Air Quality Monitoring Network for January 2008

Prepared by

FOCUS
AMBIENT AIR MONITORING

Airshed Zone Association – January 2008 PASZA Ambient Air Report **3**
PASZA Monthly Continuous Data Summary 5
PASZA - Henry Pirker AQI Monthly Summary 11
PASZA - Henry Pirker Sulphur Dioxide Monthly Summary 12
PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary 17
PASZA - Henry Pirker Nitric Oxide Monthly Summary 22
PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary 23
PASZA - Henry Pirker Ozone Monthly Summary 28
PASZA - Henry Pirker Ozone Eight Hour Average Summary 33
PASZA - Henry Pirker Carbon Monoxide Monthly Summary 34
PASZA - Henry Pirker Carbon Monoxide Eight Hour Average Summary 39
PASZA - Henry Pirker Total Hydrocarbons Monthly Summary 40
PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary 45
PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Monthly Summary 50
PASZA - Henry Pirker Relative Humidity Monthly Summary 55
PASZA - Henry Pirker Temperature Monthly Summary 57
PASZA - Henry Pirker Solar Radiation Monthly Summary 59
PASZA - Henry Pirker Scalar Wind Speed Monthly Summary 61
PASZA - Henry Pirker Vector Wind Speed Monthly Summary 62
PASZA - Henry Pirker Wind Direction Monthly Summary 63
PASZA - Henry Pirker Standard Deviation of Wind Direction Monthly Summary 64
PASZA - Evergreen Park Sulphur Dioxide Monthly Summary 67
PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary 72
PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Monthly Summary 77
PASZA - Evergreen Park Temperature Monthly Summary 82
PASZA - Evergreen Park Scalar Wind Speed Monthly Summary 84
PASZA - Evergreen Park Vector Wind Speed Monthly Summary 85
PASZA - Evergreen Park Wind Direction Monthly Summary 86
PASZA - Evergreen Park Standard Deviation of Wind Direction Monthly Summary 87
PASZA - Smoky Heights Sulphur Dioxide Monthly Summary 90
PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary 95
PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Monthly Summary 100
PASZA - Smoky Heights Temperature Monthly Summary 105
PASZA - Smoky Heights Scalar Wind Speed Monthly Summary 107
PASZA - Smoky Heights Vector Wind Speed Monthly Summary 108
PASZA - Smoky Heights Wind Direction Monthly Summary 109
PASZA - Smoky Heights Standard Deviation of Wind Direction Monthly Summary 110
PASZA - Beaverlodge AQI Monthly Summary 113
PASZA - Beaverlodge Sulphur Dioxide Monthly Summary 114
PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary 119
PASZA - Beaverlodge Nitric Oxide Monthly Summary 124
PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary 125
PASZA - Beaverlodge Ozone Monthly Summary 130
PASZA - Beaverlodge Ozone Eight Hour Average Summary 135
PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Monthly Summary 136
PASZA - Beaverlodge Relative Humidity Monthly Summary 141
PASZA - Beaverlodge Temperature Monthly Summary 143
PASZA - Beaverlodge Scalar Wind Speed Monthly Summary 145

PASZA - Beaverlodge Vector Wind Speed Monthly Summary 146
PASZA - Beaverlodge Wind Direction Monthly Summary 147
PASZA - Beaverlodge Standard Deviation of Wind Direction Monthly Summary 148
PASZA - Portable-Spirit River Sulphur Dioxide Monthly Summary 151
PASZA - Portable-Spirit River Nitrogen Dioxide Monthly Summary 156
PASZA - Portable-Spirit River Nitric Oxide Monthly Summary 161
PASZA - Portable-Spirit River Oxides of Nitrogen Monthly Summary 162
PASZA - Portable-Spirit River Ozone Monthly Summary 167
PASZA - Portable-Spirit River Ozone Eight Hour Average Summary 172
PASZA - Portable-Spirit River Relative Humidity Monthly Summary 173
PASZA - Portable-Spirit River Temperature Monthly Summary 175
PASZA - Portable-Spirit River Scalar Wind Speed Monthly Summary 177
PASZA - Portable-Spirit River Vector Wind Speed Monthly Summary 178
PASZA - Portable-Spirit River Wind Direction Monthly Summary 179
PASZA - Portable-Spirit River Standard Deviation of Wind Direction Monthly Summary 180
PASZA - Valleyview Sulphur Dioxide Monthly Summary 183
PASZA - Valleyview Hydrogen Sulphide Monthly Summary 188
PASZA - Valleyview Relative Humidity Monthly Summary 193
PASZA - Valleyview Temperature Monthly Summary 195
PASZA - Valleyview Scalar Wind Speed Monthly Summary 197
PASZA - Valleyview Vector Wind Speed Monthly Summary 198
PASZA - Valleyview Wind Direction Monthly Summary 199
PASZA - Valleyview Standard Deviation of Wind Direction Monthly Summary 200
PASZA Passive Stations for January 2008 203
January 2008 Calibration Reports 213

PASZA
Peace AirShed Zone Association

P.O. Box 21135
Grande Prairie, AB
T8V 6W7
Phone: (780) 539-2298

March 6, 2008

Alberta Environment
12th Floor, Oxbridge Place
9820-106 Street
Edmonton Alberta T6B 2X3

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

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

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

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

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

During the month of January 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 8th, 20th, and 27th to 31st – intermittent issue and reason under investigation.
- No THC spans January 1st to 4th – cylinder ran out.
- The O_3 spans were high due to a new lamp settling in (new lamp was installed during the December 13th calibration).
- A power bump on January 28th resulted in thirty-seven (37) hours of invalid data for the TEOM.
- The AQI for the month resulted in 653 hours of Good readings and 2 hours of Fair readings.

Evergreen Park Station:

- On January 4th the TRS analyzer had a reading of 10 ppb, but did not exceed the Alberta Objective.
- The TRS analyzer had sixty-nine (69) flagged invalid due to excessive baseline drift – a new lamp and socket were replaced on January 23rd.
- All analyzers / sensors at the Evergreen Park station had an operational uptime greater than 90%.

Smoky Heights Station:

- One (1) hour was flagged invalid for the TEOM analyzer due to flatlining – reason unknown.
- 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%.

- Fifteen (15) hours were flagged invalid for the TEOM analyzer due to a power bump on January 28th.
- Four (4) hours were flagged invalid for wind speed and wind direction on January 19th due to flatlining – probably a result of the wind cups freezing.
- The AQI for the month resulted in 685 hours of Good readings.

Portable – Spirit River Station:

- Due to a series of communication errors a number of hours were flagged invalid for all sensors on January 26th, 27th and 29th: four (4) hours for TRS, five (5) hours for SO_2, relative humidity and temperature, and six (6) hours for NO_2, O_3, wind speed and wind direction.
- All analyzers / sensors at the Spirit River station had an operational uptime greater than 90%.

Valleyview Station:

- New analyzer racks were installed in the station on January 22nd – approximately twenty-four (24) hours were flagged maintenance for all analyzers and sensors due to the station upgrade.
- All analyzers / sensors at the Valleyview station had an operational uptime greater than 90%.

Passive Monitoring: 54 Stations throughout the PASZA zone:

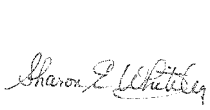
Notes from MAXXAM noted that: the NO_2 from the Puskaskau site was damaged and therefore there is no result for the month of January. There were seven duplicate sites sampled in the month of January: Shaftsbury, Eaglesham, Flyingshot, Grande Prairie I, Clairmont Lake, Gerry Lake and Grande Prairie HP. 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 SO_2 passives ranged from 0.2 ppb to 1.5 ppb, with a mean of 0.6 ppb.
- Monthly average concentrations for NO_2 passives ranged from 1.6 ppb to 18.3 ppb, with a mean of 4.1 ppb.
- Monthly average concentrations for O_3 passives ranged from 18.7 ppb to 45.5 ppb, with a mean of 35.7 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

Jan-2008	Peace Airshed Zone Assocation						Maximum Recorded Values						
							1-hr				24-hr / 8-hr		
Pollutant	**Objectives**		**Station**	**Monthly**	**Exceedence**		Conc	Day	WSPD	WDIR	Conc	Day	**Operational**
(units)	1-hr	24-hr		**Average**	1-hr	24-hr			(km/hr)	(Sector)			**Time (%)**
SO_2 (ppb)	172	57	Henry Pirker	0.4	0	0	3.4	Jan-13 14:00	5.0	ESE	1.1	Jan-30	100.0%
SO_2 (ppb)	172	57	Evergreen Park	0.5	0	0	3.0	Jan-30 19:00	4.4	NE	1.7	Jan-30	99.9%
SO_2 (ppb)	172	57	Smoky Heights	0.9	0	0	8.3	Jan-28 20:00	5.3	W	2.0	Jan-11	100.0%
SO_2 (ppb)	172	57	Beaverlodge	0.9	0	0	7.2	Jan-15 08:00	2.7	N	2.8	Jan-30	100.0%
SO_2 (ppb)	172	57	Portable-Spirit River	0.8	0	0	4.2	Jan-28 22:00	1.7	WSW	2.0	Jan-28	99.3%
SO_2 (ppm)	172	57	Valleyview	0.30	0	0	4.79	Jan-16 18:00	10.2	W	0.70	Jan-16	97.3%
NO (ppb)			Henry Pirker	23.0	-	-	204.4	Jan-04 09:00	4.1	WNW	69.3	Jan-11	100.0%
NO_2 (ppb)	212	106	Henry Pirker	21.0	0	0	63.1	Jan-14 13:00	3.9	WNW	33.4	Jan-23	100.0%
NO_X (ppb)			Henry Pirker	44.0	-	-	266.5	Jan-14 13:00	3.9	WNW	99.2	Jan-11	100.0%
NO (ppb)			Beaverlodge	3.2	-	-	73.1	Jan-08 12:00	1.6	W	23.5	Jan-08	100.0%
NO_2 (ppb)	212	106	Beaverlodge	9.1	0	0	32.0	Jan-12 17:00	2.0	SSW	22.7	Jan-08	100.0%
NO_X (ppb)			Beaverlodge	12.4	-	-	99.6	Jan-08 12:00	1.6	W	46.4	Jan-08	100.0%
NO (ppb)			Portable-Spirit River	1.1	-	-	34.2	Jan-08 07:00	2.0	NW	8.0	Jan-12	99.2%
NO_2 (ppb)	212	106	Portable-Spirit River	6.6	0	0	51.2	Jan-08 07:00	2.0	NW	16.4	Jan-12	99.2%
NO_X (ppb)			Portable-Spirit River	7.7	-	-	85.4	Jan-08 07:00	2.0	NW	24.4	Jan-12	99.2%
O_3 (ppb)	82		Henry Pirker	11.7	0	-	38.2	Jan-17 05:00	23.7	WNW	29.0	Jan-16	100.0%
O_3 (ppb) - 8-hr	65		Henry Pirker		0						37.1	Jan-17	
O_3 (ppb)	82		Beaverlodge	24.5	0	-	42.6	Jan-25 21:00	17.4	WNW	38.8	Jan-16	100.0%
O_3 (ppb) - 8-hr	65		Beaverlodge		0						41.7	Jan-17	
O_3 (ppb)	82		Portable-Spirit River	23.5	0	-	41.3	Jan-04 13:00	8.6	SW	35.1	Jan-14	99.2%
O_3 (ppb) - 8-hr	65		Portable-Spirit River		0						38.3	Jan-26	
CO (ppm)	13		Henry Pirker	0.36	0	-	2.8	Jan-26 10:00	4.4	SE	0.6	Jan-11	100.0%
CO (ppm) - 8-hr	5		Henry Pirker		0						1.0	Jan-12	
THC (ppm)			Henry Pirker	2.45	-	-	4.1	Jan-11 12:00	2.8	WNW	3.5	Jan-11	100.0%
TRS (ppb)			Henry Pirker	0.5	-	-	1.8	Jan-13 12:00	5.7	ESE	0.8	Jan-13	100.0%
TRS (ppb)			Evergreen Park	0.8	-	-	10.0	Jan-04 12:00	3.8	NNW	2.4	Jan-04	90.5%
TRS (ppb)			Smoky Heights	0.4	-	-	1.2	Jan-11 16:00	8.0	SSW	0.9	Jan-11	100.0%
TRS (ppb)			Portable-Spirit River	0.5	-	-	1.4	Sep-22 22:00	1.6	SSE	0.6	Sep-22	100.0%
H_2S (ppb)	10	3	Valleyview	0.1	0	0	1.2	Jan-02 18:00	4.2	SSW	0.3	Jan-24	97.4%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Henry Pirker	5.5	0	0	33.9	Jan-14 13:00	3.9	WNW	17.1	Jan-11	92.6%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Evergreen Park	6.7	0	0	49.9	Jan-10 13:00	4.4	SW	20.7	Jan-11	98.3%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Smoky Heights	4.6	0	0	65.4	Jan-23 23:00	3.0	ESE	11.3	Jan-11	99.3%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Beaverlodge	3.4	0	0	16.7	Jan-08 11:00	2.2	NE	11.8	Jan-10	96.6%

PASZA Monthly Continuous Data Summary - continued

Jan-2008	Peace Airshed Zone Assocation						Maximum Recorded Values						
							1-hr				24-hr / 8-hr		
RH (%)			Henry Pirker	72.4	-	-	-	-	-	-	-	-	100.0%
RH (%)			Beaverlodge	72.9	-	-	-	-	-	-	-	-	100.0%
RH (%)			Portable-Spirit River	75.3	-	-	-	-	-	-	-	-	99.3%
RH (%)			Valleyview	76.6	-	-	-	-	-	-	-	-	96.9%
SR (W/m^2)			Henry Pirker	25.3	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Henry Pirker	-13.7	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Evergreen Park	-13.8	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Smoky Heights	-13.6	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Beaverlodge	-11.4	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Portable-Spirit River	-13.3	-	-	-	-	-	-	-	-	99.3%
Temp (°C)			Valleyview	-13.1	-	-	-	-	-	-	-	-	96.9%
WSPD v (km/hr)			Henry Pirker	6.2	-	-	26.1	Jan-26 00:00	26.1	WNW	16.6	Jan-16	100.0%
WSPD v (km/hr)			Evergreen Park	5.0	-	-	29.0	Jan-16 17:00	29.0	W	17.3	Jan-16	100.0%
WSPD v (km/hr)			Smoky Heights	9.8	-	-	36.3	Jan-16 20:00	36.3	W	20.8	Jan-16	100.0%
WSPD v (km/hr)			Beaverlodge	5.7	-	-	37.5	Jan-16 20:00	37.5	WNW	18.8	Jan-16	99.5%
WSPD v (km/hr)			Portable-Spirit River	5.5	-	-	54.3	Jan-03 02:00	54.3	SW	17.7	Jan-02	99.2%
WSPD v (km/hr)			Valleyview	5.2	-	-	26.2	Jan-26 23:00	26.2	N	16.0	Jan-27	96.9%
WSPD s (km/hr)			Henry Pirker	6.7	-	-	26.1	Jan-26 00:00	26.1	WNW	17.2	Jan-16	100.0%
WSPD s (km/hr)			Evergreen Park	5.6	-	-	29.2	Jan-16 17:00	29.2	W	18.4	Jan-16	100.0%
WSPD s (km/hr)			Smoky Heights	10.1	-	-	36.3	Jan-16 20:00	36.3	W	21.7	Jan-16	100.0%
WSPD s (km/hr)			Beaverlodge	6.1	-	-	37.5	Jan-16 20:00	37.5	WNW	19.1	Jan-16	99.5%
WSPD s (km/hr)			Portable-Spirit River	5.7	-	-	17.5	Jan-03 02:00	54.4	SW	17.5	Jan-02	99.2%
WSPD s (km/hr)			Valleyview	5.5	-	-	26.2	Jan-26 23:00	26.2	N	16.1	Jan-27	96.9%
WDIR			Henry Pirker	WNW	-	-	-	-	-	-	-	-	100.0%
WDIR			Evergreen Park	WNW	-	-	-	-	-	-	-	-	100.0%
WDIR			Smoky Heights	S	-	-	-	-	-	-	-	-	100.0%
WDIR			Beaverlodge	NW	-	-	-	-	-	-	-	-	99.5%
WDIR			Portable-Spirit River	WSW	-	-	-	-	-	-	-	-	99.2%
WDIR			Valleyview	WNW	-	-	-	-	-	-	-	-	96.9%

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

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on January 11th (SO_2, NO_X and O_3) and January 14th (CO, THC and TRS).

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	The O_3 spans were high due to a new lamp settling in (new lamp was installed during the December 13th calibration).
CO	TEI	48C	No operational issues observed.
THC	TEI	51-CLT	No THC spans January 1st to 4th – cylinder ran out.
TRS	TEI	43C	Spans dropped on the 8th, 20th, and 27th to 31st – intermittent issue and reason under investigation.
$PM_{2.5}$	R&P	1400AB	Eighteen (18) hours were flagged due to excessive baseline drift. A power bump on January 28th resulted in thirty-seven (37) hours of invalid data for the TEOM.
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 January 15th (SO_2, TRS and $PM_{2.5}$). A second calibration was performed on the TRS analyzer due to trouble shooting (lamp and trigger pack) on January 16th.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
TRS	TEI	43C	The TRS analyzer had sixty-nine (69) flagged invalid due to excessive baseline drift – a new lamp and socket were replaced on January 23rd.
$PM_{2.5}$	R&P	1400AB	Thirteen (13) 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 January 17th (SO_2, TRS and TEOM).

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	On January 28th - one (1) hour was flagged invalid for the TEOM analyzer due to flatlining – reason unknown. Four (4) 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 – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on January 4th (SO_2, NO_X and O_3).

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	Ten (10) hours were removed due to excessive baseline drift. Fifteen (15) hours were flagged invalid for the TEOM analyzer due to a power bump on January 28th.
AT	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS	Blue Sky	857	Four (4) hours were flagged invalid for wind speed and wind direction on January 19th due to flatlining – probably a result of the wind cups freezing.
WD	Blue Sky	857	Four (4) hours were flagged invalid for wind speed and wind direction on January 19th due to flatlining – probably a result of the wind cups freezing.

PASZA – Spirit River (Portable) Station

General Station Issues

Routine monthly calibrations were performed on January 8th (SO_2 and NO_X,) and January 9th (O_3 and TRS). Due to a series of communication errors a number of hours were flagged invalid for all sensors on January 26th, 27th and 29th: four (4) hours for TRS, five (5) hours for SO_2, relative humidity and temperature, and six (6) hours for NO_2, O_3, wind speed and wind direction.

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed other than above noted error.
NOx/NO/NO_2	TEI	42i	No operational issues observed other than above noted error.
TRS	TEI	43C	No operational issues observed other than above noted error.
O_3	TEI	49C	No operational issues observed other than above noted error.
AT	Gill	Met Pak 3	No operational issues observed other than above noted error.
RH	Gill	Met Pak 3	No operational issues observed other than above noted error.
WS	Met One		No operational issues observed other than above noted error.
WD	Met One		No operational issues observed other than above noted error.

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on January 22nd and 23rd (SO_2 and H_2S). New analyzer racks were installed in the station on January 22nd – approximately twenty-four (24) hours were flagged maintenance for all analyzers and sensors due to the station upgrade.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed other than above noted mainatenance.
H_2S	TEI	43A	No operational issues observed other than above noted mainatenance.
AT	Gill	Met Pak 3	No operational issues observed other than above noted mainatenance.
RH	Gill	Met Pak 3	No operational issues observed other than above noted mainatenance.
WS	Gill	Met Pak 3	No operational issues observed other than above noted mainatenance.
WD	Gill	Met Pak 3	No operational issues observed other than above noted mainatenance.

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: January 1, 2008 to February 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:	653
Number of 1-hr Fair Readings:	2
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	23:00 / 0:00
1-Jan-08	7	6	7	6	6	7	6	4	7	8	9	N	N	11	N	N	N	N	N	N	N	N	N	5
2-Jan-08	5	6	5	5	5	5	6	6	7	7	N	5	5	9	8	8	11	11	8	8	7	10	7	9
3-Jan-08	N	9	9	9	9	8	8	9	9	N	9	9	11	10	8	7	9	9	9	N	12	12	13	13
4-Jan-08	10	11	6	6	8	6	7	9	N	13	9	9	8	7	10	8	9	9	9	11	12	14	N	16
5-Jan-08	16	10	10	11	10	5	6	N	8	7	6	7	6	6	9	9	6	6	6	5	7	7	6	5
6-Jan-08	5	6	6	6	7	8	N	5	6	6	4	5	5	6	7	6	5	7	4	4	5	4	6	4
7-Jan-08	4	4	4	4	4	N	5	6	6	6	6	6	4	5	4	5	6	7	8	7	5	6	6	5
8-Jan-08	5	5	5	5	N	6	6	6	7	9	12	10	11	12	14	18	21	11	9	7	7	10	11	8
9-Jan-08	6	8	9	N	8	8	8	8	6	7	7	7	7	7	7	9	9	10	12	11	6	5	6	5
10-Jan-08	5	6	N	6	5	5	7	8	8	11	11	12	13	15	14	20	20	26	25	22	22	18	24	20
11-Jan-08	19	N	16	15	16	12	7	10	15	18	N	N	N	15	N	16	15	16	10	12	10	13	8	11
12-Jan-08	17	11	15	8	6	N	6	6	6	5	6	6	4	5	5	6	6	7	8	9	11	9	8	15
13-Jan-08	7	9	11	15	N	9	9	10	8	12	8	10	12	17	15	8	6	8	6	8	7	6	7	6
14-Jan-08	6	7	8	N	8	9	8	9	8	8	13	18	16	27	15	11	N	N	N	17	17	18	19	18
15-Jan-08	18	18	17	12	11	N	9	12	13	12	10	9	9	11	11	6	9	7	7	9	10	11	13	14
16-Jan-08	16	14	15	15	N	8	10	9	14	14	15	16	15	15	15	15	16	16	17	17	17	18	18	18
17-Jan-08	18	18	19	N	19	19	18	14	17	17	16	17	17	17	15	12	8	9	12	15	15	10	11	10
18-Jan-08	10	8	N	6	5	6	6	6	7	6	6	9	6	6	6	7	8	10	6	5	7	4	7	9
19-Jan-08	9	N	12	14	13	12	13	13	12	12	12	12	12	12	13	12	9	6	8	9	10	8	8	6
20-Jan-08	N	4	4	7	7	7	6	6	7	7	8	7	7	11	N	7	8	8	8	7	7	6	6	N
21-Jan-08	6	5	8	8	7	5	6	8	N	11	12	13	14	13	14	11	7	9	8	9	10	6	N	12
22-Jan-08	12	14	14	17	17	17	14	11	7	9	10	14	12	17	17	15	7	10	9	11	9	N	6	5
23-Jan-08	7	8	6	8	7	8	8	10	11	16	10	6	6	7	7	7	8	10	10	10	N	10	10	14
24-Jan-08	14	13	13	14	15	15	13	10	12	12	13	14	15	15	14	14	14	13	13	N	13	13	10	7
25-Jan-08	8	13	10	9	7	6	9	15	14	19	18	21	16	17	18	15	16	17	N	12	7	9	13	7
26-Jan-08	15	11	7	9	7	10	14	8	12	11	13	9	7	8	10	9	9	N	12	13	14	14	14	15
27-Jan-08	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	N	14	13	13	12	14	13	13
28-Jan-08	12	11	10	10	9	6	7	6	9	9	7	9	8	9	10	N	8	14	11	11	10	7	7	N
29-Jan-08	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
30-Jan-08	N	N	N	N	N	N	N	N	N	N	N	N	8	8	9	9	8	7	7	8	8	7	7	6
31-Jan-08	5	6	4	6	5	N	5	5	5	7	7	9	9	9	9	9	8	7	5	5	7	6	7	7

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

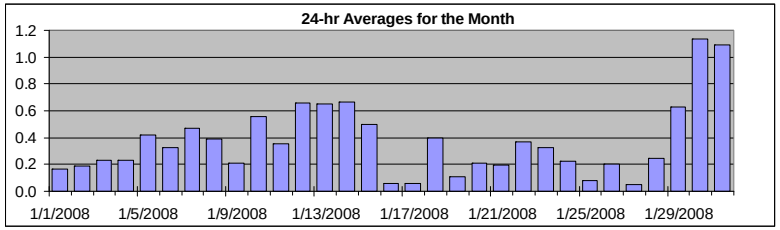
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	3.4	ppb	13-Jan	14:00 15:00
Maximum 24-hr Average:	1.1	ppb	30-Jan	



AIC Time:	32 hrs	Operational Time:	710 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	2.5	1.5	0.5	0.2	0.0	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**

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-Jan-08	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.5
2-Jan-08	0	0	0	0	0	0	0	0	1	0	A	0	0	1	1	0	1	0	0	0	0	0	0	0	0.2	1.0
3-Jan-08	2	1	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
4-Jan-08	0	0	0	0	0	0	0	0	A	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7
5-Jan-08	0	0	0	1	2	1	0	A	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0.4	2.1
6-Jan-08	0	0	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0.3	1.0
7-Jan-08	0	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	1.2
8-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0	0.4	1.3
9-Jan-08	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.2	0.8
10-Jan-08	0	0	A	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1
11-Jan-08	1	A	0	0	0	0	0	0	1	1	C	C	A	0	0	0	0	0	0	0	1	1	0	1	0.4	1.3
12-Jan-08	3	2	3	1	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0.7	3.1
13-Jan-08	0	0	1	1	A	1	1	0	0	0	0	1	2	3	3	2	0	0	0	0	0	0	0	0	0.7	3.4
14-Jan-08	0	0	0	A	1	1	1	1	1	1	2	2	2	3	1	0	0	0	0	0	0	0	0	0	0.7	2.8
15-Jan-08	0	0	0	0	0	A	0	1	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.8
16-Jan-08	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
17-Jan-08	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
18-Jan-08	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	1	0	0	0	0.4	1.3
19-Jan-08	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1	0.7
20-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.5
21-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0.2	0.7
22-Jan-08	0	0	0	1	1	0	0	0	0	0	0	0	1	1	1	0	1	1	0	1	0	A	0	0	0.4	0.9
23-Jan-08	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	A	0	1	2	0.3	1.8
24-Jan-08	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	2.7
25-Jan-08	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.6
26-Jan-08	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	0	A	0	0	0	0	0	0	0.2	1.4
27-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.3
28-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0.2	0.9
29-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	2	1	1	1	2	2	2	0.6	2.0
30-Jan-08	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	2	2	1	1	2	1	1.1	2.1
31-Jan-08	0	0	2	1	1	A	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1.1	2.5
Hourly Avg	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3		
Hourly Max	3.1	2.4	2.9	1.5	2.1	1.2	1.3	2.5	1.8	1.7	1.8	2.2	2.1	2.8	3.4	1.5	1.4	1.7	2.1	1.9	1.5	1.8	1.9	2.0		

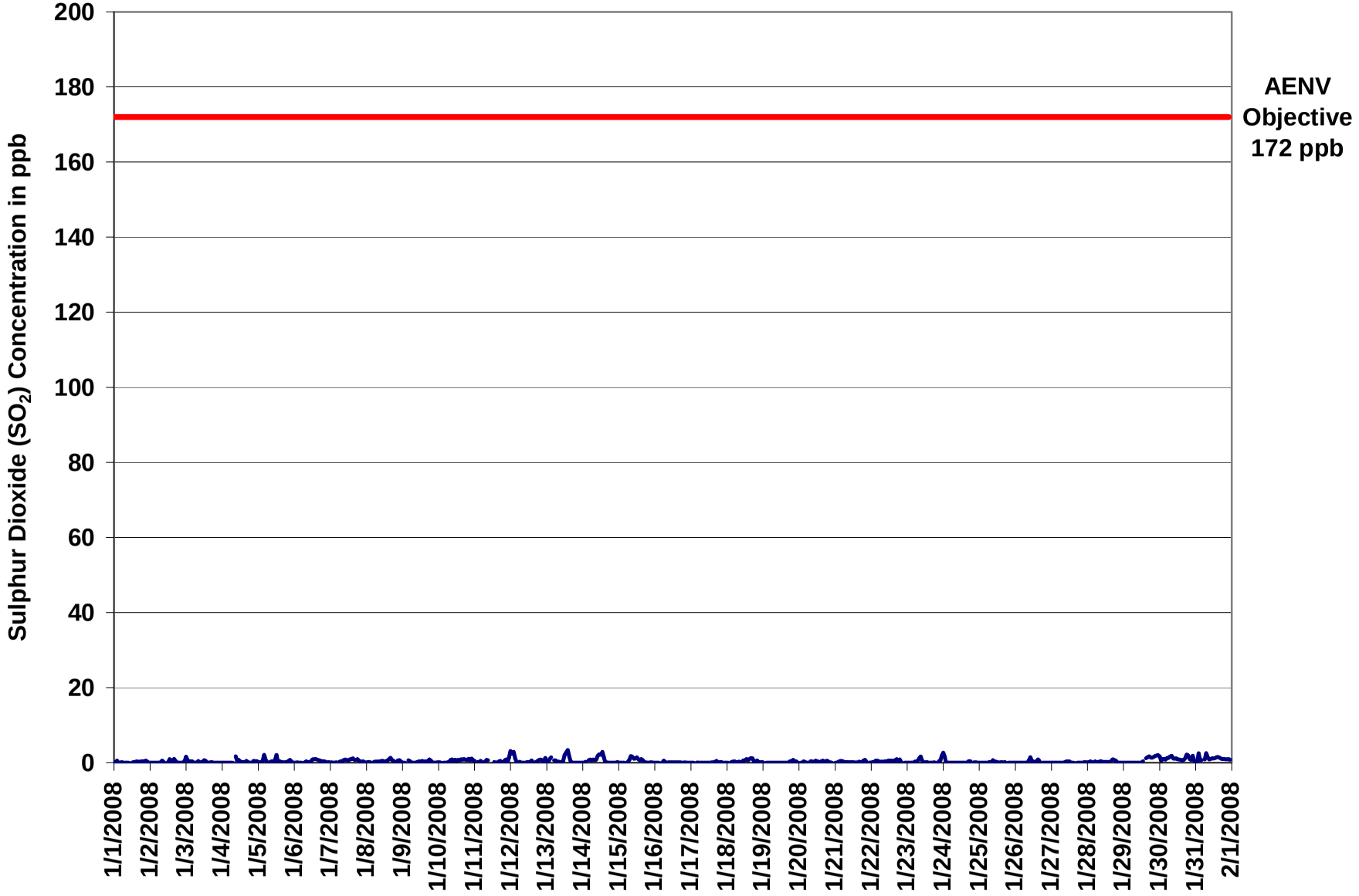


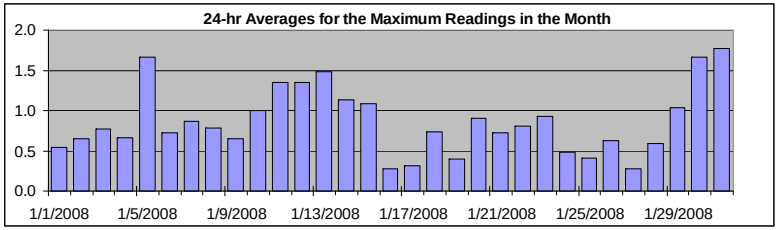
Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	20.4	ppb	5-Jan	12:00 13:00
Maximum 24-hr Value:	1.8	ppb	31-Jan	

AIC Time:	32 hrs	Operational Time:	710 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	4.3	2.5	1.1	0.6	0.3	0.0	0.0	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**

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-Jan-08	1	1	2	1	0	1	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	0	0.5	1.6
2-Jan-08	0	0	0	0	0	0	0	1	1	1	A	0	1	1	1	1	2	1	0	0	0	0	2	2	0.7	1.8
3-Jan-08	3	1	1	1	1	0	0	1	2	A	1	1	2	2	0	0	1	2	0	0	0	0	0	0	0.8	2.7
4-Jan-08	0	1	0	1	0	0	0	1	A	3	1	2	1	1	1	1	1	1	0	0	0	1	1	1	0.7	2.5
5-Jan-08	1	0	0	3	3	1	0	A	1	1	1	1	20	1	1	0	0	0	1	0	1	1	0	0	1.7	20.4
6-Jan-08	0	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	0.7	1.4
7-Jan-08	0	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.9	1.3
8-Jan-08	0	1	0	0	A	0	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	0	0.8	1.6
9-Jan-08	0	0	0	A	2	2	0	0	0	0	1	0	0	1	0	1	0	1	1	1	0	0	0	1	0.6	1.9
10-Jan-08	1	1	A	1	0	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1	2	1	2	1	1.0	2.0
11-Jan-08	1	A	1	1	1	1	0	1	1	1	C	C	A	1	1	0	5	4	1	1	1	1	1	4	1.3	4.7
12-Jan-08	5	3	4	4	1	A	1	0	0	0	1	1	1	1	1	0	0	1	1	1	1	2	1	2	1.3	4.8
13-Jan-08	1	1	2	3	A	1	1	1	1	0	1	1	4	3	9	4	1	0	0	0	0	0	0	0	1.5	9.2
14-Jan-08	1	1	1	A	1	1	1	1	1	1	3	3	3	3	2	0	0	0	0	0	0	0	0	1	1.1	3.3
15-Jan-08	0	0	0	0	0	A	3	1	4	4	2	2	2	2	1	1	1	1	0	0	0	0	0	0	1.1	3.6
16-Jan-08	0	0	0	0	A	0	1	1	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0.3	1.1
17-Jan-08	0	0	0	A	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0.3	1.1
18-Jan-08	0	0	A	1	1	1	0	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	0.7	1.6
19-Jan-08	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0.4	1.2
20-Jan-08	A	0	1	2	1	1	0	0	1	0	0	1	1	0	0	1	1	1	5	1	0	0	0	A	0.9	5.5
21-Jan-08	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	2	1	A	1	0.7	1.8
22-Jan-08	0	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	A	0	0	0.8	2.0
23-Jan-08	0	0	0	0	0	1	1	1	3	3	2	1	1	1	0	0	0	1	1	0	A	1	1	3	0.9	2.8
24-Jan-08	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	1	0	0.5	3.8
25-Jan-08	0	0	0	0	0	0	1	0	0	2	1	1	1	0	1	1	0	1	A	0	0	0	0	0	0.4	2.2
26-Jan-08	0	0	1	0	0	0	0	0	0	1	2	1	3	1	1	1	1	A	0	0	0	0	0	0	0.6	2.9
27-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4
28-Jan-08	0	1	1	1	0	0	0	0	1	1	0	0	1	1	1	A	1	2	2	1	1	0	0	0	0.6	1.5
29-Jan-08	0	0	1	1	0	0	0	0	0	0	0	0	1	2	A	3	2	2	2	2	2	2	2	2	1.0	2.8
30-Jan-08	2	1	1	2	1	2	2	2	2	1	1	2	1	1	1	1	1	2	2	3	2	1	3	1	1.7	3.4
31-Jan-08	0	0	4	2	3	A	2	5	2	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1.8	5.4
Hourly Avg	0.7	0.6	0.8	0.8	0.7	0.6	0.6	0.7	0.9	0.9	0.8	0.9	1.7	1.0	1.1	0.9	1.1	1.2	0.9	0.8	0.7	0.7	0.7	0.8		
Hourly Max	4.8	3.6	4.1	3.5	2.9	1.8	2.6	5.4	3.6	3.5	2.7	2.8	20.4	3.3	9.2	4.3	4.7	4.1	5.5	2.9	2.4	2.3	3.4	4.3		

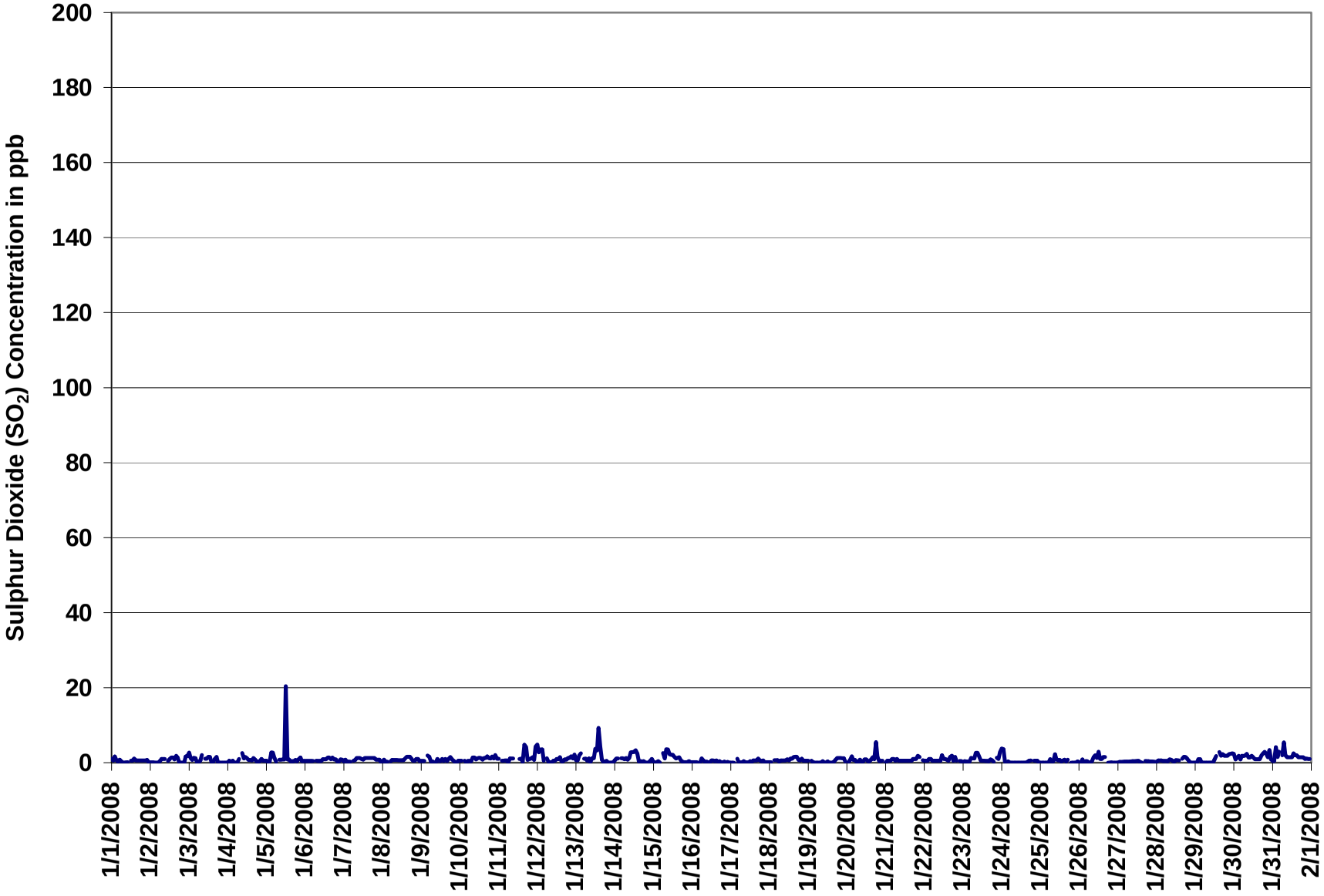
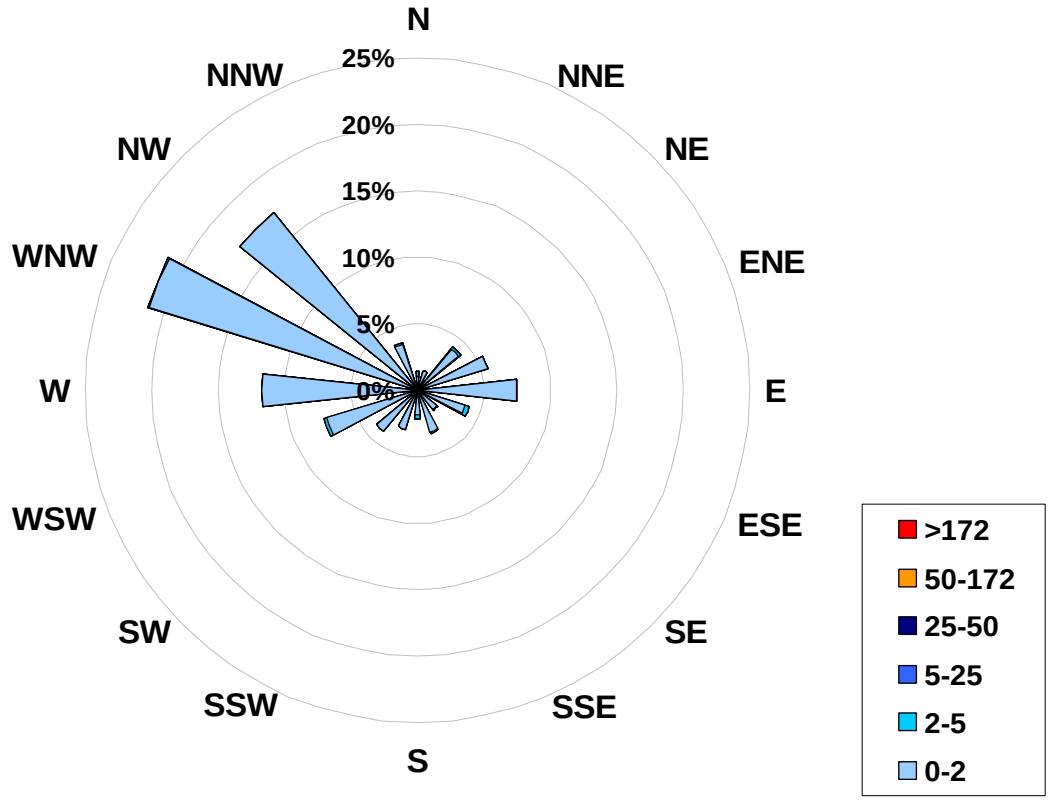


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Henry Pirker Site for January 2008



Calms:	**0%**

Frequency Distribution of SO_2 in ppb			
Range			**Frequency (hrs)**
0.0	<	2	696
2	to	5	14
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			710

PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

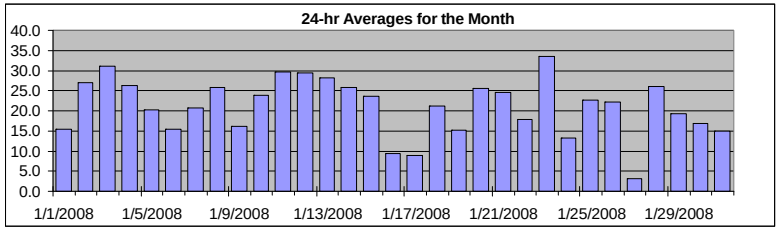
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	63.1	ppb	14-Jan	13:00 14:00
Maximum 24-hr Average:	33.4	ppb	23-Jan	



AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	50.5	40.5	28.7	20.8	11.1	3.3	1.2	21.0 ppb	20.8 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-Jan-08	23	25	28	27	27	29	26	17	10	9	9	A	8	8	8	10	10	11	9	10	9	8	13	19	15.4	28.7
2-Jan-08	20	23	23	21	22	22	25	26	31	29	A	21	17	36	32	33	46	45	32	24	25	19	26	23	27.1	45.8
3-Jan-08	27	38	40	38	37	35	34	36	39	A	39	39	44	41	34	31	38	39	21	16	14	14	11	11	31.1	44.3
4-Jan-08	16	15	20	19	32	26	29	36	A	52	36	39	35	31	30	33	36	36	23	19	14	12	7	7	26.2	51.5
5-Jan-08	8	18	14	10	12	23	26	A	34	31	27	29	21	19	10	9	14	17	22	19	29	28	25	18	20.1	33.6
6-Jan-08	22	15	17	19	19	19	A	20	22	18	10	8	9	8	7	9	18	22	19	16	21	18	9	13	15.5	21.8
7-Jan-08	17	18	15	13	13	A	19	26	24	26	23	20	13	13	15	21	25	29	29	26	22	24	24	22	20.7	29.1
8-Jan-08	22	22	21	19	A	24	24	24	25	25	26	23	19	24	27	35	40	32	27	25	25	29	29	26	25.8	39.6
9-Jan-08	23	24	23	A	7	6	7	8	12	9	8	8	9	13	15	20	23	28	29	28	22	18	18	16	16.2	29.3
10-Jan-08	19	23	A	23	22	20	20	21	22	24	21	25	19	23	21	28	32	29	29	25	26	24	27	27	23.9	31.5
11-Jan-08	27	A	31	30	31	26	22	25	30	27	C	C	C	C	A	27	32	32	31	30	30	32	31	40	29.7	40.5
12-Jan-08	48	46	40	32	27	A	26	24	26	22	20	23	18	20	21	23	27	28	35	35	34	33	31	33	29.3	48.0
13-Jan-08	30	31	35	35	A	34	34	41	35	15	33	32	27	24	23	19	18	15	25	34	30	25	28	26	28.3	40.9
14-Jan-08	27	31	32	A	35	37	34	36	32	32	42	50	50	63	46	11	4	5	5	5	5	4	1	3	25.8	63.1
15-Jan-08	2	2	3	14	16	A	36	50	56	50	42	37	20	14	14	26	36	29	26	19	17	15	10	8	23.6	55.6
16-Jan-08	5	10	8	6	A	22	44	20	9	10	6	6	7	8	9	7	7	6	6	5	5	3	3	2	9.3	44.0
17-Jan-08	2	3	1	A	2	1	4	11	6	5	8	7	7	6	9	15	34	40	12	8	7	7	6	8	9.0	39.9
18-Jan-08	8	11	A	12	14	14	15	24	29	24	25	29	26	26	16	28	34	35	26	23	28	19	14	10	21.3	35.3
19-Jan-08	8	A	7	5	5	6	5	6	7	8	7	8	8	8	7	9	18	24	35	36	36	36	32	27	15.1	36.2
20-Jan-08	A	16	19	30	30	31	27	26	29	28	23	19	16	11	15	28	34	32	34	31	28	27	27	A	25.5	34.0
21-Jan-08	25	23	33	33	29	22	27	32	24	16	16	12	12	12	12	18	30	37	35	40	42	27	A	12	24.6	41.5
22-Jan-08	10	8	9	2	2	2	8	15	29	21	20	10	15	5	6	10	29	44	37	45	37	A	25	21	17.8	44.9
23-Jan-08	15	14	20	33	28	33	35	40	48	53	33	25	25	25	24	24	35	40	41	41	A	42	43	50	33.4	52.7
24-Jan-08	55	47	11	8	7	7	10	18	12	10	8	7	6	6	7	8	8	11	9	A	10	10	14	16	13.3	54.5
25-Jan-08	14	12	12	12	16	22	30	31	30	34	24	23	21	18	22	24	28	32	A	16	31	25	14	31	22.7	33.8
26-Jan-08	9	14	19	13	19	17	12	33	50	46	56	38	29	33	31	39	38	A	4	3	2	2	1	1	22.2	55.8
27-Jan-08	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	A	6	7	8	10	5	5	7	3.2	9.9
28-Jan-08	8	10	11	10	13	20	31	26	37	38	27	14	24	21	18	A	22	51	44	45	40	31	29	25	25.9	50.6
29-Jan-08	23	21	18	17	16	18	21	30	34	24	16	14	22	15	A	17	17	17	26	26	18	13	11	10	19.3	34.1
30-Jan-08	20	28	27	28	22	21	19	12	15	20	18	14	13	11	10	11	13	15	15	14	13	15	16	17	16.9	28.0
31-Jan-08	17	24	19	25	20	A	21	23	18	12	12	9	8	7	8	10	10	12	17	19	13	13	11	12	14.8	25.0
Hourly Avg	18.4	19.8	19.1	19.1	18.7	20.0	22.4	24.6	25.8	24.1	22.0	20.3	18.3	18.4	17.2	19.6	25.2	26.7	23.6	23.0	21.5	19.3	18.1	18.0		
Hourly Max	54.5	47.0	39.8	37.9	37.5	37.4	44.0	50.5	55.6	52.7	55.8	49.9	50.4	63.1	45.7	39.2	45.8	50.6	44.2	44.9	41.5	42.2	43.3	50.4		

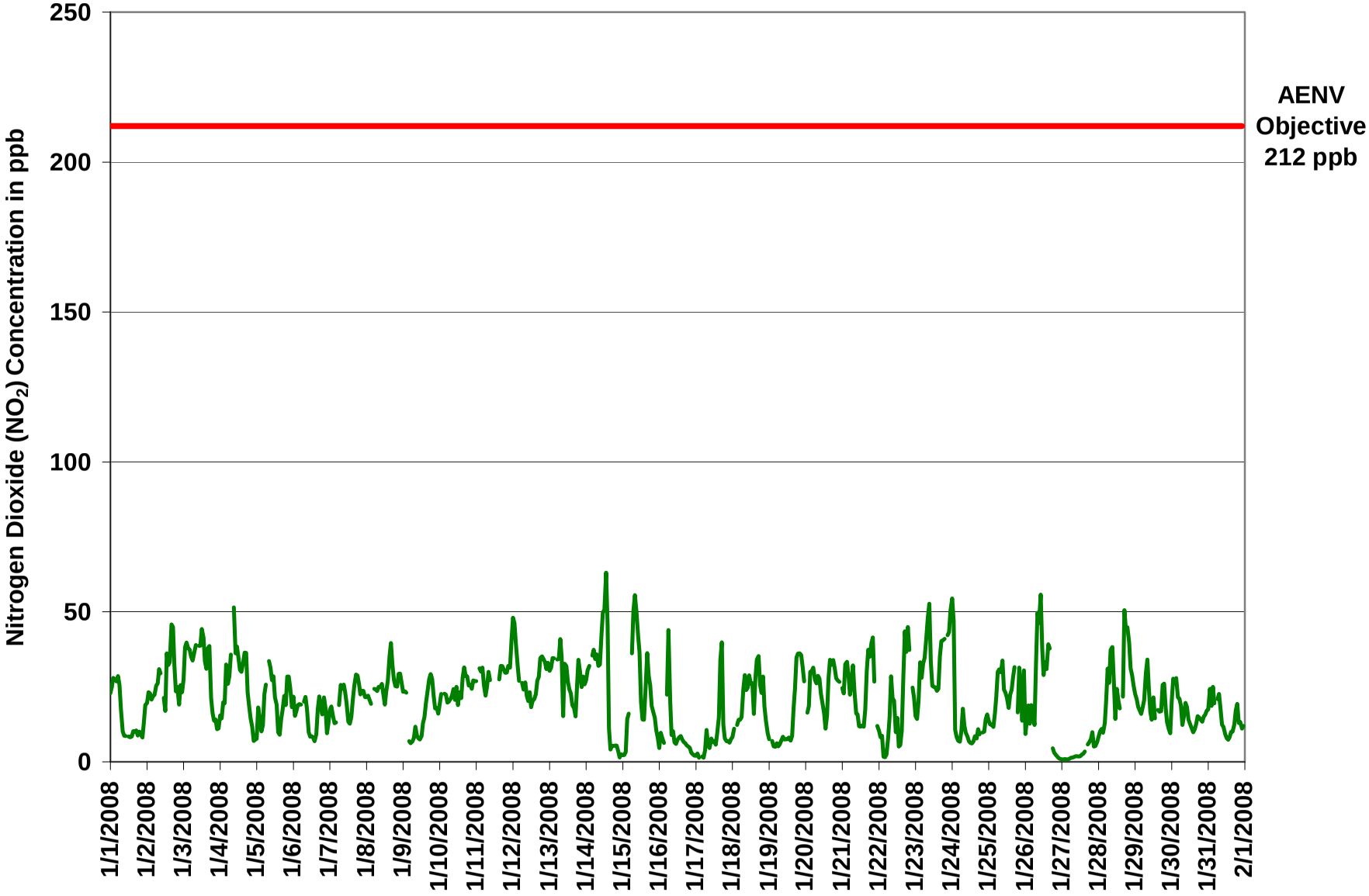


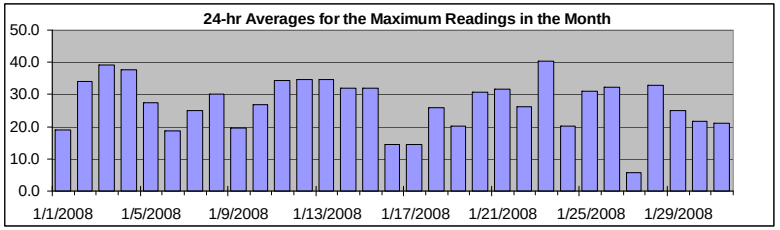
Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	103.8	ppb	26-Jan	8:00 9:00
Maximum 24-hr Value:	40.5	ppb	23-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	67.4	49.5	34.6	27.0	16.4	6.3	2.0	27.0 ppb	27.0 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**

Day	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-Jan-08	34	29	33	31	31	32	29	25	11	11	11	A	11	10	11	14	11	13	12	15	11	10	23	21	19.0	34.1
2-Jan-08	22	24	25	22	24	25	33	31	42	39	A	27	36	40	40	40	57	53	42	32	38	23	34	35	34.2	57.4
3-Jan-08	37	43	45	46	57	44	49	43	49	A	51	46	50	55	37	34	44	48	35	21	24	16	14	15	39.3	57.2
4-Jan-08	20	39	32	52	57	34	35	59	A	69	47	49	42	39	36	40	43	49	35	27	18	19	12	14	37.6	68.7
5-Jan-08	11	34	22	16	25	35	35	A	42	36	32	32	31	22	19	14	28	26	28	28	30	31	27	23	27.3	41.8
6-Jan-08	23	23	22	20	20	21	A	25	25	20	12	10	10	10	9	12	22	24	22	20	23	23	14	19	18.7	25.2
7-Jan-08	20	22	17	19	20	A	24	33	30	28	28	22	19	15	17	27	29	33	33	32	25	28	30	23	25.0	33.5
8-Jan-08	24	25	23	21	A	31	27	27	28	29	31	29	24	31	34	44	42	41	30	29	27	34	33	30	30.2	43.9
9-Jan-08	25	26	24	A	9	10	10	11	17	12	10	12	11	15	17	24	26	30	32	31	26	21	22	24	19.5	32.3
10-Jan-08	21	26	A	25	25	22	23	23	24	27	25	27	24	28	26	31	34	31	31	27	27	26	33	28	26.8	34.2
11-Jan-08	28	A	35	32	32	31	23	32	34	31	C	C	C	C	A	31	36	35	43	35	36	35	36	52	34.3	52.1
12-Jan-08	54	54	43	46	30	A	35	27	31	25	23	32	25	29	32	28	32	33	37	38	38	38	34	36	34.7	54.5
13-Jan-08	33	36	38	39	A	42	42	49	46	30	40	42	34	29	26	23	23	22	34	37	35	32	31	33	34.7	49.4
14-Jan-08	33	34	35	A	40	43	38	44	36	41	49	56	56	72	57	29	12	12	13	10	9	6	2	5	31.8	71.7
15-Jan-08	5	4	5	31	21	A	46	60	67	70	53	41	34	20	21	35	45	41	35	26	19	24	15	14	31.8	70.1
16-Jan-08	6	21	15	9	A	41	46	43	17	16	13	8	13	11	12	9	9	8	8	9	7	6	4	4	14.5	46.4
17-Jan-08	3	5	3	A	3	2	12	23	12	9	11	9	10	11	17	29	45	49	27	14	13	9	7	11	14.6	48.6
18-Jan-08	12	16	A	18	20	21	23	29	38	29	30	32	29	27	26	32	39	39	30	27	32	22	17	13	26.0	39.0
19-Jan-08	12	A	14	11	10	10	10	13	10	18	13	11	13	14	11	13	24	32	39	39	41	39	37	30	20.1	41.1
20-Jan-08	A	20	30	32	37	37	38	30	32	31	30	27	19	14	19	33	39	35	39	34	33	30	34	A	30.6	39.2
21-Jan-08	28	31	38	35	34	34	34	40	32	23	19	16	17	17	17	31	35	44	44	43	46	44	A	28	31.8	45.8
22-Jan-08	18	18	19	2	2	8	14	35	41	32	32	14	29	14	12	17	46	50	45	51	43	A	33	30	26.2	51.1
23-Jan-08	19	20	33	36	33	37	40	46	66	59	54	30	34	32	28	36	39	46	45	47	A	47	47	56	40.5	65.9
24-Jan-08	73	68	25	15	13	14	17	28	22	13	10	10	11	9	13	13	10	14	13	A	15	13	29	19	20.3	72.7
25-Jan-08	17	14	14	15	23	28	34	34	38	72	31	29	26	28	31	30	34	40	A	33	37	38	22	46	31.2	72.1
26-Jan-08	38	19	24	18	33	22	19	46	104	61	67	49	47	46	42	43	43	A	8	5	3	3	2	1	32.3	103.8
27-Jan-08	2	2	1	1	2	2	3	2	3	3	3	3	3	4	8	6	A	16	10	12	16	10	7	8	5.6	16.4
28-Jan-08	11	13	15	12	18	32	39	35	46	62	34	27	29	27	22	A	30	62	48	51	46	35	32	30	32.9	62.4
29-Jan-08	26	26	21	22	21	22	28	37	40	36	25	25	31	18	A	20	23	22	29	30	23	18	18	11	24.9	39.9
30-Jan-08	32	31	30	33	28	24	26	16	27	27	21	18	14	15	14	16	16	20	20	17	18	20	19	21	21.7	32.6
31-Jan-08	25	30	27	28	24	A	24	26	25	15	16	19	12	11	13	18	47	17	21	22	17	16	16	15	21.0	47.0
Hourly Avg	23.8	26.0	24.5	24.6	24.7	26.0	28.5	32.4	34.5	32.5	28.3	26.0	24.8	23.7	23.1	25.7	32.1	32.8	29.6	28.0	25.8	23.9	22.7	23.1		
Hourly Max	72.7	67.5	44.6	51.7	57.2	43.8	48.6	59.6	103.8	72.1	66.9	56.2	56.2	71.7	57.3	43.9	57.4	62.4	48.4	51.3	46.1	46.8	46.8	56.3		

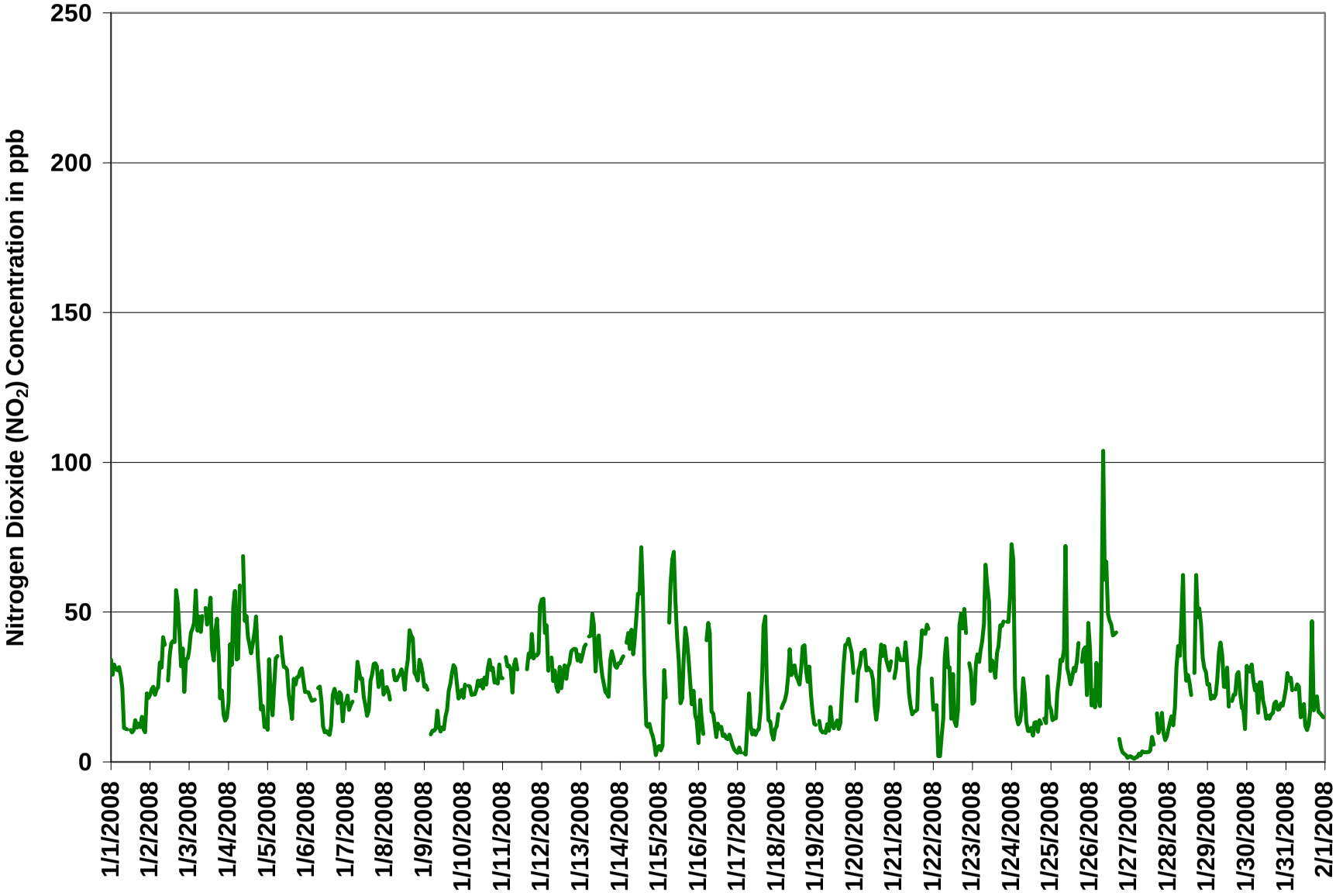
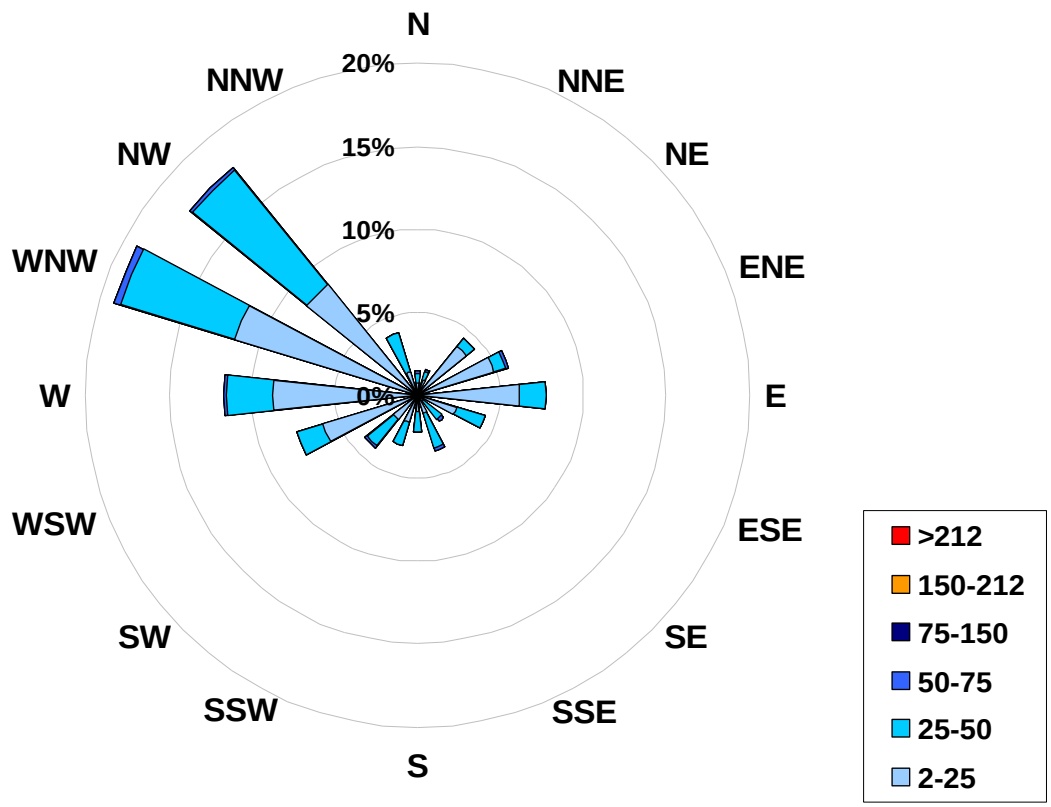


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Henry Pirker Site for January 2008



Calms:	0%

Frequency Distribution of NO_2 in ppb			
Range			Frequency (hrs)
2.0	<	25	483
25	to	50	110
50	to	75	56
75	to	150	50
150	to	212	9
	>	212	0
Total Non-Zero Values			708

PASZA - Henry Pirker Nitric Oxide Monthly Summary

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

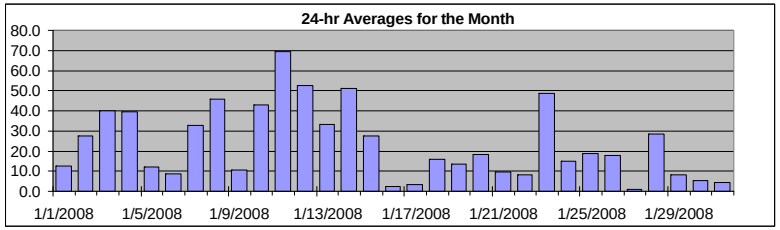
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Maximum 1-hr Average:	204.4	ppb	4-Jan	9:00 10:00
Maximum 24-hr Average:	69.3	ppb	11-Jan	



AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	152.0	90.0	33.2	6.9	1.4	0.1	0.0	23.0 ppb	6.9 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-Jan-08	22	40	52	40	45	44	12	4	2	2	3	A	3	3	3	2	1	1	1	1	1	0	1	3	12.4	52.3
2-Jan-08	2	4	5	3	7	8	30	50	90	78	A	27	16	81	49	35	85	53	8	1	1	0	0	0	27.5	90.5
3-Jan-08	1	16	24	26	20	27	23	56	86	A	95	91	122	111	50	31	69	64	2	0	0	0	0	0	39.9	121.8
4-Jan-08	0	0	0	1	11	8	20	74	A	204	110	120	88	60	44	51	78	39	1	1	0	0	0	0	39.6	204.4
5-Jan-08	0	1	0	0	0	2	5	A	44	31	23	30	18	11	5	2	3	3	4	5	26	40	19	4	12.1	44.4
6-Jan-08	4	3	2	3	5	5	A	13	42	22	7	7	8	7	5	5	10	19	9	3	9	7	1	2	8.6	42.4
7-Jan-08	2	3	1	1	1	A	7	30	28	64	55	45	24	19	20	31	35	68	106	85	35	40	41	13	32.8	105.8
8-Jan-08	13	16	12	6	A	18	40	54	71	73	78	53	43	52	56	90	109	55	26	19	15	58	66	33	45.9	108.9
9-Jan-08	9	9	5	A	1	1	1	1	2	2	3	5	6	12	13	18	19	27	59	40	9	3	2	2	10.8	58.7
10-Jan-08	2	12	A	20	28	32	29	19	26	50	36	56	36	54	40	66	78	57	55	40	46	37	89	75	42.8	88.7
11-Jan-08	61	A	53	49	66	40	21	49	101	76	C	C	C	C	A	52	87	88	92	96	84	108	33	90	69.3	108.4
12-Jan-08	151	158	148	62	22	A	46	23	23	19	22	32	27	32	26	16	15	10	37	63	70	70	53	80	52.4	157.8
13-Jan-08	63	64	93	102	A	73	82	45	61	1	27	34	28	24	16	8	3	1	3	26	6	3	7	2	33.4	102.0
14-Jan-08	6	10	23	A	47	66	64	90	59	68	135	165	141	203	93	2	0	0	0	0	1	0	0	0	51.1	203.3
15-Jan-08	0	0	0	1	1	A	13	62	152	152	103	56	17	9	7	15	27	6	4	2	1	1	1	0	27.4	152.1
16-Jan-08	0	0	0	0	A	3	29	5	1	1	1	2	3	2	2	1	1	1	0	1	1	0	0	0	2.4	28.9
17-Jan-08	0	0	0	A	0	0	0	1	1	1	1	1	2	1	3	4	21	32	1	1	1	1	1	1	3.2	32.0
18-Jan-08	0	0	A	0	1	1	2	5	12	10	27	47	38	36	12	29	50	55	11	7	18	3	3	2	16.0	54.9
19-Jan-08	2	A	2	2	2	2	2	2	2	4	4	4	5	5	4	3	4	2	35	63	49	47	40	25	13.5	63.1
20-Jan-08	A	1	4	18	14	23	9	11	18	40	29	23	20	9	13	29	35	13	33	30	13	8	7	A	18.1	40.5
21-Jan-08	2	2	9	17	9	4	7	11	3	2	4	4	7	6	6	8	11	18	16	25	40	14	A	1	9.8	39.5
22-Jan-08	0	0	0	0	0	0	0	1	5	3	5	2	5	1	2	3	10	36	12	73	24	A	2	1	8.1	73.2
23-Jan-08	0	0	1	5	3	17	36	87	129	180	83	49	36	31	25	16	26	43	59	41	A	55	60	133	48.5	180.0
24-Jan-08	192	118	2	1	1	1	1	4	2	2	2	3	3	3	3	3	2	1	1	A	1	1	0	0	15.1	192.3
25-Jan-08	0	0	0	0	1	1	14	24	35	82	36	33	35	25	32	25	33	43	A	0	1	0	0	8	18.7	82.0
26-Jan-08	0	0	0	0	0	0	0	2	25	60	147	43	24	31	20	34	19	A	1	0	0	0	0	0	17.7	146.6
27-Jan-08	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	A	2	1	1	1	1	1	1	0.7	1.9
28-Jan-08	1	1	1	0	1	3	14	9	39	63	32	17	38	28	20	A	11	89	45	91	83	37	19	8	28.3	91.3
29-Jan-08	3	3	1	1	1	2	4	20	32	19	12	14	32	17	A	13	8	2	2	1	0	0	0	0	8.1	31.9
30-Jan-08	3	5	3	5	3	2	2	0	1	7	15	13	13	11	10	8	7	5	4	3	2	2	2	2	5.3	14.5
31-Jan-08	3	6	4	6	2	A	4	6	5	5	7	7	7	7	8	8	6	3	1	2	2	1	1	1	4.5	8.4
Hourly Avg	18.1	16.3	15.4	13.2	10.5	14.2	17.2	25.3	36.6	44.0	38.0	33.9	28.2	29.8	20.3	20.3	28.7	27.9	21.0	24.0	18.0	18.0	15.0	16.3		
Hourly Max	192.3	157.8	147.6	102.0	66.1	72.7	81.9	90.1	152.1	204.4	146.6	165.1	141.4	203.3	93.3	89.8	108.9	89.3	105.8	95.8	84.0	108.4	88.7	132.5		

PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

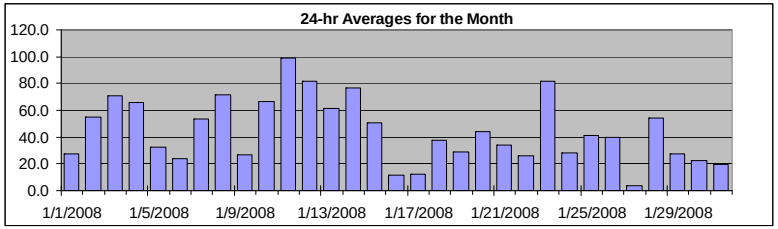
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Maximum 1-hr Average:	266.5	ppb	14-Jan	13:00 14:00
Maximum 24-hr Average:	99.2	ppb	11-Jan	



AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	202.7	125.9	62.5	28.0	13.5	4.3	1.4	44.0 ppb	28.0 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**

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-Jan-08	44	65	80	67	72	72	38	21	12	10	12	A	12	11	11	13	11	11	10	11	10	9	14	22	27.8	80.2
2-Jan-08	22	28	28	24	29	30	55	76	121	107	A	49	33	117	82	69	130	98	40	24	26	19	26	23	54.6	130.4
3-Jan-08	29	54	64	64	58	62	57	92	125	A	133	129	166	153	84	61	106	103	23	16	14	14	10	10	70.8	165.8
4-Jan-08	15	15	20	20	43	34	48	110	A	255	146	158	123	91	74	83	114	75	25	19	15	12	7	7	65.6	255.5
5-Jan-08	8	19	15	10	13	25	31	A	78	63	50	59	40	30	14	12	18	20	26	24	54	69	44	23	32.2	78.0
6-Jan-08	26	18	19	22	24	24	A	33	64	39	16	15	16	15	11	14	28	41	27	19	31	25	10	14	24.0	63.9
7-Jan-08	19	22	16	14	14	A	25	55	52	90	79	64	37	32	35	52	60	97	134	111	58	63	65	35	53.5	134.4
8-Jan-08	34	38	33	26	A	42	64	77	96	98	104	76	62	76	83	125	149	88	53	44	40	88	96	60	71.8	148.5
9-Jan-08	33	33	28	A	8	7	8	9	14	11	11	12	15	25	28	37	42	55	88	68	31	21	20	18	27.0	87.9
10-Jan-08	22	34	A	43	51	52	49	40	48	74	57	81	55	77	62	94	110	85	84	65	72	62	116	102	66.7	116.0
11-Jan-08	88	A	85	80	98	65	43	75	131	103	C	C	C	C	A	80	119	121	123	126	114	141	65	131	99.2	140.6
12-Jan-08	199	204	187	94	49	A	73	48	50	41	42	55	45	53	47	39	42	38	72	98	104	103	84	113	81.8	204.3
13-Jan-08	93	95	127	137	A	107	116	86	96	16	60	66	55	48	39	27	21	16	28	60	37	28	35	28	61.7	136.7
14-Jan-08	33	40	55	A	83	103	98	126	91	101	177	215	192	266	139	13	4	6	6	6	6	4	1	2	76.8	266.5
15-Jan-08	2	2	3	14	17	A	48	113	207	202	144	92	37	23	21	40	63	34	30	20	18	15	11	8	50.7	207.5
16-Jan-08	4	10	8	6	A	25	73	25	10	11	8	8	10	10	11	8	7	7	6	5	5	3	3	2	11.5	72.6
17-Jan-08	2	3	2	A	2	2	4	12	6	5	9	8	9	7	12	19	55	72	13	9	8	8	7	8	12.3	71.9
18-Jan-08	9	11	A	13	15	15	17	30	41	34	52	76	64	63	28	57	84	90	36	30	46	22	16	11	37.3	90.2
19-Jan-08	10	A	9	7	7	8	7	8	10	12	11	12	12	14	11	12	22	26	70	100	85	83	72	52	28.7	99.5
20-Jan-08	A	18	23	48	44	55	36	38	46	68	51	42	36	20	28	56	69	46	67	61	40	35	33	A	43.7	69.1
21-Jan-08	26	24	42	50	38	26	33	43	26	18	20	16	18	18	17	25	41	56	51	65	81	40	A	13	34.3	81.1
22-Jan-08	11	9	9	2	2	3	8	16	34	24	25	12	20	6	7	13	39	80	49	118	61	A	27	22	25.9	118.2
23-Jan-08	15	14	21	38	32	50	70	127	178	233	117	74	61	56	49	40	61	83	99	82	A	98	104	183	82.0	232.9
24-Jan-08	247	165	12	10	8	8	12	21	14	11	11	10	9	9	10	11	10	12	10	A	11	11	15	16	28.4	247.0
25-Jan-08	14	13	13	12	17	23	44	55	65	116	61	56	56	43	55	49	61	75	A	17	33	26	13	39	41.5	116.0
26-Jan-08	10	14	19	12	19	17	12	35	75	106	203	81	53	65	51	73	57	A	5	4	3	2	1	1	39.9	202.7
27-Jan-08	1	1	1	1	1	1	2	2	2	3	3	3	3	4	5	5	A	8	8	8	11	6	6	8	4.0	10.8
28-Jan-08	9	11	12	10	14	24	45	35	77	101	59	31	63	49	38	A	33	140	90	137	123	68	48	34	54.5	140.3
29-Jan-08	26	24	20	18	17	20	25	49	66	43	28	28	53	32	A	31	24	19	28	27	19	13	11	9	27.5	65.8
30-Jan-08	23	32	30	33	24	23	21	12	16	27	33	27	26	22	19	19	19	21	18	17	16	17	18	19	22.2	33.4
31-Jan-08	20	30	23	31	22	A	25	28	23	17	19	17	15	15	16	18	16	15	19	21	15	15	12	13	19.3	31.0
Hourly Avg	36.4	36.1	34.5	32.4	29.2	34.2	39.6	49.9	62.4	68.1	60.0	54.2	46.5	48.3	37.5	39.9	53.9	54.6	44.6	47.0	39.5	37.2	33.1	34.3		
Hourly Max	247.0	204.3	187.2	136.7	97.8	106.9	116.3	127.3	207.5	255.5	202.7	215.1	191.9	266.5	138.9	125.0	148.5	140.3	134.4	136.5	123.4	140.6	116.0	183.1		

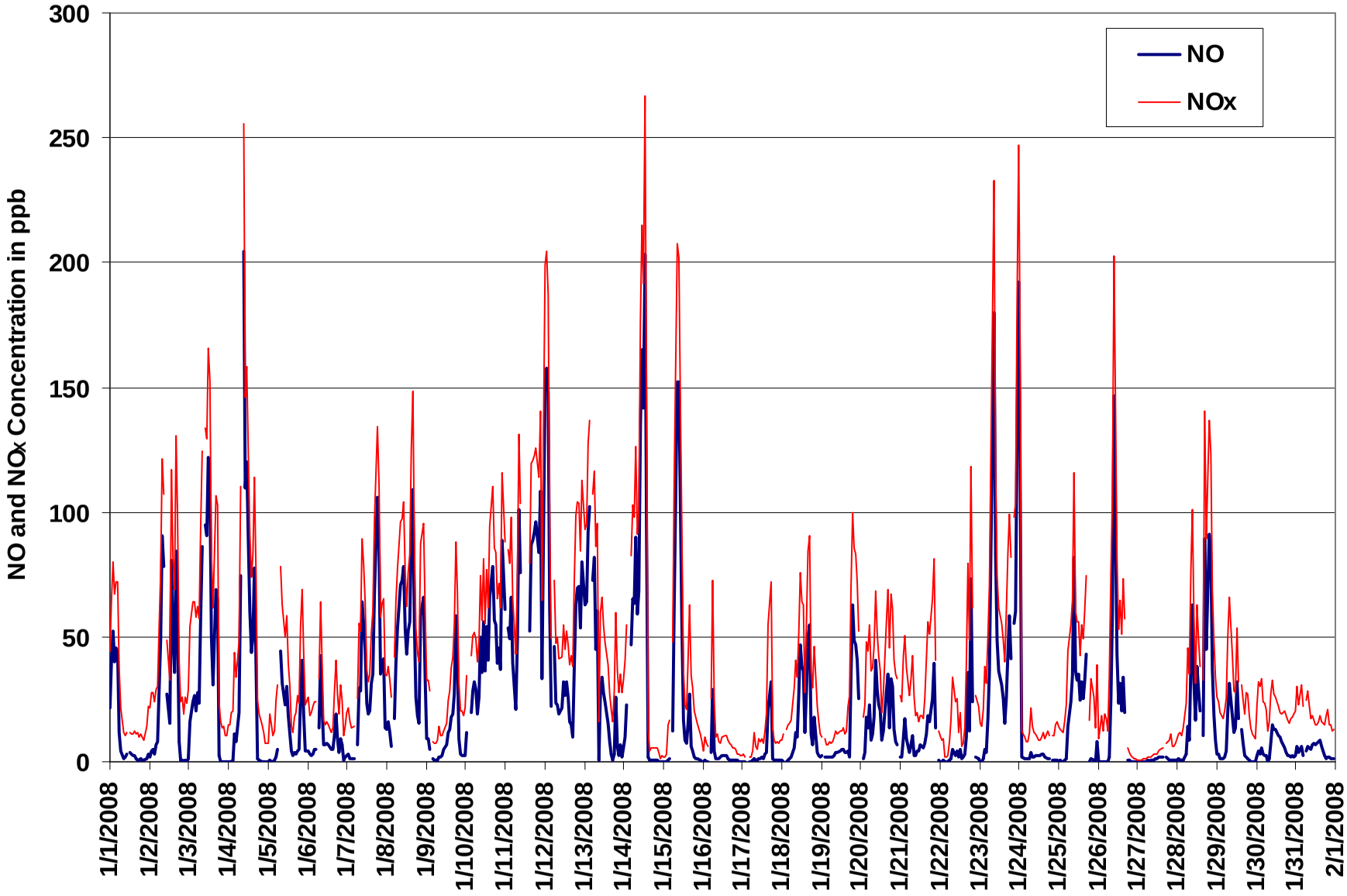


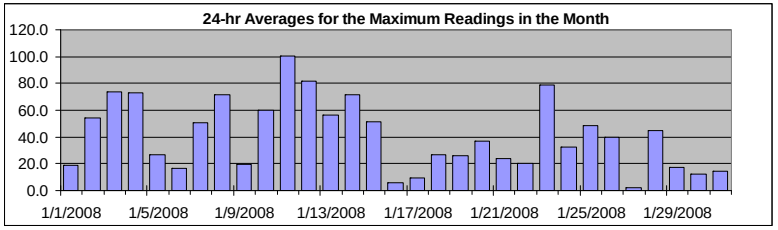
Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	310.6	ppb	25-Jan	9:00 10:00
Maximum 24-hr Value:	100.6	ppb	11-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	220.6	152.0	59.7	17.0	5.0	0.7	0.3	40.4 ppb	17.0 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**

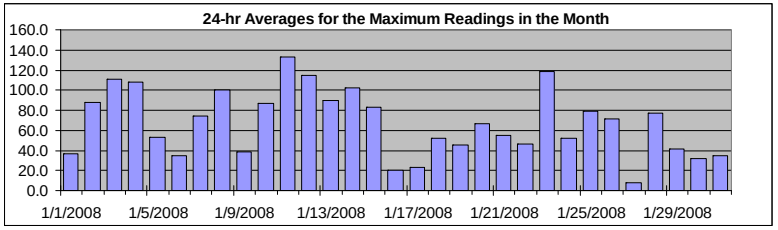
Day	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jan-08	49	56	58	51	61	65	16	11	3	6	6	A	5	4	4	5	2	2	2	8	7	1	5	5	18.8	64.8
2-Jan-08	4	8	8	6	13	16	82	86	178	126	A	47	73	111	87	59	170	114	32	3	8	2	14	9	54.6	178.4
3-Jan-08	11	39	45	56	54	54	55	85	127	A	162	138	191	199	73	42	155	174	17	3	14	1	1	0	73.7	198.7
4-Jan-08	0	22	9	66	62	23	59	158	A	278	154	174	141	103	69	107	130	84	6	2	1	3	10	12	72.8	278.1
5-Jan-08	1	9	3	2	8	10	32	A	125	62	32	41	39	18	15	5	16	15	13	19	42	63	31	18	26.9	125.1
6-Jan-08	12	14	7	5	9	7	A	45	70	31	9	9	10	8	8	6	20	42	19	13	15	13	2	6	16.7	69.9
7-Jan-08	4	6	3	4	6	A	18	63	58	93	78	57	41	28	29	49	55	102	133	129	54	54	67	29	50.3	133.3
8-Jan-08	41	23	20	10	A	41	67	84	93	112	123	79	69	87	88	139	124	112	37	31	22	92	87	60	71.4	139.1
9-Jan-08	17	14	7	A	8	8	3	8	8	5	6	10	9	19	16	30	29	38	80	81	19	7	13	12	19.5	80.9
10-Jan-08	6	20	A	25	40	68	73	30	45	70	55	63	60	74	61	81	94	70	72	51	54	59	122	91	60.2	121.8
11-Jan-08	70	A	66	57	74	73	30	102	122	96	C	C	C	C	A	79	115	126	149	132	119	160	72	169	100.6	169.0
12-Jan-08	210	183	172	161	35	A	93	34	32	31	31	49	55	68	64	33	32	21	52	80	104	157	78	99	81.5	210.3
13-Jan-08	88	83	123	140	A	99	119	86	182	9	52	58	44	35	25	16	6	3	10	61	15	10	16	23	56.7	182.0
14-Jan-08	22	32	40	A	61	91	90	141	90	117	183	183	170	245	155	12	2	1	1	1	1	1	1	0	71.3	244.9
15-Jan-08	0	0	0	2	2	A	43	86	281	258	192	96	40	15	13	37	81	20	9	3	2	2	1	1	51.6	280.8
16-Jan-08	0	1	1	0	A	16	45	35	3	2	3	3	5	3	3	2	1	1	1	1	1	1	1	1	5.7	44.7
17-Jan-08	0	1	1	A	1	1	2	3	1	1	2	3	4	3	8	19	67	77	5	1	4	2	1	1	9.0	76.6
18-Jan-08	1	1	A	1	2	3	4	14	35	23	50	60	46	42	29	40	72	76	20	17	36	13	10	14	26.4	76.5
19-Jan-08	11	A	12	10	5	8	8	12	9	13	12	11	12	12	11	10	8	7	85	86	82	64	60	47	25.9	85.9
20-Jan-08	A	5	28	27	38	42	28	21	39	69	52	50	30	13	18	49	54	33	69	42	31	21	47	A	36.6	69.4
21-Jan-08	5	5	32	23	18	17	15	21	9	4	6	5	11	9	9	17	17	57	49	46	91	82	A	2	24.0	91.3
22-Jan-08	1	1	1	0	0	0	1	9	14	7	13	4	15	4	5	7	37	82	49	140	61	A	9	6	20.2	139.6
23-Jan-08	0	2	5	13	14	31	74	130	195	221	188	71	59	50	38	40	47	95	91	93	A	93	92	171	78.8	220.6
24-Jan-08	285	301	13	11	10	9	11	17	22	3	4	6	7	7	11	11	6	2	2	A	2	2	3	1	32.4	300.6
25-Jan-08	1	1	1	1	3	4	30	32	141	311	97	56	52	54	66	50	63	93	A	3	3	11	1	44	48.5	310.6
26-Jan-08	6	0	1	0	5	0	1	8	112	180	220	95	71	69	48	46	46	A	2	2	1	1	1	0	39.8	220.3
27-Jan-08	1	0	0	0	0	1	1	1	1	2	2	2	2	5	5	4	A	14	4	1	2	2	1	2	2.4	14.5
28-Jan-08	1	4	3	2	3	10	28	23	62	112	53	45	52	40	26	A	18	131	69	129	113	50	38	16	44.6	130.6
29-Jan-08	6	13	3	3	7	8	11	41	61	41	20	38	70	24	A	19	14	9	6	3	3	1	1	0	17.4	69.9
30-Jan-08	10	8	7	12	6	5	27	1	12	16	20	17	17	17	18	19	16	15	14	9	7	4	7	4	12.0	26.6
31-Jan-08	14	17	11	16	7	A	7	11	17	15	12	21	15	18	16	21	84	7	3	6	7	4	5	4	14.7	84.2
Hourly Avg	29.3	29.9	23.4	25.1	19.8	26.2	35.7	46.6	71.6	77.1	63.3	51.5	47.2	46.2	35.2	35.1	52.7	54.1	36.7	39.9	30.7	32.5	26.5	28.3		
Hourly Max	284.6	300.6	172.0	161.0	74.5	98.9	119.3	158.3	280.8	310.6	220.3	182.7	190.7	244.9	155.4	139.1	169.7	173.6	148.7	139.6	119.5	159.8	121.8	171.0		

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	369.4	ppb	25-Jan	9:00 10:00
Maximum 24-hr Value:	133.4	ppb	11-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	283.0	193.0	92.3	43.6	22.7	7.5	2.4	66.5 ppb	43.6 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**

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-Jan-08	82	83	88	78	91	95	44	35	14	17	15	A	15	13	14	19	13	15	14	23	18	11	27	27	37.0	94.6
2-Jan-08	26	32	33	28	37	41	113	117	208	164	A	74	109	150	127	98	226	166	74	35	45	24	49	44	87.8	225.6
3-Jan-08	44	82	88	102	111	90	90	124	172	A	214	184	238	252	110	75	199	221	52	24	36	17	14	14	111.0	252.3
4-Jan-08	19	61	41	118	120	54	92	194	A	340	201	216	182	142	105	145	170	127	41	28	18	21	22	25	107.9	339.7
5-Jan-08	11	41	25	16	28	43	65	A	167	97	62	72	70	39	33	20	43	40	41	46	72	92	57	39	53.1	166.7
6-Jan-08	35	37	28	26	29	26	A	68	94	49	20	19	20	17	17	18	42	66	41	32	38	36	16	24	34.8	94.5
7-Jan-08	24	28	19	23	26	A	42	91	88	119	103	79	60	43	46	75	83	133	166	160	77	82	97	50	74.5	166.2
8-Jan-08	63	49	42	31	A	71	94	108	120	140	152	108	93	116	122	183	166	151	66	60	47	124	118	89	100.5	183.0
9-Jan-08	42	38	31	A	17	19	13	19	22	17	15	22	20	34	33	54	54	67	112	110	45	28	32	36	38.2	111.8
10-Jan-08	28	45	A	50	65	88	93	52	68	96	80	90	85	103	87	112	128	100	103	78	80	85	154	118	86.5	154.5
11-Jan-08	96	A	101	88	106	101	53	135	157	126	C	C	C	C	A	110	149	161	191	163	154	188	106	216	133.4	216.2
12-Jan-08	264	233	211	203	64	A	128	60	59	55	54	76	79	97	96	58	63	52	87	116	142	194	112	133	114.7	264.2
13-Jan-08	119	116	162	176	A	141	159	131	228	37	91	98	78	63	51	39	27	24	44	97	50	39	44	56	90.1	228.3
14-Jan-08	55	66	74	A	100	132	127	179	123	157	232	233	226	315	213	41	13	13	14	11	9	7	3	5	102.0	314.5
15-Jan-08	5	4	6	33	24	A	88	144	348	328	242	135	74	34	34	72	124	61	43	29	21	25	16	14	82.8	348.2
16-Jan-08	6	21	15	9	A	57	89	77	20	18	15	11	18	14	15	10	10	8	8	10	8	6	5	4	19.8	89.2
17-Jan-08	3	5	3	A	3	3	14	26	14	10	12	12	14	14	24	44	111	124	30	16	16	11	9	12	23.2	124.4
18-Jan-08	13	17	A	19	22	23	27	40	72	52	80	92	74	68	55	72	110	115	50	44	67	33	27	26	52.0	115.2
19-Jan-08	24	A	25	19	15	17	16	24	19	31	25	22	24	26	21	23	30	39	122	126	119	103	95	75	45.2	125.7
20-Jan-08	A	24	58	59	74	78	66	51	69	98	79	77	49	27	35	81	91	68	108	76	63	52	81	A	66.5	107.6
21-Jan-08	33	36	69	58	52	50	49	60	40	26	25	21	27	25	27	48	50	101	92	89	136	127	A	31	55.3	136.4
22-Jan-08	18	19	20	2	2	8	16	43	55	38	44	18	44	18	17	24	83	131	91	188	104	A	41	36	46.1	187.9
23-Jan-08	19	21	37	49	46	68	112	176	261	279	242	101	92	82	65	77	86	138	135	140	A	137	136	225	118.5	279.3
24-Jan-08	358	366	38	24	23	22	27	43	36	16	13	17	18	15	22	23	16	16	14	A	16	14	32	20	51.7	366.0
25-Jan-08	18	15	15	15	26	33	64	65	179	369	127	85	77	82	98	80	96	131	A	36	40	50	23	88	78.8	369.4
26-Jan-08	44	18	25	18	37	22	20	53	215	241	283	144	116	115	91	88	90	A	9	7	4	4	3	2	71.7	283.3
27-Jan-08	2	2	2	1	2	2	4	3	5	5	6	5	6	7	13	9	A	31	12	13	18	11	9	10	7.7	31.0
28-Jan-08	12	17	17	13	21	42	67	59	107	168	87	72	81	67	49	A	48	192	117	180	158	84	70	43	77.0	191.6
29-Jan-08	31	39	24	24	28	31	39	77	101	74	45	63	97	43	A	39	36	26	35	33	26	19	18	11	41.6	101.3
30-Jan-08	42	39	37	44	34	28	39	17	39	42	40	35	31	32	32	33	30	30	34	24	23	23	23	25	32.2	44.2
31-Jan-08	38	46	37	44	31	A	32	36	39	29	27	40	27	28	26	35	131	21	24	26	22	18	21	17	34.6	130.7
Hourly Avg	52.5	55.2	47.2	48.9	44.1	51.3	62.6	76.9	104.6	108.0	90.8	76.6	71.6	69.4	57.9	60.1	84.0	85.7	65.7	67.3	55.8	55.5	48.6	50.5		
Hourly Max	357.7	366.0	210.9	202.5	119.7	141.0	159.3	193.7	348.2	369.4	283.3	233.4	238.3	314.5	212.8	183.0	225.6	221.1	191.5	187.9	157.6	194.1	154.5	225.0		

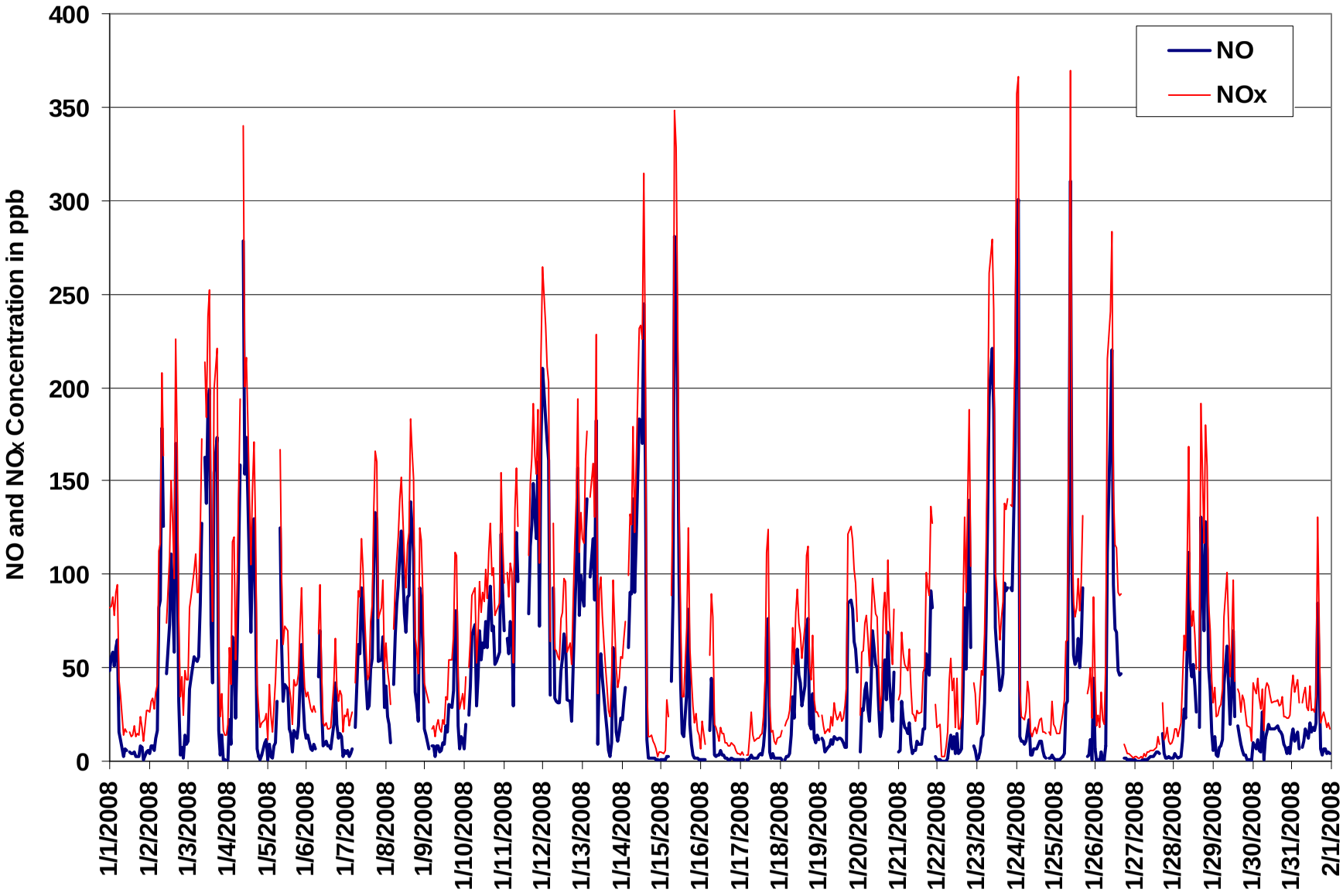


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Henry Pirker Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O_3)

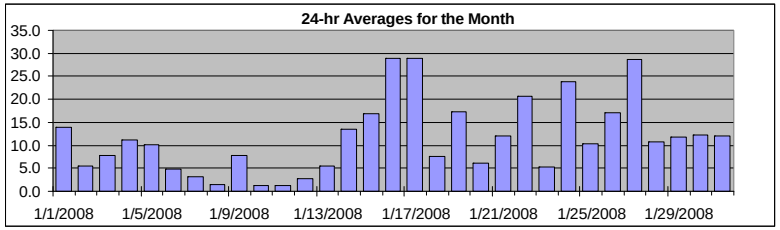
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	38.2	ppb	17-Jan	5:00 6:00
Maximum 24-hr Average:	29.0	ppb	16-Jan	



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
	36.2	32.3	20.5	8.2	1.5	0.0	0.0	11.7 ppb	8.2 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**

Day	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-Jan-08	2	2	2	1	0	1	0	7	15	17	18	A	21	22	23	23	24	23	25	24	25	25	17	2	14.0	25.5
2-Jan-08	2	0	0	1	1	0	0	0	0	0	A	5	10	4	7	4	1	0	7	15	15	20	14	18	5.4	19.8
3-Jan-08	15	3	0	1	1	0	0	0	0	A	1	2	3	3	5	3	1	2	17	22	24	23	27	26	7.8	26.7
4-Jan-08	21	21	12	13	1	3	1	0	A	1	1	3	4	6	6	3	1	5	18	22	24	27	33	33	11.3	33.3
5-Jan-08	32	20	20	23	21	9	7	A	0	0	5	5	12	13	19	17	12	9	4	6	0	0	0	3	10.2	31.7
6-Jan-08	0	5	2	0	0	0	A	0	0	0	7	10	11	12	13	11	4	0	3	6	1	4	12	9	4.8	13.4
7-Jan-08	5	3	5	7	8	A	3	0	0	0	2	5	9	10	9	4	1	0	0	0	0	0	0	0	3.1	10.1
8-Jan-08	0	0	0	0	A	0	0	0	0	1	2	6	6	5	4	3	2	1	0	1	0	1	1	0	1.4	5.8
9-Jan-08	0	0	0	A	16	17	16	15	12	14	15	14	14	11	10	6	3	0	1	1	2	5	4	6	7.9	16.6
10-Jan-08	3	0	A	0	0	0	0	0	0	1	2	3	5	4	4	3	1	2	1	1	1	1	1	1	1.4	4.5
11-Jan-08	1	A	0	0	1	0	0	1	1	1	2	4	5	5	C	C	C	A	0	0	0	1	0	1	1.2	5.2
12-Jan-08	2	1	1	0	0	A	0	0	0	1	5	7	9	9	10	7	3	2	0	1	1	0	0	2	2.7	10.3
13-Jan-08	0	1	1	1	A	0	0	0	0	24	8	6	7	9	9	12	13	16	7	0	3	5	1	3	5.5	24.0
14-Jan-08	2	0	0	A	0	0	0	0	0	0	1	2	2	3	2	22	32	35	35	34	34	35	37	36	13.6	37.0
15-Jan-08	36	35	34	24	22	A	3	0	0	0	3	7	18	23	23	13	5	12	14	19	20	22	26	28	16.8	35.9
16-Jan-08	31	27	29	30	A	16	0	18	28	27	31	31	30	30	30	31	32	33	33	34	35	36	37	37	29.0	36.8
17-Jan-08	37	36	38	A	37	38	36	29	33	35	32	33	33	34	31	25	6	2	25	30	29	21	21	21	28.8	38.2
18-Jan-08	21	17	A	13	10	11	12	3	1	4	5	5	7	6	11	4	1	0	1	2	0	7	13	19	7.5	20.6
19-Jan-08	19	A	23	27	26	24	26	25	24	24	24	24	24	24	25	24	16	10	3	1	1	2	1	0	17.3	27.3
20-Jan-08	A	8	8	1	2	1	5	4	2	2	9	13	15	22	19	11	5	2	1	1	2	2	3	A	6.2	21.7
21-Jan-08	5	6	0	0	3	7	4	4	16	22	23	27	27	27	27	22	11	4	5	1	1	11	A	23	11.9	27.2
22-Jan-08	25	28	28	35	35	33	28	23	12	18	19	28	25	33	34	29	14	2	5	0	1	A	8	10	20.6	34.7
23-Jan-08	15	16	12	1	3	0	0	0	1	2	3	7	11	14	14	14	5	0	0	0	A	0	0	1	5.3	16.1
24-Jan-08	1	4	25	28	29	29	26	19	24	25	26	28	30	30	28	28	29	25	27	A	26	25	20	13	23.8	30.5
25-Jan-08	15	17	18	18	15	10	2	1	0	2	5	8	9	11	8	6	2	1	A	25	12	18	26	10	10.4	26.4
26-Jan-08	31	23	13	19	15	21	28	10	2	3	3	9	15	12	13	7	5	A	24	26	27	28	29	29	17.0	31.0
27-Jan-08	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	29	A	28	27	26	23	27	27	25	28.6	29.9
28-Jan-08	24	22	20	21	17	11	4	7	1	4	12	19	16	19	19	A	15	5	2	2	1	1	1	3	10.7	23.6
29-Jan-08	5	7	9	10	11	9	7	2	2	10	16	18	15	19	A	17	16	15	8	7	13	17	19	20	11.8	19.9
30-Jan-08	11	4	5	4	8	8	9	14	12	9	12	15	16	16	18	18	16	14	14	16	16	14	13	12	12.3	18.3
31-Jan-08	11	6	9	2	6	A	7	6	9	13	15	17	18	19	18	17	17	14	10	8	13	13	15	14	12.0	18.8
Hourly Avg	13.3	11.8	12.0	11.0	11.3	10.3	8.5	7.3	7.5	9.7	11.2	13.1	14.7	15.6	16.1	14.3	10.1	9.0	10.6	11.0	11.7	13.1	13.6	13.5		
Hourly Max	36.9	36.2	37.5	34.6	37.3	38.2	35.6	29.7	33.4	34.6	32.3	33.5	33.3	33.8	33.5	30.7	32.2	35.0	35.4	34.1	34.7	36.2	37.0	36.8		

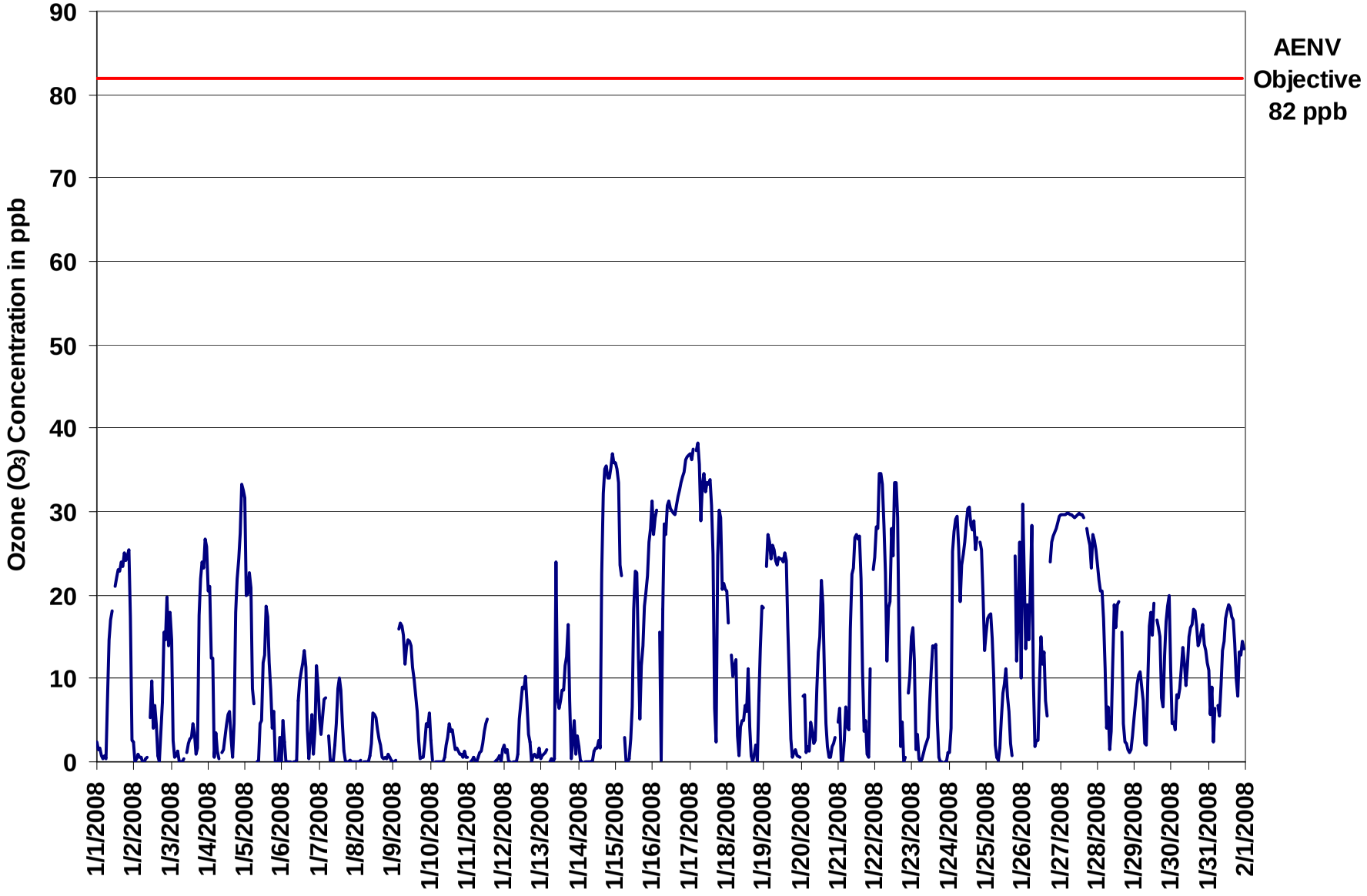


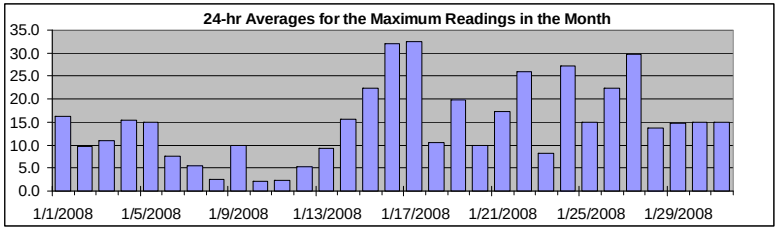
Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	39.3	ppb	17-Jan	5:00 6:00
Maximum 24-hr Value:	32.5	ppb	17-Jan	

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
	37.9	35.0	25.4	13.2	3.6	0.5	0.0	14.9 ppb	13.2 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-Jan-08	4	4	3	2	1	2	1	15	16	18	20	A	23	24	24	25	26	26	27	27	26	27	26	5	16.2	27.3
2-Jan-08	5	1	3	3	4	1	0	1	1	1	A	12	14	6	13	13	2	1	17	24	27	25	24	25	9.7	27.3
3-Jan-08	25	8	1	3	7	2	0	1	2	A	2	3	4	4	7	9	3	12	24	27	27	26	29	28	11.0	28.9
4-Jan-08	24	27	18	20	7	12	9	3	A	3	3	4	7	8	10	5	3	14	23	25	27	32	35	36	15.4	35.9
5-Jan-08	34	34	26	25	25	18	18	A	0	2	12	7	16	17	21	21	18	13	10	14	0	0	4	8	15.0	33.7
6-Jan-08	1	10	8	2	1	0	A	0	0	5	9	12	12	13	15	13	9	2	10	8	5	13	14	14	7.7	14.7
7-Jan-08	8	7	8	11	12	A	7	4	3	1	4	6	11	14	11	8	3	1	1	1	1	0	0	0	5.4	13.5
8-Jan-08	0	1	0	1	A	0	0	1	0	2	4	9	8	8	6	3	3	1	1	1	1	2	3	2	2.6	8.9
9-Jan-08	1	1	2	A	17	18	18	18	14	16	17	16	16	13	12	8	5	1	2	3	6	8	10	9	10.0	18.4
10-Jan-08	6	2	A	0	0	0	0	0	0	2	3	4	6	5	4	3	2	2	2	2	2	1	3	1	2.2	5.8
11-Jan-08	2	A	0	1	1	1	0	2	2	2	3	5	6	6	C	C	C	A	1	1	3	1	1	6	2.3	6.4
12-Jan-08	6	3	2	5	0	A	0	0	0	3	8	10	11	19	20	10	6	6	0	2	2	2	3	4	5.3	20.4
13-Jan-08	1	1	2	4	A	1	2	1	9	31	20	10	10	11	10	17	16	19	18	7	7	9	4	7	9.3	31.0
14-Jan-08	5	3	1	A	0	1	0	1	0	1	2	3	2	3	8	29	36	37	38	38	35	37	38	37	15.6	38.4
15-Jan-08	37	36	35	33	28	A	20	0	1	4	13	10	26	26	28	19	11	22	24	25	24	26	30	33	22.3	36.9
16-Jan-08	33	34	33	33	A	26	2	28	33	30	33	33	33	32	31	32	34	35	35	36	37	37	38	38	32.0	37.8
17-Jan-08	38	37	39	A	39	39	38	37	36	38	35	35	37	36	34	33	19	11	29	34	35	23	23	22	32.5	39.3
18-Jan-08	22	20	A	16	14	16	16	7	4	8	7	7	8	7	15	9	3	1	3	4	4	11	18	21	10.5	22.3
19-Jan-08	21	A	27	29	29	27	27	27	26	26	26	25	25	27	27	27	24	15	12	2	3	4	1	1	19.9	29.0
20-Jan-08	A	11	14	4	5	4	7	10	7	8	15	16	20	24	22	17	8	5	2	2	4	5	7	A	9.9	23.8
21-Jan-08	8	11	0	3	9	10	10	8	24	27	27	30	31	30	31	27	16	14	12	6	7	27	A	28	17.3	31.3
22-Jan-08	32	33	36	35	35	35	32	32	23	25	28	31	35	37	36	34	29	5	10	1	4	A	15	17	26.0	36.7
23-Jan-08	17	19	19	4	7	3	2	2	3	6	5	12	15	19	19	19	12	3	1	1	A	2	0	2	8.2	19.3
24-Jan-08	2	24	29	29	31	31	30	24	27	27	28	30	32	33	30	30	31	29	30	A	29	29	26	16	27.2	32.5
25-Jan-08	18	19	19	21	20	18	6	3	1	3	9	9	14	15	11	9	4	1	A	31	19	30	32	33	15.0	32.6
26-Jan-08	39	34	18	22	23	29	32	26	7	15	5	17	22	19	17	11	8	A	26	28	28	29	30	30	22.4	39.1
27-Jan-08	30	30	30	30	30	30	30	30	30	30	30	31	31	30	31	31	A	30	29	28	27	29	28	28	29.8	30.8
28-Jan-08	25	24	22	23	21	17	10	11	2	6	19	22	19	21	21	A	19	13	3	3	2	2	3	6	13.8	25.1
29-Jan-08	7	10	11	14	14	12	12	3	3	15	20	21	18	22	A	19	20	20	13	10	15	20	21	21	14.8	21.7
30-Jan-08	20	6	7	5	11	10	14	16	14	12	13	17	18	17	20	20	18	16	16	18	18	17	15	17	14.9	20.3
31-Jan-08	18	11	14	5	10	A	10	9	14	16	17	19	20	20	20	20	19	18	13	12	15	16	16	16	15.0	19.7
Hourly Avg	16.3	15.9	14.8	13.7	14.3	13.5	11.9	10.6	10.1	12.7	14.6	15.6	17.7	18.1	19.1	18.0	14.1	12.9	14.4	14.0	14.7	16.4	16.5	17.0		
Hourly Max	39.1	36.8	38.6	35.2	39.3	39.3	38.2	36.7	36.3	37.9	35.3	34.8	36.9	36.7	36.2	33.7	36.4	37.4	38.4	37.9	36.8	37.4	37.6	37.8		

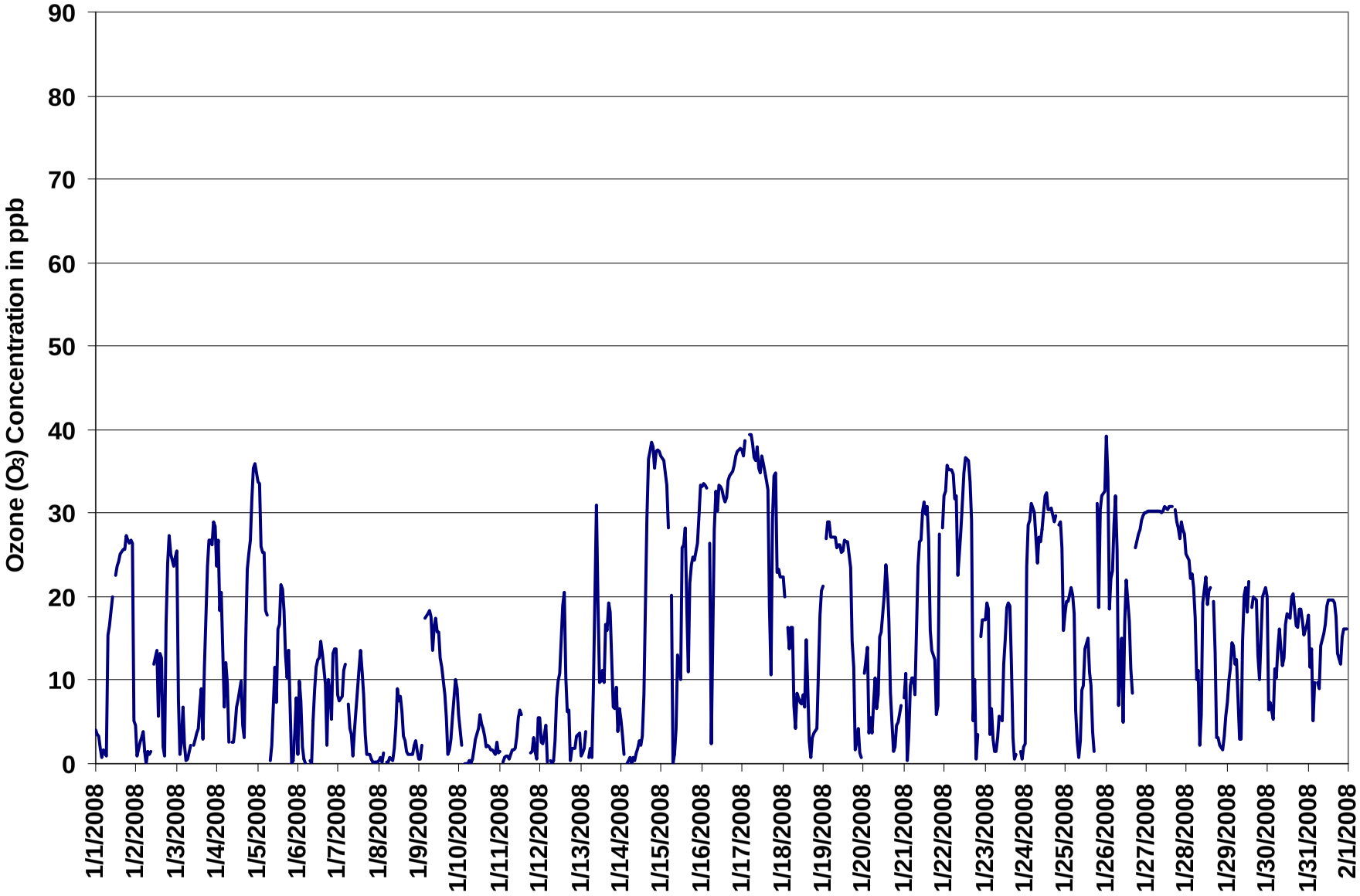
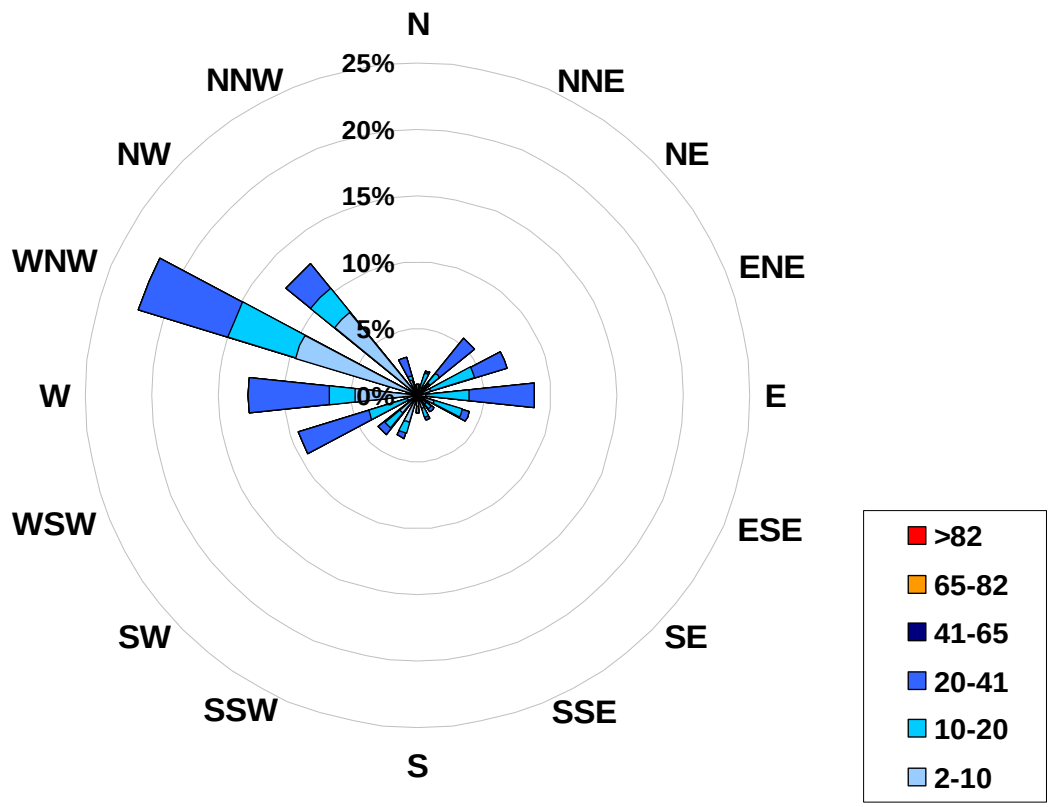


Figure 8. PASZA - Henry Pirker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Henry Pirker Site for January 2008



Calms:	**0%**

Frequency Distribution of O_3 in ppb			
Range			**Frequency (hrs)**
2.0	<	10	381
10	to	20	146
20	to	41	182
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			709

PASZA - Henry Pirker Ozone Eight Hour Average Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

Station: Henry Pirker
Station Owner: PASZA

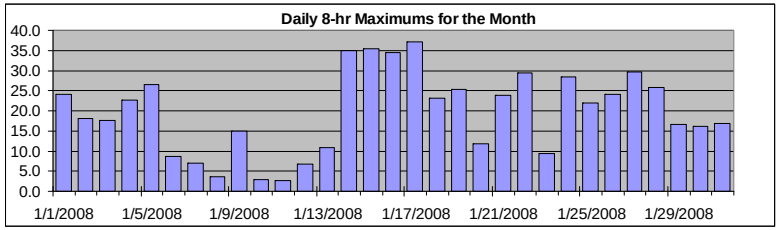
Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	37.1	ppb	17-Jan	5:00 6:00

Percentile	99	95	75	50	25	5	1
	35.3	29.6	18.7	8.9	3.3	0.5	0.0



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	23:00 / 0:00	Daily Maximum
1-Jan-08	2	2	2	2	2	2	1	2	3	5	7	8	11	14	18	20	21	22	23	23	24	24	23	21	24.1
2-Jan-08	18	15	12	9	6	3	1	1	0	0	0	1	2	3	4	4	4	4	5	6	7	9	9	11	18.2
3-Jan-08	13	13	12	11	9	6	5	2	1	0	0	1	1	1	2	2	3	2	5	7	10	12	15	18	17.7
4-Jan-08	20	23	22	21	18	15	12	9	7	5	3	2	2	2	3	3	3	4	6	8	10	13	17	20	22.6
5-Jan-08	24	26	26	27	26	24	20	19	14	11	9	7	5	6	8	9	10	11	11	11	10	8	6	4	26.5
6-Jan-08	3	2	2	1	1	1	1	1	1	0	1	2	4	6	7	8	9	9	8	8	6	5	5	5	8.6
7-Jan-08	5	5	6	6	7	7	6	5	4	3	3	3	3	4	4	5	5	5	5	4	3	2	1	0	7.1
8-Jan-08	0	0	0	0	0	0	0	0	0	0	0	1	2	2	3	3	4	4	3	3	2	1	1	1	3.6
9-Jan-08	0	0	0	0	3	5	7	9	11	13	15	15	15	14	13	12	11	9	7	6	4	3	3	3	14.9
10-Jan-08	3	3	3	3	2	2	1	0	0	0	0	1	1	2	2	2	3	3	3	2	2	2	1	1	2.9
11-Jan-08	1	1	1	1	1	0	0	0	0	0	1	1	2	2	3	N	N	N	N	N	N	N	N	N	2.7
12-Jan-08	1	1	1	1	1	1	1	1	0	0	1	2	3	4	5	6	6	7	6	5	4	3	2	1	6.7
13-Jan-08	1	1	1	1	1	1	1	1	1	4	5	6	6	7	8	9	11	10	10	9	8	8	7	6	10.8
14-Jan-08	5	3	2	2	2	1	1	0	0	0	0	0	1	1	1	4	8	12	17	21	25	29	33	35	34.8
15-Jan-08	35	35	35	34	32	32	27	22	17	12	7	5	4	7	9	11	11	13	14	16	16	16	16	18	35.3
16-Jan-08	22	24	25	27	28	27	23	22	21	21	22	22	23	25	28	30	30	31	31	32	32	33	34	35	34.6
17-Jan-08	35	36	36	36	37	37	37	36	35	35	34	34	34	33	33	32	29	25	24	23	23	21	20	19	37.1
18-Jan-08	21	23	23	20	18	16	15	12	10	8	7	6	6	5	5	5	5	5	4	4	3	3	4	5	23.0
19-Jan-08	8	9	12	16	19	22	24	24	25	25	25	25	25	25	24	24	23	22	19	16	13	10	7	4	25.3
20-Jan-08	2	2	3	3	3	3	4	4	4	3	3	5	6	9	11	12	12	12	11	9	8	5	3	2	11.9
21-Jan-08	2	3	3	3	3	3	3	4	5	7	10	13	16	19	22	24	23	21	19	15	12	10	8	8	23.9
22-Jan-08	10	13	17	21	26	29	29	29	28	27	25	25	23	23	24	25	25	23	21	18	15	12	8	6	29.5
23-Jan-08	6	8	9	9	9	8	7	6	4	3	1	2	3	5	7	8	9	9	8	7	7	5	3	1	9.4
24-Jan-08	0	1	4	8	11	15	18	20	23	26	26	26	26	26	26	28	28	28	28	28	28	27	26	24	28.4
25-Jan-08	22	21	19	19	18	16	14	12	10	8	7	5	5	5	5	6	6	6	6	9	9	10	13	13	21.8
26-Jan-08	17	21	20	19	19	20	20	20	16	14	12	11	11	10	8	8	8	9	12	15	16	19	21	24	24.1
27-Jan-08	28	28	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	29	29	28	28	27	27	26	29.7
28-Jan-08	26	25	24	24	23	21	18	16	13	11	9	9	9	10	12	13	15	15	14	11	9	7	4	4	25.9
29-Jan-08	3	3	4	5	6	7	8	8	7	8	8	9	10	11	12	14	16	17	15	14	13	13	14	14	16.6
30-Jan-08	14	12	12	12	11	10	9	8	8	8	9	11	12	13	14	15	15	16	16	16	16	16	15	14	16.2
31-Jan-08	14	13	12	10	9	8	8	7	6	7	8	10	12	13	14	16	17	17	16	15	15	14	13	13	17.0
Hourly Max	35.3	35.6	36.1	36.4	36.8	37.1	36.9	35.8	35.3	35.1	34.3	34.2	33.7	33.2	32.5	32.0	30.2	30.9	31.2	31.6	32.1	32.9	33.8	34.8	

PASZA - Henry Pirker Carbon Monoxide Monthly Summary

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

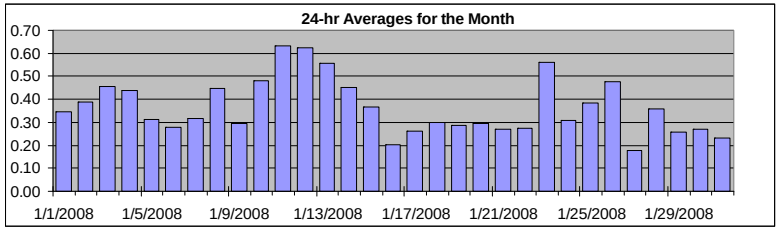
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: **Alberta Environment:** 1-hr 13 ppm | 24-hr na ppm

Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	2.8	ppm	26-Jan	10:00 11:00
Maximum 24-hr Value:	0.6	ppm	11-Jan	



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
	1.4	0.8	0.4	0.3	0.2	0.2	0.1	0.4 ppm	0.3 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	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-Jan-08	0.5	0.6	0.6	0.5	0.7	0.6	0.4	0.3	0.3	0.3	0.3	A	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.35	0.67
2-Jan-08	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.5	0.7	0.6	A	0.3	0.3	0.6	0.5	0.4	0.8	0.7	0.3	0.2	0.3	0.2	0.3	0.4	0.39	0.77
3-Jan-08	0.5	0.5	0.5	0.6	0.4	0.4	0.3	0.5	0.7	A	0.6	0.5	0.7	0.7	0.5	0.4	0.5	0.7	0.3	0.3	0.2	0.2	0.2	0.2	0.46	0.75
4-Jan-08	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.9	A	1.8	0.7	0.6	0.5	0.4	0.4	0.4	0.6	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.44	1.76
5-Jan-08	0.2	0.3	0.2	0.2	0.2	0.2	0.3	A	0.5	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.3	0.31	0.52
6-Jan-08	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.2	0.28	0.46
7-Jan-08	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.5	0.4	0.4	0.3	0.2	0.32	0.55
8-Jan-08	0.3	0.2	0.3	0.3	A	0.3	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.8	0.8	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.45	0.81
9-Jan-08	0.3	0.3	0.3	A	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.30	0.54
10-Jan-08	0.2	0.3	A	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.4	0.5	0.4	0.5	0.4	0.6	0.7	0.8	0.7	0.6	0.7	0.6	0.8	0.6	0.48	0.85
11-Jan-08	0.5	A	0.5	0.5	0.5	0.4	0.4	0.5	0.7	0.6	0.6	0.7	1.0	0.6	0.6	0.5	0.7	0.7	0.6	0.6	0.8	0.9	0.5	1.0	0.63	1.05
12-Jan-08	1.3	1.3	1.5	0.6	0.4	A	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.5	0.4	0.4	0.4	0.6	0.8	0.9	0.8	0.7	1.0	0.62	1.46
13-Jan-08	0.7	0.7	0.9	1.0	A	0.8	0.7	0.6	0.6	0.2	0.6	0.8	0.6	0.5	0.6	0.5	0.4	0.3	0.4	0.6	0.3	0.3	0.3	0.3	0.55	1.04
14-Jan-08	0.3	0.3	0.4	A	0.5	0.7	0.7	0.9	0.8	1.0	1.5	C	C	C	0.6	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.45	1.50
15-Jan-08	0.1	0.1	0.1	0.2	0.2	A	0.3	0.9	1.3	1.0	0.6	0.6	0.3	0.2	0.2	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.37	1.29
16-Jan-08	0.2	0.2	0.2	0.2	A	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.39
17-Jan-08	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.9	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.91
18-Jan-08	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3	0.2	0.4	0.5	0.6	0.4	0.3	0.4	0.3	0.3	0.2	0.30	0.60
19-Jan-08	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.4	0.3	0.29	0.51
20-Jan-08	A	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.3	0.2	0.2	0.1	0.2	0.4	0.5	0.3	0.4	0.4	0.3	0.3	0.3	A	0.29	0.49
21-Jan-08	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.4	0.5	0.4	A	0.2	0.27	0.50
22-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.7	0.5	0.6	0.3	A	0.2	0.2	0.28	0.70
23-Jan-08	0.2	0.2	0.2	0.2	0.2	0.3	0.5	1.0	1.4	1.5	0.5	0.3	0.5	0.4	0.3	0.3	0.4	0.6	0.5	0.5	A	0.7	0.7	1.4	0.56	1.50
24-Jan-08	1.5	0.8	0.2	0.2	0.2	0.2	0.3	0.4	0.3	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	0.31	1.52
25-Jan-08	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.5	0.6	0.6	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.6	A	0.2	0.3	0.3	0.2	0.5	0.38	0.60
26-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	1.1	2.8	0.8	0.6	0.6	0.6	0.7	0.5	A	0.2	0.2	0.2	0.1	0.1	0.2	0.48	2.76
27-Jan-08	0.2	0.2	0.2	0.2	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	0.2	0.2	0.18	0.19
28-Jan-08	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.5	0.4	0.3	0.2	0.4	0.3	0.3	A	0.3	0.7	0.6	0.6	0.6	0.4	0.3	0.2	0.36	0.72
29-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	A	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.26	0.39
30-Jan-08	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.27	0.32
31-Jan-08	0.2	0.3	0.2	0.2	0.2	A	0.2	0.3	0.3	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	0.2	0.23	0.34
Hourly Avg	0.35	0.33	0.33	0.30	0.27	0.29	0.32	0.40	0.48	0.48	0.47	0.37	0.36	0.34	0.34	0.35	0.42	0.47	0.37	0.37	0.34	0.33	0.31	0.35		
Hourly Max	1.52	1.30	1.46	1.04	0.67	0.79	0.72	1.01	1.42	1.76	2.76	0.79	1.05	0.66	0.63	0.81	0.77	0.91	0.71	0.80	0.89	0.92	0.85	1.44		

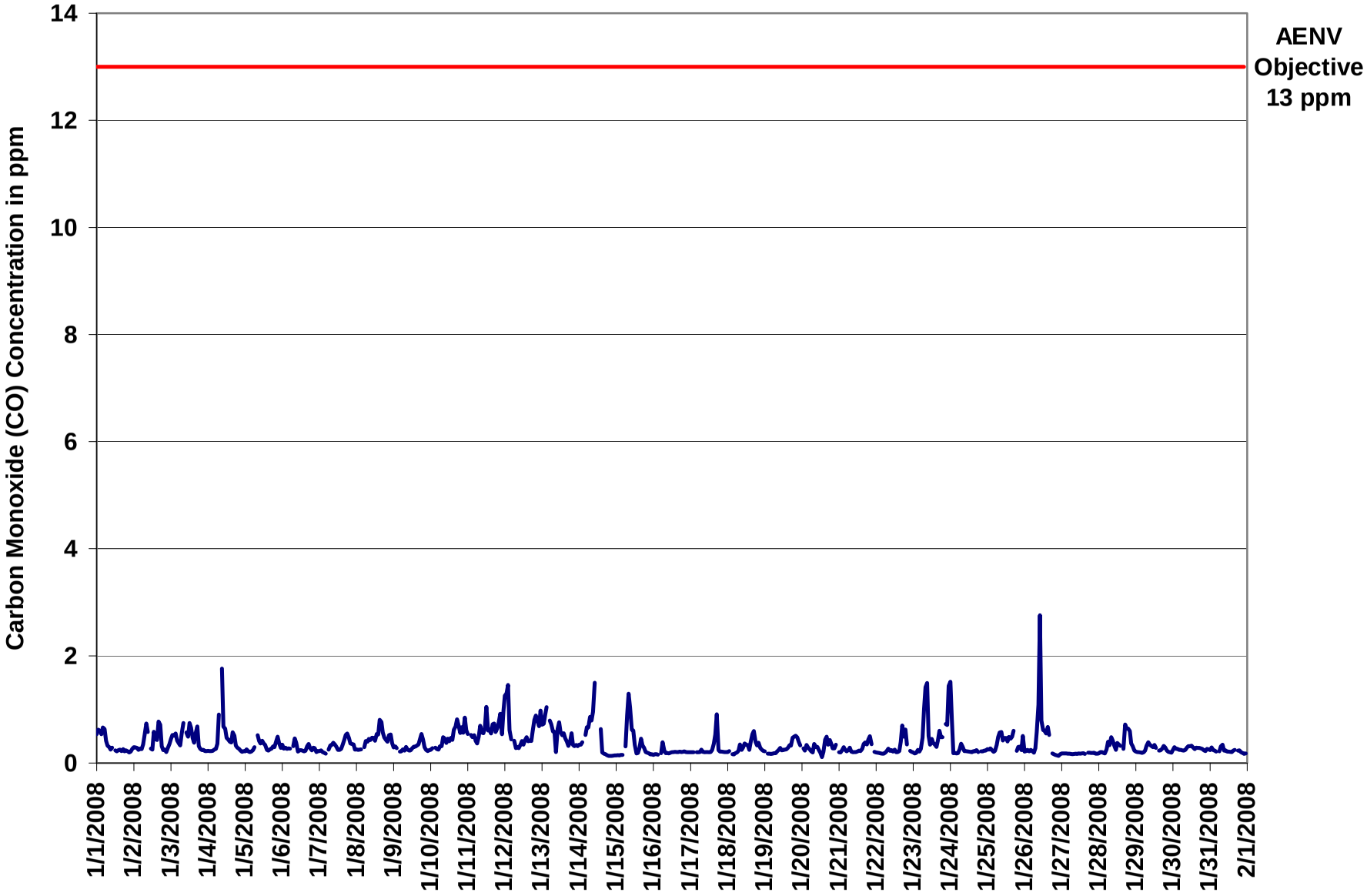


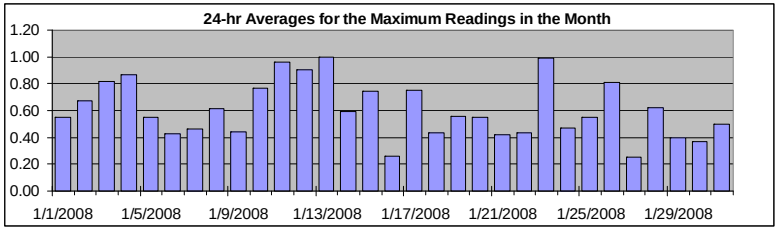
Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Carbon Monoxide (CO)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	10.5	ppm	17-Jan	17:00 18:00
Maximum 24-hr Value:	1.0	ppm	13-Jan	

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
	2.7	1.5	0.7	0.4	0.3	0.2	0.2	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	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-Jan-08	1.1	1.1	0.9	0.7	0.7	0.8	0.5	0.4	0.4	0.4	1.0	A	0.6	0.4	0.5	0.4	0.4	0.3	0.4	0.5	0.3	0.2	0.2	0.3	0.55	1.11
2-Jan-08	0.3	0.4	0.3	0.4	0.4	0.9	0.8	0.9	1.4	1.2	A	0.3	0.5	0.7	0.6	0.9	1.2	1.0	0.5	0.4	0.4	0.2	0.5	1.0	0.67	1.38
3-Jan-08	0.5	0.7	0.7	1.0	0.5	0.6	1.0	1.4	1.7	A	1.2	0.9	1.3	0.9	1.0	0.5	1.2	1.4	0.4	0.5	0.3	0.4	0.3	0.3	0.82	1.72
4-Jan-08	0.3	0.3	0.3	0.3	0.3	0.4	1.3	4.3	A	3.7	1.3	1.0	0.7	0.6	0.5	0.7	1.2	0.7	0.5	0.4	0.4	0.3	0.3	0.3	0.87	4.31
5-Jan-08	0.3	0.4	0.3	0.2	0.3	0.3	0.9	A	1.3	1.7	0.5	0.5	0.6	0.6	0.3	0.3	0.4	0.3	0.4	0.5	0.6	1.0	0.6	0.4	0.55	1.70
6-Jan-08	0.7	0.4	0.5	0.3	0.3	0.3	A	0.5	0.8	1.0	0.3	0.4	0.4	0.3	0.3	0.3	0.6	0.7	0.5	0.3	0.4	0.4	0.2	0.3	0.43	0.95
7-Jan-08	0.3	0.4	0.2	0.2	0.2	A	0.6	0.5	0.5	0.5	0.7	0.4	0.4	0.4	0.3	0.5	0.9	1.0	0.7	0.7	0.4	0.4	0.4	0.3	0.46	0.97
8-Jan-08	0.3	0.3	0.3	0.5	A	0.4	0.7	0.6	0.5	0.5	0.6	0.6	0.6	0.8	0.8	1.4	0.9	0.8	0.8	0.6	0.5	0.9	0.6	0.5	0.62	1.42
9-Jan-08	0.3	0.4	0.3	A	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.9	0.4	0.4	0.4	0.6	0.7	0.6	0.4	0.3	0.4	0.9	0.44	0.91
10-Jan-08	0.3	0.4	A	0.4	0.4	0.3	0.5	0.5	2.0	0.6	0.5	0.5	0.5	0.6	0.6	0.8	0.8	1.1	1.0	0.7	2.8	0.7	1.2	0.7	0.77	2.80
11-Jan-08	0.6	A	0.6	0.6	0.6	0.6	0.4	0.7	0.8	0.8	1.1	1.0	1.7	0.8	1.1	0.8	1.2	1.2	0.8	1.3	1.3	1.7	1.2	1.6	0.96	1.71
12-Jan-08	1.6	1.5	1.7	1.4	0.9	A	0.9	0.4	0.4	0.4	0.6	0.5	0.6	0.8	0.7	0.7	0.6	0.5	0.8	1.1	1.2	1.5	1.0	1.3	0.91	1.73
13-Jan-08	1.0	0.9	1.1	1.3	A	1.1	0.9	1.6	0.7	0.3	1.8	5.1	0.7	0.6	0.7	0.6	0.6	0.4	0.5	1.2	0.4	0.6	0.4	0.4	1.00	5.12
14-Jan-08	0.5	0.5	0.4	A	0.6	1.0	0.9	1.2	0.9	1.4	1.8	C	C	C	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.59	1.82
15-Jan-08	0.1	0.1	0.1	0.2	0.2	A	0.8	1.4	2.1	2.7	1.3	1.8	1.9	0.3	0.3	0.7	1.0	0.5	0.4	0.4	0.2	0.3	0.2	0.2	0.75	2.71
16-Jan-08	0.2	0.2	0.2	0.2	A	0.3	0.6	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.26	0.64
17-Jan-08	0.2	0.2	0.2	A	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.7	0.9	10.5	0.3	0.3	0.3	0.3	0.3	0.3	0.75	10.50
18-Jan-08	0.3	0.3	A	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.6	0.7	1.1	0.7	0.5	0.6	0.3	0.3	0.4	0.43	1.09
19-Jan-08	0.4	A	0.3	0.3	0.2	0.2	0.3	0.3	0.6	0.4	0.5	0.3	0.4	0.4	0.5	0.6	0.8	0.4	0.6	1.8	1.6	0.8	0.6	0.5	0.55	1.83
20-Jan-08	A	0.6	0.3	0.4	0.5	0.3	0.4	0.2	0.8	0.6	0.5	0.4	0.3	0.2	0.3	0.6	0.8	0.5	0.7	0.5	0.4	0.4	2.4	A	0.55	2.40
21-Jan-08	0.3	0.2	0.3	0.4	0.3	0.3	0.4	0.5	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.8	0.8	1.2	0.8	A	0.3	0.42	1.18
22-Jan-08	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.6	0.7	1.5	0.9	1.3	0.5	A	0.3	0.3	0.43	1.48
23-Jan-08	0.2	0.2	0.2	0.4	0.2	0.4	0.9	3.0	2.4	2.3	1.4	0.5	0.6	0.5	0.5	0.5	0.6	1.0	0.9	0.8	A	1.6	0.9	2.6	0.99	2.99
24-Jan-08	1.7	1.5	0.2	0.3	0.2	0.3	0.6	0.9	0.6	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	A	0.3	0.3	0.5	0.3	0.47	1.72
25-Jan-08	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9	0.8	0.7	0.5	0.6	0.6	0.6	0.8	0.6	0.9	1.0	A	0.4	0.4	0.4	0.3	1.2	0.55	1.23
26-Jan-08	0.5	0.3	0.3	0.2	0.3	0.3	0.2	0.3	1.6	2.4	4.7	1.3	1.7	0.8	0.8	0.8	0.8	A	0.2	0.2	0.2	0.2	0.2	0.2	0.81	4.69
27-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.5	0.2	A	0.8	0.2	0.3	0.3	0.3	0.2	0.2	0.25	0.75
28-Jan-08	0.2	0.2	0.2	0.2	0.2	2.1	1.3	1.1	1.0	0.6	0.4	0.4	0.5	0.4	0.4	A	0.4	1.1	0.9	0.8	0.8	0.5	0.4	0.3	0.62	2.12
29-Jan-08	0.3	0.3	0.3	0.4	0.2	0.3	0.4	0.8	0.6	0.4	1.1	0.4	0.4	0.3	A	0.3	0.3	0.8	0.4	0.3	0.3	0.3	0.2	0.2	0.40	1.05
30-Jan-08	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.6	0.4	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.37	0.56
31-Jan-08	0.3	0.4	0.3	0.3	0.3	A	0.3	1.6	2.0	0.4	0.5	0.3	0.4	0.3	0.5	0.4	1.1	A	0.3	0.4	0.3	0.3	0.2	0.2	0.50	2.04
Hourly Avg	0.45	0.45	0.40	0.41	0.33	0.49	0.58	0.87	0.88	0.85	0.84	0.70	0.60	0.48	0.51	0.55	0.70	1.07	0.55	0.61	0.57	0.53	0.51	0.54		
Hourly Max	1.72	1.50	1.73	1.43	0.87	2.12	1.34	4.31	2.38	3.75	4.69	5.12	1.90	0.94	1.07	1.42	1.24	10.50	1.02	1.83	2.80	1.71	2.40	2.64		

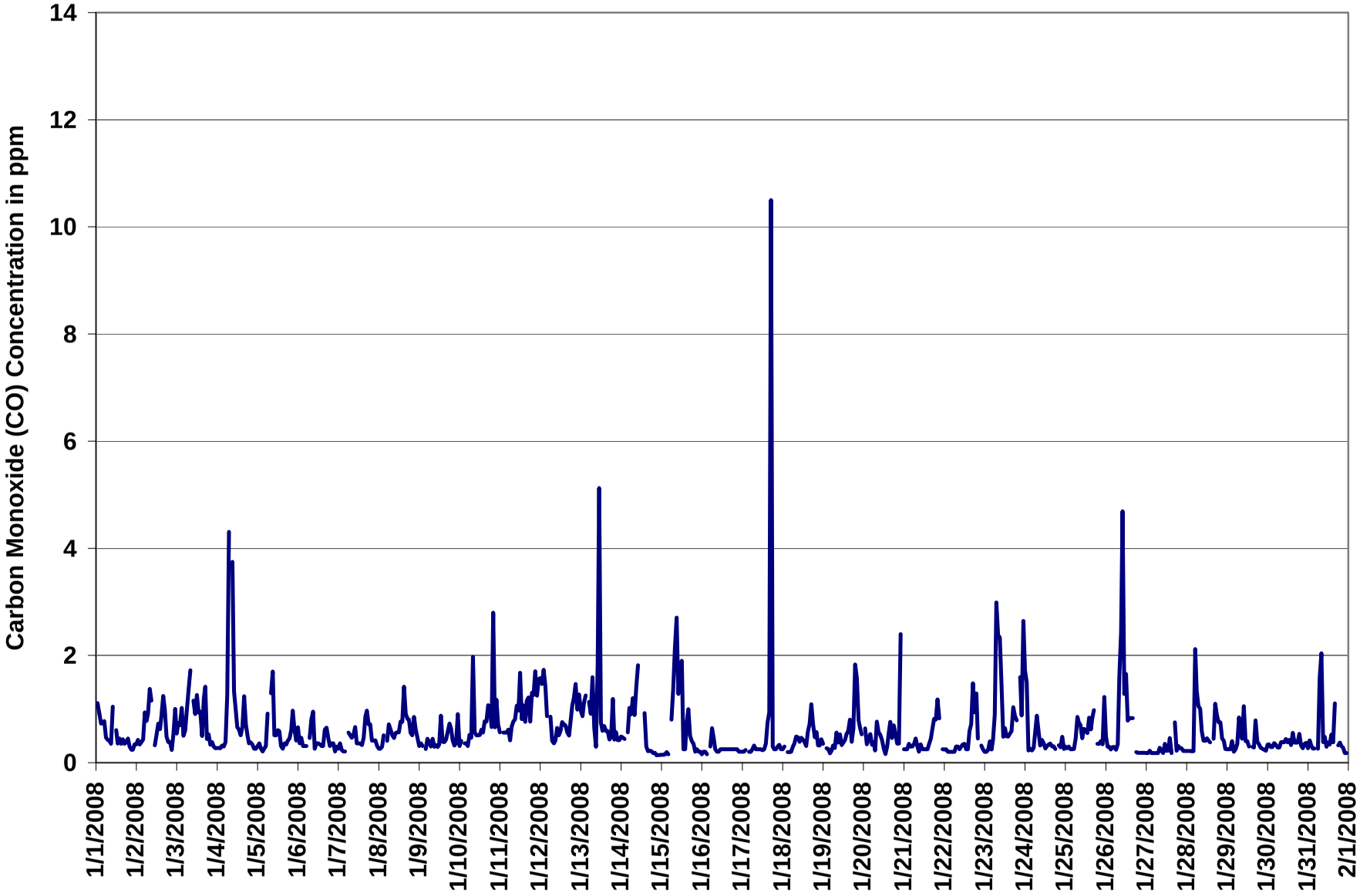
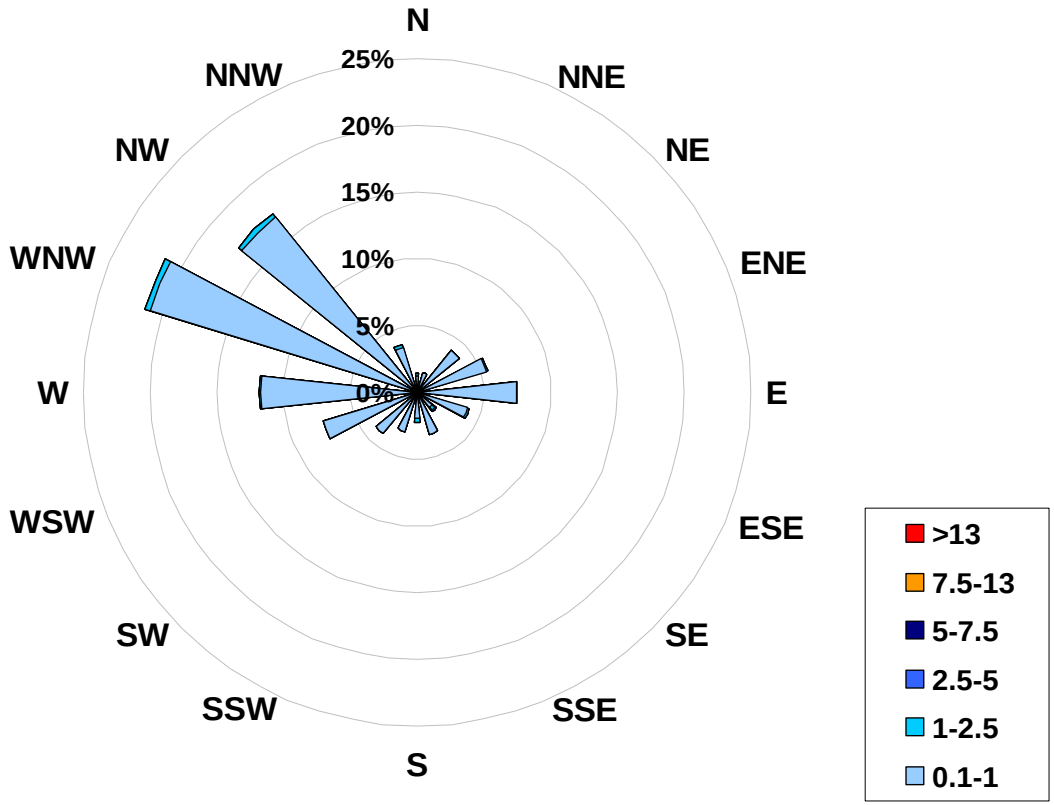


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located at the Henry Pirker Site for January 2008



Calms: 0%

Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0.1	<	1	693
1	to	2.5	15
2.5	to	5	1
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			709

PASZA - Henry Pirker Carbon Monoxide Eight Hour Average Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

Station: Henry Pirker
Station Owner: PASZA

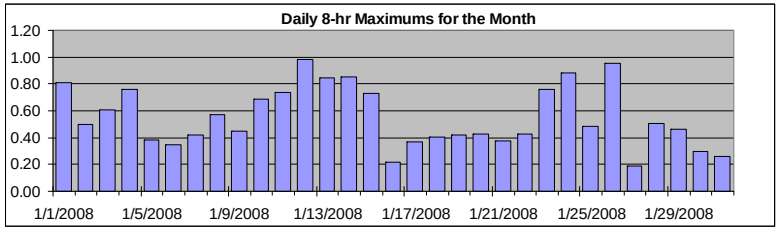
Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: **Alberta Environment:** 8-hr 5 ppm

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	1.0	ppm	12-Jan	2:00 3:00

Percentile	99	95	75	50	25	5	1
	0.9	0.7	0.4	0.3	0.2	0.2	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**

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-Jan-08	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.81
2-Jan-08	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.50
3-Jan-08	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.60
4-Jan-08	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.76
5-Jan-08	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.39
6-Jan-08	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.35
7-Jan-08	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.42
8-Jan-08	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.57
9-Jan-08	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.45
10-Jan-08	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.68
11-Jan-08	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.74
12-Jan-08	0.8	0.9	1.0	1.0	0.9	0.9	0.9	0.8	0.7	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.98
13-Jan-08	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.84
14-Jan-08	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.9	0.9	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.1	0.85
15-Jan-08	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.73
16-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
17-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.37
18-Jan-08	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.40
19-Jan-08	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.42
20-Jan-08	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.43
21-Jan-08	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.38
22-Jan-08	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.43
23-Jan-08	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.7	0.76
24-Jan-08	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.88
25-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.48
26-Jan-08	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.7	0.8	0.8	0.9	0.9	1.0	1.0	0.9	0.6	0.5	0.4	0.3	0.3	0.2	0.96
27-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
28-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.51
29-Jan-08	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.47
30-Jan-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29
31-Jan-08	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
Hourly Max	0.85	0.88	0.98	0.98	0.94	0.94	0.92	0.82	0.77	0.69	0.85	0.85	0.82	0.86	0.91	0.96	0.95	0.93	0.69	0.69	0.65	0.69	0.68	0.74	

PASZA - Henry Pirker Total Hydrocarbons Monthly Summary

HOURLY AVERAGE TABLE

Total Hydrocarbons (THC)

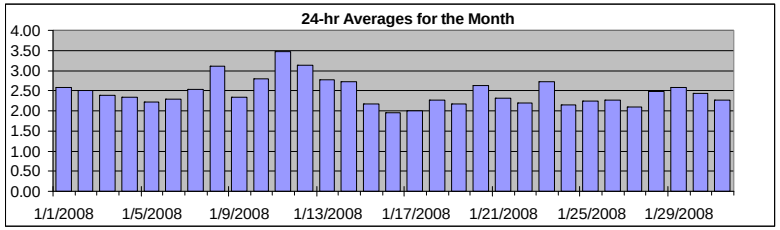
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: **Alberta Environment:** 1-hr na ppm 24-hr na ppm

Summary

Maximum 1-hr Average:	4.1	ppm	11-Jan	12:00 13:00
Maximum 24-hr Value:	3.5	ppm	11-Jan	



AIC Time:	32 hrs	Operational Time:	710 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	3.7	3.4	2.6	2.3	2.1	2.0	1.9	2.5 ppm	2.3 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	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-Jan-08	3.7	3.7	3.6	3.5	3.6	3.4	3.1	2.6	2.3	2.2	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.4	2.57	3.68
2-Jan-08	2.7	2.5	2.5	2.5	2.6	2.5	2.5	2.6	2.8	2.7	A	2.7	2.8	3.0	2.6	2.5	2.6	2.5	2.2	2.1	2.1	2.1	2.1	2.2	2.50	3.04
3-Jan-08	2.3	2.5	2.5	2.6	2.5	2.4	2.3	2.4	2.6	A	2.7	2.6	2.7	2.7	2.6	2.6	2.6	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.39	2.73
4-Jan-08	2.0	2.0	2.1	2.2	2.3	2.3	2.4	2.6	A	3.0	2.6	2.5	2.6	2.6	2.7	2.7	2.7	2.4	2.0	2.0	2.0	2.0	1.9	1.9	2.34	2.97
5-Jan-08	2.0	2.0	2.1	2.1	2.1	2.2	2.2	A	2.4	2.4	2.4	2.5	2.4	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.3	2.22	2.49
6-Jan-08	2.4	2.3	2.3	2.3	2.4	2.4	A	2.5	2.6	2.6	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.1	2.1	2.30	2.62
7-Jan-08	2.1	2.2	2.1	2.2	2.2	A	2.2	2.3	2.3	2.4	2.5	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.8	2.8	2.9	3.0	3.0	3.1	2.54	3.07
8-Jan-08	3.2	3.3	3.3	3.3	A	3.5	3.5	3.5	3.6	3.5	3.5	3.5	3.4	3.2	3.2	3.3	3.1	2.7	2.5	2.4	2.5	2.6	2.7	2.6	3.12	3.58
9-Jan-08	2.6	2.5	2.5	A	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.34	2.55
10-Jan-08	2.4	2.5	A	2.4	2.5	2.4	2.7	2.8	3.1	2.9	2.6	2.8	2.7	2.9	2.8	2.9	2.9	2.8	2.9	3.0	3.0	3.0	3.3	3.2	2.80	3.33
11-Jan-08	3.1	A	3.1	3.1	3.4	3.4	3.6	3.6	3.4	3.4	3.4	3.8	4.1	3.4	3.4	3.3	3.6	3.6	3.5	3.6	3.8	3.9	3.1	3.2	3.47	4.12
12-Jan-08	3.5	3.5	3.9	3.2	3.1	A	3.1	3.0	3.0	3.2	3.0	3.4	3.2	3.3	2.8	2.7	2.8	2.7	2.7	2.9	3.0	3.2	3.3	3.5	3.13	3.86
13-Jan-08	3.3	3.5	3.7	3.6	A	3.3	3.4	2.8	3.0	2.1	2.6	2.9	2.8	2.8	2.6	2.6	2.3	2.3	2.3	2.5	2.3	2.4	2.6	2.5	2.78	3.71
14-Jan-08	2.6	2.6	3.6	A	3.8	3.6	3.0	2.9	2.6	2.7	3.1	3.2	3.4	3.6	C	C	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.72	3.77
15-Jan-08	2.0	2.0	2.0	2.0	2.0	A	2.2	2.4	2.5	2.5	2.3	2.4	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.17	2.53
16-Jan-08	2.0	2.0	2.0	2.0	A	2.1	2.2	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.95	2.24
17-Jan-08	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.0	2.0	2.0	2.1	2.1	2.1	2.01	2.38
18-Jan-08	2.1	2.1	A	2.2	2.3	2.3	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.3	2.3	2.4	2.5	2.5	2.3	2.3	2.3	2.2	2.1	2.1	2.27	2.48
19-Jan-08	2.1	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.16	2.40
20-Jan-08	A	2.5	2.5	2.6	2.6	2.6	2.5	2.4	2.8	2.8	2.8	2.7	2.7	2.4	2.4	2.5	2.5	2.5	2.6	2.9	2.8	2.8	2.9	A	2.63	2.91
21-Jan-08	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.3	2.1	A	2.1	2.31	2.85
22-Jan-08	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.4	2.2	2.3	2.3	A	2.2	2.2	2.18	2.39
23-Jan-08	2.3	2.3	2.5	2.6	2.6	2.6	2.7	2.8	2.9	3.1	2.8	2.9	2.9	2.8	2.7	2.6	2.7	2.8	2.7	2.5	A	2.7	2.7	3.2	2.72	3.23
24-Jan-08	3.3	2.8	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.2	2.13	3.34
25-Jan-08	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	A	2.0	2.0	2.0	1.9	2.2	2.25	2.47
26-Jan-08	1.9	2.2	2.6	2.3	2.3	2.2	2.0	2.0	2.2	2.5	3.3	2.6	2.5	2.4	2.3	2.4	2.4	A	2.1	2.0	2.1	2.0	2.1	2.1	2.27	3.30
27-Jan-08	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.10	2.17
28-Jan-08	2.2	2.3	2.3	2.4	2.5	2.4	2.4	2.4	2.5	2.4	2.4	2.5	2.5	2.3	2.3	A	2.2	2.6	2.5	2.5	2.6	2.8	2.9	3.0	2.48	2.95
29-Jan-08	2.9	2.8	2.8	2.8	2.9	3.0	3.1	3.1	3.0	2.5	2.3	2.3	2.5	2.4	A	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.58	3.12
30-Jan-08	2.4	2.5	2.6	2.5	2.6	2.6	2.6	2.5	2.5	2.5	2.6	2.6	2.6	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.44	2.60
31-Jan-08	2.3	2.3	2.3	2.3	2.4	A	2.4	2.3	2.3	2.2	2.3	2.2	2.2	2.3	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.27	2.43
Hourly Avg	2.48	2.48	2.55	2.50	2.50	2.54	2.52	2.51	2.52	2.50	2.51	2.55	2.54	2.49	2.40	2.40	2.43	2.39	2.31	2.33	2.34	2.37	2.37	2.39		
Hourly Max	3.67	3.68	3.86	3.56	3.77	3.57	3.60	3.59	3.58	3.50	3.52	3.81	4.12	3.63	3.37	3.32	3.60	3.57	3.47	3.55	3.82	3.92	3.33	3.50		

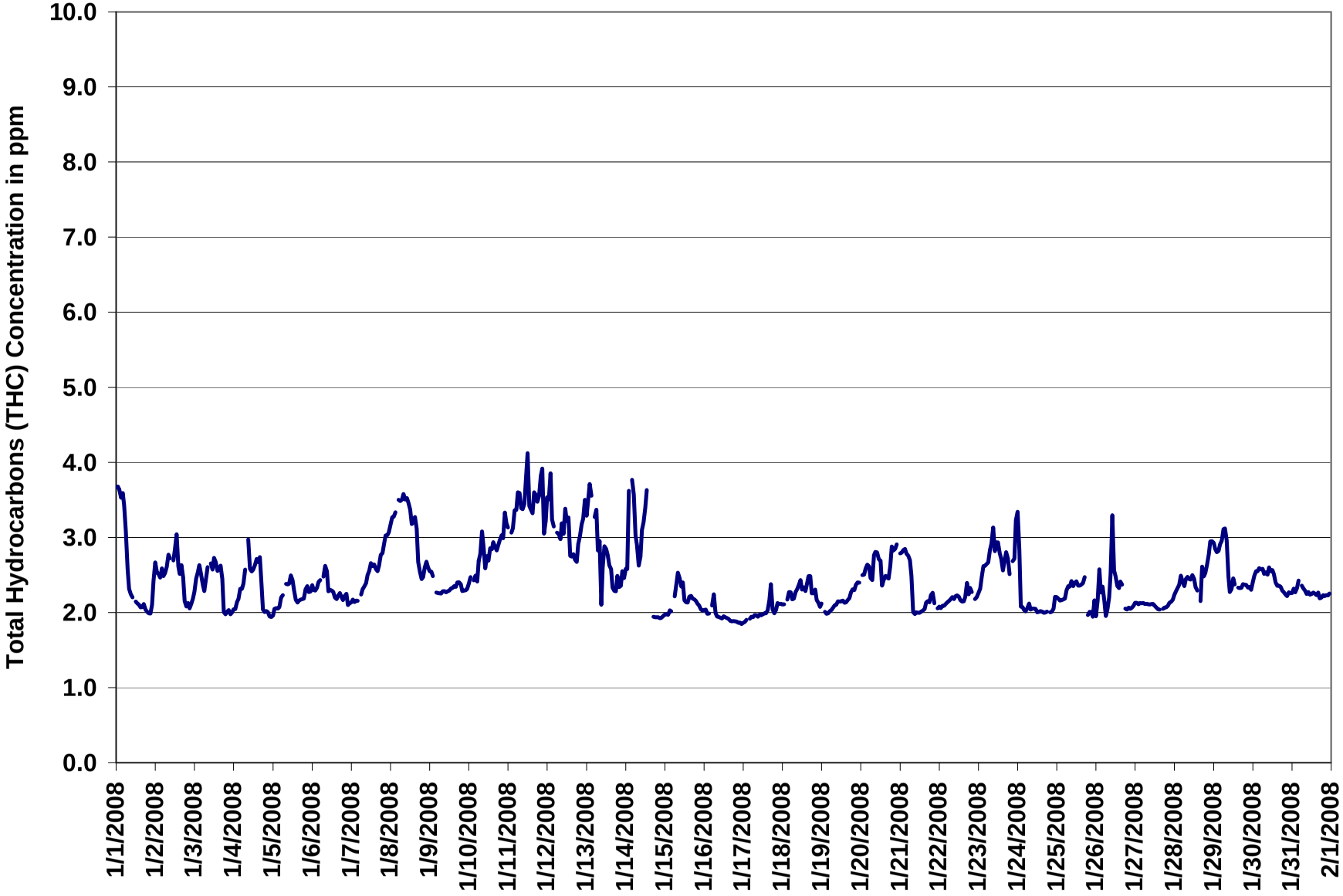


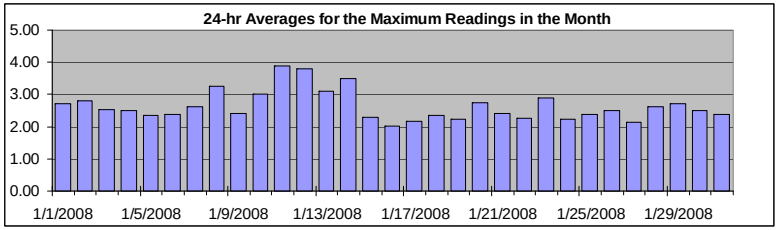
Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Hydrocarbons (THC)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	8.5	ppm	14-Jan	4:00 5:00
Maximum 24-hr Value:	3.9	ppm	11-Jan	

AIC Time:	32 hrs	Operational Time:	710 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	5.0	3.8	2.9	2.5	2.2	2.0	1.9	2.6 ppm	2.5 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	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-Jan-08	3.8	4.2	3.7	3.7	3.7	3.7	3.1	3.0	2.4	2.3	2.4	A	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.4	2.5	2.70	4.18
2-Jan-08	4.8	2.6	2.7	2.5	2.7	2.7	2.7	2.7	3.0	2.9	A	2.9	3.1	3.3	2.9	2.7	3.7	2.9	2.3	2.2	2.4	2.1	2.2	2.3	2.79	4.84
3-Jan-08	2.5	2.5	2.8	2.7	2.6	2.6	2.5	2.6	2.9	A	3.1	2.7	2.9	2.8	2.6	2.6	2.8	2.8	2.2	2.1	2.1	2.1	2.0	2.0	2.54	3.07
4-Jan-08	2.1	2.1	2.2	2.3	2.4	2.5	2.6	3.3	A	3.5	2.8	2.7	2.7	2.7	2.8	2.8	2.9	2.7	2.2	2.1	2.1	2.1	2.0	2.0	2.50	3.46
5-Jan-08	2.0	2.2	2.1	2.1	2.1	2.6	2.6	A	2.6	2.5	2.5	2.6	2.9	2.4	2.3	2.2	2.2	2.2	2.2	2.3	2.4	2.5	2.3	2.4	2.35	2.85
6-Jan-08	2.5	2.4	2.5	2.4	2.5	2.5	A	2.7	2.7	2.7	2.3	2.3	2.4	2.3	2.2	2.2	2.3	2.4	2.2	2.2	2.3	2.4	2.2	2.1	2.38	2.73
7-Jan-08	2.2	2.2	2.2	2.2	2.2	A	2.4	2.4	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.6	2.7	2.8	2.8	2.9	3.0	3.1	3.1	3.1	2.61	3.15
8-Jan-08	3.2	3.4	3.3	3.4	A	3.6	3.6	3.6	3.7	3.6	3.6	3.8	3.4	3.3	3.3	3.5	3.3	3.1	2.6	2.5	2.5	2.8	2.8	2.7	3.25	3.82
9-Jan-08	2.6	2.6	2.6	A	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.6	2.5	2.3	2.4	2.4	2.6	2.42	2.65
10-Jan-08	2.6	3.0	A	2.9	3.2	2.5	2.9	2.9	3.4	3.2	2.7	2.9	2.8	3.0	2.9	3.0	3.0	2.9	2.9	3.0	3.3	3.0	3.8	3.4	3.01	3.82
11-Jan-08	3.3	A	3.1	3.3	4.0	3.7	3.8	3.8	3.5	3.9	3.9	5.0	4.9	3.7	3.5	3.4	4.4	3.9	3.7	3.7	4.2	5.1	3.4	3.9	3.88	5.14
12-Jan-08	4.0	3.7	5.7	6.2	4.1	A	3.8	3.3	3.1	3.3	3.2	5.7	3.5	3.7	3.6	3.0	2.9	3.0	2.8	3.5	3.2	3.7	4.3	4.2	3.80	6.19
13-Jan-08	3.5	3.8	4.1	3.8	A	3.4	4.1	3.7	3.1	2.3	2.9	3.9	3.0	2.9	2.7	2.7	2.5	2.4	2.4	3.4	2.7	2.9	2.9	2.6	3.11	4.10
14-Jan-08	3.0	2.8	6.8	A	8.5	7.5	3.3	3.4	2.9	3.1	3.4	3.8	3.8	4.0	C	C	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.50	8.49
15-Jan-08	2.0	2.0	2.0	2.1	2.1	A	2.3	2.5	2.8	3.1	2.5	2.6	2.5	2.2	2.2	2.3	2.4	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.30	3.09
16-Jan-08	2.1	2.2	2.0	2.0	A	2.3	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.00	2.34
17-Jan-08	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.5	4.5	2.1	2.0	2.1	2.2	2.2	2.2	2.17	4.49
18-Jan-08	2.1	2.2	A	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.4	2.5	2.4	2.4	2.3	2.4	2.7	2.7	2.3	2.3	2.4	2.2	2.2	2.1	2.34	2.71
19-Jan-08	2.2	A	2.1	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.2	2.4	2.5	2.5	2.5	2.5	2.5	2.23	2.52
20-Jan-08	A	2.6	2.6	2.7	2.9	2.7	2.7	2.6	2.9	2.9	2.9	2.8	2.8	2.5	2.5	2.6	2.5	2.5	2.8	2.9	2.9	2.9	3.3	A	2.75	3.31
21-Jan-08	2.8	2.9	2.9	2.9	2.9	3.0	2.8	2.8	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.4	A	2.1	2.41	2.96
22-Jan-08	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.6	2.3	2.4	2.3	A	2.2	2.2	2.25	2.58
23-Jan-08	2.3	2.3	2.6	2.7	2.7	2.7	2.8	3.1	3.1	3.6	3.1	3.0	3.1	2.9	2.9	2.7	2.8	3.0	2.8	2.6	A	3.0	2.9	3.5	2.88	3.61
24-Jan-08	3.5	3.4	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.2	2.2	A	2.0	2.0	2.2	2.3	2.23	3.51
25-Jan-08	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.7	2.5	2.5	2.4	2.6	2.8	2.5	2.5	2.4	2.5	2.6	A	2.1	2.1	2.1	2.0	2.6	2.38	2.81
26-Jan-08	2.2	2.4	3.2	2.4	2.6	2.6	2.0	2.1	2.4	3.1	4.2	2.8	2.7	2.5	2.5	2.5	2.6	A	2.1	2.1	2.1	2.1	2.1	2.1	2.50	4.23
27-Jan-08	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.15	2.23
28-Jan-08	2.3	2.3	2.4	2.5	2.7	3.0	2.6	2.6	2.6	2.5	2.6	2.6	2.6	2.4	2.3	A	2.3	2.8	2.7	2.7	2.7	2.9	3.2	3.2	2.63	3.19
29-Jan-08	3.0	3.0	2.9	2.9	3.0	3.1	3.2	3.3	3.2	2.9	2.6	2.5	2.5	2.4	A	2.4	2.3	2.6	2.4	2.4	2.4	2.4	2.4	2.3	2.71	3.29
30-Jan-08	2.6	2.5	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.5	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.51	2.74
31-Jan-08	2.3	2.4	2.3	2.4	2.6	A	2.4	2.5	3.0	2.4	2.3	2.3	2.4	2.3	2.3	2.3	2.5	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.37	2.96
Hourly Avg	2.67	2.63	2.83	2.70	2.83	2.84	2.69	2.72	2.68	2.69	2.68	2.80	2.70	2.60	2.51	2.48	2.61	2.62	2.41	2.45	2.43	2.52	2.52	2.53		
Hourly Max	4.84	4.18	6.78	6.19	8.49	7.50	4.09	3.84	3.65	3.92	4.23	5.71	4.91	3.97	3.58	3.46	4.45	4.49	3.66	3.69	4.16	5.14	4.30	4.17		

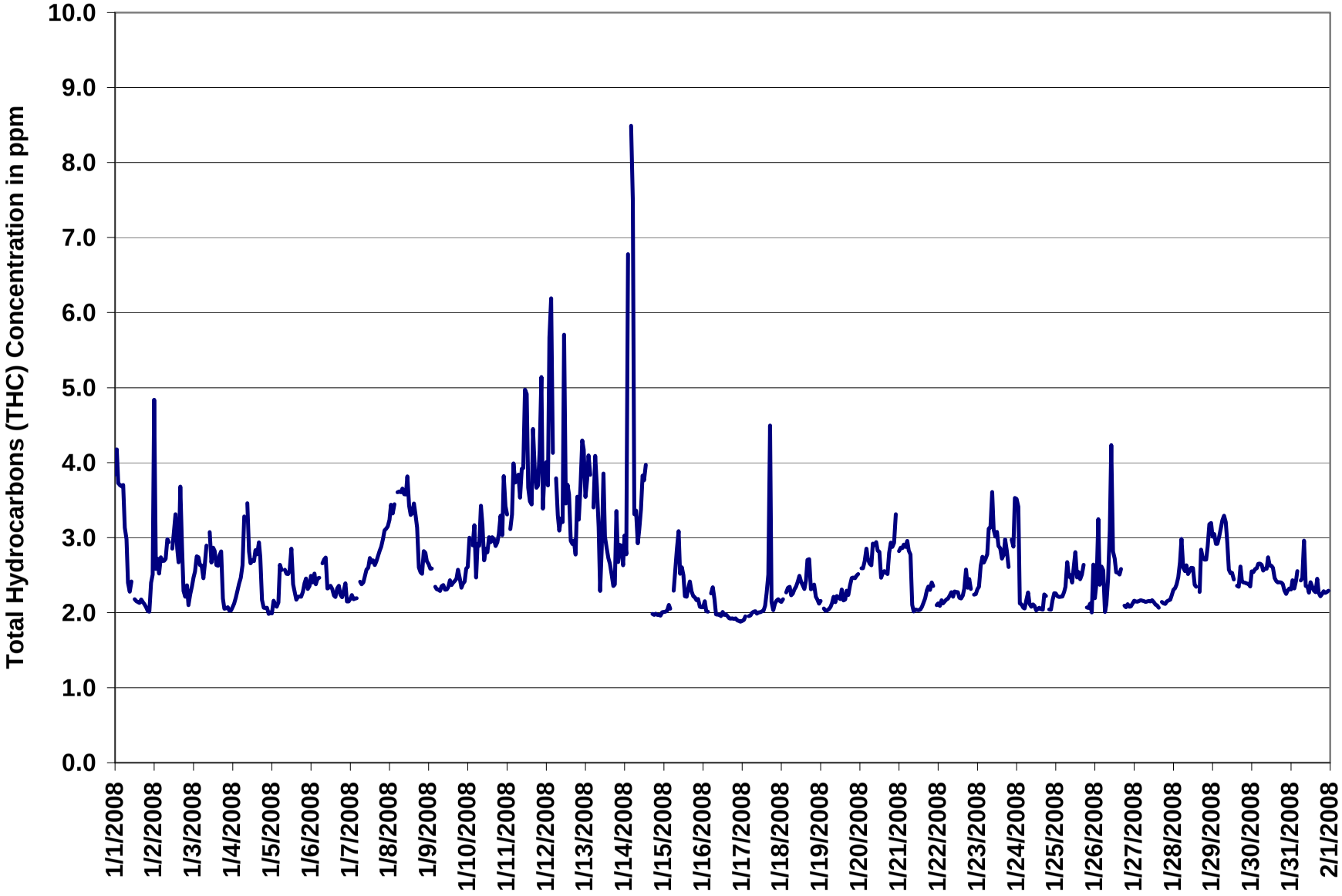
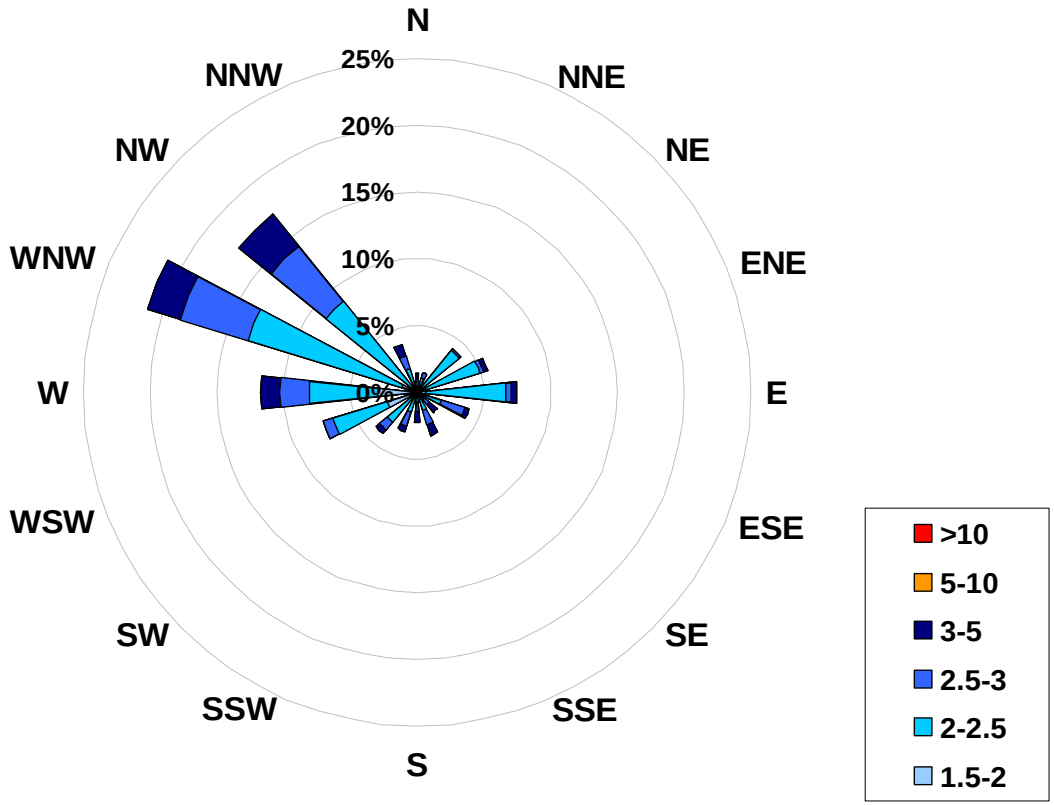


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)
Located at the Henry Pirker Site for January 2008



Calms:	0%

Frequency Distribution of THC in ppm			
Range			Frequency (hrs)
1.5	<	2	62
2	to	2.5	401
2.5	to	3	157
3	to	5	90
5	to	10	0
	>	10	0
Total Non-Zero Values			710

PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

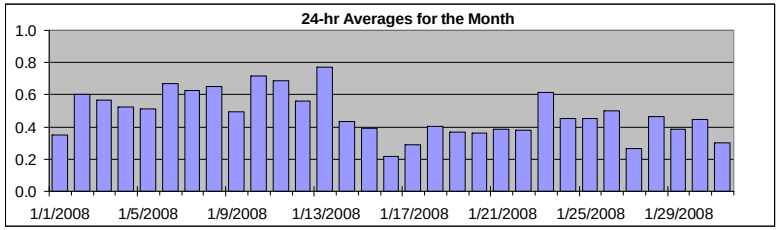
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: **Alberta Environment:** 1-hr na ppb | 24-hr na ppb

Summary

Maximum 1-hr Average:	1.8	ppb	13-Jan	12:00 13:00
Maximum 24-hr Value:	0.8	ppb	13-Jan	



AIC Time:	31 hrs	Operational Time:	708 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.3	0.9	0.6	0.4	0.3	0.2	0.1	0.5 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**

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-Jan-08	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
2-Jan-08	1	1	1	1	1	0	0	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0.6	1.0
3-Jan-08	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0.6	0.9
4-Jan-08	0	0	0	0	0	0	0	1	A	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.7
5-Jan-08	0	0	0	0	0	0	0	A	1	1	0	0	1	1	1	0	1	0	1	1	1	1	1	1	0.5	0.8
6-Jan-08	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
7-Jan-08	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
8-Jan-08	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
9-Jan-08	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.5	0.7
10-Jan-08	0	0	A	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4
11-Jan-08	1	A	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.1
12-Jan-08	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0.6	1.0
13-Jan-08	1	1	1	1	A	1	1	1	1	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0.8	1.8
14-Jan-08	0	0	0	A	1	1	1	1	0	C	C	C	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.5
15-Jan-08	0	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
16-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
17-Jan-08	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
18-Jan-08	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0.4	0.7
19-Jan-08	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0.4	0.6
20-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.4
21-Jan-08	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0.4	0.5
22-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	A	0	0	0.4	0.7
23-Jan-08	0	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	1	1	1	A	1	1	1	0.6	1.3
24-Jan-08	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.5	1.4
25-Jan-08	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	1	1	A	0	0	0	0	0	0.5	0.8
26-Jan-08	0	0	1	0	0	0	0	0	0	1	1	1	0	1	1	1	1	A	0	0	0	0	0	0	0.5	1.3
27-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4
28-Jan-08	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	1	1	1	1	1	0	0	0	0.5	0.8
29-Jan-08	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0.4	0.6
30-Jan-08	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	1.2
31-Jan-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	C	C	1	0	0	0	0	0.3	0.6
Hourly Avg	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4		
Hourly Max	1.4	1.1	1.2	1.0	0.8	0.9	1.0	0.8	1.4	1.7	1.3	1.5	1.8	1.5	0.9	1.0	1.0	0.9	0.8	1.1	1.4	1.2	1.2	1.2		

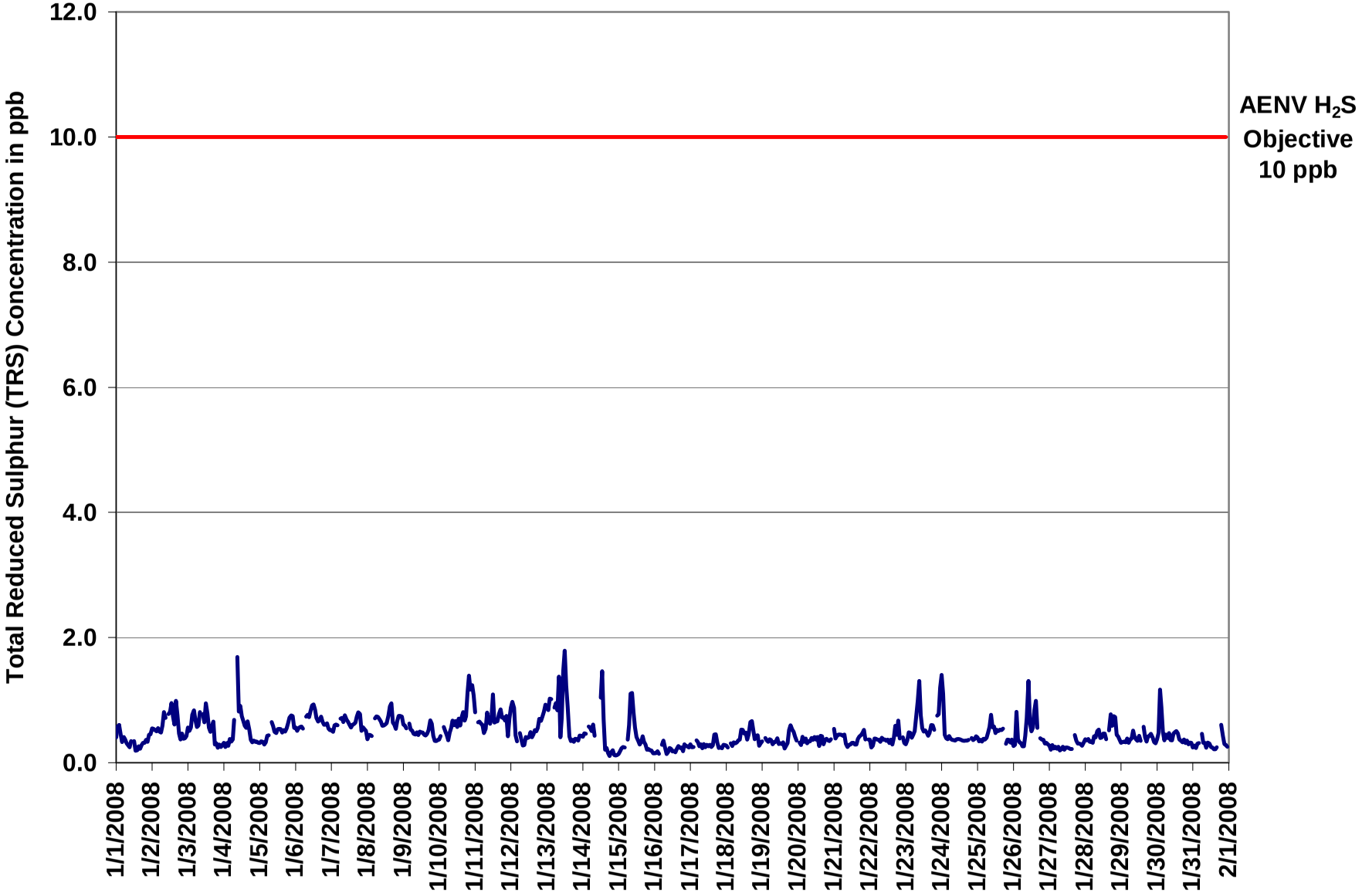


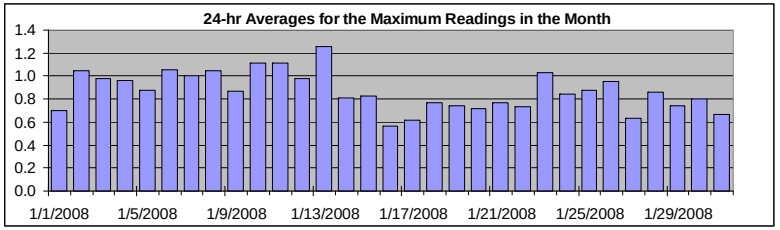
Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	2.7	ppb	4-Jan	9:00 10:00
Maximum 24-hr Value:	1.3	ppb	13-Jan	

AIC Time:	31 hrs	Operational Time:	708 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.9	1.4	1.0	0.8	0.7	0.5	0.5	0.9 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	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-Jan-08	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
2-Jan-08	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1.0	1.9
3-Jan-08	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	1.4
4-Jan-08	1	1	1	1	1	1	1	1	A	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.7
5-Jan-08	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
6-Jan-08	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3
7-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
8-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.0	1.6
9-Jan-08	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
10-Jan-08	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1.1	1.9
11-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4
12-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
13-Jan-08	1	1	1	1	A	1	1	1	2	1	1	3	3	2	1	1	1	1	1	1	1	1	1	1	1.3	2.6
14-Jan-08	1	1	1	A	1	1	1	1	1	C	C	C	1	2	1	1	1	1	0	1	1	0	0	0	0.8	2.0
15-Jan-08	0	0	1	1	1	A	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.9
16-Jan-08	1	1	1	0	A	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0.6	0.7
17-Jan-08	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
18-Jan-08	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	1.0
19-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
20-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.8
21-Jan-08	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	1.0
22-Jan-08	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	1.1
23-Jan-08	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1.0	1.8
24-Jan-08	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	2.1
25-Jan-08	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.8
26-Jan-08	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1.0	1.8
27-Jan-08	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	1.0
28-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.3
29-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.2
30-Jan-08	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.7
31-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	C	C	1	1	1	1	1	0.7	1.2
Hourly Avg	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.9	1.0	1.0	0.9	1.0	0.9	0.9	0.8	0.8	0.9	0.9	0.8	0.9	0.8	0.8	0.8	0.8		
Hourly Max	1.9	2.1	1.7	1.6	1.1	1.3	1.4	1.4	2.0	2.7	1.8	2.5	2.6	2.0	1.3	1.4	1.9	1.4	1.2	1.5	1.9	1.5	1.8	1.6		

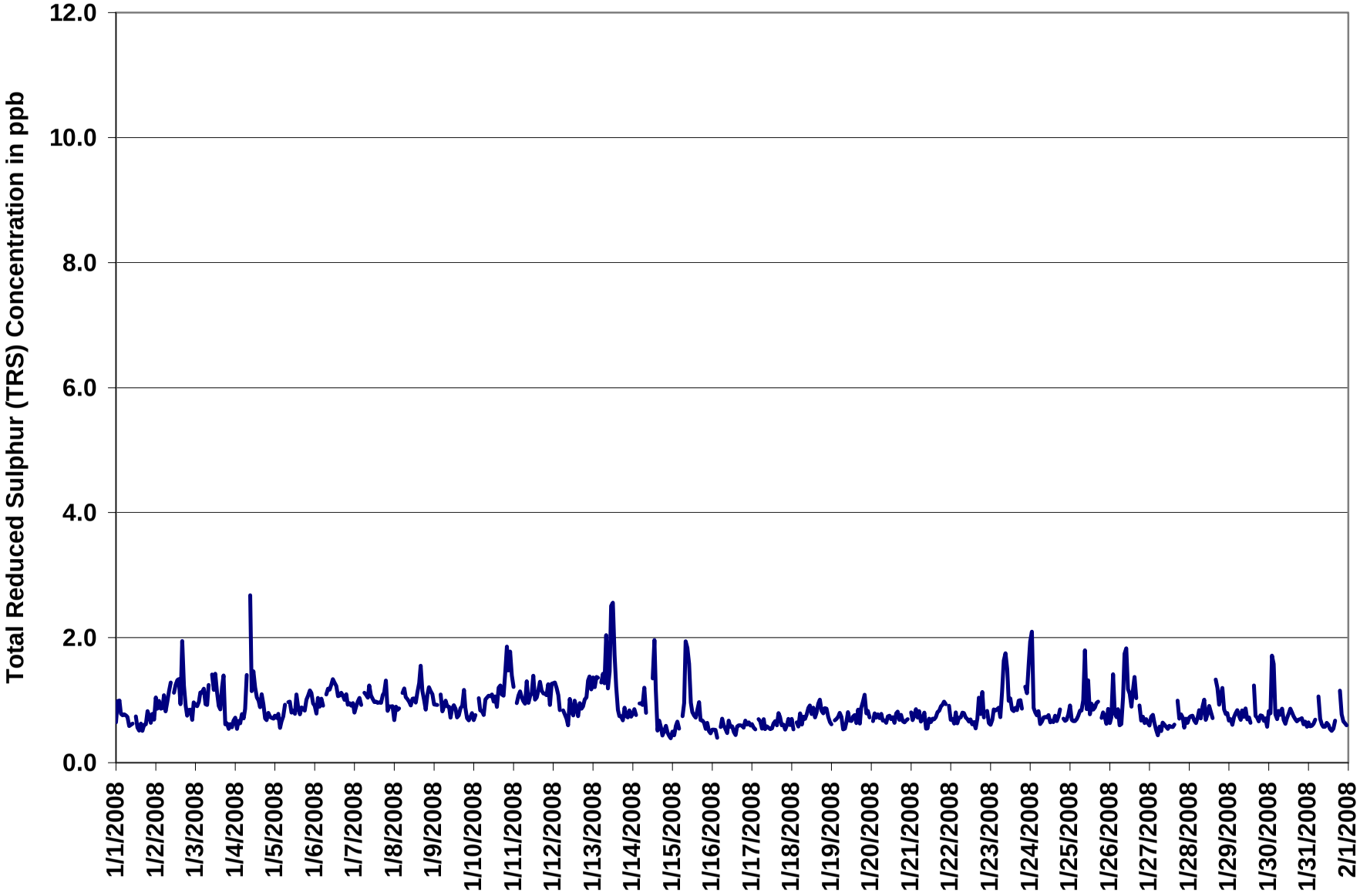
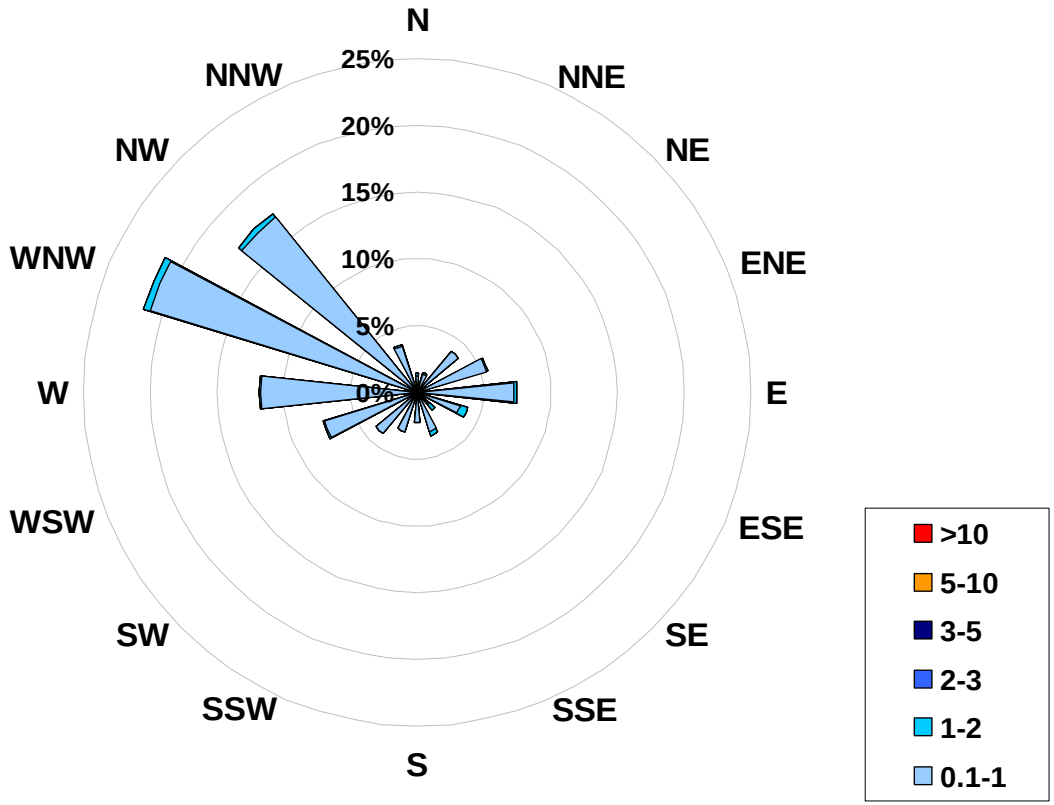


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Henry Pirker Site for January 2008



Calms:	0%

Frequency Distribution of TRS in ppb			
Range			Frequency (hrs)
0.1	<	1	685
1	to	2	23
2	to	3	0
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

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

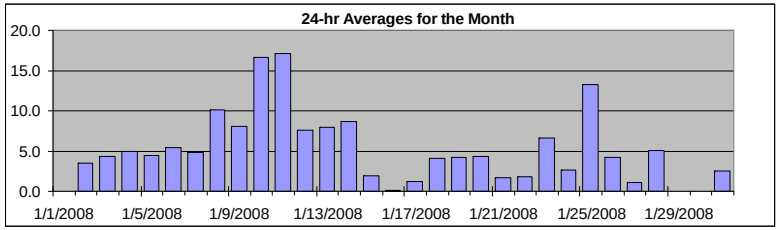
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	33.9	µg/m³	14-Jan	13:00 14:00
Maximum 24-hr Value:	17.1	µg/m³	11-Jan	



AIC Time:	0 hrs	Operational Time:	689 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	92.6%

Percentile	99	95	75	50	25	5	1	Average / Median		Geomean
	25.3	18.6	7.8	3.7	1.0	0.0	0.0	5.5	4 µg/m³	4.0 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**

Day	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-Jan-08	9	7	8	1	5	7	4	3	3	2	0	0	D	0	D	D	D	D	D	D	D	D	D	0	N	8.7
2-Jan-08	2	2	2	1	3	2	3	5	8	6	7	5	0	9	8	2	6	4	0	0	0	0	0	10	3.5	9.7
3-Jan-08	D	8	6	6	5	0	1	3	5	7	8	6	9	9	5	5	5	4	0	D	0	0	0	1	4.4	9.4
4-Jan-08	0	2	3	4	3	3	2	5	13	15	11	10	7	7	12	6	6	4	0	0	0	0	D	1	4.9	15.5
5-Jan-08	0	2	2	1	1	3	1	4	4	6	6	5	5	6	5	4	5	7	8	5	8	9	6	6	4.5	8.7
6-Jan-08	6	8	7	7	8	9	8	5	8	7	3	3	3	3	5	5	5	8	4	4	4	5	3	2	5.4	9.0
7-Jan-08	3	3	3	3	4	2	3	4	4	6	8	7	2	4	3	5	7	8	10	9	6	5	5	3	4.8	10.0
8-Jan-08	4	2	6	3	2	4	5	5	8	10	15	12	13	15	16	21	25	13	11	9	8	13	13	10	10.2	24.9
9-Jan-08	7	9	11	8	6	6	5	6	6	6	7	6	7	8	9	10	11	12	14	13	7	6	7	6	8.0	13.9
10-Jan-08	6	7	9	7	7	7	9	10	10	13	13	15	15	18	17	24	24	31	31	26	26	22	28	24	16.6	31.5
11-Jan-08	22	22	19	19	19	15	9	13	18	22	18	21	29	19	16	19	17	19	12	14	12	15	9	13	17.1	29.5
12-Jan-08	20	11	18	4	0	1	3	5	4	4	8	4	4	3	2	8	6	9	7	11	13	11	9	18	7.6	19.9
13-Jan-08	9	11	14	18	14	11	11	6	6	0	2	11	14	20	18	9	1	0	0	2	1	3	4	4	7.9	20.4
14-Jan-08	4	4	6	5	7	10	7	10	8	9	15	21	19	34	18	1	D	D	D	0	0	1	4	0	8.7	33.9
15-Jan-08	0	0	1	0	0	0	3	4	7	10	8	6	0	0	0	1	3	2	2	0	0	0	0	0	1.9	9.7
16-Jan-08	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	2.3
17-Jan-08	0	0	2	7	1	0	0	2	1	0	0	0	0	1	0	0	1	7	1	0	0	0	3	2	1.2	7.4
18-Jan-08	1	0	1	1	1	4	1	4	3	4	8	11	8	7	3	6	10	11	4	4	5	1	0	1	4.2	11.5
19-Jan-08	0	0	0	0	0	0	1	1	3	4	5	4	4	4	4	3	10	7	10	9	12	10	4	4	4.2	11.7
20-Jan-08	6	5	5	8	5	6	4	0	7	6	9	1	8	3	D	8	8	2	1	4	2	2	2	1	4.4	9.1
21-Jan-08	3	2	3	3	3	3	2	3	D	0	0	0	0	0	0	0	1	3	1	4	6	0	0	3	1.7	5.7
22-Jan-08	1	2	3	2	1	2	1	1	2	1	2	0	1	0	0	0	2	6	3	4	5	2	3	3	1.9	6.1
23-Jan-08	3	3	6	4	2	7	7	9	13	20	12	6	7	3	0	1	2	5	6	4	6	9	8	17	6.6	19.5
24-Jan-08	17	15	0	1	0	0	0	0	0	1	1	1	3	1	0	2	2	3	2	2	3	2	3	4	2.7	17.1
25-Jan-08	10	16	12	11	8	7	11	18	17	22	22	25	20	20	21	19	19	20	20	0	0	0	0	2	13.3	25.1
26-Jan-08	0	1	6	4	4	2	0	2	3	8	14	9	4	6	11	11	5	0	0	3	2	2	3	2	4.2	13.5
27-Jan-08	1	1	1	1	1	1	1	1	1	2	2	2	0	1	1	1	1	2	1	1	1	1	0	0	1.1	1.8
28-Jan-08	1	1	0	1	1	3	5	3	6	9	9	4	10	5	7	6	2	17	11	9	6	2	0	N	5.1	16.8
29-Jan-08	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	0.0
30-Jan-08	N	N	N	N	N	N	N	N	N	N	N	N	1	0	1	1	0	1	1	3	1	1	1	0	N	2.7
31-Jan-08	0	0	0	7	3	0	1	0	0	2	3	3	2	3	3	3	4	2	4	5	3	4	3	4	2.6	7.3
Hourly Avg	4.7	5.0	5.4	4.7	4.0	4.0	3.8	4.4	6.0	7.0	7.4	6.8	6.7	6.9	6.6	6.2	6.8	7.3	5.9	5.2	4.8	4.3	4.3	4.9		
Hourly Max	22.3	21.9	18.8	18.6	18.9	14.8	11.1	17.6	18.4	22.3	22.1	25.1	29.5	33.9	21.3	23.5	24.9	31.5	30.8	26.5	26.3	21.5	28.4	23.5		

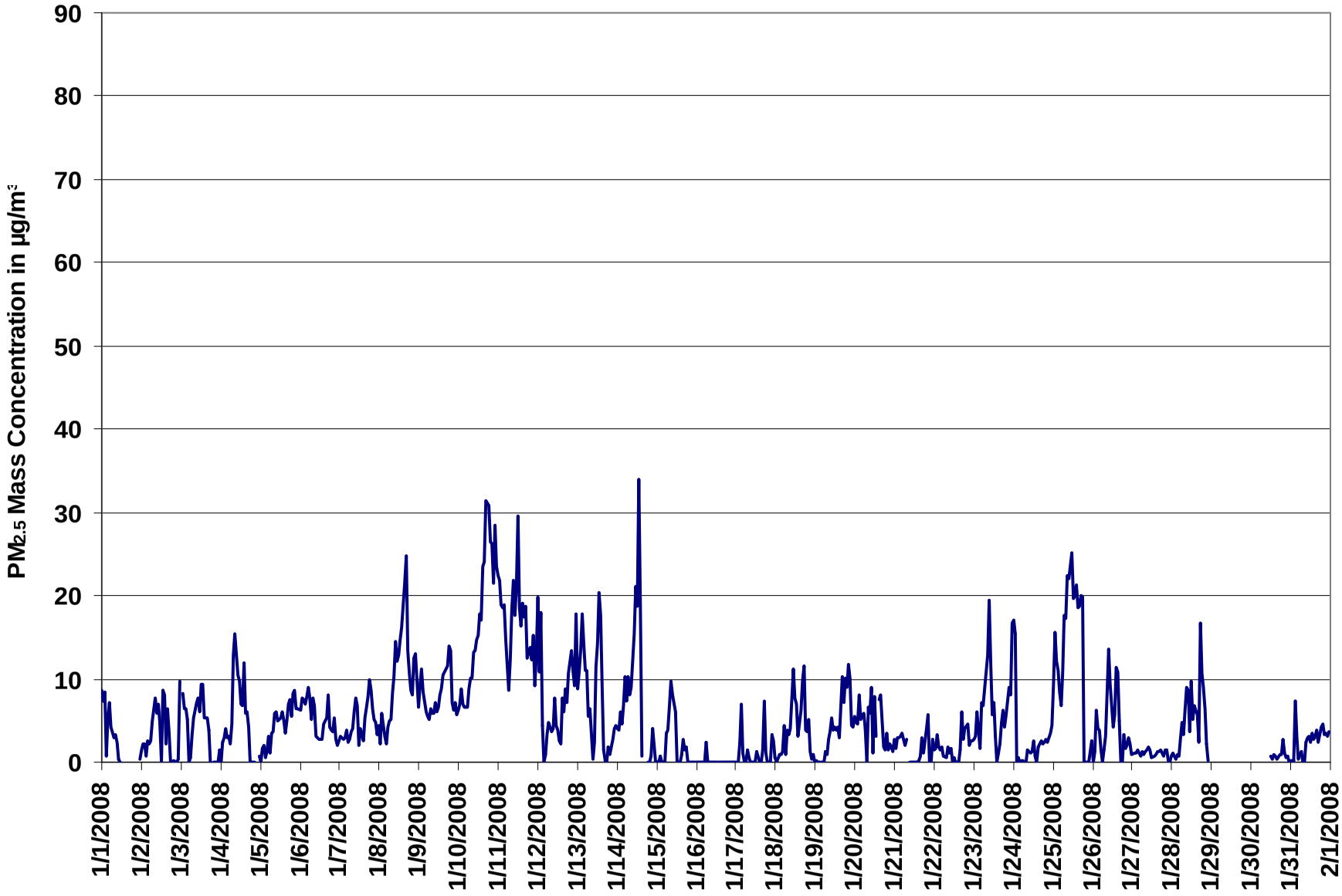


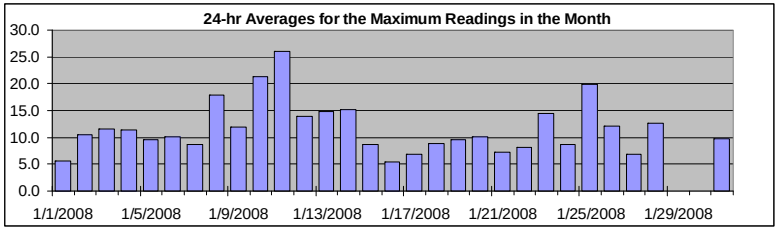
Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	63.9	µg/m³	11-Jan	9:00 10:00
Maximum 24-hr Value:	26.0	µg/m³	11-Jan	

AIC Time:	0 hrs	Operational Time:	707 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	95.0%

Percentile	99	95	75	50	25	5	1	Average / Median		Geomean
	34.9	26.7	14.8	9.2	6.3	3.5	1.0	11.5	9 µg/m˘	10.8 µg/m˘

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**

Day	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-Jan-08	17	13	14	10	10	10	8	6	9	6	4	6	0	3	0	0	0	0	4	2	2	1	2	4	5.5	16.8
2-Jan-08	6	6	5	4	7	7	6	10	12	12	16	11	10	17	17	12	17	15	4	4	6	3	18	26	10.5	26.0
3-Jan-08	35	15	13	10	10	7	6	9	13	13	17	15	17	16	12	15	10	10	3	4	6	6	5	9	11.5	35.0
4-Jan-08	8	12	8	9	7	6	6	14	19	22	15	17	16	15	19	11	17	14	5	5	6	7	6	9	11.3	22.0
5-Jan-08	7	7	8	5	7	8	7	7	8	9	10	9	10	13	9	7	10	14	12	12	12	14	10	12	9.5	14.2
6-Jan-08	12	12	12	11	12	13	13	10	12	12	7	6	7	8	10	10	11	14	8	10	8	9	9	7	10.1	14.1
7-Jan-08	6	7	6	6	6	5	6	9	6	9	11	12	9	10	8	10	11	14	14	13	9	7	8	5	8.7	14.3
8-Jan-08	18	17	16	10	16	8	7	9	20	33	27	18	21	20	24	26	30	23	14	12	13	16	18	13	17.8	32.9
9-Jan-08	11	13	15	14	11	9	8	8	8	10	9	11	13	13	12	14	15	16	18	19	12	9	10	9	12.0	18.9
10-Jan-08	11	10	12	10	9	14	10	13	14	18	18	21	21	24	24	30	29	38	42	31	30	26	34	26	21.4	41.5
11-Jan-08	28	27	26	22	26	22	14	20	23	64	42	30	36	26	23	23	22	24	19	21	17	20	19	31	26.0	63.9
12-Jan-08	30	17	24	17	4	5	7	8	7	8	13	10	14	16	14	13	9	14	10	17	17	16	16	24	13.8	29.8
13-Jan-08	15	15	19	26	21	15	16	15	15	22	12	18	23	27	24	15	7	7	7	9	6	8	9	8	14.9	27.2
14-Jan-08	11	9	16	9	11	16	13	15	13	15	21	31	29	46	31	16	1	0	5	4	5	21	20	5	15.1	46.1
15-Jan-08	5	6	8	5	7	12	18	9	11	15	16	23	2	7	7	9	12	8	9	3	3	3	4	5	8.6	23.3
16-Jan-08	4	4	3	5	5	4	8	8	5	6	7	9	8	4	7	3	6	6	7	5	5	2	4	5	5.4	8.5
17-Jan-08	5	6	9	17	6	5	5	8	9	5	5	2	5	8	6	4	8	13	6	5	6	5	8	7	6.8	16.8
18-Jan-08	6	3	5	4	5	10	5	8	9	10	13	17	12	12	8	11	16	16	8	6	11	5	6	4	8.8	16.8
19-Jan-08	2	6	4	4	4	4	6	6	7	7	9	8	11	8	9	8	21	11	21	20	18	18	10	7	9.5	21.2
20-Jan-08	10	8	8	15	12	11	9	8	13	15	19	9	14	8	5	15	17	9	6	9	6	10	5	4	10.2	19.3
21-Jan-08	6	6	7	10	9	9	10	11	7	3	4	5	4	6	5	5	8	8	8	10	11	8	8	8	7.3	10.8
22-Jan-08	7	7	14	8	5	7	6	4	8	7	6	6	7	5	4	6	8	13	7	15	14	10	9	9	8.1	15.4
23-Jan-08	8	10	15	10	9	14	12	18	28	26	22	11	18	12	9	9	7	9	15	10	13	25	15	25	14.5	28.0
24-Jan-08	26	23	11	5	5	7	6	5	8	7	7	6	9	7	5	10	8	8	7	8	9	7	8	10	8.7	25.6
25-Jan-08	21	21	19	15	13	13	18	23	21	30	30	34	31	27	29	24	24	27	32	6	5	4	6	10	20.0	33.6
26-Jan-08	10	10	12	10	12	8	5	8	9	19	23	18	16	16	21	19	16	16	5	9	7	7	6	6	12.1	23.2
27-Jan-08	4	5	7	8	6	6	6	6	7	9	8	9	5	7	7	8	6	8	8	7	7	8	5	6	6.8	9.0
28-Jan-08	7	7	8	7	8	10	10	10	15	15	15	11	17	9	21	10	11	31	21	17	15	9	8	N	12.7	31.3
29-Jan-08	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	0.0
30-Jan-08	N	N	N	N	N	N	N	N	N	N	N	N	4	3	4	4	3	3	3	4	3	3	3	2	N	4.4
31-Jan-08	3	3	8	41	17	8	12	32	5	24	5	5	6	6	5	6	8	5	6	6	6	6	5	6	9.8	41.0
Hourly Avg	11.6	10.5	11.4	11.3	9.7	9.4	9.1	10.9	11.8	15.5	14.2	13.4	13.1	13.3	12.6	11.8	12.3	13.2	11.2	10.1	9.6	9.7	9.7	10.5		
Hourly Max	35.0	27.4	25.5	41.0	25.8	22.4	17.7	32.1	28.0	63.9	42.3	33.6	36.2	46.1	31.5	30.0	30.2	38.4	41.5	30.7	29.8	25.9	33.8	30.5		

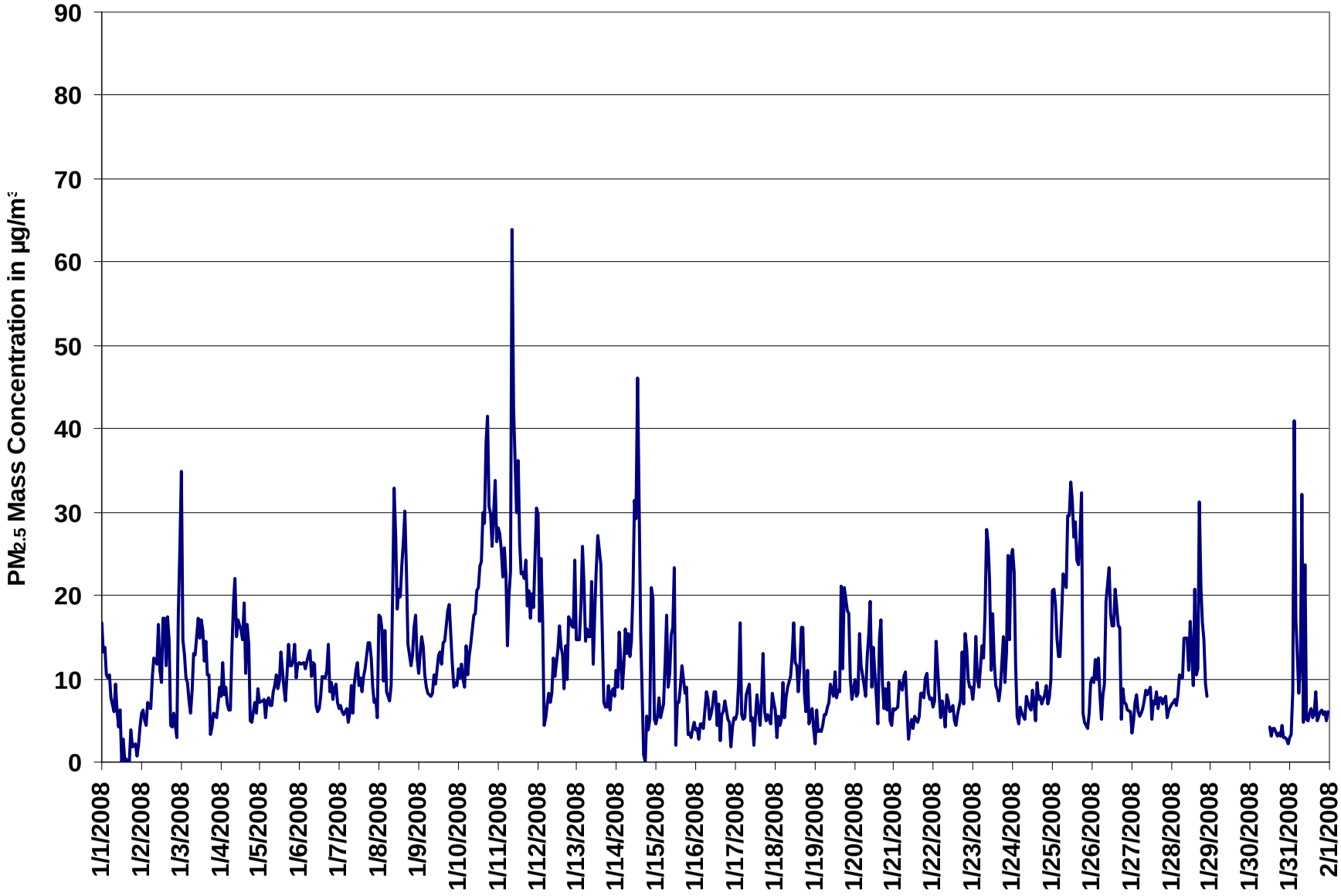
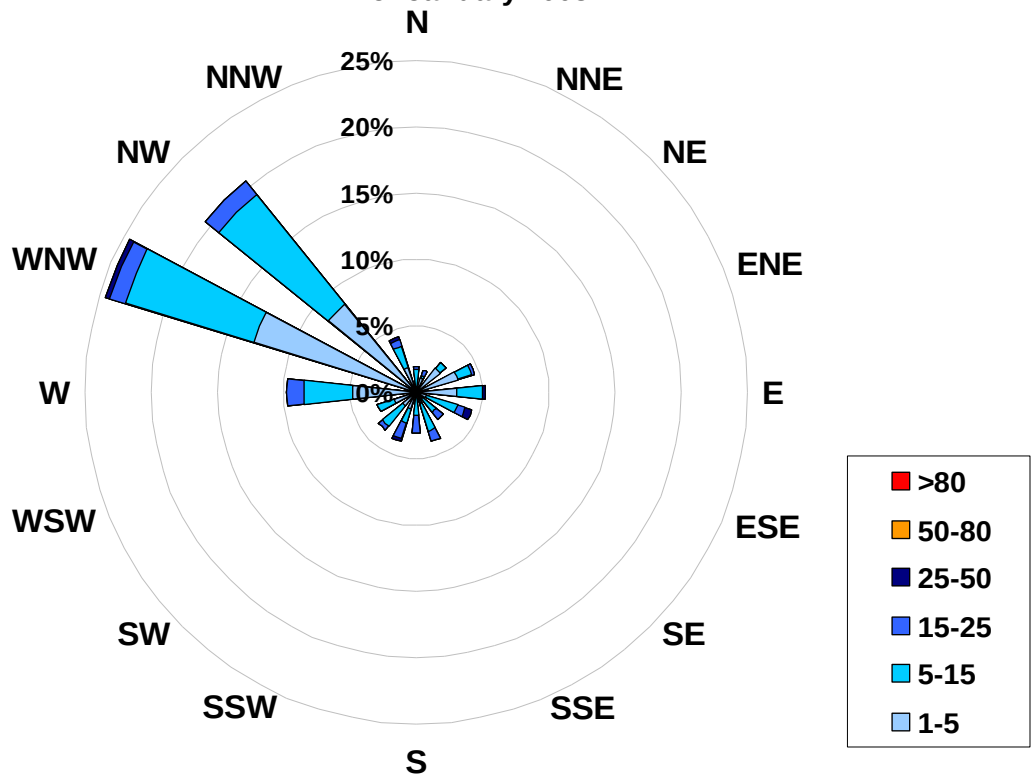


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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 January 2008



Calms:	**0%**

Frequency Distribution of $PM_{2.5}$ in µg/m^3			
Range			**Frequency (hrs)**
1.0	<	5	403
5	to	15	225
15	to	25	53
25	to	50	8
50	to	80	0
	>	80	0
Total Non-Zero Values			689

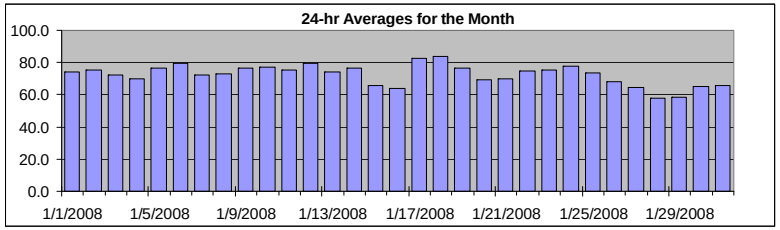
PASZA - Henry Pirker Relative Humidity Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	91.3	%	17-Jan	8:00 9:00
Maximum 24-hr Value:	83.5	%	18-Jan	

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
	88.1	84.8	78.9	73.9	65.4	57.7	52.8	72.4 %	73.9 %

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**

Day	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-Jan-08	72	73	74	75	75	76	76	79	79	79	79	78	77	76	74	73	71	71	72	72	69	67	69	78	74.3	79.0
2-Jan-08	78	78	79	80	80	79	79	79	80	79	76	74	73	71	70	73	76	78	75	74	74	68	70	68	75.4	80.2
3-Jan-08	71	76	80	82	80	78	78	80	79	78	75	72	68	70	70	73	74	75	64	63	64	64	62	64	72.5	82.5
4-Jan-08	67	67	77	81	83	84	85	85	84	83	76	67	59	58	65	70	74	70	58	56	57	57	54	56	69.6	85.1
5-Jan-08	57	65	67	66	66	74	77	82	85	85	80	75	71	75	76	77	79	82	82	81	82	83	84	85	76.6	84.8
6-Jan-08	84	85	85	85	86	86	86	87	85	84	81	79	75	72	70	71	75	79	78	76	77	76	75	75	79.6	86.8
7-Jan-08	76	76	78	79	79	77	77	77	77	75	73	67	64	61	61	61	69	73	74	73	73	74	74	74	72.6	79.0
8-Jan-08	73	73	72	72	73	73	73	72	71	71	68	65	66	68	72	73	74	76	77	77	78	77	76	77	72.9	77.6
9-Jan-08	77	78	78	79	78	77	77	77	77	76	76	76	76	76	76	76	76	76	76	76	76	76	76	77	76.6	79.0
10-Jan-08	76	76	76	75	74	72	74	76	76	77	78	78	77	76	75	74	77	79	80	79	80	81	81	80	77.0	80.7
11-Jan-08	79	79	80	79	80	80	78	79	80	76	75	69	60	59	59	64	70	75	77	78	77	78	83	85	75.0	85.2
12-Jan-08	86	85	84	83	82	81	79	79	79	78	77	73	67	65	71	79	80	82	81	82	84	85	85	85	79.7	85.5
13-Jan-08	84	84	84	84	84	83	83	79	77	55	59	65	68	68	68	63	65	67	68	74	75	79	79	80	73.9	84.2
14-Jan-08	79	80	80	82	84	84	84	83	81	80	78	76	73	73	75	87	90	70	59	59	59	61	85	78	76.7	90.2
15-Jan-08	74	76	79	78	74	78	82	82	80	80	72	57	52	50	48	49	55	57	58	60	60	60	57	60	65.8	82.3
16-Jan-08	62	64	65	68	71	70	71	67	64	64	63	62	61	60	61	61	61	62	64	64	62	61	60	62	63.8	71.2
17-Jan-08	62	63	64	78	88	88	84	88	91	89	86	82	77	87	83	85	88	91	90	80	80	80	83	86	82.2	91.3
18-Jan-08	86	85	82	80	79	80	81	80	80	81	81	81	82	82	82	83	84	86	86	87	88	88	88	88	83.5	88.1
19-Jan-08	86	85	85	84	83	82	81	80	79	77	74	72	71	69	65	68	72	78	79	75	76	75	72	69	76.4	85.7
20-Jan-08	68	68	69	70	70	70	72	70	69	68	71	69	67	64	58	57	65	71	73	73	73	73	73	74	69.0	73.7
21-Jan-08	74	74	74	76	75	76	77	77	71	68	67	64	58	58	57	56	60	69	71	77	79	74	70	74	69.8	79.1
22-Jan-08	72	65	67	66	69	71	74	76	77	74	73	73	71	73	69	69	75	82	85	83	81	81	80	79	74.4	84.9
23-Jan-08	79	79	79	80	78	78	78	78	78	79	77	74	71	64	60	61	67	72	76	79	79	79	82	82	75.3	82.2
24-Jan-08	82	80	71	74	76	77	79	80	80	79	77	76	74	76	78	79	79	79	78	79	79	80	80	80	78.0	82.2
25-Jan-08	78	78	79	79	80	82	84	84	84	83	82	76	70	69	70	69	71	73	69	58	60	60	63	67	73.6	84.4
26-Jan-08	64	64	67	67	68	63	61	64	68	74	74	67	61	61	61	61	66	72	73	75	76	76	75	73	67.9	76.4
27-Jan-08	72	71	71	70	69	68	67	65	65	64	63	61	61	60	60	62	62	63	63	64	65	63	62	62	64.7	72.2
28-Jan-08	62	61	60	59	58	59	58	58	58	59	58	56	56	55	56	57	58	62	63	59	56	54	53	53	57.8	63.2
29-Jan-08	53	53	53	53	53	53	54	55	56	58	59	59	59	59	59	60	61	61	63	64	64	64	64	64	58.4	64.2
30-Jan-08	64	64	65	65	65	65	65	65	65	65	64	62	62	63	63	64	65	67	67	67	67	67	68	68	65.1	67.9
31-Jan-08	68	68	66	64	65	66	66	67	67	67	66	64	63	61	61	62	64	66	67	67	67	67	67	68	65.5	67.8
Hourly Avg	73.2	73.4	73.8	74.6	74.9	75.2	75.5	75.8	75.6	74.2	72.8	70.0	67.4	67.1	67.0	68.3	71.1	73.0	72.4	72.0	72.1	71.8	72.6	73.2		
Hourly Max	86.4	85.4	84.8	84.7	88.3	87.9	86.4	88.1	91.3	88.9	86.1	82.4	81.9	87.2	83.1	86.9	90.2	90.9	89.7	87.1	87.8	87.9	88.1	88.1		

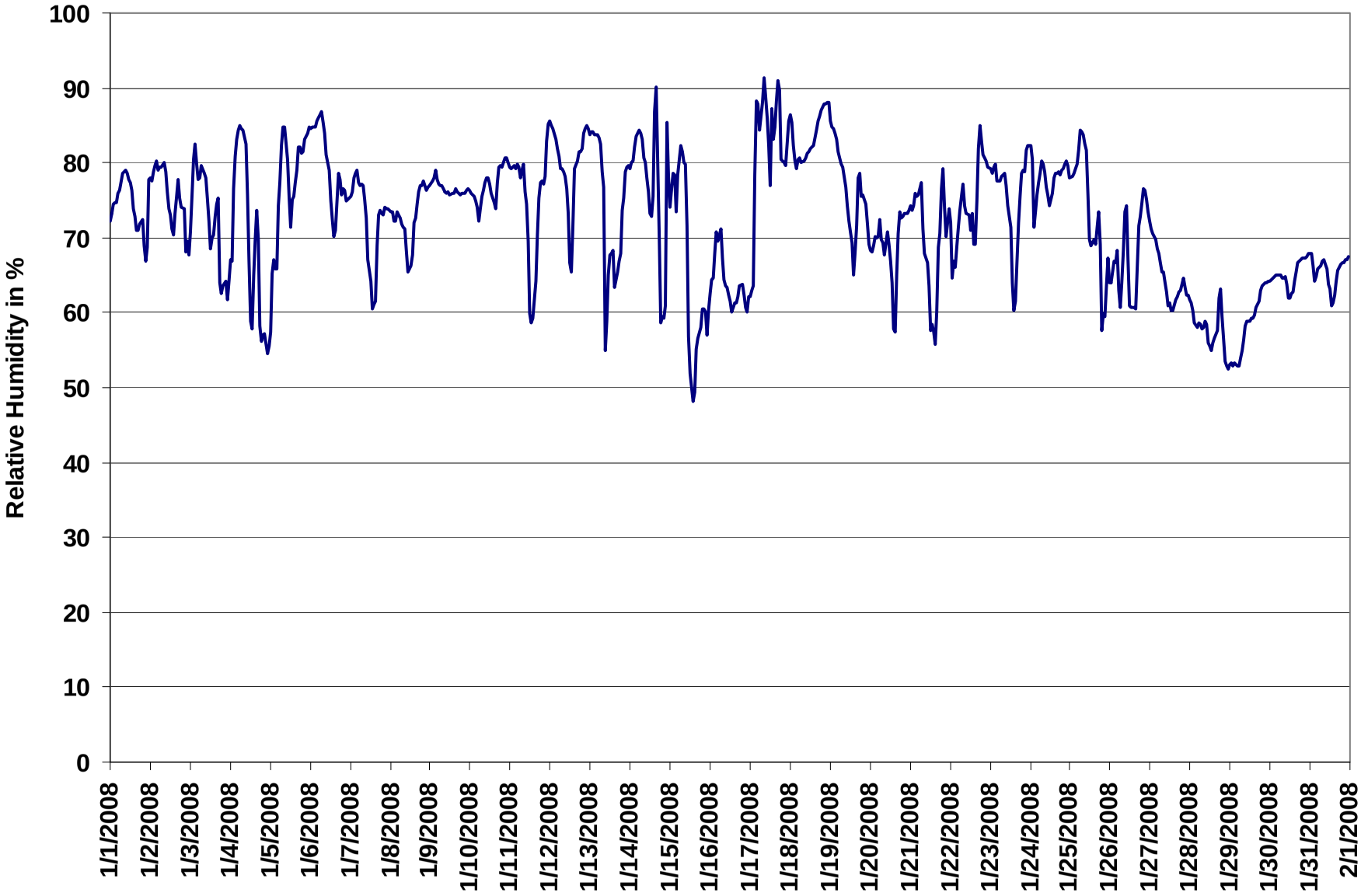


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

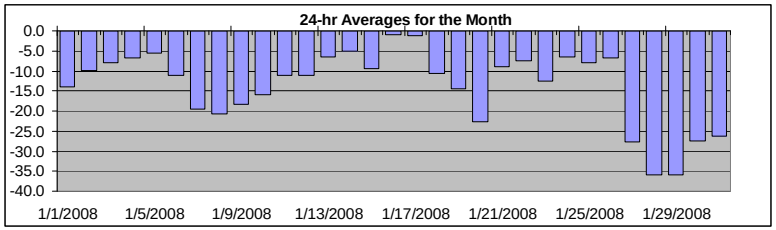
PASZA - Henry Pirker Temperature Monthly Summary

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	3.7	°C	16-Jan	21:00 22:00
Maximum 24-hr Value:	-1.1	°C	16-Jan	

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
	3.0	-1.0	-6.6	-11.6	-19.3	-31.0	-43.5	-13.7 °C	-11.6 °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**

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-Jan-08	-24	-23	-22	-21	-21	-20	-19	-17	-16	-16	-15	-14	-13	-11	-10	-9	-8	-7	-7	-7	-6	-6	-8	-13	-13.9	-6.2
2-Jan-08	-13	-13	-13	-15	-15	-15	-15	-16	-17	-16	-15	-13	-12	-9	-4	-3	-3	-3	-3	-4	-4	-3	-5	-5	-9.8	-2.9
3-Jan-08	-6	-8	-10	-10	-9	-11	-13	-15	-14	-14	-13	-11	-8	-7	-8	-8	-8	-7	-3	-2	-2	-2	-1	-2	-8.1	-1.4
4-Jan-08	-3	-3	-6	-8	-9	-10	-10	-12	-12	-12	-11	-8	-6	-6	-9	-10	-11	-7	-3	-2	-2	-1	0	0	-6.7	-0.3
5-Jan-08	-1	-3	-4	-3	-3	-5	-6	-9	-10	-10	-8	-6	-4	-4	-3	-4	-5	-6	-6	-6	-6	-6	-7	-7	-5.5	-1.0
6-Jan-08	-7	-7	-7	-8	-8	-8	-8	-9	-10	-12	-12	-13	-12	-12	-11	-11	-13	-14	-14	-13	-13	-14	-15	-16	-11.1	-7.0
7-Jan-08	-16	-17	-19	-20	-20	-20	-20	-20	-20	-22	-20	-18	-17	-15	-16	-15	-17	-19	-22	-23	-24	-24	-23	-24	-19.6	-15.2
8-Jan-08	-24	-24	-24	-25	-23	-23	-23	-24	-25	-25	-21	-19	-19	-17	-18	-17	-17	-18	-18	-18	-19	-20	-20	-19	-20.8	-16.9
9-Jan-08	-19	-18	-18	-17	-18	-18	-18	-19	-19	-19	-19	-18	-17	-17	-17	-17	-18	-19	-20	-19	-19	-18	-18	-18	-18.2	-17.0
10-Jan-08	-19	-19	-20	-21	-21	-23	-22	-19	-18	-17	-16	-14	-13	-13	-12	-11	-12	-13	-13	-12	-12	-13	-14	-13	-15.8	-11.1
11-Jan-08	-13	-12	-13	-12	-13	-14	-14	-13	-13	-13	-13	-11	-7	-6	-6	-7	-9	-11	-12	-13	-12	-11	-9	-9	-11.1	-5.9
12-Jan-08	-9	-10	-11	-12	-13	-15	-16	-18	-18	-17	-14	-10	-8	-7	-7	-10	-10	-9	-7	-7	-8	-9	-10	-11	-11.0	-6.5
13-Jan-08	-11	-11	-12	-12	-12	-12	-12	-8	-9	-1	-3	-4	-3	-2	-2	0	-1	-2	-3	-6	-7	-9	-9	-8	-6.6	-0.1
14-Jan-08	-8	-8	-8	-8	-8	-9	-9	-9	-8	-7	-6	-4	-3	-2	-1	0	-1	-2	-2	-3	-3	-4	-6	-5	-5.2	-0.1
15-Jan-08	-6	-8	-8	-9	-9	-12	-14	-13	-15	-16	-12	-8	-7	-7	-6	-7	-8	-9	-9	-9	-9	-8	-8	-8	-9.4	-5.8
16-Jan-08	-8	-8	-7	-8	-8	-7	-8	-4	-2	-2	0	1	2	3	3	3	3	3	3	3	3	4	4	3	-1.1	3.7
17-Jan-08	3	2	2	1	0	1	1	0	0	0	0	0	0	0	1	0	-2	-3	-2	-2	-3	-9	-9	-9	-1.1	2.7
18-Jan-08	-9	-10	-14	-16	-17	-16	-15	-15	-15	-14	-13	-11	-10	-10	-9	-8	-8	-8	-7	-7	-6	-6	-5	-5	-10.6	-4.9
19-Jan-08	-6	-8	-8	-8	-9	-10	-11	-11	-12	-12	-13	-13	-13	-14	-13	-14	-16	-18	-20	-22	-22	-23	-25	-27	-14.5	-6.3
20-Jan-08	-29	-29	-28	-27	-27	-27	-25	-26	-27	-28	-22	-19	-17	-15	-14	-14	-16	-19	-21	-23	-24	-24	-22	-21	-22.6	-13.6
21-Jan-08	-20	-18	-17	-16	-15	-13	-12	-12	-7	-6	-5	-5	-3	-3	-2	-1	-3	-6	-7	-8	-9	-9	-9	-10	-9.0	-1.1
22-Jan-08	-10	-6	-6	-4	-4	-6	-7	-7	-7	-5	-5	-5	-4	-4	-3	-3	-5	-7	-8	-12	-15	-16	-16	-17	-7.6	-2.8
23-Jan-08	-17	-17	-17	-16	-18	-18	-18	-18	-17	-16	-13	-11	-8	-6	-5	-5	-7	-9	-11	-11	-11	-10	-11	-11	-12.5	-5.1
24-Jan-08	-11	-10	-6	-6	-6	-6	-7	-7	-8	-8	-7	-6	-5	-4	-6	-5	-5	-5	-6	-6	-6	-6	-6	-7	-6.4	-4.4
25-Jan-08	-7	-7	-7	-7	-7	-8	-10	-11	-12	-12	-11	-9	-9	-8	-9	-9	-10	-10	-7	-3	-4	-4	-4	-5	-7.9	-3.2
26-Jan-08	-3	-4	-5	-5	-5	-4	-3	-4	-5	-6	-6	-4	-2	-1	-1	0	-3	-7	-12	-14	-15	-17	-18	-20	-6.7	-0.2
27-Jan-08	-21	-22	-23	-24	-25	-26	-27	-27	-28	-28	-29	-28	-28	-28	-28	-28	-29	-29	-29	-30	-30	-31	-32	-34	-27.8	-21.5
28-Jan-08	-35	-36	-36	-38	-39	-38	-38	-39	-38	-37	-35	-32	-30	-28	-29	-27	-30	-33	-33	-36	-40	-43	-44	-45	-35.8	-27.5
29-Jan-08	-44	-44	-44	-44	-44	-44	-43	-41	-39	-37	-35	-35	-34	-31	-31	-31	-31	-31	-30	-30	-30	-30	-30	-30	-35.9	-29.6
30-Jan-08	-30	-30	-30	-30	-29	-29	-29	-29	-28	-28	-27	-26	-26	-26	-25	-26	-26	-26	-26	-26	-26	-26	-26	-27	-27.4	-25.5
31-Jan-08	-28	-29	-29	-32	-31	-30	-29	-28	-27	-27	-26	-25	-25	-23	-24	-24	-24	-25	-25	-24	-24	-24	-24	-24	-26.3	-23.4
Hourly Avg	-14.6	-14.8	-15.1	-15.5	-15.7	-16.0	-16.1	-16.1	-16.0	-15.6	-14.4	-12.9	-11.6	-10.8	-10.4	-10.4	-11.3	-12.2	-12.3	-12.8	-13.2	-13.6	-13.9	-14.4		
Hourly Max	2.7	2.2	2.4	1.3	0.5	0.6	0.8	0.5	0.1	0.0	0.2	1.2	1.8	2.5	2.7	3.0	3.3	3.4	3.2	3.1	3.5	3.7	3.6	2.9		

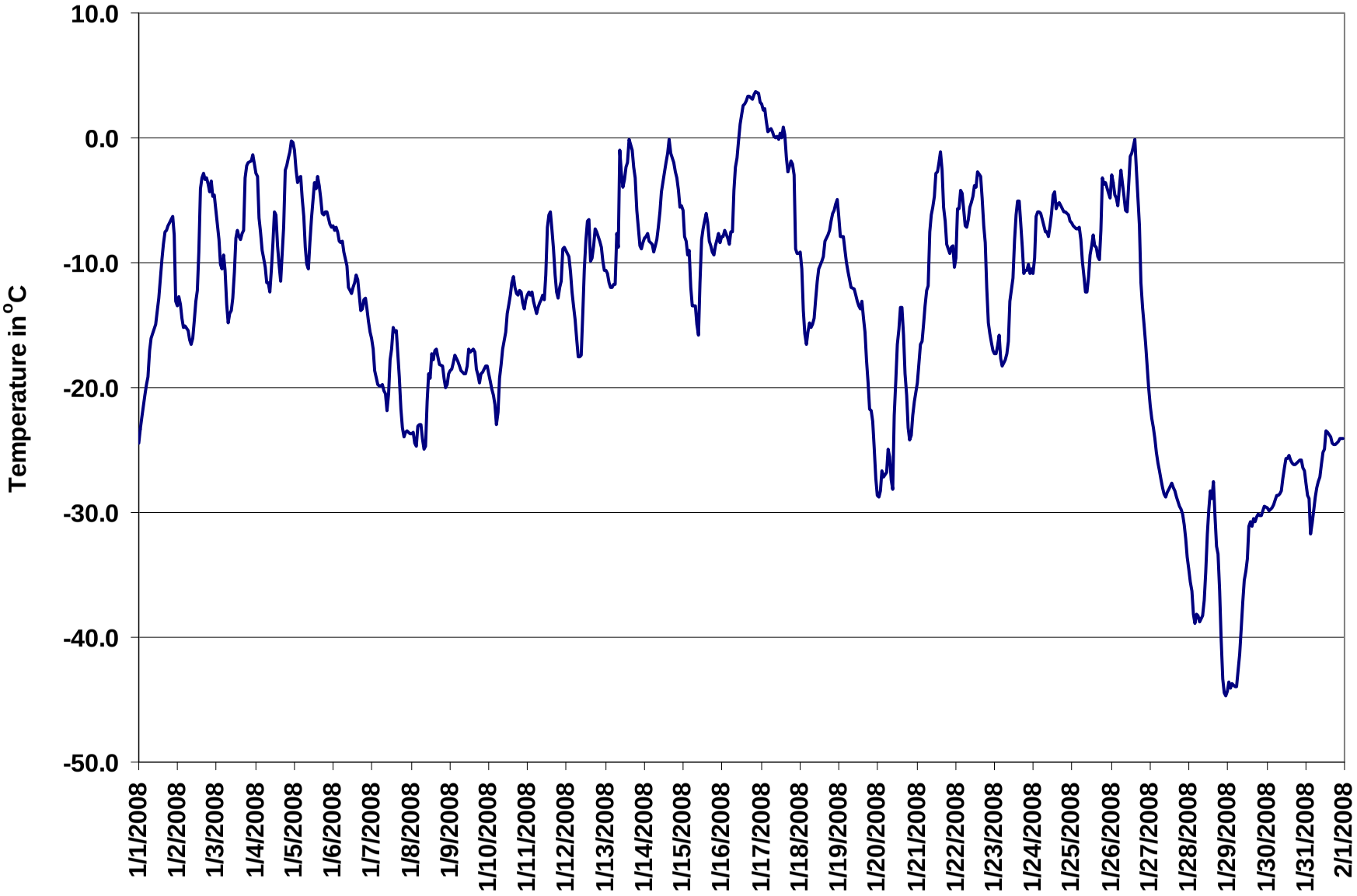


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

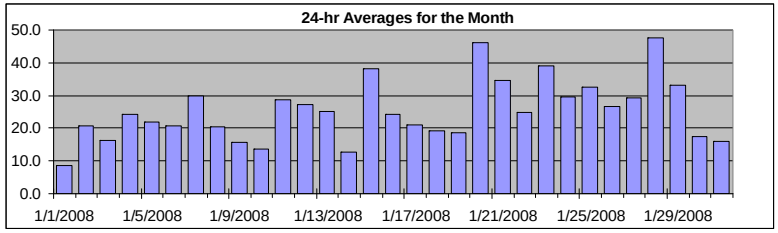
PASZA - Henry Pirker Solar Radiation Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Solar Radiation (SR)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	239.9	W/m²	20-Jan	12:00 13:00
Maximum 24-hr Value:	47.6	W/m²	28-Jan	

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
	194.4	138.4	29.5	0.0	0.0	0.0	0.0	25.3 W/m²	0.0 W/m²

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-Jan-08	0	0	0	0	0	0	0	0	0	3	23	37	30	28	55	25	3	0	0	0	0	0	0	0	8.5	55.5
2-Jan-08	0	0	0	0	0	0	0	0	0	4	51	75	67	108	129	51	15	0	0	0	0	0	0	0	20.8	128.7
3-Jan-08	0	0	0	0	0	0	0	0	0	7	34	73	90	82	67	31	6	0	0	0	0	0	0	0	16.2	89.6
4-Jan-08	0	0	0	0	0	0	0	0	1	8	54	123	150	125	77	37	6	0	0	0	0	0	0	0	24.2	150.0
5-Jan-08	0	0	0	0	0	0	0	0	0	7	45	60	156	79	108	61	12	0	0	0	0	0	0	0	22.0	156.3
6-Jan-08	0	0	0	0	0	0	0	0	0	8	44	77	103	109	100	48	8	0	0	0	0	0	0	0	20.8	109.1
7-Jan-08	0	0	0	0	0	0	0	0	0	8	42	131	166	167	133	65	7	0	0	0	0	0	0	0	29.9	167.0
8-Jan-08	0	0	0	0	0	0	0	0	0	11	66	140	102	89	41	37	6	0	0	0	0	0	0	0	20.5	139.7
9-Jan-08	0	0	0	0	0	0	0	0	0	6	36	68	85	80	72	27	5	0	0	0	0	0	0	0	15.8	85.0
10-Jan-08	0	0	0	0	0	0	0	0	0	7	31	48	63	68	57	41	10	0	0	0	0	0	0	0	13.6	68.2
11-Jan-08	0	0	0	0	0	0	0	0	0	15	39	63	181	171	136	72	8	0	0	0	0	0	0	0	28.6	180.9
12-Jan-08	0	0	0	0	0	0	0	0	0	10	68	123	167	157	75	42	10	0	0	0	0	0	0	0	27.2	167.4
13-Jan-08	0	0	0	0	0	0	0	0	0	12	65	92	103	127	74	111	21	0	0	0	0	0	0	0	25.3	126.5
14-Jan-08	0	0	0	0	0	0	0	0	0	11	31	50	67	74	51	18	5	0	0	0	0	0	0	0	12.7	73.8
15-Jan-08	0	0	0	0	0	0	0	0	0	14	91	163	191	192	160	88	18	0	0	0	0	0	0	0	38.2	192.4
16-Jan-08	0	0	0	0	0	0	0	0	0	12	74	107	120	120	88	45	12	0	0	0	0	0	0	0	24.1	120.1
17-Jan-08	0	0	0	0	0	0	0	0	0	8	36	52	126	70	145	50	18	1	0	0	0	0	0	0	21.1	144.9
18-Jan-08	0	0	0	0	0	0	0	0	0	9	51	81	104	96	68	39	13	0	0	0	0	0	0	0	19.2	103.5
19-Jan-08	0	0	0	0	0	0	0	0	0	13	38	64	81	88	100	50	16	0	0	0	0	0	0	0	18.8	99.6
20-Jan-08	0	0	0	0	0	0	0	0	0	41	164	228	240	201	136	72	25	1	0	0	0	0	0	0	46.1	239.9
21-Jan-08	0	0	0	0	0	0	0	0	0	13	54	108	196	157	166	113	24	2	0	0	0	0	0	0	34.7	195.8
22-Jan-08	0	0	0	0	0	0	0	0	0	11	31	57	79	105	164	119	28	2	0	0	0	0	0	0	24.8	163.5
23-Jan-08	0	0	0	0	0	0	0	0	0	17	64	117	178	216	191	123	29	2	0	0	0	0	0	0	39.0	215.7
24-Jan-08	0	0	0	0	0	0	0	0	1	25	94	139	182	120	77	52	19	1	0	0	0	0	0	0	29.6	181.9
25-Jan-08	0	0	0	0	0	0	0	0	1	38	69	134	182	160	115	63	18	1	1	0	0	0	0	0	32.6	181.5
26-Jan-08	0	0	0	0	0	0	0	0	0	12	48	100	116	125	114	95	28	3	0	0	0	0	0	0	26.7	124.7
27-Jan-08	0	0	0	0	0	0	0	0	1	13	56	103	145	161	118	71	32	4	0	0	0	0	0	0	29.4	161.2
28-Jan-08	0	0	0	0	0	0	0	0	1	29	93	179	214	228	202	143	50	4	0	0	0	0	0	0	47.6	227.7
29-Jan-08	0	0	0	0	0	0	0	0	1	22	62	87	121	184	164	104	44	4	0	0	0	0	0	0	33.0	183.8
30-Jan-08	0	0	0	0	0	0	0	0	1	14	44	73	81	71	72	43	20	1	0	0	0	0	0	0	17.5	80.7
31-Jan-08	0	0	0	0	0	0	0	0	0	10	35	55	58	83	73	44	22	2	0	0	0	0	0	0	16.0	82.7
Hourly Avg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	13.5	55.9	97.0	127.2	123.8	107.3	63.9	17.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0		
Hourly Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	40.6	163.7	228.1	239.9	227.7	201.9	142.8	49.5	4.3	0.7	0.0	0.0	0.0	0.0	0.0		

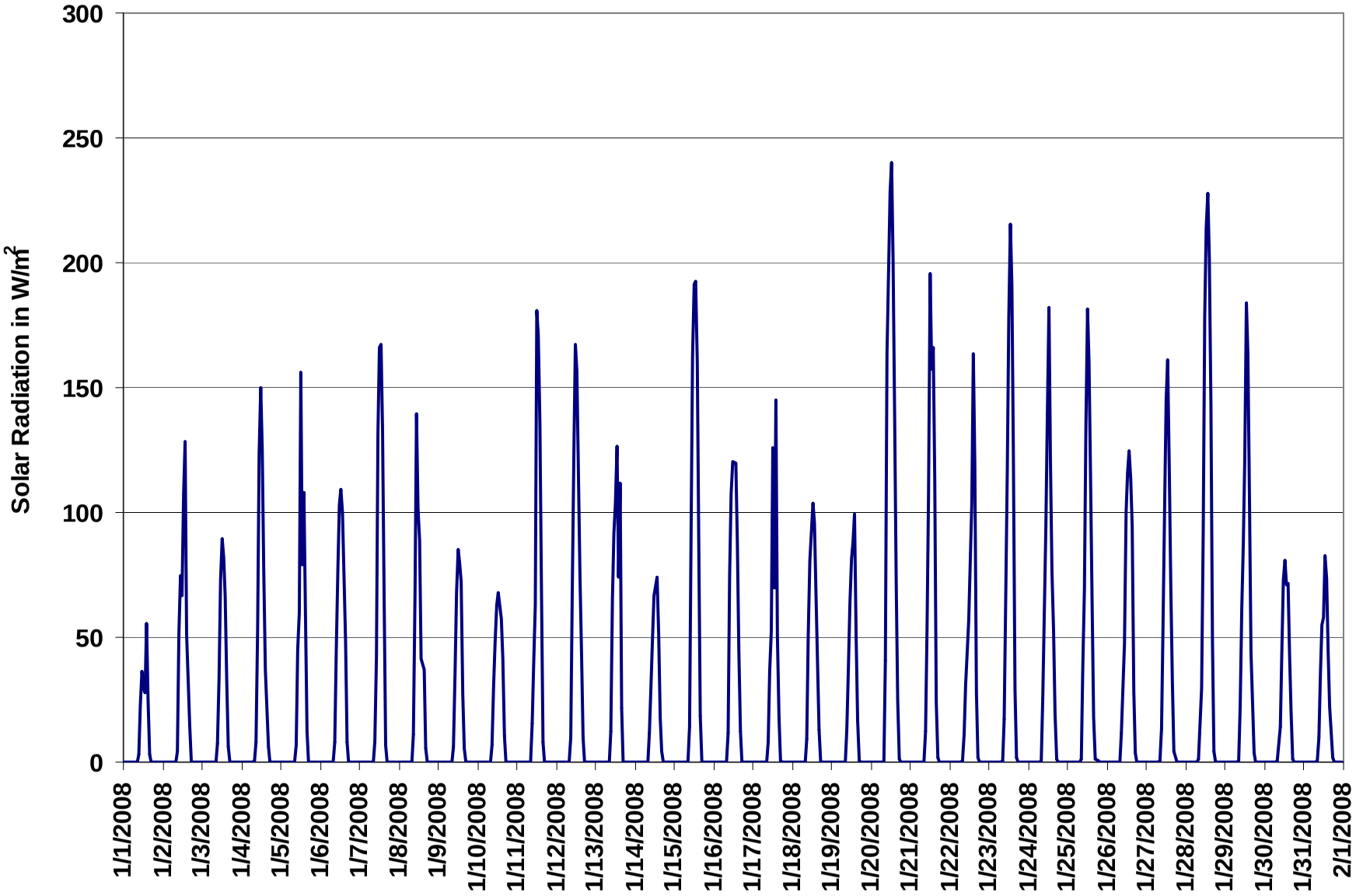


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

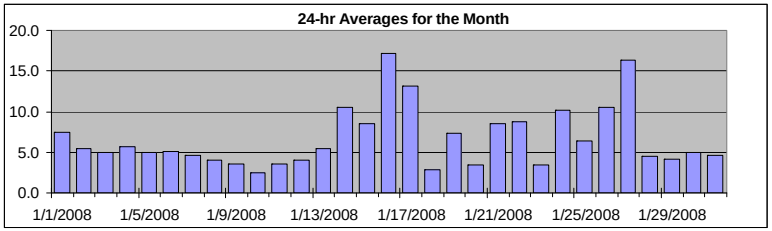
PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	26.1	km/hr	27-Jan	0:00 1:00
Maximum 24-hr Value:	17.2	km/hr	16-Jan	

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
	24.5	19.4	7.6	4.6	3.5	2.3	1.8	6.7 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**

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-hr Scalar Average	Daily Max
1-Jan-08	2	3	2	2	2	3	3	4	7	7	7	8	14	14	14	12	11	9	12	9	10	11	8	5	7.4	14.4
2-Jan-08	3	3	4	3	4	4	3	3	4	3	4	7	5	5	8	5	9	9	10	8	7	9	6	5	5.4	9.6
3-Jan-08	4	5	3	4	5	4	4	4	3	3	4	3	3	4	5	4	3	4	7	7	9	8	11	9	5.0	11.0
4-Jan-08	6	6	4	4	3	4	4	3	4	4	3	5	3	4	5	4	4	5	8	10	9	11	13	10	5.7	12.7
5-Jan-08	7	5	6	7	4	4	4	3	4	5	4	4	6	5	7	8	6	6	4	5	3	3	3	3	4.9	8.4
6-Jan-08	3	5	3	4	3	2	3	3	4	5	8	7	7	8	7	6	5	5	5	5	7	7	7	5	5.1	7.8
7-Jan-08	5	5	4	3	4	7	6	4	5	4	4	4	5	5	5	5	4	4	4	4	5	5	4	4	4.6	6.5
8-Jan-08	5	4	4	5	5	4	4	4	4	4	4	5	5	3	4	4	4	4	4	5	3	3	3	4	4.1	5.4
9-Jan-08	4	5	3	6	5	4	4	4	4	4	4	3	2	3	3	2	3	3	2	3	3	3	2	3	3.5	5.9
10-Jan-08	2	2	2	2	2	3	3	3	2	3	2	2	2	3	2	2	2	3	3	3	3	2	3	3	2.5	3.4
11-Jan-08	4	4	3	3	4	5	4	2	3	4	4	3	3	4	4	4	4	4	4	4	3	5	3	3	3.6	5.3
12-Jan-08	4	3	3	3	3	2	4	5	4	4	4	4	5	4	5	7	5	5	3	3	3	4	3	4	4.0	7.0
13-Jan-08	5	4	3	6	5	5	6	6	6	13	5	5	6	6	5	5	7	7	5	5	6	5	4	3	5.5	13.1
14-Jan-08	3	3	3	3	3	3	4	4	4	3	4	3	2	4	6	18	24	22	24	22	26	25	23	18	10.5	25.6
15-Jan-08	17	10	9	8	11	7	5	4	4	3	2	3	7	10	8	5	7	12	13	14	12	10	12	9	8.6	16.9
16-Jan-08	9	11	11	9	7	8	6	15	18	16	19	22	20	15	20	19	23	23	19	22	23	24	26	26	17.2	25.7
17-Jan-08	20	15	19	17	19	24	22	18	17	17	14	10	9	11	8	6	4	4	10	12	12	12	9	7	13.1	23.7
18-Jan-08	3	1	5	2	3	4	4	2	2	2	1	1	3	3	4	2	2	2	4	2	2	4	5	6	2.9	5.8
19-Jan-08	8	8	8	10	10	11	12	11	10	10	10	10	9	8	7	8	5	3	2	4	2	4	3	3	7.3	11.9
20-Jan-08	3	4	3	2	2	3	5	5	2	3	2	4	3	5	3	3	2	2	3	5	5	4	4	5	3.4	5.2
21-Jan-08	3	2	1	2	4	4	7	11	14	15	17	17	11	14	14	10	7	5	7	5	5	9	8	9	8.5	17.4
22-Jan-08	9	13	15	24	23	15	12	11	12	10	7	3	3	7	5	5	4	6	5	4	5	4	5	5	8.8	24.0
23-Jan-08	4	3	4	3	3	2	2	3	2	3	2	3	3	5	5	5	6	5	4	4	3	4	2	3	3.5	6.4
24-Jan-08	3	6	7	8	8	9	7	8	14	14	14	14	14	14	13	13	13	12	12	11	10	9	7	6	10.2	14.4
25-Jan-08	8	10	9	9	8	6	7	6	5	4	4	4	5	5	6	4	3	3	9	14	8	6	6	4	6.4	13.6
26-Jan-08	10	6	7	6	6	10	10	5	2	2	4	7	3	4	4	3	5	19	23	21	21	24	25	26	10.6	25.9
27-Jan-08	26	25	22	22	23	21	22	19	19	19	18	19	17	15	16	13	13	10	8	7	6	10	11	10	16.3	26.1
28-Jan-08	9	7	5	5	4	4	5	4	4	3	5	4	4	4	5	2	5	4	4	2	3	5	4	5	4.5	9.2
29-Jan-08	4	3	4	4	4	4	4	4	3	3	3	3	5	4	5	6	4	5	3	6	6	6	6	3	4.2	6.5
30-Jan-08	4	4	4	4	6	4	4	4	2	5	5	5	5	6	7	8	8	7	5	5	5	5	4	4	5.0	7.7
31-Jan-08	4	4	4	4	4	4	6	6	5	6	4	5	5	4	5	5	5	4	4	3	5	4	5	4	4.6	6.5
1-hr Average	6.5	6.0	5.9	6.2	6.4	6.3	6.4	6.1	6.3	6.5	6.3	6.4	6.3	6.7	6.9	6.6	6.7	7.0	7.4	7.5	7.4	7.9	7.6	6.8		
Hourly Max	26.1	24.6	22.1	24.0	23.2	23.7	22.5	19.5	18.7	19.4	19.4	21.6	19.8	15.4	19.5	19.5	24.3	23.4	23.8	21.9	25.6	24.9	25.5	25.9		

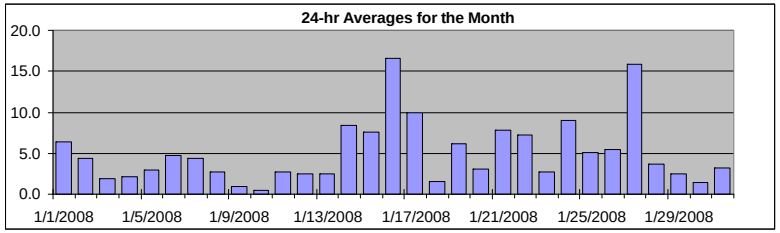
PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	26.1	km/hr	27-Jan	0:00 1:00
Maximum 24-hr Value:	16.6	km/hr	16-Jan	

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
	24.4	19.3	7.5	4.2	2.9	1.3	0.9	8.0 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**

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-hr Vector Average	Daily Max
1-Jan-08	1	3	2	1	2	3	2	4	7	7	7	7	14	14	14	12	11	9	12	9	10	11	5	5	6.4	14.3
2-Jan-08	3	2	3	2	3	2	1	2	2	2	3	7	5	2	8	4	9	9	10	8	7	8	6	5	4.4	9.5
3-Jan-08	3	4	3	4	4	2	4	3	1	3	4	2	3	3	5	3	1	3	7	7	9	8	11	9	1.9	10.8
4-Jan-08	6	1	3	3	2	4	3	2	3	4	3	4	3	4	5	4	3	5	8	10	9	11	13	9	2.1	12.5
5-Jan-08	7	4	5	7	2	3	3	3	4	4	3	4	6	4	7	8	6	6	4	3	2	3	3	2	3.0	8.4
6-Jan-08	2	4	1	4	3	1	3	2	3	5	8	7	7	8	7	6	5	5	5	5	7	7	7	5	4.8	7.7
7-Jan-08	5	5	4	3	4	6	6	4	4	4	4	4	5	5	5	5	4	4	4	4	5	4	4	4	4.4	6.5
8-Jan-08	4	4	3	4	4	3	4	4	4	3	3	5	5	3	4	4	4	4	3	4	3	2	3	4	2.7	5.2
9-Jan-08	4	5	3	5	4	4	4	4	4	4	4	3	2	3	3	2	3	3	2	3	3	3	2	3	0.9	5.3
10-Jan-08	2	1	1	2	2	3	3	3	1	3	1	1	2	2	1	1	1	3	3	2	3	1	3	2	0.4	3.1
11-Jan-08	4	3	3	3	3	4	3	1	3	3	3	1	2	4	3	4	4	4	2	3	2	3	2	3	2.7	4.4
12-Jan-08	3	2	2	2	2	2	4	5	4	4	4	4	4	2	1	6	5	3	2	1	2	2	1	1	2.5	6.1
13-Jan-08	1	2	2	6	4	4	6	3	3	12	3	4	5	6	5	5	7	7	4	2	2	4	3	1	2.5	12.5
14-Jan-08	1	1	2	3	1	2	3	3	4	2	4	3	2	4	5	17	24	21	24	22	26	25	23	18	8.4	25.5
15-Jan-08	17	10	8	8	11	7	4	4	3	3	2	3	7	10	7	5	7	12	13	14	12	10	12	8	7.6	16.8
16-Jan-08	9	11	11	9	6	6	6	15	18	16	19	21	20	15	19	19	23	23	19	21	23	24	25	26	16.6	25.6
17-Jan-08	20	14	19	16	19	24	22	18	17	17	14	10	9	10	7	6	4	4	10	12	8	12	9	7	10.0	23.6
18-Jan-08	3	0	5	2	2	4	3	2	2	2	1	1	3	3	4	1	1	1	4	2	2	3	5	6	1.5	5.6
19-Jan-08	8	8	8	10	10	11	12	11	10	10	10	10	9	8	7	8	5	3	1	3	1	4	3	3	6.1	11.8
20-Jan-08	3	3	3	1	2	3	5	4	2	3	2	4	3	5	2	3	2	2	2	4	5	4	3	5	3.1	5.1
21-Jan-08	3	2	0	2	4	3	7	11	14	15	17	17	11	14	13	10	7	4	7	5	4	9	8	9	7.8	17.3
22-Jan-08	8	12	13	24	23	15	11	11	11	10	7	2	2	6	3	4	3	6	3	4	5	4	4	4	7.3	23.8
23-Jan-08	3	3	3	2	3	2	2	2	1	1	2	3	3	5	5	5	6	5	4	4	2	1	1	3	2.8	6.4
24-Jan-08	1	6	7	8	7	8	7	8	14	14	14	14	14	14	13	13	13	12	12	11	10	8	6	6	9.0	14.3
25-Jan-08	8	10	9	9	8	6	7	5	5	4	4	4	3	4	5	4	2	1	7	13	8	5	5	1	5.1	13.5
26-Jan-08	9	4	7	5	5	10	10	5	1	2	4	6	1	4	3	2	3	18	23	21	21	24	25	26	5.4	25.9
27-Jan-08	26	25	22	22	23	21	22	19	19	19	18	19	17	15	16	13	12	10	8	7	6	10	11	10	15.8	26.1
28-Jan-08	9	7	5	5	4	4	5	4	4	3	5	4	3	3	5	2	5	3	4	2	2	5	4	5	3.7	9.1
29-Jan-08	3	3	4	3	4	3	4	3	3	1	3	2	5	3	5	5	2	4	2	5	6	6	6	2	2.5	6.3
30-Jan-08	4	4	4	4	6	4	4	4	1	5	4	4	4	6	7	7	7	6	4	5	5	5	3	4	1.5	7.4
31-Jan-08	4	3	3	4	4	4	6	6	4	5	3	4	5	4	5	4	5	4	4	2	4	4	4	4	3.2	6.3
1-hr Vector	3.6	2.8	3.3	3.0	3.5	3.8	3.7	3.3	2.5	2.6	2.2	2.0	2.1	2.4	3.0	2.8	2.5	2.2	1.9	3.3	3.1	2.9	3.0	2.9		
Hourly Max	26.1	24.6	22.0	23.8	23.2	23.6	22.3	19.4	18.6	19.3	19.2	21.3	19.7	15.3	19.5	19.4	24.1	23.3	23.5	21.8	25.5	24.6	25.5	25.9		

PASZA - Henry Pirker Wind Direction Monthly Summary

HOURLY AVERAGE TABLE

Wind Direction (WD)

Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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
	345.9	325.3	301.0	271.9	145.3	49.8	21.6		290 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 / 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	WD Sector
1-Jan-08	306	338	314	157	151	111	82	64	83	86	79	88	91	91	96	93	88	92	95	80	74	81	122	225	90	E
2-Jan-08	198	201	238	278	192	231	251	302	184	299	300	307	277	207	208	219	219	217	223	217	195	220	168	185	224	SW
3-Jan-08	99	96	110	92	93	342	305	304	273	298	324	314	304	286	306	301	262	40	74	79	87	88	85	102	54	NE
4-Jan-08	101	132	293	286	316	295	288	330	111	292	322	310	304	293	306	310	320	50	88	83	82	74	65	83	39	NE
5-Jan-08	75	25	11	28	351	238	264	314	312	288	269	230	225	234	271	275	281	300	292	293	301	286	289	235	292	WNW
6-Jan-08	179	334	280	288	312	307	304	262	280	302	309	311	317	314	298	305	315	311	294	286	273	287	285	289	298	WNW
7-Jan-08	271	273	297	296	280	273	285	278	307	308	309	277	275	270	274	292	319	310	321	304	304	311	320	280	292	WNW
8-Jan-08	295	330	288	305	344	269	314	301	295	300	286	289	273	260	299	329	341	13	130	96	149	240	294	302	303	WNW
9-Jan-08	305	285	307	65	76	76	98	114	99	103	110	91	127	314	306	280	309	325	319	305	314	301	284	313	18	NNE
10-Jan-08	313	353	198	147	318	295	306	293	281	174	281	150	164	174	206	177	200	115	123	123	86	106	331	311	209	SSW
11-Jan-08	305	291	280	296	313	310	290	167	187	261	279	190	282	281	270	290	318	321	311	290	225	193	300	331	282	WNW
12-Jan-08	348	183	176	305	310	334	289	306	300	300	312	306	284	312	286	301	302	313	234	9	192	171	220	140	291	WNW
13-Jan-08	168	68	98	139	125	107	181	154	157	247	145	130	113	122	106	102	91	101	116	307	321	301	322	204	135	SE
14-Jan-08	279	152	356	138	158	359	145	285	323	52	142	134	166	288	278	296	291	272	271	272	270	277	291	280	278	W
15-Jan-08	284	296	290	257	265	297	294	214	280	298	259	320	282	269	277	287	251	237	238	237	234	208	217	258	260	W
16-Jan-08	272	241	256	260	293	332	316	259	270	260	262	254	260	246	243	245	249	249	250	254	261	256	256	244	257	WSW
17-Jan-08	257	262	303	315	279	288	274	263	277	276	272	281	294	284	327	329	295	346	311	314	324	99	98	100	288	WNW
18-Jan-08	84	144	311	326	294	322	321	304	321	315	287	284	300	305	285	331	311	92	73	47	3	51	57	64	351	N
19-Jan-08	46	45	47	48	41	44	46	46	43	46	47	50	43	54	62	76	103	158	226	317	259	304	320	320	45	NE
20-Jan-08	298	302	274	280	230	256	225	273	318	305	303	313	284	276	273	255	291	297	298	309	304	320	290	294	287	WNW
21-Jan-08	300	275	341	345	307	322	292	276	253	248	243	247	261	243	246	240	254	287	282	288	260	259	271	296	263	W
22-Jan-08	274	271	267	297	298	285	251	246	248	244	254	301	248	267	242	267	346	89	79	289	302	300	297	297	277	W
23-Jan-08	297	307	355	223	323	304	336	329	312	314	289	273	297	278	299	286	319	320	328	291	9	335	118	59	311	NW
24-Jan-08	357	21	45	55	47	48	61	61	80	83	82	74	76	62	50	60	69	76	79	86	91	102	164	205	72	ENE
25-Jan-08	209	222	218	240	249	251	211	188	165	167	184	207	207	193	271	315	235	297	208	245	223	262	292	28	228	SW
26-Jan-08	306	160	169	168	181	208	222	209	153	105	128	166	123	129	50	102	83	303	306	303	293	300	302	299	283	WNW
27-Jan-08	299	302	300	297	299	300	302	301	299	302	303	305	302	327	341	336	345	341	327	312	290	300	309	314	308	NW
28-Jan-08	317	323	325	302	284	310	295	307	308	300	291	295	266	239	287	278	318	13	61	78	284	310	302	291	306	NW
29-Jan-08	308	310	295	308	301	282	307	305	287	58	79	110	277	266	277	287	60	88	146	270	284	282	297	257	295	WNW
30-Jan-08	243	238	249	211	216	201	260	299	289	155	155	115	103	85	62	63	61	59	56	31	30	22	60	88	82	E
31-Jan-08	83	51	45	284	309	312	322	2	36	84	79	75	61	27	23	53	62	55	113	96	72	78	81	100	49	NE
Hourly Avg	289	288	294	297	295	298	285	284	285	283	282	283	284	279	295	303	310	313	283	289	283	283	290	279		

PASZA - Henry Pirker Standard Deviation of Wind Direction Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 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
	84.8	72.6	36.9	18.9	10.7	5.3	4.1

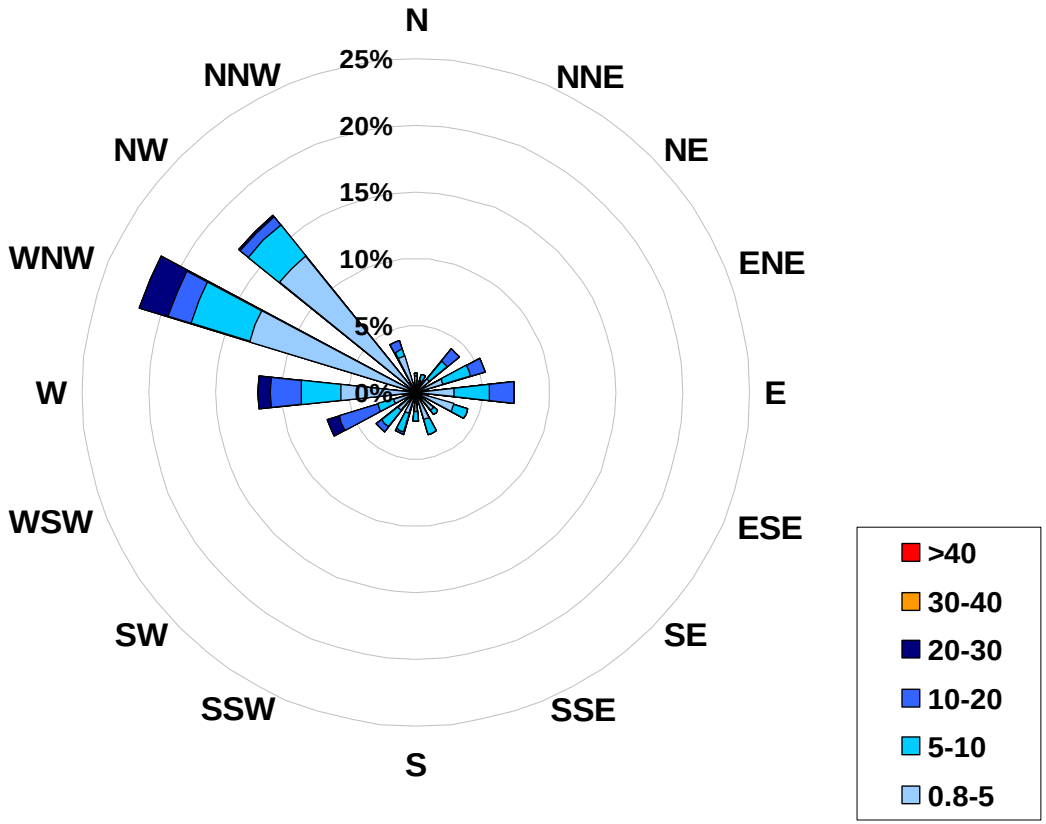
Status Flag Characters

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 / 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-Jan-08	53	28	62	76	33	17	39	13	9	11	10	13	7	5	5	5	7	8	11	15	6	6	54	26	76.0
2-Jan-08	37	66	41	60	41	73	77	51	65	73	52	10	32	63	19	45	15	9	7	15	24	27	34	19	77.5
3-Jan-08	37	31	38	18	23	68	47	68	79	47	35	64	33	37	18	70	85	50	9	12	10	18	11	12	85.0
4-Jan-08	12	83	42	60	90	63	35	67	62	43	59	42	51	34	23	20	50	20	8	6	10	15	9	24	89.9
5-Jan-08	8	30	24	10	58	43	35	49	28	38	55	35	12	28	11	7	14	7	29	59	75	41	28	61	74.9
6-Jan-08	50	21	81	16	16	79	36	58	37	20	7	12	9	9	13	11	12	17	7	12	9	7	8	14	81.5
7-Jan-08	9	23	14	13	12	8	8	13	10	14	15	13	7	11	8	17	8	14	12	14	16	11	21	18	22.9
8-Jan-08	20	15	44	33	20	45	10	18	17	38	21	14	11	30	41	27	19	35	40	22	33	66	16	17	66.2
9-Jan-08	19	11	23	30	26	17	23	33	27	19	19	25	45	22	20	34	13	18	38	15	17	24	26	19	45.3
10-Jan-08	18	62	69	47	33	11	20	21	66	29	82	70	33	23	61	39	66	19	25	48	36	92	22	52	92.1
11-Jan-08	16	21	27	21	28	27	40	82	37	46	56	66	67	14	44	34	15	24	76	41	62	58	59	68	81.8
12-Jan-08	52	45	58	56	69	45	32	13	24	17	9	18	26	62	84	28	34	67	77	90	61	60	83	84	90.0
13-Jan-08	92	60	46	28	41	27	27	63	57	17	53	63	23	11	12	20	14	8	50	85	69	55	46	74	92.5
14-Jan-08	80	80	49	31	83	47	30	43	51	49	19	32	59	27	52	7	6	9	10	4	3	9	8	6	82.8
15-Jan-08	6	6	14	16	8	14	28	16	32	41	25	29	10	4	9	16	9	7	5	5	8	12	14	32	40.7
16-Jan-08	23	19	10	10	37	37	36	5	6	7	8	9	7	6	5	6	5	5	6	8	4	5	4	5	37.3
17-Jan-08	5	14	8	15	4	6	6	5	5	5	5	6	7	10	23	14	34	13	11	7	52	8	9	10	51.9
18-Jan-08	44	77	11	21	29	9	10	13	23	30	17	15	9	9	21	51	21	84	13	25	44	23	11	16	84.2
19-Jan-08	12	14	12	7	9	8	9	11	10	10	10	9	12	18	17	11	20	19	57	14	59	13	15	12	59.1
20-Jan-08	16	19	13	36	29	25	14	27	16	10	31	7	12	6	23	23	26	45	46	11	10	20	29	13	45.9
21-Jan-08	23	75	73	32	21	39	15	9	8	8	4	6	8	5	7	9	22	34	10	14	45	13	9	9	75.1
22-Jan-08	22	13	25	7	5	18	11	11	23	7	21	57	50	22	48	45	26	16	65	19	14	17	18	22	64.6
23-Jan-08	17	18	43	45	23	19	47	12	66	65	25	18	29	18	15	20	7	12	38	35	70	87	73	30	87.0
24-Jan-08	79	23	12	7	13	13	15	11	7	5	5	6	7	8	9	10	6	7	6	7	7	12	26	15	79.4
25-Jan-08	11	8	11	11	13	17	9	16	9	16	18	30	53	52	51	19	58	90	34	8	8	39	36	71	90.1
26-Jan-08	21	59	12	49	31	15	19	23	83	19	19	17	74	35	40	41	53	34	5	6	5	5	4	4	82.6
27-Jan-08	4	4	4	5	4	4	4	4	4	4	4	4	6	16	5	8	12	9	12	6	6	6	5	6	15.5
28-Jan-08	6	10	13	13	16	9	7	10	10	11	8	11	33	36	8	45	19	39	15	28	77	12	8	15	77.2
29-Jan-08	17	11	18	19	17	20	20	16	22	66	31	64	12	46	12	18	83	37	54	40	13	11	15	26	83.5
30-Jan-08	31	17	15	30	14	20	32	16	66	14	26	26	31	23	15	12	14	14	20	23	19	14	21	19	65.9
31-Jan-08	16	22	31	38	9	15	11	25	33	31	40	30	30	33	26	26	24	22	19	57	27	32	19	22	56.8
Hourly Max	92	83	81	76	90	79	77	82	83	73	82	70	74	63	84	70	85	90	77	90	77	92	83	84	

1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for January 2008



Calms:	**0%**

Frequency Distribution of Wind in km/hr			
Range			**Frequency (hrs)**
0.8	<	5	421
5	to	10	192
10	to	20	99
20	to	30	32
30	to	40	0
	>	40	0
Total Non-Zero Values			744

PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

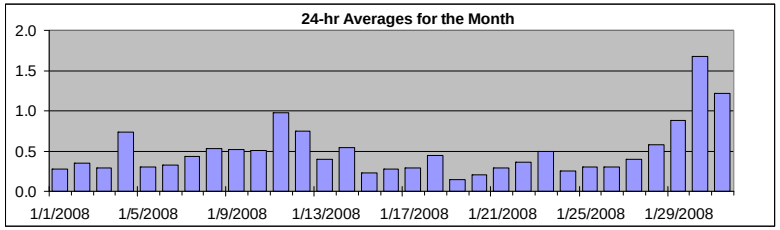
Station: Evergreen Park
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	3.0	ppb	30-Jan	19:00 20:00
Maximum 24-hr Average:	1.7	ppb	30-Jan	



AIC Time:	32 hrs	Operational Time:	709 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.9%

Percentile	99	95	75	50	25	5	1	Average	Median
	2.1	1.5	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**

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-Jan-08	1	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	0.6
2-Jan-08	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0.3	0.8
3-Jan-08	0	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0.3	0.9
4-Jan-08	0	0	0	0	0	0	0	1	1	0	1	A	1	2	2	2	2	2	1	1	1	0	0	0	0.7	2.1
5-Jan-08	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
6-Jan-08	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
7-Jan-08	0	0	0	0	0	0	0	0	A	1	0	0	0	1	1	1	1	0	0	1	1	1	1	1	0.4	0.8
8-Jan-08	1	1	1	1	0	0	0	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	1.2
9-Jan-08	0	0	0	0	0	0	A	0	0	1	1	0	0	1	1	1	1	0	0	0	0	1	1	0	0.5	1.2
10-Jan-08	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0.5	1.0
11-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1.0	1.7
12-Jan-08	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	1	0	1	0	0.8	1.3
13-Jan-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	1	0.4	1.0
14-Jan-08	1	A	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.3
15-Jan-08	A	0	0	0	0	0	0	0	0	0	0	1	C	C	A	0	0	0	0	0	0	0	0	0	0.2	1.0
16-Jan-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
17-Jan-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
18-Jan-08	0	0	0	0	0	A	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0.4	1.8
19-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
20-Jan-08	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
21-Jan-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	0.5
22-Jan-08	0	Z	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0.4	0.6
23-Jan-08	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	0	0.5	1.4
24-Jan-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	0.6
25-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0.3	0.6
26-Jan-08	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.7
27-Jan-08	0	0	A	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0.4	0.6
28-Jan-08	0	A	0	0	0	0	0	0	0	0	1	1	1	1	2	2	1	0	0	0	0	0	0	0	0.6	1.8
29-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1	2	2	2	2	2	A	0.9	2.1
30-Jan-08	1	1	1	2	1	1	2	1	1	2	2	2	2	2	2	2	1	2	2	3	3	2	A	1	1.7	3.0
31-Jan-08	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	A	1	1	1.2	2.3
Hourly Avg	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4		
Hourly Max	1.1	1.1	1.5	1.5	1.4	1.0	1.5	1.4	1.4	1.7	2.1	2.3	2.1	2.2	2.3	2.1	2.0	1.8	2.4	3.0	2.7	1.9	1.7	1.4		

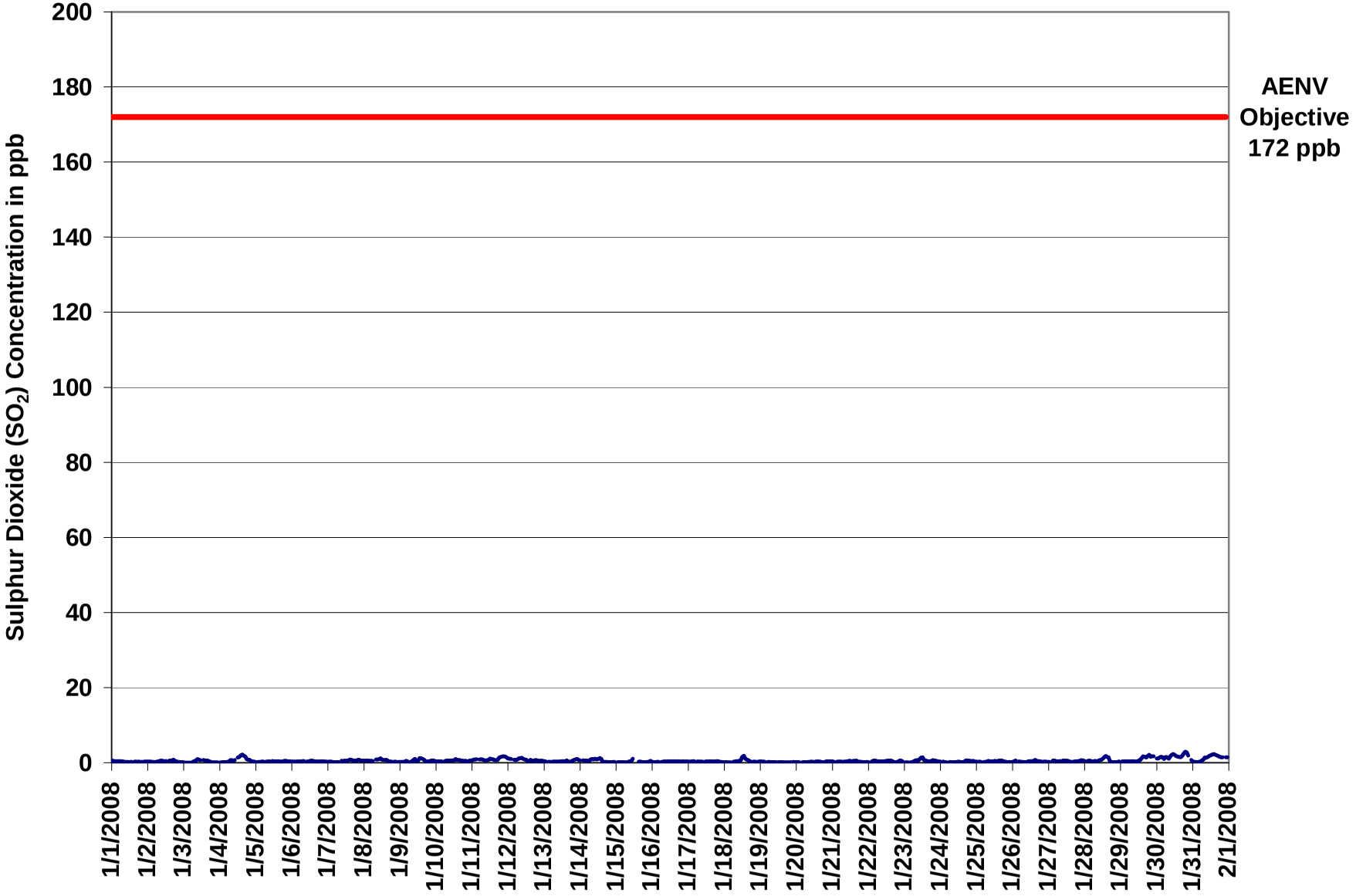


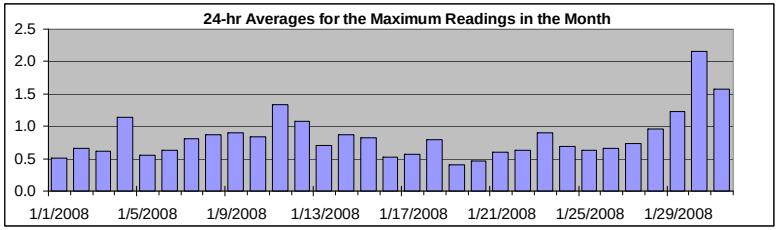
Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	7.3	ppb	15-Jan	11:00 12:00
Maximum 24-hr Value:	2.2	ppb	30-Jan	

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
	2.7	1.9	1.0	0.7	0.5	0.3	0.2	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**

Day	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-Jan-08	1	1	1	1	1	1	1	1	1	0	0	0	0	1	A	1	0	0	1	0	0	1	1	1	0.5	1.1
2-Jan-08	1	0	1	1	0	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0.7	1.2
3-Jan-08	0	0	0	0	0	0	0	1	1	1	1	1	A	1	1	1	1	1	0	1	0	0	0	0	0.6	1.3
4-Jan-08	0	0	0	0	0	0	1	1	1	1	1	A	2	2	3	3	3	3	1	1	1	1	1	1	1.1	2.7
5-Jan-08	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
6-Jan-08	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
7-Jan-08	1	1	1	0	0	0	0	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.0
8-Jan-08	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.9	1.4
9-Jan-08	1	1	1	1	1	1	A	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	0.9	1.7
10-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	0.8	1.7
11-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	2	2	2	2	2	2	1.3	1.9
12-Jan-08	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6
13-Jan-08	1	1	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	1	1	1	1	0.7	1.4
14-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0.9	1.9
15-Jan-08	A	0	0	0	0	1	0	0	0	0	1	7	C	C	A	0	0	0	0	0	0	1	0	1	0.8	7.3
16-Jan-08	1	0	0	1	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.5	0.8
17-Jan-08	1	1	1	1	1	A	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0	0.6	0.9
18-Jan-08	0	0	0	0	0	A	1	1	1	1	1	1	3	2	1	1	1	1	1	0	1	0	0	1	0.8	3.0
19-Jan-08	1	1	1	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
20-Jan-08	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	0.5	0.7
21-Jan-08	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0.6	1.1
22-Jan-08	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0.6	0.9
23-Jan-08	A	0	0	0	0	0	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	0.9	2.0
24-Jan-08	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	4	1	0.7	4.4
25-Jan-08	0	0	1	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.6	1.3
26-Jan-08	0	1	1	A	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0.7	1.3
27-Jan-08	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0.7	1.3
28-Jan-08	1	A	1	1	1	0	1	1	1	1	2	1	1	2	2	2	2	1	0	0	0	0	0	1	1.0	2.2
29-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	2	2	2	A	1.2	2.5
30-Jan-08	2	1	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	3	4	4	2	A	1	2.2	3.6
31-Jan-08	1	1	1	0	0	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	A	2	2	1.6	2.5
Hourly Avg	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.9	1.1	1.1	1.1	1.1	1.0	1.0	0.9	0.8	0.9	0.8	0.8	0.9	0.7		
Hourly Max	1.8	1.3	2.1	1.9	1.9	1.6	1.9	2.0	2.1	2.2	2.5	7.3	3.0	2.4	2.7	2.6	2.6	2.7	3.0	3.5	3.6	2.4	4.4	1.8		

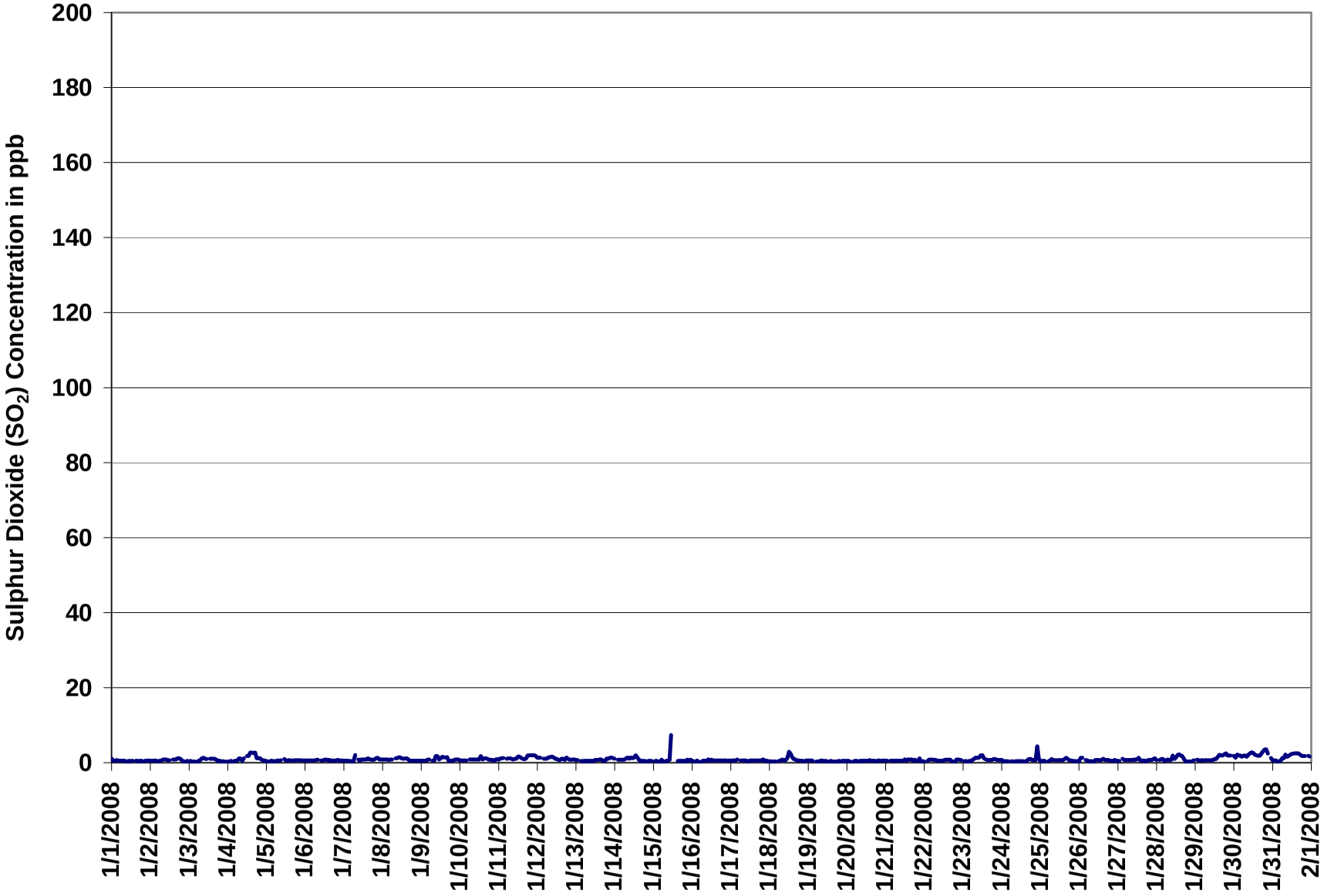
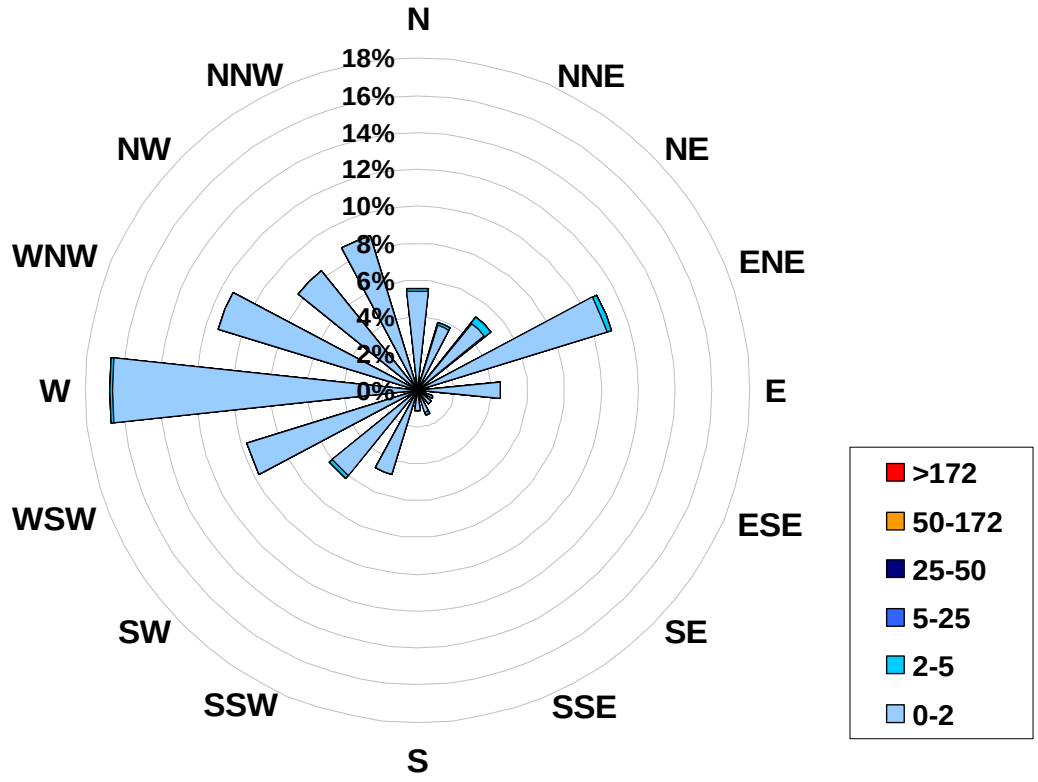


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Evergreen Park Site for January 2008



Calms: 0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	698
2	to	5	11
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			709

PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

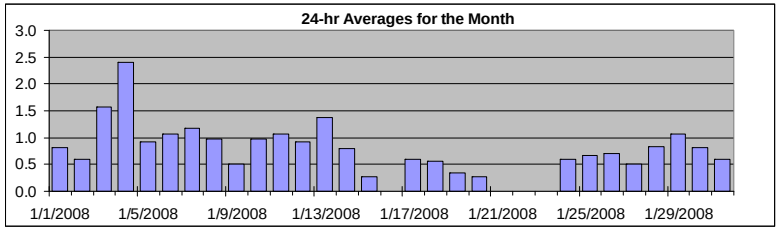
Station: Evergreen Park
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: **Alberta Environment:** 1-hr na ppb | 24-hr na ppb

Summary

Maximum 1-hr Average:	10.0	ppb	4-Jan	12:00 13:00
Maximum 24-hr Value:	2.4	ppb	4-Jan	



AIC Time:	34 hrs	Operational Time:	629 hrs
Calibration Time:	10 hrs	AMD Operational Uptime:	90.5%

Percentile	99	95	75	50	25	5	1	Average	Median
	3.1	1.8	1.0	0.7	0.5	0.2	0.0	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-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	1	1	1	0.8	1.3
2-Jan-08	D	D	D	0	0	0	0	0	0	0	0	1	1	A	0	1	1	1	1	1	1	0	0	1	0.6	1.4
3-Jan-08	1	0	1	1	1	1	2	3	3	3	2	3	A	2	2	2	2	1	1	1	1	1	1	1	1.6	3.2
4-Jan-08	1	1	1	2	2	2	2	3	3	2	3	A	10	5	4	3	3	2	2	1	1	1	1	1	2.4	10.0
5-Jan-08	1	0	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	0.9	1.6
6-Jan-08	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1.1	1.6
7-Jan-08	1	1	2	2	1	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6
8-Jan-08	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	D	1.0	1.6
9-Jan-08	0	0	1	0	0	1	A	1	1	0	1	1	0	0	1	1	1	0	0	0	0	1	2	1	0.5	1.6
10-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
11-Jan-08	2	2	2	1	A	1	1	1	1	1	0	1	0	0	0	1	1	1	2	1	1	1	1	1	1.1	2.1
12-Jan-08	1	1	1	A	1	0	D	0	3	3	2	1	1	1	0	1	1	1	1	0	0	1	1	1	0.9	2.8
13-Jan-08	D	D	A	1	0	1	1	1	1	1	2	3	3	2	2	1	1	1	1	1	1	2	1	1	1.4	3.3
14-Jan-08	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0.8	1.6
15-Jan-08	A	0	0	0	0	0	0	0	0	0	1	0	0	0	C	C	C	C	A	0	0	0	0	1	0.3	0.6
16-Jan-08	1	1	0	1	0	A	0	0	0	0	C	C	C	C	C	A	1	1	1	1	1	1	1	0	N	0.9
17-Jan-08	1	0	0	1	1	A	1	1	1	0	1	0	1	0	0	1	1	1	1	0	1	1	1	1	0.6	0.9
18-Jan-08	D	1	1	0	1	A	D	D	D	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.6	0.9
19-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0.3	0.6
20-Jan-08	1	0	0	A	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.9
21-Jan-08	0	0	A	0	1	1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	N	0.6
22-Jan-08	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	N	0.0
23-Jan-08	A	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	M	M	A	1	1	1	N	1.1
24-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.9
25-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0.7	1.0
26-Jan-08	1	1	2	A	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.7	2.1
27-Jan-08	0	0	A	0	0	1	1	0	0	1	0	0	0	1	0	0	0	0	1	0	1	1	1	1	0.5	0.7
28-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.8	1.6
29-Jan-08	A	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.6
30-Jan-08	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	1.2
31-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.9
Hourly Avg	0.8	0.8	0.9	0.8	0.8	0.8	0.9	0.9	1.0	0.9	0.9	0.9	1.2	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.8		
Hourly Max	1.8	2.1	2.1	1.7	2.1	1.8	2.3	2.9	3.2	2.7	2.5	3.3	10.0	4.7	4.3	3.3	2.8	1.8	1.6	1.6	1.5	1.5	1.6	1.6		

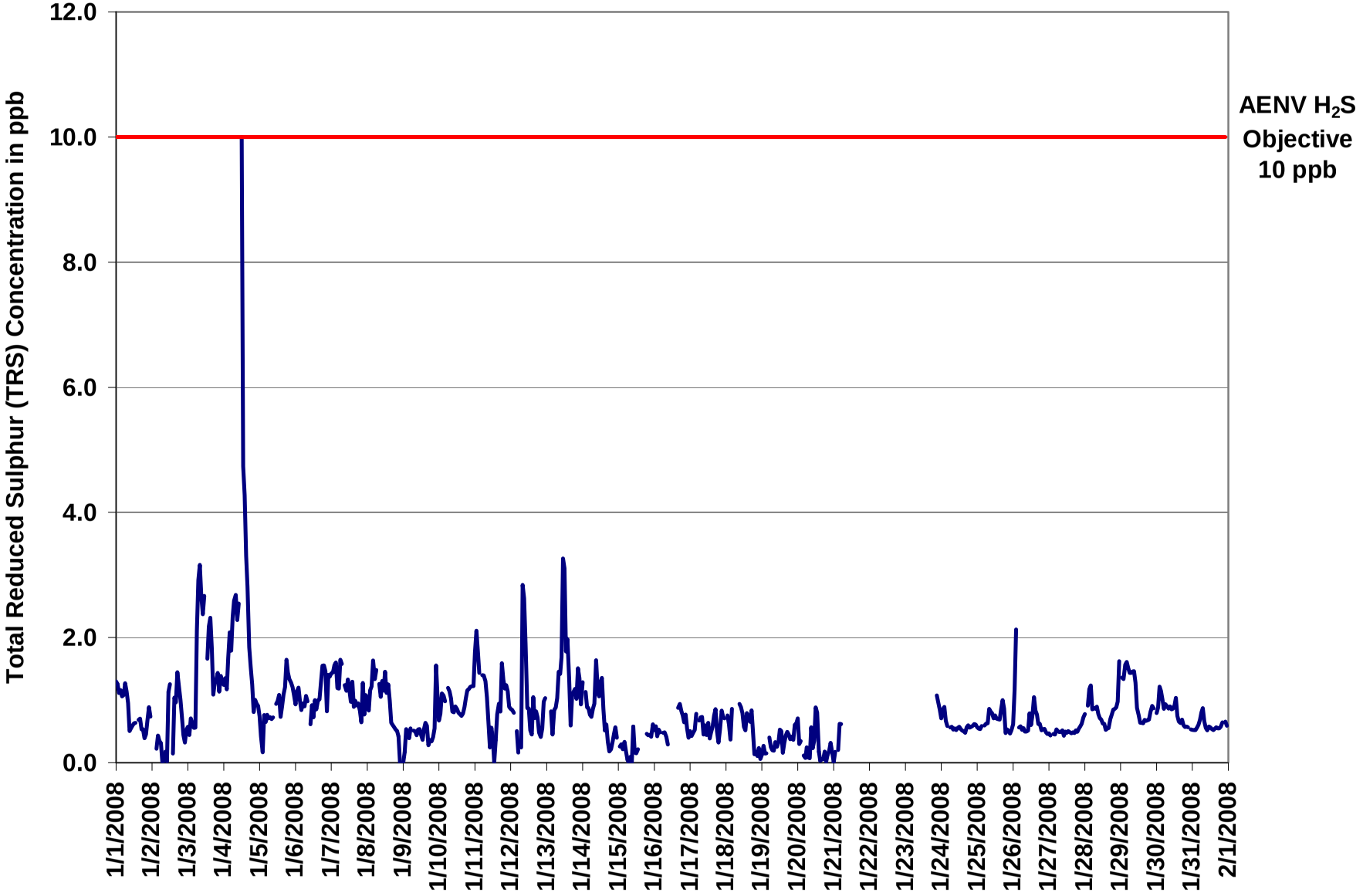


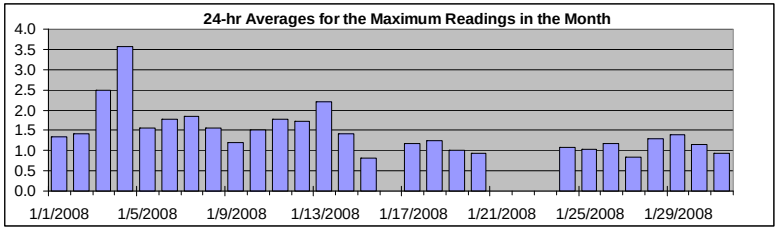
Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	15.3	ppb	4-Jan	12:00 13:00
Maximum 24-hr Value:	3.6	ppb	4-Jan	

AIC Time:	33 hrs	Operational Time:	629 hrs
Calibration Time:	10 hrs	AMD Operational Uptime:	90.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	4.2	2.8	1.7	1.3	1.0	0.8	0.6	1.5 ppb	1.3 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**

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-Jan-08	2	2	1	2	2	2	2	2	2	1	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1.3	1.9
2-Jan-08	D	D	D	1	1	1	1	1	1	1	1	2	2	A	1	2	2	2	2	2	1	2	1	1	1.4	2.5
3-Jan-08	1	1	1	1	1	1	4	4	4	4	4	4	A	3	3	4	3	2	2	2	2	2	2	2	2.5	4.4
4-Jan-08	2	3	3	3	3	3	4	3	3	3	3	A	15	8	5	4	4	3	2	2	1	2	2	1	3.6	15.3
5-Jan-08	1	1	1	2	1	1	2	1	1	2	A	2	1	2	1	1	2	2	2	2	2	2	2	2	1.6	2.2
6-Jan-08	2	2	2	2	1	2	2	2	2	A	2	2	1	2	2	2	2	2	2	2	3	2	2	2	1.8	3.4
7-Jan-08	2	2	2	2	2	2	2	2	A	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	1.8	2.5
8-Jan-08	2	2	2	2	2	2	2	A	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	D	1.6	2.1
9-Jan-08	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	1.2	4.2
10-Jan-08	1	2	2	2	1	A	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1.5	1.8
11-Jan-08	3	3	2	2	A	2	2	2	2	1	1	1	2	1	1	1	2	1	2	2	2	2	2	2	1.8	3.0
12-Jan-08	1	2	1	A	1	1	D	2	4	3	3	1	2	1	2	2	1	1	1	1	1	1	2	2	1.7	3.6
13-Jan-08	D	D	A	2	1	1	1	2	2	2	3	6	4	3	3	2	2	2	2	2	2	3	2	1	2.2	5.8
14-Jan-08	2	A	2	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1.4	2.2
15-Jan-08	A	1	1	1	1	1	1	0	1	1	1	1	1	1	C	C	C	C	A	1	1	1	1	1	0.8	1.3
16-Jan-08	1	1	1	1	1	A	1	1	1	1	C	C	C	C	C	A	1	1	1	1	1	1	1	1	N	1.5
17-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.2	1.5
18-Jan-08	D	1	1	1	2	A	D	D	D	1	2	1	1	1	2	2	1	1	1	1	1	1	1	1	1.3	1.9
19-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
20-Jan-08	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	1.4
21-Jan-08	0	1	A	1	1	1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	N	1.4
22-Jan-08	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	N	0.0
23-Jan-08	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	M	M	A	1	1	1	N	1.4
24-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1.1	4.0
25-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
26-Jan-08	1	2	4	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	3.5
27-Jan-08	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	1.2
28-Jan-08	1	A	1	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1.3	2.4
29-Jan-08	A	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1.4	2.0
30-Jan-08	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.2	1.7
31-Jan-08	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	1.3
Hourly Avg	1.3	1.4	1.5	1.4	1.3	1.3	1.5	1.5	1.5	1.5	1.5	1.5	1.9	1.6	1.5	1.5	1.5	1.3	1.3	1.3	1.3	1.4	1.6	1.4		
Hourly Max	2.8	3.0	3.5	2.6	2.7	2.5	4.1	3.7	4.4	4.2	3.7	5.8	15.3	8.5	5.2	4.0	3.8	2.9	2.3	2.1	3.4	2.7	4.2	3.1		

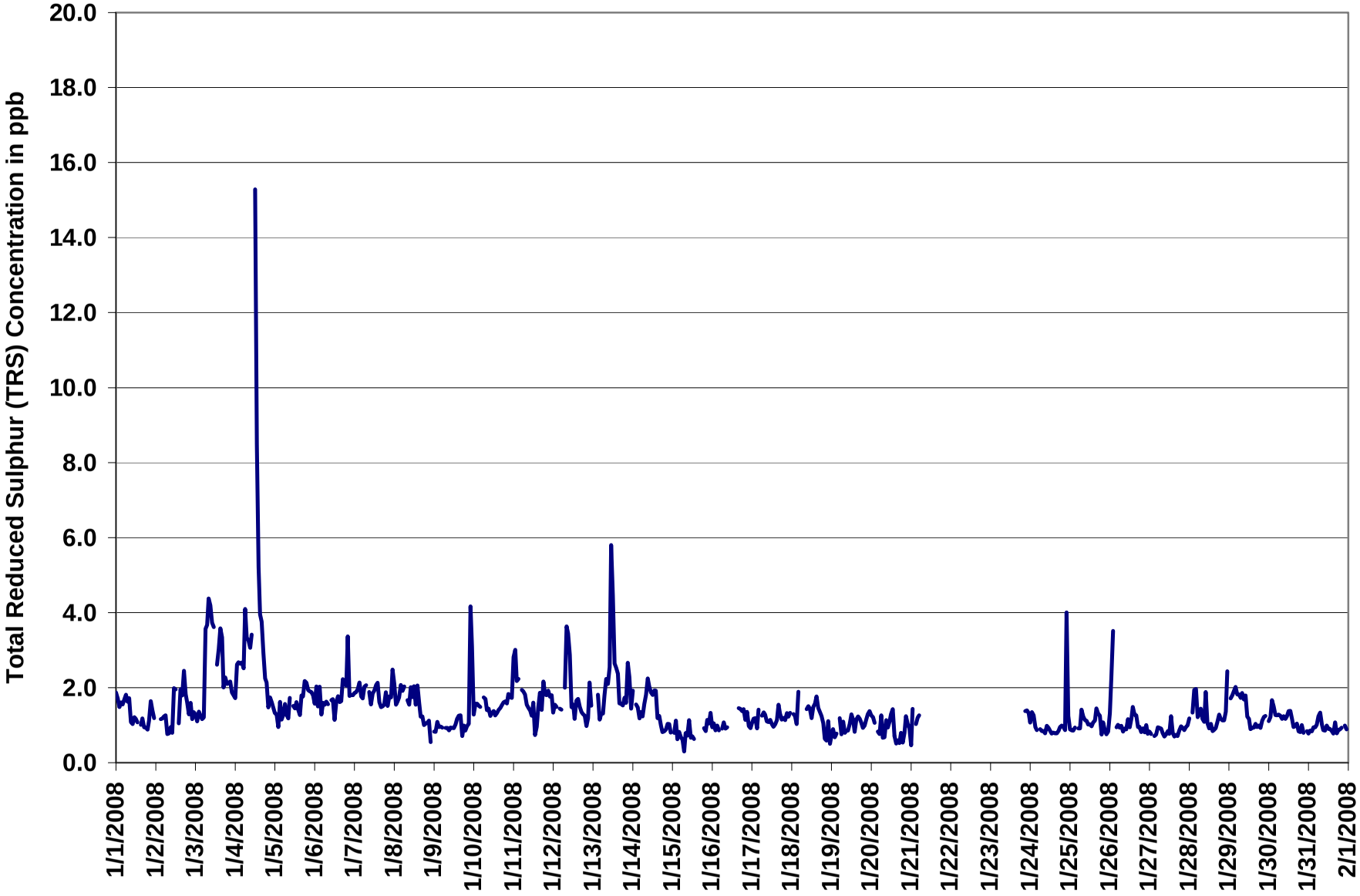
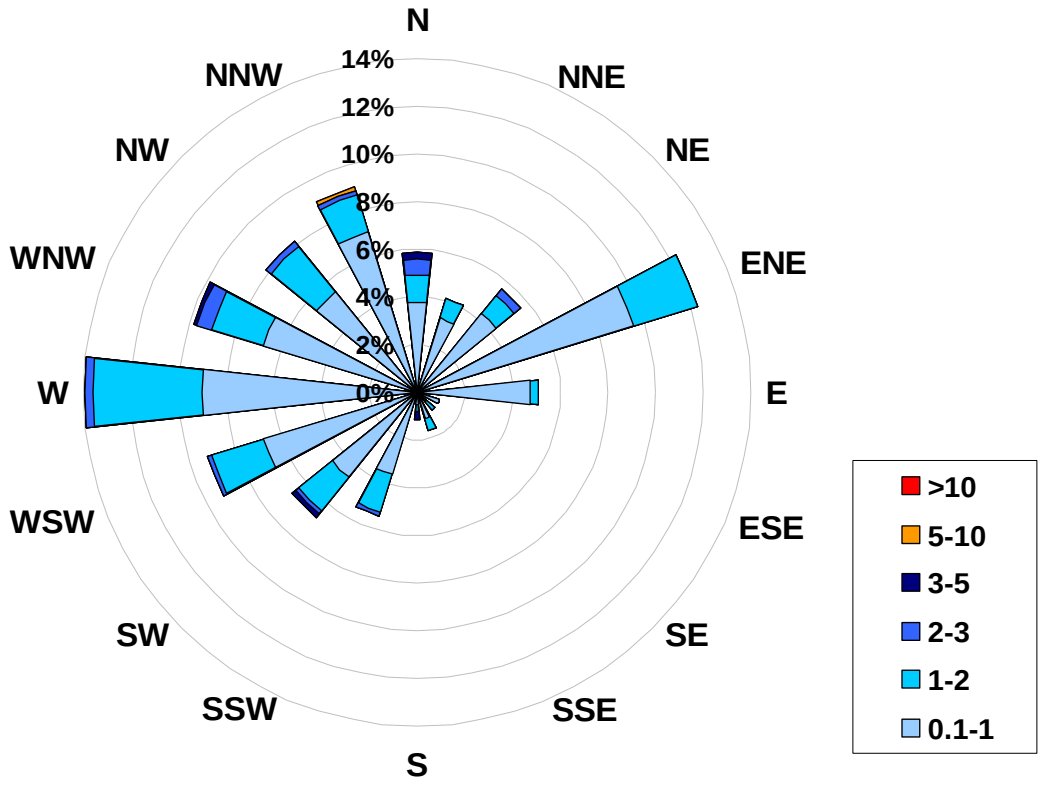


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Evergreen Park Site for January 2008



Calms:	**0%**

Frequency Distribution of TRS in ppb			
Range			**Frequency (hrs)**
0.1	<	1	457
1	to	2	147
2	to	3	18
3	to	5	6
5	to	10	1
	>	10	0
Total Non-Zero Values			629

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

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

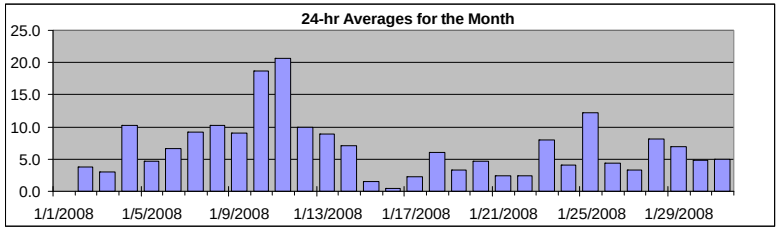
Station: Evergreen Park
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	49.9	µg/m³	10-Jan	13:00 14:00
Maximum 24-hr Value:	20.7	µg/m³	11-Jan	



AIC Time:	0 hrs	Operational Time:	729 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	98.3%

Percentile	99	95	75	50	25	5	1	Average / Median		Geomean
	28.0	19.7	8.4	5.1	2.7	0.0	0.0	6.7	5 µg/m³	5.3 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**

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-Jan-08	6	6	5	5	2	2	3	3	4	3	2	1	D	0	D	D	D	D	D	D	D	0	1	2	N	5.8
2-Jan-08	2	3	1	3	3	2	3	3	4	7	8	3	5	6	6	7	7	8	5	6	0	0	0	0	3.8	7.8
3-Jan-08	D	0	0	0	0	0	2	4	6	9	8	11	11	7	3	5	4	0	0	0	0	0	0	0	3.0	10.9
4-Jan-08	0	1	4	5	6	7	8	9	7	6	14	20	13	28	32	29	23	12	4	4	1	0	D	0	10.2	32.1
5-Jan-08	1	1	1	2	3	4	3	5	4	7	8	10	2	5	5	5	5	6	6	7	6	6	6	5	4.7	10.4
6-Jan-08	6	7	9	11	10	8	8	8	8	6	8	5	2	6	6	6	7	7	6	7	8	4	3	4	6.7	10.9
7-Jan-08	4	4	4	3	3	4	5	6	11	15	16	21	11	12	9	13	15	12	11	11	11	8	6	6	9.2	20.8
8-Jan-08	6	5	7	7	4	6	6	11	12	12	17	22	13	20	19	19	17	10	6	4	5	5	6	8	10.3	21.9
9-Jan-08	8	8	9	9	8	7	7	6	6	8	9	7	7	9	11	13	12	10	10	10	11	14	11	8	9.0	13.7
10-Jan-08	8	7	8	6	7	8	11	12	12	16	16	15	15	50	29	35	37	30	27	24	20	18	19	19	18.7	49.9
11-Jan-08	21	26	27	27	25	26	25	21	17	18	17	21	20	15	20	16	16	16	23	22	22	21	19	16	20.7	27.4
12-Jan-08	15	14	13	11	8	8	9	13	14	14	14	14	8	6	4	11	8	7	9	9	7	7	8	9	10.0	14.8
13-Jan-08	7	7	7	6	6	7	8	8	10	8	10	14	17	10	11	10	8	8	6	7	9	11	9	7	8.8	17.4
14-Jan-08	6	5	7	4	5	6	4	8	11	10	13	10	13	22	15	3	D	D	D	0	0	0	9	0	7.2	22.4
15-Jan-08	0	0	1	1	1	0	0	0	1	2	5	5	C	C	4	4	5	2	2	0	0	0	0	1	1.6	5.3
16-Jan-08	0	0	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0.5	2.2
17-Jan-08	1	2	5	5	3	2	2	2	3	2	2	1	1	3	1	2	4	6	2	1	1	2	3	1	2.3	6.1
18-Jan-08	1	0	1	2	6	5	2	4	6	7	12	12	10	10	16	15	13	4	3	3	4	2	1	2	6.0	15.7
19-Jan-08	2	1	2	1	0	1	2	2	3	5	5	6	6	5	5	4	3	3	3	4	3	3	5	5	3.3	5.6
20-Jan-08	5	5	5	5	6	5	5	7	7	7	8	6	3	3	3	5	4	3	1	3	4	2	5	4	4.6	8.3
21-Jan-08	5	5	5	4	5	5	3	0	0	1	1	1	0	0	4	8	4	3	2	0	0	0	0	1	2.5	8.5
22-Jan-08	1	4	3	4	3	3	2	1	3	4	3	2	1	1	0	0	1	0	0	1	4	7	6	4	2.5	7.3
23-Jan-08	4	5	4	6	10	9	8	7	11	10	18	27	22	5	2	1	4	7	4	8	7	6	5	4	8.0	27.2
24-Jan-08	5	17	26	7	2	1	1	0	2	1	2	1	1	1	3	3	2	3	2	3	2	2	3	9	4.1	25.6
25-Jan-08	12	13	11	13	13	12	12	13	16	21	23	23	20	14	13	14	17	17	13	0	0	0	1	2	12.2	23.1
26-Jan-08	2	7	10	7	6	3	2	2	2	1	2	4	3	4	7	8	7	4	3	4	4	4	5	4	4.4	9.7
27-Jan-08	3	4	3	4	3	3	3	3	3	3	3	3	2	3	2	3	4	4	4	4	3	3	4	4	3.3	4.1
28-Jan-08	4	5	4	5	5	5	7	7	6	7	7	6	5	6	4	3	4	14	15	15	16	15	16	15	8.1	16.2
29-Jan-08	10	7	8	6	6	5	6	7	7	9	7	5	6	6	4	5	6	7	5	6	8	12	9	9	6.9	11.6
30-Jan-08	8	9	7	6	5	6	5	5	5	5	5	5	4	4	4	3	3	4	4	4	4	4	3	2	4.8	8.6
31-Jan-08	2	3	4	4	4	5	7	8	5	5	5	5	4	5	5	5	5	6	5	6	6	5	5	5	4.9	7.8
Hourly Avg	5.2	5.9	6.4	5.9	5.4	5.3	5.5	6.0	6.6	7.4	8.7	9.2	7.6	8.9	8.2	8.5	8.4	7.3	6.3	5.8	5.6	5.2	5.6	5.1		
Hourly Max	20.8	26.1	26.5	27.4	25.1	26.4	24.9	21.4	17.2	20.9	22.8	27.2	21.5	49.9	32.1	34.9	37.2	30.0	26.7	23.7	21.7	21.0	19.5	18.9		

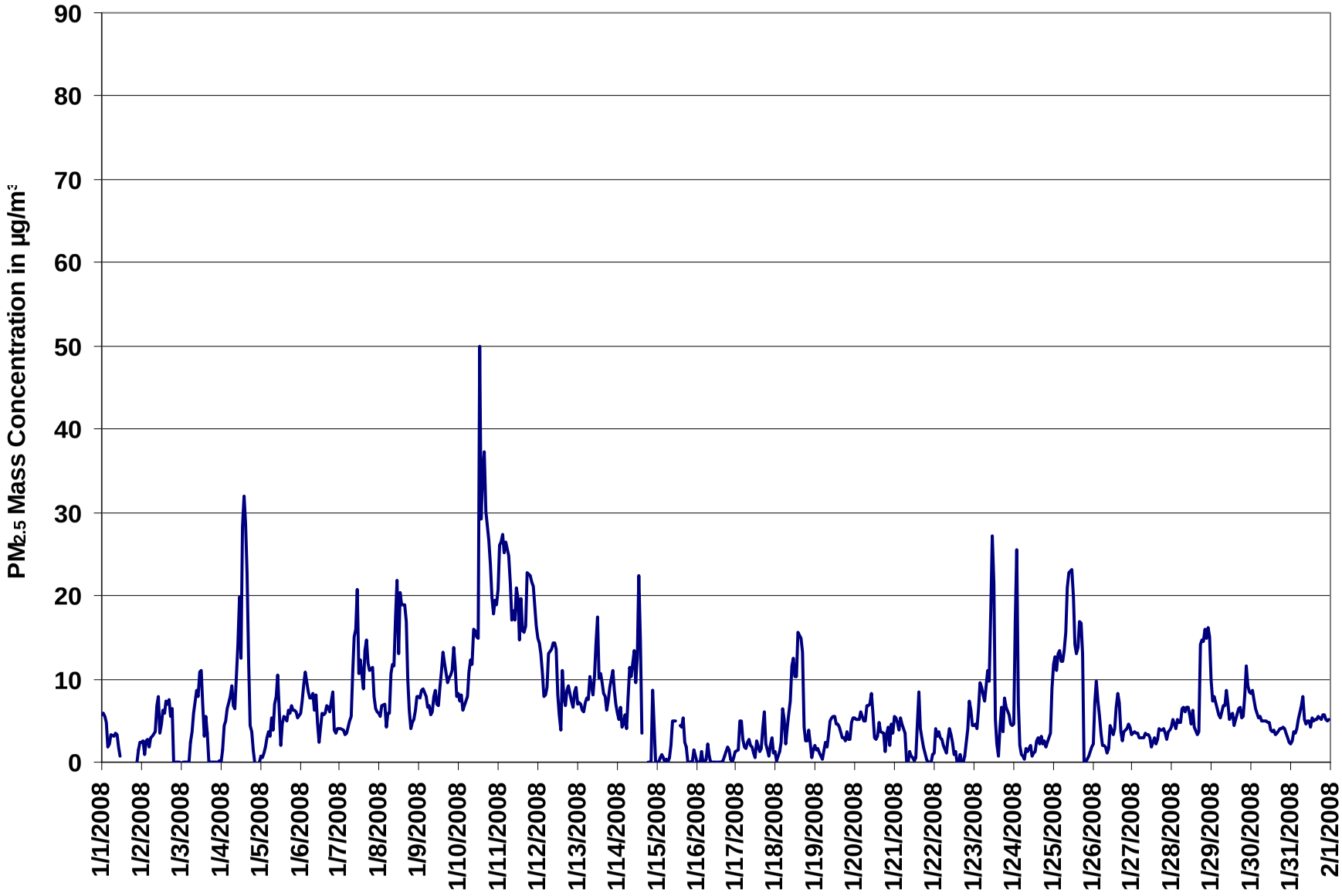


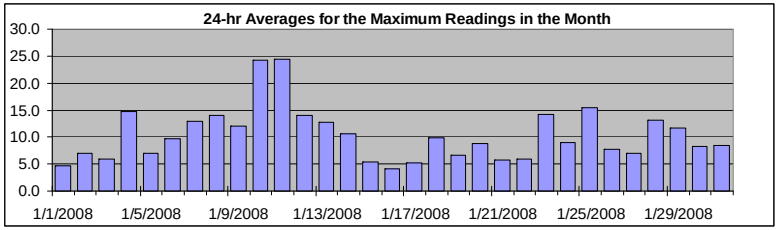
Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	83.2	µg/m³	10-Jan	13:00 14:00
Maximum 24-hr Value:	24.4	µg/m³	11-Jan	

AIC Time:	0 hrs	Operational Time:	741 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.9%

Percentile	99	95	75	50	25	5	1	Average / Median		Geomean
	37.5	25.3	12.4	8.7	5.9	2.0	0.0	10.4	9 µg/m˘	9.3 µg/m˘

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-Jan-08	9	11	10	15	6	7	7	6	6	6	5	3	0	10	2	0	0	0	0	0	0	1	3	6	4.7	14.6
2-Jan-08	5	7	5	5	5	4	5	5	6	9	11	10	7	9	9	11	10	11	11	18	0	1	0	4	7.0	17.9
3-Jan-08	0	1	2	1	3	2	6	6	10	11	12	21	20	10	7	8	7	3	2	0	1	3	3	4	6.0	20.7
4-Jan-08	1	6	6	8	9	9	10	11	10	12	21	27	28	36	41	34	26	25	10	6	4	6	1	5	14.6	40.6
5-Jan-08	3	2	3	4	6	6	5	8	8	10	10	13	6	6	7	8	6	8	8	9	9	8	8	7	7.0	12.8
6-Jan-08	9	9	12	13	12	11	11	10	10	11	11	7	6	14	14	8	9	10	8	10	11	7	5	6	9.8	14.0
7-Jan-08	6	7	6	6	6	7	8	15	15	20	25	25	14	15	11	18	18	14	14	13	14	14	9	10	12.9	24.6
8-Jan-08	9	10	11	10	8	10	13	13	15	15	25	25	16	24	22	24	22	13	10	7	7	8	9	11	14.0	25.5
9-Jan-08	10	11	12	11	12	9	9	8	10	11	12	10	12	12	17	16	14	12	13	13	13	16	14	11	12.0	16.5
10-Jan-08	10	10	10	8	9	11	13	16	15	23	19	19	25	83	36	44	46	36	33	28	24	20	22	22	24.3	83.2
11-Jan-08	24	30	30	31	27	29	28	25	19	23	19	24	26	18	22	24	19	21	26	27	27	23	22	19	24.4	30.5
12-Jan-08	17	17	16	14	11	10	13	16	16	19	17	20	12	10	21	22	11	11	10	12	9	10	12	13	14.1	21.6
13-Jan-08	11	10	10	9	9	10	11	11	13	12	17	20	23	25	13	13	10	11	10	11	12	15	12	10	12.8	25.3
14-Jan-08	9	7	9	7	6	9	6	10	16	14	19	12	17	33	26	7	2	D	0	2	1	2	27	0	10.5	33.2
15-Jan-08	1	2	3	2	3	2	2	2	4	6	14	22	C	C	7	6	10	8	10	2	4	3	3	4	5.4	21.7
16-Jan-08	5	3	4	11	2	2	5	7	4	3	3	7	5	2	1	4	4	4	4	6	4	4	3	3	4.1	10.9
17-Jan-08	5	4	7	8	5	6	4	5	6	4	5	3	4	5	4	3	9	9	6	4	5	5	7	4	5.2	9.1
18-Jan-08	4	4	5	8	11	11	6	8	10	12	15	15	15	15	19	19	19	9	6	7	7	6	3	5	9.9	19.3
19-Jan-08	5	4	4	4	4	4	6	6	7	8	8	9	9	8	8	7	6	6	6	7	7	6	9	10	6.7	10.0
20-Jan-08	10	11	10	11	11	10	9	11	11	12	13	10	8	6	7	8	6	7	5	6	8	7	8	7	8.8	13.0
21-Jan-08	8	8	8	7	9	9	9	3	3	5	4	4	1	2	9	14	6	6	7	3	2	3	2	4	5.7	13.6
22-Jan-08	9	8	6	7	7	6	6	5	8	7	7	5	3	4	4	2	4	0	4	6	7	10	9	8	5.9	10.3
23-Jan-08	9	8	9	11	15	14	12	11	21	15	41	42	30	14	6	2	11	13	7	13	11	9	8	8	14.2	41.7
24-Jan-08	9	42	38	15	6	3	4	3	8	5	4	4	3	5	6	6	5	5	4	5	4	6	13	14	9.1	42.4
25-Jan-08	19	18	14	16	15	15	14	16	19	26	25	26	23	17	16	16	20	20	18	3	0	5	4	5	15.5	26.0
26-Jan-08	5	11	14	10	8	7	5	5	6	3	4	8	5	8	14	14	9	10	7	6	7	7	8	7	7.8	14.0
27-Jan-08	7	7	6	7	7	6	6	6	7	7	7	7	5	9	6	6	8	7	8	8	8	7	7	8	6.9	8.6
28-Jan-08	9	10	9	10	10	10	11	11	10	11	10	10	8	12	11	8	7	23	20	19	21	20	24	23	13.1	23.6
29-Jan-08	17	13	13	12	12	11	11	13	12	14	11	10	11	11	8	8	10	11	9	9	15	16	13	12	11.6	17.0
30-Jan-08	12	12	11	10	11	9	9	8	8	9	8	7	7	7	8	8	7	7	7	7	6	6	5	6	8.2	12.5
31-Jan-08	5	7	8	7	7	9	12	11	8	8	8	9	8	9	8	8	9	10	9	8	9	8	8	9	8.4	12.1
Hourly Avg	8.5	10.0	10.1	9.6	8.7	8.6	8.9	9.4	10.4	11.4	13.3	13.9	11.9	14.6	12.6	12.1	11.3	11.0	9.4	8.8	8.3	8.4	9.1	8.5		
Hourly Max	24.5	42.4	38.2	30.5	27.3	29.2	27.6	25.4	21.4	26.0	41.2	41.7	30.3	83.2	40.6	44.3	45.6	36.4	32.9	27.5	27.3	23.1	26.5	23.2		

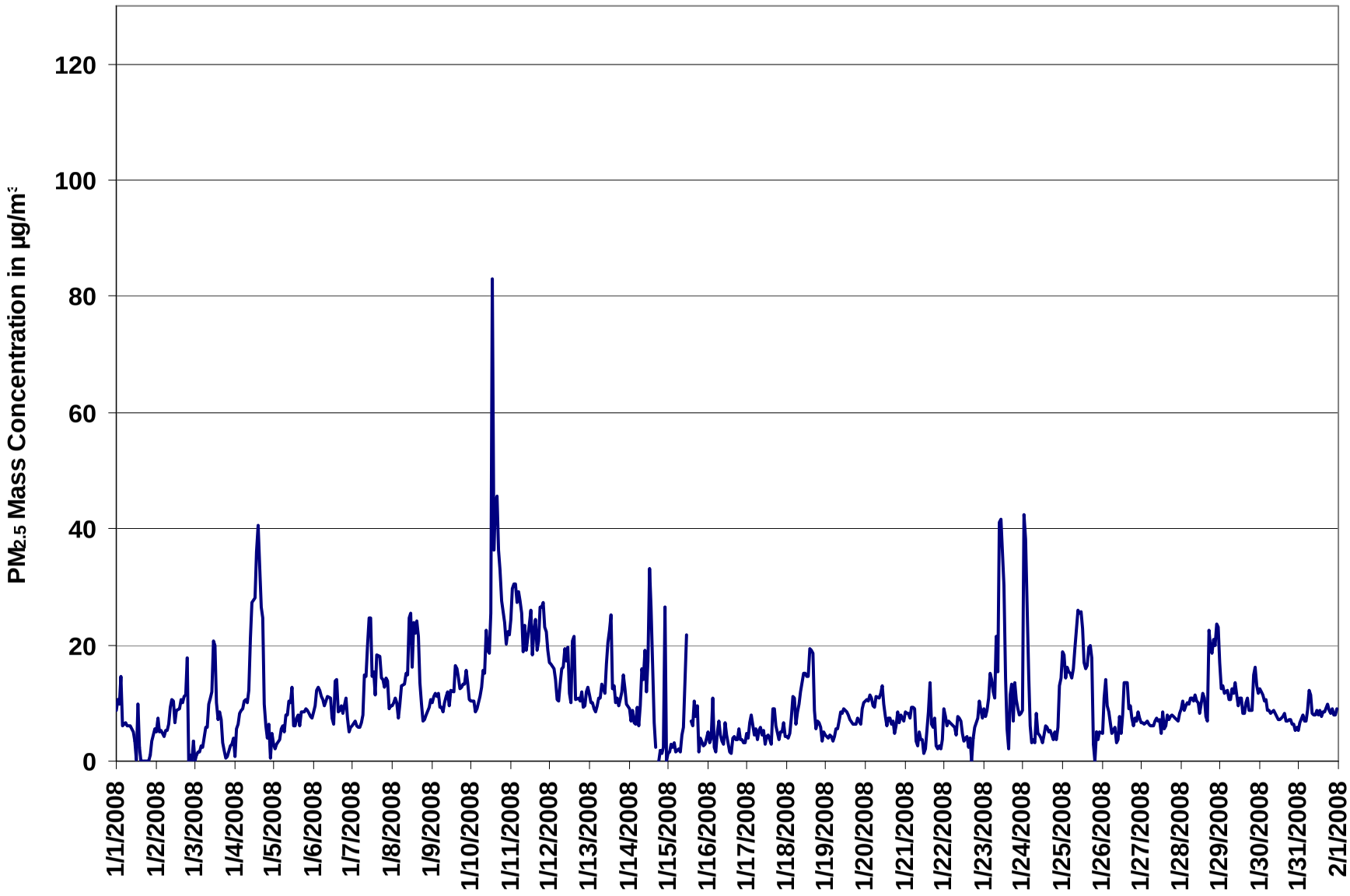
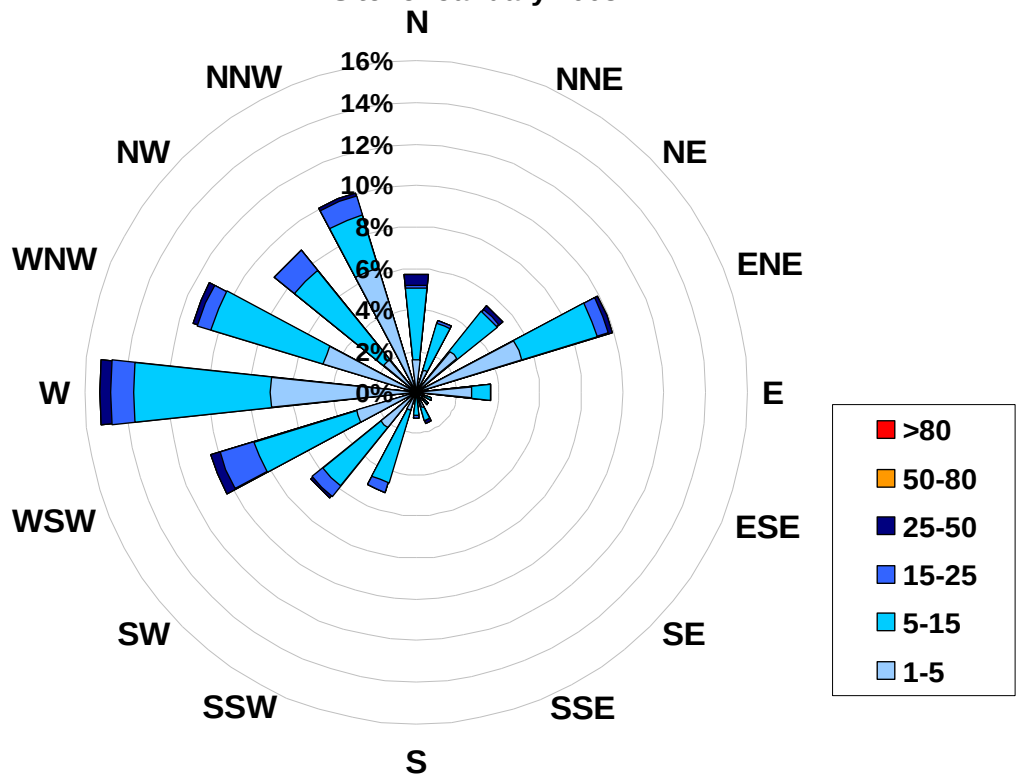


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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 January 2008



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	353
5	to	15	309
15	to	25	51
25	to	50	16
50	to	80	0
	>	80	0
Total Non-Zero Values			729

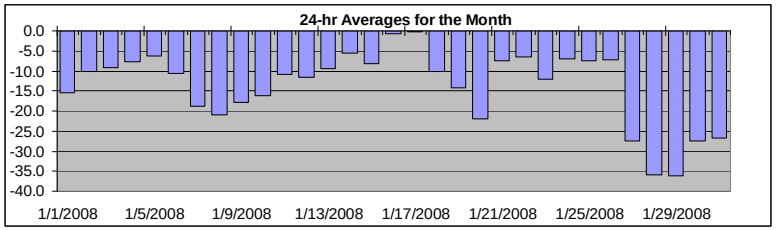
PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

HOURLY AVERAGE TABLE

Ambient Temperature (T)



Summary

Maximum 1-hr Average:	4.6	°C	16-Jan	16:00 17:00
Maximum 24-hr Value:	-0.3	°C	17-Jan	

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
	4.2	-0.6	-6.5	-12.1	-19.3	-31.4	-41.8	-13.8 °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**

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-Jan-08	-25	-25	-25	-24	-23	-23	-23	-21	-20	-18	-17	-15	-12	-10	-9	-8	-8	-8	-8	-7	-7	-7	-11	-13	-15.4	-7.4
2-Jan-08	-13	-13	-13	-14	-15	-15	-15	-16	-17	-16	-15	-12	-11	-9	-5	-5	-6	-9	-4	-2	-1	-3	-4	-7	-10.0	-1.1
3-Jan-08	-9	-11	-13	-14	-14	-14	-14	-15	-15	-15	-13	-11	-8	-6	-5	-5	-6	-6	-6	-5	-4	-4	-4	-4	-9.2	-3.6
4-Jan-08	-5	-6	-6	-8	-10	-10	-11	-13	-14	-15	-13	-9	-5	-4	-4	-6	-8	-8	-8	-8	-6	-4	-3	-2	-7.8	-2.1
5-Jan-08	-3	-5	-6	-5	-6	-7	-8	-9	-10	-11	-9	-7	-5	-4	-3	-3	-4	-6	-6	-7	-7	-7	-7	-7	-6.3	-2.7
6-Jan-08	-7	-7	-7	-7	-8	-8	-9	-10	-10	-11	-11	-11	-11	-11	-10	-10	-12	-13	-13	-12	-13	-13	-14	-15	-10.7	-7.2
7-Jan-08	-16	-16	-17	-18	-20	-21	-21	-22	-22	-21	-21	-16	-15	-14	-12	-13	-16	-18	-20	-21	-22	-22	-23	-23	-18.7	-12.4
8-Jan-08	-24	-24	-25	-25	-24	-24	-24	-25	-25	-26	-23	-19	-18	-16	-16	-16	-17	-18	-18	-19	-19	-19	-19	-19	-20.9	-15.9
9-Jan-08	-18	-18	-18	-18	-18	-18	-18	-18	-19	-19	-19	-18	-17	-17	-16	-16	-17	-18	-19	-18	-17	-17	-17	-18	-17.9	-16.2
10-Jan-08	-19	-21	-22	-22	-23	-23	-21	-19	-18	-17	-16	-14	-13	-13	-12	-11	-12	-13	-13	-13	-13	-14	-15	-14	-16.2	-11.2
11-Jan-08	-13	-12	-12	-12	-13	-14	-12	-12	-13	-13	-13	-12	-10	-7	-5	-4	-7	-9	-11	-12	-12	-12	-12	-13	-10.9	-4.2
12-Jan-08	-14	-14	-15	-15	-15	-16	-17	-17	-17	-17	-14	-10	-7	-5	-5	-8	-8	-7	-7	-8	-9	-10	-11	-12	-11.6	-5.0
13-Jan-08	-11	-12	-14	-15	-16	-16	-16	-15	-13	-13	-12	-8	-5	-1	-1	0	-2	-5	-6	-8	-8	-9	-9	-9	-9.3	0.2
14-Jan-08	-9	-9	-9	-10	-10	-11	-11	-10	-9	-8	-7	-5	-3	-2	-1	0	-1	-1	-2	-2	-2	-3	-5	-5	-5.5	0.4
15-Jan-08	-5	-6	-7	-8	-9	-10	-10	-12	-13	-13	-12	-9	-7	-6	-5	-5	-7	-8	-8	-7	-7	-7	-7	-7	-8.1	-5.0
16-Jan-08	-9	-11	-13	-7	-5	-8	-10	-4	-1	0	1	2	3	4	4	4	5	4	4	4	4	4	4	4	-0.6	4.6
17-Jan-08	4	4	3	2	1	1	1	1	1	1	1	1	2	0	1	1	-1	-2	-1	-1	-3	-7	-8	-8	-0.3	3.8
18-Jan-08	-9	-10	-11	-12	-13	-13	-14	-14	-14	-14	-13	-12	-11	-9	-8	-8	-8	-8	-8	-7	-7	-6	-6	-6	-10.0	-5.8
19-Jan-08	-6	-7	-7	-7	-8	-9	-10	-11	-12	-12	-12	-13	-13	-13	-13	-14	-16	-18	-19	-21	-22	-24	-25	-26	-14.1	-6.0
20-Jan-08	-27	-28	-28	-29	-28	-29	-28	-25	-25	-24	-22	-19	-17	-15	-14	-13	-13	-17	-19	-21	-21	-22	-21	-20	-22.0	-13.3
21-Jan-08	-18	-17	-17	-17	-16	-14	-10	-7	-6	-6	-5	-4	-4	-2	-2	-1	-1	-5	-5	-4	-4	-4	-5	-5	-7.6	-0.7
22-Jan-08	-6	-5	-5	-4	-4	-5	-5	-6	-6	-5	-5	-4	-3	-3	-3	-2	-3	-7	-10	-12	-12	-13	-14	-15	-6.5	-1.8
23-Jan-08	-16	-16	-17	-17	-18	-19	-19	-19	-20	-19	-16	-11	-7	-5	-2	-1	-3	-5	-7	-9	-11	-11	-12	-13	-12.1	-0.5
24-Jan-08	-13	-13	-12	-9	-8	-7	-7	-9	-9	-9	-8	-5	-4	-4	-4	-4	-4	-5	-5	-5	-6	-6	-6	-6	-7.1	-3.5
25-Jan-08	-7	-7	-7	-7	-7	-7	-9	-12	-14	-14	-12	-10	-9	-7	-5	-5	-7	-8	-7	-3	-3	-3	-5	-6	-7.6	-2.7
26-Jan-08	-6	-5	-5	-5	-6	-7	-6	-6	-8	-9	-8	-5	-2	0	1	-1	-2	-5	-10	-13	-15	-16	-18	-20	-7.3	0.7
27-Jan-08	-21	-22	-23	-24	-25	-26	-26	-27	-28	-28	-28	-28	-28	-28	-28	-28	-29	-29	-29	-29	-29	-30	-31	-32	-27.4	-21.1
28-Jan-08	-34	-34	-36	-37	-37	-39	-39	-38	-39	-37	-36	-34	-32	-30	-29	-29	-29	-34	-36	-38	-40	-41	-42	-42	-35.9	-28.7
29-Jan-08	-42	-42	-42	-43	-42	-42	-42	-41	-40	-39	-38	-36	-34	-34	-32	-31	-31	-31	-31	-30	-30	-31	-30	-30	-36.1	-30.2
30-Jan-08	-30	-30	-30	-30	-30	-30	-29	-29	-29	-28	-27	-26	-25	-25	-25	-26	-26	-26	-26	-26	-26	-26	-26	-27	-27.4	-24.6
31-Jan-08	-29	-31	-31	-32	-31	-31	-29	-28	-28	-27	-27	-26	-25	-24	-24	-24	-24	-25	-25	-25	-24	-24	-24	-24	-26.7	-23.8
Hourly Avg	-14.9	-15.4	-15.8	-15.9	-16.2	-16.5	-16.5	-16.5	-16.5	-16.3	-15.1	-13.1	-11.5	-10.3	-9.5	-9.4	-10.4	-11.9	-12.3	-12.6	-12.8	-13.3	-13.9	-14.3		
Hourly Max	3.8	3.6	3.3	2.1	0.9	1.1	1.3	0.9	0.6	0.6	0.8	1.6	2.7	3.5	4.1	4.4	4.6	4.5	4.5	4.4	4.5	4.3	4.2	4.1		

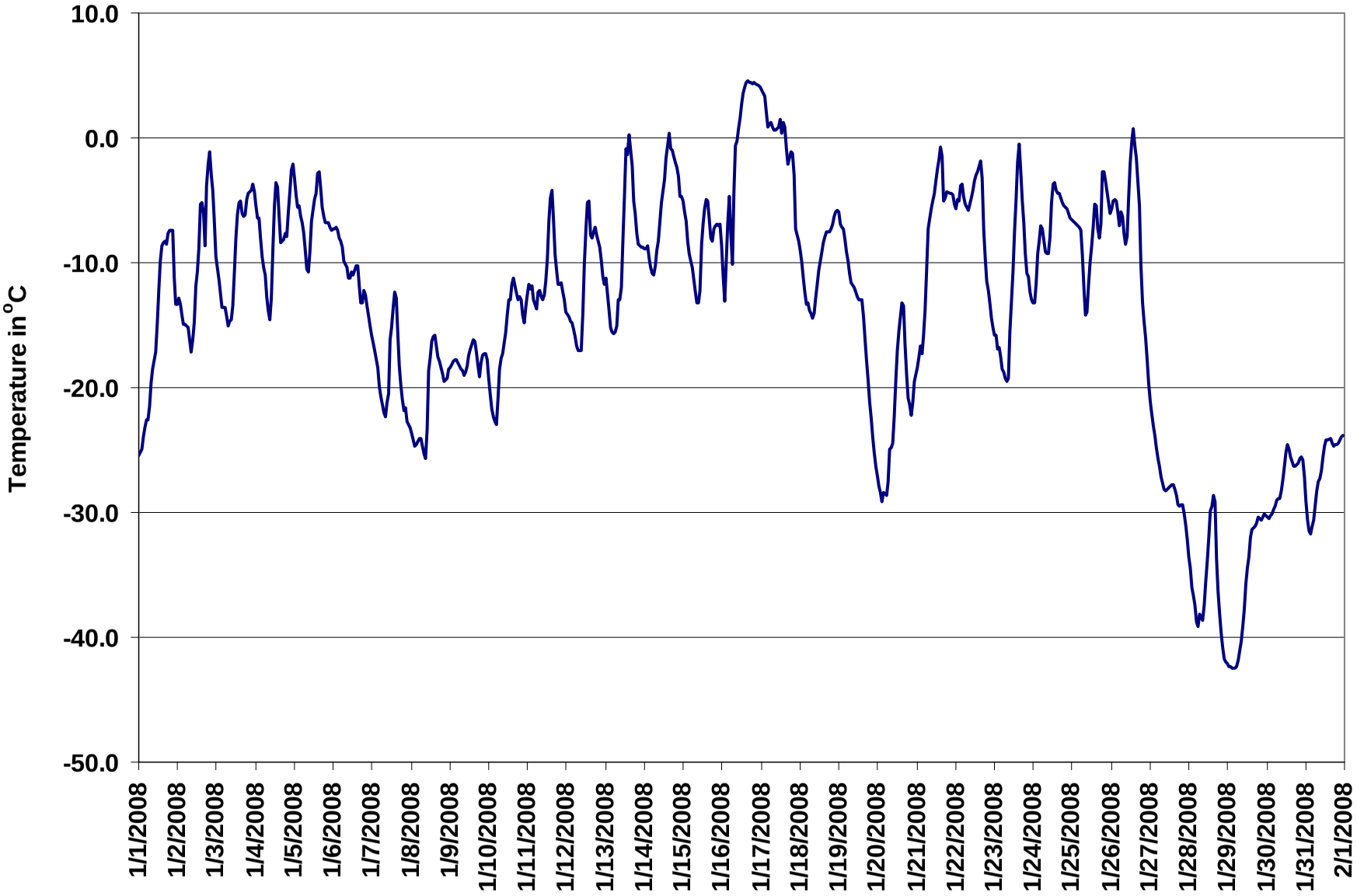


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

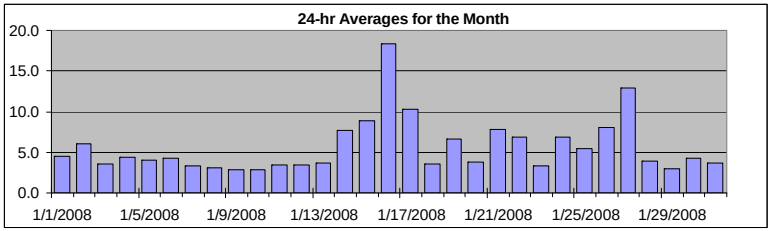
PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	29.2	km/hr	16-Jan	17:00 18:00
Maximum 24-hr Value:	18.4	km/hr	16-Jan	

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
	25.9	15.5	6.2	3.9	2.9	2.2	1.8	5.6 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**

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-hr Scalar Average	Daily Max
1-Jan-08	4	3	2	3	2	3	3	4	4	4	5	4	8	9	6	5	5	3	4	5	6	4	6	6	4.5	8.6
2-Jan-08	5	4	5	6	5	4	4	3	4	3	3	5	5	4	5	4	3	7	13	14	14	10	11	5	6.1	14.2
3-Jan-08	4	3	3	3	3	4	3	3	4	3	3	2	3	3	3	3	3	4	4	5	4	4	5	3	3.5	4.7
4-Jan-08	3	4	4	4	2	3	3	3	3	3	3	3	4	4	3	4	4	7	4	6	6	9	10	5	4.3	10.1
5-Jan-08	4	4	4	3	4	5	4	4	4	4	4	5	6	6	6	5	4	3	3	3	3	3	3	2	4.0	6.5
6-Jan-08	3	4	2	3	2	3	3	3	4	4	3	6	8	7	6	4	4	4	4	4	6	5	6	5	4.3	7.7
7-Jan-08	6	6	6	3	2	2	2	2	3	5	3	3	4	4	3	4	3	2	3	2	3	3	2	2	3.3	6.5
8-Jan-08	3	3	3	3	3	3	2	2	3	3	3	3	3	4	3	4	3	4	4	5	3	3	2	2	3.1	4.9
9-Jan-08	4	3	3	4	3	4	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	3	3	3	2.9	4.1
10-Jan-08	2	2	2	2	3	3	2	3	4	4	3	2	3	4	3	3	3	2	3	3	3	2	3	2	2.8	4.4
11-Jan-08	3	3	3	3	2	3	3	4	5	4	4	4	4	4	4	4	3	3	3	4	3	4	3	2	3.4	5.5
12-Jan-08	4	3	3	3	3	3	3	3	3	2	3	3	4	5	4	6	4	4	3	3	3	4	3	4	3.4	5.8
13-Jan-08	5	5	3	4	4	3	4	4	5	4	4	4	4	3	3	5	4	4	3	3	3	3	3	3	3.7	5.0
14-Jan-08	3	3	3	3	2	3	3	3	3	3	3	3	2	3	5	12	18	15	16	15	18	18	16	12	7.7	18.3
15-Jan-08	13	9	7	7	7	7	7	4	6	5	4	9	10	12	11	9	8	8	10	12	13	12	11	12	8.8	13.3
16-Jan-08	4	3	3	15	13	4	5	11	16	14	21	21	19	20	26	29	28	29	29	27	26	25	26	28	18.4	29.2
17-Jan-08	24	20	14	13	11	15	13	13	10	10	9	8	10	7	8	5	3	6	9	10	11	7	6	5	10.3	23.6
18-Jan-08	3	2	3	4	3	5	5	3	3	2	3	3	3	3	3	3	3	4	4	4	3	5	6	6	3.6	6.3
19-Jan-08	7	6	8	8	10	9	9	11	11	10	10	8	7	6	6	7	5	5	5	3	3	2	2	2	6.7	11.0
20-Jan-08	2	2	3	3	4	3	4	5	5	5	5	6	7	7	5	3	2	2	2	3	4	3	3	3	3.7	7.2
21-Jan-08	3	3	3	3	3	4	6	9	12	10	13	14	13	12	11	7	5	4	7	7	8	10	10	10	7.8	13.8
22-Jan-08	13	13	14	14	12	11	10	12	8	5	5	4	3	6	6	4	3	4	3	3	3	3	2	3	6.9	14.5
23-Jan-08	3	3	4	4	2	2	2	2	2	2	3	3	3	5	5	4	6	4	4	2	3	2	2	3	3.3	6.3
24-Jan-08	3	4	5	6	7	5	6	6	9	8	7	7	10	10	10	8	8	9	8	8	6	4	5	6	6.8	10.3
25-Jan-08	7	10	8	6	5	5	5	5	5	4	4	3	4	7	5	4	3	2	5	10	9	5	4	3	5.4	10.0
26-Jan-08	5	4	7	6	5	6	9	3	4	2	2	4	3	3	4	3	4	16	16	14	15	17	19	19	8.0	19.3
27-Jan-08	20	18	16	17	19	19	18	15	16	16	16	16	15	12	9	9	10	7	5	6	6	8	9	7	12.9	19.6
28-Jan-08	4	4	3	4	4	3	3	4	4	6	8	7	7	5	6	4	3	4	2	2	2	2	2	2	3.9	8.3
29-Jan-08	2	2	2	2	2	2	2	2	2	2	3	2	3	4	4	4	4	3	2	2	6	4	4	4	2.9	6.2
30-Jan-08	4	4	4	5	4	3	4	3	3	4	4	3	4	4	7	7	6	6	5	4	4	4	3	2	4.3	7.2
31-Jan-08	3	3	2	2	2	2	2	2	4	3	5	5	5	7	6	6	5	4	3	3	4	3	3	3	3.6	6.6
1-hr Average	5.6	5.2	4.9	5.3	5.0	4.8	4.9	5.0	5.5	5.1	5.4	5.7	6.1	6.2	6.1	5.9	5.5	5.8	6.0	6.3	6.5	6.3	6.3	5.7		
Hourly Max	23.6	19.7	16.1	17.2	19.1	18.5	18.3	15.3	15.8	16.0	20.8	20.7	19.4	20.3	25.8	28.9	28.1	29.2	29.1	27.3	25.9	24.6	26.2	27.6		

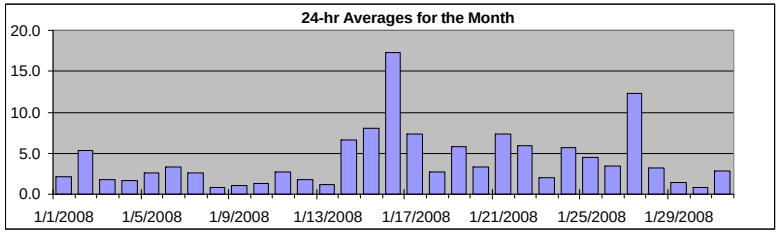
PASZA - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	29.0	km/hr	16-Jan	17:00 18:00
Maximum 24-hr Value:	17.3	km/hr	16-Jan	

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
	25.7	15.3	5.9	3.3	2.1	1.0	0.6	6.0 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**

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-hr Vector Average	Daily Max
1-Jan-08	2	2	1	2	1	2	3	4	3	3	5	4	8	8	6	5	5	3	4	4	5	2	6	6	2.1	8.4
2-Jan-08	5	4	5	5	4	4	4	2	3	2	2	4	5	2	3	2	2	5	13	14	14	10	10	3	5.3	14.2
3-Jan-08	3	2	2	1	1	2	2	1	2	1	2	2	3	3	3	3	3	4	4	4	4	4	4	1	1.8	4.3
4-Jan-08	2	2	3	3	1	1	2	2	1	1	2	2	3	3	3	3	4	7	4	5	6	9	10	3	1.6	9.8
5-Jan-08	4	3	4	3	2	4	3	4	2	2	4	5	6	6	5	4	4	3	1	2	1	1	2	2	2.6	6.3
6-Jan-08	1	3	2	1	2	3	3	2	4	4	3	6	8	6	5	4	4	3	4	4	5	5	6	5	3.3	7.6
7-Jan-08	6	6	6	3	2	2	2	1	3	5	2	2	4	2	3	4	3	2	2	1	2	3	2	2	2.7	6.4
8-Jan-08	2	2	2	2	1	1	2	2	2	1	3	2	2	3	2	4	2	4	3	5	2	2	2	1	0.8	4.7
9-Jan-08	4	2	2	3	2	3	3	2	1	2	3	2	2	2	2	2	0	2	2	1	2	3	3	2	1.1	3.7
10-Jan-08	1	1	2	2	2	2	2	2	2	4	2	1	2	4	2	2	2	2	1	2	2	2	2	1	1.2	4.3
11-Jan-08	2	2	3	2	2	3	3	4	5	3	4	4	4	3	3	3	3	2	3	2	1	3	1	1	2.7	5.3
12-Jan-08	3	1	2	2	2	2	2	2	2	2	2	3	3	4	2	5	4	2	3	2	1	4	1	0	1.8	4.9
13-Jan-08	2	1	1	1	1	0	2	2	5	2	1	3	4	2	3	5	4	3	2	1	1	2	2	2	1.2	4.5
14-Jan-08	0	1	1	1	2	1	2	2	2	1	1	2	2	2	5	12	17	14	15	15	18	18	15	11	6.6	18.2
15-Jan-08	13	9	7	7	7	7	6	4	5	5	4	9	9	12	10	9	8	8	10	12	13	12	11	12	8.1	13.0
16-Jan-08	2	3	2	15	10	2	4	11	16	14	21	21	19	20	26	29	28	29	29	27	26	24	26	27	17.3	29.0
17-Jan-08	24	19	12	12	11	15	12	13	9	10	9	8	10	6	8	5	2	6	9	10	7	6	6	4	7.3	23.5
18-Jan-08	2	1	2	3	3	5	5	3	2	1	2	3	3	2	2	3	3	4	4	4	3	5	6	6	2.8	6.1
19-Jan-08	7	6	8	8	10	9	8	10	11	10	10	8	6	6	6	7	5	5	4	1	2	2	2	2	5.8	10.8
20-Jan-08	2	2	3	1	3	3	4	5	4	4	5	6	7	7	5	3	1	1	2	2	3	3	2	2	3.3	7.0
21-Jan-08	2	3	2	1	2	1	5	9	12	10	13	14	13	12	11	7	5	2	7	7	8	9	10	10	7.3	13.7
22-Jan-08	13	13	14	14	12	11	9	11	8	4	4	2	1	5	6	3	2	3	3	3	2	3	2	2	6.0	14.3
23-Jan-08	3	3	2	3	2	2	2	2	1	1	2	3	2	4	5	4	6	4	3	2	1	1	1	2	2.1	6.1
24-Jan-08	3	4	4	6	7	4	6	6	8	8	6	7	10	10	10	8	8	8	8	8	6	3	5	6	5.7	9.9
25-Jan-08	7	10	8	6	4	5	5	5	4	4	4	3	4	6	4	3	2	1	4	10	9	2	3	1	4.5	9.9
26-Jan-08	3	4	7	3	4	5	9	1	2	1	1	4	2	2	1	1	2	16	16	14	14	17	19	19	3.4	19.1
27-Jan-08	19	18	16	17	19	18	18	15	15	16	16	16	15	11	9	9	10	7	5	6	5	8	9	7	12.3	19.5
28-Jan-08	4	4	3	4	4	2	3	4	4	6	8	7	6	4	6	3	2	3	2	1	1	2	2	2	3.2	8.2
29-Jan-08	2	1	1	1	1	2	1	1	1	2	3	1	3	4	4	3	3	3	0	2	6	4	4	4	1.4	6.0
30-Jan-08	4	4	4	5	4	3	4	3	3	3	4	1	3	2	6	7	6	6	4	4	4	4	2	2	0.8	6.9
31-Jan-08	3	3	2	2	1	2	2	1	3	3	4	4	5	6	6	5	5	3	2	3	4	3	2	2	2.8	6.1
1-hr Vector	2.5	2.8	2.4	2.8	2.8	2.2	2.4	2.5	2.1	2.3	2.6	2.9	2.8	2.6	3.0	3.0	2.5	1.8	2.2	2.7	3.0	2.7	2.9	2.6		
Hourly Max	23.5	19.4	15.8	17.1	19.0	18.4	18.1	15.1	15.6	15.8	20.7	20.5	19.2	20.1	25.6	28.8	27.9	29.0	28.9	27.2	25.8	24.5	26.1	27.4		

PASZA - Evergreen Park Wind Direction Monthly Summary

HOURLY AVERAGE TABLE

Wind Direction (WD)

Station: Evergreen Park
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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
	356.6	344.3	292.9	256.2	94.5	29.8	6.0		297 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 / 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	WD Sector
1-Jan-08	202	235	356	277	332	281	46	67	63	73	70	67	100	106	92	83	69	72	86	59	75	140	262	264	81	E
2-Jan-08	268	260	266	272	243	267	247	245	235	266	301	315	267	256	262	356	256	219	231	228	233	218	220	206	245	WSW
3-Jan-08	162	34	24	8	15	335	243	297	229	289	358	351	45	43	36	354	51	61	63	72	61	69	95	142	40	NE
4-Jan-08	53	214	260	280	296	331	228	286	38	274	344	270	335	359	301	355	4	71	70	73	68	77	81	94	31	NNE
5-Jan-08	58	46	350	326	233	229	256	252	291	244	255	262	269	266	274	312	335	317	274	220	194	258	2	214	275	W
6-Jan-08	212	30	5	292	290	223	319	234	269	287	308	338	336	341	336	346	341	288	268	268	277	284	276	259	301	WNW
7-Jan-08	255	266	264	281	329	274	331	327	307	247	245	312	325	302	339	3	35	352	304	292	311	293	321	305	299	WNW
8-Jan-08	269	284	247	277	249	211	308	251	248	220	266	276	309	295	304	11	76	95	117	80	139	182	279	78	263	W
9-Jan-08	76	210	63	75	24	49	47	64	84	100	140	118	270	287	333	256	85	39	40	20	37	314	296	277	44	NE
10-Jan-08	262	300	223	314	348	279	304	288	204	233	270	218	243	218	249	351	329	147	52	64	65	345	313	331	282	WNW
11-Jan-08	277	276	239	270	290	272	269	239	247	253	257	250	256	257	264	323	335	326	253	254	294	206	59	249	265	W
12-Jan-08	23	282	199	216	277	19	357	324	322	317	320	359	352	27	318	303	288	289	262	211	276	208	301	144	303	WNW
13-Jan-08	229	131	341	196	171	54	232	167	214	205	198	182	171	168	73	63	69	56	32	326	6	265	259	201	176	S
14-Jan-08	30	253	296	218	253	312	214	319	230	16	173	359	256	288	283	310	324	286	282	282	285	286	321	283	293	WNW
15-Jan-08	292	310	315	257	267	280	272	318	313	299	291	277	283	277	273	271	259	253	254	250	250	245	242	231	270	W
16-Jan-08	281	195	89	250	255	124	56	280	274	270	266	260	269	269	265	264	265	265	265	269	268	267	264	266	265	W
17-Jan-08	266	268	331	344	303	318	291	284	294	289	284	289	331	306	350	7	298	31	345	346	16	93	102	82	313	NW
18-Jan-08	14	355	10	7	308	341	348	346	321	318	337	349	2	325	320	358	14	61	59	48	35	65	68	67	13	NNE
19-Jan-08	76	71	67	70	70	67	71	66	61	62	60	68	75	76	81	82	89	94	73	4	241	277	277	280	69	ENE
20-Jan-08	252	313	220	261	290	253	269	261	240	240	249	255	266	292	278	319	289	312	345	340	300	280	271	248	272	W
21-Jan-08	204	211	221	248	265	214	270	282	277	279	273	278	270	269	274	274	258	331	300	286	283	274	278	297	274	W
22-Jan-08	276	282	283	298	301	284	298	284	261	274	285	287	302	272	259	241	14	99	53	359	299	277	301	298	287	WNW
23-Jan-08	275	278	38	232	274	315	244	302	252	317	339	254	317	252	277	314	345	359	335	274	172	352	238	44	300	WNW
24-Jan-08	26	43	71	78	64	87	76	68	87	85	74	86	93	84	66	74	83	94	99	98	107	151	217	234	86	E
25-Jan-08	240	255	253	245	267	256	219	195	206	226	211	228	235	210	249	290	308	290	271	265	254	235	85	154	243	WSW
26-Jan-08	168	204	202	168	207	207	213	212	98	53	232	200	51	147	28	53	52	338	340	328	328	330	335	334	322	NW
27-Jan-08	336	334	329	333	336	337	334	333	333	337	336	339	338	347	24	4	31	39	25	353	317	321	333	335	341	NNW
28-Jan-08	339	305	309	301	308	247	306	283	276	272	273	268	295	285	267	296	316	48	29	323	332	28	346	296	297	WNW
29-Jan-08	332	277	277	287	305	221	190	162	89	57	39	300	16	355	357	347	356	55	119	278	277	298	290	247	321	NW
30-Jan-08	221	241	271	244	207	199	216	207	179	201	220	217	163	145	61	61	61	60	58	56	50	39	22	39	128	SE
31-Jan-08	61	61	7	238	268	257	315	7	71	76	52	66	53	42	20	64	59	63	68	58	61	88	82	69	53	NE
Hourly Avg	284	284	305	287	294	296	291	290	282	287	288	289	306	295	308	330	343	347	312	299	291	280	296	277		

PASZA - Evergreen Park Standard Deviation of Wind Direction Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 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
	93.4	79.6	48.2	27.4	14.4	7.3	4.8

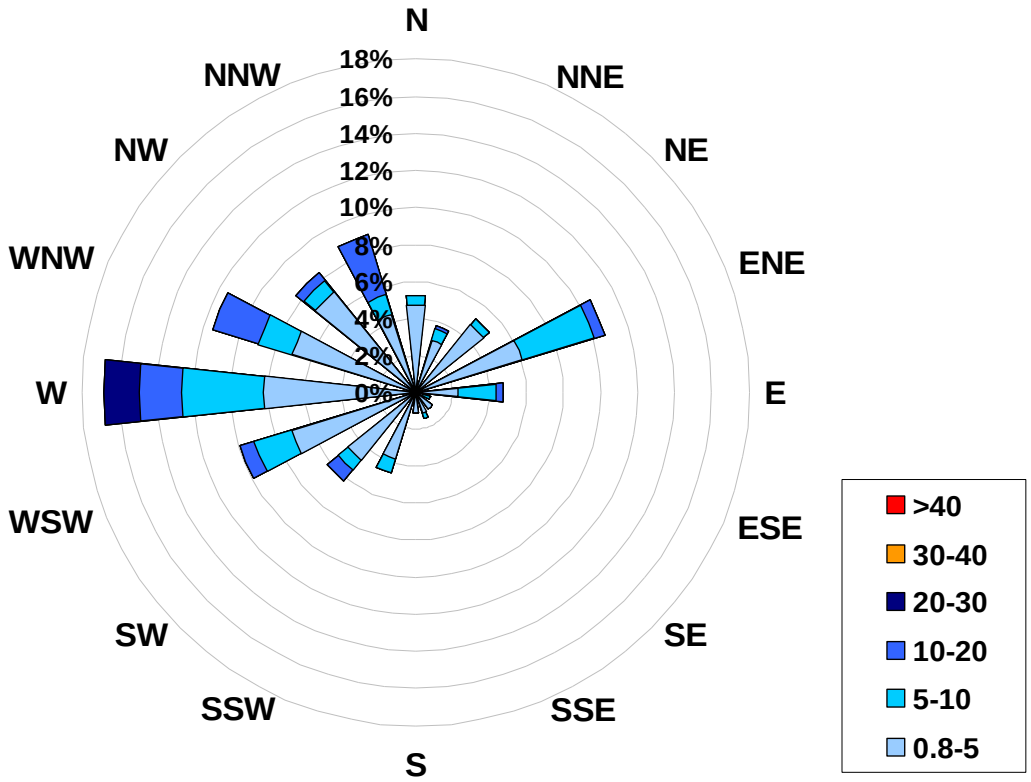
Status Flag Characters

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-Jan-08	70	70	75	41	80	64	20	12	20	34	12	22	13	12	21	19	16	45	38	47	14	55	18	14	79.8
2-Jan-08	18	26	27	19	34	24	20	70	35	43	45	24	16	58	53	68	47	70	3	3	3	8	5	69	70.3
3-Jan-08	57	54	70	92	72	62	46	77	67	68	39	29	19	14	15	17	30	16	14	24	21	37	45	95	95.5
4-Jan-08	73	73	49	41	65	75	51	48	82	63	36	49	36	39	33	43	20	13	38	9	14	14	16	71	82.4
5-Jan-08	22	31	16	30	67	37	24	19	62	60	24	14	12	17	27	26	19	26	65	60	94	79	65	49	93.6
6-Jan-08	73	38	35	74	41	12	43	65	18	30	22	22	11	17	25	18	15	24	14	21	14	18	13	13	73.7
7-Jan-08	7	8	7	20	18	27	36	68	29	10	17	42	26	47	13	27	16	37	55	55	32	20	26	33	67.7
8-Jan-08	50	54	40	53	80	72	39	36	41	89	33	43	39	49	46	26	58	25	49	16	50	54	44	90	89.6
9-Jan-08	33	43	48	32	67	32	34	44	87	52	40	61	48	42	50	44	86	30	57	85	52	37	28	45	86.5
10-Jan-08	64	60	43	35	52	26	29	45	71	36	35	88	31	11	26	47	56	45	80	60	40	36	57	75	88.2
11-Jan-08	51	37	39	33	27	33	40	25	14	52	34	29	20	33	41	41	22	36	39	63	63	62	95	79	94.8
12-Jan-08	51	58	74	62	50	53	30	41	30	31	39	36	31	41	49	37	23	69	29	56	81	42	70	93	92.6
13-Jan-08	65	84	61	88	95	92	68	83	29	79	88	57	28	61	35	15	11	27	69	68	80	58	55	72	94.7
14-Jan-08	96	59	77	65	44	84	51	53	66	84	87	61	30	47	34	17	12	16	10	8	7	9	16	11	95.6
15-Jan-08	12	14	21	11	7	8	14	24	16	22	27	12	11	10	6	9	8	5	3	4	5	5	5	5	26.7
16-Jan-08	57	34	57	8	69	63	46	18	8	10	6	7	8	6	6	6	6	5	5	5	6	5	5	5	68.9
17-Jan-08	5	11	28	27	12	14	15	10	15	13	11	12	16	28	14	25	55	16	21	13	47	24	28	24	54.5
18-Jan-08	54	61	51	25	34	13	16	18	57	66	39	14	23	41	45	30	32	15	14	14	16	11	12	16	66.2
19-Jan-08	15	14	10	12	11	10	14	10	10	10	14	16	19	25	20	18	14	10	13	68	36	32	31	36	67.6
20-Jan-08	19	40	20	58	41	18	13	10	7	9	7	10	11	16	16	34	44	34	21	24	26	42	30	32	58.4
21-Jan-08	43	35	31	78	46	77	42	14	8	11	8	9	8	8	7	10	22	55	17	10	9	12	9	14	78.1
22-Jan-08	12	10	9	16	16	16	22	10	19	57	48	62	93	32	18	35	45	25	38	16	35	21	16	27	93.2
23-Jan-08	24	31	71	44	49	30	40	28	48	63	56	27	36	15	23	29	13	21	26	35	89	64	77	72	88.6
24-Jan-08	27	19	43	7	9	19	12	10	11	11	11	17	16	20	13	14	14	15	17	14	17	46	30	13	46.1
25-Jan-08	11	8	12	8	13	12	25	7	13	21	12	22	37	20	39	35	47	52	58	7	5	89	53	87	89.0
26-Jan-08	76	20	13	58	31	24	24	96	62	73	77	27	68	74	80	95	69	35	11	12	11	11	8	9	96.0
27-Jan-08	7	10	10	8	8	8	8	10	9	9	8	9	8	22	18	21	13	13	13	22	23	16	9	9	23.0
28-Jan-08	18	13	17	11	8	28	15	23	18	8	7	6	29	33	11	29	48	18	41	34	33	27	15	36	48.2
29-Jan-08	13	55	39	50	47	16	83	60	83	31	21	65	27	17	31	29	50	42	98	47	18	17	19	20	98.3
30-Jan-08	16	14	21	18	22	18	14	23	20	20	27	83	47	78	26	16	15	14	19	22	23	18	49	39	83.0
31-Jan-08	36	37	36	39	50	30	33	75	43	44	26	45	30	24	19	30	20	24	44	20	19	35	54	48	75.5
Hourly Max	96	84	77	92	95	92	83	96	87	89	88	88	93	78	80	95	86	70	98	85	94	89	95	95	

1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for January 2008



Calms:	0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	495
5	to	10	150
10	to	20	85
20	to	30	14
30	to	40	0
	>	40	0
Total Non-Zero Values			744

PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

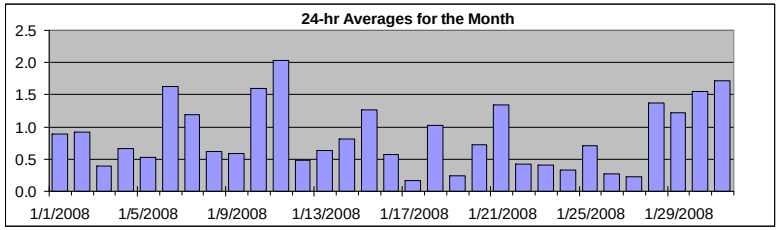
Station: Smoky Heights
Station Owner: PASAA

Monitoring Dates: January 1, 2008 to February 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:	8.3	ppb	28-Jan	20:00 21:00
Maximum 24-hr Average:	2.0	ppb	11-Jan	



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
	4.4	2.7	1.1	0.5	0.3	0.1	0.0	0.9 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-Jan-08	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	0.9	2.0
2-Jan-08	2	2	2	2	1	A	1	1	2	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0.9	2.0
3-Jan-08	0	0	0	1	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.4	0.9
4-Jan-08	0	1	1	A	2	4	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.7	3.9
5-Jan-08	0	0	A	0	0	1	1	1	1	0	0	0	0	1	1	1	1	1	1	0	0	0	0	1	0.5	1.3
6-Jan-08	1	A	3	1	3	3	2	1	1	1	2	3	3	2	2	2	1	1	1	0	1	1	1	1	1.6	3.3
7-Jan-08	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	8	6	2	1	A	1.2	7.5
8-Jan-08	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1	A	1	0.6	1.6
9-Jan-08	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	2	0.6	1.8
10-Jan-08	1	1	1	1	2	6	6	3	1	1	1	1	1	1	1	1	0	0	1	1	A	2	3	3	1.6	6.0
11-Jan-08	2	2	3	4	4	4	4	3	3	2	2	1	1	1	1	1	2	1	1	A	1	1	1	0	2.0	4.4
12-Jan-08	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	1	1	1	0.5	1.4
13-Jan-08	1	1	1	1	1	1	1	0	1	1	0	0	1	0	1	0	0	A	0	0	0	1	1	1	0.6	1.4
14-Jan-08	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0.8	2.2
15-Jan-08	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	A	3	3	2	4	2	3	1	0	1.3	3.7
16-Jan-08	0	0	0	0	0	0	0	0	0	1	0	0	2	0	A	1	2	0	1	1	0	1	0	0	0.6	2.2
17-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0.2	0.5
18-Jan-08	0	0	0	0	0	A	3	3	1	0	0	0	3	5	6	1	1	0	0	0	0	0	0	0	1.0	5.5
19-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0.2	1.3
20-Jan-08	1	1	1	A	0	0	1	1	1	1	1	1	2	1	1	1	0	0	0	0	0	1	1	1	0.7	1.5
21-Jan-08	1	1	A	0	0	2	1	1	0	1	0	0	1	1	4	2	2	3	1	1	3	3	1	1	1.3	3.9
22-Jan-08	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
23-Jan-08	A	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0.4	0.7
24-Jan-08	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.3	0.9
25-Jan-08	1	1	1	1	0	0	1	1	0	0	0	1	1	1	2	1	1	1	1	1	1	A	0	0	0.7	2.2
26-Jan-08	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	1.2
27-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	1	0.2	0.7
28-Jan-08	1	1	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	2	A	4	8	3	3	2	1.4	8.3
29-Jan-08	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	2	2	2	2	2	2	1.2	2.2
30-Jan-08	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	A	2	2	1	1	1	1	1	1.6	2.4
31-Jan-08	1	1	1	1	1	1	2	3	2	2	2	2	2	2	2	A	2	2	2	2	1	1	1	1	1.7	2.8
Hourly Avg	0.7	0.6	0.8	0.8	0.9	1.1	1.1	0.9	0.7	0.6	0.6	0.8	0.9	0.9	1.2	0.7	0.8	0.8	0.8	1.1	1.1	1.0	0.8	0.8		
Hourly Max	2.2	1.9	2.9	4.2	4.4	6.0	5.7	2.9	3.4	2.1	2.4	3.3	3.0	5.0	5.5	2.1	3.2	3.0	2.2	7.5	8.3	3.0	2.7	2.9		

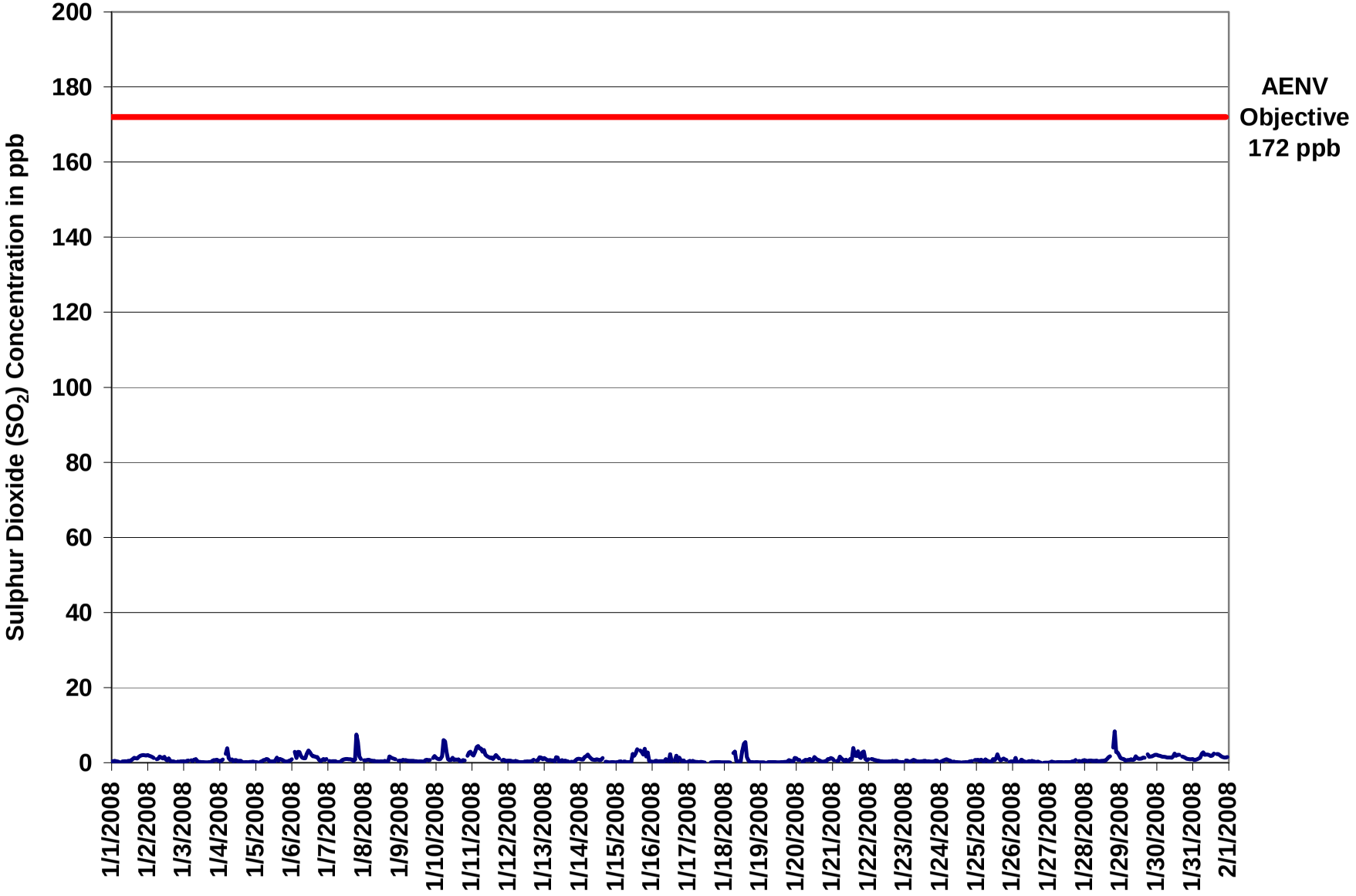


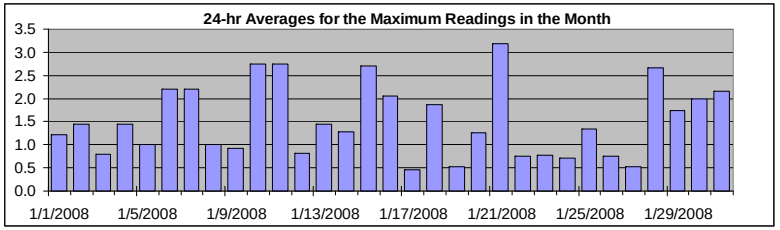
Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights
Station Owner: PASAA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	16.9	ppb	28-Jan	19:00 20:00
Maximum 24-hr Value:	3.2	ppb	21-Jan	

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
	11.1	4.2	1.6	1.0	0.6	0.3	0.2	1.5 ppb	1.0 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**

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-Jan-08	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2	2	2	1.2	2.4
2-Jan-08	2	2	2	2	2	A	1	2	2	2	2	2	2	1	3	1	1	1	1	0	1	0	1	1	1.5	3.3
3-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	1	0	1	1	1	1	1	0.8	1.5
4-Jan-08	1	1	1	A	8	7	3	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1.4	7.7
5-Jan-08	0	0	A	1	1	1	1	1	1	1	1	1	0	2	3	1	1	1	1	1	1	1	1	1	1.0	2.9
6-Jan-08	1	A	4	2	4	4	2	2	2	2	4	4	3	3	2	2	2	2	1	1	1	1	1	1	2.2	4.1
7-Jan-08	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	2	14	14	3	1	A	2.2	13.9
8-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	A	1	1.0	2.4
9-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	2	2	0.9	2.4
10-Jan-08	2	2	1	1	5	14	9	5	2	1	1	2	1	1	1	1	1	1	1	1	A	3	3	3	2.7	14.3
11-Jan-08	3	2	5	5	5	5	5	4	4	3	2	2	2	2	1	3	3	2	2	A	1	1	1	1	2.7	5.3
12-Jan-08	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	A	1	1	2	2	1	0.8	2.3
13-Jan-08	2	1	1	1	1	1	1	1	10	4	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1.5	10.1
14-Jan-08	1	1	1	2	2	3	2	2	1	1	1	1	1	1	1	3	A	1	0	0	0	0	0	0	1.3	3.1
15-Jan-08	0	0	1	1	1	1	1	0	0	0	1	7	3	4	5	A	4	3	3	10	5	10	2	1	2.7	10.1
16-Jan-08	1	0	1	1	1	1	1	1	1	2	1	1	12	1	A	5	11	1	3	2	1	1	1	0	2.1	11.8
17-Jan-08	1	1	1	1	1	0	1	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0.5	0.9
18-Jan-08	0	0	0	0	0	A	7	5	1	0	1	1	5	6	7	3	1	1	0	0	0	0	0	0	1.9	7.4
19-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	0.5	1.9
20-Jan-08	2	1	1	A	1	1	1	1	1	2	1	1	2	2	1	1	1	1	0	1	1	2	2	2	1.2	2.2
21-Jan-08	1	1	A	1	1	4	3	1	1	1	1	1	4	1	11	3	6	4	3	2	9	11	2	1	3.2	11.2
22-Jan-08	2	A	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	1	0.8	1.6
23-Jan-08	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
24-Jan-08	1	1	1	2	2	1	1	1	0	2	0	0	0	0	0	0	0	0	0	1	1	1	A	1	0.7	1.7
25-Jan-08	1	1	1	1	1	1	1	1	1	1	0	2	1	2	4	4	1	1	2	1	1	A	0	2	1.3	4.3
26-Jan-08	1	1	4	0	0	1	1	1	1	1	0	1	1	1	1	1	0	1	0	0	A	0	0	0	0.8	4.2
27-Jan-08	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	0.5	1.1
28-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	A	17	16	4	3	2	2.7	16.9
29-Jan-08	2	1	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	A	3	2	2	3	3	2	1.7	3.1
30-Jan-08	2	2	2	2	2	2	2	2	2	2	2	3	4	2	3	2	A	2	2	2	1	1	1	1	2.0	4.0
31-Jan-08	1	1	1	1	1	2	3	3	3	3	2	2	2	2	3	A	3	3	2	2	2	2	2	2	2.2	3.4
Hourly Avg	1.1	1.0	1.3	1.2	1.6	2.0	1.8	1.4	1.4	1.1	1.0	1.4	1.8	1.4	2.0	1.4	1.6	1.3	1.2	2.3	2.3	1.9	1.3	1.3		
Hourly Max	2.7	2.3	4.6	5.0	7.7	14.3	9.0	5.4	10.1	3.7	4.0	6.9	11.8	5.9	11.1	4.6	10.7	4.2	3.1	16.9	16.2	11.2	3.4	3.5		

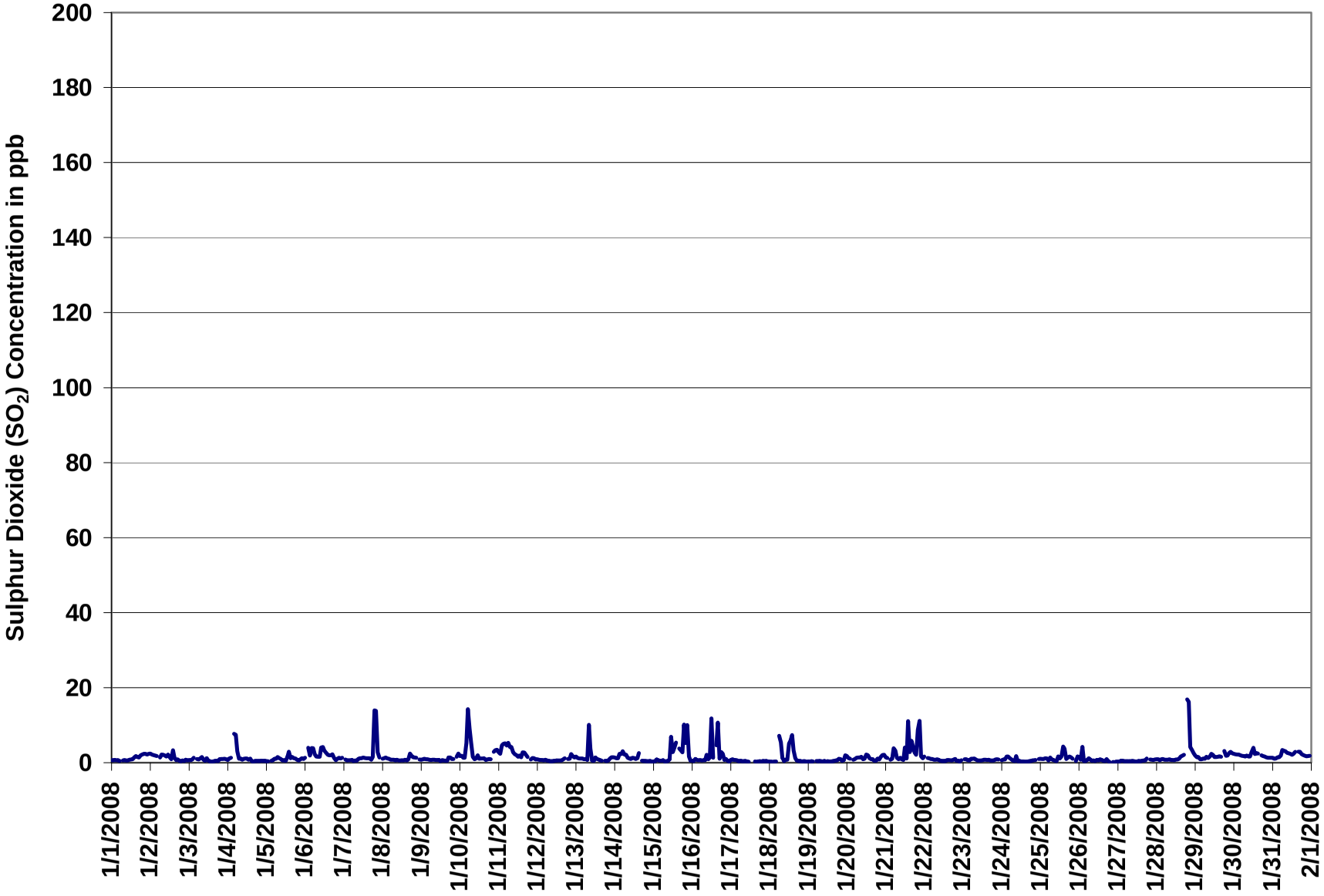
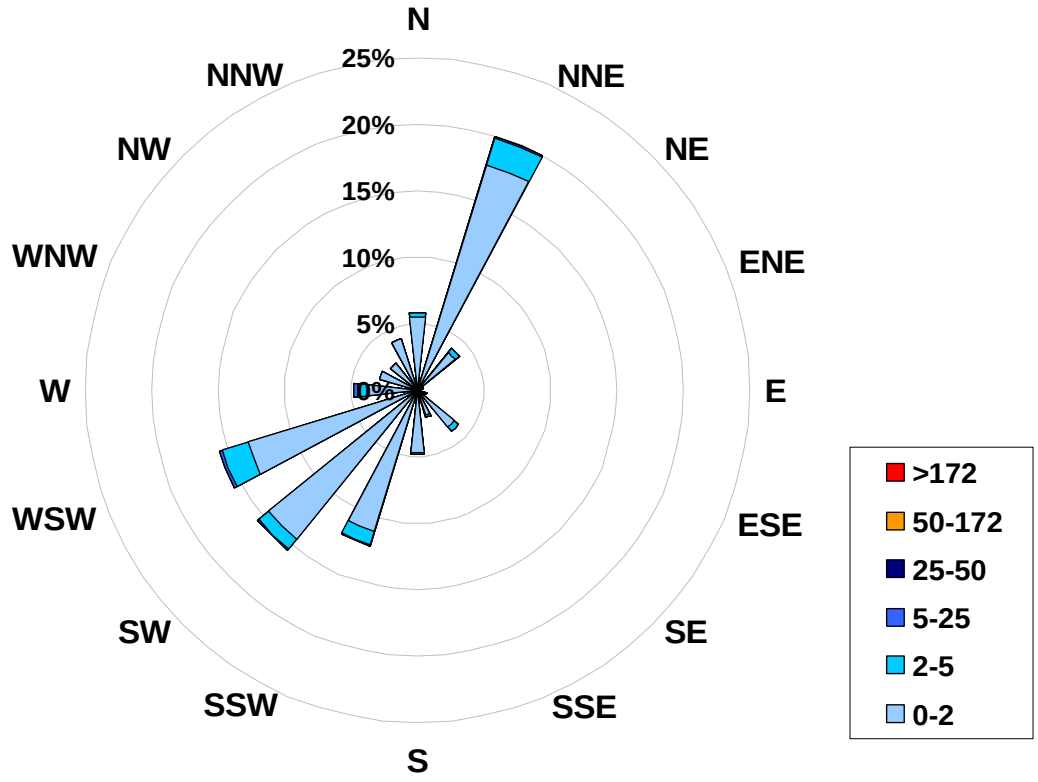


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Smoky Heights Site for January 2008



Calms: 0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	643
2	to	5	59
5	to	25	7
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			709

PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

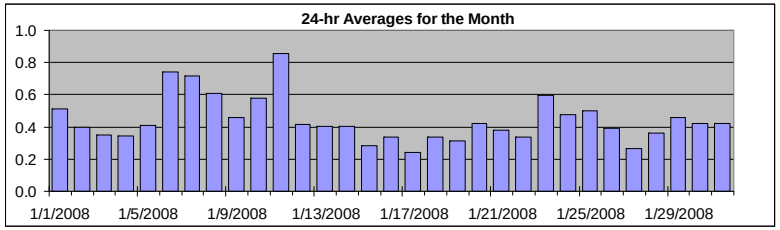
Station: Smoky Heights
Station Owner: PASAA

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: **Alberta Environment:** 1-hr na ppb | 24-hr na ppb

Summary

Maximum 1-hr Average:	1.2	ppb	11-Jan	16:00 17:00
Maximum 24-hr Value:	0.9	ppb	11-Jan	



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
	0.9	0.8	0.5	0.4	0.3	0.2	0.1	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**

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-Jan-08	1	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.1
2-Jan-08	0	0	0	0	0	A	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6
3-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
4-Jan-08	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-Jan-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0.4	0.6
6-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
7-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	0.7	1.1
8-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.7
9-Jan-08	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	A	1	1	0.5	0.6
10-Jan-08	0	1	1	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	1	A	1	1	1	0.6	0.9
11-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.2
12-Jan-08	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0.4	0.9
13-Jan-08	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.7
14-Jan-08	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	A	0	0	0	0	0	0	0	0.4	0.6
15-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.4
16-Jan-08	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	0.5
17-Jan-08	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Jan-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
19-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
20-Jan-08	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.5
21-Jan-08	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
22-Jan-08	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
23-Jan-08	A	0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	0.6	0.8
24-Jan-08	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	0.8
25-Jan-08	0	0	1	1	0	0	0	0	0	1	1	0	1	1	1	1	1	1	0	0	0	A	0	0	0.5	0.7
26-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0.4	0.5
27-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.4
28-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0.4	0.8
29-Jan-08	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	A	0	0	0	1	0	0	0.5	0.5
30-Jan-08	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.5
31-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.5
Hourly Avg	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
Hourly Max	0.8	0.9	0.9	1.1	1.1	0.9	1.0	0.9	0.9	0.9	0.8	0.9	1.0	0.9	0.9	1.1	1.2	0.9	0.9	0.7	0.8	0.8	0.8	0.9		

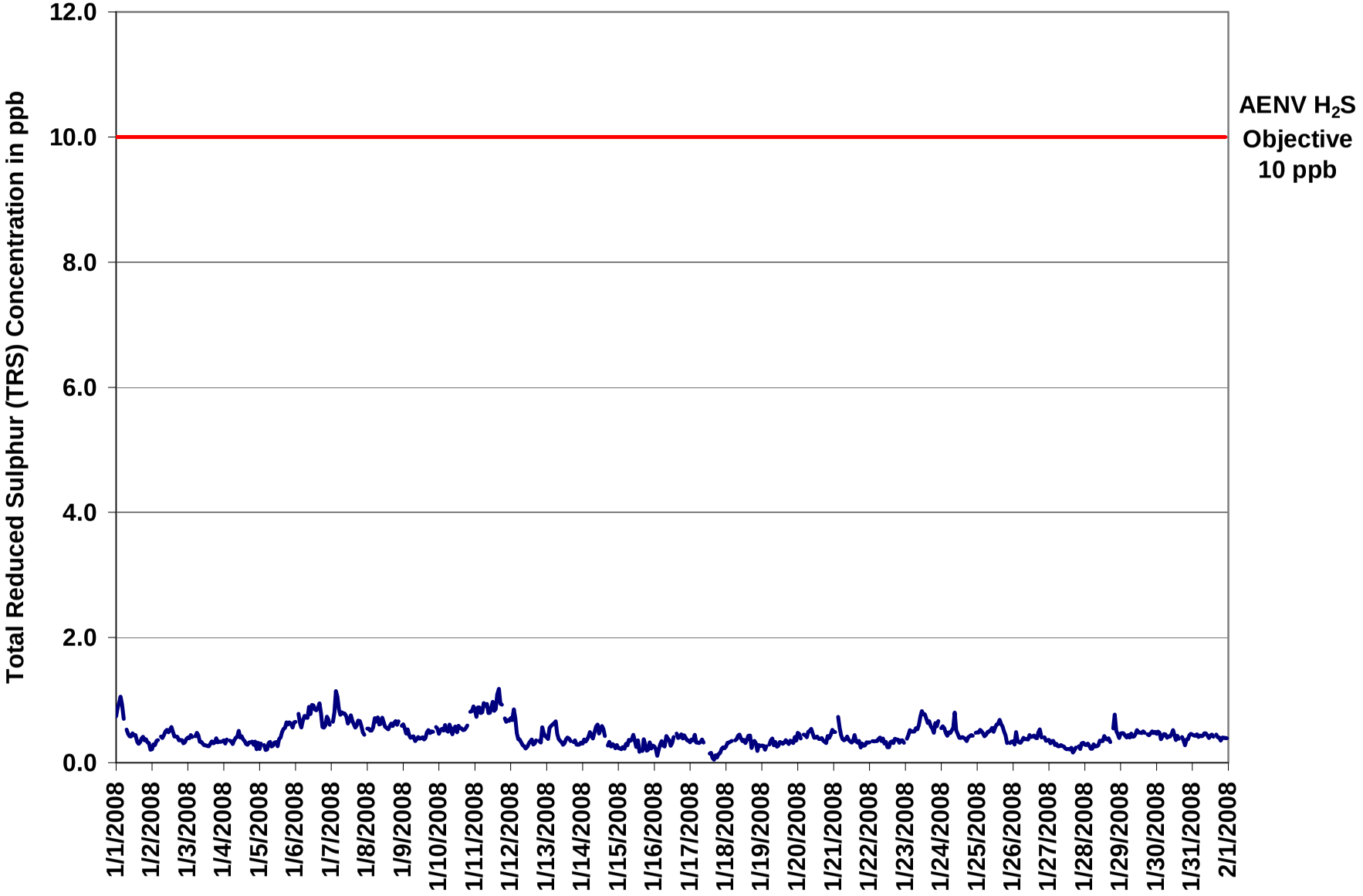


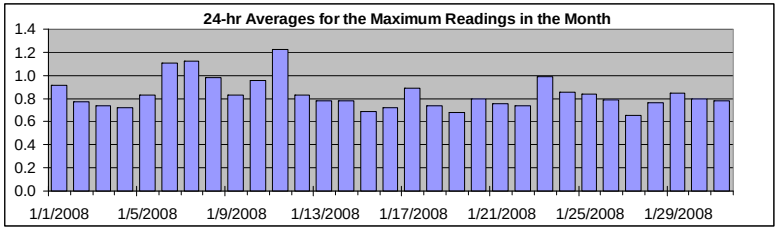
Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights
Station Owner: PASAA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	4.3	ppb	17-Jan	13:00 14:00
Maximum 24-hr Value:	1.2	ppb	11-Jan	

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
	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**

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-Jan-08	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	1.4
2-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
3-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
4-Jan-08	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
5-Jan-08	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	1.3
6-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3
7-Jan-08	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.7
8-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.1
9-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.0
10-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.0	1.3
11-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1.2	1.5
12-Jan-08	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.3
13-Jan-08	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
14-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.1
15-Jan-08	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	1.2
16-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
17-Jan-08	1	1	1	1	1	1	1	1	1	1	C	C	A	4	2	0	0	1	0	1	1	1	1	1	0.9	4.3
18-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
19-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
20-Jan-08	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
21-Jan-08	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.8	1.1
22-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
23-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.3
24-Jan-08	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.8
25-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.0
26-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.0
27-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	0.8
28-Jan-08	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	1.4
29-Jan-08	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	0.9
30-Jan-08	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	1.0
31-Jan-08	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	0.9
Hourly Avg	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.9	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8		
Hourly Max	1.2	1.4	1.4	1.7	1.4	1.2	1.3	1.2	1.3	1.8	1.1	1.3	1.3	4.3	2.4	1.5	1.5	1.5	1.3	1.3	1.4	1.1	1.3	1.3		

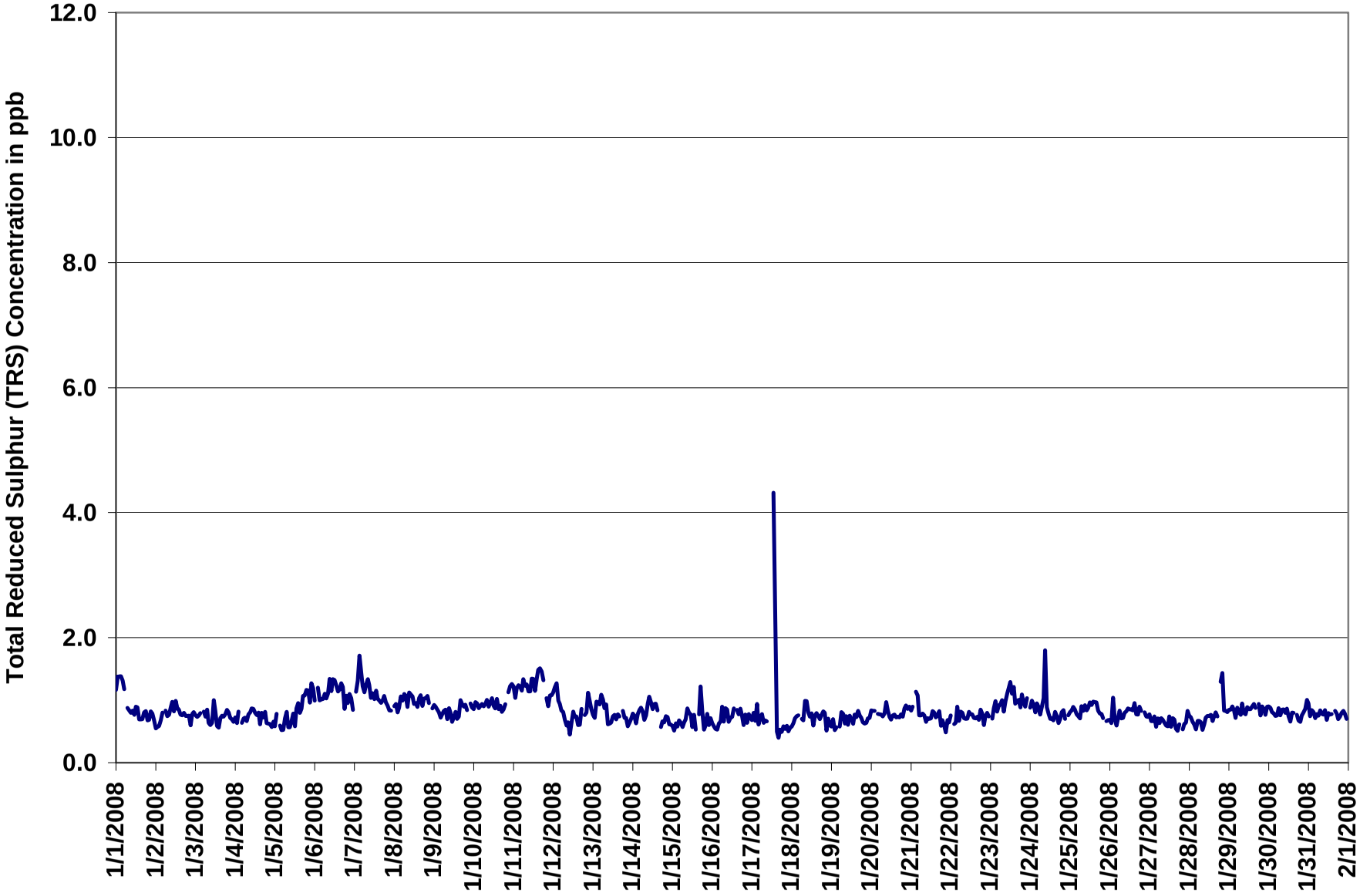
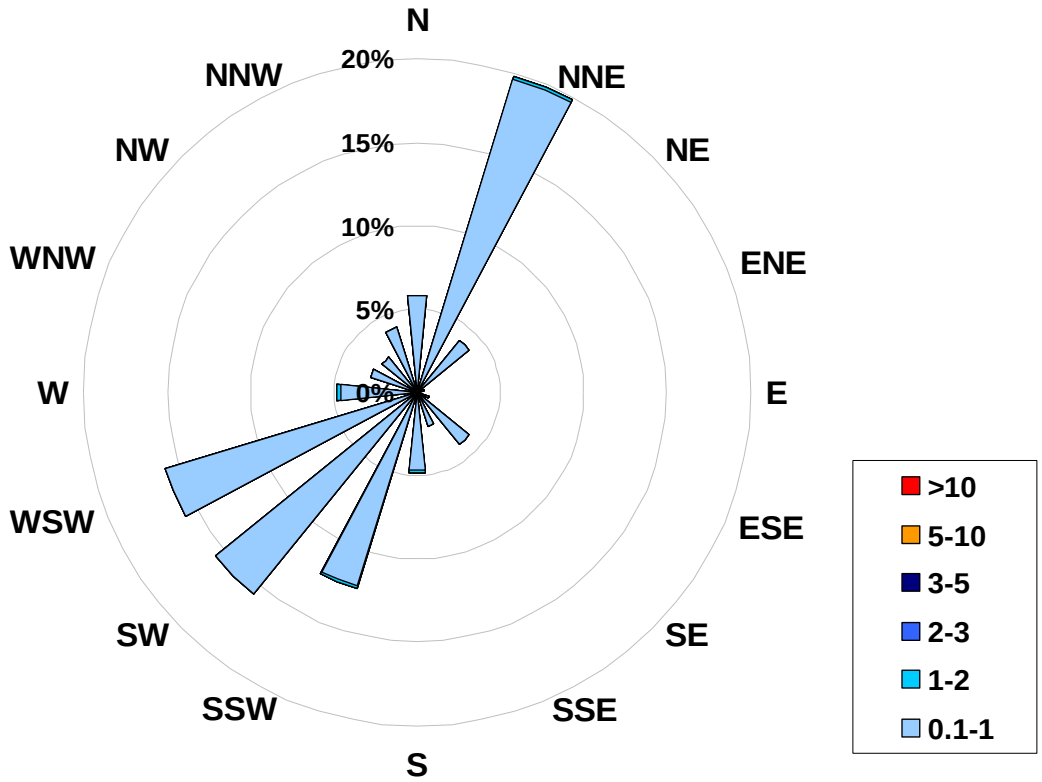


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Smoky Heights Site for January 2008



Calms: 0%

Frequency Distribution of TRS in ppb			
Range			Frequency (hrs)
0.1	<	1	704
1	to	2	5
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			709

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

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

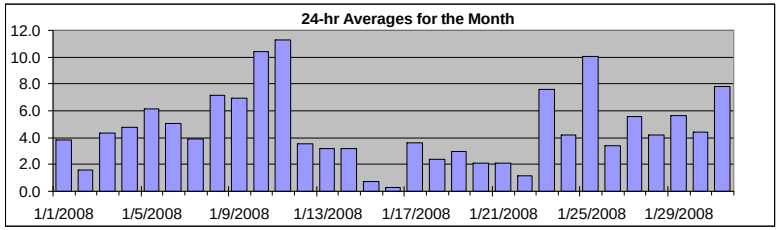
Station: Smoky Heights
Station Owner: PASAA

Monitoring Dates: January 1, 2008 **to** February 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:	65.4	µg/m³	23-Jan	23:00 0:00
Maximum 24-hr Value:	11.3	µg/m³	11-Jan	



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		Geomean
	22.9	15.3	6.0	3.3	1.1	0.0	0.0	4.6	3 µg/m˘	3.7 µg/m˘

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-Jan-08	7	9	9	21	4	17	4	1	4	3	1	0	0	5	0	0	0	D	D	0	0	0	0	0	3.8	20.7
2-Jan-08	0	0	0	0	2	1	1	1	0	2	3	3	2	6	5	1	0	1	1	2	3	0	0	5	1.6	6.4
3-Jan-08	9	15	8	0	4	7	3	4	2	6	4	4	2	0	0	0	2	17	5	4	1	2	2	1	4.3	16.6
4-Jan-08	3	3	4	3	3	4	2	3	3	3	6	3	2	4	3	0	3	31	16	0	4	1	3	9	4.8	30.8
5-Jan-08	2	5	2	3	2	2	4	7	4	4	3	4	4	2	4	8	5	5	9	13	9	19	5	25	6.2	24.9
6-Jan-08	5	16	7	3	3	2	3	2	3	7	9	4	2	3	7	10	7	2	2	3	2	9	10	1	5.1	15.7
7-Jan-08	3	3	3	3	2	3	1	1	2	2	6	5	3	4	6	8	6	4	5	4	6	4	6	4	3.9	8.4
8-Jan-08	2	6	6	6	5	6	6	8	7	9	22	18	5	5	5	7	8	5	5	6	6	6	7	7	7.2	22.3
9-Jan-08	11	8	7	7	6	6	5	5	6	5	6	6	8	8	7	7	7	7	7	7	7	7	7	10	7.0	11.1
10-Jan-08	9	8	7	7	6	6	11	10	9	9	11	11	9	10	12	11	13	12	11	12	13	13	14	14	10.4	14.5
11-Jan-08	13	10	12	14	14	16	16	15	14	13	9	11	11	10	9	18	17	13	6	9	6	6	4	7	11.3	17.7
12-Jan-08	5	4	8	5	2	0	3	1	2	2	3	6	4	1	17	0	0	2	3	3	3	4	4	3	3.5	16.8
13-Jan-08	3	3	10	4	8	6	6	16	7	0	0	0	0	0	3	3	0	1	3	1	0	0	2	1	3.2	16.1
14-Jan-08	0	1	1	2	2	3	3	5	6	7	8	4	5	5	6	4	0	D	0	0	4	4	1	1	3.2	7.5
15-Jan-08	0	0	2	0	0	1	0	0	1	2	1	1	0	0	0	0	0	1	2	2	1	1	1	0	0.7	1.9
16-Jan-08	0	0	0	0	0	0	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.3
17-Jan-08	1	7	4	0	1	2	0	0	0	0	0	12	16	2	5	0	2	2	2	1	5	9	12	7	3.6	15.8
18-Jan-08	0	6	0	0	1	1	0	0	1	3	1	1	2	1	0	1	1	1	9	21	0	0	0	6	2.4	21.1
19-Jan-08	3	1	0	1	2	2	2	3	3	4	3	15	6	3	4	3	2	2	2	1	1	2	1	2	3.0	15.2
20-Jan-08	3	3	3	3	3	2	4	3	2	3	3	4	0	0	0	0	0	1	1	1	2	2	4	5	2.1	4.9
21-Jan-08	7	6	6	7	5	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3	2	5	6	2.1	6.8
22-Jan-08	6	4	2	3	3	3	1	2	1	2	1	0	0	0	0	0	0	0	D	1	0	0	0	0	1.2	5.5
23-Jan-08	1	1	3	5	5	3	4	4	4	11	12	13	5	7	5	6	4	0	0	1	11	7	3	65	7.6	65.4
24-Jan-08	5	25	11	0	0	0	1	6	6	29	4	0	0	0	1	1	1	1	0	1	1	2	3	4	4.2	29.4
25-Jan-08	4	5	5	9	9	8	5	2	5	14	16	19	17	17	20	21	22	18	17	6	0	0	0	1	10.0	22.3
26-Jan-08	3	0	0	0	1	0	2	2	2	0	2	3	2	6	17	11	4	1	3	2	3	7	8	5	3.4	16.6
27-Jan-08	4	4	6	6	5	5	6	4	4	7	5	3	5	7	2	3	3	2	2	2	2	1	26	20	5.5	26.2
28-Jan-08	8	0	0	0	1	1	1	2	2	3	5	5	4	4	10	23	6	4	4	4	4	4	3	N	4.2	23.3
29-Jan-08	10	21	14	1	6	2	2	3	3	3	4	4	3	3	4	6	10	4	6	5	5	6	4	5	5.6	21.4
30-Jan-08	5	5	5	5	5	4	4	4	4	4	5	5	4	4	3	4	6	3	4	6	5	3	3	5	4.4	6.4
31-Jan-08	21	9	57	7	3	2	3	2	3	4	4	5	4	4	6	5	6	5	7	5	7	7	6	6	7.8	56.7
Hourly Avg	5.0	6.0	6.5	4.0	3.6	3.7	3.4	3.7	3.6	5.2	5.1	5.5	4.0	3.8	5.2	5.2	4.4	5.0	4.6	3.9	3.6	4.1	4.7	7.5		
Hourly Max	21.4	25.2	56.7	20.7	13.9	16.7	15.8	16.1	14.5	29.4	22.3	19.0	17.1	17.1	20.5	23.3	22.3	30.8	17.3	21.1	12.8	18.9	26.2	65.4		

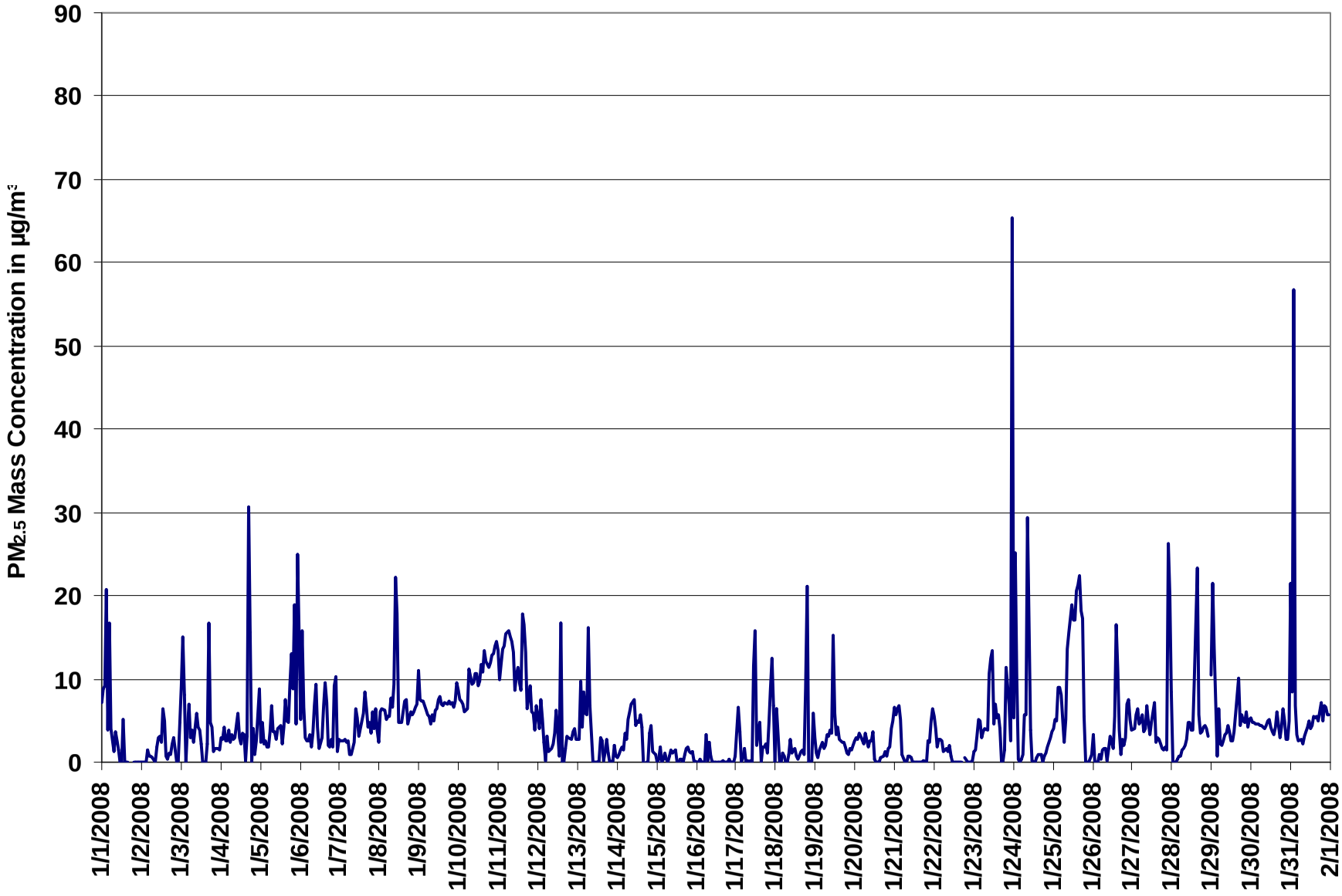


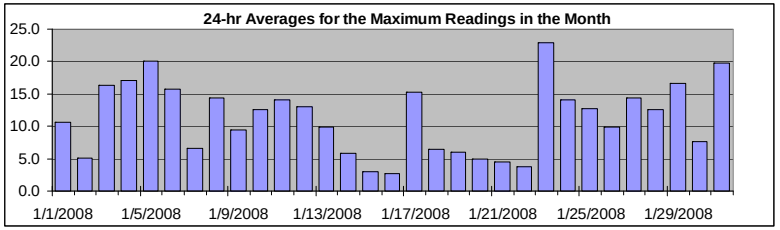
Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights
Station Owner: PASAA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	272.8	µg/m³	23-Jan	23:00 0:00
Maximum 24-hr Value:	22.9	µg/m³	23-Jan	

AIC Time:	0 hrs	Operational Time:	743 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%

Percentile	99	95	75	50	25	5	1	Average / Median		Geomean
	88.6	35.6	10.7	6.7	3.7	1.3	0.0	11.2	7 µg/m˘	9.7 µg/m˘

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-Jan-08	9	12	24	59	10	49	28	3	14	8	4	2	5	17	0	2	0	0	0	2	3	1	0	1	10.6	59.0
2-Jan-08	2	2	3	2	4	7	4	3	3	5	5	6	5	11	12	4	3	4	3	7	9	1	5	14	5.1	14.4
3-Jan-08	25	38	37	2	10	23	18	8	13	10	8	10	6	0	0	0	7	83	24	42	12	5	5	4	16.2	83.3
4-Jan-08	5	5	6	4	6	6	4	6	6	9	10	7	6	22	10	3	87	133	26	4	11	4	10	22	17.1	132.7
5-Jan-08	6	8	4	4	3	3	8	8	6	5	5	8	12	5	6	27	7	6	23	44	19	72	72	120	20.1	119.6
6-Jan-08	18	35	22	9	6	4	6	3	8	20	29	16	3	7	40	36	18	3	3	7	4	39	40	2	15.8	40.1
7-Jan-08	4	5	4	4	4	5	3	4	4	5	10	9	4	6	7	12	10	7	9	7	11	9	9	7	6.6	11.7
8-Jan-08	6	12	11	12	13	11	14	20	11	25	53	53	10	7	8	10	14	7	7	8	8	9	9	9	14.4	53.0
9-Jan-08	17	11	10	9	8	8	8	7	8	9	9	9	10	11	10	9	9	9	9	9	9	9	9	11	9.5	17.2
10-Jan-08	10	10	12	9	9	9	16	13	11	12	13	13	11	12	13	13	15	14	13	13	14	15	16	16	12.6	16.2
11-Jan-08	15	11	14	15	16	17	17	17	16	15	11	14	14	13	16	20	18	17	11	13	8	10	8	11	14.0	20.0
12-Jan-08	10	6	15	8	6	5	11	6	4	5	9	11	12	11	122	28	7	4	5	5	5	5	6	6	13.1	122.0
13-Jan-08	8	5	35	11	27	9	9	38	20	17	1	0	1	3	5	5	1	4	13	10	1	4	6	3	9.8	38.0
14-Jan-08	3	3	4	5	4	8	6	10	9	9	12	6	8	7	7	10	2	0	1	1	12	8	5	2	5.8	11.8
15-Jan-08	1	3	4	2	3	4	2	3	3	6	4	5	1	1	2	1	2	3	5	5	4	4	3	2	3.0	5.8
16-Jan-08	2	2	2	3	4	2	6	3	6	4	2	6	4	2	0	1	2	1	2	3	3	2	2	2	2.6	5.9
17-Jan-08	3	10	7	3	3	5	2	3	2	4	3	44	34	19	18	1	9	4	8	4	20	64	67	31	15.3	66.9
18-Jan-08	5	15	2	5	4	4	0	1	5	5	3	6	10	3	2	4	4	2	21	34	3	1	2	13	6.4	33.5
19-Jan-08	11	4	2	3	7	3	3	6	6	6	8	21	13	6	6	5	5	4	5	3	3	5	4	5	6.0	21.3
20-Jan-08	5	9	7	7	6	6	5	6	4	5	6	7	3	2	1	2	2	3	5	3	4	4	10	7	4.9	9.6
21-Jan-08	9	8	9	10	11	5	3	2	3	2	2	2	1	1	1	2	1	2	3	2	6	5	7	9	4.4	10.5
22-Jan-08	8	8	3	6	5	4	3	5	4	4	3	2	1	1	1	1	1	3	4	7	2	7	2	3	3.8	8.2
23-Jan-08	3	5	10	10	8	5	8	8	7	19	20	24	13	10	10	13	10	7	6	13	35	18	13	273	22.9	272.8
24-Jan-08	18	67	29	5	2	2	4	26	29	84	33	4	1	2	2	3	3	3	0	2	3	4	5	5	14.0	84.1
25-Jan-08	7	8	7	11	11	9	8	5	12	17	18	21	19	20	23	23	24	21	20	15	1	2	2	3	12.8	24.1
26-Jan-08	8	0	0	2	3	2	3	4	3	2	4	5	3	16	95	27	9	6	8	5	6	10	10	7	9.9	94.7
27-Jan-08	6	7	9	8	7	7	8	6	7	12	8	6	17	28	8	5	5	5	4	4	3	4	83	89	14.4	89.5
28-Jan-08	26	1	3	2	3	4	4	6	5	6	8	7	7	8	28	110	13	6	7	10	10	8	6	N	12.6	109.7
29-Jan-08	38	79	84	8	36	11	5	6	7	6	7	7	5	5	6	12	17	9	7	8	7	15	7	11	16.7	83.8
30-Jan-08	9	7	9	7	7	7	6	6	7	7	7	7	7	6	6	7	9	6	6	15	10	6	5	13	7.6	15.3
31-Jan-08	82	40	115	78	12	5	6	5	6	6	8	11	6	6	8	7	8	7	16	7	10	9	8	9	19.7	114.8
Hourly Avg	12.3	14.0	16.2	10.5	8.3	8.0	7.3	7.9	7.9	11.3	10.4	11.3	8.1	8.7	15.3	13.0	10.4	12.4	8.8	10.0	8.3	11.5	14.0	23.7		
Hourly Max	82.2	78.6	114.8	77.7	35.6	49.5	28.2	38.0	28.7	84.1	53.0	52.9	34.4	27.6	122.0	109.7	87.4	132.7	25.9	43.9	35.3	71.7	83.3	272.8		

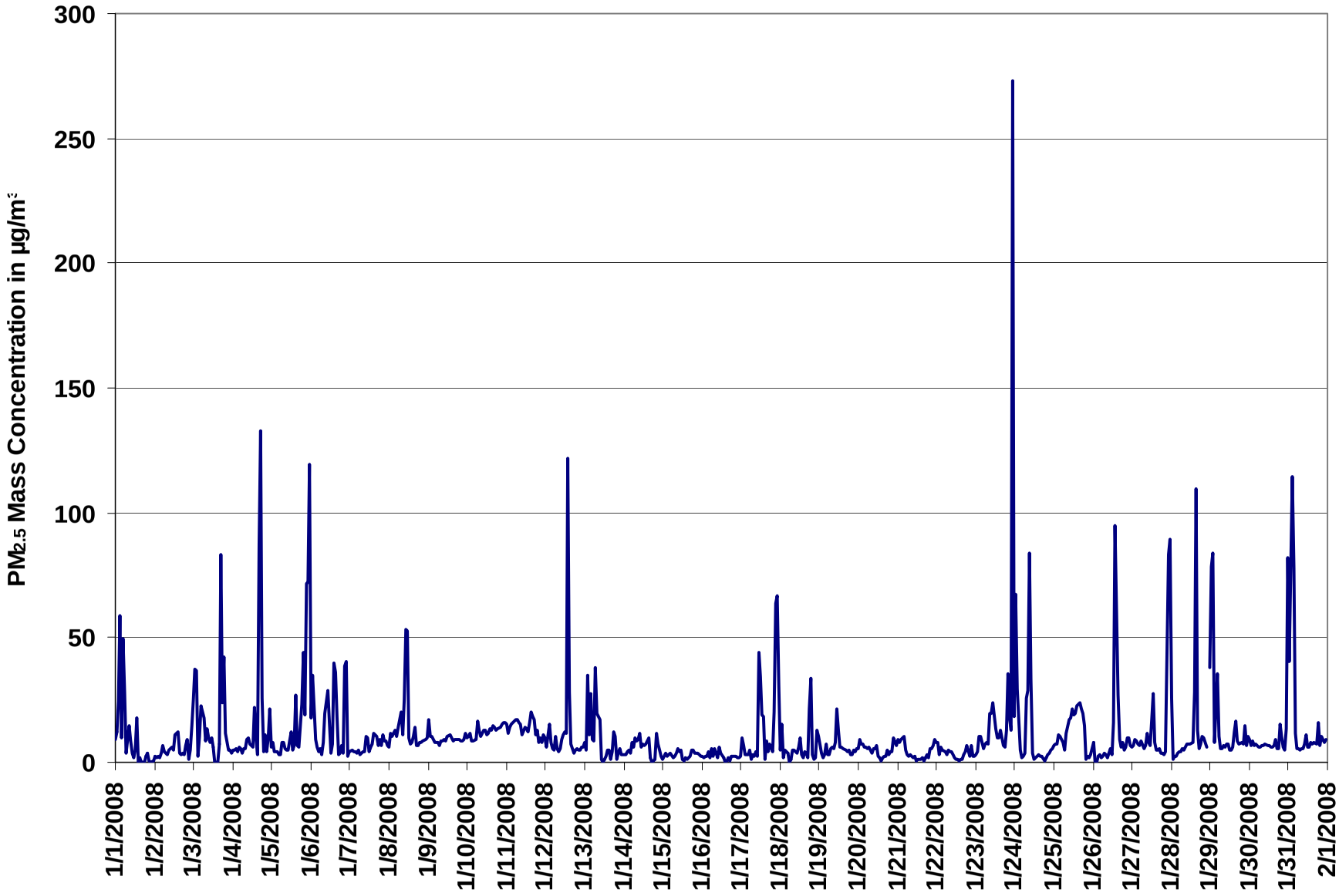
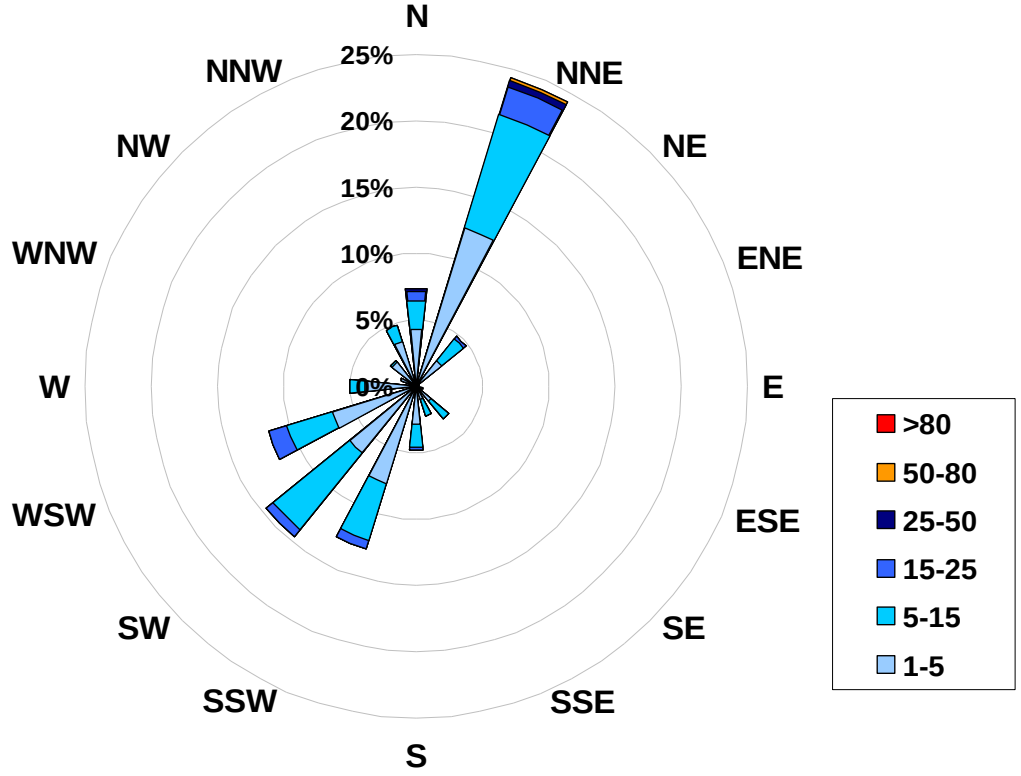


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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 January 2008



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	496
5	to	15	203
15	to	25	34
25	to	50	4
50	to	80	2
	>	80	0
Total Non-Zero Values			739

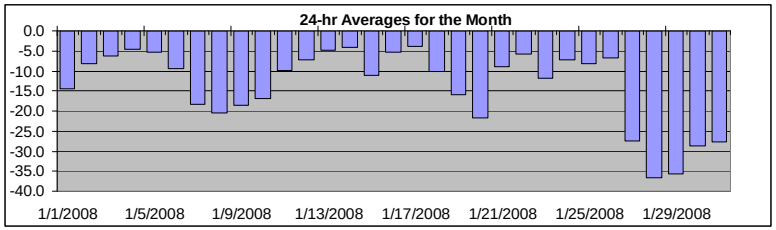
PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights
Station Owner: PASAA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	3.2	°C	16-Jan	21:00 22:00
Maximum 24-hr Value:	-3.8	°C	17-Jan	

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
	2.2	-1.9	-6.0	-10.5	-19.1	-32.2	-39.8	-13.6 °C	-10.5 °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**

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-Jan-08	-23	-22	-22	-22	-22	-22	-21	-20	-19	-18	-17	-15	-14	-12	-10	-8	-8	-8	-7	-7	-7	-7	-8	-8	-14.4	-6.8
2-Jan-08	-8	-8	-8	-9	-10	-13	-11	-14	-14	-15	-15	-13	-12	-10	-5	-4	-3	-4	-4	-3	-4	-3	-4	-7	-8.3	-2.5
3-Jan-08	-9	-9	-9	-8	-10	-9	-10	-10	-10	-9	-6	-6	-5	-3	-2	-3	-5	-5	-5	-4	-4	-3	-4	-5	-6.2	-2.3
4-Jan-08	-5	-4	-3	-5	-6	-4	-4	-7	-8	-11	-7	-5	-4	-1	-3	-3	-5	-5	-3	-3	-3	-2	-3	-3	-4.5	-1.1
5-Jan-08	-4	-4	-4	-4	-4	-4	-4	-5	-5	-5	-4	-4	-3	-4	-5	-4	-5	-6	-7	-8	-8	-9	-9	-9	-5.3	-2.6
6-Jan-08	-8	-7	-8	-7	-8	-8	-8	-9	-10	-10	-9	-9	-9	-8	-8	-9	-10	-11	-11	-11	-11	-12	-12	-12	-9.3	-7.4
7-Jan-08	-13	-15	-16	-17	-18	-19	-21	-22	-23	-21	-20	-19	-18	-16	-12	-13	-17	-19	-18	-20	-19	-20	-20	-21	-18.3	-12.2
8-Jan-08	-22	-22	-21	-21	-23	-23	-23	-23	-24	-25	-22	-19	-18	-20	-19	-19	-19	-18	-19	-19	-18	-18	-18	-18	-20.6	-18.3
9-Jan-08	-18	-18	-18	-18	-18	-18	-18	-18	-19	-19	-19	-19	-19	-18	-18	-18	-20	-20	-20	-19	-19	-18	-18	-17	-18.7	-16.9
10-Jan-08	-16	-18	-19	-20	-20	-22	-22	-21	-19	-18	-18	-16	-16	-15	-15	-14	-15	-15	-16	-16	-14	-14	-15	-14	-16.9	-14.0
11-Jan-08	-12	-11	-11	-10	-10	-10	-10	-10	-10	-10	-11	-11	-10	-8	-7	-6	-7	-9	-11	-10	-10	-10	-11	-10	-9.8	-6.0
12-Jan-08	-10	-11	-11	-10	-9	-10	-9	-9	-11	-9	-8	-5	-4	-2	-4	-5	-6	-4	-3	-4	-5	-6	-7	-9	-7.1	-2.4
13-Jan-08	-10	-12	-11	-11	-10	-12	-12	-8	-5	0	0	0	-1	0	-2	-2	-2	-2	-2	-2	-2	-2	-4	-4	-4.8	0.4
14-Jan-08	-4	-4	-5	-6	-8	-8	-8	-7	-6	-6	-5	-4	-3	-3	-3	0	0	0	0	-1	-2	-5	-4	-4	-4.0	0.1
15-Jan-08	-4	-5	-7	-7	-7	-9	-12	-14	-15	-14	-14	-13	-12	-11	-10	-10	-12	-15	-15	-13	-13	-11	-11	-12	-11.1	-4.2
16-Jan-08	-14	-13	-15	-14	-15	-16	-13	-12	-12	-7	-6	-4	-2	-1	-2	-1	2	3	3	3	3	3	2	2	-5.2	3.2
17-Jan-08	2	2	1	1	2	1	1	0	1	1	-3	-4	-4	-4	-5	-6	-7	-8	-9	-11	-10	-11	-10	-10	-3.8	2.5
18-Jan-08	-10	-11	-12	-13	-11	-10	-11	-15	-15	-13	-11	-10	-9	-8	-8	-8	-8	-8	-8	-8	-8	-8	-9	-10	-10.1	-7.7
19-Jan-08	-10	-10	-10	-10	-11	-12	-13	-13	-14	-15	-16	-16	-17	-17	-16	-16	-17	-19	-19	-20	-22	-22	-23	-24	-15.8	-9.7
20-Jan-08	-24	-24	-25	-25	-25	-27	-27	-27	-27	-26	-25	-21	-19	-18	-18	-18	-18	-18	-19	-19	-19	-19	-18	-17	-21.7	-17.0
21-Jan-08	-17	-17	-17	-17	-13	-10	-9	-10	-10	-8	-6	-6	-6	-5	-5	-5	-5	-6	-6	-8	-6	-6	-7	-7	-8.9	-4.7
22-Jan-08	-7	-4	0	-2	-3	-3	-4	-5	-5	-5	-4	-4	-4	-5	-5	-5	-6	-9	-10	-10	-9	-10	-11	-11	-5.8	-0.5
23-Jan-08	-13	-14	-13	-15	-15	-16	-17	-16	-16	-15	-12	-11	-8	-7	-7	-8	-8	-11	-11	-10	-10	-9	-10	-11	-11.8	-6.9
24-Jan-08	-10	-10	-8	-8	-8	-8	-9	-9	-9	-9	-8	-7	-7	-7	-6	-6	-5	-5	-6	-6	-6	-6	-6	-6	-7.3	-5.3
25-Jan-08	-6	-7	-7	-7	-7	-7	-8	-9	-12	-12	-12	-11	-10	-10	-11	-11	-10	-10	-10	-7	-4	-3	-4	-4	-8.3	-3.4
26-Jan-08	-3	-4	-4	-3	-4	-5	-5	-5	-4	-5	-6	-5	-4	-3	-3	-4	-4	-6	-9	-12	-14	-16	-17	-18	-6.7	-2.7
27-Jan-08	-20	-22	-23	-24	-25	-25	-26	-27	-27	-28	-28	-28	-28	-29	-29	-29	-29	-30	-30	-30	-30	-30	-30	-31	-27.4	-20.0
28-Jan-08	-32	-34	-36	-37	-39	-39	-40	-40	-40	-40	-38	-36	-36	-32	-30	-31	-33	-36	-38	-41	-38	-39	-38	-38	-36.7	-29.7
29-Jan-08	-38	-40	-39	-41	-40	-41	-40	-40	-40	-40	-38	-36	-34	-34	-33	-32	-32	-32	-32	-32	-31	-31	-31	-31	-35.7	-30.9
30-Jan-08	-31	-31	-31	-31	-31	-31	-31	-31	-31	-30	-29	-28	-27	-26	-26	-26	-26	-27	-27	-27	-27	-27	-28	-29	-28.7	-26.1
31-Jan-08	-29	-30	-30	-31	-31	-30	-30	-29	-29	-29	-29	-28	-26	-26	-25	-25	-25	-25	-26	-26	-26	-26	-26	-26	-27.7	-25.1
Hourly Avg	-13.8	-14.1	-14.2	-14.6	-14.8	-15.0	-15.3	-15.6	-15.7	-15.2	-14.3	-13.3	-12.6	-11.7	-11.2	-11.2	-11.8	-12.4	-12.8	-12.9	-12.8	-13.0	-13.4	-13.7		
Hourly Max	2.5	2.3	0.6	0.9	1.5	1.4	0.6	-0.5	0.7	0.6	0.4	-0.1	-0.9	-0.3	-1.6	0.1	1.9	2.9	2.7	2.8	3.0	3.2	2.5	2.0		

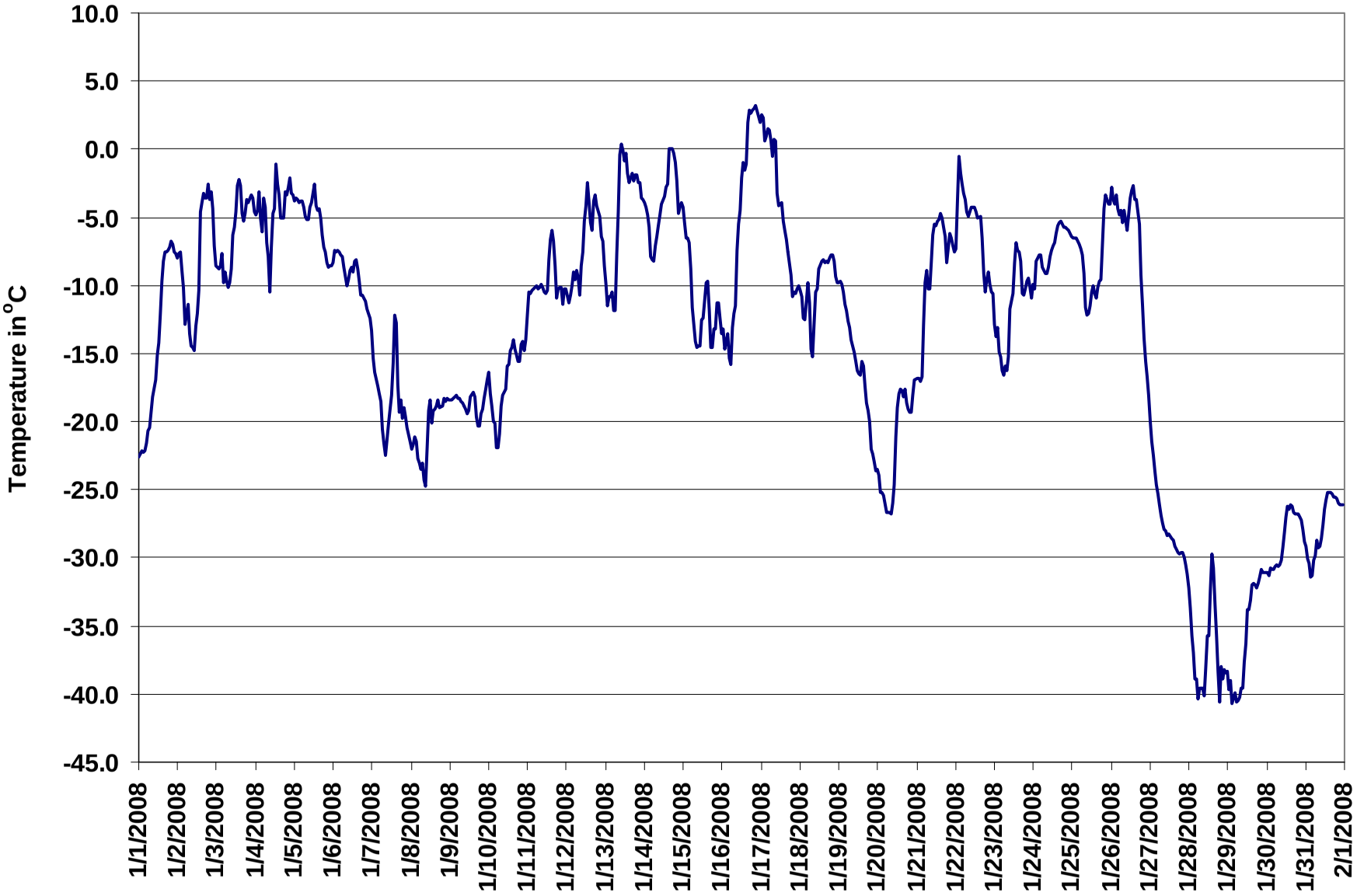


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

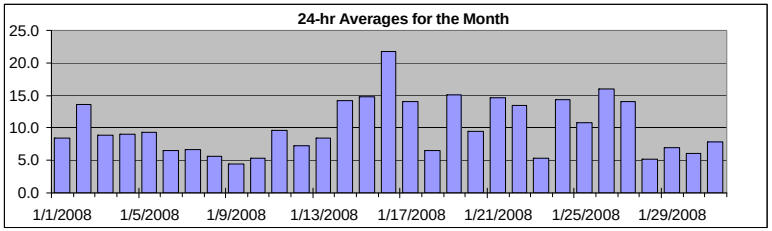
PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights
Station Owner: PASAA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	36.3	km/hr	16-Jan	20:00 21:00
Maximum 24-hr Value:	21.7	km/hr	16-Jan	

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
	30.8	22.0	13.3	8.8	5.7	2.8	1.6	10.1 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**

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-hr Scalar Average	Daily Max
1-Jan-08	3	2	1	2	1	1	3	1	2	3	3	5	5	4	15	20	19	24	16	14	12	15	12	17	8.4	23.6
2-Jan-08	14	11	9	9	10	8	8	10	9	10	9	8	10	14	17	16	18	20	21	23	20	22	18	14	13.6	22.6
3-Jan-08	11	14	14	12	7	9	8	11	12	12	13	8	5	5	5	3	7	8	8	9	9	8	8	9	8.9	14.3
4-Jan-08	5	4	8	5	12	13	13	6	9	10	10	8	7	3	4	6	5	11	10	9	11	13	16	16	9.0	16.5
5-Jan-08	17	17	15	16	15	14	13	12	10	12	11	7	7	8	8	8	6	5	4	4	4	4	4	3	9.3	17.2
6-Jan-08	2	7	8	7	9	11	8	5	4	4	6	9	9	4	3	6	6	8	8	6	7	8	8	5	6.5	10.7
7-Jan-08	2	5	6	8	10	4	5	5	7	8	7	9	6	3	3	2	5	8	11	11	10	8	9	6	6.6	11.5
8-Jan-08	7	9	6	2	2	2	3	4	3	2	4	4	6	7	9	8	9	10	7	7	8	6	6	5	5.7	10.0
9-Jan-08	5	4	4	3	3	2	2	2	2	2	2	2	2	2	1	1	2	3	8	10	10	11	12	13	4.5	13.2
10-Jan-08	11	10	9	10	6	3	4	4	5	5	5	4	5	3	4	4	4	5	4	5	5	4	6	5	5.4	11.3
11-Jan-08	6	7	6	9	10	11	12	12	13	15	13	12	9	8	7	9	8	6	7	10	14	11	11	8	9.6	14.5
12-Jan-08	5	8	13	10	7	6	3	7	8	7	9	7	3	7	6	5	4	7	7	6	9	10	9	10	7.2	13.1
13-Jan-08	8	7	5	4	3	6	7	16	15	22	18	8	12	8	7	6	4	4	3	3	8	9	10	9	8.4	22.0
14-Jan-08	11	12	11	11	10	9	11	10	10	9	6	6	7	5	7	15	24	22	26	30	22	31	20	18	14.2	30.8
15-Jan-08	24	24	13	11	12	11	12	12	12	17	16	13	13	13	17	18	15	15	17	15	15	16	11	14	14.8	24.1
16-Jan-08	11	17	16	13	10	11	12	10	14	18	14	15	24	23	23	23	31	34	34	36	36	35	31	31	21.7	36.3
17-Jan-08	31	18	11	22	25	25	17	15	17	20	12	10	9	9	9	7	9	10	15	18	11	4	5	7	14.0	31.3
18-Jan-08	5	3	5	8	11	9	7	5	4	5	6	6	4	4	4	4	4	4	5	6	7	10	15	17	6.5	16.8
19-Jan-08	17	17	17	21	17	16	17	18	19	18	17	18	17	16	14	18	16	16	13	8	3	9	10	10	15.1	20.8
20-Jan-08	9	10	7	7	7	7	6	9	9	7	7	6	9	9	12	11	10	13	11	11	15	11	12	10	9.4	14.7
21-Jan-08	7	10	10	11	13	13	12	13	15	14	16	19	18	16	19	19	15	17	15	11	12	18	17	20	14.6	19.7
22-Jan-08	14	14	25	28	25	22	23	18	9	10	10	10	10	11	14	15	11	8	6	7	7	8	11	12	13.5	28.3
23-Jan-08	12	8	7	6	6	6	6	6	5	5	4	4	4	4	6	5	4	6	6	4	3	3	4	3	5.3	12.0
24-Jan-08	7	9	12	14	14	16	15	14	14	10	12	15	17	15	12	11	11	16	22	19	19	18	18	16	14.4	21.9
25-Jan-08	14	10	10	12	11	10	11	11	12	13	13	9	9	13	15	11	11	7	4	12	13	16	5	7	10.8	15.5
26-Jan-08	16	7	13	18	12	21	23	16	17	14	20	6	6	5	5	4	6	27	29	29	25	23	21	21	16.0	29.2
27-Jan-08	22	20	19	18	19	17	17	17	17	16	13	14	15	16	16	16	14	9	8	8	8	6	6	6	14.0	22.1
28-Jan-08	6	5	6	4	2	2	2	5	7	5	6	7	7	7	4	5	8	7	6	5	5	7	4	2	5.1	8.1
29-Jan-08	3	5	5	3	5	5	5	3	3	7	8	8	7	7	9	10	10	11	11	9	11	6	6	10	7.0	11.2
30-Jan-08	8	4	5	5	5	4	4	4	4	4	3	4	4	5	5	3	5	8	7	10	12	11	11	9	6.1	11.7
31-Jan-08	9	11	10	8	7	8	7	9	7	6	9	7	7	7	8	8	7	8	9	8	7	7	7	8	7.9	11.1
1-hr Average	10.4	9.9	9.9	10.2	9.8	9.7	9.5	9.4	9.4	9.9	9.8	8.6	8.7	8.4	9.2	9.6	9.9	11.5	11.6	11.7	11.5	11.9	11.0	11.0		
Hourly Max	31.3	23.7	25.0	28.3	25.1	25.1	22.6	18.4	18.6	22.0	19.7	19.4	23.6	22.6	23.4	23.3	30.8	33.8	33.8	35.8	36.3	35.0	31.5	30.8		

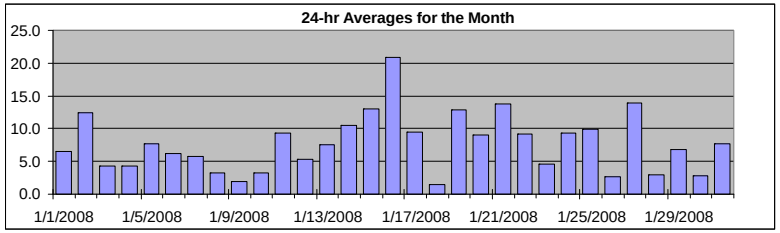
PASZA - Smoky Heights Vector Wind Speed Monthly Summary

Station: Smoky Heights
Station Owner: PASAA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	36.3	km/hr	16-Jan	20:00 21:00
Maximum 24-hr Value:	20.8	km/hr	16-Jan	

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
	30.7	21.8	13.0	8.6	5.4	2.0	1.1	10.9 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**

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-hr Vector Average	Daily Max
1-Jan-08	3	2	0	2	1	1	2	1	2	3	3	4	5	4	15	20	19	24	16	14	11	15	12	17	6.5	23.5
2-Jan-08	14	10	8	8	10	7	7	10	8	10	9	8	10	14	16	16	17	20	20	23	20	22	18	13	12.4	22.6
3-Jan-08	10	14	14	12	7	7	7	10	11	12	13	8	5	5	4	3	7	8	8	9	9	7	8	9	4.4	14.2
4-Jan-08	4	4	8	4	12	13	13	3	9	10	10	8	6	2	3	6	4	11	10	9	11	13	16	16	4.2	16.4
5-Jan-08	17	17	15	16	14	14	12	12	10	11	11	6	7	5	7	8	6	5	3	3	3	2	3	3	7.7	17.1
6-Jan-08	2	7	8	7	9	11	8	4	3	4	6	9	9	4	3	6	6	8	8	6	7	8	8	5	6.2	10.6
7-Jan-08	2	5	6	8	10	3	4	5	7	7	7	9	6	3	3	1	5	7	11	11	10	8	9	6	5.8	11.4
8-Jan-08	7	9	6	2	2	0	2	3	3	1	4	4	5	7	9	8	8	10	7	7	8	6	6	5	3.3	10.0
9-Jan-08	5	4	4	3	3	2	2	2	0	2	2	2	2	1	1	1	2	3	8	10	10	11	11	13	2.0	12.9
10-Jan-08	11	10	8	10	6	2	3	4	4	4	4	2	4	3	4	3	4	5	4	4	5	4	6	4	3.2	11.2
11-Jan-08	6	7	6	9	10	11	11	12	13	14	13	11	8	8	6	9	8	6	6	9	14	11	11	8	9.3	14.5
12-Jan-08	1	8	13	10	7	6	2	6	7	6	9	7	2	7	6	4	4	7	6	5	9	10	9	9	5.3	13.1
13-Jan-08	8	7	1	3	1	5	5	15	13	22	17	7	11	6	7	6	4	3	1	2	8	9	9	9	7.6	21.9
14-Jan-08	11	12	10	11	10	9	10	10	10	8	6	6	7	5	7	14	23	22	26	30	22	31	19	17	10.6	30.6
15-Jan-08	23	24	13	11	11	11	11	12	12	17	16	13	13	13	17	18	15	15	17	15	15	16	11	14	13.0	23.6
16-Jan-08	10	17	16	13	10	11	12	10	14	17	14	14	24	23	23	23	31	34	34	36	36	35	31	31	20.8	36.3
17-Jan-08	31	15	10	22	25	25	17	15	17	19	12	10	9	9	8	7	8	10	15	18	11	3	4	6	9.5	31.2
18-Jan-08	3	2	5	8	11	9	7	5	4	5	6	6	4	4	4	4	3	4	5	5	7	10	15	17	1.5	16.8
19-Jan-08	17	17	17	21	17	16	17	18	19	18	17	18	17	16	14	18	16	16	13	8	2	9	10	10	12.9	20.8
20-Jan-08	8	10	7	7	7	7	6	9	9	7	7	6	9	9	12	11	10	13	11	11	15	11	11	10	9.1	14.5
21-Jan-08	7	10	10	11	13	13	12	13	14	13	16	19	18	16	19	18	15	17	15	11	12	18	17	19	13.8	19.3
22-Jan-08	13	13	25	28	25	21	23	16	6	9	10	10	10	10	13	15	11	7	6	6	7	8	11	12	9.2	28.3
23-Jan-08	12	8	6	6	6	6	6	6	5	5	4	3	3	4	6	3	3	4	6	3	2	2	2	3	4.6	11.7
24-Jan-08	7	9	12	14	14	16	15	14	13	10	12	14	17	15	11	11	10	16	22	19	19	18	18	16	9.3	21.7
25-Jan-08	14	9	10	12	11	10	11	11	12	13	13	9	9	12	15	11	10	7	3	12	13	15	4	7	9.9	15.3
26-Jan-08	16	7	12	17	12	21	23	16	17	13	20	5	6	4	3	3	2	27	29	29	25	23	21	21	2.6	29.1
27-Jan-08	22	20	19	18	19	17	17	16	17	15	13	14	14	16	16	15	14	9	8	8	8	6	6	6	13.9	22.0
28-Jan-08	6	5	6	3	1	1	2	5	6	5	6	7	7	7	3	4	8	7	6	5	5	7	4	2	3.0	8.1
29-Jan-08	2	5	5	3	5	5	5	3	2	7	8	7	7	7	9	10	10	11	11	9	11	6	6	10	6.9	11.1
30-Jan-08	8	4	5	4	5	4	3	4	4	4	3	4	4	5	5	3	5	8	7	10	12	11	10	9	2.9	11.6
31-Jan-08	9	11	10	8	7	8	7	9	6	6	9	7	7	7	8	8	7	8	9	8	7	7	7	8	7.7	11.1
1-hr Vector	3.2	2.7	3.5	4.4	4.4	4.1	3.9	3.7	4.2	4.2	3.8	3.0	2.4	2.0	2.5	2.5	3.1	3.0	3.3	3.1	3.1	4.6	3.2	2.9		
Hourly Max	31.2	23.6	24.9	28.3	25.1	24.9	22.6	18.4	18.6	21.9	19.7	19.3	23.5	22.6	23.3	23.2	30.7	33.8	33.8	35.7	36.3	34.9	31.5	30.7		

PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights
Station Owner: PASAA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 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
	355.4	342.3	249.3	212.2	39.4	15.3	5.7		269 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 / 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	WD Sector
1-Jan-08	192	219	277	19	339	358	23	31	355	21	25	28	26	44	131	133	138	135	134	133	135	141	138	140	128	SE
2-Jan-08	147	156	167	218	253	253	224	217	222	215	212	213	192	188	210	227	229	232	237	226	217	226	238	224	217	SW
3-Jan-08	240	233	248	245	231	240	261	258	246	231	219	239	232	255	251	309	23	23	8	19	18	11	24	26	267	W
4-Jan-08	341	311	269	283	251	260	229	212	264	235	247	266	228	307	290	290	3	24	14	12	12	25	23	18	309	NW
5-Jan-08	21	17	13	4	6	356	347	336	333	332	336	6	25	210	255	31	46	44	346	334	8	5	349	45	359	N
6-Jan-08	7	13	18	356	354	7	10	32	45	29	27	28	30	37	26	19	20	29	5	349	354	4	355	313	12	NNE
7-Jan-08	153	252	262	267	270	204	214	211	206	214	226	229	255	249	126	166	260	237	245	256	242	256	249	198	238	WSW
8-Jan-08	182	221	240	217	130	124	261	25	31	20	25	26	46	34	31	26	14	25	41	39	38	39	36	39	32	NNE
9-Jan-08	25	26	24	32	34	29	21	40	150	119	157	150	130	158	255	199	205	218	223	224	216	226	221	224	218	SW
10-Jan-08	235	220	219	243	235	265	29	24	40	70	262	193	133	140	188	161	135	195	201	195	223	230	217	191	210	SSW
11-Jan-08	220	210	213	213	216	222	209	201	218	216	222	230	235	246	220	175	197	211	240	219	207	227	215	253	218	SW
12-Jan-08	244	174	182	193	227	249	251	241	214	213	252	258	259	24	27	331	253	248	216	208	220	244	222	210	227	SW
13-Jan-08	202	205	209	240	234	227	198	217	218	252	256	239	203	196	175	211	233	271	127	256	256	257	236	217	227	SW
14-Jan-08	212	222	213	207	214	212	201	194	207	202	220	219	226	205	223	299	303	283	291	295	305	288	315	294	265	W
15-Jan-08	306	318	294	300	295	254	255	253	258	259	258	252	249	248	244	243	250	262	262	254	248	230	191	198	260	W
16-Jan-08	209	250	244	230	225	244	227	214	205	207	211	232	247	249	256	260	255	252	252	255	259	258	254	256	246	WSW
17-Jan-08	263	359	346	279	297	296	291	275	299	327	50	14	8	18	33	33	25	34	25	25	27	319	351	15	332	NNW
18-Jan-08	78	8	258	265	252	252	255	208	190	234	252	254	240	222	211	207	160	106	24	18	20	26	30	19	295	WNW
19-Jan-08	22	22	23	26	21	26	21	23	23	26	24	15	17	17	9	17	19	25	21	37	184	257	255	252	18	NNE
20-Jan-08	239	206	206	200	197	202	199	212	208	210	223	230	229	237	236	243	232	219	205	227	248	218	228	189	220	SW
21-Jan-08	169	193	193	196	215	227	232	231	223	231	234	246	243	248	255	246	247	243	245	240	243	253	247	258	237	WSW
22-Jan-08	251	306	316	317	320	324	309	319	271	310	315	283	283	238	188	188	203	220	217	205	215	235	236	227	280	W
23-Jan-08	228	222	227	207	199	186	193	198	212	197	206	161	201	175	181	173	217	238	217	201	129	216	277	108	204	SSW
24-Jan-08	32	20	14	17	25	31	24	19	28	19	26	29	26	34	42	72	97	133	120	116	124	133	141	150	65	ENE
25-Jan-08	158	184	228	238	217	216	237	232	255	252	254	247	232	241	243	246	245	242	196	222	228	229	194	212	230	SW
26-Jan-08	266	188	183	195	184	198	203	201	218	211	196	210	190	176	1	217	283	339	354	25	29	16	11	348	271	W
27-Jan-08	344	348	349	343	346	346	341	345	349	356	352	345	355	355	351	348	346	344	330	340	346	349	6	12	348	NNW
28-Jan-08	17	317	277	297	285	285	219	230	261	196	180	177	177	129	132	252	267	261	271	272	263	261	269	306	247	WSW
29-Jan-08	346	28	12	358	25	25	24	4	360	30	28	31	26	26	26	16	15	23	13	11	20	27	37	26	21	NNE
30-Jan-08	23	44	24	172	190	171	161	160	178	178	182	127	128	113	124	143	12	37	25	21	20	24	25	21	58	ENE
31-Jan-08	18	18	13	17	12	11	16	17	46	40	32	33	34	31	20	16	18	12	22	38	44	42	39	27	25	NNE
Hourly Avg	269	290	282	276	279	276	268	257	252	255	256	270	264	258	247	260	276	283	288	285	273	265	270	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: January 1, 2008 to February 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
	78.5	50.9	17.1	9.7	6.4	3.6	2.6

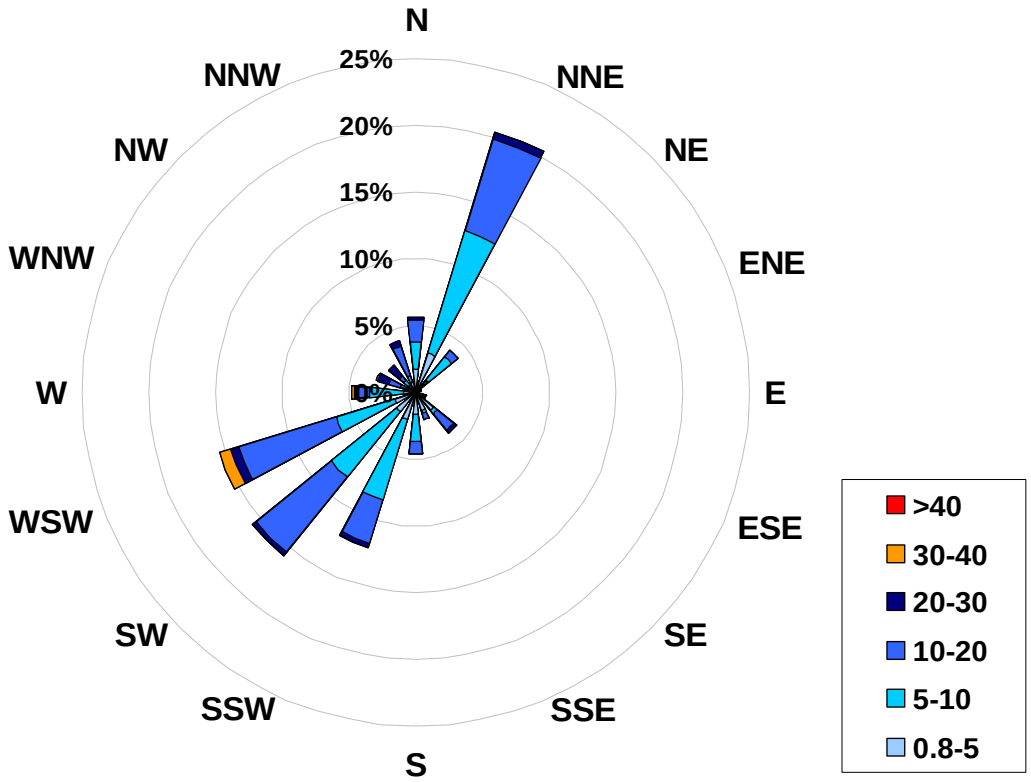
Status Flag Characters

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**

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-Jan-08	19	10	77	26	29	23	14	39	15	16	19	5	7	31	10	5	5	4	6	15	27	6	7	6	76.8
2-Jan-08	8	7	20	27	9	18	20	20	21	10	18	14	10	6	22	9	9	7	8	2	7	7	8	18	27.4
3-Jan-08	24	7	7	6	21	48	45	12	15	9	7	13	18	10	21	40	12	8	10	7	8	14	7	7	48.4
4-Jan-08	20	35	22	43	12	12	11	66	16	17	18	12	44	67	18	16	32	7	6	11	8	8	7	6	66.7
5-Jan-08	6	4	6	6	9	9	9	7	6	10	12	29	14	58	36	10	14	10	47	46	51	80	32	30	79.7
6-Jan-08	69	8	16	11	9	7	10	26	50	15	9	7	8	12	14	6	8	7	17	14	13	7	11	21	69.0
7-Jan-08	51	17	13	7	7	27	19	12	7	14	6	12	7	60	19	54	9	11	7	7	6	8	12	28	60.3
8-Jan-08	9	6	21	34	40	91	41	34	14	78	14	15	17	11	5	16	22	3	8	4	4	5	5	6	91.4
9-Jan-08	11	9	7	7	11	22	27	18	79	16	25	19	14	38	16	39	11	7	3	6	5	6	6	13	78.7
10-Jan-08	7	12	24	8	12	66	22	16	23	29	58	72	21	23	18	30	14	14	11	14	24	10	6	23	72.2
11-Jan-08	15	12	15	4	8	5	12	9	6	4	5	5	8	6	38	7	15	15	25	24	8	9	9	24	37.8
12-Jan-08	88	6	5	9	14	23	89	10	10	15	3	11	73	6	9	40	25	12	32	26	11	12	13	19	88.8
13-Jan-08	17	18	88	43	86	38	64	26	33	7	27	19	12	33	8	18	12	32	89	58	24	13	12	11	89.3
14-Jan-08	9	5	14	9	9	16	18	13	7	14	15	12	14	18	17	15	12	6	7	4	13	6	19	14	18.6
15-Jan-08	15	5	11	12	16	9	9	10	6	3	3	4	5	4	2	2	5	3	5	6	5	7	9	9	16.4
16-Jan-08	9	8	6	5	9	11	11	14	8	3	6	15	4	4	5	6	2	3	4	3	2	3	2	3	15.3
17-Jan-08	6	31	21	9	4	6	9	13	15	25	10	13	9	6	9	10	22	8	6	3	15	47	36	30	47.3
18-Jan-08	51	59	26	12	6	5	9	12	21	13	5	3	15	10	10	23	41	16	17	6	3	4	5	3	58.8
19-Jan-08	4	3	3	3	4	4	4	4	4	3	4	3	3	4	5	4	9	5	3	21	59	10	6	4	58.7
20-Jan-08	22	6	8	6	10	5	10	4	4	5	5	7	5	5	5	6	6	8	9	6	10	16	17	8	22.0
21-Jan-08	19	9	10	6	15	11	6	7	9	4	4	4	12	6	8	5	6	7	5	10	10	5	8	11	19.3
22-Jan-08	18	36	6	4	7	6	6	43	49	28	11	16	16	25	13	11	15	22	26	11	12	8	3	4	49.0
23-Jan-08	11	11	16	13	10	11	12	14	8	16	19	50	24	6	9	40	41	44	15	40	54	59	69	29	68.7
24-Jan-08	14	14	4	3	5	4	7	7	11	8	7	8	3	7	12	13	16	6	7	5	5	5	4	5	15.8
25-Jan-08	7	8	9	5	7	8	9	4	7	8	6	11	13	15	11	8	9	16	50	18	7	9	39	22	49.7
26-Jan-08	13	12	18	7	13	4	4	5	9	20	3	36	8	69	67	67	66	7	12	4	5	4	10	8	68.8
27-Jan-08	7	8	11	7	6	8	6	9	9	9	11	8	10	11	10	9	8	11	7	7	7	9	10	11	11.5
28-Jan-08	10	27	8	31	63	63	31	10	12	23	5	5	5	6	61	55	7	5	5	10	8	4	9	16	63.5
29-Jan-08	30	8	10	21	9	8	9	26	39	13	7	5	4	4	4	9	7	9	4	6	7	11	12	9	38.8
30-Jan-08	9	12	25	46	8	11	11	19	10	8	15	13	27	18	25	28	30	6	7	7	5	5	4	4	46.4
31-Jan-08	4	3	3	7	7	10	9	14	9	9	5	19	9	8	8	8	15	9	15	8	9	9	8	7	18.7
Hourly Max	88	59	88	46	86	91	89	66	79	78	58	72	73	69	67	67	66	44	89	58	59	80	69	30	

1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for January 2008



Calms:	**0%**

Frequency Distribution of Wind in km/hr			
Range			**Frequency (hrs)**
0.8	<	5	151
5	to	10	279
10	to	20	266
20	to	30	37
30	to	40	10
	>	40	0
Total Non-Zero Values			744

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: January 1, 2008 to February 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:	685
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	23:00 / 0:00
1-Jan-08	16	16	14	13	N	15	10	7	12	9	11	11	N	12	11	10	8	8	9	9	7	8	8	7
2-Jan-08	5	5	6	7	N	7	9	7	6	8	7	13	15	16	19	20	20	20	19	19	19	19	19	18
3-Jan-08	19	19	19	19	N	18	18	17	17	17	18	18	19	16	17	13	16	16	12	17	16	17	12	14
4-Jan-08	12	11	11	11	N	14	11	12	14	17	N	N	N	N	N	2	1	17	20	19	19	19	19	19
5-Jan-08	19	18	18	18	N	12	12	13	13	13	13	12	13	12	12	12	10	9	10	9	10	9	9	6
6-Jan-08	7	7	7	7	N	6	7	7	7	7	8	8	9	9	9	9	10	10	9	9	9	8	6	7
7-Jan-08	8	9	10	10	N	9	8	8	8	6	7	10	9	8	7	10	10	11	6	6	5	7	5	6
8-Jan-08	6	6	5	6	N	6	7	6	8	10	11	14	12	11	11	12	11	11	12	11	11	8	6	7
9-Jan-08	8	8	8	10	N	9	8	8	6	7	8	9	8	9	8	8	8	8	8	10	9	9	8	8
10-Jan-08	7	8	8	8	N	8	8	9	10	10	9	10	10	11	12	12	11	11	10	11	10	12	11	11
11-Jan-08	13	12	11	11	N	12	12	12	9	5	5	8	9	11	13	12	9	6	6	12	18	17	17	17
12-Jan-08	16	17	16	16	N	16	16	N	13	13	11	11	9	7	9	7	7	8	8	7	7	8	8	6
13-Jan-08	6	12	N	20	N	21	21	20	20	19	20	20	18	18	20	20	18	19	17	18	16	14	14	11
14-Jan-08	13	12	13	13	N	13	15	14	15	15	11	15	14	11	13	19	N	N	21	20	20	20	20	20
15-Jan-08	19	19	19	18	N	17	17	16	15	16	17	18	19	19	19	19	18	18	16	16	17	17	15	17
16-Jan-08	18	19	19	19	N	19	18	17	17	16	18	19	19	20	20	20	20	21	21	21	21	21	21	21
17-Jan-08	21	21	20	20	N	19	18	20	20	20	21	21	20	19	16	16	15	17	20	20	18	19	18	19
18-Jan-08	16	11	13	14	N	12	12	7	5	7	8	11	7	8	7	5	7	7	6	6	7	7	6	6
19-Jan-08	12	14	14	16	N	18	17	17	17	17	17	17	18	17	16	15	13	11	12	11	10	11	11	12
20-Jan-08	12	13	13	12	N	10	9	11	11	11	12	13	14	14	15	15	15	14	14	15	15	14	11	14
21-Jan-08	14	16	16	16	N	16	15	16	16	17	16	16	17	16	17	17	17	16	15	16	16	17	17	18
22-Jan-08	17	13	19	18	N	18	19	18	17	18	17	18	19	19	15	16	18	17	18	17	14	14	14	14
23-Jan-08	N	12	13	13	N	17	19	N	19	20	20	18	20	19	20	20	20	19	19	19	18	18	15	15
24-Jan-08	19	19	19	19	N	20	19	19	18	17	16	17	17	18	18	18	18	17	17	16	14	13	13	11
25-Jan-08	10	11	13	13	N	13	12	11	10	9	10	10	10	10	12	18	20	21	21	21	21	21	20	20
26-Jan-08	20	20	21	21	N	21	20	20	21	18	18	19	20	20	20	20	15	14	15	15	15	16	16	16
27-Jan-08	16	16	16	16	N	16	16	16	16	16	16	16	16	16	16	16	15	15	16	14	15	15	14	10
28-Jan-08	11	N	11	8	N	8	N	6	6	7	11	11	11	11	13	12	11	11	13	15	14	13	11	N
29-Jan-08	N	N	N	N	N	N	N	N	N	N	N	N	N	N	10	11	10	9	8	10	10	8	8	8
30-Jan-08	9	8	9	10	N	10	11	10	9	10	11	11	11	11	11	10	9	6	5	7	6	5	8	5
31-Jan-08	6	5	8	8	N	7	7	6	7	7	7	8	9	10	10	10	10	9	9	10	9	7	7	8

PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

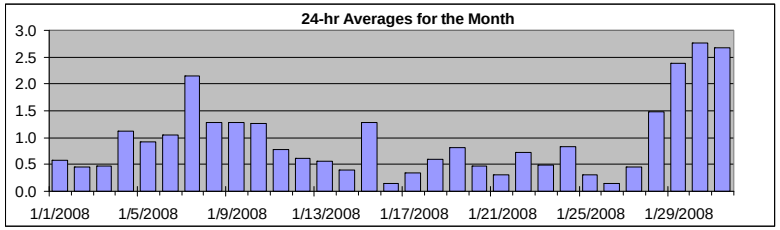
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	7.2	ppb	15-Jan	8:00 9:00
Maximum 24-hr Average:	2.8	ppb	30-Jan	



AIC Time:	31 hrs	Operational Time:	710 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	4.4	2.9	1.3	0.7	0.3	0.1	0.1	0.9 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**

Day	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-Jan-08	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
2-Jan-08	1	0	0	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
3-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	0.5	1.0
4-Jan-08	2	2	2	2	A	1	1	1	1	1	C	C	C	0	0	0	0	1	1	1	1	2	1	2	1.1	2.5
5-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0.9	1.9
6-Jan-08	1	1	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1.0	2.0
7-Jan-08	2	2	2	2	A	3	3	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	2	2.1	3.4
8-Jan-08	2	1	1	1	A	1	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	1.8
9-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	1	2	1	1.3	1.7
10-Jan-08	1	1	2	1	A	1	2	2	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1.3	1.7
11-Jan-08	1	1	2	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0.8	1.6
12-Jan-08	0	0	0	0	A	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0.6	1.3
13-Jan-08	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	1	1	1	1	0.6	3.6
14-Jan-08	2	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6
15-Jan-08	0	0	0	0	A	0	0	4	7	7	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1.3	7.2
16-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
17-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.4
18-Jan-08	0	0	0	0	A	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	0.6	0.9
19-Jan-08	1	1	1	1	A	0	0	0	0	0	0	0	0	2	3	3	0	1	1	1	1	1	1	1	0.8	3.0
20-Jan-08	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0.5	1.0
21-Jan-08	1	1	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
22-Jan-08	1	1	1	1	A	1	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	0.7	1.2
23-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	0.5	1.4
24-Jan-08	1	1	1	1	A	1	0	1	1	1	1	1	1	0	1	0	0	1	1	2	1	1	0	0	0.8	1.5
25-Jan-08	0	0	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
26-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
27-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	0.5	0.8
28-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	4	1.5	3.6
29-Jan-08	5	3	4	3	A	3	3	2	2	2	1	1	1	1	1	1	1	2	1	2	2	2	5	6	2.4	5.5
30-Jan-08	3	4	4	3	A	4	2	2	2	2	3	3	4	3	3	3	3	2	2	2	2	2	2	2	2.8	4.5
31-Jan-08	2	2	2	2	A	3	2	3	2	2	2	3	4	3	3	3	3	3	3	3	3	3	3	3	2.7	3.9
Hourly Avg	1.1	1.0	1.0	0.9	N	0.9	0.9	1.0	1.1	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.9	1.1	1.1		
Hourly Max	4.5	4.5	3.6	3.4	0.0	3.7	2.7	4.5	7.2	6.8	5.7	3.4	3.9	3.4	3.4	3.0	2.9	3.1	3.6	3.0	2.8	2.9	5.1	5.5		

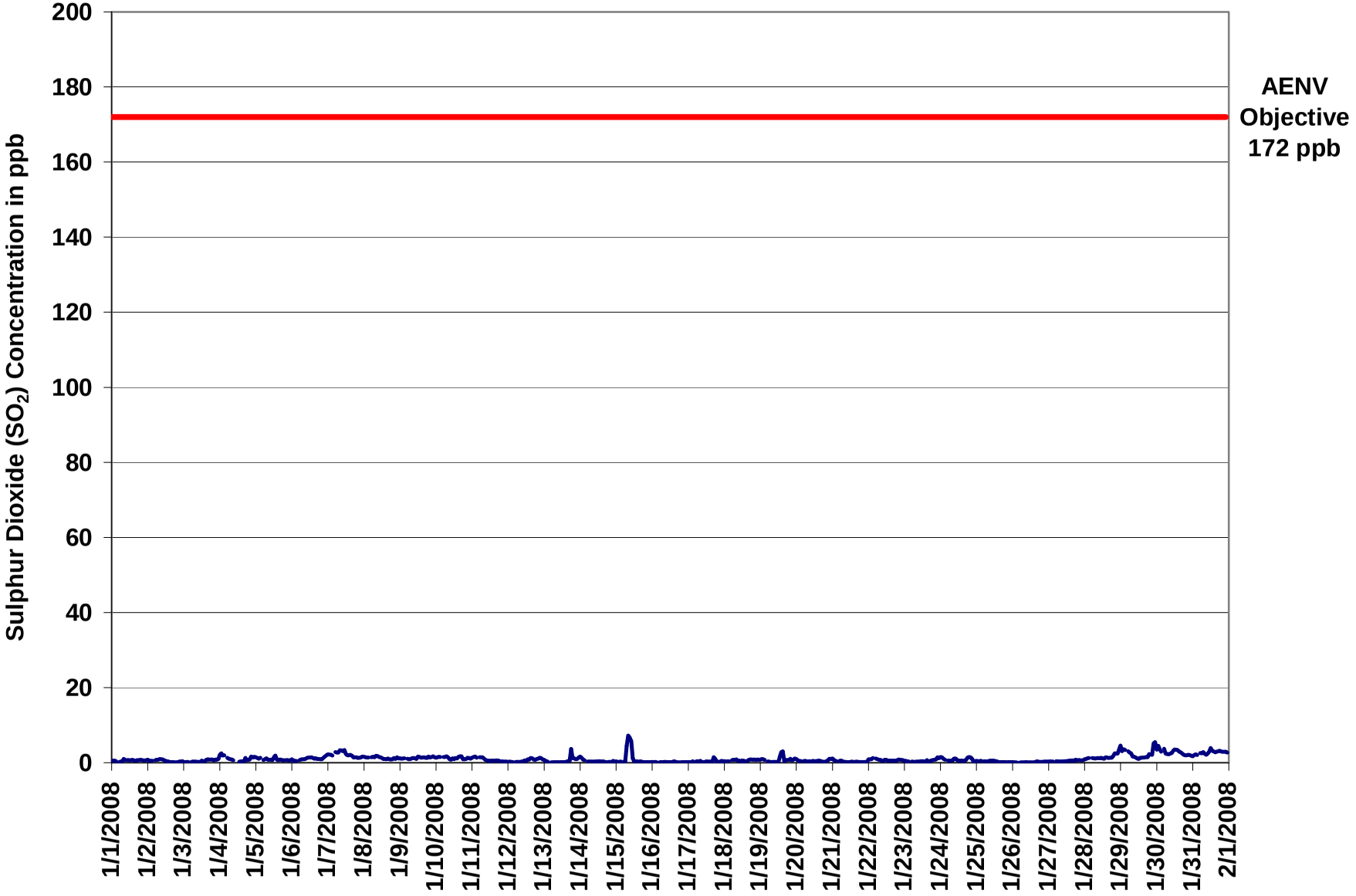


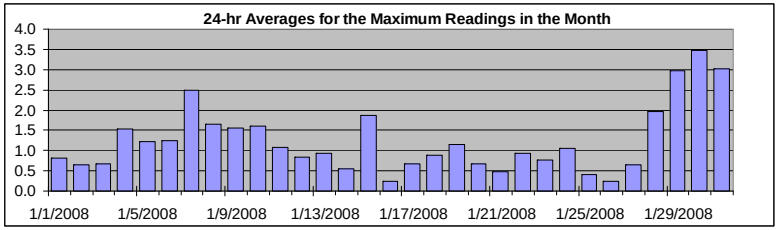
Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	9.2	ppb	15-Jan	8:00 9:00
Maximum 24-hr Value:	3.5	ppb	30-Jan	

AIC Time:	31 hrs	Operational Time:	710 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	6.7	3.4	1.6	0.9	0.4	0.2	0.1	1.2 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**

Day	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-Jan-08	1	1	2	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.2
2-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0.7	1.3
3-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.4
4-Jan-08	3	3	2	2	A	2	1	1	1	1	C	C	C	0	1	1	0	3	2	1	1	2	2	2	1.5	2.8
5-Jan-08	2	2	1	1	A	1	1	2	1	1	1	1	2	3	1	1	2	1	1	1	1	1	1	1	1.2	2.6
6-Jan-08	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	2	2	2	1.3	2.3
7-Jan-08	2	2	2	2	A	3	3	3	4	4	4	4	3	3	3	2	2	2	2	2	1	2	2	2	2.5	4.0
8-Jan-08	2	2	2	2	A	2	2	2	3	2	2	2	2	1	1	1	1	1	1	1	2	2	2	1	1.7	3.1
9-Jan-08	2	1	1	1	A	1	1	1	1	1	2	2	2	2	1	2	1	2	2	3	2	2	2	2	1.5	2.7
10-Jan-08	2	2	2	2	A	2	2	2	2	1	1	2	1	2	2	2	2	2	1	1	2	2	1	1	1.6	2.1
11-Jan-08	2	3	2	1	A	2	3	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1.1	2.9
12-Jan-08	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	2	2	1	1	1	1	2	2	1	0.8	1.8
13-Jan-08	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	2	6	2	1	1	1	2	0.9	6.4
14-Jan-08	2	2	1	1	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0.6	1.8
15-Jan-08	1	0	0	1	A	0	1	9	9	8	6	4	0	0	0	0	1	1	0	0	0	0	0	0	1.9	9.2
16-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.2	0.6
17-Jan-08	0	0	0	1	A	0	1	0	1	0	0	0	0	0	0	0	0	5	2	0	0	0	1	0	0.7	5.1
18-Jan-08	1	0	1	0	A	1	1	1	1	1	1	1	2	1	0	0	1	1	1	1	1	1	1	1	0.9	2.4
19-Jan-08	1	1	1	1	A	0	0	0	0	0	0	0	0	2	3	5	2	1	1	1	2	1	1	1	1.2	5.2
20-Jan-08	1	1	0	1	A	1	1	0	0	1	0	1	0	0	1	1	1	0	0	0	1	1	2	1	0.7	1.6
21-Jan-08	2	1	1	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.6
22-Jan-08	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
23-Jan-08	1	1	1	0	A	0	0	0	0	1	0	1	1	0	0	1	0	1	1	1	1	1	3	2	0.8	3.4
24-Jan-08	2	2	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	2	2	2	2	1	1	1.1	2.1
25-Jan-08	1	0	1	1	A	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7
26-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.5
27-Jan-08	0	0	0	0	A	1	0	0	0	0	0	1	0	1	1	1	1	1	2	1	1	1	1	1	0.7	2.4
28-Jan-08	1	1	1	1	A	1	1	1	2	2	2	2	1	1	2	2	1	1	1	2	3	3	3	7	2.0	6.7
29-Jan-08	8	3	4	4	A	4	4	4	3	2	2	2	1	1	1	1	2	2	2	3	2	2	7	6	3.0	7.7
30-Jan-08	4	8	9	4	A	4	3	2	2	3	3	4	4	4	4	3	3	3	2	2	2	2	2	2	3.5	8.7
31-Jan-08	2	2	2	2	A	3	3	3	3	2	3	4	4	4	3	3	3	3	3	3	3	3	3	3	3.0	4.2
Hourly Avg	1.5	1.4	1.4	1.1	N	1.2	1.2	1.3	1.4	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.3	1.3	1.1	1.1	1.2	1.4	1.5		
Hourly Max	7.7	8.5	8.7	4.1	0.0	4.3	3.6	8.6	9.2	7.9	6.3	3.7	4.2	3.7	3.6	5.2	3.2	5.1	6.4	3.2	3.1	3.4	6.8	6.7		

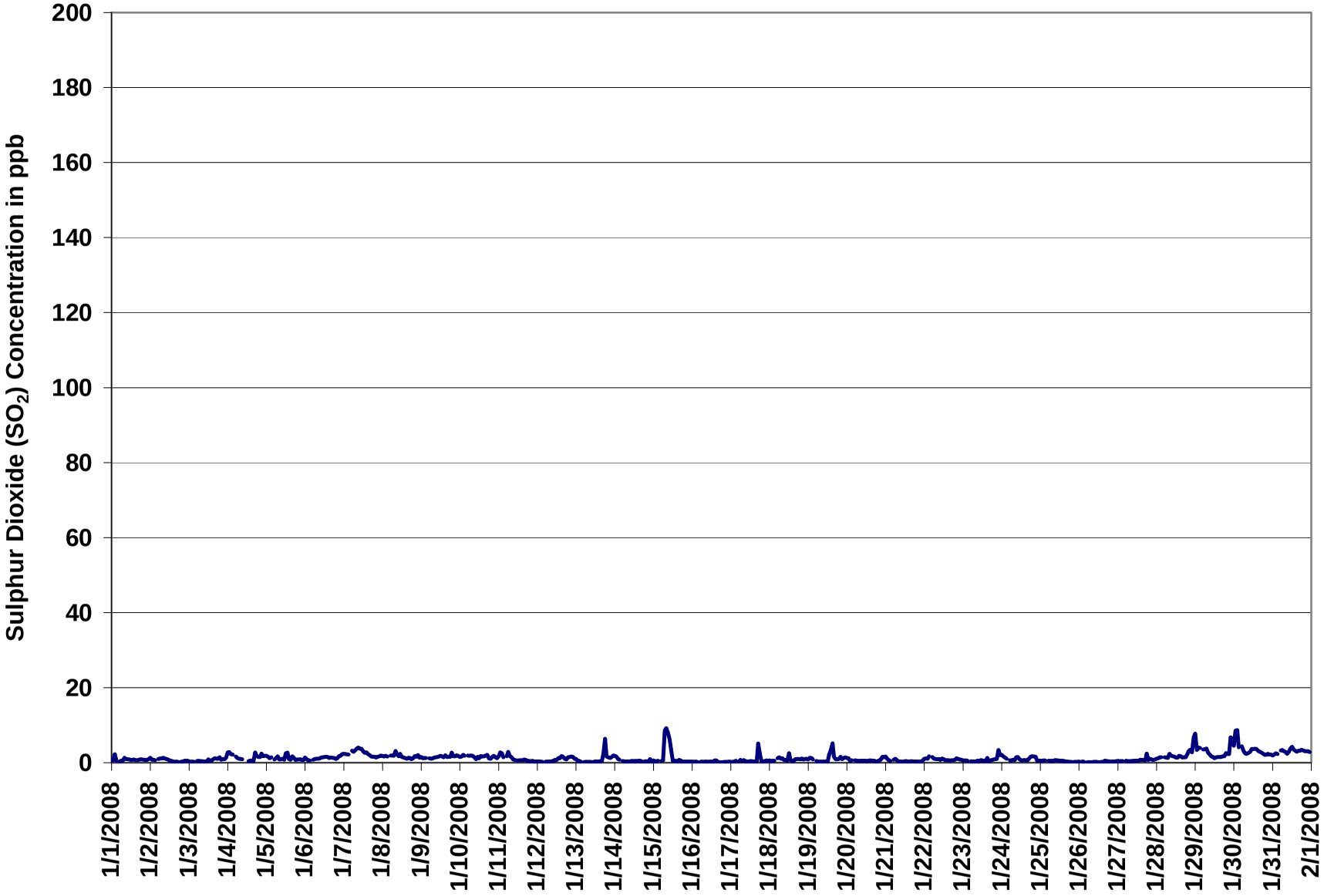
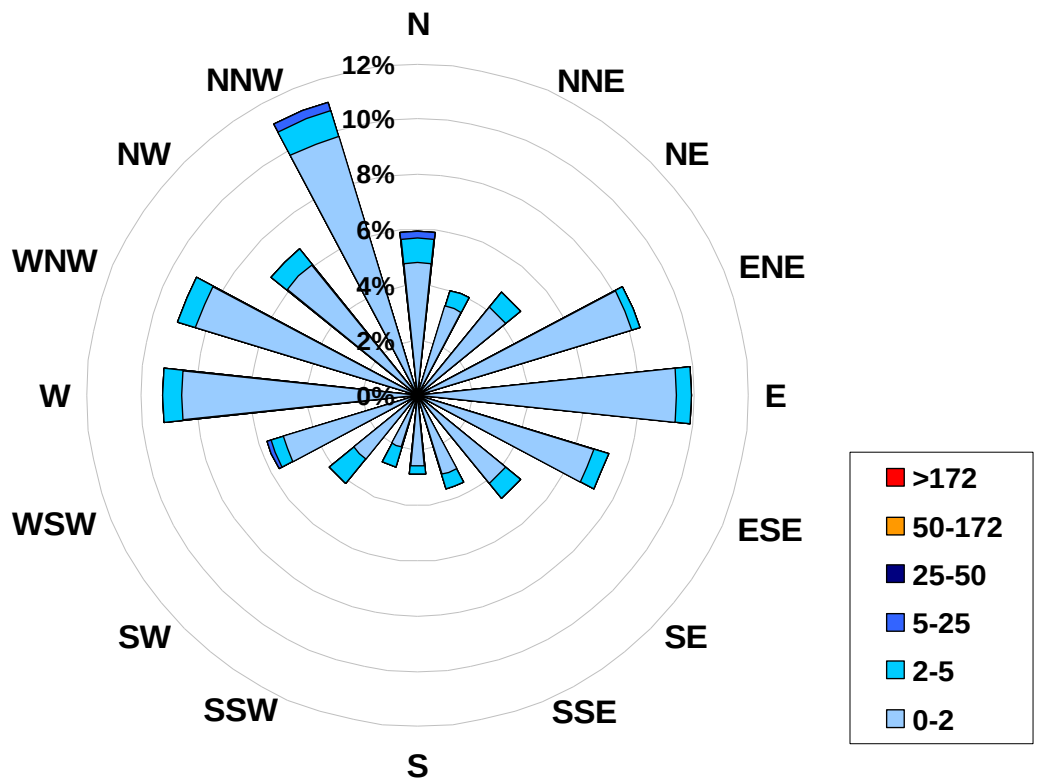


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Beaverlodge Site for January 2008



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	631
2	to	5	74
5	to	25	5
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			710

PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

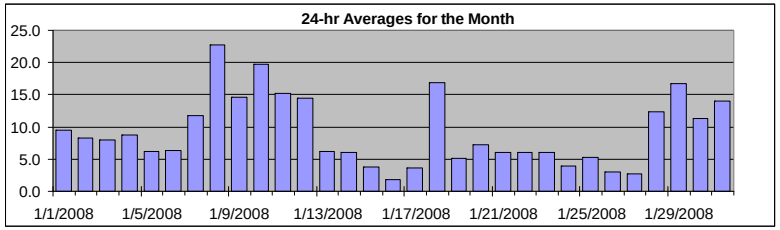
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	32.0	ppb	12-Jan	17:00 18:00
Maximum 24-hr Average:	22.7	ppb	8-Jan	



AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	28.7	23.9	12.1	7.0	3.7	1.3	0.9	9.1 ppb	7.0 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**

Day	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-Jan-08	5	5	6	7	A	4	13	16	9	13	9	8	4	6	8	10	14	16	11	10	12	10	9	11	9.4	16.0
2-Jan-08	18	15	13	12	A	12	10	12	16	12	16	8	7	7	4	3	3	3	4	3	3	3	4	4	8.3	18.5
3-Jan-08	3	3	4	3	A	4	4	6	7	7	4	5	4	11	9	17	11	12	19	8	9	8	16	11	8.0	18.8
4-Jan-08	11	12	11	11	A	10	15	13	9	10	C	C	C	C	A	10	6	11	5	5	5	5	4	4	8.8	15.4
5-Jan-08	3	4	4	3	A	12	10	8	7	6	6	5	4	4	5	5	7	8	6	7	6	6	6	11	6.1	11.9
6-Jan-08	10	7	7	7	A	7	6	6	6	6	5	4	4	3	5	6	5	5	7	6	7	8	11	9	6.3	11.2
7-Jan-08	7	5	4	4	A	5	6	6	8	11	9	3	6	7	11	12	23	27	23	20	19	20	16	16	11.7	26.5
8-Jan-08	17	16	18	20	A	21	24	23	26	23	17	20	26	21	22	24	26	28	27	27	28	23	21	23	22.7	28.2
9-Jan-08	25	22	22	23	A	10	10	9	11	10	7	6	6	6	7	8	12	17	17	22	25	22	20	20	14.6	24.7
10-Jan-08	18	17	20	20	A	21	20	22	25	21	14	15	13	15	16	17	21	22	21	22	24	25	23	23	19.7	24.6
11-Jan-08	23	23	23	23	A	22	22	22	22	20	14	11	10	9	8	11	15	25	20	13	3	4	3	3	15.3	24.9
12-Jan-08	3	3	3	3	A	4	4	9	6	7	12	9	12	21	14	20	27	32	32	31	29	16	16	19	14.4	32.0
13-Jan-08	19	9	6	3	A	2	2	3	3	6	3	4	8	7	4	3	6	5	6	4	8	9	9	13	6.2	18.9
14-Jan-08	10	9	8	8	A	7	6	8	6	5	13	8	9	14	10	3	2	2	2	2	1	1	1	2	6.0	14.3
15-Jan-08	2	3	2	3	A	4	5	7	8	7	4	1	1	1	1	2	2	3	6	6	4	4	7	4	3.7	8.4
16-Jan-08	2	2	1	1	A	2	4	4	4	6	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.9	5.8
17-Jan-08	1	1	1	1	A	5	6	3	3	4	3	3	3	3	7	8	10	6	3	2	5	3	3	3	3.7	9.6
18-Jan-08	5	9	5	4	A	6	5	16	23	14	13	6	17	14	15	18	29	29	26	26	28	29	25	24	16.8	29.4
19-Jan-08	8	6	3	3	A	1	2	2	1	1	2	1	1	2	3	6	7	11	9	12	12	11	9	7	5.2	11.9
20-Jan-08	7	6	6	8	A	12	12	8	8	7	6	6	5	6	6	6	5	7	7	5	6	7	13	8	7.2	13.4
21-Jan-08	7	5	4	5	A	6	9	7	6	5	6	6	5	8	5	5	6	8	10	7	6	5	5	3	6.0	10.1
22-Jan-08	3	13	2	3	A	2	2	5	7	4	6	4	3	3	11	10	5	7	5	6	11	9	9	9	6.0	12.5
23-Jan-08	11	11	9	9	A	6	4	3	5	4	3	8	5	6	3	4	3	5	4	4	5	6	10	11	6.1	11.1
24-Jan-08	4	3	2	2	A	1	2	2	2	3	4	4	3	3	2	2	3	4	5	5	8	8	7	9	3.9	8.9
25-Jan-08	9	7	6	8	A	6	7	6	8	7	7	6	8	8	9	5	2	1	1	1	1	1	3	3	5.3	9.5
26-Jan-08	3	3	2	1	A	1	3	2	2	7	8	5	3	3	4	3	4	3	3	2	2	1	1	1	3.0	8.0
27-Jan-08	1	1	1	2	A	1	2	1	2	1	2	2	2	1	1	1	3	4	3	5	5	4	5	14	2.7	14.4
28-Jan-08	11	19	11	15	A	16	24	24	25	19	9	13	12	9	8	9	11	11	6	4	4	6	9	10	12.4	25.0
29-Jan-08	13	14	13	20	A	22	25	27	31	26	22	18	13	12	12	9	11	14	14	11	11	14	15	14	16.7	31.1
30-Jan-08	11	12	11	9	A	9	7	9	11	8	6	7	6	6	7	8	12	21	20	13	17	18	12	18	11.3	21.4
31-Jan-08	24	21	19	24	A	19	23	18	24	20	16	11	8	6	7	8	7	8	9	8	8	13	12	10	14.1	24.1
Hourly Avg	9.5	9.2	8.0	8.5	N	8.4	9.5	9.9	10.7	9.7	8.2	7.0	7.0	7.4	7.5	8.2	9.6	11.5	10.7	9.6	10.1	9.7	9.9	10.2		
Hourly Max	24.7	23.1	22.9	24.0	0.0	22.4	25.4	27.5	31.1	25.6	22.4	20.3	26.0	21.4	22.5	24.3	28.9	32.0	31.7	30.7	28.7	29.4	25.3	23.9		

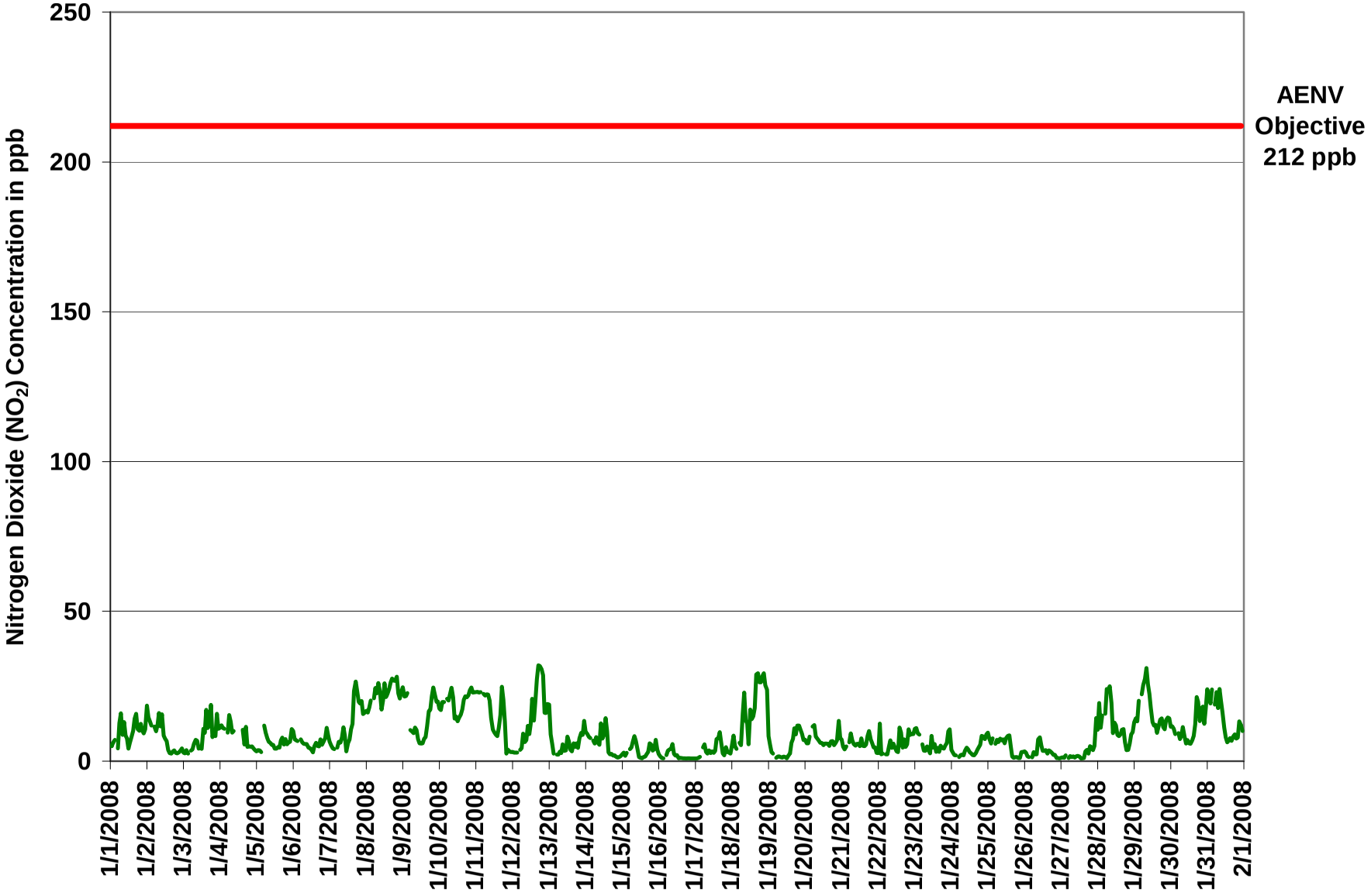


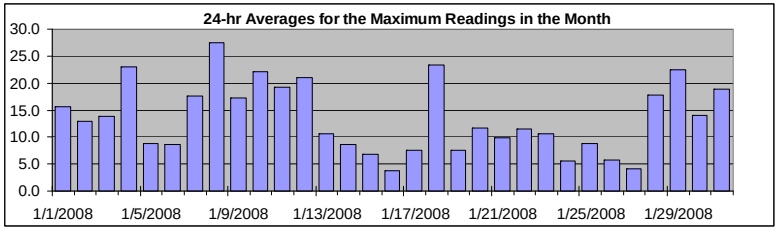
Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	171.2	ppb	4-Jan	9:00 10:00
Maximum 24-hr Value:	27.5	ppb	8-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	36.0	31.0	18.6	10.7	5.9	1.9	1.9	13.4 ppb	10.7 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-Jan-08	11	7	12	17	A	6	32	29	12	21	16	16	7	8	19	13	19	24	17	15	21	14	11	17	15.7	31.7
2-Jan-08	29	21	20	16	A	15	12	17	23	22	25	14	13	10	7	4	4	9	11	5	6	5	6	6	12.9	29.5
3-Jan-08	5	3	9	3	A	8	8	10	12	22	6	7	6	21	26	20	17	23	25	21	12	17	27	13	13.8	27.3
4-Jan-08	13	13	13	13	A	25	34	30	14	171	C	C	C	C	A	15	17	19	10	8	6	5	5	4	23.0	171.2
5-Jan-08	4	4	5	4	A	16	12	9	8	8	7	7	5	6	6	6	10	15	11	11	8	13	10	19	8.8	18.6
6-Jan-08	16	13	10	8	A	8	7	7	7	8	6	6	4	4	7	8	7	6	15	13	8	11	13	12	8.7	15.7
7-Jan-08	7	6	5	5	A	7	10	15	12	26	18	4	8	13	26	23	34	31	32	25	24	27	21	28	17.6	34.2
8-Jan-08	25	25	25	26	A	26	28	26	34	28	24	32	31	27	26	26	29	29	28	28	33	26	27	26	27.5	33.8
9-Jan-08	27	24	23	24	A	17	12	10	13	13	9	7	8	7	8	12	16	20	21	29	28	26	23	22	17.2	29.5
10-Jan-08	20	20	29	21	A	29	22	27	28	26	16	19	15	16	16	19	23	24	23	24	25	26	25	24	22.1	29.3
11-Jan-08	24	26	25	24	A	24	24	24	25	22	18	13	13	12	11	22	32	34	25	23	6	6	5	5	19.1	33.7
12-Jan-08	7	3	3	4	A	5	6	24	9	26	22	14	17	37	22	33	33	34	35	36	33	25	24	32	20.9	37.2
13-Jan-08	29	11	8	8	A	5	4	8	5	13	7	7	17	10	5	5	10	10	9	10	10	18	13	25	10.6	28.6
14-Jan-08	11	11	9	9	A	8	8	13	9	7	18	11	15	23	18	5	4	6	4	5	3	2	2	3	8.7	22.6
15-Jan-08	4	5	3	4	A	7	6	9	17	12	7	3	3	3	3	3	6	6	15	10	9	8	12	7	6.9	16.7
16-Jan-08	5	4	2	2	A	4	6	8	11	11	7	4	4	2	2	2	2	2	2	2	2	2	2	1	3.7	11.0
17-Jan-08	1	2	2	2	A	18	17	5	9	9	4	6	9	11	11	12	19	9	5	3	10	4	4	3	7.5	18.5
18-Jan-08	7	10	7	12	A	8	10	45	46	28	19	11	31	22	17	21	33	31	30	31	31	30	30	28	23.3	46.2
19-Jan-08	16	14	4	3	A	2	2	3	2	2	2	3	2	3	7	12	12	13	13	15	14	15	11	9	7.6	15.7
20-Jan-08	18	7	8	20	A	31	16	10	10	9	7	8	6	7	7	11	7	10	10	6	9	9	32	12	11.6	32.3
21-Jan-08	14	9	5	6	A	17	16	8	9	9	11	10	8	14	8	7	9	14	15	10	7	6	14	4	9.9	17.0
22-Jan-08	4	34	4	6	A	3	3	7	22	7	13	11	8	6	17	21	7	14	9	9	16	11	16	21	11.5	33.5
23-Jan-08	15	15	13	10	A	7	6	8	12	5	5	21	10	18	5	8	6	7	6	8	14	16	18	16	10.7	20.6
24-Jan-08	6	3	3	3	A	2	3	5	3	6	6	5	4	4	3	3	4	5	6	7	14	14	10	12	5.6	13.7
25-Jan-08	12	10	10	24	A	10	10	8	10	8	10	8	12	12	14	16	3	2	4	3	2	3	9	6	8.8	24.4
26-Jan-08	5	5	6	4	A	6	6	4	7	10	9	10	7	5	8	4	15	6	5	3	4	2	2	2	5.8	15.3
27-Jan-08	2	3	2	3	A	2	3	3	3	2	2	2	2	1	2	2	5	5	6	8	6	5	11	18	4.2	17.7
28-Jan-08	12	25	17	23	A	28	30	29	30	36	26	25	18	11	11	11	15	13	9	4	7	10	10	12	17.8	36.0
29-Jan-08	17	19	23	32	A	28	42	40	40	31	29	21	17	19	14	13	13	19	18	15	13	19	20	19	22.5	41.5
30-Jan-08	16	14	12	10	A	11	9	11	13	10	7	9	7	7	9	10	18	26	27	14	24	24	15	25	14.1	26.5
31-Jan-08	27	25	32	32	A	29	34	29	28	25	18	15	9	8	8	9	8	10	14	14	12	19	19	11	18.8	34.3
Hourly Avg	13.1	12.4	11.1	12.0	N	13.1	14.0	15.4	15.5	20.3	12.3	10.8	10.4	11.4	11.2	12.0	13.9	15.3	14.6	13.3	13.3	13.4	14.2	14.1		
Hourly Max	29.5	33.5	32.5	31.8	0.0	30.8	41.5	44.6	46.2	171.2	29.5	32.3	31.5	37.2	25.7	33.4	34.2	34.4	35.0	35.7	33.4	30.5	32.3	31.8		

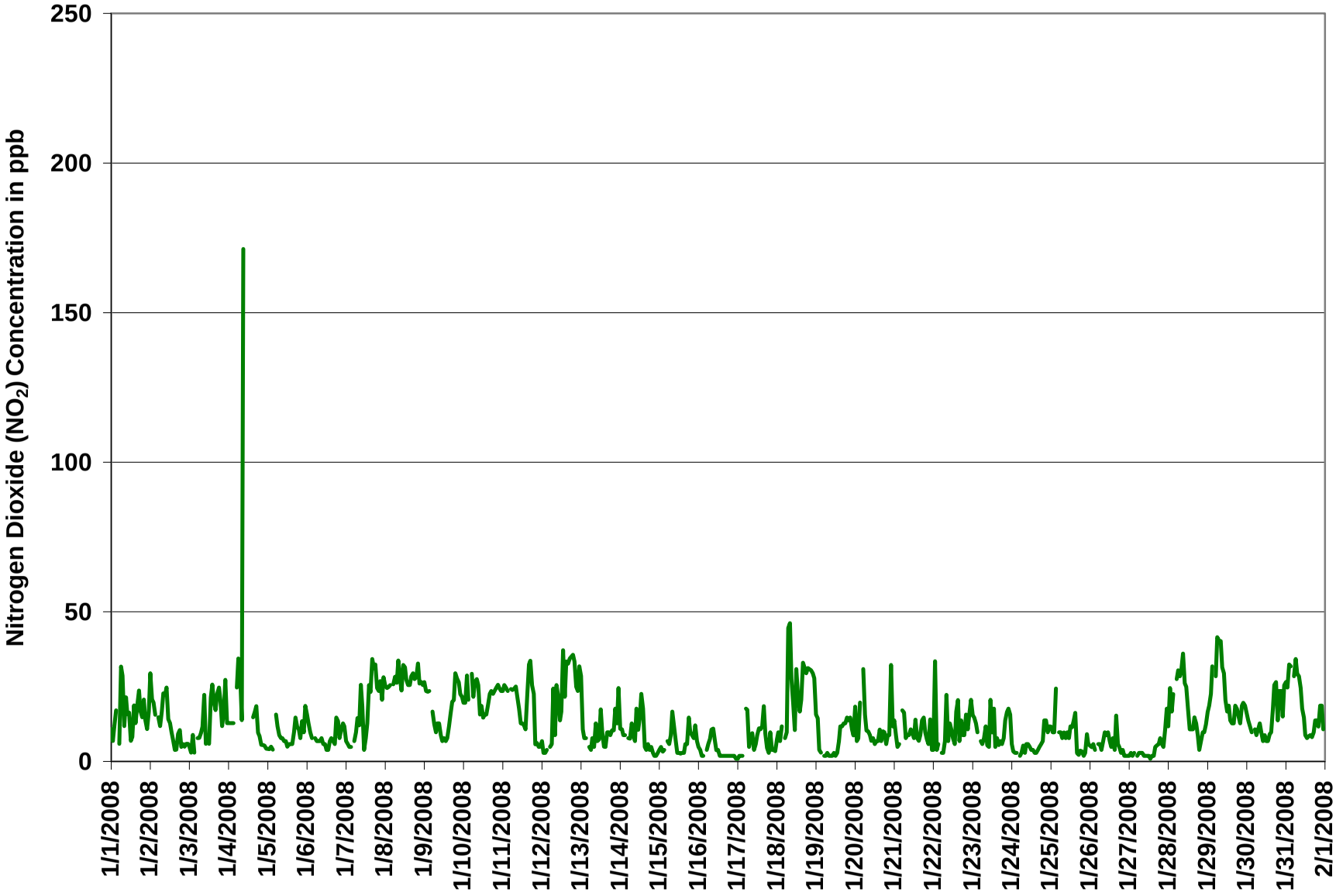
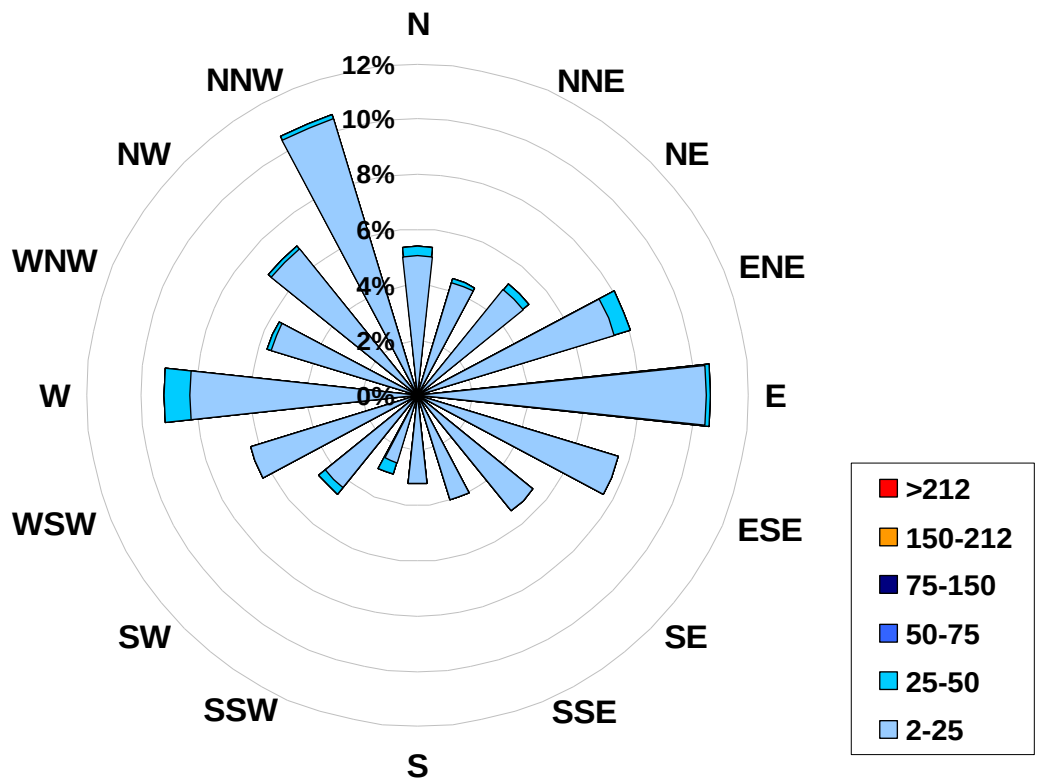


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Beaverlodge Site for January 2008



Calms:	0%

Frequency Distribution of NO_2 in ppb

Range			Frequency (hrs)
2.0	<	25	691
25	to	50	16
50	to	75	1
75	to	150	0
150	to	212	0
	>	212	0
Total Non-Zero Values			708

PASZA - Beaverlodge Nitric Oxide Monthly Summary

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

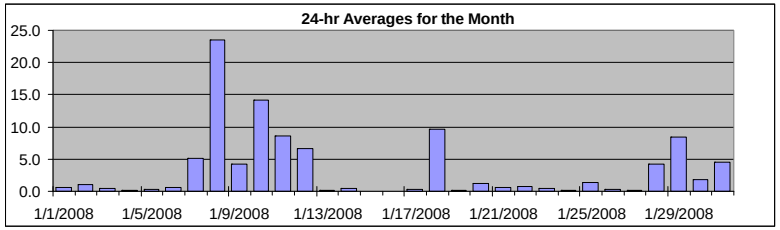
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Maximum 1-hr Average:	73.1	ppb	8-Jan	12:00 13:00
Maximum 24-hr Average:	23.5	ppb	8-Jan	



AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	34.8	19.0	2.3	0.0	0.0	0.0	0.0	3.2 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**

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-Jan-08	0	0	0	0	A	0	1	0	0	1	2	3	1	2	2	2	1	0	0	0	0	0	0	0	0.7	2.6
2-Jan-08	4	0	0	0	A	0	0	0	0	1	11	3	2	3	0	0	0	0	0	0	0	0	0	0	1.0	10.8
3-Jan-08	0	0	0	0	A	0	0	0	0	0	0	1	1	4	3	3	0	0	0	0	0	0	0	0	0.5	3.8
4-Jan-08	0	0	0	0	A	0	0	0	0	0	C	C	C	C	A	1	0	0	0	0	0	0	0	0	0.2	1.4
5-Jan-08	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	1.3
6-Jan-08	0	0	0	0	A	0	0	0	0	0	1	2	3	2	3	2	0	0	0	0	0	0	0	0	0.6	3.3
7-Jan-08	0	0	0	0	A	0	0	0	0	12	5	2	6	8	14	8	23	24	8	0	0	3	0	1	5.1	23.7
8-Jan-08	4	2	2	8	A	9	15	11	36	21	17	40	73	42	40	35	29	33	31	22	44	15	6	5	23.5	73.1
9-Jan-08	11	1	0	0	A	0	0	0	0	1	2	4	4	5	5	3	2	0	0	14	26	13	3	1	4.2	25.9
10-Jan-08	0	0	8	4	A	12	9	15	23	24	12	19	19	20	19	15	16	7	9	17	17	26	18	16	14.2	26.1
11-Jan-08	15	19	17	15	A	17	23	20	16	6	9	9	8	6	3	4	7	4	0	0	0	0	0	0	8.5	22.6
12-Jan-08	0	0	0	0	A	0	0	0	0	2	6	5	12	26	10	16	17	20	15	14	9	0	0	1	6.7	26.5
13-Jan-08	1	0	0	0	A	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0.2	1.9
14-Jan-08	0	0	0	0	A	0	0	0	0	0	2	1	2	5	2	0	0	0	0	0	0	0	0	0	0.5	4.6
15-Jan-08	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
16-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
17-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0.2	2.2
18-Jan-08	0	0	0	0	A	0	0	12	27	4	8	3	22	12	12	12	39	14	1	10	11	23	8	5	9.6	38.7
19-Jan-08	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0.2	1.9
20-Jan-08	0	0	0	0	A	0	0	0	0	1	3	5	4	5	4	2	0	0	0	0	0	0	2	0	1.2	5.0
21-Jan-08	0	0	0	0	A	0	0	0	0	0	1	3	3	4	2	1	0	0	0	0	0	0	0	0	0.6	4.5
22-Jan-08	0	0	0	0	A	0	0	0	0	0	1	1	1	1	7	3	0	0	0	0	0	0	0	0	0.7	7.1
23-Jan-08	0	0	0	0	A	0	0	0	0	0	0	4	2	3	1	1	0	0	0	0	0	0	0	0	0.5	3.8
24-Jan-08	0	0	0	0	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.0
25-Jan-08	0	0	0	0	A	0	0	0	0	1	3	4	8	8	5	1	0	0	0	0	0	0	0	0	1.4	8.4
26-Jan-08	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.2
27-Jan-08	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
28-Jan-08	0	0	0	0	A	1	2	1	3	8	7	20	20	13	9	7	4	1	0	0	0	0	0	0	4.2	20.0
29-Jan-08	0	0	0	0	A	1	15	15	17	21	34	28	21	17	12	6	4	1	0	0	0	0	0	0	8.4	33.9
30-Jan-08	0	0	0	0	A	0	0	0	0	1	3	6	6	5	7	5	5	3	1	0	0	0	0	0	1.8	6.6
31-Jan-08	1	0	2	4	A	0	7	2	9	13	18	14	10	8	7	6	3	1	0	0	0	0	0	0	4.5	17.9
Hourly Avg	1.1	0.7	1.0	1.0	N	1.3	2.3	2.4	4.2	3.8	5.0	6.1	7.8	6.8	5.8	4.5	5.0	3.5	2.1	2.5	3.4	2.6	1.2	1.0		
Hourly Max	14.7	18.9	17.4	15.4	0.0	17.2	22.6	19.5	35.6	23.9	33.9	40.5	73.1	42.5	40.2	34.9	38.7	33.0	30.9	22.4	43.5	26.1	18.1	15.8		

PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

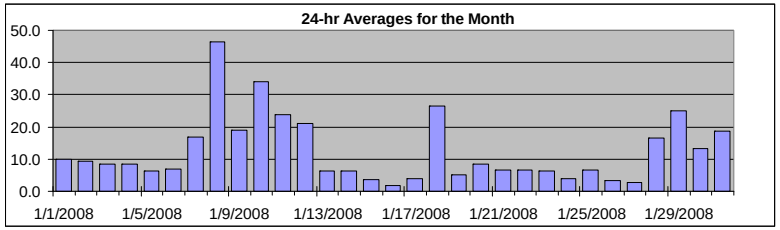
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Maximum 1-hr Average:	99.6	ppb	8-Jan	12:00 13:00
Maximum 24-hr Average:	46.4	ppb	8-Jan	



AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	60.7	41.0	14.7	7.8	3.9	1.2	0.9	12.4 ppb	7.8 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-Jan-08	5	5	6	7	A	4	14	16	9	14	11	10	6	8	10	12	15	16	11	10	12	10	9	11	10.0	16.4
2-Jan-08	22	15	13	12	A	12	10	12	17	13	26	11	10	10	4	3	3	3	4	3	2	3	3	4	9.3	26.5
3-Jan-08	3	2	4	2	A	3	4	6	7	7	4	6	5	15	12	20	11	12	19	8	9	8	16	11	8.4	19.6
4-Jan-08	11	12	11	11	A	9	16	14	9	10	C	C	C	C	A	11	5	11	4	4	4	4	4	3	8.5	15.9
5-Jan-08	3	3	3	3	A	12	9	8	6	6	6	7	5	6	6	5	7	8	5	7	6	6	6	11	6.3	11.8
6-Jan-08	10	7	7	7	A	7	6	6	6	6	6	7	6	5	8	9	5	5	7	5	7	8	11	8	6.9	11.2
7-Jan-08	6	5	4	4	A	4	6	6	8	24	14	5	12	15	25	21	46	50	31	20	20	24	16	18	16.8	50.4
8-Jan-08	20	18	20	28	A	31	40	34	62	44	34	61	100	64	63	59	55	61	58	49	72	38	27	28	46.4	99.6
9-Jan-08	36	23	22	23	A	10	10	9	11	11	10	10	10	10	12	11	14	17	18	35	51	36	22	21	18.8	50.8
10-Jan-08	18	17	28	24	A	33	29	37	48	45	27	35	32	34	35	33	36	29	30	39	40	51	41	39	34.0	50.8
11-Jan-08	38	42	41	38	A	40	45	42	39	26	23	19	17	15	12	15	23	29	20	13	3	4	3	3	23.9	44.8
12-Jan-08	3	3	3	3	A	4	4	9	6	9	18	14	24	48	24	36	45	53	46	44	38	16	16	21	21.1	52.5
13-Jan-08	20	9	6	3	A	2	2	3	3	6	4	4	10	8	5	3	6	5	6	4	7	9	9	13	6.3	19.5
14-Jan-08	10	9	8	7	A	7	6	8	6	5	15	9	11	19	12	3	2	2	2	2	1	1	1	2	6.4	19.0
15-Jan-08	2	3	1	2	A	4	4	7	8	7	4	2	1	1	2	2	3	3	6	5	3	4	7	4	3.7	8.2
16-Jan-08	2	2	1	1	A	2	3	4	4	6	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1.8	5.8
17-Jan-08	1	1	1	1	A	4	6	3	2	3	3	4	3	4	10	9	11	6	2	2	5	3	3	2	3.9	10.7
18-Jan-08	5	8	5	4	A	6	5	28	50	18	20	9	39	26	27	30	68	44	28	36	39	52	33	29	26.5	67.9
19-Jan-08	8	5	3	2	A	1	1	1	1	1	2	2	1	2	4	8	8	11	9	12	12	10	9	7	5.3	11.7
20-Jan-08	7	6	6	8	A	12	12	8	7	8	9	11	10	11	10	8	6	7	7	5	6	7	16	7	8.3	15.6
21-Jan-08	7	5	4	5	A	6	9	7	6	5	7	8	8	12	7	6	6	8	10	7	6	4	5	3	6.6	12.2
22-Jan-08	3	13	2	2	A	2	2	5	7	5	7	6	4	4	18	13	5	7	5	5	11	9	9	9	6.6	18.3
23-Jan-08	11	11	9	9	A	5	3	3	5	4	3	12	6	9	4	5	3	5	4	4	5	6	10	10	6.4	12.3
24-Jan-08	4	3	2	2	A	1	2	2	2	4	5	5	4	3	3	2	3	4	5	5	8	8	7	9	4.0	8.8
25-Jan-08	9	7	6	7	A	6	7	6	7	8	11	10	16	17	14	6	1	1	1	1	1	1	3	3	6.6	16.9
26-Jan-08	3	3	2	1	A	1	3	2	2	8	9	7	4	4	5	3	4	3	3	2	2	1	1	1	3.2	9.2
27-Jan-08	1	1	1	2	A	1	2	1	2	1	2	2	2	1	1	2	4	4	2	5	5	4	5	14	2.8	14.4
28-Jan-08	10	19	11	15	A	17	26	24	28	28	17	33	32	22	17	17	15	12	6	3	4	6	9	9	16.5	33.1
29-Jan-08	13	14	13	21	A	23	40	43	48	47	57	46	34	29	25	16	16	15	14	11	11	14	15	14	25.1	56.7
30-Jan-08	11	12	11	9	A	9	7	9	11	10	9	14	12	11	14	14	17	25	20	13	17	18	12	18	13.2	24.7
31-Jan-08	25	22	21	28	A	19	30	20	33	34	34	26	18	14	14	14	9	9	9	7	8	13	12	10	18.6	34.4
Hourly Avg	10.6	9.8	8.8	9.4	N	9.6	11.8	12.3	14.9	13.6	13.3	13.2	14.9	14.3	13.4	12.8	14.6	15.0	12.7	12.0	13.4	12.2	11.0	11.0		
Hourly Max	37.9	42.2	40.6	38.5	0.0	39.9	44.8	42.9	62.0	47.3	56.7	61.2	99.6	64.3	63.0	59.4	67.9	60.8	58.1	49.3	72.0	52.2	41.2	38.9		

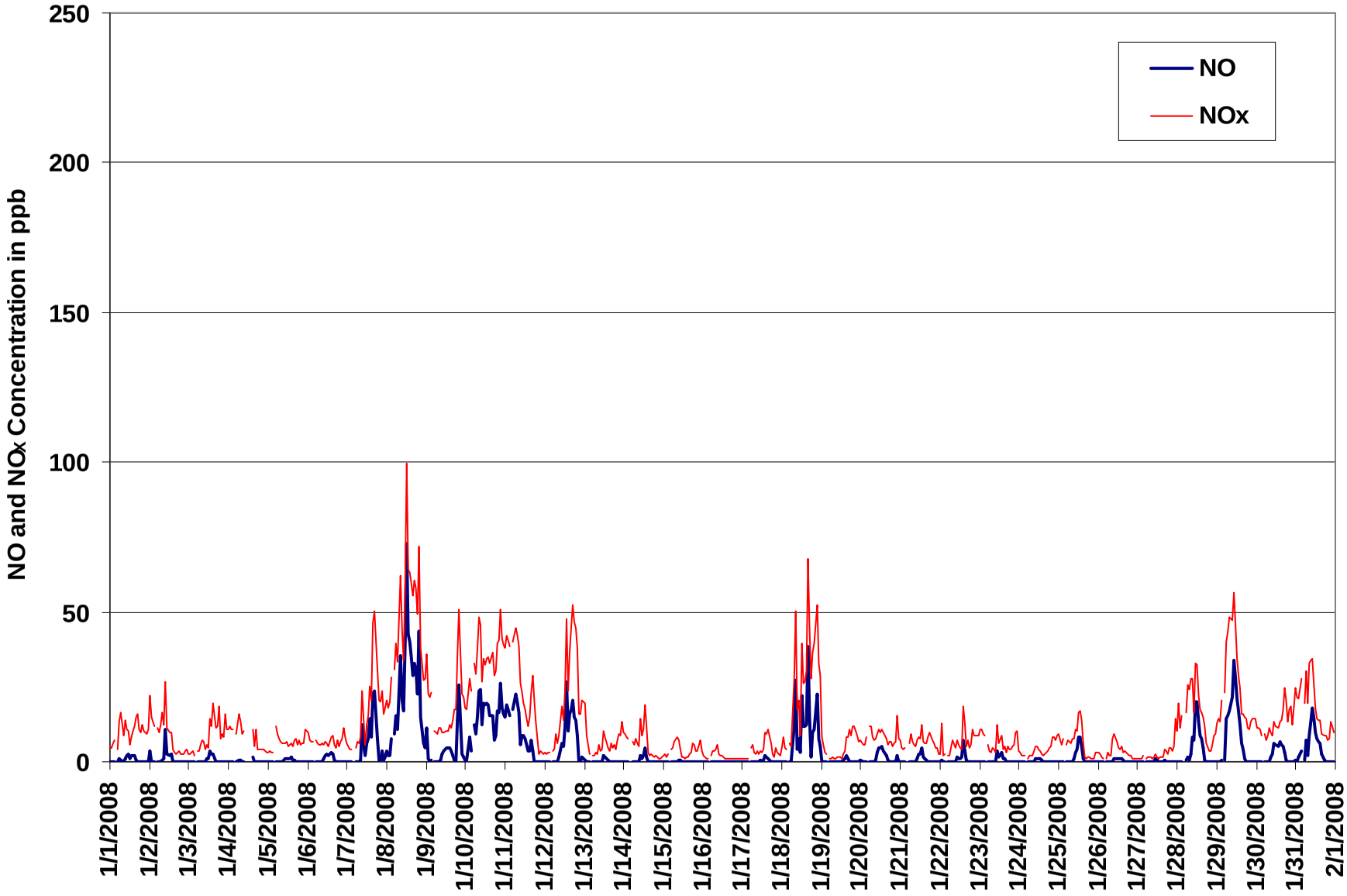


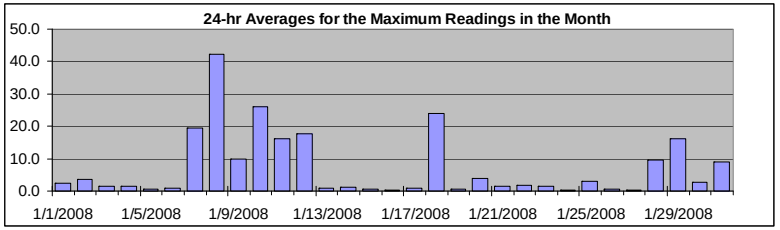
Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	104.8	ppb	7-Jan	9:00 10:00
Maximum 24-hr Value:	42.2	ppb	8-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	71.7	37.9	5.8	0.9	0.0	0.0	0.0	7.2 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**

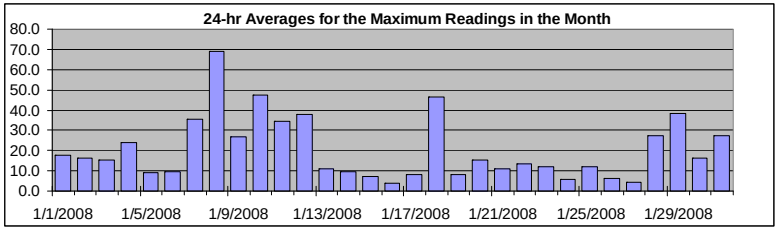
Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jan-08	0	0	0	0	A	0	7	4	0	4	8	7	3	4	9	3	2	1	0	0	0	1	0	0	2.3	8.8
2-Jan-08	15	2	1	0	A	0	0	2	5	7	30	8	5	6	1	0	0	1	1	0	0	0	0	0	3.6	29.8
3-Jan-08	0	0	0	0	A	0	0	0	0	0	1	1	1	10	12	4	2	0	0	0	0	0	4	0	1.5	11.7
4-Jan-08	0	0	0	0	A	2	5	7	0	6	C	C	C	C	A	3	0	0	0	0	0	0	0	0	1.4	6.8
5-Jan-08	0	0	0	0	A	0	0	0	0	0	1	2	1	2	2	1	1	0	0	0	0	3	0	1	0.6	2.9
6-Jan-08	1	1	0	0	A	0	0	0	0	1	3	3	3	3	4	5	1	0	0	0	0	0	0	0	1.0	4.8
7-Jan-08	0	0	0	0	A	0	2	5	3	105	16	3	8	18	57	40	49	44	41	3	4	29	1	20	19.4	104.8
8-Jan-08	30	21	15	44	A	33	40	23	65	35	37	84	86	74	49	44	43	39	34	30	72	36	23	15	42.2	85.7
9-Jan-08	21	6	0	2	A	0	0	0	0	2	4	5	6	6	6	6	4	2	2	47	55	42	13	3	10.0	54.5
10-Jan-08	1	3	51	9	A	66	18	34	37	34	16	32	22	23	22	18	30	12	15	23	30	43	38	22	26.1	66.0
11-Jan-08	19	28	20	22	A	24	32	33	41	11	15	11	11	10	7	23	38	28	1	1	0	0	0	0	16.3	41.2
12-Jan-08	0	0	0	0	A	0	0	2	0	15	21	9	22	72	30	42	37	30	30	51	21	0	0	20	17.5	72.0
13-Jan-08	6	0	0	0	A	0	0	0	0	0	1	1	5	3	1	1	0	0	0	0	0	0	0	0	0.8	5.6
14-Jan-08	0	0	0	0	A	0	0	0	0	0	4	2	5	10	5	0	0	0	0	0	0	0	0	0	1.1	9.7
15-Jan-08	0	0	0	0	A	0	0	0	1	7	1	1	1	1	1	0	1	0	1	0	0	0	0	0	0.6	6.7
16-Jan-08	0	0	0	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
17-Jan-08	0	0	0	0	A	0	0	0	0	0	0	2	2	4	4	3	6	0	0	0	0	0	0	0	0.9	6.0
18-Jan-08	0	0	0	1	A	0	0	85	88	28	23	5	56	33	14	15	61	29	5	28	22	26	20	12	23.9	88.2
19-Jan-08	0	0	0	0	A	0	0	0	0	0	0	1	1	1	4	5	2	1	0	0	0	1	0	0	0.7	4.8
20-Jan-08	11	0	0	1	A	4	0	1	1	2	7	6	6	6	6	6	2	2	0	0	0	0	31	0	3.9	31.5
21-Jan-08	0	0	0	0	A	0	0	0	0	0	3	5	5	11	4	3	1	0	0	0	0	0	2	0	1.4	10.6
22-Jan-08	0	3	0	0	A	0	0	0	1	1	5	4	3	3	13	9	2	0	0	0	0	0	0	1	1.9	12.9
23-Jan-08	0	0	0	0	A	0	0	0	0	0	1	13	5	14	2	1	1	0	0	0	0	0	0	0	1.6	13.6
24-Jan-08	0	0	0	0	A	0	0	0	0	1	2	2	1	2	1	0	1	0	0	0	0	0	0	0	0.4	1.9
25-Jan-08	0	0	0	1	A	0	0	0	1	2	6	7	16	13	10	16	0	0	0	0	0	0	0	0	3.1	16.5
26-Jan-08	0	0	0	0	A	0	0	0	0	1	2	2	3	1	4	1	4	0	0	0	0	0	0	0	0.7	3.8
27-Jan-08	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.3	1.0
28-Jan-08	0	0	1	4	A	5	5	3	6	36	26	54	34	17	13	10	6	2	0	0	0	0	0	0	9.6	54.3
29-Jan-08	0	0	1	6	A	3	57	36	36	32	71	34	29	34	16	10	6	3	1	0	0	0	1	0	16.3	71.1
30-Jan-08	1	0	0	0	A	0	0	0	1	2	4	8	7	7	9	7	7	5	3	0	0	2	0	3	2.8	8.7
31-Jan-08	3	1	17	11	A	3	38	8	18	21	23	19	11	10	8	9	5	2	0	0	0	0	0	0	9.0	37.9
Hourly Avg	3.5	2.1	3.5	3.2	N	4.5	6.6	7.8	9.8	11.4	11.0	11.1	12.0	13.2	10.4	9.1	10.0	6.5	4.3	5.9	6.6	5.9	4.3	3.1		
Hourly Max	29.6	28.4	51.1	43.8	0.0	66.0	56.8	84.9	88.2	104.8	71.1	83.6	85.7	74.1	56.5	43.6	61.1	43.8	40.9	50.7	71.7	42.6	38.0	22.4		

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	174.1	ppb	4-Jan	9:00 10:00
Maximum 24-hr Value:	69.1	ppb	8-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	104.0	68.3	24.5	11.8	6.7	2.5	1.9	20.2 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-Jan-08	11	7	12	17	A	6	37	32	12	25	24	24	10	12	27	16	19	25	17	15	21	14	11	17	17.7	37.3
2-Jan-08	44	22	21	15	A	15	12	18	27	29	54	22	18	16	8	5	4	10	11	6	6	5	6	6	16.4	53.9
3-Jan-08	5	3	9	3	A	7	8	9	12	23	7	8	7	32	37	24	19	23	25	21	12	17	31	13	15.2	36.6
4-Jan-08	13	13	13	13	A	27	39	37	14	174	C	C	C	C	A	16	16	18	9	8	5	5	5	4	23.7	174.1
5-Jan-08	3	4	5	4	A	16	12	9	8	8	7	9	6	8	8	7	10	15	12	11	8	16	10	19	9.1	18.6
6-Jan-08	16	14	10	8	A	8	7	7	7	9	8	10	7	7	11	13	8	6	15	14	8	11	13	12	9.7	16.0
7-Jan-08	7	6	5	5	A	6	11	19	15	127	34	7	16	31	79	61	73	72	66	28	26	56	22	47	35.6	126.6
8-Jan-08	54	46	38	69	A	60	69	49	93	63	60	116	114	102	75	69	70	68	62	57	104	63	50	39	69.1	115.8
9-Jan-08	44	29	23	25	A	17	12	10	14	13	12	12	14	13	14	18	18	22	22	77	82	69	35	25	26.8	82.4
10-Jan-08	21	22	77	30	A	95	39	58	64	58	29	50	37	38	38	35	52	35	36	46	51	66	62	45	47.3	95.4
11-Jan-08	43	53	43	45	A	47	55	56	65	28	29	23	23	23	18	45	69	59	25	23	6	7	4	5	34.5	69.4
12-Jan-08	7	3	3	3	A	4	6	26	9	40	43	22	38	104	51	75	70	65	63	84	53	25	23	51	37.8	104.3
13-Jan-08	32	11	8	8	A	5	4	7	5	13	8	9	22	12	6	5	10	10	9	10	10	18	13	25	11.2	32.1
14-Jan-08	11	11	9	9	A	8	8	13	9	7	21	12	20	32	23	5	4	6	4	5	3	2	2	3	9.7	32.4
15-Jan-08	4	4	3	4	A	7	6	9	17	18	8	3	4	3	3	3	7	6	15	10	9	8	12	6	7.3	17.7
16-Jan-08	5	4	2	2	A	4	6	8	10	11	7	4	5	2	3	3	2	2	2	2	2	2	1	1	3.8	11.0
17-Jan-08	1	1	2	2	A	18	17	5	9	10	4	8	10	15	15	14	23	9	4	3	10	4	3	3	8.2	23.2
18-Jan-08	7	10	6	12	A	8	10	128	126	55	41	15	86	55	29	36	94	59	33	58	52	56	50	38	46.3	128.3
19-Jan-08	16	14	4	3	A	2	2	3	2	2	2	3	2	4	10	17	14	12	13	15	14	16	11	8	8.1	16.6
20-Jan-08	29	7	7	21	A	35	16	11	12	10	13	13	12	12	13	16	9	12	10	6	9	9	64	12	15.4	63.8
21-Jan-08	13	9	4	6	A	17	16	8	9	9	14	15	14	25	12	10	9	14	15	10	7	5	16	4	11.2	25.2
22-Jan-08	4	35	4	6	A	3	3	7	23	8	17	15	11	9	29	29	9	14	9	9	16	10	16	21	13.2	35.4
23-Jan-08	16	15	13	10	A	7	6	8	12	6	5	33	14	30	7	9	6	7	5	8	13	16	18	16	12.1	33.3
24-Jan-08	6	3	3	2	A	2	3	6	3	6	7	7	5	6	4	3	4	5	6	8	14	14	10	13	5.9	13.6
25-Jan-08	12	10	10	25	A	10	10	8	11	10	16	14	28	24	24	33	3	3	4	4	2	3	9	5	11.9	33.0
26-Jan-08	5	4	6	4	A	6	6	4	7	11	11	12	9	6	11	5	19	6	5	3	4	2	2	1	6.4	19.2
27-Jan-08	2	3	2	3	A	2	3	3	3	2	3	3	3	2	2	2	6	6	6	8	6	5	11	18	4.4	17.6
28-Jan-08	12	25	17	25	A	32	34	31	35	72	51	78	52	28	23	21	20	15	10	4	7	9	10	12	27.1	78.1
29-Jan-08	17	18	22	37	A	31	99	77	76	62	101	55	46	53	28	22	18	20	18	15	13	19	21	19	38.4	100.7
30-Jan-08	17	14	12	10	A	11	9	11	14	11	10	17	14	14	18	17	24	26	29	14	24	24	15	27	16.5	29.2
31-Jan-08	28	26	50	41	A	31	72	36	45	44	42	35	20	17	16	18	13	11	14	14	12	19	19	11	27.4	72.3
Hourly Avg	16.2	14.3	14.2	15.1	N	17.5	20.4	22.9	24.6	31.0	22.9	21.7	22.2	24.5	21.3	20.9	23.2	21.2	18.4	19.0	19.6	19.0	18.4	16.8		
Hourly Max	53.7	53.0	77.4	69.3	0.0	95.4	99.0	128.3	126.4	174.1	100.7	115.8	114.3	104.3	78.6	74.6	93.8	72.1	65.8	84.3	104.1	68.5	63.8	50.9		

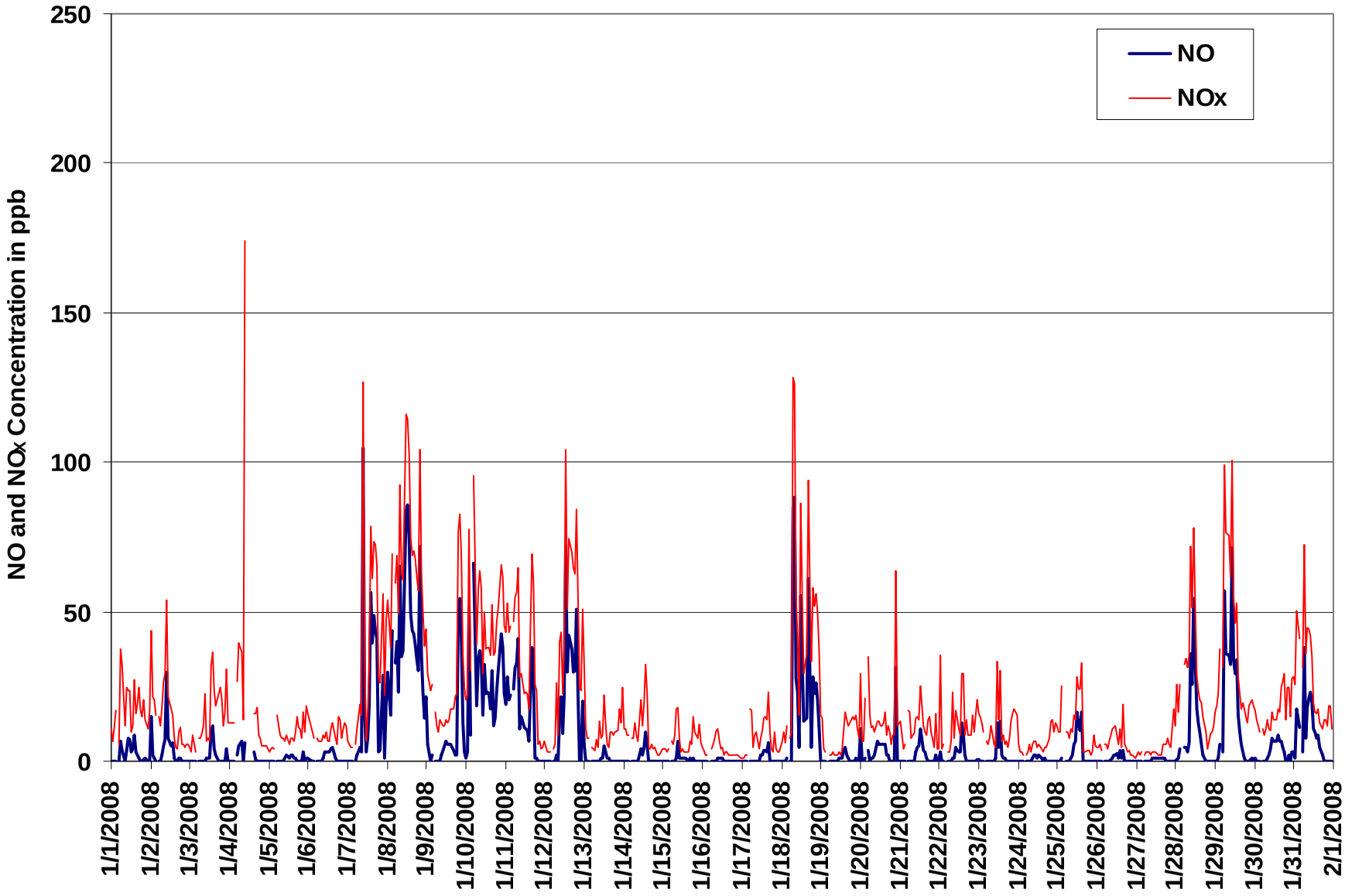


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Beaverlodge Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O_3)

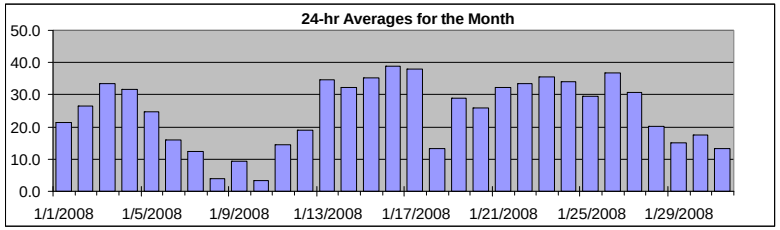
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	42.6	ppb	25-Jan	21:00 22:00
Maximum 24-hr Average:	38.8	ppb	16-Jan	



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
	42.0	40.8	34.8	26.0	16.0	2.0	1.0	24.5 ppb	26.0 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**

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-Jan-08	31	31	28	26	A	30	20	14	23	19	23	23	28	24	23	20	17	15	19	17	15	15	16	15	21.4	31.4
2-Jan-08	9	10	12	13	A	14	17	15	12	16	13	25	30	33	38	41	41	39	38	39	39	38	37	36	26.4	40.9
3-Jan-08	38	38	37	38	A	37	36	35	33	34	37	37	38	32	34	26	33	32	23	35	33	33	24	27	33.5	38.4
4-Jan-08	24	22	23	23	A	28	23	25	29	35	32	40	41	C	C	C	A	33	39	38	37	37	37	37	31.7	40.8
5-Jan-08	37	37	37	37	A	23	25	25	27	26	26	25	25	24	23	23	20	19	20	18	19	18	17	13	24.6	37.2
6-Jan-08	14	15	14	14	A	12	13	14	14	14	16	17	17	19	18	18	20	20	18	19	17	16	13	15	15.9	20.2
7-Jan-08	16	18	19	20	A	18	16	17	16	12	15	21	18	17	14	15	5	1	2	4	4	4	7	7	12.4	20.8
8-Jan-08	6	6	4	3	A	2	1	2	2	3	9	9	6	7	6	5	3	1	1	1	1	4	6	3	3.9	8.9
9-Jan-08	1	3	3	2	A	15	16	16	13	13	16	18	17	17	15	15	12	7	6	4	1	2	2	2	9.4	17.5
10-Jan-08	3	4	2	2	A	1	1	1	1	2	6	8	8	9	8	8	4	2	1	1	1	2	1	1	3.4	8.5
11-Jan-08	2	2	2	1	A	2	2	2	1	4	11	15	18	22	26	24	19	8	12	23	36	34	34	33	14.4	35.6
12-Jan-08	33	33	32	32	A	32	32	24	26	27	21	23	19	14	18	14	6	1	0	2	4	15	16	12	19.0	33.3
13-Jan-08	12	23	32	40	A	42	42	41	41	38	41	41	36	36	39	40	36	38	35	35	31	28	28	22	34.7	42.4
14-Jan-08	25	25	25	26	A	27	29	27	30	31	22	30	29	23	27	38	42	42	41	40	40	40	40	40	32.1	42.2
15-Jan-08	39	38	39	37	A	35	34	32	30	32	34	37	37	38	39	38	37	36	32	33	34	34	31	34	35.2	38.7
16-Jan-08	36	37	38	38	A	37	36	35	35	33	37	37	39	40	40	41	41	41	42	42	42	42	42	42	38.8	41.9
17-Jan-08	42	42	41	41	A	38	36	40	39	41	42	41	41	38	32	32	30	34	39	39	36	37	37	37	38.0	42.2
18-Jan-08	33	22	25	27	A	24	24	15	10	14	15	22	13	15	13	10	3	1	4	3	1	0	3	5	13.2	32.8
19-Jan-08	25	28	29	31	A	36	34	34	34	34	34	34	35	34	32	30	27	23	24	21	21	21	22	24	29.0	35.7
20-Jan-08	24	26	27	24	A	21	18	22	21	22	24	25	27	28	30	30	30	29	28	30	29	28	23	28	25.9	30.4
21-Jan-08	28	31	32	31	A	32	30	31	33	34	33	33	33	31	34	34	34	31	29	31	32	33	33	35	32.1	35.3
22-Jan-08	35	27	37	37	A	37	37	35	33	35	33	35	37	38	30	32	37	34	36	33	28	29	28	28	33.5	37.5
23-Jan-08	26	25	27	26	A	34	39	40	38	39	41	36	40	38	40	39	40	38	38	38	37	36	31	29	35.5	40.8
24-Jan-08	38	38	39	38	A	39	38	37	37	34	32	33	35	36	37	37	36	35	33	31	28	26	26	23	34.2	39.4
25-Jan-08	21	23	26	26	A	27	23	23	20	19	18	20	19	19	24	37	41	42	42	42	42	43	41	40	29.5	42.6
26-Jan-08	40	41	42	42	A	42	40	41	41	36	36	38	40	40	39	41	31	28	29	30	30	31	32	32	36.6	42.5
27-Jan-08	32	32	32	31	A	32	32	32	32	32	32	32	32	33	33	33	31	30	31	29	29	30	28	19	30.8	32.7
28-Jan-08	22	14	21	17	A	16	8	8	7	14	23	21	22	23	25	24	22	22	26	29	29	26	23	22	20.2	29.4
29-Jan-08	19	17	18	12	A	9	8	7	3	7	11	15	18	21	20	22	20	17	16	19	20	17	16	16	15.1	22.1
30-Jan-08	17	17	18	20	A	20	22	21	18	20	22	21	22	23	22	21	17	9	10	15	11	11	16	10	17.5	22.9
31-Jan-08	4	6	9	5	A	9	6	10	4	7	11	15	19	21	21	20	20	19	18	19	19	14	15	16	13.3	20.6
Hourly Avg	23.6	23.5	24.7	24.6	N	24.9	23.8	23.2	22.7	23.5	24.7	26.7	27.1	26.4	26.7	26.8	25.1	23.4	23.7	24.6	24.1	24.0	23.3	22.8		
Hourly Max	41.8	41.6	41.9	42.5	0.0	42.4	42.1	41.0	41.1	40.5	42.2	41.1	40.8	40.3	40.4	40.9	41.9	42.2	41.7	42.0	42.5	42.6	41.6	41.8		

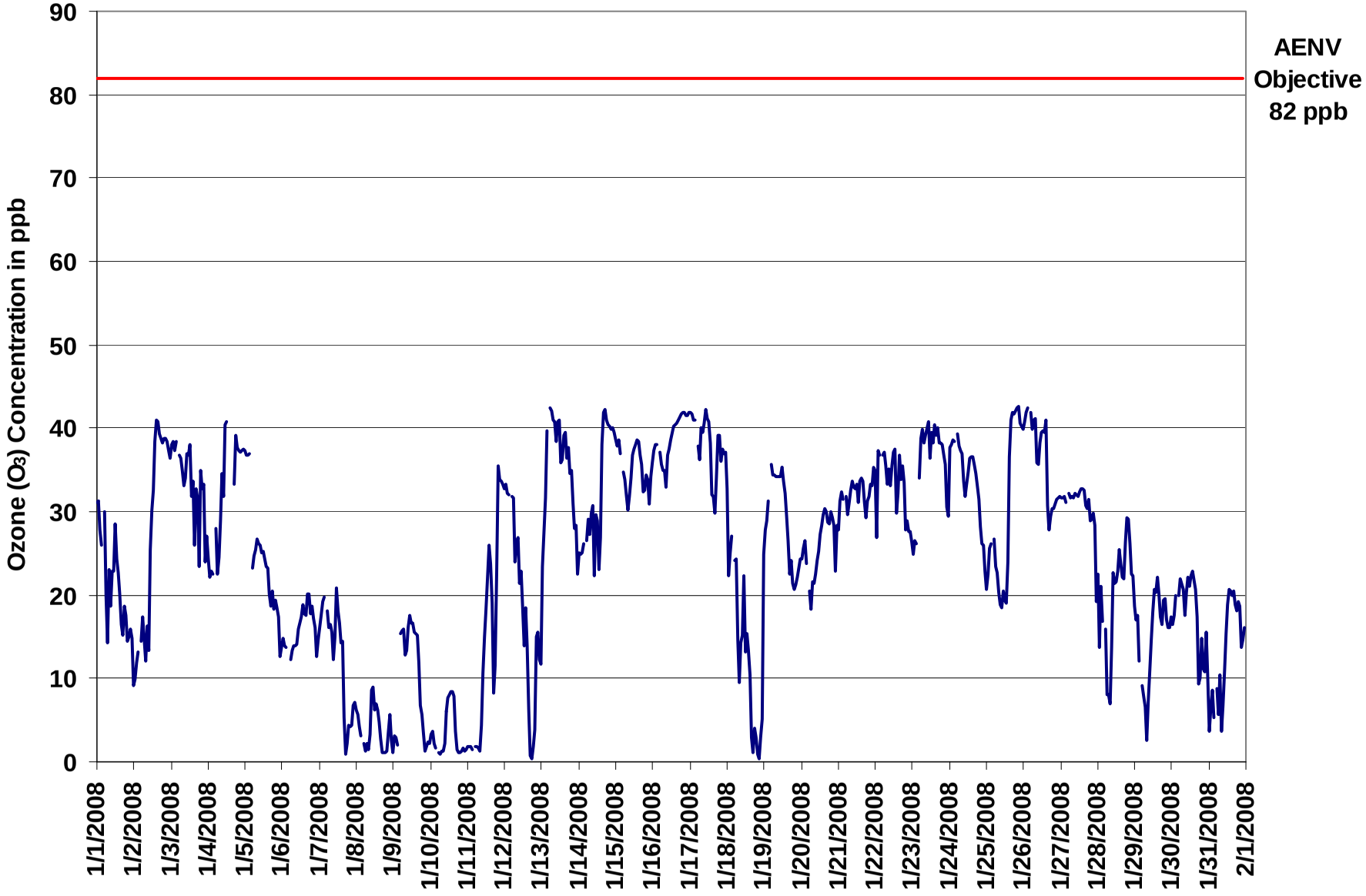


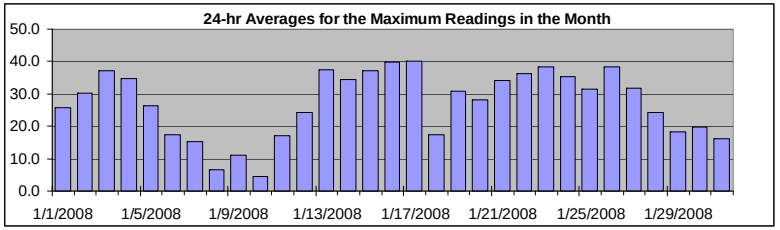
Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	43.9	ppb	14-Jan	17:00 18:00
Maximum 24-hr Value:	40.0	ppb	17-Jan	

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
	43.4	42.1	37.5	29.5	19.0	4.1	1.5	27.0 ppb	29.5 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-Jan-08	35	32	37	29	A	33	31	19	29	29	27	28	32	27	26	25	19	19	22	20	18	18	19	17	25.7	37.5
2-Jan-08	18	15	18	19	A	19	20	18	19	20	25	32	34	39	40	42	42	41	40	40	40	40	39	38	30.4	42.4
3-Jan-08	40	39	39	39	A	39	38	37	36	37	37	38	39	39	39	33	35	37	35	39	39	38	30	30	37.1	39.9
4-Jan-08	26	23	24	24	A	32	31	34	33	38	41	42	42	C	C	C	A	39	40	40	38	38	38	38	34.7	42.0
5-Jan-08	38	37	37	38	A	26	27	26	28	27	27	26	26	25	24	24	22	22	22	21	21	21	21	17	26.2	37.6
6-Jan-08	16	16	16	15	A	13	14	14	14	15	17	17	18	20	19	20	21	21	22	20	18	17	14	16	17.2	22.0
7-Jan-08	17	18	21	20	A	19	18	18	18	17	21	21	21	20	18	20	12	2	6	7	8	9	8	10	15.2	21.3
8-Jan-08	10	9	8	7	A	6	1	7	2	7	11	12	7	9	8	7	4	1	1	1	2	11	13	5	6.5	12.7
9-Jan-08	2	5	4	3	A	19	18	17	16	15	17	18	17	17	16	17	14	10	8	6	2	4	4	4	11.0	18.6
10-Jan-08	5	5	4	3	A	2	1	2	2	5	7	9	9	10	10	10	6	3	1	1	1	2	2	2	4.5	10.0
11-Jan-08	2	3	3	2	A	2	4	2	2	8	13	16	20	26	27	26	25	18	18	36	37	35	34	34	17.1	36.9
12-Jan-08	34	34	33	33	A	32	33	32	29	32	28	26	24	24	24	22	19	5	1	9	19	22	20	24	24.3	34.1
13-Jan-08	21	25	38	43	A	44	43	43	42	41	43	42	41	38	40	40	40	39	37	36	33	32	30	30	37.5	43.9
14-Jan-08	27	27	26	28	A	28	31	30	31	32	29	32	33	27	36	40	44	44	42	41	41	41	41	40	34.4	43.9
15-Jan-08	40	39	39	39	A	36	35	35	33	34	37	38	38	39	40	39	39	38	37	38	38	36	33	37	37.1	40.0
16-Jan-08	37	38	39	39	A	39	38	38	38	36	39	38	40	41	41	41	41	42	42	42	42	42	42	42	39.9	42.4
17-Jan-08	42	42	42	42	A	42	39	42	40	43	44	43	43	43	34	35	34	37	40	40	39	38	38	38	40.0	43.5
18-Jan-08	35	29	26	29	A	26	26	25	22	20	19	24	21	17	16	13	7	3	6	7	1	1	6	16	17.2	35.2
19-Jan-08	31	32	31	36	A	37	36	35	35	35	35	35	36	36	33	33	30	24	26	23	23	22	24	26	31.0	37.0
20-Jan-08	26	28	28	26	A	28	22	24	23	24	25	26	28	29	31	31	31	31	30	31	32	30	28	31	28.0	31.7
21-Jan-08	30	32	33	33	A	34	33	35	34	36	38	36	35	33	37	36	35	35	32	33	33	34	34	36	34.2	37.5
22-Jan-08	36	37	39	38	A	38	38	38	37	37	37	38	40	40	38	37	38	38	38	35	31	30	30	30	36.3	39.9
23-Jan-08	29	29	28	30	A	36	42	42	41	41	42	41	42	42	42	41	42	40	40	39	40	39	39	35	38.3	42.3
24-Jan-08	39	38	39	40	A	41	39	38	38	36	33	34	36	37	37	37	37	36	34	33	30	30	28	24	35.5	40.6
25-Jan-08	22	24	30	30	A	29	26	23	22	20	20	21	21	21	30	41	42	42	42	43	43	43	43	41	31.4	43.4
26-Jan-08	42	42	43	43	A	43	42	43	43	39	37	40	41	41	41	41	41	30	31	31	32	32	32	32	38.4	43.4
27-Jan-08	32	32	32	32	A	33	33	33	33	33	33	32	33	33	33	33	32	32	33	31	30	31	31	23	31.8	33.2
28-Jan-08	24	25	25	21	A	23	14	15	16	20	27	26	25	25	28	27	24	25	30	30	30	30	24	24	24.2	29.9
29-Jan-08	21	19	20	18	A	14	14	16	7	11	13	16	20	23	23	24	22	19	19	21	21	19	20	19	18.3	24.2
30-Jan-08	18	18	19	20	A	21	23	23	19	22	23	22	23	24	23	21	20	15	15	16	15	18	18	17	19.7	23.7
31-Jan-08	6	9	10	10	A	14	12	17	14	10	13	18	20	21	21	21	21	20	20	21	20	18	17	17	16.1	21.5
Hourly Avg	25.8	25.9	26.9	26.7	N	27.3	26.5	26.4	25.6	26.4	27.6	28.7	29.3	28.8	29.2	29.3	28.0	26.1	26.2	26.8	26.4	26.5	25.8	25.6		
Hourly Max	42.4	42.5	43.1	43.4	0.0	43.9	43.4	42.8	43.1	43.3	43.5	42.7	43.4	42.9	42.1	42.4	43.9	43.9	42.4	42.9	43.4	43.3	42.9	42.4		

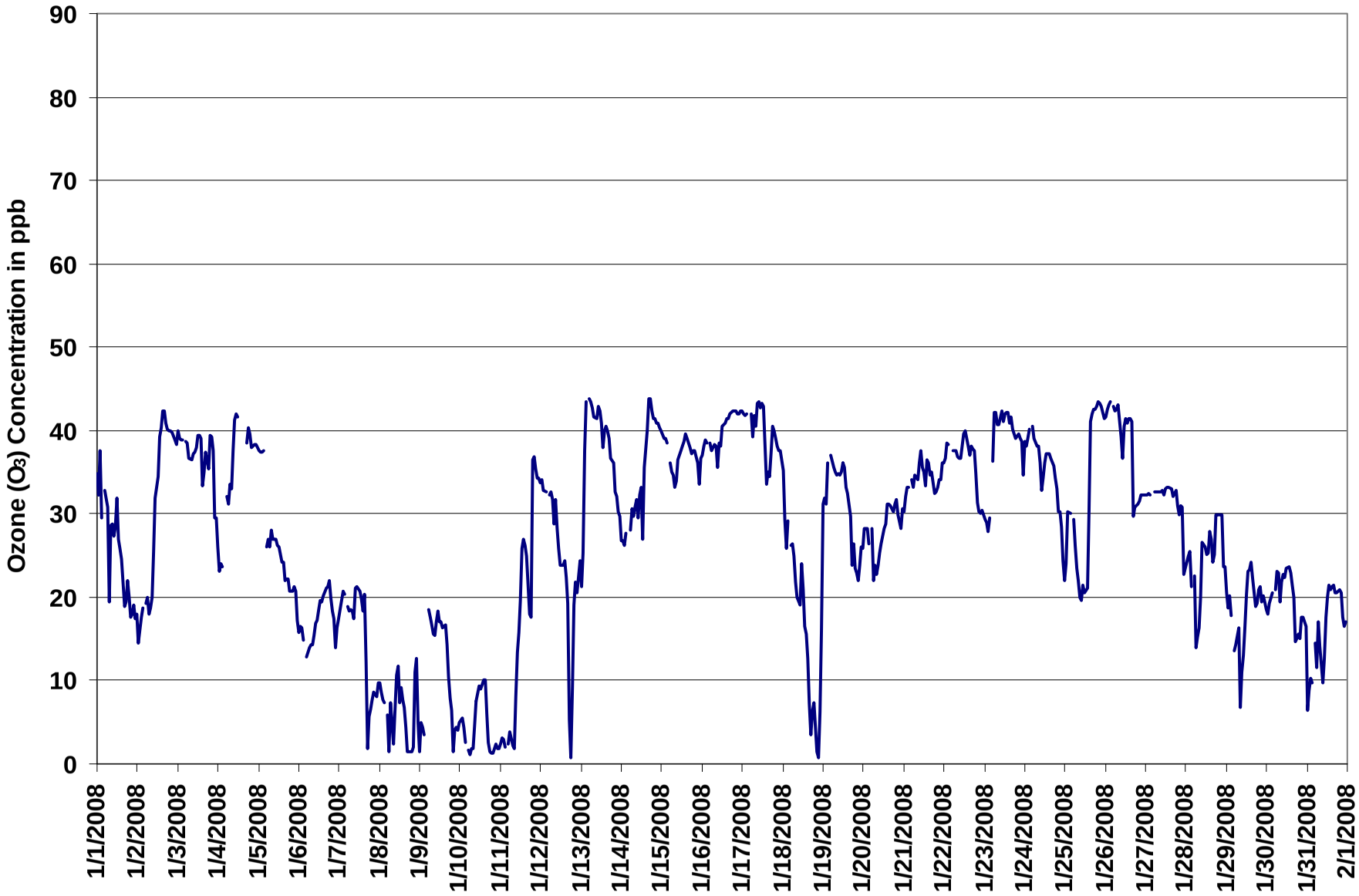
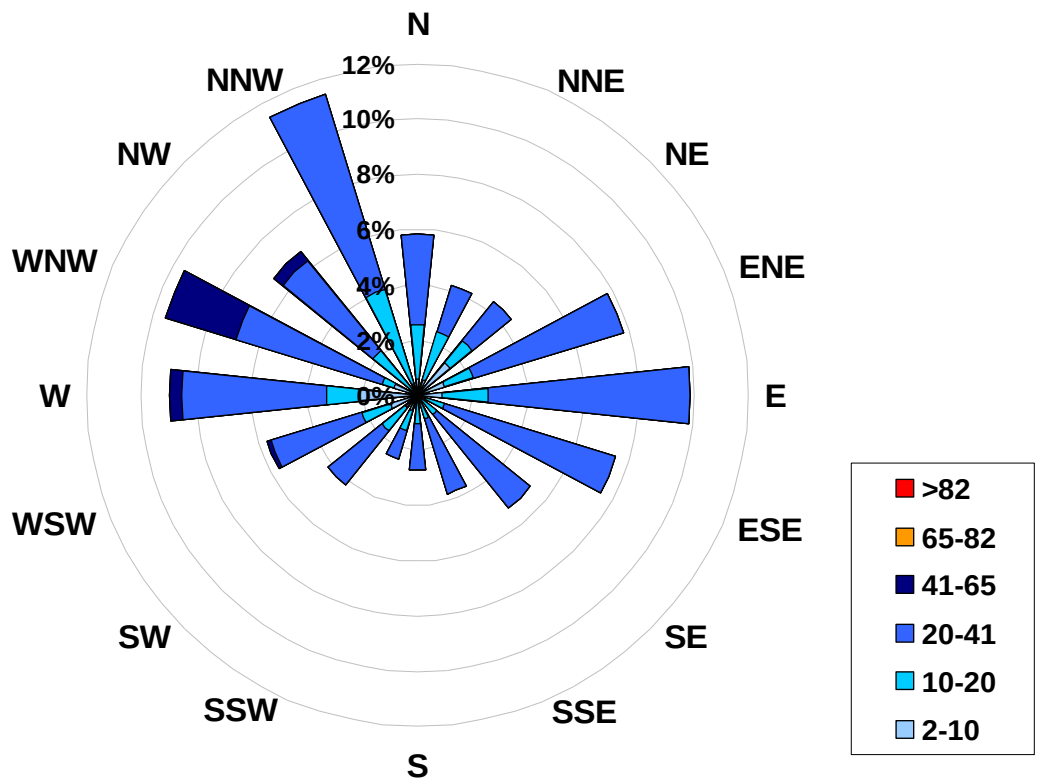


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Beaverlodge Site for January 2008



Calms:	**0%**

Frequency Distribution of O_3 in ppb			
Range			**Frequency (hrs)**
2.0	<	10	109
10	to	20	140
20	to	41	435
41	to	65	25
65	to	82	0
	>	82	0
Total Non-Zero Values			709

PASZA - Beaverlodge Ozone Eight Hour Average Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

Station: Beaverlodge
Station Owner: PASZA

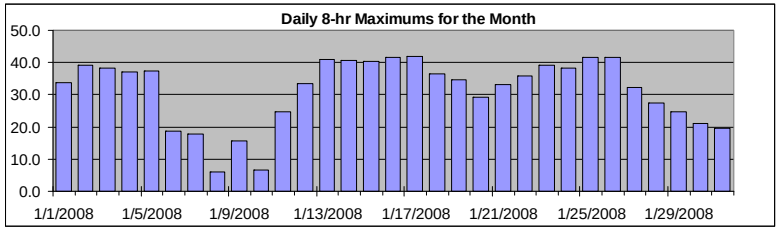
Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	41.7	ppb	17-Jan	1:00 2:00

Percentile	99	95	75	50	25	5	1
	41.4	39.6	34.5	26.1	16.1	3.3	1.7



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-Jan-08	33	34	33	32	31	31	29	26	25	23	22	22	23	22	22	23	22	22	21	20	19	18	17	16	33.8
2-Jan-08	15	14	14	13	13	13	13	13	13	14	14	16	18	20	23	26	30	33	36	37	38	39	39	39	39.2
3-Jan-08	38	38	38	38	38	38	37	37	36	36	36	36	36	35	35	34	34	33	32	32	31	31	30	30	38.2
4-Jan-08	29	28	28	26	25	24	24	24	24	26	28	30	31	32	N	N	N	N	N	N	N	N	N	37	37.0
5-Jan-08	37	37	37	37	37	35	33	32	30	29	27	25	25	25	25	25	24	23	23	22	21	20	20	18	37.5
6-Jan-08	17	17	16	16	15	14	13	14	14	14	14	14	15	16	16	17	17	18	18	19	19	18	18	17	18.5
7-Jan-08	17	16	17	17	17	17	17	18	18	17	16	16	17	16	16	16	15	13	12	10	8	6	5	4	17.6
8-Jan-08	5	5	5	5	5	5	4	4	3	3	3	4	4	5	6	6	6	6	5	4	3	3	3	2	6.0
9-Jan-08	2	2	3	3	3	5	6	8	10	11	13	15	15	16	16	15	15	15	13	11	10	8	6	4	15.6
10-Jan-08	3	3	3	2	2	2	2	2	2	2	2	3	4	5	5	6	7	6	6	5	4	3	2	2	6.6
11-Jan-08	1	1	2	2	2	2	2	2	2	2	3	5	7	9	12	15	17	18	18	19	21	23	24	25	24.8
12-Jan-08	26	30	32	33	33	33	32	31	30	29	28	26	25	23	22	20	18	15	12	9	7	8	7	7	33.3
13-Jan-08	8	11	14	19	21	25	29	33	37	39	41	41	40	39	39	39	38	38	38	37	36	35	34	32	40.9
14-Jan-08	30	29	27	26	26	26	26	26	27	28	27	28	28	28	27	29	30	32	34	35	37	39	40	41	40.7
15-Jan-08	40	40	39	39	39	38	37	36	35	34	33	33	34	34	35	36	37	37	37	36	36	35	34	34	40.3
16-Jan-08	34	34	35	35	35	36	37	37	37	36	36	36	36	36	37	38	38	40	40	41	41	41	41	42	41.6
17-Jan-08	42	42	42	42	41	41	40	40	40	39	40	40	40	40	39	38	37	36	36	36	35	35	36	36	41.7
18-Jan-08	37	35	33	32	31	29	28	24	21	20	18	18	17	16	15	14	13	12	10	8	6	4	3	3	36.6
19-Jan-08	5	9	12	15	17	22	27	31	32	33	34	34	35	34	34	33	32	31	30	28	26	25	24	23	34.6
20-Jan-08	23	23	23	24	24	24	23	23	23	22	22	22	23	24	25	26	27	28	29	29	29	29	29	28	29.4
21-Jan-08	28	28	29	29	29	29	30	31	31	32	32	32	32	32	33	33	33	33	32	32	32	32	32	32	33.1
22-Jan-08	33	32	33	34	34	34	35	35	35	36	35	35	35	36	35	34	35	35	35	35	33	32	32	31	36.0
23-Jan-08	30	29	28	27	27	28	29	31	33	35	37	38	38	39	39	39	39	39	39	39	39	38	37	36	39.2
24-Jan-08	36	36	36	36	35	36	37	38	38	37	37	36	36	35	35	35	35	35	35	35	34	33	31	30	38.2
25-Jan-08	28	26	25	25	24	24	24	24	24	23	22	22	21	20	20	22	25	28	30	33	36	39	41	42	41.6
26-Jan-08	41	41	41	41	41	41	41	41	41	41	40	39	39	39	39	39	38	37	36	35	34	33	32	30	41.4
27-Jan-08	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	31	31	31	30	28	32.3
28-Jan-08	27	25	24	23	22	20	17	15	13	13	13	14	15	16	18	20	22	23	23	24	25	26	25	25	27.5
29-Jan-08	25	24	23	21	20	17	15	13	10	9	8	8	10	11	13	15	17	18	19	19	19	19	19	18	24.6
30-Jan-08	17	17	17	18	17	18	18	19	19	20	20	21	21	21	21	21	21	20	18	17	16	14	14	12	21.1
31-Jan-08	11	10	10	9	9	8	7	7	7	7	7	9	10	12	13	15	17	18	19	20	20	19	18	17	19.6
Hourly Max	41.7	41.7	41.6	41.5	41.5	41.1	41.0	41.1	41.3	40.6	40.7	40.9	40.3	39.8	39.3	39.0	39.2	39.5	40.1	40.7	41.1	41.3	41.4	41.6	

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

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

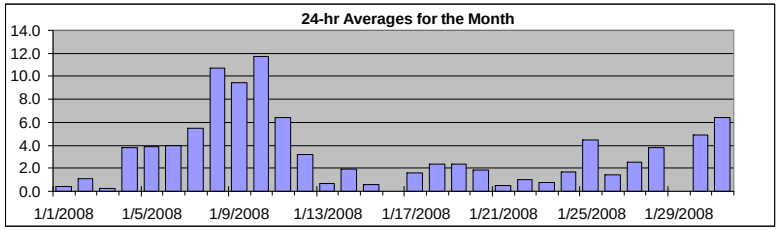
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	16.7	µg/m³	8-Jan	11:00 12:00
Maximum 24-hr Value:	11.8	µg/m³	10-Jan	



AIC Time:	0 hrs	Operational Time:	719 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	96.6%

Percentile	99	95	75	50	25	5	1	Average / Median		Geomean
	14.4	11.9	5.2	2.1	0.0	0.0	0.0	3.4	2 µg/m˘	1.9 µg/m˘

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**

Day	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-Jan-08	0	1	0	1	2	0	0	0	0	0	0	0	D	0	0	1	1	1	0	0	0	0	0	1	0.4	2.5
2-Jan-08	1	2	3	2	2	1	0	0	1	1	3	4	1	4	0	1	0	0	0	0	0	0	0	1	1.1	4.3
3-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	2	0.2	2.5
4-Jan-08	2	7	6	8	7	9	9	6	6	5	6	1	0	D	0	0	0	7	0	0	0	5	2	0	3.8	9.2
5-Jan-08	3	2	2	2	3	4	3	5	3	3	4	4	4	4	4	4	5	4	4	6	5	5	5	6	3.9	5.8
6-Jan-08	9	6	4	3	3	3	4	3	4	4	5	4	4	5	3	4	3	3	3	3	3	5	5	5	4.0	8.7
7-Jan-08	3	4	3	2	3	3	3	2	1	2	9	5	3	5	7	12	12	13	8	7	6	8	6	7	5.5	12.8
8-Jan-08	7	7	7	7	7	7	9	8	9	12	13	17	15	13	13	14	14	13	14	13	13	10	8	8	10.7	16.7
9-Jan-08	10	9	10	12	11	10	9	7	6	8	7	7	10	11	9	8	9	9	10	12	11	11	9	9	9.4	12.1
10-Jan-08	9	9	10	10	8	10	9	11	12	12	11	12	12	13	15	14	14	13	12	13	12	15	13	13	11.8	14.8
11-Jan-08	15	14	13	13	14	15	14	14	11	5	5	2	2	2	1	1	0	5	4	2	0	0	0	0	6.4	15.1
12-Jan-08	0	0	0	0	0	0	0	D	0	0	0	0	2	6	7	6	8	6	6	8	9	7	6	2	3.2	8.8
13-Jan-08	6	2	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	2	2	0.7	5.9
14-Jan-08	3	4	7	7	5	3	1	0	0	0	0	0	0	0	0	3	D	D	0	1	0	1	7	0	1.9	7.4
15-Jan-08	0	0	0	3	0	0	0	0	1	1	1	0	0	0	3	3	1	0	0	0	0	0	0	0	0.6	3.2
16-Jan-08	0	0	0	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
17-Jan-08	0	0	4	5	3	2	1	1	2	0	0	0	1	0	1	1	1	12	5	0	0	0	0	0	1.6	11.5
18-Jan-08	0	0	2	1	0	1	0	2	3	1	3	4	0	4	3	2	5	3	2	3	5	3	5	5	2.4	5.2
19-Jan-08	3	3	0	1	0	1	0	0	1	2	2	2	3	1	2	2	3	5	4	5	4	4	5	4	2.4	5.1
20-Jan-08	3	4	3	2	0	0	3	0	0	1	2	4	3	1	4	8	2	0	0	0	0	0	1	2	1.8	8.4
21-Jan-08	3	2	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	1	0.5	2.9
22-Jan-08	2	3	4	3	3	1	2	0	0	0	2	1	0	1	0	1	0	0	0	0	0	0	2	1	1.0	3.8
23-Jan-08	D	0	0	2	0	1	0	D	0	0	0	1	1	1	0	1	0	1	4	0	0	0	1	3	0.7	3.7
24-Jan-08	0	0	3	0	1	0	1	0	0	0	3	2	2	2	2	2	1	2	2	3	4	3	3	4	1.7	3.7
25-Jan-08	4	6	5	8	5	3	3	5	6	11	12	12	9	12	5	0	0	0	0	0	0	0	0	0	4.5	12.5
26-Jan-08	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	4	4	7	4	4	2	4	3	1.5	7.2
27-Jan-08	3	3	3	3	2	2	3	2	3	2	4	2	0	2	3	1	2	2	2	3	5	3	2	2	2.5	4.7
28-Jan-08	1	D	1	0	7	1	D	2	5	3	11	11	6	3	5	3	1	2	2	3	6	6	2	P	3.8	11.0
29-Jan-08	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	4	6	7	3	9	6	5	7	5	N	9.1
30-Jan-08	4	8	6	5	4	3	1	1	2	4	6	7	5	5	6	6	5	7	6	6	6	5	4	3	4.9	7.7
31-Jan-08	2	6	9	9	7	9	8	7	8	9	8	7	7	8	4	5	5	4	6	5	5	5	6	6	6.4	9.3
Hourly Avg	3.2	3.6	3.7	3.6	3.3	3.0	2.9	2.7	2.8	2.9	4.0	3.7	3.1	3.6	3.2	3.6	3.5	4.2	3.3	3.4	3.5	3.4	3.4	3.2		
Hourly Max	15.1	14.5	13.4	12.6	13.8	14.9	14.4	14.1	11.9	11.8	13.5	16.7	14.5	13.4	14.6	14.4	13.7	13.5	14.0	13.4	13.2	14.8	13.2	13.2		

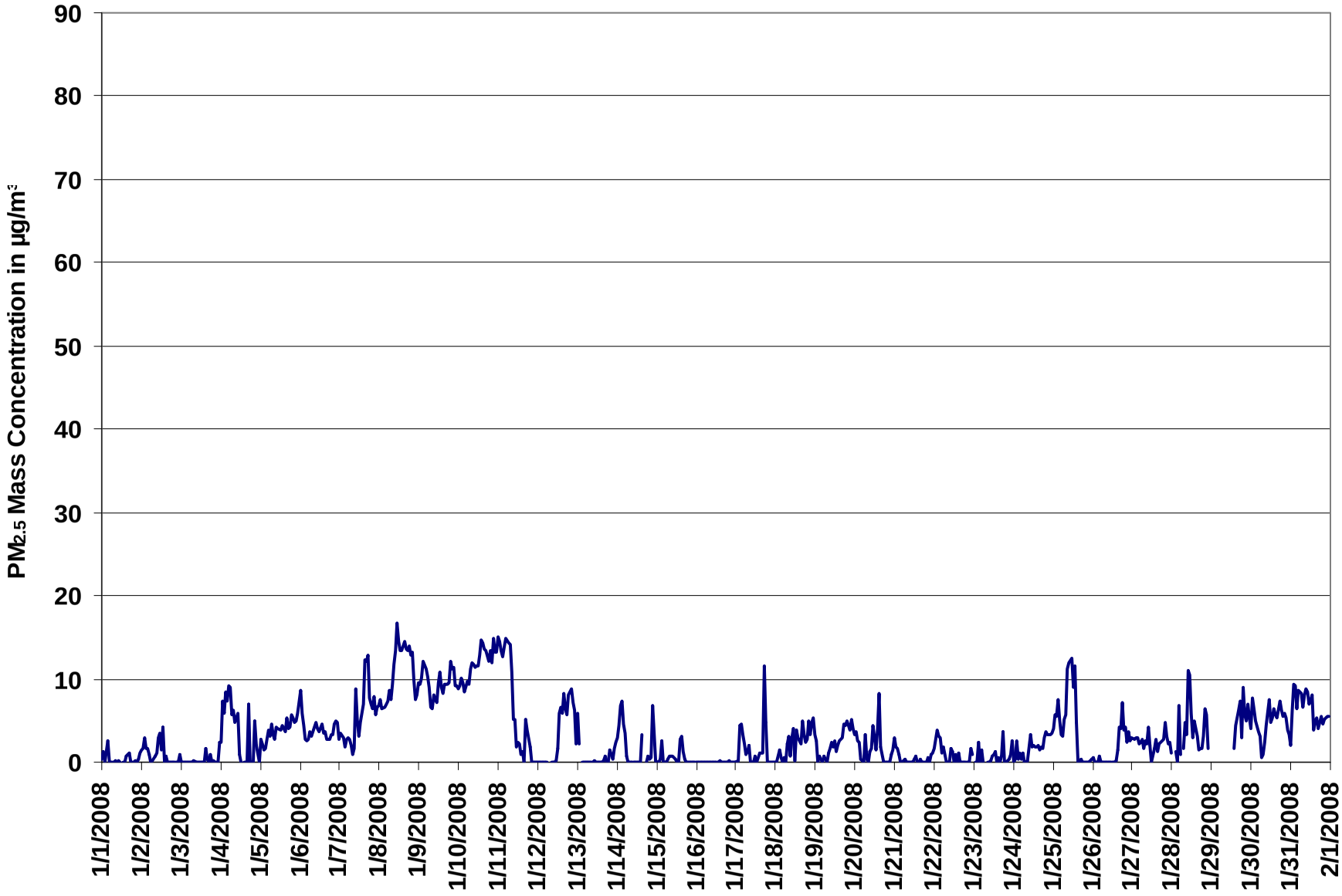


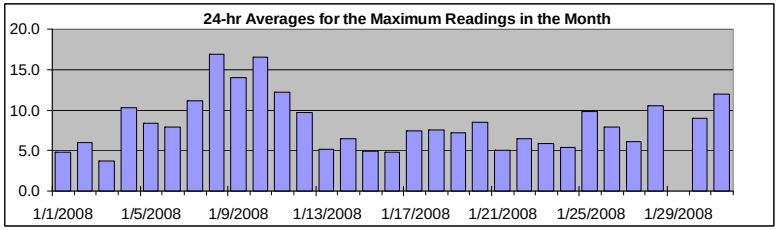
Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	41.2	µg/m³	28-Jan	10:00 11:00
Maximum 24-hr Value:	16.9	µg/m³	8-Jan	

AIC Time:	0 hrs	Operational Time:	729 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	98.0%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	22.2	17.9	11.4	7.1	4.5	2.3	0.9	8.4 7 µg/m˘	7.8 µg/m˘

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**

Day	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-Jan-08	6	6	9	8	8	4	5	4	3	3	4	3	2	4	3	6	6	8	6	3	3	3	4	6	4.8	8.7
2-Jan-08	6	7	8	7	6	6	4	4	5	6	9	13	7	15	2	24	4	2	2	2	0	2	2	4	6.0	24.4
3-Jan-08	3	2	7	4	2	4	4	4	5	3	1	1	0	3	2	5	6	4	5	4	4	4	4	8	3.7	7.9
4-Jan-08	7	14	10	14	12	14	17	12	11	9	17	11	5	6	1	11	15	19	8	3	8	12	9	4	10.3	18.9
5-Jan-08	7	7	8	7	7	7	8	10	9	8	9	9	8	8	8	9	9	8	7	9	10	10	9	9	8.4	10.3
6-Jan-08	12	12	8	7	7	6	8	7	8	10	9	8	8	7	6	7	6	5	6	8	7	11	9	8	7.9	12.2
7-Jan-08	9	8	8	6	9	8	6	6	5	11	15	12	6	9	16	19	20	18	15	15	12	14	11	12	11.2	19.6
8-Jan-08	13	13	13	14	13	17	14	16	17	16	21	29	21	20	19	19	18	18	18	17	17	16	14	12	16.9	29.4
9-Jan-08	13	13	14	17	15	13	13	11	10	11	11	12	14	16	12	13	15	13	16	22	16	17	13	15	14.1	22.2
10-Jan-08	12	17	16	17	15	15	15	16	15	16	16	17	16	17	20	19	16	17	15	18	15	20	17	17	16.5	20.5
11-Jan-08	19	20	17	17	19	21	23	20	17	11	12	12	6	7	5	9	4	19	9	13	6	0	7	2	12.2	22.8
12-Jan-08	1	3	3	2	4	7	3	12	5	8	16	13	9	17	16	14	15	12	11	11	16	12	12	9	9.7	17.2
13-Jan-08	16	16	4	5	4	4	4	6	5	1	4	5	4	0	1	0	5	4	3	4	5	5	7	8	5.2	16.5
14-Jan-08	7	9	11	12	8	7	4	4	3	3	4	3	2	2	11	10	7	6	4	5	7	7	14	6	6.4	14.1
15-Jan-08	6	4	6	9	3	4	3	7	5	6	5	4	3	5	6	7	5	4	4	6	5	3	5	4	4.9	9.0
16-Jan-08	4	5	3	2	2	2	2	4	4	7	4	7	5	5	5	3	5	6	6	8	10	6	5	7	4.8	9.6
17-Jan-08	7	6	14	9	9	5	4	6	7	6	6	5	7	2	6	6	5	27	22	2	5	5	6	3	7.5	27.5
18-Jan-08	5	4	8	7	3	5	4	8	9	7	9	11	8	15	9	8	10	7	5	6	9	6	9	9	7.5	15.0
19-Jan-08	6	6	6	6	5	6	5	3	8	6	7	6	7	5	6	6	8	9	9	12	9	9	11	12	7.2	12.4
20-Jan-08	8	9	9	9	8	7	16	6	6	7	9	20	12	7	12	15	8	4	4	4	4	5	6	7	8.5	20.2
21-Jan-08	9	7	7	5	5	4	5	3	2	3	3	3	6	4	2	4	3	3	6	6	7	5	6	14	5.1	13.7
22-Jan-08	9	7	10	9	9	9	9	5	4	4	11	9	6	6	1	3	1	3	2	4	2	4	11	15	6.4	14.9
23-Jan-08	8	11	5	11	13	8	6	4	2	6	5	5	4	5	2	4	2	6	7	3	4	8	6	8	5.9	13.4
24-Jan-08	4	5	10	5	5	5	6	3	3	4	8	5	5	4	4	6	5	5	5	6	7	6	6	7	5.3	9.8
25-Jan-08	9	10	9	12	10	9	8	10	11	16	18	18	18	18	14	11	2	8	5	4	4	4	2	5	9.9	18.3
26-Jan-08	6	3	3	5	8	2	4	5	4	4	3	5	3	4	6	3	15	21	37	11	10	10	10	9	7.8	37.3
27-Jan-08	10	8	11	11	9	4	4	4	5	4	6	5	1	10	7	3	3	4	6	4	7	5	4	11	6.1	11.3
28-Jan-08	7	0	7	4	30	18	3	9	15	10	41	15	12	8	10	9	6	4	4	6	9	13	3	P	10.5	41.2
29-Jan-08	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	9	11	12	7	13	7	8	13	16	N	15.9
30-Jan-08	6	18	10	6	6	4	2	4	5	10	11	12	8	9	12	11	10	13	11	10	12	10	6	9	9.0	17.9
31-Jan-08	5	12	16	16	12	17	18	16	15	14	14	16	13	14	7	9	11	6	9	7	10	10	10	10	12.0	17.8
Hourly Avg	8.1	8.8	9.0	8.8	8.8	8.1	7.5	7.6	7.4	7.6	10.3	9.8	7.5	8.4	7.6	9.1	8.1	9.5	8.8	8.0	7.9	8.1	8.1	8.8		
Hourly Max	18.5	20.1	17.5	17.5	29.9	21.2	22.8	19.9	17.4	16.5	41.2	29.4	21.1	20.5	20.5	24.4	19.6	27.5	37.3	22.2	16.7	20.3	16.9	17.5		

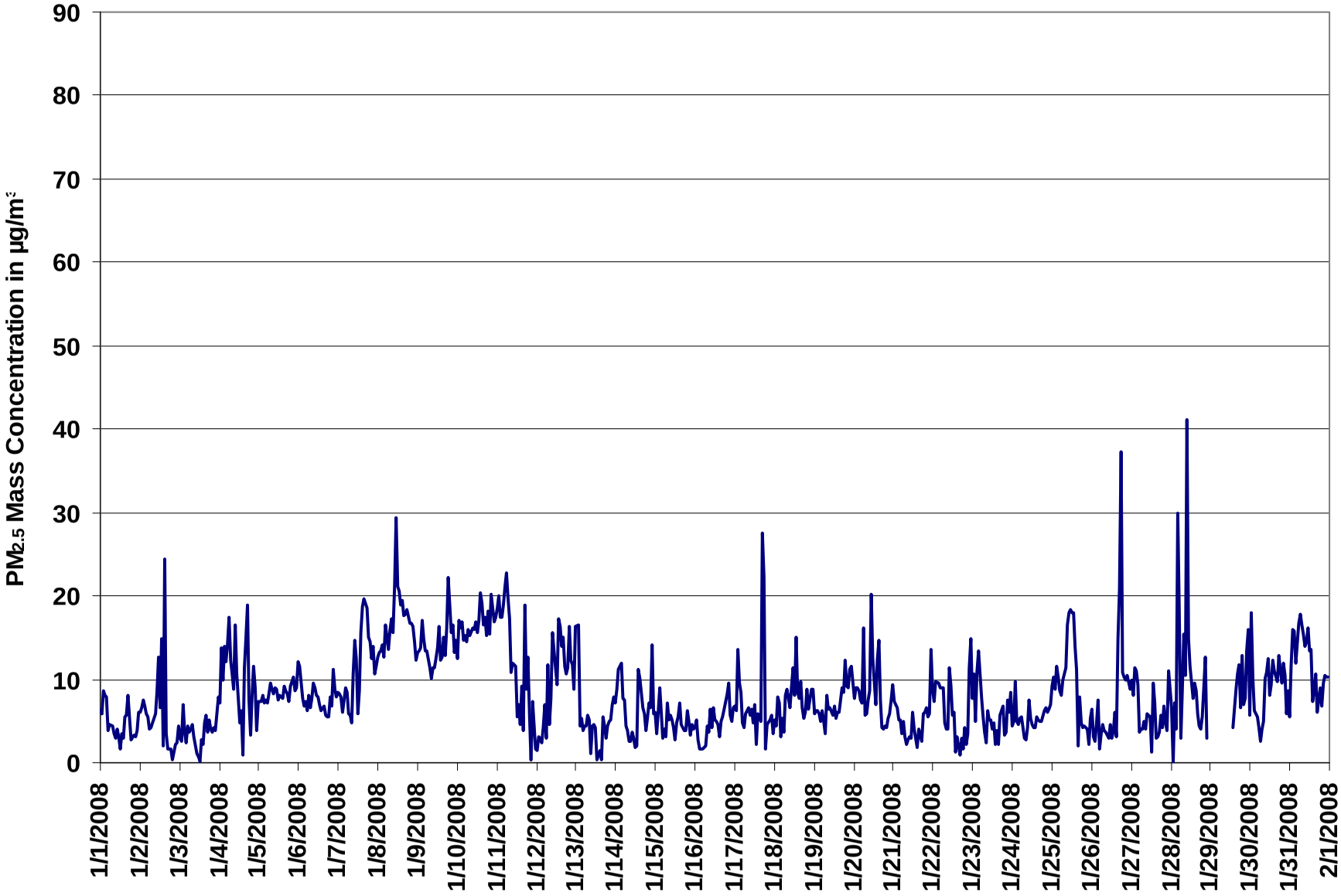
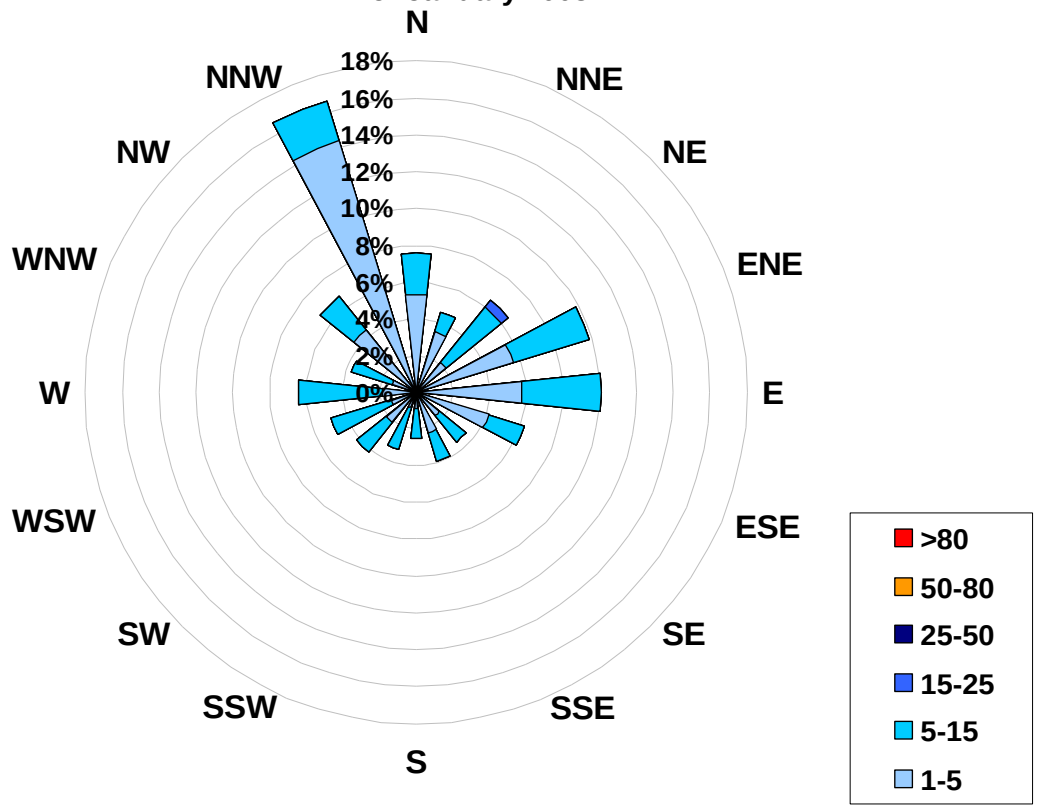


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Beaverlodge Site for January 2008



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	531
5	to	15	186
15	to	25	2
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			719

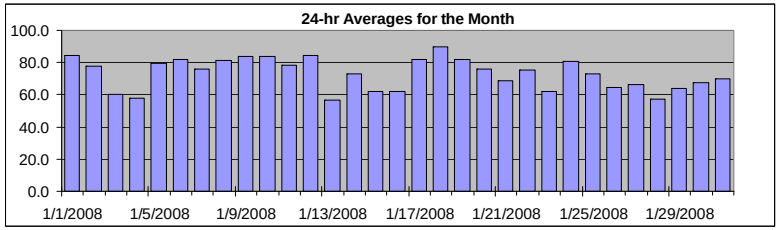
PASZA - Beaverlodge Relative Humidity Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	95.9	%	17-Jan	9:00 10:00
Maximum 24-hr Value:	89.5	%	18-Jan	

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
	93.3	89.6	84.4	74.1	64.2	49.0	40.2	72.9 %	74.1 %

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**

Day	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-Jan-08	85	87	85	88	89	87	86	86	86	83	80	80	73	77	79	82	84	84	86	87	87	89	89	89	84.4	89.2
2-Jan-08	87	88	87	88	86	87	87	87	87	88	83	87	85	70	72	61	62	66	70	70	70	66	68	71	78.0	88.0
3-Jan-08	66	66	64	63	61	64	68	68	69	66	62	54	52	53	52	53	52	52	55	55	58	59	65	70	60.3	69.7
4-Jan-08	76	76	78	79	68	61	67	71	70	63	58	46	45	42	46	48	44	49	48	50	49	50	58	53	58.1	79.0
5-Jan-08	53	54	57	61	73	78	79	83	88	89	90	89	86	84	83	85	86	85	83	84	85	85	86	86	79.6	90.0
6-Jan-08	87	87	88	87	86	85	85	86	87	88	85	82	74	70	69	70	75	80	83	80	80	82	84	85	81.8	87.9
7-Jan-08	84	85	84	84	84	85	85	84	84	83	74	66	58	43	46	55	72	80	78	78	82	83	83	84	76.1	85.2
8-Jan-08	83	84	84	84	84	83	84	84	83	82	72	72	72	78	78	78	80	82	82	84	85	87	86	85	81.6	87.4
9-Jan-08	86	87	84	84	84	84	84	84	83	83	83	82	82	83	83	82	82	83	83	83	83	84	84	83	83.5	87.4
10-Jan-08	83	83	82	83	82	82	84	85	85	84	83	83	81	79	78	79	84	86	86	86	86	87	86	88	83.6	87.7
11-Jan-08	86	87	86	87	87	86	85	85	87	88	84	73	67	57	54	74	73	82	81	73	70	75	78	75	78.4	87.9
12-Jan-08	80	81	87	88	88	90	88	91	94	90	80	78	73	74	78	83	85	87	87	88	89	88	85	80	84.6	93.6
13-Jan-08	86	78	63	50	45	42	43	45	46	46	46	49	54	56	56	51	56	56	58	60	64	69	69	72	56.7	86.3
14-Jan-08	72	72	73	73	79	81	85	87	87	87	87	81	76	77	76	87	72	55	50	51	53	55	65	74	73.1	87.4
15-Jan-08	76	76	73	73	77	73	66	64	68	61	54	49	47	45	45	46	51	55	58	63	64	68	69	71	62.2	76.7
16-Jan-08	71	67	66	67	67	67	69	72	69	72	66	63	55	54	55	55	57	57	56	56	56	57	56	55	61.9	71.7
17-Jan-08	55	56	58	67	83	94	95	95	96	96	93	84	85	83	81	89	88	88	85	79	80	81	78	78	82.0	95.9
18-Jan-08	86	91	94	93	91	91	91	90	90	89	88	86	84	84	83	85	89	91	92	92	92	92	92	92	89.5	93.8
19-Jan-08	93	92	88	89	87	86	86	86	84	80	72	70	69	67	66	68	79	86	87	86	87	87	87	84	82.0	93.5
20-Jan-08	83	83	83	81	81	81	80	80	80	78	73	63	58	60	62	67	70	76	79	78	80	81	81	78	75.7	83.3
21-Jan-08	79	76	76	76	76	72	74	76	75	73	71	56	41	52	52	49	58	65	65	72	77	77	81	75	68.5	80.6
22-Jan-08	68	69	61	62	68	71	73	78	82	80	78	76	62	57	62	70	76	85	85	85	89	92	93	90	75.5	93.1
23-Jan-08	87	90	91	92	82	74	62	59	63	62	50	37	38	37	37	46	45	56	60	60	61	63	69	72	62.2	92.2
24-Jan-08	63	63	68	70	74	78	83	83	83	82	80	79	78	79	82	85	86	86	86	87	87	89	91	89	80.5	90.9
25-Jan-08	87	89	89	88	91	92	91	89	87	87	87	80	70	71	70	55	50	50	54	55	55	55	54	54	73.0	92.0
26-Jan-08	56	56	57	57	60	61	66	66	64	69	66	60	56	52	43	49	68	75	76	78	78	78	76	73	64.2	78.4
27-Jan-08	72	73	73	71	70	69	68	66	66	65	61	58	59	59	60	60	63	68	65	67	67	68	68	68	66.0	73.0
28-Jan-08	68	67	67	66	66	66	66	66	64	64	56	45	40	27	26	28	40	61	63	62	64	67	67	67	57.3	68.0
29-Jan-08	66	65	64	64	64	63	63	63	64	64	64	63	54	54	57	59	63	65	68	67	67	68	68	69	63.6	69.2
30-Jan-08	71	69	68	67	68	68	67	67	68	64	63	63	62	63	63	65	67	72	70	67	69	73	72	73	67.5	73.1
31-Jan-08	75	75	74	73	73	73	73	74	74	74	72	67	63	52	58	65	67	71	71	70	69	71	73	73	70.0	74.6
Hourly Avg	76.5	76.5	75.8	76.0	76.6	76.6	76.9	77.4	77.8	76.8	73.0	68.4	64.5	62.5	62.9	65.5	68.5	72.0	72.5	72.7	73.7	75.0	76.2	76.1		
Hourly Max	93.5	91.8	93.8	93.0	91.3	93.7	95.2	95.3	95.7	95.9	92.9	88.6	86.4	84.3	83.2	88.7	88.8	90.8	91.8	91.9	92.0	92.2	93.1	92.1		

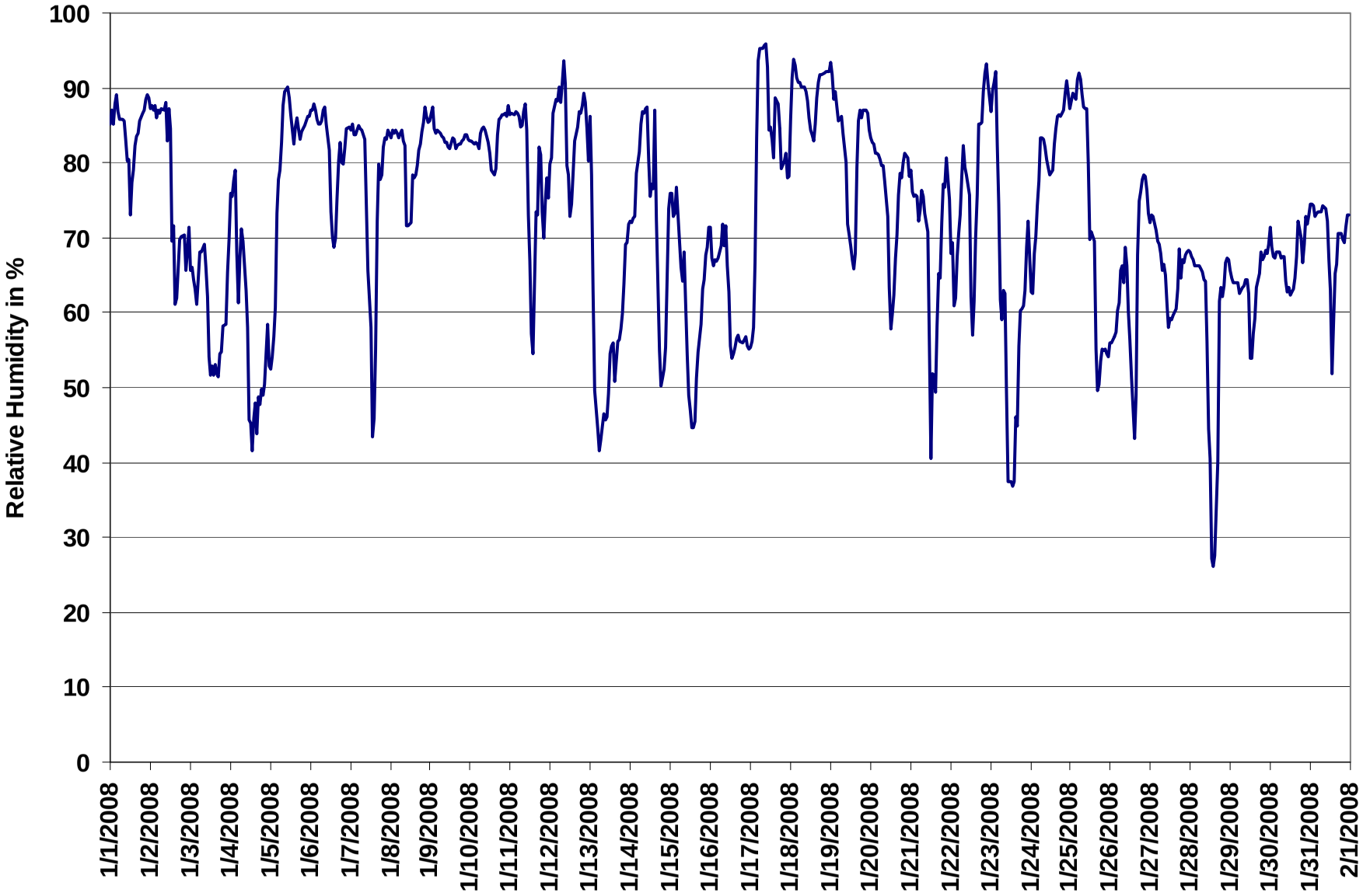


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

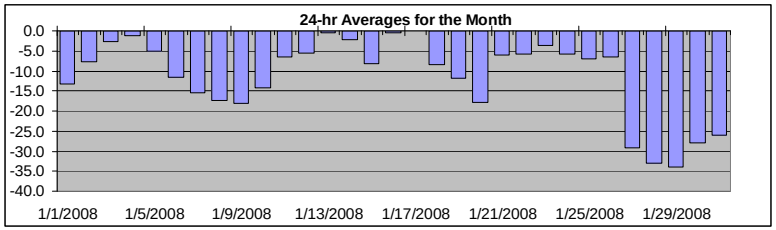
PASZA - Beaverlodge Temperature Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	4.1	°C	16-Jan	19:00 20:00
Maximum 24-hr Value:	0.0	°C	17-Jan	

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
	3.7	1.3	-3.8	-8.5	-17.2	-31.3	-37.0	-11.4 °C	-8.5 °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**

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-Jan-08	-13	-12	-16	-16	-14	-13	-15	-16	-13	-14	-14	-14	-11	-13	-12	-13	-13	-12	-12	-12	-12	-13	-14	-14	-13.3	-11.3
2-Jan-08	-13	-15	-15	-15	-14	-14	-13	-14	-13	-13	-12	-8	-5	-1	0	1	0	-1	-3	-3	-3	-3	-4	-5	-7.6	1.5
3-Jan-08	-4	-4	-4	-4	-4	-4	-5	-5	-5	-4	-3	-2	-1	-1	-1	-1	-1	-1	-1	0	0	0	-2	-3	-2.5	0.1
4-Jan-08	-4	-5	-5	-6	-3	-2	-3	-4	-3	-2	-1	3	2	2	0	-1	0	0	0	0	1	1	1	0	-1.2	2.5
5-Jan-08	-1	-1	-1	-1	-3	-4	-5	-6	-7	-7	-6	-6	-5	-5	-5	-5	-6	-6	-6	-6	-7	-7	-7	-7	-5.1	-0.6
6-Jan-08	-7	-7	-8	-8	-9	-9	-10	-11	-12	-13	-13	-13	-11	-11	-10	-10	-11	-13	-14	-14	-15	-15	-16	-17	-11.5	-6.7
7-Jan-08	-17	-17	-17	-17	-18	-18	-18	-18	-18	-18	-16	-13	-11	-7	-8	-10	-14	-17	-16	-15	-16	-16	-16	-17	-15.3	-7.1
8-Jan-08	-17	-17	-18	-20	-18	-19	-19	-19	-21	-19	-15	-16	-16	-17	-16	-15	-15	-16	-16	-16	-17	-18	-18	-19	-17.4	-15.1
9-Jan-08	-19	-19	-19	-19	-18	-18	-18	-18	-19	-19	-19	-17	-18	-16	-16	-18	-19	-19	-19	-18	-18	-17	-17	-17	-18.0	-16.2
10-Jan-08	-18	-18	-18	-19	-18	-19	-17	-16	-15	-15	-15	-13	-12	-11	-11	-10	-11	-11	-12	-11	-11	-12	-12	-13	-14.1	-10.3
11-Jan-08	-12	-12	-13	-13	-13	-13	-13	-12	-12	-10	-9	-5	-3	0	2	-3	-3	-5	-5	-2	1	-1	-2	-1	-6.5	2.1
12-Jan-08	-2	-2	-4	-4	-4	-4	-4	-8	-6	-5	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-8	-7	-6	-5	-5.7	-2.0
13-Jan-08	-7	-4	-2	0	1	1	2	2	1	1	1	2	1	0	0	2	0	0	0	-1	-2	-3	-3	-4	-0.4	2.1
14-Jan-08	-4	-3	-3	-3	-3	-3	-2	-2	-1	-1	-1	0	1	1	1	0	-2	-2	-2	-3	-4	-4	-5	-6	-2.1	1.5
15-Jan-08	-7	-8	-7	-8	-9	-10	-10	-11	-12	-10	-9	-7	-6	-5	-5	-5	-6	-8	-9	-10	-9	-9	-9	-9	-8.2	-4.6
16-Jan-08	-9	-7	-6	-5	-5	-4	-4	-5	-4	-5	-2	0	3	3	4	4	4	4	4	4	4	4	4	4	-0.5	4.1
17-Jan-08	4	3	3	2	1	0	0	0	0	0	0	0	1	1	1	0	0	-1	-1	-2	-2	-3	-3	-4	0.0	3.6
18-Jan-08	-7	-10	-10	-9	-10	-10	-11	-11	-11	-12	-11	-9	-8	-9	-8	-7	-8	-7	-6	-6	-5	-6	-6	-5	-8.3	-5.1
19-Jan-08	-5	-4	-5	-6	-6	-7	-9	-9	-10	-11	-11	-11	-11	-11	-11	-12	-16	-17	-18	-17	-19	-19	-20	-20	-11.9	-4.4
20-Jan-08	-19	-20	-21	-22	-22	-23	-25	-24	-24	-23	-20	-18	-16	-15	-14	-14	-14	-14	-13	-13	-13	-13	-13	-12	-17.7	-12.2
21-Jan-08	-13	-11	-11	-10	-9	-8	-7	-8	-8	-7	-7	-3	2	-1	-1	0	-2	-3	-3	-6	-7	-7	-8	-8	-6.1	1.7
22-Jan-08	-7	-7	-4	-4	-5	-6	-6	-6	-8	-7	-8	-6	-2	0	-2	-3	-5	-7	-7	-6	-7	-8	-9	-8	-5.8	-0.1
23-Jan-08	-8	-10	-11	-10	-8	-7	-5	-5	-5	-5	-2	2	2	3	4	1	1	-1	-2	-3	-4	-4	-6	-6	-3.7	3.7
24-Jan-08	-4	-4	-4	-4	-3	-4	-6	-6	-7	-8	-7	-6	-6	-5	-6	-6	-6	-6	-6	-6	-6	-7	-7	-7	-5.7	-3.4
25-Jan-08	-7	-7	-8	-8	-9	-11	-13	-13	-14	-13	-12	-8	-8	-9	-8	-3	-2	-2	-2	-3	-2	-2	-2	-2	-7.0	-1.6
26-Jan-08	-1	-1	-1	-2	-2	-3	-4	-3	-3	-4	-4	-2	-1	0	3	1	-5	-12	-15	-17	-18	-20	-21	-23	-6.6	2.7
27-Jan-08	-24	-25	-26	-26	-27	-28	-28	-29	-29	-30	-30	-30	-29	-29	-29	-30	-30	-30	-30	-31	-32	-33	-33	-34	-29.2	-23.9
28-Jan-08	-35	-36	-36	-36	-36	-36	-36	-36	-37	-36	-33	-30	-30	-24	-23	-24	-28	-33	-34	-34	-34	-35	-35	-35	-32.9	-22.8
29-Jan-08	-36	-37	-38	-37	-38	-38	-38	-38	-38	-37	-36	-35	-32	-31	-31	-31	-32	-31	-32	-31	-31	-31	-30	-30	-34.0	-29.6
30-Jan-08	-30	-30	-31	-31	-30	-30	-30	-30	-30	-29	-28	-27	-26	-26	-26	-25	-25	-26	-26	-26	-26	-27	-27	-28	-27.9	-25.1
31-Jan-08	-29	-29	-29	-29	-29	-29	-28	-28	-28	-27	-26	-25	-24	-21	-23	-24	-24	-25	-25	-25	-24	-24	-24	-24	-26.1	-21.3
Hourly Avg	-12.0	-12.3	-12.5	-12.6	-12.5	-12.6	-12.9	-13.2	-13.3	-13.0	-12.1	-10.4	-9.4	-8.5	-8.3	-8.7	-9.6	-10.6	-10.9	-10.9	-11.2	-11.6	-11.9	-12.2		
Hourly Max	3.6	3.2	2.9	2.3	1.4	1.4	1.6	1.6	1.3	0.9	1.3	2.5	2.5	3.4	3.7	3.9	3.7	3.8	4.0	4.1	4.0	3.7	3.8	3.7		

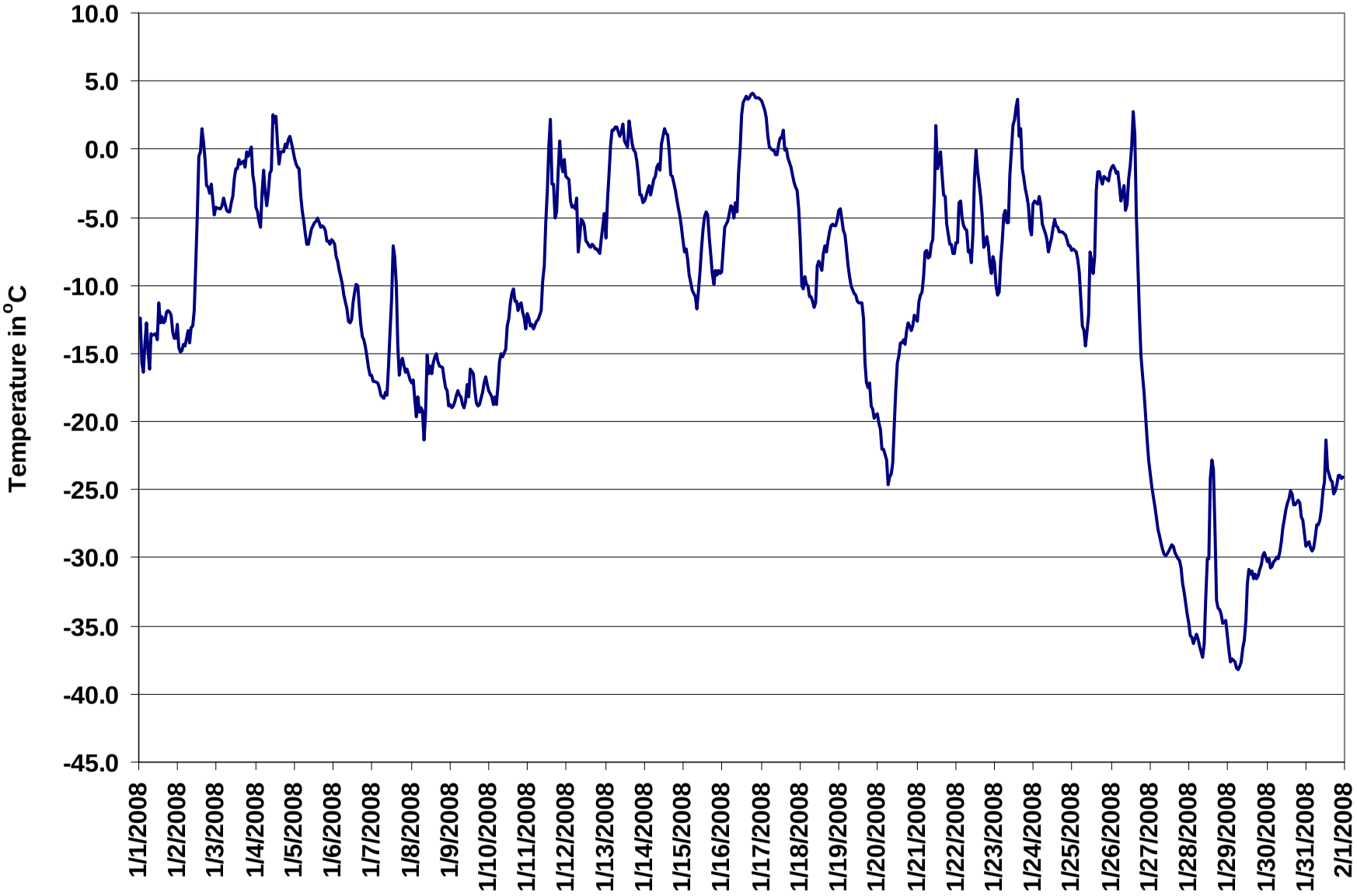


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

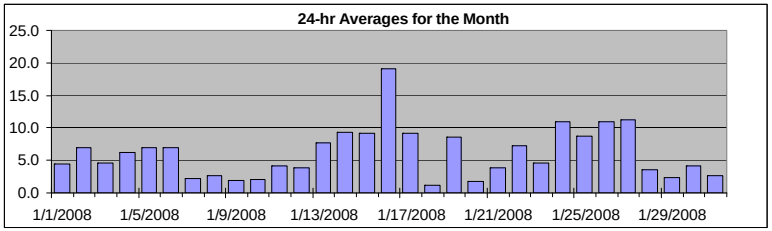
PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	37.5	km/hr	16-Jan	20:00 21:00
Maximum 24-hr Value:	19.1	km/hr	16-Jan	

Calm Time:	0 hrs **0%** calms	Operational Time:	740 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.5%

Percentile	99	95	75	50	25	5	1	AverageS
	30.6	17.5	8.2	4.1	2.4	1.0	0.0	6.1 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**

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-hr Scalar Average	Daily Max
1-Jan-08	2	2	3	2	4	4	3	4	6	6	6	5	10	3	5	5	7	7	4	4	4	2	3	5	4.4	10.3
2-Jan-08	4	5	4	4	4	3	2	3	2	2	2	3	4	9	12	16	16	15	15	16	13	8	5	3	7.0	15.9
3-Jan-08	4	2	3	4	5	6	5	3	3	2	4	5	6	5	5	4	6	5	4	7	6	5	4	4	4.5	7.3
4-Jan-08	5	6	4	2	4	5	4	5	3	3	2	3	3	3	4	4	8	8	12	10	15	15	12	7	6.2	15.3
5-Jan-08	5	5	5	5	3	5	5	11	12	13	13	11	12	10	9	9	5	6	4	3	6	5	3	1	7.0	13.2
6-Jan-08	2	5	7	9	10	8	9	9	9	11	11	11	5	8	6	5	5	6	5	8	6	4	4	6	7.0	11.2
7-Jan-08	7	6	6	7	4	1	2	2	2	0	2	2	2	0	1	0	2	2	2	0	1	2	0	1	2.2	7.3
8-Jan-08	3	3	3	4	5	5	2	3	0	0	1	2	2	5	3	3	2	2	2	2	4	4	3	2	2.7	5.0
9-Jan-08	4	2	2	2	2	1	2	3	4	3	3	3	2	0	1	3	2	1	2	1	1	1	1	0	1.9	4.3
10-Jan-08	0	3	2	2	1	3	3	2	4	3	3	3	2	2	1	1	1	2	3	3	1	2	1	3	2.1	3.6
11-Jan-08	2	2	2	2	2	2	2	2	3	4	4	4	3	2	2	3	2	3	2	11	18	9	4	6	4.1	17.6
12-Jan-08	5	3	3	3	3	3	3	4	4	2	3	6	4	8	6	6	7	2	2	4	4	2	3	4	3.9	8.4
13-Jan-08	4	3	5	21	15	10	13	14	9	8	8	7	5	5	5	6	11	8	11	6	1	2	1	3	7.7	20.8
14-Jan-08	2	1	3	3	4	4	3	3	3	3	4	4	3	2	5	15	27	23	22	20	21	18	18	15	9.4	27.1
15-Jan-08	12	7	7	6	4	6	6	4	3	3	3	14	18	19	18	16	16	15	9	7	9	9	7	4	9.2	19.1
16-Jan-08	4	10	16	14	12	10	6	5	5	3	9	11	14	22	25	25	29	32	34	36	38	34	33	33	19.1	37.5
17-Jan-08	32	26	22	9	6	3	6	6	6	7	8	4	4	7	2	3	2	10	16	9	9	8	9	6	9.2	31.8
18-Jan-08	4	4	4	3	1	1	0	0	0	1	0	2	0	1	1	0	0	1	1	1	0	1	1	1	1.2	4.0
19-Jan-08	4	5	10	9	12	16	13	11	11	12	12	10	12	9	8	7	2	1	3	2	N	N	N	N	8.6	15.8
20-Jan-08	1	1	0	0	0	0	1	2	1	1	1	0	2	4	4	4	3	3	4	4	0	2	3	3	1.8	4.4
21-Jan-08	3	2	2	2	2	5	4	3	7	9	8	5	2	2	2	2	3	6	7	2	3	2	2	6	3.8	8.6
22-Jan-08	11	7	14	14	16	20	13	11	7	6	6	3	3	3	4	4	5	8	7	4	2	1	2	3	7.2	19.7
23-Jan-08	3	2	0	1	4	3	4	2	1	3	5	5	4	5	6	6	9	10	10	7	7	7	4	4	4.6	9.7
24-Jan-08	7	8	14	14	17	10	11	11	8	10	15	12	12	16	15	14	14	13	12	10	7	3	6	7	11.0	17.2
25-Jan-08	6	3	5	5	4	2	3	3	2	2	2	1	3	3	4	14	18	28	24	20	21	17	9	10	8.7	27.5
26-Jan-08	12	9	9	12	21	14	13	6	7	4	3	2	2	2	4	5	14	18	20	17	16	19	17	18	11.0	20.7
27-Jan-08	16	17	15	13	14	15	13	12	11	10	12	11	12	9	10	10	8	7	6	7	9	10	11	11	11.3	16.8
28-Jan-08	11	4	7	3	6	8	2	1	2	0	1	2	2	0	0	0	1	4	5	5	5	6	6	3	3.5	10.7
29-Jan-08	3	2	3	1	3	1	1	3	3	2	2	2	1	3	3	3	3	3	4	3	2	2	3	2	2.4	4.3
30-Jan-08	4	6	11	10	8	6	4	3	3	2	2	3	3	4	4	2	3	4	4	1	2	5	4	3	4.1	10.9
31-Jan-08	2	3	2	1	1	2	2	3	2	3	2	2	2	1	2	4	5	5	4	3	1	3	4	3	2.7	5.5
1-hr Average	5.9	5.2	6.2	6.0	6.3	5.8	5.2	5.0	4.6	4.5	5.1	5.2	5.1	5.6	5.7	6.4	7.6	8.3	8.4	7.6	7.7	7.1	6.2	5.9		
Hourly Max	31.8	26.1	22.1	20.8	20.7	19.7	13.3	14.4	11.7	13.0	14.6	14.2	17.9	21.5	25.2	24.6	29.2	31.6	34.5	35.9	37.5	34.0	32.6	32.8		

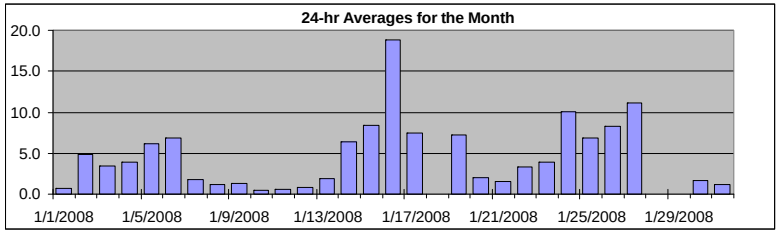
PASZA - Beaverlodge Vector Wind Speed Monthly Summary

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	37.5	km/hr	16-Jan	20:00 21:00
Maximum 24-hr Value:	18.8	km/hr	16-Jan	

Calm Time:	0 hrs	**0%** calms	Operational Time: 740 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 99.5%

Percentile	99	95	75	50	25	5	1	AverageV
	30.5	17.4	7.8	3.4	1.7	0.5	0.0	3.8 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**

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-hr Vector Average	Daily Max
1-Jan-08	1	1	2	1	4	4	2	3	6	5	3	3	6	2	2	5	6	3	4	4	4	2	1	3	0.7	6.5
2-Jan-08	2	4	2	3	2	2	1	1	1	2	2	3	1	9	12	16	16	15	14	16	13	7	3	3	4.9	15.9
3-Jan-08	4	1	1	3	4	6	0	2	2	2	4	5	6	5	5	4	6	5	4	7	6	5	4	4	3.5	7.1
4-Jan-08	4	4	3	0	3	4	4	5	3	3	2	3	3	3	3	4	7	7	12	10	15	15	9	7	3.9	15.3
5-Jan-08	4	4	5	5	1	3	5	11	12	13	13	11	12	10	9	9	5	6	3	3	5	5	3	0	6.2	13.2
6-Jan-08	2	5	7	9	10	7	9	9	9	11	11	11	5	8	6	4	5	6	4	8	5	4	4	6	6.9	11.2
7-Jan-08	7	5	6	7	3	1	2	2	1	1	1	2	2	1	0	1	1	1	2	1	1	1	0	0	1.8	7.3
8-Jan-08	1	2	2	2	2	3	2	2	0	0	0	1	1	3	2	2	2	2	2	1	4	3	3	1	1.2	3.6
9-Jan-08	1	1	2	1	1	1	2	2	4	3	3	3	2	1	1	3	2	1	2	0	0	1	1	0	1.3	3.8
10-Jan-08	0	2	2	1	0	1	3	1	3	3	2	1	1	2	1	1	1	1	2	3	1	2	1	1	0.5	3.3
11-Jan-08	1	1	1	1	2	1	1	2	3	4	4	4	3	2	2	3	2	3	1	11	18	9	4	6	0.5	17.6
12-Jan-08	3	3	3	3	2	2	3	2	3	1	2	6	3	8	5	4	5	0	1	2	4	2	3	3	0.8	8.1
13-Jan-08	1	3	2	21	15	9	12	14	9	8	7	7	2	4	5	6	11	8	11	6	0	1	1	2	1.9	20.6
14-Jan-08	1	1	3	3	4	3	2	3	3	3	2	3	3	1	3	14	27	23	22	20	21	18	18	15	6.4	26.8
15-Jan-08	12	7	6	5	4	6	6	3	2	3	0	14	18	19	18	16	16	14	8	6	9	9	7	4	8.4	19.1
16-Jan-08	4	10	16	14	12	10	6	4	5	2	9	11	14	21	25	24	29	31	34	36	37	34	33	33	18.8	37.5
17-Jan-08	32	26	21	8	5	3	6	6	5	7	8	4	4	6	2	3	2	10	16	9	9	8	8	6	7.4	31.8
18-Jan-08	2	4	4	3	1	1	0	1	1	1	1	2	0	1	1	0	1	1	1	0	1	1	1	0	-	4.0
19-Jan-08	4	5	10	9	12	16	13	11	11	12	12	10	12	9	7	4	2	1	3	2	N	N	N	N	7.3	15.6
20-Jan-08	1	1	0	0	0	0	1	2	1	1	1	1	2	4	4	4	3	3	4	3	0	2	3	3	2.0	4.4
21-Jan-08	3	1	2	2	1	5	4	2	7	9	8	5	1	0	1	1	2	5	7	1	2	2	2	5	1.6	8.6
22-Jan-08	11	6	14	14	16	20	13	11	7	5	2	2	3	3	4	4	5	8	7	4	2	1	2	3	3.4	19.6
23-Jan-08	3	1	0	1	3	3	3	1	1	3	4	4	4	5	5	6	9	10	10	7	6	6	3	4	3.9	9.7
24-Jan-08	7	8	14	14	17	9	10	11	8	10	15	12	12	16	15	14	14	13	12	10	6	3	5	6	10.0	17.0
25-Jan-08	6	3	4	5	3	2	2	3	2	2	1	1	3	3	1	14	18	27	24	20	21	17	9	10	6.8	27.4
26-Jan-08	12	9	9	12	21	14	13	6	6	4	3	1	2	1	1	5	14	18	20	17	16	18	17	18	8.2	20.5
27-Jan-08	16	17	15	13	14	14	13	12	10	10	12	11	11	9	10	10	8	7	5	7	9	10	11	11	11.2	16.7
28-Jan-08	11	4	6	2	6	8	1	0	1	1	1	1	2	1	0	0	1	4	5	5	5	6	6	2	N	10.7
29-Jan-08	3	2	3	0	3	0	0	1	1	1	2	0	1	3	2	2	3	3	4	3	2	2	2	2	N	4.2
30-Jan-08	4	6	11	10	8	6	4	3	3	2	2	2	3	4	4	2	3	4	3	1	2	5	4	1	1.6	10.9
31-Jan-08	2	3	2	0	1	2	2	2	2	2	2	2	2	1	2	4	5	5	4	3	1	3	4	3	1.2	5.5
1-hr Vector	2.7	2.7	3.5	2.7	2.8	2.7	2.2	2.1	1.6	1.3	1.1	1.3	0.7	1.7	1.7	2.3	2.9	3.0	2.1	3.0	4.4	3.3	2.9	3.0		
Hourly Max	31.8	26.0	21.3	20.6	20.5	19.6	13.1	14.4	11.5	12.9	14.5	14.2	17.8	21.5	25.2	24.5	29.1	31.5	34.4	35.8	37.5	33.9	32.6	32.7		

PASZA - Beaverlodge Wind Direction Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

Calm Time:	0 hrs	**0%** calms			Operational Time:			740 hrs	
Calibration Time:		0 hrs			AMD Operational Uptime:			99.5%	
Percentile	99	95	75	50	25	5	1		Average
	355.6	347.7	296.3	215.3	92.4	30.6	4.1		323 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 / 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	WD Sector
1-Jan-08	309	291	289	61	75	78	205	234	136	181	186	178	130	268	295	318	319	359	252	272	254	240	32	28	249	WSW
2-Jan-08	348	284	349	48	337	50	355	27	323	86	58	45	231	259	261	263	264	266	251	256	261	285	227	118	271	W
3-Jan-08	188	181	174	148	135	215	226	175	168	92	109	102	111	120	113	127	114	118	148	129	153	151	238	222	147	SSE
4-Jan-08	224	294	44	118	230	246	240	240	81	77	78	132	86	96	110	93	84	112	121	126	118	112	90	111	116	ESE
5-Jan-08	114	24	28	17	32	312	345	330	334	332	329	322	322	331	332	328	335	9	334	343	355	0	31	319	341	NNW
6-Jan-08	321	346	345	333	329	334	333	337	335	334	338	336	352	343	358	341	348	348	339	330	322	324	316	326	336	NNW
7-Jan-08	323	326	343	340	340	49	31	330	335	297	61	101	96	72	56	84	250	73	116	263	48	30	1	259	354	N
8-Jan-08	262	38	70	50	300	41	258	55	94	70	252	45	268	314	63	300	288	35	69	67	265	243	270	354	342	NNW
9-Jan-08	173	194	100	266	244	150	118	148	131	129	144	158	185	202	177	184	161	87	56	248	341	280	230	267	159	SSE
10-Jan-08	51	29	275	356	32	353	48	316	313	266	81	267	237	76	96	99	220	173	195	77	97	248	262	42	351	N
11-Jan-08	45	342	66	61	340	1	52	75	76	84	85	113	108	91	104	83	127	200	148	270	267	250	252	244	255	WSW
12-Jan-08	216	193	124	99	108	80	73	143	82	95	226	275	32	305	48	12	331	213	269	309	41	77	68	263	18	NNE
13-Jan-08	184	68	331	281	295	302	298	303	310	308	297	317	171	125	100	113	130	119	126	114	22	87	100	177	293	WNW
14-Jan-08	171	137	70	93	128	128	147	124	97	124	134	268	265	125	316	334	309	300	301	303	302	303	324	314	309	NW
15-Jan-08	307	292	318	10	289	296	303	306	1	327	348	283	286	287	285	286	281	277	264	268	256	243	241	252	285	WNW
16-Jan-08	261	284	276	280	277	275	264	245	249	260	259	268	284	286	283	280	286	290	291	292	294	292	291	292	285	WNW
17-Jan-08	294	295	311	352	25	309	297	325	344	325	316	323	341	261	250	61	43	37	33	1	338	328	331	353	327	NNW
18-Jan-08	103	118	93	97	237	74	84	263	288	101	74	91	270	265	79	237	221	217	214	77	266	212	268	112	-	-
19-Jan-08	147	80	77	86	82	78	65	69	62	72	68	68	67	46	6	22	159	218	260	285	N	N	N	N	68	ENE
20-Jan-08	310	344	4	356	67	213	83	61	77	68	70	76	83	70	75	79	93	115	131	148	163	87	72	81	87	E
21-Jan-08	85	97	88	97	308	287	297	234	274	269	254	252	261	124	264	118	97	282	286	226	83	72	67	12	280	W
22-Jan-08	317	308	318	322	330	326	338	334	282	266	26	58	70	68	146	138	109	133	126	124	202	226	79	71	335	NNW
23-Jan-08	72	83	105	80	294	69	27	296	131	60	14	321	3	351	347	36	29	37	42	40	31	52	81	82	31	NNE
24-Jan-08	81	99	86	104	105	96	70	80	104	116	120	112	108	116	112	99	105	110	121	125	142	157	189	228	109	ESE
25-Jan-08	234	259	270	293	283	237	104	90	102	101	95	103	140	88	10	301	290	292	298	292	293	285	301	308	293	WNW
26-Jan-08	307	298	275	271	277	269	238	258	250	189	192	227	305	269	331	54	340	348	348	349	339	333	336	341	313	NW
27-Jan-08	341	340	339	342	350	342	348	357	352	356	345	349	352	9	359	347	339	342	3	336	331	339	339	339	346	NNW
28-Jan-08	338	22	356	29	354	355	23	244	334	104	82	240	234	162	234	160	89	79	106	101	119	110	115	139	N	-
29-Jan-08	223	231	56	13	59	276	280	353	24	4	290	68	87	290	71	155	197	275	202	234	261	347	350	252	N	-
30-Jan-08	236	323	328	326	326	328	349	354	359	41	98	161	161	138	153	144	269	263	143	147	349	17	44	25	340	NNW
31-Jan-08	73	57	46	220	126	301	303	354	204	254	225	226	198	198	147	185	192	197	171	105	341	285	243	226	204	SSW
Hourly Avg	300	321	341	342	329	331	333	340	351	358	6	319	354	325	335	329	308	313	306	304	301	306	319	315		

PASZA - Beaverlodge Standard Deviation of Wind Direction Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 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: 99.5%

Percentile	99	95	75	50	25	5	1
	87.6	78.3	49.7	22.3	9.2	4.3	3.1

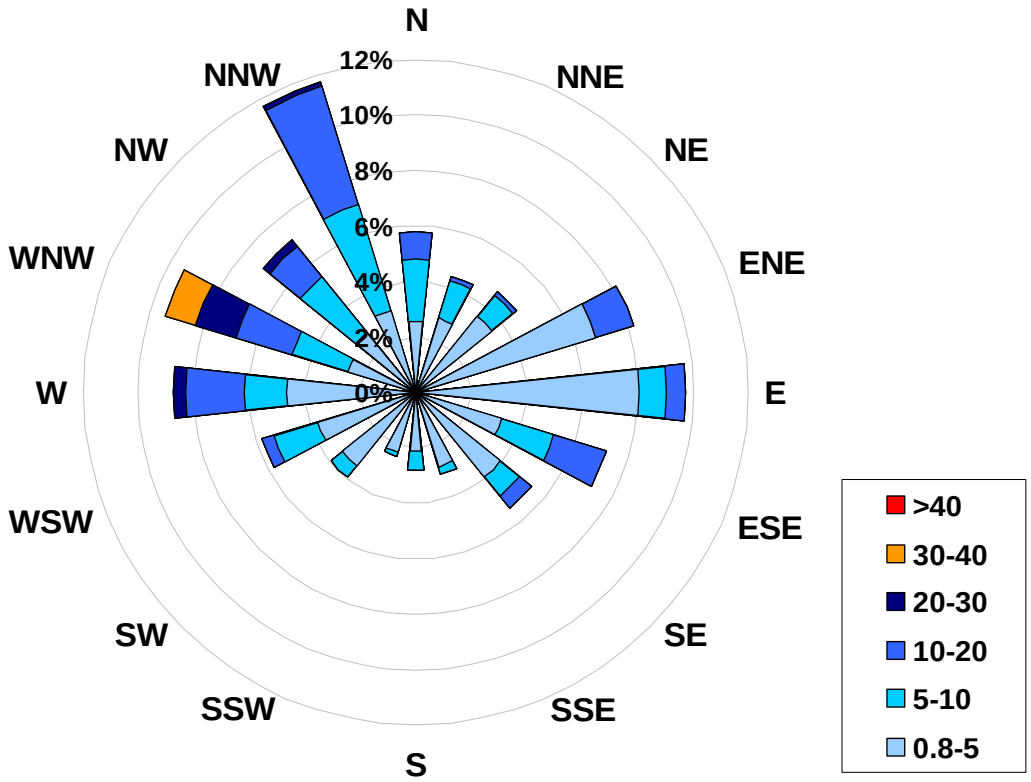
Status Flag Characters

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 / 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-Jan-08	68	77	76	72	6	13	58	50	15	36	61	60	78	78	80	35	9	64	27	36	42	35	76	59	79.7
2-Jan-08	65	20	53	45	59	56	71	73	62	20	46	34	78	17	9	5	4	4	8	3	8	26	63	37	78.3
3-Jan-08	26	47	62	39	35	15	88	56	41	36	16	8	8	19	31	29	7	21	36	16	12	30	25	27	87.6
4-Jan-08	34	59	52	80	80	29	49	40	28	18	28	22	17	28	32	18	16	34	5	5	6	14	54	14	80.5
5-Jan-08	18	38	13	19	93	63	42	5	8	8	5	7	8	8	11	9	32	18	30	37	22	24	36	77	92.7
6-Jan-08	56	22	8	8	4	19	9	5	5	4	5	5	25	8	16	13	14	11	22	8	8	9	6	8	55.6
7-Jan-08	5	8	6	6	22	51	19	28	54	11	55	9	15	61	84	46	68	83	38	36	76	61	84	83	83.8
8-Jan-08	73	64	69	77	77	51	71	66	49	59	76	67	76	60	71	61	46	54	85	51	19	24	44	81	84.7
9-Jan-08	76	57	19	73	25	27	27	21	21	10	16	14	10	31	31	16	28	11	43	87	82	84	51	53	87.3
10-Jan-08	69	57	24	75	93	88	12	81	41	40	55	74	30	61	13	37	18	67	31	11	47	25	43	68	93.1
11-Jan-08	80	77	87	70	57	66	78	49	41	21	15	19	23	33	33	18	26	31	70	5	4	13	52	21	87.1
12-Jan-08	66	34	25	31	42	39	13	57	15	84	36	21	63	19	33	55	43	91	80	72	37	24	31	76	90.9
13-Jan-08	77	56	65	9	6	14	10	4	10	16	45	16	63	33	9	13	7	14	8	60	88	68	36	40	87.6
14-Jan-08	50	59	33	26	21	27	39	31	14	20	56	42	34	81	45	13	8	3	5	5	3	4	7	4	81.3
15-Jan-08	4	11	31	24	24	16	5	44	50	25	76	4	3	3	4	3	3	3	15	58	13	7	6	62	76.2
16-Jan-08	42	9	7	7	6	5	11	84	22	72	8	14	12	4	4	6	4	4	3	4	3	3	4	4	83.6
17-Jan-08	3	4	17	24	13	16	12	15	25	14	6	10	23	45	49	72	34	17	9	12	13	5	9	16	72.3
18-Jan-08	51	14	6	59	43	40	75	52	75	78	47	31	35	71	12	69	73	39	58	75	78	39	39	85	84.7
19-Jan-08	10	29	16	9	6	8	6	7	6	7	4	7	5	7	22	76	44	44	22	37	N	N	N	N	75.8
20-Jan-08	16	46	51	72	33	66	34	9	8	9	5	6	7	5	9	10	12	13	13	17	74	14	15	20	73.5
21-Jan-08	16	25	47	19	76	7	18	38	7	3	5	14	75	85	84	71	60	31	6	67	59	12	28	38	84.8
22-Jan-08	6	13	7	9	5	4	4	9	25	19	66	35	15	12	25	33	8	11	7	11	27	30	83	27	82.8
23-Jan-08	20	50	76	64	83	15	49	85	50	44	38	20	34	41	16	13	7	4	5	7	25	43	43	9	85.2
24-Jan-08	9	11	9	6	9	17	13	12	16	8	5	5	7	4	6	6	6	6	5	4	14	17	20	10	19.9
25-Jan-08	6	9	31	14	36	37	42	22	20	13	23	27	24	49	81	26	5	5	3	5	5	5	8	6	80.8
26-Jan-08	4	7	10	7	6	6	10	11	75	16	22	57	76	72	91	19	21	9	10	11	9	5	6	7	91.1
27-Jan-08	6	6	6	9	11	6	12	13	12	11	7	11	16	15	16	15	7	18	20	6	5	3	3	3	19.8
28-Jan-08	3	21	22	61	37	15	73	97	81	12	9	77	23	37	57	51	23	6	11	9	12	8	8	38	96.9
29-Jan-08	14	19	43	88	15	74	73	64	68	55	70	86	68	72	45	54	28	23	10	21	17	38	46	74	88.0
30-Jan-08	12	41	5	4	7	8	22	18	17	35	25	28	19	24	21	63	31	12	42	43	60	24	8	65	65.2
31-Jan-08	14	9	33	67	59	32	51	39	32	24	26	31	31	40	18	13	11	7	17	36	66	12	15	17	66.8
Hourly Max	80	77	87	88	93	88	88	97	81	84	76	86	78	85	91	76	73	91	85	87	88	84	84	85	

1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for January 2008



Calms:	**0%**

Frequency Distribution of Wind in km/hr			
Range			**Frequency (hrs)**
0.8	<	5	442
5	to	10	156
10	to	20	117
20	to	30	17
30	to	40	8
	>	40	0
Total Non-Zero Values			740

PASZA
Portable – Spirit River Station
Monthly Summary Tables, Graphs and Roses

PASZA - Portable-Spirit River Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

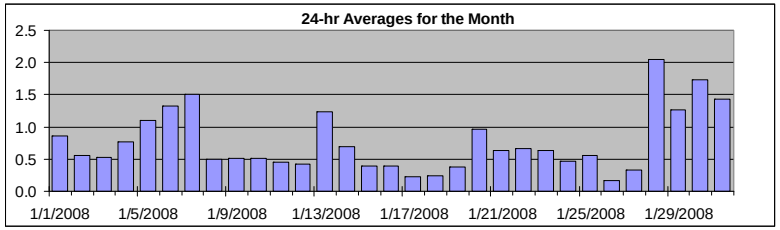
Station: Portable-Spirit River
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	4.2	ppb	28-Jan	22:00 23:00
Maximum 24-hr Average:	2.0	ppb	28-Jan	



AIC Time:	33 hrs	Operational Time:	704 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	3.0	2.1	1.0	0.5	0.3	0.1	0.0	0.8 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**

Day	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-Jan-08	2	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	0.9	1.5
2-Jan-08	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0.6	1.1
3-Jan-08	0	0	0	1	0	A	1	1	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.9
4-Jan-08	0	0	0	A	1	1	1	0	0	0	1	0	0	0	1	1	2	1	1	2	1	1	0	0	0.8	2.4
5-Jan-08	0	0	A	0	0	0	0	0	0	0	0	1	2	2	2	2	2	1	2	2	1	1	1	1	1.1	2.3
6-Jan-08	2	A	1	1	1	2	3	2	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.3	2.7
7-Jan-08	A	0	1	2	2	1	1	1	2	2	1	1	1	2	2	2	2	3	2	1	1	1	2	2	1.5	2.9
8-Jan-08	2	1	1	A	1	1	1	1	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0.5	1.7
9-Jan-08	0	0	1	A	0	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0.5	1.5
10-Jan-08	0	0	0	A	0	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	0.8
11-Jan-08	0	0	A	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	1	0	0	0.4	0.7
12-Jan-08	0	A	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
13-Jan-08	A	1	1	1	2	1	1	0	0	0	0	0	0	0	1	1	2	2	3	2	3	2	3	A	1.2	3.5
14-Jan-08	4	3	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.7	4.0
15-Jan-08	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	A	0	0	0.4	1.1
16-Jan-08	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	1	0.4	0.8
17-Jan-08	0	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	0.6
18-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.4
19-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5
20-Jan-08	1	0	0	2	3	3	3	2	2	1	1	0	1	1	1	0	A	0	0	0	0	0	0	0	1.0	2.9
21-Jan-08	0	0	0	0	1	1	1	1	0	1	1	1	1	0	1	A	0	0	0	2	1	1	0	0	0.6	1.5
22-Jan-08	1	1	1	1	1	1	1	1	1	1	0	0	0	0	A	1	0	1	2	0	0	1	1	0	0.7	1.6
23-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	0.6	1.3
24-Jan-08	1	1	1	1	1	1	1	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.5	1.0
25-Jan-08	1	0	1	1	1	0	1	1	1	1	1	A	1	0	0	1	0	0	0	0	0	0	0	1	0.6	1.0
26-Jan-08	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	1	0	0	0	0	0	N	N	0	0.2	0.6
27-Jan-08	N	0	N	N	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.3	1.2
28-Jan-08	1	1	1	1	1	1	1	1	A	1	2	3	3	3	2	2	2	3	4	2	2	3	4	3	2.0	4.2
29-Jan-08	3	2	2	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.3	3.5
30-Jan-08	1	2	2	2	2	2	A	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	1	1.7	2.4
31-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1.4	2.1
Hourly Avg	0.9	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.9	0.8	0.7	0.8	0.9	0.7		
Hourly Max	4.0	2.9	1.8	1.8	2.6	2.9	2.7	2.2	2.1	1.9	2.2	3.0	2.7	2.7	2.5	2.3	2.3	2.9	4.0	2.4	2.6	2.7	4.2	3.3		

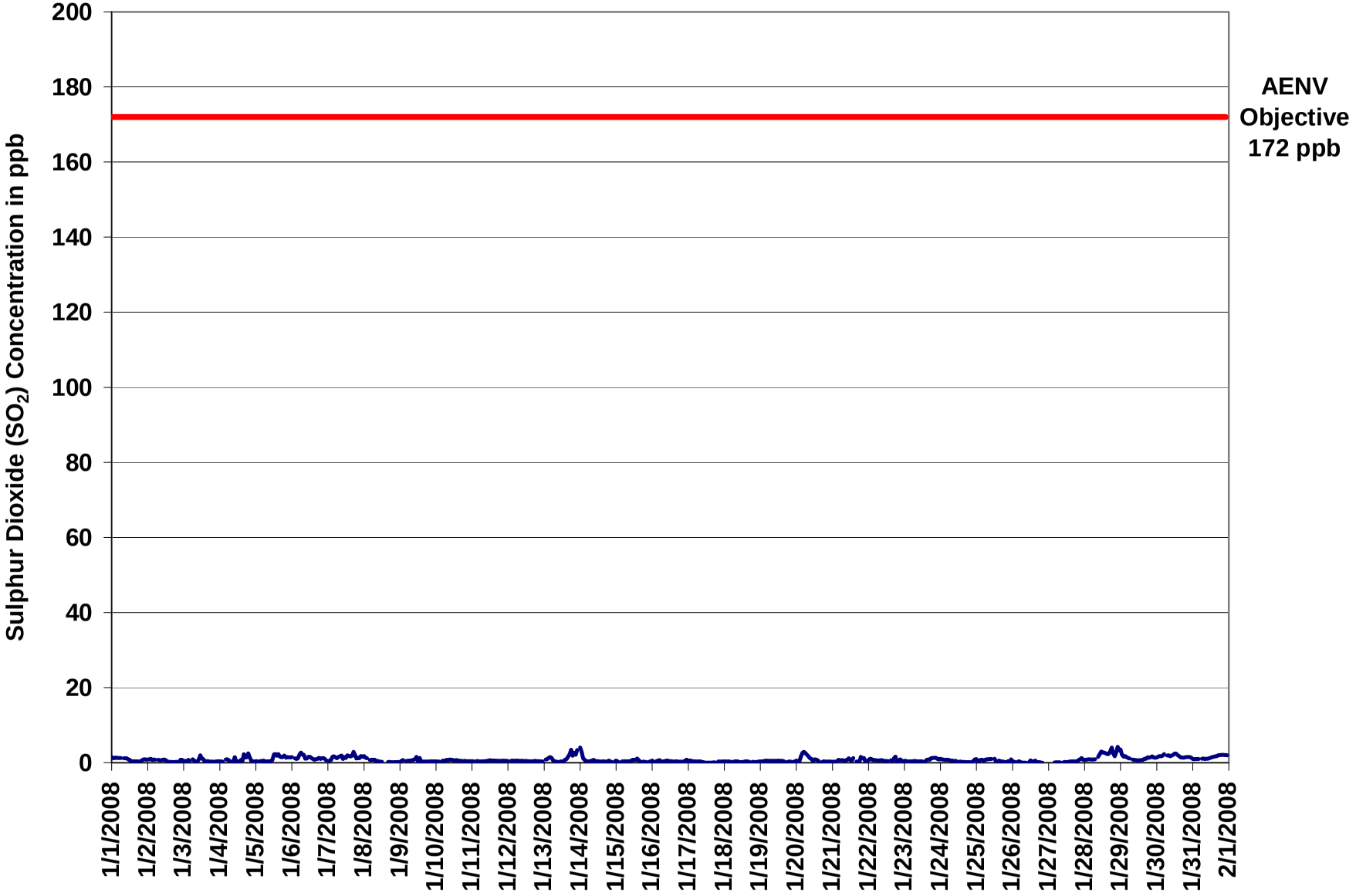


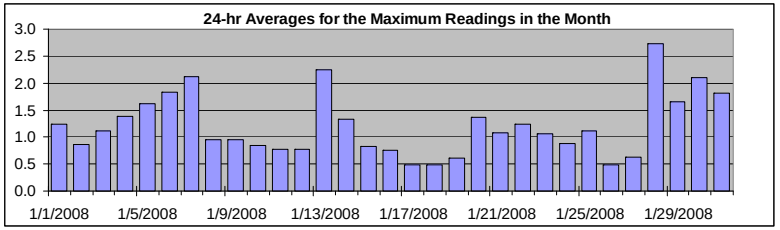
Figure 46. PASZA - Portable-Spirit River Sulphur Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	6.4	ppb	14-Jan	0:00 1:00
Maximum 24-hr Value:	2.7	ppb	28-Jan	

AIC Time:	33 hrs	Operational Time:	704 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	4.9	2.9	1.4	0.9	0.5	0.4	0.3	1.2 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-Jan-08	2	2	2	2	2	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.3
2-Jan-08	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	1	1	0.9	1.4
3-Jan-08	1	1	0	1	1	A	1	1	0	1	5	3	2	2	1	1	0	0	0	0	0	0	0	1	1.1	4.7
4-Jan-08	0	1	0	A	2	1	1	0	0	1	3	1	1	0	1	3	3	2	3	3	2	1	1	1	1.4	2.9
5-Jan-08	1	1	A	1	1	1	1	0	1	1	1	1	4	3	2	3	2	2	2	2	1	2	2	1	1.6	4.4
6-Jan-08	2	A	1	1	2	3	3	3	3	2	2	2	2	2	1	1	1	1	2	1	1	1	1	1	1.8	3.0
7-Jan-08	A	1	1	2	2	2	1	2	2	2	1	2	2	2	2	2	2	5	5	2	2	2	2	2	2.1	4.8
8-Jan-08	2	2	2	A	1	1	1	2	1	1	1	1	1	C	C	A	1	1	1	1	1	1	1	1	0.9	2.2
9-Jan-08	1	1	1	A	1	1	1	1	1	1	3	4	1	2	1	0	1	0	0	0	0	0	0	1	0.9	3.7
10-Jan-08	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.8	1.0
11-Jan-08	0	0	A	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
12-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	0	0	0	0.8	0.9
13-Jan-08	A	1	1	2	2	2	1	1	1	0	0	1	1	1	1	1	3	5	6	4	5	3	5	A	2.2	6.4
14-Jan-08	6	5	2	1	1	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1	0	0	A	1	1.3	6.4
15-Jan-08	1	1	0	0	1	1	1	0	1	1	1	1	1	2	2	1	0	0	1	0	0	A	0	1	0.8	2.3
16-Jan-08	1	0	0	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	0	0	A	1	1	1	0.8	1.4
17-Jan-08	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.5	0.9
18-Jan-08	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0.5	0.9
19-Jan-08	0	1	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	A	0	0	0	0	0	1	0.6	1.0
20-Jan-08	1	0	1	3	3	3	3	3	2	2	1	1	1	1	1	1	A	0	1	1	0	0	1	0	1.4	3.5
21-Jan-08	0	1	0	1	1	1	1	1	1	1	1	2	1	1	2	A	1	1	1	2	2	3	1	1	1.1	2.6
22-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	1	4	2	1	1	2	1	1	1.2	4.2
23-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	2	2	2	1	1	1.1	1.8
24-Jan-08	1	1	1	1	1	1	1	1	1	0	1	0	A	0	0	0	0	0	0	0	0	0	1	4	0.9	3.9
25-Jan-08	4	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	0	0	0	0	1	0	2	1.1	3.8
26-Jan-08	0	0	0	0	1	1	0	0	0	0	A	0	1	1	0	1	1	0	0	0	0	N	N	0	0.5	1.3
27-Jan-08	N	0	N	N	0	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.6	1.4
28-Jan-08	1	1	1	1	1	1	1	1	A	2	3	4	3	3	3	2	3	5	5	3	2	4	6	5	2.7	5.8
29-Jan-08	4	4	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1.7	4.3
30-Jan-08	2	2	2	2	2	3	A	2	2	2	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2.1	2.9
31-Jan-08	1	1	1	1	1	A	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1.8	2.4
Hourly Avg	1.4	1.2	1.1	1.2	1.2	1.2	1.0	1.0	1.0	1.1	1.3	1.2	1.3	1.2	1.1	1.1	1.1	1.4	1.5	1.3	1.1	1.3	1.3	1.2		
Hourly Max	6.4	4.9	2.3	2.6	3.0	3.5	3.0	2.9	2.8	2.4	4.7	3.9	4.4	3.2	2.9	2.8	2.9	5.4	6.4	4.3	4.9	3.8	5.8	5.3		

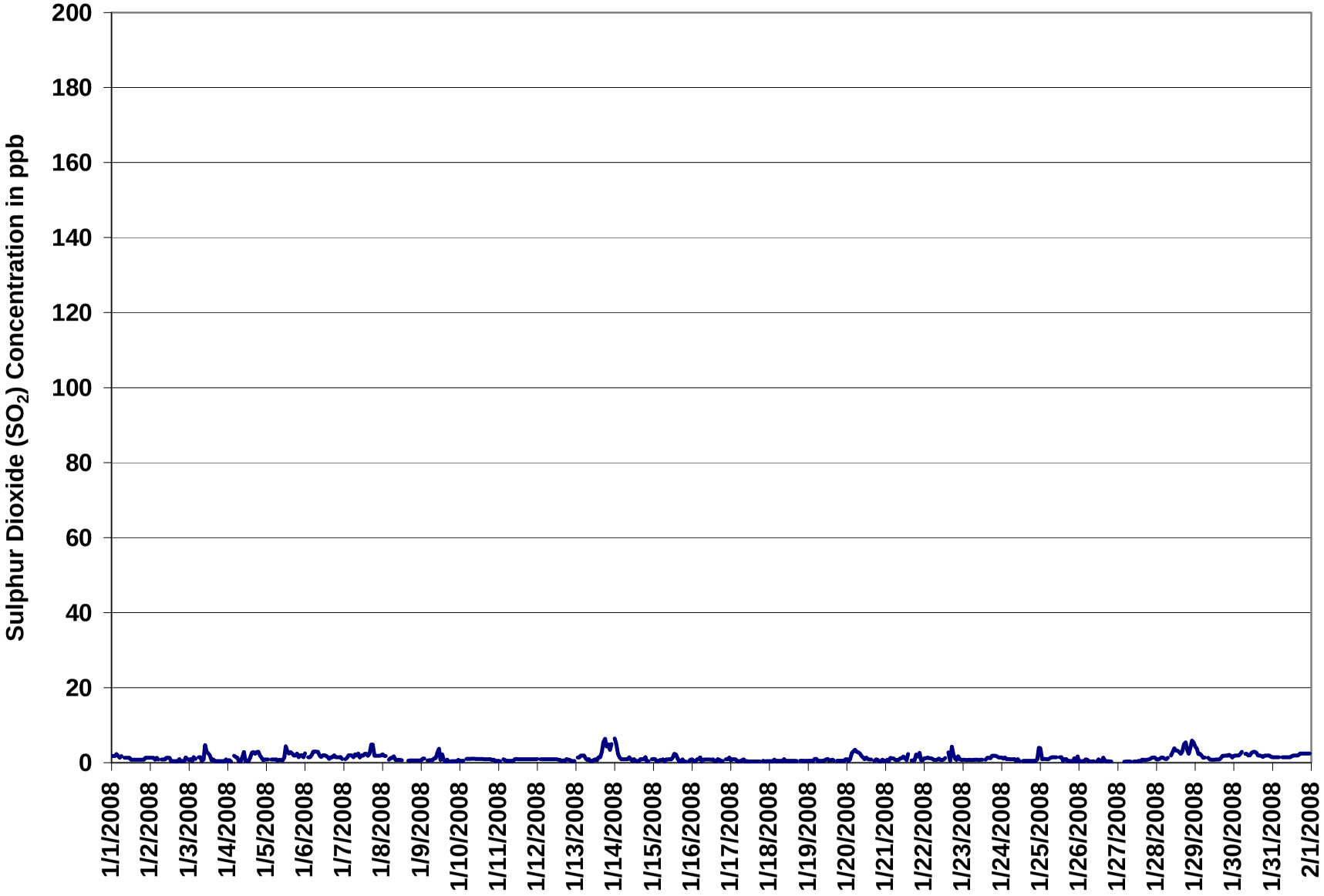
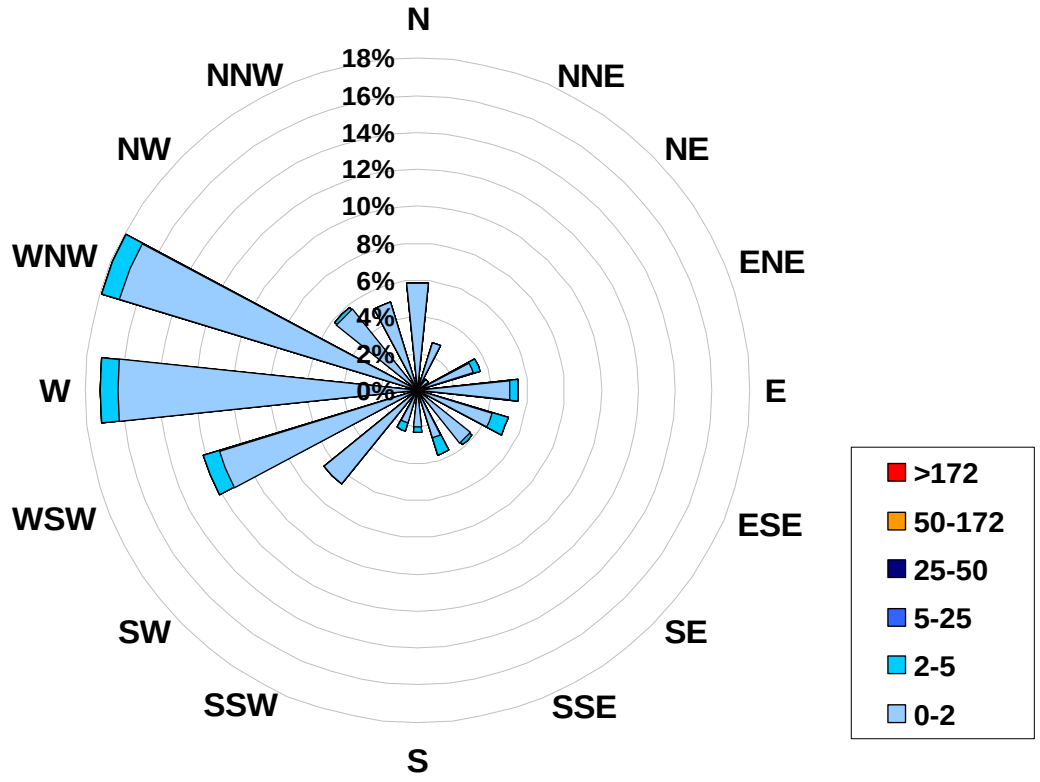


Figure 47. PASZA - Portable-Spirit River Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Portable-Spirit River Site for January 2008



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	658
2	to	5	46
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			704

PASZA - Portable-Spirit River Nitrogen Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

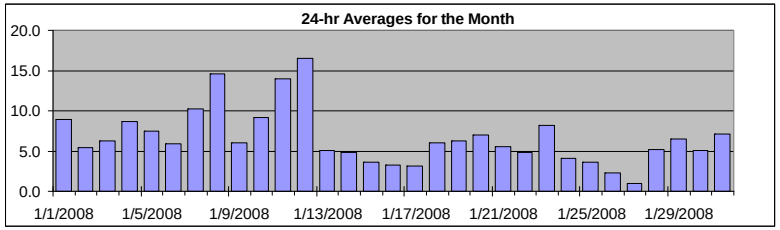
Station: Portable-Spirit River
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	51.2	ppb	8-Jan	7:00 8:00
Maximum 24-hr Average:	16.4	ppb	12-Jan	



AIC Time:	33 hrs	Operational Time:	701 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	21.3	15.8	8.5	5.2	3.3	2.0	0.8	6.6 ppb	5.2 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-Jan-08	16	16	16	14	14	14	15	A	14	13	10	9	8	5	5	5	4	4	4	3	4	4	4	4	8.9	16.4
2-Jan-08	5	5	5	6	7	6	A	9	8	9	11	12	8	4	3	3	3	3	3	3	3	3	3	3	5.4	11.5
3-Jan-08	3	4	4	4	4	A	7	4	3	4	7	11	8	9	7	6	7	7	8	7	8	7	7	6	6.3	11.2
4-Jan-08	6	6	6	A	9	8	8	4	4	4	5	8	6	4	9	12	13	19	21	15	12	9	6	6	8.7	20.7
5-Jan-08	6	6	A	8	9	11	8	6	7	7	6	6	7	6	6	7	8	7	8	9	8	9	9	8	7.4	10.9
6-Jan-08	8	A	6	7	6	8	7	5	5	4	4	5	4	4	4	4	6	7	14	6	6	6	5	4	5.9	13.7
7-Jan-08	A	4	4	6	6	6	4	7	8	23	9	7	9	7	8	11	14	15	17	15	13	14	14	15	10.2	22.8
8-Jan-08	15	14	12	A	10	12	12	51	13	15	9	8	6	C	C	C	C	A	16	14	13	14	13	14	14.5	51.2
9-Jan-08	13	10	8	A	8	6	6	5	6	6	4	4	3	3	3	4	5	6	8	7	8	7	6	6	6.1	12.8
10-Jan-08	5	5	6	A	7	7	9	15	12	9	8	7	6	6	7	7	8	11	15	14	11	11	13	13	9.1	14.8
11-Jan-08	14	14	A	13	11	12	12	14	16	15	12	12	10	8	9	10	12	17	18	19	18	18	18	18	13.9	18.6
12-Jan-08	18	A	18	18	18	17	17	17	18	16	12	9	8	8	9	12	15	19	21	21	21	21	21	21	16.4	21.3
13-Jan-08	A	5	4	4	3	3	3	3	4	3	3	3	4	3	4	7	14	11	7	6	5	6	6	A	5.0	13.6
14-Jan-08	10	8	5	4	5	5	4	5	5	5	5	5	6	5	5	4	5	4	3	3	4	3	A	4	4.8	10.4
15-Jan-08	3	3	2	3	4	4	2	3	6	4	4	6	5	3	3	4	5	4	5	2	3	A	2	2	3.6	6.1
16-Jan-08	2	2	2	2	2	2	3	4	9	10	3	2	3	3	3	3	3	3	3	3	A	3	3	3	3.2	9.5
17-Jan-08	3	3	3	4	4	4	5	5	4	4	3	2	2	2	3	3	3	4	3	A	3	3	3	3	3.2	5.0
18-Jan-08	3	4	4	8	6	9	9	9	9	9	8	5	6	4	4	4	4	5	A	6	6	5	5	5	6.1	9.5
19-Jan-08	5	5	5	4	3	3	2	2	2	2	2	2	3	2	3	2	4	A	24	23	12	11	15	8	6.3	23.9
20-Jan-08	12	13	4	4	5	6	5	3	4	4	3	2	3	3	6	10	A	20	10	8	7	8	11	12	7.0	19.9
21-Jan-08	12	12	12	11	3	3	3	2	3	3	2	3	3	3	12	A	4	4	5	5	7	5	6	3	5.5	12.4
22-Jan-08	3	3	3	3	3	3	3	3	3	3	3	2	2	2	A	3	3	6	8	12	10	10	10	8	4.8	11.9
23-Jan-08	10	10	11	12	12	8	7	11	13	9	7	8	7	A	4	4	5	5	5	6	6	7	9	11	8.2	12.8
24-Jan-08	11	7	7	7	6	4	4	5	4	3	3	2	A	2	2	2	2	2	3	3	3	3	4	3	4.1	11.5
25-Jan-08	4	6	5	4	4	3	4	6	4	5	5	A	6	3	3	5	2	2	2	2	2	3	2	3	3.6	5.9
26-Jan-08	3	4	2	2	2	2	2	2	2	2	A	3	3	4	3	3	2	2	2	1	1	N	N	1	2.3	4.0
27-Jan-08	N	1	N	N	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1	2	0.9	2.3
28-Jan-08	4	4	3	5	4	3	5	6	A	6	5	N	3	3	4	5	7	10	12	7	3	5	5	5	5.2	12.1
29-Jan-08	5	6	8	8	10	11	11	A	10	7	4	3	2	2	3	3	3	3	4	9	8	14	8	7	6.5	13.7
30-Jan-08	6	5	9	5	7	7	A	6	10	6	5	4	3	3	3	2	2	3	5	5	5	4	4	5	5.0	10.2
31-Jan-08	9	6	5	5	8	A	13	13	12	9	7	5	4	3	4	4	5	5	5	7	8	8	9	10	7.1	13.0
Hourly Avg	7.7	6.5	6.3	6.5	6.5	6.5	6.6	7.8	7.3	7.2	5.7	5.4	5.0	4.0	4.7	5.2	5.9	7.3	8.7	8.1	7.2	7.7	7.7	7.1		
Hourly Max	18.0	16.2	18.4	17.9	17.7	17.4	17.1	51.2	17.6	22.8	12.5	11.7	9.6	9.3	11.8	11.9	14.8	19.9	23.9	22.8	21.3	21.3	21.3	20.8		

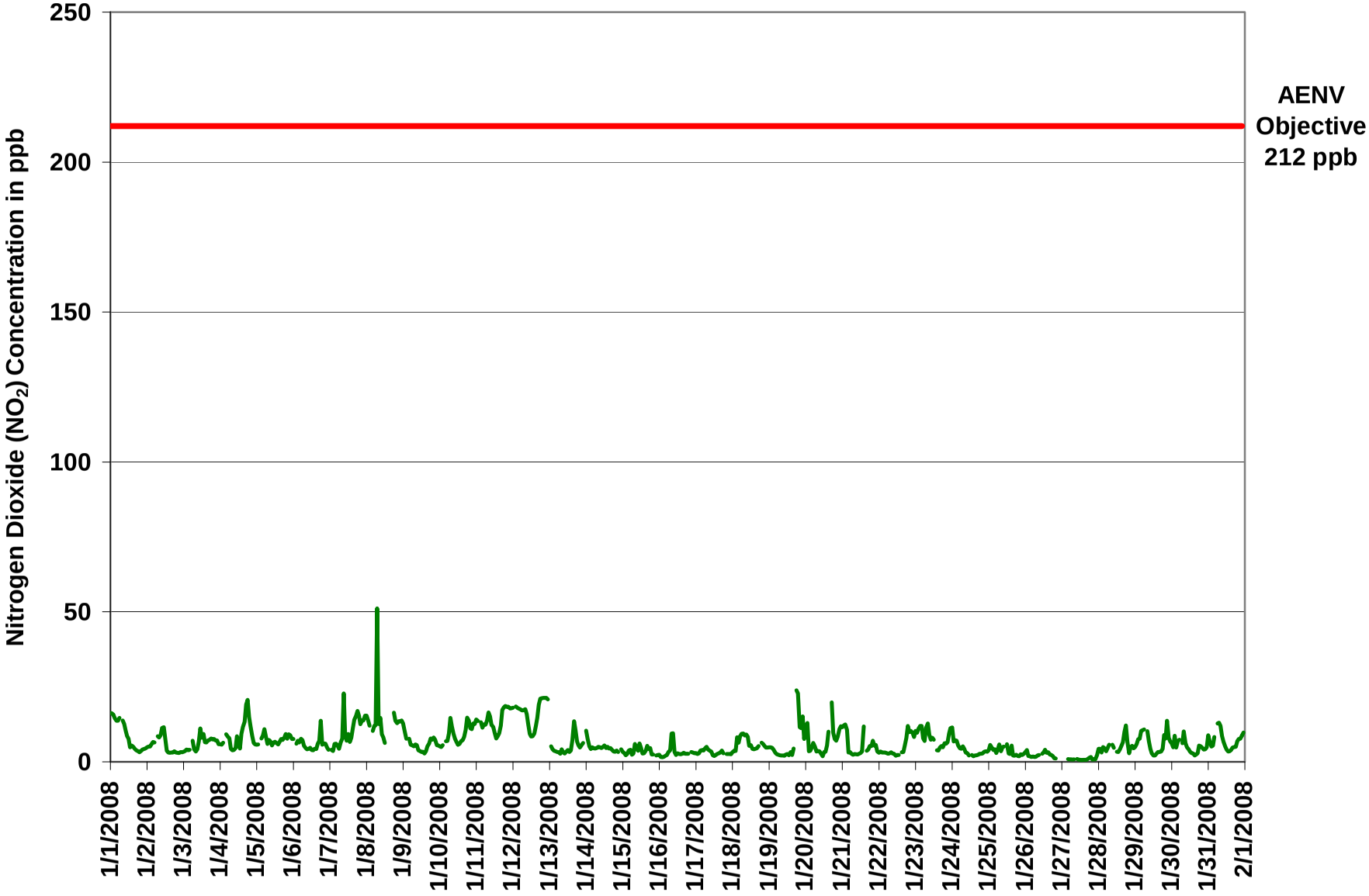


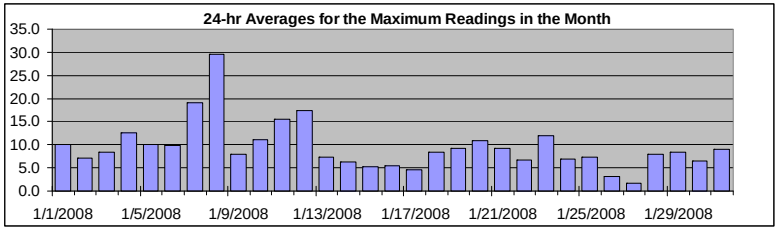
Figure 48. PASZA - Portable-Spirit River Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	290.5	ppb	8-Jan	7:00 8:00
Maximum 24-hr Value:	29.5	ppb	8-Jan	

AIC Time:	33 hrs	Operational Time:	701 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	28.6	19.4	12.2	7.1	4.7	2.5	1.1	9.4 ppb	7.1 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**

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-Jan-08	18	17	17	16	14	14	16	A	14	14	11	10	12	6	10	6	5	4	4	3	4	4	5	5	10.0	17.8
2-Jan-08	5	6	6	9	7	7	A	10	10	13	14	18	12	4	6	4	4	4	4	9	3	3	4	4	7.2	17.7
3-Jan-08	4	4	5	5	5	A	11	6	5	8	13	15	12	13	7	9	8	8	9	9	16	9	9	7	8.5	16.4
4-Jan-08	7	7	9	A	12	12	18	5	5	5	8	10	9	8	16	24	25	24	23	21	15	11	8	7	12.6	25.4
5-Jan-08	6	7	A	11	13	13	11	7	20	8	8	13	9	8	7	8	10	9	10	14	10	12	10	9	10.0	20.2
6-Jan-08	9	A	10	11	8	9	9	6	5	5	5	10	4	4	5	5	16	8	59	7	8	7	10	5	9.8	58.6
7-Jan-08	A	6	4	9	7	7	5	14	13	151	16	9	12	14	11	17	19	20	21	19	14	16	17	18	19.1	150.9
8-Jan-08	19	16	14	A	12	13	13	290	15	18	12	9	8	C	C	C	C	A	18	16	14	15	14	14	29.5	290.5
9-Jan-08	15	13	9	A	11	6	6	6	8	7	5	4	4	5	7	7	7	9	11	11	13	10	6	6	8.0	14.6
10-Jan-08	6	5	7	A	7	9	13	20	13	11	8	8	6	7	7	7	10	20	20	20	12	12	14	14	11.1	20.3
11-Jan-08	15	14	A	15	12	14	13	16	17	19	14	13	11	9	13	12	16	19	19	20	19	20	18	19	15.5	19.9
12-Jan-08	19	A	19	20	18	18	18	18	19	18	15	10	9	9	10	13	17	21	22	22	22	22	22	22	17.5	22.0
13-Jan-08	A	6	5	4	4	4	5	3	9	6	5	5	8	5	6	12	24	14	10	7	6	7	8	A	7.3	24.1
14-Jan-08	13	12	7	5	5	5	5	7	6	5	5	5	8	5	8	5	5	6	5	6	5	6	A	6	6.3	13.1
15-Jan-08	5	6	3	7	5	5	3	5	8	7	5	7	6	3	6	6	7	5	6	4	5	A	3	4	5.3	8.0
16-Jan-08	3	2	2	2	2	4	4	6	11	18	12	3	17	6	4	3	6	3	4	3	A	4	4	4	5.5	17.8
17-Jan-08	5	3	4	5	5	6	6	7	7	6	5	3	2	3	3	5	7	9	3	A	3	3	3	3	4.7	8.8
18-Jan-08	4	4	4	16	14	11	11	12	11	12	10	13	13	5	5	6	5	6	A	7	6	6	5	5	8.3	16.2
19-Jan-08	5	5	5	5	3	3	3	2	3	3	2	7	8	4	5	3	11	A	29	32	16	27	20	13	9.3	32.0
20-Jan-08	18	18	5	4	5	13	12	4	4	10	5	3	4	4	9	19	A	26	11	33	8	11	13	13	10.9	32.7
21-Jan-08	13	13	13	12	3	4	4	6	7	4	5	3	3	4	52	A	5	6	6	10	11	9	9	7	9.2	52.1
22-Jan-08	3	4	4	4	5	3	3	5	10	4	4	4	3	3	A	4	5	9	15	15	14	13	12	9	6.7	15.2
23-Jan-08	15	12	14	17	17	9	9	16	18	17	10	10	11	A	6	7	8	13	9	8	7	13	14	14	11.9	18.3
24-Jan-08	16	9	9	10	7	5	5	10	11	9	4	4	A	7	5	6	8	6	6	3	4	6	6	4	6.9	16.1
25-Jan-08	5	7	5	5	5	6	7	44	6	8	7	A	9	6	5	16	3	2	4	2	2	7	4	4	7.3	44.1
26-Jan-08	4	7	2	2	2	2	2	4	3	3	A	4	5	5	4	4	3	3	2	2	1	N	N	1	3.2	6.9
27-Jan-08	N	1	N	N	1	1	1	1	1	A	2	1	1	1	1	1	1	3	4	3	1	1	1	7	1.7	7.3
28-Jan-08	5	5	4	6	5	4	6	7	A	8	16	N	7	7	5	15	8	15	16	13	5	7	7	5	8.0	16.3
29-Jan-08	5	9	9	9	12	12	12	A	12	9	5	3	2	3	3	4	4	4	5	13	14	19	14	10	8.4	19.5
30-Jan-08	8	7	14	6	8	8	A	8	14	10	5	5	4	3	4	2	3	4	9	6	5	8	5	7	6.6	14.2
31-Jan-08	13	9	6	8	14	A	14	15	14	11	8	6	5	4	4	9	6	5	7	10	10	11	10	11	9.1	14.8
Hourly Avg	9.4	8.1	7.6	8.5	8.1	7.8	8.3	19.3	10.0	14.2	8.1	7.4	7.4	5.7	8.1	8.3	8.8	9.9	12.3	11.5	9.2	10.2	9.4	8.5		
Hourly Max	19.2	17.7	19.3	19.6	18.2	18.0	17.8	290.5	20.2	150.9	16.5	17.7	17.1	14.3	52.1	24.0	25.4	25.9	58.6	32.7	22.0	26.9	21.7	21.7		

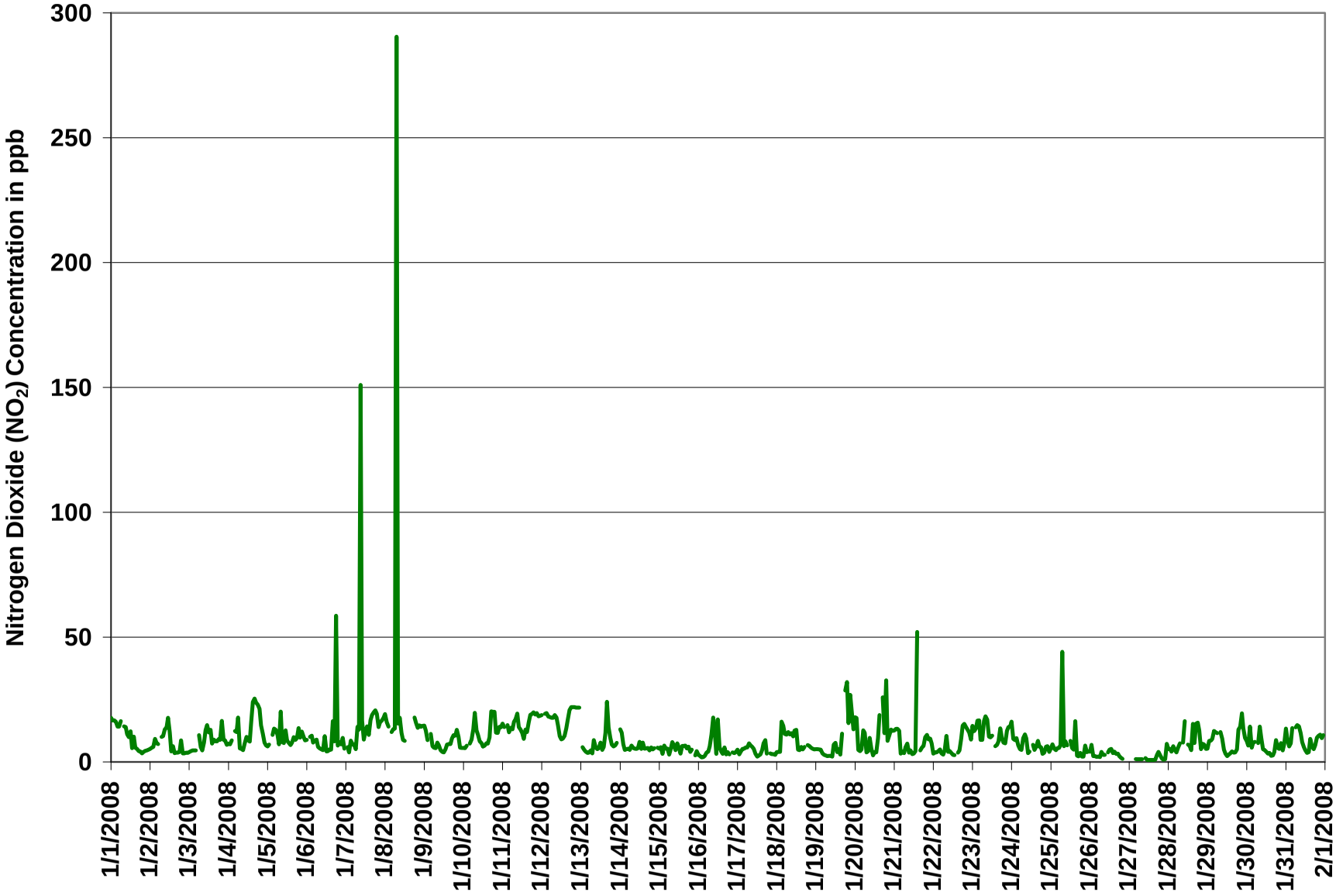
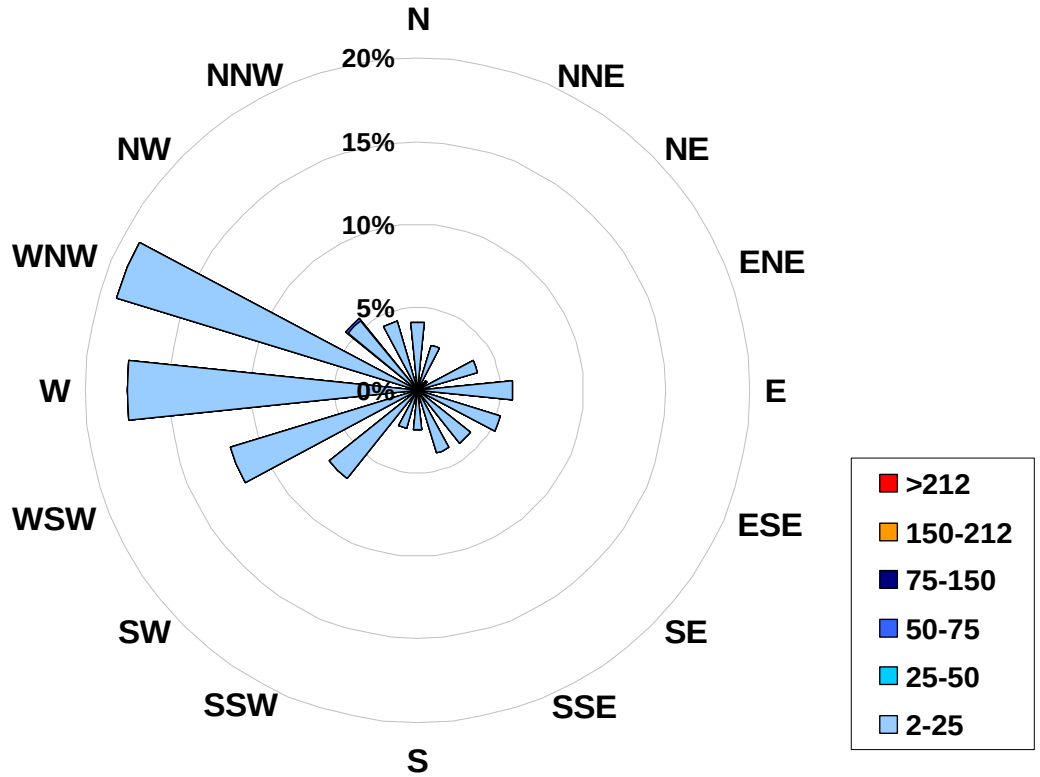


Figure 49. PASZA - Portable-Spirit River Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Portable-Spirit River Site for January 2008



Calms:	**0%**

Frequency Distribution of NO_2 in ppb			
Range			**Frequency (hrs)**
2.0	<	25	700
25	to	50	1
50	to	75	0
75	to	150	0
150	to	212	0
	>	212	0
Total Non-Zero Values			701

PASZA - Portable-Spirit River Nitric Oxide Monthly Summary

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

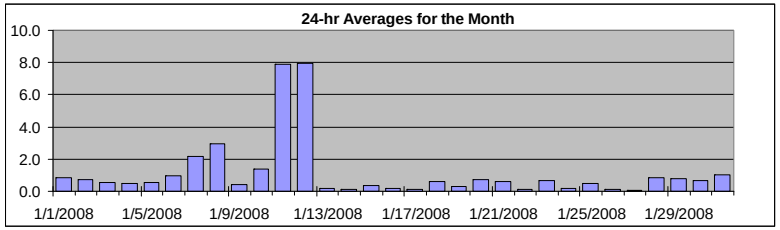
Station: Portable-Spirit River
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Maximum 1-hr Average:	34.2	ppb	8-Jan	7:00 8:00
Maximum 24-hr Average:	8.0	ppb	12-Jan	



AIC Time:	33 hrs	Operational Time:	701 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	14.0	6.8	0.7	0.1	0.0	0.0	0.0	1.1 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**

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-Jan-08	0	0	0	0	0	0	1	A	0	1	3	5	5	1	1	1	0	0	0	0	0	0	0	0	0.8	4.7
2-Jan-08	0	0	0	0	0	0	A	0	0	0	3	7	4	0	0	0	0	0	0	1	0	0	0	0	0.7	6.8
3-Jan-08	0	0	0	0	0	A	0	0	0	0	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0.5	2.4
4-Jan-08	0	0	0	A	0	0	0	0	0	0	0	2	1	0	2	2	1	0	0	0	0	0	0	0	0.5	2.0
5-Jan-08	0	0	A	0	0	0	0	0	0	0	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0.6	2.0
6-Jan-08	0	A	0	0	0	0	0	0	0	0	1	2	1	1	1	1	1	0	12	0	0	0	0	0	1.0	12.0
7-Jan-08	A	0	0	0	0	0	0	0	0	13	4	4	8	5	5	5	2	0	0	2	0	0	0	0	2.2	13.1
8-Jan-08	0	0	0	A	0	0	0	34	0	2	4	5	6	C	C	C	C	A	0	0	0	0	0	0	2.9	34.2
9-Jan-08	0	0	0	A	0	0	0	0	0	0	1	1	2	2	1	1	1	0	0	0	0	0	0	0	0.4	1.6
10-Jan-08	0	0	0	A	0	0	0	2	0	1	3	4	4	4	4	3	1	2	1	0	0	0	0	0	1.4	4.3
11-Jan-08	0	0	A	0	0	0	0	0	2	8	13	19	16	11	11	8	5	9	11	15	15	17	11	11	7.9	18.8
12-Jan-08	10	A	10	9	8	8	8	9	8	10	14	14	13	13	12	10	7	4	3	2	4	2	2	1	8.0	14.2
13-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0.2	0.7
14-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0.1	0.8
15-Jan-08	0	0	0	0	0	0	0	0	0	0	1	2	2	1	1	1	0	0	0	0	0	A	0	0	0.4	2.3
16-Jan-08	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	A	0	0	0	0.2	1.9
17-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4
18-Jan-08	0	0	0	0	0	0	0	0	0	2	2	2	3	2	1	1	0	0	A	0	0	0	0	0	0.6	3.3
19-Jan-08	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	A	1	1	0	1	0	0	0.3	1.6
20-Jan-08	1	0	0	0	0	0	0	0	0	1	1	0	2	2	3	4	A	1	0	2	0	0	0	0	0.7	3.8
21-Jan-08	0	0	0	0	0	0	0	0	0	0	0	1	1	1	8	A	0	0	0	0	0	0	0	0	0.6	8.4
22-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Jan-08	0	0	0	0	0	0	0	1	0	1	2	4	4	A	1	0	0	0	0	0	0	0	0	0	0.7	4.4
24-Jan-08	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	1	0	0	0	0	0	0	0	0	0.2	0.8
25-Jan-08	0	0	0	0	0	0	0	5	0	0	1	A	2	1	0	1	0	0	0	0	0	0	0	0	0.5	4.7
26-Jan-08	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	N	N	0	0.1	0.7
27-Jan-08	N	0	N	N	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1	0.6
28-Jan-08	0	0	0	0	0	0	0	0	A	1	3	N	3	3	3	4	2	0	0	0	0	0	0	0	0.8	3.5
29-Jan-08	0	0	0	0	0	0	0	A	0	2	3	2	2	2	2	2	1	0	0	0	0	1	0	0	0.8	2.7
30-Jan-08	0	0	0	0	0	0	A	0	0	1	2	3	3	2	2	1	1	0	0	0	0	0	0	0	0.7	2.8
31-Jan-08	0	0	0	0	0	A	0	0	0	2	4	4	4	3	3	2	1	0	0	0	0	0	0	0	1.1	4.2
Hourly Avg	0.5	0.1	0.4	0.4	0.3	0.3	0.4	1.9	0.5	1.6	2.3	3.0	3.1	2.1	2.4	1.8	0.9	0.7	1.0	0.8	0.7	0.8	0.5	0.5		
Hourly Max	9.9	0.2	10.2	9.1	8.4	8.2	8.1	34.2	8.2	13.1	14.2	18.8	16.0	13.0	11.8	10.0	7.3	8.8	12.0	15.0	15.4	16.9	10.5	11.3		

PASZA - Portable-Spirit River Oxides of Nitrogen Monthly Summary

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

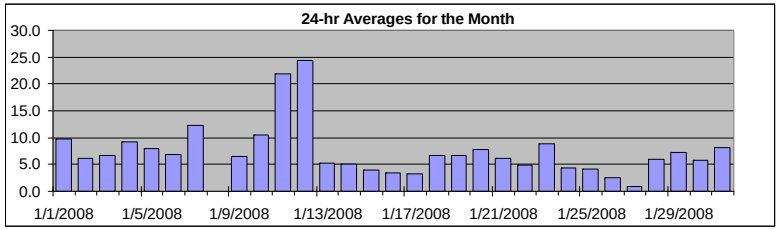
Station: Portable-Spirit River
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Maximum 1-hr Average:	85.4	ppb	8-Jan	7:00 8:00
Maximum 24-hr Average:	24.4	ppb	12-Jan	



AIC Time:	33 hrs	Operational Time:	700 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	28.8	21.9	9.8	5.6	3.6	2.1	0.7	7.7 ppb	5.6 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**

Day	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-Jan-08	17	16	16	15	14	14	15	A	14	14	14	13	12	6	7	6	4	4	4	3	4	4	4	4	9.7	16.7
2-Jan-08	5	5	5	6	7	7	A	9	8	9	14	18	11	4	3	3	3	3	4	4	3	3	3	3	6.1	18.3
3-Jan-08	3	4	4	4	4	A	7	4	4	4	8	13	10	12	8	7	7	7	8	8	8	7	7	6	6.8	13.5
4-Jan-08	6	6	7	A	9	8	8	4	4	4	5	10	8	5	11	13	14	19	21	15	12	9	6	6	9.2	20.9
5-Jan-08	6	6	A	8	9	11	9	6	8	7	6	8	9	8	7	8	8	7	8	10	8	10	9	8	8.0	11.0
6-Jan-08	8	A	6	7	7	8	7	5	5	4	5	7	5	5	5	5	8	7	26	6	6	6	5	4	6.8	25.6
7-Jan-08	A	4	4	6	6	6	4	7	8	36	13	11	17	12	13	16	16	16	17	17	13	14	14	15	12.3	35.9
8-Jan-08	16	14	12	A	10	12	12	85	13	17	13	13	C	C	C	C	C	A	17	14	13	14	14	14	N	85.4
9-Jan-08	13	10	8	A	8	6	6	5	6	6	5	5	5	5	4	5	6	6	8	7	8	7	6	6	6.5	12.8
10-Jan-08	5	5	6	A	7	7	10	17	12	10	11	11	10	10	11	10	10	13	15	14	11	11	13	13	10.5	16.9
11-Jan-08	14	14	A	13	11	12	12	14	18	23	25	30	26	18	19	18	17	26	29	34	34	35	28	29	21.8	35.3
12-Jan-08	28	A	29	27	26	26	25	26	26	26	27	23	22	22	21	22	22	24	24	23	25	24	24	22	24.4	28.6
13-Jan-08	A	5	4	4	4	3	3	3	4	3	3	4	4	4	4	8	14	11	7	6	5	6	6	A	5.2	14.2
14-Jan-08	10	8	5	4	5	5	5	5	5	5	5	5	6	5	5	5	5	4	4	4	4	3	A	4	5.0	10.5
15-Jan-08	3	3	2	3	4	4	2	3	6	5	4	8	7	4	4	4	6	4	5	2	2	A	2	2	3.9	8.5
16-Jan-08	2	2	2	2	2	2	3	4	10	10	4	3	5	3	3	3	3	3	3	3	A	3	3	3	3.4	10.4
17-Jan-08	3	3	3	4	4	4	5	5	4	4	4	2	2	3	3	3	3	4	3	A	3	3	3	3	3.3	5.1
18-Jan-08	3	4	4	8	6	9	9	10	9	11	11	7	9	6	5	5	5	5	A	6	6	5	5	5	6.7	11.4
19-Jan-08	5	5	5	4	3	3	2	2	2	2	2	3	4	3	4	3	5	A	24	24	12	12	15	8	6.6	24.5
20-Jan-08	13	13	4	4	5	6	5	4	4	4	4	2	5	5	8	14	A	20	10	9	7	8	11	12	7.7	20.5
21-Jan-08	12	12	13	11	3	3	3	3	3	3	3	3	4	4	20	A	4	4	5	5	7	6	6	4	6.1	20.2
22-Jan-08	3	4	3	3	3	3	3	3	3	3	3	2	2	3	A	3	3	6	8	12	10	10	10	8	4.9	12.0
23-Jan-08	10	10	11	12	12	8	7	12	13	10	10	12	11	A	5	4	5	5	5	6	6	7	10	11	8.8	13.0
24-Jan-08	12	7	7	7	6	5	4	5	4	3	3	3	A	3	2	3	2	2	3	3	3	3	4	3	4.3	11.5
25-Jan-08	4	6	5	4	4	3	4	10	4	5	6	A	8	3	3	7	2	2	2	2	2	3	2	3	4.1	10.5
26-Jan-08	3	4	2	2	2	2	2	2	2	2	A	3	4	5	4	4	3	2	2	1	1	N	N	1	2.5	4.8
27-Jan-08	N	1	N	N	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	1	1	1	2	1.0	2.3
28-Jan-08	4	4	3	5	4	3	5	6	A	7	7	N	6	6	7	9	8	10	12	7	3	5	5	5	6.0	12.2
29-Jan-08	5	6	8	8	10	11	11	A	11	9	7	5	4	4	5	5	4	4	4	9	8	14	8	7	7.2	14.4
30-Jan-08	6	5	9	5	7	7	A	6	10	7	7	7	6	5	5	3	3	3	6	5	5	4	4	5	5.7	10.4
31-Jan-08	9	7	5	5	8	A	13	13	12	11	11	9	8	6	6	6	6	5	5	7	8	8	9	10	8.2	13.2
Hourly Avg	8.2	6.6	6.8	6.9	6.8	6.8	7.0	9.7	7.8	8.9	8.0	8.4	7.9	6.2	7.1	7.0	6.8	7.9	9.7	8.9	7.9	8.5	8.2	7.5		
Hourly Max	28.0	16.3	28.6	27.0	26.0	25.6	25.3	85.4	25.8	35.9	26.7	30.4	25.5	21.5	21.2	21.8	22.1	26.1	28.8	33.6	33.6	35.3	28.3	29.2		

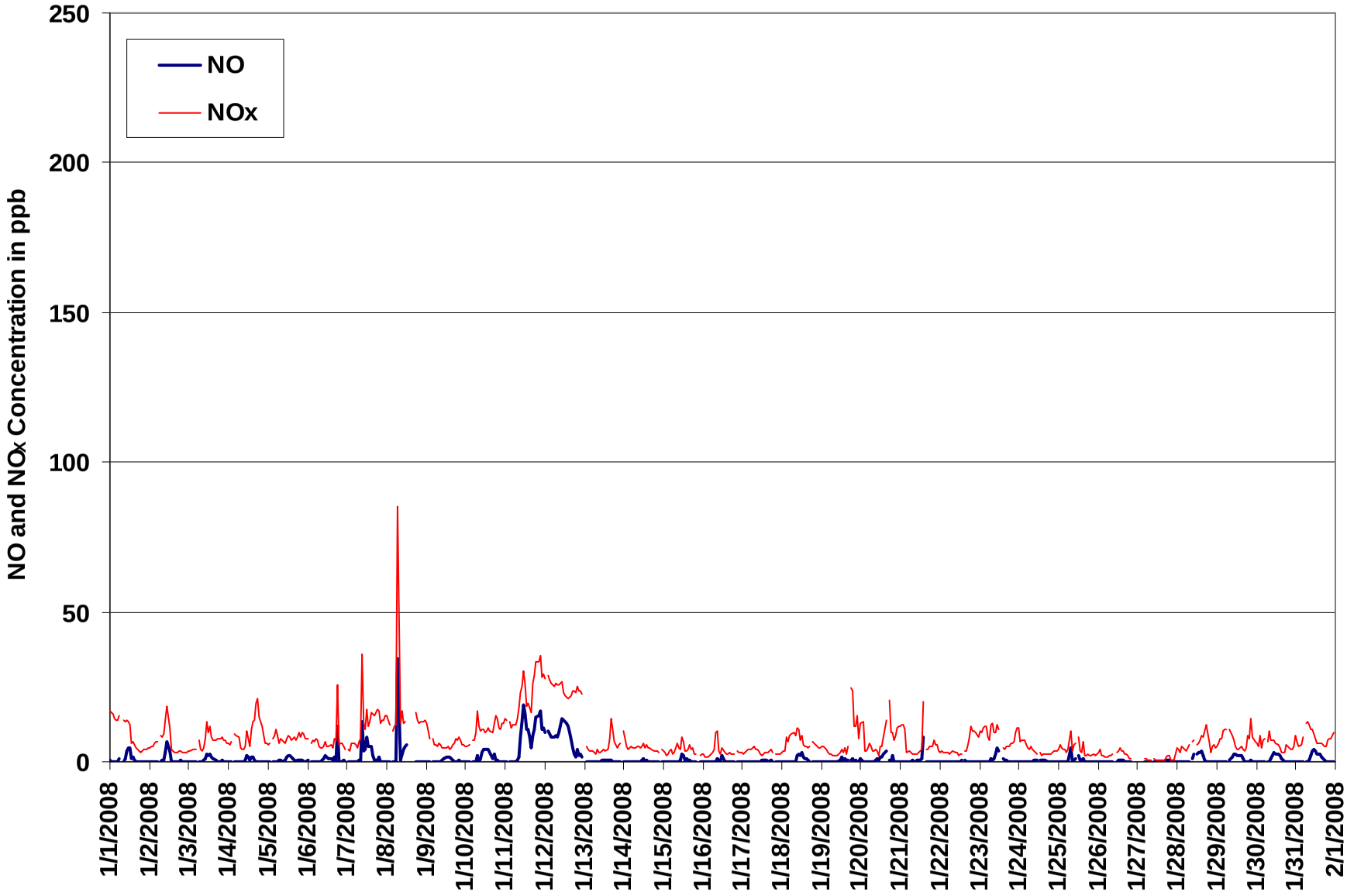


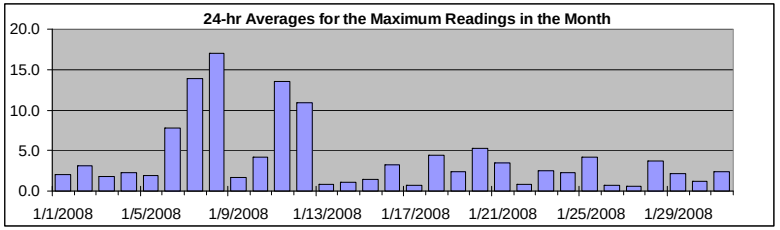
Figure 50. PASZA - Portable-Spirit River Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Portable-Spirit River
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	270.8	ppb	8-Jan	7:00 8:00
Maximum 24-hr Value:	17.0	ppb	8-Jan	

AIC Time:	33 hrs	Operational Time:	701 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	47.0	15.5	2.9	0.8	0.2	0.0	0.0	3.9 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**

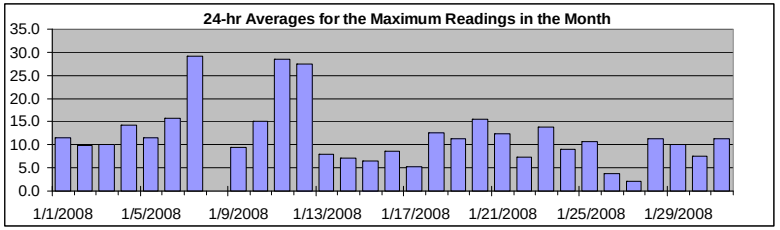
Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jan-08	2	0	1	2	0	1	4	A	0	2	4	5	14	1	6	1	0	0	0	0	0	0	0	0	2.0	14.3
2-Jan-08	0	1	1	0	1	0	A	2	3	2	8	22	8	1	5	0	0	0	0	18	0	1	0	0	3.1	21.6
3-Jan-08	0	0	0	0	0	A	0	2	2	6	5	5	3	3	2	2	1	1	1	0	7	0	0	1	1.8	6.6
4-Jan-08	0	3	1	A	2	2	0	1	5	0	4	3	2	5	5	9	4	0	1	1	1	1	0	2	2.3	9.0
5-Jan-08	0	1	A	1	1	0	1	2	4	0	3	9	3	3	2	2	1	0	5	1	1	2	1	1	1.9	9.5
6-Jan-08	2	A	0	0	0	0	1	0	0	1	1	9	2	1	2	1	24	0	125	0	0	0	7	0	7.8	125.0
7-Jan-08	A	0	0	0	0	0	0	2	3	167	26	7	12	21	10	12	4	1	4	47	0	2	0	0	13.9	167.3
8-Jan-08	1	0	1	A	1	0	0	271	3	6	5	7	7	C	C	C	C	A	1	0	0	1	1	0	17.0	270.8
9-Jan-08	0	0	0	A	0	0	0	0	2	1	1	1	3	4	6	5	3	4	1	0	5	0	0	0	1.6	6.4
10-Jan-08	0	1	1	A	1	0	1	16	1	2	5	5	5	5	5	4	2	33	3	3	3	1	0	0	4.2	33.1
11-Jan-08	0	0	A	0	0	0	1	2	4	27	18	21	22	15	28	21	8	21	19	28	23	23	15	16	13.6	27.9
12-Jan-08	12	A	13	11	10	10	11	11	18	14	17	16	14	14	14	12	10	6	6	6	12	4	3	7	10.9	18.5
13-Jan-08	A	0	1	0	0	0	0	1	0	1	2	1	2	1	1	2	2	3	1	0	0	0	0	A	0.8	2.6
14-Jan-08	0	0	0	0	0	0	1	1	1	2	0	2	6	0	6	0	0	0	0	4	0	1	A	0	1.1	6.0
15-Jan-08	1	1	1	1	0	0	0	3	2	3	1	3	3	1	6	3	2	0	2	0	0	A	0	0	1.4	5.9
16-Jan-08	0	0	0	0	0	0	0	1	2	6	2	1	54	1	1	0	2	0	1	0	A	0	0	0	3.2	53.8
17-Jan-08	0	0	0	0	0	0	0	0	2	1	1	0	0	0	1	2	2	5	0	A	0	0	0	0	0.8	4.7
18-Jan-08	0	0	0	0	2	0	2	1	2	47	3	11	26	2	2	2	1	0	A	0	1	0	0	0	4.4	46.7
19-Jan-08	0	0	0	0	0	0	0	0	0	0	0	3	26	2	2	1	2	A	3	5	0	8	0	1	2.4	25.9
20-Jan-08	7	1	0	0	0	0	0	0	0	6	3	2	2	2	5	12	A	2	0	73	2	0	2	0	5.2	72.9
21-Jan-08	0	0	1	1	0	0	0	7	2	0	1	1	1	1	53	A	0	0	1	1	1	1	1	6	3.5	52.6
22-Jan-08	0	0	0	0	0	0	0	0	7	0	0	0	1	1	A	1	1	0	1	1	2	0	2	0	0.8	7.1
23-Jan-08	0	2	0	0	0	0	0	19	2	4	6	6	6	A	3	2	1	1	1	1	2	0	0	0	2.6	19.1
24-Jan-08	0	0	1	0	0	0	0	1	0	5	1	2	A	12	2	11	8	4	0	0	0	0	2	0	2.2	12.4
25-Jan-08	0	0	0	0	0	1	0	67	1	5	3	A	4	2	2	6	0	0	0	0	0	2	0	0	4.2	67.2
26-Jan-08	0	2	0	0	0	0	0	2	0	0	A	1	1	2	1	4	0	1	1	0	0	N	N	0	0.7	3.6
27-Jan-08	N	0	N	N	0	0	0	0	0	A	0	0	0	0	0	0	1	3	4	2	0	0	0	1	0.6	3.6
28-Jan-08	0	0	0	0	0	0	0	0	A	2	19	N	10	9	4	24	3	1	1	0	4	1	1	2	3.7	24.0
29-Jan-08	0	1	1	0	0	1	1	A	8	5	4	3	2	9	3	3	1	0	0	0	1	3	2	1	2.2	9.4
30-Jan-08	0	0	0	0	0	0	A	2	1	2	3	3	3	3	3	1	1	1	3	0	0	2	0	0	1.2	3.4
31-Jan-08	0	1	0	0	0	A	0	2	2	4	5	5	4	3	3	8	3	1	2	5	1	5	0	0	2.4	8.4
Hourly Avg	1.0	0.6	0.9	0.7	0.7	0.6	0.8	14.4	2.6	10.7	5.0	5.4	8.2	4.4	6.3	5.2	2.9	3.1	6.3	6.6	2.2	2.1	1.4	1.3		
Hourly Max	12.1	2.5	12.5	11.2	9.7	10.0	10.5	270.8	18.5	167.3	25.9	21.6	53.8	21.0	52.6	24.0	24.5	33.1	125.0	72.9	23.4	22.9	15.2	16.1		

Station: Portable-Spirit River
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	484.7	ppb	8-Jan	7:00 8:00
Maximum 24-hr Value:	29.2	ppb	7-Jan	

AIC Time:	33 hrs	Operational Time:	700 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	57.1	31.4	14.1	8.7	5.2	2.5	1.1	12.7 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-Jan-08	19	17	17	18	14	15	20	A	14	14	14	14	26	7	17	6	5	4	4	4	4	4	5	5	11.6	26.0
2-Jan-08	5	6	7	9	8	7	A	11	12	15	21	38	19	5	9	4	4	4	4	23	4	4	4	4	9.9	38.4
3-Jan-08	4	4	5	5	5	A	11	6	7	13	16	19	15	16	9	11	9	9	9	9	23	9	9	7	10.0	22.8
4-Jan-08	7	9	9	A	12	12	18	6	9	5	10	12	11	13	20	31	29	24	24	22	16	11	8	8	14.2	30.7
5-Jan-08	6	7	A	11	13	13	11	9	24	8	10	22	12	10	9	10	11	9	12	14	10	12	10	10	11.5	23.6
6-Jan-08	11	A	10	11	8	9	9	6	5	6	6	19	6	6	6	5	40	8	146	7	8	7	16	5	15.7	146.4
7-Jan-08	A	6	4	9	7	7	5	16	13	261	41	16	24	35	21	29	20	21	22	47	14	18	17	18	29.2	261.2
8-Jan-08	21	16	14	A	12	13	13	485	18	21	15	16	C	C	C	C	C	A	19	16	14	15	15	14	N	484.7
9-Jan-08	15	13	9	A	11	6	6	6	10	7	5	5	7	9	13	10	9	13	12	11	17	10	6	6	9.4	17.3
10-Jan-08	6	6	8	A	8	9	14	35	13	12	12	12	11	11	13	11	11	53	23	23	14	13	14	14	15.0	53.4
11-Jan-08	16	14	A	15	12	14	14	17	21	43	31	34	32	24	40	31	24	40	37	48	42	42	33	32	28.5	47.7
12-Jan-08	30	A	31	31	28	27	28	28	37	31	28	26	23	23	24	23	24	26	27	28	33	26	25	26	27.5	36.7
13-Jan-08	A	6	5	4	4	4	5	4	9	6	7	6	10	6	7	13	26	15	10	7	6	7	8	A	7.9	25.6
14-Jan-08	13	12	7	5	5	5	5	8	6	6	5	7	13	5	13	5	6	6	5	9	5	6	A	6	7.2	13.4
15-Jan-08	6	6	4	7	5	5	3	8	10	9	5	10	8	4	11	8	8	5	8	4	5	A	3	5	6.5	10.6
16-Jan-08	3	2	2	2	2	4	4	7	11	23	14	4	70	7	5	3	8	3	5	3	A	4	4	4	8.5	70.1
17-Jan-08	5	3	4	5	5	6	6	8	9	6	6	4	2	3	4	6	8	11	4	A	4	3	4	3	5.2	10.8
18-Jan-08	4	4	4	16	16	11	12	12	13	57	12	24	39	7	6	8	5	6	A	7	7	6	5	5	12.5	57.0
19-Jan-08	5	5	5	5	3	3	3	2	3	2	2	10	33	6	7	3	12	A	30	36	16	33	21	13	11.3	36.3
20-Jan-08	22	18	5	4	5	13	12	4	4	15	8	4	6	6	14	31	A	28	12	101	10	11	14	13	15.6	101.2
21-Jan-08	13	13	14	14	3	4	4	13	9	4	5	4	4	5	105	A	5	6	7	10	11	10	10	13	12.4	104.7
22-Jan-08	3	4	4	4	5	4	3	5	17	4	5	4	3	3	A	4	5	9	14	16	16	13	13	9	7.3	17.3
23-Jan-08	15	12	14	17	17	9	9	33	19	18	16	16	16	A	9	9	9	14	10	9	9	13	14	14	13.9	32.7
24-Jan-08	16	9	10	10	7	5	5	11	11	15	4	6	A	19	7	15	16	10	6	3	4	6	8	4	9.0	19.3
25-Jan-08	6	7	5	5	6	6	7	96	8	13	10	A	12	8	7	23	3	2	4	2	2	9	4	4	10.8	95.9
26-Jan-08	4	8	2	2	2	2	2	6	3	3	A	5	6	7	4	8	4	4	3	2	1	N	N	1	3.8	8.1
27-Jan-08	N	1	N	N	1	1	1	1	1	A	2	1	1	1	1	1	1	6	7	4	2	1	1	8	2.1	7.9
28-Jan-08	5	5	4	6	5	4	6	7	A	8	36	N	17	16	8	39	9	15	16	13	9	8	7	7	11.4	39.1
29-Jan-08	5	9	9	9	12	13	12	A	18	14	7	6	4	10	6	7	4	4	5	13	15	23	14	10	10.0	22.8
30-Jan-08	8	7	14	6	8	8	A	8	14	10	8	8	7	6	7	4	4	4	12	6	5	9	5	7	7.6	14.4
31-Jan-08	13	9	6	8	14	A	14	16	16	16	13	10	9	7	7	18	9	6	8	15	11	15	10	11	11.2	17.6
Hourly Avg	10.2	8.3	8.3	9.1	8.5	8.2	8.9	30.1	12.1	22.2	12.5	12.4	15.5	9.8	14.1	13.0	11.3	12.6	16.9	17.1	11.2	12.0	10.5	9.6		
Hourly Max	29.8	18.3	31.1	30.8	27.9	26.9	27.8	484.7	36.7	261.2	41.5	38.4	70.1	34.8	104.7	39.1	40.2	53.4	146.4	101.2	42.3	42.4	33.2	32.3		

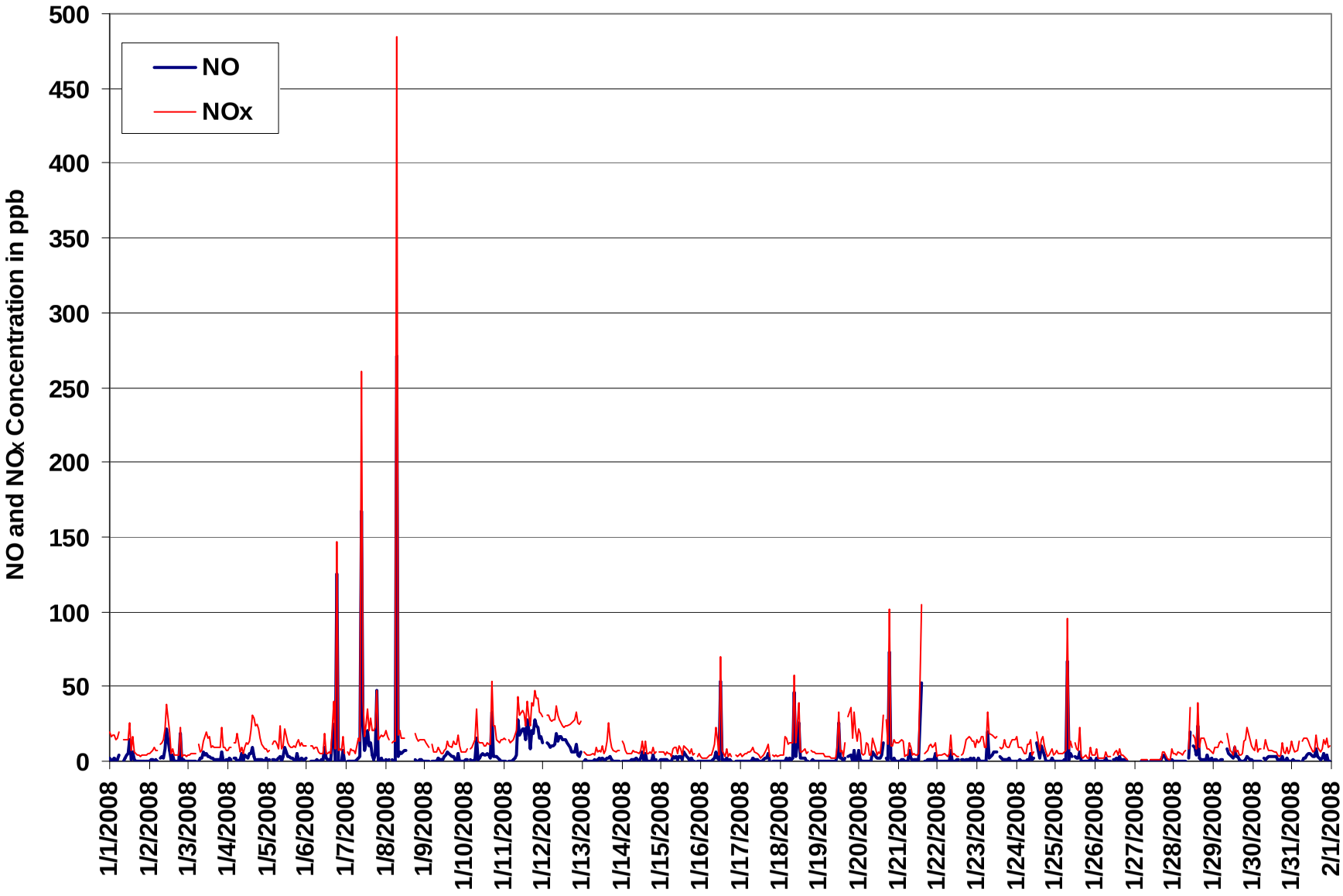


Figure 51. PASZA - Portable-Spirit River Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Portable-Spirit River Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O_3)

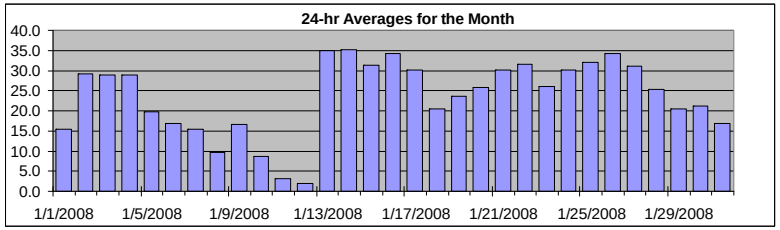
Station: Portable-Spirit River
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	41.3	ppb	4-Jan	13:00 14:00
Maximum 24-hr Average:	35.1	ppb	14-Jan	



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
	38.6	37.3	32.5	24.5	17.2	3.7	0.0	23.5 ppb	24.5 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-Jan-08	2	3	2	5	4	4	3	A	4	6	9	12	14	21	21	23	26	27	28	29	29	28	28	27	15.4	28.7
2-Jan-08	26	26	26	23	22	22	A	19	19	18	15	15	20	37	38	38	39	39	38	38	38	39	38	37	29.1	38.9
3-Jan-08	37	37	36	37	36	A	33	36	37	34	31	29	29	26	24	23	23	22	21	21	21	22	23	25	28.8	37.1
4-Jan-08	24	24	23	A	20	20	26	37	38	39	39	34	38	41	35	33	31	22	18	24	25	24	26	25	28.9	41.3
5-Jan-08	25	25	A	23	22	21	23	27	25	25	27	23	19	20	19	18	17	16	15	13	14	12	12	13	19.8	27.3
6-Jan-08	13	A	15	14	15	13	14	15	16	17	17	18	19	19	18	19	17	16	16	18	17	18	20	22	16.7	21.7
7-Jan-08	A	22	22	20	20	20	21	19	17	14	17	19	17	20	18	14	12	10	7	8	11	10	10	7	15.4	22.3
8-Jan-08	8	9	10	A	11	9	9	22	8	5	11	12	13	13	12	12	8	7	5	7	8	8	8	8	9.6	22.2
9-Jan-08	9	15	18	A	19	21	21	21	20	19	C	C	A	20	19	18	16	15	13	13	12	12	14	13	16.5	21.4
10-Jan-08	13	13	12	A	10	10	8	3	5	7	9	11	12	12	11	11	10	8	4	5	6	6	5	4	8.6	13.2
11-Jan-08	3	4	A	4	4	3	3	2	0	1	4	5	7	9	8	7	5	0	0	0	0	0	0	0	3.0	8.6
12-Jan-08	0	A	0	0	0	0	0	0	0	1	4	7	8	9	8	6	3	0	0	0	0	0	0	0	2.0	8.7
13-Jan-08	A	32	34	35	35	35	36	38	36	38	38	38	38	37	37	34	28	31	34	36	36	33	33	A	35.0	38.3
14-Jan-08	28	30	33	36	35	36	36	36	35	34	34	34	34	36	35	37	37	37	38	37	36	37	A	35	35.1	37.8
15-Jan-08	36	35	34	33	30	30	30	30	27	29	30	27	28	32	33	32	31	32	31	33	33	A	35	34	31.4	35.7
16-Jan-08	33	35	35	35	34	34	30	30	25	24	33	35	35	36	37	38	36	37	37	37	A	37	37	37	34.2	37.5
17-Jan-08	37	36	36	36	37	37	34	33	35	35	32	27	26	26	26	25	24	23	25	A	26	25	26	26	30.2	37.3
18-Jan-08	25	24	24	18	20	18	17	17	18	16	17	21	20	22	24	24	23	22	A	20	20	21	21	22	20.5	24.8
19-Jan-08	22	22	22	25	27	28	27	27	27	27	27	27	27	27	26	27	26	A	8	9	21	21	18	25	23.7	27.8
20-Jan-08	22	22	31	30	27	25	27	29	29	33	36	37	29	30	30	26	A	19	22	20	20	18	16	16	25.7	36.6
21-Jan-08	16	16	15	18	34	33	34	34	34	34	35	35	35	35	33	A	35	33	31	30	29	31	29	33	30.0	35.3
22-Jan-08	33	32	34	33	32	32	32	33	33	34	36	37	37	37	A	36	36	34	30	24	26	23	22	23	31.7	36.7
23-Jan-08	21	21	19	18	18	23	24	19	18	22	22	24	28	A	37	37	36	35	34	33	31	30	26	24	26.0	37.1
24-Jan-08	24	27	26	25	26	27	26	24	28	30	29	32	A	34	35	35	35	34	34	34	33	32	32	33	30.2	35.0
25-Jan-08	30	27	28	29	29	31	29	30	30	28	27	A	28	34	35	31	36	35	35	36	37	37	36	35	32.0	37.3
26-Jan-08	35	35	37	38	39	39	39	38	38	38	A	37	36	35	36	29	25	26	28	29	30	N	N	30	34.2	39.0
27-Jan-08	N	30	N	N	30	31	31	31	30	A	31	32	32	32	32	32	32	31	31	31	32	32	31	28	31.1	32.1
28-Jan-08	26	26	27	25	25	26	24	24	A	25	27	N	28	27	27	25	24	22	20	25	28	26	25	25	25.3	28.4
29-Jan-08	24	22	20	20	18	16	15	A	15	18	21	23	25	25	24	23	23	23	23	18	19	14	19	20	20.4	24.9
30-Jan-08	20	21	17	21	19	18	A	20	16	20	21	22	23	24	24	25	24	24	21	21	21	22	21	20	21.2	25.1
31-Jan-08	16	18	19	18	15	A	10	10	11	15	17	19	20	21	21	21	20	20	20	18	17	16	15	14	17.0	21.4
Hourly Avg	21.8	23.7	23.5	23.8	23.0	22.8	22.8	24.2	22.5	22.8	24.0	24.6	25.0	26.6	26.2	25.4	24.5	23.3	22.2	22.2	22.5	21.9	21.5	22.1		
Hourly Max	37.3	36.9	37.4	38.2	39.0	38.7	38.6	37.9	38.1	38.8	38.8	37.8	37.9	41.3	38.2	38.1	38.6	38.9	38.1	37.7	38.0	38.5	37.8	37.4		

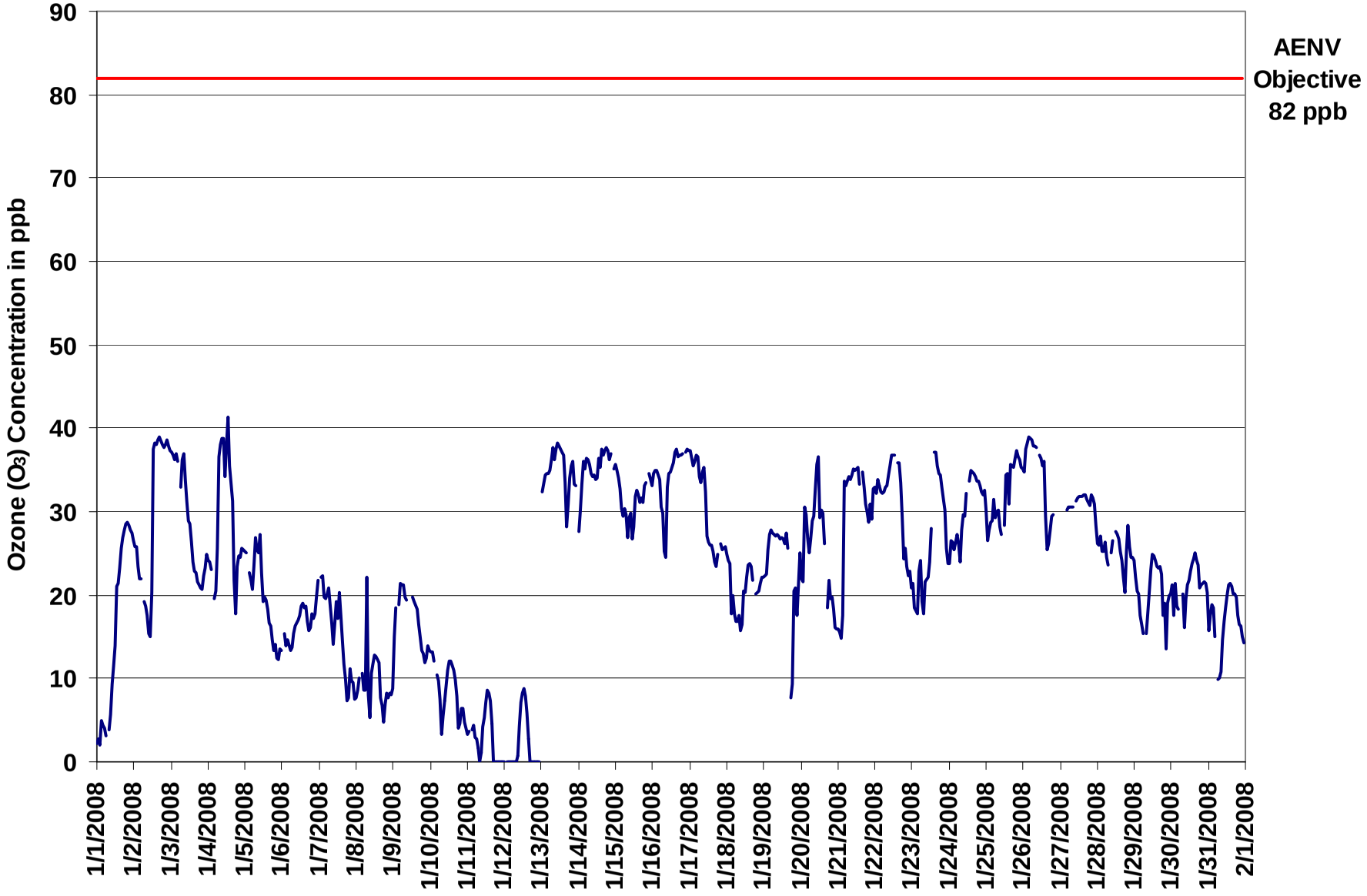


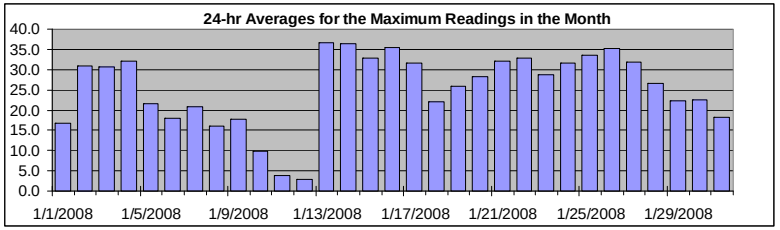
Figure 52. PASZA - Portable-Spirit River Ozone 1-hr Average Monthly Trend

Station: Portable-Spirit River
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	132.3	ppb	8-Jan	7:00 8:00
Maximum 24-hr Value:	36.6	ppb	13-Jan	

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
	39.8	38.4	34.2	26.3	19.2	4.7	0.0	25.3 ppb	26.3 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**

Day	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-Jan-08	3	4	3	10	8	5	4	A	4	8	10	13	20	22	23	25	26	28	28	29	29	29	28	28	16.9	29.3
2-Jan-08	27	27	27	25	23	23	A	21	20	19	17	18	38	38	39	39	39	39	39	38	39	39	38	38	30.9	39.5
3-Jan-08	38	37	37	38	37	A	35	37	38	37	36	34	34	29	25	24	24	23	23	23	23	24	24	26	30.7	37.9
4-Jan-08	26	25	25	A	22	23	35	38	39	40	40	37	42	42	42	40	38	28	22	25	26	26	27	26	32.1	42.4
5-Jan-08	26	26	A	24	24	24	26	30	29	27	28	27	20	21	20	20	18	18	16	16	16	14	13	15	21.6	29.9
6-Jan-08	15	A	16	16	16	15	15	16	17	18	18	19	19	20	19	19	18	18	18	19	19	19	21	23	17.9	22.7
7-Jan-08	A	23	23	22	20	21	22	21	19	89	20	21	20	22	20	18	14	13	11	10	13	12	12	13	20.9	89.5
8-Jan-08	11	12	13	A	12	10	10	132	12	9	12	13	14	14	13	13	11	8	6	9	9	8	8	9	16.0	132.3
9-Jan-08	10	20	20	A	21	22	22	22	21	20	C	C	A	20	20	19	18	16	15	14	14	14	14	14	17.8	22.0
10-Jan-08	14	14	13	A	11	10	10	6	7	8	10	12	12	12	12	12	11	9	9	6	7	7	6	5	9.8	13.9
11-Jan-08	4	4	A	5	5	4	3	3	0	3	5	6	8	9	9	9	7	2	0	0	0	0	0	0	3.7	9.3
12-Jan-08	0	A	0	0	0	0	0	0	5	3	6	8	9	9	8	7	5	1	0	1	0	0	0	0	2.8	9.3
13-Jan-08	A	34	35	35	35	36	38	38	38	39	39	39	39	38	38	37	33	34	36	38	38	36	35	A	36.6	39.1
14-Jan-08	30	34	36	37	36	37	37	37	36	35	35	34	37	38	37	39	38	38	39	39	37	39	A	36	36.4	38.5
15-Jan-08	37	36	35	34	33	31	31	31	30	32	31	29	31	33	34	33	33	33	33	34	35	A	35	35	32.9	36.5
16-Jan-08	34	35	35	35	35	34	32	31	30	29	35	35	36	37	38	38	37	37	37	37	A	38	38	38	35.4	38.4
17-Jan-08	38	38	37	37	38	38	35	35	36	37	37	28	27	27	27	26	25	25	25	A	27	26	26	28	31.5	38.4
18-Jan-08	26	25	24	23	22	20	19	19	19	18	21	22	21	24	24	24	24	23	A	20	21	21	22	22	22.0	26.4
19-Jan-08	23	23	23	28	28	28	28	28	28	28	28	28	28	28	28	29	28	A	16	17	24	27	23	29	25.8	29.5
20-Jan-08	27	29	32	31	28	27	28	29	31	34	37	37	37	33	32	31	A	24	24	22	21	19	19	18	28.3	37.3
21-Jan-08	18	18	16	34	35	34	35	35	35	35	36	36	36	36	36	A	35	34	32	32	33	34	31	34	32.2	36.3
22-Jan-08	34	33	35	35	33	33	33	34	34	36	37	37	37	37	A	36	36	36	32	26	27	27	24	24	32.9	37.3
23-Jan-08	23	24	21	23	23	25	27	24	22	26	25	27	30	A	38	38	37	36	36	34	34	32	29	27	28.7	38.1
24-Jan-08	26	28	29	28	28	28	28	26	31	31	31	33	A	35	36	36	35	35	35	34	34	33	33	33	31.6	35.8
25-Jan-08	33	28	29	29	31	32	31	32	32	29	28	A	30	36	36	36	36	36	36	37	38	38	37	37	33.5	38.3
26-Jan-08	36	37	38	39	40	40	40	39	39	39	A	38	37	36	37	35	26	28	29	30	30	N	N	31	35.3	39.7
27-Jan-08	N	31	N	N	31	31	31	31	31	A	32	32	32	32	32	32	33	32	32	32	32	32	32	31	31.8	32.6
28-Jan-08	27	27	28	27	26	27	26	25	A	26	27	N	28	28	27	26	25	24	22	29	30	27	27	26	26.6	29.5
29-Jan-08	25	25	22	21	20	18	17	A	17	20	23	25	26	26	25	24	24	24	24	22	22	23	21	22	22.3	25.6
30-Jan-08	22	22	21	22	20	19	A	21	21	21	22	23	25	25	26	26	25	25	23	22	22	23	22	22	22.6	26.0
31-Jan-08	18	19	20	20	19	A	12	12	14	17	19	20	21	22	22	22	21	21	21	20	18	17	16	15	18.3	22.0
Hourly Avg	23.2	25.4	24.8	26.1	24.4	24.1	24.5	29.4	24.5	27.1	25.7	26.0	27.4	27.7	27.5	27.1	26.1	25.0	23.9	23.8	23.9	23.6	22.8	23.4		
Hourly Max	38.4	37.6	38.2	39.2	39.7	39.6	39.5	132.3	39.4	89.5	39.9	39.0	41.7	41.9	42.4	39.8	39.0	39.5	38.9	38.5	38.9	39.3	38.4	37.9		

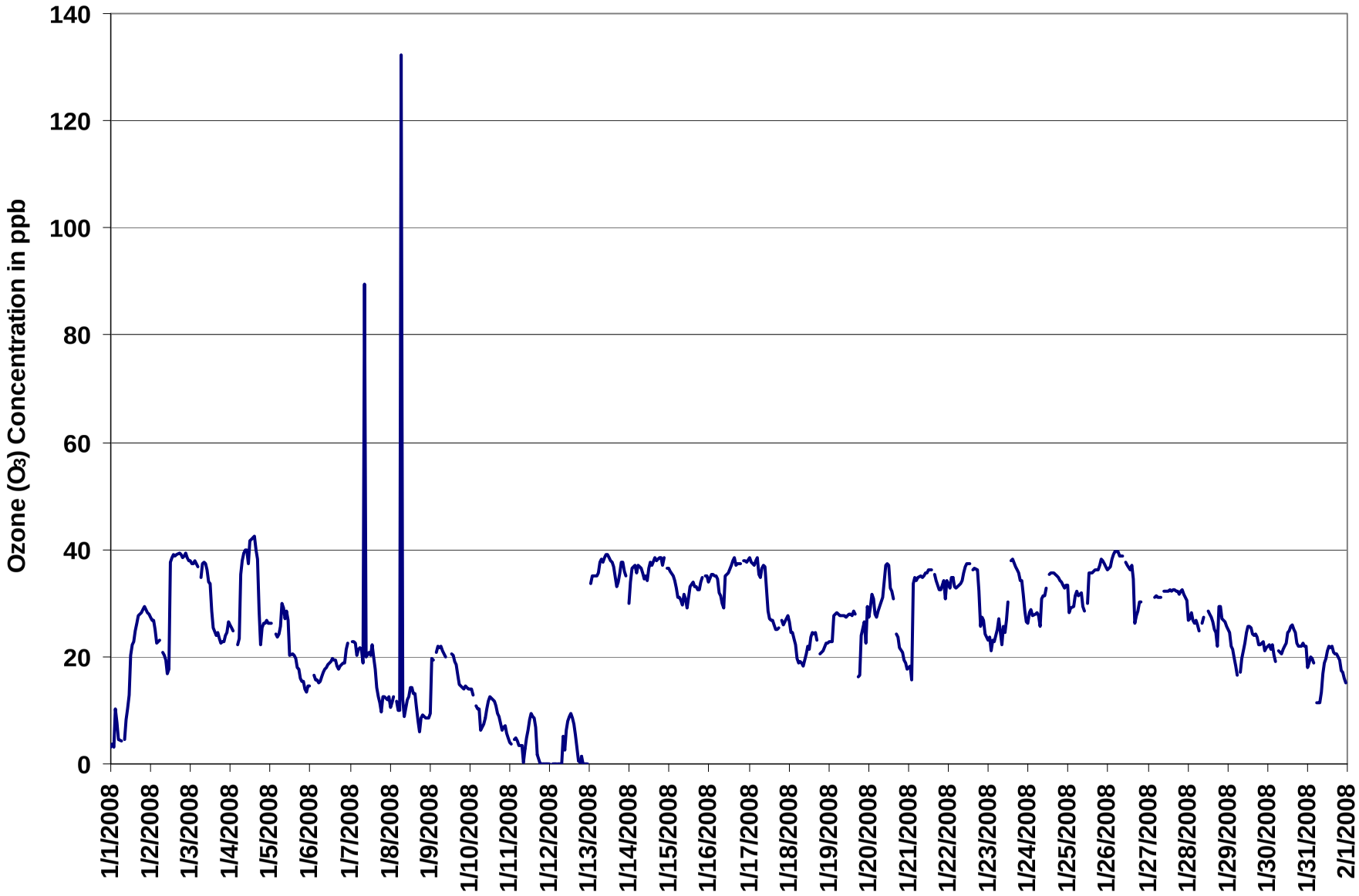
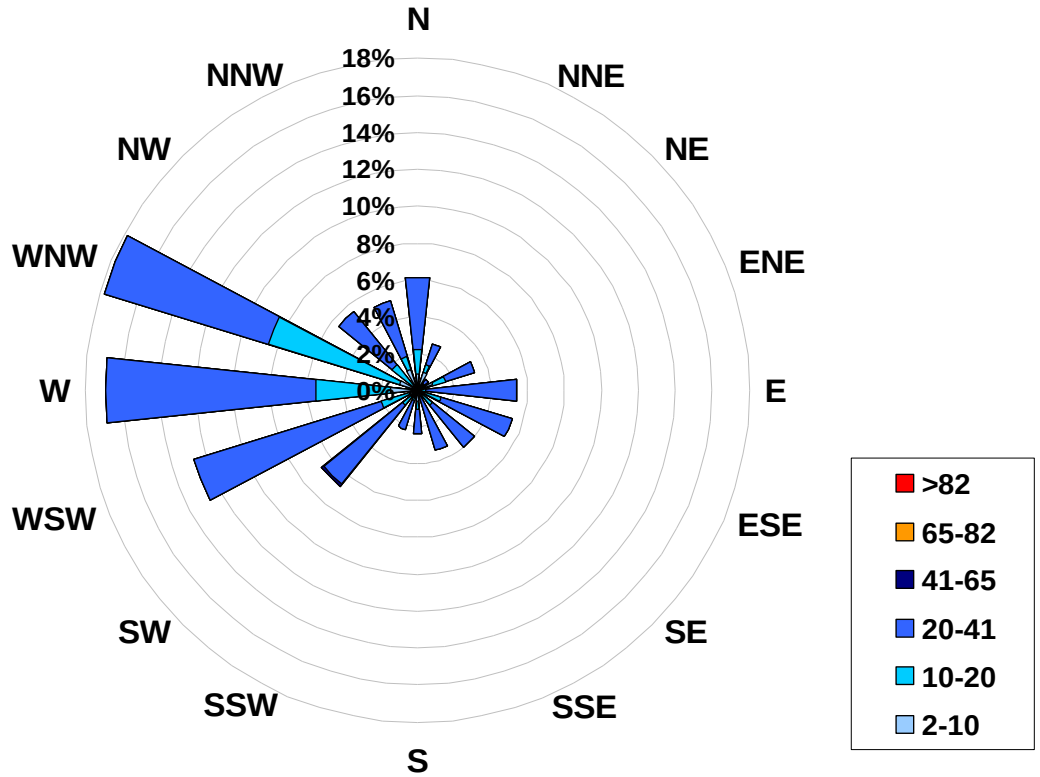


Figure 53. PASZA - Portable-Spirit River Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Portable-Spirit River Site for January 2008



Calms:	0%

Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
2.0	<	10	93
10	to	20	144
20	to	41	464
41	to	65	1
65	to	82	0
	>	82	0
Total Non-Zero Values			702

PASZA - Portable-Spirit River Ozone Eight Hour Average Summary

Station: Portable-Spirit River
Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

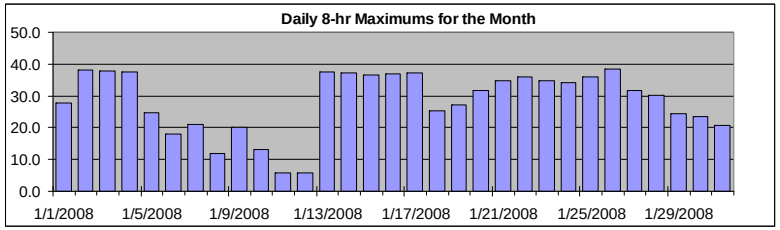
Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	38.3	ppb	26-Jan	10:00 11:00

Percentile	99	95	75	50	25	5	1
	37.9	36.8	31.8	24.3	17.7	4.1	0.0



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	23:00 / 0:00	Daily Maximum
1-Jan-08	5	5	5	6	6	6	3	3	4	4	5	6	7	10	12	14	16	19	21	24	25	26	27	28	27.6
2-Jan-08	28	28	27	27	26	25	25	24	22	21	20	19	18	21	23	25	28	30	33	36	38	38	38	38	38.3
3-Jan-08	38	38	37	37	37	37	36	36	36	36	35	34	33	32	31	29	27	26	25	24	23	22	22	22	37.9
4-Jan-08	22	23	23	23	23	23	23	25	27	29	31	32	34	36	38	37	36	34	32	30	29	27	25	24	37.6
5-Jan-08	24	24	25	25	24	24	23	24	24	24	24	24	24	24	23	22	21	20	18	17	17	16	15	14	24.8
6-Jan-08	14	13	13	14	14	14	14	14	15	15	15	16	16	17	17	18	18	18	18	18	17	17	17	18	17.9
7-Jan-08	18	19	20	20	20	21	21	20	20	19	18	18	18	18	18	17	16	16	15	13	13	11	10	9	20.9
8-Jan-08	9	9	9	9	9	9	9	11	11	11	11	11	11	11	12	11	11	11	10	9	9	8	8	7	12.0
9-Jan-08	7	8	10	11	12	14	16	18	19	20	N	N	N	N	N	N	N	N	N	16	16	15	14	14	20.0
10-Jan-08	13	13	13	13	13	12	11	10	9	8	8	8	8	8	9	10	11	11	10	9	8	8	7	6	13.3
11-Jan-08	5	5	5	5	4	4	4	3	3	2	3	3	3	4	5	5	6	6	5	4	4	3	1	1	5.8
12-Jan-08	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	5	6	6	5	4	3	2	1	0	5.7
13-Jan-08	0	5	10	14	19	24	30	35	35	36	36	37	37	37	37	37	36	35	34	34	34	34	33	33	37.4
14-Jan-08	33	33	33	33	33	33	34	34	35	35	35	35	35	35	35	35	35	36	36	37	37	37	37	37	37.1
15-Jan-08	37	36	36	35	34	33	33	32	31	30	30	29	29	29	29	30	30	30	31	31	32	32	32	33	36.6
16-Jan-08	33	33	34	34	34	34	34	33	32	31	31	31	31	31	32	33	34	36	36	37	37	37	37	37	37.0
17-Jan-08	37	37	37	37	37	37	36	36	35	35	35	34	33	31	30	29	28	26	25	25	25	25	25	25	37.1
18-Jan-08	25	25	25	24	23	22	21	20	19	18	17	18	18	18	19	20	21	22	22	22	22	22	22	21	25.2
19-Jan-08	21	21	21	22	23	24	25	25	26	26	27	27	27	27	27	27	27	27	24	21	21	20	18	18	27.2
20-Jan-08	18	18	21	23	24	25	26	26	27	29	29	30	31	31	32	31	31	29	27	25	24	22	20	19	31.6
21-Jan-08	18	18	17	17	18	20	23	25	27	29	32	34	34	35	35	35	35	35	34	33	32	32	31	31	34.7
22-Jan-08	31	31	31	32	32	32	33	33	33	33	33	34	34	35	35	36	36	36	35	33	32	30	29	27	35.9
23-Jan-08	25	24	22	22	21	21	21	20	20	20	20	21	22	22	24	27	29	31	33	34	35	34	33	31	34.7
24-Jan-08	30	29	28	27	26	26	26	26	26	27	27	28	28	29	30	32	33	33	34	34	34	34	34	33	34.3
25-Jan-08	33	32	31	30	30	30	29	29	29	29	29	29	29	30	30	31	31	32	34	34	35	35	36	36	36.1
26-Jan-08	36	36	36	36	37	37	37	37	38	38	38	38	38	37	37	36	34	32	32	31	30	29	N	N	38.3
27-Jan-08	N	N	N	N	N	N	N	N	N	N	N	31	31	31	31	32	32	32	32	32	32	32	31	31	31.8
28-Jan-08	30	30	29	28	28	27	26	26	25	25	25	N	N	N	N	N	26	26	25	25	25	25	24	24	30.3
29-Jan-08	24	24	24	24	22	21	20	19	18	18	18	18	19	20	22	22	23	23	24	23	22	21	20	20	24.4
30-Jan-08	19	19	18	19	19	20	20	20	19	19	19	19	20	21	21	22	23	23	23	23	23	23	22	22	23.4
31-Jan-08	21	20	20	19	19	18	17	15	14	14	14	14	14	15	17	18	19	20	20	20	20	19	18	17	20.8
Hourly Max	37.9	37.7	37.4	37.4	37.1	36.9	37.1	37.5	37.8	38.2	38.3	38.1	37.7	37.3	37.6	37.2	36.4	35.8	36.2	36.5	38.1	38.3	38.2	38.1	

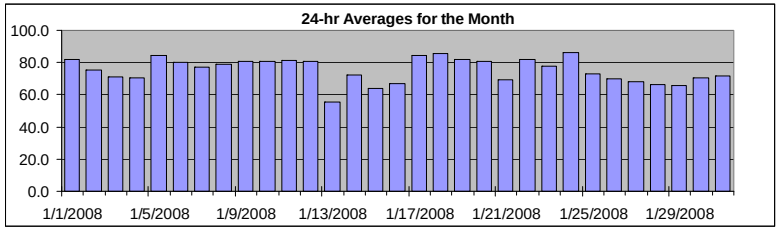
PASZA - Portable-Spirit River Relative Humidity Monthly Summary

Station: Portable-Spirit River
Station Owner: PASZA

HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	94.8	%	17-Jan	2:00 3:00
Maximum 24-hr Value:	86.2	%	24-Jan	

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
	91.6	88.1	83.2	77.8	68.0	58.8	51.4	75.3 %	77.8 %

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**

Day	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-Jan-08	79	78	77	79	77	76	77	76	77	77	78	78	79	82	82	84	86	87	88	89	89	89	89	88	81.7	89.3
2-Jan-08	87	87	87	85	85	85	84	86	83	84	84	84	84	73	67	68	66	63	63	64	62	59	60	62	75.5	86.8
3-Jan-08	62	63	63	59	63	60	64	61	61	66	65	62	69	69	75	76	79	82	84	84	87	85	85	84	71.2	86.5
4-Jan-08	85	85	85	83	84	82	72	61	63	62	61	67	56	47	53	51	55	73	75	73	74	79	82	80	70.3	84.9
5-Jan-08	81	81	82	81	81	80	85	88	90	90	88	86	83	82	82	82	82	82	85	85	89	86	87	87	84.3	90.0
6-Jan-08	88	88	89	89	87	82	81	80	79	80	78	75	74	74	74	75	75	76	76	77	80	81	83	82	80.2	89.1
7-Jan-08	83	80	79	79	78	78	78	80	81	81	77	73	66	68	63	61	75	76	77	84	84	84	83	83	77.1	84.1
8-Jan-08	83	82	81	80	80	82	79	78	78	77	77	77	77	76	77	78	79	79	79	81	80	79	80	81	79.2	83.5
9-Jan-08	81	82	82	82	82	82	82	82	82	82	81	81	81	81	80	80	79	78	78	78	78	78	79	79	80.5	82.3
10-Jan-08	79	79	78	78	78	77	78	79	79	80	80	80	81	79	81	82	82	83	83	83	83	83	82	82	80.4	83.4
11-Jan-08	83	83	84	84	83	84	83	83	82	82	81	79	77	76	70	69	79	83	84	84	82	83	84	84	81.1	84.1
12-Jan-08	84	83	84	84	84	84	85	82	85	83	79	74	64	62	70	80	83	85	86	85	85	84	84	85	81.0	86.0
13-Jan-08	73	66	60	60	60	59	54	54	53	51	52	52	48	51	48	49	51	52	57	56	54	59	56	59	55.6	73.1
14-Jan-08	65	64	68	69	71	69	72	75	76	75	75	74	69	62	72	77	75	59	52	71	92	90	85	86	72.6	92.5
15-Jan-08	84	73	60	61	69	68	73	72	71	69	66	63	59	56	55	56	55	59	62	62	60	59	60	65	64.0	83.8
16-Jan-08	66	65	65	67	68	72	81	85	81	77	70	67	63	61	60	60	61	60	63	62	61	62	63	63	66.8	84.6
17-Jan-08	63	74	95	87	81	89	92	91	82	75	76	82	84	81	83	84	89	92	90	87	85	85	85	86	84.2	94.8
18-Jan-08	86	87	87	88	89	85	85	85	84	83	83	83	81	83	85	85	85	86	86	86	86	86	87	87	85.3	88.7
19-Jan-08	87	87	88	88	87	86	85	84	83	82	81	80	80	64	66	82	85	86	84	82	81	80	80	80	81.9	88.2
20-Jan-08	80	81	81	80	81	81	81	81	80	82	81	78	78	80	79	72	81	82	85	82	82	82	83	82	80.5	85.2
21-Jan-08	81	82	82	82	74	75	75	72	71	68	64	62	62	61	60	59	61	65	68	69	70	69	70	68	69.6	81.9
22-Jan-08	68	70	69	72	75	77	79	82	83	84	85	83	84	86	83	83	85	86	91	91	90	89	88	87	82.1	91.5
23-Jan-08	88	87	85	85	86	87	87	87	86	86	86	87	92	89	60	56	59	59	63	65	68	70	72	80	77.9	92.1
24-Jan-08	77	79	76	79	84	86	88	89	92	92	92	91	90	88	88	86	85	86	87	87	87	88	87	86	86.2	92.4
25-Jan-08	86	88	86	83	83	83	83	83	84	84	83	77	73	59	59	64	59	60	60	60	60	63	61	68	72.9	88.4
26-Jan-08	88	87	70	61	58	61	60	61	61	64	66	60	59	59	60	75	83	87	84	81	77	N	N	72	69.8	87.5
27-Jan-08	N	74	N	N	74	73	72	70	68	70	68	64	61	60	60	59	62	70	72	73	71	71	70	70	68.2	73.9
28-Jan-08	72	72	70	70	70	70	69	68	69	69	67	64	58	63	64	62	62	62	64	66	65	64	64	69	66.2	71.7
29-Jan-08	71	68	67	66	66	66	65	65	65	65	66	65	63	62	63	63	64	64	65	67	68	68	68	68	65.9	71.2
30-Jan-08	69	69	70	71	71	70	70	69	70	70	67	68	66	68	68	69	71	72	73	73	72	72	73	75	70.3	74.7
31-Jan-08	74	74	74	74	73	73	71	71	72	73	72	71	70	70	69	68	70	71	71	71	72	72	72	72	71.7	74.1
Hourly Avg	78.4	78.0	77.5	76.9	76.8	76.8	77.1	76.8	76.5	76.3	75.1	73.8	71.9	70.0	69.5	70.8	73.0	74.4	75.3	76.0	76.6	76.7	76.7	77.3		
Hourly Max	87.7	88.5	94.8	89.1	88.7	88.6	92.5	90.7	92.3	92.4	91.7	91.0	92.1	89.1	87.7	86.5	89.4	91.8	90.7	91.5	92.5	89.5	88.8	87.6		

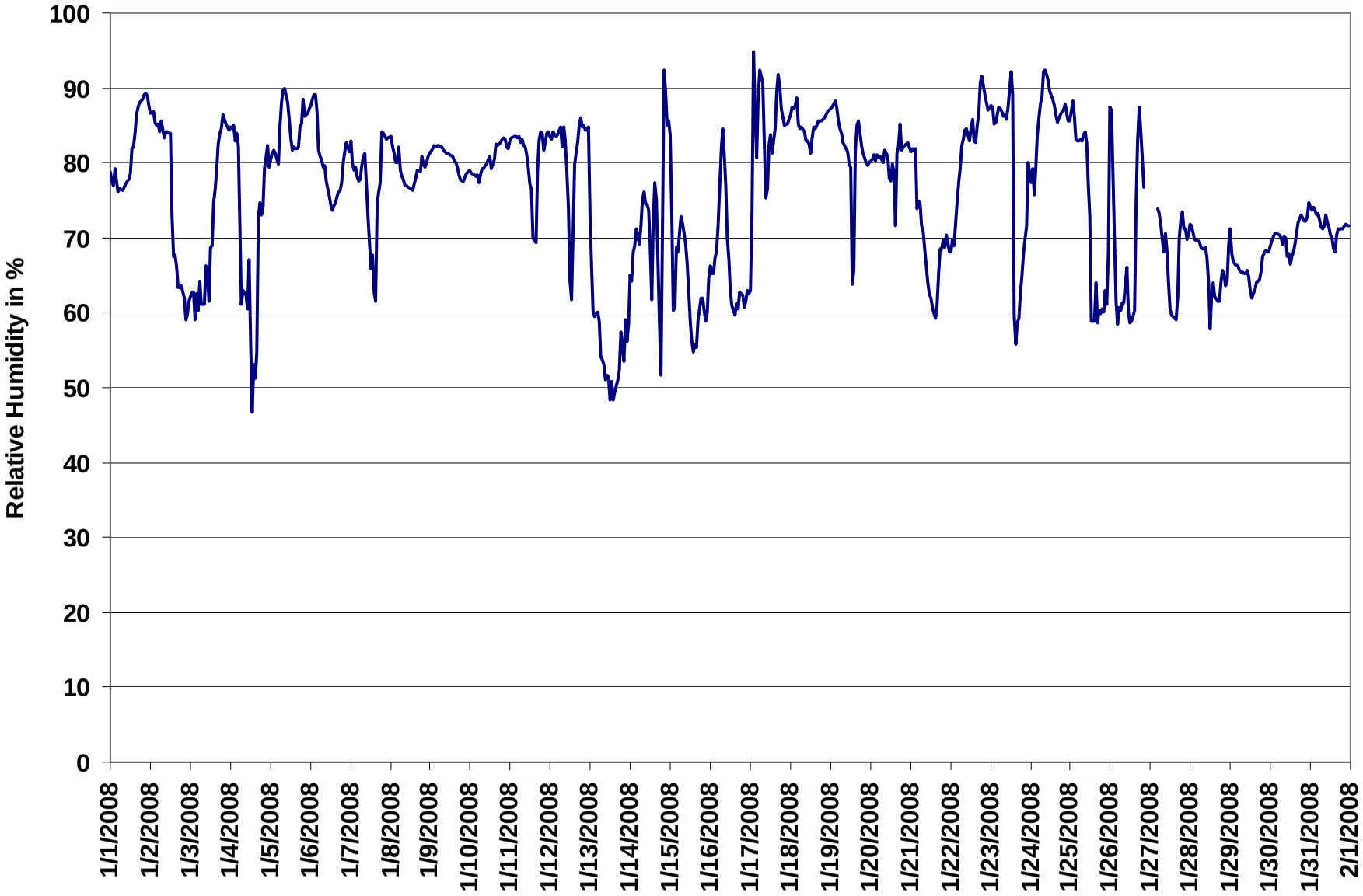


Figure 54. PASZA - Portable-Spirit River Relative Humidity 1-hr Average Monthly Trend

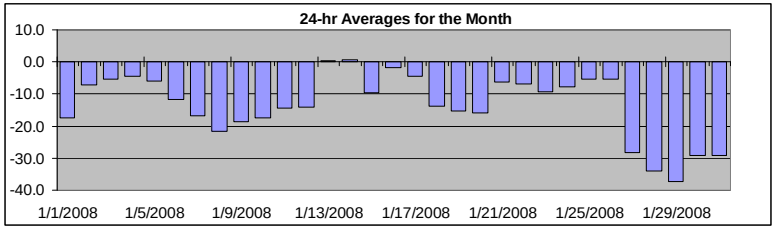
PASZA - Portable-Spirit River Temperature Monthly Summary

Station: Portable-Spirit River
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	4.0	°C	14-Jan	13:00 14:00
Maximum 24-hr Value:	0.6	°C	14-Jan	

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
	3.3	1.0	-5.7	-12.4	-18.6	-32.9	-39.7	-13.3 °C	-12.4 °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**

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-Jan-08	-21	-21	-22	-21	-22	-23	-23	-23	-22	-22	-20	-19	-19	-16	-16	-15	-13	-12	-12	-11	-11	-10	-11	-12	-17.3	-10.4
2-Jan-08	-12	-12	-12	-14	-14	-14	-15	-14	-15	-15	-14	-13	-13	1	1	1	0	0	0	0	0	0	0	-1	-7.2	1.2
3-Jan-08	-1	-1	-1	-1	-3	-2	-4	-2	-2	-4	-4	-2	-5	-5	-8	-9	-9	-10	-10	-10	-10	-9	-9	-8	-5.4	-0.7
4-Jan-08	-8	-8	-8	-8	-9	-8	-5	0	0	0	0	-4	-1	2	0	0	-1	-7	-7	-6	-6	-7	-7	-6	-4.3	2.0
5-Jan-08	-6	-6	-6	-5	-5	-5	-5	-5	-5	-5	-4	-4	-5	-5	-6	-6	-6	-7	-7	-8	-8	-8	-8	-8	-6.0	-4.4
6-Jan-08	-9	-9	-9	-9	-9	-9	-10	-12	-13	-13	-13	-13	-12	-12	-12	-12	-12	-12	-13	-13	-13	-13	-13	-13	-11.6	-8.7
7-Jan-08	-13	-15	-16	-15	-15	-16	-17	-18	-19	-19	-18	-17	-16	-16	-15	-14	-16	-16	-17	-20	-20	-20	-20	-21	-16.9	-13.4
8-Jan-08	-21	-21	-22	-23	-23	-23	-23	-22	-24	-24	-23	-23	-23	-21	-22	-21	-20	-20	-20	-21	-20	-20	-19	-18	-21.5	-18.4
9-Jan-08	-18	-17	-17	-17	-17	-17	-17	-17	-17	-18	-18	-18	-17	-18	-18	-18	-19	-20	-21	-21	-21	-21	-19	-20	-18.5	-16.8
10-Jan-08	-19	-20	-20	-20	-19	-21	-21	-19	-19	-19	-18	-17	-15	-15	-15	-14	-15	-16	-16	-16	-16	-15	-16	-17	-17.4	-14.1
11-Jan-08	-15	-15	-14	-14	-15	-15	-15	-16	-16	-17	-17	-15	-13	-12	-10	-10	-14	-14	-14	-14	-14	-15	-16	-15	-14.4	-9.9
12-Jan-08	-15	-16	-16	-16	-15	-16	-16	-17	-17	-16	-16	-15	-12	-11	-14	-15	-15	-13	-12	-11	-11	-11	-11	-11	-14.0	-10.7
13-Jan-08	-2	1	1	0	-1	-1	0	1	1	1	1	1	1	1	2	1	1	1	0	1	1	-1	0	0	0.4	1.6
14-Jan-08	-1	1	1	2	2	3	3	3	2	3	3	3	3	4	3	1	1	0	-1	-3	-4	-4	-4	-6	0.6	4.0
15-Jan-08	-6	-6	-7	-9	-10	-11	-12	-13	-14	-13	-12	-11	-10	-9	-8	-8	-8	-10	-11	-10	-9	-7	-8	-9	-9.6	-6.0
16-Jan-08	-9	-7	-6	-6	-5	-6	-11	-11	-9	-7	-3	0	1	2	3	4	3	3	3	3	4	3	3	3	-1.8	3.8
17-Jan-08	3	2	0	1	1	1	0	-1	-1	0	-2	-6	-7	-7	-7	-8	-8	-9	-10	-11	-11	-10	-10	-10	-4.6	3.1
18-Jan-08	-11	-12	-11	-12	-14	-15	-15	-15	-15	-16	-16	-15	-15	-15	-15	-15	-14	-14	-13	-13	-13	-12	-12	-12	-13.8	-10.8
19-Jan-08	-11	-11	-11	-11	-12	-12	-13	-13	-14	-15	-15	-15	-16	-12	-13	-16	-16	-18	-19	-19	-20	-20	-21	-20	-15.2	-11.1
20-Jan-08	-19	-19	-18	-18	-17	-17	-17	-17	-15	-13	-13	-12	-16	-15	-14	-11	-12	-14	-17	-18	-17	-17	-17	-16	-15.8	-11.3
21-Jan-08	-16	-15	-14	-12	-6	-7	-7	-6	-6	-6	-4	-4	-3	-3	-3	-3	-3	-4	-5	-5	-6	-6	-5	-3	-6.2	-2.6
22-Jan-08	-4	-5	-4	-5	-6	-7	-7	-7	-6	-5	-5	-5	-5	-5	-5	-5	-5	-7	-9	-10	-11	-12	-13	-14	-6.9	-3.9
23-Jan-08	-13	-14	-15	-15	-14	-13	-13	-13	-14	-14	-14	-13	-7	-4	-2	-2	-3	-3	-5	-6	-6	-7	-7	-10	-9.4	-1.6
24-Jan-08	-8	-9	-8	-9	-9	-9	-10	-10	-9	-9	-9	-8	-8	-8	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-7.9	-6.2
25-Jan-08	-6	-7	-6	-6	-6	-6	-6	-6	-7	-9	-8	-8	-7	-4	-4	-5	-3	-4	-4	-5	-4	-4	-4	-4	-5.5	-3.2
26-Jan-08	-5	-5	-3	-2	-1	-2	-1	-1	-1	-2	-3	-1	-1	-1	-1	-4	-8	-11	-13	-14	-16	N	N	-21	-5.3	-0.7
27-Jan-08	N	-23	N	N	-25	-26	-27	-27	-28	-28	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-30	-30	-30	-32	-28.4	-22.8
28-Jan-08	-33	-34	-34	-33	-33	-34	-35	-36	-36	-37	-35	-33	-31	-33	-33	-32	-32	-31	-33	-33	-33	-34	-36	-39	-33.9	-30.7
29-Jan-08	-38	-39	-40	-40	-40	-40	-40	-40	-40	-40	-40	-39	-38	-37	-37	-37	-36	-35	-34	-34	-33	-32	-32	-32	-37.2	-31.8
30-Jan-08	-32	-31	-30	-30	-29	-29	-29	-29	-29	-29	-29	-29	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-29	-29	-29.0	-27.9
31-Jan-08	-30	-31	-31	-32	-32	-32	-33	-33	-32	-31	-30	-30	-29	-28	-27	-27	-27	-27	-27	-27	-27	-27	-26	-26	-29.2	-26.2
Hourly Avg	-13.3	-13.6	-13.3	-13.3	-13.7	-13.9	-14.3	-14.2	-14.3	-14.2	-13.7	-13.3	-12.7	-11.6	-11.6	-11.7	-12.1	-12.7	-13.3	-13.4	-13.5	-13.4	-13.5	-14.0		
Hourly Max	3.1	1.8	1.1	2.5	2.4	3.3	3.1	2.5	2.1	2.5	2.8	2.8	3.3	4.0	3.1	3.6	3.2	3.5	3.3	3.5	3.8	3.5	2.9	2.9		

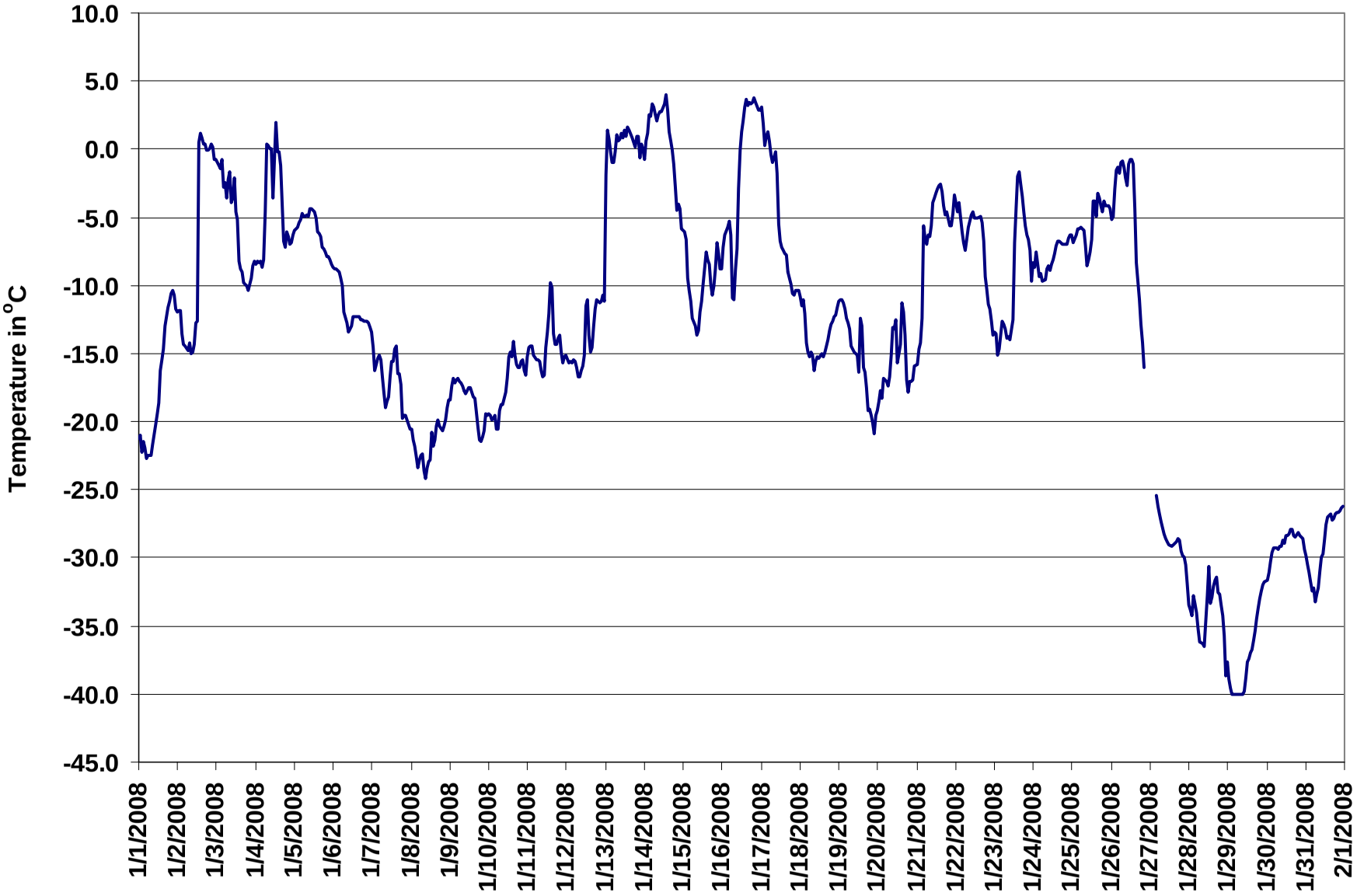


Figure 55. PASZA - Portable-Spirit River Temperature 1-hr Average Monthly Trend

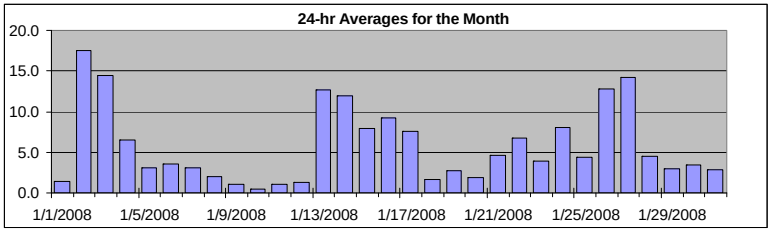
PASZA - Portable-Spirit River Scalar Wind Speed Monthly Summary

Station: Portable-Spirit River
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	54.4	km/hr	3-Jan	2:00 3:00
Maximum 24-hr Value:	17.5	km/hr	2-Jan	

Calm Time:	0 hrs	**0%** calms	Operational Time:	738 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	90.0%

Percentile	99	95	75	50	25	5	1	AverageS
	36.6	19.3	6.7	3.4	1.7	0.6	0.0	5.7 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**

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-hr Scalar Average	Daily Max
1-Jan-08	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	2	2	2	1	1.4	3.0
2-Jan-08	1	1	1	2	2	2	1	2	1	1	1	1	3	29	50	35	28	32	34	24	31	45	53	38	17.5	52.8
3-Jan-08	47	41	54	38	17	17	13	26	24	15	8	5	4	4	3	3	2	2	3	2	4	6	3	4	14.4	54.4
4-Jan-08	4	3	3	6	7	5	9	15	12	13	10	6	8	9	4	8	5	6	7	3	3	4	5	3	6.6	15.0
5-Jan-08	3	4	2	2	4	2	4	3	2	2	4	4	3	4	3	3	3	3	3	4	2	4	2	2	3.1	4.3
6-Jan-08	2	2	2	2	3	3	3	4	5	3	4	5	4	5	4	3	3	4	5	4	3	4	3	4	3.5	5.4
7-Jan-08	3	4	4	3	4	3	1	3	7	4	3	4	1	1	1	1	2	3	2	5	6	4	3	3	3.1	6.6
8-Jan-08	2	3	3	3	4	3	3	2	2	1	1	1	2	1	2	2	2	2	2	2	2	1	1	1	2.0	4.2
9-Jan-08	2	1	1	1	2	1	1	1	1	1	3	2	1	1	1	1	0	1	1	1	1	1	0	1	1.0	2.7
10-Jan-08	1	1	1	0	0	1	1	1	1	1	0	1	1	0	1	0	0	0	1	1	1	1	1	1	0.5	1.1
11-Jan-08	0	0	0	1	1	1	1	1	2	2	3	1	1	1	0	1	1	1	2	2	1	1	2	2	1.1	2.6
12-Jan-08	1	1	2	2	1	2	1	1	2	1	1	1	0	1	1	3	1	1	1	2	2	1	1	2	1.3	2.6
13-Jan-08	14	18	14	12	11	11	21	25	21	25	19	11	9	7	9	11	10	12	8	9	7	6	7	8	12.7	25.3
14-Jan-08	7	8	9	20	23	30	25	11	10	18	17	14	14	15	7	8	6	8	6	7	6	10	4	5	11.9	30.1
15-Jan-08	6	11	8	4	3	4	5	5	11	11	6	1	2	3	5	10	14	13	14	13	12	8	11	10	7.9	14.1
16-Jan-08	9	10	8	7	9	3	4	3	2	3	6	8	9	8	8	11	13	14	14	14	14	15	17	14	9.3	17.1
17-Jan-08	12	18	13	6	7	3	4	3	5	4	11	12	10	7	6	8	5	10	11	13	6	2	3	3	7.6	18.3
18-Jan-08	6	5	1	3	4	3	3	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	2	1	1.6	6.3
19-Jan-08	1	1	2	6	7	8	8	6	6	4	3	2	2	1	0	0	1	1	1	2	2	2	1	0	2.7	7.8
20-Jan-08	1	1	0	1	1	2	0	0	2	2	1	2	4	4	3	1	4	4	4	2	3	2	2	2	1.9	4.2
21-Jan-08	2	3	1	2	5	4	5	6	6	6	6	6	6	7	5	6	6	5	3	5	2	4	4	8	4.7	8.3
22-Jan-08	9	6	5	5	5	6	6	6	5	3	3	3	6	9	13	9	13	13	10	8	7	6	4	4	6.8	13.3
23-Jan-08	7	7	4	2	2	2	2	2	2	2	2	3	2	4	5	6	4	4	8	9	5	6	2	3	3.9	9.0
24-Jan-08	3	4	3	4	3	3	4	2	8	10	12	15	13	13	17	19	15	9	9	6	4	5	8	5	8.1	19.3
25-Jan-08	2	2	4	3	3	2	3	6	9	8	7	4	5	4	2	3	5	5	4	4	6	8	3	3	4.4	8.5
26-Jan-08	7	9	9	15	19	16	21	11	10	7	4	2	5	6	5	13	12	11	12	27	29	N	N	31	12.7	31.4
27-Jan-08	N	21	N	N	22	21	21	19	20	17	19	19	20	19	16	16	9	2	2	4	9	8	9	5	14.2	22.5
28-Jan-08	5	5	4	2	3	5	6	8	10	9	8	3	2	4	4	3	2	5	5	4	3	5	2	2	4.5	9.8
29-Jan-08	4	2	2	4	3	3	4	5	7	4	N	2	1	2	3	5	3	2	2	2	3	2	2	2	3.0	6.6
30-Jan-08	3	2	2	2	2	2	2	2	1	1	1	3	3	6	9	6	7	6	2	4	4	5	4	3	3.4	8.7
31-Jan-08	3	2	5	6	6	5	5	3	2	2	2	3	2	2	1	1	2	2	3	4	3	2	1	1	2.9	6.5
1-hr Average	5.5	6.4	5.6	5.5	6.0	5.6	6.0	6.0	6.2	5.9	5.6	4.7	4.7	5.7	6.1	6.3	5.8	5.9	5.8	6.0	5.9	5.6	5.4	5.5		
Hourly Max	47.3	41.5	54.4	37.8	23.2	30.1	24.9	26.1	24.0	25.3	19.0	18.6	19.8	29.4	50.3	34.5	28.3	32.2	34.3	26.8	31.2	45.4	52.8	38.1		

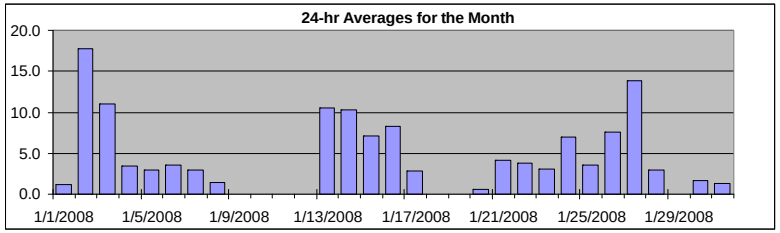
PASZA - Portable-Spirit River Vector Wind Speed Monthly Summary

Station: Portable-Spirit River
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	54.3	km/hr	3-Jan	2:00 3:00
Maximum 24-hr Value:	17.7	km/hr	2-Jan	

Calm Time:	0 hrs	**0%** calms	Operational Time: 738 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 90.0%

Percentile	99	95	75	50	25	5	1	AverageV
	36.5	19.2	6.4	3.1	1.5	0.4	0.2	9.8 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**

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-hr Vector Average	Daily Max
1-Jan-08	1	1	1	2	1	1	0	1	0	0	1	1	1	1	1	1	2	3	3	3	2	2	2	1	1.1	2.9
2-Jan-08	0	1	1	2	2	2	1	2	1	1	1	1	2	29	50	34	28	32	34	24	31	45	53	38	17.7	52.6
3-Jan-08	47	41	54	38	13	15	8	25	23	3	6	3	2	2	3	2	1	2	3	2	4	5	3	4	11.0	54.3
4-Jan-08	4	3	3	6	6	4	9	15	12	13	9	6	8	9	3	8	5	5	6	2	3	2	4	2	3.5	15.0
5-Jan-08	3	4	2	2	3	2	4	3	2	2	4	4	3	4	3	3	3	3	3	4	2	4	2	2	3.0	4.1
6-Jan-08	2	2	2	2	3	3	3	4	5	3	4	5	4	4	4	3	3	4	5	4	3	4	3	4	3.5	5.3
7-Jan-08	3	3	3	3	3	3	1	3	7	4	3	4	0	1	0	0	2	3	1	4	6	4	3	3	3.0	6.5
8-Jan-08	2	3	2	3	4	3	3	2	2	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1.4	4.2
9-Jan-08	1	1	1	1	1	1	1	1	1	1	3	2	0	0	1	1	0	1	1	0	1	1	0	1	0.0	2.7
10-Jan-08	1	1	1	0	0	1	1	1	1	1	0	1	0	0	1	0	0	0	1	1	0	1	1	0	0.0	1.1
11-Jan-08	0	0	0	1	0	0	1	1	2	2	3	1	1	1	0	0	1	1	2	2	1	0	2	1	0.0	2.6
12-Jan-08	1	1	2	2	1	2	0	1	2	1	1	1	0	0	1	2	1	1	1	1	2	1	0	2	0.0	2.5
13-Jan-08	13	18	14	11	11	11	20	25	21	25	19	11	9	7	9	11	10	11	7	9	6	5	7	7	10.6	25.1
14-Jan-08	6	6	6	20	23	30	25	11	9	18	17	14	14	14	7	7	6	8	6	7	6	9	4	5	10.3	30.0
15-Jan-08	6	11	8	4	3	4	5	5	11	11	6	1	2	3	5	10	13	13	14	12	12	8	11	10	7.1	14.1
16-Jan-08	9	10	8	7	9	3	4	3	2	3	6	8	9	8	8	11	13	14	14	14	14	15	17	14	8.3	17.1
17-Jan-08	8	18	9	6	7	3	4	3	5	4	6	12	10	6	6	8	4	9	10	12	6	1	3	3	2.8	18.2
18-Jan-08	6	5	1	3	4	3	2	1	0	1	0	0	0	1	1	1	1	1	1	0	1	1	2	1	0.0	6.0
19-Jan-08	1	1	2	6	7	8	8	6	6	4	3	2	2	0	0	0	1	1	1	2	2	2	0	0	0.0	7.7
20-Jan-08	1	1	0	1	1	2	0	0	2	1	1	2	2	3	3	1	4	2	3	2	2	2	2	1	0.6	4.1
21-Jan-08	1	2	1	1	5	4	5	5	6	6	6	6	6	6	5	6	6	5	3	4	1	4	4	8	4.2	8.3
22-Jan-08	9	6	5	5	5	6	6	6	5	3	3	2	6	8	13	9	12	12	10	8	7	2	4	4	3.7	13.1
23-Jan-08	7	5	4	2	2	2	1	1	2	2	2	3	2	4	4	6	4	4	7	9	4	6	2	2	3.1	9.0
24-Jan-08	2	4	2	3	2	2	4	2	8	10	12	15	13	13	17	19	15	9	8	6	4	5	8	2	6.9	19.2
25-Jan-08	2	2	4	3	3	2	3	6	8	8	7	3	5	4	2	1	5	5	4	4	6	8	3	2	3.6	8.5
26-Jan-08	6	8	9	15	19	16	21	11	10	1	3	2	5	5	5	13	12	11	12	27	29	N	N	31	7.6	31.3
27-Jan-08	N	21	N	N	22	21	21	19	20	17	19	19	20	19	16	15	9	2	2	4	9	8	9	5	13.8	22.4
28-Jan-08	5	5	4	2	3	5	6	8	10	9	8	3	1	4	4	3	2	5	5	3	2	4	1	1	2.9	9.8
29-Jan-08	4	2	2	4	3	3	3	5	6	4	N	2	1	2	3	5	3	2	2	2	3	2	2	2	N	6.5
30-Jan-08	3	2	2	2	2	2	2	2	1	1	1	3	3	6	9	6	7	6	2	4	4	5	4	2	1.6	8.6
31-Jan-08	3	2	5	6	6	5	5	3	2	2	2	3	2	1	1	1	2	2	2	3	2	1	1	0	1.3	6.4
1-hr Vector	4.5	3.5	5.0	4.8	4.2	4.0	3.6	4.6	4.9	3.7	2.3	1.0	0.8	2.4	2.4	2.4	2.6	2.2	2.1	2.1	2.4	3.6	3.4	3.1		
Hourly Max	47.2	41.4	54.3	37.7	23.2	30.0	24.9	25.1	23.4	25.1	18.8	18.5	19.7	29.4	50.2	34.5	28.2	31.9	34.2	26.6	31.1	45.3	52.6	38.0		

PASZA - Portable-Spirit River Wind Direction Monthly Summary

Station: Portable-Spirit River
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

Calm Time:	0 hrs	**0%** calms			Operational Time:			738 hrs	
Calibration Time:		0 hrs			AMD Operational Uptime:			90.0%	
Percentile	99	95	75	50	25	5	1		Average
	357.8	340.8	287.2	257.7	155.4	31.2	3.9		259 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 / 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	WD Sector
1-Jan-08	188	30	60	191	21	190	205	18	34	15	22	101	137	107	92	102	101	101	93	91	101	99	98	133	103	ESE
2-Jan-08	172	334	285	254	244	248	249	253	276	263	261	360	336	259	252	255	258	254	248	260	258	250	237	229	250	WSW
3-Jan-08	232	231	235	238	178	205	128	236	240	180	141	179	133	8	31	296	338	333	304	320	264	304	330	336	228	SW
4-Jan-08	244	299	263	229	259	292	219	223	220	220	212	127	198	216	154	160	117	98	105	104	23	341	342	326	212	SSW
5-Jan-08	286	270	289	282	263	302	299	309	282	291	312	283	295	281	278	276	282	287	296	311	298	315	293	304	291	WNW
6-Jan-08	304	299	288	288	289	283	284	282	270	285	277	271	276	282	282	283	283	288	287	289	287	288	286	287	284	WNW
7-Jan-08	288	277	277	283	285	278	292	279	256	268	264	246	243	84	66	215	211	201	272	307	284	287	282	281	273	W
8-Jan-08	287	303	291	299	286	280	276	305	354	250	337	299	297	267	350	250	255	331	30	153	78	54	287	2	301	WNW
9-Jan-08	97	185	121	54	93	124	134	84	146	144	167	165	80	301	76	70	80	74	23	249	281	262	12	4	-	-
10-Jan-08	7	10	360	316	318	270	264	344	343	2	331	2	123	283	359	74	64	74	67	112	126	65	142	187	-	-
11-Jan-08	37	27	31	357	337	221	339	269	288	272	265	267	342	359	333	214	187	197	268	267	215	90	279	291	-	-
12-Jan-08	327	301	283	289	295	277	315	319	270	304	358	12	62	102	287	267	291	307	2	154	69	286	77	21	-	W
13-Jan-08	223	215	219	218	219	223	248	247	240	240	249	244	214	218	201	177	167	160	147	163	155	110	163	184	216	SW
14-Jan-08	158	197	230	234	232	237	235	237	230	223	225	229	237	253	285	286	284	300	300	292	280	319	290	290	244	WSW
15-Jan-08	304	321	313	300	278	284	281	278	256	257	265	295	286	286	267	251	240	233	233	238	247	263	257	244	261	W
16-Jan-08	225	257	263	273	264	289	61	129	155	28	273	272	269	272	279	266	261	264	267	268	267	264	261	265	265	W
17-Jan-08	322	5	284	278	301	288	285	288	302	306	34	91	83	85	103	81	139	87	87	81	106	238	5	143	40	NE
18-Jan-08	127	114	127	276	273	284	281	260	291	339	234	275	254	59	126	113	102	124	100	13	342	345	357	4	-	ENE
19-Jan-08	348	354	13	86	85	76	72	71	99	75	107	158	165	167	358	238	249	246	242	221	214	218	255	261	-	WNW
20-Jan-08	247	250	335	253	256	251	286	280	250	251	238	240	79	155	145	198	165	109	36	314	296	275	274	275	203	SSW
21-Jan-08	153	146	31	340	278	287	280	272	268	274	282	290	284	286	284	283	285	285	295	289	306	318	298	280	284	WNW
22-Jan-08	278	281	290	285	277	275	271	279	278	288	308	269	230	204	202	219	178	153	128	131	125	210	283	281	224	SW
23-Jan-08	259	335	258	264	230	266	296	175	289	345	293	235	268	280	274	264	275	274	258	258	352	227	244	158	268	W
24-Jan-08	237	278	334	27	349	61	77	91	89	109	109	96	103	115	111	104	108	120	117	118	112	97	114	94	104	ESE
25-Jan-08	262	256	255	271	293	295	271	251	247	227	205	209	155	270	287	43	278	278	274	273	265	255	270	280	255	WSW
26-Jan-08	201	174	233	249	245	252	252	262	255	298	117	233	237	238	351	317	310	307	312	349	351	N	N	4	294	WNW
27-Jan-08	N	349	N	N	341	336	346	341	337	334	356	2	6	5	359	2	351	312	315	325	351	358	5	307	349	N
28-Jan-08	288	270	272	293	285	263	260	250	255	259	249	269	248	107	83	73	198	168	158	184	240	242	241	291	247	WSW
29-Jan-08	271	320	335	297	295	305	296	291	296	307	N	306	1	218	240	242	251	229	268	282	276	307	303	273	-	-
30-Jan-08	276	291	286	287	287	284	276	281	302	344	31	76	72	93	90	103	80	80	135	90	122	115	122	180	94	E
31-Jan-08	218	291	288	284	270	270	272	288	300	315	309	343	358	356	81	124	157	154	104	127	110	170	246	238	277	W
Hourly Avg	243	271	256	256	263	264	264	261	259	254	255	255	241	257	252	256	241	233	246	274	286	266	258	274		

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: January 1, 2008 to February 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms	Operational Time:	738 hrs	
Calibration Time:	0 hrs		AMD Operational Uptime:	90.0%	

Percentile	99	95	75	50	25	5	1
	80.7	65.7	31.9	15.7	8.5	4.3	2.2

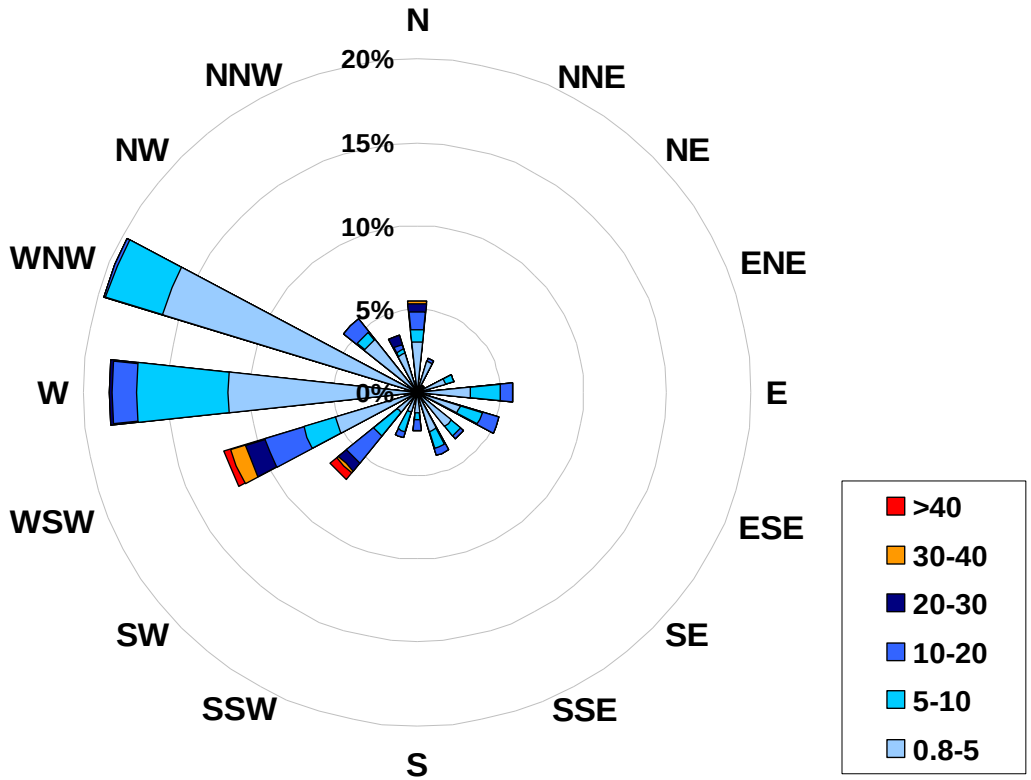
Status Flag Characters

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**

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-Jan-08	2	60	50	27	54	74	87	18	78	81	27	40	15	16	48	17	8	9	11	18	12	13	10	10	86.8
2-Jan-08	74	40	25	33	23	23	21	29	49	37	30	75	46	3	4	3	4	7	5	5	6	3	5	3	74.5
3-Jan-08	4	2	2	5	50	57	50	48	23	90	46	54	71	62	24	55	32	49	10	17	21	27	52	37	90.1
4-Jan-08	31	15	34	16	29	32	27	2	3	2	30	19	27	5	51	13	20	29	26	50	20	56	57	70	69.5
5-Jan-08	19	20	36	30	24	12	16	11	16	10	9	18	10	9	10	17	12	17	15	8	14	10	17	12	36.4
6-Jan-08	16	16	17	13	12	14	14	7	11	24	10	12	21	12	10	12	20	8	8	16	14	9	17	13	23.8
7-Jan-08	22	11	13	13	13	18	35	17	11	18	14	20	74	34	78	71	39	14	65	17	5	8	14	7	78.0
8-Jan-08	15	13	14	9	10	13	11	20	63	32	24	25	40	43	24	53	28	18	62	44	27	71	39	44	70.7
9-Jan-08	40	54	41	20	29	41	39	41	23	34	15	29	46	45	8	6	20	27	32	50	35	47	71	7	71.0
10-Jan-08	10	15	13	33	34	23	29	25	38	2	47	23	72	59	19	64	37	34	6	30	15	19	52	42	71.6
11-Jan-08	86	53	30	23	66	45	25	25	8	8	9	22	29	50	74	75	56	62	20	17	48	68	35	21	86.4
12-Jan-08	21	30	13	13	16	30	48	31	18	53	30	28	52	38	47	18	17	30	51	44	49	37	74	41	74.0
13-Jan-08	31	7	5	7	5	7	5	6	9	8	7	10	10	13	11	6	7	11	33	16	34	31	13	17	34.2
14-Jan-08	16	46	75	4	2	4	2	26	69	2	2	2	6	10	11	8	10	8	6	9	9	17	10	10	75.1
15-Jan-08	9	9	6	12	20	9	4	8	6	6	17	12	20	20	9	8	2	5	2	8	7	5	4	15	19.9
16-Jan-08	7	7	5	6	5	33	27	27	46	28	33	9	6	9	7	8	4	5	4	4	5	4	3	4	46.2
17-Jan-08	40	6	38	11	16	13	11	14	12	11	64	7	6	11	9	15	38	19	14	7	21	63	47	28	63.6
18-Jan-08	16	15	38	22	8	14	15	17	38	35	66	68	63	46	25	27	15	16	20	57	6	11	11	19	68.2
19-Jan-08	6	9	25	15	13	7	5	8	12	15	8	33	32	66	76	36	14	5	7	10	10	42	42	54	76.2
20-Jan-08	11	44	53	40	21	5	41	24	6	38	21	29	62	20	27	17	15	52	30	20	38	25	27	91	90.8
21-Jan-08	50	35	67	57	9	12	10	8	9	9	10	8	8	7	6	7	6	7	13	23	65	14	24	8	67.0
22-Jan-08	8	7	10	10	9	7	7	9	10	14	15	46	19	19	10	12	18	13	15	10	23	66	10	10	65.7
23-Jan-08	18	54	38	38	48	32	43	61	30	22	23	18	17	7	8	5	8	5	11	7	29	5	73	27	72.5
24-Jan-08	64	9	47	54	51	55	16	46	10	14	5	5	7	4	7	6	4	9	6	4	22	11	5	80	80.5
25-Jan-08	35	24	30	13	14	23	15	8	5	11	11	22	27	16	23	85	10	6	6	9	6	5	20	16	85.1
26-Jan-08	37	13	24	6	4	6	5	6	12	87	58	59	8	37	12	9	3	4	6	7	4	N	N	5	87.3
27-Jan-08	N	6	N	N	6	3	8	9	6	5	8	4	5	4	6	6	12	7	6	7	9	7	12	22	22.4
28-Jan-08	6	6	12	9	11	8	5	3	6	6	5	7	76	8	6	23	23	7	14	22	25	17	84	68	83.7
29-Jan-08	9	15	21	15	7	12	17	8	11	17	N	47	42	47	35	9	11	25	24	21	18	22	18	21	47.3
30-Jan-08	12	19	10	7	12	11	14	16	28	39	43	11	19	8	8	16	5	14	15	14	11	8	13	39	42.7
31-Jan-08	7	44	9	12	12	18	16	23	17	15	26	13	25	79	50	44	56	15	26	14	15	20	46	64	79.0
Hourly Max	86	60	75	57	66	74	87	61	78	90	66	75	76	79	78	85	56	62	65	57	65	71	84	91	

1-hr Average Wind Rose (in km/hr) Located at the Portable-Spirit River Site for January 2008



Calms:	**0%**

Frequency Distribution of Wind in km/hr			
Range			**Frequency (hrs)**
0.8	<	5	480
5	to	10	142
10	to	20	81
20	to	30	20
30	to	40	8
	>	40	6
Total Non-Zero Values			737

PASZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

PASZA - Valleyview Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

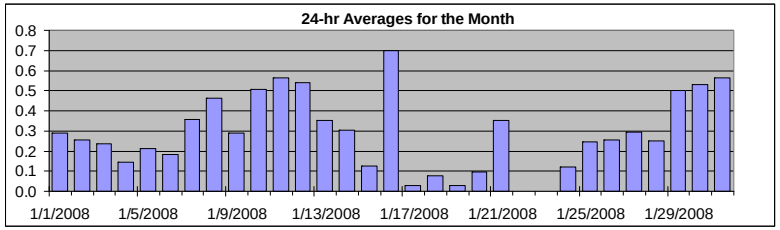
Station: Valleyview
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 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:	4.8	ppb	16-Jan	18:00 19:00
Maximum 24-hr Average:	0.7	ppb	16-Jan	



AIC Time:	30 hrs	Operational Time:	686 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	97.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.7	0.8	0.5	0.2	0.1	0.0	0.0	0.3 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**

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-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.3	0.9
2-Jan-08	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
3-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	1.1
4-Jan-08	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
5-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.2	0.8
6-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0.4	0.8
8-Jan-08	A	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0.5	0.9
9-Jan-08	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.3	0.7
10-Jan-08	A	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	1	1	1	0.5	0.9
11-Jan-08	A	0	0	0	1	0	0	0	0	0	0	2	1	1	1	1	0	0	1	1	1	1	0	0	0.6	2.0
12-Jan-08	A	1	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0.5	1.1
13-Jan-08	A	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
14-Jan-08	A	1	0	1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
15-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
16-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	1	5	2	0	0	0	0	0.7	4.8
17-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
18-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
19-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
20-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
21-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	0	0	0	1	0.4	1.1
22-Jan-08	A	1	0	1	1	0	0	0	0	0	0	C	C	C	C	C	C	M	M	M	M	M	M	M	N	0.7
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	C	C	0	0	0	0	0	0	0	0	1	N	1.4
24-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1	0.7
25-Jan-08	A	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
26-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0.3	0.6
27-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0.3	0.5
28-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.3	1.1
29-Jan-08	A	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	1	2	1	0	1	0	0	0	0.5	2.4
30-Jan-08	A	0	0	0	0	0	1	1	0	0	1	1	1	0	0	1	1	1	1	1	1	1	0	0	0.5	0.8
31-Jan-08	A	0	0	0	0	0	1	0	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0.6	0.9
Hourly Avg	N	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4		
Hourly Max	0.0	0.9	0.7	0.9	0.7	0.6	0.8	0.6	0.6	0.7	0.7	2.0	0.6	0.6	1.8	3.0	2.6	2.4	4.8	2.0	1.1	0.8	0.9	1.4		

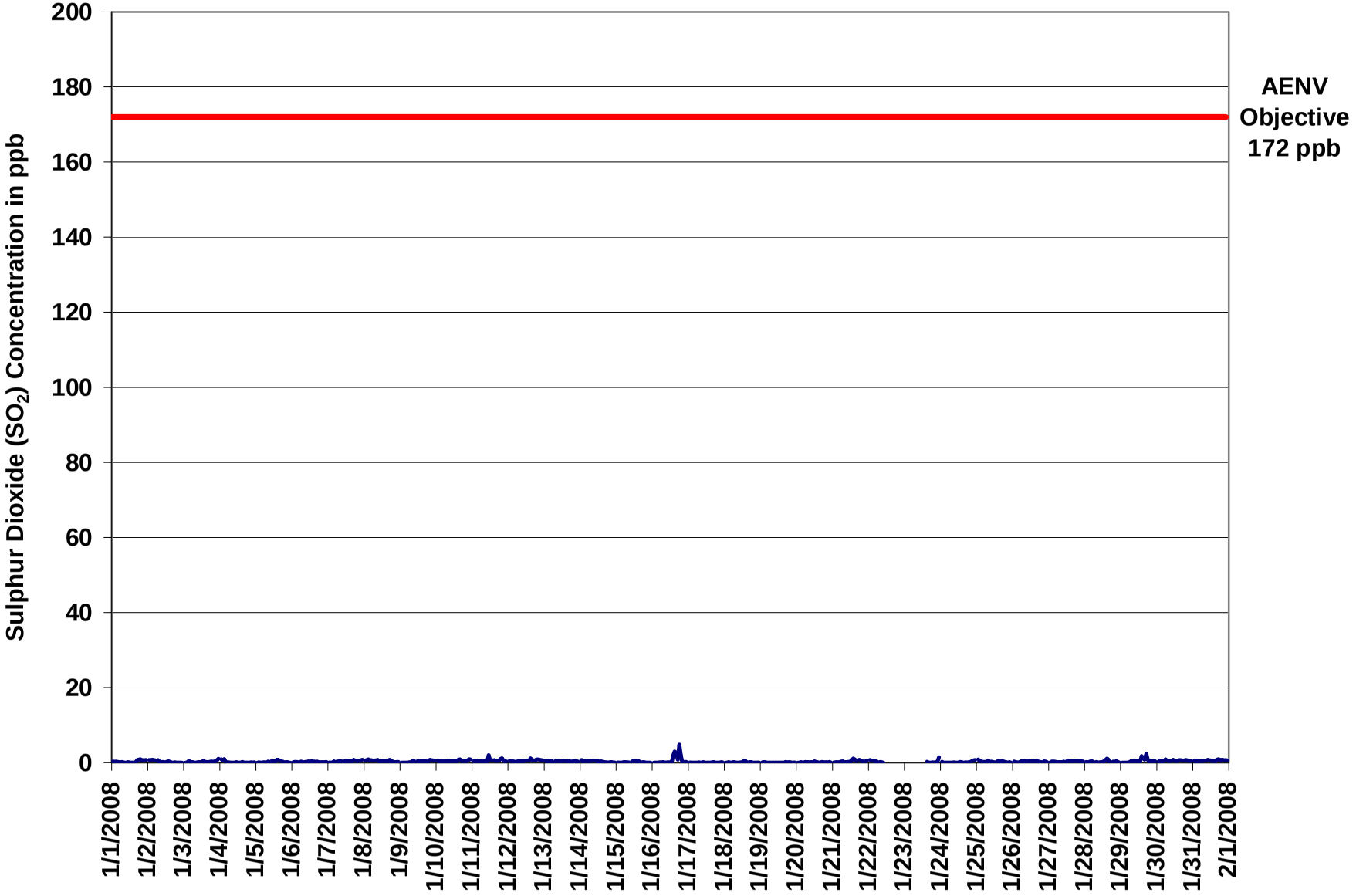


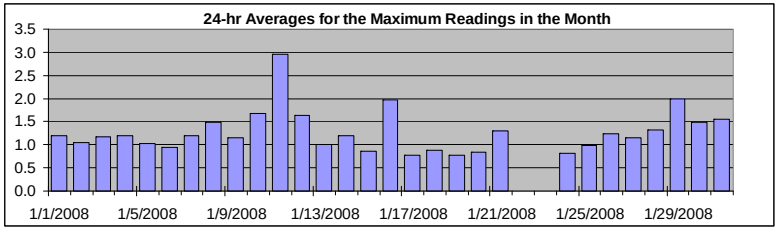
Figure 56. PASZA - Valleyview Sulphur Dioxide 1-hr Average Monthly Trend

Station: Valleyview
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	25.5	ppb	11-Jan	11:00 12:00
Maximum 24-hr Value:	3.0	ppb	11-Jan	

AIC Time:	30 hrs	Operational Time:	686 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	97.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	5.7	2.2	1.5	1.1	0.8	0.5	0.4	1.3 ppb	1.1 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**

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-Jan-08	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	2	1	2	1	2	1.2	2.0
2-Jan-08	A	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1.0	2.0
3-Jan-08	A	0	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1.2	2.2
4-Jan-08	A	2	2	4	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0	1	1.2	4.0
5-Jan-08	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1.0	1.5
6-Jan-08	A	0	1	0	0	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.9	1.5
7-Jan-08	A	0	0	1	1	1	1	2	1	1	1	2	1	2	1	2	1	2	2	2	2	2	1	2	1.2	1.7
8-Jan-08	A	2	2	2	2	2	2	1	1	2	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1.5	2.3
9-Jan-08	A	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.2	2.2
10-Jan-08	A	1	1	1	1	1	1	1	1	2	1	1	1	2	1	3	3	2	1	2	1	2	3	2	1.7	3.4
11-Jan-08	A	1	1	1	1	1	1	1	1	1	1	25	2	1	2	2	1	1	1	11	4	1	1	1	3.0	25.5
12-Jan-08	A	1	1	1	1	0	1	1	1	2	2	2	2	2	2	4	3	2	2	2	2	2	2	2	1.6	3.6
13-Jan-08	A	2	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	2	1	1	1.0	1.7
14-Jan-08	A	3	2	1	2	1	1	2	1	2	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1.2	2.7
15-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	0	0	1	1	0	0	1	0	0.9	1.6
16-Jan-08	A	0	0	0	1	0	0	0	0	1	1	0	0	1	6	5	6	2	10	8	1	1	1	1	2.0	9.7
17-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
18-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0.9	1.8
19-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0.8	1.7
20-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0.8	1.7
21-Jan-08	A	1	2	1	1	1	1	1	1	1	1	1	1	2	3	4	2	2	2	1	1	1	1	1	1.3	3.9
22-Jan-08	A	3	1	1	1	1	1	1	1	1	0	C	C	C	C	C	C	M	M	M	M	M	M	M	N	2.9
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	C	C	1	1	1	1	1	0	1	5	4	N	5.3
24-Jan-08	A	1	0	0	0	0	0	1	0	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	0.8	1.6
25-Jan-08	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1.0	1.9
26-Jan-08	A	1	1	1	1	1	1	1	2	1	1	1	2	1	3	2	2	2	1	1	1	1	1	1	1.2	2.8
27-Jan-08	A	1	1	2	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	2	1	1	2	1	1.1	1.9
28-Jan-08	A	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	2	1	1	2	1	3	1	1	1.3	2.8
29-Jan-08	A	1	1	1	1	1	1	2	1	2	1	1	1	1	8	2	2	11	4	2	1	1	2	1	2.0	10.8
30-Jan-08	A	1	2	2	2	1	2	1	1	1	2	2	1	1	2	1	3	2	2	1	1	2	1	2	1.5	2.8
31-Jan-08	A	1	2	2	1	1	2	1	2	1	2	2	2	1	1	2	2	2	2	2	2	2	2	2	1.5	1.8
Hourly Avg	N	1.1	1.0	1.2	1.0	0.9	1.0	1.0	1.1	1.0	1.1	1.9	1.1	1.2	1.8	1.6	1.5	1.6	1.6	1.8	1.1	1.2	1.2	1.2		
Hourly Max	0.0	2.9	1.8	4.0	1.9	1.5	1.9	1.7	1.7	2.2	1.9	25.5	2.3	1.8	8.2	4.5	6.4	10.8	9.7	11.3	4.4	2.8	5.3	4.2		

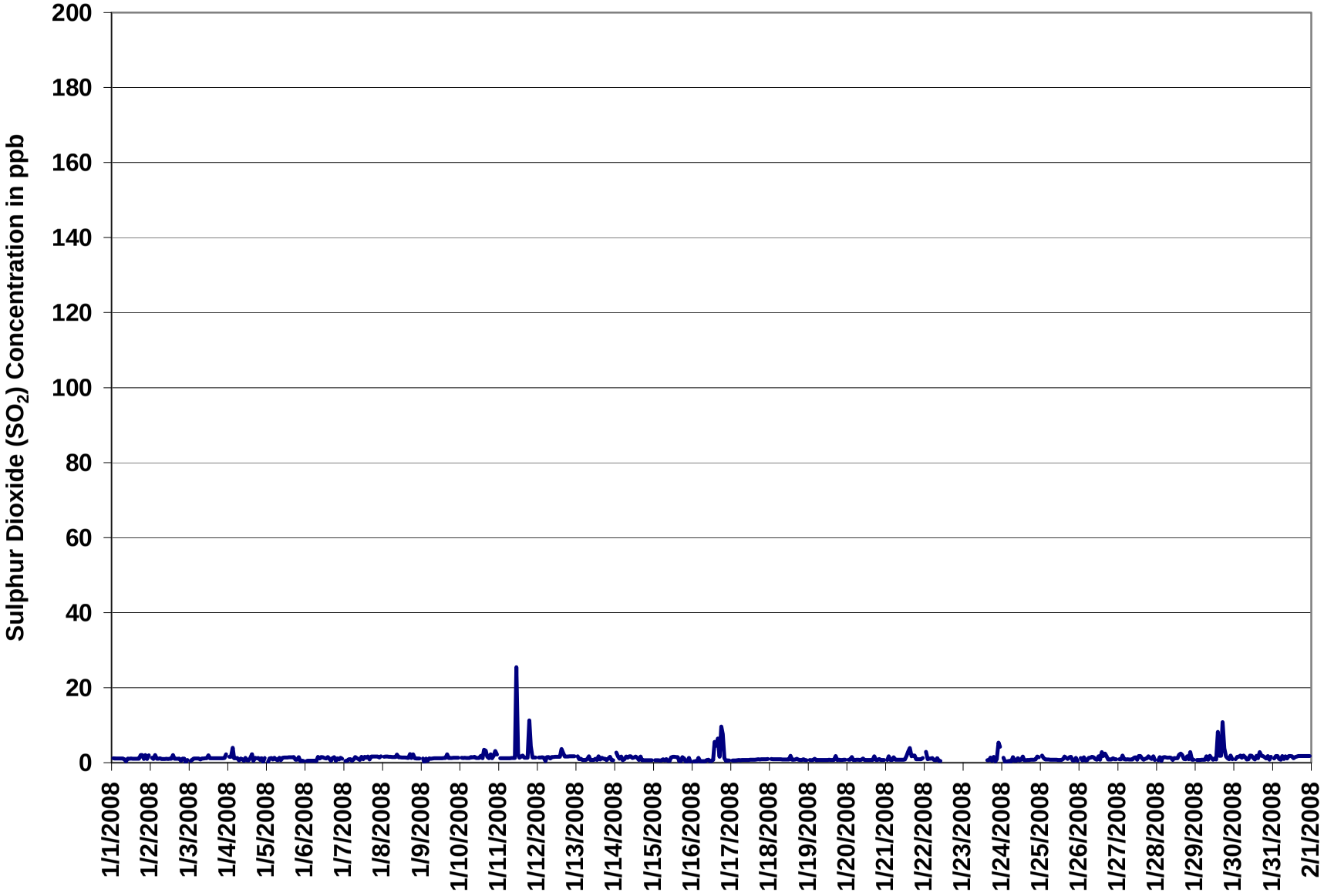
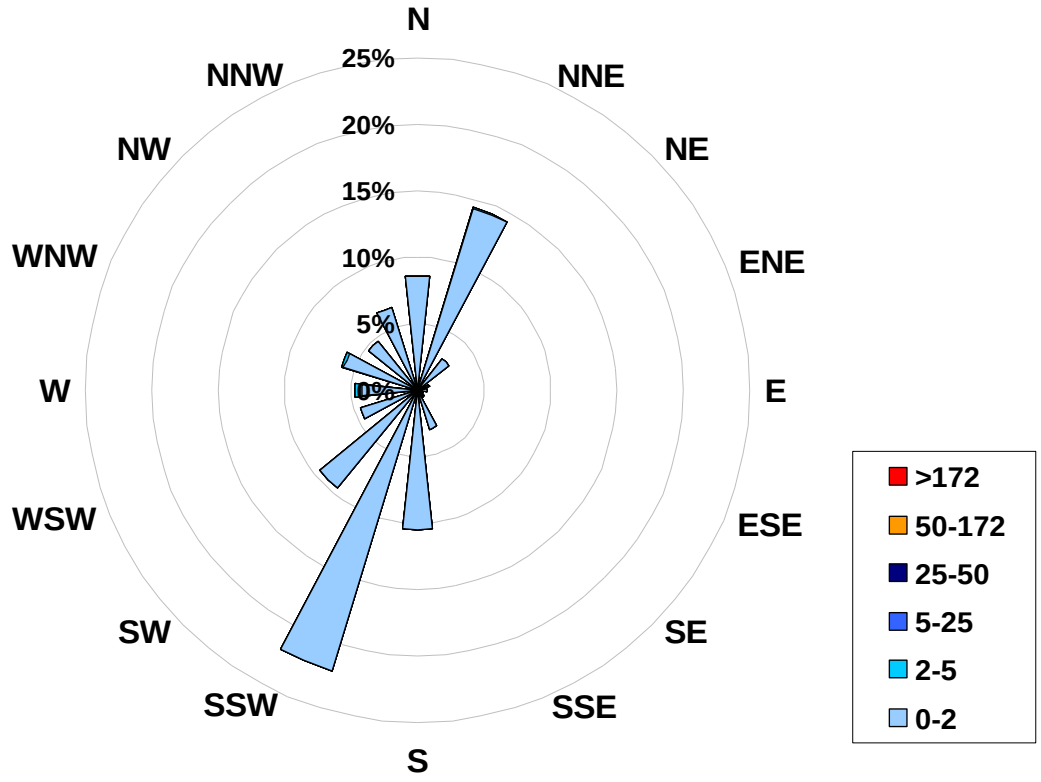


Figure 57. PASZA - Valleyview Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Valleyview Site for January 2008



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	681
2	to	5	5
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			686

PASZA - Valleyview Hydrogen Sulphide Monthly Summary

HOURLY AVERAGE TABLE

Hydrogen Sulphide (H_2S)

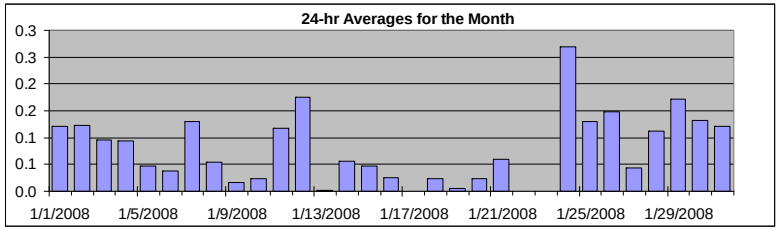
Station: Valleyview
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: **Alberta Environment:** 1-hr 10 ppb | 24-hr 3 ppb

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	1.2	ppb	2-Jan	18:00 19:00
Maximum 24-hr Value:	0.3	ppb	24-Jan	



AIC Time:	30 hrs	Operational Time:	686 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	97.4%

Percentile	99	95	75	50	25	5	1	Average	Median
	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.1 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**

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-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
2-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.1	1.2
3-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
4-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
5-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
6-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
7-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.1	1.1
8-Jan-08	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
9-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
10-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
11-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.1	0.8
12-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0.2	0.7
13-Jan-08	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
14-Jan-08	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
15-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
16-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
17-Jan-08	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
18-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
19-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
21-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
22-Jan-08	A	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	M	M	M	M	M	M	M	N	0.1
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	0	0	0	0	0	0	0	1	1	N	0.7
24-Jan-08	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
25-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
26-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
27-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
28-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Jan-08	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
30-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
31-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
Hourly Avg	N	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1		
Hourly Max	0.0	0.3	0.3	0.4	0.3	0.5	0.5	0.6	0.8	0.7	0.4	0.3	0.2	0.2	0.2	0.3	0.7	0.7	1.2	0.9	0.5	0.4	0.6	0.7		

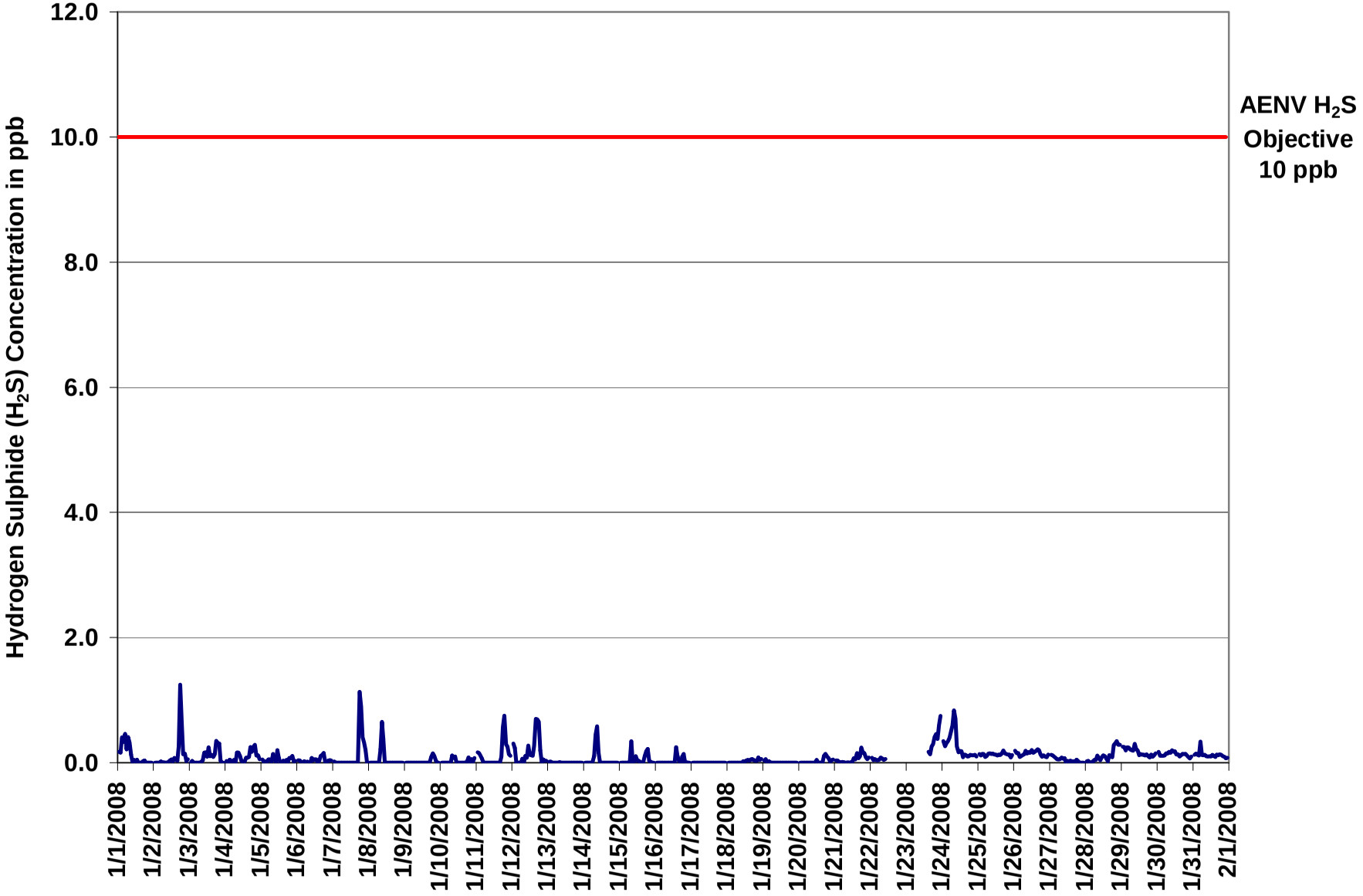


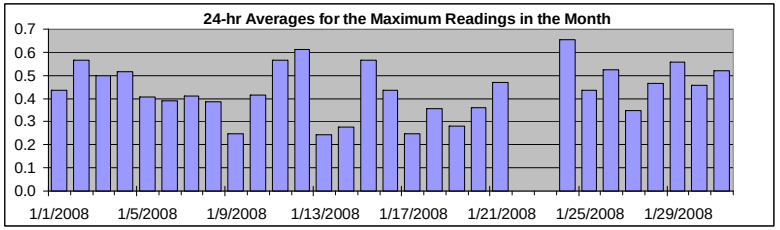
Figure 58. PASZA - Valleyview Hydrogen Sulphide 1-hr Average Monthly Trend

Station: Valleyview
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Hydrogen Sulphide (H_2S)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Value:	2.8	ppb	15-Jan	8:00 9:00
Maximum 24-hr Value:	0.7	ppb	24-Jan	

AIC Time:	30 hrs	Operational Time:	686 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	97.4%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.6	1.0	0.5	0.4	0.3	0.1	0.0	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**

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-Jan-08	A	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
2-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	1	1	1	0	0	0.6	2.1
3-Jan-08	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	1	1	1	0	0	0	0.5	1.0
4-Jan-08	A	0	0	0	0	0	0	0	1	0	1	1	0	0	1	1	0	1	1	1	1	0	0	0	0.5	1.4
5-Jan-08	A	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.9
6-Jan-08	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.8
7-Jan-08	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	1	0	0.4	2.1
8-Jan-08	A	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0.4	1.2
9-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.2	0.5
10-Jan-08	A	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0.4	1.7
11-Jan-08	A	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	1	0	1	0.6	1.5
12-Jan-08	A	1	1	0	0	0	0	1	0	1	1	1	1	1	0	1	2	1	1	1	0	0	0	0	0.6	1.5
13-Jan-08	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.4
14-Jan-08	A	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
15-Jan-08	A	0	0	0	0	0	0	1	3	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0.6	2.8
16-Jan-08	A	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0.4	1.3
17-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.4	1.1
19-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
20-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0.4	1.1
21-Jan-08	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0.5	1.4
22-Jan-08	A	0	0	0	0	1	0	0	0	0	0	C	C	C	C	C	C	M	M	M	M	M	M	M	N	0.5
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	0	0	1	1	1	1	1	1	1	N	1.2
24-Jan-08	A	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.7	1.3
25-Jan-08	A	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0.4	0.6
26-Jan-08	A	1	0	0	0	0	0	0	2	0	0	0	1	1	1	0	1	1	0	0	0	0	0	1	0.5	1.6
27-Jan-08	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
28-Jan-08	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1	1	1	0.5	1.0
29-Jan-08	A	1	1	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0.6	1.4
30-Jan-08	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0.5	0.8
31-Jan-08	A	0	1	0	0	2	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0.5	2.3
Hourly Avg	N	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.4	0.4	0.4	0.4		
Hourly Max	0.0	1.3	1.0	1.2	0.8	2.3	0.9	1.4	2.8	1.2	1.4	1.4	1.2	1.2	1.1	1.4	1.5	1.7	2.1	2.1	0.9	1.1	1.0	1.2		

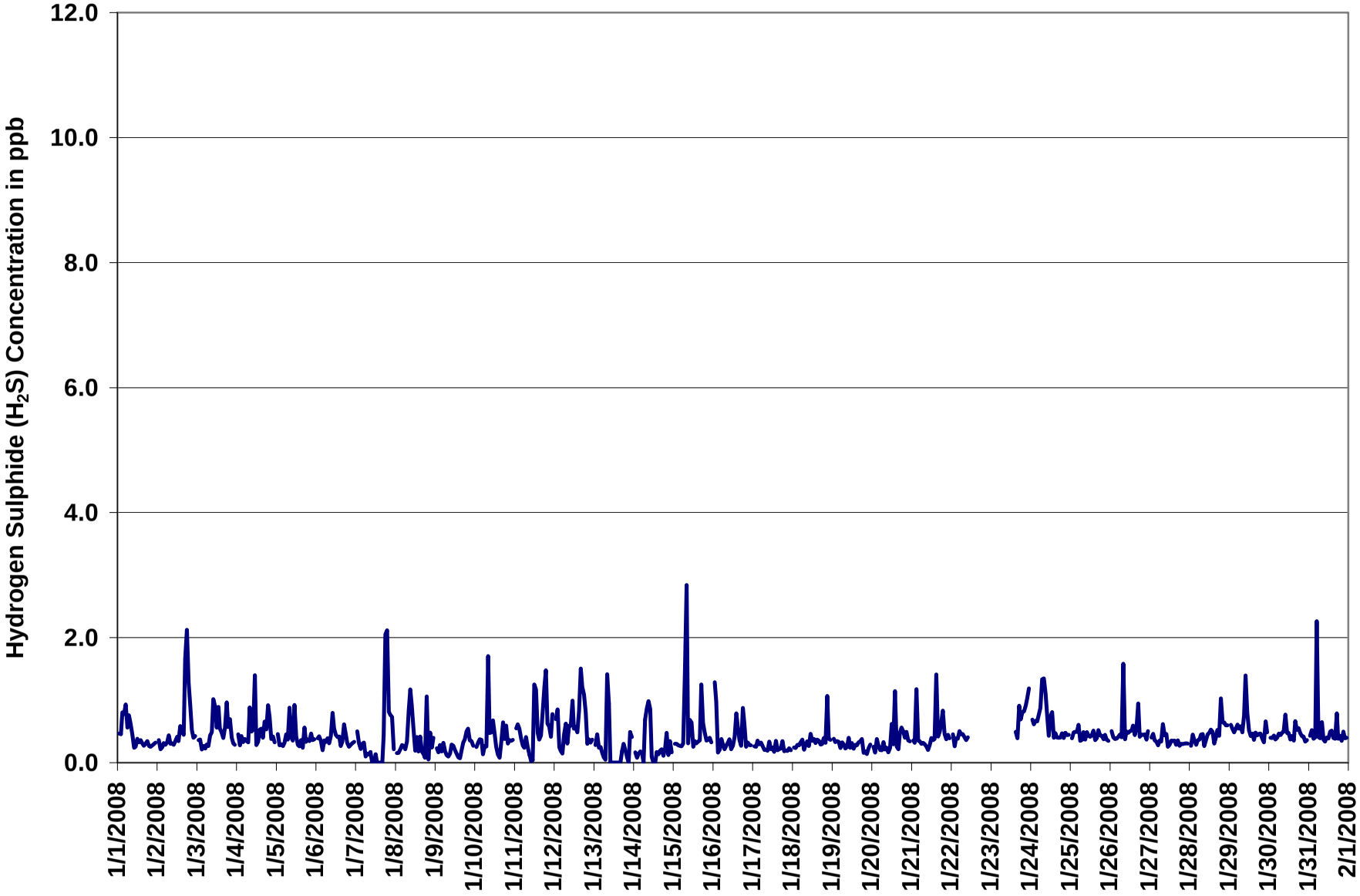
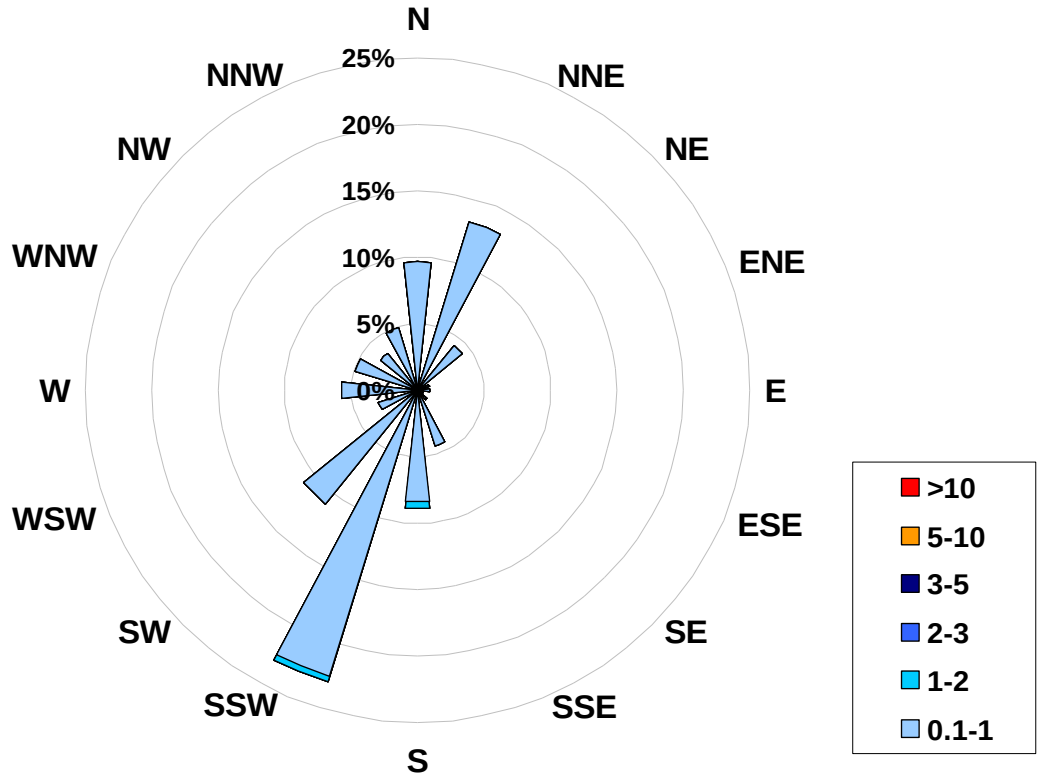


Figure 59. PASZA - Valleyview Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Hydrogen Sulphide (in ppb) Located at the Valleyview Site for January 2008



Calms:	0%

Frequency Distribution of H_2S in ppb			
Range			Frequency (hrs)
0.1	<	1	684
1	to	2	2
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			686

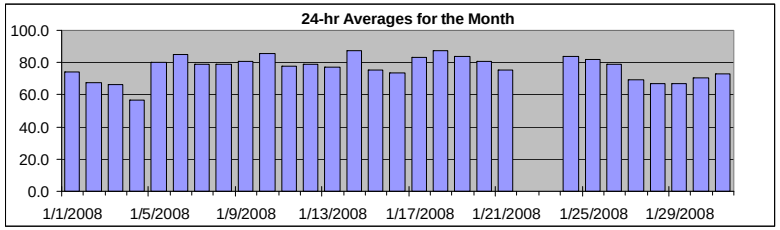
PASZA - Valleyview Relative Humidity Monthly Summary

Station: Valleyview
Station Owner: PASZA

HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	97.4	%	14-Jan	18:00 19:00
Maximum 24-hr Value:	87.6	%	18-Jan	

AIC Time:	0 hrs	Operational Time:	721 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	96.9%

Percentile	99	95	75	50	25	5	1	Average	Median
	93.6	89.9	83.5	79.0	69.2	58.7	51.1	76.6 %	79.0 %

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	23:00 0:00	24-hour Average	Daily Maximum
1-Jan-08	83	82	81	78	78	78	79	77	78	78	78	78	80	81	74	69	68	64	66	66	67	67	67	66	74.2	82.5
2-Jan-08	68	68	68	68	68	68	67	67	68	71	69	66	64	63	63	63	64	69	76	71	66	69	67	72	67.5	75.7
3-Jan-08	68	70	64	62	63	68	71	76	78	75	73	69	66	65	62	63	63	69	73	72	58	55	50	51	66.0	78.1
4-Jan-08	53	55	56	59	63	61	59	57	63	68	63	52	46	42	42	50	57	64	63	62	57	54	56	56	56.7	67.7
5-Jan-08	62	65	68	73	80	82	82	87	89	90	83	79	70	72	74	73	76	79	83	88	92	92	93	92	80.2	93.4
6-Jan-08	91	90	89	89	89	89	89	88	87	87	84	84	82	80	80	81	83	85	85	83	84	81	81	83	85.2	91.1
7-Jan-08	82	83	83	84	83	82	80	79	79	79	79	74	68	69	68	67	70	77	84	86	85	83	82	83	78.8	86.0
8-Jan-08	82	83	83	82	79	79	78	77	77	76	75	74	75	72	73	75	78	79	80	82	83	82	82	83	78.8	83.3
9-Jan-08	83	81	80	80	80	80	80	79	79	79	79	79	79	80	80	81	82	82	81	81	82	83	83	84	80.7	83.5
10-Jan-08	85	86	87	86	86	85	85	85	84	84	85	85	86	86	85	86	86	87	87	87	87	87	86	86	85.7	87.0
11-Jan-08	85	82	81	81	79	80	80	82	82	81	78	72	69	65	59	63	67	70	73	79	84	86	89	91	77.5	91.2
12-Jan-08	91	90	90	91	91	90	90	90	90	88	86	84	82	78	74	75	77	77	65	58	57	58	59	61	78.8	91.4
13-Jan-08	66	70	71	77	84	85	85	86	87	86	82	78	72	65	65	66	69	73	79	83	84	81	81	82	77.4	87.3
14-Jan-08	83	84	83	82	86	87	88	89	91	87	83	81	82	86	92	95	96	97	97	93	86	81	81	90	87.5	97.4
15-Jan-08	86	85	82	79	73	72	76	75	79	83	79	68	63	61	60	58	59	72	86	86	85	80	79	81	75.3	86.5
16-Jan-08	82	83	83	83	83	83	83	84	83	83	83	83	82	79	67	64	66	65	64	60	56	56	56	55	73.5	83.7
17-Jan-08	55	63	95	97	96	92	90	86	83	85	79	76	78	80	82	84	85	89	88	86	83	81	81	80	83.1	97.2
18-Jan-08	84	89	90	88	87	87	86	85	87	90	88	86	84	83	83	81	84	88	91	92	92	93	93	93	87.6	93.4
19-Jan-08	94	93	92	90	87	86	85	85	83	82	81	80	81	81	81	81	85	84	83	83	82	80	78	78	83.9	93.6
20-Jan-08	78	79	79	80	81	82	82	82	81	80	80	82	83	80	74	73	76	81	85	85	84	84	83	83	80.7	85.2
21-Jan-08	82	81	81	81	82	82	83	83	83	84	82	80	73	64	59	55	56	61	69	78	78	82	78	69	75.3	84.1
22-Jan-08	66	64	65	66	66	67	68	71	75	77	77	78	77	77	79	78	M	M	M	M	M	M	M	M	N	79.0
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	51	49	58	70	75	81	88	88	88	N	88.4
24-Jan-08	87	89	90	89	86	86	85	85	85	85	86	83	80	80	80	79	80	82	84	84	83	82	82	82	83.9	90.4
25-Jan-08	82	82	83	88	90	89	86	85	85	86	85	83	83	75	73	71	74	77	80	81	82	81	82	85	82.0	90.0
26-Jan-08	85	86	86	86	85	82	81	80	80	80	81	77	73	70	69	71	72	75	79	86	81	78	77	77	79.1	86.4
27-Jan-08	76	75	75	73	73	72	70	73	71	71	70	68	66	66	64	64	65	68	67	66	67	69	69	67	69.4	75.6
28-Jan-08	67	67	67	68	68	70	71	71	71	69	65	64	61	60	58	58	58	65	72	72	72	70	68	68	66.7	72.4
29-Jan-08	67	67	67	67	66	66	66	67	66	66	67	68	66	62	61	60	62	65	68	70	71	73	73	73	67.0	73.1
30-Jan-08	73	73	73	74	73	70	69	70	70	70	67	66	65	63	63	64	69	74	75	76	76	75	75	74	70.7	75.9
31-Jan-08	75	75	76	76	75	75	74	74	75	75	73	70	69	69	71	71	72	72	71	72	72	72	72	72	72.9	76.1
Hourly Avg	77.3	78.0	79.0	79.2	79.4	79.2	78.9	79.2	79.7	79.8	78.0	75.6	73.5	71.8	70.5	70.0	71.6	75.0	77.5	78.1	77.3	76.7	76.5	76.8		
Hourly Max	93.6	93.2	94.8	97.2	95.9	91.9	89.8	89.7	90.8	90.2	88.2	86.3	85.5	85.9	92.2	94.8	96.0	97.1	97.4	93.1	92.2	92.6	93.4	93.4		

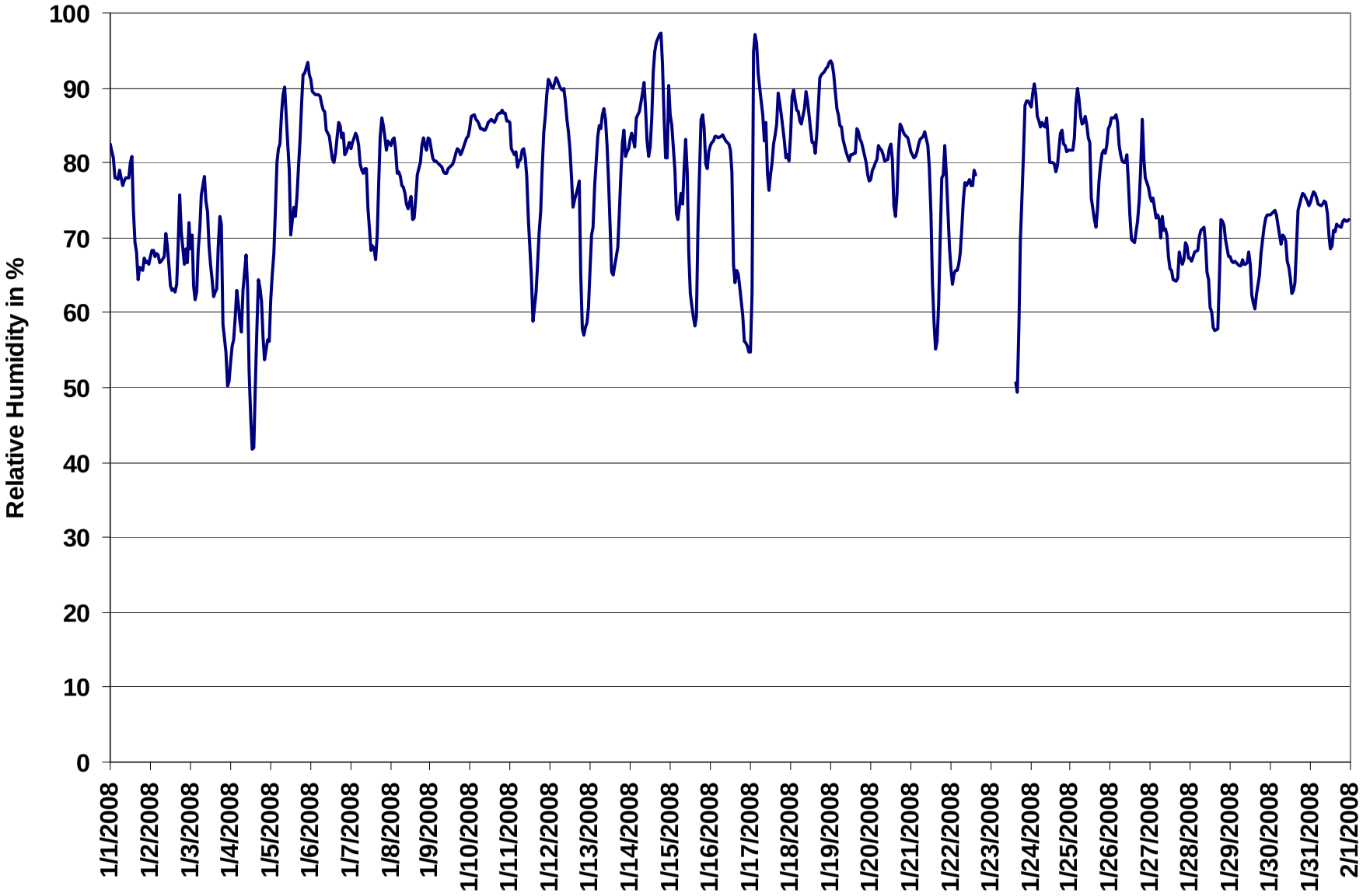


Figure 60. PASZA - Valleyview Relative Humidity 1-hr Average Monthly Trend

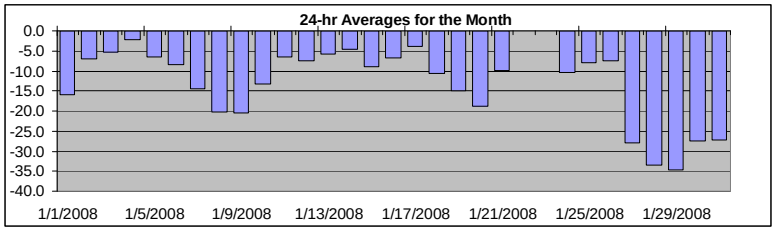
PASZA - Valleyview Temperature Monthly Summary

Station: Valleyview
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	4.4	°C	16-Jan	21:00 22:00
Maximum 24-hr Value:	-2.1	°C	4-Jan	

AIC Time:	0 hrs	Operational Time:	721 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	96.9%

Percentile	99	95	75	50	25	5	1	Average	Median
	2.5	-0.7	-6.3	-9.8	-19.3	-30.9	-40.4	-13.1 °C	-9.8 °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**

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-Jan-08	-20	-21	-22	-24	-25	-25	-24	-24	-24	-23	-21	-19	-16	-13	-9	-8	-8	-8	-8	-8	-9	-8	-8	-8	-16.0	-7.7
2-Jan-08	-8	-8	-8	-8	-8	-8	-8	-8	-8	-9	-9	-8	-7	-7	-6	-5	-6	-7	-8	-4	-3	-4	-4	-6	-6.9	-2.8
3-Jan-08	-5	-6	-5	-4	-5	-7	-7	-9	-9	-9	-9	-8	-7	-5	-5	-4	-4	-5	-6	-6	-3	-1	1	1	-5.3	0.6
4-Jan-08	0	-1	-1	-1	-2	-2	-1	-1	-3	-4	-4	-1	0	1	1	-1	-3	-5	-5	-5	-4	-3	-3	-2	-2.1	1.4
5-Jan-08	-3	-4	-4	-5	-7	-8	-8	-9	-10	-11	-9	-7	-5	-4	-4	-3	-4	-5	-5	-6	-7	-8	-9	-10	-6.5	-3.0
6-Jan-08	-10	-10	-9	-9	-9	-9	-8	-8	-8	-8	-8	-8	-7	-6	-6	-6	-7	-7	-8	-8	-9	-10	-11	-11	-8.4	-6.1
7-Jan-08	-12	-12	-12	-13	-14	-14	-14	-15	-15	-15	-15	-14	-13	-12	-12	-11	-12	-14	-15	-17	-17	-18	-20	-19	-14.4	-11.3
8-Jan-08	-20	-20	-20	-21	-22	-23	-24	-25	-26	-26	-24	-21	-19	-17	-16	-16	-16	-17	-18	-18	-19	-20	-21	-21	-20.3	-15.5
9-Jan-08	-21	-21	-21	-21	-21	-22	-22	-22	-23	-23	-23	-22	-22	-21	-20	-19	-18	-19	-19	-19	-18	-18	-17	-17	-20.4	-16.8
10-Jan-08	-16	-14	-14	-15	-15	-15	-16	-16	-16	-16	-15	-14	-13	-12	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-13.3	-11.0
11-Jan-08	-12	-11	-10	-10	-9	-9	-8	-8	-7	-7	-6	-4	-3	-2	-1	-2	-3	-3	-4	-6	-7	-7	-8	-10	-6.6	-0.5
12-Jan-08	-9	-11	-11	-12	-11	-11	-12	-13	-12	-13	-13	-11	-8	-7	-5	-5	-5	-6	-3	0	0	0	-1	-1	-7.5	0.0
13-Jan-08	-3	-4	-4	-6	-8	-8	-8	-8	-8	-8	-8	-6	-5	-3	-3	-3	-3	-4	-6	-7	-8	-6	-7	-7	-5.8	-2.6
14-Jan-08	-7	-7	-7	-6	-7	-8	-8	-9	-9	-8	-7	-4	-3	-1	0	0	0	0	-2	-3	-3	-3	-4	-5	-4.7	0.2
15-Jan-08	-5	-6	-6	-7	-8	-7	-7	-8	-8	-9	-9	-9	-8	-8	-7	-7	-7	-10	-12	-13	-14	-13	-13	-14	-9.0	-5.4
16-Jan-08	-14	-14	-15	-16	-16	-16	-16	-16	-17	-16	-13	-11	-8	-5	0	2	2	2	3	4	4	4	4	4	-6.8	4.4
17-Jan-08	4	3	0	0	0	0	0	0	0	-3	-4	-4	-5	-5	-6	-6	-7	-7	-8	-9	-9	-10	-10	-10	-3.9	4.1
18-Jan-08	-10	-12	-13	-13	-13	-13	-14	-14	-14	-14	-13	-12	-11	-10	-9	-8	-8	-8	-8	-7	-7	-7	-7	-6	-10.5	-6.4
19-Jan-08	-6	-6	-8	-9	-11	-11	-12	-12	-13	-13	-14	-15	-15	-16	-16	-16	-17	-18	-19	-20	-21	-23	-25	-25	-15.1	-5.8
20-Jan-08	-25	-25	-24	-23	-23	-21	-20	-20	-20	-21	-20	-18	-16	-15	-13	-13	-13	-14	-16	-17	-17	-17	-19	-19	-18.7	-12.7
21-Jan-08	-20	-20	-19	-18	-18	-16	-15	-14	-13	-13	-12	-10	-7	-3	-2	-1	-1	-3	-4	-6	-6	-7	-5	-3	-9.9	-1.1
22-Jan-08	-3	-3	-4	-4	-4	-5	-5	-6	-6	-6	-6	-6	-5	-5	-5	-5	M	M	M	M	M	M	M	M	N	-3.4
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	-1	-1	-3	-5	-8	-9	-12	-12	-12	N	-0.6
24-Jan-08	-14	-13	-14	-15	-15	-16	-16	-15	-15	-14	-13	-11	-9	-6	-5	-5	-6	-6	-6	-6	-7	-7	-7	-7	-10.4	-5.4
25-Jan-08	-7	-8	-8	-9	-10	-10	-10	-9	-9	-9	-8	-8	-8	-7	-7	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7.9	-6.3
26-Jan-08	-7	-8	-8	-8	-7	-7	-7	-6	-7	-7	-7	-5	-4	-3	-3	-3	-3	-4	-3	-7	-14	-17	-18	-19	-7.5	-2.5
27-Jan-08	-20	-21	-23	-24	-24	-25	-26	-27	-28	-28	-29	-29	-29	-29	-30	-30	-30	-30	-31	-31	-31	-31	-31	-32	-27.9	-20.0
28-Jan-08	-32	-33	-33	-32	-32	-32	-33	-34	-35	-35	-34	-32	-31	-30	-30	-30	-29	-31	-33	-35	-37	-39	-40	-40	-33.5	-29.2
29-Jan-08	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-38	-34	-31	-29	-28	-28	-28	-28	-29	-29	-29	-29	-30	-34.8	-28.2
30-Jan-08	-30	-29	-29	-29	-29	-30	-30	-30	-29	-29	-29	-28	-27	-26	-25	-25	-25	-25	-26	-26	-25	-26	-26	-26	-27.4	-24.6
31-Jan-08	-27	-28	-29	-30	-30	-30	-30	-30	-30	-29	-29	-28	-27	-26	-26	-25	-25	-25	-25	-25	-25	-25	-26	-25	-27.3	-24.9
Hourly Avg	-13.4	-13.7	-14.1	-14.5	-14.8	-14.9	-15.0	-15.2	-15.4	-15.6	-14.9	-13.7	-12.3	-11.1	-10.2	-9.8	-10.2	-11.0	-11.6	-12.1	-12.5	-12.8	-13.1	-13.4		
Hourly Max	4.1	3.2	0.0	-0.2	0.0	0.2	0.1	0.3	-0.2	-2.9	-3.7	-1.4	0.2	1.4	1.2	1.6	1.7	2.0	2.6	3.6	4.3	4.4	4.4	4.2		

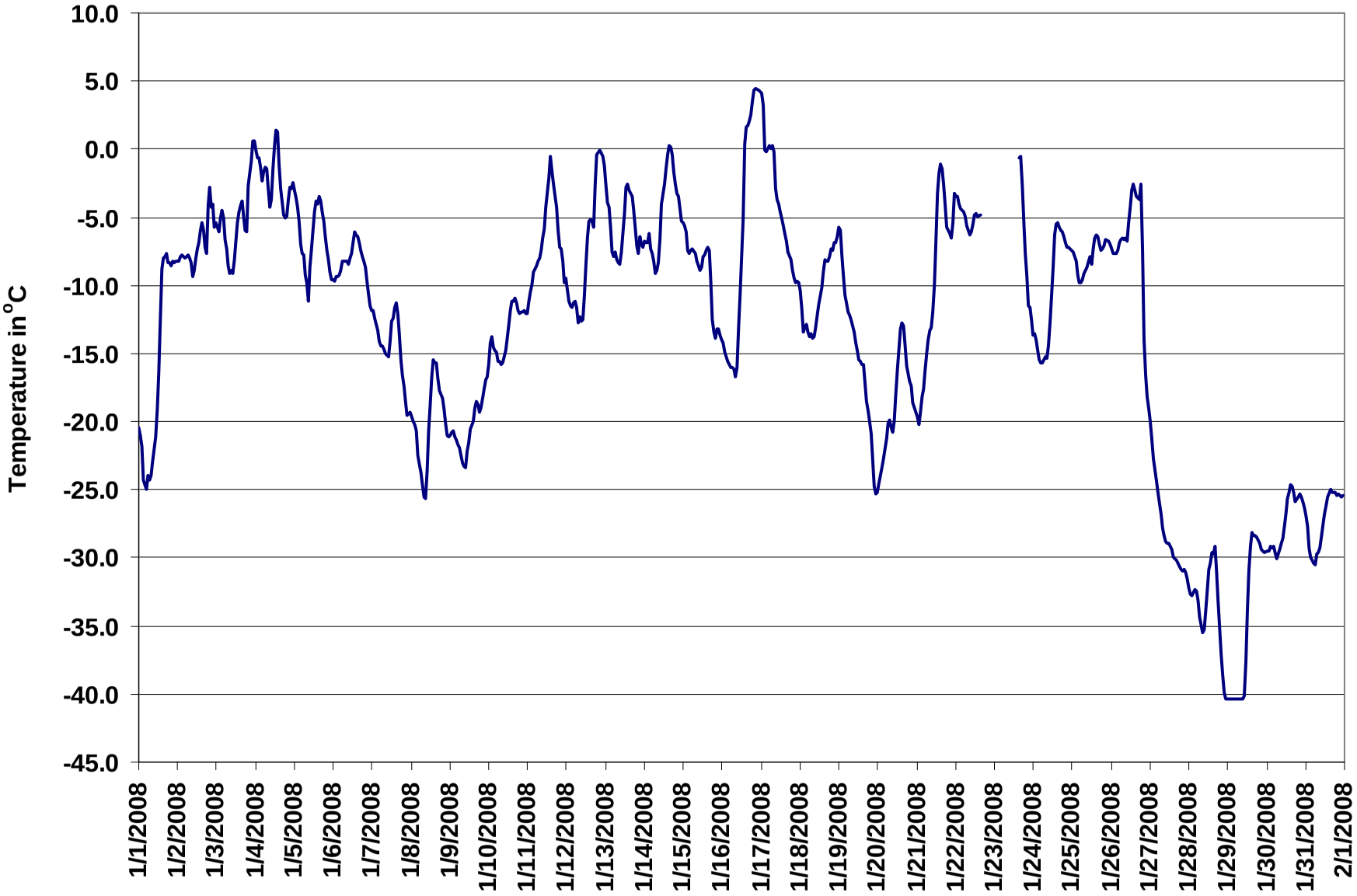


Figure 61. PASZA - Valleyview Temperature 1-hr Average Monthly Trend

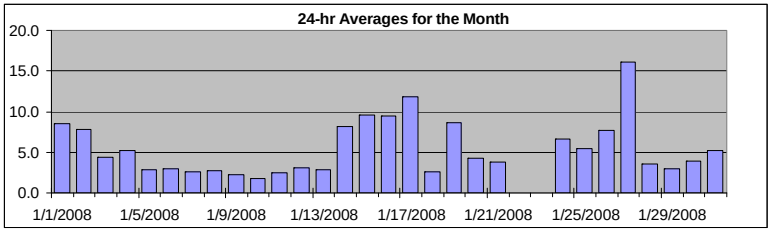
PASZA - Valleyview Scalar Wind Speed Monthly Summary

Station: Valleyview
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	26.2	km/hr	26-Jan	23:00 0:00
Maximum 24-hr Value:	16.1	km/hr	27-Jan	

Calm Time:	0 hrs	**0%** calms	Operational Time: 721 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 96.9%

Percentile	99	95	75	50	25	5	1	AverageS
	22.6	17.5	6.5	3.7	2.2	1.3	0.9	5.5 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**

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-hr Scalar Average	Daily Max
1-Jan-08	3	3	2	2	1	2	2	1	2	2	1	1	2	4	9	11	11	19	25	19	23	22	19	19	8.6	25.3
2-Jan-08	20	20	16	14	11	13	10	10	7	7	6	5	3	4	2	2	2	3	4	6	8	5	5	7	7.8	20.0
3-Jan-08	7	5	9	10	4	4	4	2	1	3	2	1	2	2	3	3	2	2	3	2	2	7	10	14	4.4	13.9
4-Jan-08	11	7	5	4	4	4	8	7	4	3	5	7	8	6	3	2	4	5	5	4	4	4	4	6	5.2	10.6
5-Jan-08	5	2	4	3	2	2	2	3	3	5	3	3	3	5	4	2	3	3	1	1	1	3	2	2	2.8	5.5
6-Jan-08	1	2	2	2	2	4	2	4	3	2	2	2	2	2	3	2	2	4	3	6	6	5	5	3	3.0	6.3
7-Jan-08	3	3	3	5	4	3	4	5	5	2	2	3	2	4	3	2	2	1	1	2	1	1	1	1	2.6	5.2
8-Jan-08	1	1	1	1	1	1	1	2	3	3	2	2	3	3	2	2	5	7	6	5	3	5	4	2	2.8	7.2
9-Jan-08	3	2	1	2	3	3	3	3	3	2	3	2	3	3	4	2	1	3	2	1	1	1	2	1	2.2	3.5
10-Jan-08	1	2	2	2	4	3	2	2	2	1	2	1	3	1	2	2	1	2	1	1	1	1	2	1	1.7	4.1
11-Jan-08	2	2	1	2	2	3	2	3	4	4	4	3	2	1	2	2	4	1	2	1	3	3	2	2	2.5	4.4
12-Jan-08	2	1	1	5	4	3	2	2	2	1	1	1	2	2	3	3	2	3	5	8	5	7	6	3	3.1	7.5
13-Jan-08	2	3	3	2	2	4	4	4	3	4	3	4	3	4	2	2	4	1	2	3	3	2	2	1	2.8	4.3
14-Jan-08	2	2	3	2	2	2	3	2	2	2	4	5	5	4	5	2	6	23	26	19	20	18	21	17	8.2	26.1
15-Jan-08	12	15	14	11	9	9	8	10	5	8	11	15	20	16	14	11	7	3	4	5	6	7	6	6	9.6	19.7
16-Jan-08	4	6	6	5	6	6	4	4	3	5	7	6	4	5	14	14	12	11	10	14	19	21	21	22	9.5	22.2
17-Jan-08	22	25	19	22	14	17	17	15	17	9	9	8	8	9	8	6	6	7	10	11	8	6	6	5	11.8	25.4
18-Jan-08	2	1	2	4	3	2	4	3	2	1	1	1	2	3	2	2	3	3	2	3	4	3	4	4	2.7	4.1
19-Jan-08	6	7	9	12	11	12	14	12	12	11	10	11	11	9	9	9	10	10	6	4	2	3	4	3	8.6	14.0
20-Jan-08	2	4	3	2	4	6	6	5	4	4	5	3	2	5	5	6	5	3	5	5	5	5	3	4	4.2	6.1
21-Jan-08	3	3	4	3	3	4	4	4	3	5	5	5	3	4	4	4	3	2	3	3	3	5	5	4	3.8	5.4
22-Jan-08	7	12	12	13	13	9	14	7	7	9	11	9	8	6	6	6	M	M	M	M	M	M	M	M	N	13.5
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	2	1	2	2	3	2	2	2	2	N	3.3
24-Jan-08	5	3	2	2	2	3	1	2	2	2	3	3	3	6	12	12	13	9	11	12	15	13	12	11	6.6	14.9
25-Jan-08	10	10	8	4	4	4	4	4	5	5	6	7	10	8	7	6	7	4	4	3	5	5	3	1	5.5	10.5
26-Jan-08	2	3	3	4	7	7	6	8	5	4	3	2	2	2	2	2	4	5	6	19	25	21	17	26	7.7	26.2
27-Jan-08	23	22	18	19	18	18	19	18	18	15	17	15	15	14	16	12	13	11	13	13	14	15	14	16	16.1	23.3
28-Jan-08	12	8	5	6	6	5	5	6	3	2	2	3	3	3	2	2	1	1	2	1	2	2	1	1	3.5	12.4
29-Jan-08	1	2	1	2	1	1	1	2	1	2	3	3	2	5	5	5	6	6	5	4	5	4	2	3	3.0	5.7
30-Jan-08	3	3	2	3	3	5	6	3	1	2	3	2	3	3	4	3	3	4	4	5	6	7	7	7	3.9	7.1
31-Jan-08	5	6	7	5	3	2	2	1	6	6	4	4	4	5	6	9	10	8	7	5	5	5	5	5	5.2	10.1
1-hr Average	6.1	6.2	5.6	5.7	5.2	5.3	5.4	5.1	4.6	4.4	4.7	4.6	4.7	5.0	5.4	4.8	5.1	5.4	6.1	6.3	7.0	6.9	6.5	6.7		
Hourly Max	23.3	25.4	19.3	22.5	17.5	18.3	18.8	18.3	17.6	15.2	16.8	15.3	19.7	16.1	15.7	14.0	13.2	22.9	26.1	19.4	25.4	21.8	21.0	26.2		

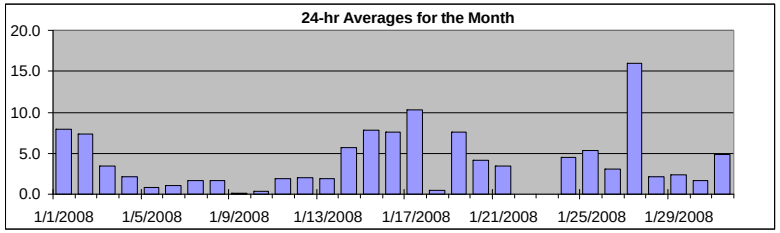
PASZA - Valleyview Vector Wind Speed Monthly Summary

Station: Valleyview
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008



Summary

Maximum 1-hr Average:	26.2	km/hr	26-Jan	23:00 0:00
Maximum 24-hr Value:	16.0	km/hr	27-Jan	

Calm Time:	0 hrs	**0%** calms	Operational Time: 721 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 96.9%

Percentile	99	95	75	50	25	5	1	AverageV
	22.4	17.3	6.3	3.5	1.7	0.6	0.3	1.9 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**

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-hr Vector Average	Daily Max
1-Jan-08	3	3	1	1	1	2	1	1	2	1	0	1	1	3	9	10	11	19	25	19	22	22	19	19	7.9	25.2
2-Jan-08	20	19	16	14	11	13	10	10	7	7	6	5	2	4	1	1	1	2	4	6	8	5	5	6	7.4	19.8
3-Jan-08	7	5	9	10	4	3	4	2	0	2	2	1	2	2	2	2	1	2	3	1	2	7	10	14	3.5	13.8
4-Jan-08	11	7	5	2	4	4	8	7	4	3	5	7	8	6	3	1	4	5	5	3	2	3	4	5	2.1	10.6
5-Jan-08	5	1	3	0	2	1	2	2	2	4	3	2	2	5	3	2	3	3	0	1	0	2	1	2	0.8	5.2
6-Jan-08	1	1	0	2	1	1	1	3	3	2	2	2	2	1	3	2	2	3	3	6	6	5	5	3	1.0	6.3
7-Jan-08	2	3	3	5	4	3	3	5	5	2	2	3	0	3	3	2	1	0	1	2	1	1	1	1	1.7	5.1
8-Jan-08	1	1	1	1	0	1	1	1	1	2	1	1	3	2	2	2	5	7	6	5	3	4	4	2	1.7	7.1
9-Jan-08	3	2	0	2	3	3	2	2	3	2	2	1	3	3	3	2	1	1	1	1	1	1	1	1	0.2	3.5
10-Jan-08	1	2	1	2	4	3	2	2	1	1	1	0	1	1	2	1	1	2	1	1	0	0	1	1	0.4	4.1
11-Jan-08	2	2	0	2	2	3	2	3	4	4	4	3	2	1	0	2	4	1	2	1	2	3	2	2	1.8	4.3
12-Jan-08	1	0	1	5	4	3	1	1	2	1	0	0	2	2	3	3	1	1	5	7	5	7	6	3	2.0	7.5
13-Jan-08	2	2	3	1	1	4	4	4	1	3	3	4	3	4	2	2	4	0	2	2	3	2	1	1	1.9	4.1
14-Jan-08	1	2	2	1	2	2	3	1	1	1	2	4	5	4	5	2	4	23	25	19	20	17	21	17	5.7	25.0
15-Jan-08	12	15	14	11	9	9	8	10	5	8	11	15	20	16	14	11	7	3	4	5	6	7	6	5	7.8	19.6
16-Jan-08	4	6	6	5	6	6	4	3	3	5	7	6	3	5	13	14	12	11	10	14	19	21	21	22	7.5	22.1
17-Jan-08	22	24	19	22	14	17	17	15	15	9	9	8	8	8	7	6	6	7	10	11	7	5	4	5	10.3	24.0
18-Jan-08	1	1	1	4	3	1	4	3	2	1	1	1	2	3	2	2	3	3	2	3	4	3	4	4	0.5	4.1
19-Jan-08	6	7	9	12	11	12	14	12	12	11	10	11	11	9	9	9	10	9	6	4	2	2	4	3	7.6	13.9
20-Jan-08	2	3	3	2	4	6	6	5	4	4	5	3	2	5	5	5	5	3	5	5	5	5	2	4	4.1	6.1
21-Jan-08	3	3	4	3	3	3	4	4	3	5	5	5	3	3	4	4	3	1	3	2	1	5	4	1	3.4	5.3
22-Jan-08	6	12	11	13	13	9	13	6	7	9	11	9	8	6	5	5	M	M	M	M	M	M	M	M	N	13.3
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	2	0	2	2	3	1	2	1	0	N	3.2
24-Jan-08	5	3	2	1	1	1	1	1	2	1	3	2	2	4	12	12	12	9	11	12	15	13	11	11	4.5	14.6
25-Jan-08	10	10	7	3	4	4	4	4	5	5	5	7	9	8	6	6	7	3	4	3	5	5	3	1	5.3	10.4
26-Jan-08	2	1	1	4	7	6	6	8	5	4	2	2	1	2	1	1	4	5	6	18	25	21	17	26	3.0	26.2
27-Jan-08	23	22	18	19	17	18	19	18	17	15	17	15	15	14	16	12	13	11	13	13	14	15	13	16	16.0	23.2
28-Jan-08	12	8	5	6	6	5	5	5	2	1	2	2	1	2	1	1	1	1	1	1	2	2	1	1	2.1	12.4
29-Jan-08	1	2	1	1	1	0	1	1	0	1	3	3	2	4	5	5	6	6	5	4	5	4	2	3	2.4	5.6
30-Jan-08	3	2	2	3	2	5	5	3	1	2	3	1	2	3	4	3	2	4	4	5	6	7	7	7	1.7	7.0
31-Jan-08	5	6	7	5	2	1	2	1	6	6	4	4	4	5	6	9	10	8	7	5	5	5	5	5	4.8	10.0
1-hr Vector	1.6	1.9	1.3	1.9	1.8	2.0	1.7	1.4	1.2	1.0	1.1	0.8	1.3	1.3	1.3	1.1	1.3	2.0	1.1	1.2	1.3	1.0	1.4	1.3		
Hourly Max	23.2	24.0	19.1	21.5	17.4	18.2	18.6	18.2	17.5	15.1	16.6	15.2	19.6	16.0	15.5	13.9	13.1	22.7	25.2	19.1	25.2	21.6	20.9	26.2		

PASZA - Valleyview Wind Direction Monthly Summary

HOURLY AVERAGE TABLE

Wind Direction (WD)

Station: Valleyview
Station Owner: PASZA

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

Calm Time:	0 hrs	**0%** calms	Operational Time: 721 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 96.9%

Percentile	99	95	75	50	25	5	1	Average
	357.9	344.0	262.0	204.7	147.5	10.7	1.9	295 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 / 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	WD Sector
1-Jan-08	209	215	220	23	266	197	214	358	187	215	271	323	350	160	173	170	174	185	185	180	188	186	182	184	185	S
2-Jan-08	182	188	191	192	192	190	192	195	205	212	213	211	198	204	266	9	66	165	204	202	209	204	204	181	194	SSW
3-Jan-08	192	192	198	194	210	229	219	224	252	232	292	272	257	276	272	260	242	321	334	314	183	192	187	188	212	SSW
4-Jan-08	192	195	186	247	220	216	181	191	211	223	214	194	189	190	201	347	26	353	344	325	345	28	27	20	210	SSW
5-Jan-08	36	2	29	359	201	209	341	137	210	190	209	168	254	307	287	281	292	324	77	358	324	209	196	205	271	W
6-Jan-08	217	196	45	12	154	193	300	194	195	207	229	346	351	302	236	223	239	277	274	299	341	29	27	1	290	WNW
7-Jan-08	323	290	271	275	263	265	263	262	281	274	198	204	51	354	343	335	13	205	180	215	183	166	200	206	275	W
8-Jan-08	248	240	279	262	178	185	197	195	124	360	10	23	13	348	346	309	13	18	13	49	32	48	34	43	18	NNE
9-Jan-08	15	341	120	164	179	175	193	152	176	204	123	286	1	358	357	1	150	246	334	351	172	170	343	183	192	SSW
10-Jan-08	245	230	195	245	197	205	214	227	72	304	138	73	283	332	20	18	83	74	351	341	241	332	318	179	242	WSW
11-Jan-08	218	223	219	216	231	213	219	218	207	211	205	208	212	222	100	21	18	248	232	213	204	208	218	206	214	SW
12-Jan-08	219	234	227	213	219	213	184	259	251	287	345	97	339	2	354	341	233	326	199	196	200	194	198	209	222	SW
13-Jan-08	231	263	202	246	317	223	218	207	254	211	225	208	205	203	277	29	1	99	251	203	214	228	199	166	225	SW
14-Jan-08	216	229	225	244	218	241	219	19	189	290	232	189	193	202	196	202	338	340	335	298	293	317	321	316	303	WNW
15-Jan-08	308	320	333	329	319	312	327	335	305	303	294	292	293	294	296	296	282	220	215	212	205	210	202	212	296	WNW
16-Jan-08	205	213	216	218	219	218	220	220	226	217	206	191	190	197	282	277	268	268	275	289	302	305	299	298	268	W
17-Jan-08	300	340	355	342	301	310	320	317	337	32	24	20	19	15	19	3	5	3	20	25	27	348	331	41	347	NNW
18-Jan-08	137	244	172	150	160	158	147	180	188	206	170	321	327	331	316	31	357	38	6	14	350	19	31	42	48	NE
19-Jan-08	39	32	19	20	23	26	26	24	31	33	31	20	19	13	8	8	3	7	20	12	232	209	184	202	21	NNE
20-Jan-08	225	214	194	193	209	184	188	194	207	208	191	193	204	184	183	184	193	209	208	211	209	204	237	223	200	SSW
21-Jan-08	220	221	219	214	209	197	191	191	219	208	192	181	192	257	255	260	245	239	195	207	268	215	238	196	216	SW
22-Jan-08	320	306	300	300	314	303	307	310	298	304	302	309	284	280	229	201	M	M	M	M	M	M	M	M	N	-
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	85	120	261	200	214	161	240	198	135	N	-
24-Jan-08	7	327	358	204	201	330	189	285	37	51	10	45	10	164	148	162	165	170	175	175	167	157	162	177	162	SSE
25-Jan-08	177	184	192	210	208	212	205	216	218	215	192	188	184	190	176	184	196	220	208	206	201	202	215	219	196	SSW
26-Jan-08	286	233	75	214	206	193	201	192	190	201	221	201	191	209	284	7	19	22	50	29	21	14	6	358	10	N
27-Jan-08	4	16	15	12	16	12	12	16	20	20	15	18	17	23	23	24	23	18	15	10	8	1	5	359	14	NNE
28-Jan-08	358	345	338	347	1	340	313	304	293	204	198	206	244	305	341	303	207	339	181	190	203	200	182	302	321	NW
29-Jan-08	228	208	257	243	316	334	345	323	212	23	357	14	30	15	12	22	21	16	25	21	16	39	41	51	15	NNE
30-Jan-08	11	44	12	24	326	302	275	273	227	214	272	41	193	169	180	186	53	21	13	8	25	20	13	12	356	N
31-Jan-08	9	16	11	2	9	249	196	47	4	22	11	5	351	357	353	355	358	1	19	30	32	20	7	2	7	N
Hourly Avg	294	296	309	304	272	261	271	271	284	275	276	289	301	296	308	312	344	336	318	304	291	290	294	300		

PASZA - Valleyview Standard Deviation of Wind Direction Monthly Summary

Station: Valleyview
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms	Operational Time: 721 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 96.9%

Percentile	99	95	75	50	25	5	1
	89.4	81.7	40.5	16.5	9.1	6.0	4.3

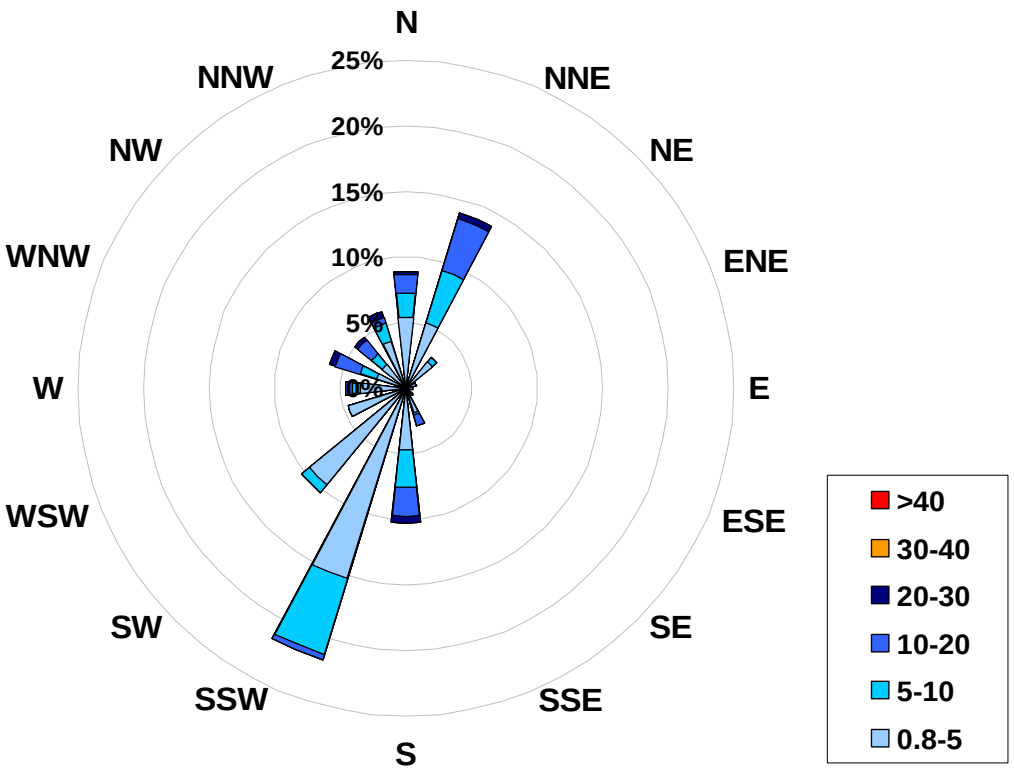
Status Flag Characters

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	Daily Maximum
1-Jan-08	15	18	92	35	75	25	62	72	19	64	82	84	69	55	11	12	11	8	6	12	8	6	7	8	92.2
2-Jan-08	8	6	7	7	8	6	9	6	8	4	8	22	21	21	47	85	69	60	11	8	4	8	20	33	84.8
3-Jan-08	9	8	8	5	12	13	6	18	88	43	39	52	27	24	51	58	57	55	18	65	53	11	9	6	87.8
4-Jan-08	7	8	13	62	9	10	8	6	10	7	7	6	7	7	15	68	14	13	21	40	61	48	35	16	68.5
5-Jan-08	13	82	17	86	38	52	60	58	40	14	43	38	50	25	52	29	19	64	64	69	87	35	62	14	87.2
6-Jan-08	31	69	86	42	81	77	88	13	15	14	24	47	24	57	25	23	25	18	22	9	22	14	10	18	87.9
7-Jan-08	41	19	27	11	27	15	19	18	12	36	13	13	88	10	14	9	54	60	44	27	57	70	48	33	87.6
8-Jan-08	70	44	27	46	72	62	56	33	66	14	49	78	20	29	26	66	12	10	14	10	23	12	12	26	78.2
9-Jan-08	16	35	71	24	10	13	19	25	19	16	43	58	36	32	12	30	70	73	91	96	44	80	82	39	95.7
10-Jan-08	27	20	48	17	9	16	11	16	62	59	38	75	69	69	19	21	34	37	58	32	71	93	82	58	93.5
11-Jan-08	22	40	85	17	19	11	33	23	25	16	15	13	37	40	85	14	12	74	42	59	28	17	21	33	85.2
12-Jan-08	67	86	68	7	6	18	70	64	21	58	75	95	82	24	17	24	62	82	19	7	8	7	6	25	95.0
13-Jan-08	11	45	22	51	90	26	15	15	87	54	36	17	23	9	41	63	25	83	22	62	11	25	83	87	89.5
14-Jan-08	73	41	38	37	29	35	11	81	82	72	65	47	10	9	11	49	59	7	18	8	6	14	7	13	81.7
15-Jan-08	7	9	7	10	5	10	13	8	13	8	7	6	5	7	5	5	12	18	6	7	7	6	9	6	17.8
16-Jan-08	17	5	3	4	3	6	7	9	11	17	5	9	33	16	19	6	7	6	8	9	7	6	6	5	33.4
17-Jan-08	6	21	10	17	8	9	7	6	31	15	12	13	17	10	11	7	14	10	8	11	10	29	54	10	54.0
18-Jan-08	71	72	58	10	59	51	26	22	16	19	32	67	12	14	23	19	11	19	14	15	6	16	5	8	71.9
19-Jan-08	8	11	6	6	7	7	7	7	10	10	10	8	8	7	5	4	3	5	9	9	44	27	8	15	43.7
20-Jan-08	17	23	11	18	10	6	5	6	4	8	7	15	52	10	9	8	7	13	4	7	6	11	24	13	52.4
21-Jan-08	13	7	8	8	11	14	18	13	13	9	12	9	15	42	21	17	16	89	25	28	65	9	24	74	88.9
22-Jan-08	55	12	13	9	9	12	9	21	9	9	7	14	17	27	21	14	M	M	M	M	M	M	M	M	54.7
23-Jan-08	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	31	85	52	33	11	53	65	82	85	84.7
24-Jan-08	15	35	39	77	75	83	79	79	75	74	17	28	31	76	13	12	12	13	13	13	12	10	11	9	82.8
25-Jan-08	8	8	8	16	11	7	9	6	8	10	12	12	9	8	10	14	15	28	11	17	25	8	12	85	84.7
26-Jan-08	34	60	67	14	7	36	9	11	22	15	30	59	69	11	57	32	12	30	26	17	7	10	11	5	69.3
27-Jan-08	6	7	7	8	8	6	7	6	7	7	7	7	9	8	9	10	8	8	8	7	7	5	6	3	10.3
28-Jan-08	3	5	6	7	6	7	10	7	51	54	28	38	76	50	67	80	48	57	89	24	22	30	25	76	89.5
29-Jan-08	57	26	62	33	69	83	69	55	98	35	20	15	10	20	14	14	13	11	14	20	8	19	49	39	98.5
30-Jan-08	19	16	72	23	39	14	12	21	40	34	24	78	57	44	35	30	44	16	15	9	9	10	9	7	78.2
31-Jan-08	8	7	8	15	34	62	17	46	11	10	15	21	16	12	7	6	5	7	14	17	12	21	15	14	62.0
Hourly Max	73	86	92	86	90	83	88	81	98	74	82	95	88	76	85	85	85	89	91	96	87	93	83	87	

1-hr Average Wind Rose (in km/hr) Located at the Valleyview Site for January 2008



Calms:	**0%**

Frequency Distribution of Wind in km/hr			
Range			**Frequency (hrs)**
0.8	<	5	460
5	to	10	146
10	to	20	96
20	to	30	19
30	to	40	0
	>	40	0
Total Non-Zero Values			721

PASZA

Monthly Passive Data Summary

Table 1. PASZA Passive Stations for January 2008

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
20a	Shaftsbury	**0.4**	**33.1**	**2.1**	
20b	Shaftsbury	**0.4**	**31.8**	**2.4**	
21a	Eaglesham	**0.4**	**32.1**	**2.4**	
21b	Eaglesham	**0.5**	**34.0**	**2.4**	
26a	Flyingshot	**0.4**	**27.8**	**7.7**	
26b	Flyingshot	**0.4**	**32.4**	**7.9**	
27a	Grande Prairie I	**0.5**	**37.3**	**18.8**	
27b	Grande Prairie I	**0.7**	**23.8**	**17.7**	
28a	Clairmont Lake	**1.0**	**20.4**	**4.2**	
28b	Clairmont Lake	**1.0**	**38.6**	**4.2**	
60a	Gerry Lake	**0.3**	**38.5**	**1.4**	
60b	Gerry Lake	**0.2**	**37.1**	**1.9**	
49a	Grande Prairie HP	**0.5**	**22.7**	**17.0**	
49b	Grande Prairie HP	**0.7**	**43.1**	**18.0**	
1	Silver Valley	**0.9**	**38.1**	**3.2**	08-27-081-11 W6M
2	Bay Tree	**0.4**	**35.4**	**2.6**	13-16-078-13 W6M
3	Forth Creek	**0.8**	**39.3**	**2.1**	04-13-082-07 W6M
4	Gordondale	**0.8**	**40.2**	**2.8**	04-34-078-10 W6M
5	Boone Creek	**0.6**	**36.3**	**3.4**	01-23-076-11 W6M
7	Steeprock Creek	**0.7**	**40.8**	**2.8**	09-35-072-13 W6M
9	Spirit River	**0.6**	**33.6**	**3.5**	08-12-079-07 W6M
10	Woking	**0.8**	**38.4**	**2.1**	01-13-076-07 W6M
11	Webber Creek	**0.7**	**36.9**	**3.9**	09-36-074-09 W6M
12	Hythe	**0.7**	**32.7**	**4.7**	14-36-072-11 W6M
14	Sylvester	**0.3**	**30.1**	**4.0**	08-06-069-12 W6M
16	Beaverlodge	**0.7**	**34.4**	**6.0**	15-36-071-10 W6M
17	Poplar	**0.7**	**35.5**	**4.3**	13-06-073-08 W6M
18	Saddle Hills	**0.7**	**40.5**	**2.2**	04-25-074-07 W6M
19	Wanham	**0.8**	**37.9**	**2.5**	16-22-077-03 W6M
20	Shaftesbury	**0.4**	**32.5**	**2.3**	04-03-082-23 W5M
21	Eaglesham	**0.5**	**33.1**	**2.4**	16-21-079-25 W5M
23	Bear Lake	**0.9**	**45.5**	**5.3**	15-31-072-06 W6M

Table 1. PASZA Passive Stations for January 2008 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	**0.6**	**35.1**	**6.2**	12-31-070-08 W6M
25	Pinto Creek	**0.4**	**42.5**	**4.4**	04-24-069-11 W6M
26	Flyingshot	**0.4**	**30.1**	**7.8**	15-36-070-07 W6M
27	Grande Prairie I	**0.6**	**30.6**	**18.3**	08-15-071-06 W6M
28	Clairmont Lake	**1.0**	**29.5**	**4.2**	09-06-073-04 W6M
29	Smoky Heights	**0.7**	**35.1**	**4.4**	04-06-075-02 W6M
30	Fitzsimmons	**0.4**	**42.7**	**4.4**	15-36-072-03 W6M
32	Gold Creek	**0.7**	**18.7**	**6.9**	06-33-067-05 W6M
33	Wapiti	**0.5**	**33.0**	**5.2**	02-25-071-03 W6M
34	Puskwaskau	**0.2**	**40.0**	**N/A**	15-35-074-25 W5M
35	Jean Cote	**0.5**	**40.7**	**2.2**	12-35-079-21 W5M
36	Guy	**0.5**	**36.9**	**2.8**	03-04-076-22 W5M
37	Crooked Creek	**0.6**	**37.4**	**4.8**	16-01-071-26 W5M
38	Karr Creek	**N/A**	**N/A**	**N/A**	10-16-065-02 W6M
39	Clouston Creek	**0.7**	**34.0**	**3.3**	12-01-073-22 W5M
40	McLennan	**0.5**	**39.2**	**2.7**	03-29-077-19 W5M
41	Valleyview	**1.1**	**39.6**	**3.8**	09-30-069-22 W5M
42	Sunset House	**0.7**	**39.8**	**1.8**	05-32-070-19 W5M
43	High Prairie	**0.4**	**33.4**	**4.3**	16-13-074-17 W5M
44	Peavine	**0.2**	**35.6**	**1.7**	03-05-079-15 W5M
45	Gift Lake	**0.3**	**31.5**	**2.3**	10-07-079-12 W5M
46	Little Smoky	**0.6**	**25.6**	**8.1**	12-01-065-21 W5M
47	Kinuso	**0.2**	**28.2**	**3.3**	12-10-073-10 W5M
48	Deer Mountain	**0.5**	**35.9**	**2.2**	15-22-068-09 W5M
49	Grande Prairie HP	**0.6**	**32.9**	**17.5**	17-26-071-06 W6M
50	Clear River	**0.9**	**39.7**	**1.9**	SE-03-084-12 W6M
51	Bear Canyon	**1.1**	**36.9**	**2.9**	SE-28-085-12 W6M
52	Worsley	**0.5**	**31.8**	**3.8**	NE-34-085-07 W6M
53	Hines Creek	**0.4**	**39.3**	**1.8**	SW-09-084-04 W6M
54	Ronan	**0.5**	**35.2**	**4.1**	SE-03-082-04 W6M
55	Cadotte Lake School	**0.4**	**26.3**	**3.9**	NE-23-086-16 W5M
56	Simon Lake Store	**1.5**	**34.3**	**2.4**	SE-32-086-17 W5M
57	Dixonville	**0.3**	**35.6**	**2.2**	SE-14-087-24 W5M
58	Queen Elizabeth Park	**0.5**	**40.2**	**2.4**	NW-19-083-23 W5M
59	Blue Sky	**0.6**	**39.2**	**3.9**	SW-35-081-02 W6M
60	Gerry Lake	**0.2**	**37.8**	**1.6**	SW-22-084-02 W6M
61	Musreau Lake	**0.2**	**39.6**	**2.4**	NE-22-064-05 W6M

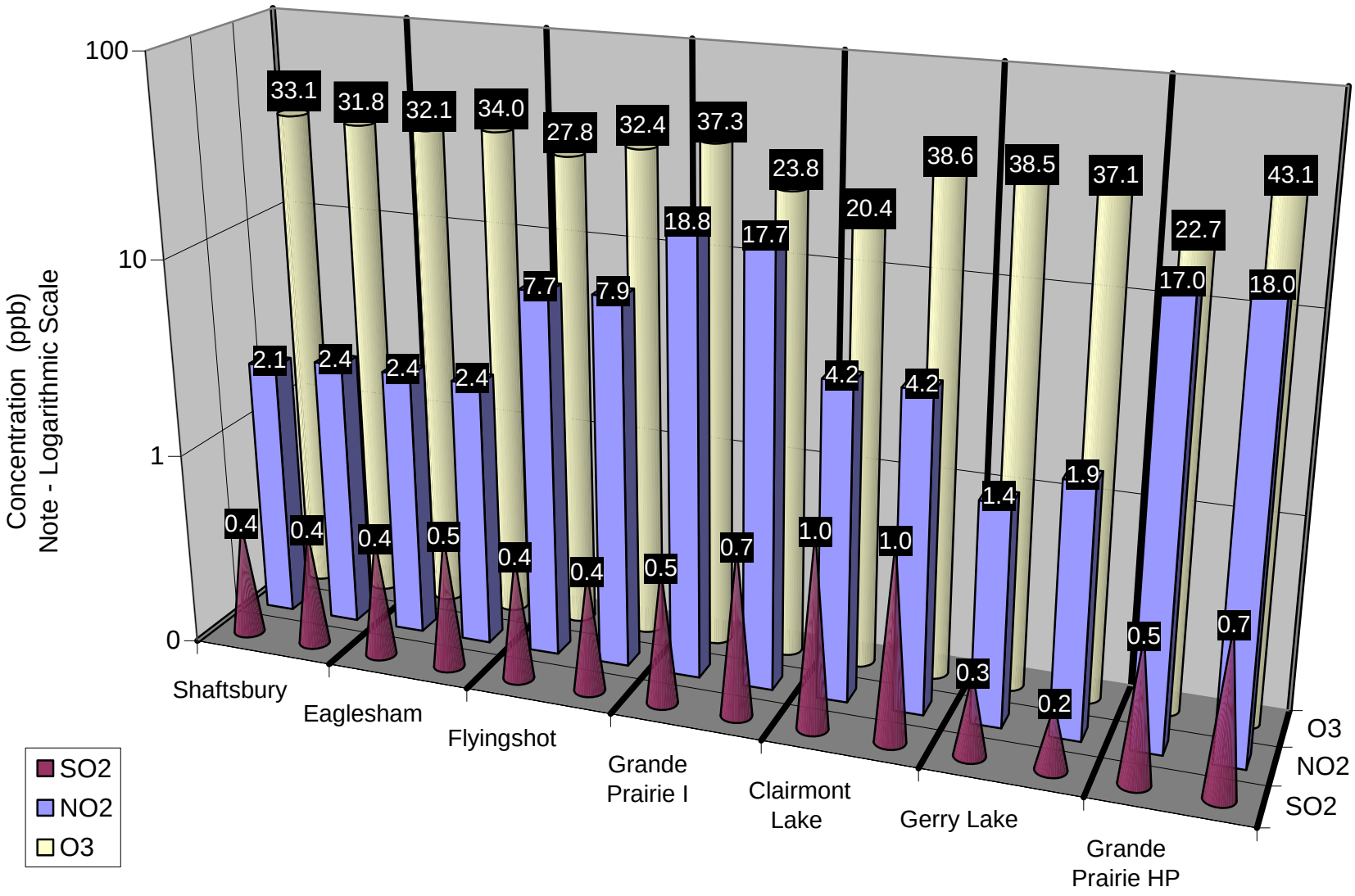


Figure 61. Duplicate Summary Chart

Table 2. Passive Summary Results for January 2008

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for January 2008 (PASZA Zone)		
Mean	**0.6**	**35.7**	**4.1**
Standard Deviation	**0.3**	**4.8**	**3.1**
Minimum	**0.2**	**18.7**	**1.6**
Minimum At	**Musreau Lake (#61)**	**Gold Creek (#32)**	**Gerry Lake (#60)**
Maximum	**1.5**	**45.5**	**6.0**
Maximum At	**Simon Lake Store (#56)**	**Bear Lake (#23)**	**Grande Prairie I (#27)**

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

	SO_2	O_3	NO_2
AENV Beaverlodge station	**0.9**	**24.5**	**9.1**
PASZA Beaverlodge passive	**0.7**	**34.4**	**6.0**

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**	**11.7**	**21.0**
PASZA Grande Prairie passive	**0.6**	**32.9**	**17.5**

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

	SO_2	O_3	NO_2
PASZA Portable Spirit River station	**0.8**	**23.5**	**6.6**
PASZA Spirit River passive	**0.6**	**33.6**	**3.5**

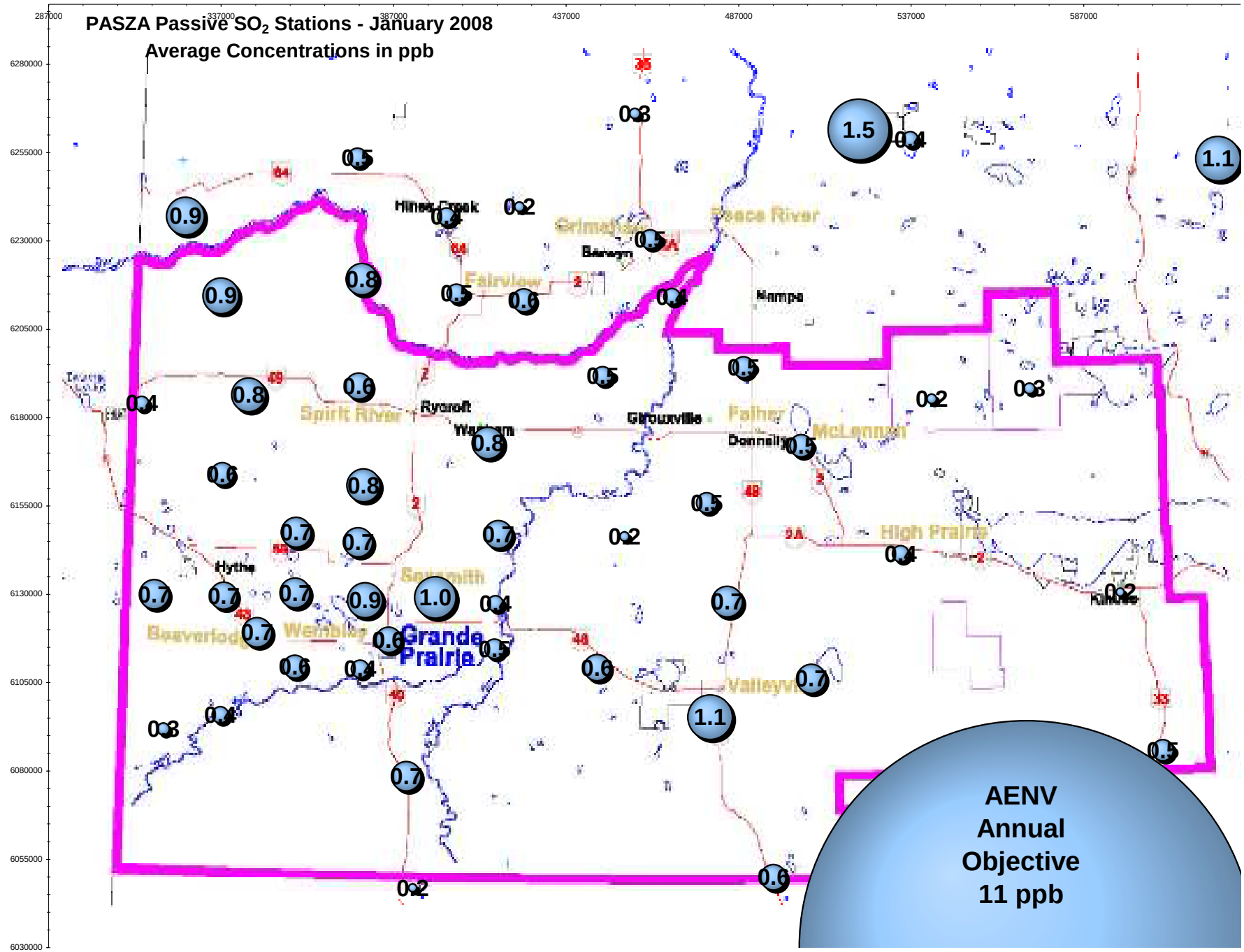


Figure 62. SO_2 Bubble Chart

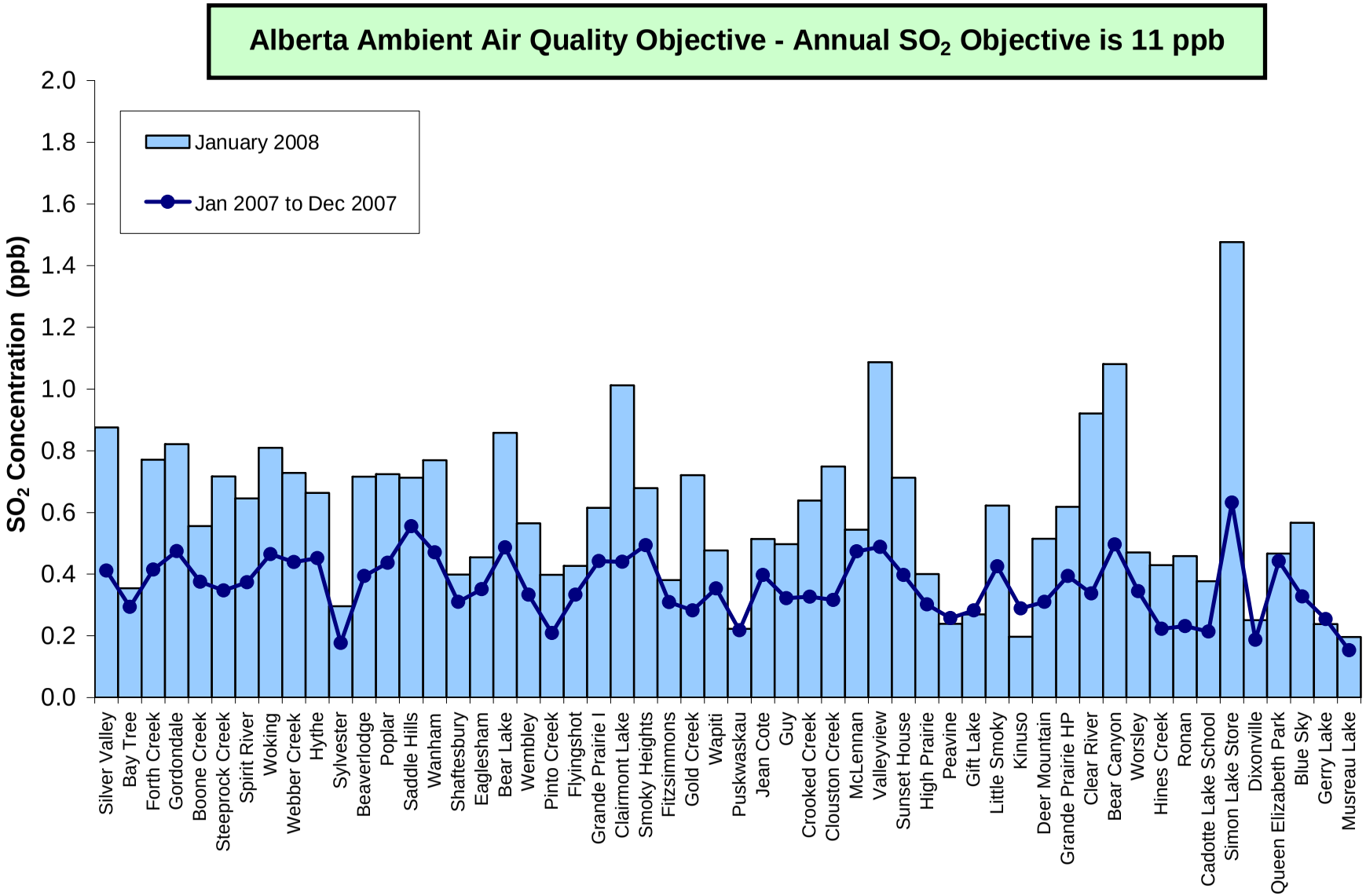


Figure 63. SO_2 Summary Chart

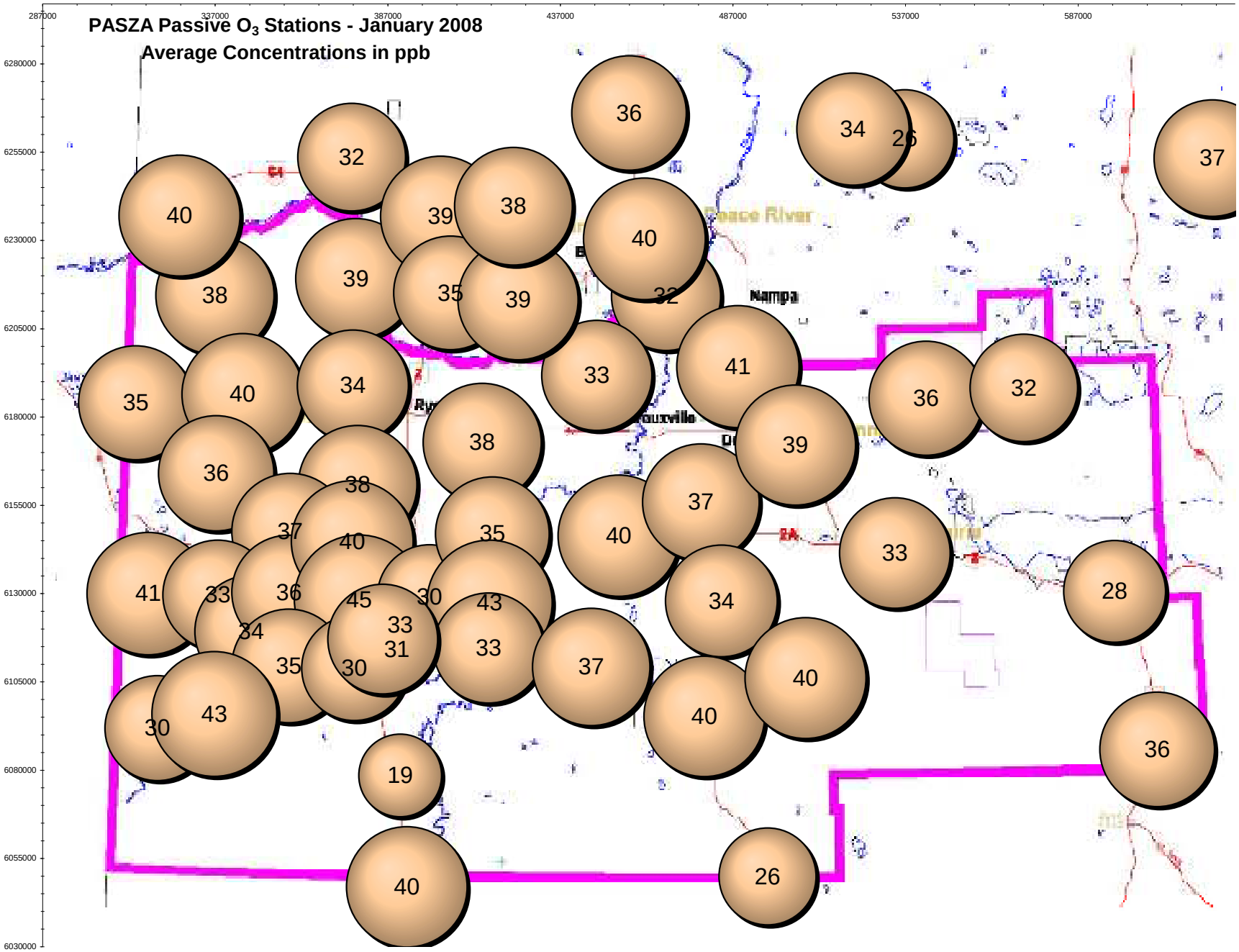


Figure 64. O_3 Bubble Chart

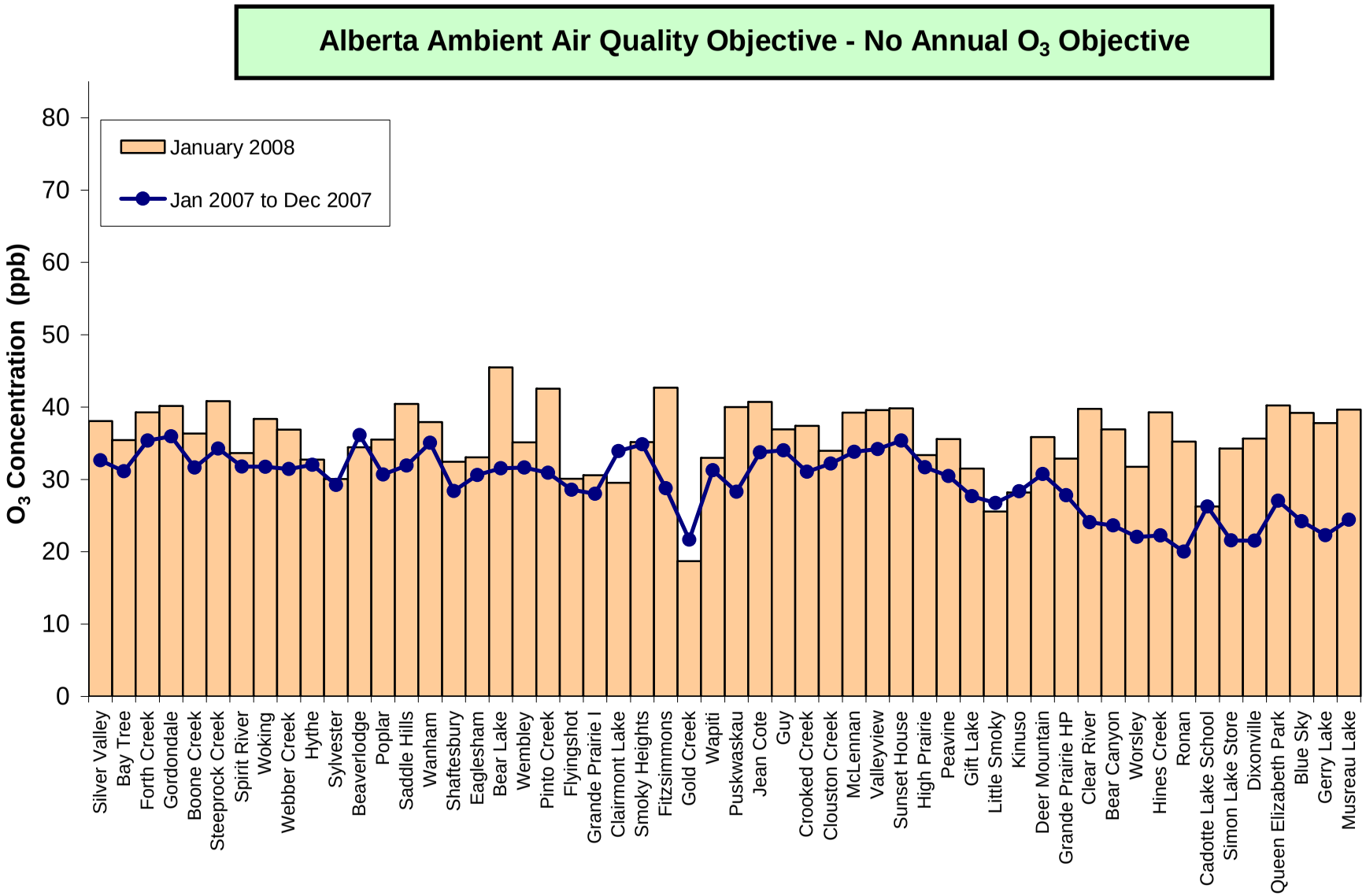


Figure 65. O_3 Summary Chart

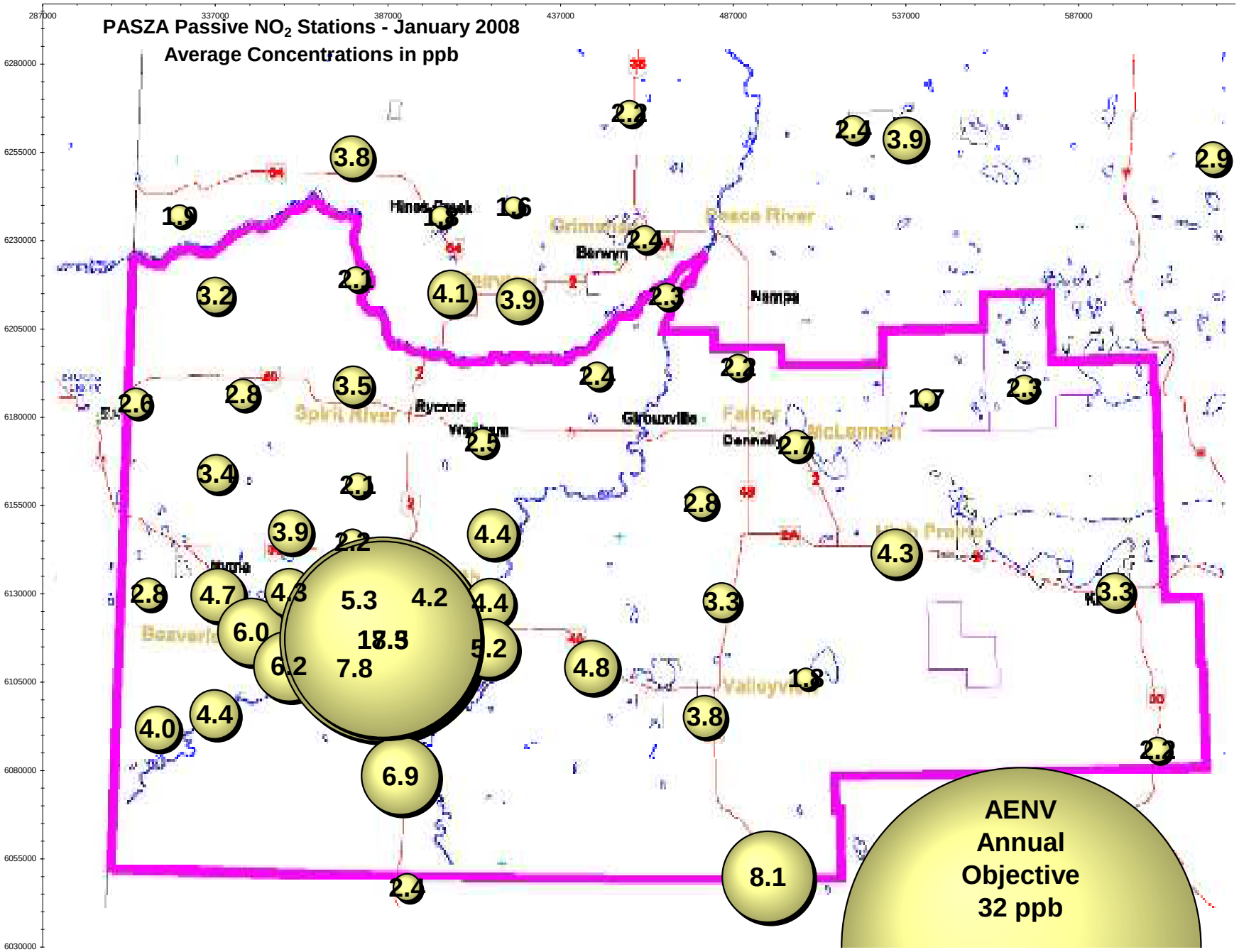


Figure 66. NO_2 Bubble Chart

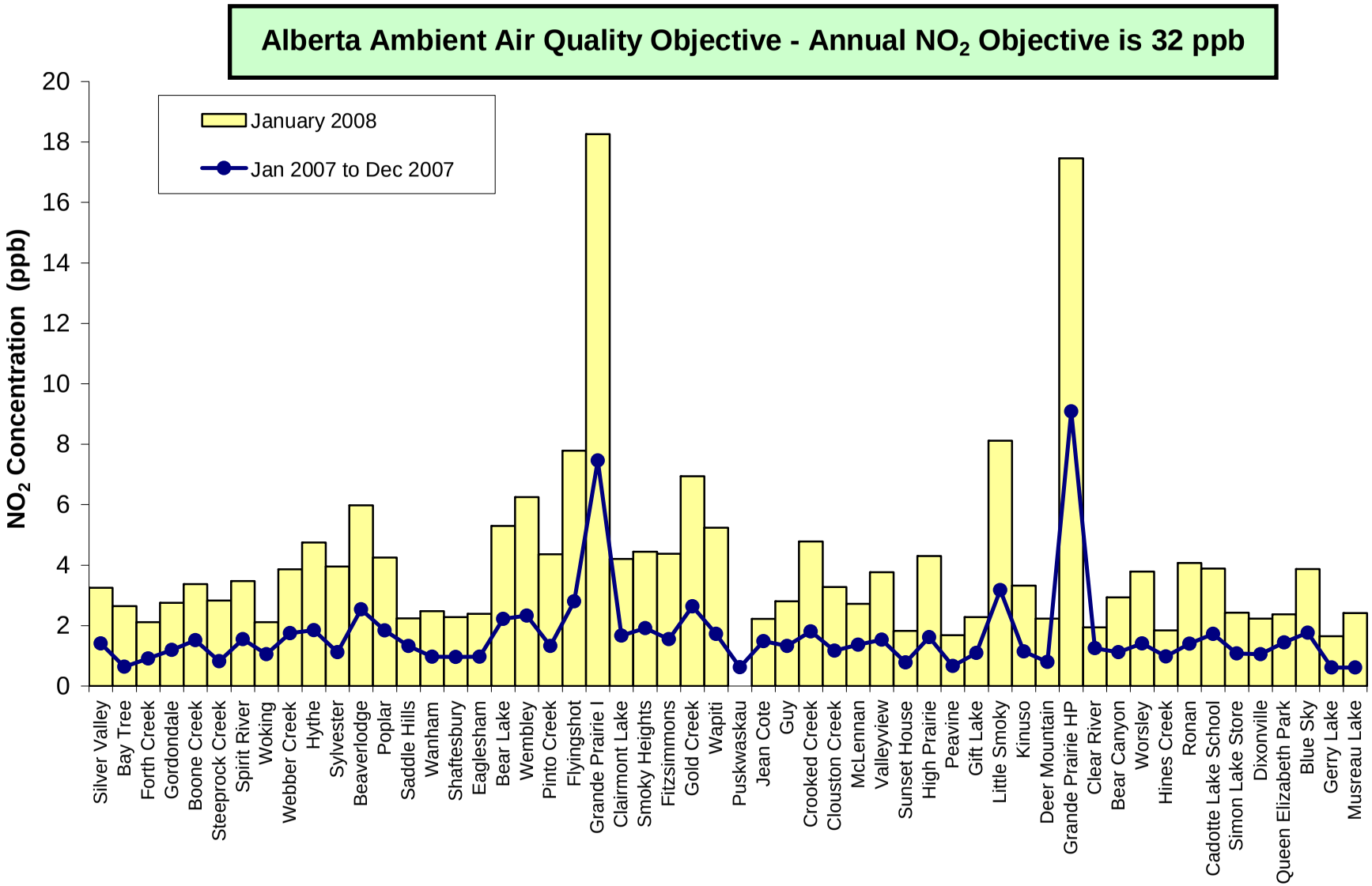


Figure 67. NO_2 Summary Chart

January 2008 Calibration Reports

PASZA - Henry Pirker Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, CO, THC and TRS

PASZA – Evergreen Park Station with the following calibrations:
SO_2 and TRS

PASZA – Smoky Heights Station with the following calibrations:
SO_2, TRS and TEOM

PASZA – Beaverlodge Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3

PASZA – Spirit River (Portable) Station with the following calibrations:
SO_2, TRS, NO, NO_2, NO_x, O_3,

PASZA – Valleyview Station with the following calibrations:
SO_2, H_2S

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	SO2
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:

Start Time (MST)	9:45	End Time (MST)	12:35
Barometric Pressure	0.914 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	50.3 ppb	Cal Gas Expiry Date	1/2/2009
		Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.997135	Calculated slope	0.995235
Calculated intercept	-0.323819	Calculated intercept	-1.092679

Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.6		7.6	
Coefficient	.807		.807	
Pressure	640.6	mm Hg	638.7	mm Hg
Flow	0.470	lpm	0.478	lpm
Lamp Voltage	44056	Hz	43287	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)
4990	0.00	0.0	0.2	N/A
4990	39.83	398.3	400.7	0.9940
4990	19.90	199.8	202.6	0.9859
4990	9.95	100.1	102.4	0.9777
4990	0.00	0.0	0.2	As Found Zero
4990	39.82	398.2	400.7	As Found Span
			Average Correction Factor	0.9859

Calculated value of As Found Response: 399.1 ppb Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	0.3	ppb	1.1	ppb
Auto span	340.6	ppb	343.3	ppb

Notes:

Calibration Performed By: Conor Whiteley

Calibration Report

FOCUS AIR QUALITY MONITORING

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: Routine	Install	Removal	Other:
Start Time (MST)	10:20	End Time (MST)	13:20
Barometric Pressure	0.921 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	50.3 ppb	Cal Gas Expiry Date	1/2/2009
		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 accidentaly powered off during zero… small spike
Span adjusted

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	SO2
Air Monitoring Network	PASZA

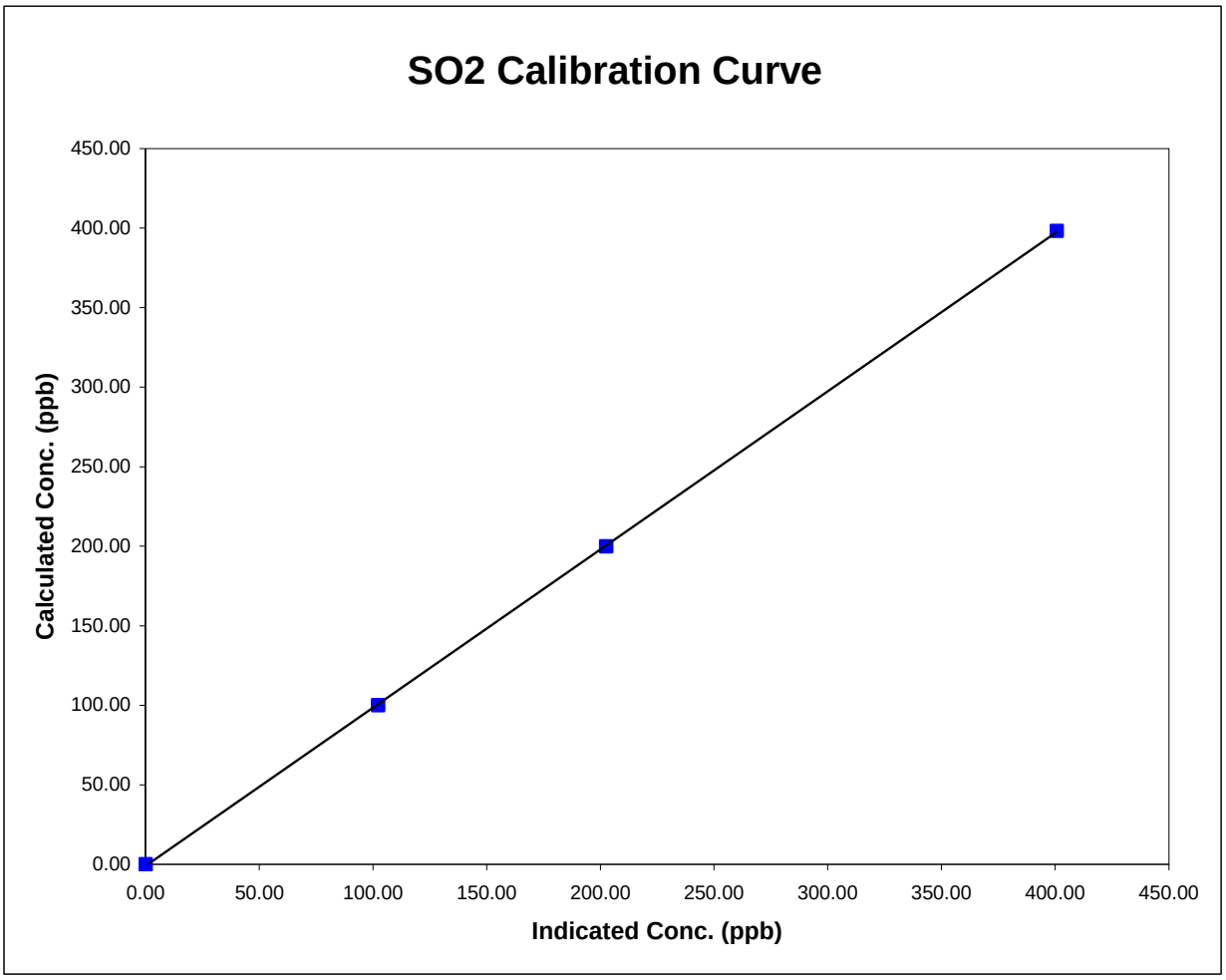
FOCUS AIR QUALITY MONITORING

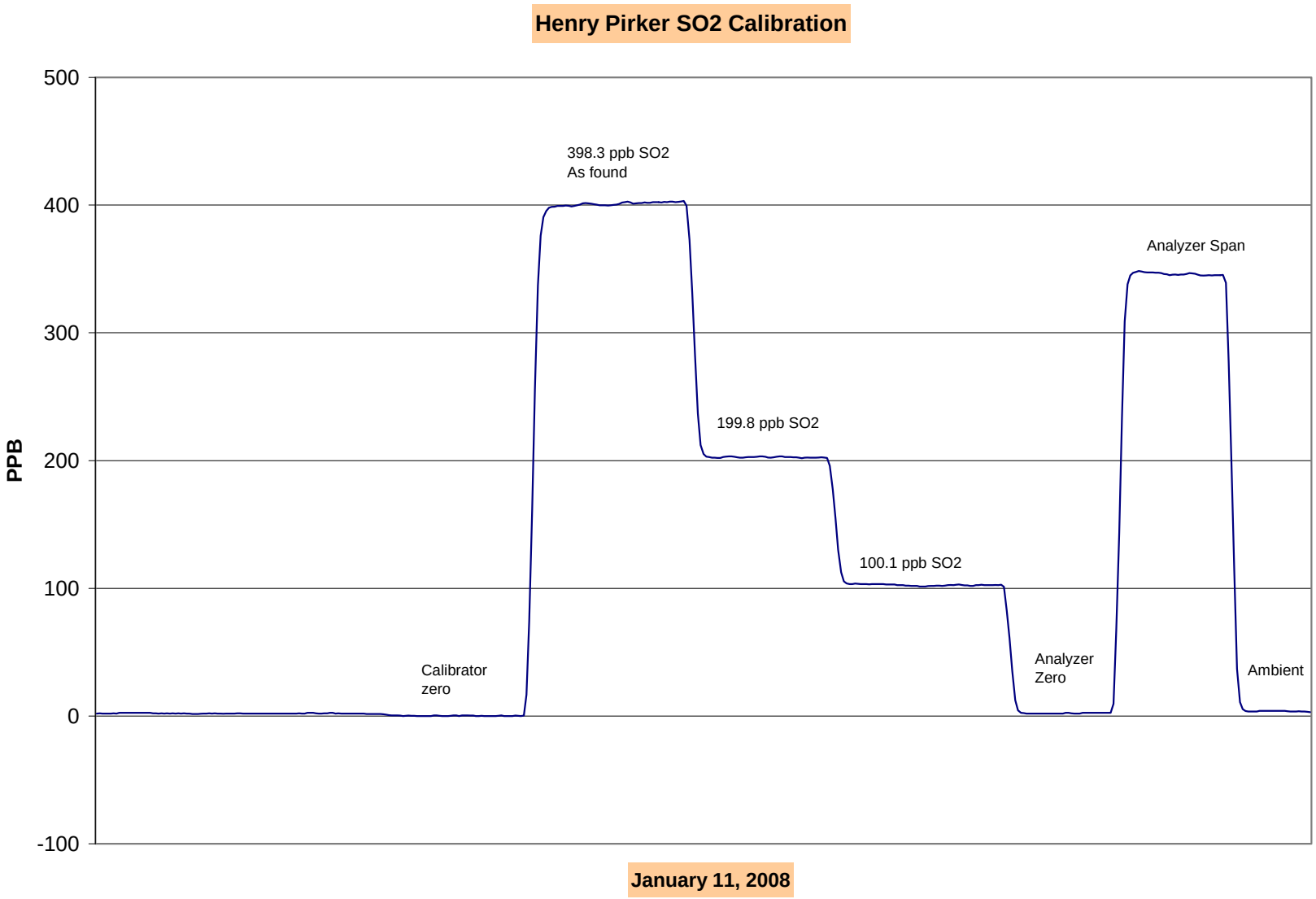
Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:45	End Time (MST)	12:35
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		
398.3	400.7	0.9940	Correlation Coefficient	0.999973
199.8	202.6	0.9859		
100.1	102.4	0.9777	Slope	0.995235
			Intercept	-1.092679




Henry Pirker SO2 Calibration
500
400
300
200
100
0
-100
PPB
398.3 ppb SO2
As found
Analyzer Span
199.8 ppb SO2
100.1 ppb SO2
Calibrator
zero
Analyzer
Zero
Ambient
January 11, 2008

Calibration Report

Parameter	**NOx-NO-NO_2**
Air Monitoring Network	**PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker

Reason: Routine Installation Removal Other:

Start Time (MST)	9:45		End Time (MST)	14:45	
Barometric Pressure	0.914	Atm	Station Temperature	21.0	Deg C
Calibrator	Environics 6100		Serial Number	3474	
NO Cal Gas Conc	48.9	ppm	Cal Gas Expiry Date	1/2/2009	
NOx Cal Gas Conc	48.9	ppm	Cal Gas Serial #	LL16161	

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269

Parameter		NO2	NOx	NO
Before	Data Slope	1.000459	1.002219	1.004226
	Data Offset	-0.347925	-1.063077	-0.751909
After	Data Slope	1.002082	1.003030	1.001967
	Data Offset	-0.377952	-0.921159	-0.348088
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model	Teco 42C	Analyzer serial #	508011073

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	7.7	ppb	7.7	mV
NOx background	8.1	ppb	8.1	mV
NO coefficient	0.678		0.678	
NOx coefficient	1.000		1.000	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	-2.4	Deg C	-2.4	Deg C
Converter Temp	319.0	Deg C	319.0	Deg C
Vacuum	164.9	mm Hg	164.9	mm Hg

Notes:

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date: January 11, 2008 Station Location: Henry Pirker

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4990	0.00	0.0	0.0	0.0	0.6	0.0	0.5	N/A	N/A
1	4990	39.83	387.2	387.2	0.0	386.9	386.7	0.1	1.0008	1.0012
2	4990	19.90	194.2	194.2	0.0	194.4	194.0	0.4	0.9989	1.0011
3	4990	9.95	97.3	97.3	0.0	98.5	98.1	0.3	0.9881	0.9920
AFZ	4990	0.00	0.0	0.0	0.0	0.6	0.0	0.5	0.0000	0.0000
AFS	4990	39.88	387.7	387.7	0.0	386.9	386.7	0.1	1.0021	1.0025
							Average Correction Factor		0.9960	0.9981

As Found Concentrations: NO_X= 385.3 NO= 386.0 As Found Percent Change NO_X= -0.6% NO= -0.4%

GPT Calibration Data

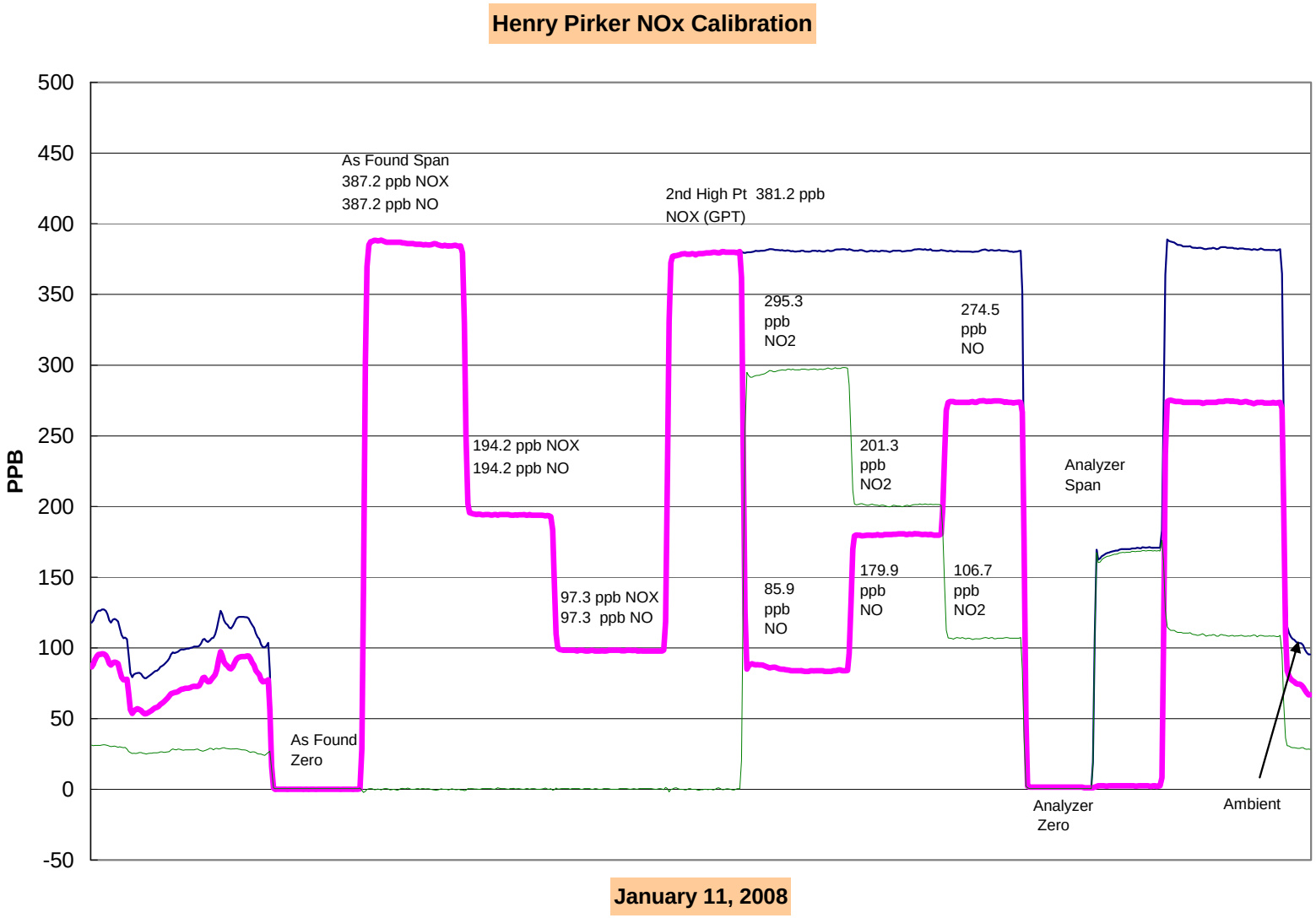
Dilution Flow 4990 ccm Source Gas Flow 39.88 ccm

O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	381.2	379.3	1.9	378.8	378.9	-0.1	1.0064	1.0010	N/A	N/A
300	381.2	85.9	295.3	381.2	86.1	295.3	0.9999	0.9979	0.9999	100.0%
200	381.2	179.9	201.3	380.8	179.9	200.9	1.0012	1.0000	1.0018	99.8%
100	381.2	274.5	106.7	380.9	274.3	106.7	1.0007	1.0007	0.9993	100.1%
					Average Correction Factor		1.0006	0.9996	1.0004	100.0%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.9	1.0	1.0	ppb	-0.9	0.8	0.0	ppb
Auto span	169.0	166.3	2.2	ppb	168.5	166.5	2.1	ppb

Calibration Performed By: Conor Whiteley


Henry Pirker NOx Calibration
PPB
500
450
400
350
300
250
200
150
100
50
0
-50
As Found Span
387.2 ppb NOX
387.2 ppb NO
2nd High Pt 381.2 ppb
NOX (GPT)
295.3
ppb
NO2
274.5
ppb
NO
194.2 ppb NOX
194.2 ppb NO
201.3
ppb
NO2
Analyzer
Span
97.3 ppb NOX
97.3 ppb NO
85.9
ppb
NO
179.9
ppb
NO
106.7
ppb
NO2
As Found
Zero
Analyzer
Zero
Ambient
January 11, 2008

Calibration Summary

Parameter	NO_2
Air Monitoring Network	PASZA

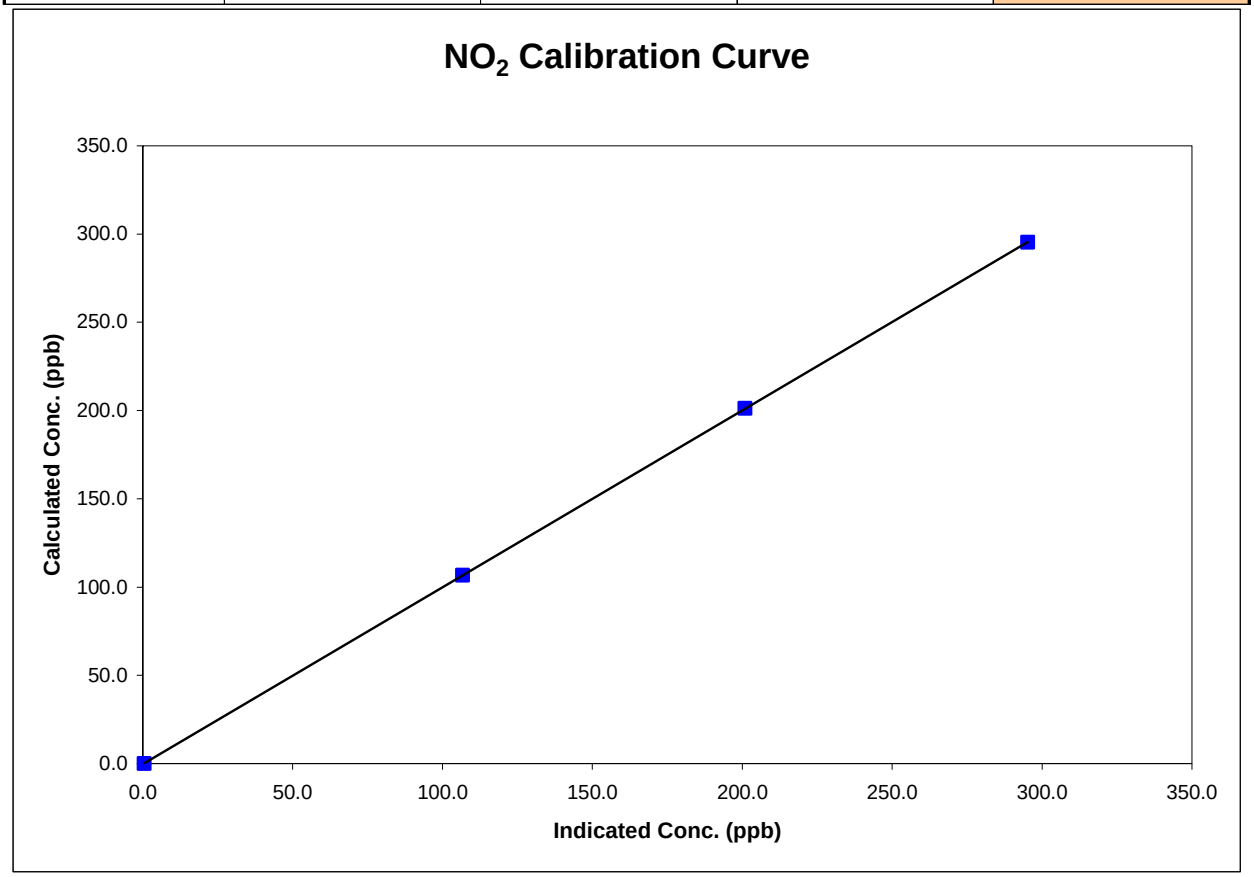
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:45	End Time (MST)	14:45
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	0.0000		
295.3	295.3	0.9999	Correlation Coefficient	0.999996
201.3	200.9	1.0018		
106.7	106.7	0.9993	Slope	1.002082
			Intercept	-0.377952



Calibration Summary

Parameter	NO_x
Air Monitoring Network	PASZA

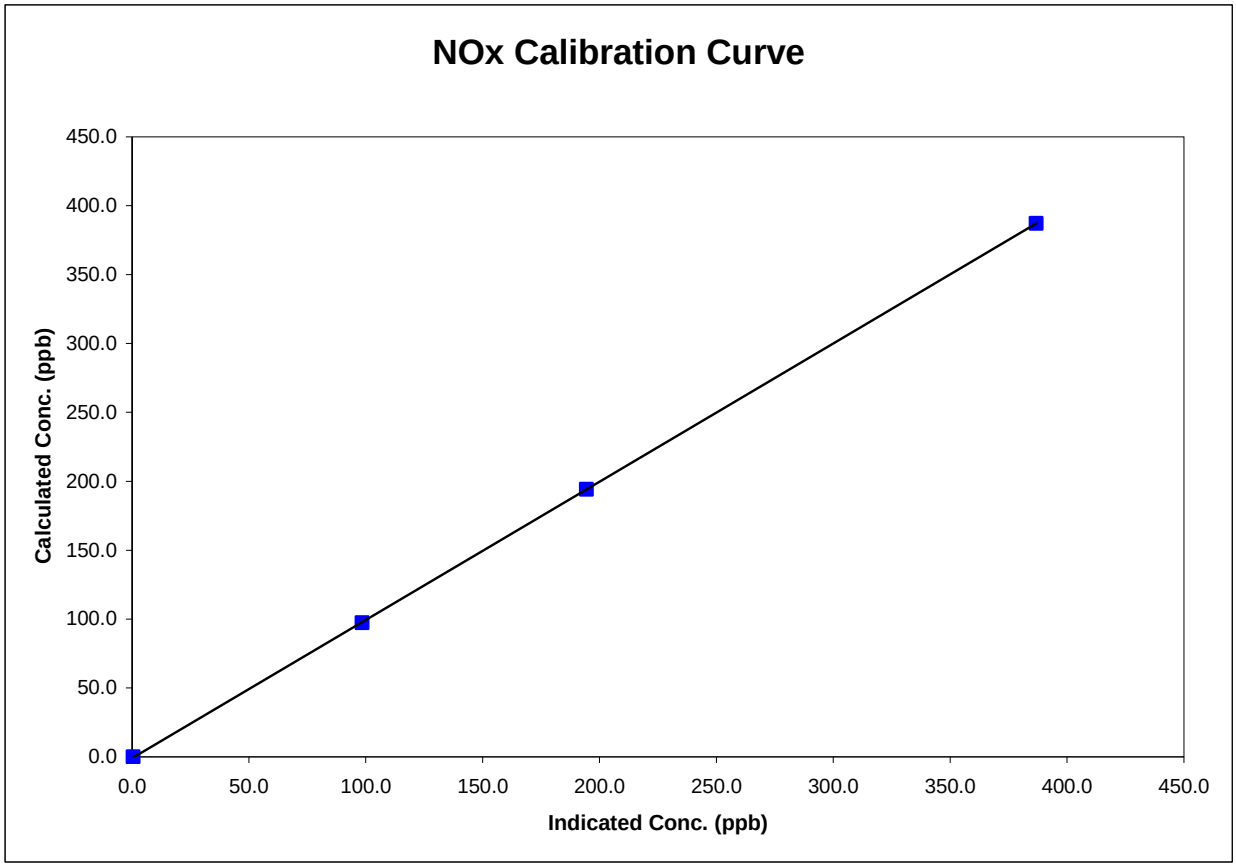
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:45	End Time (MST)	14:45
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	0.0000		
387.2	386.9	1.0008	Correlation Coefficient	0.999995
194.2	194.4	0.9989		
97.3	98.5	0.9881	Slope	1.003030
			Intercept	-0.921159



Calibration Summary

Parameter	NO
Air Monitoring Network	PASZA

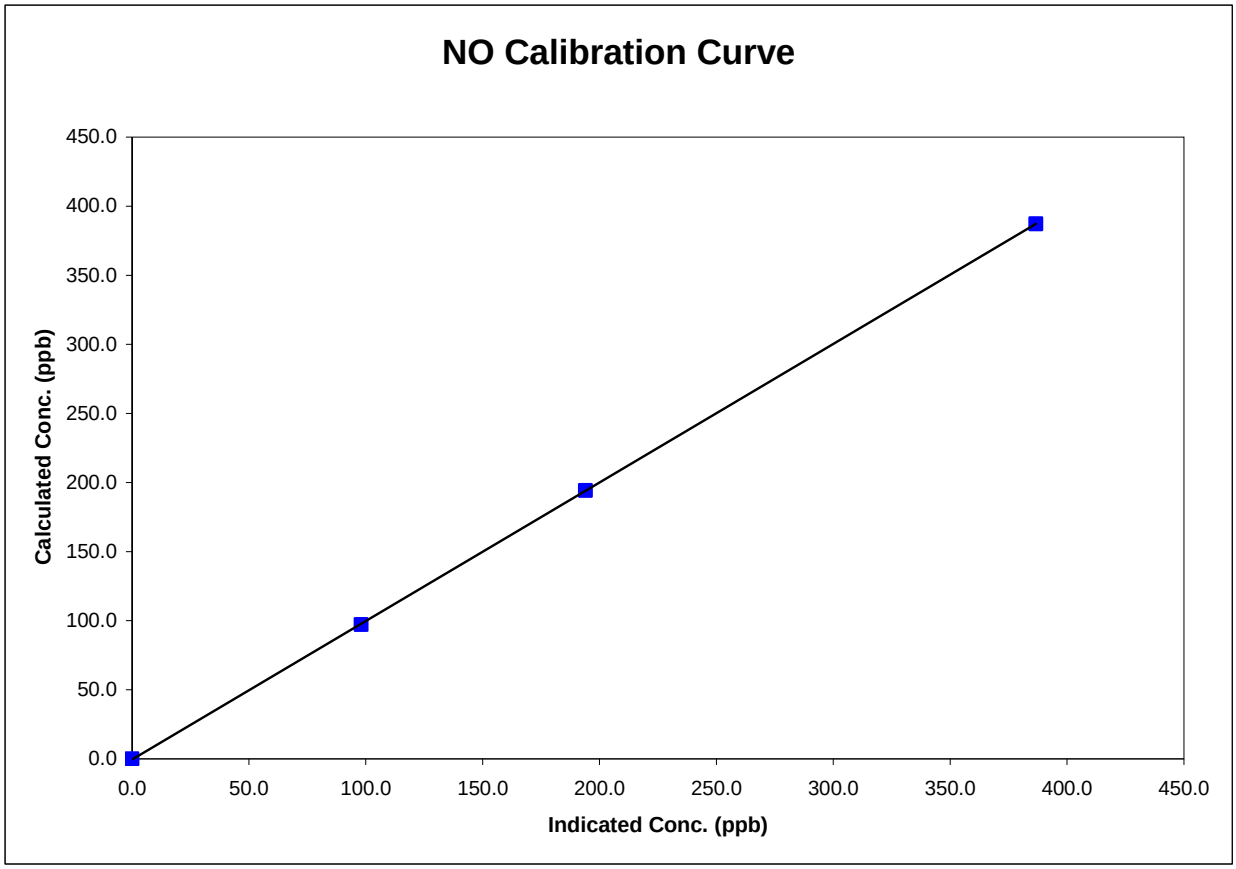
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:45	End Time (MST)	14:45
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		
387.2	386.7	1.0012	Correlation Coefficient	0.999993
194.2	194.0	1.0011		
97.3	98.1	0.9920	Slope	1.001967
			Intercept	-0.348088



Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	O3
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	14:45	End Time (MST)	17:55
Barometric Pressure	0.914 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	1.006449	Calculated slope	1.007818
Calculated intercept	2.541506	Calculated intercept	0.494040
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	0.0	N/A
300	4992	295.3	293.2	1.0069
200	4992	201.3	198.3	1.0151
100	4992	106.7	105.0	1.0156
0	4992	0.0	0.0	As found zero
300	4992	295.3	293.2	As found span
			Average Correction Factor	1.0126

Calculated value of As Found Response: 297.6 ppm Percent Change of As Found: 0.8%

	before calibration		after calibration	
Auto zero	4.4	ppb	1.9	ppb
Auto span	426.7	ppb	463.5	ppb

Notes: Adjusted Span

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	O3
Air Monitoring Network	PASZA

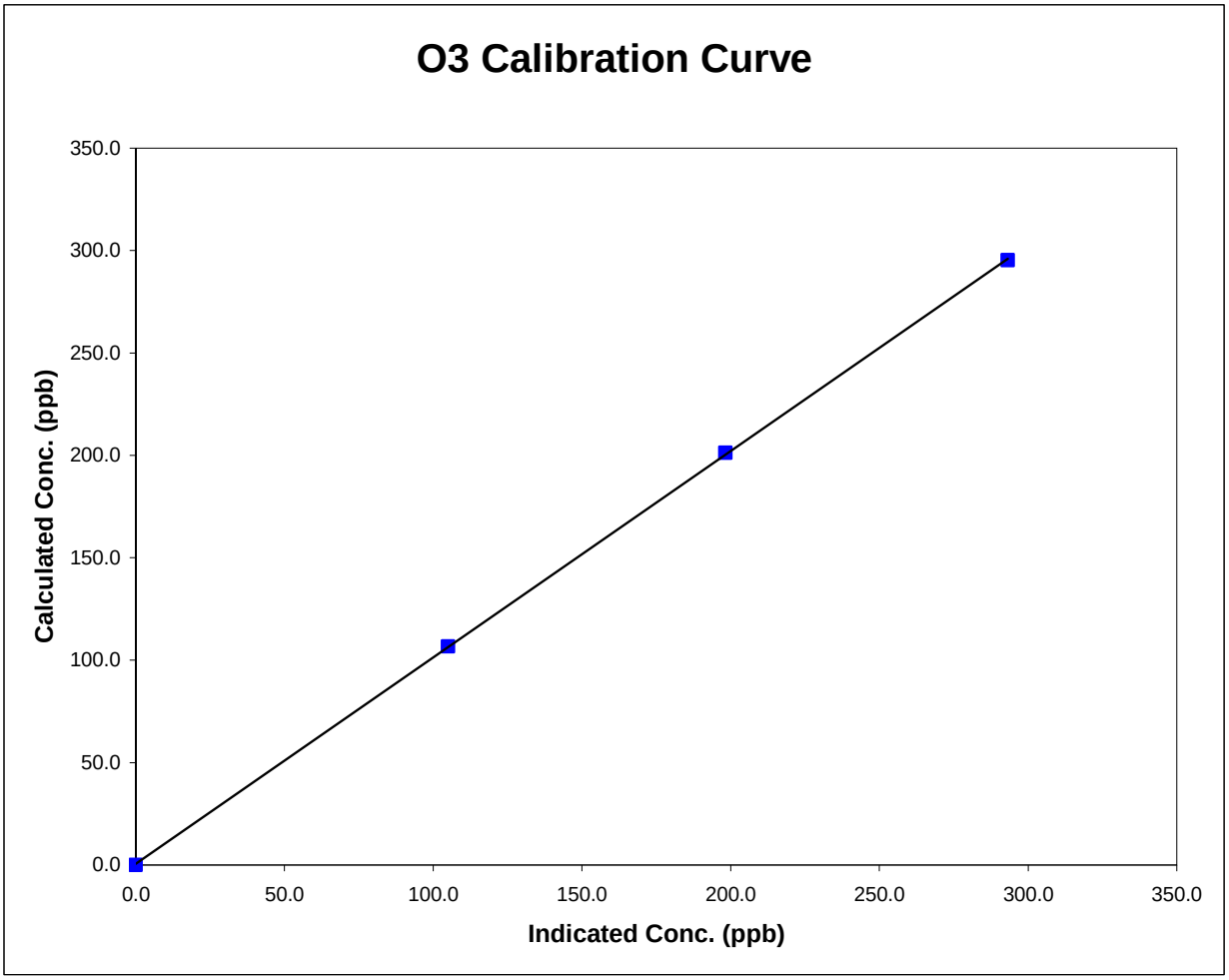
FOCUS AIR QUALITY MONITORING

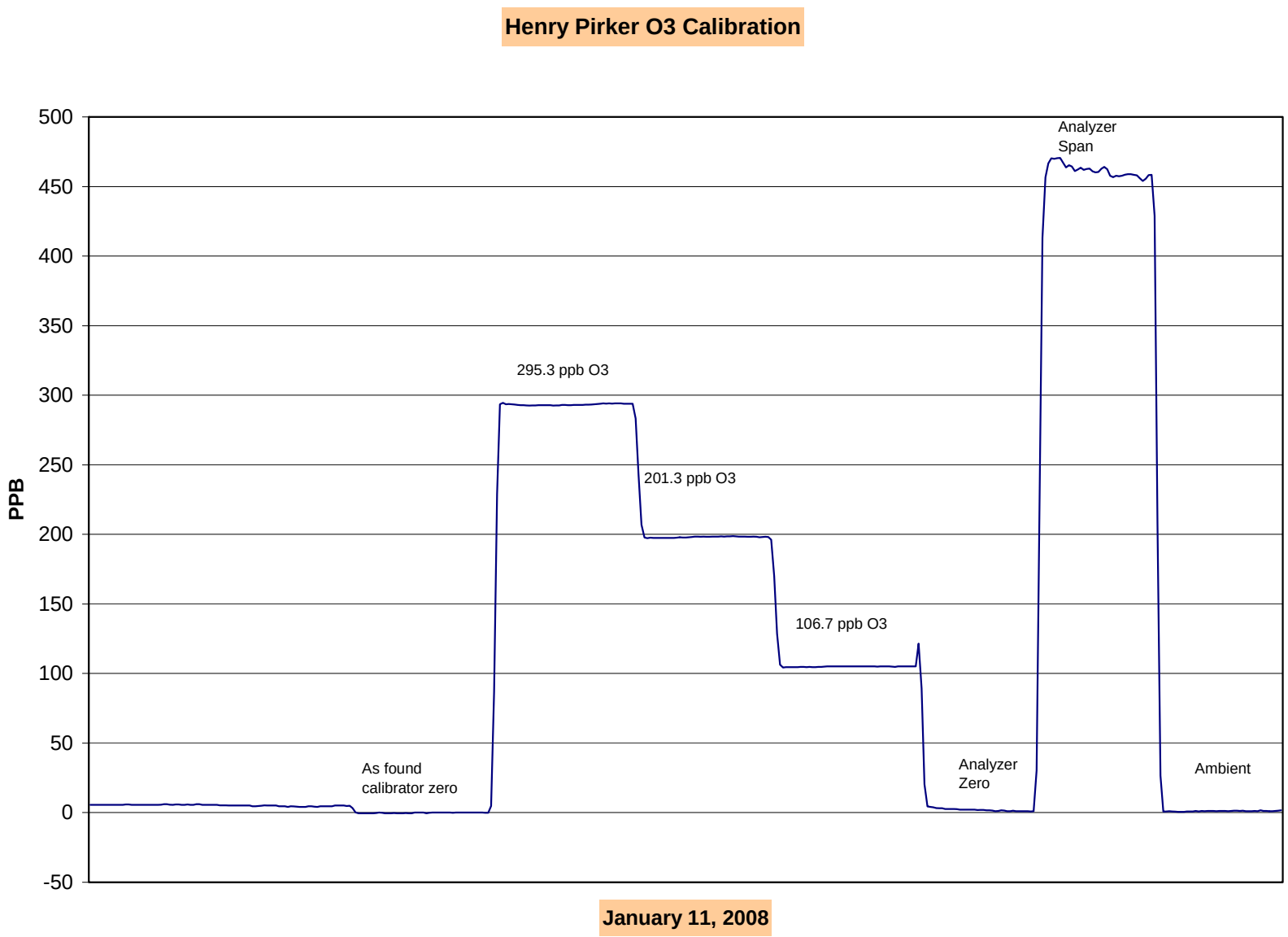
Station Information

Calibration Date	January 11, 2008	Previous Calibration	December 12, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:45	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	0.0	NA		
295.3	293.2	1.0069	Correlation Coefficient	0.999962
201.3	198.3	1.0151		
106.7	105.0	1.0156	Slope	1.007818
			Intercept	0.494040




Henry Pirker O3 Calibration
PPB
500
450
400
350
300
250
200
150
100
50
0
-50
295.3 ppb O3
201.3 ppb O3
106.7 ppb O3
As found
calibrator zero
Analyzer
Zero
Analyzer
Span
Ambient
January 11, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	CO
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 14, 2008	Previous Calibration	December 13, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:

Start Time (MST)	11:30	End Time (MST)	14:20
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.021589	Calculated slope	0.999851
Calculated intercept	-0.476919	Calculated intercept	-0.883368

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	-0.002		-0.002	
Sample pressure	686.9	mm Hg	671.2	mm Hg
Sample Flow	1.118	LPM	1.107	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	0.85	N/A
4987	39.90	23.81	24.67	0.9651
4987	19.85	11.89	12.83	0.9274
4987	9.92	5.96	6.86	0.8688
4987	0.00	0.00	0.85	As Found Zero
4987	39.90	23.81	24.67	As Found Span
			Average Correction Factor	0.9204

Calculated value of As Found Response: 23.860 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	-0.01	ppm	0.01	ppm
Auto span	NA	ppm	20.38	ppm

Notes: Still waiting on CO span bottle from Praxair

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	CO
Air Monitoring Network	PASZA

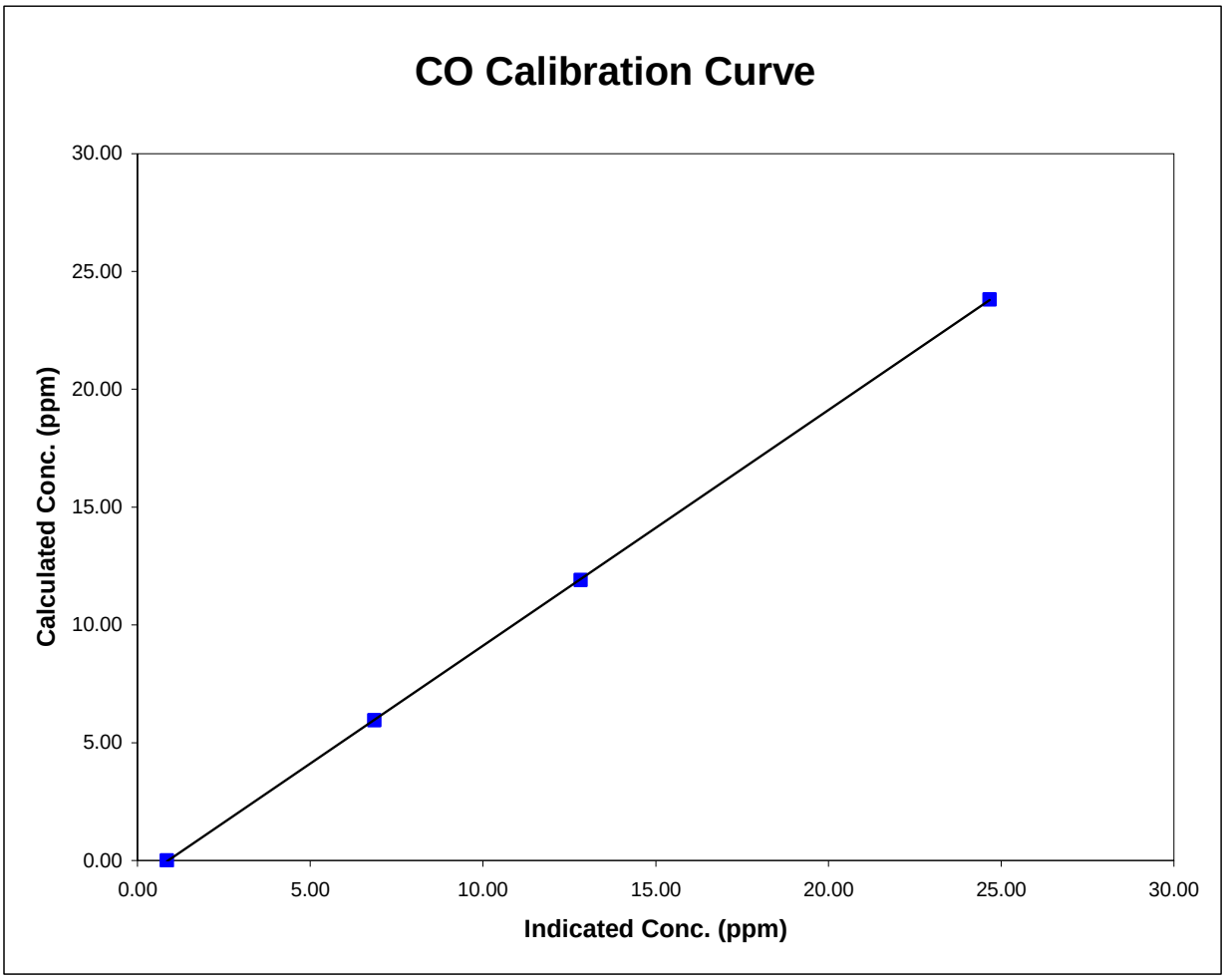
FOCUS AIR QUALITY MONITORING

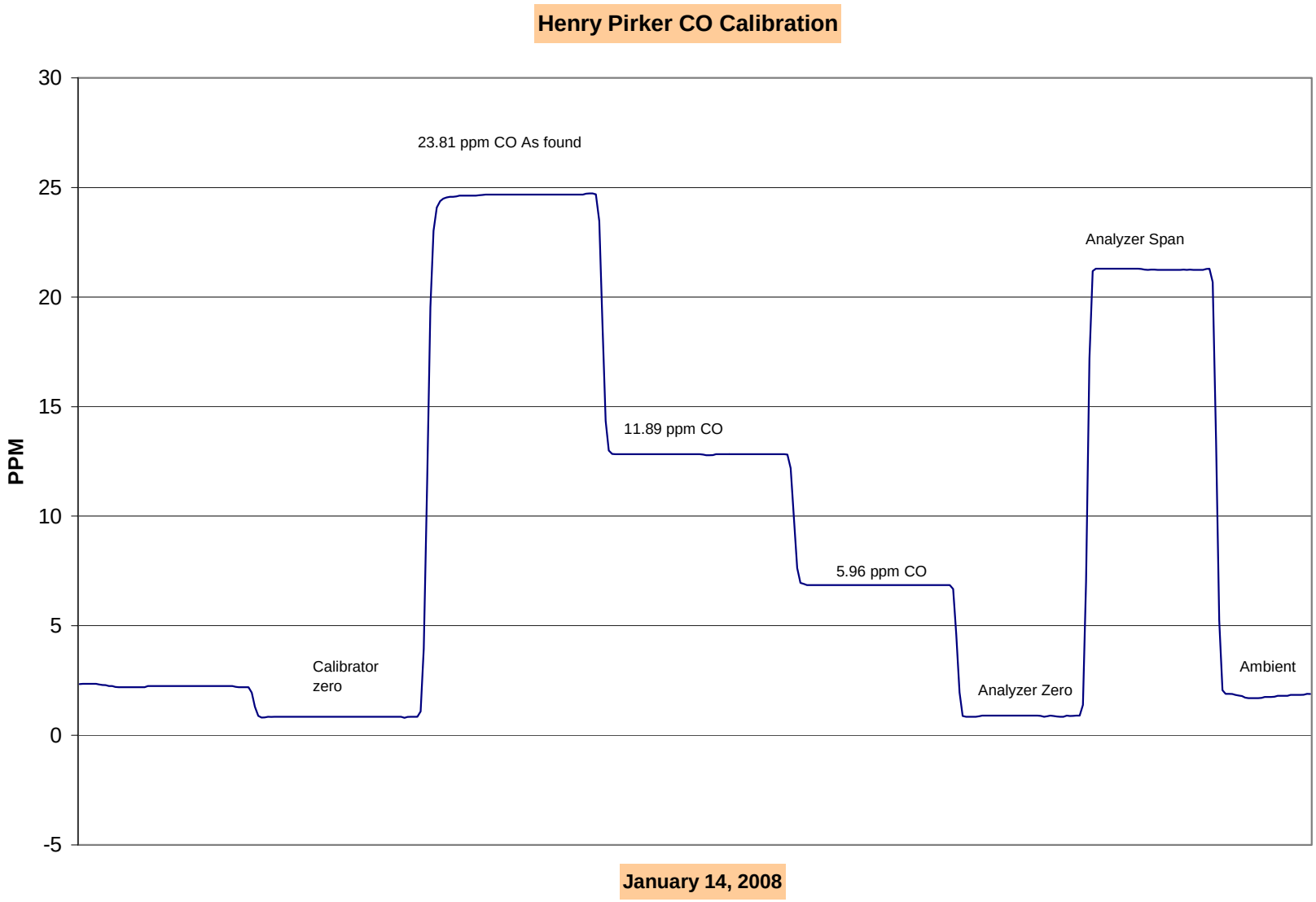
Station Information

Calibration Date	January 14, 2008	Previous Calibration	December 13, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:30	End Time (MST)	14:20
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	0.849	N/A		
23.812	24.672	0.9651	Correlation Coefficient	0.999986
11.894	12.825	0.9274		
5.956	6.855	0.8688	Slope	0.999851
			Intercept	-0.883368




Henry Pirker CO Calibration
30
25
20
15
10
5
0
-5
PPM
23.81 ppm CO As found
Analyzer Span
11.89 ppm CO
5.96 ppm CO
Calibrator
zero
Analyzer Zero
Ambient
January 14, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	THC
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 14, 2008	Previous Calibration	December 14, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:

Start Time (MST)	14:00	End Time (MST)	16:30
Barometric Pressure	0.907 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 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	0.990375
Calculated intercept	0.093326	Calculated intercept	0.575651

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	6.09	psi
THC span counts	6894	capture	6923	capture
THC zero counts	1348	capture	1431	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	-0.56	N/A
4990	69.81	21.00	20.65	1.0171
4990	29.89	9.06	8.51	1.0654
4990	9.92	3.02	2.49	1.2129
4990	0.00	0.00	-0.56	As Found Zero
4990	64.92	19.55	20.65	As Found Span
			Average Correction Factor	1.0985

Calculated value of As Found Response: 22.626 ppm Percent Change of As Found: -15.7%

	before calibration		after calibration	
Auto zero	-0.19	ppm	0.01	ppm
Auto span	25.27	ppm	21.77	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	THC
Air Monitoring Network	PASZA

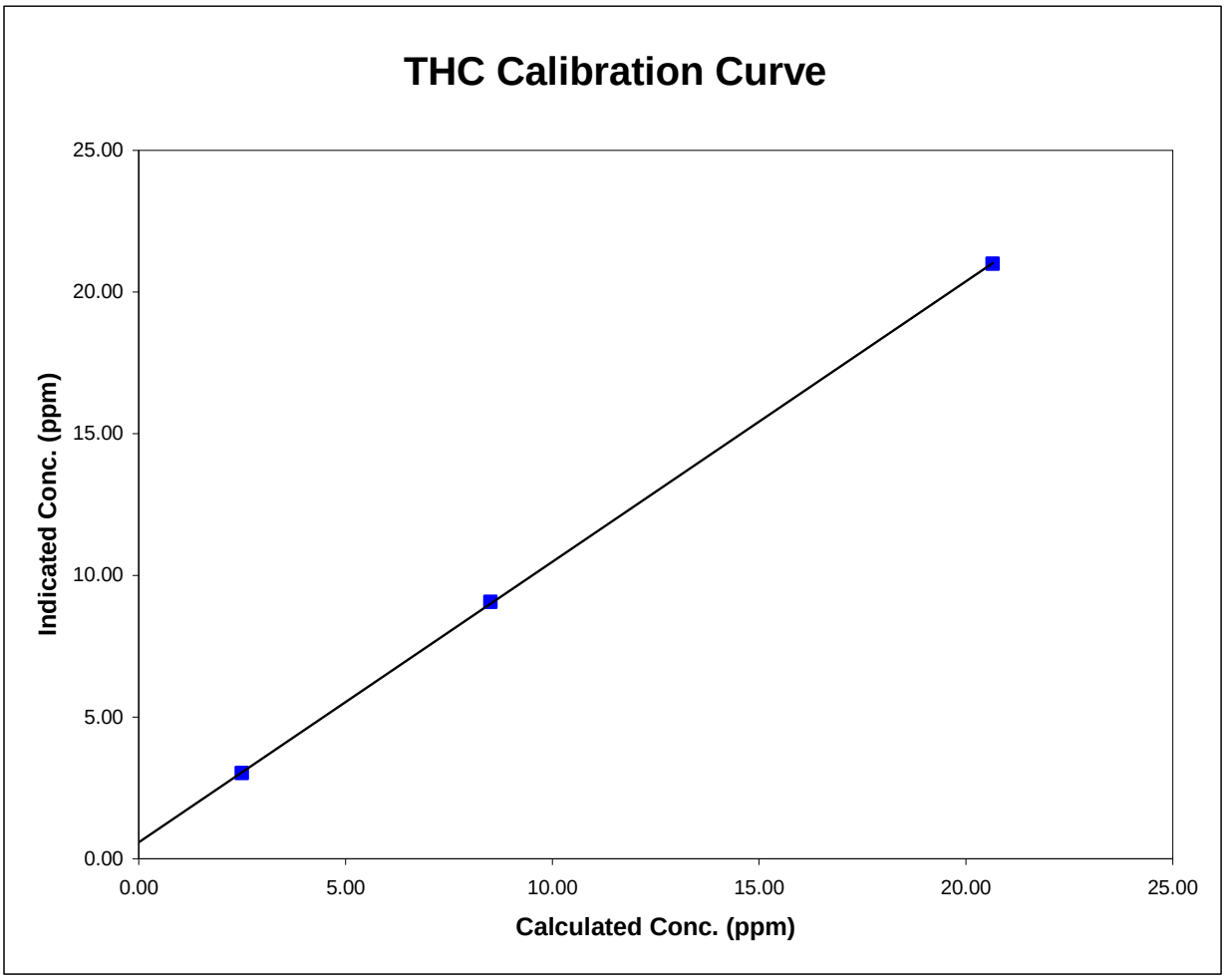
FOCUS AIR QUALITY MONITORING

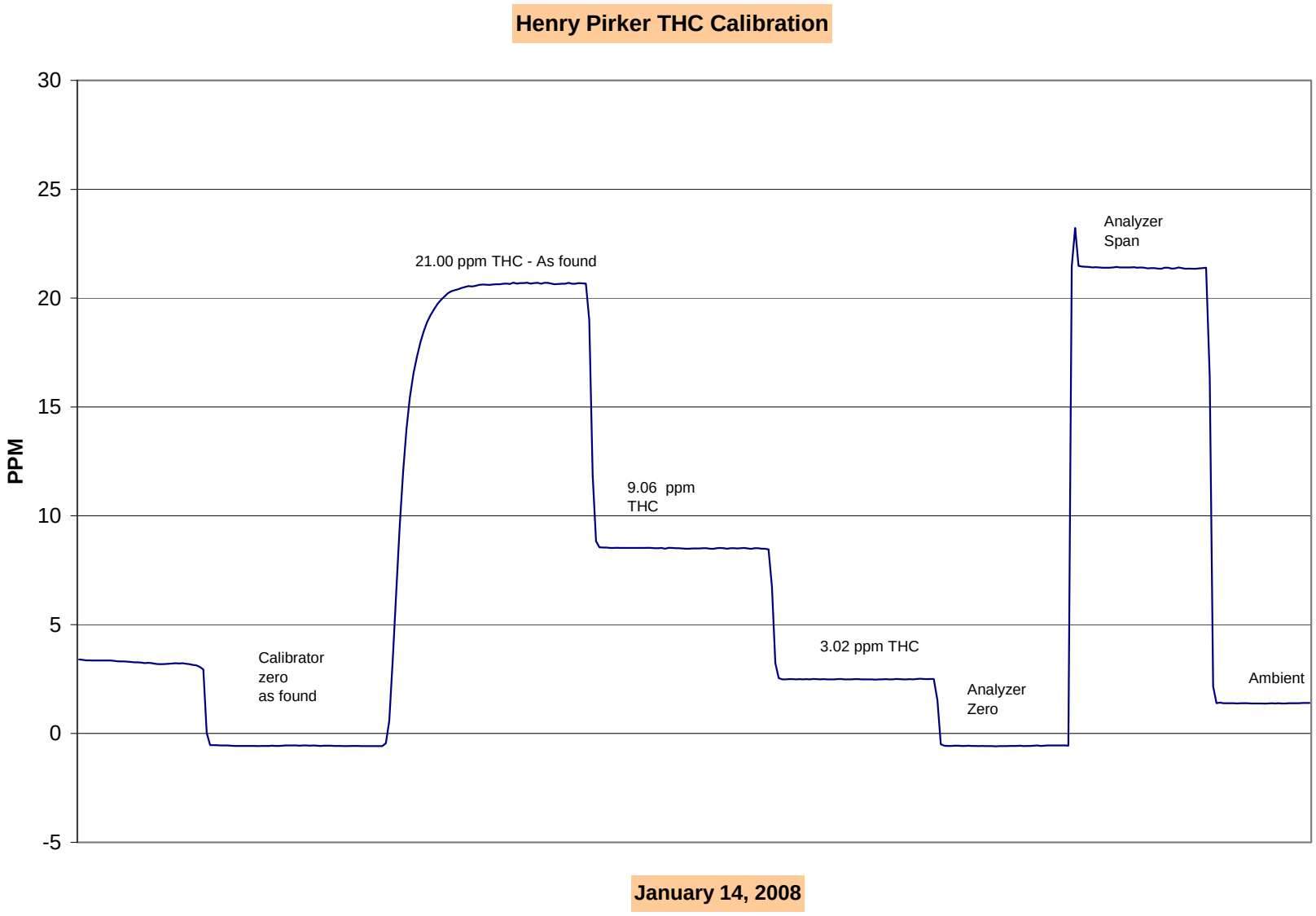
Station Information

Calibration Date	January 14, 2008	Previous Calibration	December 14, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:00	End Time (MST)	16:30
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	-0.564	N/A		
21.002	20.649	1.0171	Correlation Coefficient	0.999980
9.064	8.508	1.0654		
3.020	2.490	1.2129	Slope	0.990375
			Intercept	0.575651




Henry Pirker THC Calibration
30
25
20
15
10
5
0
-5
PPM
Calibrator
zero
as found
21.00 ppm THC - As found
9.06 ppm
THC
3.02 ppm THC
Analyzer
Zero
Analyzer
Span
Ambient
January 14, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	TRS
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 14, 2008	Previous Calibration	December 13, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:

Start Time (MST)	9:30	End Time (MST)	12:00
Barometric Pressure	0.907 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 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
	Before		After
Calculated slope	1.019275	Calculated slope	0.985088
Calculated intercept	-0.761279	Calculated intercept	-0.568152

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		17.2	
Pressure	654.8	mm Hg	649.2	mm Hg
Flow	453	ccm	455	ccm
Lamp Voltage	862	V	865	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	0.50	N/A
4987	69.74	70.89	72.52	0.9775
4990	39.84	40.71	41.91	0.9713
4990	9.97	10.25	11.08	0.9257
4990	0.00	0.00	0.50	As Found Zero
4990	69.75	70.86	72.52	As Found Span
			Average Correction Factor	0.9582

Calculated value of As Found Response: 72.7 ppb Percent Change of As Found: -2.5%

	before calibration		after calibration	
Auto zero	0.21	ppb	0.14	ppb
Auto span	36.53	ppb	36.98	ppb

Notes: No adjustments preformed

Calibration Performed By: Conor Whiteley

Calibration Summary

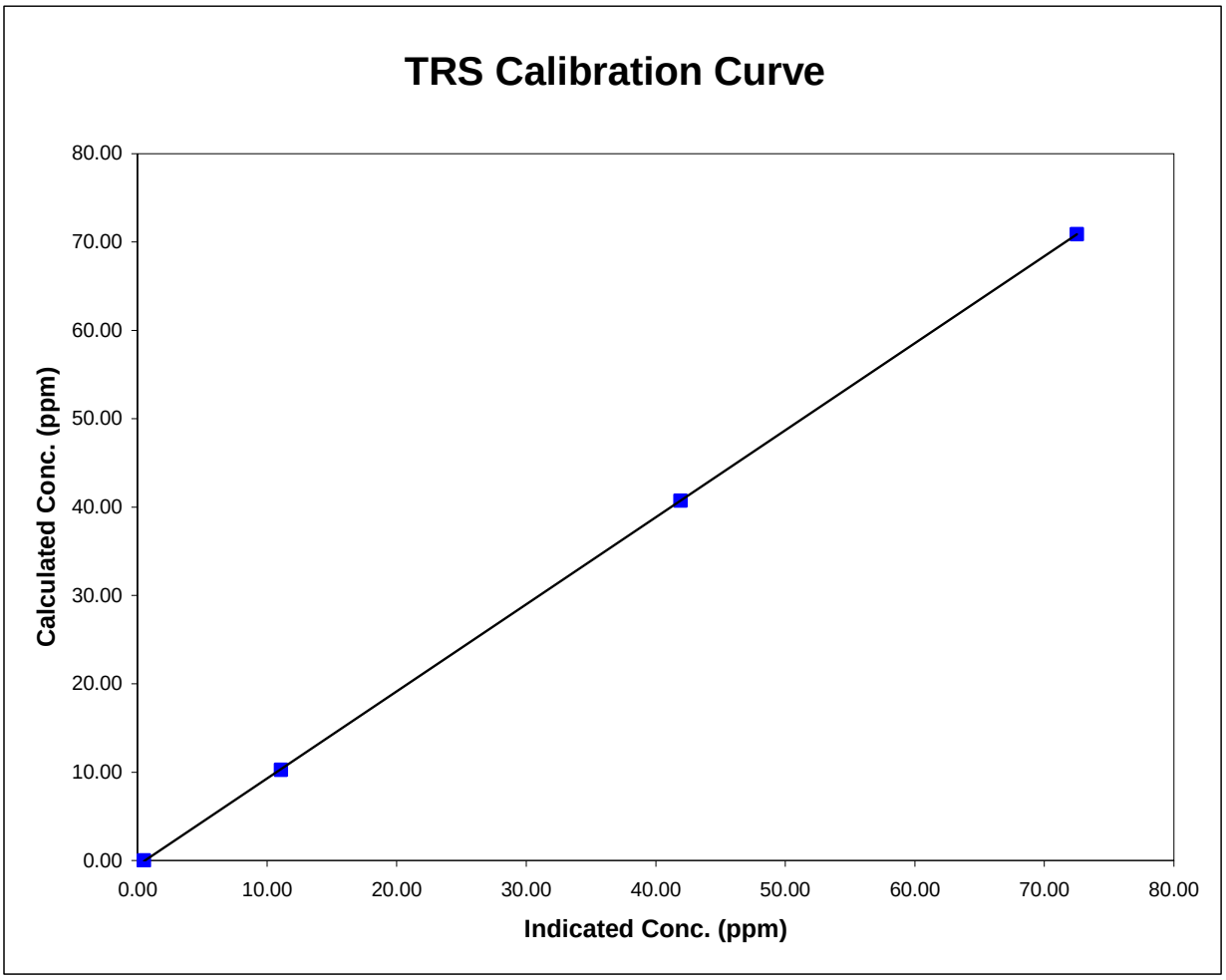
Parameter	TRS
Air Monitoring Network	PASZA

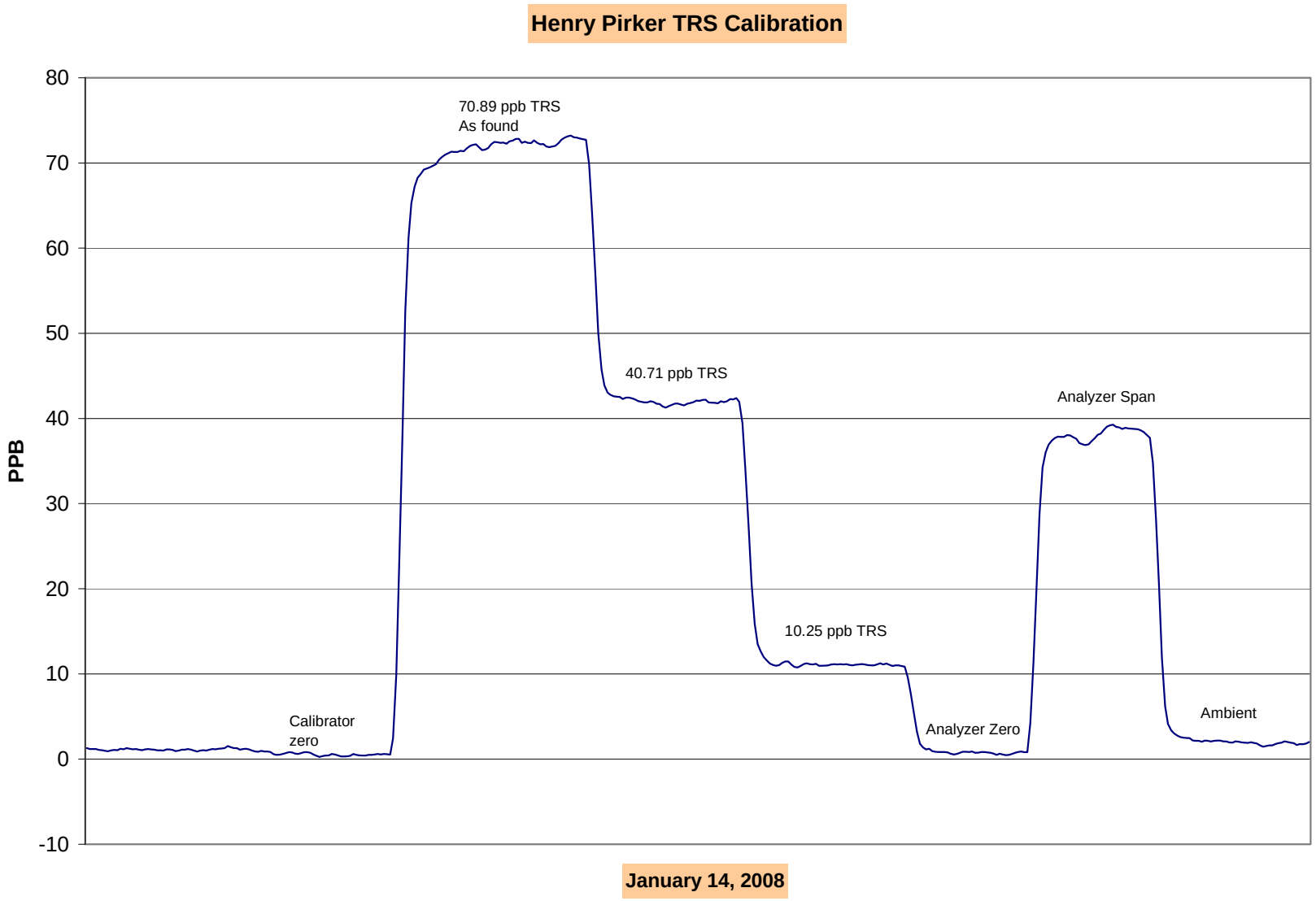
Station Information

Calibration Date	January 14, 2008	Previous Calibration	December 13, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:30	End Time (MST)	12:00
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.495	N/A		
70.888	72.520	0.9775	Correlation Coefficient	0.999995
40.713	41.914	0.9713		
10.253	11.077	0.9257	Slope	0.985088
			Intercept	-0.568152




Henry Pirker TRS Calibration
80
70
60
50
40
30
20
10
0
-10
PPB
70.89 ppb TRS
As found
40.71 ppb TRS
10.25 ppb TRS
Analyzer Span
Calibrator
zero
Analyzer Zero
Ambient
January 14, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	TRS
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 31, 2008	Previous Calibration	January 14, 2008
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:

Start Time (MST)	16:30	End Time (MST)	18:50
Barometric Pressure	0.907 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 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
	Before		After
Calculated slope	1.019275	Calculated slope	1.027449
Calculated intercept	-0.761279	Calculated intercept	-0.691877

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		17.2	
Pressure	654.8	mm Hg	649.2	mm Hg
Flow	453	ccm	455	ccm
Lamp Voltage	862	V	865	V

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.00	0.67	N/A
4988	69.77	70.90	69.68	1.0175
4988	0.00	0.00	0.67	As Found Zero
4988	69.75	70.88	69.68	As Found Span
			Average Correction Factor	1.0175

Calculated value of As Found Response: 69.6 ppb Percent Change of As Found: 1.8%

	before calibration		after calibration	
Auto zero	0.21	ppb	2.38	ppb
Auto span	36.53	ppb	35.85	ppb

Notes: Investigating TRS span issues, looks to be a Sox scrubber problem, but I will have to find one to replace the current one…

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	TRS
Air Monitoring Network	PASZA

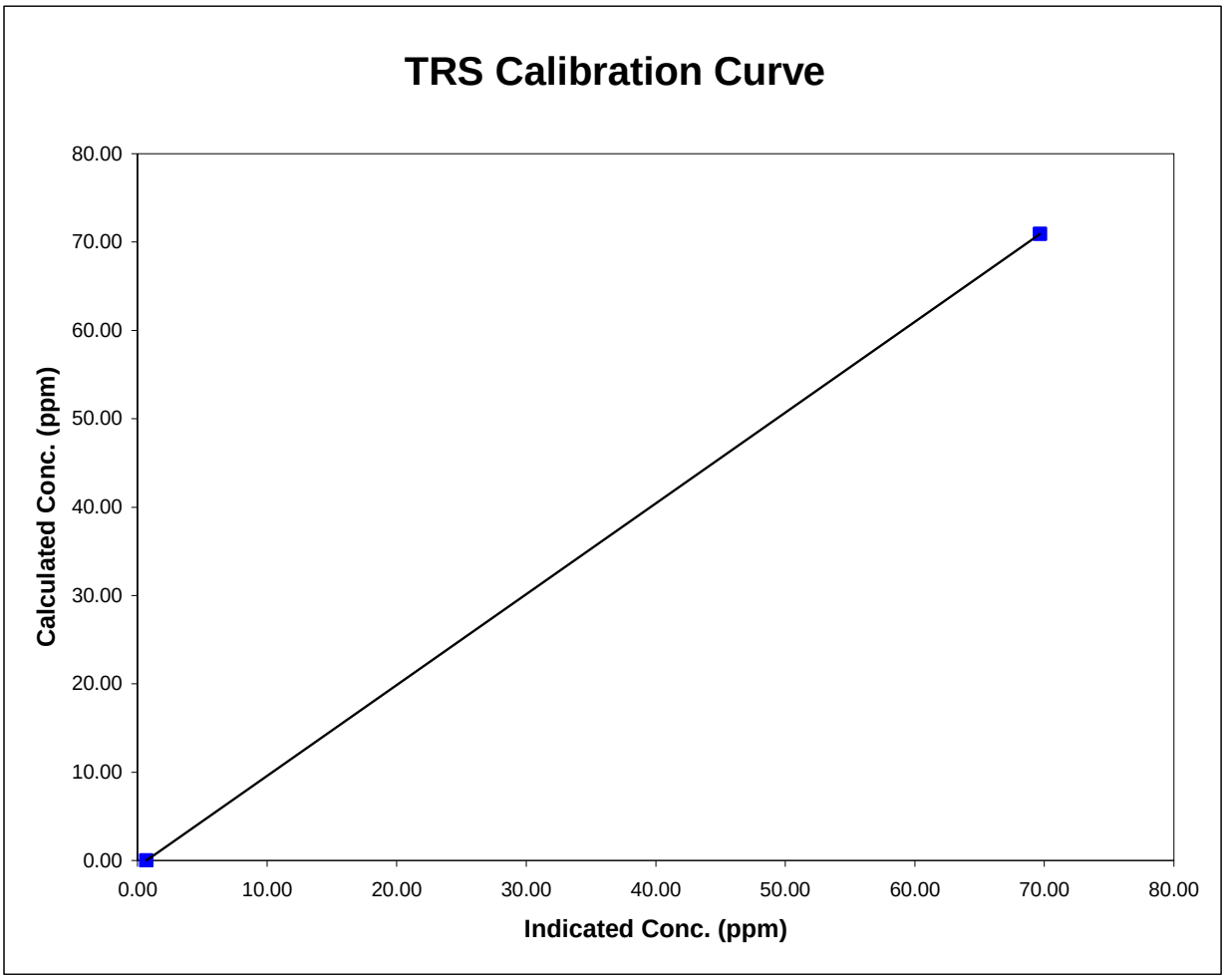
FOCUS AIR QUALITY MONITORING

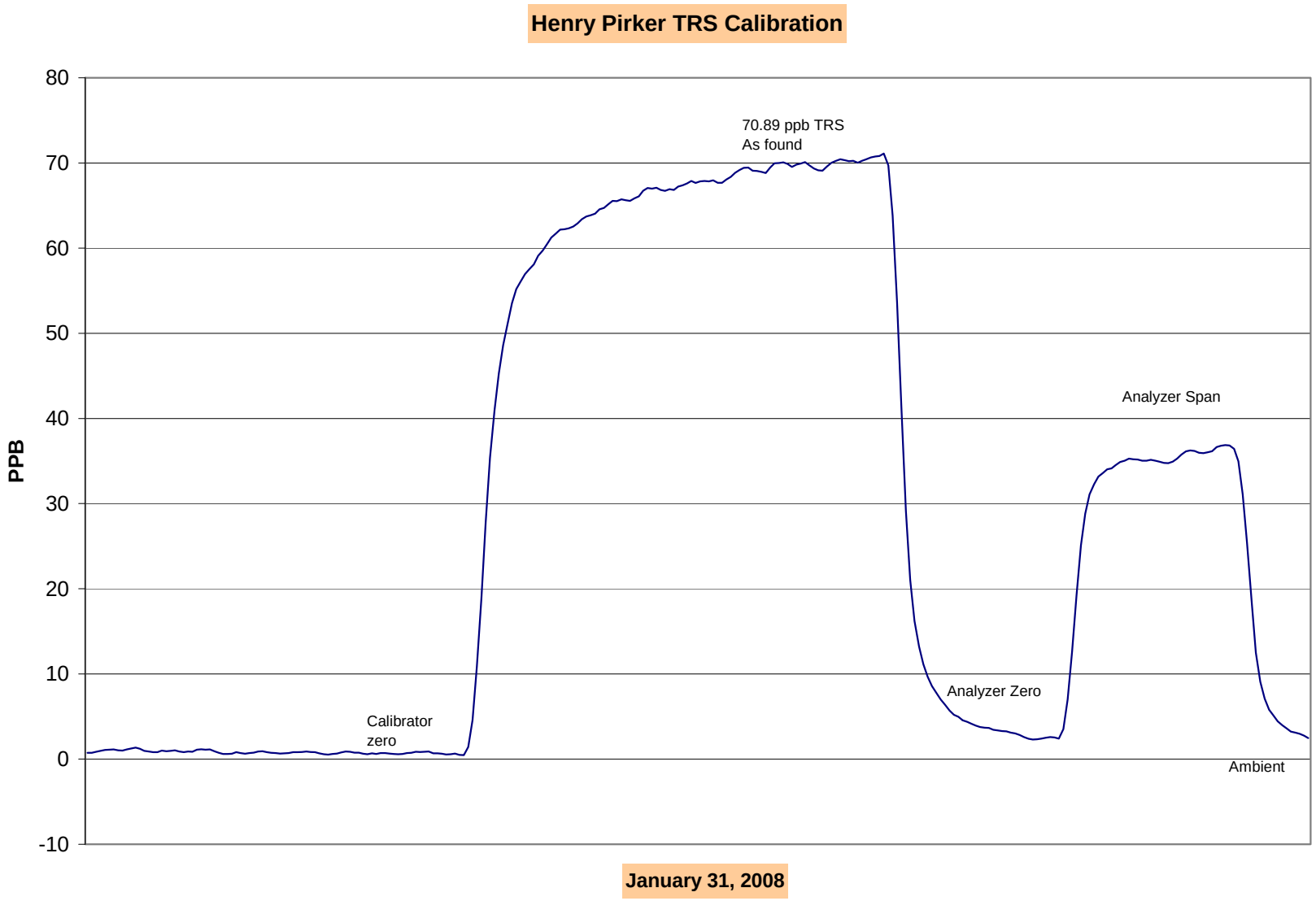
Station Information

Calibration Date	January 31, 2008	Previous Calibration	January 14, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	16:30	End Time (MST)	18:50
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	0.673	N/A		
70.904	69.683	1.0175	Correlation Coefficient	1.000000
			Slope	1.027449
			Intercept	-0.691877




Henry Pirker TRS Calibration
80
70
60
50
40
30
20
10
0
-10
PPB
70.89 ppb TRS
As found
Analyzer Span
Analyzer Zero
Calibrator
zero
Ambient
January 31, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	SO_2
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 15, 2008	Previous Calibration	December 14, 2007
Station Number	2	Station Location	Evergreen Park
Reason:	Routine / Install	Removal	Other:

Start Time (MST)	11:55	End Time (MST)	14:30
Barometric Pressure	0.931 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	0.031647	Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.008435	Calculated slope	1.010044
Calculated intercept	-1.439672	Calculated intercept	-1.778470

Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	8.9		8.9	
coefficient	0.928		0.928	
Lamp Voltage	837	volts	838	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	668.6	mm Hg	671	mm Hg
Sample Flow	448	ccm	447	ccm
Lamp Intensity	89	%	88	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.00	0.9	N/A
4990	39.87	398.71	396.1	1.0066
4990	19.94	200.20	200.3	0.9995
4990	9.94	100.00	101.8	0.9828
4990	0.0	0.00	0.9	As Found Zero
4990	39.9	399.11	396.1	As Found Span
			Average Correction Factor	0.9963

Calculated value of As Found Response: 397.119 ppm Percent Change of As Found: 0.5%

	before calibration		after calibration	
Auto zero	-0.5	ppm	-0.9	ppm
Auto span	276.1	ppm	270.9	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	SO2
Air Monitoring Network	PASZA

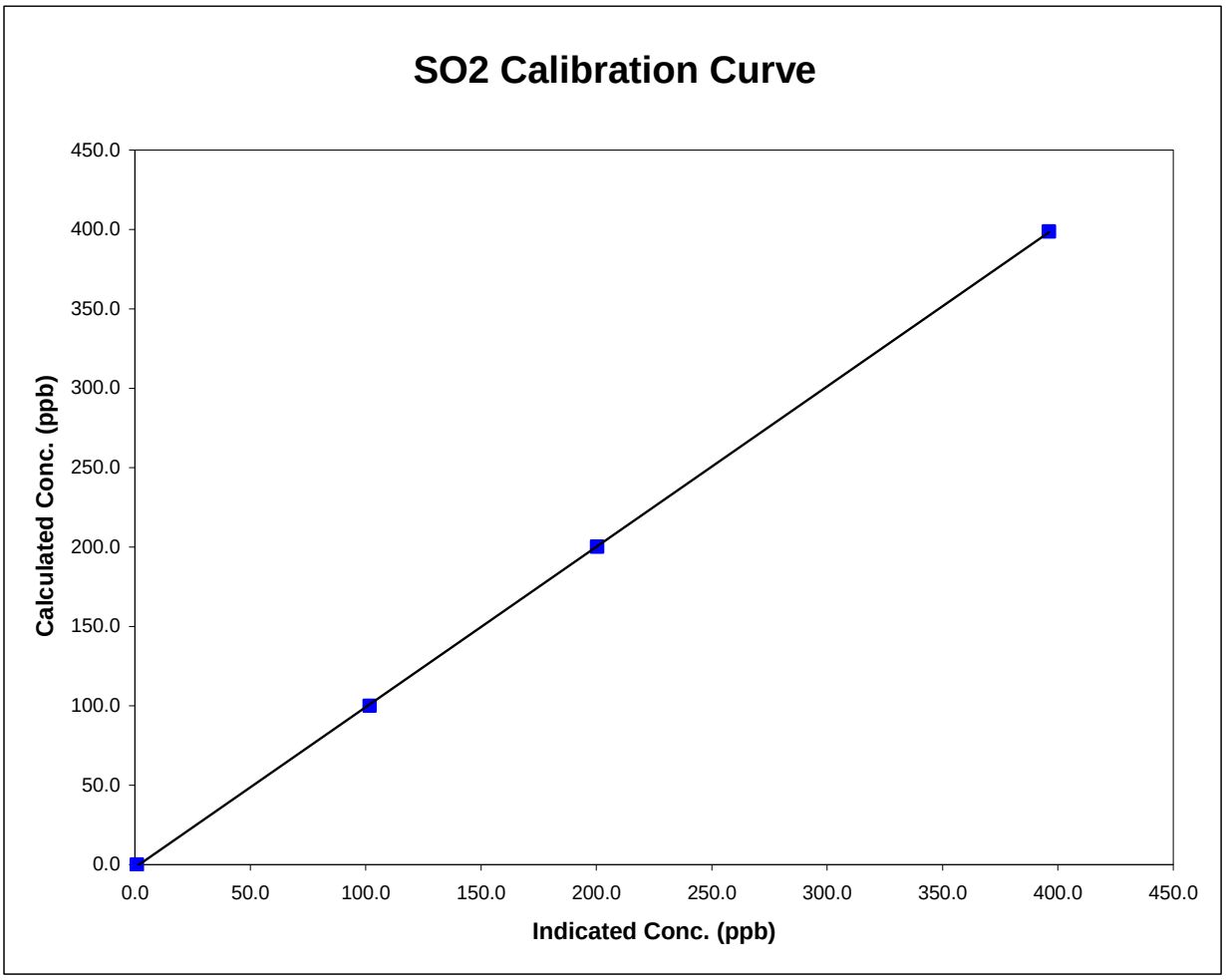
FOCUS AIR QUALITY MONITORING

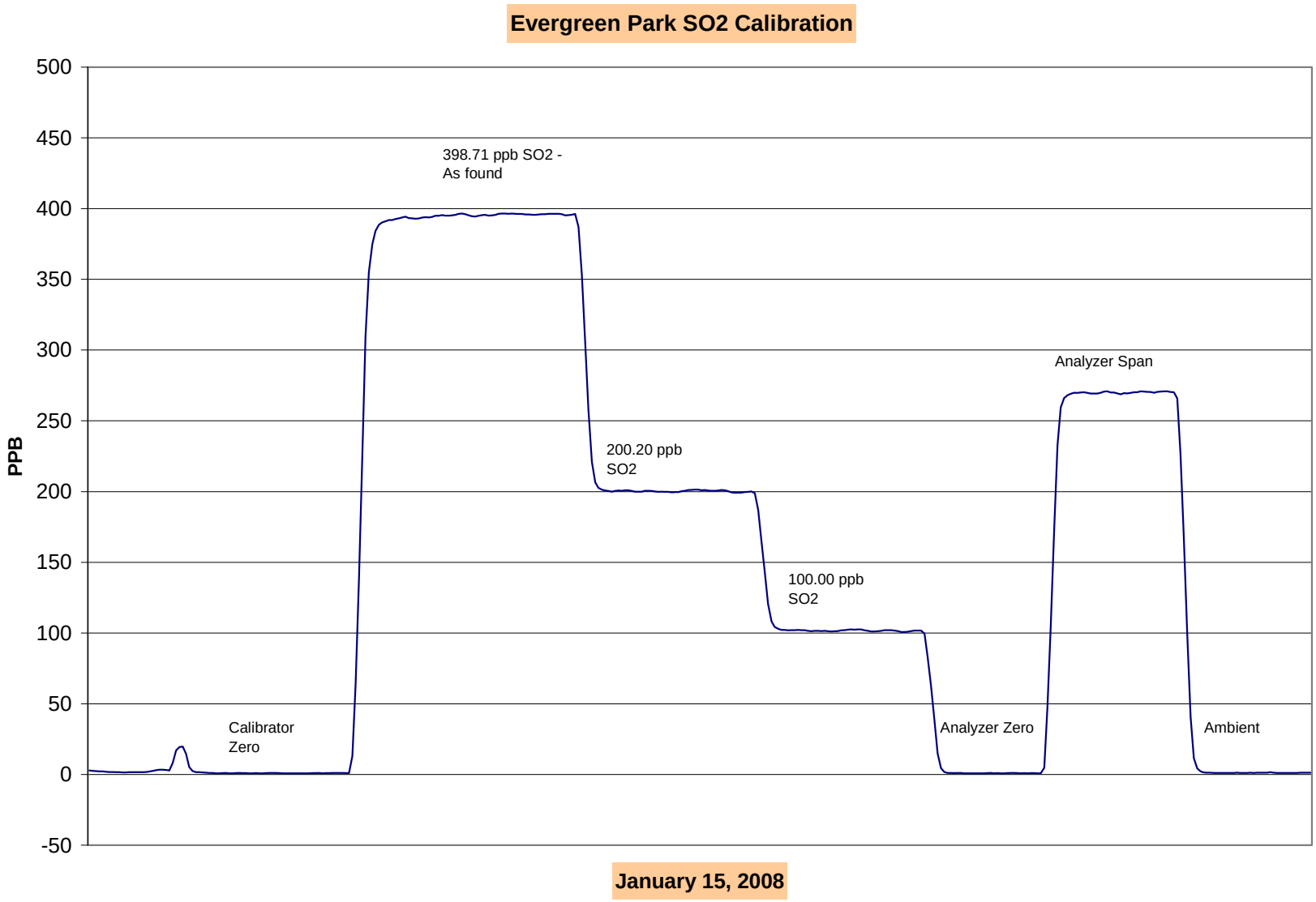
Station Information

Calibration Date	January 15, 2008	Previous Calibration	December 14, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	11:55	End Time (MST)	14:30
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.9	N/A		
398.7	396.1	1.0066	Correlation Coefficient	0.999976
200.2	200.3	0.9995		
100.0	101.8	0.9828	Slope	1.010044
			Intercept	-1.778470




Evergreen Park SO2 Calibration
PPB
500
450
400
350
300
250
200
150
100
50
0
-50
398.71 ppb SO2 -
As found
200.20 ppb
SO2
100.00 ppb
SO2
Analyzer Span
Calibrator
Zero
Analyzer Zero
Ambient
January 15, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

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

Station Information

Calibration Date	January 15, 2007	Previous Calibration	December 14, 2007
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:

Start Time (MST)	13:40	End Time (MST)	16:00
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.14 ppm	Cal Gas Expiry Date	7/31/2008
Correction factor	0.031647	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	1.001093	Calculated slope	1.027015
Calculated intercept	0.372246	Calculated intercept	-0.774906

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	16	ppb	16.6	ppb
coefficient	0.976		1.027	
Lamp Voltage	791	volts	793	volts
Chamber Temp	44.3	Deg C	44.3	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	635.4	mm Hg	650.5	mm Hg
Sample Flow	467	ccm	475	ccm
Lamp Intensity	45,838	mv	44,726	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.00	-0.5	N/A
4990	79.72	80.83	79.1	1.0218
4990	39.88	40.75	40.7	1.0012
4990	9.97	10.25	12.1	0.8473
4990	0.00	0.00	-0.5	As Found Zero
4990	80.00	81.10	77.4	As Found Span
			Average Correction Factor	0.9568

Calculated value of As Found Response: 78.40 ppm Percent Change of As Found: 3.3%

	before calibration		after calibration	
Auto zero	0.1	ppm	1.7	ppm
Auto span	71.9	ppm	69.1	ppm

Notes: Calibrated TRS, calibration not sticking, replacing UV lamp as per Kelly B.

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	TRS
Air Monitoring Network	PASZA

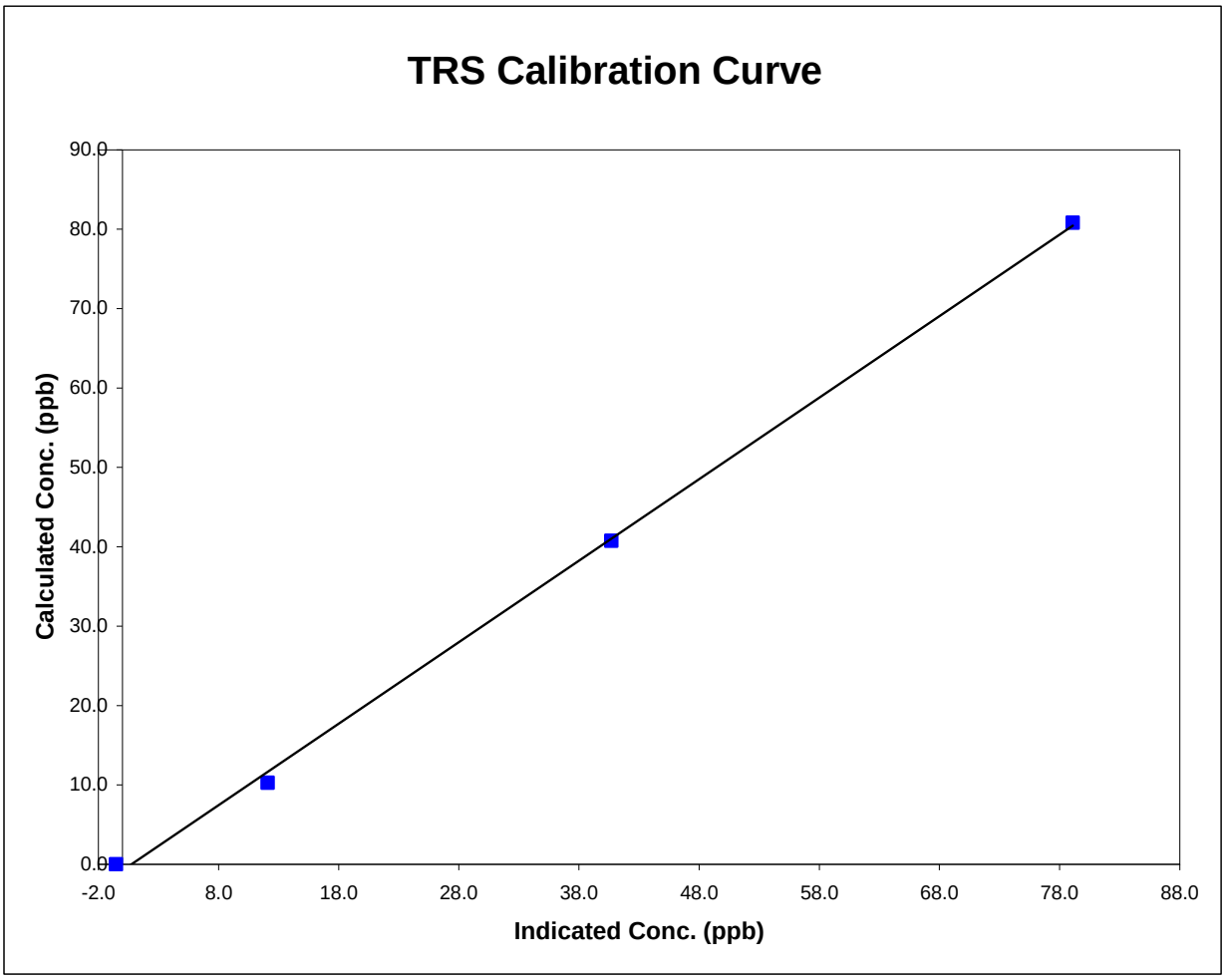
FOCUS AIR QUALITY MONITORING

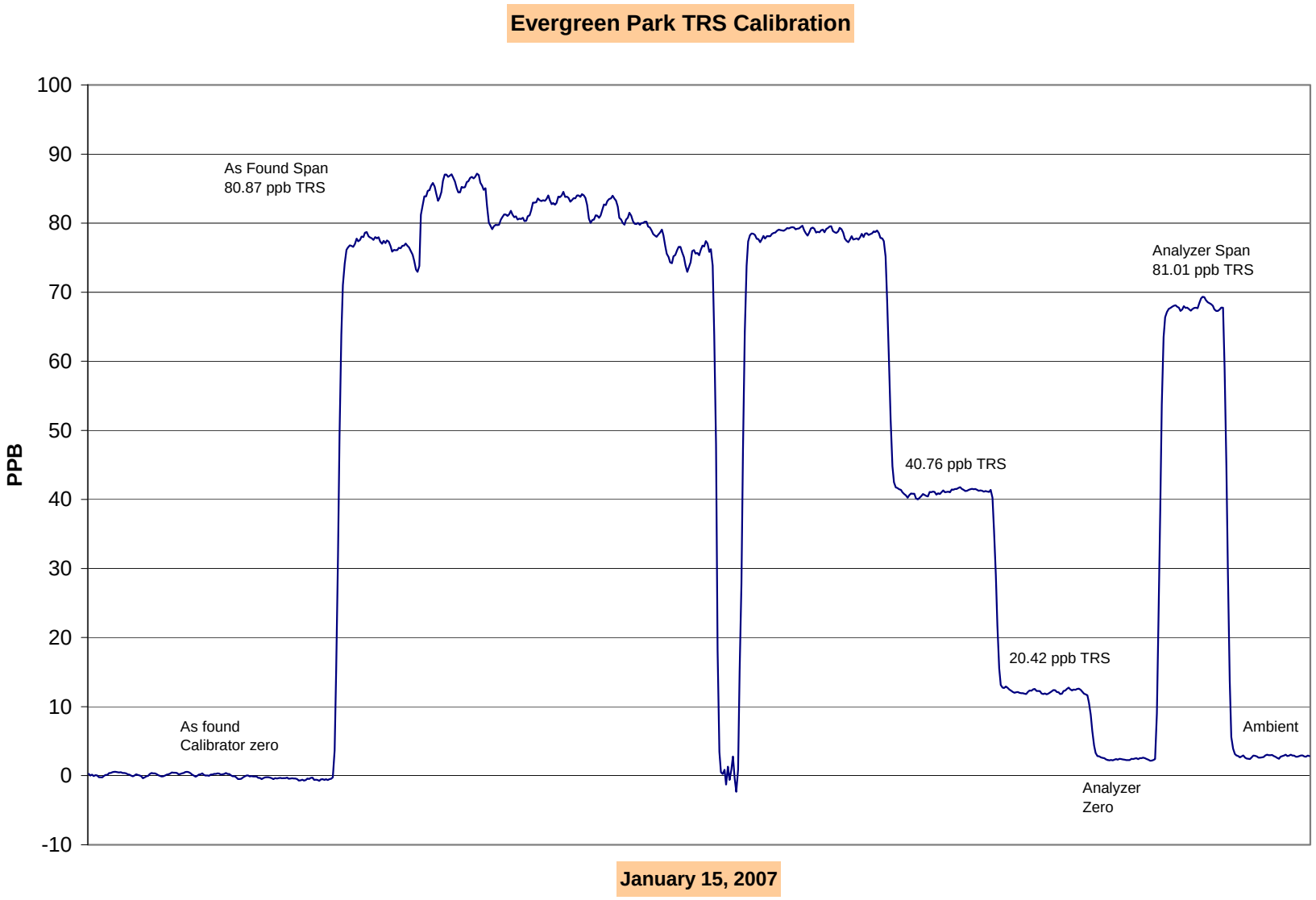
Station Information

Calibration Date	January 15, 2007	Previous Calibration	December 14, 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	-0.5	N/A		
80.8	79.1	1.0218	Correlation Coefficient	0.999019
40.8	40.7	1.0012		
10.2	12.1	0.8473	Slope	1.027015
			Intercept	-0.774906




Evergreen Park TRS Calibration
PPB
100
90
80
70
60
50
40
30
20
10
0
-10
As Found Span
80.87 ppb TRS
Analyzer Span
81.01 ppb TRS
40.76 ppb TRS
20.42 ppb TRS
As found
Calibrator zero
Ambient
Analyzer
Zero
January 15, 2007

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	TRS
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 16, 2007	Previous Calibration	January 15, 2007
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:

Start Time (MST)	9:50	End Time (MST)	
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.14 ppm	Cal Gas Expiry Date	7/31/2008
Correction factor	0.031647	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	1.029853	Calculated slope	0.996136
Calculated intercept	-0.942352	Calculated intercept	0.000148

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	16.6	ppb	19.6	ppb
coefficient	1.027		1.05	
Lamp Voltage	793	volts	794	volts
Chamber Temp	44.3	Deg C	44.3	Deg C
Perm Gas Temp	45	Deg C	44.97	Deg C
Pressure	650.5	mm Hg	636.1	mm Hg
Sample Flow	475	ccm	467	ccm
Lamp Intensity	44,726	mv	44,726	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.00	0.1	N/A
4990	79.72	80.83	81.2	0.9950
4990	39.84	40.71	40.7	1.0005
4990	9.90	10.18	10.2	1.0015
4990	0.00	0.00	2.5	As Found Zero
4990	80.00	81.10	79.4	As Found Span
			Average Correction Factor	0.9990

Calculated value of As Found Response: 78.23 ppm Percent Change of As Found: 3.5%

	before calibration		after calibration	
Auto zero	1.5	ppm	-1.2	ppm
Auto span	69.1	ppm	60.5	ppm

Notes: Adjusted Zero, Adjusted TRS

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	TRS
Air Monitoring Network	PASZA

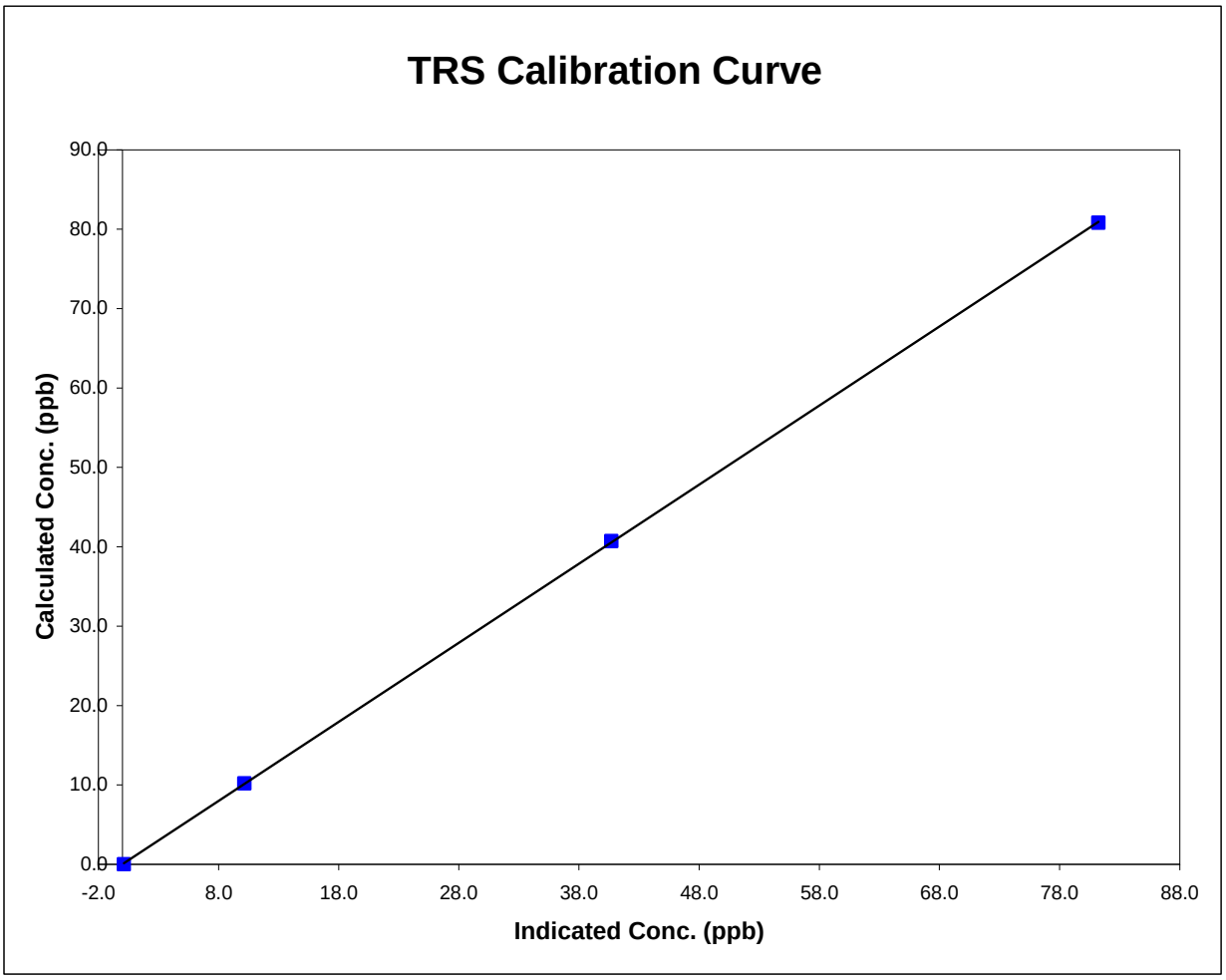
FOCUS AIR QUALITY MONITORING

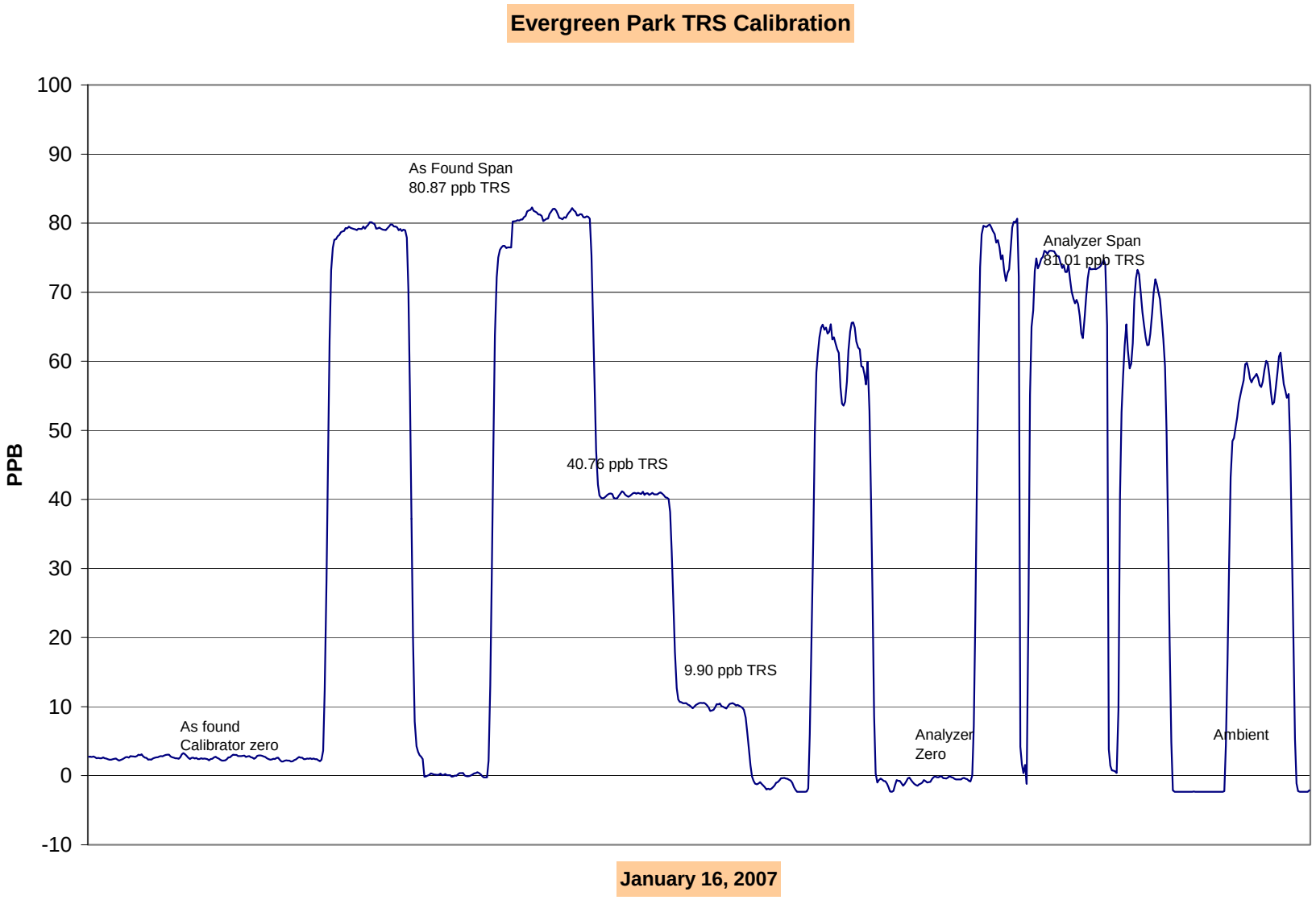
Station Information

Calibration Date	January 16, 2007	Previous Calibration	January 15, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	9:50	End Time (MST)	0:00
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	0.1	N/A		
80.8	81.2	0.9950	Correlation Coefficient	0.999984
40.7	40.7	1.0005		
10.2	10.2	1.0015	Slope	0.996136
			Intercept	0.000148




Evergreen Park TRS Calibration
PPB
100
90
80
70
60
50
40
30
20
10
0
-10
As Found Span
80.87 ppb TRS
40.76 ppb TRS
9.90 ppb TRS
Analyzer Span
81.01 ppb TRS
As found
Calibrator zero
Analyzer
Zero
Ambient
January 16, 2007

Calibration Report

FOCUS AIR QUALITY MONITORING

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

Station Information

Calibration Date	January 23, 2007	Previous Calibration	January 16, 2007
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other: analyzer repair

Start Time (MST)	16:30	End Time (MST)	21:00
Barometric Pressure	0.919 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.14 ppm	Cal Gas Expiry Date	7/31/2008
Correction factor	0.031239	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	1.029767	Calculated slope	0.987029
Calculated intercept	-0.949638	Calculated intercept	0.390227

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	19.6	ppb	19.6	ppb
coefficient	1.05		1.05	
Lamp Voltage	794	volts	794	volts
Chamber Temp	44.3	Deg C	44.3	Deg C
Perm Gas Temp	44.97	Deg C	44.97	Deg C
Pressure	636.1	mm Hg	636.1	mm Hg
Sample Flow	467	ccm	467	ccm
Lamp Intensity	44,726	mv	44,726	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.00	-0.3	N/A
4990	79.78	80.89	81.7	0.9896
4990	39.84	40.71	40.5	1.0064
4990	9.90	10.18	10.0	1.0127
4990	0.00	0.00	-2.3	As Found Zero
4990	80.00	81.10	30.5	As Found Span
			Average Correction Factor	1.0029

Calculated value of As Found Response: 32.82 ppm Percent Change of As Found: 59.5%

	before calibration		after calibration	
Auto zero	1.5	ppm	0.0	ppm
Auto span	69.1	ppm	69.3	ppm

Notes: Installed brand new UV lamp and Trigger Pack

Calibration Performed By: Conor Whiteley

Calibration Summary

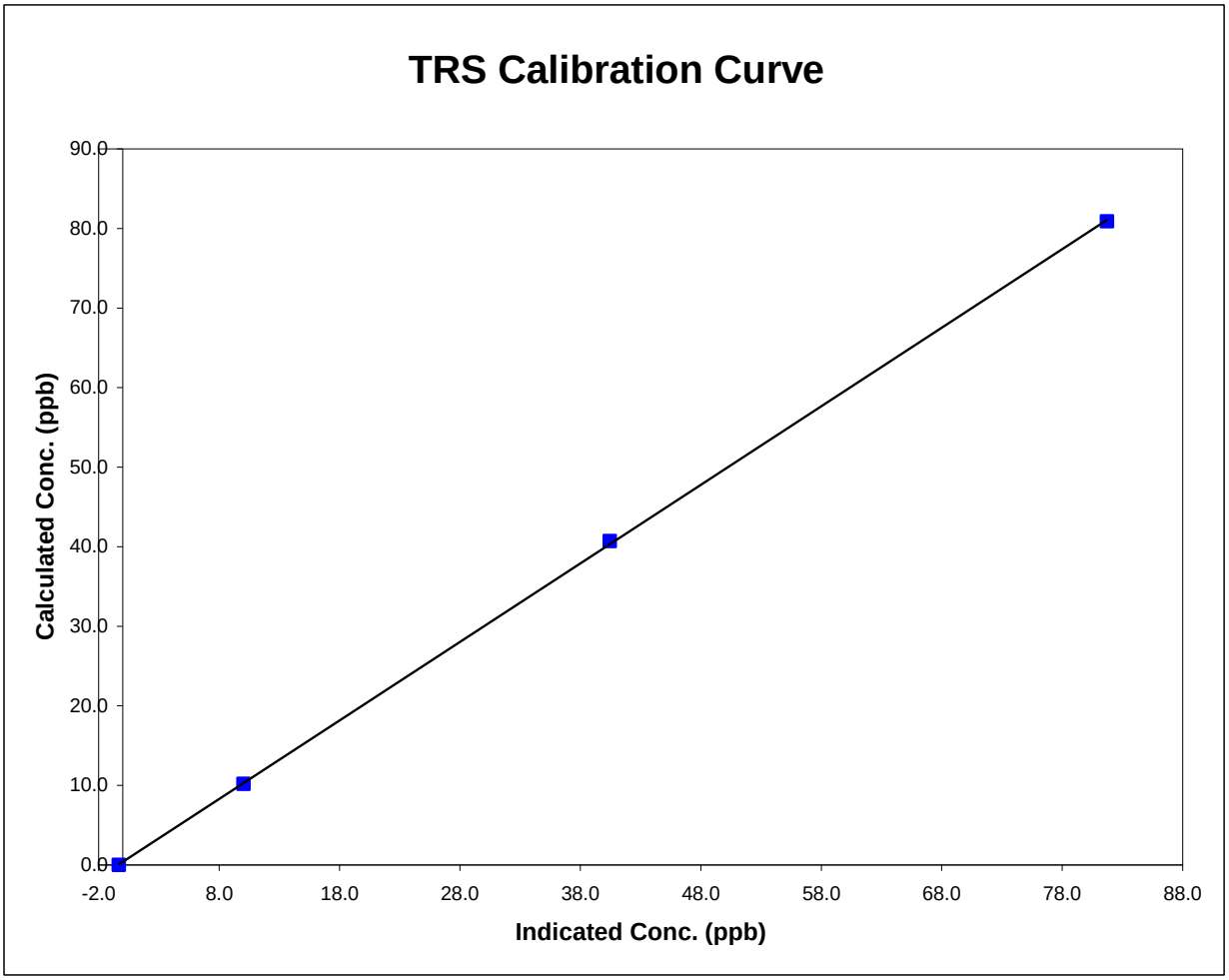
Parameter	TRS
Air Monitoring Network	PASZA

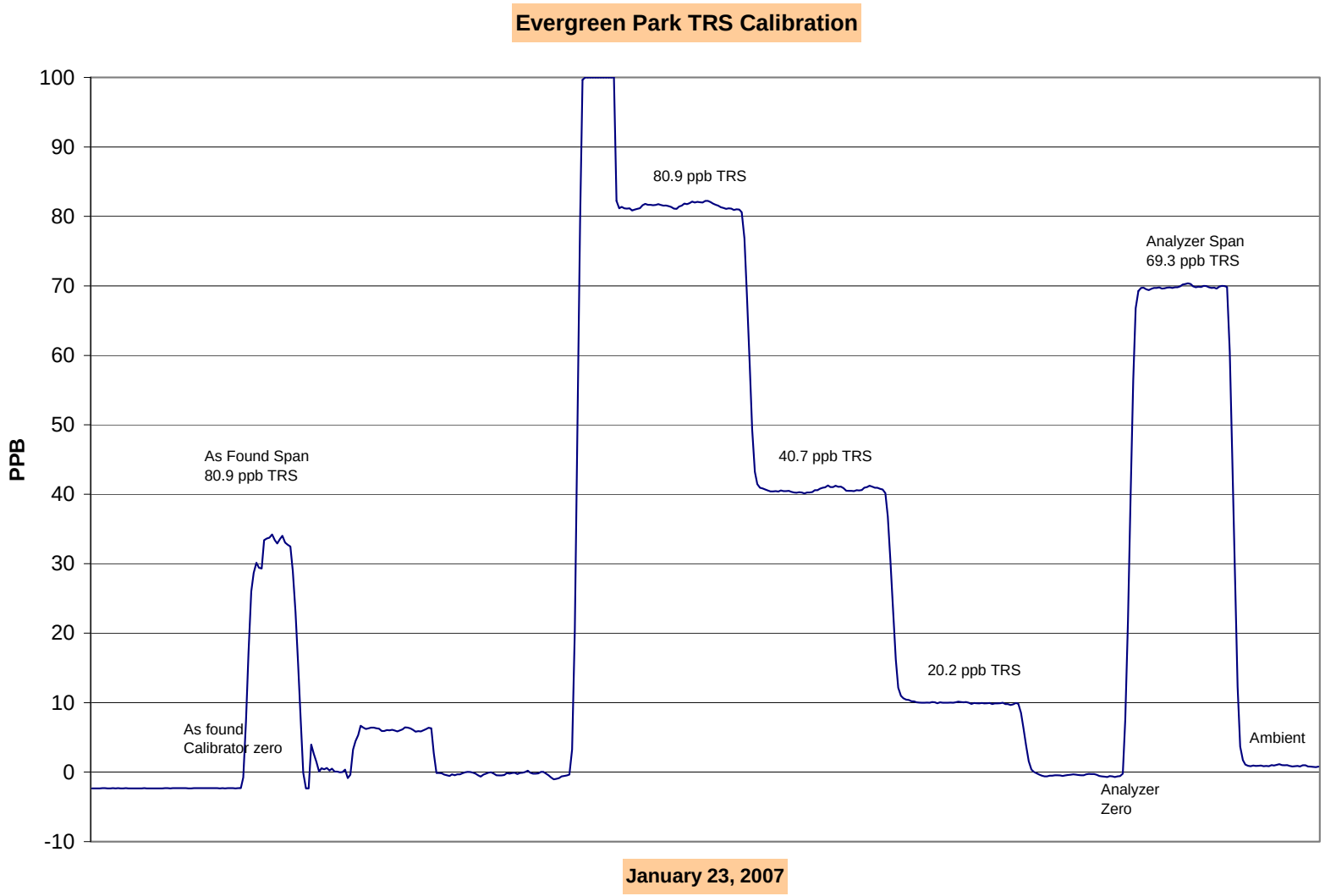
Station Information

Calibration Date	January 23, 2007	Previous Calibration	January 16, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	16:30	End Time (MST)	21:00
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	81.7	0.9896	Correlation Coefficient	0.999947
40.7	40.5	1.0064		
10.2	10.0	1.0127	Slope	0.987029
			Intercept	0.390227




Evergreen Park TRS Calibration
PPB
100
90
80
70
60
50
40
30
20
10
0
-10
As Found Span
80.9 ppb TRS
As found
Calibrator zero
80.9 ppb TRS
40.7 ppb TRS
20.2 ppb TRS
Analyzer Span
69.3 ppb TRS
Analyzer
Zero
Ambient
January 23, 2007

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	January 17, 2008	Previous Calibration	December 6, 2007
Station Number	3	Station Location	Smoky Heights
Reason: Routine	Install	Removal	Other:

Start Time (MST)	12:05	End Time (MST)	14:45
Barometric Pressure	0.930 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	0.031613	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	1.012710	Calculated slope	0.997867
Calculated intercept	-0.802536	Calculated intercept	-1.830752

Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	6.6		6.7	
coefficient	0.745		0.745	
Lamp Voltage	943	volts	936	volts
Chamber Temp	45.2	Deg C	45.2	Deg C
Perm Gas Temp	44.99	Deg C	44.97	Deg C
Pressure	667.2	mm Hg	677.7	mm Hg
Sample Flow	443	ccm	451	ccm
Lamp Intensity	87	%	88	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.00	0.2	N/A
4990	39.92	399.21	400.8	0.9960
4990	19.91	199.90	203.8	0.9811
4990	9.98	100.42	103.6	0.9697
4990	0.0	0.00	0.2	As Found Zero
4990	39.92	399.21	400.8	As Found Span
			Average Correction Factor	0.9823

Calculated value of As Found Response: 404.850 ppm Percent Change of As Found: -1.4%

	before calibration		after calibration	
Auto zero	-0.6	ppm	-1.6	ppm
Auto span	311.6	ppm	309.4	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	SO2
Air Monitoring Network	PASZA

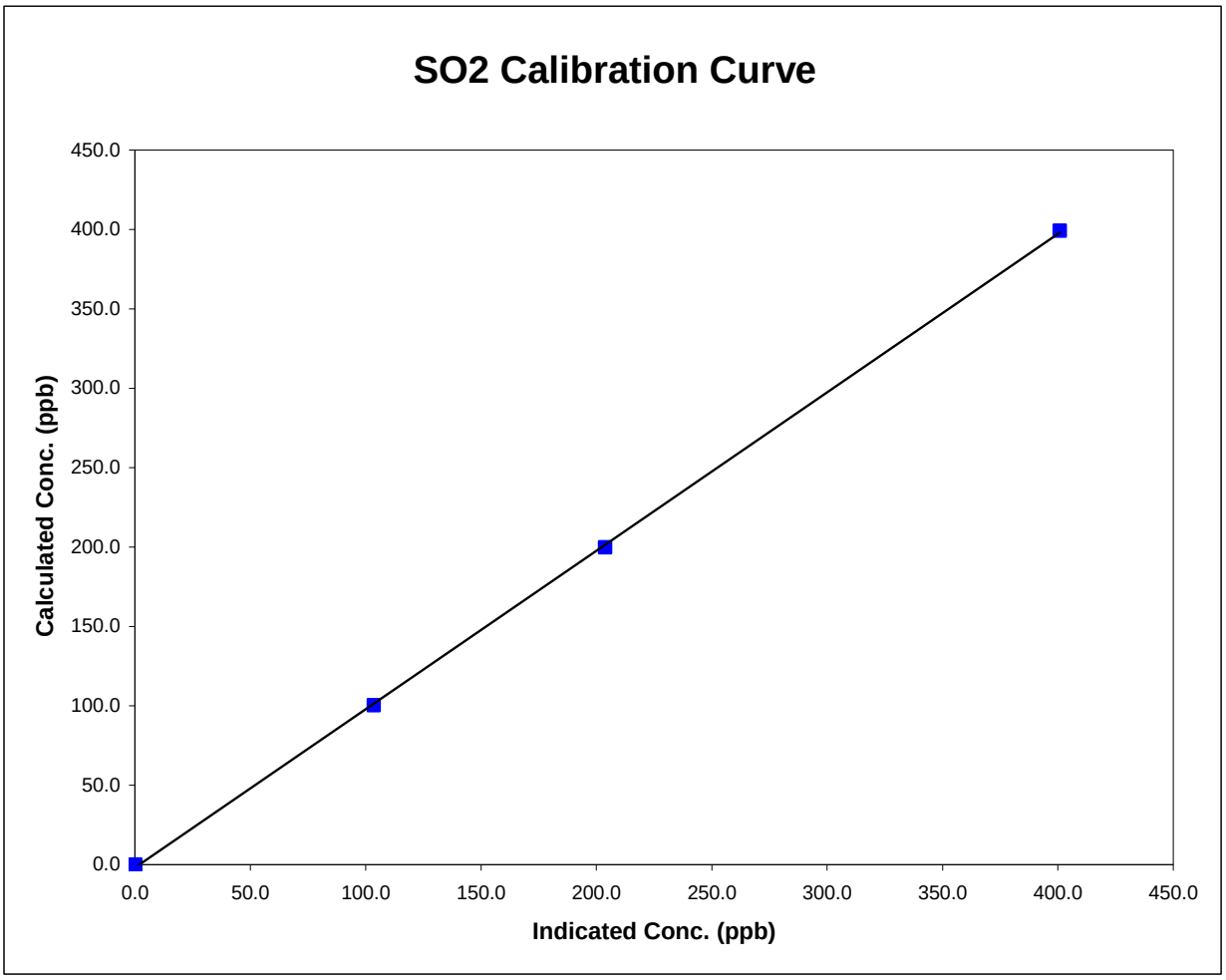
FOCUS AIR QUALITY MONITORING

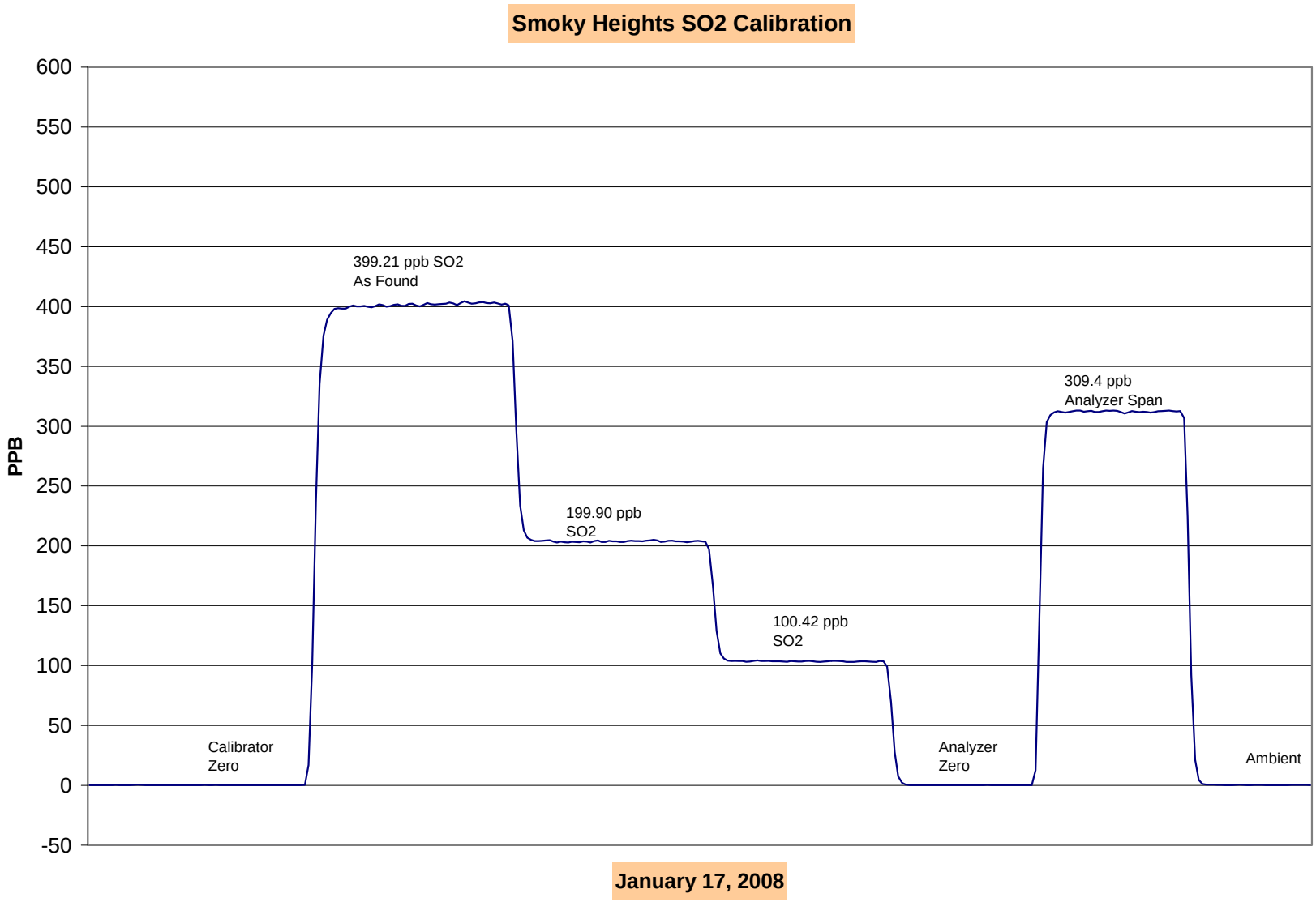
Station Information

Calibration Date	January 17, 2008	Previous Calibration	December 6, 2007
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	12:05	End Time (MST)	14:45
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
399.2	400.8	0.9960	Correlation Coefficient	0.999915
199.9	203.8	0.9811		
100.4	103.6	0.9697	Slope	0.997867
			Intercept	-1.830752




Smoky Heights SO2 Calibration
PPB
600
550
500
450
400
350
300
250
200
150
100
50
0
-50
399.21 ppb SO2
As Found
199.90 ppb
SO2
100.42 ppb
SO2
309.4 ppb
Analyzer Span
Calibrator
Zero
Analyzer
Zero
Ambient
January 17, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

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

Station Information

Calibration Date	January 17, 2008	Previous Calibration	December 6, 2007
Station Number	3	Station Location	Smoky Heights
Reason: Routine	Install	Removal	Other:

Start Time (MST)	10:15	End Time (MST)	13:00
Barometric Pressure	0.930 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.14 ppm	Cal Gas Expiry Date	7/31/2008
Correction factor	0.031613	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	1.016778	Calculated slope	1.017460
Calculated intercept	-0.441479	Calculated intercept	-0.832947

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	11.2	ppb	11.5	ppb
coefficient	1.006		1.006	
Lamp Voltage	775	volts	775	volts
Chamber Temp	43.9	Deg C	43.8	Deg C
Perm Gas Temp	45.02	Deg C	45.02	Deg C
Pressure	505.1	mm Hg	484	mm Hg
Sample Flow	780	ccm	744	ccm
Lamp Intensity	32,307	mv	32,355	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.00	0.7	N/A
4990	79.77	80.88	80.3	1.0075
4990	39.87	40.74	40.9	0.9959
4990	9.92	10.20	10.9	0.9361
4990	0.0	0.00	0.7	As Found Zero
4990	79.7	80.83	80.3	As Found Span
			Average Correction Factor	0.9798

Calculated value of As Found Response: 80.42 ppm Percent Change of As Found: 0.5%

	before calibration		after calibration	
Auto zero	0.3	ppm	-0.1	ppm
Auto span	42.4	ppm	42.4	ppm

Notes: No Adjustments Made

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	TRS
Air Monitoring Network	PASZA

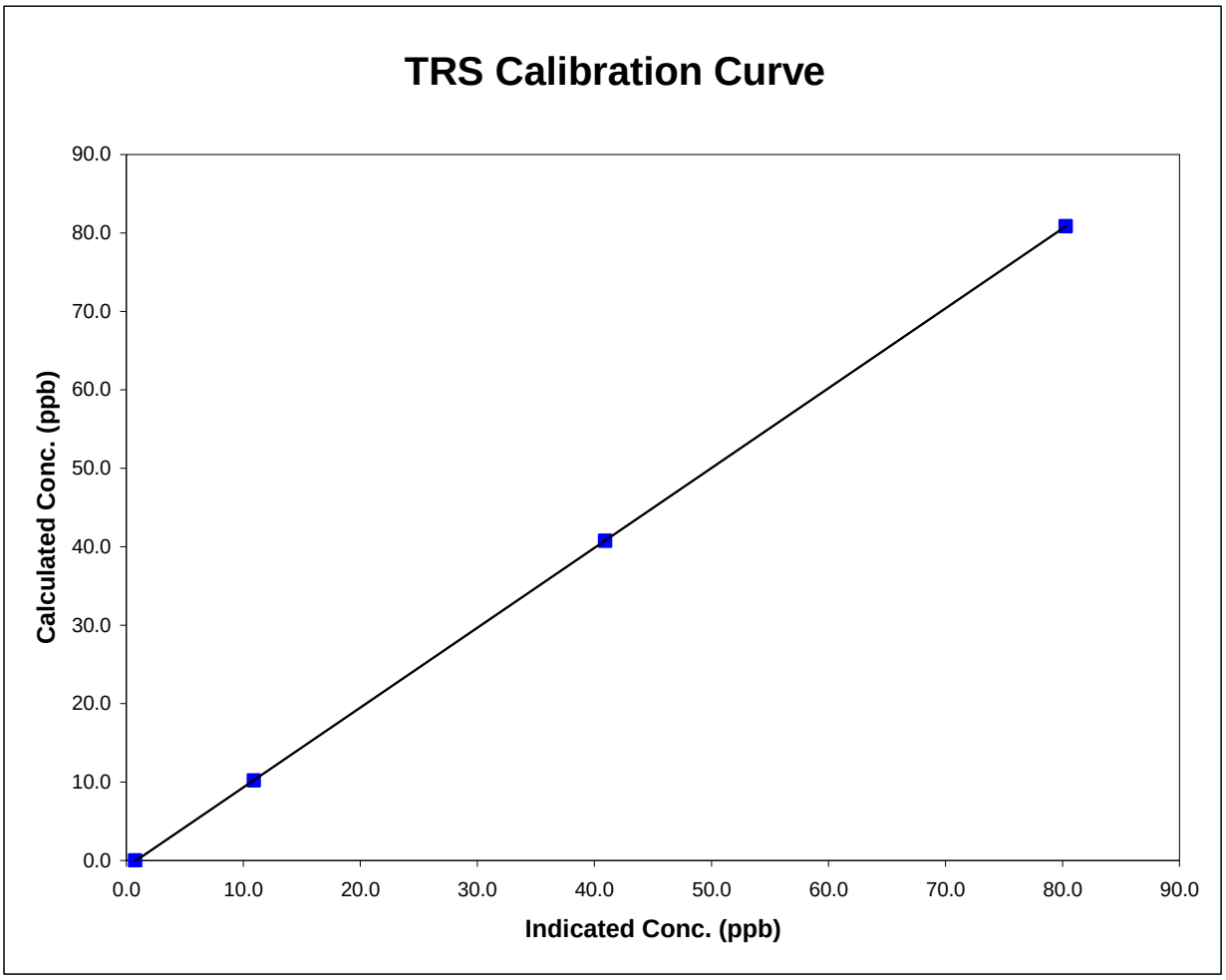
FOCUS AIR QUALITY MONITORING

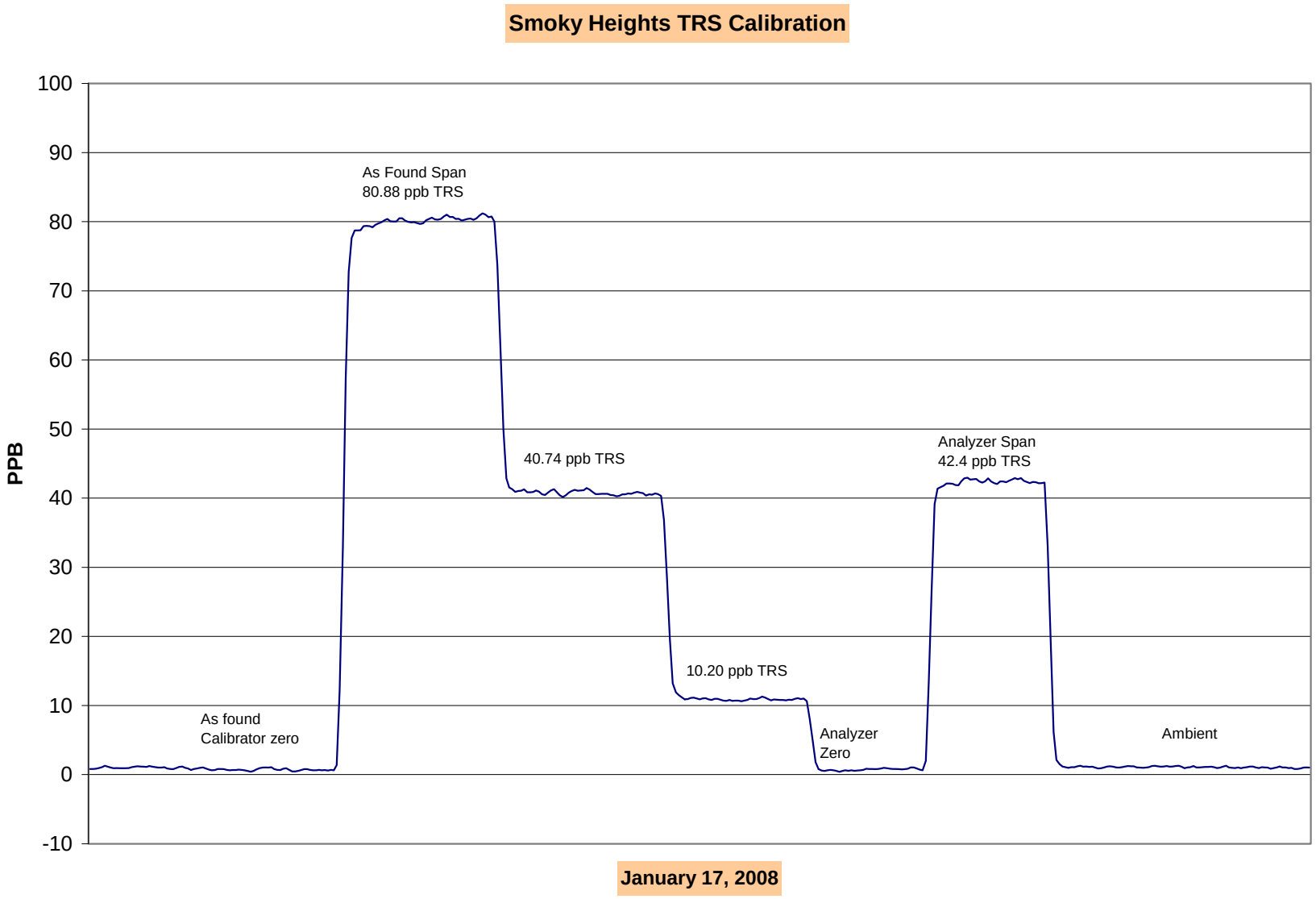
Station Information

Calibration Date	January 17, 2008	Previous Calibration	December 6, 2007
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:15	End Time (MST)	13:00
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	0.7	N/A		
80.9	80.3	1.0075	Correlation Coefficient	0.999997
40.7	40.9	0.9959		
10.2	10.9	0.9361	Slope	1.017460
			Intercept	-0.832947




Smoky Heights TRS Calibration
PPB
100
90
80
70
60
50
40
30
20
10
0
-10
As Found Span
80.88 ppb TRS
40.74 ppb TRS
10.20 ppb TRS
Analyzer Span
42.4 ppb TRS
As found
Calibrator zero
Analyzer
Zero
Ambient
January 17, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	SO2
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:20	End Time (MST)	12:55
Barometric Pressure	0.880 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	10.06 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	CC 114395		
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.012745	Calculated slope	0.965142
Calculated intercept	0.058379	Calculated intercept	0.055132
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.8		2.86	
Coefficient	1.03		1.03	
PMT	-813	V	-812	V
UV Lamp Voltage	1021	V	1011	V
Chamber Temp	45	Deg C	45	Deg C
Pressure	668.8	mm Hg	645.5	mm Hg
Sample Flow	0.467	LPM	0.453	LPM
Lamp Intesity	86	%	86%	%

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	-0.3	N/A
4990	39.86	79.7	82.4	0.9674
4990	19.96	40.1	41.6	0.9629
4990	9.92	20.0	20.8	0.9580
4990	0.00	0.0	-0.3	As found zero
4990	39.86	79.7	82.4	As found span
			Average Correction Factor	0.9628

Calculated value of As Found Response: 83.815 ppm Percent Change of As Found: -5.1%

	before calibration		after calibration	
Auto zero	-0.2	ppm	-0.2	ppm
Auto span	53.9	ppm	56.5	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	SO2
Air Monitoring Network	PASZA

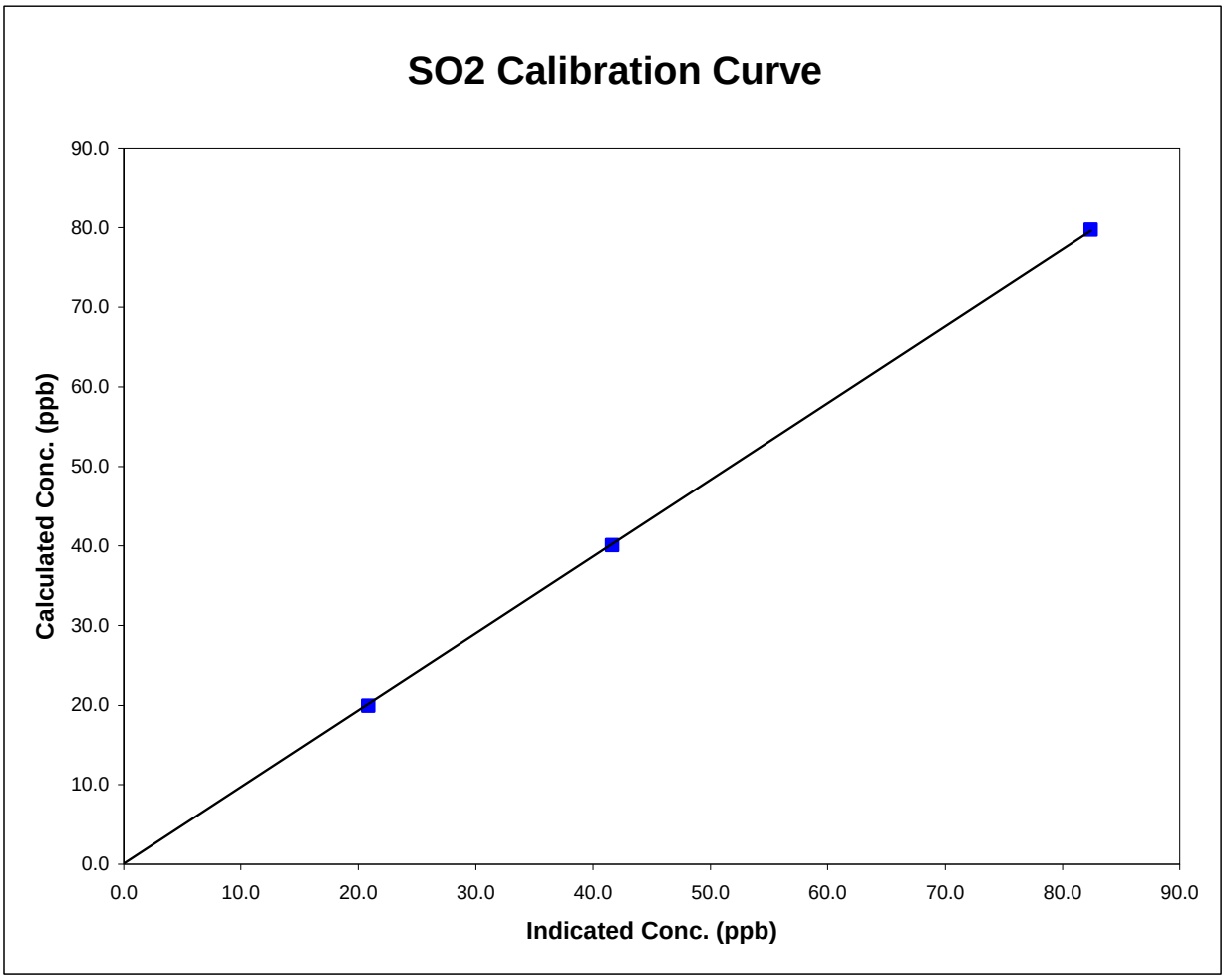
FOCUS AIR QUALITY MONITORING

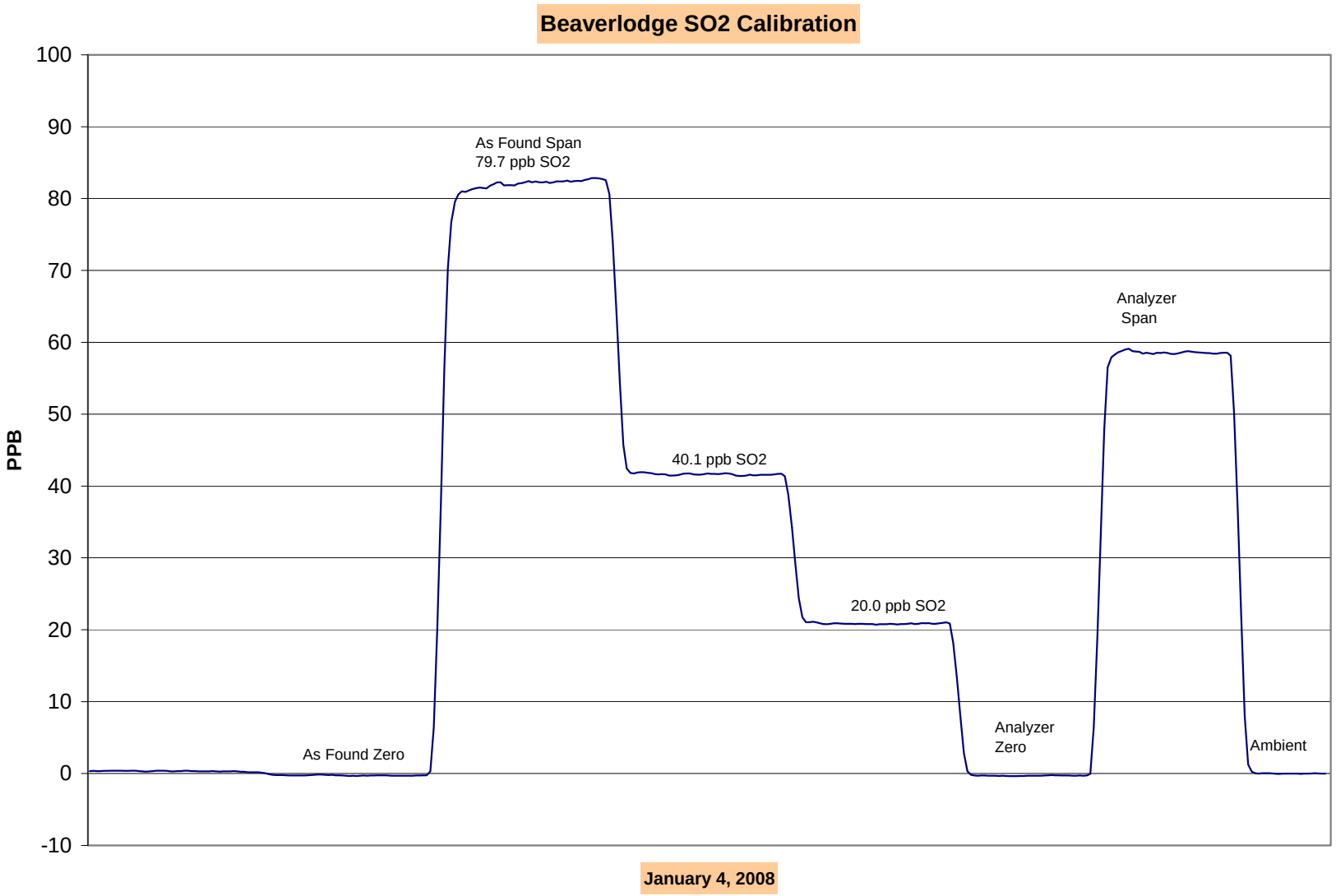
Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:20	End Time (MST)	12:55
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	-0.3	N/A		
79.7	82.4	0.9674	Correlation Coefficient	0.999962
40.1	41.6	0.9629		
20.0	20.8	0.9580	Slope	0.965142
			Intercept	0.055132




Beaverlodge SO2 Calibration
PPB
100
90
80
70
60
50
40
30
20
10
0
-10
As Found Span
79.7 ppb SO2
40.1 ppb SO2
20.0 ppb SO2
Analyzer
Span
As Found Zero
Analyzer
Zero
Ambient
January 4, 2008

Calibration Report

Parameter	**NOx-NO-NO_2**
Air Monitoring Network	**PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge

Reason: Routine Installation Removal Other:

Start Time (MST)	10:20:00		End Time (MST)	14:20:00	
Barometric Pressure	0.880	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	0.991055	0.990048	0.993226
	Data Offset	-0.055510	-1.078086	-0.987284
After	Data Slope	0.985341	0.981955	0.974864
	Data Offset	1.100655	-0.782428	-0.675589
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	-636	V	-636	V
Chamber Temp	49.2	Deg C	49.2	Deg C
Cooler Temp	-2.2	Deg C	-2.1	Deg C
Converter Temp	324.0	Deg C	324.0	Deg C
Sample Flow	0.776	LPM	0.773	LPM
Ozonator Flow	0.087	LPM	0.083	LPM
Pressure	175.4	mm Hg	166.2	mm Hg

Notes:

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: January 4, 2008 Station Location: Beaverlodge

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	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	405.6	407.6	-2.6	0.9808	0.9740
2	4990	19.96	200.0	199.6	0.4	204.3	205.3	-1.5	0.9787	0.9721
3	4990	9.92	99.6	99.4	0.2	103.8	104.2	-0.9	0.9599	0.9543
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	405.6	407.6	-2.6	0.9823	0.9755
							Average Correction Factor		0.9731	0.9668

As Found Concentrations: NO_X= 404.8 NO= 407.0 As Found Percent Change NO_X= 1.6% NO= 2.4%

GPT Calibration Data

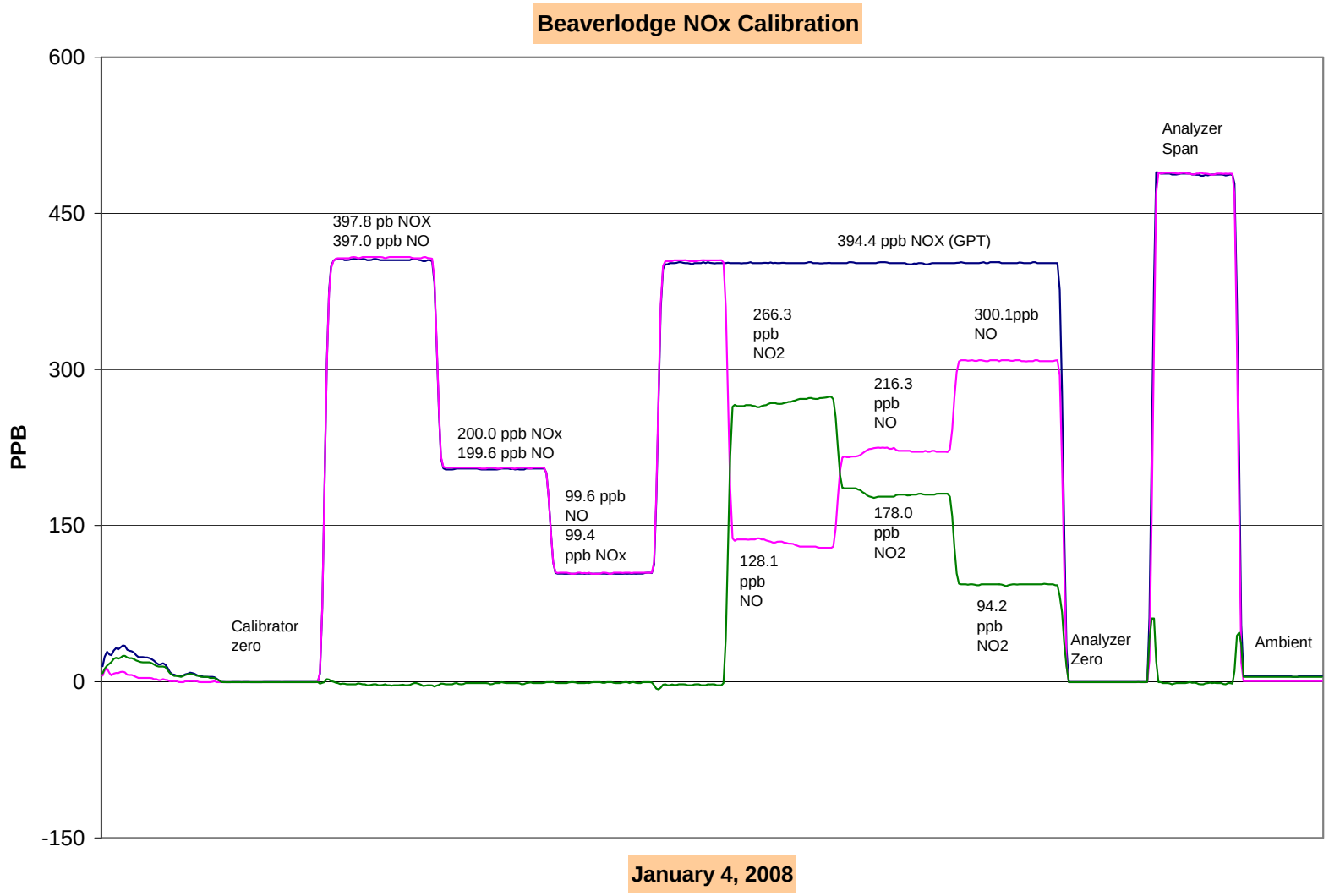
Dilution Flow 4990 ccm Source Gas Flow 39.86 ccm

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	394.4	393.8	0.6	402.3	404.6	-2.8	0.9803	0.9732	N/A	N/A
300	394.4	128.1	266.3	402.3	132.1	269.7	0.9802	0.9697	0.9875	101.3%
200	394.4	216.3	178.0	402.3	222.6	179.3	0.9801	0.9718	0.9929	100.7%
100	394.4	300.1	94.2	402.5	308.6	93.5	0.9797	0.9727	1.0080	99.2%
					Average Correction Factor		0.9800	0.9714	0.9961	100.4%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-1.3	-0.4	-1.3	ppb	-1.0	0.8	-1.0	ppb
Auto span	487.4	3.1	485.2	ppb	477.6	-0.3	475.1	ppb

Calibration Performed By: Conor Whiteley


Beaverlodge NOx Calibration
600
450
300
150
0
-150
PPB
Calibrator zero
397.8 pb NOX
397.0 ppb NO
200.0 ppb NOx
199.6 ppb NO
99.6 ppb NO
99.4 ppb NOx
266.3 ppb NO2
128.1 ppb NO
394.4 ppb NOX (GPT)
216.3 ppb NO
178.0 ppb NO2
300.1ppb NO
94.2 ppb NO2
Analyzer Zero
Analyzer Span
Ambient
January 4, 2008

Calibration Summary

Parameter	NO_2
Air Monitoring Network	PASZA

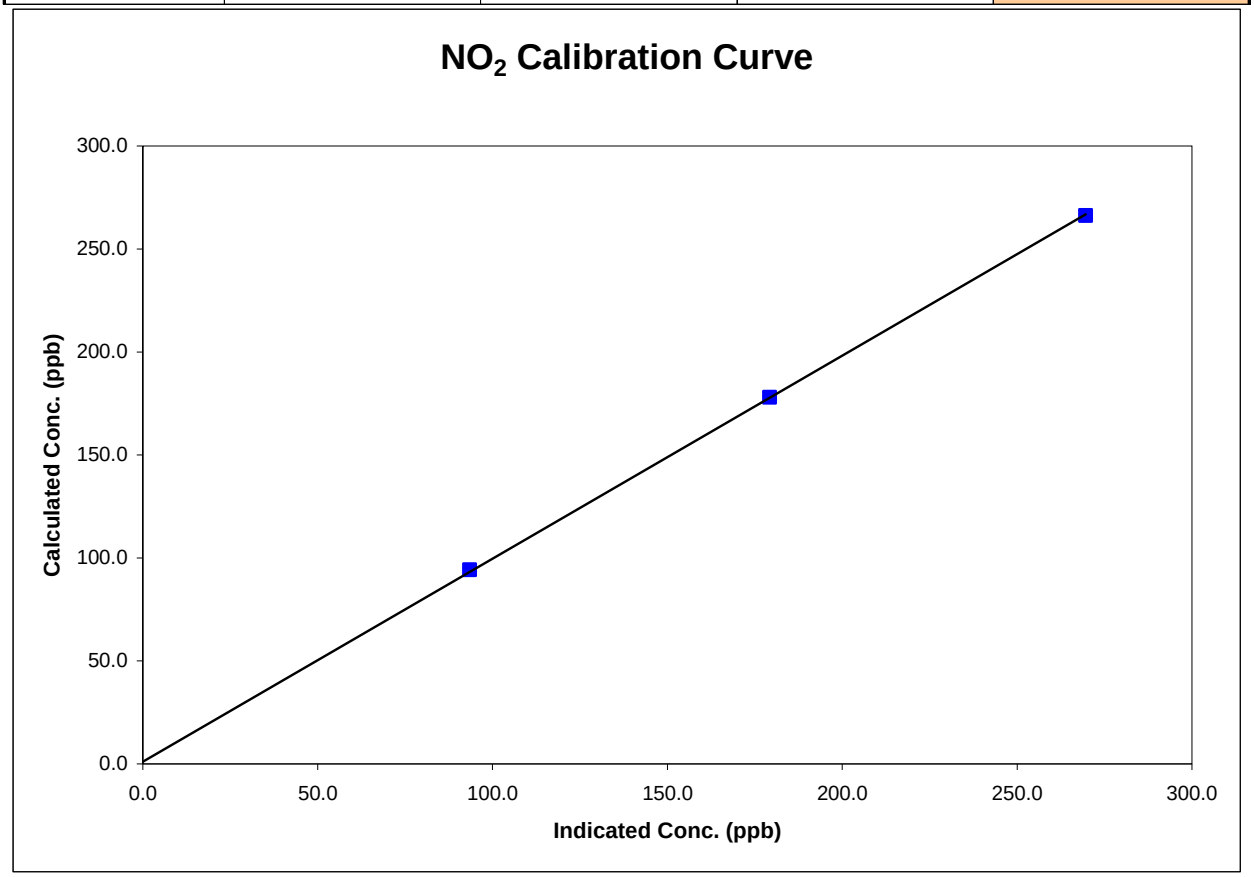
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:20	End Time (MST)	14:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	0.0000		
266.3	269.7	0.9875	Correlation Coefficient	0.999951
178.0	179.3	0.9929		
94.2	93.5	1.0080	Slope	0.985341
			Intercept	1.100655



Calibration Summary

Parameter	NO_x
Air Monitoring Network	PASZA

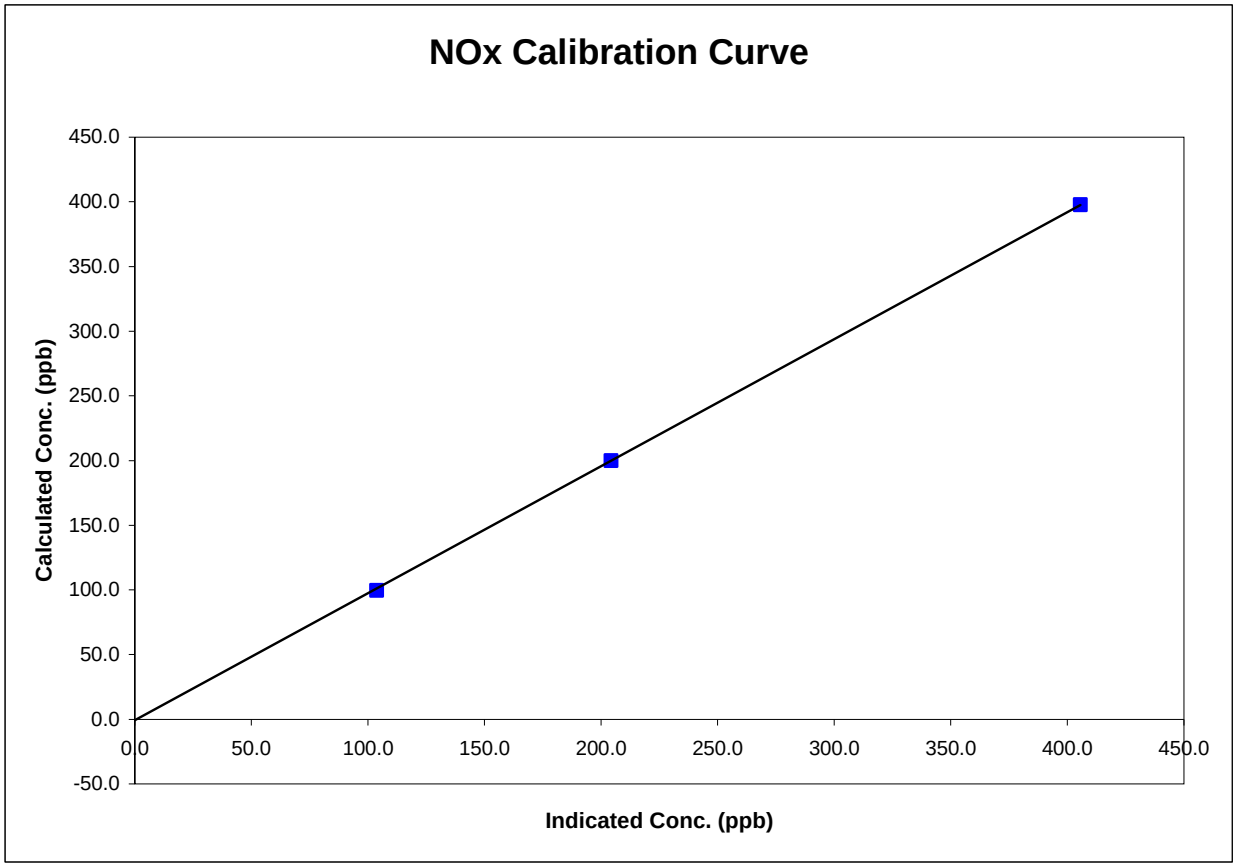
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:20	End Time (MST)	14:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000		
397.8	405.6	0.9808	Correlation Coefficient	0.999959
200.0	204.3	0.9787		
99.6	103.8	0.9599	Slope	0.981955
			Intercept	-0.782428



Calibration Summary

Parameter	NO
Air Monitoring Network	PASZA

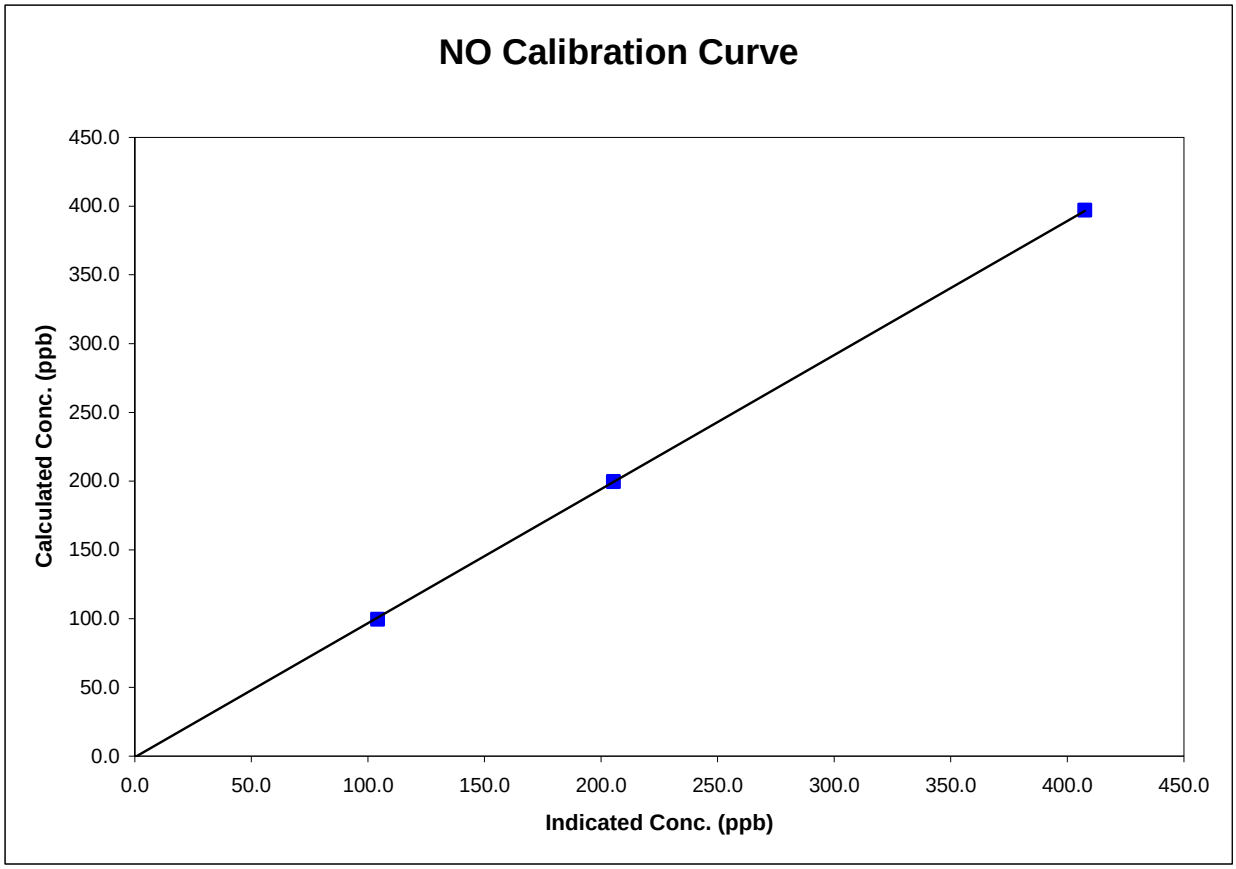
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:20	End Time (MST)	14:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A		
397.0	407.6	0.9740	Correlation Coefficient	0.999961
199.6	205.3	0.9721		
99.4	104.2	0.9543	Slope	0.974864
			Intercept	-0.675589



Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	O3
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:40	End Time (MST)	16:15
Barometric Pressure	0.880 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	0.994661	Calculated slope	0.975295
Calculated intercept	1.913623	Calculated intercept	-0.342185
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	1.074		1.042	
Lamp temp	56.3	mV	56.3	mV
Lamp Intensity A/B	79654/77070	mV	78046/75580	mV
Pressure	672.7	mm Hg	645.8	mm Hg
Flow A	742	ccm	724	ccm
Flow B	697	ccm	677	ccm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	-0.2	N/A
4990	0.00	266.3	272.3	0.9778
4990	0.00	178.0	184.3	0.9657
4990	0.00	94.2	97.1	0.9699
4990	0.00	0.0	-0.2	As found zero
4990	0.00	266.3	272.3	As found span
			Average Correction Factor	0.9711

Calculated value of As Found Response: 273.0 ppm Percent Change of As Found: 2.5%

	before calibration		after calibration	
Auto zero	1.9	ppb	-0.5	ppb
Auto span	115.3	ppb	112.0	ppb

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	O3
Air Monitoring Network	PASZA

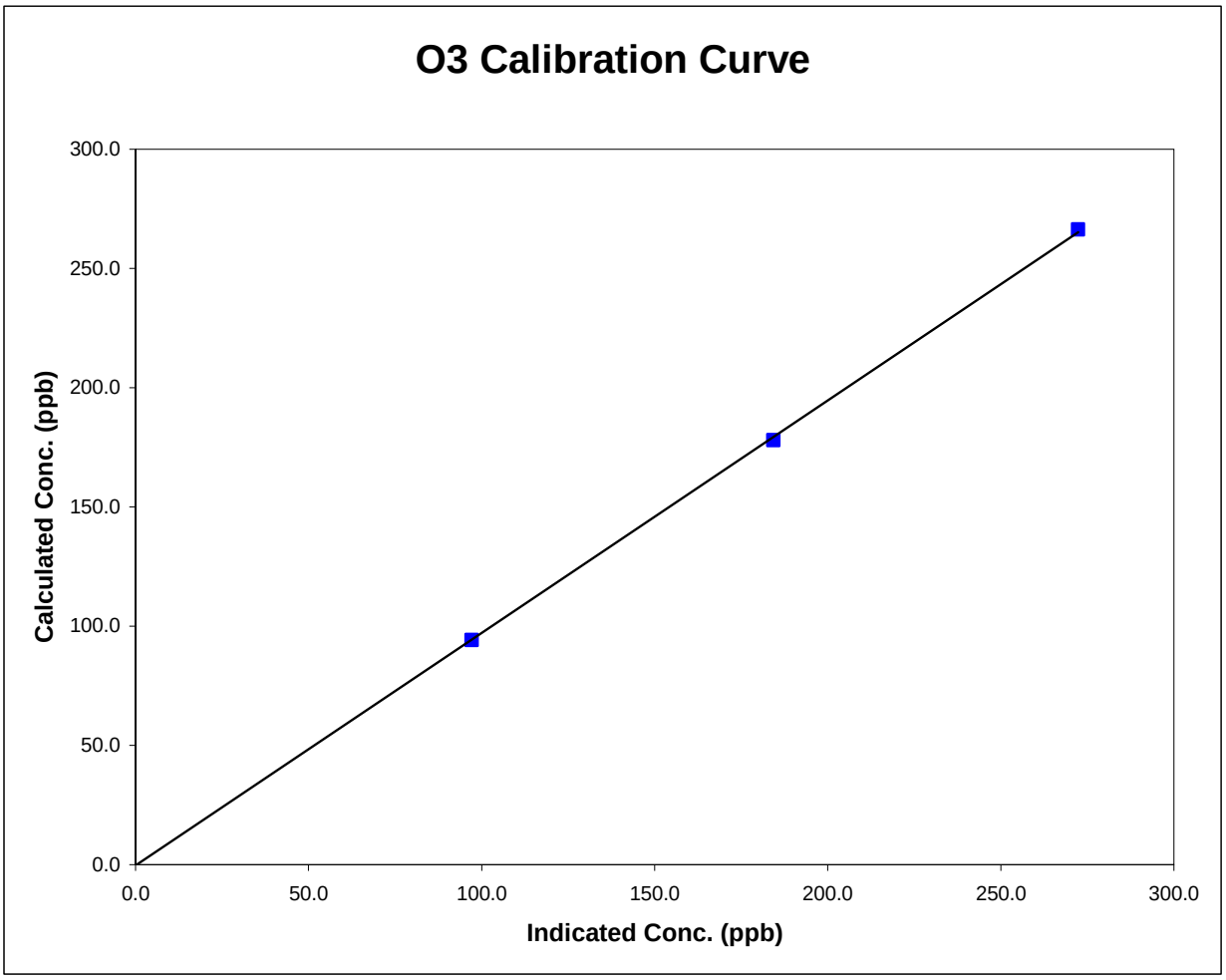
FOCUS AIR QUALITY MONITORING

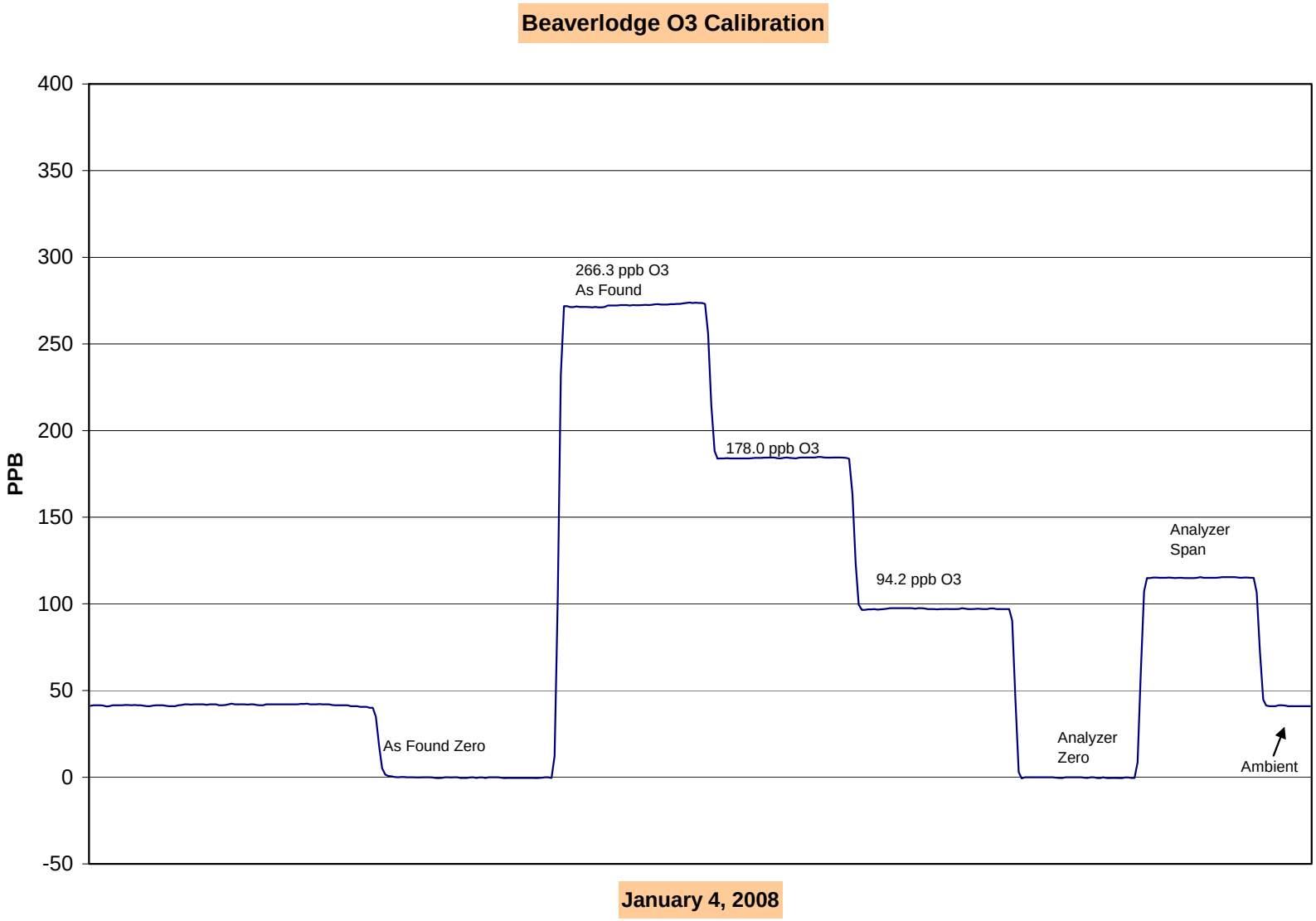
Station Information

Calibration Date	January 4, 2008	Previous Calibration	December 5, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:40	End Time (MST)	16:15
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		
266.3	272.3	0.9778	Correlation Coefficient	0.999912
178.0	184.3	0.9657		
94.2	97.1	0.9699	Slope	0.975295
			Intercept	-0.342185




Beaverlodge O3 Calibration
400
350
300
250
200
150
100
50
0
-50
PPB
266.3 ppb O3
As Found
178.0 ppb O3
94.2 ppb O3
Analyzer
Span
As Found Zero
Analyzer
Zero
Ambient
January 4, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	SO2
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 8, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	12:40	End Time (MST)	15:45
Barometric Pressure	27.37 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	0.992926	Calculated slope	0.999852
Calculated intercept	-1.121894	Calculated intercept	-1.241810
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	8		8	
Coefficient	1.156		1.137	
UV Lamp Voltage	744	V	740	V
Chamber Temp	44.5	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	679.6	mm Hg	667.3	mm Hg
Sample Flow	488	LPM	481	LPM
Lamp Intesity	34319	Hz	34409	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.1	N/A
4988	39.80	398.2	398.9	0.9981
4988	19.88	199.7	201.4	0.9916
4988	9.92	99.8	102.4	0.9748
4988	0.00	0.0	0.1	As found zero
4988	39.94	399.5	406.0	As found span
			Average Correction Factor	0.9882

Calculated value of As Found Response: 401.995 ppm Percent Change of As Found: -0.6%

	before calibration		after calibration	
Auto zero	-0.9	ppm	-0.9	ppm
Auto span	262.5	ppm	274.5	ppm

Notes: Adjusted SO2 Span

Calibration Performed By: Conor Whiteley

Calibration Summary

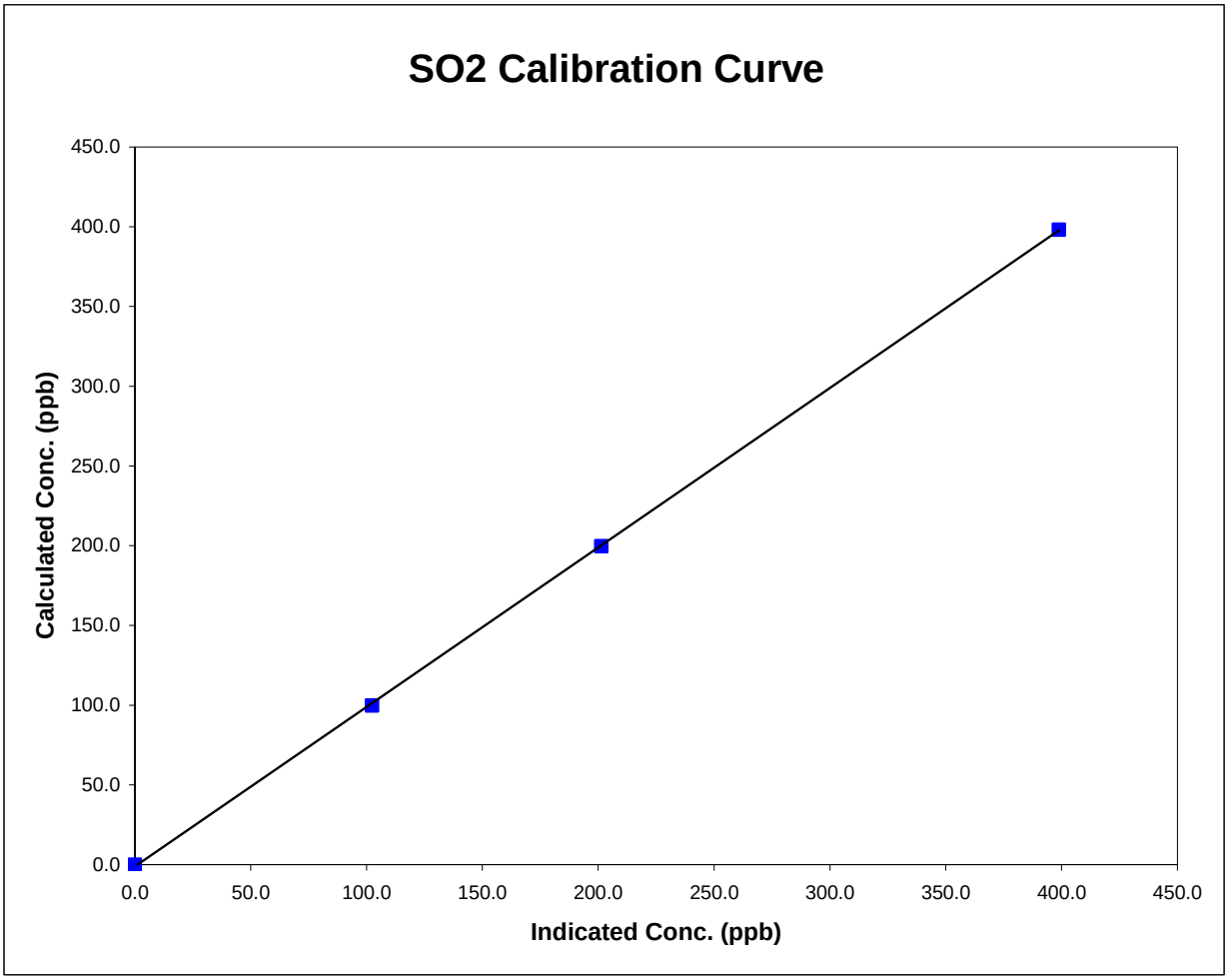
Parameter	SO2
Air Monitoring Network	PASZA

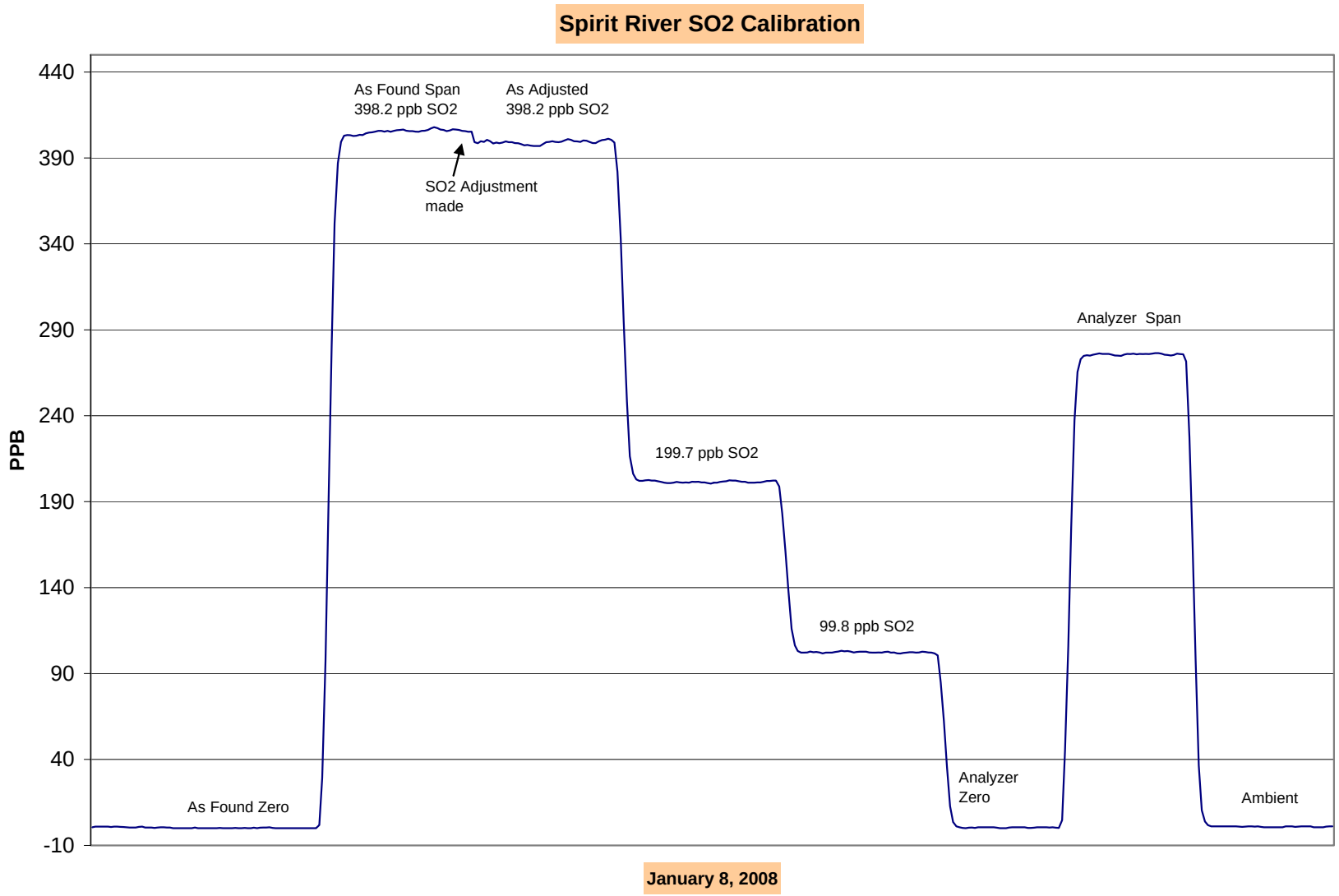
Station Information

Calibration Date	January 8, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:40	End Time (MST)	15:45
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		
398.2	398.9	0.9981	Correlation Coefficient	0.999958
199.7	201.4	0.9916		
99.8	102.4	0.9748	Slope	0.999852
			Intercept	-1.241810




Spirit River SO2 Calibration
PPB
440
390
340
290
240
190
140
90
40
-10
As Found Span
398.2 ppb SO2
As Adjusted
398.2 ppb SO2
SO2 Adjustment
made
Analyzer Span
199.7 ppb SO2
99.8 ppb SO2
Analyzer
Zero
Ambient
As Found Zero
January 8, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	TRS
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 9, 2008	Previous Calibration	December 11, 2007
Station Number	6	Station Location	Portable - Spirit River
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:50	End Time (MST)	14:30
Barometric Pressure	27.5 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Environics 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
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.983091	Calculated slope	0.986486
Calculated intercept	0.115516	Calculated intercept	-0.067829
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	4.8	ppb	9.3	ppb
Coefficient	1.055		1.496	
Lamp Voltage	800	V	807	V
Chamber Temp	44.0	C	44.0	C
Perm gas Temp	45	C	44.9	C
Pressure	669	mmHg	656	mmHg
Sample Flow	445	ccm	431	ccm
Lamp Intensity	37857.0	Hz	39264.0	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.0	0.0	0.2	N/A
4988	69.80	70.9	72.1	0.9844
4988	39.78	40.7	41.2	0.9875
4988	19.85	20.4	20.6	0.9867
4988	0.00	0.0	0.2	As found zero
4988	69.74	70.9	72.1	As found span
			Average Correction Factor	0.9862

Calculated value of As Found Response: 70.79 ppm Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	0.2	ppm	0.2	ppm
Auto span	76.3	ppm	77.1	ppm

Notes: No adjustments made

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	TRS
Air Monitoring Network	PASZA

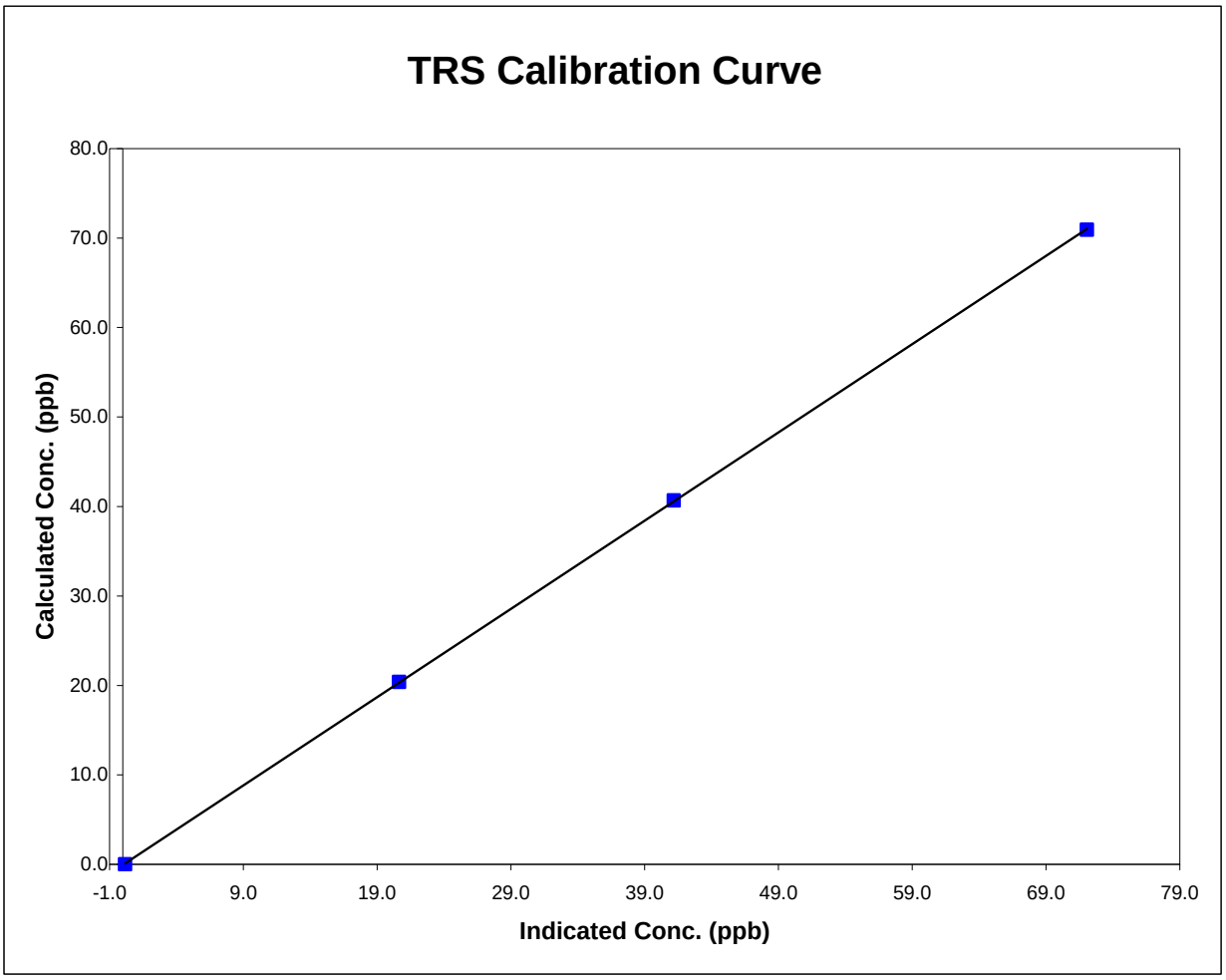
FOCUS AIR QUALITY MONITORING

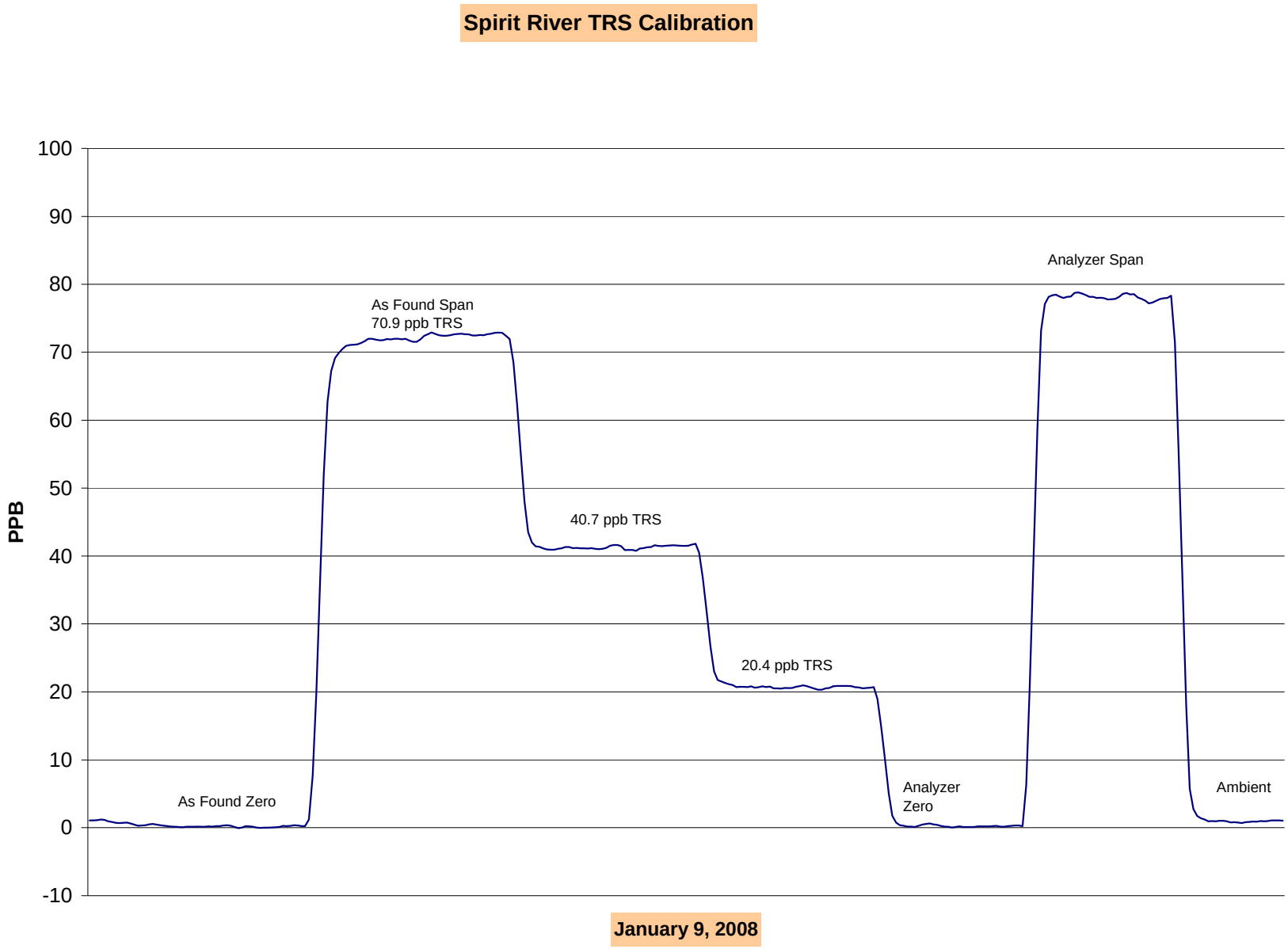
Station Information

Calibration Date	January 9, 2008	Previous Calibration	December 11, 2007
Station Number	6	Station Location	Portable - Spirit River
Start Time (MST)	11:50	End Time (MST)	14:30
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
70.9	72.1	0.9844	Correlation Coefficient	0.999988
40.7	41.2	0.9875		
20.4	20.6	0.9867	Slope	0.986486
			Intercept	-0.067829




Spirit River TRS Calibration
PPB
100
90
80
70
60
50
40
30
20
10
0
-10
As Found Zero
As Found Span
70.9 ppb TRS
40.7 ppb TRS
20.4 ppb TRS
Analyzer
Zero
Analyzer Span
Ambient
January 9, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	O3
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 9, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	10:12	End Time (MST)	12:45
Barometric Pressure	0.920 atm	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0-5	DACS channel #	7
	Before		After
Calculated slope	1.034885	Calculated slope	0.998089
Calculated intercept	0.929610	Calculated intercept	1.173136
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	1.022		1.022	
Cell A	112151	Hz	113174	Hz
Cell B	111132	Hz	111092	Hz
Pressure	679	in Hg	669	in Hg
CellA Flow	669	ccm	670	ccm
Cell B Flow	665	cmm	664	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	0.3	N/A
4990	0.00	265.9	266.1	0.9992
4990	0.00	181.9	181.1	1.0046
4990	0.00	102.3	99.0	1.0334
4990	0.00	0.0	0.3	As found zero
4990	0.00	300.0	266.1	As found span
			Average Correction Factor	1.0124

Calculated value of As Found Response: 276.0 ppm Percent Change of As Found: -8.0%

	before calibration		after calibration	
Auto zero	2.5	ppb	2.2	ppb
Auto span	348.8	ppb	379.1	ppb

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

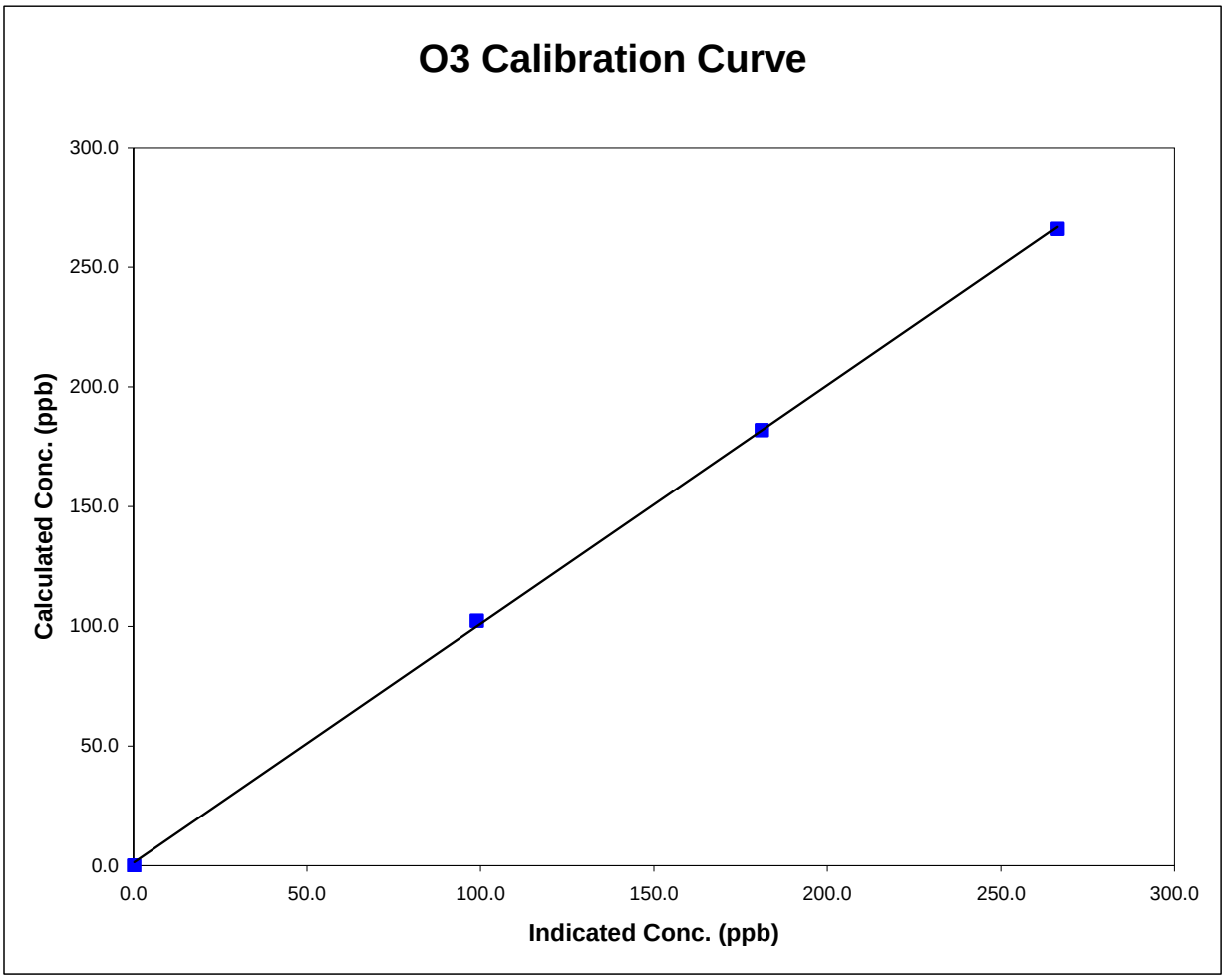
Parameter	O3
Air Monitoring Network	PASZA

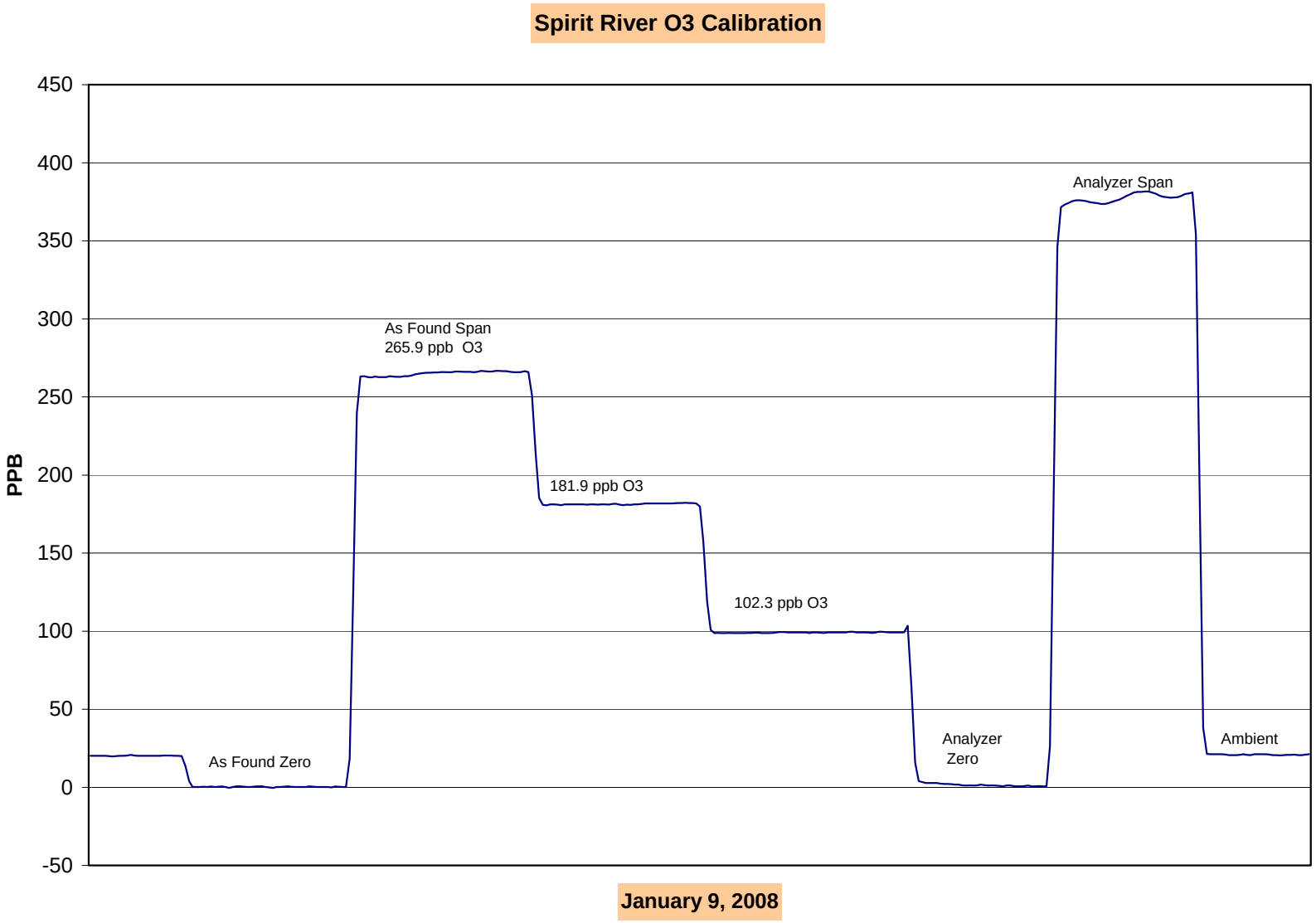
Station Information

Calibration Date	January 9, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:12	End Time (MST)	12:45
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	0.3	NA		
265.9	266.1	0.9992	Correlation Coefficient	0.999786
181.9	181.1	1.0046		
102.3	99.0	1.0334	Slope	0.998089
			Intercept	1.173136




Spirit River O3 Calibration
450
400
350
300
250
200
150
100
50
0
-50
PPB
As Found Zero
As Found Span
265.9 ppb O3
181.9 ppb O3
102.3 ppb O3
Analyzer
Zero
Analyzer Span
Ambient
January 9, 2008

Calibration Report

Parameter	**NOx-NO-NO_2**
Air Monitoring Network	**PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 8, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River

Reason: Routine Installation Removal Other:

Start Time (MST)	12:30		End Time (MST)	16:30	
Barometric Pressure	27.37	Inches Hg	Station Temperature	22.0	Deg C
Calibrator	Environics 6100		Serial Number	3474	
NO Cal Gas Conc	48.9	ppm	Cal Gas Expiry Date	2-Jan-09	
NOx Cal Gas Conc	48.9	ppm	Cal Gas Serial #	LL-16161	

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	52662

Parameter		NO2	NOx	NO
Before	Data Slope	0.986211	0.988894	0.988037
	Data Offset	0.145279	-1.358579	-1.518898
After	Data Slope	1.004452	1.006997	1.005280
	Data Offset	-0.070086	-1.357492	-1.328860
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model	TECO 42i	Analyzer serial #	701120011

Test Point	before		after	
Concentration range	0-1000	ppb	0-1000	ppb
NO background	4.2	ppb	4.2	mV
NOx background	4.4	ppb	4.4	mV
NO coefficient	0.689		0.712	
NOx coefficient	0.999		0.999	
Chamber Temp	50.2	Deg C	50.1	Deg C
Cooler Temp	-2.7	Deg C	-3.0	Deg C
NO2 Converter Temp	323.7	Deg C	326.3	Deg C
Sample Flow	654.0	ccm	632.0	ccm
Ozonator Flow	OK	LPM	OK	LPM
Preasure	161.4	mm Hg	166.3	mm Hg

Notes:

Calibration Performed By: Conor Whiteley

Calibration Report

Parameter	**NOx-NO-NO_2**
Air Monitoring Network	**PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 8, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River

Reason: Routine Installation Removal Other:

Start Time (MST)	12:30		End Time (MST)	16:30	
Barometric Pressure	27.37	Inches Hg	Station Temperature	22.0	Deg C
Calibrator	Environics 6100		Serial Number	3474	
NO Cal Gas Conc	48.9	ppm	Cal Gas Expiry Date	2-Jan-09	
NOx Cal Gas Conc	48.9	ppm	Cal Gas Serial #	LL-16161	

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	52662

Parameter		NO2	NOx	NO
Before	Data Slope	0.986211	0.988894	0.988037
	Data Offset	0.145279	-1.358579	-1.518898
After	Data Slope	1.004452	1.006997	1.005280
	Data Offset	-0.070086	-1.357492	-1.328860
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model	TECO 42i	Analyzer serial #	701120011

Test Point	before		after	
Concentration range	0-1000	ppb	0-1000	ppb
NO background	4.2	ppb	4.2	mV
NOx background	4.4	ppb	4.4	mV
NO coefficient	0.689		0.712	
NOx coefficient	0.999		0.999	
Chamber Temp	50.2	Deg C	50.1	Deg C
Cooler Temp	-2.7	Deg C	-3.0	Deg C
NO2 Converter Temp	323.7	Deg C	326.3	Deg C
Sample Flow	654.0	ccm	632.0	ccm
Ozonator Flow	OK	LPM	OK	LPM
Preasure	161.4	mm Hg	166.3	mm Hg

Notes:

Calibration Performed By: Conor Whiteley

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: January 8, 2008 Station Location: Rover - Spirit River

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4988	0.00	0.0	0.0	0.0	0.3	0.0	0.5	N/A	N/A
1	4988	39.80	387.1	387.1	0.0	385.2	385.7	0.4	1.0049	1.0035
2	4988	19.88	194.1	194.1	0.0	194.6	195.0	0.6	0.9974	0.9957
3	4988	9.92	97.0	97.0	0.0	98.8	99.2	0.3	0.9824	0.9776
AFZ	4988	0.00	0.0	0.0	0.0	0.3	0.0	0.5	0.0000	0.0000
AFS	4988	39.92	388.2	388.2	0.0	375.8	375.7	0.8	1.0332	1.0334
							Average Correction Factor		0.9949	0.9923

As Found Concentrations: NO_X= 374.1 NO= 374.2 As Found Percent Change NO_X= -3.6% NO= -3.6%

GPT Calibration Data

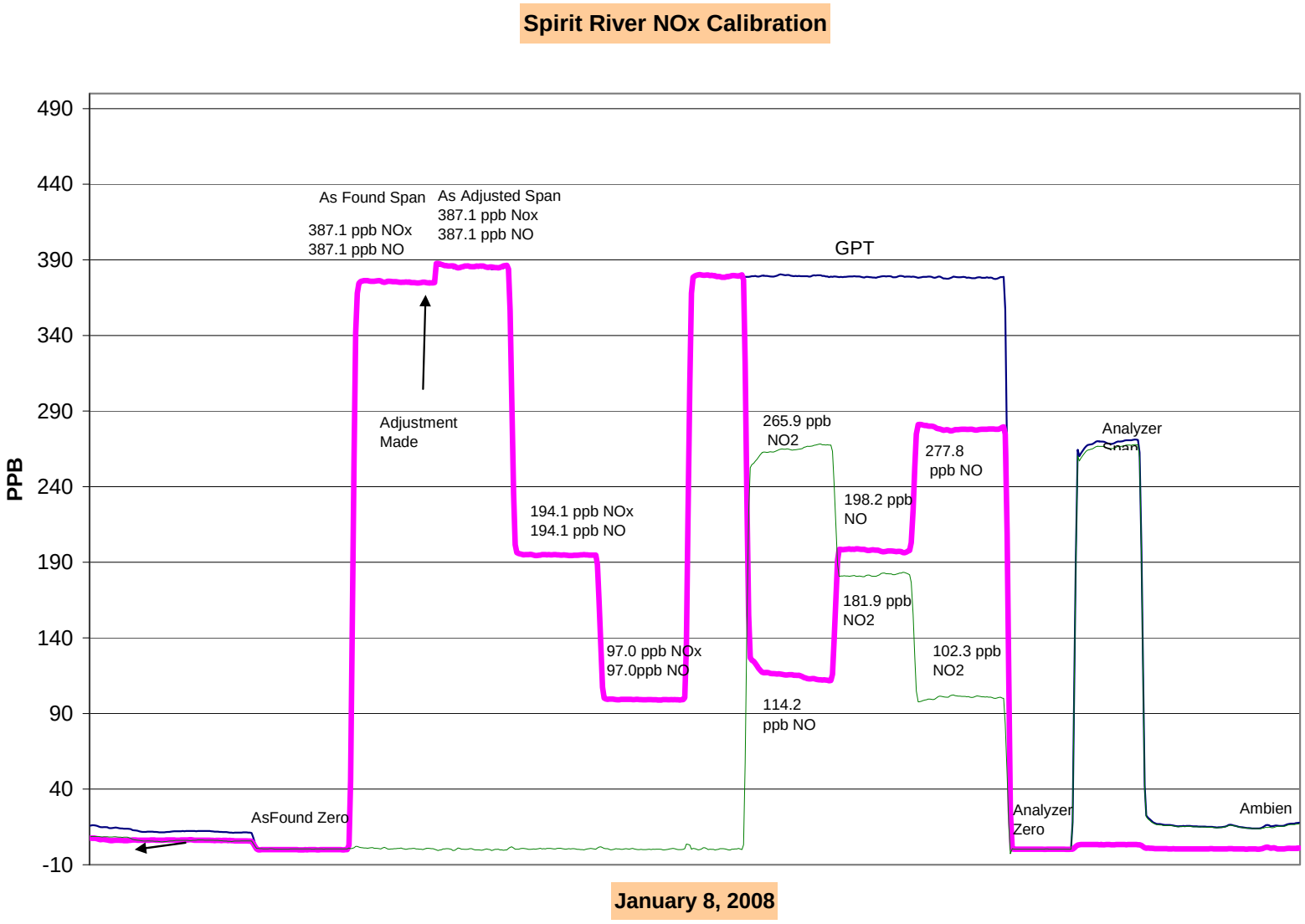
Dilution Flow 4988 ccm Source Gas Flow 39.82 ccm

O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	380.1	380.1	0.0	378.8	379.4	0.3	1.0033	1.0018	N/A	N/A
300	380.1	114.2	265.9	379.5	114.9	265.2	1.0016	0.9937	1.0027	99.7%
200	380.1	198.2	181.9	378.7	198.4	181.0	1.0037	0.9986	1.0054	99.5%
100	380.1	277.8	102.3	378.2	277.7	101.3	1.0050	1.0005	1.0096	99.0%
					Average Correction Factor		1.0034	0.9976	1.0059	99.4%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.8	1.0	0.9	ppb	0.2	1.1	0.6	ppb
Auto span	268.8	264.0	4.1	ppb	268.1	265.4	2.0	ppb

Calibration Performed By: Conor Whiteley


Spirit River NOx Calibration
PPB
490
440
390
340
290
240
190
140
90
40
-10
As Found Span
387.1 ppb NOx
387.1 ppb NO
As Adjusted Span
387.1 ppb Nox
387.1 ppb NO
GPT
Adjustment
Made
265.9 ppb
NO2
277.8
ppb NO
Analyzer
194.1 ppb NOx
194.1 ppb NO
198.2 ppb
NO
181.9 ppb
NO2
97.0 ppb NOx
97.0ppb NO
102.3 ppb
NO2
114.2
ppb NO
AsFound Zero
Analyzer
Zero
Ambien
January 8, 2008

Calibration Summary

Parameter	NO_2
Air Monitoring Network	PASZA

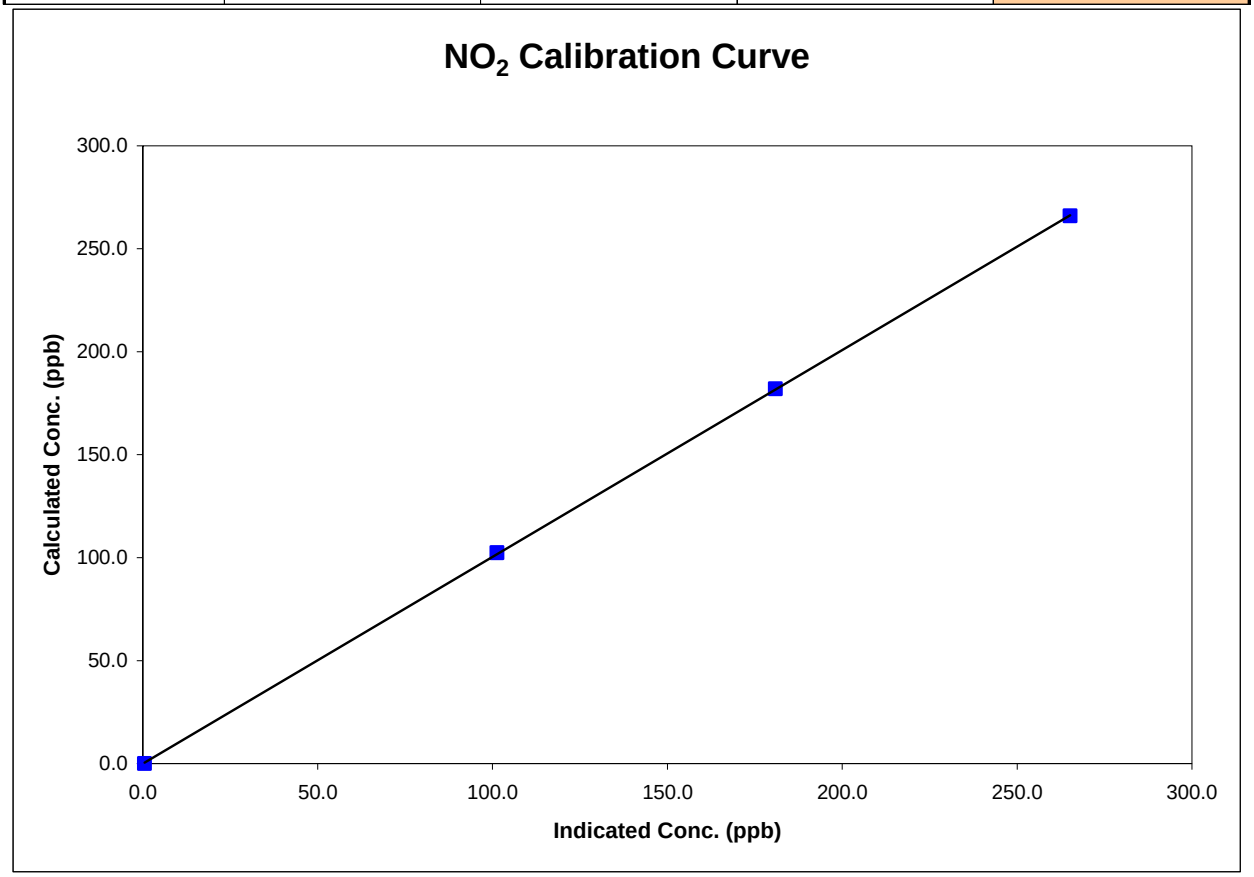
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 8, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:30	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	0.5	0.0000		
265.9	265.2	1.0027	Correlation Coefficient	0.999980
181.9	181.0	1.0054		
102.3	101.3	1.0096	Slope	1.004452
			Intercept	-0.070086



Calibration Summary

Parameter	NO_x
Air Monitoring Network	PASZA

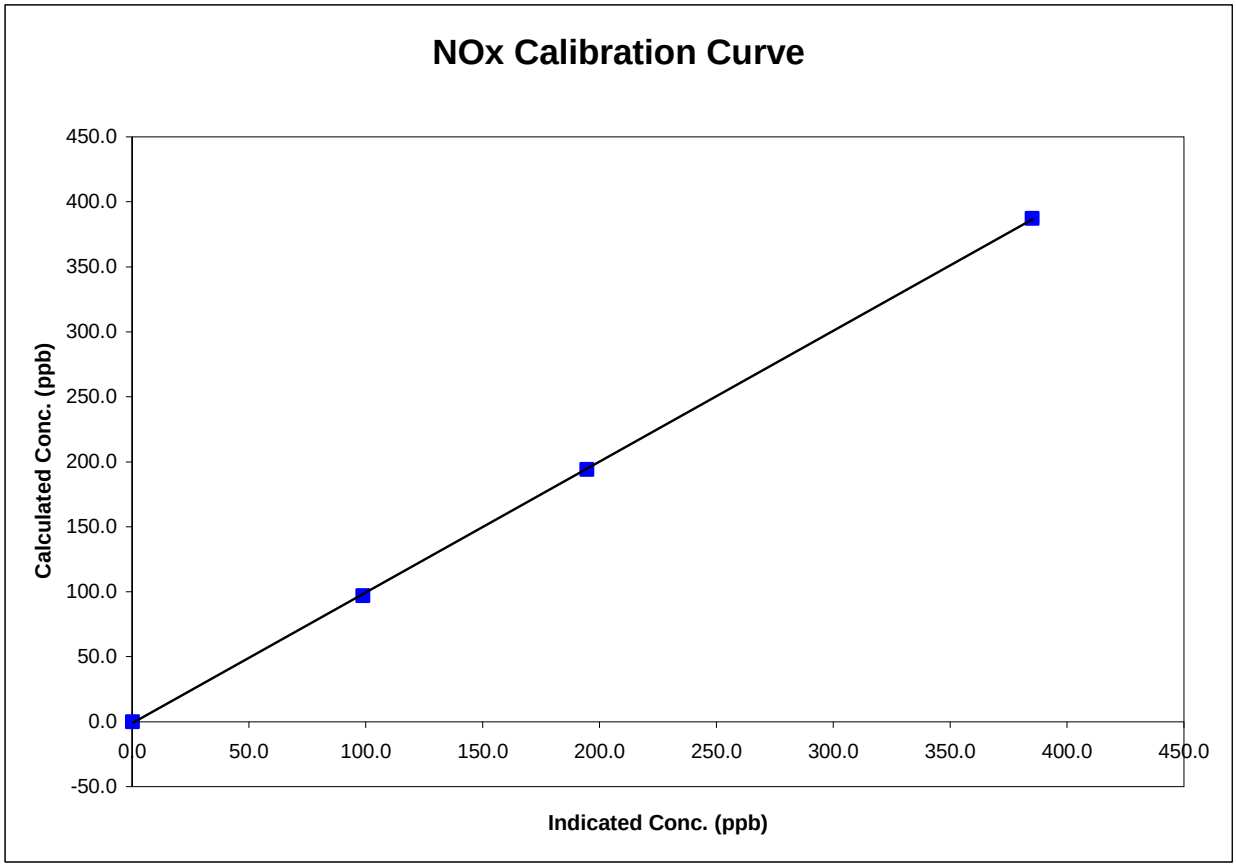
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 8, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:30	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	0.3	0.0000		
387.1	385.2	1.0049	Correlation Coefficient	0.999966
194.1	194.6	0.9974		
97.0	98.8	0.9824	Slope	1.006997
			Intercept	-1.357492



Calibration Summary

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

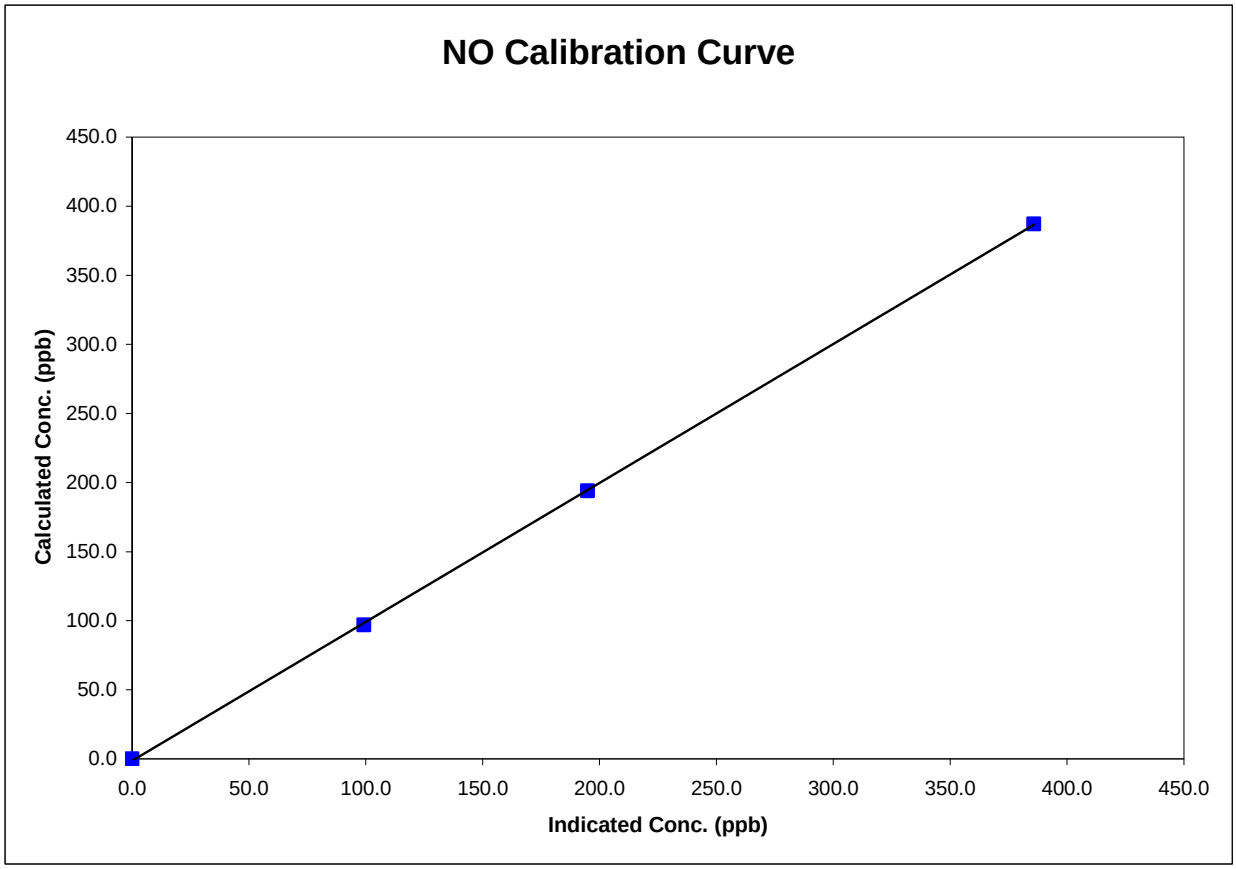
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	January 8, 2008	Previous Calibration	December 10, 2007
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	12:30	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		
387.1	385.7	1.0035	Correlation Coefficient	0.999946
194.1	195.0	0.9957		
97.0	99.2	0.9776	Slope	1.005280
			Intercept	-1.328860



Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	SO2
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 22, 2008	Previous Calibration	December 7, 2007
Station Number	6	Station Location	Valleyview
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	11:30	End Time (MST)	14:20
Barometric Pressure	27.84 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL16161		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.018085	Calculated slope	0.999244
Calculated intercept	-1.252793	Calculated intercept	-2.160242
Analyzer make	TEI 43i	Analyzer serial #	43C-57351-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	27.8		28.2	
Coefficient	0.741		0.758	
UV Lamp Voltage	700	LPM	697	LPM
Chamber Temp	43.9	V	44.2	V
Perm Gas Temp	30.5	C	30.5	C
Pressure	633.5	in Hg	641.9	in Hg
Sample Flow	0.473	LPM	0.474	LPM
Lamp Intesity	45521	Hz	45186	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	399.6	0.9967
4992	19.91	199.8	203.8	0.9806
4992	9.99	100.5	103.9	0.9674
4992	0.00	0.0	0.1	As found zero
4992	39.91	398.9	382.7	As found span
			Average Correction Factor	0.9816

Calculated value of As Found Response: 388.262 ppm Percent Change of As Found: 2.7%

	before calibration		after calibration	
Auto zero	-0.7	ppm	-2.0	ppm
Auto span	139.0	ppm	162.6	ppm

Notes: Adjusted SO2 Span

Calibration Performed By: Conor Whiteley

Calibration Summary

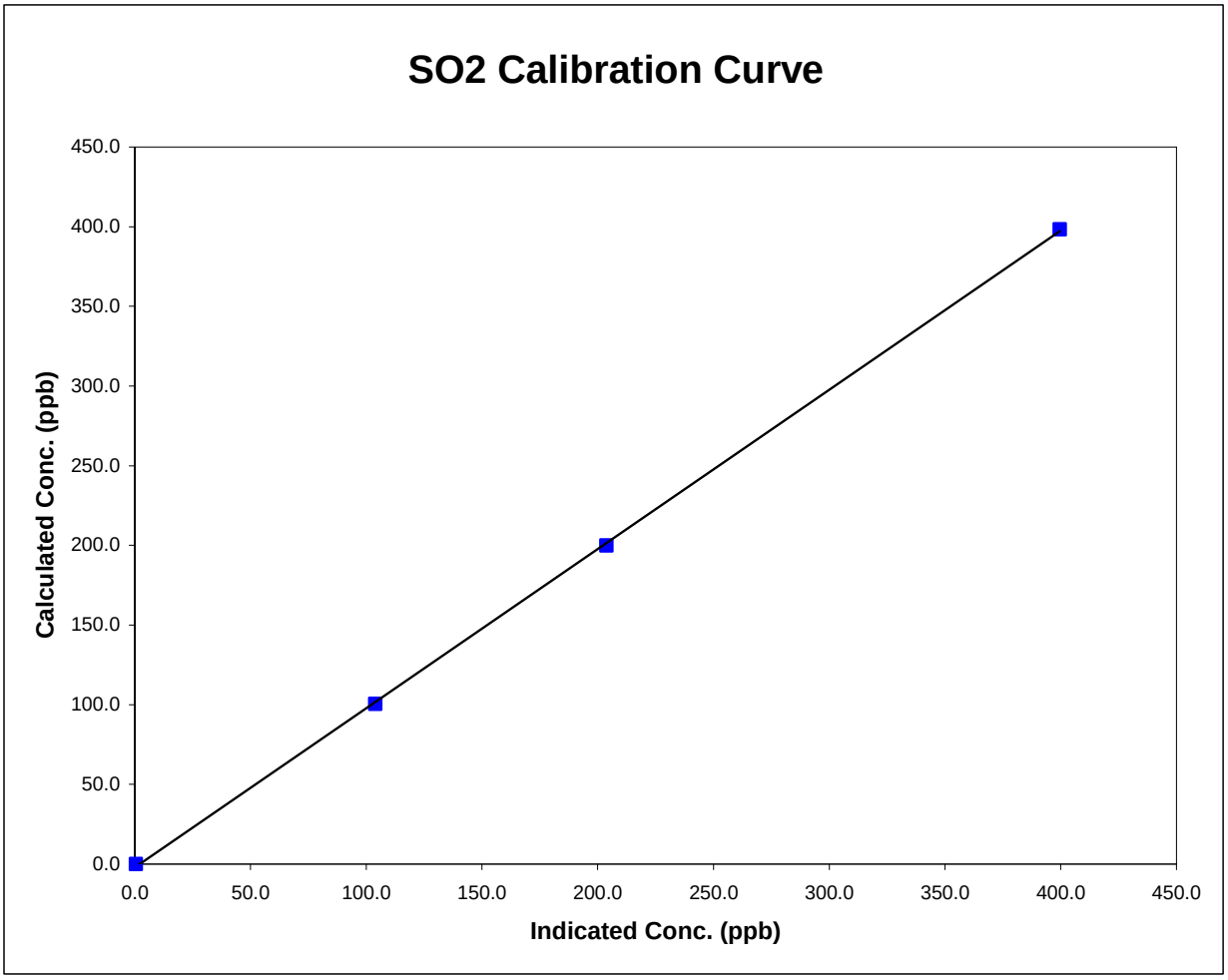
Parameter	SO2
Air Monitoring Network	PASZA

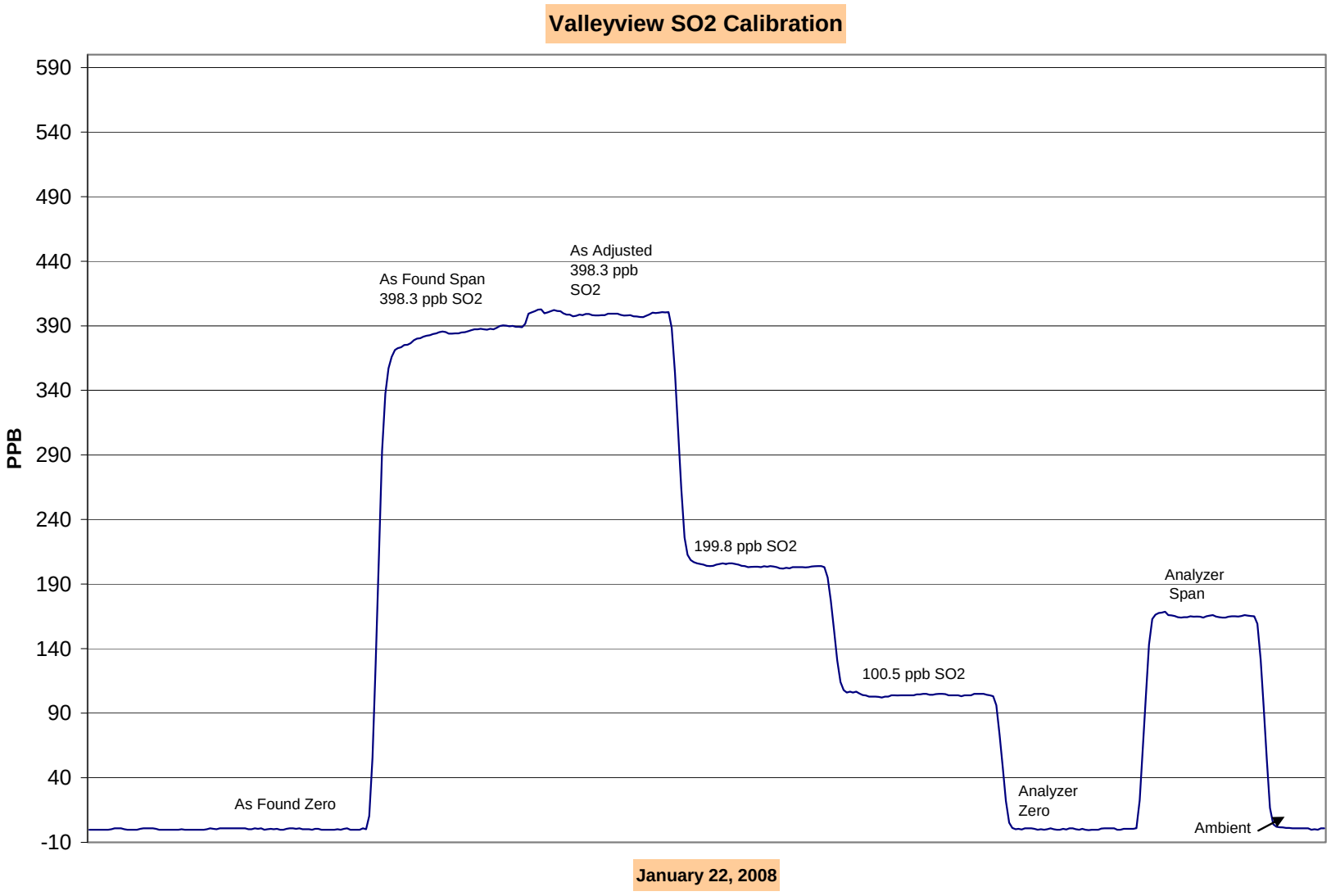
Station Information

Calibration Date	January 22, 2008	Previous Calibration	December 7, 2007
Station Number	6	Station Location	Valleyview
Start Time (MST)	11:30	End Time (MST)	14:20
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	399.6	0.9967	Correlation Coefficient	0.999907
199.8	203.8	0.9806		
100.5	103.9	0.9674	Slope	0.999244
			Intercept	-2.160242




Valleyview SO2 Calibration
590
540
490
440
390
340
290
240
190
140
90
40
-10
PPB
As Found Zero
As Found Span
398.3 ppb SO2
As Adjusted
398.3 ppb
SO2
199.8 ppb SO2
100.5 ppb SO2
Analyzer
Zero
Analyzer
Span
Ambient
January 22, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter	SO2
Air Monitoring Network	PASZA

Station Information

Calibration Date	January 23, 2008	Previous Calibration	January 22, 2008
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	12:15	End Time (MST)	14:10
Barometric Pressure	27.52 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL16161		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.000033	Calculated slope	1.002229
Calculated intercept	-1.981759	Calculated intercept	0.279153
Analyzer make	TEI 43i	Analyzer serial #	43C-57351-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	28.2		28.5	
Coefficient	0.758		0.758	
UV Lamp Voltage	697	LPM	696	LPM
Chamber Temp	44.2	V	43.3	V
Perm Gas Temp	30.5	C	30.5	C
Pressure	641.9	in Hg	630.5	in Hg
Sample Flow	0.474	LPM	0.469	LPM
Lamp Intesity	45186	Hz	45523	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	-0.3	N/A
4990	39.83	398.3	397.1	1.0029
4990	0.00	0.0	-0.3	As found zero
4990	39.83	398.3	397.1	As found span
			Average Correction Factor	1.0029

Calculated value of As Found Response: 395.459 ppm Percent Change of As Found: 0.7%

	before calibration		after calibration	
Auto zero	-1.8	ppm	0.3	ppm
Auto span	162.9	ppm	170.3	ppm

Notes: Rack Install As Found

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	SO2
Air Monitoring Network	PASZA

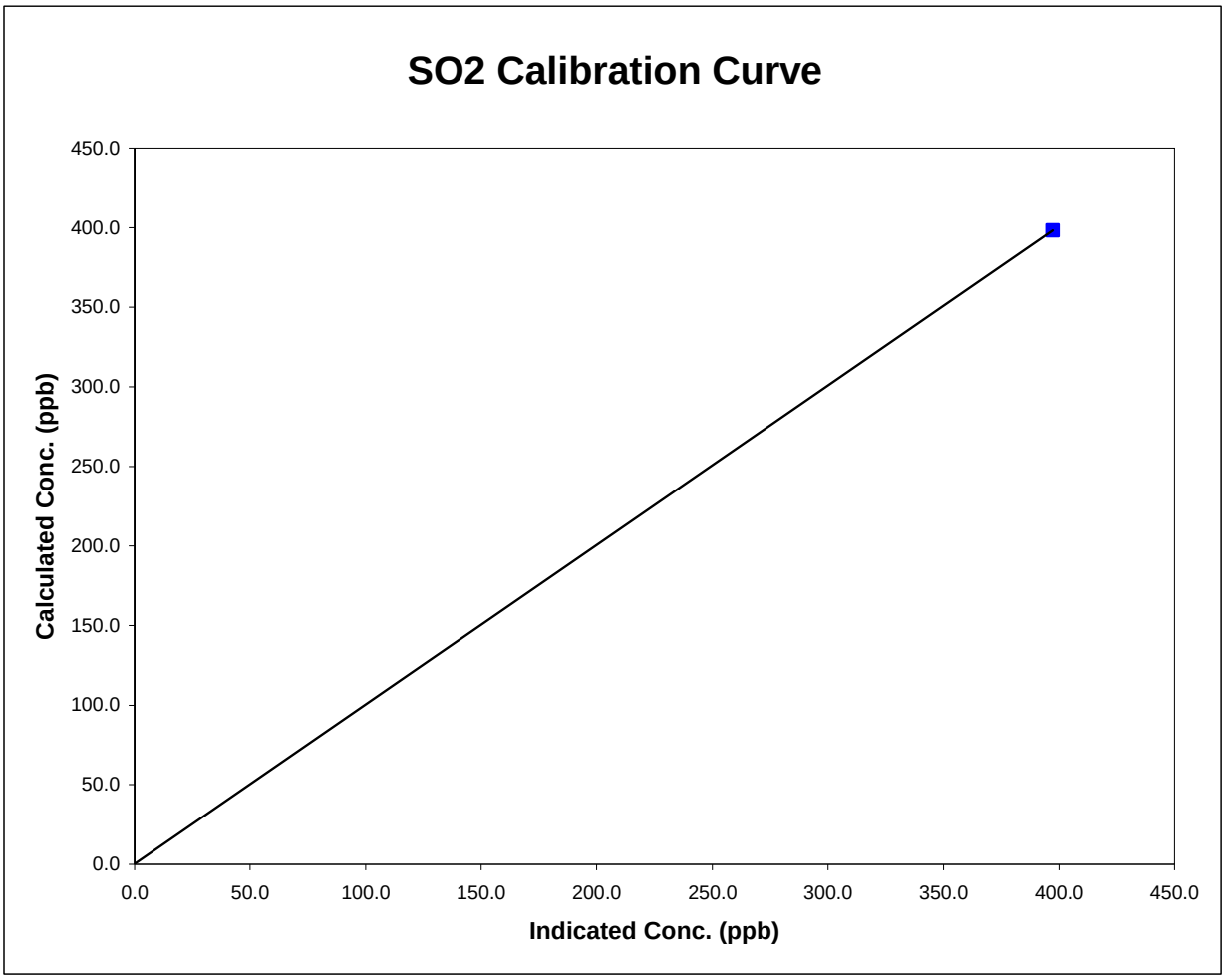
FOCUS AIR QUALITY MONITORING

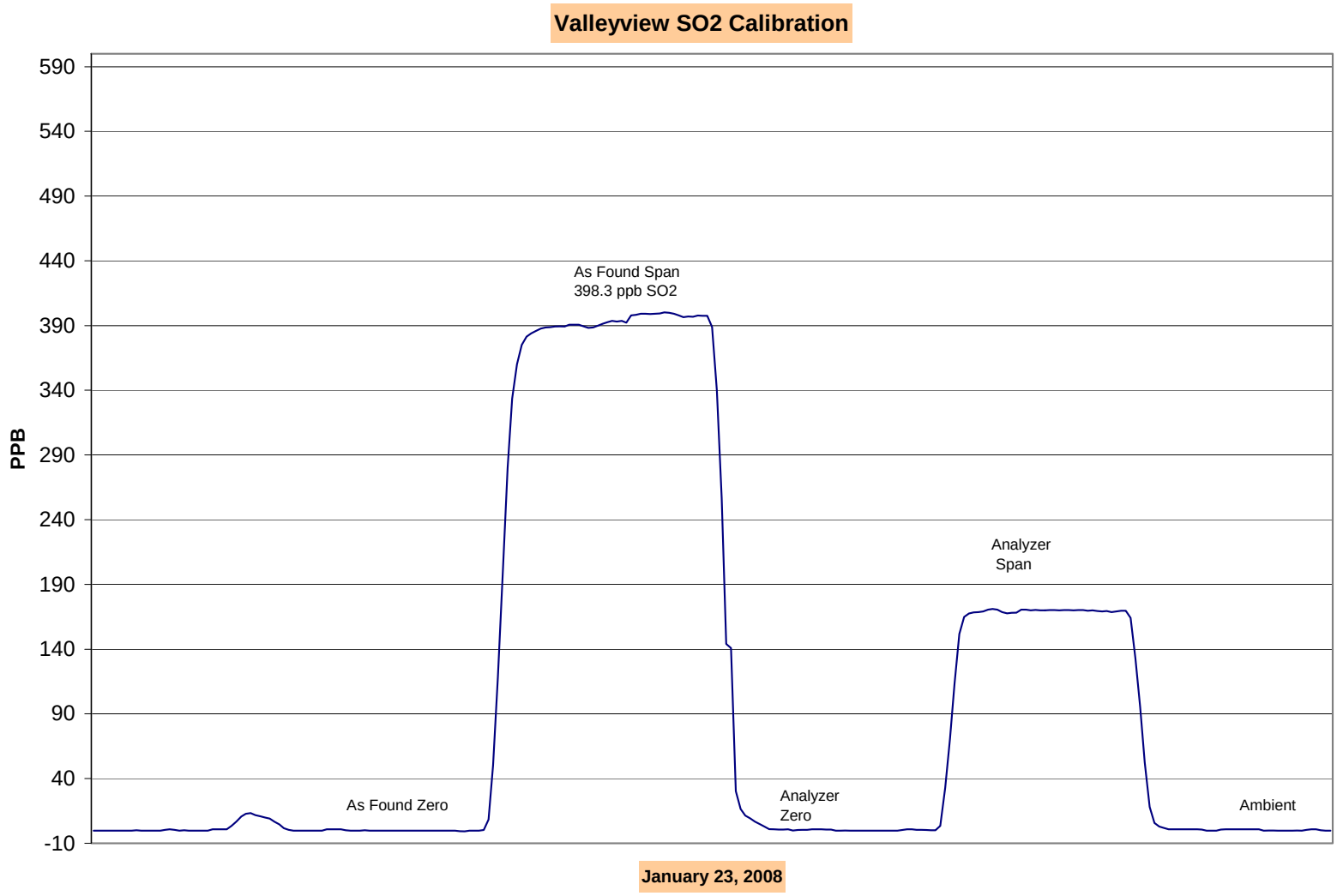
Station Information

Calibration Date	January 23, 2008	Previous Calibration	January 22, 2008
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:15	End Time (MST)	14:10
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	-0.3	N/A		
398.3	397.1	1.0029	Correlation Coefficient	1.000000
			Slope	1.002229
			Intercept	0.279153




Valleyview SO2 Calibration
590
540
490
440
390
340
290
240
190
140
90
40
-10
PPB
As Found Span
398.3 ppb SO2
Analyzer
Span
As Found Zero
Analyzer
Zero
Ambient
January 23, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter: H2S

Air Monitoring Network: PASZA

Station Information

Calibration Date	January 22, 2008	Previous Calibration	December 7, 2007
Station Number	5	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:45	End Time (MST)	16:10
Barometric Pressure	27.99 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	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
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.029111	Calculated slope	1.023808
Calculated intercept	0.049694	Calculated intercept	-0.012858
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	4.7	ppb
Coefficient	1.026		1.026	
Lamp Voltage	806	V	802	V
Chamber Temp	45.1	c	45	c
Perm Oven Temp	45	c	44.98	c
Pressure	651	mm Hg	649	mm Hg
Sample Flow	430	ccm	433	ccm
Lamp Intensity	90.0	%	91.0	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.0	0.0	N/A
4991	79.75	80.8	78.9	1.0243
4991	39.81	40.7	39.8	1.0211
4991	9.95	10.2	10.0	1.0207
4991	0.00	0.0	0.0	As found zero
4991	69.78	70.9	78.9	As found span
			Average Correction Factor	1.0220

Calculated value of As Found Response: 81.32 ppm Percent Change of As Found: -14.7%

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.1	ppm
Auto span	65.0	ppm	63.5	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	H2S
Air Monitoring Network	PASZA

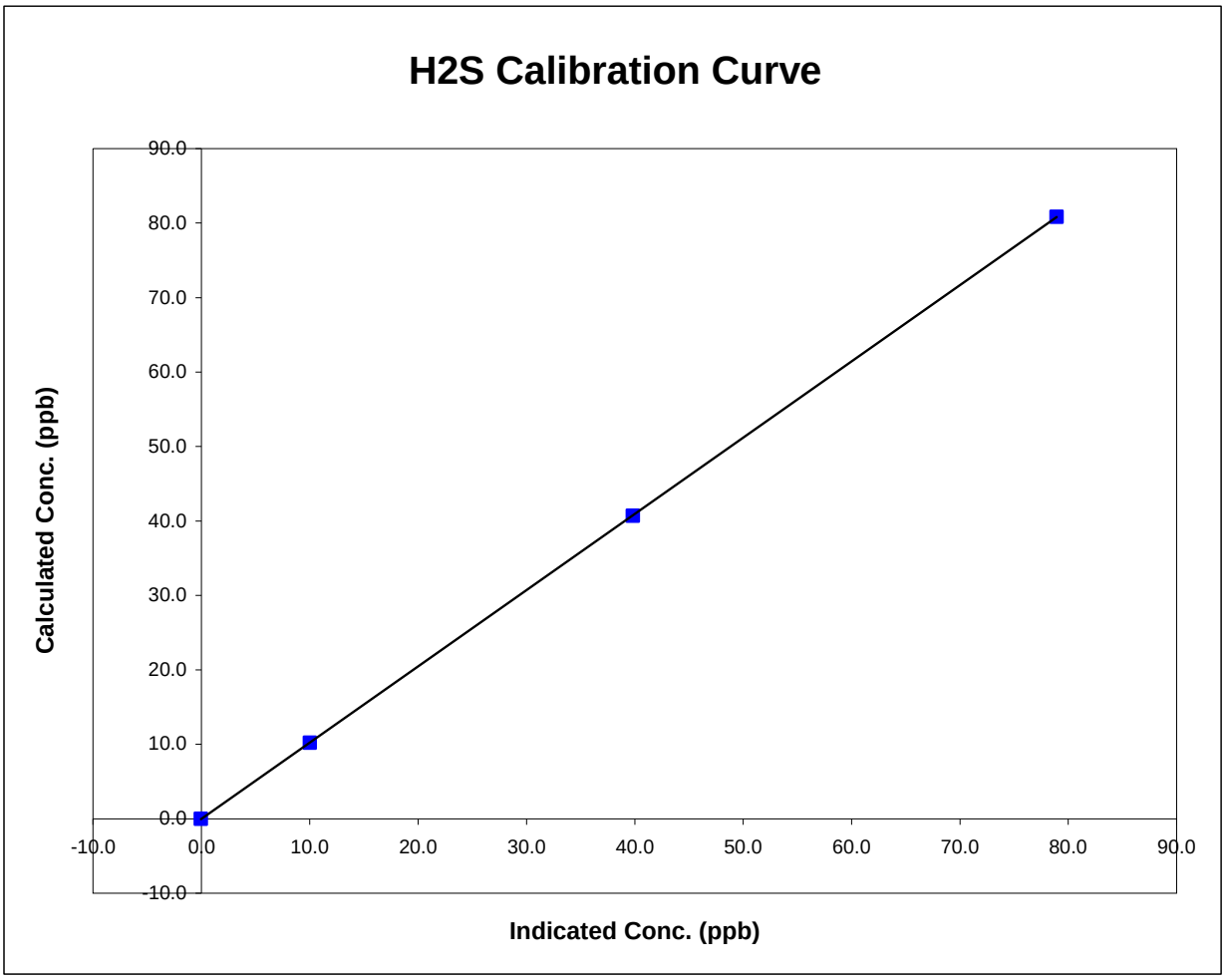
FOCUS AIR QUALITY MONITORING

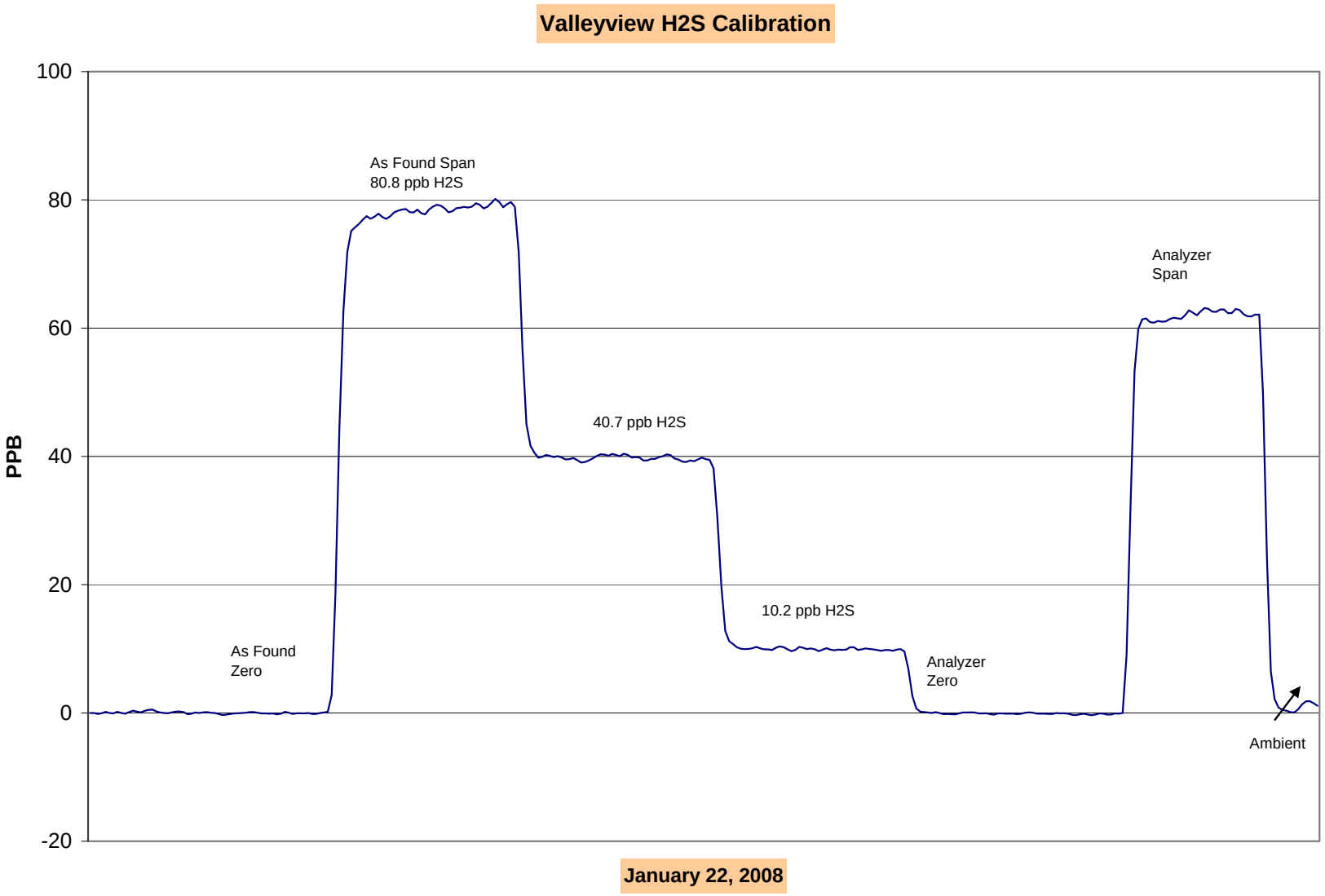
Station Information

Calibration Date	January 22, 2008	Previous Calibration	December 7, 2007
Station Number	5	Station Location	Valleyview
Start Time (MST)	13:45	End Time (MST)	16:10
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		
80.8	78.9	1.0243	Correlation Coefficient	0.999996
40.7	39.8	1.0211		
10.2	10.0	1.0207	Slope	1.023808
			Intercept	-0.012858




Valleyview H2S Calibration
100
80
60
40
20
0
-20
PPB
As Found Span
80.8 ppb H2S
40.7 ppb H2S
10.2 ppb H2S
As Found
Zero
Analyzer
Zero
Analyzer
Span
Ambient
January 22, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter: **H2S**

Air Monitoring Network: **PASZA**

Station Information

Calibration Date	January 23, 2008	Previous Calibration	January 22, 2008
Station Number	5	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:30	End Time (MST)	14:10
Barometric Pressure	27.52 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Environics 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
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.023808	Calculated slope	1.014495
Calculated intercept	-0.012858	Calculated intercept	0.088348
Analyzer make	TEI Model 43A	Analyzer serial #	43A-25575-221

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	4.7	ppb	4.8	ppb
Coefficient	1.026		1.026	
Lamp Voltage	802	V	805	V
Chamber Temp	45	c	44.8	c
Perm Oven Temp	44.98	c	44.95	c
Pressure	649	mm Hg	640	mm Hg
Sample Flow	433	ccm	427	ccm
Lamp Intensity	91.0	%	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	-0.1	N/A
4991	79.75	80.8	79.6	1.0156
4991	0.00	0.0	-0.1	As found zero
4991	69.78	70.9	79.6	As found span
			Average Correction Factor	1.0156

Calculated value of As Found Response: 81.57 ppm Percent Change of As Found: -15.1%

	before calibration		after calibration	
Auto zero	-0.1	ppm	0.3	ppm
Auto span	63.5	ppm	65.1	ppm

Notes: Rack Install As Found

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter	H2S
Air Monitoring Network	PASZA

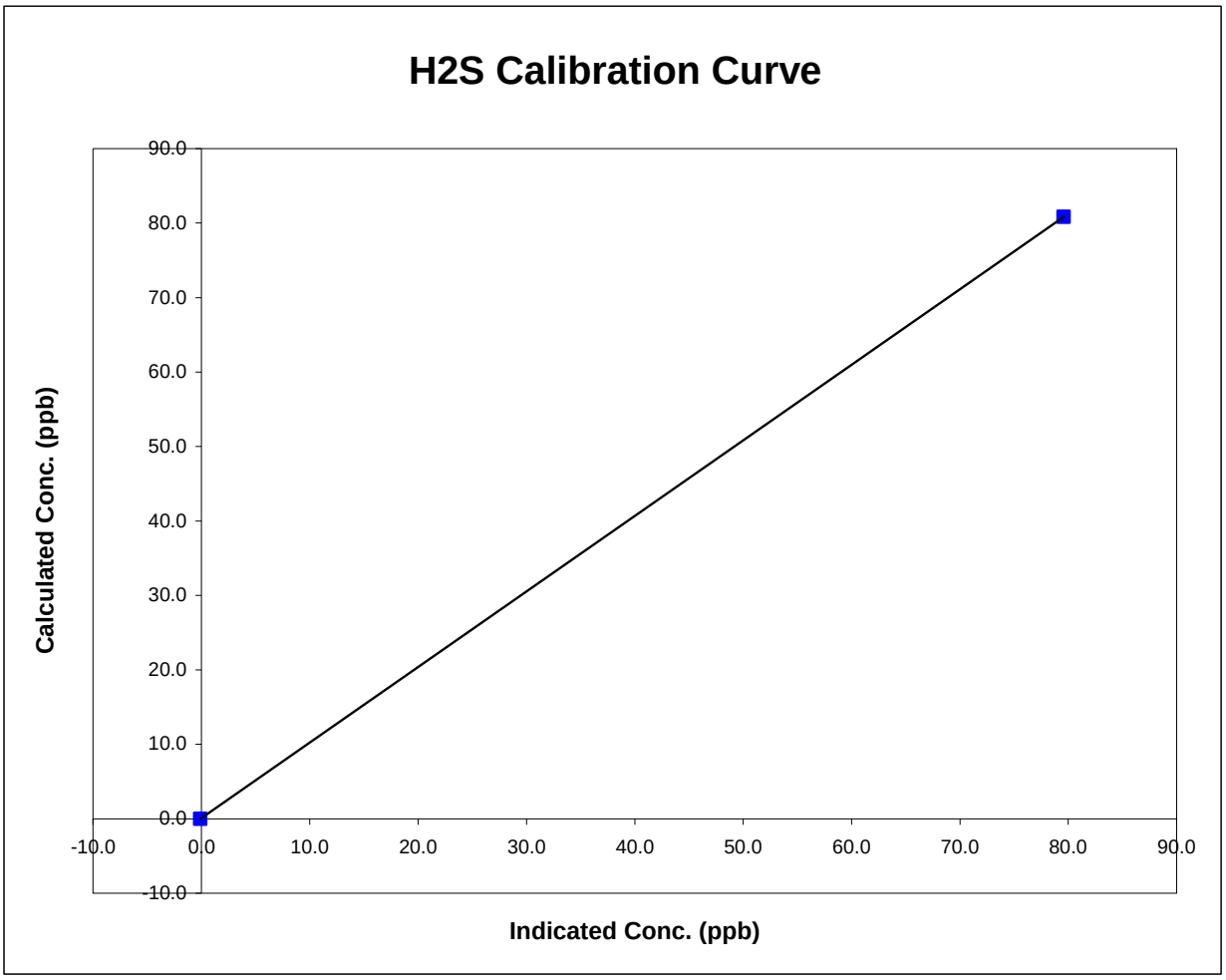
FOCUS AIR QUALITY MONITORING

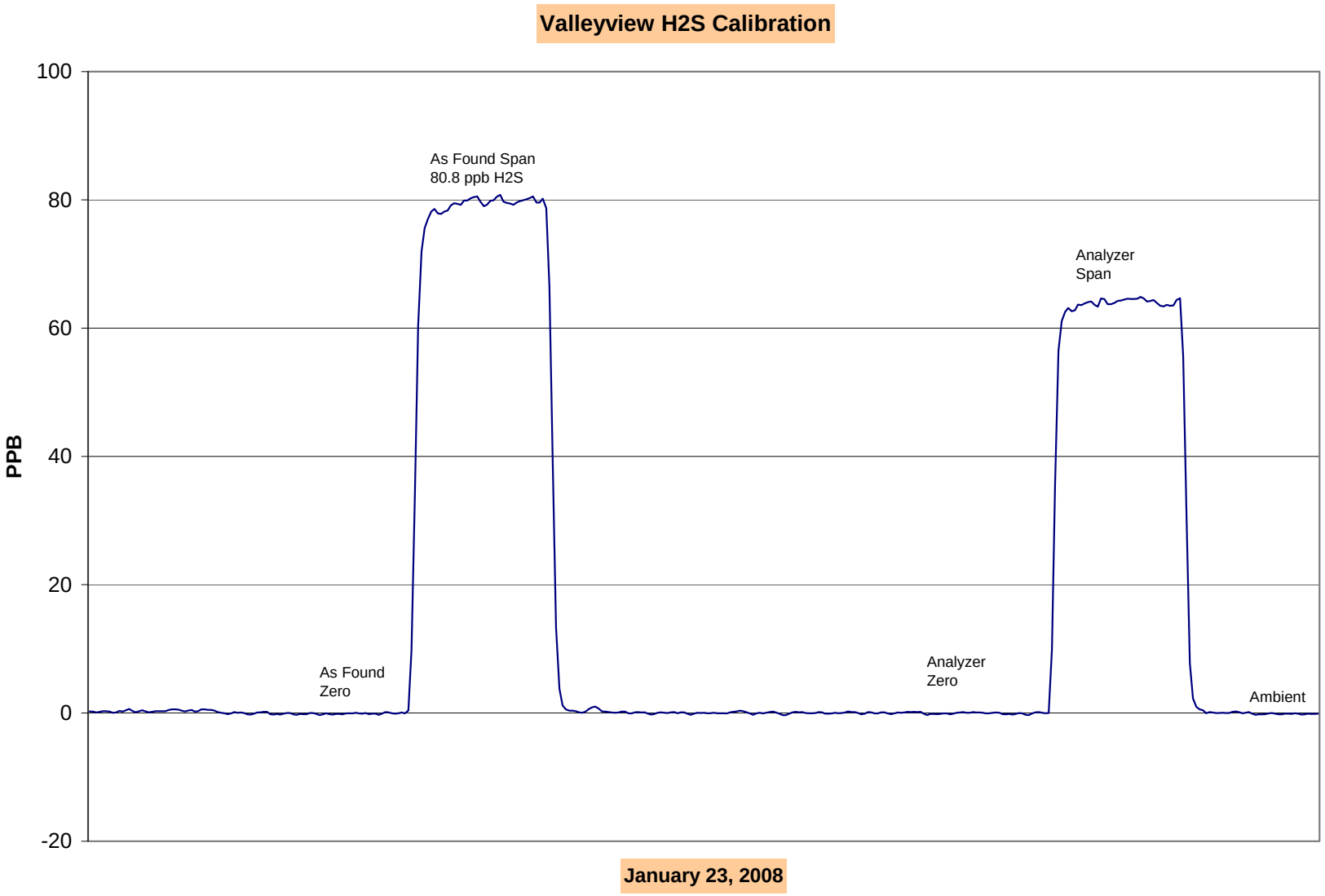
Station Information

Calibration Date	January 23, 2008	Previous Calibration	January 22, 2008
Station Number	5	Station Location	Valleyview
Start Time (MST)	11:30	End Time (MST)	14:10
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	-0.1	N/A		
80.8	79.6	1.0156	Correlation Coefficient	1.000000
			Slope	1.014495
			Intercept	0.088348




Valleyview H2S Calibration
100
80
60
40
20
0
-20
PPB
As Found Span
80.8 ppb H2S
Analyzer
Span
As Found
Zero
Analyzer
Zero
Ambient
January 23, 2008