	1	0	2	0	2	1	6	7	8	7	6	5	3	4	4.7	9.3
Dir	262	257	250	260	265	271	269	266	261	264	263	262	246	146	181	201	224	226	244	246	263	307	294	267	255.8	249.6
24 Spd	5	6	2	2	2	4	4	1	1	3	2	4	5	6	5	5	5	4	3	3	6	7	6	5	4.0	6.8
Dir	264	260	286	279	279	269	279	290	299	321	297	290	285	289	289	286	287	288	292	289	286	286	284	286	284.0	285.6
25 Spd	6	7	7	7	7	5	6	7	4	4	6	7	7	5	5	3	2	4	3	4	2	1	1	1	3.6	7.5
Dir	283	284	288	286	286	288	287	285	284	303	291	289	284	281	284	290	336	129	122	162	34	349	3	138	286.4	283.9
26 Spd	1	6	6	5	2	5	5	4	3	2	2	1	2	1	1	2	1	4	2	1	1	3	1	4	0.7	6.0
Dir	246	276	136	269	250	323	254	316	287	303	254	294	57	69	356	92	103	28	225	295	35	102	13	111	291.6	135.6
27 Spd	2	2	2	2	4	4	2	5	1	3	5	3	1	2	4	2	5	2	1	2	4	1	3	6	0.9	5.9
Dir	41	350	329	7	32	69	46	42	96	202	147	162	245	288	291	353	45	106	116	250	220	37	92	108	65.9	108.2
28 Spd	4	4	4	5	4	7	5	4	6	5	2	2	3	3	3	7	8	2	12	10	13	13	14	11	3.5	13.9
Dir	108	45	304	276	308	261	267	277	263	252	67	77	141	133	115	114	136	131	253	257	254	255	253	246	248.0	253.2
29 Spd	12	14	26	26	20	16	13	7	9	9	7	16	14	5	4	8	7	13	28	20	25	24	25	19	15.1	27.6
Dir	240	249	243	247	255	259	261	269	268	268	264	259	260	278	275	260	260	254	252	253	252	250	245	254	253.7	251.7
30 Spd	31	29	23	19	24	21	22	20	12	10	6	3	36	37	34	30	28	23	20	18	17	21	24	21	21.4	36.8
Dir	241	240	239	236	240	242	236	240	252	246	179	192	242	240	235	228	239	257	266	266	268	260	257	259	244.2	239.7
31 Spd	22	25	28	27	25	22	15	14	17	17	18	14	16	14	14	14	14	11	10	10	9	8	7	7	15.6	27.5
Dir	259	256	255	256	258	259	266	268	263	262	263	270	269	270	273	275	272	275	279	278	276	274	268	264	264.6	255.0
Spd	3.9	3.7	4.2	4.5	3.3	2.9	2.8	2.5	2.5	1.7	1.0	1.2	2.5	2.0	1.7	1.6	2.2	2.5	4.1	3.4	3.8	3.7	3.6	3.2	Diurnal Average	
Dir	258.5	260.2	254.7	264.7	271.0	275.2	266.6	278.0	280.0	264.7	296.1	300.4	292.0	273.9	261.1	254.9	241.3	267.8	266.0	269.5	271.7	272.4	261.7	261.3	Diurnal Maximum	
Spd	30.9	28.7	27.5	27.1	24.5	22.0	21.7	20.1	17.5	17.2	17.7	15.8	35.6	36.8	34.0	29.6	28.4	23.0	27.6	27.3	24.5	23.8	25.2	21.2		
Dir	241.4	240.1	255.0	256.4	257.8	258.8	236.2	239.9	262.9	261.7	262.6	259.2	242.4	239.7	235.0	227.8	238.8	257.4	251.7	348.5	251.7	250.3	245.1	258.5		
Maximum Speed Value: 37 km/h on Jan 30 14:00							Minimum Speed Value: 0 km/h on Jan 2 02:00													Hours in Service:				744		
Maximum Daily Speed Average: 21.4 km/h on Jan 30							Minimum Daily Speed Average: 0.1 km/h on Jan 3													Hours of Data:				685		
Maximum Diurnal Speed Average: 4.5 km/h at hour 4							Minimum Diurnal Speed Average: 1.0 km/h at hour 11													Hours of Missing Data:				59		
Monthly Average Velocity: 2.80 km/h 267.61 deg							Speed Percentiles: P ₁ = 0.4 P ₁₀ = 1.2 Q ₁ = 2.1 Median = 4.0 Q ₃ = 7.2 P ₉₀ = 13.9 P ₉₉ = 28.3													Percent Operational Time:				92.1		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
P - Power Failure N - Not Valid																										
Frequency Distribution																										
Speed Range (km/h)																										
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total													
North	30		1		1		1		0		0		33													
NorthEast	39		6		0		0		0		0		45													
East	49		17		15		0		0		0		81													
SouthEast	37		12		9		0		0		0		58													
South	20		4		0		0		0		0		24													
SouthWest	32		14		1		9		7		0		63													
West	121		81		29		20		0		0		251													
NorthWest	85		29		13		3		0		0		130													
Total	413		164		68		33		7		0		685													

Wind Rose for WS at Portable-Spirit River 2009



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

Portable-Spirit River - Wind Speed (WS) - km/h
January 1, 2009 to February 1, 2009

Maximum Speed: 37 km/h on Jan 30 14:00																			Maximum Daily Speed Average: 22.4 km/h on Jan 30							Hours in Service: 744	
Minimum Speed: 1 km/h on Jan 23 12:00																			Minimum Daily Speed Average: 1.8 km/h on Jan 3							Hours of Data: 685	
Maximum Diurnal Speed Average: 7.6 km/h at hour 4																			Minimum Diurnal Speed Average: 5.5 km/h at hour 8							Hours of Missing Data: 59	
Monthly Average Speed: 6.42 km/h																			Percentiles: P ₁ = 1.0 P ₁₀ = 1.6 Q ₁ = 2.6 Median = 4.4 Q ₃ = 7.5 P ₉₀ = 14.0 P ₉₉ = 28.4							Percent Operational Time: 92.1	
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-Jan	3	3	4	4	4	4	3	5	5	4	7	7	5	2	3	5	2	6	3	7	5	4	4	2	4.2	6.9	
2-Jan	2	4	3	1	2	3	2	4	4	5	3	1	1	2	2	1	3	3	N	2	1	2	1	3	2.5	4.7	
3-Jan	2	3	3	N	3	1	2	2	2	1	2	1	1	1	1	2	2	1	2	1	2	1	2	2	1.8	3.1	
4-Jan	1	3	5	3	2	2	1	1	2	3	3	3	3	2	2	1	2	2	2	2	2	2	2	2	2.1	4.7	
5-Jan	2	1	2	2	1	2	2	2	2	2	3	6	12	13	6	P	P	P	P	P	P	P	P	P	--	12.9	
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--	--	
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	6	6	2	1	2	4	--	6.0	
8-Jan	4	1	2	1	2	2	1	1	2	2	3	3	3	3	3	3	2	2	6	7	5	3	6	5	3.0	7.0	
9-Jan	2	P	P	P	P	P	P	2	2	4	3	2	3	4	2	1	1	1	3	2	3	6	7	3	2.9	7.4	
10-Jan	1	1	2	3	8	8	6	6	5	5	6	9	11	7	3	4	4	6	6	8	4	5	3	2	5.1	11.1	
11-Jan	1	4	5	4	7	7	4	6	11	5	5	12	21	17	14	7	3	3	2	1	2	1	2	6	6.3	21.4	
12-Jan	8	4	1	3	4	3	6	7	8	10	9	12	14	13	14	11	9	6	2	4	2	1	2	3	6.5	14.3	
13-Jan	3	1	2	16	6	4	4	5	9	13	13	14	11	15	17	14	14	15	18	18	17	14	15	15	11.3	18.0	
14-Jan	14	13	14	14	12	10	8	10	8	7	5	2	4	2	2	2	2	1	1	3	5	3	3	4	6.2	13.9	
15-Jan	4	5	5	5	3	2	7	3	3	6	5	5	1	2	2	4	6	9	23	20	20	19	15	19	8.1	22.7	
16-Jan	19	9	8	9	6	6	7	6	4	5	9	4	6	8	5	3	3	3	6	7	4	3	3	4	6.1	18.8	
17-Jan	2	4	6	5	4	4	7	4	3	4	3	5	4	3	5	3	6	8	4	4	5	7	6	10	4.8	9.7	
18-Jan	8	4	3	3	4	3	3	4	4	6	3	5	6	5	4	5	4	6	6	2	4	2	2	4	4.2	7.6	
19-Jan	6	6	2	4	3	3	3	4	4	4	4	5	8	9	10	5	6	4	4	7	6	5	2	5	4.9	10.0	
20-Jan	5	2	3	5	4	5	4	6	6	6	3	2	2	1	2	7	6	8	3	4	4	4	4	2	4.1	8.1	
21-Jan	4	4	7	8	5	3	3	4	9	5	11	5	3	8	10	6	6	13	20	28	20	14	11	13	9.1	27.7	
22-Jan	13	12	10	7	7	8	9	9	9	11	7	4	4	10	7	2	2	3	3	2	4	5	2	2	6.4	13.0	
23-Jan	5	9	9	9	6	5	5	5	7	6	1	1	2	2	2	1	6	7	8	7	6	5	3	4	5.1	9.4	
24-Jan	5	6	2	3	2	4	4	2	1	3	2	4	5	6	5	5	5	4	3	4	6	7	6	5	4.1	6.8	
25-Jan	6	7	7	7	7	5	6	7	5	4	6	7	7	5	5	4	3	4	3	4	3	1	1	2	4.9	7.5	
26-Jan	3	6	8	9	3	5	6	5	4	3	2	2	2	1	2	3	1	5	3	1	3	4	2	5	3.6	8.7	
27-Jan	3	2	3	2	4	5	3	5	2	4	5	3	2	2	4	3	5	2	2	2	4	3	3	6	3.4	6.2	
28-Jan	4	5	6	5	4	7	5	4	6	5	4	3	4	3	4	7	8	3	12	11	13	13	14	11	6.7	13.9	
29-Jan	12	14	26	26	20	16	13	8	9	9	7	16	15	5	4	8	7	13	28	20	25	24	25	19	15.3	27.6	
30-Jan	31	29	23	19	24	21	22	20	12	10	8	7	36	37	34	30	29	23	20	18	17	21	24	21	22.4	36.9	
31-Jan	22	25	28	27	25	22	16	14	18	17	18	14	16	14	14	14	14	11	10	10	9	8	7	7	15.8	27.5	
6.8 6.7 7.1 7.6 6.5 6.1 5.8 5.5 5.7 5.8 5.5 5.6 7.4 6.9 6.6 5.7 5.8 6.1 7.4 7.3 7.0 6.5 6.2 6.6																									Diurnal Average		
30.9 28.7 27.5 27.1 24.6 22.1 21.8 20.1 17.5 17.2 17.8 15.8 35.7 36.9 34.3 29.7 29.5 23.3 27.6 27.7 24.5 23.8 25.2 21.2																									Diurnal Maximum		
P - Power Failure 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
January 1, 2009 to February 1, 2009

Maximum Value: 95.5 deg on Jan 19 03:00																				Hours in Service: 744					
Minimum Value: 1.4 deg on Jan 11 03:00																				Hours of Data: 685					
																				Hours of Missing Data: 59					
Percentiles: P ₁ = 2.4 P ₁₀ = 4.5 Q ₁ = 7.5 Median = 16.6 Q ₃ = 41.3 P ₉₀ = 63.9 P ₉₉ = 86.8																				Hours of Calibration: 0					
																				Percent Operational Time: 92.1					
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jan	11	23	12	15	12	11	8	8	10	12	16	7	9	13	11	10	18	29	16	15	9	11	6	18	28.8
2-Jan	11	87	18	46	60	28	47	8	13	10	12	34	57	30	23	42	11	22	N	32	53	26	55	23	87.1
3-Jan	33	34	16	N	36	80	47	37	37	89	17	54	68	62	62	52	42	45	30	69	34	32	43	29	89.2
4-Jan	83	31	13	24	28	75	90	70	48	19	14	14	56	34	28	85	77	32	29	27	42	39	61	65	89.9
5-Jan	68	51	34	31	82	54	82	60	36	16	11	6	7	3	14	P	P	P	P	P	P	P	P	P	81.9
6-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	--
7-Jan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	6	11	34	36	35	23	36.4
8-Jan	9	18	16	30	25	23	25	20	31	50	12	13	11	13	10	13	20	23	15	7	24	30	7	48	49.5
9-Jan	64	P	P	P	P	P	P	78	33	44	49	41	23	15	70	65	72	72	38	78	28	87	14	49	86.9
10-Jan	45	52	74	71	33	21	22	59	34	36	11	9	5	10	13	17	20	10	15	5	18	17	14	23	73.8
11-Jan	27	2	1	16	11	17	59	8	9	9	10	8	4	4	4	5	25	20	24	47	49	87	42	20	86.7
12-Jan	20	15	45	49	8	12	10	8	9	7	6	6	5	4	5	16	32	22	71	18	41	72	45	30	72.4
13-Jan	25	47	35	61	64	55	57	47	9	4	6	6	13	7	6	6	5	8	6	7	5	5	8	4	64.4
14-Jan	10	9	5	5	6	7	10	16	7	16	21	48	12	57	33	36	47	45	39	49	47	37	31	25	56.5
15-Jan	67	51	23	24	48	59	74	86	33	11	21	39	76	44	69	64	35	70	4	3	3	4	5	7	85.6
16-Jan	3	7	8	11	24	8	7	5	8	9	7	16	82	15	33	23	18	12	6	7	9	69	33	13	82.0
17-Jan	45	70	41	50	82	43	7	53	90	57	63	13	8	11	15	66	38	23	14	14	13	11	10	6	90.4
18-Jan	9	15	50	27	38	59	53	12	44	37	61	17	4	23	30	12	34	13	5	53	63	64	73	43	73.3
19-Jan	20	56	96	16	40	36	29	20	52	22	37	39	64	54	65	59	16	87	80	17	37	85	46	22	95.5
20-Jan	22	42	13	14	24	68	53	31	10	63	42	74	41	88	28	23	22	11	81	19	56	22	23	64	88.1
21-Jan	30	21	14	11	38	78	36	13	15	16	11	8	11	9	5	12	5	4	5	9	14	5	4	3	78.1
22-Jan	3	3	4	4	4	4	2	3	3	3	4	5	6	7	12	12	16	11	10	9	7	12	6	8	16.4
23-Jan	5	5	2	8	4	8	5	4	5	8	30	68	41	84	10	41	6	7	7	9	18	11	22	12	84.2
24-Jan	4	14	17	10	23	8	6	36	32	22	24	13	7	6	6	6	12	16	12	27	6	5	9	11	36.0
25-Jan	7	6	6	5	5	6	5	6	10	13	7	5	5	7	8	11	65	21	15	11	64	62	85	71	84.7
26-Jan	71	21	48	59	47	15	21	27	44	32	33	51	26	77	86	53	72	53	57	50	84	49	76	23	85.8
27-Jan	45	37	46	46	38	34	39	9	53	27	8	16	47	21	20	49	30	19	54	51	34	88	29	21	88.2
28-Jan	26	19	41	23	15	9	9	6	10	22	69	54	37	17	17	20	7	59	5	4	2	3	3	9	68.5
29-Jan	6	5	4	3	4	3	3	7	6	8	8	3	3	11	9	9	9	9	3	3	2	3	4	3	11.4
30-Jan	3	2	3	4	3	5	3	4	8	9	50	65	6	4	8	4	19	9	6	6	5	4	3	4	65.2
31-Jan	3	3	2	3	3	4	5	6	4	4	4	6	5	6	6	6	6	6	6	5	6	6	6	6	6.4
83.5 87.1 95.5 71.1 82.4 79.9 89.9 85.6 90.4 89.2 68.5 73.8 82.0 88.1 85.8 85.3 76.8 87.0 80.8 77.8 84.1 88.2 84.7 71.0																									
P - Power Failure N - Not Valid																									

PASZA

Valleyview Station

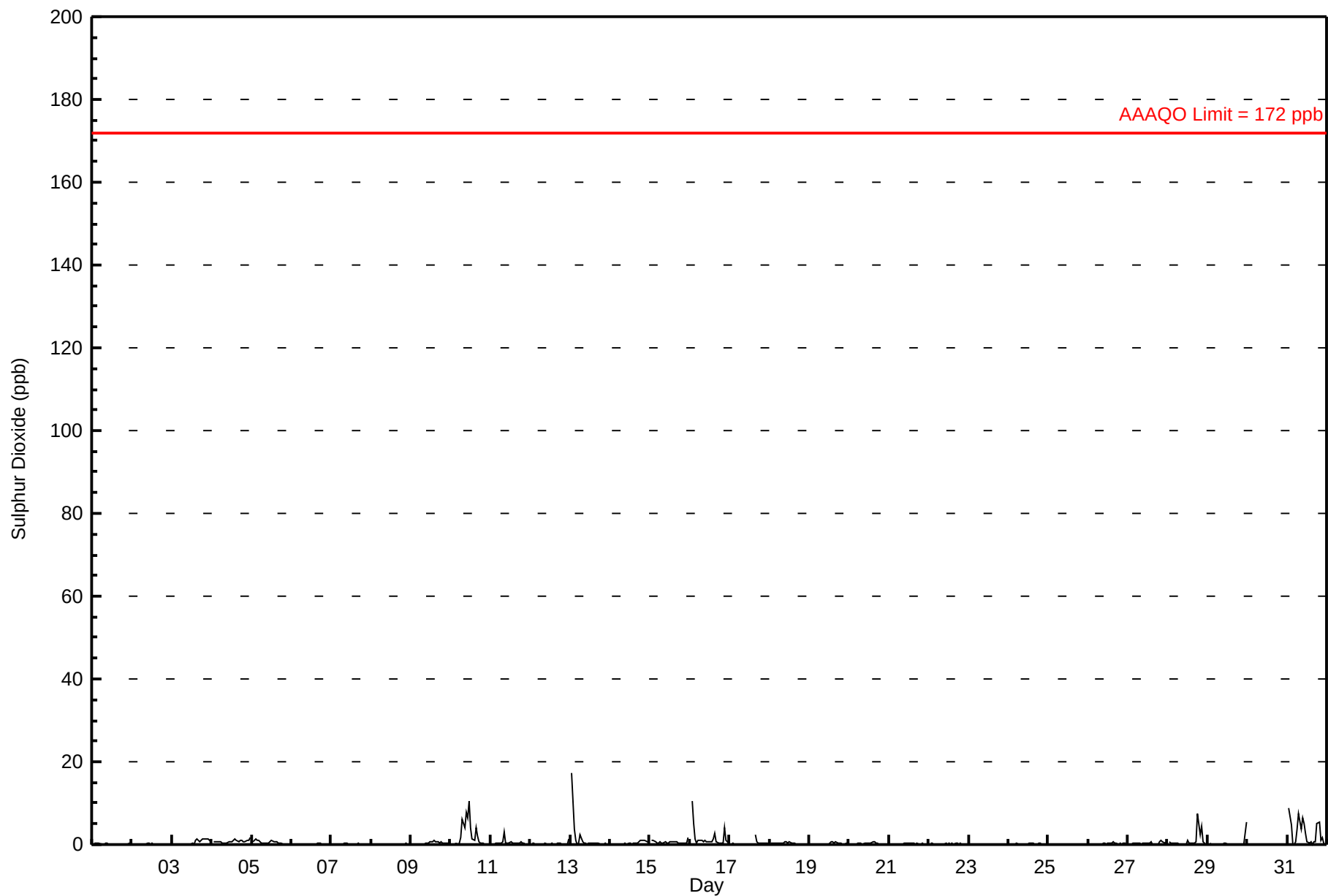
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association
Summary of Hourly Averages

Valleyview - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 17.1 ppb on Jan 13 02:00 Maximum Daily Average: 2.6 ppb on Jan 31																				Hours in Service: 744 Hours of Data: 704 Hours of Missing Data: 40 Hours of Calibration: 34 Percent Operational Time: 99.2						
Minimum Value: 0 ppb on Jan 1 07:00 Maximum Diurnal Average: 1.3 ppb at hour 2 Monthly Average: 0.48 ppb										Minimum Daily Average: 0.0 ppb on Jan 25 Minimum Diurnal Average: 0.1 ppb at hour 5 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.9 P ₉₉ = 7.4																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
2-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
3-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0.5	1.5
4-Jan	A	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.8	1.7
5-Jan	A	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0.4	1.2
6-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
7-Jan	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
8-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
9-Jan	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	0	0	0	0.3	1.0
10-Jan	A	0	0	0	0	0	2	6	4	8	6	11	4	1	1	4	2	1	0	0	0	0	0	0	2.2	10.5
11-Jan	A	0	0	0	0	0	0	1	3	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0.4	3.0
12-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	1.3
13-Jan	A	17	4	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	17.1
14-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.4	1.1
15-Jan	A	1	1	1	0	0	1	0	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0	2	0.6	1.7
16-Jan	A	10	5	1	0	1	1	1	1	1	1	1	1	1	1	3	1	0	0	0	0	4	1	0	1.6	10.3
17-Jan	A	0	0	0	0	0	0	0	0	0	0	0	C	C	C	2	1	0	0	0	0	0	0	0	0.3	2.5
18-Jan	A	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
19-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0.2	0.7
20-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.2	0.5
21-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
22-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
23-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
24-Jan	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
25-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
26-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.7
27-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0.3	0.9
28-Jan	A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	7	2	4	1	0	0	0.9	7.4
29-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0.3	5.5
30-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	P	P	P	P	P	--	0.0
31-Jan	A	9	5	0	0	1	4	8	4	7	5	3	1	0	1	0	1	1	5	5	1	2	0	0	2.6	8.7
--	1.3	0.6	0.2	0.1	0.2	0.4	0.6	0.5	0.7	0.5	0.6	0.5	0.3	0.4	0.6	0.4	0.3	0.6	0.5	0.4	0.4	0.2	0.5	Diurnal Average		
--	17.1	5.2	1.3	0.9	1.0	3.8	7.6	3.9	7.8	6.5	10.5	4.0	1.3	1.3	4.1	2.0	0.9	7.4	5.4	4.3	4.0	1.2	5.5	Diurnal Maximum		
C - Calibration P - Power Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																										

Hourly Averages for SO₂ at Valleyview January 2009



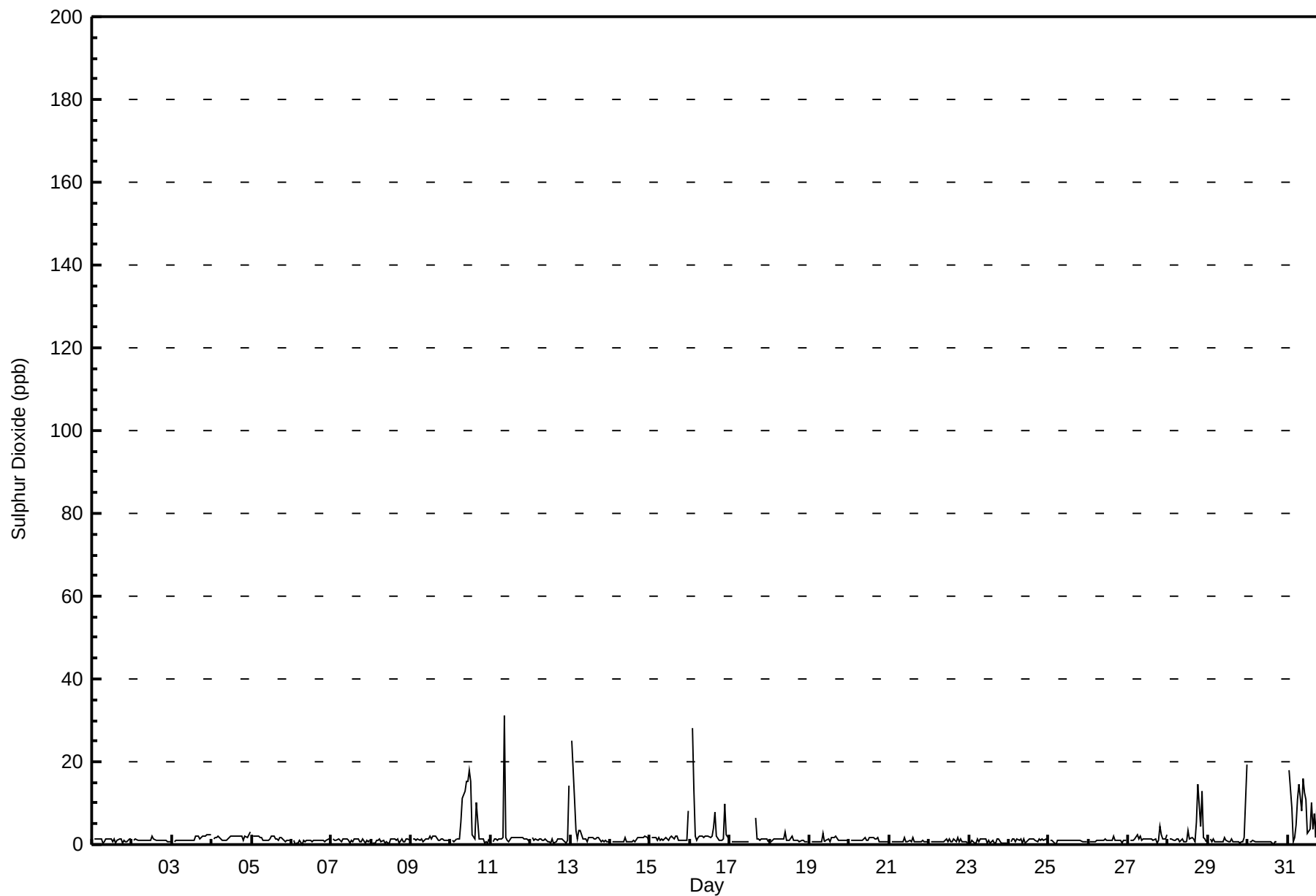
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Valleyview - Sulphur Dioxide (SO₂) - ppb
January 1, 2009 to February 1, 2009**

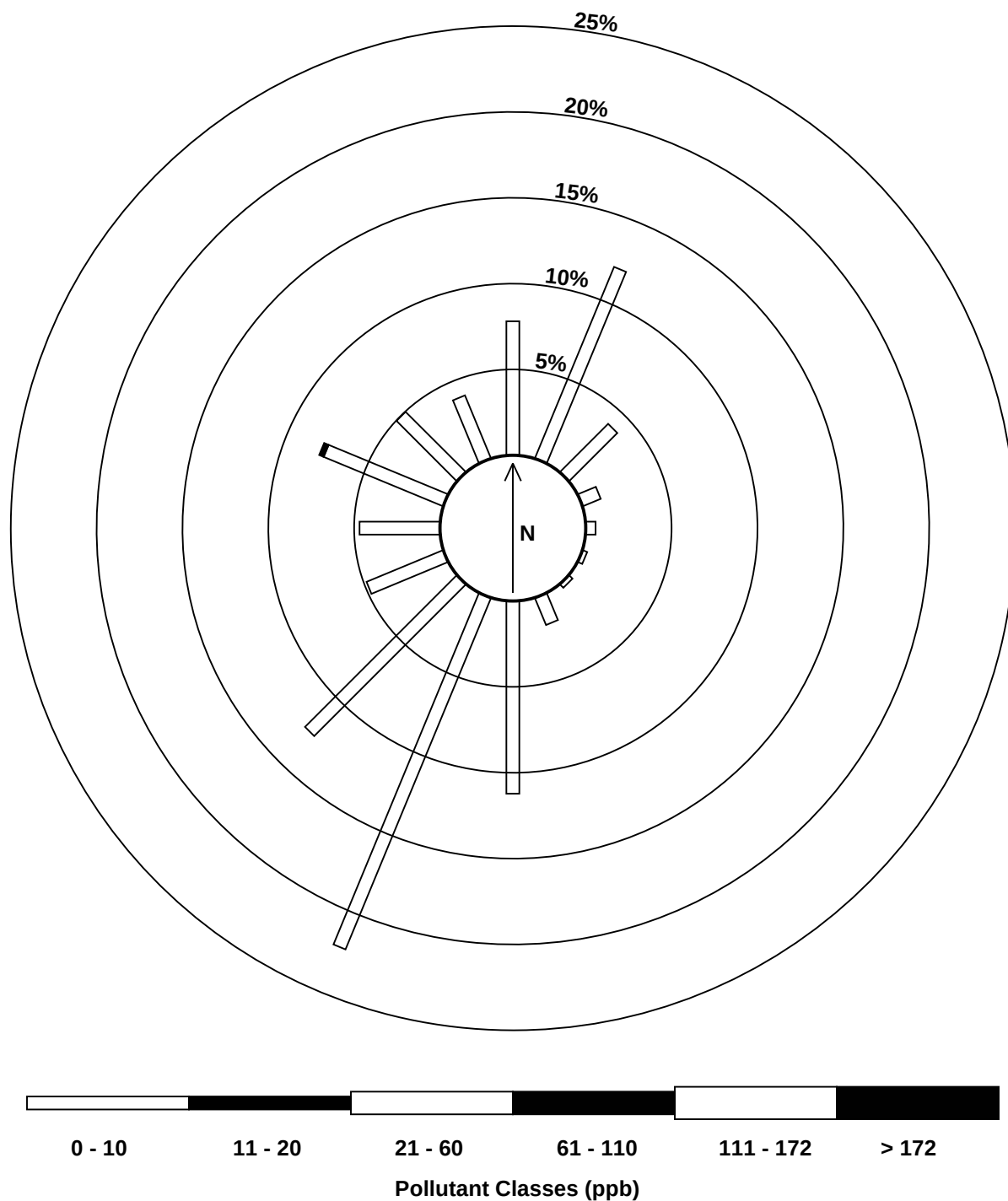
Maximum Value: 31.2 ppb on Jan 11 09:00																				Maximum Daily Average: 7.8 ppb on Jan 31					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 30 16:00																				Minimum Daily Average: 0.8 ppb on Jan 23					Hours of Data: 704	
Maximum Diurnal Average: 3.2 ppb at hour 2																				Minimum Diurnal Average: 1.0 ppb at hour 5					Hours of Missing Data: 40	
Monthly Average: 1.78 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.7 Q ₁ = 0.8 Median = 1.1 Q ₃ = 1.5 P ₉₀ = 2.1 P ₉₉ = 17.9					Hours of Calibration: 34	
																				Percent Operational Time: 99.2						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	A	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1.0	1.3
2-Jan	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0
3-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1.4	2.2
4-Jan	A	1	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	2	2	2	3	1.8	2.9
5-Jan	A	2	2	2	2	2	2	1	1	1	1	1	2	2	1	2	1	2	2	1	1	1	1	1	1.4	1.9
6-Jan	A	1	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
7-Jan	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	0.9	1.2
8-Jan	A	0	0	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	0.8	1.2
9-Jan	A	1	1	1	1	1	1	1	1	1	1	2	1	2	2	2	1	1	1	1	1	1	1	1	1.3	2.2
10-Jan	A	1	1	1	1	1	5	11	13	15	15	18	15	2	2	10	6	1	1	1	0	1	0	1	5.5	17.9
11-Jan	A	1	1	1	1	1	2	2	31	2	1	1	2	2	2	2	2	2	2	2	1	1	2	1	2.6	31.2
12-Jan	A	2	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	1	14	1.6	14.2
13-Jan	A	25	11	3	1	3	3	1	1	1	1	2	2	2	1	1	2	2	1	1	1	1	1	1	3.0	25.1
14-Jan	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1.1	2.1
15-Jan	A	2	2	2	1	2	1	1	1	2	1	1	2	2	1	2	2	1	1	1	1	1	1	8	1.7	8.1
16-Jan	A	28	13	2	1	2	2	2	2	2	2	2	2	2	4	8	2	1	1	1	1	10	3	1	4.1	28.2
17-Jan	A	1	1	1	1	1	1	1	1	1	1	1	C	C	C	6	1	1	1	1	1	1	1	1	1.3	6.4
18-Jan	A	1	1	1	1	1	1	1	1	3	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1.2	3.2
19-Jan	A	1	1	1	1	1	1	1	3	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1.1	2.8
20-Jan	A	1	1	1	1	1	1	1	1	2	1	1	2	2	2	1	1	2	1	1	1	1	1	1	1.1	1.8
21-Jan	A	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0.9	1.8
22-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0.8	1.5
23-Jan	A	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	0	1	1	0	0	0	0	0	0.8	1.4
24-Jan	A	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
25-Jan	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
26-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	0	1	1	1	1.0	2.0
27-Jan	A	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	0	1	4	2	1	1	2	1.5	4.4
28-Jan	A	1	1	1	1	1	1	1	1	1	1	1	4	1	2	2	1	6	15	5	13	2	1	1	2.7	14.7
29-Jan	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	2	19		1.7	19.3
30-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	P	P	P	P	P	P	--	1.1
31-Jan	A	18	9	1	2	5	11	15	8	16	13	11	3	4	10	4	7	2	12	19	3	6	1	1	7.8	18.8
--	3.2	2.0	1.1	1.0	1.4	1.5	1.8	2.6	2.2	1.9	1.9	1.8	1.4	1.7	2.0	1.6	1.3	1.9	1.9	1.5	1.5	1.2	2.3	Diurnal Average		
--	28.2	13.1	3.4	2.2	4.8	10.8	14.7	31.2	15.8	15.3	17.9	15.4	3.8	10.2	10.1	7.4	5.5	14.7	18.8	12.7	9.9	2.5	19.3	Diurnal Maximum		
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

Hourly Maximums for SO₂ at Valleyview

January 2009



Pollutant Rose for SO₂ at Valleyview **January 2009**

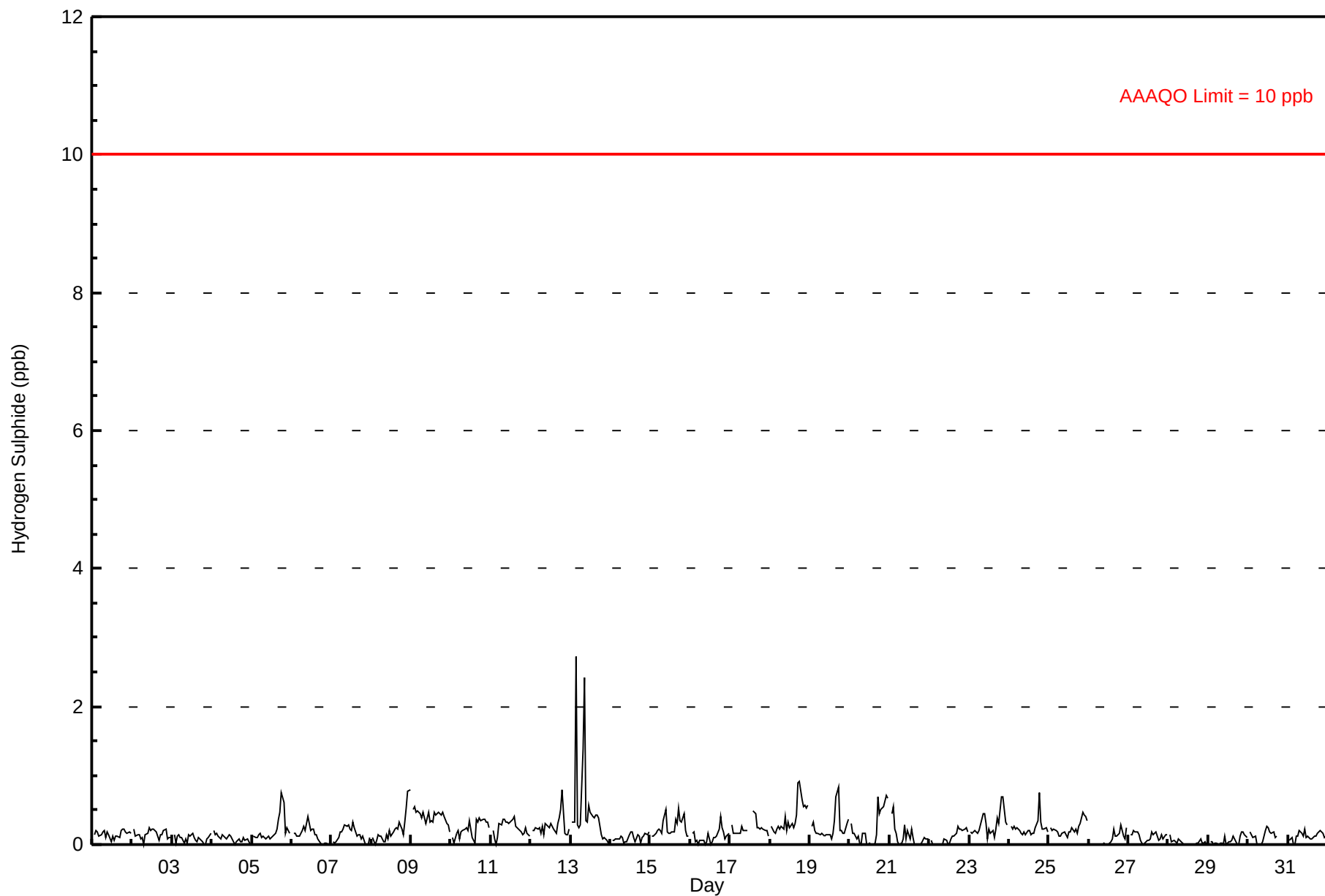


**Peace Airshed Zone Association
Summary of Hourly Averages**

**Valleyview - Hydrogen Sulphide (H₂S) - ppb
January 1, 2009 to February 1, 2009**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.7 ppb on Jan 13 04:00 Maximum Daily Average: 0.5 ppb on Jan 13																				Hours in Service: 744 Hours of Data: 704 Hours of Missing Data: 40 Hours of Calibration: 34 Percent Operational Time: 99.2							
Minimum Value: 0 ppb on Jan 2 08:00 Maximum Diurnal Average: 0.3 ppb at hour 18 Monthly Average: 0.19 ppb										Minimum Daily Average: 0.0 ppb on Jan 28 Minimum Diurnal Average: 0.1 ppb at hour 7 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 0.8																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
2-Jan	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	
3-Jan	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	
4-Jan	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	
5-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.2	0.7	
6-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
7-Jan	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	
8-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.2	0.8	
9-Jan	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
10-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
11-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
12-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.3	0.8	
13-Jan	A	0	0	3	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.7
14-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
15-Jan	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.5	
16-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
17-Jan	A	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
18-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.4	0.9	
19-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.2	0.8	
20-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	0.2	0.7	
21-Jan	A	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	0.5	
22-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
23-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0.3	0.7	
24-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	0.7	
25-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
26-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
27-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
28-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
29-Jan	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	
30-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	P	P	P	P	P	--	0.3	
31-Jan	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	
-- 0.2 0.2 0.2 0.1 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.3 0.3 0.2 0.2 0.2 0.2																									Diurnal Average		
-- 0.5 0.6 2.7 0.5 0.4 0.4 1.4 2.4 0.5 0.5 0.6 0.5 0.4 0.5 0.4 0.7 0.9 0.9 0.8 0.7 0.6 0.8 0.8																									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 H₂S at Valleyview January 2009



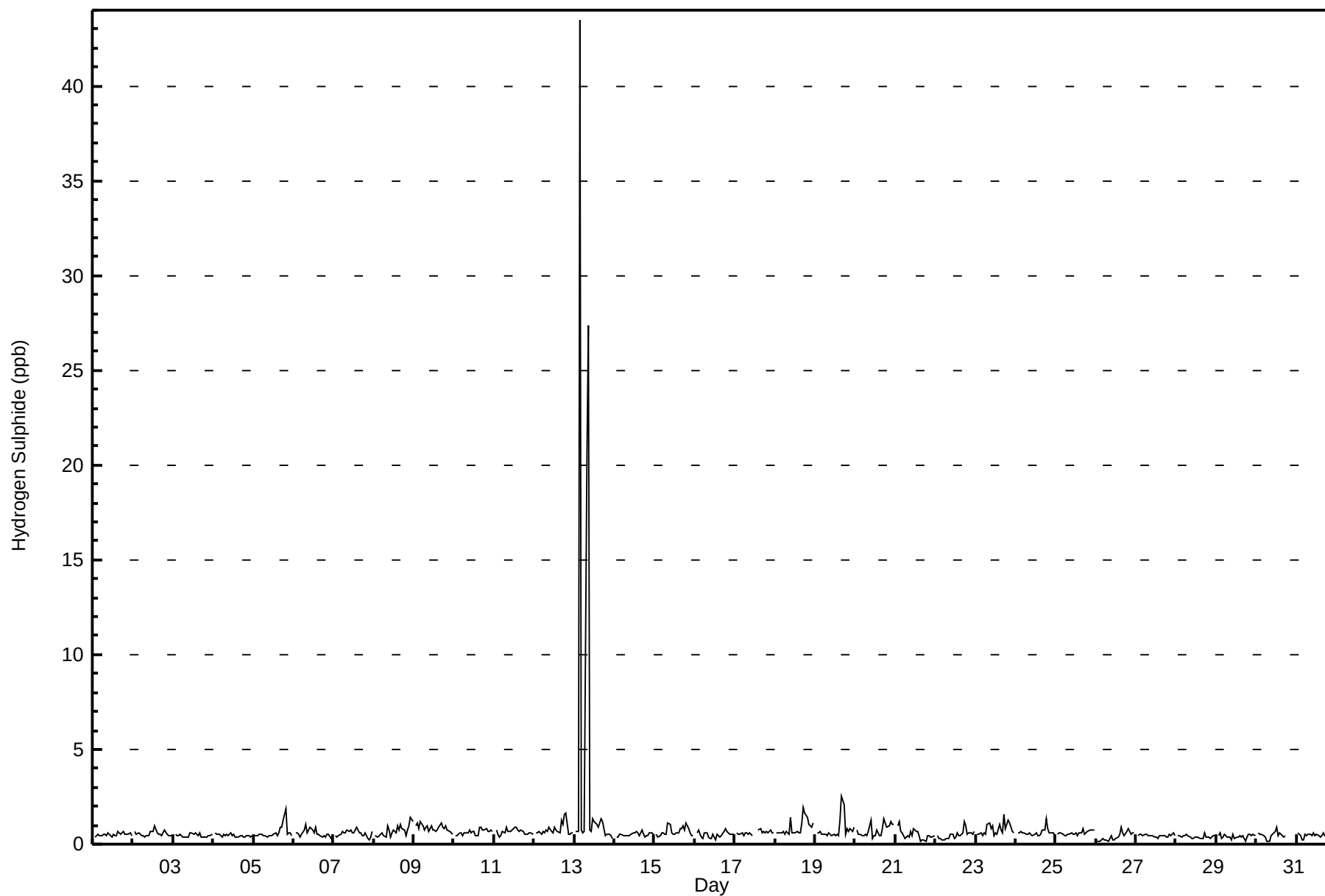
Peace Airshed Zone Association
Summary of Hourly Maximums

Valleyview - Hydrogen Sulphide (H₂S) - ppb
January 1, 2009 to February 1, 2009

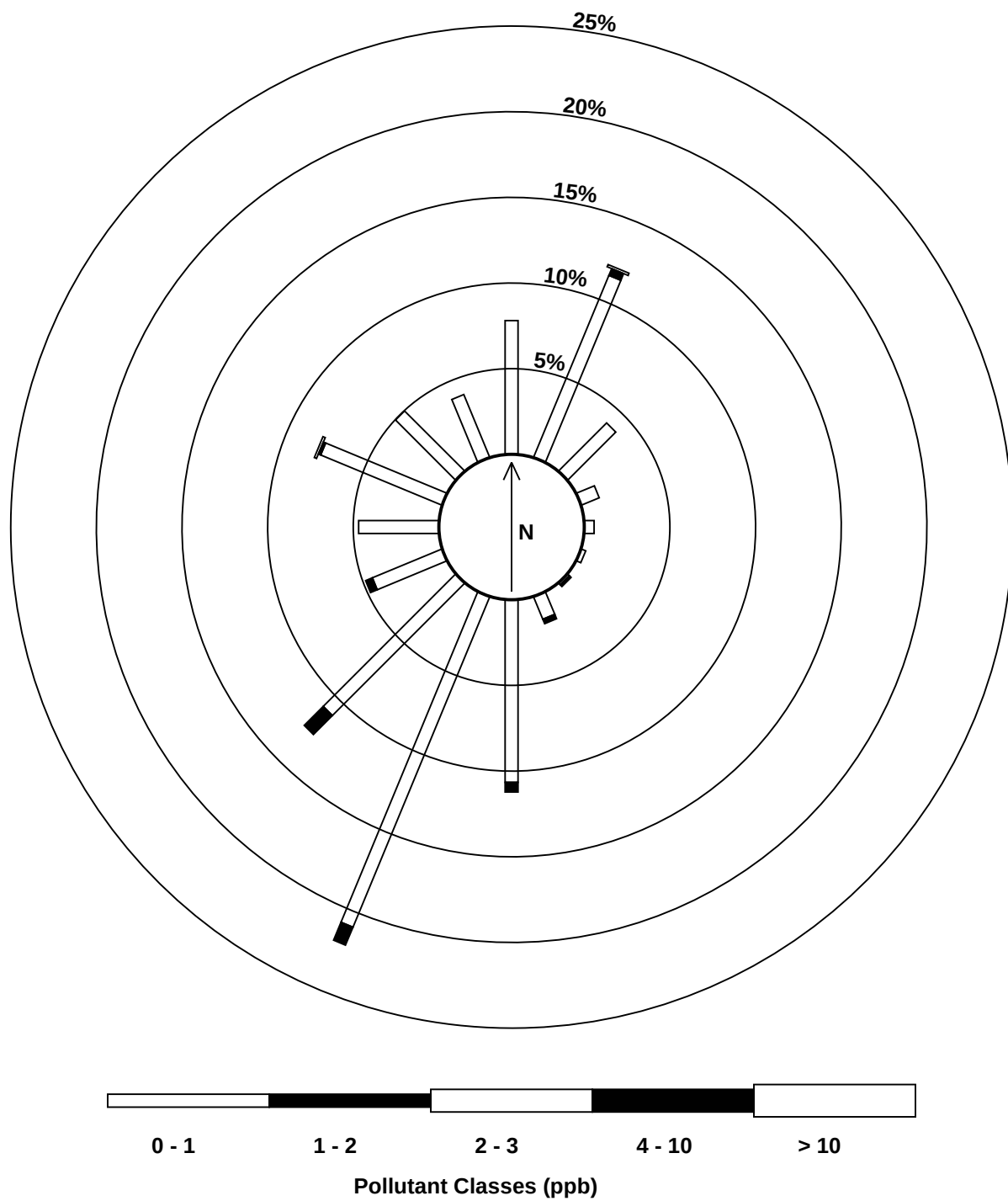
Maximum Value: 43.5 ppb on Jan 13 04:00																				Maximum Daily Average: 4.6 ppb on Jan 13					Hours in Service: 744	
Minimum Value: 0 ppb on Jan 30 07:00																				Minimum Daily Average: 0.4 ppb on Jan 28					Hours of Data: 704	
Maximum Diurnal Average: 1.9 ppb at hour 4																				Minimum Diurnal Average: 0.5 ppb at hour 7					Hours of Missing Data: 40	
Monthly Average: 0.72 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 0.9 P ₉₉ = 1.8					Hours of Calibration: 34	
																				Percent Operational Time: 99.2						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	A	0	0	1	0	0	1	1	0	1	1	0	1	0	0	1	1	1	1	1	1	1	1	0	0.5	0.7
2-Jan	A	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0.6	1.0
3-Jan	A	1	0	0	1	0	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	1	0.5	0.6
4-Jan	A	1	0	1	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.6
5-Jan	A	0	0	0	1	1	0	0	0	0	0	0	1	1	0	1	1	1	1	2	1	1	1	0	0.6	1.9
6-Jan	A	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1	0	0	0.6	1.1
7-Jan	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	1	0.6	0.9
8-Jan	A	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	1.4
9-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
10-Jan	A	0	0	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0.6	0.9
11-Jan	A	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0.6	0.9
12-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	0	1	1	0.8	1.6
13-Jan	A	1	1	43	1	1	1	21	27	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	4.6	43.5
14-Jan	A	0	0	1	0	0	0	0	0	0	1	1	1	1	1	0	1	1	0	0	0	1	1	1	0.5	0.8
15-Jan	A	1	0	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0.7	1.1
16-Jan	A	1	1	1	0	0	1	1	0	0	0	1	0	1	0	0	0	1	1	1	1	1	1	1	0.5	0.8
17-Jan	A	1	1	0	1	0	1	1	1	1	0	C	C	A	1	1	1	1	1	1	1	1	1	1	0.6	0.8
18-Jan	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	0.9	2.0
19-Jan	A	1	1	1	1	0	1	0	1	0	0	1	0	1	0	1	3	2	1	1	1	1	1	1	0.8	2.5
20-Jan	A	1	1	1	0	0	1	0	1	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	0.7	1.3
21-Jan	A	1	1	1	1	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.2
22-Jan	A	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	1	1	1	1	1	1	0.5	1.2
23-Jan	A	1	0	1	0	1	1	1	1	1	1	0	1	1	1	1	1	2	1	1	1	1	1	1	0.8	1.6
24-Jan	A	1	1	1	1	1	0	0	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1	0	0.6	1.3
25-Jan	A	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.6	0.8
26-Jan	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	0.4	0.9
27-Jan	A	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.5	0.6
28-Jan	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.6
29-Jan	A	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0.4	0.6
30-Jan	A	1	1	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	P	P	P	P	P	P	--	0.9
31-Jan	A	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	1	0	0	1	0.5	0.6
--	0.6	0.5	1.9	0.5	0.5	0.5	1.2	1.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6	Diurnal Average	
--	1.0	1.2	43.5	1.2	1.0	0.8	20.6	27.3	1.4	1.0	1.4	1.2	1.1	1.0	1.3	2.5	2.1	1.6	1.9	1.1	1.2	1.4	1.2		Diurnal Maximum	
C - Calibration P - Power Failure A - Automated Daily Zero Span																										

Hourly Maximums for H₂S at Valleyview

January 2009



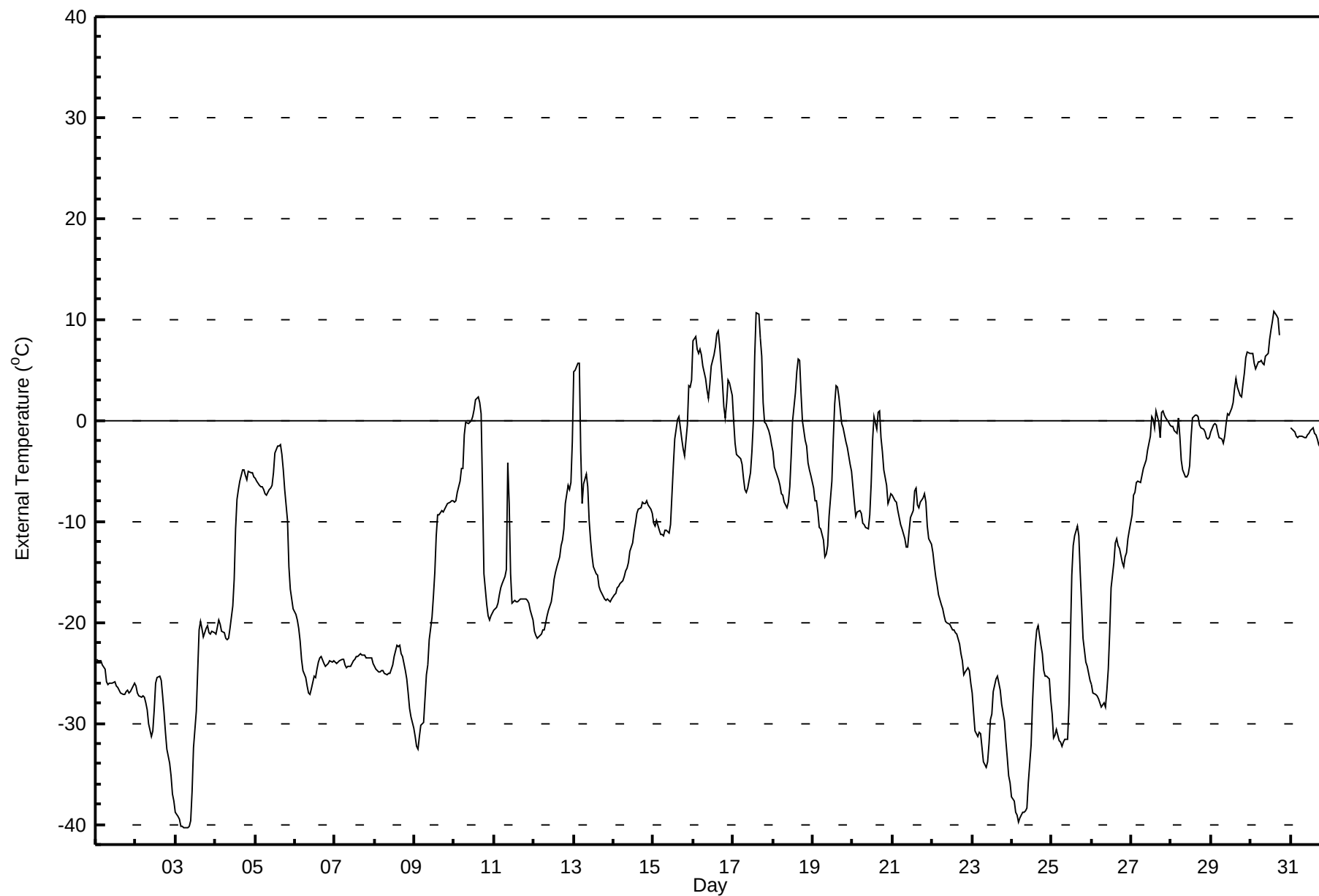
Pollutant Rose for H₂S at Valleyview January 2009



Valleyview - External Temperature (ET) - °C
January 1, 2009 to February 1, 2009

194 of 280

Hourly Averages for External Temperature at Valleyview January 2009



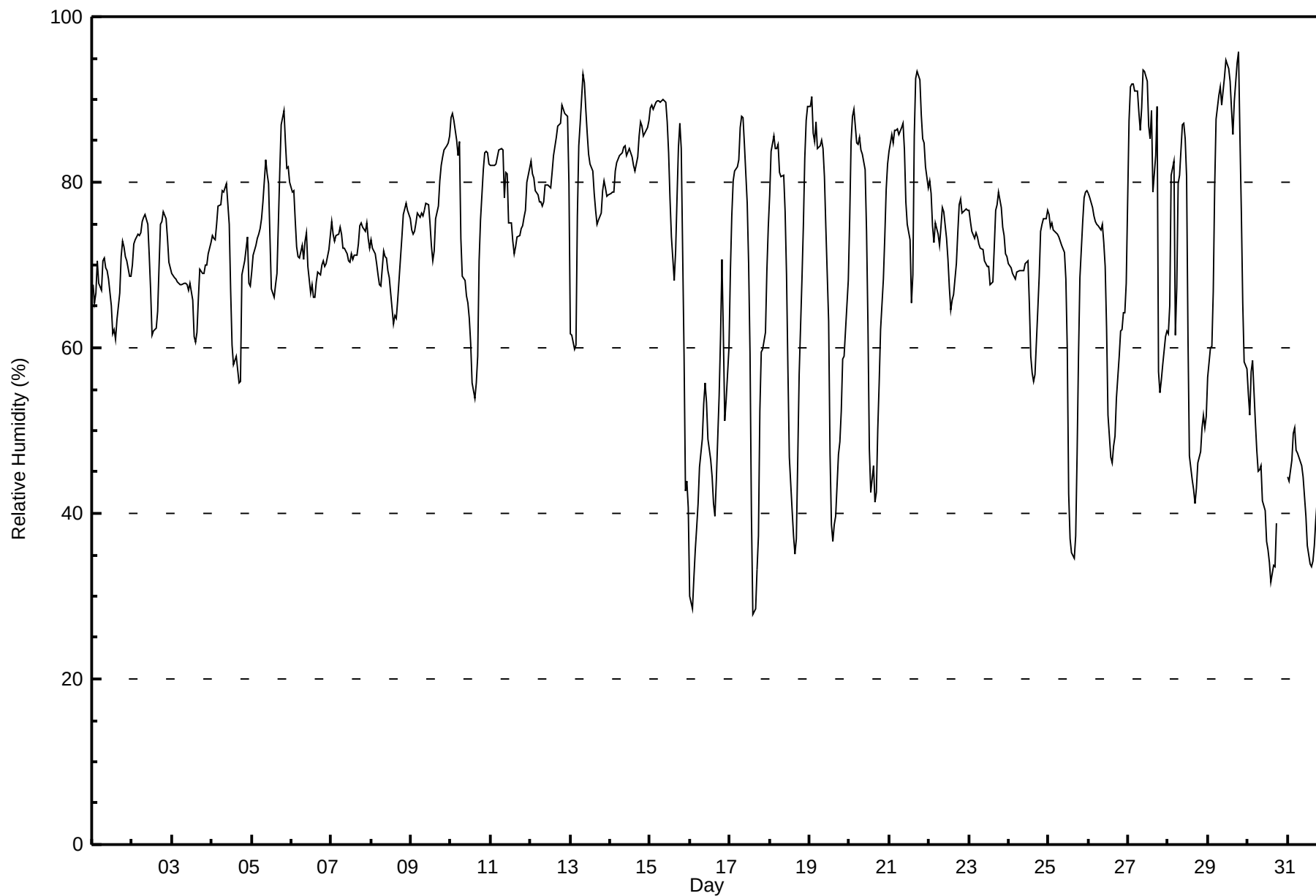
Peace Airshed Zone Association
Summary of Hourly Averages

Valleyview - Relative Humidity (RH) - %
January 1, 2009 to February 1, 2009

Maximum Value: 95.7 % on Jan 29 19:00																				Maximum Daily Average: 83.5 % on Jan 14					Hours in Service: 744	
Minimum Value: 28 % on Jan 17 15:00																				Minimum Daily Average: 43.2 % on Jan 31					Hours of Data: 738	
Maximum Diurnal Average: 76.0 % at hour 9																				Minimum Diurnal Average: 59.2 % at hour 15					Hours of Missing Data: 6	
Monthly Average: 70.38 %																				Percentiles: P ₁ = 33.5 P ₁₀ = 46.8 Q ₁ = 64.2 Median = 73.2 Q ₃ = 80.8 P ₉₀ = 86.7 P ₉₉ = 93.3					Hours of Calibration: 0	
																									Percent Operational Time: 99.2	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jan	68	65	67	70	68	67	70	71	70	69	68	65	62	62	61	63	67	71	73	72	71	70	69	69	67.8	72.9
2-Jan	70	73	73	74	74	74	75	76	76	75	71	67	61	62	62	64	70	75	75	76	76	73	70	70	71.4	76.4
3-Jan	69	68	68	68	68	68	68	68	68	68	67	68	66	61	61	62	66	70	69	69	70	70	71	73	67.6	72.7
4-Jan	73	73	73	75	77	77	79	79	79	80	75	67	60	58	58	59	56	56	69	70	71	73	68	67	69.7	79.8
5-Jan	69	71	72	73	74	74	76	78	83	81	80	73	67	66	68	69	75	81	87	89	85	82	82	80	76.4	88.6
6-Jan	79	79	75	72	71	71	72	71	73	74	70	67	68	66	66	68	69	69	70	70	70	70	72	74	71.0	78.9
7-Jan	75	74	73	74	74	75	74	72	72	71	71	70	71	71	71	71	73	75	75	75	74	75	73	72	72.9	75.2
8-Jan	73	72	71	70	69	68	67	72	71	71	69	69	67	63	64	64	66	68	73	76	77	77	77	76	70.4	77.4
9-Jan	74	74	74	75	76	76	76	76	77	77	77	75	72	71	72	76	77	80	82	83	84	84	85	86	77.4	85.6
10-Jan	88	88	87	85	83	85	73	69	68	66	65	64	60	56	54	56	59	70	75	82	84	84	84	82	73.6	88.3
11-Jan	82	82	82	82	83	84	84	84	78	81	81	75	75	73	71	72	73	74	74	75	76	77	80	82	78.4	84.1
12-Jan	83	81	80	79	79	78	78	77	78	80	80	79	79	81	83	85	87	87	87	89	88	88	88	80	82.2	89.4
13-Jan	62	61	60	60	76	84	87	93	92	89	86	83	82	81	79	77	75	75	76	79	80	79	78	79	78.1	93.1
14-Jan	79	79	79	81	82	83	83	84	84	84	83	84	84	83	82	81	83	86	87	87	86	86	87	88	83.5	87.5
15-Jan	89	89	89	90	90	90	90	90	90	90	87	83	78	73	68	72	78	84	87	84	59	43	44	41	78.3	90.1
16-Jan	30	29	32	36	38	41	46	49	53	56	53	49	46	44	41	40	44	54	61	71	62	51	54	60	47.5	70.6
17-Jan	69	76	80	81	82	83	87	88	88	85	78	70	59	40	28	29	33	37	52	59	60	62	69	75	65.4	88.0
18-Jan	78	84	86	84	84	85	81	81	81	76	69	57	47	40	37	35	37	47	57	68	75	83	87	89	68.7	89.2
19-Jan	89	90	86	85	87	84	84	85	84	81	75	63	47	39	37	39	40	47	49	52	59	59	65	68	66.4	90.4
20-Jan	76	85	88	89	85	85	85	84	83	81	74	63	48	43	46	41	43	50	56	62	68	73	79	82	69.5	88.8
21-Jan	84	86	85	86	86	86	86	87	87	84	78	75	73	65	69	86	93	93	92	88	85	85	82	79	83.3	93.4
22-Jan	80	79	75	73	75	74	72	75	77	76	73	71	67	65	66	66	70	74	77	78	76	77	77	77	73.7	80.1
23-Jan	77	75	74	73	74	73	73	72	72	71	70	70	70	68	68	72	77	77	79	77	75	74	71	71	73.0	78.7
24-Jan	70	70	69	69	68	69	69	69	69	69	70	70	65	59	57	56	57	65	69	74	75	76	76	77	68.2	76.5
25-Jan	76	75	75	74	74	74	73	73	72	72	68	60	42	37	35	35	37	47	59	68	75	78	79	79	64.1	78.9
26-Jan	79	78	77	76	75	75	75	74	75	73	70	62	52	47	46	48	49	54	59	62	62	64	64	68	65.2	78.7
27-Jan	88	92	92	92	91	91	89	86	89	94	93	92	87	85	89	79	83	89	57	55	56	58	61	62	81.2	93.6
28-Jan	62	65	81	82	62	67	80	81	87	87	85	81	61	47	44	43	41	43	46	47	50	52	50	52	62.4	87.2
29-Jan	56	60	60	67	79	88	91	91	89	91	93	95	94	92	89	86	90	94	96	86	77	65	58	57	81.0	95.7
30-Jan	54	52	57	59	51	48	45	45	46	42	40	37	36	34	32	34	34	39	P	P	P	P	P	P	43.5	58.6
31-Jan	44	44	46	50	50	48	47	47	46	44	42	40	36	34	34	34	36	39	41	45	47	48	47	46	43.2	50.3
72.4 73.2 73.8 74.3 74.3 74.9 75.3 75.6 76.0 75.4 73.0 69.2 64.0 60.2 59.2 60.0 62.5 66.8 70.4 72.3 71.7 71.2 71.6 71.9																									Diurnal Average	
89.2 91.6 91.8 91.9 91.0 91.1 90.5 93.1 92.0 93.6 93.5 94.8 93.8 92.2 88.8 85.8 92.6 94.3 95.7 89.4 88.3 88.1 87.9 89.2																									Diurnal Maximum	
P - Power Failure																										

Hourly Averages for Relative Humidity at Valleyview

January 2009



Peace Airshed Zone Association
Summary of Hourly Averages

Valleyview
January 1, 2009 to February 1, 2009
WS (km/h), WD (deg)

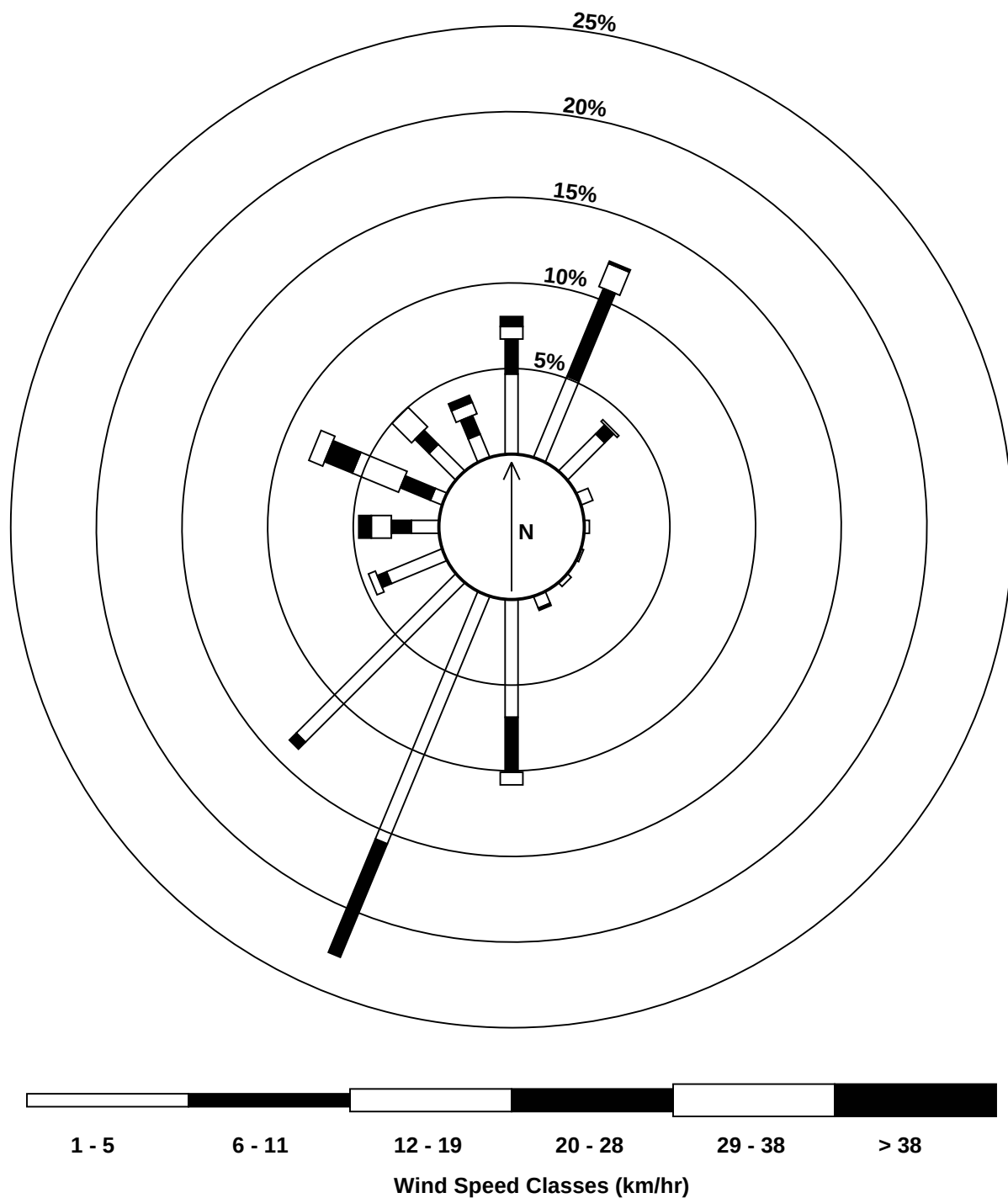
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	6	5	1	2	3	4	3	1	3	7	7	6	11	9	10	10	8	4	1	3	2	3	3	2	4.5	11.0
Dir	317	326	30	304	321	320	357	294	305	318	322	322	330	325	327	335	333	341	13	316	278	245	283	296	322.8	330.3
2 Spd	4	3	3	2	1	2	3	3	1	1	1	1	1	2	4	4	5	3	3	4	3	1	3	1	1.6	5.1
Dir	341	49	30	28	6	354	34	352	174	173	81	183	180	19	354	356	15	9	11	357	348	204	181	226	9.2	14.6
3 Spd	1	1	1	1	1	1	1	1	0	0	1	1	2	1	9	8	5	4	8	6	8	8	5	3	2.8	9.1
Dir	195	223	202	182	171	220	151	18	331	201	180	164	45	183	194	197	211	212	200	203	203	202	207	221	200.5	193.8
4 Spd	4	4	2	2	2	2	3	3	2	2	1	1	6	10	10	8	16	19	18	13	8	11	12	10	6.9	18.9
Dir	217	210	240	240	228	218	206	219	222	229	248	190	192	185	189	164	182	184	186	187	173	190	190	192	191.1	184.1
5 Spd	10	8	9	7	6	4	3	4	3	3	3	4	5	3	3	1	2	1	1	10	13	13	10	11	0.9	13.4
Dir	195	194	189	189	189	209	221	210	184	202	216	192	188	208	208	223	219	241	234	27	23	30	23	11	189.0	30.1
6 Spd	7	10	12	12	8	5	3	5	2	1	1	1	3	4	6	6	8	10	8	8	9	9	10	10	5.8	12.1
Dir	16	1	322	333	332	322	357	4	33	181	233	169	346	359	9	35	28	25	24	8	22	27	26	9	5.0	322.2
7 Spd	10	12	11	10	8	6	6	6	5	5	4	4	3	5	6	4	5	4	4	5	4	4	7	7	5.3	12.2
Dir	7	352	347	351	357	333	302	307	304	315	309	348	358	1	6	11	9	32	41	54	45	17	22	27	356.6	352.2
8 Spd	6	8	8	6	9	8	8	6	5	6	4	3	2	2	2	1	4	1	3	2	2	1	1	2	3.6	8.7
Dir	17	17	15	19	14	15	23	32	30	26	42	13	6	12	14	31	337	320	182	178	14	14	284	189	18.4	13.5
9 Spd	1	1	2	2	2	1	2	3	3	2	2	2	2	3	4	5	3	3	2	2	3	3	4	8	2.5	8.1
Dir	199	237	197	267	263	276	274	238	196	238	197	170	169	210	209	215	208	216	237	232	228	203	206	207	216.3	206.8
10 Spd	7	7	4	2	2	4	8	11	9	10	11	12	14	13	12	9	5	11	10	9	7	6	3	2	5.1	13.6
Dir	213	208	187	75	210	195	281	277	278	279	288	283	289	295	293	278	274	2	14	10	14	358	23	13	296.7	289.3
11 Spd	2	3	3	1	1	4	2	2	13	20	13	10	7	7	6	5	4	3	3	2	2	1	2	3	3.8	20.2
Dir	2	16	36	332	60	29	4	199	308	353	36	35	38	39	30	59	56	97	55	100	74	94	38	39	24.1	353.2
12 Spd	4	3	3	3	2	0	1	1	1	2	2	2	1	1	1	1	1	3	1	5	6	6	5	4	0.1	6.4
Dir	1	21	11	7	24	60	177	55	16	38	58	352	359	44	359	239	40	37	190	211	207	209	176	248	311.6	207.0
13 Spd	19	19	28	28	15	4	3	1	8	9	13	12	13	11	10	11	8	9	7	7	5	6	5	3	7.2	28.4
Dir	284	283	289	291	357	37	185	133	29	20	24	27	16	18	27	8	18	12	26	24	30	24	21	40	346.6	288.8
14 Spd	2	2	1	2	3	4	3	2	3	2	1	2	2	3	3	3	1	2	5	4	6	6	4	2	0.3	6.4
Dir	39	27	37	31	31	31	11	9	32	54	68	357	34	11	353	351	273	188	191	184	196	195	196	232	43.7	195.2
15 Spd	5	6	3	2	3	4	5	5	1	3	5	4	5	4	3	3	4	6	6	4	6	13	4	5	4.2	12.7
Dir	216	210	213	235	215	212	217	207	215	231	212	206	210	207	207	217	206	212	216	202	255	266	234	263	223.3	266.2
16 Spd	16	18	9	15	19	18	17	16	11	10	14	15	14	9	1	2	4	3	4	5	4	2	3	5	8.0	19.0
Dir	278	285	287	297	299	297	295	296	303	312	311	306	299	300	167	207	197	226	208	178	178	174	211	163	288.4	299.3
17 Spd	4	5	6	5	4	2	3	3	4	2	4	6	6	3	6	3	5	4	4	4	4	4	6	6	3.9	6.5
Dir	218	212	212	205	203	213	223	222	230	197	214	206	195	241	299	186	190	177	189	200	180	225	196	201	208.8	205.6
18 Spd	4	6	6	5	5	7	6	4	5	2	6	5	6	7	6	6	4	4	4	4	3	3	4	3	4.7	6.7
Dir	215	215	212	213	214	211	215	227	217	212	211	205	211	209	208	203	206	205	216	211	217	225	222	223	212.6	211.3
19 Spd	3	3	4	3	3	4	5	4	4	5	3	4	6	3	2	3	2	5	7	6	3	1	3	2	3.0	6.5
Dir	235	234	257	208	211	217	186	214	222	207	217	212	211	211	221	22	239	224	198	202	133	57	208	212	211.1	198.4
20 Spd	3	3	2	2	4	5	4	6	4	4	5	6	4	1	5	1	0	3	1	2	1	1	2	4	2.5	6.0
Dir	224	220	198	237	193	210	217	203	215	225	214	209	195	262	350	307	111	186	218	191	237	159	235	218	215.3	209.3
21 Spd	4	4	5	5	6	7	6	6	5	4	3	2	2	2	10	12	11	11	13	16	19	22	23	20	4.5	23.3
Dir	225	221	222	216	215	211	212	213	211	218	217	187	1	12	12	24	36	15	358	352	13	15	9	7	358.3	8.7
22 Spd	20	21	20	17	13	14	16	15	12	8	10	13	12	12	11	10	7	4	3	1	2	3	3	2	9.3	20.9
Dir	359	347	339	334	317	324	333	347	355	348	13	20	24	20	22	28	29	348	326	242	340	297	319	193	352.1	347.5

Peace Airshed Zone Association
Summary of Hourly Averages

Valleyview
 January 1, 2009 to February 1, 2009
 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	2	3	3	2	1	1	1	1	0	2	2	3	2	2	2	3	1	1	0	1	2	2	0	0.5	3.5	
Dir	182	207	192	190	212	190	6	27	321	180	192	172	340	320	6	355	345	327	354	165	209	189	204	204	231.3	344.7	
24 Spd	4	2	3	1	3	5	3	5	4	5	5	4	4	5	4	3	2	4	4	6	6	6	6	6	3.9	6.1	
Dir	188	238	194	279	193	218	228	216	218	219	209	211	207	184	197	215	201	204	204	187	183	177	181	188	200.8	187.5	
25 Spd	6	5	6	6	6	5	6	6	6	6	6	4	2	3	3	0	1	2	1	3	4	3	3	3	3.5	6.4	
Dir	186	183	177	181	207	198	205	173	200	207	183	181	275	246	251	258	20	355	191	198	208	202	232	220	199.3	207.1	
26 Spd	3	3	5	4	3	3	5	5	4	4	4	4	4	2	2	2	2	2	1	1	1	3	3	3	2.9	5.0	
Dir	219	229	218	226	213	226	223	206	225	245	204	209	205	232	237	245	227	243	164	256	260	203	212	221	220.2	217.5	
27 Spd	5	3	4	4	2	3	6	3	3	4	2	1	1	3	5	1	1	1	16	15	15	16	10	6	3.6	15.6	
Dir	186	231	202	207	213	201	196	177	197	172	188	184	162	293	274	280	120	285	289	294	291	301	313	301	268.5	300.9	
28 Spd	6	8	4	1	15	21	16	7	3	2	4	6	10	19	18	16	13	9	13	13	8	4	5	5	7.6	20.8	
Dir	283	291	312	168	317	337	345	0	0	188	198	207	294	305	309	312	305	282	285	288	275	239	206	210	301.6	336.5	
29 Spd	4	7	5	7	4	5	6	6	5	3	5	3	3	3	11	10	4	4	5	6	8	13	16	10	5.4	15.6	
Dir	217	258	223	251	213	193	188	181	196	231	266	207	239	234	287	282	229	192	190	252	263	273	271	271	246.2	270.8	
30 Spd	12	15	5	7	7	8	8	7	7	9	4	5	3	3	4	16	12	14	P	P	P	P	P	P	6.8	15.6	
Dir	269	265	183	190	196	191	190	192	192	200	209	195	167	184	222	259	238	251	P	P	P	P	P	P	223.4	258.5	
31 Spd	28	25	24	19	19	20	24	28	26	26	29	29	28	30	35	30	30	26	22	24	24	24	20	19	25.3	35.4	
Dir	281	280	278	271	270	273	278	282	287	286	286	287	291	295	292	293	291	290	287	288	290	290	293	293	286.1	291.8	
Spd	3.5	4.1	3.3	3.3	2.8	2.7	2.9	2.7	2.6	2.5	2.2	2.0	2.5	2.9	3.6	2.9	2.0	1.8	1.9	2.1	1.8	2.3	1.9	1.8	Diurnal Average		
Dir	277.5	281.8	274.6	277.3	280.9	276.0	271.8	266.0	276.3	283.5	278.4	275.7	293.3	301.4	303.8	304.9	292.4	279.1	265.2	276.8	291.9	286.1	280.4	277.1	Diurnal Maximum		
Spd	28.3	25.5	28.4	28.1	19.0	20.8	24.1	27.9	26.1	25.8	29.0	28.8	27.8	30.3	35.4	29.6	30.0	25.7	22.4	24.0	24.3	24.4	23.3	19.7	Diurnal Maximum		
Dir	280.9	280.2	288.8	290.7	299.3	336.5	278.5	282.2	287.5	286.1	286.1	287.4	290.7	294.9	291.8	292.8	291.4	290.1	286.8	288.2	290.2	289.9	8.7	6.9			
Maximum Speed Value: 35 km/h on Jan 31 15:00								Minimum Speed Value: 0 km/h on Jan 20 17:00												Hours in Service:				744			
Maximum Daily Speed Average: 25.3 km/h on Jan 31								Minimum Daily Speed Average: 0.1 km/h on Jan 23												Hours of Data:				738			
Maximum Diurnal Speed Average: 4.1 km/h at hour 2								Minimum Diurnal Speed Average: 1.8 km/h at hour 24												Hours of Missing Data:				6			
Monthly Average Velocity: 2.55 km/h 282.55 deg								Speed Percentiles: P ₁ = 0.5 P ₁₀ = 1.3 Q ₁ = 2.5 Median = 4.2 Q ₃ = 7.4 P ₉₀ = 13.2 P ₉₉ = 28.0												Percent Operational Time:				99.2			
All monthly, daily, and diurnal averages have been calculated using vector methods																											
P - Power Failure																											
Frequency Distribution																											
Speed Range (km/h)																											
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total														
North	63		37		12		7		0		0		119														
NorthEast	44		25		7		0		0		0		76														
East	8		0		0		0		0		0		8														
SouthEast	4		0		0		0		0		0		4														
South	96		52		6		0		0		0		154														
SouthWest	177		43		1		0		0		0		221														
West	22		19		18		16		7		0		82														
NorthWest	23		21		25		3		2		0		74														
Total	437		197		69		26		9		0		738														

Wind Rose for WS at Valleyview January 2009



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

Valleyview - Wind Speed (WS) - km/h
January 1, 2009 to February 1, 2009

Maximum Speed: 36 km/h on Jan 31 15:00																			Maximum Daily Speed Average: 25.6 km/h on Jan 31										Hours in Service: 744	
Minimum Speed: 1 km/h on Jan 23 10:00																			Minimum Daily Speed Average: 1.9 km/h on Jan 23										Hours of Data: 738	
Maximum Diurnal Speed Average: 7.3 km/h at hour 2																			Minimum Diurnal Speed Average: 5.7 km/h at hour 9										Hours of Missing Data: 6	
Monthly Average Speed: 6.35 km/h																			Percentiles: P ₁ = 0.9 P ₁₀ = 1.9 Q ₁ = 2.9 Median = 4.5 Q ₃ = 7.5 P ₉₀ = 13.5 P ₉₉ = 28.1										Percent Operational Time: 99.2	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
1-Jan	6	5	1	2	3	4	3	2	3	7	7	6	11	10	10	10	8	4	1	3	2	3	3	3	5.0	11.1				
2-Jan	5	3	3	2	1	2	3	3	2	1	1	1	2	2	4	4	5	3	4	4	3	1	3	2	2.7	5.2				
3-Jan	1	1	1	2	1	1	2	1	1	1	1	1	2	3	9	8	5	4	8	6	8	8	5	3	3.6	9.2				
4-Jan	5	5	3	3	3	2	3	3	2	2	2	1	7	10	10	8	16	19	18	13	8	11	12	10	7.4	19.0				
5-Jan	10	8	9	7	6	4	3	4	4	3	3	4	6	3	4	2	2	2	3	10	13	14	10	11	6.0	13.5				
6-Jan	7	10	12	12	8	5	4	6	3	1	2	2	3	4	7	6	8	10	8	8	9	10	10	10	6.8	12.3				
7-Jan	11	12	11	10	8	6	6	6	5	5	4	4	4	5	6	4	5	4	4	5	5	5	7	7	6.3	12.3				
8-Jan	6	8	8	6	9	8	9	6	6	6	5	3	2	2	2	2	4	2	3	2	3	2	2	2	4.5	8.8				
9-Jan	2	2	2	2	2	2	3	3	4	3	2	3	2	3	5	5	3	3	3	3	4	4	5	8	3.3	8.1				
10-Jan	7	7	5	2	3	5	8	11	9	10	11	12	14	13	12	9	6	11	10	9	7	6	4	3	8.1	13.7				
11-Jan	2	3	3	2	2	5	3	3	14	22	13	10	7	8	6	5	4	3	3	3	3	1	2	3	5.5	22.4				
12-Jan	4	3	3	3	2	1	1	1	1	3	2	2	1	2	2	1	2	4	2	5	6	6	6	7	2.9	6.9				
13-Jan	19	19	28	28	21	6	3	3	8	9	13	12	13	12	10	11	8	9	7	7	5	6	5	3	11.2	28.5				
14-Jan	2	3	2	2	3	4	3	2	3	2	2	2	2	3	3	3	2	3	5	4	6	6	4	2	3.1	6.4				
15-Jan	5	6	3	3	4	5	5	5	3	3	5	4	5	5	3	3	4	6	6	4	6	13	5	8	4.8	12.8				
16-Jan	16	18	9	15	19	18	17	16	11	10	14	15	14	9	2	3	4	3	4	5	5	3	4	5	10.0	19.1				
17-Jan	4	5	6	5	5	2	3	3	4	2	4	7	6	6	6	4	5	4	4	5	5	4	6	6	4.6	6.5				
18-Jan	4	6	6	5	5	7	6	4	5	3	6	5	6	7	6	6	4	4	4	4	3	3	4	3	4.8	6.8				
19-Jan	3	3	4	3	4	5	5	4	4	5	4	5	6	3	3	5	2	5	7	6	4	3	3	3	4.0	6.5				
20-Jan	3	3	3	2	4	5	4	6	4	4	5	6	4	2	5	2	1	3	1	2	1	1	3	4	3.2	6.1				
21-Jan	4	4	5	5	6	7	6	6	5	5	4	3	4	3	10	12	11	11	13	16	19	22	24	20	9.3	23.5				
22-Jan	20	21	20	17	13	14	16	15	12	8	10	13	12	12	11	10	7	4	4	2	2	3	3	2	10.5	21.1				
23-Jan	1	3	3	3	2	2	1	1	1	1	2	2	3	2	2	2	4	1	1	1	1	2	2	1	1.9	3.6				
24-Jan	4	2	3	1	3	5	3	5	4	5	5	4	4	5	4	3	2	4	4	6	6	6	6	6	4.2	6.1				
25-Jan	6	5	6	6	6	6	6	6	6	7	6	5	3	3	3	1	3	2	2	3	4	3	3	3	4.4	6.5				
26-Jan	3	3	5	4	3	4	7	5	4	4	4	4	4	3	2	2	3	2	2	1	2	3	5	3	3.5	6.7				
27-Jan	5	3	4	4	3	4	6	3	3	4	2	1	1	4	5	1	1	2	16	15	15	16	10	7	5.6	15.8				
28-Jan	6	9	5	3	15	21	17	8	3	2	4	6	11	19	18	16	13	9	14	13	8	4	5	5	9.7	20.9				
29-Jan	4	7	5	8	4	5	6	6	5	4	5	3	3	4	12	10	4	4	5	7	8	13	16	10	6.6	15.7				
30-Jan	12	15	5	7	7	8	8	7	7	9	4	5	4	3	6	16	12	14	P	P	P	P	P	P	8.4	15.7				
31-Jan	28	26	24	19	19	20	24	28	26	26	29	29	28	31	36	30	30	26	22	24	24	25	21	19	25.6	35.6				
6.9 7.3 6.8 6.3 6.3 6.2 6.3 5.9 5.7 5.7 5.9 5.8 6.2 6.4 7.2 6.6 6.1 6.0 6.3 6.6 6.5 6.9 6.5 5.9																								Diurnal Average						
28.4 25.6 28.5 28.2 21.3 20.9 24.4 28.1 26.3 25.9 29.2 28.9 27.9 30.5 35.6 29.8 30.1 25.8 22.5 24.1 24.4 24.5 23.5 20.0																								Diurnal Maximum						
P - Power Failure																														
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
January 1, 2009 to February 1, 2009

Maximum Value: 95.6 deg on Jan 20 17:00																				Hours in Service: 744					
Minimum Value: 3.9 deg on Jan 20 11:00																				Hours of Data: 738					
																				Hours of Missing Data: 6					
Percentiles: P ₁ = 4.3 P ₁₀ = 6.3 Q ₁ = 8.7 Median = 14.5 Q ₃ = 31.7 P ₉₀ = 59.3 P ₉₉ = 86.4																				Hours of Calibration: 0					
																				Percent Operational Time: 99.2					
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jan	13	18	59	58	24	11	12	72	35	11	10	11	9	10	9	9	11	10	45	24	52	24	17	41	71.6
2-Jan	38	25	18	20	54	11	15	30	71	88	68	63	60	23	7	6	6	16	8	4	19	68	27	71	87.9
3-Jan	56	67	44	44	63	48	86	69	81	86	56	70	33	84	7	8	7	6	12	11	8	10	11	18	85.7
4-Jan	14	22	32	23	20	16	19	24	16	19	55	58	18	7	7	12	6	6	9	14	26	10	7	8	58.3
5-Jan	8	9	8	8	12	13	17	11	41	19	17	22	12	9	27	54	33	59	79	10	8	8	30	12	78.8
6-Jan	19	17	7	13	14	26	42	23	62	65	47	75	37	14	12	13	12	7	10	8	10	9	10	9	74.6
7-Jan	7	6	7	7	5	25	11	12	16	15	30	24	21	11	12	20	9	13	15	12	22	14	13	13	30.3
8-Jan	11	9	9	10	9	14	11	13	11	12	19	20	28	23	23	35	9	85	11	44	48	68	50	31	85.4
9-Jan	62	54	37	29	17	78	42	10	58	43	49	47	60	49	23	8	11	20	40	76	47	21	49	5	77.8
10-Jan	5	6	36	49	71	31	10	6	6	7	8	8	7	7	9	9	26	12	6	5	8	6	45	36	70.6
11-Jan	72	28	16	79	86	41	76	61	35	31	10	11	14	17	24	19	25	25	21	29	28	62	19	9	85.9
12-Jan	13	21	14	23	22	81	52	67	68	31	29	36	62	80	45	62	54	31	71	17	7	10	24	60	81.4
13-Jan	6	7	5	5	46	89	17	57	12	12	6	12	7	8	13	9	15	13	15	10	15	11	14	27	89.1
14-Jan	42	36	46	22	16	13	19	20	12	52	76	47	32	34	31	12	65	19	9	15	7	6	14	17	76.2
15-Jan	7	5	57	69	18	13	8	7	74	37	8	8	8	17	8	10	14	10	7	21	9	9	30	69	73.7
16-Jan	7	6	20	8	6	5	4	4	6	8	6	6	7	10	87	44	9	9	20	17	36	62	36	18	86.6
17-Jan	11	10	9	11	17	30	12	21	36	56	15	8	15	52	32	28	18	32	19	26	21	11	25	11	56.3
18-Jan	9	5	7	6	6	6	9	10	11	61	6	13	4	4	10	7	10	14	8	9	10	11	11	11	61.0
19-Jan	45	16	15	27	25	32	25	25	31	24	10	10	4	21	16	87	32	11	6	17	29	76	48	85	87.1
20-Jan	15	16	39	55	26	5	13	11	13	11	4	6	14	69	13	72	96	19	27	20	58	66	31	21	95.6
21-Jan	12	13	6	5	5	5	5	4	6	19	14	53	75	29	13	7	10	15	6	7	8	8	8	8	75.2
22-Jan	7	9	5	10	6	7	6	15	5	12	9	8	9	8	9	8	12	16	33	65	71	33	15	19	70.6
23-Jan	45	12	11	12	13	50	38	38	52	85	37	30	30	44	24	16	12	54	58	76	74	31	37	73	84.6
24-Jan	15	23	13	65	32	8	8	7	7	8	8	6	8	11	17	22	25	13	6	8	6	11	10	11	65.5
25-Jan	13	13	11	16	10	22	13	13	11	12	7	47	50	22	23	89	71	55	70	18	12	19	8	15	88.6
26-Jan	16	8	5	13	17	28	41	23	23	25	20	11	14	54	46	26	29	28	39	52	43	45	53	25	53.6
27-Jan	9	24	15	16	50	43	20	32	25	17	9	12	36	88	15	71	25	90	5	7	6	9	8	13	90.3
28-Jan	13	23	63	56	11	5	8	14	58	32	15	7	35	7	7	7	7	11	7	6	10	19	7	10	63.2
29-Jan	9	18	16	13	18	8	9	15	11	30	30	16	26	35	35	13	28	13	9	21	8	5	6	12	34.9
30-Jan	9	7	32	8	6	8	10	14	11	4	22	10	66	17	37	10	12	12	P	P	P	P	P	P	65.7
31-Jan	6	6	6	6	7	8	8	7	7	6	7	7	6	7	6	6	5	6	6	5	5	5	6	5	8.0
71.9 67.3 63.2 78.8 85.9 89.1 85.6 71.6 81.2 87.9 76.2 74.6 75.2 87.8 86.6 88.6 95.6 90.3 78.8 76.0 74.1 75.9 53.0 84.9																									
P - Power Failure																									

PASZA

Monthly Passive Data Summary

PASZA Passive Results for January 2009

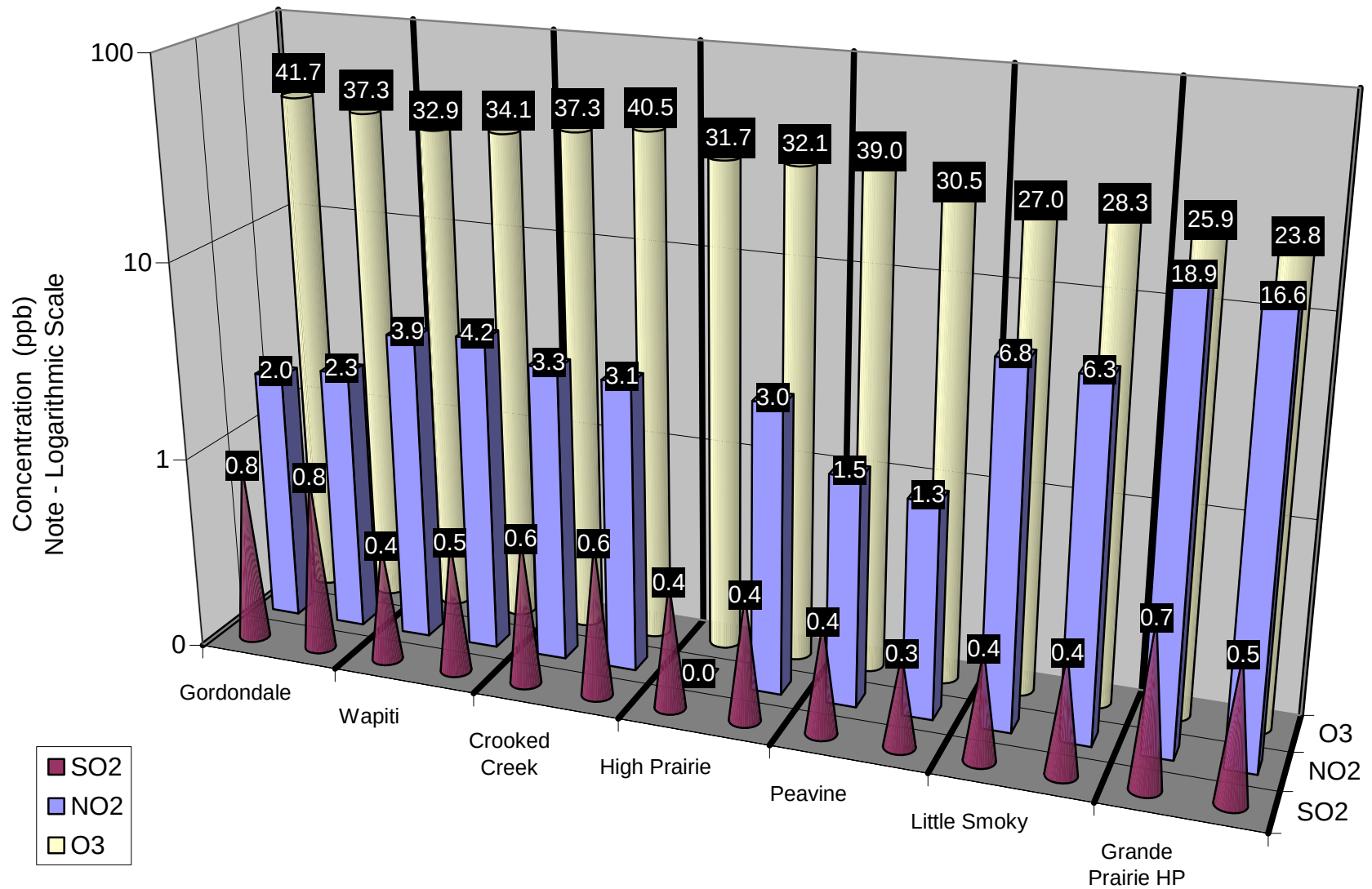
Peace Airshed Zone Association - PASZA Passive Stations for January 2009

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
4a	Gordondale	0.8	41.7	2.0	
4b	Gordondale	0.8	37.3	2.3	
33a	Wapiti	0.4	32.9	3.9	
33b	Wapiti	0.5	34.1	4.2	
37a	Crooked Creek	0.6	37.3	3.3	
37b	Crooked Creek	0.6	40.5	3.1	
43a	High Prairie	0.4	31.7	0.0	
43b	High Prairie	0.4	32.1	3.0	
44a	Peavine	0.4	39.0	1.5	
44b	Peavine	0.3	30.5	1.3	
46a	Little Smoky	0.4	27.0	6.8	
46b	Little Smoky	0.4	28.3	6.3	
49a	Grande Prairie HP	0.7	25.9	18.9	
49b	Grande Prairie HP	0.5	23.8	16.6	
1	Silver Valley	0.8	38.8	2.1	08-27-081-11 W6M
2	Bay Tree	0.7	39.8	1.7	13-16-078-13 W6M
3	Forth Creek	0.7	34.6	1.7	04-13-082-07 W6M
4	Gordondale	0.8	39.5	2.1	04-34-078-10 W6M
5	Boone Creek	0.7	37.1	2.7	01-23-076-11 W6M
7	Steeprock Creek	0.5	41.3	1.6	09-35-072-13 W6M
9	Spirit River	0.8	38.5	2.0	08-12-079-07 W6M
10	Woking	0.7	41.4	1.4	01-13-076-07 W6M
11	Webber Creek	0.7	36.1	2.8	09-36-074-09 W6M
12	Hythe	0.5	36.3	3.9	14-36-072-11 W6M
14	Sylvester	0.3	32.2	2.8	08-06-069-12 W6M
16	Beaverlodge	0.7	34.0	4.4	15-36-071-10 W6M
17	Poplar	0.8	39.4	4.2	13-06-073-08 W6M
18	Saddle Hills	0.5	45.6	1.8	04-25-074-07 W6M
19	Wanham	0.8	39.3	1.4	16-22-077-03 W6M
20	Shaftesbury	0.5	36.4	2.1	04-03-082-23 W5M
21	Eaglesham	0.4	32.0	1.7	16-21-079-25 W5M
23	Bear Lake	0.9	38.7	3.9	15-31-072-06 W6M

PASZA Passive Results for January 2009 (Continued)

Station Number	Station Name	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Site Legal
24	Wembley	0.5	39.5	5.3	12-31-070-08 W6M
25	Pinto Creek	0.4	34.7	3.1	04-24-069-11 W6M
26	Flyingshot	0.5	32.5	5.8	15-36-070-07 W6M
27	Grande Prairie I	0.5	29.0	16.5	08-15-071-06 W6M
28	Clairmont Lake	0.8	40.8	3.9	09-06-073-04 W6M
29	Smoky Heights	1.0	34.6	4.1	04-06-075-02 W6M
30	Fitzsimmons	0.4	33.9	3.9	15-36-072-03 W6M
32	Gold Creek	0.4	32.4	9.5	06-33-067-05 W6M
33	Wapiti	0.4	33.5	4.0	02-25-071-03 W6M
34	Puskwaskau	0.4	38.1	1.3	15-35-074-25 W5M
35	Jean Cote	0.6	42.1	2.0	12-35-079-21 W5M
36	Guy	0.4	40.7	1.8	03-04-076-22 W5M
37	Crooked Creek	0.6	38.9	3.2	16-01-071-26 W5M
39	Clouston Creek	0.6	45.7	2.1	12-01-073-22 W5M
40	McLennan	BDL	35.9	2.0	03-29-077-19 W5M
41	Valleyview	0.7	39.4	2.4	09-30-069-22 W5M
42	Sunset House	0.6	44.1	1.6	05-32-070-19 W5M
43	High Prairie	0.4	31.9	1.5	16-13-074-17 W5M
44	Peavine	0.3	34.7	1.4	03-05-079-15 W5M
45	Gift Lake	0.3	31.6	1.8	10-07-079-12 W5M
46	Little Smoky	0.4	27.7	6.6	12-01-065-21 W5M
47	Kinuso	0.2	31.8	2.1	12-10-073-10 W5M
48	Deer Mountain	0.2	35.1	1.7	15-22-068-09 W5M
49	Grande Prairie HP	0.6	24.8	17.8	17-26-071-06 W6M

*BDL = Below Detection Level



Passive Summary for January 2009

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

Passive Summary for January 2009 (PASZA Zone)			
Mean	0.6	36.5	3.6
Standard Deviation	0.2	4.6	3.5
Minimum	0.2	24.8	1.3
Minimum At	Kinuso (#47)	Grande Prairie HP (#49)	Puskwaskau (#34)
Maximum	1.0	45.7	17.8
Maximum At	Smoky Heights (#29)	Clouston Creek (#39)	Grande Prairie HP (#49)

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

	SO ₂	O ₃	NO ₂
PASZA Beaverlodge station	0.7	27.9	7.1
PASZA Beaverlodge passive	0.7	34.0	4.4

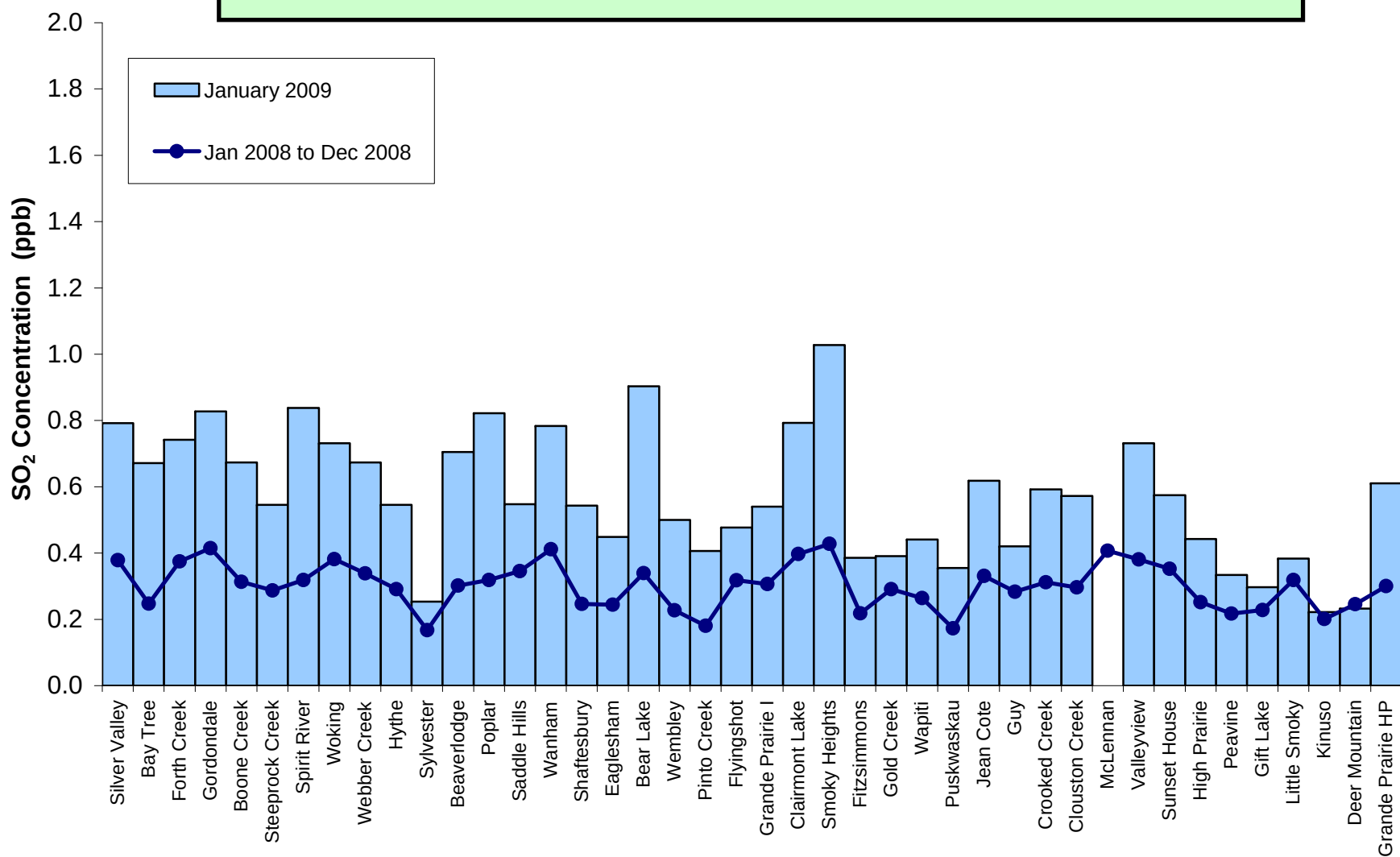
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

	SO ₂	O ₃	NO ₂
PASZA Henry Pirker station	0.5	14.7	21.2
PASZA Grande Prairie passive	0.6	24.8	17.8

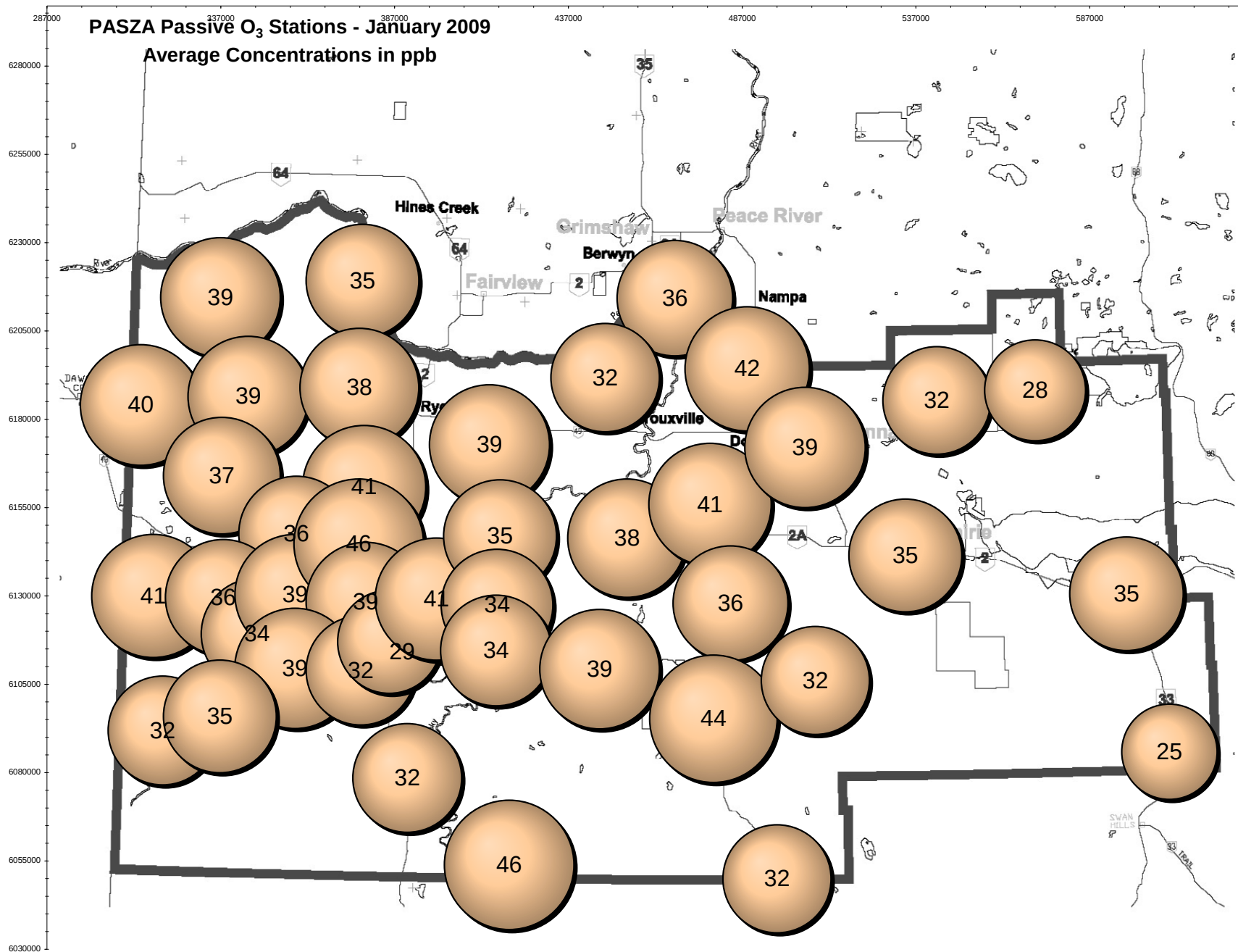
Comparison between Continuous and Passive monitoring at Spirit River (passive #9 Spirit River)

	SO ₂	O ₃	NO ₂
PASZA Portable Spirit River station	0.9	27.4	5.0
PASZA Spirit River passive	0.8	38.5	2.0

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

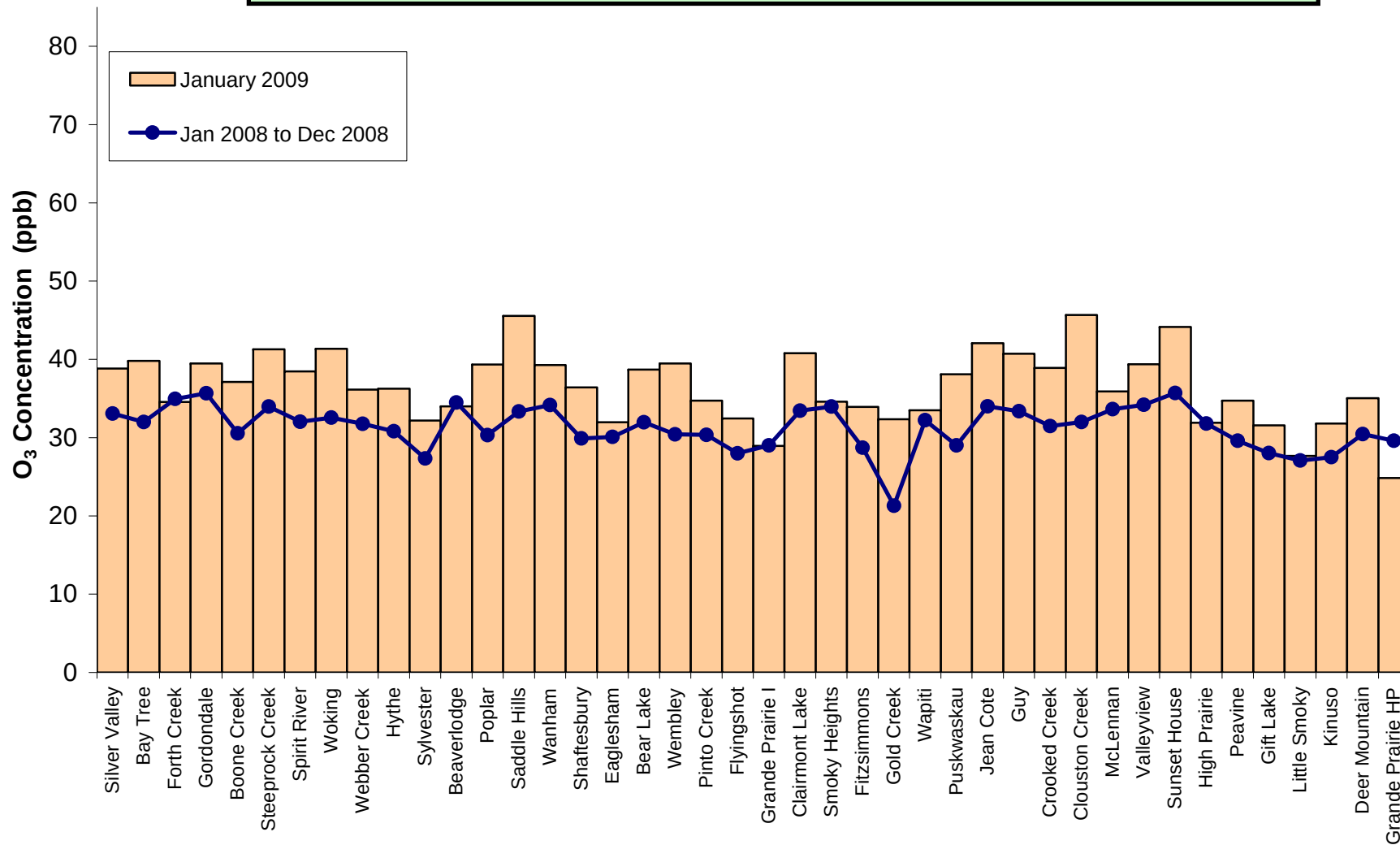


SO₂ Summary Chart

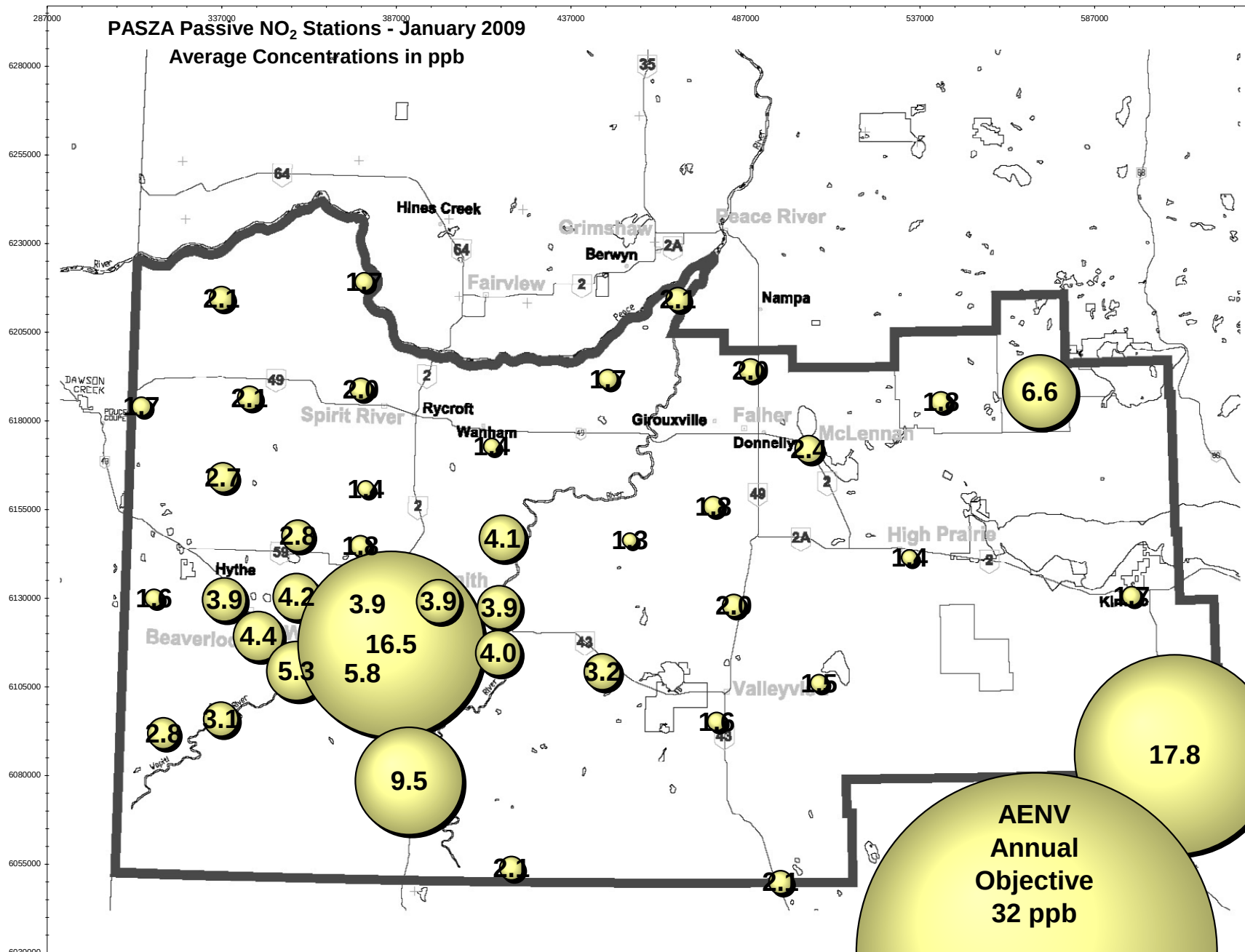


O₃ Bubble Chart

Alberta Ambient Air Quality Objective - No Annual O₃ Objective

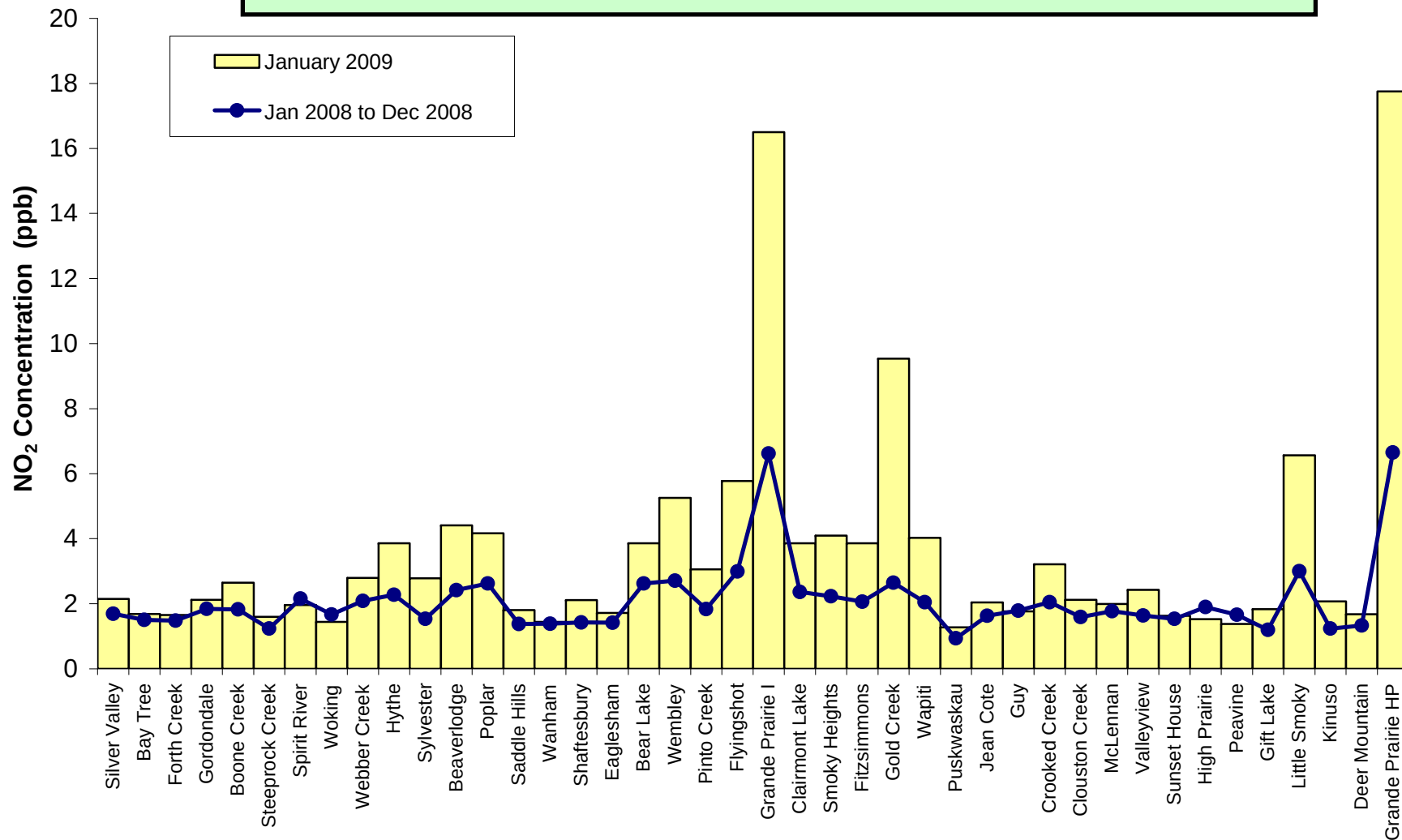


O₃ Summary Chart



NO₂ Bubble Chart

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



NO₂ Summary Chart

January 2009 Calibration Reports

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

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

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

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

**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	January 13, 2009	Previous Calibration	December 12, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:
Start Time (MST)	10:17	End Time (MST)	13:41
Barometric Pressure	0.927 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	49.6 ppb	Cal Gas Cert Date	6/8/2008
		Cal Gas Cylinder #	AAL 15377
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.000636	Calculated slope	1.002809
Calculated intercept	-1.855342	Calculated intercept	-1.706753
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.8		8.4	
Coefficient	.804		.817	
Pressure	657.7	mm Hg	657.7	mm Hg
Flow	0.541	lpm	0.543	lpm
Lamp Voltage	44751	Hz	44101	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	0.6	N/A
4989	39.85	393.0	393.1	0.9998
4989	19.91	197.2	198.7	0.9921
4989	9.95	98.7	101.4	0.9739
4988	0.00	0.0	0.5	As Found Zero
4991	39.84	392.8	384.6	As Found Span
Average Correction Factor				0.9886

Calculated value of As Found Response: 382.5 ppb Percent Change of As Found: 2.6%

	before calibration		after calibration	
Auto zero	-1.1	ppb	-1.5	ppb
Auto span	350.0	ppb	305.0	ppb

Notes:

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**



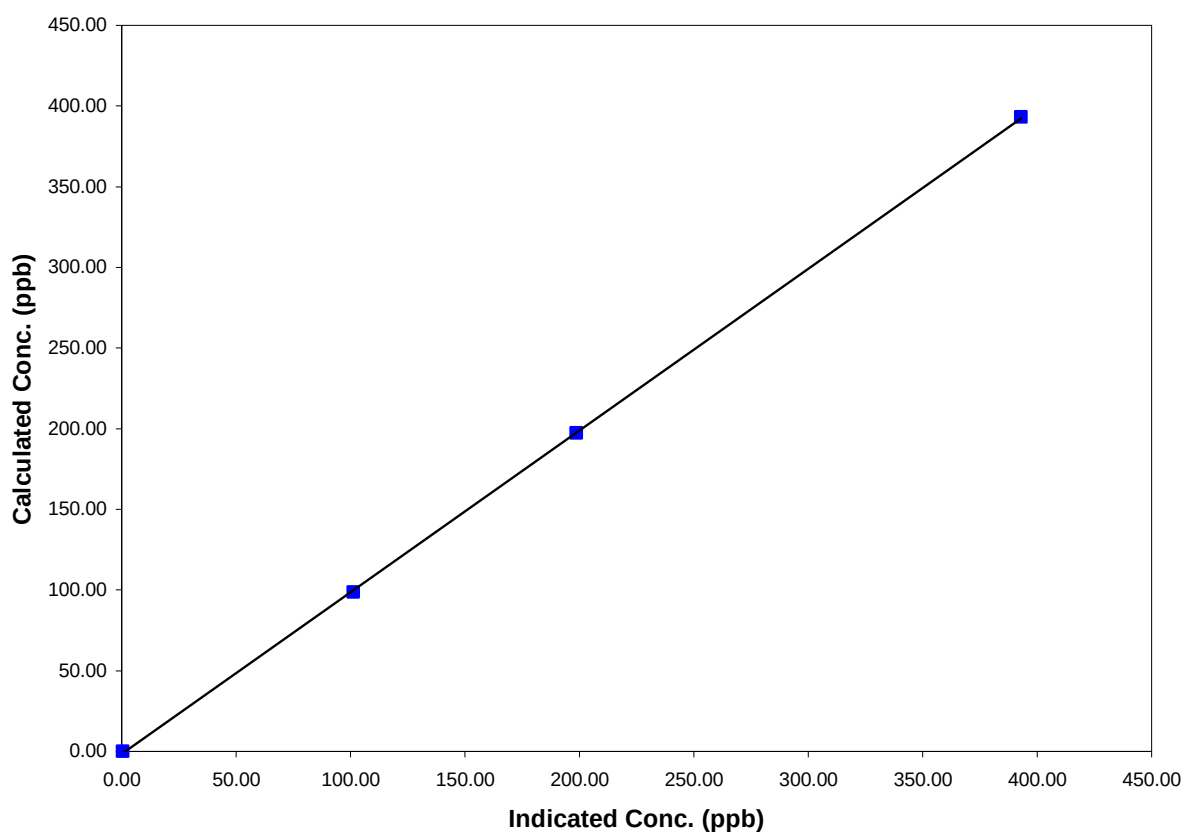
Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 12, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:17	End Time (MST)	13:41
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

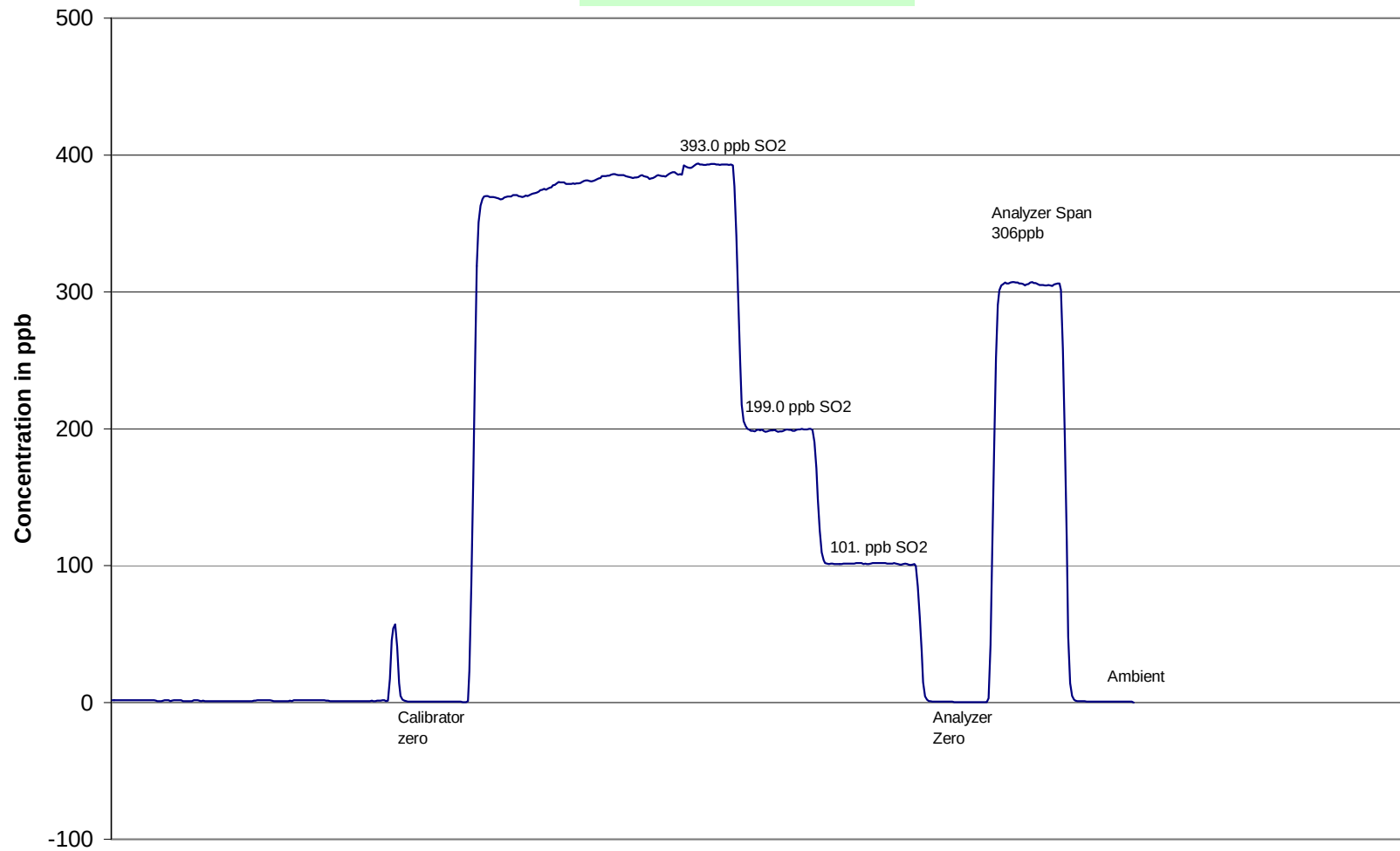
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A	Correlation Coefficient	0.999962
393.0	393.1	0.9998		
197.2	198.7	0.9921		
98.7	101.4	0.9739	Slope	1.002809
			Intercept	-1.706753

SO2 Calibration Curve



Henry Pirker SO₂ Calibration



January 13, 2009

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 12, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	Routine Installation Removal Other: _____		
Start Time (MST)	10:17	End Time (MST)	15:15
Barometric Pressure	0.927 atm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
NO Cal Gas Conc	49.6 ppm	Cal Gas Cert Date	6/8/2008
NOx Cal Gas Conc	49.6 ppm	Cal Gas Cylinder #	AAL 15377

DACS Information

DACS make		FOCUS AP1000	DACS serial No.	45269
Parameter		NO2	NOx	NO
Before	Data Slope	1.003980	1.003856	1.003543
	Data Offset	-0.119446	-2.838420	-2.856101
After	Data Slope	1.004640	1.005115	1.004515
	Data Offset	-0.107436	-2.663458	-2.520832
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	9.9	ppb	9.7	mV
NOx background	10.2	ppb	10.4	mV
NO coefficient	0.791		0.778	
NOx coefficient	0.998		1.001	
Chamber Temp	49.5	Deg C	49.7	Deg C
Cooler Temp	-2.5	Deg C	-2.5	Deg C
Converter Temp	319.0	Deg C	319.0	Deg C
Vacuum	189.5	mm Hg	187.4	mm Hg

Notes:

Calibration Report

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



Station Information

Calibration Date: January 13, 2009 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	0.8	0.5	0.1	N/A	N/A
1	4989	39.85	393.0	393.0	0.0	392.7	392.7	0.0	1.0008	1.0009
2	4989	19.91	197.2	197.2	0.0	199.7	199.9	-0.1	0.9871	0.9864
3	4989	9.92	98.4	98.4	0.0	102.5	102.5	0.0	0.9601	0.9599
AFZ	4990	0.00	0.0	0.0	0.0	0.6	0.0	0.5	0.0000	0.0000
AFS	4990	39.85	393.0	393.0	0.0	397.7	398.9	-1.2	0.9880	0.9852
Average Correction Factor									0.9827	0.9824

As Found Concentrations: NO_x= 394.3 NO= 396.0 As Found Percent Change NO_x= 0.3% NO= 0.8%

GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.88 ccm

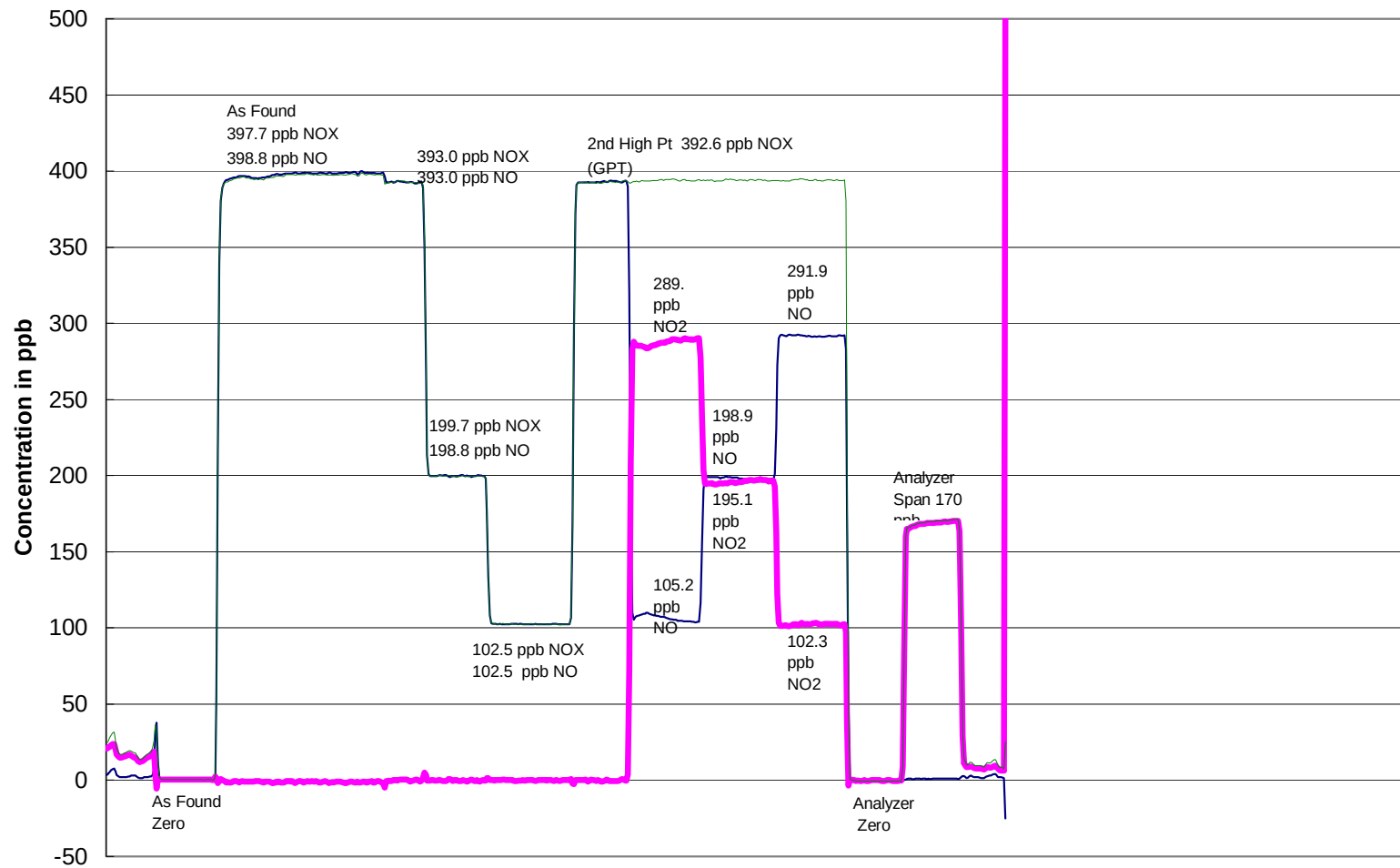
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	393.4	392.2	1.2	392.7	392.9	-0.2	1.0018	0.9981	N/A	N/A
300	393.4	103.2	290.2	394.1	105.2	289.0	0.9983	0.9806	1.0041	99.6%
200	393.4	197.3	196.0	393.9	199.0	195.1	0.9985	0.9918	1.0045	99.6%
100	393.4	290.7	102.6	394.1	291.9	102.3	0.9983	0.9959	1.0033	99.7%
Average Correction Factor							0.9984	0.9894	1.0040	99.6%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-1.4	1.0	-0.8	ppb	1.9	1.0	1.0	ppb
Auto span	159.5	160.7	-2.0	ppb	168.5	170.1	-1.5	ppb

Calibration Performed By: Grover Christiansen

Henry Pirker NOx Calibration



January 13, 2009

Calibration Summary

Parameter **NO₂**

Air Monitoring Network **PASZA**



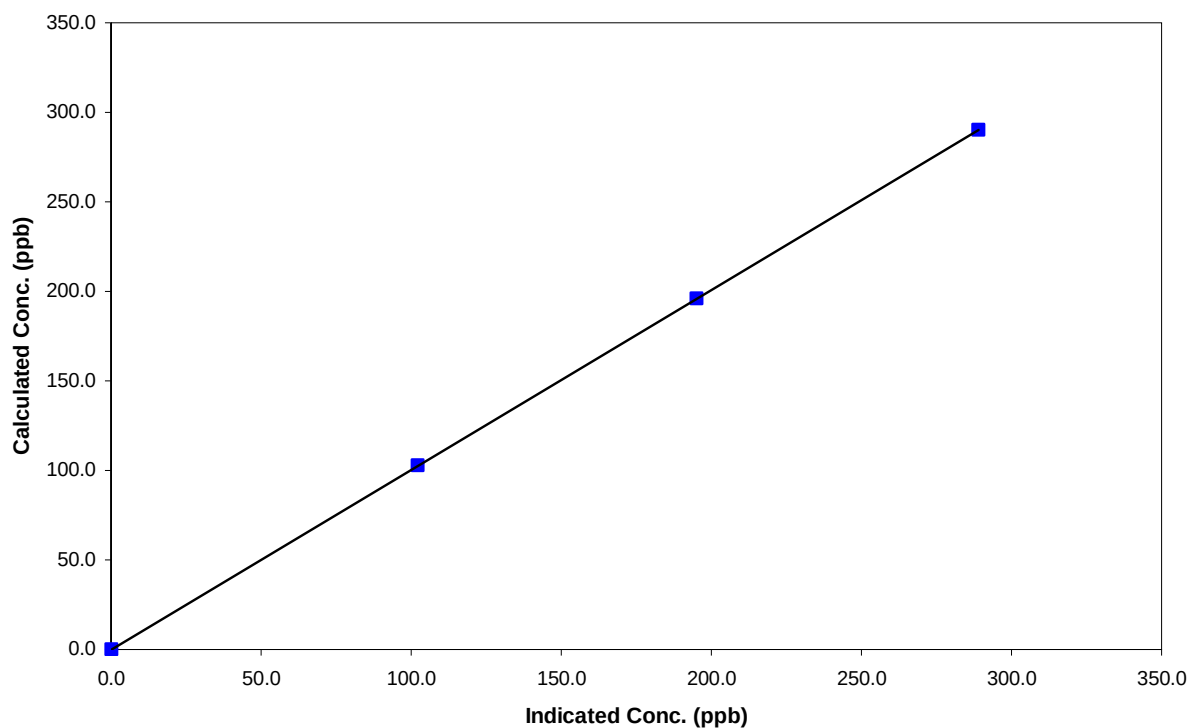
Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 12, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:17	End Time (MST)	15:15
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	0.1	0.0000	Correlation Coefficient	1.000000
290.2	289.0	1.0041		
196.0	195.1	1.0045		
102.6	102.3	1.0033	Slope	1.004640
			Intercept	-0.107436

NO₂ Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**



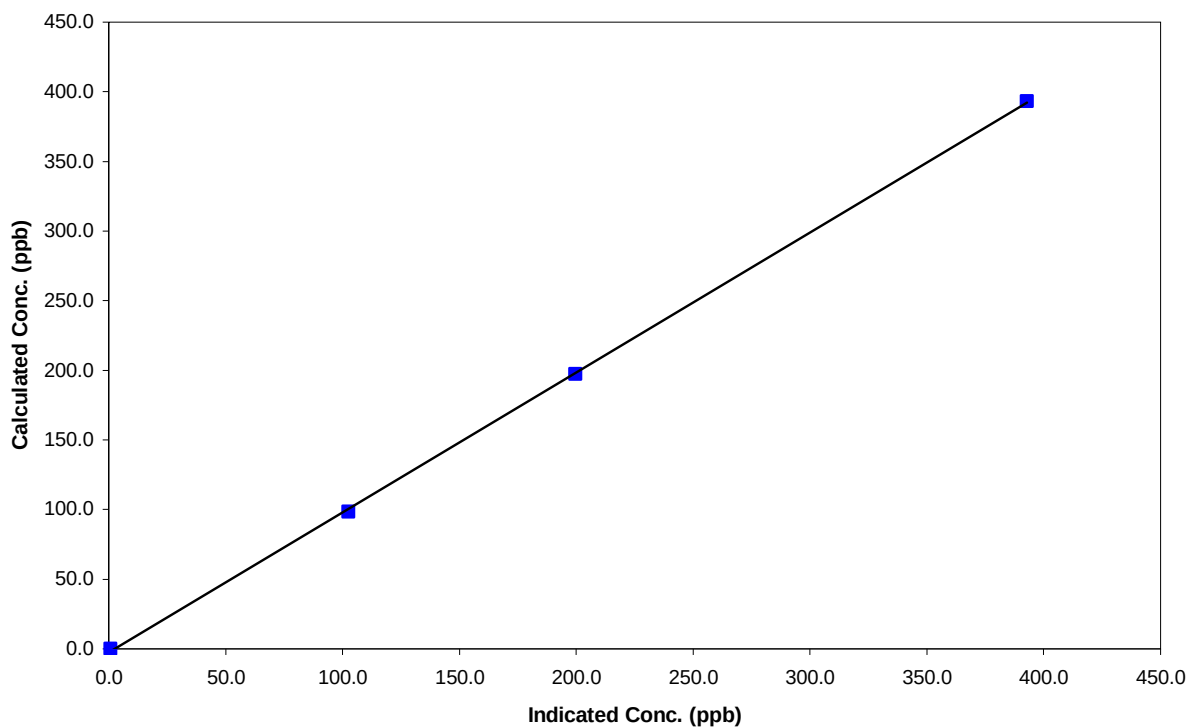
Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 12, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:17	End Time (MST)	15:15
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	0.8	0.0000	Correlation Coefficient	0.999890
393.0	392.7	1.0008		
197.2	199.7	0.9871		
98.4	102.5	0.9601	Slope	1.005115
			Intercept	-2.663458

NO_x Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**



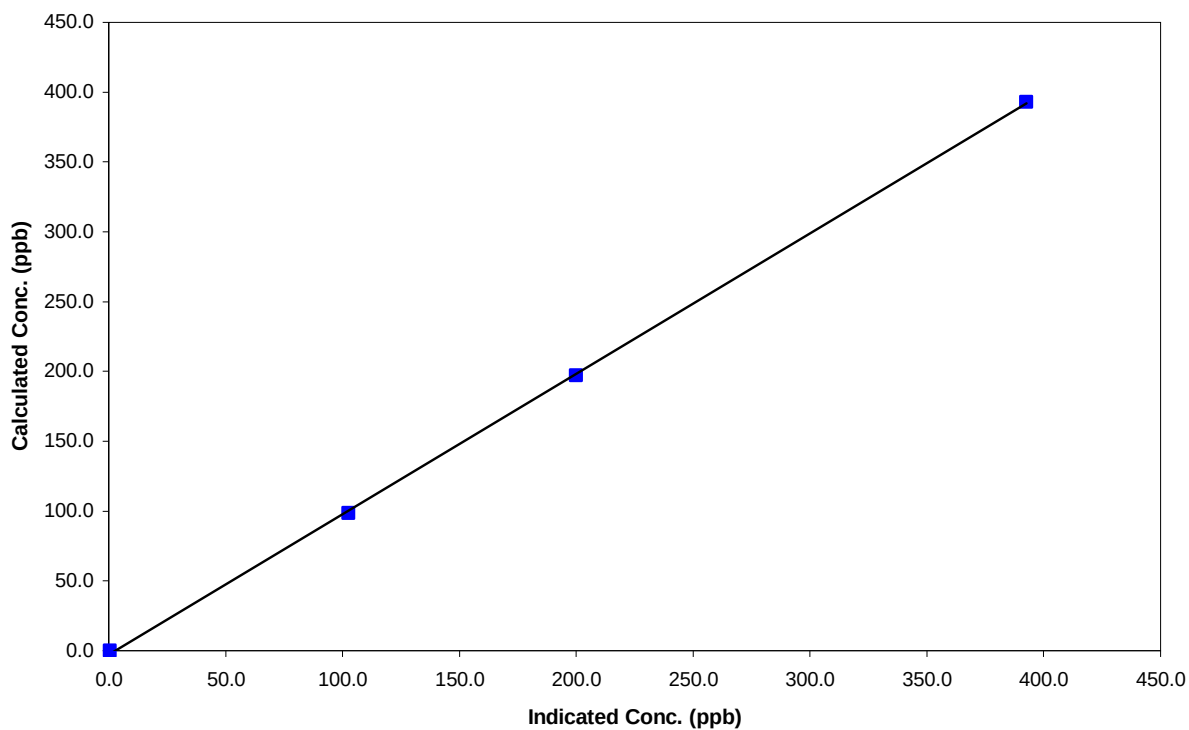
Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 12, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:17	End Time (MST)	15:15
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999872
393.0	392.7	1.0009		
197.2	199.9	0.9864		
98.4	102.5	0.9599	Slope	1.004515
			Intercept	-2.520832

NO Calibration Curve



Calibration Report



Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 15, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	14:20	End Time (MST)	16:17
Barometric Pressure	0.927 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
	<u>Before</u>		<u>After</u>
Calculated slope	1.013732	Calculated slope	1.035038
Calculated intercept	5.520317	Calculated intercept	0.802469
Analyzer make	TECO 49C	Analyzer serial #	607415761

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.6	ppb	-0.6	ppb
slope	0.966		0.966	
O3 Lamp temp	71.2	Deg C	71.2	Deg C
Intensities	100819/81123	mV	100879/82540	mV
Pressure	706.9	inches Hg	695.6	inches Hg
Flow A	0.719	ccm	0.711	ccm
Flow B	0.744	Deg C	0.736	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	4988	0.0	0.1	N/A
300	4988	287.5	278.2	1.0335
200	4988	194.5	185.7	1.0476
100	4988	101.2	96.4	1.0497
0	4988	0.0	0.1	As found zero
300	4988	287.7	277.8	As found span
Average Correction Factor				1.0436

Calculated value of As Found Response: 287.0 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	-0.2	ppb	1.5	ppb
Auto span	155.3	ppb	102.9	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**



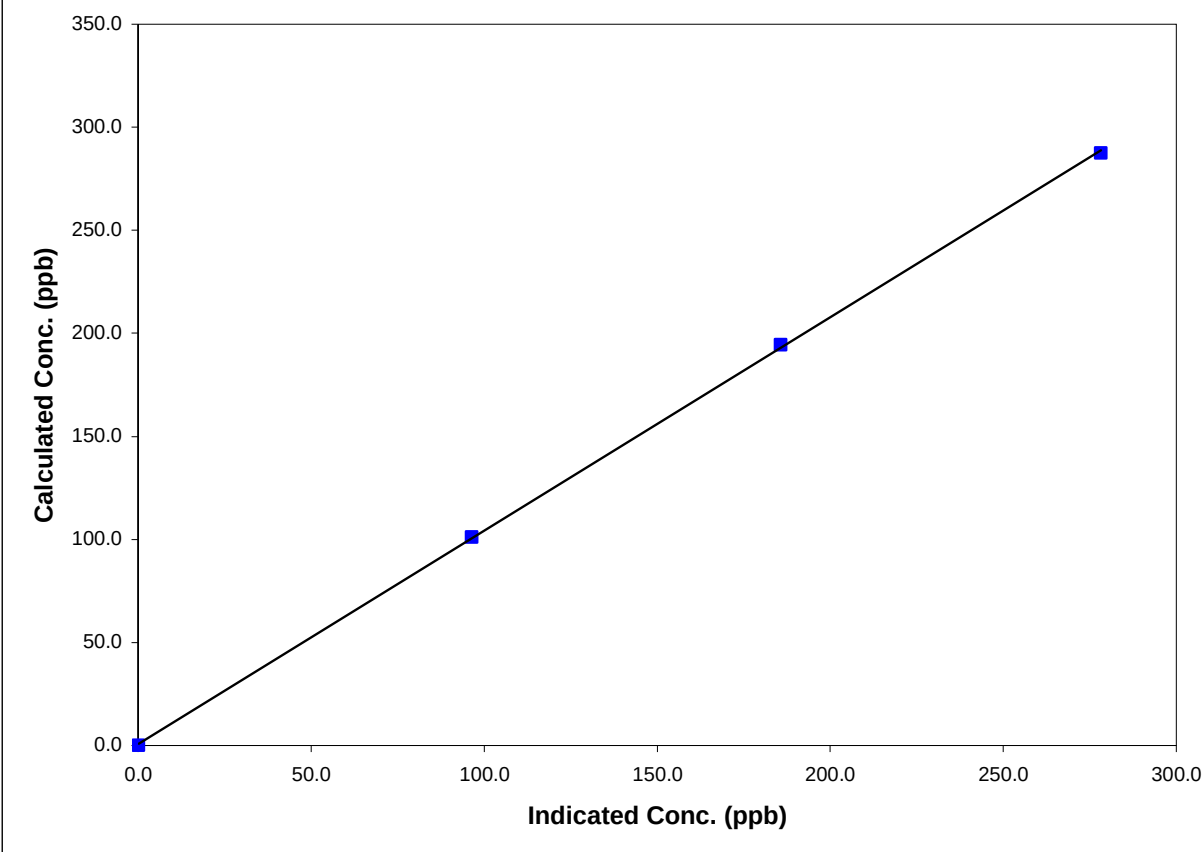
Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 15, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:20	End Time (MST)	16:17
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

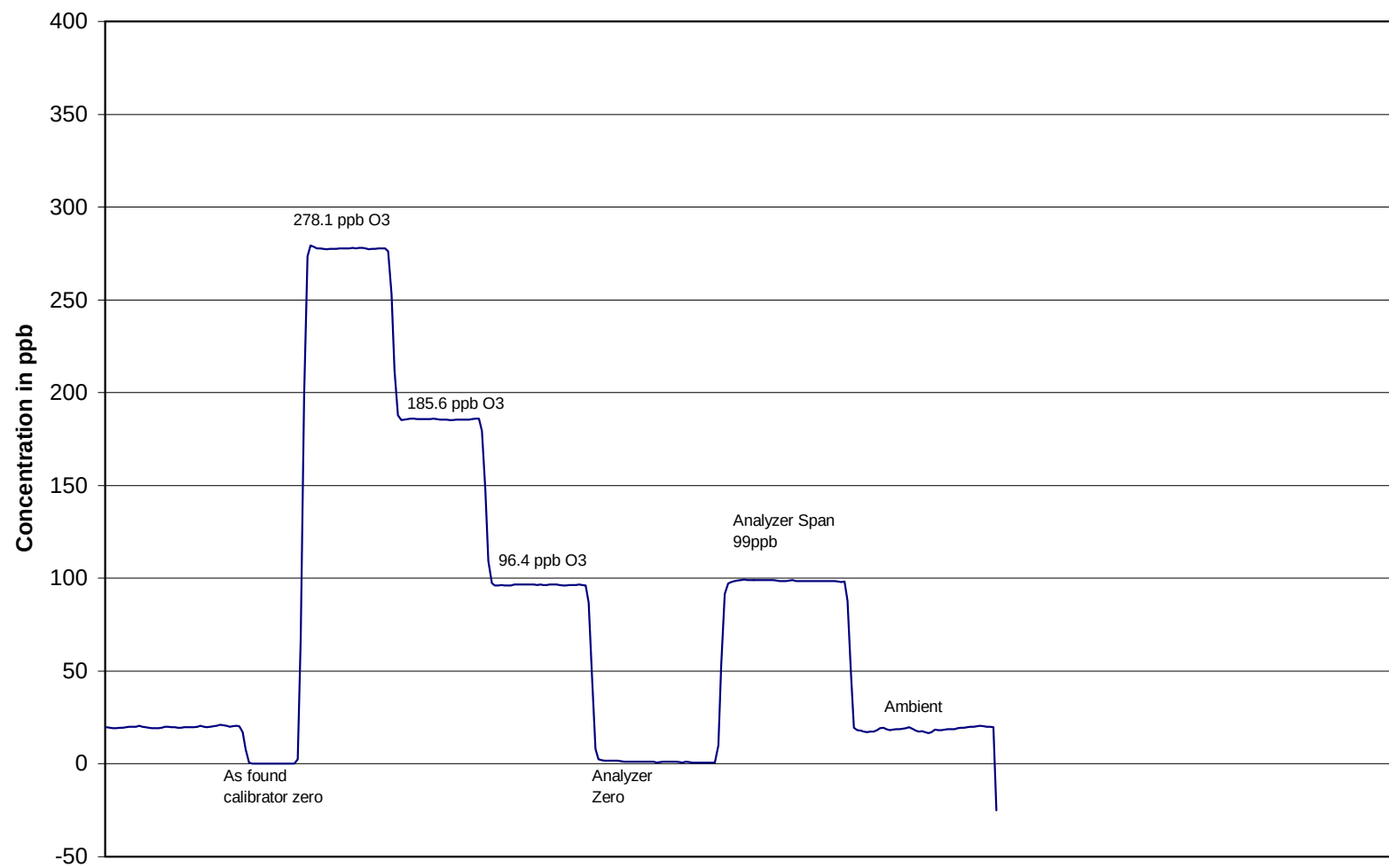
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA	Correlation Coefficient	0.999890
287.5	278.2	1.0335		
194.5	185.7	1.0476		
101.2	96.4	1.0497	Slope	1.035038
			Intercept	0.802469

O3 Calibration Curve



Henry Pirker O₃ Calibration



January 13, 2009

Calibration Report



Parameter **CO**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 14, 2009	Previous Calibration	December 16, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:
Start Time (MST)	9:29	End Time (MST)	12:02
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.008675	Calculated slope	0.999691
Calculated intercept	-0.128063	Calculated intercept	-0.781199
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.029		1.017	
CO zero setting	4.156		.808	
Sample pressure	696.3	mm Hg	679.1	mm Hg
Sample Flow	1.16	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)
4988	0.00	0.00	0.79	N/A
4988	39.82	23.76	24.56	0.9675
4988	19.88	11.91	12.67	0.9397
4989	9.94	5.96	6.75	0.8836
4990	0.00	0.00	0.58	As Found Zero
4990	39.86	23.77	24.58	As Found Span
Average Correction Factor				0.9303

Calculated value of As Found Response: 24.077 ppm Percent Change of As Found: -1.3%

	before calibration		after calibration	
Auto zero	-0.01	ppm	-0.12	ppm
Auto span	19.41	ppm	19.11	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **CO**

Air Monitoring Network **PASZA**



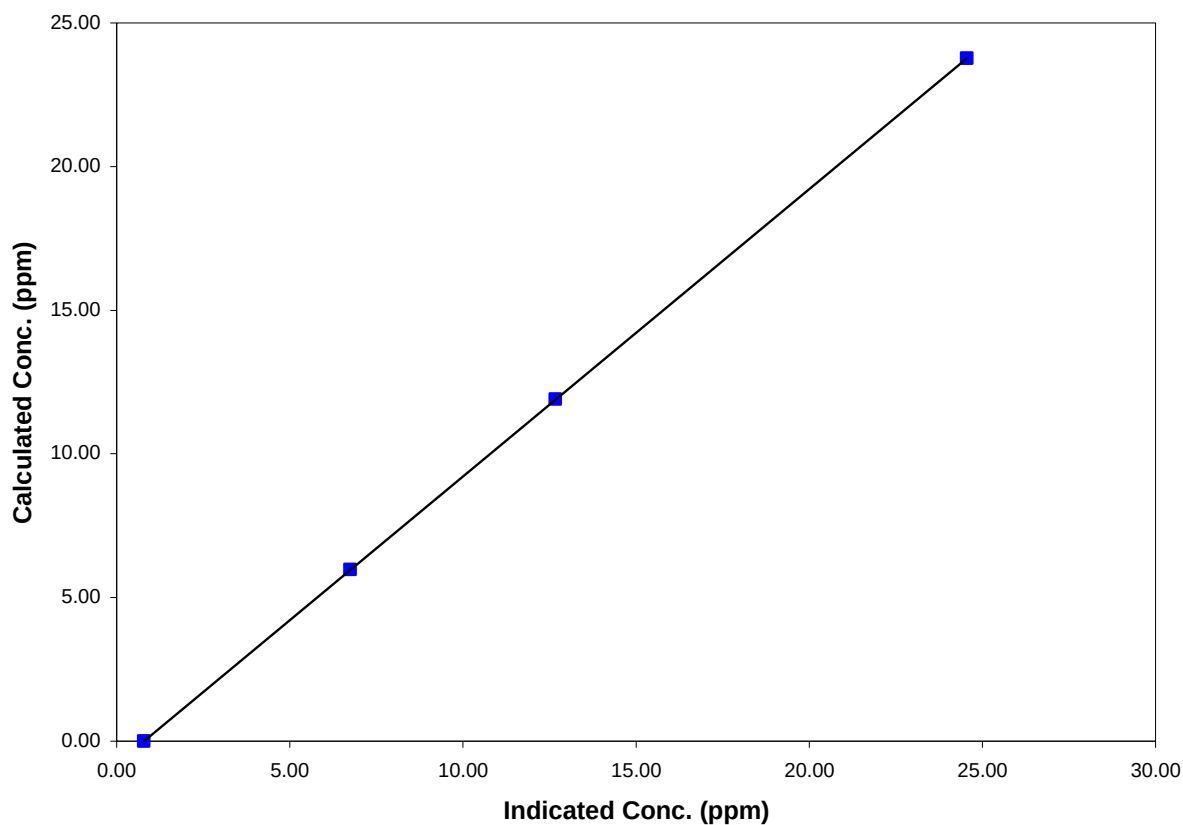
Station Information

Calibration Date	January 14, 2009	Previous Calibration	December 16, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:29	End Time (MST)	12:02
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

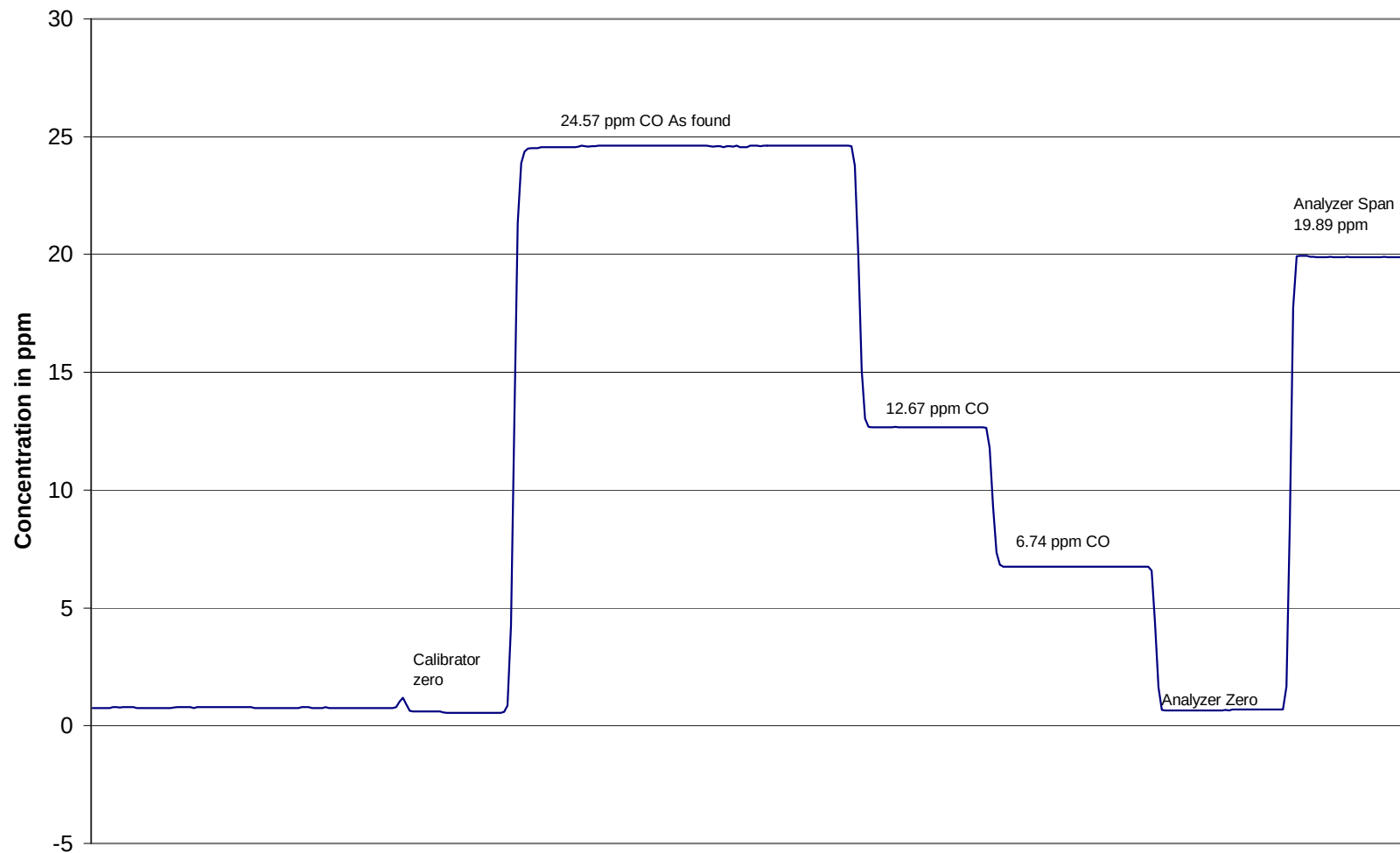
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.790	N/A	Correlation Coefficient	0.999998
23.758	24.557	0.9675		
11.909	12.673	0.9397		
5.962	6.748	0.8836	Slope	0.999691
			Intercept	-0.781199

CO Calibration Curve



Henry Pirker CO Calibration



January 14, 2009

Calibration Report



Parameter **THC**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 14, 2009	Previous Calibration	December 16, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	11:50	End Time (MST)	14:35
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	701 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	2/4/2010
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
	<u>Before</u>		<u>After</u>
Calculated slope	0.998116	Calculated slope	0.999809
Calculated intercept	-0.044167	Calculated intercept	-0.211860
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.50	psi	6.50	psi
THC span counts	7170	capture	7205	capture
THC zero counts	1121	capture	1166	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	0.07	N/A
4988	69.75	21.01	21.14	0.9936
4989	29.88	9.07	9.44	0.9603
4988	9.92	3.02	3.29	0.9179
4988	0.00	0.00	0.13	As Found Zero
4988	69.82	21.03	21.97	As Found Span
Average Correction Factor				0.9573

Calculated value of As Found Response: 21.759 ppm Percent Change of As Found: -3.5%

	before calibration		after calibration	
Auto zero	-0.01	ppm	-0.10	ppm
Auto span	23.67	ppm	24.18	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **THC**

Air Monitoring Network **PASZA**



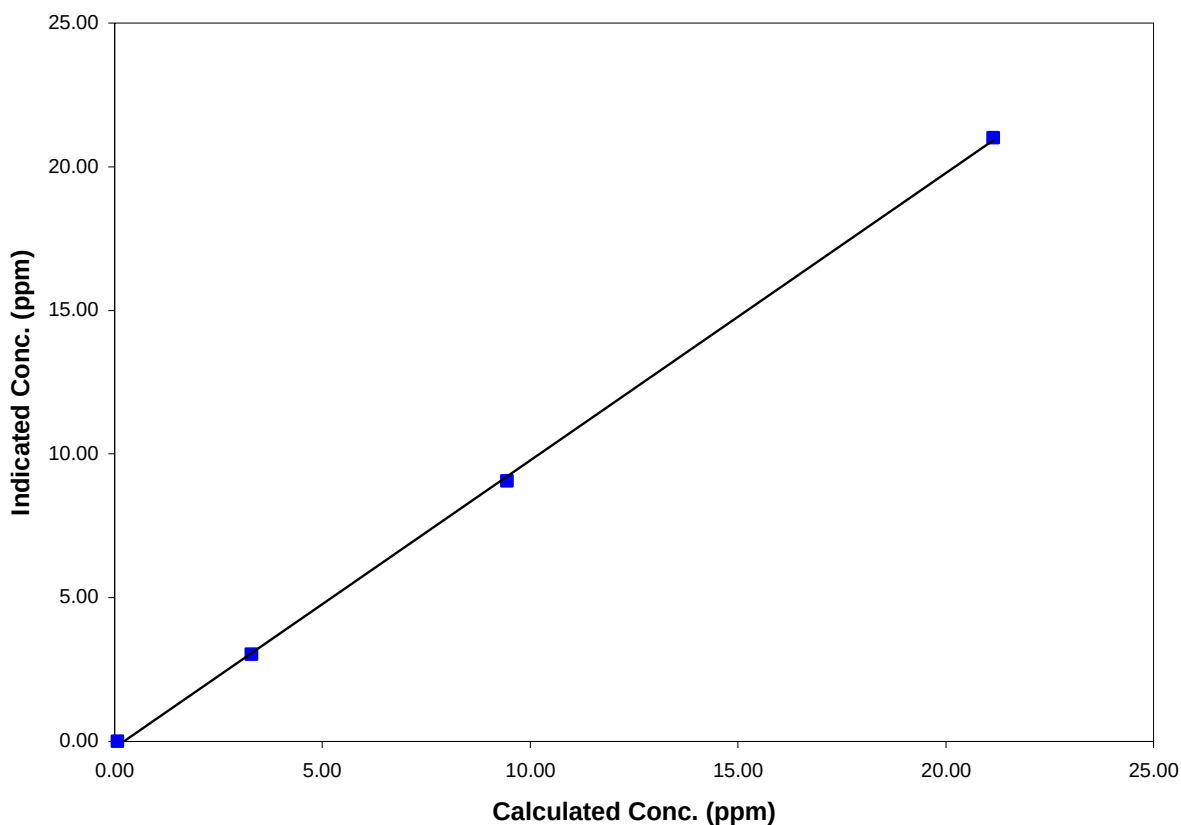
Station Information

Calibration Date	January 14, 2009	Previous Calibration	December 16, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:50	End Time (MST)	14:35
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

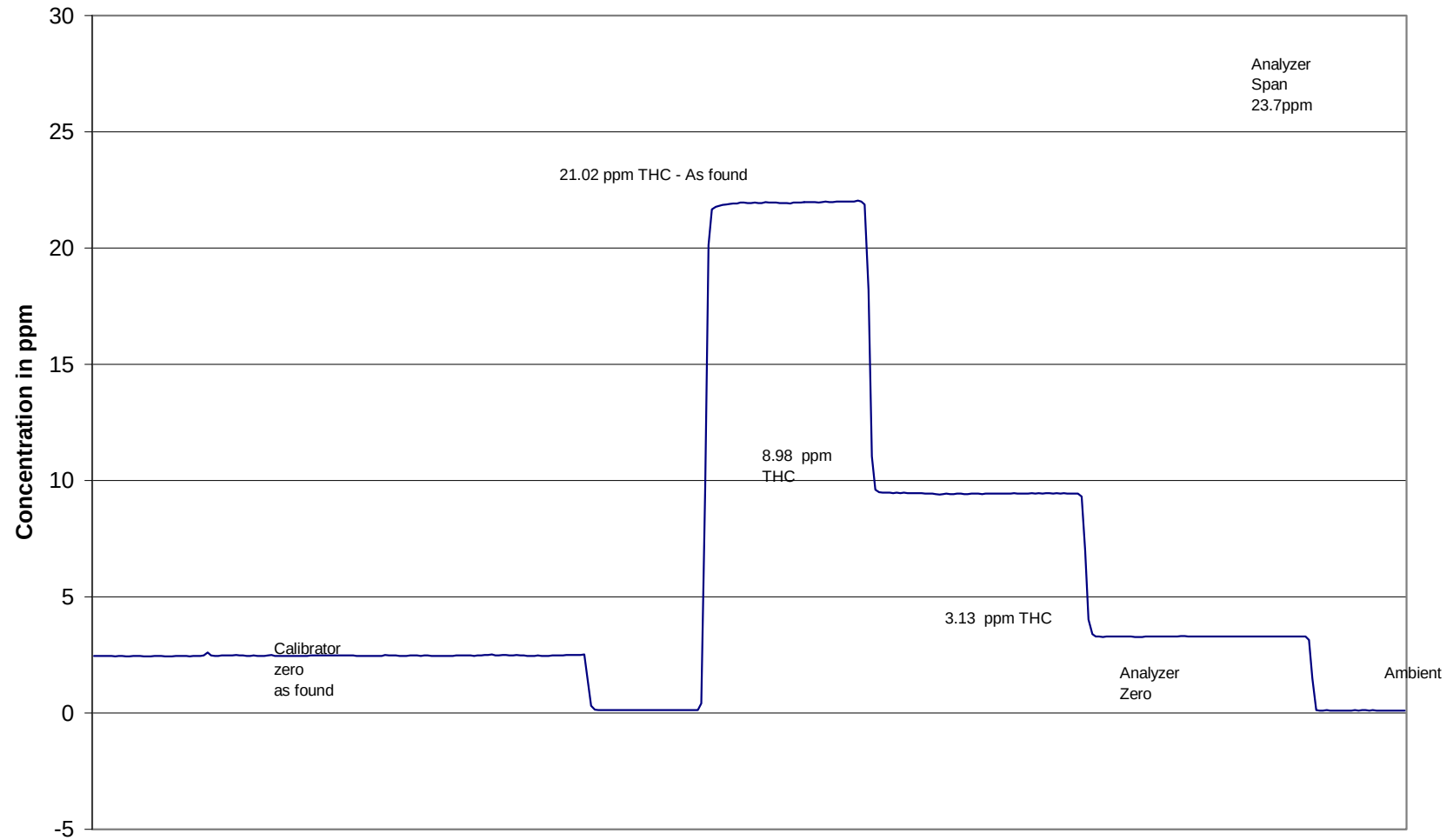
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.073	N/A	Correlation Coefficient	0.999787
21.007	21.142	0.9936		
9.069	9.444	0.9603		
3.023	3.294	0.9179	Slope	0.999809
			Intercept	-0.211860

THC Calibration Curve



Henry Pirker THC Calibration



January 14, 2009

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 15, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:
Start Time (MST)	15:35	End Time (MST)	18:09
Barometric Pressure	0.927 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Conc	5.1 ppb	Cal Gas Expiry Date	7/31/2008
		Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.003183	Calculated slope	1.005719
Calculated intercept	0.007759	Calculated intercept	-0.481442
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.850		0.871	
Background	17.1		18.0	
Pressure	672.7	mm Hg	653	mm Hg
Flow	471	ccm	462	ccm
Lamp Voltage	848	v	848	v

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.00	-0.03	N/A
4988	79.83	80.34	80.02	1.0039
4988	39.81	40.38	41.21	0.9799
4988	9.92	10.12	10.80	0.9370
4988	0.00	0.00	-0.03	As Found Zero
4988	79.77	80.28	80.98	As Found Span
Average Correction Factor				0.9736

Calculated value of As Found Response: 81.3 ppb Percent Change of As Found: -1.2%

	before calibration		after calibration	
Auto zero	-0.18	ppb	-0.25	ppb
Auto span	35.29	ppb	25.55	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



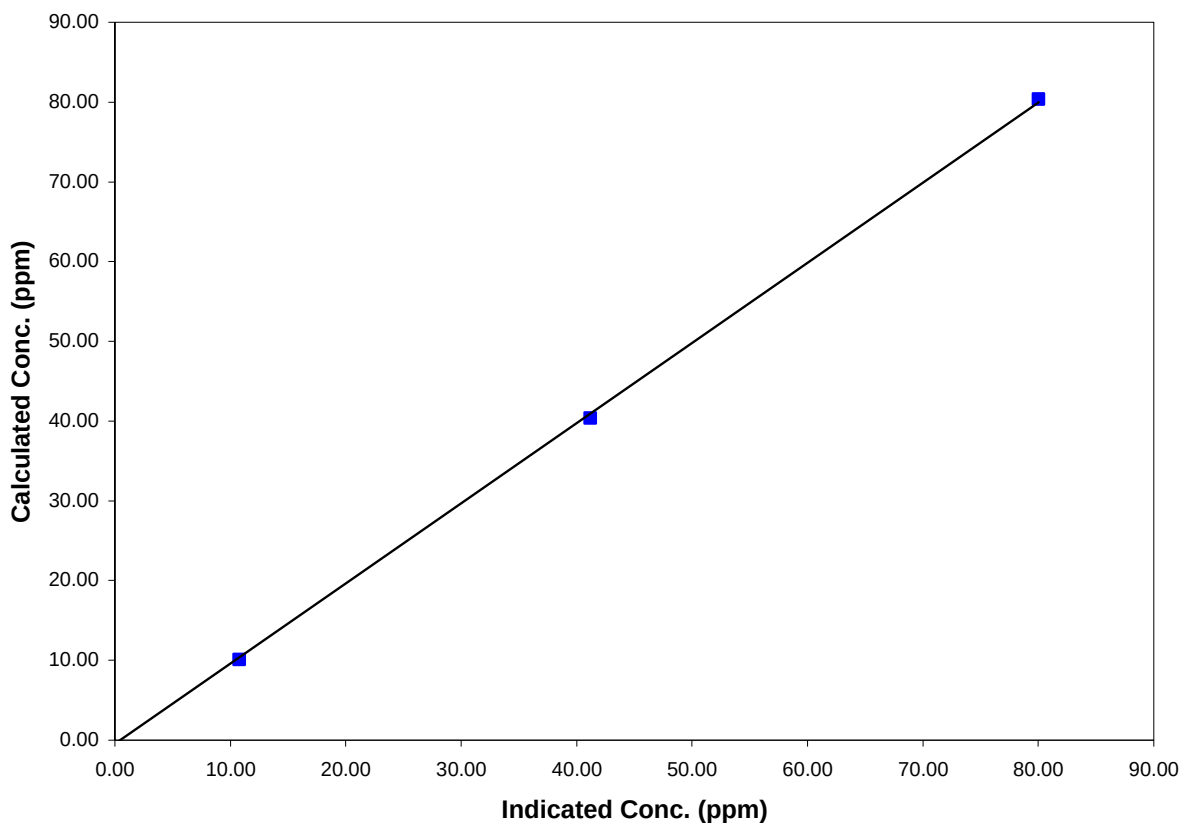
Station Information

Calibration Date	January 13, 2009	Previous Calibration	December 15, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	15:35	End Time (MST)	18:09
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

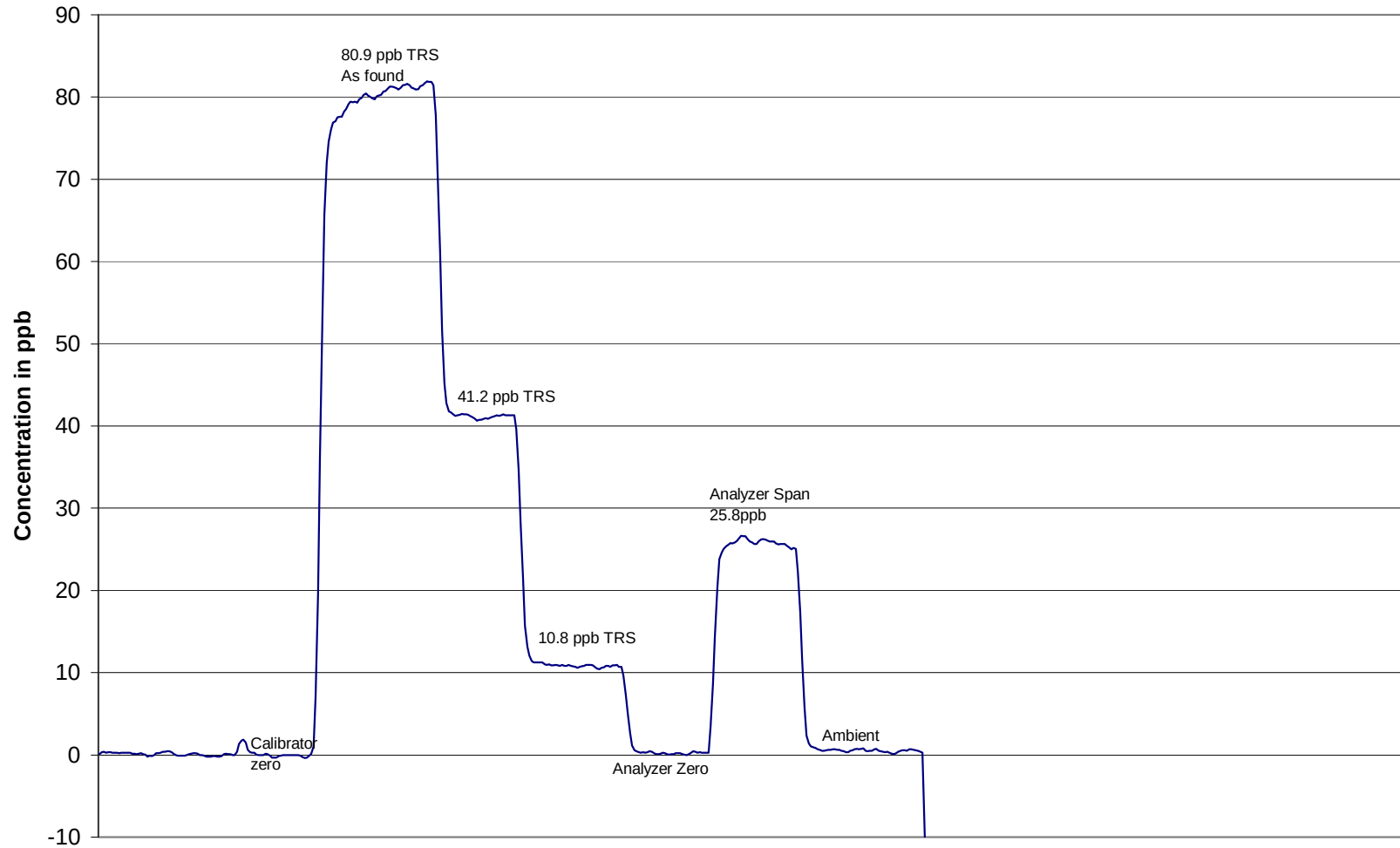
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.027	N/A	Correlation Coefficient	0.999800
80.337	80.025	1.0039		
40.382	41.211	0.9799		
10.123	10.804	0.9370	Slope	1.005719
			Intercept	-0.481442

TRS Calibration Curve



Henry Pirker TRS Calibration



January 13, 2009

Calibration Report

Parameter **SO₂**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 27, 2009	Previous Calibration	December 17, 2008
Station Number	2	Station Location	Evergreen Park
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:

Start Time (MST)	9:14	End Time (MST)	12:15
Barometric Pressure	0.937 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.031851	Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.996237	Calculated slope	1.018378
Calculated intercept	-2.283662	Calculated intercept	-2.604355

Analyzer make **Teco 43i** Analyzer serial # **701120008**

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	10.2		10.2	
coefficient	1		1	
Lamp Voltage	838	volts	842	volts
Chamber Temp	45.3	Deg C	45.3	Deg C
Perm Gas Temp	45	Deg C	44.99	Deg C
Pressure	658.6	mm Hg	657.7	mm Hg
Sample Flow	444	ccm	442	ccm
Lamp Intensity	89	%	90	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.00	1.0	N/A
4988	39.83	398.47	393.0	1.0138
4989	19.88	199.64	199.4	1.0010
4989	9.93	99.92	102.2	0.9780
4990	0.0	0.00	0.8	As Found Zero
4988	39.82	398.37	393.1	As Found Span
Average Correction Factor				0.9976

Calculated value of As Found Response: **388.571 ppm** Percent Change of As Found: **2.5%**

	before calibration		after calibration	
Auto zero	-1.4	ppm	-1.4	ppm
Auto span	268.0	ppm	268.0	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**



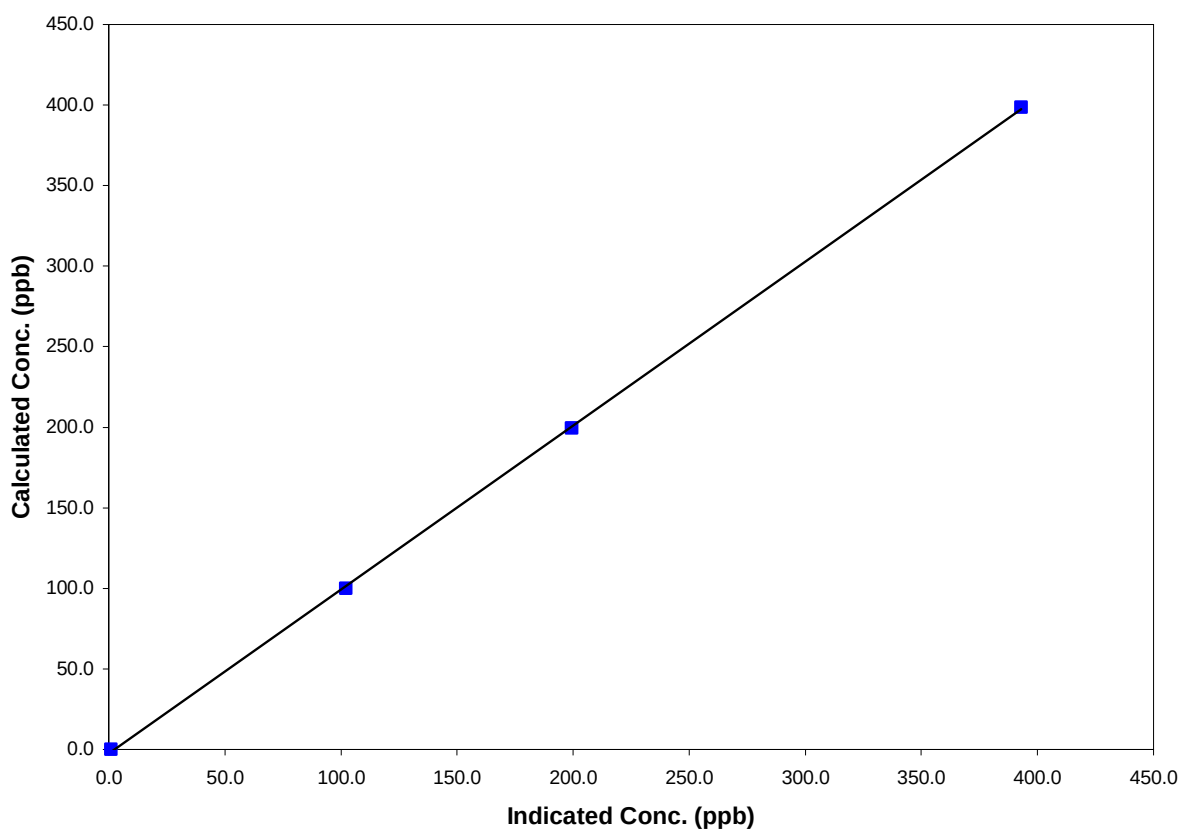
Station Information

Calibration Date	January 27, 2009	Previous Calibration	December 17, 2008
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	9:14	End Time (MST)	12:15
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

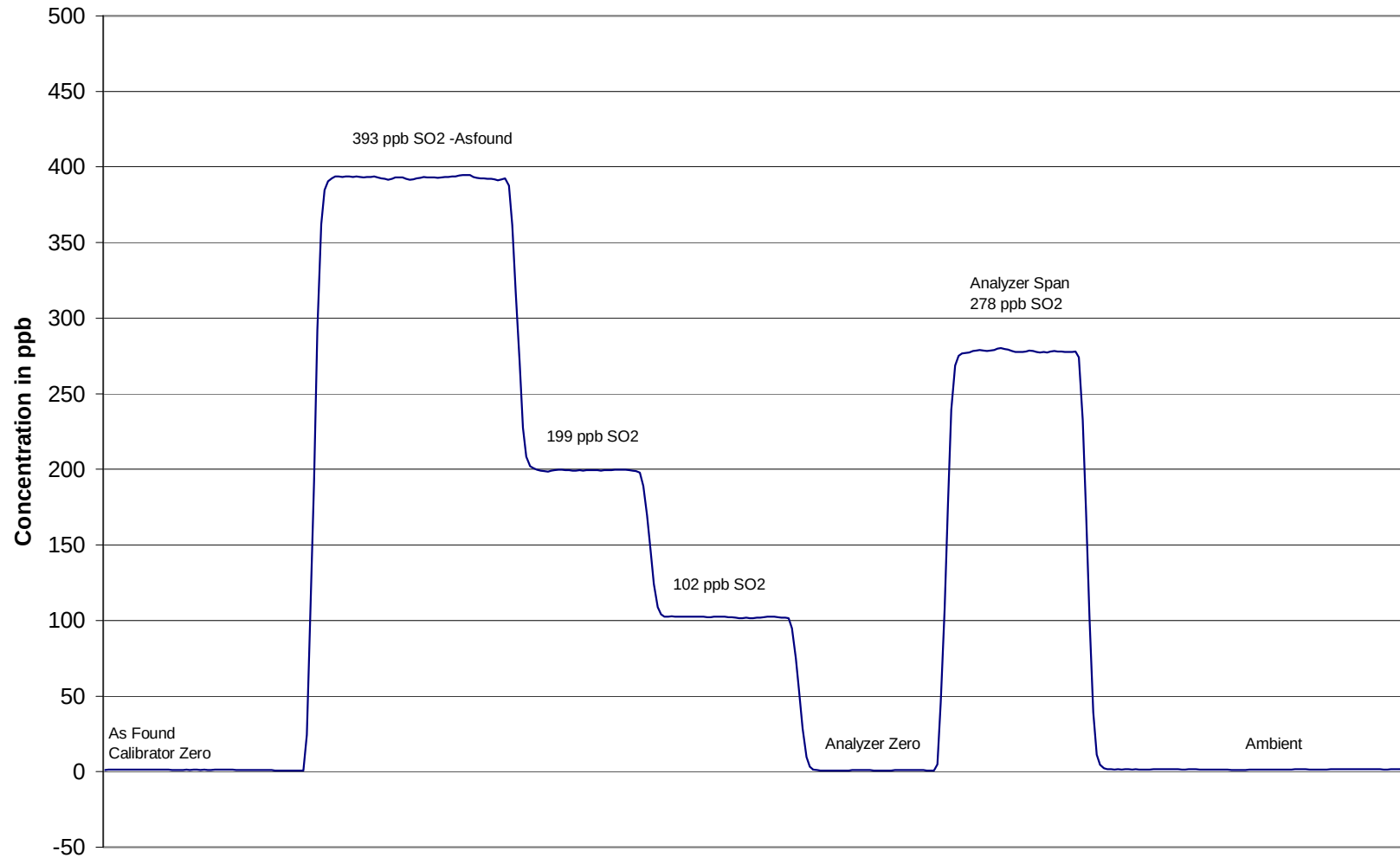
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.0	N/A	Correlation Coefficient	0.999929
398.5	393.0	1.0138		
199.6	199.4	1.0010		
99.9	102.2	0.9780	Slope	1.018378
			Intercept	-2.604355

SO2 Calibration Curve



Evergreen Park SO₂ Calibration



January 27, 2009

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 27, 2009	Previous Calibration	December 17, 2008
Station Number	2	Station Location	Evergreen Park
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:
Start Time (MST)	10:40	End Time (MST)	13:38
Barometric Pressure	0.928 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	0.031545	Cal Gas Cylinder #	ALM 013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	0.995993	Calculated slope	1.022342
Calculated intercept	0.102177	Calculated intercept	-0.230577

Analyzer make **TEI Model 43C** Analyzer serial # **0436610005**

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	14.3	ppb	14.6	ppb
coefficient	0.586		0.586	
Lamp Voltage	822	volts	821	volts
Chamber Temp	44.3	Deg C	44.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	624	mm Hg	623	mm Hg
Sample Flow	0.456	ccm	0.455	ccm
Lamp Intensity	45,393	mv	45,455	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.00	0.2	N/A
4987	79.91	80.43	78.9	1.0194
4989	39.84	40.40	39.7	1.0172
4990	9.89	10.09	10.2	0.9897
4990	0.00	0.00	0.3	As Found Zero
4987	79.91	80.43	78.9	As Found Span
Average Correction Factor				1.0088

Calculated value of As Found Response: **78.44 ppm** Percent Change of As Found: **2.5%**

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.1	ppm
Auto span	66.2	ppm	69.7	ppm

Notes:

Calibration Performed By: **Grover Christiansen**

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



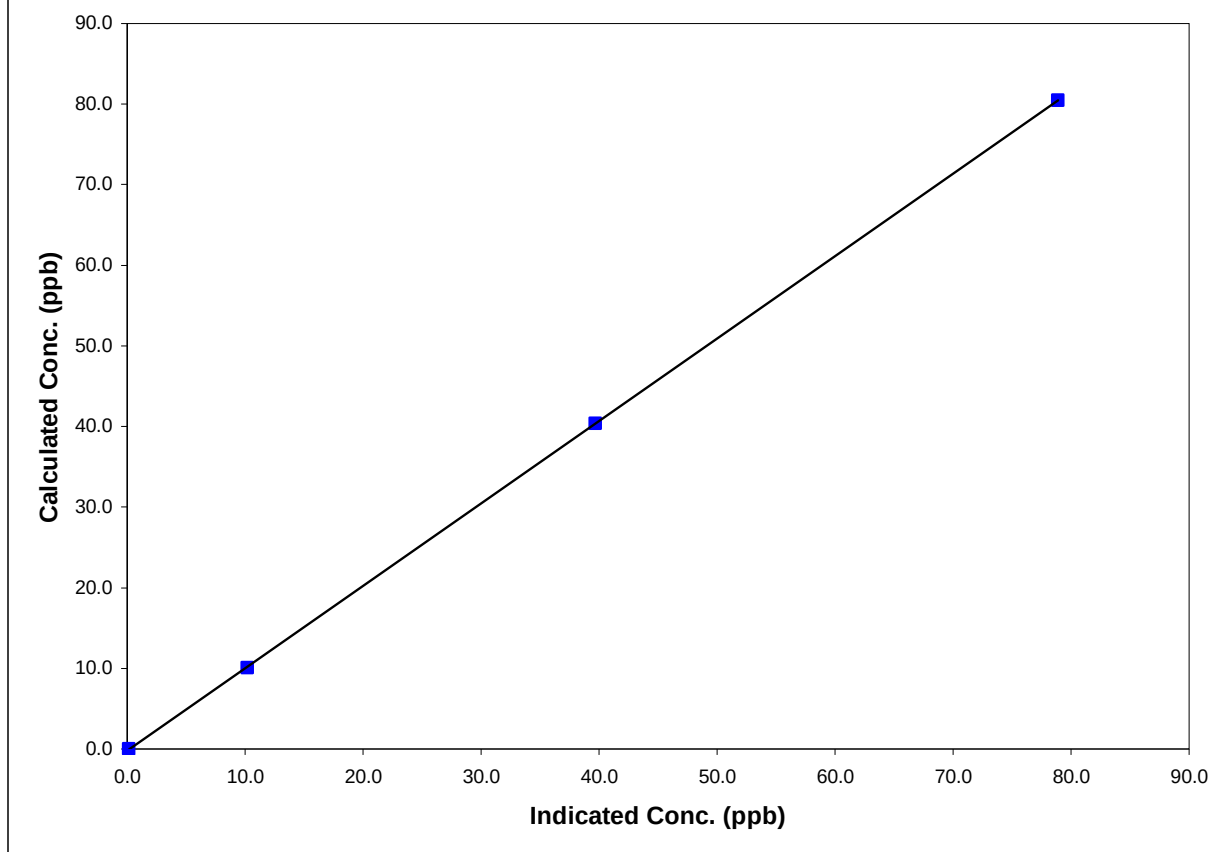
Station Information

Calibration Date	January 27, 2009	Previous Calibration	December 17, 2008
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:40	End Time (MST)	13:38
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

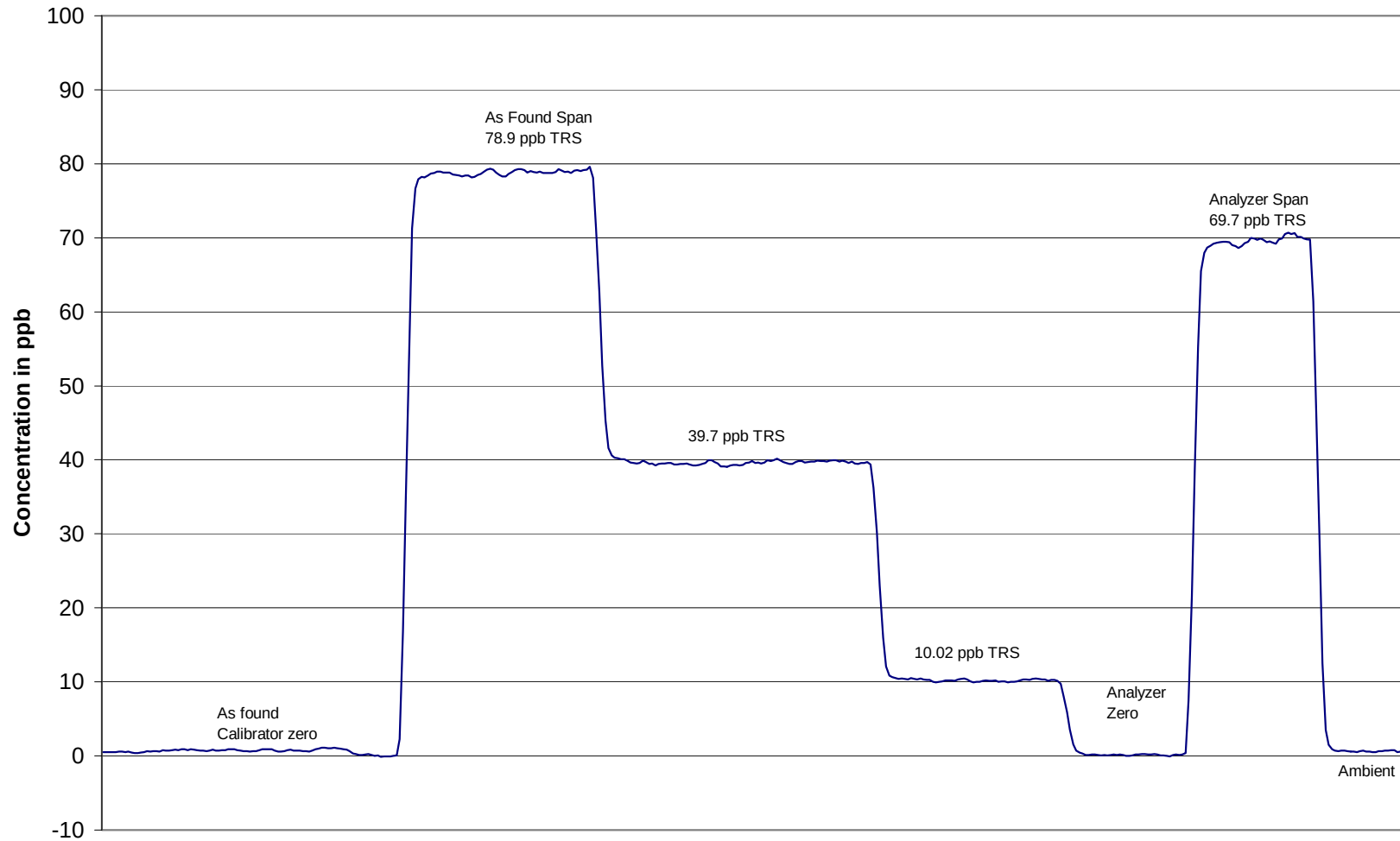
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999996
80.4	78.9	1.0194		
40.4	39.7	1.0172		
10.1	10.2	0.9897	Slope	1.022342
			Intercept	-0.230577

TRS Calibration Curve



Evergreen Park TRS Calibration



January 27, 2009

Calibration Report



Parameter **SO₂**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 16, 2009	Previous Calibration	December 19, 2008
Station Number	3	Station Location	Smokey Heights
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:
Start Time (MST)	11:00	End Time (MST)	14:30
Barometric Pressure	0.938 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Cert Date	6/8/2008
Correction factor	0.031885	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	1.005527	Calculated slope	1.006426
Calculated intercept	-2.179325	Calculated intercept	-2.363879

Analyzer make **Teco 43i** Analyzer serial # **701120009**

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.3		7.4	
coefficient	0.724		0.733	
Lamp Voltage	926	volts	929	volts
Chamber Temp	45.2	Deg C	45.2	Deg C
Perm Gas Temp	45.01	Deg C	44.99	Deg C
Pressure	673.2	mm Hg	674.4	mm Hg
Sample Flow	445	ccm	446	ccm
Lamp Intensity	88	%	88	%

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	0.9	N/A
4988	39.80	400.55	399.7	1.0022
4988	19.92	201.27	202.9	0.9922
4988	9.92	100.43	103.7	0.9686
4988	0.0	0.00	0.4	As Found Zero
4988	39.81	400.65	393.8	As Found Span
Average Correction Factor				0.9876

Calculated value of As Found Response: **393.374 ppm** Percent Change of As Found: **1.8%**

	before calibration		after calibration	
Auto zero	-1.9	ppm	-2.0	ppm
Auto span	305.2	ppm	309.7	ppm

Notes:

Calibration Performed By: **Grover Christiansen**

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**



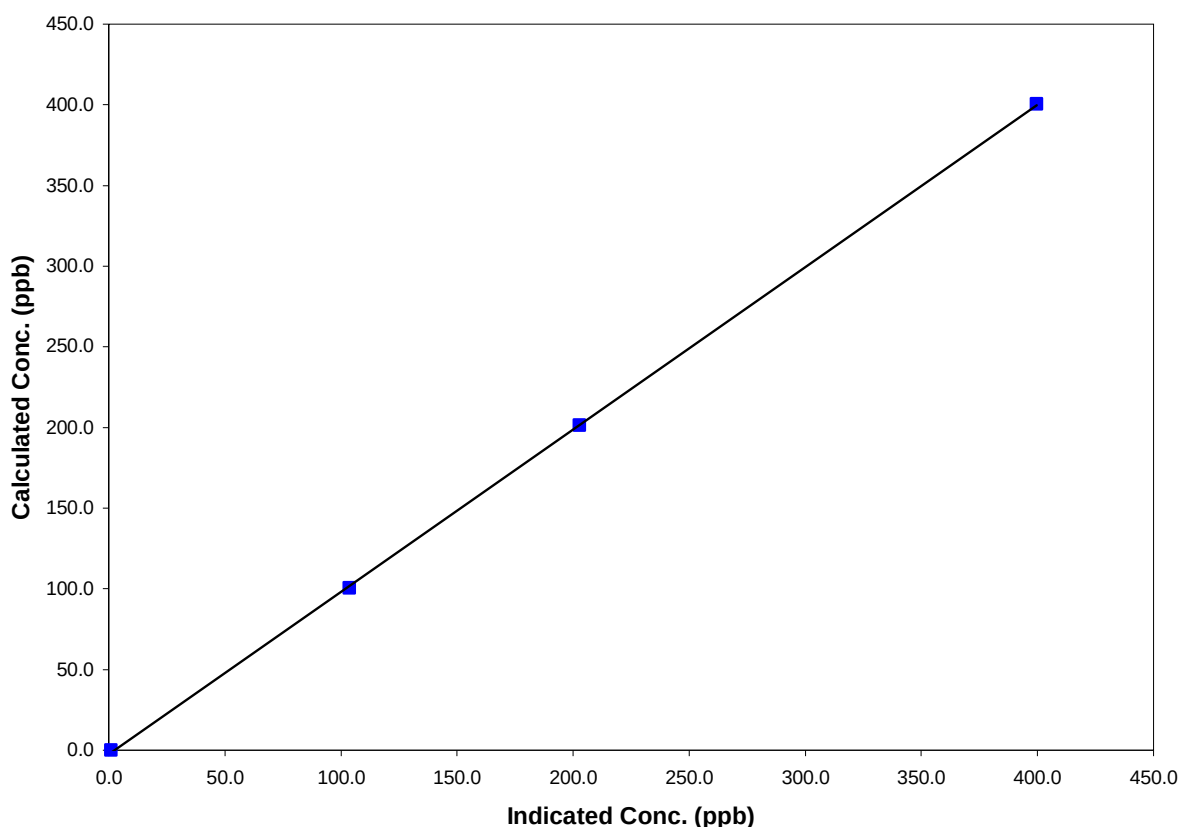
Station Information

Calibration Date	January 16, 2009	Previous Calibration	December 19, 2008
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	11:00	End Time (MST)	14:30
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

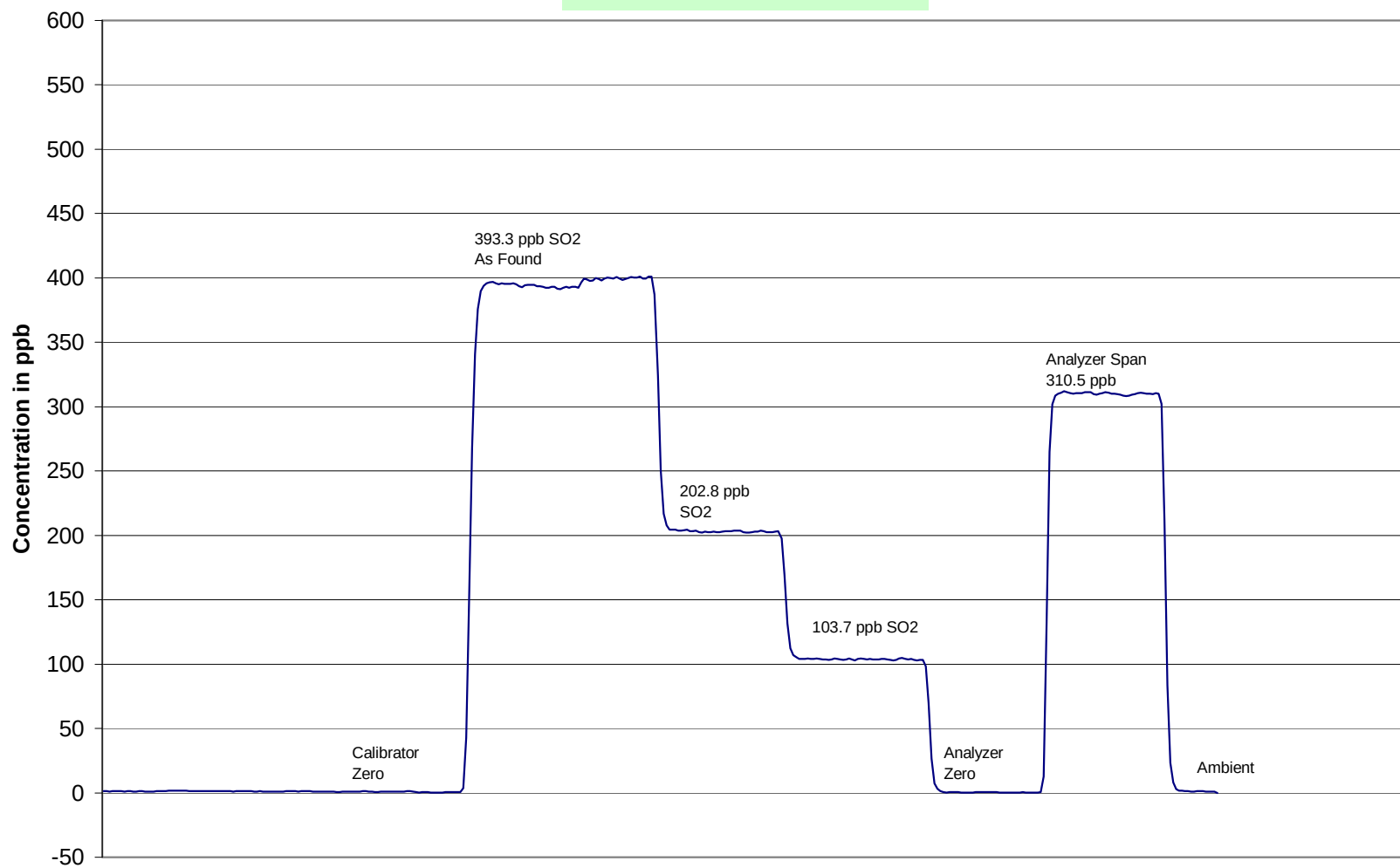
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.9	N/A	Correlation Coefficient	0.999941
400.5	399.7	1.0022		
201.3	202.9	0.9922		
100.4	103.7	0.9686	Slope	1.006426
			Intercept	-2.363879

SO2 Calibration Curve



Smoky Heights SO₂ Calibration



January 16, 2009

Calibration Report



Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 16, 2009	Previous Calibration	December 19, 2008
Station Number	3	Station Location	Smokey Heights
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:

Start Time (MST)	9:00	End Time (MST)	12:30
Barometric Pressure	0.938 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	0.031885	Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	1.010840	Calculated slope	0.996603
Calculated intercept	-0.372271	Calculated intercept	-0.389357

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
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	before		after	
Concentration range	100	ppb	100	ppb
Background	12.7	ppb	13	ppb
coefficient	1.004		1.027	
Lamp Voltage	772	volts	772	volts
Chamber Temp	43.9	Deg C	44	Deg C
Perm Gas Temp	45	Deg C	44.9	Deg C
Pressure	489.2	mm Hg	488.2	mm Hg
Sample Flow	749	ccm	751	ccm
Lamp Intensity	32,335	mv	32,341	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.00	0.3	N/A
4988	79.76	80.27	80.9	0.9920
4988	39.85	40.42	41.0	0.9870
4988	9.93	10.13	10.7	0.9503
4990	0.0	0.00	0.5	As Found Zero
4990	79.71	80.19	78.9	As Found Span
Average Correction Factor				0.9764

Calculated value of As Found Response: 78.89 ppm Percent Change of As Found: 1.6%

	before calibration		after calibration	
Auto zero	-0.4	ppm	-0.2	ppm
Auto span	40.1	ppm	41.6	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



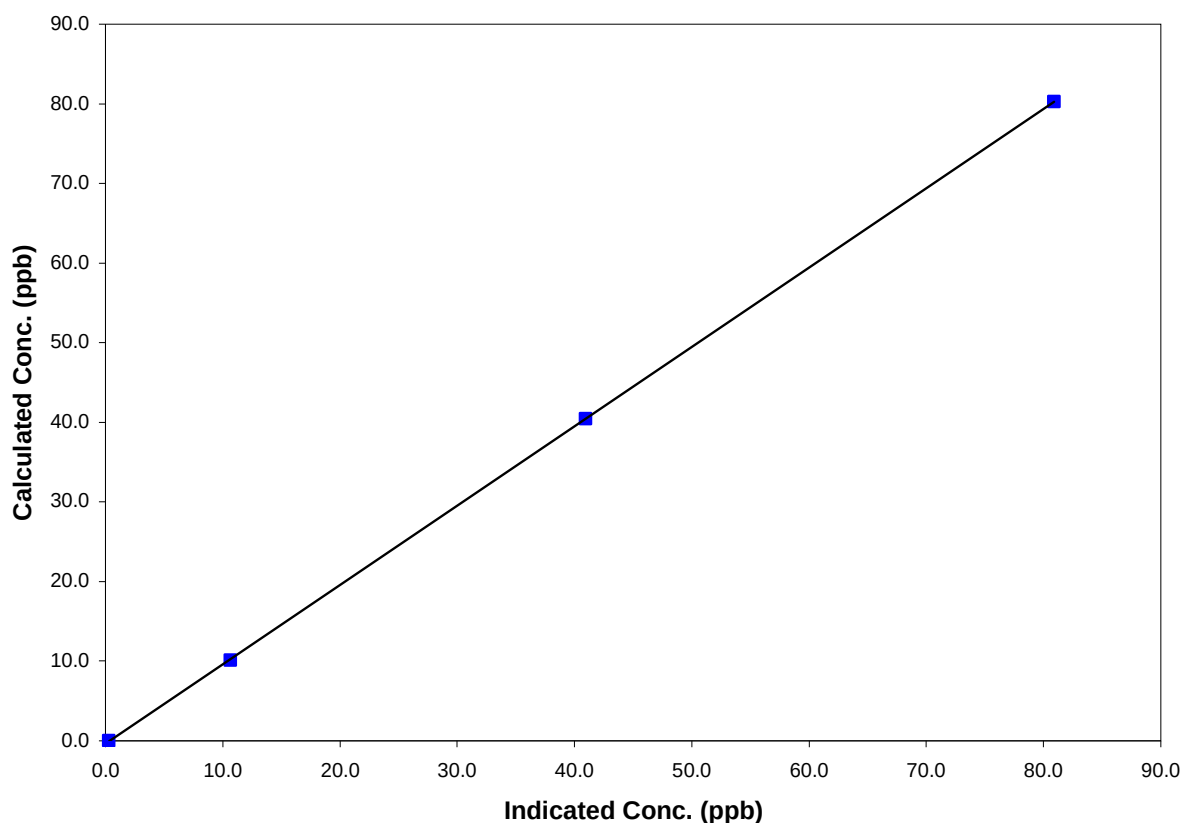
Station Information

Calibration Date	January 16, 2009	Previous Calibration	December 19, 2008
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	9:00	End Time (MST)	12:30
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

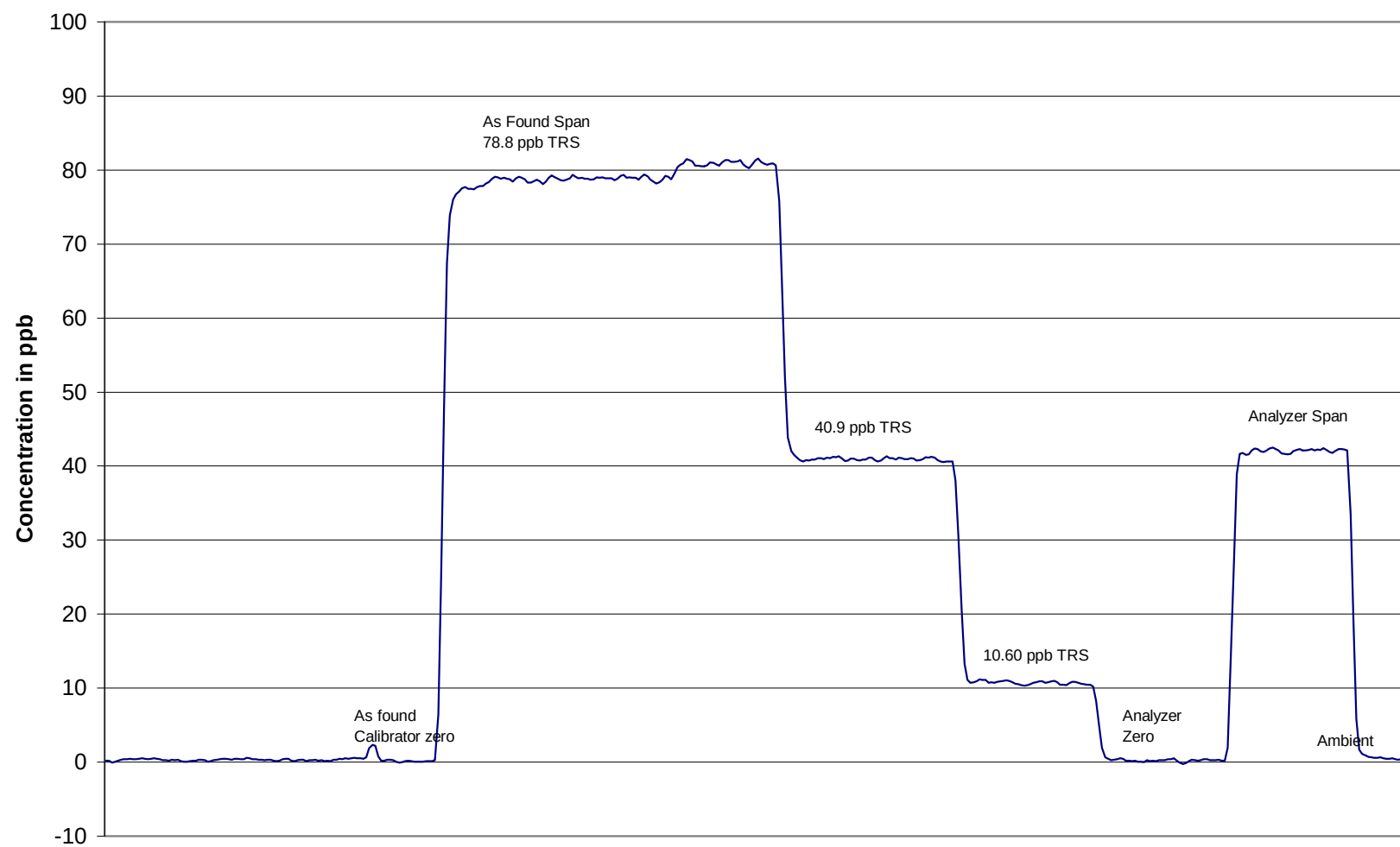
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999995
80.3	80.9	0.9920		
40.4	41.0	0.9870		
10.1	10.7	0.9503	Slope	0.996603
			Intercept	-0.389357

TRS Calibration Curve



Smoky Heights TRS Calibration



January 16, 2009

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:

Start Time (MST)	11:50	End Time (MST)	14:00
Barometric Pressure	0.924 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	10.06 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	CC 114395		
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.999103	Calculated slope	1.000965
Calculated intercept	-0.561815	Calculated intercept	-0.435638

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

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.44		244	
Coefficient	0.913		0.913	
PMT	-813	V	-813	V
UV Lamp Voltage	1068	V	1062	V
Chamber Temp	45.2	Deg C	45.1	Deg C
Pressure	676.1	mm Hg	673.1	mm Hg
Sample Flow	0.485	LPM	0.483	LPM
Lamp Intesity	84%	%	84%	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.0	N/A
4988	39.90	79.8	79.9	0.9990
4988	19.87	39.9	40.6	0.9821
4988	9.91	19.9	20.8	0.9596
4988	0.00	0.0	0.2	As found zero
4988	39.90	79.8	79.9	As found span
Average Correction Factor				0.9802

Calculated value of As Found Response: 79.047 ppm Percent Change of As Found: 1.0%

	before calibration		after calibration	
Auto zero	-0.5	ppm	-0.4	ppm
Auto span	55.5	ppm	54.8	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**



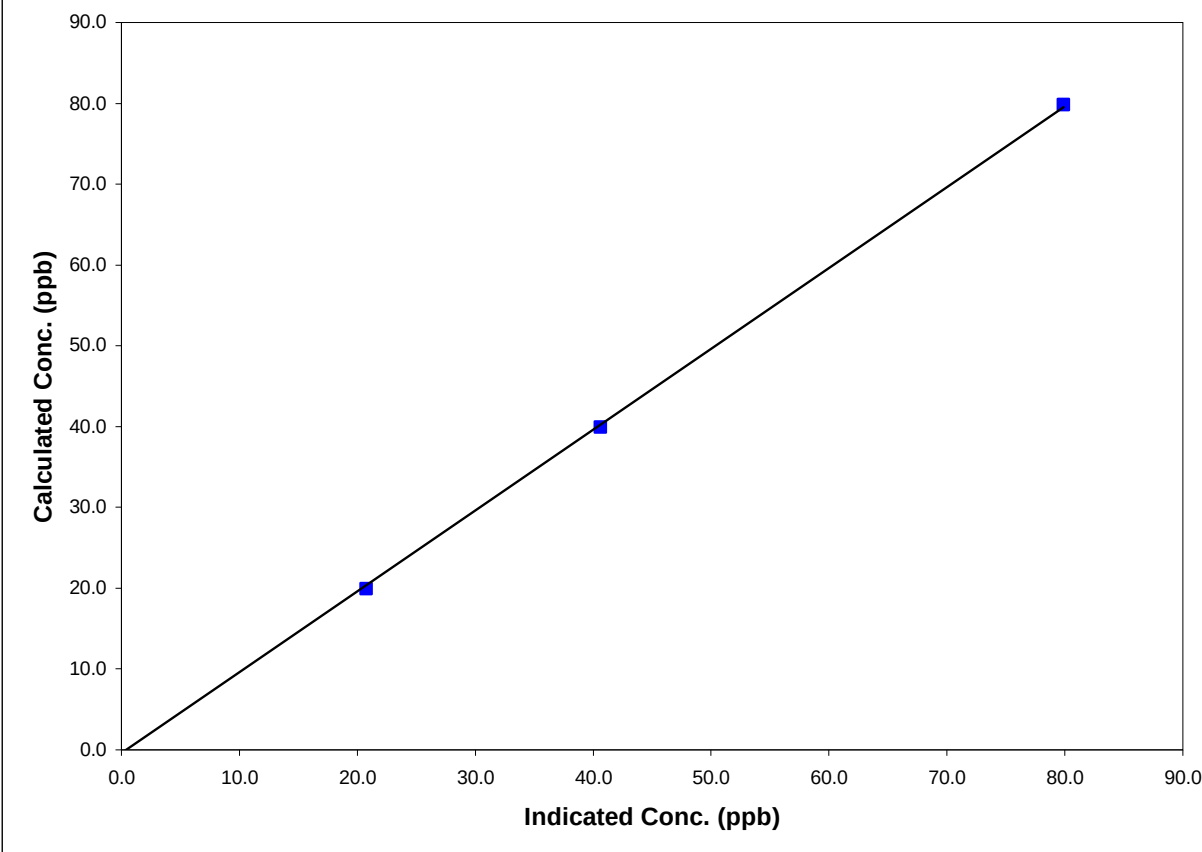
Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:50	End Time (MST)	14:00
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

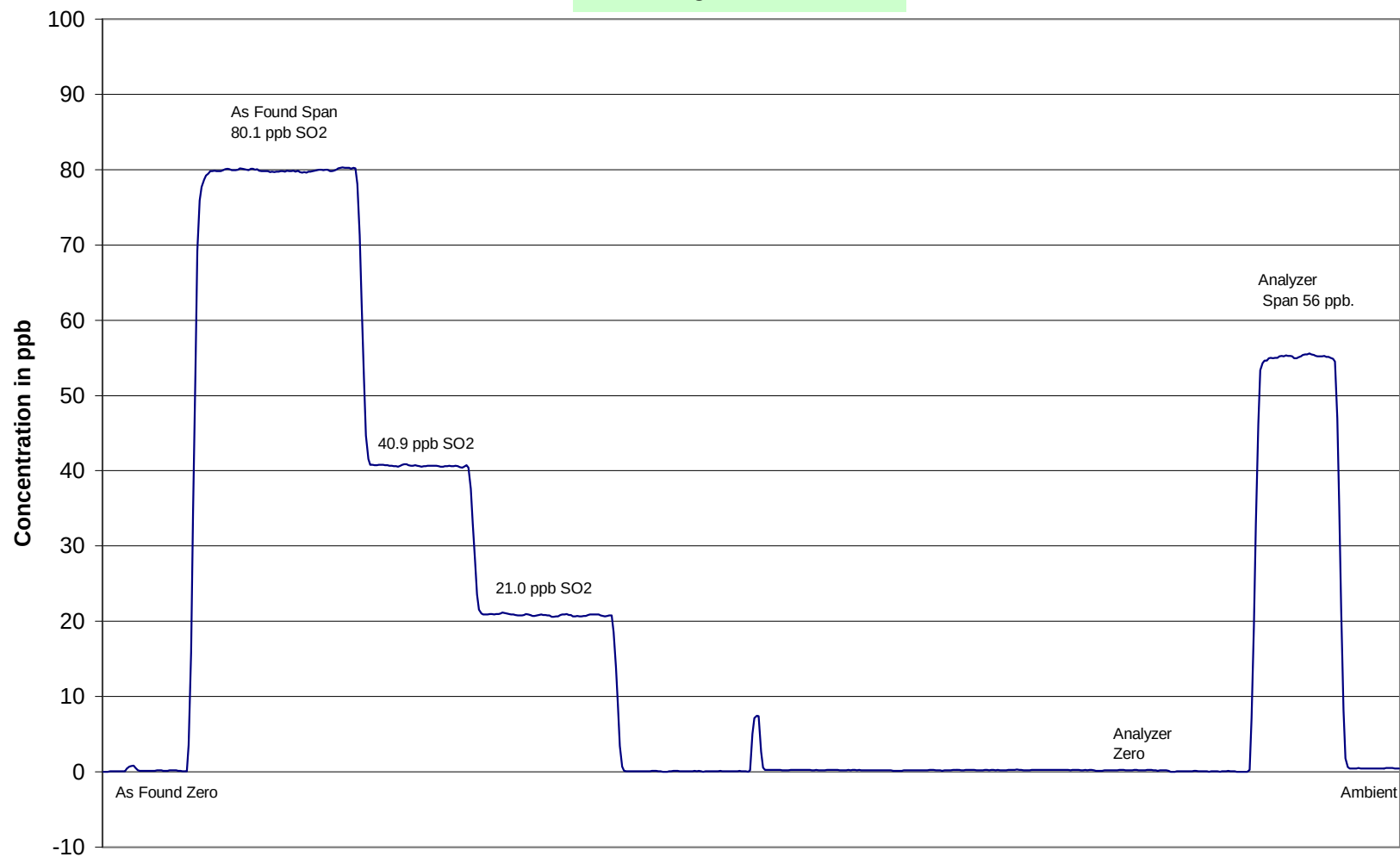
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999830
79.8	79.9	0.9990		
39.9	40.6	0.9821		
19.9	20.8	0.9596	Slope	1.000965
			Intercept	-0.435638

SO2 Calibration Curve



Beaverlodge SO₂ Calibration



January 19, 2009

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Reason:	☒ Routine ☐ Installation ☐ Removal ☐ Other: _____		
Start Time (MST)	11:50:00	End Time (MST)	15:50:00
Barometric Pressure	0.924 Atm	Station Temperature	24.0 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	1.004679		1.001392		1.003633	
	Data Offset	-0.333389		-2.528292		-2.491940	
After	Data Slope	1.001636		1.004636		1.002894	
	Data Offset	0.992315		-2.286548		-1.932829	
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	1.5	ppb	1.4	mV
NO _x background	1.5	ppb	1.4	mV
NO coefficient	1.213		1.116	
NO _x coefficient	0.999		0.999	
PMT Voltage	-636	V	-635	V
Chamber Temp	49.1	Deg C	49.3	Deg C
Cooler Temp	-2.0	Deg C	-2.0	Deg C
Converter Temp	324.0	Deg C	322.0	Deg C
Sample Flow	0.733	LPM	0.733	LPM
Ozonator Flow	0.083	LPM	0.083	LPM
Pressure	197.0	mm Hg	191.9	mm Hg

Notes:

Calibration Report

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



Station Information

Calibration Date: **January 19, 2009**

Station Location: **Beaverlodge**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4991	0.00	0.0	0.0	0.0	-0.2	-0.3	-0.3	N/A	N/A
1	4991	39.90	398.1	397.3	0.8	397.2	396.8	-0.1	1.0024	1.0013
2	4991	19.87	199.1	198.7	0.4	201.9	201.6	226.9	0.9859	0.9856
3	4991	9.91	99.5	99.3	0.2	103.7	102.9	0.0	0.9593	0.9645
AFZ	4991	0.00	0.0	0.0	0.0	-0.2	-0.3	-0.2	0.0000	0.0000
AFS	4991	39.90	398.1	397.3	0.8	409.4	410.1	-1.1	0.9724	0.9689
Average Correction Factor									0.9825	0.9838

As Found Concentrations: NO_x= 407.1 NO= 407.9 As Found Percent Change NO_x= 2.2% NO= 2.6%

GPT Calibration Data

Dilution Flow **4990** ccm Source Gas Flow **39.82** ccm

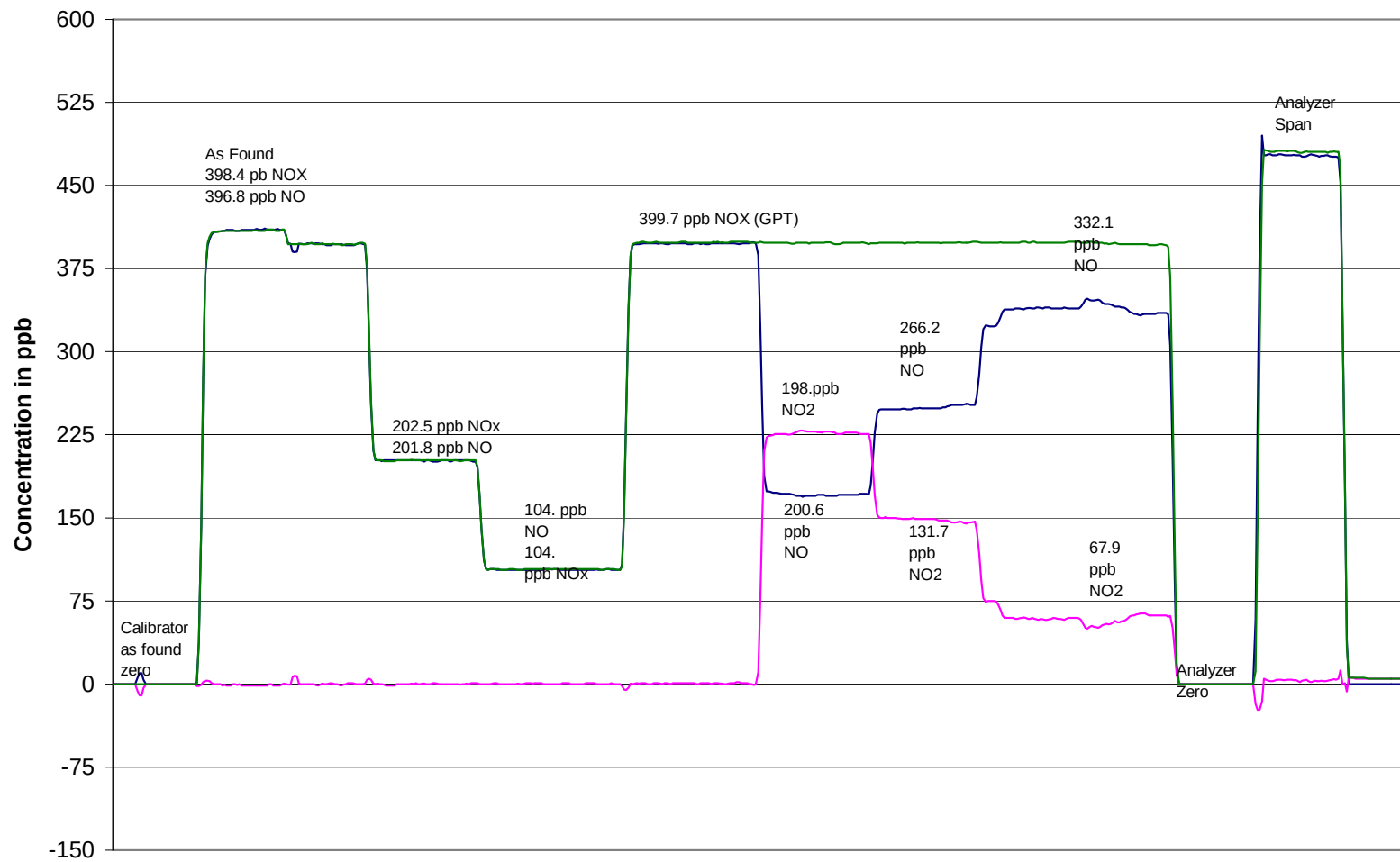
O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	397.4	397.1	0.3	398.8	397.9	0.6	0.9965	0.9980	N/A	N/A
300	397.4	169.3	228.0	398.1	170.7	226.7	0.9981	0.9916	1.0061	99.4%
200	397.4	249.7	147.6	398.4	250.9	146.9	0.9974	0.9952	1.0047	99.5%
100	397.4	333.7	63.6	396.9	334.7	61.4	1.0011	0.9971	1.0371	96.4%
Average Correction Factor							0.9989	0.9946	1.0160	98.4%

AIC Data

	Previous calibration				Current calibration			
Parameter	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	-2.6	-0.5	-2.7	ppb	-2.4	0.8	-2.1	ppb
Auto span	485.4	2.5	483.3	ppb	480.3	4.1	475.2	ppb

Calibration Performed By: **Grover Christiansen**

Beaverlodge NOx Calibration



January 19, 2009

Calibration Summary

Parameter **NO₂**

Air Monitoring Network **PASZA**



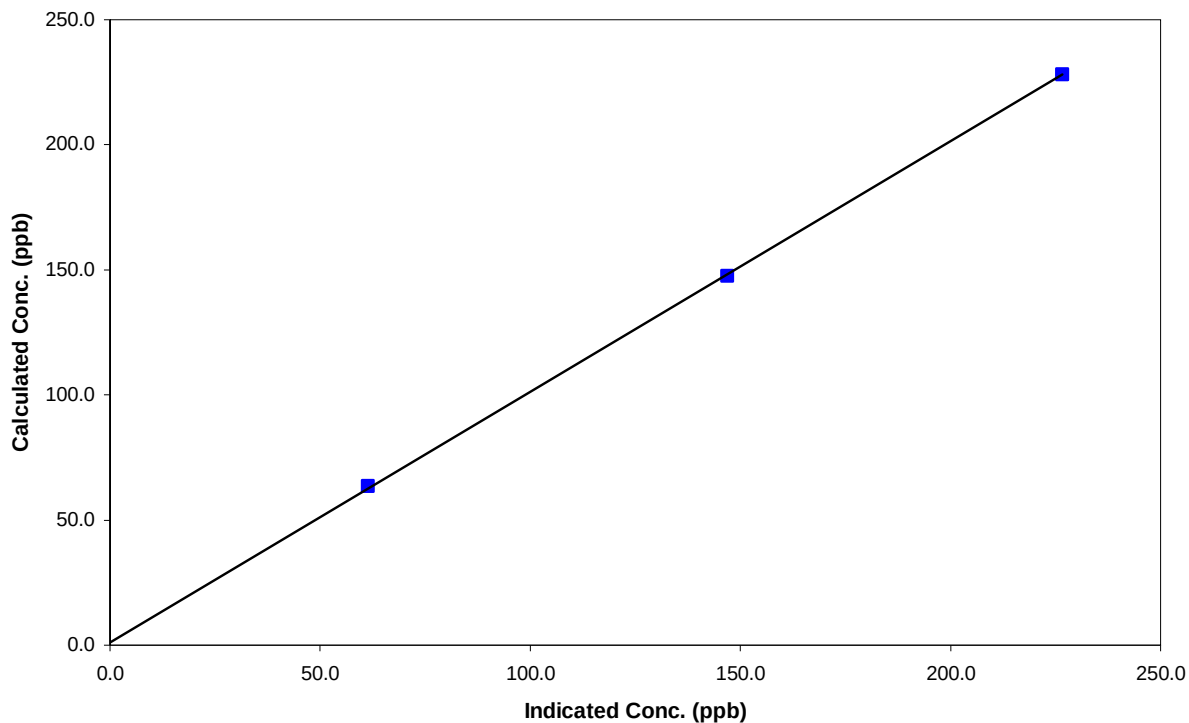
Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:50	End Time (MST)	15:50
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	-0.3	0.0000	Correlation Coefficient	0.999927
228.0	226.7	1.0061		
147.6	146.9	1.0047		
63.6	61.4	1.0371	Slope	1.001636
			Intercept	0.992315

NO₂ Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**



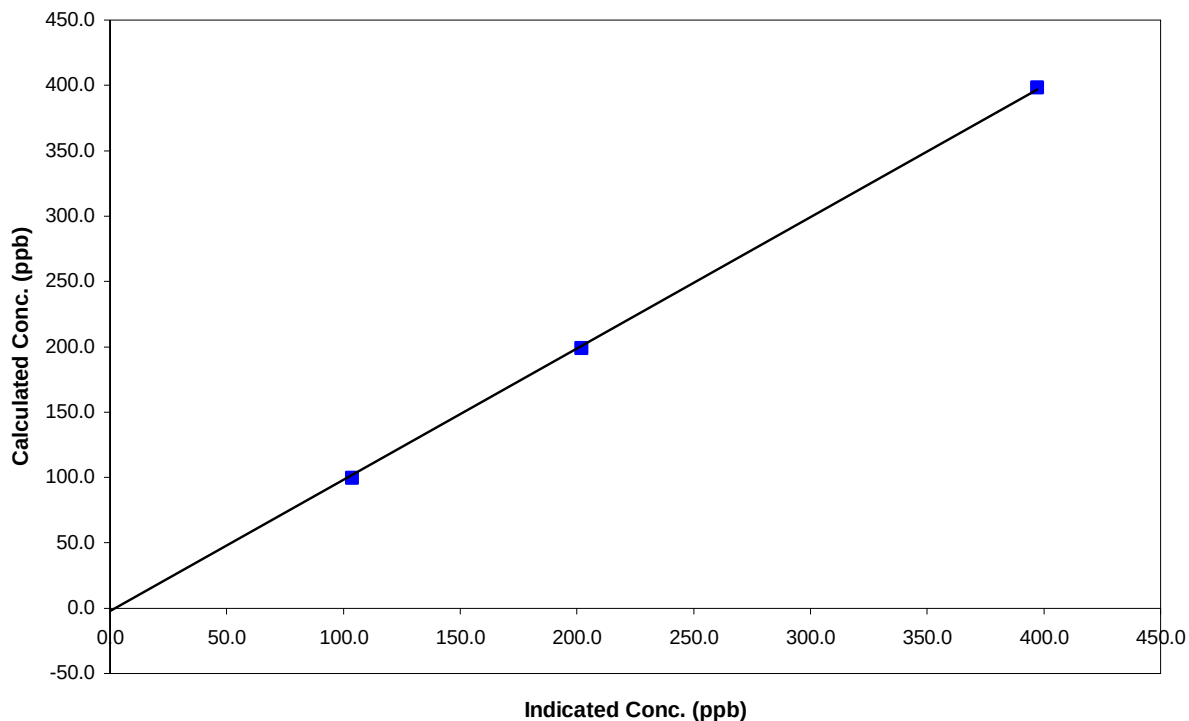
Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:50	End Time (MST)	15:50
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	0.999811
398.1	397.2	1.0024		
199.1	201.9	0.9859		
99.5	103.7	0.9593	Slope	1.004636
			Intercept	-2.286548

NO_x Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**



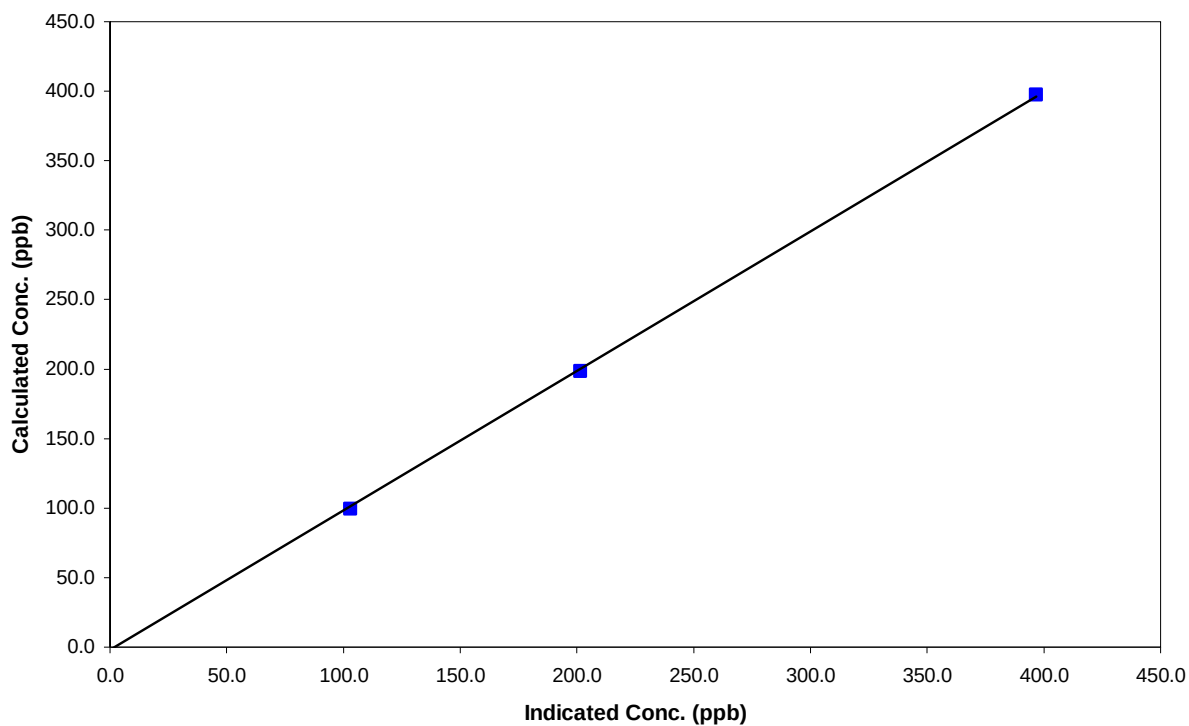
Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:50	End Time (MST)	15:50
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	-0.3	N/A	Correlation Coefficient	0.999845
397.3	396.8	1.0013		
198.7	201.6	0.9856		
99.3	102.9	0.9645	Slope	1.002894
			Intercept	-1.932829

NO Calibration Curve



Calibration Report



Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	15:55:00 PM	End Time (MST)	18:14:00 PM
Barometric Pressure	0.923 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
	Before		After
Calculated slope	1.003214	Calculated slope	1.012164
Calculated intercept	0.082044	Calculated intercept	-6.819483
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	1.020		0.956	
Lamp temp	56.3	mV	56.2	mV
Lamp Intensity A/B	73748/73166	mV	72098/71158	mV
Pressure	699.1	mm Hg	668	mm Hg
Flow A	754	ccm	728	ccm
Flow B	706	ccm	682	ccm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	-0.4	N/A
4990	0.00	226.0	227.0	0.9956
4990	0.00	146.0	149.9	0.9740
4990	0.00	58.0	75.3	0.7701
4990	0.00	0.0	-0.3	As found zero
4990	0.00	246.4	226.7	As found span
Average Correction Factor				0.9133

Calculated value of As Found Response: 227.9 ppm Percent Change of As Found: -7.5%

	before calibration		after calibration	
Auto zero	-0.2	ppb	-0.2	ppb
Auto span	113.7	ppb	113.7	ppb

Notes: O3 Adjustment Made

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**



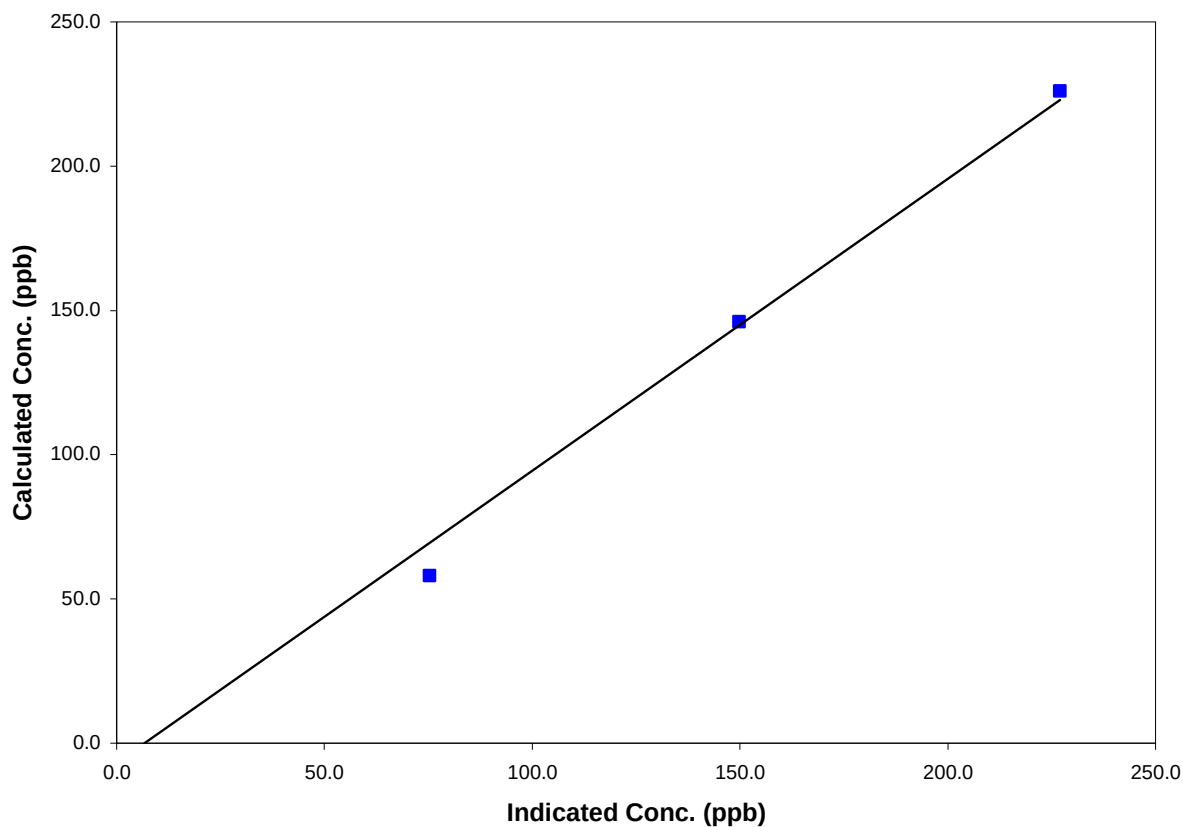
Station Information

Calibration Date	January 19, 2009	Previous Calibration	December 9, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	15:55:00 PM	End Time (MST)	18:14:00 PM
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

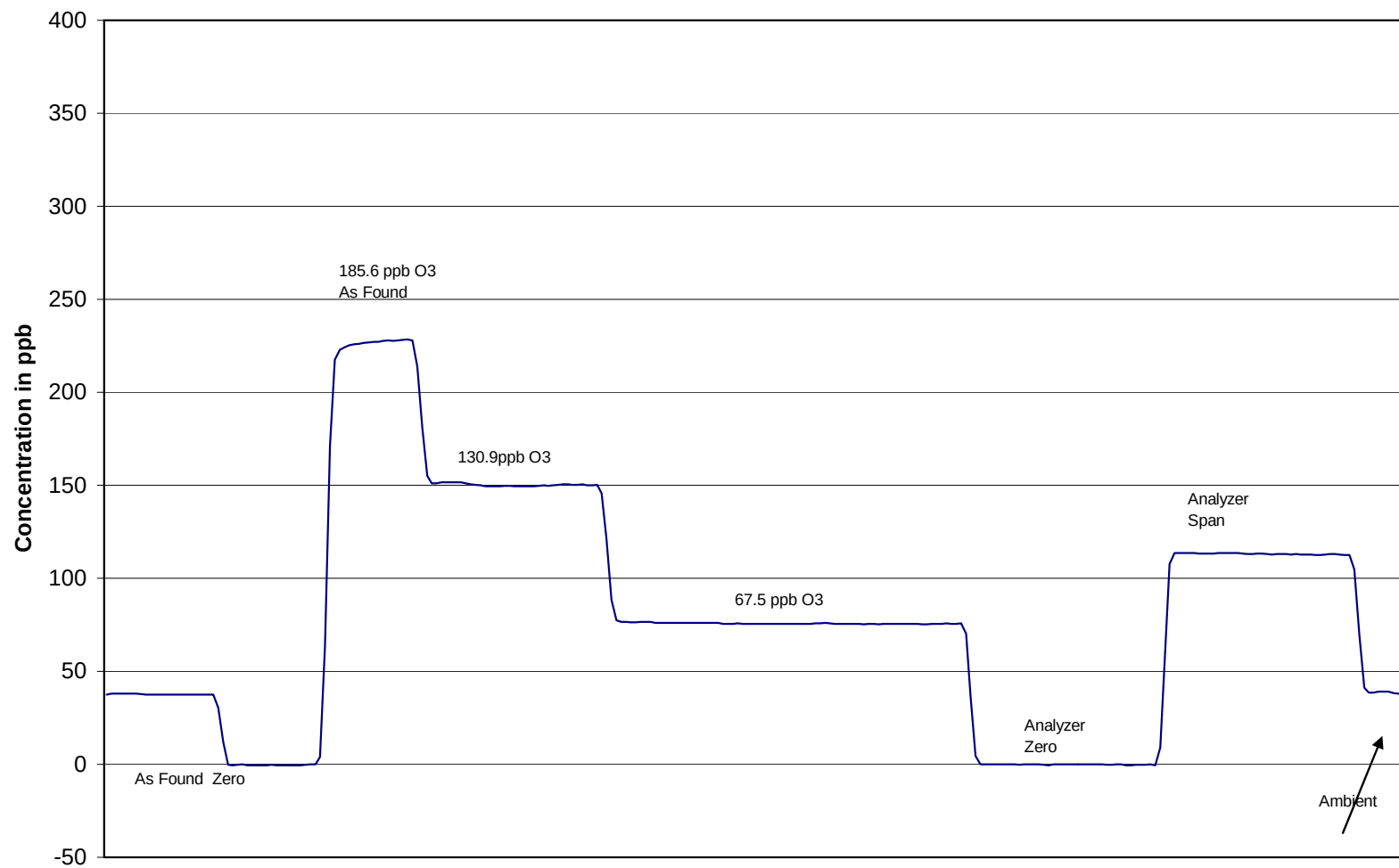
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	NA	Correlation Coefficient	0.993456
226.0	227.0	0.9956		
146.0	149.9	0.9740		
58.0	75.3	0.7701	Slope	1.012164
			Intercept	-6.819483

O3 Calibration Curve



Beaverlodge O₃ Calibration



January 19, 2009

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Reason:	☒ Routine	☐ Install	☐ Removal
			Other:

Start Time (MST)	9:00	End Time (MST)	13:41
Barometric Pressure	27.66 inches Hg	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL 16161		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.001972	Calculated slope	1.000876
Calculated intercept	-2.723536	Calculated intercept	-0.154021

Analyzer make **TEI 43C** Analyzer serial # **609716238**

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	8.1		8.4	
Coefficient	1.181		1.213	
UV Lamp Voltage	731	V	731	V
Chamber Temp	44.5	C	44.7	C
Perm Gas Temp	45	C	45	C
Pressure	686.1	mm Hg	681.4	mm Hg
Sample Flow	0.480	LPM	492	LPM
Lamp Intesity	34825	Hz	34206	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.4	N/A
4989	39.83	400.8	401.3	0.9988
4989	19.88	200.8	198.9	1.0098
4989	9.92	100.4	101.5	0.9893
4988	0.00	0.0	0.5	As found zero
4990	39.89	401.3	384.7	As found span
Average Correction Factor				0.9993

Calculated value of As Found Response: **382.222 ppm** Percent Change of As Found: **4.8%**

	before calibration		after calibration	
Auto zero	-2.6	ppm	0.1	ppm
Auto span	262.8	ppm	305.9	ppm

Notes: Internal Pump Replaced

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**



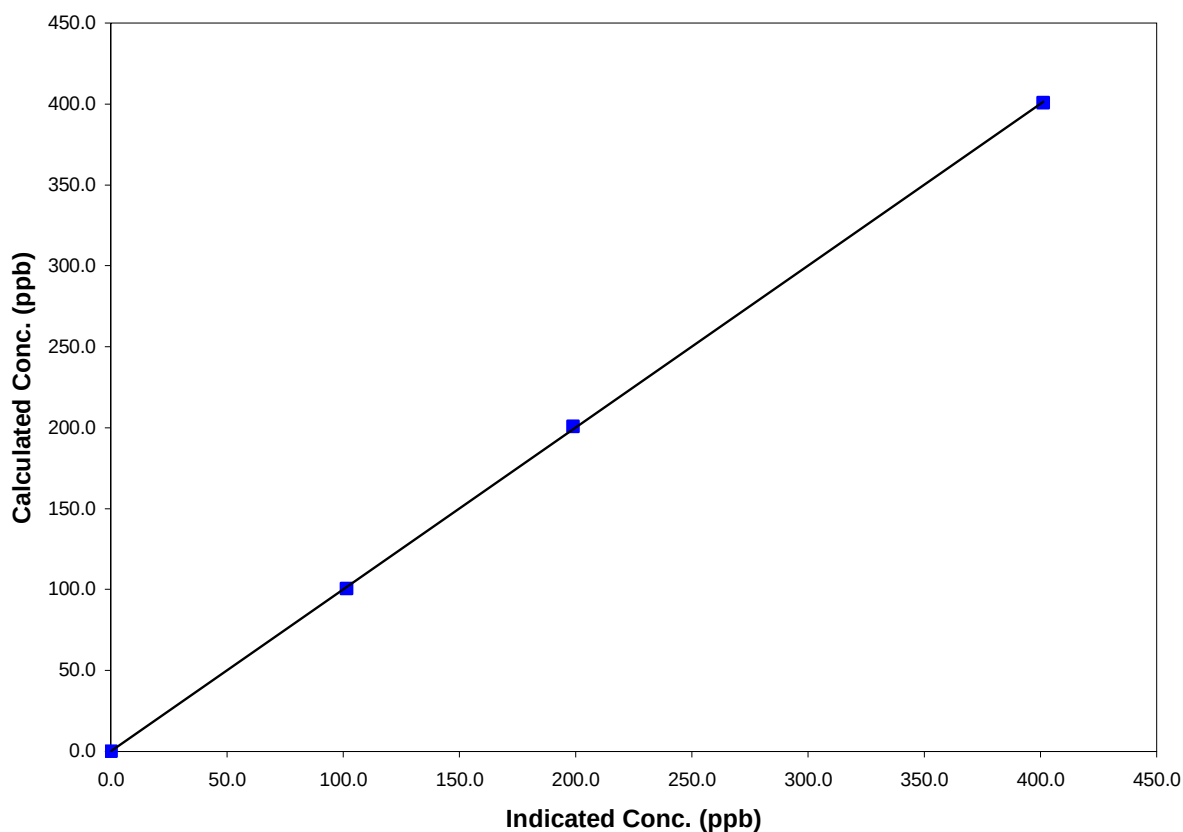
Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	9:00	End Time (MST)	13:41
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

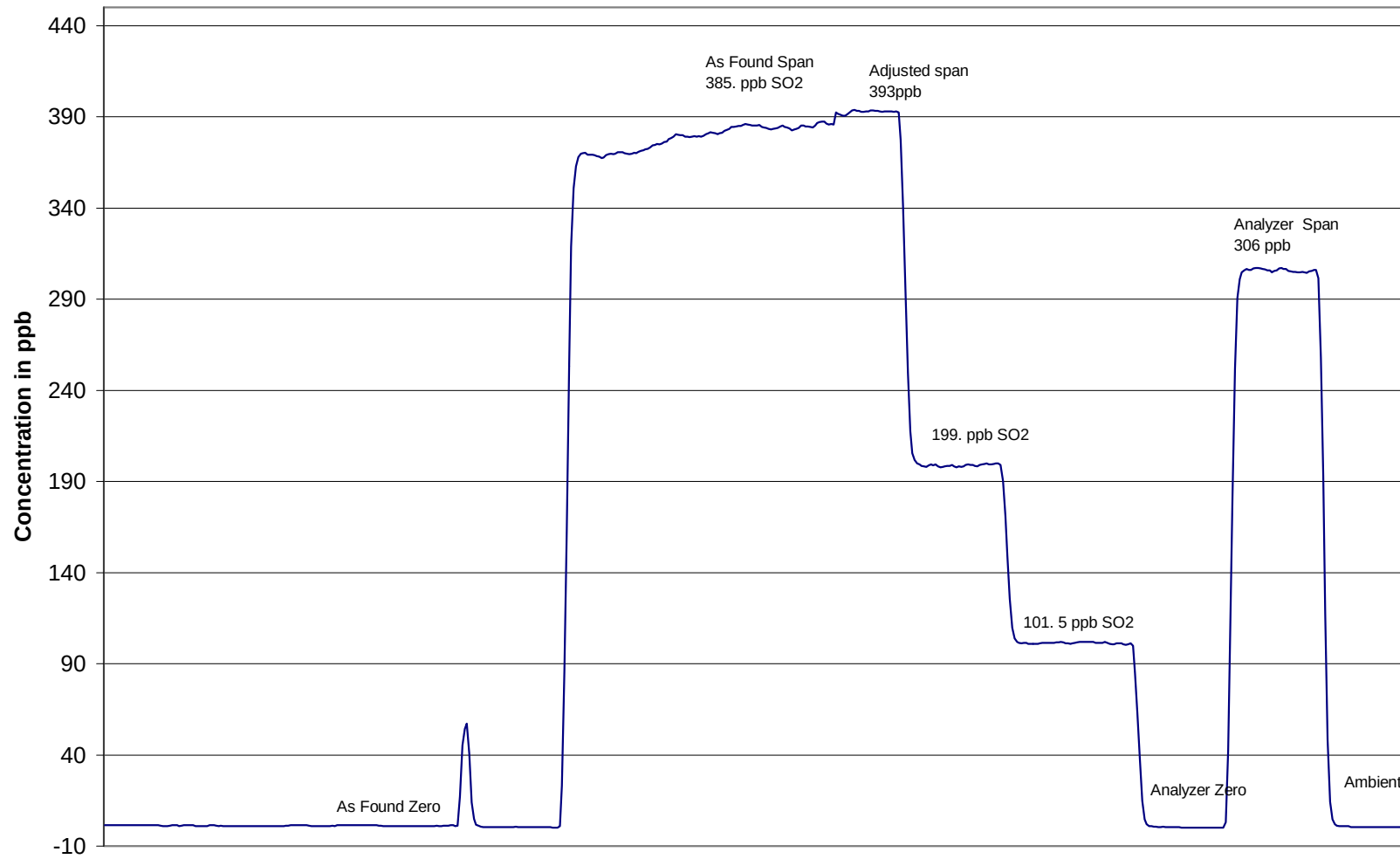
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A	Correlation Coefficient	0.999940
400.8	401.3	0.9988		
200.8	198.9	1.0098		
100.4	101.5	0.9893	Slope	1.000876
			Intercept	-0.154021

SO2 Calibration Curve



Spirit River SO₂ Calibration



January 15, 2009

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 4, 2008
Station Number	6	Station Location	Rover
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	

Start Time (MST)	16:40:00 PM	End Time (MST)	17:57:00 PM
Barometric Pressure	27.5 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	5.1 ppm	Cal Gas Expiry Date	11/15/2005
Gas Cert Reference	ALM013295		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 5 volt	DACS channel #	8
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.992210	Calculated slope	1.000773
Calculated intercept	0.386388	Calculated intercept	-0.094463

Analyzer make	TEI 43C	Analyzer serial #	609716238
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	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	10.6	ppb	10.7	ppb
Coefficient	1.454		1.454	
Lamp Voltage	799	V	798	V
Chamber Temp	43.8	C	44.0	C
Perm gas Temp	44.99	C	45	C
Pressure	671	mmHg	671	mmHg
Sample Flow	437	ccm	436	ccm
Lamp Intensity	38527.0	Hz	38687.0	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	79.88	80.4	80.8	0.9953
4988	39.85	40.4	39.7	1.0178
4988	9.92	10.1	10.4	0.9706
4988	0.00	0.0	59.0	As found zero
4988	79.88	80.4	9.5	As found span
Average Correction Factor				0.9946

Calculated value of As Found Response: -48.78 ppm Percent Change of As Found: 160.7%

	before calibration		after calibration	
Auto zero	-0.1	ppm	NA	ppm
Auto span	72.3	ppm	NA	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



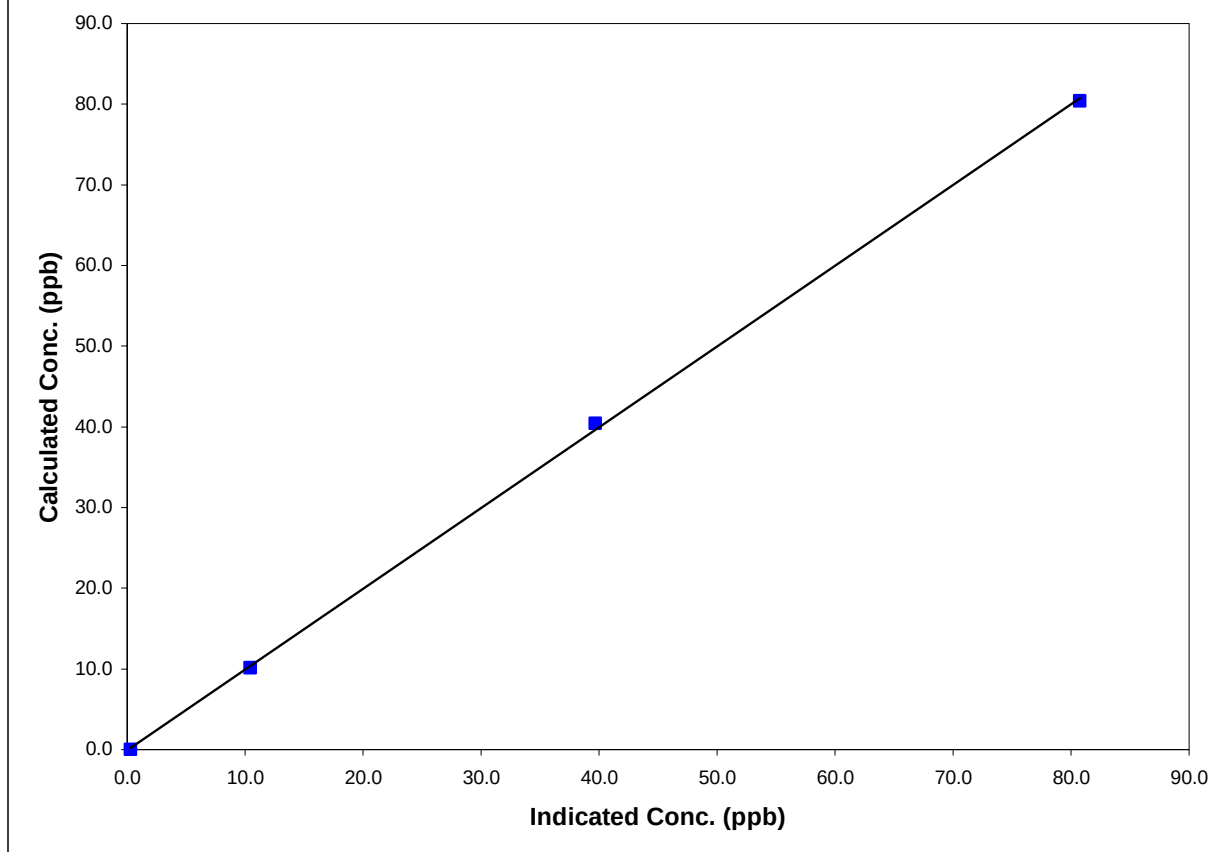
Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 4, 2008
Station Number	6	Station Location	Rover
Start Time (MST)	16:40:00 PM	End Time (MST)	17:57:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

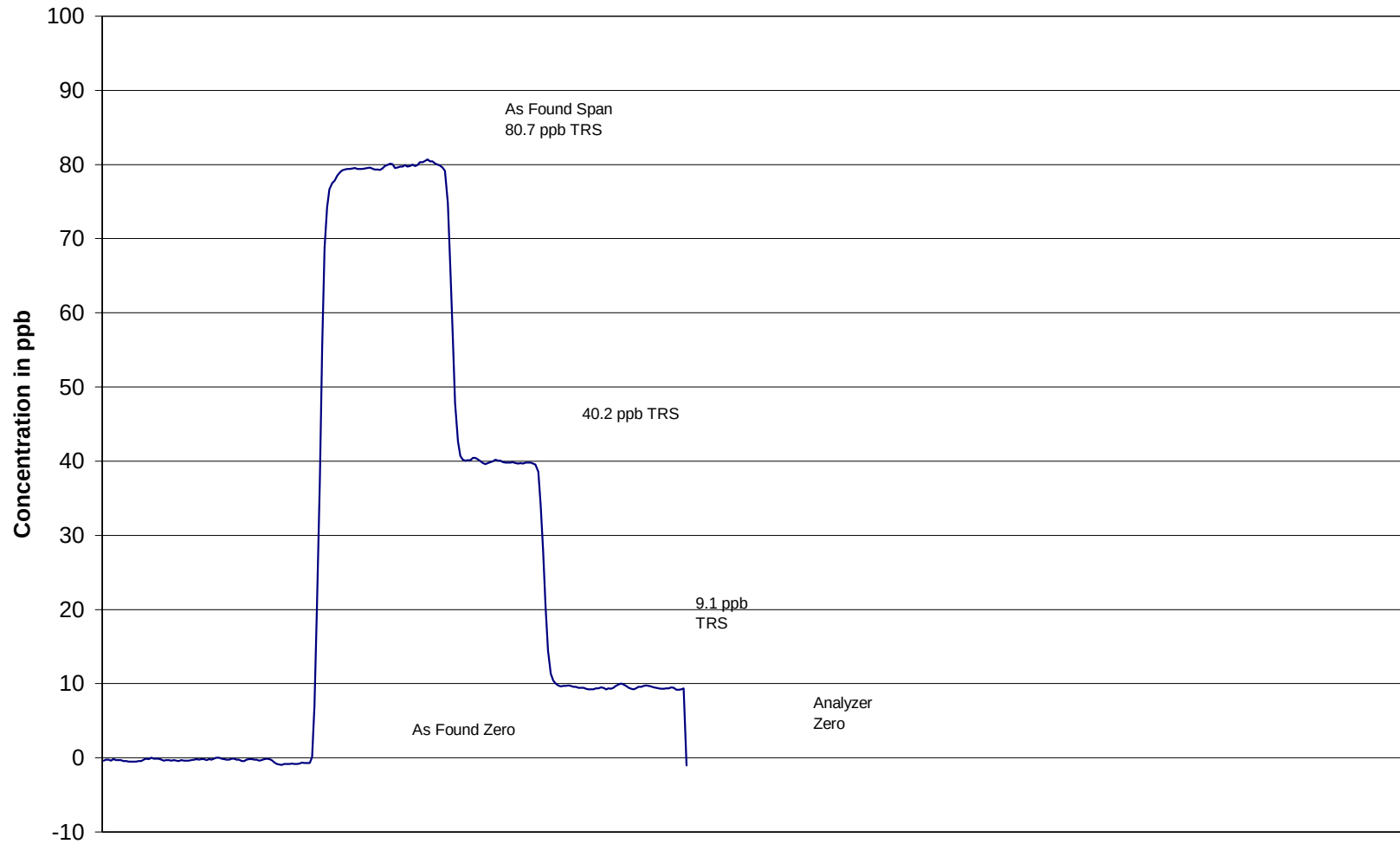
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999794
80.4	80.8	0.9953		
40.4	39.7	1.0178		
10.1	10.4	0.9706	Slope	1.000773
			Intercept	-0.094463

TRS Calibration Curve



Spirit River TRS Calibration



January 15, 2009

Calibration Report



Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:

Start Time (MST)		End Time (MST)	17:22
Barometric Pressure	0.935 atm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474

DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0-5	DACS channel #	7

	<u>Before</u>		<u>After</u>
Calculated slope	1.114646	Calculated slope	1.006135
Calculated intercept	-1.823801	Calculated intercept	0.460004

Analyzer make	TEI Model 49C	Analyzer serial #	609-716240
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	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	1.487		1.487	
Cell A	64084	Hz	71173	Hz
Cell B	62574	Hz	69544	Hz
Pressure	706	in Hg	697	in Hg
CellA Flow	677	ccm	671	ccm
Cell B Flow	677	cmm	671	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	0.0	N/A
4990	0.00	281.3	279.7	1.0058
4990	0.00	189.1	186.9	1.0119
4990	0.00	97.1	95.7	1.0154
4990	0.00	0.0	-0.3	As found zero
4990	0.00	282.3	279.7	As found span
Average Correction Factor				1.0110

Calculated value of As Found Response: 310.3 ppm Percent Change of As Found: 9.9%

	before calibration		after calibration	
Auto zero	-1.2	ppb	1.0	ppb
Auto span	232.7	ppb	218.4	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

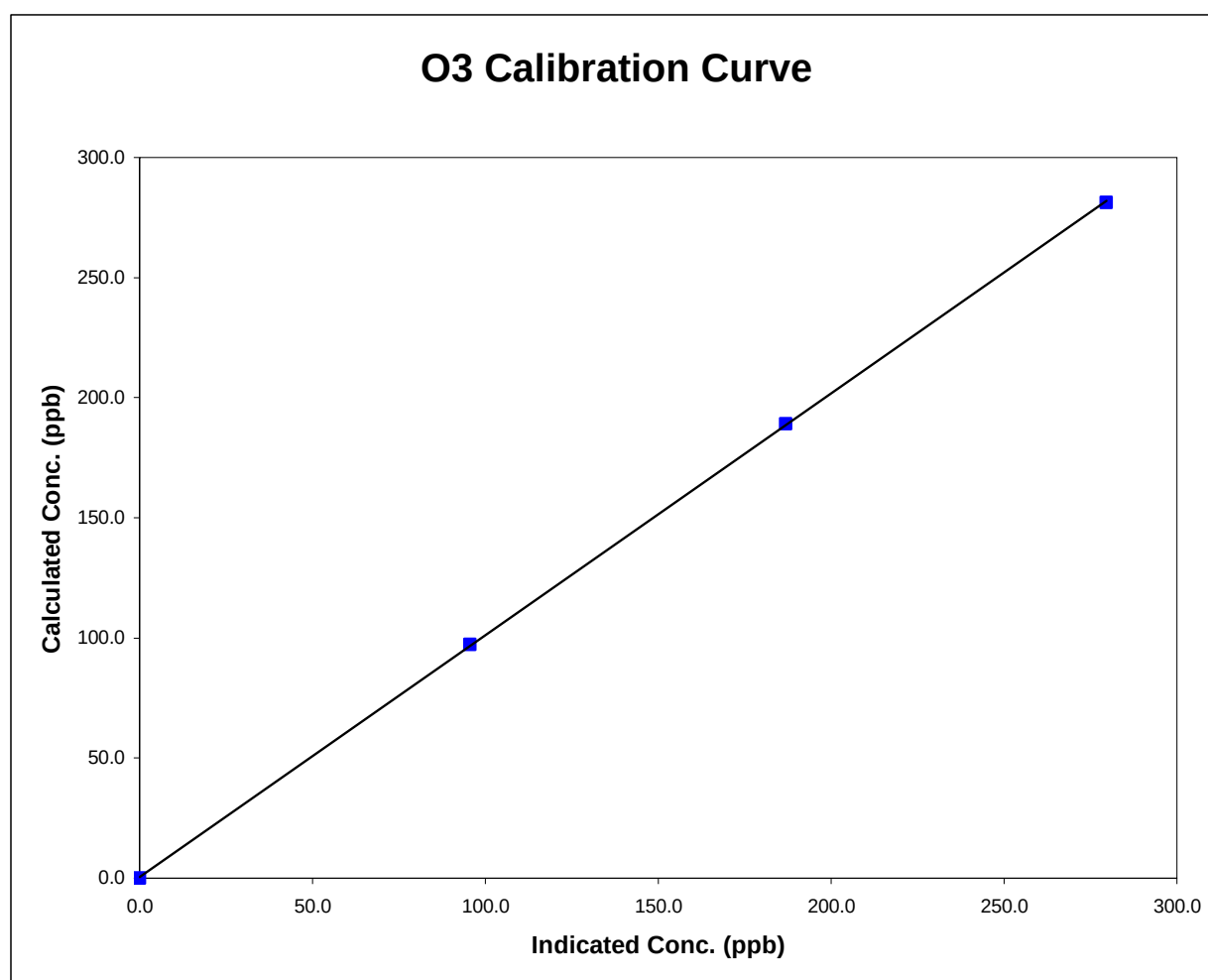


Station Information

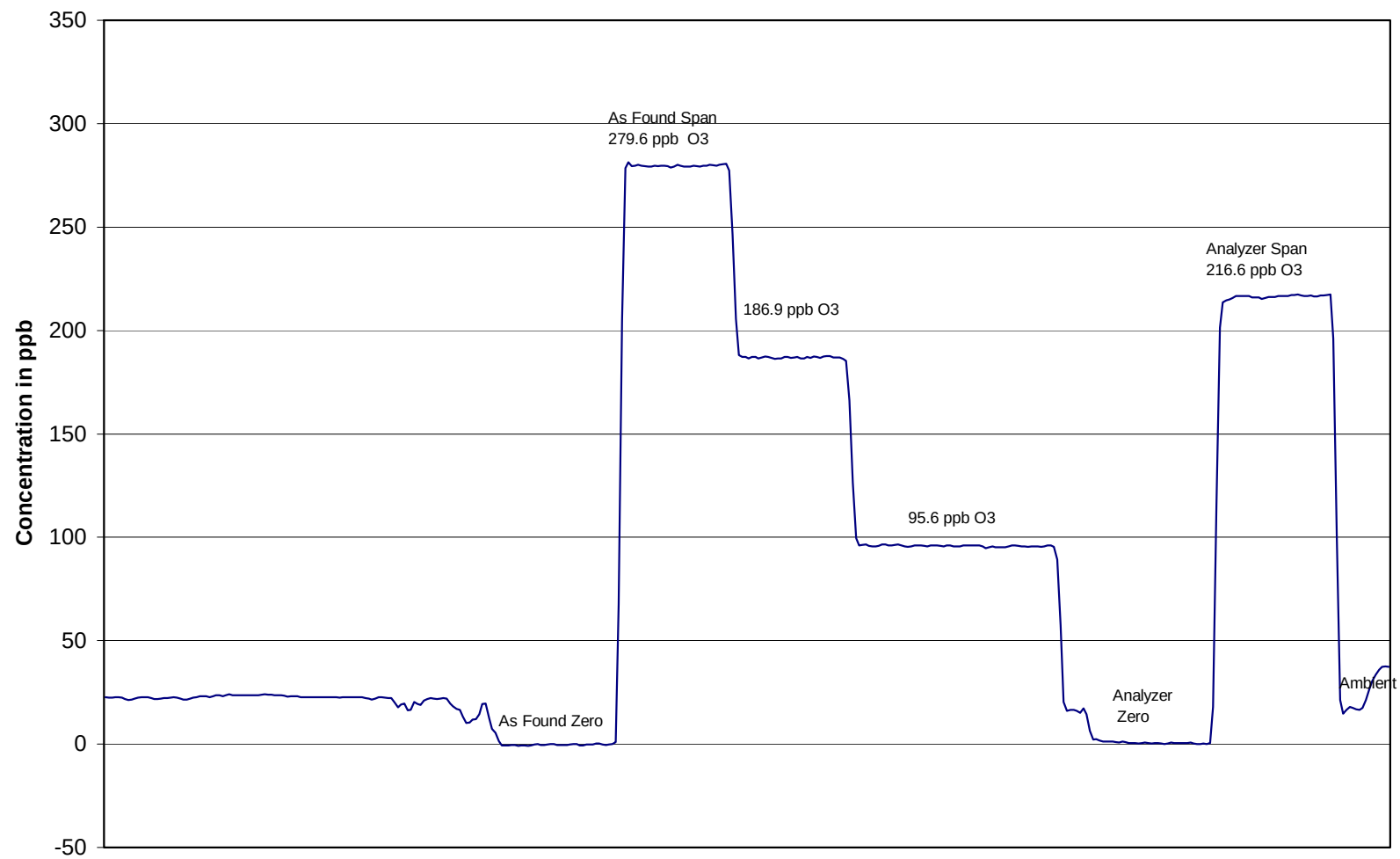
Calibration Date	January 15, 2009	Previous Calibration	December 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	0:00	End Time (MST)	17:22
Analyzer make/model	TEI Model 49C	Analyzer serial #	609-716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	NA	Correlation Coefficient	0.999975
281.3	279.7	1.0058		
189.1	186.9	1.0119		
97.1	95.7	1.0154	Slope	1.006135
			Intercept	0.460004



Spirit River O₃ Calibration



January 15, 2009

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date January 15, 2009

Previous Calibration December 3, 2008

Station Number 8

Station Location Rover - Spirit River

Reason:

☒ Routine

☐ Installation

☐ Removal

☐ Other:

Start Time (MST) 9:00

End Time (MST) 16:00

Barometric Pressure 27.66 Inches Hg

Station Temperature 22.0 Deg C

Calibrator Environics 6100

Serial Number 3474

NO Cal Gas Conc 49.6 ppm

Cal Gas Expiry Date 2-Jan-09

NOx Cal Gas Conc 49.6 ppm

Cal Gas Serial # LL-16161

DACS Information

DACS make FOCUS AP1000

DACS serial No. 52662

Parameter		NO2	NOx	NO
Before	Data Slope	1.006119	0.997784	1.001441
	Data Offset	0.055380	-2.730082	-3.010724
After	Data Slope	1.011852	1.003503	1.001742
	Data Offset	0.925347	-2.680208	-3.139347
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	5.5	ppb	5.0	mV
NOx background	5.7	ppb	5.1	mV
NO coefficient	1.019		0.914	
NOx coefficient	0.996		0.998	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	-3.1	Deg C	-3.0	Deg C
NO2 Converter Temp	325.5	Deg C	325.6	Deg C
Sample Flow	0.5	ccm	0.5	ccm
Ozonator Flow	OK	LPM	OK	LPM
Pressure	162.4	mm Hg	162.4	mm Hg

Notes:

Calibration Performed By:

Grover Christiansen

Calibration Report

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



Station Information

Calibration Date: **January 15, 2009**

Station Location: **Rover - Spirit River**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4988	0.00	0.0	0.0	0.0	0.1	-0.1	0.4	N/A	N/A
1	4989	39.84	392.9	392.9	0.0	392.8	392.8	-0.8	1.0005	1.0004
2	4989	19.89	197.0	197.0	0.0	200.7	203.8	-0.7	0.9815	0.9662
3	4989	9.90	98.2	98.2	0.0	102.9	103.0	-0.6	0.9550	0.9539
AFZ	4988	0.00	0.0	0.0	0.0	0.7	0.6	-0.3	0.0000	0.0000
AFS	4990	39.84	392.9	392.9	0.0	438.6	437.5	-2.1	0.8958	0.8979
Average Correction Factor									0.9790	0.9735

As Found Concentrations: NO_x= 435.2 NO= 433.9 As Found Percent Change NO_x= 10.8% NO= 10.4%

GPT Calibration Data

Dilution Flow **4988** ccm Source Gas Flow **39.82** ccm

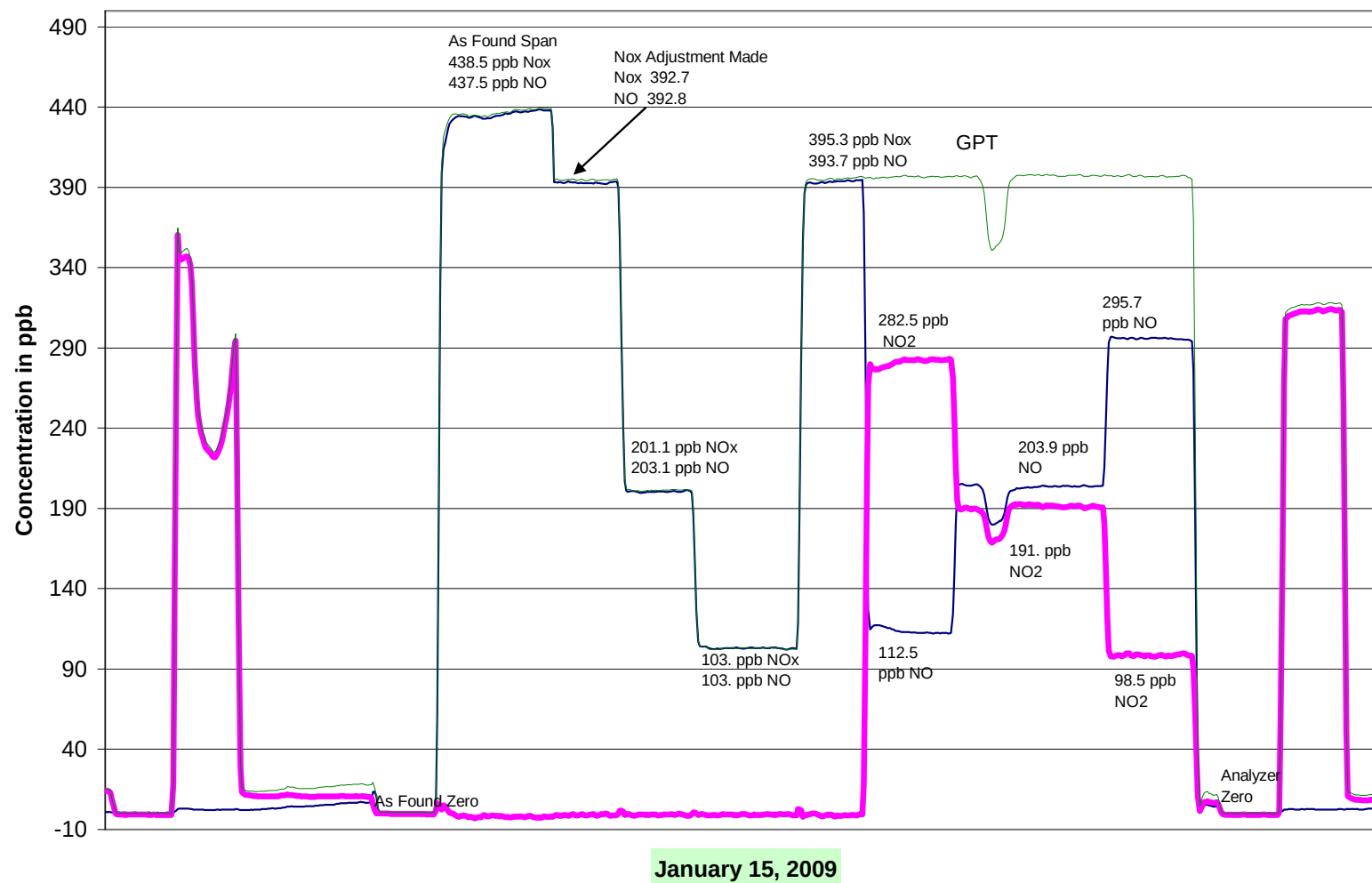
O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	395.7	391.3	4.4	395.4	393.7	-1.1	1.0008	0.9938	N/A	N/A
300	395.7	109.6	286.1	396.7	112.5	282.6	0.9973	0.9738	1.0124	98.8%
200	395.7	201.1	194.5	397.3	203.9	191.2	0.9958	0.9863	1.0175	98.3%
100	395.7	293.1	102.6	396.8	295.7	98.6	0.9972	0.9911	1.0404	96.1%
Average Correction Factor							0.9968	0.9838	1.0234	97.7%

AIC Data

	Previous calibration				Current calibration			
Parameter	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	-548.5	12.2	5.5	ppb	1.1	1.0	0.0	ppb
Auto span	138.4	142.5	-3.9	ppb	315.9	317.9	-0.5	ppb

Calibration Performed By: Grover Christiansen

Spirit River NOx Calibration



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**



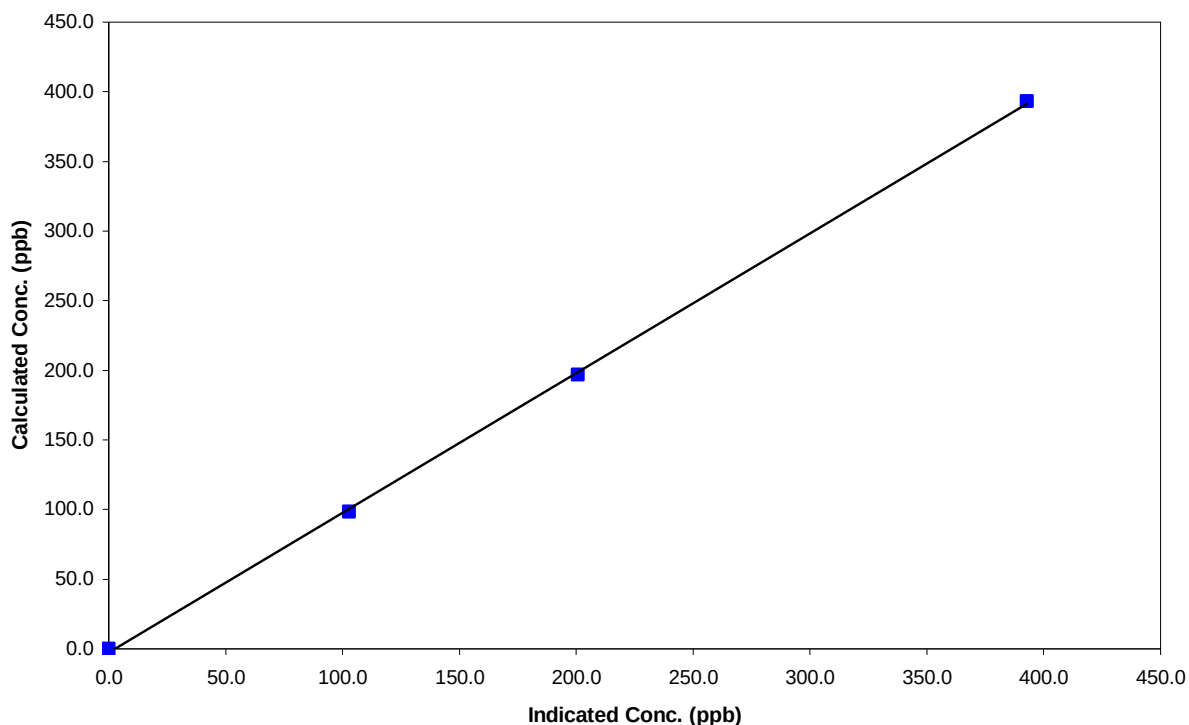
Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	9:00	End Time (MST)	16:00
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	0.1	0.0000	Correlation Coefficient	0.999798
392.9	392.8	1.0005		
197.0	200.7	0.9815		
98.2	102.9	0.9550	Slope	1.003503
			Intercept	-2.680208

NO_x Calibration Curve



Calibration Summary

Parameter **NO₂**

Air Monitoring Network **PASZA**



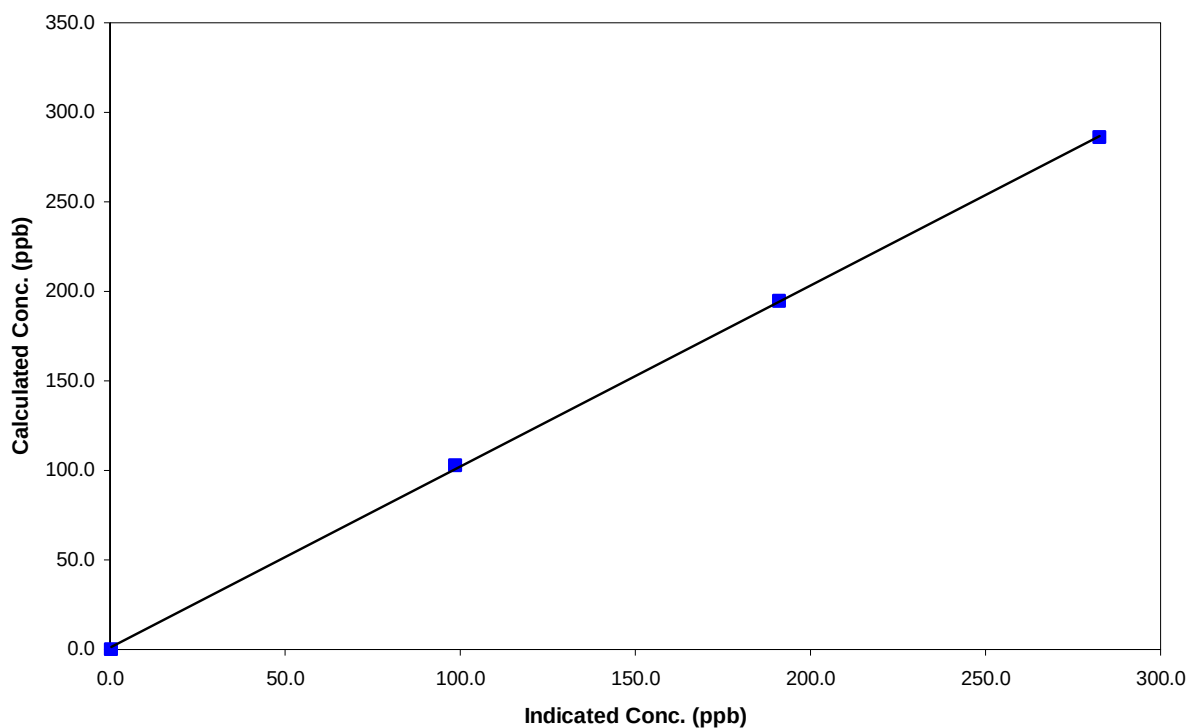
Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	9:00	End Time (MST)	16:00
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	0.4	0.0000	Correlation Coefficient	0.999872
286.1	282.6	1.0124		
194.5	191.2	1.0175		
102.6	98.6	1.0404	Slope	1.011852
			Intercept	0.925347

NO₂ Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**



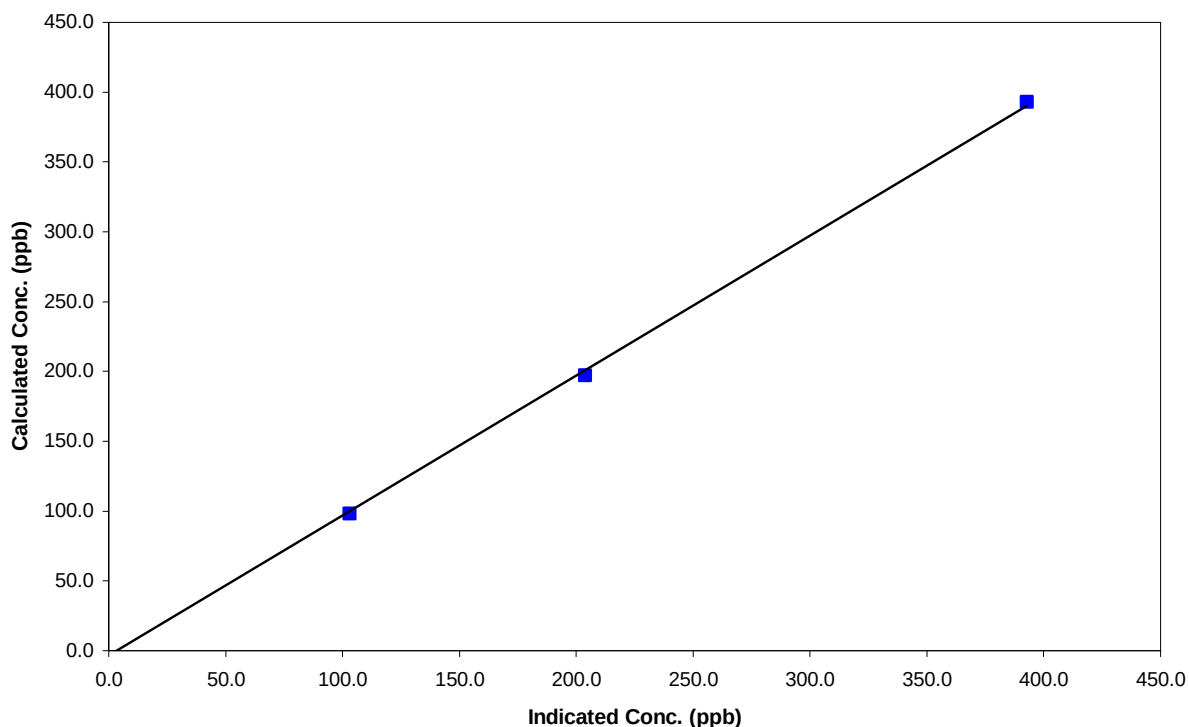
Station Information

Calibration Date	January 15, 2009	Previous Calibration	December 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	9:00	End Time (MST)	16:00
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	-0.1	N/A	Correlation Coefficient	0.999555
392.9	392.8	1.0004		
197.0	203.8	0.9662		
98.2	103.0	0.9539	Slope	1.001742
			Intercept	-3.139347

NO Calibration Curve



Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 17, 2009	Previous Calibration	December 22, 2008
Station Number	6	Station Location	Valleyview
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:
Start Time (MST)	12:30	End Time (MST)	14:31
Barometric Pressure	29.90 inches Hg	Station Temperature	6.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Cert Date	8/6/2008
Gas Cert Reference	AAL 56996		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.999927	Calculated slope	0.995132
Calculated intercept	-1.222394	Calculated intercept	-2.496438
Analyzer make	TEI 45C	Analyzer serial #	43C-57531-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	30.6		29.5	
Coefficient	0.753		0.753	
UV Lamp Voltage	698	LPM	697	LPM
Chamber Temp	44.2	V	44.2	V
Perm Gas Temp	35	C	35.1	C
Pressure	631.4	in Hg	635.2	in Hg
Sample Flow	0.473	LPM	0.474	LPM
Lamp Intesity	45621	Hz	45036	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	0.2	N/A
4989	39.84	400.9	403.9	0.9925
4988	19.92	201.3	206.6	0.9744
4988	9.90	100.2	105.2	0.9526
4988	0.00	0.0	-0.4	As found zero
4988	39.88	401.3	403.9	As found span
Average Correction Factor				0.9732

Calculated value of As Found Response: 403.092 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	-1.4	ppm	-3.1	ppm
Auto span	167.8	ppm	164.8	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**



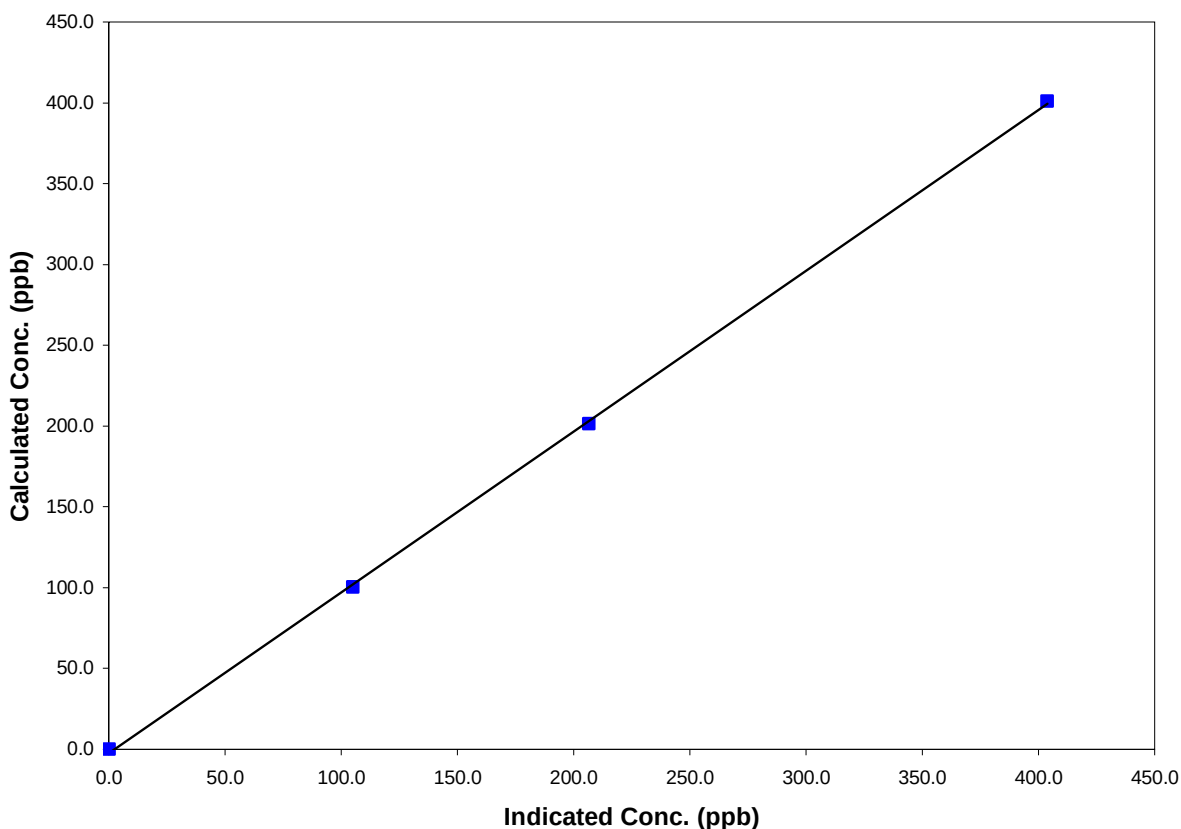
Station Information

Calibration Date	January 17, 2009	Previous Calibration	December 22, 2008
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:30	End Time (MST)	14:31
Analyzer make/model	TEI 45C	Analyzer serial #	43C-57531-313

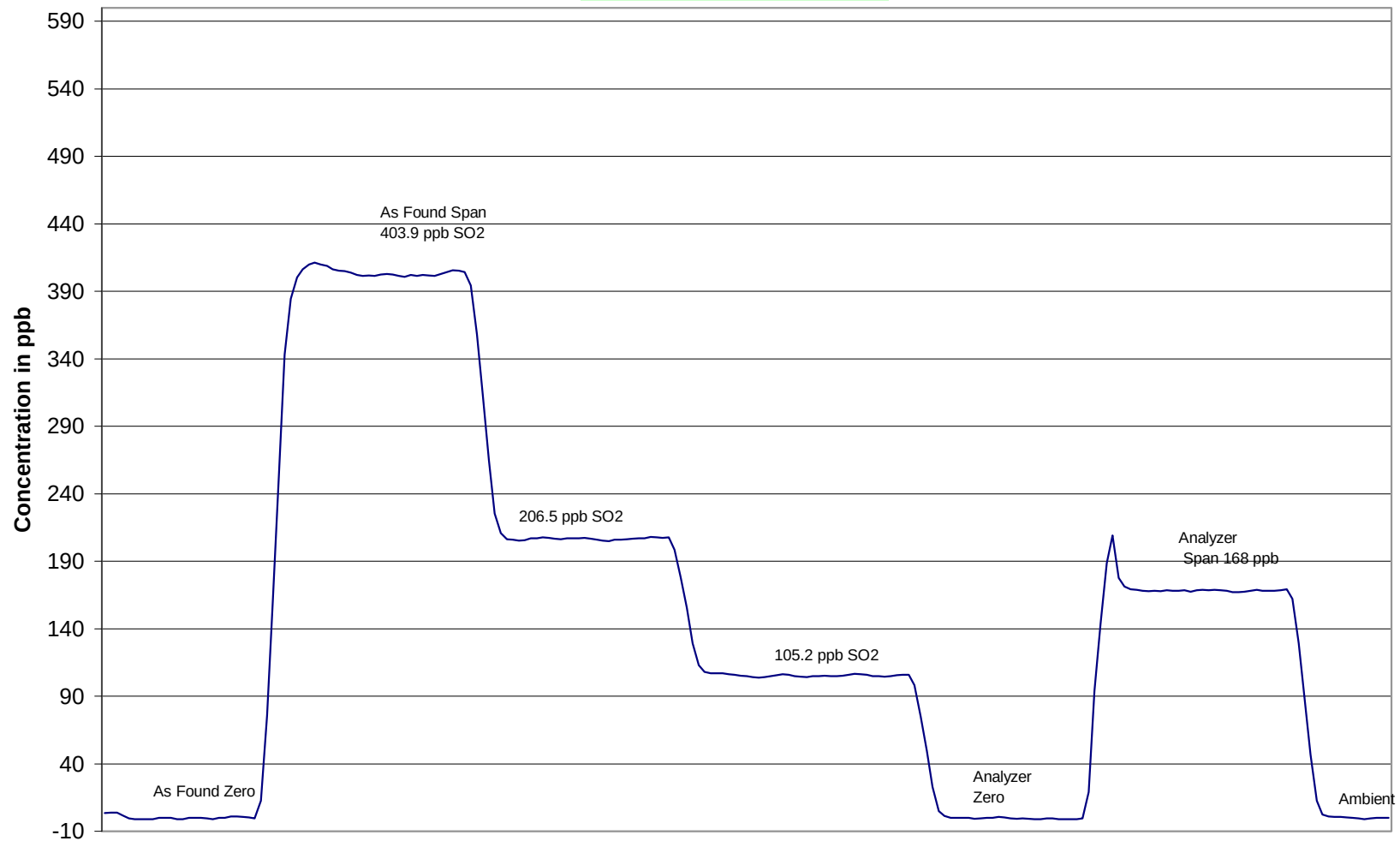
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999834
400.9	403.9	0.9925		
201.3	206.6	0.9744		
100.2	105.2	0.9526	Slope	0.995132
			Intercept	-2.496438

SO2 Calibration Curve



Valleyview SO₂ Calibration



January 17, 2009

Calibration Report

Parameter **H2S**

Air Monitoring Network **PASZA**



Station Information

Calibration Date	January 17, 2009	Previous Calibration	December 22, 2008
Station Number	5	Station Location	Valleyview
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:

Start Time (MST)	10:50	End Time (MST)	16:00
Barometric Pressure	27.16 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 make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.999518	Calculated slope	0.999638
Calculated intercept	-0.183146	Calculated intercept	-0.411736

Analyzer make **TEI Model 43A** Analyzer serial # **43A-25575-221**

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	4.9	ppb	4.9	ppb
Coefficient	1.070		1.070	
Lamp Voltage	793	v	798	v
Chamber Temp	45.2	c	45	c
Perm Oven Temp	44.41	c	45	c
Pressure	650	mm Hg	641	mm Hg
Sample Flow	451	ccm	446	ccm
Lamp Intensity	90.0	%	90.0	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.2	N/A
4989	79.74	80.2	80.6	0.9956
4988	39.88	40.5	41.0	0.9866
4988	9.93	10.1	10.7	0.9467
4988	0.00	0.0	0.3	As found zero
4988	79.81	80.3	81.1	As found span
Average Correction Factor				0.9763

Calculated value of As Found Response: **80.66 ppm** Percent Change of As Found: **-0.4%**

	before calibration		after calibration	
Auto zero	-0.1	ppm	-0.1	ppm
Auto span	65.0	ppm	62.0	ppm

Notes:

Calibration Performed By: **Grover Christiansen**

Calibration Summary

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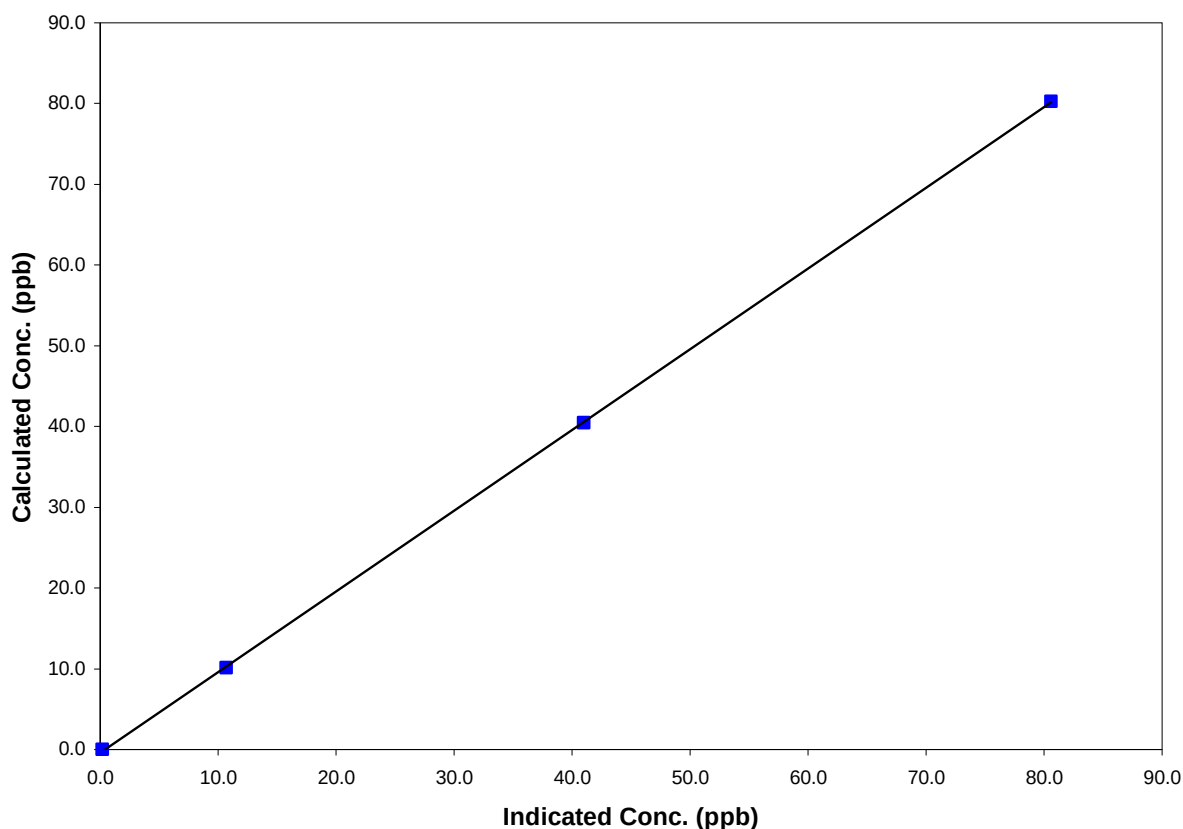
Station Information

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Start Time (MST)	10:50	End Time (MST)	16:00
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-25575-221

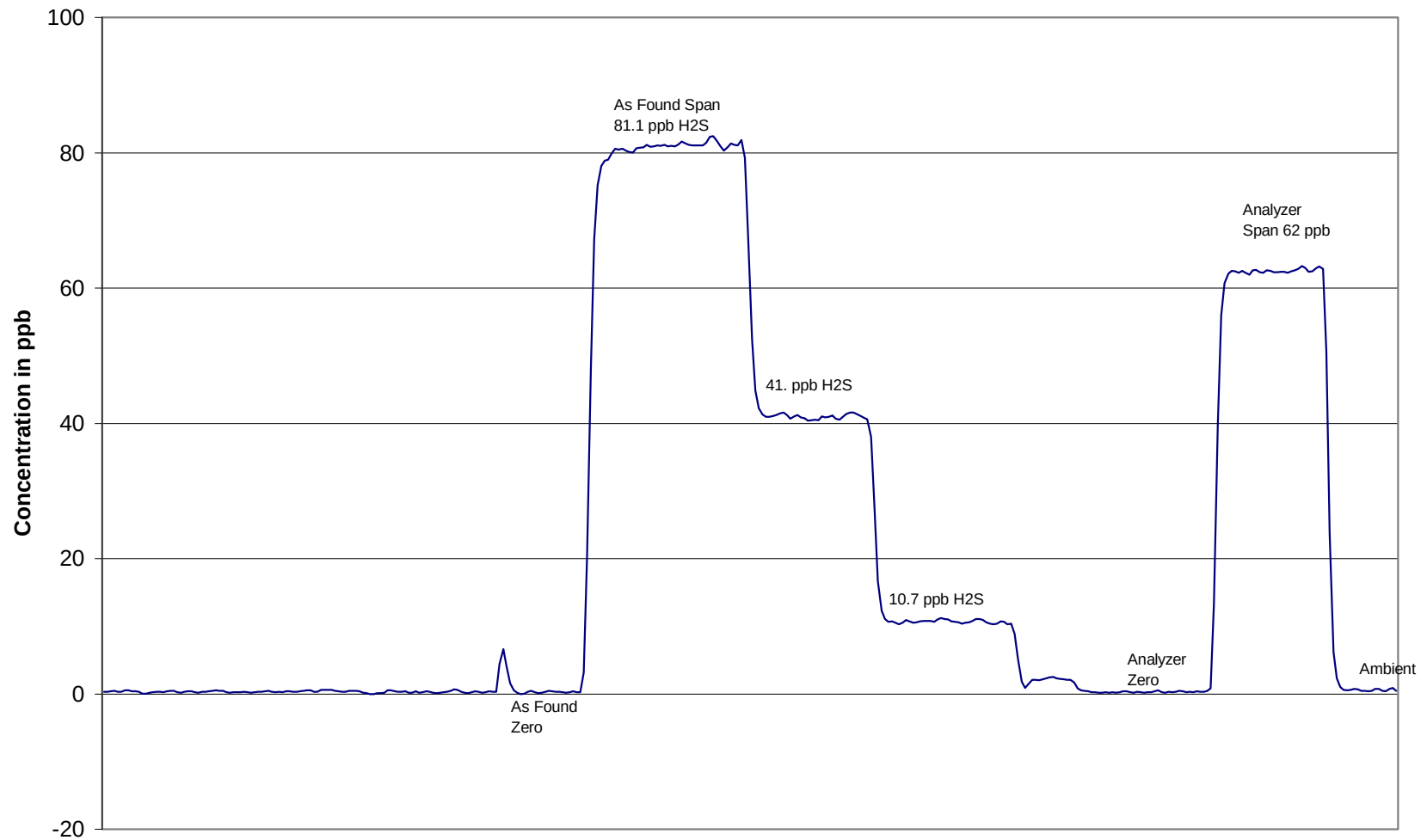
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999978
80.2	80.6	0.9956		
40.5	41.0	0.9866		
10.1	10.7	0.9467	Slope	0.999638
			Intercept	-0.411736

H2S Calibration Curve



Valleyview H₂S Calibration



January 17, 2009