



Air Quality Monitoring Network for December 2007

Prepared by
FOCUS
 AMBIENT AIR MONITORING

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RE: Peace Airshed Zone Association (PASZA) – December 2007 Ambient Air Report

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **December 2007**.

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

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the "Monthly Summary" and "Continuous Monitoring" pages of the report.

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

During the month of December the following events were noted:

Henry Pirker Station:

- ◆ All analyzers / sensors at the Henry Pirker station had an operational uptime greater than 90%.
- ◆ TRS spans dropped on the 1st – 5th, 7th, 8th, and 21st – reason under investigation.
- ◆ No CO spans from December 1st to 19th due to cylinder failure with no spare available.
- ◆ No THC spans post December 14th calibration to end of month due to empty cylinder.
- ◆ The O₃ analyzer had a number of days where the spans were unstable due to failing UV lamp; a new lamp was installed during the December 13th calibration.
- ◆ The station environmental controls failed on December 31st – January 2nd causing analyzer internal span fluctuations. The temperature drift did not affect analyzer uptime.
- ◆ The AQI for the month resulted in 675 hours of Good readings and 1 hour of Fair readings.

Evergreen Park Station:

- ◆ A power failure on December 17th resulted in three (3) hours removed for meteorological parameters, four (4) hours for SO₂ and TRS, and five (5) hours for the TEOM.
- ◆ All analyzers / sensors at the Evergreen Park station had an operational uptime greater than 90%.

Smoky Heights Station:

- ◆ A power failure on December 9th resulted in five (5) hours removed for meteorological parameters, and six (6) hours for all pollutant analyzers.
- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90%.

Beaverlodge Station:

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

- ◆ SO₂ maximum readings were notably excessive on December 14th.
- ◆ Calm meteorological conditions throughout December resulted in flat wind speed readings; these were flagged invalid resulting in 90.5% uptime for the wind speed sensor.
- ◆ The AQI for the month resulted in 705 hours of Good readings.

Portable – Spirit River Station:

- ◆ Wind speed and wind direction had four (4) hours of data flagged invalid; the original ultrasonic sensor was replaced back into service on December 11th.
- ◆ The relative humidity and temperature sensors were replaced with warranty returned sensors on December 11th – Alberta Environment reference # 192650.
- ◆ All analyzers / sensors at the Spirit River station had an operational uptime greater than 90% with the exception of the relative humidity and temperature sensors.

Valleyview Station:

- ◆ SO₂ spans continue to increase and had stabilized by mid-month.
- ◆ A power failure on December 19th resulted in three (3) hours of invalid data for meteorological parameters and four (4) hours for the analyzers.
- ◆ All analyzers / sensors at the Valleyview station had an operational uptime greater than 90%.

Passive Monitoring: 54 Stations throughout the PASZA zone:

Field notes during collection noted that: all three samples (SO₂, NO₂ and O₃) from the Ronan site were missing along with the passive sample housing unit. This site is being moved to a new location. There were seven duplicate sites sampled in the month of December: Poplar, Wanham, Bear Lake, Jean Cote, Little Smoky, Queen Elizabeth Park 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.

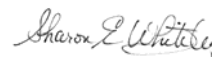
- Monthly average concentrations for SO₂ passives ranged from 0.1 ppb to 1.8 ppb, with a mean of 0.4 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.1 ppb to 15.1 ppb, with a mean of 3.0 ppb.
- Monthly average concentrations for O₃ passives ranged from 10.5 ppb to 33.3 ppb, with a mean of 24.7 ppb.

If you have any questions, please contact the Focus office at 1-888-869-2252 (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

Dec-2007 Peace Airshed Zone Association							Maximum Recorded Values						Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr				24-hr / 8-hr		
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	
SO ₂ (ppb)	172	57	Henry Pirker	0.4	0	0	7.9	Dec-15 18:00	7.7	SW	1.8	Dec-15	100.0%
SO ₂ (ppb)	172	57	Evergreen Park	0.5	0	0	8.9	Dec-12 23:00	16.5	WSW	2.9	Dec-13	99.5%
SO ₂ (ppb)	172	57	Smoky Heights	0.7	0	0	19.5	Dec-15 20:00	14.4	SW	2.8	Dec-15	99.2%
SO ₂ (ppb)	172	57	Beaverlodge	1.2	0	0	53.2	Dec-14 14:00	1.4	E	6.9	Dec-14	100.0%
SO ₂ (ppb)	172	57	Portable-Spirit River	0.7	0	0	6.5	Dec-05 21:00	13.2	NNE	2.1	Dec-05	100.0%
SO ₂ (ppm)	172	57	Valleyview	0.36	0	0	12.69	Dec-24 09:00	15.5	WNW	1.48	Dec-24	99.5%
NO (ppb)			Henry Pirker	22.2	-	-	238.7	Dec-13 10:00	4.5	S	88.1	Dec-11	100.0%
NO ₂ (ppb)	212	106	Henry Pirker	21.3	0	0	60.5	Dec-13 10:00	4.5	S	37.9	Dec-11	100.0%
NO _x (ppb)			Henry Pirker	43.5	-	-	298.7	Dec-13 10:00	4.5	S	125.8	Dec-11	100.0%
NO (ppb)			Beaverlodge	1.9	-	-	36.1	Dec-21 15:00	0.0	Calm	9.6	Dec-21	100.0%
NO ₂ (ppb)	212	106	Beaverlodge	8.7	0	0	32.1	Dec-21 17:00	0.0	Calm	20.2	Dec-22	100.0%
NO _x (ppb)			Beaverlodge	10.4	-	-	65.6	Dec-21 15:00	0.0	Calm	28.4	Dec-21	100.0%
NO (ppb)			Portable-Spirit River	0.7	-	-	10.4	Dec-21 11:00	1.7	N	2.1	Dec-08	100.0%
NO ₂ (ppb)	212	106	Portable-Spirit River	7.0	0	0	26.2	Dec-07 21:00	10.1	WSW	14.6	Dec-08	100.0%
NO _x (ppb)			Portable-Spirit River	7.8	-	-	30.0	Dec-14 09:00	4.1	SW	16.7	Dec-08	100.0%
O ₃ (ppb)	82		Henry Pirker	11.3	0	-	36.4	Dec-24 04:00	24.5	WSW	28.7	Dec-24	100.0%
O ₃ (ppb) - 8-hr		65	Henry Pirker			0					34.1	Dec-24	
O ₃ (ppb)	82		Beaverlodge	25.6	0	-	45.8	Dec-09 06:00	18.3	WNW	40.8	Dec-09	100.0%
O ₃ (ppb) - 8-hr		65	Beaverlodge			0					43.7	Dec-09	
O ₃ (ppb)	82		Portable-Spirit River	23.4	0	-	37.4	Dec-09 10:00	13.9	WSW	34.6	Dec-24	100.0%
O ₃ (ppb) - 8-hr		65	Portable-Spirit River			0					36.6	Dec-24	
CO (ppm)	13		Henry Pirker	0.34	0	-	2.0	Dec-13 10:00	4.5	S	0.8	Dec-11	100.0%
CO (ppm) - 8-hr		5	Henry Pirker			0					1.4	Dec-11	
THC (ppm)			Henry Pirker	2.52	-	-	5.1	Dec-11 19:00	4.9	SSW	3.7	Dec-08	100.0%
TRS (ppb)			Henry Pirker	0.4	-	-	2.1	Dec-19 09:00	7.1	SE	0.9	Dec-11	100.0%
TRS (ppb)			Evergreen Park	0.8	-	-	3.2	Dec-14 22:00	2.2	W	1.5	Dec-11	99.3%
TRS (ppb)			Smoky Heights	0.4	-	-	1.2	Dec-07 17:00	9.8	WSW	0.8	Dec-08	99.2%
TRS (ppb)			Portable-Spirit River	0.5	-	-	1.4	Sep-22 22:00	1.6	SSE	0.6	Sep-22	100.0%
H ₂ S (ppb)	10	3	Valleyview	0.1	0	0	1.2	Dec-31 17:00	2.2	SSW	0.2	Dec-05	99.5%
PM _{2.5} (µg/m ³)		30 ^a	Henry Pirker	4.6	0	0	34.0	Dec-31 22:00	6.4	NNW	8.7	Dec-15	95.7%
PM _{2.5} (µg/m ³)		30 ^a	Evergreen Park	4.6	0	0	23.7	Dec-14 12:00	3.5	W	8.9	Dec-05	98.7%
PM _{2.5} (µg/m ³)		30 ^a	Smoky Heights	3.8	0	0	45.6	Dec-14 23:00	8.1	NNE	6.4	Dec-03	99.2%
PM _{2.5} (µg/m ³)		30 ^a	Beaverlodge	2.7	0	0	19.8	Dec-19 03:00	3.8	NE	7.9	Dec-15	99.6%

PASZA Monthly Continuous Data Summary - continued

Dec-2007		Peace Airshed Zone Association				Maximum Recorded Values						
						1-hr				24-hr / 8-hr		
RH (%)		Henry Pirker	72.7	-	-	-	-	-	-	-	-	100.0%
RH (%)		Beaverlodge	74.1	-	-	-	-	-	-	-	-	100.0%
RH (%)		Portable-Spirit River	78.0	-	-	-	-	-	-	-	-	65.5%
RH (%)		Valleyview	76.8	-	-	-	-	-	-	-	-	99.6%
SR (W/m ²)		Henry Pirker	19.5	-	-	-	-	-	-	-	-	100.0%
Temp (°C)		Henry Pirker	-12.9	-	-	-	-	-	-	-	-	100.0%
Temp (°C)		Evergreen Park	-13.0	-	-	-	-	-	-	-	-	99.6%
Temp (°C)		Smoky Heights	-13.0	-	-	-	-	-	-	-	-	99.3%
Temp (°C)		Beaverlodge	-10.2	-	-	-	-	-	-	-	-	100.0%
Temp (°C)		Portable-Spirit River	-9.6	-	-	-	-	-	-	-	-	65.5%
Temp (°C)		Valleyview	-11.9	-	-	-	-	-	-	-	-	99.6%
WSPD v (km/hr)		Henry Pirker	7.9	-	-	33.1	Dec-20 09:00	33.1	WNW	19.9	Dec-12	100.0%
WSPD v (km/hr)		Evergreen Park	5.0	-	-	25.7	Dec-24 11:00	25.7	W	16.2	Dec-24	99.6%
WSPD v (km/hr)		Smoky Heights	10.3	-	-	34.3	Dec-16 02:00	34.3	WSW	23.5	Dec-24	99.3%
WSPD v (km/hr)		Beaverlodge	5.9	-	-	33.8	Dec-23 02:00	33.8	W	20.0	Dec-24	90.5%
WSPD v (km/hr)		Portable-Spirit River	10.8	-	-	54.9	Dec-15 20:00	54.9	SW	29.6	Dec-03	90.0%
WSPD v (km/hr)		Valleyview	4.6	-	-	22.7	Dec-12 08:00	22.7	WNW	13.0	Dec-12	99.6%
WSPD s (km/hr)		Henry Pirker	8.8	-	-	33.2	Dec-20 09:00	33.2	WNW	20.7	Dec-12	100.0%
WSPD s (km/hr)		Evergreen Park	5.7	-	-	25.9	Dec-24 11:00	25.9	W	17.0	Dec-24	99.6%
WSPD s (km/hr)		Smoky Heights	10.5	-	-	34.3	Dec-16 02:00	34.3	WSW	23.8	Dec-24	99.3%
WSPD s (km/hr)		Beaverlodge	6.4	-	-	33.8	Dec-23 02:00	33.8	W	20.2	Dec-24	90.5%
WSPD s (km/hr)		Portable-Spirit River	11.6	-	-	55.0	Dec-15 20:00	55.0	SW	30.6	Dec-03	90.0%
WSPD s (km/hr)		Valleyview	4.9	-	-	22.8	Dec-12 08:00	22.8	WNW	14.0	Dec-12	99.6%
WDIR		Henry Pirker	WNW	-	-	-	-	-	-	-	-	100.0%
WDIR		Evergreen Park	WNW	-	-	-	-	-	-	-	-	99.6%
WDIR		Smoky Heights	S	-	-	-	-	-	-	-	-	99.3%
WDIR		Beaverlodge	WNW	-	-	-	-	-	-	-	-	100.0%
WDIR		Portable-Spirit River	W	-	-	-	-	-	-	-	-	90.0%
WDIR		Valleyview	W	-	-	-	-	-	-	-	-	99.6%

Note: ^a the draft 24-hr Alberta Ambient Air Quality Objective

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

The station environmental controls failed on December 31st – January 2nd causing analyzer internal span fluctuations. The temperature drift did not affect analyzer uptime. Onsite calibrations performed December 12th, 13th, and 14th.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
NOx/NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	Spans unstable for month due to failing UV lamp, lamp replaced during December 13 th calibration. An initial 4 point calibration was performed December 12 th prior to receiving part. The lamp settled in over a week whereas the span levels stabilized.
CO	TEI	48C	No spans from December 1 st – 19 th due to cylinder failure.
THC	TEI	51-CLT	No THC spans post December 14 th calibration to end of month due to empty cylinder.
TRS	TEI	43C	TRS spans dropped on the 1 st – 5 th , 7 th , 8 th , and 21 st – reason under investigation.
PM _{2.5}	R&P	1400AB	Eight (8) hours were flagged due to excessive baseline drift; an additional twenty-four (24) hours were flagged invalid due to excessive noise.
RH	Met One	083D	No operational issues observed.
AT	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS/WD	Met One	010C/020C	No operational issues observed.

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on December 14th (SO₂ and TRS). A power failure on December 17th resulted in 3 hours removed for meteorological parameters, 4 hours for SO₂ and TRS, and 5 hours for the TEOM.

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	Five (5) hours were removed due to excessive baseline drift.
AT	Met One	083D	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on December 6th (SO₂, TRS and TEOM). A power failure on December 9th resulted in 5 hours removed for meteorological parameters, and 6 hours for all analyzers.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	No operational issues observed.
AT	Met One	083D	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on December 5th.

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No operational issues observed.
NOx/NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
PM _{2.5}	R&P	1400AB	No operational issues observed.
AT	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS	Blue Sky	857	Calm meteorological conditions throughout December resulted in flat wind speed readings.
WD	Blue Sky	857	No operational issues observed.

PASZA – Spirit River (Portable) Station

General Station Issues

Routine monthly calibrations were performed on December 10th (SO₂, NO_x, and O₃) and 11th (TRS). Original wind system was replaced on December 11th.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
NO _x /NO/NO ₂	TEI	42i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
AT	Gill	Met Pak 3	The temperature & relative humidity sensors were re-installed December 11 th – Alberta Environment reference # 192650.
RH	Gill	Met Pak 3	The temperature & relative humidity sensors were re-installed December 11 th – Alberta Environment reference # 192650.
WS	Met One		Four (4) hours of maintenance – Gill ultrasonic wind system replaced back into service.
WD	Met One		Four (4) hours of maintenance – Gill ultrasonic wind system replaced back into service.

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on December 7th (SO₂ and H₂S). A power failure on December 19th resulted in three (3) hours of invalid data for all meteorological parameters and four (4) hours for analyzers.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	Due to a new perm tube – spans continue to increase throughout the month and stabilized mid-month. No other issues other than above noted power failure.
H ₂ S	TEI	43A	No operational issues observed other than above noted power failure.
AT	Gill	Met Pak 3	No operational issues observed other than above noted power failure.
RH	Gill	Met Pak 3	No operational issues observed other than above noted power failure.
WS	Gill	Met Pak 3	No operational issues observed other than above noted power failure.
WD	Gill	Met Pak 3	No operational issues observed other than above noted power failure.

PASZA – Henry Pirker Station

Monthly Summary Tables, Graphs and Roses

PASZA - Henry Pirker AQI Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

Air Quality Index (AQI)

Monitoring Dates: December 1, 2007 to January 1, 2008

Alberta's Air Quality Index

Good	1 to 25
Fair	26 to 50
Poor	51 to 100
Very Poor	> 100

Summary

Number of 1-hr Good Readings:	675
Number of 1-hr Fair Readings:	1
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
1-Dec-07	17	16	N	15	13	8	8	10	7	10	9	N	15	15	15	12	8	7	8	8	7	6	6	6	5
2-Dec-07	5	N	4	4	4	N	11	11	11	11	12	12	12	13	12	12	12	12	13	13	13	13	13	13	13
3-Dec-07	N	13	13	13	12	12	11	10	9	10	10	10	10	11	10	9	10	9	10	9	9	10	11	N	N
4-Dec-07	11	10	10	9	10	9	10	9	10	10	11	10	11	11	11	9	7	7	9	9	9	10	N	10	10
5-Dec-07	10	11	10	10	10	8	6	12	14	11	6	6	7	7	6	6	8	8	9	10	8	N	6	7	7
6-Dec-07	6	9	9	8	7	7	9	11	10	10	7	8	9	8	8	8	10	12	11	10	N	10	9	7	7
7-Dec-07	8	7	6	7	8	8	7	8	9	8	6	6	11	9	10	9	9	10	12	N	8	8	8	7	7
8-Dec-07	7	7	7	7	7	6	7	7	6	6	6	5	9	11	7	7	8	9	N	9	8	10	17	17	17
9-Dec-07	9	9	8	9	10	10	9	18	N	16	15	N	17	18	16	14	15	N	14	16	15	17	17	17	17
10-Dec-07	16	17	17	16	15	11	7	7	8	8	7	8	10	10	7	8	N	8	9	8	7	7	6	7	7
11-Dec-07	6	6	7	8	8	8	9	10	10	9	7	N	7	7	7	N	12	13	N	N	N	N	N	N	N
12-Dec-07	9	16	16	15	14	15	15	15	15	15	N	N	N	N	12	N	7	6	13	N	N	N	N	N	N
13-Dec-07	N	N	12	12	12	N	9	9	11	12	14	11	9	7	8	7	7	9	12	7	13	9	9	8	8
14-Dec-07	7	7	7	7	5	N	8	9	8	9	7	7	6	5	5	6	7	8	9	8	7	6	6	8	8
15-Dec-07	N	10	5	4	8	N	7	7	7	6	5	5	8	9	7	6	8	9	10	14	17	24	15	7	7
16-Dec-07	9	N	15	16	N	16	13	15	7	8	8	9	8	12	12	7	8	7	10	11	11	N	N	N	N
17-Dec-07	N	N	5	N	7	5	6	7	10	11	12	7	6	7	8	8	6	9	8	9	9	9	11	12	12
18-Dec-07	8	8	N	9	7	11	N	8	10	12	12	N	11	10	7	7	9	8	6	6	5	7	8	8	8
19-Dec-07	7	N	9	13	14	14	14	13	9	8	7	5	8	9	8	8	7	9	10	12	12	11	11	9	9
20-Dec-07	N	5	5	6	7	7	7	7	7	11	11	12	12	13	13	13	12	8	8	7	8	11	7	N	N
21-Dec-07	8	7	7	6	6	5	6	6	8	9	9	7	9	6	7	7	7	7	8	8	6	6	N	6	6
22-Dec-07	6	6	6	6	6	6	6	6	7	7	7	5	7	9	9	6	7	7	8	8	8	N	11	25	25
23-Dec-07	7	9	11	7	12	6	7	7	11	11	13	7	7	8	8	7	8	9	10	10	N	13	10	10	10
24-Dec-07	14	7	6	15	18	18	18	18	17	15	16	16	16	16	16	15	15	15	16	N	16	16	16	15	15
25-Dec-07	16	16	15	15	15	12	12	11	6	7	4	6	7	6	6	4	5	6	N	6	4	5	7	8	8
26-Dec-07	8	8	6	4	5	5	7	6	6	6	6	5	8	11	12	7	6	N	7	8	8	5	7	6	6
27-Dec-07	6	10	8	9	8	8	9	9	11	8	7	8	7	6	9	7	N	8	7	6	5	5	6	6	6
28-Dec-07	4	6	6	6	8	6	5	6	7	5	11	9	7	8	8	N	7	7	7	5	5	6	6	6	6
29-Dec-07	6	5	5	5	4	5	5	4	5	7	5	4	8	13	N	13	7	4	4	5	7	7	6	7	7
30-Dec-07	7	7	6	6	5	4	6	5	6	7	7	6	6	N	7	7	7	9	7	6	10	7	8	17	17
31-Dec-07	13	10	5	8	6	4	4	5	6	N	N	N	N	N	8	5	6	9	6	6	8	9	27	5	5

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

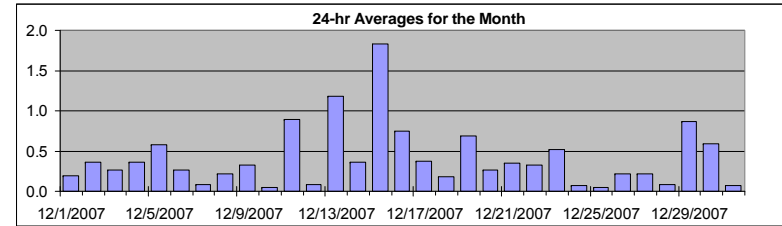
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	7.9 ppb	15-Dec	18:00	19:00
Maximum 24-hr Average:	1.8 ppb	15-Dec		



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	4.2	1.8	0.5	0.1	0.0	0.0	0.0	0.4 ppb	0.1 ppb

Status Flag Characters	
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Dec-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	0.6
2-Dec-07	0	A	0	0	0	0	0	1	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	1.7
3-Dec-07	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.6
4-Dec-07	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	1	1	1	1	1	A	0	0.4	1.7
5-Dec-07	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	3	2	2	1	1	1	A	0	0	0.6	2.5
6-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0.3	1.5
7-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0.1	0.5
8-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	2	2	0.2	2.2
9-Dec-07	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.9
10-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.4
11-Dec-07	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	A	2	2	2	2	2	3	3	1	0.9	2.6
12-Dec-07	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3
13-Dec-07	0	0	0	0	0	A	0	0	1	2	3	2	2	5	5	4	0	0	0	0	1	1	1	1	1.2	5.3
14-Dec-07	0	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.4	1.1
15-Dec-07	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0	1	7	8	5	5	5	4	2	1.8	7.9
16-Dec-07	1	1	0	0	A	0	2	1	1	1	2	2	2	2	1	0	0	0	0	0	0	1	0	0	0.7	2.2
17-Dec-07	0	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0.4	2.1
18-Dec-07	2	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	2.2
19-Dec-07	0	A	0	1	1	1	1	1	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0.7	1.8
20-Dec-07	A	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.5
21-Dec-07	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0	0	1	1	0	0	A	0	0.4	1.1
22-Dec-07	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	A	1	1	0.3	1.4
23-Dec-07	1	1	1	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	1	1	A	1	1	1	0.5	1.6
24-Dec-07	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	1.5
25-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3
26-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	0	0	0	0	0	0	0.2	1.1
27-Dec-07	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.9
28-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.5
29-Dec-07	0	0	1	0	0	1	2	3	1	0	1	4	2	1	A	1	1	1	0	0	0	0	0	0	0.9	3.9
30-Dec-07	0	0	0	0	0	1	1	1	2	3	3	2	1	A	0	0	0	0	0	0	0	0	0	0	0.6	3.5
31-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0.1	0.8
Hourly Avg	0.3	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.3	0.6	0.7	0.5	0.5	0.5	0.6	0.4		
Hourly Max	2.2	1.1	1.2	0.7	0.9	1.5	1.8	2.9	1.8	3.5	2.8	3.9	2.4	5.3	4.5	4.2	2.1	6.9	7.9	5.2	5.2	5.3	3.8	2.2		

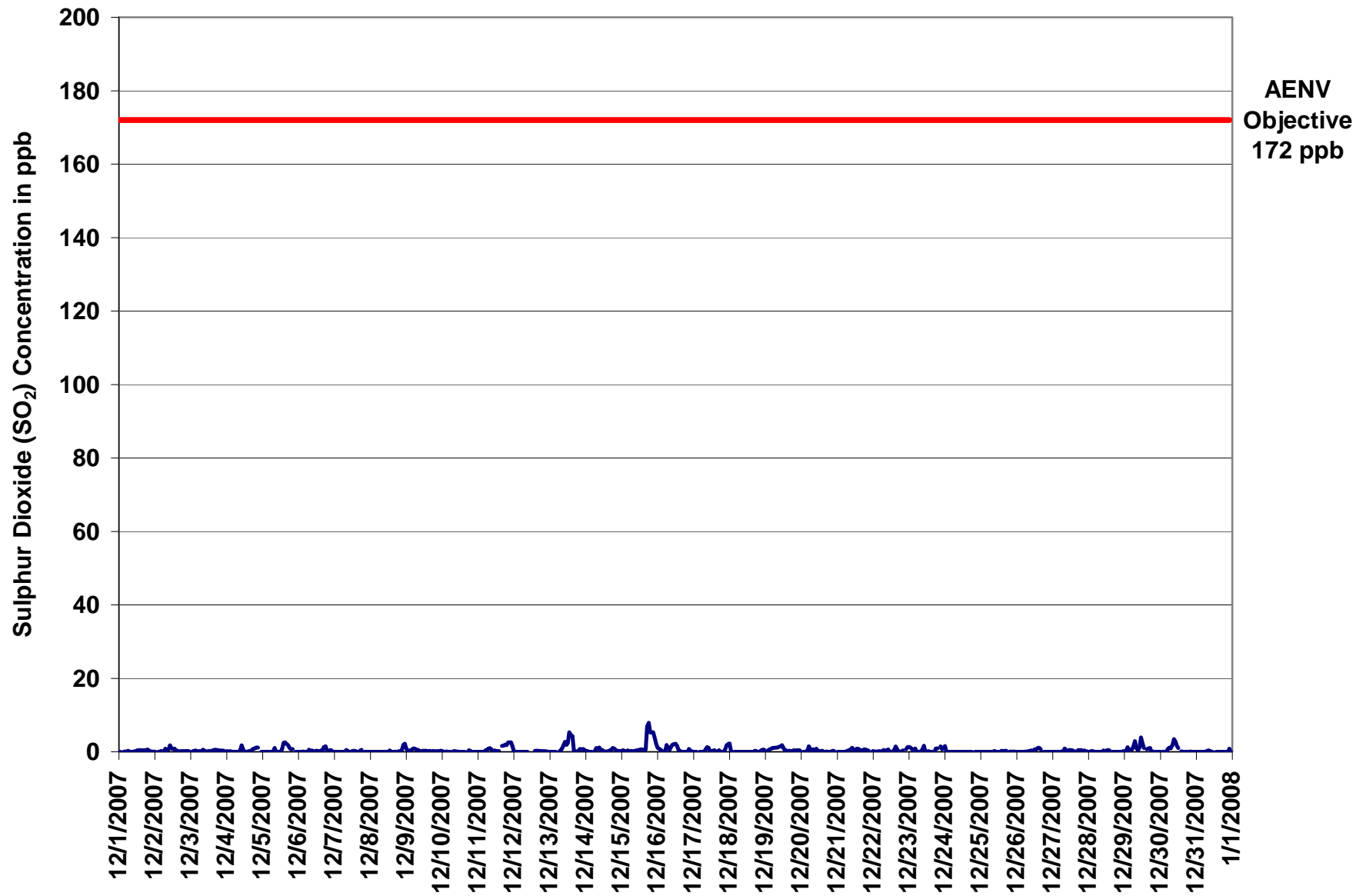


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

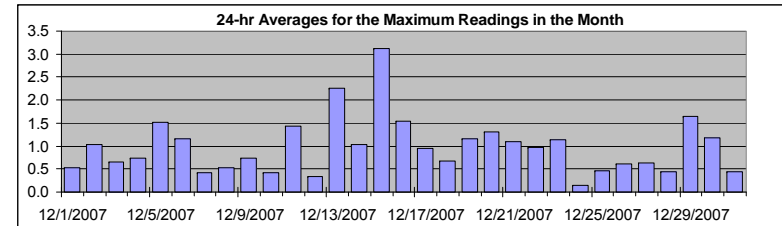
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	13.7	ppb	15-Dec	17:00 18:00
Maximum 24-hr Value:	3.1	ppb	15-Dec	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	7.8	3.3	1.1	0.5	0.2	0.0	0.0	1.0 ppb	0.5 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Dec-07	0	0	A	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.5	1.0	
2-Dec-07	1	A	1	0	1	1	1	2	1	1	3	2	5	4	1	1	0	0	1	0	0	1	0	0	1.0	5.2	
3-Dec-07	A	0	1	1	0	0	1	1	1	1	0	1	1	1	1	0	1	1	2	0	0	0	1	A	0.7	2.0	
4-Dec-07	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	1	0	1	1	1	2	3	A	1	0.7	2.6	
5-Dec-07	0	0	0	0	0	0	0	1	5	1	0	3	2	2	3	4	5	3	1	1	2	A	0	0	1.5	5.2	
6-Dec-07	0	1	1	1	1	0	0	2	1	1	1	1	1	1	1	1	1	2	8	1	A	1	1	0	1.2	7.6	
7-Dec-07	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	0	1	1	2	A	0	0	0	0	0.4	1.5	
8-Dec-07	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	A	1	0	1	3	3	0.5	3.3	
9-Dec-07	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0.7	1.8	
10-Dec-07	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	1	A	0	1	1	0	0	1	0	0.4	1.0	
11-Dec-07	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	3	3	3	2	1.4	3.4	
12-Dec-07	1	0	0	0	0	0	0	0	0	0	C	C	C	A	1	0	1	0	0	0	0	1	0	0	0.3	1.4	
13-Dec-07	0	0	0	0	0	A	0	1	2	4	4	3	6	8	7	9	1	1	1	1	2	1	2	1	2.3	8.5	
14-Dec-07	1	1	0	1	0	A	1	1	2	2	1	1	0	0	0	1	1	2	2	2	1	0	1	1	1.0	2.5	
15-Dec-07	0	1	1	1	1	A	0	0	0	0	1	1	1	1	1	2	14	10	6	8	9	6	6	6	3.1	13.7	
16-Dec-07	1	1	1	1	A	0	4	2	1	2	2	3	3	2	1	1	0	1	0	0	0	7	1	1	1.5	6.9	
17-Dec-07	0	0	0	A	0	0	0	1	2	2	2	1	0	0	1	0	0	1	0	0	0	1	4	3	1.0	3.8	
18-Dec-07	7	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0.7	7.4	
19-Dec-07	1	A	1	1	1	2	1	1	2	2	2	3	3	1	0	0	0	0	0	0	0	1	0	0	1.2	3.4	
20-Dec-07	A	0	0	0	0	13	1	1	1	1	1	1	0	1	1	0	1	0	0	0	0	1	0	A	1.3	12.6	
21-Dec-07	0	0	0	0	0	0	1	2	1	1	4	3	0	1	1	1	1	1	2	1	1	0	A	0	1.1	4.4	
22-Dec-07	1	0	0	0	1	0	1	1	1	1	1	0	0	0	1	3	1	0	1	0	2	A	1	3	1.0	3.2	
23-Dec-07	2	2	1	1	1	0	0	0	1	2	3	1	1	1	1	0	0	0	2	1	A	3	2	2	1.1	3.1	
24-Dec-07	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	2.6	
25-Dec-07	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	2	0	1	1	A	0	1	0	1	0	0.5	1.5
26-Dec-07	0	0	0	0	0	0	1	0	1	1	1	0	2	1	2	2	1	A	0	0	0	0	0	1	0.6	1.6	
27-Dec-07	0	0	0	0	0	0	0	0	2	2	1	1	1	1	0	0	A	1	1	1	0	0	0	0	0.6	1.9	
28-Dec-07	0	0	0	1	0	0	0	1	0	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0.4	1.0	
29-Dec-07	0	1	2	1	1	1	3	5	2	1	3	5	4	2	A	2	2	3	1	1	0	0	0	0	1.6	5.3	
30-Dec-07	0	0	0	0	1	2	2	2	4	6	4	2	2	A	1	0	1	1	0	0	1	1	0	0	1.2	6.0	
31-Dec-07	0	0	0	0	0	0	0	1	1	1	0	1	A	0	0	1	1	0	1	0	0	1	4	0	0.4	4.0	
Hourly Avg	0.8	0.5	0.4	0.4	0.4	0.8	0.7	0.9	1.2	1.2	1.4	1.3	1.3	1.1	1.0	1.1	0.8	1.4	1.5	0.9	1.0	1.3	1.3	1.0			
Hourly Max	7.4	2.2	2.0	1.2	1.2	12.6	3.9	5.3	5.2	6.0	4.4	5.1	5.6	8.0	6.5	8.5	4.9	13.7	10.3	6.4	7.9	9.3	6.2	5.9			

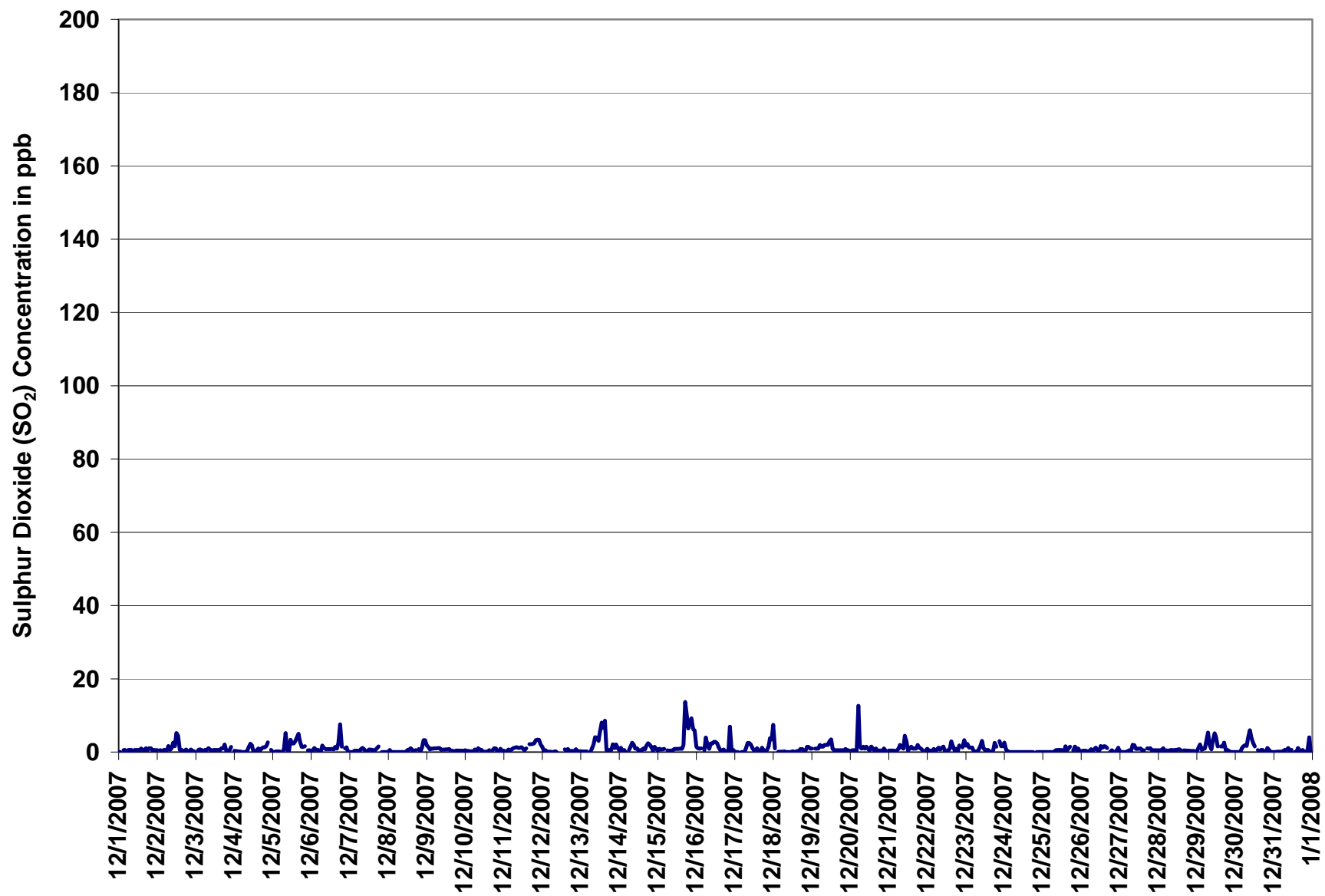
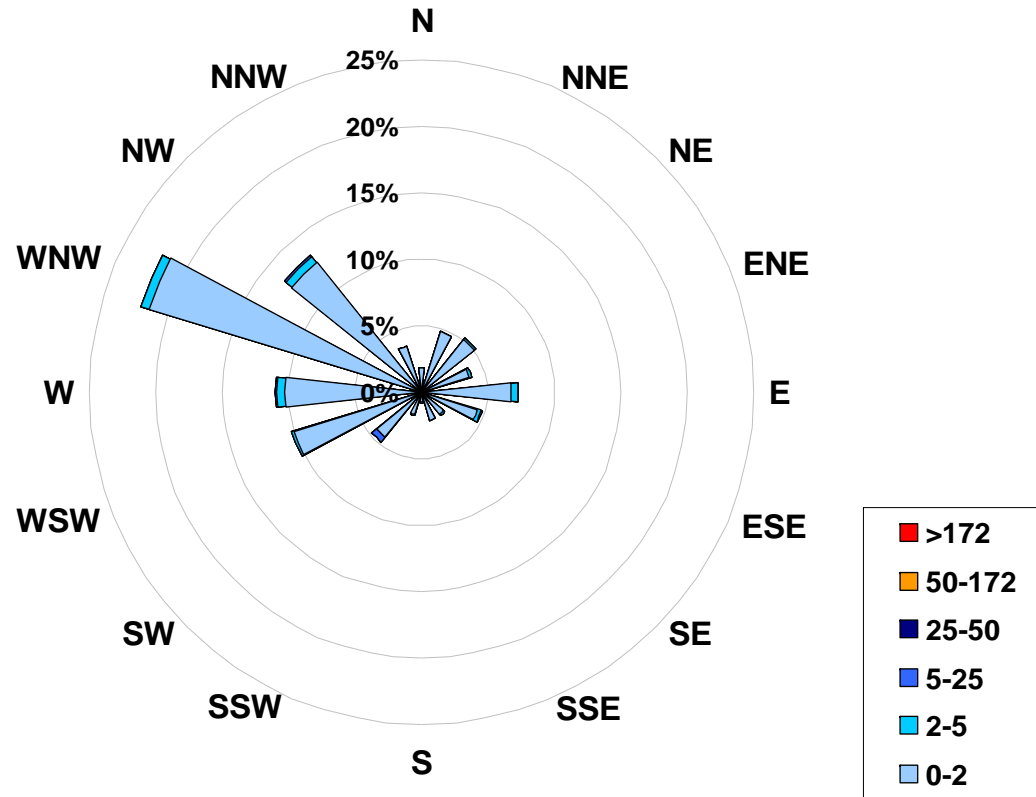


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Henry Pirker Site for December 2007



Calms: 0%

Frequency Distribution of SO ₂ in ppb			Frequency (hrs)
Range			
0.0	<	2	679
2	to	5	23
5	to	25	6
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			708

PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

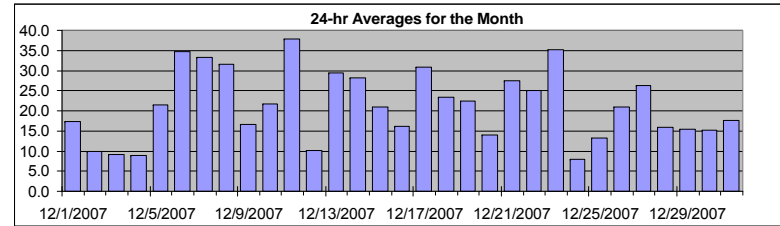
HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 212 ppb 24-hr 106 ppb
 Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	60.5	ppb	13-Dec	10:00 11:00
Maximum 24-hr Average:	37.9	ppb	11-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	48.9	40.6	30.1	20.3	12.0	3.7	2.1	21.3 ppb	20.3 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Dec-07	3	7	A	7	10	22	23	15	22	17	19	13	4	3	5	11	21	30	35	33	29	25	24	22	17.4	35.1	
2-Dec-07	21	A	19	15	18	15	11	10	10	10	8	7	7	7	8	9	9	8	8	6	6	6	5	5	9.9	21.2	
3-Dec-07	A	5	5	5	6	7	7	10	12	10	9	11	10	8	10	12	10	12	11	13	13	10	7	A	9.2	12.7	
4-Dec-07	7	7	8	10	8	10	7	10	11	8	8	6	8	8	7	12	16	14	11	10	8	7	A	7	9.0	15.7	
5-Dec-07	6	4	5	5	5	11	21	40	42	36	21	14	15	15	14	25	32	34	33	31	30	A	27	28	21.4	42.0	
6-Dec-07	26	24	28	30	31	29	40	48	42	41	29	28	24	26	26	34	44	49	48	40	A	42	38	30	34.6	49.2	
7-Dec-07	33	29	27	31	33	34	31	34	37	33	22	24	33	36	41	39	37	40	43	A	32	33	32	30	33.2	43.3	
8-Dec-07	27	27	29	29	28	25	30	28	27	24	22	18	29	40	30	29	33	38	A	39	35	41	48	47	31.5	48.2	
9-Dec-07	37	36	33	39	40	41	39	5	6	10	13	13	7	5	8	12	9	A	9	6	6	3	2	1	16.6	41.5	
10-Dec-07	2	2	2	2	4	13	24	27	32	36	30	19	13	12	22	32	A	35	39	35	31	29	26	30	21.6	39.0	
11-Dec-07	27	25	28	32	32	36	37	40	42	38	29	32	31	31	31	A	49	49	47	46	52	49	45	40	37.9	51.7	
12-Dec-07	19	3	3	3	3	2	3	3	5	5	C	C	C	C	C	A	30	24	16	14	16	13	10	8	10.1	30.1	
13-Dec-07	9	10	13	13	12	A	18	37	45	52	61	45	39	27	32	28	30	20	13	28	38	36	37	33	29.3	60.5	
14-Dec-07	30	31	27	28	22	A	33	39	35	37	29	28	20	20	21	26	31	33	36	33	28	26	27	13	28.3	38.9	
15-Dec-07	11	10	18	18	13	A	14	14	15	19	20	20	14	13	17	22	26	28	28	29	34	35	38	29	21.0	37.7	
16-Dec-07	15	4	4	5	A	5	11	5	23	35	33	37	23	13	14	23	20	30	15	12	12	11	11	11	16.1	36.5	
17-Dec-07	21	19	20	A	13	23	26	31	33	45	39	29	27	29	31	27	27	34	32	37	37	40	45	44	30.8	45.3	
18-Dec-07	32	35	A	37	20	14	18	23	18	12	13	12	17	15	15	22	27	37	35	26	26	22	28	33	23.4	37.0	
19-Dec-07	29	A	27	31	32	34	33	33	34	32	29	22	15	13	15	16	20	17	18	12	13	12	12	14	22.5	34.4	
20-Dec-07	A	19	17	18	30	28	31	21	11	4	3	3	2	2	3	5	7	17	17	19	18	12	19	A	13.9	31.4	
21-Dec-07	15	29	28	23	27	19	26	26	34	36	35	27	23	23	28	27	31	31	32	32	27	25	A	27	27.5	35.8	
22-Dec-07	25	25	27	26	26	24	23	29	26	29	29	20	18	12	13	19	28	26	29	30	31	A	32	31	25.1	31.8	
23-Dec-07	31	32	31	30	36	24	21	29	44	46	56	28	30	33	32	28	33	37	41	44	A	43	40	41	35.2	56.2	
24-Dec-07	40	30	25	7	2	2	2	3	4	8	6	5	5	5	5	7	7	7	3	A	3	3	2	3	8.0	39.9	
25-Dec-07	2	2	3	3	4	8	9	11	26	30	15	12	12	13	15	18	22	26	A	16	17	16	12	11	13.2	30.2	
26-Dec-07	11	11	16	19	13	20	28	25	27	25	25	21	18	13	10	20	25	A	30	32	16	21	27	27	20.9	32.4	
27-Dec-07	24	13	15	14	17	33	38	38	45	34	30	32	29	25	15	20	A	35	30	26	20	21	25	25	26.3	45.5	
28-Dec-07	17	20	27	18	9	12	19	23	12	17	23	16	15	13	13	A	14	14	13	16	17	14	12	14	16.0	26.7	
29-Dec-07	14	15	13	14	17	19	19	18	20	23	19	15	7	9	A	23	25	19	14	13	10	9	11	10	15.5	24.9	
30-Dec-07	10	10	11	10	12	17	11	12	16	14	11	10	11	A	14	17	24	22	18	22	26	20	17	16	15.2	25.7	
31-Dec-07	14	14	14	13	15	17	17	19	22	22	14	14	A	13	14	19	20	22	20	18	18	20	25	20	17.6	25.2	
Hourly Avg	19.2	17.2	18.1	17.8	17.9	19.5	21.6	22.8	25.1	25.4	23.4	19.3	17.4	16.7	17.6	20.8	24.3	27.1	25.0	24.8	22.4	22.2	23.6	22.4	17.6		
Hourly Max	39.9	36.3	32.9	38.6	40.0	41.5	39.6	48.0	45.5	52.4	60.5	44.7	39.0	40.0	41.0	38.6	49.3	49.4	48.1	46.3	51.7	48.9	48.2	46.9			

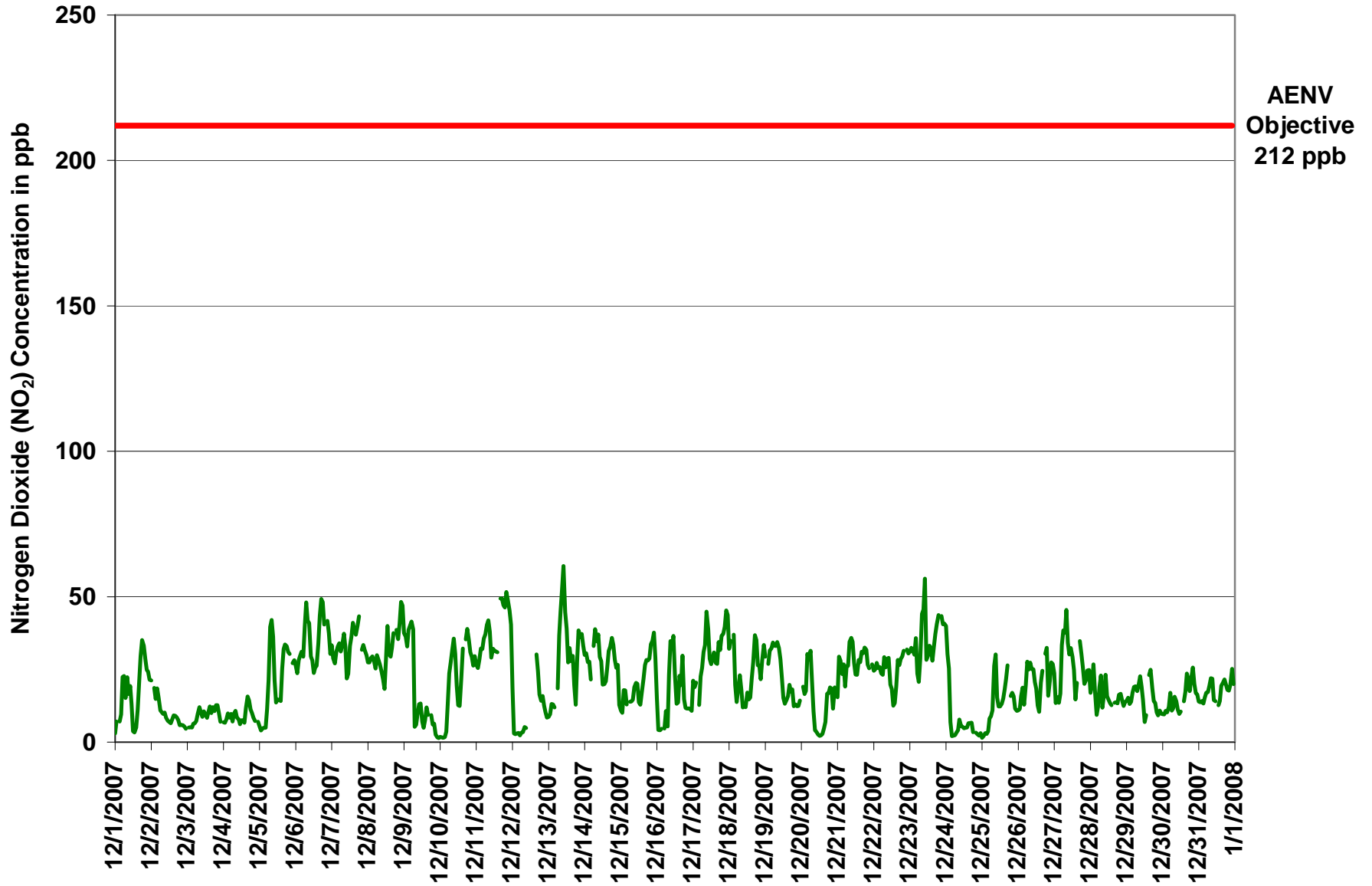


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

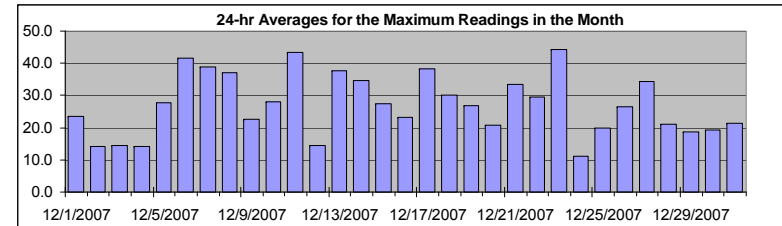
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	113.6	ppb	23-Dec	10:00 11:00
Maximum 24-hr Value:	44.4	ppb	23-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	62.7	49.6	36.4	27.4	16.5	6.5	3.4	27.2 ppb	27.4 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	6	9	A	11	18	41	32	21	33	23	23	21	10	6	9	15	28	36	38	40	37	28	28	24	23.5	41.3
2-Dec-07	24	A	23	19	26	19	16	15	15	15	13	13	10	8	10	13	14	15	11	9	9	10	11	8	14.1	26.0
3-Dec-07	A	8	10	8	11	10	14	16	18	15	12	16	14	16	21	19	14	18	16	19	19	15	10	A	14.6	20.6
4-Dec-07	13	10	12	19	10	13	12	17	17	13	27	9	11	15	11	21	21	22	14	15	10	9	A	8	14.3	27.0
5-Dec-07	9	6	8	9	14	17	36	49	55	50	29	20	21	18	17	31	38	38	39	35	37	A	30	30	27.6	54.6
6-Dec-07	28	30	33	36	38	37	51	58	47	50	37	33	31	31	31	44	48	61	60	45	A	48	43	37	41.5	60.7
7-Dec-07	37	36	31	34	38	37	36	41	45	43	25	34	35	44	46	43	45	55	53	A	34	36	35	33	39.0	55.1
8-Dec-07	29	29	32	32	32	27	34	33	30	30	34	24	40	44	41	34	36	42	A	43	39	53	55	55	37.0	55.1
9-Dec-07	45	52	38	46	42	44	45	8	13	31	21	20	19	8	11	17	17	A	14	11	9	6	3	2	22.7	52.1
10-Dec-07	4	2	4	9	9	27	31	40	38	42	42	29	21	20	34	36	A	38	47	40	33	33	31	34	28.0	46.9
11-Dec-07	32	30	35	37	36	40	40	43	44	41	34	41	39	35	41	A	54	54	50	55	63	58	53	43	43.4	63.0
12-Dec-07	42	4	4	5	5	5	6	7	8	11	C	C	C	C	C	A	37	32	19	17	19	16	13	10	14.5	42.4
13-Dec-07	11	19	16	17	17	A	34	48	53	64	71	64	48	36	39	36	39	27	18	39	46	47	42	39	37.8	70.6
14-Dec-07	33	35	32	31	30	A	38	49	54	47	36	33	26	25	27	30	35	36	45	43	32	26	36	15	34.5	53.8
15-Dec-07	14	15	29	23	15	A	17	18	19	28	23	25	18	18	20	27	29	31	31	51	46	41	50	44	27.6	51.3
16-Dec-07	20	7	5	6	A	6	21	10	40	43	39	50	42	18	18	34	30	44	24	15	14	16	15	16	23.2	49.5
17-Dec-07	30	25	28	A	20	28	34	41	38	70	46	40	36	34	35	33	38	38	37	40	39	46	50	50	38.1	69.6
18-Dec-07	39	51	A	42	25	20	23	30	28	17	16	16	25	20	25	29	36	52	42	31	32	28	32	37	30.2	51.9
19-Dec-07	36	A	32	33	34	41	38	38	36	37	33	25	21	15	18	22	23	23	24	16	15	15	15	23	26.8	40.6
20-Dec-07	A	27	27	27	35	32	38	36	25	5	5	4	5	4	5	8	13	27	27	24	33	20	29	A	20.7	38.2
21-Dec-07	24	33	34	28	30	26	31	33	52	44	42	32	27	26	37	32	35	33	42	40	31	29	A	29	33.5	52.0
22-Dec-07	26	28	32	31	30	27	31	32	29	33	37	23	22	17	17	32	33	29	31	32	34	A	42	34	29.7	42.0
23-Dec-07	34	34	36	38	42	35	35	39	57	55	114	47	35	40	38	32	38	41	45	46	A	50	47	45	44.4	113.6
24-Dec-07	46	35	35	23	2	3	3	6	7	12	7	7	7	9	8	9	9	9	5	A	4	4	3	5	11.2	45.8
25-Dec-07	3	3	7	4	7	12	16	22	36	40	29	20	20	17	24	25	30	32	A	26	28	25	16	14	19.8	39.6
26-Dec-07	13	14	22	25	15	28	31	29	35	30	29	23	22	15	17	29	32	A	38	40	24	31	31	36	26.5	40.3
27-Dec-07	35	19	24	22	33	39	42	46	68	63	36	35	33	37	19	28	A	37	36	31	27	25	29	29	34.4	67.5
28-Dec-07	25	27	29	30	13	20	22	31	19	25	28	20	20	16	14	A	17	17	17	19	21	17	15	18	21.0	31.0
29-Dec-07	15	17	16	15	20	23	23	24	24	24	22	16	10	13	A	25	28	24	16	23	13	13	14	14	18.8	28.1
30-Dec-07	12	12	16	13	16	20	14	22	22	20	14	12	15	A	18	21	28	26	24	24	30	26	18	19	19.2	30.1
31-Dec-07	15	16	17	14	17	19	18	28	28	28	19	17	A	15	19	25	23	24	23	20	20	27	38	23	21.5	38.1
Hourly Avg	24.3	21.9	23.0	22.9	22.8	24.7	27.8	30.0	33.3	33.8	31.4	25.7	23.6	21.4	23.2	26.8	29.9	33.1	30.6	30.7	27.6	27.6	28.8	26.7		
Hourly Max	45.8	52.1	37.7	45.8	42.3	44.1	50.8	58.4	67.5	69.6	113.6	63.6	48.0	43.9	45.8	44.4	54.1	60.7	60.2	55.2	63.0	58.0	55.0	55.1		

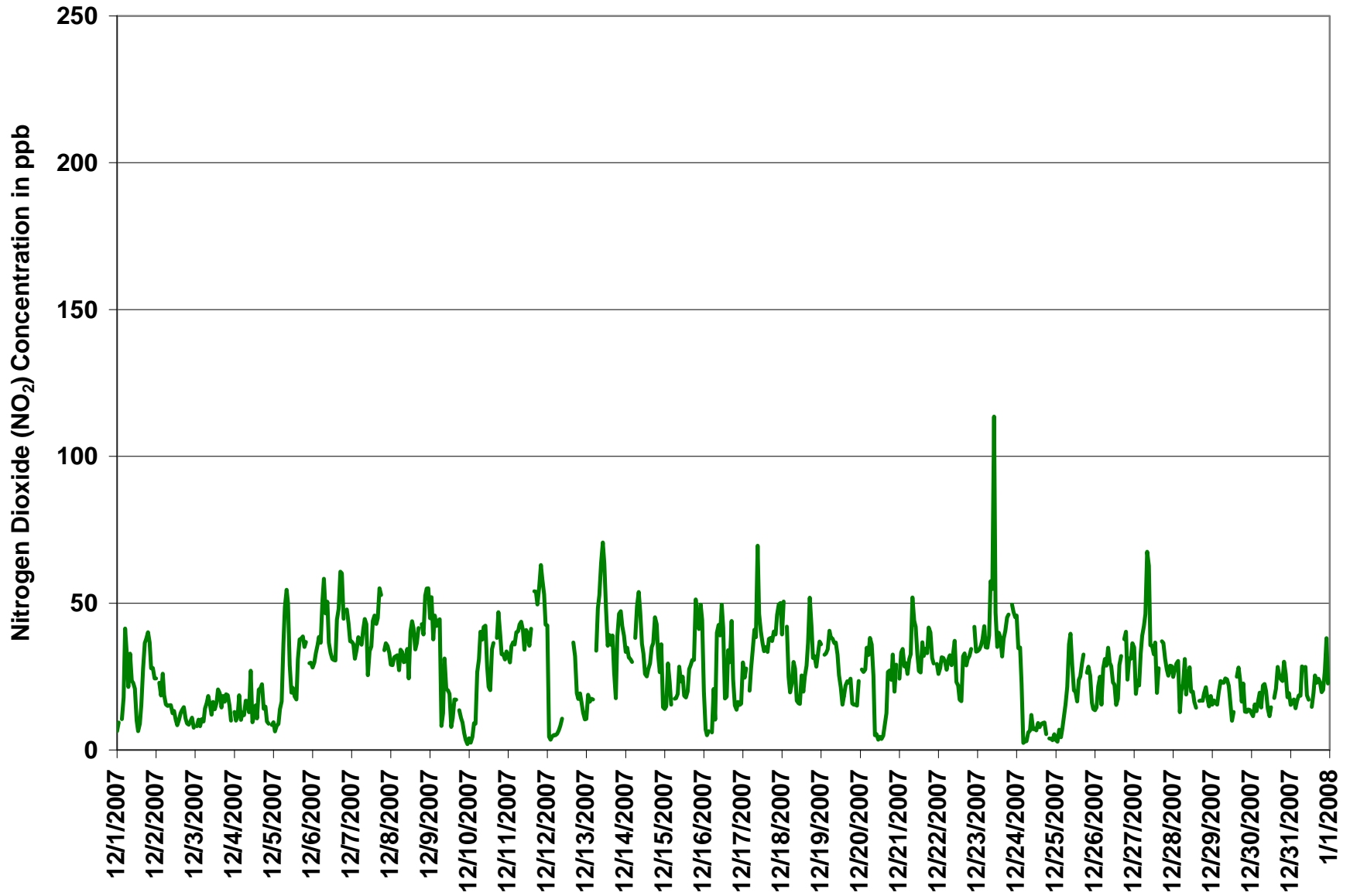
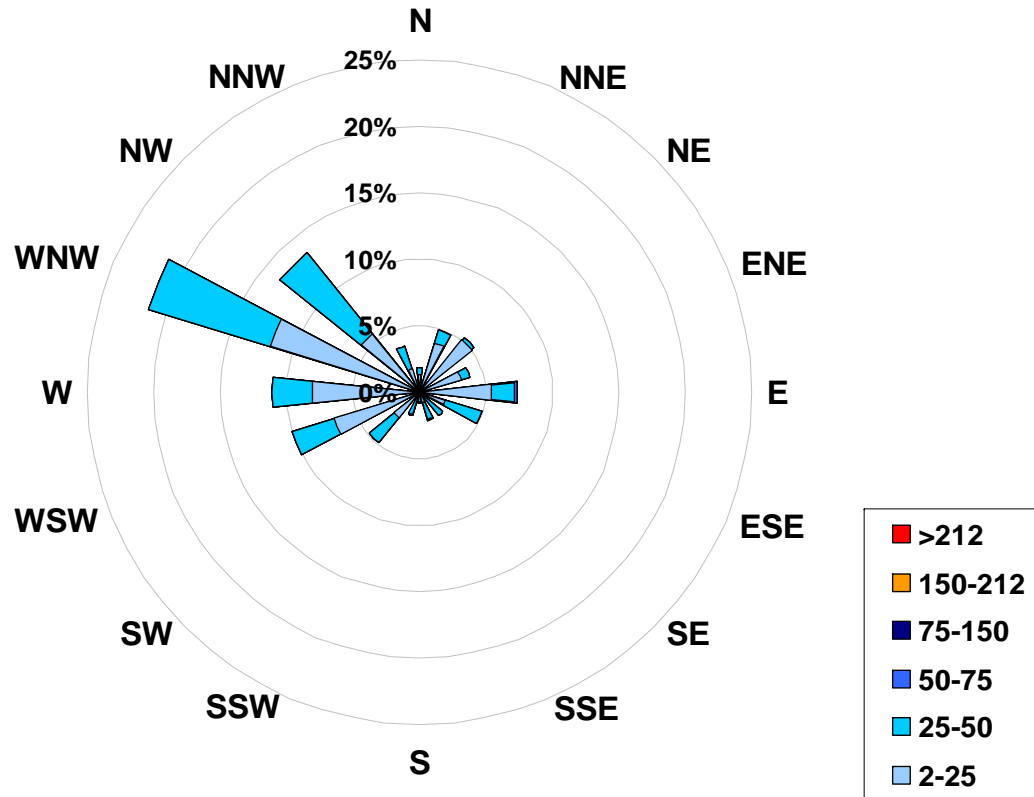


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Henry Pirker Site for December 2007



Calms: 0%

Frequency Distribution of NO ₂ in ppb			Frequency (hrs)
Range			
2.0	< 25		503
25	to 50		96
50	to 75		50
75	to 150		48
150	to 212		7
	> 212		2
Total Non-Zero Values			706

PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

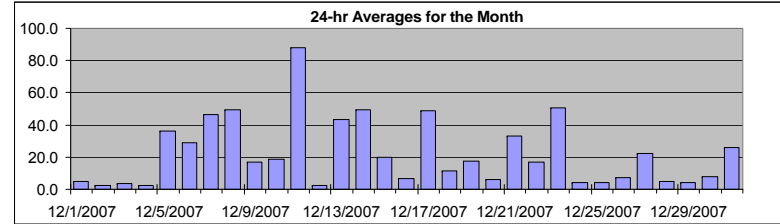
HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Monitoring Dates: December 1, 2007 to January 1, 2008

Guideline Limit: 1-hr na ppb 24-hr na ppb
 Summary

Maximum 1-hr Average:	238.7	ppb	13-Dec	10:00 11:00
Maximum 24-hr Average:	88.1	ppb	11-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	156.8	91.8	30.3	6.5	1.5	0.1	0.0	22.2 ppb	6.5 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Dec-07	0	1	A	0	0	2	2	1	2	3	8	6	1	1	1	2	2	5	9	10	30	8	7	5	4.7	30.1
2-Dec-07	5	A	3	1	1	1	3	4	4	5	4	4	4	3	4	3	2	2	2	1	2	2	1	1	2.7	4.5
3-Dec-07	A	1	2	2	1	1	3	5	5	5	7	6	5	7	7	4	3	2	3	3	2	1	A	3.6	7.4	
4-Dec-07	1	0	1	1	0	1	2	2	3	4	3	3	5	5	3	5	3	2	2	1	1	1	A	0	2.1	5.4
5-Dec-07	0	0	0	0	0	1	8	86	123	106	42	17	20	19	15	38	69	85	74	56	42	A	21	14	36.4	123.3
6-Dec-07	5	3	5	4	5	3	15	41	21	31	18	23	20	21	18	23	36	99	110	47	A	62	39	10	28.7	109.8
7-Dec-07	13	7	4	9	18	28	36	51	83	67	21	31	51	51	76	55	52	75	134	A	48	66	43	41	46.1	134.4
8-Dec-07	14	12	11	27	17	12	40	46	48	20	24	23	49	87	49	32	29	67	A	87	58	82	139	157	49.2	157.2
9-Dec-07	85	59	30	48	55	64	33	0	0	1	2	3	2	1	2	2	1	A	0	0	0	0	0	0	16.9	85.3
10-Dec-07	0	0	0	0	0	0	0	4	8	17	22	12	8	7	13	34	A	42	93	67	50	20	14	22	18.8	92.6
11-Dec-07	11	7	28	41	39	60	81	104	114	86	28	47	42	36	29	A	140	147	161	150	217	205	172	82	88.1	217.5
12-Dec-07	15	0	0	0	0	0	0	0	1	1	C	C	C	C	C	A	8	4	2	2	2	1	1	1	2.2	15.1
13-Dec-07	1	0	0	0	0	A	1	23	57	140	239	179	93	35	31	13	8	2	1	6	36	49	46	43	43.7	238.7
14-Dec-07	24	20	7	10	5	A	50	132	82	132	64	58	34	26	20	30	55	60	110	93	52	33	33	1	49.1	131.9
15-Dec-07	1	1	2	1	1	A	1	2	1	4	6	10	5	5	6	9	11	16	21	34	76	113	106	26	19.8	112.6
16-Dec-07	1	0	0	0	A	0	1	0	2	15	25	45	16	6	4	7	3	15	2	1	1	2	1	2	6.4	44.8
17-Dec-07	1	0	0	A	0	2	12	28	86	163	129	75	62	77	64	28	12	37	18	13	27	55	112	116	48.6	163.0
18-Dec-07	25	17	A	19	1	1	1	3	2	3	3	6	4	3	4	11	57	40	7	6	3	7	37	11.3	56.5	
19-Dec-07	17	A	3	9	21	49	53	56	55	45	28	18	10	8	7	5	4	2	3	1	1	1	1	0	17.2	55.9
20-Dec-07	A	1	1	1	19	18	51	10	3	1	1	2	2	1	1	2	2	3	3	4	4	2	3	A	6.1	51.3
21-Dec-07	0	5	6	2	5	3	16	22	56	94	86	51	36	33	44	34	37	42	58	63	33	26	A	13	33.3	94.0
22-Dec-07	6	6	17	13	12	5	8	30	15	27	32	9	10	5	4	6	16	10	18	23	38	A	35	41	16.8	40.9
23-Dec-07	48	56	52	26	67	3	3	6	55	79	147	23	15	31	21	8	10	38	84	119	A	122	68	90	50.9	147.4
24-Dec-07	80	8	6	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	A	0	0	0	0	4.3	80.4
25-Dec-07	0	0	0	0	0	0	0	0	7	22	8	8	9	8	9	9	6	9	A	1	2	1	1	0	4.4	22.2
26-Dec-07	0	0	0	1	0	2	11	7	17	13	35	19	10	5	4	6	5	A	5	9	1	3	7	8	7.4	35.0
27-Dec-07	2	0	1	0	1	9	26	28	115	63	53	58	51	34	5	6	A	26	13	6	3	3	6	8	22.4	115.4
28-Dec-07	2	7	23	6	0	0	1	3	0	2	18	9	9	7	5	A	2	1	2	2	2	1	1	1	4.6	22.8
29-Dec-07	0	0	0	0	0	1	2	2	4	13	14	11	4	5	A	14	11	4	3	3	2	1	2	2	4.4	14.2
30-Dec-07	1	1	1	1	1	1	1	2	2	5	5	5	7	A	9	10	15	8	5	11	41	35	9	4	7.8	41.2
31-Dec-07	1	0	0	0	0	4	6	31	43	69	31	28	A	30	34	47	54	61	30	24	18	28	45	13	25.9	68.7
Hourly Avg	12.5	7.3	6.9	7.4	9.1	9.7	15.2	23.5	32.8	39.8	36.8	26.2	20.3	19.3	16.8	15.6	21.0	31.9	34.6	29.2	27.4	31.9	31.7	25.4		
Hourly Max	85.3	59.5	52.1	47.9	66.6	64.0	80.8	131.9	123.3	163.0	238.7	179.0	93.0	87.2	75.7	54.7	139.6	147.2	161.4	150.1	217.5	205.0	171.9	157.2		

PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

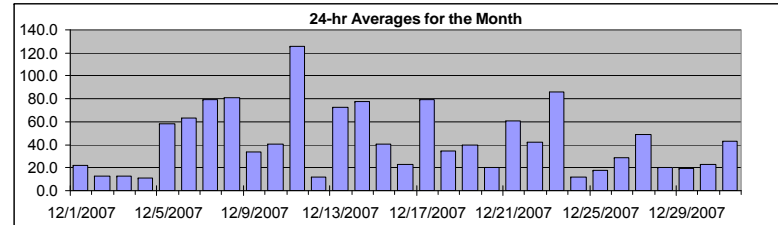
Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2007 to January 1, 2008

Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb

Maximum 1-hr Average:	298.7	ppb	13-Dec	10:00 11:00
Maximum 24-hr Average:	125.8	ppb	11-Dec	

AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	203.9	129.0	59.1	27.9	13.8	4.2	1.8	43.5 ppb	27.9 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Dec-07	3	8	A	7	10	24	24	16	24	19	28	19	5	4	6	13	23	34	44	44	59	32	31	26	21.9	58.8
2-Dec-07	26	A	21	16	20	17	14	14	13	15	13	12	11	10	11	12	11	10	10	7	7	8	7	5	12.6	25.6
3-Dec-07	A	6	7	7	8	8	10	15	17	15	13	18	16	14	18	20	14	15	13	16	15	12	8	A	12.8	19.7
4-Dec-07	8	7	9	10	9	11	9	12	14	12	11	9	13	13	10	17	19	17	13	11	9	8	A	7	11.1	18.8
5-Dec-07	6	4	5	5	5	12	30	126	165	142	64	30	35	33	29	64	101	119	107	87	72	A	48	42	57.9	165.3
6-Dec-07	31	27	34	34	37	32	55	90	63	72	47	51	43	47	44	57	79	148	158	87	A	103	76	40	63.3	157.8
7-Dec-07	47	36	31	40	51	62	67	85	121	99	43	55	84	87	117	93	89	115	178	A	80	100	75	71	79.3	177.8
8-Dec-07	42	40	40	56	45	37	70	75	75	45	46	41	78	127	79	61	62	105	A	125	93	123	187	204	80.7	204.0
9-Dec-07	123	96	63	86	95	105	72	5	6	11	15	16	9	6	9	14	10	A	9	6	7	3	2	1	33.4	122.7
10-Dec-07	2	2	1	2	3	13	24	31	40	53	53	31	20	19	36	66	A	78	131	102	81	49	40	51	40.4	131.5
11-Dec-07	38	32	56	73	71	95	118	144	156	124	57	79	74	67	60	A	189	196	208	196	269	254	217	122	125.8	268.9
12-Dec-07	34	3	3	3	3	2	4	4	6	6	C	C	C	C	C	A	38	28	18	16	17	14	11	9	12.2	38.4
13-Dec-07	9	10	13	13	12	A	20	59	102	192	299	223	132	62	63	41	38	21	14	34	75	85	83	76	72.9	298.7
14-Dec-07	54	50	35	38	27	A	83	171	117	169	93	86	54	45	41	55	86	93	145	126	80	58	60	14	77.3	170.6
15-Dec-07	12	11	20	19	14	A	15	16	16	23	26	30	19	18	24	30	37	44	49	63	109	147	144	55	40.8	147.3
16-Dec-07	16	4	4	5	A	5	12	6	25	49	58	81	39	19	18	29	22	45	16	13	13	13	12	12	22.5	81.2
17-Dec-07	22	19	21	A	13	25	38	59	119	208	168	103	89	106	95	55	39	71	49	50	64	94	157	159	79.3	207.5
18-Dec-07	57	52	A	56	21	14	19	26	21	14	16	15	23	19	18	26	39	93	75	33	32	24	35	70	34.8	93.3
19-Dec-07	46	A	30	41	53	83	87	89	89	78	56	40	25	21	21	21	23	20	21	14	14	14	13	15	39.7	88.9
20-Dec-07	A	20	17	19	49	47	83	31	14	5	5	4	4	4	4	6	9	20	20	23	22	13	22	A	19.9	82.6
21-Dec-07	16	34	34	26	31	22	42	48	91	130	121	78	59	56	72	62	68	72	90	95	59	52	A	40	60.8	129.6
22-Dec-07	31	31	44	38	38	29	32	59	41	56	61	29	28	18	17	25	44	37	46	52	70	A	67	71	41.9	71.4
23-Dec-07	79	88	84	56	102	27	24	35	99	124	203	51	44	65	53	36	43	75	124	162	A	165	109	130	86.1	203.5
24-Dec-07	120	38	32	7	1	2	2	3	4	8	6	6	5	6	6	7	7	7	3	A	3	3	2	3	12.1	120.3
25-Dec-07	2	2	3	3	4	8	9	11	33	52	23	20	21	21	24	27	28	36	A	17	19	17	12	11	17.6	52.3
26-Dec-07	11	12	16	19	13	22	38	32	44	38	60	40	29	18	14	27	30	A	36	41	17	25	34	35	28.3	60.0
27-Dec-07	26	14	16	14	18	43	64	65	161	96	83	91	80	58	20	26	A	60	43	31	23	24	31	32	48.5	160.5
28-Dec-07	18	27	49	23	9	12	20	26	12	19	41	25	23	20	17	A	15	15	15	18	18	15	13	15	20.2	49.3
29-Dec-07	14	15	13	14	17	20	21	19	23	35	33	26	11	14	A	37	36	23	17	16	12	10	13	12	19.7	36.6
30-Dec-07	10	10	11	11	13	18	12	14	18	19	16	15	18	A	23	27	38	29	23	34	67	55	26	20	22.9	66.8
31-Dec-07	15	14	14	13	15	20	23	51	65	90	46	41	A	43	47	66	75	82	49	42	36	48	70	33	43.4	90.3
Hourly Avg	31.7	24.5	25.0	25.1	26.9	29.2	36.7	46.3	57.8	65.1	60.1	45.5	37.6	35.9	34.3	36.5	45.2	58.9	59.5	53.9	49.8	54.1	55.3	47.7		
Hourly Max	122.7	95.7	83.5	86.5	102.3	105.4	117.8	170.6	165.3	207.5	298.7	223.3	131.8	127.1	116.8	93.4	188.8	196.4	208.3	196.2	268.9	253.7	217.1	204.0		

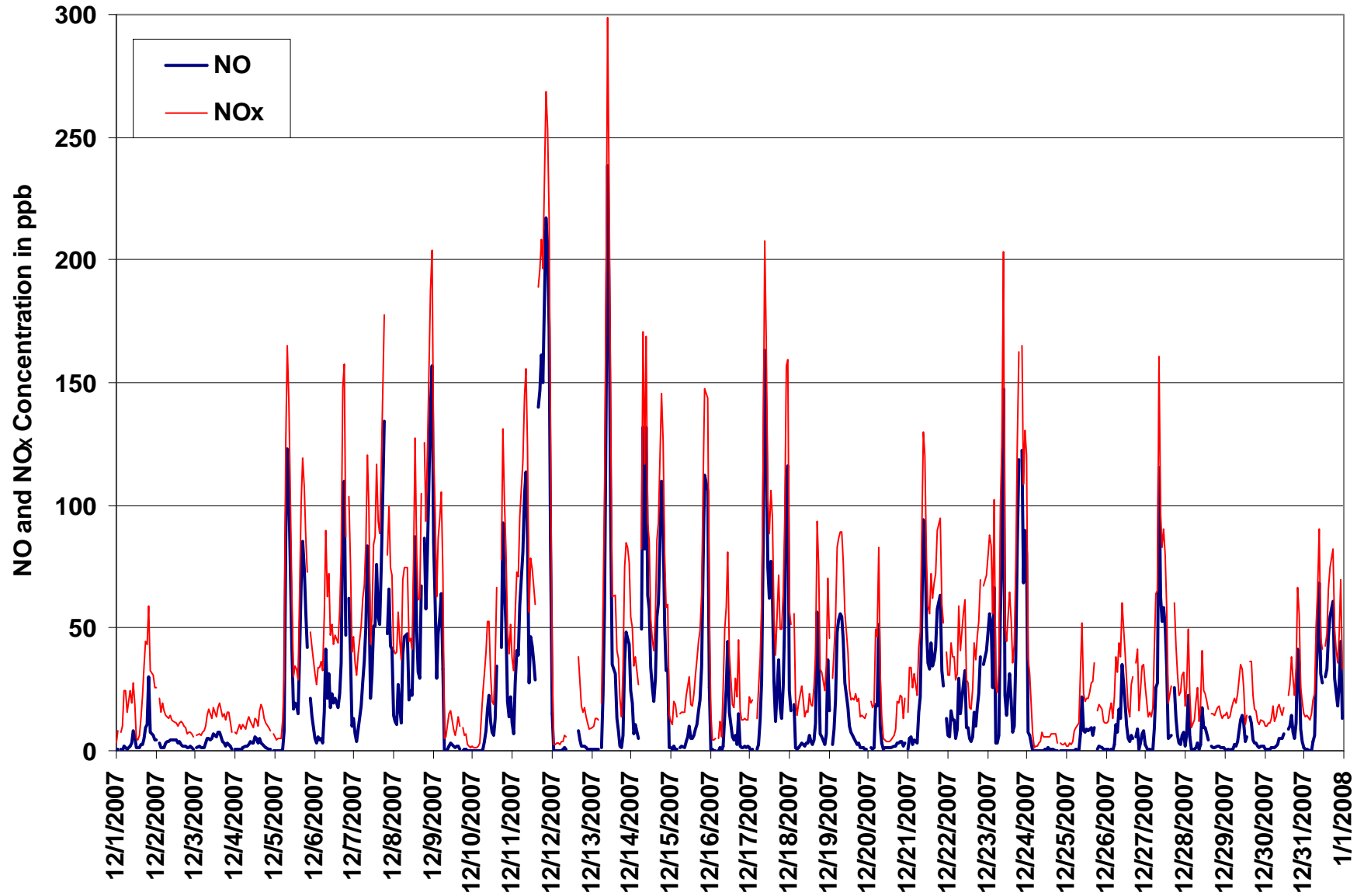


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

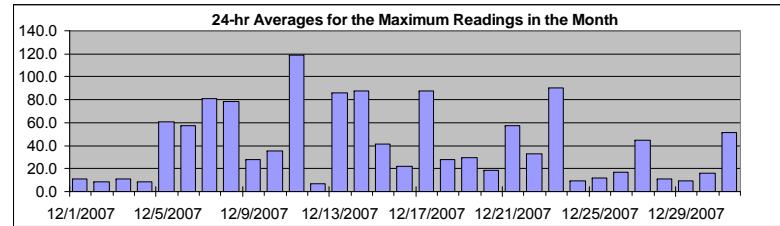
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	332.8	ppb	13-Dec	11:00 12:00
Maximum 24-hr Value:	119.2	ppb	11-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	236.9	154.7	59.0	16.5	5.2	0.6	0.2	40.8 ppb	16.5 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	1	2	A	2	1	15	6	2	5	8	12	11	4	2	2	5	4	11	16	37	56	21	16	13	11.0	56.1
2-Dec-07	8	A	7	3	5	6	11	11	15	12	12	10	12	5	9	9	6	7	7	4	7	8	9	7	8.3	14.9
3-Dec-07	A	6	11	8	8	6	12	14	12	14	12	16	13	16	20	19	10	5	5	9	18	6	2	A	11.2	20.2
4-Dec-07	4	3	4	3	1	11	11	8	11	12	16	9	12	20	15	15	8	14	3	7	2	2	A	0	8.3	19.9
5-Dec-07	1	1	1	1	4	3	42	173	186	140	83	28	35	28	23	68	102	124	104	85	80	A	56	29	60.8	185.5
6-Dec-07	11	22	19	11	14	7	51	93	35	64	26	32	31	30	26	42	60	219	237	68	A	115	64	31	56.9	237.4
7-Dec-07	26	29	9	18	46	41	80	88	106	113	32	64	71	85	96	97	111	191	217	A	85	117	88	61	81.3	217.1
8-Dec-07	22	18	31	39	32	27	78	68	79	45	61	51	91	117	108	55	59	113	A	121	84	143	171	204	78.8	204.2
9-Dec-07	125	137	47	71	67	73	63	0	1	16	7	6	7	2	2	4	2	A	0	1	1	1	0	0	27.7	137.4
10-Dec-07	1	0	0	4	0	1	1	29	15	45	47	23	20	15	37	66	A	70	156	98	71	38	36	43	35.4	155.9
11-Dec-07	32	24	55	59	56	81	99	119	120	116	48	87	86	55	75	A	170	180	183	200	280	276	227	114	119.2	279.8
12-Dec-07	75	0	0	0	0	1	1	1	2	2	C	C	C	C	C	A	14	7	3	3	2	2	1	1	6.5	74.6
13-Dec-07	1	1	1	1	1	A	4	88	140	282	303	333	165	83	54	30	22	4	2	19	148	134	80	83	86.0	332.8
14-Dec-07	48	43	18	20	21	A	88	207	196	204	98	87	59	39	33	48	94	93	214	184	79	44	90	2	87.5	214.2
15-Dec-07	2	2	14	2	2	A	3	7	5	13	11	17	9	9	9	16	17	27	44	103	142	178	213	111	41.5	213.1
16-Dec-07	1	1	0	1	A	1	5	0	12	37	65	109	50	9	15	33	21	84	5	2	2	16	6	21	21.6	109.0
17-Dec-07	7	2	1	A	4	13	39	69	151	309	195	141	113	97	94	54	37	63	65	28	55	127	173	181	87.8	309.3
18-Dec-07	75	46	A	32	4	2	3	8	7	3	7	5	18	9	7	9	52	126	98	19	15	9	18	63	27.5	125.6
19-Dec-07	51	A	8	16	35	80	78	74	73	102	48	27	23	10	11	8	7	5	5	2	4	2	2	A	29.3	101.6
20-Dec-07	A	6	13	11	39	36	110	100	14	2	4	3	4	2	4	3	3	8	9	8	14	6	9	2	18.6	109.9
21-Dec-07	1	13	14	12	11	9	57	54	123	135	140	70	49	42	65	65	56	64	103	111	50	44	A	26	57.1	139.7
22-Dec-07	10	25	39	35	34	13	28	51	30	54	67	12	15	9	8	23	27	18	39	34	62	A	59	60	32.6	66.7
23-Dec-07	67	65	66	84	85	16	29	27	97	151	316	133	32	60	56	14	33	74	130	136	A	168	112	125	90.3	316.5
24-Dec-07	141	27	23	3	0	0	0	0	0	0	1	1	1	3	2	1	1	0	0	A	0	0	0	0	9.0	141.5
25-Dec-07	13	0	1	0	0	1	3	2	21	38	19	20	19	11	19	22	18	30	A	8	21	8	2	1	12.1	38.1
26-Dec-07	1	1	2	3	0	9	30	16	53	37	54	30	16	7	7	11	11	A	22	25	4	11	17	29	17.2	54.3
27-Dec-07	9	1	8	2	12	31	35	67	187	195	74	77	71	81	9	19	A	47	31	21	10	7	21	20	45.0	195.3
28-Dec-07	8	25	31	27	1	3	4	12	2	10	35	16	16	15	6	A	4	5	3	5	10	4	3	3	10.8	35.0
29-Dec-07	1	1	1	1	1	3	6	5	12	17	20	15	6	8	A	20	19	10	7	14	7	8	9	20	9.2	20.3
30-Dec-07	2	2	3	4	3	2	4	14	7	15	10	7	12	A	12	19	30	18	25	19	75	59	23	8	16.3	74.7
31-Dec-07	3	2	3	1	2	7	11	86	69	120	59	39	A	42	55	209	86	91	49	31	30	44	111	27	51.1	208.7
Hourly Avg	25.8	17.4	14.9	15.8	16.4	17.7	32.0	48.3	57.5	74.5	62.8	49.3	36.6	31.5	30.3	35.2	37.5	58.9	61.5	48.3	48.8	55.2	55.8	44.3		
Hourly Max	141.5	137.4	65.5	84.3	84.7	80.7	109.9	207.1	195.8	309.3	316.5	332.8	165.4	116.6	107.9	208.7	170.3	219.3	237.4	200.2	279.8	276.2	227.3	204.2		

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

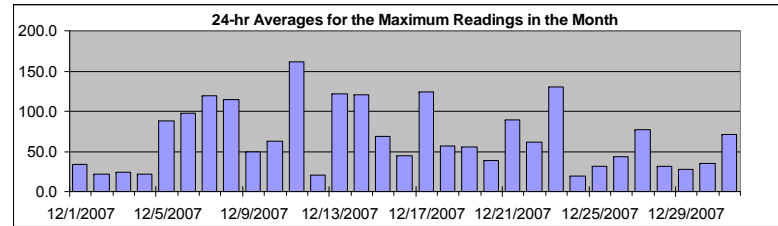
Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	395.3	ppb	13-Dec	11:00 12:00
Maximum 24-hr Value:	161.2	ppb	11-Dec	

AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	289.8	204.9	94.1	43.7	21.6	7.9	3.7	66.9 ppb	43.7 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	7	11	A	13	18	57	38	22	38	31	35	32	15	9	11	21	30	48	53	76	85	44	43	37	33.6	84.9
2-Dec-07	31	A	30	21	31	21	24	24	30	27	21	23	22	13	18	22	16	21	18	14	13	14	20	15	21.3	31.3
3-Dec-07	A	14	20	16	16	16	26	30	29	29	25	30	26	29	41	36	25	22	19	28	36	17	12	A	24.6	40.8
4-Dec-07	17	11	16	20	11	22	23	22	27	22	43	18	23	35	24	28	28	33	17	21	11	11	A	9	21.4	42.9
5-Dec-07	10	8	9	10	18	19	78	222	240	190	112	47	56	47	38	99	138	162	139	119	112	A	85	58	87.7	239.7
6-Dec-07	39	45	52	46	53	43	102	151	80	115	62	64	61	61	57	87	108	274	290	111	A	161	107	68	97.2	290.4
7-Dec-07	60	65	40	52	83	73	116	129	146	152	56	97	106	128	141	139	156	238	270	A	118	153	122	92	118.8	269.5
8-Dec-07	50	45	60	70	64	54	111	94	106	75	95	75	131	159	149	89	95	153	A	163	122	195	225	259	114.7	259.2
9-Dec-07	167	189	85	117	109	116	106	8	13	46	28	26	26	10	13	19	19	A	14	12	10	6	4	2	49.8	189.0
10-Dec-07	5	2	5	13	9	27	32	67	52	86	89	51	42	35	72	101	A	107	202	137	103	70	65	75	63.0	202.4
11-Dec-07	63	54	90	96	92	121	139	159	163	155	82	127	124	90	116	A	220	229	232	252	341	328	279	155	161.2	341.4
12-Dec-07	114	4	4	4	5	6	6	8	10	13	C	C	C	C	C	A	50	38	22	20	21	18	14	11	20.6	114.1
13-Dec-07	11	19	17	18	18	A	37	125	190	342	370	395	213	117	93	66	60	30	20	52	190	181	119	121	121.9	395.3
14-Dec-07	80	76	49	47	46	A	125	253	248	248	128	118	85	64	58	78	128	129	251	227	110	70	125	17	120.1	253.2
15-Dec-07	16	17	44	25	16	A	20	24	23	41	35	42	27	27	29	43	45	58	74	154	185	217	262	149	68.4	262.2
16-Dec-07	21	7	5	6	A	6	26	10	51	79	102	158	92	26	33	67	46	128	28	17	16	33	21	35	44.1	157.5
17-Dec-07	37	26	29	A	24	40	68	107	189	372	239	181	148	130	127	87	74	101	101	68	94	171	220	226	124.3	372.4
18-Dec-07	113	96	A	73	29	22	24	38	34	20	23	21	43	29	32	37	88	175	139	47	46	37	50	100	57.2	175.0
19-Dec-07	87	A	40	48	69	121	113	110	109	126	80	52	44	26	29	29	30	27	30	18	19	17	17	25	55.1	125.6
20-Dec-07	A	33	39	39	73	64	145	136	40	7	9	6	8	6	9	12	16	35	35	30	46	21	38	A	38.5	145.4
21-Dec-07	26	46	47	39	39	34	88	85	173	174	178	102	75	68	100	96	90	97	143	150	79	73	A	55	89.3	178.3
22-Dec-07	36	52	70	66	64	41	58	82	58	87	104	35	36	26	24	55	60	46	69	66	96	A	100	91	61.8	103.8
23-Dec-07	99	97	100	122	124	51	60	63	153	206	363	179	67	100	94	46	71	115	174	179	A	217	156	168	130.5	362.7
24-Dec-07	185	62	57	25	2	2	3	6	6	12	8	8	8	12	10	9	10	10	6	A	4	4	3	6	19.9	185.1
25-Dec-07	16	3	8	5	8	12	16	24	57	74	47	39	38	28	42	47	48	63	A	34	49	33	17	14	31.3	73.8
26-Dec-07	14	15	24	28	16	36	60	45	86	66	82	53	38	22	24	38	42	A	59	64	27	42	48	63	43.2	86.4
27-Dec-07	44	20	29	23	43	69	74	107	254	258	107	110	103	117	26	39	A	82	67	51	36	31	49	48	77.7	257.6
28-Dec-07	32	51	60	57	14	23	25	43	19	32	63	35	35	29	20	A	20	20	19	23	31	20	17	20	30.8	62.9
29-Dec-07	16	18	17	15	20	26	29	27	36	40	40	30	16	21	A	45	47	34	22	36	18	20	20	32	27.3	47.3
30-Dec-07	14	13	17	16	20	22	18	29	29	32	24	18	26	A	30	40	58	44	48	42	105	84	41	27	34.6	104.6
31-Dec-07	18	18	19	15	18	25	29	113	92	147	78	55	A	57	72	230	108	114	71	48	50	71	134	49	70.9	230.3
Hourly Avg	49.3	38.5	37.3	38.1	38.3	41.7	58.7	76.3	89.7	106.6	90.9	74.3	59.9	52.4	52.9	60.9	66.4	90.8	90.8	77.8	75.0	81.3	83.3	69.9		
Hourly Max	185.1	189.0	100.2	121.8	123.5	120.7	145.4	253.2	253.8	372.4	369.6	395.3	213.2	159.4	149.2	230.3	220.4	273.6	290.4	252.4	341.4	328.0	278.7	259.2		

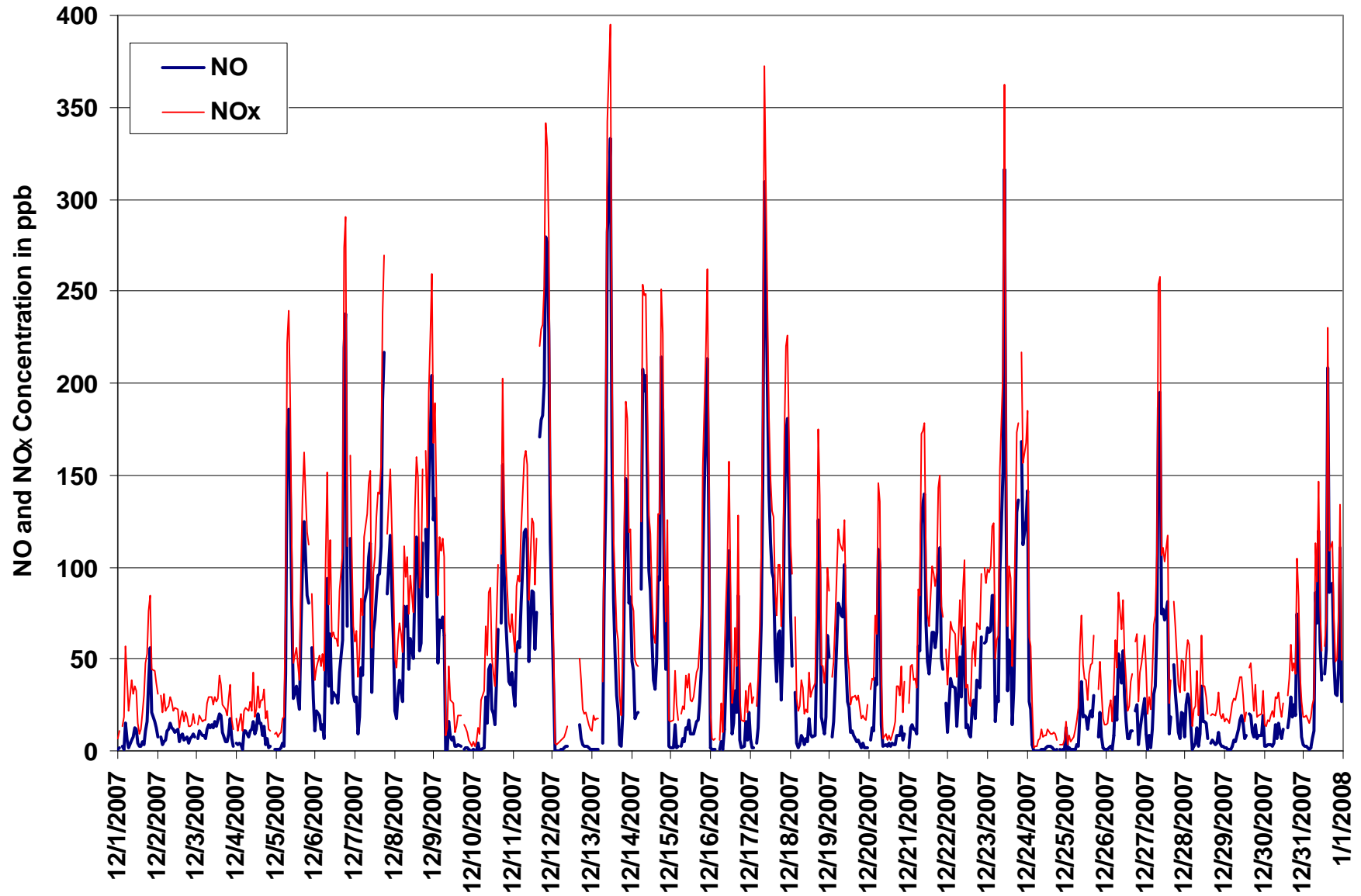


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

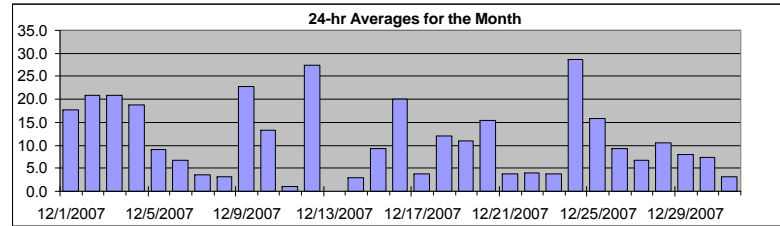
Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 82 ppb 24-hr na ppb

Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	36.4	ppb	24-Dec	4:00 5:00
Maximum 24-hr Average:	28.7	ppb	24-Dec	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	34.6	31.1	19.3	8.3	1.9	0.1	0.0	11.3 ppb	8.3 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Dec-07	35	31	A	31	26	16	15	20	15	20	18	23	30	31	30	24	16	9	4	5	1	2	3	4	17.6	34.6
2-Dec-07	4	A	5	8	8	15	21	22	22	22	23	24	25	26	25	24	24	25	26	27	26	26	26	27	20.8	26.7
3-Dec-07	A	26	26	25	24	23	23	21	19	20	21	20	20	22	20	19	20	18	19	17	17	20	21	A	21.0	26.3
4-Dec-07	21	21	20	18	19	18	20	18	17	19	20	21	21	21	21	17	13	14	16	17	18	19	A	19	18.7	21.4
5-Dec-07	20	21	21	21	21	15	8	3	3	3	6	12	14	14	13	5	2	1	2	2	2	A	2	1	9.2	21.4
6-Dec-07	3	7	5	6	7	11	5	2	3	5	13	15	18	17	16	9	2	2	2	1	A	2	1	4	6.7	17.5
7-Dec-07	2	4	5	2	1	1	1	2	2	3	9	10	9	10	6	4	2	2	2	A	1	1	1	1	3.6	10.3
8-Dec-07	1	1	1	1	1	1	1	1	1	3	8	9	8	6	7	5	2	2	A	1	2	2	4	3	3.1	9.0
9-Dec-07	2	1	1	1	1	1	3	35	36	32	29	29	34	36	33	29	30	A	29	31	31	34	34	34	22.8	35.8
10-Dec-07	33	33	34	33	31	22	13	9	6	4	9	16	21	21	14	5	A	0	0	0	0	0	1	0	13.3	33.6
11-Dec-07	0	0	0	0	0	0	0	0	0	0	3	3	4	3	4	A	0	1	1	1	1	1	1	0	1.1	4.3
12-Dec-07	18	32	31	30	28	30	29	30	29	29	24	27	29	27	23	C	C	C	25	26	24	26	28	29	27.4	32.4
13-Dec-07	29	28	24	24	A	18	5	0	1	2	C	C	C	C	C	A	18	24	9	2	3	1	1	N	29.2	
14-Dec-07	1	0	1	0	6	A	0	0	0	1	2	4	8	9	10	3	0	0	0	0	0	0	2	17	2.9	16.9
15-Dec-07	19	19	9	8	16	A	14	15	14	12	11	9	15	17	14	8	3	1	0	0	2	3	2	4	9.4	19.2
16-Dec-07	17	30	31	32	A	32	26	31	14	5	7	7	17	23	24	15	17	6	21	23	22	21	21	22	20.1	31.8
17-Dec-07	10	14	11	A	14	5	2	0	1	2	2	4	4	4	4	4	3	0	3	1	0	1	1	1	3.8	14.3
18-Dec-07	4	1	A	1	15	23	19	16	20	24	23	25	20	22	21	14	9	0	0	5	6	10	3	0	12.1	24.7
19-Dec-07	2	A	4	1	1	1	1	1	0	1	4	10	17	18	16	16	14	18	19	24	23	23	22	18	11.0	24.0
20-Dec-07	A	10	10	8	0	0	0	5	15	22	23	24	25	26	27	26	24	16	16	14	15	21	14	A	15.4	26.7
21-Dec-07	16	4	4	8	3	9	3	3	1	1	3	6	9	8	6	4	1	0	1	1	1	0	A	0	3.9	16.0
22-Dec-07	1	0	0	1	0	2	3	1	1	4	10	13	18	17	12	3	2	1	1	1	1	A	0	2	4.0	17.6
23-Dec-07	1	1	1	3	2	11	15	8	0	2	2	9	7	6	6	8	4	0	1	1	A	1	0	1	3.9	14.5
24-Dec-07	2	3	9	30	36	36	36	35	34	30	32	33	33	32	32	30	30	29	32	A	31	32	32	30	28.7	36.4
25-Dec-07	32	31	30	31	30	25	24	22	4	1	8	12	14	13	12	8	4	3	A	11	9	10	15	17	15.8	31.8
26-Dec-07	16	16	12	7	11	6	0	1	1	1	3	8	15	22	23	15	12	A	6	3	15	10	3	4	9.2	23.2
27-Dec-07	8	19	16	18	15	1	0	0	0	2	4	5	9	17	14	A	0	4	6	7	7	2	1	6.8	19.4	
28-Dec-07	6	7	0	8	16	13	7	4	14	9	4	10	14	17	17	A	14	14	13	10	10	12	13	10	10.6	16.9
29-Dec-07	9	8	10	9	6	4	4	5	3	1	4	8	15	16	A	5	1	5	7	9	13	14	12	14	8.0	16.3
30-Dec-07	13	13	12	13	11	6	13	11	6	8	10	12	11	A	9	7	2	2	4	0	1	0	1	3	7.3	13.1
31-Dec-07	4	5	4	4	2	1	1	1	1	2	4	5	A	8	6	4	2	2	2	2	2	3	4	2	3.1	7.8
Hourly Avg	11.4	13.4	11.6	12.7	12.5	11.7	10.5	10.4	9.1	9.1	10.8	13.6	16.3	17.2	16.3	12.4	9.4	6.8	9.6	8.5	9.7	10.4	9.4	9.3		
Hourly Max	34.6	33.1	33.6	33.0	36.4	36.4	36.2	35.4	35.7	32.5	32.3	32.6	34.1	35.8	32.9	30.0	29.6	29.0	32.0	31.1	31.3	33.7	34.2	33.9		

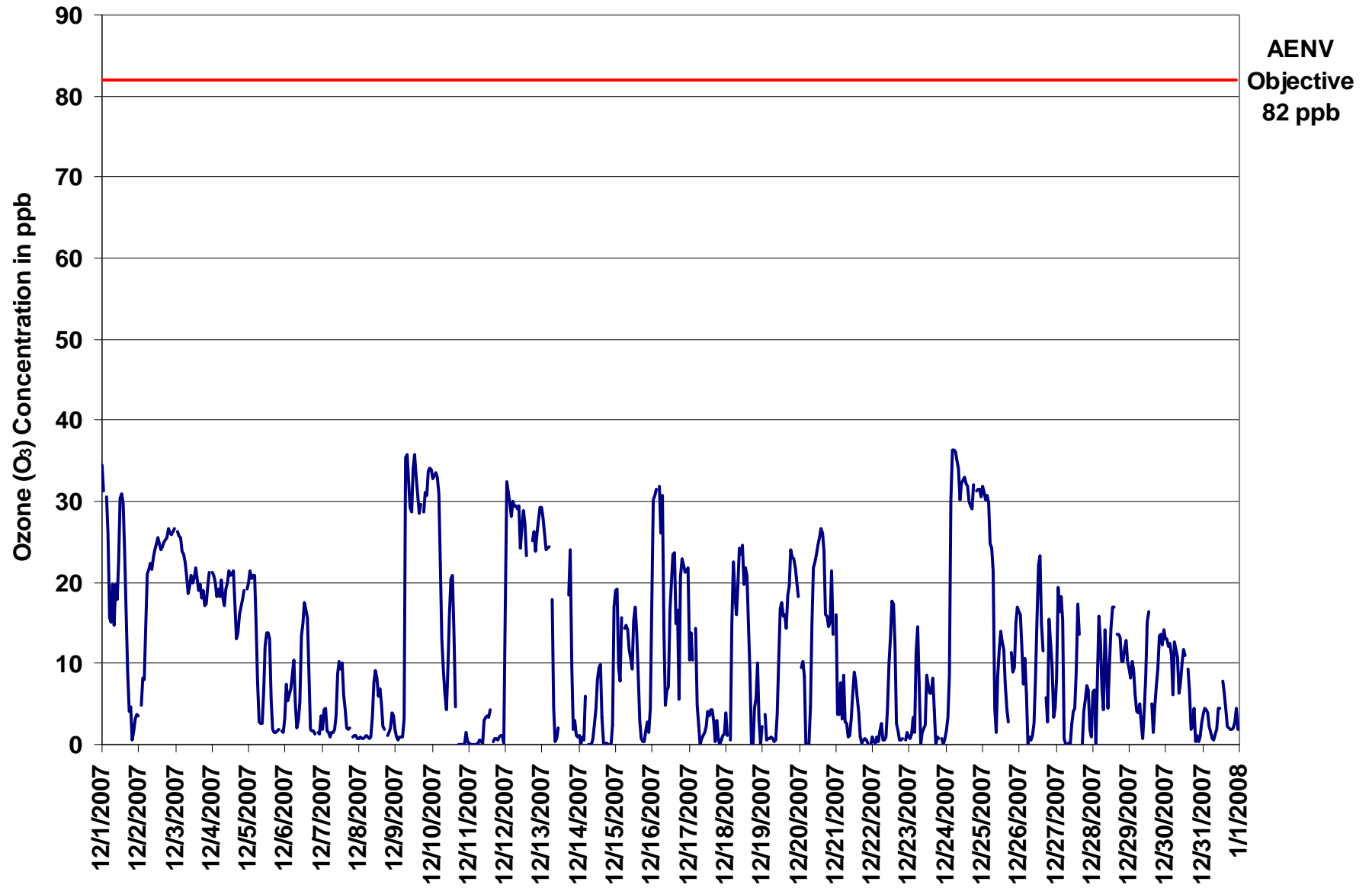


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

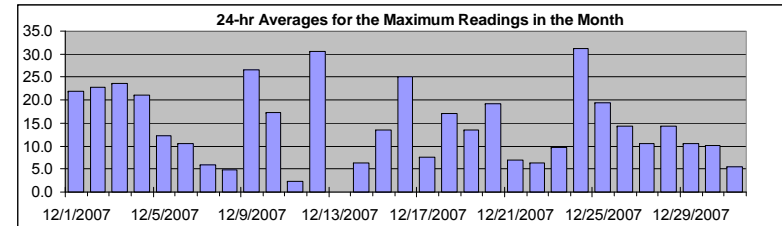
Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	37.9	ppb	9-Dec	9:00 10:00
Maximum 24-hr Value:	31.2	ppb	24-Dec	

AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	36.7	33.0	23.1	13.7	4.7	1.1	0.3	14.7 ppb	13.7 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	36	34	A	33	30	26	21	28	26	24	23	26	32	32	31	28	22	16	10	10	3	3	6	7	22.0	36.0
2-Dec-07	7	A	7	9	10	18	23	23	24	24	25	26	27	28	27	28	28	27	28	28	27	28	28	28	22.9	28.0
3-Dec-07	A	28	27	27	26	25	25	23	22	22	23	22	22	24	23	22	23	22	21	21	22	23	23	A	23.5	27.5
4-Dec-07	23	23	22	21	21	21	22	21	20	21	22	23	23	24	23	22	17	17	17	19	19	20	A	21	21.0	23.5
5-Dec-07	21	22	22	23	23	20	14	22	7	3	11	15	17	15	15	10	3	2	3	3	4	A	3	3	12.2	23.2
6-Dec-07	7	12	9	10	17	19	12	5	6	11	18	18	21	20	19	15	3	5	4	3	A	3	3	9	10.6	20.6
7-Dec-07	6	8	9	3	5	1	5	4	4	10	11	15	11	13	7	6	6	3	3	A	2	2	2	1	5.9	14.9
8-Dec-07	1	2	1	1	2	3	2	1	2	5	10	14	11	7	10	6	5	7	A	2	4	3	6	6	4.8	13.9
9-Dec-07	4	3	1	1	2	1	32	38	37	38	36	35	37	37	35	32	36	A	32	33	34	35	35	35	26.5	37.9
10-Dec-07	34	34	34	34	33	32	23	18	15	10	17	21	25	23	19	13	A	2	2	1	0	0	5	2	17.3	34.2
11-Dec-07	2	1	0	0	0	0	1	3	1	0	5	5	5	5	7	A	1	2	2	2	2	3	3	1	2.2	6.7
12-Dec-07	33	33	32	31	29	31	31	31	31	32	29	33	31	32	27	C	C	C	28	29	26	29	30	31	30.6	33.5
13-Dec-07	31	31	27	27	28	A	29	24	3	3	3	C	C	C	C	A	23	27	26	8	10	5	10	N	31.2	
14-Dec-07	10	3	5	4	13	A	0	2	2	1	8	7	13	12	15	6	1	0	2	1	1	0	17	20	6.3	19.7
15-Dec-07	21	21	20	15	19	A	17	17	17	13	14	14	18	21	16	13	7	2	1	2	9	14	4	14	13.5	20.8
16-Dec-07	28	31	32	33	A	33	32	34	26	14	14	14	24	25	28	24	20	18	24	25	25	24	24	23	25.1	34.3
17-Dec-07	21	18	16	A	20	13	10	0	10	6	3	3	6	5	6	7	7	1	9	7	1	1	3	3	7.6	20.7
18-Dec-07	10	5	A	13	22	26	23	20	23	27	26	27	25	24	24	20	16	0	5	14	14	15	9	0	17.0	27.1
19-Dec-07	8	A	7	1	1	2	2	1	1	2	10	13	19	19	18	19	18	22	23	26	25	25	26	21	13.5	26.4
20-Dec-07	A	13	13	16	4	1	1	10	20	23	24	25	26	27	28	28	27	24	22	20	23	29	20	A	19.2	28.6
21-Dec-07	21	10	13	10	8	17	8	8	3	2	5	9	10	11	9	6	2	0	2	2	1	1	A	1	6.9	21.3
22-Dec-07	2	1	2	3	1	5	7	1	2	2	9	13	17	20	20	19	7	3	1	2	5	A	2	4	6.4	19.8
23-Dec-07	2	1	10	13	10	24	26	27	5	7	8	15	11	11	11	15	12	0	6	2	A	2	1	2	9.6	27.4
24-Dec-07	3	16	19	36	37	37	37	37	36	33	34	34	35	34	33	32	32	31	33	A	32	32	32	33	31.2	37.1
25-Dec-07	33	32	32	32	31	29	28	27	12	4	14	14	16	16	16	13	9	8	A	17	14	17	19	19	19.5	32.8
26-Dec-07	18	18	16	12	12	12	1	4	3	3	4	13	21	28	29	19	19	A	13	9	25	20	14	18	14.4	28.6
27-Dec-07	22	23	20	21	21	5	1	1	2	2	4	6	6	18	20	19	A	0	8	10	13	9	5	3	10.5	23.4
28-Dec-07	15	17	0	16	17	15	12	8	16	16	9	11	21	21	20	A	17	16	17	13	13	15	14	12	14.4	20.7
29-Dec-07	12	9	12	11	8	6	8	10	6	2	8	12	17	19	A	8	3	9	10	13	15	16	14	17	10.6	18.6
30-Dec-07	15	16	15	15	14	12	15	15	11	10	12	13	14	A	13	11	7	7	9	1	2	2	2	4	10.2	15.5
31-Dec-07	5	6	5	5	4	2	2	2	3	3	6	6	A	9	9	6	3	3	4	4	5	5	27	4	5.5	27.4
Hourly Avg	15.5	16.2	14.8	15.9	15.6	15.6	15.1	15.0	12.8	12.2	14.2	16.7	19.4	20.0	19.1	16.6	13.0	9.6	12.7	11.9	12.9	13.3	13.2	12.1		
Hourly Max	36.0	34.2	34.1	36.2	36.8	37.1	36.7	37.7	37.5	37.9	35.8	34.7	37.3	37.3	34.6	32.1	35.6	31.4	32.9	33.1	34.4	34.6	34.9	34.6		

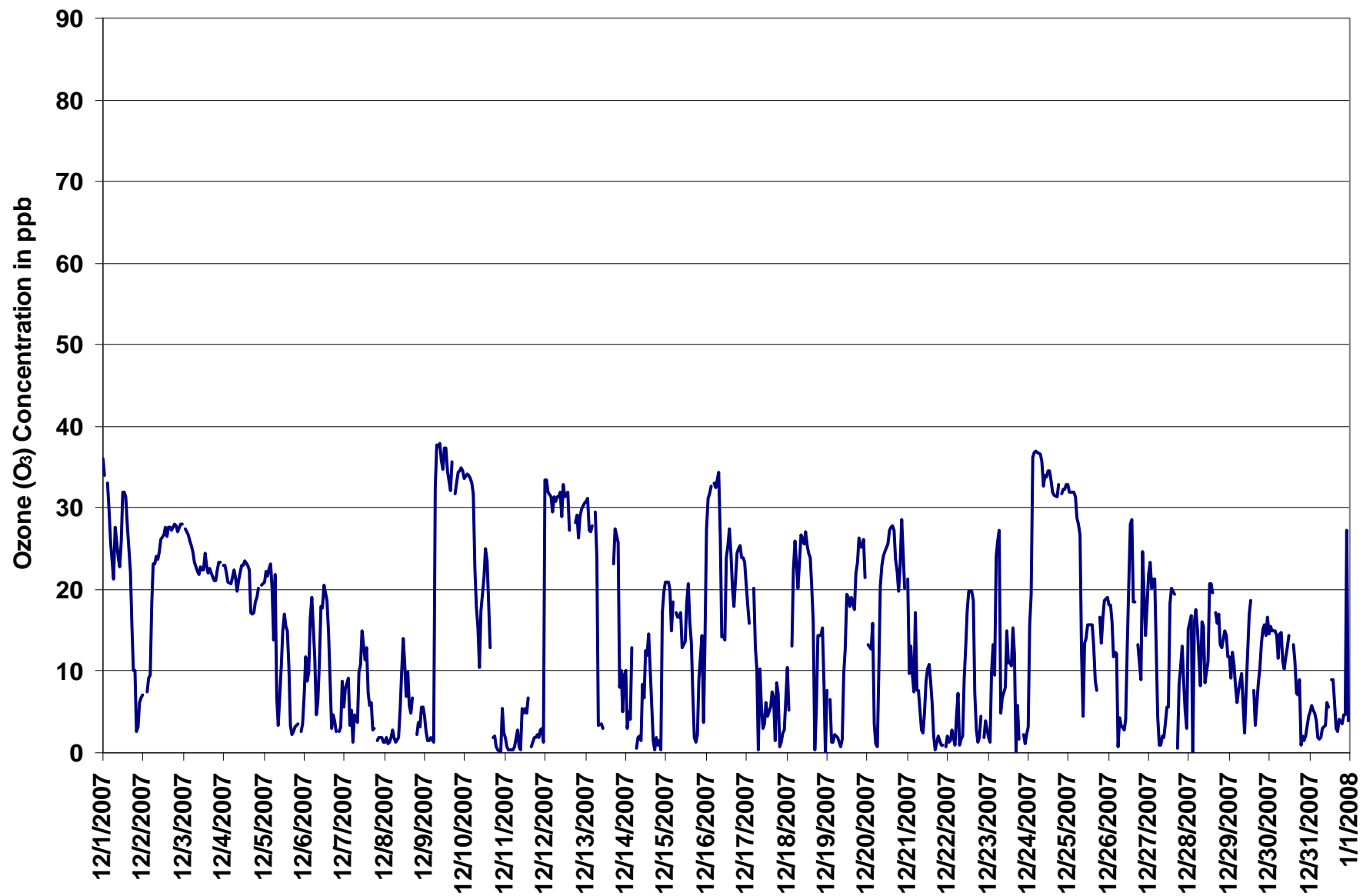
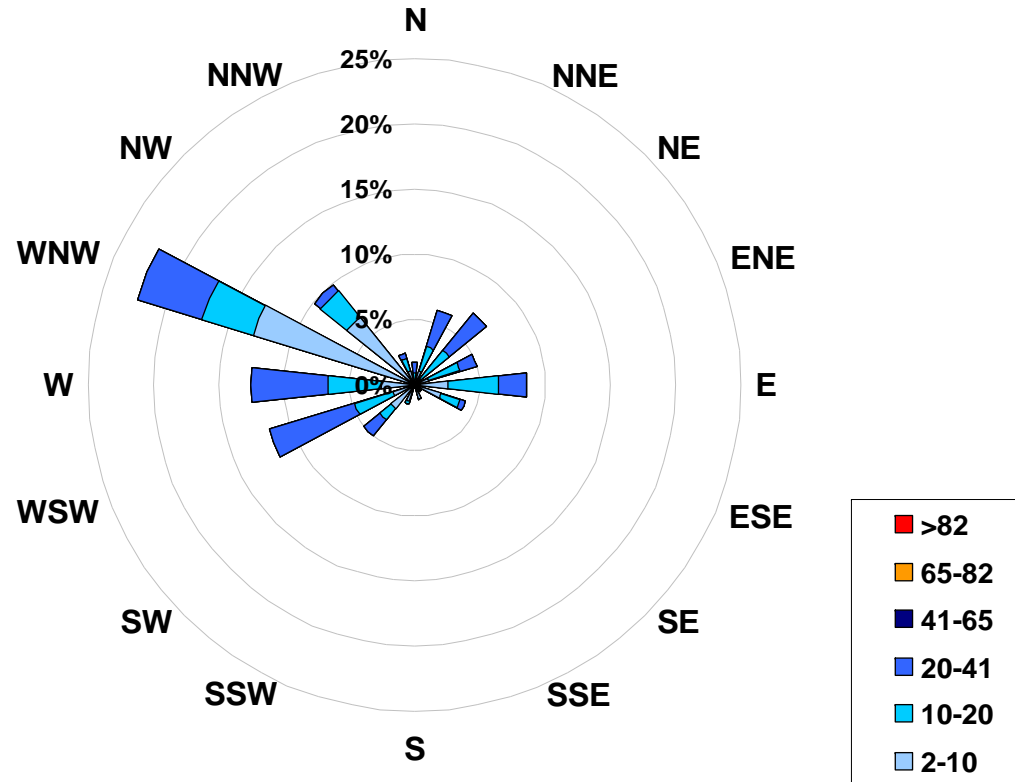


Figure 8. PASZA - Henry Pirker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Henry Pirker Site for December 2007



Calms: 0%

Frequency Distribution of O ₃ in ppb Range			Frequency (hrs)
2.0	<	10	383
10	to	20	156
20	to	41	164
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			703

PASZA - Henry Pirker Ozone Eight Hour Average Summary

Station: Henry Pirker
 Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

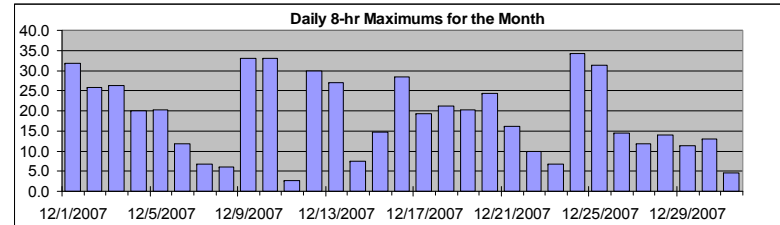
Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 8-hr 65 ppb
 Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	34.1	ppb	24-Dec	11:00	12:00		

Percentile	99	95	75	50	25	5	1
	32.8	30.8	18.3	8.9	3.7	0.9	0.2



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																							Daily Maximum																									
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Dec-07	31	32	32	32	31	29	26	25	22	20	20	19	19	21	23	24	24	23	21	19	15	11	8	5	31.8																								
2-Dec-07	4	3	3	4	5	7	9	12	14	15	18	20	22	23	23	24	24	24	25	25	25	25	26	26	25.8																								
3-Dec-07	26	26	26	26	26	25	25	24	23	23	22	21	21	21	20	20	20	20	20	19	19	19	19	19	26.3																								
4-Dec-07	19	20	20	20	20	20	20	20	19	19	19	19	19	20	20	20	19	19	18	18	17	17	16	17	20.1																								
5-Dec-07	18	19	19	20	20	20	18	16	14	12	10	9	8	8	8	9	9	8	8	7	5	4	2	2	20.3																								
6-Dec-07	2	3	3	4	5	5	6	6	6	6	7	8	9	10	11	12	12	11	10	8	7	5	3	2	11.9																								
7-Dec-07	2	2	3	3	3	2	2	2	2	2	3	4	5	6	6	7	7	7	6	5	4	3	2	1	6.8																								
8-Dec-07	1	1	1	1	1	1	1	1	1	1	2	3	4	5	5	6	6	6	6	4	4	3	3	2	6.1																								
9-Dec-07	2	2	2	2	2	2	2	6	10	14	17	21	25	29	33	32	31	31	31	32	31	31	31	32	33.0																								
10-Dec-07	32	32	33	33	33	32	29	26	23	19	16	14	13	12	13	12	13	12	11	9	6	3	1	0	33.1																								
11-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	3	3	3	2	2	2	1	1	1	2.7																								
12-Dec-07	3	7	11	14	18	21	25	29	30	30	29	28	28	28	27	27	N	N	N	N	N	N	N	N	30.0																								
13-Dec-07	27	27	27	27	27	25	22	18	14	11	N	N	N	N	N	N	N	N	N	N	N	N	N	8	26.9																								
14-Dec-07	7	5	2	1	2	1	1	1	1	1	1	2	2	3	4	5	5	5	4	4	3	2	1	2	7.5																								
15-Dec-07	5	7	8	9	11	13	15	14	14	13	13	13	13	13	13	13	11	10	8	7	6	4	2	2	14.7																								
16-Dec-07	4	7	11	15	17	21	25	28	28	24	21	17	17	16	16	14	14	14	16	18	19	18	18	19	28.3																								
17-Dec-07	18	19	18	17	16	14	11	8	7	5	4	3	2	2	2	3	3	3	3	3	2	2	2	1	19.3																								
18-Dec-07	1	1	1	1	3	6	9	11	13	17	18	21	21	21	21	21	20	17	14	11	10	8	6	4	21.3																								
19-Dec-07	3	4	4	4	3	2	1	1	1	1	1	2	4	6	8	10	12	14	16	18	19	19	20	20	20.3																								
20-Dec-07	21	20	19	16	13	10	7	5	6	8	9	11	14	17	21	23	24	24	23	22	20	20	18	17	24.3																								
21-Dec-07	16	14	13	12	10	8	7	6	4	4	4	4	4	4	5	5	5	5	4	4	3	2	1	0	16.1																								
22-Dec-07	0	0	0	0	0	1	1	1	1	1	1	3	4	6	8	10	10	10	9	8	7	5	3	1	9.9																								
23-Dec-07	1	1	1	1	1	3	4	5	5	5	6	7	6	6	5	5	6	5	5	4	4	3	2	1	6.7																								
24-Dec-07	1	1	2	6	10	15	19	23	27	31	34	34	34	33	33	32	31	31	31	31	31	31	31	31	34.1																								
25-Dec-07	31	31	31	31	31	30	29	28	25	21	18	16	14	12	11	9	9	9	9	9	8	8	8	10	31.4																								
26-Dec-07	12	13	13	13	13	13	11	9	7	5	4	4	4	4	6	9	11	12	14	14	14	14	12	9	8	14.5																							
27-Dec-07	7	9	10	12	12	11	10	10	9	6	5	3	2	3	5	6	7	7	8	8	8	8	6	4	11.9																								
28-Dec-07	4	5	4	5	6	7	7	8	9	9	9	10	10	10	11	12	12	13	14	14	14	13	12	12	14.1																								
29-Dec-07	11	11	10	10	10	9	8	7	6	5	4	4	6	7	7	8	7	8	8	8	8	8	8	10	11.4																								
30-Dec-07	11	12	13	13	13	12	12	11	11	10	10	10	10	10	10	9	8	8	7	5	4	3	2	2	13.0																								
31-Dec-07	2	2	2	3	3	3	3	3	2	2	2	2	2	2	3	4	4	5	5	4	4	3	3	2	4.5																								

Hourly Max	32.1	32.3	32.9	33.1	33.1	31.7	29.1	28.5	30.0	30.9	33.8	34.1	33.7	33.2	33.0	32.2	31.5	31.3	31.3	31.5	31.0	30.8	30.9	31.7
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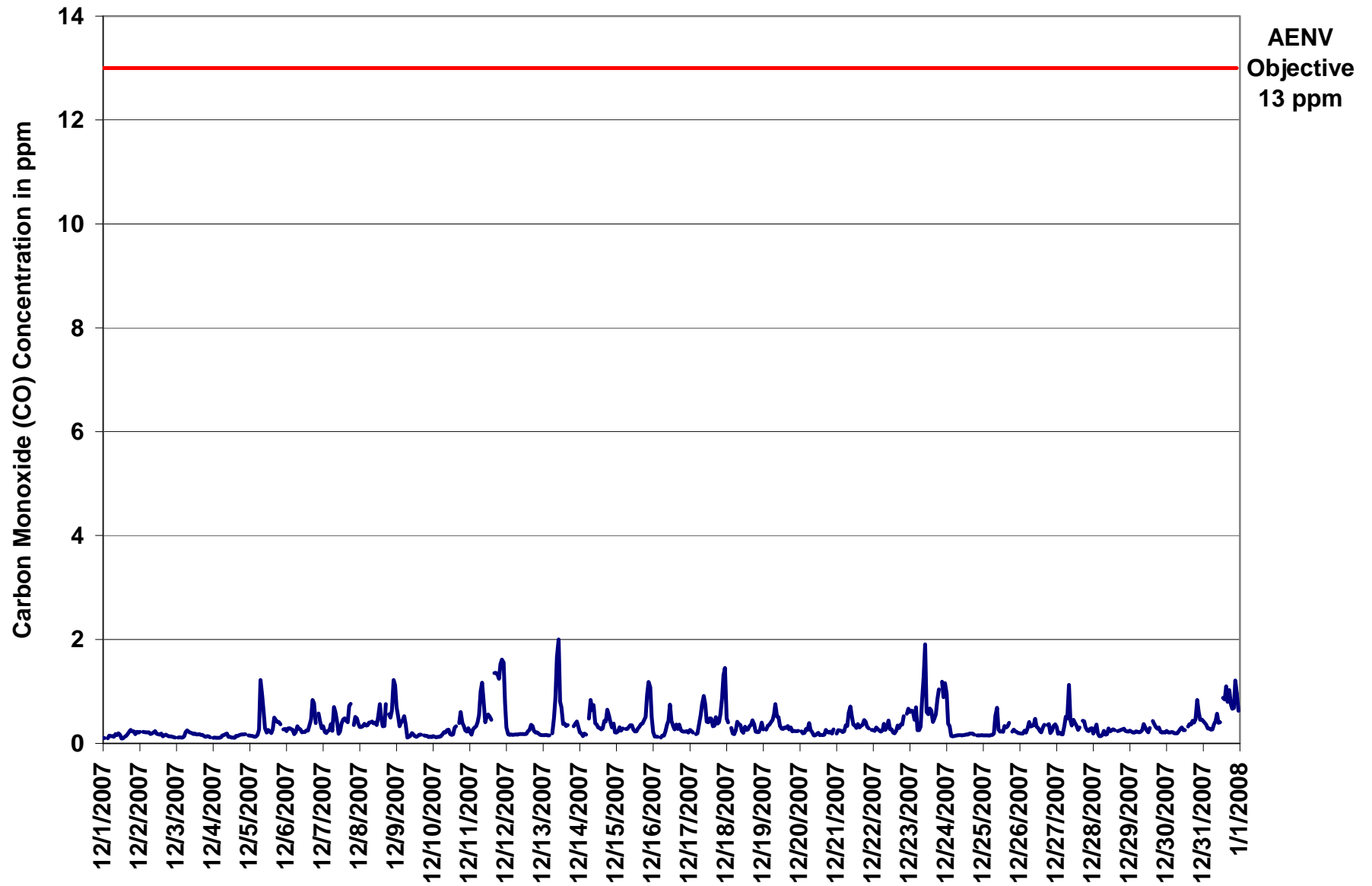


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

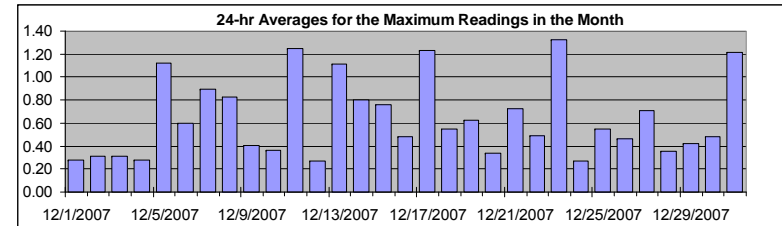
Carbon Monoxide (CO)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	13.3	ppm	5-Dec	7:00 8:00
Maximum 24-hr Value:	1.3	ppm	23-Dec	

AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.5	1.8	0.7	0.4	0.3	0.2	0.1	0.6 ppm	0.4 ppm



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-Dec-07	0.2	0.2	A	0.3	1.1	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.3	0.2	0.3	0.3	0.28	1.07	
2-Dec-07	0.3	A	0.4	0.3	0.3	0.3	0.8	0.3	0.4	0.5	0.5	0.3	0.2	0.3	0.6	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.31	0.84
3-Dec-07	A	0.2	0.2	0.2	0.2	0.2	0.6	0.6	0.5	0.3	0.6	0.3	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	A	0.31	0.61
4-Dec-07	0.1	0.2	0.1	0.1	0.1	0.4	0.5	0.6	0.7	0.4	0.3	0.2	0.2	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.28	0.68
5-Dec-07	0.2	0.1	0.1	0.2	0.2	0.2	0.6	13.3	3.2	1.5	0.4	0.3	0.4	0.3	0.3	0.4	1.1	0.6	0.6	0.6	0.5	A	0.3	0.4	1.13	13.32
6-Dec-07	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.7	0.7	2.1	1.8	0.7	A	0.9	0.9	0.9	0.60	2.14
7-Dec-07	0.7	0.3	0.3	0.3	0.3	1.4	0.4	5.3	1.1	1.5	0.2	0.4	0.5	0.6	0.6	0.6	1.0	1.1	1.1	A	0.5	0.7	0.8	0.5	0.89	5.31
8-Dec-07	0.4	0.4	0.5	0.4	0.4	1.0	0.5	0.6	0.8	0.7	0.6	0.6	0.7	0.8	0.7	0.5	0.8	1.4	A	0.8	0.7	0.9	3.5	1.4	0.83	3.47
9-Dec-07	1.5	1.0	0.4	0.5	0.5	0.8	0.8	0.1	0.2	0.4	0.7	0.3	0.3	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.40	1.46
10-Dec-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.5	A	0.6	0.9	0.7	0.5	0.4	0.4	0.5	0.36	0.88
11-Dec-07	0.4	0.2	0.5	0.4	0.4	0.5	0.7	1.9	1.4	1.1	0.7	1.0	0.8	0.7	0.7	A	2.0	1.8	1.6	1.7	2.1	3.5	3.9	0.9	1.25	3.95
12-Dec-07	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.27	0.72
13-Dec-07	0.2	0.2	0.2	0.2	0.2	A	0.5	1.3	2.5	4.6	3.2	1.3	1.6	0.6	0.6	0.7	0.6	C	C	A	0.9	1.0	1.2	1.1	1.12	4.56
14-Dec-07	0.6	0.3	0.2	0.3	0.2	A	1.5	3.2	1.8	1.9	1.0	0.6	0.4	0.4	0.3	0.4	0.6	0.7	1.1	1.0	0.5	0.4	0.8	0.3	0.80	3.21
15-Dec-07	0.3	0.3	0.7	0.3	0.4	A	0.7	0.4	0.5	0.6	0.6	0.5	0.3	0.3	0.4	0.4	0.5	0.4	1.7	1.0	1.8	2.0	1.9	1.4	0.76	2.04
16-Dec-07	0.3	0.2	0.2	0.2	A	0.2	0.3	0.2	0.4	0.6	0.8	1.6	0.8	1.2	0.4	0.7	0.4	0.7	0.5	0.4	0.3	0.3	0.4	0.3	0.48	1.60
17-Dec-07	0.4	0.3	0.3	A	0.3	0.3	1.9	1.5	1.7	2.1	1.2	0.9	0.7	0.7	0.6	0.5	0.5	0.7	0.6	0.8	3.3	1.6	2.5	5.2	1.23	5.18
18-Dec-07	1.0	0.6	A	0.4	0.2	0.2	0.4	0.6	0.6	1.4	0.6	0.2	1.0	0.3	0.5	0.5	0.5	0.8	0.6	0.4	0.3	0.4	0.4	0.6	0.55	1.43
19-Dec-07	0.4	A	0.9	0.7	0.4	0.6	1.4	1.2	1.1	0.6	0.9	0.5	0.4	1.1	0.4	0.4	0.6	0.4	0.5	0.3	0.5	0.4	0.4	0.3	0.62	1.37
20-Dec-07	A	0.6	0.3	0.3	0.4	0.4	0.6	0.5	0.5	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.5	0.3	0.3	0.4	0.3	0.6	A	0.34	0.61
21-Dec-07	0.2	0.3	0.3	0.4	0.2	0.3	2.5	0.5	1.5	1.5	3.0	0.5	0.4	0.3	0.5	0.4	0.4	0.4	0.9	0.8	0.4	0.4	A	0.3	0.72	3.03
22-Dec-07	0.3	0.3	0.5	0.5	0.3	0.3	0.4	0.7	0.4	0.5	0.7	0.4	0.4	0.3	0.2	0.4	0.5	0.4	0.6	0.5	0.8	A	0.8	0.9	0.49	0.92
23-Dec-07	0.7	0.8	0.7	1.0	0.9	0.4	0.4	1.1	2.0	2.6	3.0	2.3	1.1	1.7	2.2	0.9	0.7	0.8	1.0	1.5	A	1.9	1.4	1.4	1.32	3.00
24-Dec-07	1.4	0.5	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	0.2	A	0.2	0.2	0.2	0.2	0.2	0.27	1.43
25-Dec-07	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.5	1.2	2.6	0.5	0.6	0.3	0.3	0.9	0.8	0.5	0.8	A	0.5	0.5	0.3	0.3	0.2	0.54	2.62
26-Dec-07	0.2	0.2	0.2	0.3	0.2	0.6	1.0	0.4	0.4	0.5	1.2	0.4	0.4	0.3	0.3	0.4	0.4	A	0.6	0.7	0.2	0.4	0.5	0.8	0.46	1.18
27-Dec-07	0.8	0.2	0.3	0.2	0.3	0.8	1.2	1.5	2.7	1.3	0.5	0.5	0.5	0.6	0.8	0.4	A	0.7	0.7	0.5	0.4	0.4	0.5	0.5	0.71	2.70
28-Dec-07	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.4	0.2	0.3	0.4	0.3	0.3	0.9	0.3	A	0.3	0.3	0.4	0.6	0.4	0.3	0.3	0.3	0.35	0.94
29-Dec-07	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.3	A	1.8	0.5	0.4	0.4	1.0	0.3	0.3	0.5	0.3	0.42	1.85
30-Dec-07	0.5	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.5	1.0	0.4	0.3	A	0.4	0.4	0.4	0.7	0.4	0.6	1.4	1.0	0.6	0.5	0.48	1.38
31-Dec-07	0.5	0.5	0.4	0.3	0.4	0.3	0.6	0.6	0.5	1.6	0.4	0.6	A	1.0	0.9	4.2	0.9	3.4	0.9	0.8	1.2	4.9	1.8	1.1	1.21	4.89
Hourly Avg	0.47	0.33	0.34	0.32	0.32	0.39	0.66	1.27	0.90	1.01	0.81	0.54	0.46	0.52	0.52	0.62	0.55	0.76	0.67	0.63	0.68	0.83	0.90	0.73		
Hourly Max	1.46	0.97	0.91	0.97	1.07	1.44	2.53	13.32	3.15	4.56	3.17	2.33	1.56	1.67	2.21	4.21	2.00	3.39	1.78	1.66	3.26	4.89	3.95	5.18		

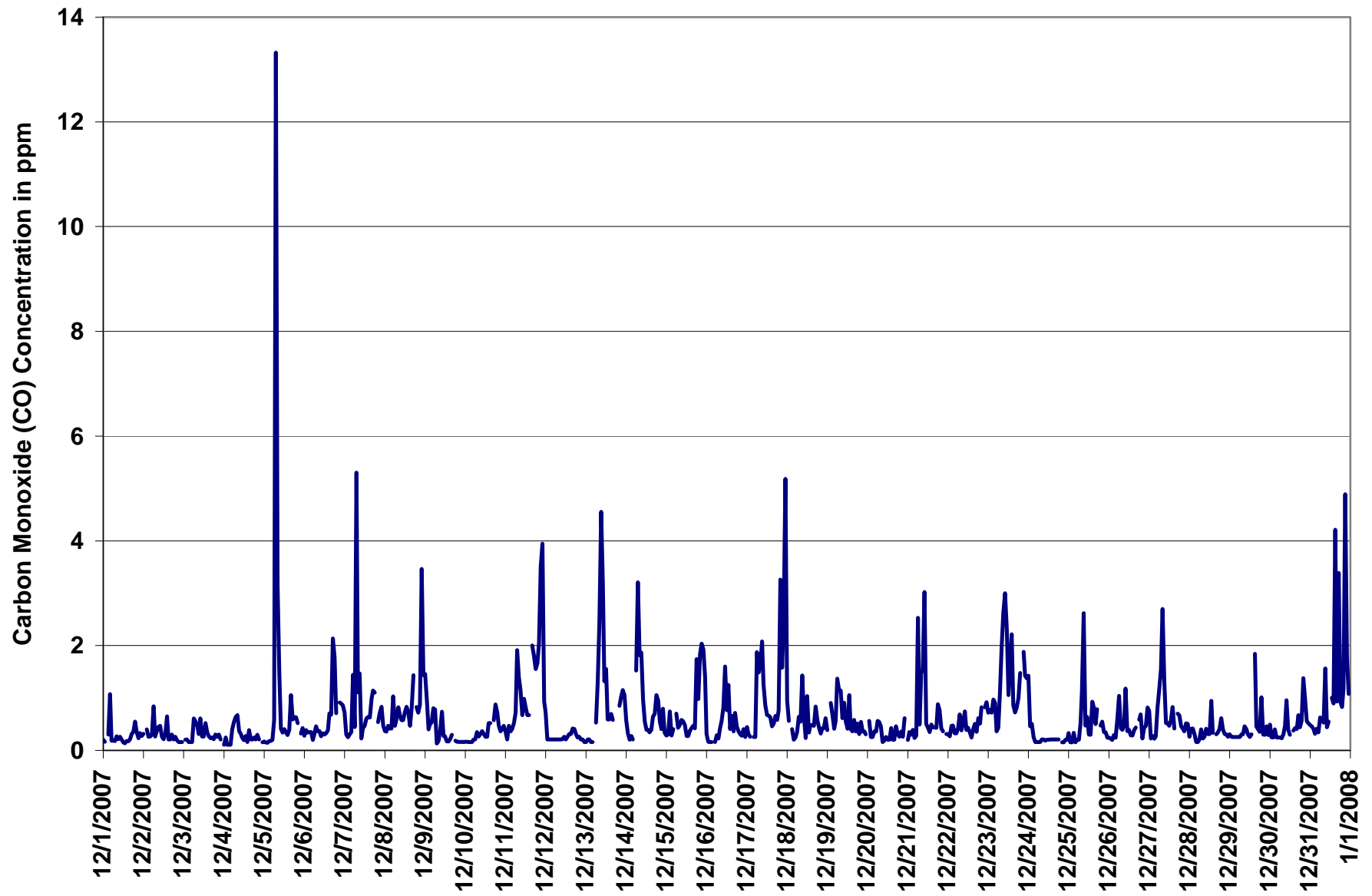
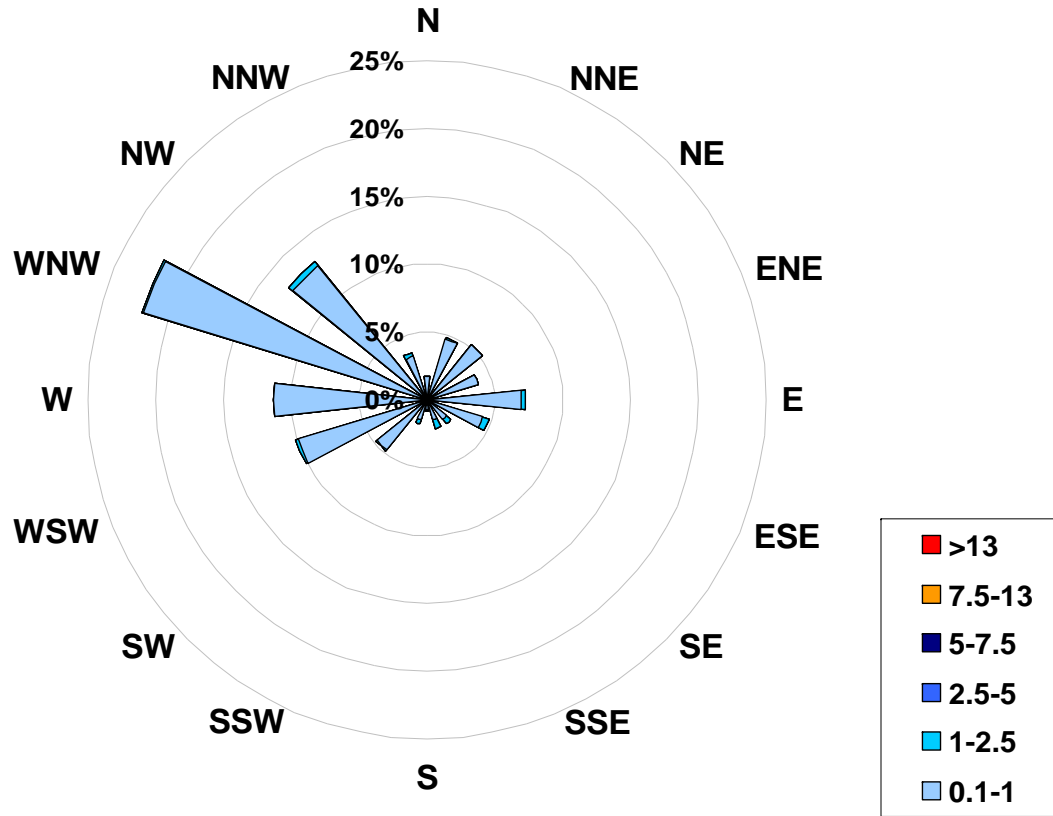


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located at the Henry Pirker Site for December 2007



Calms: 0%

Frequency Distribution of CO in ppm			
Range		Frequency (hrs)	
0.1	< 1	683	
1	to 2.5	26	
2.5	to 5	0	
5	to 7.5	0	
7.5	to 13	0	
	> 13	0	
Total Non-Zero Values			709

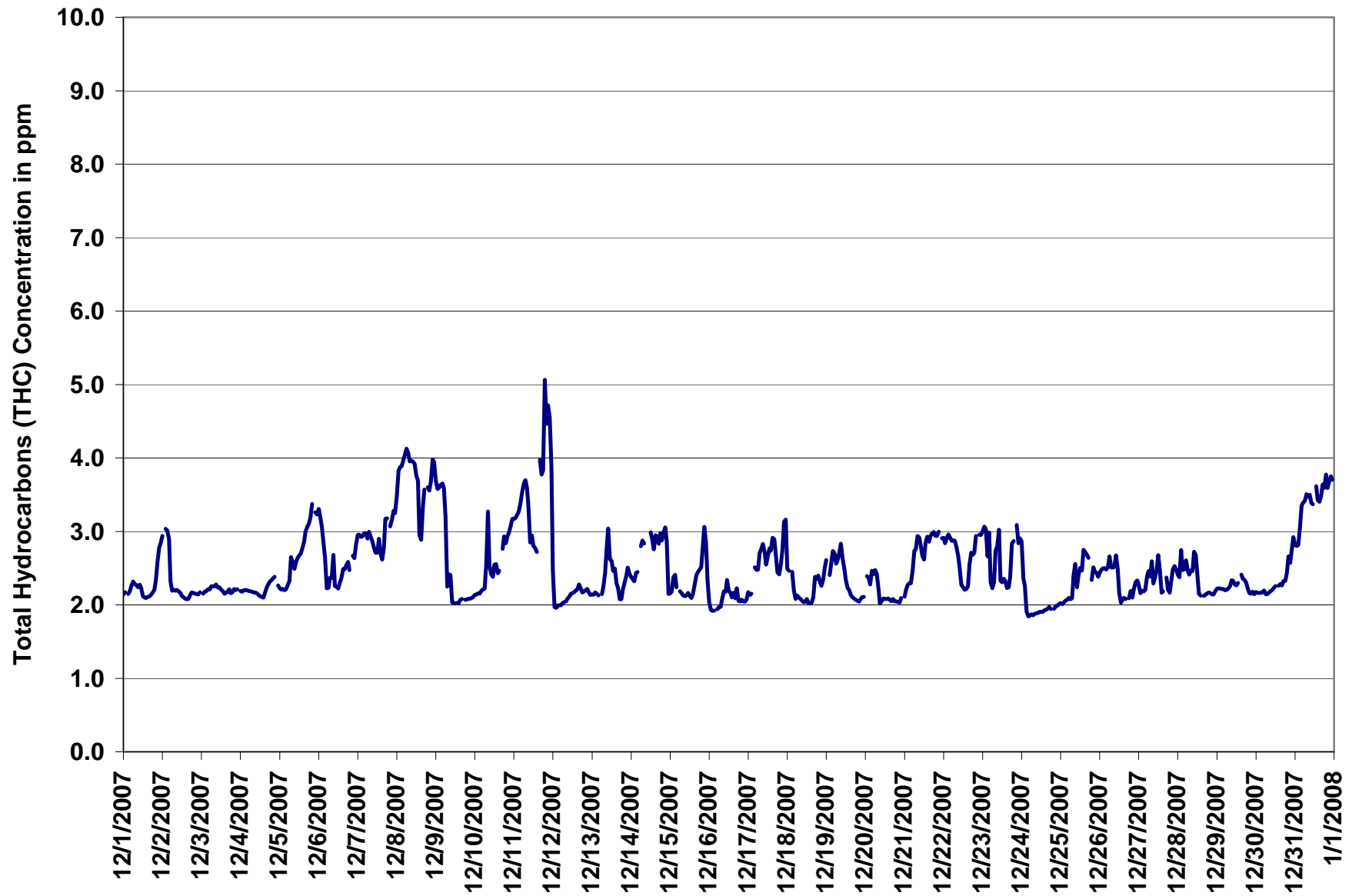


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

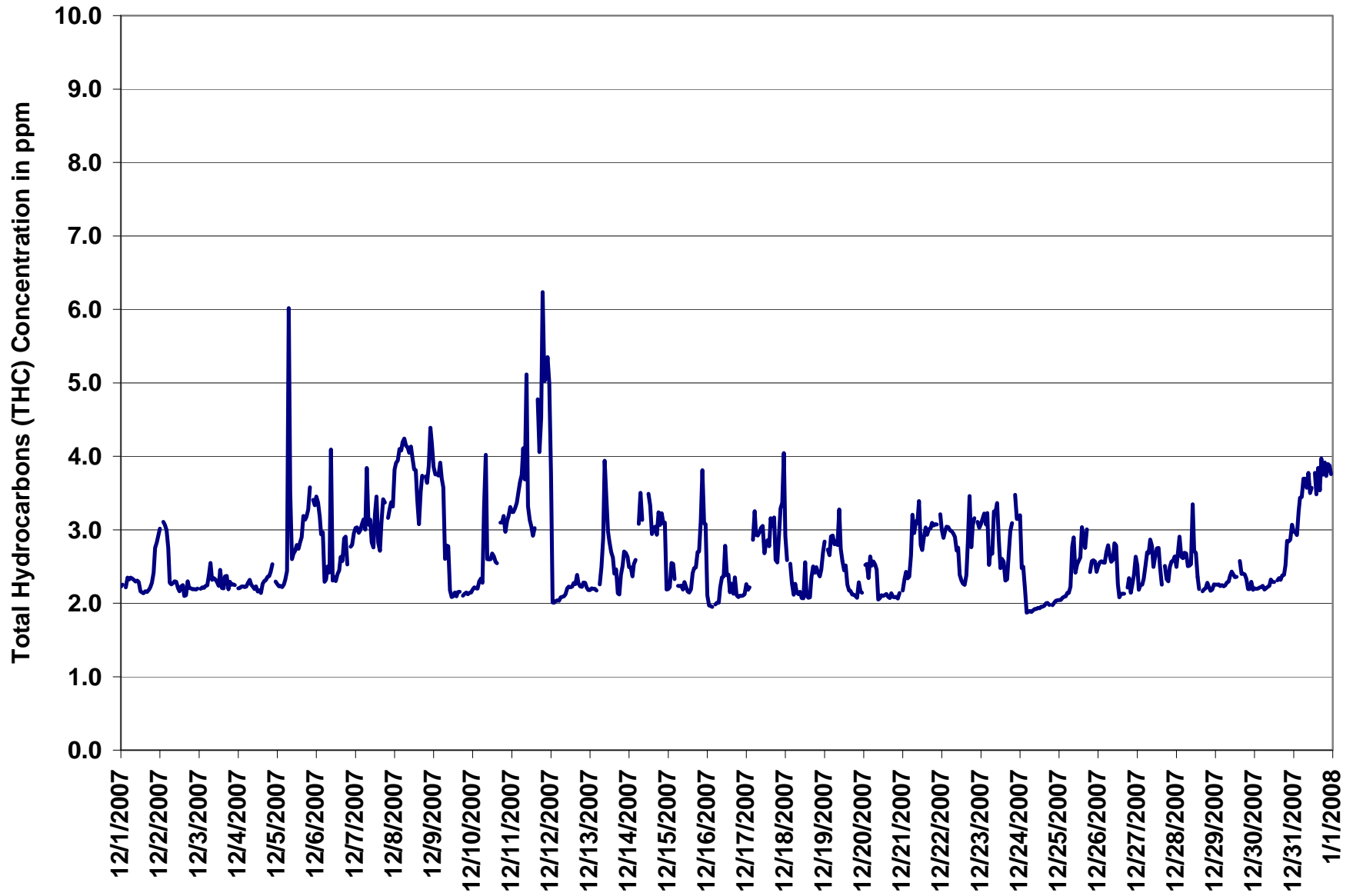
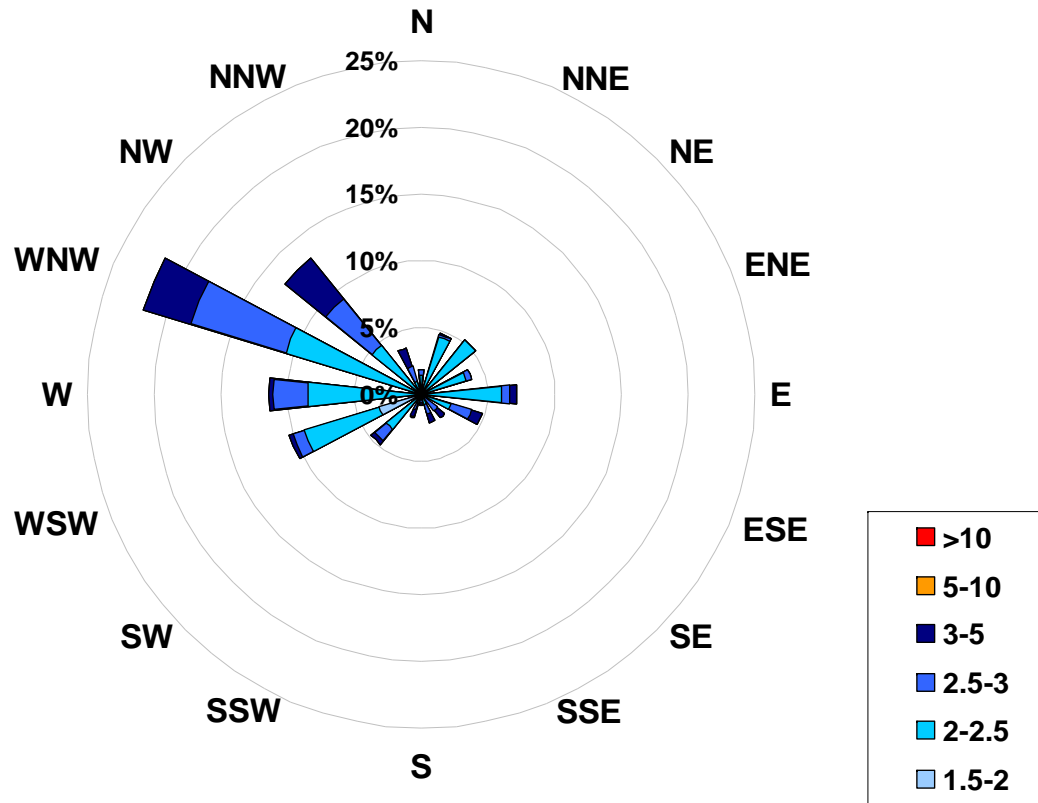


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)
Located at the Henry Pirker Site for December 2007**



Calms: 0%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	30
2	to	2.5	413
2.5	to	3	169
3	to	5	96
5	to	10	1
	>	10	0
Total Non-Zero Values			709

PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

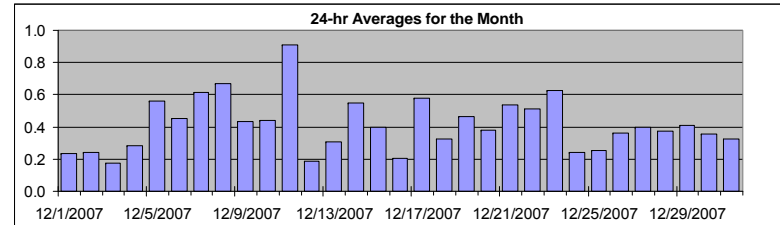
HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb
 Summary

Maximum 1-hr Average:	2.1	ppb	19-Dec	9:00 10:00
Maximum 24-hr Value:	0.9	ppb	11-Dec	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.2	0.9	0.5	0.4	0.2	0.1	0.1	0.4 ppb	0.4 ppb

Status Flag Characters	
C	Calibration
S	Instrument out of Service
N	No Data
D	Excessive Instrument Drift
A	AIC - Zero / Span Check
X	Filter Exchange
M	Equipment Maintenance
P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Dec-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
2-Dec-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
3-Dec-07	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	0.2	0.4
4-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	A	0	0	0.3	1.0
5-Dec-07	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	0.6	1.1
6-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	0	0	0.5	0.9
7-Dec-07	0	0	0	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	1.0
8-Dec-07	0	0	0	1	1	0	0	1	1	0	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.2
9-Dec-07	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.8
10-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	0	0	0	0	0.4	0.8
11-Dec-07	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	2	2	2	1	1	1	0.9	1.7
12-Dec-07	0	0	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
13-Dec-07	0	0	0	0	0	A	0	1	1	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
14-Dec-07	0	0	0	0	0	A	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0	0	0.5	1.0
15-Dec-07	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0.4	1.0
16-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
17-Dec-07	0	0	0	A	0	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	1	1	1	1	0.6	1.2
18-Dec-07	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
19-Dec-07	1	A	0	0	0	0	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.1
20-Dec-07	A	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.6
21-Dec-07	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	1	0.5	0.8
22-Dec-07	1	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	0	1	A	1	1	1	0.5	1.1
23-Dec-07	1	1	1	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	A	1	1	1	1	0.6	1.2
24-Dec-07	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.8
25-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.4
26-Dec-07	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.8
27-Dec-07	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	A	1	0	0	0	0	0	0	0	0.4	0.9
28-Dec-07	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.6
29-Dec-07	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0.4	0.6
30-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
31-Dec-07	0	0	0	0	0	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.7
Hourly Avg	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4		
Hourly Max	0.8	0.8	0.8	0.7	0.8	0.7	0.7	1.0	1.3	2.1	1.2	0.9	0.8	0.9	0.7	0.6	1.1	1.1	1.3	1.7	1.7	1.5	1.5	1.1	1.1		

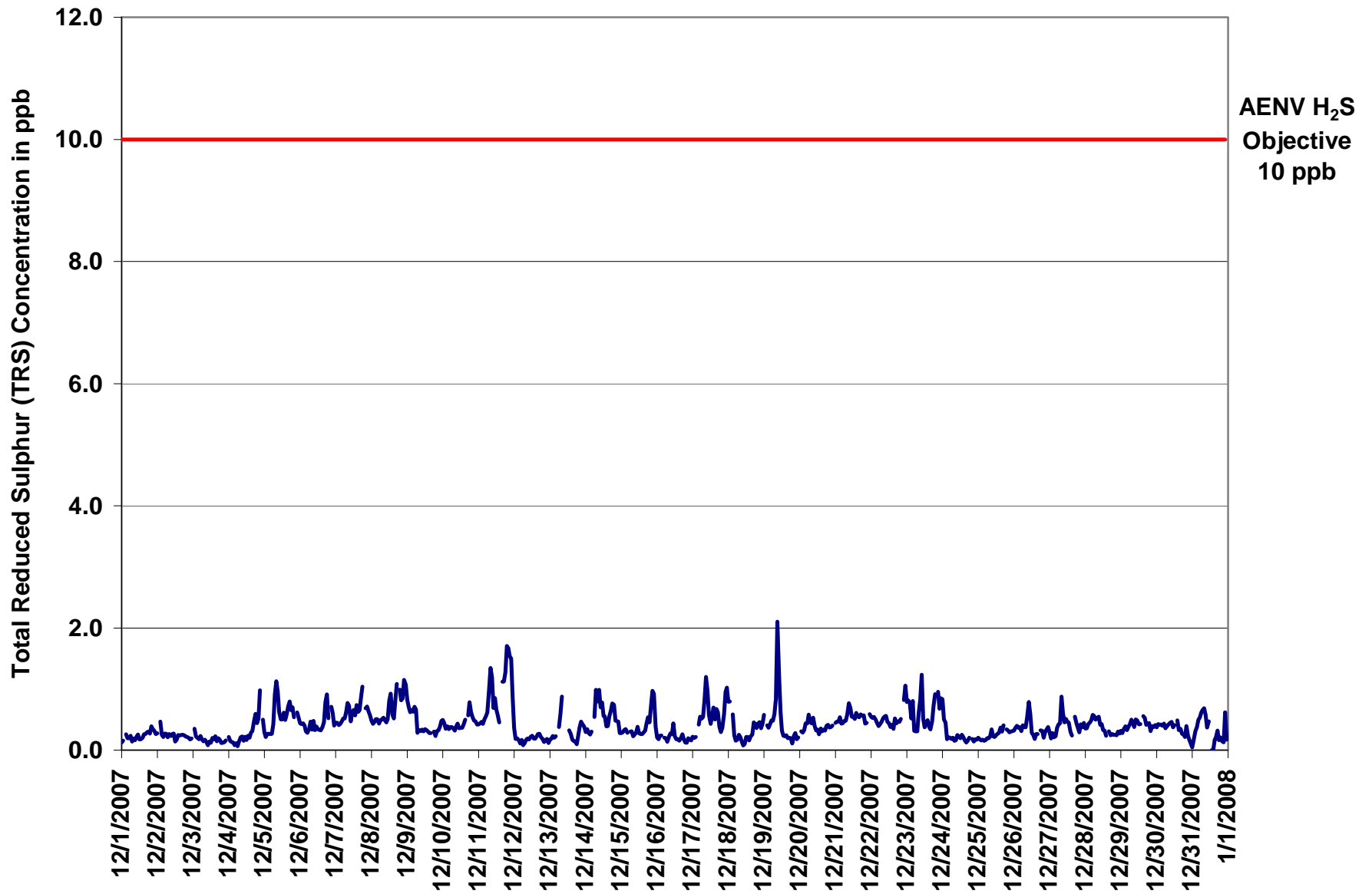


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

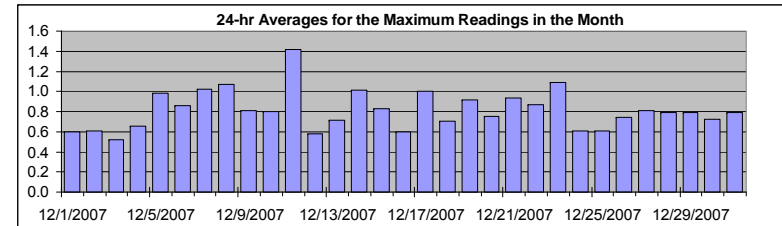
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	3.2	ppb	19-Dec	9:00 10:00
Maximum 24-hr Value:	1.4	ppb	11-Dec	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.9	1.5	0.9	0.7	0.6	0.5	0.4	0.8 ppb	0.7 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	0	1	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
2-Dec-07	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0.6	1.0
3-Dec-07	A	1	1	0	1	0	1	1	1	0	0	0	0	1	0	1	0	0	1	0	0	0	1	A	0.5	0.8
4-Dec-07	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	0.7	1.6
5-Dec-07	1	1	1	0	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	1.7
6-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	A	1	1	1	0.9	1.7
7-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1.0	1.8
8-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	2	2	1.1	1.7
9-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.3
10-Dec-07	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	1.2
11-Dec-07	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	A	2	2	2	2	2	2	2	1	1.4	2.4
12-Dec-07	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.1
13-Dec-07	1	1	1	1	1	A	1	1	1	C	C	C	A	1	1	1	0	0	0	1	1	1	1	1	0.7	1.5
14-Dec-07	1	1	1	1	1	A	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7
15-Dec-07	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0.8	1.9
16-Dec-07	1	1	1	1	A	1	1	0	1	1	1	1	1	0	1	0	1	1	0	1	0	1	1	1	0.6	1.1
17-Dec-07	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	1.8
18-Dec-07	1	1	A	1	1	0	0	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
19-Dec-07	1	A	1	1	1	1	1	1	2	3	2	1	1	1	1	0	1	1	1	0	1	1	1	1	0.9	3.2
20-Dec-07	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	1.1
21-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.4
22-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.4
23-Dec-07	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	2	1	1	1.1	1.9
24-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	0.6	1.3
25-Dec-07	1	1	1	0	1	0	1	0	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	0.6	0.8
26-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	1	1	1	1	1	1	1	0.7	1.5
27-Dec-07	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.6
28-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.3
29-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.1
30-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0.7	0.9
31-Dec-07	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	0	2	1	0.8	2.2
Hourly Avg	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	1.0	1.0	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.9	0.9	0.8	0.8	0.9	1.0	0.8		
Hourly Max	1.3	1.4	1.1	1.1	1.2	1.2	1.3	1.6	1.8	3.2	1.9	1.3	1.3	1.2	1.2	1.2	1.5	1.6	2.0	2.4	2.1	2.3	2.2	1.6		

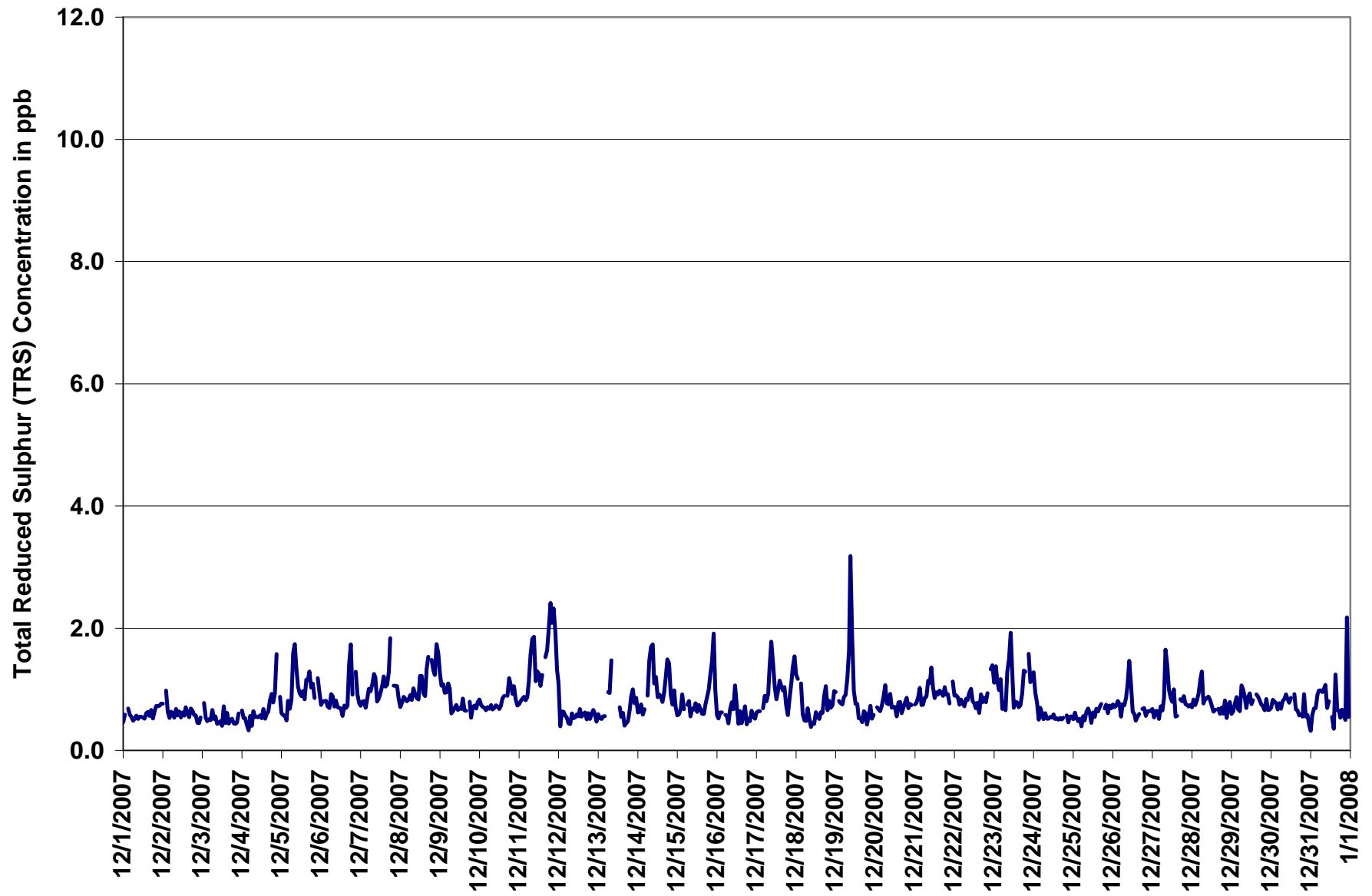
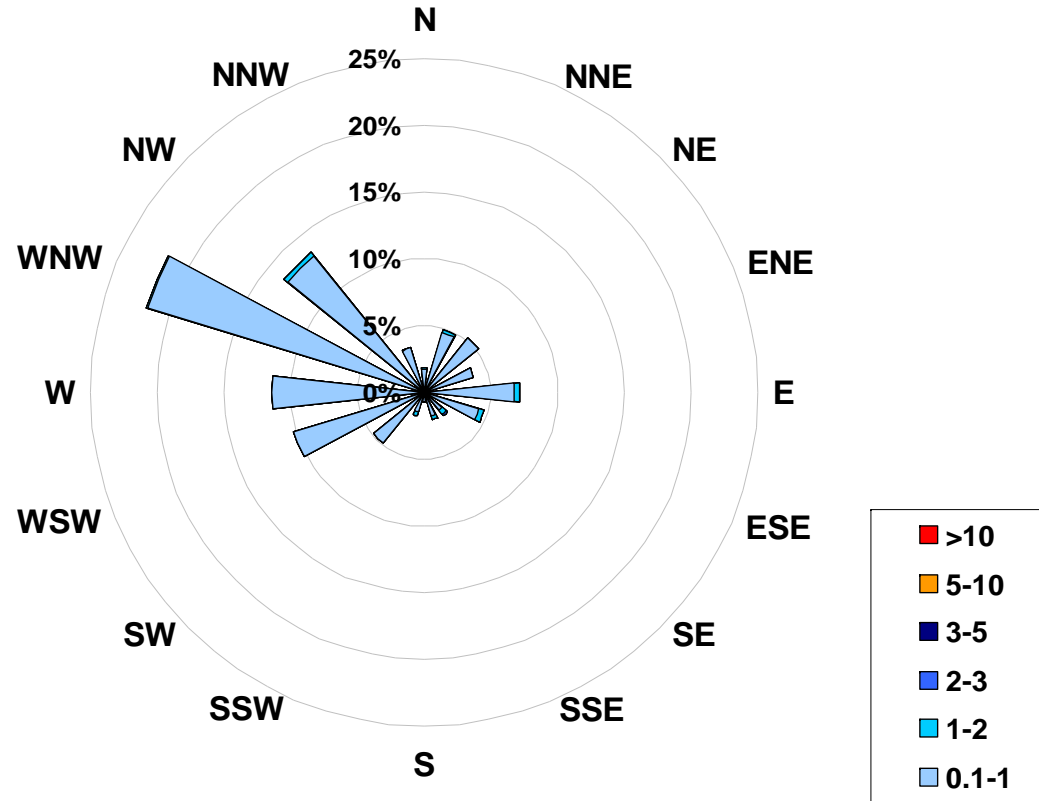


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Henry Pirker Site for December 2007**



Calms: 0%

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	688
1	to	2	19
2	to	3	1
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			708

PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

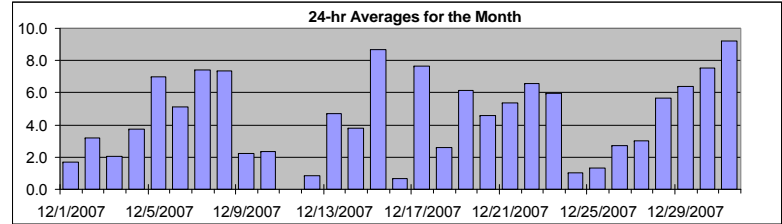
HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m³ 24-hr 30 µg/m³
 Summary

Number of 24-hr Exceedances (draft):	0		
Maximum 1-hr Average:	34.0	µg/m ³	31-Dec 22:00 23:00
Maximum 24-hr Value:	9.2	µg/m ³	31-Dec



AIC Time:	0 hrs		Operational Time:	712 hrs						
Calibration Time:	0 hrs		AMD Operational Uptime:	95.7%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	20.3	12.7	6.8	3.6	1.5	0.0	0.0	4.6	4 µg/m ³	3.7 µg/m ³

Status Flag Characters	
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Dec-07	0	0	0	0	0	0	1	0	0	0	0	D	0	0	0	7	2	3	4	5	3	3	5	4	1.7	7.4
2-Dec-07	4	4	4	4	3	D	4	3	3	4	4	4	2	1	1	2	10	3	2	2	2	3	2	3	3.2	9.7
3-Dec-07	1	3	2	3	1	1	2	1	1	2	1	2	0	2	2	3	3	3	2	2	3	4	2	3	2.0	4.0
4-Dec-07	2	3	2	2	2	2	2	2	2	2	2	2	2	1	2	3	3	8	10	8	7	5	3	3	3.8	10.4
5-Dec-07	2	2	1	2	2	7	8	14	17	13	7	3	4	5	4	6	8	10	11	11	10	7	7	7	7.0	17.0
6-Dec-07	7	11	11	10	8	1	2	4	4	3	3	1	1	3	1	2	4	9	9	6	4	8	6	3	5.1	11.1
7-Dec-07	4	2	3	5	5	5	4	7	9	9	8	7	13	5	9	8	7	11	14	12	9	9	8	6	7.4	14.4
8-Dec-07	5	5	6	5	4	3	6	5	5	5	7	3	11	14	3	1	4	8	12	8	7	10	21	21	7.3	20.8
9-Dec-07	9	6	3	5	5	5	5	0	D	0	0	D	1	0	0	0	3	1	0	1	2	2	1	1	2.2	9.5
10-Dec-07	1	0	0	1	0	0	1	0	0	1	7	0	0	0	2	9	6	4	6	4	3	3	4	5	2.4	9.2
11-Dec-07	2	0	3	5	5	6	8	10	9	7	3	N	6	5	4	11	15	15	N	N	N	N	N	N	N	15.1
12-Dec-07	4	0	0	0	0	1	0	0	0	0	0	2	0	0	0	1	3	2	2	N	N	N	N	N	0.9	4.0
13-Dec-07	N	N	0	0	0	0	0	1	4	6	15	11	8	2	2	3	6	2	0	5	16	9	8	5	4.7	16.0
14-Dec-07	2	1	2	1	0	1	3	6	5	9	8	7	8	1	0	3	3	3	7	7	4	3	5	1	3.8	9.2
15-Dec-07	D	3	6	5	9	9	5	4	5	5	3	4	2	3	5	7	10	11	12	17	21	28	18	8	8.7	28.4
16-Dec-07	0	D	0	0	0	0	0	0	0	4	1	3	3	0	0	0	0	2	0	0	0	N	N	N	0.7	3.9
17-Dec-07	N	N	2	4	2	2	3	4	11	11	14	6	8	8	10	10	7	11	7	4	10	9	12	14	7.7	14.4
18-Dec-07	9	5	5	3	0	0	D	0	0	0	0	D	0	0	0	2	8	6	5	2	4	4	5	2.6	8.5	
19-Dec-07	5	4	10	15	17	17	17	15	10	9	7	4	1	0	1	1	1	1	1	0	0	2	3	4	6.1	17.3
20-Dec-07	3	4	3	7	8	6	8	8	6	4	5	4	6	4	3	1	2	5	2	3	5	4	4	4	4.6	8.5
21-Dec-07	3	4	3	4	4	4	5	5	6	9	10	0	11	4	5	5	7	4	7	7	7	5	4	4	5.4	11.2
22-Dec-07	4	0	3	1	4	0	4	5	9	3	3	5	3	4	5	5	8	8	9	9	9	13	13	30	6.6	30.0
23-Dec-07	9	11	13	1	15	0	0	0	2	3	13	0	0	4	2	1	1	3	9	9	13	15	10	10	6.0	15.2
24-Dec-07	16	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1.0	16.3
25-Dec-07	0	0	0	0	0	0	0	0	0	3	1	0	2	2	2	4	4	4	0	0	4	2	3	2	1.4	3.9
26-Dec-07	1	2	1	2	3	3	4	4	5	8	7	3	2	0	2	2	2	2	2	3	0	0	3	4	2.7	7.7
27-Dec-07	3	0	1	0	0	5	3	3	7	5	5	4	6	5	0	3	3	3	4	6	1	1	3	1	3.0	7.2
28-Dec-07	3	8	5	7	1	0	6	7	3	4	13	11	7	4	6	6	6	5	4	6	6	6	6	7	5.7	13.0
29-Dec-07	7	6	4	5	5	5	4	4	5	8	6	5	5	16	23	16	8	5	5	3	1	2	2	2	6.4	23.3
30-Dec-07	2	2	3	3	3	4	5	6	7	8	9	8	8	8	9	9	9	10	8	8	13	8	10	21	7.5	20.7
31-Dec-07	16	12	6	9	7	4	3	5	7	N	N	N	N	N	9	6	7	10	7	7	10	11	34	4	9.2	34.0
Hourly Avg	4.4	3.7	3.4	3.5	3.6	3.0	3.6	4.0	4.8	4.9	5.4	3.7	4.1	3.4	3.6	4.3	5.0	5.7	5.4	5.6	5.9	6.4	7.2	6.4		
Hourly Max	16.3	12.3	13.4	15.2	17.1	16.6	17.3	15.2	17.0	13.3	14.6	11.0	12.6	15.6	23.3	15.5	14.9	15.1	14.4	17.3	21.0	28.4	34.0	30.0		

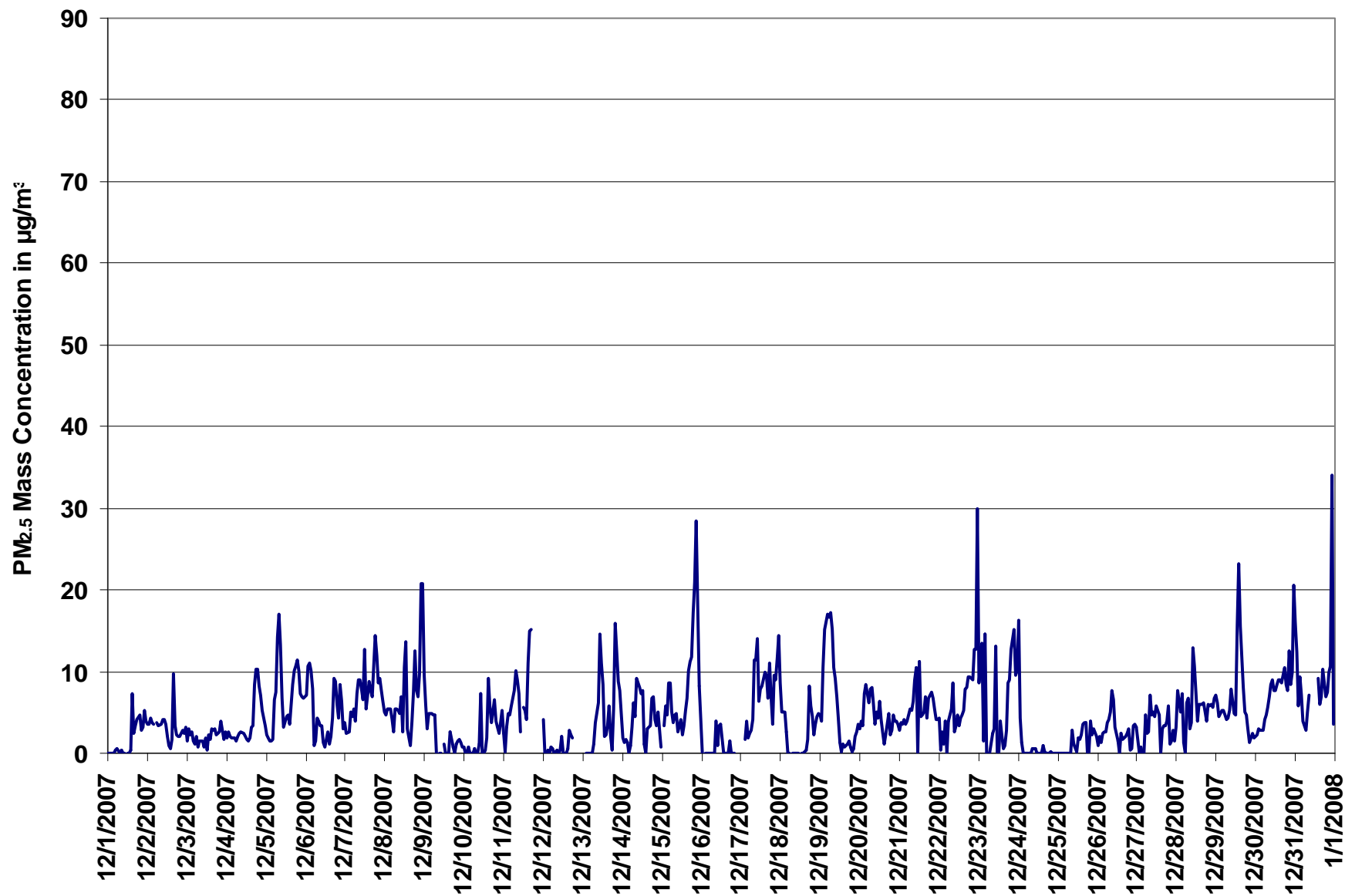


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

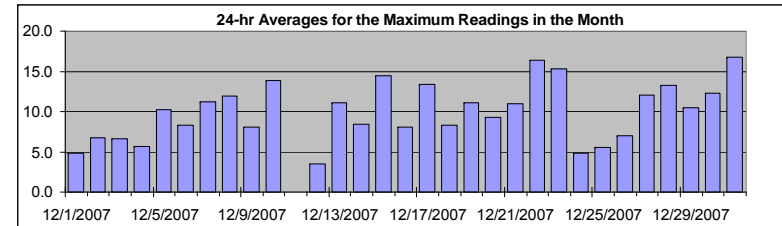
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	67.3	µg/m ³	31-Dec	22:00 23:00
Maximum 24-hr Value:	16.8	µg/m ³	31-Dec	



AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	96.8%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	40.4	28.4	12.2	7.6	4.8	1.4	0.1	10.0	8 µg/m ³
									9.3 µg/m ³

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Dec-07	1	1	0	1	2	3	3	1	2	1	3	2	1	1	1	36	5	6	6	8	7	7	11	7	4.8	35.9	
2-Dec-07	6	6	6	7	9	6	7	5	5	7	6	5	7	3	2	4	34	7	4	5	5	7	4	6	6.8	34.2	
3-Dec-07	5	6	5	6	7	5	12	7	7	6	6	7	5	13	11	8	6	6	5	5	7	4	5	6.6	12.6		
4-Dec-07	4	5	5	4	4	4	3	4	4	4	4	3	4	3	3	6	6	12	12	12	10	8	8	5	5.7	12.3	
5-Dec-07	3	3	4	4	3	9	11	18	25	19	10	6	7	9	6	9	14	14	14	14	9	10	10	10.2	25.0		
6-Dec-07	8	15	14	14	13	3	3	7	6	6	5	4	3	6	4	6	7	19	15	8	8	11	10	5	8.3	18.6	
7-Dec-07	5	4	5	8	7	8	6	11	13	12	11	14	18	11	14	13	12	17	19	17	11	11	12	8	11.2	19.4	
8-Dec-07	6	8	9	8	7	4	11	9	10	10	17	6	16	16	12	3	9	12	22	12	11	14	28	28	11.9	27.9	
9-Dec-07	16	11	5	8	7	7	9	11	0	0	1	22	30	29	0	3	6	7	3	3	3	5	3	3	8.1	30.3	
10-Dec-07	3	2	3	3	0	2	5	3	1	31	41	38	41	16	35	44	12	7	12	7	4	5	9	9	13.9	43.5	
11-Dec-07	7	4	5	7	8	8	10	12	11	12	5	N	20	9	8	16	18	20	N	N	N	N	N	N	N	20.3	
12-Dec-07	13	1	1	3	2	4	3	1	4	0	2	6	2	4	2	3	5	4	7	N	N	N	N	N	3.5	12.9	
13-Dec-07	N	N	2	2	1	1	3	4	6	13	25	26	33	6	6	8	11	5	3	10	36	16	17	10	11.1	36.4	
14-Dec-07	4	5	4	4	3	5	6	10	9	13	12	11	36	8	5	6	5	6	11	11	7	7	8	5	8.4	35.7	
15-Dec-07	20	27	10	9	10	10	7	5	7	7	4	8	5	6	8	10	13	14	15	39	29	41	24	20	14.4	40.9	
16-Dec-07	3	17	8	0	0	1	1	1	2	24	31	9	9	3	1	1	21	22	0	12	N	N	N	N	8.1	31.0	
17-Dec-07	N	N	8	7	5	6	6	7	31	20	21	15	11	11	13	14	11	14	15	20	15	11	16	17	13.4	31.3	
18-Dec-07	14	9	7	6	2	0	0	0	0	0	1	2	17	22	1	7	3	31	29	9	6	12	12	7	8.3	31.1	
19-Dec-07	7	10	18	17	19	21	21	18	13	34	28	7	4	3	3	3	4	14	3	2	2	3	5	6	11.1	33.9	
20-Dec-07	8	7	5	31	19	10	11	12	14	8	11	7	9	8	7	3	5	8	4	5	8	7	7	8	9.2	30.5	
21-Dec-07	6	6	5	6	6	6	9	8	10	13	15	10	51	14	11	7	10	8	13	12	11	10	6	7	10.9	50.9	
22-Dec-07	9	5	10	8	10	7	26	9	21	13	9	18	9	8	8	8	11	11	34	32	13	17	36	61	16.3	60.6	
23-Dec-07	33	33	34	21	32	20	2	7	7	10	25	5	5	10	5	4	4	5	22	12	25	21	13	14	15.3	34.0	
24-Dec-07	23	11	4	1	1	1	3	3	3	3	6	3	4	5	6	5	6	4	4	5	4	3	4	5	4.8	23.1	
25-Dec-07	5	2	3	3	1	2	2	1	5	8	6	6	5	9	8	10	12	9	4	3	11	8	7	5	5.5	11.6	
26-Dec-07	4	5	4	6	6	6	7	9	11	17	10	8	5	4	8	5	5	8	6	6	4	6	10	7	7.0	17.5	
27-Dec-07	7	4	6	3	25	25	23	7	22	15	14	9	9	11	3	12	8	7	10	14	5	7	16	26	12.0	26.1	
28-Dec-07	28	29	8	14	9	22	37	11	9	8	17	15	10	9	9	10	10	9	7	11	10	9	10	9	13.3	37.2	
29-Dec-07	12	10	9	8	9	7	8	8	9	13	12	8	10	24	29	22	12	8	8	8	4	5	6	5	10.5	28.8	
30-Dec-07	7	5	6	6	8	7	9	8	11	12	12	11	10	12	13	13	12	15	12	11	18	16	15	45	12.3	44.6	
31-Dec-07	23	18	13	14	11	7	6	10	16	N	N	N	N	N	17	11	10	23	16	13	17	17	67	9	16.8	67.3	
Hourly Avg	10.1	9.3	7.3	7.7	8.1	7.4	8.8	7.4	9.6	11.3	12.3	10.1	13.2	9.7	8.3	10.0	9.2	11.3	11.9	10.8	10.8	10.7	13.4	12.6			
Hourly Max	32.9	33.5	34.0	30.5	32.3	25.4	37.2	18.4	31.3	33.9	41.0	38.0	50.9	29.4	35.0	43.5	34.2	31.1	34.4	39.0	36.4	40.9	67.3	60.6			

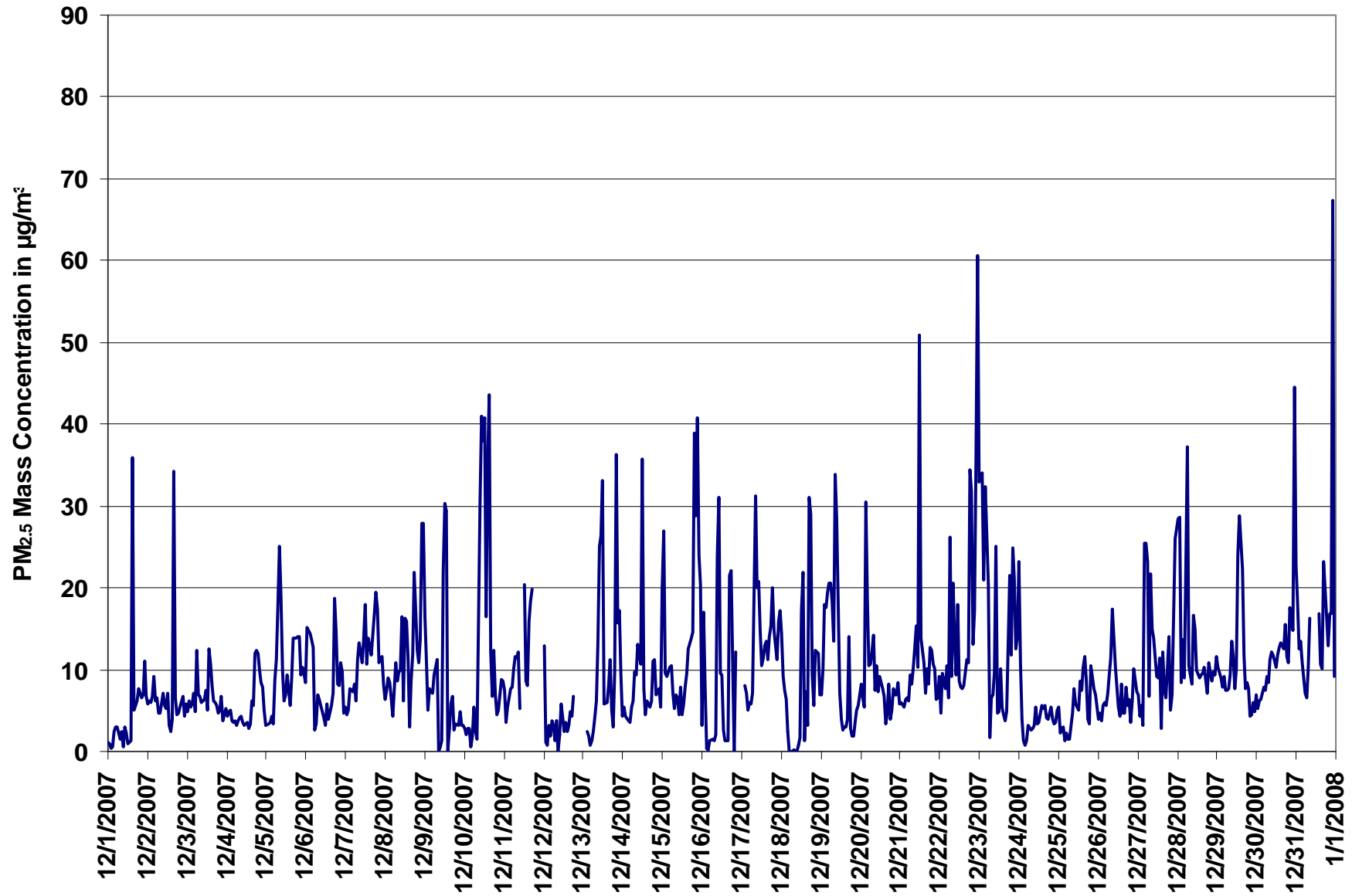
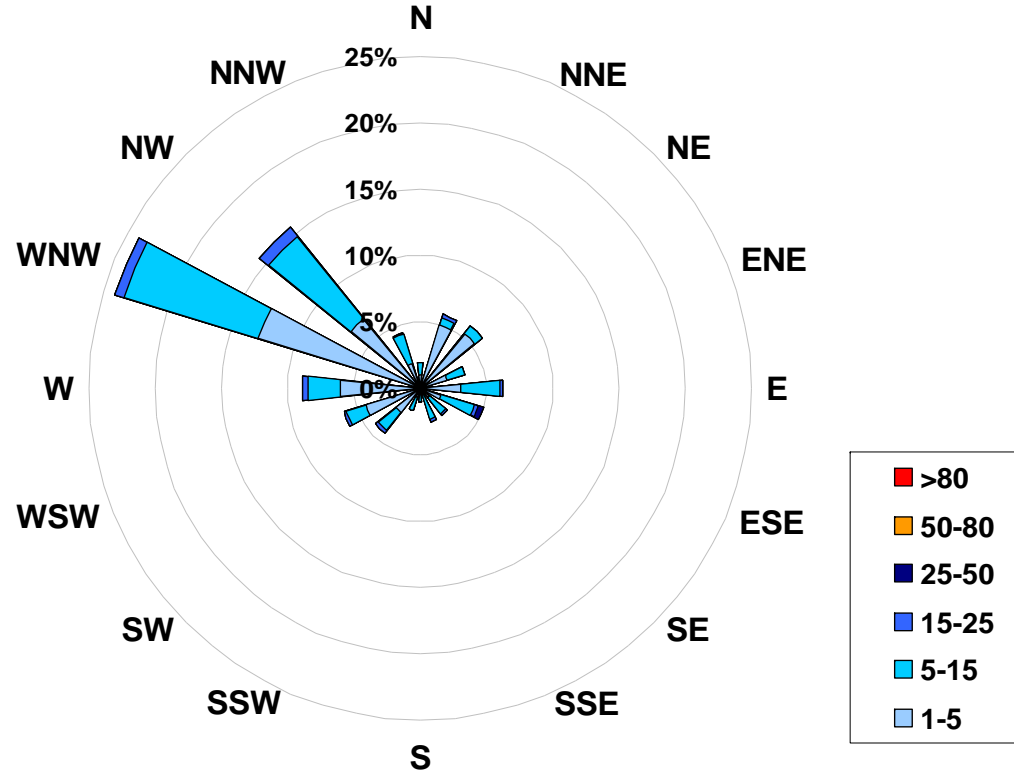


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Henry Pirker Site for December 2007



Calms: 0%

Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
1.0	<	5	455
5	to	15	234
15	to	25	20
25	to	50	3
50	to	80	0
	>	80	0
Total Non-Zero Values			712

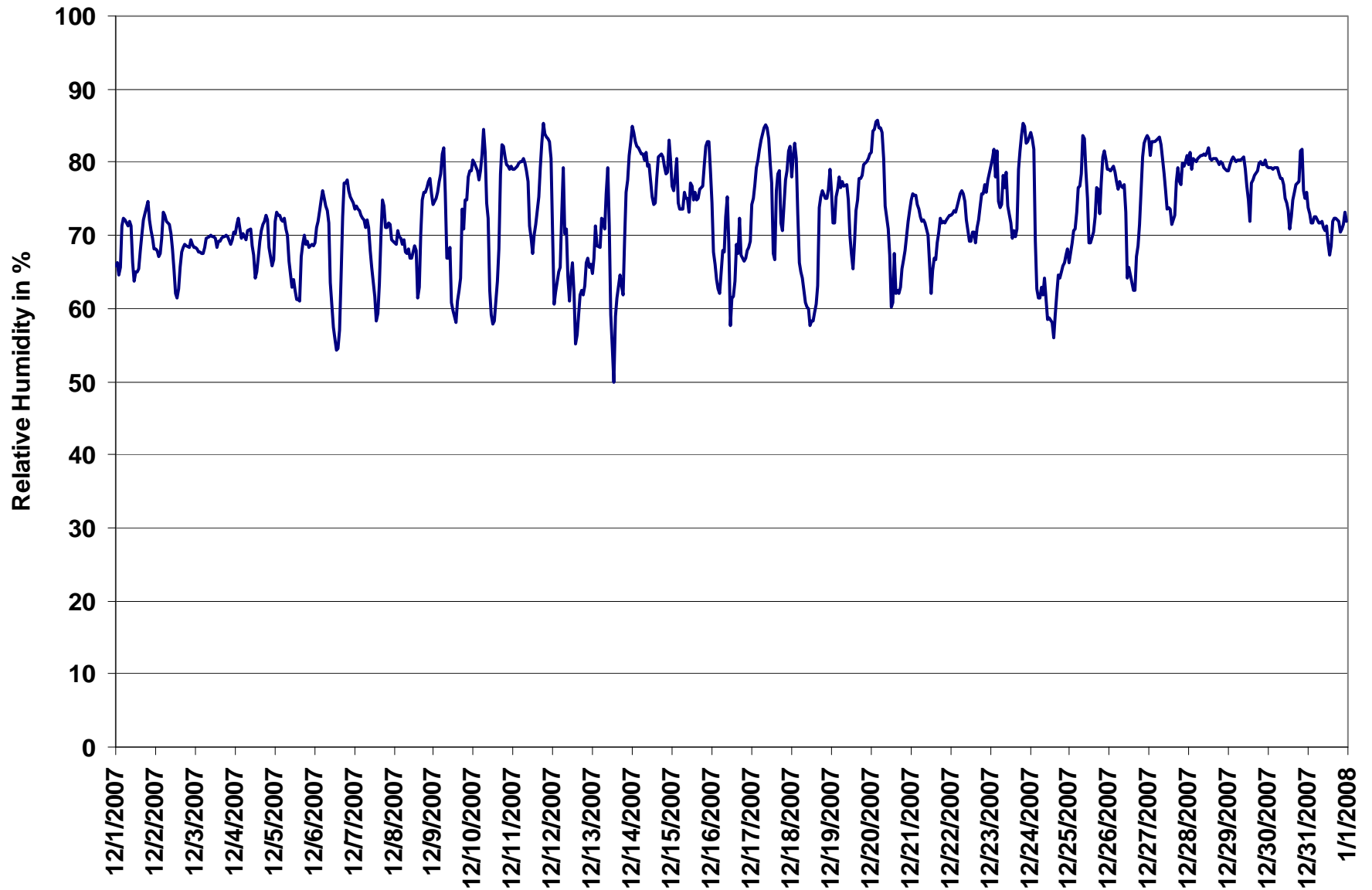


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

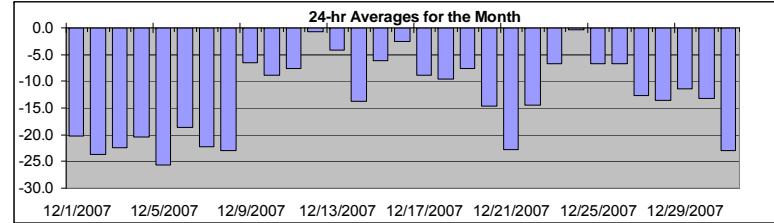
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	2.5 °C	12-Dec	1:00 2:00
Maximum 24-hr Value:	-0.4 °C	24-Dec	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.1	-0.5	-6.2	-11.9	-20.5	-25.8	-28.6	-12.9 °C	-11.9 °C

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	-16	-17	-18	-19	-21	-21	-21	-21	-21	-20	-19	-17	-18	-17	-18	-18	-19	-19	-20	-21	-24	-26	-27	-28	-28	-20.3	-16.2	
2-Dec-07	-29	-29	-29	-29	-27	-24	-22	-22	-23	-23	-23	-22	-20	-21	-22	-22	-23	-23	-23	-23	-23	-23	-23	-23	-23	-23	-23.6	-20.2
3-Dec-07	-23	-23	-23	-23	-23	-23	-23	-23	-23	-23	-23	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22.5	-21.6	
4-Dec-07	-21	-21	-21	-21	-21	-21	-21	-21	-21	-21	-20	-19	-18	-19	-19	-19	-19	-20	-20	-21	-21	-21	-22	-22	-22	-20.4	-17.9	
5-Dec-07	-22	-22	-22	-22	-23	-24	-26	-26	-27	-29	-30	-26	-23	-23	-24	-23	-25	-27	-28	-28	-28	-28	-29	-28	-28	-25.6	-22.1	
6-Dec-07	-28	-26	-25	-23	-22	-19	-19	-19	-19	-18	-15	-13	-12	-11	-11	-11	-14	-17	-19	-20	-22	-21	-23	-24	-24	-18.7	-10.8	
7-Dec-07	-24	-24	-24	-24	-24	-24	-25	-25	-25	-25	-21	-17	-13	-13	-15	-16	-20	-21	-23	-26	-27	-26	-26	-27	-27	-22.2	-12.7	
8-Dec-07	-28	-28	-27	-27	-27	-28	-28	-28	-29	-27	-24	-23	-19	-17	-14	-15	-19	-20	-20	-21	-21	-20	-20	-21	-21	-23.0	-13.9	
9-Dec-07	-22	-20	-19	-16	-14	-12	-9	-3	-3	-4	-5	-3	-2	0	-1	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-6.6	-0.2	
10-Dec-07	-4	-4	-5	-4	-4	-6	-7	-7	-7	-8	-6	-5	-5	-4	-6	-9	-13	-14	-14	-15	-17	-16	-16	-16	-16	-8.8	-3.5	
11-Dec-07	-15	-16	-14	-13	-11	-10	-10	-9	-9	-8	-6	-5	-4	-3	-2	-3	-4	-5	-6	-6	-6	-6	-5	-4	-4	-7.5	-2.3	
12-Dec-07	-1	2	2	1	1	0	0	0	0	0	0	0	-1	0	1	0	-2	-3	-2	-3	-4	-4	-3	-3	-3	-0.8	2.5	
13-Dec-07	-3	-4	-6	-5	-4	-5	-6	-5	-7	-7	-6	-4	-2	1	-2	-2	-2	-1	0	-3	-5	-6	-8	-10	-10	-4.2	0.7	
14-Dec-07	-11	-12	-14	-14	-14	-15	-15	-16	-15	-16	-15	-15	-12	-12	-10	-10	-13	-15	-16	-16	-16	-17	-17	-13	-7	-13.7	-6.7	
15-Dec-07	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-5	-5	-4	-5	-5	-5	-6	-6	-7	-8	-8	-8	-6	-6	-6.2	-4.2	
16-Dec-07	-4	-2	-2	-1	-1	-1	-2	-2	-4	-5	-3	0	0	0	-1	-3	-3	-6	-3	-3	-4	-4	-4	-4	-4	-2.5	0.4	
17-Dec-07	-7	-6	-7	-8	-9	-9	-10	-11	-11	-11	-11	-12	-10	-8	-8	-10	-10	-8	-6	-5	-7	-8	-10	-11	-11	-8.8	-5.4	
18-Dec-07	-10	-12	-13	-12	-11	-10	-10	-10	-9	-9	-9	-9	-8	-7	-7	-6	-6	-7	-9	-9	-10	-10	-10	-11	-12	-9.5	-6.4	
19-Dec-07	-12	-11	-11	-12	-12	-12	-12	-11	-10	-9	-8	-6	-4	-4	-5	-6	-5	-5	-5	-5	-5	-5	-5	-6	-6	-7.6	-3.8	
20-Dec-07	-7	-9	-9	-10	-10	-11	-11	-11	-10	-15	-17	-18	-17	-16	-17	-17	-17	-17	-17	-17	-17	-18	-18	-20	-21	-14.6	-7.3	
21-Dec-07	-22	-21	-22	-23	-24	-25	-25	-26	-25	-25	-22	-20	-18	-20	-21	-21	-21	-23	-23	-24	-24	-25	-24	-23	-23	-22.8	-18.2	
22-Dec-07	-23	-22	-21	-21	-19	-18	-18	-17	-16	-15	-13	-13	-11	-11	-10	-9	-10	-11	-12	-12	-11	-12	-12	-12	-12	-14.5	-9.4	
23-Dec-07	-12	-12	-12	-9	-12	-6	-6	-5	-7	-5	-6	-4	-3	-2	-2	-2	-3	-5	-7	-8	-9	-10	-7	-7	-7	-6.7	-2.2	
24-Dec-07	-7	-5	-5	-2	1	1	1	0	0	-1	1	1	1	2	2	1	0	0	0	0	0	0	0	-1	-1	-0.4	2.4	
25-Dec-07	0	-1	-2	-3	-4	-5	-6	-6	-8	-10	-11	-10	-8	-7	-8	-8	-8	-6	-6	-8	-10	-10	-9	-8	-8	-6.7	0.0	
26-Dec-07	-8	-7	-7	-7	-7	-6	-6	-6	-6	-6	-5	-3	-3	-2	-2	-2	-5	-6	-7	-9	-11	-12	-13	-13	-13	-6.7	-2.3	
27-Dec-07	-12	-11	-12	-12	-14	-14	-14	-15	-16	-16	-13	-11	-12	-10	-9	-9	-11	-11	-10	-11	-14	-15	-15	-16	-16	-12.7	-9.1	
28-Dec-07	-17	-16	-16	-15	-15	-15	-14	-14	-14	-14	-13	-12	-11	-10	-11	-12	-12	-13	-13	-13	-13	-13	-13	-13	-13	-13.5	-10.3	
29-Dec-07	-13	-13	-12	-12	-12	-12	-13	-12	-12	-12	-11	-11	-10	-9	-10	-10	-10	-11	-11	-11	-11	-12	-11	-12	-12	-11.4	-9.1	
30-Dec-07	-12	-12	-12	-12	-12	-13	-12	-12	-12	-12	-12	-12	-11	-11	-11	-11	-12	-12	-12	-14	-15	-20	-22	-23	-23	-13.2	-10.6	
31-Dec-07	-23	-24	-24	-25	-24	-23	-24	-25	-24	-25	-24	-20	-18	-17	-18	-19	-22	-23	-23	-26	-26	-25	-24	-24	-24	-23.0	-17.2	
Hourly Avg	-14.3	-14.0	-14.2	-13.9	-13.8	-13.5	-13.6	-13.4	-13.5	-13.7	-12.7	-11.3	-10.2	-9.6	-9.8	-10.5	-11.6	-12.3	-12.5	-13.3	-14.0	-14.4	-14.4	-14.5				
Hourly Max	0.0	2.5	2.0	1.2	0.9	0.7	0.7	0.3	0.2	-0.2	0.7	1.3	1.5	1.8	2.4	1.4	0.5	-0.5	-0.2	-0.2	-0.3	-0.3	-0.2	-0.7				

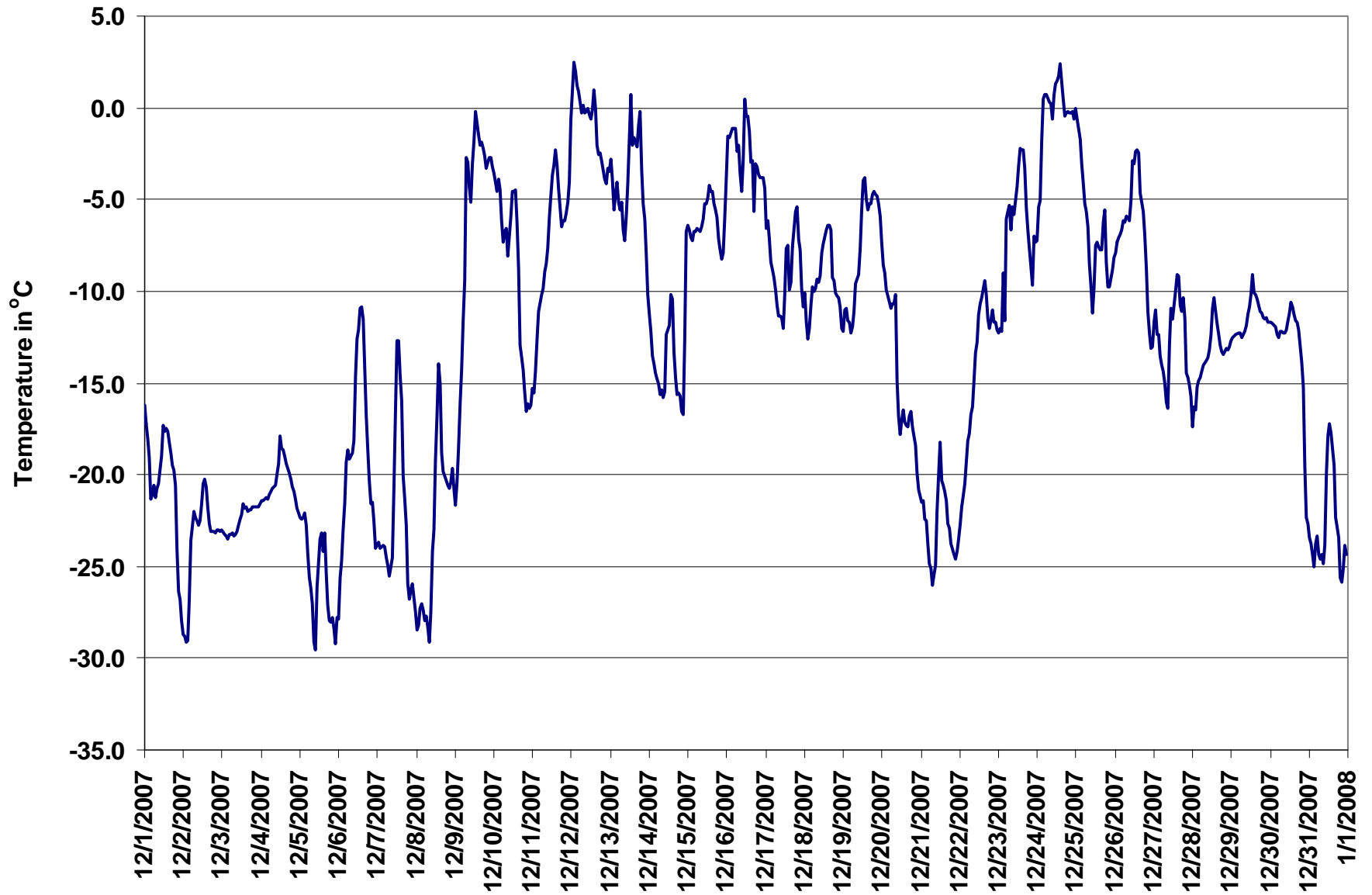


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

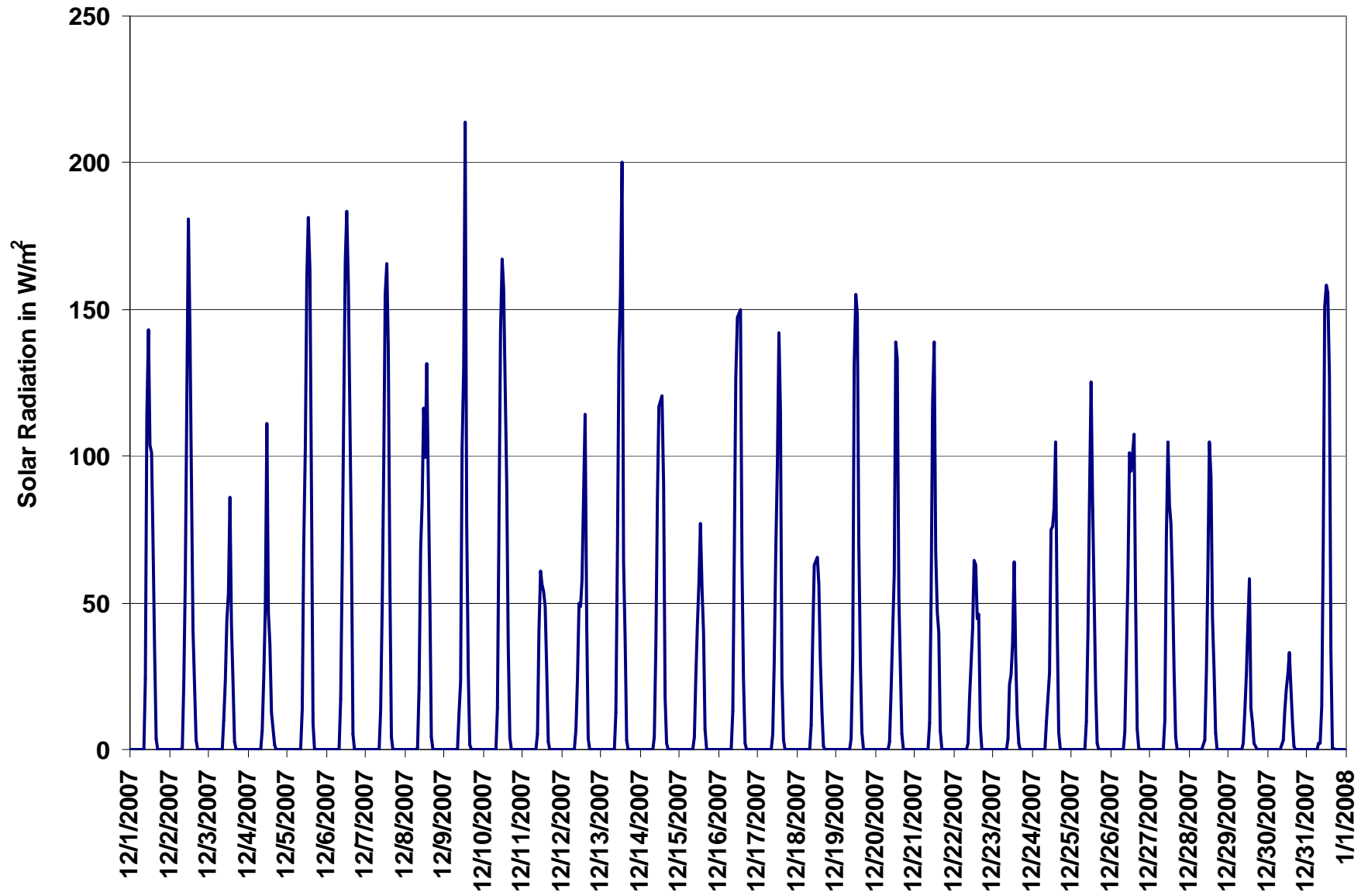


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

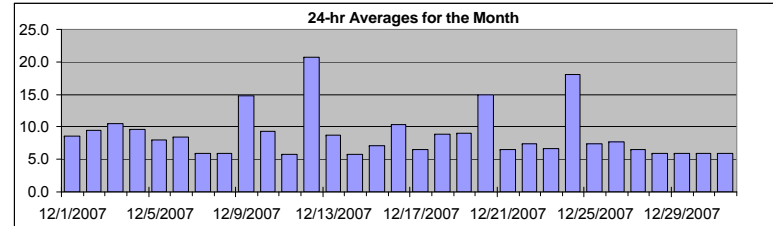
HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	33.2	km/hr	20-Dec	9:00 10:00
Maximum 24-hr Value:	20.7	km/hr	12-Dec	



Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	28.6	19.5	9.5	7.0	6.0	5.0	4.5	8.8 km/hr

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	12	11	10	7	8	8	9	8	9	11	8	8	11	11	10	9	8	8	6	6	7	7	7	7	8.6	11.7	
2-Dec-07	7	7	7	7	6	6	10	11	10	11	10	11	10	12	10	11	11	11	10	12	11	10	10	8	9.4	11.8	
3-Dec-07	9	10	9	9	9	9	9	11	10	10	13	12	12	14	13	12	12	11	11	10	9	9	8	8	10.4	14.4	
4-Dec-07	8	8	8	9	8	6	7	7	7	8	8	8	8	8	7	8	8	11	13	13	15	16	17	16	9.7	16.9	
5-Dec-07	16	15	12	13	9	7	6	5	6	7	8	6	7	7	6	6	6	7	6	7	7	7	9	7	8.0	15.8	
6-Dec-07	7	8	7	7	8	9	9	8	8	9	10	11	11	11	11	8	7	6	7	7	8	6	7	7	8.4	11.3	
7-Dec-07	6	7	6	6	5	5	5	5	6	6	5	4	4	5	6	6	8	7	7	7	6	6	7	7	5.9	7.6	
8-Dec-07	7	6	5	6	6	6	6	6	7	7	7	6	5	4	5	6	8	5	7	6	6	5	4	6	5.9	7.6	
9-Dec-07	6	6	5	4	7	6	8	22	18	12	11	9	13	20	22	18	20	18	15	21	22	26	24	22	14.8	26.3	
10-Dec-07	19	17	13	17	13	11	8	9	11	8	8	9	9	8	7	6	7	7	7	6	6	6	6	6	9.3	18.8	
11-Dec-07	6	6	5	5	4	5	7	5	6	6	7	6	6	7	6	6	5	6	7	5	5	6	6	7	5.8	7.3	
12-Dec-07	15	23	23	21	23	31	29	29	32	31	21	25	22	19	14	17	13	15	18	18	14	15	15	14	20.7	31.6	
13-Dec-07	16	11	7	12	10	7	10	8	6	5	5	5	6	7	9	10	11	14	18	8	7	7	8	6	8.8	17.7	
14-Dec-07	5	6	5	5	7	5	5	5	6	6	6	6	6	6	6	7	6	6	5	6	6	6	6	9	5.8	8.5	
15-Dec-07	9	8	5	5	8	7	8	8	6	7	6	7	7	7	8	7	8	9	8	7	5	6	7	7	7.1	9.1	
16-Dec-07	9	17	15	14	15	13	11	11	9	9	7	6	8	10	10	7	8	7	11	12	12	11	10	9	10.4	16.7	
17-Dec-07	7	5	6	7	6	6	7	5	5	5	5	7	6	6	8	10	7	7	9	7	6	7	5	8	6.5	9.8	
18-Dec-07	8	7	7	8	9	10	10	12	13	15	15	11	8	7	7	7	6	5	7	7	8	9	7	6	8.8	15.1	
19-Dec-07	8	7	6	6	5	5	5	6	6	7	8	10	12	13	12	13	11	12	13	13	11	10	9	6	9.0	13.2	
20-Dec-07	7	8	6	6	7	5	6	8	22	33	30	30	28	24	21	18	17	14	14	14	12	11	9	8	15.0	33.2	
21-Dec-07	5	5	6	6	6	8	7	7	6	6	6	7	7	7	6	7	7	6	6	7	7	7	6	7	6.4	7.7	
22-Dec-07	7	5	6	6	7	6	7	6	6	5	9	11	11	9	8	7	8	10	7	6	6	8	8	7	7.4	11.3	
23-Dec-07	8	6	7	6	7	7	8	7	6	7	7	6	6	6	6	6	8	6	6	6	6	7	7	7	6.7	7.9	
24-Dec-07	8	7	7	18	25	27	26	23	22	15	19	19	22	21	20	18	17	16	21	21	18	18	15	12	18.1	27.3	
25-Dec-07	13	9	9	10	8	7	7	5	5	5	6	6	6	6	6	7	6	9	8	7	7	7	8	8	7.3	13.3	
26-Dec-07	10	7	6	7	7	6	6	7	7	6	6	8	11	12	8	9	11	9	8	7	7	7	6	6	7.7	12.5	
27-Dec-07	7	7	6	6	6	6	6	5	5	6	5	7	6	6	7	6	7	6	8	8	8	8	6	5	6.4	8.2	
28-Dec-07	5	7	6	7	7	6	5	5	5	6	6	5	5	5	5	7	6	8	7	6	7	7	6	5	5.9	7.5	
29-Dec-07	5	5	5	5	5	5	5	5	4	4	5	6	6	6	6	6	6	8	8	8	8	8	6	6	5.9	8.5	
30-Dec-07	5	5	6	5	7	5	6	5	6	6	7	7	6	5	6	6	5	6	7	6	5	6	7	7	5.9	7.3	
31-Dec-07	7	7	6	6	6	6	5	5	5	6	5	5	5	5	5	6	6	5	6	6	6	6	6	6	5.9	7.3	
1-hr Average	8.6	8.5	7.6	8.3	8.5	8.3	8.4	8.8	9.1	9.2	9.0	9.2	9.3	9.6	9.1	8.9	8.9	8.9	9.4	9.0	8.7	8.9	8.4	8.1			
Hourly Max	18.8	23.2	23.5	21.3	24.5	31.3	28.7	28.8	31.6	33.2	30.0	29.6	28.4	24.4	22.4	18.2	20.1	18.1	21.0	21.1	22.2	26.3	24.3	21.9			

PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

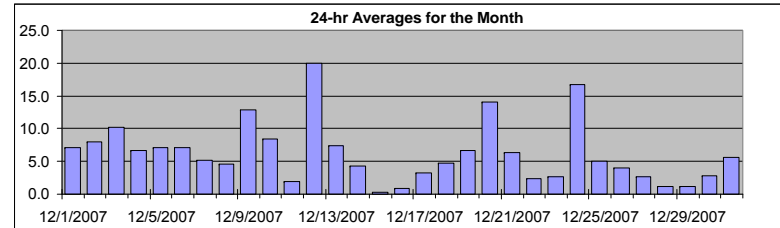
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	33.1	km/hr	20-Dec	9:00 10:00
Maximum 24-hr Value:	19.9	km/hr	12-Dec	



Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	28.5	19.3	9.2	6.4	5.0	2.6	1.1	13.5 km/hr

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	12	11	10	6	7	8	9	8	8	11	8	8	11	10	10	9	8	8	6	6	6	7	6	7.1	11.6		
2-Dec-07	7	6	7	7	4	5	10	10	10	11	10	11	10	11	9	10	10	10	9	11	10	9	8	8.0	11.5		
3-Dec-07	8	10	9	8	8	9	9	11	10	10	13	12	12	14	13	11	12	11	11	10	9	9	7	7	10.2	14.2	
4-Dec-07	7	8	7	9	8	5	7	6	6	8	7	8	7	7	7	7	7	11	13	13	15	16	17	16	6.7	16.7	
5-Dec-07	16	15	12	13	9	7	3	4	5	7	7	6	7	7	5	6	7	6	7	7	7	7	6	7.2	15.7		
6-Dec-07	7	8	7	6	7	9	9	8	8	9	10	10	11	11	11	8	7	5	6	7	7	6	7	6	7.2	11.2	
7-Dec-07	6	6	5	6	5	4	5	5	5	5	5	4	1	4	6	3	7	5	6	7	6	6	7	6	5.2	7.0	
8-Dec-07	7	6	2	6	6	5	6	6	6	7	7	6	4	2	4	6	7	4	6	5	5	2	4	4	4.6	7.0	
9-Dec-07	5	4	3	3	6	5	3	22	18	12	10	8	13	19	22	18	20	18	15	21	22	26	24	22	12.9	26.3	
10-Dec-07	19	17	13	17	13	11	8	7	11	8	8	8	9	7	7	6	6	7	6	6	5	6	4	8.5	18.6		
11-Dec-07	6	5	3	2	1	3	6	4	6	5	6	5	5	6	2	3	1	5	7	1	3	3	5	4	2.0	6.6	
12-Dec-07	15	23	23	21	22	31	29	29	31	31	21	25	22	19	14	17	13	15	18	18	14	15	15	14	19.9	31.5	
13-Dec-07	16	10	6	12	9	6	8	7	5	4	0	3	5	7	9	9	10	14	17	7	7	6	7	5	7.4	17.2	
14-Dec-07	4	5	4	3	6	3	3	5	4	6	5	5	6	6	6	6	6	5	5	5	6	6	3	8	4.2	8.4	
15-Dec-07	9	7	1	4	7	7	8	8	6	4	3	7	6	7	8	6	8	8	6	2	1	4	4	2	0.2	9.0	
16-Dec-07	8	17	15	14	15	13	10	11	8	6	6	4	8	10	9	6	7	4	11	12	12	11	9	9	0.9	16.6	
17-Dec-07	5	4	6	6	6	4	6	1	4	4	3	6	5	5	7	9	5	5	9	5	6	6	4	8	3.3	9.0	
18-Dec-07	8	6	4	8	9	10	10	12	13	15	15	11	7	7	7	7	5	3	5	7	8	8	7	4	4.8	15.0	
19-Dec-07	7	7	3	5	1	2	2	3	4	7	7	10	12	13	11	13	11	12	13	13	11	10	9	4	6.7	13.1	
20-Dec-07	3	7	4	2	1	3	3	8	21	33	30	29	28	24	21	18	17	14	14	14	12	11	8	8	14.1	33.1	
21-Dec-07	2	3	5	6	6	8	7	6	5	5	5	6	6	7	6	7	7	6	5	7	7	7	6	7	6.3	7.5	
22-Dec-07	6	4	3	5	7	5	4	3	6	3	8	4	10	9	7	5	6	5	5	3	3	6	7	5	2.4	10.4	
23-Dec-07	4	5	3	4	5	5	6	2	6	3	6	7	1	3	5	6	2	4	2	4	2	2	6	5	2.6	6.5	
24-Dec-07	7	5	5	17	24	27	26	23	22	15	19	19	22	21	20	17	17	16	21	21	18	18	14	12	16.7	27.2	
25-Dec-07	13	9	8	9	7	7	6	4	4	2	5	6	6	5	6	6	3	3	4	6	6	6	8	8	5.0	13.2	
26-Dec-07	10	3	5	7	7	5	6	7	6	6	6	8	11	12	8	9	11	9	5	7	7	7	5	5	4.0	11.6	
27-Dec-07	7	6	6	6	1	5	5	5	4	5	3	4	5	4	7	5	5	4	8	4	7	8	5	2	2.6	8.1	
28-Dec-07	3	5	4	6	6	5	4	4	5	6	5	5	0	4	4	6	6	7	7	6	6	6	5	5	1.1	7.4	
29-Dec-07	3	4	5	4	4	4	5	4	1	4	2	6	5	5	5	3	5	8	8	8	8	7	6	6	1.2	8.3	
30-Dec-07	5	4	5	5	7	3	5	5	5	6	7	6	6	5	3	5	5	6	7	6	3	6	7	7	2.8	7.1	
31-Dec-07	7	7	6	6	6	6	5	5	4	5	5	5	5	5	5	6	6	5	4	6	6	6	6	6	5.7	7.0	
1-hr Vector	4.5	4.5	4.5	4.3	4.5	3.7	3.4	3.8	3.6	3.0	2.9	3.5	4.5	3.8	4.3	3.7	3.2	3.3	3.0	4.0	3.6	3.4	3.6	3.7			
Hourly Max	18.6	23.2	23.4	21.2	24.5	31.2	28.6	28.7	31.5	33.1	29.8	29.4	28.3	24.2	22.3	18.1	19.7	17.6	21.0	21.0	22.0	26.3	24.2	21.8			

PASZA - Henry Pirker Wind Direction Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	350.2	326.1	297.9	262.1	115.2	31.2	14.0	288 deg

Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	WD Sector	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	329	358	353	352	282	261	271	287	249	244	255	249	283	280	277	269	227	247	283	310	294	291	291	292	283	283	WNW
2-Dec-07	298	293	299	305	328	58	49	48	49	50	39	42	38	23	27	17	31	31	36	31	32	36	29	29	29	26	NNE
3-Dec-07	24	32	43	34	27	29	44	44	45	50	49	47	46	58	52	39	34	24	22	19	19	15	19	11	36	NE	
4-Dec-07	10	353	346	336	331	21	62	35	42	48	30	26	16	43	53	46	342	306	304	298	295	294	289	283	341	NNW	
5-Dec-07	278	281	277	273	289	306	158	219	307	299	282	269	298	278	268	286	323	311	307	303	319	315	299	318	289	WNW	
6-Dec-07	294	304	315	328	270	251	245	246	250	240	238	242	242	234	236	234	251	302	305	302	292	305	307	303	267	W	
7-Dec-07	314	301	291	275	312	308	293	300	307	288	290	307	208	189	290	272	284	344	326	301	304	334	324	317	300	WNW	
8-Dec-07	300	306	300	336	314	314	342	318	310	294	305	270	319	205	285	293	299	336	340	279	312	134	96	294	306	NW	
9-Dec-07	310	293	327	101	146	115	225	249	261	286	291	290	285	269	262	261	267	278	253	258	261	277	292	300	271	W	
10-Dec-07	290	282	286	285	279	260	244	269	231	234	241	279	288	284	332	296	293	292	336	297	305	282	295	329	281	WNW	
11-Dec-07	309	293	297	247	298	173	148	121	145	126	116	123	115	96	324	324	26	155	156	200	199	113	134	210	151	SSE	
12-Dec-07	235	245	248	244	255	267	270	275	265	263	256	268	272	272	255	241	236	237	238	236	224	223	228	234	253	WSW	
13-Dec-07	239	247	321	248	260	319	280	292	265	148	172	250	284	272	264	275	270	246	246	319	273	309	314	309	268	W	
14-Dec-07	251	272	305	241	307	351	327	320	274	316	289	290	278	308	295	287	308	279	324	284	300	304	104	89	299	WNW	
15-Dec-07	90	101	41	71	84	90	89	85	77	57	3	300	302	277	284	234	211	215	224	231	313	115	312	259	73	ENE	
16-Dec-07	254	231	222	226	223	237	343	262	215	318	318	98	98	87	70	48	80	40	79	82	75	68	75	57	115	ESE	
17-Dec-07	323	6	295	292	324	307	303	222	274	349	351	278	298	283	283	292	260	230	248	208	143	134	149	110	280	W	
18-Dec-07	95	88	121	92	105	104	106	103	98	95	98	102	100	83	93	78	59	301	298	305	310	294	303	251	89	E	
19-Dec-07	207	210	150	145	30	266	288	120	134	124	83	101	92	82	83	80	82	80	80	83	82	87	84	102	96	E	
20-Dec-07	285	292	275	198	255	1	313	300	304	299	292	288	280	285	286	277	274	254	248	262	281	304	290	286	284	WNW	
21-Dec-07	298	317	293	312	297	289	307	293	298	328	304	290	289	293	305	289	301	284	316	300	308	298	319	288	300	WNW	
22-Dec-07	298	271	279	317	293	301	332	252	301	211	104	90	323	295	300	245	203	254	263	253	97	120	106	120	275	W	
23-Dec-07	105	101	158	165	135	210	277	258	136	130	83	73	15	32	18	116	107	220	9	154	41	247	94	114	113	ESE	
24-Dec-07	114	22	217	239	243	240	244	242	250	255	259	249	249	256	257	254	243	241	242	243	246	244	256	297	248	WSW	
25-Dec-07	286	294	303	282	272	326	317	293	91	67	272	319	301	272	317	298	340	136	70	267	314	321	317	318	306	NW	
26-Dec-07	312	293	244	152	144	76	117	117	137	156	229	227	237	253	273	239	236	242	263	315	279	305	301	293	246	WSW	
27-Dec-07	260	269	272	292	288	103	171	188	328	303	195	295	295	95	64	63	323	14	61	295	298	310	333	298	308	NW	
28-Dec-07	273	91	226	292	311	261	264	302	292	276	231	278	352	21	64	73	90	108	87	84	76	74	68	62	27	NNE	
29-Dec-07	110	287	305	286	294	286	300	318	218	178	225	287	272	282	325	14	100	81	91	90	76	72	46	49	7	N	
30-Dec-07	48	23	350	34	12	357	34	39	22	41	77	102	105	83	157	158	156	104	114	147	71	305	306	311	57	ENE	
31-Dec-07	298	314	306	295	300	312	299	294	341	305	299	308	282	284	293	318	312	333	290	294	297	313	336	283	304	NW	
Hourly Avg	291	294	285	274	280	282	286	275	274	289	286	287	292	290	297	287	281	275	287	280	302	303	316	307			

PASZA - Henry Pirker Standard Deviation of Wind Direction Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	87.9	72.5	36.0	20.2	11.9	5.3	4.1

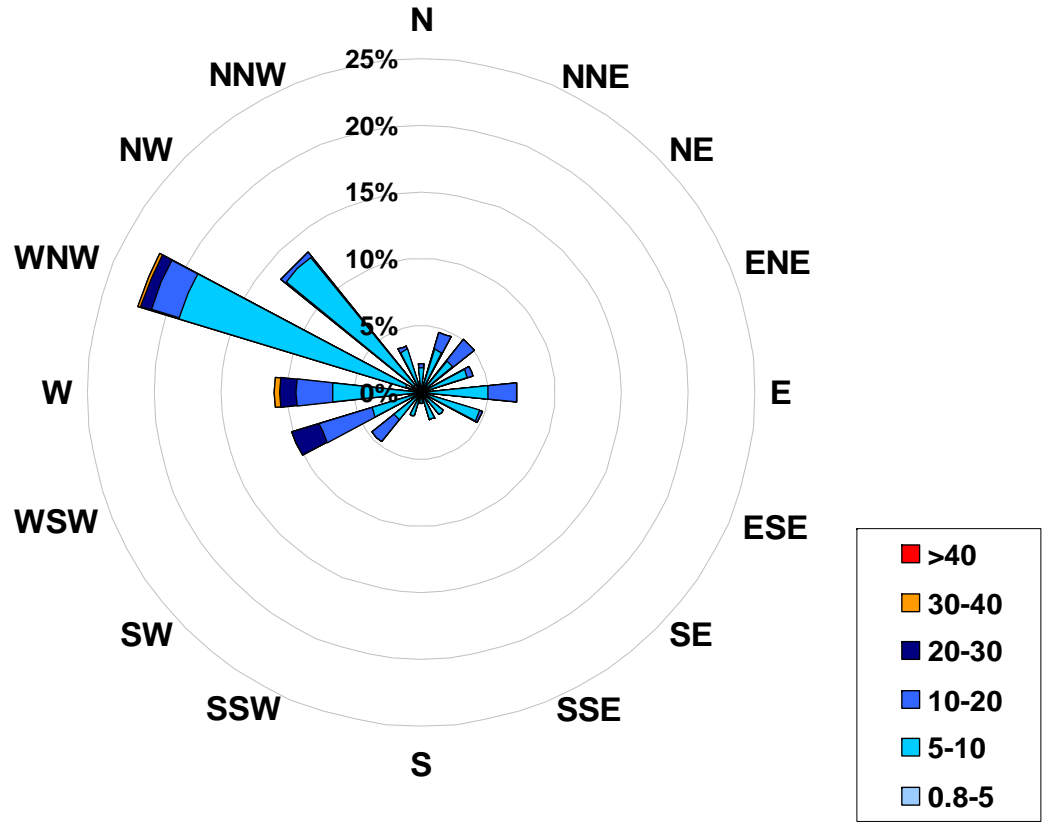
Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	9	10	13	31	22	12	9	18	29	8	23	20	11	9	8	17	17	19	23	10	17	15	15	15	15	31.4	
2-Dec-07	17	20	12	14	71	36	11	13	10	12	12	15	19	16	17	17	16	17	17	12	12	12	15	22	20	70.7	
3-Dec-07	20	20	15	18	21	18	14	21	12	22	10	11	10	12	10	14	13	18	14	19	17	18	23	22	22	23.0	
4-Dec-07	24	21	23	10	14	35	22	30	27	15	22	21	29	23	21	31	30	11	5	5	5	6	9	5	5	34.7	
5-Dec-07	5	5	9	7	8	15	72	46	60	11	11	19	16	23	11	25	18	15	26	9	17	20	36	25	25	71.8	
6-Dec-07	16	12	12	31	46	8	8	12	7	8	7	8	8	12	9	14	26	27	18	10	27	19	19	31	31	46.4	
7-Dec-07	25	14	25	15	28	31	11	14	13	14	19	30	86	37	20	64	33	61	17	15	18	26	12	21	21	86.4	
8-Dec-07	12	22	79	16	14	25	21	8	24	20	27	20	51	66	30	20	25	58	20	38	29	80	37	70	70	79.6	
9-Dec-07	38	38	61	55	26	32	87	6	7	19	16	22	10	14	5	6	11	15	7	5	7	4	7	4	4	87.2	
10-Dec-07	9	7	7	6	7	12	22	36	10	15	11	18	11	17	15	16	22	17	19	29	20	42	11	66	66	66.0	
11-Dec-07	20	30	65	76	92	54	20	47	20	41	57	27	42	42	87	76	98	31	15	78	64	77	36	70	70	98.0	
12-Dec-07	16	5	5	5	10	6	5	4	5	6	7	9	4	5	10	4	5	5	5	4	6	7	5	7	7	15.8	
13-Dec-07	6	28	32	15	29	32	40	25	41	33	90	68	33	20	9	28	19	11	15	33	11	23	12	35	35	90.5	
14-Dec-07	25	22	44	57	27	70	68	29	38	14	32	23	12	11	16	18	13	24	15	21	8	12	71	8	8	70.7	
15-Dec-07	10	16	88	52	16	27	16	17	19	71	62	20	39	16	10	30	18	18	43	85	91	48	59	82	82	91.1	
16-Dec-07	33	6	6	7	8	22	26	16	28	44	30	62	17	13	11	23	32	65	8	7	6	10	9	17	17	65.1	
17-Dec-07	53	50	20	23	17	59	21	88	52	46	70	24	28	20	16	26	47	58	21	43	14	14	46	14	14	88.0	
18-Dec-07	34	43	53	15	8	8	9	5	5	6	5	9	28	31	22	16	37	79	67	14	11	20	14	50	50	78.6	
19-Dec-07	21	25	73	43	84	61	73	69	54	14	23	13	7	7	7	4	5	4	7	7	7	8	10	57	57	84.2	
20-Dec-07	83	37	60	78	84	63	57	21	9	5	7	6	4	6	6	4	5	8	10	12	12	12	20	22	22	84.2	
21-Dec-07	78	67	24	21	16	12	11	15	31	30	24	20	14	12	20	14	11	13	29	18	12	20	26	20	20	78.4	
22-Dec-07	23	53	63	34	21	57	51	68	35	65	41	81	20	14	42	50	50	61	54	62	65	40	33	48	48	80.7	
23-Dec-07	57	32	75	65	49	49	41	90	25	68	17	26	91	71	44	27	86	49	77	61	79	81	28	39	39	90.9	
24-Dec-07	29	47	57	11	4	4	5	7	11	9	11	6	5	6	5	7	5	6	4	4	5	5	19	18	18	57.0	
25-Dec-07	9	13	29	19	22	19	35	37	41	72	47	42	18	35	15	39	63	70	81	22	24	34	30	7	7	80.6	
26-Dec-07	9	63	25	17	17	40	20	16	21	9	26	11	8	24	19	7	7	9	61	8	15	15	41	37	37	63.2	
27-Dec-07	12	14	21	18	88	28	37	27	52	34	58	69	22	75	28	46	41	48	12	65	18	5	53	72	72	87.8	
28-Dec-07	70	43	42	20	29	25	40	42	17	15	31	22	91	37	40	19	24	12	16	24	14	16	24	27	27	90.7	
29-Dec-07	60	29	24	48	50	23	27	31	79	33	69	11	39	30	44	66	31	13	14	13	12	14	19	23	23	78.8	
30-Dec-07	29	51	29	28	13	71	28	29	23	23	14	25	20	36	71	24	16	20	12	11	49	15	11	14	14	71.3	
31-Dec-07	20	9	12	13	16	17	22	19	34	24	17	21	23	16	22	16	14	21	47	14	19	20	20	15	15	47.4	
Hourly Max	83	67	88	78	92	71	87	90	79	72	90	81	91	75	87	76	98	79	81	85	91	81	71	82	82	82	

1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for December 2007



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	37
5	to	10	536
10	to	20	135
20	to	30	31
30	to	40	5
	>	40	0
Total Non-Zero Values			744

PASZA – Evergreen Park Station

Monthly Summary Tables, Graphs and Roses

PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

HOURLY AVERAGE TABLE

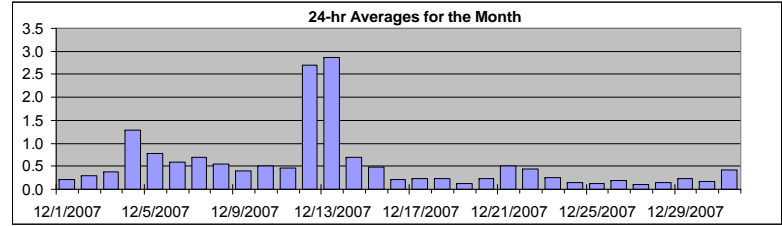
Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	8.9 ppb 12-Dec 23:00 0:00
Maximum 24-hr Average:	2.9 ppb 13-Dec



AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	6.9	1.3	0.6	0.3	0.2	0.1	0.0	0.5 ppb	0.3 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00	
1-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.7
2-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	1	1	1	0	0	0	0	0	0	0	0	0.3	1.0
3-Dec-07	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	0.4	1.3	
4-Dec-07	2	2	1	1	1	0	0	1	1	1	A	1	2	2	1	1	1	1	2	2	2	2	2	1	1	1.3	2.2	
5-Dec-07	1	1	1	1	1	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
6-Dec-07	1	1	1	1	1	1	0	0	A	1	1	1	1	1	1	1	1	0	1	0	1	1	0	0	0	0.6	0.9	
7-Dec-07	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	0.7	1.2	
8-Dec-07	1	1	0	0	0	0	A	1	1	1	0	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0.6	0.8	
9-Dec-07	1	1	1	1	1	1	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
10-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	0.5	0.9	
11-Dec-07	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0.5	0.7	
12-Dec-07	1	3	A	4	1	0	0	0	0	0	0	0	0	0	0	0	1	7	8	2	7	5	4	9	9	2.7	8.9	
13-Dec-07	5	A	2	7	8	7	8	5	1	1	1	1	1	3	2	4	3	1	1	3	2	1	0	0	0	2.9	8.4	
14-Dec-07	A	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	0.7	1.4	
15-Dec-07	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.5	1.4	
16-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
17-Dec-07	0	0	0	A	0	0	0	1	1	1	0	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0.2	0.6	
18-Dec-07	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0.2	1.3	
19-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
20-Dec-07	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
21-Dec-07	0	0	A	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0.5	1.1	
22-Dec-07	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0	
23-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.5	
24-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.3	
25-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3	
26-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3	
27-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2	
28-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.2	
29-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	0	0.2	0.6	
30-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.3	
31-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	0	1	0.4	0.7	
Hourly Avg	0.6	0.5	0.4	0.7	0.6	0.5	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.7	0.5	0.8	0.6	0.5	0.7	0.7			
Hourly Max	5.0	3.5	1.7	7.0	8.3	6.7	8.4	4.8	1.4	1.3	0.9	1.1	1.9	2.6	1.9	4.2	7.1	7.5	1.7	7.0	5.1	4.0	8.8	8.9				

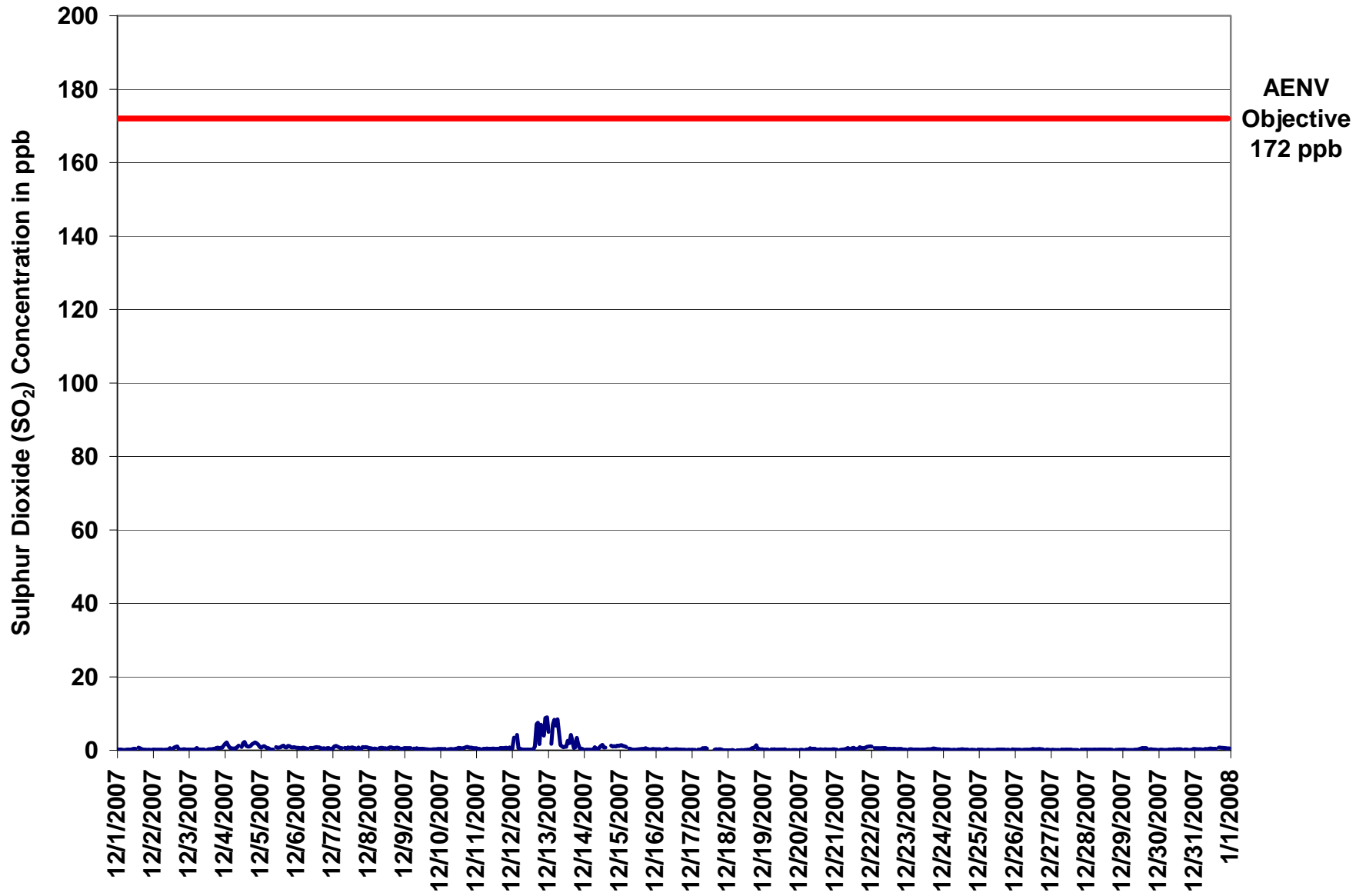


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park
 Station Owner: PASZA

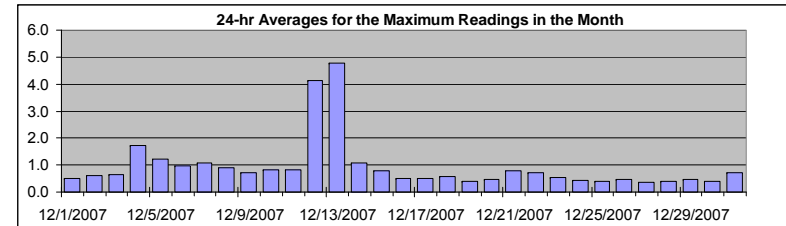
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	10.8	ppb	13-Dec	6:00 7:00
Maximum 24-hr Value:	4.8	ppb	13-Dec	



AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	10.2	2.1	0.9	0.6	0.4	0.3	0.3	0.9 ppb	0.6 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Dec-07	0	0	0	0	0	0	0	1	0	0	1	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0.5	1.1
2-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	A	1	2	2	2	1	0	0	1	0	0	0	0	0.6	1.6
3-Dec-07	0	0	0	0	1	1	0	0	0	0	0	A	0	0	1	0	1	1	1	1	1	1	1	2	0.7	2.0	
4-Dec-07	2	3	2	1	1	1	1	1	1	2	A	1	3	3	2	1	1	1	2	2	3	2	2	1	1.7	2.9	
5-Dec-07	1	1	2	1	1	1	1	1	1	A	1	1	1	1	2	2	1	1	2	2	1	1	2	1	1.2	2.1	
6-Dec-07	1	1	1	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6	
7-Dec-07	1	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1.1	1.6	
8-Dec-07	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5	
9-Dec-07	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	1.1	
10-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
11-Dec-07	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	1.5	
12-Dec-07	1	8	A	7	1	1	1	1	1	0	0	0	0	0	4	9	11	4	11	8	6	10	10	4.1	10.5		
13-Dec-07	10	A	3	9	11	10	11	7	3	2	2	2	2	4	5	9	9	1	2	5	3	1	1	1	4.8	10.8	
14-Dec-07	A	1	0	0	0	0	1	1	1	1	2	2	2	1	1	C	C	C	2	1	1	1	2	1	1.1	1.8	
15-Dec-07	2	2	2	1	1	A	1	1	0	0	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0.8	1.9	
16-Dec-07	1	1	1	0	A	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.5	1.2	
17-Dec-07	0	0	0	A	1	0	0	1	1	1	1	P	P	P	P	0	0	0	0	0	0	0	0	0	0.5	1.0	
18-Dec-07	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	2	2	1	1	1	0	0.6	2.1		
19-Dec-07	0	0	0	0	A	1	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.4	0.6	
20-Dec-07	0	0	0	A	0	0	1	1	1	1	1	0	0	1	0	0	1	0	0	1	0	1	0	0	0.5	0.7	
21-Dec-07	0	0	A	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
22-Dec-07	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0.7	1.4	
23-Dec-07	A	1	1	1	0	1	1	0	1	0	0	0	1	1	0	1	1	1	1	1	1	1	1	A	0.6	1.1	
24-Dec-07	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0.4	0.6	
25-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	1	0	0.4	0.6	
26-Dec-07	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	A	0	0	0	0.4	0.6	
27-Dec-07	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	A	0	0	0	1	0.4	0.5	
28-Dec-07	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	A	0	0	0	0	0	0.4	0.6	
29-Dec-07	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	1	1	0	0	1	0	0.5	0.9	
30-Dec-07	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	0	0	0	0	0	0	1	0.4	0.6	
31-Dec-07	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	1.1	
Hourly Avg	1.0	0.9	0.7	1.1	0.9	0.9	0.9	0.8	0.7	0.6	0.7	0.7	0.8	0.9	0.8	1.1	1.3	1.1	1.0	1.3	1.1	0.9	1.1	1.0			
Hourly Max	10.4	8.1	2.7	9.0	10.8	10.5	10.8	6.9	2.9	2.3	1.6	1.6	2.6	4.2	4.5	9.1	9.3	10.5	4.5	10.5	8.4	5.5	10.2	10.4			

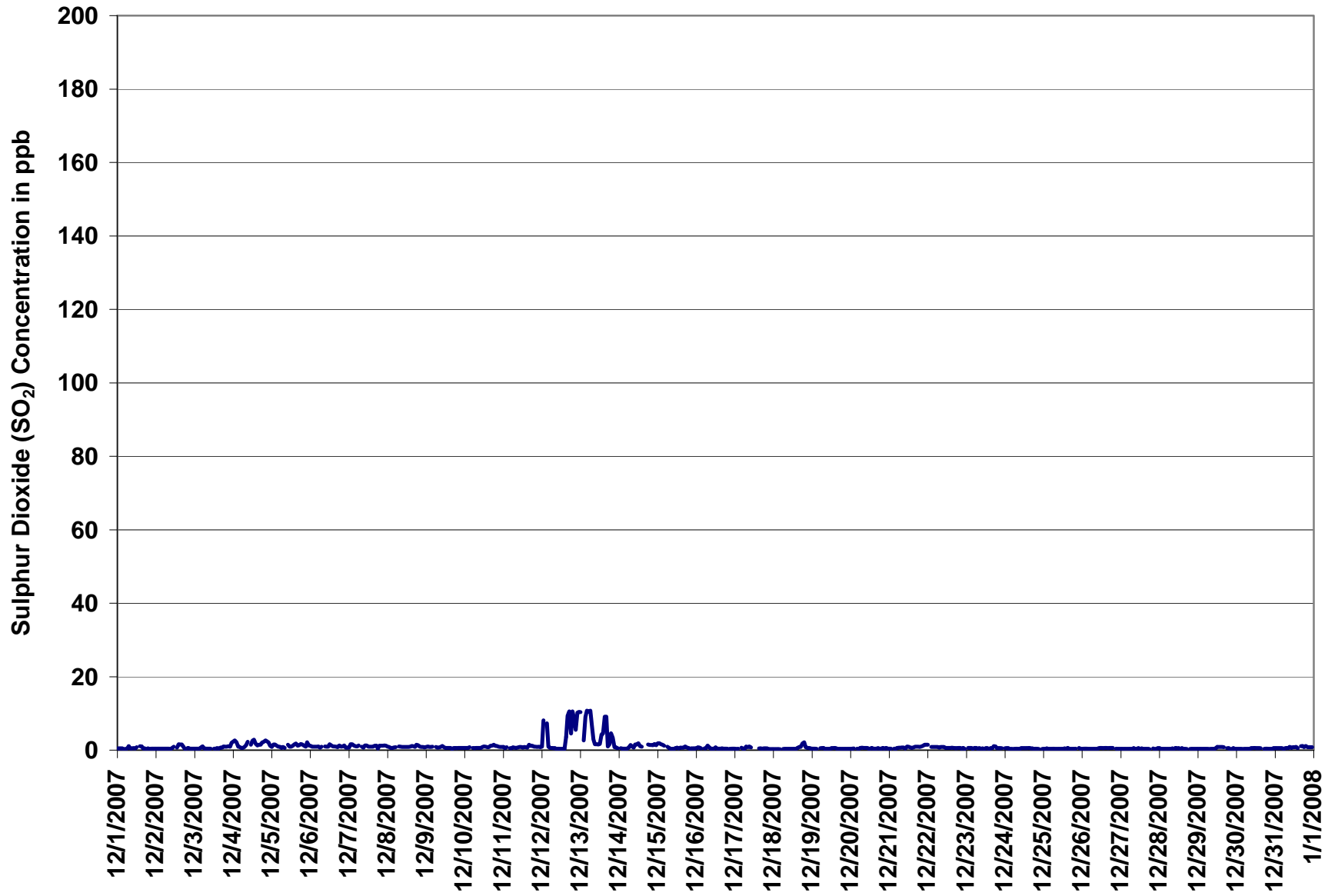
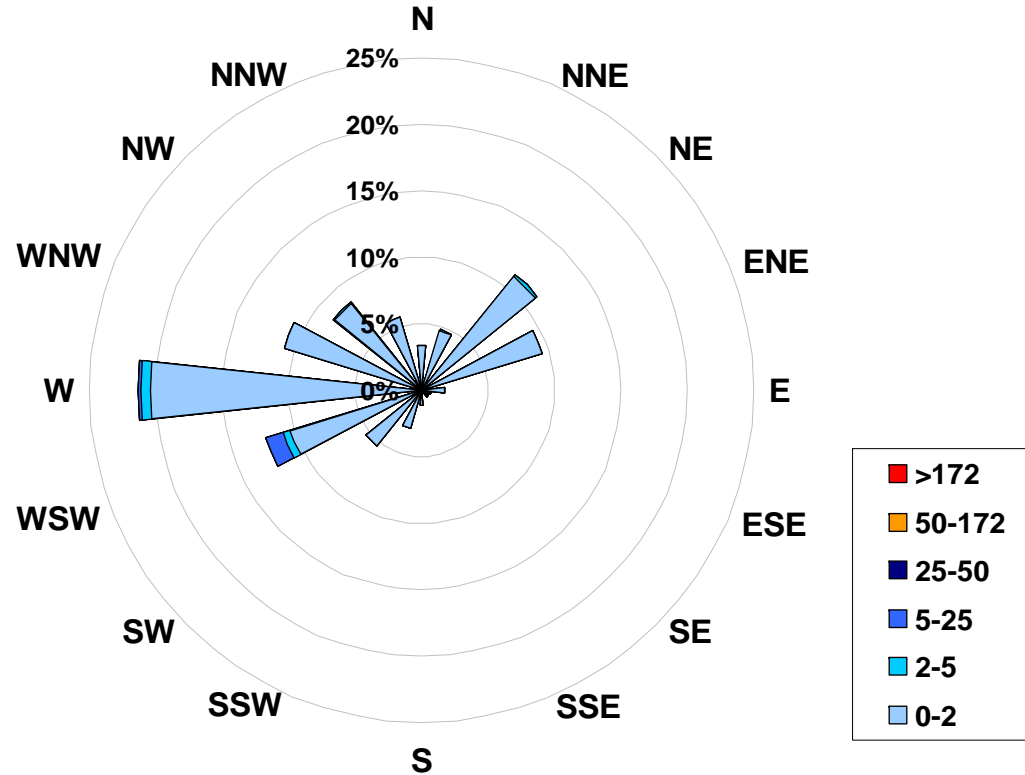


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Evergreen Park Site for December 2007



Calms: 0%

Frequency Distribution of SO ₂ in ppb			Frequency (hrs)
Range			
0.0	<	2	683
2	to	5	12
5	to	25	10
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			705

PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

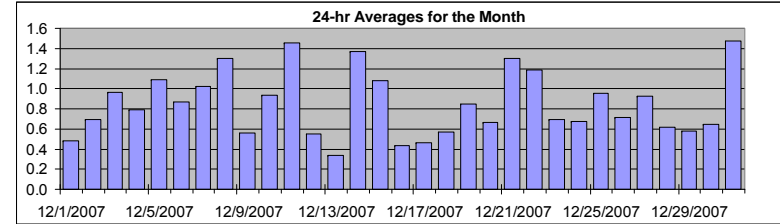
HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb
Summary

Maximum 1-hr Average:	3.2	ppb	14-Dec	22:00 23:00
Maximum 24-hr Value:	1.5	ppb	31-Dec	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.3%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.4	1.9	1.0	0.7	0.5	0.2	0.0	0.8 ppb	0.7 ppb

Status Flag Characters	
C	Calibration
S	Instrument out of Service
N	No Data
D	Excessive Instrument Drift
A	AIC - Zero / Span Check
X	Filter Exchange
M	Equipment Maintenance
P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum				
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00			22:00	23:00		
1-Dec-07	0:00	1:00	0	0	1	1	1	0	1	0	0	0	1	1	0	A	1	0	0	1	1	1	1	1	1	1	1	0.5	0.7	
2-Dec-07	0:00	1:00	0	1	1	1	1	1	1	1	0	0	1	1	1	A	0	0	1	0	1	1	1	1	0	1	1	1	0.7	1.3
3-Dec-07	1:00	2:00	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	0	1	1.0	1.4	
4-Dec-07	1:00	2:00	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	1	1	1	1	1	1	1	0.8	1.2	
5-Dec-07	1:00	2:00	1	1	1	1	0	1	1	1	1	1	A	2	1	1	1	1	1	1	0	1	1	1	1	2	2	1.1	1.9	
6-Dec-07	2:00	3:00	2	2	1	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.9	2.4	
7-Dec-07	0:00	1:00	0	1	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1.0	2.0	
8-Dec-07	2:00	3:00	2	1	2	1	1	1	A	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.1	
9-Dec-07	1:00	2:00	1	1	0	1	1	A	1	1	1	1	0	0	0	0	1	0	0	1	1	1	0	0	1	1	1	0.6	1.1	
10-Dec-07	1:00	2:00	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	2	2	2	2	0.9	1.9	
11-Dec-07	1:00	2:00	1	2	2	A	2	2	2	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	2.5	
12-Dec-07	1:00	2:00	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.6	0.7	
13-Dec-07	0:00	1:00	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	0.6	
14-Dec-07	A	1	1	1	0	0	0	0	0	1	1	1	1	3	2	C	C	C	C	A	1	1	1	2	2	3	3	1.4	3.2	
15-Dec-07	2:00	3:00	2	2	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1.1	2.4	
16-Dec-07	0:00	1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0.4	0.6	
17-Dec-07	1:00	2:00	1	1	1	A	1	1	1	1	1	1	0	0	P	P	P	P	0	0	0	1	1	0	0	0	0.5	0.8		
18-Dec-07	0:00	1:00	0	0	0	0	1	A	1	0	1	1	0	1	1	0	0	0	1	2	2	1	0	0	1	1	0	0.6	1.7	
19-Dec-07	0:00	1:00	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.8	1.3	
20-Dec-07	1:00	2:00	1	0	1	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2		
21-Dec-07	1:00	2:00	1	1	A	1	1	1	1	1	2	1	1	1	1	2	3	1	1	1	1	1	1	1	2	2	2	1.3	2.5	
22-Dec-07	2:00	3:00	2	A	2	1	2	3	2	2	2	2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.9	
23-Dec-07	A	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1	A	0.7	1.0	
24-Dec-07	1:00	2:00	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	1	1	A	1	0.7	1.5	
25-Dec-07	1:00	2:00	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1.0	2.0	
26-Dec-07	1:00	2:00	1	1	1	0	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0.7	1.2	
27-Dec-07	1:00	2:00	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	1	1	1	1	1	A	1	1	0	1	0.9	1.7	
28-Dec-07	0:00	1:00	0	0	0	0	1	0	1	2	1	1	1	1	0	0	0	1	1	1	1	A	1	0	0	1	1	0.6	2.1	
29-Dec-07	1:00	2:00	1	0	0	1	1	0	0	0	1	1	1	1	1	1	1	1	1	A	1	0	0	0	1	0	0.6	0.9		
30-Dec-07	1:00	2:00	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	1	1	A	1	1	1	1	1	1	1	0.6	1.0	
31-Dec-07	1:00	2:00	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	3	2	2	2	2	2	2	2	1.5	2.6	
Hourly Avg			0.9	0.9	0.9	0.8	0.9	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.9	0.8	0.9	1.0	0.9			
Hourly Max			2.4	2.5	2.3	2.0	2.1	2.9	2.1	2.1	1.9	2.2	2.1	2.6	2.1	2.0	2.5	1.5	2.6	2.2	2.0	2.3	2.0	2.3	3.2	2.7				

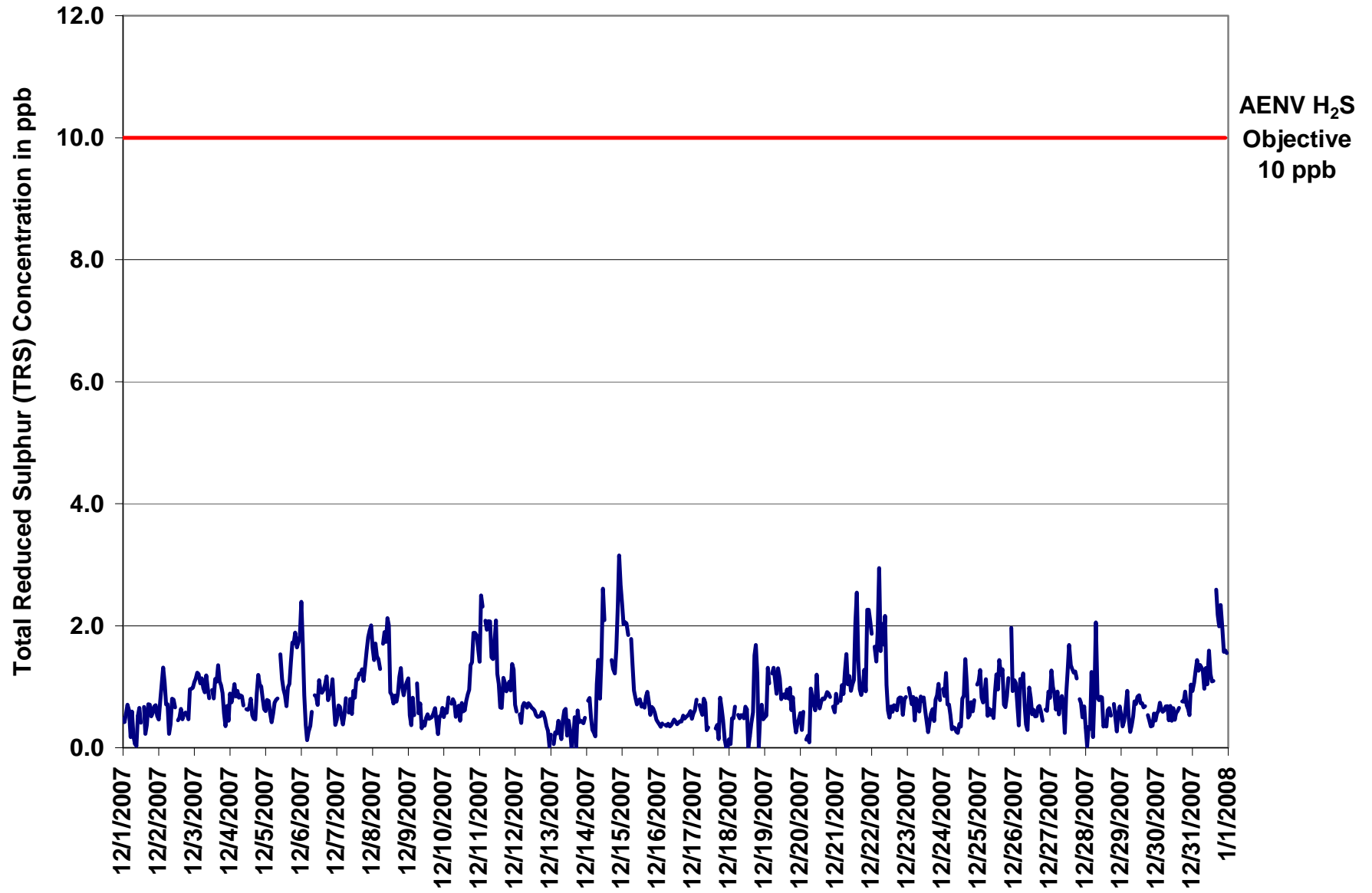


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park
 Station Owner: PASZA

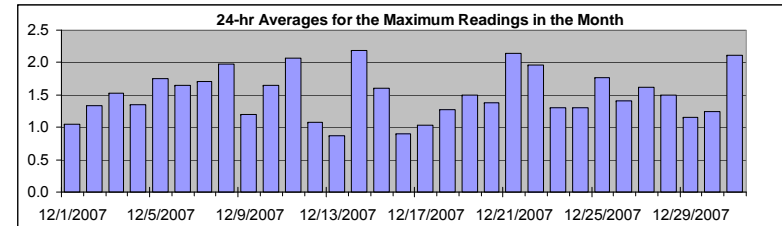
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	5.9	ppb	22-Dec	5:00 6:00
Maximum 24-hr Value:	2.2	ppb	14-Dec	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.3%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.5	2.7	1.7	1.4	1.1	0.8	0.6	1.5 ppb	1.4 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00	
1-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
2-Dec-07	1	2	2	2	2	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1.3	1.8
3-Dec-07	1	2	2	2	2	2	2	2	2	2	1	A	2	2	2	2	2	2	2	2	1	1	1	1	1	1.5	1.9	
4-Dec-07	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	2	2	2	1	1	1	1.3	1.9	
5-Dec-07	1	1	2	1	1	1	1	1	1	1	A	2	2	2	1	2	2	2	3	2	2	2	3	2	2	1.8	3.2	
6-Dec-07	4	3	2	1	1	1	1	1	A	2	2	1	2	2	2	1	2	2	2	2	1	2	1	1	1	1.6	3.8	
7-Dec-07	1	1	1	1	1	1	2	A	1	2	1	2	2	2	2	2	2	2	2	2	2	2	3	3	3	1.7	2.8	
8-Dec-07	2	2	2	2	2	2	A	3	3	3	3	3	1	2	1	2	1	2	2	2	1	1	2	2	2	2.0	3.1	
9-Dec-07	2	2	1	2	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.9	
10-Dec-07	1	1	1	1	A	2	1	1	1	1	1	1	1	2	1	2	1	2	2	2	3	2	2	3	2	1.6	2.9	
11-Dec-07	2	4	3	A	3	3	3	3	2	2	2	3	2	1	1	1	2	2	1	1	2	2	2	2	2	2.1	3.5	
12-Dec-07	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0	1.1	2.0	
13-Dec-07	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	3	1	1	1	1	1	0.9	3.0	
14-Dec-07	A	1	1	1	1	1	1	2	2	2	2	3	3	C	C	C	A	2	3	2	2	4	5	3	2.2	4.6		
15-Dec-07	3	3	3	2	2	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	3.4	
16-Dec-07	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	0.9	1.2	
17-Dec-07	1	1	1	A	1	1	1	1	1	1	1	P	P	P	P	1	1	1	1	1	1	1	0	1	1.0	1.5		
18-Dec-07	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1.3	3.0	
19-Dec-07	1	2	2	2	A	2	2	2	2	2	2	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1.5	2.0	
20-Dec-07	1	1	2	A	1	1	1	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	D	2	1	1.4	2.2	
21-Dec-07	2	2	A	2	2	2	2	2	2	2	1	2	2	2	4	3	2	1	2	2	2	2	3	3	3	2.1	3.5	
22-Dec-07	3	A	2	2	3	6	3	3	2	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2.0	5.9	
23-Dec-07	A	2	1	2	2	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.3	1.8	
24-Dec-07	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	2	A	2	1.3	2.1		
25-Dec-07	2	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	1	1	2	2	A	4	2	1.8	3.7		
26-Dec-07	2	2	1	1	2	2	2	2	1	1	2	2	1	1	1	1	2	2	1	1	A	1	1	2	1.4	2.0		
27-Dec-07	2	2	2	2	1	2	1	1	2	2	1	1	2	2	2	2	2	2	2	A	2	1	1	2	1.6	2.4		
28-Dec-07	1	1	1	1	3	2	4	3	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.5	3.5	
29-Dec-07	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1.2	1.9	
30-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	2	1	1	1	2	1.2	1.7	
31-Dec-07	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	A	4	3	3	3	3	2	2	2	2.1	3.5	
Hourly Avg	1.6	1.6	1.5	1.5	1.6	1.5	1.5	1.6	1.5	1.5	1.4	1.6	1.4	1.4	1.3	1.3	1.4	1.5	1.7	1.5	1.5	1.5	1.7	1.6				
Hourly Max	3.8	3.5	2.8	2.5	3.3	5.9	3.5	3.0	3.1	3.7	2.8	3.3	3.0	3.5	3.4	2.3	3.5	3.0	3.0	3.4	2.9	4.2	4.6	3.1				

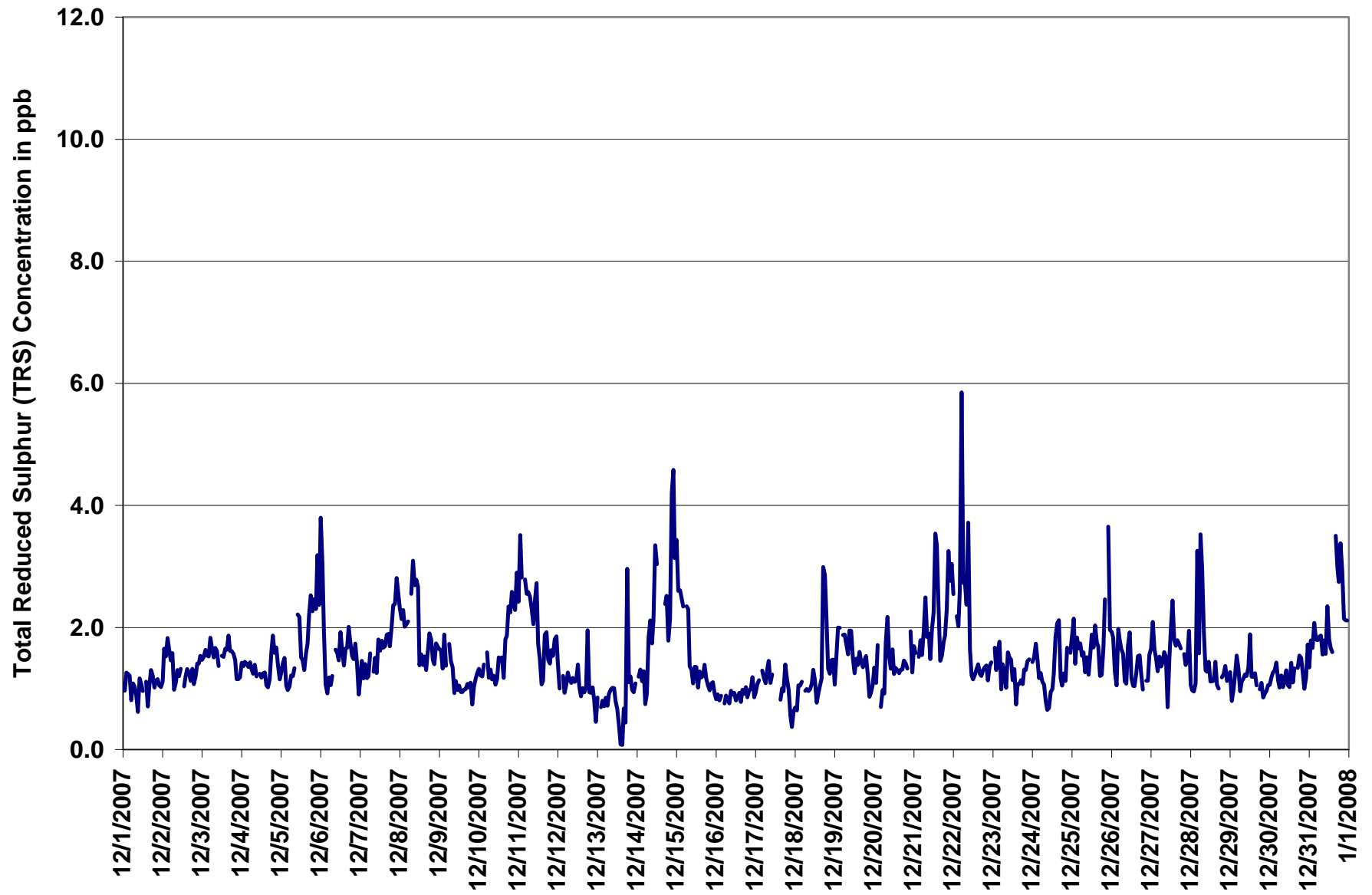
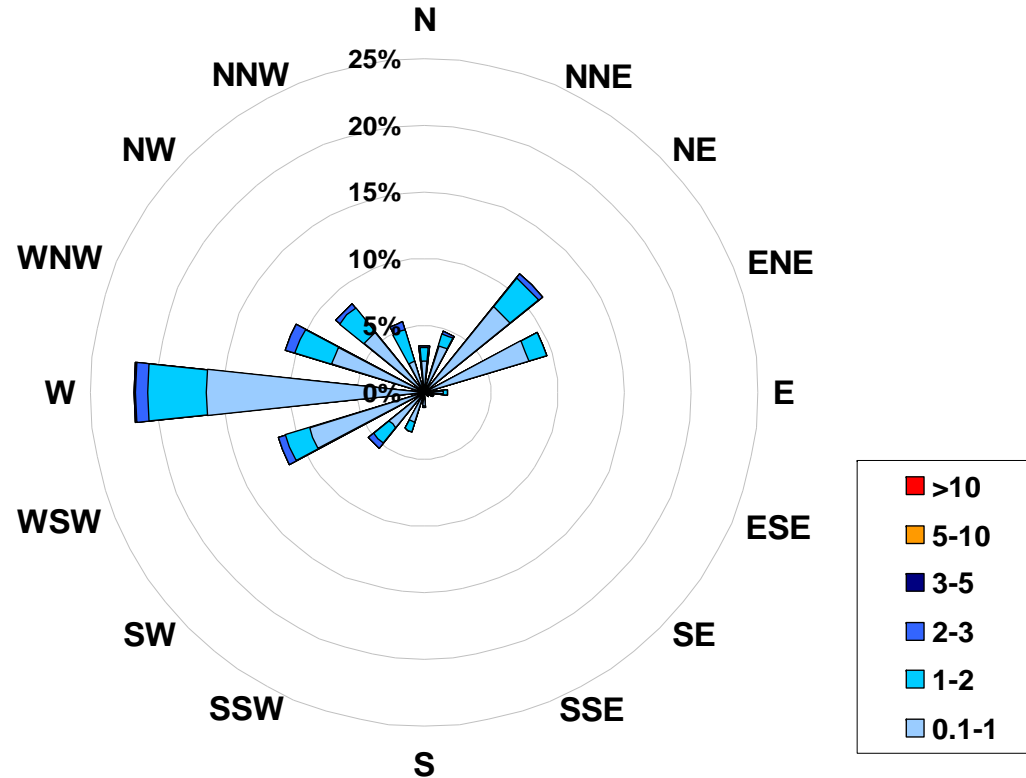


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Evergreen Park Site for December 2007**



Calms: 0%

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	512
1	to	2	160
2	to	3	30
3	to	5	1
5	to	10	0
	>	10	0
Total Non-Zero Values			703

PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

HOURLY AVERAGE TABLE

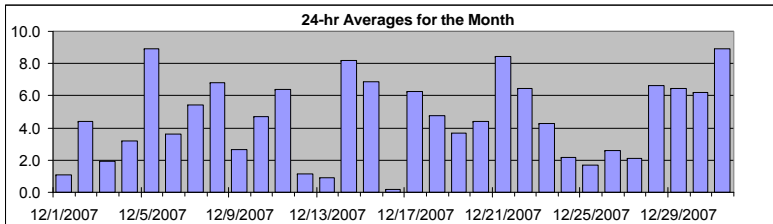
Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m³ 24-hr 30 µg/m³
Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	23.7 µg/m³ 14-Dec 12:00 13:00
Maximum 24-hr Value:	8.9 µg/m³ 31-Dec

AIC Time:	0 hrs	Operational Time:	734 hrs								
Calibration Time:	0 hrs	AMD Operational Uptime:	98.7%								
Percentile	99	95	75	50	25	5	1	Average / Median		Geomean	
	15.4	11.7	7.0	3.8	1.7	0.0	0.0	4.6	4	µg/m³	3.6 µg/m³



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Dec-07	0	0	0	0	0	0	1	2	0	0	1	0	0	0	1	2	2	2	2	1	2	2	4	3	1.1	4.2
2-Dec-07	7	12	9	9	8	8	7	7	4	3	4	4	1	2	1	2	2	2	2	2	2	3	3	4.4	12.0	
3-Dec-07	2	3	1	3	2	2	2	1	3	1	1	2	1	0	1	2	4	3	3	2	3	1	3	1.9	3.7	
4-Dec-07	2	3	2	2	2	2	2	2	2	3	2	2	2	3	2	2	2	2	8	10	8	6	4	3	3.2	9.5
5-Dec-07	3	3	2	3	5	5	4	5	6	8	22	9	10	7	10	12	13	11	15	15	12	11	13	10	8.9	21.6
6-Dec-07	10	9	8	3	0	1	2	3	2	3	1	2	2	2	2	2	4	5	4	3	4	5	6	4	3.6	10.0
7-Dec-07	3	3	2	3	1	1	4	5	5	5	10	5	2	1	3	5	5	8	4	7	12	12	13	11	5.4	12.8
8-Dec-07	12	10	8	8	8	8	7	10	10	11	12	12	8	1	2	3	6	5	5	7	4	3	2	3	6.8	12.2
9-Dec-07	3	4	5	7	6	5	6	7	D	D	0	0	0	0	0	0	2	3	2	1	2	2	2	1	2.7	7.3
10-Dec-07	2	0	0	1	0	0	1	0	0	1	3	1	0	3	9	3	8	12	12	8	9	11	15	13	4.7	15.0
11-Dec-07	12	9	10	9	8	6	6	7	7	7	7	7	4	2	1	2	6	4	4	4	7	5	10	9	6.4	12.0
12-Dec-07	8	2	0	0	0	3	2	0	2	D	1	0	2	3	0	1	2	1	1	0	0	0	0	0	1.2	7.6
13-Dec-07	0	0	0	0	0	0	0	1	1	2	1	2	0	1	0	0	0	0	2	1	1	1	2	5	0.9	5.0
14-Dec-07	4	4	3	3	3	3	4	8	5	4	11	18	24	8	7	9	11	12	11	9	9	8	10	8	8.2	23.7
15-Dec-07	10	10	8	7	5	6	6	5	5	5	4	6	5	5	8	8	9	9	7	8	7	7	D	6.9	10.3	
16-Dec-07	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7
17-Dec-07	1	1	2	3	2	2	3	5	6	5	6	P	P	P	P	P	19	14	16	10	8	6	5	4	6.2	19.3
18-Dec-07	4	5	6	5	3	5	5	5	4	4	2	3	4	2	4	5	7	8	8	3	5	7	6	6	4.8	8.5
19-Dec-07	4	4	3	4	4	6	6	6	7	8	7	6	1	2	0	2	2	1	4	2	2	1	3	3	3.7	7.6
20-Dec-07	3	5	4	4	5	5	6	11	10	4	4	4	7	6	3	2	4	5	2	2	2	3	3	3	4.4	10.7
21-Dec-07	2	2	2	2	4	6	8	8	10	8	9	13	9	7	5	9	16	11	11	10	13	13	12	13	8.5	16.1
22-Dec-07	10	5	6	5	7	5	6	6	8	8	4	6	7	6	4	6	8	7	7	7	7	5	6	8	6.4	10.2
23-Dec-07	7	9	7	6	6	5	6	6	4	3	4	5	4	2	1	2	1	2	3	3	6	3	7	7	4.3	9.0
24-Dec-07	4	7	9	8	D	0	0	0	0	1	1	2	3	1	3	3	3	1	1	0	1	0	1	0	2.2	9.3
25-Dec-07	0	0	0	0	0	0	0	0	0	0	1	0	4	9	6	4	3	1	0	0	2	4	5	4	1.7	8.6
26-Dec-07	3	3	4	3	1	2	3	4	3	4	7	4	3	0	0	1	2	2	4	1	2	2	1	2	2.6	6.7
27-Dec-07	1	2	1	0	0	0	0	5	2	3	8	4	2	5	1	0	1	1	0	5	3	3	3	3	2.1	7.7
28-Dec-07	2	4	5	7	9	9	6	10	10	10	11	9	8	4	3	4	6	5	5	6	6	6	6	6	6.6	10.9
29-Dec-07	6	6	6	6	5	5	6	6	6	6	8	8	15	12	10	10	9	7	6	2	2	2	3	3	6.4	15.4
30-Dec-07	2	3	4	3	3	4	4	5	4	6	8	8	8	8	9	9	9	8	8	7	5	6	7	11	6.2	10.8
31-Dec-07	12	8	7	7	10	10	9	7	7	8	13	12	8	7	6	13	14	10	8	8	9	8	7	6	8.9	14.1
Hourly Avg	4.5	4.3	4.1	4.0	3.6	3.7	4.0	4.7	4.4	4.5	5.7	5.2	4.7	3.6	3.3	4.0	5.7	5.2	5.3	4.9	4.8	4.9	5.2	5.2		
Hourly Max	12.2	12.0	10.2	9.0	10.1	9.7	9.0	10.7	10.4	10.6	21.6	17.7	23.7	11.9	9.7	13.2	19.3	13.6	16.0	15.3	13.4	13.2	15.0	12.8		

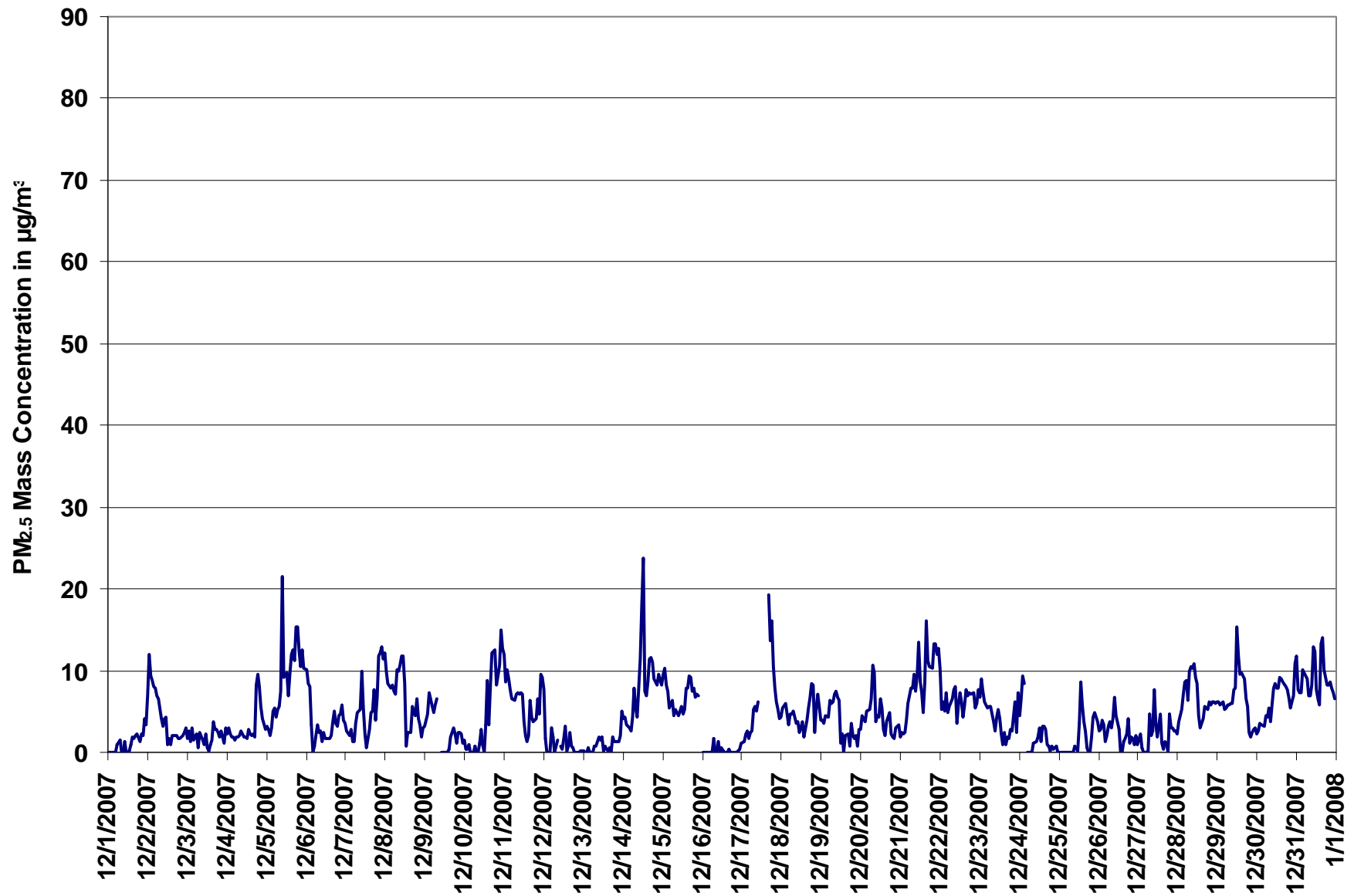


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park
 Station Owner: PASZA

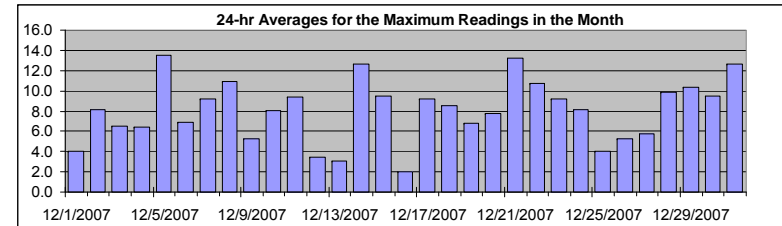
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	38.6	µg/m ³	14-Dec	12:00 13:00
Maximum 24-hr Value:	13.5	µg/m ³	5-Dec	



AIC Time:	0 hrs	Operational Time:	734 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	98.7%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	22.3	16.9	10.8	7.4	4.8	1.6	0.2	8.1	7.4 µg/m ³

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	2	3	2	2	2	3	5	6	2	3	4	3	3	2	4	5	5	5	5	5	6	5	7	7	4.0	7.5
2-Dec-07	15	16	13	13	12	12	10	12	8	7	7	8	5	5	5	5	5	6	6	5	5	5	6	6	8.1	16.0
3-Dec-07	5	6	6	7	6	7	14	5	6	5	8	8	5	8	7	7	7	6	7	6	5	5	5	6.5	13.9	
4-Dec-07	6	6	5	6	5	5	5	5	5	6	5	4	6	6	5	5	6	5	13	12	11	9	8	6	6.4	12.9
5-Dec-07	7	6	6	7	8	8	8	10	10	11	30	15	14	10	12	22	17	17	21	20	17	14	20	14	13.5	29.7
6-Dec-07	14	12	11	12	2	4	5	6	5	5	6	6	5	5	4	4	7	9	7	7	8	8	9	6	6.9	13.8
7-Dec-07	7	7	5	7	5	4	8	9	9	8	14	10	5	2	5	9	8	12	8	11	16	19	19	15	9.2	19.4
8-Dec-07	19	14	13	11	11	11	11	14	13	15	16	15	20	4	6	6	9	7	10	11	8	8	5	6	11.0	20.0
9-Dec-07	7	7	8	11	9	7	10	17	D	D	0	1	0	0	2	2	7	6	4	3	4	4	3	5.3	17.0	
10-Dec-07	3	2	2	4	1	3	5	2	2	3	5	4	2	9	18	5	13	14	18	11	12	13	24	16	8.0	24.1
11-Dec-07	16	11	14	13	10	9	9	9	10	9	11	10	6	4	4	5	14	8	7	7	10	8	12	12	9.4	15.5
12-Dec-07	13	3	2	1	3	6	6	2	3	D	3	2	5	5	3	3	5	3	3	2	1	2	1	2	3.5	12.6
13-Dec-07	2	1	1	2	2	1	2	4	3	5	5	5	2	3	3	1	3	2	4	3	5	3	3	8	3.1	8.0
14-Dec-07	8	7	6	6	5	5	9	11	8	7	21	21	39	12	11	11	16	18	24	12	12	11	13	11	12.7	38.6
15-Dec-07	13	13	11	9	7	9	9	6	7	7	7	11	7	7	10	11	12	11	10	11	9	9	10	D	9.5	13.2
16-Dec-07	0	0	0	1	0	1	1	6	2	2	5	4	5	1	1	2	3	1	2	1	1	2	3	3	2.1	6.2
17-Dec-07	4	3	5	5	4	5	5	8	9	8	9	P	P	P	P	P	24	18	19	14	11	9	9	7	9.2	23.6
18-Dec-07	7	9	11	8	6	10	9	8	6	8	6	5	5	8	6	7	9	11	12	14	6	8	12	12	8.5	14.0
19-Dec-07	7	6	6	9	10	9	9	9	10	10	13	13	5	7	2	4	4	4	6	5	3	4	3	5	6.8	13.1
20-Dec-07	5	8	6	8	9	8	11	16	16	7	8	8	10	9	6	6	8	9	5	4	4	5	6	7	7.7	15.8
21-Dec-07	6	6	5	6	8	10	15	14	14	13	15	18	16	14	9	20	21	15	15	15	16	16	15	17	13.2	20.9
22-Dec-07	15	10	15	8	17	9	10	9	11	11	10	11	11	12	7	11	11	12	10	10	10	7	9	12	10.7	16.6
23-Dec-07	10	12	11	9	9	7	9	9	6	5	7	9	8	8	9	16	7	5	5	11	10	17	9	11	9.2	17.0
24-Dec-07	8	10	18	22	D	2	1	4	8	4	7	10	15	8	11	8	6	5	3	2	3	3	18	11	8.1	21.8
25-Dec-07	2	3	0	1	0	0	2	0	2	2	2	4	11	11	9	6	5	4	2	2	5	8	7	7	4.0	11.1
26-Dec-07	4	5	6	7	5	5	6	9	6	7	10	9	6	2	1	3	4	4	7	3	4	6	4	5	5.3	9.7
27-Dec-07	3	5	5	1	1	2	4	11	6	7	17	13	8	11	3	2	3	4	4	8	6	5	5	6	5.7	17.0
28-Dec-07	7	8	8	11	13	12	12	13	14	15	16	12	15	8	5	7	9	7	8	8	8	9	8	8	9.9	15.6
29-Dec-07	8	8	8	8	7	8	9	22	27	9	10	11	23	15	12	11	11	9	8	5	4	5	5	5	10.3	26.8
30-Dec-07	4	4	5	5	5	7	7	8	6	9	13	11	12	10	12	11	11	10	21	10	8	9	14	14	9.5	21.4
31-Dec-07	15	10	11	11	14	14	13	10	10	12	17	17	11	13	9	18	18	14	12	12	12	11	11	11	12.7	18.0
Hourly Avg	7.7	7.1	7.2	7.4	6.5	6.5	7.6	8.8	8.2	7.6	9.9	9.3	9.5	7.4	6.9	7.8	9.2	8.3	9.2	8.0	7.6	8.1	9.2	8.6		
Hourly Max	18.8	16.0	17.7	21.8	16.6	13.7	14.6	22.1	26.8	14.9	29.7	21.1	38.6	14.7	18.2	22.4	23.6	17.9	23.9	20.0	16.9	18.8	24.1	16.6		

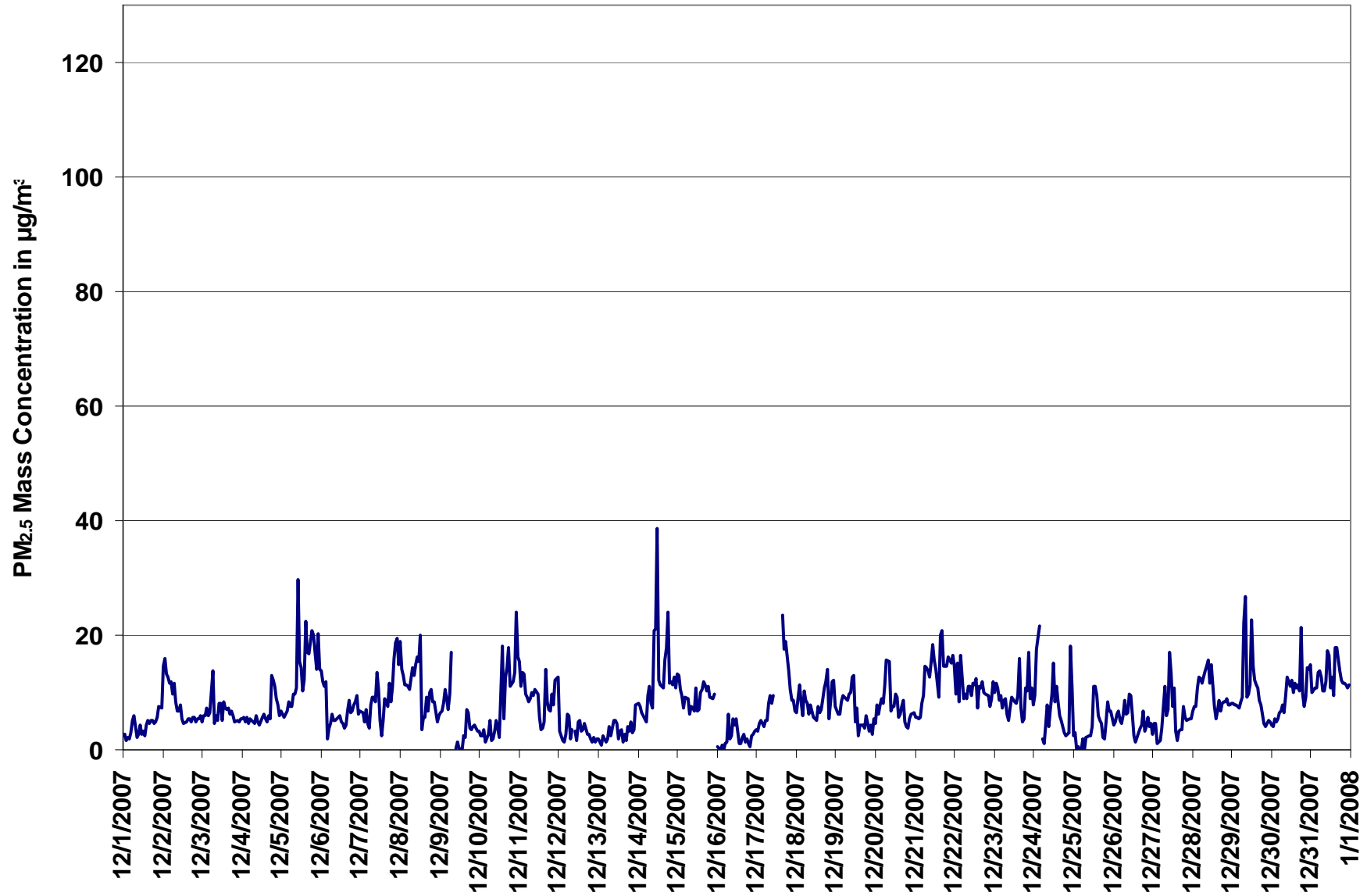
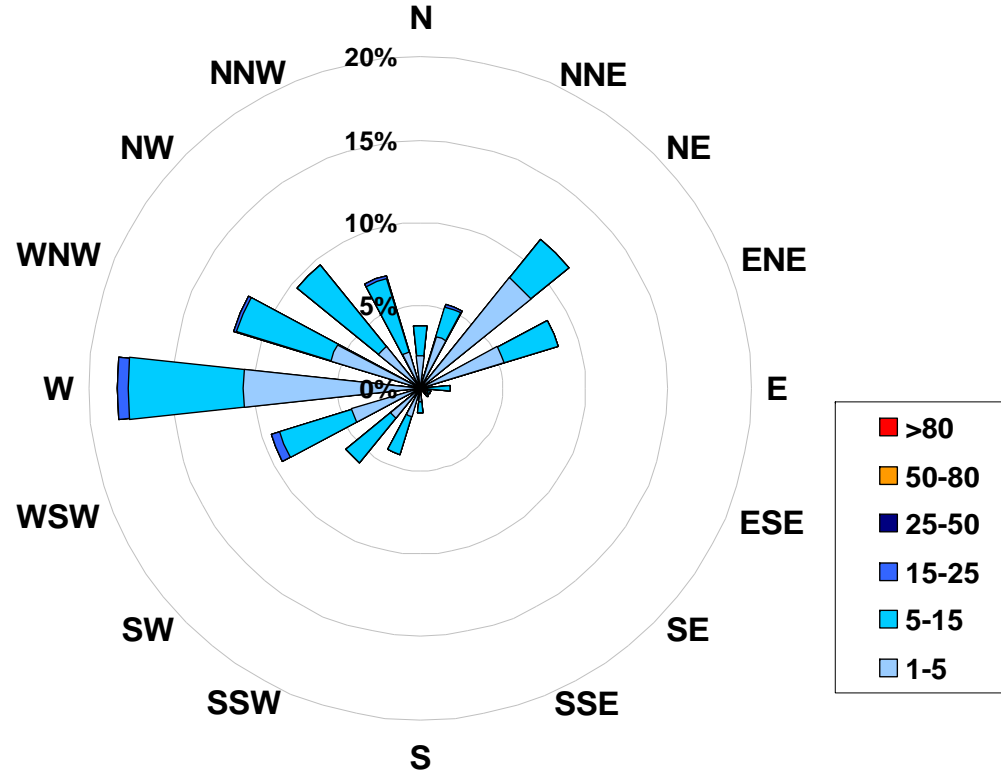


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Evergreen Park Site for December 2007



Calms: 0%

Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
1.0	<	5	439
5	to	15	285
15	to	25	10
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			734

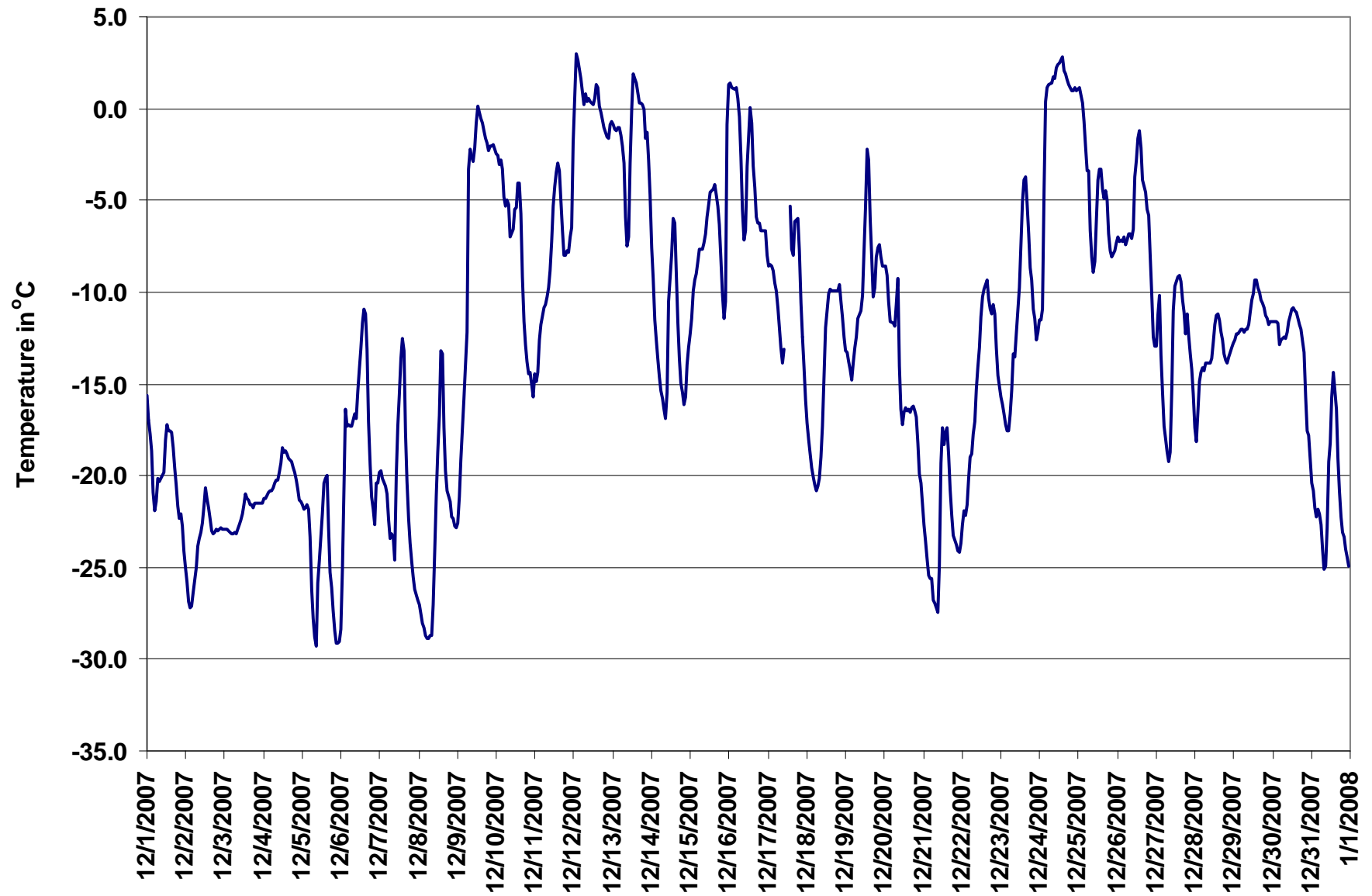


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

PASZA - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

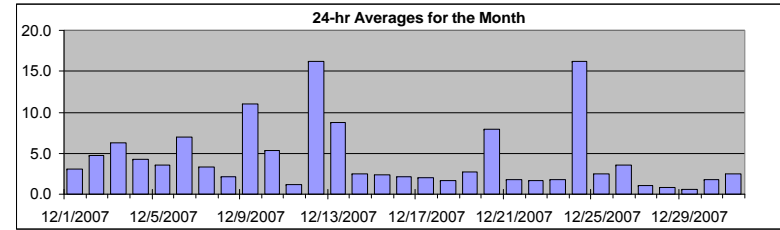
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	25.7	km/hr	24-Dec	11:00 12:00
Maximum 24-hr Value:	16.2	km/hr	24-Dec	



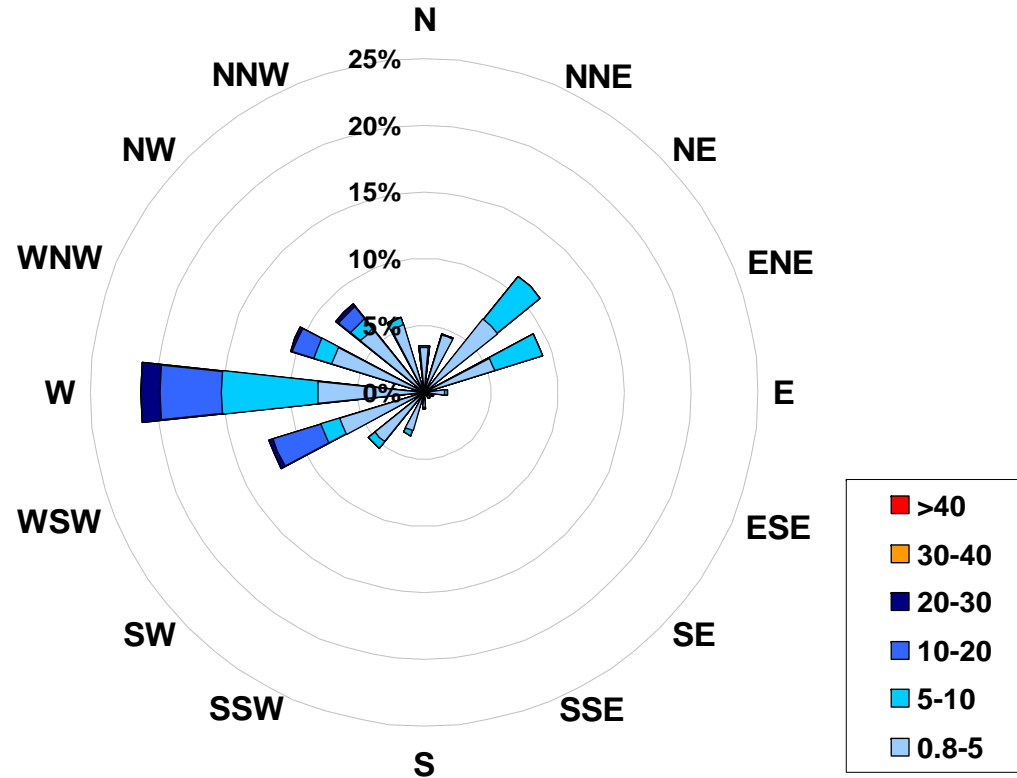
Calm Time:	0 hrs	0% calms	Operational Time:	741 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.6%				
Percentile	99	95	75	50	25	5	1	AverageV
	21.7	16.4	6.1	3.1	1.9	0.8	0.4	9.0 km/hr

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00		
1-Dec-07	7	6	7	6	1	2	3	5	6	6	7	8	6	7	6	6	4	2	2	1	1	1	1	1	2	3.1	8.0	
2-Dec-07	2	2	2	2	1	1	1	1	5	6	7	8	7	9	9	9	8	7	7	6	7	7	5	5	5	4.8	9.4	
3-Dec-07	6	6	5	4	6	5	6	6	6	5	6	6	7	9	8	8	8	7	7	7	6	5	5	4	6.2	8.6		
4-Dec-07	4	3	4	4	4	4	3	4	4	4	5	6	6	6	5	4	4	4	7	7	8	8	9	7	4.3	8.7		
5-Dec-07	10	9	9	10	6	3	2	2	1	2	3	4	3	4	4	2	2	3	3	2	1	1	3	1	3.6	9.7		
6-Dec-07	2	5	7	11	9	11	9	8	9	11	10	9	9	9	10	8	5	2	2	2	2	4	4	5	7.0	11.0		
7-Dec-07	5	6	5	6	6	5	4	4	4	3	4	5	5	3	3	2	2	1	2	2	2	1	1	2	3.3	6.0		
8-Dec-07	2	1	0	1	1	2	1	2	2	4	2	2	5	5	2	2	5	3	2	2	1	1	1	2	2.2	4.8		
9-Dec-07	1	2	1	1	1	2	1	19	18	11	10	9	13	22	19	16	16	12	15	17	18	18	13	13	11.0	21.8		
10-Dec-07	11	10	9	9	9	9	6	6	7	7	5	8	8	7	5	4	2	2	2	1	1	1	1	1	5.3	10.7		
11-Dec-07	2	1	1	1	2	1	0	3	2	2	1	2	2	4	2	2	1	2	1	2	1	0	2	1	1.2	3.7		
12-Dec-07	12	22	19	21	21	20	17	18	20	16	15	17	13	11	11	15	16	17	16	15	14	14	16	16	16.2	21.6		
13-Dec-07	17	15	14	15	14	13	11	6	2	1	0	3	8	10	12	13	10	12	8	8	7	12	6	3	8.7	17.0		
14-Dec-07	3	3	1	1	1	3	3	3	1	1	1	3	2	3	5	5	3	2	2	2	2	1	1	1	2.5	5.2		
15-Dec-07	1	3	2	1	0	2	2	3	1	1	1	4	3	6	5	5	4	4	4	1	3	4	8	14	2.4	13.7		
16-Dec-07	16	18	18	17	19	16	9	3	2	1	1	1	5	6	5	4	3	4	5	5	6	7	3	3	2.1	19.3		
17-Dec-07	3	2	3	3	2	1	1	2	1	1	1	P	P	P	3	5	5	7	4	3	2	2	1	0	2.0	7.3		
18-Dec-07	0	2	1	1	1	2	3	3	4	4	5	4	3	3	3	2	2	2	1	3	4	6	5	5	1.7	5.7		
19-Dec-07	3	3	3	2	2	0	2	1	3	5	6	6	6	6	6	6	5	5	7	6	3	3	2	2	2.7	6.7		
20-Dec-07	2	3	2	3	1	2	1	3	13	19	20	16	16	13	13	12	10	12	9	8	7	5	4	5	8.0	19.6		
21-Dec-07	4	2	1	2	3	3	2	3	3	0	1	1	3	3	2	3	3	1	2	1	1	2	1	2	1.8	3.7		
22-Dec-07	2	0	1	1	2	1	1	3	1	2	3	1	4	5	4	3	5	4	3	4	2	1	2	0	1.7	4.8		
23-Dec-07	3	1	1	2	1	2	1	1	1	2	4	5	1	2	3	1	2	3	1	2	1	3	2	1	1.7	5.2		
24-Dec-07	2	4	1	13	18	23	23	19	23	21	24	26	22	22	19	16	16	16	18	17	16	16	15	12	16.2	25.7		
25-Dec-07	10	12	12	11	7	6	5	1	3	2	0	1	2	2	3	4	2	0	4	1	2	2	3	4	2.5	12.1		
26-Dec-07	2	4	4	4	2	4	2	1	2	6	6	4	5	10	9	7	7	6	6	6	4	3	2	1	3.5	9.9		
27-Dec-07	2	5	5	5	2	2	3	3	2	1	1	2	3	4	4	3	4	1	5	4	3	3	3	3	1.0	5.3		
28-Dec-07	2	2	3	3	2	5	2	2	3	4	3	2	3	3	3	3	3	1	2	2	2	2	2	2	0.8	4.5		
29-Dec-07	1	2	1	1	1	2	1	1	2	2	2	2	3	2	1	2	2	3	3	3	2	3	3	3	0.6	3.3		
30-Dec-07	3	2	2	1	2	2	2	2	3	3	3	2	3	4	4	2	2	2	2	2	2	3	2	3	1.7	4.0		
31-Dec-07	3	3	4	4	3	2	2	3	2	2	2	2	4	2	2	3	2	2	2	2	3	2	1	2	2.5	4.1		
1-hr Vector	3.2	3.6	3.5	3.9	3.8	3.9	3.3	2.8	3.0	2.6	2.8	3.4	3.5	3.6	3.1	3.1	2.7	3.0	2.1	2.8	2.4	2.4	2.4	2.5				
Hourly Max	17.0	21.6	18.8	20.6	21.1	23.0	22.8	19.3	23.3	20.5	24.3	25.7	22.0	22.3	19.2	15.7	16.3	17.0	18.4	16.8	18.5	17.6	16.1	16.4				

1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for December 2007



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	482
5	to	10	160
10	to	20	83
20	to	30	16
30	to	40	0
	>	40	0
Total Non-Zero Values			741

PASZA – Smoky Heights Station

Monthly Summary Tables, Graphs and Roses

PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

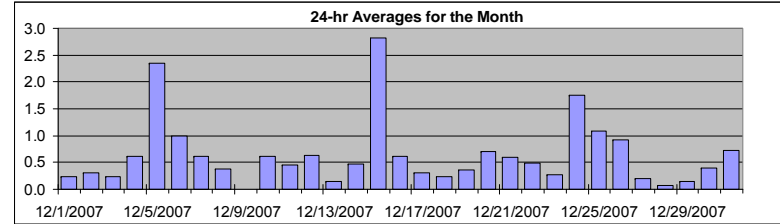
Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	19.5	ppb	15-Dec	20:00 21:00
Maximum 24-hr Average:	2.8	ppb	15-Dec	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average	Median
	5.8	2.2	0.7	0.3	0.1	0.0	0.0	0.7 ppb	0.3 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Dec-07	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.1
2-Dec-07	0	0	A	0	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.0
3-Dec-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
4-Dec-07	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	0.6	1.2	
5-Dec-07	1	1	2	1	1	4	3	1	1	0	1	2	4	7	6	4	3	3	3	2	2	1	A	1	2.3	7.0	
6-Dec-07	1	1	1	1	1	1	0	0	0	0	0	0	1	C	C	A	1	2	3	2	1	1	1	1	1.0	3.4	
7-Dec-07	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	2	1	1	1	1	1	1	0.6	2.4	
8-Dec-07	1	1	1	0	A	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
9-Dec-07	0	0	0	A	0	0	0	0	0	1	1	2	P	P	P	P	P	P	3	1	1	1	1	0	N	3.0	
10-Dec-07	0	0	0	0	0	A	1	1	1	1	0	0	0	1	2	1	0	0	2	1	1	1	0	0	0.6	1.9	
11-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	1	1	1	0.5	1.5	
12-Dec-07	1	4	1	A	1	1	0	0	1	0	1	1	0	1	1	2	0	0	0	0	0	0	0	0	0.6	3.7	
13-Dec-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.8	
14-Dec-07	1	A	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.4	
15-Dec-07	A	0	0	0	0	0	0	1	1	0	0	0	1	0	1	2	1	1	2	6	19	14	12	A	2.8	19.5	
16-Dec-07	3	2	1	0	0	0	2	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0.6	3.3	
17-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	A	1	1	0.3	1.0	
18-Dec-07	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0.2	0.8	
19-Dec-07	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	A	1	0	1	1	0.4	1.1	
20-Dec-07	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	3	A	1	1	1	1	0	0.7	2.9	
21-Dec-07	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	A	2	1	1	0	0	0	0.6	1.6	
22-Dec-07	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	1	1	2	1	0	1	0	0.5	1.8	
23-Dec-07	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.7	
24-Dec-07	0	0	0	0	0	0	0	0	3	3	2	2	2	0	A	5	2	9	4	2	0	1	2	2	1.8	9.3	
25-Dec-07	4	5	9	2	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1.1	8.8	
26-Dec-07	0	0	0	1	1	0	0	0	0	1	2	1	A	2	4	5	0	0	0	0	0	0	0	1	0.9	4.7	
27-Dec-07	1	0	1	1	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0	
28-Dec-07	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
29-Dec-07	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	1.1	
30-Dec-07	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0.4	1.4	
31-Dec-07	0	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	1.2	
Hourly Avg	0.6	0.7	0.7	0.6	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.7	0.8	1.0	0.7	1.0	0.9	0.8	1.2	0.9	0.9	0.4			
Hourly Max	3.7	5.4	8.8	4.4	1.2	3.9	2.6	3.3	3.0	3.4	2.0	2.2	4.4	7.0	5.8	5.2	3.4	9.3	4.3	6.1	19.5	13.9	12.0	1.5			

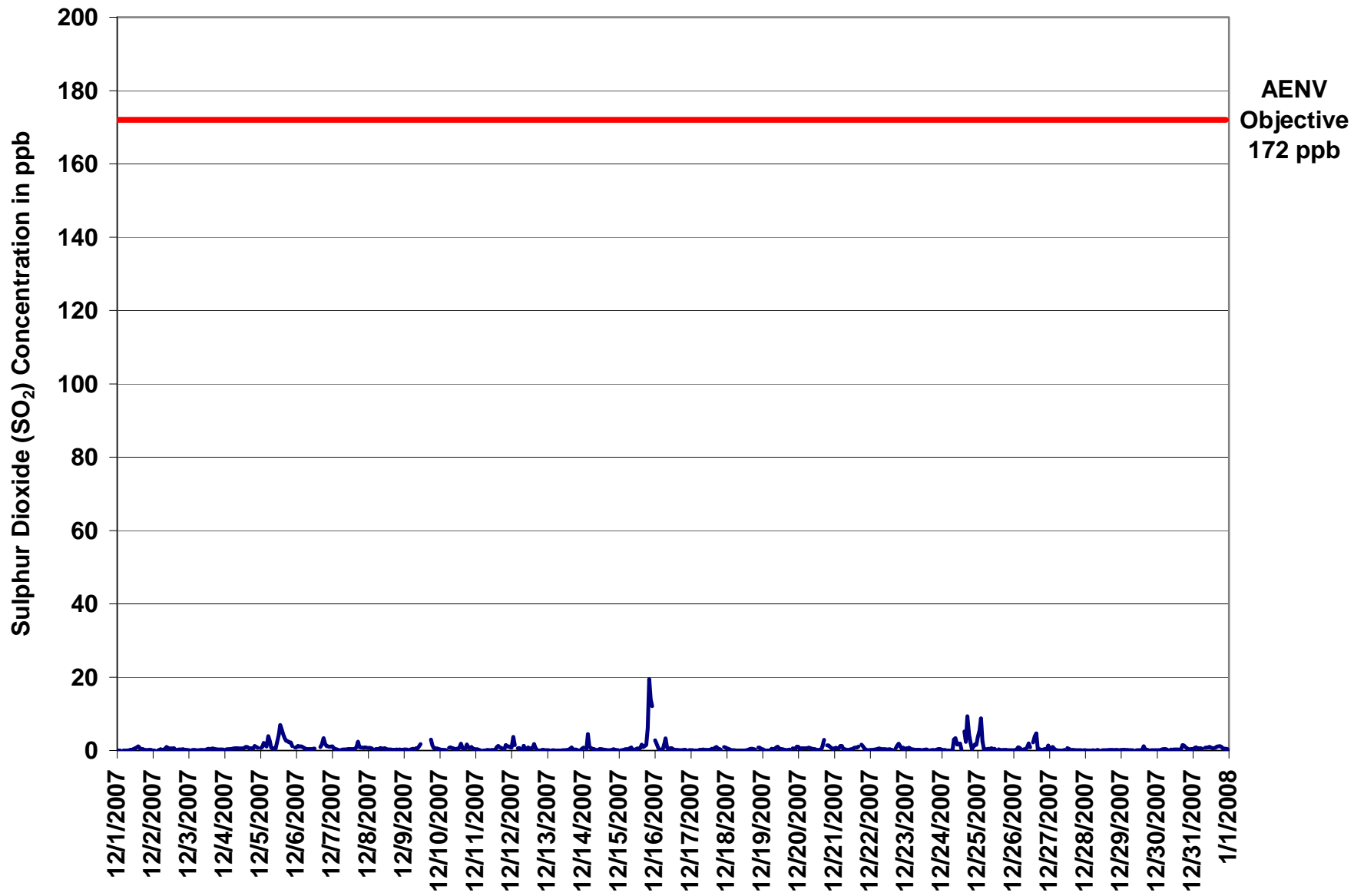


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights
 Station Owner: PASAA

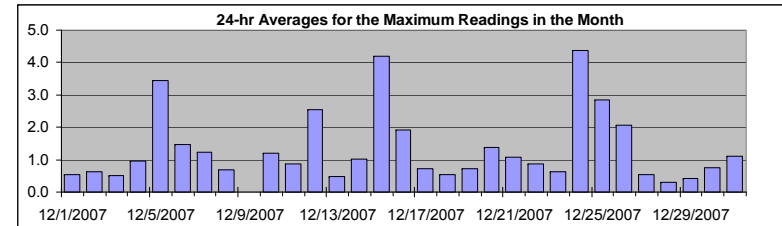
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	22.0	ppb	15-Dec	20:00 21:00
Maximum 24-hr Value:	4.4	ppb	24-Dec	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average	Median
	12.8	4.7	1.2	0.7	0.4	0.2	0.1	1.3 ppb	0.7 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Dec-07	0	0	0	A	0	0	0	0	1	1	0	1	1	1	1	1	1	1	0	1	0	0	0	0	0.5	1.5	
2-Dec-07	0	0	A	0	0	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0	0	0	0.6	1.5	
3-Dec-07	0	A	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0.5	0.9	
4-Dec-07	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1.0	1.9	
5-Dec-07	1	3	3	2	2	8	8	1	1	1	1	4	6	8	7	5	4	3	3	3	3	2	A	1	3.5	8.2	
6-Dec-07	1	2	1	2	1	1	1	1	1	1	1	1	1	C	C	A	1	2	5	4	2	2	1	1	1.5	4.7	
7-Dec-07	2	1	1	1	0	A	0	0	1	1	1	1	1	1	1	1	5	5	1	1	1	1	1	1	1.2	5.0	
8-Dec-07	1	1	1	0	A	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	0	0	0.7	1.1	
9-Dec-07	1	0	1	A	1	1	1	1	2	1	3	5	P	P	P	P	P	P	4	3	1	1	1	1	N	5.2	
10-Dec-07	1	1	0	0	0	A	1	1	1	1	1	1	1	1	7	1	1	1	3	1	1	1	1	1	1.2	7.0	
11-Dec-07	1	1	0	0	A	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	3	2	1	1	0.9	3.0	
12-Dec-07	2	13	6	A	3	1	1	0	4	0	1	2	1	2	3	15	2	0	0	0	0	1	0	0	2.6	15.2	
13-Dec-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	1	0.5	1.3	
14-Dec-07	2	A	2	7	3	1	1	1	0	0	1	1	1	1	0	0	0	0	1	0	1	0	0	0	1.0	7.0	
15-Dec-07	A	0	0	1	1	1	1	1	1	0	0	1	1	1	1	3	1	2	4	11	22	20	18	A	4.2	22.0	
16-Dec-07	4	2	1	1	1	3	4	16	6	0	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	1.9	16.0
17-Dec-07	0	0	0	0	0	0	1	1	1	1	0	0	0	1	2	1	2	2	1	1	0	A	1	1	0.7	1.8	
18-Dec-07	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	2	1	1	0.5	1.6	
19-Dec-07	1	0	0	0	0	0	1	1	1	2	2	1	1	1	1	0	0	0	1	A	1	1	1	1	0.7	1.5	
20-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	3	6	A	3	2	1	1	1	1.4	6.2	
21-Dec-07	1	1	1	1	2	2	1	1	1	0	0	1	1	2	1	1	2	A	2	2	1	1	0	0	1.1	2.5	
22-Dec-07	0	0	1	0	1	1	1	1	1	1	1	1	0	1	1	0	A	2	2	3	2	1	1	1	0.9	2.5	
23-Dec-07	1	1	1	1	1	1	0	1	1	0	0	0	1	1	1	A	0	0	0	0	0	1	1	1	0.6	1.3	
24-Dec-07	1	0	0	0	0	0	0	0	6	10	3	4	5	1	A	11	5	21	11	10	2	4	2	4	4.4	21.0	
25-Dec-07	9	9	21	10	3	1	1	2	1	1	1	1	0	A	1	0	0	0	0	0	0	0	0	0	2.8	20.6	
26-Dec-07	0	0	1	1	1	1	0	1	1	2	3	3	A	5	9	12	1	1	1	1	1	1	1	2	2.1	11.8	
27-Dec-07	1	1	2	1	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.9	
28-Dec-07	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
29-Dec-07	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0.4	2.7	
30-Dec-07	0	0	0	1	1	1	1	0	A	0	0	1	1	0	1	0	1	2	2	1	1	1	1	1	0.8	1.8	
31-Dec-07	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1.1	1.7	
Hourly Avg	1.2	1.5	1.7	1.2	0.9	1.0	0.9	1.1	1.2	1.0	0.9	1.2	1.0	1.2	1.6	2.3	1.3	2.0	1.6	1.8	1.7	1.6	1.4	0.9			
Hourly Max	9.2	12.9	20.6	10.3	3.0	7.9	8.2	16.0	5.8	10.0	3.3	5.2	6.3	7.6	8.8	15.2	4.9	21.0	10.6	11.4	22.0	20.4	17.9	4.2			

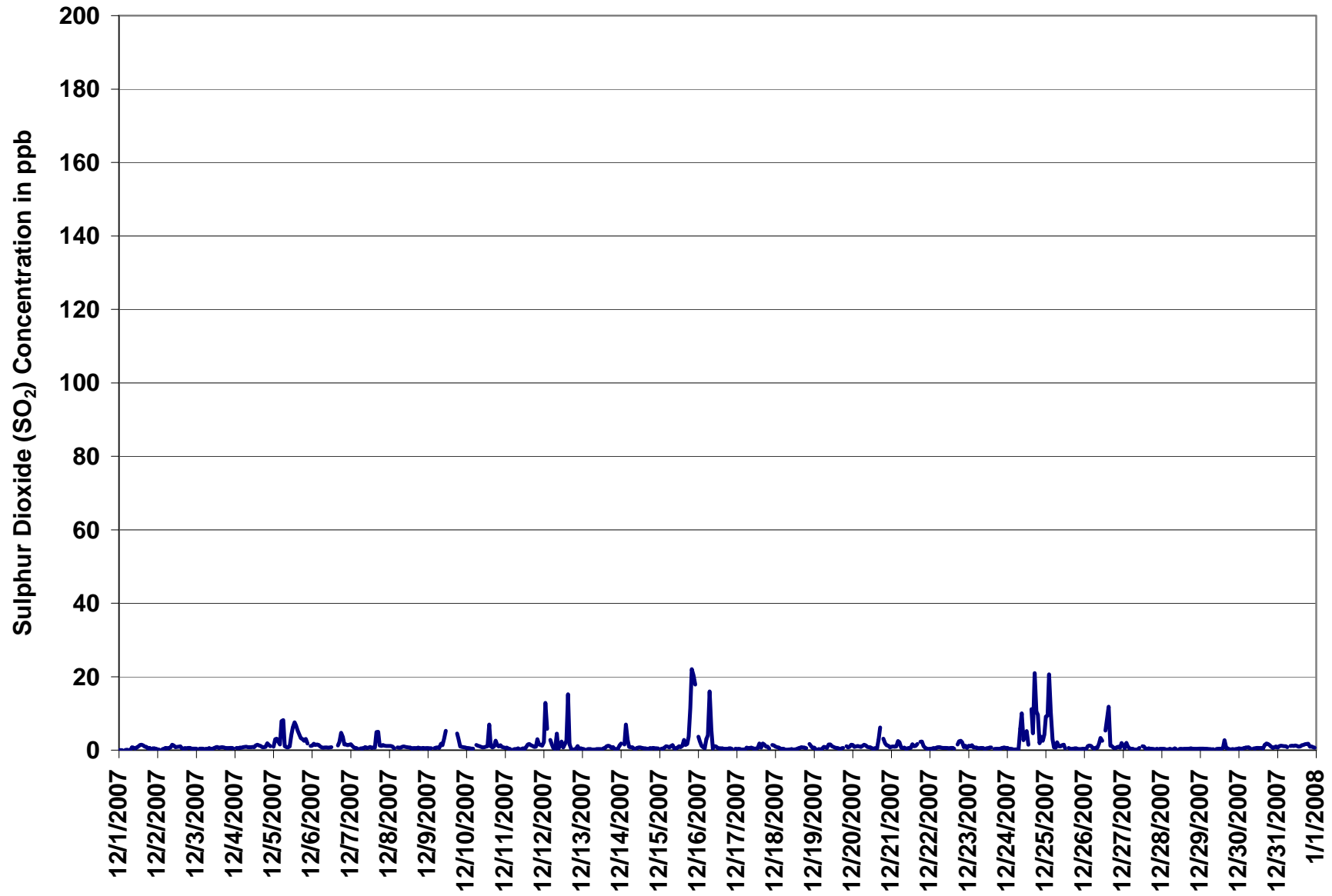
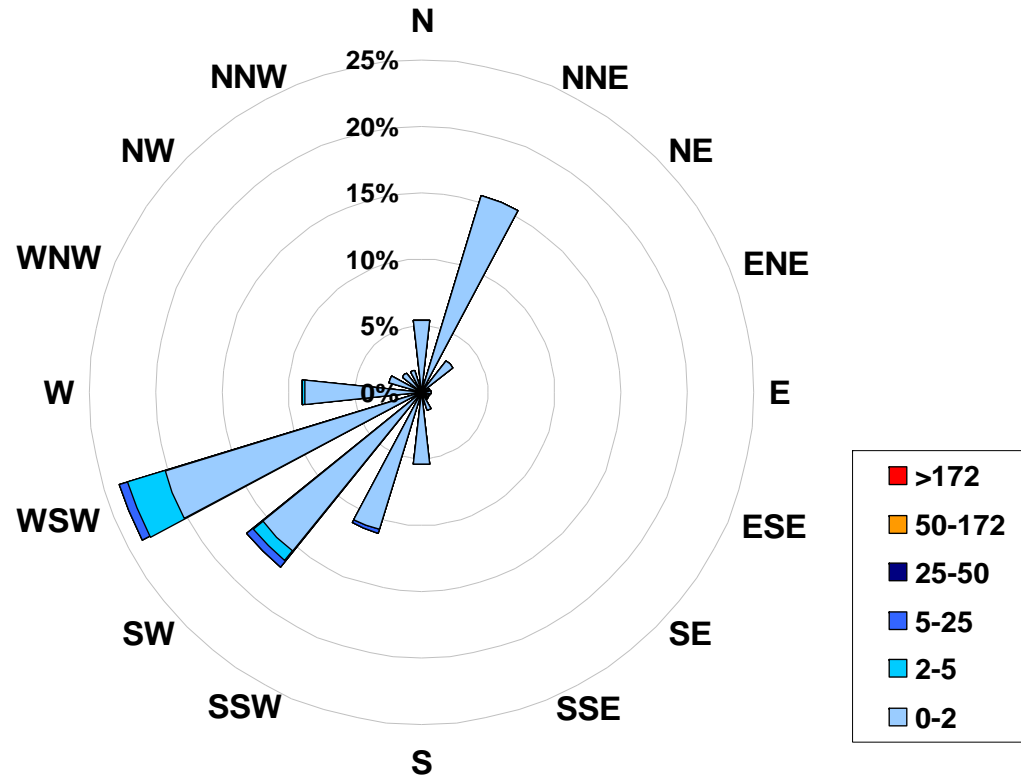


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Smoky Heights Site for December 2007



Calms: 0%

Frequency Distribution of SO ₂ in ppb			Frequency (hrs)
Range			
0.0	< 2		664
2	to 5		29
5	to 25		10
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			703

PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

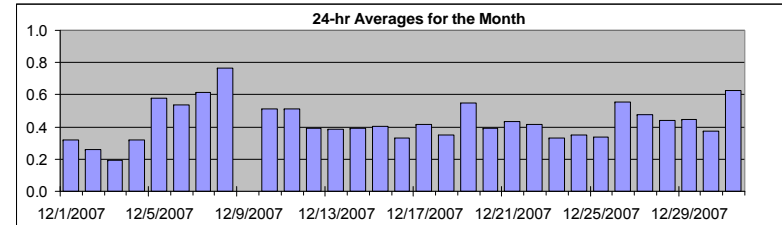
HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb
 Summary

Maximum 1-hr Average:	1.2	ppb	7-Dec	17:00 18:00
Maximum 24-hr Value:	0.8	ppb	8-Dec	



AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.0	0.7	0.5	0.4	0.3	0.2	0.2	0.4 ppb	0.4 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Dec-07	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
2-Dec-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
3-Dec-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
4-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5
5-Dec-07	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	A	1	0.6	0.8
6-Dec-07	1	1	1	1	1	1	1	1	1	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.5	0.9
7-Dec-07	0	0	1	1	1	A	1	1	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	0.6	1.2
8-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.1	
9-Dec-07	1	1	1	A	0	1	0	0	0	0	0	0	P	P	P	P	P	P	0	0	0	0	0	0	0	N	0.7
10-Dec-07	0	0	0	0	0	A	0	0	0	0	1	0	0	1	1	0	1	0	0	0	1	1	1	1	1	0.5	1.0
11-Dec-07	1	1	1	1	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	1	0	0	0	0.5	0.7
12-Dec-07	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.6
13-Dec-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.5
14-Dec-07	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
15-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5
16-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4
17-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	A	1	0	0.4	0.6
18-Dec-07	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.6
19-Dec-07	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0.5	1.1
20-Dec-07	1	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
21-Dec-07	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	A	1	0	0	0	0	0	0.4	0.6
22-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	1	0.4	1.0
23-Dec-07	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.6
24-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
25-Dec-07	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.5
26-Dec-07	0	0	0	1	1	1	1	1	1	1	1	1	A	0	1	0	1	1	0	1	1	1	1	1	1	0.6	0.7
27-Dec-07	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.6
28-Dec-07	1	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
29-Dec-07	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0.4	0.6
30-Dec-07	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
31-Dec-07	0	0	0	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
Hourly Avg	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5		
Hourly Max	0.8	0.8	1.1	1.0	0.9	0.8	0.7	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.0	1.2	0.9	0.7	0.7	0.9	1.0	0.8		

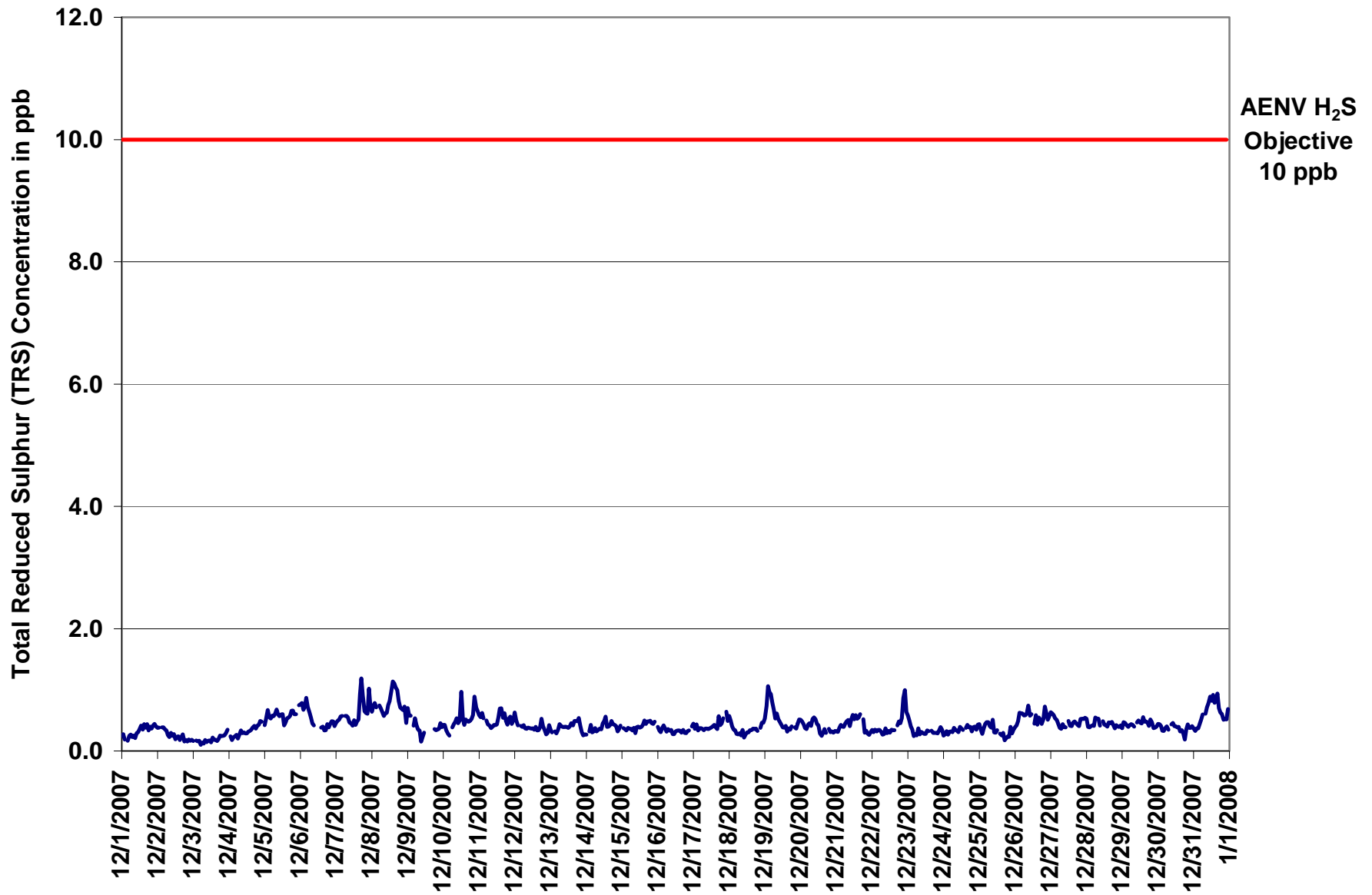


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights
 Station Owner: PASAA

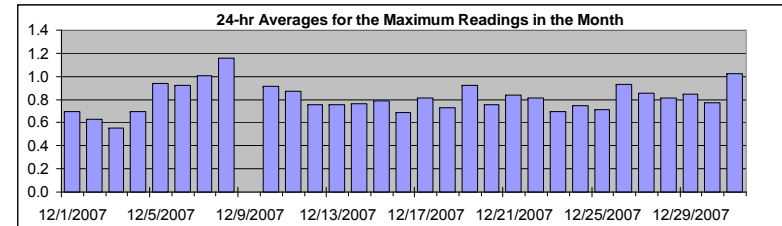
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	1.8	ppb	10-Dec	12:00 13:00
Maximum 24-hr Value:	1.2	ppb	8-Dec	



AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.4	1.2	0.9	0.8	0.7	0.6	0.5	0.8 ppb	0.8 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00	
1-Dec-07	0	1	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8	
2-Dec-07	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	1	0	1	0.6	0.8	
3-Dec-07	0	A	1	1	1	0	1	0	0	1	0	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0.6	0.7	
4-Dec-07	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.9	
5-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.1	
6-Dec-07	1	1	1	1	1	1	1	1	1	1	C	C	C	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
7-Dec-07	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1.0	1.7	
8-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1.2	1.5	
9-Dec-07	1	1	1	A	1	1	1	1	1	1	1	1	1	P	P	P	P	P	P	1	1	1	1	1	1	N	1.2	
10-Dec-07	1	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.8	
11-Dec-07	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	0.9	1.2	
12-Dec-07	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	0.8	1.1	
13-Dec-07	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	0.8	1.0	
14-Dec-07	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
15-Dec-07	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	0.9	
16-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.8	
17-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.3	
18-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	0.9	
19-Dec-07	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.6	
20-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0	
21-Dec-07	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	0.8	1.1	
22-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	1	0.8	1.5	
23-Dec-07	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	0.7	0.9	
24-Dec-07	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	0.7	0.9	
25-Dec-07	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	0.7	1.0	
26-Dec-07	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	0.9	1.1	
27-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
28-Dec-07	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	0.8	1.0	
29-Dec-07	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	0.8	1.0	
30-Dec-07	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	0.8	0.9	
31-Dec-07	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
Hourly Avg	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9		
Hourly Max	1.2	1.3	1.6	1.2	1.3	1.3	1.1	1.3	1.0	1.1	1.2	1.3	1.8	1.4	1.5	1.5	1.7	1.6	1.3	1.0	1.1	1.4	1.5	1.3				

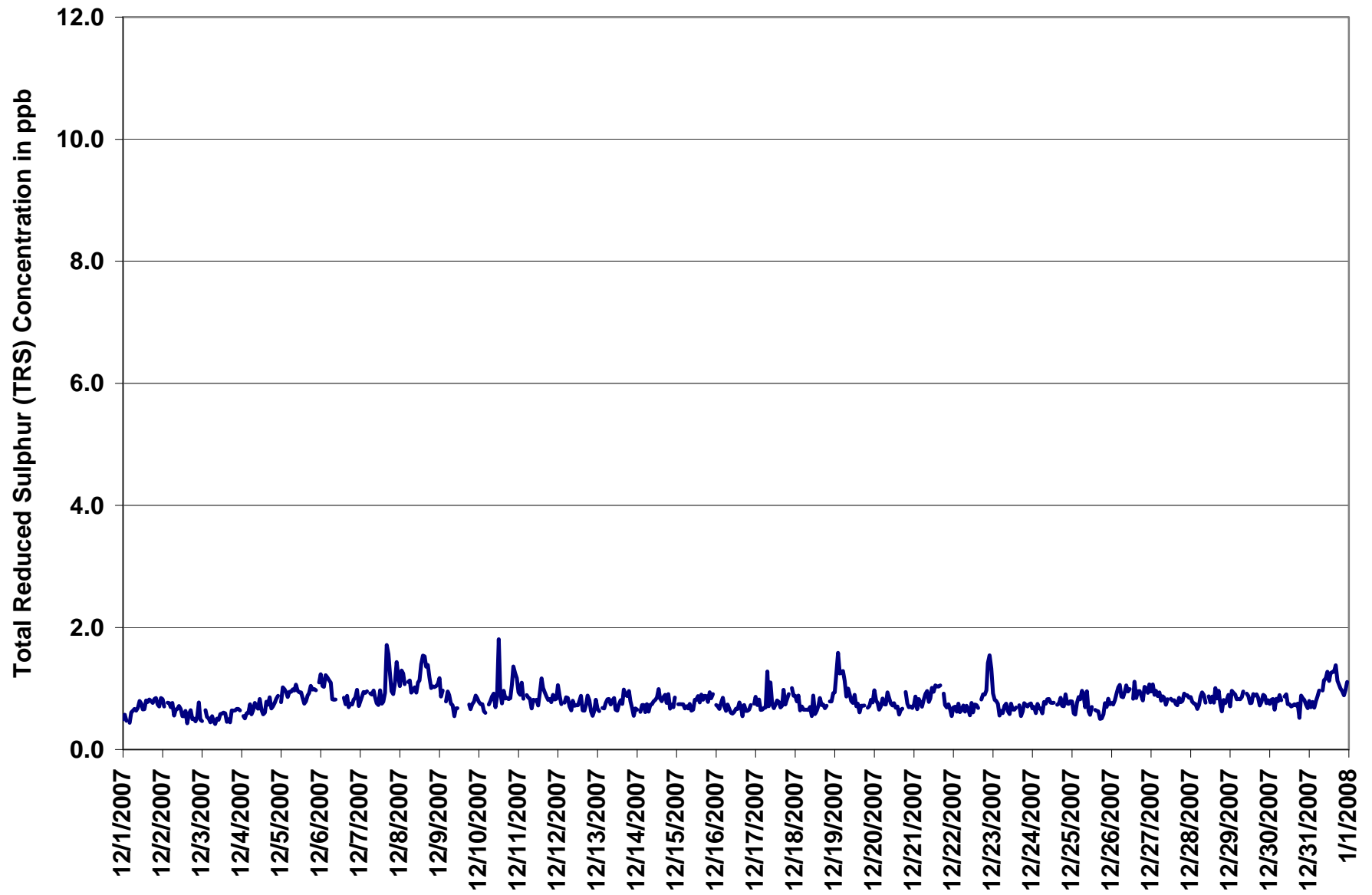
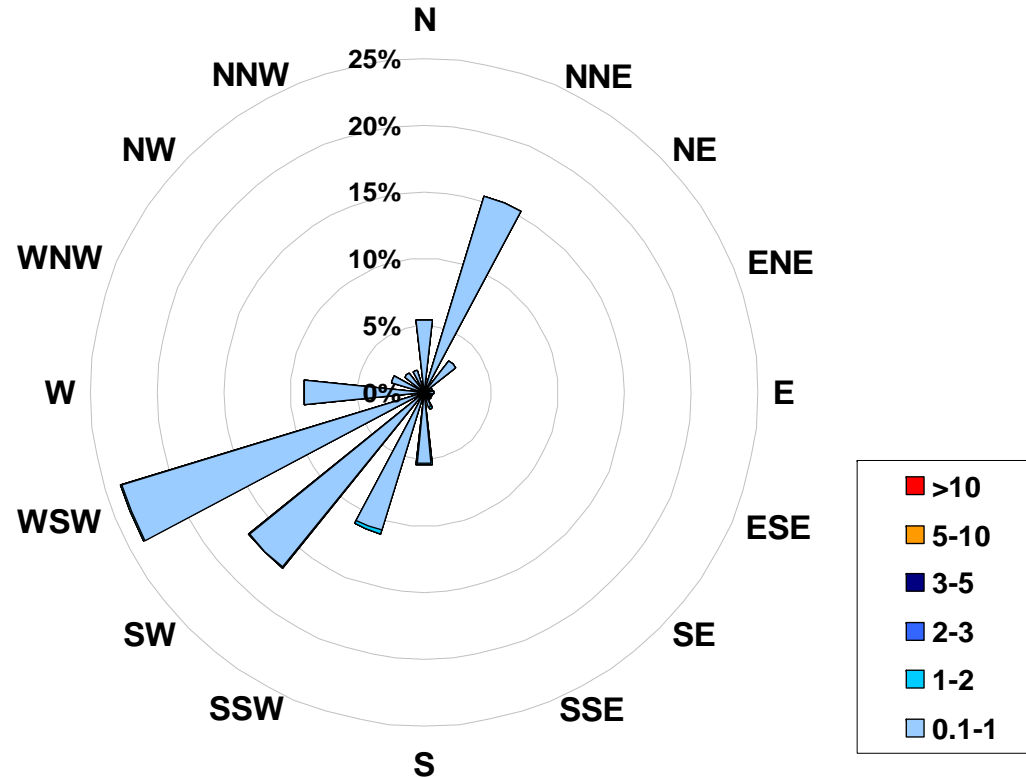


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Smoky Heights Site for December 2007**



Calms: 0%

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	696
1	to	2	6
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			702

PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

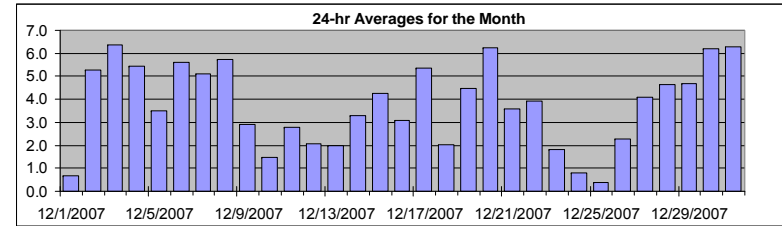
Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m³ 24-hr 30 µg/m³
 Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	45.6 µg/m ³ 14-Dec 23:00 0:00
Maximum 24-hr Value:	6.4 µg/m ³ 3-Dec

AIC Time:	0 hrs	Operational Time:	736 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.2%
Percentile	99	95	75
	16.8	9.9	5.3
	3.0	1.1	0.0
	0.0	0.0	0.0
	Average / Median		3.8
	3 µg/m ³		3.1 µg/m ³



Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Dec-07	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	2	2	4	4	2	0.7	3.9
2-Dec-07	3	5	8	3	4	3	3	3	4	4	3	16	4	2	2	2	2	2	5	8	4	5	17	15	5.3	17.4
3-Dec-07	3	4	2	2	2	0	1	2	9	5	7	7	3	2	0	4	3	19	21	15	13	4	11	12	6.4	20.5
4-Dec-07	5	3	4	4	5	9	5	13	20	9	10	11	4	5	5	2	2	2	1	2	2	2	2	1	5.4	20.0
5-Dec-07	1	1	5	4	0	1	0	0	1	2	4	4	4	4	2	8	5	4	3	6	4	5	8	8	3.5	8.3
6-Dec-07	9	10	9	8	8	9	8	7	8	8	10	8	5	C	C	1	2	1	1	2	6	2	1	2	5.6	10.4
7-Dec-07	2	3	5	4	4	3	3	5	3	6	3	6	5	6	6	5	7	9	8	7	6	6	6	6	5.1	8.7
8-Dec-07	5	5	5	6	6	5	5	4	4	4	5	9	7	8	10	9	8	8	5	4	4	2	5	4	5.7	10.4
9-Dec-07	4	3	3	3	4	5	4	3	3	0	0	0	P	P	P	P	P	P	4	3	3	3	3	3	2.9	4.8
10-Dec-07	2	2	2	2	0	0	1	1	0	0	1	1	1	1	2	2	2	2	2	2	2	2	2	4	1.5	4.0
11-Dec-07	4	3	3	4	3	1	1	0	0	0	0	2	0	2	4	5	3	3	2	1	5	5	7	9	2.8	8.7
12-Dec-07	9	4	0	0	0	1	3	3	2	1	1	1	1	2	1	0	0	0	0	1	4	5	6	5	2.1	9.5
13-Dec-07	5	4	3	3	1	1	1	1	1	1	1	1	1	2	3	2	4	3	3	1	1	1	1	2	2.0	4.5
14-Dec-07	1	1	2	1	0	0	0	0	0	1	8	4	1	2	3	2	0	0	1	6	0	1	2	46	3.3	45.6
15-Dec-07	3	6	1	2	3	2	2	2	2	2	2	4	4	3	2	2	3	3	6	8	12	11	11	8	4.3	11.7
16-Dec-07	4	1	0	1	0	0	0	1	0	1	0	0	0	0	1	5	5	26	12	7	0	0	1	10	3.1	25.8
17-Dec-07	7	4	6	5	19	1	0	4	1	1	7	4	5	7	3	3	5	6	6	7	8	7	4	6	5.3	19.1
18-Dec-07	5	5	4	1	2	0	0	0	3	1	0	0	0	0	0	1	2	5	4	2	3	3	3	3	2.0	5.2
19-Dec-07	4	6	6	7	6	6	5	4	5	8	5	3	3	3	2	2	1	0	5	4	2	6	9	4	4.5	9.1
20-Dec-07	5	6	7	6	9	14	14	10	14	5	7	9	6	7	3	2	3	3	2	3	3	9	1	1	6.2	14.4
21-Dec-07	1	1	2	2	2	2	2	2	2	5	5	7	6	5	4	5	6	6	6	3	4	3	2	1	3.6	7.1
22-Dec-07	3	4	7	5	4	2	3	0	1	0	0	2	3	2	4	4	5	4	3	5	7	8	10	7	3.9	9.6
23-Dec-07	8	6	6	3	1	0	0	0	0	0	0	0	1	2	4	7	0	0	0	0	0	2	3	1	1.8	7.7
24-Dec-07	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	2	1	1	1	1	2	1	0	0	0.8	2.1
25-Dec-07	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3	0	1	2	0.4	2.5
26-Dec-07	1	1	1	2	3	4	5	5	4	4	4	2	1	1	1	1	1	2	1	1	3	2	1	3	2.3	4.6
27-Dec-07	1	2	1	0	11	0	1	1	2	3	9	7	0	1	1	11	11	7	9	3	0	3	8	7	4.1	11.3
28-Dec-07	7	1	1	1	2	1	2	1	4	4	6	7	7	7	5	4	4	4	6	9	4	4	12	10	4.6	12.1
29-Dec-07	4	3	4	4	4	4	4	4	4	5	4	3	3	3	3	3	10	14	2	0	14	0	3	12	4.7	13.9
30-Dec-07	21	10	6	6	6	10	5	4	5	14	12	4	6	3	6	5	5	4	3	4	2	2	2	3	6.2	21.2
31-Dec-07	3	6	9	5	7	6	6	5	6	6	8	9	8	6	12	7	4	5	5	4	3	6	6	7	6.3	11.6
Hourly Avg	4.2	3.6	3.7	3.1	3.8	2.9	2.7	2.8	3.5	3.3	4.1	4.2	3.1	3.0	3.2	3.6	3.5	4.8	4.1	3.9	4.0	3.6	4.9	6.6		
Hourly Max	21.2	10.4	9.0	8.3	19.1	13.9	13.7	13.1	20.0	13.8	12.3	15.7	7.7	7.9	11.6	11.3	11.2	25.8	20.5	14.9	13.5	11.0	17.4	45.6		

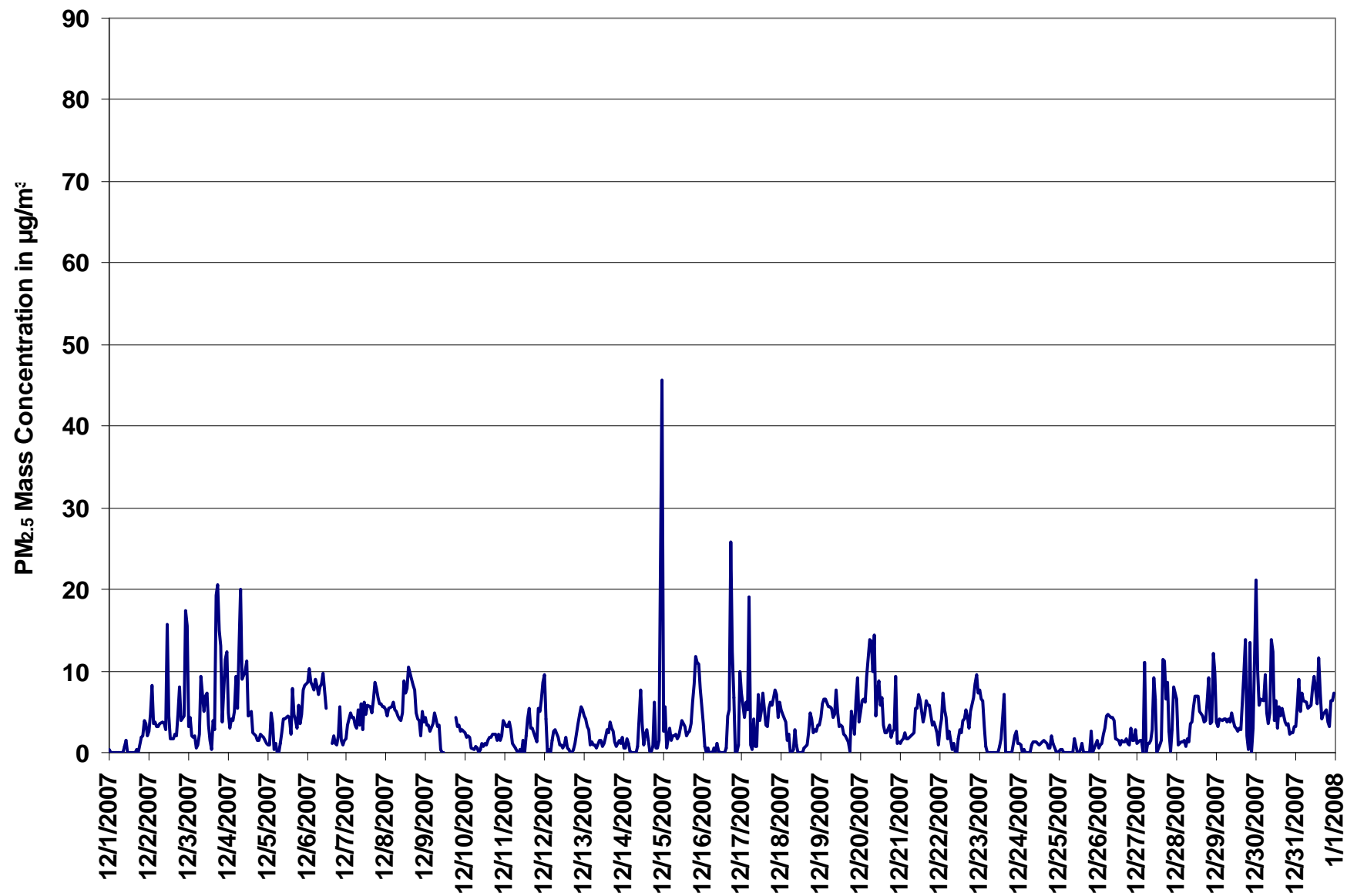


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights
 Station Owner: PASAA

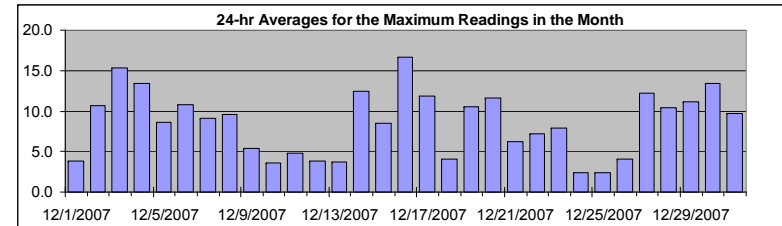
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	178.1	µg/m ³	14-Dec	23:00 0:00
Maximum 24-hr Value:	16.6	µg/m ³	16-Dec	



AIC Time:	0 hrs	Operational Time:	736 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	55.0	24.7	9.4	5.7	3.3	1.3	0.1	8.6	6 µg/m ³
									7.5 µg/m ³

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	18	0	0	0	2	2	3	1	1	3	5	2	1	0	3	2	2	4	6	6	5	10	7	7	3.8	17.7
2-Dec-07	5	19	22	8	10	5	6	6	6	7	5	24	14	4	3	4	6	5	11	14	7	10	36	22	10.7	35.7
3-Dec-07	12	7	9	4	5	4	9	10	16	8	18	13	7	8	9	8	15	50	43	26	24	9	39	17	15.3	50.3
4-Dec-07	10	7	8	9	9	20	13	61	55	21	16	24	10	9	10	4	4	5	4	5	5	5	5	3	13.4	61.1
5-Dec-07	3	4	9	9	2	4	2	3	5	4	8	7	9	8	6	41	20	9	6	9	9	10	11	11	8.6	40.8
6-Dec-07	14	16	11	13	11	13	12	13	11	16	17	18	9	C	C	6	5	5	3	5	25	6	4	5	10.8	25.0
7-Dec-07	6	9	8	9	7	8	7	9	7	10	7	11	7	12	8	9	11	12	12	10	8	11	10	10	9.1	12.5
8-Dec-07	8	8	10	10	10	11	8	7	9	10	10	12	12	12	13	13	11	10	9	8	6	5	8	7	9.5	13.4
9-Dec-07	7	8	5	4	5	6	11	8	9	5	0	1	P	P	P	P	P	P	7	5	5	4	4	4	5.4	10.8
10-Dec-07	5	3	3	3	4	2	3	4	2	4	4	3	3	3	4	3	4	4	4	3	4	4	3	6	3.5	6.2
11-Dec-07	6	6	6	6	4	3	2	1	1	2	1	5	2	4	7	7	5	5	6	5	10	6	8	11	4.8	10.6
12-Dec-07	12	8	2	2	2	3	5	5	3	2	2	2	2	3	2	2	2	2	2	3	5	7	8	7	3.8	11.8
13-Dec-07	6	6	4	5	3	3	3	2	3	3	3	2	3	4	5	4	7	5	5	3	3	3	3	4	3.7	6.8
14-Dec-07	3	2	3	3	2	1	1	2	0	6	9	8	3	4	4	4	3	4	6	38	4	2	6	178	12.4	178.1
15-Dec-07	23	25	6	6	14	4	3	4	3	3	4	7	5	5	4	4	4	5	10	11	14	14	14	11	8.5	24.6
16-Dec-07	7	2	2	3	0	1	2	2	2	3	3	3	1	1	8	23	30	106	101	42	11	12	8	26	16.6	105.7
17-Dec-07	13	8	10	11	39	31	2	14	10	4	29	10	10	12	7	5	7	8	8	10	9	10	8	8	11.8	38.8
18-Dec-07	9	6	7	4	5	3	3	5	5	3	2	0	1	1	2	3	4	7	6	4	4	5	5	5	4.1	8.9
19-Dec-07	6	10	9	9	8	8	9	7	7	10	8	9	7	5	4	5	4	2	37	32	8	21	25	5	10.5	37.3
20-Dec-07	6	13	10	10	13	18	17	19	26	9	10	15	8	9	6	4	5	6	4	5	5	52	5	4	11.7	52.3
21-Dec-07	3	3	4	4	4	6	4	5	6	8	9	9	8	7	5	7	11	8	9	6	6	6	5	4	6.2	10.9
22-Dec-07	5	5	10	9	7	4	6	3	4	2	3	6	7	11	10	10	8	8	6	7	9	10	12	10	7.2	12.1
23-Dec-07	11	9	9	5	2	2	2	3	2	0	2	2	4	6	59	58	0	0	0	2	0	4	5	3	7.9	58.6
24-Dec-07	3	3	2	1	1	1	1	1	3	3	3	2	2	2	3	3	2	3	2	3	6	3	1	1	2.4	6.1
25-Dec-07	2	3	1	1	0	0	2	1	1	3	5	3	1	2	6	1	3	2	1	0	13	1	2	3	2.4	12.6
26-Dec-07	2	3	3	4	6	6	6	6	6	6	6	3	3	2	3	2	3	3	2	2	6	5	4	5	4.0	6.3
27-Dec-07	2	4	3	1	64	0	5	6	4	10	13	12	2	4	3	21	40	32	20	9	2	8	14	15	12.3	64.1
28-Dec-07	11	4	4	2	3	2	3	3	5	5	8	9	10	10	7	5	5	6	16	44	7	8	54	18	10.4	54.0
29-Dec-07	10	4	5	6	5	6	5	6	6	6	5	5	5	4	5	4	22	27	12	4	55	3	9	46	11.1	55.1
30-Dec-07	43	28	16	9	9	13	7	6	9	23	51	10	22	6	12	7	8	6	5	7	5	6	7	7	13.4	50.6
31-Dec-07	7	12	12	8	13	9	8	8	9	9	11	14	10	10	20	10	7	8	9	6	6	10	10	10	9.7	19.8
Hourly Avg	9.0	7.9	6.9	5.7	8.7	6.4	5.5	7.4	7.6	6.7	8.9	8.1	6.2	5.8	8.2	9.4	8.6	11.9	12.0	10.7	9.2	8.7	10.9	15.3		
Hourly Max	43.2	28.4	22.3	12.5	64.1	30.6	17.3	61.1	54.9	22.8	50.6	23.7	22.0	12.5	58.6	57.9	39.6	105.7	100.7	43.6	55.1	52.3	54.0	178.1		

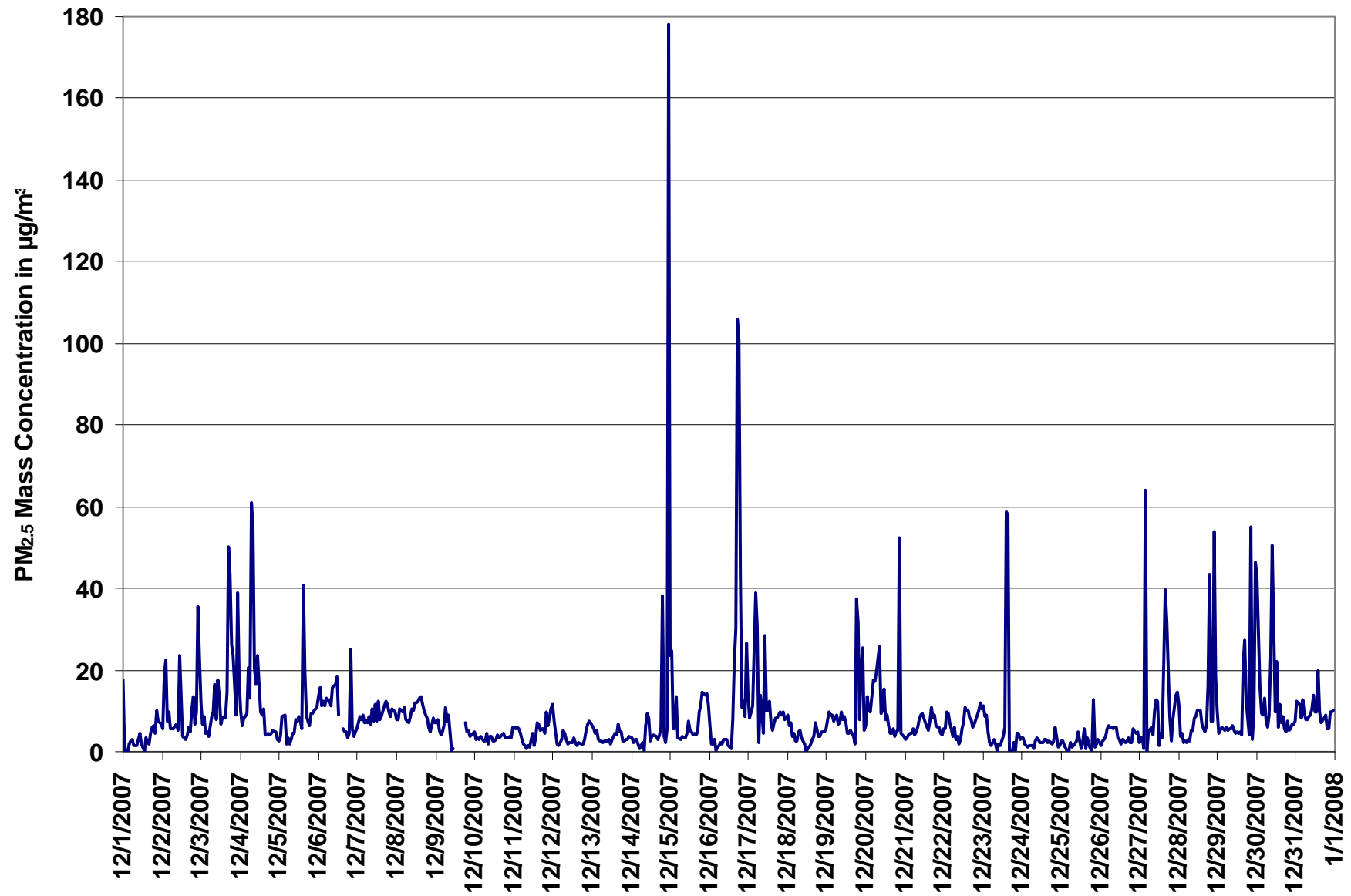
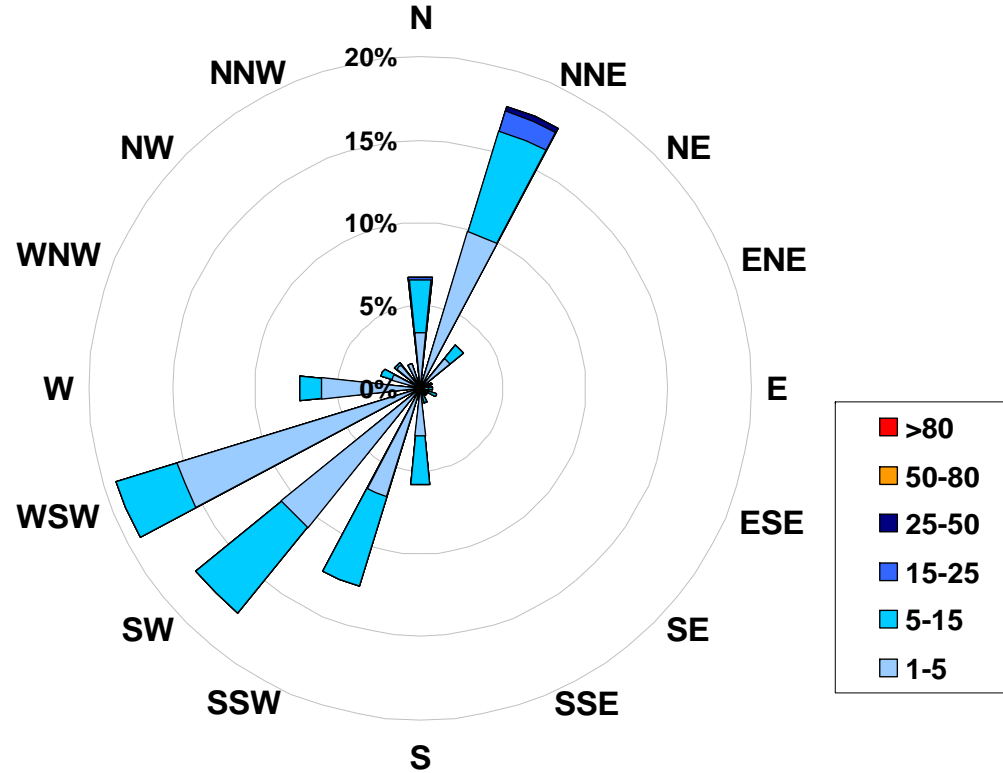


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Smoky Heights Site for December 2007



Calms: 0%

Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
1.0	<	5	535
5	to	15	191
15	to	25	8
25	to	50	2
50	to	80	0
	>	80	0
Total Non-Zero Values			736

PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

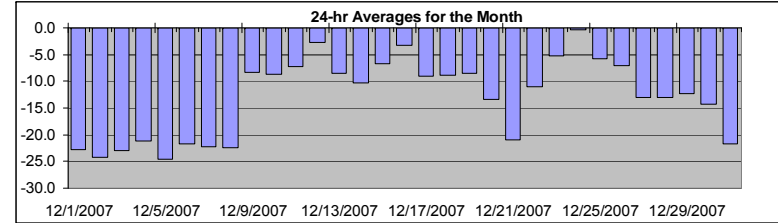
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	1.5 °C	12-Dec	2:00 3:00
Maximum 24-hr Value:	-0.4 °C	24-Dec	



AIC Time:	0 hrs	Operational Time:	739 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.3%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.8	-1.0	-6.5	-12.1	-20.7	-24.9	-26.7	-13.0 °C	-12.1 °C

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	-17	-18	-20	-21	-23	-23	-23	-24	-25	-24	-22	-21	-20	-20	-20	-21	-23	-24	-26	-26	-27	-27	-26	-27	-27	-22.8	-17.3	
2-Dec-07	-26	-27	-26	-26	-25	-24	-24	-24	-24	-24	-24	-24	-24	-23	-22	-23	-23	-24	-24	-24	-23	-24	-24	-24	-24	-24	-24.2	-22.4
3-Dec-07	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-23	-23	-23	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-22	-23.0	-21.8	
4-Dec-07	-22	-22	-22	-22	-21	-21	-21	-21	-21	-21	-21	-20	-20	-20	-20	-21	-21	-21	-21	-21	-21	-21	-21	-21	-21	-21.1	-19.9	
5-Dec-07	-21	-21	-22	-22	-22	-23	-25	-28	-29	-30	-28	-26	-25	-22	-22	-22	-24	-25	-26	-25	-25	-26	-26	-26	-26	-24.6	-20.9	
6-Dec-07	-26	-24	-24	-25	-25	-26	-27	-26	-26	-24	-23	-20	-19	-17	-15	-16	-18	-19	-19	-19	-20	-20	-21	-21	-21	-21.6	-15.5	
7-Dec-07	-22	-23	-23	-24	-24	-25	-25	-24	-25	-24	-23	-20	-19	-18	-18	-19	-22	-23	-22	-22	-22	-23	-24	-23	-23	-22.3	-17.5	
8-Dec-07	-22	-23	-24	-27	-27	-26	-26	-26	-24	-24	-24	-22	-21	-21	-20	-19	-20	-21	-20	-21	-20	-21	-20	-19	-19	-22.4	-18.7	
9-Dec-07	-19	-18	-17	-16	-16	-15	-14	-13	-9	-4	-4	-4	P	P	P	P	P	-3	-2	-2	-2	-2	-2	-2	-2	-8.4	-1.5	
10-Dec-07	-3	-3	-3	-3	-3	-4	-6	-7	-10	-11	-10	-9	-8	-8	-7	-8	-12	-14	-13	-14	-13	-13	-14	-14	-14	-8.7	-2.5	
11-Dec-07	-13	-12	-13	-11	-10	-10	-10	-9	-8	-8	-7	-6	-5	-5	-5	-4	-4	-6	-6	-6	-6	-4	-1	-1	-1	-7.2	-1.4	
12-Dec-07	-1	0	2	1	1	1	0	0	0	-1	-1	0	-1	-1	0	-1	-3	-6	-8	-9	-9	-10	-10	-9	-9	-2.7	1.5	
13-Dec-07	-10	-10	-11	-11	-11	-11	-11	-11	-10	-9	-8	-7	-6	-6	-6	-6	-6	-7	-8	-6	-7	-9	-9	-8	-8	-8.5	-5.8	
14-Dec-07	-8	-11	-10	-9	-11	-12	-11	-11	-12	-13	-11	-10	-9	-8	-7	-8	-10	-12	-12	-13	-12	-10	-10	-9	-9	-10.3	-6.6	
15-Dec-07	-9	-9	-10	-9	-9	-8	-7	-7	-6	-7	-7	-6	-5	-5	-4	-4	-5	-6	-7	-7	-6	-6	-6	-6	-6	-6.7	-4.3	
16-Dec-07	-3	-2	0	-1	-1	-1	-3	-3	-5	-4	-5	-4	-3	-2	-2	-4	-5	-6	-4	-5	-5	-4	-4	-4	-4	-3.3	-0.4	
17-Dec-07	-5	-5	-6	-6	-7	-8	-9	-9	-11	-11	-11	-10	-10	-9	-8	-9	-10	-9	-8	-8	-10	-11	-13	-13	-13	-9.0	-4.5	
18-Dec-07	-15	-14	-14	-14	-13	-13	-14	-13	-10	-8	-8	-7	-6	-4	-4	-4	-5	-5	-5	-5	-6	-7	-8	-9	-9	-8.8	-4.0	
19-Dec-07	-8	-10	-11	-12	-14	-13	-12	-13	-14	-11	-10	-9	-8	-6	-4	-6	-6	-7	-7	-5	-5	-5	-5	-5	-5	-8.5	-4.3	
20-Dec-07	-6	-7	-7	-8	-8	-8	-8	-9	-9	-10	-12	-15	-16	-16	-17	-18	-19	-18	-18	-20	-17	-17	-16	-16	-16	-13.3	-5.8	
21-Dec-07	-22	-23	-23	-24	-24	-24	-25	-25	-25	-25	-24	-23	-21	-20	-20	-20	-18	-18	-20	-17	-17	-17	-16	-16	-16	-21.0	-15.7	
22-Dec-07	-15	-15	-14	-14	-13	-13	-13	-13	-12	-11	-10	-9	-8	-7	-7	-8	-8	-8	-9	-9	-10	-11	-12	-13	-13	-11.0	-7.0	
23-Dec-07	-12	-12	-9	-8	-5	-6	-3	-5	-5	-5	-5	-5	-4	-3	-2	-2	-3	-3	-3	-5	-6	-6	-6	-4	-4	-5.3	-2.2	
24-Dec-07	-3	-2	-1	0	0	-1	-1	-1	-1	0	1	1	1	1	1	1	1	1	1	-1	-2	-1	0	0	-1	-0.4	1.0	
25-Dec-07	-2	-1	-1	-3	-5	-6	-7	-8	-9	-11	-9	-7	-7	-5	-5	-6	-8	-7	-6	-5	-6	-6	-5	-5	-5	-5.9	-0.6	
26-Dec-07	-5	-5	-6	-7	-7	-7	-6	-6	-6	-8	-6	-5	-6	-5	-4	-5	-7	-7	-8	-9	-10	-12	-13	-12	-12	-7.1	-4.3	
27-Dec-07	-12	-13	-13	-13	-13	-15	-15	-15	-18	-18	-15	-11	-10	-10	-11	-11	-11	-12	-13	-13	-13	-13	-12	-12	-12	-13.0	-10.1	
28-Dec-07	-12	-11	-11	-11	-11	-12	-12	-13	-14	-15	-15	-15	-14	-13	-13	-13	-13	-14	-14	-14	-14	-14	-13	-14	-14	-13.0	-10.7	
29-Dec-07	-14	-14	-14	-14	-14	-14	-13	-13	-13	-13	-12	-12	-12	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-12	-12	-12.4	-10.9	
30-Dec-07	-13	-13	-13	-13	-13	-13	-13	-15	-15	-15	-14	-13	-12	-12	-12	-13	-13	-13	-13	-14	-16	-19	-20	-21	-21	-14.3	-12.2	
31-Dec-07	-23	-23	-22	-22	-23	-23	-23	-24	-24	-24	-24	-23	-21	-19	-18	-19	-20	-21	-20	-21	-20	-22	-23	-22	-22	-21.8	-18.3	
Hourly Avg	-13.2	-13.3	-13.3	-13.5	-13.5	-13.8	-14.0	-14.1	-14.3	-14.1	-13.4	-12.4	-11.9	-11.3	-10.9	-11.4	-12.3	-12.6	-12.8	-12.9	-13.1	-13.4	-13.5	-13.3				
Hourly Max	-1.3	0.3	1.5	1.2	1.1	0.9	0.1	-0.2	-0.5	0.2	0.6	0.7	0.6	0.8	1.0	0.8	0.8	0.6	-0.9	-1.5	-0.7	-0.5	-0.3	-0.9				

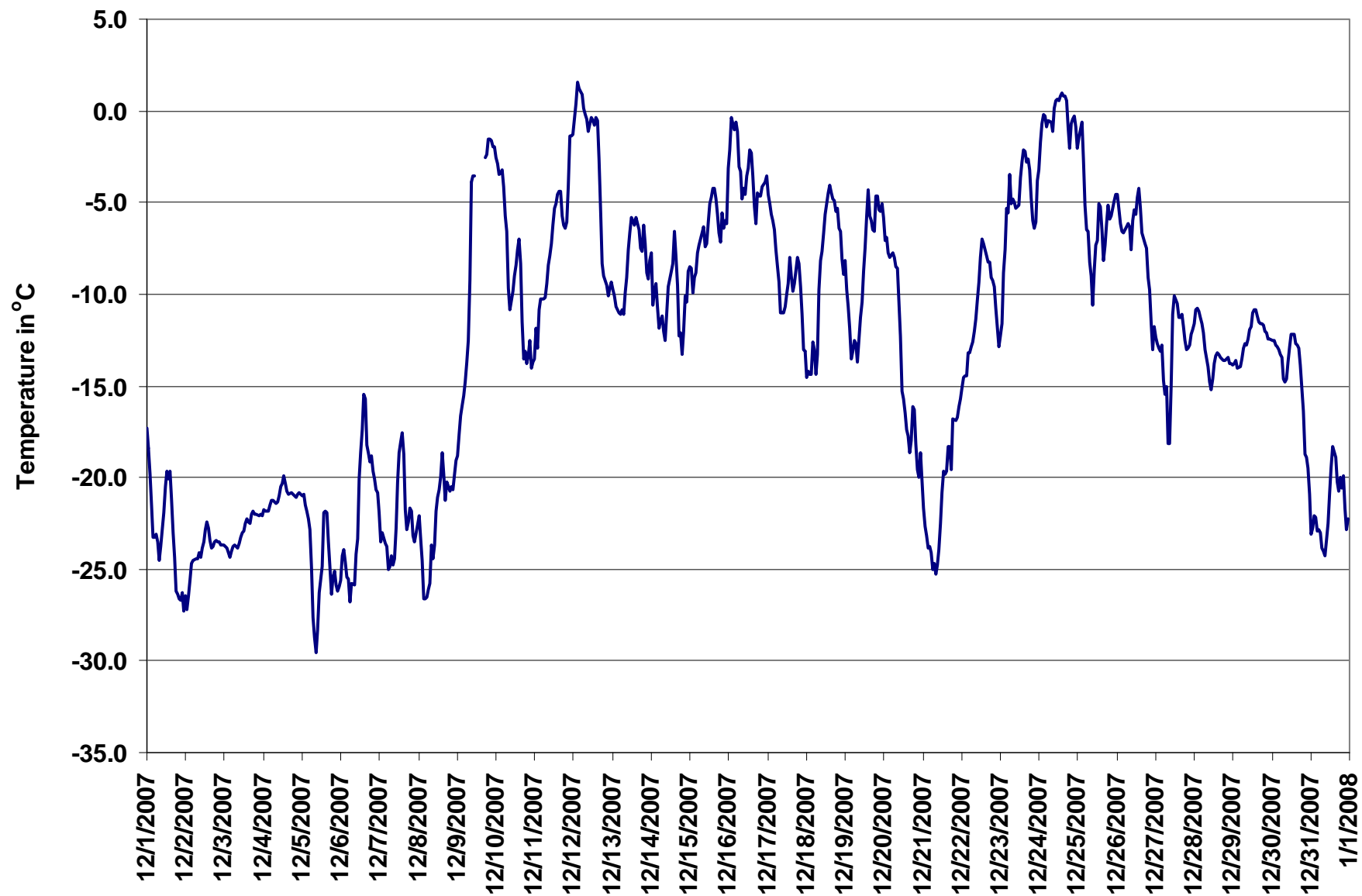


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

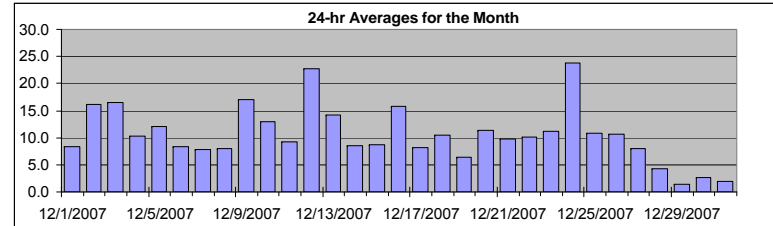
Wind Speed (WSs)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	34.3	km/hr	16-Dec	2:00 3:00
Maximum 24-hr Value:	23.8	km/hr	24-Dec	

Calm Time:	0 hrs	0% calms	Operational Time:	739 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.3%				
Percentile	99	95	75	50	25	5	1	AverageS
	29.2	24.2	14.1	9.5	6.0	1.7	1.1	10.5 km/hr



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-Dec-07	14	15	10	6	10	10	10	10	8	11	12	7	8	7	8	8	7	7	8	6	7	5	2		8.4	14.9		
2-Dec-07	2	3	4	6	7	11	12	14	16	15	17	16	19	22	24	21	22	22	25	24	25	19	20	21		16.1	24.6	
3-Dec-07	20	19	18	17	16	16	16	20	18	19	17	17	20	19	19	13	16	15	15	15	15	12	11		16.5	20.4		
4-Dec-07	11	12	11	11	11	10	9	9	10	10	11	12	12	13	12	11	10	11	12	11	11	7	5	5		10.3	12.9	
5-Dec-07	7	8	13	14	14	13	12	15	16	14	15	10	12	15	17	15	12	12	11	7	7	9	10	10		12.1	16.8	
6-Dec-07	9	9	8	6	8	10	9	7	8	7	8	6	7	8	5	5	7	8	12	12	9	11	12	10		8.4	12.1	
7-Dec-07	6	7	5	6	6	8	9	7	5	5	7	5	5	6	5	7	10	10	11	12	11	14	10	11		7.8	14.1	
8-Dec-07	11	10	9	9	9	8	9	9	9	7	7	6	7	8	7	6	7	8	8	8	8	7	8	8		8.0	10.9	
9-Dec-07	8	7	10	9	8	7	9	9	12	21	26	24	P	P	P	P	22	23	23	29	28	26	25		17.1	29.3		
10-Dec-07	20	20	15	17	21	17	8	9	10	9	13	13	10	12	12	11	13	13	12	13	16	13	8	8		13.0	21.2	
11-Dec-07	9	7	11	8	10	9	6	6	10	9	8	10	11	8	5	7	10	7	8	7	9	13	17	16		9.2	17.1	
12-Dec-07	18	26	29	26	25	26	27	31	26	29	28	29	28	27	24	17	16	13	15	17	17	15	17	17		22.7	31.1	
13-Dec-07	16	15	17	16	16	17	17	15	15	15	12	12	10	10	9	10	12	10	14	15	16	17	17	17		14.2	17.5	
14-Dec-07	18	15	16	10	12	12	11	10	9	6	7	9	9	9	4	4	6	6	4	5	5	4	4	8		8.4	18.1	
15-Dec-07	7	6	3	3	6	3	4	4	3	5	6	6	4	4	11	13	14	16	14	14	14	13	19	14		8.6	19.3	
16-Dec-07	22	27	34	30	27	28	22	23	15	16	11	10	11	8	8	6	8	7	10	9	11	12	11	11		15.8	34.3	
17-Dec-07	11	12	11	12	10	11	10	6	6	7	5	4	3	4	5	3	9	10	8	12	13	11	7	7		8.2	13.0	
18-Dec-07	12	9	11	14	5	3	5	9	18	19	18	19	17	13	13	8	5	7	8	7	7	6	6	12		10.4	19.5	
19-Dec-07	9	7	8	5	7	8	8	9	10	10	9	6	4	5	3	6	3	4	4	7	6	4	4	4		6.3	9.9	
20-Dec-07	3	3	5	7	8	9	10	12	12	17	17	21	16	19	19	17	11	13	17	10	10	6	6	8		11.4	21.5	
21-Dec-07	7	7	10	13	15	9	8	8	8	9	11	9	8	7	7	8	13	12	11	10	11	11	12	11		9.7	14.6	
22-Dec-07	14	11	10	10	10	10	11	9	13	10	11	9	9	13	5	4	3	5	11	14	14	10	13	11	12		10.2	14.1
23-Dec-07	13	15	15	16	18	15	18	14	19	10	6	5	8	9	5	7	3	4	9	8	14	8	14	17		11.1	18.7	
24-Dec-07	17	18	27	31	27	24	26	29	27	28	33	29	26	28	24	23	23	21	18	17	18	18	21	19		23.8	33.4	
25-Dec-07	18	19	23	20	20	19	16	9	6	9	14	14	7	4	5	7	6	5	8	4	3	6	9	9		10.8	22.7	
26-Dec-07	9	8	8	7	7	8	8	7	9	11	10	14	14	11	13	9	11	13	13	14	13	10	11	18		10.7	17.6	
27-Dec-07	15	8	4	3	2	6	4	4	5	3	4	4	5	5	7	8	10	11	12	14	16	15	15	12		8.0	15.9	
28-Dec-07	11	12	10	8	7	6	6	4	4	3	4	3	2	2	2	2	3	2	2	2	2	2	2	2		4.3	12.2	
29-Dec-07	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	3	3		1.5	2.9	
30-Dec-07	3	4	4	4	4	4	3	3	3	3	3	4	3	4	3	2	2	2	2	1	1	1	1	1		2.7	3.8	
31-Dec-07	1	2	2	1	1	1	1	1	1	1	1	1	1	2	2	4	3	3	5	3	2	2	2	3		2.0	4.8	
1-hr Average	11.2	11.0	11.7	11.1	11.2	10.8	10.5	10.4	10.7	11.0	11.2	10.8	10.0	9.8	9.4	8.8	9.3	9.9	10.8	10.3	10.9	10.4	10.5	10.7				
Hourly Max	22.2	27.0	34.3	31.1	27.3	28.0	26.6	31.1	27.1	29.3	33.4	29.4	28.1	28.1	24.2	22.6	22.8	22.4	24.5	23.6	29.3	28.3	26.3	25.1				

PASZA - Smoky Heights Vector Wind Speed Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

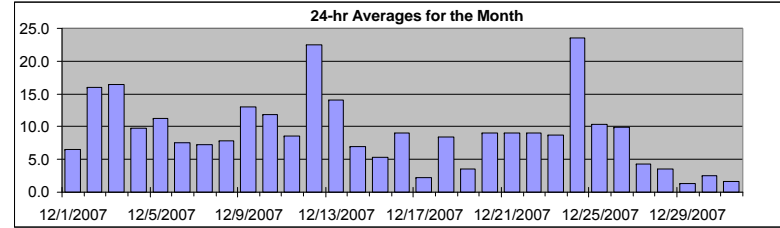
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	34.3	km/hr	16-Dec	2:00 3:00
Maximum 24-hr Value:	23.5	km/hr	24-Dec	



Calm Time:	0 hrs	0% calms	Operational Time:	739 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.3%				
Percentile	99	95	75	50	25	5	1	AverageV
	29.1	24.1	14.0	9.2	5.6	1.4	0.9	32.1 km/hr

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-Dec-07	14	15	10	6	8	9	10	8	10	12	6	8	7	8	8	8	7	7	7	6	7	5	2			6.5	14.8	
2-Dec-07	2	3	4	5	7	11	12	14	16	15	16	16	19	22	24	21	22	22	25	24	25	19	20	21			16.0	24.6
3-Dec-07	20	19	18	16	16	16	16	20	18	19	16	17	20	19	19	12	16	15	15	15	15	15	12	11			16.5	20.3
4-Dec-07	11	12	11	11	11	10	9	9	10	10	11	12	12	13	12	11	10	10	12	11	11	6	5	5			9.8	12.8
5-Dec-07	6	8	12	14	14	13	12	15	16	14	15	10	12	15	17	15	12	12	11	6	6	9	10	10			11.3	16.8
6-Dec-07	9	9	8	5	8	9	9	7	8	7	8	6	6	7	5	5	7	8	12	8	11	12	9			7.6	11.8	
7-Dec-07	6	7	5	6	6	8	9	7	5	5	7	5	5	6	5	7	9	10	11	12	11	14	10	10			7.2	13.9
8-Dec-07	11	10	9	9	9	8	9	9	8	6	7	6	7	8	7	6	7	8	8	7	8	7	8	8			7.8	10.7
9-Dec-07	8	7	10	9	8	7	9	8	11	21	26	24	P	P	P	P	P	22	23	23	29	28	26	25			13.0	29.2
10-Dec-07	20	20	15	16	20	16	7	9	10	9	13	13	10	12	12	11	12	12	11	12	16	13	8	8			11.9	20.0
11-Dec-07	9	7	11	8	9	9	6	6	10	8	8	10	11	8	4	7	9	6	7	7	9	13	17	16			8.6	17.0
12-Dec-07	18	26	29	26	25	26	26	31	26	29	28	29	28	27	24	17	16	13	15	17	17	15	17	17			22.5	31.1
13-Dec-07	16	15	17	16	16	17	17	15	15	15	12	11	10	10	9	10	12	10	14	15	16	17	17	17			14.0	17.3
14-Dec-07	18	15	16	9	12	12	11	10	8	6	6	9	9	9	3	4	6	5	4	4	5	3	4	8			6.9	17.9
15-Dec-07	7	5	2	3	6	3	4	4	2	5	6	6	4	2	11	13	14	16	14	13	14	13	19	13			5.4	19.1
16-Dec-07	22	27	34	30	27	27	22	22	15	16	11	10	11	8	6	4	8	7	10	9	11	12	11	11			9.0	34.3
17-Dec-07	11	12	11	11	10	11	10	6	6	7	4	4	3	3	4	1	8	10	7	11	13	10	6	7			2.1	12.9
18-Dec-07	11	9	10	13	4	2	3	8	17	19	18	19	17	13	13	8	5	6	8	7	7	6	3	12			8.4	19.4
19-Dec-07	8	6	8	4	7	7	8	9	9	10	9	6	4	4	3	4	3	4	3	7	5	4	3	3			3.5	9.8
20-Dec-07	2	2	5	7	8	9	7	11	11	17	17	21	15	18	18	17	11	12	16	10	10	5	4	7			9.1	21.2
21-Dec-07	6	7	10	13	14	9	8	8	8	8	11	9	8	7	7	8	13	12	11	10	11	10	11	11			9.0	14.5
22-Dec-07	14	11	10	10	10	10	11	9	13	10	10	9	12	3	2	2	5	11	13	13	10	13	11	12			9.0	14.0
23-Dec-07	13	15	15	16	18	14	18	13	19	8	6	4	8	8	4	6	1	3	9	7	13	5	13	17			8.7	18.6
24-Dec-07	17	18	27	31	27	24	26	29	27	28	33	29	26	28	24	23	23	21	18	17	18	18	21	19			23.5	33.4
25-Dec-07	18	19	23	20	20	19	16	8	6	9	14	14	7	3	5	7	4	5	8	3	1	6	9	9			10.3	22.7
26-Dec-07	9	6	8	7	7	7	8	7	9	11	10	14	14	11	13	9	11	13	13	14	13	10	11	18			9.9	17.6
27-Dec-07	15	7	3	2	1	6	3	3	5	2	3	3	5	2	7	8	10	11	11	14	16	15	15	12			4.3	15.9
28-Dec-07	11	12	10	8	7	6	6	4	3	3	4	3	2	1	2	2	3	2	1	2	2	2	2	2			3.5	12.2
29-Dec-07	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3			1.3	2.9
30-Dec-07	3	4	4	4	4	4	3	3	3	3	3	4	3	4	3	2	2	2	1	1	1	1	1	1			2.5	3.7
31-Dec-07	1	2	2	1	1	1	1	1	1	1	1	1	1	2	2	4	3	3	5	3	2	1	2	3			1.6	4.8
1-hr Vector	6.6	5.9	7.1	7.1	7.1	6.8	6.0	5.6	6.0	5.8	6.1	6.2	5.0	4.3	3.5	4.0	4.7	5.8	6.3	5.7	5.5	5.1	5.6	6.4				
Hourly Max	22.2	26.9	34.3	31.0	27.2	27.2	26.4	31.1	27.1	29.2	33.4	29.3	28.1	28.0	24.1	22.6	22.8	22.3	24.5	23.5	29.2	28.1	26.2	24.9				

PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Calm Time: 0 hrs	0% calms	Operational Time: 739 hrs						
Calibration Time: 0 hrs		AMD Operational Uptime: 99.3%						
Percentile	99	95	75	50	25	5	1	Average
	351.6	306.0	252.5	225.7	160.2	12.9	6.2	255 deg

Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	0:00
1-Dec-07	349	341	341	333	274	286	262	235	257	264	237	243	247	259	255	263	261	263	267	200	210	233	259	290	271	W
2-Dec-07	311	24	21	18	20	20	18	18	23	23	27	15	21	19	19	18	19	23	25	21	25	22	18	16	20	NNE
3-Dec-07	18	19	18	16	15	16	18	19	19	22	20	18	17	22	25	7	10	12	11	7	13	13	14	8	16	NNE
4-Dec-07	5	359	356	356	1	3	6	7	13	7	6	7	360	6	7	355	351	349	343	336	325	323	322	283	355	N
5-Dec-07	271	234	234	240	245	258	244	259	262	256	258	227	244	233	227	225	216	216	243	248	218	186	193	192	236	WSW
6-Dec-07	200	167	187	217	210	193	188	194	196	211	184	171	168	172	169	172	195	226	247	247	251	227	215	214	205	SSW
7-Dec-07	208	177	190	211	205	194	195	187	200	214	210	215	186	180	192	194	242	245	242	247	227	230	235	220	215	SW
8-Dec-07	222	207	193	193	201	204	191	219	237	211	197	180	178	179	190	193	207	205	201	199	192	199	192	216	201	SSW
9-Dec-07	221	211	196	204	177	181	175	185	223	255	252	252	P	P	P	P	P	263	252	275	296	308	308	310	262	W
10-Dec-07	290	290	274	300	298	264	235	220	243	258	256	243	244	222	224	232	265	252	246	238	260	246	239	235	258	WSW
11-Dec-07	227	214	192	189	185	196	210	221	189	202	185	211	204	232	255	247	245	238	217	231	230	241	235	240	219	SW
12-Dec-07	244	256	255	257	256	269	270	274	264	260	264	263	259	256	259	253	239	247	261	258	256	250	261	260	259	W
13-Dec-07	262	259	257	259	258	261	260	247	246	246	235	242	247	236	245	230	228	241	256	257	250	256	247	246	250	WSW
14-Dec-07	253	261	260	252	247	237	228	238	215	191	226	229	243	249	220	223	231	257	306	297	287	330	16	17	250	WSW
15-Dec-07	17	48	7	281	262	235	203	244	269	22	25	23	9	176	226	221	211	220	223	221	227	212	211	248	230	SW
16-Dec-07	236	239	237	240	239	251	264	257	222	211	199	192	197	192	206	348	16	14	19	16	19	20	17	14	248	WSW
17-Dec-07	12	14	8	11	13	22	21	27	40	33	38	39	44	360	45	311	246	220	173	188	207	235	228	238	357	N
18-Dec-07	232	240	247	212	190	351	235	170	171	167	173	170	165	157	159	169	210	206	265	226	219	208	248	260	195	SSW
19-Dec-07	210	184	162	229	204	219	220	247	245	242	233	223	247	244	158	53	94	139	89	113	99	55	103	156	198	SSW
20-Dec-07	242	306	239	221	215	233	281	22	5	341	291	291	274	285	279	271	242	255	276	256	249	255	226	265	277	W
21-Dec-07	218	244	257	264	262	234	226	239	195	195	194	200	209	230	221	221	231	250	258	260	254	244	240	239	235	SW
22-Dec-07	238	230	230	234	235	233	229	254	241	232	200	219	255	286	61	78	196	229	224	223	192	187	202	227	226	SW
23-Dec-07	228	248	235	235	231	230	225	227	219	202	186	261	322	24	29	5	96	253	242	200	204	224	222	231	231	SW
24-Dec-07	208	234	238	241	244	253	245	243	253	245	251	253	257	256	253	255	257	254	252	255	253	241	241	246	248	WSW
25-Dec-07	247	248	251	260	264	264	258	220	240	248	233	248	231	270	276	288	250	234	250	253	18	286	258	254	253	WSW
26-Dec-07	259	189	228	234	204	211	187	223	242	256	247	255	252	241	247	257	270	268	260	268	269	259	256	265	249	WSW
27-Dec-07	265	253	205	204	131	255	99	11	274	209	174	243	250	341	32	7	14	21	12	10	9	9	12	10	352	N
28-Dec-07	13	24	29	35	34	48	45	72	137	109	124	137	107	58	48	37	34	31	352	16	48	39	24	13	42	NE
29-Dec-07	359	342	15	24	338	305	17	14	122	343	47	51	35	24	33	36	12	7	20	27	19	22	18	14	17	NNE
30-Dec-07	15	17	18	15	17	14	17	19	9	14	28	25	33	28	15	352	18	27	28	350	307	348	288	279	14	NNE
31-Dec-07	286	259	275	25	248	242	213	210	203	227	227	225	234	217	209	216	243	248	261	241	242	46	213	187	237	WSW
Hourly Avg	259	259	250	254	252	255	248	252	244	249	241	248	253	258	257	265	256	258	266	262	264	263	256	263		

PASZA - Smoky Heights Standard Deviation of Wind Direction Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	739 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	99.3%			
Percentile	99	95	75	50	25	5	1
	71.6	47.0	16.2	9.2	5.5	2.8	2.0

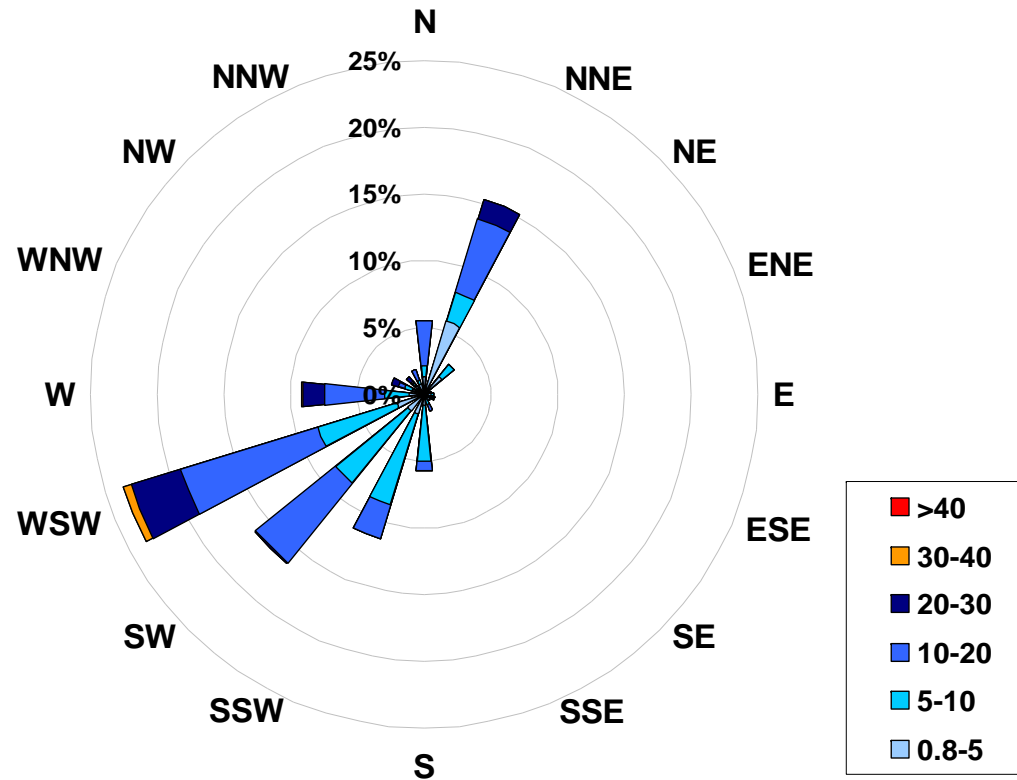
Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Dec-07	10	5	8	10	34	9	9	22	15	10	21	7	7	8	3	4	11	8	14	7	18	20	10	21	33.7
2-Dec-07	37	14	9	11	5	4	4	4	3	4	3	4	6	4	4	3	4	4	3	3	3	4	4	3	37.0
3-Dec-07	5	4	4	5	6	5	6	5	4	4	4	6	3	4	4	13	5	4	5	7	6	6	5	6	13.2
4-Dec-07	7	7	7	8	9	8	8	9	5	7	7	7	8	8	9	9	9	8	6	6	8	31	24	16	30.7
5-Dec-07	7	12	6	5	5	8	4	6	4	5	6	7	6	6	4	4	6	8	7	19	41	14	13	4	41.3
6-Dec-07	6	16	17	47	17	11	4	9	11	13	9	13	23	28	16	10	10	8	9	14	44	11	4	13	47.2
7-Dec-07	26	6	10	11	9	8	4	10	9	7	7	12	9	11	19	22	22	7	5	5	16	10	9	13	25.5
8-Dec-07	9	8	11	11	6	7	7	7	12	30	11	9	5	4	9	9	16	17	7	13	12	9	8	12	29.7
9-Dec-07	14	13	8	9	10	12	11	10	28	4	3	5	P	P	P	P	P	5	3	15	4	7	5	8	27.7
10-Dec-07	7	7	7	11	25	12	38	17	8	15	3	5	13	4	5	5	16	8	14	13	3	10	10	15	38.3
11-Dec-07	20	11	5	9	10	16	21	13	7	8	12	10	17	14	25	22	14	38	27	16	9	8	7	3	38.3
12-Dec-07	5	2	4	6	5	4	5	4	5	2	3	2	2	4	4	5	2	9	3	2	3	6	5	7	8.7
13-Dec-07	3	4	3	2	3	3	2	4	3	4	3	7	5	3	12	10	4	6	5	6	5	7	2	2	12.4
14-Dec-07	7	5	5	23	5	9	6	5	10	15	17	22	11	16	34	16	11	8	37	45	20	33	15	10	44.8
15-Dec-07	7	35	64	28	23	38	17	17	56	16	18	17	27	91	10	5	7	6	6	9	8	16	8	17	91.5
16-Dec-07	3	3	2	3	3	15	7	7	15	9	9	9	9	12	40	37	17	10	5	5	3	5	2	4	39.7
17-Dec-07	7	7	7	5	5	7	5	17	9	14	24	30	23	67	44	84	36	9	32	13	5	16	33	30	84.1
18-Dec-07	12	8	15	10	55	39	65	61	3	2	3	3	5	5	6	23	22	29	13	15	7	19	69	16	69.4
19-Dec-07	25	47	15	39	14	13	11	7	11	6	11	11	18	20	34	44	19	17	60	16	31	26	31	41	59.6
20-Dec-07	51	47	16	22	16	11	51	10	16	14	19	9	13	14	13	7	12	9	7	14	7	34	43	23	50.8
21-Dec-07	28	11	9	6	7	11	11	16	12	12	8	9	16	9	6	6	13	9	6	7	6	7	6	5	28.0
22-Dec-07	6	6	7	12	9	12	8	16	7	15	15	21	18	72	53	77	32	14	11	13	10	8	14	12	77.2
23-Dec-07	17	6	6	8	4	23	6	21	7	35	24	24	15	34	49	58	80	60	9	19	9	93	14	7	92.6
24-Dec-07	10	10	3	4	5	4	4	3	4	2	5	2	2	2	2	3	2	2	3	3	11	9	5	3	10.7
25-Dec-07	4	4	2	2	2	3	3	27	25	13	13	6	39	35	11	16	50	23	9	56	62	15	10	9	61.9
26-Dec-07	7	35	12	9	15	15	16	18	8	5	5	4	4	4	3	12	4	4	4	3	3	11	7	4	35.4
27-Dec-07	4	24	64	52	85	13	63	47	16	35	24	28	11	61	10	9	5	7	5	4	4	6	4	5	85.4
28-Dec-07	6	3	6	6	7	8	5	26	21	27	13	16	24	56	13	8	8	16	34	22	11	17	13	8	56.1
29-Dec-07	11	16	48	51	26	27	20	35	59	24	26	9	14	14	11	12	17	17	12	8	9	7	9	11	58.6
30-Dec-07	9	8	8	10	11	8	9	10	9	10	12	14	19	13	17	30	19	23	71	32	34	28	17	7	70.5
31-Dec-07	50	7	10	37	22	16	7	12	10	6	7	4	5	6	6	15	9	8	3	7	35	83	21	16	82.6
Hourly Max	51	47	64	52	85	39	65	61	59	35	26	30	39	91	53	84	80	60	71	56	62	93	69	41	

1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for December 2007



Calms: 0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	156
5	to	10	241
10	to	20	277
20	to	30	60
30	to	40	5
	>	40	0
Total Non-Zero Values			739

PASZA – Beaverlodge Station

Monthly Summary Tables, Graphs and Roses

PASZA - Beaverlodge AQI Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

Air Quality Index (AQI)

Monitoring Dates: December 1, 2007 to January 1, 2008

Alberta's Air Quality Index

Good	1	to	25
Fair	26	to	50
Poor	51	to	100
Very Poor	>		100

Summary

Number of 1-hr Good Readings:	705
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																							
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00
1-Dec-07	20	19	18	18	N	18	17	15	15	15	16	15	15	15	16	15	9	15	15	15	16	17	17	12
2-Dec-07	14	13	12	10	N	13	15	14	15	15	14	15	16	16	16	17	17	18	17	17	17	14	14	17
3-Dec-07	17	17	17	16	N	16	15	15	14	14	14	15	15	15	15	14	14	14	14	14	14	14	14	14
4-Dec-07	14	14	14	14	N	13	13	11	11	10	11	11	12	12	12	12	11	11	11	11	11	11	11	12
5-Dec-07	12	12	12	11	N	11	11	10	11	11	N	N	N	N	N	N	2	3	9	6	8	11	14	16
6-Dec-07	16	15	17	17	N	18	13	16	16	16	17	16	16	16	15	15	16	18	19	16	13	10	12	14
7-Dec-07	13	13	14	14	N	12	12	12	12	13	12	9	14	11	9	12	9	11	12	12	12	9	8	10
8-Dec-07	12	13	13	14	N	16	17	17	14	13	14	15	10	15	14	17	16	15	14	19	19	19	19	20
9-Dec-07	20	20	20	18	N	21	23	23	22	21	21	22	22	22	21	20	19	19	20	20	20	19	19	20
10-Dec-07	19	19	18	18	N	16	15	14	13	13	14	15	15	15	15	13	16	15	15	15	15	16	17	16
11-Dec-07	16	14	12	11	N	15	14	12	11	14	12	17	16	18	9	14	15	10	10	11	8	18	20	21
12-Dec-07	20	19	18	18	N	18	17	18	18	18	18	18	18	19	19	18	18	17	17	18	18	18	18	19
13-Dec-07	19	19	19	19	N	18	17	18	16	16	17	17	17	18	19	18	18	17	18	18	18	17	17	17
14-Dec-07	17	17	17	17	N	16	16	15	13	13	15	13	10	13	15	15	16	7	11	7	12	12	10	7
15-Dec-07	8	9	6	6	N	6	6	5	5	6	7	7	6	8	7	7	8	10	13	16	14	11	16	18
16-Dec-07	19	19	19	19	N	19	18	18	17	18	17	16	18	19	18	19	18	17	16	16	16	17	16	15
17-Dec-07	13	10	12	11	N	12	7	8	6	6	6	9	10	9	8	7	7	6	16	18	16	18	18	18
18-Dec-07	18	18	18	17	N	19	16	17	14	13	13	13	13	13	10	9	6	6	7	10	8	9	10	10
19-Dec-07	6	7	11	16	N	12	14	9	8	12	15	16	17	17	16	16	16	15	16	15	15	15	12	12
20-Dec-07	11	10	7	7	N	9	5	7	11	13	13	13	14	14	15	15	14	14	13	14	16	16	15	16
21-Dec-07	16	16	13	14	N	9	8	12	12	11	9	10	11	10	6	8	7	8	8	8	7	7	7	6
22-Dec-07	6	6	7	6	N	7	7	6	6	5	5	6	10	10	9	8	7	6	7	6	5	7	12	17
23-Dec-07	17	18	19	19	N	19	19	19	18	N	18	19	19	17	15	15	12	12	10	12	15	18	18	18
24-Dec-07	19	20	20	20	N	20	20	20	20	19	19	19	19	19	19	19	19	18	18	18	18	18	18	17
25-Dec-07	17	18	18	18	N	17	17	17	17	17	18	18	18	17	15	18	17	17	N	13	13	12	9	11
26-Dec-07	12	11	9	7	N	13	16	17	16	15	16	16	16	15	18	18	17	18	18	17	17	17	17	17
27-Dec-07	18	17	18	17	N	15	15	14	13	13	13	13	9	10	9	7	5	6	9	7	5	7	6	7
28-Dec-07	9	8	9	8	N	4	5	5	5	5	6	8	8	10	10	9	8	8	7	6	6	8	5	7
29-Dec-07	6	6	6	6	N	5	4	4	4	5	7	10	8	7	8	6	7	8	7	8	10	10	7	8
30-Dec-07	8	7	7	7	N	6	5	5	6	7	7	8	8	8	7	7	5	4	4	4	4	5	5	5
31-Dec-07	5	5	6	5	N	3	4	3	4	5	10	8	10	10	11	11	11	13	17	18	17	17	17	17

PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

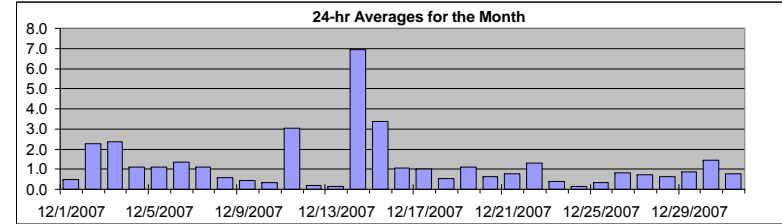
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

Number of 1-hr Exceedances:	0				
Number of 24-hr Exceedances:	0				
Maximum 1-hr Average:	53.2	ppb	14-Dec	14:00	15:00
Maximum 24-hr Average:	6.9	ppb	14-Dec		



AIC Time:	32 hrs		Operational Time:	709 hrs					
Calibration Time:	3 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average	Median
	13.4	3.1	1.2	0.7	0.3	0.1	0.1	1.2 ppb	0.7 ppb

Status Flag Characters	
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Dec-07	0	0	0	0	A	0	0	0	1	0	1	1	1	1	1	1	1	1	0	1	0	0	0	1	0.5	0.8
2-Dec-07	0	0	1	1	A	1	2	3	2	2	5	3	3	3	3	1	0	1	3	4	5	3	3	3	2.2	5.3
3-Dec-07	2	1	3	4	A	2	1	2	4	5	3	4	4	2	1	2	4	3	2	1	1	1	1	2.4	5.0	
4-Dec-07	1	1	1	1	A	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1.1	3.1
5-Dec-07	2	1	1	1	A	1	1	1	1	1	C	C	C	A	2	1	1	1	1	1	1	1	1	1.1	1.7	
6-Dec-07	3	4	2	1	A	2	1	1	1	1	2	2	1	1	1	1	1	3	3	1	1	1	1	1.4	3.7	
7-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	2	4	3	3	2	1.1	3.6
8-Dec-07	2	1	1	1	A	1	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	0	0	0.6	1.5	
9-Dec-07	1	2	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6	
10-Dec-07	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
11-Dec-07	0	6	4	6	A	15	3	2	6	4	2	2	2	1	2	4	3	2	1	2	2	1	1	3.0	15.1	
12-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
13-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	0.7	
14-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	30	53	30	23	11	3	3	1	1	1	6.9	53.2	
15-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	18	19	14	6	3	1	3.4	19.1	
16-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	2	3	2	2	2	2	2	1	1	1	1.0	3.2	
17-Dec-07	1	1	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1.0	1.8	
18-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	1	1	1	0.5	1.1	
19-Dec-07	1	1	1	2	A	2	1	1	1	1	0	0	0	1	1	1	1	1	1	2	2	2	2	1.1	2.1	
20-Dec-07	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	0.6	1.2	
21-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0.8	1.4	
22-Dec-07	1	1	1	1	A	1	1	1	1	1	1	2	3	3	3	2	1	1	1	1	1	0	0	1.3	2.8	
23-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0.4	1.1	
24-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
25-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.3	0.7	
26-Dec-07	1	1	1	1	A	0	0	0	0	0	0	1	4	3	1	3	1	1	0	1	0	0	0	0.8	4.3	
27-Dec-07	0	0	0	0	A	0	0	0	0	0	2	1	1	2	1	1	1	1	1	1	1	1	1	0.7	2.2	
28-Dec-07	1	1	1	1	A	1	1	1	1	1	0	1	0	1	0	0	0	0	0	1	1	1	1	0.6	1.1	
29-Dec-07	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	1.4	
30-Dec-07	1	1	2	2	A	2	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1.5	2.2	
31-Dec-07	2	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0.8	1.6	
Hourly Avg	0.8	1.0	0.9	0.9	N	1.2	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.9	2.6	1.9	1.7	1.8	1.6	1.4	1.2	1.0	0.8	0.8		
Hourly Max	2.6	6.2	4.0	5.8	0.0	15.1	3.4	3.1	5.5	5.0	5.3	4.1	4.3	30.0	53.2	30.1	22.7	18.3	19.1	13.6	6.0	3.5	2.8	2.8		

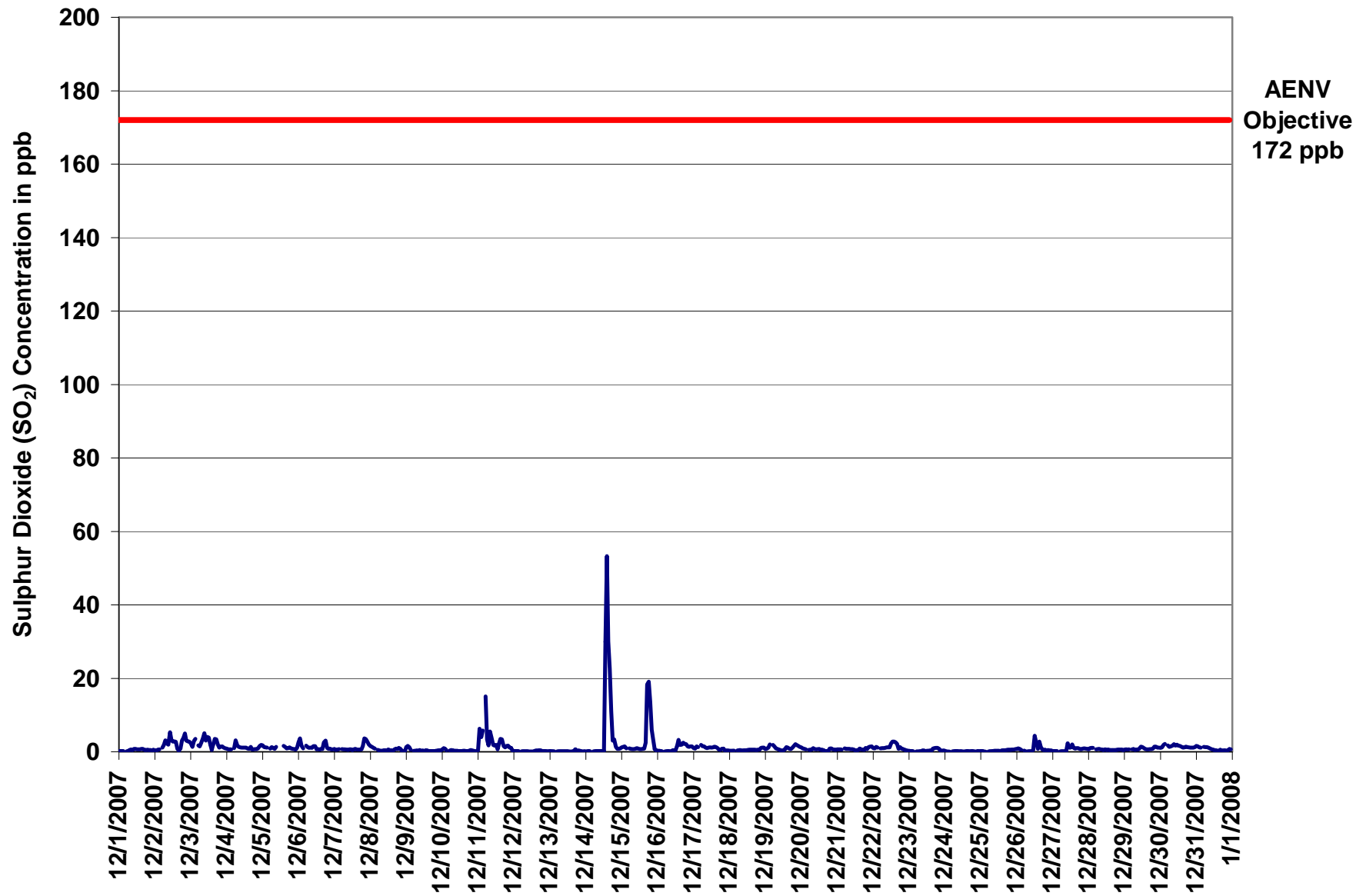


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

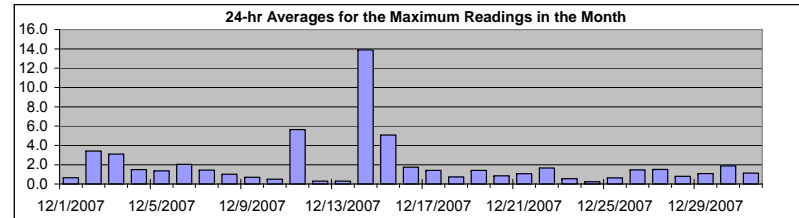
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	100.0	ppb	14-Dec	13:00 14:00
Maximum 24-hr Value:	13.9	ppb	14-Dec	



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	23.5	5.1	1.6	0.9	0.4	0.2	0.2	1.9 ppb	0.9 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
2-Dec-07	0	0	1	1	A	2	3	5	4	6	7	4	3	3	4	2	0	2	6	5	7	6	4	3	3.4	6.6
3-Dec-07	3	2	4	4	A	3	2	3	5	6	4	5	4	3	1	3	4	4	4	1	2	2	1	1	3.1	6.1
4-Dec-07	1	1	1	1	A	2	4	3	2	1	1	1	1	1	1	2	2	1	1	1	1	3	3	1.5	3.9	
5-Dec-07	2	2	1	1	A	1	1	1	1	2	C	C	C	A	2	2	1	1	1	1	1	1	1	2	1.4	2.2
6-Dec-07	4	4	3	2	A	2	2	1	1	1	1	2	2	1	1	1	1	5	5	1	1	1	1	2	2.1	5.4
7-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	4	3	3	1.5	4.1
8-Dec-07	2	2	1	1	A	1	1	0	0	1	0	0	1	1	1	0	6	1	1	1	1	0	0	0	1.0	5.6
9-Dec-07	3	2	2	1	A	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0.7	3.0
10-Dec-07	1	1	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.5	1.3
11-Dec-07	2	9	13	11	A	31	7	2	7	7	2	2	2	2	3	11	7	2	2	2	1	1	1	5.6	30.8	
12-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0.3	0.7
13-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0.3	1.0
14-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	100	100	46	29	24	8	5	2	1	1	1	13.9	100.0
15-Dec-07	1	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	9	28	24	18	12	5	2	1	5.1	28.2
16-Dec-07	0	0	0	0	A	0	0	0	0	0	0	1	1	7	7	3	3	3	3	3	2	2	2	2	1.7	7.2
17-Dec-07	1	1	2	2	A	2	2	2	1	1	1	1	1	2	2	3	1	1	1	1	1	0	0	0	1.4	3.3
18-Dec-07	0	0	0	0	A	0	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	2	1	2	0.7	1.9
19-Dec-07	1	1	2	2	A	2	2	1	1	1	1	0	1	1	1	1	1	1	1	2	2	2	2	2	1.4	2.4
20-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0.9	1.4
21-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1.1	1.9
22-Dec-07	1	1	2	1	A	1	1	1	2	2	1	1	4	4	3	3	3	1	2	1	1	1	1	0	1.7	4.0
23-Dec-07	0	0	0	0	A	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	1	0	0	1	0.5	1.4
24-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
25-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	4	2	1	1	0.6	3.6
26-Dec-07	1	1	1	1	A	1	0	0	0	0	0	2	8	6	3	3	2	1	1	1	0	1	0	0	1.5	7.9
27-Dec-07	0	0	0	0	A	0	0	0	0	0	4	3	5	5	1	1	2	2	1	2	2	2	2	2	1.5	5.4
28-Dec-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4
29-Dec-07	1	1	1	1	A	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	2	2	2	2	1.1	1.9
30-Dec-07	1	1	3	3	A	3	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	1	1.9	2.8
31-Dec-07	3	2	1	1	A	2	1	2	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	2	1.1	2.9
Hourly Avg	1.2	1.3	1.5	1.3	N	1.9	1.2	1.1	1.2	1.4	1.3	1.2	1.5	4.9	4.6	3.0	2.6	2.9	2.3	2.0	1.7	1.5	1.2	1.2		
Hourly Max	4.3	9.2	12.8	11.0	0.0	30.8	6.8	4.8	7.2	7.3	6.5	4.6	7.9	100.0	100.0	45.7	29.0	28.2	24.0	17.6	12.3	6.0	3.8	3.5		

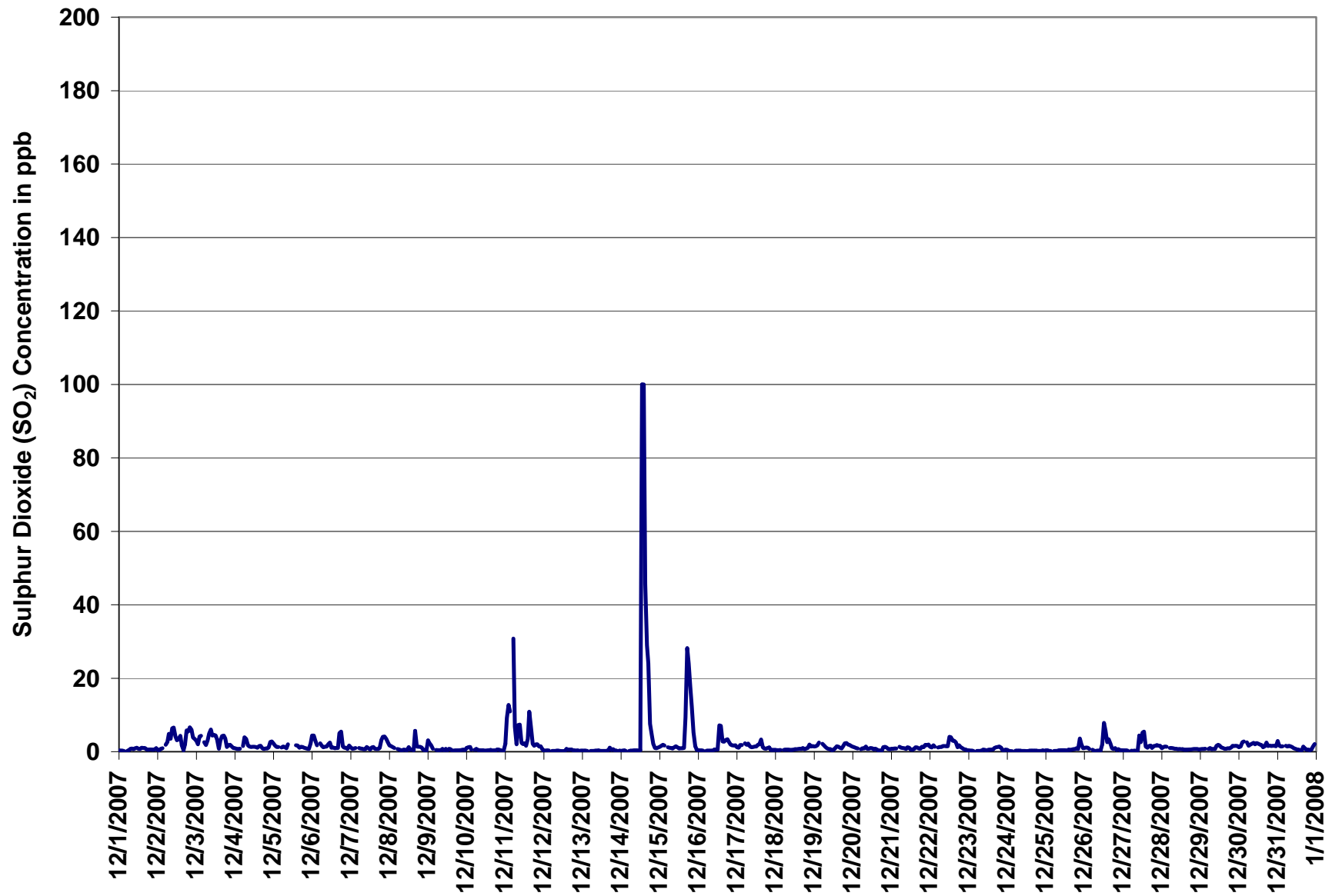
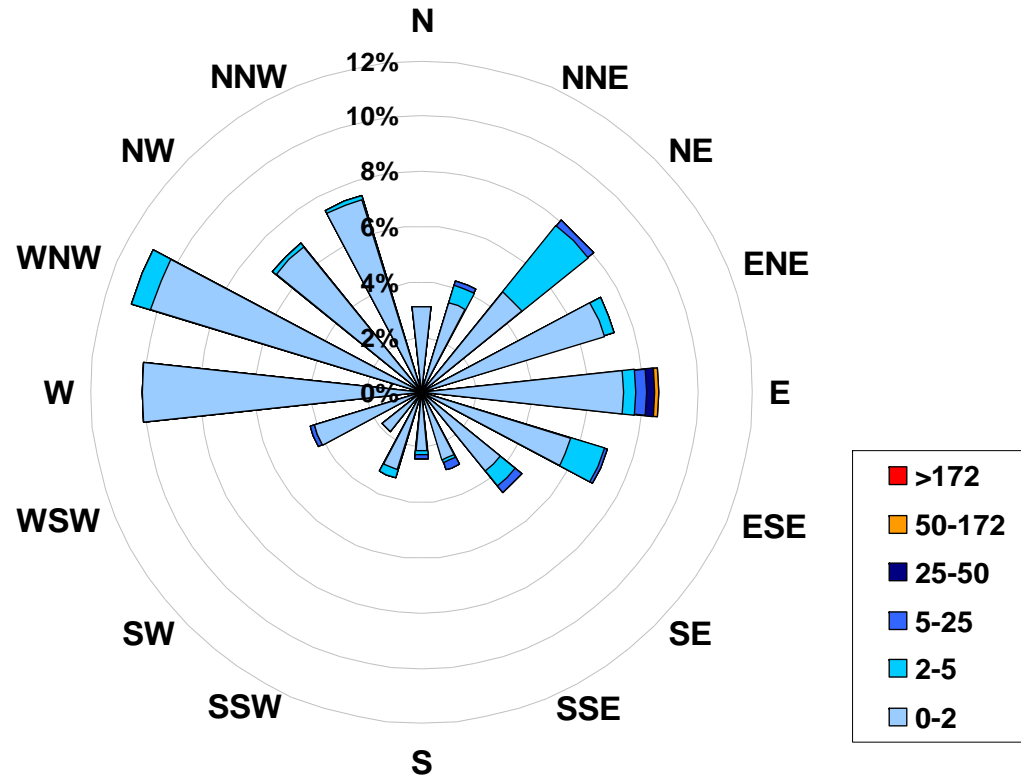


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Beaverlodge Site for December 2007



Calms: 7%

Frequency Distribution of SO ₂ in ppb			Frequency (hrs)
Range			
0.0	<	2	634
2	to	5	59
5	to	25	13
25	to	50	2
50	to	172	1
	>	172	0
Total Non-Zero Values			709

PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

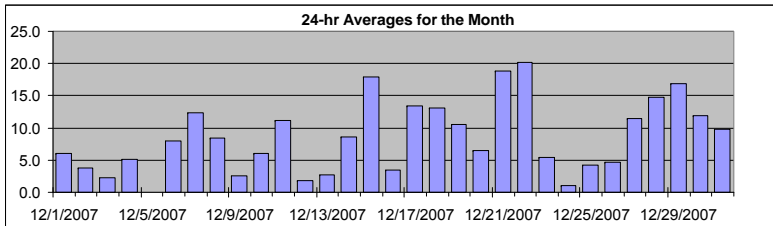
Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 212 ppb 24-hr 106 ppb

Summary

Number of 1-hr Exceedances:	0				
Number of 24-hr Exceedances:	0				
Maximum 1-hr Average:	32.1	ppb	21-Dec	17:00	18:00
Maximum 24-hr Average:	20.2	ppb	22-Dec		



AIC Time:	32 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile 99	95	75	50	25	5	1	Average	Median	
29.5		22.5		12.9		6.7		2.9	
				1.0		0.9		8.7 ppb	
								6.7 ppb	

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Dec-07	1	2	4	2	A	3	4	9	6	6	6	6	5	6	6	8	18	7	7	6	5	4	3	12	6.0	18.4
2-Dec-07	7	8	10	14	A	6	4	5	4	4	4	2	2	2	2	2	1	1	2	2	2	1	1	1	3.8	13.5
3-Dec-07	1	1	1	2	A	2	2	2	3	3	2	2	2	2	2	3	3	3	3	3	2	2	2	3	2.2	3.4
4-Dec-07	3	2	2	3	A	2	2	6	7	8	7	7	5	5	5	7	7	7	7	7	7	5	4	4	5.2	7.9
5-Dec-07	4	4	5	7	A	5	4	6	4	6	C	C	C	C	C	A	9	9	11	19	16	11	8	7	N	19.0
6-Dec-07	6	8	4	4	A	4	13	8	8	7	6	7	7	6	8	12	8	6	3	8	13	18	11	7	7.9	18.0
7-Dec-07	8	7	7	7	A	10	9	8	8	7	12	18	8	18	24	16	21	17	11	10	10	17	18	14	12.4	23.5
8-Dec-07	11	9	9	7	A	5	5	5	9	10	8	7	22	11	12	8	9	12	12	4	4	5	4	4	8.5	22.3
9-Dec-07	4	2	3	5	A	3	1	1	1	4	3	3	1	2	2	3	5	4	3	2	2	2	2	2	2.6	4.8
10-Dec-07	2	2	4	3	A	6	6	8	8	8	6	5	6	6	7	10	6	7	7	7	7	5	4	6	6.0	10.3
11-Dec-07	6	7	10	12	A	6	8	9	13	10	13	8	10	9	18	15	14	19	20	17	23	6	4	1	11.1	23.5
12-Dec-07	1	1	1	1	A	1	2	2	2	2	2	2	2	1	1	3	4	4	3	2	1	1	1	1	1.8	4.4
13-Dec-07	1	1	1	1	A	2	4	3	6	6	4	5	5	2	2	2	4	5	2	2	1	1	1	2	2.7	5.9
14-Dec-07	2	1	2	2	A	4	3	3	9	7	5	9	14	9	6	6	6	21	15	21	10	10	14	19	8.6	21.5
15-Dec-07	15	13	18	25	A	24	24	21	21	25	18	18	15	14	14	14	21	26	24	22	19	15	4	1	17.9	26.3
16-Dec-07	1	1	1	1	A	1	1	2	3	2	5	6	3	2	3	5	5	6	7	5	5	4	5	7	3.4	7.0
17-Dec-07	8	12	9	10	A	7	17	15	24	18	18	15	12	15	20	21	29	20	9	7	9	5	5	5	13.4	28.6
18-Dec-07	3	3	3	5	A	3	7	5	10	12	12	13	12	13	20	20	26	27	22	16	15	20	17	14	13.0	27.2
19-Dec-07	19	23	18	17	A	11	6	14	21	10	8	6	5	5	6	8	7	7	7	8	7	8	11	10	10.5	22.5
20-Dec-07	12	12	16	14	A	10	17	12	4	3	2	2	2	2	3	3	6	5	8	6	3	3	3	3	6.5	17.3
21-Dec-07	2	3	8	5	A	18	19	10	8	11	17	16	12	14	20	30	30	32	32	32	30	30	31	23	18.9	32.1
22-Dec-07	23	23	29	26	A	28	28	26	27	23	19	16	11	12	15	17	24	24	17	19	22	19	11	5	20.2	28.6
23-Dec-07	3	2	1	1	A	2	1	1	2	5	4	3	3	7	9	10	12	13	15	12	8	4	4	3	5.5	15.1
24-Dec-07	3	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	2.6
25-Dec-07	1	1	1	1	A	1	2	2	2	2	3	2	2	3	6	3	4	4	4	7	7	8	19	9	4.1	19.1
26-Dec-07	9	10	11	12	A	6	2	2	2	3	2	2	3	4	4	5	5	3	3	4	3	3	4	3	4.6	12.4
27-Dec-07	2	2	1	2	A	4	3	4	7	7	8	9	17	12	15	18	21	20	14	18	22	18	24	16	11.5	23.8
28-Dec-07	13	13	10	13	A	17	19	22	21	21	18	13	11	9	9	10	12	12	14	18	19	12	16	18	14.8	22.4
29-Dec-07	13	12	12	12	A	14	17	16	18	15	20	20	12	14	14	14	19	23	21	19	23	22	18	21	16.9	22.8
30-Dec-07	21	21	10	9	A	10	11	12	10	8	8	7	6	9	10	9	13	17	13	18	17	12	11	12	11.9	21.5
31-Dec-07	13	15	9	10	A	13	14	12	18	20	12	9	8	9	8	10	15	11	4	3	3	3	3	3	9.7	19.6
Hourly Avg	7.1	7.2	7.0	7.6	N	7.4	8.3	8.3	9.3	8.8	8.5	7.9	7.6	7.6	9.0	9.7	11.7	12.1	10.3	10.4	10.2	8.9	8.6	7.7		
Hourly Max	23.1	23.2	28.6	26.5	0.0	28.3	27.7	26.5	26.6	24.5	20.0	20.4	22.3	18.3	23.5	29.8	30.4	32.1	31.9	32.0	30.3	29.6	30.7	23.5		

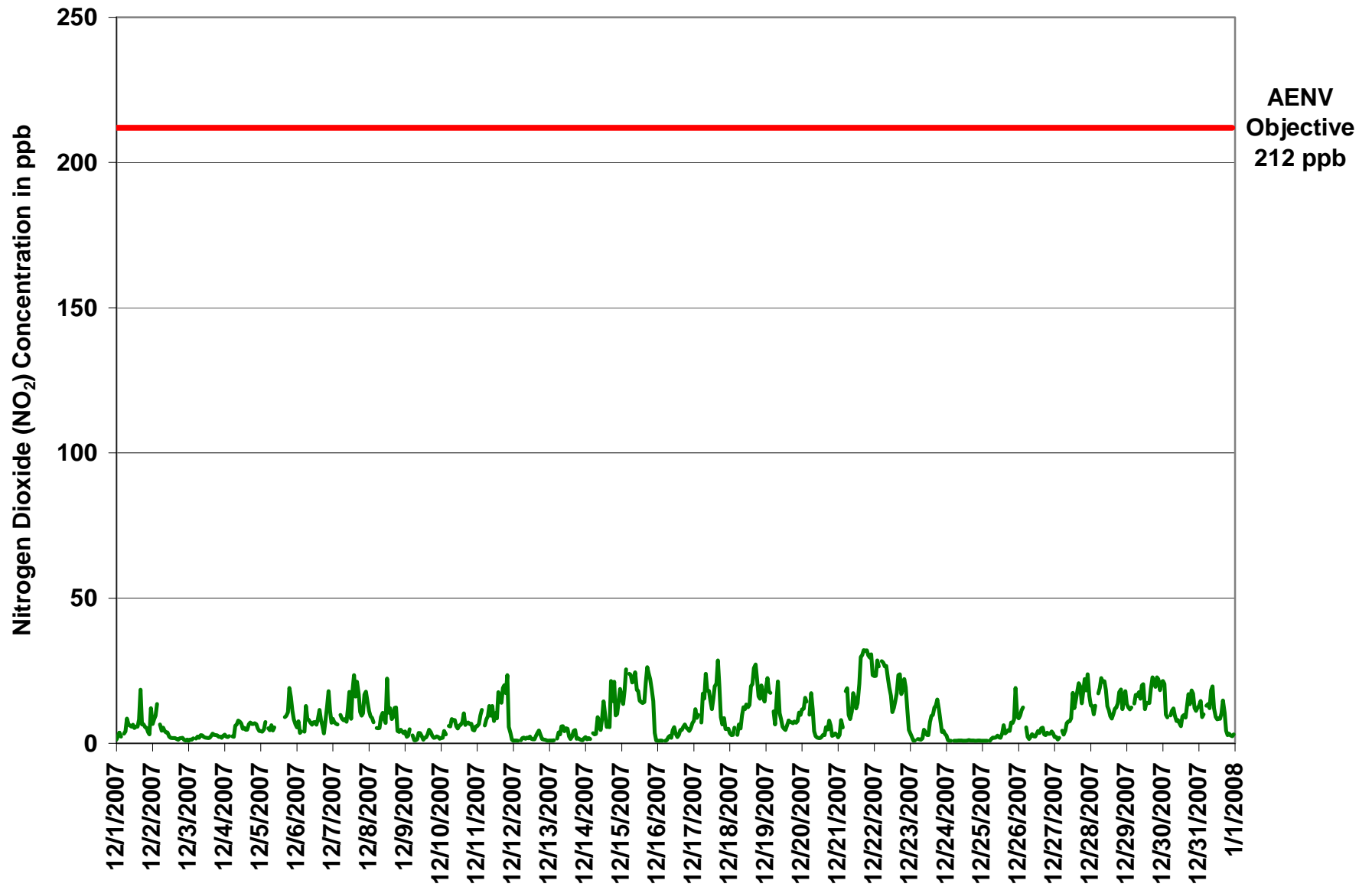


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

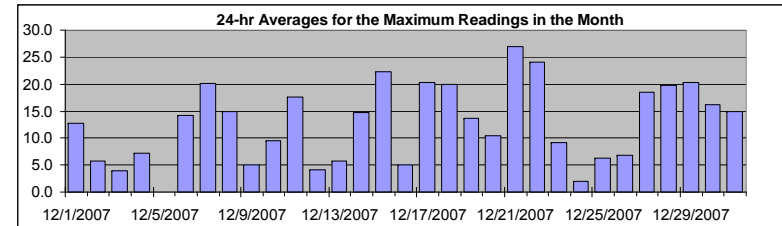
Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	43.9	ppb	21-Dec	5:00 6:00
Maximum 24-hr Value:	26.9	ppb	21-Dec	

AIC Time:	32 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	40.1	32.1	19.6	10.8	4.9	1.9	1.0	13.1 ppb	10.8 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	2	5	7	4	A	11	13	13	21	22	11	13	9	8	12	15	24	12	11	18	16	13	11	23	12.8	24.3
2-Dec-07	10	14	20	22	A	7	6	7	6	7	6	3	3	2	2	2	2	3	3	3	2	2	2	2	5.8	22.3
3-Dec-07	2	2	2	2	A	2	5	4	18	9	5	3	3	2	3	3	4	5	4	3	3	3	3	4	3.9	17.8
4-Dec-07	4	4	3	3	A	3	4	9	8	9	9	27	6	6	6	6	9	8	8	8	9	8	6	6	7.2	27.2
5-Dec-07	9	7	7	12	A	13	7	10	7	10	C	C	C	C	C	A	12	12	17	21	21	13	12	14	N	20.5
6-Dec-07	8	14	9	6	A	9	26	12	17	12	11	13	14	15	14	18	16	15	5	16	21	27	20	9	14.1	27.3
7-Dec-07	15	14	11	9	A	18	15	12	17	10	26	24	12	36	39	37	34	26	15	12	12	36	21	15	20.1	39.0
8-Dec-07	14	11	10	9	A	6	18	12	18	15	10	13	40	19	26	13	19	41	21	7	7	6	5	5	14.9	40.6
9-Dec-07	13	7	5	7	A	6	3	2	3	7	6	6	4	3	4	5	8	8	6	3	3	5	3	2	5.1	12.8
10-Dec-07	2	2	11	9	A	11	9	12	17	11	8	8	8	8	12	14	11	11	12	9	8	8	12	7	9.5	17.1
11-Dec-07	7	9	13	13	A	7	14	14	19	13	17	14	20	18	26	22	31	34	36	28	35	10	6	3	17.7	35.5
12-Dec-07	1	2	2	2	A	2	4	5	3	10	2	5	4	3	5	5	11	10	7	4	4	4	3	1	4.2	10.6
13-Dec-07	2	2	3	3	A	5	7	6	10	9	10	10	8	6	4	5	9	8	5	5	4	3	3	10	5.8	9.8
14-Dec-07	3	2	2	2	A	5	4	4	28	13	9	18	22	14	7	9	10	39	31	32	16	25	23	23	14.7	38.6
15-Dec-07	19	17	30	29	A	30	30	24	23	30	24	25	19	20	16	16	26	29	29	24	24	20	10	2	22.3	29.7
16-Dec-07	2	1	3	2	A	2	2	4	3	4	11	10	5	3	4	6	6	8	8	6	6	5	7	12	5.1	12.1
17-Dec-07	11	22	15	11	A	11	29	28	36	22	22	33	22	31	30	26	32	29	13	12	18	7	6	6	20.3	35.5
18-Dec-07	5	3	5	8	A	5	10	10	14	16	14	16	15	15	28	29	35	41	33	26	34	35	33	31	19.9	40.9
19-Dec-07	25	29	20	19	A	18	9	26	28	20	11	8	6	6	8	9	8	8	8	9	8	9	15	13	13.7	28.7
20-Dec-07	24	22	20	17	A	12	31	20	6	3	3	2	2	4	4	9	7	13	14	5	5	8	9	7	10.5	31.3
21-Dec-07	4	8	18	7	A	44	42	14	13	17	36	29	17	25	29	35	34	35	33	38	34	41	40	27	26.9	43.9
22-Dec-07	28	28	33	29	A	30	30	29	29	27	23	20	15	17	19	19	30	28	22	29	25	24	17	9	24.1	32.6
23-Dec-07	4	4	2	2	A	3	2	3	3	8	8	5	6	26	24	19	18	17	18	14	11	5	5	5	9.2	26.3
24-Dec-07	5	2	1	2	A	1	1	2	2	2	2	1	2	2	2	2	3	3	2	1	2	2	2	2	1.9	4.9
25-Dec-07	2	1	1	1	A	1	5	4	3	3	3	3	2	8	9	6	6	5	6	9	9	15	31	12	6.2	30.7
26-Dec-07	12	16	15	13	A	8	3	4	3	5	4	3	5	7	6	7	13	5	6	5	5	4	5	5	6.8	15.8
27-Dec-07	3	4	2	3	A	14	4	9	11	11	16	23	31	18	19	22	29	28	20	36	36	28	31	31	18.6	36.0
28-Dec-07	23	23	16	20	A	20	23	28	31	28	23	20	14	12	10	12	15	14	16	23	22	14	27	26	19.8	30.6
29-Dec-07	16	15	14	13	A	23	23	21	21	21	30	25	16	16	15	15	22	24	24	24	24	25	22	23	20.3	29.8
30-Dec-07	23	24	18	14	A	15	15	14	11	12	15	10	7	13	14	11	19	20	17	22	22	20	17	22	16.1	23.7
31-Dec-07	19	18	14	15	A	18	17	17	25	24	16	10	11	11	10	15	42	35	8	5	6	4	3	5	15.0	42.4
Hourly Avg	10.0	10.6	10.5	9.8	N	11.5	13.1	12.1	14.5	13.1	12.9	13.3	11.5	12.3	13.5	13.5	17.5	18.2	14.6	14.9	14.4	13.6	13.1	11.7		
Hourly Max	27.8	28.7	32.6	28.7	0.0	43.9	41.6	28.9	35.5	29.7	35.9	32.8	40.1	36.2	39.0	36.6	42.4	40.9	35.5	37.6	36.0	40.8	40.4	31.4		

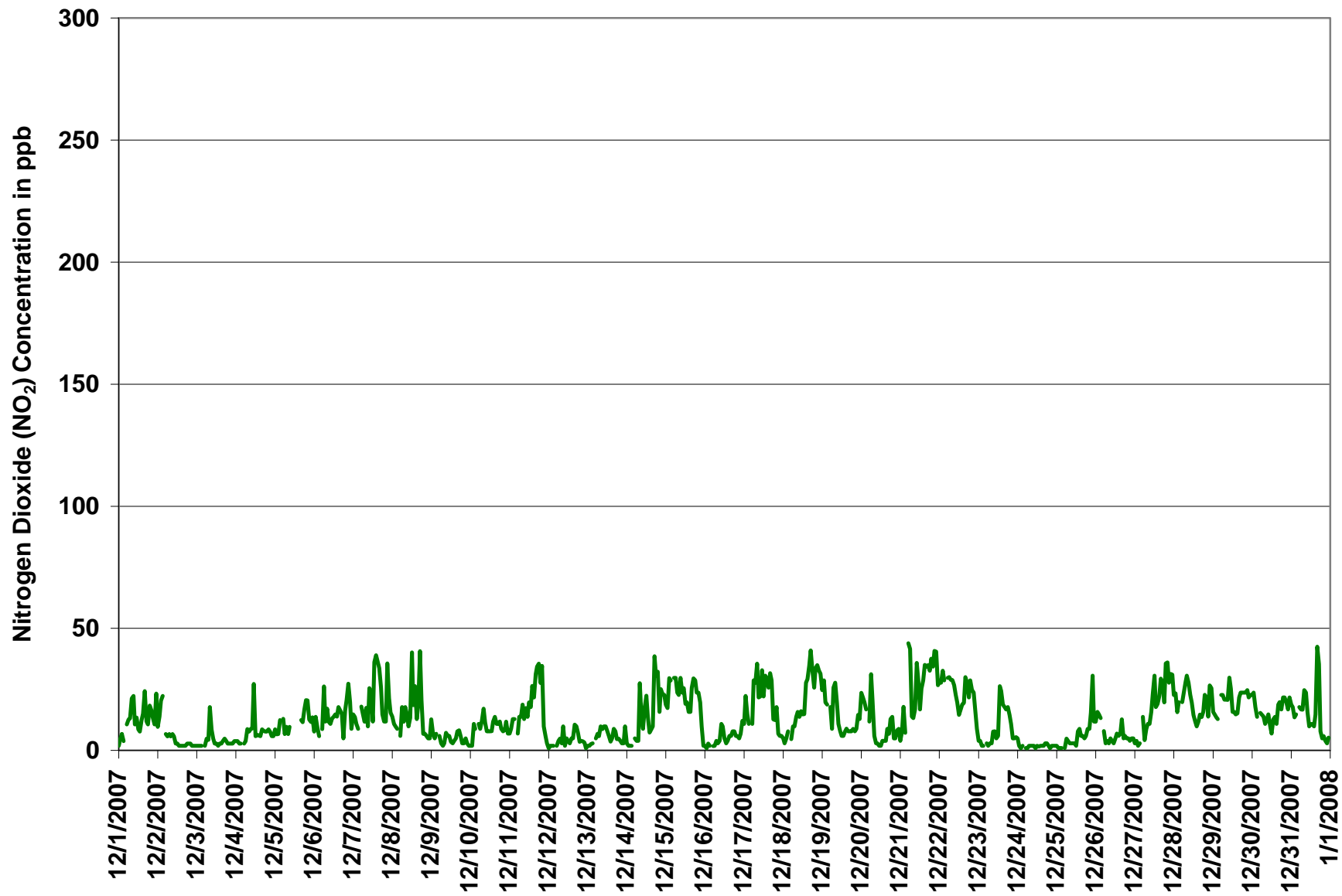
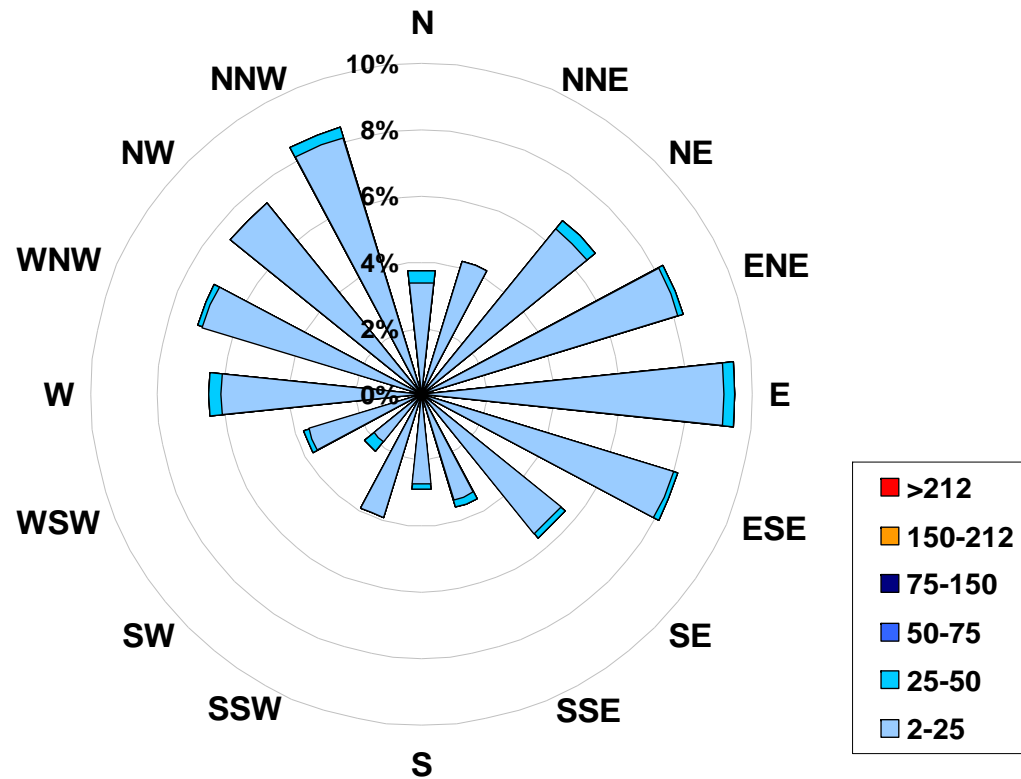


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Beaverlodge Site for December 2007



Calms: 7%

Frequency Distribution of NO ₂ in ppb			Frequency (hrs)
Range			
2.0	< 25		702
25	to 50		5
50	to 75		0
75	to 150		0
150	to 212		0
	> 212		0
Total Non-Zero Values			707

PASZA - Beaverlodge Nitric Oxide Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

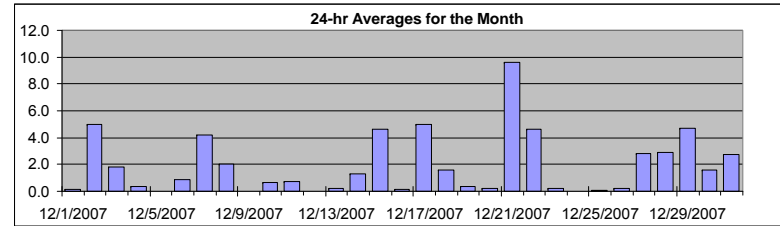
HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Monitoring Dates: December 1, 2007 to January 1, 2008

Guideline Limit: 1-hr na ppb 24-hr na ppb
 Summary

Maximum 1-hr Average:	36.1	ppb	21-Dec	15:00 16:00
Maximum 24-hr Average:	9.6	ppb	21-Dec	



AIC Time:	32 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	22.0	9.8	1.7	0.0	0.0	0.0	0.0	1.9 ppb	0.0 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum																							
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Dec-07	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.1	1.7																							
2-Dec-07	0	0	5	3	A	0	0	0	4	3	6	6	5	4	5	9	12	13	12	9	11	5	2	4	5.0	13.5																							
3-Dec-07	3	3	4	2	A	0	4	1	0	0	0	0	0	0	0	0	0	2	5	4	4	3	2	1.8	5.0																								
4-Dec-07	2	2	1	0	A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0																								
5-Dec-07	5	4	5	0	A	0	0	0	0	0	C	C	C	C	C	A	1	0	0	0	0	0	0	N	4.6																								
6-Dec-07	0	0	0	0	A	0	0	0	0	0	1	4	5	4	4	3	0	0	0	0	0	0	0	0.9	4.6																								
7-Dec-07	0	0	0	0	A	0	0	0	0	0	7	19	6	24	30	7	2	0	0	0	0	1	0	4.2	29.9																								
8-Dec-07	0	0	0	0	A	0	0	0	0	1	2	3	27	6	7	1	0	1	0	0	0	0	0	2.0	26.7																								
9-Dec-07	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	0.3																								
10-Dec-07	0	0	0	0	A	0	0	0	0	0	1	2	3	3	2	2	0	0	0	0	0	0	0	0.6	3.2																								
11-Dec-07	0	0	0	0	A	0	0	0	0	0	2	1	2	1	6	2	0	0	1	0	0	0	0	0.7	6.3																								
12-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																								
13-Dec-07	0	0	0	0	A	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0.2	1.7																								
14-Dec-07	0	0	0	0	A	0	0	0	1	0	1	5	12	6	2	1	0	3	0	1	0	0	0	1.3	11.7																								
15-Dec-07	0	0	1	6	A	4	5	0	0	12	9	15	15	13	8	4	5	3	4	0	0	0	0	4.6	15.3																								
16-Dec-07	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.5																								
17-Dec-07	0	0	0	0	A	0	1	0	6	2	8	15	13	19	17	9	22	3	0	0	0	0	0	5.0	22.1																								
18-Dec-07	0	0	0	0	A	0	0	0	0	2	5	4	4	4	5	3	4	4	0	0	1	3	0	1.6	5.0																								
19-Dec-07	0	0	0	0	A	0	0	1	1	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0.4	1.6																								
20-Dec-07	0	0	0	0	A	0	3	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0.2	2.7																								
21-Dec-07	0	0	0	0	A	10	5	0	0	1	12	10	6	12	20	36	18	25	15	16	8	20	8	9.6	36.1																								
22-Dec-07	1	0	7	8	A	9	12	9	9	3	7	9	4	5	6	7	5	2	0	2	0	0	0	4.6	11.7																								
23-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0.2	1.9																								
24-Dec-07	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																								
25-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.1	1.1																								
26-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0.2	1.6																								
27-Dec-07	0	0	0	0	A	0	0	0	0	0	1	3	21	8	8	7	3	0	0	2	5	1	4	2.8	20.5																								
28-Dec-07	0	0	0	0	A	0	1	6	7	9	13	9	9	6	3	2	1	0	0	0	0	0	1	2.9	12.8																								
29-Dec-07	0	0	0	0	A	0	1	0	0	2	26	27	10	14	11	6	4	2	1	1	0	1	0	4.7	27.5																								
30-Dec-07	2	1	0	0	A	0	0	0	0	0	4	3	3	7	6	3	2	1	0	1	1	0	0	1.6	6.6																								
31-Dec-07	0	0	0	0	A	0	0	0	4	6	7	7	7	8	5	2	14	1	0	0	0	0	0	2.8	13.6																								
Hourly Avg	0.4	0.3	0.7	0.6	N	0.8	1.1	0.6	1.1	1.4	3.8	4.9	5.2	5.0	5.1	3.6	3.0	1.9	1.2	1.1	1.0	1.1	0.6	0.3																									
Hourly Max	4.5	4.0	7.4	7.9	0.0	9.6	11.7	9.4	9.1	12.4	25.9	27.5	26.7	23.7	29.9	36.1	22.1	24.8	14.7	15.6	10.6	19.6	8.4	3.8																									

PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

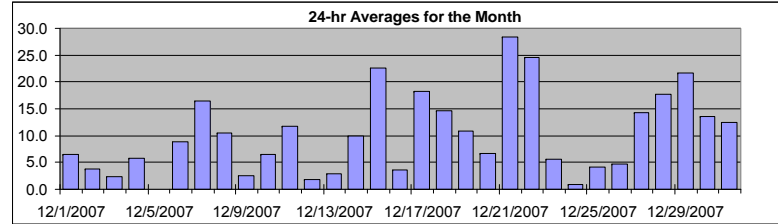
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2007 to January 1, 2008

Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb
 Summary

Maximum 1-hr Average:	65.6	ppb	21-Dec	15:00 16:00
Maximum 24-hr Average:	28.4	ppb	21-Dec	



AIC Time:	32 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	47.8	29.3	14.5	7.2	2.9	1.0	0.9	10.4 ppb	7.2 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Dec-07	1	2	3	2	A	3	4	8	6	7	7	9	8	8	8	10	20	6	7	6	5	4	3	12	6.6	20.2
2-Dec-07	6	8	9	14	A	6	4	5	4	4	5	3	3	2	2	2	1	1	2	2	2	1	1	1	3.9	13.6
3-Dec-07	1	1	1	2	A	1	2	2	5	3	3	2	2	2	2	3	3	3	3	2	2	2	3	2.3	5.0	
4-Dec-07	3	2	2	2	A	2	2	6	7	9	10	11	8	8	6	5	7	7	7	7	7	5	4	5.8	11.5	
5-Dec-07	4	4	5	7	A	5	4	6	4	7	C	C	C	C	C	A	10	10	12	20	16	12	9	7	N	19.6
6-Dec-07	6	8	4	4	A	4	13	8	8	8	8	11	12	10	12	14	8	6	3	7	13	18	11	7	8.8	17.9
7-Dec-07	8	7	7	6	A	10	8	8	9	8	19	37	14	42	53	23	24	17	11	9	10	18	18	14	16.5	53.4
8-Dec-07	11	9	9	7	A	5	5	5	9	11	10	10	49	16	19	10	9	14	12	4	4	4	4	3	10.4	48.9
9-Dec-07	4	2	3	5	A	3	1	1	1	4	4	3	2	2	2	3	5	4	2	2	2	2	1	2.6	4.7	
10-Dec-07	2	2	4	3	A	6	6	8	8	8	7	7	9	9	10	12	6	7	7	6	7	5	4	6	6.5	12.3
11-Dec-07	6	6	9	11	A	6	8	9	13	10	15	9	12	10	24	17	14	19	21	17	24	6	3	1	11.8	23.9
12-Dec-07	1	1	1	1	A	1	2	2	1	2	2	3	2	2	2	3	4	4	3	1	1	1	1	1	1.8	4.4
13-Dec-07	1	1	1	1	A	2	4	3	6	6	5	7	7	3	2	2	4	5	2	2	1	1	1	2	2.9	6.8
14-Dec-07	2	1	2	1	A	3	3	3	10	8	5	13	26	15	7	7	6	24	14	23	10	10	14	19	9.9	26.2
15-Dec-07	15	13	19	31	A	28	28	21	22	37	28	33	29	28	22	18	26	29	29	22	19	14	3	1	22.5	37.0
16-Dec-07	1	1	1	1	A	1	1	2	2	2	5	7	4	3	3	5	5	6	6	5	5	4	5	7	3.6	7.3
17-Dec-07	8	12	9	10	A	7	18	16	30	20	27	29	24	34	37	30	51	22	9	6	8	5	5	5	18.3	50.7
18-Dec-07	3	2	3	5	A	3	6	5	10	13	14	18	17	17	25	24	29	31	22	16	16	23	17	15	14.6	30.9
19-Dec-07	19	22	18	17	A	11	6	15	23	11	9	7	7	6	8	9	7	7	7	7	7	8	10	10	10.9	22.8
20-Dec-07	12	12	16	14	A	10	20	12	4	3	2	2	2	3	4	3	6	5	8	6	2	3	3	3	6.7	20.1
21-Dec-07	2	3	8	5	A	28	24	10	8	12	29	25	18	26	41	66	48	57	46	47	38	49	39	23	28.4	65.6
22-Dec-07	23	23	36	34	A	37	39	36	36	26	26	25	15	17	20	24	29	26	17	20	22	19	11	4	24.6	39.2
23-Dec-07	3	2	1	1	A	1	1	1	2	5	4	3	3	9	11	11	13	13	15	11	7	4	4	3	5.6	15.1
24-Dec-07	2	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	2.3
25-Dec-07	1	1	1	1	A	1	1	2	2	2	3	3	2	4	7	4	4	4	4	7	7	8	20	9	4.2	20.0
26-Dec-07	8	10	11	12	A	5	2	1	2	3	2	3	5	6	4	6	5	3	3	4	3	3	4	3	4.7	12.2
27-Dec-07	2	2	1	2	A	4	3	4	7	8	9	12	38	21	23	25	24	20	14	20	27	19	28	18	14.3	37.9
28-Dec-07	13	13	10	13	A	17	20	28	29	30	31	22	20	16	12	12	12	12	14	17	18	12	17	18	17.7	31.3
29-Dec-07	13	12	12	12	A	14	18	17	18	17	46	48	21	28	25	20	23	25	22	20	23	23	18	22	21.7	47.9
30-Dec-07	23	22	10	9	A	10	11	12	9	8	12	10	9	16	16	12	15	18	14	19	19	12	12	13	13.5	23.4
31-Dec-07	13	15	9	10	A	13	14	13	22	26	19	17	16	17	14	13	28	12	4	3	3	3	2	3	12.5	28.3
Hourly Avg	7.0	7.1	7.2	7.9	N	8.0	9.1	8.7	10.2	10.2	12.3	13.0	12.9	12.7	14.1	13.1	14.4	13.5	10.9	11.0	10.6	9.7	9.0	7.7		
Hourly Max	23.4	23.1	35.6	34.0	0.0	37.2	39.2	35.7	35.5	37.0	45.9	47.9	48.9	42.0	53.4	65.6	50.7	56.7	46.4	47.4	38.0	49.0	38.8	23.2		

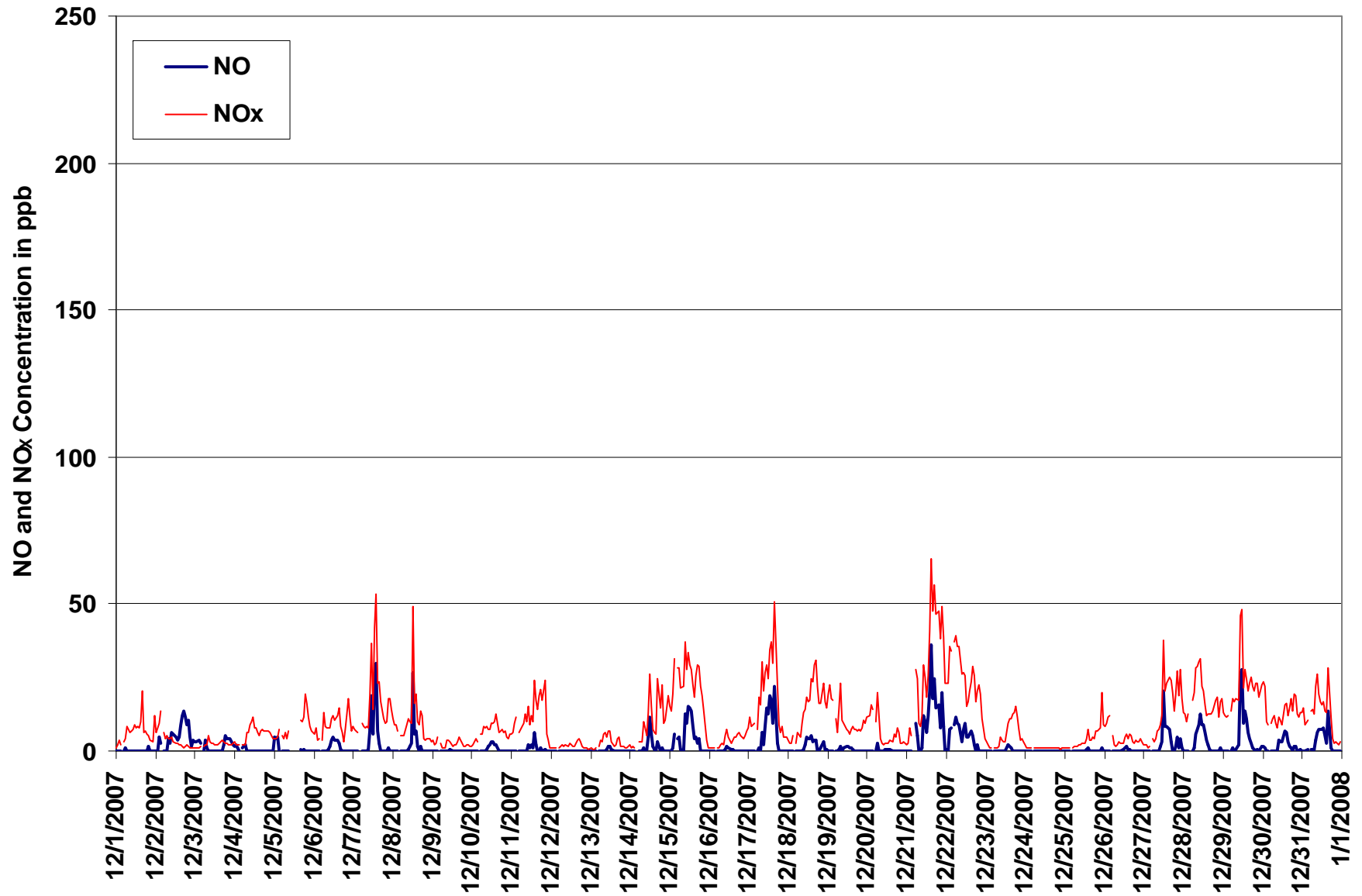


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

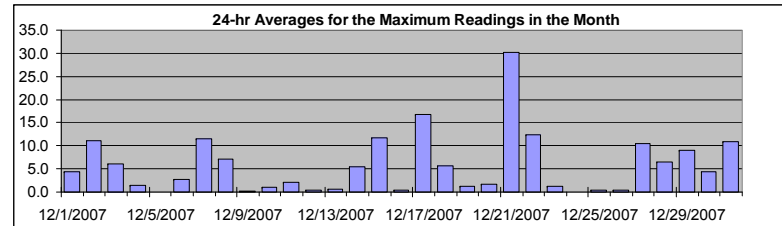
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	107.9	ppb	31-Dec	16:00 17:00
Maximum 24-hr Value:	30.1	ppb	21-Dec	



AIC Time:	32 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	63.7	28.2	6.0	0.9	0.0	0.0	0.0	5.8 ppb	0.9 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Dec-07	0	5	1	12	A	22	23	2	0	0	0	0	0	0	0	5	6	3	9	7	0	8	4.5	22.8		
2-Dec-07	0	6	12	7	A	3	1	10	9	6	12	11	12	8	16	21	20	21	17	19	19	11	7	8	11.1	21.0
3-Dec-07	15	10	7	5	A	1	11	6	18	7	6	5	2	2	0	0	6	6	8	6	5	6	5	5	6.1	18.1
4-Dec-07	3	3	3	1	A	2	3	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9	1.4	8.8
5-Dec-07	8	8	10	1	A	2	6	3	0	7	C	C	C	C	A	2	2	4	0	0	0	0	0	0	N	9.6
6-Dec-07	0	0	0	0	A	0	1	0	2	2	2	8	11	11	10	7	2	1	0	1	1	0	2	0	2.6	10.9
7-Dec-07	0	0	0	0	A	0	0	0	4	1	22	43	11	65	69	30	12	1	0	0	0	8	0	0	11.5	69.3
8-Dec-07	0	0	0	0	A	0	0	0	0	1	3	9	85	13	33	3	0	19	0	0	0	0	0	0	7.2	85.2
9-Dec-07	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.2	1.0
10-Dec-07	0	0	0	0	A	0	0	0	2	2	2	3	4	4	4	4	1	0	0	0	0	0	0	0	1.1	3.9
11-Dec-07	0	0	0	0	A	0	0	0	0	1	4	3	5	4	12	7	1	2	7	0	2	0	0	0	2.1	11.9
12-Dec-07	0	0	0	0	A	0	0	0	0	4	0	1	1	1	1	2	1	0	0	0	0	0	0	0	0.5	3.9
13-Dec-07	0	0	0	0	A	0	0	0	0	0	2	4	3	2	1	0	1	0	0	0	0	0	0	1	0.6	3.9
14-Dec-07	0	0	0	0	A	0	0	0	10	2	2	19	28	10	3	1	1	38	1	6	0	2	1	1	5.4	37.8
15-Dec-07	0	0	9	11	A	23	21	3	3	33	17	40	28	25	12	6	16	8	13	1	2	0	0	0	11.7	39.7
16-Dec-07	0	0	0	0	A	0	0	0	0	0	4	3	2	1	1	0	0	0	0	0	0	0	0	0	0.5	3.6
17-Dec-07	0	2	0	0	A	0	7	1	32	7	20	74	45	64	43	25	49	16	0	0	0	0	0	0	16.7	74.5
18-Dec-07	0	0	0	0	A	0	0	0	0	1	3	7	6	6	10	8	12	32	1	1	14	14	8	6	5.6	31.7
19-Dec-07	0	1	0	0	A	0	1	6	10	1	2	2	2	2	2	1	0	0	0	0	0	0	0	0	1.3	9.8
20-Dec-07	3	0	0	0	A	0	25	1	0	1	0	1	1	1	1	1	0	1	0	0	0	0	0	0	1.6	24.8
21-Dec-07	0	0	0	0	A	66	52	0	1	22	50	27	11	32	48	58	47	44	35	68	26	55	51	1	30.1	68.4
22-Dec-07	12	2	25	29	A	22	26	19	20	7	11	12	9	9	11	10	16	10	1	35	1	1	0	0	12.4	35.1
23-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	1	14	9	5	1	0	0	0	0	0	0	0	1.3	13.8
24-Dec-07	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
25-Dec-07	0	0	0	0	A	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	8	0	0.5	7.6
26-Dec-07	0	0	0	0	A	0	0	0	0	0	0	1	2	3	2	1	0	0	0	0	0	0	0	0	0.4	2.9
27-Dec-07	0	0	0	0	A	0	0	0	1	1	6	17	59	19	14	13	14	1	0	27	28	7	17	15	10.4	59.3
28-Dec-07	1	0	0	0	A	1	4	17	26	23	19	19	13	8	6	3	1	0	0	2	0	0	4	2	6.4	26.1
29-Dec-07	0	0	0	0	A	3	8	3	2	5	59	46	15	19	14	11	8	4	3	3	1	2	0	4	9.1	58.6
30-Dec-07	4	4	0	0	A	0	0	0	0	1	16	7	4	12	12	7	3	2	2	11	7	2	4	4	4.4	15.8
31-Dec-07	1	0	1	8	A	5	2	4	11	11	12	9	12	13	8	4	108	42	0	0	0	0	0	0	10.8	107.9
Hourly Avg	1.5	1.4	2.2	2.4	N	4.8	6.1	2.5	4.8	4.7	9.1	12.3	12.4	11.6	11.4	7.5	10.4	8.2	3.2	5.9	3.7	3.6	2.1			
Hourly Max	14.8	10.2	24.8	28.8	0.0	66.0	51.7	18.7	31.8	32.8	58.6	74.5	85.2	65.1	69.3	57.8	107.9	43.6	34.7	68.4	28.3	54.8	15.1			

Station: Beaverlodge
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

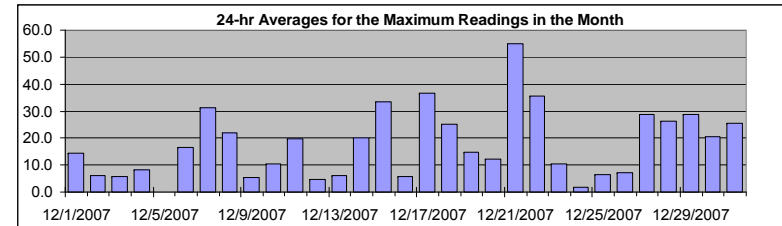
Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	150.1	ppb	31-Dec	16:00 17:00
Maximum 24-hr Value:	55.1	ppb	21-Dec	

AIC Time:	32 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	92.2	59.2	23.7	11.8	4.9	1.9	0.9	18.0 ppb	11.8 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	2	5	6	4	A	11	13	13	23	25	13	21	13	11	19	18	28	12	11	19	18	16	11	23	14.5	28.2
2-Dec-07	10	14	20	22	A	7	6	7	6	8	8	4	4	3	3	2	2	2	3	3	3	2	2	2	6.1	22.4
3-Dec-07	1	2	2	2	A	2	6	6	33	21	8	4	5	3	3	4	5	6	4	3	3	3	2	4	5.6	33.2
4-Dec-07	4	4	3	3	A	3	4	9	8	11	12	34	10	9	9	7	9	9	9	8	9	7	6	6	8.2	33.7
5-Dec-07	9	6	7	13	A	13	6	17	8	17	C	C	C	C	C	A	15	12	21	22	21	13	12	14	N	22.1
6-Dec-07	8	14	9	6	A	9	27	12	19	13	13	21	26	25	24	25	18	15	5	16	22	27	21	9	16.6	27.2
7-Dec-07	15	14	11	9	A	18	14	11	19	10	47	65	23	101	107	67	45	27	15	12	11	44	21	15	31.2	107.0
8-Dec-07	13	11	10	9	A	6	18	12	18	15	13	22	123	31	59	16	19	59	21	7	7	5	5	5	21.8	123.0
9-Dec-07	13	7	5	7	A	6	3	2	3	8	7	7	4	4	5	5	8	8	6	3	3	5	3	2	5.3	12.8
10-Dec-07	2	2	11	9	A	11	9	12	18	13	10	11	12	12	16	18	12	11	12	9	8	8	12	7	10.5	18.3
11-Dec-07	7	9	13	13	A	7	14	14	19	14	21	17	24	22	38	29	33	36	42	28	37	10	6	3	19.6	41.6
12-Dec-07	1	2	2	2	A	2	4	5	3	11	3	6	5	4	6	6	13	10	8	4	5	4	4	1	4.7	12.5
13-Dec-07	2	2	2	3	A	5	7	6	10	9	12	13	11	7	4	5	10	8	5	5	4	3	3	11	6.2	12.8
14-Dec-07	3	2	2	2	A	5	4	4	37	14	11	37	50	24	11	10	10	76	31	38	16	28	25	23	20.0	75.7
15-Dec-07	19	18	39	39	A	52	50	27	25	62	40	65	47	44	27	20	41	37	42	25	25	19	10	2	33.6	65.1
16-Dec-07	2	1	3	2	A	1	3	4	3	5	14	13	7	4	5	7	6	8	8	6	5	5	6	12	5.6	14.4
17-Dec-07	11	24	15	11	A	11	36	29	66	28	41	106	67	92	72	51	79	44	13	12	18	7	6	6	36.6	105.6
18-Dec-07	5	3	4	8	A	4	10	10	14	17	17	23	21	21	38	36	46	71	34	26	46	48	41	37	25.1	71.0
19-Dec-07	25	29	20	19	A	18	10	30	35	20	12	10	9	8	9	11	8	8	8	9	8	9	14	12	14.7	34.5
20-Dec-07	27	22	19	17	A	12	56	21	6	3	3	4	3	5	5	10	7	14	14	4	5	9	9	9	12.1	56.2
21-Dec-07	4	8	18	7	A	107	92	14	14	29	85	56	28	54	76	88	80	76	67	100	59	89	91	26	55.1	107.2
22-Dec-07	39	29	53	56	A	49	52	48	48	32	33	31	22	25	28	28	45	37	22	63	26	25	16	9	35.5	63.0
23-Dec-07	4	4	1	2	A	3	2	3	3	8	9	6	6	40	33	23	19	17	18	14	11	4	5	5	10.3	39.9
24-Dec-07	5	2	1	2	A	1	1	2	2	2	2	1	2	2	2	2	3	3	2	1	2	2	2	2	1.9	4.9
25-Dec-07	1	1	1	1	A	1	4	4	2	3	3	3	3	10	11	6	6	5	6	9	8	16	38	12	6.6	37.6
26-Dec-07	12	16	15	13	A	8	3	4	3	5	4	4	7	10	8	8	14	5	6	5	5	4	5	4	7.2	15.8
27-Dec-07	3	4	2	3	A	14	5	9	11	12	22	40	90	36	33	33	43	29	20	63	64	34	47	46	28.7	89.9
28-Dec-07	24	24	16	20	A	21	27	44	57	50	41	38	27	20	16	15	15	14	16	25	22	14	31	28	26.1	56.8
29-Dec-07	16	15	13	13	A	26	31	22	23	24	87	70	31	34	29	26	27	29	27	26	26	26	22	26	28.8	87.1
30-Dec-07	27	28	18	14	A	16	15	14	11	13	31	17	10	26	25	18	22	22	18	34	29	21	18	26	20.3	33.6
31-Dec-07	20	18	13	20	A	23	20	20	36	34	25	19	23	24	17	19	150	77	8	5	7	4	3	5	25.5	150.1
Hourly Avg	10.6	10.8	11.3	11.2	N	15.1	17.7	13.9	18.6	17.2	21.5	25.5	23.7	23.6	24.5	20.1	26.9	25.0	16.7	19.7	17.0	16.2	15.9	12.6		
Hourly Max	38.7	29.2	53.1	56.1	0.0	107.2	92.3	47.7	65.6	62.4	87.1	105.6	123.0	100.8	107.0	88.1	150.1	76.7	67.1	100.3	64.3	89.2	91.0	46.2		

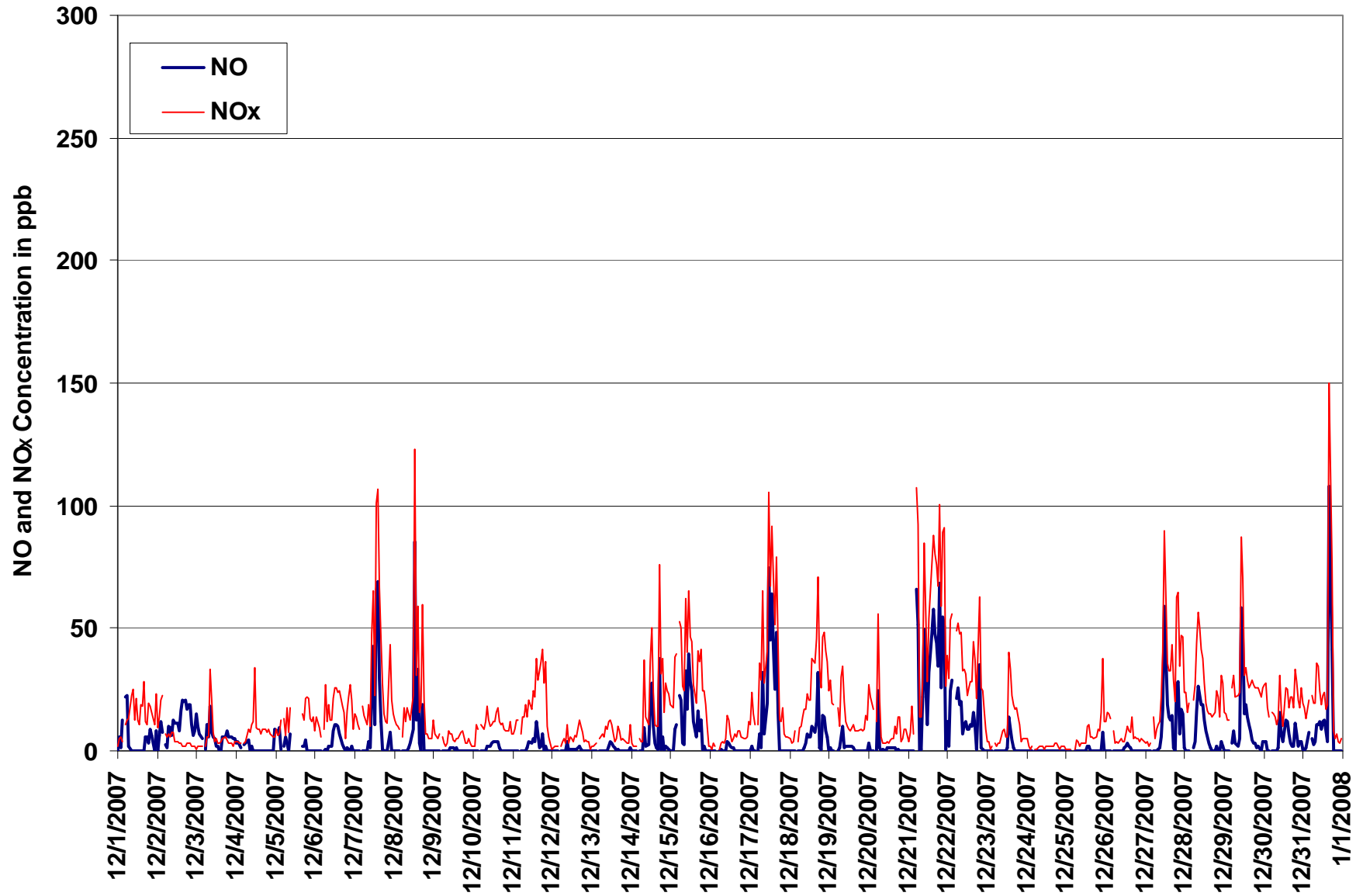


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

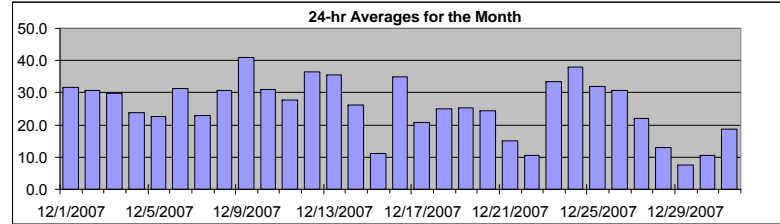
Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 82 ppb 24-hr na ppb

Summary

Number of 1-hr Exceedances:	0				
Maximum 1-hr Average:	45.8	ppb	9-Dec	6:00	7:00
Maximum 24-hr Average:	40.8	ppb	9-Dec		



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	42.2	38.5	34.5	28.3	18.2	5.2	2.1	25.6 ppb	28.3 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	39	37	36	37	A	35	34	30	31	31	31	30	30	31	32	29	18	30	30	31	32	33	34	23		31.5	39.3	
2-Dec-07	27	26	25	20	A	26	29	28	29	30	29	30	31	32	33	34	35	35	35	34	35	35	35	34		30.7	35.1	
3-Dec-07	34	34	33	33	A	32	31	30	29	29	29	29	29	30	29	29	28	28	28	28	29	29	29	28		29.8	34.1	
4-Dec-07	27	28	28	27	A	27	27	23	22	21	21	22	24	23	24	24	22	22	22	22	22	22	23	24		23.7	27.9	
5-Dec-07	24	24	24	21	A	22	23	21	23	22	23	23	24	26	C	C	C	A	19	12	16	22	27	31		22.4	31.1	
6-Dec-07	32	30	35	35	A	36	27	32	32	33	34	33	32	33	30	29	32	36	38	33	27	21	25	28		31.3	37.5	
7-Dec-07	27	27	27	27	A	23	25	25	24	25	23	18	27	21	18	24	18	21	25	24	23	17	16	20		22.9	27.3	
8-Dec-07	24	25	26	28	A	32	33	34	28	26	28	30	19	29	28	33	32	29	28	38	38	37	38	39		30.7	39.1	
9-Dec-07	39	41	39	36	A	42	46	45	45	42	42	43	43	43	42	40	37	38	39	39	39	39	38	39	39		40.8	45.8
10-Dec-07	38	38	35	36	A	32	31	27	26	26	29	31	30	30	29	27	31	30	30	30	29	32	33	32		31.1	38.5	
11-Dec-07	31	29	25	22	A	30	27	23	22	28	25	34	32	35	19	27	29	20	19	23	16	36	40	41		27.6	41.4	
12-Dec-07	40	38	37	35	A	36	35	35	36	36	37	36	37	37	38	37	36	33	34	36	36	36	37	37		36.3	39.9	
13-Dec-07	38	38	38	37	A	36	34	35	33	32	35	34	34	37	38	37	35	35	36	36	35	35	35	34		35.5	38.1	
14-Dec-07	33	34	34	34	A	31	31	31	26	27	30	26	21	26	30	30	31	15	21	13	24	24	19	14		26.3	34.0	
15-Dec-07	16	18	12	4	A	4	3	5	5	3	8	9	13	13	13	13	6	3	5	6	11	16	32	37		11.2	37.0	
16-Dec-07	37	38	38	39	A	37	36	35	35	36	33	33	36	37	36	37	36	34	32	33	33	34	32	29		35.0	38.9	
17-Dec-07	26	20	23	21	A	25	15	16	7	12	13	18	19	17	13	11	2	12	31	36	33	36	36	36		20.8	36.4	
18-Dec-07	36	37	37	35	A	37	32	34	29	26	27	26	25	19	18	12	10	14	19	20	15	18	20		24.9	37.1		
19-Dec-07	12	10	16	18	A	23	28	19	9	24	29	33	33	34	32	32	31	31	31	30	30	29	25	24		25.4	33.8	
20-Dec-07	21	19	15	14	A	18	10	14	23	26	26	26	27	29	30	30	27	28	26	28	32	32	31	31		24.5	32.1	
21-Dec-07	32	32	25	28	A	18	15	23	24	21	18	19	23	19	12	7	4	1	1	3	2	4	3	8		14.9	32.5	
22-Dec-07	8	6	2	3	A	1	1	2	2	5	8	12	20	20	17	15	8	4	14	12	9	14	25	33		10.5	33.5	
23-Dec-07	35	36	38	38	A	38	38	38	37	34	36	37	37	33	31	29	25	24	21	24	30	35	35	36		33.3	38.5	
24-Dec-07	37	40	40	40	A	40	40	39	39	39	39	39	38	38	38	37	37	37	36	36	36	36	35	35		37.9	40.4	
25-Dec-07	35	35	35	36	A	35	34	34	35	35	35	36	36	35	31	35	34	33	33	26	26	24	12	23		31.9	36.3	
26-Dec-07	23	22	18	15	A	26	33	35	33	31	32	32	31	31	35	35	34	36	36	35	35	35	34	34		30.8	35.7	
27-Dec-07	35	35	35	35	A	29	31	29	26	27	26	26	17	20	18	14	11	11	19	14	11	14	8	15		22.0	35.4	
28-Dec-07	17	16	19	16	A	8	7	5	6	6	9	15	17	20	20	19	17	16	14	10	9	16	11	8		13.0	20.3	
29-Dec-07	12	12	12	11	A	9	7	6	5	7	7	8	14	12	11	10	6	2	3	4	4	3	5	2		7.5	13.5	
30-Dec-07	2	3	14	14	A	12	10	9	11	14	13	15	17	15	13	14	9	5	9	5	5	9	10	10		10.4	16.8	
31-Dec-07	9	7	11	10	A	6	6	6	3	4	12	17	20	19	21	23	21	26	34	35	35	35	34		18.6	35.5		
Hourly Avg	27.4	27.0	26.9	26.0	N	26.0	25.0	24.7	23.7	24.4	25.4	26.5	27.0	27.4	26.1	25.9	23.5	22.9	24.6	24.4	24.6	25.9	26.3	27.1				
Hourly Max	39.9	40.9	40.4	40.0	0.0	42.0	45.8	45.5	44.6	42.4	42.1	43.1	43.1	43.2	42.2	39.6	37.4	38.4	39.4	39.5	39.1	38.4	39.9	41.4				

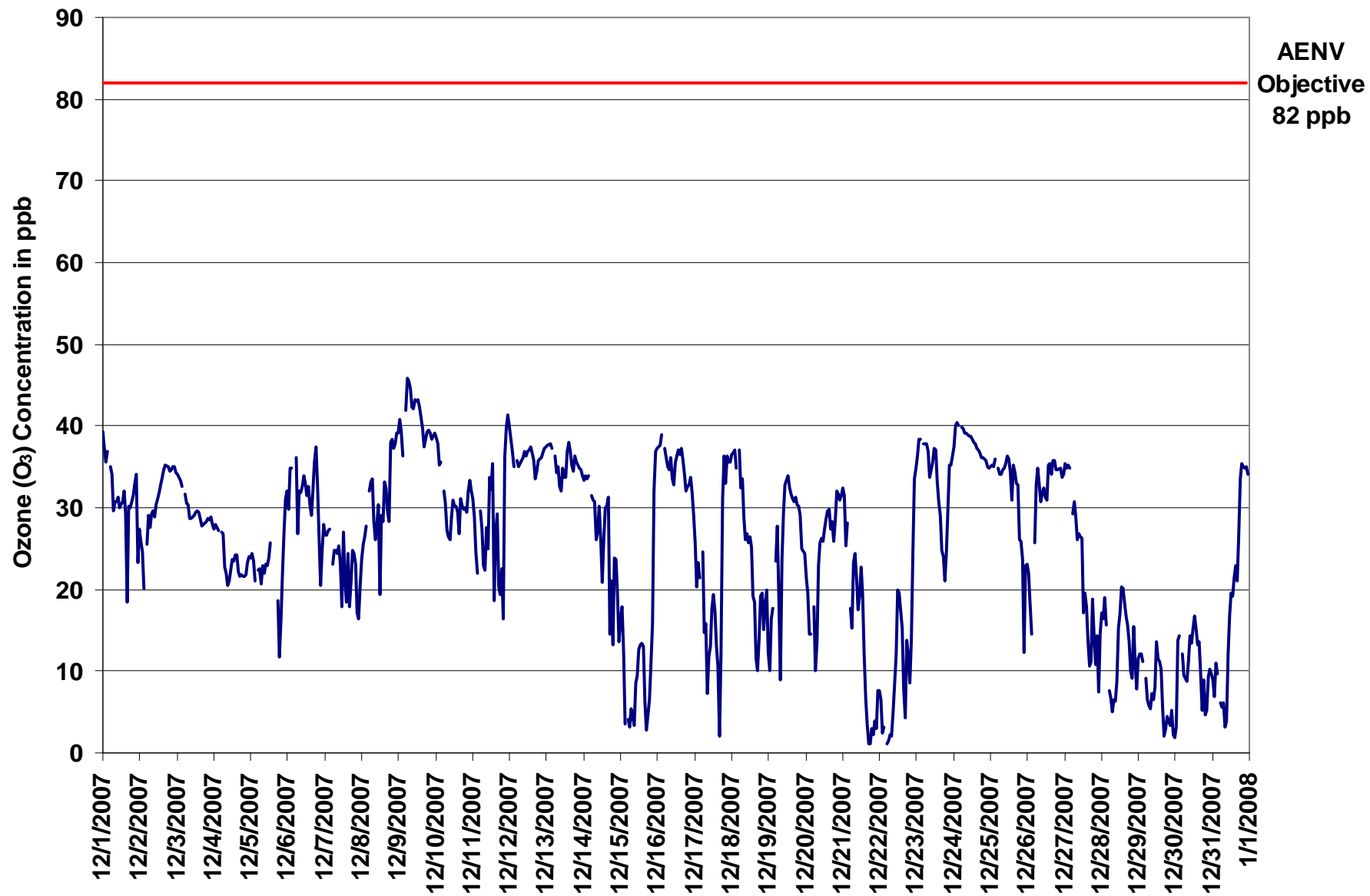


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

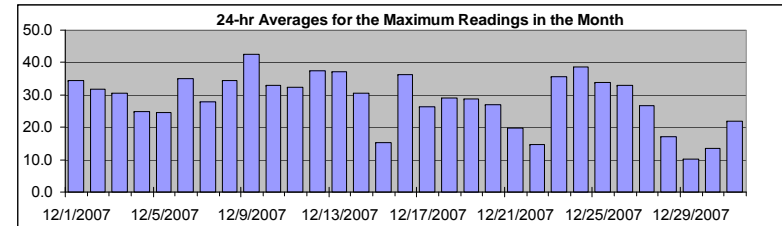
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	46.3	ppb	9-Dec	5:00 6:00
Maximum 24-hr Value:	42.4	ppb	9-Dec	



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	43.8	39.8	36.3	30.9	23.2	9.0	5.4	28.5 ppb	30.9 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	40	40	38	38	A	37	37	33	32	35	33	33	33	35	35	24	34	32	34	34	35	36	30	34.5	40.0	
2-Dec-07	29	28	27	24	A	27	30	29	31	32	30	31	32	33	33	35	35	36	36	35	35	35	35	35	31.9	35.7
3-Dec-07	34	34	34	33	A	32	32	31	30	29	30	30	30	30	30	28	28	29	29	29	29	29	29	29	30.4	34.5
4-Dec-07	28	29	28	28	A	27	27	27	23	22	22	24	24	24	25	25	23	23	23	22	23	22	24	25	24.8	28.7
5-Dec-07	25	26	25	23	A	24	24	22	24	24	24	24	25	28	C	C	C	A	20	14	21	24	31	33	24.4	33.2
6-Dec-07	33	34	36	37	A	37	37	36	36	36	36	37	36	36	35	32	38	39	39	37	32	28	29	31	35.1	39.3
7-Dec-07	30	29	29	29	A	27	27	27	27	28	29	23	29	32	38	38	27	29	26	26	24	23	20	21	27.9	37.9
8-Dec-07	25	27	27	28	A	34	36	37	34	29	30	33	34	33	34	38	37	39	38	41	40	38	38	40	34.5	40.7
9-Dec-07	41	42	41	38	A	46	46	46	45	45	44	44	44	44	44	41	41	41	41	41	40	40	40	40	42.4	46.3
10-Dec-07	39	38	38	37	A	37	34	30	29	28	31	32	31	31	31	30	32	32	32	32	30	35	34	33	33.0	39.1
11-Dec-07	33	30	28	23	A	32	31	26	28	33	27	37	37	41	24	35	38	24	32	29	33	40	42	43	32.5	42.6
12-Dec-07	41	39	38	36	A	36	36	37	37	37	38	38	38	38	39	38	38	36	36	37	37	37	37	38	37.5	40.8
13-Dec-07	38	38	38	38	A	37	37	37	36	34	38	37	37	39	39	39	38	37	37	36	36	36	35	35	37.1	38.9
14-Dec-07	34	34	34	34	A	34	32	32	33	32	32	32	24	31	31	32	33	33	28	23	27	29	19	19	30.6	34.4
15-Dec-07	20	20	18	15	A	14	8	7	7	7	11	13	18	18	15	14	12	7	7	15	23	37	37	15.2	37.5	
16-Dec-07	38	38	39	40	A	38	36	36	35	38	36	34	37	38	37	39	36	36	33	33	33	34	33	31	36.2	39.5
17-Dec-07	29	26	27	25	A	26	24	26	17	15	18	25	24	25	22	16	8	28	39	39	38	39	37	37	26.5	39.4
18-Dec-07	37	37	38	36	A	38	37	35	31	30	28	28	28	28	24	21	20	18	24	25	27	28	21	28	29.1	38.4
19-Dec-07	23	14	18	20	A	28	28	27	23	28	33	34	34	35	33	34	33	32	32	31	31	30	29	27	28.6	34.7
20-Dec-07	25	22	20	18	A	19	20	21	25	26	27	26	29	30	31	31	30	31	29	31	33	33	32	33	27.1	33.0
21-Dec-07	33	33	33	30	A	30	26	26	26	25	27	25	26	26	22	10	7	2	2	7	9	13	5	12	19.8	33.4
22-Dec-07	9	9	5	7	A	2	3	7	6	9	11	15	23	24	24	17	14	7	19	20	14	18	34	37	14.6	36.9
23-Dec-07	36	39	39	39	A	38	39	38	38	35	37	38	39	39	36	34	28	26	22	29	36	36	37	38	35.5	39.3
24-Dec-07	39	41	41	40	A	40	40	40	40	40	39	39	39	39	38	38	38	37	37	37	36	36	35	35	38.5	40.8
25-Dec-07	36	36	36	37	A	36	35	35	36	35	37	37	37	37	34	37	36	34	34	33	28	27	22	24	33.8	36.8
26-Dec-07	25	26	26	18	A	33	33	37	34	33	34	34	32	34	37	36	36	37	37	36	36	36	34	35	33.0	37.3
27-Dec-07	36	36	36	35	A	32	31	31	28	29	29	29	29	25	24	16	16	15	23	24	22	25	19	20	26.6	36.3
28-Dec-07	21	19	22	19	A	12	12	12	15	14	15	23	19	22	21	20	18	16	15	13	13	18	19	10	17.0	22.5
29-Dec-07	13	13	13	12	A	11	10	10	10	10	10	12	15	14	13	12	9	4	6	6	6	6	10	8	10.1	15.5
30-Dec-07	3	7	19	18	A	14	13	12	13	16	18	17	18	18	18	15	14	8	13	7	11	13	15	15	13.6	18.5
31-Dec-07	14	11	12	12	A	10	9	10	8	8	15	20	21	22	23	26	32	36	35	36	36	36	35	35	21.8	36.4
Hourly Avg	29.3	28.9	29.1	28.0	N	28.8	28.1	27.7	27.0	27.2	28.0	29.1	29.8	30.5	29.7	28.8	27.4	26.9	27.7	27.5	28.0	29.1	29.5	29.5		
Hourly Max	41.3	41.8	41.2	40.4	0.0	46.3	46.3	45.8	45.3	45.2	43.7	44.3	44.2	43.8	43.7	41.3	40.8	40.8	41.3	40.8	40.0	39.8	41.7	42.6		

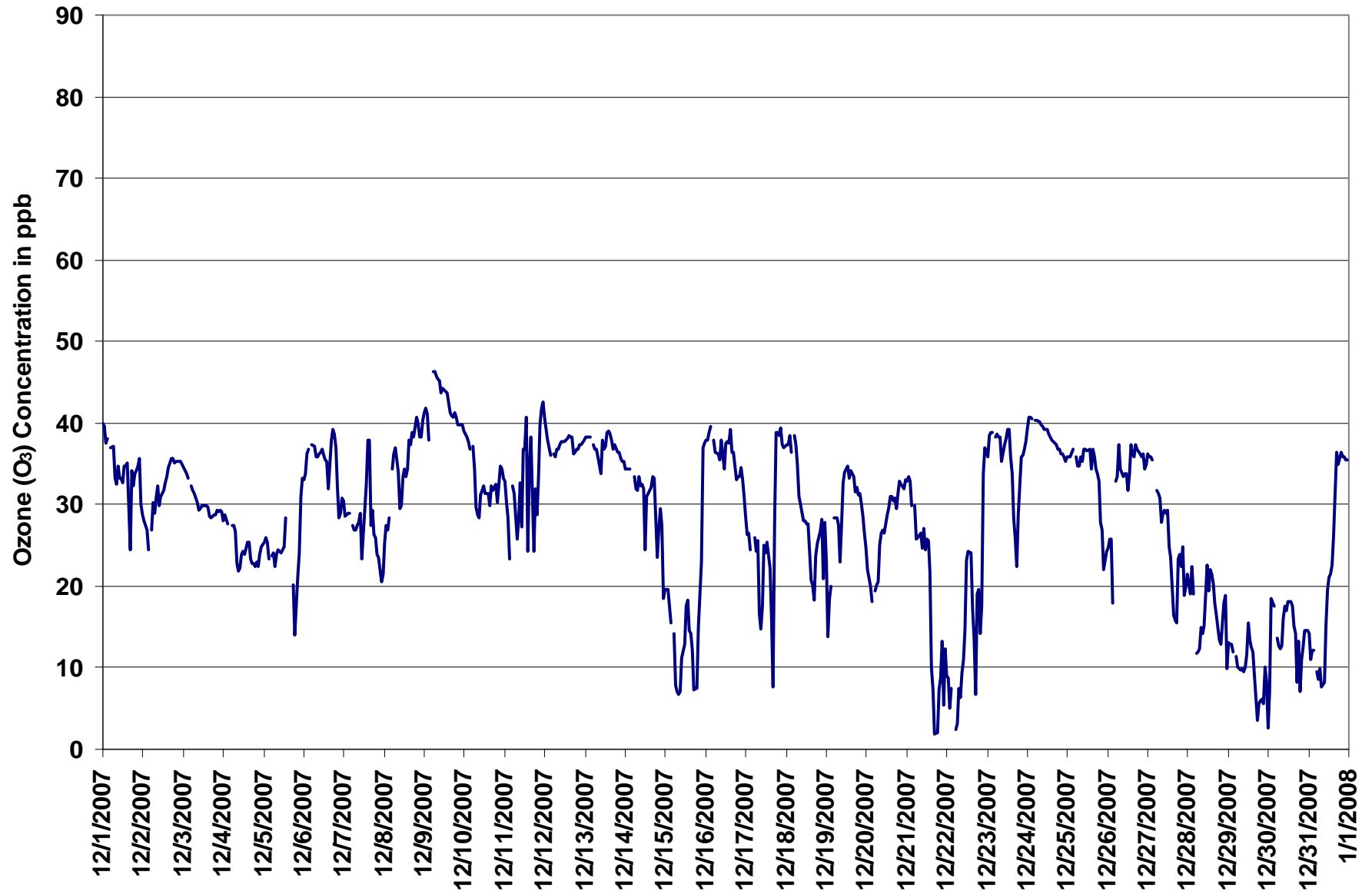
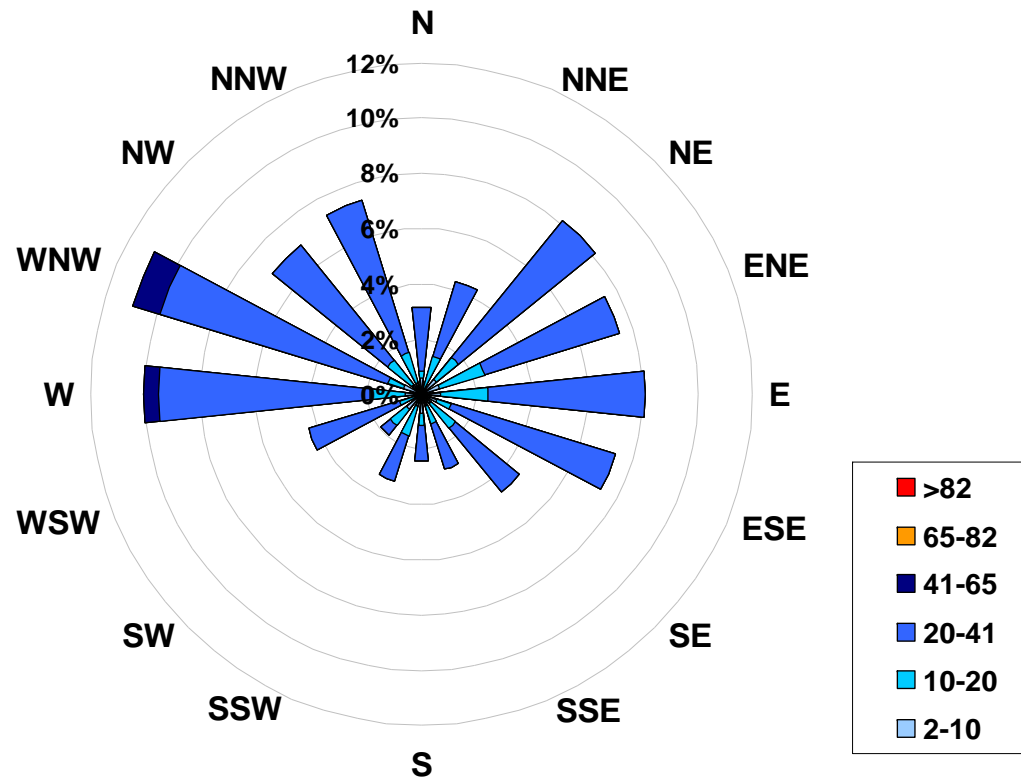


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Beaverlodge Site for December 2007



Calms: 7%

Frequency Distribution of O ₃ in ppb			Frequency (hrs)
Range			
2.0	<	10	80
10	to	20	123
20	to	41	495
41	to	65	11
65	to	82	0
	>	82	0
Total Non-Zero Values			709

PASZA - Beaverlodge Ozone Eight Hour Average Summary

Station: Beaverlodge
 Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

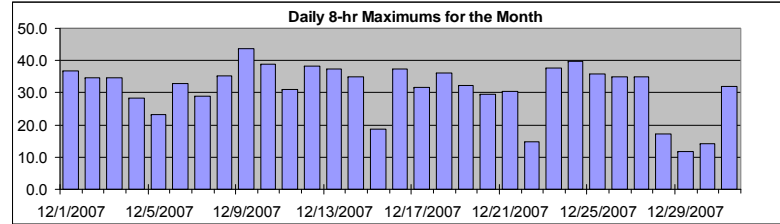
Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 8-hr 65 ppb

Number of 8-hr Exceedances:		0	
Maximum 8-hr Average:	43.7 ppb	9-Dec	13:00 14:00

Percentile							
99	95	75	50	25	5	1	
41.9	38.2	34.1	28.2	18.5	7.5	3.6	



Status Flag Characters	
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																							Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00		22:00 23:00
1-Dec-07	36	36	37	37	37	37	36	35	34	33	33	32	31	31	31	31	29	29	29	29	29	29	30	29	36.8
2-Dec-07	30	30	29	28	27	26	25	26	26	27	27	29	29	30	30	31	32	32	33	34	34	34	35	35	34.8
3-Dec-07	35	35	34	34	34	34	33	32	32	31	30	30	29	29	29	29	29	29	29	29	29	28	28	28	34.7
4-Dec-07	28	28	28	28	28	28	27	27	26	25	24	23	23	23	22	23	23	23	23	23	23	22	22	22	28.2
5-Dec-07	22	23	23	23	23	23	23	23	23	22	22	22	23	23	23	N	N	N	N	N	N	N	N	N	23.2
6-Dec-07	23	24	26	29	30	32	32	32	32	33	33	32	32	32	32	32	32	32	33	33	32	31	30	30	32.7
7-Dec-07	29	28	27	26	26	26	26	26	25	25	25	23	24	24	23	23	22	21	22	22	22	21	21	21	29.0
8-Dec-07	21	22	22	23	22	25	27	29	30	30	30	30	29	29	28	28	28	29	29	30	32	33	34	35	35.1
9-Dec-07	36	37	39	39	39	39	40	41	42	42	43	44	44	44	43	43	42	41	41	40	40	39	39	39	43.7
10-Dec-07	39	39	38	38	38	37	36	34	32	30	30	29	29	29	29	29	29	30	30	30	30	30	30	31	38.9
11-Dec-07	31	31	30	29	29	29	28	27	25	25	25	27	28	28	27	28	29	28	27	26	24	24	26	28	31.0
12-Dec-07	30	32	34	36	38	38	37	37	36	36	36	36	36	36	37	37	37	36	36	36	36	36	36	36	38.3
13-Dec-07	36	36	37	37	37	37	37	37	36	35	35	34	34	34	35	35	35	35	36	36	36	36	35	35	37.3
14-Dec-07	35	35	34	34	34	34	33	33	32	31	30	29	28	27	27	27	28	26	25	23	24	23	22	20	34.8
15-Dec-07	18	19	18	16	15	12	10	9	7	5	5	5	6	8	9	10	10	10	9	9	9	9	12	15	18.7
16-Dec-07	18	23	27	31	34	37	37	37	37	37	36	35	35	35	35	35	36	35	35	35	35	34	34	33	37.4
17-Dec-07	31	30	29	27	26	25	23	21	18	17	16	15	16	15	14	14	13	13	15	18	19	22	25	28	31.5
18-Dec-07	32	35	36	36	36	36	36	35	34	33	31	30	30	28	26	25	22	20	19	18	17	16	16	16	36.2
19-Dec-07	16	16	16	16	16	17	18	18	18	20	21	23	25	26	27	28	31	32	32	32	31	31	30	29	32.2
20-Dec-07	28	26	24	22	21	20	17	16	16	17	19	20	21	23	25	27	28	28	28	28	29	29	29	30	29.5
21-Dec-07	30	31	30	30	30	28	26	25	24	22	21	20	20	20	20	18	15	13	11	9	6	4	3	3	30.5
22-Dec-07	4	4	5	5	5	4	4	3	3	2	3	5	7	9	11	12	13	13	14	14	12	12	15	15	14.8
23-Dec-07	18	22	25	29	31	35	37	37	38	37	37	37	37	36	35	34	33	31	30	28	27	27	28	29	37.7
24-Dec-07	30	32	35	37	38	38	39	40	40	40	39	39	39	39	39	38	38	38	38	37	37	37	36	36	39.8
25-Dec-07	36	36	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	34	34	33	32	30	28	26	35.7
26-Dec-07	25	24	22	20	20	20	23	24	26	27	29	32	32	32	32	33	33	33	34	34	35	35	35	35	35.0
27-Dec-07	35	35	35	35	35	34	33	33	31	30	29	28	26	25	24	22	20	18	17	15	15	14	13	13	34.8
28-Dec-07	14	14	14	14	15	14	14	13	11	10	8	8	9	11	12	14	15	17	17	16	16	15	14	12	17.1
29-Dec-07	12	11	11	11	12	11	10	10	9	8	7	7	8	8	9	9	9	9	8	8	6	5	5	4	11.8
30-Dec-07	3	3	5	6	6	8	8	9	10	12	12	12	13	13	14	14	14	13	12	11	9	9	8	8	14.1
31-Dec-07	8	8	8	9	9	9	8	8	7	7	7	8	9	11	13	15	17	20	23	25	27	29	31	32	31.9
Hourly Max	38.9	38.8	38.7	38.5	38.5	39.2	40.4	41.3	42.1	42.3	42.7	43.6	43.6	43.7	43.3	42.5	41.6	41.1	40.8	40.4	39.9	39.2	38.8	38.7	

PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

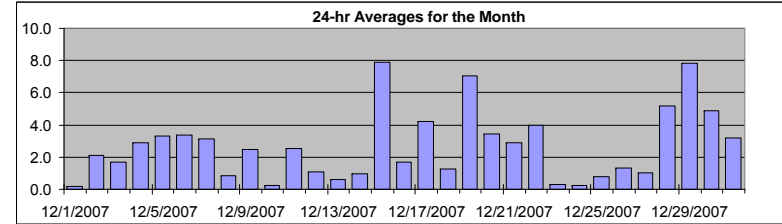
Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m³ 24-hr 30 µg/m³
 Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	19.8 µg/m ³ 19-Dec 3:00 4:00
Maximum 24-hr Value:	7.9 µg/m ³ 15-Dec

AIC Time:	0 hrs	Operational Time:	741 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.6%
Percentile	99	95	75
	13.1	8.8	3.9
	50	25	5
	1.8	0.0	0.0
	1	0.0	0.0
	Average / Median		2.7
	2 µg/m ³		1.8 µg/m ³



Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0.2	1.8
2-Dec-07	1	1	3	3	3	3	3	3	3	3	2	2	2	1	1	2	1	2	2	1	2	2	3	3	3	2.1	3.4
3-Dec-07	2	2	1	4	2	2	1	2	1	0	1	1	0	0	2	1	3	2	2	2	2	1	3	3	3	1.7	3.6
4-Dec-07	3	2	2	2	3	3	2	2	3	3	4	3	3	4	4	3	3	2	3	2	3	3	3	2	2	2.9	4.3
5-Dec-07	2	2	5	6	6	3	7	7	4	4	3	3	2	4	0	1	0	3	4	3	2	1	3	5	3	3.3	7.3
6-Dec-07	15	12	6	4	3	3	2	4	3	4	3	4	1	3	1	3	1	0	0	1	1	3	3	1	3	3.3	14.7
7-Dec-07	2	1	2	3	4	4	4	4	4	6	5	7	7	5	7	2	0	2	1	1	1	0	1	2	3	3.1	7.1
8-Dec-07	1	0	1	0	0	0	0	0	0	2	3	1	5	5	0	0	1	1	0	0	0	0	0	0	0	0.8	4.9
9-Dec-07	10	13	9	2	0	1	1	0	0	0	0	3	0	5	3	0	1	2	0	3	2	1	2	1	2	2.5	12.7
10-Dec-07	1	0	0	1	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.8
11-Dec-07	0	0	6	6	3	1	0	1	3	1	2	0	0	0	3	0	0	2	2	4	6	8	9	2	2	2.5	9.0
12-Dec-07	0	0	0	1	2	2	0	0	0	0	0	0	0	0	2	4	7	3	3	2	0	0	0	0	0	1.1	7.0
13-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	0	0	0	0	0	0	0	0.6	8.9
14-Dec-07	1	0	0	0	0	0	0	0	1	2	2	0	1	2	3	1	0	0	0	2	1	1	2	1	1	1.0	2.6
15-Dec-07	4	6	6	6	3	4	5	4	5	6	9	9	8	10	8	9	10	12	16	19	17	13	1	0	7	7.9	18.9
16-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	5	4	3	0	2	4	7	8	8	1.7	8.7
17-Dec-07	4	3	2	2	2	0	4	0	5	4	6	6	5	8	10	9	9	7	3	4	8	0	0	1	4	4.2	10.0
18-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	2	2	3	5	3	3	3	1.3	4.9
19-Dec-07	3	8	13	20	14	14	10	8	9	5	3	0	0	1	2	7	3	4	6	9	8	9	7	6	6	7.0	19.8
20-Dec-07	5	4	5	6	6	5	6	7	1	2	2	5	4	4	4	3	1	2	2	2	2	1	2	2	2	3.4	6.5
21-Dec-07	1	1	2	3	1	1	3	2	1	3	3	4	4	3	1	9	5	4	3	3	2	4	3	3	3	2.9	9.2
22-Dec-07	2	1	3	2	4	4	3	3	5	3	2	6	5	5	7	7	9	7	6	2	4	4	2	1	4	4.0	8.7
23-Dec-07	0	1	1	0	D	0	0	0	0	0	D	0	0	0	0	1	1	0	1	1	0	1	0	0	0	0.3	1.3
24-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0.2	1.1
25-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	D	2	0	2	11	3	3	0.8	11.0
26-Dec-07	1	3	6	3	0	0	0	0	0	1	0	0	1	1	2	7	4	1	1	0	1	0	0	0	0	1.3	6.8
27-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	2	1	1	0	3	4	3	3	3	1.0	3.9
28-Dec-07	2	2	1	2	2	4	3	4	6	6	8	6	7	6	6	7	6	5	6	8	7	6	6	8	8	5.2	8.4
29-Dec-07	7	6	6	5	5	4	5	5	5	6	9	12	9	8	10	8	8	9	8	9	12	12	9	10	10	7.8	12.4
30-Dec-07	10	9	3	3	4	4	6	6	4	4	5	5	3	5	7	7	6	6	4	4	4	3	3	3	3	4.9	10.1
31-Dec-07	6	6	4	4	4	0	4	1	3	6	12	8	4	2	2	1	1	1	2	0	2	2	1	3	3	3.2	12.1
Hourly Avg	2.7	2.7	2.8	2.9	2.3	2.1	2.2	2.0	2.1	2.4	2.8	2.8	2.4	2.7	2.8	3.4	3.0	3.0	2.7	2.8	3.1	2.9	2.8	2.5	2.5		
Hourly Max	14.7	12.7	13.3	19.8	13.7	14.4	10.0	8.0	9.1	6.4	12.1	12.4	9.4	10.2	10.0	9.2	9.8	11.7	15.5	18.9	17.0	12.7	11.0	10.1	10.1		

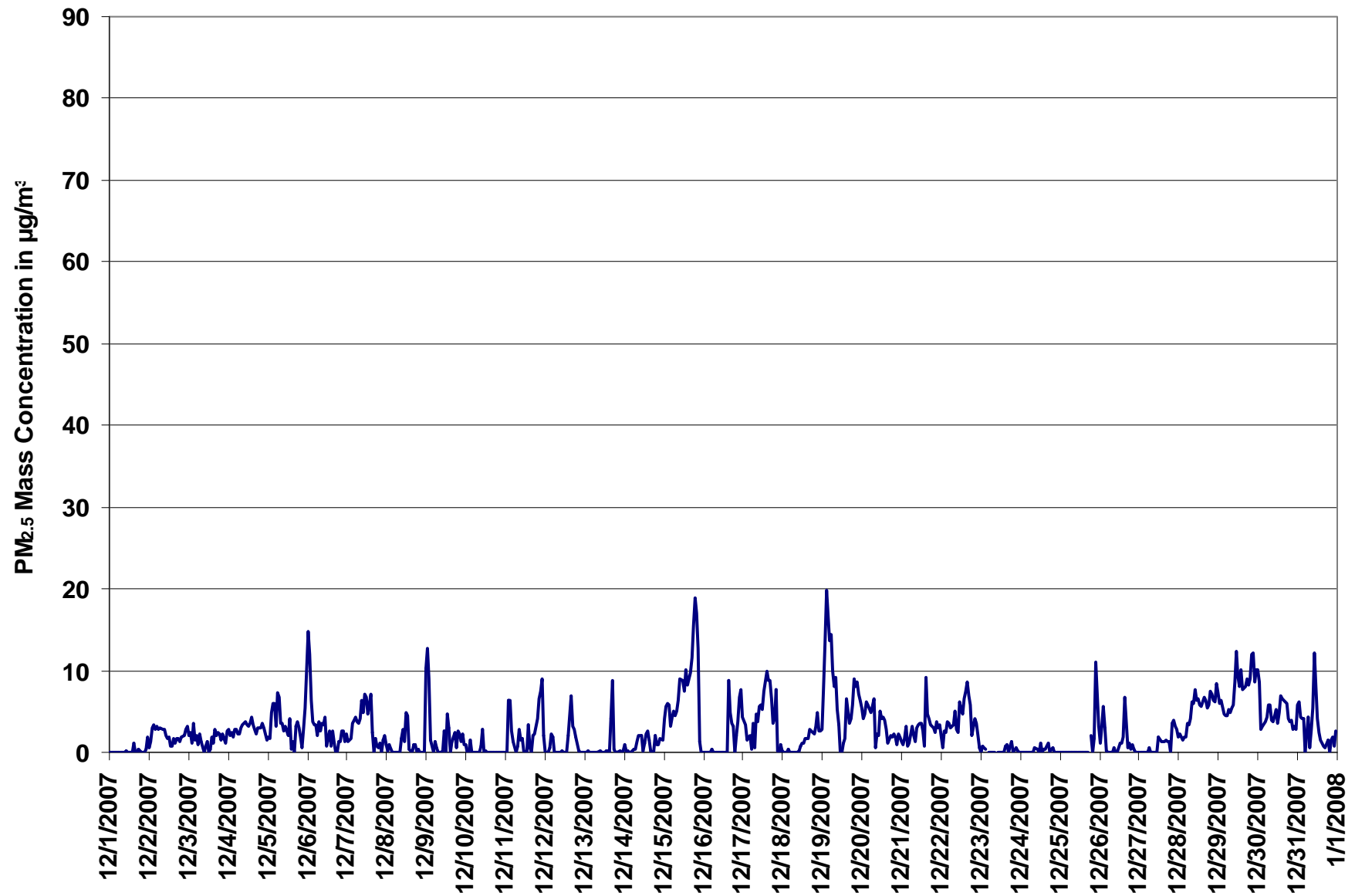


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

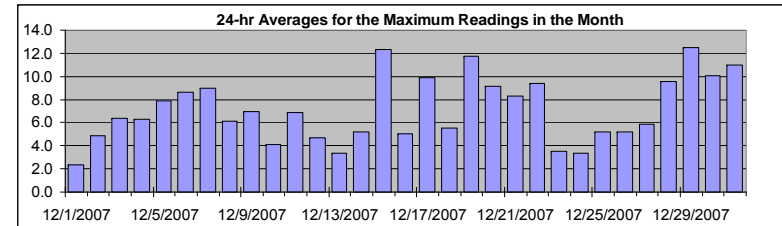
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	38.3	µg/m ³	25-Dec	22:00 23:00
Maximum 24-hr Value:	12.5	µg/m ³	29-Dec	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	21.4	14.5	9.3	6.5	4.0	1.7	0.8	7.1	6 µg/m ³
									6.5 µg/m ³

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	1	1	2	3	3	2	2	1	2	3	3	2	1	3	1	4	4	2	3	2	2	2	3	5	2.4	5.2
2-Dec-07	4	4	5	8	6	7	5	6	6	6	5	5	4	5	4	4	3	3	4	4	4	3	6	5	4.8	7.9
3-Dec-07	4	6	5	7	4	5	11	9	6	5	7	9	9	5	11	5	6	5	5	7	6	6	5	6	6.4	11.2
4-Dec-07	6	5	5	4	7	5	4	6	8	6	7	7	5	7	8	6	6	6	7	7	6	7	7	7	6.3	8.2
5-Dec-07	5	4	9	9	9	6	11	10	7	10	11	8	6	7	7	5	5	10	9	7	7	6	8	13	7.9	13.0
6-Dec-07	20	17	13	10	7	7	7	8	8	9	8	9	6	10	7	7	12	5	5	6	5	7	8	5	8.7	20.3
7-Dec-07	7	7	6	7	8	8	8	7	7	10	19	16	14	13	17	11	6	8	5	6	7	5	7	7	9.0	19.0
8-Dec-07	4	4	5	4	6	3	4	6	4	8	9	4	11	8	4	6	13	14	8	8	4	3	5	3	6.1	14.3
9-Dec-07	24	18	16	6	4	8	6	1	0	4	3	7	2	10	8	2	3	9	4	6	5	5	8	6	6.9	24.3
10-Dec-07	6	3	3	5	4	5	7	2	3	5	11	6	2	1	3	4	2	4	4	4	4	3	2	5	4.1	10.7
11-Dec-07	3	4	14	12	7	5	3	5	7	6	4	4	2	7	8	3	4	6	7	10	12	12	15	6	6.9	14.9
12-Dec-07	4	4	2	4	8	6	3	4	3	4	4	5	3	2	7	8	9	7	6	7	3	3	3	3	4.7	9.0
13-Dec-07	1	1	4	3	3	2	3	3	2	5	5	1	1	3	3	1	7	14	7	2	2	3	2	2	3.3	14.1
14-Dec-07	4	3	4	3	6	4	5	4	7	7	8	8	4	6	7	4	3	4	6	6	4	6	7	6	5.2	7.7
15-Dec-07	8	9	8	10	6	11	8	9	10	10	14	13	11	14	11	14	13	15	21	26	27	18	6	0	12.3	27.3
16-Dec-07	2	0	1	1	3	4	2	3	3	2	2	2	2	1	3	18	13	6	8	4	6	10	11	12	5.0	18.3
17-Dec-07	9	9	5	7	7	7	9	7	11	11	11	11	14	16	15	15	12	11	7	8	15	7	5	6	9.9	15.7
18-Dec-07	4	4	4	4	4	3	4	4	4	4	5	5	6	5	5	6	7	6	7	7	9	10	9	7	5.5	10.1
19-Dec-07	8	12	21	24	21	20	16	14	20	13	7	5	3	4	6	11	7	7	10	12	10	11	10	9	11.7	23.8
20-Dec-07	10	8	10	10	10	10	11	12	8	7	11	14	9	12	10	9	6	7	7	8	7	5	8	6	9.1	14.3
21-Dec-07	6	6	6	11	7	5	8	7	5	8	9	10	7	6	7	18	14	11	9	8	8	7	10	7	8.3	18.4
22-Dec-07	7	5	9	6	8	10	9	8	9	8	10	14	9	8	11	11	13	12	12	8	13	10	6	9	9.4	13.7
23-Dec-07	2	7	6	7	1	1	2	2	1	0	2	0	3	5	6	5	4	4	4	5	4	5	3	4	3.5	7.4
24-Dec-07	2	2	3	2	3	3	3	3	3	5	5	5	6	3	4	4	4	4	2	4	3	3	2	3	3.4	6.1
25-Dec-07	1	1	3	2	2	2	1	1	3	2	2	1	2	2	3	4	2	3	0	8	4	29	38	7	5.2	38.3
26-Dec-07	5	9	11	8	4	4	2	3	4	4	3	3	4	4	5	9	8	5	7	4	10	5	4	4	5.2	10.7
27-Dec-07	6	4	3	5	6	4	5	5	4	5	4	4	7	4	5	5	6	5	5	8	12	11	8	9	5.9	12.0
28-Dec-07	7	7	7	5	6	10	8	9	11	10	14	12	10	11	9	10	10	9	9	11	11	11	10	12	9.6	14.1
29-Dec-07	11	10	10	9	9	9	9	9	9	10	15	17	14	17	16	12	13	14	13	14	16	17	13	14	12.5	17.0
30-Dec-07	14	13	7	7	9	10	11	10	9	9	9	9	8	9	12	10	12	11	9	10	10	8	13	9	10.0	13.7
31-Dec-07	14	12	10	9	8	9	15	13	8	12	23	20	9	8	6	7	11	20	9	6	8	8	7	12	11.0	22.6
Hourly Avg	6.7	6.5	7.1	6.9	6.3	6.3	6.5	6.1	6.2	6.7	8.1	7.5	6.4	7.1	7.4	7.7	7.7	8.1	7.1	7.5	7.8	7.9	8.0	6.8		
Hourly Max	24.3	17.8	21.2	23.8	21.5	20.4	16.0	13.6	20.0	12.9	22.6	19.7	14.3	16.9	17.3	18.4	13.6	20.3	21.0	26.2	27.3	28.9	38.3	14.3		

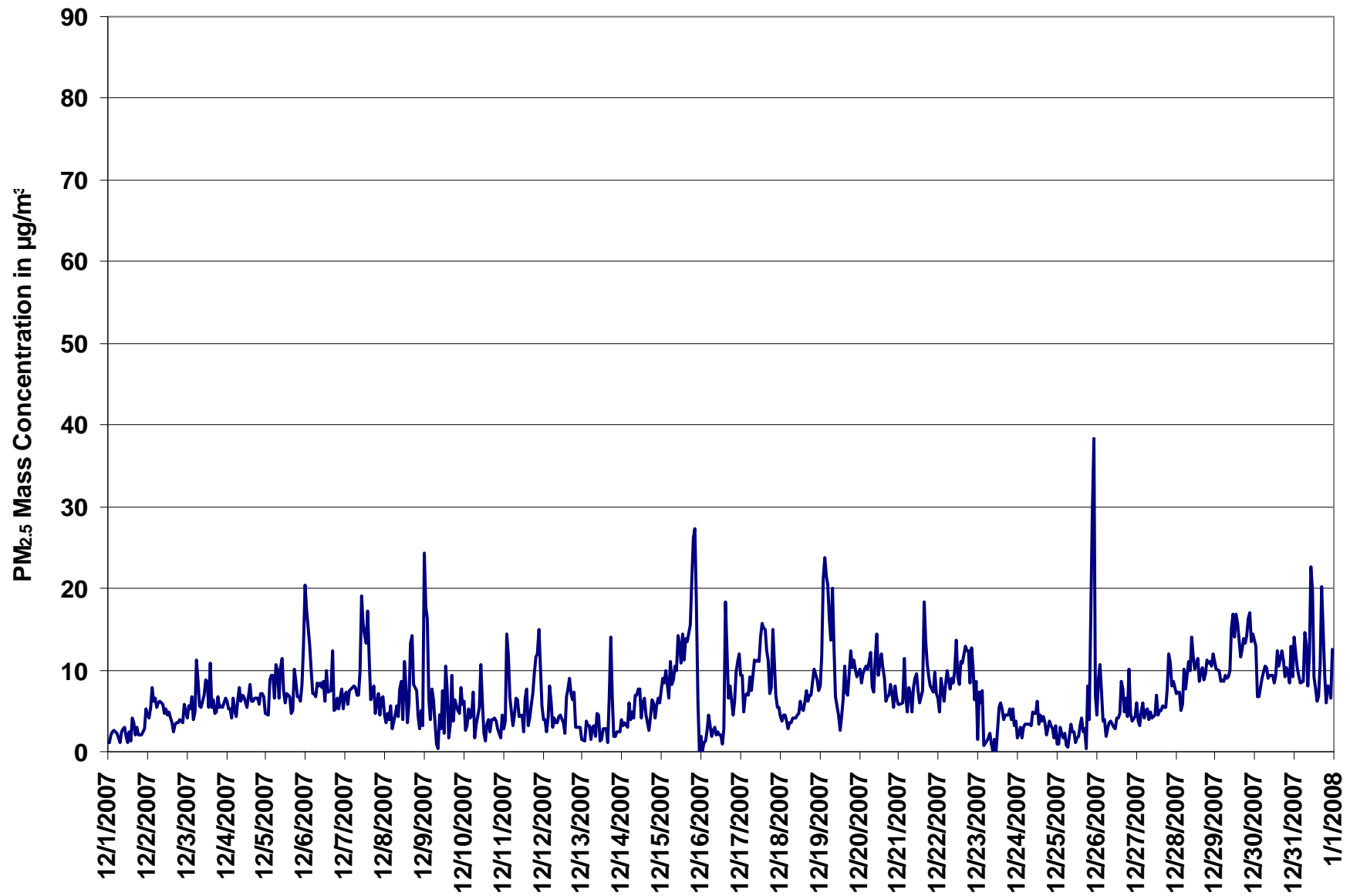
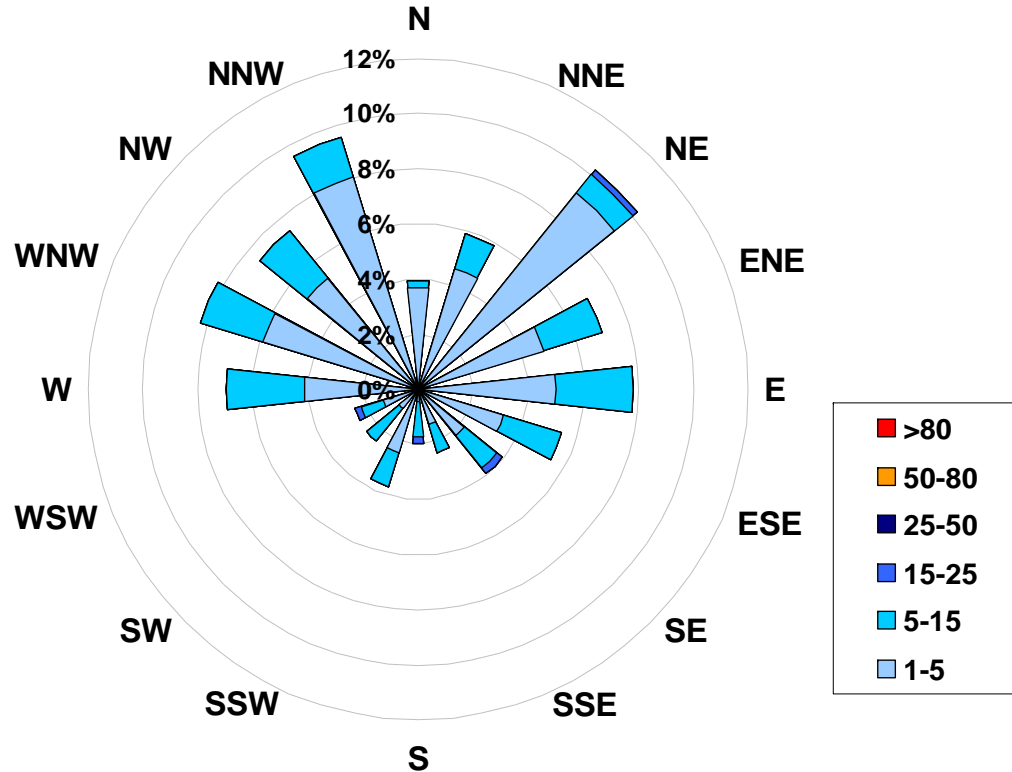


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Beaverlodge Site for December 2007



Calms: 7%

Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
1.0	<	5	605
5	to	15	132
15	to	25	4
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			741

PASZA - Beaverlodge Relative Humidity Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

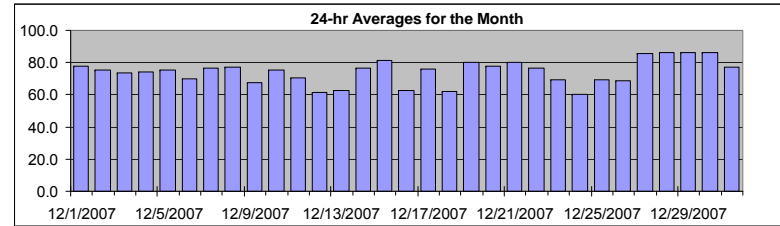
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	93.1	%	20-Dec	3:00 4:00
Maximum 24-hr Value:	86.0	%	28-Dec	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	90.6	88.0	82.4	75.0	66.7	56.9	50.9	74.1 %	75.0 %

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00
1-Dec-07	73	76	78	78	77	80	82	80	81	80	76	75	72	66	62	72	84	82	83	82	82	81	81	79	77.6	84.0	
2-Dec-07	80	80	80	79	80	80	79	78	78	77	75	73	70	69	71	72	73	73	74	75	74	73	73	73	75.3	79.9	
3-Dec-07	73	74	73	73	72	72	72	74	74	75	75	74	74	72	72	73	75	75	75	75	75	73	74	75	76	73.7	75.6
4-Dec-07	76	76	75	73	73	74	73	75	76	75	74	70	69	69	73	75	75	74	74	75	76	72	72	74	81	73.9	80.7
5-Dec-07	80	80	80	79	79	78	77	77	78	78	79	74	62	61	50	63	71	76	79	83	84	84	80	79	75.5	84.1	
6-Dec-07	77	78	76	80	76	71	77	74	74	70	60	46	46	49	56	55	64	70	70	74	79	85	86	86	70.0	86.3	
7-Dec-07	86	84	84	83	83	83	83	83	83	82	70	62	55	55	62	58	74	78	77	79	80	85	85	85	76.6	85.6	
8-Dec-07	84	86	86	86	85	83	83	83	85	82	78	79	74	67	64	61	73	76	77	75	74	73	68	67	77.0	86.0	
9-Dec-07	66	63	68	66	74	71	69	70	66	62	59	52	53	52	53	60	66	72	75	78	76	81	81	84	67.4	83.7	
10-Dec-07	80	80	82	87	88	89	90	92	91	89	77	61	58	57	63	67	68	68	69	70	70	69	69	66	75.1	92.4	
11-Dec-07	70	70	73	73	69	66	68	70	69	70	69	67	65	65	75	71	70	80	78	76	78	67	66	63	70.3	79.8	
12-Dec-07	62	64	64	65	69	81	71	63	62	60	57	57	54	49	48	52	59	64	66	62	62	61	61	60	61.4	80.7	
13-Dec-07	62	64	63	63	65	69	69	73	70	71	56	53	47	54	56	58	62	64	61	62	64	65	67	69	62.7	72.9	
14-Dec-07	70	70	72	73	82	82	89	90	88	89	75	63	64	64	60	75	76	83	82	80	75	74	76	79	76.3	90.4	
15-Dec-07	79	78	80	86	86	87	91	89	89	90	87	83	78	77	80	80	82	83	83	82	79	77	68	64	81.6	90.7	
16-Dec-07	65	64	61	57	61	67	73	72	72	66	62	59	58	55	63	62	64	63	61	61	61	57	59	66	62.9	72.9	
17-Dec-07	75	80	80	80	79	80	85	84	89	90	87	79	63	69	79	81	82	75	62	57	64	67	69	66	75.9	90.3	
18-Dec-07	64	63	58	56	58	53	58	55	57	59	56	55	54	57	60	60	67	69	70	68	69	71	73	72	61.8	73.2	
19-Dec-07	76	75	77	83	85	88	88	86	86	84	83	78	74	71	76	75	76	78	77	78	79	80	82	85	80.0	88.4	
20-Dec-07	88	90	92	93	92	89	89	89	81	74	74	66	64	72	71	65	68	69	72	72	72	74	75	76	77.9	93.1	
21-Dec-07	77	79	83	84	82	82	83	83	83	82	79	79	75	70	71	72	78	81	82	83	82	82	83	84	80.0	84.1	
22-Dec-07	83	84	82	82	81	82	81	80	80	78	80	78	75	74	73	60	76	78	72	70	74	74	71	68	76.6	84.1	
23-Dec-07	69	67	63	61	61	61	66	68	72	73	68	64	60	58	61	66	76	77	81	78	78	78	79	78	69.3	80.5	
24-Dec-07	75	65	64	65	62	60	59	60	59	58	56	53	50	53	53	56	57	61	62	63	64	62	65	66	60.3	75.1	
25-Dec-07	67	67	72	71	75	80	83	80	76	73	68	61	62	61	67	62	60	60	56	70	70	75	78	72	69.5	82.6	
26-Dec-07	70	69	75	82	77	73	68	67	72	74	71	66	58	54	53	59	63	65	70	69	72	72	73	74	68.6	81.7	
27-Dec-07	78	81	87	88	87	91	91	89	89	87	83	82	80	76	80	83	88	90	88	87	89	87	87	88	85.6	90.8	
28-Dec-07	88	88	87	86	84	84	86	86	87	87	86	86	84	78	86	87	88	88	87	87	87	87	86	87	86.0	88.3	
29-Dec-07	87	86	86	87	87	86	87	87	86	86	85	83	80	81	83	84	86	87	88	88	88	87	87	88	85.8	88.3	
30-Dec-07	88	88	87	88	87	87	87	87	87	87	84	83	80	80	83	86	87	87	87	87	86	87	87	86	85.9	88.1	
31-Dec-07	86	86	86	85	84	85	83	83	84	84	72	60	60	57	67	83	76	76	76	72	73	75	76	77	76.9	86.4	
Hourly Avg	76.0	75.9	76.6	77.2	77.4	78.0	78.7	78.4	78.1	77.1	72.9	68.3	65.1	64.3	66.8	68.8	73.1	74.9	74.6	74.9	75.2	75.4	75.5	75.6			
Hourly Max	88.3	90.3	92.4	93.1	92.0	90.8	90.7	92.4	90.8	90.3	87.4	85.6	83.8	80.9	85.7	86.9	87.6	89.6	87.9	88.3	89.1	87.5	87.3	88.0			

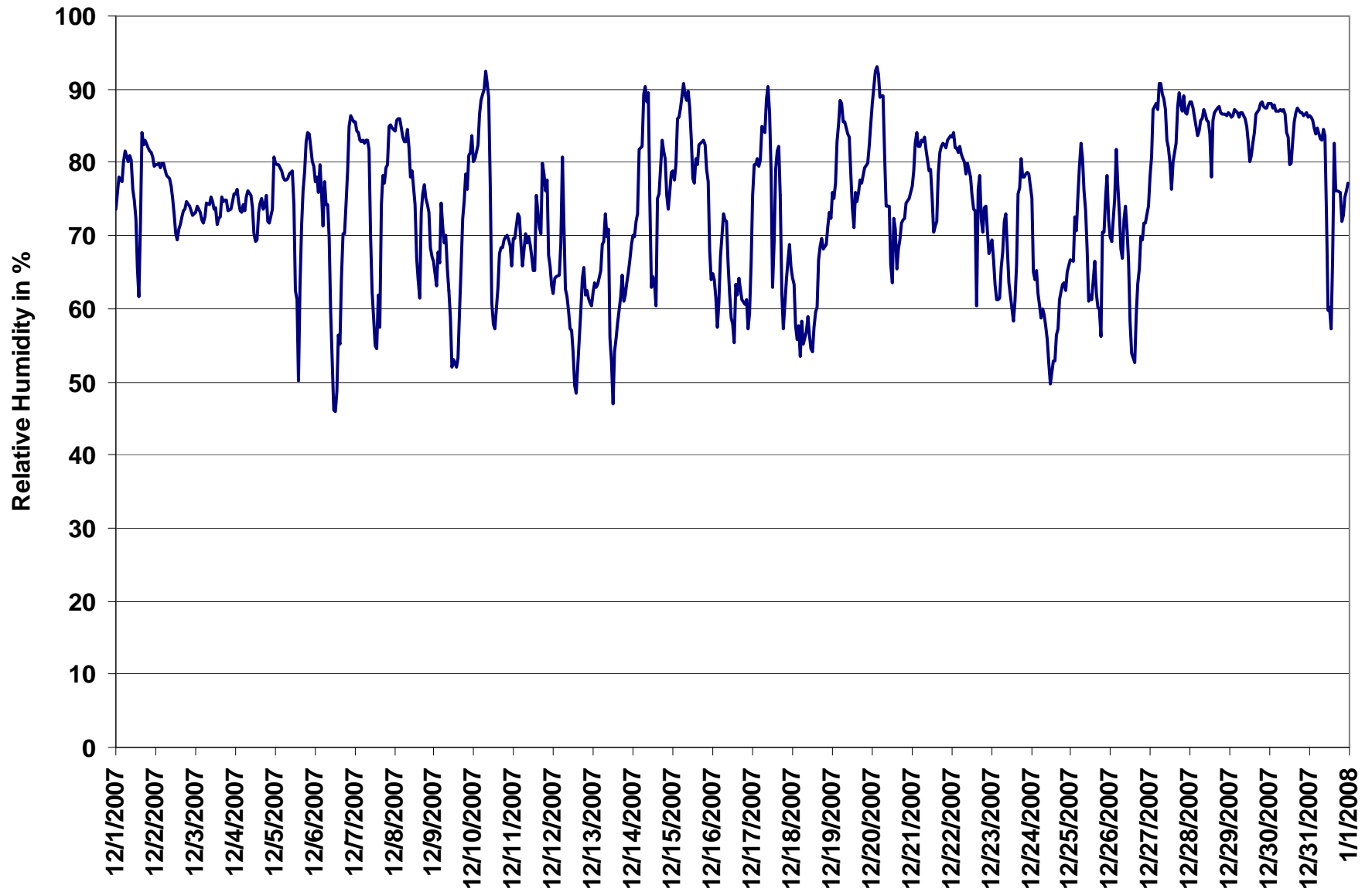


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

PASZA - Beaverlodge Temperature Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

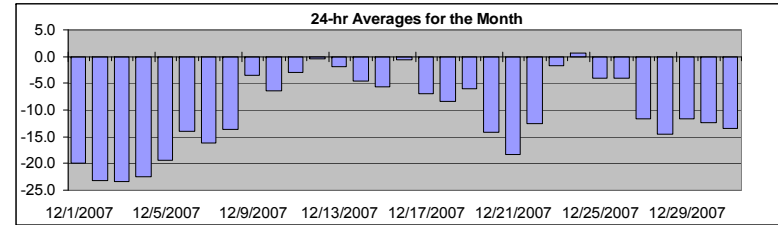
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	2.5 °C	24-Dec	12:00 13:00
Maximum 24-hr Value:	0.7 °C	24-Dec	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.4	0.4	-3.9	-9.3	-16.4	-23.0	-24.4	-10.2 °C	-9.3 °C

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Dec-07	-16	-17	-18	-19	-20	-21	-21	-21	-21	-22	-20	-20	-19	-17	-16	-18	-21	-21	-22	-22	-22	-21	-21	-23	-20.0	-15.7	
2-Dec-07	-24	-24	-23	-24	-23	-22	-22	-22	-22	-22	-23	-23	-23	-22	-23	-23	-24	-24	-24	-24	-24	-24	-24	-24	-23.2	-21.7	
3-Dec-07	-24	-24	-24	-24	-24	-24	-24	-24	-25	-25	-24	-24	-23	-22	-22	-22	-23	-23	-23	-23	-23	-23	-23	-22	-23.4	-22.1	
4-Dec-07	-22	-22	-22	-22	-22	-22	-22	-23	-23	-23	-24	-24	-23	-22	-22	-22	-22	-23	-23	-23	-23	-23	-23	-23	-22.5	-21.8	
5-Dec-07	-23	-23	-23	-23	-23	-24	-25	-25	-25	-25	-23	-17	-18	-18	-17	-13	-16	-16	-16	-15	-16	-16	-16	-16	-19.3	-13.2	
6-Dec-07	-15	-15	-15	-16	-15	-15	-18	-16	-16	-16	-15	-12	-9	-10	-10	-12	-11	-12	-13	-13	-14	-15	-17	-17	-14.1	-9.1	
7-Dec-07	-18	-18	-19	-19	-19	-20	-20	-20	-20	-18	-13	-16	-10	-9	-13	-11	-15	-16	-16	-15	-14	-16	-16	-16	-16.1	-9.3	
8-Dec-07	-16	-17	-17	-17	-16	-15	-16	-16	-18	-19	-16	-15	-14	-11	-10	-10	-11	-12	-10	-10	-11	-10	-9	-13.6	-9.4		
9-Dec-07	-9	-8	-9	-8	-8	-4	-2	-2	-3	-3	-3	0	0	0	0	-2	-3	-2	-3	-3	-3	-3	-3	-3.5	0.5		
10-Dec-07	-3	-4	-5	-5	-6	-6	-7	-8	-10	-10	-8	-5	-5	-4	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6.5	-3.0	
11-Dec-07	-7	-7	-8	-7	-6	-5	-5	-6	-4	-3	-2	0	0	0	-1	-1	-1	-3	-2	-2	-2	0	1	2	-2.9	1.8	
12-Dec-07	2	2	1	1	1	0	0	0	0	0	0	0	0	1	1	0	-2	-4	-4	-2	-2	-2	-1	-1	-0.4	2.2	
13-Dec-07	-2	-3	-3	-2	-3	-4	-4	-5	-4	-5	-1	0	1	1	1	0	-1	-1	0	-1	-2	-2	-2	-3	-1.9	1.5	
14-Dec-07	-3	-3	-3	-4	-6	-5	-7	-7	-6	-7	-3	-2	-3	-2	-1	-4	-4	-7	-6	-6	-5	-5	-5	-7	-4.6	-1.1	
15-Dec-07	-6	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-5	-6	-6	-6	-6	-7	-6	-5	-4	0	1	-5.7	1.2	
16-Dec-07	1	1	1	0	0	0	-1	-1	-2	-1	0	1	1	1	-1	-1	-1	-1	-1	-1	-2	-1	-2	-3	-0.6	1.2	
17-Dec-07	-5	-6	-6	-7	-7	-7	-8	-9	-10	-11	-9	-7	-4	-6	-7	-8	-8	-6	-3	-3	-6	-6	-8	-8	-6.9	-3.2	
18-Dec-07	-9	-9	-8	-8	-8	-7	-9	-8	-9	-9	-8	-8	-7	-7	-8	-8	-9	-9	-9	-9	-9	-9	-10	-10	-8.4	-7.2	
19-Dec-07	-11	-11	-9	-9	-9	-8	-7	-8	-9	-7	-5	-4	-3	-3	-4	-4	-4	-5	-4	-4	-4	-4	-5	-6	-6.1	-2.6	
20-Dec-07	-7	-8	-8	-9	-9	-8	-9	-10	-15	-17	-18	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-17	-17	-14.1	-6.7	
21-Dec-07	-17	-18	-21	-20	-19	-21	-23	-21	-21	-20	-18	-18	-16	-14	-15	-16	-17	-18	-18	-17	-18	-19	-18	-17	-18.4	-14.4	
22-Dec-07	-17	-18	-18	-18	-18	-18	-17	-16	-15	-15	-14	-14	-11	-10	-10	-7	-11	-13	-10	-9	-9	-7	-4	-2	-12.6	-2.5	
23-Dec-07	-3	-2	1	1	0	0	0	0	-1	-2	-1	0	0	0	0	-1	-3	-4	-5	-5	-4	-4	-3	-3	-1.6	1.1	
24-Dec-07	-2	0	1	0	0	1	1	1	0	1	1	2	3	2	2	1	1	1	0	0	0	1	0	0	0.7	2.5	
25-Dec-07	-1	-1	-3	-3	-4	-5	-6	-6	-6	-5	-5	-3	-4	-3	-4	-3	-3	-2	-3	-5	-5	-6	-6	-5	-4.0	-0.7	
26-Dec-07	-4	-4	-5	-6	-6	-5	-3	-3	-4	-5	-4	-3	-1	0	0	-2	-3	-4	-5	-5	-6	-6	-7	-4.1	-0.2		
27-Dec-07	-8	-8	-10	-10	-10	-15	-13	-12	-12	-11	-10	-10	-10	-10	-10	-11	-12	-13	-12	-14	-14	-14	-16	-15	-11.6	-7.7	
28-Dec-07	-15	-16	-16	-17	-19	-19	-17	-16	-16	-15	-15	-13	-13	-11	-13	-13	-13	-13	-13	-13	-13	-13	-12	-13	-14.4	-10.8	
29-Dec-07	-12	-12	-12	-12	-12	-13	-13	-13	-13	-13	-12	-11	-10	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-11	-11.6	-9.8	
30-Dec-07	-11	-11	-12	-12	-12	-13	-13	-13	-13	-12	-11	-11	-9	-9	-10	-11	-11	-12	-13	-14	-15	-14	-16	-16	-12.3	-9.2	
31-Dec-07	-17	-18	-18	-19	-19	-18	-20	-20	-18	-17	-13	-9	-9	-9	-11	-12	-11	-10	-9	-8	-9	-9	-10	-10	-13.4	-8.3	
Hourly Avg	-10.5	-10.7	-10.8	-11.1	-11.2	-11.3	-11.5	-11.6	-11.9	-11.6	-10.2	-9.3	-8.4	-7.9	-8.5	-8.9	-9.7	-10.1	-10.0	-10.0	-10.1	-10.1	-10.1	-10.1			
Hourly Max	2.2	1.7	1.4	1.1	0.5	0.7	1.1	0.7	0.3	0.8	1.0	1.7	2.5	1.8	1.9	1.1	1.2	0.5	0.3	0.0	0.2	0.8	0.9	1.8			

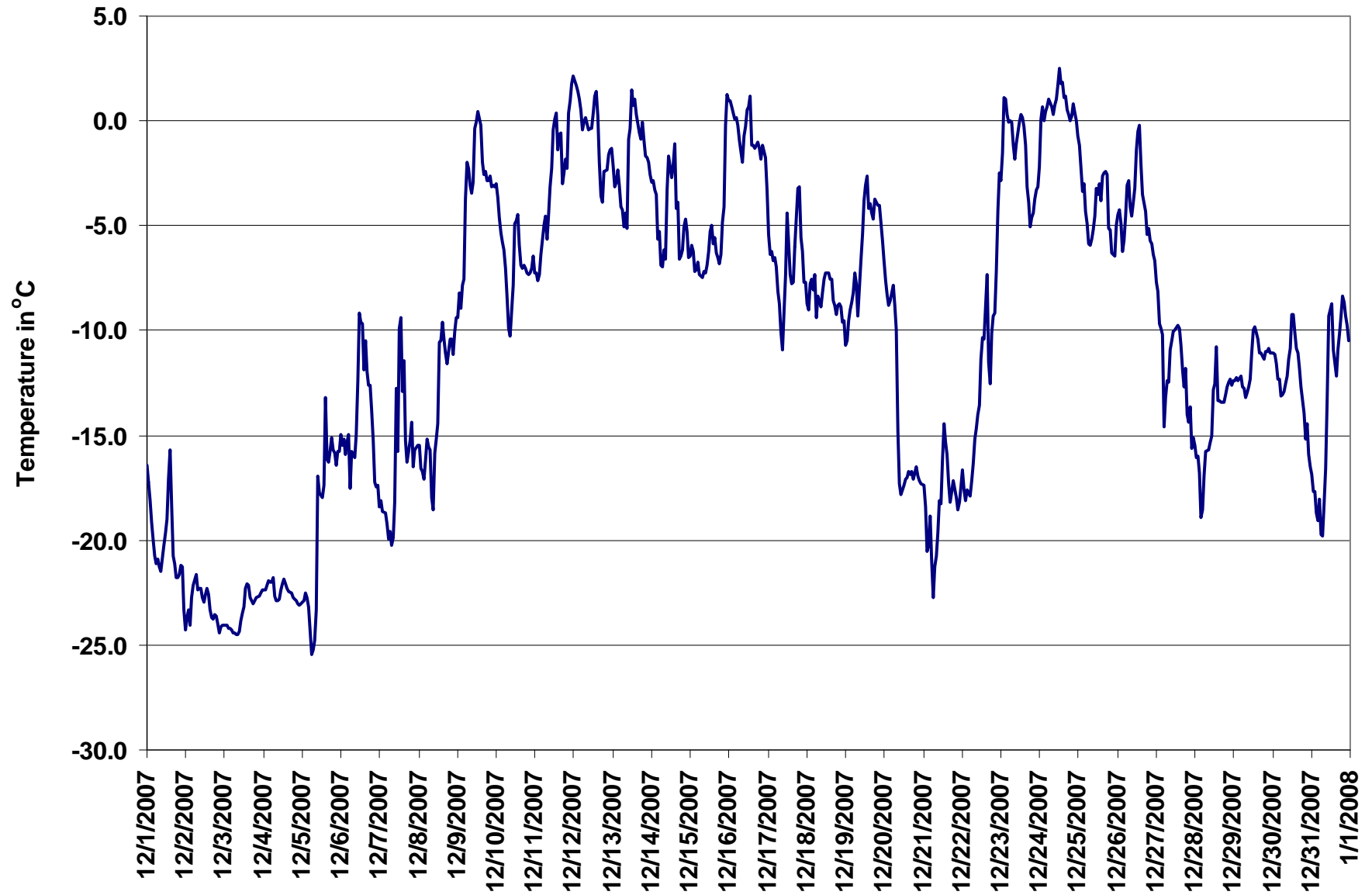


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

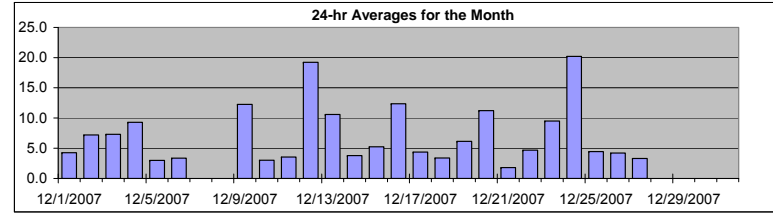
Wind Speed (WSs)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	33.8	km/hr	23-Dec	2:00 3:00
Maximum 24-hr Value:	20.2	km/hr	24-Dec	

Calm Time:	0 hrs	0% calms	Operational Time:	673 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	90.5%				
Percentile	99	95	75	50	25	5	1	AverageS
	27.7	20.4	8.3	4.2	2.5	0.9	0.0	6.6 km/hr



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Dec-07	10	8	7	7	7	5	5	7	5	7	5	6	4	2	2	3	2	0	2	3	3	1	3	3	2	4.3	9.9
2-Dec-07	3	1	1	5	7	6	9	7	6	6	8	10	9	9	10	9	9	10	9	8	9	8	8	8	7.2	10.3	
3-Dec-07	9	6	7	7	8	8	8	8	8	9	7	7	8	7	7	8	8	8	9	7	5	7	6	6	4	7.3	8.9
4-Dec-07	5	5	7	7	7	6	6	9	10	11	11	11	10	8	10	11	11	11	10	12	13	12	10	9	9.3	12.6	
5-Dec-07	7	7	5	3	3	1	1	1	2	1	0	1	2	4	2	3	4	5	4	2	3	3	6	3	3.0	7.3	
6-Dec-07	3	4	6	3	6	7	3	3	4	4	3	2	4	3	4	2	3	4	5	2	2	1	2	1	3.4	6.7	
7-Dec-07	N	N	N	N	N	N	N	N	N	N	N	1	0	2	4	1	2	4	2	4	3	1	2	3	N	4.1	
8-Dec-07	2	2	N	N	N	N	N	N	N	N	N	N	0	0	0	0	5	6	3	3	2	2	2	3	N	5.7	
9-Dec-07	3	1	3	3	3	13	18	20	19	8	7	14	18	19	19	15	10	13	15	15	16	15	15	15	12.3	19.6	
10-Dec-07	14	6	6	5	4	2	1	2	2	2	1	0	2	2	3	4	3	2	2	3	2	1	0	3	3.0	13.6	
11-Dec-07	1	3	2	3	3	3	2	3	2	3	1	3	2	3	3	2	2	1	2	3	3	4	8	22	3.6	22.0	
12-Dec-07	33	26	24	25	25	24	16	20	21	21	20	16	17	17	19	15	14	11	11	16	15	17	18	20	19.2	32.8	
13-Dec-07	15	12	12	14	6	11	7	2	6	3	6	6	4	12	19	13	13	12	15	14	13	15	14	9	10.6	18.8	
14-Dec-07	6	7	6	5	2	2	2	3	2	1	3	2	3	4	1	3	4	3	4	6	6	6	7	4	3.8	7.1	
15-Dec-07	3	3	2	2	1	4	7	2	2	7	4	2	2	3	4	2	3	2	5	3	3	3	25	30	5.3	29.9	
16-Dec-07	28	26	18	17	23	28	27	16	3	11	5	3	3	5	7	8	7	10	13	12	10	7	6	4	12.4	27.9	
17-Dec-07	4	6	9	3	5	3	3	3	5	4	3	3	2	3	4	3	3	6	9	8	6	4	4	4	4.4	9.2	
18-Dec-07	3	3	5	4	5	4	5	6	4	4	3	3	3	0	1	2	2	2	4	2	3	5	5	4	3.4	6.4	
19-Dec-07	2	3	4	4	2	3	3	3	4	5	8	10	10	9	9	9	9	8	12	9	8	7	4	3	6.1	11.7	
20-Dec-07	3	1	3	3	3	3	9	18	26	24	25	20	22	17	14	14	11	13	8	7	7	6	6	6	11.2	25.9	
21-Dec-07	5	4	2	3	3	2	2	1	3	2	3	2	2	0	0	0	0	0	0	2	2	3	2	2	1.8	4.6	
22-Dec-07	3	2	3	3	6	5	3	4	2	3	8	13	9	3	5	1	4	6	5	4	4	4	8	4	4.7	13.3	
23-Dec-07	4	21	34	28	17	17	22	19	5	4	5	7	6	4	2	5	5	3	3	4	4	3	2	6	9.5	33.8	
24-Dec-07	11	19	20	20	25	28	29	26	24	22	23	26	27	21	19	16	19	15	16	17	17	17	13	13	20.2	28.7	
25-Dec-07	12	12	3	5	4	1	2	3	2	5	3	4	4	3	4	7	5	5	7	6	3	3	2	4	4.4	12.5	
26-Dec-07	3	4	2	2	2	7	7	6	3	3	2	0	2	3	9	8	5	5	2	2	4	7	8	5	4.2	8.9	
27-Dec-07	3	2	1	2	4	3	3	3	3	3	1	3	4	6	7	4	4	6	4	2	5	2	3	1	3.3	6.5	
28-Dec-07	2	1	1	0	3	4	4	1	4	2	1	0	0	1	1	0	N	N	N	N	N	N	N	N	N	N	4.3
29-Dec-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0	1	2	0	2	N	1.5
30-Dec-07	1	1	1	1	0	2	0	0	1	1	N	N	N	1	1	1	N	N	N	N	N	N	N	N	N	N	1.6
31-Dec-07	N	N	N	N	N	N	N	N	N	N	N	N	0	1	1	3	9	5	4	6	5	5	6	5	N	9.4	
1-hr Average	7.1	7.0	7.2	6.7	6.8	7.4	7.5	7.2	6.6	6.4	6.5	6.4	6.1	5.8	6.4	5.7	6.2	6.3	6.5	6.2	6.0	6.0	6.7	6.8			
Hourly Max	32.8	26.4	33.8	27.9	25.3	27.7	28.7	26.0	25.9	23.6	25.4	25.7	27.1	21.4	19.4	16.5	18.7	14.8	15.8	17.2	17.1	17.1	25.4	29.9			

PASZA - Beaverlodge Vector Wind Speed Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

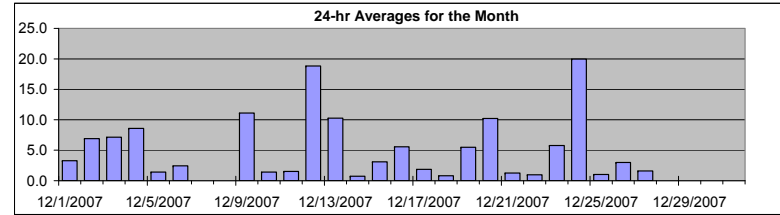
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	33.8	km/hr	23-Dec	2:00 3:00
Maximum 24-hr Value:	20.0	km/hr	24-Dec	



Calm Time:	0 hrs	0% calms	Operational Time:	673 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	90.5%				
Percentile	99	95	75	50	25	5	1	AverageV
	27.6	20.1	8.2	3.4	1.8	0.6	0.0	8.2 km/hr

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00
1-Dec-07	10	8	7	7	7	4	5	7	5	4	6	2	2	2	3	2	1	3	2	1	3	3	1	3.3	9.6		
2-Dec-07	3	1	1	4	7	5	9	7	5	4	8	10	9	9	10	9	9	10	9	8	8	8	8	6.9	10.2		
3-Dec-07	9	6	7	7	8	8	8	8	9	7	7	7	7	7	8	7	8	9	7	5	7	6	6	4	7.1	8.8	
4-Dec-07	5	5	7	7	7	6	6	8	10	11	11	11	10	8	10	11	11	11	10	12	13	12	10	9	8.6	12.5	
5-Dec-07	7	7	4	3	3	1	1	1	2	1	0	1	2	4	2	3	4	4	3	2	3	3	6	2	1.4	7.3	
6-Dec-07	3	4	5	1	6	6	1	3	3	4	3	1	2	2	2	2	3	4	5	1	1	1	2	1	2.4	6.0	
7-Dec-07	N	N	N	N	N	N	N	N	N	N	N	1	0	2	3	0	1	3	2	3	3	1	2	2	N	3.3	
8-Dec-07	2	2	N	N	N	N	N	N	N	N	N	1	0	0	1	4	5	1	3	2	2	2	1	N	4.8		
9-Dec-07	2	1	3	1	3	11	18	20	19	8	7	14	18	19	19	15	10	13	15	15	16	15	15	15	11.1	19.6	
10-Dec-07	14	6	6	5	4	2	1	2	1	2	1	0	2	2	3	4	3	2	2	3	1	1	0	3	1.4	13.6	
11-Dec-07	1	3	2	3	3	3	2	3	2	3	1	3	2	2	3	2	1	1	2	3	2	3	8	22	1.5	21.9	
12-Dec-07	33	26	24	25	25	24	16	20	21	21	20	16	17	17	19	15	14	11	11	16	15	17	18	20	18.8	32.7	
13-Dec-07	15	11	12	14	6	11	7	1	6	0	6	6	4	12	19	13	13	12	15	14	13	15	14	9	10.3	18.8	
14-Dec-07	6	7	6	5	1	1	1	3	2	0	0	2	2	4	1	3	4	3	3	5	6	6	7	2	0.8	7.1	
15-Dec-07	2	2	1	2	1	3	6	1	1	6	4	1	2	3	4	1	3	2	5	2	1	2	25	30	3.1	29.8	
16-Dec-07	28	26	18	16	23	28	27	15	1	11	4	2	3	4	6	8	7	10	13	12	10	6	6	3	5.6	27.9	
17-Dec-07	2	4	9	2	4	2	1	1	3	4	2	1	2	1	4	2	2	5	9	8	3	2	4	2	1.9	9.2	
18-Dec-07	3	2	3	3	5	4	4	6	4	4	2	3	2	0	1	1	1	1	2	1	2	3	5	3	0.8	6.2	
19-Dec-07	1	2	4	3	1	3	2	3	4	5	8	9	10	9	9	9	9	8	12	9	8	7	3	2	5.5	11.6	
20-Dec-07	3	1	3	2	3	2	9	18	26	23	25	20	22	17	14	14	11	13	8	7	7	6	6	6	10.2	25.8	
21-Dec-07	5	3	0	3	3	2	2	1	3	2	1	2	2	1	0	0	0	0	0	1	1	1	1	1	1.3	4.5	
22-Dec-07	3	1	1	2	4	5	2	1	1	2	1	13	8	2	4	0	4	2	4	2	2	3	4	3	1.0	12.7	
23-Dec-07	2	20	34	28	17	17	21	19	5	3	5	7	5	3	1	4	3	2	2	4	2	1	2	1	5.8	33.8	
24-Dec-07	11	19	20	20	25	28	29	26	24	22	23	26	27	21	19	16	19	15	16	17	17	17	13	13	20.0	28.6	
25-Dec-07	12	12	1	5	1	1	2	2	1	4	2	3	4	2	4	5	3	5	7	5	2	2	0	2	1.0	12.5	
26-Dec-07	3	3	2	2	2	4	7	3	3	3	2	1	2	1	9	8	5	4	2	2	3	7	8	5	3.0	8.8	
27-Dec-07	3	2	1	1	2	3	3	2	3	3	0	2	2	3	3	1	4	2	4	1	4	1	2	1	1.6	4.0	
28-Dec-07	0	1	0	1	2	3	2	1	4	1	1	0	1	1	1	1	N	N	N	N	N	N	N	N	N	4.2	
29-Dec-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1	1	0	1	N	1.5
30-Dec-07	1	1	1	1	0	1	0	0	1	1	N	N	N	1	1	1	N	N	N	N	N	N	N	N	N	N	1.4
31-Dec-07	N	N	N	N	N	N	N	N	N	N	N	N	1	1	1	1	9	5	3	6	5	5	6	5	N	9.2	
1-hr Vector	3.7	4.5	4.6	3.8	3.6	3.7	4.2	4.0	3.6	2.8	3.3	3.2	2.7	2.9	3.1	2.5	2.1	1.8	1.7	2.2	2.1	2.2	3.3	4.4			
Hourly Max	32.7	26.4	33.8	27.9	25.2	27.7	28.6	25.9	25.8	23.5	25.3	25.6	27.1	21.4	19.4	16.4	18.7	14.8	15.8	17.2	17.1	17.1	25.1	29.8			

PASZA - Beaverlodge Wind Direction Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	354.5	334.2	287.9	182.8	81.9	29.3	8.8	304 deg

Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Dec-07	20	346	342	349	342	328	288	316	330	288	323	266	211	314	300	213	119	297	59	64	75	49	346	349	335	NNW
2-Dec-07	87	207	299	1	45	52	57	35	30	22	21	37	39	31	40	40	29	38	37	43	43	47	43	34	38	NE
3-Dec-07	42	39	46	37	42	50	39	50	40	40	39	23	47	62	72	52	41	36	34	15	28	25	31	9	40	NE
4-Dec-07	3	9	16	29	33	41	44	332	330	333	336	338	336	342	327	331	327	330	334	330	330	331	328	317	341	NNW
5-Dec-07	318	309	299	309	312	309	137	94	63	37	112	106	60	53	87	96	88	82	89	105	82	122	47	20	37	NE
6-Dec-07	39	323	302	27	328	354	302	344	329	301	298	214	275	294	358	57	344	39	45	356	359	90	41	10	341	NNW
7-Dec-07	349	4	19	41	8	229	56	41	93	82	324	74	95	250	54	284	126	106	122	79	76	85	83	65	N	-
8-Dec-07	80	87	104	92	75	70	85	55	231	162	288	71	84	147	62	45	356	325	31	76	91	76	70	30	N	-
9-Dec-07	52	95	85	100	83	272	284	281	281	292	298	283	281	288	295	298	299	297	294	300	303	305	319	321	295	WNW
10-Dec-07	324	338	310	320	323	269	264	99	137	105	100	210	104	79	63	65	86	73	74	80	64	110	90	86	17	NNE
11-Dec-07	124	161	146	87	64	82	139	184	136	181	145	182	137	75	145	121	146	201	254	212	213	273	261	268	208	SSW
12-Dec-07	262	273	278	285	295	297	295	293	292	291	291	298	294	291	286	277	271	257	260	277	276	278	279	279	283	WNW
13-Dec-07	277	273	272	270	257	265	255	161	251	269	262	252	247	268	271	269	266	266	282	285	286	287	288	291	272	W
14-Dec-07	312	307	296	307	320	317	87	72	247	101	344	151	122	82	89	93	87	153	122	142	126	137	142	206	120	ESE
15-Dec-07	232	167	226	214	42	47	235	210	79	318	333	21	68	212	243	314	163	123	189	142	242	204	260	261	250	WSW
16-Dec-07	260	253	250	255	267	266	264	261	206	252	186	116	74	86	112	93	89	113	118	115	118	116	148	301	238	WSW
17-Dec-07	0	355	327	6	29	36	28	13	303	51	22	18	75	322	312	59	223	254	280	274	265	165	107	148	333	NNW
18-Dec-07	146	148	203	180	94	108	121	114	128	144	188	199	210	271	209	266	2	241	348	50	33	333	358	315	130	SE
19-Dec-07	162	129	66	56	108	77	79	130	125	117	130	126	123	123	120	112	111	117	118	120	116	135	210	271	119	ESE
20-Dec-07	260	267	65	158	76	72	340	334	334	334	327	322	323	323	322	313	302	306	313	309	333	340	337	331	327	NNW
21-Dec-07	323	319	144	58	52	264	72	84	73	71	87	86	99	124	43	173	82	154	138	263	45	358	79	45	47	NE
22-Dec-07	70	103	295	60	319	47	281	332	346	158	235	332	25	95	302	292	207	90	56	196	172	69	243	240	331	NNW
23-Dec-07	171	257	272	269	257	251	254	265	242	132	92	60	61	95	191	239	169	133	116	76	220	132	149	197	250	WSW
24-Dec-07	251	263	269	263	272	277	277	273	276	278	282	284	286	286	291	293	289	289	286	288	288	290	283	280	280	W
25-Dec-07	283	281	73	250	174	121	92	106	99	71	95	121	102	101	128	108	91	115	102	301	344	49	95	18	92	E
26-Dec-07	46	318	290	128	143	254	249	286	168	219	254	94	114	294	292	302	312	305	13	301	304	321	322	329	297	WNW
27-Dec-07	45	9	99	35	318	184	76	104	70	83	118	46	330	303	34	26	235	314	327	320	33	263	65	65	13	NNE
28-Dec-07	311	121	98	201	294	48	359	10	319	350	62	33	279	284	237	223	191	187	89	121	115	87	73	273	N	-
29-Dec-07	268	220	242	210	269	265	236	55	274	339	282	325	325	187	263	268	172	125	200	175	103	95	75	291	N	-
30-Dec-07	294	300	279	326	317	58	149	131	94	71	284	255	12	289	278	251	302	315	333	334	354	11	48	274	N	-
31-Dec-07	237	168	54	32	43	25	251	96	72	76	89	99	130	163	77	338	282	283	305	313	327	324	342	343	N	-
Hourly Avg	293	283	286	289	304	293	285	298	307	311	314	322	326	315	312	322	308	317	335	309	319	321	304	295		

PASZA - Beaverlodge Standard Deviation of Wind Direction Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

--

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	92.6	82.2	52.0	21.5	8.4	3.4	2.8

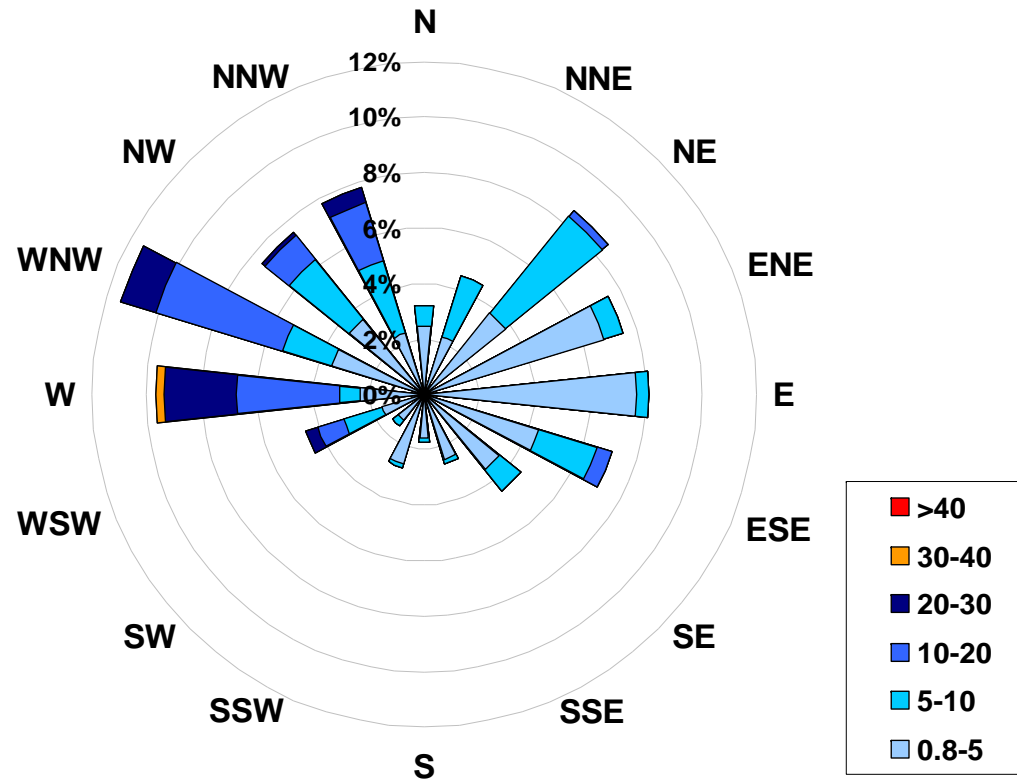
Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Dec-07	13	13	10	12	8	29	17	7	34	31	9	52	9	65	17	26	29	52	16	53	11	13	58	83	82.7
2-Dec-07	23	34	33	45	5	5	3	11	20	39	15	7	5	6	8	6	8	8	5	6	6	6	7	7	45.0
3-Dec-07	8	13	9	8	9	10	8	9	6	9	11	20	9	7	15	16	11	7	10	10	10	8	11	13	20.0
4-Dec-07	11	9	7	12	7	8	10	22	4	4	3	4	6	9	4	5	5	5	6	4	5	6	6	4	22.0
5-Dec-07	8	5	7	8	8	75	25	23	8	45	64	18	38	7	11	16	15	11	20	21	20	23	19	64	75.1
6-Dec-07	22	31	47	56	13	31	94	21	33	28	7	55	73	71	58	91	63	24	17	55	64	37	40	50	93.7
7-Dec-07	88	57	71	13	60	72	83	90	21	83	82	75	36	51	69	84	48	37	19	41	9	11	57	28	89.8
8-Dec-07	13	13	32	11	9	9	21	20	63	97	93	24	22	49	11	15	36	34	78	26	38	29	36	61	96.5
9-Dec-07	35	28	16	71	40	69	5	4	3	11	17	6	4	3	4	3	6	5	4	4	4	4	6	3	70.6
10-Dec-07	4	11	10	11	13	27	61	26	45	19	67	47	30	23	10	15	9	23	8	19	36	36	32	15	67.2
11-Dec-07	29	20	21	12	12	18	37	15	36	32	31	33	34	43	36	33	45	53	53	23	46	74	9	5	74.2
12-Dec-07	5	4	4	4	3	3	3	4	4	3	4	4	4	4	5	5	7	8	10	3	3	3	3	3	9.8
13-Dec-07	5	5	9	16	11	4	27	75	19	87	19	27	16	21	5	8	8	7	7	2	2	3	3	7	86.6
14-Dec-07	6	5	6	8	67	70	75	9	77	70	91	43	24	15	24	13	10	24	20	17	7	19	13	54	90.6
15-Dec-07	46	31	63	44	95	65	24	43	85	26	19	73	25	50	13	86	23	27	14	43	89	49	10	4	95.1
16-Dec-07	3	4	5	10	6	5	4	28	87	14	33	46	9	14	12	6	11	6	3	5	8	31	14	72	86.8
17-Dec-07	71	52	9	53	27	59	85	94	67	39	62	65	54	79	31	69	53	28	5	7	79	64	24	51	94.4
18-Dec-07	19	41	60	41	15	22	25	14	11	11	30	23	31	76	64	54	55	85	63	48	60	61	49	51	85.0
19-Dec-07	64	41	21	55	57	13	20	30	36	11	4	6	3	6	8	5	6	8	5	12	5	20	45	50	63.8
20-Dec-07	20	75	37	47	41	30	25	6	5	5	5	7	5	5	7	7	4	3	4	8	9	5	6	5	75.2
21-Dec-07	13	54	79	40	46	26	46	55	14	74	73	47	43	30	77	57	78	55	52	81	65	82	87	97	97.1
22-Dec-07	20	70	76	66	60	20	54	68	88	54	77	17	28	63	43	98	27	64	30	60	71	83	82	83	98.3
23-Dec-07	57	21	3	3	4	6	11	5	31	34	12	9	50	57	74	27	60	39	27	39	73	65	53	80	80.2
24-Dec-07	17	6	4	3	4	3	3	4	3	4	5	3	3	3	4	3	3	4	3	2	2	4	3	4	16.6
25-Dec-07	3	6	82	57	79	63	32	48	72	13	61	15	13	53	18	50	67	14	12	47	54	52	92	45	92.0
26-Dec-07	18	54	68	41	25	83	22	81	38	10	14	80	31	87	8	3	15	47	43	34	46	6	3	7	87.3
27-Dec-07	24	36	21	79	57	19	25	38	25	20	62	60	64	76	67	72	31	68	23	78	43	77	65	88	88.1
28-Dec-07	77	74	95	74	88	37	54	72	8	56	17	73	22	10	12	16	15	21	22	19	20	27	92	13	95.4
29-Dec-07	11	59	19	24	14	19	40	14	74	86	38	18	63	49	71	67	39	61	23	29	13	15	76	9	86.4
30-Dec-07	7	24	11	42	84	64	49	35	31	12	75	15	52	30	17	10	40	9	14	25	23	35	19	75	84.0
31-Dec-07	88	76	16	66	72	57	91	67	9	16	16	25	28	37	13	72	13	21	38	7	15	9	9	12	91.3
Hourly Max	88	76	95	79	95	83	94	94	88	97	93	80	73	87	77	98	78	85	78	81	89	83	92	97	

1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for December 2007



Calms: 7%

Frequency Distribution of Wind in km/hr Range			Frequency (hrs)
0.8	<	5	408
5	to	10	153
10	to	20	95
20	to	30	35
30	to	40	2
	>	40	0
Total Non-Zero Values			693

PASZA – Portable -Spirit River Station

Monthly Summary Tables, Graphs and
Roses

PASZA - Portable-Spirit River Sulphur Dioxide Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

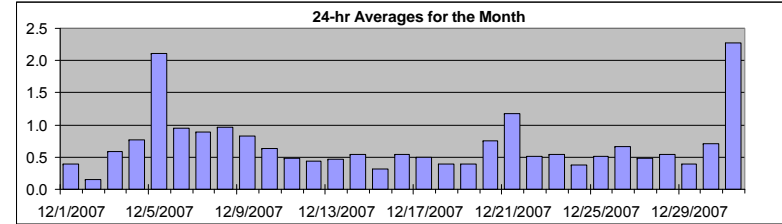
Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	6.5 ppb 5-Dec 21:00 22:00
Maximum 24-hr Average:	2.3 ppb 31-Dec



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.8	1.8	0.9	0.5	0.3	0.1	0.0	0.7 ppb	0.5 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Dec-07	A	0	0	0	0	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0.4	1.0	
2-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4	
3-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	1.0	
4-Dec-07	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.3	
5-Dec-07	1	1	1	1	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2	A	6	7	3	2	2.1	6.5	
6-Dec-07	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	2	1	1.0	1.9	
7-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.4	
8-Dec-07	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.0	1.7	
9-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0.8	1.2	
10-Dec-07	0	0	0	0	0	0	1	1	1	1	1	1	C	C	C	1	1	0	1	1	1	1	1	1	0.6	1.2	
11-Dec-07	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0.5	0.9	
12-Dec-07	1	1	0	A	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0.4	1.0	
13-Dec-07	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	2	1	1	1	0.5	2.3	
14-Dec-07	1	1	A	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.5	
15-Dec-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
16-Dec-07	A	0	0	0	0	0	1	0	0	0	0	0	0	1	1	2	1	1	1	1	1	0	0	A	0.5	1.5	
17-Dec-07	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0.5	1.4	
18-Dec-07	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.4	1.0	
19-Dec-07	0	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.8	
20-Dec-07	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	1	2	2	A	2	1	1	1	0.7	2.3	
21-Dec-07	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.2	2.2	
22-Dec-07	0	0	0	0	0	0	1	1	0	1	0	0	1	1	0	0	A	0	0	0	0	0	0	1	0.5	1.1	
23-Dec-07	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	A	2	1	1	1	1	1	0	0.5	2.4	
24-Dec-07	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0.4	0.9
25-Dec-07	1	1	1	0	0	0	0	0	0	0	0	1	1	1	A	1	0	1	0	1	1	0	0	0	0.5	1.2	
26-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0	1	1	1	1	1	1	1	1	1	0.7	1.5	
27-Dec-07	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.5	1.0	
28-Dec-07	0	1	1	0	1	0	0	0	0	0	0	0	A	0	0	0	1	1	1	1	0	0	1	1	0.5	1.3	
29-Dec-07	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.1	
30-Dec-07	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0.7	1.6	
31-Dec-07	2	2	2	1	2	1	2	2	A	2	2	2	2	5	5	4	4	3	3	2	2	1	1	1	2.3	4.7	
Hourly Avg	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.6	1.0	0.9	0.8	0.7			
Hourly Max	1.7	1.9	2.2	2.2	2.2	1.7	1.6	2.1	2.0	2.4	2.3	2.2	2.4	4.7	4.5	3.9	3.8	2.9	2.6	2.3	5.8	6.5	3.2	2.3			

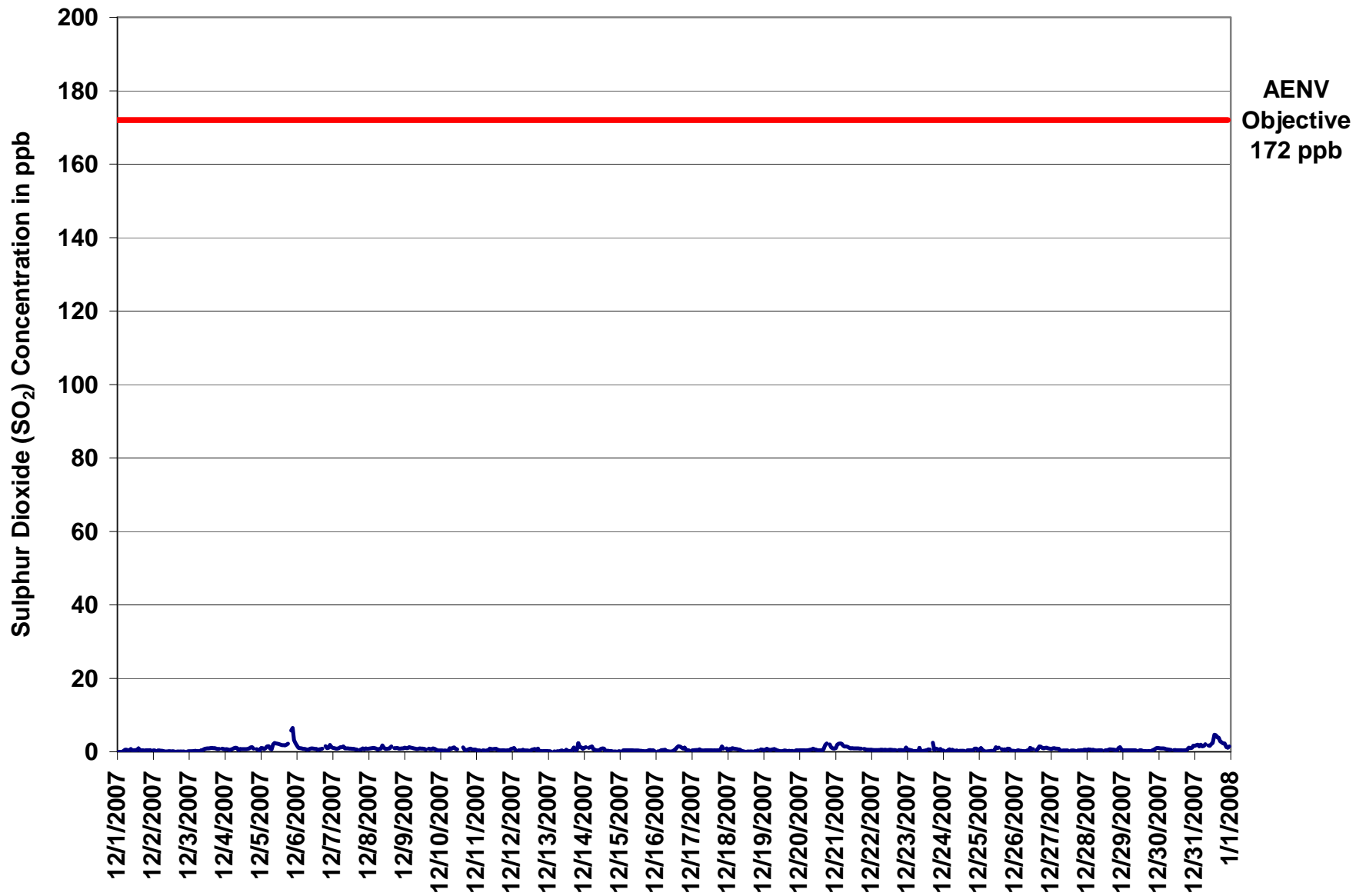


Figure 46. PASZA - Portable-Spirit River Sulphur Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

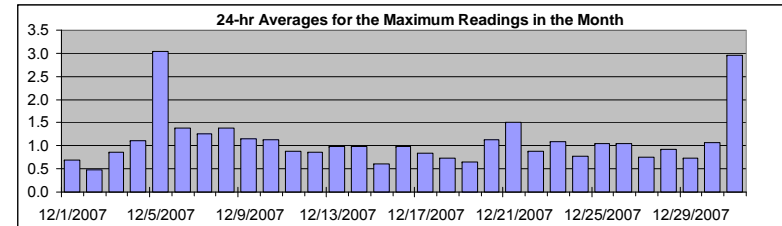
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	10.8	ppb	5-Dec	21:00 22:00
Maximum 24-hr Value:	3.0	ppb	5-Dec	



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	4.6	2.4	1.4	0.9	0.5	0.4	0.4	1.1 ppb	0.9 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	A	0	0	0	0	1	1	0	1	1	1	0	1	1	1	0	1	0	0	0	1	1	A	0.7	1.4	
2-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	0.5
3-Dec-07	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.5	
4-Dec-07	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	1	A	2	1	1	1.1	2.2	
5-Dec-07	2	2	1	2	2	2	1	1	3	3	3	3	2	2	2	2	2	3	A	10	11	6	3	3.0	10.8	
6-Dec-07	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	2	2	1.4	2.4	
7-Dec-07	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.3	1.9	
8-Dec-07	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	2	A	1	1	1	1	1	1	1.4	2.3	
9-Dec-07	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	1.6	
10-Dec-07	1	1	0	0	1	0	1	1	1	2	1	1	C	C	C	4	1	1	1	1	2	1	1	1.1	3.8	
11-Dec-07	1	1	1	A	1	1	1	0	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.9	
12-Dec-07	1	2	1	A	1	1	1	1	0	1	1	1	0	1	2	1	1	1	0	0	0	0	0	0.9	1.8	
13-Dec-07	0	0	0	A	0	0	0	0	1	0	0	0	2	1	0	0	1	2	1	3	3	2	1	1.0	3.3	
14-Dec-07	2	2	A	1	3	3	1	1	1	1	1	1	1	2	0	1	0	0	0	0	0	0	0	1.0	2.8	
15-Dec-07	0	A	0	0	1	1	1	1	0	1	0	1	0	0	1	0	0	0	1	1	1	1	1	0.6	0.9	
16-Dec-07	A	0	0	1	1	1	1	0	0	0	0	0	1	1	2	2	2	1	1	1	1	1	0	1.0	2.1	
17-Dec-07	1	0	1	1	1	1	1	0	0	0	0	1	1	1	0	1	1	1	1	2	2	1	A	0.8	2.3	
18-Dec-07	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	A	1	0.7	1.4	
19-Dec-07	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.6	1.4	
20-Dec-07	1	1	1	0	0	1	1	1	1	1	1	1	0	1	0	1	1	2	3	A	3	1	1	1.1	2.9	
21-Dec-07	1	2	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.5	2.9	
22-Dec-07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	1	1	1	0.9	1.5	
23-Dec-07	1	1	1	0	0	0	0	0	1	1	0	0	1	1	1	1	A	5	1	1	1	1	2	1.1	5.3	
24-Dec-07	1	0	0	1	1	0	1	1	0	1	0	0	0	0	1	A	1	1	1	1	1	1	2	0.8	1.9	
25-Dec-07	1	2	2	0	0	0	0	0	0	0	2	2	2	2	A	1	1	1	1	1	2	0	0	1.1	2.4	
26-Dec-07	0	0	1	0	0	0	0	0	1	1	2	1	1	A	1	1	2	2	1	1	1	2	1	1.0	1.9	
27-Dec-07	1	1	1	1	1	1	1	0	0	0	0	1	A	1	0	0	0	0	0	0	1	1	1	0.8	1.4	
28-Dec-07	1	1	1	1	1	1	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	0.9	1.7	
29-Dec-07	1	1	1	1	1	1	1	1	1	0	A	0	1	0	0	0	0	0	0	0	1	1	1	0.7	1.4	
30-Dec-07	1	1	1	1	1	1	1	1	1	A	1	1	0	0	1	1	0	1	0	1	1	2	2	1.1	2.3	
31-Dec-07	2	3	3	2	3	2	2	3	A	2	2	2	3	6	5	5	5	3	3	3	3	2	2	3.0	5.8	
Hourly Avg	1.0	1.1	1.0	1.0	1.1	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.2	1.1	1.3	1.0	1.1	1.6	1.4	1.3	1.1		
Hourly Max	2.3	3.3	2.8	2.9	2.8	2.8	2.3	2.7	2.8	2.8	2.8	2.9	5.8	5.3	4.6	4.7	5.3	3.2	2.8	9.8	10.8	6.3	2.8			

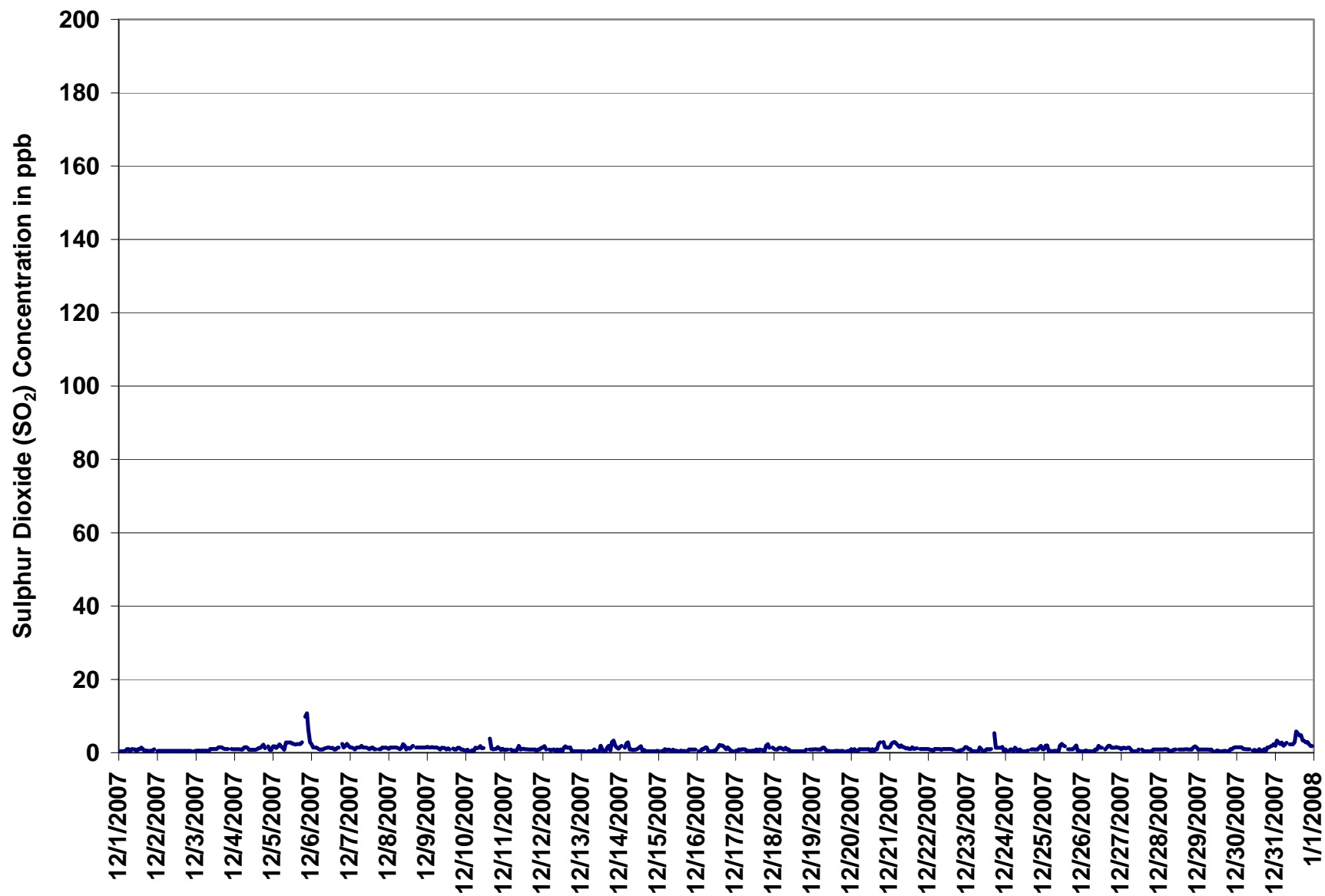
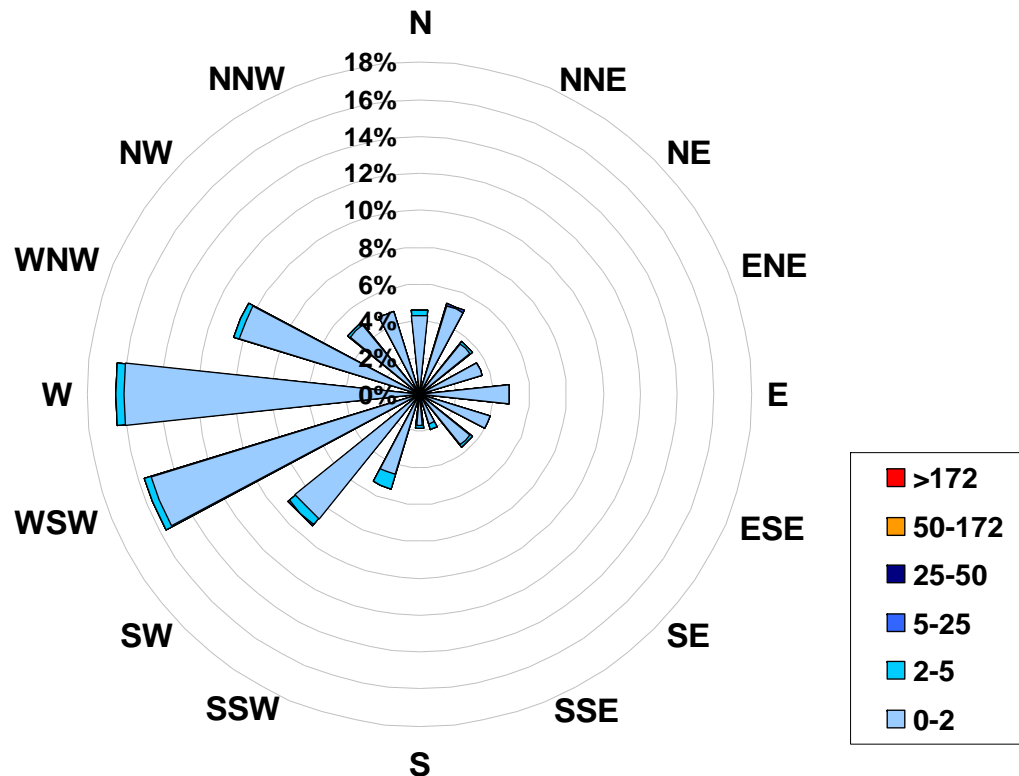


Figure 47. PASZA - Portable-Spirit River Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Portable-Spirit River Site for December 2007



Calms: 0%

Frequency Distribution of SO ₂ in ppb			Frequency (hrs)
Range			
0.0	< 2		682
2	to 5		25
5	to 25		2
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			709

PASZA - Portable-Spirit River Nitrogen Dioxide Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

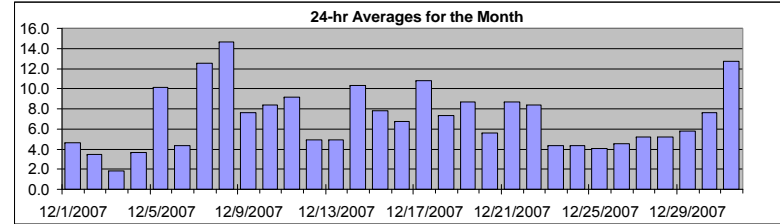
HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 212 ppb 24-hr 106 ppb

Number of 1-hr Exceedances:		0	
Number of 24-hr Exceedances:		0	
Maximum 1-hr Average:	26.2 ppb	7-Dec	21:00 22:00
Maximum 24-hr Average:	14.6 ppb	8-Dec	



AIC Time:	33 hrs	Operational Time:	707 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	21.1	15.1	9.1
	50	25	5
	4.1	2.1	1.5
	Average		Median
	7.0 ppb		5.7 ppb

Status Flag Characters	
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Dec-07	A	1	2	3	3	2	2	3	4	5	3	4	4	3	3	4	7	9	8	7	7	10	8	A	4.6	9.8	
2-Dec-07	8	8	6	7	6	6	6	5	3	2	3	2	2	2	2	1	2	1	1	1	1	1	A	2	3.4	8.1	
3-Dec-07	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	A	3	3	1.8	2.8		
4-Dec-07	3	3	3	2	2	2	2	2	3	2	4	3	3	2	3	4	4	5	7	12	A	5	5	4	3.7	12.3	
5-Dec-07	5	6	5	4	4	4	4	5	13	8	7	6	8	7	8	9	21	23	18	A	18	18	19	15	10.1	22.8	
6-Dec-07	6	3	3	5	3	3	3	5	3	3	3	4	3	4	4	5	6	6	A	6	6	8	5	4	4.3	8.0	
7-Dec-07	5	7	6	9	8	7	5	5	7	10	14	10	13	11	10	15	20	A	18	15	25	26	24	18	12.5	26.2	
8-Dec-07	15	15	15	16	11	8	11	14	16	15	14	14	13	13	15	9	A	18	15	14	19	19	18	16	14.6	19.4	
9-Dec-07	14	13	11	11	11	13	13	11	13	15	4	3	3	4	A	A	4	4	5	4	4	4	4	4	7.7	15.2	
10-Dec-07	3	3	3	4	4	4	4	5	5	7	9	7	C	C	C	C	A	14	13	22	15	13	13	13	8.4	21.7	
11-Dec-07	10	9	9	A	11	9	8	8	11	9	10	8	7	6	7	8	8	9	10	9	9	12	12	11	9.2	12.0	
12-Dec-07	7	4	4	A	5	5	5	6	6	5	5	5	4	5	5	6	6	6	6	4	4	4	4	4	4.9	7.1	
13-Dec-07	3	3	3	A	4	4	4	4	7	5	5	4	5	5	5	9	7	8	5	4	4	4	5	4	4.9	8.7	
14-Dec-07	5	6	A	6	6	6	5	7	13	24	16	11	12	9	9	10	14	10	12	11	12	11	11	10	10.3	23.6	
15-Dec-07	10	A	10	10	9	9	8	8	8	7	8	8	8	7	7	8	10	10	8	7	5	6	6	5	7.8	10.4	
16-Dec-07	A	5	5	4	4	4	4	4	4	4	4	5	5	7	9	12	12	12	10	11	8	7	6	A	6.7	12.4	
17-Dec-07	7	9	10	9	10	10	8	8	9	16	21	16	13	13	10	12	12	9	12	14	13	5	A	4	10.8	20.5	
18-Dec-07	4	6	6	7	5	4	7	6	7	6	5	5	5	6	7	7	8	8	8	9	14	A	15	13	7.3	15.0	
19-Dec-07	11	11	10	7	8	8	8	9	8	7	7	5	5	5	7	9	9	11	11	12	A	11	11	10	8.6	11.6	
20-Dec-07	13	13	11	9	11	10	11	5	4	4	3	2	2	2	2	1	2	2	3	A	5	4	4	3	5.6	12.8	
21-Dec-07	4	4	4	3	3	4	9	10	15	21	18	15	10	8	7	7	8	7	A	8	8	8	9	10	8.7	21.3	
22-Dec-07	11	12	11	13	12	9	9	8	8	7	6	6	7	5	6	6	9	A	9	9	8	9	8	5	8.4	13.2	
23-Dec-07	4	3	3	3	3	3	3	3	4	3	3	6	6	5	4	5	A	7	7	7	5	4	4	5	4.4	7.1	
24-Dec-07	5	4	4	4	4	4	4	4	4	4	9	5	4	4	4	A	4	4	4	4	5	4	4	4	4.3	8.9	
25-Dec-07	5	4	4	4	3	3	3	3	3	3	3	4	4	4	5	A	5	4	4	4	5	5	5	4	6	4.0	6.2
26-Dec-07	6	5	5	5	5	5	5	5	5	4	5	4	4	A	4	4	5	4	4	4	4	4	4	5	4.5	5.5	
27-Dec-07	6	5	5	5	6	5	4	4	5	5	6	7	A	7	6	5	5	5	5	5	5	4	5	5	5.3	7.3	
28-Dec-07	5	6	7	6	6	6	4	3	3	4	4	A	4	4	4	5	5	5	5	5	6	6	6	6	5.2	6.8	
29-Dec-07	6	6	6	6	6	6	6	6	5	5	A	6	5	5	5	6	6	6	7	6	6	5	5	5	5.8	6.8	
30-Dec-07	5	6	6	6	6	6	6	7	7	A	6	6	5	5	6	6	6	6	10	12	12	13	14	14	7.6	14.1	
31-Dec-07	14	14	13	13	11	13	12	13	A	13	10	8	8	9	10	11	13	15	16	17	18	15	7	18	12.7	18.0	
Hourly Avg	7.0	6.5	6.5	6.5	6.2	6.0	6.1	6.1	6.7	7.6	7.2	6.3	6.0	5.8	6.0	6.7	7.9	7.9	8.4	8.5	8.8	8.6	8.4	7.7			
Hourly Max	15.4	14.6	15.0	16.1	11.6	13.1	13.3	14.4	16.5	23.6	20.5	16.1	13.5	12.6	15.0	14.5	21.1	22.8	18.0	21.7	24.6	26.2	23.9	17.9			

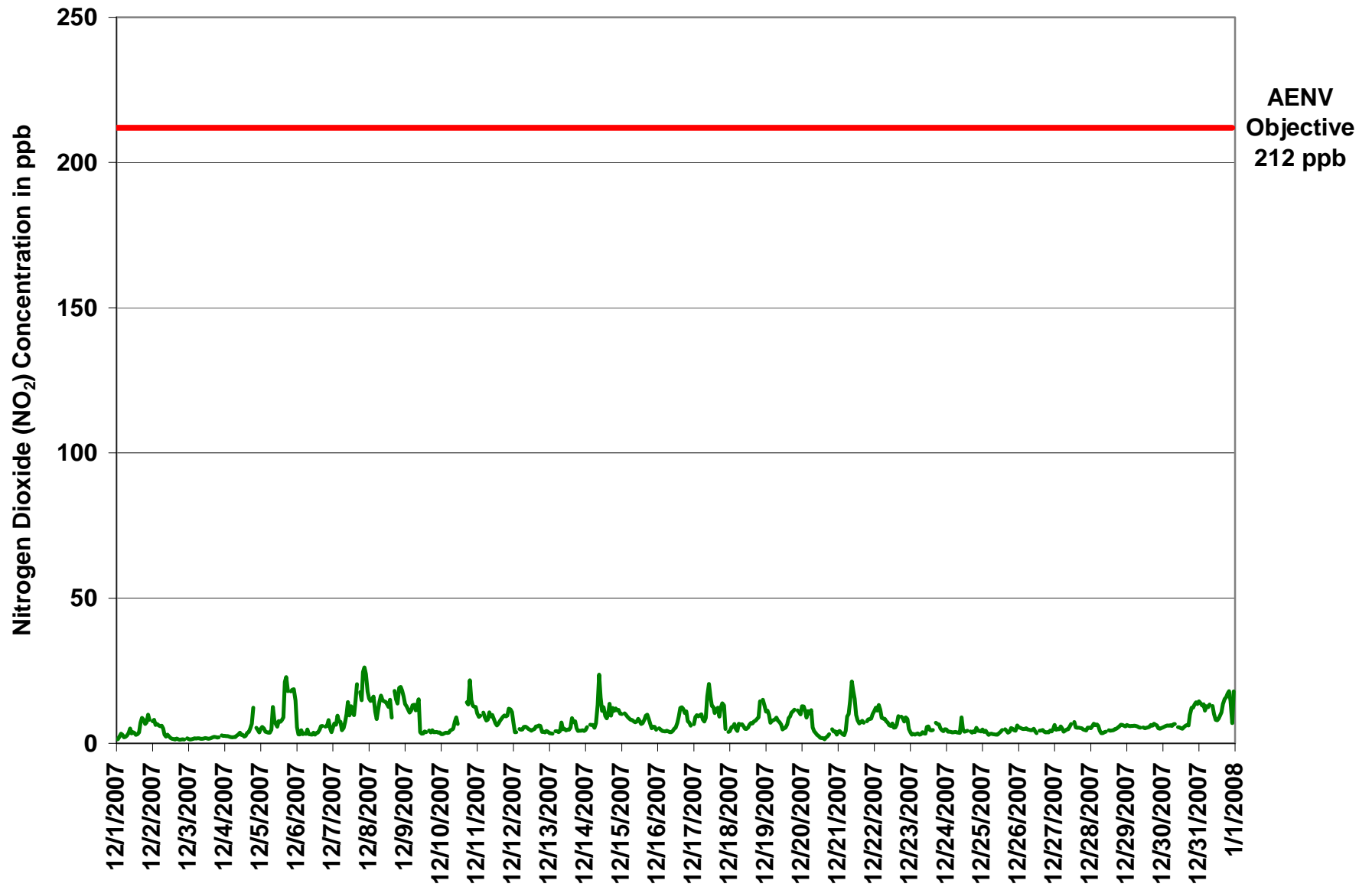


Figure 48. PASZA - Portable-Spirit River Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

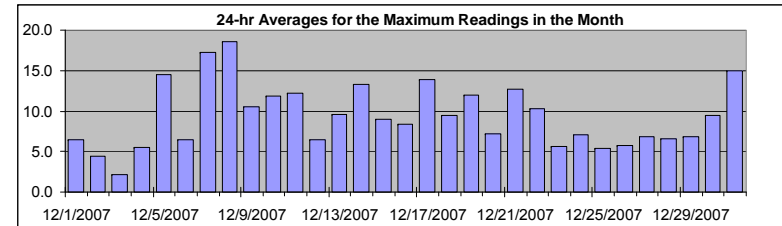
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	60.1	ppb	13-Dec	8:00 9:00
Maximum 24-hr Value:	18.5	ppb	8-Dec	



AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	28.3	21.0	12.2	7.5	5.1	2.5	1.8	9.4 ppb	7.5 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	A	2	5	7	5	3	3	3	5	7	4	5	4	6	5	5	10	10	9	10	9	13	11	A	6.4	12.5
2-Dec-07	10	9	8	8	7	13	7	6	4	2	4	3	2	2	2	2	3	2	2	2	2	A	2	A	4.5	13.4
3-Dec-07	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	A	3	3	2.2	3.4
4-Dec-07	3	3	3	3	2	2	3	2	4	4	5	4	4	3	4	5	5	7	7	38	A	7	6	4	5.5	38.3
5-Dec-07	6	6	6	4	5	5	8	6	23	13	8	10	12	9	10	20	30	27	26	A	24	25	28	22	14.5	30.1
6-Dec-07	11	3	4	7	4	4	4	6	4	4	4	5	4	6	4	7	9	12	A	9	8	12	8	9	6.4	12.1
7-Dec-07	7	8	7	13	10	11	5	11	11	24	21	18	17	18	13	26	24	A	26	19	30	28	26	22	17.2	30.1
8-Dec-07	18	19	19	20	20	11	14	23	21	20	19	16	15	15	20	20	A	21	18	18	21	20	20	17	18.5	23.4
9-Dec-07	17	14	15	11	12	17	15	12	27	28	4	4	4	9	12	A	6	5	6	5	5	5	5	5	10.5	28.4
10-Dec-07	4	4	5	5	4	4	5	11	7	14	13	14	C	C	C	C	A	18	23	28	21	16	14	14	11.9	28.2
11-Dec-07	13	10	11	A	12	10	9	29	18	11	11	10	8	7	9	8	15	13	16	10	11	15	13	12	12.2	29.1
12-Dec-07	10	4	4	A	6	6	6	8	6	7	8	5	5	6	6	8	8	7	15	4	5	5	5	5	6.5	14.9
13-Dec-07	4	4	4	A	5	5	5	5	60	13	7	5	5	5	12	17	10	10	16	6	7	5	5	5	9.5	60.1
14-Dec-07	5	7	A	7	8	9	6	9	21	30	21	13	14	12	11	17	20	11	16	15	15	15	14	12	13.3	30.2
15-Dec-07	11	A	11	11	10	10	9	9	9	8	8	11	9	8	9	10	13	11	10	8	6	7	6	6	9.0	13.3
16-Dec-07	A	6	6	5	5	6	6	5	5	5	5	6	6	9	12	15	17	14	14	13	10	8	8	A	8.4	16.6
17-Dec-07	9	10	11	10	11	11	9	8	15	25	23	18	14	18	12	14	17	18	18	16	16	10	A	5	13.9	25.0
18-Dec-07	5	6	7	8	7	5	10	9	8	10	6	6	6	8	14	8	8	12	10	11	18	A	19	17	9.5	19.3
19-Dec-07	13	12	12	9	10	10	10	12	17	14	9	5	9	6	11	15	13	27	13	13	A	12	12	10	12.0	26.6
20-Dec-07	15	15	15	10	14	16	15	9	5	4	3	3	2	4	3	2	3	3	4	A	6	5	6	4	7.2	16.0
21-Dec-07	5	9	9	6	5	11	13	16	18	25	25	19	13	10	10	14	16	10	A	11	11	10	11	13	12.6	24.9
22-Dec-07	14	13	12	14	13	11	9	9	8	8	7	7	10	7	9	13	11	A	17	10	8	10	10	5	10.3	17.0
23-Dec-07	7	3	4	3	4	4	4	4	4	4	4	7	7	8	7	5	A	9	9	10	7	5	5	5	5.6	10.0
24-Dec-07	5	5	5	5	4	4	5	4	6	4	33	16	5	5	5	A	8	4	7	5	7	5	6	9	7.1	33.4
25-Dec-07	9	4	5	5	3	4	4	4	4	4	4	5	8	11	A	6	5	5	5	7	7	6	5	7	5.4	11.3
26-Dec-07	6	7	8	5	5	6	5	5	7	5	7	5	5	A	5	5	6	6	4	6	4	5	5	8	5.7	8.0
27-Dec-07	11	5	5	11	10	6	4	5	5	6	7	7	A	9	14	7	6	6	6	5	5	5	7	6	6.8	13.5
28-Dec-07	6	7	8	8	7	7	5	4	4	4	6	A	5	5	5	5	8	7	8	8	7	12	8	6	6.5	12.3
29-Dec-07	7	7	6	7	6	7	7	6	6	6	A	6	6	6	6	8	9	9	10	8	8	6	6	6	6.8	10.3
30-Dec-07	6	7	7	20	6	7	7	8	7	A	7	6	6	6	6	7	8	8	15	13	15	16	15	15	9.5	19.7
31-Dec-07	16	16	14	15	15	14	14	17	A	14	12	9	8	10	12	12	16	17	17	19	19	20	20	20	14.9	19.8
Hourly Avg	8.9	7.6	7.9	8.4	7.7	7.8	7.3	8.6	11.4	10.9	9.9	8.4	7.5	7.9	8.6	10.1	10.9	10.7	12.0	11.3	10.9	10.7	10.5	9.5		
Hourly Max	18.0	19.0	18.5	20.1	20.2	17.0	15.5	29.1	60.1	30.2	33.4	19.1	17.0	18.2	19.8	26.4	30.1	26.8	25.9	38.3	30.1	28.0	27.9	22.2		

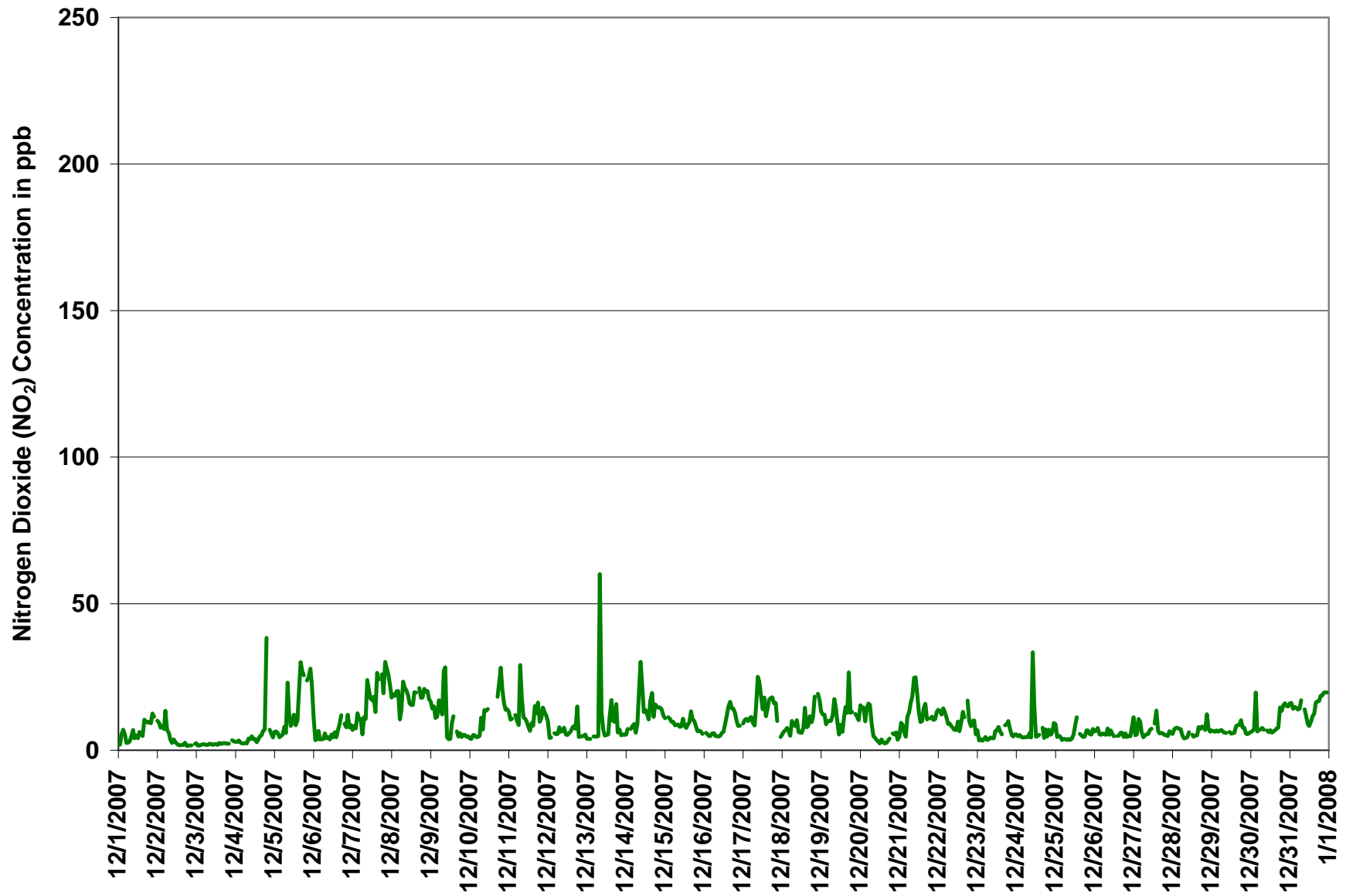
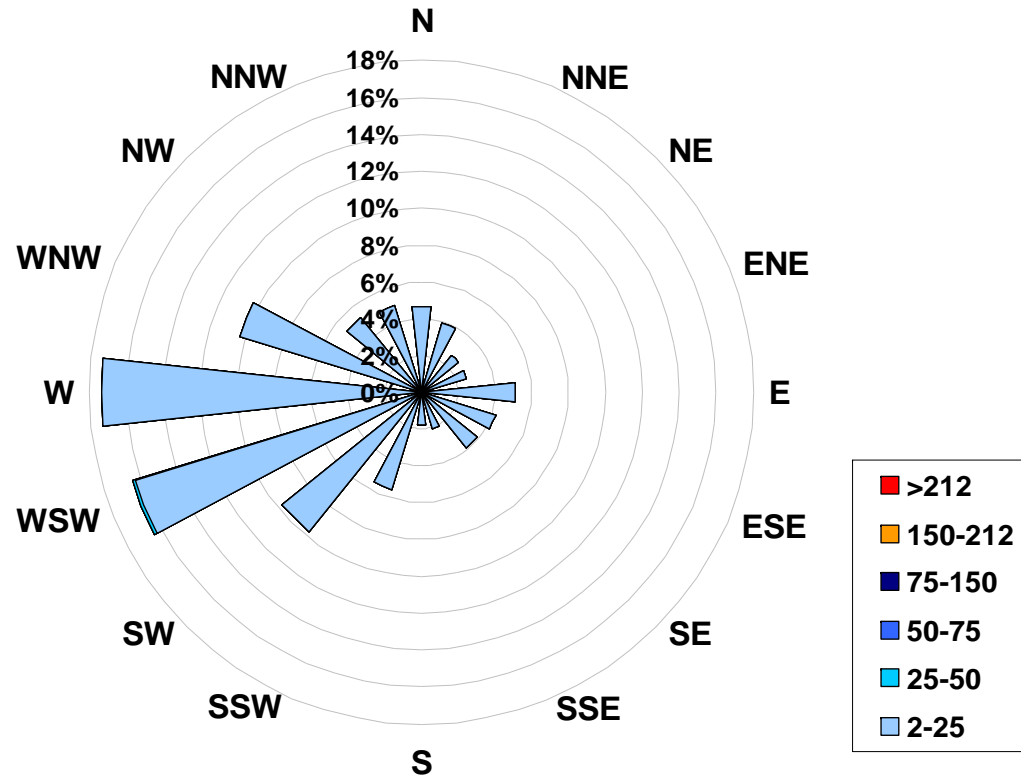


Figure 49. PASZA - Portable-Spirit River Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Portable-Spirit River Site for December 2007



Calms: 0%

Frequency Distribution of NO ₂ in ppb			Frequency (hrs)
Range			
2.0	< 25		707
25	to 50		0
50	to 75		0
75	to 150		0
150	to 212		0
	> 212		0
Total Non-Zero Values			707

PASZA - Portable-Spirit River Nitric Oxide Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

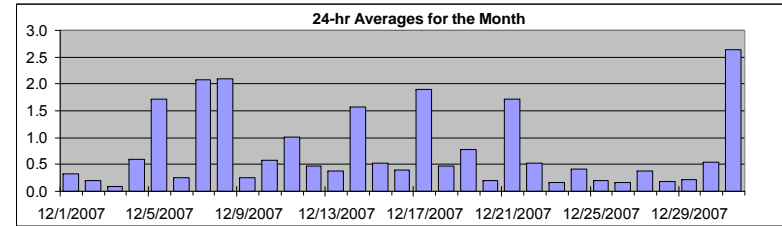
Nitric Oxide (NO)

Monitoring Dates: December 1, 2007 to January 1, 2008

Guideline Limit: 1-hr na ppb 24-hr na ppb
 Summary

Maximum 1-hr Average:	10.4	ppb	21-Dec	11:00 12:00
Maximum 24-hr Average:	2.6	ppb	31-Dec	

AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	8.1	3.8	0.5	0.2	0.1	0.0	0.0	0.7 ppb	0.2 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Dec-07	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0.3	1.3
2-Dec-07	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.7
3-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.4
4-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	7	A	0	0	0	0.6	6.9
5-Dec-07	0	0	0	0	0	0	0	0	1	1	3	4	6	6	5	4	6	1	1	A	0	1	0	0	1.7	6.5
6-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0.3	0.9
7-Dec-07	0	0	0	0	0	0	0	0	0	2	6	6	9	7	6	5	2	A	1	0	2	1	0	0	2.1	9.5
8-Dec-07	0	0	0	0	4	0	0	0	0	2	7	8	8	8	8	2	A	0	0	0	0	0	0	0	2.1	8.1
9-Dec-07	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0.3	0.9
10-Dec-07	0	0	0	0	0	0	0	0	0	0	2	2	C	C	C	C	A	1	1	1	1	1	0	0	0.6	2.5
11-Dec-07	0	0	0	A	0	0	0	0	1	1	2	3	3	3	2	2	1	1	0	0	0	1	0	0	1.0	3.5
12-Dec-07	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	0.9
13-Dec-07	0	0	0	A	0	0	0	0	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.4	2.2
14-Dec-07	0	0	A	0	0	0	0	0	0	6	5	3	5	4	4	3	2	0	1	0	0	1	0	0	1.6	6.4
15-Dec-07	0	A	0	0	0	0	0	0	0	0	1	2	2	2	2	1	1	0	0	0	0	0	0	0	0.5	1.9
16-Dec-07	A	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1	0	0	0	0	0	0	A	0.4	1.8
17-Dec-07	0	0	0	0	0	0	0	0	0	3	8	9	6	8	4	2	1	1	0	0	0	0	0	A	1.9	8.7
18-Dec-07	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	1	0	1	0	0	0	0	A	0	0.5	1.9
19-Dec-07	0	0	0	0	0	0	0	0	0	1	1	2	2	3	3	2	1	1	0	0	0	A	0	0	0.8	2.6
20-Dec-07	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
21-Dec-07	0	0	0	0	0	0	0	0	0	3	8	10	6	4	2	2	2	0	A	0	0	0	0	0	1.7	10.4
22-Dec-07	0	0	0	0	0	0	0	0	0	0	1	1	3	2	1	2	0	A	0	0	0	0	0	0	0.5	2.7
23-Dec-07	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0.2	0.6
24-Dec-07	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	A	0	0	0	0	0	0	0	0	0.4	5.1
25-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0.2	1.0
26-Dec-07	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	0.5
27-Dec-07	0	0	0	0	1	0	0	0	0	0	1	2	A	2	1	1	0	0	0	0	0	0	0	0	0.4	2.0
28-Dec-07	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
29-Dec-07	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
30-Dec-07	0	0	0	3	0	0	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	2.8
31-Dec-07	0	0	0	0	0	1	0	0	A	2	5	7	8	9	9	7	4	1	1	2	2	0	0	0	2.6	9.1
Hourly Avg	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.3	0.9	2.1	2.4	2.4	2.4	2.1	1.4	0.8	0.3	0.3	0.5	0.3	0.2	0.2	0.1		
Hourly Max	0.4	0.5	0.3	2.8	3.6	0.7	0.5	0.7	2.2	6.4	8.3	10.4	9.5	9.1	9.1	6.5	6.1	1.0	1.4	6.9	2.3	1.4	0.5	0.4		

PASZA - Portable-Spirit River Oxides of Nitrogen Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

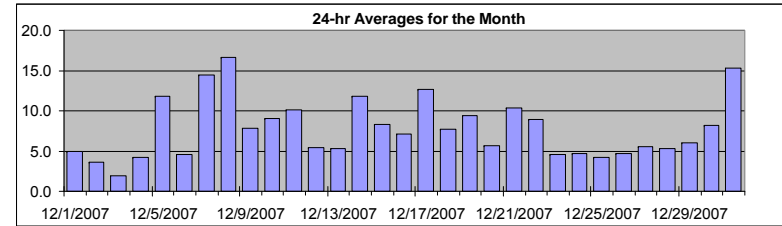
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2007 to January 1, 2008

Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb

Summary			
Maximum 1-hr Average:	30.0	ppb	14-Dec 9:00 10:00
Maximum 24-hr Average:	16.7	ppb	8-Dec



AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	24.7	18.4	9.9	6.1	4.3	2.1	1.4	7.8 ppb	6.1 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Dec-07	A	1	2	3	3	2	2	3	4	6	4	5	5	4	4	4	7	9	8	7	7	10	8	A	5.0	9.9	
2-Dec-07	8	8	7	7	7	7	6	5	3	2	4	3	2	2	2	1	2	1	1	1	1	1	A	2	3.6	8.2	
3-Dec-07	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	A	3	3	1.9	2.8	
4-Dec-07	3	3	3	2	2	2	2	2	3	2	5	4	4	3	3	4	4	5	7	19	A	5	5	4	4.3	19.2	
5-Dec-07	5	6	5	4	4	4	4	5	13	9	9	9	14	13	13	13	27	24	19	A	18	19	19	15	11.8	27.2	
6-Dec-07	6	3	3	5	3	3	3	5	3	3	3	5	4	4	4	5	6	6	A	6	6	8	5	4	4.6	8.0	
7-Dec-07	6	7	6	10	8	8	5	5	8	12	20	15	22	17	15	19	22	A	19	15	26	27	24	18	14.5	26.8	
8-Dec-07	16	15	15	16	14	8	11	15	17	17	21	22	21	20	23	11	A	18	15	14	19	20	18	16	16.7	23.1	
9-Dec-07	14	13	12	11	11	13	13	12	13	16	4	4	4	5	5	A	5	4	5	4	4	4	4	4	4	7.9	16.0
10-Dec-07	3	3	4	4	4	4	5	5	5	8	11	9	C	C	C	C	A	15	15	23	16	14	13	13	9.0	22.6	
11-Dec-07	11	10	10	A	11	9	8	9	11	10	12	12	10	9	9	9	9	10	10	9	10	12	12	11	10.1	12.5	
12-Dec-07	7	4	4	A	5	5	5	6	6	6	6	5	5	5	6	7	6	7	6	4	4	4	4	4	5.4	7.4	
13-Dec-07	4	4	3	A	4	4	4	4	9	6	5	5	5	5	6	10	8	8	5	4	5	4	5	4	5.3	9.7	
14-Dec-07	5	6	A	7	7	6	5	7	14	30	20	14	17	13	12	12	15	10	13	11	12	13	12	10	11.8	30.0	
15-Dec-07	10	A	11	10	9	9	8	8	8	8	8	10	9	8	8	9	10	10	9	7	5	6	6	5	8.3	10.5	
16-Dec-07	A	5	5	4	4	4	4	4	4	4	4	6	6	8	11	14	13	12	11	11	8	7	6	A	7.1	13.7	
17-Dec-07	7	9	10	9	10	10	8	8	9	19	29	25	19	20	14	14	13	10	13	14	13	5	A	4	12.6	28.6	
18-Dec-07	4	6	6	7	5	4	7	7	7	6	6	6	7	8	9	7	8	8	9	9	15	A	15	13	7.8	15.4	
19-Dec-07	11	11	10	7	8	8	8	9	8	8	8	6	8	8	9	11	10	11	11	12	A	12	11	10	9.4	11.7	
20-Dec-07	13	13	11	9	11	10	12	6	4	4	3	3	2	2	2	2	2	3	3	A	5	4	4	3	5.7	12.9	
21-Dec-07	4	5	4	3	3	4	10	10	15	24	26	26	15	12	9	9	10	7	A	8	8	8	9	10	10.4	26.4	
22-Dec-07	11	12	11	13	12	9	9	9	8	7	7	7	9	7	7	8	10	A	10	9	8	9	8	5	8.9	13.3	
23-Dec-07	4	3	3	3	3	4	3	3	4	4	3	6	6	6	5	5	5	A	7	7	7	5	5	4	5	4.5	7.3
24-Dec-07	5	4	4	4	4	4	4	4	4	4	4	14	6	4	4	5	A	4	4	4	4	5	4	4	4	4.7	14.0
25-Dec-07	5	4	4	4	3	3	3	3	3	3	3	4	5	6	A	5	4	4	4	5	5	5	4	6	4.2	6.3	
26-Dec-07	6	5	5	5	5	5	5	5	5	5	5	5	4	A	5	5	5	4	4	4	4	4	4	5	4.7	5.6	
27-Dec-07	6	5	5	5	7	5	4	5	5	5	6	8	A	9	7	6	6	5	5	5	5	4	5	5	5.6	9.3	
28-Dec-07	5	6	7	6	7	6	4	4	4	4	4	A	5	5	5	5	5	5	5	6	6	7	6	6	5.3	7.0	
29-Dec-07	6	6	6	6	6	6	6	6	5	5	A	6	6	6	6	6	6	6	7	6	6	5	5	5	6.0	6.8	
30-Dec-07	6	6	6	9	6	6	6	7	7	A	6	7	7	6	7	7	7	6	10	12	12	13	14	14	8.2	14.4	
31-Dec-07	15	14	13	14	11	13	13	14	A	15	15	15	16	18	19	17	17	16	17	19	20	15	7	18	15.3	20.3	
Hourly Avg	7.1	6.6	6.6	6.7	6.4	6.1	6.2	6.2	7.0	8.5	9.2	8.7	8.4	8.1	8.0	8.1	8.1	8.7	8.2	8.7	8.9	9.0	8.8	8.5	7.8		
Hourly Max	15.6	14.7	15.1	16.2	14.0	13.3	13.4	14.7	16.8	30.0	28.6	25.7	22.1	20.4	23.1	19.2	27.2	23.8	18.9	22.6	26.2	26.8	24.2	18.4			

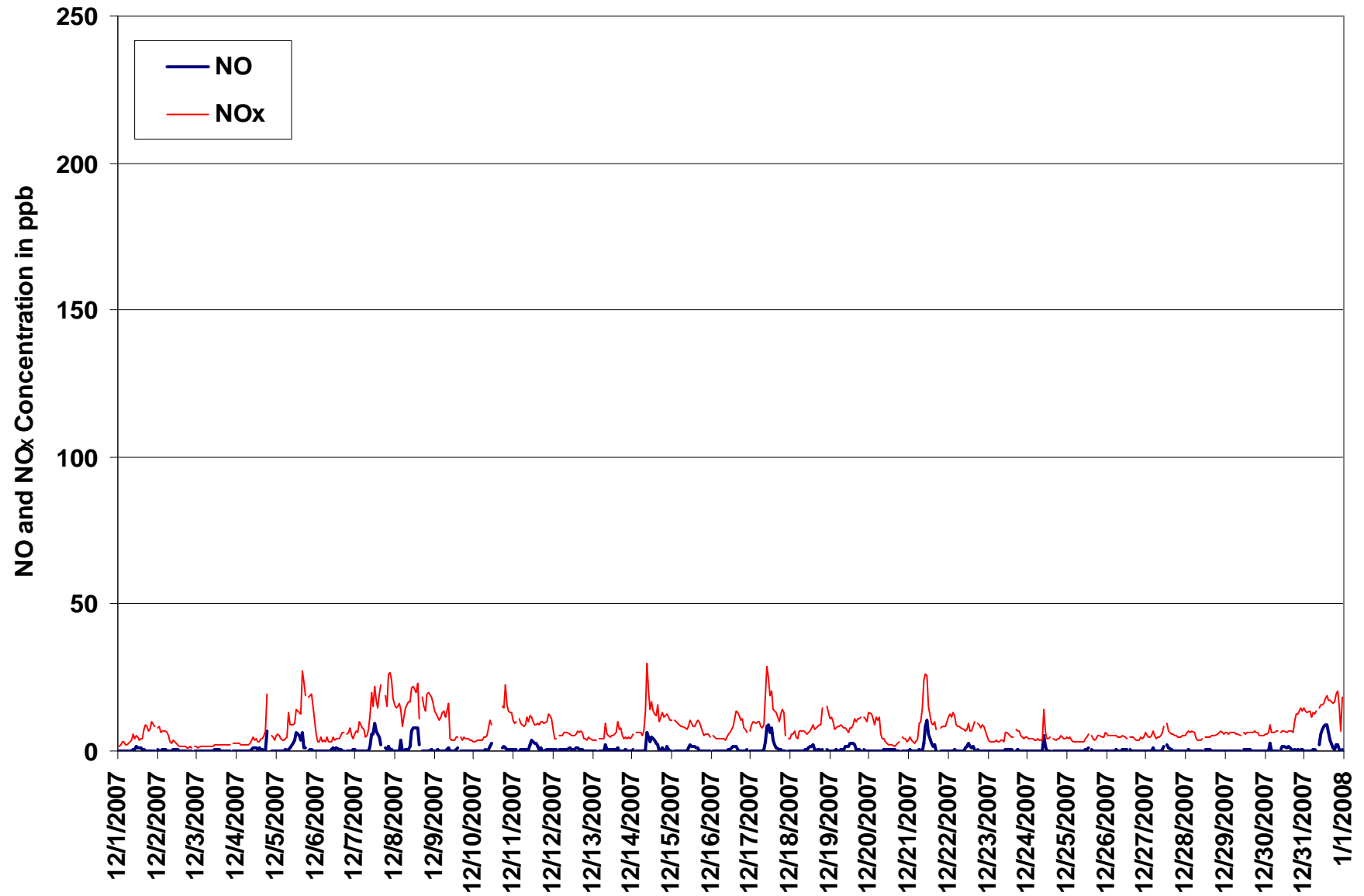


Figure 50. PASZA - Portable-Spirit River Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

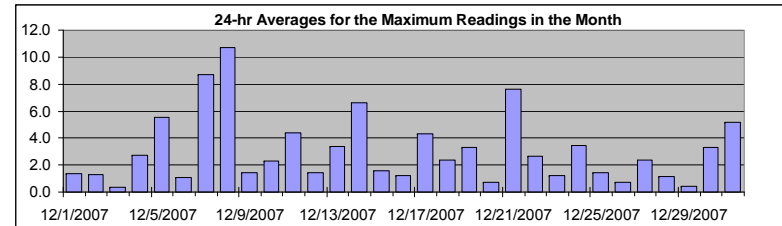
Nitric Oxide (NO)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	130.7	ppb	8-Dec	4:00 5:00
Maximum 24-hr Value:	10.7	ppb	8-Dec	

AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	32.8	12.3	2.6	0.8	0.3	0.1	0.1	3.1 ppb	0.8 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-Dec-07	A	0	0	0	0	0	0	0	7	1	2	1	3	3	2	1	1	1	2	0	0	3	A	1.3	7.3	
2-Dec-07	2	0	1	3	2	14	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	A	0	1.3	14.2	
3-Dec-07	1	0	0	0	0	0	0	0	1	1	0	0	1	0	2	0	0	0	0	0	A	0	0	0.4	2.0	
4-Dec-07	0	0	1	0	0	0	0	0	2	2	2	2	2	1	2	1	1	1	0	45	A	0	0	2.7	45.0	
5-Dec-07	0	0	0	0	0	2	5	4	7	8	3	7	13	7	16	16	20	2	6	A	1	5	2	5.5	19.6	
6-Dec-07	0	0	1	1	0	0	0	1	1	0	1	2	1	3	1	1	0	A	0	1	1	1	3	4	1.1	3.9
7-Dec-07	5	0	0	3	0	0	0	4	3	14	9	22	15	20	53	20	5	A	8	6	7	1	1	2	8.7	53.1
8-Dec-07	2	0	0	1	131	0	1	4	3	3	47	9	9	9	11	10	A	1	1	0	0	2	2	0	10.7	130.7
9-Dec-07	0	1	2	0	0	0	0	1	1	2	0	0	0	6	12	A	2	0	1	0	0	0	0	1.5	12.5	
10-Dec-07	0	0	0	0	0	0	0	5	1	1	6	12	C	C	C	C	A	3	7	1	1	2	1	1	2.3	12.5
11-Dec-07	1	2	1	A	0	1	1	12	9	1	3	4	4	4	5	2	3	30	2	1	5	9	1	1	4.4	29.7
12-Dec-07	0	0	1	A	1	1	1	2	1	1	5	1	1	1	2	3	2	2	8	0	0	0	0	0	1.4	8.1
13-Dec-07	0	0	0	A	0	0	0	0	33	15	2	1	1	1	4	6	1	0	4	3	7	0	0	0	3.4	32.8
14-Dec-07	1	2	A	0	1	0	0	0	4	52	11	4	6	7	9	8	7	3	10	1	0	23	2	0	6.6	52.0
15-Dec-07	1	A	1	1	1	0	0	0	1	1	5	2	2	3	1	13	2	1	0	0	1	0	0	0	1.6	12.7
16-Dec-07	A	0	0	0	0	1	1	0	1	0	0	3	1	3	2	3	3	1	2	0	0	0	4	A	1.2	4.2
17-Dec-07	2	0	0	0	0	0	0	0	3	9	11	11	8	16	5	6	7	12	3	2	1	1	A	0	4.3	16.0
18-Dec-07	0	1	0	0	0	0	3	2	2	4	2	2	2	2	14	1	0	6	1	0	1	A	9	2	2.4	13.7
19-Dec-07	0	2	0	0	5	2	1	5	6	13	3	3	7	3	6	5	2	7	1	1	A	2	1	1	3.3	13.2
20-Dec-07	1	0	0	1	1	1	1	0	1	3	0	1	1	3	2	1	0	0	A	0	0	0	0	0	0.7	2.8
21-Dec-07	0	7	3	1	2	0	9	1	2	13	32	15	8	6	4	7	61	1	A	1	1	1	0	1	7.6	61.3
22-Dec-07	1	1	1	1	1	1	0	0	0	1	1	2	5	3	4	30	1	A	7	0	1	0	0	0	2.7	29.9
23-Dec-07	0	1	0	0	0	1	0	1	0	0	1	1	1	6	5	0	A	2	5	0	1	0	0	0	1.2	6.2
24-Dec-07	0	0	0	0	0	0	0	1	3	0	29	32	0	2	1	A	3	0	4	0	1	1	0	2	3.5	31.7
25-Dec-07	3	0	0	0	0	0	0	0	0	0	0	1	4	11	A	7	0	0	0	0	0	2	1	1	1.5	11.2
26-Dec-07	1	0	3	0	0	0	2	0	3	0	2	1	1	A	1	0	0	0	0	0	0	0	0	0	0.7	2.7
27-Dec-07	0	0	0	5	27	0	0	1	1	1	1	2	A	3	8	1	0	1	0	0	0	0	0	0	2.3	27.4
28-Dec-07	1	1	5	1	1	1	0	0	0	0	1	A	1	1	1	0	3	3	0	1	0	6	1	0	1.2	5.9
29-Dec-07	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	2	0	2	0	0	0	0	0	0	0.5	1.9
30-Dec-07	0	1	2	38	0	1	2	2	0	A	1	2	3	2	4	1	1	1	4	2	3	0	5	2	3.3	38.2
31-Dec-07	0	1	0	0	3	3	3	2	A	6	6	11	9	11	15	8	11	5	7	7	9	1	1	1	5.1	14.7
Hourly Avg	0.8	0.8	0.8	2.1	5.8	1.0	1.0	1.7	2.9	5.3	6.2	5.4	3.7	4.7	6.7	5.1	5.3	3.0	2.9	2.6	1.4	2.1	1.3	0.7		
Hourly Max	4.9	6.7	4.7	38.2	130.7	14.2	8.7	12.4	32.8	52.0	46.6	31.7	14.6	19.7	53.1	29.9	61.3	29.7	10.2	45.0	9.0	23.2	8.8	3.9		

Station: Portable-Spirit River
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

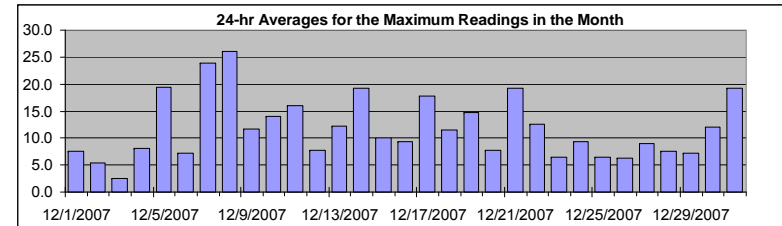
Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	100.4	ppb	8-Dec	4:00 5:00
Maximum 24-hr Value:	26.1	ppb	8-Dec	

AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	54.3	29.4	14.7	8.7	5.4	2.7	1.8	11.9 ppb	8.7 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	A	2	6	7	5	3	3	3	5	13	5	7	5	9	8	6	11	10	11	12	9	13	14	A	7.5	14.0
2-Dec-07	11	9	8	10	9	27	7	6	4	3	6	4	3	2	2	2	3	1	1	2	2	A	2	5.4	27.2	
3-Dec-07	3	1	2	2	2	2	2	2	3	3	2	2	3	2	4	3	2	3	2	2	2	A	3	2.4	4.5	
4-Dec-07	3	3	4	3	2	2	2	2	4	5	6	5	6	4	5	6	6	7	7	83	A	7	6	4	8.0	83.3
5-Dec-07	6	7	6	5	5	7	13	9	25	21	11	17	25	16	26	35	49	29	28	A	24	27	30	22	19.4	49.5
6-Dec-07	11	4	5	7	4	4	4	6	5	5	4	7	6	9	5	7	9	12	A	9	9	12	10	12	7.2	12.4
7-Dec-07	12	8	7	16	11	11	6	15	13	34	28	40	32	38	36	46	27	A	30	25	37	29	26	22	23.9	46.5
8-Dec-07	19	19	19	20	100	11	14	24	22	21	58	24	24	24	30	29	A	23	18	18	21	21	21	17	26.1	100.4
9-Dec-07	17	15	15	11	12	17	15	13	28	29	5	4	4	14	23	A	9	5	7	5	6	5	5	5	11.7	29.2
10-Dec-07	4	4	5	5	5	5	5	17	8	15	19	26	C	C	C	C	A	21	29	29	22	17	14	14	14.0	29.3
11-Dec-07	13	12	12	A	12	11	9	42	27	12	14	13	11	11	14	10	18	38	19	10	15	22	13	12	16.1	41.5
12-Dec-07	10	5	5	A	6	6	6	10	7	7	12	6	6	7	8	10	10	9	23	5	5	5	5	6	7.8	23.0
13-Dec-07	4	4	4	A	5	5	5	5	93	17	8	5	6	6	16	22	11	10	20	8	13	5	5	5	12.3	92.9
14-Dec-07	5	9	A	7	9	9	6	9	22	74	32	17	20	19	19	25	26	14	26	15	15	37	16	12	19.2	73.7
15-Dec-07	11	A	11	11	10	10	9	9	9	8	9	16	10	9	12	10	19	12	10	8	6	8	6	6	10.1	19.3
16-Dec-07	A	6	6	5	5	7	7	5	5	5	8	7	12	14	17	18	15	15	13	10	9	12	A	9.3	17.8	
17-Dec-07	11	10	11	10	11	11	9	9	18	34	33	29	21	33	16	20	24	30	20	18	17	10	A	5	17.8	34.0
18-Dec-07	5	6	7	8	7	5	13	11	10	11	8	8	8	9	28	9	8	17	10	12	19	A	28	19	11.5	28.3
19-Dec-07	13	14	12	9	14	12	10	15	23	27	11	8	16	9	17	20	14	34	13	14	A	13	12	10	14.8	33.5
20-Dec-07	16	15	15	11	15	16	16	9	5	6	4	4	3	6	4	2	3	3	4	A	6	5	6	4	7.7	16.0
21-Dec-07	5	15	11	6	6	11	22	17	20	37	57	34	21	15	14	21	62	11	A	12	12	10	11	13	19.3	62.5
22-Dec-07	14	13	12	14	14	11	9	9	8	8	7	9	14	9	13	43	12	A	24	10	9	10	10	5	12.5	42.7
23-Dec-07	7	4	4	3	4	5	4	4	4	4	5	7	7	14	12	6	A	9	13	10	8	5	5	5	6.5	13.9
24-Dec-07	5	5	5	5	4	4	5	5	7	4	54	35	5	7	6	A	11	4	10	5	8	6	6	11	9.4	54.5
25-Dec-07	12	5	5	5	3	4	4	4	4	4	4	7	12	22	A	7	5	5	5	7	7	8	6	8	6.5	22.4
26-Dec-07	7	7	10	5	5	6	7	5	10	5	8	6	6	A	5	5	6	6	5	6	5	5	5	8	6.3	10.3
27-Dec-07	11	5	5	15	36	6	4	6	6	6	8	9	A	12	20	8	6	6	6	5	5	5	7	6	8.9	35.5
28-Dec-07	6	8	11	9	8	8	5	4	4	5	7	A	6	5	5	5	10	10	9	9	7	18	8	6	7.5	18.0
29-Dec-07	7	6	6	7	6	7	7	6	6	A	7	6	7	7	10	9	10	11	8	8	6	5	6	7	7.1	10.6
30-Dec-07	6	7	9	52	7	8	9	9	7	A	7	8	9	8	10	8	9	9	15	14	16	16	20	17	12.1	51.6
31-Dec-07	16	16	14	15	15	16	16	18	A	19	16	18	17	20	26	18	27	21	23	26	23	20	20	21	19.2	26.8
Hourly Avg	9.4	8.2	8.4	10.1	11.5	8.6	8.1	9.9	13.8	14.9	15.2	13.0	11.0	12.4	14.0	14.7	15.1	13.2	14.3	13.7	11.8	12.3	11.6	10.0		
Hourly Max	19.3	19.2	18.7	51.6	100.4	27.2	21.6	41.5	92.9	73.7	58.3	39.8	31.6	37.8	35.9	46.5	62.5	37.8	29.8	83.3	36.8	37.0	29.6	22.4		

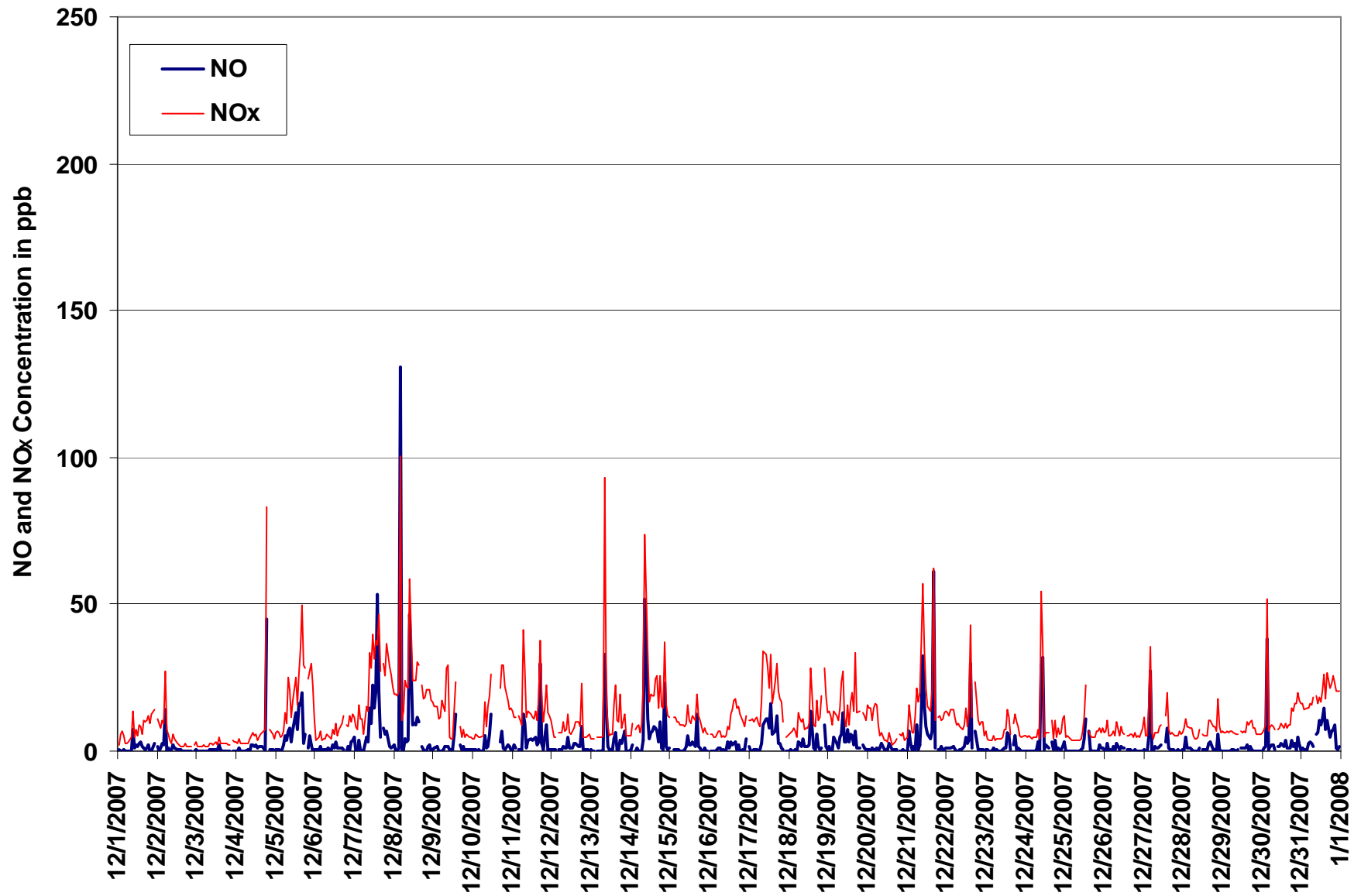


Figure 51. PASZA - Portable-Spirit River Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Portable-Spirit River Ozone Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

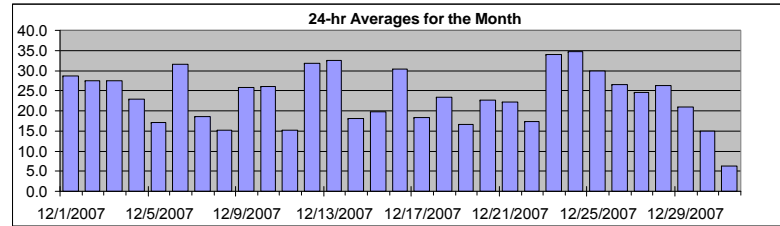
Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 82 ppb 24-hr na ppb
 Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	37.4 ppb	9-Dec	10:00	11:00
Maximum 24-hr Average:	34.6 ppb	24-Dec		

AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	36.9	35.3	30.8	23.3	17.5	10.2	4.3	23.4 ppb	23.3 ppb



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Dec-07	A	35	33	31	31	32	31	31	29	28	29	28	30	31	31	30	26	24	25	27	25	22	24	A	28.7	35.5
2-Dec-07	22	20	21	21	21	22	21	22	27	29	27	28	31	32	33	33	32	32	33	32	32	32	A	31	27.5	32.8
3-Dec-07	30	31	30	29	28	28	28	27	27	27	27	27	27	27	27	27	27	27	27	26	26	A	25	25	27.5	30.6
4-Dec-07	25	25	25	25	25	25	25	25	24	23	22	23	23	24	24	23	22	20	19	17	A	20	21	22	22.9	25.0
5-Dec-07	20	20	21	21	21	22	22	22	14	18	20	21	20	20	19	18	8	7	11	A	12	11	11	14	17.0	21.8
6-Dec-07	29	34	35	31	34	33	33	31	33	33	33	33	34	34	33	32	30	30	A	30	28	26	29	32	31.6	34.6
7-Dec-07	29	25	25	22	24	25	28	27	22	20	18	20	20	20	20	17	11	A	13	13	5	4	7	13	18.6	28.6
8-Dec-07	14	15	15	14	18	22	16	13	11	11	13	16	18	16	16	28	A	14	15	16	11	11	13	15.1	27.6	
9-Dec-07	15	15	16	16	15	13	12	12	10	16	16	16	16	16	36	A	34	35	33	34	34	33	33	34	25.8	37.4
10-Dec-07	34	34	34	34	35	34	30	29	28	26	25	28	27	24	25	23	C	C	C	9	16	16	16	17	25.9	34.6
11-Dec-07	18	18	17	A	15	15	16	15	14	17	15	15	16	16	15	14	13	13	16	13	13	11	12	19	15.1	19.1
12-Dec-07	29	35	33	A	31	31	30	29	29	30	31	33	34	34	34	33	32	31	31	33	32	33	32	33	31.8	35.0
13-Dec-07	33	34	34	A	34	34	34	34	34	34	34	34	34	34	33	29	30	30	31	32	32	31	30	30	32.6	34.4
14-Dec-07	30	28	A	27	26	26	26	24	18	8	17	22	21	21	17	15	11	14	11	11	10	10	10	11	18.1	29.9
15-Dec-07	12	A	13	14	15	18	19	18	18	18	19	18	19	20	19	18	15	15	18	27	30	29	29	33	19.8	33.0
16-Dec-07	A	35	36	36	37	37	36	36	35	34	34	33	33	31	28	24	24	24	24	22	24	23	23	A	30.3	36.7
17-Dec-07	22	19	18	18	19	18	19	19	18	11	9	12	16	17	19	17	16	19	15	14	14	36	A	36	18.4	36.1
18-Dec-07	35	33	32	31	33	32	28	27	25	23	22	21	21	21	21	20	19	19	19	18	12	A	13	13	23.3	35.4
19-Dec-07	15	14	20	24	21	21	21	22	20	18	18	18	17	16	14	13	12	11	10	A	12	13	13	13	16.7	24.5
20-Dec-07	11	11	14	16	12	14	14	20	23	22	22	23	26	27	28	30	31	31	29	A	27	28	29	30	22.6	31.0
21-Dec-07	28	28	29	30	31	29	24	23	17	11	14	17	22	23	24	23	22	22	A	21	19	19	18	16	22.2	30.6
22-Dec-07	14	13	13	11	12	15	16	16	17	18	19	19	19	21	22	21	18	A	17	15	17	15	18	32	17.2	31.9
23-Dec-07	33	35	34	35	34	35	35	35	35	36	37	26	27	35	35	35	A	34	33	33	35	36	37	35	34.1	37.0
24-Dec-07	36	37	37	37	37	37	36	36	36	36	34	35	36	35	35	A	33	33	33	33	31	32	32	31	34.6	37.0
25-Dec-07	30	30	30	31	33	33	32	33	32	33	33	32	30	30	A	30	33	34	34	32	26	20	19	17	30.0	34.0
26-Dec-07	18	18	19	17	18	17	17	17	29	30	30	31	32	A	34	34	32	32	32	31	31	29	30	30	26.4	34.3
27-Dec-07	28	28	27	26	25	25	25	24	24	24	22	20	A	21	23	22	22	22	23	25	26	27	26	26	24.5	28.5
28-Dec-07	27	25	24	25	24	26	30	31	31	30	30	A	30	29	28	27	26	26	25	24	22	22	22	22	26.3	31.1
29-Dec-07	21	21	21	21	20	20	20	20	20	20	A	21	21	22	22	22	21	21	21	21	21	22	21	21	21.0	22.4
30-Dec-07	20	19	18	17	17	17	16	15	15	A	17	17	18	18	18	18	18	17	12	9	8	6	5	6	14.9	19.9
31-Dec-07	4	4	4	4	7	5	5	5	A	7	8	10	10	10	9	8	5	2	1	0	0	10	24	1	6.3	24.0
Hourly Avg	23.6	24.7	24.3	23.7	24.3	24.4	24.0	23.8	23.9	23.0	23.8	24.0	25.0	25.0	24.9	23.6	22.4	22.8	21.8	21.7	21.4	21.6	21.5	22.6		
Hourly Max	35.6	36.9	37.0	36.9	36.9	36.8	36.4	36.1	36.0	36.0	37.4	37.2	36.9	36.0	36.0	35.4	34.4	34.5	33.8	34.1	34.9	36.2	37.0	36.1		

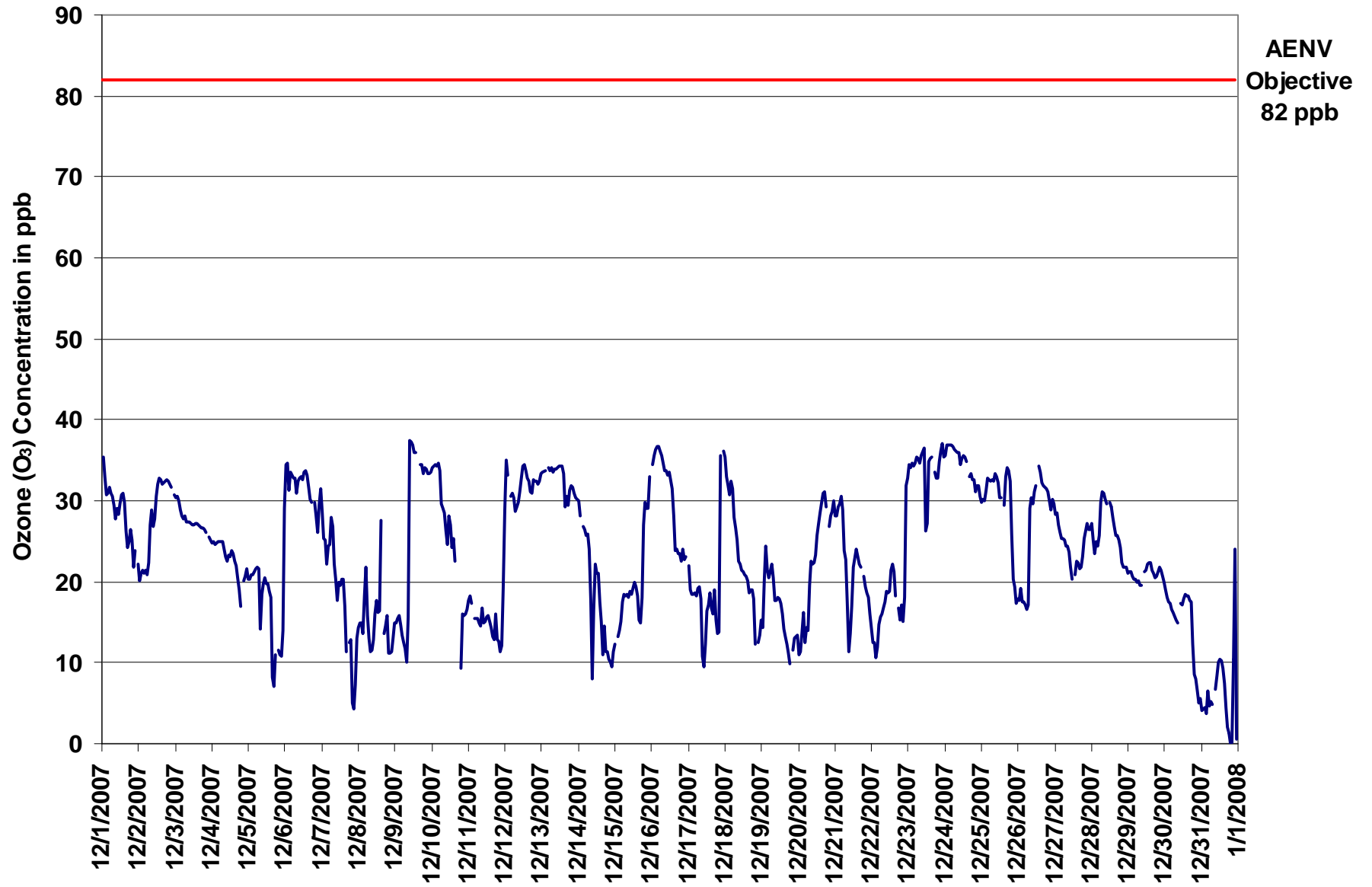


Figure 52. PASZA - Portable-Spirit River Ozone 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

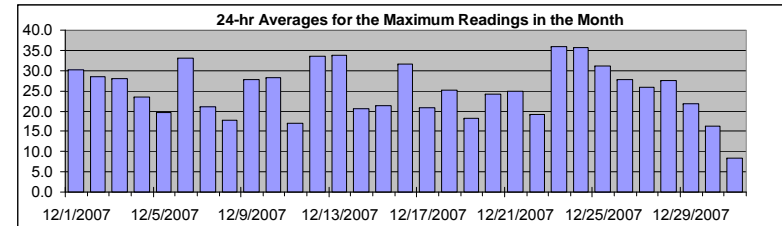
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Value:	42.6	ppb	12-Dec	13:00 14:00
Maximum 24-hr Value:	36.0	ppb	23-Dec	



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	37.8	36.4	32.3	25.2	19.2	12.1	5.7	25.1 ppb	25.2 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Dec-07	A	36	36	33	32	32	32	31	31	30	30	30	31	32	32	32	29	26	27	28	27	24	25	A	30.1	36.2
2-Dec-07	24	21	23	23	22	22	22	26	29	29	29	29	32	33	33	33	32	33	33	33	32	32	A	31	28.5	33.1
3-Dec-07	31	31	30	29	29	28	28	28	28	28	27	27	27	27	27	27	27	27	27	27	A	26	26		28.0	31.1
4-Dec-07	26	25	25	25	25	26	25	25	25	24	24	24	24	24	24	23	23	22	20	19	A	21	22	23	23.6	25.5
5-Dec-07	22	21	22	22	22	22	23	23	20	20	21	22	22	21	20	19	19	11	17	A	14	15	15	19	19.6	23.2
6-Dec-07	35	35	35	34	34	33	34	33	33	33	33	34	34	37	34	33	32	A	31	29	28	32	32		33.1	36.9
7-Dec-07	32	26	26	25	26	28	29	29	23	23	20	21	21	22	22	22	15	A	16	14	14	8	11	15	21.2	31.9
8-Dec-07	17	17	18	18	22	25	19	15	16	15	16	18	19	19	18	32	A	16	17	18	14	12	12	16	17.7	31.9
9-Dec-07	18	17	17	17	15	15	14	13	12	37	38	38	38	37	37	A	35	35	35	35	35	34	34	34	27.8	37.9
10-Dec-07	35	35	35	35	36	35	31	30	30	28	27	30	31	27	26	35	C	C	C	15	19	17	17	17	28.2	35.7
11-Dec-07	20	19	18	A	16	17	17	16	16	20	16	16	16	17	16	15	14	14	28	14	14	13	16	24	17.0	28.0
12-Dec-07	36	36	35	A	31	32	31	31	30	31	32	34	36	43	34	34	34	33	33	33	33	33	33	34	33.5	42.6
13-Dec-07	34	34	34	A	34	34	35	34	35	35	35	35	35	35	34	33	33	32	33	33	32	32	31	31	33.7	35.3
14-Dec-07	31	30	A	28	29	27	26	26	24	11	23	24	24	26	19	17	15	16	15	13	12	13	12	13	20.5	30.6
15-Dec-07	13	A	14	15	17	19	19	19	19	19	19	19	20	21	20	19	17	16	27	29	31	30	31	34	21.2	34.2
16-Dec-07	A	35	36	37	37	37	37	36	35	34	34	34	34	33	30	27	27	29	25	24	25	24	24	A	31.6	37.0
17-Dec-07	23	21	19	19	20	19	21	21	20	18	11	15	18	19	22	19	20	21	19	16	21	38	A	38	20.9	38.1
18-Dec-07	36	34	33	32	36	34	30	29	26	25	23	22	22	22	23	21	20	22	20	20	14	A	14	17	25.0	36.4
19-Dec-07	17	15	24	27	26	23	24	24	22	19	19	19	18	18	17	16	14	13	13	11	A	13	14	14	18.3	27.2
20-Dec-07	14	13	17	18	16	17	16	23	23	23	25	27	29	29	31	32	32	30	A	28	30	30	31		24.2	32.5
21-Dec-07	29	29	31	31	32	30	27	25	20	15	17	22	25	27	27	31	24	24	A	22	21	21	21	18	24.8	31.7
22-Dec-07	17	14	14	12	13	16	16	17	17	18	19	19	21	23	23	23	20	A	19	17	18	17	33	33	19.1	32.9
23-Dec-07	35	35	35	35	35	36	36	36	35	37	37	36	34	37	36	36	A	35	35	35	37	38	38	36	36.0	38.1
24-Dec-07	37	37	37	37	37	37	37	36	36	36	36	39	36	36	35	A	34	34	34	33	33	33	33	32	35.6	39.2
25-Dec-07	31	31	31	33	33	33	33	34	33	34	34	33	32	32	A	33	34	35	34	33	32	21	20	20	31.2	34.9
26-Dec-07	19	19	25	19	18	18	18	22	31	31	31	33	33	A	35	34	33	32	32	32	32	30	31	31	27.9	34.9
27-Dec-07	31	30	28	28	26	26	27	25	28	25	24	22	A	23	23	23	22	23	26	26	27	28	27		25.9	30.7
28-Dec-07	28	29	25	27	26	28	32	32	32	31	31	A	30	30	29	29	27	27	26	26	23	23	23	23	27.6	31.8
29-Dec-07	22	22	22	21	21	21	21	21	21	21	A	22	22	23	23	23	22	22	22	22	22	23	22	21	21.8	23.1
30-Dec-07	21	20	19	22	18	17	18	16	16	A	18	18	19	19	19	19	18	18	18	10	9	8	8	6	16.3	21.9
31-Dec-07	6	6	5	7	9	7	6	7	A	9	11	11	11	11	10	9	7	3	2	1	2	25	29	1	8.4	28.8
Hourly Avg	25.5	25.8	25.7	25.3	25.6	25.6	25.3	25.2	25.7	25.4	25.3	25.7	26.4	26.7	26.0	25.8	24.3	24.3	24.4	23.1	23.4	23.5	23.5	24.1		
Hourly Max	37.5	37.5	37.5	37.5	37.5	37.5	37.0	36.5	36.5	37.4	37.9	39.2	37.8	42.6	37.0	36.2	35.3	35.3	34.8	34.8	37.5	38.0	38.1	38.1		

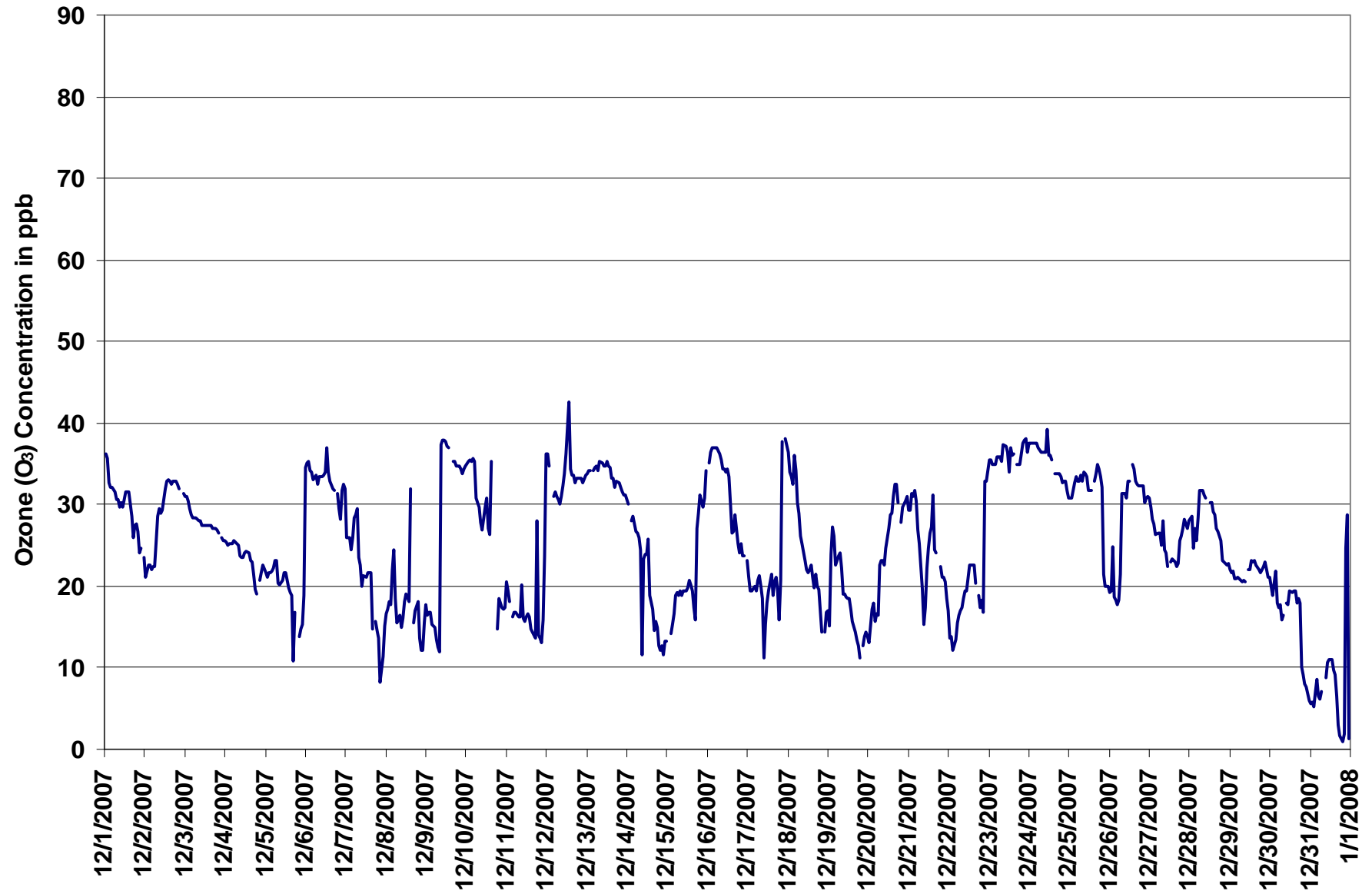
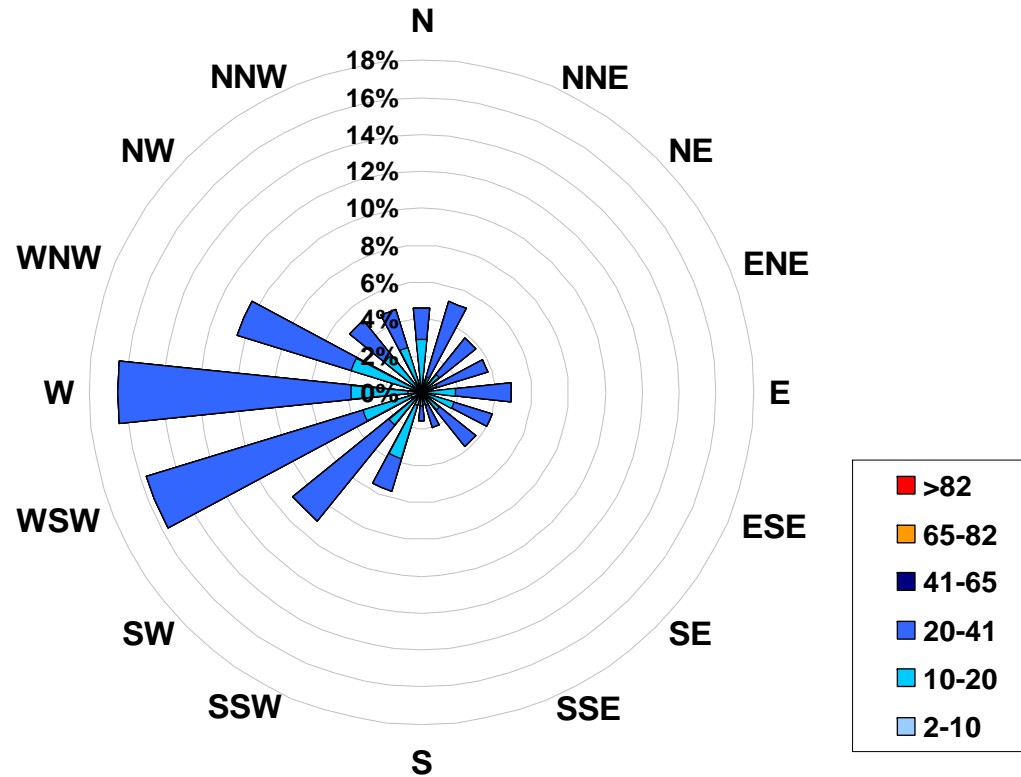


Figure 53. PASZA - Portable-Spirit River Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Portable-Spirit River Site for December 2007



Calms: 0%

Frequency Distribution of O ₃ in ppb			Frequency (hrs)
Range			
2.0	<	10	33
10	to	20	218
20	to	41	458
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			709

PASZA - Portable-Spirit River Ozone Eight Hour Average Summary

Station: Portable-Spirit River
 Station Owner: PASZA

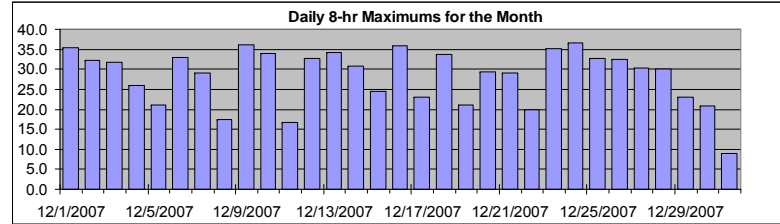
EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 8-hr 65 ppb

Number of 8-hr Exceedances:		0			
Maximum 8-hr Average:	36.6	ppb	24-Dec	8:00	9:00



Percentile							
99	95	75	50	25	5	1	
36.2	34.6	30.6	23.5	17.6	11.5	5.2	

Status Flag Characters	
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																							Daily Maximum		
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Dec-07	35	35	35	35	34	33	33	32	32	31	30	30	30	30	29	29	29	28	28	27	26	25	25		35.4	
2-Dec-07	24	23	23	22	22	22	21	21	22	23	24	25	26	27	29	30	30	31	32	32	32	32	32	32		32.3
3-Dec-07	32	32	31	31	30	30	29	29	29	28	28	28	27	27	27	27	27	27	27	27	27	27	26	26		31.7
4-Dec-07	26	26	25	25	25	25	25	25	25	25	24	24	24	24	24	23	23	23	22	21	21	20	20		25.9	
5-Dec-07	20	20	20	21	21	21	21	21	20	20	20	20	19	19	19	18	17	15	15	14	12	11	11		21.1	
6-Dec-07	14	17	21	22	25	28	30	32	33	33	32	33	33	33	33	33	33	32	32	32	31	30	29	29		32.9
7-Dec-07	29	28	28	27	27	26	26	26	25	24	23	23	22	22	21	20	18	18	17	16	14	12	10	10		29.1
8-Dec-07	10	11	11	11	13	15	16	16	15	15	15	15	14	14	16	17	17	17	17	16	16	15	13		17.5	
9-Dec-07	13	13	13	13	14	14	14	14	14	14	16	19	22	25	28	30	33	36	36	35	35	34	34	34		36.1
10-Dec-07	34	34	34	34	34	34	34	33	32	31	30	29	28	27	27	26	25	N	N	N	N	N	N	N		34.0
11-Dec-07	N	16	16	17	17	17	17	16	16	16	15	15	15	15	15	15	15	15	15	14	14	14	13	14		16.8
12-Dec-07	16	18	21	22	24	27	30	31	31	30	30	30	31	31	32	32	33	33	33	33	33	32	32	32		32.8
13-Dec-07	32	32	33	33	33	33	34	34	34	34	34	34	34	34	34	33	33	32	32	32	31	31	31	31		34.1
14-Dec-07	31	31	30	30	29	28	28	27	25	22	21	21	20	20	19	17	17	17	17	15	14	13	12	11		30.7
15-Dec-07	11	11	11	12	12	13	15	16	16	17	17	18	18	19	19	19	18	18	18	19	20	21	23	25		24.5
16-Dec-07	26	29	31	33	33	35	36	36	36	36	35	35	35	34	33	32	30	29	28	26	25	24	23	23		36.0
17-Dec-07	23	22	22	21	20	20	19	19	19	18	17	16	15	15	15	15	15	16	16	17	16	19	19	21		23.0
18-Dec-07	24	26	29	31	34	33	32	31	30	29	27	26	25	24	23	22	21	20	20	20	19	18	17	16		33.6
19-Dec-07	16	15	15	16	17	18	19	20	21	21	21	20	19	19	18	17	17	16	15	14	13	13	12	12		21.0
20-Dec-07	12	12	12	13	13	13	13	14	16	17	18	19	20	22	24	25	26	27	28	29	29	29	29	29		29.3
21-Dec-07	29	28	28	29	29	29	29	28	26	24	22	21	20	19	19	19	20	21	22	22	22	21	21	20		29.2
22-Dec-07	18	17	17	15	14	14	14	14	14	15	16	17	18	19	19	19	20	20	20	19	19	18	17	19		19.9
23-Dec-07	21	23	25	27	29	32	34	34	35	35	35	34	33	33	33	33	33	33	32	33	34	34	35	35		35.1
24-Dec-07	35	35	36	36	36	37	36	37	37	37	36	36	36	36	35	35	35	35	34	34	33	33	32	32		36.6
25-Dec-07	32	31	31	31	31	31	31	31	32	32	33	33	32	32	32	32	32	32	32	32	31	30	29	27		32.7
26-Dec-07	25	23	21	19	18	18	18	18	19	21	22	24	25	27	29	31	32	32	32	32	32	32	31	31		32.4
27-Dec-07	30	30	29	29	28	28	27	26	26	25	25	24	24	23	23	22	22	22	22	23	23	24	24	25		30.4
28-Dec-07	25	26	26	26	26	25	26	26	27	28	28	29	30	30	30	29	28	28	27	27	26	25	24	24		30.1
29-Dec-07	23	22	22	21	21	21	21	21	20	20	20	20	20	21	21	21	21	22	22	22	21	21	21	21		23.0
30-Dec-07	21	21	20	20	19	19	18	17	17	17	16	16	16	17	17	17	18	18	17	16	15	13	12	10		20.9
31-Dec-07	8	7	6	5	5	5	5	5	5	5	6	7	7	8	9	9	8	8	7	6	4	4	6	5		9.0

Hourly Max 35.1 35.4 35.7 36.2 36.5 36.6 36.5 36.6 36.6 36.6 36.5 36.2 36.0 35.8 35.6 35.4 35.3 34.9 36.1 35.5 35.1 34.6 34.4 34.7 34.7

PASZA - Portable-Spirit River Relative Humidity Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

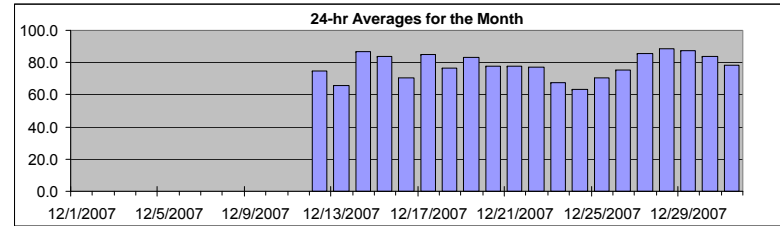
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	96.8	%	12-Dec	7:00 8:00
Maximum 24-hr Value:	88.3	%	28-Dec	



AIC Time:	0 hrs	Operational Time:	487 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	65.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	93.7	90.0	86.6	79.2	69.9	61.4	57.6	78.0	79.2

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
2-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
3-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
6-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
7-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
8-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
9-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
10-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
11-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	M	M	M	M	87	81	88	88	86	84	81	N	88.3
12-Dec-07	77	71	69	73	81	89	94	97	96	91	83	76	77	74	65	62	64	63	67	65	65	65	66	66	74.7	96.8
13-Dec-07	67	66	65	64	63	64	64	65	65	64	65	62	60	60	62	64	67	68	70	69	69	71	72	74	65.8	73.7
14-Dec-07	78	82	84	85	86	88	94	94	88	89	92	91	87	85	80	84	87	90	88	87	85	85	85	85	86.6	94.4
15-Dec-07	86	86	87	87	88	88	89	89	89	89	89	90	90	90	88	89	90	90	86	66	65	66	68	66	83.8	89.8
16-Dec-07	64	63	61	58	57	56	57	60	63	64	64	63	60	63	68	76	75	81	87	87	91	93	94	93	70.7	93.7
17-Dec-07	93	91	91	91	91	90	90	90	90	91	90	90	88	84	88	88	87	87	86	86	84	58	55	61	85.0	92.6
18-Dec-07	64	71	76	76	69	74	74	73	76	80	81	80	79	79	79	80	80	79	81	80	76	77	75	77	76.5	81.3
19-Dec-07	79	77	76	79	84	83	85	87	87	87	84	81	73	75	76	83	88	89	87	88	87	86	87	86	83.1	89.0
20-Dec-07	86	86	86	86	87	87	86	81	77	80	80	77	74	70	70	71	73	73	73	74	75	73	73	72	77.9	86.9
21-Dec-07	75	74	74	77	79	80	81	81	81	80	78	77	77	76	77	78	78	79	79	79	79	79	78	78	78.0	81.4
22-Dec-07	77	77	77	77	78	78	79	79	79	80	80	81	80	79	78	76	78	76	78	78	78	76	74	66	77.4	80.7
23-Dec-07	66	66	66	66	67	65	62	64	64	63	61	68	67	68	82	84	86	79	64	61	62	63	60	64	67.4	85.5
24-Dec-07	64	65	62	61	61	62	63	62	62	60	59	59	58	60	61	63	65	66	68	69	65	66	66	69	63.1	69.2
25-Dec-07	74	72	68	68	69	66	68	69	70	68	70	69	75	70	71	70	63	62	61	57	74	84	84	84	70.2	83.7
26-Dec-07	83	82	76	84	84	83	84	83	71	70	70	67	64	64	67	70	73	75	77	81	80	77	79	75.6	84.0	
27-Dec-07	77	81	90	93	91	89	84	83	83	83	84	85	85	85	85	85	86	86	87	87	87	87	88	85.5	92.6	
28-Dec-07	88	88	88	89	89	89	90	90	90	89	89	89	89	89	89	88	88	87	87	87	87	87	87	87	88.3	89.8
29-Dec-07	87	87	87	87	87	87	87	87	87	87	87	88	87	87	89	89	87	87	87	87	87	87	86	85	87.1	89.3
30-Dec-07	85	85	84	84	85	85	84	84	84	84	85	85	85	85	85	85	85	85	84	82	81	80	81	79	83.8	85.3
31-Dec-07	79	80	78	76	79	78	77	78	77	76	76	77	77	80	77	77	76	77	78	79	82	85	76	78.0	84.7	
Hourly Avg	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
Hourly Max	92.6	91.5	91.1	92.6	90.7	90.4	94.4	96.8	96.2	91.3	91.7	91.4	89.8	89.6	89.3	89.1	89.5	90.5	88.0	88.3	91.3	92.6	93.7	92.6		

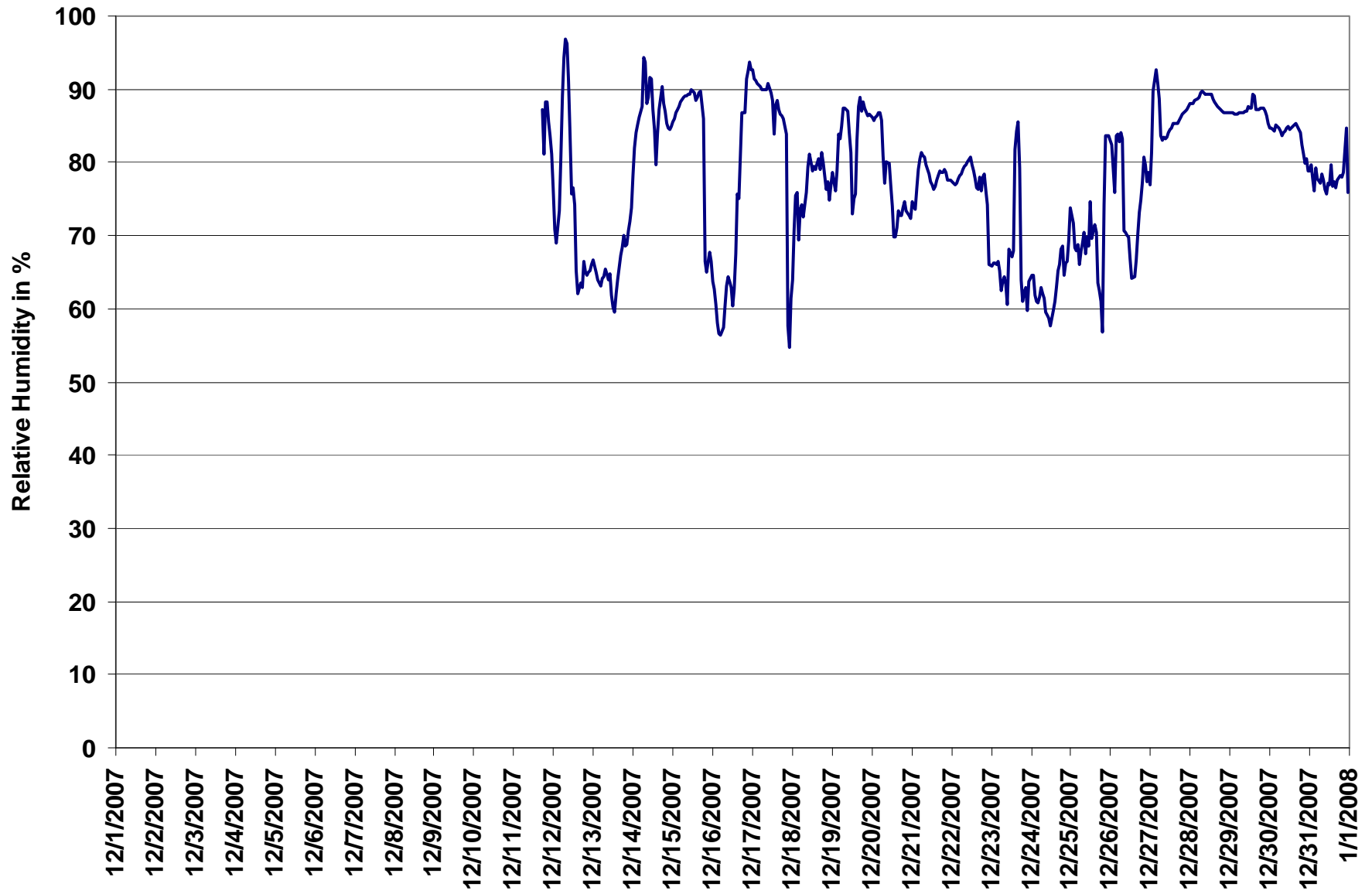


Figure 54. PASZA - Portable-Spirit River Relative Humidity 1-hr Average Monthly Trend

PASZA - Portable-Spirit River Temperature Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

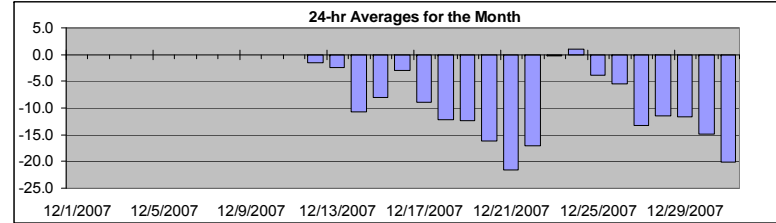
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	2.5 °C	24-Dec	13:00 14:00
Maximum 24-hr Value:	1.1 °C	24-Dec	



AIC Time:	0 hrs	Operational Time:	487 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	65.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.1	0.8	-3.0	-10.6	-14.1	-21.3	-23.4	-9.6 °C	-10.6 °C

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			24:00
1-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
2-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
3-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
6-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
7-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
8-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
9-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
10-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
11-Dec-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	M	M	M	M	-7	-4	-7	-8	-7	-5	-3	N	-3.1
12-Dec-07	-1	0	1	1	0	0	-1	-1	-1	-2	-1	-1	-1	0	-1	-2	-4	-4	-5	-3	-3	-3	-3	-3	-1.5	0.9	
13-Dec-07	-3	-3	-3	-3	-2	-3	-3	-3	-3	-2	-2	-2	-2	-1	0	-1	-2	-3	-2	-3	-2	-3	-3	-4	-4	-2.4	0.1
14-Dec-07	-6	-8	-7	-7	-7	-8	-10	-10	-13	-12	-9	-7	-6	-9	-12	-13	-13	-14	-14	-15	-15	-15	-15	-15	-10.7	-6.0	
15-Dec-07	-14	-14	-13	-13	-12	-11	-11	-11	-11	-10	-10	-9	-9	-8	-8	-8	-8	-9	-6	0	1	1	0	1	-8.0	1.4	
16-Dec-07	1	1	1	1	1	1	0	-1	-1	-1	-1	-1	0	-1	-3	-6	-5	-6	-8	-8	-9	-9	-9	-10	-3.0	1.4	
17-Dec-07	-10	-10	-9	-10	-10	-9	-9	-9	-9	-9	-9	-10	-9	-8	-10	-10	-9	-9	-9	-9	-9	-5	-4	-7	-8.8	-4.4	
18-Dec-07	-6	-9	-11	-12	-11	-13	-15	-12	-13	-15	-15	-15	-14	-13	-13	-12	-12	-11	-11	-11	-11	-11	-10	-11	-12.1	-6.5	
19-Dec-07	-12	-11	-9	-9	-10	-12	-11	-11	-12	-13	-13	-14	-12	-13	-13	-13	-14	-14	-14	-14	-14	-14	-14	-13	-12	-12.4	-8.7
20-Dec-07	-12	-11	-11	-11	-11	-11	-10	-13	-16	-18	-19	-19	-19	-19	-18	-18	-17	-17	-17	-18	-19	-20	-20	-20	-16.1	-10.2	
21-Dec-07	-20	-20	-19	-20	-20	-20	-21	-21	-21	-22	-22	-22	-22	-21	-21	-22	-22	-22	-23	-23	-23	-23	-24	-24	-21.5	-18.7	
22-Dec-07	-24	-24	-24	-23	-23	-22	-20	-20	-19	-19	-18	-17	-16	-16	-15	-14	-14	-15	-14	-14	-14	-14	-11	-11	-17.1	-1.0	
23-Dec-07	-1	0	-1	-1	-1	-1	1	1	1	0	1	-3	-2	0	-1	0	-1	0	0	-1	0	1	2	1	-0.2	2.1	
24-Dec-07	1	1	2	2	2	1	1	1	1	2	2	2	2	2	2	2	1	1	0	0	0	0	0	-1	1.1	2.5	
25-Dec-07	-3	-2	-1	-2	-2	-2	-3	-3	-4	-4	-4	-4	-6	-4	-6	-5	-3	-3	-2	-1	-5	-7	-8	-7	-3.9	-0.9	
26-Dec-07	-7	-7	-5	-8	-8	-7	-8	-7	-3	-3	-4	-4	-4	-3	-3	-3	-4	-5	-6	-7	-8	-7	-6	-7	-5.5	-2.5	
27-Dec-07	-7	-8	-10	-11	-11	-12	-16	-17	-17	-16	-16	-16	-15	-15	-14	-14	-14	-14	-13	-13	-13	-13	-12	-12	-13.3	-7.0	
28-Dec-07	-11	-12	-12	-11	-11	-11	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-12	-12	-12	-12	-13	-13	-13	-13	-11.5	-10.3	
29-Dec-07	-13	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-11	-11	-11	-8	-8	-11	-12	-12	-12	-12	-13	-14	-11.7	-8.0	
30-Dec-07	-14	-14	-14	-15	-14	-14	-14	-15	-15	-15	-14	-13	-13	-13	-12	-13	-13	-13	-13	-15	-17	-18	-19	-20	-14.9	-12.4	
31-Dec-07	-20	-20	-20	-23	-21	-21	-21	-21	-21	-22	-22	-21	-18	-17	-17	-18	-18	-21	-21	-21	-21	-18	-14	-22	-20.1	-14.1	
Hourly Avg	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		
Hourly Max	1.4	1.1	1.5	1.6	2.0	1.5	0.8	0.7	1.4	1.8	2.1	2.2	2.3	2.5	2.3	2.0	1.5	0.6	0.1	0.1	1.2	0.8	2.1	1.4			

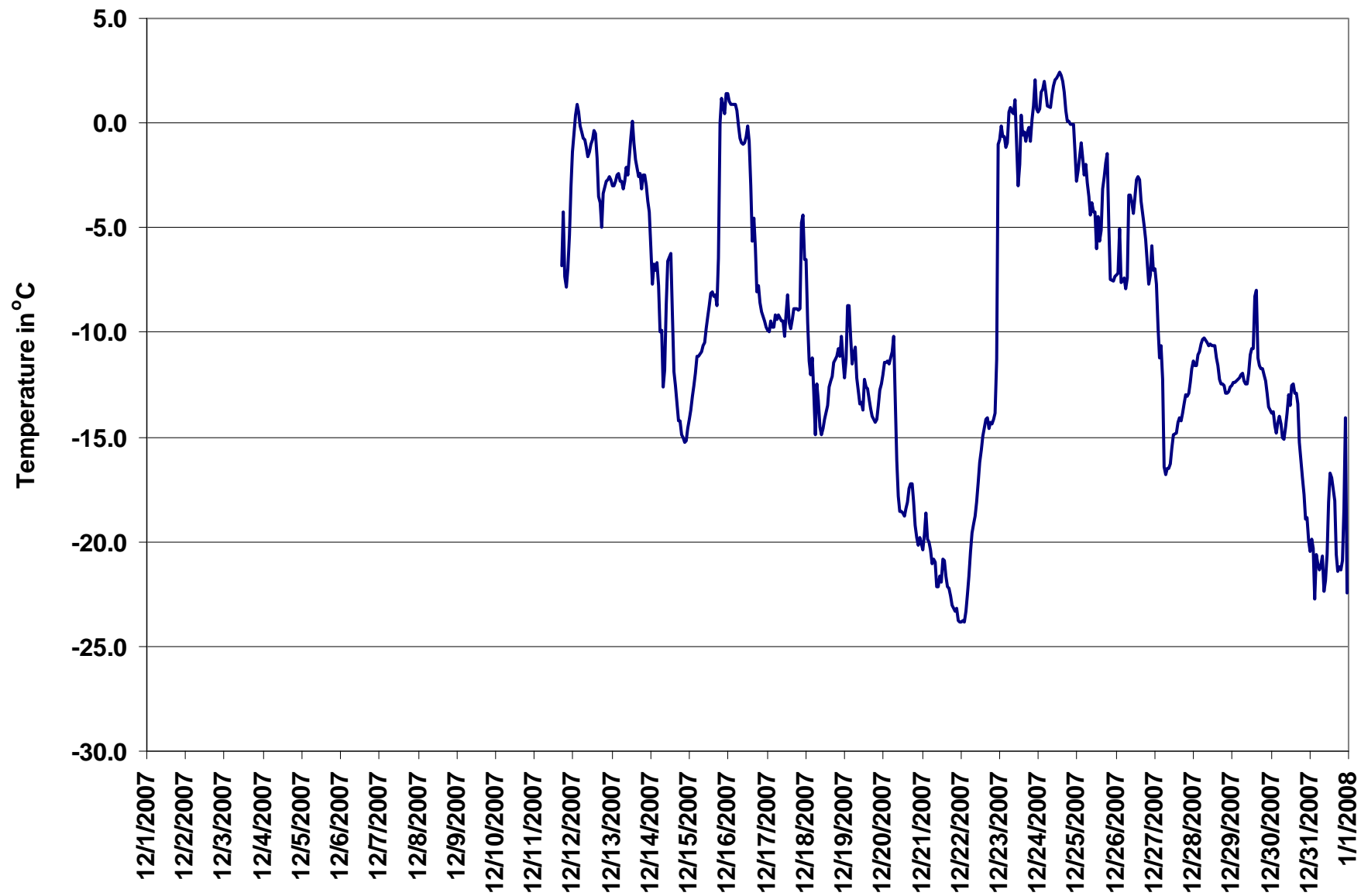


Figure 55. PASZA - Portable-Spirit River Temperature 1-hr Average Monthly Trend

PASZA - Portable-Spirit River Scalar Wind Speed Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

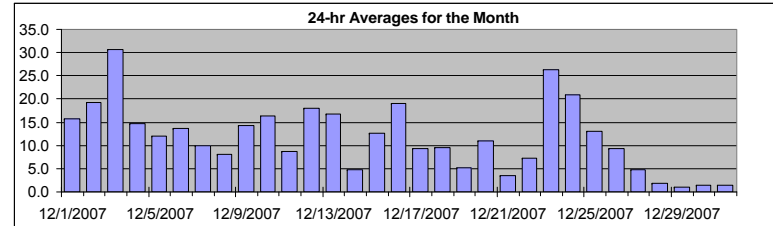
Wind Speed (WSs)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	55.0	km/hr	15-Dec	20:00 21:00
Maximum 24-hr Value:	30.6	km/hr	3-Dec	

Calm Time:	0 hrs	0% calms	Operational Time:	740 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	90.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	44.5	32.2	15.9	9.3	4.5	1.0	0.8	11.6 km/hr



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Dec-07	32	18	13	14	11	13	15	11	11	9	8	11	12	14	18	19	23	27	25	19	12	11	14	17	15.7	32.2	
2-Dec-07	11	11	10	7	6	11	9	9	15	15	8	10	18	19	32	37	24	27	33	31	27	27	32	32	19.2	37.2	
3-Dec-07	31	21	15	18	23	28	19	31	39	43	39	35	38	43	38	33	32	36	43	34	28	25	22	19	30.6	43.5	
4-Dec-07	19	20	15	18	17	15	13	14	18	14	14	15	16	17	15	14	13	11	11	12	12	13	13	13	14.7	20.0	
5-Dec-07	12	11	9	9	14	7	6	8	20	16	9	12	8	13	9	12	15	8	23	10	13	13	13	18	12.0	22.6	
6-Dec-07	21	18	13	12	16	17	11	10	15	16	14	18	15	13	12	10	8	14	12	19	18	9	8	8	13.7	21.3	
7-Dec-07	13	14	7	8	11	8	8	8	11	7	6	6	6	11	13	13	9	11	11	16	14	10	10	7	9.9	15.9	
8-Dec-07	6	7	6	5	5	7	9	13	8	9	7	5	5	7	10	7	13	7	8	14	13	9	7	9	8.1	14.2	
9-Dec-07	8	8	6	6	7	8	12	8	10	7	14	14	14	13	18	18	21	20	20	20	23	25	22	20	14.2	25.5	
10-Dec-07	15	13	14	11	12	17	17	20	23	21	10	28	15	11	20	23	18	18	19	14	15	12	14	13	16.3	27.7	
11-Dec-07	7	8	8	13	7	6	5	7	7	17	12	10	15	M	M	M	M	2	8	10	11	8	5	7	8.7	16.8	
12-Dec-07	14	16	16	18	15	13	14	10	14	15	13	16	14	14	18	18	23	25	22	22	25	27	28	25	18.1	27.5	
13-Dec-07	23	22	23	26	25	22	23	17	22	21	22	18	16	9	11	8	6	4	11	18	18	12	15	9	16.7	26.2	
14-Dec-07	6	6	6	8	5	10	5	4	3	4	9	6	5	8	4	3	2	5	4	4	2	1	2	1	4.7	10.2	
15-Dec-07	1	2	2	3	2	1	5	6	4	4	4	7	9	7	3	4	2	2	13	42	55	49	36	40	12.7	55.0	
16-Dec-07	42	44	45	32	22	18	24	21	23	22	25	19	5	9	8	11	16	17	12	11	9	4	8	10	19.0	44.6	
17-Dec-07	13	10	10	9	11	9	8	5	5	8	6	6	2	2	7	7	3	7	11	11	10	29	21	12	9.3	28.7	
18-Dec-07	23	9	7	9	13	13	15	29	16	5	6	6	5	7	6	5	4	5	5	5	8	10	7	10	9.5	28.7	
19-Dec-07	7	5	8	4	5	5	5	3	7	6	6	7	2	4	4	4	5	7	6	7	7	5	3	5	5.2	7.6	
20-Dec-07	6	4	8	6	4	5	6	14	18	20	21	17	15	14	12	14	15	12	10	8	7	8	9	8	10.9	21.3	
21-Dec-07	8	10	4	4	4	2	2	5	8	3	2	2	3	2	1	1	1	2	2	2	3	4	5	5	3.5	9.8	
22-Dec-07	5	4	3	4	4	2	4	6	3	6	8	5	9	5	4	7	4	5	4	5	6	8	20	41	7.2	41.0	
23-Dec-07	35	30	20	22	19	33	45	45	38	18	13	8	11	16	24	22	16	15	18	13	26	42	54	49	26.3	53.6	
24-Dec-07	48	33	35	29	22	28	33	30	30	24	23	20	17	18	16	14	13	10	8	6	8	10	16	12	21.0	47.7	
25-Dec-07	12	12	13	13	26	32	23	18	19	21	10	7	8	6	5	9	17	14	16	9	8	8	4	3	13.1	32.2	
26-Dec-07	3	5	5	6	3	4	7	12	18	19	20	15	9	9	8	10	8	9	10	8	10	9	8	6	9.2	20.2	
27-Dec-07	10	10	11	14	16	13	5	4	3	3	2	1	1	1	2	1	2	1	1	2	4	3	3	1	4.9	16.1	
28-Dec-07	1	3	2	1	1	1	3	4	3	2	2	3	2	2	3	2	1	1	1	1	1	1	1	1	1	1.9	4.2
29-Dec-07	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.6
30-Dec-07	1	1	1	3	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	2	1	2	3	3	1.4	2.7	
31-Dec-07	3	3	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	2	3	1	1	1.5	3.2	
1-hr Average	14.0	12.2	10.9	10.7	10.6	11.4	11.3	12.1	13.5	12.2	10.9	10.7	9.6	9.9	10.8	11.0	10.6	10.5	12.0	12.1	12.8	12.8	13.0	13.1			
Hourly Max	47.7	44.5	44.6	31.9	26.0	32.5	44.5	45.1	38.7	42.6	38.6	34.6	37.9	43.5	38.3	37.2	32.2	36.3	42.8	41.9	55.0	49.4	53.6	49.3			

PASZA - Portable-Spirit River Vector Wind Speed Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

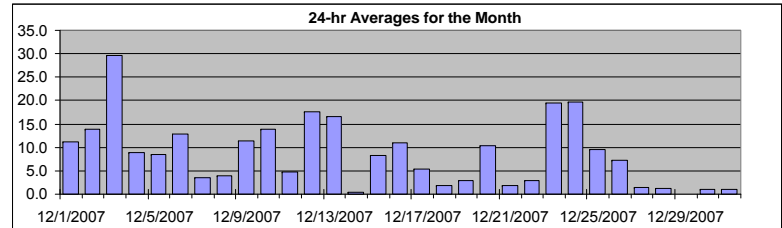
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	54.9	km/hr	15-Dec	20:00 21:00
Maximum 24-hr Value:	29.6	km/hr	3-Dec	



Calm Time:	0 hrs	0% calms	Operational Time:	740 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	90.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	44.4	31.8	15.0	8.3	3.1	0.8	0.4	24.4 km/hr

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max		
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	23:00
1-Dec-07	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07		32	15	12	14	11	13	14	11	11	9	8	11	11	14	18	19	23	27	25	19	3	8	14	16	11.2	31.8	
2-Dec-07		10	10	10	7	6	10	8	8	14	14	7	10	16	19	32	37	24	27	33	31	27	27	31	31	13.8	37.0	
3-Dec-07		30	20	15	18	23	28	19	31	39	43	38	34	38	43	38	33	32	36	43	34	27	25	21	19	29.6	43.4	
4-Dec-07		18	19	13	17	17	15	13	13	14	14	14	15	16	16	14	15	14	13	11	11	11	12	13	13	9.0	19.3	
5-Dec-07		11	11	8	9	13	7	5	6	19	16	9	11	7	12	6	12	15	7	22	9	12	4	6	6	8.4	21.8	
6-Dec-07		21	18	13	9	15	17	11	10	14	16	14	17	15	12	12	10	8	13	12	10	13	9	7	8	12.9	20.9	
7-Dec-07		7	13	6	6	10	7	7	1	10	6	4	3	5	7	12	9	7	10	11	16	14	10	10	6	3.4	15.7	
8-Dec-07		5	6	5	3	4	2	5	13	7	9	5	2	2	4	9	5	7	1	3	13	12	7	2	8	3.9	13.4	
9-Dec-07		6	7	4	4	6	7	10	4	8	2	13	14	14	12	17	17	20	19	20	19	23	25	22	20	11.4	25.2	
10-Dec-07		15	13	14	10	12	16	17	20	23	21	8	28	11	7	20	23	17	18	19	13	14	5	10	12	13.9	27.7	
11-Dec-07		5	6	7	12	5	4	2	1	3	12	11	8	14	M	M	M	M	1	6	9	10	8	4	7	4.8	13.7	
12-Dec-07		14	16	16	18	15	13	14	10	14	15	13	16	14	14	18	18	23	25	22	22	25	27	27	25	17.5	27.5	
13-Dec-07		23	22	23	26	25	22	23	17	22	21	22	18	16	9	11	8	6	3	10	18	18	12	15	9	16.7	26.1	
14-Dec-07		5	4	5	8	4	10	3	2	2	4	9	6	4	5	2	3	1	4	1	3	1	1	2	1	0.3	9.5	
15-Dec-07		1	2	2	3	2	0	5	6	4	3	4	7	9	6	2	2	1	10	42	55	49	36	40	8.3	54.9		
16-Dec-07		41	44	45	32	22	18	24	21	23	22	25	18	3	9	8	10	16	16	12	10	8	3	7	10	11.1	44.6	
17-Dec-07		12	10	10	9	11	9	8	5	4	7	5	5	1	2	6	5	3	6	10	11	4	29	21	10	5.4	28.6	
18-Dec-07		20	8	5	2	12	11	14	29	15	3	6	5	5	7	6	4	3	4	5	3	6	9	5	8	1.8	28.5	
19-Dec-07		3	4	6	2	3	1	4	2	7	4	5	7	1	3	3	4	4	7	6	6	7	5	3	5	2.8	6.7	
20-Dec-07		5	1	7	5	4	5	6	14	18	20	21	17	15	14	12	14	15	12	10	8	7	8	9	8	10.3	21.2	
21-Dec-07		7	10	4	1	3	2	2	4	7	1	1	0	2	1	1	1	0	2	1	1	3	4	4	5	1.9	9.5	
22-Dec-07		5	3	2	3	3	2	1	6	2	5	8	5	6	5	2	3	2	3	3	3	3	4	18	41	2.8	40.6	
23-Dec-07		34	30	20	22	19	32	44	45	38	17	13	6	6	13	23	20	14	15	17	13	24	42	53	49	19.5	53.5	
24-Dec-07		48	33	34	29	22	28	33	30	30	24	23	20	17	18	16	14	12	10	8	6	7	10	14	10	19.7	47.5	
25-Dec-07		11	12	13	13	26	32	23	18	19	21	9	6	8	6	3	8	17	13	15	8	7	7	4	3	9.4	32.2	
26-Dec-07		2	4	2	5	2	1	6	12	18	19	20	15	9	9	8	10	8	9	10	8	10	9	8	6	7.4	20.0	
27-Dec-07		10	6	11	13	16	10	5	1	2	2	2	1	1	1	1	1	1	2	1	0	1	4	2	3	1	1.5	16.0
28-Dec-07		1	2	2	1	1	1	3	4	3	2	2	3	2	2	3	2	1	1	1	1	1	1	1	1	1	1.2	4.2
29-Dec-07		1	1	1	1	1	1	0	1	2	3	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	N	2.6
30-Dec-07		1	0	1	3	1	1	1	1	1	1	1	1	1	0	1	1	1	1	2	2	1	2	3	3	1.0	2.6	
31-Dec-07		3	3	1	0	2	1	1	2	0	1	1	1	1	0	1	1	1	1	1	2	1	2	2	1	1	0.9	3.1
1-hr Vector		8.0	6.9	6.7	4.9	5.7	5.0	6.0	5.1	5.7	5.8	5.5	5.3	2.0	1.4	1.9	2.2	2.9	3.4	4.4	4.4	5.3	6.7	7.8	8.6			
Hourly Max		47.5	44.3	44.6	31.7	26.0	32.3	44.5	44.9	38.5	42.6	38.5	34.5	37.8	43.4	37.9	37.0	32.0	36.1	42.7	41.8	54.9	49.3	53.5	49.3			

PASZA - Portable-Spirit River Wind Direction Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

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Calm Time:	0 hrs	0% calms	Operational Time:	740 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	90.0%				
Percentile	99	95	75	50	25	5	1	Average
	354.2	331.7	275.2	241.5	129.7	24.8	4.7	261 deg

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	WD Sector	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	13	350	231	238	250	240	236	243	243	257	251	252	239	235	229	221	224	226	226	228	168	120	215	243	237	WSW	
2-Dec-07	292	249	278	273	281	286	242	289	18	27	292	292	20	38	54	53	30	22	31	27	28	28	39	38	20	NNE	
3-Dec-07	39	25	25	38	41	45	17	54	68	63	65	61	68	67	70	71	50	57	57	55	61	55	42	26	55	NE	
4-Dec-07	10	23	340	357	12	22	34	6	355	287	277	279	281	280	278	279	277	275	243	244	243	240	239	236	307	NW	
5-Dec-07	238	239	241	240	227	233	245	202	199	222	239	201	125	74	117	195	186	208	212	217	228	12	252	166	211	SSW	
6-Dec-07	230	234	246	259	237	235	241	239	235	235	241	231	243	252	242	251	244	234	232	260	321	232	256	271	245	WSW	
7-Dec-07	39	130	105	181	224	225	238	329	131	147	115	78	130	31	224	122	316	242	256	228	233	253	240	256	206	SSW	
8-Dec-07	250	204	207	174	248	142	259	233	239	207	251	194	194	81	199	258	98	51	129	107	99	117	132	207	176	S	
9-Dec-07	202	285	313	79	142	121	29	256	211	271	253	253	249	257	252	248	241	239	246	248	265	265	263	264	252	WSW	
10-Dec-07	260	259	265	257	249	237	237	232	229	233	254	226	63	222	212	213	191	226	236	167	197	274	254	234	231	SW	
11-Dec-07	204	346	7	50	58	330	42	45	77	345	13	298	319	M	M	M	M	251	250	3	339	241	260	261	343	NNW	
12-Dec-07	258	265	273	282	287	292	292	291	288	287	282	282	275	275	258	258	251	241	252	260	262	262	261	261	268	W	
13-Dec-07	262	264	263	261	262	262	263	266	258	259	259	263	263	272	244	262	254	243	265	264	264	268	264	269	262	W	
14-Dec-07	338	326	148	125	345	25	140	92	211	233	210	230	269	33	119	53	50	116	193	5	239	322	282	343	65	ENE	
15-Dec-07	352	291	290	271	275	56	94	91	81	96	117	110	85	86	311	345	334	5	252	233	233	231	229	253	233	SW	
16-Dec-07	252	253	251	261	269	273	262	264	262	262	256	257	19	132	72	110	127	96	85	88	42	302	313	303	257	WSW	
17-Dec-07	273	272	280	279	269	273	290	312	280	234	130	109	91	87	106	213	307	165	130	141	206	236	222	235	235	SW	
18-Dec-07	235	73	109	91	29	67	131	111	111	29	352	312	296	292	314	332	263	266	305	229	314	328	158	57	65	ENE	
19-Dec-07	138	329	236	163	316	196	205	312	6	39	5	339	327	14	268	287	292	287	299	296	281	297	303	273	300	WNW	
20-Dec-07	257	298	33	334	288	285	296	283	288	287	293	292	293	292	292	298	290	291	292	287	284	283	283	280	291	WNW	
21-Dec-07	283	267	274	45	225	145	200	200	215	225	24	357	339	278	180	13	305	356	6	96	290	305	305	301	275	W	
22-Dec-07	289	323	303	315	313	360	102	92	42	88	63	296	1	86	102	327	267	215	235	332	275	311	236	245	279	W	
23-Dec-07	251	252	259	259	258	249	249	241	239	252	255	28	147	89	143	133	122	153	173	206	227	236	234	231	230	SW	
24-Dec-07	237	251	257	263	268	262	260	261	262	264	266	269	271	280	278	281	284	281	282	285	326	274	328	330	267	W	
25-Dec-07	228	245	266	265	252	247	256	256	258	254	254	348	119	143	24	210	205	208	183	214	50	335	310	300	244	WSW	
26-Dec-07	297	182	289	86	55	163	343	255	242	235	229	254	266	281	291	291	289	286	282	270	268	283	280	287	264	W	
27-Dec-07	328	28	90	129	157	118	97	355	311	305	270	285	267	268	306	263	230	346	275	144	102	150	186	213	113	ESE	
28-Dec-07	325	277	275	289	309	335	82	88	90	101	88	81	85	78	88	93	115	137	141	112	106	109	96	106	86	E	
29-Dec-07	58	28	31	14	4	1	313	325	3	5	349	344	320	8	14	168	176	164	127	100	68	76	59	29	N	-	
30-Dec-07	8	350	1	265	215	285	300	327	274	315	339	355	356	309	354	5	183	270	223	250	292	267	259	274	285	WNW	
31-Dec-07	255	267	274	213	201	330	336	193	344	347	203	208	201	189	1	8	317	240	275	283	236	236	269	175	252	WSW	
Hourly Avg	267	272	267	267	268	262	262	259	252	266	266	268	302	351	229	238	241	239	236	245	260	263	254	258			

PASZA - Portable-Spirit River Standard Deviation of Wind Direction Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	740 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	90.0%			
Percentile	99	95	75	50	25	5	1
	88.5	76.1	44.5	20.3	8.6	3.6	2.8

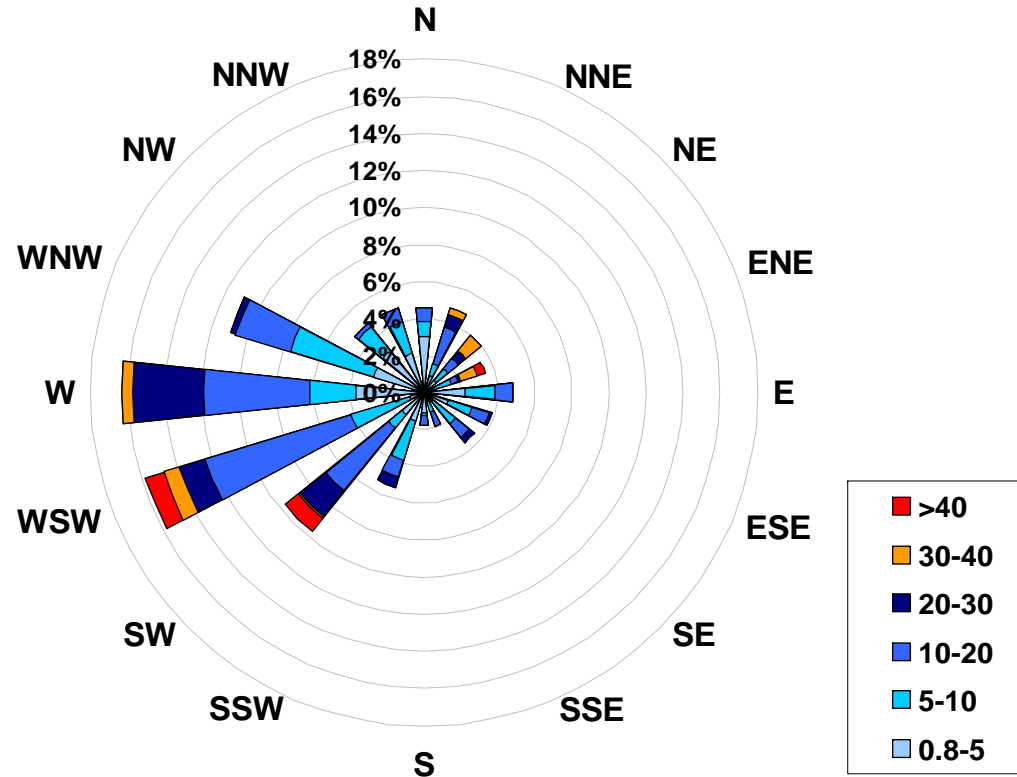
Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Dec-07	9	47	18	12	10	13	9	15	17	21	26	10	12	8	3	7	7	5	4	4	72	49	11	28	72.0
2-Dec-07	29	12	11	21	23	28	30	28	7	19	25	12	27	5	7	6	8	6	3	3	5	5	11	9	30.5
3-Dec-07	15	8	10	7	12	7	5	8	6	3	4	5	4	4	9	8	6	6	5	6	10	7	11	11	14.9
4-Dec-07	14	19	33	21	5	10	13	23	41	8	6	6	6	6	6	6	5	18	13	14	23	15	14	16	40.9
5-Dec-07	29	18	39	13	12	31	34	51	23	8	18	25	35	15	52	7	12	41	15	32	34	80	67	73	79.8
6-Dec-07	13	9	29	45	18	8	28	16	18	10	11	10	9	17	22	15	38	10	11	57	48	31	40	18	57.2
7-Dec-07	67	15	30	58	24	36	23	83	18	35	54	67	34	74	24	67	54	23	10	9	22	20	6	17	83.0
8-Dec-07	50	25	24	62	52	73	66	3	16	14	49	80	75	48	15	59	68	96	83	21	30	42	88	27	96.1
9-Dec-07	54	29	57	51	26	32	27	76	55	84	21	18	32	32	25	21	13	13	14	14	12	9	10	10	83.5
10-Dec-07	12	17	16	26	12	9	9	5	6	9	36	5	65	61	8	7	21	8	9	16	19	72	67	34	72.2
11-Dec-07	50	44	38	9	49	62	84	92	76	44	30	38	30	M	M	M	M	88	58	22	34	19	38	19	92.1
12-Dec-07	7	5	8	9	10	11	8	7	9	9	7	8	8	10	6	2	5	1	4	2	3	3	3	3	10.7
13-Dec-07	3	3	4	3	3	3	4	4	4	4	4	3	5	10	9	10	26	78	11	4	3	6	4	9	78.4
14-Dec-07	46	52	36	22	40	25	60	50	65	20	9	18	36	74	62	27	70	30	94	44	91	45	34	41	94.2
15-Dec-07	34	20	16	13	28	83	10	7	13	52	50	17	7	23	34	62	53	87	46	3	4	4	3	5	87.1
16-Dec-07	4	5	2	5	6	8	4	4	3	3	5	37	71	19	20	26	9	22	13	21	35	49	11	16	70.6
17-Dec-07	19	7	8	11	8	10	10	11	73	12	35	16	69	39	37	44	28	49	15	11	86	6	3	51	85.7
18-Dec-07	48	59	62	86	39	35	20	6	25	54	29	29	16	11	15	37	35	34	19	79	50	43	62	35	86.5
19-Dec-07	63	57	42	75	59	82	48	80	14	54	60	63	70	71	20	19	27	14	28	25	24	18	27	16	81.6
20-Dec-07	18	93	24	39	21	27	21	8	7	7	6	6	7	7	8	9	7	8	9	13	9	6	5	6	92.6
21-Dec-07	7	17	18	85	49	50	59	25	35	84	70	89	49	82	52	54	77	57	72	68	45	24	16	11	89.2
22-Dec-07	14	51	44	48	46	56	85	40	64	42	18	36	49	31	79	63	72	75	63	55	57	60	64	9	85.2
23-Dec-07	36	6	4	3	6	9	3	5	4	10	33	64	76	67	16	30	34	17	17	24	24	4	4	3	76.1
24-Dec-07	5	5	4	4	6	3	3	3	3	5	5	6	8	8	7	9	12	10	14	17	24	19	31	52	51.5
25-Dec-07	14	15	5	6	4	3	7	6	4	7	31	29	31	29	61	23	6	27	34	28	38	21	18	22	60.5
26-Dec-07	70	64	76	23	63	72	35	13	4	8	8	8	6	12	9	4	9	6	6	6	6	4	4	9	76.4
27-Dec-07	18	53	16	15	6	44	38	66	36	52	30	52	78	46	67	56	37	57	93	52	17	32	27	53	93.1
28-Dec-07	59	25	17	29	30	45	15	4	18	28	25	5	23	23	7	27	16	24	19	14	10	12	12	32	59.2
29-Dec-07	47	33	20	51	33	5	56	55	8	4	20	26	58	20	81	79	76	49	35	19	11	15	8	67	81.4
30-Dec-07	13	69	21	21	18	48	29	26	37	51	48	47	29	54	42	63	5	58	22	27	31	17	18	14	68.8
31-Dec-07	29	29	49	73	50	28	52	22	72	42	76	43	42	89	59	65	48	45	18	19	20	13	58	74	88.9
Hourly Max	70	93	76	86	63	83	85	92	76	84	76	89	78	89	81	79	77	96	94	79	91	80	88	74	

**1-hr Average Wind Rose (in km/hr) Located at the Portable-Spirit River Site
for December 2007**



Calms: 0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	206
5	to	10	186
10	to	20	231
20	to	30	71
30	to	40	29
	>	40	17
Total Non-Zero Values			740

PASZA – Valleyview Station

Monthly Summary Tables, Graphs and Roses

PASZA - Valleyview Sulphur Dioxide Monthly Summary

Station: Valleyview
 Station Owner: PASZA

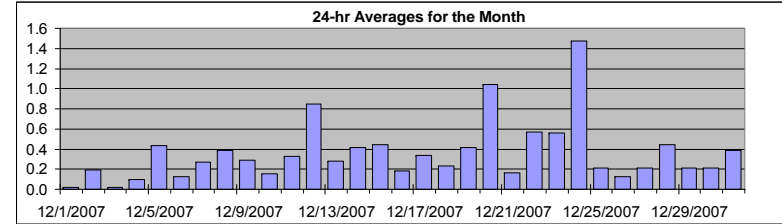
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: December 1, 2007 to January 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb
 Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	12.7	ppb	24-Dec	9:00 10:00
Maximum 24-hr Average:	1.5	ppb	24-Dec	



AIC Time:	31 hrs	Operational Time:	706 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.3	0.9	0.4	0.2	0.1	0.0	0.0	0.4 ppb	0.2 ppb

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
2-Dec-07	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.8
3-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
4-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
5-Dec-07	A	0	0	0	1	3	1	1	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0.4	3.4
6-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
7-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	1	1	1	1	0	0	0	0	0.3	0.8	
8-Dec-07	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	0.4	0.7
9-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	0.5
10-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
11-Dec-07	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	0.5
12-Dec-07	A	0	1	0	3	8	1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.8	7.5
13-Dec-07	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.7
14-Dec-07	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0.4	1.0
15-Dec-07	A	0	0	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	0.8
16-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.6
17-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0.3	1.1
18-Dec-07	A	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
19-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	P	P	P	P	0	0	0	0	0	0	2	2	0.4	2.2	
20-Dec-07	A	2	3	3	3	3	1	1	1	1	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	1.0	3.4
21-Dec-07	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	0.5	
22-Dec-07	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.6	1.5	
23-Dec-07	A	0	0	1	1	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	0.6	1.3	
24-Dec-07	A	0	0	1	0	0	0	0	6	13	3	2	1	1	0	0	1	1	1	1	0	0	1	0	1.5	12.7	
25-Dec-07	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8	
26-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.9	
27-Dec-07	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	
28-Dec-07	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.3	
29-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
30-Dec-07	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	0.9	
31-Dec-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	0	0.4	1.2	
Hourly Avg	N	0.2	0.3	0.3	0.4	0.6	0.3	0.3	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.3	0.3			
Hourly Max	0.0	2.3	3.2	3.3	3.5	7.5	1.3	1.1	6.2	12.7	3.4	1.6	1.1	1.5	1.2	1.3	1.0	1.3	1.7	1.4	0.7	0.9	1.8	2.2			

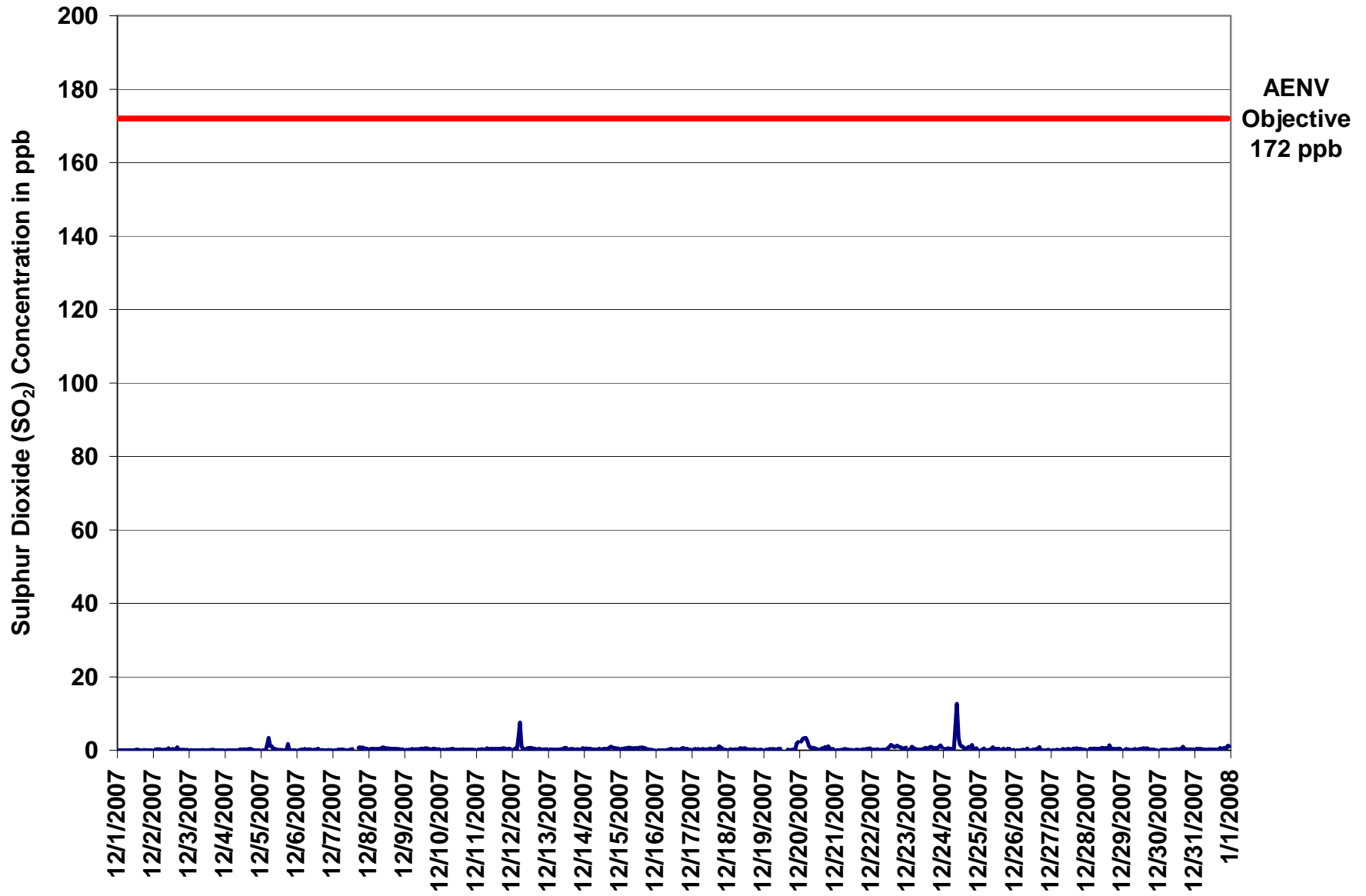


Figure 55. PASZA - Valleyview Sulphur Dioxide 1-hr Average Monthly Trend

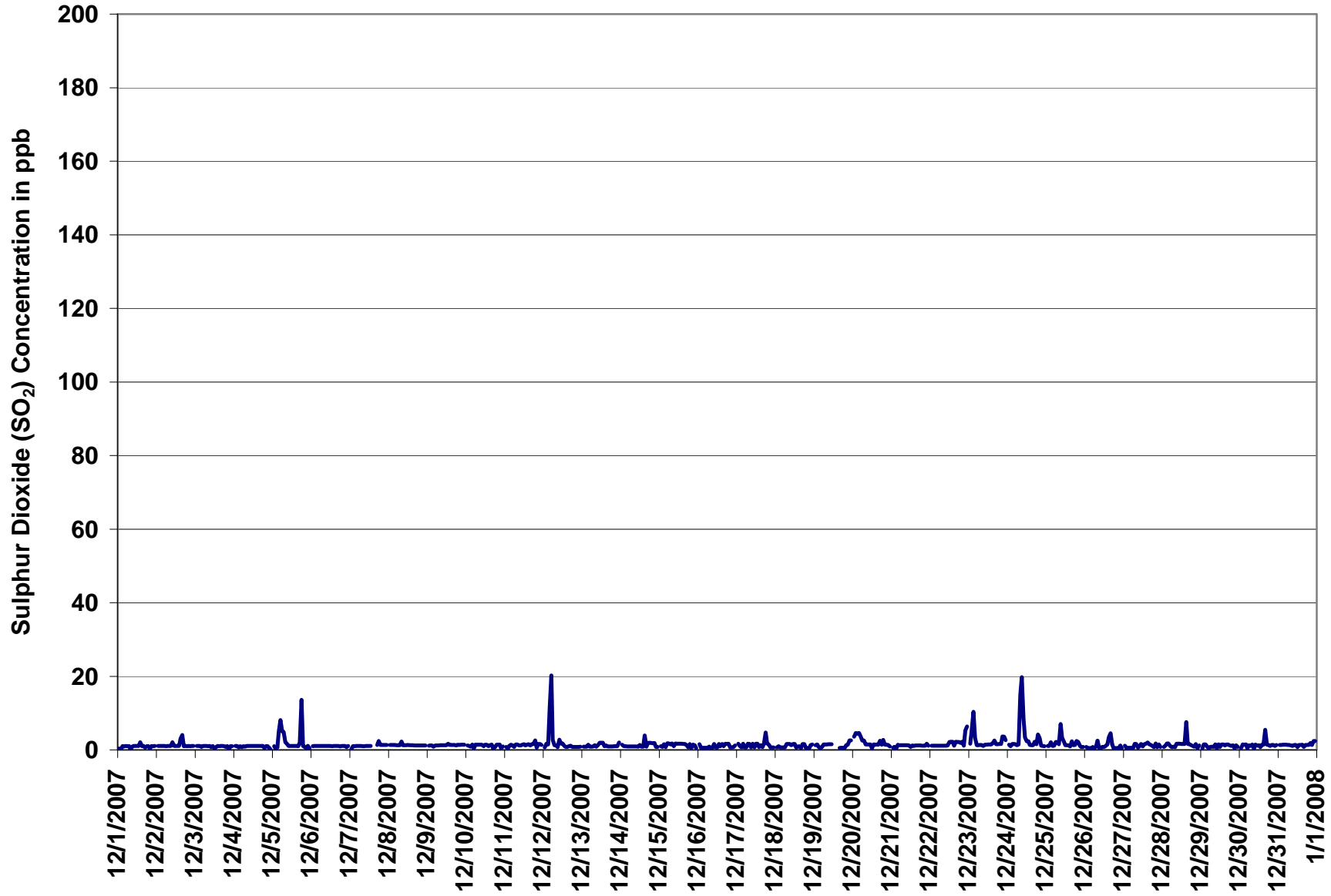
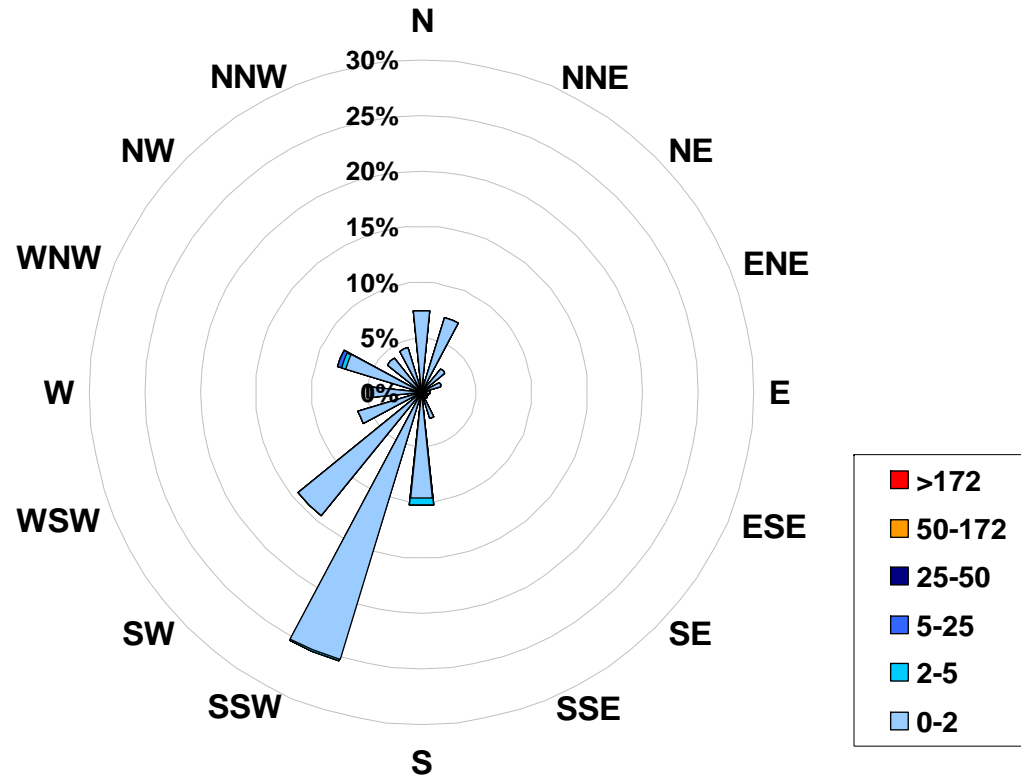


Figure 56. PASZA - Valleyview Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Valleyview Site for December 2007



Calms: 0%

Frequency Distribution of SO ₂ in ppb			Frequency (hrs)
Range			
0.0	<	2	694
2	to	5	9
5	to	25	3
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			706

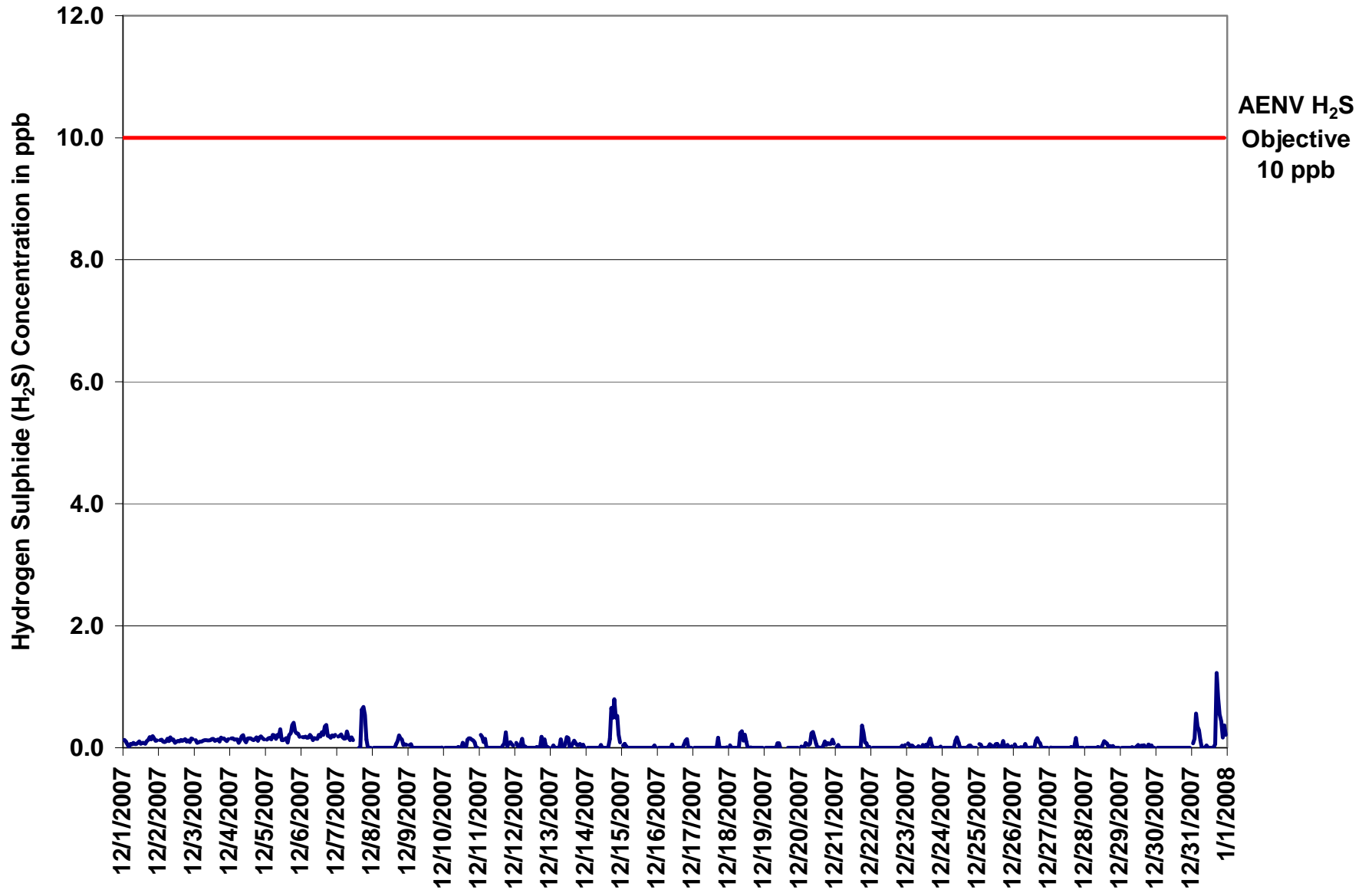


Figure 57. PASZA - Valleyview Hydrogen Sulphide 1-hr Average Monthly Trend

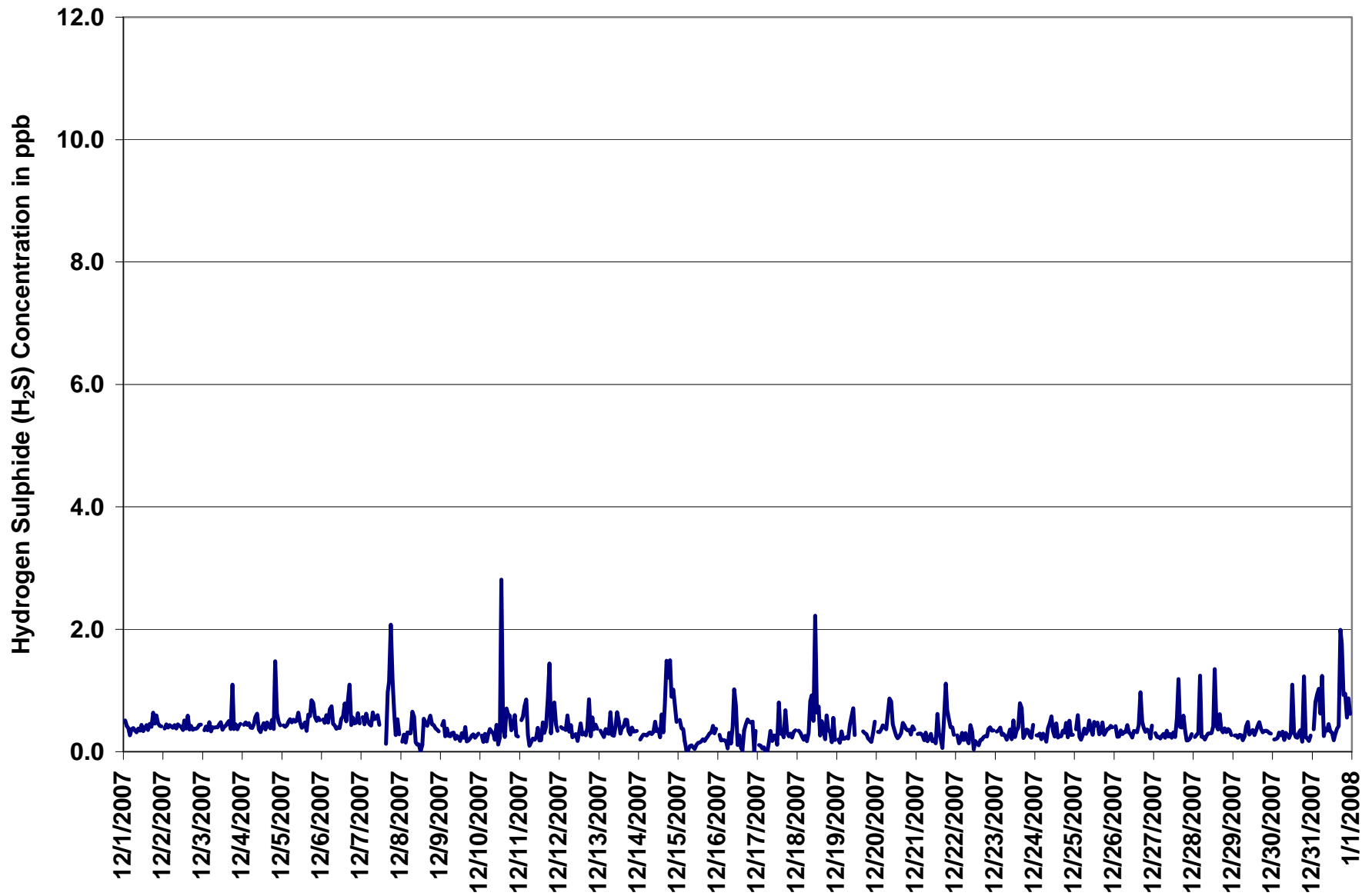
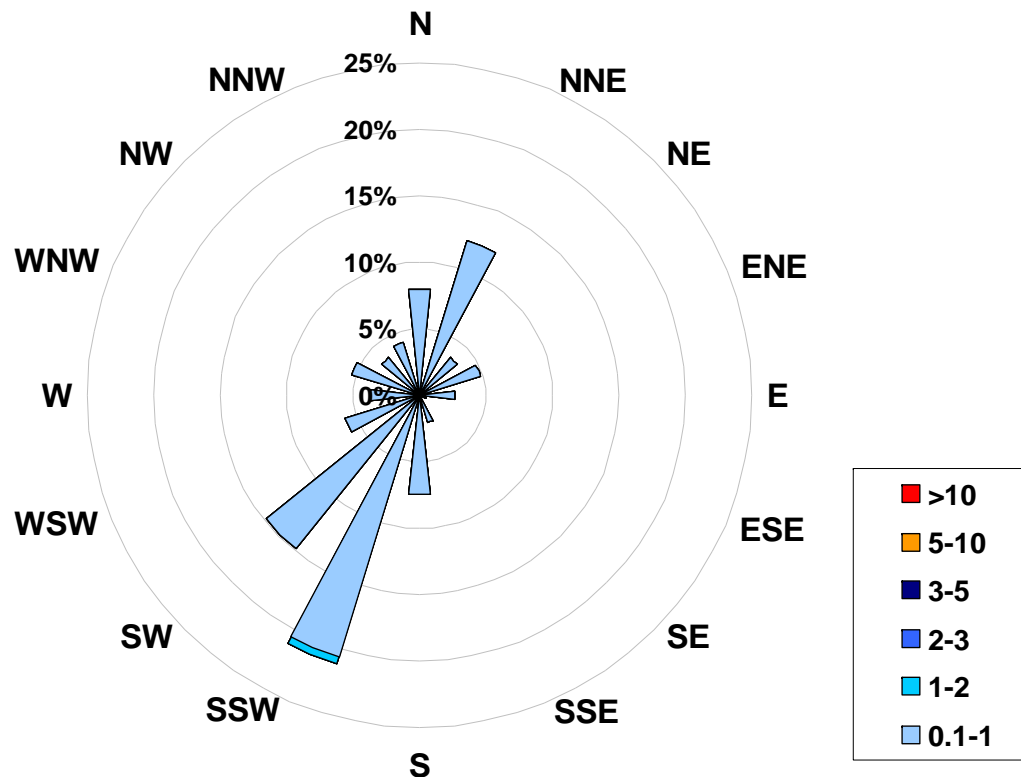


Figure 58. PASZA - Valleyview Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Hydrogen Sulphide (in ppb) Located at the Valleyview Site for December 2007



Calms: 0%

Frequency Distribution of H ₂ S in ppb Range			Frequency (hrs)
0.1	<	1	705
1	to	2	1
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			706

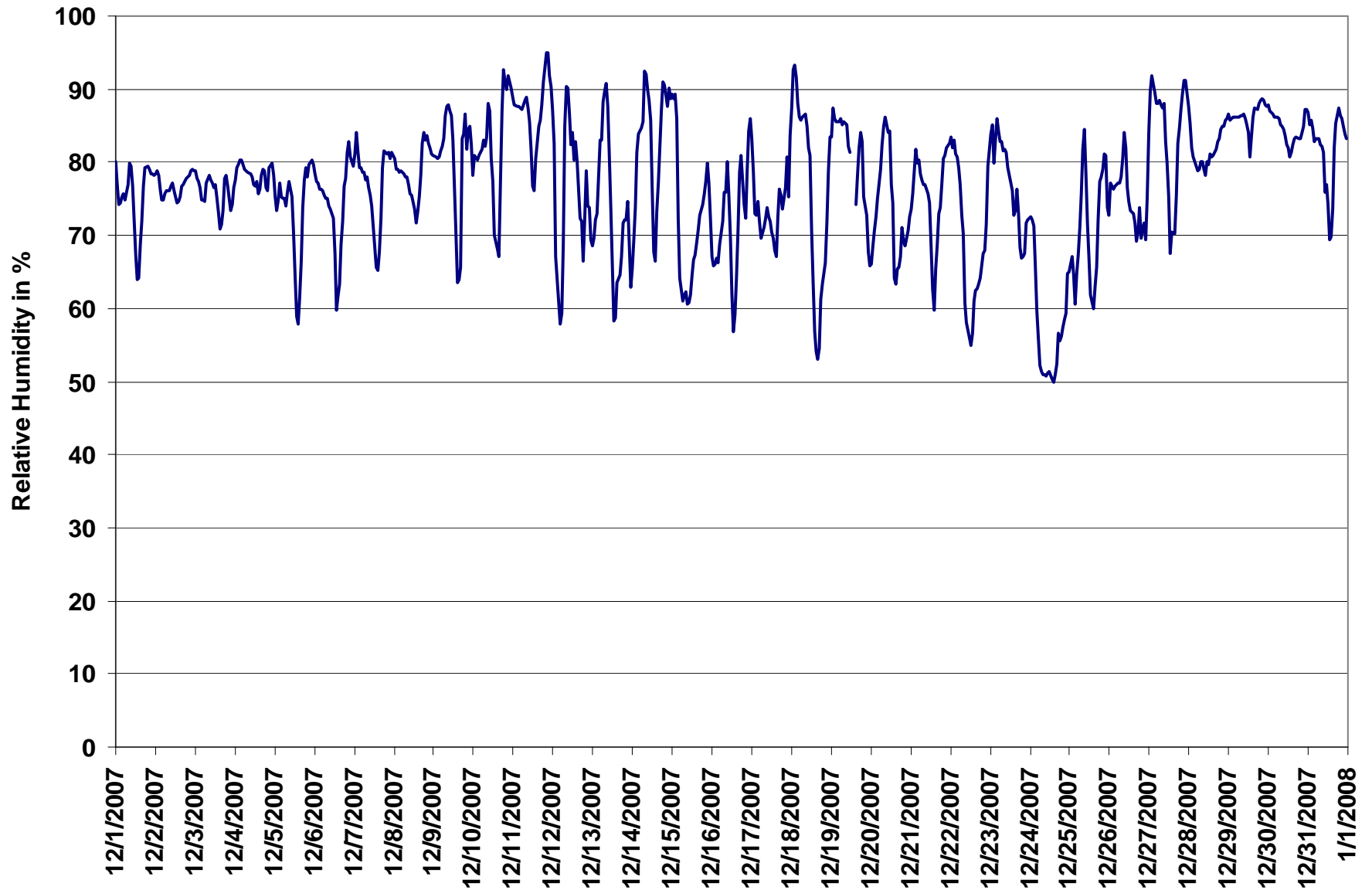


Figure 59. PASZA - Valleyview Relative Humidity 1-hr Average Monthly Trend

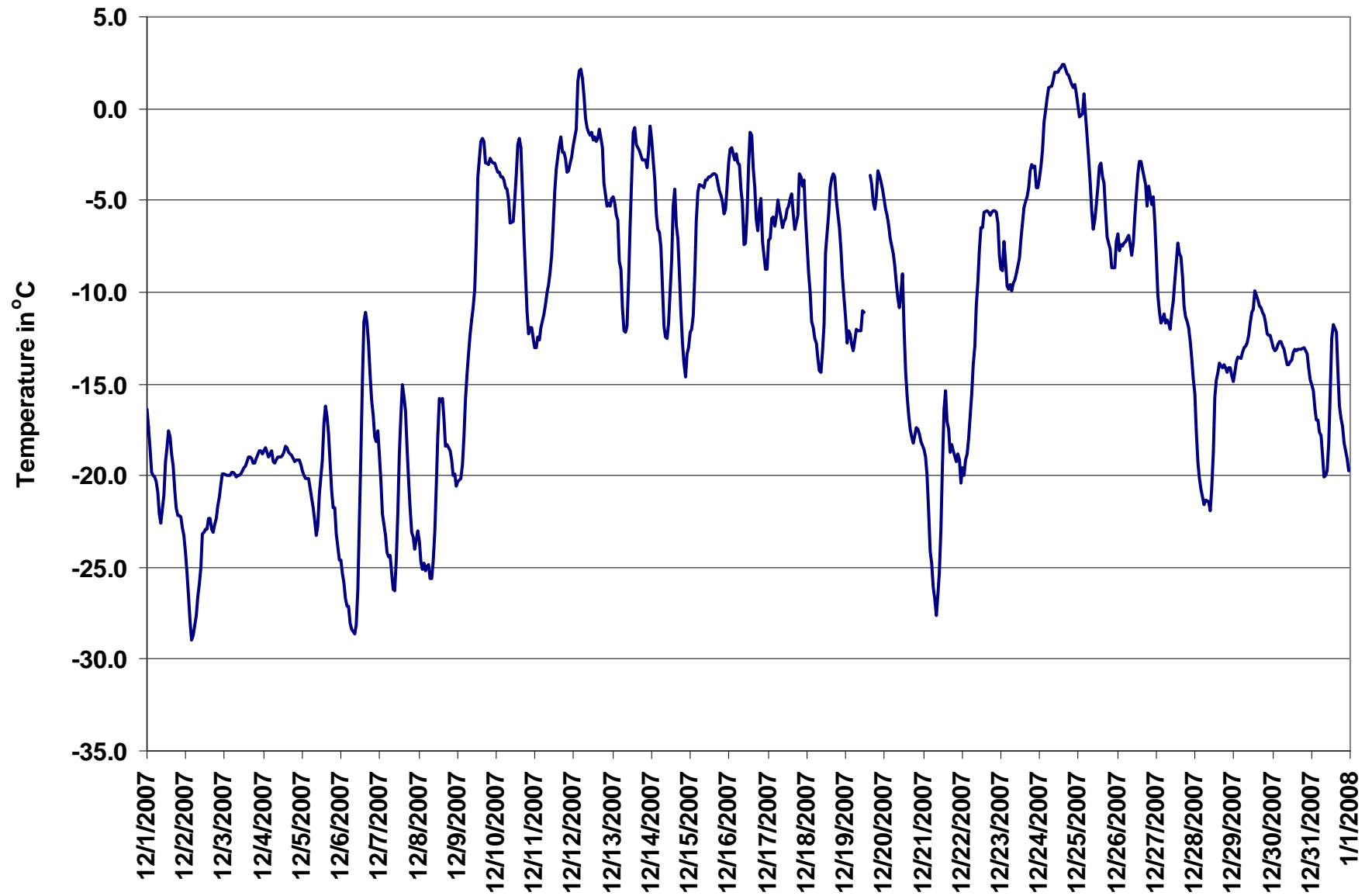


Figure 60. PASZA - Valleyview Temperature 1-hr Average Monthly Trend

PASZA - Valleyview Scalar Wind Speed Monthly Summary

Station: Valleyview
 Station Owner: PASZA

HOURLY AVERAGE TABLE

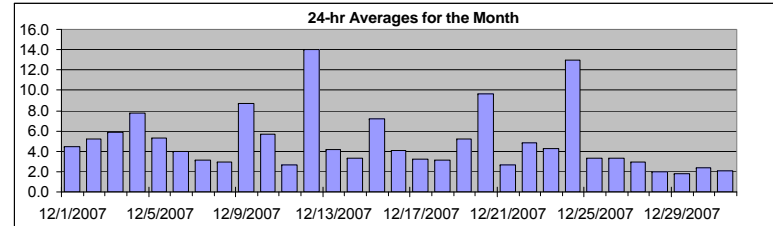
Wind Speed (WSs)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	22.8	km/hr	12-Dec	8:00 9:00
Maximum 24-hr Value:	14.0	km/hr	12-Dec	

Calm Time:	0 hrs	0% calms	Operational Time:	741 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.6%				
Percentile	99	95	75	50	25	5	1	AverageS
	21.0	14.3	5.8	3.6	2.3	1.3	1.0	4.9 km/hr



Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-07	11	10	14	11	6	3	3	3	3	4	3	3	6	4	4	4	2	3	2	1	1	1	2	2	4.4	14.3	
2-Dec-07	1	2	2	1	1	1	2	1	2	3	6	9	11	10	9	11	9	9	6	6	6	6	5	5	5.2	10.7	
3-Dec-07	5	6	5	4	5	5	5	5	6	8	9	7	8	8	7	6	7	7	6	4	4	3	5	5	5.8	8.8	
4-Dec-07	5	6	7	7	5	6	8	7	6	7	9	9	10	11	9	10	9	8	9	10	10	5	4	9	7.7	10.5	
5-Dec-07	8	7	7	5	9	9	10	5	4	3	4	6	7	5	4	6	2	4	2	4	4	1	3	5	5.3	10.4	
6-Dec-07	6	3	4	4	5	4	3	4	4	4	4	4	2	2	3	2	4	2	4	5	6	5	7	4	3.9	7.5	
7-Dec-07	3	1	4	4	6	6	3	1	3	6	4	4	3	3	3	3	2	2	2	1	3	3	3	2	3.1	6.1	
8-Dec-07	3	2	3	2	5	3	4	2	3	4	2	5	4	2	1	1	2	2	3	2	4	3	4	4	2.9	4.6	
9-Dec-07	3	4	4	4	4	5	5	4	3	4	5	6	5	6	11	10	12	14	19	17	17	17	17	17	8.7	19.0	
10-Dec-07	18	13	13	9	8	8	8	6	5	4	4	4	5	2	2	2	2	3	2	3	4	5	5	4	5.7	17.6	
11-Dec-07	4	3	3	2	2	2	2	2	3	4	3	4	3	4	3	5	3	1	2	2	1	1	2	2	2.7	4.7	
12-Dec-07	3	4	9	21	21	21	22	18	23	21	23	21	20	21	21	19	13	6	8	4	4	4	4	4	14.0	22.8	
13-Dec-07	5	6	5	5	4	4	2	2	3	4	5	7	6	4	4	3	4	3	2	2	3	4	4	9	4.2	9.4	
14-Dec-07	8	5	4	3	5	5	4	4	4	4	5	4	3	2	3	5	2	1	1	2	2	2	1	1	3.3	8.0	
15-Dec-07	2	2	2	5	13	13	14	13	12	8	10	11	11	7	8	8	5	4	5	4	4	4	6	5	7.2	14.1	
16-Dec-07	6	5	7	5	6	6	6	6	5	4	3	5	4	2	4	5	3	4	4	2	3	2	3	2	4.1	6.6	
17-Dec-07	2	2	2	3	3	3	3	3	3	3	3	1	2	1	1	1	2	7	8	8	5	4	3	4	3.2	7.7	
18-Dec-07	3	3	4	5	3	2	2	2	3	2	2	2	2	4	2	2	3	9	7	1	3	4	3	1	3.1	9.4	
19-Dec-07	4	4	3	2	2	2	4	3	2	2	1	2	2	P	P	P	7	4	4	5	6	15	9	14	5.2	15.2	
20-Dec-07	14	13	10	11	11	11	7	4	2	3	6	18	18	16	15	13	12	8	4	6	7	8	7	8	9.7	18.4	
21-Dec-07	5	4	1	2	3	2	3	2	4	4	4	4	4	3	2	3	1	2	2	2	2	2	2	1	2.7	5.5	
22-Dec-07	3	2	2	2	3	3	4	3	3	4	7	8	8	11	8	8	7	9	4	3	3	4	2	4	4.8	11.2	
23-Dec-07	3	5	5	3	3	5	7	7	6	4	4	3	3	2	3	2	3	4	7	5	6	4	3	6	4.3	6.8	
24-Dec-07	5	8	6	9	8	7	13	11	14	16	16	20	17	18	19	17	15	18	13	12	13	13	14	10	13.0	19.7	
25-Dec-07	7	4	6	7	3	4	4	4	2	1	2	2	2	3	3	3	2	2	4	3	2	5	1	3	3.3	7.4	
26-Dec-07	2	2	2	3	2	3	3	2	2	3	5	4	4	4	2	2	4	5	5	6	3	4	3	2	3.3	6.4	
27-Dec-07	3	3	2	2	4	2	2	2	1	3	3	3	1	2	4	5	4	4	5	4	4	3	3	3	3.0	5.3	
28-Dec-07	2	3	1	2	1	1	2	2	2	2	1	1	2	2	2	4	5	2	1	2	2	2	1	1	2.0	5.1	
29-Dec-07	2	2	2	2	2	1	1	2	1	1	1	2	1	1	1	3	3	3	3	2	1	2	1	2	1.8	3.2	
30-Dec-07	3	3	3	3	4	5	3	3	3	3	3	3	3	2	2	3	2	2	1	1	1	1	1	1	2.4	4.9	
31-Dec-07	1	1	1	1	1	2	2	3	4	2	1	3	3	2	1	2	1	2	3	2	3	3	3	3	2.1	3.6	
1-hr Average	4.8	4.4	4.5	4.9	5.1	4.9	5.2	4.4	4.5	4.6	5.1	5.9	6.0	5.4	5.4	5.6	5.0	5.0	4.6	4.5	4.7	4.2	4.3	4.7			
Hourly Max	17.6	13.2	14.3	21.4	21.0	21.1	21.6	18.4	22.8	21.4	22.7	21.0	19.8	20.7	21.0	18.8	14.6	18.4	19.0	17.3	16.9	17.2	16.7	17.3			

PASZA - Valleyview Vector Wind Speed Monthly Summary

Station: Valleyview
Station Owner: PASZA

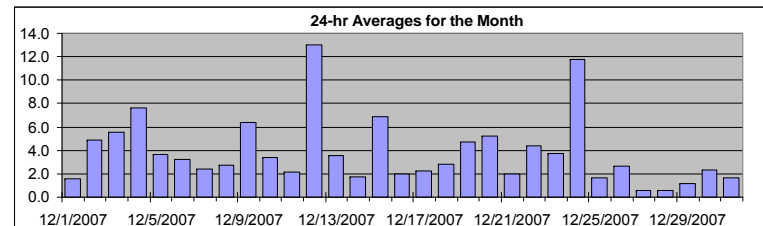
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

Maximum 1-hr Average:	22.7	km/hr	12-Dec	8:00 9:00
Maximum 24-hr Value:	13.0	km/hr	12-Dec	



Calm Time:	0 hrs	0% calms	Operational Time:	741 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.6%				
Percentile	99	95	75	50	25	5	1	AverageV
	20.9	14.2	5.6	3.4	2.0	0.7	0.3	4.0 km/hr

Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
	Hour Start 0:00	Hour End 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Dec-07	11	10	14	10	6	2	3	2	3	4	3	2	6	4	4	2	3	2	1	1	1	2	2			
2-Dec-07	1	2	2	0	1	0	2	1	2	3	6	9	11	10	9	11	9	9	6	6	6	5	5			
3-Dec-07	5	5	4	4	5	5	4	5	6	8	9	7	7	8	7	6	7	7	6	4	4	3	4			
4-Dec-07	5	6	7	7	5	6	8	7	6	7	9	9	10	10	9	10	9	8	9	10	10	5	4			
5-Dec-07	8	7	7	5	8	9	10	5	3	3	4	6	7	5	4	6	1	4	2	4	4	1	2			
6-Dec-07	5	3	4	3	5	2	3	4	3	4	4	4	1	2	2	2	4	2	4	5	5	7	3			
7-Dec-07	2	1	4	4	6	6	3	1	3	6	4	3	3	2	2	3	0	1	1	1	3	3				
8-Dec-07	2	2	3	2	4	3	3	2	3	4	2	4	4	1	1	1	0	1	2	2	4	3				
9-Dec-07	3	4	3	4	4	4	5	4	3	4	5	6	4	3	11	10	11	14	19	17	17	17				
10-Dec-07	18	13	12	9	8	8	8	6	5	3	4	4	5	2	2	1	2	3	2	3	4	5				
11-Dec-07	4	3	3	1	1	2	2	2	3	3	3	4	3	3	2	4	2	1	2	1	0	1				
12-Dec-07	2	4	9	21	21	21	21	18	23	21	23	21	20	21	21	19	13	6	8	4	4	4				
13-Dec-07	5	5	4	5	4	4	2	2	2	4	5	7	6	4	4	3	4	3	2	2	3	4				
14-Dec-07	8	5	3	3	5	5	3	3	4	4	5	4	3	2	2	5	2	1	1	0	1					
15-Dec-07	1	2	2	5	13	13	14	13	12	7	10	11	11	7	8	8	5	4	5	4	4	3				
16-Dec-07	6	4	6	5	5	6	6	5	4	3	3	5	3	2	1	4	3	4	3	1	1					
17-Dec-07	2	2	2	3	3	3	3	3	3	3	3	1	1	1	1	1	2	6	7	6	4					
18-Dec-07	3	3	4	5	3	2	2	1	2	1	2	2	4	2	1	2	9	7	1	3	4					
19-Dec-07	2	3	3	2	1	2	4	2	2	1	0	2	P	P	P	6	4	4	5	6	15					
20-Dec-07	14	13	9	11	10	11	6	3	2	2	6	18	18	16	15	13	12	7	4	6	7					
21-Dec-07	5	4	1	2	2	2	3	2	3	4	4	4	4	3	1	2	1	2	1	1	1					
22-Dec-07	3	1	2	2	3	2	4	3	2	4	7	7	8	11	8	8	7	9	4	2	2					
23-Dec-07	2	5	5	3	3	5	7	7	6	4	4	2	3	0	1	2	1	4	6	5	6					
24-Dec-07	5	8	6	9	8	7	12	11	14	15	16	20	17	18	19	17	15	18	13	11	13					
25-Dec-07	7	4	5	7	3	4	4	4	2	1	2	2	2	3	3	1	1	1	4	2	0					
26-Dec-07	2	2	1	3	2	3	3	0	1	3	5	4	4	3	2	2	4	5	4	6	2					
27-Dec-07	2	2	2	1	4	2	2	2	1	2	3	2	1	1	4	5	4	4	5	4	4					
28-Dec-07	2	3	1	1	1	0	2	2	1	1	0	0	1	1	2	3	5	2	1	2	2					
29-Dec-07	2	2	2	2	1	0	1	2	1	1	1	0	1	1	1	3	2	3	2	1	2					
30-Dec-07	3	3	3	3	4	5	3	2	3	2	3	2	3	2	2	3	2	2	1	1	0					
31-Dec-07	0	1	0	0	1	1	2	3	2	1	1	3	3	2	0	1	1	2	3	2	3					
1-hr Vector	1.7	1.4	1.4	2.1	2.6	2.9	2.7	2.3	2.3	2.1	2.2	2.2	2.1	2.1	2.4	2.3	2.0	1.9	1.9	2.1	2.0					
Hourly Max	17.6	13.1	14.2	21.3	20.8	20.9	21.4	18.3	22.7	21.3	22.6	20.9	19.7	20.6	20.9	18.7	14.6	18.3	18.8	17.1	16.8					

PASZA - Valleyview Standard Deviation of Wind Direction Monthly Summary

Station: Valleyview
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2007 to January 1, 2008

Summary

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Determined by the Yamartino 15-min interval calculation

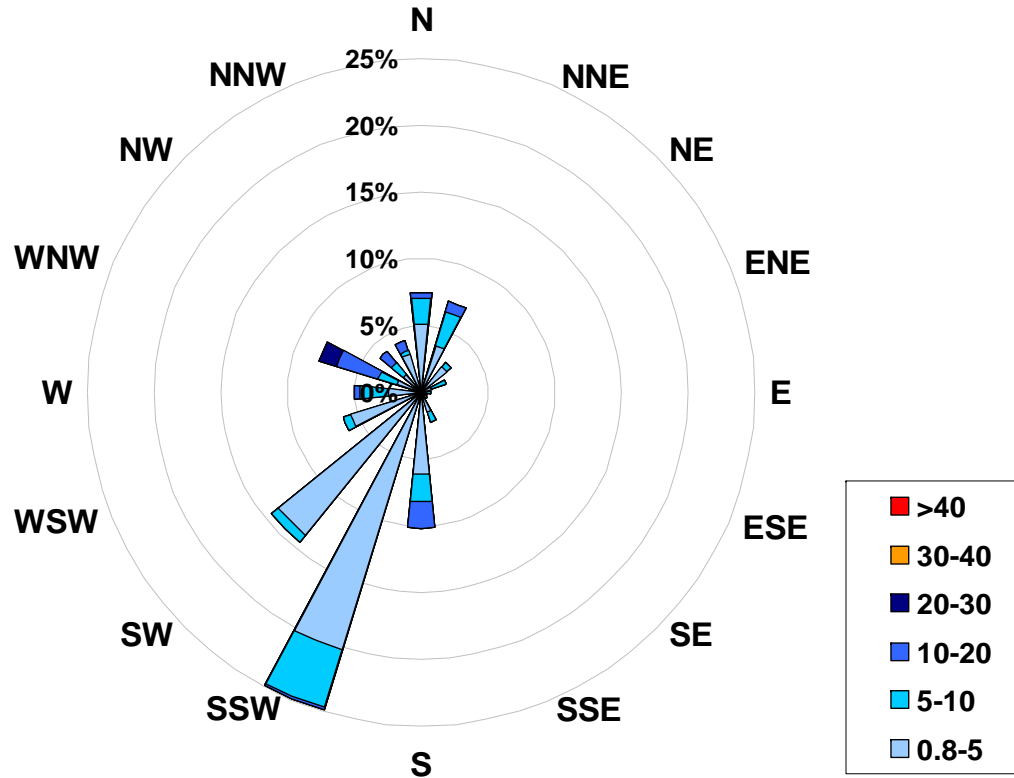
Calm Time:	0 hrs	0% calms	Operational Time:	741 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	99.6%			
Percentile	99	95	75	50	25	5	1
	87.0	74.5	37.1	16.5	9.3	5.9	4.3

C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Dec-07	10	10	7	8	9	31	12	53	11	9	11	31	11	31	29	38	16	6	20	61	39	47	24	59	61.3
2-Dec-07	75	41	36	86	52	79	63	84	21	17	12	8	8	7	9	10	7	7	9	9	7	10	10	13	86.3
3-Dec-07	10	14	14	13	12	13	35	46	10	11	9	14	15	14	18	17	13	10	13	16	13	38	14	11	45.7
4-Dec-07	10	11	8	9	9	11	7	7	9	8	5	7	5	4	8	7	6	8	8	7	7	10	13	8	12.6
5-Dec-07	16	13	14	14	15	13	10	13	20	7	12	6	8	8	22	6	42	16	23	6	11	70	26	15	69.8
6-Dec-07	17	11	18	25	10	67	31	14	22	8	10	24	54	26	47	49	9	38	21	27	18	20	9	48	66.6
7-Dec-07	39	45	22	13	6	10	69	65	12	14	13	34	30	34	82	26	88	86	72	49	6	8	15	18	87.7
8-Dec-07	19	30	21	18	20	13	10	19	12	6	16	11	7	42	56	83	92	54	17	40	13	11	7	12	91.8
9-Dec-07	11	19	10	8	16	9	15	15	22	13	14	9	22	69	10	13	11	10	8	7	7	7	7	7	69.1
10-Dec-07	4	6	9	7	9	8	9	10	12	34	8	8	7	50	19	21	21	17	18	16	9	5	6	8	49.8
11-Dec-07	4	9	29	61	70	26	32	33	17	26	18	20	13	36	38	19	63	63	17	62	80	68	63	67	79.6
12-Dec-07	65	24	26	8	8	8	7	7	6	6	6	7	7	7	5	5	9	11	8	21	5	8	3	3	64.9
13-Dec-07	5	3	18	9	10	19	40	6	9	10	12	13	4	8	9	14	6	31	11	19	8	9	25	6	39.7
14-Dec-07	8	11	37	20	14	8	25	20	9	8	9	19	19	22	61	10	53	59	78	85	54	54	34	57	84.8
15-Dec-07	37	24	42	11	9	7	7	7	7	13	10	8	9	10	8	7	11	11	7	10	14	15	4	6	41.6
16-Dec-07	5	20	9	19	6	6	8	27	42	39	42	8	23	55	80	22	22	14	25	66	59	34	22	72	79.6
17-Dec-07	30	50	31	16	10	9	18	9	9	13	28	59	31	73	57	52	49	26	52	41	17	23	46	12	73.0
18-Dec-07	18	14	15	8	14	19	43	50	22	50	20	24	43	50	80	43	5	6	17	8	16	29	91	72	91.3
19-Dec-07	53	22	13	41	80	18	16	44	39	73	82	27	P	P	P	9	11	13	14	31	8	11	6	6	81.5
20-Dec-07	6	7	14	10	12	8	22	29	41	72	21	9	12	10	10	12	8	25	15	8	7	6	6	7	72.4
21-Dec-07	16	6	53	27	40	38	20	19	20	15	12	7	14	21	70	21	50	27	62	54	87	79	52	35	86.7
22-Dec-07	15	34	48	33	22	49	44	58	51	14	8	16	24	8	10	17	8	9	20	43	39	44	41	16	57.8
23-Dec-07	36	10	10	15	13	5	9	5	7	12	15	45	33	96	71	74	57	25	10	9	10	28	20	13	96.1
24-Dec-07	22	5	17	5	6	14	8	6	10	8	6	7	7	7	7	6	6	7	8	8	8	7	7	12	22.5
25-Dec-07	11	19	35	23	8	7	12	5	17	21	11	12	10	17	43	63	74	73	36	63	97	38	74	80	97.1
26-Dec-07	26	45	36	31	28	22	14	87	87	38	5	23	12	12	30	14	18	13	22	6	35	21	49	47	87.1
27-Dec-07	33	31	48	66	14	15	37	26	50	23	18	65	61	69	10	7	6	10	9	12	15	30	33	16	68.7
28-Dec-07	41	8	71	51	64	78	14	46	68	59	77	81	61	62	26	18	17	26	68	31	35	75	37	55	81.4
29-Dec-07	13	36	12	28	70	78	71	30	63	17	24	90	45	38	22	22	38	17	11	22	65	47	68	16	89.6
30-Dec-07	21	6	14	18	12	11	15	15	12	10	14	20	9	22	21	8	16	21	44	77	86	84	80	68	85.8
31-Dec-07	72	48	70	87	32	41	24	6	61	80	54	13	8	36	91	64	79	17	11	36	8	26	18	24	91.2
Hourly Max	75	50	71	87	80	79	71	87	87	80	82	90	61	96	91	83	92	86	78	85	97	84	91	80	

1-hr Average Wind Rose (in km/hr) Located at the Valleyview Site for December 2007



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	515
5	to	10	149
10	to	20	67
20	to	30	10
30	to	40	0
	>	40	0
Total Non-Zero Values			741

PASZA

Monthly Passive Data Summary

Table 1. PASZA Passive Stations for December 2007

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
17a	Poplar	0.5	22.5	3.5	
17b	Poplar	0.4	24.2	3.3	
19a	Wanham	0.7	31.7	1.6	
19b	Wanham	0.2	32.2	2.4	
23a	Bear lake	0.3	22.2	4.0	
23b	Bear Lake	1.9	24.1	3.8	
35a	Jean Cote	0.3	29.3	2.1	
35b	Jean Cote	0.4	29.5	2.0	
46a	Little Smoky	0.7	17.8	5.5	
46b	Little Smoky	0.3	17.8	5.3	
58a	Queen Elizabeth Park	2.2	31.2	2.0	
58b	Queen Elizabeth Park	0.5	30.1	2.3	
49a	Grande Prairie HP	0.5	14.4	16.5	
49b	Grande Prairie HP	0.2	14.5	13.7	
1	Silver Valley	0.2	28.2	2.3	08-27-081-11 W6M
2	Bay Tree	0.2	28.1	1.5	13-16-078-13 W6M
3	Forth Creek	0.6	31.5	1.5	04-13-082-07 W6M
4	Gordondale	0.5	33.3	1.9	04-34-078-10 W6M
5	Boone Creek	0.3	22.4	2.3	01-23-076-11 W6M
7	Steeprock Creek	0.3	28.7	1.4	09-35-072-13 W6M
9	Spirit River	0.2	27.3	2.5	08-12-079-07 W6M
10	Woking	0.4	31.7	1.3	01-13-076-07 W6M
11	Webber Creek	0.5	23.8	3.2	09-36-074-09 W6M
12	Hythe	0.4	23.1	3.1	14-36-072-11 W6M
14	Sylvester	0.2	22.5	1.5	08-06-069-12 W6M
16	Beaverlodge	0.3	26.8	5.2	15-36-071-10 W6M
17	Poplar	0.5	23.3	3.4	13-06-073-08 W6M
18	Saddle Hills	1.8	29.5	2.1	04-25-074-07 W6M
19	Wanham	0.4	31.9	2.0	16-22-077-03 W6M
20	Shaftesbury	0.5	24.6	2.0	04-03-082-23 W5M
21	Eaglesham	0.2	24.0	2.1	16-21-079-25 W5M
23	Bear Lake	1.1	23.2	3.9	15-31-072-06 W6M

Table 1. PASZA Passive Stations for December 2007 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	0.3	21.2	4.5	12-31-070-08 W6M
25	Pinto Creek	0.3	24.1	2.4	04-24-069-11 W6M
26	Flyingshot	0.1	19.5	5.9	15-36-070-07 W6M
27	Grande Prairie I	0.2	14.3	14.0	08-15-071-06 W6M
28	Clairmont Lake	0.3	25.2	3.6	09-06-073-04 W6M
29	Smoky Heights	0.2	24.5	3.7	04-06-075-02 W6M
30	Fitzsimmons	0.3	19.7	3.3	15-36-072-03 W6M
32	Gold Creek	0.3	12.2	5.0	06-33-067-05 W6M
33	Wapiti	0.4	21.7	3.7	02-25-071-03 W6M
34	Puskwaskau	0.2	25.4	1.3	15-35-074-25 W5M
35	Jean Cote	0.3	29.4	2.0	12-35-079-21 W5M
36	Guy	0.3	30.7	1.7	03-04-076-22 W5M
37	Crooked Creek	0.5	23.0	3.6	16-01-071-26 W5M
38	Karr Creek	N/A	N/A	N/A	10-16-065-02 W6M
39	Clouston Creek	0.2	25.6	2.2	12-01-073-22 W5M
40	McLennan	0.2	27.7	1.9	03-29-077-19 W5M
41	Valleyview	0.1	26.3	2.9	09-30-069-22 W5M
42	Sunset House	0.2	33.0	1.2	05-32-070-19 W5M
43	High Prairie	0.3	29.4	2.0	16-13-074-17 W5M
44	Peavine	0.3	22.8	1.8	03-05-079-15 W5M
45	Gift Lake	0.7	21.3	1.9	10-07-079-12 W5M
46	Little Smoky	0.5	17.8	5.4	12-01-065-21 W5M
47	Kinuso	0.5	21.5	2.3	12-10-073-10 W5M
48	Deer Mountain	0.4	27.5	1.0	15-22-068-09 W5M
49	Grande Prairie HP	0.3	14.4	15.1	17-26-071-06 W6M
50	Clear River	0.2	29.6	1.9	SE-03-084-12 W6M
51	Bear Canyon	0.3	24.5	2.4	SE-28-085-12 W6M
52	Worsley	0.7	20.5	2.8	NE-34-085-07 W6M
53	Hines Creek	0.3	26.9	1.5	SW-09-084-04 W6M
54	Ronan	N/A	N/A	N/A	SE-03-082-04 W6M
55	Cadotte Lake School	0.3	16.6	2.8	NE-23-086-16 W5M
56	Simon Lake Store	0.8	24.5	1.9	SE-32-086-17 W5M
57	Dixonville	0.2	10.5	1.9	SE-14-087-24 W5M
58	Queen Elizabeth Park	1.4	30.7	2.2	NW-19-083-23 W5M
59	Blue Sky	0.4	28.2	3.0	SW-35-081-02 W6M
60	Gerry Lake	0.4	25.4	1.3	SW-22-084-02 W6M
61	Musreau Lake	0.2	28.7	1.1	NE-22-064-05 W6M

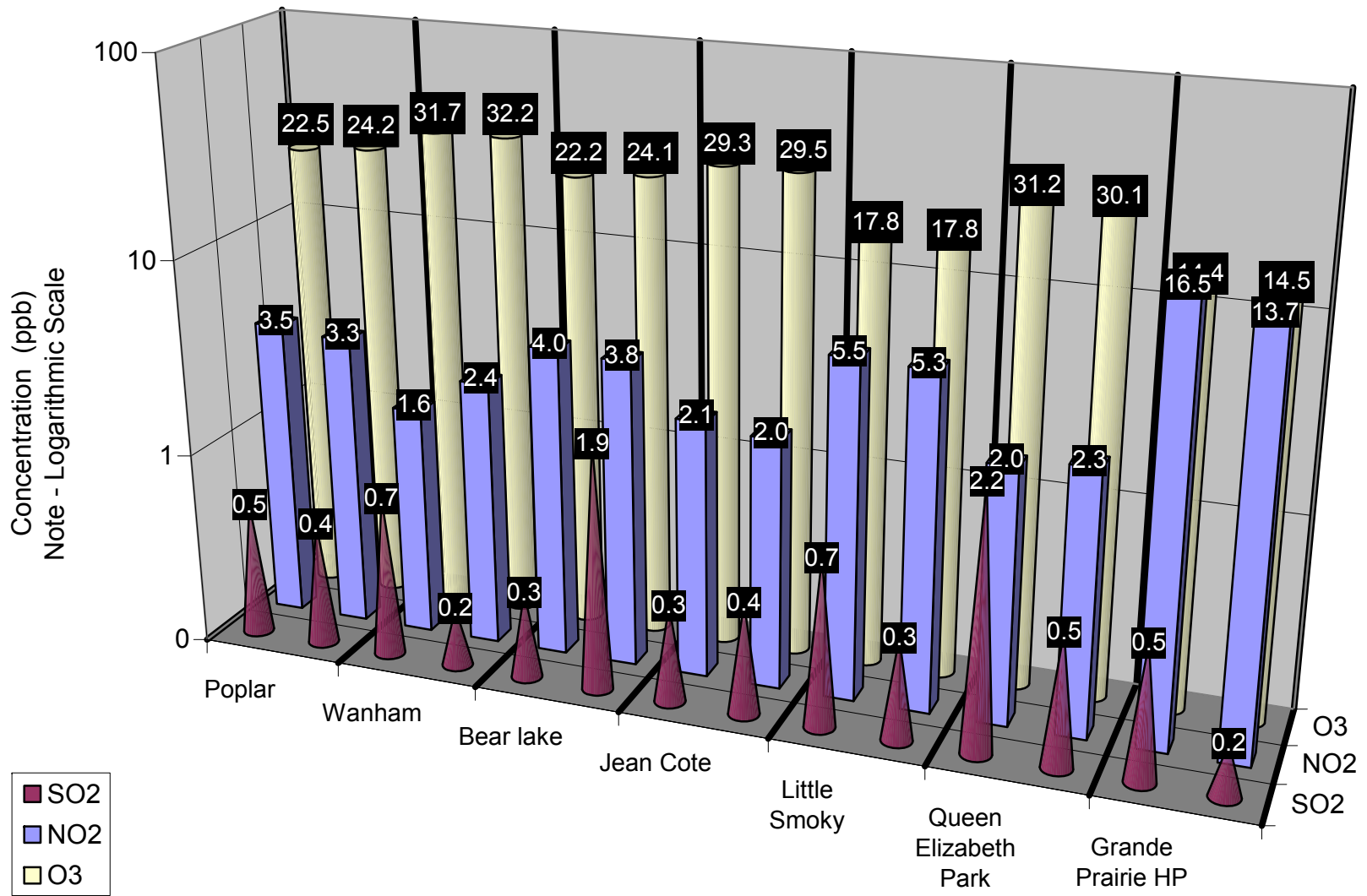


Figure 61. Duplicate Summary Chart

Table 2. Passive Summary Results for December 2007

Stats	Sulphur Dioxide SO ₂	Ozone O ₃	Nitrogen Dioxide NO ₂
	ppb	ppb	ppb
Passive Summary for December 2007 (PASZA Zone)			
Mean	0.4	24.7	3.0
Standard Deviation	0.3	5.2	2.6
Minimum	0.1	10.5	1.0
Minimum At	Flyingshot (#26)	Dixonville (#57)	Deer Mountain (#48)
Maximum	1.8	33.3	6.0
Maximum At	Saddle Hills (#18)	Gordondale (#4)	Grande Prairie HP (#49)
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)			
	SO ₂	O ₃	NO ₂
AENV Beaverlodge station	1.2	25.6	8.7
PASZA Beaverlodge passive	0.3	26.8	5.2
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)			
	SO ₂	O ₃	NO ₂
PASZA Henry Pirker station	0.4	11.3	21.3
PASZA Grande Prairie passive	0.3	14.4	15.1
Comparison between Continuous and Passive monitoring at Spirit River (passive #9 Spirit River)			
	SO ₂	O ₃	NO ₂
PASZA Portable Spirit River station	0.7	23.4	7.0
PASZA Spirit River passive	0.2	27.3	2.5

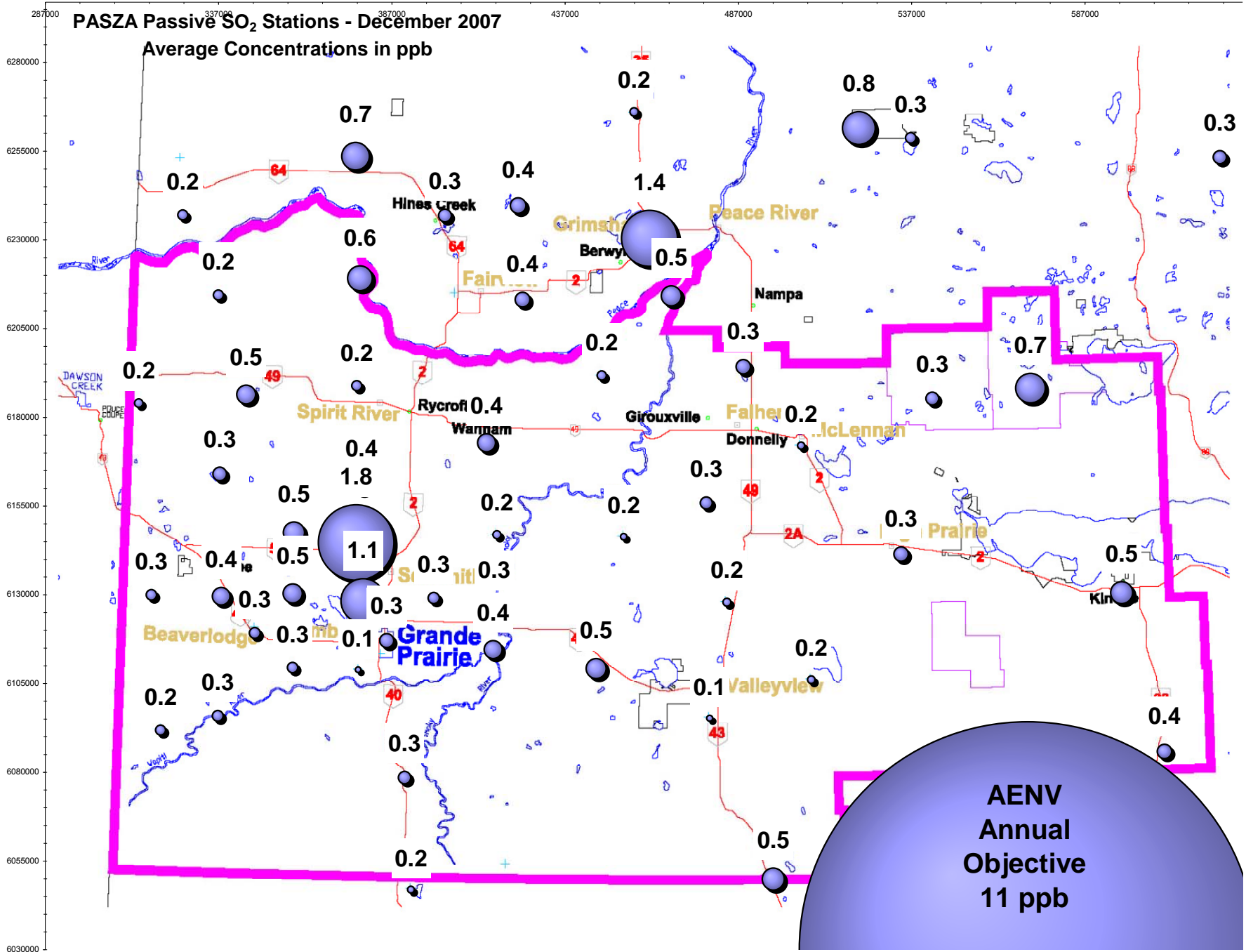


Figure 62. SO₂ Bubble Chart

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

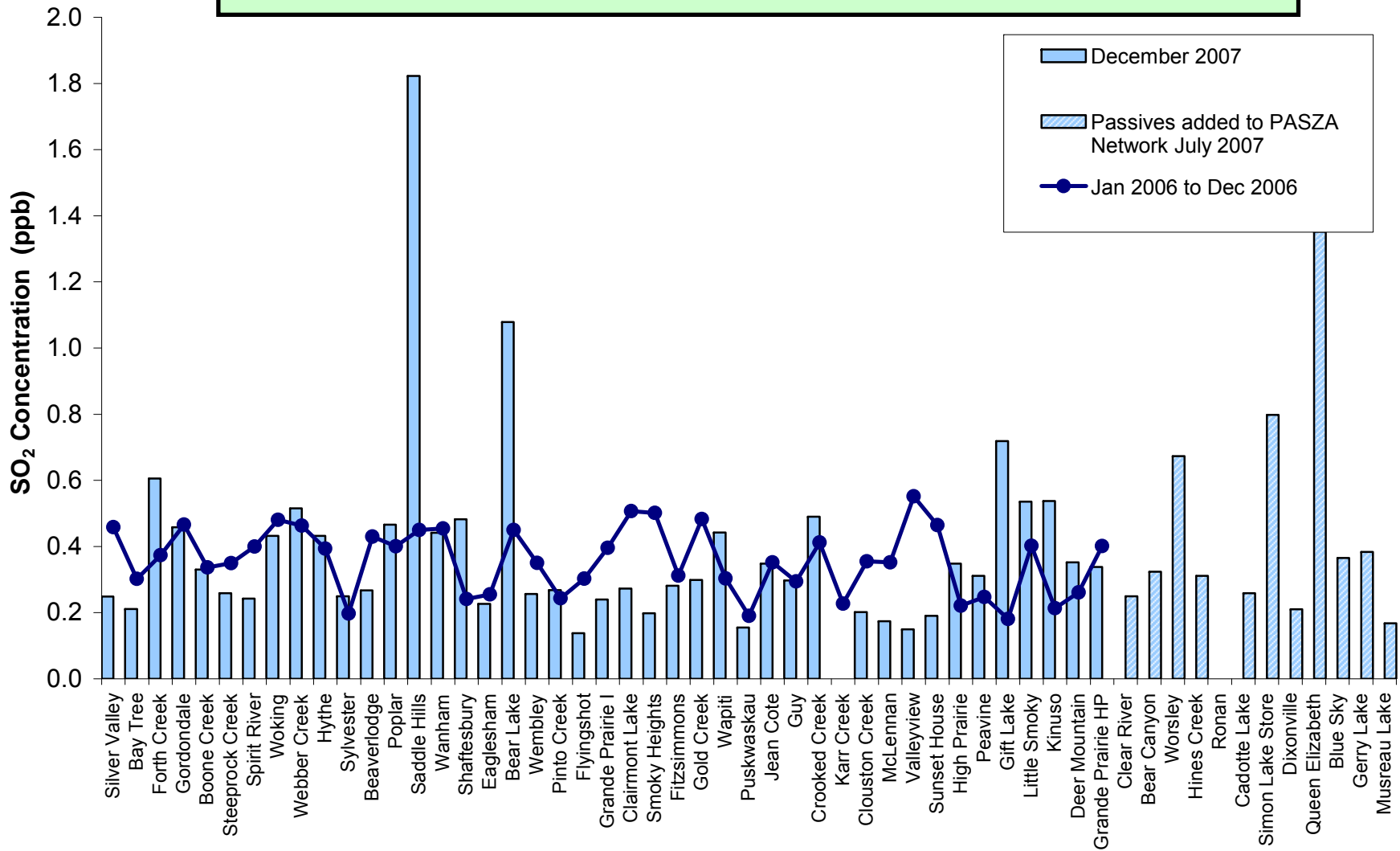


Figure 63. SO₂ Summary Chart

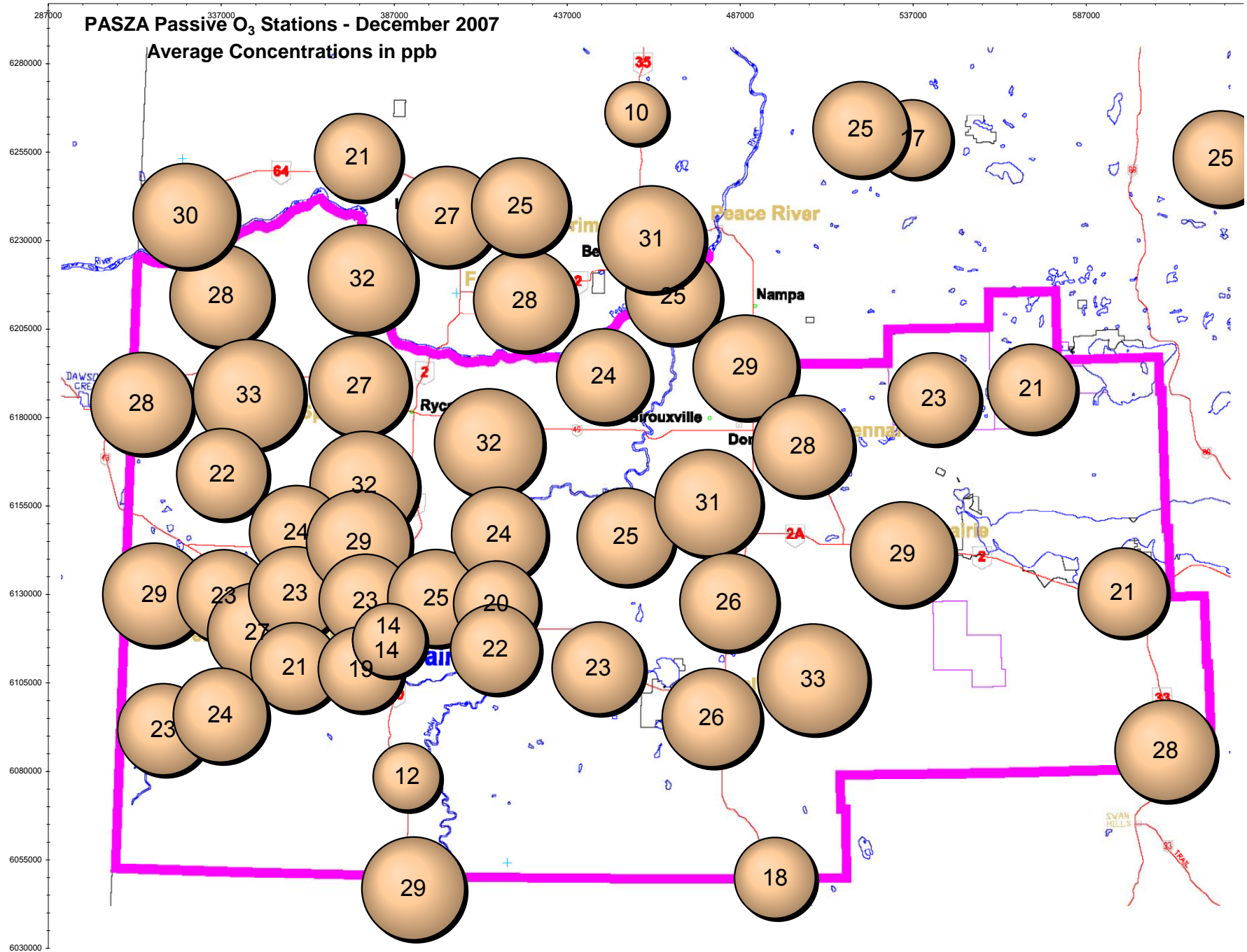


Figure 64. O₃ Bubble Chart

Alberta Ambient Air Quality Objective - No Annual O₃ Objective

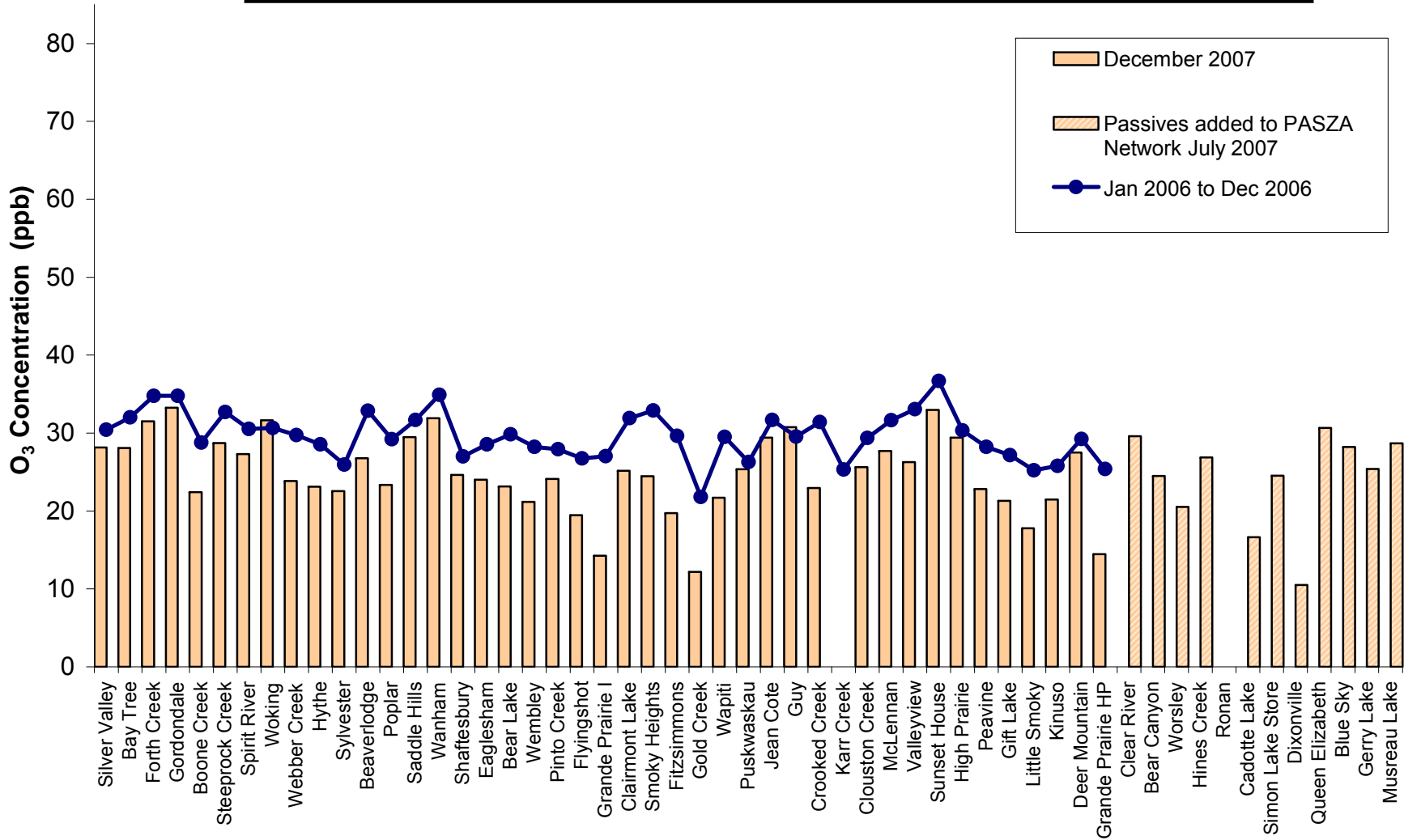


Figure 65. O₃ Summary Chart

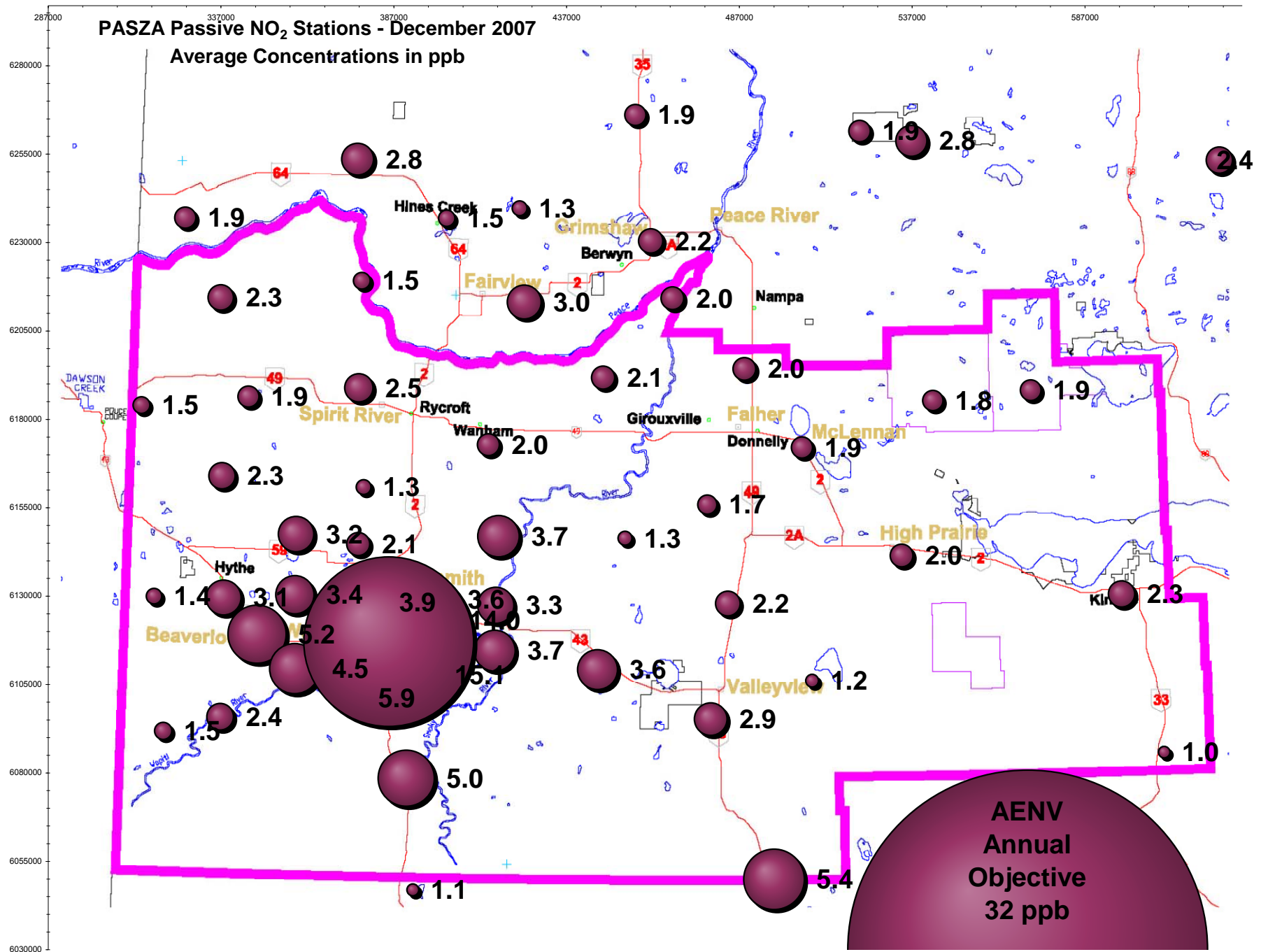


Figure 66. NO₂ Bubble Chart

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

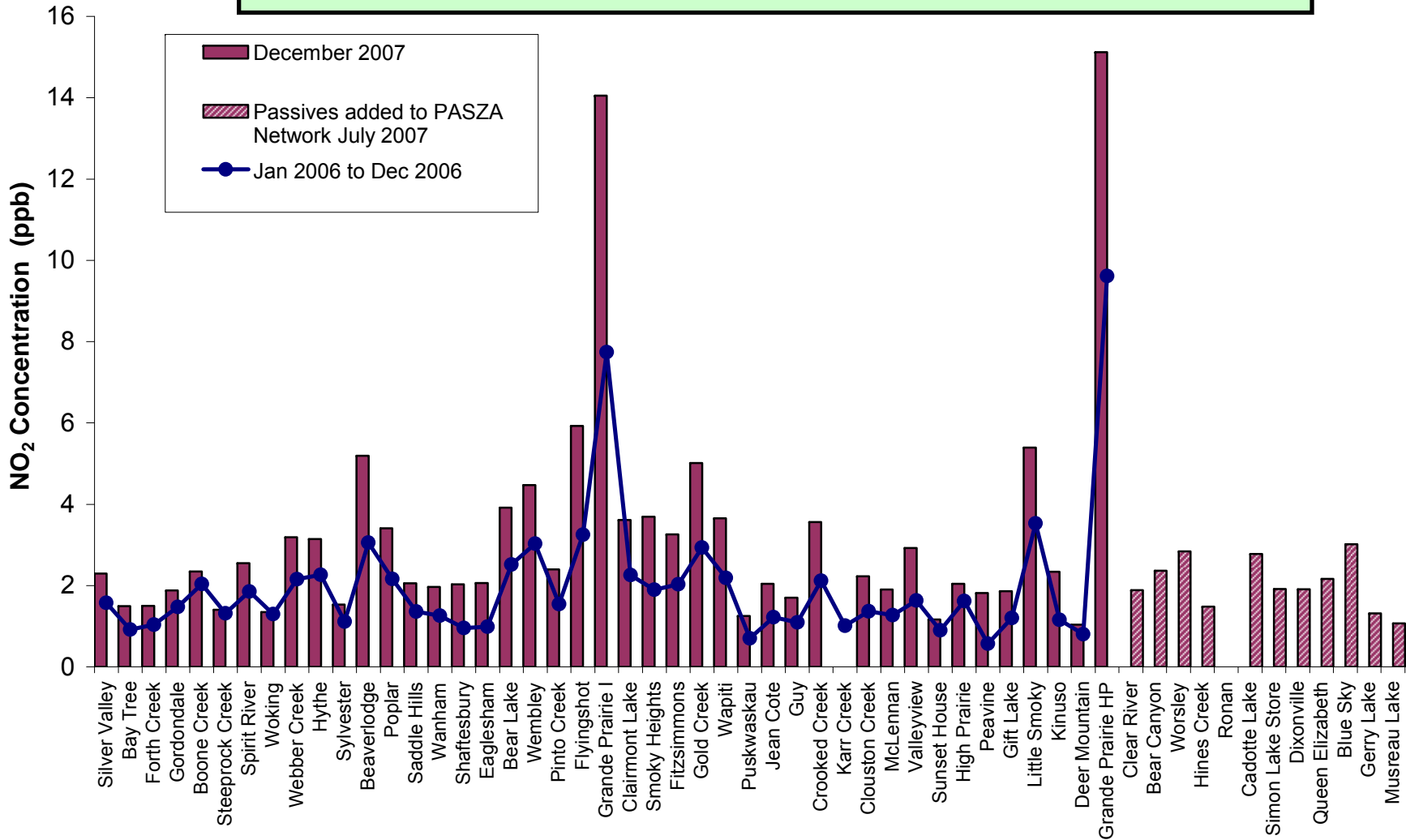


Figure 67. NO₂ Summary Chart

December 2007 Calibration Reports

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

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

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

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

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

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

Calibration Report

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

Station Information

Calibration Date	December 12, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	10:20	End Time (MST)	13:20
Barometric Pressure	0.921 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	50.3 ppb	Cal Gas Expiry Date	1/2/2009
		Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.018804	Calculated slope	0.997135
Calculated intercept	-0.803087	Calculated intercept	-0.323819
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.4		7.6	
Coefficient	0.785		.807	
Pressure	644.3	mm Hg	640.6	mm Hg
Flow	0.463	lpm	0.470	lpm
Lamp Voltage	44088	Hz	44056	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	0.2	N/A
4988	39.83	398.5	399.8	0.9966
4988	19.95	200.4	201.4	0.9949
4988	9.95	100.1	100.9	0.9926
4988	0.00	0.0	0.2	As Found Zero
4988	39.82	398.4	385.9	As Found Span
Average Correction Factor				0.9947

Calculated value of As Found Response: 392.2 ppb Percent Change of As Found: 1.6%

	before calibration		after calibration	
Auto zero	0.5	ppb	0.3	ppb
Auto span	345.8	ppb	340.6	ppb

Notes: Calibrator was accidentally powered off during zero... small spike
Span adjusted

Calibration Performed By: Conor Whiteley

Calibration Summary

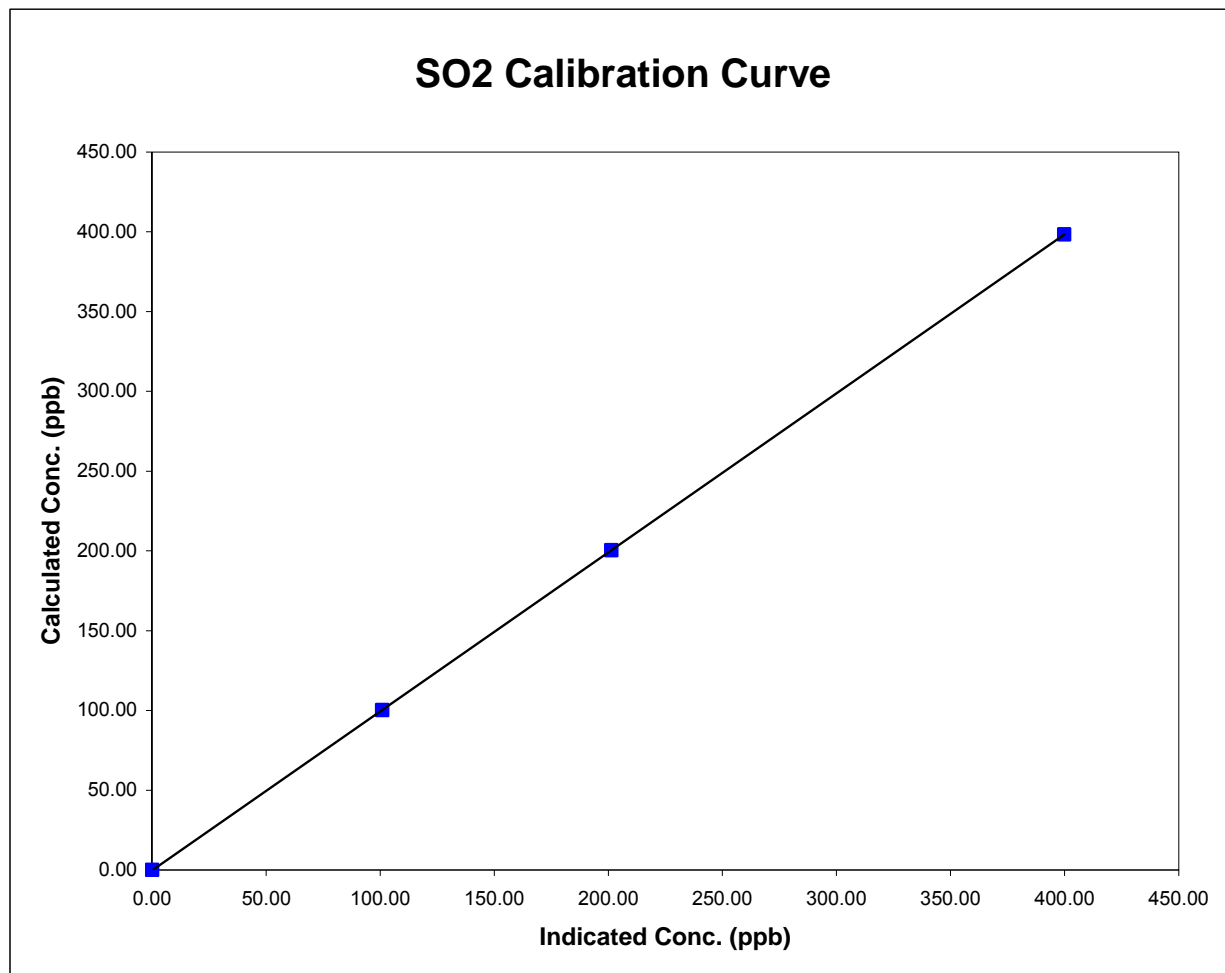
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

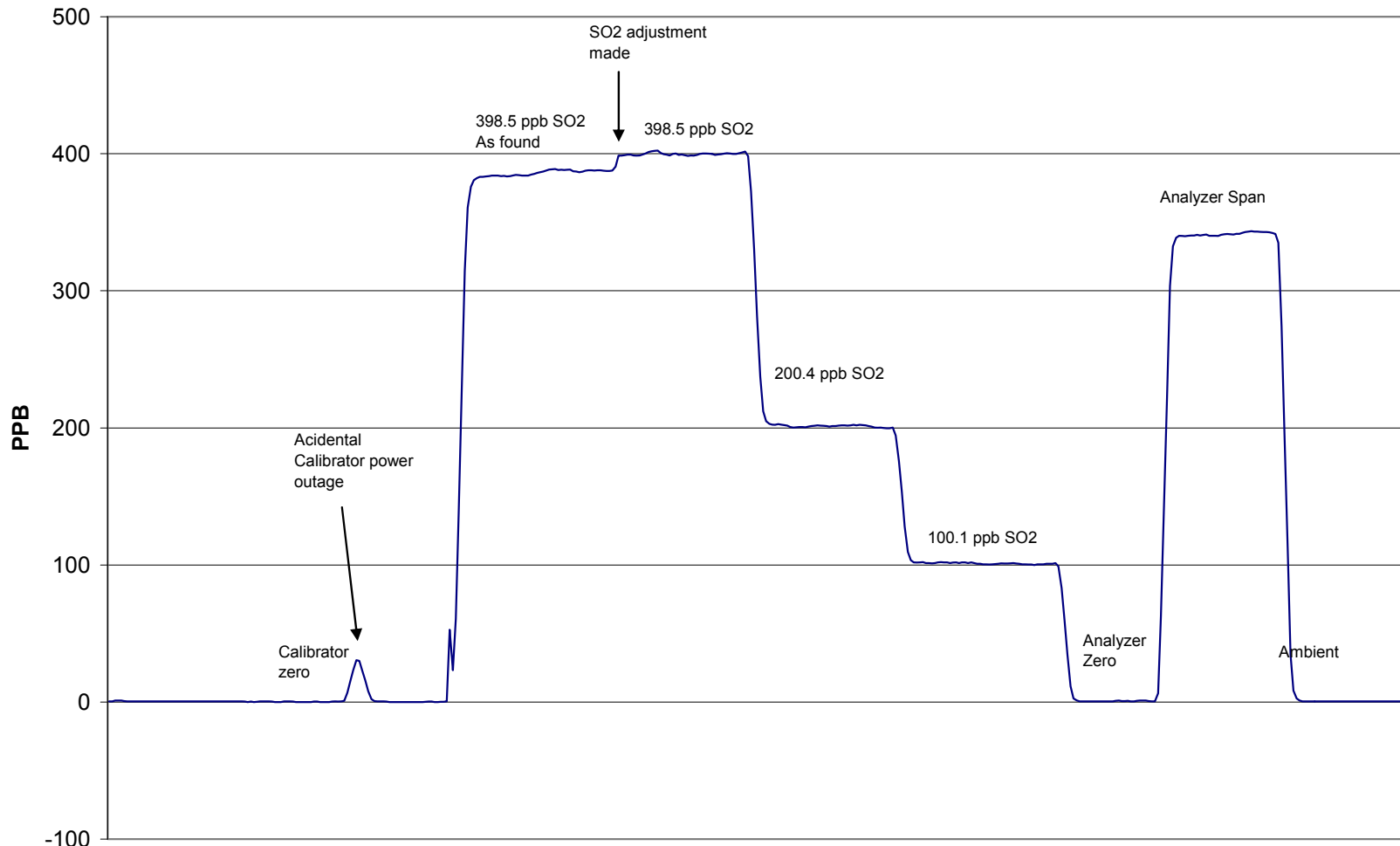
Calibration Date	December 12, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:20	End Time (MST)	13:20
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
398.5	399.8	0.9966	Correlation Coefficient	0.999999
200.4	201.4	0.9949		
100.1	100.9	0.9926	Slope	0.997135
			Intercept	-0.323819



Henry Pirker SO2 Calibration



December 12, 2007

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date	December 12, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal
Other:			
Start Time (MST)	11:45	End Time (MST)	15:10
Barometric Pressure	0.921 Atm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
NO Cal Gas Conc	48.9 ppm	Cal Gas Expiry Date	1/2/2009
NOx Cal Gas Conc	48.9 ppm	Cal Gas Serial #	LL16161

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269
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Parameter		NO2	NOx	NO
Before	Data Slope	1.002362	1.002510	1.003047
	Data Offset	-0.892123	-2.156176	-1.442479
After	Data Slope	1.000459	1.002219	1.004226
	Data Offset	-0.347925	-1.063077	-0.751909
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
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Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	7.8	ppb	7.7	mV
NOx background	8.2	ppb	8.1	mV
NO coefficient	0.678		0.678	
NOx coefficient	1.000		1.000	
Chamber Temp	49.8	Deg C	50.0	Deg C
Cooler Temp	-2.5	Deg C	-2.4	Deg C
Converter Temp	318.0	Deg C	319.0	Deg C
Vacuum	165.5	mm Hg	164.9	mm Hg

Notes: Calibrator was accidentally powered off during zero... small spike

Calibration Report



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

Station Information

Calibration Date: **December 12, 2007** 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	4988	0.00	0.0	0.0	0.0	0.4	0.0	0.3	N/A	N/A
1	4988	39.83	387.4	387.4	0.0	387.3	386.1	1.1	1.0002	1.0033
2	4988	19.95	194.8	194.8	0.0	195.7	195.1	0.6	0.9956	0.9987
3	4988	9.95	97.4	97.4	0.0	98.9	98.5	0.4	0.9843	0.9880
AFZ	4988	0.00	0.0	0.0	0.0	0.4	0.0	0.3	0.0000	0.0000
AFS	4988	39.88	387.9	387.9	0.0	387.3	386.1	1.1	1.0015	1.0045
Average Correction Factor									0.9934	0.9967

As Found Concentrations: NO_x= 384.7 NO= 384.7 As Found Percent Change NO_x= -0.8% NO= -0.8%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.88 ccm

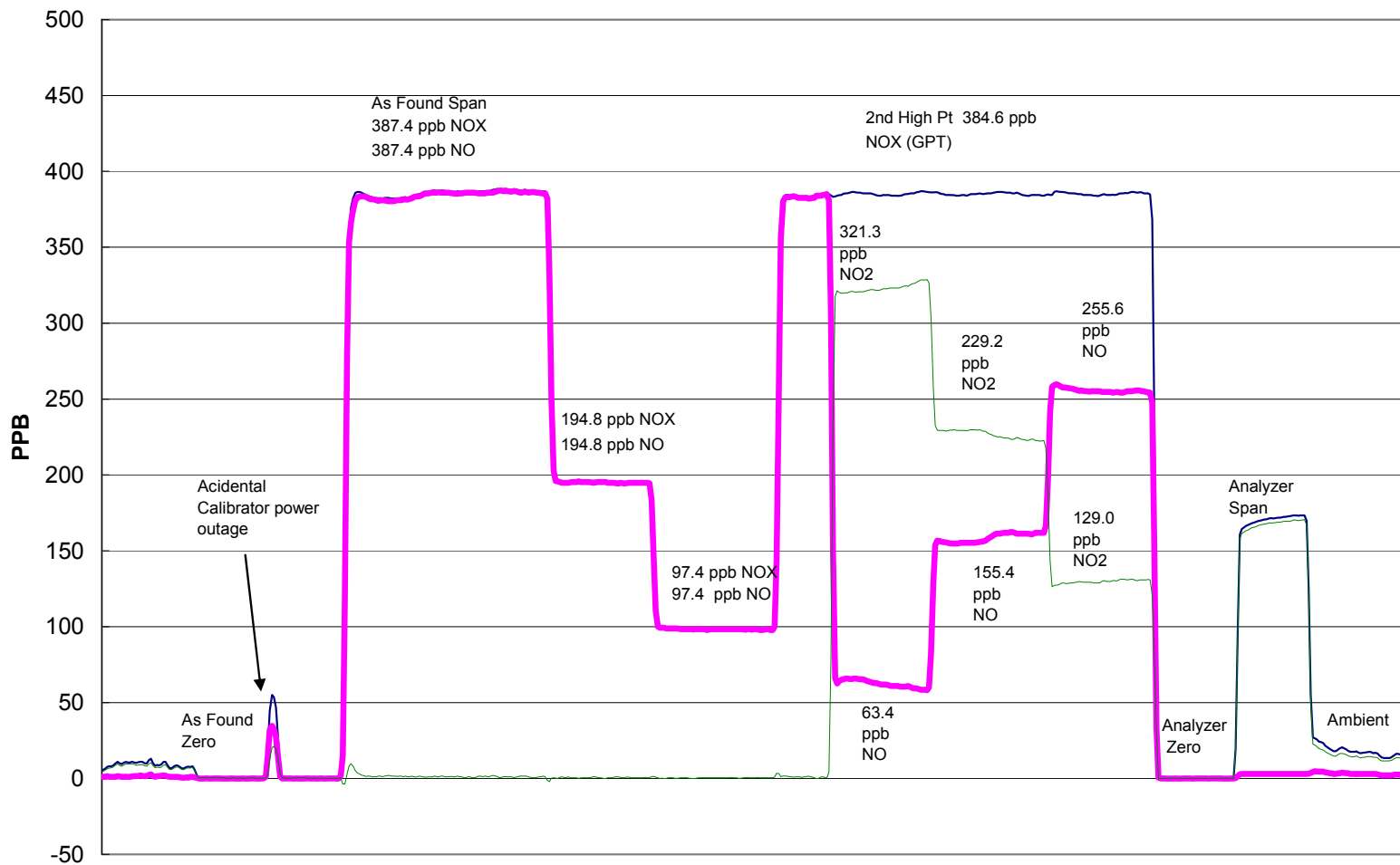
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	384.6	383.7	1.0	383.8	382.8	1.0	1.0022	1.0023	N/A	N/A
300	384.6	63.4	321.3	385.2	63.8	321.5	0.9986	0.9924	0.9993	100.1%
200	384.6	155.4	229.2	384.7	155.5	229.3	0.9998	0.9994	0.9996	100.0%
100	384.6	255.6	129.0	384.6	255.3	129.5	1.0000	1.0013	0.9965	100.4%
Average Correction Factor							0.9995	0.9977	0.9984	100.2%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-2.4	0.1	0.4	ppb	0.9	1.0	1.1	ppb
Auto span	165.8	165.3	0.5	ppb	169.0	166.3	2.2	ppb

Calibration Performed By: Conor Whiteley

Henry Pirker NOx Calibration



December 12, 2007

Calibration Summary

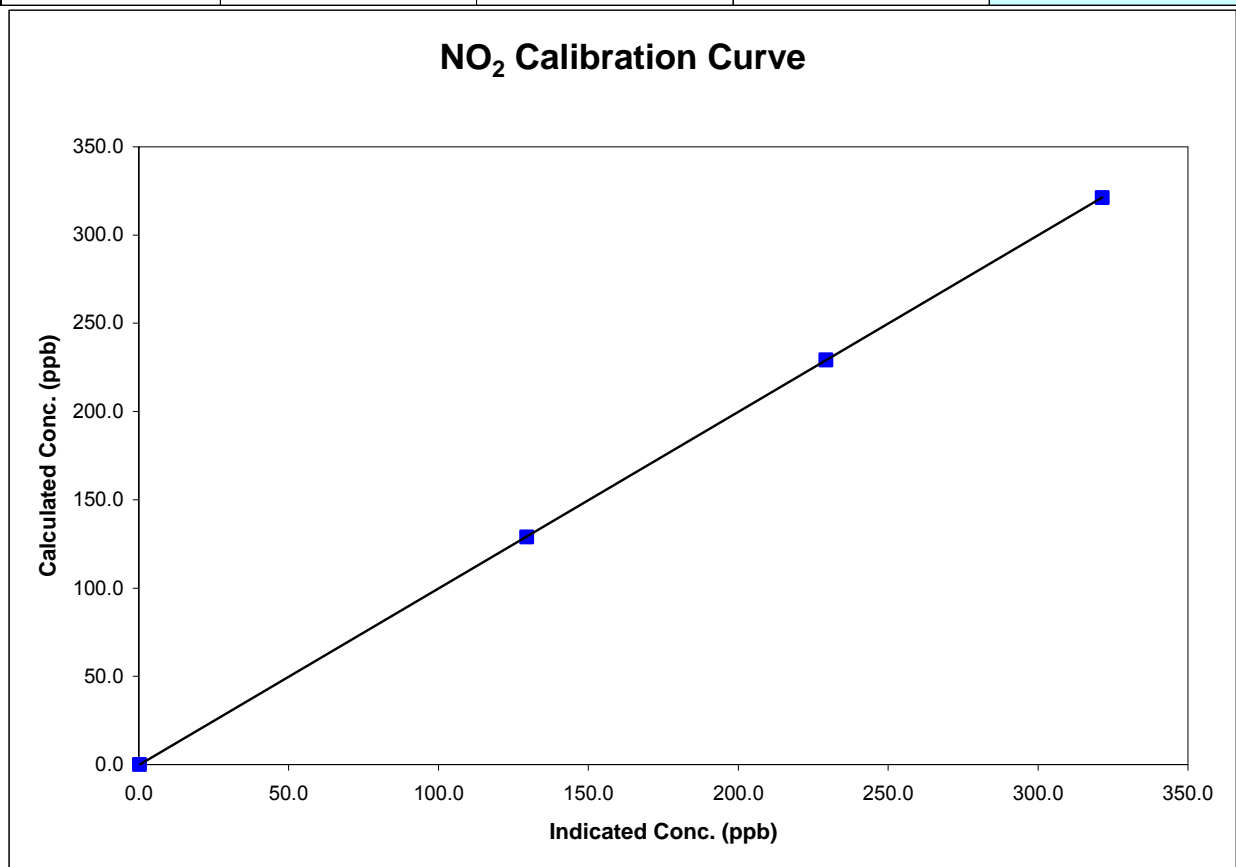
Parameter **NO₂**Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 12, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:45	End Time (MST)	15:10
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	0.3	0.0000		
321.3	321.5	0.9993	Correlation Coefficient	0.999999
229.2	229.3	0.9996		
129.0	129.5	0.9965	Slope	1.000459
			Intercept	-0.347925



Calibration Summary

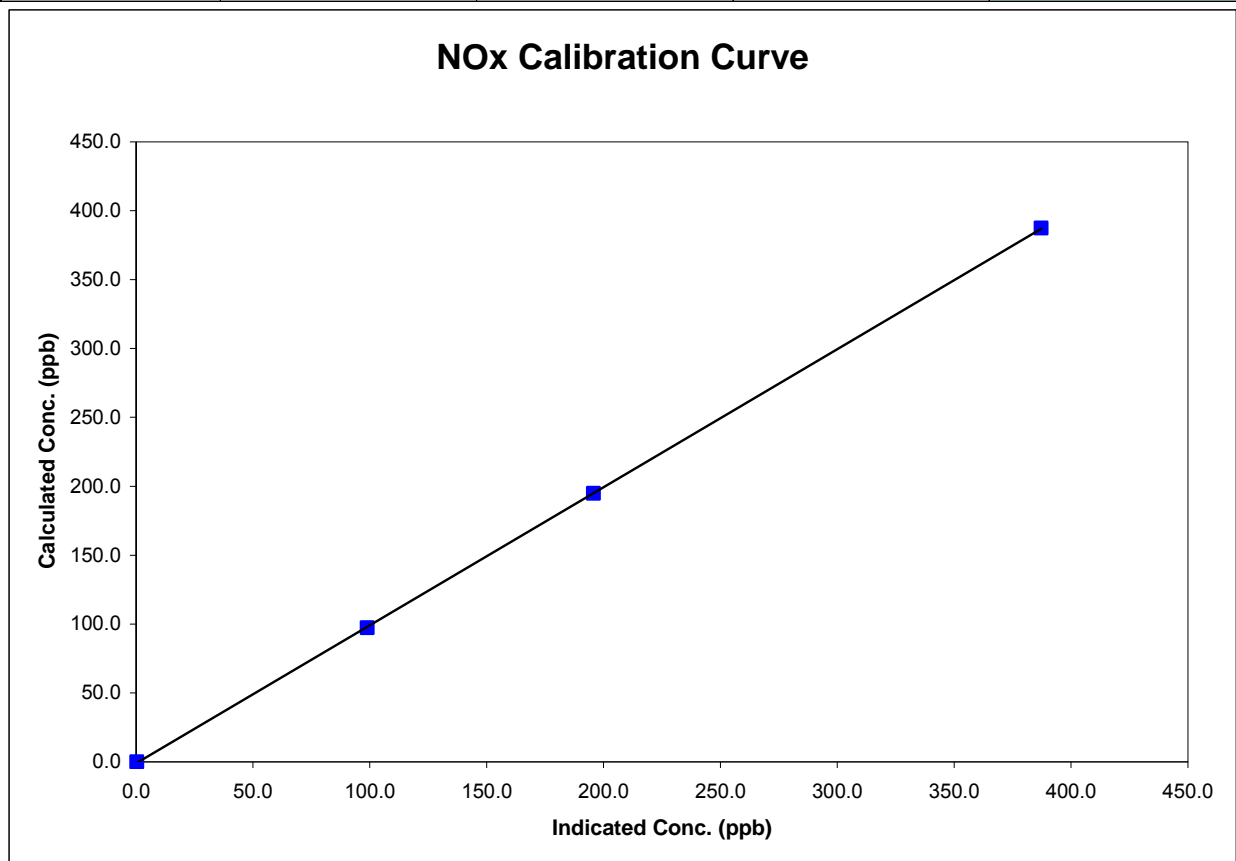
Parameter **NO_x**Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 12, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:45	End Time (MST)	15:10
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	0.4	0.0000	Correlation Coefficient	0.999987
387.4	387.3	1.0002		
194.8	195.7	0.9956	Slope	1.002219
97.4	98.9	0.9843		
			Intercept	-1.063077



Calibration Summary

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

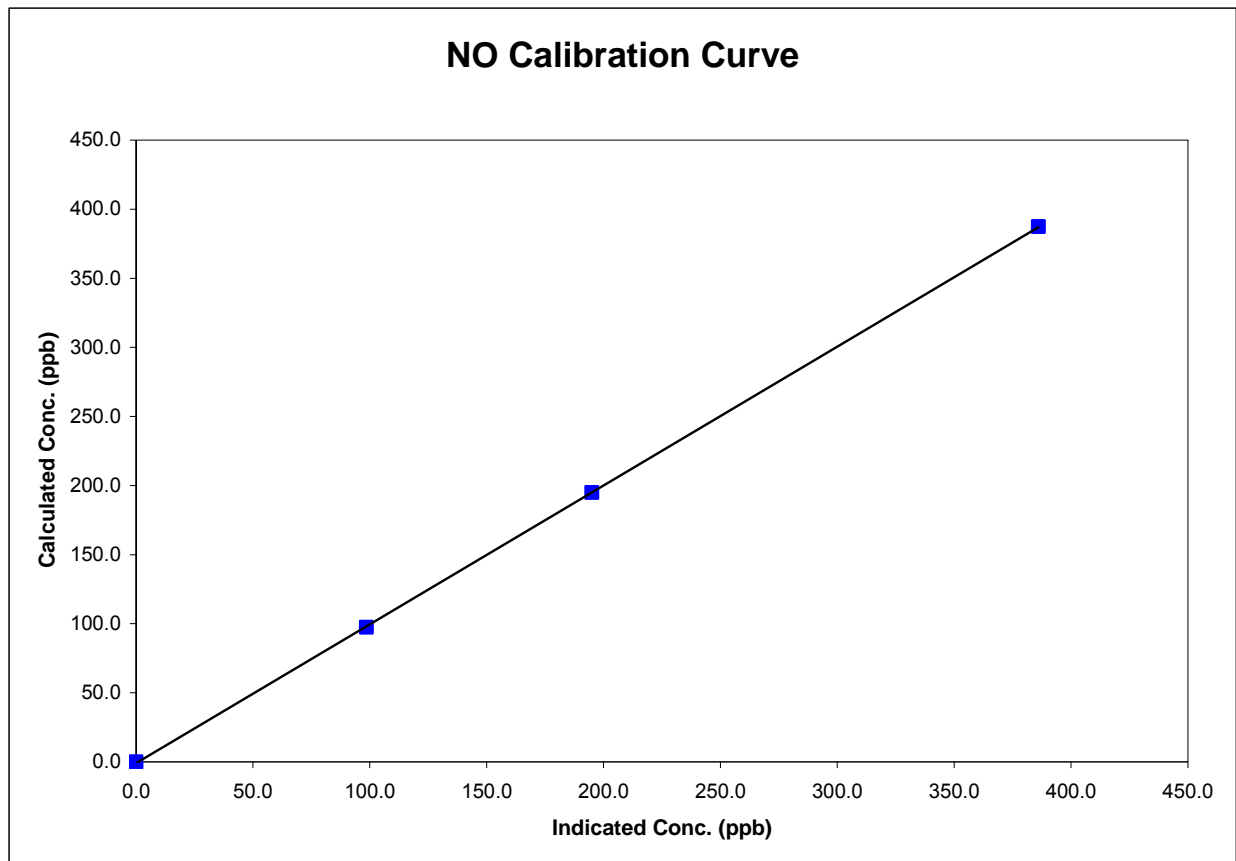


Station Information

Calibration Date	December 12, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:45	End Time (MST)	15:10
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
387.4	386.1	1.0033	Correlation Coefficient	0.999981
194.8	195.1	0.9987		
97.4	98.5	0.9880	Slope	1.004226
			Intercept	-0.751909



Calibration ReportParameter **O3**Air Monitoring Network **PASZA****Station Information**

Calibration Date	December 12, 2007	Previous Calibration	October 9, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:

Start Time (MST)	15:00	End Time (MST)	17:55
Barometric Pressure	0.921 atm	Station Temperature	20.0 Deg C
Calibrator	Enviroics 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	1.006682	Calculated slope	1.006449
Calculated intercept	-2.344232	Calculated intercept	2.541506

Analyzer make	TECO 49C	Analyzer serial #	607415761
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	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.7	ppb	-0.6	ppb
slope	1.042		1.006	
O3 Lamp temp	71.1	mV	71	mV
Intensities	92374/74326	mV	93243/73081	mV
Pressure	702.9	inches Hg	698.5	inches Hg
Flow A	665	ccm	673	ccm
Flow B	688	Deg C	685	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	4992	0.0	0.5	N/A
300	4992	321.3	320.9	1.0011
200	4992	229.2	220.4	1.0398
100	4992	129.0	123.2	1.0472
0	4992	0.0	0.5	As found zero
300	4992	321.3	309.1	As found span
Average Correction Factor				1.0294

Calculated value of As Found Response: 308.3 ppm Percent Change of As Found: -4.0%

	before calibration		after calibration	
Auto zero	-4.0	ppb	4.4	ppb
Auto span	338.6	ppb	426.7	ppb

Notes: Adjusted SpanCalibration Performed By: Conor Whiteley

Calibration Summary

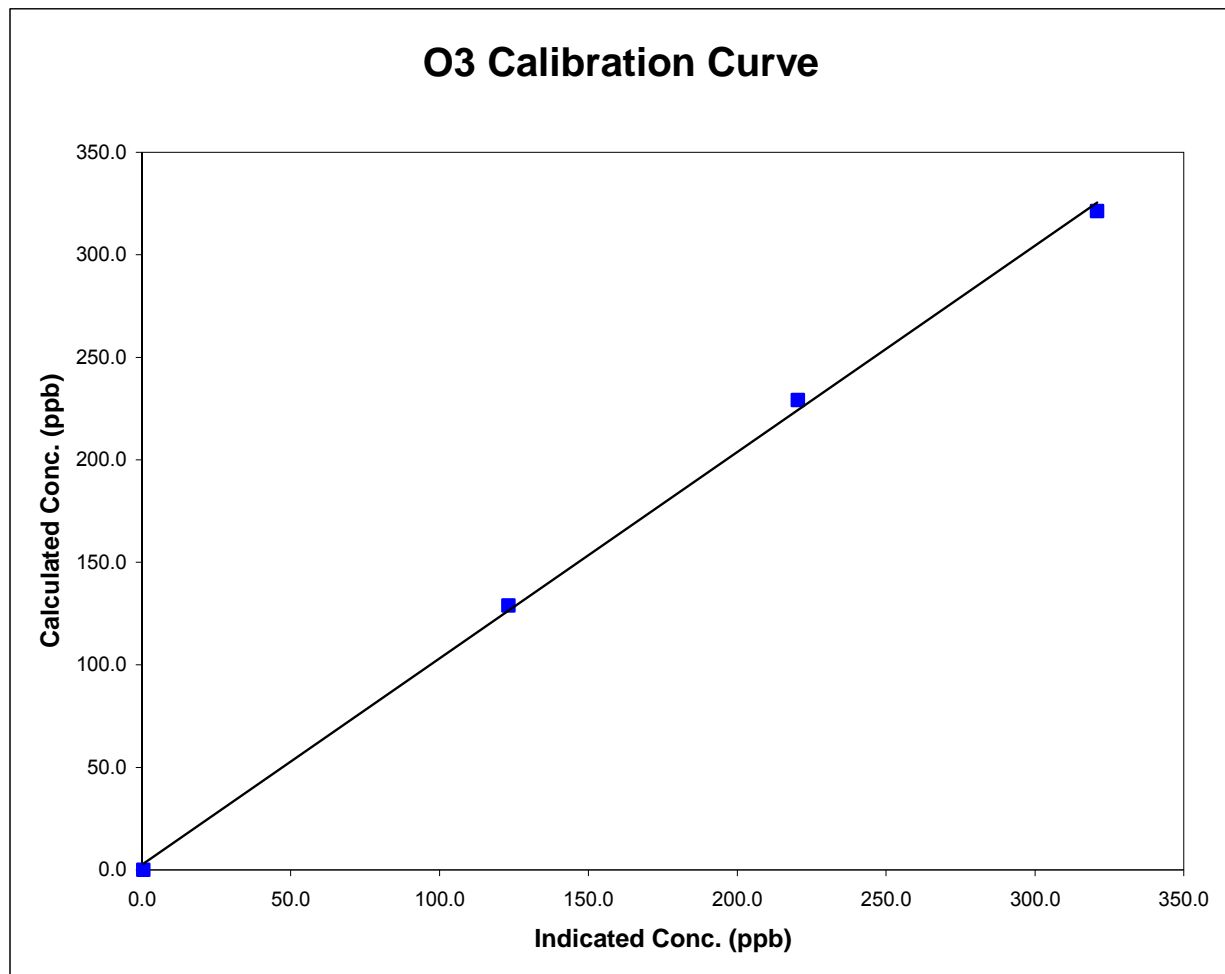
Parameter **O3**Air Monitoring Network **PASZA**

Station Information

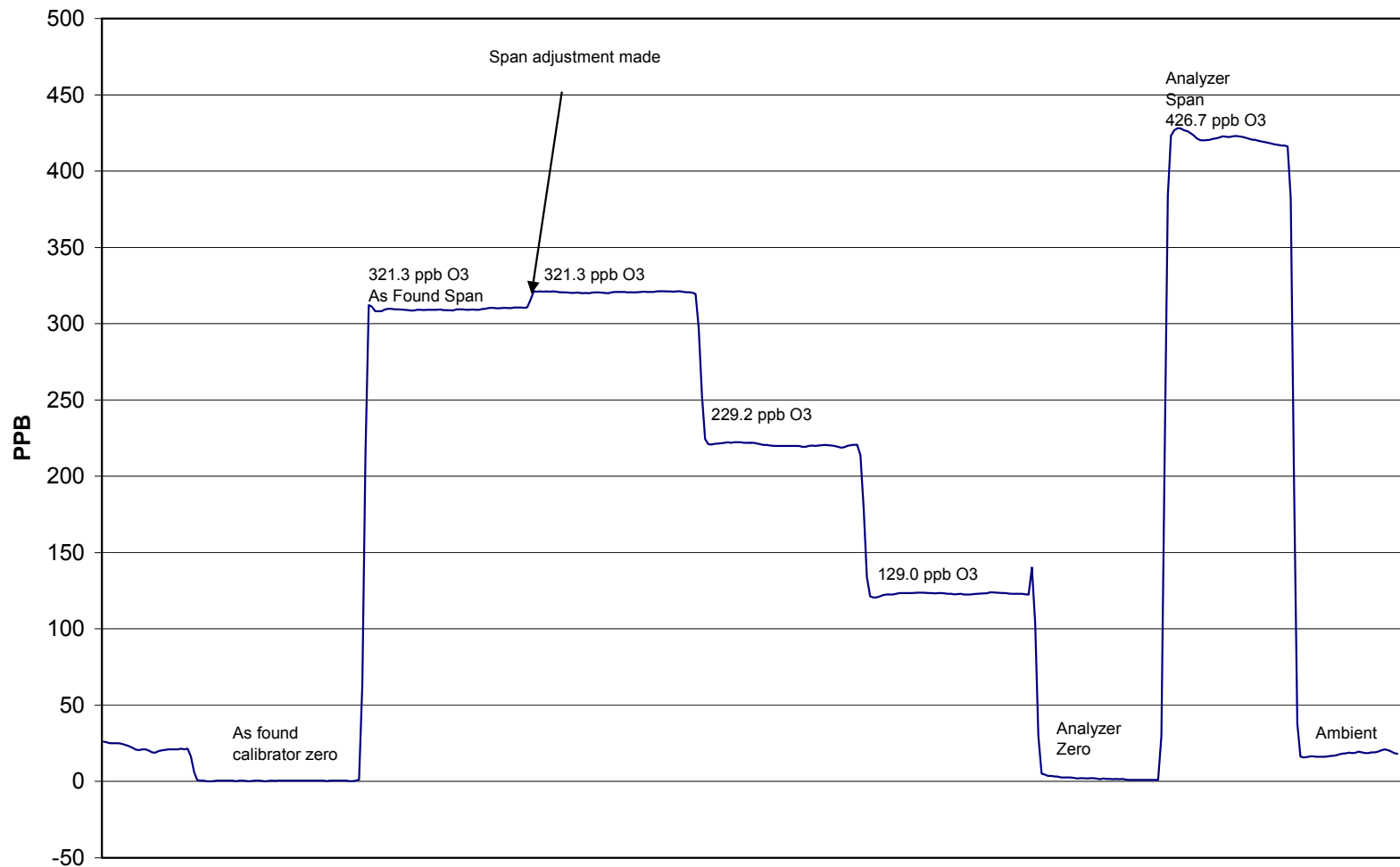
Calibration Date	December 12, 2007	Previous Calibration	October 9, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	15:00	End Time (MST)	17:55
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	NA		
321.3	320.9	1.0011	Correlation Coefficient	0.999007
229.2	220.4	1.0398		
129.0	123.2	1.0472	Slope	1.006449
			Intercept	2.541506



Henry Pirker O3 Calibration



December 12, 2007

Calibration ReportParameter **O3**Air Monitoring Network **PASZA****Station Information**

Calibration Date	December 13, 2007	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	<input type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:

Start Time (MST)	11:30	End Time (MST)	16:45
Barometric Pressure	0.921 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	1.006449	Calculated slope	1.050681
Calculated intercept	2.541506	Calculated intercept	1.995315

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

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.6	ppb	-0.6	ppb
slope	1.006		1.006	
O3 Lamp temp	71	mV	71	mV
Intensities	93243/73081	mV	93243/73081	mV
Pressure	698.5	inches Hg	698.5	inches Hg
Flow A	673	ccm	673	ccm
Flow B	685	Deg C	685	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	4992	0.0	0.4	N/A
300	4992	321.3	306.0	1.0498
200	4992	229.2	214.9	1.0666
100	4992	129.0	117.7	1.0956
0	4992	0.0	0.3	As found zero
300	4992	321.3	305.6	As found span
Average Correction Factor				1.0707

Calculated value of As Found Response: 309.8 ppm Percent Change of As Found: -3.6%

	before calibration		after calibration	
Auto zero	4.4	ppb	3.4	ppb
Auto span	426.7	ppb	421.4	ppb

Notes: UV span bulb replacement...
No Nox cal done for this, GPT points utilized from Dec 12th NOX calibration

Calibration Performed By: Conor Whiteley

Calibration Summary

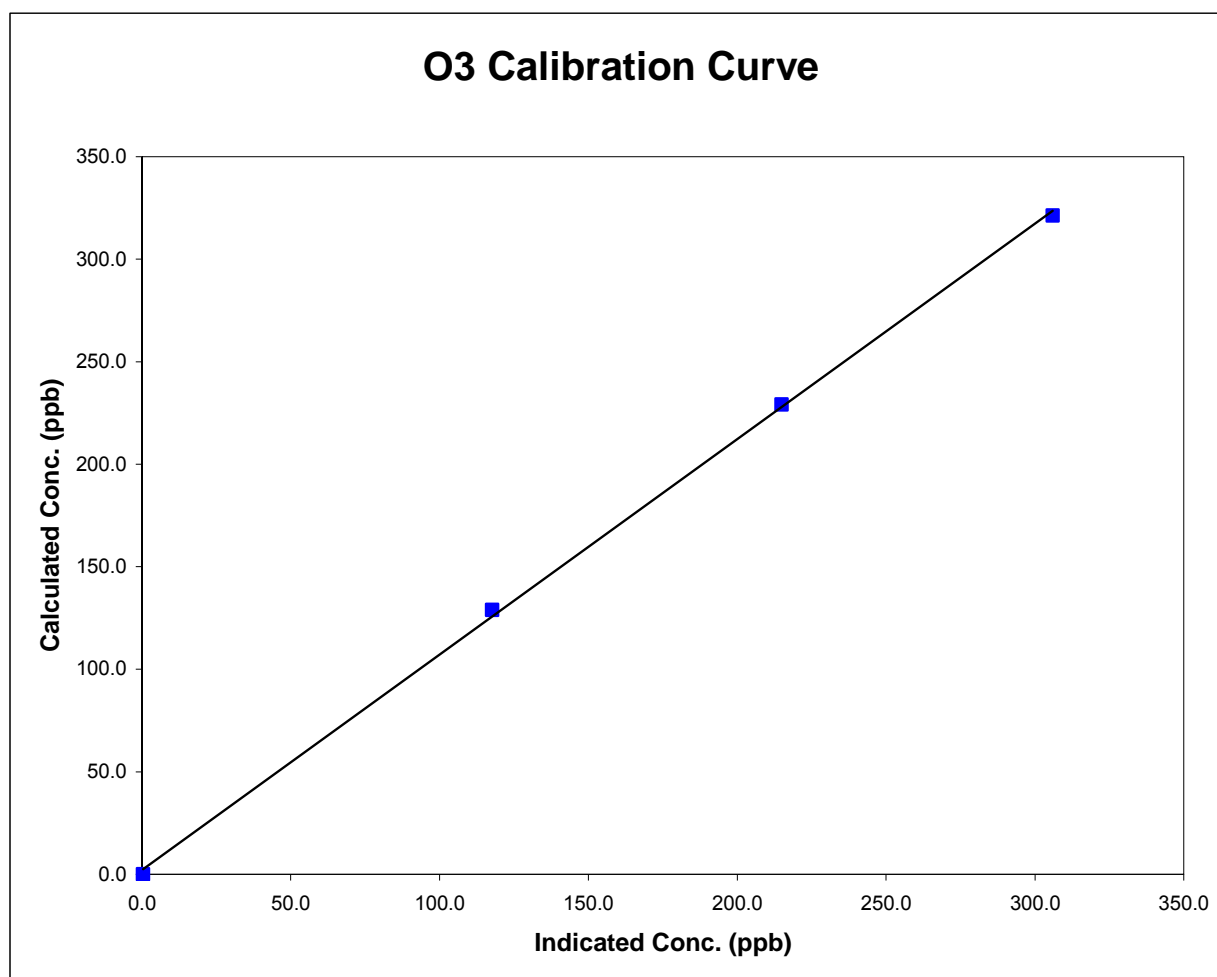
Parameter **O3**Air Monitoring Network **PASZA**

Station Information

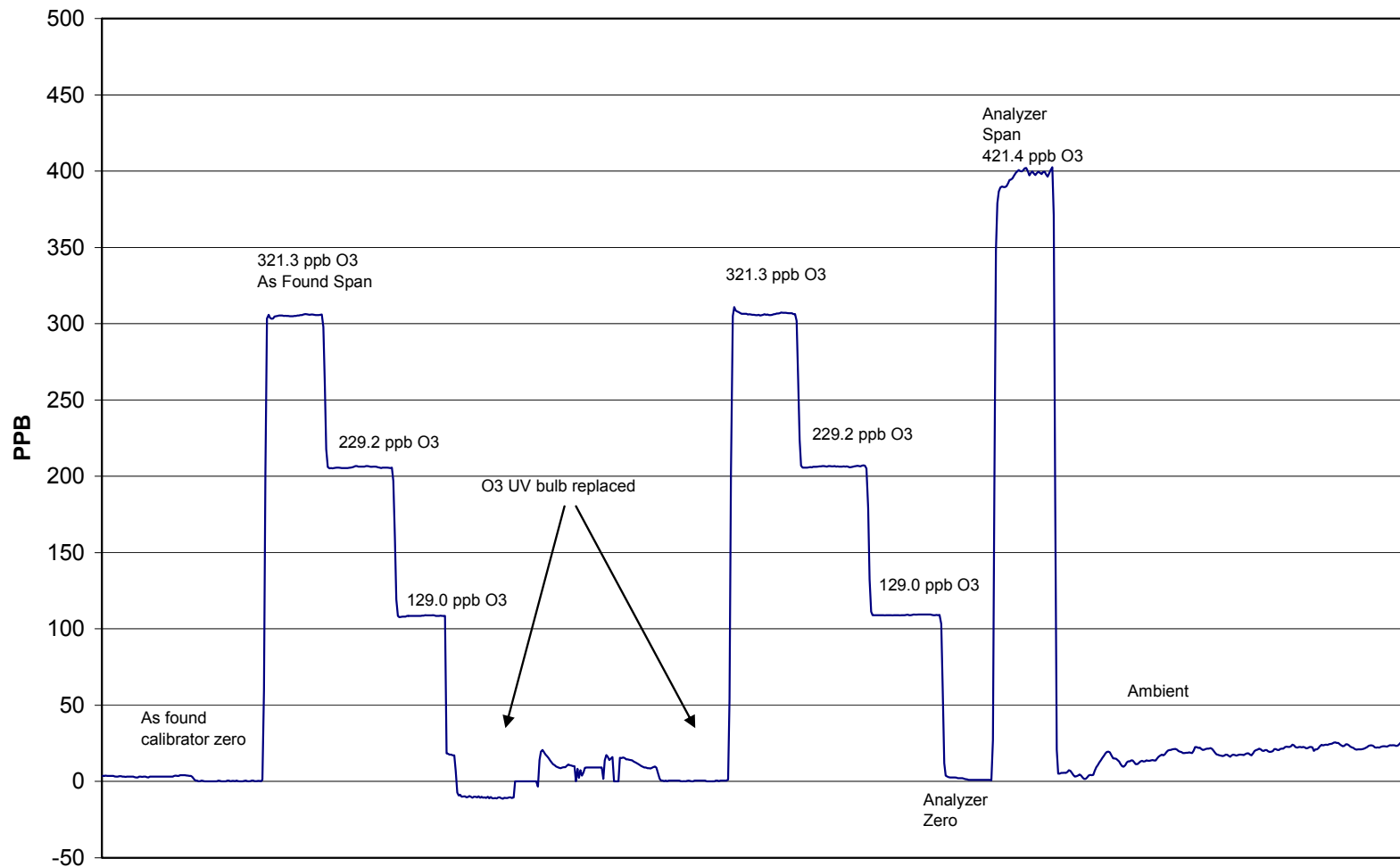
Calibration Date	December 13, 2007	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:30	End Time (MST)	16:45
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	NA		
321.3	306.0	1.0498	Correlation Coefficient	0.999577
229.2	214.9	1.0666		
129.0	117.7	1.0956	Slope	1.050681
			Intercept	1.995315



Henry Pirker O3 Calibration



December 13, 2007

Calibration Report



Parameter **CO**
Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 13, 2007	Previous Calibration	November 23, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:50	End Time (MST)	19:40
Barometric Pressure	0.925 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	1.036306	Calculated slope	1.021589
Calculated intercept	-0.134148	Calculated intercept	-0.476919
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.049		1.049	
CO zero setting	9.937		-0.002	
Sample pressure	684.3	mm Hg	686.9	mm Hg
Sample Flow	1.112	LPM	1.118	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)
4987	0.00	0.00	0.41	N/A
4987	39.90	23.81	23.75	1.0028
4987	19.85	11.89	12.14	0.9798
4987	9.92	5.96	6.35	0.9375
4987	0.00	0.00	0.41	As Found Zero
4987	39.90	23.81	23.75	As Found Span
Average Correction Factor				0.9734

Calculated value of As Found Response: 24.049 ppm Percent Change of As Found: -1.0%

	before calibration		after calibration	
Auto zero	-0.05	ppm	-0.01	ppm
Auto span	20.86	ppm	NA	ppm

Notes: Still waiting on CO span bottle from Praxair

Calibration Summary

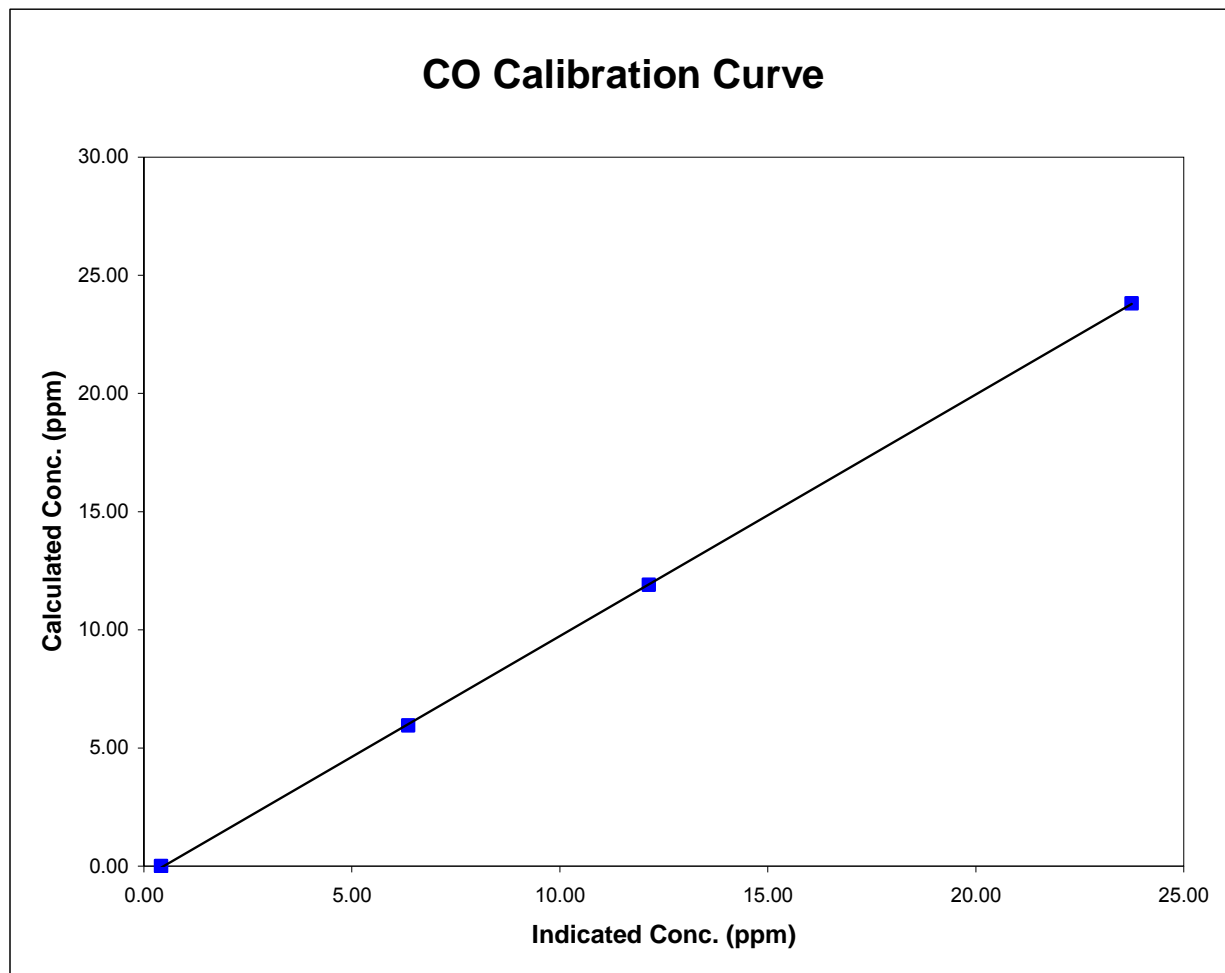
Parameter **CO**Air Monitoring Network **PASZA**

Station Information

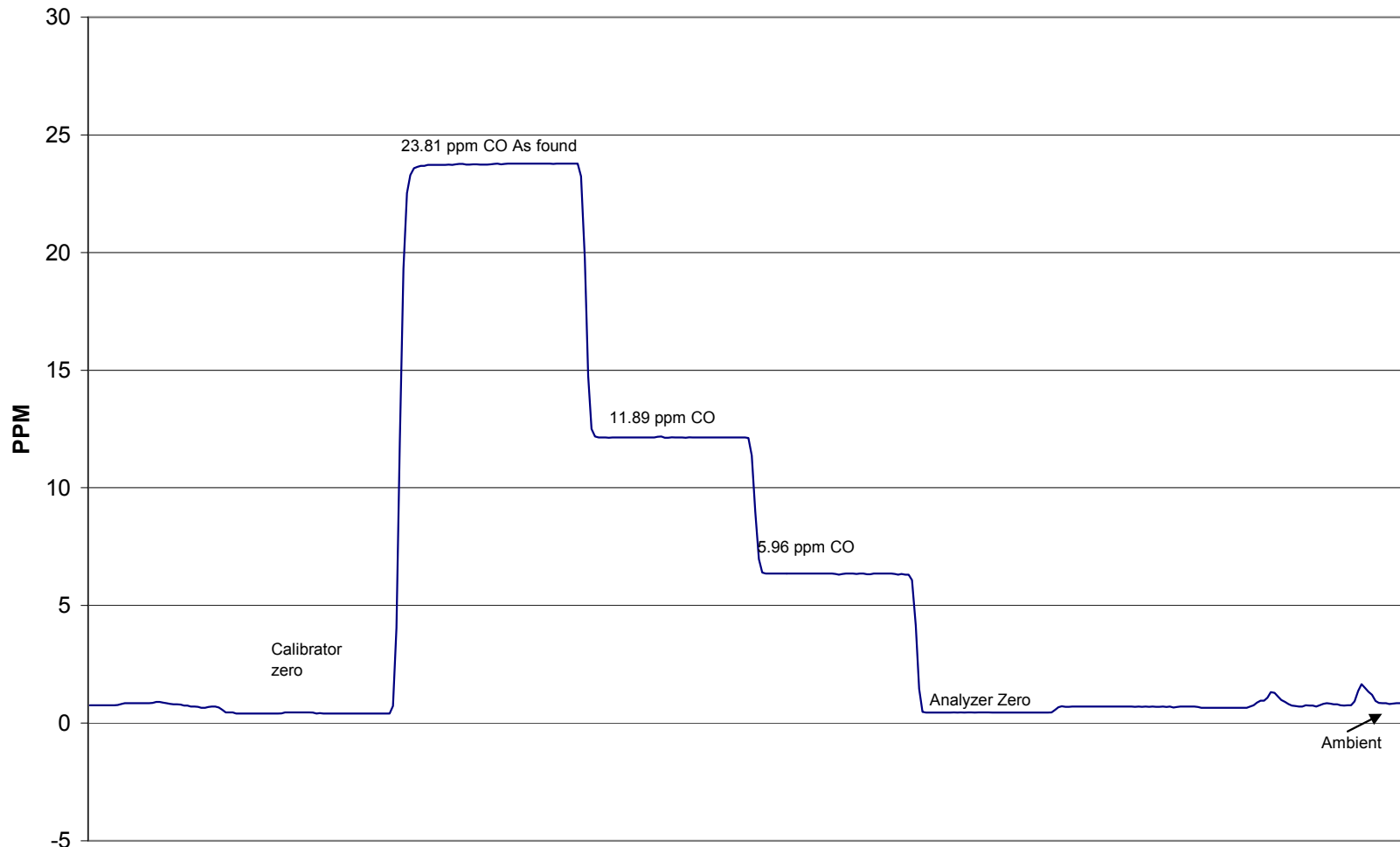
Calibration Date	December 13, 2007	Previous Calibration	November 23, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	16:50	End Time (MST)	19:40
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.411	N/A		
23.812	23.746	1.0028	Correlation Coefficient	0.999973
11.894	12.139	0.9798		
5.956	6.352	0.9375	Slope	1.021589
			Intercept	-0.476919



Henry Pirker CO Calibration



December 13, 2007

Calibration Report

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

Station Information

Calibration Date	December 14, 2007	Previous Calibration	November 23, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:20	End Time (MST)	11:40
Barometric Pressure	0.920 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	700 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1522.25 ppm	Cal Gas Cylinder #	ALM 005412
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.062209	Calculated slope	0.983791
Calculated intercept	0.093326	Calculated intercept	0.270556
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	5.95	psi	6.11	psi
THC span counts	6894	capture	6894	capture
THC zero counts	1348	capture	1346	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)
4990	0.00	0.00	-0.27	N/A
4990	69.81	21.00	21.09	0.9960
4990	29.89	9.06	8.90	1.0182
4990	9.92	3.02	2.81	1.0742
4990	0.00	0.00	-0.27	As Found Zero
4990	64.92	19.55	21.09	As Found Span
Average Correction Factor				1.0295

Calculated value of As Found Response: 22.777 ppm Percent Change of As Found: -16.5%

	before calibration		after calibration	
Auto zero	-0.19	ppm	-0.01	ppm
Auto span	25.27	ppm	NA	ppm

Notes: Still waiting on Span Cylinder from Praxair

Calibration Performed By: Conor Whiteley

Calibration Summary

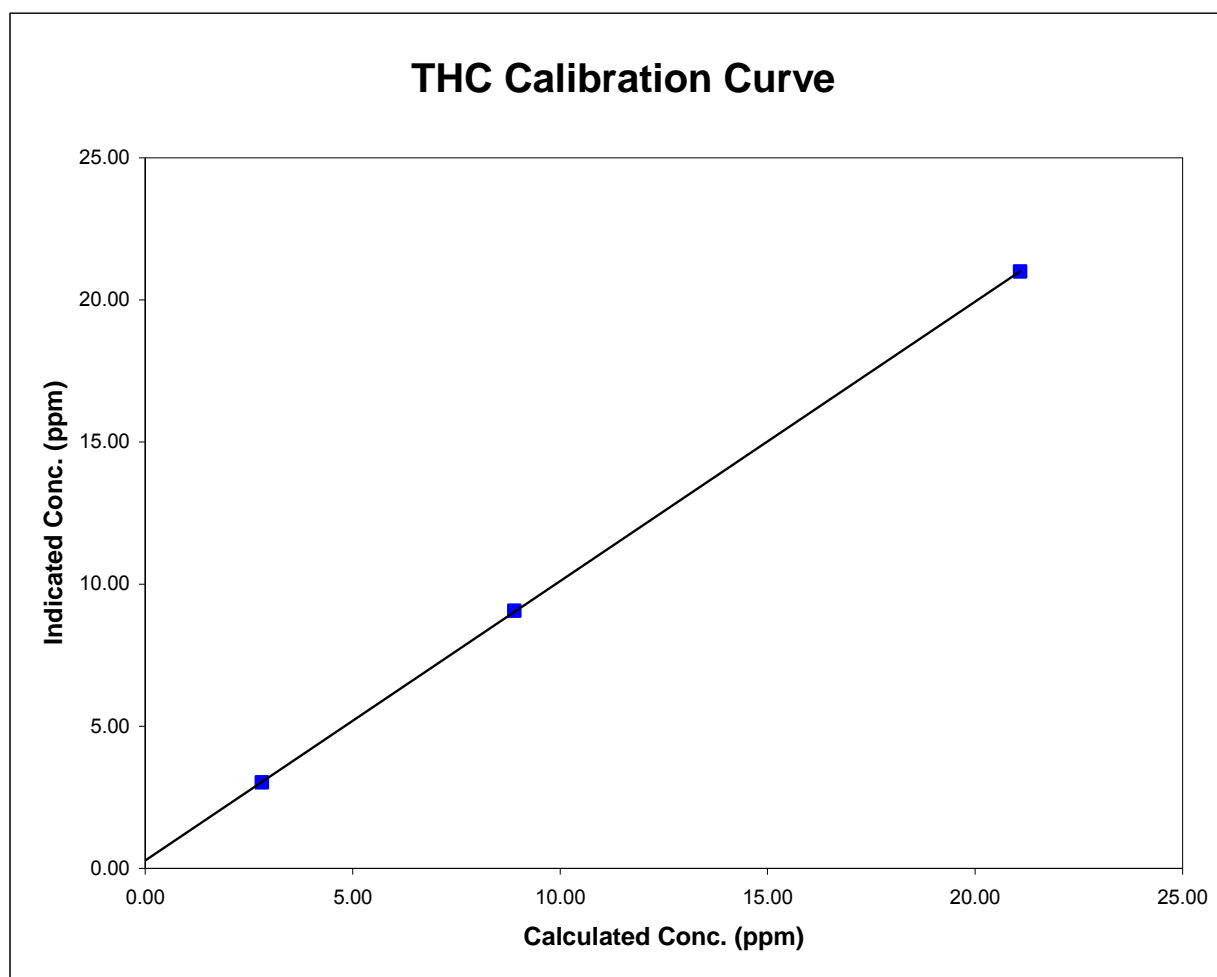
Parameter **THC**Air Monitoring Network **PASZA**

Station Information

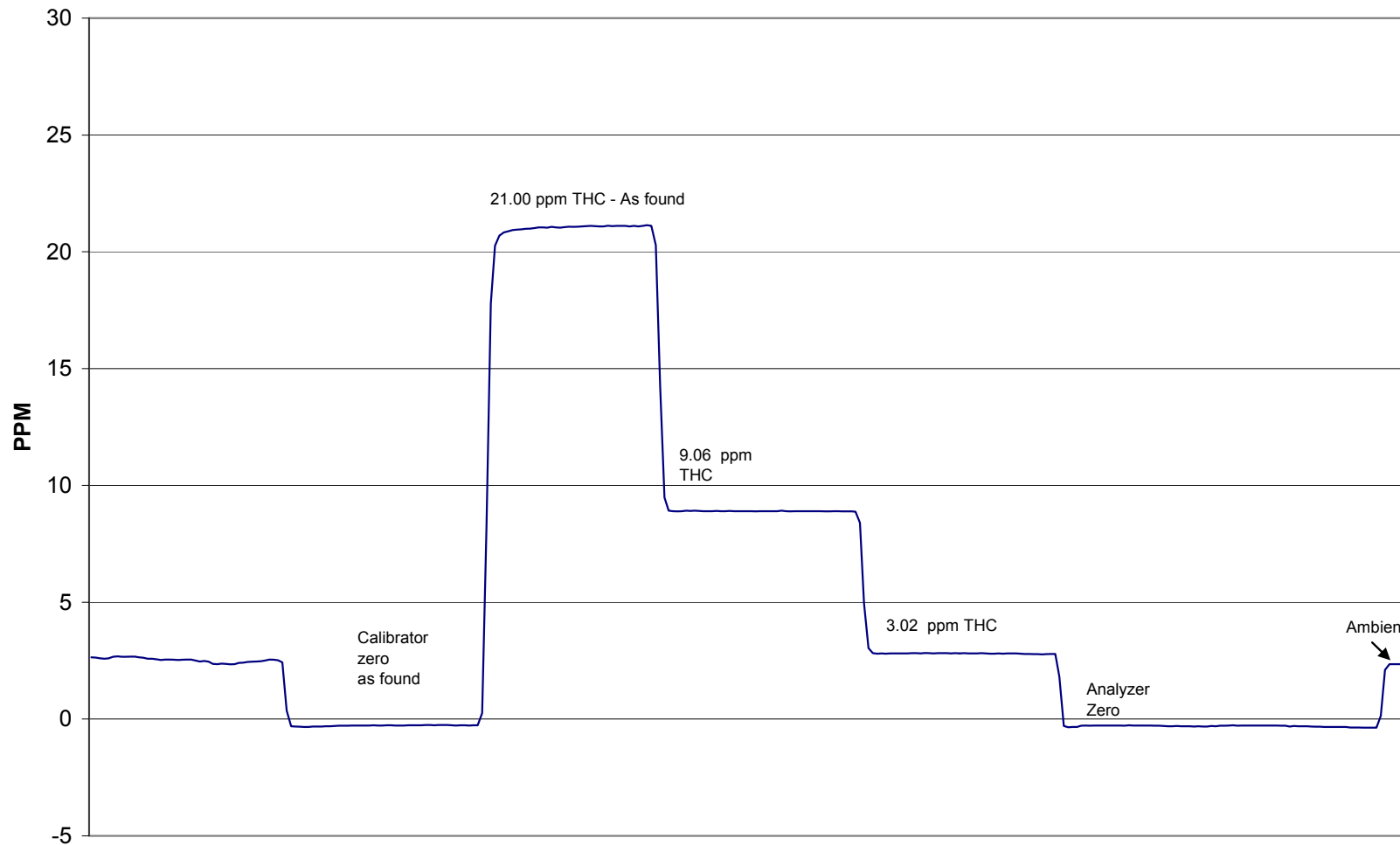
Calibration Date	December 14, 2007	Previous Calibration	November 23, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:20	End Time (MST)	11:40
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.268	N/A		
21.002	21.087	0.9960	Correlation Coefficient	0.999993
9.064	8.902	1.0182		
3.020	2.811	1.0742	Slope	0.983791
			Intercept	0.270556



Henry Pirker THC Calibration



December 14, 2007

Calibration ReportParameter **TRS**Air Monitoring Network **PASZA****Station Information**

Calibration Date	December 13, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:25	End Time (MST)	12:20
Barometric Pressure	0.922 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	5.14 ppb	Cal Gas Expiry Date	7/31/2008
		Cal Gas Cylinder #	LL 74274
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	1.018865	Calculated slope	1.019275
Calculated intercept	-0.040509	Calculated intercept	-0.761279
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.871		0.871	
Background	16.9		16.9	
Pressure	659.7	mm Hg	654.8	mm Hg
Flow	458	ccm	453	ccm
Lamp Voltage	861	V	862	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)
4987	0.00	0.00	0.71	N/A
4987	69.74	70.89	70.17	1.0102
4990	39.84	40.71	40.92	0.9949
4990	9.97	10.25	10.73	0.9552
4990	0.00	0.00	0.71	As Found Zero
4990	69.75	70.86	70.17	As Found Span
Average Correction Factor				0.9868

Calculated value of As Found Response: 70.7 ppb Percent Change of As Found: 0.2%

	before calibration		after calibration	
Auto zero	0.46	ppb	0.21	ppb
Auto span	37.31	ppb	36.53	ppb

Notes: No adjustments preformedCalibration Performed By: Conor Whiteley

Calibration Summary

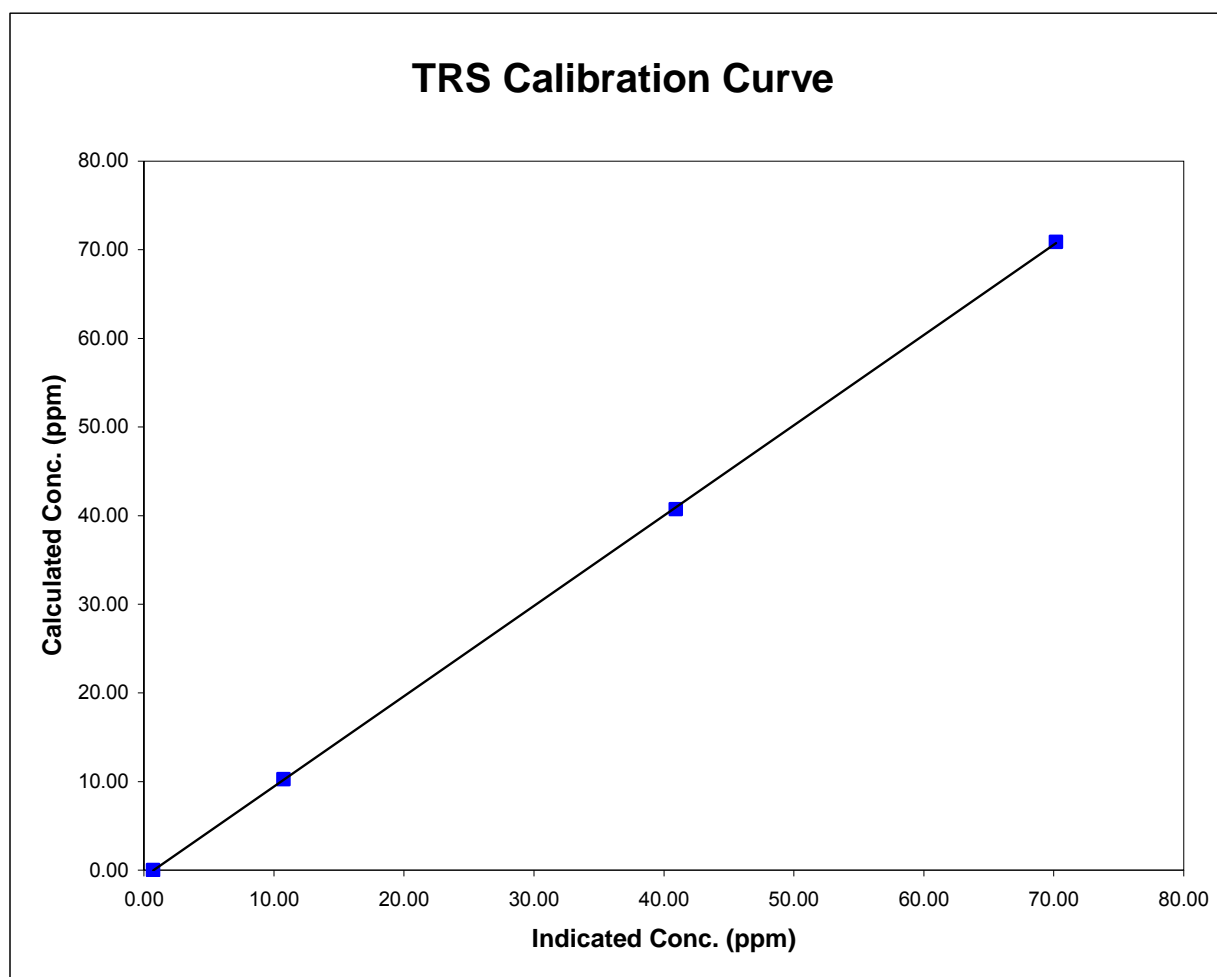
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

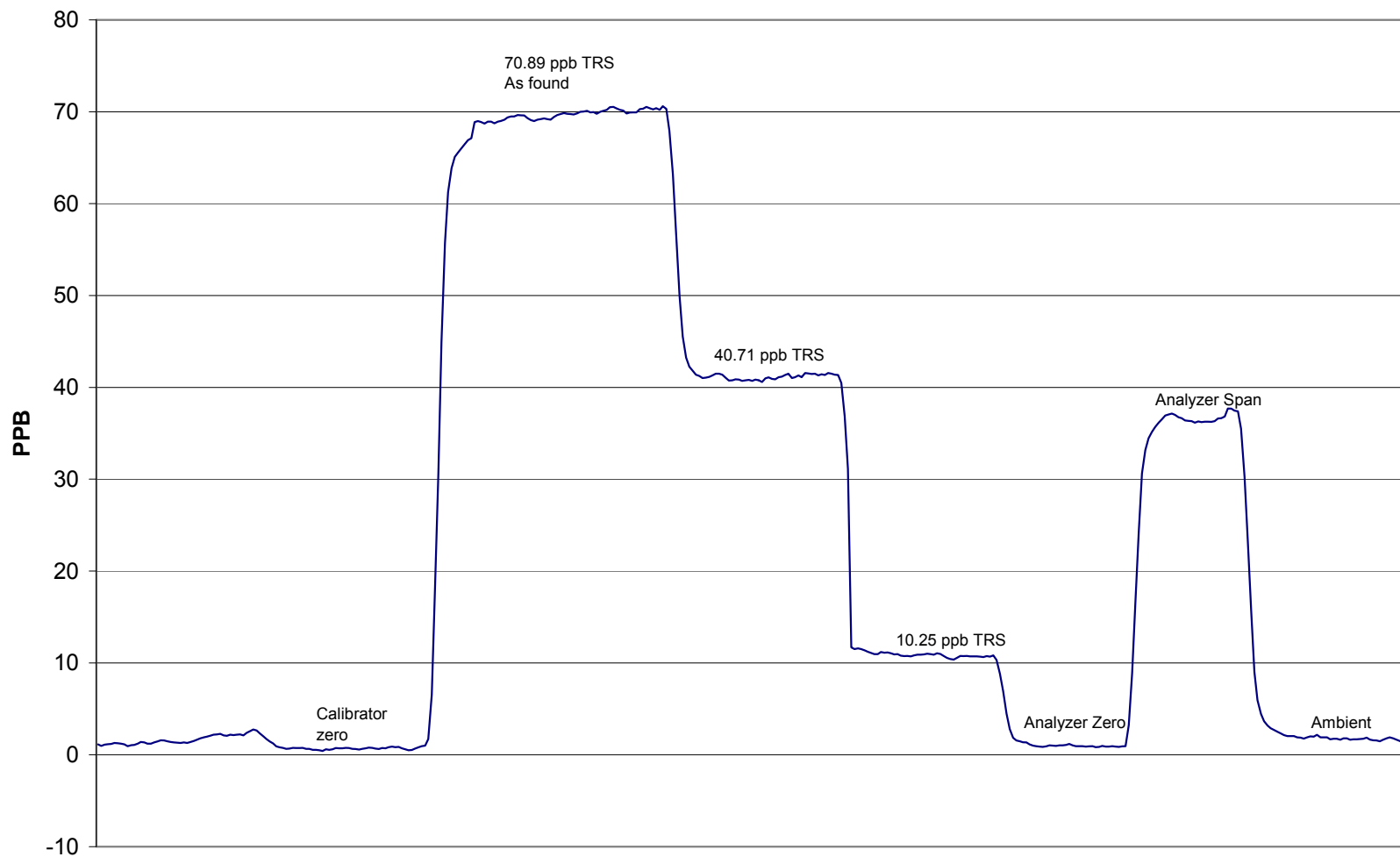
Calibration Date	December 13, 2007	Previous Calibration	November 19, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:25	End Time (MST)	12:20
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.712	N/A		
70.888	70.172	1.0102	Correlation Coefficient	0.999975
40.713	40.920	0.9949		
10.253	10.734	0.9552	Slope	1.019275
			Intercept	-0.761279



Henry Pirker TRS Calibration



December 13, 2007

Calibration Report



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

Station Information

Calibration Date	December 14, 2007		Previous Calibration	November 15, 2007	
Station Number	2		Station Location	Evergreen Park	
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal	<input type="checkbox"/> Other:	
Start Time (MST)	15:25		End Time (MST)	18:05	
Barometric Pressure	0.911	ATM	Station Temperature	20.0	Deg C
Calibrator	EnviroNics 6100		Serial Number	3474	
Cal Gas Concentration	50.3	ppm	Cal Gas Expiry Date	1/2/2009	
Correction factor	0.030967		Cal Gas Cylinder #	LL16161	
DACS make	Focus AP1000		DACS serial No.	52620	
DACS voltage range	0 - 10 volt		DACS channel #	6	
	Before			After	
Calculated slope	0.997865		Calculated slope	1.008435	
Calculated intercept	-1.638222		Calculated intercept	-1.439672	
Analyzer make	Teco 43i		Analyzer serial #	701120008	

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	9		8.9	
coefficient	0.928		0.928	
Lamp Voltage	836	volts	837	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	44.99	Deg C	45	Deg C
Pressure	656.2	mm Hg	668.6	mm Hg
Sample Flow	438	ccm	448	ccm
Lamp Intensity	90	%	89	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.00	1.0	N/A
4989	39.84	398.49	396.4	1.0052
4989	19.92	200.04	199.9	1.0006
4989	9.95	100.12	101.1	0.9899
4989	0.0	0.00	1.0	As Found Zero
4989	39.9	399.19	396.4	As Found Span
Average Correction Factor				0.9986

Calculated value of As Found Response: 392.887 ppm Percent Change of As Found: 1.6%

	before calibration		after calibration	
Auto zero	-0.8	ppm	-0.5	ppm
Auto span	280.2	ppm	276.1	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

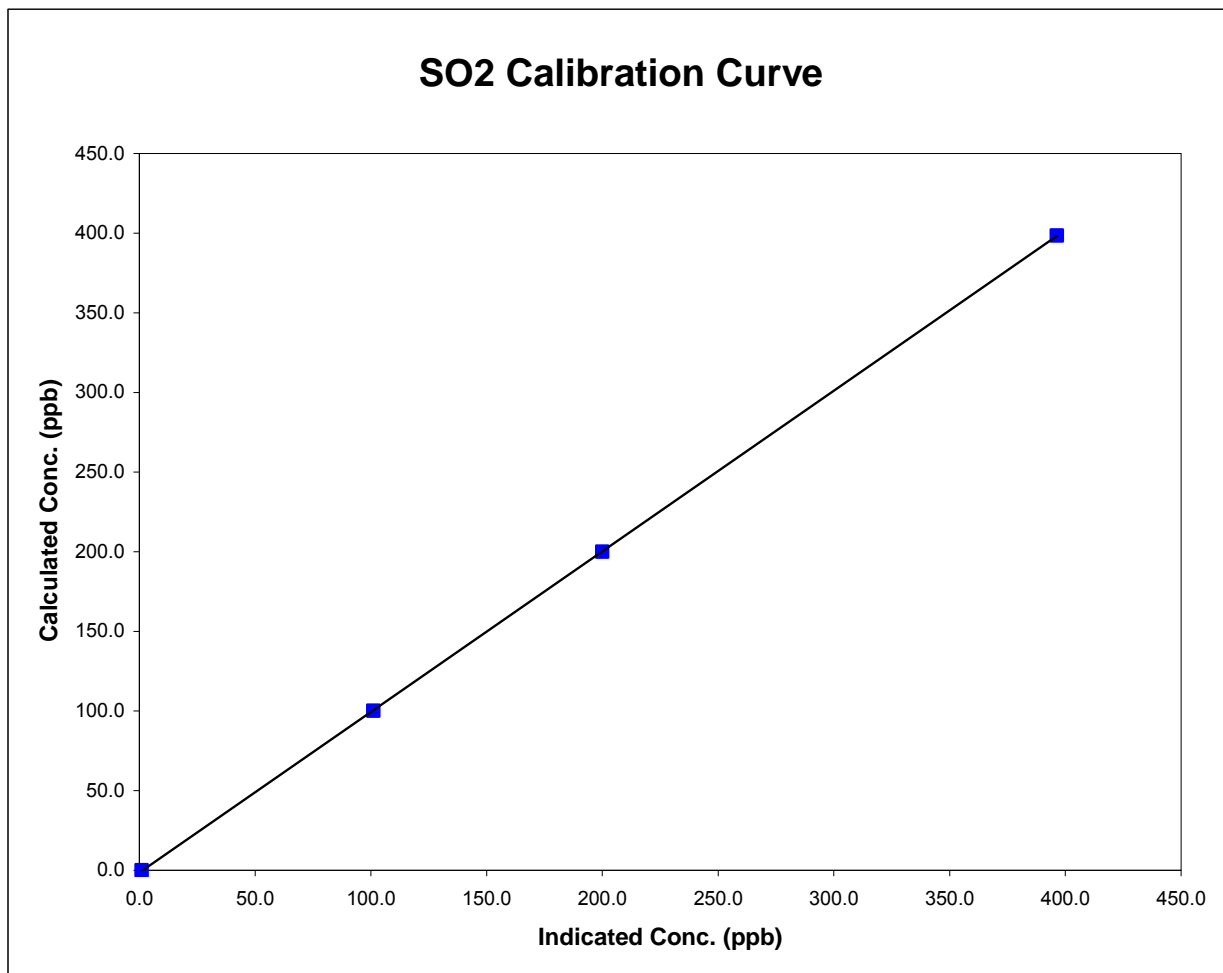
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

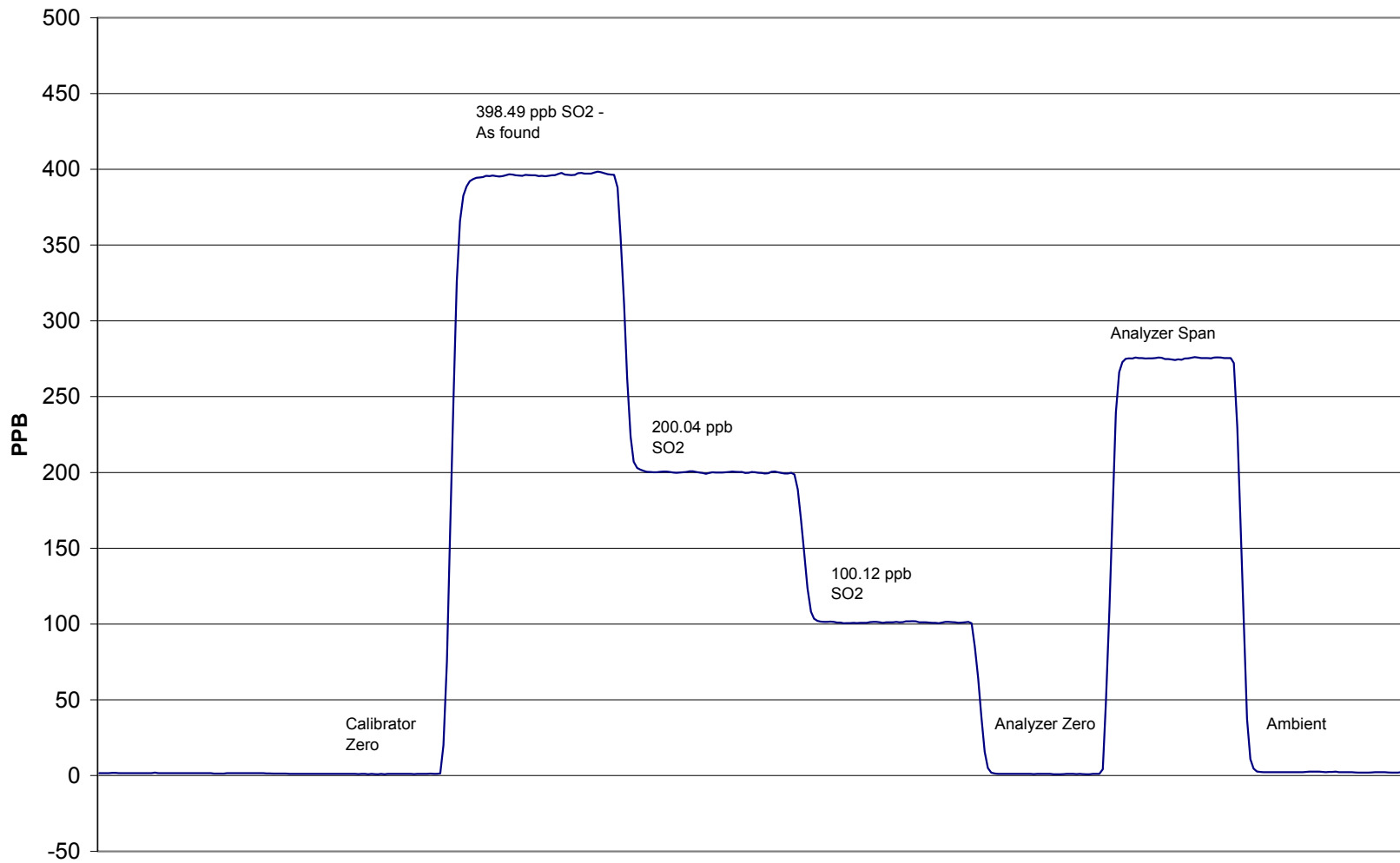
Calibration Date	December 14, 2007	Previous Calibration	November 15, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	15:25	End Time (MST)	18:05
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.0	N/A		
398.5	396.4	1.0052	Correlation Coefficient	0.999996
200.0	199.9	1.0006		
100.1	101.1	0.9899	Slope	1.008435
			Intercept	-1.439672



Evergreen Park SO2 Calibration



December 14, 2007

Calibration Report

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

Station Information

Calibration Date	December 14, 2007	Previous Calibration	November 15, 2007
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:40	End Time (MST)	16:00
Barometric Pressure	0.911 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	5.14 ppm	Cal Gas Expiry Date	7/31/2008
Correction factor	0.030967	Cal Gas Cylinder #	LL 74274
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	0.985475	Calculated slope	1.001093
Calculated intercept	0.835791	Calculated intercept	0.372246
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.9	ppb	16	ppb
coefficient	0.976		0.976	
Lamp Voltage	786	volts	791	volts
Chamber Temp	44.3	Deg C	44.3	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	639.9	mm Hg	635.4	mm Hg
Sample Flow	468	ccm	467	ccm
Lamp Intensity	48,170	mv	45,838	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.00	0.00	-0.3	N/A
4989	79.75	80.87	80.4	1.0054
4989	39.88	40.76	40.4	1.0092
4989	19.90	20.42	19.8	1.0293
4989	0.00	0.00	-0.3	As Found Zero
4989	80.00	81.12	80.4	As Found Span
Average Correction Factor				1.0146

Calculated value of As Found Response: 80.35 ppm Percent Change of As Found: 0.9%

	before calibration		after calibration	
Auto zero	0.4	ppm	0.1	ppm
Auto span	70.3	ppm	71.9	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary



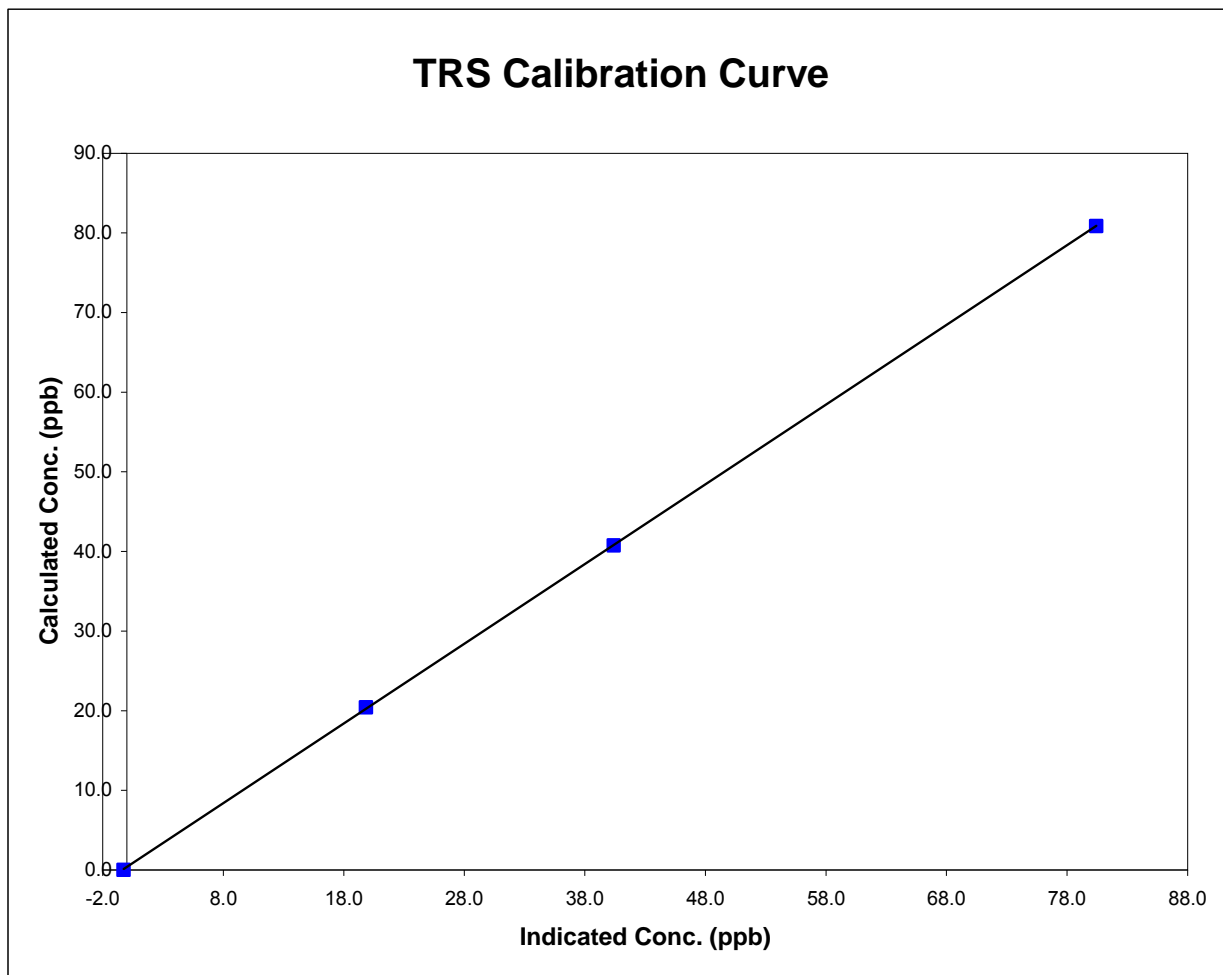
Parameter **TRS**
 Air Monitoring Network **PASZA**

Station Information

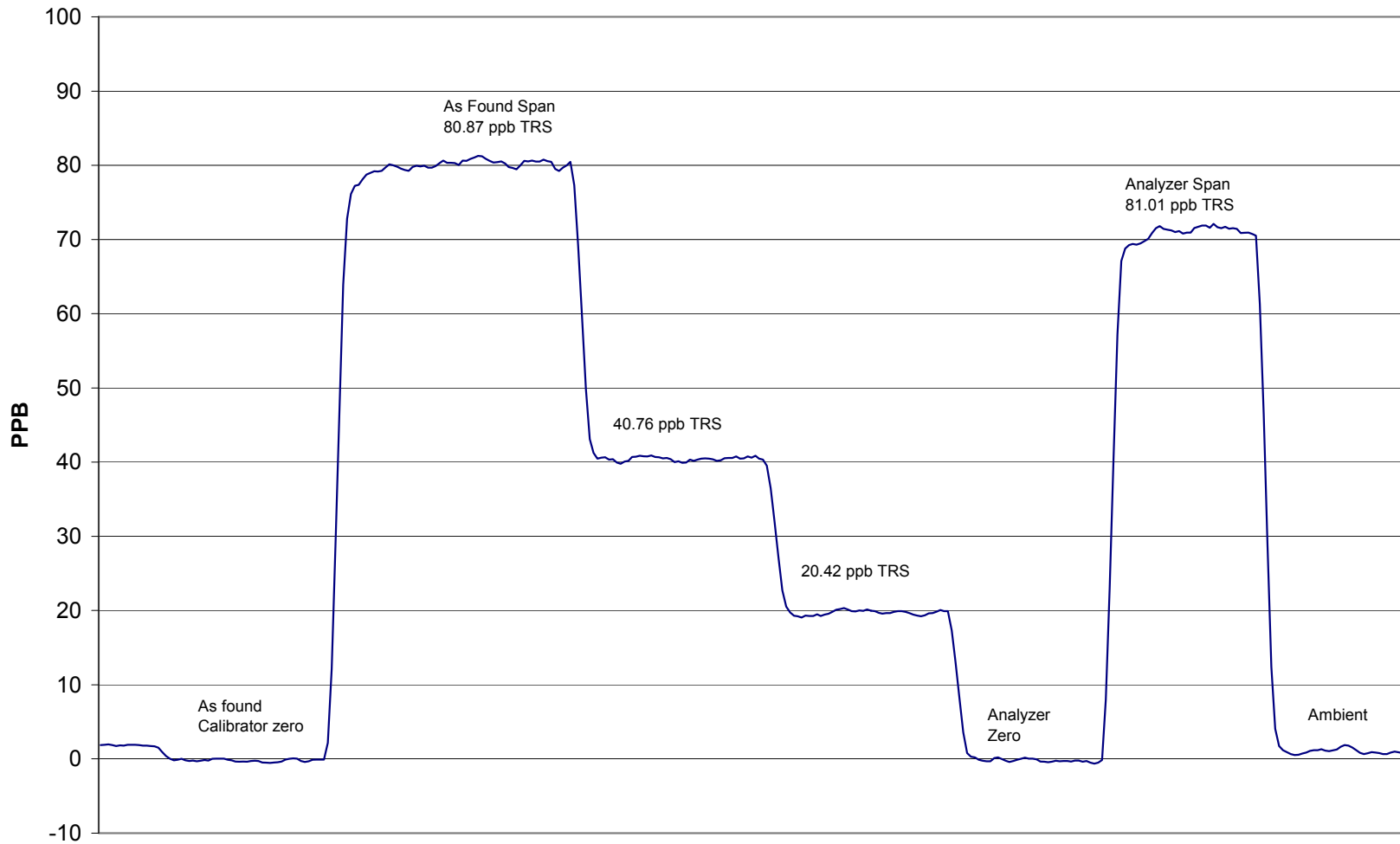
Calibration Date	December 14, 2007	Previous Calibration	November 15, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	13:40	End Time (MST)	16:00
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
80.9	80.4	1.0054	Correlation Coefficient	0.999985
40.8	40.4	1.0092		
20.4	19.8	1.0293	Slope	1.001093
			Intercept	0.372246



Evergreen Park TRS Calibration



November 15, 2007

Calibration Report



Parameter

SO₂

Air Monitoring Network

PASZA

Station Information

Calibration Date	December 6, 2007	Previous Calibration	November 28, 2007
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:45	End Time (MST)	15:31
Barometric Pressure	0.934 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.031749	Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	45272
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.001957	Calculated slope	1.012710
Calculated intercept	-1.421296	Calculated intercept	-0.802536
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	6.5		6.6	
coefficient	0.745		0.745	
Lamp Voltage	938	volts	943	volts
Chamber Temp	45.2	Deg C	45.2	Deg C
Perm Gas Temp	45	Deg C	44.99	Deg C
Pressure	680.1	mm Hg	667.2	mm Hg
Sample Flow	452	ccm	443	ccm
Lamp Intensity	88	%	87	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.0	0.00	0.2	N/A
4993	39.83	398.08	393.5	1.0116
4993	19.91	199.78	198.6	1.0061
4993	9.98	100.36	100.3	1.0004
4993	0.0	0.00	0.2	As Found Zero
4993	39.83	398.08	393.5	As Found Span
Average Correction Factor				1.0060

Calculated value of As Found Response: 392.633 ppm Percent Change of As Found: 1.4%

	before calibration		after calibration	
Auto zero	-1.2	ppm	-0.6	ppm
Auto span	305.3	ppm	311.6	ppm

Notes:

Calibration Performed By:

Conor Whiteley

Calibration Summary

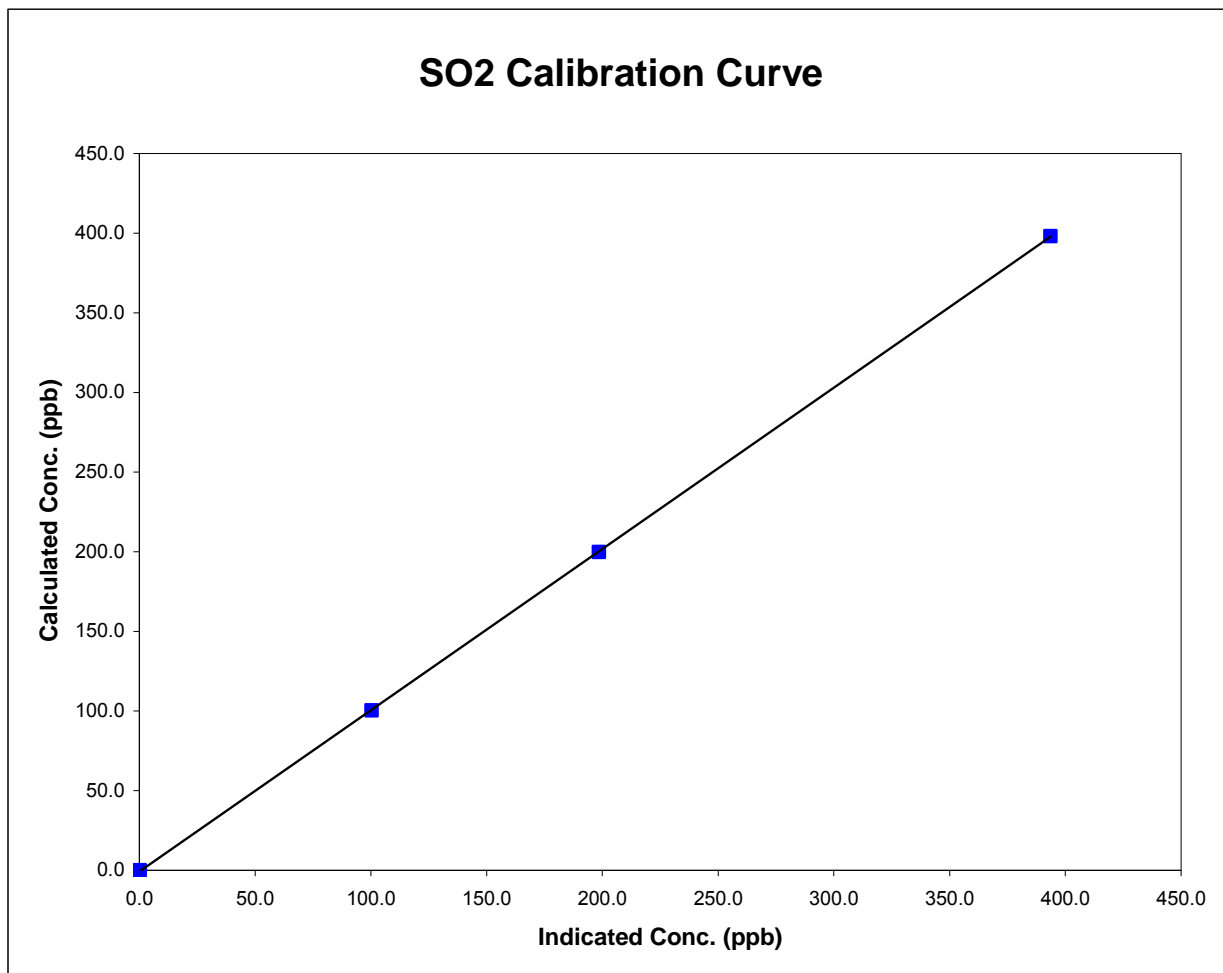
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

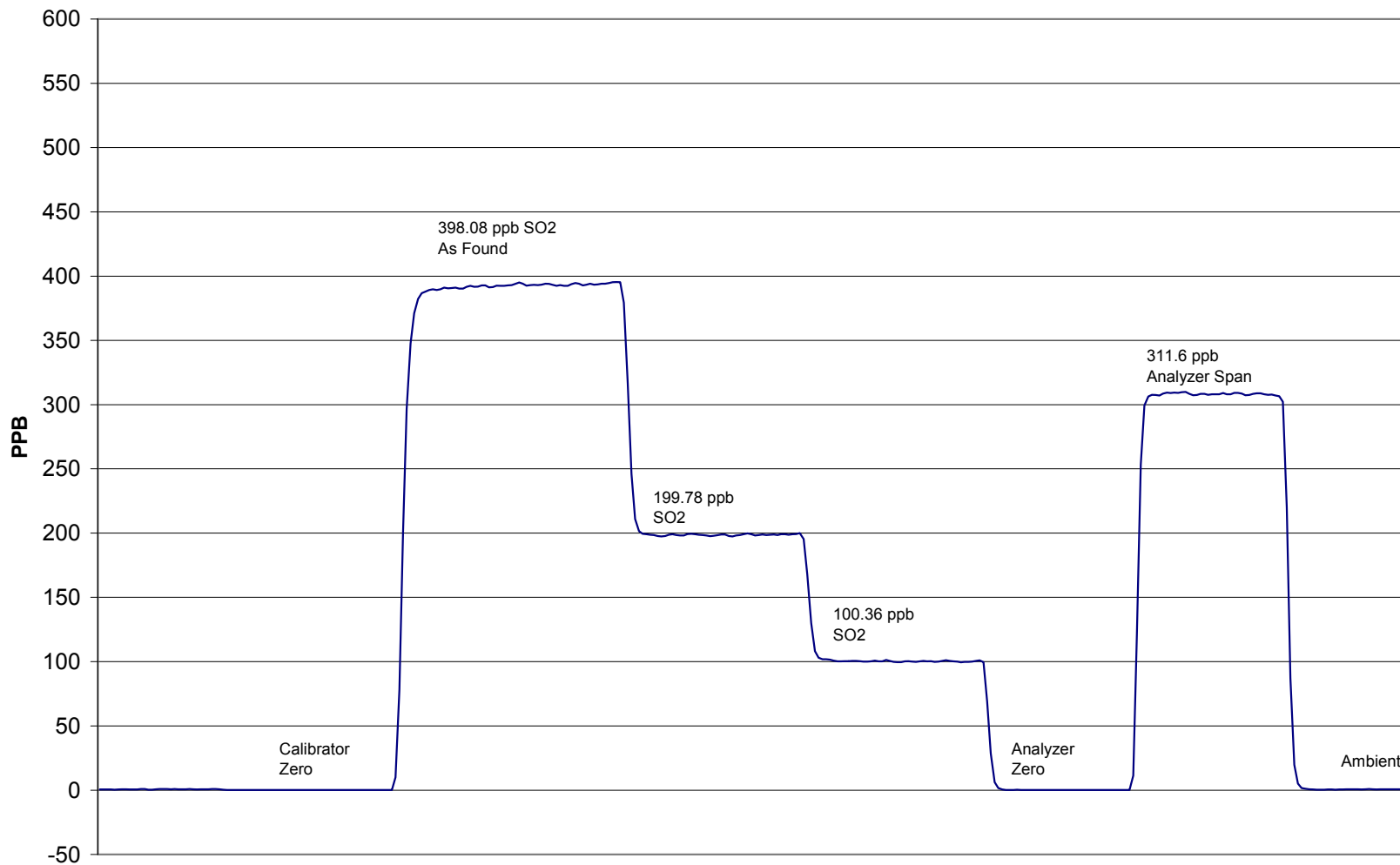
Calibration Date	December 6, 2007	Previous Calibration	November 28, 2007
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	12:45	End Time (MST)	15:31
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
398.1	393.5	1.0116	Correlation Coefficient	0.999989
199.8	198.6	1.0061		
100.4	100.3	1.0004	Slope	1.012710
			Intercept	-0.802536



Smoky Heights SO2 Calibration



December 6, 2007

Calibration Report

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

Station Information

Calibration Date	December 6, 2007		Previous Calibration	November 28, 2007	
Station Number	3		Station Location	Smoky Heights	
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal	<input type="checkbox"/> Other:	
Start Time (MST)	10:45		End Time (MST)	13:20	
Barometric Pressure	0.926	ATM	Station Temperature	20.0	Deg C
Calibrator	Envionics 6100		Serial Number	3474	
Cal Gas Conc	5.14	ppm	Cal Gas Expiry Date	7/31/2008	
Correction factor	0.031477		Cal Gas Cylinder #	LL 74274	
DACS make	Focus AP1000		DACS serial No.	52620	
DACS voltage range	0 - 10 volt		DACS channel #	5	
	<u>Before</u>			<u>After</u>	
Calculated slope	1.026207		Calculated slope	1.016778	
Calculated intercept	-0.620893		Calculated intercept	-0.441479	
Analyzer make	TEI Model 43C		Analyzer serial #	0436610005	

	before		after	
Concentration range	100	ppb	100	ppb
Background	11.1	ppb	11.2	ppb
coefficient	1.006		1.006	
Lamp Voltage	771	volts	775	volts
Chamber Temp	43.9	Deg C	43.9	Deg C
Perm Gas Temp	45	Deg C	45.02	Deg C
Pressure	508.5	mm Hg	505.1	mm Hg
Sample Flow	781	ccm	780	ccm
Lamp Intensity	32,390	mv	32,307	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)
4993	0.0	0.00	0.3	N/A
4993	79.76	80.82	79.8	1.0126
4993	39.87	40.72	40.7	1.0012
4993	9.92	10.19	10.5	0.9693
4993	0.0	0.00	0.3	As Found Zero
4993	79.7	80.78	79.8	As Found Span
Average Correction Factor				0.9944

Calculated value of As Found Response: 80.99 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.3	ppm
Auto span	43.1	ppm	42.4	ppm

Notes: No Adjustments Made

Calibration Performed By: Conor Whiteley

Calibration Summary

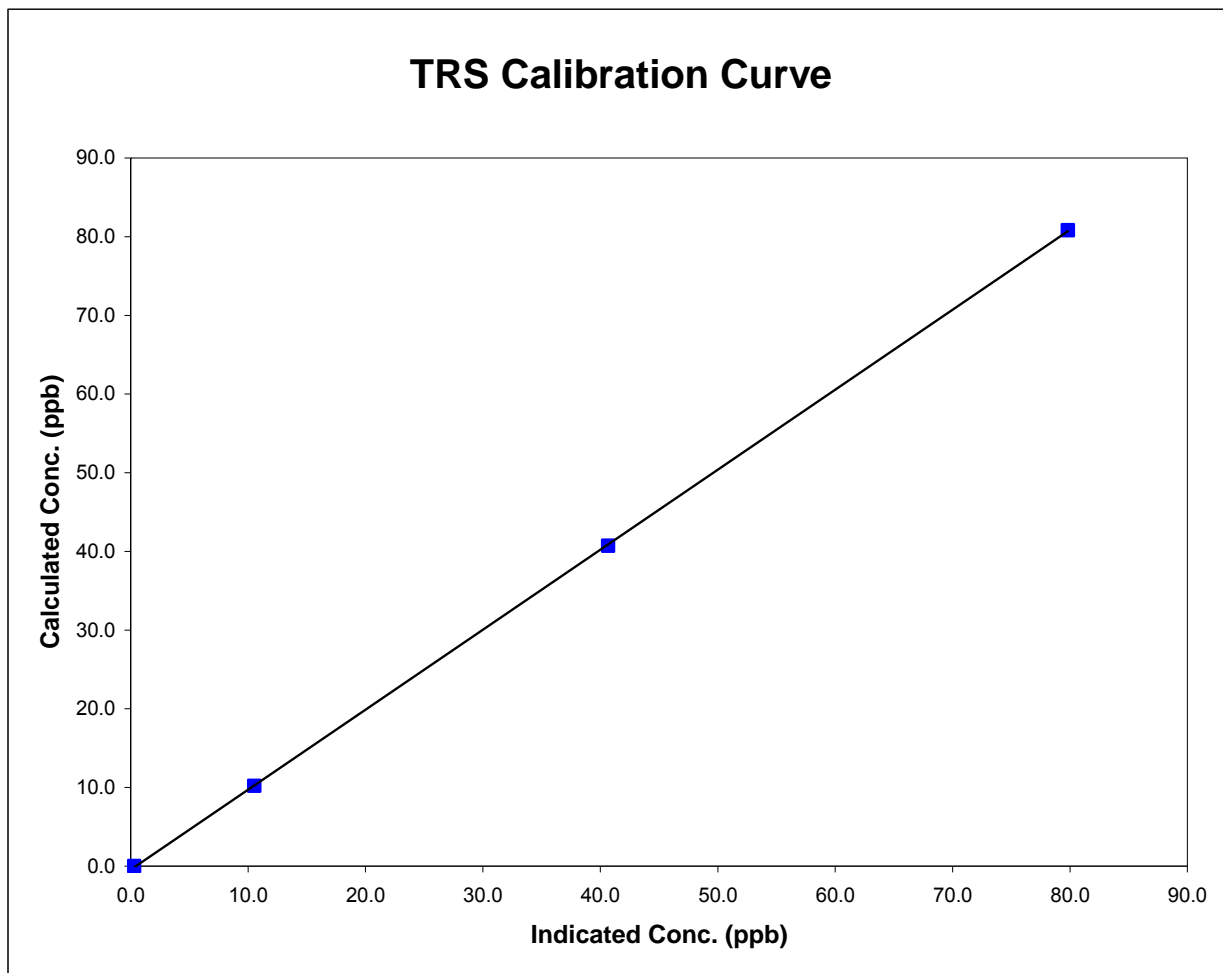
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

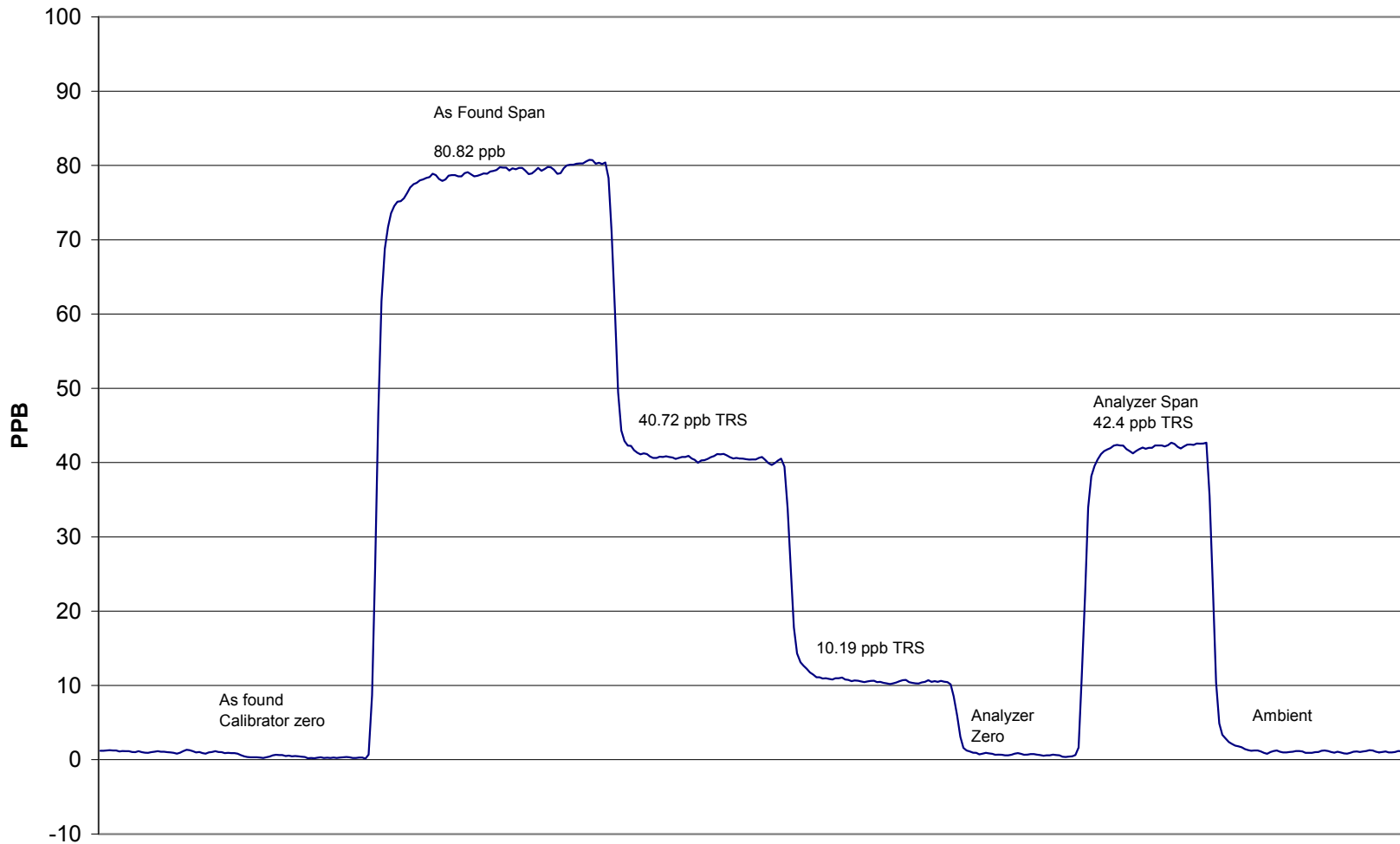
Calibration Date	December 6, 2007	Previous Calibration	November 28, 2007
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:45	End Time (MST)	13:20
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
80.8	79.8	1.0126	Correlation Coefficient	0.999982
40.7	40.7	1.0012		
10.2	10.5	0.9693	Slope	1.016778
			Intercept	-0.441479



Smoky Heights TRS Calibration



December 6, 2007

Calibration Report

Parameter **PM2.5**Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 6, 2007	Previous Calibration	October 4, 2007
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:10	End Time (MST)	14:55
Barometric Pressure	0.928 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15

Analyzer Information

Analyzer make	R&P	Control Unit serial #	140AB246340305
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB246340305

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	41	%	19	%
Ko Factor	12122		12122	
Temperature	9.3	Deg C	9.3	Deg C
Pressure	0.921	ATM	0.93	ATM
Main Fadj	1.000		1.000	
Aux Fadj	1.000		1.000	

Calibration Data

Parameter	Set Point	As Found	Tolerance	New Reading
zero flow - main	0.0	-0.01		0.00
zero flow - auxillary	0.0	-0.01		0.01
flow recovery - main	45 - 60 Seconds	40	45 - 60 Seconds	33
flow recovery - aux	46 - 60 Seconds	40	46 - 60 Seconds	45
Temperature	measured	-11.5	+/- 1.0 Deg C	-10.7
Pressure	measured	0.926	+/- 1.5% ΔATM	0.927
Total Flow	16.67 SLPM	17.67		16.52
Main Flow	13.67 SLPM	3.21	+/- 1.0 SLPM	3.01
Auxillary Flow	3.0 SLPM	14.570	+/- 0.2 SLPM	13.530
Leak Check - main	0.0	0.00	<0.15 SLPM	0.00
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.00
Ko Factor (w/o filter)	measured		filter weight (g)	0.11014
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: Replaced Filter, tried to adjust the aux flow but the span was already as low as possible...

Calibration Performed By: Conor Whiteley

Calibration ReportParameter **SO2**Air Monitoring Network **PASZA****Station Information**

Calibration Date	December 5, 2007	Previous Calibration	November 13, 2007
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:35	End Time (MST)	13:10
Barometric Pressure	0.915 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
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.001394	Calculated slope	1.012745
Calculated intercept	-0.011291	Calculated intercept	0.058379
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.98		2.8	
Coefficient	0.769		1.03	
PMT	-705	V	-813	V
UV Lamp Voltage	906	V	1021	V
Chamber Temp	44.3	Deg C	45	Deg C
Pressure	656.6	mm Hg	668.8	mm Hg
Sample Flow	0.614	LPM	0.467	LPM
Lamp Intesity	29202	Hz	29202	Hz

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)
4990	0.00	0.0	-0.2	N/A
4990	39.86	79.7	78.6	1.0144
4990	19.94	40.0	39.6	1.0120
4990	9.96	20.0	19.9	1.0095
4990	0.00	0.0	-0.2	As found zero
4990	8.00	16.1	78.6	As found span
Average Correction Factor				1.0120

Calculated value of As Found Response: 78.877 ppm Percent Change of As Found: -389.8%

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.2	ppm
Auto span	51.3	ppm	53.9	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary



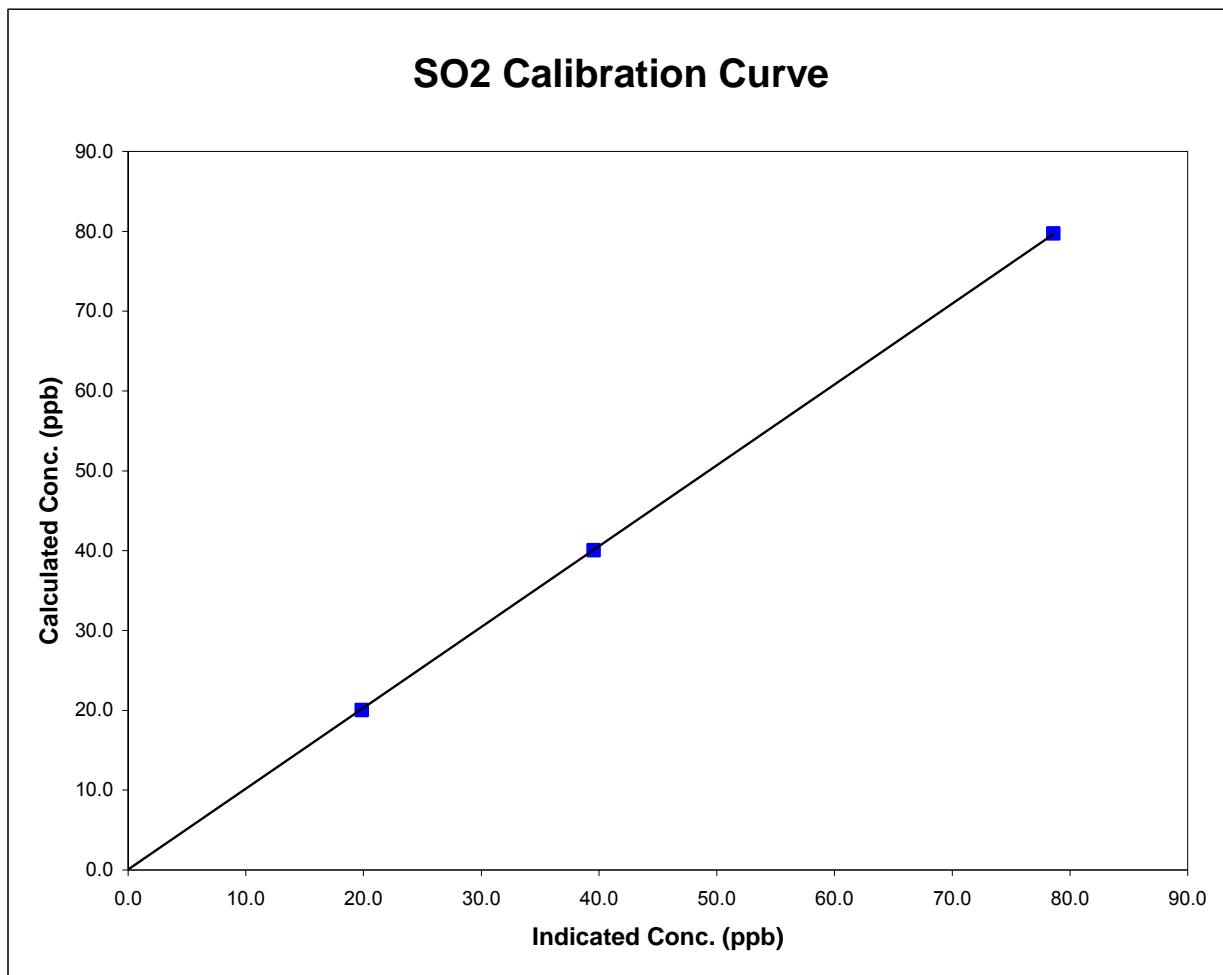
Parameter **SO2**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 5, 2007	Previous Calibration	November 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:35	End Time (MST)	13:10
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
79.7	78.6	1.0144	Correlation Coefficient	0.999987
40.0	39.6	1.0120		
20.0	19.9	1.0095	Slope	1.012745
			Intercept	0.058379



Beaverlodge SO2 Calibration



December 5, 2007

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date	December 5, 2007	Previous Calibration	November 13, 2007
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal
Start Time (MST)	10:35:00	End Time (MST)	15:00:00
Barometric Pressure	0.915 Atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
NO Cal Gas Conc	50.1 ppm	Cal Gas Cert. Date	2-Jan-07
NOx Cal Gas Conc	50.2 ppm	Cal Gas Serial #	CC 114395

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269	
Parameter	NO2	NOx	NO	
Before	Data Slope	0.973828	0.977952	0.980823
	Data Offset	0.275670	-1.707589	-1.167270
After	Data Slope	0.991055	0.990048	0.993226
	Data Offset	-0.055510	-1.078086	-0.987284
Channel #	8	6	7	
Voltage Range	0 - 10 VDC	0 - 10 VDC	0 - 10 VDC	

Analyzer Information

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

Test Point	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
NO background	1.3	ppb	1.3	mV
NOx background	1.3	ppb	1.3	mV
NO coefficient	1.061		1.061	
NOx coefficient	0.999		0.999	
PMT Voltage	-635	V	-636	V
Chamber Temp	49.4	Deg C	49.2	Deg C
Cooler Temp	-2.1	Deg C	-2.2	Deg C
Converter Temp	324.0	Deg C	324.0	Deg C
Sample Flow	0.806	LPM	0.776	LPM
Ozonator Flow	0.086	LPM	0.087	LPM
Pressure	174.7	mm Hg	175.4	mm Hg

Notes: NO channel not recording the right numbers, wire was loose at the back of DACS
 Zero air was cut off just as the second point was set, nox bloomed for a moment then zero air resumed.

Calibration Report

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



Station Information

Calibration Date: **December 5, 2007** 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	4990	0.00	0.0	0.0	0.0	-0.3	-0.4	-0.4	N/A	N/A
1	4990	39.86	397.8	397.0	0.8	402.3	400.1	1.5	0.9889	0.9923
2	4990	19.94	199.8	199.4	0.4	203.3	202.1	0.8	0.9830	0.9865
3	4990	9.96	100.0	99.8	0.2	103.7	103.1	-0.1	0.9642	0.9683
AFZ	4990	0.00	0.0	0.0	0.0	-0.3	-0.4	-0.4	0.0000	0.0000
AFS	4990	39.92	398.4	397.6	0.8	402.3	400.1	1.5	0.9903	0.9937
Average Correction Factor									0.9787	0.9823

As Found Concentrations: NO_x= 400.9 NO= 399.3 As Found Percent Change NO_x= 0.6% NO= 0.4%

GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.92 ccm

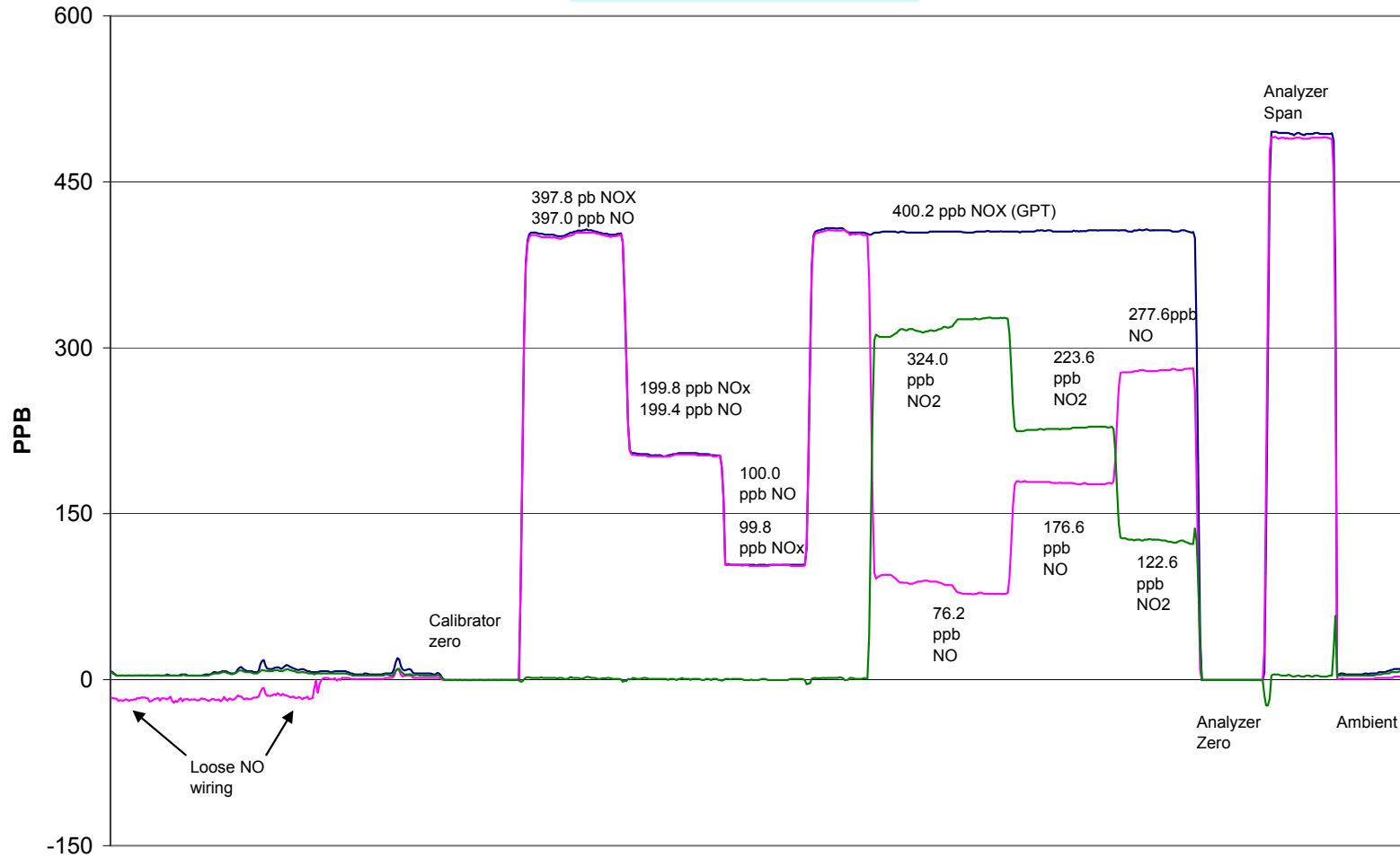
O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	400.2	401.7	-1.5	407.1	405.5	1.3	0.9831	0.9908	N/A	N/A
300	400.2	76.2	324.0	405.0	77.7	326.6	0.9882	0.9805	0.9920	100.8%
200	400.2	176.6	223.6	405.6	178.8	225.9	0.9868	0.9877	0.9898	101.0%
100	400.2	277.6	122.6	405.4	280.5	124.4	0.9871	0.9897	0.9862	101.4%
Average Correction Factor							0.9874	0.9860	0.9893	101.1%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	-1.9	0.0	-1.5	ppb	-1.3	-0.4	-1.3	ppb
Auto span	974.9	183.6	977.2	ppb	487.4	3.1	485.2	ppb

Calibration Performed By: Conor Whiteley

Beaverlodge NOx Calibration



December 5, 2007

Calibration Summary

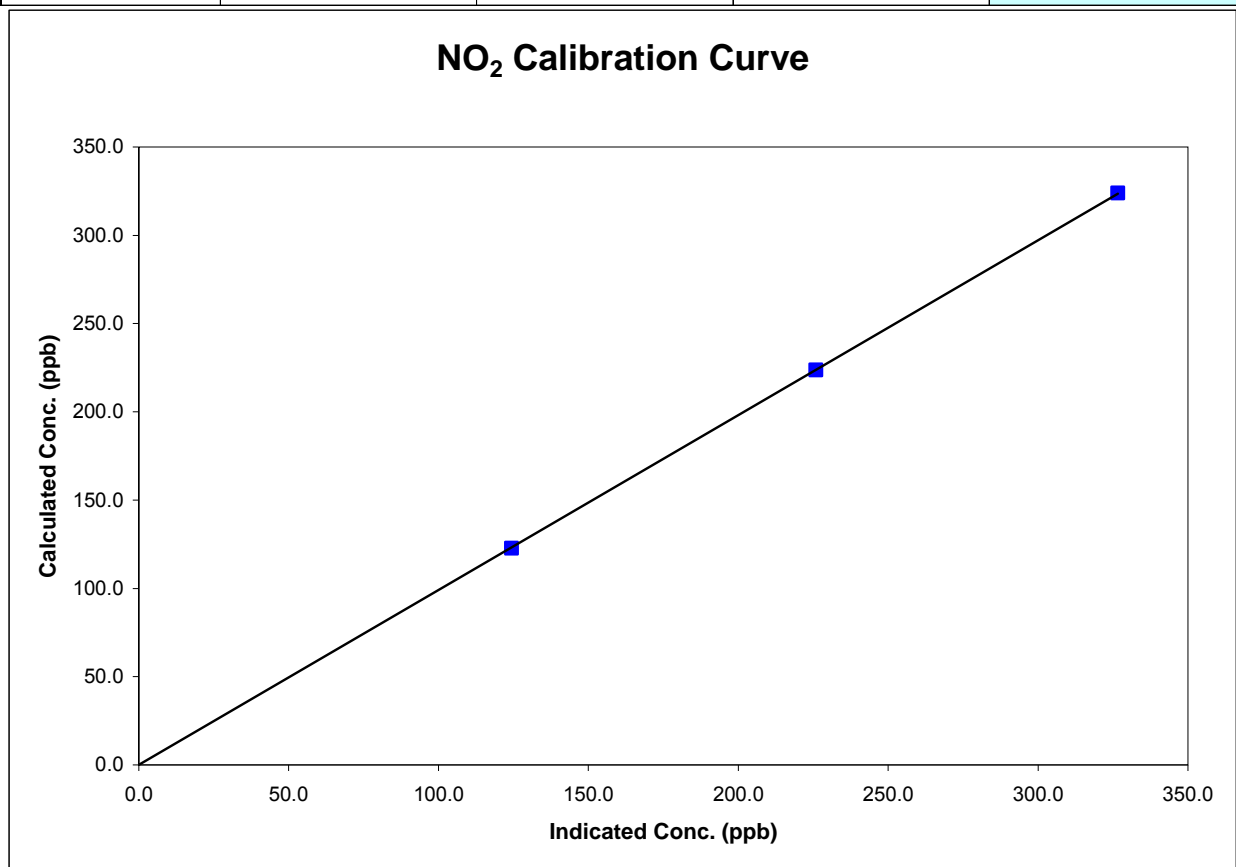
Parameter **NO₂**Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 5, 2007	Previous Calibration	November 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:35	End Time (MST)	15:00
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	-0.4	0.0000		
324.0	326.6	0.9920	Correlation Coefficient	0.999989
223.6	225.9	0.9898		
122.6	124.4	0.9862	Slope	0.991055
			Intercept	-0.055510



Calibration Summary

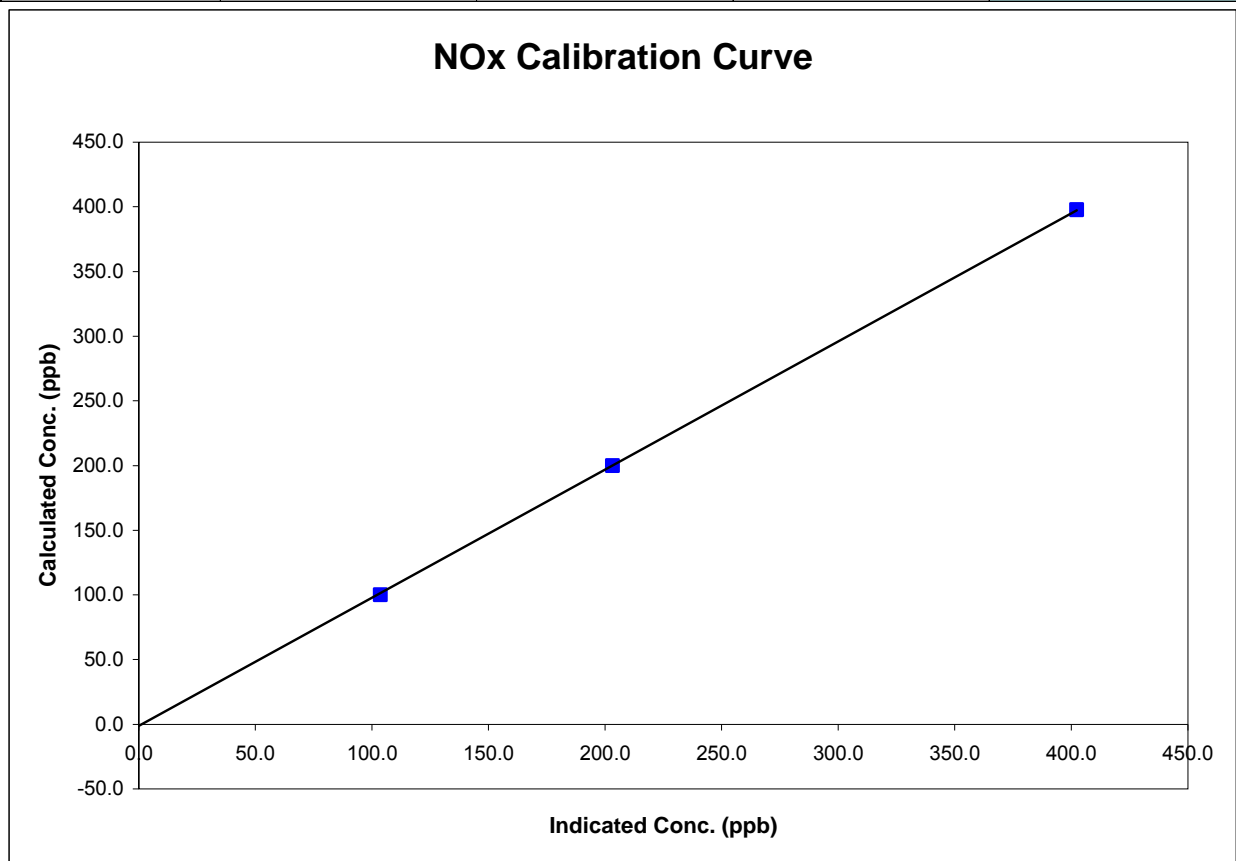
Parameter **NO_x**Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 5, 2007	Previous Calibration	November 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:35	End Time (MST)	15:00
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		
397.8	402.3	0.9889	Correlation Coefficient	0.999943
199.8	203.3	0.9830		
100.0	103.7	0.9642	Slope	0.990048
			Intercept	-1.078086



Calibration Summary



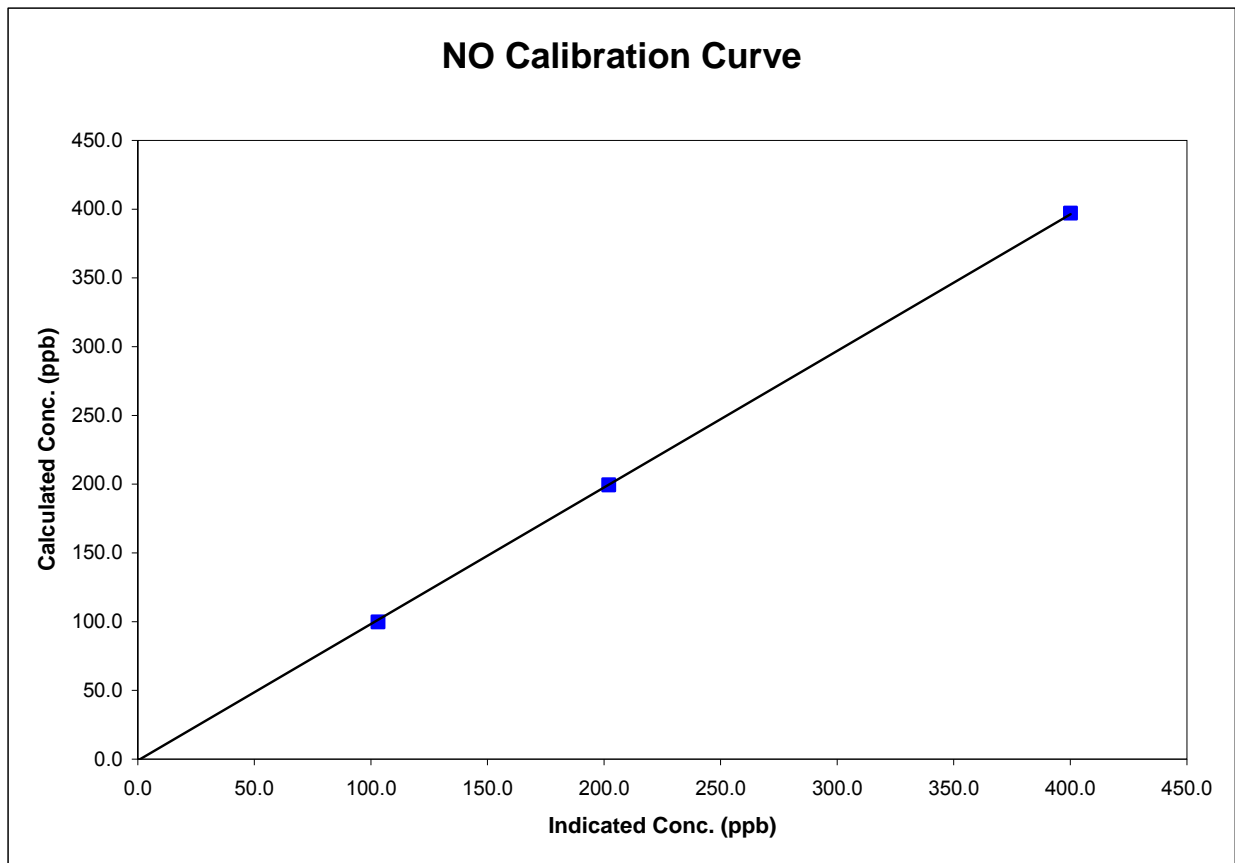
Parameter **NO**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 5, 2007	Previous Calibration	November 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:35	End Time (MST)	15:00
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	-0.4	N/A		
397.0	400.1	0.9923	Correlation Coefficient	0.999943
199.4	202.1	0.9865		
99.8	103.1	0.9683		
			Slope	0.993226
			Intercept	-0.987284



Calibration Report

Parameter O3 Air Monitoring Network PASZA

Station Information

Calibration Date	<u>December 5, 2007</u>	Previous Calibration	<u>November 14, 2007</u>
Station Number	<u>4</u>	Station Location	<u>Beaverlodge</u>
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	<u>14:25</u>	End Time (MST)	<u>5:10</u>
Barometric Pressure	<u>0.915</u> atm	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>Enviroics 6100</u>	Serial Number	<u>3474</u>
Cal Gas Concentration	<u>NA</u>	Cal Gas Expiry Date	<u>NA</u>
DACS make	<u>Focus AP1000</u>	DACS serial No.	<u>45269</u>
DACS voltage range	<u>0 - 1 volt</u>	DACS channel #	<u>5</u>
	<u>Before</u>		<u>After</u>
Calculated slope	<u>0.972885</u>	Calculated slope	<u>0.994661</u>
Calculated intercept	<u>6.125586</u>	Calculated intercept	<u>1.913623</u>
Analyzer make	<u>Teco 49C</u>	Analyzer serial #	<u>49C-76443-383</u>

	before		after	
Concentration range	<u>0 - 500</u>	<u>ppb</u>	<u>0 - 500</u>	<u>ppb</u>
offset	<u>-0.20</u>	<u>ppb</u>	<u>-0.20</u>	<u>ppb</u>
slope	<u>1.074</u>		<u>1.042</u>	
Lamp temp	<u>56.3</u>	<u>mV</u>	<u>56.3</u>	<u>mV</u>
Lamp Intensity A/B	<u>79654/77070</u>	<u>mV</u>	<u>77866/75491</u>	<u>mV</u>
Pressure	<u>672.7</u>	<u>mm Hg</u>	<u>671.1</u>	<u>mm Hg</u>
Flow A	<u>742</u>	<u>ccm</u>	<u>736</u>	<u>ccm</u>
Flow B	<u>697</u>	<u>ccm</u>	<u>690</u>	<u>ccm</u>

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
<u>4990</u>	<u>0.00</u>	<u>0.0</u>	<u>-0.2</u>	<u>N/A</u>
<u>4990</u>	<u>0.00</u>	<u>324.0</u>	<u>325.0</u>	<u>0.9970</u>
<u>4990</u>	<u>0.00</u>	<u>223.6</u>	<u>222.6</u>	<u>1.0046</u>
<u>4990</u>	<u>0.00</u>	<u>122.6</u>	<u>118.7</u>	<u>1.0328</u>
<u>4990</u>	<u>0.00</u>	<u>0.0</u>	<u>-0.2</u>	<u>As found zero</u>
<u>4990</u>	<u>0.00</u>	<u>323.9</u>	<u>333.4</u>	<u>As found span</u>
Average Correction Factor				<u>1.0115</u>

Calculated value of As Found Response: 330.6 ppm Percent Change of As Found: 2.1%

	before calibration		after calibration	
Auto zero	<u>6.1</u>	<u>ppb</u>	<u>1.9</u>	<u>ppb</u>
Auto span	<u>119.0</u>	<u>ppb</u>	<u>115.3</u>	<u>ppb</u>

Notes: Adjusted O3 as found high pointCalibration Performed By: Conor Whiteley

Calibration Summary

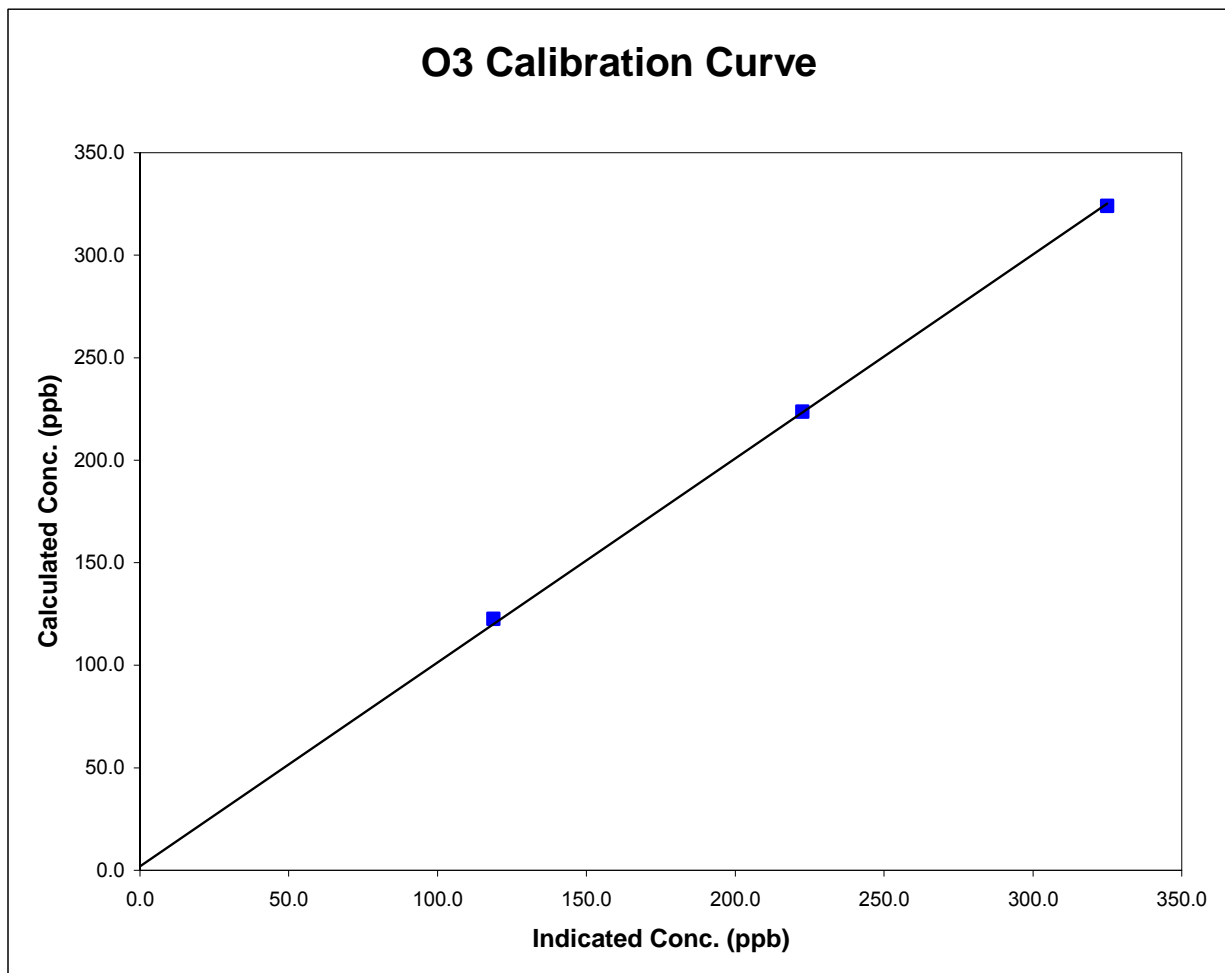
Parameter **O3**Air Monitoring Network **PASZA**

Station Information

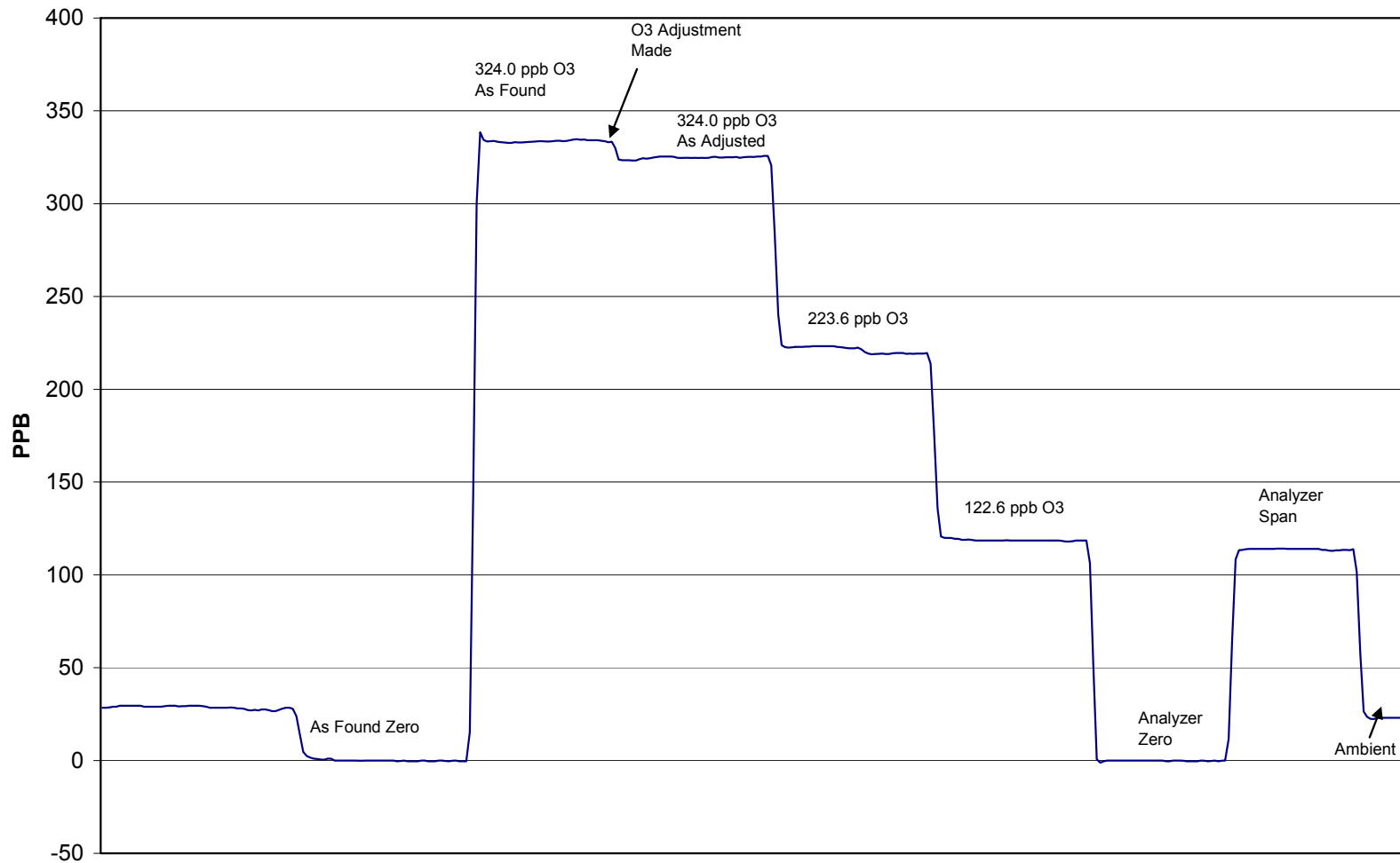
Calibration Date	December 5, 2007	Previous Calibration	November 14, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	14:25	End Time (MST)	5:10
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	NA		
324.0	325.0	0.9970	Correlation Coefficient	0.999804
223.6	222.6	1.0046		
122.6	118.7	1.0328		
			Slope	0.994661
			Intercept	1.913623



Beaverlodge O3 Calibration



December 5, 2007

Calibration Report



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

Station Information

Calibration Date	December 10, 2007	Previous Calibration	November 6, 2007
Station Number	8	Station Location	Rover - Spirit River
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:20	End Time (MST)	14:50
Barometric Pressure	27.93 inches Hg	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL 16161		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.997191	Calculated slope	0.992926
Calculated intercept	-0.632348	Calculated intercept	-1.121894
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	7.9		8	
Coefficient	1.156		1.156	
UV Lamp Voltage	740	V	744	V
Chamber Temp	44.4	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	689.6	mm Hg	679.6	mm Hg
Sample Flow	494	LPM	488	LPM
Lamp Intesity	33971	Hz	34319	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	0.1	N/A
4990	39.86	398.6	402.1	0.9914
4990	19.90	199.8	202.8	0.9853
4990	9.93	99.9	102.8	0.9712
4990	0.00	0.0	0.1	As found zero
4990	39.94	399.4	402.1	As found span
Average Correction Factor				0.9826

Calculated value of As Found Response: 400.232 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	-0.5	ppm	-0.9	ppm
Auto span	268.8	ppm	262.5	ppm

Notes: Adjusted SO2 Span

Calibration Performed By: Conor Whiteley

Calibration Summary

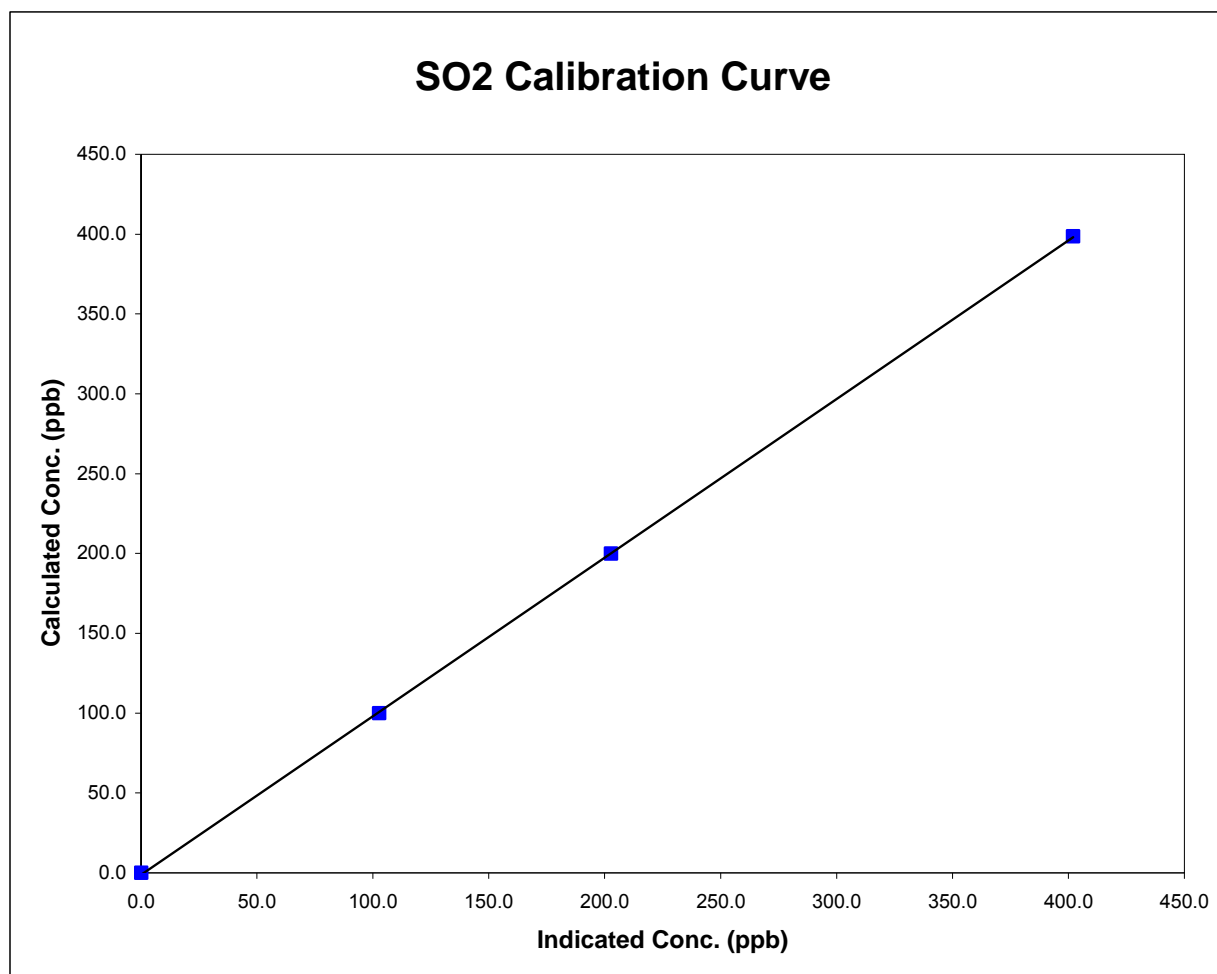
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

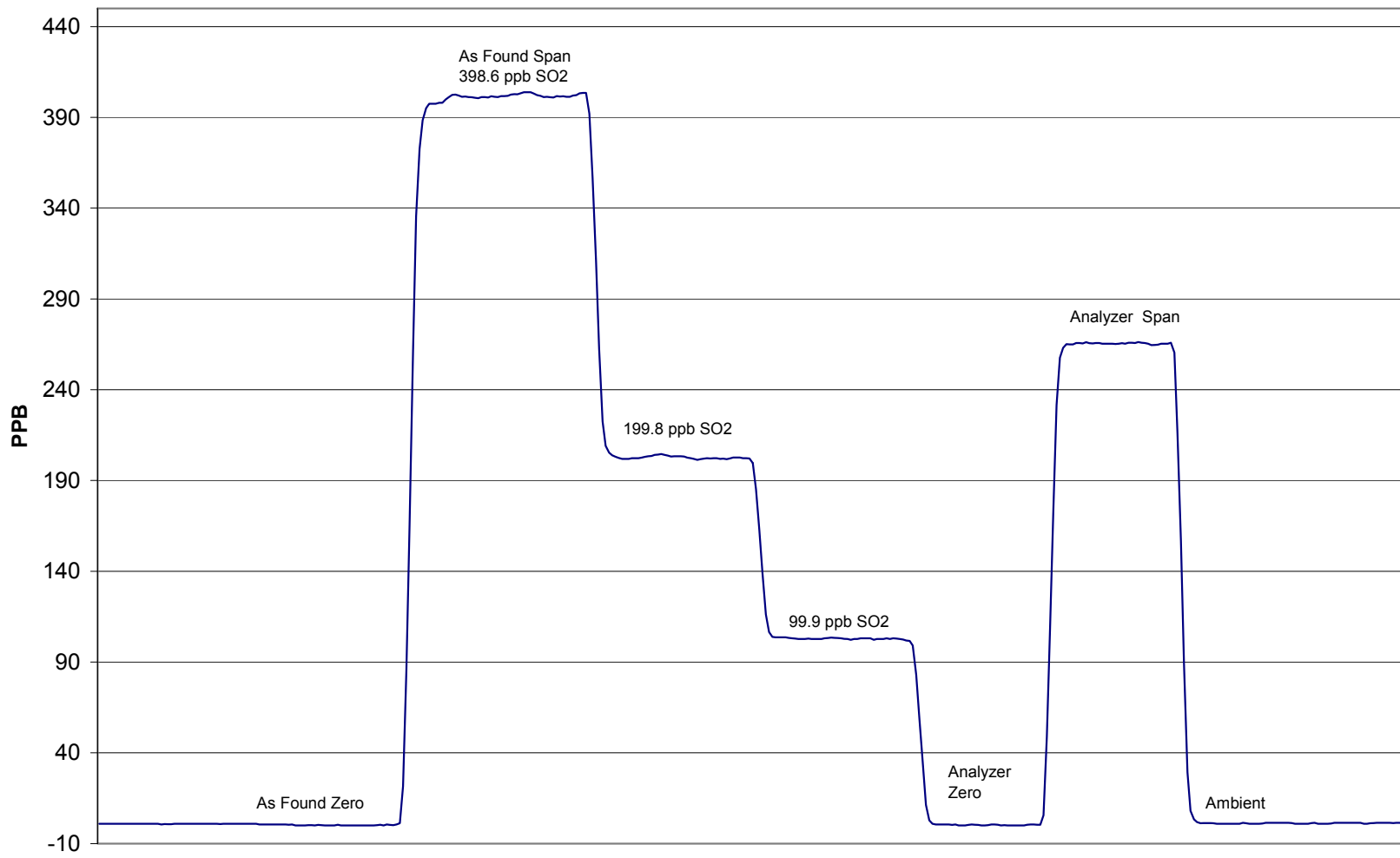
Calibration Date	December 10, 2007	Previous Calibration	November 6, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:20	End Time (MST)	14:50
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
398.6	402.1	0.9914	Correlation Coefficient	0.999968
199.8	202.8	0.9853		
99.9	102.8	0.9712	Slope	0.992926
			Intercept	-1.121894



Spirit River SO2 Calibration



December 10, 2007

Calibration Report

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

Station Information

Calibration Date	December 11, 2007	Previous Calibration	November 7, 2007
Station Number	6	Station Location	Rover
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:40	End Time (MST)	13:20
Barometric Pressure	28.0 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	5.14 ppm	Cal Gas Expiry Date	11/15/2005
Gas Cert Reference	LL 74274		
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	1.004783	Calculated slope	0.983091
Calculated intercept	0.584556	Calculated intercept	0.115516
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	4.8	ppb	4.8	ppb
Coefficient	1.055		1.055	
Lamp Voltage	801	V	800	V
Chamber Temp	43.9	C	44.0	C
Perm gas Temp	45	C	45	C
Pressure	675	mmHg	669	mmHg
Sample Flow	441	ccm	445	ccm
Lamp Intensity	38522.0	Hz	37857.0	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)
4992	0.0	0.0	0.0	N/A
4992	69.74	70.8	72.0	0.9836
4992	39.93	40.8	41.3	0.9881
4992	19.96	20.5	20.6	0.9928
4992	0.00	0.0	0.0	As found zero
4992	69.74	70.8	72.0	As found span
Average Correction Factor				0.9882

Calculated value of As Found Response: 72.94 ppm Percent Change of As Found: -3.0%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.2	ppm
Auto span	80.0	ppm	76.3	ppm

Notes: No adjustments madeCalibration Performed By: Conor Whiteley

Calibration Summary

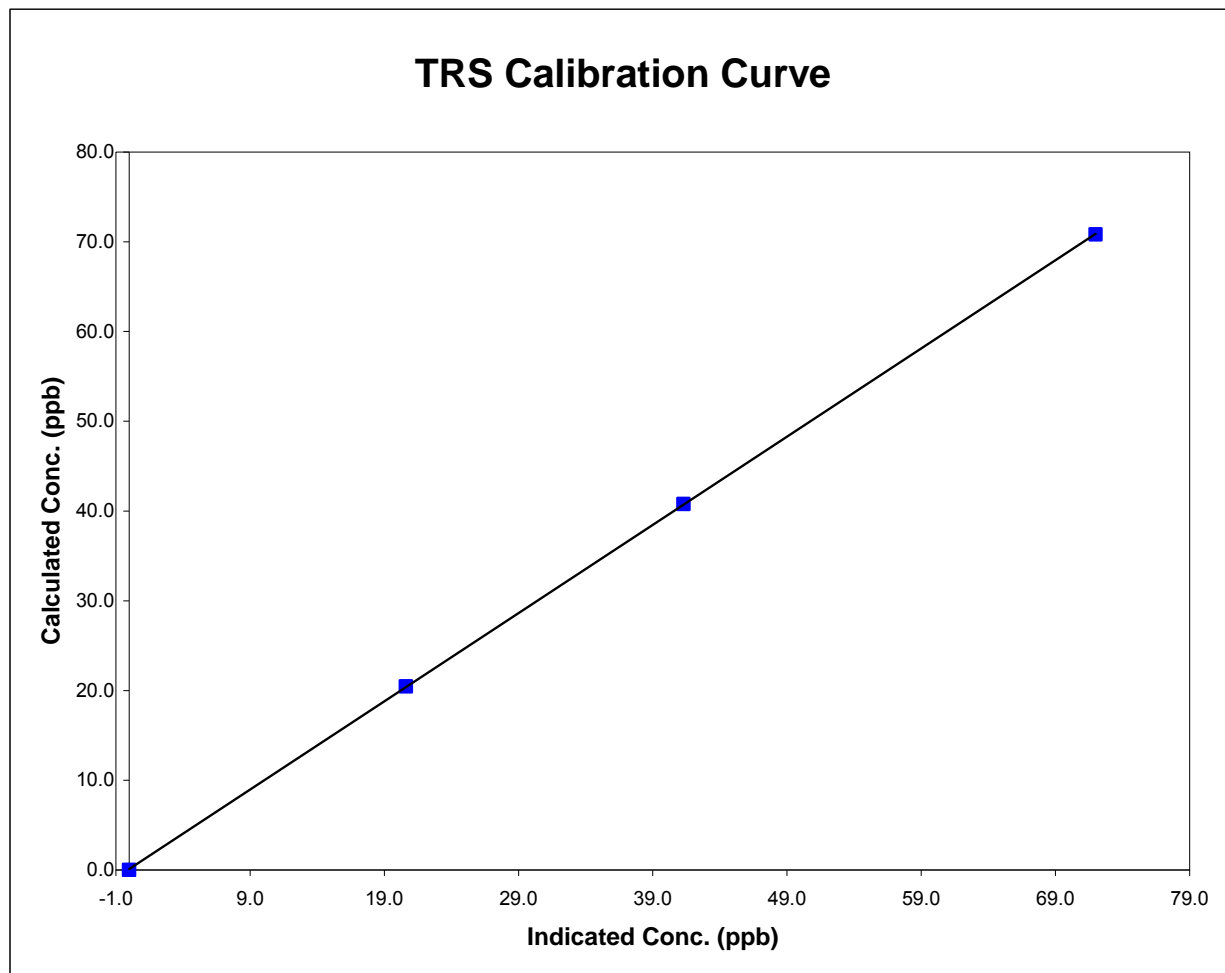
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

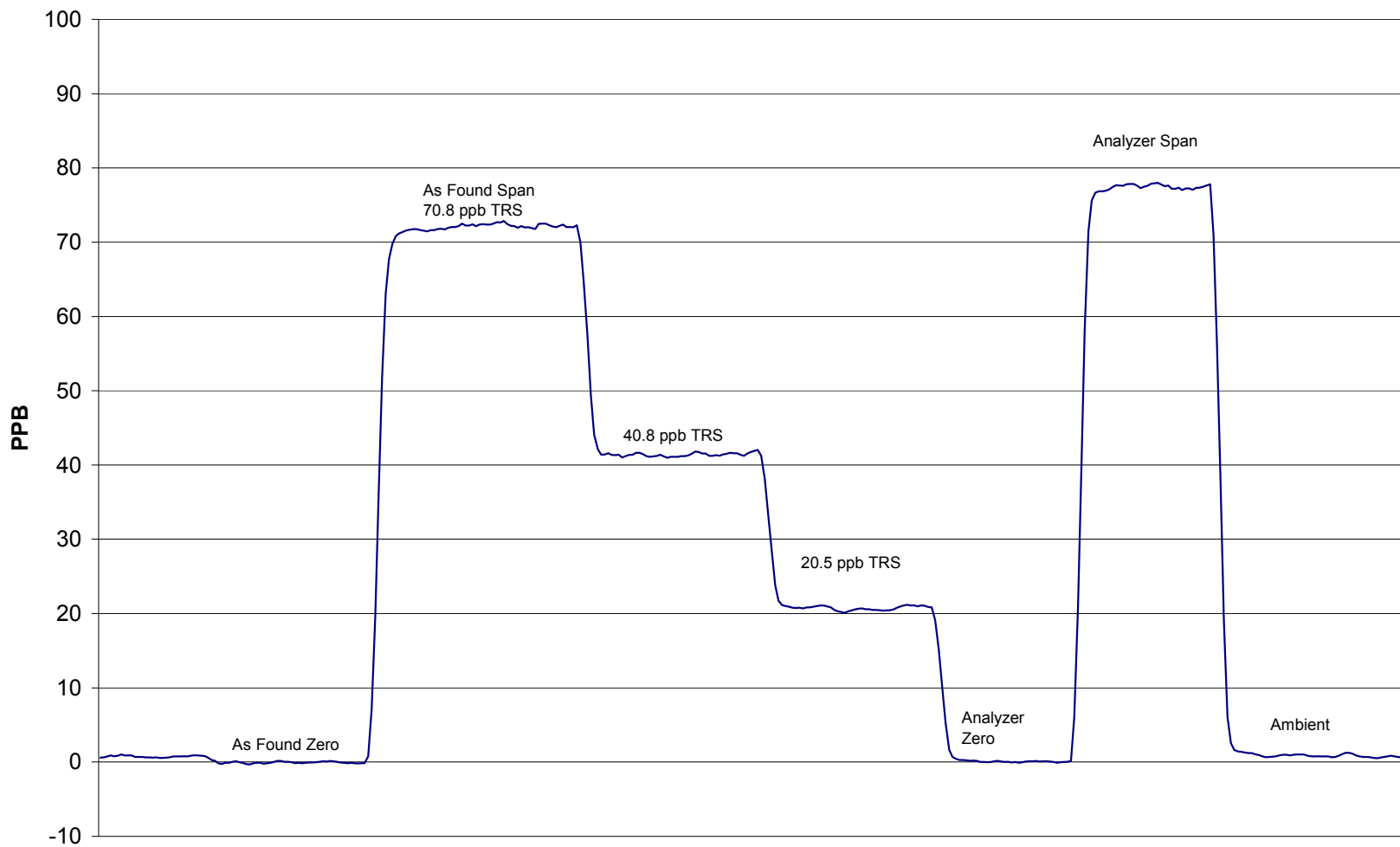
Calibration Date	December 11, 2007	Previous Calibration	November 7, 2007
Station Number	6	Station Location	Rover
Start Time (MST)	10:40	End Time (MST)	13:20
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
70.8	72.0	0.9836	Correlation Coefficient	0.999989
40.8	41.3	0.9881		
20.5	20.6	0.9928	Slope	0.983091
			Intercept	0.115516



Spirit River TRS Calibration



December 11, 2007

Calibration Summary



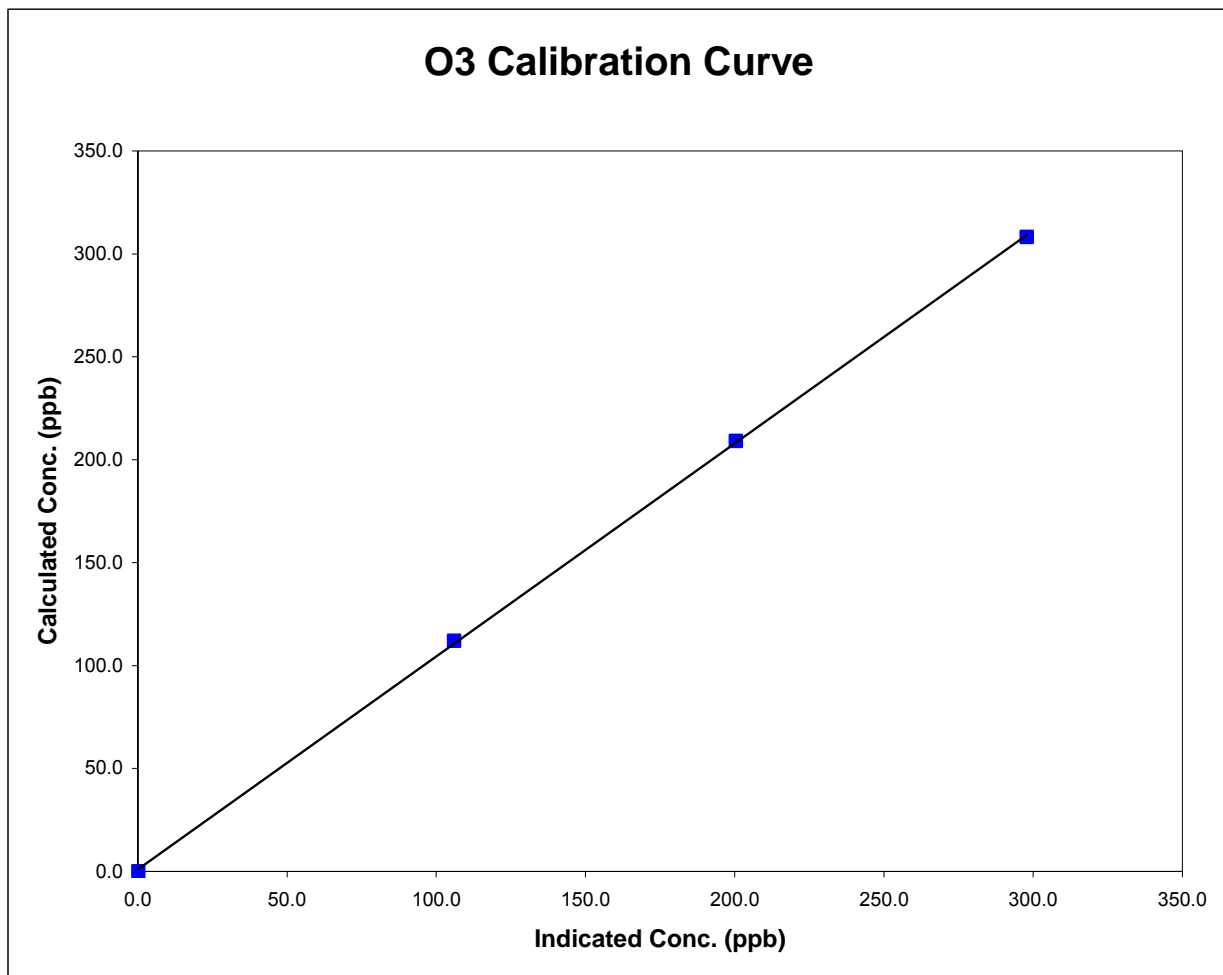
Parameter **O3**
 Air Monitoring Network **PASZA**

Station Information

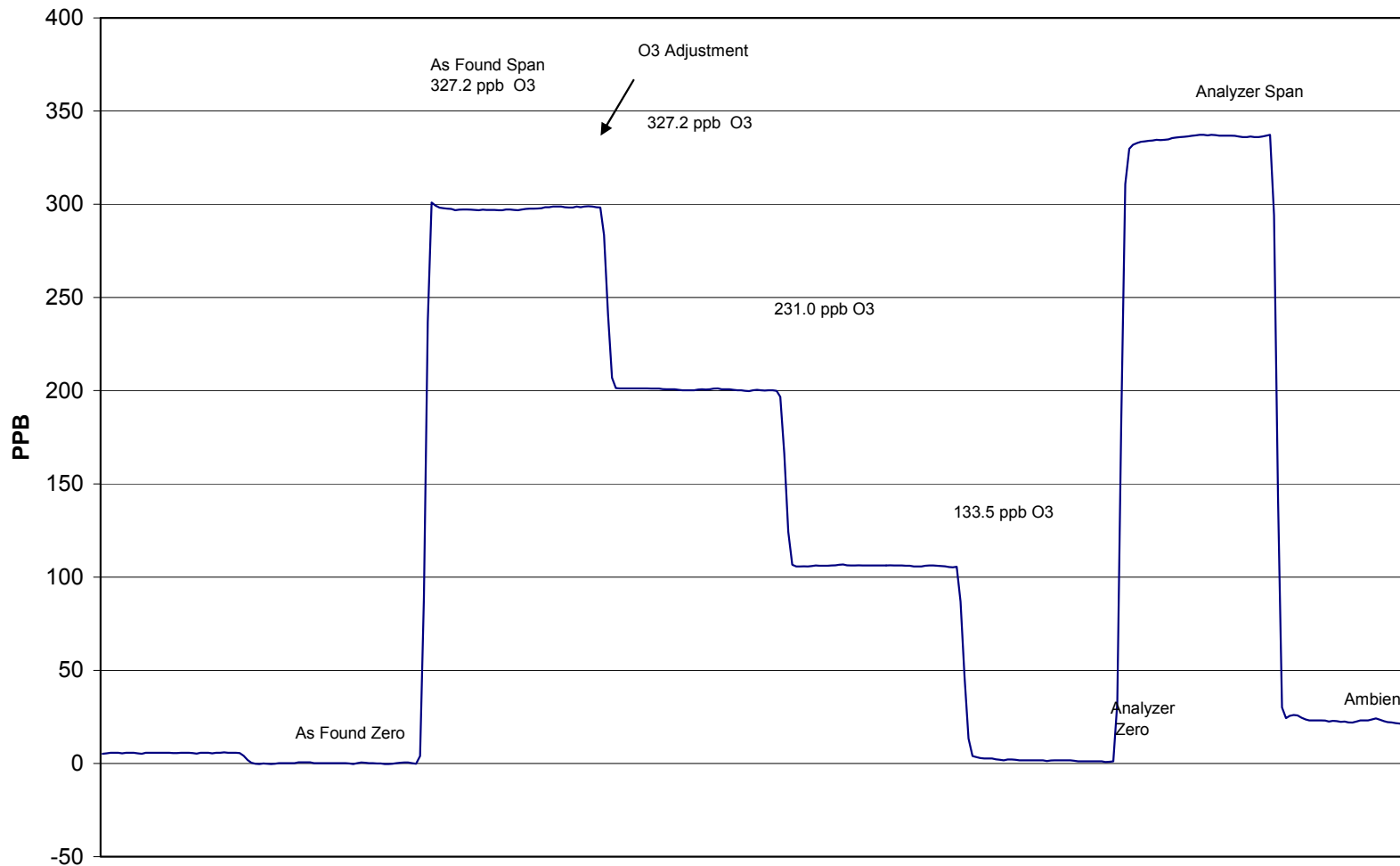
Calibration Date	December 10, 2007	Previous Calibration	November 7, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	16:20	End Time (MST)	18:45
Analyzer make/model	TEI Model 49C	Analyzer serial #	609-716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA		
308.2	297.9	1.0347	Correlation Coefficient	0.999909
209.1	200.5	1.0432		
112.0	106.0	1.0567	Slope	1.034885
			Intercept	0.929610



Spirit River O3 Calibration



December 10, 2007

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA**Station Information**

Calibration Date	December 10, 2007	Previous Calibration	November 6, 2007
Station Number	8	Station Location	Rover - Spirit River
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal
Start Time (MST)	12:20	End Time (MST)	16:30
Barometric Pressure	27.93 Inches Hg	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
NO Cal Gas Conc	48.9 ppm	Cal Gas Expiry Date	2-Jan-09
NOx Cal Gas Conc	48.9 ppm	Cal Gas Serial #	LL-16161

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	52662
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Parameter		NO ₂	NO _x	NO
Before	Data Slope	1.000355	1.003276	1.002388
	Data Offset	0.013704	-2.133688	-2.043094
After	Data Slope	0.986211	0.988894	0.988037
	Data Offset	0.145279	-1.358579	-1.518898
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
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Test Point	before		after	
Concentration range	0-1000	ppb	0-1000	ppb
NO background	4.2	ppb	4.2	mV
NO _x background	4.4	ppb	4.4	mV
NO coefficient	0.689		0.689	
NO _x coefficient	0.999		0.999	
Chamber Temp	50.4	Deg C	50.2	Deg C
Cooler Temp	-2.8	Deg C	-2.7	Deg C
NO ₂ Converter Temp	324.2	Deg C	323.7	Deg C
Sample Flow	663.0	ccm	654.0	ccm
Ozonator Flow	OK	LPM	OK	LPM
Pressure	163.0	mm Hg	161.4	mm Hg

Notes:

Calibration Performed By: Conor Whiteley

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date: December 10, 2007

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	4990	0.00	0.0	0.0	0.0	0.1	0.0	0.2	N/A	N/A
1	4990	39.86	387.5	387.5	0.0	392.5	392.8	0.5	0.9873	0.9865
2	4990	19.90	194.2	194.2	0.0	198.7	199.4	0.2	0.9776	0.9743
3	4990	9.93	97.1	97.1	0.0	100.7	101.0	0.4	0.9643	0.9608
AFZ	4990	0.00	0.0	0.0	0.0	0.1	0.0	0.2	0.0000	0.0000
AFS	4990	39.92	388.1	388.1	0.0	392.5	392.8	0.5	0.9888	0.9880
Average Correction Factor									0.9764	0.9739

As Found Concentrations: NO_x= 390.3 NO= 390.8 As Found Percent Change NO_x= 0.6% NO= 0.7%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.82 ccm

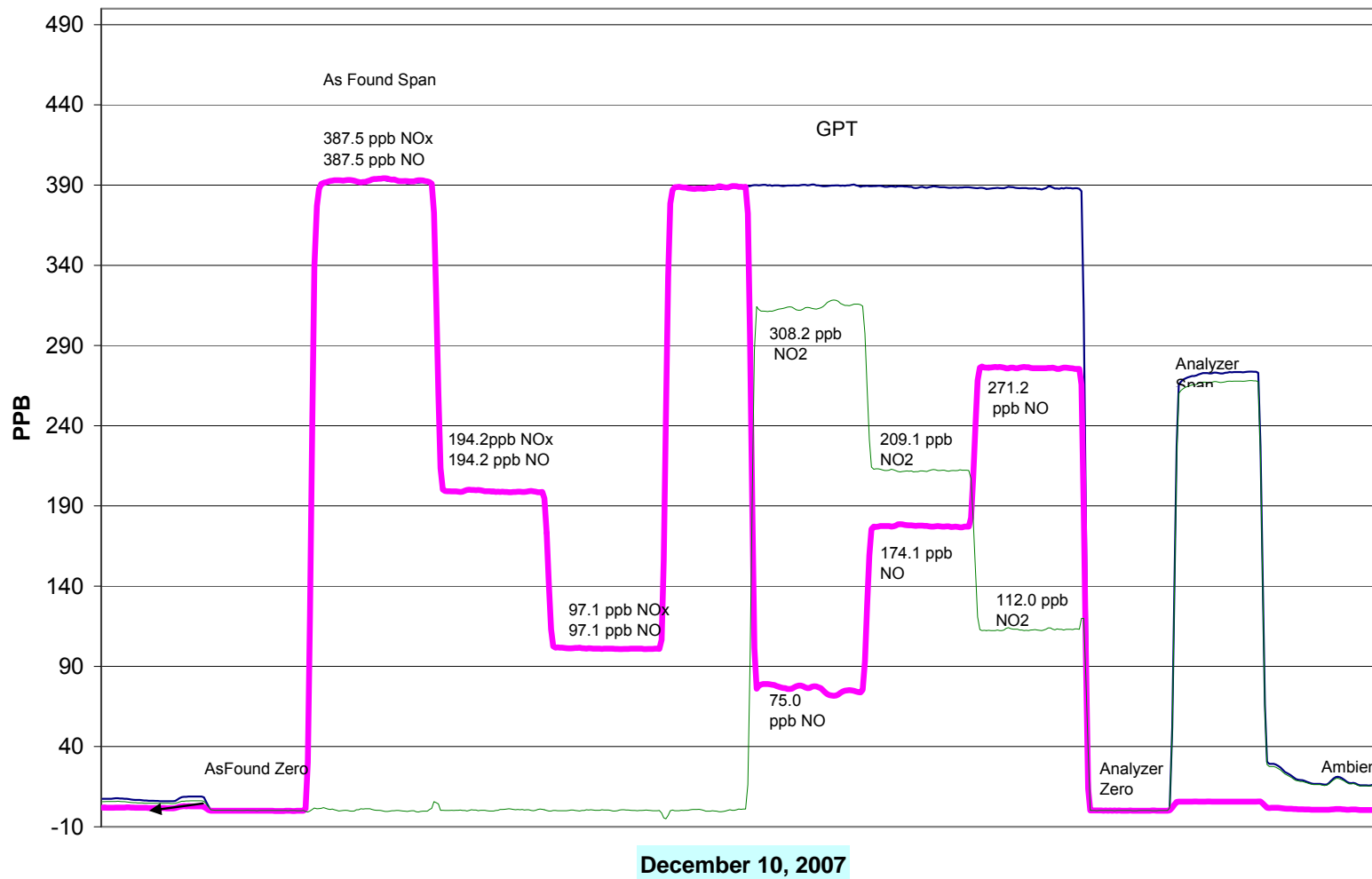
O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	383.2	381.9	1.3	387.5	388.1	0.3	0.9890	0.9841	N/A	N/A
300	383.2	75.0	308.2	389.8	77.5	312.6	0.9832	0.9684	0.9859	101.4%
200	383.2	174.1	209.1	388.9	177.8	211.8	0.9855	0.9795	0.9872	101.3%
100	383.2	271.2	112.0	388.1	276.1	112.9	0.9875	0.9825	0.9922	100.8%
Average Correction Factor							0.9854	0.9768	0.9884	101.2%

AIC Data

	Previous calibration				Current calibration			
Parameter	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	0.5	1.0	0.7	ppb	0.7	1.0	0.8	ppb
Auto span	264.9	262.8	1.5	ppb	268.8	264.0	4.1	ppb

Calibration Performed By: Conor Whiteley

Spirit River NOx Calibration



Calibration Summary

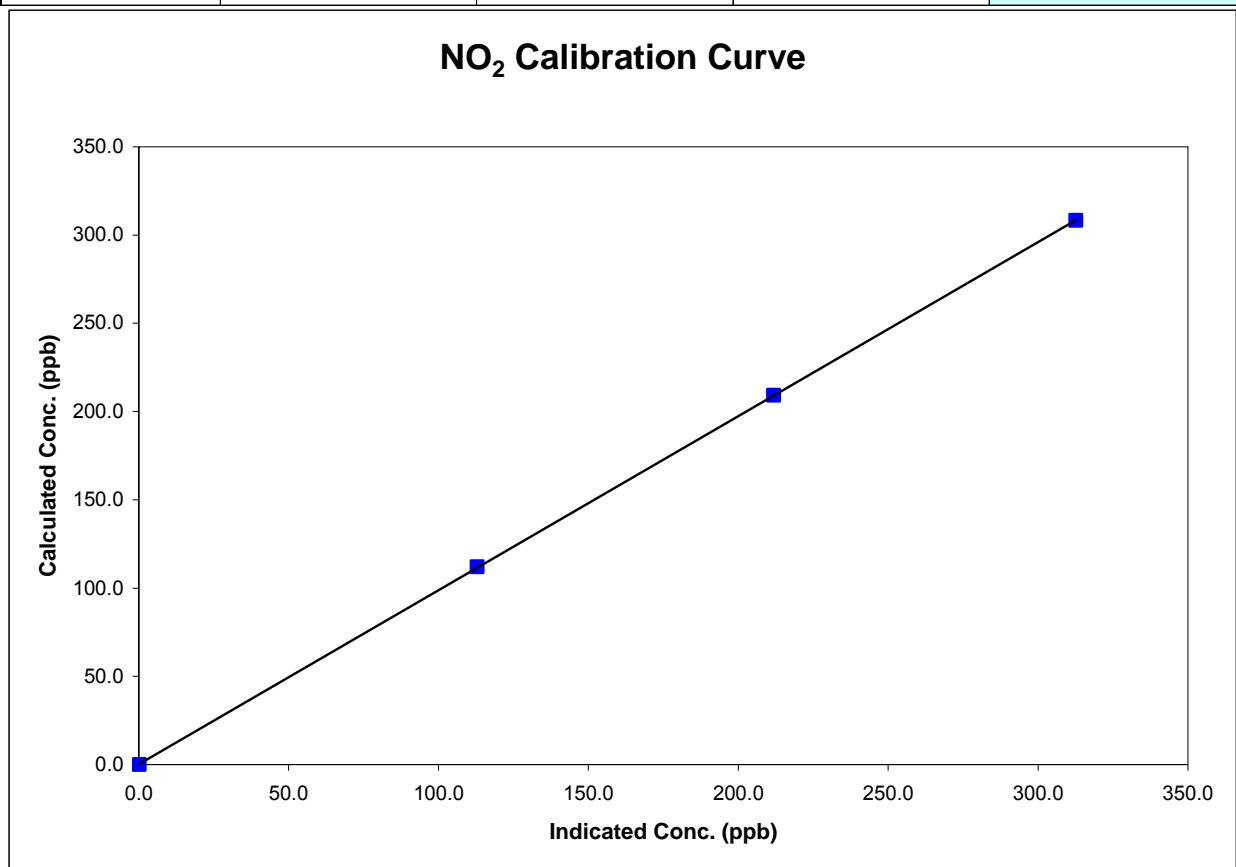
Parameter **NO₂**Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 10, 2007	Previous Calibration	November 6, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:20	End Time (MST)	16:30
Analyzer make	TECO 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	0.0000	Correlation Coefficient	0.999991
308.2	312.6	0.9859		
209.1	211.8	0.9872		
112.0	112.9	0.9922		
			Slope	0.986211
			Intercept	0.145279



Calibration Summary

Parameter **NO_x**
 Air Monitoring Network **PASZA**

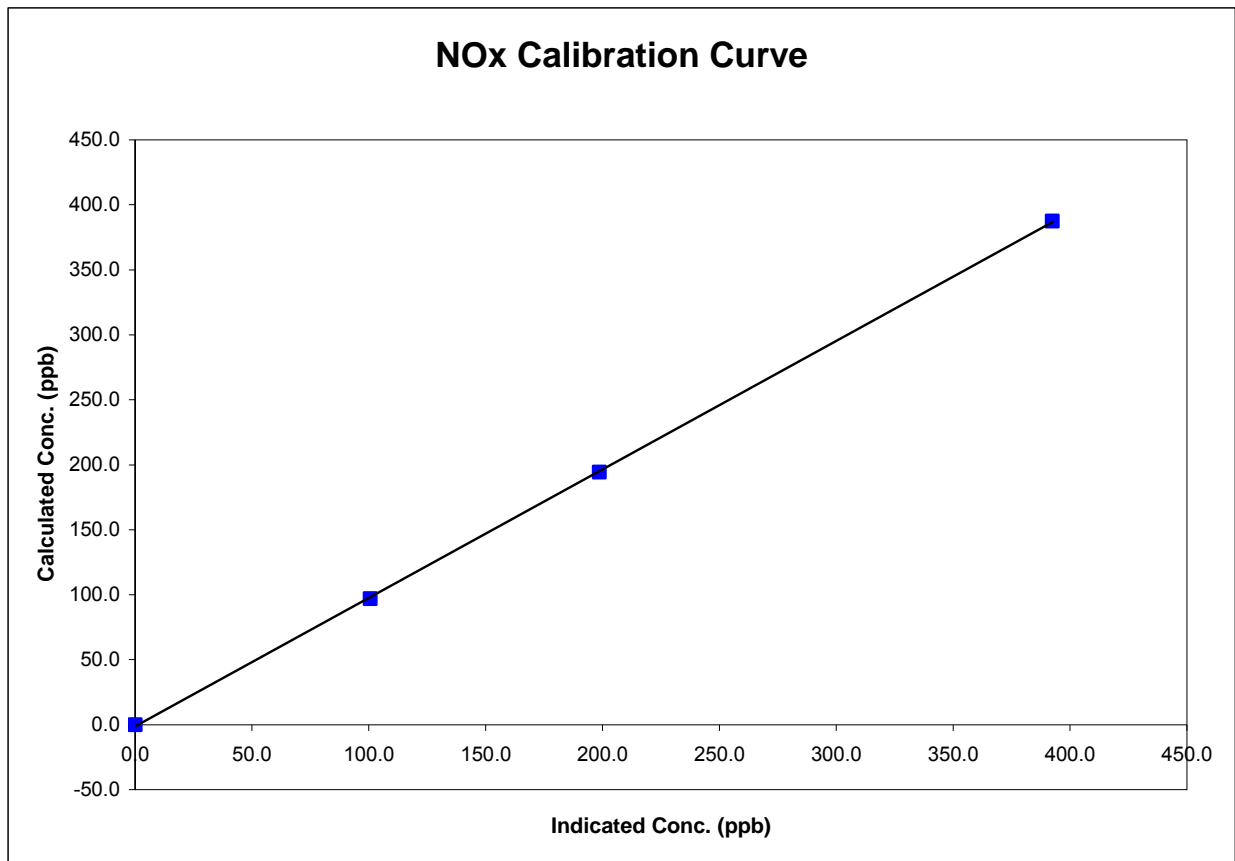


Station Information

Calibration Date	December 10, 2007	Previous Calibration	November 6, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:20	End Time (MST)	16:30
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	0.999949
387.5	392.5	0.9873		
194.2	198.7	0.9776		
97.1	100.7	0.9643		
			Slope	0.988894
			Intercept	-1.358579



Calibration Summary

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

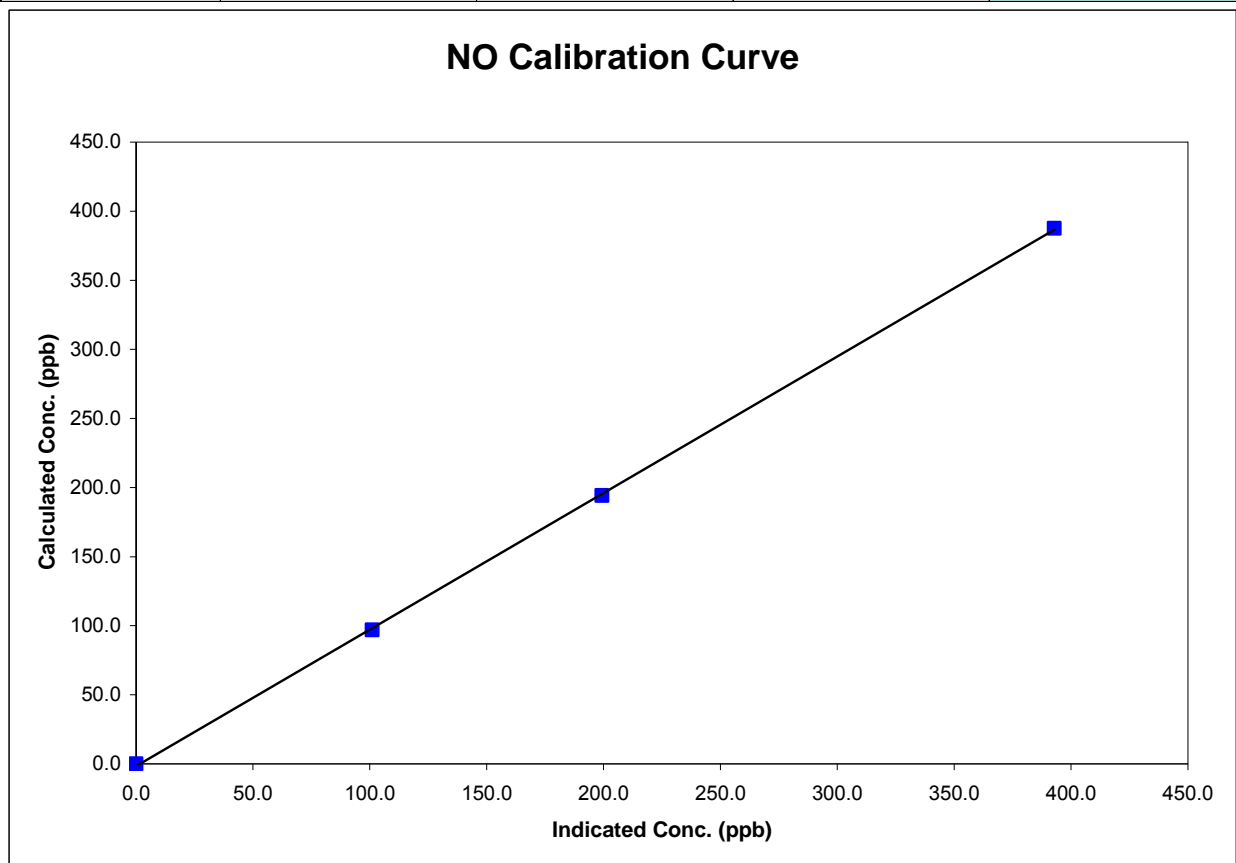


Station Information

Calibration Date	December 10, 2007	Previous Calibration	November 6, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:20	End Time (MST)	16:30
Analyzer make	TECO 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
387.5	392.8	0.9865	Correlation Coefficient	0.999925
194.2	199.4	0.9743		
97.1	101.0	0.9608	Slope	0.988037
			Intercept	-1.518898



Calibration ReportParameter **SO2**Air Monitoring Network **PASZA****Station Information**

Calibration Date	December 7, 2007	Previous Calibration	November 16, 2007
Station Number	6	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	14:10	End Time (MST)	16:55
Barometric Pressure	27.84 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL16161		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.003534	Calculated slope	1.018085
Calculated intercept	-0.468114	Calculated intercept	-1.252793
Analyzer make	TEI 43i	Analyzer serial #	43C-57351-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	27.8		27.8	
Coefficient	0.741		0.741	
UV Lamp Voltage	694	LPM	700	LPM
Chamber Temp	44.6	V	43.9	V
Perm Gas Temp	30.5	C	30.5	C
Pressure	634.7	in Hg	633.5	in Hg
Sample Flow	0.473	LPM	0.473	LPM
Lamp Intesity	45261	Hz	45521	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)
4992	0.00	0.0	0.5	N/A
4992	39.84	398.3	391.9	1.0162
4992	19.91	199.8	198.3	1.0077
4992	9.99	100.5	100.4	1.0011
4992	0.00	0.0	0.5	As found zero
4992	39.91	398.9	391.9	As found span
Average Correction Factor				1.0083

Calculated value of As Found Response: 392.304 ppm Percent Change of As Found: 1.7%

	before calibration		after calibration	
Auto zero	-0.8	ppm	-0.7	ppm
Auto span	107.1	ppm	139.0	ppm

Notes: No adjustments madeCalibration Performed By: Conor Whiteley

Calibration Summary



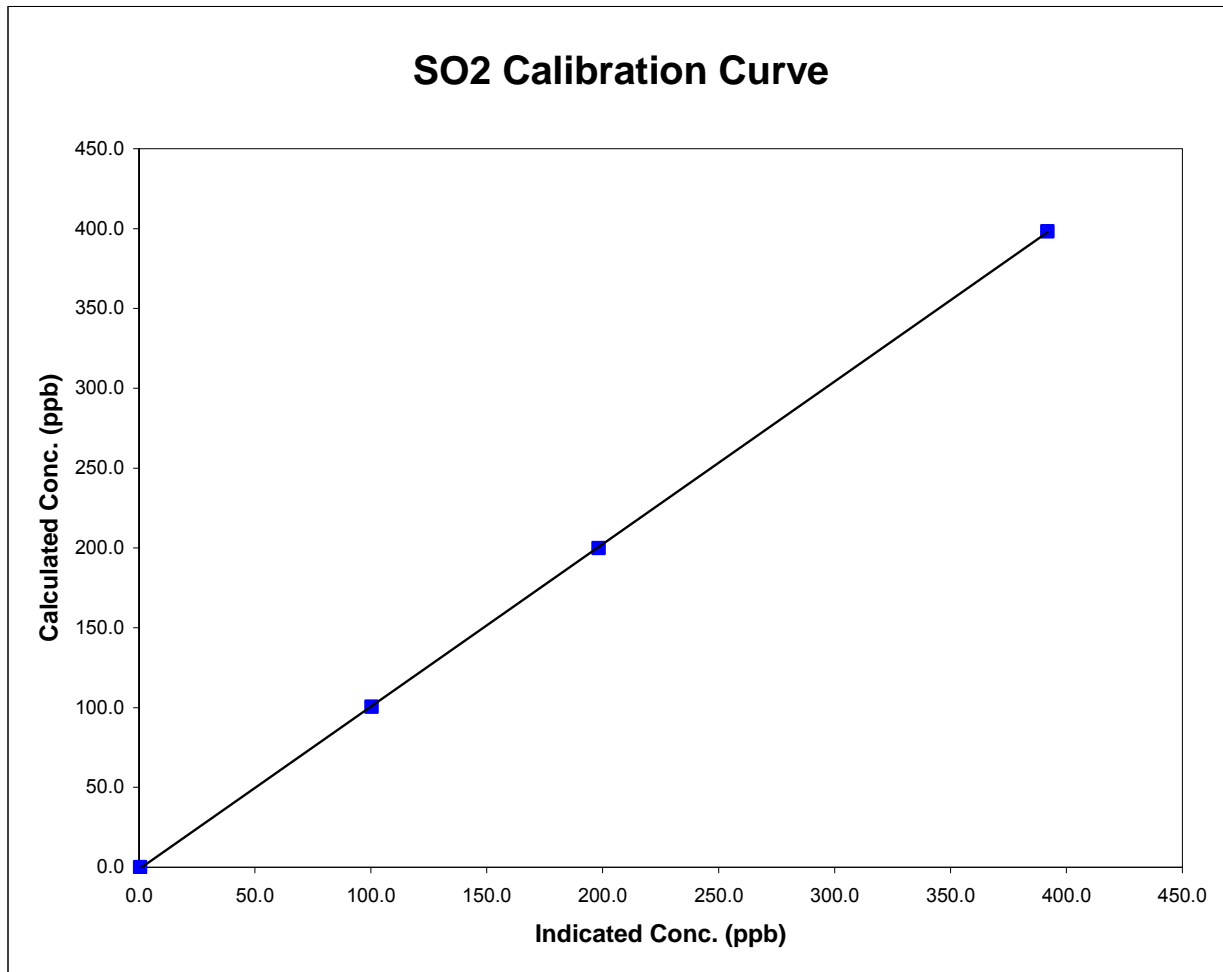
Parameter **SO2**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	December 7, 2007	Previous Calibration	November 16, 2007
Station Number	6	Station Location	Valleyview
Start Time (MST)	14:10	End Time (MST)	16:55
Analyzer make/model	TEI 43i	Analyzer serial #	43C-57351-313

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A		
398.3	391.9	1.0162	Correlation Coefficient	0.999981
199.8	198.3	1.0077		
100.5	100.4	1.0011	Slope	1.018085
			Intercept	-1.252793



Valleyview SO2 Calibration



December 7, 2007

Calibration Report

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

Station Information

Calibration Date	December 7, 2007	Previous Calibration	November 16, 2007
Station Number	5	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="text"/>
Start Time (MST)	12:20	End Time (MST)	15:10
Barometric Pressure	27.84 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Enviroics 6100	Serial Number	3474
Cal Gas Concentration	5.14 ppm	Cal Gas Expiry Date	11/29/2006
Gas Cert Reference	LL 74274		
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.017433	Calculated slope	1.029111
Calculated intercept	0.422495	Calculated intercept	0.049694
Analyzer make	TEI Model 43A	Analyzer serial #	43A-25575-221

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	4.6	ppb	4.6	ppb
Coefficient	1.026		1.026	
Lamp Voltage	795	v	806	v
Chamber Temp	45	c	45.1	c
Perm Oven Temp	45.1	c	45	c
Pressure	646	mm Hg	651	mm Hg
Sample Flow	430	ccm	430	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)
4991	0.00	0.0	0.0	N/A
4991	69.78	70.9	68.8	1.0295
4991	39.81	40.7	39.4	1.0313
4991	9.95	10.2	9.9	1.0328
4991	0.00	0.0	0.0	As found zero
4991	69.78	70.9	68.8	As found span
Average Correction Factor				1.0312

Calculated value of As Found Response: 70.51 ppm Percent Change of As Found: 0.5%

	before calibration		after calibration	
Auto zero	0.4	ppm	0.0	ppm
Auto span	68.4	ppm	65.0	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

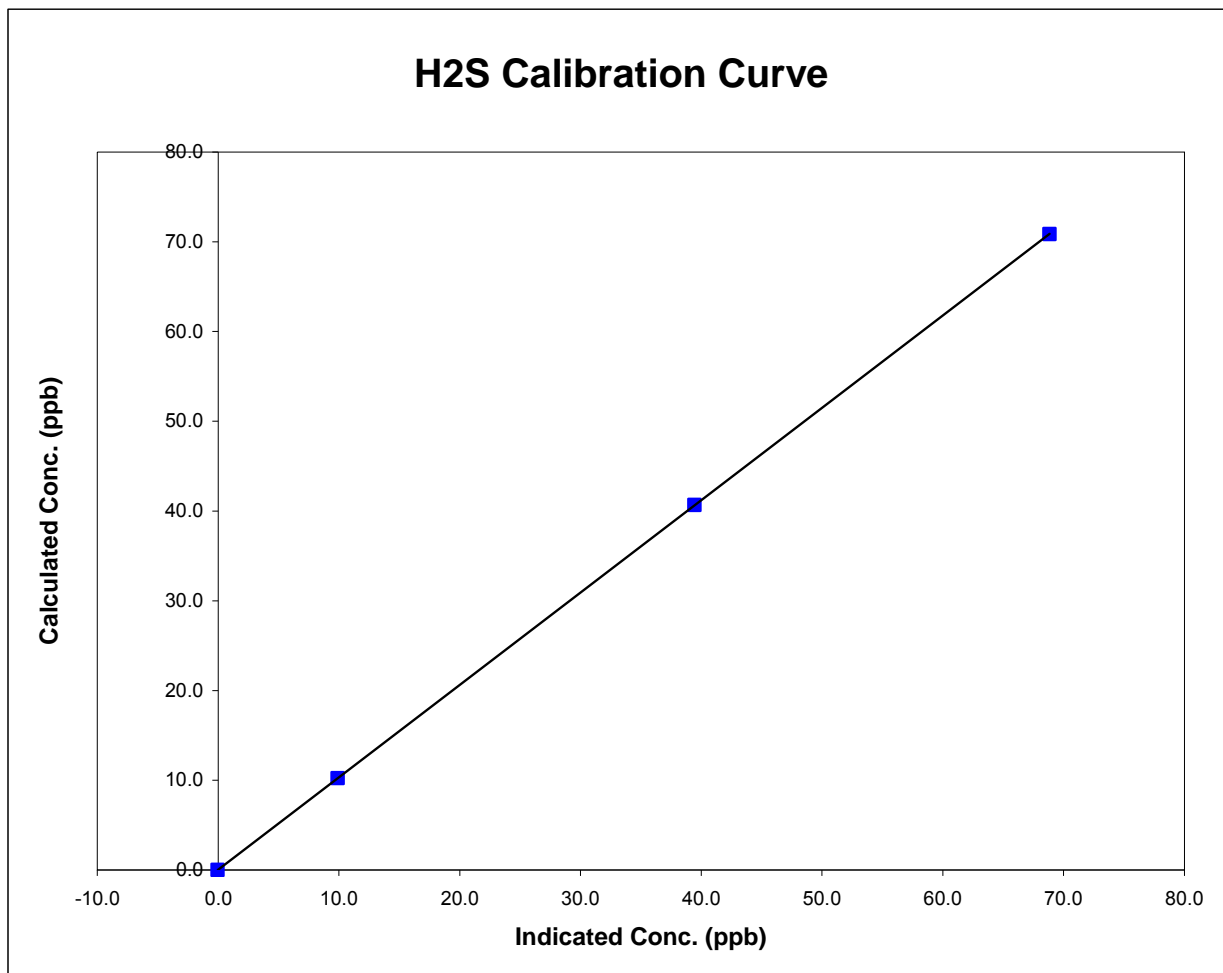
Parameter **H2S**Air Monitoring Network **PASZA**

Station Information

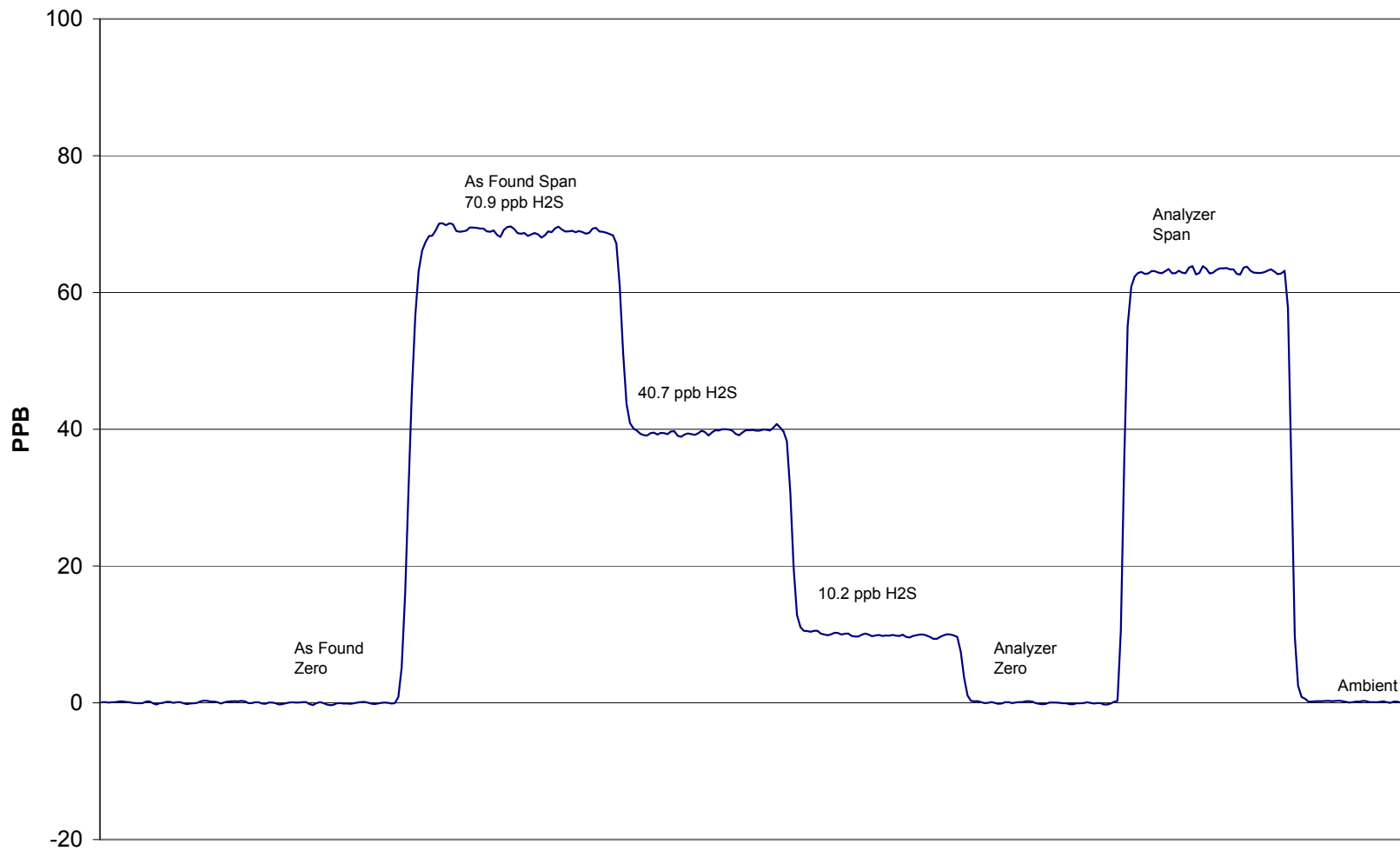
Calibration Date	December 7, 2007	Previous Calibration	November 16, 2007
Station Number	5	Station Location	Valleyview
Start Time (MST)	12:20	End Time (MST)	15:10
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-25575-221

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
70.9	68.8	1.0295	Correlation Coefficient	0.999999
40.7	39.4	1.0313		
10.2	9.9	1.0328	Slope	1.029111
			Intercept	0.049694



Valleyview H2S Calibration



December 7, 2007