



# Air Quality Monitoring Network for May 2008

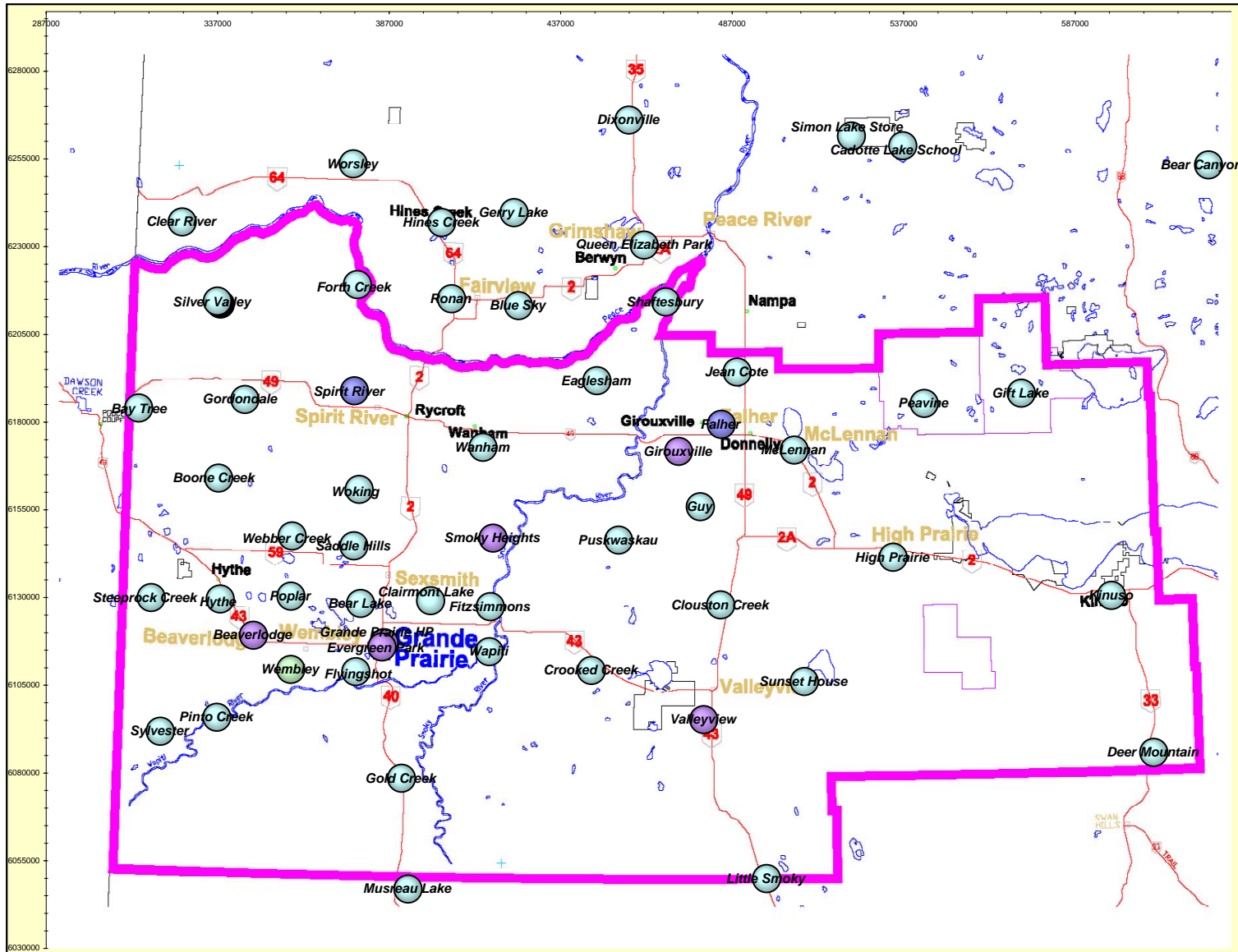
Prepared by  
**FOCUS**  
 AMBIENT AIR MONITORING

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# Location of PASZA Continuous and Passive Monitoring Stations





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July 14, 2008

Alberta Environment  
12th Floor, Oxbridge Place  
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Edmonton Alberta T6B 2X3

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

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Enclosed is the PASZA Ambient Monitoring Network Report for the month of **May 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 May the following events were noted:

**Henry Pirker Station:**

- ◆ All analyzers / sensors at the Henry Pirker station had an operational uptime greater than 90%.
- ◆ THC spans dropped on from May 17<sup>th</sup> to 23<sup>rd</sup> regulator pressure increased on 23<sup>rd</sup>.
- ◆ CO spans dropped from May 3<sup>rd</sup> to 7<sup>th</sup> and May 30<sup>th</sup> & 31<sup>st</sup> – all due to pressure issues from span cylinder.
- ◆ The AQI for the month resulted in 616 hours of Good readings and 84 Fair readings.

**Evergreen Park Station:**

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

**Smoky Heights Station:**

- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90%.
- ◆ A power bump on May 24<sup>th</sup> resulted in two (2) hours of invalid data for the TEOM.

**Beaverlodge Station:**

- ◆ All analyzers / sensors at the Beaverlodge station had an operational uptime greater than 90%.
- ◆ A power outage resulted in one (1) hour of invalid data for all parameters on May 1<sup>st</sup>.
- ◆ The AQI for the month resulted in 569 hours of Good readings and 139 Fair readings.

**Portable – Spirit River Station:**

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

**Valleyview Station:**

- ◆ All analyzers / sensors at the Valleyview station had an operational uptime of 100%.
- ◆ On May 27<sup>th</sup> to 29<sup>th</sup> there were seventeen (17) hours flagged for baseline drift on the H<sub>2</sub>S analyzer – reason undetermined.

**Passive Monitoring - 54 Stations throughout the PASZA zone:**

There were seven duplicate sites sampled in the month of May: Smoky Heights, Fitzsimmons, Wapiti, McLennan, High Prairie, Worsley 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<sub>2</sub> passives ranged from 0.1 ppb to 0.5 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 1.3 ppb to 3.3 ppb, with a mean of 0.9 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 28.0 ppb to 45.8 ppb, with a mean of 36.0 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

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## PASZA Monthly Continuous Data Summary

May-2008 Peace Airshed Zone Association							Maximum Recorded Values						Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	WSPD (km/hr)	WDIR (Sector)	24-hr / 8-hr		
	1-hr	24-hr			1-hr	24-hr					Conc	Day	
SO <sub>2</sub> (ppb)	172	57	Henry Pirker	0.2	0	0	6.1	May-17 09:00	10.9	E	0.9	May-17	100.0%
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	0.3	0	0	12.3	May-17 09:00	7.2	ESE	1.6	May-27	100.0%
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.3	0	0	9.2	May-04 01:00	20.8	WSW	1.2	May-04	100.0%
SO <sub>2</sub> (ppb)	172	57	Beaverlodge	0.4	0	0	4.4	May-26 02:00	6.9	E	1.0	May-26	99.9%
SO <sub>2</sub> (ppb)	172	57	Portable-Spirit River	0.2	0	0	2.0	May-09 09:00	5.4	E	0.5	May-12	100.0%
SO <sub>2</sub> (ppm)	172	57	Valleyview	0.26	0	0	14.91	May-18 05:00	14.2	WNW	2.98	May-18	100.0%
NO (ppb)			Henry Pirker	0.9	-	-	38.1	May-02 08:00	3.1	WSW	6.3	May-02	100.0%
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	5.1	0	0	32.7	May-11 22:00	2.7	WNW	9.8	May-06	100.0%
NO <sub>x</sub> (ppb)			Henry Pirker	6.0	-	-	57.0	May-02 08:00	3.1	WSW	13.8	May-02	100.0%
NO (ppb)			Beaverlodge	0.1	-	-	5.7	May-02 08:00	3.0	WSW	0.9	May-02	99.9%
NO <sub>2</sub> (ppb)	212	106	Beaverlodge	2.0	0	0	10.0	May-20 01:00	2.6	SSE	3.1	May-20	99.9%
NO <sub>x</sub> (ppb)			Beaverlodge	2.1	-	-	12.6	May-03 06:00	3.8	NNW	3.9	May-02	99.9%
NO (ppb)			Portable-Spirit River	0.4	-	-	5.7	May-26 06:00	2.1	N	1.4	May-26	100.0%
NO <sub>2</sub> (ppb)	212	106	Portable-Spirit River	2.7	0	0	19.5	May-27 21:00	5.0	SE	6.2	May-27	100.0%
NO <sub>x</sub> (ppb)			Portable-Spirit River	3.1	-	-	22.1	May-27 21:00	5.0	SE	7.1	May-26	100.0%
O <sub>3</sub> (ppb)	82		Henry Pirker	34.2	0	-	73.2	May-04 16:00	31.5	W	53.7	May-05	100.0%
O <sub>3</sub> (ppb) - 8-hr		65	Henry Pirker			0					64.9	May-04	
O <sub>3</sub> (ppb)	82		Beaverlodge	38.7	0	-	78.8	May-04 15:00	21.5	NW	63.7	May-05	99.9%
O <sub>3</sub> (ppb) - 8-hr		65	Beaverlodge			20					74.7	May-04	
O <sub>3</sub> (ppb)	82		Portable-Spirit River	33.6	0	-	65.6	May-05 13:00	10.3	NNW	50.8	May-05	100.0%
O <sub>3</sub> (ppb) - 8-hr		65	Portable-Spirit River			0					63.0	May-05	
CO (ppm)	13		Henry Pirker	0.20	0	-	0.5	May-02 09:00	4.0	SSW	0.3	May-02	100.0%
CO (ppm) - 8-hr		5	Henry Pirker			0					0.4	May-02	
THC (ppm)			Henry Pirker	1.93	-	-	2.4	May-13 02:00	6.6	S	2.1	May-09	100.0%
TRS (ppb)			Henry Pirker	0.3	-	-	1.1	May-10 03:00	4.0	NW	0.4	May-10	100.0%
TRS (ppb)			Evergreen Park	0.5	-	-	1.2	May-19 04:00	3.9	NNW	0.6	May-20	100.0%
TRS (ppb)			Smoky Heights	0.4	-	-	0.9	May-04 00:00	13.4	WSW	0.6	May-20	100.0%
TRS (ppb)			Portable-Spirit River	0.5	-	-	1.0	Apr-30 07:00	9.0	NE	0.6	Apr-04	100.0%
H <sub>2</sub> S (ppb)	10	3	Valleyview	0.2	0	0	2.2	May-18 01:00	10.2	W	0.3	May-25	97.7%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	80	30	Henry Pirker	5.5	0	0	34.4	May-06 05:00	5.0	WNW	11.6	May-06	99.2%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	80	30	Evergreen Park	5.7	0	0	36.5	May-15 13:00	34.3	W	10.8	May-05	99.3%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	80	30	Smoky Heights	5.4	1	0	29.2	May-27 20:00	7.6	E	11.6	May-05	99.7%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	80	30	Beaverlodge	3.6	0	0	21.4	May-27 23:00	11.5	ESE	10.3	May-17	99.7%



## Continuous Network Equipment Summary

### PASZA – Henry Pirker Station

#### General Station Issues

Routine monthly calibrations were performed on May 6<sup>th</sup> (SO<sub>2</sub> & NO<sub>x</sub>) May 7<sup>th</sup> (TRS, O<sub>3</sub> & CO) and May 8<sup>th</sup> (THC & TEOM).

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43C	No operational issues observed.
NO <sub>x</sub> /NO/NO <sub>2</sub>	TEI	42C	No operational issues observed.
O <sub>3</sub>	TEI	49C	No operational issues observed.
CO	TEI	48C	CO spans dropped May 3 <sup>rd</sup> to 7 <sup>th</sup> and May 30 <sup>th</sup> & 31 <sup>st</sup> - all due to pressure issues from span cylinder.
THC	TEI	51-CLT	THC spans dropped from May 17 <sup>th</sup> to the 23 <sup>rd</sup> – regulator pressure increased on 23 <sup>rd</sup> .
TRS	TEI	43C	No operational issues observed.
PM <sub>2.5</sub>	R&P	1400AB	Six (6) hour were flagged due to excessive baseline drift.
RH	Met One	083D	No operational issues observed.
AT	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS/WD	Met One	010C/020C	No operational issues observed.

### PASZA – Evergreen Park Station

#### General Station Issues

Routine monthly calibrations were performed on May 9<sup>th</sup> (SO<sub>2</sub>, TRS & TEOM).

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM <sub>2.5</sub>	R&P	1400AB	Five (5) hour were flagged 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.



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**PASZA – Smoky Heights Station**

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**General Station Issues**

Routine monthly calibrations were performed on May 23<sup>rd</sup> (SO<sub>2</sub>, TRS).

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM <sub>2.5</sub>	R&P	1400AB	A power bump resulted in two (2) hours of invalid data on May 24 <sup>th</sup> .
AT	Met One	083D	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

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**PASZA – Beaverlodge Station**

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**General Station Issues**

Routine monthly calibrations were performed on May 12<sup>th</sup> (SO<sub>2</sub> and NO<sub>x</sub>) and May 13<sup>th</sup> (O<sub>3</sub>). A power outage resulted in one (1) hour of invalid data for all parameters on May 1<sup>st</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43CTL	No operational issues observed.
NO <sub>x</sub> /NO/NO <sub>2</sub>	TEI	42C	No operational issues observed.
O <sub>3</sub>	TEI	49C	No operational issues observed.
PM <sub>2.5</sub>	R&P	1400AB	No operational issues observed.
AT	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS	Blue Sky	857	No operational issues observed.
WD	Blue Sky	857	No operational issues observed.

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**PASZA – Spirit River (Portable) Station**

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**General Station Issues**

Routine monthly calibrations were performed on May 14<sup>th</sup> (SO<sub>2</sub> and NO<sub>x</sub>) and May 15<sup>th</sup> (TRS and O<sub>3</sub>).

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43C	No operational issues observed.
NOx/NO/NO <sub>2</sub>	TEI	42i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
O <sub>3</sub>	TEI	49C	No operational issues observed.
AT	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS	Met One		No operational issues observed.
WD	Met One		No operational issues observed.

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**PASZA – Valleyview Station**

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**General Station Issues**

Routine monthly calibrations were performed on May 2<sup>nd</sup> (SO<sub>2</sub> and H<sub>2</sub>S).

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43i	No operational issues observed.
H <sub>2</sub> S	TEI	43A	On May 27 <sup>th</sup> to 29 <sup>th</sup> there were seventeen (17) hours flagged for baseline drift – reason undetermined.
AT	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS	Gill	Met Pak 3	No operational issues observed.
WD	Gill	Met Pak 3	No operational issues observed.

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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: May 1, 2008 to June 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:	616
Number of 1-hr Fair Readings:	84
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-May-08	13	12	13	13	12	N	9	10	10	11	11	14	15	17	18	19	19	18	17	15	13	12	11	11
2-May-08	11	10	8	3	N	3	4	4	5	5	11	16	N	21	22	23	23	24	24	23	22	20	18	19
3-May-08	18	15	14	N	8	4	7	10	15	17	21	23	27	29	28	26	27	28	27	24	23	22	21	21
4-May-08	23	21	N	21	21	20	21	N	24	24	25	27	29	33	37	40	44	44	40	32	23	24	23	27
5-May-08	28	N	21	19	21	18	17	19	30	33	34	40	40	37	36	37	36	36	35	32	25	24	26	23
6-May-08	N	19	15	17	19	27	15	15	25	30	31	N	N	N	30	30	30	25	23	22	22	15	15	19
7-May-08	19	17	12	4	3	N	6	8	15	2	2	2	22	22	22	21	19	19	19	18	19	20	19	19
8-May-08	19	19	19	16	17	N	16	17	17	19	19	20	22	23	N	N	N	24	N	23	17	18	N	N
9-May-08	8	5	5	6	6	N	7	6	8	10	14	20	23	23	24	24	24	24	23	24	23	22	20	20
10-May-08	18	13	15	11	N	4	5	6	14	N	24	24	25	24	24	21	23	24	24	23	17	20	19	17
11-May-08	13	8	10	N	7	5	10	14	24	29	29	30	30	32	33	34	35	34	33	33	22	14	21	18
12-May-08	21	14	N	16	15	13	12	14	15	17	21	25	28	27	28	27	25	24	23	21	17	14	11	13
13-May-08	13	N	15	14	14	16	13	19	25	26	25	25	27	27	28	28	26	26	25	24	23	22	22	21
14-May-08	20	18	17	17	16	N	14	19	24	27	30	30	31	29	25	21	18	16	14	14	12	11	10	11
15-May-08	11	10	10	10	N	10	9	11	12	13	13	13	12	12	12	11	11	12	12	11	10	10	10	10
16-May-08	10	11	11	N	12	10	11	13	15	17	17	17	18	20	21	20	22	21	19	19	17	14	14	15
17-May-08	13	10	N	12	12	12	9	11	13	15	19	21	22	23	24	23	21	19	18	16	15	15	15	16
18-May-08	18	N	20	20	19	17	16	14	14	14	14	15	18	19	20	22	23	23	23	24	23	20	17	17
19-May-08	N	16	14	13	11	10	8	18	21	21	23	24	25	25	25	26	26	24	24	23	21	23	23	N
20-May-08	16	11	9	11	5	5	7	11	11	13	13	17	17	19	21	19	15	13	12	11	11	11	N	9
21-May-08	8	8	8	8	8	9	10	12	13	13	15	15	15	15	14	15	14	13	13	12	12	N	11	10
22-May-08	7	4	8	6	4	3	7	11	13	13	14	15	17	17	18	17	17	16	16	15	N	13	11	9
23-May-08	9	9	9	8	8	8	7	8	11	11	11	10	11	13	13	13	13	12	12	N	10	11	11	12
24-May-08	11	11	11	11	11	10	9	8	8	8	7	7	7	8	8	9	9	8	N	9	7	9	9	11
25-May-08	11	11	10	11	9	9	10	13	15	18	19	20	22	23	23	24	25	N	26	25	23	20	17	18
26-May-08	18	19	19	19	17	16	16	16	17	21	25	26	28	28	28	28	N	29	29	27	25	24	23	21
27-May-08	19	18	17	16	14	13	12	12	13	15	16	18	20	20	21	N	22	22	22	21	18	15	18	21
28-May-08	21	21	21	21	20	17	18	18	20	21	22	24	27	29	N	21	23	22	23	22	19	12	18	16
29-May-08	17	15	11	9	8	6	7	12	16	19	21	22	21	N	21	21	19	19	18	17	16	14	15	11
30-May-08	10	10	9	9	8	6	6	11	14	15	16	17	N	21	22	20	19	16	17	18	17	16	15	14
31-May-08	14	13	11	12	11	9	9	13	17	21	22	N	27	28	28	28	27	26	26	25	23	19	17	17

# PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

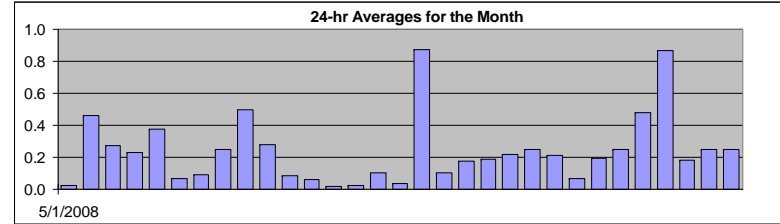
## Sulphur Dioxide (SO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

**Summary**

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	6.1 ppb	17-May	9:00	10:00
Maximum 24-hr Average:	0.9 ppb	17-May		



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
	2.8	0.8	0.3	0.1	0.0	0.0	0.0	0.2 ppb	0.1 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-May-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	0.0	0.3
2-May-08	0	0	0	0	A	0	0	0	0	1	2	3	0	0	0	0	1	0	1	1	1	0	0	0	0	0.5	3.2
3-May-08	0	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
4-May-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0.2	0.7
5-May-08	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
6-May-08	A	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
7-May-08	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
8-May-08	0	0	0	0	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.9
9-May-08	0	0	1	0	0	A	0	0	0	2	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0.5	4.8
10-May-08	0	0	1	4	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.6
11-May-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	0.1	0.4
12-May-08	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
13-May-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	0.0	0.4
14-May-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	0.0	0.2
15-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	0.9
16-May-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	0.0	0.3
17-May-08	0	5	A	0	0	0	0	0	2	3	6	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.9	6.1
18-May-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	0.1	0.3
19-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.2	0.5
20-May-08	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	1.1
21-May-08	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	A	0	0	0.2	0.6
22-May-08	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	1.4
23-May-08	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	2.2
24-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0.1	0.6
25-May-08	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0.2	0.8
26-May-08	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1	0	1	A	0	0	0	0	0	0	0	0.2	0.8
27-May-08	0	0	0	0	0	0	0	1	3	3	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	3.0
28-May-08	0	0	0	0	0	0	0	2	1	1	2	2	1	1	A	0	0	0	0	0	6	2	1	0	0	0.9	5.7
29-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
30-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
31-May-08	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
Hourly Avg	0.1	0.3	0.2	0.3	0.1	0.1	0.1	0.3	0.4	0.6	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2		
Hourly Max	0.4	4.9	0.8	3.6	0.9	0.4	0.4	2.0	3.0	6.1	4.8	3.2	1.2	1.4	0.5	0.5	0.6	0.7	0.6	5.7	1.5	0.7	0.9	0.9			

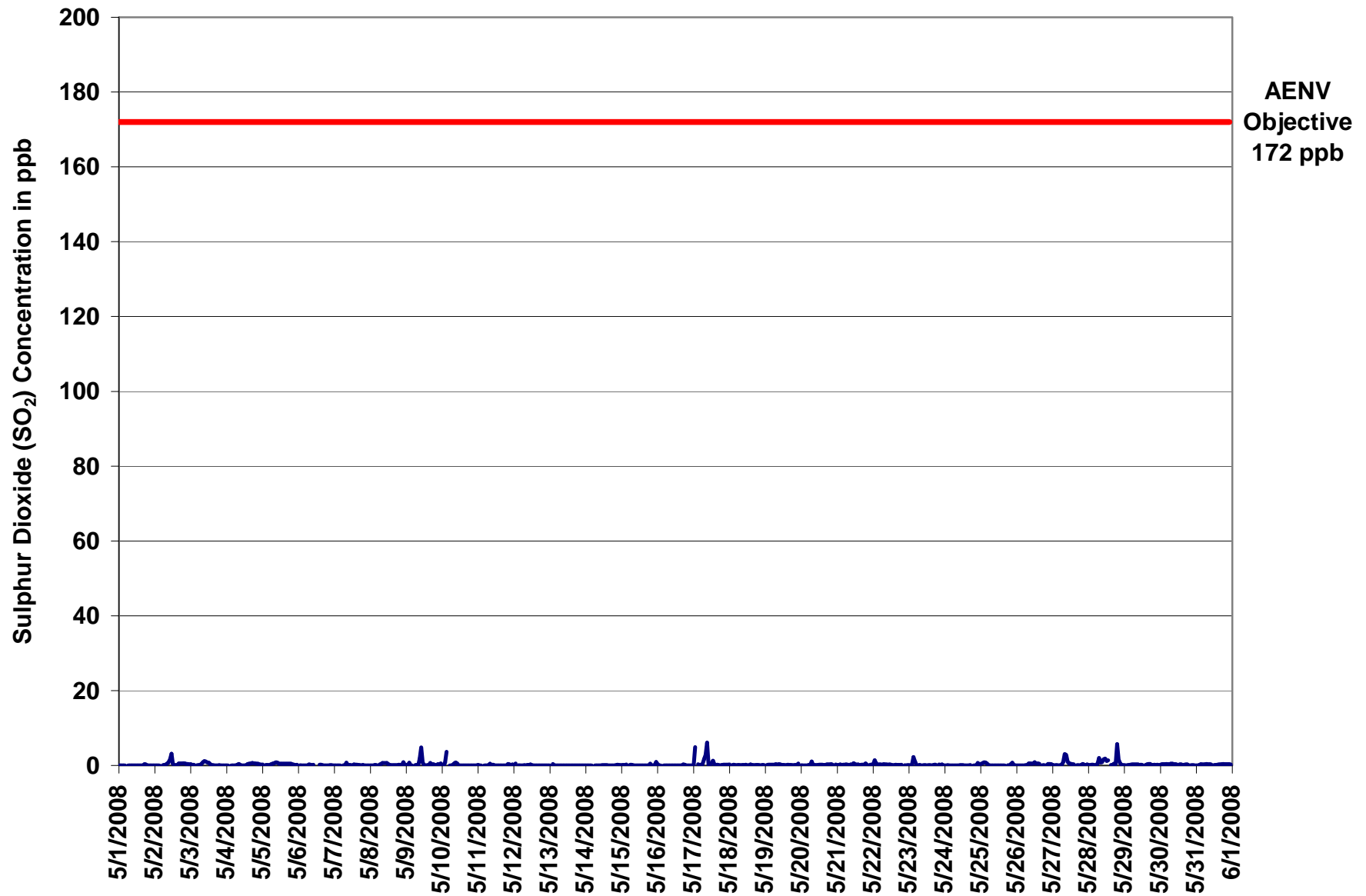


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

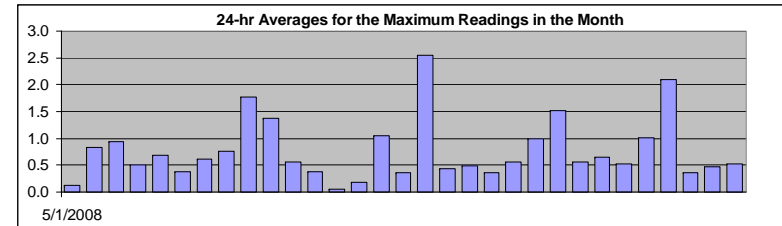
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	21.5	ppb	17-May	1:00 2:00
Maximum 24-hr Value:	2.6	ppb	17-May	



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
	7.7	2.5	0.6	0.4	0.2	0.0	0.0	0.8 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	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	Daily Maximum
1-May-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.1	1.0
2-May-08	0	0	0	0	A	0	1	1	1	1	3	4	2	1	0	1	1	1	1	1	1	1	1	1	0.8	4.1
3-May-08	1	1	1	A	1	0	1	1	1	2	2	1	1	1	1	0	0	4	0	6	0	0	0	0	0.9	6.1
4-May-08	0	1	A	0	0	0	0	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0.5	1.0
5-May-08	0	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.0
6-May-08	A	1	1	0	0	0	0	1	1	0	0	C	C	A	1	0	0	0	0	0	1	0	0	0	0.4	0.8
7-May-08	0	0	0	0	0	A	0	0	6	1	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0.6	6.4
8-May-08	0	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	5	1	0.8	5.1
9-May-08	2	1	6	0	0	A	1	1	1	6	6	3	1	0	1	1	1	1	1	1	0	5	2	2	1.8	6.3
10-May-08	1	1	12	11	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1.4	12.0
11-May-08	1	0	0	A	0	0	0	1	1	1	1	1	0	0	0	0	0	0	1	0	2	1	1	4	0.6	3.9
12-May-08	1	3	A	1	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0.4	2.5
13-May-08	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
14-May-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	0.2	0.4
15-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0	0	5	5	1.1	6.6
16-May-08	5	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.4	4.9
17-May-08	0	22	A	1	1	1	1	6	4	18	1	0	2	2	1	0	0	0	0	0	0	0	0	0	2.6	21.5
18-May-08	0	A	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0.4	2.7
19-May-08	A	0	0	0	0	1	1	1	0	1	1	0	0	0	1	0	1	0	0	1	0	2	A	0	0.5	2.1
20-May-08	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	2.2
21-May-08	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	2	0	A	0	0	0.6	2.4
22-May-08	3	4	8	0	0	0	0	1	0	1	0	1	0	0	1	1	0	1	1	A	0	0	0	0	1.0	7.8
23-May-08	0	0	1	15	12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	2	0	1	0	1.5	15.0
24-May-08	1	1	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	A	1	1	1	2	2	0.6	2.7
25-May-08	1	3	2	1	1	1	0	0	0	0	0	0	1	0	0	1	0	A	1	1	1	1	1	0	0.6	2.5
26-May-08	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	0.5	1.3
27-May-08	1	1	1	1	0	1	1	2	5	5	2	1	1	1	1	A	1	1	0	1	1	1	1	1	1.0	4.5
28-May-08	1	1	1	1	1	1	2	4	2	2	2	3	2	2	A	1	1	1	1	21	3	1	0	0	2.1	21.1
29-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0.4	0.9
30-May-08	0	0	0	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.5	0.9
31-May-08	0	0	0	0	0	0	1	1	1	1	0	A	0	0	0	0	0	0	1	1	0	0	1	0	0.5	1.3
Hourly Avg	0.7	1.4	1.4	1.2	0.7	0.3	0.4	0.9	1.0	1.5	0.8	0.7	0.5	0.4	0.4	0.3	0.3	0.6	0.5	1.6	0.6	0.5	0.9	0.8		
Hourly Max	4.9	21.5	12.0	15.0	12.3	0.7	1.5	5.6	6.4	17.9	6.1	4.1	2.1	2.2	2.7	0.9	1.1	3.6	1.3	21.1	3.5	5.0	5.3	5.4		

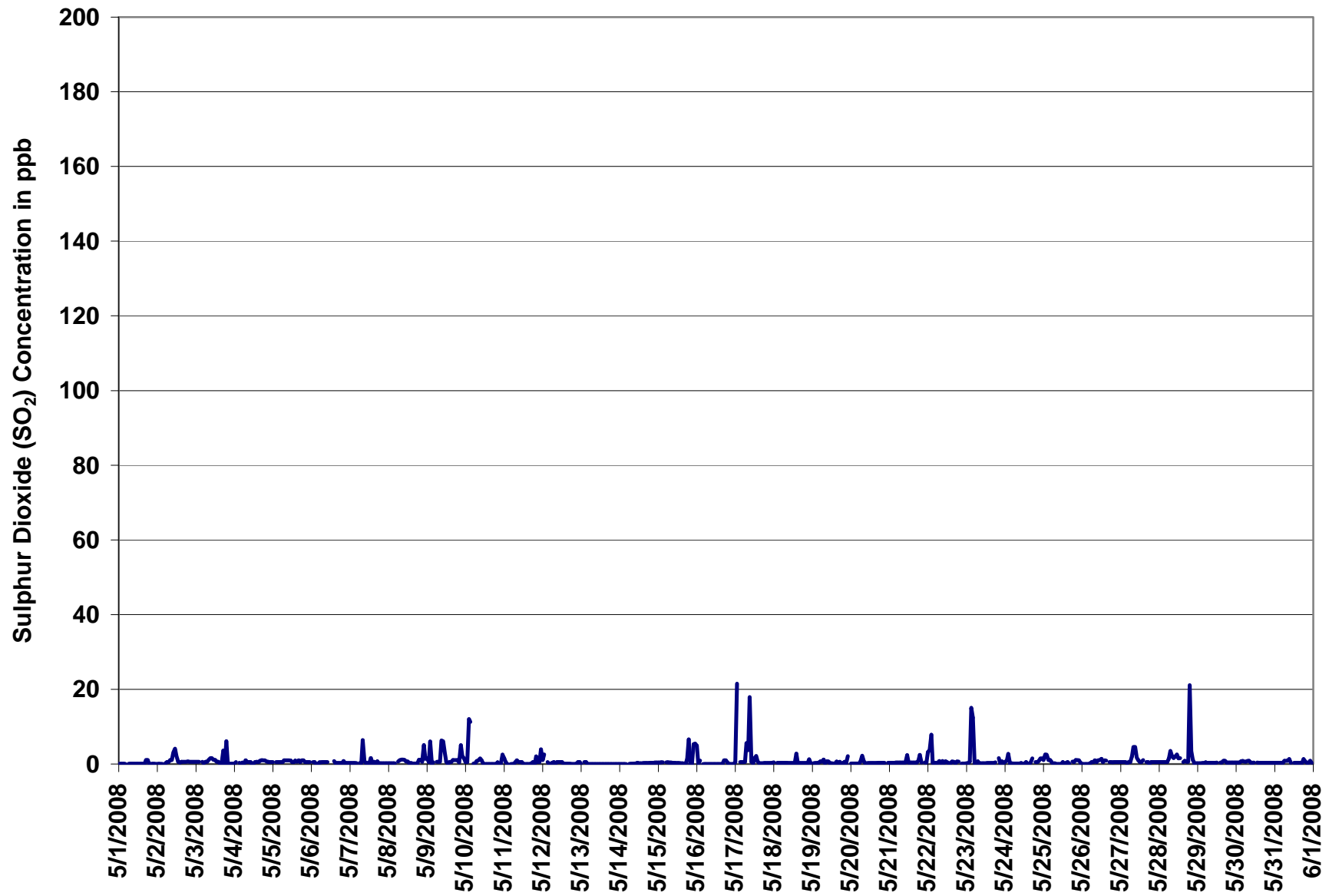
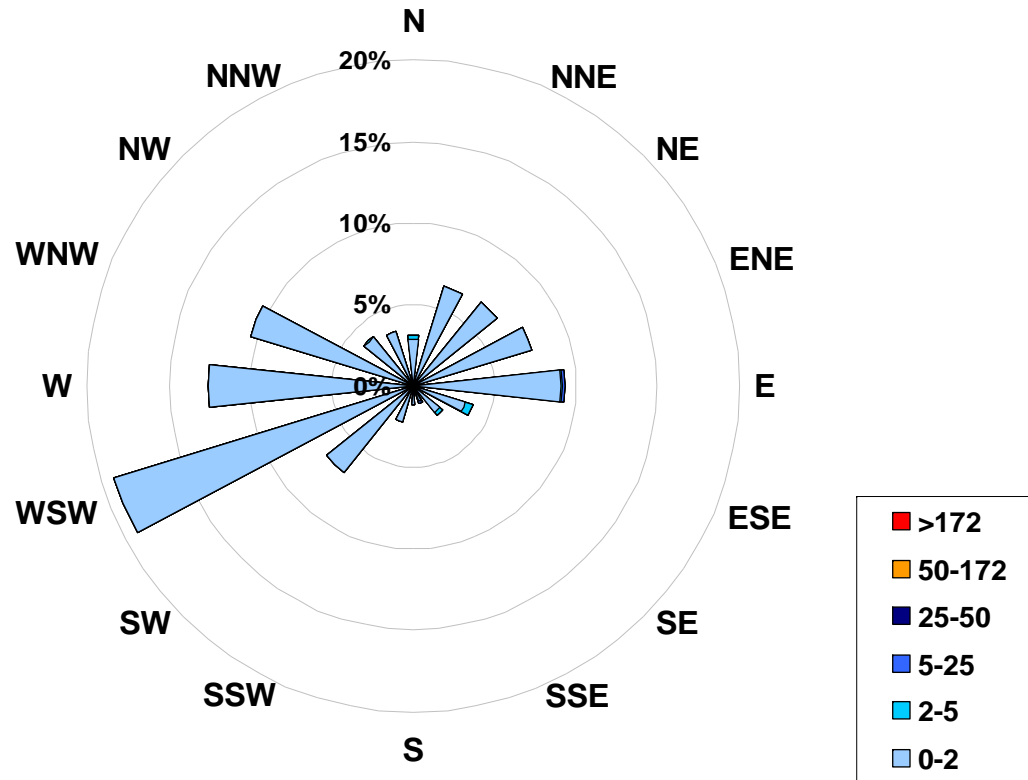


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	< 2		699
2	to 5		8
5	to 25		2
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			709

# PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

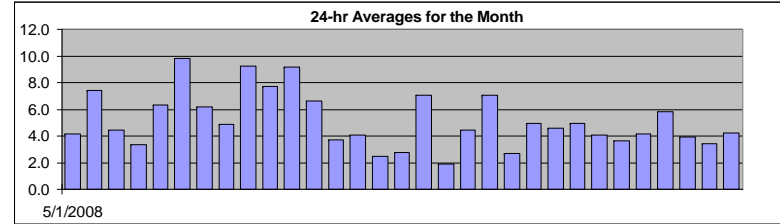
## Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 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:	32.7	ppb	11-May	22:00	23:00
Maximum 24-hr Average:	9.8	ppb	6-May		



AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile 99	95	75	50	25	5	1	Average	Median
	22.7	14.5	6.1	3.6	2.2	1.3	5.1 ppb	3.6 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	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-May-08	3	3	2	2	2	A	9	5	7	6	6	4	4	3	3	3	3	2	3	4	5	6	6	6	4.2	9.0	
2-May-08	6	5	6	8	A	12	15	16	19	22	12	5	2	2	2	2	3	3	4	4	6	6	6	5	7.4	21.9	
3-May-08	5	6	7	A	9	11	10	7	4	6	4	3	2	1	2	4	3	2	3	4	3	2	3	2	4.5	10.6	
4-May-08	2	3	A	3	3	3	2	2	1	1	1	1	1	1	1	2	1	2	2	4	13	12	11	4	3.3	13.4	
5-May-08	3	A	9	9	7	15	21	19	5	2	2	1	1	1	1	1	2	2	3	7	11	8	5	8	6.3	20.8	
6-May-08	A	9	14	14	15	22	17	14	4	4	4	C	C	C	C	A	3	5	5	5	7	15	14	6	9.8	21.9	
7-May-08	6	6	7	10	9	A	23	19	8	3	3	3	4	4	6	4	5	5	3	4	3	2	2	2	6.2	22.9	
8-May-08	1	2	2	3	3	A	8	6	6	4	4	2	2	1	3	1	2	2	3	5	15	10	14	12	4.9	14.6	
9-May-08	17	22	16	13	24	A	24	20	14	11	6	2	2	2	2	2	3	3	3	3	6	8	6	6	9.2	24.4	
10-May-08	7	13	9	23	A	13	14	16	14	4	2	2	2	3	3	5	4	3	3	4	11	5	5	10	7.7	22.7	
11-May-08	9	19	11	A	10	13	10	9	5	3	2	2	2	2	1	2	2	2	3	4	15	28	33	23	9.1	32.7	
12-May-08	19	13	A	7	8	11	13	8	7	6	3	2	2	3	2	2	2	2	2	4	6	10	14	7	6.6	18.6	
13-May-08	6	A	6	5	5	4	13	7	3	3	3	3	2	2	2	2	2	2	2	3	3	2	2	2	3.7	12.6	
14-May-08	2	3	3	4	5	A	13	6	3	2	2	3	2	3	3	3	3	4	6	4	6	6	5	2	4.1	12.6	
15-May-08	2	2	3	3	A	5	6	3	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	3	2.5	6.2	
16-May-08	3	1	2	A	3	4	5	3	2	1	2	1	2	2	1	1	1	2	2	3	5	7	7	5	2.7	7.1	
17-May-08	7	19	A	25	17	18	14	10	9	7	2	2	2	2	2	1	2	2	2	6	6	4	4	2	7.1	24.5	
18-May-08	1	A	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	7	6	1.9	6.6	
19-May-08	A	6	6	7	9	11	14	4	2	2	2	2	2	1	2	2	2	4	4	5	6	5	4	A	4.5	13.5	
20-May-08	6	7	8	7	11	17	19	22	8	6	6	3	2	1	2	5	8	4	4	3	4	3	A	6	7.1	21.9	
21-May-08	4	3	3	2	3	3	3	2	2	2	2	1	1	2	3	2	3	4	3	4	3	A	3	3	2.7	3.9	
22-May-08	6	11	5	8	9	12	7	3	2	3	2	1	1	1	2	3	2	4	4	5	A	6	7	8	5.0	11.7	
23-May-08	7	4	3	3	3	4	6	6	3	3	3	4	7	5	4	7	6	5	6	4	A	6	3	3	2	4.6	6.9
24-May-08	4	3	3	2	2	3	4	5	4	4	4	4	5	5	5	3	5	7	A	9	9	8	10	6	4.9	9.9	
25-May-08	6	6	6	4	7	7	4	2	2	2	1	1	1	1	1	1	1	A	4	3	7	9	10	8	4.1	10.3	
26-May-08	6	4	3	4	5	6	6	5	3	3	2	2	2	2	3	3	A	4	3	3	4	4	3	4	3.7	6.0	
27-May-08	4	3	4	4	5	6	5	5	6	4	3	3	2	2	2	A	3	2	3	4	7	10	6	3	4.2	9.7	
28-May-08	3	4	3	4	5	9	6	7	4	6	9	6	2	2	A	8	5	6	4	6	9	18	3	4	5.8	18.0	
29-May-08	3	3	6	6	8	11	11	7	4	3	3	2	3	A	3	2	2	2	2	2	2	2	4	3	3.9	10.6	
30-May-08	4	3	3	3	5	9	7	3	1	2	2	2	A	3	2	2	3	5	6	3	4	3	4	4	3.4	9.0	
31-May-08	4	3	4	3	4	6	8	6	6	6	5	A	3	2	2	1	2	2	2	3	4	8	8	5	4.2	8.1	
Hourly Avg	5.4	6.7	5.5	6.7	7.0	9.0	10.3	8.0	5.2	4.3	3.5	2.5	2.3	2.1	2.4	2.7	2.8	3.2	3.1	4.0	6.1	7.2	7.1	5.6			
Hourly Max	18.6	22.0	15.7	24.5	24.4	21.9	23.8	21.9	18.8	21.9	11.6	6.9	4.9	4.6	6.9	8.0	8.0	7.0	6.0	8.6	14.6	28.2	32.7	23.5			

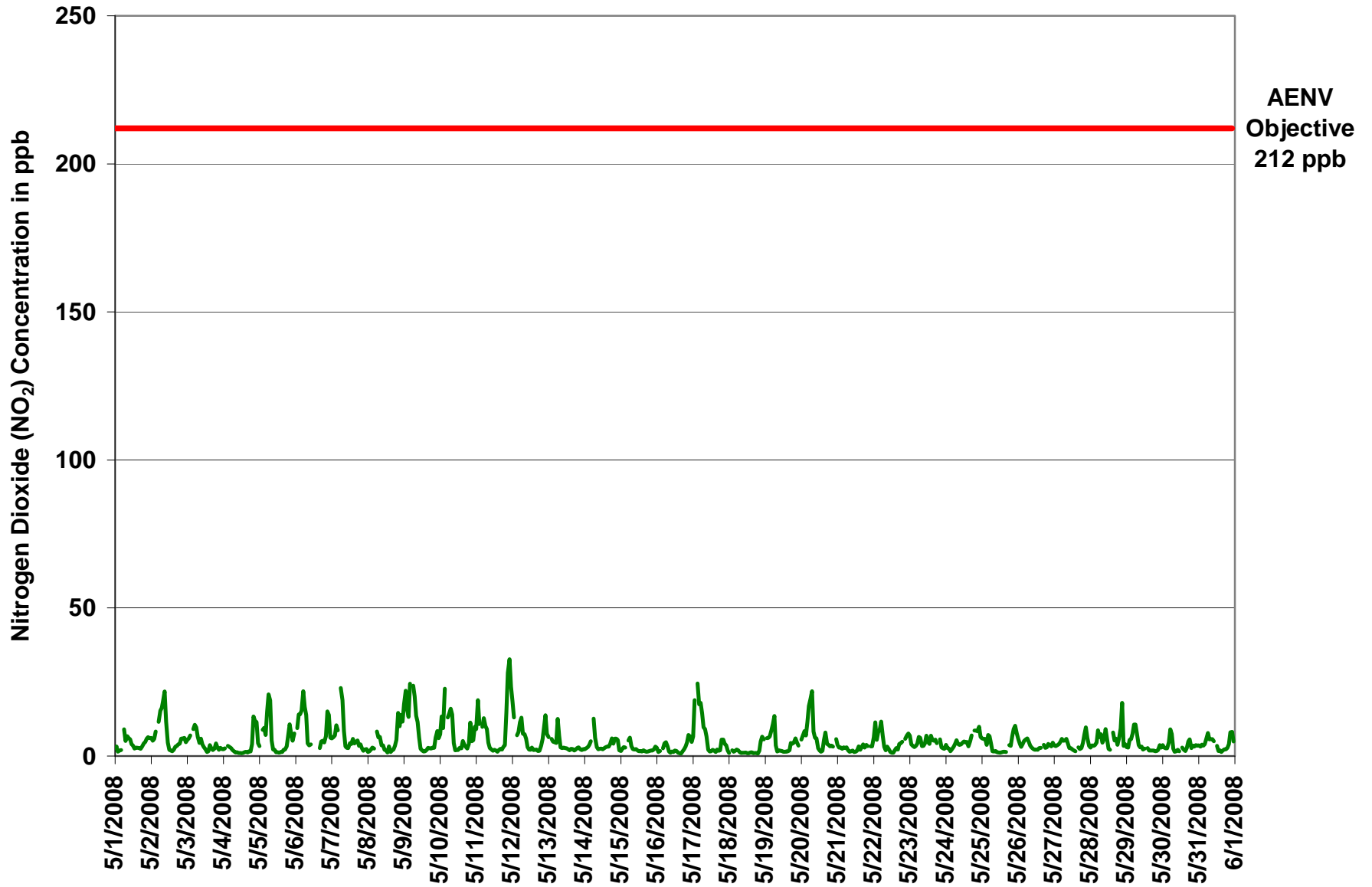


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

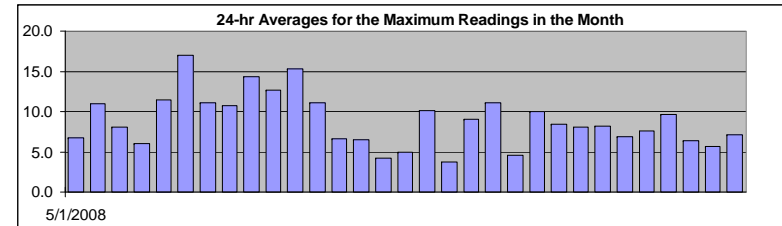
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitrogen Dioxide (NO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	43.5	ppb	11-May	21:00 22:00
Maximum 24-hr Value:	17.0	ppb	6-May	



AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	29.6	23.0	11.1	6.6	4.3	2.5	2.0	8.8 ppb	6.6 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-May-08	6	6	3	2	4	A	13	13	10	9	9	7	6	4	5	4	5	5	5	10	7	8	8	10	6.8	13.1
2-May-08	8	10	9	12	A	14	22	19	21	26	19	8	4	4	4	5	7	9	8	12	9	9	9	7	10.9	25.7
3-May-08	11	14	17	A	12	14	12	11	9	11	7	5	7	3	5	9	7	4	5	7	5	3	5	5	8.1	17.0
4-May-08	5	4	A	4	5	4	4	2	2	3	2	2	2	4	3	3	2	4	3	12	20	23	16	11	6.0	22.7
5-May-08	9	A	15	21	15	23	28	29	12	4	3	3	5	3	3	4	5	5	7	18	18	14	9	13	11.5	29.0
6-May-08	A	13	29	27	24	29	22	21	7	7	13	C	C	C	C	A	5	7	14	9	13	29	23	14	17.0	29.5
7-May-08	8	13	12	16	12	A	27	25	19	6	5	5	11	7	16	7	10	12	6	9	8	3	4	12	11.0	26.6
8-May-08	2	6	11	5	4	A	11	13	15	7	7	4	8	2	15	4	8	6	14	16	22	20	28	21	10.8	28.1
9-May-08	24	27	24	19	29	A	30	24	21	17	10	4	9	6	4	4	6	5	5	8	6	18	19	10	14.4	29.7
10-May-08	13	20	27	29	A	16	19	23	24	10	4	3	5	7	6	8	6	6	5	9	17	12	9	15	12.7	29.3
11-May-08	19	30	17	A	16	16	13	13	13	5	6	5	11	4	3	5	12	5	5	7	27	43	42	37	15.4	43.5
12-May-08	31	25	A	13	11	15	17	11	11	9	5	5	6	5	5	4	5	4	4	8	12	16	19	15	11.1	30.5
13-May-08	8	A	7	8	7	7	29	15	6	7	5	6	5	4	4	5	4	3	4	4	5	4	3	4	6.6	29.0
14-May-08	4	4	5	6	7	A	16	11	6	4	5	5	5	6	5	5	5	7	8	6	8	8	9	7	6.5	16.3
15-May-08	3	4	5	4	A	7	9	7	4	4	8	5	3	3	3	3	2	3	2	3	3	3	3	4	4.2	8.6
16-May-08	4	2	3	A	3	9	7	5	3	2	4	3	4	3	3	3	3	3	4	5	8	10	12	9	4.9	11.9
17-May-08	12	28	A	27	25	23	19	12	12	11	3	3	2	3	4	3	5	3	4	10	10	7	6	3	10.2	27.6
18-May-08	2	A	3	2	4	5	3	2	2	2	2	2	3	2	3	3	2	3	5	2	4	9	13	11	3.8	12.6
19-May-08	A	10	9	11	10	20	19	11	4	3	3	3	5	3	3	8	6	16	12	8	9	8	18	A	9.0	19.8
20-May-08	9	9	13	11	14	21	23	41	12	11	11	5	4	3	4	14	15	6	6	5	5	5	A	10	11.1	41.2
21-May-08	5	5	4	4	6	6	6	4	2	3	4	2	2	3	7	4	6	6	5	7	6	A	4	5	4.5	7.0
22-May-08	13	15	13	11	14	14	11	6	3	37	4	5	2	2	4	10	6	7	11	9	A	11	10	12	10.0	37.1
23-May-08	13	6	5	4	6	7	9	12	6	5	7	12	9	9	17	8	11	9	7	A	13	7	5	7	8.4	16.6
24-May-08	8	4	7	3	4	5	8	8	6	6	6	6	8	8	7	6	9	10	A	13	18	12	16	9	8.1	18.0
25-May-08	10	11	11	6	10	11	7	3	3	4	6	3	4	8	5	3	5	A	12	8	13	23	16	10	8.2	23.0
26-May-08	8	8	5	5	8	8	9	8	5	4	4	4	4	3	10	21	A	6	5	4	6	5	5	12	6.8	21.3
27-May-08	6	5	5	6	6	9	7	8	7	7	6	23	4	3	5	A	5	5	5	7	12	18	10	8	7.6	22.9
28-May-08	5	5	5	5	10	13	9	10	10	10	11	9	5	4	A	11	9	11	10	10	19	34	6	6	9.7	34.1
29-May-08	6	5	8	7	14	12	13	11	6	6	13	5	6	A	4	3	3	4	4	3	3	3	8	4	6.4	14.2
30-May-08	5	6	3	4	8	13	10	4	3	4	4	4	A	4	4	4	4	10	9	5	5	5	6	5	5.6	12.6
31-May-08	5	6	7	6	8	8	11	10	12	9	7	A	5	3	5	3	3	4	5	5	8	11	14	7	7.1	14.5
Hourly Avg	9.0	10.6	10.0	9.9	10.5	12.5	14.3	12.6	8.9	8.1	6.6	5.3	5.3	4.3	5.7	6.0	6.0	6.2	6.6	7.8	10.5	12.7	11.8	10.0		
Hourly Max	30.5	29.5	28.6	29.3	28.7	28.8	29.7	41.2	23.8	37.1	19.2	22.9	11.1	8.7	16.6	21.3	15.0	15.8	14.2	18.0	26.6	43.5	42.2	36.9		

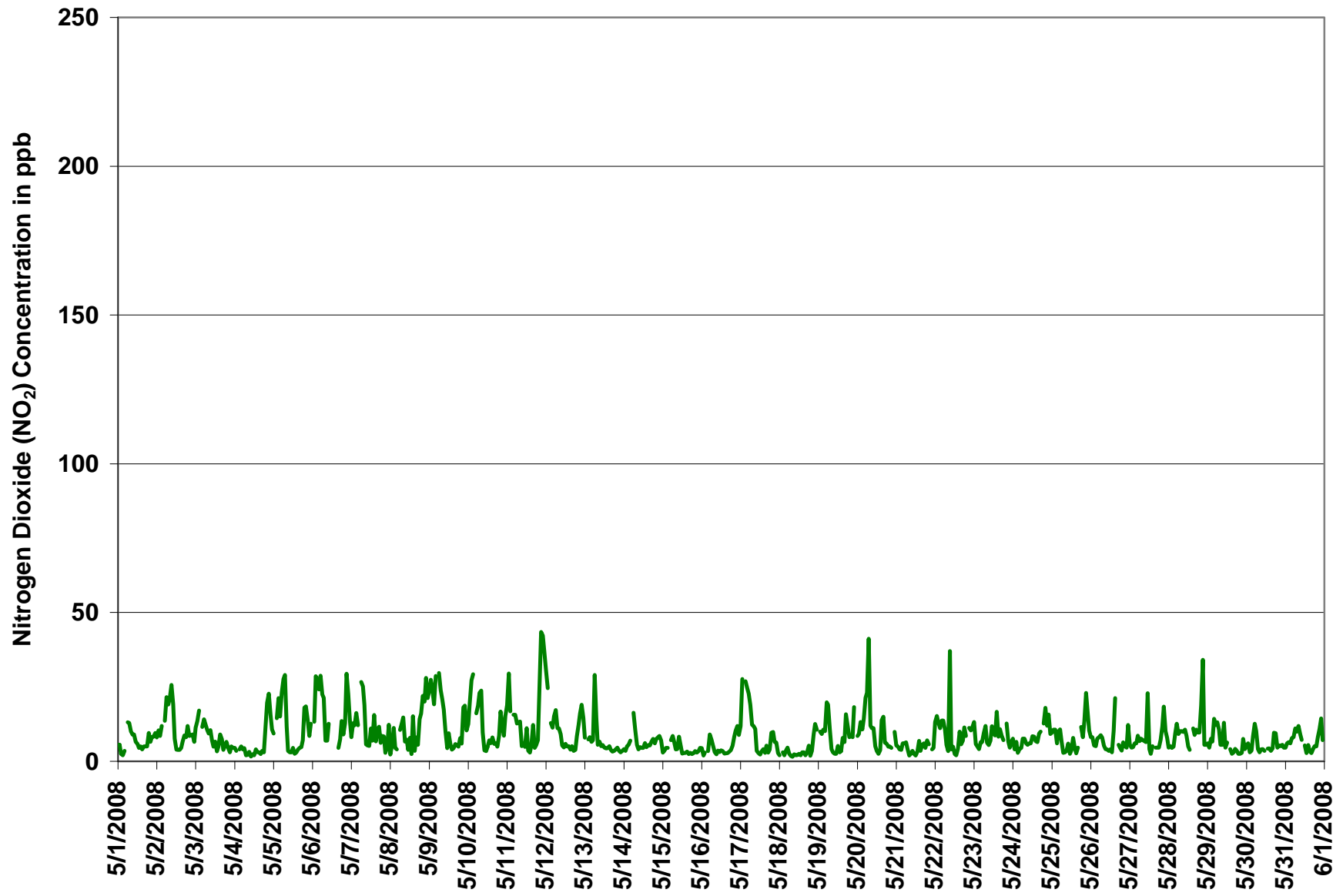
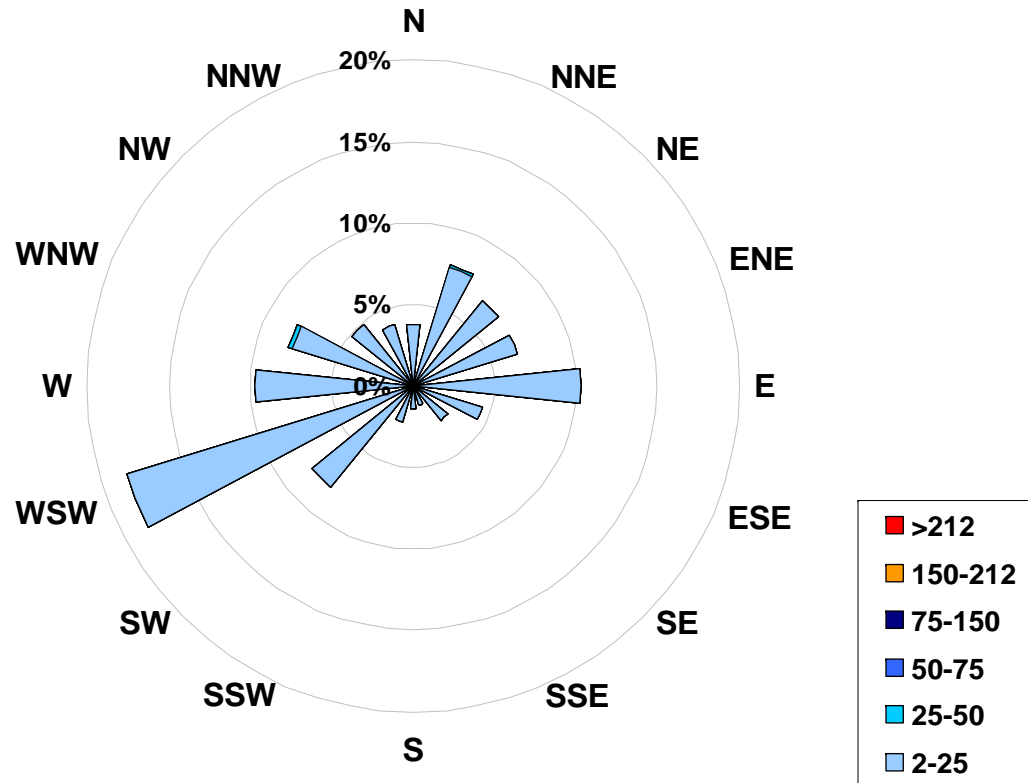


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range			
2.0	< 25		704
25	to 50		3
50	to 75		0
75	to 150		0
150	to 212		0
	> 212		0
Total Non-Zero Values			707

# PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

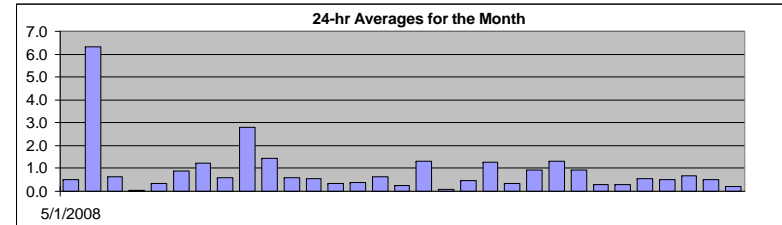
## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Maximum 1-hr Average:	38.1	ppb	2-May	8:00 9:00
Maximum 24-hr Average:	6.3	ppb	2-May	



AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	11.5	3.1	0.7	0.2	0.1	0.0	0.0	0.9 ppb	0.2 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-May-08	0	0	0	0	0	A	1	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.6
2-May-08	0	0	0	0	A	12	27	23	38	31	8	2	0	0	0	0	1	1	1	0	0	0	0	0	0	6.3	38.1
3-May-08	0	1	1	A	0	2	3	3	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.8
4-May-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
5-May-08	0	A	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	3.3
6-May-08	A	0	0	0	0	4	4	4	1	0	1	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0.9	4.4
7-May-08	0	0	0	1	1	A	12	5	2	1	0	0	1	1	2	1	1	1	1	0	0	0	0	0	0	1.2	11.6
8-May-08	0	0	1	0	0	A	1	2	2	1	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0.6	2.0
9-May-08	0	1	1	0	4	A	20	18	9	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.8	20.0
10-May-08	0	0	0	4	A	2	8	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	8.6
11-May-08	0	0	0	A	0	2	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.6	2.7	
12-May-08	1	0	A	0	0	1	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.4
13-May-08	0	A	0	0	0	0	2	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0
14-May-08	0	0	0	0	0	A	2	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0.4	2.4
15-May-08	0	0	0	0	A	0	2	1	1	1	2	1	1	1	1	1	1	1	1	0	0	0	0	1	0.6	1.7	
16-May-08	0	0	0	A	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
17-May-08	0	1	A	7	3	6	4	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	6.7
18-May-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	0.1	0.3
19-May-08	A	0	0	0	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.5	5.3	
20-May-08	0	0	0	0	0	5	7	10	1	1	1	0	0	0	0	0	1	0	1	0	0	0	A	0	1.3	9.5	
21-May-08	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	1	1	1	0	A	0	0	0.4	1.1
22-May-08	0	1	0	0	1	5	3	1	1	4	1	0	0	0	1	1	0	1	1	1	A	0	0	0	0	0.9	5.0
23-May-08	0	0	0	0	0	1	2	4	1	1	2	4	2	2	3	2	2	2	1	A	1	0	0	0	0	1.3	3.8
24-May-08	0	0	0	0	0	0	1	1	1	2	2	2	2	2	2	1	1	1	A	1	1	0	1	0	0	1.0	2.2
25-May-08	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.8
26-May-08	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0.3	1.3
27-May-08	0	0	0	0	0	1	1	2	3	2	1	1	0	0	0	A	0	0	0	0	0	0	1	0	0	0.6	2.7
28-May-08	0	0	0	0	0	1	1	2	1	1	2	1	0	0	A	0	1	1	0	0	0	0	1	0	0	0.5	2.4
29-May-08	0	0	0	0	0	2	4	2	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.7	3.6
30-May-08	0	0	0	0	0	2	3	1	0	0	1	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0.5	3.2
31-May-08	0	0	0	0	0	0	1	1	1	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
Hourly Avg	0.1	0.2	0.2	0.5	0.4	2.0	4.0	3.4	2.7	2.1	1.0	0.7	0.5	0.4	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1			
Hourly Max	0.6	1.4	1.4	6.7	4.1	12.3	26.7	23.3	38.1	31.0	7.7	3.8	2.2	1.8	3.3	1.8	1.8	1.5	1.0	0.8	1.0	1.0	0.9	0.6			

# PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

### Oxides of Nitrogen (NO<sub>x</sub>)

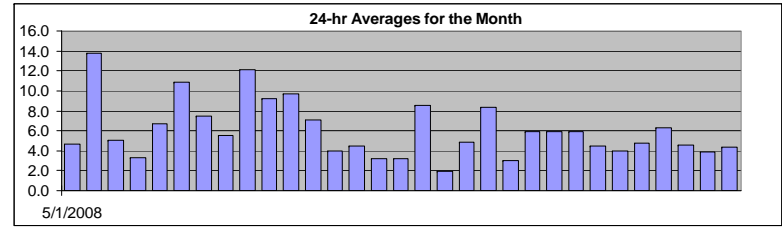
Monitoring Dates: May 1, 2008 to June 1, 2008

Guideline Limit: Alberta Environment: 

1-hr	na	ppb	24-hr	na	ppb
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Summary

Maximum 1-hr Average:	57.0	ppb	2-May	8:00 9:00
Maximum 24-hr Average:	13.8	ppb	2-May	



AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	33.4	18.3	6.9	3.9	2.5	1.4	1.1	6.0 ppb	3.9 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	3	3	1	2	2	A	10	6	8	7	7	5	5	3	4	3	3	3	4	5	5	6	7	6		4.6	9.6	
2-May-08	6	5	6	9	A	24	42	40	57	53	19	6	3	2	2	2	4	4	5	4	6	6	6	5		13.8	57.0	
3-May-08	5	7	8	A	9	12	13	9	6	8	5	4	3	1	2	4	3	2	3	4	3	2	3	2		5.0	12.5	
4-May-08	2	2	A	3	3	3	2	2	1	1	1	1	1	1	1	1	1	2	2	4	8	11	8	5	7		3.3	13.4
5-May-08	3	A	9	9	7	15	23	22	6	2	2	1	1	1	1	1	2	2	4	8	11	8	5	7		6.7	23.0	
6-May-08	A	9	14	14	15	26	21	18	5	4	5	C	C	C	C	A	3	6	6	5	7	15	14	6		10.8	26.4	
7-May-08	6	6	7	12	9	A	35	24	10	4	3	3	5	5	7	5	6	6	4	4	3	2	2	3		7.5	34.6	
8-May-08	1	2	3	3	3	A	9	8	9	5	5	3	3	1	4	2	2	3	4	6	15	11	14	12		5.5	15.4	
9-May-08	18	23	17	13	29	A	44	39	22	18	9	3	2	2	2	2	3	3	3	3	3	6	8	6		12.1	43.9	
10-May-08	7	13	10	27	A	15	23	25	21	5	2	2	2	3	3	6	4	3	3	4	11	5	5	10		9.2	26.7	
11-May-08	9	19	11	A	10	15	13	12	5	3	3	2	3	2	1	2	3	2	3	4	15	29	34	24		9.7	33.6	
12-May-08	19	13	A	7	8	12	15	10	9	8	4	2	2	3	2	2	2	2	2	3	6	10	14	7		7.1	18.9	
13-May-08	6	A	6	5	4	4	15	8	3	3	4	3	3	3	2	3	3	2	2	3	3	2	2	2		3.9	14.6	
14-May-08	2	2	3	4	5	A	15	8	4	3	3	3	3	3	3	4	4	4	6	4	6	6	6	2		4.4	14.9	
15-May-08	2	2	3	3	A	6	8	5	3	3	4	3	2	3	2	3	3	2	2	2	2	2	3	4		3.2	8.0	
16-May-08	3	1	2	A	3	5	6	4	2	1	2	2	3	2	2	1	1	2	3	4	5	7	7	5		3.2	7.3	
17-May-08	7	21	A	32	20	25	18	12	13	9	3	2	2	2	2	1	2	2	2	6	6	4	3	2		8.5	31.6	
18-May-08	1	A	2	1	2	2	2	1	1	1	1	2	1	1	2	1	1	1	1	1	2	5	7	6		1.9	6.5	
19-May-08	A	6	6	7	9	13	19	4	2	2	2	2	2	2	2	2	2	5	4	5	6	4	4	A		4.9	18.8	
20-May-08	6	7	9	7	12	22	27	31	10	7	7	3	2	2	2	6	9	5	4	4	4	3	A	6		8.4	31.5	
21-May-08	4	3	3	2	3	3	3	2	2	2	2	2	2	2	4	3	4	5	4	5	4	A	3	3		3.0	5.1	
22-May-08	7	12	6	9	9	17	10	4	3	7	3	2	1	1	3	4	3	5	5	6	A	6	7	8		5.9	16.7	
23-May-08	7	4	4	3	4	5	9	10	5	5	6	11	7	6	10	7	7	7	5	A	6	3	3	3		5.9	10.7	
24-May-08	4	3	3	2	2	3	5	7	6	6	6	7	7	6	6	5	6	8	A	9	10	9	10	7		5.9	10.4	
25-May-08	6	6	6	4	7	7	5	2	2	2	2	1	1	2	2	2	2	A	4	4	7	10	10	7		4.4	10.5	
26-May-08	6	4	3	4	5	6	7	6	4	3	3	2	3	2	3	3	A	4	3	3	4	4	3	4		4.0	7.1	
27-May-08	4	3	4	4	5	7	6	7	9	6	4	4	3	2	2	A	3	3	3	5	8	10	6	3		4.7	10.2	
28-May-08	3	4	3	4	5	9	7	9	5	7	12	7	3	2	A	8	6	7	4	6	9	19	3	4		6.3	18.7	
29-May-08	3	3	5	6	8	13	14	9	5	4	4	3	4	A	3	2	2	2	2	2	2	4	3		4.6	14.2		
30-May-08	4	3	3	3	5	11	11	4	2	2	3	2	A	3	2	2	3	6	7	3	4	3	4	3		3.9	10.8	
31-May-08	3	3	4	3	4	6	8	6	6	6	5	A	4	2	2	1	2	2	2	3	4	8	8	5		4.4	8.3	
Hourly Avg	5.4	6.9	5.7	7.1	7.4	11.0	14.3	11.4	7.9	6.4	4.5	3.2	2.8	2.5	2.9	3.1	3.3	3.6	3.5	4.2	6.3	7.3	7.2	5.6				
Hourly Max	18.9	23.0	17.2	31.6	28.6	26.4	43.9	39.6	57.0	52.9	19.4	10.7	7.1	6.3	10.2	8.5	8.9	8.2	6.5	9.3	15.4	29.0	33.6	23.9				



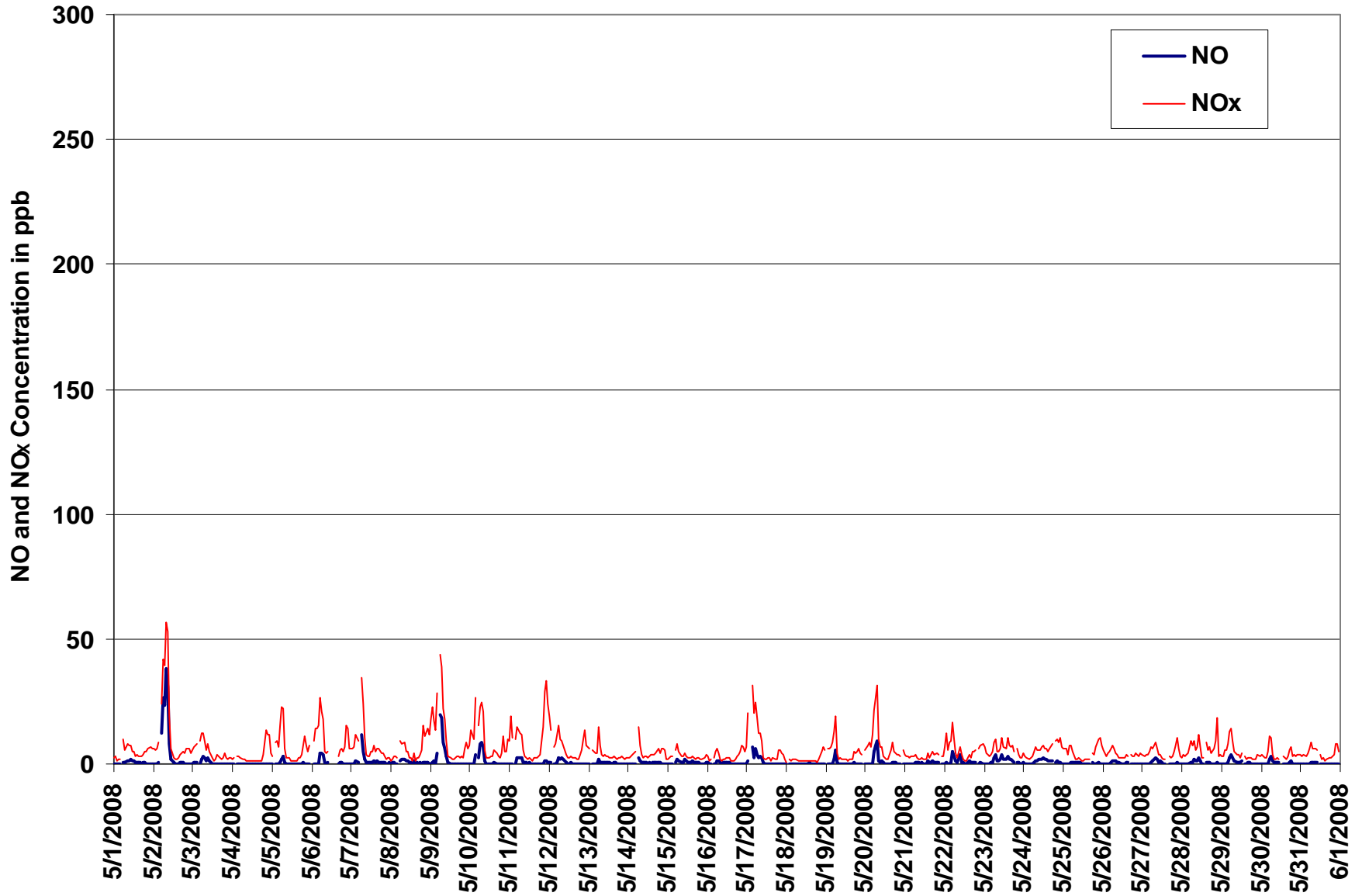


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

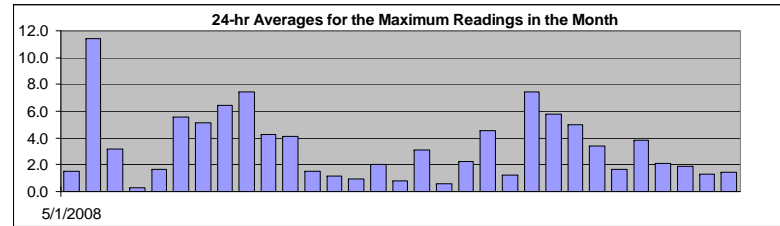
**Nitric Oxide (NO)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	81.5	ppb	22-May	9:00 10:00
Maximum 24-hr Value:	11.4	ppb	2-May	

AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	31.4	12.8	3.6	1.2	0.5	0.0	0.0	3.3 ppb	1.2 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-May-08	1	0	0	0	0	A	2	3	2	2	3	2	2	2	1	1	1	1	1	6	1	1	1	1	1.5	5.9	
2-May-08	2	8	2	2	A	26	53	36	51	37	17	4	1	2	1	4	5	4	6	1	1	1	1	1	11.4	53.1	
3-May-08	5	11	17	A	1	6	6	6	4	7	3	2	2	1	1	1	1	1	0	0	0	0	0	0	3.2	17.3	
4-May-08	0	0	A	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0.3	0.8	
5-May-08	1	A	0	0	0	2	5	6	3	1	1	1	2	0	1	1	1	2	8	5	1	0	0	0	1.6	8.1	
6-May-08	A	1	5	3	1	32	13	22	1	1	13	C	C	C	C	A	0	1	5	1	0	1	1	1	5.6	31.7	
7-May-08	0	3	0	6	2	A	22	9	7	2	1	2	3	3	13	2	7	4	5	5	6	2	4	8	5.2	21.9	
8-May-08	1	6	8	1	2	A	3	15	15	5	5	2	10	1	13	2	8	4	8	8	12	14	3	1	6.4	14.7	
9-May-08	1	5	10	2	14	A	37	26	27	20	11	2	4	7	1	1	1	1	0	0	0	0	1	1	7.5	37.0	
10-May-08	0	3	3	11	A	5	19	18	23	5	1	1	1	2	1	1	1	1	1	1	1	0	0	0	4.3	22.5	
11-May-08	1	1	1	A	0	4	4	5	8	3	3	2	14	3	1	2	5	2	1	1	3	13	6	10	4.1	14.4	
12-May-08	6	2	A	0	0	2	4	3	4	4	2	1	1	1	1	1	1	1	1	1	1	0	0	0	1.5	6.3	
13-May-08	0	A	0	0	0	0	8	3	1	2	2	1	3	2	1	2	1	1	1	0	0	0	0	0	1.2	8.1	
14-May-08	0	0	0	0	0	A	4	3	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1.0	3.9	
15-May-08	0	0	0	0	A	1	3	3	2	2	12	7	2	2	2	3	2	2	1	1	1	1	1	1	2.0	12.3	
16-May-08	1	0	0	A	0	1	2	3	1	1	1	1	2	1	1	1	1	1	1	1	0	0	0	0	0.8	2.5	
17-May-08	0	7	A	12	9	13	7	5	5	6	1	1	1	1	0	1	0	1	1	0	0	0	0	0	3.1	13.3	
18-May-08	0	A	0	0	0	0	0	0	1	1	1	1	1	1	5	1	1	0	1	0	0	0	1	0	0.6	4.8	
19-May-08	A	0	0	1	0	7	8	4	4	1	1	1	3	1	1	1	1	9	4	1	1	0	3	A	2.3	8.5	
20-May-08	2	0	5	2	1	13	15	44	3	2	3	1	2	1	1	1	2	2	3	2	1	0	A	0	4.5	44.4	
21-May-08	0	1	1	0	1	1	2	4	1	1	2	1	1	1	3	1	2	3	2	2	2	A	0	0	1.2	3.5	
22-May-08	1	3	2	2	3	11	6	3	2	82	2	5	1	1	6	12	4	3	6	6	A	5	6	1	7.4	81.5	
23-May-08	1	2	2	1	2	5	8	9	6	4	8	17	7	12	13	6	9	4	7	A	2	4	3	2	5.8	16.5	
24-May-08	4	1	1	1	2	2	2	6	4	9	5	4	8	13	8	7	14	2	A	4	5	11	3	2	5.0	13.5	
25-May-08	1	3	2	2	2	7	4	2	2	3	4	1	2	7	2	1	3	A	6	3	5	12	3	1	3.4	12.3	
26-May-08	1	1	0	1	1	1	3	3	2	1	1	1	1	1	13	7	A	1	1	0	1	0	0	0	1.7	13.0	
27-May-08	1	0	0	1	1	3	3	4	4	7	6	28	10	1	2	A	1	2	1	3	2	10	1	0	3.8	27.5	
28-May-08	0	0	0	0	2	4	6	3	4	3	3	5	1	1	A	2	2	2	2	1	0	8	0	1	2.1	8.2	
29-May-08	0	0	0	0	3	4	6	5	2	2	5	1	6	A	1	1	3	3	1	1	1	0	0	0	1.9	6.3	
30-May-08	1	0	0	0	2	5	6	2	2	1	1	1	A	1	1	1	1	3	2	1	1	0	0	0	1.3	6.4	
31-May-08	0	1	1	0	2	1	1	4	4	2	1	A	1	1	4	1	1	1	1	1	2	1	1	5	1	1.5	5.2
Hourly Avg	1.1	2.1	2.2	1.6	1.8	5.9	8.4	8.3	6.4	6.9	3.8	3.3	3.2	2.4	3.4	2.0	2.5	1.9	2.2	2.1	1.7	2.9	1.5	1.0			
Hourly Max	6.3	11.0	17.3	12.0	14.0	31.7	53.1	44.4	50.9	81.5	17.3	27.5	14.4	12.8	13.3	11.6	13.5	8.5	8.1	8.1	12.5	14.2	6.3	10.2			

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

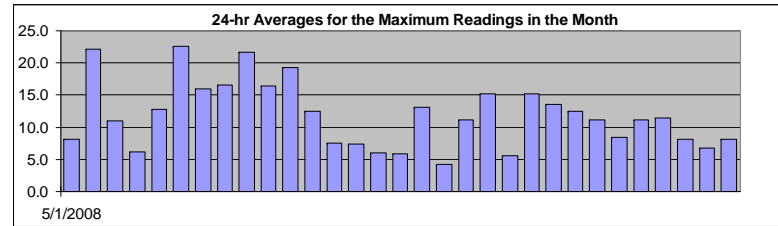
**Oxides of Nitrogen (NO<sub>x</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	83.8	ppb	20-May	7:00 8:00
Maximum 24-hr Value:	22.5	ppb	6-May	

AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	56.3	33.7	14.3	8.4	5.1	3.1	2.1	11.8 ppb	8.4 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-May-08	6	6	3	2	3	A	15	15	12	11	12	8	8	5	7	5	6	6	6	16	7	9	9	11	8.2	15.6
2-May-08	9	18	10	12	A	39	75	55	72	61	37	12	5	5	5	11	14	12	18	9	9	9	7	22.1	74.8	
3-May-08	16	25	33	A	12	18	17	16	14	18	10	6	9	4	5	10	8	4	6	7	4	3	5	5	11.0	32.8
4-May-08	5	3	A	4	5	4	4	3	3	4	2	3	3	4	3	3	3	4	3	13	20	23	16	11	6.2	22.7
5-May-08	10	A	14	22	15	25	32	35	14	5	4	3	6	3	4	4	5	5	8	25	20	14	9	13	12.8	34.6
6-May-08	A	14	34	30	25	59	36	44	8	8	26	C	C	C	A	5	9	19	10	13	30	23	14	22.5	58.6	
7-May-08	8	16	12	22	14	A	49	34	26	8	7	6	14	9	26	9	17	16	11	12	15	4	9	20	15.9	48.7
8-May-08	3	12	19	5	5	A	14	27	29	12	11	5	18	3	28	5	12	9	22	24	33	34	28	21	16.6	34.2
9-May-08	24	32	33	21	42	A	67	50	47	38	21	6	14	13	5	5	7	6	5	8	6	19	20	11	21.7	66.6
10-May-08	13	21	29	37	A	19	38	41	46	15	5	5	6	9	7	9	6	7	5	9	18	11	8	15	16.4	46.4
11-May-08	19	31	18	A	16	19	17	18	22	8	9	6	26	7	4	7	17	6	6	8	28	56	48	47	19.2	56.3
12-May-08	36	25	A	13	11	17	21	14	15	13	7	6	7	6	7	5	6	4	4	9	12	16	19	14	12.4	36.1
13-May-08	8	A	7	8	6	7	37	17	7	8	6	6	7	5	5	6	5	4	4	4	4	4	3	3	7.5	36.8
14-May-08	4	4	5	6	7	A	20	14	7	5	6	6	5	7	5	6	7	7	8	7	8	9	9	8	7.3	19.9
15-May-08	3	4	5	5	A	8	12	9	5	6	20	10	4	5	5	6	4	4	3	4	4	4	5	6	6.1	20.2
16-May-08	5	2	3	A	4	11	10	8	4	3	5	4	5	5	3	3	4	4	5	6	9	11	12	9	5.9	12.2
17-May-08	12	32	A	38	34	35	26	17	17	17	5	4	3	4	5	3	6	3	4	10	10	7	7	3	13.1	38.2
18-May-08	2	A	3	2	4	4	3	2	2	3	3	3	3	2	7	3	3	3	6	2	4	9	14	11	4.2	14.0
19-May-08	A	10	9	11	10	27	26	15	8	4	3	3	8	4	4	8	7	24	16	9	9	8	21	A	11.1	27.0
20-May-08	8	9	18	11	15	31	38	84	14	13	14	6	6	3	4	15	17	8	9	7	6	5	A	10	15.3	83.8
21-May-08	6	5	5	4	7	7	8	6	3	3	5	4	3	4	9	5	7	8	6	9	7	A	4	5	5.6	9.0
22-May-08	14	18	15	13	16	25	17	8	5	70	6	10	3	3	9	21	9	10	17	14	A	17	16	12	15.1	70.1
23-May-08	14	7	6	5	8	11	16	21	11	9	15	27	17	19	30	14	17	12	13	A	15	10	7	7	13.5	30.2
24-May-08	10	5	7	3	5	6	9	12	10	14	9	9	16	20	14	13	23	12	A	17	23	23	18	11	12.5	23.2
25-May-08	10	12	11	7	10	18	11	5	5	7	10	3	6	15	7	3	7	A	17	11	18	35	18	11	11.1	35.3
26-May-08	9	9	6	5	8	9	11	11	7	5	5	5	5	4	23	28	A	6	5	4	7	5	5	13	8.4	28.3
27-May-08	6	5	5	7	7	11	9	12	11	13	12	50	13	4	7	A	5	6	5	10	12	28	11	8	11.1	50.4
28-May-08	5	5	5	5	11	15	13	12	15	13	14	11	6	4	A	13	10	12	11	11	19	42	6	6	11.4	42.0
29-May-08	6	4	8	7	18	15	18	16	8	7	17	6	12	A	5	4	6	7	5	3	3	3	8	4	8.1	18.1
30-May-08	6	6	3	4	10	16	17	5	5	5	6	5	A	5	5	5	5	12	11	5	6	6	6	5	6.8	16.8
31-May-08	5	6	7	6	9	9	12	14	14	10	8	A	6	3	9	4	3	5	6	7	8	11	19	7	8.2	19.2
Hourly Avg	9.7	12.3	11.8	11.2	12.0	17.8	22.4	20.6	15.0	13.4	10.2	8.3	8.3	6.4	9.0	7.9	8.2	7.9	8.6	9.9	11.8	15.5	13.0	10.8		
Hourly Max	36.1	32.0	33.7	38.2	42.1	58.6	74.8	83.8	71.9	70.1	36.5	50.4	25.7	20.4	30.2	28.3	22.8	24.5	22.4	25.1	33.1	56.3	47.7	46.9		

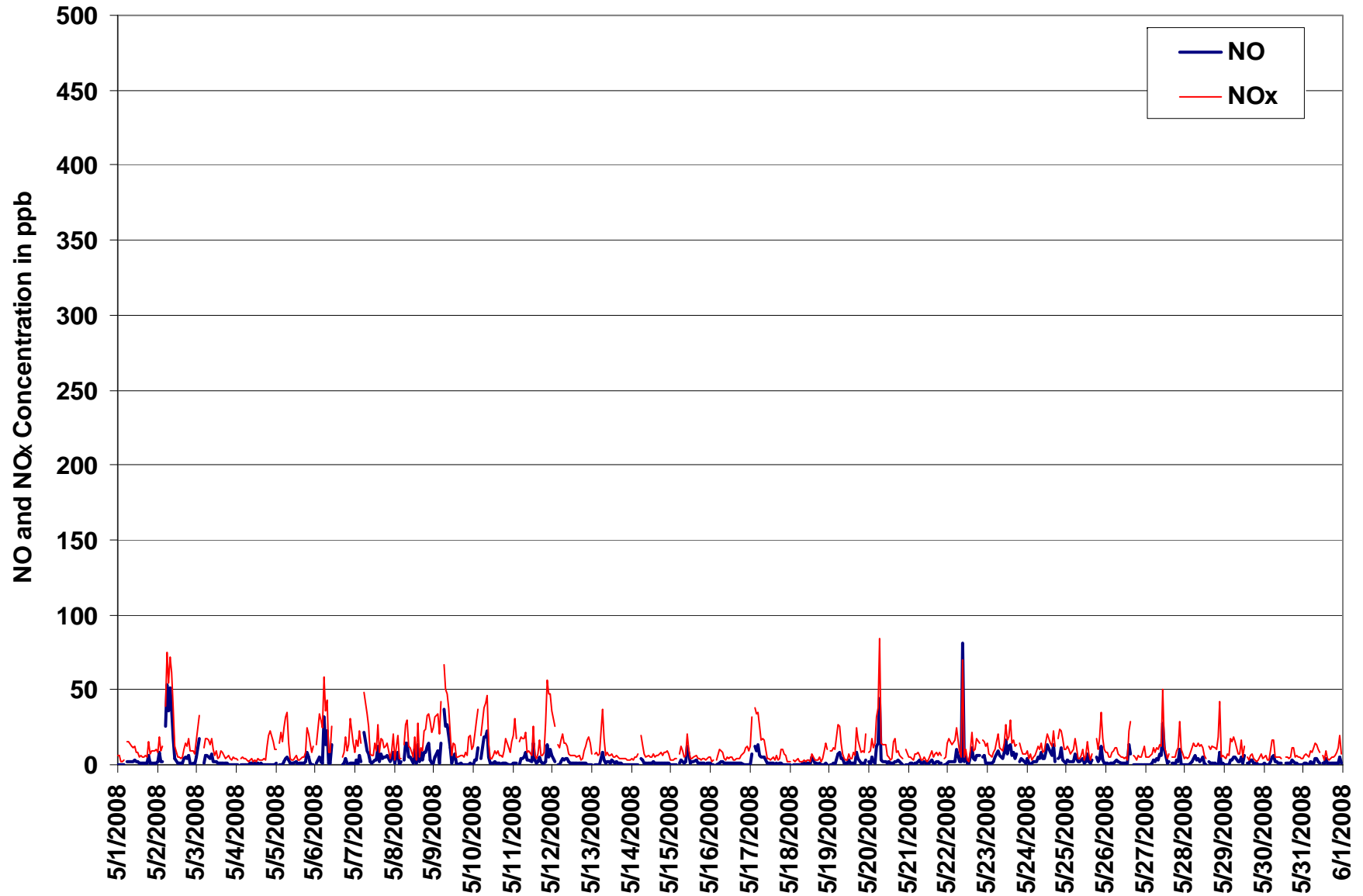


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

# PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

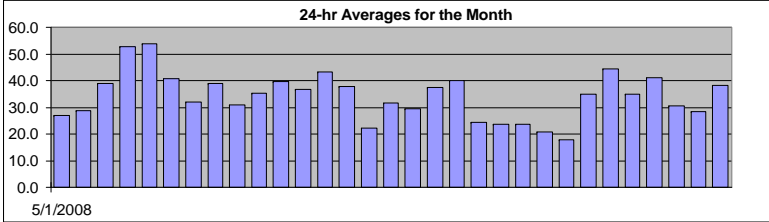
Ozone (O<sub>3</sub>)

Monitoring Dates: May 1, 2008 to June 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:	73.2 ppb	4-May	16:00 17:00
Maximum 24-hr Average:	53.7 ppb	5-May	

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
	64.3	55.7	45.0	34.5	22.9	12.6	5.3	34.2 ppb	34.5 ppb



Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-08	26	24	26	25	24	A	18	19	19	22	23	28	29	33	35	38	38	37	34	30	27	23	22	21	27.0	38.1
2-May-08	21	21	15	5	A	1	2	5	6	10	22	33	41	42	45	47	47	49	49	47	43	40	37	37	28.9	48.8
3-May-08	35	31	28	A	16	9	14	19	30	33	41	47	52	55	54	51	52	54	52	48	46	44	42	43	38.9	54.7
4-May-08	45	43	A	43	42	39	42	45	48	49	50	53	55	60	64	68	73	73	68	58	47	49	46	53	52.7	73.2
5-May-08	53	A	42	38	41	37	34	39	56	60	61	68	68	65	64	64	64	63	62	58	50	49	51	47	53.7	68.1
6-May-08	A	38	27	20	16	8	13	23	49	56	58	59	61	60	56	55	57	50	46	45	43	31	30	37	40.8	60.9
7-May-08	37	35	23	7	7	A	4	17	31	C	C	C	45	45	44	42	39	38	39	36	39	41	38	37	32.1	44.7
8-May-08	38	38	38	33	35	A	32	35	34	38	38	41	44	47	45	48	48	48	48	45	33	37	31	25	39.1	48.3
9-May-08	15	8	10	12	3	A	4	8	16	20	28	40	46	47	48	48	48	48	47	47	47	43	39	39	30.9	47.9
10-May-08	36	26	29	5	A	5	7	13	28	41	48	49	50	48	48	42	47	49	49	45	35	40	38	33	35.2	49.8
11-May-08	26	17	20	A	14	9	19	28	48	55	55	56	56	58	59	61	62	61	60	59	44	23	8	16	39.7	61.5
12-May-08	14	22	A	33	31	26	24	29	30	34	43	51	53	53	54	53	50	48	47	43	34	27	21	27	36.7	53.5
13-May-08	25	A	29	29	29	32	25	38	51	51	50	51	52	53	54	53	51	51	50	48	46	45	44	41	43.3	53.7
14-May-08	39	37	35	34	32	A	27	37	49	52	56	56	57	55	50	42	36	32	28	28	24	21	20	22	37.9	57.3
15-May-08	22	21	20	20	A	19	17	21	24	26	26	26	25	23	23	23	23	23	23	22	21	20	20	19	22.0	26.2
16-May-08	21	23	23	A	23	21	22	25	30	33	34	35	37	41	41	41	44	41	39	37	34	27	27	29	31.7	44.2
17-May-08	26	11	A	2	8	5	14	23	25	30	38	41	43	47	48	46	41	38	37	31	30	31	31	32	29.6	48.1
18-May-08	36	A	39	39	39	35	32	29	28	28	29	30	35	37	40	45	46	45	47	48	46	39	34	35	37.4	48.2
19-May-08	A	33	29	26	22	19	15	35	41	42	45	48	49	50	50	51	51	49	47	46	43	45	45	A	40.2	51.3
20-May-08	32	22	19	23	10	5	7	13	23	26	27	34	34	37	41	38	29	26	25	23	22	22	A	18	24.2	41.1
21-May-08	17	16	16	17	17	18	20	24	25	27	29	30	30	30	28	30	28	26	27	25	24	A	23	19	23.7	30.0
22-May-08	15	8	16	11	8	6	13	22	27	27	31	33	35	35	35	35	35	33	33	31	A	26	21	18	23.7	35.5
23-May-08	18	18	17	17	16	16	14	17	22	22	22	20	22	25	25	26	26	24	24	A	21	22	21	23	20.7	26.2
24-May-08	22	22	22	23	21	19	17	15	16	16	15	14	15	15	16	19	18	16	A	18	14	18	18	22	17.9	22.9
25-May-08	23	22	20	22	18	18	21	26	31	35	38	40	43	46	46	49	49	A	51	50	45	41	34	35	34.9	50.7
26-May-08	36	38	39	37	35	32	32	32	35	42	50	52	53	54	54	53	A	55	55	53	50	48	46	42	44.4	54.9
27-May-08	39	36	34	32	28	25	25	24	25	29	33	36	39	41	42	A	44	44	44	41	37	31	36	42	35.0	44.1
28-May-08	43	43	42	41	39	33	36	36	40	42	44	48	52	54	A	41	45	44	47	44	37	24	35	33	41.1	54.4
29-May-08	34	30	21	18	16	12	14	24	32	37	42	44	43	A	42	41	38	38	37	35	33	28	29	22	30.7	43.8
30-May-08	20	20	19	18	16	11	13	22	28	30	32	34	A	42	43	39	37	33	33	35	33	33	31	28	28.3	43.1
31-May-08	27	26	23	25	21	17	19	26	34	41	43	A	53	53	53	54	52	52	51	49	46	39	34	33	38.0	53.6
Hourly Avg	29.1	25.9	25.8	23.4	22.4	18.4	19.3	24.8	31.7	35.2	38.2	41.1	43.8	45.0	44.9	44.7	43.9	42.9	43.2	40.9	36.4	33.5	31.7	31.0		
Hourly Max	53.2	42.8	42.5	42.7	41.7	39.5	42.4	44.8	56.4	60.1	61.2	68.0	68.1	64.9	64.3	68.1	73.2	72.5	67.8	59.4	50.3	48.8	50.9	52.6		

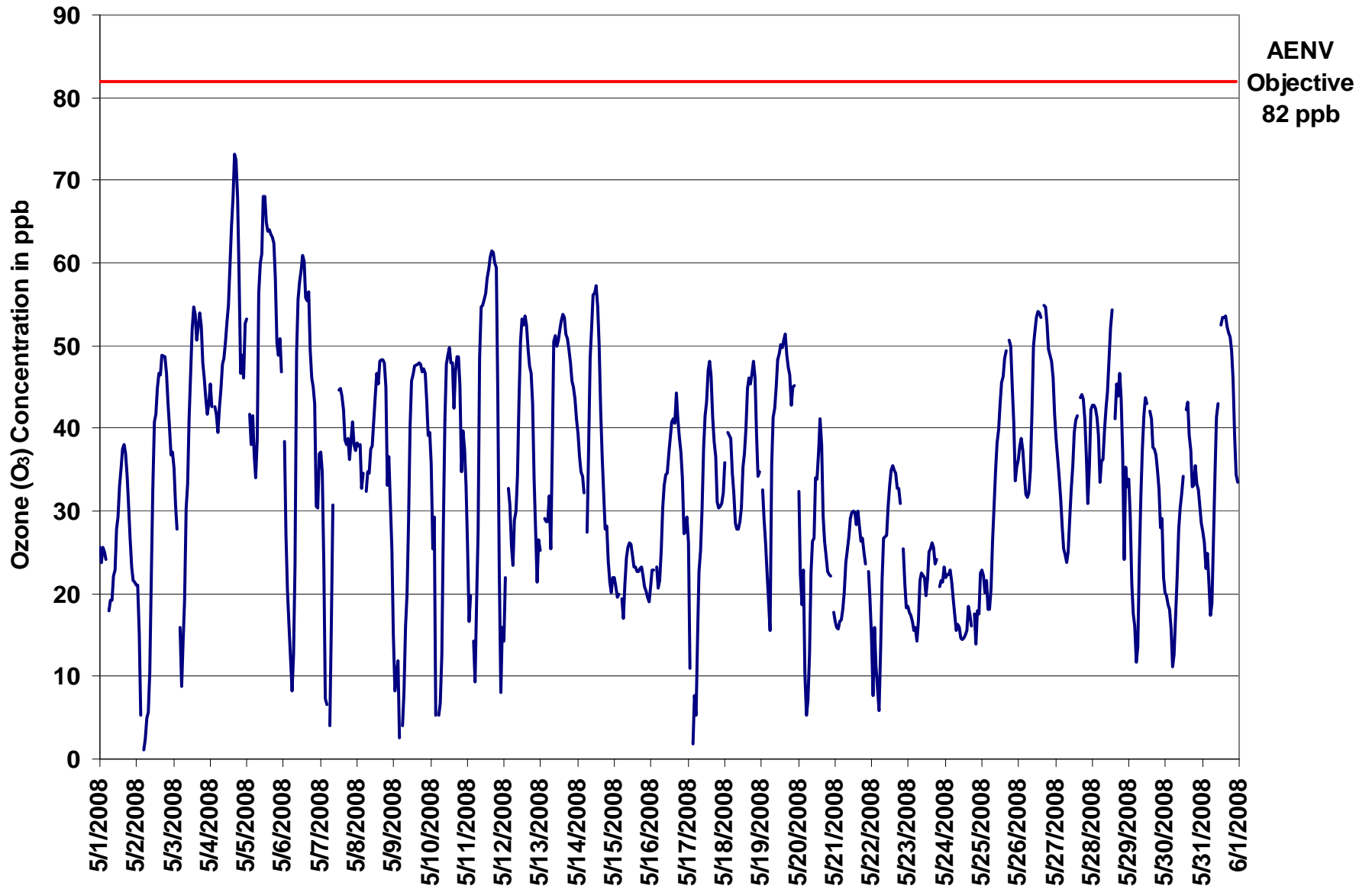


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

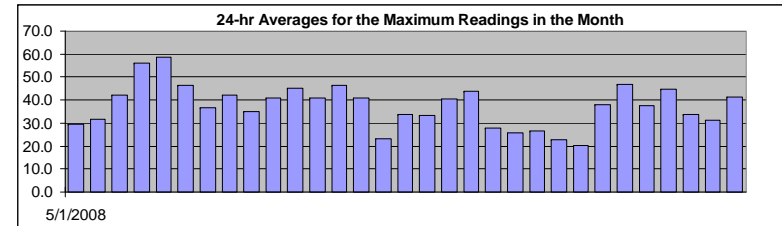
**Ozone (O<sub>3</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	76.1	ppb	4-May	16:00 17:00
Maximum 24-hr Value:	58.5	ppb	5-May	

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
	66.7	58.4	48.5	38.1	26.1	16.6	8.6	37.5 ppb	38.1 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-May-08	26	26	27	26	25	A	21	21	22	25	28	30	32	37	39	39	40	40	36	33	31	25	23	23	29.5	40.4
2-May-08	23	23	21	9	A	2	4	6	7	18	27	38	43	43	48	48	49	51	51	50	46	43	39	38	31.7	51.2
3-May-08	38	33	30	A	21	15	16	24	34	39	46	50	55	56	55	54	55	56	55	50	49	46	43	46	42.1	56.2
4-May-08	47	44	A	44	44	43	44	47	49	50	52	55	58	64	67	71	76	76	71	65	55	58	51	58	56.0	76.1
5-May-08	57	A	50	48	49	46	44	52	61	62	65	71	70	67	66	66	66	64	65	64	57	51	54	51	58.5	70.7
6-May-08	A	44	35	28	25	13	18	36	56	59	61	62	63	63	59	59	59	55	50	49	53	38	37	41	46.2	62.6
7-May-08	40	37	35	15	11	A	14	30	38	C	C	C	48	48	47	46	43	42	42	38	41	42	41	40	36.9	47.9
8-May-08	40	39	40	35	36	A	35	37	38	40	40	43	47	48	48	49	50	51	51	50	42	39	40	33	42.3	51.0
9-May-08	20	18	15	16	9	A	8	11	21	24	33	48	48	48	50	51	50	50	49	50	50	48	44	41	34.9	50.5
10-May-08	40	33	40	32	A	12	13	17	42	47	50	50	52	52	52	46	51	51	51	51	42	42	40	37	41.0	51.8
11-May-08	34	27	23	A	18	15	26	34	55	56	56	58	58	61	62	63	65	64	63	62	57	36	16	26	45.1	64.6
12-May-08	23	33	A	39	35	30	27	32	34	41	48	54	57	56	56	55	53	50	49	47	38	32	26	31	41.0	56.6
13-May-08	28	A	32	32	32	40	31	46	53	53	52	53	54	56	56	55	53	53	51	50	48	46	45	43	46.2	55.8
14-May-08	42	38	37	36	34	A	34	45	52	56	58	58	59	58	53	46	41	35	31	32	26	24	23	24	41.0	59.1
15-May-08	23	22	21	22	A	21	19	24	26	27	27	27	26	24	24	24	24	24	24	23	23	21	21	20	23.4	27.2
16-May-08	23	24	24	A	24	23	23	28	33	34	37	36	41	42	43	42	46	46	41	39	38	30	31	31	33.9	46.5
17-May-08	30	23	A	4	17	12	21	25	28	37	41	43	45	49	50	49	44	41	40	35	33	33	33	34	33.2	49.8
18-May-08	40	A	40	41	41	36	35	31	29	29	31	33	38	39	45	49	48	49	52	53	50	44	40	38	40.5	52.5
19-May-08	A	39	31	29	29	25	23	39	43	44	49	50	50	52	52	54	54	52	51	49	46	52	51	A	43.7	53.6
20-May-08	35	29	24	26	13	8	11	23	29	30	35	37	36	40	43	43	33	29	27	24	24	24	A	19	28.0	43.4
21-May-08	19	18	18	19	19	22	24	26	26	29	31	31	31	32	31	32	31	29	28	27	25	A	25	21	25.8	32.1
22-May-08	20	13	19	16	11	9	21	24	29	29	31	33	35	36	37	38	37	36	34	33	A	27	24	21	26.6	37.7
23-May-08	21	19	19	18	17	18	17	20	24	24	24	22	24	29	29	29	28	27	26	A	23	23	23	24	22.9	29.4
24-May-08	24	24	24	24	23	22	20	18	18	18	16	16	17	18	19	21	20	19	A	21	21	20	23	26	20.3	25.7
25-May-08	26	25	22	22	21	20	24	30	34	38	42	44	46	49	49	51	52	A	53	52	49	45	39	38	37.9	53.2
26-May-08	38	40	40	39	37	33	33	34	38	49	53	54	55	56	56	56	A	57	56	54	51	50	48	45	46.6	57.1
27-May-08	41	38	36	34	29	27	27	25	27	33	34	38	43	42	44	A	45	45	46	44	41	33	41	44	37.3	45.7
28-May-08	44	44	45	42	41	37	40	40	42	45	48	52	54	56	A	48	48	48	50	47	43	39	41	36	44.8	56.4
29-May-08	35	34	26	20	20	15	18	31	34	41	45	45	A	45	45	43	40	41	38	38	36	30	34	27	33.9	45.5
30-May-08	23	21	20	19	18	16	18	26	31	34	36	36	A	45	45	42	41	36	37	37	36	34	33	31	31.0	45.2
31-May-08	30	28	26	27	24	19	27	30	40	45	49	A	55	55	55	56	54	54	53	52	50	43	40	36	41.2	55.7
Hourly Avg	32.0	29.9	29.3	27.3	25.8	22.3	23.7	29.3	35.3	38.5	41.4	43.7	46.2	47.4	47.5	47.4	46.6	45.7	45.8	44.0	40.7	37.3	35.6	34.1		
Hourly Max	57.2	44.5	50.5	47.7	48.5	46.0	44.0	52.1	60.6	61.7	65.0	70.7	70.1	67.2	66.7	70.5	76.1	75.5	71.3	65.2	57.3	58.1	54.3	57.9		

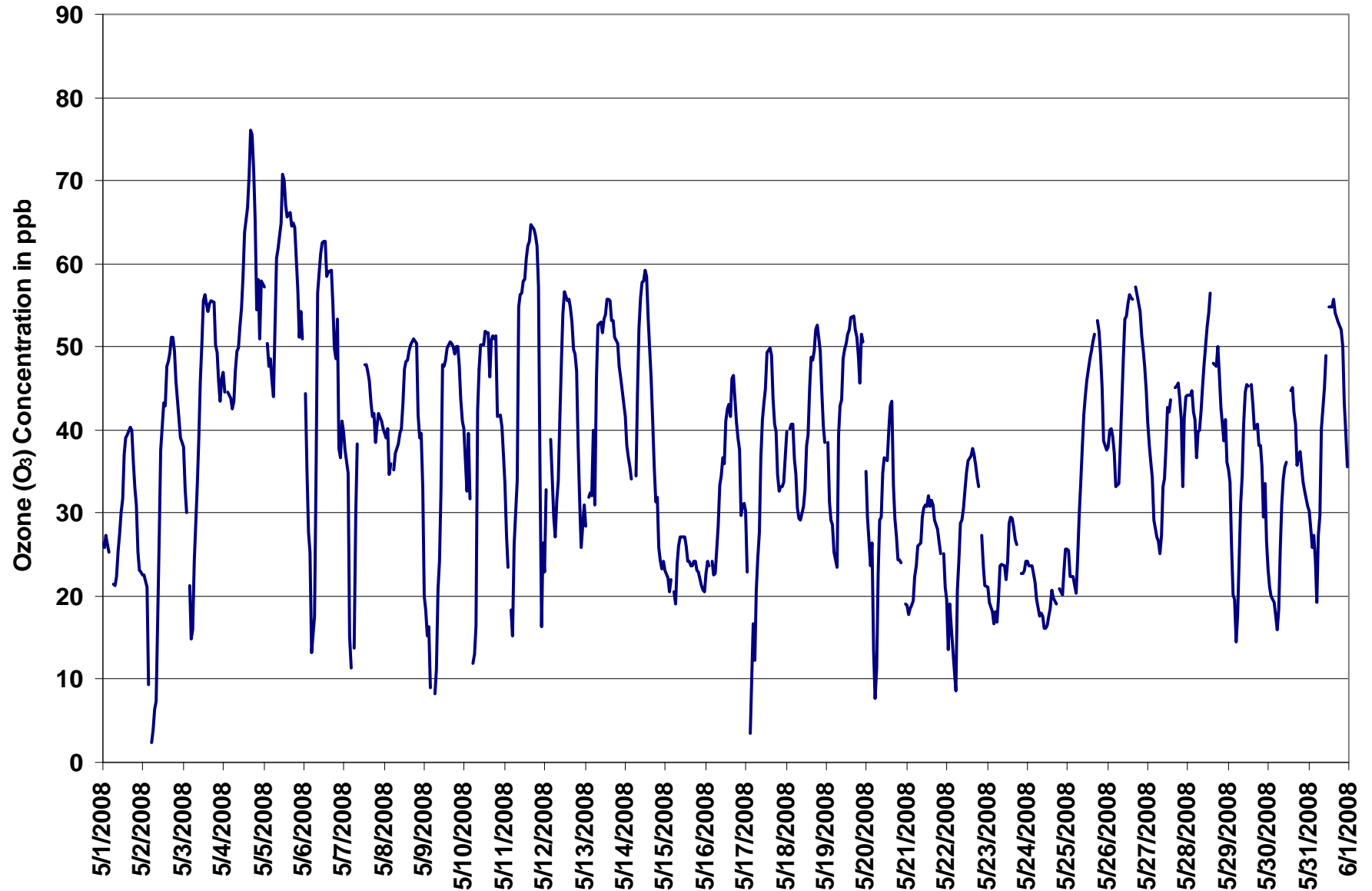
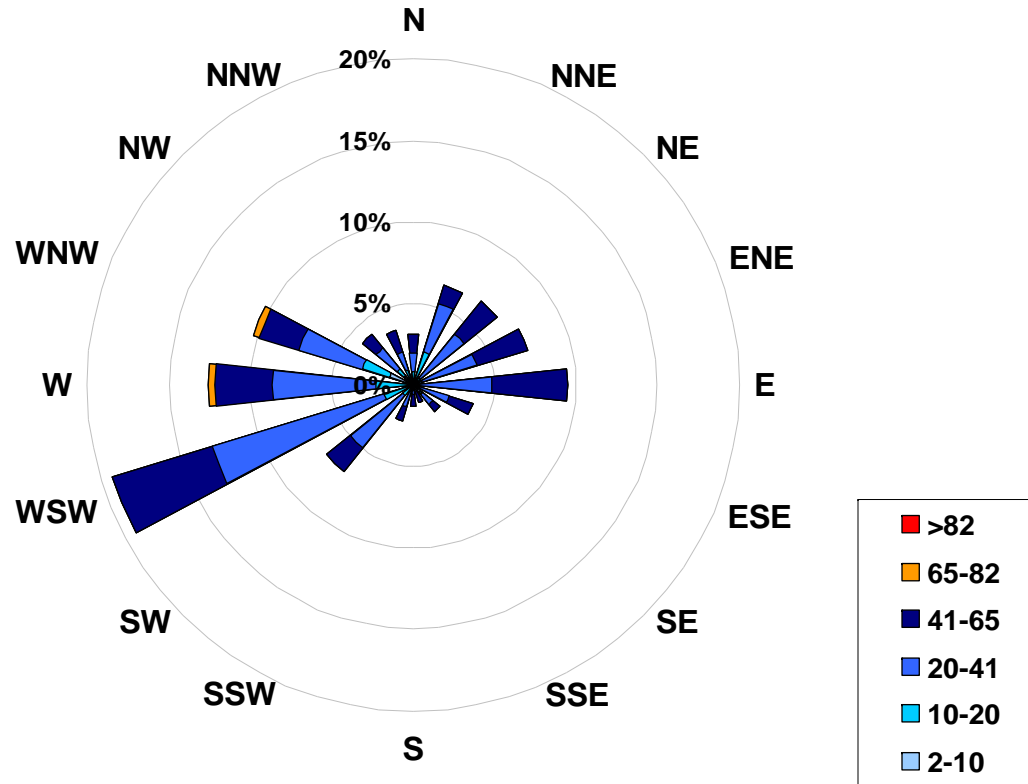


Figure 8. PASZA - Henry Pirker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	< 10		28
10	to 20		87
20	to 41		348
41	to 65		240
65	to 82		6
	> 82		0
Total Non-Zero Values			709

## PASZA - Henry Pirker Ozone Eight Hour Average Summary

Station: Henry Pirker  
 Station Owner: PASZA

### EIGHT HOUR RUNNING AVERAGE TABLE

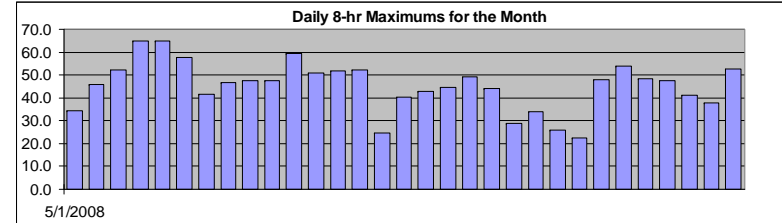
**Ozone (O<sub>3</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	64.9 ppb 4-May 19:00 20:00

Percentile	99	95	75	50	25	5	1
	63.0	53.4	43.0	34.0	23.6	16.4	11.2



**Status Flag Characters**

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

Day	Mountain Standard Time																								Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		23:00 0:00
1-May-08	26	26	26	26	25	25	24	23	22	22	22	22	23	24	26	28	31	33	34	34	34	33	31	29	34.3	
2-May-08	27	25	23	19	18	15	12	10	8	6	7	11	15	20	25	31	36	41	44	46	46	46	45	43	45.9	
3-May-08	42	40	37	36	32	27	24	22	21	21	23	26	31	36	41	45	48	51	52	52	51	50	49	48	52.2	
4-May-08	47	45	44	44	43	42	42	43	43	44	45	46	48	50	53	56	59	62	64	65	64	62	60	58	64.9	
5-May-08	56	53	50	47	46	44	43	41	41	43	46	50	53	56	60	63	64	65	65	64	61	59	58	56	64.7	
6-May-08	54	51	46	40	36	30	24	21	24	27	30	35	41	47	53	57	58	57	55	54	51	48	45	42	57.7	
7-May-08	40	38	35	30	26	25	21	19	18	N	N	N	N	N	N	N	N	N	N	42	41	40	40	38	41.6	
8-May-08	38	38	38	38	37	37	36	36	35	35	35	36	37	39	40	42	44	45	46	47	45	44	42	39	46.7	
9-May-08	35	30	26	21	18	15	11	9	9	10	13	17	23	26	32	37	41	44	46	47	47	47	46	45	47.3	
10-May-08	43	41	38	33	31	26	21	17	16	18	21	27	30	35	40	44	47	48	48	47	45	44	43	42	47.7	
11-May-08	39	35	32	30	27	22	20	19	22	28	33	36	41	47	52	56	58	58	59	60	58	54	47	42	59.6	
12-May-08	36	31	27	23	21	21	24	25	28	29	31	33	36	39	43	46	49	50	51	50	47	44	40	37	50.8	
13-May-08	34	32	30	27	27	27	28	29	33	35	38	41	44	46	50	52	52	52	52	52	51	50	48	47	51.9	
14-May-08	45	44	42	40	38	37	35	35	36	38	41	44	48	49	52	52	51	48	45	41	37	33	29	26	52.2	
15-May-08	25	23	22	21	21	21	20	20	20	21	22	23	23	24	24	24	24	24	24	23	23	22	22	21	24.7	
16-May-08	21	21	21	21	21	21	22	22	24	25	27	28	30	32	35	36	38	39	40	40	40	38	36	35	40.1	
17-May-08	33	29	27	22	19	16	14	13	13	15	18	23	28	33	37	40	42	43	43	41	40	38	36	34	42.9	
18-May-08	33	33	33	34	35	36	36	36	34	34	32	31	31	31	32	34	36	38	41	43	44	45	44	43	44.6	
19-May-08	42	40	38	35	31	28	26	26	28	29	31	34	37	41	45	47	48	49	49	49	48	48	47	47	49.4	
20-May-08	44	40	36	33	28	22	17	16	15	16	17	18	21	25	29	32	33	33	33	32	30	28	27	24	44.0	
21-May-08	22	20	19	18	17	17	17	18	19	20	22	24	25	27	28	29	29	29	29	29	28	27	27	26	25	29.0
22-May-08	23	20	18	16	14	13	12	12	14	16	18	20	23	27	30	31	32	33	34	34	34	32	30	28	33.7	
23-May-08	26	24	21	19	19	18	17	17	17	18	18	19	19	20	22	23	24	24	24	25	24	24	23	23	25.7	
24-May-08	22	22	22	22	22	22	21	20	20	19	18	17	16	15	15	16	16	16	16	16	16	17	17	18	22.4	
25-May-08	18	19	19	20	20	20	21	21	22	24	26	28	32	35	38	41	43	44	46	48	48	47	45	43	47.9	
26-May-08	42	41	40	38	37	36	35	35	35	35	37	39	41	44	46	49	51	53	54	54	53	52	51	50	53.9	
27-May-08	48	46	43	41	38	35	33	30	29	28	28	28	29	31	33	35	38	40	41	42	42	40	39	40	48.3	
28-May-08	40	39	39	39	40	40	40	39	39	39	39	40	42	44	45	46	47	47	47	47	45	40	40	39	47.4	
29-May-08	37	35	32	29	26	25	22	21	21	22	24	27	31	34	38	40	41	41	40	39	38	36	35	32	41.0	
30-May-08	30	28	26	24	21	19	17	17	18	20	21	23	24	29	33	36	37	37	37	38	37	36	34	33	37.6	
31-May-08	32	31	30	28	27	25	23	23	24	26	28	29	33	39	44	47	50	51	53	52	51	50	47	45	52.6	
Hourly Max	55.8	53.4	49.7	46.7	46.0	44.3	42.5	42.7	43.1	43.9	45.8	49.6	52.9	56.4	60.2	63.3	64.2	64.6	64.7	64.9	63.9	62.5	60.2	58.3		



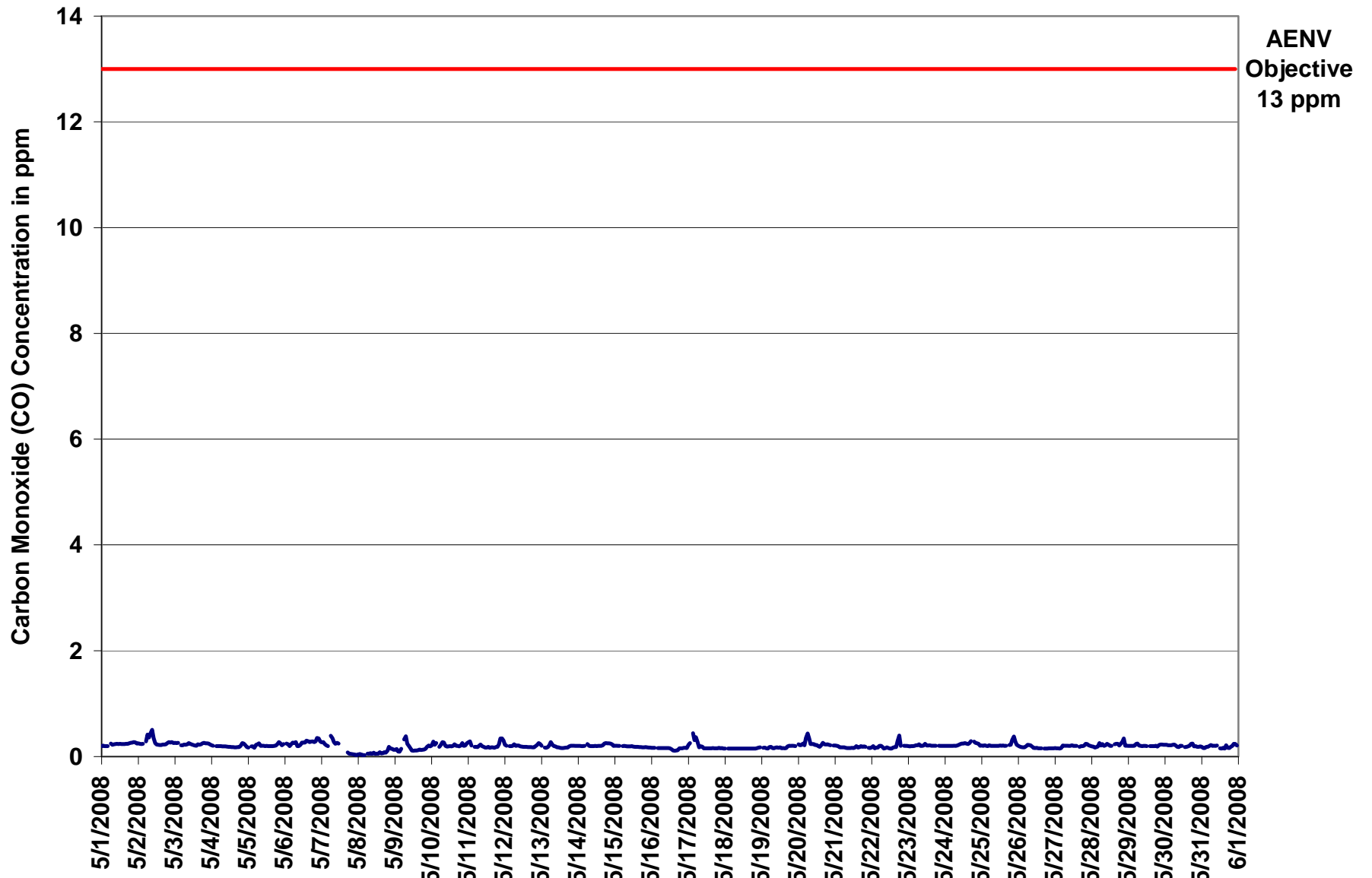


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend



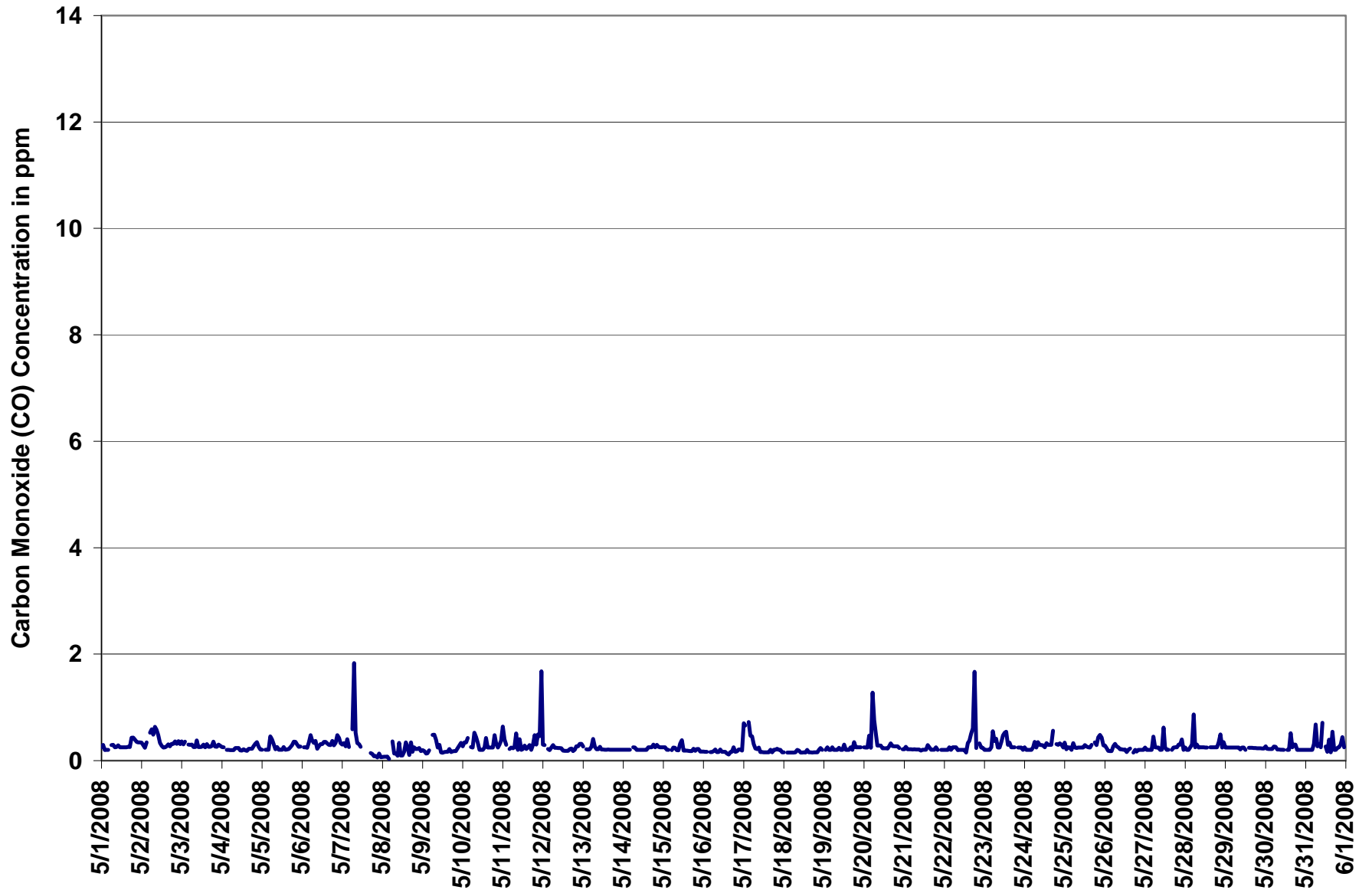
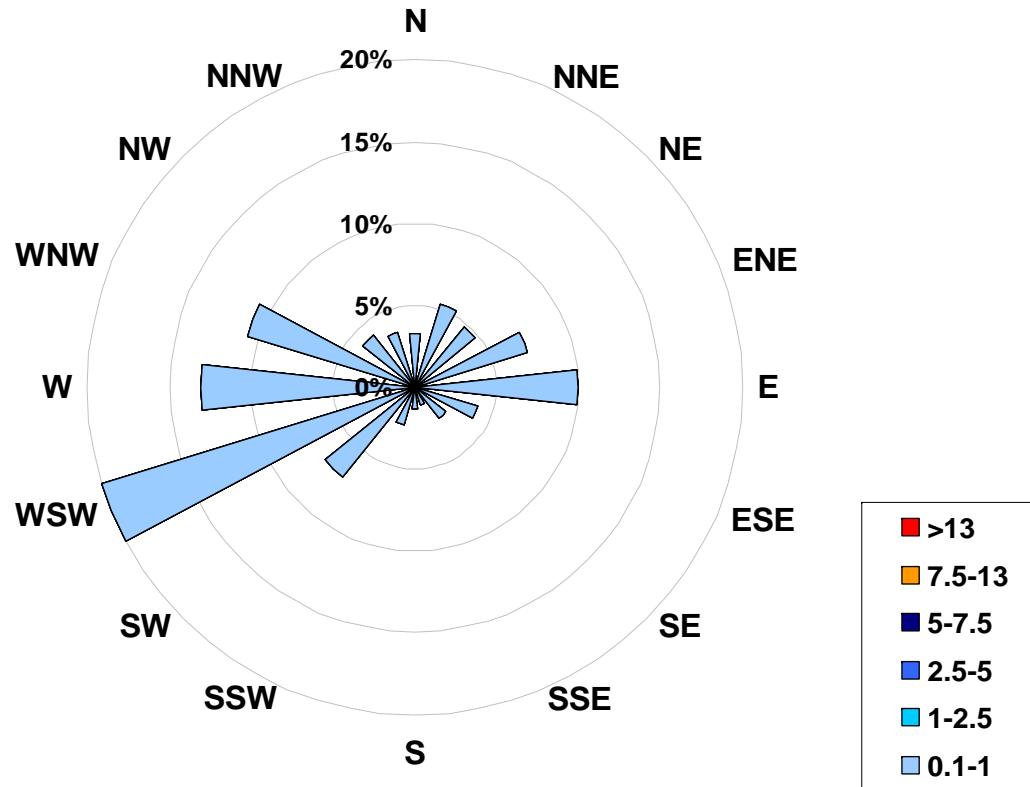


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of CO in ppm Range			Frequency (hrs)
0.1	<	1	708
1	to	2.5	0
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			708

### PASZA - Henry Pirker Carbon Monoxide Eight Hour Average Summary

Station: Henry Pirker  
Station Owner: PASZA

### EIGHT HOUR RUNNING AVERAGE TABLE

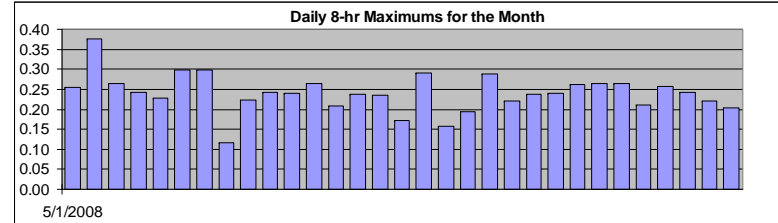
### Carbon Monoxide (CO)

Monitoring Dates: May 1, 2008 to June 1, 2008

Objective Limit: Alberta Environment: 8-hr 5 ppm

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	0.4	ppm	2-May	11:00	12:00		

Percentile	99	95	75	50	25	5	1
	0.3	0.3	0.2	0.2	0.2	0.1	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																							Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-May-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	0.3	0.3	0.3	0.26
2-May-08	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	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.38
3-May-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
4-May-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	0.24
5-May-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	0.23
6-May-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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30
7-May-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	N	0.3	N	N	N	N	N	N	N	N	N	0.0	0.30
8-May-08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12
9-May-08	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.22
10-May-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	0.24
11-May-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	0.24
12-May-08	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.26
13-May-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	0.21
14-May-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	0.24
15-May-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	0.24
16-May-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17
17-May-08	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.29
18-May-08	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16
19-May-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
20-May-08	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.29
21-May-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
22-May-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	0.24
23-May-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	0.24
24-May-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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.26
25-May-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	0.3	0.3	0.3	0.26
26-May-08	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
27-May-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	0.21
28-May-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	0.3	0.2	0.2	0.26
29-May-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	0.24
30-May-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
31-May-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	0.20
Hourly Max	0.30	0.30	0.29	0.28	0.27	0.27	0.29	0.29	0.32	0.36	0.37	0.38	0.36	0.35	0.32	0.31	0.28	0.27	0.28	0.28	0.28	0.29	0.30	0.30	



# PASZA - Henry Pirker Total Hydrocarbons Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

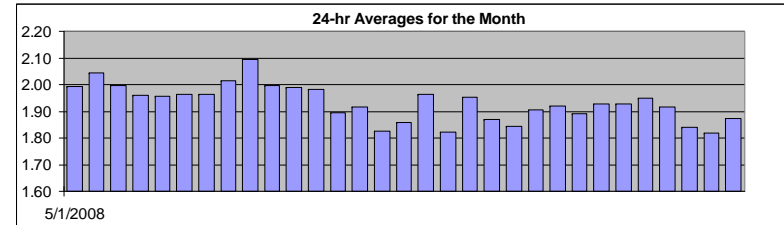
## HOURLY AVERAGE TABLE

### Total Hydrocarbons (THC)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Maximum 1-hr Average: 2.4 ppm 13-May 2:00 3:00  
 Maximum 24-hr Value: 2.1 ppm 9-May



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
	2.3	2.1	2.0	1.9	1.9	1.8	1.8	1.9 ppm	1.9 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																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.05
2-May-08	2.0	2.0	2.0	2.0	A	2.1	2.2	2.4	2.4	2.4	2.1	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.05	2.41
3-May-08	2.0	2.0	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.00	2.12	
4-May-08	2.0	1.9	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	1.96	2.07	
5-May-08	1.9	A	2.0	2.0	2.0	2.2	2.1	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.96	2.18
6-May-08	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.96	2.12	
7-May-08	2.0	2.0	2.0	2.1	2.1	A	2.2	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.96	2.17	
8-May-08	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	C	C	C	C	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.01	2.13		
9-May-08	2.2	2.2	2.1	2.2	2.3	A	2.4	2.3	2.3	2.2	2.1	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	2.10	2.37	
10-May-08	2.0	2.1	2.0	2.2	A	2.2	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.00	2.24	
11-May-08	2.0	2.1	2.1	A	2.0	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.1	1.99	2.15	
12-May-08	2.1	2.1	A	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.98	2.13	
13-May-08	2.0	A	2.4	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.89	2.44	
14-May-08	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.92	1.95	
15-May-08	1.8	1.9	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.83	1.87	
16-May-08	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.9	2.0	1.9	1.86	1.97	
17-May-08	2.0	2.1	A	2.3	2.3	2.4	2.4	2.1	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.96	2.43	
18-May-08	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.82	1.92	
19-May-08	A	2.0	2.0	2.1	2.2	2.2	2.2	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.95	2.24	
20-May-08	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.87	2.10	
21-May-08	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.8	1.84	1.89	
22-May-08	1.9	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.91	2.05	
23-May-08	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.92	1.97	
24-May-08	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.89	1.92	
25-May-08	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	1.93	2.02	
26-May-08	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.98	
27-May-08	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.95	2.01	
28-May-08	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.8	1.92	1.97
29-May-08	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.84	1.99	
30-May-08	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.82	1.89	
31-May-08	1.8	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.87	1.94	
Hourly Avg	1.94	1.97	1.96	1.98	1.98	2.00	2.02	1.98	1.95	1.93	1.92	1.90	1.90	1.89	1.88	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.93	1.93	1.93		
Hourly Max	2.18	2.21	2.44	2.34	2.31	2.43	2.39	2.40	2.41	2.37	2.11	2.03	2.01	2.00	1.98	2.05	2.04	2.05	2.05	2.01	2.02	2.05	2.08	2.10	2.13		

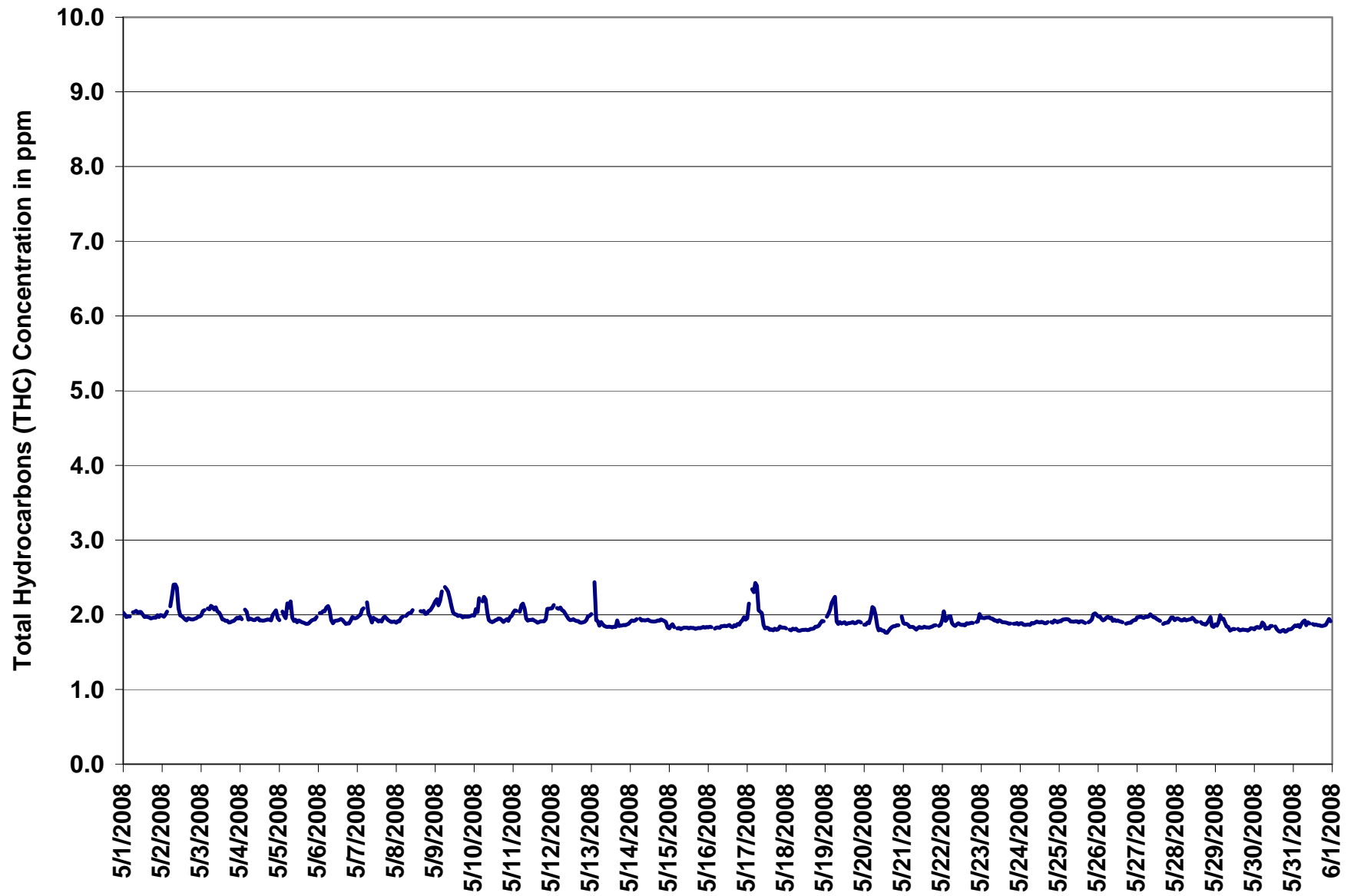


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend



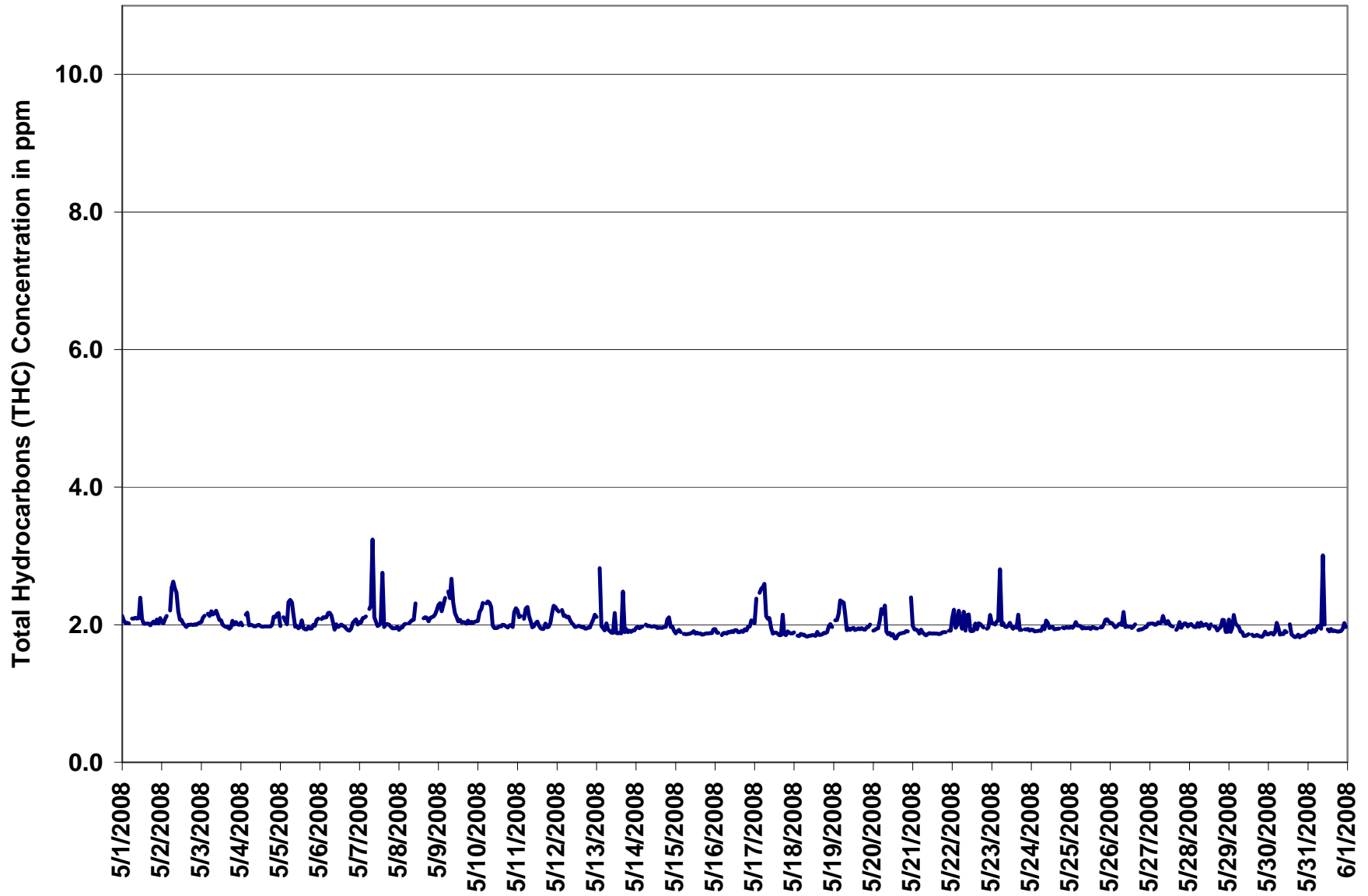
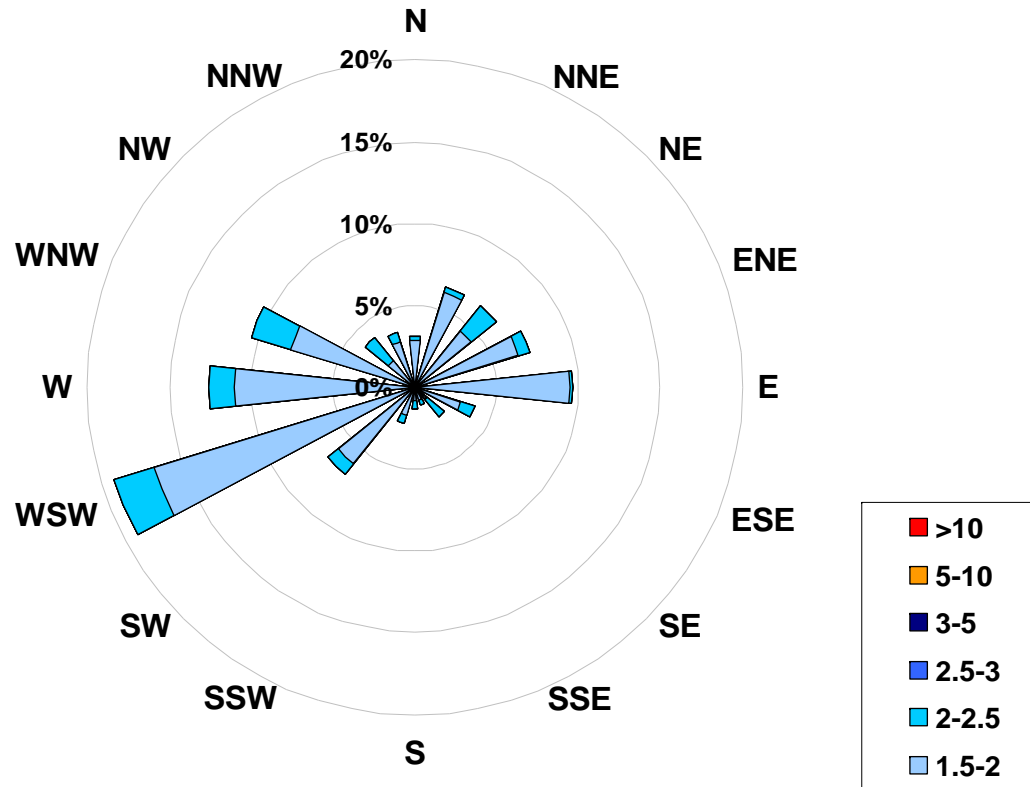


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of THC in ppm Range		Frequency (hrs)
1.5	< 2	588
2	to 2.5	117
2.5	to 3	0
3	to 5	0
5	to 10	0
	> 10	0
Total Non-Zero Values		708

# PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

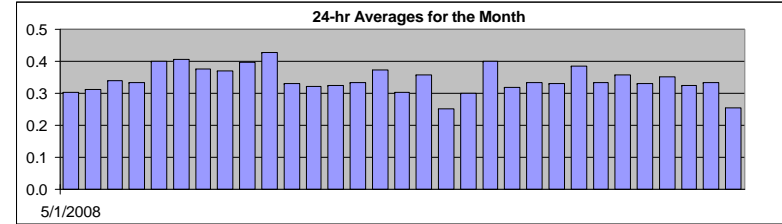
## Total Reduced Sulphur (TRS)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Maximum 1-hr Average:	1.1	ppb	10-May	3:00 4:00
Maximum 24-hr Value:	0.4	ppb	10-May	

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
	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.3 ppb	0.3 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	1	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
2-May-08	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
3-May-08	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
4-May-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-May-08	0	A	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
6-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6
7-May-08	0	0	0	0	0	A	1	0	0	0	0	0	C	C	A	0	0	0	0	1	0	0	0	0	0	0.4	0.6
8-May-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	0.4	0.5
9-May-08	0	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
10-May-08	0	0	0	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
11-May-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	0.3	0.4
12-May-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
13-May-08	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
14-May-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	0.3	0.4
15-May-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	0.4	0.5
16-May-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	0.3	0.4
17-May-08	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
18-May-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	0.3	0.3
19-May-08	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5
20-May-08	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.7
21-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5
22-May-08	0	1	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	0.5
23-May-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	0.3	0.5
24-May-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	0.4	0.5
25-May-08	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.5
26-May-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	0.4	0.4
27-May-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	0.3	0.4
28-May-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	0.4	0.4
29-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
30-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
31-May-08	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
Hourly Avg	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
Hourly Max	0.5	0.5	0.6	1.1	0.5	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.4	0.6	0.5	0.5	0.5	0.5		

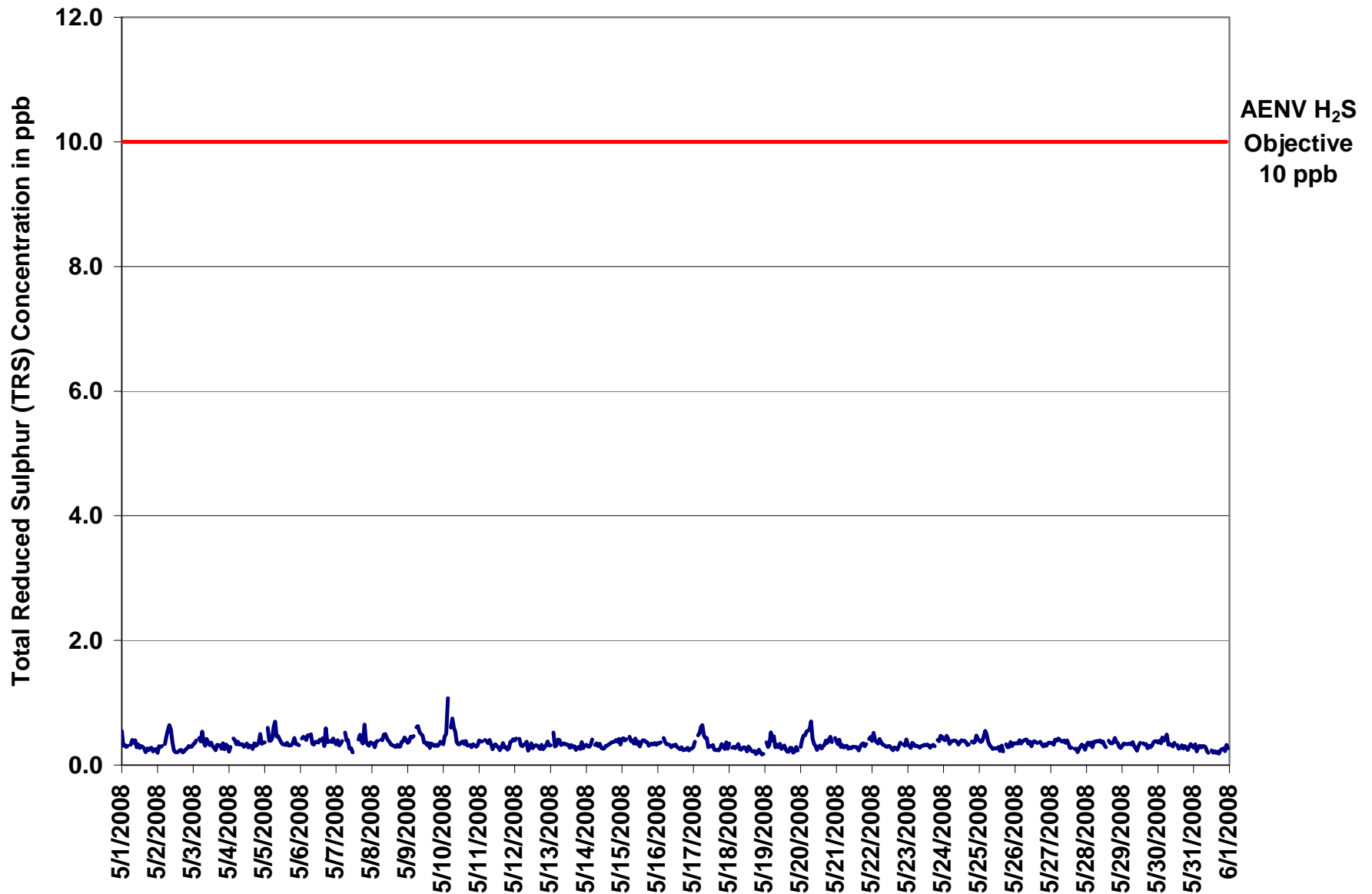


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

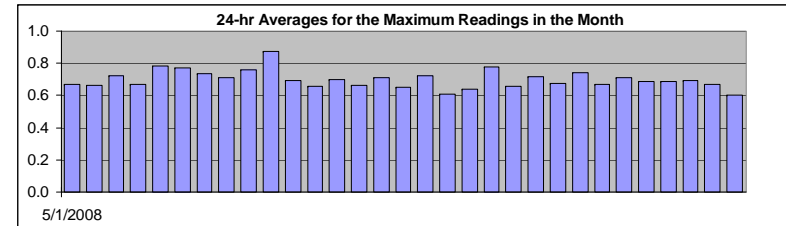
**Total Reduced Sulphur (TRS)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	2.2	ppb	10-May	3:00 4:00
Maximum 24-hr Value:	0.9	ppb	10-May	

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
	1.2	0.9	0.8	0.7	0.6	0.5	0.5	0.7 ppb	0.7 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-May-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	0.7	1.0
2-May-08	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0.7	1.0
3-May-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	1	0.7	1.2
4-May-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	1	0.7	0.9
5-May-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	0.8	1.2
6-May-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	1	0.8	1.4
7-May-08	1	1	1	1	1	A	1	1	1	1	1	1	1	C	C	A	1	1	1	1	1	1	1	1	1	0.7	1.1
8-May-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	0.7	1.1
9-May-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	0.8	1.3
10-May-08	1	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.2
11-May-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	1	0.7	0.8
12-May-08	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
13-May-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	0.7	1.0
14-May-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	0.7	0.8
15-May-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	0.7	0.8
16-May-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	1	0.7	0.8
17-May-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	1	0.7	1.1
18-May-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.6	0.8
19-May-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	A	0.6	0.9
20-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.5
21-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.8
22-May-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	1	0.7	1.1
23-May-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	0.7	0.9
24-May-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	1	0.7	0.8
25-May-08	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	A	1	1	1	1	1	1	1	0.7	0.9
26-May-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	1	0.7	0.9
27-May-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	1	0.7	0.8
28-May-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	1	0.7	0.8
29-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
30-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
31-May-08	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
Hourly Avg	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Hourly Max	1.0	0.9	2.2	2.2	1.0	1.2	1.2	1.5	1.0	0.9	1.0	0.8	0.8	0.8	0.8	0.9	1.0	0.8	1.4	0.8	1.1	0.9	0.9	1.1	0.9	0.9	



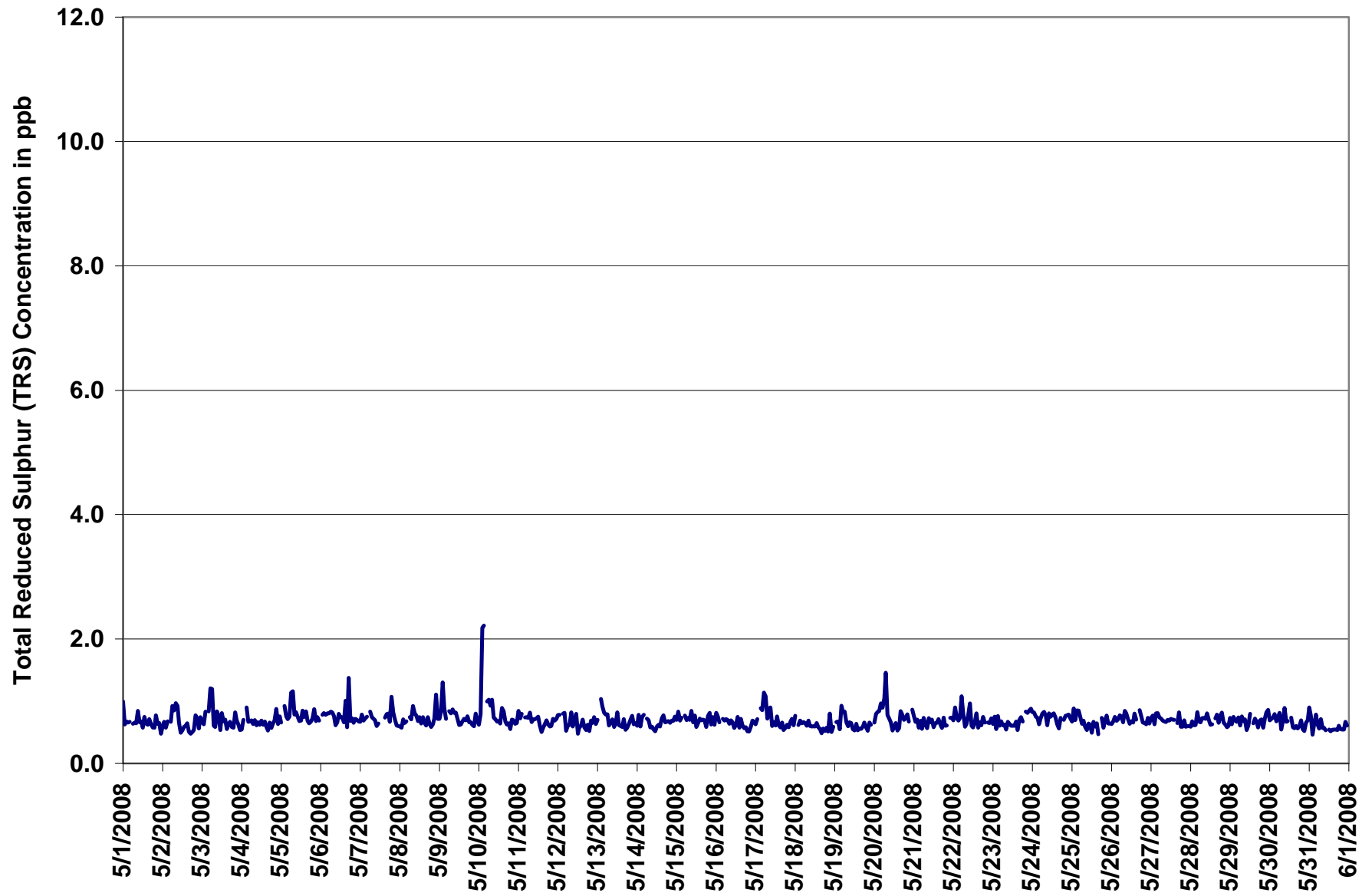
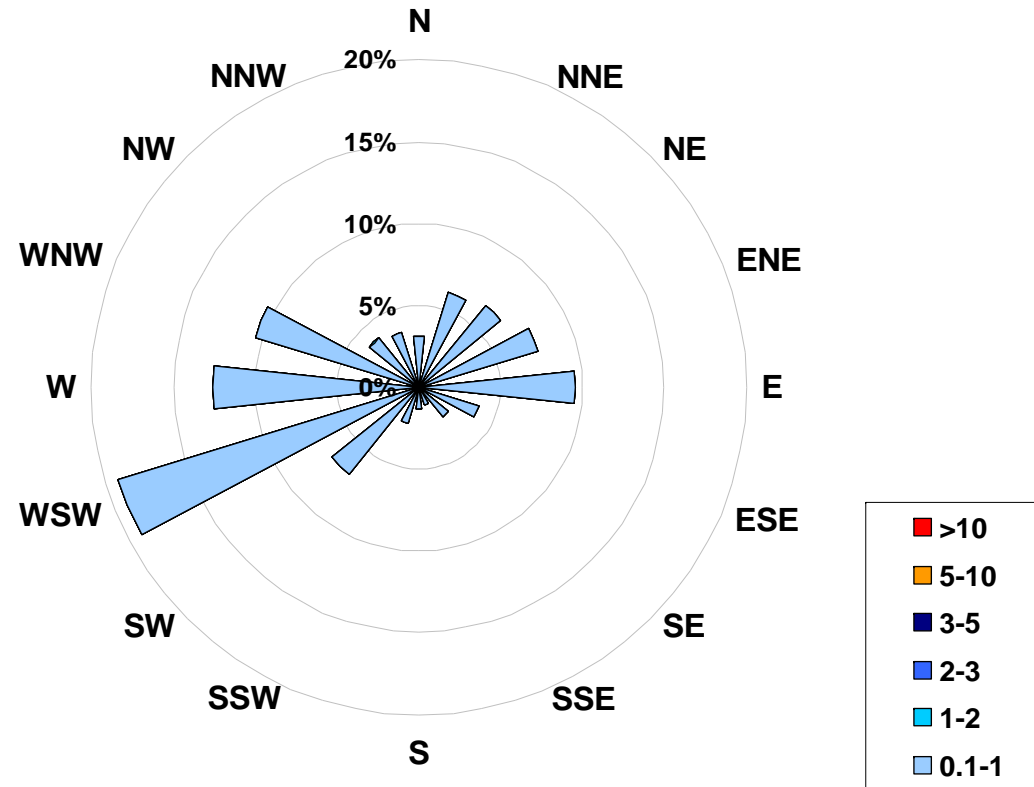


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of TRS in ppb Range			Frequency (hrs)
0.1	<	1	708
1	to	2	1
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			709

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

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

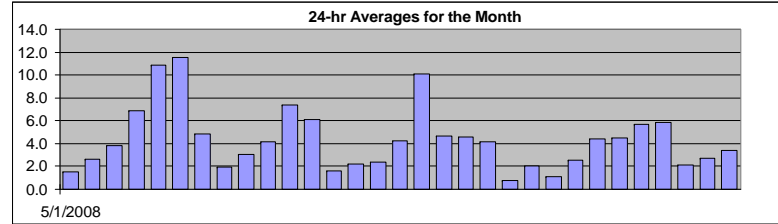
## Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m<sup>3</sup> 24-hr 30 µg/m<sup>3</sup>  
 Summary

Number of 24-hr Exceedances (draft):	0			
Maximum 1-hr Average:	34.4	µg/m <sup>3</sup>	6-May	5:00 6:00
Maximum 24-hr Value:	11.6	µg/m <sup>3</sup>	6-May	

AIC Time:	0 hrs	Operational Time:	735 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	17.9	11.5	6.0	3.2	1.6	0.0	0.0	4.3 3 µg/m <sup>3</sup>	3.6 µg/m <sup>3</sup>



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-08	1	1	0	0	1	1	1	2	1	1	0	0	1	2	3	2	2	3	2	3	2	3	2	1	1.5	3.1
2-May-08	1	1	1	3	3	2	3	1	6	3	3	0	D	0	0	0	2	0	3	4	6	7	7	5	2.6	7.0
3-May-08	11	8	5	7	4	5	5	0	4	6	4	3	2	1	3	5	4	1	1	1	2	6	3	3.8	11.3	
4-May-08	3	2	2	2	2	3	4	D	2	1	0	0	1	4	8	9	13	13	12	20	15	17	15	11	6.8	19.6
5-May-08	11	9	12	11	11	11	13	11	7	8	10	8	11	9	8	9	9	9	14	16	15	14	10	10	10.8	15.6
6-May-08	12	11	18	21	23	34	18	18	10	10	8	5	8	11	11	10	7	8	5	3	5	7	8	6	11.6	34.4
7-May-08	4	3	2	3	3	6	8	7	10	3	2	2	10	0	5	9	12	8	3	3	3	4	2	3	4.8	11.8
8-May-08	4	1	2	0	2	1	4	3	3	2	1	0	1	2	C	C	C	4	D	0	2	2	D	D	1.9	4.1
9-May-08	2	0	5	3	5	5	9	7	4	2	0	0	0	1	0	2	2	3	7	4	4	2	3	2	3.0	8.6
10-May-08	2	5	3	14	6	4	6	7	7	D	0	0	0	2	13	4	0	0	2	6	7	3	1	3	4.2	13.6
11-May-08	5	3	1	2	2	4	5	5	6	4	1	4	5	6	6	7	11	8	8	9	13	17	25	22	7.4	24.8
12-May-08	25	17	8	8	7	8	8	7	6	2	3	0	3	6	3	4	5	2	2	3	3	2	6	7	6.1	24.8
13-May-08	4	2	4	2	2	3	2	0	0	0	0	0	0	1	1	2	2	2	2	4	3	2	1	1	1.6	4.0
14-May-08	1	2	1	2	2	1	4	2	1	1	3	2	9	6	4	4	6	2	0	0	0	0	0	0	2.2	9.2
15-May-08	0	0	0	0	0	1	2	1	3	2	2	2	3	2	7	2	7	6	6	4	3	2	0	1	2.4	7.4
16-May-08	1	0	0	1	1	1	2	2	2	2	1	1	2	3	8	10	8	8	7	7	8	10	8	8	4.3	10.0
17-May-08	8	12	15	14	14	15	11	9	12	7	7	6	7	10	10	10	10	9	9	9	10	10	10	9	10.1	14.8
18-May-08	9	7	6	6	5	7	7	7	6	5	4	4	2	3	2	2	3	3	5	2	3	5	6	6	4.7	9.0
19-May-08	6	3	4	5	5	6	6	5	2	3	3	2	3	1	3	3	3	5	5	5	8	6	10	8	4.6	10.4
20-May-08	6	5	4	5	5	6	9	13	3	4	3	1	1	1	0	3	5	6	5	8	3	1	2	2	4.2	12.9
21-May-08	1	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1	2	3	3	3	1	1	1	0.8	2.7
22-May-08	1	2	1	1	1	2	3	1	0	1	0	1	0	0	1	4	3	4	5	5	5	4	3	2	2.0	4.7
23-May-08	3	2	3	2	2	0	2	2	2	0	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1.1	2.8
24-May-08	1	0	1	0	1	1	2	2	2	1	3	5	4	5	3	2	4	6	7	2	3	2	2	2	2.5	6.7
25-May-08	3	3	4	3	3	3	3	2	1	0	2	1	2	4	4	6	5	5	7	6	9	17	9	4	4.4	17.1
26-May-08	4	3	3	3	4	4	7	6	6	4	2	4	4	4	6	5	6	5	4	5	5	6	5	5	4.5	6.8
27-May-08	5	5	5	5	4	6	6	5	6	7	6	6	6	6	5	4	5	6	6	4	7	9	8	6	5.7	8.7
28-May-08	4	4	4	4	4	5	6	5	8	8	8	9	6	5	8	10	6	4	5	7	7	9	3	0	5.9	9.7
29-May-08	2	3	3	5	4	7	4	1	1	2	0	0	1	0	0	2	2	1	2	0	5	2	2	1	2.1	7.0
30-May-08	1	2	4	5	5	6	4	2	0	3	3	2	0	1	2	1	9	2	1	0	1	2	4	3	2.7	8.7
31-May-08	2	3	6	2	5	5	4	3	1	1	0	0	0	0	2	3	3	5	5	4	5	8	7	7	3.4	8.1
Hourly Avg	4.7	3.9	4.0	4.5	4.5	5.3	5.3	4.6	3.9	3.1	2.6	2.2	3.1	3.2	4.3	4.4	5.2	4.5	4.7	4.7	5.2	5.8	5.6	4.8		
Hourly Max	24.8	16.8	17.6	20.9	22.8	34.4	17.7	18.0	11.8	10.3	10.1	8.7	11.4	11.1	13.4	10.0	12.6	13.2	14.2	19.6	14.9	17.1	24.8	21.8		

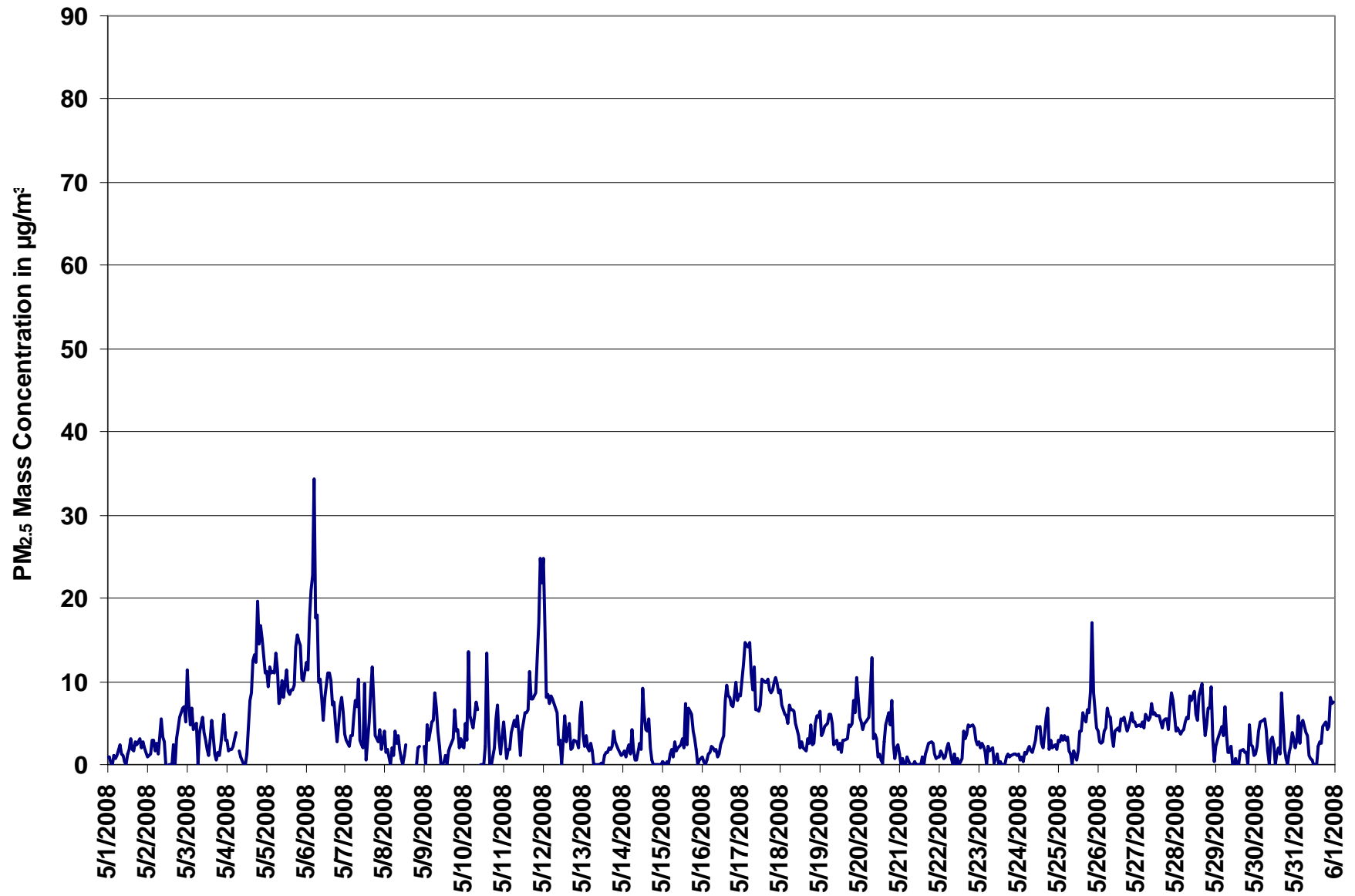


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

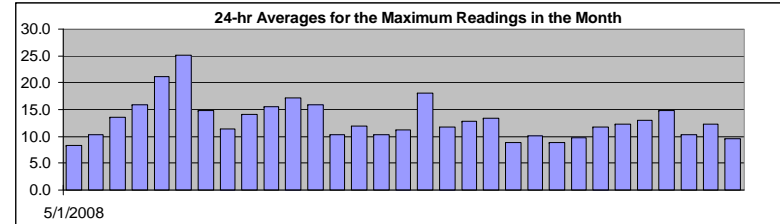
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Particulate Matter (PM<sub>2.5</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	63.5	µg/m <sup>3</sup>	6-May	5:00 6:00
Maximum 24-hr Value:	25.1	µg/m <sup>3</sup>	6-May	



AIC Time:	0 hrs	Operational Time:	741 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	38.9	25.3	15.1	11.7	8.8	6.1	5.4	13.0 12 µg/m <sup>3</sup>	12.6 µg/m <sup>3</sup>

**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-May-08	9	8	8	9	11	9	9	11	12	11	9	8	6	8	9	6	6	7	6	7	6	8	7	8	8.2	11.9
2-May-08	6	7	9	11	14	11	12	11	14	15	13	6	6	11	6	8	11	7	10	12	11	11	11	13	10.2	15.3
3-May-08	25	25	17	18	19	19	18	9	12	14	16	11	10	6	12	12	12	10	9	9	6	6	14	15	13.5	24.8
4-May-08	11	14	12	13	13	16	14	9	11	7	6	6	11	13	16	16	19	19	20	31	27	29	26	23	15.8	30.6
5-May-08	22	23	27	27	28	25	25	24	16	17	16	15	18	14	17	18	18	16	32	24	22	22	21	20	21.1	32.5
6-May-08	23	28	50	39	43	63	29	28	18	18	20	12	15	30	32	34	21	24	11	9	13	14	16	14	25.1	63.5
7-May-08	13	10	10	14	13	16	17	15	35	11	9	13	22	12	10	16	23	23	10	10	13	14	11	13	14.8	35.1
8-May-08	14	10	11	11	12	11	14	11	12	11	14	5	6	10	C	C	C	29	12	6	13	12	8	8	11.4	28.8
9-May-08	14	19	21	15	17	18	19	14	11	15	10	6	6	9	12	10	10	20	21	13	13	15	16	15	14.1	21.5
10-May-08	14	16	15	35	17	17	19	21	23	6	6	8	9	14	43	14	8	8	9	12	15	16	12	16	15.5	42.8
11-May-08	14	14	13	13	14	15	17	14	12	8	8	10	13	13	15	17	27	18	18	18	22	28	37	33	17.2	36.7
12-May-08	39	36	19	20	19	20	18	19	16	11	8	8	12	23	11	10	13	6	6	11	10	11	18	19	15.8	38.7
13-May-08	12	11	14	12	12	14	10	11	6	7	9	8	7	9	5	8	10	8	13	12	13	12	12	11	10.4	14.3
14-May-08	11	12	12	12	14	15	14	9	8	8	11	8	43	14	12	13	13	12	9	7	8	7	8	6	11.9	43.2
15-May-08	8	10	8	9	9	9	8	8	8	7	9	8	9	8	28	11	14	14	13	10	11	9	8	11	10.3	27.8
16-May-08	10	10	10	10	10	13	11	8	7	6	5	6	8	9	16	16	14	18	13	12	14	15	14	15	11.3	17.8
17-May-08	15	24	26	26	25	25	19	17	17	16	14	13	14	18	20	16	19	15	15	14	18	16	17	14	18.1	26.0
18-May-08	15	13	13	12	12	14	14	12	13	12	10	10	8	9	8	8	11	8	15	13	11	14	14	13	11.8	15.5
19-May-08	17	13	15	14	15	16	14	14	11	10	8	6	8	9	11	10	10	11	12	11	16	14	25	18	12.9	25.3
20-May-08	15	14	11	14	15	16	17	28	14	13	12	7	10	7	7	14	12	15	14	16	12	11	15	12	13.4	27.6
21-May-08	9	8	13	10	9	10	6	5	7	8	8	5	8	9	8	6	9	11	10	13	12	10	9	10	8.8	12.9
22-May-08	9	15	13	12	12	14	12	9	8	7	5	9	5	7	8	15	13	10	11	9	11	11	9	9	10.1	15.3
23-May-08	11	12	12	11	9	8	10	12	14	7	10	11	5	8	7	5	5	7	6	9	9	8	8	7	8.8	13.9
24-May-08	7	7	9	7	10	12	10	10	9	11	11	12	12	11	8	7	9	12	16	7	11	9	10	8	9.7	15.7
25-May-08	9	10	10	11	10	9	11	8	7	5	7	6	8	12	13	15	16	14	14	11	17	25	20	12	11.7	25.2
26-May-08	15	13	15	14	15	17	16	12	9	8	8	9	10	13	14	14	16	12	10	11	9	10	13	13	12.3	16.9
27-May-08	16	15	15	16	17	16	15	11	10	12	11	10	13	12	14	12	14	12	11	11	12	14	12	11	13.0	17.0
28-May-08	10	10	13	16	16	20	16	10	14	14	15	17	16	17	21	21	11	11	13	13	12	22	15	13	14.9	22.0
29-May-08	14	15	17	15	16	20	12	10	6	9	5	4	8	7	8	9	11	7	7	6	13	10	10	6	10.2	19.8
30-May-08	6	7	9	12	10	10	11	6	8	44	43	8	3	8	11	7	25	18	10	6	8	9	7	8	12.2	44.3
31-May-08	7	10	14	7	9	11	8	7	7	7	6	4	7	7	8	9	13	11	13	9	11	15	16	15	9.6	16.4
Hourly Avg	13.5	14.2	14.8	15.0	15.0	16.4	14.4	12.7	12.1	11.5	11.0	8.6	10.9	11.6	13.6	12.5	13.8	13.3	12.5	11.7	12.8	13.8	14.1	13.2		
Hourly Max	38.7	35.6	50.2	39.0	43.0	63.5	29.5	27.6	35.1	44.3	42.7	17.1	43.2	30.0	42.8	33.9	26.8	28.8	32.5	30.6	26.5	28.8	36.7	33.4		

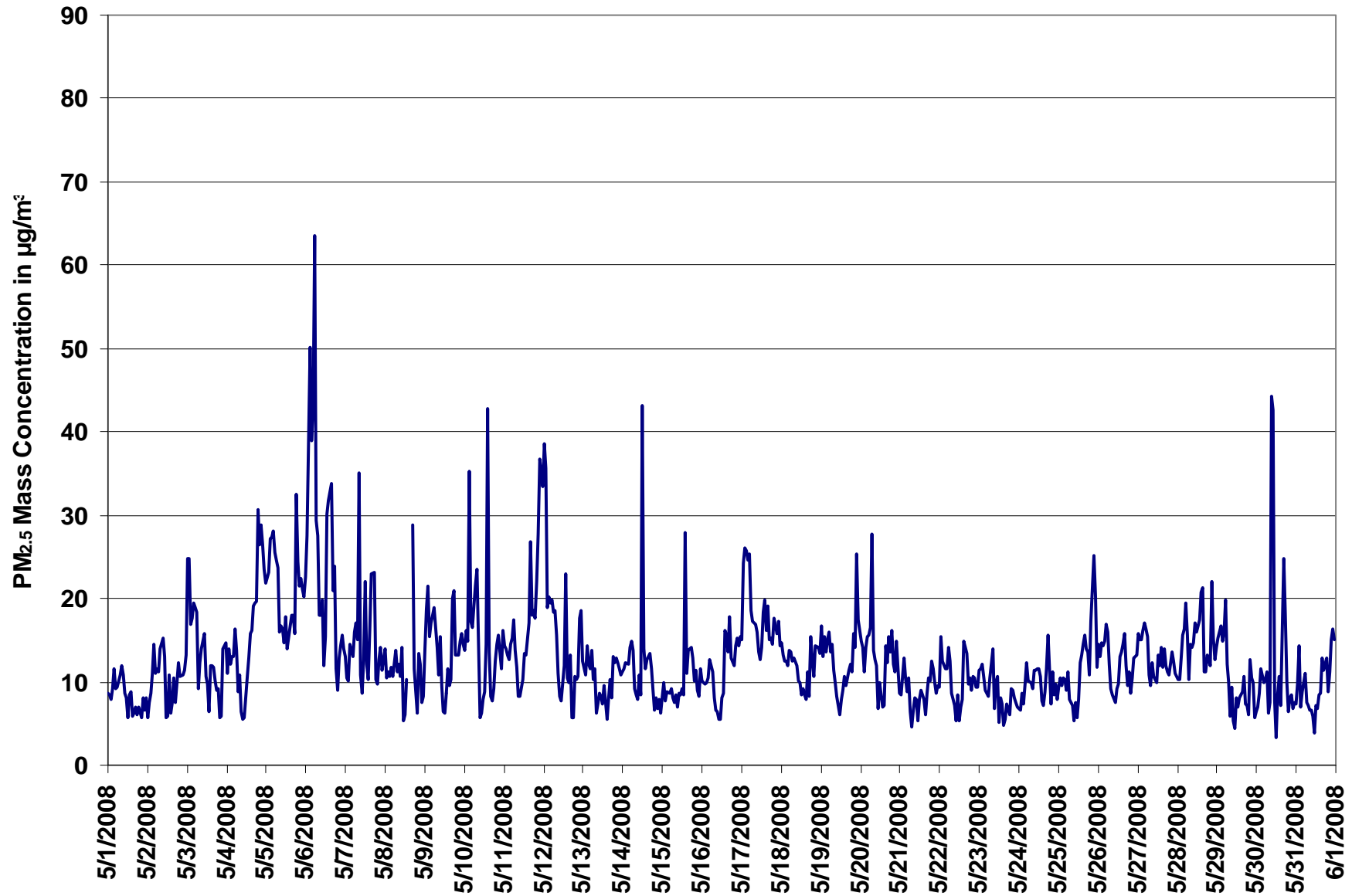
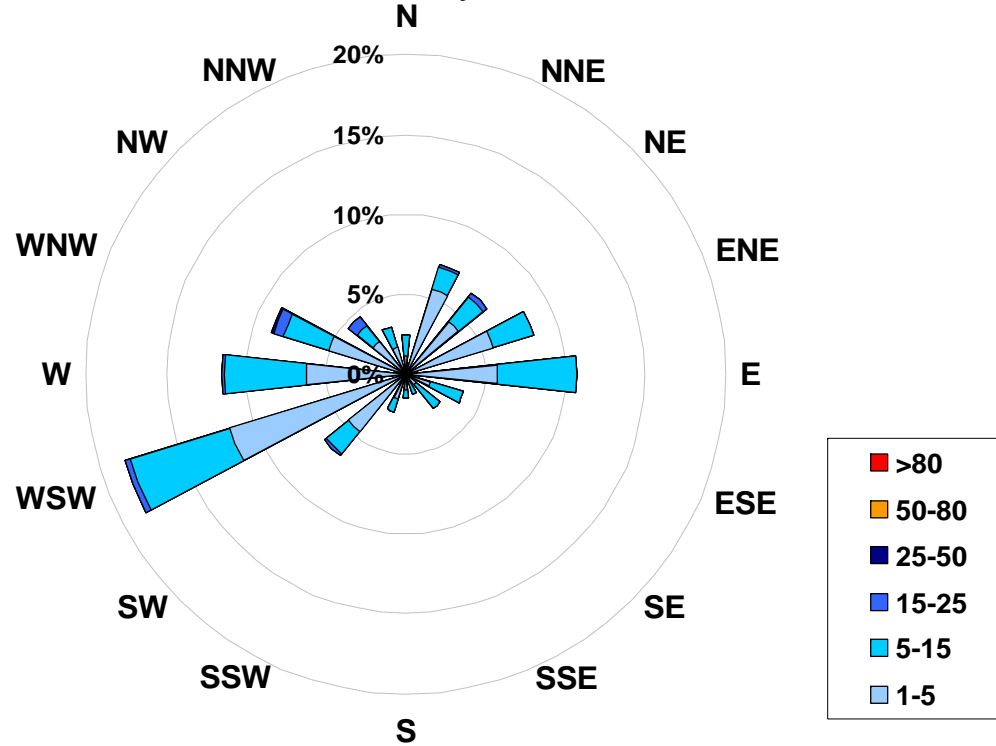


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**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 May 2008**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	490
5	to	15	229
15	to	25	15
25	to	50	1
50	to	80	0
	>	80	0
Total Non-Zero Values			735

# PASZA - Henry Pirker Relative Humidity Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

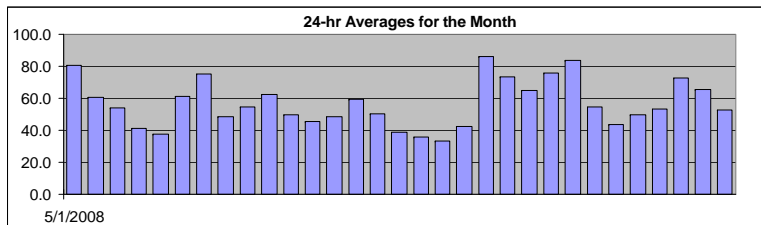
## Relative Humidity (RH)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	94.5	%	7-May	7:00 8:00
Maximum 24-hr Value:	85.9	%	20-May	

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
	92.6	89.9	74.6	56.2	39.1	25.0	19.8	56.6 %	56.2 %



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00			22:00 23:00
1-May-08	92	92	91	91	92	92	92	92	92	90	87	81	77	68	64	59	59	64	66	71	76	81	83	83	80.6	92.3
2-May-08	83	84	87	91	92	93	93	86	76	69	63	52	40	36	30	27	33	29	32	40	46	53	59	61	60.7	92.6
3-May-08	64	71	74	78	85	89	81	74	64	54	45	39	32	26	30	37	36	35	38	41	44	49	53	53	53.7	89.0
4-May-08	51	57	59	58	57	57	55	46	45	46	40	31	25	24	24	23	25	28	28	35	40	40	43	44	40.9	58.9
5-May-08	45	49	59	62	62	62	55	49	41	35	32	23	22	22	22	21	21	24	24	28	33	39	40	43	37.8	61.7
6-May-08	45	52	62	69	74	74	72	62	54	52	50	45	41	42	54	58	53	63	68	67	67	77	83	88	61.3	88.3
7-May-08	90	91	92	92	93	94	94	95	92	80	71	63	67	57	53	55	63	72	65	63	61	67	67	65	75.1	94.5
8-May-08	81	81	77	69	64	60	55	53	53	48	47	41	36	32	31	30	29	30	31	33	40	41	48	62	48.7	80.9
9-May-08	70	78	82	77	78	77	81	79	70	63	54	40	33	31	29	29	29	31	34	36	47	50	54	60	54.5	81.7
10-May-08	67	75	76	82	84	85	80	73	61	54	44	41	37	43	51	67	61	48	43	49	55	69	75	76	62.3	84.6
11-May-08	82	85	87	89	92	92	76	63	50	39	31	27	25	26	25	23	25	25	25	23	28	38	62	54	49.7	91.9
12-May-08	60	59	58	60	62	66	68	62	60	55	45	36	30	32	29	27	27	26	27	29	36	42	49	50	45.7	68.0
13-May-08	51	52	51	55	65	77	78	66	51	47	40	38	35	33	33	31	34	34	37	42	46	52	56	60	48.6	78.2
14-May-08	65	69	70	71	72	73	67	58	43	38	34	32	30	33	40	45	58	77	82	79	78	75	73	69	59.6	82.3
15-May-08	69	70	71	68	64	61	57	48	43	41	37	37	37	37	39	40	40	41	43	45	49	53	55	56	50.0	70.5
16-May-08	55	56	57	59	58	59	54	50	45	42	38	33	28	23	19	19	17	21	23	25	29	36	40	41	38.6	59.4
17-May-08	45	51	60	63	65	66	56	48	44	37	28	20	18	15	14	16	20	20	22	26	27	30	32	33	35.7	65.6
18-May-08	36	38	39	41	38	38	39	40	41	43	43	40	35	32	28	22	20	22	23	21	23	29	33	38	33.4	43.0
19-May-08	46	46	55	59	60	63	57	53	49	44	41	36	30	28	26	27	27	27	28	29	32	36	47	76	42.6	76.2
20-May-08	83	88	92	90	94	95	93	88	89	87	88	80	76	69	65	74	89	91	89	88	88	88	88	88	85.9	94.5
21-May-08	87	86	87	86	84	84	81	79	78	75	70	66	65	65	64	60	61	61	63	66	69	71	76	80	73.5	87.3
22-May-08	83	88	84	86	89	89	82	74	66	63	60	55	49	45	41	42	44	46	50	55	59	66	69	73	64.9	89.4
23-May-08	75	78	81	82	82	80	79	80	81	81	79	80	79	73	68	65	65	64	64	68	72	75	78	82	75.5	82.0
24-May-08	84	86	88	87	87	88	89	89	88	88	89	88	86	84	82	78	78	79	80	80	84	78	76	74	83.7	89.3
25-May-08	76	78	80	81	81	81	79	72	64	55	50	47	42	38	37	35	34	32	32	33	38	44	51	51	54.6	81.0
26-May-08	53	54	54	55	60	63	61	59	56	48	36	34	33	31	29	29	28	26	27	30	36	41	46	52	43.4	63.5
27-May-08	58	63	67	71	75	77	74	67	60	55	51	45	40	35	34	31	31	30	29	30	34	41	44	48	49.6	77.2
28-May-08	51	54	58	61	65	67	62	56	52	47	41	38	36	32	34	55	54	54	48	50	56	63	70	75	53.4	75.2
29-May-08	79	87	90	91	86	86	80	69	64	65	64	61	58	55	53	55	59	59	65	66	83	90	90	92	72.8	91.7
30-May-08	90	90	91	90	90	89	86	76	66	59	57	55	46	41	42	41	55	75	59	46	48	52	57	62	65.2	90.7
31-May-08	64	67	73	69	72	76	74	70	62	57	52	42	37	35	33	33	33	33	35	36	42	48	55	62	52.6	76.3
Hourly Avg	67.1	70.1	72.6	73.6	74.9	75.9	72.6	66.9	61.3	56.8	51.9	46.7	42.7	40.1	39.4	40.5	42.2	44.0	44.5	46.1	50.6	55.3	59.7	62.9		
Hourly Max	92.2	91.5	92.2	92.2	93.6	94.5	94.3	94.5	92.5	90.1	88.9	88.0	86.0	84.1	81.8	77.7	89.0	90.7	88.9	88.4	87.9	90.4	90.3	91.7		



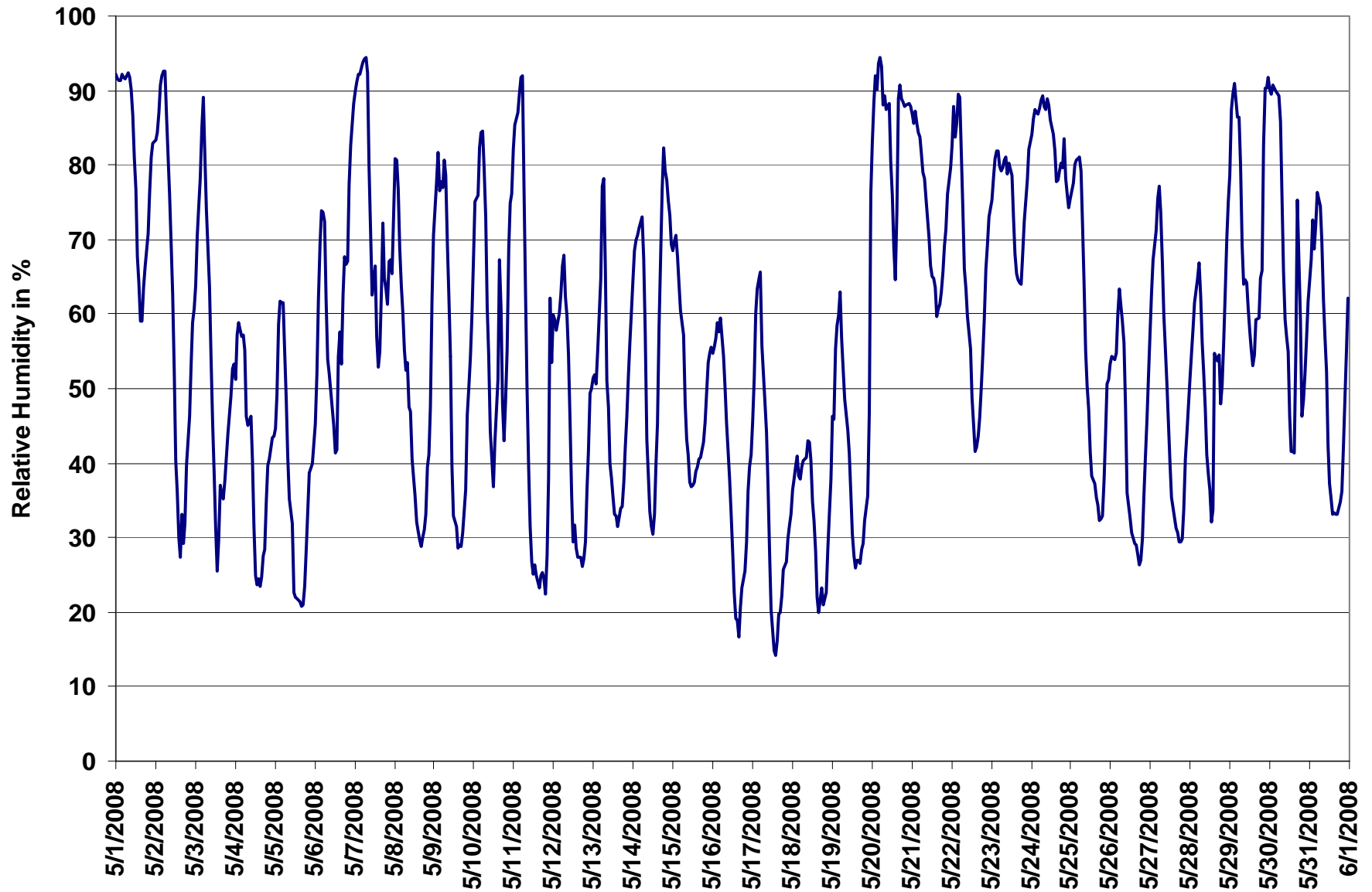


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

# PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

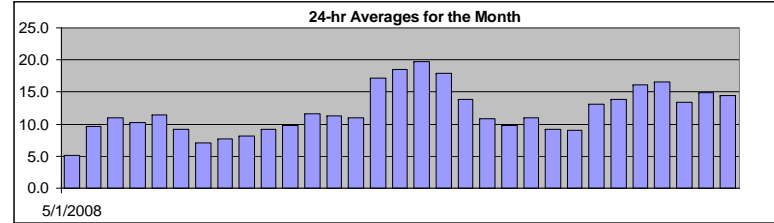
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	31.0 °C	17-May	14:00 15:00
Maximum 24-hr Value:	19.7 °C	17-May	



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
	25.0	20.8	15.8	11.5	8.4	3.3	0.4	12.0 °C	11.5 °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																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	2	2	2	2	2	2	2	2	2	2	4	5	6	9	9	10	10	10	9	8	7	6	5	5	5	5.1	10.3
2-May-08	5	4	3	1	0	0	1	4	7	9	11	13	14	16	17	17	17	17	17	15	13	11	9	9	9	9.6	17.4
3-May-08	8	6	5	3	1	0	3	6	10	13	15	16	18	19	17	16	16	17	15	15	13	11	10	8	8	10.9	18.7
4-May-08	8	6	5	5	5	4	6	7	9	10	11	13	15	16	16	16	15	14	14	13	11	10	9	8	8	10.2	15.8
5-May-08	8	6	4	4	3	3	5	8	11	12	14	16	17	17	18	18	18	18	16	15	13	12	11	10	10	11.5	18.3
6-May-08	10	8	6	4	4	4	5	9	11	12	12	13	15	15	13	12	12	11	10	10	9	7	6	6	6	9.2	14.6
7-May-08	5	4	3	0	-1	0	2	4	6	9	10	12	11	12	12	12	10	9	9	9	9	8	7	8	8	7.1	12.2
8-May-08	6	5	6	5	4	3	4	4	4	7	7	10	11	12	12	13	13	12	11	10	9	7	6	5	5	7.7	12.9
9-May-08	3	2	0	0	0	0	1	3	6	8	10	12	13	14	15	14	14	13	13	12	11	10	9	8	8	8.1	15.0
10-May-08	7	6	6	4	3	2	4	7	10	12	14	15	16	14	12	10	10	12	13	12	11	9	7	7	7	9.3	15.8
11-May-08	5	4	3	2	1	1	4	9	11	13	14	15	15	15	15	16	15	15	15	14	12	9	6	6	6	9.7	15.8
12-May-08	5	5	6	5	4	3	4	7	9	12	15	16	17	16	18	19	18	18	18	16	14	12	11	10	10	11.6	18.5
13-May-08	10	9	9	9	9	8	8	9	11	12	13	13	14	14	15	15	15	14	14	12	11	10	9	8	8	11.3	15.1
14-May-08	7	6	6	6	6	6	7	10	12	13	15	16	16	16	15	15	13	11	11	11	12	12	12	13	13	11.0	16.4
15-May-08	13	12	12	12	13	14	15	17	18	19	20	21	21	21	21	21	20	20	20	19	18	16	16	15	15	17.2	20.8
16-May-08	15	15	14	13	13	13	14	16	17	18	20	21	23	24	25	25	25	24	23	21	19	17	16	15	15	18.5	24.7
17-May-08	13	11	10	9	9	9	11	13	15	18	23	26	27	29	31	30	28	26	25	24	23	21	21	20	20	19.7	31.0
18-May-08	20	19	19	18	17	17	16	17	17	17	17	18	19	21	21	21	21	20	19	19	18	16	13	11	11	18.0	21.1
19-May-08	10	9	7	5	5	5	8	13	14	15	16	18	19	19	19	18	18	18	18	18	17	16	15	12	12	13.8	19.3
20-May-08	11	10	10	10	9	9	10	11	11	11	11	12	13	15	15	13	11	10	10	10	10	9	8	9	9	10.9	14.7
21-May-08	9	9	8	8	8	8	8	8	8	9	9	10	11	11	11	12	12	12	12	11	10	9	9	8	8	9.7	12.4
22-May-08	7	5	6	5	3	3	6	8	10	11	13	14	16	17	18	17	16	16	15	14	13	11	11	9	9	11.0	17.8
23-May-08	9	9	9	9	9	8	8	7	7	7	8	8	8	9	10	11	11	12	12	11	10	10	9	8	8	9.1	11.7
24-May-08	8	7	7	7	7	7	7	7	8	8	8	9	9	9	10	11	11	11	12	11	11	11	10	10	10	9.0	11.5
25-May-08	10	9	9	9	9	9	9	11	12	13	14	15	16	17	18	18	18	17	17	16	15	12	11	10	10	13.0	17.8
26-May-08	9	8	8	8	6	6	7	10	12	15	16	17	18	19	20	20	20	20	19	18	16	15	13	11	11	13.9	20.2
27-May-08	10	9	8	7	7	7	8	10	13	15	17	19	21	23	23	24	24	24	24	23	21	18	17	16	16	16.2	24.4
28-May-08	15	13	12	11	10	10	12	14	16	18	20	23	24	24	23	18	18	18	18	19	19	17	15	14	13	16.5	24.3
29-May-08	12	11	10	9	9	9	11	13	15	16	16	16	17	17	18	18	17	16	14	14	12	11	11	11	11	13.3	17.8
30-May-08	11	11	10	10	10	10	11	14	15	17	17	18	19	19	19	21	18	14	18	18	17	15	14	13	13	14.9	20.5
31-May-08	11	10	10	12	11	11	11	12	13	13	14	15	17	18	19	20	20	20	18	18	16	14	12	11	11	14.5	19.6
Hourly Avg	9.0	8.1	7.5	6.9	6.3	6.1	7.4	9.4	11.0	12.3	13.7	15.0	16.0	16.7	16.9	16.7	16.3	15.8	15.5	14.7	13.4	12.0	10.9	10.1	10.1		
Hourly Max	19.7	19.5	18.7	17.8	17.2	16.5	16.3	17.5	18.2	18.8	22.5	25.6	27.4	29.4	31.0	30.2	27.8	26.5	25.3	23.7	22.7	21.5	20.8	20.2	20.2		

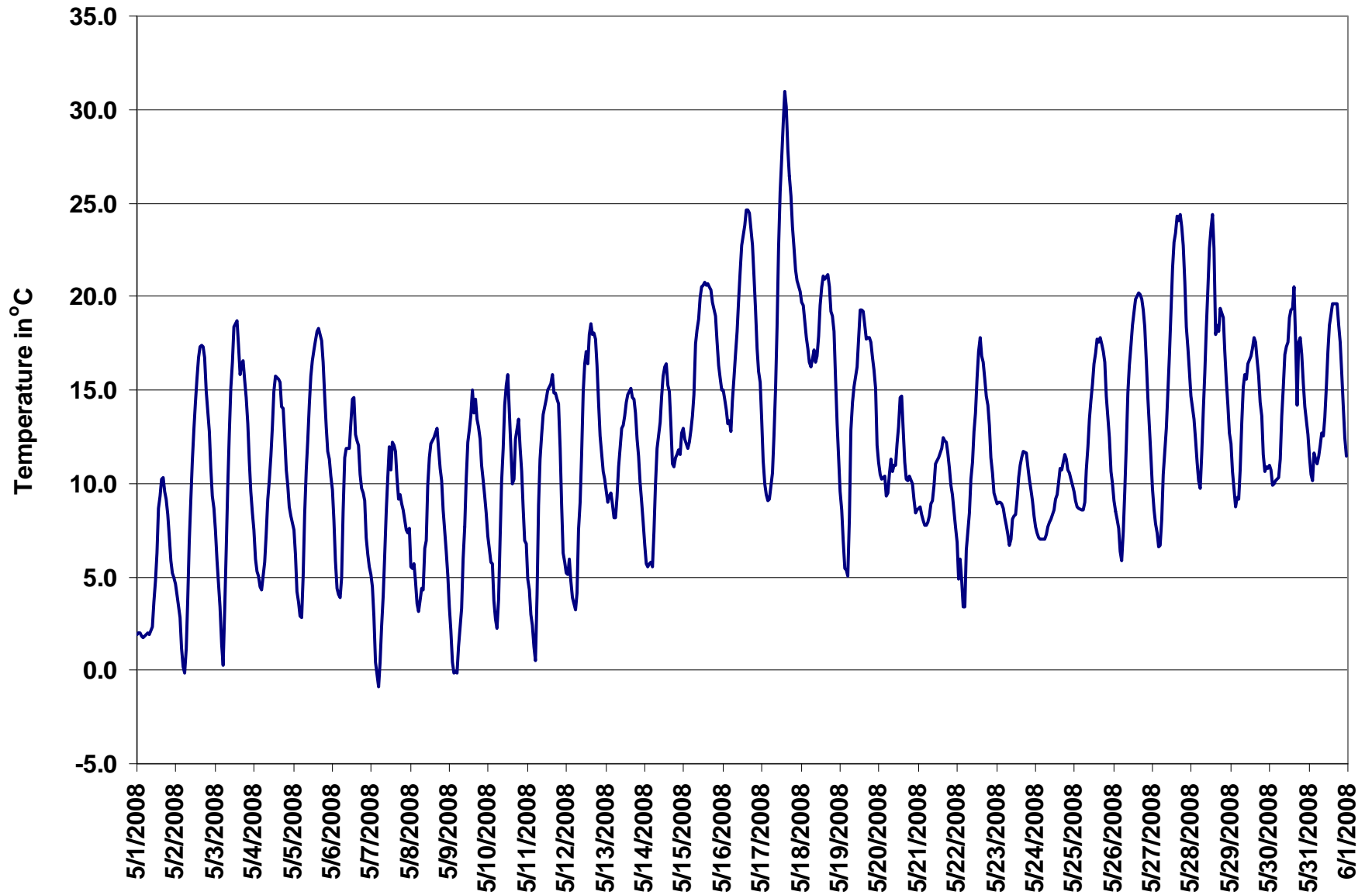


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

# PASZA - Henry Pirker Solar Radiation Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

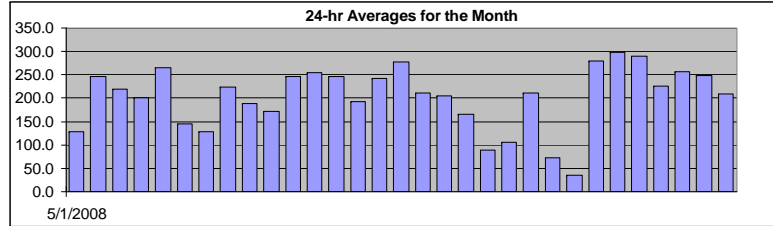
## Solar Radiation (SR)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	799.9	W/m <sup>2</sup>	30-May	12:00 13:00
Maximum 24-hr Value:	298.2	W/m <sup>2</sup>	26-May	

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
	746.5	694.5	367.2	86.7	0.0	0.0	0.0	202.6 W/m <sup>2</sup>	86.7 W/m <sup>2</sup>



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	0	0	0	0	0	2	13	33	52	116	164	237	365	446	485	383	300	270	151	64	13	0	0	0	129.0	485.0	
2-May-08	0	0	0	0	1	10	79	150	309	460	572	681	656	638	673	560	494	352	210	77	9	0	0	0	247.1	680.8	
3-May-08	0	0	0	0	0	20	124	228	394	507	623	693	730	646	292	142	324	299	138	74	19	0	0	0	218.8	729.7	
4-May-08	0	0	0	0	0	17	57	180	372	422	582	683	704	626	400	293	229	94	115	43	8	0	0	0	201.0	704.2	
5-May-08	0	0	0	0	0	18	119	222	388	518	617	691	728	714	683	628	494	339	163	41	7	0	0	0	265.5	728.1	
6-May-08	0	0	0	0	0	15	87	186	328	200	206	523	568	355	268	365	174	92	64	45	13	0	0	0	145.4	568.0	
7-May-08	0	0	0	0	0	15	45	108	171	341	395	489	215	317	312	310	171	104	68	31	3	0	0	0	129.1	488.6	
8-May-08	0	0	0	0	0	24	160	168	210	466	342	761	586	664	528	563	473	235	103	51	10	0	0	0	222.7	760.7	
9-May-08	0	0	0	0	1	19	92	205	272	339	516	625	480	492	586	264	369	152	89	30	8	0	0	0	189.1	625.4	
10-May-08	0	0	0	0	2	18	92	172	268	355	631	661	646	435	162	131	118	176	212	52	6	0	0	0	172.4	660.8	
11-May-08	0	0	0	0	1	26	156	252	422	548	646	718	702	654	561	426	302	215	176	104	17	0	0	0	247.0	718.1	
12-May-08	0	0	0	0	1	19	66	262	287	430	639	708	630	542	714	661	476	336	230	80	17	0	0	0	254.1	714.5	
13-May-08	0	0	0	0	0	13	71	167	430	504	600	354	578	702	702	635	442	392	232	69	16	0	0	0	246.2	702.2	
14-May-08	0	0	0	0	2	21	152	249	423	555	652	712	622	413	259	197	128	77	67	66	10	1	0	0	191.9	712.0	
15-May-08	0	0	0	0	3	21	103	254	336	454	584	670	528	506	574	589	470	337	217	124	22	1	0	0	241.3	670.0	
16-May-08	0	0	0	0	3	29	165	254	435	557	652	717	748	729	654	622	500	320	192	68	17	1	0	0	277.6	748.3	
17-May-08	0	0	0	0	2	28	102	191	344	451	598	735	573	609	573	398	191	144	89	37	14	0	0	0	211.7	735.5	
18-May-08	0	0	0	0	1	16	81	156	305	164	271	536	699	587	604	462	504	315	101	85	24	1	0	0	204.7	698.6	
19-May-08	0	0	0	0	5	31	168	252	373	394	439	580	533	410	304	161	98	71	91	52	11	0	0	0	165.6	580.3	
20-May-08	0	0	0	0	2	20	60	68	88	87	135	210	340	512	283	73	66	58	73	53	19	1	0	0	89.6	511.7	
21-May-08	0	0	0	0	1	15	61	149	229	184	201	319	207	214	190	232	160	161	140	65	16	2	0	0	106.1	319.0	
22-May-08	0	0	0	0	3	35	117	199	337	367	461	593	676	716	638	371	285	102	56	57	35	2	0	0	210.4	715.7	
23-May-08	0	0	0	0	2	13	39	65	88	139	157	152	132	207	208	172	166	123	49	25	4	0	0	0	72.6	208.1	
24-May-08	0	0	0	0	0	3	11	28	50	61	73	87	95	71	84	102	42	66	55	31	9	1	0	0	36.2	101.6	
25-May-08	0	0	0	0	2	21	100	235	327	549	656	732	767	770	703	593	493	356	257	137	28	2	0	0	280.4	769.6	
26-May-08	0	0	0	0	5	34	170	261	447	574	672	735	763	757	713	636	530	405	274	150	29	3	0	0	298.2	763.3	
27-May-08	0	0	0	0	5	32	175	256	432	561	658	725	744	729	696	619	510	385	257	138	28	3	0	0	289.7	744.2	
28-May-08	0	0	0	0	7	34	164	253	426	548	654	658	734	624	274	170	258	243	208	129	18	2	0	0	225.2	733.9	
29-May-08	0	0	0	0	7	50	102	239	469	468	448	698	538	706	705	631	523	337	145	73	9	0	0	0	256.2	705.6	
30-May-08	0	0	0	0	3	27	123	271	451	507	524	575	800	695	649	649	181	126	209	114	52	5	0	0	248.4	799.9	
31-May-08	0	0	0	0	2	19	37	61	83	100	181	457	661	768	724	594	538	387	219	140	29	3	0	0	208.5	767.6	
Hourly Avg	0.0	0.0	0.0	0.0	2.0	21.4	99.7	186.3	308.0	384.7	469.4	571.5	572.5	556.5	490.4	407.5	322.9	228.0	150.0	74.4	16.7	0.9	0.0	0.0			
Hourly Max	0.0	0.0	0.0	0.1	7.4	49.8	174.6	270.8	469.5	573.6	672.0	760.7	799.9	769.6	724.3	661.4	537.9	404.8	273.6	149.6	52.5	4.5	0.1	0.0			

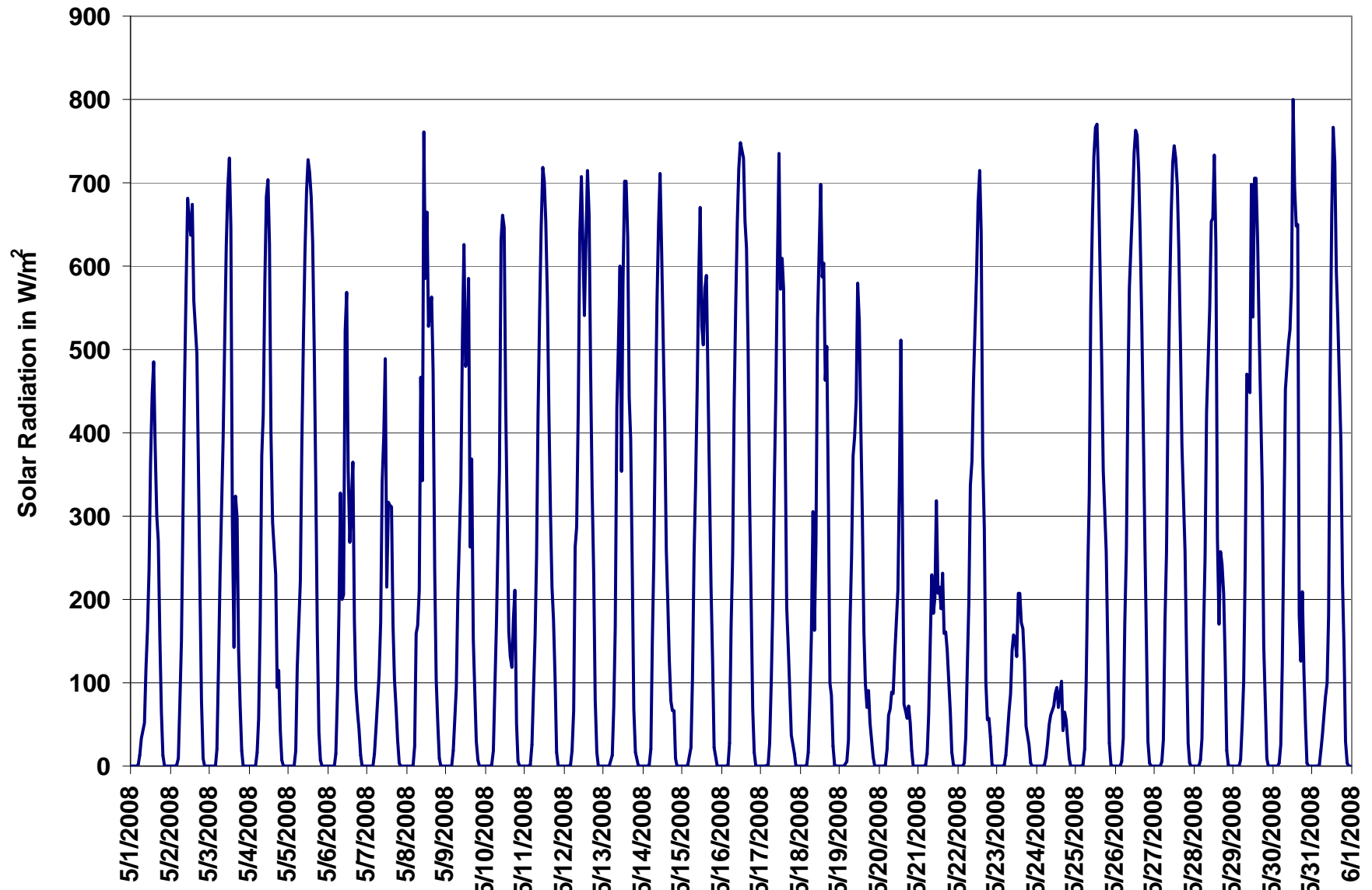


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

## PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

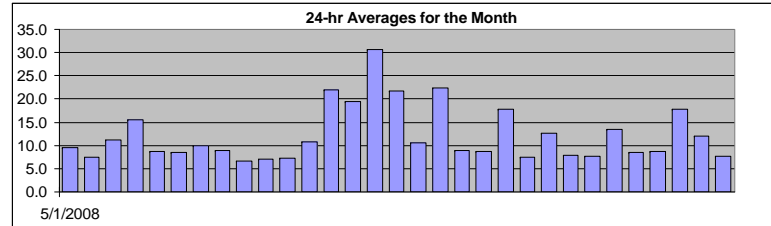
### HOURLY AVERAGE TABLE

### Wind Speed (WSs)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	46.5	km/hr	15-May	14:00 15:00
Maximum 24-hr Value:	30.6	km/hr	15-May	



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
	40.4	28.3	15.0	10.2	6.7	4.0	3.0	12.2 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-May-08	12	11	10	11	9	8	9	10	11	12	10	12	10	7	7	7	7	10	10	12	12	12	9	8	8	9.6	12.3
2-May-08	6	6	4	3	3	3	4	3	3	4	6	8	9	10	8	10	10	9	12	13	13	12	11	11	7.5	13.4	
3-May-08	8	6	5	4	5	5	5	6	6	5	8	10	8	11	12	17	18	19	18	17	18	23	19	17	11.2	22.6	
4-May-08	17	13	14	16	15	11	16	17	18	15	14	14	10	20	22	26	32	24	18	11	6	7	7	11	15.6	31.5	
5-May-08	7	5	4	5	5	7	10	8	10	14	11	10	11	12	14	12	9	9	10	8	6	8	10	6	8.7	13.6	
6-May-08	5	3	5	5	3	5	5	5	11	8	10	9	10	10	18	21	17	21	11	5	4	4	4	6	8.6	21.4	
7-May-08	5	5	3	4	4	4	4	4	7	9	11	12	11	12	14	17	18	12	14	12	13	17	12	13	9.8	18.4	
8-May-08	18	13	11	12	11	11	10	10	9	9	8	9	8	8	9	8	8	8	7	5	5	7	6	5	9.0	17.8	
9-May-08	4	4	5	3	2	2	4	5	4	5	6	9	9	7	7	9	8	10	9	9	10	10	7	9	6.6	10.4	
10-May-08	6	4	4	4	4	4	4	4	5	5	5	6	9	13	12	18	15	6	9	6	4	9	5	7	7.0	18.0	
11-May-08	4	4	6	6	6	4	4	3	7	10	11	12	12	12	12	11	12	11	8	7	4	3	3	3	7.3	12.1	
12-May-08	4	7	5	6	7	9	13	15	16	14	13	13	15	16	12	15	13	11	12	11	11	9	5	7	10.8	16.2	
13-May-08	5	6	7	13	9	11	6	18	26	27	34	30	31	34	32	33	32	32	29	26	23	24	21	17	21.9	34.4	
14-May-08	13	12	12	12	12	11	14	21	30	27	29	28	27	29	27	30	34	19	12	14	13	12	10	20	19.4	33.9	
15-May-08	20	14	17	16	17	18	20	31	39	33	40	41	41	42	46	45	43	41	41	35	28	23	22	20	30.6	46.5	
16-May-08	23	20	19	22	21	16	17	25	26	23	19	24	22	27	30	34	34	29	23	20	17	11	9	11	21.8	34.3	
17-May-08	5	6	4	2	4	4	5	7	8	11	12	13	11	6	7	9	24	19	23	15	12	16	15	16	10.5	24.2	
18-May-08	24	27	20	19	21	21	22	26	31	28	26	25	23	21	23	27	30	28	27	23	19	12	8	5	22.3	30.7	
19-May-08	5	5	5	5	6	5	4	10	16	15	13	13	9	9	9	11	7	6	9	11	10	10	15	6	8.9	15.9	
20-May-08	6	7	4	5	4	3	2	8	11	9	10	7	10	11	9	8	15	13	13	10	11	12	11	10	8.8	15.0	
21-May-08	11	14	14	14	15	17	20	23	26	24	23	24	23	21	18	19	18	17	19	17	14	15	12	10	17.8	25.7	
22-May-08	7	4	8	5	4	4	6	10	10	10	8	9	9	7	6	7	7	9	10	9	9	7	6	6	7.4	10.2	
23-May-08	6	9	10	12	12	15	14	18	19	16	14	11	14	15	13	13	15	13	13	11	11	10	10	11	12.7	19.1	
24-May-08	10	11	11	11	10	9	9	11	11	11	10	10	8	6	6	8	5	3	3	4	6	4	6	6	7.9	11.2	
25-May-08	7	6	5	5	5	5	6	9	9	10	12	10	9	9	9	9	8	8	9	9	6	5	5	6	7.6	12.2	
26-May-08	7	7	9	12	11	10	11	11	10	12	16	15	15	17	16	18	19	20	19	18	14	13	12	10	13.5	19.6	
27-May-08	10	11	12	11	11	10	11	7	5	7	7	7	5	6	7	7	8	6	8	9	8	8	10	11	8.4	11.5	
28-May-08	12	11	11	11	8	6	6	6	6	6	5	5	6	7	7	16	13	12	8	8	5	8	18	6	8.7	17.7	
29-May-08	9	7	6	6	9	7	8	13	19	22	24	25	27	29	30	28	28	27	22	22	20	15	13	13	17.7	30.4	
30-May-08	12	13	12	10	9	9	8	10	8	7	7	10	12	12	13	13	17	10	9	23	20	22	16	9	12.1	22.6	
31-May-08	9	11	7	10	5	5	7	8	5	7	4	7	7	6	7	6	7	7	8	12	11	8	8	9	7.6	12.2	
1-hr Average	9.6	9.0	8.7	9.1	8.6	8.3	9.1	11.6	13.6	13.3	13.8	14.1	13.9	14.6	14.9	16.5	17.2	15.2	14.3	13.3	11.7	11.4	10.4	9.9			
Hourly Max	24.0	26.7	20.2	22.5	20.8	21.3	22.0	30.8	39.0	32.8	39.9	41.3	41.4	41.7	46.5	44.7	43.5	40.7	41.1	35.0	28.3	23.7	22.1	19.9			

## PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

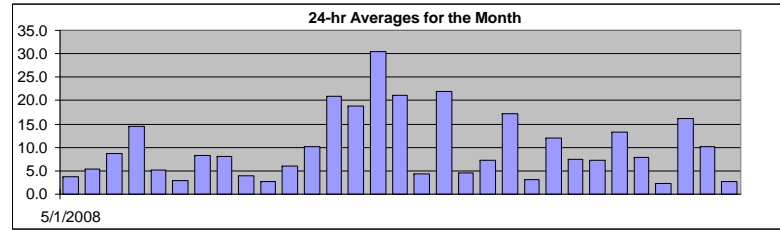
### HOURLY AVERAGE TABLE

### Wind Speed (WSv)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:				46.1	km/hr	15-May	14:00 15:00
Maximum 24-hr Value:				30.5	km/hr	15-May	



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
	40.0	28.1	14.4	9.6	5.9	2.9	1.5	23.3 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
Hour Start 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-May-08	12	11	10	11	9	8	8	9	11	12	10	12	9	6	5	4	4	8	10	11	12	9	8	8	3.7	12.2
2-May-08	6	5	2	3	3	3	3	3	3	2	4	7	8	8	4	8	9	8	11	13	13	12	10	11	5.3	13.2
3-May-08	7	6	5	4	4	5	5	5	6	2	7	9	6	9	11	17	17	19	17	16	18	23	19	17	8.6	22.5
4-May-08	17	13	14	16	13	11	16	17	18	14	13	13	9	19	22	25	31	24	18	11	6	7	7	9	14.4	31.4
5-May-08	7	4	3	4	5	7	10	8	10	13	10	9	10	11	13	11	7	7	9	7	6	8	9	6	5.1	13.3
6-May-08	5	3	2	3	2	4	4	5	11	7	9	9	8	7	17	20	17	21	9	5	4	4	4	6	2.9	21.2
7-May-08	5	4	0	4	4	3	3	3	6	8	10	11	11	12	14	17	17	11	14	12	13	16	12	12	8.4	17.1
8-May-08	17	13	11	12	11	11	10	10	8	9	7	8	7	6	8	5	6	6	6	4	5	7	1	4	8.0	17.4
9-May-08	4	4	5	1	1	1	4	4	3	4	5	8	7	5	3	8	7	9	9	7	8	9	7	9	3.9	9.3
10-May-08	5	1	2	4	4	4	4	4	4	4	3	1	8	13	6	17	15	3	8	6	3	8	4	7	2.6	17.5
11-May-08	2	4	6	5	5	4	4	2	6	9	9	11	11	11	11	10	11	10	8	7	4	3	2	3	6.0	11.2
12-May-08	3	6	4	5	6	9	13	14	16	14	13	12	13	15	10	14	12	10	10	10	11	9	5	7	10.2	15.8
13-May-08	4	6	5	12	9	11	6	18	26	26	34	29	31	33	31	32	32	31	29	26	23	24	21	17	20.9	33.7
14-May-08	13	12	12	12	12	11	14	21	30	27	28	27	26	28	26	30	34	19	12	14	13	12	10	20	18.9	33.7
15-May-08	19	14	17	16	17	18	20	31	39	33	39	41	41	41	46	44	43	40	41	35	28	23	22	20	30.5	46.1
16-May-08	23	20	19	22	21	15	16	24	25	22	18	24	21	27	30	34	34	28	23	20	17	11	9	11	21.1	34.0
17-May-08	5	4	3	1	4	4	5	7	7	11	11	12	10	3	4	7	24	19	23	15	12	16	15	16	4.3	23.6
18-May-08	24	27	20	19	21	21	22	26	30	28	26	24	22	20	23	26	30	27	24	22	19	12	7	4	21.9	30.4
19-May-08	4	3	5	5	5	5	3	10	16	15	13	12	9	8	8	10	7	6	9	11	10	9	15	4	4.5	15.7
20-May-08	6	7	2	2	4	2	0	8	9	9	9	7	10	11	9	7	14	12	13	10	11	12	11	10	7.3	13.7
21-May-08	11	14	14	14	15	16	19	23	26	24	23	23	23	21	18	19	17	17	19	17	14	15	12	10	17.1	25.6
22-May-08	7	3	8	5	2	4	6	10	10	9	7	8	8	5	3	5	5	8	10	9	9	7	6	6	3.0	9.9
23-May-08	6	9	10	12	12	14	14	18	19	16	14	11	13	15	12	13	15	12	12	11	11	9	10	11	12.0	19.0
24-May-08	9	11	11	11	10	9	9	11	11	11	10	9	8	6	6	8	5	3	3	3	5	4	6	6	7.6	11.0
25-May-08	7	5	5	5	5	5	6	9	9	10	11	9	8	8	7	7	6	8	8	9	6	5	5	6	7.3	11.5
26-May-08	7	7	9	12	11	10	11	11	9	11	15	14	15	16	15	18	19	19	19	18	14	13	12	10	13.3	19.2
27-May-08	10	11	11	11	11	9	11	7	4	6	5	4	3	3	6	3	4	5	8	9	8	8	10	11	7.9	11.5
28-May-08	12	11	11	11	8	6	6	5	5	4	3	4	2	4	5	14	12	12	7	8	5	6	18	5	2.4	17.5
29-May-08	8	7	5	5	9	6	8	12	18	22	24	25	27	28	30	28	28	27	22	21	20	14	12	12	16.1	30.1
30-May-08	12	13	12	10	8	9	7	10	8	5	6	9	10	11	12	12	10	7	8	22	20	22	16	9	10.1	22.5
31-May-08	9	8	6	10	5	5	6	7	4	6	3	6	5	3	5	4	4	5	8	12	11	8	8	7	2.7	11.9
1-hr Vector	2.8	2.9	3.1	4.0	4.4	4.0	4.4	6.0	7.1	6.1	5.7	5.5	5.9	7.1	6.6	8.7	8.5	6.0	4.5	3.5	2.9	2.5	2.6	2.6		
Hourly Max	23.9	26.5	20.1	22.4	20.6	21.3	21.9	30.7	38.8	32.5	39.4	41.0	41.0	41.3	46.1	44.3	43.0	40.4	40.7	34.7	28.2	23.6	22.0	19.8		

# PASZA - Henry Pirker Wind Direction Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 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
	346.3	317.7	270.7	236.1	82.0	21.7	5.0	270 deg

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	WD Sector	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	WD Sector	
1-May-08	258	272	283	289	282	262	265	275	261	244	241	235	224	242	221	256	219	115	97	87	82	82	80	87	245	WSW	
2-May-08	82	66	33	288	306	303	254	283	254	201	142	94	106	91	76	103	57	61	51	65	73	77	80	80	76	ENE	
3-May-08	69	49	43	29	288	305	320	269	246	203	283	306	316	274	283	271	267	258	258	261	243	243	238	239	266	W	
4-May-08	239	227	228	238	255	289	288	290	292	296	296	291	303	280	288	281	279	276	279	276	248	226	248	243	273	W	
5-May-08	289	284	248	271	280	265	254	256	265	284	291	301	298	276	287	275	345	346	355	53	64	72	92	119	297	WNW	
6-May-08	74	45	308	307	241	296	302	310	261	247	157	91	101	173	195	264	280	260	308	328	117	118	91	94	250	WSW	
7-May-08	109	82	61	297	290	313	304	329	53	72	80	67	46	28	21	16	22	30	52	33	39	47	31	58	38	NE	
8-May-08	74	56	42	17	27	28	23	39	48	61	49	45	58	74	34	43	40	41	49	41	57	59	138	272	46	NE	
9-May-08	320	291	298	339	136	10	141	130	148	109	110	113	75	41	95	95	107	104	144	214	182	98	82	88	109	ESE	
10-May-08	95	185	201	321	285	285	305	331	10	37	37	254	314	341	169	228	216	205	347	335	287	217	183	212	260	W	
11-May-08	332	275	295	322	271	318	314	249	51	20	10	346	3	344	343	10	5	13	24	12	10	19	283	299	352	N	
12-May-08	302	315	257	255	234	225	236	241	239	235	234	241	246	221	210	220	211	217	235	230	256	246	229	218	235	SW	
13-May-08	156	143	184	253	270	279	197	241	250	242	247	244	245	252	256	250	252	245	237	238	236	239	239	238	244	WSW	
14-May-08	229	224	226	229	235	232	231	242	257	254	252	247	250	245	246	247	258	252	225	205	214	224	234	240	242	WSW	
15-May-08	234	230	234	242	239	246	241	243	245	245	247	245	248	252	256	256	254	251	250	251	254	249	252	254	248	WSW	
16-May-08	256	254	249	243	249	242	255	265	272	276	265	267	254	266	279	278	280	262	250	241	240	231	233	241	260	W	
17-May-08	241	9	141	142	139	121	129	126	111	100	115	112	123	162	281	260	270	275	270	260	249	252	256	244	233	SW	
18-May-08	254	252	244	243	245	242	241	246	256	253	252	254	259	262	259	259	264	261	263	282	255	259	295	277	256	WSW	
19-May-08	240	273	280	261	291	278	294	54	61	75	96	81	71	92	91	150	139	63	65	76	83	99	170	212	92	E	
20-May-08	325	293	64	105	287	59	172	233	280	264	269	281	284	282	285	260	249	303	304	296	286	280	273	258	279	W	
21-May-08	265	269	254	257	268	271	275	277	277	279	284	289	293	295	302	298	307	309	316	312	305	302	295	285	287	WNW	
22-May-08	274	223	241	280	289	284	282	294	268	263	248	278	271	251	10	24	63	57	44	40	37	42	51	23	317	NW	
23-May-08	22	6	0	355	356	346	342	339	336	334	340	352	343	346	360	4	1	14	23	29	29	37	32	19	359	N	
24-May-08	12	13	7	4	5	21	19	19	27	31	32	30	28	55	40	31	63	65	33	49	331	30	28	19	23	NNE	
25-May-08	16	32	21	31	27	41	49	76	76	64	69	67	57	62	49	58	41	53	50	50	43	44	55	69	53	NE	
26-May-08	70	76	75	83	88	96	98	100	102	125	106	109	90	99	100	89	93	89	89	96	88	89	90	86	94	E	
27-May-08	80	82	84	89	84	92	105	109	105	140	121	132	164	85	97	65	76	80	69	76	66	65	89	93	91	E	
28-May-08	85	86	79	79	75	71	96	80	83	201	248	222	315	307	203	224	111	129	122	149	143	269	277	323	123	ESE	
29-May-08	206	227	221	242	236	226	232	244	252	255	249	259	279	281	285	297	300	300	301	290	291	282	251	243	272	W	
30-May-08	264	282	282	280	268	256	265	278	293	265	226	206	210	189	184	196	277	333	214	247	240	242	241	235	247	WSW	
31-May-08	252	275	268	233	301	298	310	329	20	3	1	358	338	315	54	254	13	55	70	86	100	94	70	47	2	N	
Hourly Avg	261	276	265	273	271	276	267	270	272	264	257	263	275	272	271	268	279	282	289	279	260	253	244	246			



## PASZA - Henry Pirker Standard Deviation of Wind Direction Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

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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
	81.0	62.5	27.5	14.6	8.3	5.0	4.2

**Status Flag Characters**

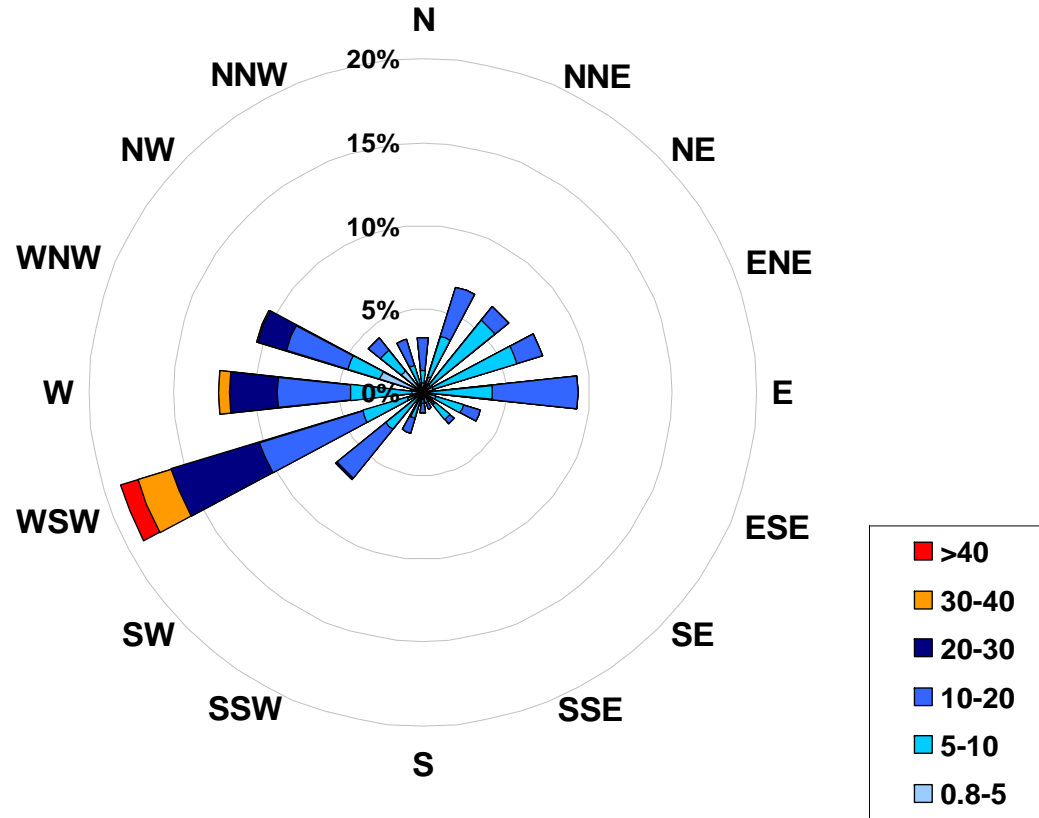
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	7	6	9	6	7	9	9	11	12	14	12	15	17	43	50	52	54	38	10	11	6	6	6	8		53.6	
2-May-08	10	13	58	41	26	37	46	17	42	75	53	28	31	40	63	59	27	29	21	9	6	5	5	4		75.4	
3-May-08	18	7	11	11	14	12	10	21	14	77	47	25	58	36	15	10	18	11	9	7	6	4	5	4		76.5	
4-May-08	5	6	6	5	33	13	6	5	7	13	20	25	42	16	10	10	6	7	6	5	18	16	17	42		42.3	
5-May-08	19	25	32	28	16	13	16	13	15	14	20	25	34	28	23	26	45	45	25	13	8	8	21	21		45.1	
6-May-08	38	46	66	43	74	33	32	17	13	23	36	26	47	56	10	19	12	8	30	40	27	25	16	7		74.4	
7-May-08	12	23	94	31	21	47	57	51	29	20	18	22	18	14	15	12	22	16	9	12	10	15	10	19		93.8	
8-May-08	12	12	14	12	11	12	12	18	13	17	25	33	36	47	30	49	53	43	32	34	15	6	81	43		81.5	
9-May-08	31	22	24	91	73	63	18	32	37	46	49	32	54	54	80	38	32	17	18	49	49	20	10	9		91.1	
10-May-08	14	78	74	26	30	25	26	33	45	57	70	91	49	22	71	16	13	93	21	29	33	16	42	23		93.3	
11-May-08	75	25	11	19	16	14	14	57	43	26	31	30	26	32	24	25	22	24	22	25	26	23	61	24		75.5	
12-May-08	49	46	41	43	28	13	7	7	8	14	18	26	28	18	35	25	23	29	26	24	10	9	18	13		48.7	
13-May-08	23	6	41	16	16	14	34	12	9	11	11	10	10	12	12	12	10	9	9	5	6	4	4	5		40.5	
14-May-08	7	7	7	7	9	8	7	7	9	9	11	14	12	9	8	8	6	9	12	7	6	8	15	12		14.6	
15-May-08	10	9	6	4	4	6	4	5	8	9	8	9	8	9	8	7	8	8	7	8	7	5	6	5	5		10.1
16-May-08	5	5	5	5	8	7	8	7	8	12	12	14	15	13	9	8	7	15	8	5	8	11	7	5		15.0	
17-May-08	47	59	22	58	27	24	9	10	18	14	16	15	21	73	66	45	14	5	7	9	6	8	6	6		72.8	
18-May-08	5	6	5	5	5	4	5	6	7	7	10	10	18	17	13	14	9	10	26	18	6	9	28	47		47.0	
19-May-08	30	45	25	26	33	41	32	42	10	12	14	19	24	27	28	25	26	25	10	7	6	14	21	58		57.6	
20-May-08	12	10	73	78	34	63	94	26	32	13	24	16	14	15	17	34	25	17	7	6	6	4	6	8		94.1	
21-May-08	14	6	15	7	6	8	6	5	5	6	7	7	7	9	9	7	9	8	6	8	7	5	5	6		14.8	
22-May-08	25	28	11	26	51	14	9	9	15	21	34	29	32	51	78	52	56	21	12	14	11	19	14	11		78.4	
23-May-08	11	12	9	8	8	7	7	5	4	7	8	11	14	10	16	13	12	13	14	12	15	14	16	15		16.5	
24-May-08	15	14	12	11	15	16	13	12	12	13	14	16	25	19	16	17	36	35	35	23	20	17	16		35.5		
25-May-08	17	17	17	19	18	17	21	14	20	22	21	25	32	34	37	43	45	26	26	16	14	11	10	6		44.9	
26-May-08	5	4	8	5	6	6	7	11	16	18	16	20	18	16	21	17	13	13	8	8	8	6	5	6		21.0	
27-May-08	5	4	5	8	8	11	12	25	43	40	39	67	71	87	39	74	67	48	22	11	8	13	8	5		86.6	
28-May-08	6	7	4	5	12	13	22	21	32	55	73	56	83	68	45	28	20	14	23	13	11	71	8	40		83.4	
29-May-08	23	19	21	31	10	18	13	11	10	9	9	9	8	8	8	7	7	7	6	10	7	7	15	10		30.7	
30-May-08	7	6	5	5	8	11	15	11	23	46	48	30	25	27	26	21	56	76	24	6	5	5	5	13		75.7	
31-May-08	13	37	31	21	19	11	14	17	40	27	53	40	56	76	49	72	63	52	25	13	7	7	11	33		76.3	

Hourly Max	75	78	94	91	74	63	94	57	45	77	73	91	83	87	80	74	67	93	35	49	49	71	81	58
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**1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for May 2008**



**Calms: 0%**

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	93
5	to	10	269
10	to	20	276
20	to	30	76
30	to	40	22
	>	40	8
Total Non-Zero Values			744

**PASZA**  
**Evergreen Park Station**  
**Monthly Summary Tables, Graphs and**  
**Roses**

# PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

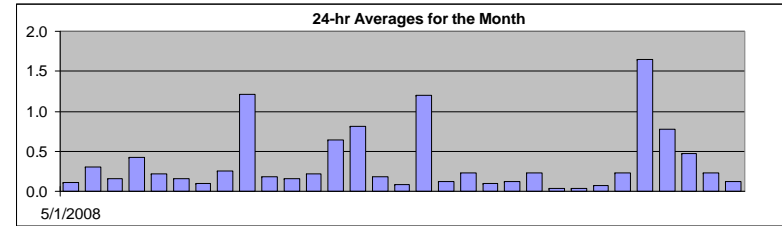
## HOURLY AVERAGE TABLE

## Sulphur Dioxide (SO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	12.3 ppb	17-May	9:00	10:00
Maximum 24-hr Average:	1.6 ppb	27-May		



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	4.0	1.2	0.2	0.1	0.1	0.0	0.0	0.3 ppb	0.1 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start 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-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0.1	0.8
2-May-08	0	0	0	0	0	0	0	0	0	0	0	1	0	A	1	0	1	0	0	1	0	0	0	0	0	0.3	0.7
3-May-08	0	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
4-May-08	0	0	0	0	0	0	0	0	0	0	0	A	2	1	0	0	1	1	0	0	0	0	0	0	0	0.4	1.9
5-May-08	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
6-May-08	0	0	0	0	0	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
7-May-08	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
8-May-08	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
9-May-08	0	0	0	0	0	0	A	0	0	10	8	1	C	C	C	A	1	0	1	0	0	0	0	0	0	1.2	10.3
10-May-08	1	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
11-May-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	0.2	0.5
12-May-08	0	0	0	A	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.4
13-May-08	0	0	A	0	0	0	0	0	1	3	4	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0.6	4.0
14-May-08	1	A	1	1	1	1	1	2	4	0	0	2	1	0	0	2	1	0	0	0	0	0	0	0	0	0.8	3.5
15-May-08	A	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0.2	1.2
16-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3
17-May-08	0	0	0	0	0	0	0	0	1	5	12	1	3	4	0	0	0	0	0	0	0	0	A	0	0	1.2	12.3
18-May-08	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.6
19-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0.2	0.9
20-May-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	0.1	0.4
21-May-08	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.5
22-May-08	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0.2	1.3
23-May-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	0.0	0.4
24-May-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	0.0	0.1
25-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
26-May-08	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
27-May-08	0	0	0	0	0	4	12	2	4	6	A	5	2	1	0	0	0	0	0	0	0	0	0	0	0	1.6	11.9
28-May-08	0	0	0	0	0	0	0	2	1	3	A	2	1	2	1	0	1	1	0	2	0	0	0	0	0	0.8	2.8
29-May-08	0	0	0	0	0	0	0	3	3	A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.9
30-May-08	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
31-May-08	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
Hourly Avg	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.9	0.8	1.4	0.9	0.5	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1			
Hourly Max	1.1	0.4	0.8	0.7	0.7	0.9	3.9	11.9	4.7	12.3	7.6	2.7	4.6	2.4	1.9	2.3	1.1	0.8	0.8	2.1	0.4	0.3	0.9	0.4			

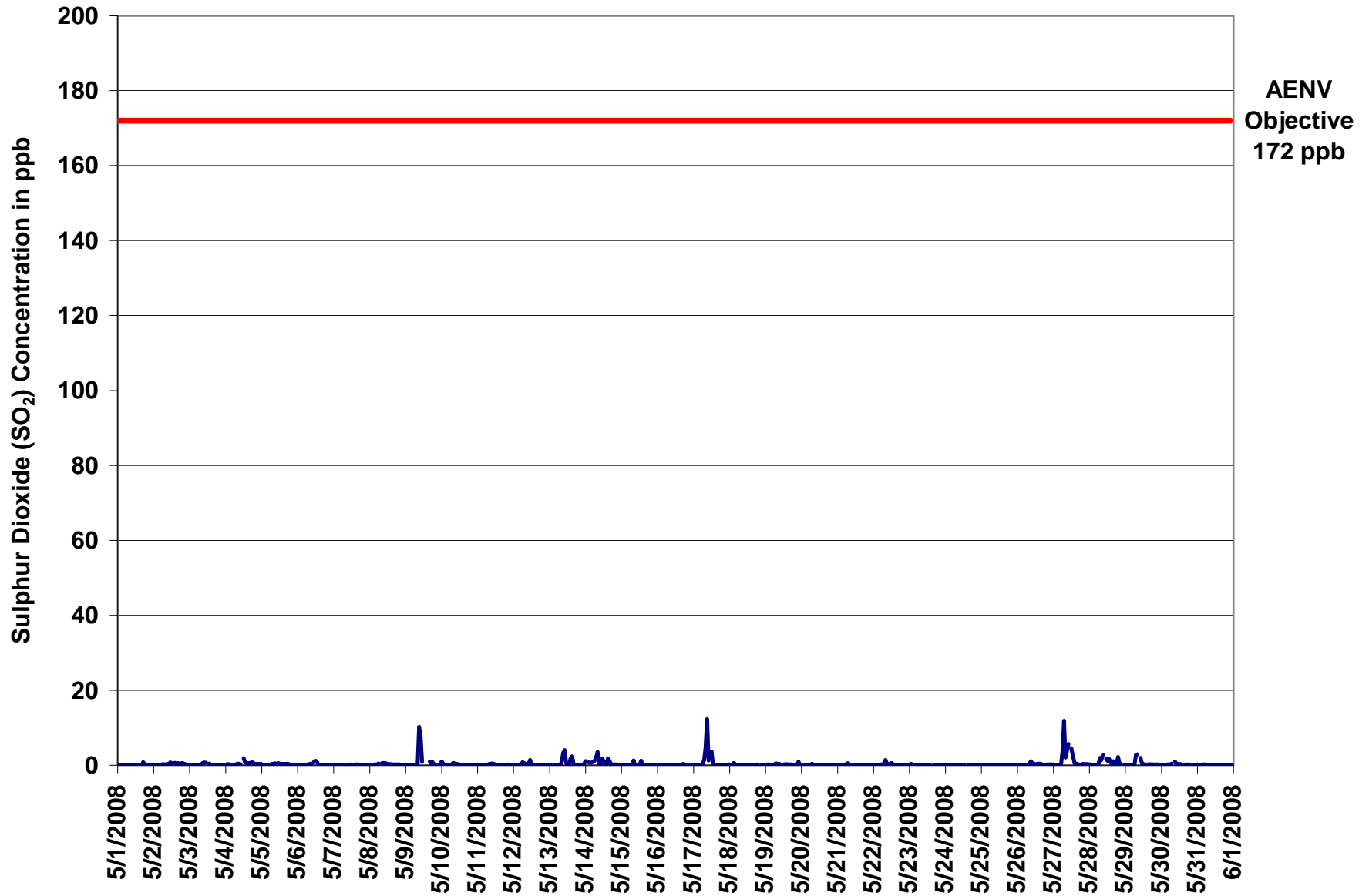


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

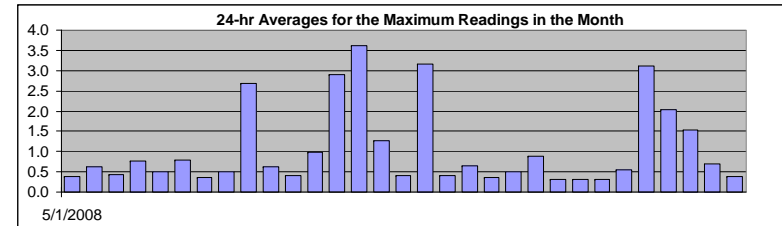
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	27.6	ppb	17-May	9:00 10:00
Maximum 24-hr Value:	3.6	ppb	14-May	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	12.0	4.7	0.6	0.4	0.3	0.2	0.1	1.0 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-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0.4	1.5	
2-May-08	0	0	0	0	0	0	0	0	0	0	0	1	1	A	2	1	1	1	1	1	1	0	0	0	0.6	1.7	
3-May-08	0	0	0	0	0	0	0	0	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0.4	1.2	
4-May-08	0	0	1	0	0	0	0	1	1	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1	0.8	2.5	
5-May-08	1	0	0	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0.5	1.2	
6-May-08	0	0	0	0	0	0	0	0	2	A	3	3	4	2	0	0	0	0	0	0	0	0	0	0	0.8	3.8	
7-May-08	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4	
8-May-08	0	0	0	0	0	0	1	A	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0.5	1.0	
9-May-08	0	0	0	0	0	0	A	1	1	24	12	3	C	C	C	A	4	1	1	0	1	0	0	1	2.7	23.7	
10-May-08	3	2	0	0	0	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	3.3	
11-May-08	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
12-May-08	0	0	0	A	1	0	3	3	1	0	4	6	0	0	0	0	0	0	0	0	1	0	0	0	1.0	5.9	
13-May-08	0	0	A	0	0	0	0	0	7	12	13	11	0	0	8	9	0	0	0	0	1	0	0	1	2.9	13.3	
14-May-08	2	A	1	1	1	1	2	13	11	1	1	18	10	0	0	11	7	1	0	1	0	1	0	0	3.6	17.9	
15-May-08	A	0	0	0	0	0	0	3	8	0	0	0	2	5	5	0	0	0	0	0	0	0	0	A	1.3	8.1	
16-May-08	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	A	1	0.4	1.2
17-May-08	1	0	0	0	0	0	0	8	10	28	7	6	8	1	0	0	0	0	0	0	0	0	A	0	3.2	27.6	
18-May-08	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0.4	1.0	
19-May-08	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	0	0	0	A	0	0	5	1	0.6	4.8	
20-May-08	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0.4	0.8	
21-May-08	0	0	0	0	0	0	2	2	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.5	1.8	
22-May-08	0	0	0	0	0	0	1	3	3	1	1	1	4	1	1	0	A	0	0	0	0	0	0	0	0.9	4.5	
23-May-08	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.9	
24-May-08	0	0	1	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	
25-May-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	0.4	
26-May-08	0	0	0	0	0	0	0	0	1	3	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0.5	3.0	
27-May-08	0	0	0	0	0	0	12	21	3	8	10	A	5	5	1	1	1	0	0	1	1	1	1	1	3.1	20.5	
28-May-08	0	1	0	0	0	0	1	4	2	8	A	2	2	10	3	0	4	1	1	5	1	1	0	0	2.0	9.8	
29-May-08	0	0	0	0	0	0	0	9	11	A	6	1	1	0	0	0	1	0	0	0	0	1	0	0	1.5	11.1	
30-May-08	0	0	0	0	0	0	0	3	A	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.7	3.2	
31-May-08	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
Hourly Avg	0.5	0.4	0.4	0.4	0.4	0.4	1.0	2.7	2.3	3.3	2.3	2.1	1.7	1.2	1.0	1.1	0.9	0.5	0.5	0.5	0.4	0.4	0.5	0.4			
Hourly Max	3.3	1.5	1.0	1.2	1.0	1.2	11.7	20.5	11.1	27.6	13.3	17.9	10.2	9.8	8.3	11.3	7.0	1.5	1.3	4.7	1.0	0.8	4.8	1.0			

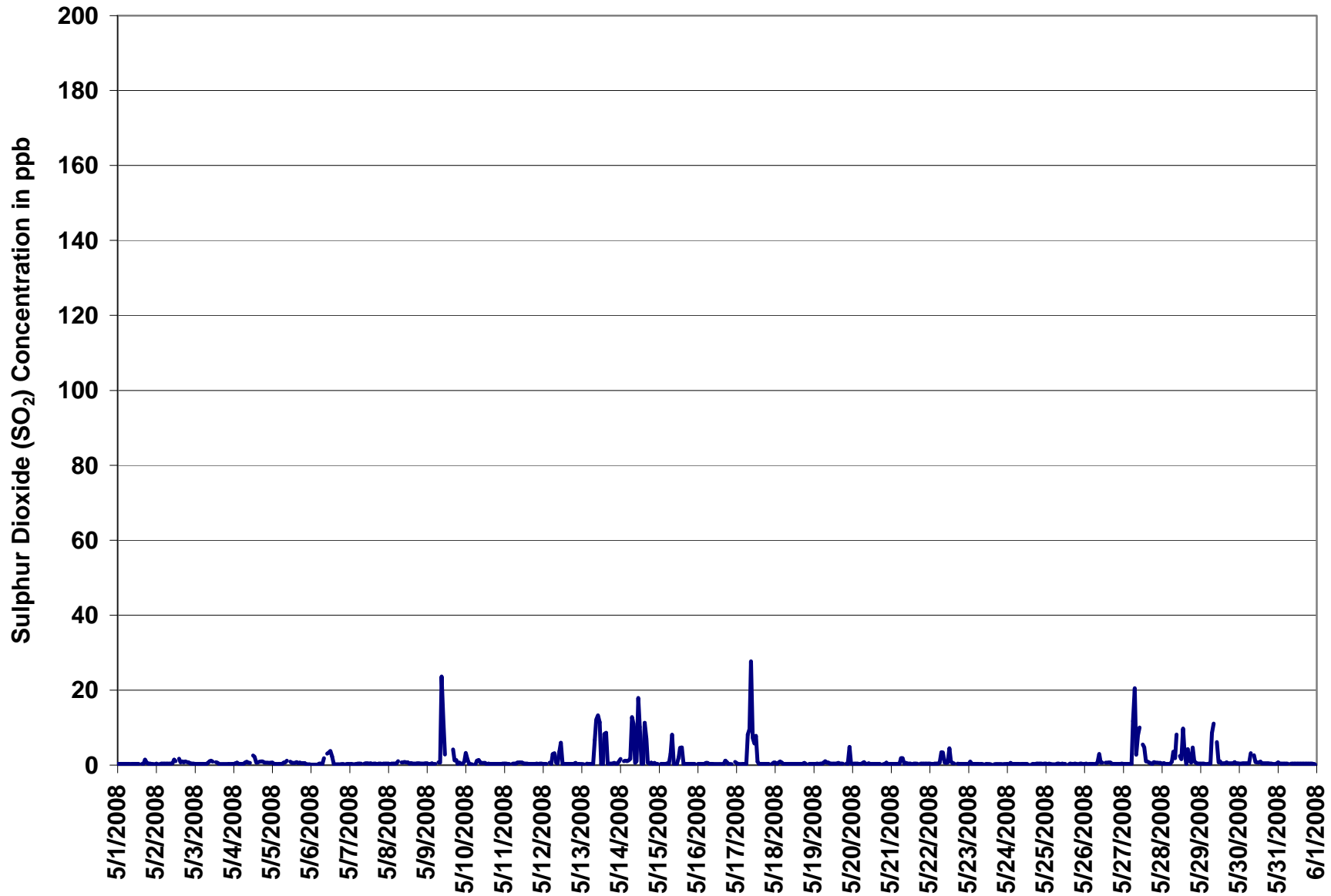
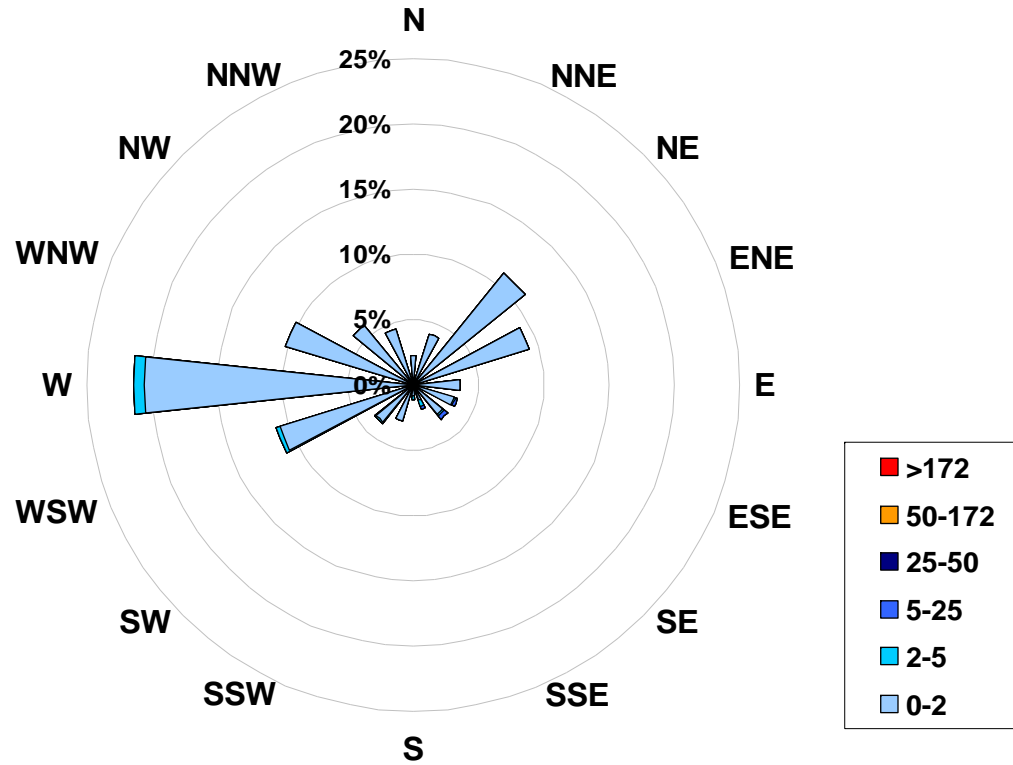


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	< 2		686
2	to 5		17
5	to 25		5
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			708



## PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

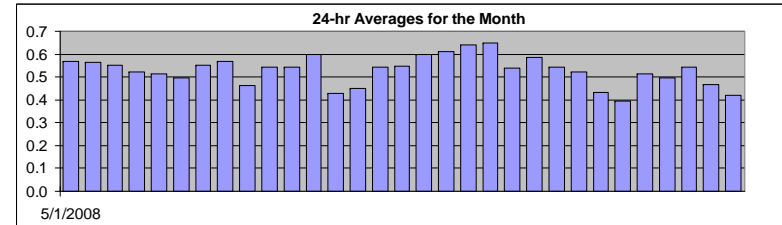
### HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Maximum 1-hr Average:	1.2	ppb	19-May	4:00 5:00
Maximum 24-hr Value:	0.6	ppb	20-May	



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
	1.0	0.7	0.6	0.5	0.5	0.4	0.3	0.5 ppb	0.5 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0.6	0.8
2-May-08	0	0	0	0	0	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	1.0
3-May-08	1	0	0	0	0	0	1	1	1	1	1	1	A	1	1	1	1	0	1	1	1	0	0	0	0.6	0.8
4-May-08	1	1	0	0	0	1	1	1	1	0	1	A	0	0	1	1	1	1	1	1	1	1	0	0	0.5	0.8
5-May-08	1	1	1	0	0	0	1	1	1	1	A	1	1	0	0	0	0	0	1	0	0	1	1	0	0.5	0.7
6-May-08	1	0	0	1	0	0	1	0	1	A	0	0	1	0	0	1	1	0	1	0	1	0	1	0	0.5	0.6
7-May-08	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.6
8-May-08	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	1	0.6	0.7
9-May-08	1	1	1	1	0	0	A	1	0	1	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8
10-May-08	1	1	1	0	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	0.9
11-May-08	0	0	0	0	A	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.6
12-May-08	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0.6	1.2
13-May-08	0	0	A	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
14-May-08	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0.4	0.7
15-May-08	A	1	1	0	1	0	0	1	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	A	0.5	0.9
16-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	A	0.5	0.6
17-May-08	1	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	0.6	0.9
18-May-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	0.7
19-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	0	0	1	1	0.6	1.2
20-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	A	1	1	1	1	1	0.6	1.1
21-May-08	1	1	0	0	1	1	1	1	0	0	1	1	1	0	0	1	1	A	1	0	1	1	1	1	0.5	0.8
22-May-08	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.7
23-May-08	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	0	0	1	1	1	1	0.5	0.6
24-May-08	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	1	0	0	0	0	0	1	1	0	0.5	0.7
25-May-08	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	0.5
26-May-08	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
27-May-08	0	0	0	0	0	0	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	1	1	0	0.5	1.1
28-May-08	0	0	0	0	0	0	0	1	0	1	A	1	0	1	0	0	1	1	0	1	0	1	1	1	0.5	0.6
29-May-08	0	0	0	0	0	0	1	1	1	A	1	0	0	0	0	0	1	0	0	0	1	1	1	0	0.5	1.1
30-May-08	0	0	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7
31-May-08	0	0	1	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
Hourly Avg	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Hourly Max	0.7	1.2	0.9	0.8	1.2	1.0	1.0	1.1	1.1	0.9	0.8	0.7	0.7	0.9	0.6	0.7	0.6	0.7	0.6	0.8	0.9	0.7	0.7	0.8	0.8	

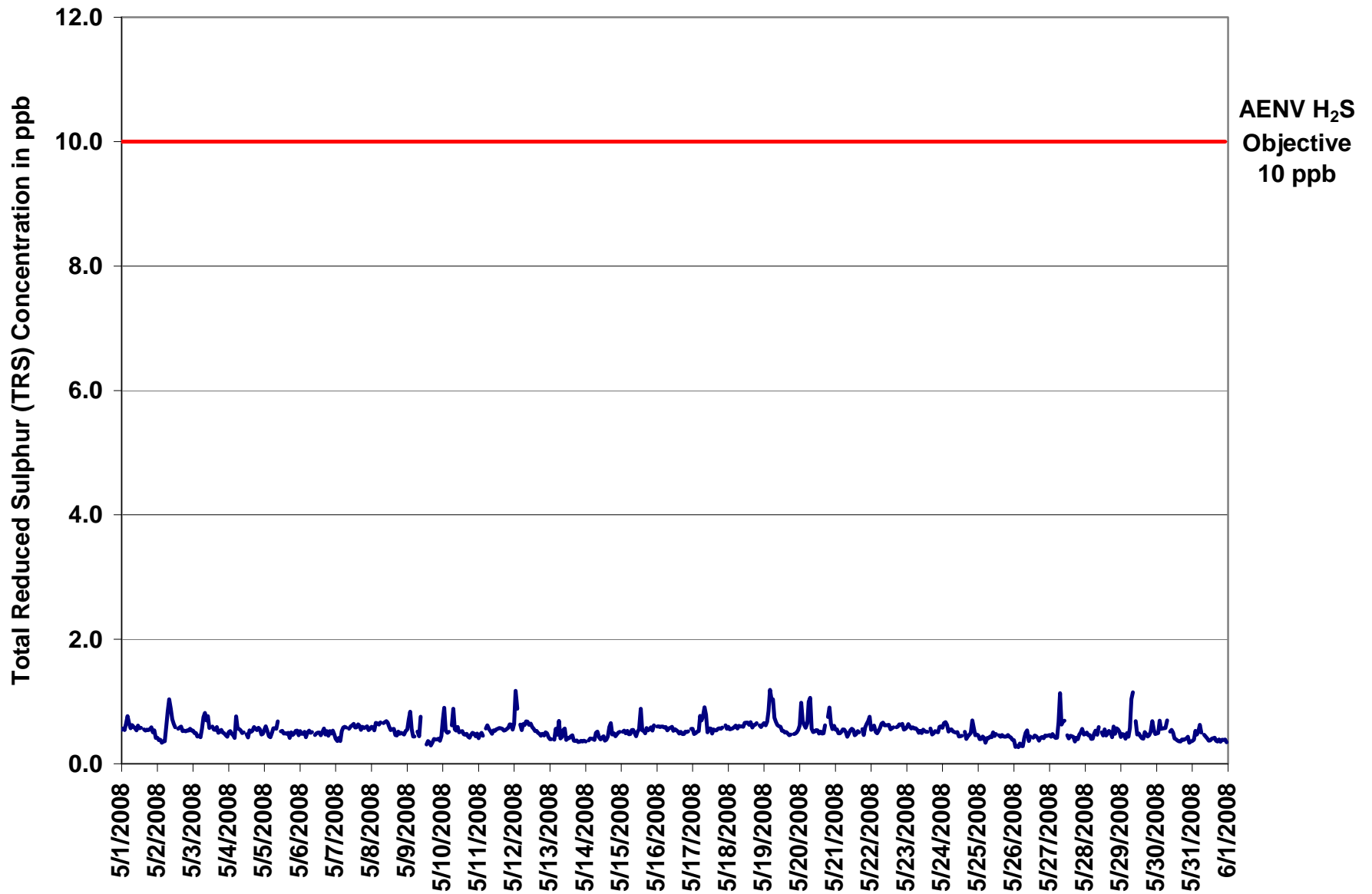


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

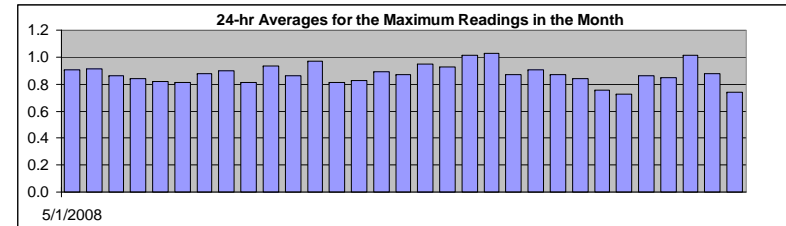
**Total Reduced Sulphur (TRS)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	2.7	ppb	29-May	7:00 8:00
Maximum 24-hr Value:	1.0	ppb	20-May	

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
	1.7	1.2	0.9	0.8	0.8	0.7	0.6	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-May-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	0.9	1.2
2-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.5
3-May-08	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
4-May-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	0.8	1.1
5-May-08	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
6-May-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	0.8	1.0
7-May-08	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
8-May-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	1.1
9-May-08	1	1	1	1	1	1	A	1	1	2	C	C	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5
10-May-08	1	1	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
11-May-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	0.9	1.0
12-May-08	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.1
13-May-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
14-May-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0.8	1.5
15-May-08	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	0.9	1.6
16-May-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	0.9	1.1
17-May-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	1.5
18-May-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	1.0
19-May-08	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	2.0
20-May-08	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	2.1
21-May-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	0.9	1.3
22-May-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	1.2
23-May-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	1.1
24-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.1
25-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.0
26-May-08	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
27-May-08	1	1	1	1	1	1	1	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.1
28-May-08	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
29-May-08	1	1	1	1	1	1	1	3	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.7
30-May-08	1	1	1	1	1	1	1	2	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
31-May-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	0.7	1.1
Hourly Avg	0.9	0.9	0.9	0.8	0.9	0.9	1.0	1.1	1.0	0.9	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.8	0.8		
Hourly Max	1.4	2.1	1.5	1.4	2.0	1.6	1.4	2.7	2.4	1.5	1.7	1.3	1.2	1.6	1.0	1.0	1.3	1.5	1.0	1.1	1.2	1.4	1.2	1.3		

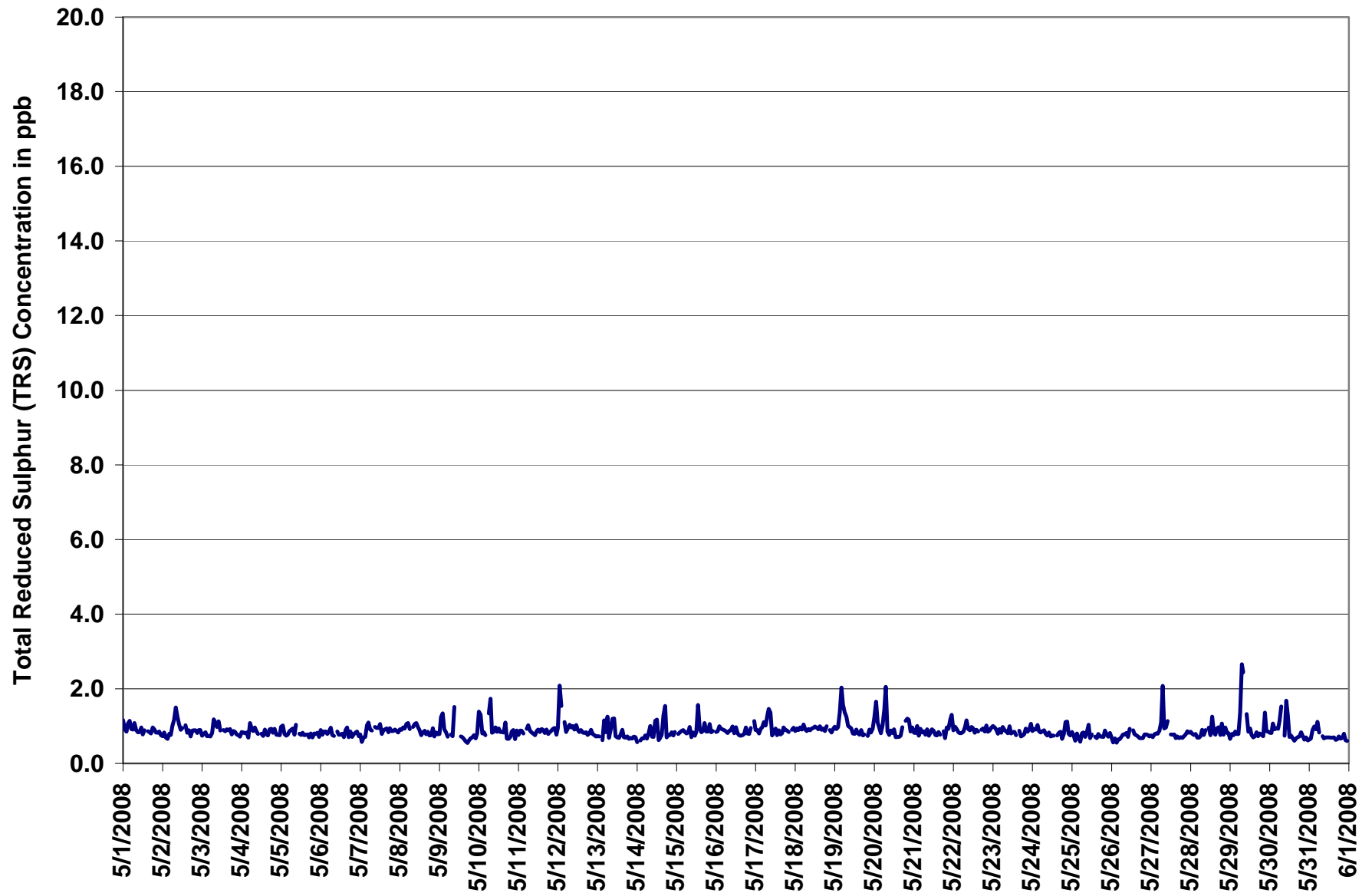
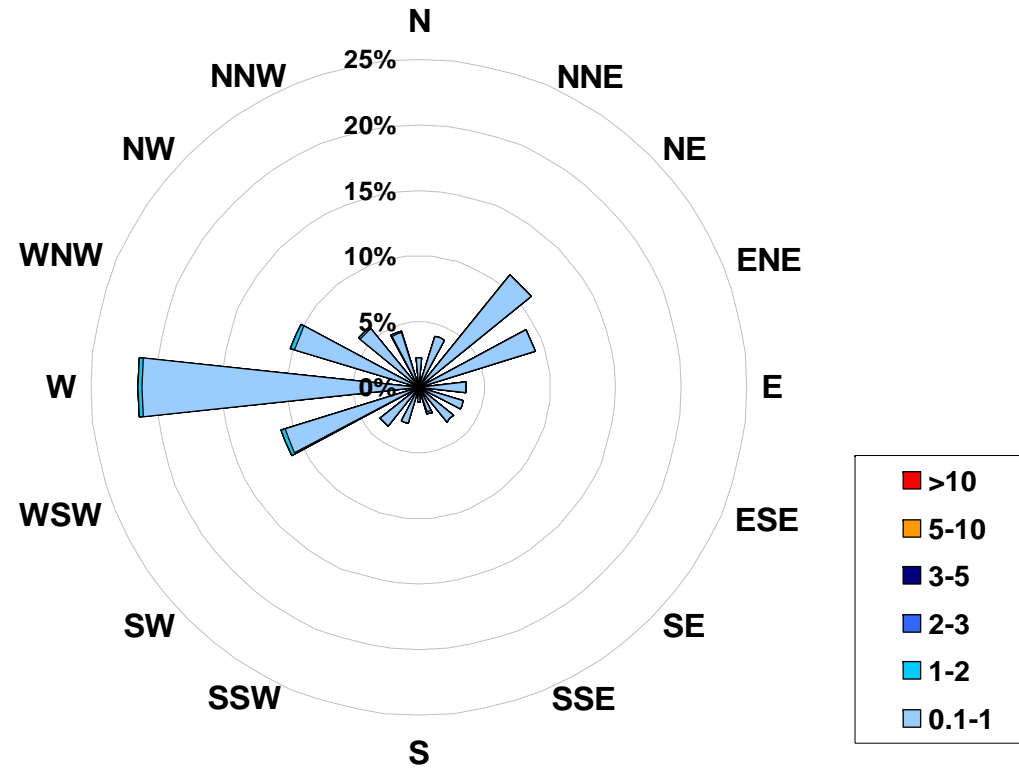


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of TRS in ppb Range			Frequency (hrs)
0.1	<	1	700
1	to	2	9
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			709

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

Station: Evergreen Park  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

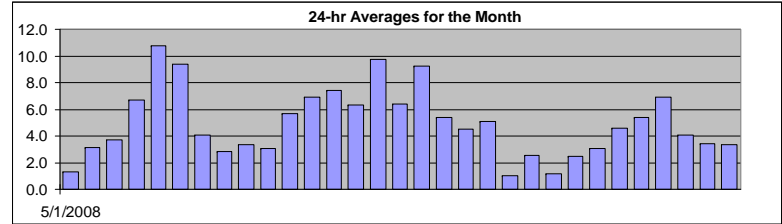
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m<sup>3</sup> 24-hr 30 µg/m<sup>3</sup>  
 Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	36.5 µg/m <sup>3</sup> 15-May 13:00 14:00
Maximum 24-hr Value:	10.8 µg/m <sup>3</sup> 5-May

AIC Time:	0 hrs	Operational Time:	737 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	99.3%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	18.7	13.2	6.8	4.0	1.8	0.2	0.0	5.0 4 µg/m <sup>3</sup>	4.2 µg/m <sup>3</sup>



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00		
1-May-08	0	0	0	0	1	1	1	3	1	2	1	2	2	0	2	1	6	1	2	3	1	1	0	1	1.3	5.6
2-May-08	0	0	1	0	1	2	8	11	4	4	3	D	0	0	D	1	3	D	0	6	7	5	5	5	3.1	10.7
3-May-08	6	5	4	5	5	7	13	6	5	4	5	1	1	2	4	6	3	2	1	1	2	2	0	0	3.7	13.4
4-May-08	2	2	2	2	3	5	4	2	3	2	0	0	2	8	11	9	14	15	14	14	15	15	11	9	6.7	14.8
5-May-08	13	12	11	11	12	13	14	10	11	11	8	9	11	10	8	8	9	10	11	12	11	12	13	10	10.8	13.6
6-May-08	10	10	11	10	10	15	22	12	18	17	8	8	7	14	6	11	6	9	4	5	4	3	3	3	9.4	21.7
7-May-08	3	1	5	5	6	6	4	6	4	2	3	3	3	0	7	9	6	6	2	4	1	4	1	5	4.1	8.9
8-May-08	3	2	0	0	0	2	1	3	2	3	2	3	0	2	2	3	3	3	3	4	5	4	7	10	2.8	9.8
9-May-08	5	4	4	5	4	5	8	5	4	7	3	0	1	C	C	2	2	2	1	4	4	1	1	0	3.4	8.4
10-May-08	5	6	1	2	2	3	6	5	2	1	0	0	1	3	7	4	9	1	1	3	6	2	2	1	3.1	8.6
11-May-08	2	2	2	2	2	4	10	4	4	3	4	4	5	6	6	6	8	7	7	8	10	10	10	10	5.7	10.4
12-May-08	10	13	10	8	7	9	16	9	8	6	5	7	6	8	5	7	7	3	3	3	5	5	5	4	6.9	16.3
13-May-08	2	2	3	2	2	3	2	0	0	11	12	19	17	9	19	19	27	10	5	3	2	2	2	1	7.4	27.5
14-May-08	2	2	2	2	2	3	8	7	19	6	10	14	15	12	12	17	13	3	1	1	0	0	0	0	6.3	18.6
15-May-08	0	0	0	1	1	2	4	5	12	9	7	14	21	37	32	17	29	18	13	5	3	1	1	1	9.7	36.5
16-May-08	1	1	0	1	1	3	5	6	6	3	3	4	6	9	13	16	12	11	7	8	10	8	8	12	6.4	16.2
17-May-08	11	9	8	8	8	11	10	9	11	7	7	7	8	9	10	11	12	8	10	8	9	10	10	9	9.2	12.0
18-May-08	9	8	7	7	5	7	7	9	9	7	5	5	4	3	3	1	3	5	5	2	4	5	5	5	5.4	9.2
19-May-08	5	4	3	5	5	6	6	5	3	4	3	3	1	1	3	3	5	7	3	3	4	5	12	10	4.5	12.0
20-May-08	7	6	5	5	7	7	11	14	5	6	9	2	2	2	1	5	4	5	5	5	3	3	3	2	5.1	13.9
21-May-08	2	1	0	1	0	1	3	2	0	0	0	0	0	1	0	1	1	2	2	2	2	1	2	1	1.0	2.9
22-May-08	1	1	3	1	1	3	5	5	6	0	1	1	1	1	1	2	3	3	4	4	4	3	3	3	2.5	5.6
23-May-08	2	3	3	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	2	1.1	3.2
24-May-08	1	0	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	5	6	5	3	0	0	2.5	5.9
25-May-08	1	2	2	2	3	2	3	2	1	0	2	2	2	3	4	4	4	5	4	5	5	5	6	5	3.1	5.9
26-May-08	4	4	5	4	6	8	6	5	6	5	2	4	4	4	4	5	4	4	4	4	4	4	5	4	4.6	7.5
27-May-08	4	4	4	5	4	7	7	8	8	9	7	7	8	7	3	4	4	3	4	4	5	6	3	4	5.4	9.5
28-May-08	4	4	4	4	5	7	6	6	6	17	12	9	6	7	13	16	5	2	5	7	7	10	4	1	6.9	17.5
29-May-08	2	2	4	2	6	12	7	11	11	7	7	3	1	D	1	0	3	0	1	1	4	4	3	1	4.1	11.7
30-May-08	2	2	3	4	6	6	7	8	8	4	0	3	0	1	1	1	7	6	0	D	1	3	3	4	3.4	7.6
31-May-08	2	2	6	4	5	6	8	5	2	0	1	0	0	1	3	3	3	2	3	3	5	7	5	6	3.4	7.7
Hourly Avg	3.9	3.7	3.7	3.6	4.0	5.4	7.0	5.9	5.8	5.3	4.4	4.5	4.4	5.5	6.3	6.2	7.0	5.2	4.3	4.6	4.9	4.7	4.3	4.2		
Hourly Max	12.9	12.6	11.3	11.4	11.9	15.3	21.7	13.9	18.6	17.5	12.4	18.5	21.1	36.5	31.6	19.0	28.6	17.7	13.7	13.6	14.7	14.7	12.5	11.7		

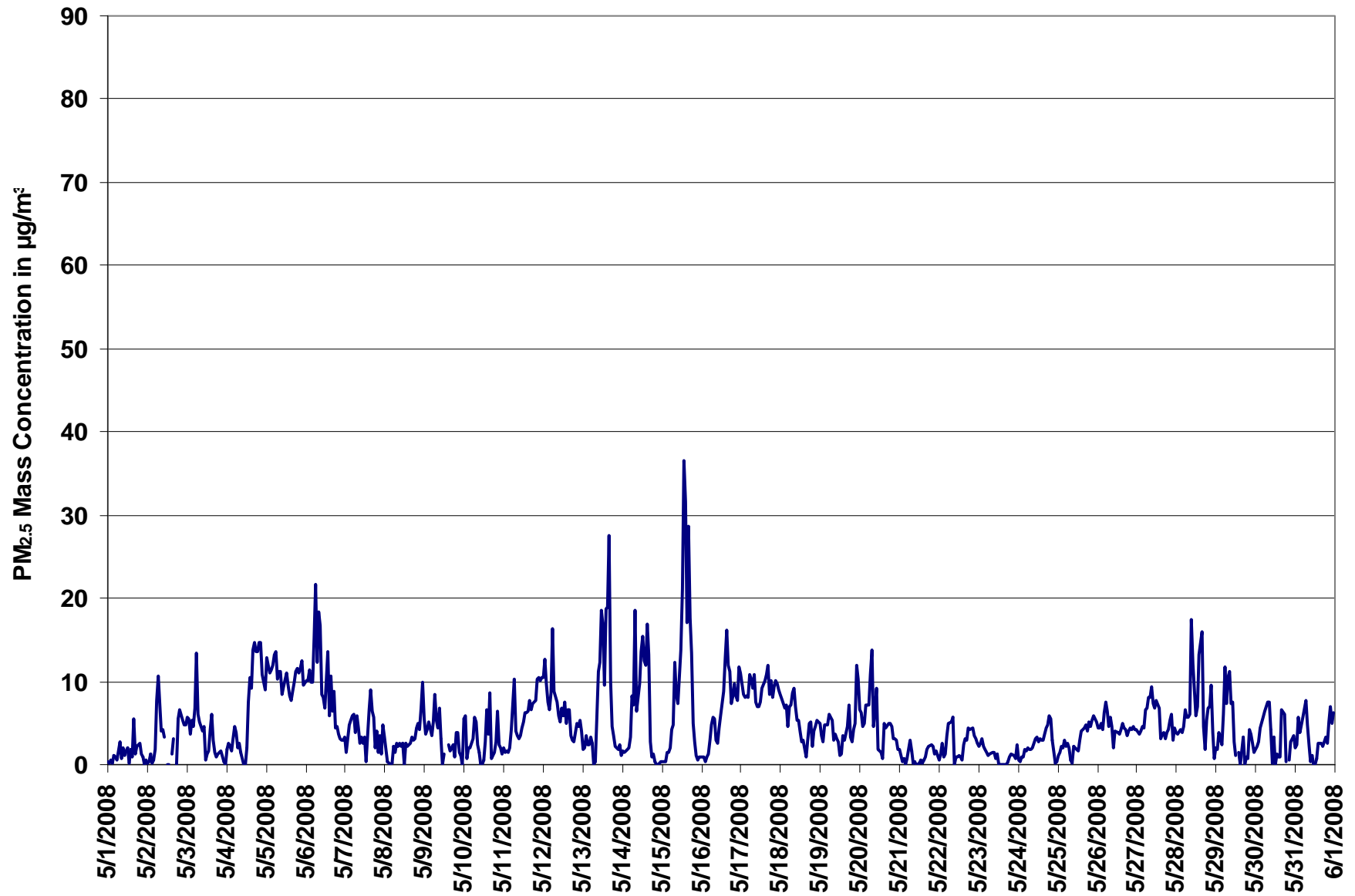


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

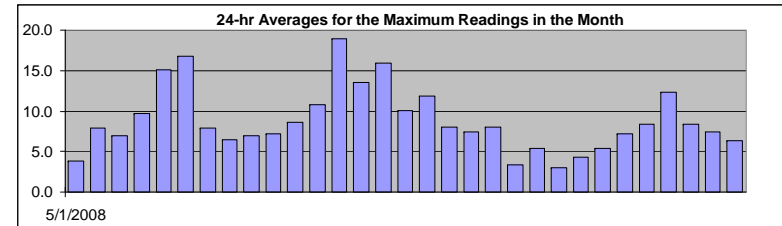
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Particulate Matter (PM<sub>2.5</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	59.5	µg/m <sup>3</sup>	13-May	14:00 15:00
Maximum 24-hr Value:	19.0	µg/m <sup>3</sup>	13-May	



AIC Time:	0 hrs	Operational Time:	742 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	45.0	22.2	10.9	6.7	4.3	2.2	1.2	8.8	7 µg/m <sup>3</sup>

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-May-08	2	2	2	2	3	3	3	5	3	3	4	4	6	5	3	16	4	6	4	3	2	1	1	3.8	15.7	
2-May-08	2	3	4	2	3	3	11	12	12	6	5	4	9	6	2	24	22	6	5	14	12	7	7	8	7.9	23.6
3-May-08	7	7	6	7	6	13	19	9	8	6	8	4	7	4	9	14	7	5	4	6	4	3	2	2	7.0	18.5
4-May-08	3	4	4	4	5	6	6	6	6	4	4	5	6	11	19	11	18	17	17	17	17	21	14	11	9.8	21.1
5-May-08	20	14	12	13	14	17	18	13	14	16	12	13	16	14	12	13	14	15	14	17	17	19	22	16	15.1	22.1
6-May-08	19	14	20	12	11	23	31	26	30	26	13	12	10	29	12	21	26	28	11	7	6	5	5	5	16.7	30.8
7-May-08	6	4	7	10	8	8	6	11	13	5	7	9	11	7	10	11	9	11	5	5	3	9	4	10	7.9	12.7
8-May-08	8	4	4	6	3	4	4	5	4	5	5	5	5	9	6	5	6	7	7	10	8	7	16	14	6.5	16.3
9-May-08	8	6	6	9	6	7	14	13	8	14	11	3	6	C	C	4	4	4	3	7	7	3	2	5	6.9	14.0
10-May-08	10	11	2	3	3	5	9	10	7	3	2	1	4	6	10	7	45	3	4	5	10	6	4	3	7.2	45.0
11-May-08	3	4	3	3	5	13	16	7	7	5	6	7	8	9	10	9	11	9	9	10	14	14	11	13	8.6	16.0
12-May-08	13	16	13	11	8	13	22	19	10	8	9	16	11	14	8	11	11	6	5	5	7	9	7	6	10.8	22.2
13-May-08	4	4	5	4	6	6	5	2	12	39	47	47	34	17	59	59	44	31	9	7	4	4	5	2	19.0	59.5
14-May-08	3	3	3	4	3	6	12	16	39	11	13	41	32	19	17	46	41	5	2	3	2	1	0	3	13.5	45.6
15-May-08	2	1	2	3	3	4	6	8	29	17	13	20	33	48	45	26	52	25	22	8	6	3	2	2	15.9	52.4
16-May-08	2	3	2	3	3	6	8	9	9	5	5	11	11	16	20	19	20	20	9	10	14	11	10	16	10.1	20.0
17-May-08	18	10	10	10	10	14	13	11	13	15	9	10	11	11	12	13	14	11	12	10	12	11	12	11	11.8	18.3
18-May-08	11	9	8	9	8	9	9	11	13	10	7	7	7	5	5	4	7	10	8	6	9	6	7	8	8.0	12.6
19-May-08	10	7	7	9	6	8	8	9	6	6	5	5	4	5	6	5	8	10	7	6	5	7	16	14	7.4	15.6
20-May-08	9	8	6	7	11	9	15	18	9	8	16	6	5	3	4	10	10	7	7	6	5	6	5	4	8.1	18.0
21-May-08	3	2	3	3	1	3	10	10	2	2	0	1	2	3	3	2	4	4	4	5	4	4	3	3	3.4	10.0
22-May-08	2	5	5	3	3	7	9	12	15	1	3	3	5	4	4	4	5	6	6	7	6	5	5	5	5.4	14.8
23-May-08	3	5	4	3	3	3	2	3	3	3	3	4	2	2	1	2	2	2	4	2	4	3	2	5	2.9	5.3
24-May-08	2	2	3	3	3	3	4	3	3	4	4	4	4	4	5	5	6	6	7	9	7	6	3	2	4.3	8.7
25-May-08	3	4	4	3	4	3	4	5	3	3	5	4	4	5	8	9	8	8	6	8	8	8	7	7	5.4	8.8
26-May-08	6	5	7	7	12	11	12	7	7	7	6	7	7	6	7	8	8	7	6	5	6	5	6	5	7.1	11.8
27-May-08	6	5	5	7	6	9	9	10	11	11	11	10	11	15	13	8	7	6	6	7	7	9	5	5	8.4	14.9
28-May-08	5	5	5	6	8	9	8	8	9	23	21	14	10	18	23	26	11	8	11	12	12	27	12	4	12.4	27.1
29-May-08	3	4	7	5	9	16	18	25	27	15	15	6	5	3	4	1	9	2	4	3	7	7	4	4	8.4	27.4
30-May-08	3	3	5	6	7	8	15	15	19	11	7	7	3	5	4	3	17	16	4	3	2	4	4	5	7.4	19.4
31-May-08	3	7	7	6	6	7	11	8	6	4	5	5	4	4	5	5	6	5	5	5	10	9	8	11	6.4	11.0
Hourly Avg	6.5	5.9	6.0	5.9	6.0	8.2	10.7	10.5	11.5	9.5	9.0	9.6	9.4	10.3	11.6	12.5	15.2	9.8	7.4	7.4	7.6	7.8	6.9	6.7		
Hourly Max	20.0	16.3	19.9	13.1	13.8	22.9	30.8	26.5	39.2	38.7	46.8	47.3	33.9	47.8	59.5	58.8	52.4	31.2	21.5	16.9	17.3	27.1	22.1	15.8		



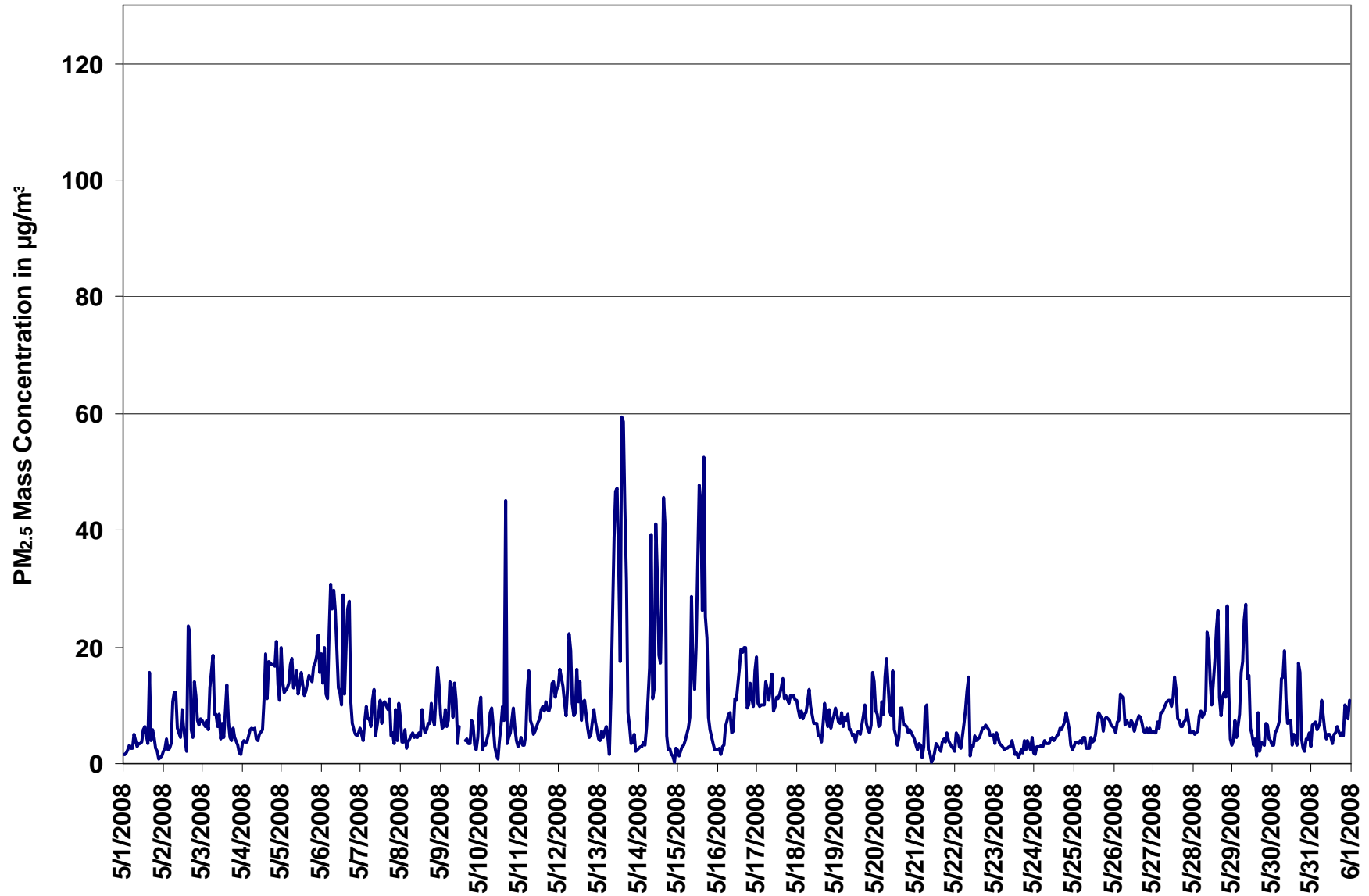
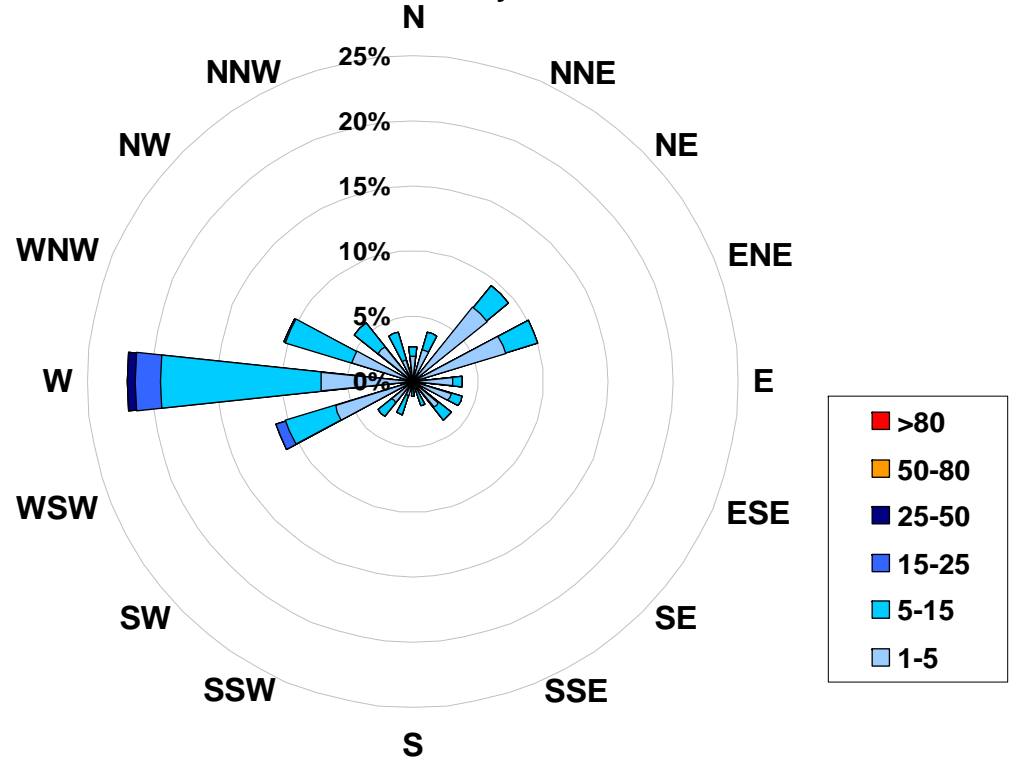


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**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 May 2008**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range			Frequency (hrs)
1.0	<	5	456
5	to	15	259
15	to	25	18
25	to	50	4
50	to	80	0
	>	80	0
Total Non-Zero Values			737

# PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

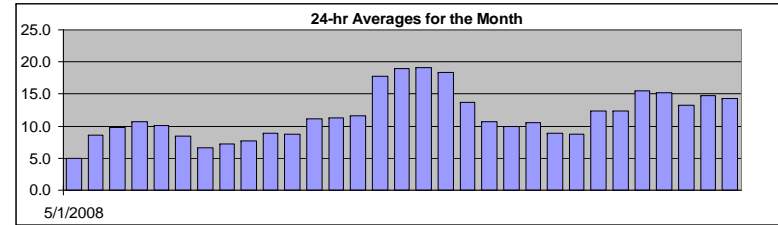
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	30.0	°C	17-May	14:00 15:00
Maximum 24-hr Value:	19.2	°C	17-May	



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
	25.6	21.1	15.8	11.3	7.9	1.7	-0.8	11.6 °C	11.3 °C

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	2	2	2	2	2	2	2	2	2	3	4	5	6	8	9	10	9	10	10	9	7	5	3	2		4.9	9.8	
2-May-08	1	1	0	0	-1	-1	0	3	5	7	10	13	14	15	17	17	17	17	18	17	12	10	8	5		8.6	18.1	
3-May-08	3	1	0	-1	-1	-1	2	6	8	11	14	15	17	17	17	16	16	17	16	15	14	12	11	10		9.8	17.4	
4-May-08	9	8	7	7	6	5	5	7	9	10	11	12	14	15	15	16	16	15	15	13	11	10	9	10		10.7	15.7	
5-May-08	9	5	1	0	-1	-1	3	7	9	12	14	15	16	16	17	17	17	17	16	14	11	10	10	8		10.1	17.3	
6-May-08	6	5	3	3	2	2	6	9	11	12	12	14	15	14	13	13	12	11	11	10	8	5	3	2		8.4	15.2	
7-May-08	1	0	0	-1	0	1	2	3	5	7	10	12	12	13	12	11	10	9	10	9	9	8	8	7		6.6	12.8	
8-May-08	6	6	6	5	4	3	4	4	4	5	7	9	11	11	12	12	12	12	11	10	7	3	3	5		7.2	12.5	
9-May-08	4	1	0	-1	-2	-2	0	3	6	8	10	12	13	13	14	14	15	14	13	13	11	9	8	8		7.7	14.6	
10-May-08	7	6	5	4	3	3	4	8	9	11	12	13	15	14	11	9	10	13	13	12	10	9	6	5		8.8	14.7	
11-May-08	3	2	2	1	0	0	4	8	10	12	13	14	15	15	15	16	15	15	15	15	11	6	4	3		8.8	15.8	
12-May-08	3	3	4	4	5	4	5	8	10	11	14	15	16	17	17	17	18	18	18	17	15	12	9	7		11.1	17.9	
13-May-08	7	7	6	9	9	9	9	9	11	12	13	14	14	15	15	15	15	15	14	13	12	11	10	9		11.3	14.9	
14-May-08	8	8	7	7	7	7	8	10	12	13	15	16	17	17	16	16	14	12	11	11	11	12	12	13		11.7	17.0	
15-May-08	13	13	13	14	13	13	14	17	19	19	20	21	22	22	21	21	21	21	21	20	19	18	17	16		17.7	21.7	
16-May-08	16	15	15	14	14	14	14	16	17	18	20	22	23	24	25	25	25	24	23	22	20	18	16	14		18.9	25.1	
17-May-08	11	8	8	7	6	6	8	12	16	19	23	26	28	30	30	29	28	27	26	25	24	23	22	21		19.2	30.0	
18-May-08	20	20	19	18	18	18	17	17	18	17	17	18	19	20	21	21	21	21	20	19	19	17	15	12		18.4	21.4	
19-May-08	11	9	8	5	4	4	8	12	14	16	16	18	19	20	20	19	18	17	17	17	16	15	14	11		13.7	19.6	
20-May-08	10	11	10	10	9	8	9	11	11	11	11	12	13	14	14	12	11	11	11	11	10	10	9	9		10.7	13.6	
21-May-08	9	9	8	8	8	8	8	8	9	9	10	11	11	12	12	13	13	13	12	11	10	10	9	8		10.0	12.7	
22-May-08	6	5	5	4	4	4	6	8	10	10	11	13	14	15	16	16	16	16	15	14	13	11	10	9		10.5	16.5	
23-May-08	8	8	8	9	9	8	8	7	7	7	8	8	8	9	10	11	11	12	11	11	10	10	9	8		8.9	11.6	
24-May-08	8	7	7	7	7	7	7	7	8	8	8	9	9	9	10	11	11	11	11	10	10	10	10	9		8.8	10.9	
25-May-08	9	9	9	8	8	8	9	10	12	13	14	15	16	17	17	18	18	18	17	17	14	10	6	4		12.4	17.8	
26-May-08	3	2	1	0	0	1	5	10	12	15	17	18	18	19	20	20	21	20	20	19	17	14	13	12		12.3	20.8	
27-May-08	10	7	6	5	4	5	8	11	13	15	17	19	21	22	23	24	24	24	24	23	20	15	16	16		15.5	24.5	
28-May-08	14	11	9	7	6	7	11	13	16	17	19	21	23	22	21	17	18	19	19	19	16	13	15	13		15.2	22.5	
29-May-08	12	10	9	7	7	9	11	14	15	15	15	16	17	18	18	18	17	16	15	14	12	11	11	11		13.2	17.7	
30-May-08	11	11	11	10	10	10	11	12	14	15	16	17	18	19	19	20	19	15	18	18	18	16	14	13		14.8	19.6	
31-May-08	13	12	12	12	12	12	12	12	13	13	13	15	16	17	18	18	18	19	19	19	18	16	13	9	8		14.2	19.2
Hourly Avg	8.1	7.1	6.5	6.0	5.5	5.5	7.2	9.2	10.7	12.0	13.3	14.7	15.8	16.4	16.6	16.5	16.4	16.1	15.8	15.0	13.3	11.4	10.3	9.3				
Hourly Max	20.4	19.7	19.3	18.2	18.0	17.5	17.1	17.2	18.5	19.2	22.6	26.0	28.1	29.7	30.0	29.5	28.4	27.3	26.2	24.7	23.5	22.6	21.8	21.2				

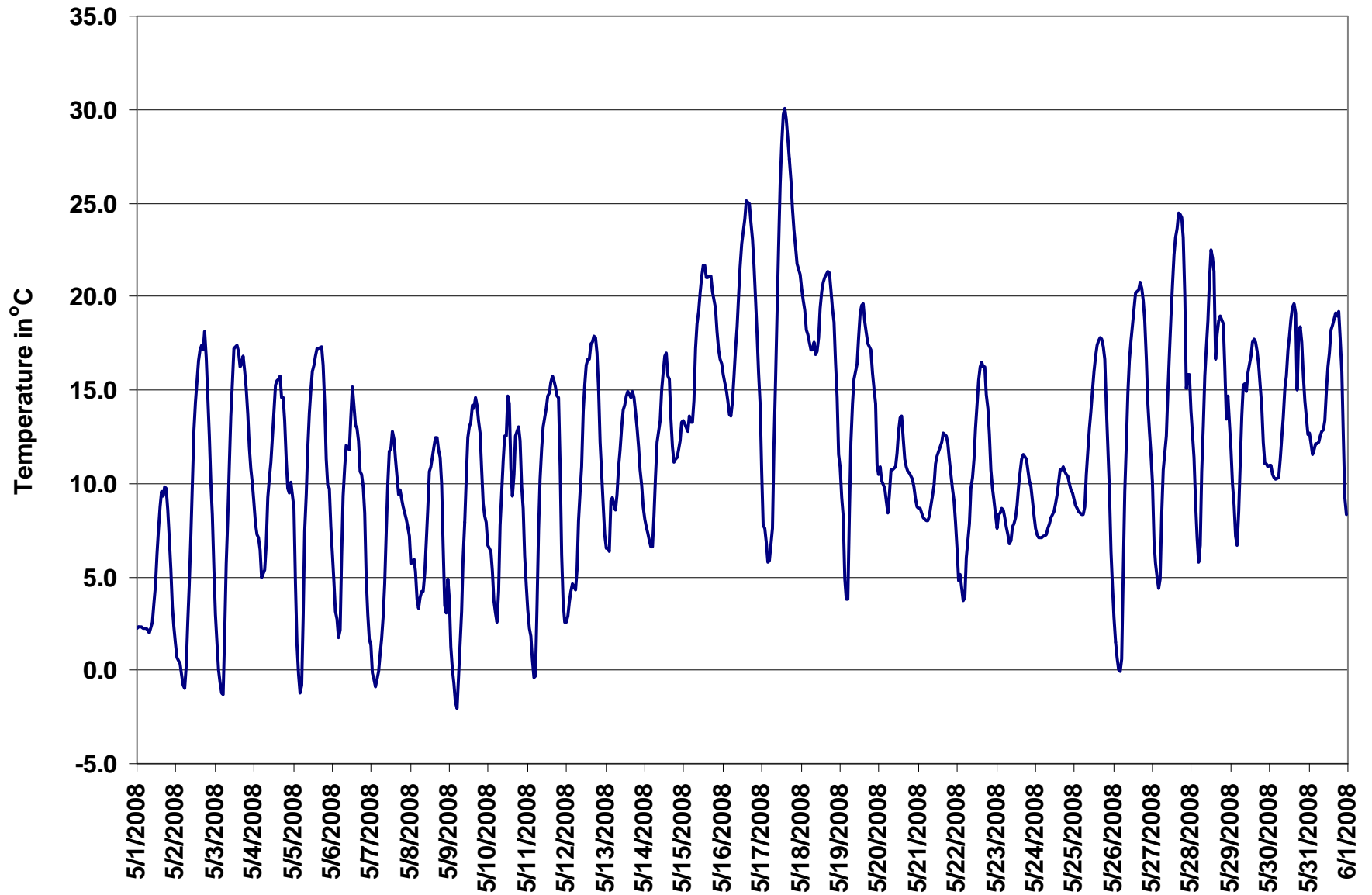


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

# PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

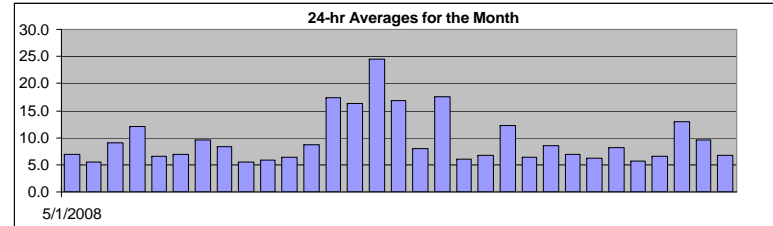
## Wind Speed (WSs)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	36.0	km/hr	15-May	14:00 15:00
Maximum 24-hr Value:	24.5	km/hr	15-May	

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
	30.7	21.6	12.0	7.9	5.2	2.7	2.2	9.5 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	11	8	7	6	4	5	7	8	11	11	10	11	8	6	5	6	6	6	7	6	7	5	4	3		7.0	10.9
2-May-08	3	3	3	2	2	2	4	4	4	6	5	7	9	7	8	8	11	8	5	6	7	6	6	6		5.5	10.6
3-May-08	5	5	3	3	2	2	4	6	7	5	6	10	9	8	11	12	12	15	12	12	14	18	19	16		9.1	18.7
4-May-08	15	15	15	15	12	8	9	9	12	11	12	13	14	17	19	17	19	13	11	7	6	5	8	11		12.1	18.7
5-May-08	6	2	2	2	3	4	5	9	9	8	9	10	9	10	10	9	10	8	8	6	4	6	3	4		6.6	10.5
6-May-08	3	3	3	3	3	4	6	6	8	8	7	7	9	14	17	15	13	15	6	3	4	3	3	3		6.9	16.5
7-May-08	2	3	3	3	3	3	3	4	7	6	7	10	11	13	18	17	18	14	17	13	15	17	12	11		9.6	18.4
8-May-08	12	14	12	12	11	9	11	10	10	8	8	8	9	8	9	8	8	8	6	5	3	2	4	4		8.3	14.5
9-May-08	3	3	4	4	2	2	2	4	4	5	6	8	8	7	8	7	7	7	5	9	10	5	5	6		5.6	9.9
10-May-08	5	6	4	2	2	3	2	3	6	6	8	7	6	8	9	12	14	5	5	3	5	7	4	5		5.8	13.9
11-May-08	3	4	3	2	3	3	3	3	6	10	10	11	11	12	11	11	10	11	9	6	3	2	3	3		6.3	11.6
12-May-08	3	4	6	5	7	8	8	12	14	13	11	11	11	15	11	14	11	9	8	8	7	5	3	3		8.7	14.9
13-May-08	3	4	4	8	7	8	6	14	15	18	22	27	26	25	27	24	32	27	27	22	21	19	17	15		17.4	31.5
14-May-08	16	15	13	12	9	10	11	16	22	21	23	23	23	24	22	23	23	14	11	9	12	10	14	18		16.4	23.8
15-May-08	18	14	16	16	13	12	12	20	26	27	26	30	31	34	36	35	35	33	33	30	26	21	19	22		24.5	36.0
16-May-08	18	19	21	22	20	16	13	19	17	17	15	17	21	19	20	23	19	23	20	15	11	7	6	5		16.8	22.7
17-May-08	5	4	3	4	3	2	3	4	5	7	9	8	8	9	9	10	15	13	15	12	10	11	12	13		8.0	14.9
18-May-08	16	17	15	14	16	20	20	24	23	21	23	25	20	18	21	21	19	21	19	15	12	11	8	4		17.6	24.6
19-May-08	7	6	5	5	4	4	4	5	9	8	8	8	7	7	6	9	5	4	5	6	5	5	11	3		6.1	10.7
20-May-08	4	5	4	4	3	3	3	8	8	8	7	7	9	7	7	8	12	8	9	8	7	7	7	8		6.7	11.8
21-May-08	9	10	11	11	11	11	13	14	15	13	14	15	15	16	14	15	15	14	15	11	8	9	8	6		12.2	16.4
22-May-08	5	5	5	5	6	4	4	6	8	9	8	8	8	7	7	7	6	8	7	7	7	7	5	4		6.3	8.8
23-May-08	5	5	7	8	9	9	9	9	8	6	6	7	8	9	10	11	11	11	11	11	8	9	10	8		8.6	11.5
24-May-08	9	9	8	10	7	10	8	9	10	9	9	9	8	5	5	7	3	4	5	4	4	3	4	6		6.8	10.1
25-May-08	6	5	4	3	3	4	5	7	7	8	9	9	9	8	9	8	8	9	8	6	5	3	2	3		6.1	9.4
26-May-08	2	2	2	2	3	3	4	7	8	8	11	12	13	12	13	13	13	13	13	13	12	9	8	7		8.2	13.1
27-May-08	6	5	5	6	4	4	5	5	4	5	6	6	5	7	8	7	7	7	7	7	4	5	7	7		5.8	8.0
28-May-08	6	6	4	3	2	4	3	4	4	8	8	7	9	7	11	16	8	6	4	5	3	6	13	7		6.5	16.2
29-May-08	8	5	6	2	4	5	7	12	17	17	18	18	18	18	19	21	21	19	17	16	15	9	10		13.0	21.3	
30-May-08	9	9	7	6	6	7	6	9	8	7	8	9	13	12	12	11	15	6	6	17	16	13	11	8		9.6	17.0
31-May-08	12	10	7	9	6	6	4	5	5	6	6	7	7	8	7	8	7	7	7	8	6	4	5	5		6.7	11.7
1-hr Average	7.6	7.3	6.9	6.8	6.2	6.3	6.6	8.8	10.2	10.4	10.8	11.7	12.0	12.2	12.8	13.3	13.3	11.8	10.8	9.8	8.8	8.0	8.0	7.6			
Hourly Max	18.1	19.1	21.3	22.3	19.7	20.2	20.2	23.8	25.7	26.7	26.2	30.2	31.1	34.3	36.0	35.2	34.6	33.4	32.7	30.1	25.8	21.3	19.3	22.1			

# PASZA - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

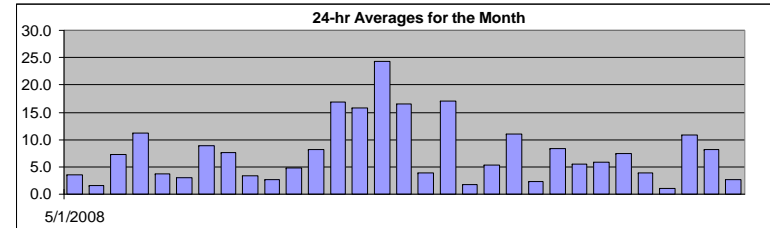
## HOURLY AVERAGE TABLE

### Wind Speed (WSv)

Monitoring Dates: May 1, 2008 to June 1, 2008

#### Summary

Maximum 1-hr Average:	35.6	km/hr	15-May	14:00 15:00
Maximum 24-hr Value:	24.3	km/hr	15-May	



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
	30.2	21.3	11.5	7.0	4.3	1.5	0.8	16.3 km/hr

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	10	8	6	5	4	5	7	7	11	11	10	11	7	5	3	3	3	5	6	6	7	5	4	2	3.5	10.7	
2-May-08	3	2	1	1	2	2	4	3	3	4	3	3	6	4	5	6	9	8	4	5	6	6	6	6	1.6	9.0	
3-May-08	5	5	3	2	2	2	4	5	7	3	3	10	8	7	9	12	12	15	12	12	14	18	19	16	7.4	18.6	
4-May-08	15	15	15	15	11	7	9	8	11	10	10	11	12	16	17	16	18	12	11	7	6	5	8	11	11.2	17.8	
5-May-08	4	1	1	1	1	4	5	9	9	7	8	8	7	9	9	7	8	7	8	6	4	5	2	3	3.7	9.1	
6-May-08	0	1	1	1	1	4	5	4	7	6	6	6	6	11	16	14	11	14	4	3	3	2	1	3	3.1	16.2	
7-May-08	1	3	1	1	2	2	1	3	6	6	6	9	10	13	18	17	18	14	16	12	15	16	12	10	8.8	18.1	
8-May-08	12	14	12	11	11	9	10	9	9	8	8	7	7	6	7	6	7	7	6	5	3	2	2	3	7.7	14.4	
9-May-08	3	3	3	4	2	1	1	4	3	3	4	6	5	4	5	4	5	6	3	8	8	4	5	5	3.5	8.0	
10-May-08	5	4	2	1	1	2	2	2	6	4	7	4	4	2	8	11	11	1	4	2	3	7	1	4	2.7	11.5	
11-May-08	2	3	3	1	2	2	2	1	4	9	9	9	9	10	9	9	9	9	8	6	2	2	2	3	4.8	9.8	
12-May-08	2	3	5	4	7	8	8	12	14	13	11	10	10	13	9	13	11	8	6	8	7	5	3	2	8.2	13.9	
13-May-08	2	4	3	8	6	8	4	14	15	18	22	26	26	25	26	24	31	27	26	21	21	19	17	15	16.9	31.2	
14-May-08	16	15	13	11	9	10	10	16	22	21	23	23	22	23	21	22	23	14	11	9	12	10	14	18	15.7	23.1	
15-May-08	18	14	16	16	13	12	12	20	25	26	26	30	31	34	36	35	34	33	32	30	26	21	19	22	24.3	35.6	
16-May-08	18	19	21	22	20	16	13	19	17	16	14	16	20	18	20	22	18	22	20	15	11	7	6	5	16.4	22.4	
17-May-08	5	2	1	2	1	2	3	2	4	6	9	7	5	6	8	8	14	13	14	12	10	11	12	13	4.0	14.3	
18-May-08	16	17	15	14	16	20	20	24	23	21	23	24	20	17	20	20	18	21	17	14	12	11	7	4	17.1	24.3	
19-May-08	6	5	5	4	2	3	3	4	8	7	7	6	4	5	7	4	4	5	6	5	4	11	0	1.8	10.5		
20-May-08	2	5	2	2	2	1	2	8	6	8	6	7	8	6	6	7	12	7	8	8	7	7	7	8	5.2	11.6	
21-May-08	9	10	11	11	11	11	13	14	15	13	13	15	15	16	14	15	15	14	15	11	8	8	7	5	11.0	16.0	
22-May-08	5	5	5	5	6	4	4	6	8	8	7	6	6	5	4	6	4	7	7	7	7	7	5	4	2.3	8.3	
23-May-08	5	5	6	8	9	9	9	9	7	6	6	6	8	9	10	11	11	11	11	11	8	9	10	7	8.4	11.2	
24-May-08	9	9	8	10	7	9	8	9	10	9	8	8	8	5	5	6	0	3	5	4	4	3	4	6	5.6	9.9	
25-May-08	6	5	4	3	3	4	5	6	6	8	8	8	8	6	8	6	6	7	7	6	4	3	2	1	5.8	8.4	
26-May-08	2	1	1	1	2	1	4	6	7	7	9	11	11	11	11	12	12	12	13	12	9	8	8	7	7.4	12.6	
27-May-08	6	5	5	6	4	4	5	4	3	2	3	4	1	3	3	2	4	5	6	6	4	4	6	7	3.9	7.0	
28-May-08	6	6	4	3	2	3	3	3	3	7	7	5	7	5	10	15	8	5	4	4	1	5	12	4	1.0	14.7	
29-May-08	7	5	6	1	4	5	7	12	16	17	17	17	17	17	18	21	20	19	16	15	14	9	9	10	10.7	20.6	
30-May-08	9	8	7	6	6	7	6	8	8	6	6	6	12	10	11	10	9	4	5	17	16	13	11	8	8.2	16.7	
31-May-08	12	9	6	9	6	6	4	4	4	6	5	5	5	4	3	6	5	5	6	8	6	4	4	5	2.7	11.6	
1-hr Vector	3.5	3.4	3.4	3.6	3.6	3.1	3.4	4.7	5.2	5.1	4.6	4.8	5.1	5.5	5.6	6.3	6.7	4.7	3.1	2.8	2.8	2.4	3.1	2.9			
Hourly Max	18.0	19.0	21.3	22.2	19.6	20.1	20.0	23.6	25.3	26.2	25.7	29.7	30.5	33.9	35.6	34.9	34.3	33.0	32.3	29.8	25.6	21.1	19.0	21.9			

# PASZA - Evergreen Park Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 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
	351.2	327.7	277.0	249.7	77.2	32.7	8.1	286 deg

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-May-08	277	278	296	296	300	256	268	251	256	260	255	255	265	249	259	248	213	75	86	81	94	96	92	57		262	W	
2-May-08	52	46	320	305	273	239	245	260	292	292	300	184	139	162	161	127	44	61	204	98	75	85	89	78		111	ESE	
3-May-08	69	67	49	311	248	284	267	268	274	324	276	334	352	325	303	283	286	284	281	279	270	266	263	257		287	WNW	
4-May-08	252	251	251	255	273	293	260	273	320	308	315	283	282	281	299	295	303	298	293	279	237	260	253	250		280	W	
5-May-08	308	264	243	281	273	244	281	279	274	296	289	328	342	332	301	340	312	42	54	74	75	65	170	123		320	NW	
6-May-08	194	329	284	239	339	248	267	344	278	258	166	113	157	210	218	298	301	277	358	26	141	136	358	42		259	W	
7-May-08	275	52	285	337	340	43	89	61	59	59	82	76	62	57	55	48	44	47	63	57	58	57	63	84		57	ENE	
8-May-08	62	55	57	48	55	53	53	52	59	65	50	47	56	56	47	71	49	51	61	66	68	20	267	288		54	NE	
9-May-08	304	318	283	193	215	149	305	208	218	145	137	135	181	125	166	124	150	127	182	228	220	68	109	147		167	SSE	
10-May-08	171	214	183	335	242	3	282	27	42	26	5	290	256	314	201	236	275	294	351	26	258	235	225	248		273	W	
11-May-08	1	275	262	303	321	323	318	358	44	42	50	33	15	10	10	24	21	32	43	53	11	249	222	215		18	NNE	
12-May-08	278	289	196	263	254	250	256	270	265	267	278	265	262	249	269	254	268	265	201	264	268	261	269	202		259	W	
13-May-08	192	191	250	277	299	290	245	267	272	272	272	269	271	277	271	276	265	264	260	259	260	256	257	245		266	W	
14-May-08	251	247	249	252	251	252	257	264	271	268	279	276	269	272	277	279	276	262	234	227	226	231	231	252		261	W	
15-May-08	251	257	257	254	252	249	251	254	260	261	270	262	275	269	271	271	269	269	274	270	269	271	271	268		266	W	
16-May-08	269	267	266	262	260	267	271	279	281	292	300	273	270	282	284	285	293	267	267	260	262	247	253	265		273	W	
17-May-08	212	64	222	230	38	321	69	127	149	115	138	140	170	231	290	320	287	285	282	279	263	270	282	273		263	W	
18-May-08	271	264	256	254	269	266	264	265	275	275	269	260	270	276	263	271	287	275	292	332	275	259	263	288		272	W	
19-May-08	315	300	281	303	327	267	325	63	83	77	114	124	168	116	136	198	154	60	75	83	97	132	201	339		118	ESE	
20-May-08	338	285	116	195	305	29	358	253	304	243	273	290	304	337	322	251	258	321	324	309	309	297	280	283		292	WNW	
21-May-08	273	272	270	275	282	278	280	281	286	292	314	309	318	330	337	338	342	342	343	336	319	322	314	287		308	NW	
22-May-08	248	257	270	250	250	251	283	269	267	264	275	298	295	336	4	41	71	52	61	59	50	55	65	49		324	NW	
23-May-08	38	37	40	40	40	30	31	25	20	4	33	41	34	32	37	42	41	48	54	52	51	58	53	45		40	NE	
24-May-08	41	41	40	43	45	50	48	47	53	56	58	52	55	57	52	65	351	243	254	273	307	26	42	39		43	NE	
25-May-08	42	48	30	23	1	54	66	88	69	67	61	63	61	75	71	53	70	61	60	64	56	61	331	357		59	ENE	
26-May-08	12	340	13	78	242	42	85	129	131	133	119	126	124	127	125	127	109	120	116	111	101	100	107	115		116	ESE	
27-May-08	105	72	86	90	65	88	124	167	149	187	167	188	234	108	71	209	59	66	83	76	63	79	111	120		108	ESE	
28-May-08	100	97	80	72	17	40	38	50	61	248	292	347	353	304	243	243	131	117	125	157	127	285	294	304		304	NW	
29-May-08	226	221	221	152	217	207	255	259	270	278	275	281	302	303	314	323	326	330	331	323	327	303	268	267		295	WNW	
30-May-08	289	291	304	284	270	260	285	271	271	252	244	245	222	226	210	207	278	22	200	260	257	254	246	230		255	WSW	
31-May-08	248	264	313	255	309	326	328	5	32	40	54	49	21	20	20	341	7	48	107	120	112	116	86	61		13	NNE	
Hourly Avg	272	279	273	273	285	284	283	277	286	284	288	282	286	291	288	290	302	313	308	303	280	277	263	263				

## PASZA - Evergreen Park Standard Deviation of Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: May 1, 2008 to June 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
	85.6	72.1	39.9	19.9	11.9	6.6	4.5

**Status Flag Characters**

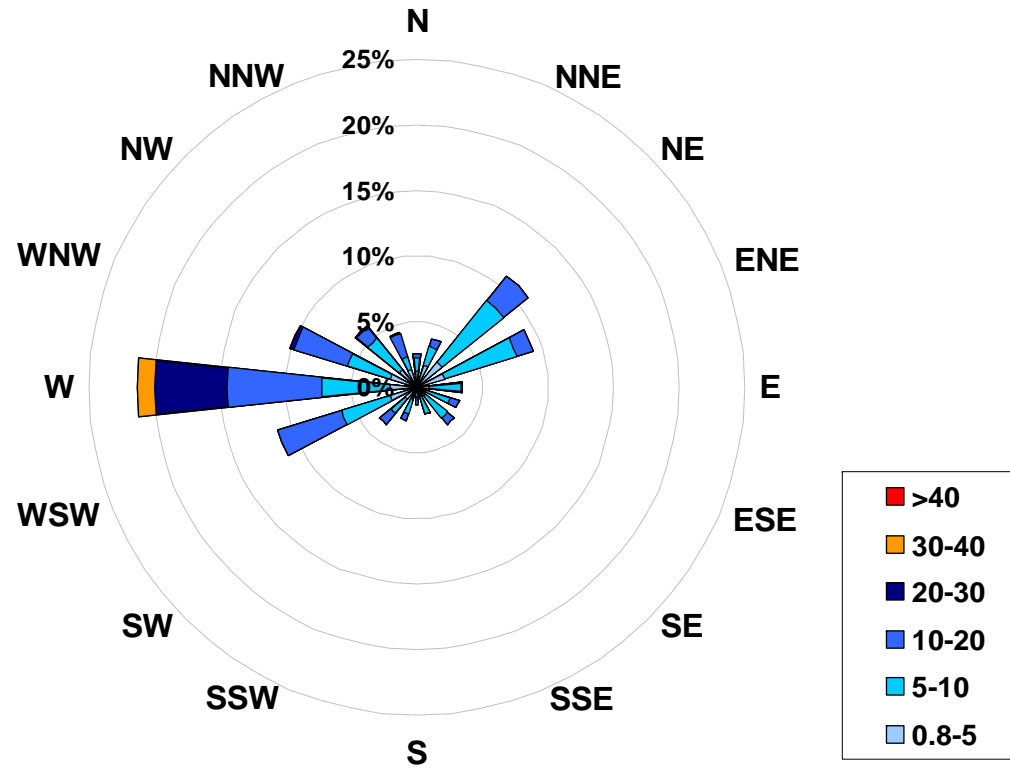
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	11	11	16	15	22	12	10	22	10	14	9	24	34	56	62	72	42	19	16	14	12	7	57		72.2		
2-May-08	35	46	72	46	29	39	23	18	40	49	46	72	62	70	59	52	35	31	70	58	9	10	13	7		71.7	
3-May-08	12	12	22	38	25	33	18	24	17	57	73	21	33	47	33	17	13	17	12	10	7	6	6	7		72.6	
4-May-08	5	5	5	5	20	28	7	11	21	27	34	30	27	17	20	21	17	17	18	11	15	19	10	5		33.6	
5-May-08	37	56	64	59	74	15	17	14	15	32	27	45	51	42	40	60	37	45	20	16	15	30	61	63		73.9	
6-May-08	91	78	75	71	73	24	45	44	27	42	41	40	58	47	11	26	24	19	60	38	63	56	83	52		91.4	
7-May-08	70	50	68	64	44	65	82	37	25	35	40	30	24	17	11	11	11	10	11	10	8	7	13	15		81.8	
8-May-08	11	8	11	9	9	11	12	13	18	18	26	43	46	52	52	56	36	33	25	13	8	43	68	38		67.8	
9-May-08	22	19	59	28	18	76	73	33	54	65	64	48	60	69	61	54	63	42	68	37	73	19	25	38		75.8	
10-May-08	28	61	92	53	77	45	49	55	24	54	41	53	58	89	27	22	64	88	37	56	54	18	79	25		91.6	
11-May-08	62	45	26	54	45	48	43	73	55	28	27	32	34	34	38	38	29	33	21	26	44	30	46	15		72.7	
12-May-08	57	50	39	42	12	6	13	11	10	9	25	28	27	32	39	28	20	27	38	12	13	11	24	61		60.8	
13-May-08	49	35	32	15	25	16	46	12	15	15	13	11	12	12	14	11	8	8	10	8	6	6	6	7		49.4	
14-May-08	4	4	5	4	6	6	7	10	10	14	14	13	17	14	11	11	8	10	13	7	4	9	8	8		17.0	
15-May-08	4	8	6	5	6	6	6	7	10	11	11	11	11	9	9	8	9	9	10	8	7	7	9	7		11.4	
16-May-08	6	6	5	4	4	6	9	9	13	22	25	15	14	17	17	14	20	8	7	6	6	9	6	15		25.1	
17-May-08	11	83	75	71	81	43	42	58	43	39	28	34	51	65	35	29	18	14	10	10	10	11	9	8		83.3	
18-May-08	8	7	7	6	9	7	8	7	9	9	9	9	16	16	16	18	17	13	25	24	10	5	30	22		29.6	
19-May-08	34	37	31	45	68	34	32	51	21	33	36	39	56	56	53	47	42	23	13	13	12	39	9	78		78.3	
20-May-08	48	17	87	73	47	79	72	24	44	19	19	22	34	36	31	29	13	29	13	14	13	13	12	14		87.2	
21-May-08	14	9	9	9	12	11	9	11	12	16	16	17	17	14	13	13	12	11	15	12	16	15	23	20		22.6	
22-May-08	14	11	11	11	7	15	21	18	22	20	23	47	46	56	62	41	60	19	20	13	11	12	15	25		62.4	
23-May-08	8	16	10	13	14	13	13	17	16	20	21	15	17	14	14	14	15	14	13	13	19	20	15	14		20.6	
24-May-08	11	14	15	13	13	13	19	16	14	19	15	14	16	25	29	22	96	32	18	20	18	24	15	10		96.4	
25-May-08	9	18	15	19	24	15	23	29	37	32	26	34	34	49	35	45	48	38	26	22	11	11	29	69		69.2	
26-May-08	35	56	67	71	61	74	29	24	30	30	35	28	29	39	30	26	20	22	16	13	13	11	13	11		73.7	
27-May-08	14	10	14	8	21	32	31	42	71	73	73	67	89	75	78	88	79	53	44	27	10	11	12	12		89.0	
28-May-08	12	9	11	17	45	32	42	36	50	43	27	51	43	44	26	39	28	39	33	33	80	47	15	61		79.6	
29-May-08	20	14	10	74	9	12	16	10	12	14	14	16	17	18	21	14	15	13	15	14	12	13	13	14		73.7	
30-May-08	15	14	11	15	11	12	23	16	22	40	55	52	19	34	27	23	52	54	33	14	9	8	10	7		55.5	
31-May-08	7	37	24	13	17	14	27	26	23	20	32	51	49	76	80	53	50	60	38	19	10	16	19	23		79.9	
Hourly Max	91	83	92	74	81	79	82	73	71	73	73	72	89	89	80	88	96	88	70	58	80	56	83	78			



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



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	< 5		169
5	to 10		316
10	to 20		204
20	to 30		45
30	to 40		10
	> 40		0
Total Non-Zero Values			744

PASZA  
Smoky Heights Station  
Monthly Summary Tables, Graphs and  
Roses

# PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
 Station Owner: PASAA

## HOURLY AVERAGE TABLE

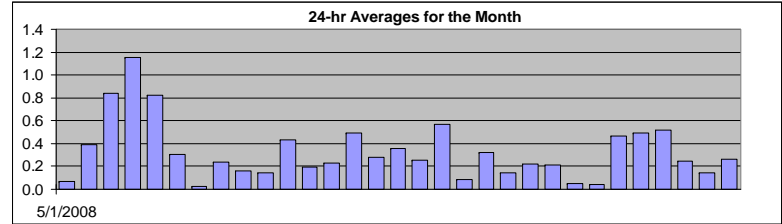
## Sulphur Dioxide (SO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 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:	9.2 ppb	4-May	1:00	2:00
Maximum 24-hr Average:	1.2 ppb	4-May		



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.1	1.1	0.4	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																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2
2-May-08	0	0	1	0	0	0	0	0	1	1	1	0	0	0	1	1	1	1	0	0	A	0	0	0	0.4	0.8
3-May-08	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	0	0	A	1	1	1	1	0.8	1.5
4-May-08	1	9	6	2	1	1	1	0	0	0	0	0	1	0	0	0	0	0	A	1	1	1	0	0	1.2	9.2
5-May-08	0	1	0	0	1	0	1	4	2	2	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0.8	3.8
6-May-08	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	1.8
7-May-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	0.0	0.1
8-May-08	0	0	0	0	0	0	0	1	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.6
9-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
10-May-08	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
11-May-08	0	0	0	0	0	0	1	1	2	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.3
12-May-08	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
13-May-08	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0.2	2.0
14-May-08	2	2	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.1
15-May-08	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	1.2
16-May-08	0	0	0	0	1	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4	1.4
17-May-08	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
18-May-08	0	1	2	4	A	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.6	4.0
19-May-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	0.3
20-May-08	0	0	A	0	0	0	0	1	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6
21-May-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	0.1	0.5
22-May-08	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.8
23-May-08	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0.2	0.4
24-May-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	0.0	0.1
25-May-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	0.1
26-May-08	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	1	1	1	0.5	1.5
27-May-08	1	1	A	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0.5	0.9
28-May-08	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	0.9
29-May-08	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.8
30-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4
31-May-08	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	2.7
Hourly Avg	0.3	0.6	0.5	0.4	0.3	0.3	0.4	0.5	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3		
Hourly Max	2.7	9.2	5.7	4.0	0.9	1.2	1.4	3.8	2.6	1.8	1.5	1.2	0.9	0.8	1.0	0.9	0.7	0.6	0.6	0.9	1.2	1.5	1.2	2.0		

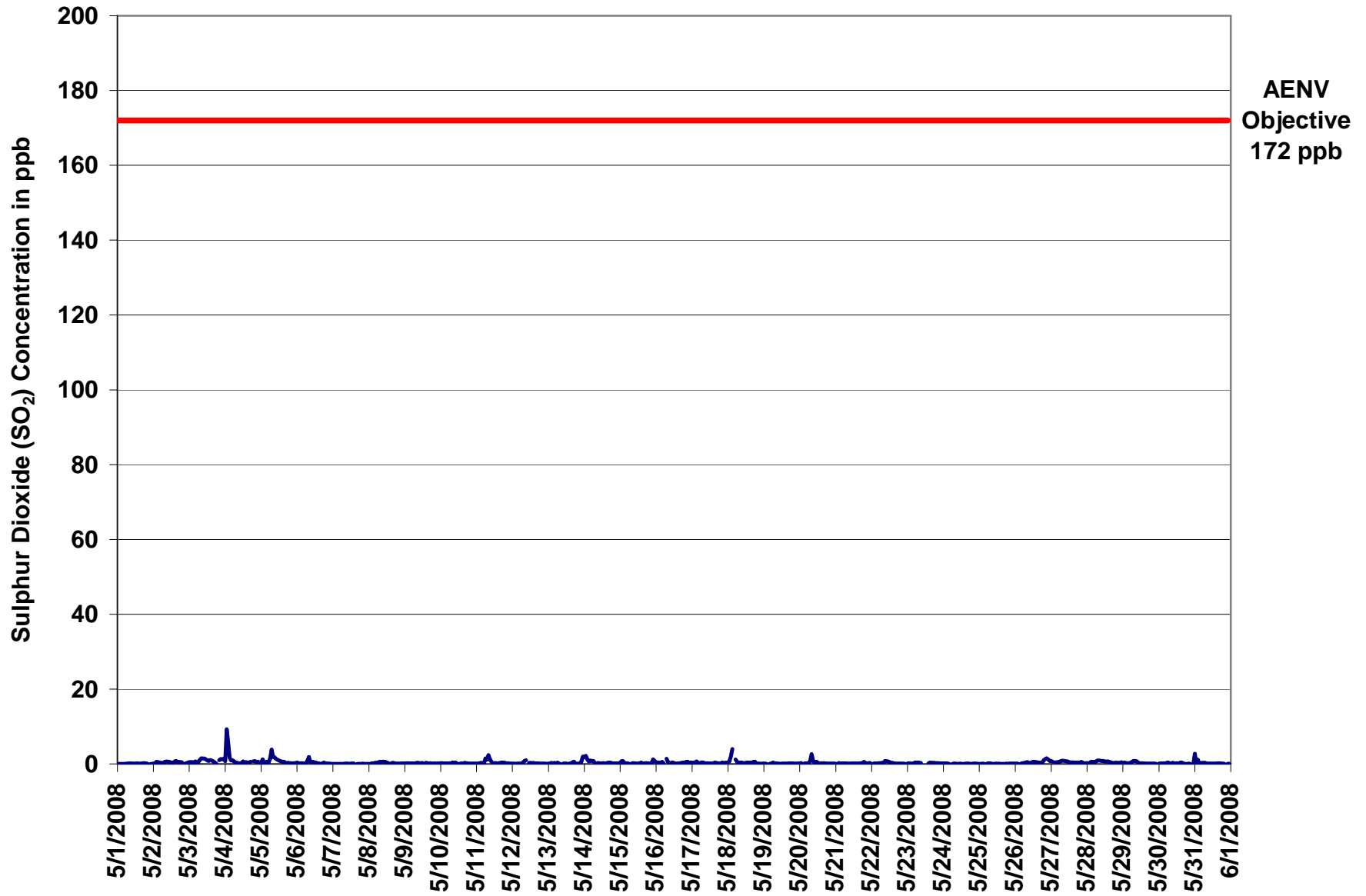


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights  
 Station Owner: PASAA

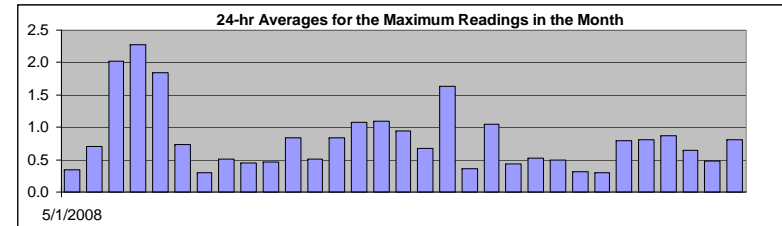
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	13.1	ppb	4-May	1:00 2:00
Maximum 24-hr Value:	2.3	ppb	4-May	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	6.8	2.3	0.8	0.5	0.3	0.3	0.2	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**

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-May-08	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	A	0	0	0.3	0.6
2-May-08	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	1	0.7	1.1
3-May-08	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	A	5	4	6	7	2.0	6.9
4-May-08	7	13	10	6	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2.3	13.1
5-May-08	1	3	1	1	1	1	10	9	3	2	2	1	1	1	1	1	A	1	1	0	0	1	0	1.8	10.3	
6-May-08	1	1	0	0	0	0	1	1	3	1	1	1	1	1	0	0	A	0	2	0	0	0	0	0	0.7	3.2
7-May-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	0.5
8-May-08	0	0	1	0	1	0	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0.5	0.9
9-May-08	0	0	0	0	0	0	0	0	1	0	0	0	1	A	1	1	0	1	0	0	0	0	0	0	0.5	0.6
10-May-08	1	0	0	0	0	0	0	1	1	1	1	0	A	0	0	0	1	1	1	0	0	0	0	0	0.5	0.9
11-May-08	0	0	0	1	1	0	3	2	3	2	1	A	1	1	0	1	1	1	1	0	1	0	0	0	0.8	3.1
12-May-08	0	0	0	0	0	0	0	1	1	2	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.7
13-May-08	0	0	1	0	1	0	1	0	0	A	1	1	0	0	0	0	2	1	1	0	1	0	3	4	0.8	3.8
14-May-08	3	3	3	1	2	2	2	1	A	1	0	0	0	0	1	1	1	1	1	0	0	0	1	0	1.1	3.4
15-May-08	1	4	4	0	0	0	0	A	1	1	1	0	0	1	1	0	1	1	1	1	0	2	3	3	1.1	4.1
16-May-08	2	1	1	0	2	1	A	2	1	0	1	1	1	0	0	0	1	1	1	1	2	1	1	1	0.9	2.4
17-May-08	1	1	1	1	1	A	1	1	1	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	0.7	1.5
18-May-08	2	2	5	7	A	5	3	1	1	1	1	1	1	1	1	1	1	2	2	0	0	0	0	1	1.6	7.0
19-May-08	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
20-May-08	1	1	A	0	0	0	1	1	10	2	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1.0	9.8
21-May-08	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0.4	1.0
22-May-08	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0.5	1.5
23-May-08	0	0	0	0	1	1	1	1	0	0	C	C	C	A	1	1	1	0	1	0	0	0	0	0	0.5	0.7
24-May-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.3	0.5
25-May-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
26-May-08	0	0	0	A	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	0.8	1.9
27-May-08	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.2
28-May-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0.9	1.3
29-May-08	A	1	0	0	0	1	1	1	2	2	1	0	0	0	1	0	0	0	0	0	0	0	0	A	0.6	1.9
30-May-08	0	0	0	0	0	1	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	0	A	1	0.5	0.8
31-May-08	7	0	4	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.8	6.6
Hourly Avg	1.1	1.3	1.3	1.0	0.6	0.7	1.1	1.1	1.3	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.7	0.9	0.9		
Hourly Max	7.1	13.1	9.6	7.0	1.6	4.8	10.3	9.1	9.8	2.3	1.8	1.6	1.3	1.3	1.4	1.3	1.5	1.6	2.3	1.5	5.4	4.2	6.4	6.9		

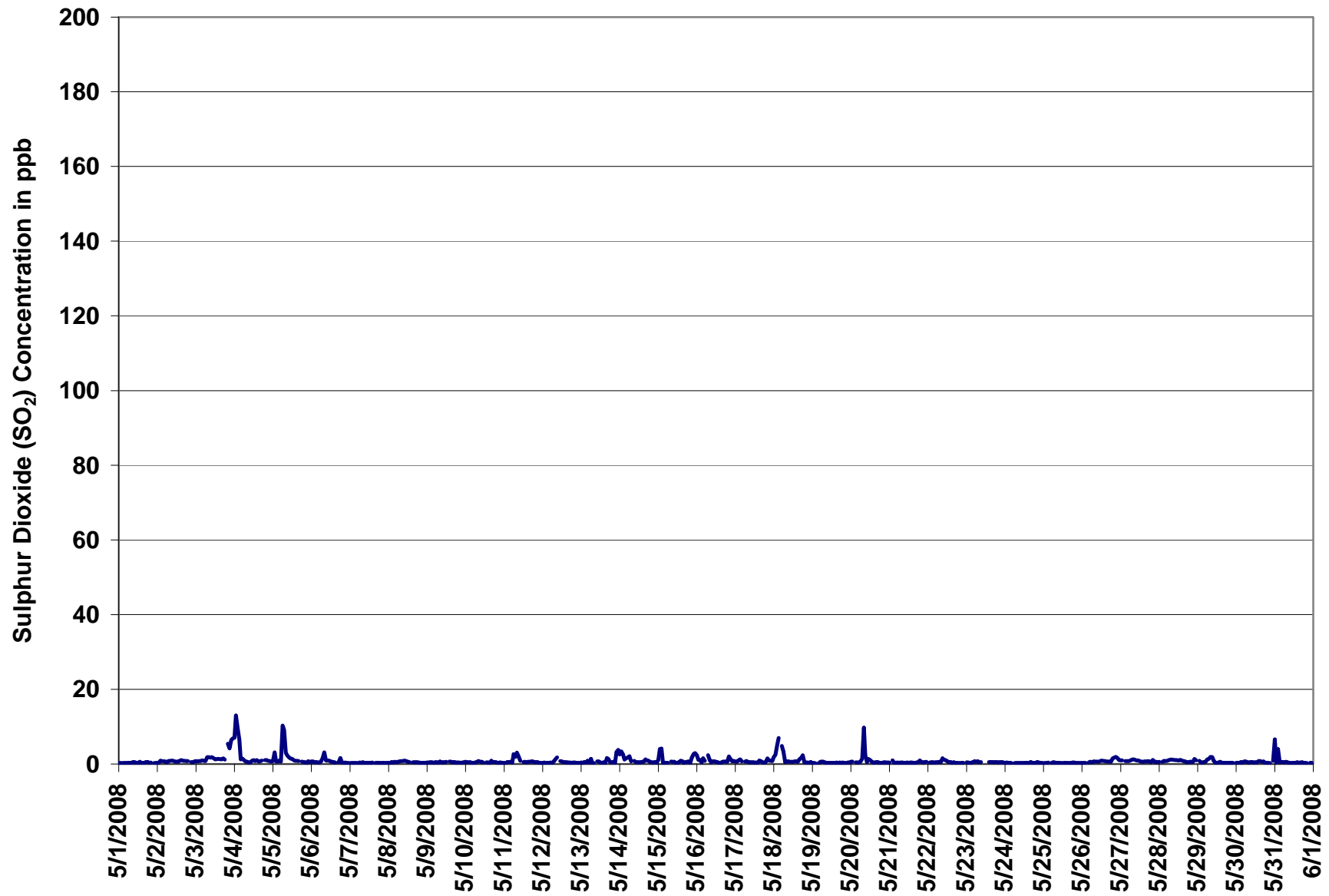
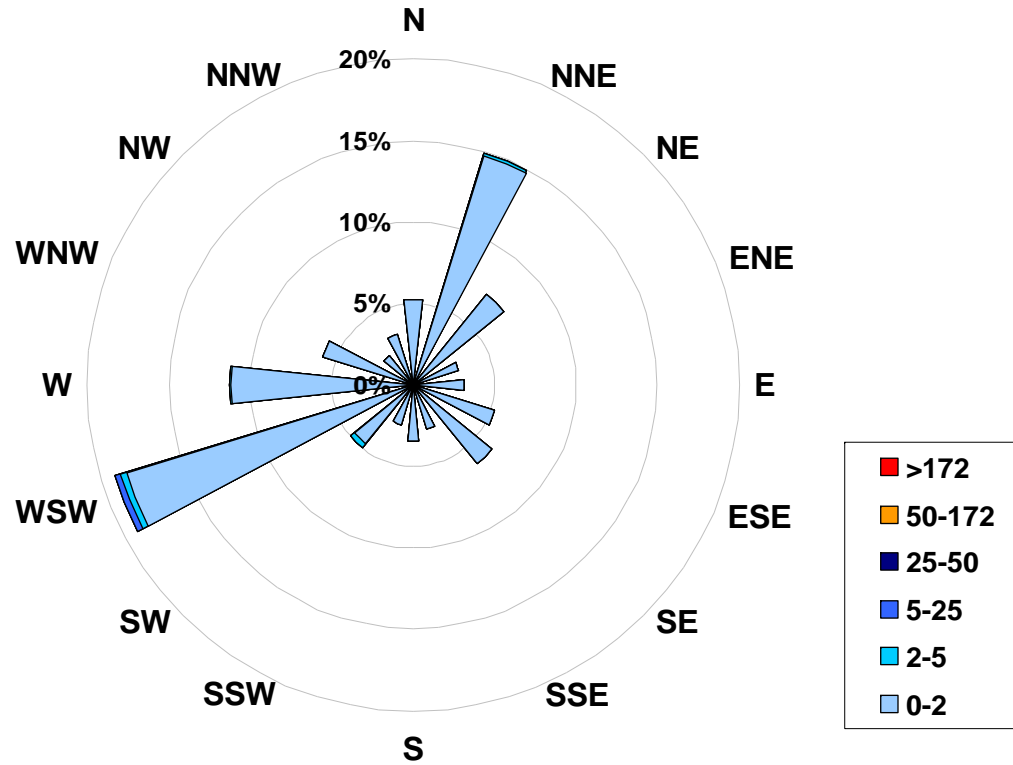


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	< 2		699
2	to 5		7
5	to 25		2
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			708

# PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary

Station: Smoky Heights  
 Station Owner: PASAA

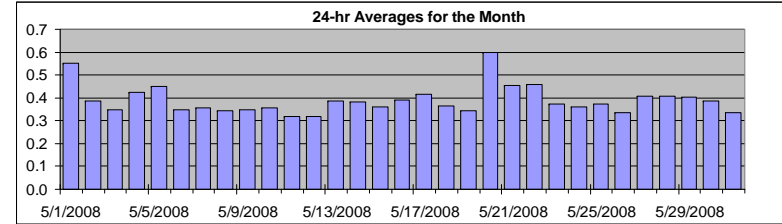
## HOURLY AVERAGE TABLE

## Total Reduced Sulphur (TRS)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Maximum 1-hr Average:	0.9	ppb	5-May	0:00 1:00
Maximum 24-hr Value:	0.6	ppb	20-May	



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
	0.7	0.6	0.4	0.4	0.3	0.3	0.2	0.4 ppb	0.4 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	A	0	0	0	0.6	0.7
2-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.5
3-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.5	
4-May-08	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	0.4	0.8	
5-May-08	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.9	
6-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.5	
7-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0.4	0.6	
8-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4	
9-May-08	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
10-May-08	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	0.4	
11-May-08	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
12-May-08	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
13-May-08	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
14-May-08	0	0	0	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
15-May-08	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
16-May-08	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
17-May-08	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.7	
18-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4	
19-May-08	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
20-May-08	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7	
21-May-08	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	0.6	
22-May-08	A	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0.5	0.6	
23-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	1	0.4	0.5	
24-May-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
25-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
26-May-08	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
27-May-08	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0.4	0.7	
28-May-08	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.5	
29-May-08	A	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.7	
30-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.4	0.5	
31-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4	
Hourly Avg	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
Hourly Max	0.9	0.8	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.8		



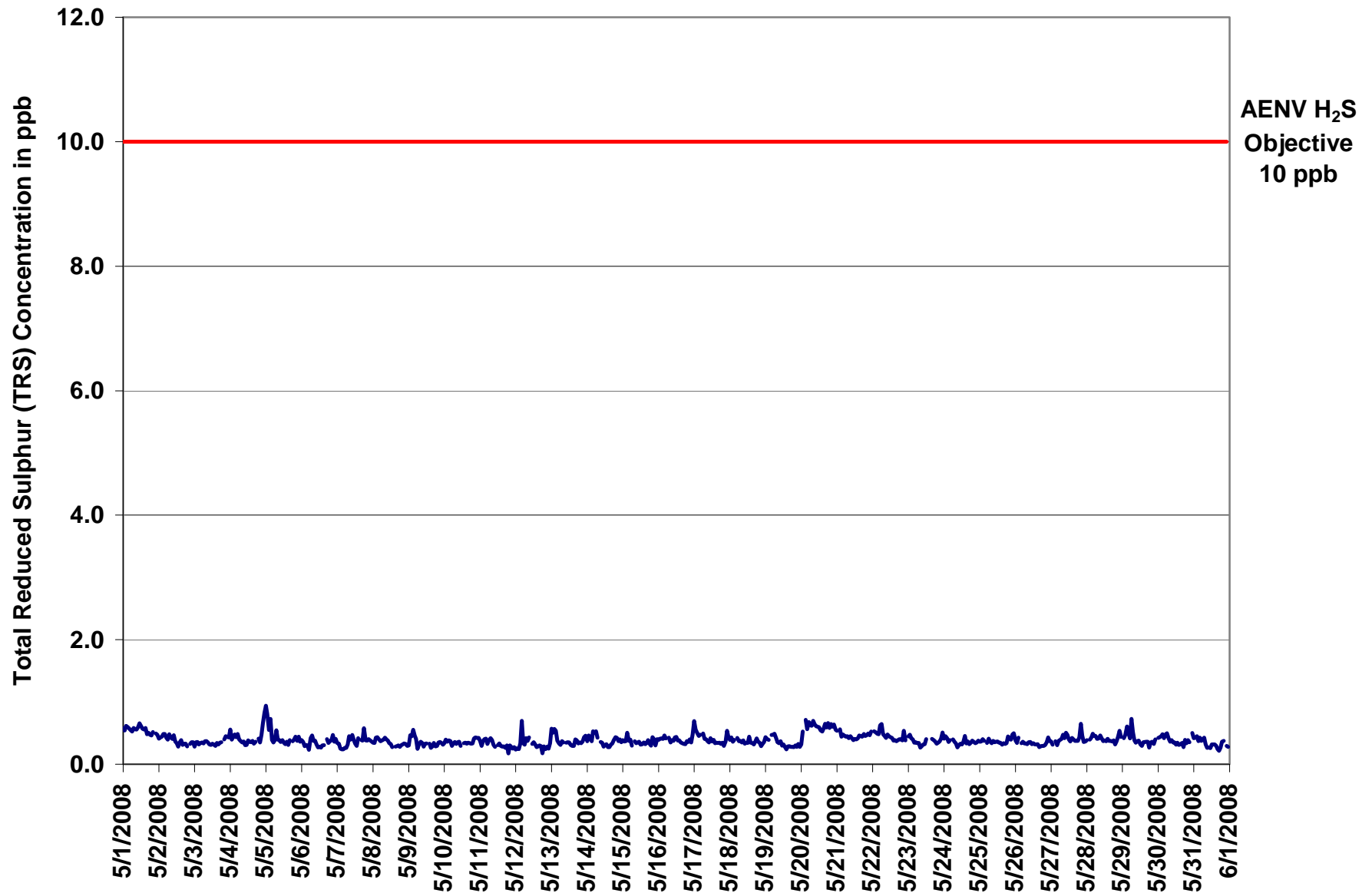


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights  
 Station Owner: PASAA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

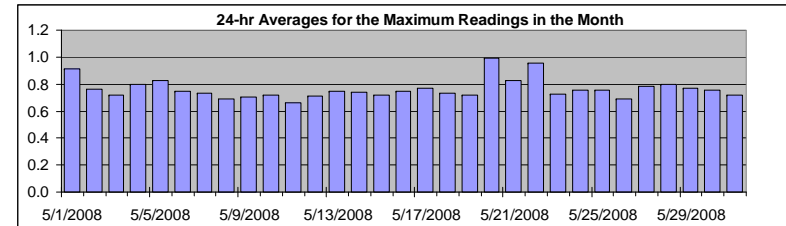
**Total Reduced Sulphur (TRS)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	3.3	ppb	22-May	21:00 22:00
Maximum 24-hr Value:	1.0	ppb	20-May	

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
	1.2	1.0	0.8	0.7	0.7	0.6	0.6	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-May-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	1.1
2-May-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	0.9
3-May-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
4-May-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
5-May-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	1.3
6-May-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	0.7	1.4
7-May-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	1.1
8-May-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	0.8
9-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.0
10-May-08	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
11-May-08	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	0.7	0.9
12-May-08	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	0.7	1.2
13-May-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	0.7	1.0
14-May-08	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
15-May-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	0.7	1.0
16-May-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	0.8
17-May-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	1.1
18-May-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	0.9
19-May-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	1.0
20-May-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	1.0	1.5
21-May-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	0.8	1.0
22-May-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	A	1.0	3.3
23-May-08	1	1	1	1	1	1	1	1	1	1	1	1	C	C	A	1	1	1	1	1	1	1	1	1	0.7	1.0
24-May-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	0.9
25-May-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	0.8	1.0
26-May-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	0.8
27-May-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	1.1
28-May-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	0.8	1.3
29-May-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	1.2
30-May-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	1.1
31-May-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	1.0
Hourly Avg	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.9	0.8	0.8		
Hourly Max	1.3	1.2	1.0	1.5	1.2	1.1	1.2	0.9	1.2	1.2	1.0	0.9	1.0	1.0	0.8	0.9	1.1	1.0	1.1	1.0	1.1	3.3	1.3	1.4		

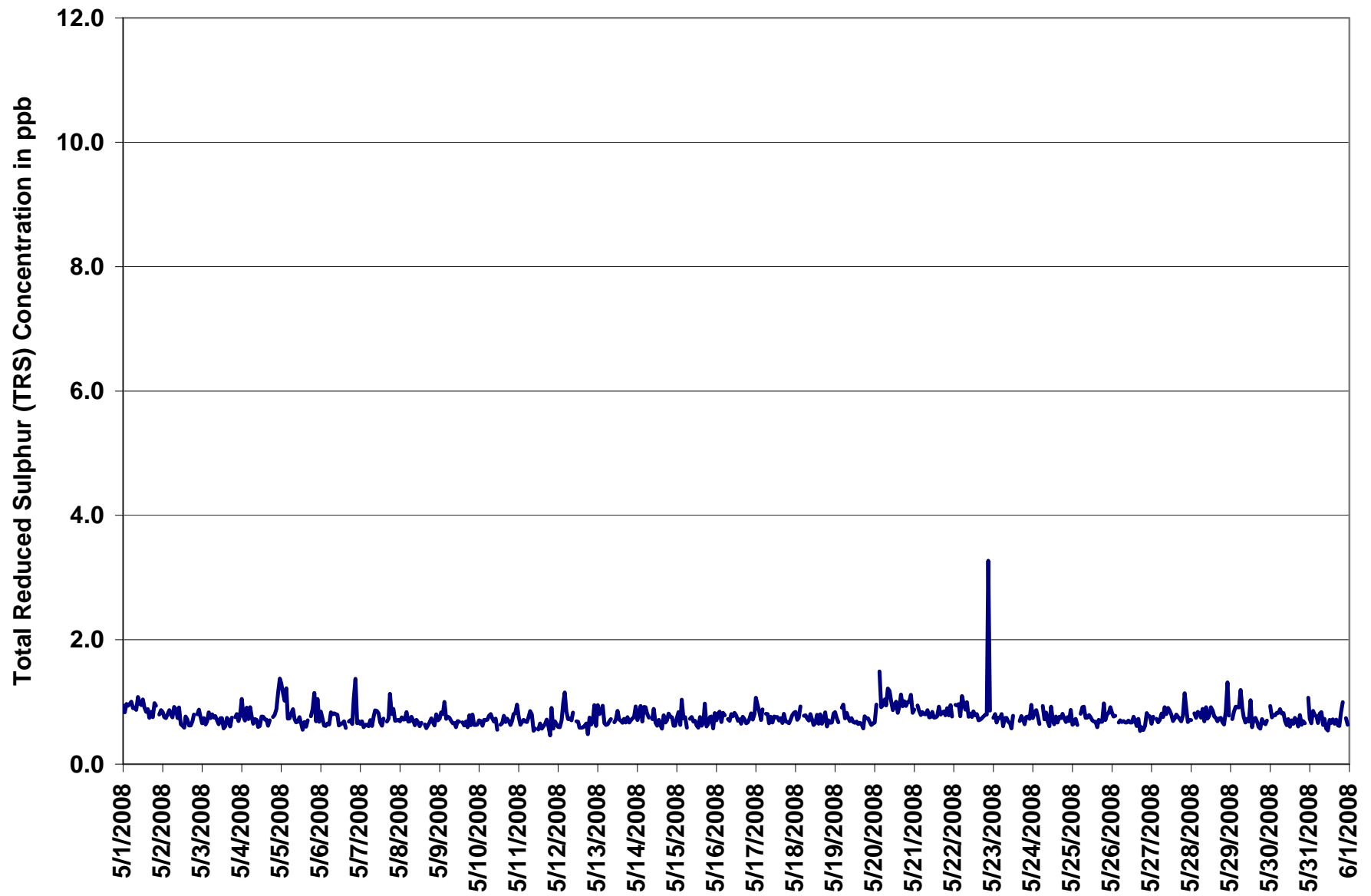
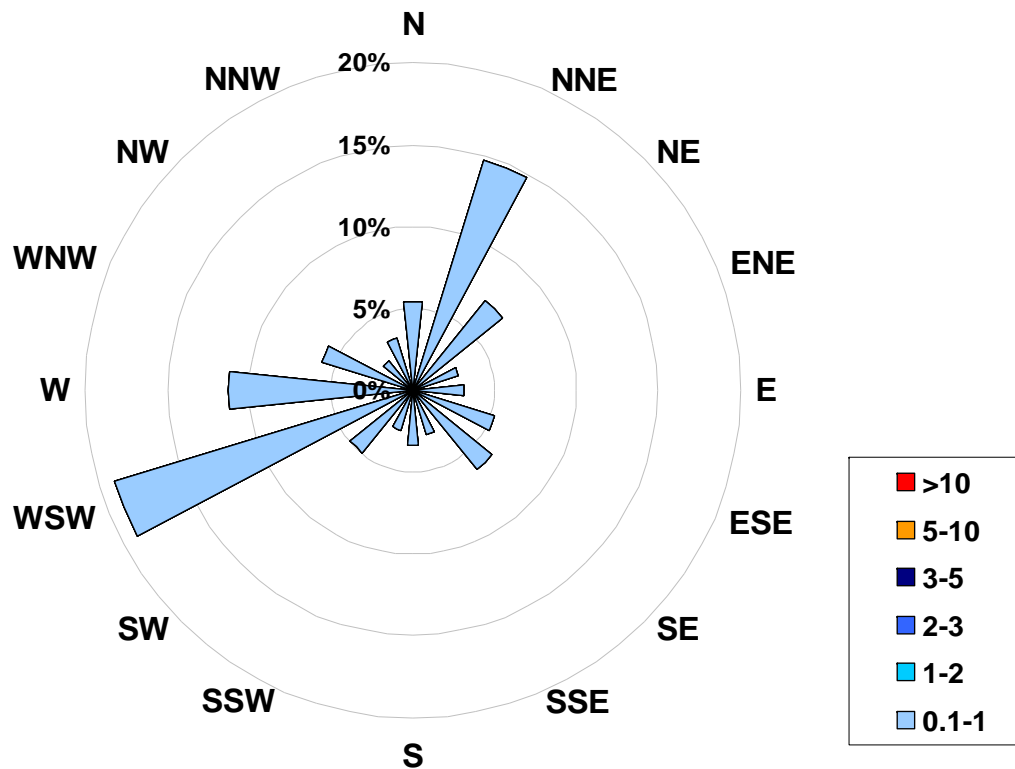


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of TRS in ppb Range			Frequency (hrs)
0.1	<	1	709
1	to	2	0
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

Station: Smoky Heights  
 Station Owner: PASAA

### HOURLY AVERAGE TABLE

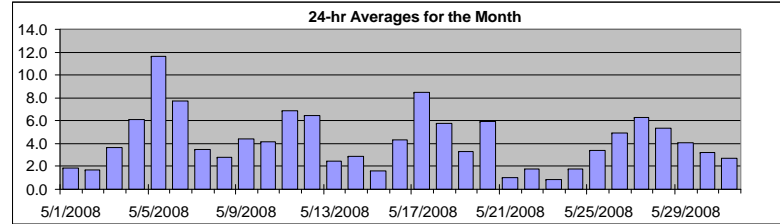
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m<sup>3</sup> 24-hr 30 µg/m<sup>3</sup>  
 Summary

Number of 24-hr Exceedances (draft):		0			
Maximum 1-hr Average:	29.2	µg/m <sup>3</sup>	27-May	20:00 21:00	
Maximum 24-hr Value:	11.6	µg/m <sup>3</sup>	5-May		

AIC Time:	0 hrs	Operational Time:	742 hrs								
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%								
Percentile	99	95	75	50	25	5	1	Average / Median			Geomean
	15.4	10.6	6.0	3.4	1.9	0.0	0.0	4.2	3 µg/m <sup>3</sup>		3.6 µg/m <sup>3</sup>



#### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00			22:00 23:00
1-May-08	2	2	2	2	2	1	3	2	1	2	1	2	2	2	2	2	2	2	2	2	1	2	2	1	1.9	2.6
2-May-08	1	1	1	2	2	2	2	4	2	3	2	1	0	0	1	1	1	1	2	3	2	1	2	3	1.7	3.8
3-May-08	4	4	4	4	5	5	6	6	5	5	5	3	2	5	6	4	4	3	0	1	1	1	2	3.7	6.3	
4-May-08	2	2	2	3	3	4	4	2	1	0	0	1	0	0	4	4	10	11	15	15	17	17	15	6.1	17.2	
5-May-08	14	11	11	10	12	21	13	11	12	11	10	11	11	11	9	9	9	9	9	10	15	17	13	8	11.6	20.7
6-May-08	8	6	6	7	8	8	14	15	9	9	7	10	9	8	9	8	12	6	8	7	4	3	2	1	7.7	15.4
7-May-08	1	2	2	1	1	1	5	4	7	3	4	4	4	8	7	5	5	4	4	3	3	3	2	2	3.5	7.6
8-May-08	5	2	0	1	2	3	3	3	4	3	3	3	2	3	3	3	3	3	2	3	2	3	3	3	2.8	4.7
9-May-08	4	5	5	5	5	6	6	6	6	6	4	1	2	3	2	4	3	4	4	6	5	7	4	4	4.4	6.9
10-May-08	4	4	4	4	5	5	6	5	4	3	2	2	2	3	3	3	11	3	4	2	3	6	4	6	4.2	11.1
11-May-08	6	5	4	5	6	6	7	8	8	6	5	4	6	6	6	7	8	7	9	9	9	8	9	9	6.9	9.4
12-May-08	7	7	7	7	9	11	14	10	9	8	4	6	8	2	4	5	5	4	4	6	4	5	6	4	6.5	13.6
13-May-08	3	4	6	6	4	5	1	0	0	0	0	0	0	0	2	2	4	3	3	3	6	3	3	2	2.4	6.4
14-May-08	3	3	2	2	3	3	3	2	1	2	2	1	2	3	6	7	8	8	4	2	0	0	0	0	2.8	7.9
15-May-08	0	2	0	2	1	2	2	1	1	2	1	2	3	3	4	3	1	1	2	2	1	2	1	1	1.6	3.6
16-May-08	0	0	0	1	2	2	3	2	0	0	1	1	1	0	3	4	9	8	13	10	17	9	8	9	4.3	16.8
17-May-08	10	7	7	7	7	9	7	6	8	8	7	6	6	8	9	9	12	14	9	7	8	10	10	10	8.5	13.9
18-May-08	10	10	8	7	6	6	7	6	4	5	5	4	5	6	3	5	3	2	3	5	7	11	6	5.7	10.6	
19-May-08	7	6	4	4	4	5	5	4	4	0	2	1	1	1	1	2	2	4	3	3	5	4	3	5	3.3	7.1
20-May-08	10	27	12	5	4	7	7	6	7	6	3	4	2	0	3	2	6	6	4	4	4	7	4	2	5.9	27.5
21-May-08	1	0	0	0	0	1	0	0	0	0	0	0	1	2	2	3	1	1	2	3	2	1	1	1	1.0	2.8
22-May-08	1	0	1	0	0	2	1	0	1	1	2	3	4	3	3	3	2	4	3	3	2	1	2	2	1.8	4.0
23-May-08	3	3	3	2	1	0	0	0	0	0	1	0	0	0	0	0	1	0	1	2	0	1	0	1	0.9	3.3
24-May-08	0	1	0	0	2	2	2	2	2	3	3	3	3	3	2	2	2	1	1	P	P	2	2	3	1.8	3.0
25-May-08	3	2	3	2	2	4	3	3	2	0	2	3	3	2	3	3	3	4	3	5	6	7	7	5	3.4	7.0
26-May-08	4	2	4	4	5	7	7	5	6	3	3	5	5	5	3	4	4	4	4	6	8	7	7	6	4.9	7.7
27-May-08	6	5	5	5	5	6	6	6	6	6	7	7	4	4	4	3	2	4	4	10	29	8	5	3	6.3	29.2
28-May-08	3	3	3	3	3	6	6	5	6	6	6	5	4	4	4	3	12	5	7	8	9	8	10	1	5.4	12.4
29-May-08	0	4	4	2	3	5	7	4	3	4	5	3	2	4	3	6	5	0	9	8	4	4	4	4	4.1	9.5
30-May-08	4	4	3	5	6	8	4	4	3	1	2	0	4	3	4	0	3	12	1	4	1	0	1	2	3.2	11.6
31-May-08	3	3	4	5	5	5	5	3	0	0	1	1	2	1	0	1	4	2	2	3	4	4	2	4	2.7	5.2
Hourly Avg	4.1	4.4	3.8	3.7	4.0	5.0	5.1	4.4	4.0	3.5	3.2	3.2	3.4	3.2	3.8	3.8	5.1	4.6	4.7	5.1	5.9	5.1	4.6	4.1		
Hourly Max	14.2	27.5	11.5	10.1	11.6	20.7	14.1	15.4	11.5	10.9	10.4	11.2	10.8	11.3	9.4	9.4	12.4	13.9	15.2	15.1	29.2	17.2	17.1	14.7		

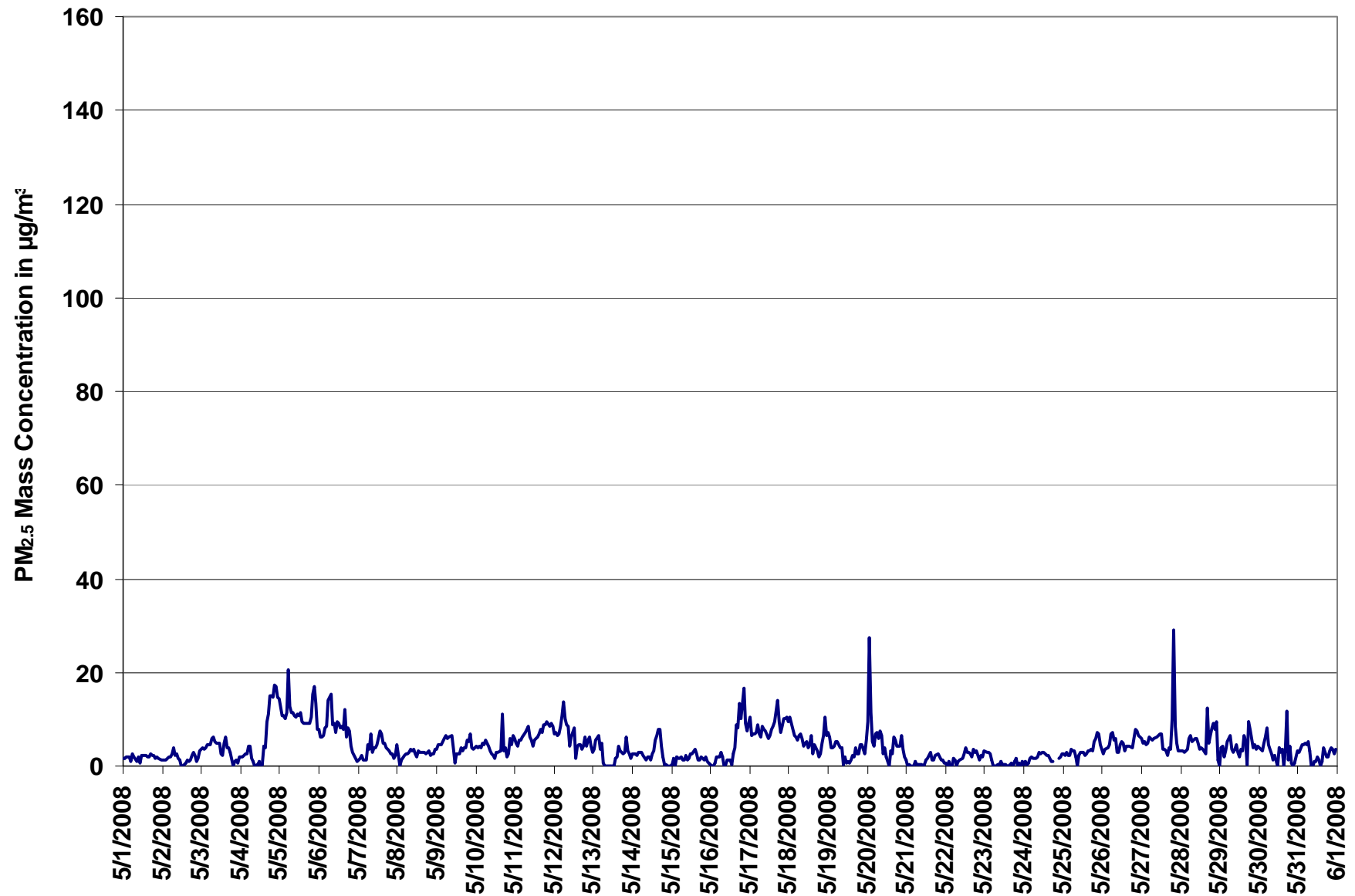


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights  
 Station Owner: PASAA

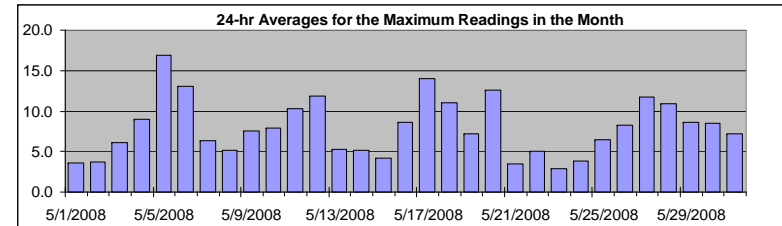
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Particulate Matter (PM<sub>2.5</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	73.9	µg/m <sup>3</sup>	20-May	1:00 2:00
Maximum 24-hr Value:	16.9	µg/m <sup>3</sup>	5-May	



AIC Time:	0 hrs	Operational Time:	742 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	26.6	17.0	10.1	6.7	4.1	2.2	1.3	7.9	7 µg/m <sup>3</sup>

**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-May-08	3	3	3	4	3	3	4	4	5	3	2	3	4	4	5	4	4	5	4	4	3	3	3	3	3.6	4.8
2-May-08	2	3	2	3	3	3	5	6	4	4	4	4	4	3	3	4	3	3	4	5	5	2	4	5	3.7	6.0
3-May-08	6	5	5	5	7	7	8	13	7	6	7	7	6	7	10	10	6	7	4	2	2	3	2	3	6.1	12.9
4-May-08	3	3	3	4	4	6	6	3	3	3	2	3	3	2	12	9	13	14	18	18	18	20	25	22	9.0	25.2
5-May-08	16	13	13	11	39	45	15	14	14	13	12	14	13	15	12	12	12	12	13	12	24	27	20	15	16.9	44.8
6-May-08	17	17	13	11	10	11	20	24	16	14	11	18	15	13	12	16	25	8	15	11	6	5	3	2	13.1	24.9
7-May-08	2	5	6	4	3	4	6	9	11	10	7	8	7	11	10	10	9	6	6	5	4	4	3	4	6.4	11.2
8-May-08	12	4	2	3	4	4	4	5	6	4	5	5	6	6	5	5	7	6	4	6	5	4	5	7	5.1	11.7
9-May-08	7	8	7	7	8	8	9	7	8	8	7	6	6	7	5	7	6	6	6	11	11	14	7	5	7.6	14.1
10-May-08	5	5	7	6	7	6	9	9	7	7	5	5	5	9	8	15	19	8	8	4	6	11	9	11	7.9	18.8
11-May-08	12	7	5	6	7	8	10	10	10	9	8	11	11	9	11	12	12	11	12	11	16	12	14	14	10.3	16.0
12-May-08	11	10	10	9	11	14	17	16	12	12	9	17	20	7	12	9	8	7	8	17	16	9	15	10	11.9	19.6
13-May-08	5	6	9	11	5	8	3	2	2	0	0	1	3	2	5	5	14	6	5	6	14	5	4	4	5.2	14.4
14-May-08	4	4	4	4	4	4	5	5	4	5	4	5	7	7	8	8	13	11	8	5	3	2	0	0	5.1	13.0
15-May-08	3	3	4	4	3	4	4	5	4	5	6	5	5	5	6	4	5	5	5	4	4	4	3	3	4.2	6.3
16-May-08	2	2	2	2	3	4	5	4	2	3	5	4	4	3	7	7	12	14	24	21	36	11	9	18	8.7	36.4
17-May-08	23	8	10	9	9	13	12	9	12	13	13	11	10	15	23	14	24	26	14	12	11	15	16	13	14.0	26.4
18-May-08	14	12	10	8	8	8	8	9	10	7	7	8	7	9	19	10	14	7	8	8	9	22	30	11	11.0	30.4
19-May-08	9	9	7	7	7	7	7	6	7	4	5	5	4	7	6	8	12	11	8	7	8	6	6	9	7.1	12.1
20-May-08	13	74	25	12	7	10	12	9	15	12	9	8	8	8	13	10	9	10	7	6	8	8	7	4	12.6	73.9
21-May-08	4	3	3	1	2	2	3	3	2	5	3	2	4	4	4	5	4	3	5	7	4	3	2	2	3.4	6.6
22-May-08	2	1	2	1	1	5	5	3	3	3	6	6	10	9	10	9	8	8	7	5	4	3	4	4	5.0	10.3
23-May-08	5	5	4	5	3	2	2	2	2	2	3	2	3	3	2	3	3	2	3	7	2	3	1	2	2.9	6.7
24-May-08	2	3	2	2	4	4	4	3	3	5	5	4	5	4	5	5	4	4	5	P	P	4	4	4	3.8	5.2
25-May-08	4	3	4	4	4	6	5	5	7	3	5	9	9	7	7	8	7	8	7	9	9	9	9	7	6.4	9.4
26-May-08	6	4	6	5	7	15	16	8	10	8	6	8	8	8	6	8	7	10	6	9	10	9	8	8	8.2	15.6
27-May-08	7	6	6	6	7	8	7	8	9	9	9	11	13	8	10	11	7	12	10	26	63	13	10	5	11.7	62.6
28-May-08	4	5	5	5	5	15	15	8	8	11	13	12	9	9	9	9	27	14	12	21	15	12	12	5	10.9	27.5
29-May-08	3	9	6	4	7	8	12	7	6	7	10	5	8	11	8	15	11	8	20	15	7	7	5	6	8.6	20.1
30-May-08	6	6	5	7	7	11	10	8	10	7	9	6	10	9	15	8	10	20	12	12	8	2	3	3	8.6	19.5
31-May-08	5	6	6	8	8	6	7	7	7	13	10	11	8	9	4	7	9	7	5	6	7	6	4	7	7.2	13.2
Hourly Avg	7.0	8.1	6.4	5.7	6.6	8.3	8.2	7.4	7.3	7.0	6.7	7.3	7.6	7.5	8.7	8.6	10.5	9.0	8.8	9.7	11.3	8.3	8.0	6.9		
Hourly Max	23.2	73.9	24.8	11.6	38.9	44.8	20.0	23.9	16.5	13.8	13.4	18.1	19.6	15.0	22.6	15.5	27.5	26.4	24.0	26.5	62.6	26.7	30.4	21.5		

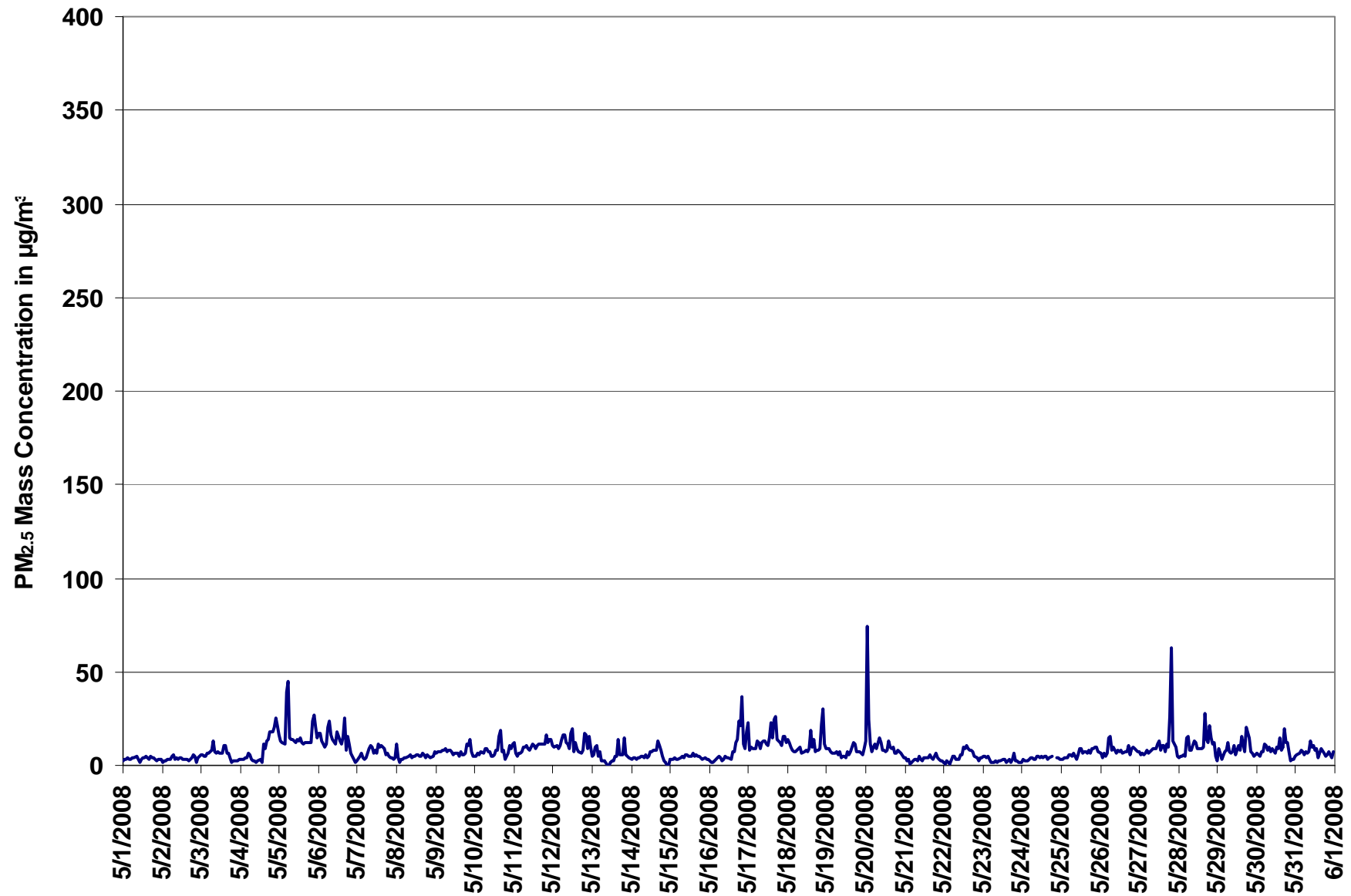
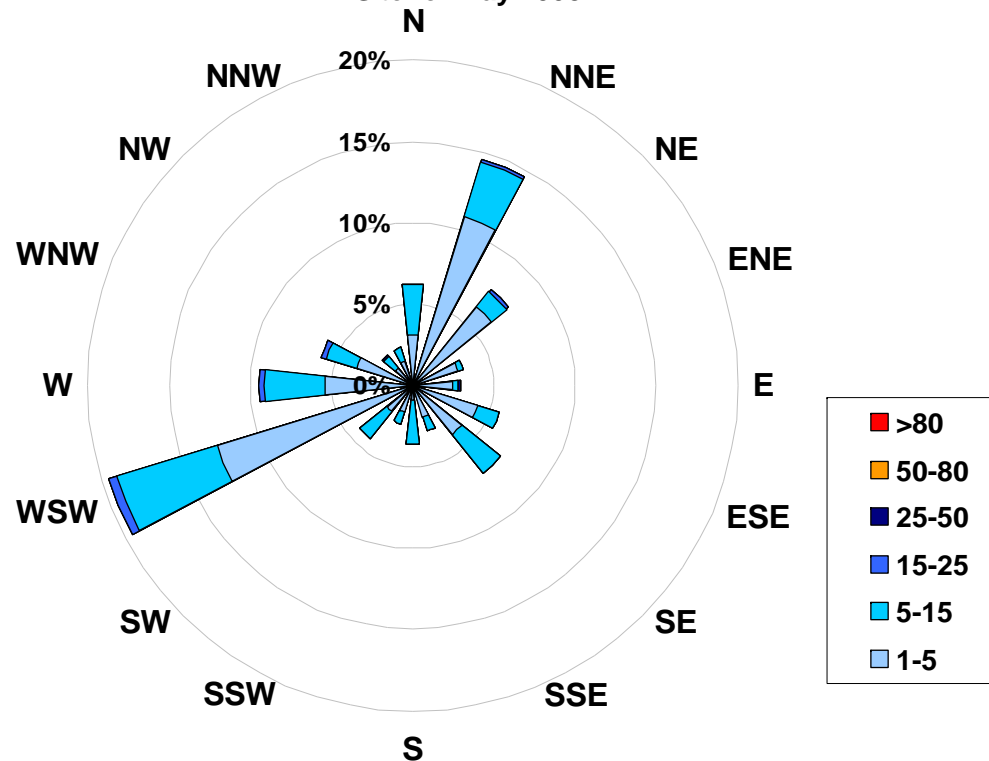


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



**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 May 2008**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range		Frequency (hrs)	
1.0	< 5	514	
5	to 15	217	
15	to 25	9	
25	to 50	2	
50	to 80	0	
	> 80	0	
Total Non-Zero Values		742	

## PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights  
 Station Owner: PASAA

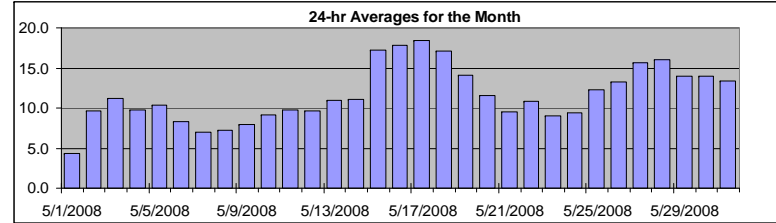
### HOURLY AVERAGE TABLE

### Ambient Temperature (T)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	28.4 °C	17-May	15:00 16:00
Maximum 24-hr Value:	18.5 °C	17-May	



AIC Time:	0 hrs	Operational Time:	744 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	24.8	20.4	15.2
			11.4
			7.9
			2.8
			1.1
	Average		Median
	11.6 °C		11.4 °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																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-May-08	2	2	2	2	2	2	2	2	3	3	3	3	4	4	5	6	7	8	8	8	7	6	5	4	4	4.4	7.8
2-May-08	5	4	5	4	3	3	3	3	5	6	8	10	13	14	14	15	16	16	16	16	15	13	11	10	9	9.7	16.3
3-May-08	8	7	5	3	3	2	5	8	9	11	14	16	17	18	18	18	17	16	16	15	13	12	10	8	11.3	18.3	
4-May-08	7	7	6	4	3	4	6	7	8	9	11	14	16	17	18	18	17	16	15	14	14	12	9	7	6	9.7	16.0
5-May-08	5	5	4	3	2	2	5	7	10	13	14	15	16	16	16	16	17	16	16	14	12	9	8	7	10.3	16.6	
6-May-08	7	6	4	4	3	2	5	7	9	11	14	13	13	14	14	14	10	11	11	8	7	6	4	2	8.4	14.5	
7-May-08	1	2	1	1	1	1	3	4	6	8	10	11	11	12	12	11	10	10	9	9	9	9	9	9	6.9	11.7	
8-May-08	8	6	5	4	3	2	3	3	4	5	7	9	10	11	12	12	12	12	11	10	8	6	4	4	7.2	12.2	
9-May-08	4	2	1	1	1	1	1	3	4	7	10	12	13	13	14	15	14	14	13	12	11	10	9	7	8.0	14.7	
10-May-08	6	5	3	3	4	3	5	8	10	11	13	14	14	14	14	15	12	12	12	10	10	8	8	7	9.2	14.6	
11-May-08	5	5	6	5	5	4	6	8	9	11	13	13	14	15	15	15	15	15	15	14	11	9	6	3	9.8	15.2	
12-May-08	2	2	1	1	3	1	4	8	10	13	14	13	12	14	15	15	16	17	17	15	14	11	9	8	9.7	16.7	
13-May-08	7	7	7	8	9	8	7	8	10	11	12	14	14	14	14	14	14	14	15	14	13	12	11	9	8	10.9	14.7
14-May-08	8	7	6	5	4	5	6	8	11	13	14	15	17	17	17	16	16	13	11	10	11	11	12	11	11.1	17.1	
15-May-08	11	13	10	14	14	14	15	17	18	19	20	21	21	21	21	20	20	21	20	19	18	17	15	14	17.2	21.4	
16-May-08	14	13	13	12	11	12	12	15	16	18	19	20	22	23	24	25	25	24	23	22	19	16	14	12	17.8	24.9	
17-May-08	11	10	8	8	8	7	10	12	14	16	20	24	26	27	28	28	28	28	26	25	23	20	17	17	18.5	28.4	
18-May-08	17	17	18	17	16	16	16	17	17	17	17	18	19	20	20	21	20	20	19	19	17	14	10	9	17.1	20.9	
19-May-08	8	8	7	7	7	7	10	12	14	16	17	17	18	19	19	19	19	18	18	17	16	16	15	14	14.1	19.5	
20-May-08	13	12	11	11	10	9	11	12	13	13	13	12	13	15	15	15	13	12	10	10	10	10	9	9	11.6	15.0	
21-May-08	9	9	8	8	8	8	8	9	9	10	10	11	11	10	10	10	11	11	11	11	10	10	9	9	9.6	11.2	
22-May-08	9	8	7	6	5	4	6	9	10	10	12	13	14	15	16	16	16	16	15	14	12	10	9	9	10.8	16.2	
23-May-08	9	9	9	9	8	7	7	6	6	7	7	8	9	10	11	12	12	12	11	10	10	9	9	8	9.0	12.3	
24-May-08	8	8	7	7	7	7	7	7	8	8	9	9	10	10	11	12	12	13	13	12	11	11	10	9	9.4	12.6	
25-May-08	9	9	9	8	7	8	10	11	12	12	13	14	15	16	17	17	17	17	17	16	14	11	7	7	12.3	17.4	
26-May-08	7	7	7	6	5	6	9	11	13	15	16	17	17	18	19	19	19	19	19	17	16	14	12	11	13.2	19.4	
27-May-08	11	10	9	8	7	8	9	10	12	14	16	18	20	21	22	22	23	23	23	22	20	18	17	15	15.7	22.6	
28-May-08	15	13	12	10	9	10	12	13	14	16	18	20	21	22	23	23	19	18	18	19	17	14	13	14	16.0	23.4	
29-May-08	14	13	12	10	9	9	11	13	15	17	17	17	17	18	19	18	17	16	15	13	12	11	11	11	13.9	18.6	
30-May-08	12	12	11	10	9	9	11	13	14	15	16	17	17	18	19	19	19	14	16	15	14	14	12	11	14.0	19.1	
31-May-08	10	11	11	10	11	11	12	12	11	12	13	14	15	16	17	18	17	17	17	16	14	13	12	12	13.4	17.6	
Hourly Avg	8.4	7.9	7.3	6.7	6.4	6.2	7.6	9.2	10.5	11.9	13.3	14.3	15.1	15.9	16.4	16.6	16.1	15.7	15.2	14.3	12.9	11.4	10.1	9.3			
Hourly Max	17.2	16.5	18.0	17.0	15.5	16.0	15.9	17.3	18.4	18.8	20.3	24.2	26.1	27.3	28.2	28.4	28.4	27.6	26.2	24.6	22.6	19.8	17.4	17.3			

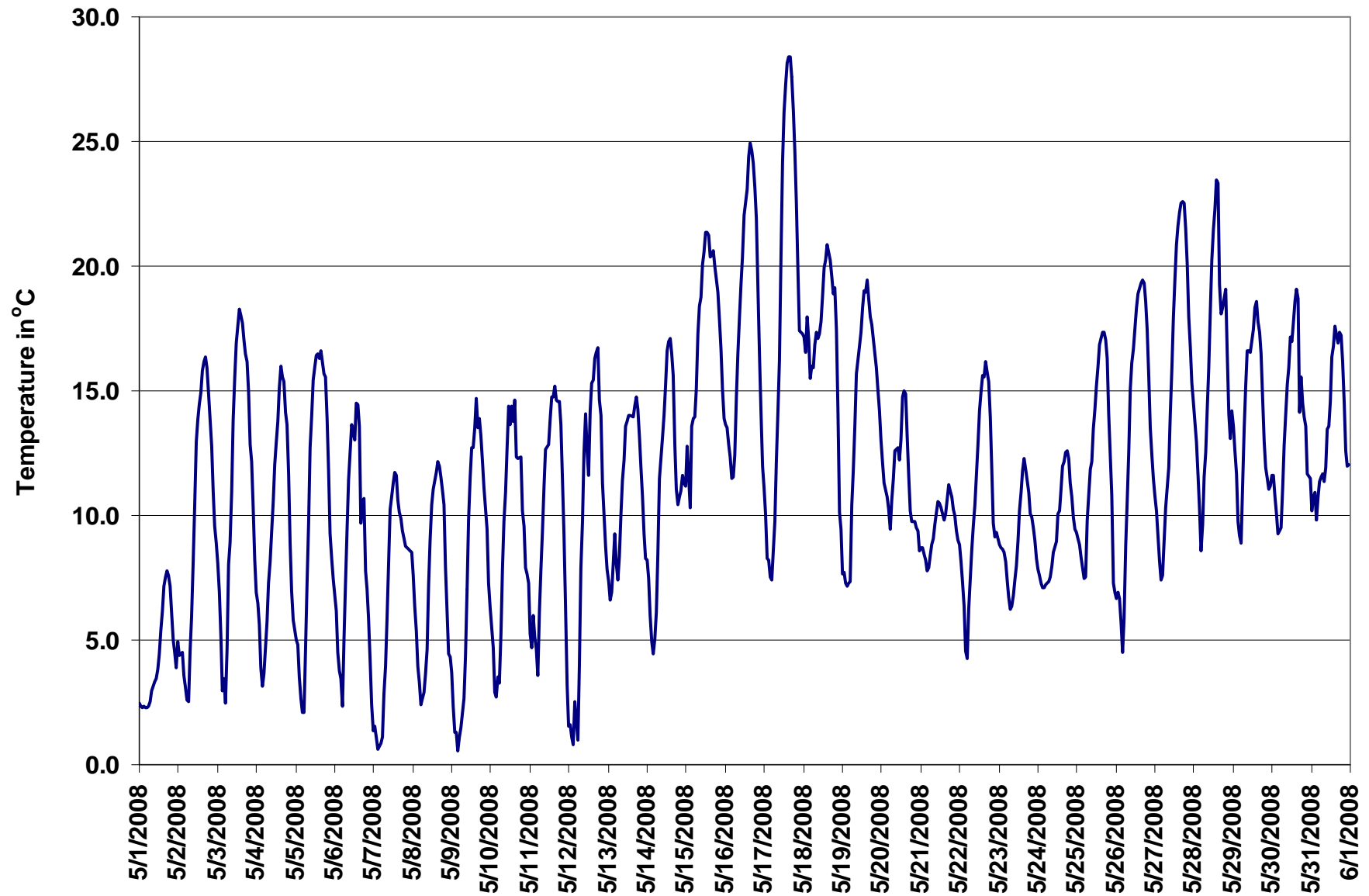


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

# PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights  
 Station Owner: PASAA

## HOURLY AVERAGE TABLE

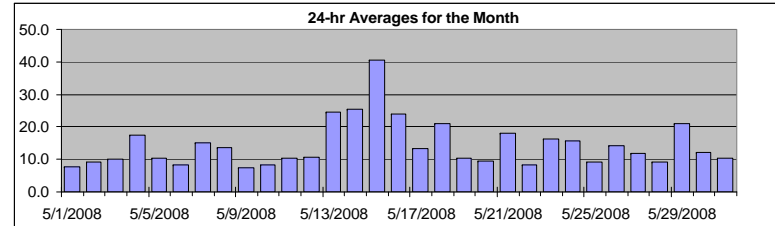
## Wind Speed (WSs)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	57.4	km/hr	15-May	18:00 19:00
Maximum 24-hr Value:	40.5	km/hr	15-May	

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
	50.8	30.7	18.1	12.0	7.9	4.5	2.9	14.3 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	6	6	5	5	7	8	7	6	7	9	9	10	11	11	8	8	9	9	10	10	7	6	5	3	7.6	10.8	
2-May-08	6	6	3	3	4	2	4	5	9	6	7	7	9	13	13	14	16	17	17	16	15	11	10	10	9.3	16.9	
3-May-08	11	4	3	4	3	3	5	4	5	5	5	5	6	7	9	12	15	22	22	18	12	18	23	20	10.1	22.9	
4-May-08	20	21	22	19	18	16	17	18	20	12	9	8	13	25	20	17	23	23	31	19	13	9	11	13	17.3	30.7	
5-May-08	13	15	17	17	16	13	5	10	8	4	6	7	8	8	11	13	14	11	10	11	10	8	7	5	10.3	16.9	
6-May-08	5	6	6	5	6	4	4	4	6	6	7	9	7	8	14	13	21	13	14	19	10	5	3	4	8.3	20.9	
7-May-08	5	6	5	4	7	7	8	10	12	12	16	15	20	23	23	23	23	24	19	23	26	18	19	16	15.1	26.1	
8-May-08	16	13	21	20	18	15	20	21	19	16	16	15	13	11	11	11	12	10	9	7	7	8	7	8	13.5	21.5	
9-May-08	7	7	7	7	5	3	3	6	6	6	5	8	9	10	10	9	8	10	10	11	5	12	6	3	7.3	12.4	
10-May-08	3	4	3	4	5	4	4	7	6	7	8	8	7	16	18	12	21	19	11	11	5	4	4	6	8.3	21.4	
11-May-08	4	8	11	10	8	11	11	12	9	11	11	15	11	12	14	13	13	11	12	10	6	8	8	6	10.2	15.3	
12-May-08	5	6	6	7	7	6	8	13	13	9	16	20	17	7	15	16	10	12	9	8	8	12	13	12	10.6	19.6	
13-May-08	9	8	8	14	17	16	15	15	30	33	34	34	37	37	35	34	32	32	28	23	26	25	23	22	24.4	37.0	
14-May-08	24	23	19	17	17	15	16	22	29	32	33	31	28	30	33	34	37	39	25	17	17	23	20	26	25.3	38.5	
15-May-08	27	29	15	28	29	26	26	36	45	46	48	50	52	55	56	52	53	54	57	52	48	37	26	26	40.5	57.4	
16-May-08	27	24	25	25	21	16	17	25	23	19	15	22	29	32	35	38	39	36	31	24	15	15	13	13	24.0	38.9	
17-May-08	12	14	8	8	8	8	7	8	7	8	12	14	14	11	10	14	16	27	29	26	19	13	13	16	13.4	28.9	
18-May-08	13	15	21	18	16	22	23	28	30	29	27	26	21	24	21	22	20	29	29	25	16	12	9	5	20.9	29.8	
19-May-08	6	8	8	9	9	10	14	14	10	17	16	15	12	10	7	9	9	11	11	11	11	12	6	8	10.5	16.9	
20-May-08	10	7	5	3	5	8	7	5	10	12	8	10	9	6	5	7	10	15	21	13	13	10	14	13	9.4	20.8	
21-May-08	14	17	19	22	16	20	20	24	26	22	25	25	21	21	19	14	9	14	16	12	12	15	11	14	18.0	25.6	
22-May-08	14	11	8	5	6	6	5	6	8	7	5	6	6	8	8	11	11	13	13	12	10	6	7	9	8.3	13.9	
23-May-08	8	11	11	12	13	15	17	17	16	16	14	14	15	16	18	19	21	21	17	17	20	22	23	22	16.4	22.5	
24-May-08	21	19	20	22	18	16	16	16	19	15	17	17	18	16	13	12	12	12	12	15	12	14	11	11	15.6	21.8	
25-May-08	9	9	8	9	9	7	10	8	9	13	15	13	9	11	11	10	12	11	10	9	6	5	4	3	9.2	14.7	
26-May-08	4	5	7	7	5	3	4	6	6	10	17	19	21	22	24	24	23	23	25	23	17	15	16	15	14.2	24.6	
27-May-08	17	17	15	13	12	11	14	14	10	10	10	10	9	10	12	13	11	10	10	9	8	9	15	18	11.9	17.6	
28-May-08	16	13	8	5	3	3	8	9	5	8	7	5	6	7	7	8	22	18	14	7	12	6	8	20	9.3	22.1	
29-May-08	13	15	15	15	10	10	14	20	24	25	27	30	30	32	30	27	27	25	23	24	21	19	16	16	21.1	31.5	
30-May-08	17	16	10	7	6	5	7	8	8	8	6	8	8	11	15	18	18	24	12	11	14	18	16	20	12.2	24.3	
31-May-08	16	16	17	12	16	10	10	7	10	10	9	8	8	9	9	6	9	10	10	10	8	10	12	9	10.4	16.6	
1-hr Average	12.2	12.2	11.4	11.4	11.0	10.3	11.2	13.1	14.4	14.3	14.8	15.6	15.6	16.7	17.2	17.1	18.6	19.5	18.3	16.1	13.8	12.9	12.2	12.6			
Hourly Max	27.1	29.1	24.8	27.9	29.1	26.2	25.7	36.0	44.8	45.6	48.0	49.5	52.0	54.6	56.5	52.1	53.0	54.3	57.4	51.8	47.8	36.6	26.4	25.7			

## PASZA - Smoky Heights Vector Wind Speed Monthly Summary

Station: Smoky Heights  
 Station Owner: PASAA

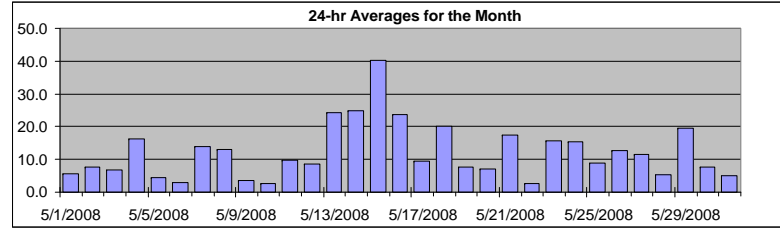
### HOURLY AVERAGE TABLE

### Wind Speed (WSv)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	57.2	km/hr	15-May	18:00 19:00
Maximum 24-hr Value:	40.3	km/hr	15-May	



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
	50.5	30.3	17.5	11.5	7.1	3.1	1.5	24.1 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	5	6	5	5	6	8	6	6	7	9	9	10	10	10	7	7	8	9	10	10	7	6	5	3		5.6	10.4
2-May-08	5	5	2	3	4	2	4	4	9	5	6	6	8	12	12	13	15	16	17	16	15	11	9	10		7.8	16.6
3-May-08	10	4	2	3	3	3	2	3	4	2	2	2	3	3	4	10	14	22	22	18	12	17	23	20		6.9	22.9
4-May-08	20	21	22	19	18	16	15	18	20	11	8	6	12	24	15	15	22	23	30	18	12	9	11	13		16.2	30.3
5-May-08	13	15	17	17	16	11	4	10	8	1	2	4	5	4	7	12	14	10	9	11	10	7	7	5		4.3	16.8
6-May-08	4	4	4	5	6	2	4	3	5	3	6	6	6	7	12	10	16	13	11	17	9	3	2	4		2.8	17.2
7-May-08	5	6	4	4	7	7	7	10	12	11	16	14	19	23	23	23	22	24	19	23	26	18	18	16		14.0	25.9
8-May-08	16	12	21	20	18	15	19	21	19	16	16	15	12	8	10	9	11	9	8	7	7	8	7	8		13.1	21.3
9-May-08	7	7	7	7	5	2	3	6	6	5	5	6	7	8	8	6	8	9	9	3	5	11	4	2		3.7	11.2
10-May-08	2	3	1	3	3	3	4	7	5	7	7	5	5	16	18	7	16	18	6	11	5	3	4	1		2.8	18.4
11-May-08	3	7	11	10	8	11	11	12	9	10	10	14	10	9	13	11	12	10	11	9	5	8	8	5		9.6	14.3
12-May-08	5	6	6	7	6	4	8	13	13	8	12	4	7	2	12	13	7	11	9	8	8	11	13	12		8.5	13.1
13-May-08	9	8	7	13	17	16	14	14	30	33	34	34	37	36	34	33	32	32	28	23	25	25	23	22		24.2	36.7
14-May-08	24	23	19	17	17	15	16	22	29	31	33	30	28	29	32	34	37	38	25	17	17	23	20	26		24.9	38.4
15-May-08	27	29	14	28	29	26	26	36	45	45	47	49	52	54	56	52	53	54	57	52	48	37	26	26		40.3	57.2
16-May-08	27	24	25	25	21	16	17	25	21	18	13	22	28	32	34	38	39	36	30	24	14	15	13	13		23.7	38.6
17-May-08	12	14	7	7	8	8	7	8	7	8	12	13	13	10	9	12	16	27	29	26	19	13	13	16		9.6	28.8
18-May-08	13	15	21	18	16	22	23	28	29	28	27	25	21	23	20	21	18	28	29	25	16	10	8	4		20.1	29.2
19-May-08	6	8	7	9	9	10	13	14	10	17	16	13	10	9	5	7	7	9	10	9	11	11	6	7		7.7	16.5
20-May-08	9	6	3	1	1	8	6	5	9	12	7	10	9	3	4	6	9	15	20	13	13	10	14	13		7.1	20.1
21-May-08	14	17	19	22	16	20	20	23	25	22	25	25	21	21	19	13	9	14	16	12	12	15	11	14		17.5	25.5
22-May-08	14	11	7	5	6	6	5	6	7	6	4	4	4	6	6	10	10	13	13	12	10	6	7	9		2.6	13.9
23-May-08	8	10	11	12	13	14	17	16	16	16	13	14	15	16	17	19	21	21	17	17	20	22	22	22		15.6	22.5
24-May-08	21	19	20	22	18	16	16	16	19	15	16	17	17	16	13	12	12	12	12	15	12	14	11	10		15.4	21.8
25-May-08	9	9	8	8	9	7	9	8	9	12	14	12	8	9	11	9	11	10	10	9	6	5	3	2		8.8	14.3
26-May-08	3	5	7	7	4	2	4	6	6	9	16	18	20	21	24	23	23	22	24	22	17	15	16	15		12.6	24.3
27-May-08	17	17	15	13	12	11	14	14	10	9	9	8	8	9	11	12	10	9	10	8	8	8	14	17		11.5	17.5
28-May-08	16	13	8	5	1	1	7	9	4	8	6	3	3	3	5	2	21	15	13	6	12	3	7	19		5.5	21.5
29-May-08	12	13	15	14	10	10	14	20	24	25	26	30	29	31	30	27	26	24	23	24	21	19	16	16		19.6	31.0
30-May-08	16	15	10	6	6	5	5	8	8	7	4	6	8	10	14	17	18	22	12	11	14	17	16	20		7.7	22.3
31-May-08	16	15	17	12	16	9	10	7	10	10	9	8	6	5	7	1	8	9	9	10	8	10	12	8		4.9	16.6
1-hr Vector	4.9	5.6	4.6	5.5	4.4	4.5	4.0	4.2	6.0	4.5	4.5	4.4	5.6	5.4	5.6	5.5	6.6	7.5	5.5	3.0	2.8	4.3	4.0	5.4			
Hourly Max	26.9	29.1	24.7	27.9	29.0	26.1	25.6	35.9	44.7	45.4	47.5	49.2	51.5	54.3	56.0	51.9	52.7	54.1	57.2	51.6	47.7	36.5	26.3	25.7			

# PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights  
 Station Owner: PASAA

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 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
	358.7	343.0	259.4	213.4	64.9	14.4	4.0	272 deg

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	WD Sector		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-May-08	106	87	79	44	76	96	90	107	150	159	165	155	162	206	165	136	136	112	98	84	70	57	54	30	118	ESE		
2-May-08	103	52	162	226	227	239	10	152	156	125	127	92	95	104	127	119	122	114	108	94	80	73	87	112	109	ESE		
3-May-08	104	78	66	275	266	257	7	64	138	219	186	158	273	238	292	310	270	255	254	255	243	248	252	250	254	WSW		
4-May-08	254	250	253	257	245	249	273	303	308	278	295	250	250	247	266	302	286	303	284	286	270	249	261	263	271	W		
5-May-08	256	255	262	264	265	253	231	220	230	179	12	32	357	22	360	359	17	360	20	34	43	31	48	38	321	NW		
6-May-08	348	324	344	360	21	223	273	270	223	164	284	247	294	41	44	18	273	322	251	143	40	33	300	299	315	NW		
7-May-08	259	279	356	25	28	358	19	27	34	35	35	38	22	22	18	36	48	50	40	51	49	49	37	48	35	NE		
8-May-08	73	45	17	24	27	15	16	23	21	29	29	29	25	18	12	13	12	26	19	18	12	12	350	7	23	NNE		
9-May-08	12	14	27	24	45	121	178	177	173	149	124	124	109	137	165	142	124	67	103	174	1	255	141	117	120	ESE		
10-May-08	87	359	25	290	358	65	13	15	27	27	30	359	354	316	319	341	189	234	114	94	51	315	9	238	348	NNW		
11-May-08	312	340	3	1	2	10	359	15	28	31	12	0	353	359	5	21	349	358	347	350	6	326	315	297	359	N		
12-May-08	274	246	243	238	183	159	188	215	226	183	240	173	262	174	295	254	261	204	189	175	198	245	260	260	227	SW		
13-May-08	243	250	239	238	257	262	246	219	238	247	252	247	242	257	250	254	256	254	256	254	240	237	244	247	248	WSW		
14-May-08	246	245	247	243	240	239	237	237	253	260	257	258	253	250	248	249	246	251	238	214	217	235	235	232	245	WSW		
15-May-08	243	251	226	244	241	238	239	246	247	246	251	252	245	251	253	251	250	251	253	248	249	253	255	259	249	WSW		
16-May-08	259	263	262	264	267	251	232	250	268	287	252	244	258	258	259	252	252	261	262	268	251	258	247	255	258	WSW		
17-May-08	254	253	217	213	232	195	205	187	180	183	136	150	125	127	171	242	276	262	258	254	252	248	248	257	230	SW		
18-May-08	246	252	252	247	245	246	258	259	280	287	276	286	274	271	275	280	285	255	248	266	281	290	258	327	267	W		
19-May-08	2	12	22	1	16	12	17	37	36	52	53	92	85	70	107	101	141	137	87	89	61	89	113	199	63	ENE		
20-May-08	280	326	284	63	121	274	249	94	222	250	259	239	289	273	35	338	300	266	289	316	306	274	288	265	281	W		
21-May-08	260	263	259	265	265	263	270	267	270	278	279	280	294	290	294	296	309	300	299	287	274	278	264	267	277	W		
22-May-08	281	268	235	259	206	234	231	234	232	222	208	71	46	31	51	49	38	41	26	18	21	24	342	347	350	N		
23-May-08	358	348	347	345	342	345	343	337	333	340	344	350	352	0	13	7	16	22	20	24	26	26	23	19	3	N		
24-May-08	20	17	17	12	8	14	17	14	19	28	28	33	37	35	42	32	29	33	32	28	31	23	17	17	24	NNE		
25-May-08	20	10	14	5	15	17	39	38	45	54	73	42	31	33	26	37	32	47	32	38	19	8	21	27	33	NNE		
26-May-08	72	66	68	12	351	269	22	120	130	101	123	131	125	120	129	127	128	132	131	128	131	121	122	125	121	ESE		
27-May-08	124	121	124	117	119	138	140	144	143	123	125	117	137	134	148	133	110	134	112	102	83	109	126	135	126	SE		
28-May-08	145	142	132	115	128	42	142	155	151	121	97	155	194	154	53	319	226	203	141	186	188	251	247	263	175	S		
29-May-08	286	232	235	232	211	232	226	239	247	258	250	252	265	253	260	288	297	292	287	290	280	263	255	260	262	W		
30-May-08	289	299	299	307	210	222	265	345	16	32	198	199	226	200	189	187	193	267	170	185	203	236	241	253	235	SW		
31-May-08	261	260	258	273	299	325	357	355	349	344	343	303	303	351	21	37	88	75	47	58	59	72	77	51	347	NNW		
Hourly Avg	268	276	278	282	278	269	280	268	268	274	270	254	271	270	279	287	267	269	267	268	285	275	268	264				

# PASZA - Smoky Heights Standard Deviation of Wind Direction Monthly Summary

Station: Smoky Heights  
 Station Owner: PASAA

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**


Determined by the Yamartino 15-min interval calculation

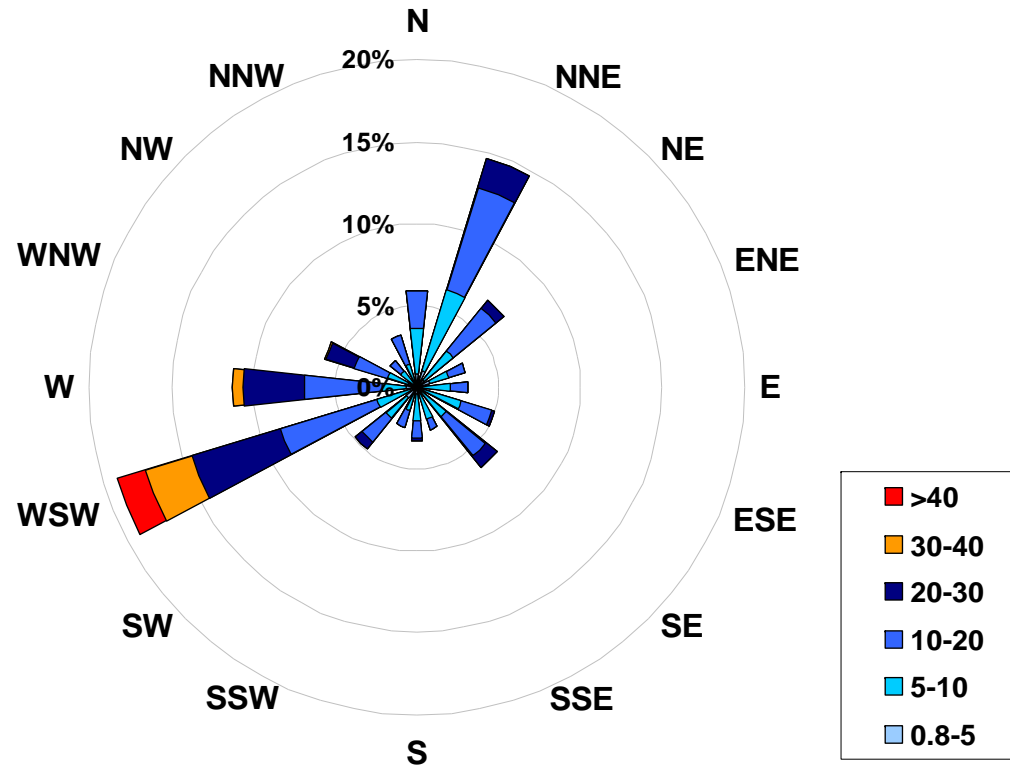
Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	81.9	64.3	26.6	12.9	7.0	3.7	2.6

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																							Daily Maximum	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00		22:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-May-08	31	8	17	16	17	11	16	20	20	12	12	22	13	29	32	19	10	8	7	9	9	14	44	43.8	
2-May-08	34	43	50	27	16	69	25	59	14	27	31	41	43	27	23	22	21	14	12	12	7	6	19	14	68.8
3-May-08	10	30	45	38	15	20	69	50	30	69	80	78	64	81	82	45	23	11	6	3	8	3	2	3	82.0
4-May-08	6	3	2	9	2	4	26	6	9	19	22	65	47	12	49	31	18	11	9	10	13	6	6	6	65.4
5-May-08	6	5	3	3	1	47	33	7	15	90	79	81	71	74	58	30	17	25	22	7	6	8	13	12	89.6
6-May-08	31	48	49	26	20	84	30	43	38	67	40	61	42	41	24	45	40	9	41	26	20	65	50	23	83.8
7-May-08	13	10	44	11	16	13	17	8	7	10	9	17	9	10	10	12	9	7	9	8	9	8	5	10	43.9
8-May-08	15	19	5	4	4	9	8	8	7	9	13	18	24	51	35	40	23	34	23	11	5	6	4	8	50.8
9-May-08	7	4	6	4	24	26	28	15	15	39	31	49	60	48	39	61	27	33	23	81	20	29	71	58	81.4
10-May-08	63	32	70	52	54	50	30	10	42	27	46	62	49	32	15	60	40	17	68	12	20	46	13	84	83.8
11-May-08	60	15	7	7	5	8	9	14	23	20	31	21	29	44	26	29	25	25	25	18	14	6	9	13	60.5
12-May-08	31	26	22	17	40	67	15	11	13	30	39	73	82	95	50	45	54	28	25	9	13	9	2	3	95.0
13-May-08	5	7	13	13	7	7	26	16	7	9	7	10	8	11	9	8	7	9	9	6	6	5	4	3	25.6
14-May-08	4	4	4	4	3	4	3	5	8	9	8	10	12	12	9	8	7	4	6	5	6	5	3	3	12.4
15-May-08	7	3	14	3	4	3	3	5	6	9	6	8	6	8	5	5	6	4	4	4	4	4	4	3	13.7
16-May-08	2	3	4	3	4	14	8	5	22	14	27	13	14	13	8	7	6	8	7	5	13	7	7	3	26.9
17-May-08	6	6	39	25	12	19	9	7	12	15	14	14	16	27	33	31	16	6	4	5	4	6	6	5	39.5
18-May-08	10	5	4	4	4	5	4	4	16	9	7	13	13	16	16	17	27	11	7	6	13	30	52	37	51.8
19-May-08	19	10	39	17	11	7	8	9	16	12	13	25	30	29	45	39	46	39	21	31	10	25	40	27	45.6
20-May-08	30	34	50	85	88	24	55	25	40	11	32	15	23	79	49	37	12	14	16	15	13	10	7	8	88.3
21-May-08	7	7	6	3	4	4	6	6	5	7	8	11	7	7	9	14	11	8	9	5	4	9	9		14.1
22-May-08	5	8	17	26	15	16	16	18	23	50	56	47	68	51	44	26	25	12	15	6	5	8	7	7	67.5
23-May-08	9	7	7	9	7	11	9	8	7	6	9	9	11	13	11	11	7	6	6	4	5	5	4	6	13.0
24-May-08	5	5	5	5	6	7	5	5	5	7	6	7	8	7	10	15	8	7	8	9	5	5	5	4	14.7
25-May-08	5	6	7	11	6	10	9	13	19	20	15	25	32	43	25	33	23	30	14	9	8	8	26	61	60.6
26-May-08	27	20	11	15	42	69	15	30	19	23	17	20	21	15	11	13	16	10	9	7	7	4	6	4	69.0
27-May-08	6	7	6	6	5	7	6	10	18	22	23	32	31	38	31	18	23	22	13	10	7	20	10	7	37.7
28-May-08	7	6	11	27	68	66	29	18	41	25	34	72	69	67	60	79	19	37	12	36	10	62	42	8	79.3
29-May-08	21	36	3	7	16	16	6	7	7	11	12	8	7	10	13	12	9	11	8	9	8	4	3	6	36.0
30-May-08	12	14	11	22	13	27	38	25	22	24	64	54	23	25	16	16	13	30	18	6	14	5	3	4	64.3
31-May-08	3	9	5	9	12	15	16	21	13	27	24	22	52	61	43	90	19	37	14	6	7	10	7	32	90.4

Hourly Max	63	48	70	85	88	84	69	59	42	90	80	81	82	95	82	90	54	39	68	81	20	65	71	84
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1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for May 2008



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	58
5	to	10	232
10	to	20	298
20	to	30	115
30	to	40	28
	>	40	13
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: May 1, 2008 to June 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:	569
Number of 1-hr Fair Readings:	139
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

**Status Flag Characters**

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

Day	Mountain Standard Time																							
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00
1-May-08	15	15	13	N	N	13	13	13	13	14	15	18	18	20	21	21	22	22	22	20	18	17	14	13
2-May-08	13	13	12	10	N	4	4	6	6	8	11	16	21	23	25	27	28	28	27	26	25	25	24	22
3-May-08	22	23	21	15	N	18	10	12	18	24	27	32	33	33	32	32	34	34	32	28	25	22	23	
4-May-08	25	26	26	25	N	24	23	24	27	31	32	35	39	45	47	49	49	45	48	43	38	38	36	37
5-May-08	40	36	35	32	N	30	28	30	30	39	44	45	44	43	40	39	39	39	38	36	35	32	30	31
6-May-08	32	28	25	19	N	23	22	28	35	38	39	40	40	36	32	33	28	30	29	26	22	21	22	25
7-May-08	22	22	20	21	N	8	8	9	14	18	21	26	32	31	27	25	24	21	22	22	21	18	19	20
8-May-08	19	20	19	18	N	20	20	22	22	22	23	23	25	26	27	28	28	28	27	24	20	18	17	17
9-May-08	17	17	17	17	N	12	10	11	15	19	22	25	27	27	27	27	27	27	25	25	23	21	22	22
10-May-08	23	22	19	19	N	15	13	11	17	19	21	24	27	27	23	26	28	27	27	25	23	22	21	20
11-May-08	20	18	18	18	N	15	15	21	26	31	33	33	33	33	34	36	39	39	39	35	35	36	35	31
12-May-08	28	28	20	19	N	17	16	16	18	24	26	N	N	N	27	26	25	24	23	22	20	18	18	18
13-May-08	15	15	15	17	N	16	22	29	0	0	0	26	28	28	29	27	26	26	25	25	23	22	22	20
14-May-08	19	19	19	19	N	18	18	22	27	30	31	31	32	28	24	21	18	16	14	14	12	12	12	12
15-May-08	13	12	12	12	N	11	12	12	13	13	13	13	12	12	12	12	11	12	12	11	11	11	11	11
16-May-08	12	13	13	12	N	13	13	14	15	17	17	18	20	20	20	22	20	20	19	19	17	17	17	18
17-May-08	18	15	14	14	N	12	12	11	12	17	19	21	23	23	21	21	20	20	19	17	16	15	16	17
18-May-08	20	19	20	20	N	17	16	14	14	14	14	16	17	18	22	22	22	22	24	23	22	21	22	22
19-May-08	22	22	22	20	N	17	16	17	20	21	22	23	25	25	27	26	26	24	24	23	22	22	20	17
20-May-08	15	9	11	14	N	13	10	10	12	16	15	20	22	22	19	18	17	15	14	16	14	13	11	10
21-May-08	9	10	8	9	N	9	11	11	13	15	16	16	16	16	16	15	15	15	14	14	13	12	11	9
22-May-08	10	10	9	9	N	9	9	12	13	14	15	15	15	16	17	18	18	18	16	15	14	14	13	13
23-May-08	13	10	9	8	N	12	12	12	12	13	14	14	13	14	15	15	14	13	12	12	11	11	11	11
24-May-08	12	10	12	12	N	11	11	10	9	9	9	9	9	9	10	9	8	8	7	7	6	6	10	12
25-May-08	11	11	11	9	N	11	10	12	14	16	19	21	22	22	23	24	25	25	25	24	21	22	22	22
26-May-08	21	20	20	21	N	18	18	17	18	19	23	24	27	28	28	28	28	29	27	26	23	22	21	20
27-May-08	19	18	17	16	N	14	14	15	15	16	18	20	22	24	25	25	25	25	25	23	21	18	19	18
28-May-08	20	20	20	17	N	16	13	18	17	21	21	21	21	21	23	23	21	23	23	21	19	18	21	17
29-May-08	16	12	9	7	N	7	10	12	17	18	19	18	18	17	17	17	17	17	15	13	11	11	10	10
30-May-08	10	9	9	10	N	8	8	10	13	15	16	17	19	19	19	17	16	18	N	16	16	15	15	14
31-May-08	14	13	13	12	N	12	13	17	18	18	19	23	26	25	25	25	24	25	25	24	22	17	18	18

# PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

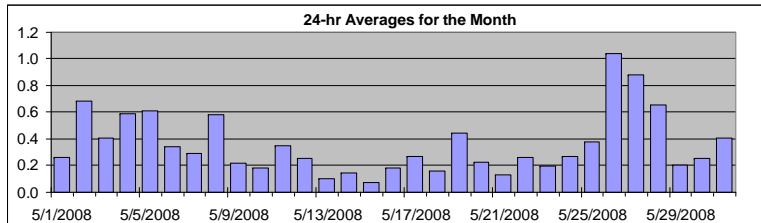
## Sulphur Dioxide (SO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 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:	4.4 ppb	26-May	2:00	3:00
Maximum 24-hr Average:	1.0 ppb	26-May		



AIC Time:	31 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.7	1.1	0.4	0.2	0.1	0.1	0.0	0.4 ppb	0.2 ppb

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	0	0	0	P	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0.3	2.3	
2-May-08	3	2	2	1	A	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	1	1	1	2	0.7	2.7
3-May-08	1	2	1	0	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
4-May-08	0	0	0	0	A	0	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
5-May-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0.6	1.0
6-May-08	1	1	1	0	A	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
7-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0.3	0.8
8-May-08	1	0	0	0	A	1	3	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	2.7
9-May-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	0.2	0.5
10-May-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	0.2	0.3
11-May-08	0	0	0	0	A	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0.3	1.1
12-May-08	0	0	0	0	A	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0.3	0.5
13-May-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	0.1	0.3
14-May-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	0.1	0.4
15-May-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	0.1	0.2
16-May-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	0.2	1.1
17-May-08	1	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-May-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	0.2	0.3
19-May-08	0	0	0	1	A	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.8
20-May-08	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
21-May-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	0.1	0.5
22-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.3	0.7
23-May-08	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
24-May-08	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
25-May-08	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
26-May-08	1	3	4	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1.0	4.4	
27-May-08	1	1	1	1	A	2	2	2	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	1	0.9	1.7	
28-May-08	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	1.5
29-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.2	1.1
30-May-08	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
31-May-08	0	0	0	1	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.4	1.0	
Hourly Avg	0.4	0.5	0.5	0.4	N	0.4	0.6	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4		
Hourly Max	2.7	2.7	4.4	1.4	0.0	1.7	2.8	1.7	1.5	1.2	1.2	0.9	0.7	0.8	0.8	1.1	0.9	1.1	1.0	0.8	0.7	1.0	0.9	2.3			

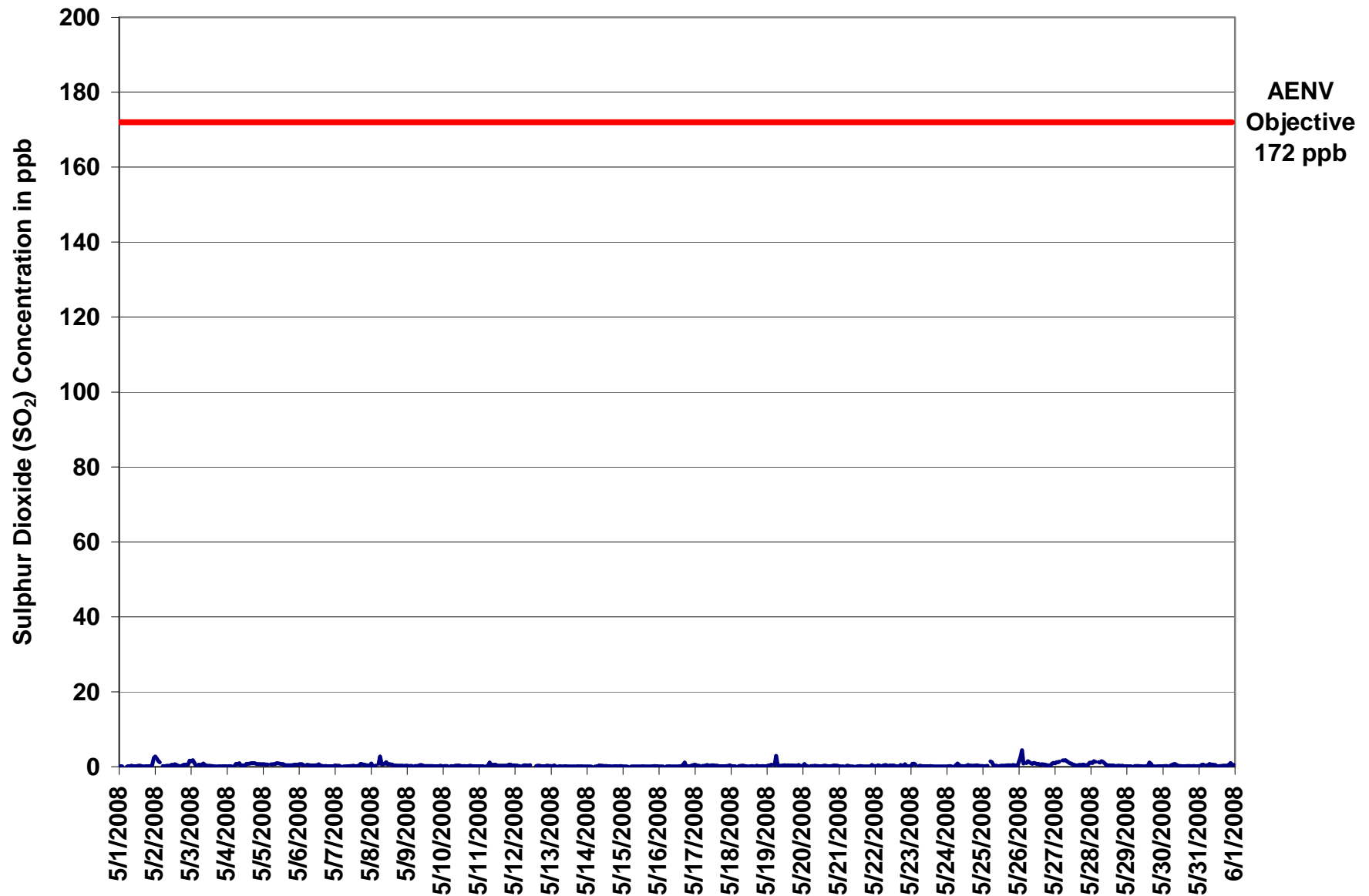


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

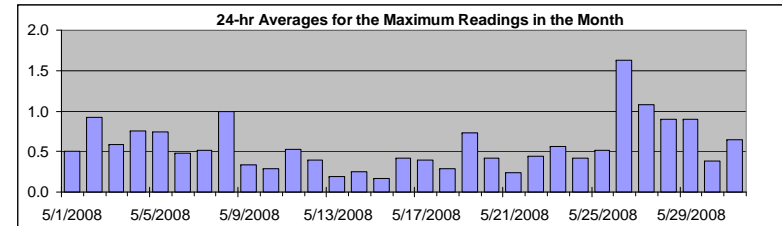
**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	8.5	ppb	29-May	15:00 16:00
Maximum 24-hr Value:	1.6	ppb	26-May	

AIC Time:	31 hrs						Operational Time:	709 hrs		
Calibration Time:	3 hrs						AMD Operational Uptime:	99.9%		
Percentile	99	95	75	50	25	5	1	Average	Median	
	3.5	1.6	0.6	0.3	0.2	0.1	0.1	0.6 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	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-May-08	0	0	0	P	A	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	2	3	0.5	2.9
2-May-08	3	3	2	2	A	0	0	0	0	0	0	1	1	1	1	0	0	1	1	1	1	1	1	2	0.9	3.0
3-May-08	2	2	2	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.0
4-May-08	0	0	0	0	A	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
5-May-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0.7	1.2
6-May-08	1	1	1	0	A	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.5	1.1
7-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0.5	1.2
8-May-08	1	0	0	1	A	3	5	1	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	1.0	5.3
9-May-08	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
10-May-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
11-May-08	0	0	0	0	A	0	1	2	1	1	1	1	0	0	0	0	0	0	0	0	1	1	0	1	0.5	1.6
12-May-08	1	0	0	0	A	0	1	1	0	0	1	C	C	C	0	0	0	0	0	0	0	0	0	1	0.4	0.6
13-May-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	0.5
14-May-08	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
15-May-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	0.3
16-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	1	0.4	2.2
17-May-08	1	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.9
18-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.6
19-May-08	0	0	1	1	A	1	5	2	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0.7	5.2
20-May-08	1	2	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.4	2.4
21-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.8
22-May-08	0	0	1	0	A	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0.4	1.3
23-May-08	0	4	4	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	4.0
24-May-08	0	0	0	0	A	0	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.4	1.0
25-May-08	0	0	0	0	A	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.5	2.0
26-May-08	3	4	7	3	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1.6	7.2
27-May-08	1	2	1	2	A	2	2	2	2	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1.1	2.2
28-May-08	1	1	2	2	A	2	2	2	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.9	2.1
29-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	8	7	0	0	0	0	0	0	0	0.9	8.5
30-May-08	0	0	0	0	A	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
31-May-08	0	0	1	1	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	2	1	1	0.7	1.6
Hourly Avg	0.6	0.8	0.9	0.6	N	0.7	0.9	0.7	0.6	0.6	0.5	0.4	0.4	0.5	0.4	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.5	0.6		
Hourly Max	3.2	4.0	7.2	3.3	0.0	2.9	5.3	2.1	1.7	1.6	1.7	1.3	1.0	1.1	0.9	8.5	6.9	2.1	1.1	1.0	1.1	1.6	1.7	2.9		

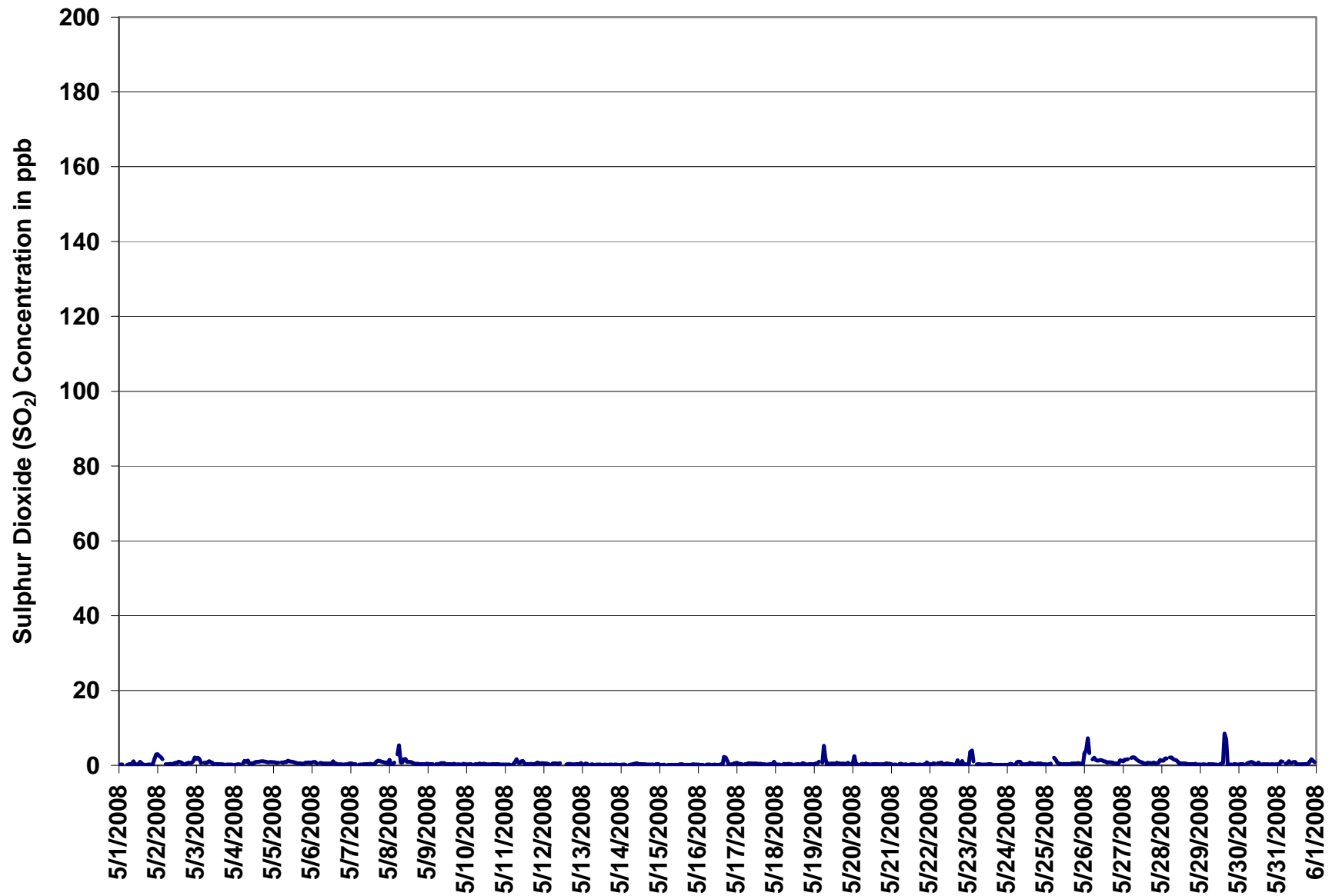
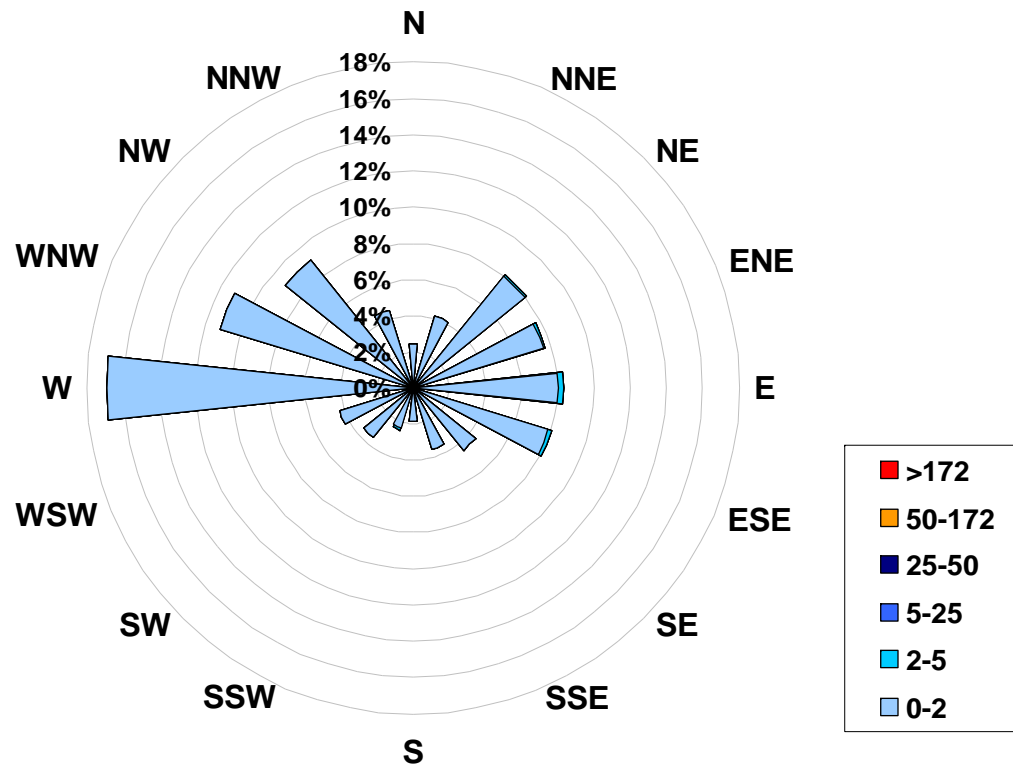


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	< 2		702
2	to 5		7
5	to 25		0
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			709

# PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

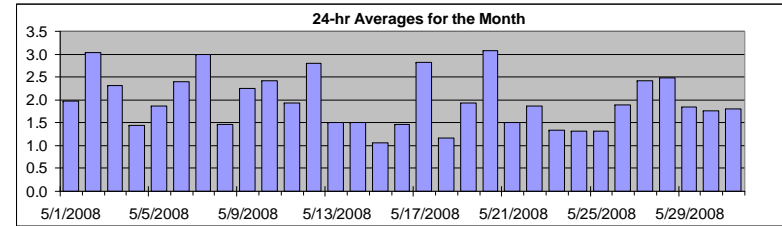
## Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 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:	10.0	ppb	20-May	1:00 2:00
Maximum 24-hr Average:	3.1	ppb	20-May	



AIC Time:	31 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	6.8	4.4	2.4	1.6	1.0	0.9	0.9	2.0 ppb	1.6 ppb

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	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-May-08	2	2	3	P	A	2	3	4	3	2	2	1	1	1	1	1	1	1	1	1	3	2	3	3	2.0	3.9
2-May-08	3	4	3	4	A	4	5	4	7	5	4	3	3	2	2	1	1	1	1	2	2	2	2	3	3.0	6.7
3-May-08	3	3	3	3	A	3	8	8	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2.3	8.2
4-May-08	1	1	2	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1.4	2.4
5-May-08	1	1	1	2	A	2	3	5	7	2	1	1	1	1	1	1	1	1	1	1	2	2	3	1.9	7.1	
6-May-08	3	3	3	4	A	3	4	3	2	1	1	1	1	2	2	2	2	1	2	2	4	3	3	2	2.4	4.5
7-May-08	2	3	3	2	A	8	6	8	5	4	4	3	1	1	4	3	2	1	1	1	1	2	2	1	3.0	8.4
8-May-08	1	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	6	2	3	2	1.5	5.9
9-May-08	2	2	2	2	A	4	5	5	4	3	2	1	1	1	1	1	1	1	2	2	2	3	2	2	2.3	4.8
10-May-08	2	2	3	3	A	4	4	5	4	4	3	2	1	1	2	1	1	1	1	2	2	2	3	2	2.4	5.3
11-May-08	3	2	2	2	A	6	4	3	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1.9	6.3
12-May-08	2	3	4	3	A	3	4	4	3	1	1	C	C	C	C	C	2	2	2	2	2	5	4	3	2.8	4.8
13-May-08	3	4	4	2	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	4.1
14-May-08	1	1	1	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	4	2	3	2	1	1	1.5	4.2
15-May-08	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	1.1	1.6
16-May-08	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	4	4	4	2	1.5	4.4
17-May-08	1	2	3	3	A	5	4	7	7	4	2	2	2	2	1	2	1	1	1	3	3	5	3	1	2.8	6.8
18-May-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1.2	2.8
19-May-08	1	2	2	2	A	6	4	3	1	1	1	2	2	1	1	1	1	2	1	1	2	3	2	2	1.9	5.5
20-May-08	4	10	5	5	A	5	6	4	4	2	2	1	1	1	2	2	2	2	3	2	2	2	2	2	3.1	10.0
21-May-08	2	1	1	1	A	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	3	5	1.5	4.9
22-May-08	3	2	3	3	A	3	4	2	1	1	1	1	1	1	1	1	2	2	2	2	3	2	2	2	1.9	3.8
23-May-08	2	3	2	3	A	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.3	2.6
24-May-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	2	1	1.3	2.5
25-May-08	2	2	2	2	A	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.5
26-May-08	2	3	3	2	A	3	3	4	3	2	2	2	1	1	1	1	1	1	1	1	2	2	2	2	1.9	3.6
27-May-08	2	2	2	3	A	3	4	4	4	3	3	3	2	2	2	2	2	1	1	2	2	2	3	2	2.4	4.1
28-May-08	3	3	3	4	A	4	4	3	4	3	2	2	1	1	1	1	2	2	2	2	3	2	2	4	2.5	4.5
29-May-08	3	2	3	4	A	3	3	2	1	2	1	1	2	1	1	1	1	1	1	1	2	2	2	2	1.8	3.6
30-May-08	2	2	2	2	A	3	3	2	1	1	2	2	5	1	1	1	2	1	1	1	1	1	1	1	1.8	5.0
31-May-08	1	2	2	3	A	3	5	2	1	2	2	1	1	1	1	1	1	1	1	1	2	4	2	2	1.8	5.3
Hourly Avg	1.9	2.3	2.4	2.4	N	3.1	3.4	3.2	2.6	1.8	1.6	1.3	1.3	1.1	1.2	1.2	1.3	1.2	1.4	1.6	2.2	2.3	2.1	2.0		
Hourly Max	3.6	10.0	4.7	4.5	0.0	8.4	8.2	8.1	7.1	4.9	4.3	2.8	5.0	1.9	3.6	2.6	2.5	2.2	4.2	2.9	5.9	4.8	3.7	4.9		



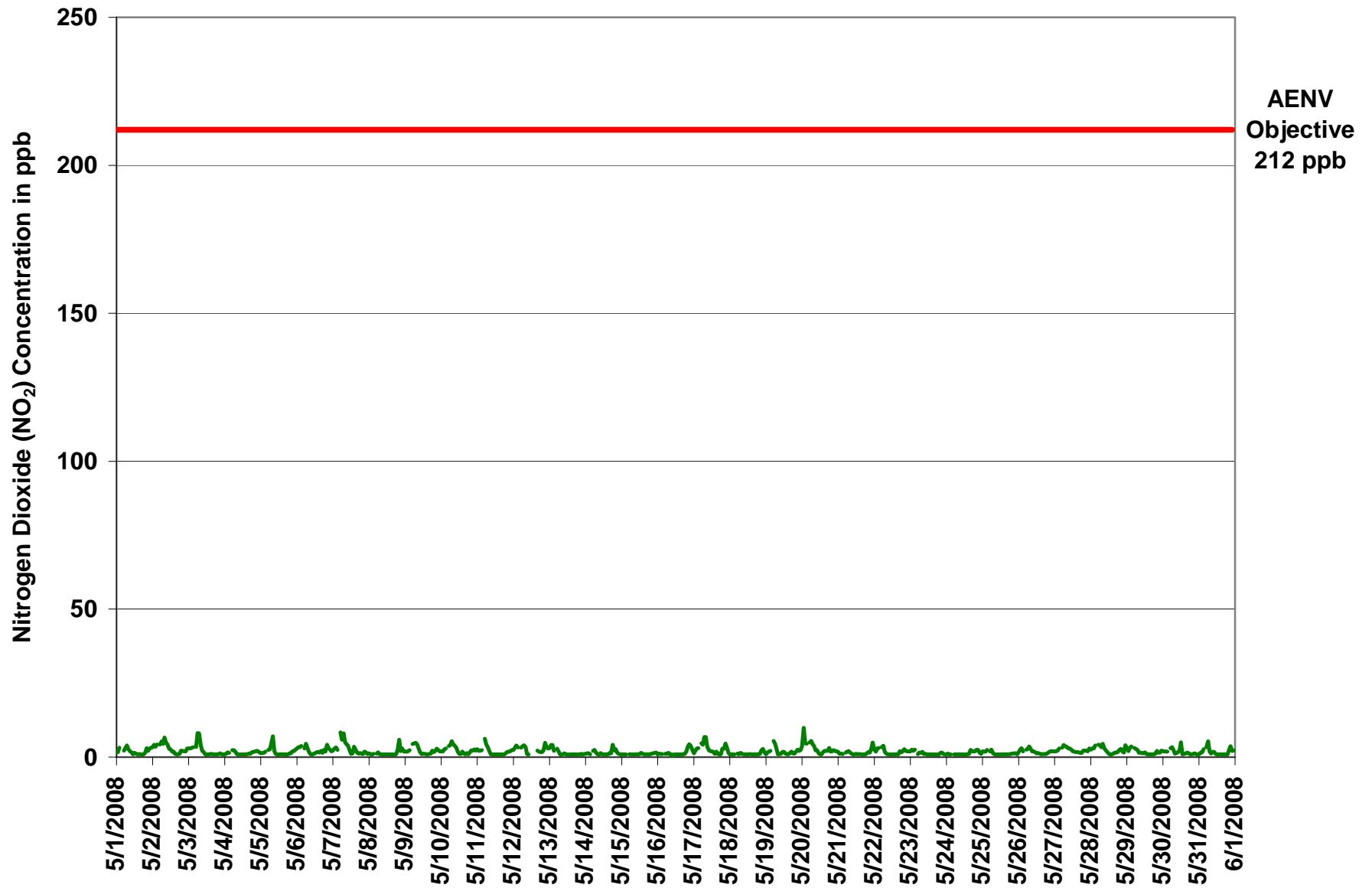


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

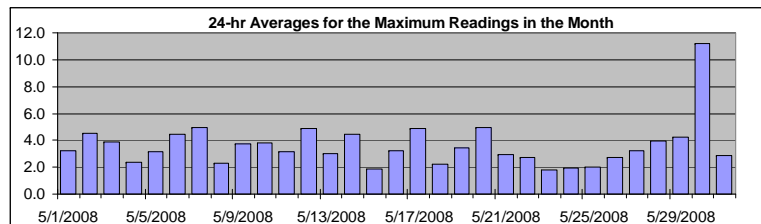
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitrogen Dioxide (NO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	150.8	ppb	30-May	12:00 13:00
Maximum 24-hr Value:	11.2	ppb	30-May	



AIC Time:	31 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	17.9	9.0	4.0	2.0	1.9	1.0	0.9	3.6 ppb	2.0 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start 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-May-08	2	3	5	P	A	4	5	5	4	8	2	2	2	3	1	2	2	1	1	3	6	3	4	4	3.2	8.0
2-May-08	4	6	4	9	A	8	9	7	10	6	5	4	4	2	2	2	1	2	5	4	3	3	3	4	4.5	10.0
3-May-08	3	3	6	5	A	4	18	15	5	3	2	2	1	2	2	2	2	1	2	2	2	3	2	3	3.9	18.0
4-May-08	2	3	2	2	A	3	3	2	2	1	1	1	1	2	2	2	2	3	4	4	3	4	4	2	2.3	3.9
5-May-08	2	2	2	2	A	3	5	9	14	5	2	1	2	2	2	2	2	1	2	2	2	3	4	4	3.2	14.1
6-May-08	4	7	5	8	A	4	8	4	3	3	2	2	2	4	4	3	6	3	4	2	7	9	4	5	4.5	9.3
7-May-08	3	5	5	4	A	16	17	13	7	6	5	3	2	2	6	4	2	2	2	2	2	2	2	2	4.9	17.1
8-May-08	2	2	1	2	A	2	2	3	1	1	1	2	1	1	1	1	1	1	2	5	12	3	4	3	2.3	12.4
9-May-08	2	3	4	5	A	15	6	5	5	4	3	2	2	2	2	2	2	3	4	2	4	5	4	2	3.8	14.8
10-May-08	4	2	4	4	A	6	6	8	6	5	4	2	2	2	2	2	2	3	2	2	6	3	6	4	3.8	8.0
11-May-08	4	3	3	4	A	10	5	7	4	2	1	1	1	1	1	1	1	1	5	3	2	6	6	6	3.2	10.0
12-May-08	4	5	9	6	A	4	6	7	7	2	2	C	C	C	C	C	3	4	3	3	6	7	6	6	4.9	9.0
13-May-08	4	4	10	4	A	4	4	2	1	3	14	2	1	1	2	1	1	2	2	1	2	2	2	2	3.0	14.0
14-May-08	3	2	2	2	A	3	4	18	2	1	25	2	2	2	2	2	2	3	10	4	5	3	3	2	4.5	24.9
15-May-08	1	2	1	1	A	2	2	1	1	1	1	1	3	8	3	1	1	1	1	2	2	2	3	3	1.9	8.0
16-May-08	1	2	2	3	A	2	4	8	2	2	1	1	2	2	2	2	2	2	5	8	11	6	4	4	3.3	11.0
17-May-08	3	4	4	4	A	6	5	10	9	6	3	3	2	2	2	3	2	2	2	4	9	15	8	4	4.9	15.0
18-May-08	1	1	1	1	A	4	3	3	2	2	2	2	1	5	2	2	1	1	1	2	2	4	7	3	2.2	7.0
19-May-08	2	3	2	3	A	15	8	7	2	2	2	2	2	2	1	2	3	3	3	2	4	4	3	3	3.5	15.0
20-May-08	10	20	6	6	A	6	10	6	6	4	4	2	2	2	3	3	3	3	5	2	3	3	3	3	5.0	20.0
21-May-08	3	2	2	2	A	2	4	3	3	2	1	2	9	2	5	2	1	2	1	2	2	3	3	11	3.0	11.1
22-May-08	4	2	4	4	A	4	5	5	2	2	2	2	1	1	1	1	5	2	3	3	3	3	3	3	2.7	5.0
23-May-08	2	3	3	3	A	2	2	2	2	2	2	1	2	2	1	1	1	1	1	1	2	2	2	2	1.8	3.0
24-May-08	1	2	1	1	A	1	1	2	2	1	1	1	1	2	2	4	3	2	3	4	4	4	2	2	1.9	4.0
25-May-08	3	2	2	3	A	3	3	3	1	1	1	1	1	1	1	1	1	2	1	2	2	2	9	1	2.0	8.7
26-May-08	3	3	4	3	A	3	3	5	4	3	3	2	2	2	2	2	2	2	2	2	2	3	3	3	2.7	4.9
27-May-08	3	2	3	4	A	4	5	4	4	3	4	3	2	2	2	2	2	2	2	6	7	4	3	3	3.3	6.6
28-May-08	3	3	3	7	A	6	7	6	7	3	3	2	1	2	2	3	2	2	2	5	6	2	3	11	3.9	11.0
29-May-08	6	3	5	5	A	5	5	6	3	2	2	2	28	2	2	2	2	2	2	2	3	3	3	4	4.3	28.1
30-May-08	3	3	2	2	A	6	6	21	2	19	11	9	151	2	2	2	3	2	2	2	2	2	2	2	11.2	150.8
31-May-08	1	2	2	4	A	10	10	2	2	3	2	2	1	1	1	1	1	1	1	1	4	9	3	3	2.9	10.0
Hourly Avg	3.0	3.5	3.5	3.7	N	5.4	5.8	6.4	4.0	3.4	3.6	2.1	7.8	2.1	2.1	1.9	2.0	2.0	2.3	2.8	4.1	4.1	3.8	3.6		
Hourly Max	9.7	20.0	9.8	9.0	0.0	16.1	18.0	21.0	14.1	19.0	24.9	9.0	150.8	8.0	6.0	4.0	6.3	5.0	10.0	5.9	12.4	15.0	8.7	11.1		

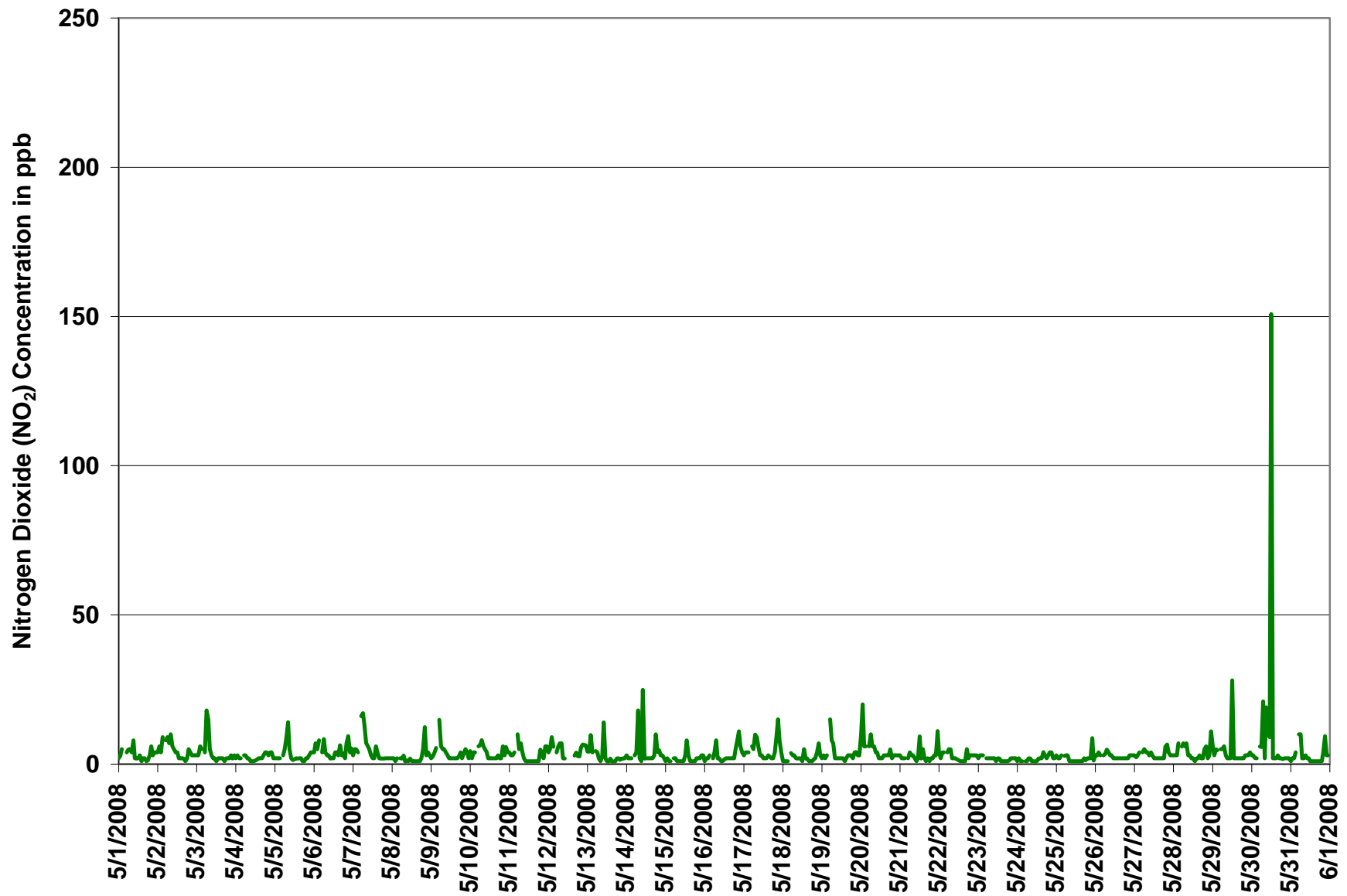
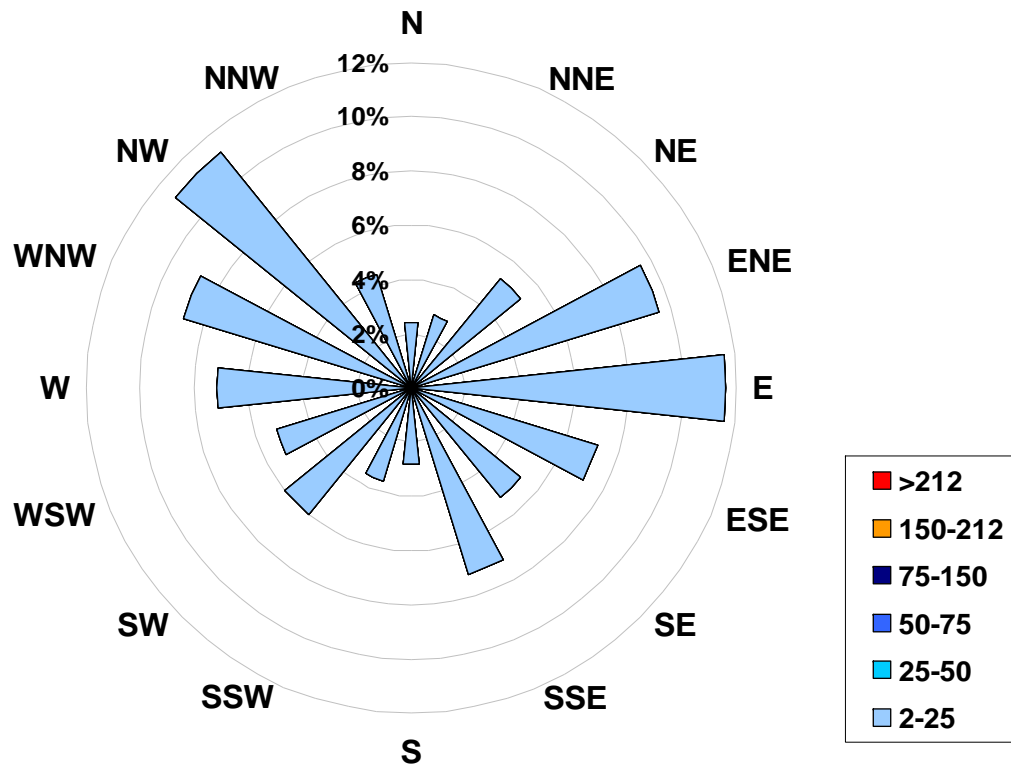


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

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

# PASZA - Beaverlodge Nitric Oxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)

Monitoring Dates: May 1, 2008 to June 1, 2008

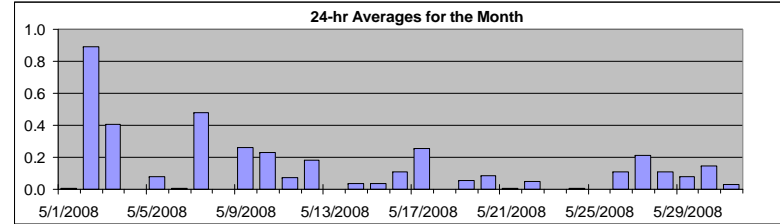
Guideline Limit: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	5.7	ppb	2-May	8:00 9:00
Maximum 24-hr Average:	0.9	ppb	2-May	

AIC Time:	31 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.6	0.9	0.0	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																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-08	0	0	0	P	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
2-May-08	0	0	0	0	A	0	3	3	6	4	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0.9	5.7
3-May-08	0	0	0	0	A	0	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	4.3
4-May-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	0.0
5-May-08	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.3
6-May-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	0.1
7-May-08	0	0	0	0	A	3	2	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.1
8-May-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	0.0
9-May-08	0	0	0	0	A	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
10-May-08	0	0	0	0	A	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.6
11-May-08	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
12-May-08	0	0	0	0	A	0	0	1	1	0	0	C	C	C	C	C	1	0	0	0	0	0	0	0	0.2	1.1
13-May-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	0.0
14-May-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	0.5
15-May-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	0.5
16-May-08	0	0	0	0	A	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.2
17-May-08	0	0	0	0	A	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.4
18-May-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	0.0
19-May-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	0.5
20-May-08	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
21-May-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	0.1
22-May-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	0.0	0.9
23-May-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	0.0
24-May-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	0.1
25-May-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	0.0
26-May-08	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
27-May-08	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
28-May-08	0	0	0	0	A	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.6
29-May-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	0.8
30-May-08	0	0	0	0	A	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
31-May-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	0.0	0.5
Hourly Avg	0.0	0.0	0.0	0.0	N	0.1	0.6	0.8	0.6	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Hourly Max	0.0	0.3	0.0	0.0	0.0	2.6	4.3	3.9	5.7	4.1	3.4	1.1	0.8	0.5	0.2	0.1	0.7	0.0	0.2	0.0	0.0	0.0	0.0	0.0		

# PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

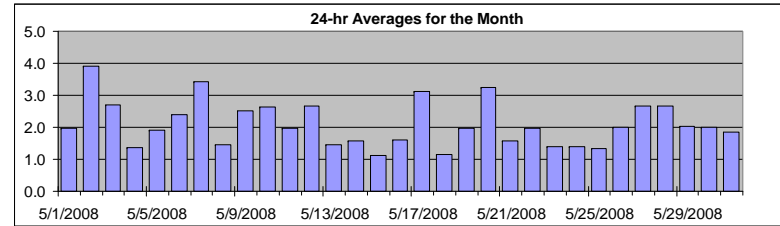
Guideline Limit: Alberta Environment: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	12.6	ppb	3-May	6:00 7:00
Maximum 24-hr Average:	3.9	ppb	2-May	

AIC Time:	31 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	9.2	4.9	2.5	1.6	1.0	0.9	0.9	2.1 ppb	1.6 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	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-May-08	1	1	3	P	A	2	3	4	3	2	2	1	2	1	1	1	1	1	1	1	3	2	3	3	2.0	4.2
2-May-08	3	4	3	4	A	5	8	7	12	9	8	4	3	2	2	1	1	1	1	2	2	2	2	3	3.9	12.4
3-May-08	3	3	3	3	A	3	13	12	5	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2.7	12.6
4-May-08	1	1	2	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1.4	2.4
5-May-08	1	1	1	2	A	2	3	5	8	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1.9	8.4
6-May-08	3	3	3	4	A	3	5	3	2	1	1	1	1	2	2	2	2	2	2	2	4	3	2	2	2.4	4.8
7-May-08	2	3	3	2	A	11	8	11	7	6	4	3	1	1	4	3	2	1	1	1	1	2	1	1	3.4	11.2
8-May-08	1	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	6	2	3	2	1.4	5.8
9-May-08	2	2	2	2	A	5	6	7	6	4	2	1	1	1	1	1	1	1	2	2	2	3	2	2	2.5	6.7
10-May-08	2	2	2	3	A	4	5	8	6	5	3	2	1	1	2	1	1	1	1	1	2	2	3	2	2.6	8.1
11-May-08	3	2	2	2	A	6	5	4	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2.0	6.5
12-May-08	2	3	4	3	A	3	4	5	4	1	1	C	C	C	C	C	1	1	1	1	2	4	3	2	2.7	5.1
13-May-08	3	4	4	2	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	4.0
14-May-08	1	1	1	1	A	2	3	2	1	1	2	1	1	1	1	1	1	1	5	2	3	2	1	1	1.6	4.5
15-May-08	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1.1	2.1
16-May-08	1	1	1	1	A	1	2	3	1	1	1	1	1	1	1	1	1	1	1	2	3	4	4	2	1.6	4.3
17-May-08	1	2	3	3	A	5	5	9	9	4	3	3	2	2	1	2	1	1	1	3	3	4	3	1	3.1	9.4
18-May-08	1	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1.2	2.6
19-May-08	1	1	2	2	A	6	5	4	1	1	1	2	2	1	1	1	1	2	1	1	2	3	2	2	2.0	5.9
20-May-08	4	10	5	4	A	5	6	5	4	3	3	1	1	1	2	2	2	2	3	2	2	2	2	2	3.3	10.3
21-May-08	2	1	1	1	A	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	3	5	1.6	4.9
22-May-08	2	2	3	3	A	4	5	2	2	1	1	1	1	1	1	1	1	2	2	2	3	2	2	2	2.0	4.9
23-May-08	2	2	2	3	A	1	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1.4	2.6
24-May-08	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	3	2	2	2	3	3	2	1	1.4	2.7
25-May-08	2	2	2	2	A	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.7
26-May-08	2	2	3	2	A	3	3	4	4	3	2	2	1	1	1	1	1	1	1	1	2	2	2	2	2.0	4.5
27-May-08	2	2	2	3	A	4	5	4	5	4	4	3	2	2	2	2	2	2	1	2	2	2	3	2	2.7	4.8
28-May-08	2	3	3	4	A	4	5	4	6	3	3	2	1	1	1	1	2	2	2	2	3	2	2	4	2.7	6.1
29-May-08	3	2	3	4	A	4	4	3	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2.0	3.7
30-May-08	2	2	2	2	A	3	4	3	2	2	2	3	5	1	1	1	2	2	1	1	1	1	1	1	2.0	5.2
31-May-08	1	1	2	3	A	4	6	2	1	2	2	1	1	1	1	1	1	1	1	1	2	4	2	2	1.8	6.0
Hourly Avg	1.9	2.2	2.3	2.4	N	3.3	4.1	4.0	3.3	2.2	2.0	1.5	1.4	1.2	1.3	1.2	1.2	1.2	1.4	1.5	2.1	2.2	2.0	2.0		
Hourly Max	3.7	10.3	4.9	4.5	0.0	11.1	12.6	11.9	12.4	9.2	7.7	3.9	5.2	2.1	3.6	2.6	2.7	2.2	4.5	2.9	5.8	4.5	3.7	4.9		

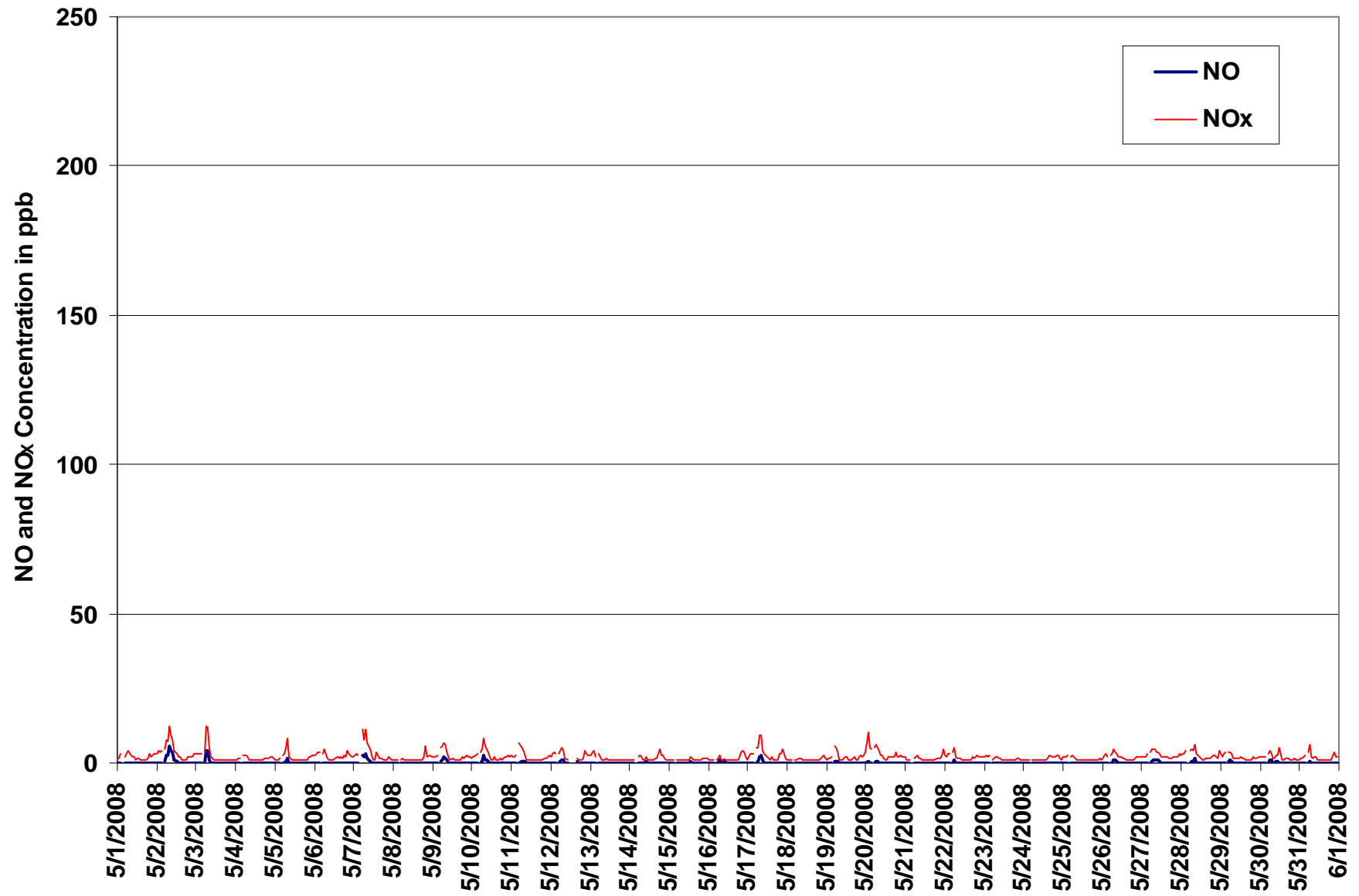


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

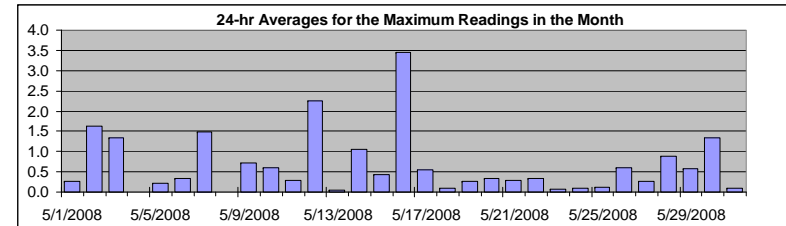
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitric Oxide (NO)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	48.6	ppb	16-May	10:00 11:00
Maximum 24-hr Value:	3.4	ppb	16-May	



AIC Time:	31 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	10.8	2.9	0.0	0.0	0.0	0.0	0.0	0.6 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-May-08	0	0	0	P	A	0	0	1	1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	3.2
2-May-08	0	0	0	0	A	2	8	4	11	5	5	2	1	0	0	0	0	0	0	0	0	0	0	0	1.6	10.9
3-May-08	0	0	0	0	A	0	17	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	16.8
4-May-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	0.0
5-May-08	0	0	0	0	A	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.9
6-May-08	0	0	0	0	A	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	6.9
7-May-08	0	0	0	0	A	10	10	6	3	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1.5	9.9
8-May-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	0.0
9-May-08	0	0	0	0	A	9	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	8.9
10-May-08	0	0	0	0	A	0	2	8	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	7.9
11-May-08	0	0	0	0	A	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.9
12-May-08	0	0	0	0	A	0	1	4	3	7	0	C	C	C	C	C	26	0	0	0	0	0	0	0	2.2	25.8
13-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.0	0.9
14-May-08	0	0	0	0	A	0	1	0	1	5	16	0	0	0	0	0	0	0	1	0	1	0	0	0	1.1	15.8
15-May-08	0	0	0	0	A	1	1	0	0	0	0	0	2	3	3	0	0	0	0	0	0	0	0	0	0.4	2.9
16-May-08	0	0	0	0	A	0	2	9	0	0	49	2	2	0	8	8	0	0	0	0	0	0	0	0	3.4	48.6
17-May-08	0	0	0	0	A	0	1	4	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.9
18-May-08	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
19-May-08	0	0	0	0	A	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0
20-May-08	1	2	0	0	A	0	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0
21-May-08	0	0	0	0	A	0	1	1	1	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0.3	1.9
22-May-08	0	0	0	0	A	1	2	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
23-May-08	0	0	0	0	A	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
24-May-08	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0.1	1.0
25-May-08	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	0.9
26-May-08	0	0	7	0	A	0	1	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	7.0
27-May-08	0	0	0	0	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
28-May-08	0	0	0	0	A	0	1	2	16	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	15.8
29-May-08	0	0	0	0	A	2	1	1	1	0	1	1	1	1	0	5	0	0	0	0	0	0	0	0	0.6	4.9
30-May-08	0	0	0	0	A	1	2	3	1	0	16	3	5	0	0	0	0	0	0	0	0	0	0	0	1.3	16.2
31-May-08	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
Hourly Avg	0.0	0.1	0.2	0.0	N	0.9	2.0	2.1	1.7	1.1	3.3	0.4	0.5	0.2	0.4	0.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Hourly Max	0.9	2.0	7.0	0.0	0.0	9.9	16.8	10.8	15.8	6.9	48.6	2.9	4.9	2.9	7.9	7.9	25.8	0.0	0.9	0.0	0.6	0.9	0.7	0.0		



Station: Beaverlodge  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

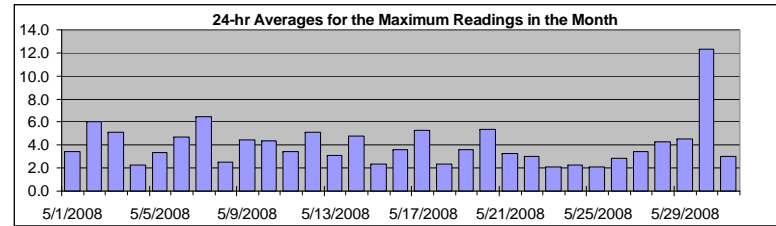
**Oxides of Nitrogen (NO<sub>x</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	150.6	ppb	30-May	12:00 13:00
Maximum 24-hr Value:	12.3	ppb	30-May	

AIC Time:	31 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	25.8	10.9	4.0	2.9	1.9	0.9	0.9	4.0 ppb	2.9 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-May-08	2	2	5	P	A	4	5	6	5	11	2	2	2	4	1	2	2	1	2	3	6	3	3	4	3.5	11.2
2-May-08	4	6	4	9	A	10	17	10	21	11	10	6	5	2	2	1	1	2	5	4	3	2	3	6.1	21.0	
3-May-08	3	3	6	5	A	4	34	26	6	4	2	2	1	2	2	2	1	2	2	2	3	2	3	5.1	34.0	
4-May-08	2	2	2	2	A	3	3	3	3	1	1	1	1	1	2	1	2	3	4	4	3	4	4	2.3	4.0	
5-May-08	2	2	2	2	A	3	5	10	17	6	2	2	1	2	2	2	1	1	2	2	3	4	4	3.4	17.1	
6-May-08	4	7	5	8	A	4	9	5	3	3	5	2	2	4	4	3	7	3	4	2	7	9	4	4.7	8.9	
7-May-08	3	5	5	4	A	26	26	19	11	8	6	4	4	2	7	4	2	2	2	2	2	2	2	6.5	26.0	
8-May-08	2	1	1	2	A	2	3	3	2	2	2	2	2	1	1	1	1	1	2	5	13	3	4	2.5	12.8	
9-May-08	2	2	4	5	A	24	8	8	7	5	4	2	2	2	2	2	2	4	2	4	5	4	2	4.4	23.9	
10-May-08	4	2	4	4	A	6	8	17	9	5	5	2	2	2	3	2	2	3	1	2	6	3	5	4.3	16.6	
11-May-08	4	3	3	4	A	11	7	9	6	2	1	2	1	1	1	1	1	1	5	3	2	6	6	3.5	10.9	
12-May-08	4	5	9	5	A	5	7	11	10	3	2	C	C	C	C	C	2	3	2	2	5	6	6	5.1	11.0	
13-May-08	4	4	10	4	A	5	4	2	2	3	14	2	1	1	3	1	1	1	2	2	1	2	2	3.1	13.9	
14-May-08	3	2	2	2	A	3	5	18	3	2	26	2	2	2	2	2	3	11	5	5	3	3	2	4.7	25.9	
15-May-08	1	2	1	2	A	3	2	2	2	2	2	2	4	9	4	2	2	1	2	2	2	3	3	2.4	8.9	
16-May-08	1	2	2	3	A	2	6	10	2	2	2	2	2	2	2	3	2	2	2	5	8	11	6	3.6	11.0	
17-May-08	3	3	4	4	A	6	6	14	13	8	3	3	2	2	2	3	3	2	2	4	9	15	8	5.3	15.0	
18-May-08	1	1	1	1	A	4	4	3	3	2	2	2	1	5	2	2	2	1	1	2	2	4	6	2.3	6.4	
19-May-08	2	2	2	3	A	17	9	8	2	2	3	2	2	2	1	2	3	3	3	2	4	4	3	3.6	17.0	
20-May-08	10	22	6	6	A	6	12	7	6	4	5	3	2	2	3	4	3	4	5	3	3	3	3	5.4	21.6	
21-May-08	3	2	2	2	A	2	4	4	3	2	2	2	11	2	6	2	2	2	2	2	2	3	3	3.3	11.8	
22-May-08	4	2	4	4	A	4	6	6	3	3	3	3	2	2	1	1	1	5	2	3	3	3	3	3.0	6.0	
23-May-08	2	3	3	4	A	2	3	2	3	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2.1	4.0	
24-May-08	2	2	1	1	A	1	1	2	2	2	2	2	2	2	2	2	5	3	3	3	4	5	2	2.2	5.0	
25-May-08	3	2	2	3	A	3	4	4	1	1	1	1	1	1	1	1	1	2	1	2	2	2	9	2.1	9.0	
26-May-08	3	3	4	3	A	3	4	6	6	4	3	2	2	2	2	2	2	2	2	2	2	3	3	2.9	5.9	
27-May-08	3	2	3	3	A	4	7	5	5	4	4	4	2	2	2	2	2	2	2	6	7	4	3	3.5	6.9	
28-May-08	3	3	3	7	A	6	8	7	10	4	4	2	2	2	2	4	2	2	2	5	6	2	3	4.3	11.0	
29-May-08	6	3	5	5	A	7	6	6	3	2	3	28	2	2	4	2	2	2	2	2	3	3	4	4.6	28.1	
30-May-08	3	3	3	2	A	6	8	24	2	19	28	11	151	2	2	2	3	2	2	2	3	2	2	12.3	150.6	
31-May-08	1	2	2	4	A	11	11	3	2	3	2	2	1	1	1	1	1	1	1	1	4	9	3	3.0	11.0	
Hourly Avg	3.0	3.3	3.5	3.7	N	6.3	7.8	8.3	5.5	4.2	4.8	2.6	8.0	2.2	2.2	2.0	2.2	2.0	2.4	2.9	4.1	4.1	3.7	3.6		
Hourly Max	10.3	21.6	9.7	8.9	0.0	26.0	34.0	26.0	21.0	19.2	27.7	11.0	150.6	8.9	6.5	4.0	6.8	5.0	11.0	6.0	12.8	15.0	9.0	11.8		

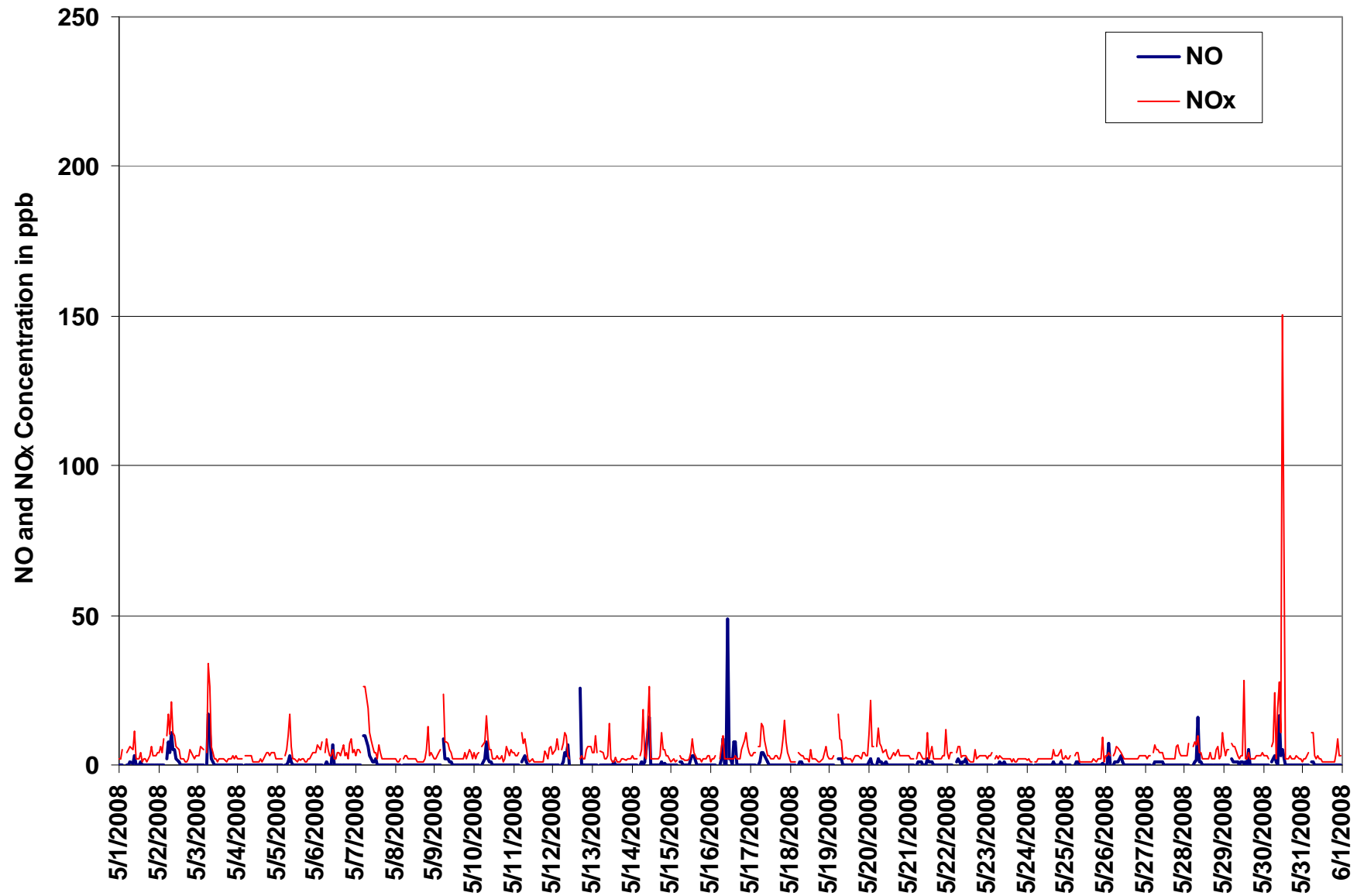


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

# PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

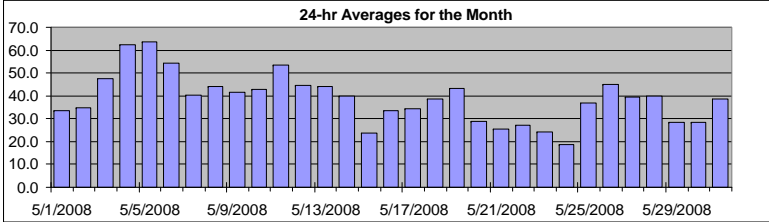
Ozone (O<sub>3</sub>)

Monitoring Dates: May 1, 2008 to June 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:	78.8 ppb	4-May	15:00 16:00
Maximum 24-hr Average:	63.7 ppb	5-May	

AIC Time:	32 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	73.2	62.4	48.6	38.1	27.7	18.7	14.3	38.7 ppb	38.1 ppb



Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-08	30	31	27	P	A	26	25	26	27	28	29	35	36	40	42	43	44	44	43	39	35	34	28	26	33.6	44.1
2-May-08	26	26	23	20	A	7	8	11	12	16	22	32	43	47	50	53	53	53	52	51	50	50	47	45	34.6	53.4
3-May-08	44	46	43	31	A	35	19	25	37	48	52	59	59	59	59	59	61	60	58	54	50	44	45	47	47.5	60.6
4-May-08	49	52	51	49	A	48	47	48	53	57	58	62	66	74	76	79	79	74	78	72	66	66	64	65	62.2	78.8
5-May-08	68	63	62	58	A	56	54	57	56	67	73	75	72	71	68	67	67	67	66	63	62	58	57	57	63.7	74.6
6-May-08	59	53	49	38	A	45	44	54	62	65	67	68	68	63	59	59	54	56	54	51	44	41	44	49	54.2	68.1
7-May-08	44	45	41	43	A	16	16	18	28	36	41	51	58	57	53	50	48	42	43	45	43	37	38	39	40.5	58.0
8-May-08	38	40	39	37	A	40	41	44	44	44	46	47	50	51	53	53	53	53	53	49	40	36	33	35	44.2	53.5
9-May-08	35	34	34	34	A	23	20	22	29	38	44	49	52	52	53	52	53	52	50	50	46	43	43	45	41.4	52.7
10-May-08	45	43	38	38	A	30	26	23	35	39	41	49	52	53	46	52	53	52	53	51	45	44	41	41	43.0	53.2
11-May-08	41	36	36	36	A	30	30	42	51	58	60	60	60	60	61	64	66	67	66	62	62	63	62	57	53.4	66.8
12-May-08	53	54	40	38	A	35	32	32	37	48	51	56	57	54	52	51	49	48	46	43	40	37	35	36	44.5	57.1
13-May-08	29	29	29	34	A	33	43	55	C	C	A	52	53	54	53	52	51	49	50	46	44	44	41	44.3	55.0	
14-May-08	39	38	38	38	A	35	35	44	52	56	58	57	58	54	48	42	36	33	28	27	24	25	25	24	39.8	58.0
15-May-08	25	24	25	24	A	22	23	25	26	27	27	26	24	24	23	23	23	24	24	23	22	22	22	23	23.9	26.7
16-May-08	25	25	25	25	A	25	26	28	31	33	34	36	40	40	41	43	39	39	38	37	34	33	33	35	33.3	43.2
17-May-08	35	29	27	29	A	25	24	21	25	34	38	43	46	46	43	43	40	39	38	34	33	31	32	35	34.4	46.5
18-May-08	39	38	41	39	A	34	31	28	28	28	28	32	34	37	44	45	45	44	45	48	46	44	42	43	38.4	47.6
19-May-08	44	44	44	40	A	33	33	34	39	41	43	47	49	50	52	51	51	47	47	47	44	44	39	34	43.4	51.9
20-May-08	30	18	21	28	A	27	21	20	23	31	29	40	43	43	39	36	33	30	27	32	28	25	22	19	29.0	43.4
21-May-08	18	20	17	17	A	19	21	22	26	29	31	32	33	32	31	31	30	29	28	27	25	25	22	19	25.4	32.6
22-May-08	21	21	18	19	A	18	19	24	26	27	30	30	31	32	34	36	36	36	32	31	28	27	26	27	27.3	36.0
23-May-08	25	21	17	17	A	23	24	25	23	25	27	27	27	29	31	29	28	26	25	24	23	22	22	23	24.4	30.8
24-May-08	24	21	24	24	A	23	21	20	19	18	18	17	18	18	19	19	17	16	15	14	11	12	20	25	18.8	24.7
25-May-08	21	22	22	19	A	22	20	24	29	33	37	42	43	45	46	48	49	50	50	47	42	45	44	44	36.7	50.5
26-May-08	43	40	40	43	A	36	35	33	35	38	45	49	53	54	54	54	54	54	53	51	47	44	42	40	45.2	54.3
27-May-08	38	37	35	32	A	29	28	29	30	32	36	40	45	48	49	50	50	49	49	47	42	36	37	37	39.3	49.9
28-May-08	39	40	41	35	A	31	26	36	34	42	42	42	42	42	46	47	42	45	46	42	38	37	42	35	39.7	46.9
29-May-08	32	24	17	14	A	15	21	24	34	36	37	36	36	34	35	34	33	34	33	30	26	22	23	21	28.3	37.1
30-May-08	19	19	19	19	A	16	15	20	27	29	33	34	39	38	38	35	32	36	33	33	31	29	29	29	28.3	38.5
31-May-08	28	26	26	24	A	25	25	34	36	36	39	46	51	50	50	49	49	49	49	48	43	34	37	37	38.7	50.7
Hourly Avg	35.7	34.0	32.6	31.4	N	28.4	27.5	30.6	33.8	38.0	40.6	43.9	46.3	46.8	46.7	46.7	45.8	45.2	44.4	42.5	39.2	37.2	36.9	36.5		
Hourly Max	68.2	63.1	62.2	58.3	0.0	55.9	53.8	56.6	62.2	66.7	73.3	74.6	72.4	73.9	76.2	78.8	78.6	74.0	77.9	71.8	65.6	65.8	63.6	64.7		

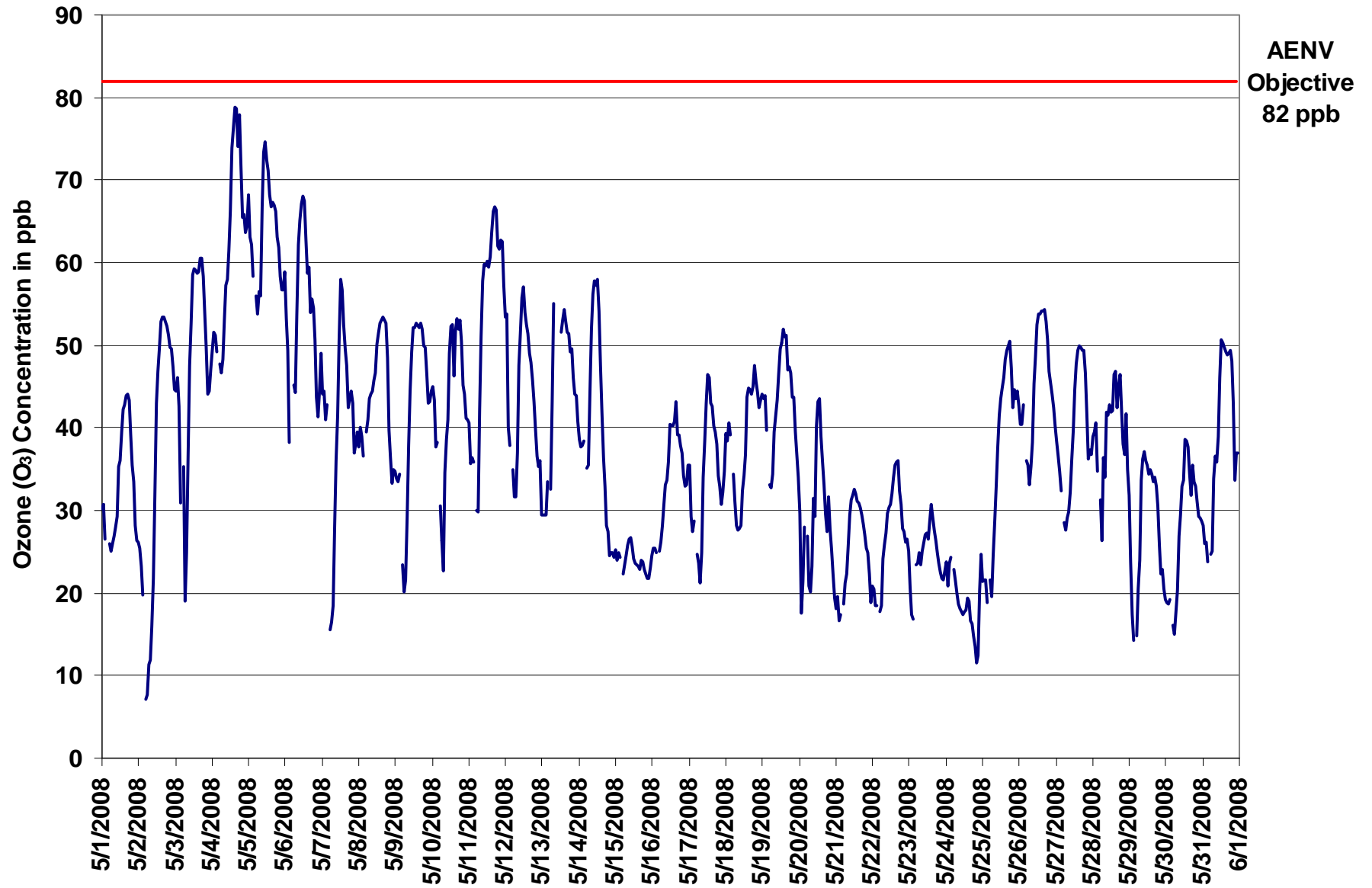


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

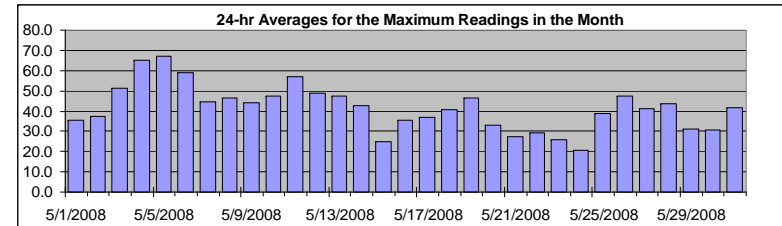
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Ozone (O<sub>3</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	81.2	ppb	4-May	16:00 17:00
Maximum 24-hr Value:	67.1	ppb	5-May	



AIC Time:	32 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	76.2	66.1	51.2	40.9	30.5	20.6	17.5	41.6 ppb	40.9 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-May-08	32	32	29	P	A	27	27	28	28	31	34	37	39	43	44	44	45	45	45	42	38	36	30	27	35.6	45.4
2-May-08	27	27	27	25	A	11	11	15	15	18	25	37	49	49	52	54	56	55	54	54	52	51	50	46	37.4	55.7
3-May-08	46	48	46	37	A	39	37	33	45	51	59	60	60	61	61	61	62	63	62	57	53	46	46	49	51.2	62.5
4-May-08	51	53	53	53	A	51	48	51	58	59	60	66	71	78	79	81	81	79	81	78	68	68	68	67	65.3	81.2
5-May-08	70	70	66	61	A	60	59	64	61	71	76	76	75	73	71	71	70	69	68	67	67	60	60	60	67.1	76.2
6-May-08	63	58	57	45	A	53	57	58	67	68	70	70	69	65	64	63	61	60	57	55	49	45	51	53	59.0	69.7
7-May-08	47	47	44	48	A	25	22	25	37	40	48	62	61	59	58	52	51	44	45	46	46	39	42	42	44.7	61.7
8-May-08	40	42	41	39	A	41	44	46	45	46	47	49	52	53	54	54	55	55	54	54	47	38	36	36	46.3	54.6
9-May-08	37	37	38	36	A	28	23	26	36	42	48	53	53	54	54	54	54	54	53	52	49	47	45	47	44.3	54.3
10-May-08	48	45	41	40	A	38	38	39	42	42	48	51	54	54	53	55	55	54	55	55	50	47	45	43	47.5	55.2
11-May-08	43	43	40	39	A	38	42	51	60	60	61	61	62	61	63	66	68	68	68	66	63	64	64	64	57.2	68.5
12-May-08	59	60	59	46	A	37	35	36	46	51	55	58	61	56	55	53	52	50	48	46	42	39	40	41	48.9	60.8
13-May-08	34	31	35	40	A	40	55	57	C	C	C	A	54	56	57	54	53	54	51	52	48	46	45	43	47.5	56.8
14-May-08	41	39	39	39	A	37	41	51	55	59	61	61	60	57	53	44	39	36	31	31	27	26	26	25	42.6	61.4
15-May-08	26	26	26	25	A	24	25	26	26	27	27	27	25	24	24	24	24	25	25	23	23	23	23	25	25.0	27.5
16-May-08	26	26	27	26	A	26	28	31	33	35	34	39	42	42	43	46	40	40	40	39	36	36	37	37	35.2	46.2
17-May-08	38	32	32	30	A	26	25	23	28	38	41	46	47	48	44	45	42	42	39	37	36	35	34	39	37.0	48.3
18-May-08	41	40	42	40	A	36	33	30	29	29	31	36	36	42	47	48	47	46	47	50	47	46	44	45	40.5	49.6
19-May-08	45	45	45	44	A	38	38	40	41	43	46	49	51	51	54	53	53	51	50	48	46	51	44	39	46.4	53.8
20-May-08	39	27	26	33	A	29	27	24	31	34	33	45	45	46	44	38	37	31	32	34	30	27	24	20	33.1	45.9
21-May-08	21	21	17	19	A	21	23	24	30	31	32	33	33	33	32	32	32	30	30	29	27	26	25	21	27.2	33.4
22-May-08	22	21	21	19	A	19	22	27	27	30	31	31	31	34	35	36	37	40	36	33	29	28	28	28	29.0	39.6
23-May-08	28	24	19	19	A	24	25	26	25	27	28	28	28	31	32	31	29	28	26	25	23	23	23	24	25.9	32.2
24-May-08	25	23	24	25	A	24	22	21	20	19	19	18	19	19	21	20	19	18	18	15	14	17	24	27	20.6	27.4
25-May-08	22	23	26	20	A	23	22	28	32	35	40	45	46	46	48	51	52	52	52	51	47	46	45	45	39.0	52.3
26-May-08	45	42	43	45	A	38	37	35	39	42	51	52	54	55	56	56	56	57	55	53	49	46	43	42	47.5	56.5
27-May-08	40	37	37	34	A	30	30	30	32	36	38	44	47	50	51	52	52	51	51	51	45	40	39	39	41.4	51.9
28-May-08	41	41	42	42	A	38	36	40	40	44	43	45	45	46	49	50	45	47	48	48	41	40	45	45	43.6	49.9
29-May-08	36	28	20	17	A	17	24	27	39	38	39	39	39	37	37	36	35	35	35	32	29	24	25	21	31.0	39.3
30-May-08	20	20	21	20	A	19	19	24	30	31	37	39	42	41	39	37	35	39	36	35	33	31	30	30	30.9	41.9
31-May-08	29	28	28	28	A	27	33	36	39	38	44	51	54	53	51	50	50	50	51	50	47	40	39	40	41.7	53.7
Hourly Avg	38.2	36.7	35.8	34.6	N	31.8	32.6	34.6	38.0	40.5	43.6	47.0	48.5	48.9	49.1	48.8	48.0	47.4	46.6	45.4	42.0	39.8	39.3	39.1		
Hourly Max	70.1	69.9	65.9	61.5	0.0	59.7	59.2	63.6	67.4	70.7	76.1	76.2	75.1	77.6	78.7	80.9	81.2	78.9	81.1	77.6	68.2	67.9	68.1	67.2		

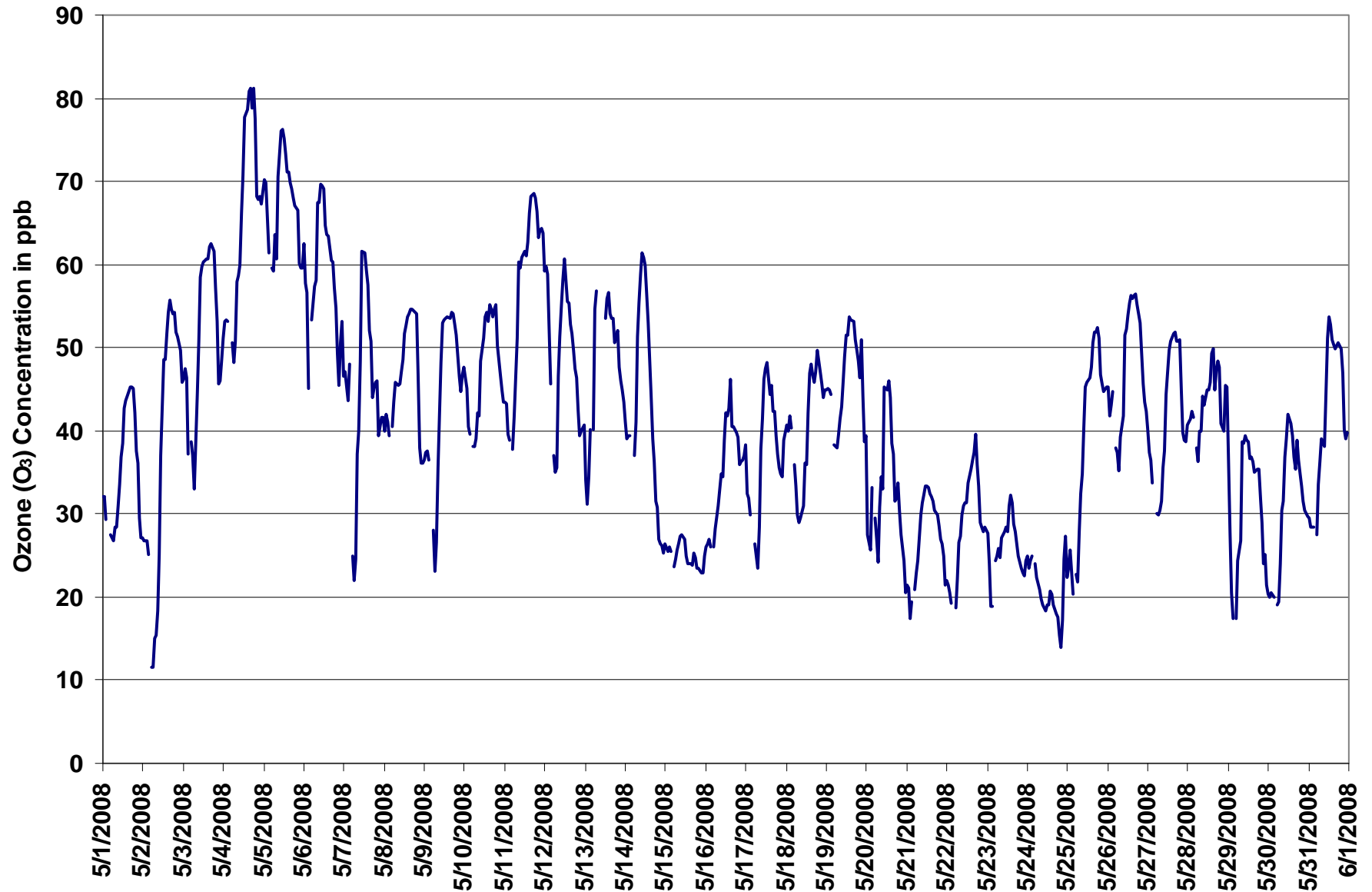
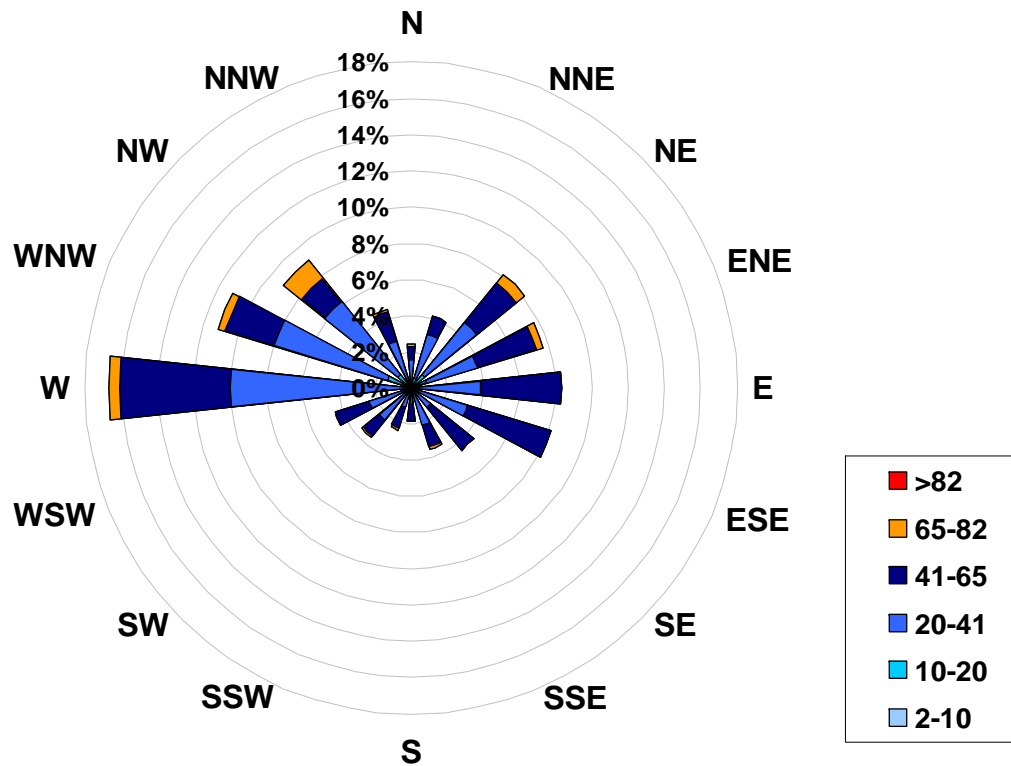


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	< 10		2
10	to 20		48
20	to 41		354
41	to 65		276
65	to 82		28
	> 82		0
Total Non-Zero Values			708

# PASZA - Beaverlodge Ozone Eight Hour Average Summary

Station: Beaverlodge  
 Station Owner: PASZA

## EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O<sub>3</sub>)

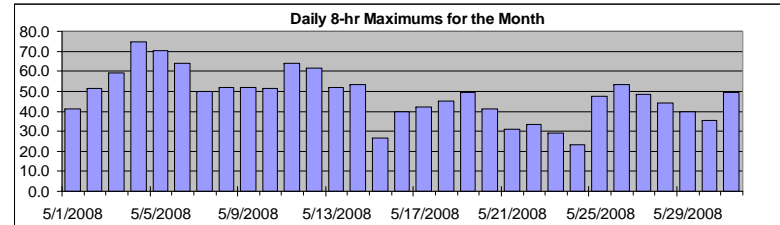
Monitoring Dates: May 1, 2008 to June 1, 2008

Objective Limit: Alberta Environment: 8-hr 65 ppb

Summary

Number of 8-hr Exceedances:	20
Maximum 8-hr Average:	74.7 ppb 4-May 19:00 20:00

Percentile	99	95	75	50	25	5	1
	70.1	62.1	47.2	37.7	28.9	20.2	16.4



Status Flag Characters

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

Day	Mountain Standard Time																							Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	
1-May-08	30	30	29	29	N	N	N	N	N	N	N	28	29	31	33	35	37	39	41	41	41	41	39	37	41.4
2-May-08	35	32	30	27	26	22	19	17	15	14	14	15	19	24	29	34	39	44	48	50	51	52	51	50	51.5
3-May-08	49	48	47	44	44	42	38	35	34	34	35	39	42	45	50	54	57	59	59	59	57	56	54	52	59.2
4-May-08	51	50	49	48	48	49	49	49	50	50	51	53	55	58	62	66	69	71	73	75	75	74	72	70	74.7
5-May-08	69	68	66	64	64	62	61	60	58	58	60	62	64	66	67	69	70	70	69	68	66	65	63	62	70.1
6-May-08	61	59	57	54	53	51	49	49	49	51	54	58	59	61	63	64	63	62	60	58	55	52	50	49	63.9
7-May-08	48	47	45	44	44	40	36	32	30	28	28	29	33	38	43	47	49	50	50	49	47	45	43	42	50.1
8-May-08	41	40	40	39	38	39	39	40	40	41	42	44	44	46	47	49	50	51	52	52	51	49	46	44	51.9
9-May-08	42	39	37	35	34	33	31	29	28	29	30	32	35	38	42	46	49	51	52	52	51	50	49	48	51.7
10-May-08	47	46	44	43	42	40	38	35	33	33	33	35	37	40	42	46	48	50	51	51	51	49	49	47	51.4
11-May-08	46	44	42	40	39	37	36	36	37	40	44	47	49	52	56	59	61	62	63	63	63	64	64	63	64.0
12-May-08	62	60	57	54	53	49	44	40	38	37	39	41	43	46	48	51	52	52	52	50	48	46	44	42	61.6
13-May-08	39	37	35	34	33	32	33	36	N	N	N	N	N	N	N	N	N	N	52	52	51	50	49	47	52.0
14-May-08	45	44	42	41	40	39	38	38	40	43	46	48	49	52	53	53	51	48	45	41	37	33	30	28	53.4
15-May-08	27	25	25	25	25	24	24	24	24	25	25	25	25	25	25	25	25	24	24	23	23	23	23	23	26.5
16-May-08	23	23	23	24	24	24	25	26	27	28	29	30	32	34	35	37	38	39	40	40	39	38	37	36	39.7
17-May-08	36	34	33	32	32	31	29	27	26	26	28	30	32	35	37	40	42	42	42	41	40	38	36	35	42.4
18-May-08	35	35	35	36	36	37	37	36	34	33	31	30	30	31	32	34	37	39	41	43	44	45	45	45	44.9
19-May-08	45	44	44	43	43	41	40	39	38	38	38	39	40	42	45	47	48	49	49	49	49	48	46	44	49.4
20-May-08	41	38	35	32	31	28	25	23	23	25	26	27	29	31	34	36	37	37	36	35	33	31	29	27	41.4
21-May-08	25	24	23	21	20	19	19	19	20	22	24	26	27	28	29	31	31	31	31	30	29	28	27	26	31.2
22-May-08	25	24	22	21	21	20	19	20	21	21	23	25	26	27	29	31	32	33	33	33	33	32	31	30	33.4
23-May-08	29	27	25	23	23	22	22	22	21	22	23	25	25	26	27	27	28	28	28	27	27	26	25	24	29.0
24-May-08	23	23	23	23	23	23	23	22	22	21	20	19	19	19	18	18	18	18	17	17	16	15	16	16	23.4
25-May-08	17	18	18	19	20	21	21	21	22	24	26	29	31	34	37	40	43	45	47	47	47	47	47	47	47.5
26-May-08	46	44	43	43	43	41	40	39	38	37	38	39	41	43	45	48	50	52	53	53	53	51	50	48	53.3
27-May-08	46	44	42	39	38	36	34	32	31	31	31	32	33	36	39	41	44	46	48	48	48	47	45	43	48.4
28-May-08	42	41	40	38	38	37	35	35	35	35	35	35	36	37	38	41	42	43	44	44	44	44	43	42	44.2
29-May-08	40	37	33	30	29	26	23	21	21	23	26	29	30	32	34	35	35	35	34	34	33	31	30	28	39.6
30-May-08	26	24	22	21	20	19	18	18	19	21	23	25	27	29	32	34	35	35	35	35	34	33	32	31	35.5
31-May-08	31	30	29	28	27	27	26	27	28	29	31	34	36	40	43	45	46	48	49	49	48	46	45	43	49.4

Hourly Max	69.0	67.6	65.6	63.9	63.7	62.3	60.9	59.7	58.0	58.5	60.1	62.4	63.6	65.5	67.4	68.6	70.0	70.9	73.4	74.7	74.6	73.6	72.0	70.2
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## PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

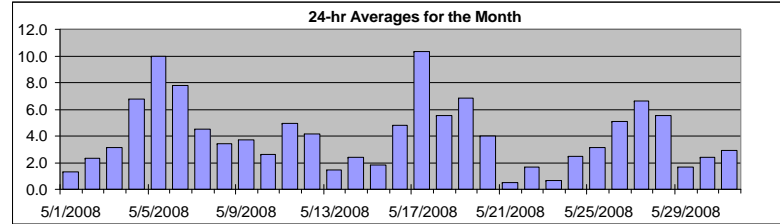
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

Draft Objective Limit: Alberta Environment: 1-hr - µg/m<sup>3</sup> 24-hr 30 µg/m<sup>3</sup>  
 Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	21.4 µg/m <sup>3</sup> 27-May 23:00 0:00
Maximum 24-hr Value:	10.3 µg/m <sup>3</sup> 17-May

AIC Time:	0 hrs	Operational Time:	742 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%
Percentile	99	95	75
	13.5	10.9	5.8
	5.0	3.1	1.4
	2.5	5	1
	0.0	0.0	0.0
	Average / Median		4.0
	3 µg/m <sup>3</sup>		3.2 µg/m <sup>3</sup>



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-May-08	0	0	0	P	1	1	0	2	1	2	2	1	2	2	2	1	1	0	2	2	1	1	2	3	1.3	3.1
2-May-08	3	3	2	2	1	1	2	3	3	5	4	1	0	0	0	0	0	0	3	3	4	5	5	5	2.3	5.3
3-May-08	5	5	5	6	5	5	6	6	5	2	3	3	3	4	4	3	1	0	0	2	2	1	1	3.2	6.0	
4-May-08	2	2	2	2	3	3	2	2	1	1	2	3	6	10	11	14	14	12	13	12	11	11	12	11	6.8	13.7
5-May-08	10	11	11	10	11	11	12	11	13	10	10	11	10	10	8	7	8	8	8	8	9	10	12	12	10.0	13.4
6-May-08	11	11	12	11	10	10	12	11	10	9	7	8	10	9	10	7	4	5	6	4	4	3	3	2	7.8	12.4
7-May-08	5	4	5	5	2	2	4	3	7	6	6	2	4	5	5	6	9	5	5	5	4	3	3	2	4.5	8.9
8-May-08	4	4	3	1	0	2	0	3	3	3	3	3	3	3	3	4	4	4	4	5	7	7	6	5	3.4	7.2
9-May-08	5	5	4	4	5	4	6	6	5	4	2	0	2	3	3	2	3	4	6	3	3	4	3	2	3.7	6.4
10-May-08	3	3	4	3	2	3	4	4	2	2	3	2	0	3	6	1	0	3	1	3	5	2	2	2	2.6	6.2
11-May-08	2	1	3	2	2	2	5	6	0	5	3	4	3	5	5	6	7	7	7	10	8	9	8	9	4.9	9.7
12-May-08	9	7	10	9	8	8	9	8	6	2	2	2	2	3	3	2	2	1	0	2	1	1	2	2	4.1	9.7
13-May-08	4	2	4	4	3	1	0	0	0	0	0	0	0	1	2	1	2	2	2	1	5	2	2	1	1.5	4.8
14-May-08	2	2	2	3	2	2	2	0	1	2	4	4	4	6	5	6	6	3	1	0	0	0	2	0	2.4	6.3
15-May-08	1	1	0	1	1	1	2	2	2	3	2	3	3	7	5	4	0	2	1	0	1	0	0	0	1.8	7.4
16-May-08	1	0	1	0	1	1	2	4	9	1	2	2	2	6	10	9	10	7	7	8	9	7	8	8	4.8	9.6
17-May-08	8	8	9	7	8	8	8	9	11	6	18	15	11	11	11	13	9	11	9	12	12	11	11	10.3	17.6	
18-May-08	9	8	7	7	7	7	7	8	6	5	5	3	4	2	13	5	3	4	3	3	5	3	5	5	5.5	13.1
19-May-08	4	3	3	4	5	6	9	8	4	3	3	17	4	4	2	5	4	11	7	11	13	10	18	6	6.8	17.8
20-May-08	6	7	12	5	5	7	7	7	4	1	4	0	0	0	5	5	5	4	5	2	2	1	3	1	4.0	12.3
21-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2	1	1	1	0.5	2.0
22-May-08	1	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	10	4	5	4	4	3	2	1.7	10.4
23-May-08	2	3	2	1	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	2	1	1	0.6	2.8
24-May-08	0	1	1	0	1	2	3	3	2	2	2	2	2	3	4	3	4	4	7	4	5	3	0	1	2.5	7.0
25-May-08	2	2	2	2	1	1	3	2	2	2	2	1	2	2	2	4	6	7	5	6	6	5	5	5	3.1	6.8
26-May-08	5	5	4	3	5	5	6	10	8	7	2	4	4	4	4	5	5	5	7	5	5	5	5	5	5.1	9.5
27-May-08	5	6	5	5	6	6	6	6	7	7	6	6	6	3	5	4	4	5	6	14	9	6	4	21	6.6	21.4
28-May-08	6	5	6	8	7	9	12	7	10	6	5	2	4	1	3	6	5	2	4	7	6	8	0	2	5.5	12.3
29-May-08	1	2	4	2	4	8	1	3	1	2	0	1	0	0	0	1	0	0	1	2	4	1	0	1	1.7	7.8
30-May-08	1	2	4	4	4	5	5	4	1	2	0	0	1	0	0	1	10	0	D	1	1	3	3	3	2.4	10.2
31-May-08	2	3	4	5	3	5	5	3	1	2	0	0	0	1	2	2	2	2	2	3	5	5	4	5	2.9	5.4
Hourly Avg	3.8	3.8	4.2	4.0	3.6	4.2	4.6	4.6	4.1	3.2	3.2	3.2	3.0	3.5	4.2	4.1	4.1	4.2	4.3	4.5	5.0	4.4	4.3	4.4		
Hourly Max	10.7	10.9	12.3	11.2	10.7	10.7	12.4	11.4	13.4	10.1	17.6	16.6	11.3	11.5	13.1	13.7	13.6	11.9	13.1	14.0	13.4	11.9	17.8	21.4		

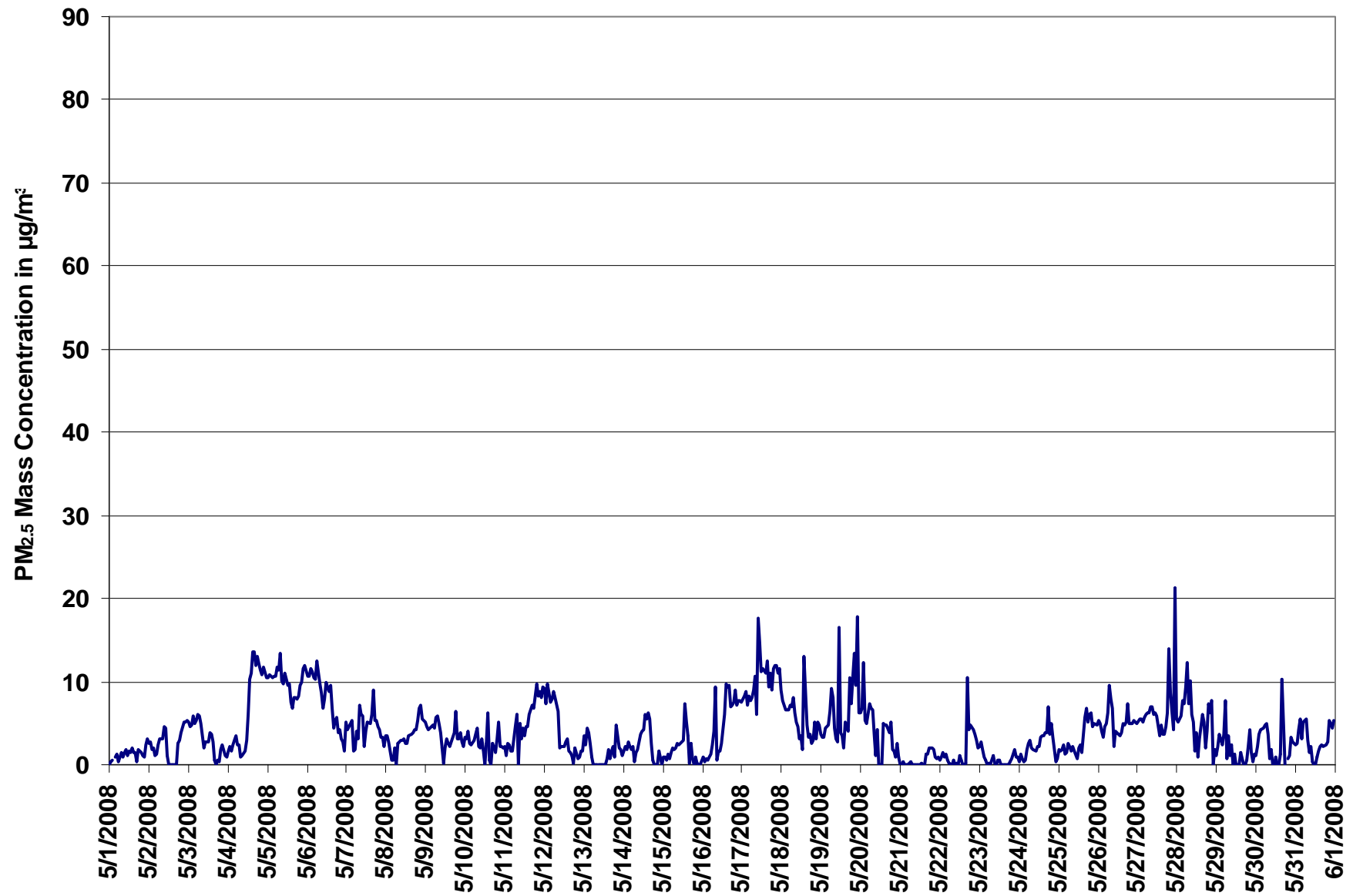


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

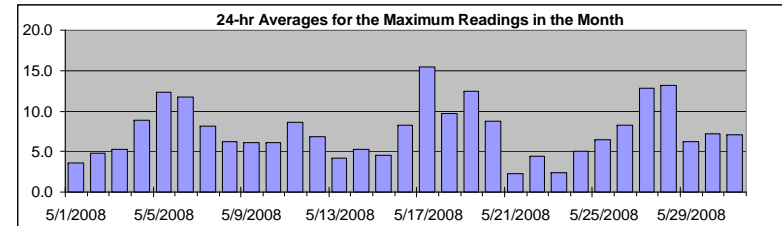
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Particulate Matter (PM<sub>2.5</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	53.3	µg/m <sup>3</sup>	27-May	23:00 0:00
Maximum 24-hr Value:	15.4	µg/m <sup>3</sup>	17-May	



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
	28.9	16.1	9.6	6.3	3.9	1.9	0.4	7.5	6 µg/m <sup>3</sup>

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-May-08	2	2	3	P	2	3	2	4	4	4	4	4	5	4	3	4	2	7	5	3	3	3	4	3.6	7.3	
2-May-08	4	4	5	4	5	4	5	7	7	11	8	4	1	3	2	2	2	8	5	5	6	6	6	4.8	10.9	
3-May-08	7	6	6	8	7	7	9	7	7	5	5	6	5	6	7	4	3	2	3	3	5	4	2	2	5.3	8.7
4-May-08	3	3	3	4	4	5	4	3	3	4	4	6	8	13	13	18	16	15	16	15	14	13	15	12	8.9	17.6
5-May-08	12	13	12	12	12	12	14	15	16	14	13	14	12	14	10	9	11	10	11	10	12	12	14	15	12.4	15.7
6-May-08	12	13	22	14	13	12	17	14	13	14	9	11	14	13	19	15	10	9	8	7	6	4	5	4	11.7	21.7
7-May-08	7	6	8	8	5	6	7	6	11	10	10	8	8	8	7	9	29	8	8	6	7	5	5	3	8.2	28.7
8-May-08	5	7	4	5	3	3	3	4	5	5	5	5	6	6	6	6	8	6	8	9	14	12	7	7	6.2	13.9
9-May-08	7	6	6	6	6	7	7	7	9	6	6	4	5	5	5	5	9	13	5	5	5	5	4	6.1	13.4	
10-May-08	4	5	5	4	4	5	8	8	6	5	6	6	4	14	15	6	3	8	4	5	11	4	4	3	6.1	15.1
11-May-08	3	3	5	4	4	3	9	15	7	9	8	11	6	9	7	12	12	11	10	14	10	11	13	14	8.6	15.2
12-May-08	12	9	15	12	9	9	11	11	10	4	5	7	7	6	7	4	5	3	3	4	3	2	4	4	6.8	14.9
13-May-08	6	4	7	7	6	5	3	0	0	0	0	3	2	4	5	4	3	5	4	11	12	3	3	2	4.1	11.6
14-May-08	3	4	3	4	5	3	3	3	5	5	9	14	9	11	8	11	9	5	4	3	0	2	4	1	5.3	13.5
15-May-08	2	3	2	2	3	4	5	5	5	6	5	5	7	12	11	11	3	5	3	1	3	1	2	3	4.6	12.3
16-May-08	3	1	2	3	3	3	4	15	18	3	3	5	7	9	17	15	16	10	10	10	12	9	9	9	8.2	18.0
17-May-08	13	13	13	9	10	10	12	12	25	13	31	20	17	18	16	19	19	16	12	15	17	15	13	14	15.4	30.9
18-May-08	11	10	9	8	8	9	10	11	9	7	7	10	7	7	46	12	8	7	5	5	10	5	7	7	9.7	45.9
19-May-08	5	4	5	7	7	11	12	12	6	5	6	41	12	9	6	9	7	21	14	14	22	20	34	10	12.5	40.6
20-May-08	9	9	39	13	11	9	11	12	6	5	8	4	4	9	9	8	8	7	9	4	5	3	5	3	8.8	39.0
21-May-08	2	1	1	2	1	0	2	1	1	2	2	0	3	2	4	2	3	4	5	5	3	2	2	2	2.2	4.8
22-May-08	2	2	3	2	3	2	2	2	2	2	2	3	4	4	2	3	5	27	8	6	6	6	5	3	4.5	26.7
23-May-08	4	5	3	2	3	0	2	2	2	3	2	3	2	1	1	1	0	1	2	2	5	4	3	3	2.4	4.9
24-May-08	2	3	3	2	2	3	5	5	4	3	4	4	4	5	6	5	7	6	20	6	6	7	4	5	5.0	19.9
25-May-08	5	3	4	4	3	2	4	4	4	9	6	6	7	6	8	10	12	12	11	9	8	6	6	6	6.4	11.6
26-May-08	7	7	6	5	6	7	9	18	10	9	8	9	7	6	8	10	9	9	18	7	7	6	6	6	8.3	17.9
27-May-08	6	6	7	6	7	7	8	9	11	10	11	12	12	8	10	9	9	9	15	33	29	10	8	53	12.8	53.3
28-May-08	8	7	7	17	11	15	25	17	18	10	16	8	10	5	18	14	15	7	10	12	25	25	1	13	13.1	25.1
29-May-08	3	6	6	7	11	12	5	7	7	9	6	7	7	8	12	6	4	4	3	6	6	4	2	3	6.2	12.0
30-May-08	3	4	5	5	6	6	11	8	8	9	9	8	9	6	8	16	19	7	2	4	4	6	4	4	7.2	19.2
31-May-08	3	7	7	9	7	7	9	5	4	5	5	5	6	10	8	8	6	6	5	7	8	6	10	15	7.1	15.4
Hourly Avg	5.6	5.7	7.3	6.5	6.1	6.2	7.6	8.0	7.8	6.7	7.1	8.1	7.1	7.8	9.9	8.6	8.6	8.2	8.4	8.1	9.1	7.1	6.8	7.8		
Hourly Max	12.6	12.8	39.0	16.9	13.1	14.7	25.1	17.6	24.6	14.3	30.9	40.6	17.3	17.8	45.9	18.6	28.7	26.7	19.9	33.3	29.1	24.7	33.8	53.3		

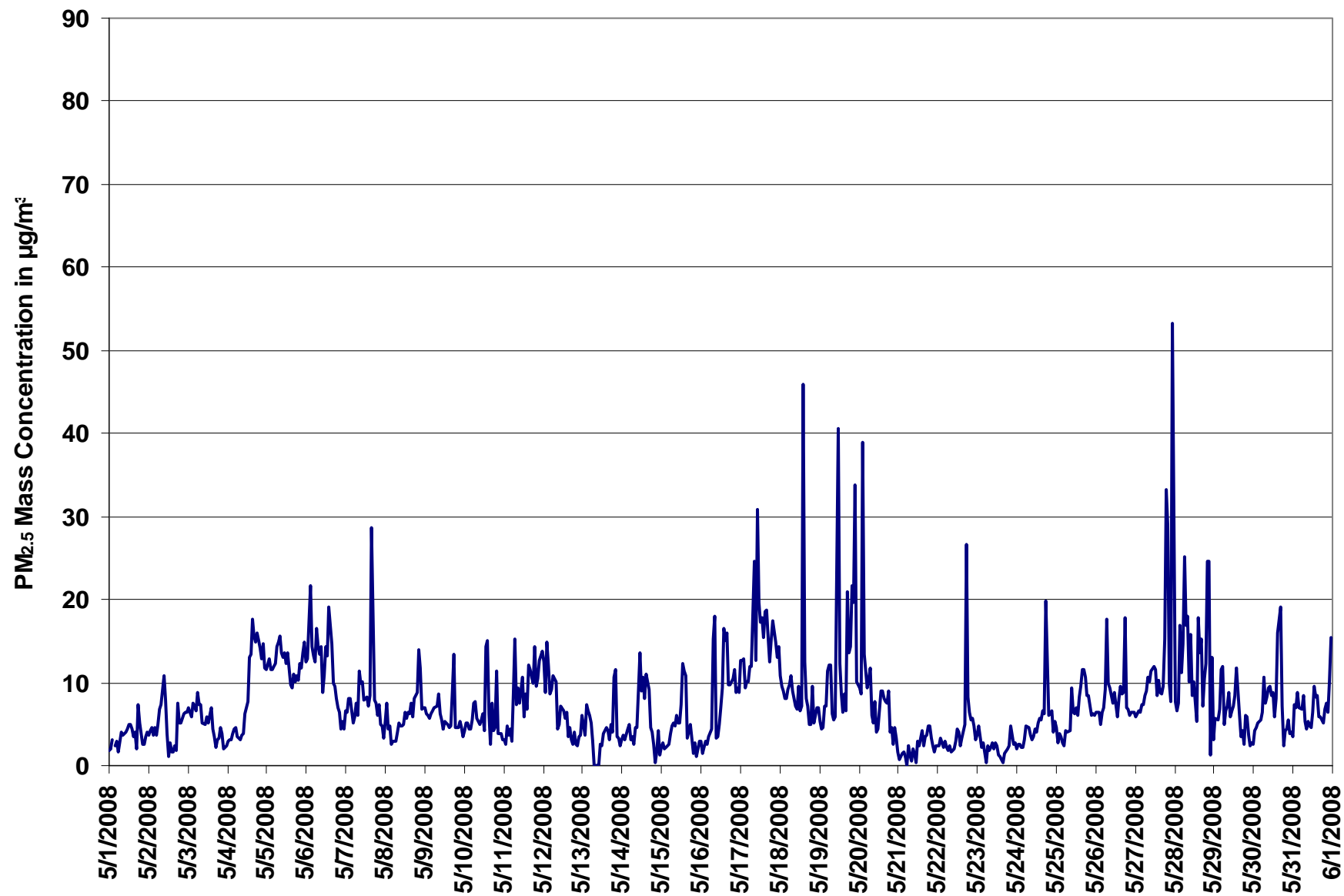
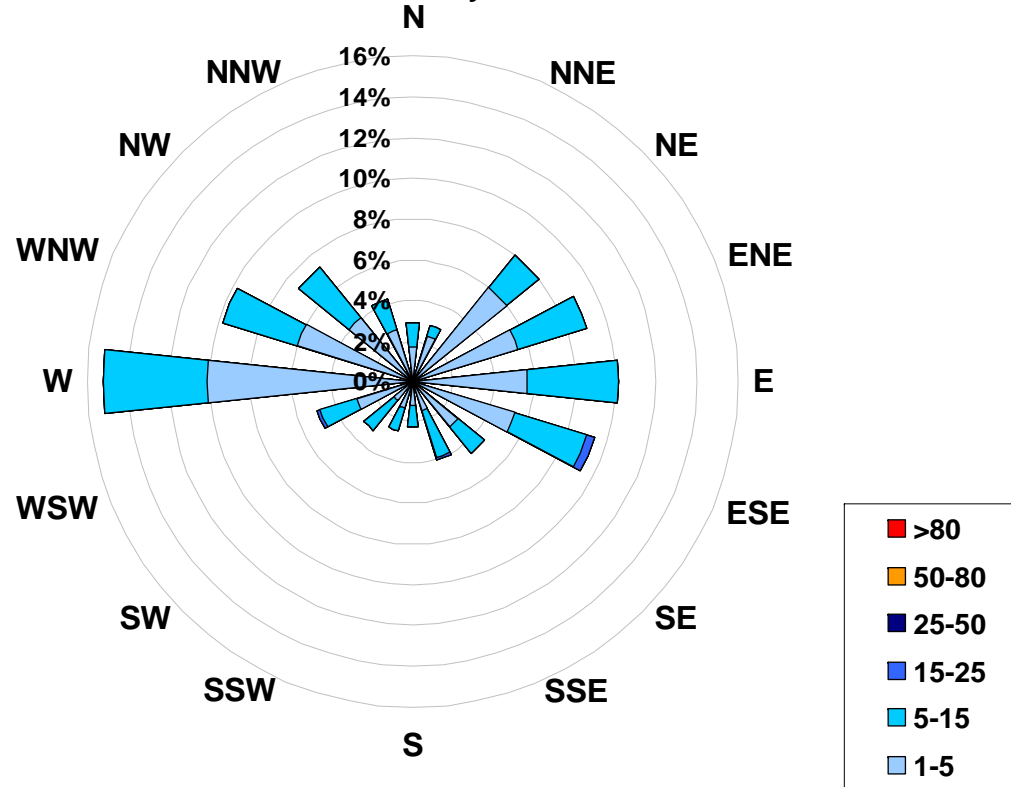


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	506
5	to	15	232
15	to	25	4
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			742

# PASZA - Beaverlodge Relative Humidity Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

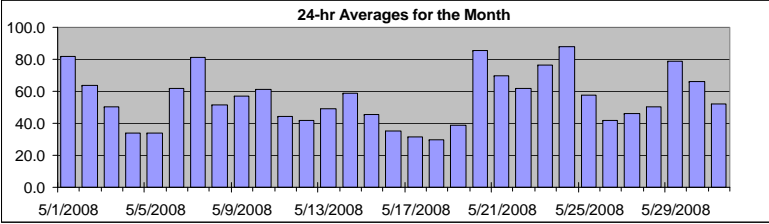
## HOURLY AVERAGE TABLE

### Relative Humidity (RH)

Monitoring Dates: May 1, 2008 to June 1, 2008

#### Summary

Maximum 1-hr Average:	96.7 %	2-May	6:00 7:00
Maximum 24-hr Value:	87.9 %	24-May	



#### 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

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
	95.3	91.7	75.0	54.2	34.9	22.6	18.3	55.6 %	54.2 %

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-May-08	95	93	94	P	93	94	95	95	94	94	90	84	79	74	63	64	62	58	60	75	80	83	84	86	82.1	95.4
2-May-08	86	90	91	93	95	96	97	96	94	86	73	63	45	39	34	27	26	25	30	36	47	50	54	58	63.9	96.7
3-May-08	60	58	64	80	81	79	76	71	55	41	35	30	29	31	35	33	32	32	34	37	43	56	58	57	50.3	81.5
4-May-08	55	53	54	54	47	48	47	39	31	27	24	22	23	23	22	23	24	25	23	25	30	32	36	36	34.2	55.4
5-May-08	34	43	48	53	57	58	55	45	38	30	23	20	20	20	19	18	20	22	23	26	30	34	39	40	34.0	57.7
6-May-08	40	48	52	64	61	61	60	58	59	52	44	39	41	53	70	68	80	74	68	69	78	84	85	78	61.9	85.2
7-May-08	86	91	94	94	95	96	96	96	94	83	79	69	75	81	84	81	71	70	71	69	68	70	66	65	81.1	96.3
8-May-08	66	72	76	73	64	61	58	53	50	45	44	42	34	34	30	30	31	32	33	39	50	68	73	74	51.3	76.4
9-May-08	77	78	81	83	88	89	88	74	61	52	43	35	31	32	31	31	31	33	54	48	54	57	58	59	56.9	88.6
10-May-08	62	66	74	75	76	81	79	75	61	55	54	44	33	35	66	54	42	46	45	47	62	74	77	79	61.0	81.0
11-May-08	80	83	85	87	88	83	71	59	41	33	26	24	22	22	21	21	22	22	23	27	29	30	30	35	44.3	88.0
12-May-08	41	41	59	64	67	66	62	60	48	41	35	30	26	28	28	27	28	26	26	30	36	40	46	46	41.7	66.9
13-May-08	54	52	56	70	75	79	70	55	50	45	37	35	34	32	30	30	30	32	40	36	51	59	63	68	49.2	79.4
14-May-08	71	71	72	72	72	74	66	50	37	31	28	29	27	34	40	50	71	81	84	80	74	69	66	66	59.0	83.8
15-May-08	61	65	62	60	56	54	46	42	40	36	34	34	33	34	35	38	37	39	40	42	48	52	52	52	45.5	65.4
16-May-08	52	53	54	55	57	54	49	44	39	34	30	26	22	19	17	16	20	22	25	27	31	32	35	33	35.2	56.6
17-May-08	36	46	48	47	50	50	49	45	35	28	24	22	19	19	17	18	16	17	20	23	28	29	30	32	31.3	50.4
18-May-08	34	38	37	38	38	35	37	38	38	38	39	33	30	27	20	19	18	19	18	19	22	24	28	29	29.9	38.6
19-May-08	29	29	29	36	39	44	46	49	46	44	39	34	30	27	23	26	26	31	31	31	32	35	83	91	38.8	91.0
20-May-08	90	95	95	94	94	93	90	92	90	85	87	76	67	62	71	82	84	83	86	86	87	88	89	89	85.6	95.0
21-May-08	88	87	87	86	86	84	83	82	77	69	63	59	56	54	52	50	51	55	59	63	66	69	73	79	69.9	87.6
22-May-08	81	84	85	85	85	82	77	74	70	62	56	50	49	46	38	36	35	39	48	56	60	61	62	64	61.9	85.4
23-May-08	67	74	80	80	80	77	76	76	80	80	77	77	78	72	69	69	68	68	69	73	78	85	88	89	76.2	89.4
24-May-08	90	91	91	90	90	90	91	92	91	90	88	89	87	88	84	82	83	86	88	89	90	90	81	76	87.9	92.2
25-May-08	81	82	82	85	85	84	84	79	72	65	56	50	44	39	36	33	34	35	33	36	46	47	48	48	57.7	85.3
26-May-08	48	49	47	47	56	58	57	58	57	52	42	38	32	30	27	26	25	26	26	28	34	41	44	49	41.6	57.8
27-May-08	55	60	64	69	73	71	67	61	53	49	43	40	35	30	28	27	27	27	27	29	36	43	41	44	45.8	72.7
28-May-08	48	51	52	61	65	63	62	49	53	44	39	34	33	32	28	31	41	38	38	45	53	80	80	84	50.1	83.9
29-May-08	86	92	95	95	95	87	78	77	73	80	80	75	67	62	58	60	66	65	66	74	89	93	92	92	79.1	95.2
30-May-08	92	92	91	91	90	90	84	75	62	58	57	52	48	45	43	45	77	58	45	47	51	59	63	65	65.8	91.8
31-May-08	66	70	69	70	69	65	68	66	63	62	56	43	35	33	33	34	34	34	33	33	41	54	57	55	51.9	70.3
Hourly Avg	65.0	67.8	70.0	71.8	73.0	72.5	69.8	65.3	59.7	54.5	49.9	45.1	41.5	40.6	40.4	40.3	42.3	42.6	44.0	46.6	52.3	57.7	60.7	61.9		
Hourly Max	95.4	94.6	95.0	95.2	95.5	96.5	96.7	96.1	94.3	93.6	90.0	88.8	87.3	87.8	84.0	82.0	83.6	85.8	88.0	89.4	90.2	92.9	92.3	91.8		

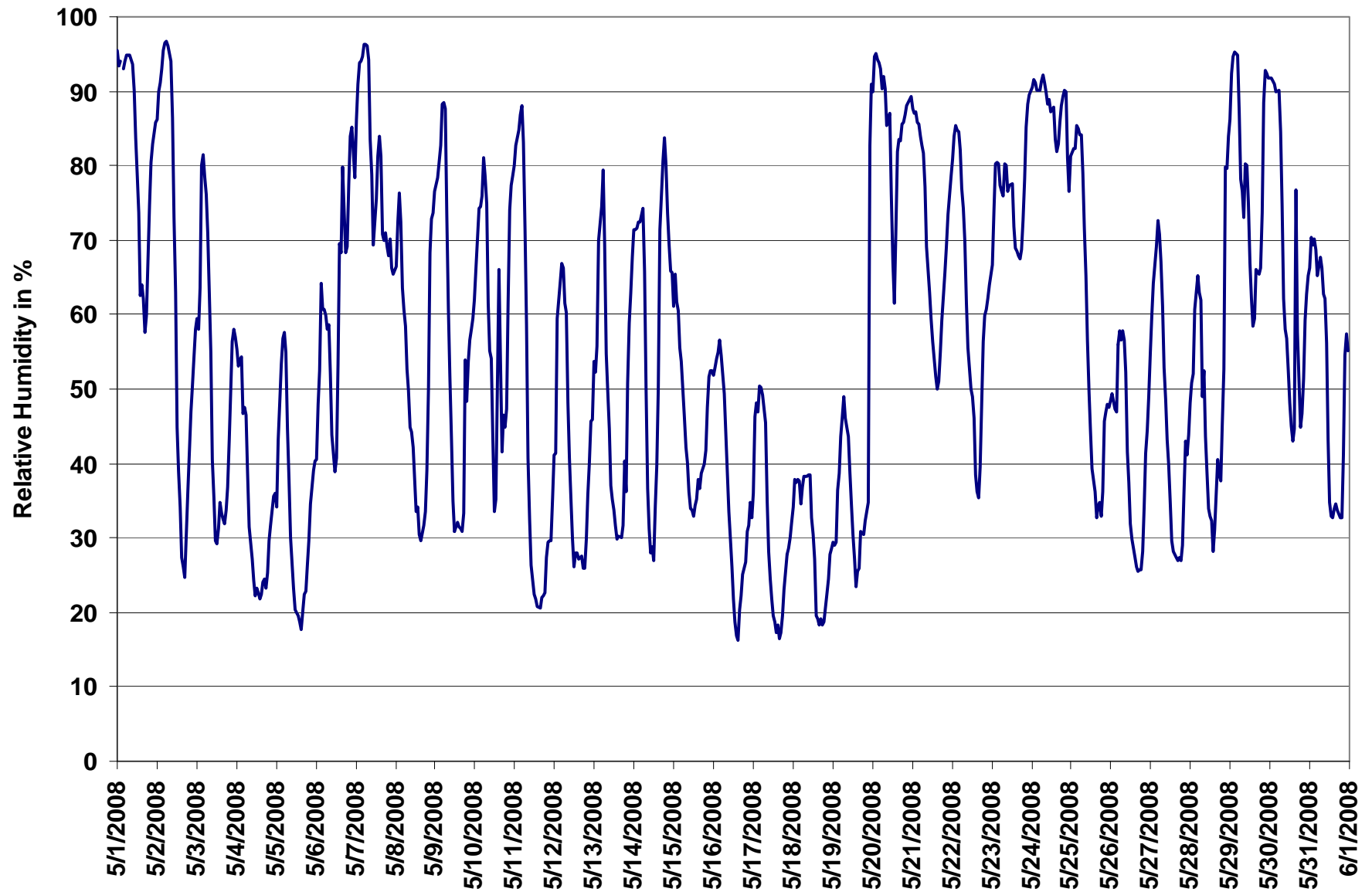


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

# PASZA - Beaverlodge Temperature Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

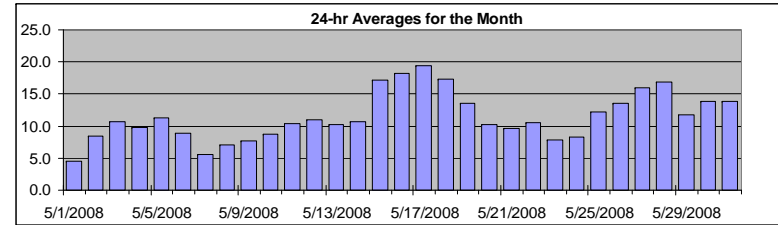
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	28.9	°C	17-May	14:00 15:00
Maximum 24-hr Value:	19.5	°C	17-May	



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
	24.5	20.5	15.2	10.9	7.8	3.2	0.9	11.5 °C	10.9 °C

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			24:00
1-May-08	1	1	1	P	1	1	1	1	1	2	3	4	6	6	9	8	9	9	9	8	6	5	5	4	4.6	9.4	
2-May-08	4	3	3	2	1	-1	-1	1	3	5	9	11	13	13	15	16	16	16	16	15	12	11	10	9	8.4	16.3	
3-May-08	8	8	7	3	3	4	4	6	10	13	15	17	17	16	16	16	16	16	15	14	11	8	7	6	10.7	16.8	
4-May-08	5	5	4	3	5	5	5	7	9	11	12	14	14	15	15	15	14	14	13	13	11	10	9	8	9.8	15.3	
5-May-08	8	6	5	4	3	3	4	8	11	13	14	16	16	17	17	18	17	16	15	14	13	12	11	11	11.3	17.9	
6-May-08	10	8	8	6	6	6	7	9	9	11	13	14	14	11	9	10	8	9	10	10	8	7	6	6	9.0	13.7	
7-May-08	5	4	3	3	1	0	0	1	4	8	9	9	6	6	6	7	8	8	8	8	7	7	7	7	5.5	9.5	
8-May-08	7	6	6	5	4	3	3	3	4	6	7	8	11	11	12	12	11	11	10	10	8	6	5	4	7.1	12.0	
9-May-08	3	3	2	2	1	0	1	5	8	10	11	11	12	12	13	13	13	12	10	11	10	9	8	7	7.7	13.2	
10-May-08	6	6	4	4	4	3	5	6	9	11	11	13	15	14	9	11	13	13	12	11	9	7	6	6	8.8	15.0	
11-May-08	6	5	5	5	4	4	7	10	12	12	13	13	14	14	15	15	15	15	14	13	11	10	10	8	10.3	15.4	
12-May-08	7	7	4	2	2	2	5	7	12	14	15	15	16	16	17	17	16	17	17	15	13	11	10	10	11.0	17.0	
13-May-08	8	8	8	8	7	7	7	9	10	11	12	12	13	13	14	14	14	14	12	10	10	8	7	6	10.2	14.3	
14-May-08	5	5	5	5	5	5	7	10	12	13	15	16	16	15	15	14	11	10	10	11	12	12	13	13	10.6	16.4	
15-May-08	14	13	13	14	14	15	16	17	18	19	20	20	21	20	21	20	20	20	19	19	19	17	15	15	15	17.2	20.7
16-May-08	14	14	13	13	13	13	14	16	17	19	20	22	23	24	24	24	24	24	22	21	20	18	17	15	16	18.2	24.5
17-May-08	15	11	11	11	10	10	11	13	17	20	22	25	27	28	29	28	27	26	24	23	21	20	20	19	19.5	28.9	
18-May-08	19	18	17	16	15	16	15	15	16	16	17	18	19	20	21	20	21	21	20	19	17	14	12	12	17.3	20.8	
19-May-08	11	11	10	8	7	7	10	12	14	14	15	17	17	18	18	17	17	16	16	16	16	15	11	10	13.5	18.2	
20-May-08	10	10	9	9	9	9	10	10	10	10	10	10	12	13	14	13	11	11	11	10	10	9	8	8	10.2	13.9	
21-May-08	8	8	8	7	7	7	7	7	8	9	11	11	12	13	13	13	14	13	12	11	10	9	8	7	9.6	13.7	
22-May-08	6	5	5	4	5	5	6	7	8	10	12	14	15	16	16	16	16	16	14	13	12	12	11	11	10.5	16.4	
23-May-08	10	9	8	7	7	6	6	6	6	6	7	7	8	9	9	9	10	10	10	9	9	8	8	7	7.9	10.1	
24-May-08	7	7	6	6	6	6	6	6	7	7	8	8	9	9	10	10	10	11	10	10	10	10	10	10	8.3	10.6	
25-May-08	10	9	9	9	8	8	8	9	11	12	13	14	15	16	16	17	16	16	16	15	13	11	10	10	12.1	16.9	
26-May-08	10	9	9	8	7	7	8	10	11	13	15	16	17	18	19	19	20	19	19	18	16	14	13	11	13.6	19.7	
27-May-08	10	9	8	7	7	8	9	11	14	16	17	19	20	22	22	23	23	23	23	23	20	18	17	17	16.0	23.0	
28-May-08	15	14	13	11	10	11	13	16	16	19	21	22	22	22	23	23	23	20	21	19	17	13	12	11	16.9	23.3	
29-May-08	11	9	8	7	7	9	11	12	13	12	12	13	15	16	16	16	16	14	14	13	12	11	10	10	11.8	16.4	
30-May-08	10	9	10	10	10	10	11	13	15	16	15	16	17	18	19	18	14	17	18	17	15	13	12	11	13.9	18.8	
31-May-08	11	10	10	10	10	11	12	12	12	12	13	15	16	18	18	18	18	18	18	18	17	16	13	11	12	13.9	18.4
Hourly Avg	8.9	8.0	7.5	7.1	6.4	6.4	7.4	8.9	10.6	11.9	13.1	14.2	15.1	15.4	15.8	15.8	15.4	15.2	14.8	14.1	12.5	11.0	10.2	9.8			
Hourly Max	19.1	17.8	17.1	16.1	15.3	15.7	16.3	17.2	17.7	20.2	22.4	24.6	26.9	27.8	28.9	27.9	26.8	26.0	24.4	23.4	21.0	20.0	19.6	19.2			



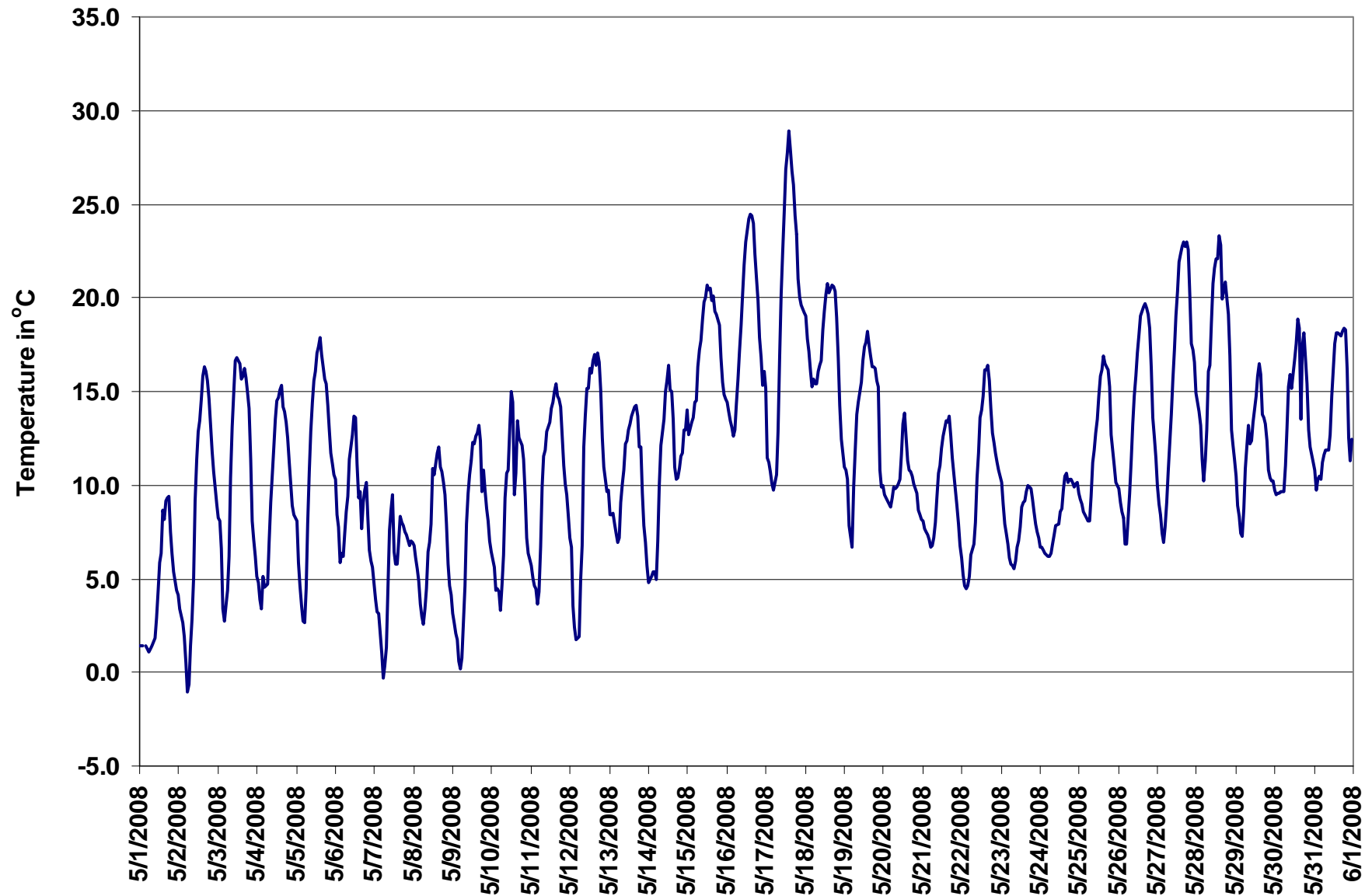


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

# PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

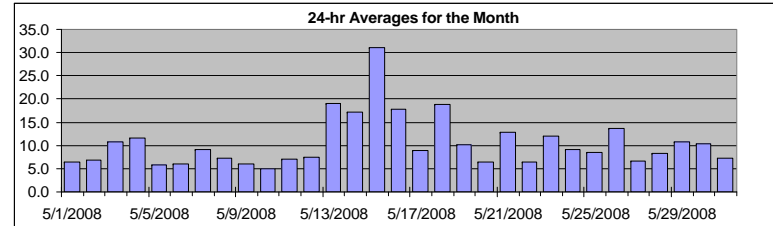
## Wind Speed (WSs)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	41.8	km/hr	15-May	9:00 10:00
Maximum 24-hr Value:	31.1	km/hr	15-May	

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	AverageS
	39.0	24.4	13.8	8.5	5.5	2.3	1.4	10.5 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	8	8	6	P	6	5	6	7	5	9	8	7	4	5	7	7	7	9	8	5	7	6	6		6.5	9.0	
2-May-08	4	2	4	2	4	4	2	2	3	2	3	7	12	11	10	6	7	7	11	10	11	12	13	11		6.7	13.3
3-May-08	7	6	6	9	4	4	4	9	6	11	12	10	6	8	13	16	19	19	20	16	15	12	14	13		10.7	19.7
4-May-08	9	6	9	7	10	7	7	9	9	11	10	14	19	22	22	22	18	16	10	11	10	9	6	7		11.6	22.1
5-May-08	6	3	3	2	3	3	3	4	5	7	8	8	9	9	9	8	8	8	7	6	5	5	4	6		5.8	9.3
6-May-08	4	4	2	3	2	4	3	6	9	8	7	5	6	13	13	13	10	5	3	6	5	5	5	6		6.1	12.7
7-May-08	5	1	3	5	2	2	2	5	2	3	3	7	16	14	10	10	17	20	18	16	15	14	15	15		9.1	20.3
8-May-08	9	10	7	10	14	16	14	9	8	6	7	8	6	7	4	5	5	4	4	4	6	3	3	4		7.2	16.2
9-May-08	2	2	3	2	3	2	3	1	2	5	7	11	11	11	8	9	11	11	14	7	6	4	5	5		6.1	14.3
10-May-08	4	5	3	4	3	1	3	5	4	3	2	3	5	6	19	6	3	11	7	3	8	3	3	2		4.9	18.9
11-May-08	1	1	2	3	5	3	4	4	8	12	11	12	12	12	13	14	13	12	10	8	3	3	2	2		7.1	13.9
12-May-08	8	3	3	2	2	3	2	2	4	8	8	12	11	15	15	11	9	10	17	14	11	5	1	2		7.4	17.2
13-May-08	3	2	7	6	4	7	16	24	23	22	28	27	25	26	28	28	30	27	25	25	23	19	18	15		19.0	29.7
14-May-08	12	11	12	12	12	10	11	18	26	25	25	24	26	25	27	18	11	10	11	11	11	11	21	16		17.1	27.5
15-May-08	22	15	22	21	28	24	28	34	41	42	41	40	42	39	41	39	37	40	34	30	26	17	18	24		31.1	41.8
16-May-08	23	23	20	21	20	15	16	18	20	19	19	17	19	21	25	22	23	21	16	14	11	9	4	8		17.7	25.0
17-May-08	5	4	4	3	4	3	1	1	2	11	12	11	7	5	9	12	19	21	18	10	8	11	14	17		8.9	21.1
18-May-08	27	19	17	13	12	19	22	22	24	24	22	18	18	19	22	24	26	25	23	19	11	12	10	6		18.8	26.5
19-May-08	6	8	8	5	8	9	7	8	14	16	14	12	11	10	11	13	10	8	9	12	11	13	10	6		10.1	16.4
20-May-08	5	3	4	2	3	1	3	8	5	8	9	10	8	7	8	9	5	5	7	12	9	9	9	8		6.4	11.6
21-May-08	9	9	10	11	10	13	14	15	17	19	22	19	17	15	15	14	14	14	13	11	8	8	6	4		12.9	22.3
22-May-08	5	6	6	6	6	5	7	8	7	6	6	7	5	5	5	5	3	4	7	10	9	9	6	7		6.4	10.0
23-May-08	7	10	11	13	14	13	13	14	13	13	14	12	11	14	16	14	15	15	14	12	10	7	7	8		12.1	15.6
24-May-08	9	8	10	11	12	15	16	16	15	14	14	12	11	8	7	6	5	4	6	3	1	4	6	7		9.2	16.1
25-May-08	6	6	5	6	8	8	9	10	11	10	11	11	11	11	9	8	9	9	10	8	8	8	8	7		8.6	11.4
26-May-08	7	7	7	5	6	8	9	12	12	13	17	17	18	18	17	19	19	20	19	19	16	15	15	14		13.6	19.9
27-May-08	11	11	11	8	6	6	6	3	3	3	3	4	5	5	6	7	6	6	5	6	6	7	10	12		6.6	11.5
28-May-08	11	8	7	6	4	4	3	3	7	5	6	11	13	14	11	6	10	12	10	7	13	11	10	10		8.4	14.1
29-May-08	7	3	2	1	2	3	5	6	13	17	16	18	19	20	21	20	17	16	14	11	8	7	8	6		10.9	20.8
30-May-08	6	6	7	6	5	4	2	4	4	6	10	14	13	13	12	16	11	8	23	24	19	13	12	8		10.3	24.0
31-May-08	7	4	6	4	6	7	7	9	7	5	5	7	7	6	5	8	8	6	7	8	10	7	9	16		7.2	16.1
1-hr Average	8.2	7.0	7.3	7.0	7.4	7.3	8.0	9.6	10.6	11.7	12.3	12.8	12.8	13.4	13.9	13.6	13.3	13.0	13.0	11.7	10.3	8.9	9.0	9.0			
Hourly Max	26.5	22.7	22.3	21.4	27.9	23.6	28.1	33.8	41.0	41.8	41.0	40.2	41.8	39.3	40.6	38.6	37.4	40.2	34.2	29.7	26.5	18.6	20.7	24.4			

# PASZA - Beaverlodge Vector Wind Speed Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

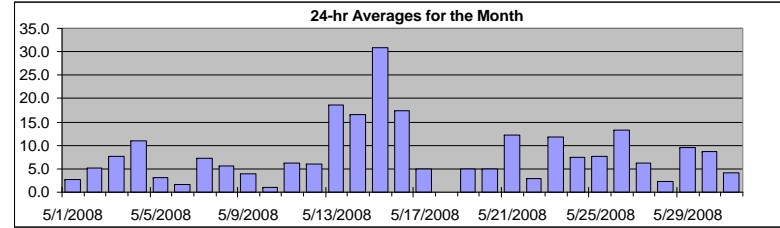
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	41.6	km/hr	15-May	9:00 10:00
Maximum 24-hr Value:	30.9	km/hr	15-May	



Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	AverageV
	38.7	24.3	13.4	8.2	4.8	1.4	0.6	11.2 km/hr

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00 0:00		
1-May-08	8	7	6	P	6	5	6	7	5	9	8	7	2	4	5	6	6	8	8	5	7	6	6	6	6	2.6	8.9
2-May-08	4	1	3	1	4	3	0	2	3	2	3	5	11	11	10	5	6	6	10	10	11	12	13	11	11	5.1	13.3
3-May-08	7	6	5	8	3	2	1	9	6	10	11	9	4	7	13	16	19	18	19	16	15	12	14	13	13	7.7	19.5
4-May-08	9	6	8	7	9	7	7	8	9	10	9	14	18	22	22	21	18	16	10	10	10	9	6	6	6	11.0	21.7
5-May-08	6	2	2	2	2	3	3	2	5	7	7	7	8	8	7	7	5	8	6	6	5	5	3	4	4	3.0	8.4
6-May-08	3	1	1	1	1	4	2	6	6	7	5	3	3	12	9	5	4	4	1	6	4	5	5	6	6	1.6	11.5
7-May-08	5	0	2	5	1	1	1	2	0	2	2	3	16	13	10	10	15	20	18	16	15	13	15	15	15	7.2	20.3
8-May-08	9	10	7	10	14	16	14	8	8	5	6	8	4	5	2	3	4	4	4	4	4	3	1	3	3	5.7	16.2
9-May-08	2	2	2	1	1	2	3	1	2	4	6	10	10	10	7	9	11	9	13	6	6	3	5	5	5	3.8	13.4
10-May-08	4	5	3	4	1	0	3	4	3	2	1	1	3	3	19	5	2	10	6	3	7	3	1	2	2	1.0	18.7
11-May-08	1	1	2	3	4	3	3	2	6	12	10	11	11	12	12	13	12	12	10	7	3	3	1	2	2	6.3	12.5
12-May-08	8	2	2	1	1	3	1	2	2	8	6	11	9	14	14	10	9	10	17	14	11	5	0	1	1	6.0	17.0
13-May-08	2	1	6	5	3	6	16	24	23	22	27	27	25	26	28	27	29	27	25	25	23	19	18	15	15	18.6	29.3
14-May-08	12	11	12	12	12	10	11	18	25	24	25	24	23	26	25	27	18	11	10	11	11	11	20	16	16	16.7	27.2
15-May-08	22	15	22	21	28	24	28	34	41	42	41	40	41	39	40	38	37	40	34	30	26	17	18	24	24	30.9	41.6
16-May-08	23	23	20	21	20	15	16	18	20	19	18	17	19	21	25	22	22	21	16	14	11	9	3	8	8	17.4	24.6
17-May-08	5	4	3	3	3	3	1	1	2	11	11	10	7	5	9	11	19	21	18	10	7	10	14	17	17	5.0	21.0
18-May-08	26	19	17	12	12	19	22	22	24	24	22	18	17	19	21	23	26	25	23	19	11	12	10	6	6	-	26.4
19-May-08	6	8	8	3	7	8	7	8	13	16	14	12	11	10	10	13	10	8	9	12	11	10	10	5	5	5.0	16.2
20-May-08	2	2	4	2	2	0	2	8	4	8	8	10	7	6	8	9	5	5	7	12	9	9	9	8	8	5.0	11.5
21-May-08	9	9	10	11	10	13	14	15	17	19	22	19	17	15	14	14	14	14	12	11	8	8	6	4	4	12.1	22.1
22-May-08	5	6	6	6	6	5	7	8	6	6	6	6	4	2	3	3	3	3	6	10	9	9	6	7	7	2.9	9.9
23-May-08	7	10	11	13	14	13	13	14	13	13	14	12	11	14	15	14	14	15	14	12	10	7	7	8	8	11.8	15.5
24-May-08	9	8	10	11	12	15	16	16	15	14	14	11	11	8	7	5	2	4	5	3	1	3	6	6	6	7.4	16.1
25-May-08	6	6	5	6	8	8	9	9	11	10	10	10	11	10	7	7	8	8	10	8	8	8	8	7	7	7.7	11.3
26-May-08	7	7	7	5	6	8	8	12	12	13	16	16	17	17	16	19	18	20	19	19	16	15	15	14	14	13.3	19.5
27-May-08	11	11	11	8	6	6	5	3	2	2	2	3	3	4	5	6	5	5	5	6	6	7	10	12	12	6.1	11.5
28-May-08	11	8	7	3	2	4	2	1	7	5	5	10	12	14	9	3	9	10	10	7	12	10	9	9	9	2.3	13.7
29-May-08	7	3	2	1	1	2	4	6	13	17	16	18	18	20	21	20	17	16	14	11	8	7	8	6	6	9.6	20.6
30-May-08	6	6	7	6	5	3	2	4	4	5	10	13	12	12	11	12	9	6	23	24	19	13	12	8	8	8.8	23.9
31-May-08	7	1	6	2	6	7	6	9	7	5	4	6	6	5	4	7	7	5	6	8	10	7	9	13	13	4.2	13.5
1-hr Vector	2.8	1.6	2.1	2.6	2.8	3.0	2.9	4.2	4.6	4.8	5.2	5.4	4.6	5.2	6.1	5.7	4.2	3.9	3.9	2.6	2.5	1.8	1.7	1.5	1.5		
Hourly Max	26.4	22.6	22.3	21.3	27.8	23.5	28.1	33.7	40.9	41.6	40.6	39.9	41.5	39.1	40.4	38.3	37.2	40.0	34.0	29.5	26.4	18.6	20.4	24.4	24.4		

## PASZA - Beaverlodge Wind Direction Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	Average
	350.1	327.2	282.2	223.6	91.1	32.7	11.6	298 deg

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	287	316	300	P	311	313	306	311	275	269	274	287	302	277	246	192	198	210	185	155	121	105	86	103	260	W
2-May-08	116	213	91	137	269	37	40	44	250	128	206	170	135	133	122	167	129	133	88	76	75	88	102	104	112	ESE
3-May-08	94	78	62	311	54	4	336	314	303	325	340	340	352	327	270	284	271	273	268	263	277	260	257	261	291	WNW
4-May-08	262	263	276	268	295	328	320	323	328	329	310	299	296	311	306	308	308	289	309	276	280	274	262	284	299	WNW
5-May-08	275	253	227	133	110	81	65	354	294	322	332	316	308	301	355	309	36	61	49	31	37	93	71	66	357	N
6-May-08	144	88	304	302	248	69	208	243	189	146	194	230	70	348	214	216	271	106	251	83	147	62	58	87	185	S
7-May-08	100	145	88	47	143	12	95	330	112	190	277	342	20	11	321	330	47	47	49	48	39	39	66	55	37	NE
8-May-08	58	94	85	40	46	53	57	57	50	36	40	30	58	129	91	129	107	143	131	147	162	224	98	75	71	ENE
9-May-08	96	70	65	114	69	89	64	127	177	155	174	132	129	125	125	113	112	158	288	22	48	90	97	91	116	ESE
10-May-08	99	94	145	83	95	69	55	311	240	224	234	210	264	243	241	209	109	350	14	90	197	223	134	98	216	SW
11-May-08	51	204	65	295	356	8	24	75	96	67	65	41	40	41	35	26	48	47	69	75	67	67	32	314	48	NE
12-May-08	333	49	271	225	99	68	211	155	276	282	252	265	264	237	224	235	242	268	271	276	284	280	350	271	262	W
13-May-08	148	162	252	276	241	247	264	265	263	278	274	267	277	276	276	273	271	269	254	267	259	261	261	263	267	W
14-May-08	264	264	265	262	265	261	260	270	282	280	287	267	275	271	273	270	272	245	221	236	245	260	273	270	268	W
15-May-08	276	267	264	261	267	267	271	272	268	268	273	276	275	279	277	275	283	282	282	281	275	279	278	276	274	W
16-May-08	284	277	281	282	282	286	290	294	298	306	292	291	280	298	300	309	275	271	267	272	272	287	286	298	287	WNW
17-May-08	327	195	96	146	133	165	196	149	122	148	156	164	180	210	239	300	287	286	282	274	270	283	272	268	253	WSW
18-May-08	263	258	264	254	270	272	272	276	280	281	281	290	286	279	295	284	281	280	290	287	289	285	286	304	279	W
19-May-08	315	320	327	17	338	334	49	128	106	107	109	123	132	120	157	174	147	90	88	92	100	160	249	42	110	ESE
20-May-08	316	148	119	83	107	227	224	234	323	305	280	295	315	317	308	319	350	336	312	304	307	309	296	290	304	NW
21-May-08	296	295	292	299	298	295	298	301	305	308	308	314	323	331	331	333	348	340	358	352	339	347	329	299	318	NW
22-May-08	305	309	312	322	321	325	321	317	304	299	325	326	271	144	54	122	84	65	85	55	57	70	76	71	5	N
23-May-08	58	42	30	24	22	17	17	14	19	15	13	17	16	27	39	42	45	47	52	42	30	37	19	41	30	NNE
24-May-08	16	24	36	37	43	51	51	53	57	58	61	62	58	54	42	6	197	201	241	259	289	15	69	59	48	NE
25-May-08	32	44	38	35	48	49	61	95	106	100	102	103	112	121	98	104	110	109	110	110	99	77	72	79	90	E
26-May-08	91	89	84	83	108	107	119	134	137	135	133	124	120	120	123	117	124	119	117	114	111	107	112	118	118	ESE
27-May-08	114	109	108	93	87	107	149	157	91	147	171	91	121	114	97	108	101	88	88	94	67	65	86	113	103	ESE
28-May-08	113	99	95	93	64	320	67	135	233	243	248	295	292	283	279	11	222	183	165	177	319	319	343	287	273	W
29-May-08	287	249	186	188	68	87	225	248	284	293	295	292	301	310	314	327	329	325	323	327	324	303	282	284	305	NW
30-May-08	295	309	318	311	315	294	226	278	278	252	234	236	231	230	236	235	11	252	265	260	261	263	267	262	262	W
31-May-08	253	256	21	327	324	345	355	9	13	343	10	46	75	39	92	54	63	56	69	112	130	116	110	64	49	NE
Hourly Avg	296	297	312	316	325	334	315	296	289	292	288	291	297	297	285	289	298	293	291	297	297	308	305	326		

## PASZA - Beaverlodge Standard Deviation of Wind Direction Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

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Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%			
Percentile	99	95	75	50	25	5	1
	85.7	70.1	31.3	13.1	7.0	3.6	2.4

**Status Flag Characters**

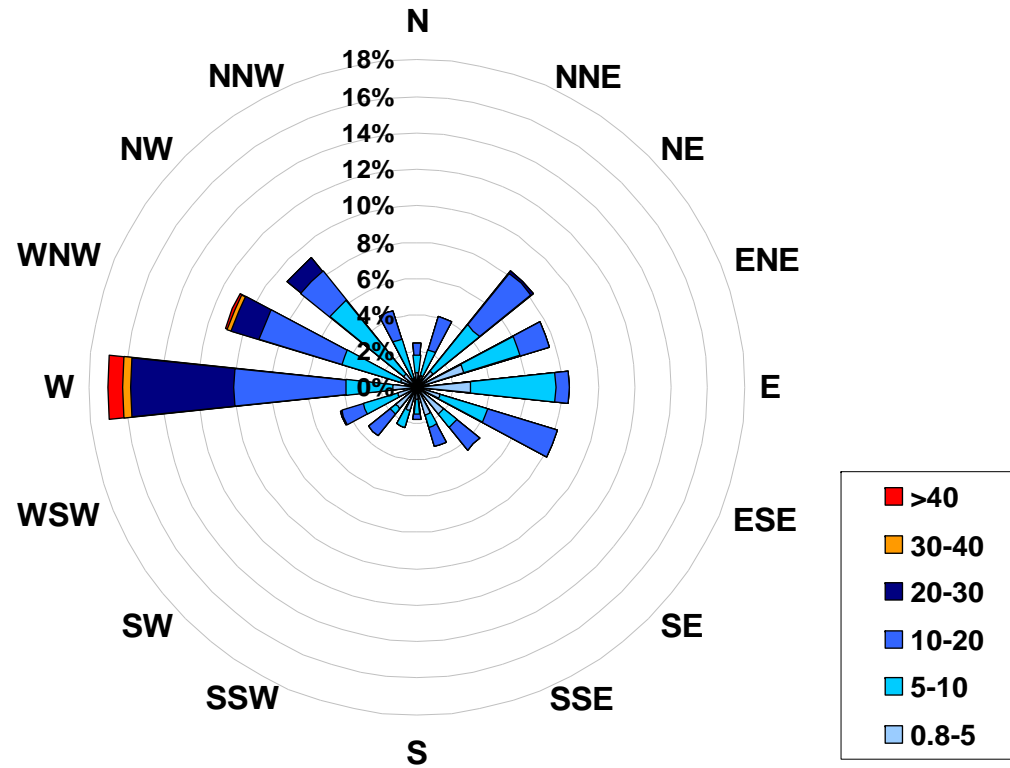
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

**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-May-08	6	8	9	P	6	8	8	6	22	8	12	14	70	31	33	23	27	27	20	9	29	6	10	7	69.5
2-May-08	16	46	51	73	13	44	83	45	32	39	45	42	20	22	19	53	42	34	15	6	3	7	2	3	82.7
3-May-08	9	13	45	15	36	48	78	6	15	15	15	26	55	31	12	13	12	15	9	8	10	4	2	4	78.5
4-May-08	5	9	11	20	11	13	6	9	13	18	22	18	13	11	10	9	10	6	9	14	5	5	31	25	31.2
5-May-08	7	62	39	30	37	26	22	56	15	22	24	32	37	29	36	41	55	22	23	19	19	29	52	62	61.9
6-May-08	27	68	60	86	84	28	50	9	48	23	42	67	56	25	46	67	82	37	73	26	22	11	8	9	86.0
7-May-08	8	59	63	10	82	72	88	68	95	69	54	69	6	17	16	11	28	4	4	3	9	14	6	8	95.2
8-May-08	14	17	20	8	5	3	5	16	13	32	26	13	66	52	76	69	72	44	31	20	42	25	73	22	76.4
9-May-08	25	22	21	70	84	32	16	43	45	34	26	21	26	24	24	13	17	33	21	24	6	45	9	12	84.1
10-May-08	27	15	23	11	70	87	62	52	44	62	70	76	67	85	9	54	85	17	23	19	30	32	60	53	86.9
11-May-08	25	69	64	25	42	55	60	80	69	13	30	26	32	23	21	27	22	20	13	15	11	11	85	55	84.6
12-May-08	21	54	72	50	79	36	45	22	70	20	45	25	39	14	25	21	21	20	8	5	2	21	88	90	90.5
13-May-08	33	57	19	37	28	16	9	5	8	11	10	9	9	9	9	7	10	9	5	9	3	2	2	4	57.2
14-May-08	4	3	3	4	3	7	5	10	7	8	9	11	11	10	8	8	8	9	4	11	16	9	14	4	16.0
15-May-08	3	5	2	6	3	4	4	5	5	6	8	7	7	6	6	7	6	5	5	6	5	4	4	4	8.0
16-May-08	3	6	3	4	4	5	3	5	8	8	15	13	10	11	10	10	10	6	6	5	4	5	87	14	87.4
17-May-08	35	20	31	14	28	14	34	24	44	12	12	15	24	22	20	22	6	7	6	10	10	8	3	6	44.0
18-May-08	5	3	3	7	10	4	3	4	4	6	9	10	15	11	10	8	7	9	7	6	5	2	4	6	14.5
19-May-08	8	5	5	62	44	31	29	33	13	9	11	14	18	14	21	14	19	10	5	4	5	40	18	23	62.3
20-May-08	67	70	19	28	45	56	75	8	41	13	8	12	21	22	17	11	14	14	7	5	4	5	8	4	75.0
21-May-08	6	6	5	4	4	4	4	5	5	6	7	8	9	11	13	11	15	10	13	12	8	15	6	10	15.3
22-May-08	7	6	7	4	7	5	6	7	15	18	34	34	55	71	59	64	38	60	61	5	5	4	8	10	70.6
23-May-08	11	8	6	6	7	5	6	7	7	8	8	10	10	10	8	8	7	6	5	7	7	11	12	16	16.2
24-May-08	9	12	7	8	7	4	3	3	6	5	5	6	6	10	15	15	75	18	13	19	49	21	13	36	75.0
25-May-08	18	9	10	6	5	5	4	14	8	13	22	15	21	26	43	37	25	37	15	4	5	6	2	6	42.5
26-May-08	4	4	4	11	11	5	7	7	9	11	15	18	15	12	18	14	13	12	10	5	4	3	4	2	18.2
27-May-08	3	3	4	8	10	9	13	46	53	70	68	52	58	54	51	47	52	58	18	9	10	5	12	3	70.3
28-May-08	4	8	12	64	60	53	78	72	12	35	40	20	14	14	35	69	34	35	12	22	14	14	32	31	77.9
29-May-08	14	48	46	58	81	35	19	11	12	6	5	6	8	7	8	9	9	6	7	8	10	7	5	6	81.0
30-May-08	5	5	7	5	12	58	59	21	24	44	17	12	18	20	21	50	34	69	8	4	3	4	4	4	69.2
31-May-08	6	91	21	51	17	11	17	8	14	16	32	35	32	49	65	34	32	36	26	20	4	7	16	34	91.2

Hourly Max	67	91	72	86	84	87	88	80	95	70	70	76	70	85	76	69	85	69	73	26	49	45	88	90
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**1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for May 2008**



**Calms: 0%**

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	160
5	to	10	264
10	to	20	244
20	to	30	63
30	to	40	5
	>	40	7
Total Non-Zero Values			743

# PASZA

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

## PASZA - Portable-Spirit River Sulphur Dioxide Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

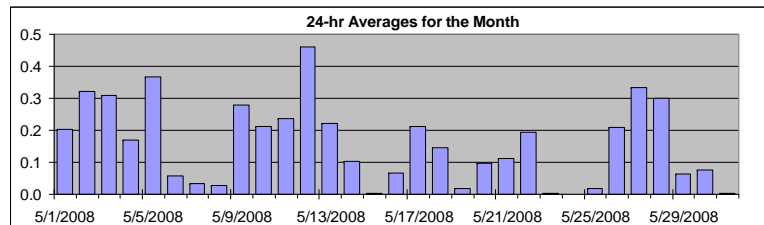
### Sulphur Dioxide (SO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 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:	2.0 ppb 9-May 9:00 10:00
Maximum 24-hr Average:	0.5 ppb 12-May



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.4	0.7	0.2	0.1	0.0	0.0	0.0	0.2 ppb	0.1 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-May-08	0:00	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.2	1.0
2-May-08	1:00	0	A	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
3-May-08	2:00	0	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	1.1
4-May-08	3:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.2	0.9	
5-May-08	4:00	0	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0.4	1.5
6-May-08	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.4
7-May-08	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.3
8-May-08	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.2
9-May-08	8:00	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	2.0
10-May-08	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.2	1.4	
11-May-08	10:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	1.0	
12-May-08	11:00	0	0	0	1	2	1	1	1	1	1	0	0	1	0	0	A	0	0	0	0	0	0	0	0.5	1.6	
13-May-08	12:00	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	1.4	
14-May-08	13:00	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0.1	0.4	
15-May-08	14:00	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	
16-May-08	15:00	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
17-May-08	16:00	0	0	A	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7	
18-May-08	17:00	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7	
19-May-08	18:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.1	
20-May-08	19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4	
21-May-08	20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3	
22-May-08	21:00	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	1.2	
23-May-08	22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.0	
24-May-08	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.0	
25-May-08	0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.1	
26-May-08	1:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0.2	0.7	
27-May-08	2:00	2	1	1	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	1.6	
28-May-08	3:00	0	0	1	0	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	1	1	0	0	0.3	0.7	
29-May-08	4:00	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	0.4	
30-May-08	5:00	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
31-May-08	6:00	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	
Hourly Avg		0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Hourly Max		1.6	1.0	1.4	1.2	1.6	1.3	1.0	1.2	1.7	2.0	1.2	0.9	0.7	0.4	1.0	0.8	0.6	0.5	0.5	0.7	0.6	0.2	0.9	1.4		



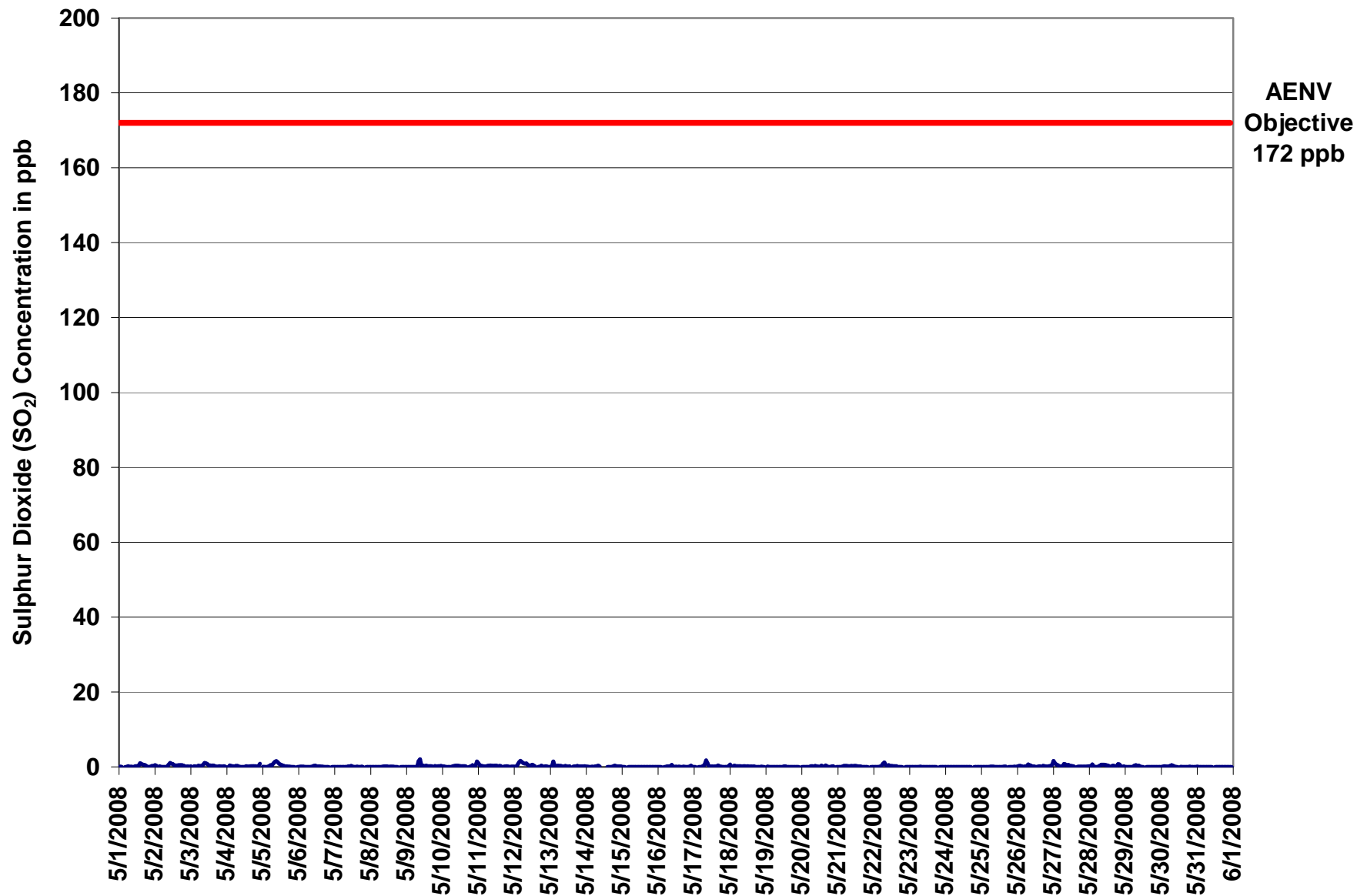


Figure 46. PASZA - Portable-Spirit River Sulphur Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River  
 Station Owner: PASZA

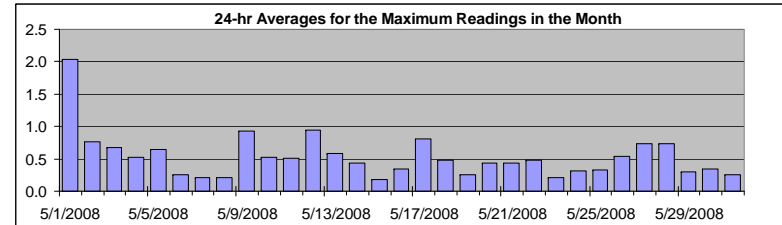
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	16.7	ppb	1-May	6:00 7:00
Maximum 24-hr Value:	2.0	ppb	1-May	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.4	1.4	0.6	0.3	0.2	0.1	0.1	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-May-08	0	17	0	A	0	0	17	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	0	2.0	16.7	
2-May-08	2	1	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.8	2.4	
3-May-08	1	A	0	0	0	1	0	0	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0.7	1.4	
4-May-08	A	0	1	0	0	0	0	1	0	0	0	0	0	1	0	1	1	1	1	1	1	1	2	A	0.5	1.6	
5-May-08	1	0	0	0	1	1	1	2	2	2	2	1	1	1	1	0	0	0	0	0	0	0	A	0	0.6	2.0	
6-May-08	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0.2	0.7	
7-May-08	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0.2	0.6	
8-May-08	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0.2	0.6	
9-May-08	0	0	0	0	0	0	0	0	7	7	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0.9	7.3	
10-May-08	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	1	1	0	1	2	0.5	1.8	
11-May-08	2	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.5	1.8	
12-May-08	0	0	1	2	2	2	1	1	1	1	1	1	1	1	0	A	0	0	2	0	0	0	0	0	0.9	2.4	
13-May-08	0	0	2	0	0	1	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0.6	2.4	
14-May-08	0	0	0	0	0	0	0	0	1	0	0	C	C	C	A	0	0	0	0	0	1	1	1	0	0.4	0.7	
15-May-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	0.5	
16-May-08	0	0	0	A	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	2.1	
17-May-08	0	0	A	0	0	0	1	1	9	2	0	0	0	0	1	1	1	1	0	0	0	0	0	1	0.8	8.7	
18-May-08	1	A	1	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0.5	1.2
19-May-08	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.8	
20-May-08	0	0	0	0	0	1	1	1	0	1	0	1	0	1	1	0	1	1	0	0	1	1	A	0	0.4	0.7	
21-May-08	0	0	0	0	1	1	1	0	0	1	0	1	1	0	1	1	0	0	0	0	0	A	0	0	0.4	0.8	
22-May-08	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0.5	1.5	
23-May-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	0.2	0.3	
24-May-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	0.3	0.4	
25-May-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	0.3	0.4	
26-May-08	0	1	1	0	0	0	0	2	1	1	0	0	0	0	1	A	1	1	1	1	0	1	1	1	0.5	1.6	
27-May-08	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	1	0.7	3.2	
28-May-08	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	A	1	1	1	0	2	2	1	0	0.7	1.7	
29-May-08	0	1	1	0	0	0	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	1.1	
30-May-08	0	0	1	1	0	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
31-May-08	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	2	0.3	1.7	
Hourly Avg	0.6	1.0	0.5	0.4	0.4	0.4	1.0	0.6	1.0	0.9	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5			
Hourly Max	3.2	16.6	2.4	1.9	2.4	1.9	16.7	1.6	8.7	7.3	1.6	1.4	0.9	0.9	1.4	1.9	1.4	0.9	2.0	1.7	1.7	0.7	1.6	1.8			

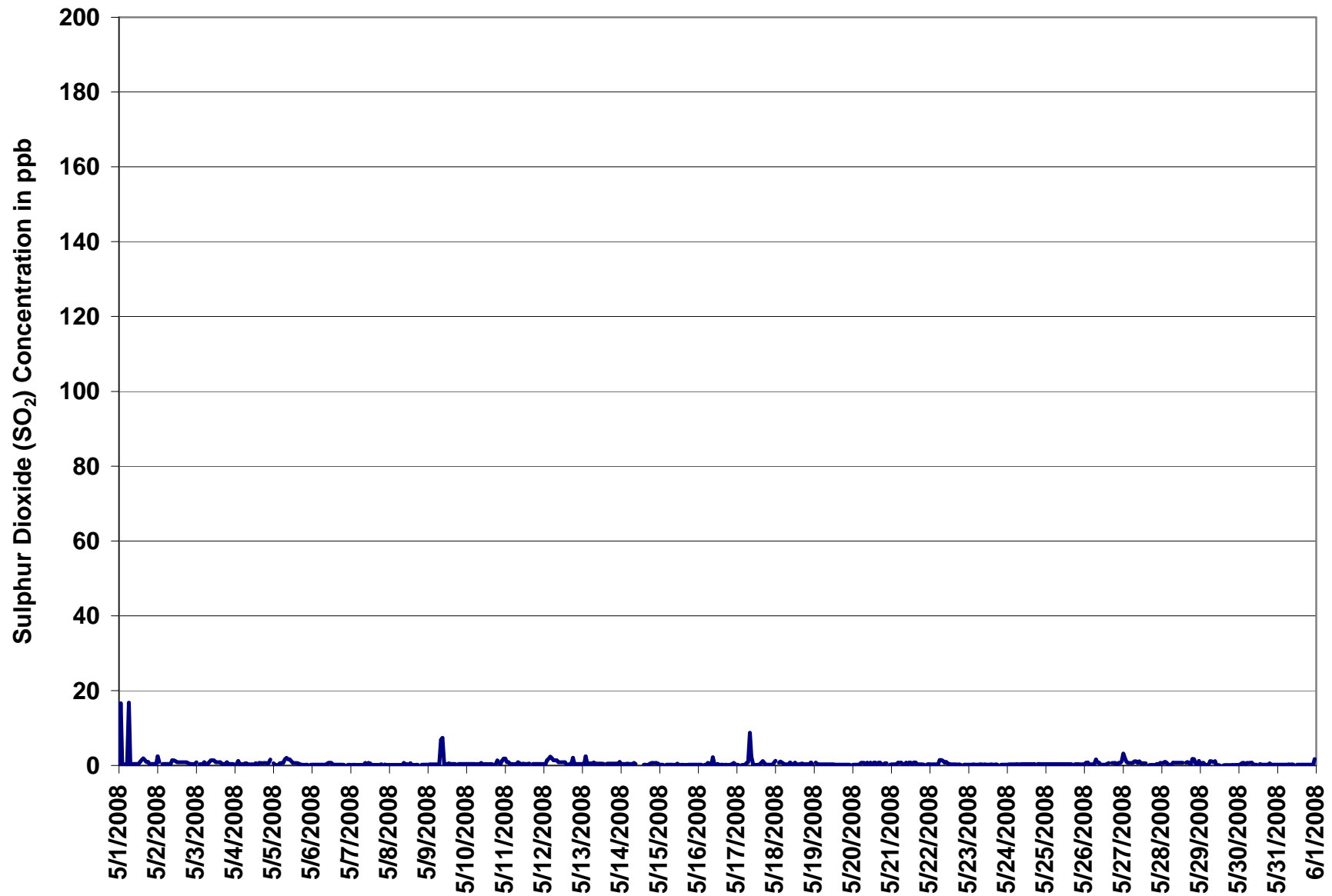
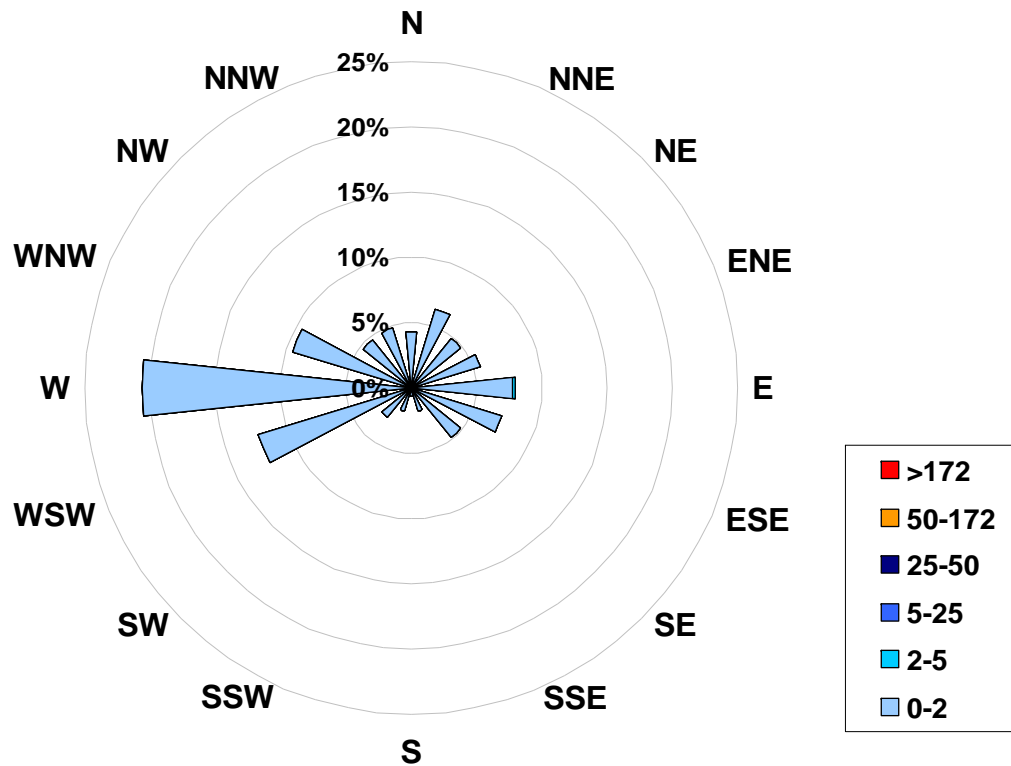


Figure 47. PASZA - Portable-Spirit River Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	< 2		707
2	to 5		1
5	to 25		0
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			708

## PASZA - Portable-Spirit River Nitrogen Dioxide Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

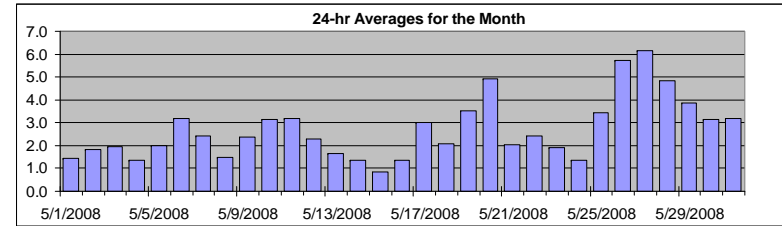
### Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 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:	19.5 ppb 27-May 21:00 22:00
Maximum 24-hr Average:	6.2 ppb 27-May



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	11.9	8.5	3.3	1.7	1.0	0.7	0.5	2.7 ppb	1.7 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-May-08	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1.5	1.8
2-May-08	2	2	A	2	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	1.8	3.4
3-May-08	2	A	3	3	3	3	4	5	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.9	5.2
4-May-08	A	2	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4	A	1.3	3.9
5-May-08	3	2	2	3	2	2	2	3	3	2	2	1	1	1	1	1	1	1	1	1	1	2	5	A	5	2.0	4.9
6-May-08	4	5	5	6	5	5	6	5	3	5	2	2	1	1	1	1	1	1	2	1	1	2	A	5	4	3.2	5.8
7-May-08	5	4	4	4	7	5	5	2	1	2	1	1	1	1	1	1	1	1	1	1	A	2	2	2	2	2.4	6.7
8-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	4	6	5	5	1.5	6.0
9-May-08	5	3	4	3	4	4	6	2	2	2	1	1	1	1	1	1	1	1	A	2	2	5	2	2	2	2.4	5.6
10-May-08	2	4	5	5	6	5	7	6	3	2	1	1	1	1	1	1	1	1	A	2	2	4	4	3	6	3.1	6.5
11-May-08	6	5	5	5	6	5	6	5	2	1	1	1	1	1	1	1	1	A	2	1	2	3	5	4	4	3.2	6.1
12-May-08	4	4	4	3	3	4	3	2	2	2	1	1	1	1	1	1	A	2	1	1	2	2	3	3	3	2.3	4.3
13-May-08	4	3	3	1	1	2	2	1	1	1	1	1	1	1	A	2	1	1	1	1	1	2	5	2	2	1.7	4.9
14-May-08	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	A	2	1	2	2	2	2	2	2	2	1.3	2.0
15-May-08	1	1	1	A	2	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0.8	1.7
16-May-08	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5	5	1.4	5.1
17-May-08	5	4	A	6	8	11	5	4	5	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3.0	10.6
18-May-08	3	A	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	9	9	2.1	9.4
19-May-08	A	11	12	11	9	7	5	2	2	1	1	1	1	1	1	1	1	1	2	1	2	2	1	2	A	3.5	11.6
20-May-08	4	5	6	14	11	12	10	7	3	2	2	2	2	3	2	2	3	3	3	3	4	4	4	A	3	4.9	13.8
21-May-08	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	A	3	2	2.0	2.9
22-May-08	3	3	3	3	3	4	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	A	5	4	10	2.4	9.5
23-May-08	6	8	5	3	3	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1.9	8.2
24-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	2	3	3	2	1.4	2.7
25-May-08	2	2	2	5	8	8	3	2	1	1	1	1	1	1	1	1	1	A	2	2	4	11	8	11	3.4	11.2	
26-May-08	11	12	12	14	11	11	10	5	4	2	1	1	1	1	1	1	1	A	2	2	2	3	7	9	8	5.7	14.0
27-May-08	7	5	10	11	11	10	5	3	3	2	2	2	2	1	1	A	2	2	2	2	2	6	19	16	17	6.2	19.5
28-May-08	16	9	8	7	7	12	6	4	3	3	2	2	2	2	A	3	2	2	2	2	3	6	4	3	5	4.8	15.5
29-May-08	6	8	4	6	6	10	8	3	2	3	2	2	2	A	3	2	3	2	2	2	2	3	3	4	3.9	9.8	
30-May-08	4	5	5	6	6	5	4	3	2	2	1	1	A	2	2	1	1	1	1	2	2	3	4	10	3.1	9.7	
31-May-08	9	6	10	5	3	2	2	3	2	2	2	A	2	1	1	1	1	1	1	1	3	5	6	6	3.2	9.9	
Hourly Avg	4.1	4.2	4.3	4.8	4.5	4.6	3.8	2.7	2.0	1.6	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.3	1.4	1.7	2.5	4.2	4.1	4.7		
Hourly Max	15.5	12.1	11.9	14.0	11.5	11.9	10.1	7.3	4.6	5.2	2.4	2.1	2.3	2.8	3.3	2.7	3.2	2.9	3.4	4.4	6.3	19.5	16.2	17.1			

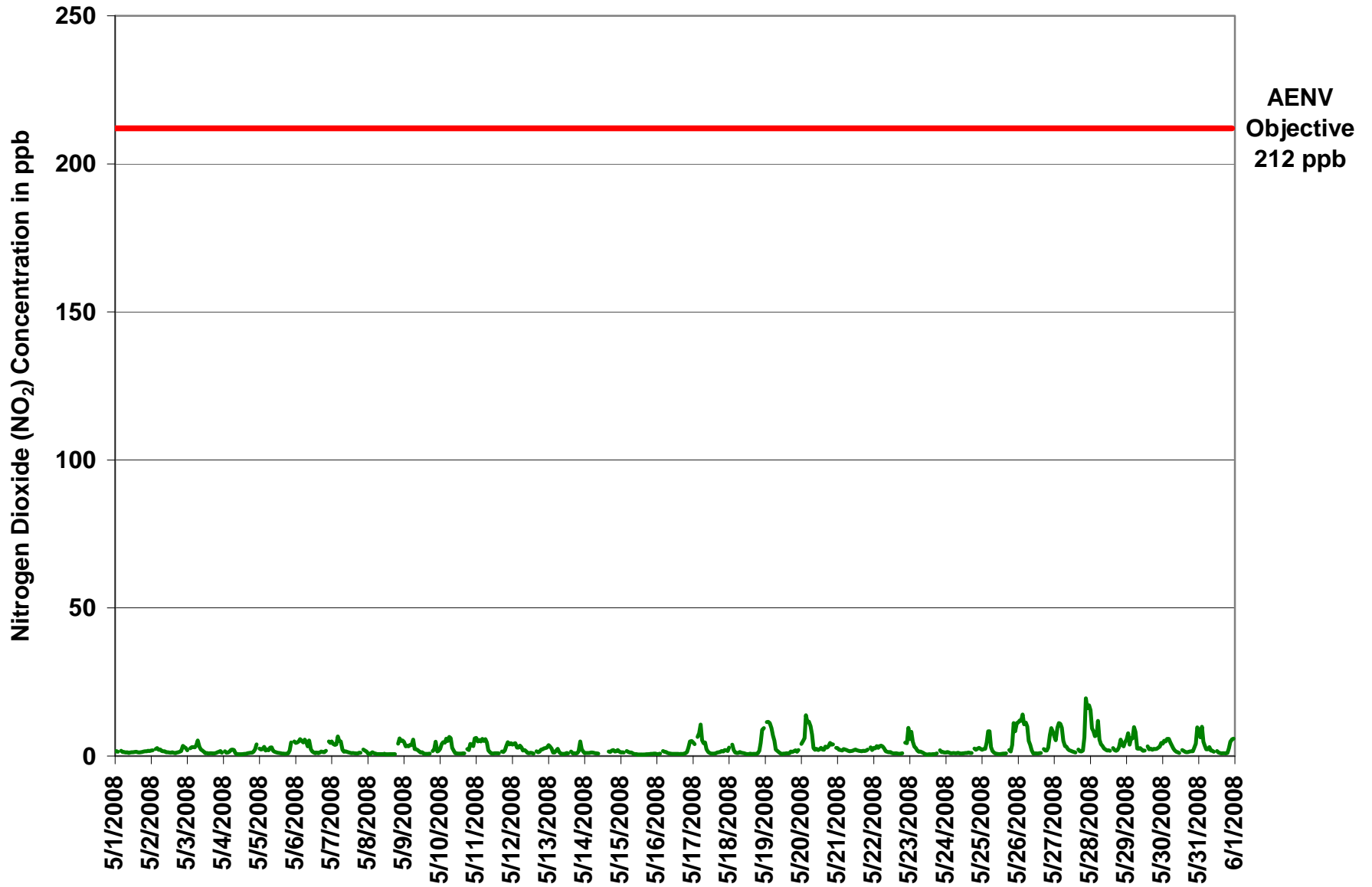


Figure 48. PASZA - Portable-Spirit River Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River  
 Station Owner: PASZA

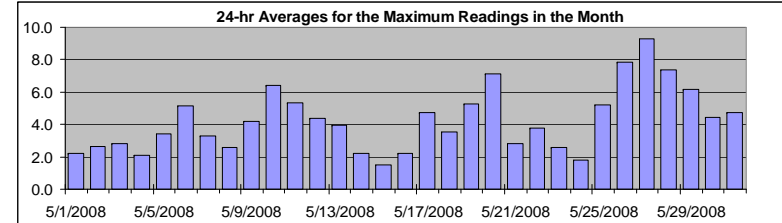
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitrogen Dioxide (NO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	46.9	ppb	10-May	4:00 5:00
Maximum 24-hr Value:	9.3	ppb	27-May	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	18.8	13.3	5.3	2.7	1.6	1.0	0.8	4.2 ppb	2.7 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-May-08	2	3	2	A	2	2	2	1	1	1	3	3	3	2	2	2	2	4	2	2	2	4	2	2.2	4.0	
2-May-08	3	3	A	3	3	3	4	2	2	2	2	2	1	1	3	1	1	2	3	3	2	9	4	3	2.6	8.8
3-May-08	2	A	4	4	4	3	6	9	4	3	2	2	1	1	1	1	2	1	1	2	3	4	3	2	2.8	9.1
4-May-08	A	2	2	1	2	6	3	3	2	1	1	1	1	1	2	1	1	2	2	2	3	3	6	A	2.1	6.5
5-May-08	4	2	5	5	2	7	2	5	4	2	2	2	1	1	2	1	1	1	1	1	4	15	A	7	3.4	15.1
6-May-08	6	7	7	7	7	9	7	13	4	8	3	3	2	1	1	2	2	5	2	2	3	A	7	8	5.1	12.9
7-May-08	7	6	5	6	8	7	7	4	2	2	2	2	1	2	1	1	1	1	1	1	A	3	4	2	3.3	8.0
8-May-08	1	1	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	13	10	7	7	2.5	13.1
9-May-08	12	5	6	5	5	6	11	3	3	3	2	2	4	4	1	1	1	2	A	2	5	9	4	2	4.2	11.8
10-May-08	4	6	8	6	47	6	8	14	4	3	1	1	1	1	1	1	A	6	4	9	5	4	7	6.4	46.9	
11-May-08	7	7	8	6	12	6	7	7	2	2	1	1	1	1	1	A	3	4	5	21	10	5	6	5.3	20.8	
12-May-08	6	5	5	3	3	5	7	2	2	2	1	2	5	4	1	A	3	6	3	9	7	7	6	4	4.3	8.6
13-May-08	5	4	4	2	2	4	6	6	3	2	2	2	5	4	A	2	2	5	1	1	3	19	5	2	3.9	18.6
14-May-08	1	1	1	1	2	2	4	2	2	2	C	C	C	C	C	A	2	3	2	3	2	4	3	2	2.2	4.5
15-May-08	1	2	2	A	3	2	2	4	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	4.2
16-May-08	1	1	1	A	2	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	3	6	9	7	2.2	8.5
17-May-08	5	8	A	9	10	14	12	7	7	4	2	2	1	1	1	2	2	2	9	2	2	3	2	4.7	14.1	
18-May-08	4	A	6	3	2	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	3	11	13	19	3.5	18.8
19-May-08	A	17	13	13	12	8	7	4	2	2	1	1	1	1	2	2	2	5	3	5	8	3	3	A	5.2	17.3
20-May-08	8	7	14	19	14	14	18	11	6	3	3	3	3	3	2	3	4	4	4	7	6	6	A	4	7.1	18.6
21-May-08	4	3	2	2	3	3	2	2	2	4	2	3	3	4	2	2	2	3	2	2	3	A	4	5	2.8	4.5
22-May-08	5	5	7	5	5	4	4	3	2	2	2	8	1	1	1	1	1	1	1	A	6	6	14	3.8	13.9	
23-May-08	11	10	6	4	4	3	2	2	2	1	1	1	1	1	1	1	1	1	2	A	3	2	2	1	2.6	10.6
24-May-08	2	2	2	1	1	1	1	1	1	1	1	1	2	2	1	2	1	2	A	3	3	3	3	3	1.8	3.4
25-May-08	2	3	3	8	10	10	5	3	2	1	1	1	1	1	1	1	A	3	2	15	19	11	15	5.2	19.0	
26-May-08	18	20	15	16	12	13	13	7	4	4	1	2	3	2	2	1	A	3	3	3	5	10	12	11	7.8	19.8
27-May-08	8	8	19	13	17	15	9	6	4	3	2	2	2	2	2	A	3	2	2	4	15	31	22	22	9.3	31.1
28-May-08	19	15	12	9	10	17	10	5	4	3	2	2	12	4	A	4	3	2	3	4	8	9	5	6	7.4	18.8
29-May-08	7	10	5	12	10	15	13	4	3	3	4	2	2	A	13	3	5	3	7	3	3	3	4	6	6.2	15.5
30-May-08	5	6	6	7	7	5	5	3	2	2	3	2	A	3	2	3	2	2	2	2	2	7	6	16	4.5	15.6
31-May-08	13	9	12	9	5	3	4	5	2	2	2	A	3	2	1	1	1	2	1	2	4	7	9	13	4.8	12.7
Hourly Avg	5.9	6.1	6.3	6.5	7.3	6.4	6.1	4.6	2.8	2.3	1.9	1.9	2.3	1.9	2.0	1.6	1.8	2.3	2.4	3.0	5.5	7.7	6.0	6.8		
Hourly Max	18.8	19.8	18.8	18.6	46.9	17.2	18.5	14.1	7.5	8.4	4.1	7.9	11.7	4.4	13.4	4.4	5.4	6.3	7.3	9.5	20.8	31.1	22.4	22.4		

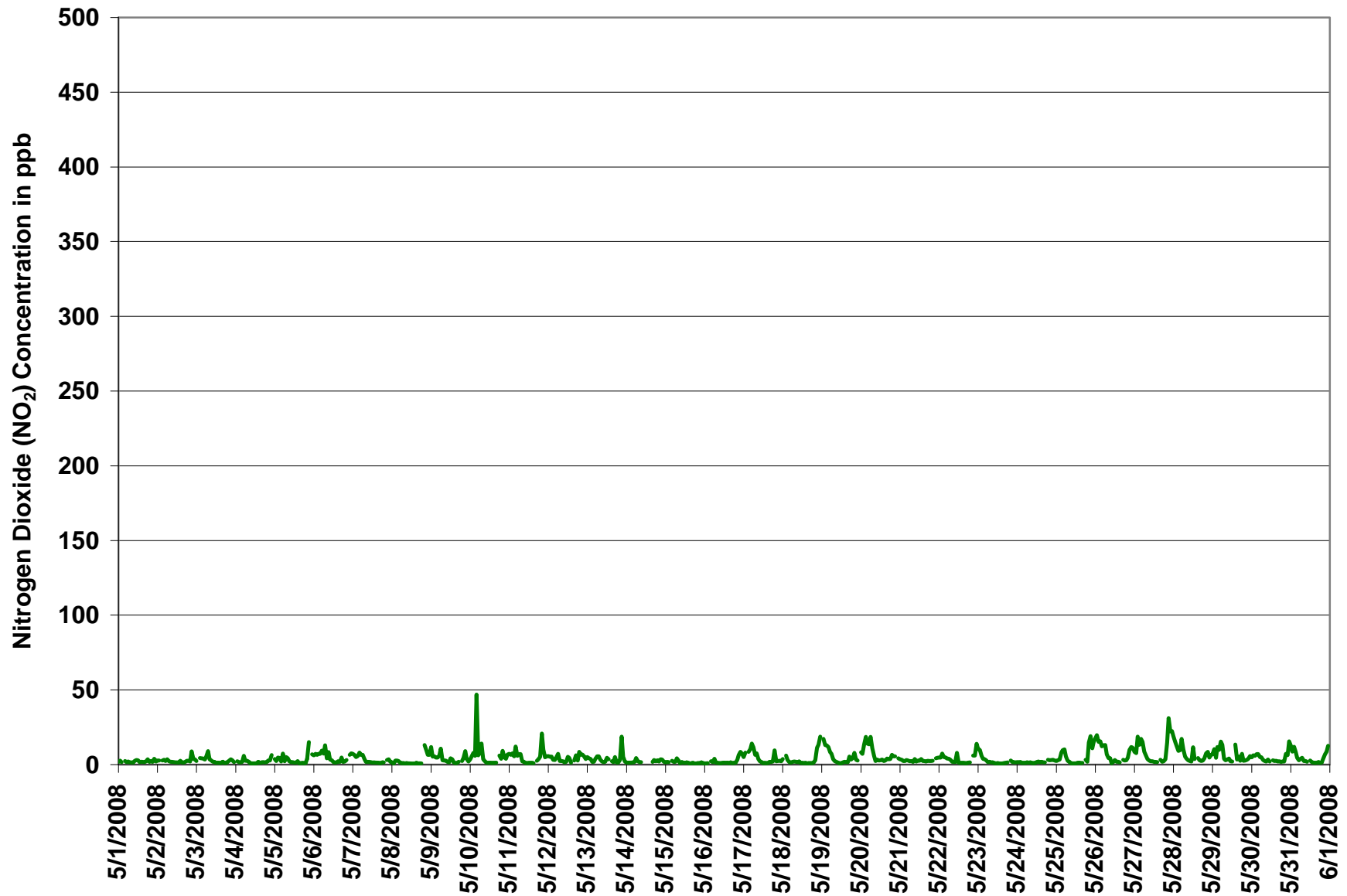
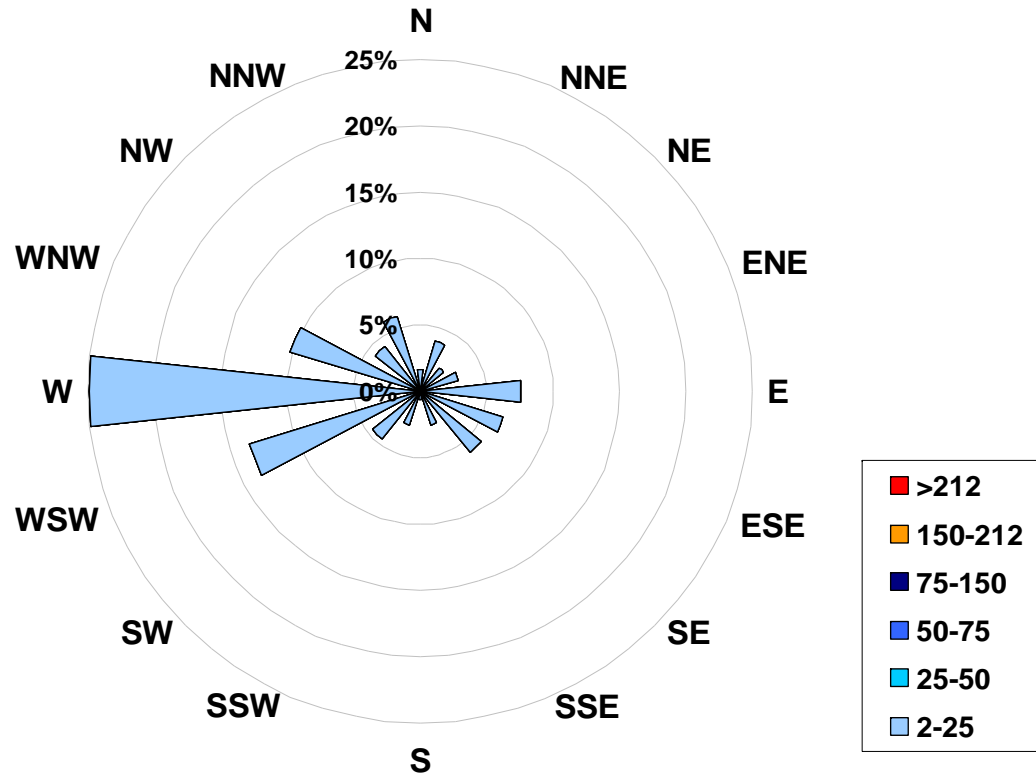


Figure 49. PASZA - Portable-Spirit River Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of NO <sub>2</sub> in ppb			
Range			Frequency (hrs)
2.0	<	25	706
25	to	50	0
50	to	75	0
75	to	150	0
150	to	212	0
	>	212	0
Total Non-Zero Values			706

## PASZA - Portable-Spirit River Nitric Oxide Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

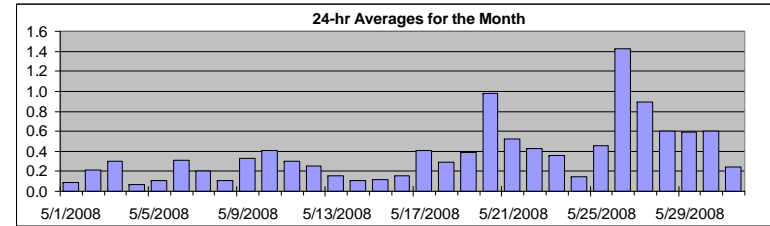
### HOURLY AVERAGE TABLE

### Nitric Oxide (NO)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Maximum 1-hr Average:	5.7	ppb	26-May	6:00 7:00
Maximum 24-hr Average:	1.4	ppb	26-May	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.6	1.5	0.4	0.2	0.1	0.0	0.0	0.4 ppb	0.2 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00		
1-May-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	0.1	0.3		
2-May-08	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9		
3-May-08	0	A	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.4		
4-May-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	0.1	0.3		
5-May-08	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.6		
6-May-08	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.3		
7-May-08	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5		
8-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4		
9-May-08	0	0	0	0	0	0	3	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	2.7		
10-May-08	0	0	0	1	1	1	2	2	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	2.5		
11-May-08	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	1.6		
12-May-08	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.5		
13-May-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	0.2	0.4		
14-May-08	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	A	0	0	0	0	0	0	0	0	0.1	0.2		
15-May-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	0.1	0.2		
16-May-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	0.2	0.3		
17-May-08	0	0	A	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8		
18-May-08	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0.3	1.6		
19-May-08	A	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	1.4		
20-May-08	0	0	0	3	2	4	4	2	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	A	1	1.0	3.9		
21-May-08	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0.5	0.8		
22-May-08	0	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	2	0.4	2.0		
23-May-08	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	2.1		
24-May-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	0.1	0.2		
25-May-08	0	0	0	0	2	3	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	2	0.5	3.1		
26-May-08	5	3	1	4	4	5	6	2	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1.4	5.7		
27-May-08	0	0	0	0	2	4	2	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	3	0	0.9	3.6		
28-May-08	2	1	0	0	0	3	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.6	3.1		
29-May-08	0	0	0	0	0	2	2	0	0	1	1	0	0	A	2	0	0	0	0	1	0	0	0	0	0	0.6	2.2		
30-May-08	0	0	1	1	1	1	2	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	1	0	1	0.6	1.8		
31-May-08	2	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7		
Hourly Avg	0.5	0.4	0.3	0.5	0.5	1.0	1.1	0.8	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.4
Hourly Max	4.9	2.8	0.6	3.7	3.9	4.8	5.7	2.5	1.5	1.2	0.8	0.8	0.8	0.7	1.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	2.6	1.3	2.6		

Station: Portable-Spirit River  
 Station Owner: PASZA

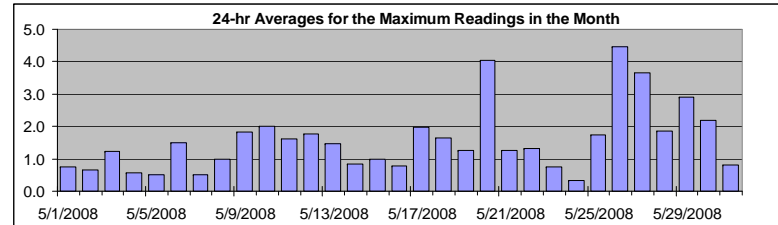
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitric Oxide (NO)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	46.4	ppb	20-May	6:00 7:00
Maximum 24-hr Value:	4.5	ppb	26-May	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	13.2	7.1	1.2	0.5	0.2	0.2	0.1	1.6 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-May-08	0	0	1	A	0	0	1	0	0	0	1	3	1	1	1	0	0	1	2	0	1	0	4	0	0.8	4.0	
2-May-08	0	0	A	0	1	0	3	1	1	1	1	1	0	0	1	0	0	0	2	0	0	0	1	0	0.7	3.5	
3-May-08	0	A	12	0	0	1	4	5	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1.2	11.9		
4-May-08	A	0	0	0	0	7	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0.6	6.9	
5-May-08	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	A	0	0.5	4.9	
6-May-08	0	1	0	0	1	3	4	9	1	2	1	1	0	6	0	1	0	1	0	1	0	A	0	1	1.5	9.0	
7-May-08	0	0	1	1	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	A	0	0	0	0	0.5	1.4	
8-May-08	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	A	12	3	0	0	1.0	12.4	
9-May-08	1	2	3	1	1	1	11	1	1	1	1	0	3	13	0	0	1	0	A	0	0	1	0	0	1.8	13.1	
10-May-08	0	0	1	2	15	4	3	11	1	1	0	0	1	0	0	0	0	A	1	1	3	0	0	0	2.0	15.4	
11-May-08	1	0	1	0	9	5	6	2	0	0	0	0	0	0	0	0	A	0	0	0	6	3	1	0	1.6	9.3	
12-May-08	0	0	1	0	0	1	4	1	1	1	0	1	5	3	1	A	0	6	2	2	4	4	3	0	1.8	6.2	
13-May-08	0	0	0	0	0	1	5	4	3	1	1	1	3	2	A	0	0	3	0	0	3	3	0	0	1.5	5.1	
14-May-08	0	0	0	0	0	0	2	2	0	0	C	C	C	C	C	A	0	0	0	1	1	5	1	0	0.8	4.6	
15-May-08	0	0	0	A	0	2	2	1	2	1	2	1	6	1	1	0	1	1	0	0	0	0	1	0	1.0	6.2	
16-May-08	0	0	0	A	0	0	3	0	0	0	0	0	0	0	0	0	0	1	3	0	1	3	1	1	0.8	3.5	
17-May-08	1	9	A	2	2	6	10	2	3	1	1	0	1	0	0	0	0	0	0	3	1	0	0	0	2.0	10.4	
18-May-08	0	A	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	18	7	6	1.7	17.8	
19-May-08	A	7	2	1	1	2	3	1	1	1	0	0	1	0	1	0	0	1	4	0	1	0	0	A	1.3	7.1	
20-May-08	1	0	2	13	8	7	46	3	2	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	4.0	46.4	
21-May-08	1	1	1	1	1	1	3	2	1	5	1	3	2	4	1	1	1	1	1	1	1	1	A	0	1	1.3	5.1
22-May-08	0	1	1	1	1	1	1	4	1	1	1	6	1	0	0	0	0	0	1	0	A	0	0	10	1.3	9.6	
23-May-08	4	3	1	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.8	4.3	
24-May-08	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	A	0	0	0	0	0	0.3	0.9	
25-May-08	0	0	0	2	6	8	1	1	0	0	0	0	0	0	0	0	A	0	0	0	10	1	0	7	1.7	10.2	
26-May-08	20	11	4	12	8	8	15	3	2	4	0	6	3	1	1	1	A	0	1	1	1	1	1	1	4.5	20.1	
27-May-08	0	0	7	2	11	13	3	4	2	1	1	1	0	1	0	A	0	1	0	1	2	18	1	11	3.6	18.3	
28-May-08	4	1	1	1	1	9	3	2	1	1	1	0	8	1	A	0	3	1	1	1	1	1	1	0	1.9	9.0	
29-May-08	1	1	0	2	1	8	7	2	1	1	4	1	1	A	15	7	3	1	10	0	0	0	0	1	2.9	15.3	
30-May-08	1	1	1	1	1	2	11	1	1	1	2	2	A	5	1	1	2	2	0	1	0	6	1	7	2.2	10.6	
31-May-08	9	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	2	0.8	9.2	
Hourly Avg	1.7	1.4	1.4	1.6	2.3	3.0	5.0	2.1	1.0	0.9	0.8	1.1	1.4	1.5	1.0	0.7	0.6	0.8	1.0	0.6	1.8	2.6	1.0	1.7			
Hourly Max	20.1	10.6	11.9	13.2	15.4	13.2	46.4	10.9	2.9	5.1	4.2	6.1	7.8	13.1	15.3	6.7	3.4	6.2	9.5	2.8	12.4	18.3	7.0	10.9			

## PASZA - Portable-Spirit River Oxides of Nitrogen Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

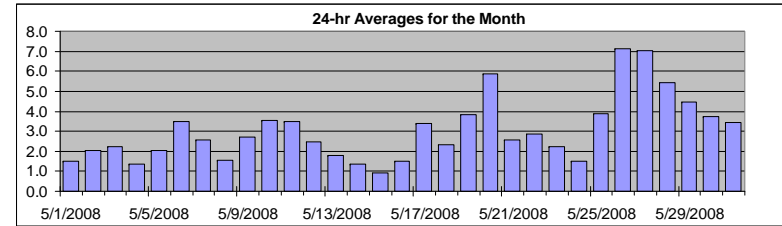
### HOURLY AVERAGE TABLE

### Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Maximum 1-hr Average:	22.1	ppb	27-May	21:00 22:00
Maximum 24-hr Average:	7.1	ppb	26-May	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	16.0	10.1	3.7	2.0	1.1	0.7	0.6	3.1 ppb	2.0 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00			22:00	23:00	0:00
1-May-08	2	2	2	A	2	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	2	1	2	2	2	2	1.5	2.0	
2-May-08	2	2	A	2	3	2	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	3	3	3	2.0	3.5	
3-May-08	2	A	3	3	3	3	5	8	4	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2	1	2.2	7.6		
4-May-08	A	2	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	A	1.4	3.9	
5-May-08	3	2	2	3	2	2	2	3	4	2	2	1	1	1	1	1	1	1	1	1	1	1	2	5	A	5	2.1	5.0	
6-May-08	5	5	5	6	5	5	7	6	4	6	3	2	1	1	1	1	1	1	1	2	1	1	2	A	5	5	3.5	6.8	
7-May-08	5	4	4	4	7	5	5	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	A	2	2	2	2.6	6.9	
8-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	5	6	5	5	1.6	6.2
9-May-08	5	3	4	3	4	4	8	3	3	3	2	1	2	1	2	1	1	1	1	1	A	2	2	5	2	2	2.7	8.3	
10-May-08	3	4	5	5	7	6	9	9	4	2	1	1	1	1	1	1	1	1	1	1	A	2	2	4	4	3	6	3.5	8.5
11-May-08	6	5	6	5	7	6	7	6	2	2	1	1	1	1	1	1	1	1	1	A	2	1	2	4	5	4	4	3.5	7.4
12-May-08	4	4	4	3	3	4	3	2	2	2	1	1	1	1	1	1	1	1	A	2	2	2	2	3	3	3	3	2.5	4.5
13-May-08	4	3	3	1	1	2	3	2	1	1	1	1	1	1	1	A	2	1	1	1	1	1	2	5	2	2	1.8	5.4	
14-May-08	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	C	A	1	1	2	2	2	1	2	2	2	1.4	2.1
15-May-08	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0.9	1.8
16-May-08	1	1	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5	5	1.5	5.3	
17-May-08	5	5	A	7	8	12	7	5	6	3	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3.4	12.3	
18-May-08	3	A	4	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	10	11	2.3	10.9	
19-May-08	A	13	12	12	10	8	6	3	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	A	3.8	12.8	
20-May-08	4	5	6	17	13	15	14	9	3	3	3	2	3	3	3	3	3	3	4	3	4	5	4	4	A	3	5.9	16.8	
21-May-08	3	3	2	2	3	3	3	2	2	3	3	3	3	3	3	2	2	2	2	2	2	2	3	A	3	2	2.6	3.3	
22-May-08	3	3	4	3	4	4	4	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	A	5	4	12	2.9	11.5	
23-May-08	7	10	5	4	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	2.2	10.3
24-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	2	3	3	1.5	2.8	
25-May-08	2	2	3	5	10	11	4	2	1	1	1	1	1	1	1	1	1	1	1	A	2	2	4	11	8	13	3.9	12.8	
26-May-08	16	15	12	18	15	16	16	7	5	3	1	1	1	1	1	1	1	1	1	A	2	2	2	3	7	10	9	7.1	17.6
27-May-08	7	6	10	12	12	13	7	5	5	3	3	2	2	2	2	2	2	2	2	2	2	2	2	7	22	16	20	7.0	22.1
28-May-08	17	10	9	7	7	15	7	5	4	3	3	2	2	2	2	2	A	3	2	2	2	3	6	4	4	5	5.4	16.9	
29-May-08	6	8	4	6	6	12	10	3	3	3	3	2	2	2	A	5	3	3	3	3	3	3	3	3	4	5	4.5	11.9	
30-May-08	5	6	6	6	7	6	5	4	3	2	2	1	A	2	2	2	2	2	2	2	2	2	2	3	5	11	3.7	11.1	
31-May-08	10	7	10	5	4	3	2	3	2	2	2	A	2	1	1	1	1	1	1	1	1	1	3	5	6	6	3.4	10.4	
Hourly Avg	4.6	4.6	4.6	5.3	5.0	5.5	4.8	3.5	2.5	2.0	1.6	1.3	1.3	1.2	1.3	1.2	1.3	1.2	1.3	1.4	1.5	1.8	2.7	4.5	4.3	5.1			
Hourly Max	16.9	14.9	12.5	17.6	14.5	16.0	15.6	9.2	5.9	6.4	2.9	3.0	3.1	3.3	4.9	2.9	3.7	3.3	3.8	5.0	6.8	22.1	16.5	19.7					

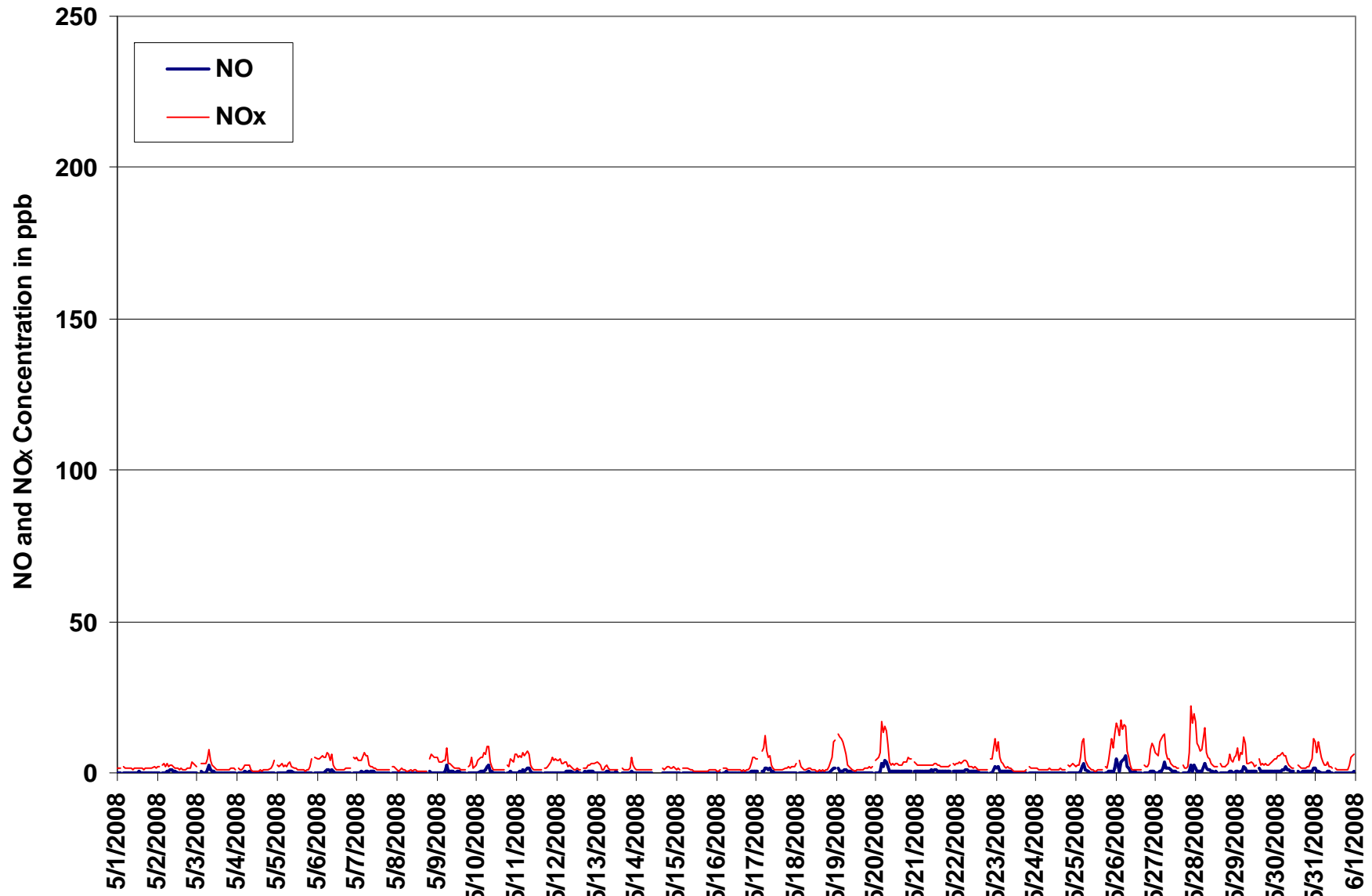


Figure 50. PASZA - Portable-Spirit River Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Portable-Spirit River  
 Station Owner: PASZA

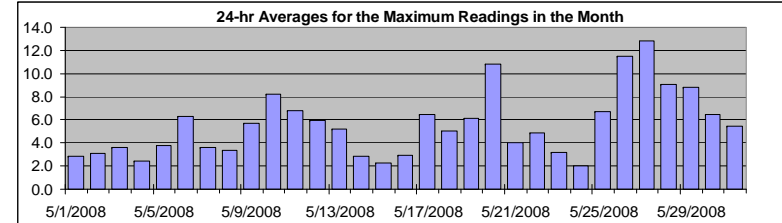
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Oxides of Nitrogen (NO<sub>x</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	63.4	ppb	20-May	6:00 7:00
Maximum 24-hr Value:	12.8	ppb	27-May	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	28.0	20.2	6.6	3.3	1.8	1.0	0.8	5.6 ppb	3.3 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-May-08	2	2	2	A	3	2	2	1	2	1	3	6	4	3	3	2	2	3	5	2	3	2	8	2	2.8	7.9
2-May-08	3	3	A	3	4	3	5	3	3	3	2	2	2	1	3	1	1	2	4	3	2	9	4	4	3.1	8.9
3-May-08	2	A	11	4	4	4	8	14	5	4	2	2	1	1	1	1	2	1	1	2	3	4	3	2	3.6	13.8
4-May-08	A	2	2	1	2	11	3	3	2	1	1	1	1	1	3	1	2	2	1	2	3	3	6	A	2.4	10.6
5-May-08	4	2	5	5	2	9	2	6	5	3	2	2	1	1	3	1	1	1	1	1	4	20	A	7	3.8	20.0
6-May-08	6	8	7	8	7	12	10	22	6	10	4	4	2	4	1	3	2	5	2	3	3	A	7	8	6.3	21.8
7-May-08	8	7	5	6	8	7	7	4	2	2	2	2	2	2	2	1	1	1	1	1	A	3	4	2	3.6	8.4
8-May-08	1	1	3	3	3	1	1	1	1	1	1	1	1	1	1	3	1	1	1	A	25	13	7	7	3.3	24.9
9-May-08	12	6	8	5	5	7	21	4	3	4	3	2	7	13	2	1	2	2	A	3	5	9	4	2	5.7	21.4
10-May-08	4	6	8	7	62	9	11	25	5	3	2	1	2	1	1	1	1	A	7	4	13	5	4	7	8.2	62.4
11-May-08	8	7	9	6	21	9	12	9	3	2	1	1	1	1	1	1	A	3	4	6	27	13	5	6	6.8	26.8
12-May-08	6	6	6	3	3	5	11	3	3	3	2	3	10	7	2	A	3	12	5	11	11	11	9	4	5.9	12.2
13-May-08	5	4	4	2	2	5	11	9	6	3	2	3	8	5	A	3	2	8	1	1	5	21	7	2	5.2	21.4
14-May-08	1	1	1	1	2	2	7	3	2	2	C	C	C	C	C	A	2	3	3	4	3	8	5	2	2.9	8.0
15-May-08	1	2	2	A	3	4	3	5	5	2	3	2	6	2	2	1	2	2	1	1	1	1	2	1	2.3	6.4
16-May-08	1	1	1	A	2	2	7	2	1	1	1	1	2	1	2	1	2	2	3	1	4	10	9	8	2.9	9.9
17-May-08	6	16	A	11	11	20	22	9	10	5	4	2	1	1	1	1	2	2	2	12	3	3	3	2	6.5	21.5
18-May-08	4	A	6	4	2	1	2	3	2	2	3	1	1	1	1	1	1	1	1	2	3	29	19	24	5.0	28.9
19-May-08	A	22	14	14	13	11	9	5	3	2	2	1	2	2	2	2	2	6	5	5	8	3	3	A	6.1	21.8
20-May-08	9	8	15	28	22	19	63	14	8	3	4	3	4	4	3	3	5	4	4	8	6	6	A	5	10.8	63.4
21-May-08	4	4	3	3	3	3	5	4	3	8	3	6	4	7	3	4	3	3	3	3	3	A	5	5	4.0	8.4
22-May-08	5	5	8	5	5	5	5	6	3	2	2	14	2	2	2	2	1	1	2	2	A	6	6	22	4.9	21.5
23-May-08	14	13	7	4	4	3	2	3	2	2	1	1	1	1	1	1	1	1	2	A	3	2	2	2	3.1	14.0
24-May-08	2	2	2	1	1	1	2	1	2	1	1	1	2	3	2	3	2	2	A	4	3	3	3	3	2.0	3.5
25-May-08	3	3	3	9	14	18	7	4	2	1	1	1	1	2	2	1	1	A	3	2	25	20	11	20	6.7	24.8
26-May-08	31	27	18	25	19	20	28	9	6	8	1	5	6	3	2	2	A	3	4	4	6	11	12	12	11.5	31.2
27-May-08	9	8	25	15	29	28	12	10	5	4	3	3	2	2	2	A	4	3	3	5	16	49	23	33	12.8	49.2
28-May-08	23	17	13	10	11	26	13	8	5	4	3	2	19	5	A	5	5	3	3	5	8	9	5	7	9.1	25.6
29-May-08	8	11	5	13	11	21	20	5	4	4	8	3	3	A	28	10	9	3	17	3	3	4	4	6	8.8	27.6
30-May-08	5	7	7	8	8	6	15	4	3	3	5	4	A	7	3	4	4	4	2	3	3	13	7	22	6.4	22.1
31-May-08	22	9	12	9	5	3	4	5	3	3	2	A	3	2	1	1	1	2	1	2	4	7	9	15	5.5	21.7
Hourly Avg	7.2	7.2	7.3	7.6	9.4	8.9	10.7	6.6	3.7	3.1	2.5	2.7	3.5	3.0	2.8	2.2	2.2	3.0	3.2	3.5	7.1	10.3	6.8	8.3		
Hourly Max	31.2	27.2	25.4	27.6	62.4	28.0	63.4	24.6	10.3	10.4	8.1	13.8	19.5	13.0	27.6	10.0	8.9	12.2	16.5	12.0	26.8	49.2	23.0	33.2		

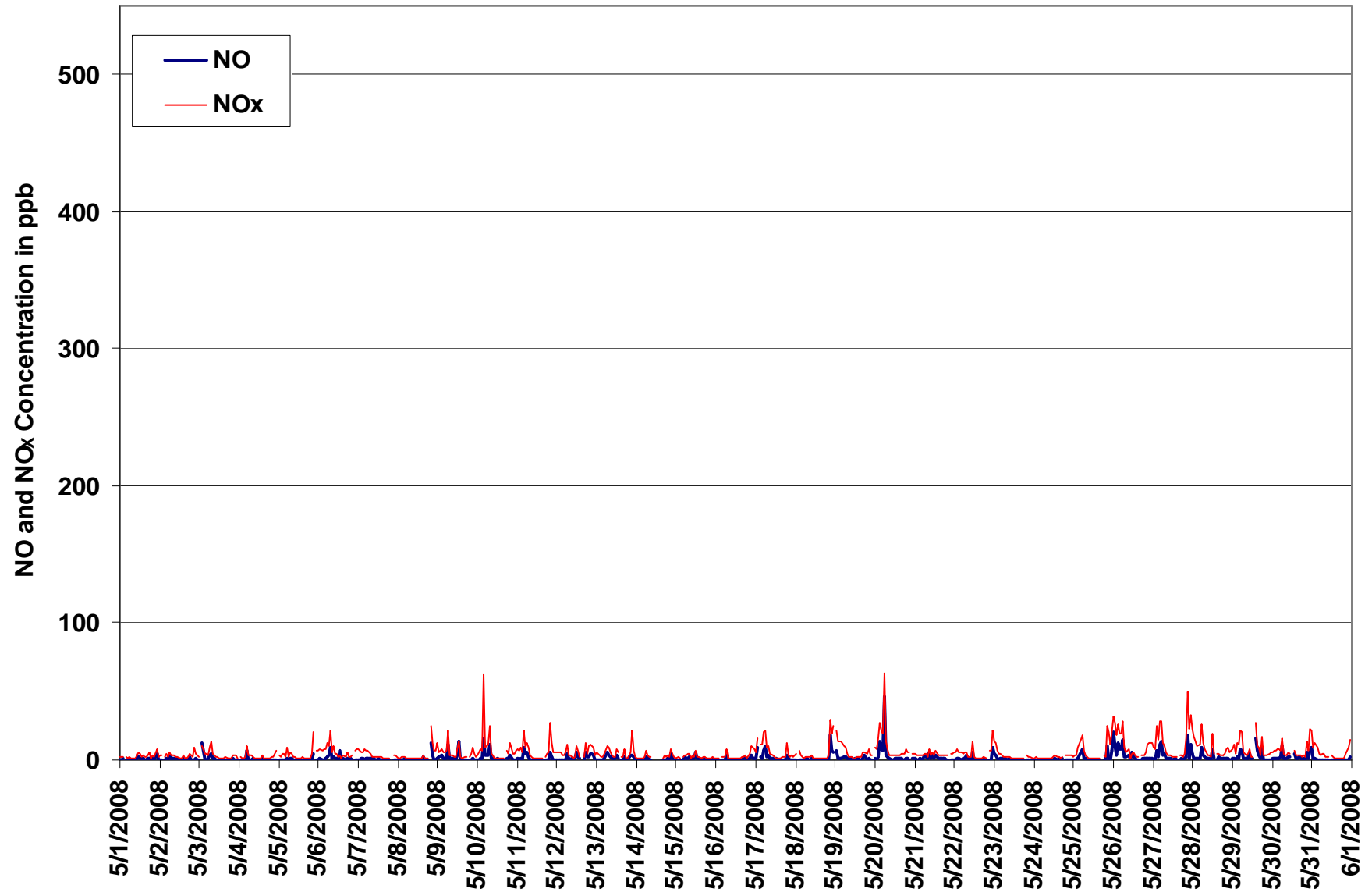


Figure 51. PASZA - Portable-Spirit River Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

# PASZA - Portable-Spirit River Ozone Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Ozone (O<sub>3</sub>)

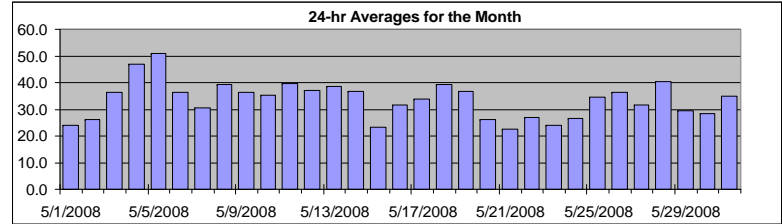
Monitoring Dates: May 1, 2008 to June 1, 2008

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

**Summary**

Number of 1-hr Exceedances:	0		
Maximum 1-hr Average:	65.6 ppb	5-May	13:00 14:00
Maximum 24-hr Average:	50.8 ppb	5-May	

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
	61.6	55.2	43.7	32.6	24.3	13.6	9.1	33.6 ppb	32.6 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	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-May-08	21	18	18	A	23	22	23	24	24	26	26	26	24	23	24	30	32	32	30	27	23	19	19	17	24.0	32.2	
2-May-08	16	15	A	14	10	11	10	11	14	18	21	25	29	34	39	40	44	46	47	41	30	28	30	28	26.1	47.3	
3-May-08	24	A	25	18	17	14	13	19	30	37	40	47	50	51	52	49	49	49	49	47	41	38	35	41	36.3	52.3	
4-May-08	A	45	44	40	36	32	33	36	43	44	44	46	47	50	53	53	56	60	63	61	54	48	49	A	47.0	62.6	
5-May-08	48	44	43	37	42	41	41	47	47	51	57	64	66	66	64	63	61	60	59	53	44	39	A	33	50.8	65.6	
6-May-08	20	20	23	24	23	20	16	24	32	36	43	50	54	55	54	55	53	49	48	48	40	A	26	21	36.3	55.3	
7-May-08	22	19	11	10	9	13	24	31	31	30	36	40	44	44	41	40	44	43	40	41	A	31	30	32	30.7	44.0	
8-May-08	36	37	33	30	32	34	38	42	42	43	43	45	46	47	47	47	47	47	A	32	31	33	30	39.4	47.3		
9-May-08	27	28	28	26	23	25	15	32	35	36	37	40	42	46	47	47	47	48	A	46	39	35	45	40	36.3	48.4	
10-May-08	33	29	20	13	14	12	16	28	40	43	48	49	49	48	49	48	49	A	49	46	37	29	31	29	35.1	49.1	
11-May-08	26	26	21	15	11	15	18	33	47	50	53	56	57	58	58	57	A	58	58	55	44	36	29	30	39.6	58.0	
12-May-08	26	30	24	31	33	30	32	39	39	44	47	48	48	48	49	A	46	46	42	37	33	26	26	26	37.0	48.9	
13-May-08	23	25	26	35	38	33	32	41	46	47	45	43	41	40	A	42	46	46	46	44	40	37	35	38	38.7	47.0	
14-May-08	39	37	36	35	34	35	38	39	42	43	42	44	47	48	46	46	40	36	32	29	27	24	22	21	36.8	47.8	
15-May-08	21	21	21	A	21	20	19	19	C	C	C	19	19	23	23	25	25	27	28	26	24	27	27	28	23.2	28.2	
16-May-08	32	34	34	A	28	25	28	30	33	36	36	35	33	31	34	36	36	37	36	35	31	25	24	24	31.8	36.9	
17-May-08	22	23	A	16	16	13	23	28	28	34	41	45	47	47	47	47	49	43	39	38	35	32	31	34	33.8	48.5	
18-May-08	29	A	30	34	33	32	30	32	37	40	41	44	44	47	46	46	48	51	53	51	47	38	30	23	39.4	52.6	
19-May-08	A	20	19	17	15	19	28	38	39	41	43	45	48	49	50	49	50	46	43	40	38	37	33	A	36.7	50.0	
20-May-08	31	31	28	12	11	8	12	25	38	37	33	33	35	35	40	38	30	25	24	22	21	20	A	15	26.3	39.8	
21-May-08	15	16	17	19	18	20	20	22	23	25	25	25	25	26	26	26	27	26	25	23	22	A	22	24	22.5	26.9	
22-May-08	22	21	21	23	19	17	20	25	29	30	30	31	33	35	35	35	35	34	34	34	A	24	22	10	27.0	35.0	
23-May-08	12	5	12	14	17	21	23	24	25	27	29	30	30	30	31	28	29	30	30	A	27	28	26	27	24.1	30.8	
24-May-08	27	26	27	26	24	23	22	21	21	21	22	24	27	29	30	31	31	31	31	A	32	31	28	27	27	26.4	31.7
25-May-08	26	24	23	17	8	9	23	29	34	38	40	45	47	48	51	53	55	A	54	52	41	28	32	16	34.4	54.7	
26-May-08	14	15	14	6	8	9	14	28	34	43	53	54	55	57	59	58	A	63	59	56	47	36	28	28	36.4	62.6	
27-May-08	30	32	23	19	17	16	24	29	29	30	34	38	41	45	48	A	49	50	50	48	34	12	21	13	31.7	50.3	
28-May-08	12	22	23	25	25	16	29	36	40	46	51	57	60	60	A	58	59	62	58	52	39	37	35	31	40.4	61.6	
29-May-08	27	23	34	28	27	19	21	33	32	29	34	36	39	A	40	37	33	33	32	30	28	23	22	18	29.5	40.0	
30-May-08	16	14	13	12	10	12	16	23	27	32	36	41	A	44	47	50	46	44	39	36	31	28	25	15	28.5	50.4	
31-May-08	14	19	13	27	30	31	34	38	39	38	40	A	48	48	47	47	45	46	45	44	36	25	24	25	34.9	48.0	
Hourly Avg	24.4	24.8	24.2	22.2	21.6	20.9	23.8	29.9	33.9	36.5	39.0	40.8	42.4	43.7	43.9	44.3	43.5	43.7	43.4	41.1	35.1	30.0	28.9	25.6			
Hourly Max	47.6	45.0	44.1	39.9	41.8	41.3	40.6	46.8	47.2	50.6	56.7	64.2	65.6	65.6	64.5	63.5	61.4	62.6	62.6	60.9	54.5	47.6	48.7	40.7			



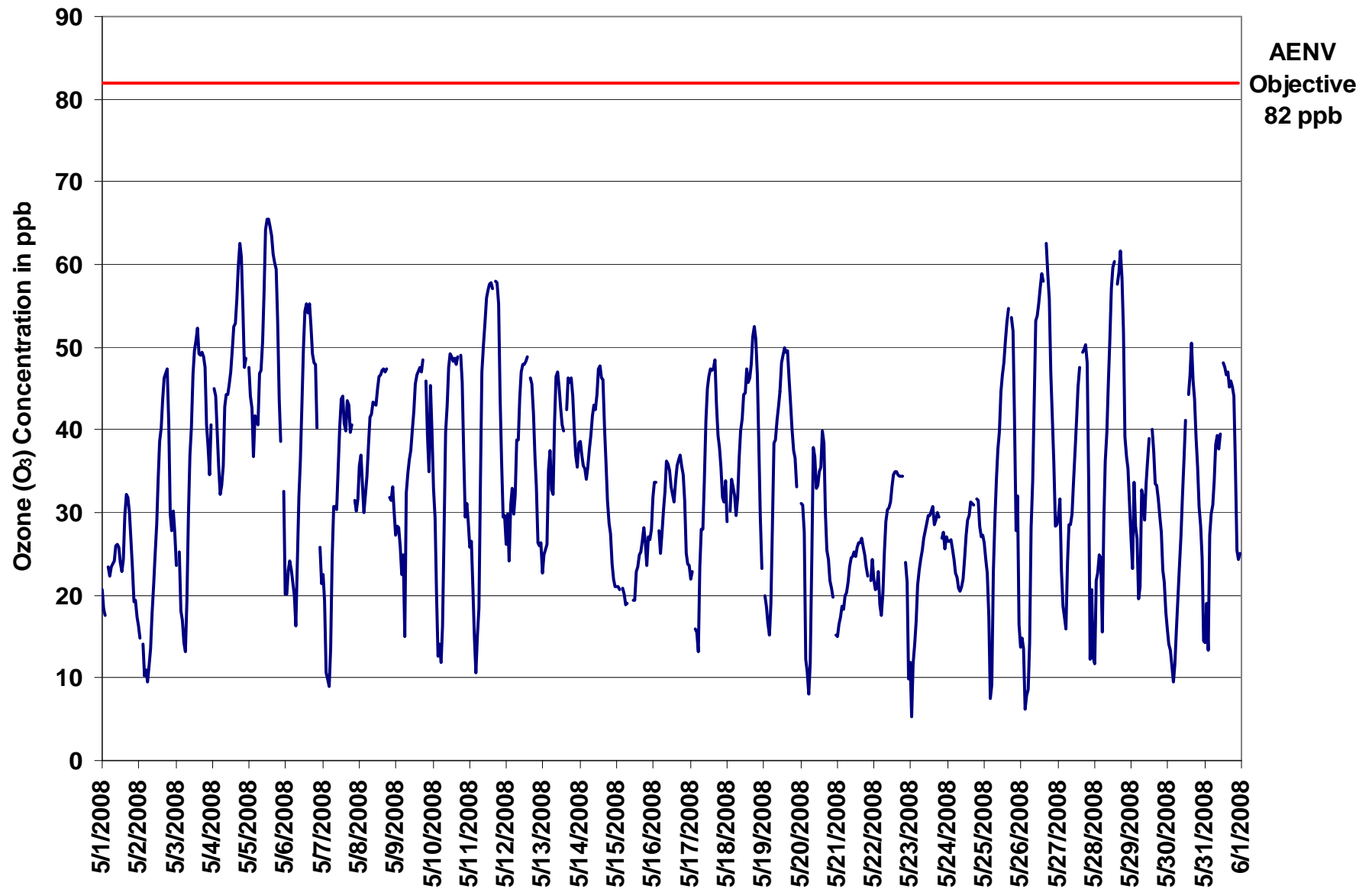


Figure 52. PASZA - Portable-Spirit River Ozone 1-hr Average Monthly Trend

Station: Portable-Spirit River  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

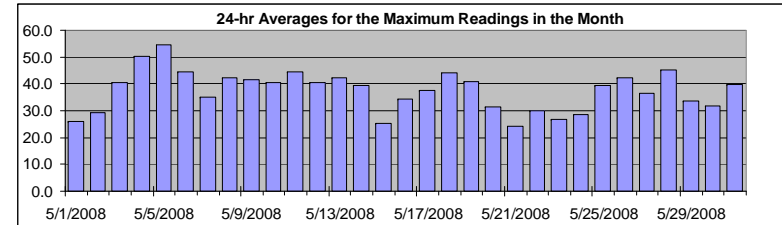
**Ozone (O<sub>3</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	67.6	ppb	5-May	13:00 14:00
Maximum 24-hr Value:	54.6	ppb	5-May	

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
	64.8	58.3	47.4	36.4	28.2	19.3	13.3	37.5 ppb	36.4 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-May-08	25	22	21	A	25	24	26	26	26	27	27	27	25	24	25	33	33	33	32	30	26	22	22	19	26.0	33.0
2-May-08	23	17	A	17	12	13	12	13	16	21	24	28	32	37	40	43	48	48	50	48	35	31	32	33	29.2	49.9
3-May-08	28	A	30	27	24	21	16	29	34	41	46	49	52	52	54	53	52	53	52	50	44	41	40	44	40.5	54.4
4-May-08	A	46	46	43	38	34	36	41	45	46	47	47	50	51	57	57	60	63	65	65	63	52	52	A	50.1	65.3
5-May-08	51	48	49	42	45	43	47	49	49	54	62	67	67	68	67	65	64	62	63	58	52	43	A	39	54.6	67.6
6-May-08	37	36	31	34	42	38	20	28	39	42	49	57	57	57	57	57	57	54	53	55	52	A	37	32	44.5	57.4
7-May-08	29	33	19	19	12	18	33	34	35	34	41	43	47	46	43	42	47	48	43	43	A	35	33	34	35.2	47.5
8-May-08	38	38	38	34	38	40	41	43	43	45	45	45	47	48	48	49	49	49	49	A	39	35	36	36	42.2	49.1
9-May-08	36	37	36	37	31	31	32	34	37	38	39	44	45	47	49	49	49	50	A	50	46	40	52	46	41.6	52.0
10-May-08	37	36	31	28	23	26	26	38	43	47	50	50	50	51	51	50	51	A	52	51	45	34	35	31	40.6	52.3
11-May-08	32	34	34	18	15	16	27	44	50	54	55	58	59	60	61	59	A	60	60	60	49	44	36	33	44.3	61.0
12-May-08	32	35	31	34	35	35	39	41	43	47	49	50	50	52	51	A	49	47	45	41	37	29	29	29	40.4	52.0
13-May-08	25	28	36	41	40	36	36	48	49	49	46	43	42	A	45	50	49	49	48	43	42	39	41	41	42.3	49.5
14-May-08	41	39	38	37	36	37	40	41	44	46	44	47	50	50	50	48	46	38	35	32	29	27	23	23	39.2	50.3
15-May-08	22	22	22	A	23	22	21	21	C	C	C	21	22	26	27	27	27	29	31	29	27	29	29	31	25.4	30.8
16-May-08	34	35	35	A	31	27	31	32	36	38	39	38	36	33	37	37	39	39	38	37	35	31	28	27	34.5	39.2
17-May-08	24	25	A	22	24	20	31	32	36	38	45	47	48	49	49	50	52	47	43	42	39	35	34	36	37.8	52.5
18-May-08	32	A	33	36	35	35	33	36	45	43	45	46	47	50	48	48	52	55	56	54	51	47	46	42	44.1	55.7
19-May-08	A	30	26	22	20	24	36	41	40	44	45	47	51	51	53	52	53	51	48	46	40	40	35	A	40.7	53.1
20-May-08	36	36	37	22	27	16	16	32	41	40	36	39	39	41	42	42	39	27	27	25	23	22	A	17	31.4	42.3
21-May-08	17	18	20	20	19	21	22	23	25	26	26	27	26	27	28	28	29	28	27	26	24	A	25	26	24.2	28.7
22-May-08	25	24	28	28	21	20	24	28	31	32	33	33	35	36	37	37	37	36	36	A	26	26	20	20	30.0	37.1
23-May-08	20	13	14	18	20	24	24	26	27	28	30	31	31	32	32	31	31	31	31	A	29	30	28	29	26.6	32.4
24-May-08	29	29	28	27	26	24	23	22	22	23	23	26	30	31	32	33	33	34	A	34	35	31	29	29	28.4	35.0
25-May-08	27	27	24	23	14	22	26	31	40	40	41	49	50	51	53	55	57	A	56	54	54	33	38	36	39.3	56.8
26-May-08	28	26	24	12	19	18	23	31	38	52	55	56	59	59	62	61	A	65	63	59	53	41	38	33	42.4	64.9
27-May-08	33	35	30	27	26	25	31	31	30	32	37	40	44	47	49	A	51	52	52	52	47	26	24	21	36.6	52.2
28-May-08	16	27	34	33	28	22	36	39	42	48	54	60	62	63	A	61	65	64	64	56	49	42	39	36	45.2	64.8
29-May-08	31	35	36	37	31	30	33	35	34	32	38	38	43	A	43	41	36	35	34	32	30	26	23	20	33.7	42.9
30-May-08	17	17	15	14	12	14	20	27	29	36	39	44	A	48	50	53	51	48	43	39	34	31	28	28	31.9	52.7
31-May-08	19	23	19	34	33	34	45	57	43	40	43	A	50	51	49	49	47	49	47	46	42	31	28	33	39.7	56.5
Hourly Avg	29.1	30.1	29.9	28.1	26.6	26.1	29.2	34.0	37.1	39.5	41.9	43.3	44.8	46.0	46.4	46.8	46.6	46.3	46.4	44.7	40.4	34.4	33.2	31.2		
Hourly Max	51.3	48.3	48.7	43.4	44.6	43.2	47.1	56.5	49.7	54.3	62.2	66.9	67.0	67.6	66.7	65.4	64.8	64.9	65.3	64.8	62.6	52.2	52.0	46.2		

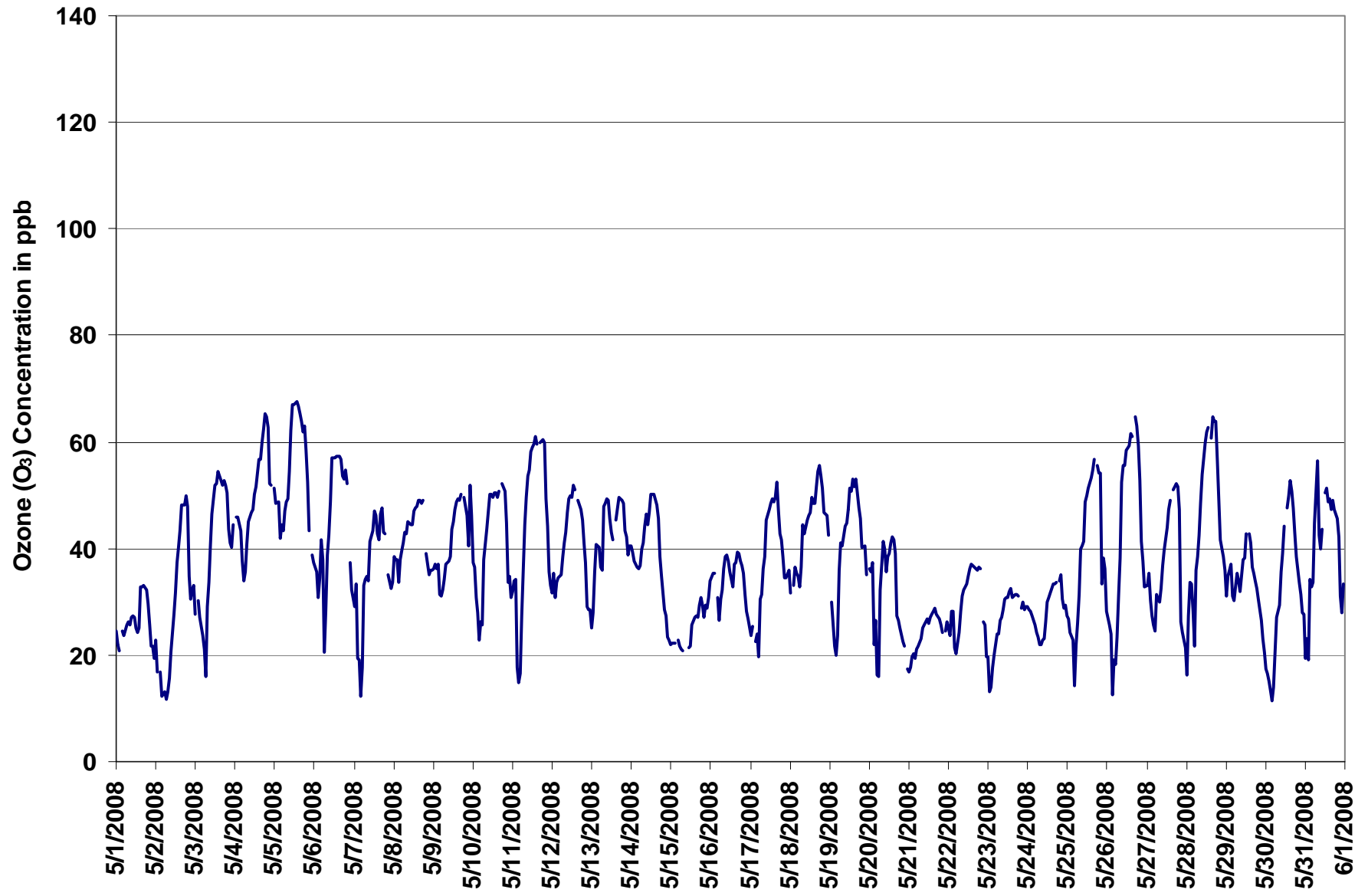
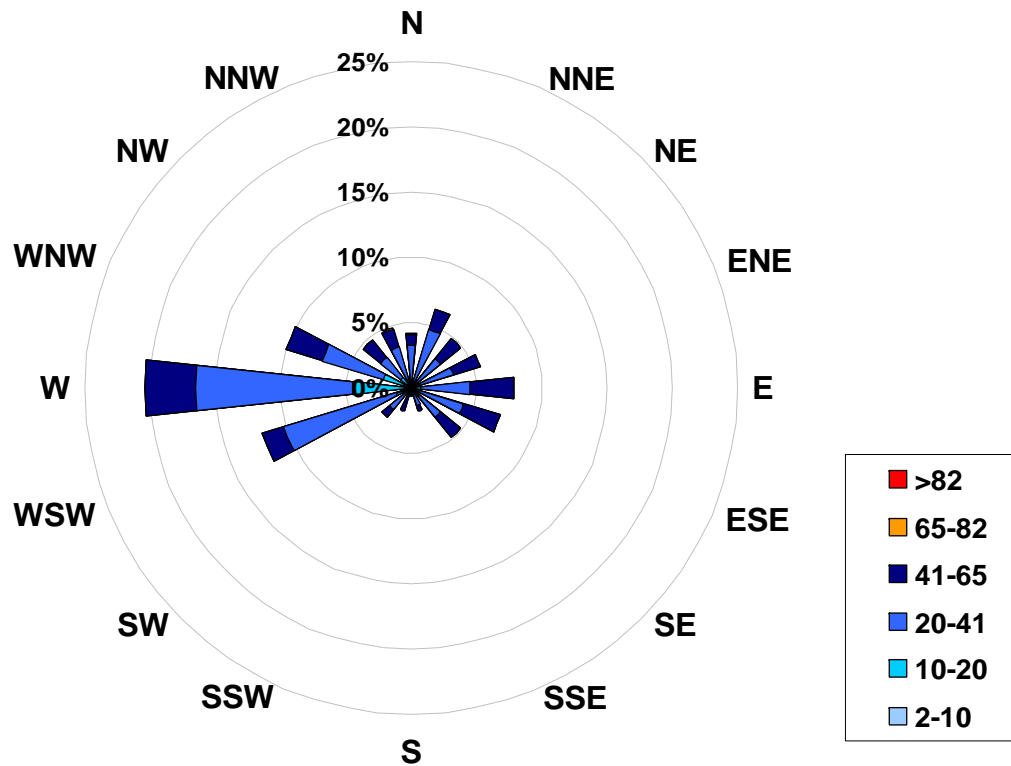


Figure 53. PASZA - Portable-Spirit River Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	< 10		12
10	to 20		86
20	to 41		401
41	to 65		208
65	to 82		2
	> 82		0
Total Non-Zero Values			709

## PASZA - Portable-Spirit River Ozone Eight Hour Average Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

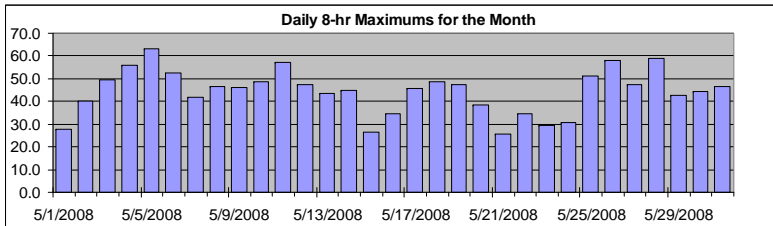
### EIGHT HOUR RUNNING AVERAGE TABLE

**Ozone (O<sub>3</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

Objective Limit: Alberta Environment: 8-hr 65 ppb

Number of 8-hr Exceedances:		0	
Maximum 8-hr Average:	63.0 ppb	5-May	18:00 19:00



Percentile							
99	95	75	50	25	5	1	
58.3	52.3	42.1	32.8	25.2	18.1	13.8	

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																							Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	
1-May-08	28	25	24	25	25	23	22	21	22	23	24	24	24	25	25	25	26	27	28	28	28	27	27	25	27.9
2-May-08	23	21	20	18	16	15	13	13	12	13	14	15	17	20	24	27	31	35	38	40	40	39	38	37	40.1
3-May-08	34	32	29	26	24	22	20	19	20	22	24	27	31	36	41	44	47	48	49	50	48	47	45	44	49.6
4-May-08	43	42	41	40	40	39	39	38	39	38	38	39	41	43	45	47	49	51	53	55	56	56	55	56	56.1
5-May-08	55	52	49	46	44	43	42	43	43	43	45	49	52	55	58	60	61	63	63	62	59	56	54	50	63.0
6-May-08	44	38	33	29	26	23	22	21	23	25	27	30	34	39	44	47	50	52	52	52	50	50	46	41	52.4
7-May-08	36	32	27	21	17	17	16	17	19	20	23	27	31	35	37	38	40	41	42	42	42	40	38	37	41.9
8-May-08	36	35	34	33	33	33	34	35	36	37	38	40	41	43	44	45	45	46	46	47	45	43	41	38	46.7
9-May-08	35	33	30	30	28	28	25	26	27	28	29	30	33	36	39	41	43	44	45	46	46	44	44	43	46.2
10-May-08	41	38	36	32	29	26	22	21	21	23	27	31	36	40	44	47	48	49	49	48	46	44	41	39	48.7
11-May-08	35	34	31	27	23	22	20	21	23	26	30	35	41	47	51	54	56	57	57	57	55	52	48	44	57.3
12-May-08	42	39	34	31	30	29	29	31	32	34	37	39	41	43	45	46	47	47	47	45	43	40	37	35	47.4
13-May-08	32	30	28	28	28	29	30	32	35	37	40	41	41	42	43	43	43	43	43	44	44	43	42	42	43.6
14-May-08	41	40	38	37	36	36	37	37	37	38	39	40	41	43	44	45	45	44	42	41	38	35	32	29	44.9
15-May-08	26	25	23	22	21	21	21	20	N	N	N	N	N	N	N	N	N	23	24	25	25	26	26	26	26.5
16-May-08	27	28	29	29	30	30	30	30	30	30	31	31	32	33	34	34	35	35	35	35	34	34	32	31	34.8
17-May-08	29	27	26	24	21	20	19	20	21	23	25	28	32	37	40	42	45	46	46	45	43	41	39	38	45.8
18-May-08	35	34	33	32	32	32	32	31	33	33	35	36	37	39	41	43	45	46	47	48	49	47	45	43	48.6
19-May-08	42	37	32	28	23	20	20	22	24	27	30	34	38	41	44	45	47	47	48	47	46	44	42	41	47.5
20-May-08	38	36	34	30	26	22	19	20	20	21	22	25	28	31	34	36	35	34	33	31	30	28	26	23	38.3
21-May-08	20	19	18	18	17	17	18	18	19	21	21	22	23	24	25	25	26	26	26	26	25	25	25	24	25.7
22-May-08	24	23	22	22	22	21	21	21	22	23	24	25	27	29	31	32	33	34	34	34	35	33	31	28	34.6
23-May-08	24	20	17	14	14	14	14	16	18	20	23	25	26	27	28	29	29	30	30	30	29	29	28	28	29.7
24-May-08	28	27	27	27	26	26	25	24	24	23	22	22	23	23	24	26	27	28	29	30	31	31	30	30	30.7
25-May-08	29	28	27	26	23	20	20	20	21	23	25	28	33	38	41	44	47	48	50	51	51	48	45	40	51.3
26-May-08	34	31	26	21	17	14	12	13	16	19	24	30	36	42	48	52	54	57	58	58	57	54	49	45	58.1
27-May-08	43	39	35	30	27	24	24	24	23	23	25	27	30	34	37	38	41	43	46	47	46	42	38	35	47.4
28-May-08	30	26	23	20	19	19	20	23	27	30	33	37	42	47	50	53	56	58	59	58	55	52	50	47	59.1
29-May-08	43	38	35	32	30	28	26	27	27	28	28	29	30	32	35	35	36	36	36	35	33	32	30	27	42.7
30-May-08	25	23	20	18	16	14	14	14	16	18	21	25	27	31	36	40	42	44	45	44	42	40	37	33	44.5
31-May-08	29	26	23	21	21	22	23	26	29	31	35	36	38	41	42	44	45	46	46	46	45	42	39	36	46.5

Hourly Max	54.5	52.3	49.4	46.0	44.2	43.3	42.1	42.7	42.6	43.5	45.2	48.6	51.6	54.6	57.6	59.7	61.5	62.7	63.0	61.6	58.9	55.8	55.3	55.7
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## PASZA - Portable-Spirit River Total Reduced Sulphur Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

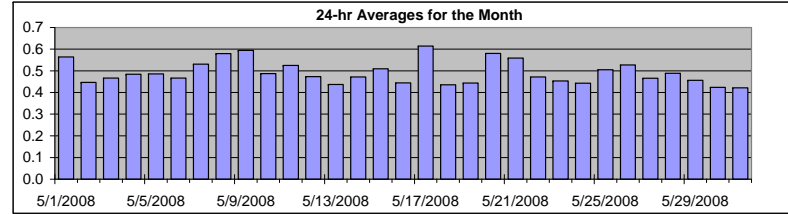
### Total Reduced Sulphur (TRS)

Monitoring Dates: May 1, 2008 to June 1, 2008

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

Summary			
Maximum 1-hr Average:	1.8	ppb	8-May 2:00 3:00
Maximum 24-hr Value:	0.6	ppb	17-May

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
	1.0	0.7	0.5	0.5	0.4	0.4	0.3	0.5 ppb	0.5 ppb



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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	23:00	0:00
1-May-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	1	1	0	0.6	0.7
2-May-08	1	0	A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
3-May-08	0	A	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0.5	0.6	
4-May-08	A	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	A	A	0.5	0.5	
5-May-08	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	0.7	
6-May-08	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0.5	0.6	
7-May-08	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	A	0	1	0	0.5	0.7		
8-May-08	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	0.6	1.8		
9-May-08	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	0	0	1	0	0	0.6	1.3		
10-May-08	0	1	0	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.5	0.7		
11-May-08	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	0	1	0.5	0.6		
12-May-08	1	1	1	1	1	1	1	0	1	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0.5	0.7		
13-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	1	0	0	0.4	0.5		
14-May-08	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0.5	0.6		
15-May-08	0	0	0	A	0	0	0	0	0	0	0	C	C	A	1	1	1	1	1	1	1	1	0	0	0	0.5	0.7		
16-May-08	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0.4	0.6		
17-May-08	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.3		
18-May-08	1	A	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6		
19-May-08	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.6		
20-May-08	1	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	A	1	0.6	0.7		
21-May-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	0.6	0.6		
22-May-08	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.5	0.6		
23-May-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	1	1	1	1	1	0.5	0.6		
24-May-08	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5		
25-May-08	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	A	1	0	1	1	1	1	0.5	0.8		
26-May-08	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	0	A	0	0	0	0	1	1	1	0	0.5	0.6		
27-May-08	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0.5	1.0		
28-May-08	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	1	0.5	0.8		
29-May-08	1	1	0	0	0	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.5	0.6		
30-May-08	0	0	1	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6		
31-May-08	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
Hourly Avg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
Hourly Max	0.8	1.0	1.8	0.7	1.3	1.1	0.9	1.2	1.3	1.0	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.8	1.3	1.3				

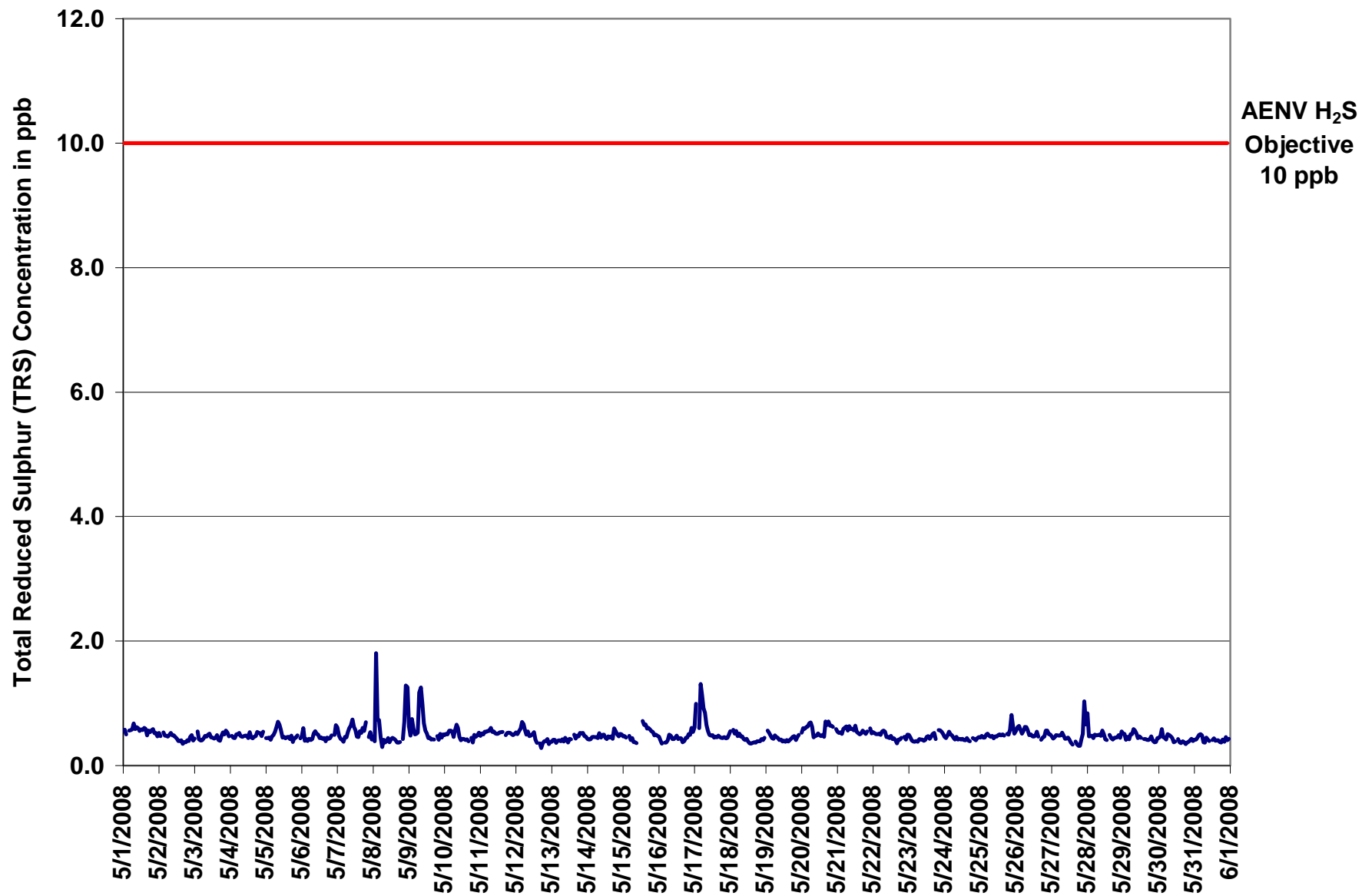


Figure 54. PASZA - Portable-Spirit River Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Portable-Spirit River  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

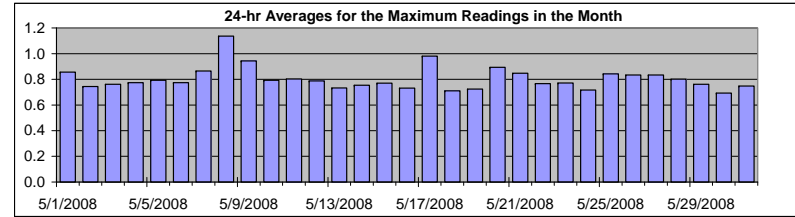
**Total Reduced Sulphur (TRS)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	4.2	ppb	8-May	2:00 3:00
Maximum 24-hr Value:	1.1	ppb	8-May	

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
	1.8	1.0	0.8	0.8	0.7	0.6	0.6	0.8 ppb	0.8 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-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	1.0	
2-May-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	0.7	1.0	
3-May-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	0.8	0.9	
4-May-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	0.9	
5-May-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	1.1	
6-May-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	1.2	
7-May-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	0.9	1.4	
8-May-08	1	1	4	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	2	1.1	4.2	
9-May-08	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.7	
10-May-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	1.0	
11-May-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	0.9	
12-May-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	1.1	
13-May-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	1.0	
14-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9	
15-May-08	1	1	1	A	1	1	1	1	1	1	1	C	C	A	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
16-May-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	
17-May-08	1	2	A	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.2	
18-May-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	
19-May-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	0.9	
20-May-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	0.9	1.2	
21-May-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	1.1	
22-May-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	
23-May-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	0.8	1.0	
24-May-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	0.7	0.8	
25-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	1	0.8	1.9
26-May-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	
27-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	1	0.8	2.3	
28-May-08	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.6	
29-May-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	0.9	
30-May-08	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8	
31-May-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	
Hourly Avg	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	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9			
Hourly Max	1.6	2.2	4.2	1.6	2.9	1.7	1.5	1.5	1.7	1.3	1.0	0.9	0.9	1.0	1.0	0.9	1.2	1.0	1.0	1.4	1.1	1.9	2.3	1.9			



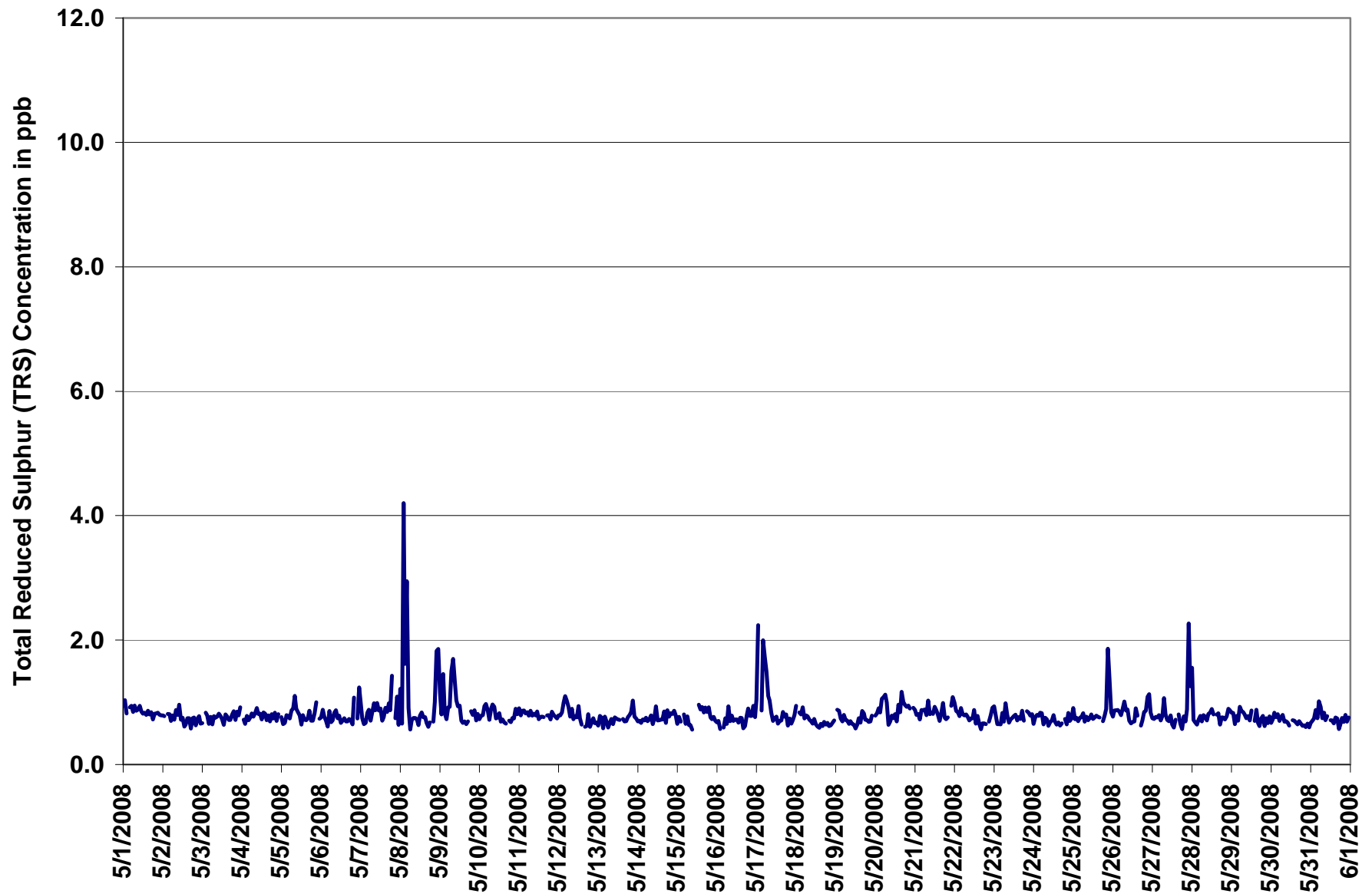
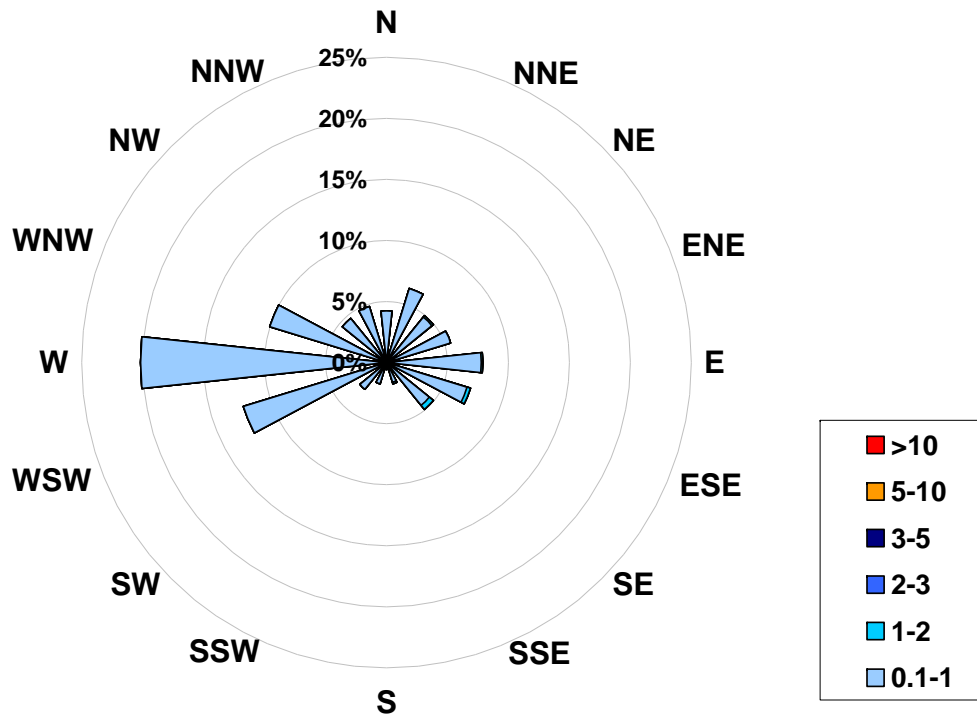


Figure 55. PASZA - Portable-Spirit River Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb) Located at the Portable-Spirit River Site for May 2008**



**Calms: 0%**

Frequency Distribution of TRS in ppb			
Range	Frequency (hrs)		
0.1 < 1	701		
1 to 2	8		
2 to 3	0		
3 to 5	0		
5 to 10	0		
> 10	0		
<b>Total Non-Zero Values</b>	<b>709</b>		

# PASZA - Portable-Spirit River Relative Humidity Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

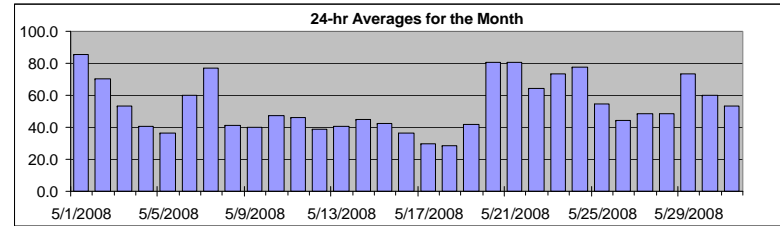
## HOURLY AVERAGE TABLE

## Relative Humidity (RH)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	99.6 %	7-May	7:00 8:00
Maximum 24-hr Value:	85.7 %	1-May	



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
	98.3	92.1	70.4	50.8	35.0	23.9	17.3	53.6 %	50.8 %

### 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																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-May-08	96	97	97	98	98	98	92	92	93	89	86	83	83	80	74	68	66	68	72	80	84	88	85	88	85.7	98.4
2-May-08	89	90	92	94	96	97	98	98	99	96	79	71	63	55	48	44	38	34	33	41	58	60	58	60	70.5	98.6
3-May-08	67	71	74	78	81	83	83	77	63	55	51	41	38	34	32	32	33	35	36	36	41	44	50	45	53.4	83.1
4-May-08	42	42	43	51	64	72	70	66	53	45	39	34	31	23	23	23	25	26	27	27	32	39	35	38	40.5	72.1
5-May-08	37	40	44	49	50	51	49	41	39	36	31	28	25	25	24	23	23	22	25	32	39	44	44	50	36.3	51.4
6-May-08	50	54	65	59	59	63	74	68	59	48	41	36	40	42	39	36	45	72	80	76	76	84	88	93	60.3	92.9
7-May-08	97	98	98	98	99	99	99	100	99	90	72	65	62	61	64	62	64	60	57	57	58	61	63	59	76.7	99.6
8-May-08	52	52	56	57	56	55	52	47	45	42	41	39	34	31	30	29	28	29	29	30	37	35	37	39	41.0	57.4
9-May-08	39	40	46	49	54	56	59	54	51	48	48	41	35	31	29	28	27	27	26	29	34	36	37	36	40.0	59.4
10-May-08	45	48	53	58	67	71	72	54	42	40	41	39	35	35	34	33	30	31	31	36	47	62	63	65	47.0	71.7
11-May-08	71	73	79	84	87	84	78	64	51	43	34	30	29	28	27	24	22	21	21	23	26	27	39	44	46.2	86.8
12-May-08	49	43	52	54	54	58	55	47	44	37	33	30	29	27	26	26	27	26	27	30	35	40	42	43	39.0	58.2
13-May-08	47	48	48	50	65	69	69	56	46	40	37	34	32	32	30	29	26	27	27	29	31	34	38	39	40.9	69.4
14-May-08	42	48	52	54	56	54	50	46	39	32	29	25	19	17	19	24	37	57	73	64	57	59	64	62	44.9	72.7
15-May-08	58	57	56	54	52	51	49	45	42	39	37	33	32	31	32	31	33	34	34	37	41	42	44	47	42.2	58.1
16-May-08	47	49	51	53	55	55	51	45	41	36	35	32	29	25	24	22	22	23	23	24	27	32	35	38	36.4	55.3
17-May-08	41	43	45	50	50	51	43	38	35	31	24	20	18	17	16	16	17	19	20	18	22	25	27	28	29.7	50.6
18-May-08	32	33	36	33	32	33	35	38	41	38	36	33	29	26	26	26	24	15	14	14	16	21	26	34	28.7	40.5
19-May-08	39	46	51	59	63	65	57	54	52	46	41	37	34	32	31	29	28	29	30	32	34	35	38	41	41.9	65.3
20-May-08	43	70	78	83	83	88	86	76	70	69	78	82	81	82	72	67	71	89	95	95	94	93	94	93	80.6	95.0
21-May-08	92	89	89	88	89	89	89	88	84	80	78	76	77	76	76	73	70	69	70	73	76	82	82	81	80.6	92.0
22-May-08	80	82	81	78	82	81	76	71	67	63	61	58	55	52	50	49	49	49	49	50	54	60	69	77	64.3	81.9
23-May-08	79	84	83	83	82	80	78	77	74	71	69	69	73	71	66	67	65	63	62	63	69	75	80	81	73.6	83.6
24-May-08	87	91	92	93	91	91	91	91	89	87	85	81	74	68	65	60	60	61	62	64	67	70	73	73	77.8	92.5
25-May-08	75	77	81	84	88	86	77	72	64	56	52	44	40	39	36	33	31	29	30	31	34	41	47	57	54.3	87.8
26-May-08	62	60	70	76	77	76	71	62	53	42	29	30	27	26	24	25	25	24	23	25	29	36	44	49	44.3	77.0
27-May-08	53	57	62	68	75	75	70	68	63	57	52	47	43	38	34	32	31	30	29	29	31	37	40	46	48.5	74.8
28-May-08	55	57	60	64	70	72	66	59	52	47	43	36	33	31	30	32	31	30	32	38	45	54	66	68	48.8	71.7
29-May-08	70	68	65	66	68	71	69	78	84	79	70	68	64	58	57	63	70	71	78	84	86	88	89	92	73.2	91.9
30-May-08	94	94	93	91	93	89	83	73	65	56	52	44	42	38	35	30	39	43	45	43	42	48	55	60	60.3	94.2
31-May-08	65	67	70	72	73	73	69	56	56	59	57	50	39	37	38	39	40	38	38	39	43	50	53	60	53.4	73.5
Hourly Avg	61.2	63.5	66.5	68.7	71.2	72.2	69.6	64.4	59.8	54.8	50.4	46.4	43.4	40.9	39.1	37.9	38.6	40.3	41.9	43.5	47.3	51.6	55.0	57.6		
Hourly Max	96.8	97.9	98.4	98.3	98.6	99.0	99.3	99.6	99.2	96.3	86.4	83.2	83.0	81.5	75.9	73.4	71.3	89.3	94.9	95.0	94.0	93.2	94.1	93.1		

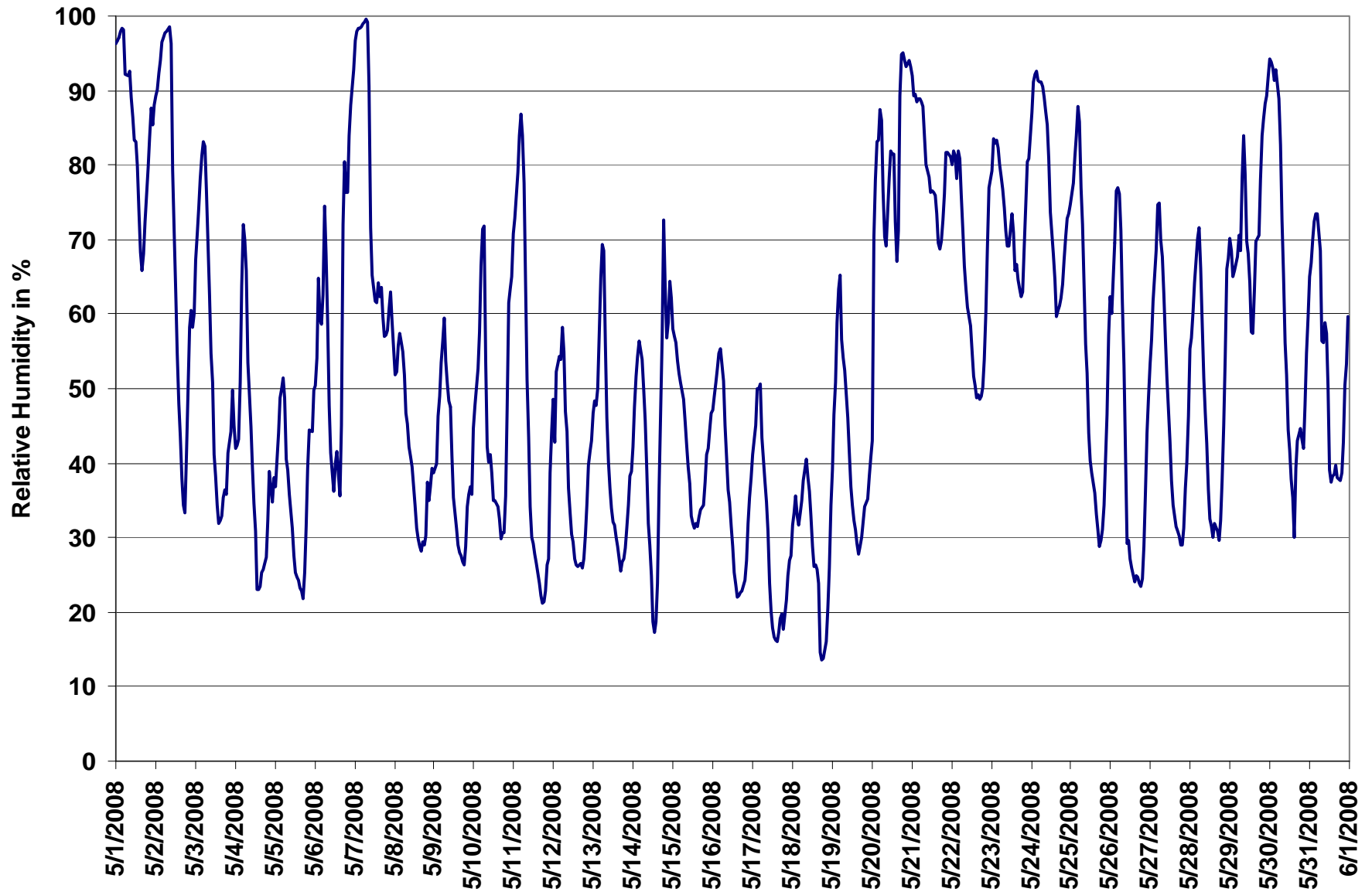


Figure 56. PASZA - Portable-Spirit River Relative Humidity 1-hr Average Monthly Trend

# PASZA - Portable-Spirit River Temperature Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

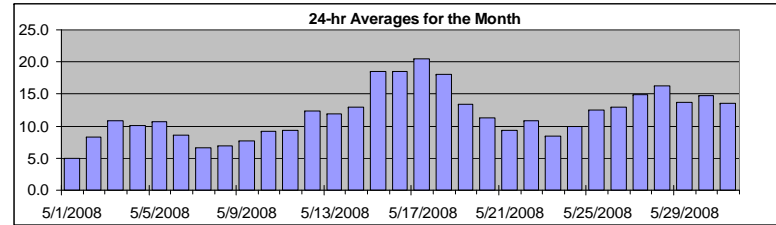
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	28.4	°C	17-May	15:00 16:00
Maximum 24-hr Value:	20.5	°C	17-May	



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
	24.9	21.6	15.4	11.6	8.1	3.5	1.4	11.9 °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																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			0:00
1-May-08	4	3	4	4	3	3	3	4	4	4	4	5	5	6	7	7	8	8	8	7	6	5	5	4	5.0	7.8	
2-May-08	4	4	3	3	2	2	1	1	3	6	8	10	12	13	13	14	15	15	16	15	11	9	9	8	8.2	15.6	
3-May-08	6	6	5	4	3	2	3	6	9	11	13	15	15	17	17	17	17	17	16	14	12	9	9	9	10.8	17.4	
4-May-08	9	8	7	6	5	4	6	7	8	10	11	12	13	15	15	15	15	14	13	11	9	9	8	8	10.1	15.4	
5-May-08	8	7	6	4	4	4	6	9	9	11	12	14	14	15	15	16	16	16	16	14	12	10	10	8	10.7	16.2	
6-May-08	7	7	5	6	5	4	3	5	7	10	12	13	13	13	14	14	13	9	8	8	8	7	7	5	8.6	14.0	
7-May-08	5	4	3	1	1	2	3	4	5	6	8	9	10	10	9	8	9	9	9	9	9	8	8	8	6.6	10.1	
8-May-08	8	6	4	3	3	3	2	3	4	5	6	8	9	10	11	11	11	11	11	10	8	7	6	5	7.0	11.4	
9-May-08	5	4	3	2	1	1	1	2	4	6	8	10	11	12	12	13	13	13	13	12	10	9	10	9	7.7	12.9	
10-May-08	6	6	4	4	2	1	2	6	8	10	11	13	13	13	14	14	14	14	14	13	12	9	8	8	9.2	14.4	
11-May-08	6	6	4	2	1	1	3	7	9	10	12	12	13	13	14	14	15	15	15	14	13	11	8	6	9.3	14.8	
12-May-08	6	7	5	6	6	6	8	11	12	15	16	16	16	17	17	17	17	18	17	16	14	12	11	11	12.4	17.6	
13-May-08	10	10	10	11	9	9	9	10	11	12	13	13	14	14	14	15	15	15	14	12	11	9	10	10	11.9	15.5	
14-May-08	10	8	8	8	8	9	10	12	13	14	15	17	18	19	18	17	16	13	11	13	14	13	13	14	12.9	18.7	
15-May-08	15	15	15	16	16	16	16	17	18	19	20	22	22	22	22	22	22	22	21	21	19	18	17	16	16	18.5	22.5
16-May-08	15	14	14	13	13	13	14	16	17	18	20	21	22	24	24	25	24	24	23	22	21	18	16	14	18.6	24.6	
17-May-08	13	13	13	11	11	11	14	18	19	20	22	24	26	27	28	28	28	28	27	25	23	22	21	20	20.5	28.4	
18-May-08	19	18	17	17	17	17	17	16	16	17	17	18	20	20	21	21	21	22	21	20	18	15	14	12	18.0	22.4	
19-May-08	10	8	7	6	5	6	10	12	12	14	15	16	17	17	18	18	19	18	18	17	16	15	14	14	13.4	18.7	
20-May-08	14	12	11	10	9	9	10	12	14	14	13	13	13	12	13	14	13	11	10	10	10	9	8	9	11.3	14.2	
21-May-08	9	8	8	8	8	8	8	8	9	9	10	10	10	10	10	11	11	11	11	11	10	9	9	9	9.3	11.3	
22-May-08	9	8	7	8	7	7	8	9	10	11	11	12	12	13	14	14	14	14	14	14	13	11	10	9	10.8	14.2	
23-May-08	8	7	7	6	6	6	6	6	7	7	8	9	9	10	11	11	11	11	11	11	10	9	8	8	8.4	11.3	
24-May-08	7	7	7	7	7	7	7	7	8	8	9	10	12	13	13	14	14	14	14	13	13	12	11	11	10	10.0	13.9
25-May-08	10	9	9	8	8	8	10	10	11	12	13	14	14	15	16	16	17	17	17	17	15	13	11	8	12.4	16.9	
26-May-08	7	7	5	4	4	4	6	8	11	14	16	16	17	18	19	20	20	20	20	19	18	15	12	11	13.0	20.2	
27-May-08	9	9	8	6	5	5	7	9	12	13	15	16	17	19	20	21	22	22	22	22	21	18	16	14	14.9	22.5	
28-May-08	12	11	10	9	8	8	10	12	15	17	18	20	21	22	22	22	22	22	22	22	21	19	17	14	13	16.2	22.5
29-May-08	12	12	14	13	13	12	13	13	12	14	16	16	17	18	17	16	15	15	14	13	12	12	12	11	13.7	17.8	
30-May-08	10	9	9	10	9	10	12	13	14	15	16	17	18	19	20	19	19	19	19	19	18	16	14	12	14.7	20.1	
31-May-08	11	11	11	11	12	11	12	12	12	12	12	14	15	16	16	16	16	16	17	17	16	15	13	13	12	13.5	16.9
Hourly Avg	9.1	8.5	7.8	7.3	6.8	6.7	7.8	9.2	10.4	11.8	12.9	14.0	14.9	15.6	15.9	16.2	16.2	15.9	15.6	15.0	13.7	12.1	11.0	10.2			
Hourly Max	18.5	17.6	17.0	17.3	17.4	17.0	16.8	17.7	19.0	20.3	22.4	24.2	25.9	27.0	27.7	28.4	28.0	27.6	26.9	25.1	23.1	21.7	20.6	20.3			

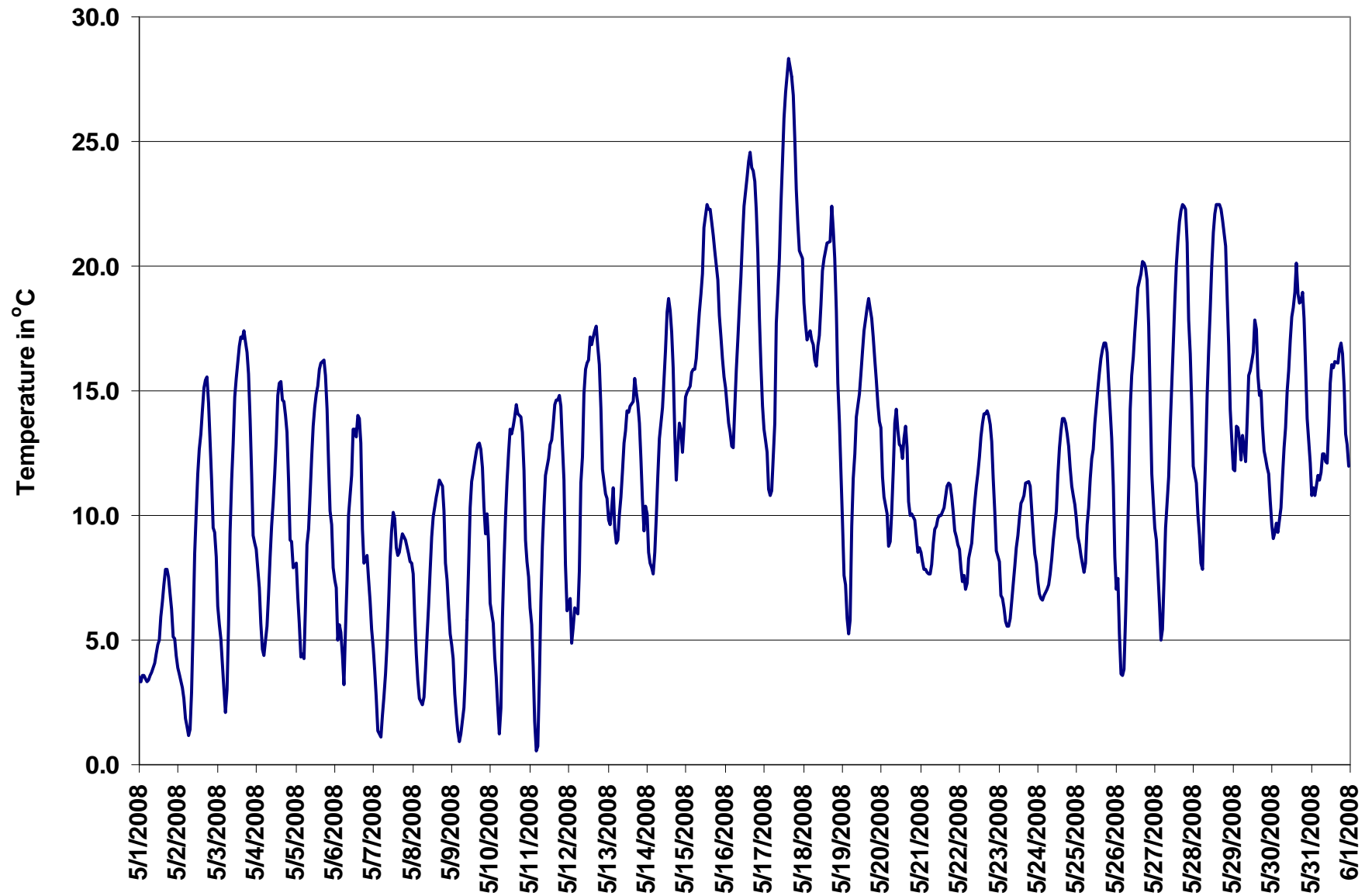


Figure 57. PASZA - Portable-Spirit River Temperature 1-hr Average Monthly Trend

# PASZA - Portable-Spirit River Scalar Wind Speed Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

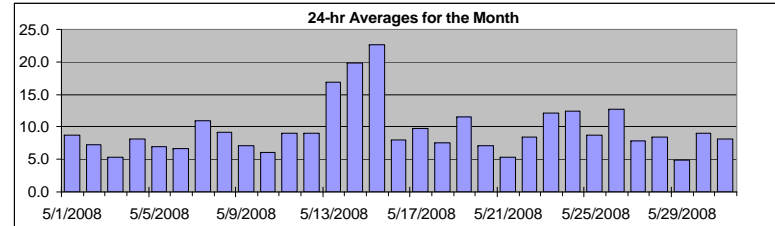
## Wind Speed (WSs)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	31.4	km/hr	15-May	17:00 18:00
Maximum 24-hr Value:	22.7	km/hr	15-May	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageS
	28.5	22.6	12.3	8.2	5.2	2.2	1.5	9.5 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-May-08	6	4	2	6	7	9	8	6	7	12	10	13	11	11	11	10	6	9	14	14	12	9	9	5	8.8	14.1
2-May-08	4	7	7	5	7	3	2	2	3	2	4	7	9	13	12	15	11	16	14	10	8	4	5	6	7.3	16.3
3-May-08	3	4	2	1	3	6	3	3	2	2	3	6	10	6	5	9	7	9	7	5	5	5	10	12	5.4	12.2
4-May-08	12	13	8	6	6	6	5	4	5	5	5	7	7	8	9	11	11	12	7	7	6	11	12	9	8.1	12.7
5-May-08	8	8	3	5	5	7	3	5	8	8	8	8	9	10	11	8	10	7	14	9	6	3	3	3	6.9	13.8
6-May-08	5	6	3	3	5	3	4	2	4	5	5	6	10	12	6	6	6	18	20	14	5	3	3	4	6.6	20.4
7-May-08	4	4	5	5	3	2	3	2	7	7	10	13	18	24	23	22	23	18	15	14	11	8	6	14	10.9	23.5
8-May-08	20	16	7	8	9	7	11	10	9	9	12	13	10	8	8	9	9	9	6	9	6	6	4	3	9.2	19.8
9-May-08	2	3	3	2	2	1	1	6	6	5	7	9	11	10	12	10	14	13	14	11	6	7	8	7	7.1	14.5
10-May-08	6	3	3	4	6	5	4	2	3	5	10	9	9	9	10	5	5	8	9	8	6	8	8	3	6.1	10.3
11-May-08	2	2	6	7	5	5	3	4	6	11	16	19	17	15	19	14	10	11	11	7	3	6	9	9	9.0	19.0
12-May-08	7	8	6	7	7	3	4	6	14	12	10	8	7	9	18	13	13	8	9	7	9	11	12	10	9.1	18.0
13-May-08	7	7	11	18	17	8	8	21	17	14	21	26	17	15	15	16	22	21	20	17	16	19	25	29	16.8	28.5
14-May-08	31	29	28	26	22	26	30	27	23	17	9	9	9	9	9	15	15	20	18	21	30	23	16	15	19.8	30.9
15-May-08	18	16	21	28	30	24	23	24	24	24	22	23	23	24	27	23	29	31	28	27	20	14	11	10	22.7	31.4
16-May-08	10	9	6	6	6	5	5	8	8	7	9	8	8	9	9	11	9	9	7	7	7	10	8	9	8.0	10.6
17-May-08	13	14	9	6	5	3	3	2	9	16	15	15	14	12	8	7	5	4	4	15	13	16	18	10	9.7	17.7
18-May-08	5	6	9	7	7	6	6	7	6	6	6	6	8	9	9	12	12	9	12	11	8	5	5	4	7.5	12.3
19-May-08	5	6	6	5	6	6	2	5	4	9	15	16	15	15	15	19	22	21	19	14	16	18	11	7	11.6	21.7
20-May-08	7	4	5	4	5	3	2	2	6	20	26	10	25	5	9	11	4	5	6	2	2	2	2	2	7.1	25.8
21-May-08	3	4	4	4	4	5	5	7	13	10	5	6	5	5	5	5	6	6	5	3	4	7	5	4	5.4	12.9
22-May-08	3	2	4	4	2	2	3	7	20	6	8	19	15	7	9	12	14	14	15	13	10	6	6	3	8.5	20.0
23-May-08	6	4	2	4	6	6	8	7	8	8	11	12	11	17	19	21	19	21	19	18	19	17	13	13	12.1	21.3
24-May-08	11	12	12	12	13	11	12	10	10	12	13	11	11	15	12	19	18	19	15	12	11	8	9	8	12.4	19.4
25-May-08	7	7	8	4	3	2	4	8	10	11	11	17	14	12	12	12	12	13	12	12	8	4	3	4	8.8	16.7
26-May-08	3	5	4	2	4	4	2	6	9	16	22	17	18	18	20	21	21	23	24	21	16	11	10	8	12.7	23.6
27-May-08	7	8	6	4	4	2	5	8	8	8	9	9	11	10	10	10	9	11	13	12	9	5	4	9	7.9	12.6
28-May-08	4	7	9	9	3	3	4	7	7	7	9	10	9	11	9	10	18	14	16	13	8	5	6	6	8.5	17.6
29-May-08	4	3	5	3	3	2	2	4	8	8	5	9	9	8	6	5	6	6	5	4	4	4	3	2	4.9	9.1
30-May-08	2	2	2	2	1	1	2	3	4	3	4	5	11	12	14	20	26	24	19	19	13	14	8	3	9.0	25.8
31-May-08	6	2	2	10	9	14	7	7	10	6	10	8	9	8	10	11	6	8	9	9	9	7	5	13	8.2	13.9
1-hr Average	7.5	7.2	6.7	7.0	7.0	6.2	5.9	7.2	8.9	9.5	10.6	11.5	12.0	11.5	12.0	12.7	12.8	13.6	13.1	11.8	9.9	8.9	8.2	7.9		
Hourly Max	30.9	29.1	27.7	28.4	30.0	26.0	29.7	27.2	23.9	24.3	25.8	25.6	24.9	24.1	26.8	22.7	28.7	31.4	27.6	27.2	30.2	22.9	24.9	28.5		

## PASZA - Portable-Spirit River Vector Wind Speed Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

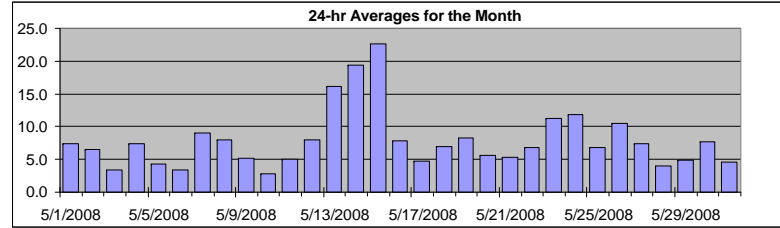
### HOURLY AVERAGE TABLE

### Wind Speed (WSv)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Average:	31.3	km/hr	15-May	17:00 18:00
Maximum 24-hr Value:	22.6	km/hr	15-May	



Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	28.4	22.1	11.8	7.6	4.6	1.6	0.8	2.8 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-May-08	6	4	1	6	7	9	8	6	7	12	10	12	11	11	10	9	5	9	14	14	12	9	9	4	7.5	14.1
2-May-08	3	6	7	5	6	2	1	1	3	1	3	6	8	12	12	14	10	16	14	10	8	4	5	6	6.5	15.8
3-May-08	3	3	1	0	3	6	3	2	1	1	2	4	10	3	3	8	7	9	7	5	5	5	10	12	3.4	12.2
4-May-08	12	13	8	6	6	6	5	4	5	5	5	7	6	7	9	11	11	11	7	7	6	11	12	9	7.5	12.7
5-May-08	8	8	3	5	5	7	3	5	7	8	7	7	7	9	9	7	8	6	13	9	5	3	2	2	4.2	13.3
6-May-08	5	5	2	3	4	3	4	2	3	3	5	5	10	11	2	3	2	18	20	14	2	1	3	2	3.3	20.2
7-May-08	4	3	5	5	3	2	2	2	6	6	10	13	18	23	23	21	23	18	15	13	11	8	5	14	9.0	23.2
8-May-08	20	16	7	8	8	6	11	10	9	9	11	12	9	6	6	6	7	9	6	9	6	6	4	1	8.0	19.7
9-May-08	2	3	2	2	1	1	1	6	5	5	6	8	10	9	11	8	13	12	13	11	6	7	1	7	5.2	13.2
10-May-08	3	2	2	4	6	5	3	1	2	5	9	8	6	8	8	4	3	7	8	4	5	7	7	2	2.8	9.0
11-May-08	1	2	6	7	5	5	3	4	6	11	15	18	16	14	14	13	8	10	10	7	1	6	9	9	5.0	18.1
12-May-08	7	8	6	7	7	2	3	6	13	11	9	7	5	8	17	13	9	6	9	7	9	11	12	10	7.9	17.0
13-May-08	7	7	11	17	17	8	8	21	17	14	20	25	17	14	15	15	21	20	20	17	15	19	25	28	16.2	28.5
14-May-08	31	29	28	26	22	26	30	27	22	16	8	8	9	9	8	15	15	20	18	21	30	23	15	15	19.3	30.8
15-May-08	18	16	21	28	30	24	23	23	24	24	22	22	23	24	27	22	28	31	28	27	20	14	11	10	22.6	31.3
16-May-08	10	9	6	6	6	5	5	8	8	7	8	8	8	9	9	10	9	9	7	7	7	9	8	9	7.8	10.3
17-May-08	13	14	9	1	5	3	3	1	8	16	14	15	13	12	6	6	4	4	4	15	13	16	18	10	4.8	17.6
18-May-08	5	6	9	7	7	6	6	7	6	5	5	6	7	8	9	11	11	9	12	11	8	4	5	3	6.9	12.2
19-May-08	5	6	5	5	5	6	2	4	3	8	14	15	14	14	15	18	21	21	18	14	16	18	11	5	8.3	21.3
20-May-08	4	3	4	4	5	3	1	2	5	18	23	8	23	5	9	11	3	5	5	2	2	2	1	2	5.6	23.1
21-May-08	2	4	4	4	4	4	4	6	12	9	5	6	5	5	5	5	6	6	5	3	3	6	4	4	5.3	11.5
22-May-08	2	2	3	3	2	1	2	7	17	5	7	18	14	6	8	11	13	14	14	13	10	6	6	2	6.8	17.8
23-May-08	6	4	2	4	6	6	8	7	8	8	11	12	11	16	19	20	19	21	19	17	19	17	13	13	11.2	21.1
24-May-08	11	12	12	12	13	11	12	10	10	12	13	11	10	14	12	18	18	19	15	12	11	8	9	8	11.8	19.1
25-May-08	7	7	8	3	3	2	4	8	9	10	10	16	13	10	11	10	10	13	12	12	8	3	2	4	6.8	16.2
26-May-08	2	5	4	1	4	4	2	5	8	15	21	17	17	17	19	19	21	22	23	21	16	11	9	8	10.5	23.2
27-May-08	7	8	6	4	3	1	4	8	7	7	8	8	10	8	8	9	8	10	12	12	9	5	4	8	7.5	12.3
28-May-08	4	7	9	8	3	3	4	7	7	6	8	8	7	8	6	10	16	14	15	13	8	5	6	6	4.0	16.3
29-May-08	4	3	5	2	2	2	1	3	8	8	4	9	9	8	5	4	5	6	5	4	3	3	2	2	4.9	8.8
30-May-08	2	1	1	1	1	1	2	3	3	2	1	2	9	11	14	19	26	24	19	19	14	13	8	2	7.7	25.6
31-May-08	6	2	2	10	9	14	7	6	10	6	10	8	8	5	9	10	6	7	7	9	9	7	4	12	4.5	13.8
1-hr Vector	2.7	3.3	3.6	4.0	4.2	3.7	3.1	2.7	2.7	1.9	2.0	2.2	1.8	1.6	1.9	2.1	1.3	0.3	0.5	0.5	0.7	2.4	3.3	2.3		
Hourly Max	30.8	29.0	27.7	28.4	29.9	25.9	29.7	27.0	23.8	24.1	23.0	24.7	23.1	23.9	26.6	22.4	28.4	31.3	27.5	27.1	30.2	22.7	24.9	28.5		



## PASZA - Portable-Spirit River Wind Direction Monthly Summary

Station: Portable-Spirit River  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 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
	355.3	334.0	277.3	245.1	95.3	23.4	6.3	292 deg

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	WD Sector
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	118	97	35	46	67	81	90	54	52	88	107	135	134	145	157	178	151	117	107	100	104	112	126	104	110	ESE
2-May-08	89	97	62	106	127	46	69	59	77	63	66	54	72	71	106	112	121	131	114	99	105	137	154	140	102	ESE
3-May-08	127	91	50	242	276	279	281	348	74	60	60	343	359	332	290	246	262	260	259	267	290	279	255	256	283	WNW
4-May-08	259	261	269	274	275	275	271	279	304	301	297	272	296	287	293	310	319	313	281	279	265	240	244	253	279	W
5-May-08	263	259	281	270	269	262	280	300	334	346	354	4	9	349	342	338	340	343	35	44	88	147	145	234	338	NNW
6-May-08	287	293	299	258	240	259	315	256	171	82	66	114	244	248	277	137	356	238	241	240	76	166	237	77	245	WSW
7-May-08	154	275	282	286	270	285	324	41	78	47	30	39	54	47	57	53	48	39	29	48	48	355	20	24	39	NE
8-May-08	49	47	42	25	20	24	21	44	62	50	48	65	86	73	79	71	86	78	75	109	110	145	146	106	62	ENE
9-May-08	285	346	358	265	345	318	308	103	88	88	96	111	128	124	115	101	105	93	73	78	100	154	232	70	100	E
10-May-08	105	192	265	262	266	275	285	242	121	25	53	91	121	23	36	351	58	107	88	84	160	110	115	95	81	E
11-May-08	131	248	279	262	270	265	282	354	18	32	18	26	36	37	22	41	38	32	31	55	144	209	223	234	18	NNE
12-May-08	254	243	261	261	264	341	279	282	292	284	269	280	269	234	210	207	242	206	207	229	219	230	238	238	245	WSW
13-May-08	235	228	238	250	238	240	218	245	256	260	266	275	277	281	282	285	269	269	275	275	276	260	248	246	261	W
14-May-08	250	251	255	259	269	258	256	262	270	291	285	281	285	284	279	259	261	255	243	240	246	241	246	256	258	WSW
15-May-08	260	253	251	243	245	252	254	253	255	256	260	260	260	259	257	259	256	255	257	256	257	263	266	266	256	WSW
16-May-08	271	272	276	280	280	278	283	286	288	290	274	280	281	294	291	276	278	272	273	265	262	252	255	257	275	W
17-May-08	250	248	255	17	146	145	209	82	115	138	155	138	149	158	143	324	312	291	283	249	253	245	244	257	210	SSW
18-May-08	259	258	250	263	266	271	281	302	297	279	294	291	284	288	305	318	323	306	314	312	311	330	259	243	292	WNW
19-May-08	283	266	277	288	301	246	279	32	78	83	76	79	110	105	86	86	81	84	108	92	77	73	96	96	85	E
20-May-08	134	289	333	234	247	257	293	255	250	266	265	285	324	326	335	333	291	269	267	283	289	292	278	273	287	WNW
21-May-08	272	270	274	285	277	275	277	276	275	274	280	283	286	289	292	294	296	300	297	280	273	268	277	297	282	WNW
22-May-08	277	261	278	300	259	270	283	309	297	297	324	331	346	352	357	357	12	26	26	23	37	27	23	348	347	NNW
23-May-08	343	319	310	314	312	310	319	317	320	329	338	345	356	354	2	359	0	1	6	15	14	31	24	23	356	N
24-May-08	7	360	2	1	8	11	11	11	22	18	14	17	30	64	62	29	36	34	49	44	40	27	25	20	25	NNE
25-May-08	14	18	12	339	283	319	49	99	105	74	84	79	89	87	78	77	81	94	92	98	112	148	222	250	79	E
26-May-08	299	301	333	247	285	295	355	85	103	122	140	134	119	122	124	114	128	127	131	131	146	152	128	97	127	SE
27-May-08	89	89	120	123	7	99	76	125	104	110	108	99	98	107	134	115	118	115	111	122	124	131	135	129	111	ESE
28-May-08	91	77	86	92	94	140	114	106	88	70	91	109	119	97	67	245	194	188	195	211	223	254	260	256	146	SE
29-May-08	259	262	259	265	258	206	275	271	258	255	272	262	263	265	276	278	266	265	265	270	266	270	265	261	264	W
30-May-08	263	267	283	259	253	273	276	315	326	278	304	249	190	194	215	214	223	203	212	235	256	245	235	51	227	SW
31-May-08	226	262	279	335	327	334	341	326	325	315	327	329	336	335	2	32	31	29	64	90	89	94	19	176	356	N
Hourly Avg	264	273	281	277	275	279	288	294	304	328	348	8	18	30	22	359	342	299	93	177	215	232	238	248		

## 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: May 1, 2008 to June 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:	90.0%			
Percentile	99	95	75	50	25	5	1
	81.5	62.2	33.1	18.1	9.1	4.3	2.9

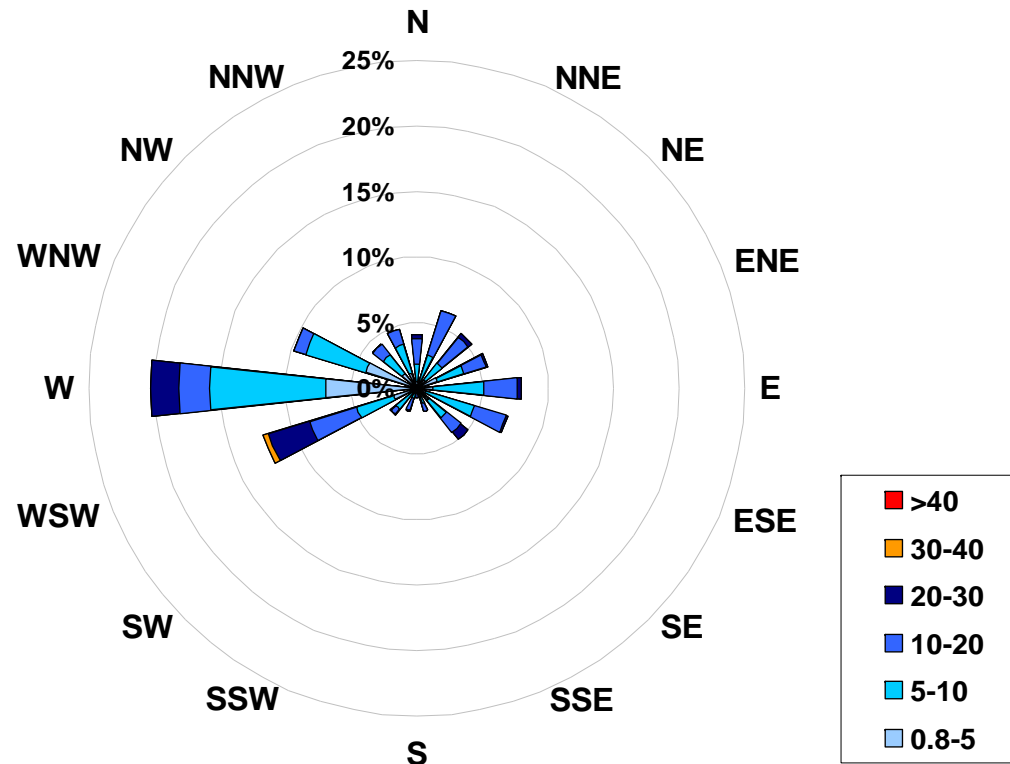
**Status Flag Characters**

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**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	20	17	42	9	10	7	12	12	16	20	13	17	13	15	11	22	32	17	6	3	10	8	11	18	41.7	
2-May-08	51	21	8	25	9	43	55	63	32	62	46	26	26	15	16	19	25	15	11	11	11	9	9	13	63.3	
3-May-08	31	29	84	94	16	10	9	51	78	63	57	65	25	71	76	34	19	13	15	12	8	6	5	3	94.5	
4-May-08	4	3	7	5	7	6	8	14	17	22	34	28	35	23	20	17	11	24	10	9	13	3	2	6	35.3	
5-May-08	4	4	14	6	7	4	9	17	21	17	26	39	59	48	52	44	37	56	16	8	18	23	49	41	59.3	
6-May-08	12	30	53	29	31	78	15	49	41	73	29	55	28	14	79	70	73	9	8	16	80	84	29	58	84.1	
7-May-08	12	56	14	9	15	32	31	54	28	20	18	17	12	12	9	10	7	8	9	7	15	28	23	6	55.8	
8-May-08	6	4	45	9	28	20	9	18	18	23	18	24	35	68	59	54	47	20	58	9	17	7	9	62	67.6	
9-May-08	12	21	58	45	72	29	57	12	22	22	22	35	36	25	21	37	31	14	15	9	13	27	92	9	91.5	
10-May-08	61	53	52	20	10	21	28	84	47	58	30	36	57	39	36	39	65	48	23	75	36	17	30	25	84.3	
11-May-08	71	64	8	9	8	9	9	29	39	16	23	19	27	22	48	30	41	26	28	15	60	9	10	18	71.0	
12-May-08	14	21	13	3	5	44	13	11	14	24	28	31	54	52	22	19	53	53	20	8	6	3	2	5	54.4	
13-May-08	8	7	7	7	4	7	12	9	9	11	13	15	15	15	15	15	15	12	13	9	12	6	3	3	15.4	
14-May-08	5	4	3	4	8	5	4	9	14	18	14	18	17	17	19	9	11	7	7	4	3	8	8	6	19.0	
15-May-08	3	6	5	4	3	4	3	4	5	6	6	7	8	8	8	8	8	5	6	4	4	5	7	8	8.5	
16-May-08	9	11	15	13	10	7	19	13	14	15	15	20	21	14	18	13	14	19	12	8	8	11	7	2	21.3	
17-May-08	4	3	6	85	19	32	30	71	20	12	14	14	22	24	61	41	32	34	27	9	5	3	6	4	84.9	
18-May-08	21	7	7	7	9	12	20	14	18	25	24	24	29	23	20	23	25	21	9	7	6	25	23	32	32.5	
19-May-08	11	14	12	15	27	19	34	31	45	37	19	20	19	22	17	16	11	9	16	14	4	4	11	39	44.9	
20-May-08	67	41	41	54	17	25	42	47	21	33	33	45	28	24	9	11	41	13	22	60	50	54	59	48	67.4	
21-May-08	48	31	35	33	29	31	32	34	36	28	34	20	25	24	25	20	25	16	20	37	33	36	33	28	47.9	
22-May-08	47	42	59	41	59	40	42	34	35	37	31	28	36	49	45	29	19	15	17	10	8	9	10	51	59.0	
23-May-08	17	8	25	18	8	14	7	9	10	10	11	12	10	13	8	8	9	8	7	5	6	6	9	6	24.8	
24-May-08	7	8	5	4	4	4	4	8	6	7	9	13	18	14	18	12	10	11	10	7	6	4	4	3	18.0	
25-May-08	3	4	6	46	21	31	40	17	17	22	27	14	25	34	31	38	39	20	22	12	8	24	39	9	46.4	
26-May-08	50	13	51	69	13	11	37	27	18	17	16	19	23	20	21	22	11	13	11	6	6	3	20	11	69.3	
27-May-08	5	12	8	44	40	47	26	15	19	34	29	31	34	37	49	43	43	32	16	13	4	14	7	9	48.5	
28-May-08	26	6	9	12	38	19	26	15	29	29	25	34	39	43	61	30	31	14	12	7	5	32	8	11	61.5	
29-May-08	20	27	25	72	65	66	51	39	7	16	36	17	25	23	37	40	30	28	38	36	31	33	36	39	72.2	
30-May-08	32	63	60	60	57	63	46	41	50	81	89	73	42	25	14	16	8	7	10	13	5	7	7	82	89.2	
31-May-08	29	45	35	20	4	4	29	36	9	13	8	20	34	71	25	29	27	26	39	11	8	10	60	17	70.8	
Hourly Max	71	64	84	94	72	78	57	84	78	81	89	73	59	71	79	70	73	56	58	75	80	84	92	82		

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



**Calms: 0%**

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	< 5		174
5	to 10		300
10	to 20		210
20	to 30		57
30	to 40		3
	> 40		0
Total Non-Zero Values			744

**PASZA**  
**Valleyview Station**  
**Monthly Summary Tables, Graphs and**  
**Roses**

# PASZA - Valleyview Sulphur Dioxide Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

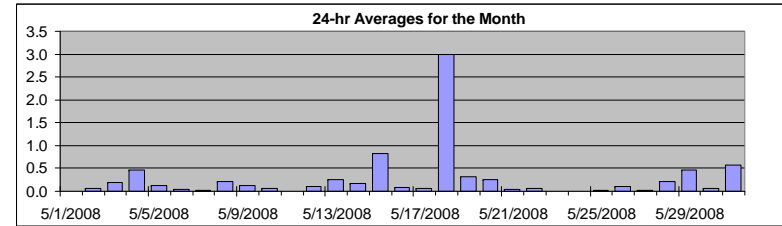
## Sulphur Dioxide (SO<sub>2</sub>)

Monitoring Dates: May 1, 2008 to June 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:	14.9 ppb	18-May	5:00	6:00
Maximum 24-hr Average:	3.0 ppb	18-May		



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	1.1	0.2	0.0	0.0	0.0	0.0	0.3 ppb	0.0 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start 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-May-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	0.0
2-May-08	A	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
3-May-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	0.2	0.5
4-May-08	A	4	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.7
5-May-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	0.1	0.4
6-May-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	0.4
7-May-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	0.1
8-May-08	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
9-May-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	0.1	0.4
10-May-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	0.1	0.3
11-May-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	0.0
12-May-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	0.1	0.3
13-May-08	A	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0.2	1.5
14-May-08	A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.2	0.9
15-May-08	A	0	2	2	1	1	0	2	2	2	1	1	1	1	0	0	0	1	0	1	0	0	0	0	0	0.8	2.3
16-May-08	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
17-May-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	0.1	0.3
18-May-08	A	4	6	8	10	15	8	6	0	0	0	0	0	1	0	0	0	1	1	0	2	4	1	0	0	3.0	14.9
19-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0.3	0.6
20-May-08	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
21-May-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	0.4
22-May-08	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
23-May-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	0.0
24-May-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	0.0
25-May-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	0.1
26-May-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	0.1	0.3
27-May-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	0.1
28-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0.2	2.6
29-May-08	A	0	0	0	0	0	0	0	0	2	4	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	3.6
30-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1	0.7
31-May-08	A	0	0	2	1	0	2	2	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.6	2.1
Hourly Avg	N	0.4	0.3	0.5	0.5	0.6	0.5	0.4	0.2	0.3	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1			
Hourly Max	0.0	4.4	5.8	8.3	10.3	14.9	8.1	6.4	1.7	1.7	3.6	2.0	1.2	1.2	1.3	0.4	0.3	1.3	2.6	0.7	2.0	3.6	1.5	0.5			

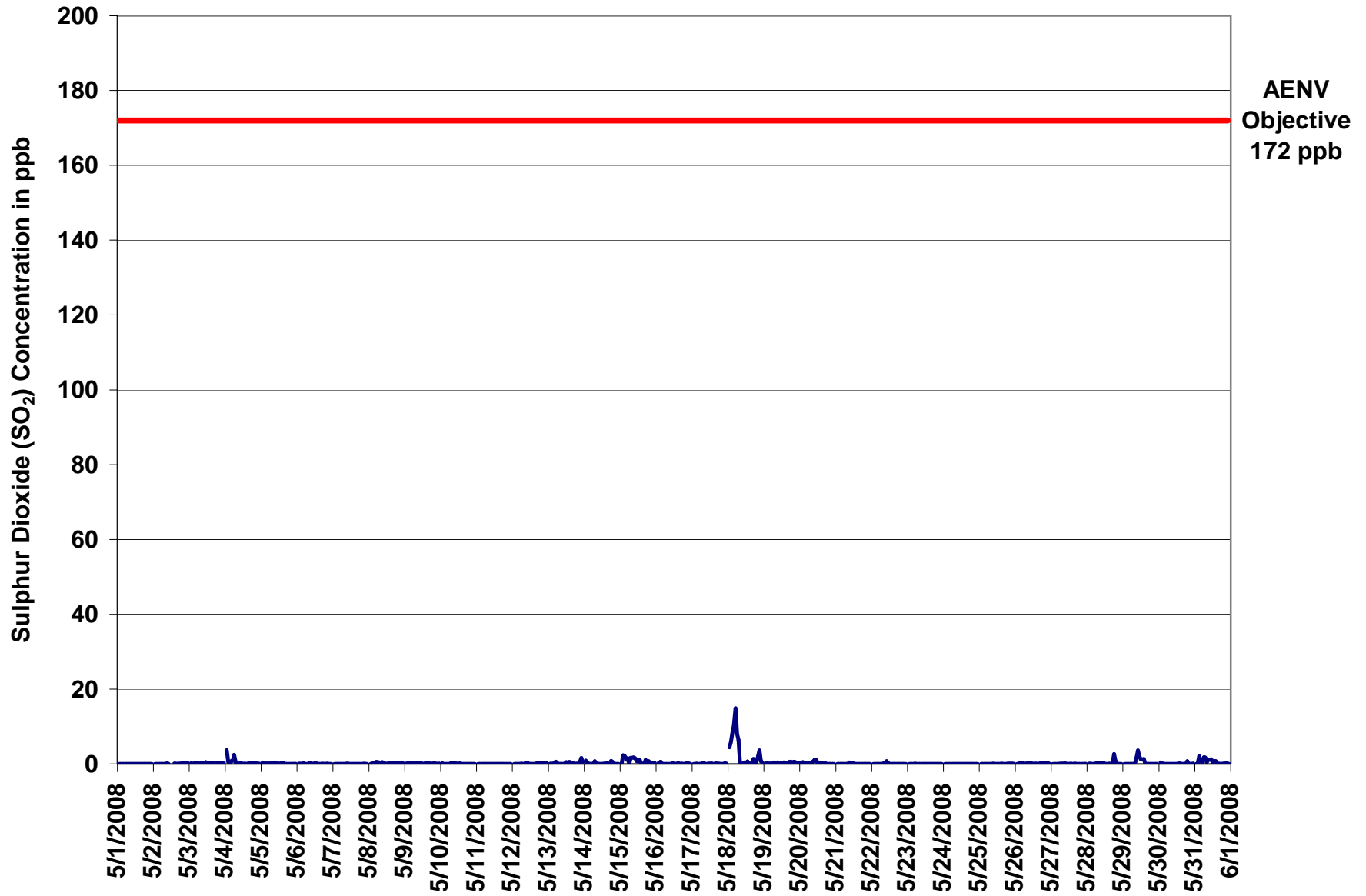


Figure 58. PASZA - Valleyview Sulphur Dioxide 1-hr Average Monthly Trend

Station: Valleyview  
 Station Owner: PASZA

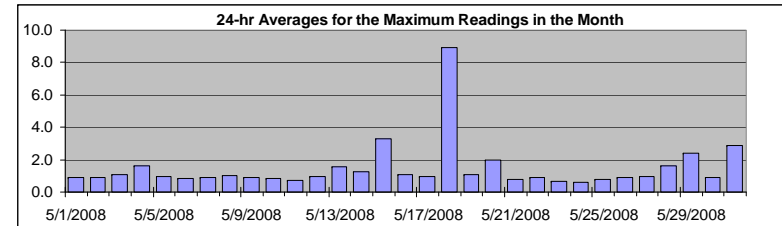
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	30.8	ppb	18-May	5:00 6:00
Maximum 24-hr Value:	8.9	ppb	18-May	



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
	13.8	4.2	1.0	1.0	0.9	0.3	0.0	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-May-08	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
2-May-08	A	1	1	0	1	1	1	0	1	1	1	C	C	A	1	1	1	1	1	1	1	1	1	1	0.9	1.4
3-May-08	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8
4-May-08	A	6	2	1	2	2	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	6.1
5-May-08	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7
6-May-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	1.2
7-May-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	0.9	1.0
8-May-08	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.9
9-May-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	0.9	0.9
10-May-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	0.9	0.9
11-May-08	A	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
12-May-08	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.2
13-May-08	A	1	1	1	3	2	1	1	1	1	1	2	2	1	2	2	1	1	1	1	1	2	4	4	1.5	3.9
14-May-08	A	2	1	1	1	1	2	2	2	1	1	1	1	1	1	2	1	1	3	2	1	1	1	1	1.3	2.7
15-May-08	A	1	10	11	3	4	1	4	5	5	4	4	2	4	3	1	2	3	2	4	1	1	1	1	3.3	11.4
16-May-08	A	1	2	1	1	1	1	1	1	1	0	2	2	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0
17-May-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	1.0	1.0
18-May-08	A	14	13	21	19	31	16	19	3	1	1	1	2	10	1	1	4	10	7	1	12	16	2	1	8.9	30.8
19-May-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	1.1	1.2
20-May-08	A	1	1	1	1	1	1	1	1	2	14	9	1	1	1	1	1	1	1	0	1	0	1	1	2.0	14.4
21-May-08	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	0.8	1.0
22-May-08	A	0	1	1	0	1	1	1	1	1	2	1	1	1	1	0	1	1	1	0	1	1	1	1	0.9	2.0
23-May-08	A	1	1	1	1	1	1	1	0	0	1	1	0	0	0	1	1	0	0	1	1	1	1	1	0.7	1.0
24-May-08	A	1	1	0	1	1	1	1	0	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0.6	1.0
25-May-08	A	1	1	0	0	0	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0.8	1.0
26-May-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	0.9	1.0
27-May-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	1.0	1.1
28-May-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	6	1	1	1	0	1.6	11.0
29-May-08	A	0	0	1	1	1	1	1	0	8	10	7	5	7	9	1	1	1	0	0	1	0	1	1	2.4	9.9
30-May-08	A	2	1	0	1	0	0	0	1	1	0	0	1	1	2	1	0	0	0	5	0	1	0	1	0.9	4.6
31-May-08	A	0	1	4	1	1	3	4	1	10	7	10	3	4	5	0	0	1	1	1	0	0	1	1	2.8	10.3
Hourly Avg	N	1.5	1.7	1.9	1.6	2.0	1.6	1.7	1.1	1.7	2.0	1.8	1.2	1.6	1.4	1.0	1.0	1.2	1.5	1.3	1.2	1.4	1.0	1.0		
Hourly Max	0.0	13.9	12.9	20.9	18.9	30.8	15.9	18.7	4.5	10.3	14.4	10.0	4.7	10.1	9.0	1.9	4.0	9.9	11.0	6.0	11.9	16.5	3.9	3.9		

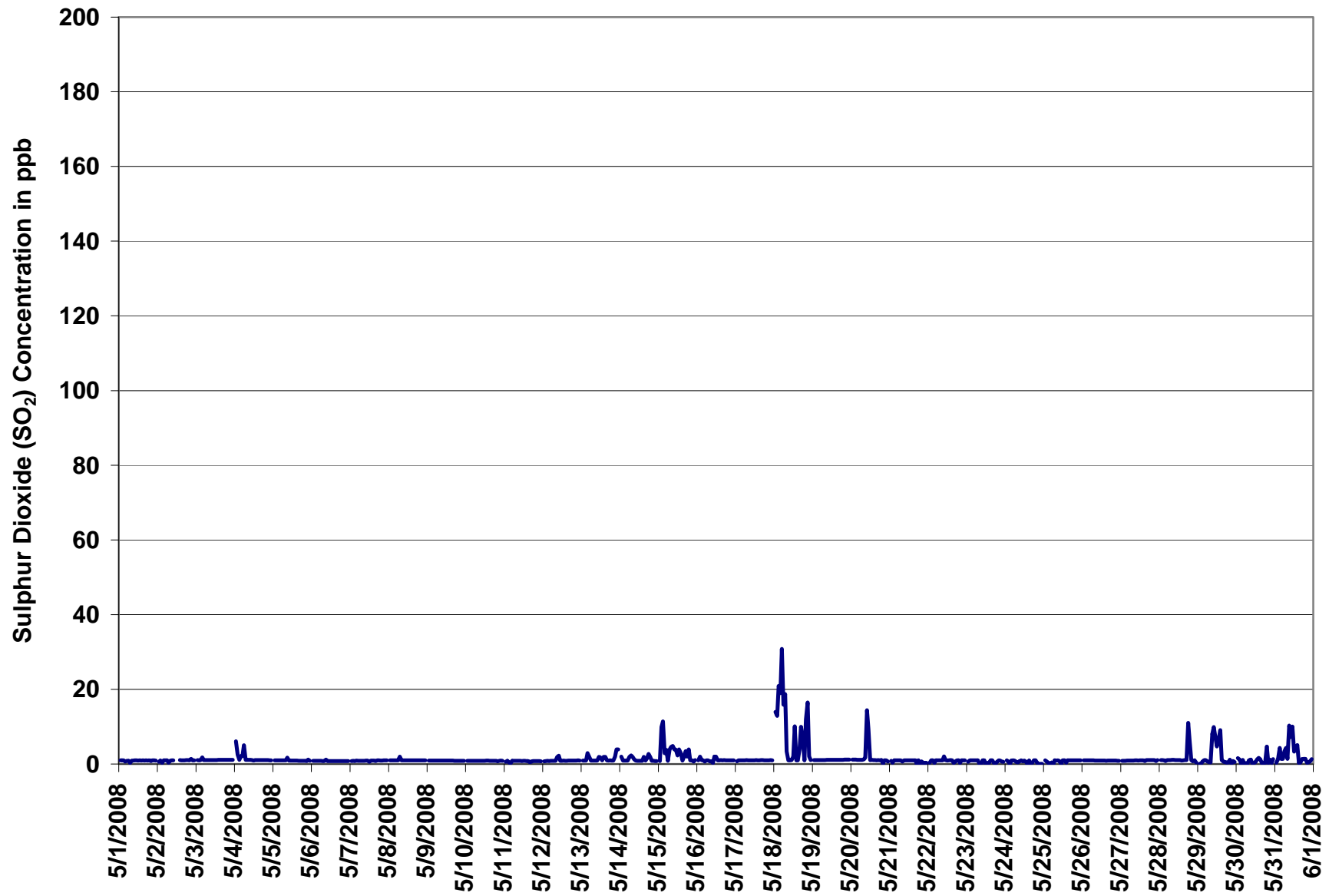
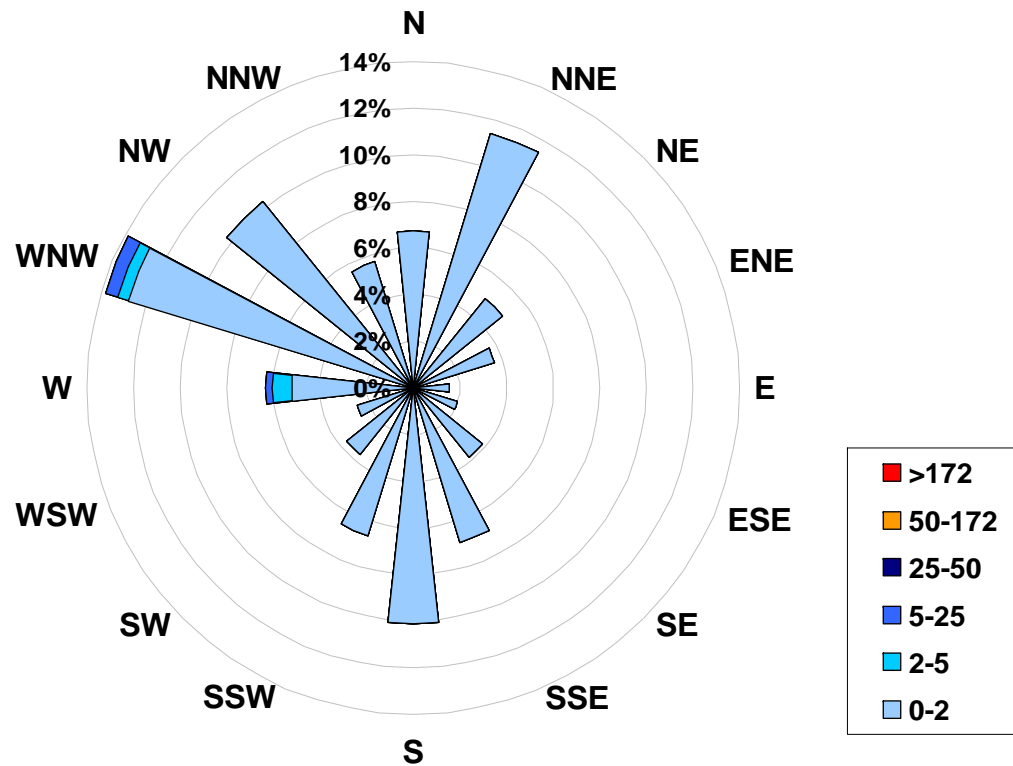


Figure 59. PASZA - Valleyview Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	< 2		695
2	to 5		9
5	to 25		6
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			710

# PASZA - Valleyview Hydrogen Sulphide Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

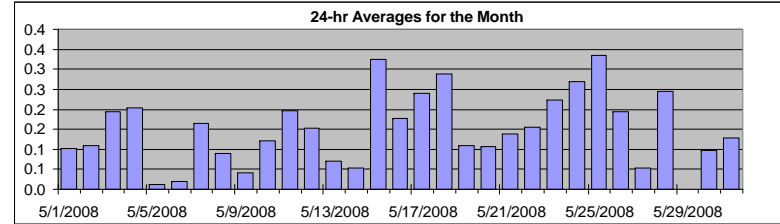
## Hydrogen Sulphide (H<sub>2</sub>S)

Monitoring Dates: May 1, 2008 to June 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:	2.2	ppb	18-May	1:00 2:00
Maximum 24-hr Value:	0.3	ppb	25-May	



AIC Time:	31 hrs	Operational Time:	693 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	97.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.2 ppb	0.1 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start 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-May-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	0.1	0.3
2-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0.1	0.3
3-May-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	0.2	0.4
4-May-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	0.2	0.4
5-May-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	0.1
6-May-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	0.1
7-May-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	0.2	0.3
8-May-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	0.1	0.2
9-May-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	0.2
10-May-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	0.1	0.2
11-May-08	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
12-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	0.6
13-May-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	0.1	0.5
14-May-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	0.1	0.1
15-May-08	A	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0.3	1.8
16-May-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	0.2	1.0
17-May-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	0.2	0.5
18-May-08	A	2	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.2
19-May-08	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
20-May-08	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
21-May-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	0.1	0.9
22-May-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	0.2	0.5
23-May-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	0.2	0.3
24-May-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	0.3	0.4
25-May-08	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
26-May-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	0.2	0.5
27-May-08	A	0	0	0	0	0	0	0	0	0	D	0	0	0	0	0	0	0	0	0	D	D	0	0	0	0.1	0.3
28-May-08	A	0	D	D	0	0	0	0	0	0	0	0	D	0	0	0	0	0	0	0	0	0	0	D	D	0.2	0.4
29-May-08	A	D	D	0	0	0	0	0	D	0	0	0	0	0	0	0	D	D	D	D	D	D	1	0	0	N	0.5
30-May-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	0.1	0.4
31-May-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	0.1	0.4
Hourly Avg	N	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2		
Hourly Max	0.0	2.2	0.6	0.6	1.0	0.6	0.4	0.9	0.4	0.4	0.5	0.5	0.5	0.4	1.8	0.4	0.3	0.3	0.3	0.3	0.6	1.0	0.5	0.4			

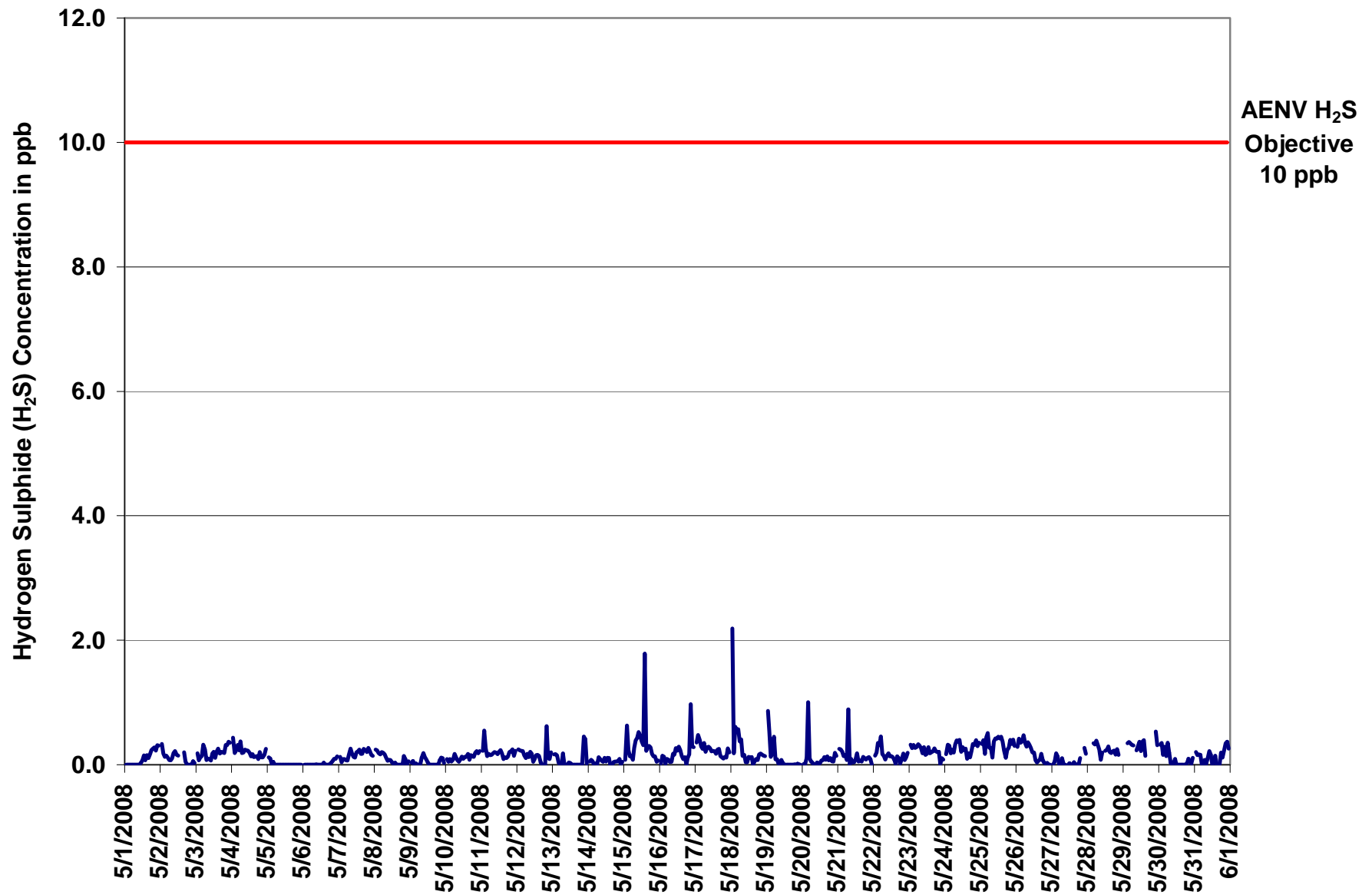


Figure 60. PASZA - Valleyview Hydrogen Sulphide 1-hr Average Monthly Trend

Station: Valleyview  
 Station Owner: PASZA

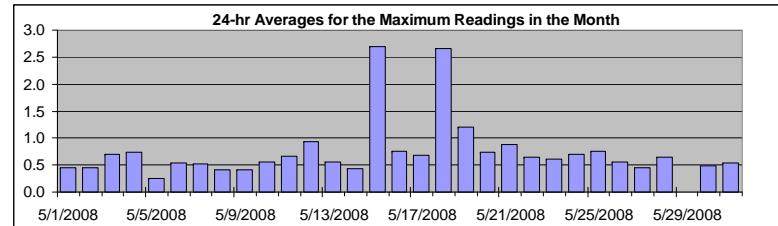
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Hydrogen Sulphide (H<sub>2</sub>S)**

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

Maximum 1-hr Value:	44.6	ppb	18-May	1:00 2:00
Maximum 24-hr Value:	2.7	ppb	15-May	



AIC Time:	31 hrs	Operational Time:	693 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	97.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	5.4	1.3	0.7	0.5	0.4	0.3	0.1	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**

Hour Start Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum	
1-May-08	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	0.5	0.8	
2-May-08	A	1	1	1	0	0	0	1	0	1	0	0	1	C	C	C	0	0	0	0	0	0	0	0	0.4	0.7	
3-May-08	A	1	0	0	1	2	1	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	2	0.7	2.5	
4-May-08	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	0	1	0	1	0	4	0.7	3.7	
5-May-08	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
6-May-08	A	0	4	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0.5	4.1	
7-May-08	A	0	0	0	0	0	0	0	1	0	0	1	1	1	1	0	0	1	1	1	1	1	0	0	0.5	0.8	
8-May-08	A	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
9-May-08	A	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0.4	0.7	
10-May-08	A	0	0	0	0	0	2	1	0	0	0	1	0	1	0	1	1	0	0	0	1	1	1	1	0.6	1.9	
11-May-08	A	1	3	1	0	1	1	1	1	1	1	0	1	1	1	0	1	0	1	0	1	1	0	1	0.7	2.6	
12-May-08	A	1	1	1	1	0	0	1	0	1	1	0	1	1	1	0	0	0	0	0	11	0	0	1	0.9	10.9	
13-May-08	A	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0.6	2.1	
14-May-08	A	0	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
15-May-08	A	0	5	1	1	0	1	1	4	5	3	10	4	1	23	1	1	1	1	0	0	0	0	0	2.7	22.9	
16-May-08	A	0	1	1	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	1	2	5	1	1	0.8	4.9	
17-May-08	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	1	0.7	1.7	
18-May-08	A	45	1	1	1	1	2	1	1	1	0	0	0	1	0	1	1	1	1	1	1	1	1	1	2.7	44.6	
19-May-08	A	12	5	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1.2	11.8	
20-May-08	A	0	0	0	7	0	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	1	0.7	6.5	
21-May-08	A	1	1	1	1	1	0	6	0	0	0	0	1	1	0	0	0	0	1	0	0	1	1	0	0.9	5.7	
22-May-08	A	1	1	1	1	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0.6	1.7	
23-May-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0.6	0.7	
24-May-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0.7	1.5	
25-May-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.7	0.9	
26-May-08	A	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0.6	1.0	
27-May-08	A	0	1	1	0	0	0	0	0	0	D	0	0	0	0	0	1	0	0	0	D	D	1	1	0.4	0.7	
28-May-08	A	1	D	D	1	1	1	1	1	0	1	D	1	1	1	1	1	1	1	0	1	1	D	D	0.7	1.4	
29-May-08	A	D	D	1	1	1	1	1	D	1	1	1	1	1	1	D	D	D	D	D	D	D	1	1	N	1.1	
30-May-08	A	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0.5	1.3
31-May-08	A	1	1	1	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	1	1	1	0.5	0.9	
Hourly Avg	N	2.5	1.2	0.7	0.8	0.7	0.7	0.7	0.6	0.7	0.6	0.8	0.6	0.5	1.3	0.5	0.5	0.5	0.5	0.5	0.9	0.8	0.6	0.7			
Hourly Max	0.0	44.6	5.1	1.4	6.5	2.5	2.1	5.7	3.6	5.3	2.6	9.7	3.8	1.2	22.9	0.9	0.8	0.8	1.5	0.8	10.9	4.9	2.1	3.7			

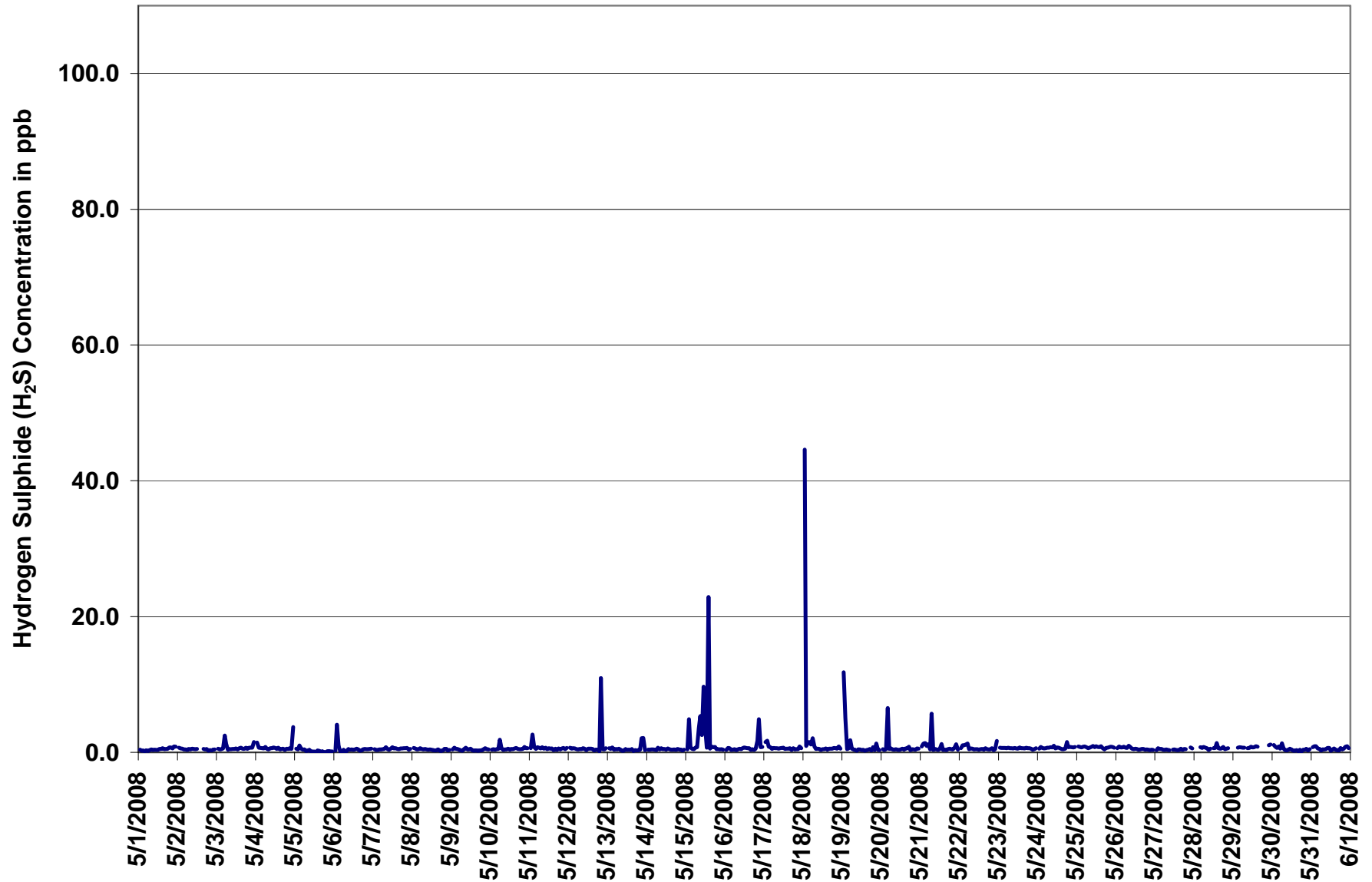
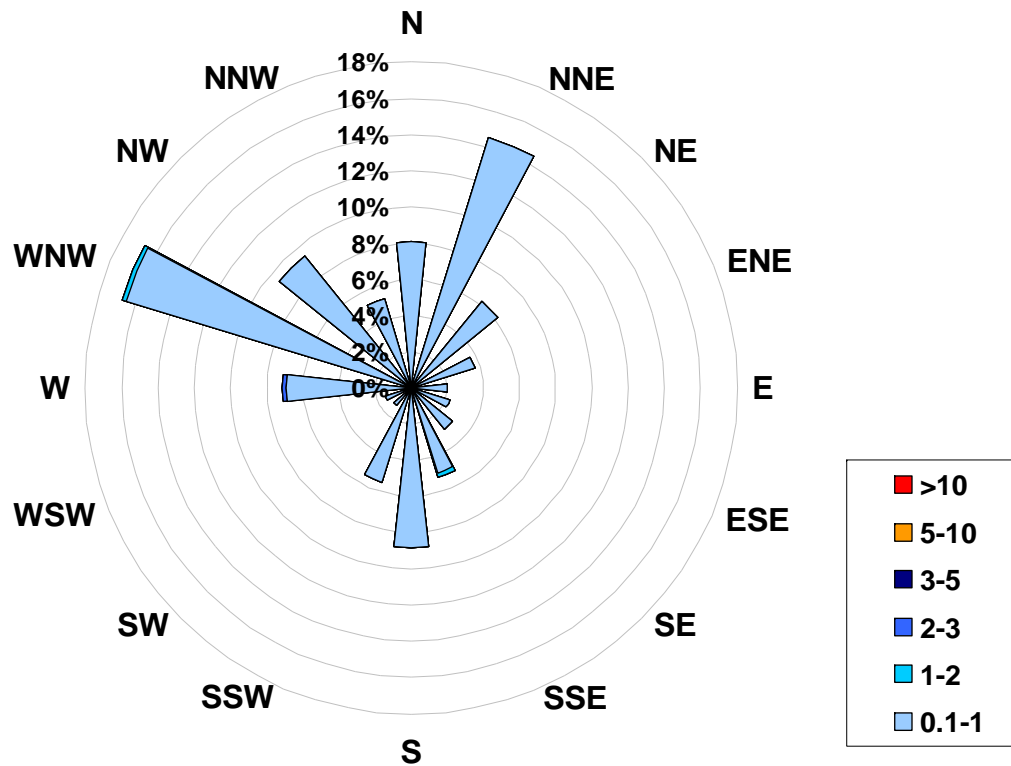


Figure 61. PASZA - Valleyview Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of H <sub>2</sub> S in ppb Range			Frequency (hrs)
0.1	<	1	690
1	to	2	2
2	to	3	1
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			693

# PASZA - Valleyview Relative Humidity Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

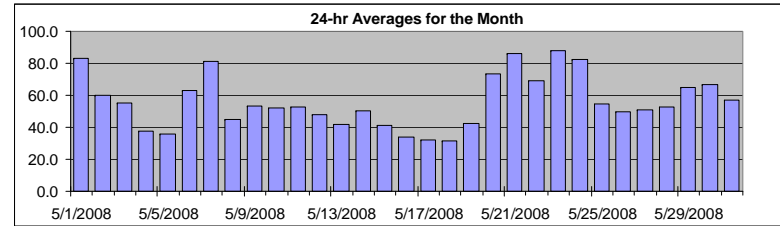
## HOURLY AVERAGE TABLE

## Relative Humidity (RH)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	99.8 %	7-May	9:00 10:00
Maximum 24-hr Value:	87.6 %	23-May	



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
	98.6	92.9	77.7	52.2	35.1	24.6	17.5	55.9 %	52.2 %

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-May-08	97	97	97	98	98	98	98	96	93	89	86	82	74	70	69	66	67	66	66	66	69	74	80	83	79	83.1	98.1
2-May-08	82	84	87	86	87	87	84	80	72	71	62	52	39	34	31	32	34	36	38	43	48	52	59	63	60.1	87.3	
3-May-08	69	76	82	88	90	91	86	74	65	53	52	45	35	32	32	34	31	30	33	40	45	46	46	45	55.0	90.8	
4-May-08	44	45	49	55	50	47	43	47	54	51	45	38	34	28	27	25	24	23	24	27	27	30	32	35	37.7	54.9	
5-May-08	40	45	46	48	52	52	51	43	35	32	29	27	23	21	22	23	24	24	26	29	33	37	44	54	35.8	53.5	
6-May-08	69	78	78	82	85	87	84	69	56	46	35	29	33	35	31	30	48	54	51	54	87	93	95	97	62.8	96.9	
7-May-08	98	98	99	99	99	99	100	100	100	100	86	64	61	59	81	73	64	68	65	63	65	67	69	70	81.2	99.8	
8-May-08	68	58	53	53	52	53	55	56	54	48	38	35	35	34	32	32	31	32	32	35	40	42	46	58	44.7	67.6	
9-May-08	67	84	88	92	91	88	83	76	65	56	45	37	35	33	31	29	29	29	29	30	33	37	46	44	53.3	91.7	
10-May-08	48	52	55	60	64	66	59	51	46	43	40	36	39	49	44	48	44	46	46	50	56	63	71	73	52.1	72.9	
11-May-08	75	80	87	90	93	93	81	69	57	43	38	36	34	28	25	24	25	26	31	34	40	45	52	64	52.9	93.2	
12-May-08	74	80	84	85	84	82	73	56	47	39	37	29	26	26	27	26	24	25	25	27	33	45	45	50	47.8	85.4	
13-May-08	49	55	54	55	51	48	53	48	45	51	47	39	36	33	33	30	28	28	28	30	35	40	43	48	41.9	54.9	
14-May-08	51	54	56	60	64	64	61	50	42	33	29	28	26	25	23	26	31	41	58	73	84	83	76	73	50.5	83.9	
15-May-08	63	61	59	58	55	51	47	43	37	34	32	30	30	29	30	31	31	32	33	36	39	41	44	46	41.3	63.5	
16-May-08	46	47	49	49	50	51	48	44	42	40	37	33	30	25	22	20	18	18	18	21	25	28	29	31	34.2	50.5	
17-May-08	39	46	56	65	57	58	52	45	35	29	24	19	17	15	15	14	15	17	20	21	23	26	26	30	31.8	65.2	
18-May-08	33	34	35	36	37	34	33	33	32	33	37	36	33	29	28	27	28	24	30	29	24	26	28	33	31.5	37.3	
19-May-08	41	56	77	82	87	83	66	53	46	41	37	32	26	19	17	17	19	21	23	25	29	37	38	38	42.2	86.6	
20-May-08	42	56	73	83	87	85	79	73	63	50	56	60	56	56	63	66	70	92	92	91	91	91	91	90	73.1	92.3	
21-May-08	90	89	88	87	86	85	85	85	83	81	78	73	72	79	84	85	86	86	86	88	93	97	97	98	85.9	97.7	
22-May-08	90	84	87	86	87	85	83	78	76	70	63	59	57	55	51	51	52	52	51	52	66	75	72	77	69.3	90.3	
23-May-08	81	85	90	96	97	98	98	97	92	91	94	91	89	85	83	83	78	79	81	82	81	82	84	86	87.6	98.1	
24-May-08	87	87	87	88	89	90	92	90	88	85	82	82	80	80	80	78	78	78	76	76	77	77	79	77	82.6	91.7	
25-May-08	79	82	85	86	87	84	82	72	58	56	51	47	44	40	35	32	31	30	28	29	33	37	47	60	54.8	86.7	
26-May-08	66	73	75	79	79	84	66	54	49	42	41	39	34	30	28	28	28	31	32	34	40	47	53	59	49.6	84.3	
27-May-08	65	72	78	82	86	84	77	70	63	54	46	37	34	32	31	28	27	28	29	31	33	38	43	47	50.7	86.5	
28-May-08	52	60	69	81	78	78	69	57	51	46	42	38	34	29	27	27	35	40	49	53	58	62	61	66	52.5	80.6	
29-May-08	77	86	83	90	95	90	84	73	60	58	55	53	51	48	43	43	43	44	46	48	57	67	73	85	64.9	95.2	
30-May-08	93	95	94	92	93	93	90	81	74	63	56	48	44	39	35	35	36	38	44	60	68	74	74	76	66.5	94.9	
31-May-08	87	85	69	62	65	68	70	70	62	49	43	42	43	46	40	39	40	40	42	46	54	63	72	74	57.1	87.4	
Hourly Avg	66.5	70.5	73.1	75.9	76.6	76.0	72.0	65.7	59.4	54.1	49.7	45.1	42.1	40.2	39.3	38.8	39.3	41.2	43.1	46.0	51.3	55.7	58.7	62.2			
Hourly Max	98.0	98.5	98.7	98.9	99.2	99.4	99.6	99.8	99.8	99.8	93.7	91.5	88.7	85.4	83.6	85.3	85.9	91.9	92.3	90.7	93.2	96.8	97.4	97.7			

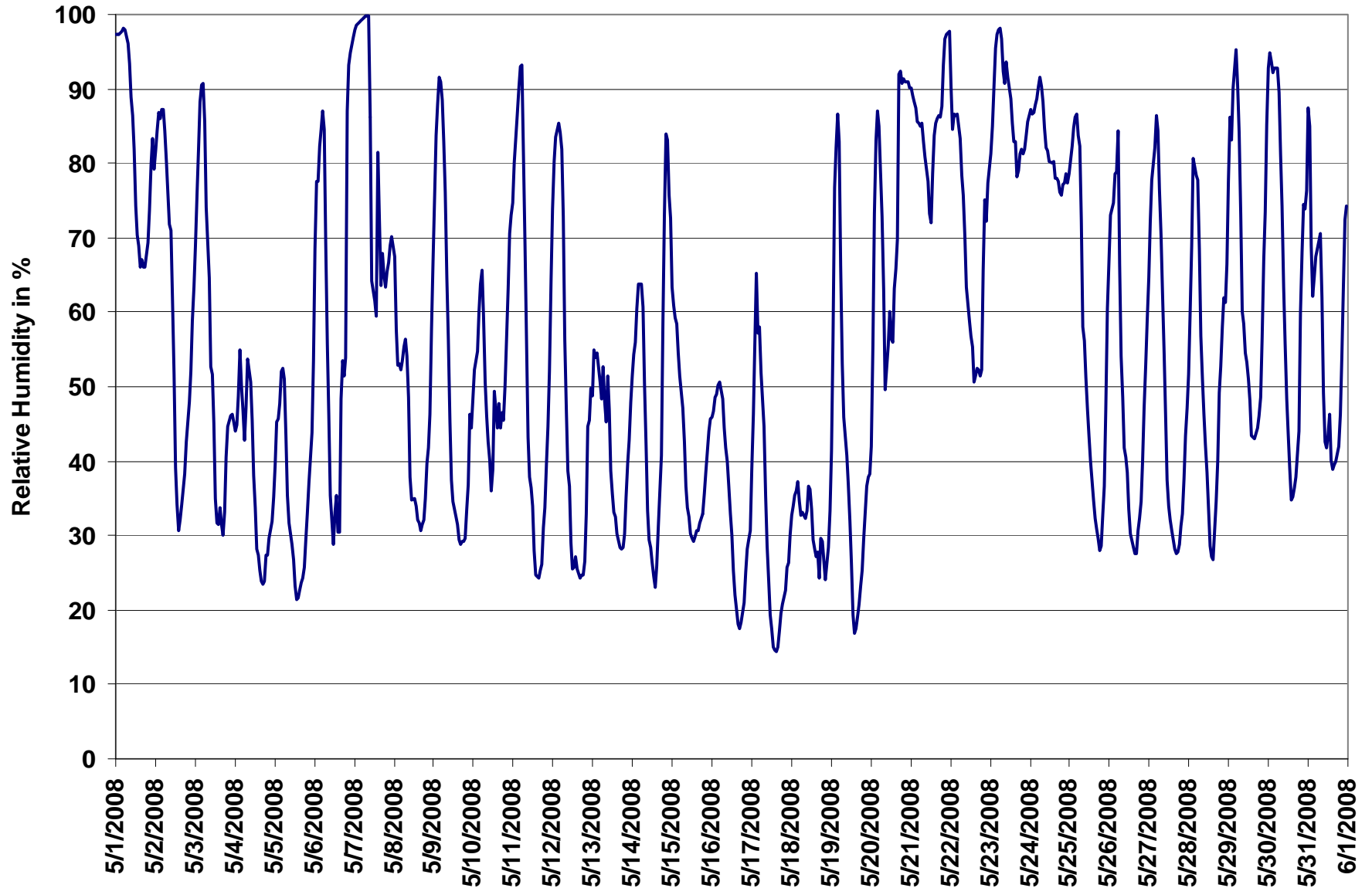


Figure 62. PASZA - Valleyview Relative Humidity 1-hr Average Monthly Trend



# PASZA - Valleyview Temperature Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

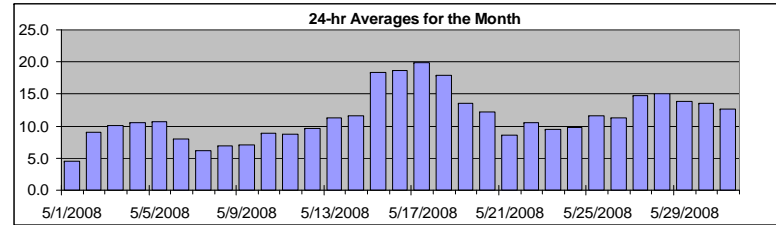
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	30.3	°C	17-May	16:00 17:00
Maximum 24-hr Value:	19.8	°C	17-May	



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
	25.2	20.4	14.9	11.1	8.0	2.0	0.3	11.4 °C	11.1 °C

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	2	2	2	2	2	2	2	2	2	3	4	5	6	7	7	8	8	8	8	8	7	6	5	5	4.5	8.0	
2-May-08	4	4	3	4	3	3	4	5	7	8	10	11	13	14	14	15	15	15	14	13	12	10	9	7	9.1	15.1	
3-May-08	6	4	3	1	0	0	2	5	8	11	12	13	15	16	16	16	17	17	16	14	13	12	12	11	10.1	16.9	
4-May-08	10	9	7	6	6	6	7	8	8	9	10	11	12	13	13	14	15	15	15	13	13	12	11	10	10.5	14.9	
5-May-08	8	7	7	6	5	5	6	9	10	12	13	14	14	15	15	16	16	15	15	14	12	11	9	7	10.7	15.6	
6-May-08	4	3	2	1	1	0	1	4	8	11	13	15	14	14	15	14	12	12	12	11	8	7	6	6	8.0	14.7	
7-May-08	4	3	2	1	1	1	1	2	4	6	9	11	10	11	8	9	10	10	9	9	8	7	7	6	6.1	10.7	
8-May-08	6	6	6	5	4	3	3	3	4	5	8	9	9	9	10	10	11	10	10	9	8	7	5	3	6.9	10.7	
9-May-08	2	0	-1	-2	-2	-1	0	3	6	8	10	11	11	12	12	13	13	13	13	12	11	10	8	9	7.0	12.8	
10-May-08	7	6	5	4	4	3	4	7	10	11	12	13	13	11	12	12	13	12	12	11	10	8	7	6	8.9	13.5	
11-May-08	6	5	3	2	1	0	4	6	8	10	11	12	12	13	14	14	14	14	13	13	11	10	8	5	8.7	14.1	
12-May-08	3	2	1	0	0	1	3	6	9	11	13	14	15	15	15	16	17	17	17	15	13	10	9	8	9.6	16.7	
13-May-08	8	7	7	7	8	10	9	11	12	11	12	13	14	14	14	14	14	14	14	13	12	11	10	9	11.2	14.4	
14-May-08	8	8	7	6	5	5	8	10	12	13	14	15	16	17	18	18	17	16	13	12	11	11	11	11	11.7	17.7	
15-May-08	13	14	14	14	14	15	16	17	19	20	20	21	22	22	22	22	22	21	21	20	19	18	17	17	18.3	22.5	
16-May-08	16	16	15	15	14	14	15	16	16	17	18	19	21	22	23	24	24	24	24	23	22	20	19	18	17	18.7	24.3
17-May-08	14	11	9	7	8	8	10	12	17	20	22	25	26	28	29	30	30	29	27	26	24	22	22	20	19.8	30.3	
18-May-08	19	20	19	19	18	18	18	18	18	18	18	17	17	18	19	20	20	19	19	18	17	17	16	15	13	17.9	19.9
19-May-08	11	8	6	4	3	4	7	10	12	14	16	17	18	19	20	20	19	19	18	17	16	15	15	14	13.5	19.9	
20-May-08	13	12	10	9	9	9	10	11	14	15	16	16	16	17	16	15	15	11	10	10	10	10	9	9	12.2	16.5	
21-May-08	9	9	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8.5	9.4	
22-May-08	8	8	8	7	7	7	7	8	9	10	11	12	12	13	13	14	14	14	14	14	13	11	11	10	10.6	14.2	
23-May-08	10	9	9	8	8	8	8	9	9	10	9	9	9	10	10	10	11	11	11	11	10	10	10	9	9.5	11.2	
24-May-08	9	9	9	8	8	8	7	8	9	9	10	10	11	11	11	11	11	11	11	12	12	11	11	10	9.8	11.7	
25-May-08	9	9	9	8	8	8	9	10	11	11	12	13	13	14	15	16	16	16	16	16	15	13	12	9	6	11.6	16.1
26-May-08	5	3	3	2	2	3	6	9	12	14	15	15	16	17	17	18	18	17	16	16	14	12	11	10	11.3	17.6	
27-May-08	9	8	7	7	6	7	9	10	12	14	16	18	19	20	21	22	22	22	22	22	20	19	17	15	14	14.8	22.2
28-May-08	13	11	9	7	7	7	9	12	14	16	18	19	20	22	22	22	22	20	19	18	17	16	15	14	15.0	22.2	
29-May-08	12	10	9	8	7	8	10	13	15	15	16	17	17	18	18	19	18	18	17	16	15	13	12	11	13.8	18.6	
30-May-08	10	10	10	10	10	9	10	11	12	13	14	15	16	17	18	18	19	19	18	18	17	15	13	12	11	13.6	18.8
31-May-08	9	9	10	11	11	11	12	12	13	13	13	13	13	14	15	15	16	16	16	15	14	12	11	9	12.7	16.2	
Hourly Avg	8.7	7.7	7.0	6.3	6.0	6.1	7.1	8.8	10.5	11.8	12.9	13.9	14.6	15.2	15.5	15.9	16.0	15.6	15.1	14.2	13.0	11.8	10.8	9.8			
Hourly Max	19.4	19.9	19.3	19.1	17.9	17.8	17.7	17.8	18.9	19.9	22.0	24.6	26.2	27.9	28.7	29.7	30.3	28.6	27.5	25.6	23.7	21.8	21.5	20.4			

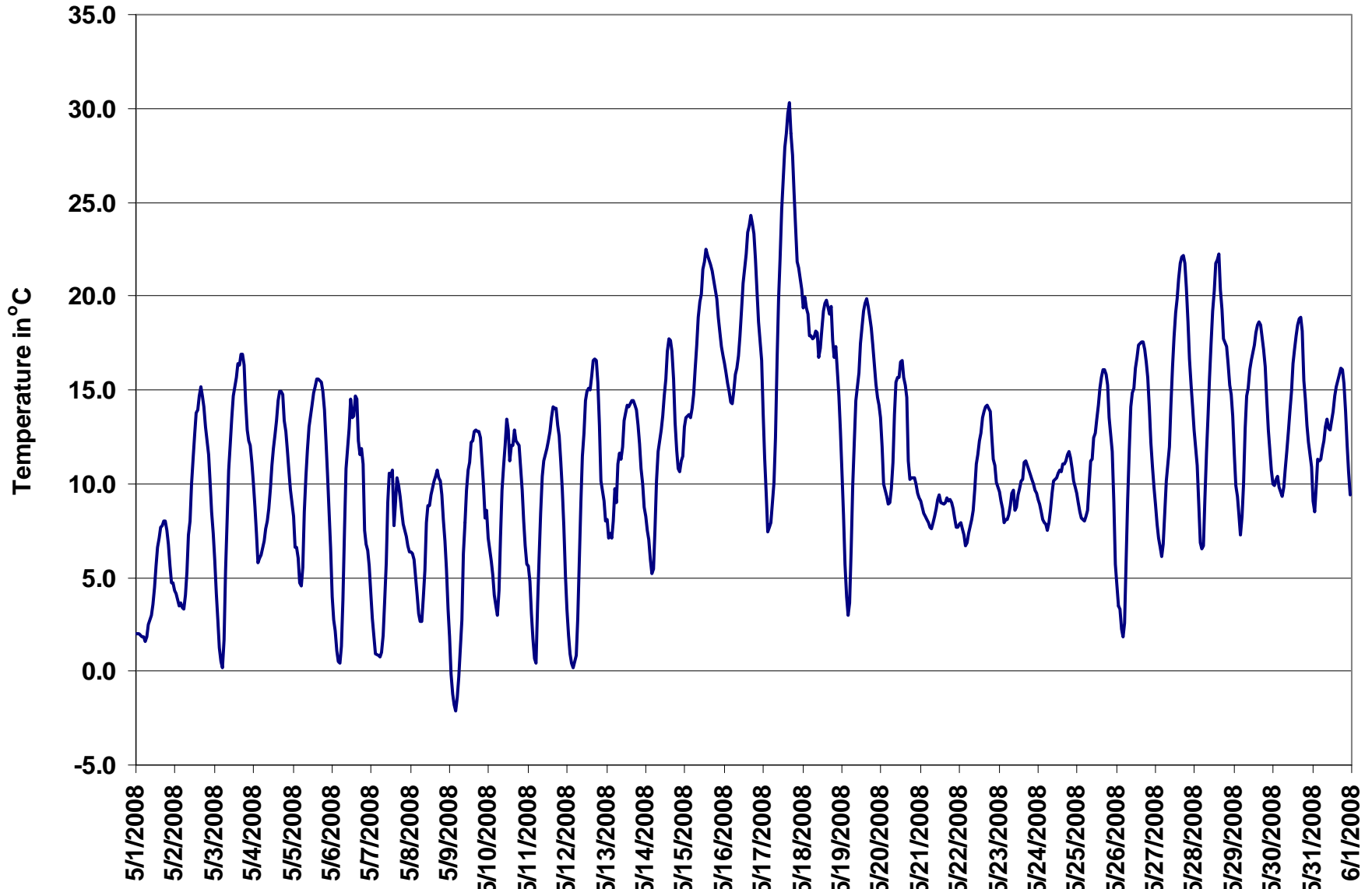


Figure 63. PASZA - Valleyview Temperature 1-hr Average Monthly Trend

# PASZA - Valleyview Scalar Wind Speed Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

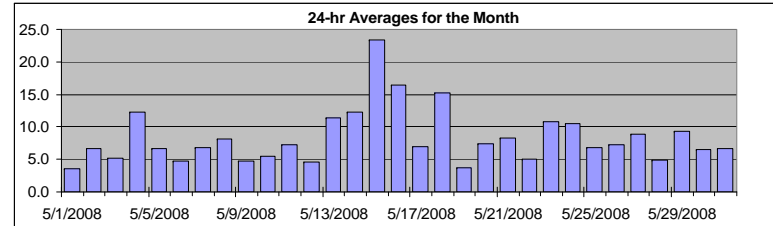
## Wind Speed (WSs)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	34.2	km/hr	15-May	16:00 17:00
Maximum 24-hr Value:	23.4	km/hr	15-May	

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
	29.5	19.3	11.2	7.3	3.7	1.6	1.1	8.3 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	3	3	2	2	2	3	4	4	4	4	3	3	3	2	4	4	7	8	5	3	3	1	1	5	3.6	7.9
2-May-08	4	1	4	3	1	1	2	4	5	4	5	7	11	11	14	11	10	13	12	12	8	6	6	4	6.6	14.0
3-May-08	1	2	2	1	1	1	1	2	3	2	4	5	7	10	7	10	7	7	10	11	5	4	8	13	5.1	12.5
4-May-08	11	8	5	4	10	12	12	13	16	14	13	14	14	15	16	14	17	21	20	14	13	7	4	4	12.2	20.7
5-May-08	4	4	4	4	3	4	4	4	7	5	8	9	11	12	12	10	10	10	10	8	5	4	4	2	6.7	12.4
6-May-08	2	1	3	2	3	2	3	4	4	6	5	5	8	8	6	6	10	7	2	6	11	4	2	3	4.7	11.1
7-May-08	3	2	2	2	2	2	1	2	2	3	4	12	16	12	11	8	10	6	11	12	10	13	11	8	6.9	16.3
8-May-08	11	8	7	10	9	10	10	10	8	8	9	11	16	11	10	9	10	8	6	5	3	3	2	3	8.1	16.0
9-May-08	2	2	2	1	1	1	3	4	4	4	5	6	6	8	7	8	8	9	8	8	3	3	6	5	4.7	9.4
10-May-08	4	6	3	3	5	3	2	3	5	6	5	4	10	9	7	9	7	8	9	11	5	3	2	3	5.5	11.3
11-May-08	4	4	2	2	1	2	1	5	7	10	12	12	12	12	14	12	15	15	9	5	10	3	1	1	7.2	15.2
12-May-08	2	2	3	3	4	3	4	5	5	7	7	8	10	10	10	6	4	5	3	2	1	1	2	4	4.6	9.9
13-May-08	3	4	5	4	5	5	5	6	8	13	12	15	14	17	19	19	18	18	19	18	14	13	12	9	11.4	18.9
14-May-08	10	10	8	3	3	3	6	14	18	21	21	17	18	16	17	18	21	22	19	8	4	5	5	5	12.2	22.2
15-May-08	10	13	10	11	10	9	15	19	27	29	29	29	30	30	28	31	31	34	32	31	30	28	23	21	23.4	34.2
16-May-08	22	20	20	20	14	11	12	18	20	18	18	15	16	19	18	22	22	23	19	14	9	9	9	7	16.5	23.3
17-May-08	4	4	3	3	3	3	3	4	5	8	10	9	11	10	7	6	6	15	14	12	9	7	5	4	6.9	14.9
18-May-08	9	10	10	12	11	14	16	18	24	22	21	19	20	20	21	19	17	15	17	15	12	10	8	6	15.3	24.0
19-May-08	4	2	2	2	3	2	1	2	5	7	6	5	4	5	4	5	4	5	3	4	4	4	3	4	3.7	6.8
20-May-08	5	3	2	1	2	2	3	4	3	5	7	11	8	11	16	17	15	16	11	9	6	6	7	6	7.4	17.1
21-May-08	7	9	8	9	10	8	10	10	11	12	16	17	14	10	7	7	8	8	5	3	2	2	2	2	8.2	17.1
22-May-08	4	4	5	4	3	3	1	4	4	3	4	5	5	6	7	8	8	8	9	7	6	4	6	3	5.0	8.8
23-May-08	2	2	1	5	5	3	3	5	6	10	15	15	17	17	17	18	18	19	17	15	13	13	12	11	10.7	18.8
24-May-08	10	13	12	11	10	9	10	9	10	9	10	12	11	13	14	12	13	13	9	11	8	8	7	9	10.5	14.0
25-May-08	7	7	7	7	7	7	7	7	8	7	7	11	10	10	7	7	8	7	7	5	4	4	1	3	6.8	10.8
26-May-08	3	2	1	1	1	1	2	2	3	7	10	12	12	13	13	13	12	13	12	11	9	7	8	7	7.3	13.4
27-May-08	8	5	4	5	3	5	12	10	10	10	10	12	12	12	10	9	9	9	11	12	9	9	10	7	8.9	12.3
28-May-08	4	2	2	1	2	2	2	7	9	8	7	5	6	4	6	5	10	11	9	2	3	4	3	3	4.9	10.7
29-May-08	2	3	3	2	3	3	3	3	6	10	11	13	15	14	16	17	17	19	17	12	9	7	9	11	9.4	19.5
30-May-08	13	9	8	9	9	7	7	8	9	10	9	9	5	6	4	5	5	6	5	7	2	3	2	3	6.6	12.9
31-May-08	2	3	8	9	5	6	2	6	7	11	13	13	12	11	9	9	6	7	6	5	3	2	2	3	6.7	13.2
1-hr Average	5.8	5.4	5.1	5.1	4.9	4.8	5.4	7.0	8.4	9.5	10.1	11.0	11.8	11.7	11.7	11.4	11.9	12.4	11.1	9.6	7.5	6.3	5.9	5.8		
Hourly Max	22.3	19.7	19.6	20.1	14.3	14.2	15.6	18.7	27.0	29.2	28.6	29.4	29.6	27.7	31.4	30.8	34.2	31.6	32.4	31.4	30.4	27.9	22.8	21.1		

# PASZA - Valleyview Vector Wind Speed Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

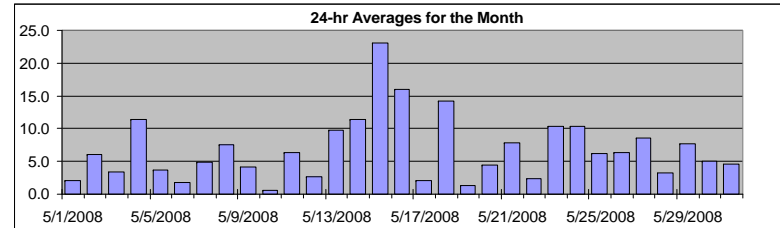
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: May 1, 2008 to June 1, 2008

### Summary

Maximum 1-hr Average:	33.9	km/hr	15-May	16:00 17:00
Maximum 24-hr Value:	23.1	km/hr	15-May	



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
	29.2	18.8	10.8	6.7	3.2	1.0	0.5	7.8 km/hr

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	3	3	2	1	2	3	4	4	4	4	4	3	3	1	3	3	7	8	5	3	2	1	1	5	2.1	7.8	
2-May-08	4	1	4	3	0	1	2	3	4	4	4	7	10	10	13	10	9	13	12	11	8	6	5	4	6.0	13.2	
3-May-08	1	2	1	1	1	0	1	1	2	1	3	4	6	9	5	9	6	6	9	11	5	4	8	12	3.4	12.4	
4-May-08	11	8	5	4	10	12	12	13	16	14	12	13	13	14	15	13	17	20	20	14	13	7	4	3	11.4	20.2	
5-May-08	3	4	4	4	3	4	3	3	7	4	6	8	10	11	11	9	9	10	10	8	5	4	4	2	3.7	11.4	
6-May-08	2	1	1	1	2	1	2	3	3	6	4	1	6	7	4	5	9	6	1	5	11	3	1	2	1.7	10.7	
7-May-08	2	1	0	1	1	2	1	2	1	2	3	12	16	10	11	7	10	5	11	12	10	13	11	8	4.9	16.1	
8-May-08	11	8	7	10	8	10	9	10	7	7	8	9	15	10	10	8	8	7	5	5	3	3	2	2	7.6	15.3	
9-May-08	1	1	1	0	1	1	2	4	4	4	5	5	3	7	6	7	7	9	8	8	3	3	5	3	4.2	9.0	
10-May-08	4	6	3	2	5	3	0	2	5	4	3	2	8	8	2	7	7	8	11	5	3	2	2	2	0.6	11.2	
11-May-08	4	3	1	1	1	2	1	5	7	10	11	11	11	12	14	11	15	15	9	5	10	2	0	1	6.4	14.6	
12-May-08	2	2	3	3	3	3	4	5	4	7	6	6	9	8	8	4	2	5	2	1	1	1	1	3	2.7	8.5	
13-May-08	3	4	5	4	4	4	4	6	7	12	11	15	13	16	17	18	18	17	18	17	14	12	12	9	9.7	18.4	
14-May-08	10	10	8	3	3	3	6	14	17	21	20	16	17	15	17	17	21	22	18	8	4	5	4	5	11.4	21.9	
15-May-08	10	13	10	11	10	9	15	18	27	29	28	29	29	27	31	31	34	31	32	31	30	28	23	21	23.1	33.9	
16-May-08	22	20	19	20	14	11	12	18	20	17	17	15	15	18	18	21	22	23	19	14	9	8	9	7	15.9	23.1	
17-May-08	1	4	2	3	3	3	3	4	4	7	10	8	10	9	6	6	5	15	14	12	9	6	5	4	2.0	14.5	
18-May-08	8	10	10	12	11	14	15	17	24	21	20	19	20	20	21	18	17	15	16	13	12	9	8	6	14.2	23.5	
19-May-08	3	2	1	2	2	1	0	0	4	6	4	3	1	3	1	4	3	4	2	4	4	4	1	4	1.3	6.3	
20-May-08	5	1	2	1	1	2	3	4	3	5	6	10	8	11	16	17	13	16	10	9	6	6	6	6	4.5	16.8	
21-May-08	7	9	8	9	10	8	9	10	11	12	16	17	13	10	6	7	7	8	5	3	1	2	2	2	7.8	16.9	
22-May-08	3	4	5	4	3	3	1	3	3	2	2	4	3	5	6	6	7	7	8	6	6	4	6	3	2.3	8.4	
23-May-08	2	1	1	5	5	3	3	5	6	10	15	15	16	17	16	17	18	19	17	14	13	12	12	11	10.4	18.7	
24-May-08	10	13	12	11	10	9	10	9	10	9	10	12	11	13	14	12	13	13	9	11	7	8	7	9	10.3	13.7	
25-May-08	7	7	7	7	7	7	7	7	7	6	5	10	10	9	6	6	7	6	6	5	4	4	1	3	6.3	10.2	
26-May-08	2	2	1	1	1	1	2	2	2	6	9	11	12	13	12	12	12	13	12	11	9	7	8	7	6.4	12.8	
27-May-08	8	5	4	4	3	5	11	10	10	9	9	12	11	11	9	9	9	9	10	12	9	9	10	7	8.6	11.7	
28-May-08	4	1	1	0	1	1	1	7	9	8	6	5	5	3	4	1	10	11	9	2	3	4	3	3	3.3	10.6	
29-May-08	2	2	2	2	3	3	3	3	6	9	11	12	15	13	15	16	17	19	16	12	8	7	9	11	7.8	19.1	
30-May-08	13	9	8	9	9	7	7	7	9	9	8	8	3	4	2	3	5	5	4	7	2	3	2	2	5.0	12.8	
31-May-08	2	2	8	9	5	6	2	6	7	10	13	13	11	10	8	9	5	6	5	4	3	1	0	2	4.6	12.8	
1-hr Vector	2.1	2.1	2.3	2.2	2.5	2.0	2.2	2.8	3.7	4.7	5.1	5.6	5.6	5.4	5.7	5.1	5.7	5.6	4.8	3.8	2.6	1.5	1.8	2.2			
Hourly Max	22.1	19.5	19.4	19.9	14.1	14.0	15.5	18.4	26.6	28.9	28.3	29.0	29.3	27.2	31.1	30.5	33.9	31.3	32.1	31.2	30.2	27.7	22.6	21.0			

# PASZA - Valleyview Wind Direction Monthly Summary

Station: Valleyview  
Station Owner: PASZA

## HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 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
	356.0	338.6	294.2	194.2	103.2	14.0	3.8	317 deg

### Status Flag Characters

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

### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	WD Sector
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-08	195	200	162	156	212	194	201	205	213	218	213	227	206	308	76	113	130	122	116	79	46	15	117	136	161	SSE
2-May-08	143	133	159	178	102	190	203	203	201	253	184	170	158	164	146	145	164	140	136	135	137	140	155	173	155	SSE
3-May-08	202	183	334	298	315	126	302	172	175	171	15	10	356	25	14	33	36	359	347	324	318	295	295	295	345	NNW
4-May-08	288	279	259	246	275	275	285	306	330	319	320	334	336	326	336	325	303	317	301	308	310	290	308	301	309	NW
5-May-08	238	208	217	181	170	190	202	234	315	317	311	349	358	344	336	6	31	17	24	33	44	25	4	339	349	N
6-May-08	182	185	108	160	349	248	152	210	199	353	339	8	318	348	39	154	249	323	231	281	319	41	171	265	312	NW
7-May-08	191	47	342	15	308	145	189	349	17	21	329	357	1	87	138	103	53	96	67	59	64	71	58	35	56	NE
8-May-08	48	57	37	42	39	39	38	31	31	20	65	72	31	42	52	51	48	59	71	86	78	78	78	257	47	NE
9-May-08	166	187	191	163	224	232	239	196	185	194	144	188	162	185	166	175	180	172	172	185	148	142	348	162	177	S
10-May-08	159	159	196	176	331	208	116	163	182	172	85	28	217	224	60	3	31	37	18	15	357	259	254	324	44	NE
11-May-08	308	328	27	42	219	178	2	14	22	37	15	20	12	357	349	11	10	17	53	31	36	26	284	154	15	NNE
12-May-08	184	205	182	193	226	188	187	198	200	289	298	329	303	288	329	354	281	246	280	154	152	229	227	207	268	W
13-May-08	190	168	185	195	257	259	205	234	242	333	315	281	279	310	294	298	308	302	312	299	299	287	282	274	290	WNW
14-May-08	278	276	274	250	232	219	265	291	294	299	304	309	303	298	298	296	300	295	285	268	216	225	222	242	289	WNW
15-May-08	259	268	277	271	273	270	270	278	285	283	284	292	292	284	303	303	293	288	293	291	292	293	297	295	288	WNW
16-May-08	291	297	292	292	307	313	313	311	323	328	320	304	303	312	315	329	326	323	323	320	299	282	277	274	310	NW
17-May-08	162	172	175	195	206	191	188	156	175	185	171	174	172	176	148	166	8	348	318	321	325	305	272	252	216	SW
18-May-08	267	278	281	284	281	284	285	291	303	304	315	307	305	305	323	319	299	293	358	358	285	277	298	295	303	WNW
19-May-08	320	167	169	202	177	24	299	76	33	48	57	64	9	237	254	169	157	154	139	112	106	102	82	187	108	ESE
20-May-08	168	178	332	239	150	187	186	181	206	211	276	321	14	6	12	8	339	289	297	328	322	307	319	310	324	NW
21-May-08	298	292	293	295	293	301	300	296	297	292	295	293	294	293	307	305	320	330	330	312	194	193	215	203	297	WNW
22-May-08	260	270	270	271	274	307	302	337	10	343	319	339	4	7	25	20	39	50	39	73	69	112	136	146	13	NNE
23-May-08	116	16	3	356	35	85	46	30	33	25	7	10	8	11	11	13	13	12	17	21	26	25	25	33	18	NNE
24-May-08	26	26	28	24	26	13	13	20	22	29	21	21	28	10	19	20	14	353	353	1	17	40	25	17	18	NNE
25-May-08	20	15	14	20	20	34	41	63	70	50	30	19	17	21	44	29	37	74	77	80	72	85	31	351	38	NE
26-May-08	345	340	305	285	293	207	193	194	185	179	170	145	155	148	138	141	144	142	141	161	153	147	142	147	152	SSE
27-May-08	136	137	152	143	165	183	183	179	186	180	174	178	178	163	163	179	166	163	150	148	159	167	169	175	167	SSE
28-May-08	170	199	226	210	273	289	254	187	184	184	186	184	159	198	354	149	261	260	269	191	150	179	179	194	207	SSW
29-May-08	186	172	222	174	174	163	180	186	255	273	284	289	292	292	304	320	315	319	317	314	303	301	297	294	296	WNW
30-May-08	292	279	302	326	319	314	301	302	343	334	336	347	296	330	281	269	219	228	217	338	215	192	201	201	302	WNW
31-May-08	173	201	273	294	298	306	348	0	15	2	5	4	12	354	352	25	41	27	63	108	119	96	89	341	1	N
Hourly Avg	270	275	284	289	298	283	276	286	302	312	318	327	324	323	339	345	331	327	335	340	333	309	302	282		

## PASZA - Valleyview Standard Deviation of Wind Direction Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2008 to June 1, 2008

**Summary**

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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
	86.9	69.9	33.8	18.5	10.9	7.2	5.9

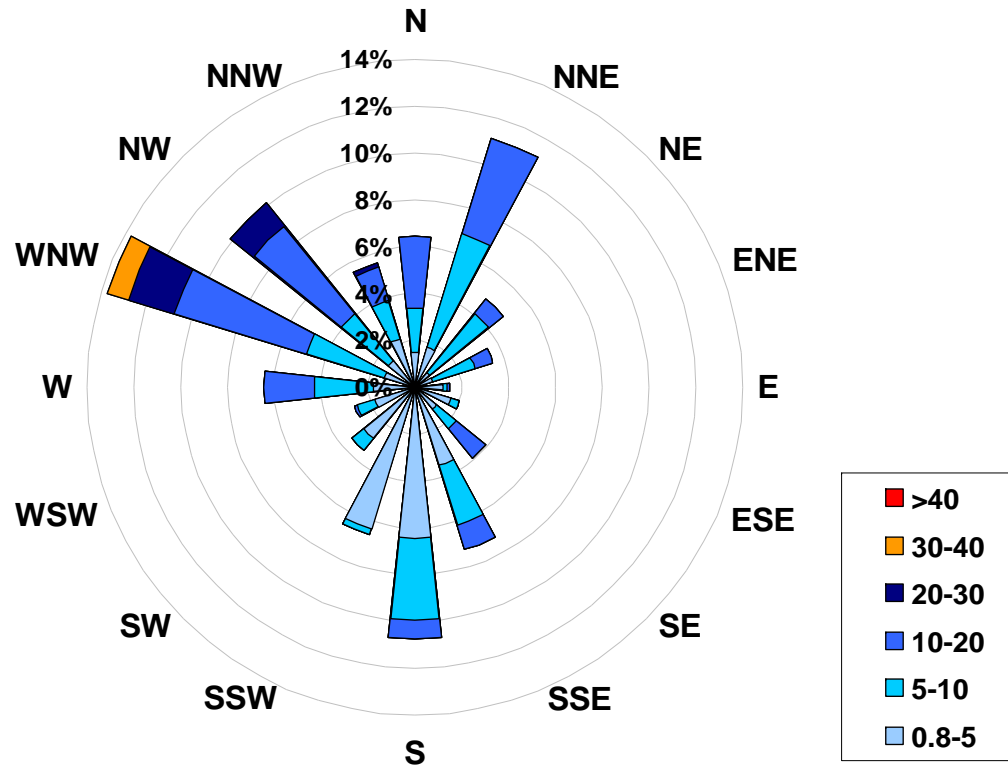
**Status Flag Characters**

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**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-08	8	14	19	23	11	15	10	17	13	13	14	26	38	90	48	46	22	11	16	18	22	34	73	9		90.2	
2-May-08	7	70	9	18	89	42	23	15	17	36	22	25	21	21	19	23	23	17	13	7	7	9	18	29		88.9	
3-May-08	34	65	67	80	49	61	46	47	38	70	53	40	37	24	58	36	32	39	23	7	11	11	13	8		80.3	
4-May-08	12	8	21	13	7	5	11	13	10	15	21	21	20	21	18	22	13	12	10	9	14	19	23	37		37.0	
5-May-08	36	12	23	18	19	11	10	37	21	60	40	35	32	29	24	37	28	23	14	8	9	12	8	53		59.8	
6-May-08	40	70	78	69	56	57	60	41	36	23	53	93	48	63	63	38	20	41	69	33	16	63	84	44		92.6	
7-May-08	30	84	89	82	61	22	41	46	66	55	57	16	10	34	13	28	13	27	15	9	10	11	11	7		89.1	
8-May-08	9	13	16	10	8	8	11	10	23	27	34	33	17	30	22	41	31	22	35	14	9	8	36	28		40.8	
9-May-08	75	31	30	93	53	31	40	19	28	29	38	51	70	33	29	55	22	16	20	10	15	17	63	50		92.8	
10-May-08	13	17	31	60	18	37	86	30	30	53	72	78	54	17	83	40	31	21	34	8	18	31	43	66		85.9	
11-May-08	33	27	40	78	33	39	72	23	23	16	22	32	29	26	18	32	18	17	21	28	19	56	78	71		77.7	
12-May-08	29	30	30	22	43	17	20	13	29	29	35	62	34	52	49	75	70	25	36	50	17	63	41	37		75.2	
13-May-08	18	11	10	10	55	50	25	17	22	21	21	19	18	21	26	22	12	11	13	8	9	9	7	6		54.6	
14-May-08	6	6	6	20	13	6	16	10	12	13	14	18	20	26	18	15	12	9	12	22	12	10	17	24		26.2	
15-May-08	7	6	13	7	7	11	7	10	9	8	8	9	12	8	8	9	8	8	7	7	7	8	6	7		13.4	
16-May-08	7	7	7	8	9	9	10	11	10	13	17	17	20	16	12	11	12	8	6	10	9	12	4	7		20.3	
17-May-08	63	19	36	18	6	7	15	23	20	16	16	19	21	16	34	34	82	13	9	7	9	14	13	26		81.6	
18-May-08	23	10	8	10	8	7	9	11	11	12	8	14	13	15	15	15	14	15	16	29	17	7	20	14		28.8	
19-May-08	71	50	66	50	52	77	93	81	50	25	52	56	95	68	82	56	52	34	49	13	16	18	79	20		94.6	
20-May-08	22	73	28	44	56	19	15	13	17	32	35	23	26	15	8	10	33	10	12	15	12	15	11	16		73.4	
21-May-08	16	11	11	10	10	14	12	10	11	10	9	8	10	8	14	14	19	11	15	23	50	16	10	17		50.4	
22-May-08	28	17	13	12	31	34	68	33	49	63	70	44	60	47	39	47	18	28	19	25	18	26	9	15		69.8	
23-May-08	25	42	30	11	28	24	23	17	14	12	7	9	11	9	10	6	8	7	10	10	8	7	7	9		42.0	
24-May-08	9	8	8	8	8	11	8	10	9	13	12	9	11	12	11	10	7	8	8	9	7	10	10	6		13.2	
25-May-08	9	6	5	7	7	11	17	20	34	42	53	22	24	26	49	37	34	36	31	23	20	16	52	29		52.9	
26-May-08	50	36	64	74	62	25	17	35	53	49	22	21	19	18	18	17	16	15	13	12	9	9	9	11		73.9	
27-May-08	7	11	10	17	12	9	10	13	15	16	18	19	22	23	26	19	24	21	16	13	11	10	9	11		26.1	
28-May-08	23	27	51	64	31	44	71	16	12	18	20	36	58	69	68	83	10	9	19	42	29	12	15	6		82.9	
29-May-08	34	21	39	46	9	14	13	35	22	17	18	12	14	16	20	13	14	12	9	11	11	10	9	12		45.8	
30-May-08	8	11	17	8	6	10	11	20	17	20	20	28	72	62	66	65	27	27	23	67	39	10	16	20		72.3	
31-May-08	23	21	23	12	13	25	64	15	24	11	11	14	17	31	28	19	46	30	38	18	21	30	88	62		87.7	
Hourly Max	75	84	89	93	89	77	93	81	66	70	72	93	95	90	83	83	82	41	69	67	50	63	88	71			

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



**Calms: 0%**

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	272
5	to	10	238
10	to	20	202
20	to	30	25
30	to	40	7
	>	40	0
Total Non-Zero Values			744

# PASZA

## Monthly Passive Data Summary



Table 1. PASZA Passive Stations for May 2008

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
<b>Duplicates</b>					
29a	Smoky Heights	0.4	38.3	1.2	
29b	Smoky Heights	0.4	38.9	1.0	
30a	Fitzsimmons	0.3	34.7	0.7	
30b	Fitzsimmons	0.2	35.7	0.6	
33a	Wapiti	0.2	36.9	0.9	
33b	Wapiti	0.3	34.9	0.9	
40a	McLennan	0.5	37.6	1.5	
40b	McLennan	0.5	38.0	1.2	
43a	High Prairie	0.3	40.6	1.0	
43b	High Prairie	0.3	37.8	0.8	
52a	Worsley	0.2	39.8	0.8	
52b	Worsley	0.1	37.0	0.8	
49a	Grande Prairie HP	0.2	36.0	3.3	
49b	Grande Prairie HP	0.2	34.8	3.3	
1	Silver Valley	0.3	33.4	0.8	08-27-081-11 W6M
2	Bay Tree	0.3	38.1	1.4	13-16-078-13 W6M
3	Forth Creek	0.3	45.8	0.5	04-13-082-07 W6M
4	Gordondale	0.4	45.5	0.7	04-34-078-10 W6M
5	Boone Creek	0.2	34.5	0.9	01-23-076-11 W6M
7	Steeprock Creek	0.3	36.2	0.4	09-35-072-13 W6M
9	Spirit River	0.3	38.3	2.4	08-12-079-07 W6M
10	Woking	0.3	31.3	0.7	01-13-076-07 W6M
11	Webber Creek	0.3	37.4	1.1	09-36-074-09 W6M
12	Hythe	0.3	32.0	1.1	14-36-072-11 W6M
14	Sylvester	0.1	28.8	0.6	08-06-069-12 W6M
16	Beaverlodge	0.3	39.1	1.0	15-36-071-10 W6M
17	Poplar	0.2	33.5	1.1	13-06-073-08 W6M
18	Saddle Hills	0.4	38.1	0.6	04-25-074-07 W6M
19	Wanham	0.3	38.8	0.7	16-22-077-03 W6M
20	Shaftesbury	0.2	32.5	0.7	04-03-082-23 W5M
21	Eaglesham	0.3	34.3	1.0	16-21-079-25 W5M
23	Bear Lake	0.3	33.7	1.3	15-31-072-06 W6M

**Table 1. PASZA Passive Stations for May 2008 (Continued)**

<b>Station Number</b>	<b>Station Name</b>	<b>SO2 ppb</b>	<b>O3 ppb</b>	<b>NO2 ppb</b>	<b>Site Legal</b>
24	Wembley	0.2	34.5	1.3	12-31-070-08 W6M
25	Pinto Creek	0.2	32.8	0.7	04-24-069-11 W6M
26	Flyingshot	0.2	32.4	1.0	15-36-070-07 W6M
27	Grande Prairie I	0.3	34.4	2.6	08-15-071-06 W6M
28	Clairmont Lake	0.3	34.8	0.8	09-06-073-04 W6M
29	Smoky Heights	0.4	38.6	1.1	04-06-075-02 W6M
30	Fitzsimmons	0.3	35.2	0.6	15-36-072-03 W6M
32	Gold Creek	0.3	28.0	0.8	06-33-067-05 W6M
33	Wapiti	0.2	35.9	0.9	02-25-071-03 W6M
34	Puskwaskau	0.2	31.3	0.3	15-35-074-25 W5M
35	Jean Cote	0.2	36.5	1.3	12-35-079-21 W5M
36	Guy	0.3	38.6	1.0	03-04-076-22 W5M
37	Crooked Creek	0.2	35.1	1.0	16-01-071-26 W5M
39	Clouston Creek	0.2	36.3	0.7	12-01-073-22 W5M
40	McLennan	0.5	37.8	1.4	03-29-077-19 W5M
41	Valleyview	0.3	39.7	0.7	09-30-069-22 W5M
42	Sunset House	0.4	37.8	0.4	05-32-070-19 W5M
43	High Prairie	0.3	39.2	0.9	16-13-074-17 W5M
44	Peavine	0.2	38.8	0.3	03-05-079-15 W5M
45	Gift Lake	0.2	33.6	0.7	10-07-079-12 W5M
46	Little Smoky	0.3	33.8	1.0	12-01-065-21 W5M
47	Kinuso	0.2	36.3	0.4	12-10-073-10 W5M
48	Deer Mountain	0.2	33.9	0.3	15-22-068-09 W5M
49	Grande Prairie HP	0.2	35.4	3.3	17-26-071-06 W6M
50	Clear River	0.3	36.9	1.0	SE-03-084-12 W6M
51	Bear Canyon	0.3	40.7	0.5	SE-28-085-12 W6M
52	Worsley	0.2	38.4	0.8	NE-34-085-07 W6M
53	Hines Creek	0.3	36.0	0.5	SW-09-084-04 W6M
54	Ronan	0.2	35.1	1.3	SE-03-082-04 W6M
55	Cadotte Lake School	0.2	31.6	0.9	NE-23-086-16 W5M
56	Simon Lake Store	0.2	36.6	0.5	SE-32-086-17 W5M
57	Dixonville	0.2	37.7	0.6	SE-14-087-24 W5M
58	Queen Elizabeth Park	0.2	42.5	0.7	NW-19-083-23 W5M
59	Blue Sky	0.2	37.1	1.6	SW-35-081-02 W6M
60	Gerry Lake	0.2	36.5	0.6	SW-22-084-02 W6M
61	Musreau Lake	0.1	32.7	0.8	NE-22-064-05 W6M

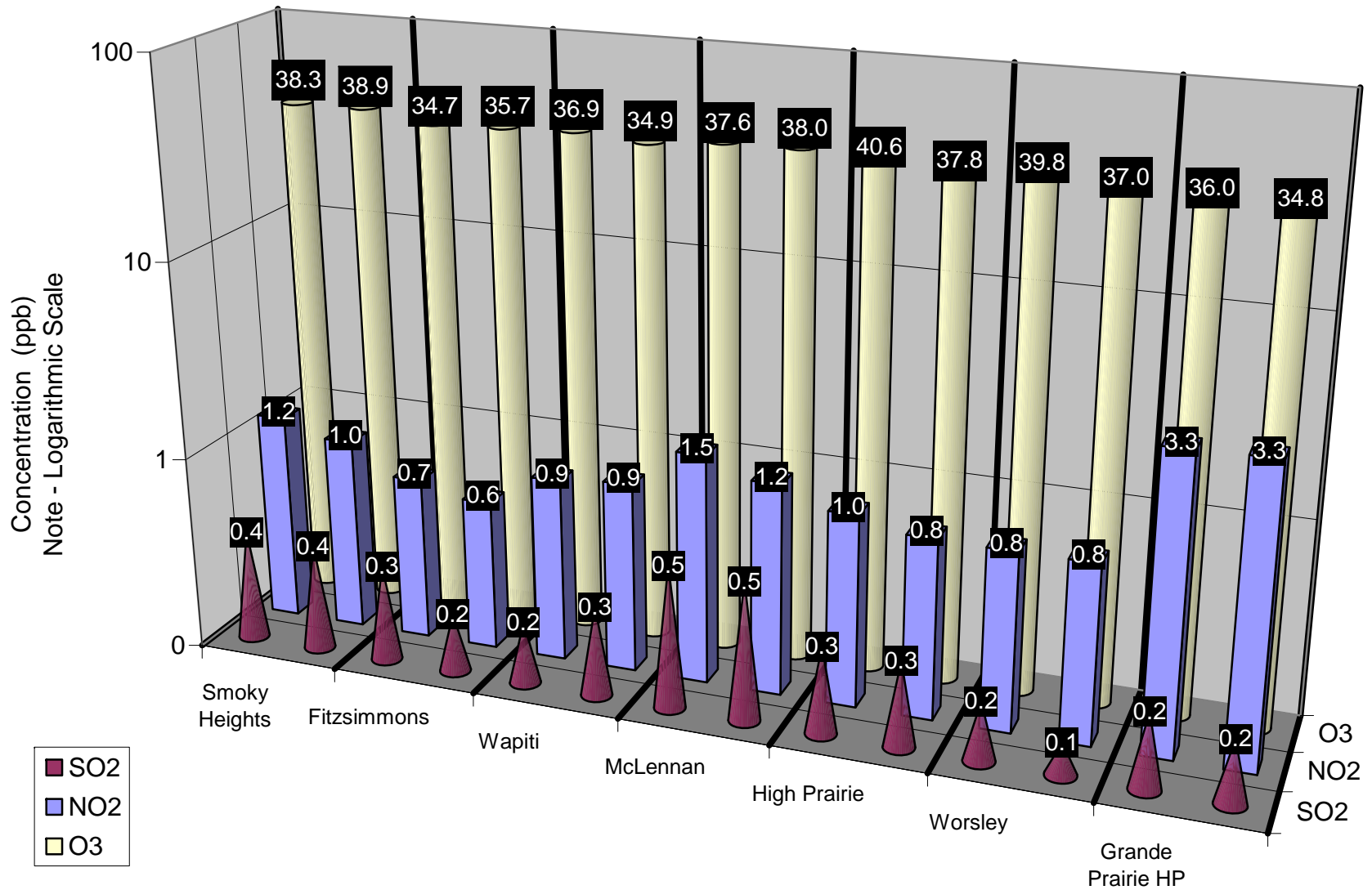


Figure 64. Duplicate Summary Chart

Table 2. Passive Summary Results for May 2008

Stats	Sulphur Dioxide SO <sub>2</sub>	Ozone O <sub>3</sub>	Nitrogen Dioxide NO <sub>2</sub>
	ppb	ppb	ppb
<b>Passive Summary for May 2008 (PASZA Zone)</b>			
Mean	0.3	36.0	0.9
Standard Deviation	0.1	3.5	0.5
Minimum	0.1	28.0	0.3
Minimum At	Musreau Lake (#61)	Gold Creek (#32)	Puskwaskau (#34)
Maximum	0.5	45.8	3.3
Maximum At	McLennan (#40)	Forth Creek (#3)	Grande Prairie HP (#49)
<b>Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)</b>			
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Beaverlodge station	0.4	38.7	2.0
PASZA Beaverlodge passive	0.3	39.1	1.0
<b>Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)</b>			
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Henry Pirker station	0.2	34.2	5.1
PASZA Grande Prairie passive	0.2	35.4	3.3
<b>Comparison between Continuous and Passive monitoring at Spirit River (passive #9 Spirit River)</b>			
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Portable Spirit River station	0.2	33.6	2.7
PASZA Spirit River passive	0.3	38.3	2.4

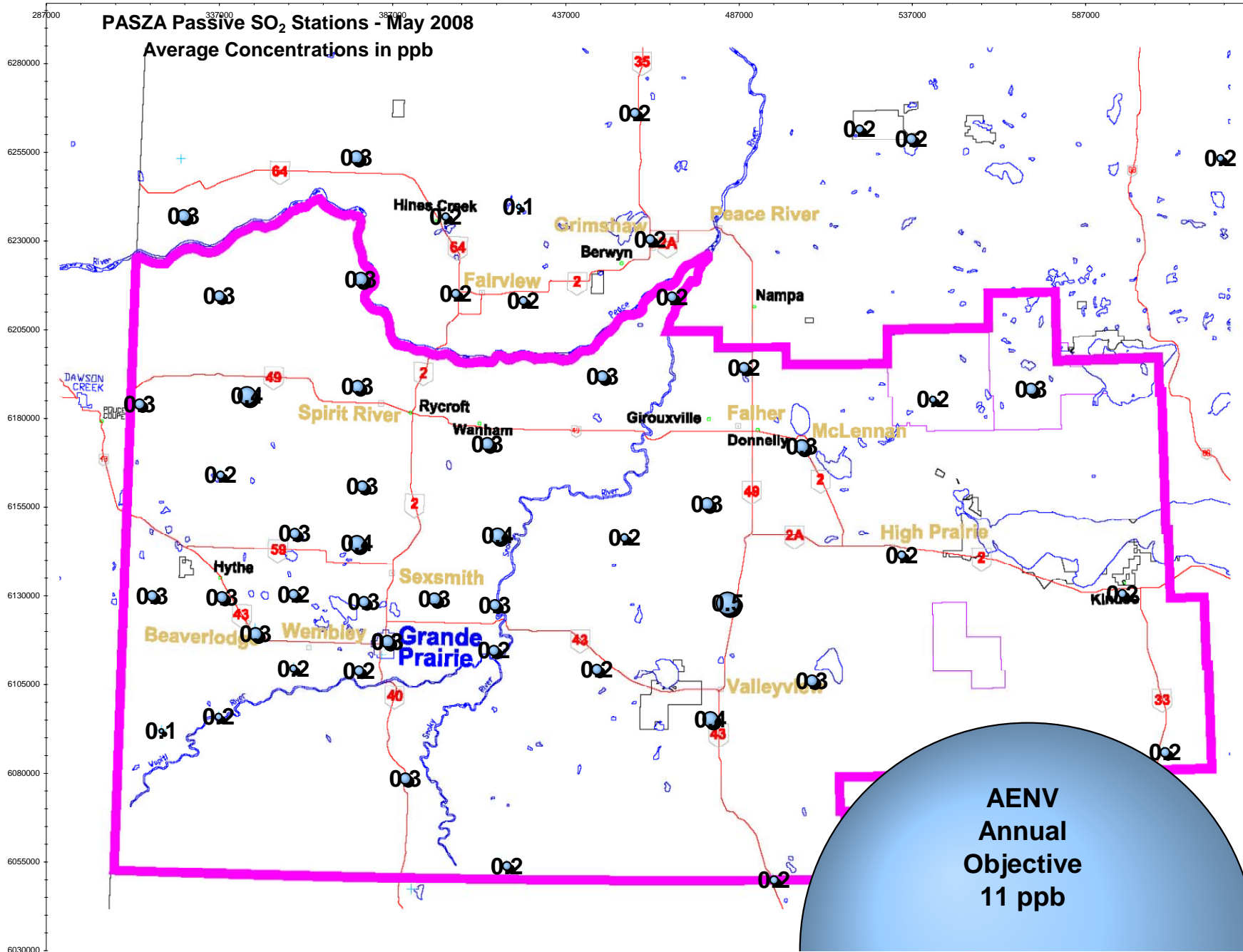
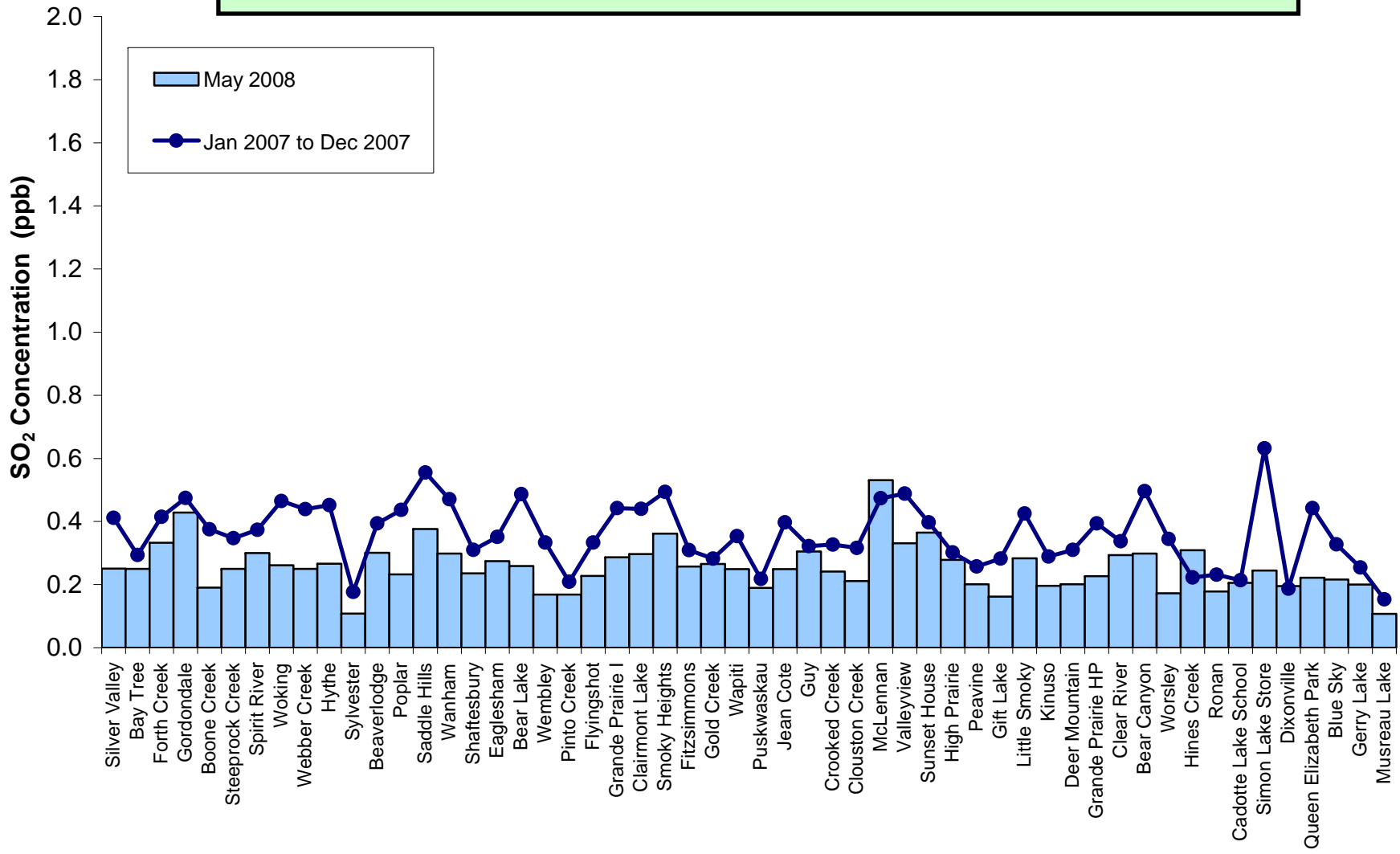


Figure 65. SO<sub>2</sub> Bubble Chart

**Alberta Ambient Air Quality Objective - Annual SO<sub>2</sub> Objective is 11 ppb**



**Figure 66. SO<sub>2</sub> Summary Chart**



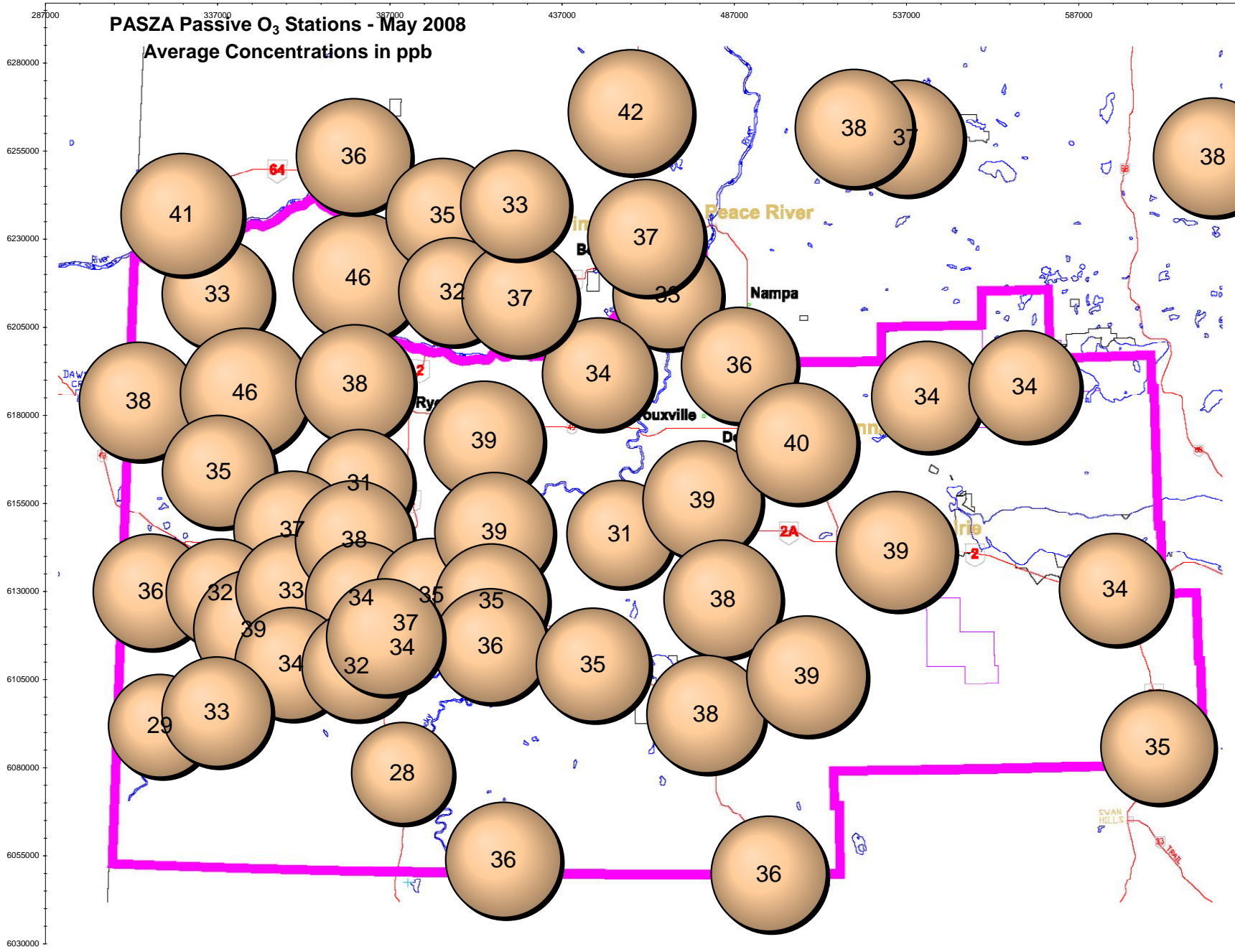
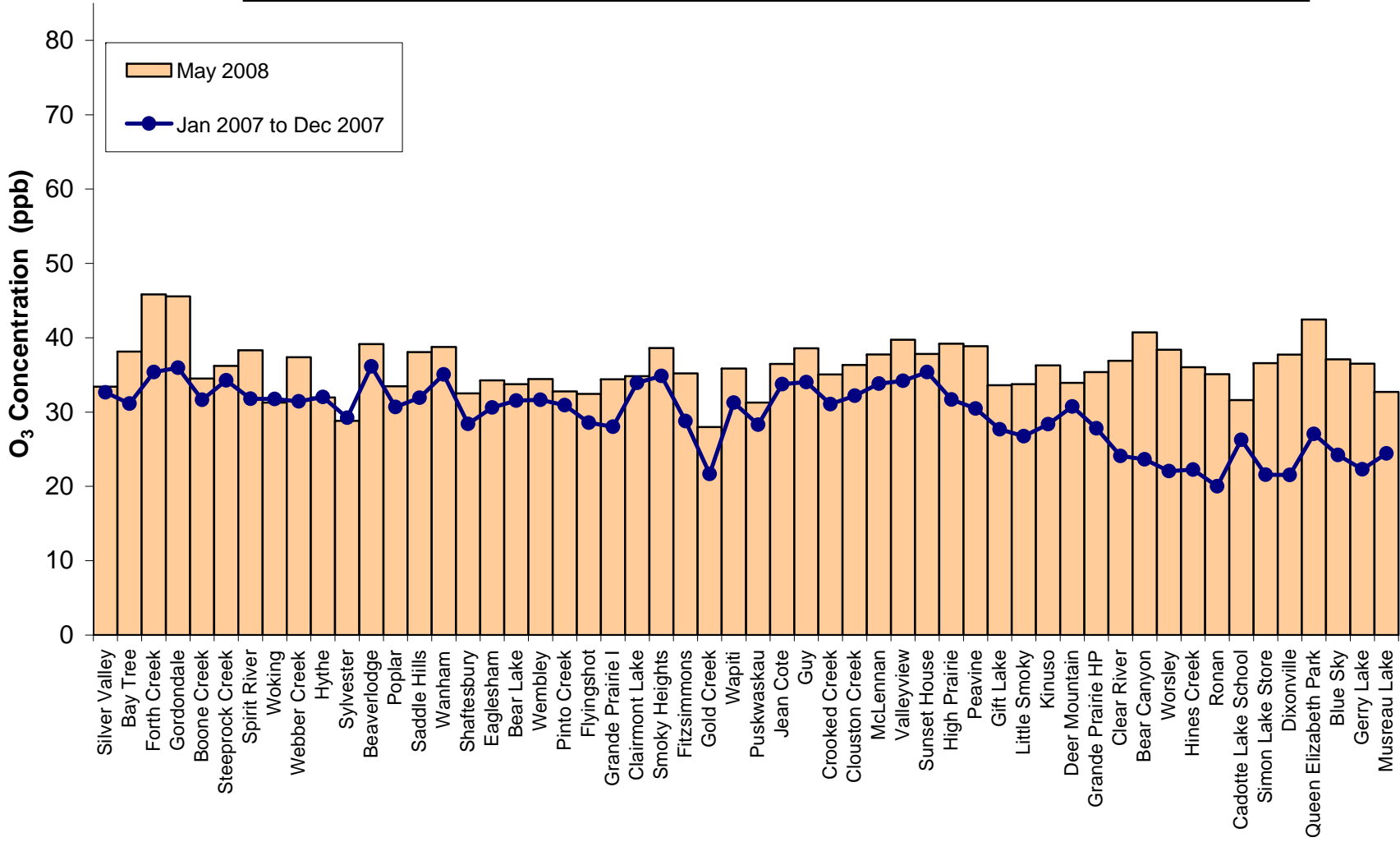


Figure 67. O<sub>3</sub> Bubble Chart

**Alberta Ambient Air Quality Objective - No Annual O<sub>3</sub> Objective**



**Figure 68. O<sub>3</sub> Summary Chart**



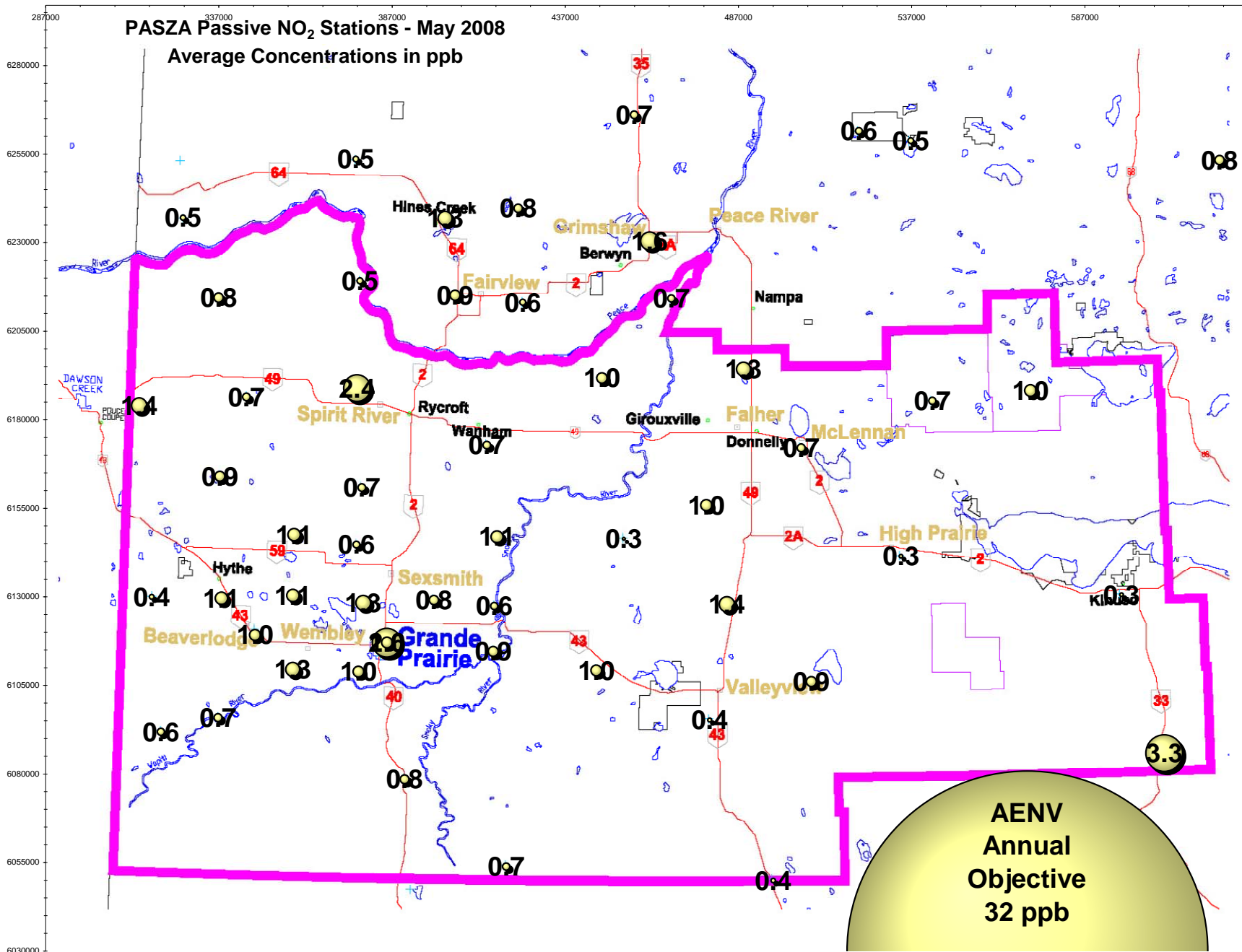
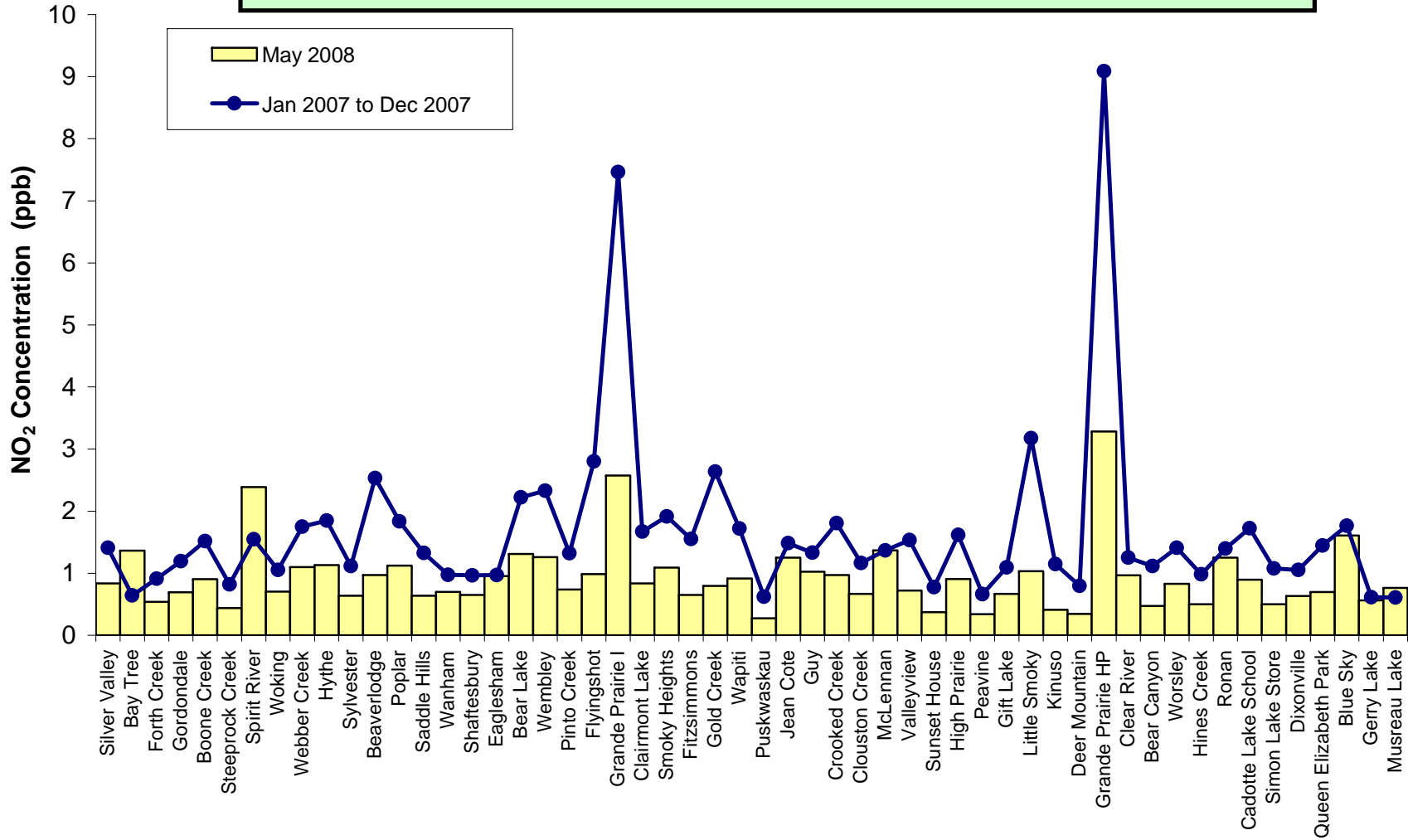


Figure 69. NO<sub>2</sub> Bubble Chart

**Alberta Ambient Air Quality Objective - Annual NO<sub>2</sub> Objective is 32 ppb**



**Figure 70. NO<sub>2</sub> Summary Chart**

## May 2008 Calibration Reports

**PASZA - Henry Pirker Station with the following calibrations:  
SO<sub>2</sub>, NO, NO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub>, CO, THC and TRS**

**PASZA – Evergreen Park Station with the following calibrations:  
SO<sub>2</sub>, TRS and TEOM**

**PASZA – Smoky Heights Station with the following calibrations:  
SO<sub>2</sub> and TRS**

**PASZA – Beaverlodge Station with the following calibrations:  
SO<sub>2</sub>, NO, NO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub>**

**PASZA – Spirit River (Portable) Station with the following calibrations:  
SO<sub>2</sub>, TRS, NO, NO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub>,**

**PASZA – Valleyview Station with the following calibrations:  
SO<sub>2</sub>, H<sub>2</sub>S**

**Calibration Report**Parameter **SO2**Air Monitoring Network **PASZA****Station Information**

Calibration Date	May 6, 2008	Previous Calibration	April 9, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	11:00	End Time (MST)	13:55
Barometric Pressure	0.920 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	50.3 ppb	Cal Gas Expiry Date	1/2/2009
		Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.003264	Calculated slope	1.001323
Calculated intercept	-1.198317	Calculated intercept	-0.936299
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.6		7.6	
Coefficient	.800		.800	
Pressure	637.6	mm Hg	637.6	mm Hg
Flow	0.481	lpm	0.481	lpm
Lamp Voltage	44657	Hz	44657	Hz

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.0	N/A
4988	39.86	398.8	398.6	1.0004
4988	19.89	199.8	201.2	0.9929
4988	9.93	99.9	101.5	0.9845
4988	0.00	0.0	0.0	As Found Zero
4988	39.82	398.4	398.6	As Found Span
Average Correction Factor				0.9926

Calculated value of As Found Response: 398.7 ppb      Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	-0.7	ppb	-0.2	ppb
Auto span	334.7	ppb	334.1	ppb

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Calibration Performed By: Conor Whiteley

## Calibration Summary

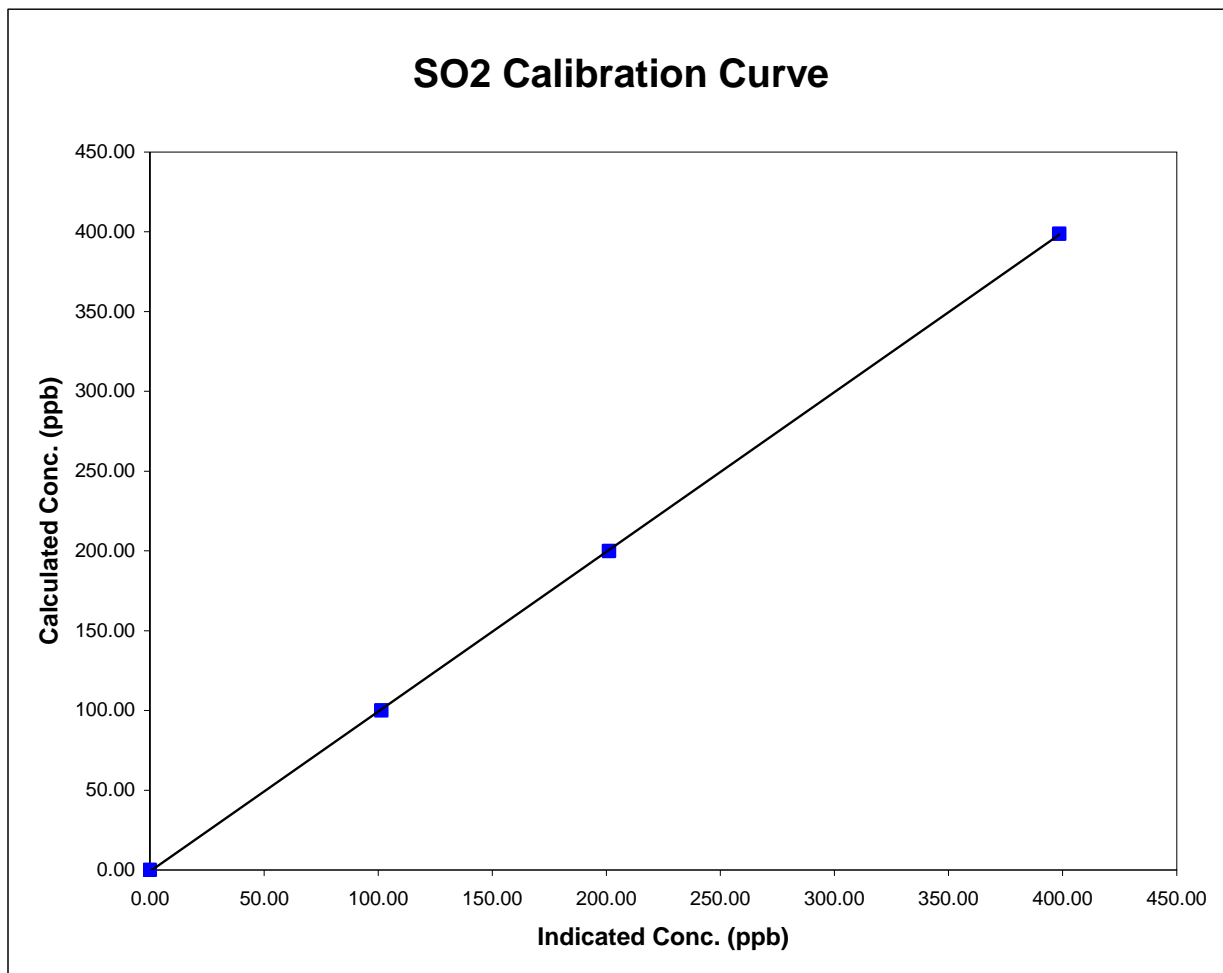
Parameter **SO2**Air Monitoring Network **PASZA**

### Station Information

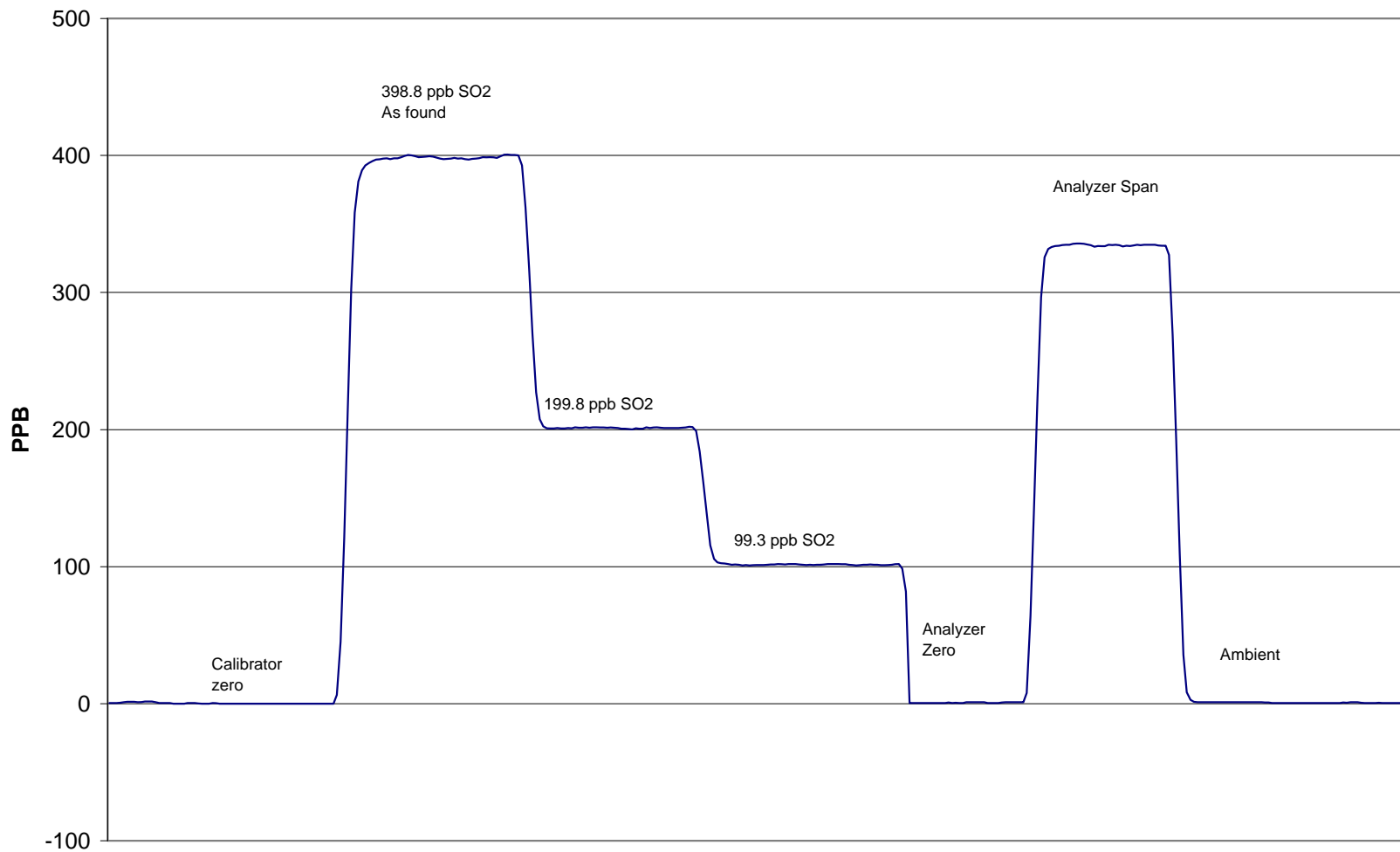
Calibration Date	May 6, 2008	Previous Calibration	April 9, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	13:55
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
398.8	398.6	1.0004	Correlation Coefficient	0.999972
199.8	201.2	0.9929		
99.9	101.5	0.9845		
			Slope	1.001323
			Intercept	-0.936299



### Henry Pirker SO<sub>2</sub> Calibration



May 6, 2008

**Calibration Report**

Parameter

**NOx-NO-NO<sub>2</sub>**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	May 6, 2008	Previous Calibration	April 9th, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal
Start Time (MST)	11:00	End Time (MST)	15:20
Barometric Pressure	0.920 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	1.010892	1.009470	1.007381
	Data Offset	-0.836225	-2.383193	-1.667471
After	Data Slope	1.019407	1.018414	1.018011
	Data Offset	0.025816	-1.632066	-1.803434
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

**Analyzer Information**

Analyzer make/model Teco 42C      Analyzer serial # 508011073

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

Notes:

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# Calibration Report



Parameter **NOx-NO-NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

## Station Information

Calibration Date: **May 6, 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	4988	0.00	0.0	0.0	0.0	0.1	0.5	0.0	N/A	N/A
1	4988	39.86	387.7	387.7	0.0	381.5	381.9	-0.5	1.0163	1.0151
2	4988	19.91	194.4	194.4	0.0	193.3	193.4	-0.2	1.0056	1.0050
3	4988	9.93	97.2	97.2	0.0	98.4	98.5	-0.1	0.9870	0.9865
AFZ	4988	0.00	0.0	0.0	0.0	0.1	0.5	0.0	0.0000	0.0000
AFS	4988	39.88	387.9	387.9	0.0	381.5	381.9	-0.5	1.0168	1.0156
Average Correction Factor									1.0029	1.0022

As Found Concentrations: NO<sub>x</sub>= 379.0 NO= 379.8 As Found Percent Change NO<sub>x</sub>= -2.3% NO= -2.1%

### GPT Calibration Data

Dilution Flow 4988 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	386.2	385.4	0.8	380.2	380.4	-0.2	1.0158	1.0133	N/A	N/A
300	386.2	108.3	277.9	380.7	108.2	272.5	1.0146	1.0013	1.0199	98.0%
200	386.2	195.4	190.8	381.1	193.7	187.4	1.0136	1.0087	1.0183	98.2%
100	386.2	285.3	100.9	380.8	282.0	98.9	1.0142	1.0116	1.0209	98.0%
Average Correction Factor							1.0141	1.0072	1.0197	98.1%

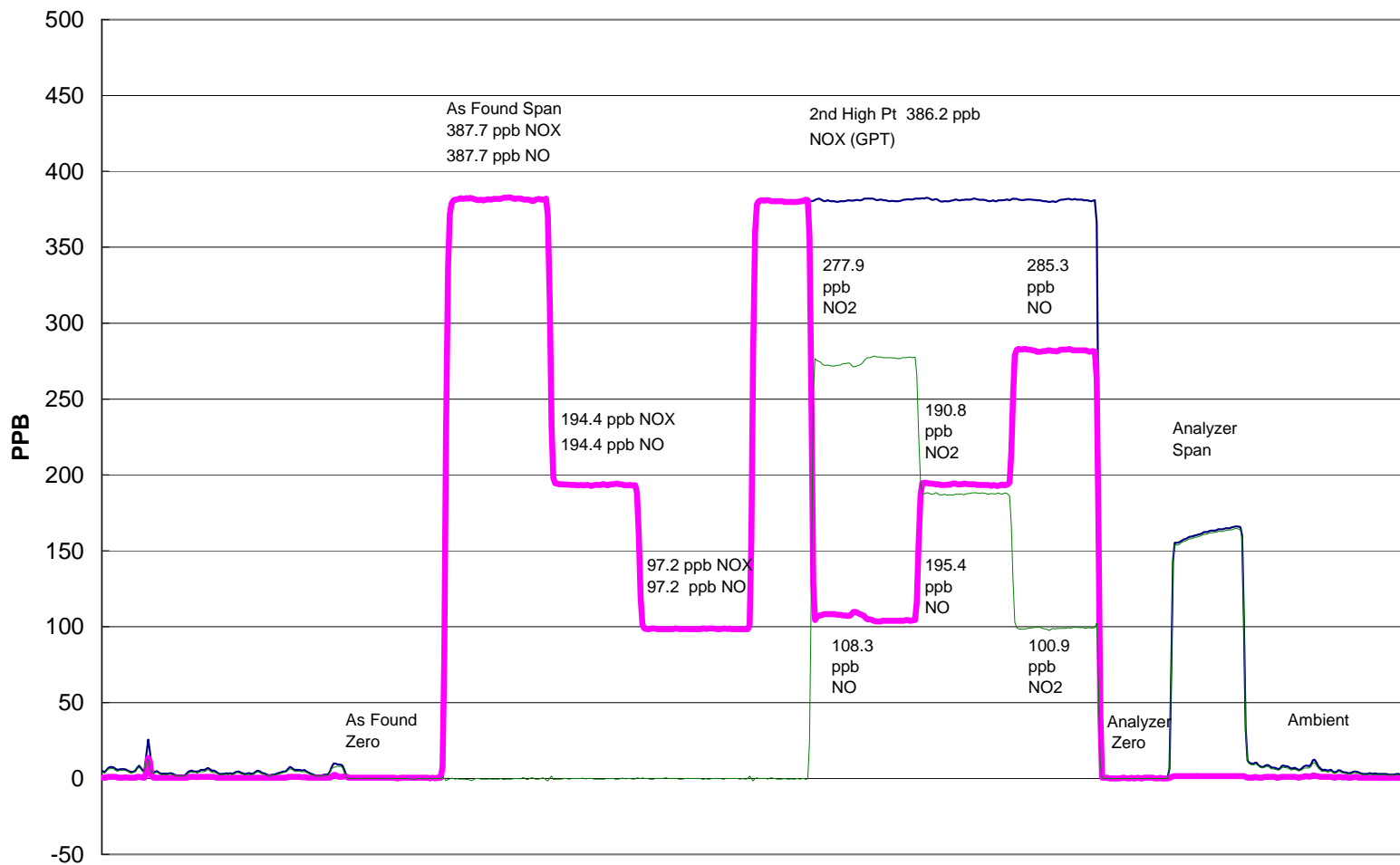
### AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.5	0.6	0.8	ppb	0.9	-155.6	-322.2	ppb
Auto span	165.7	166.1	-0.5	ppb	165.7	166.1	-0.3	ppb

Calibration Performed By: Conor Whiteley



### Henry Pirker NOx Calibration



May 6, 2008

## Calibration Summary

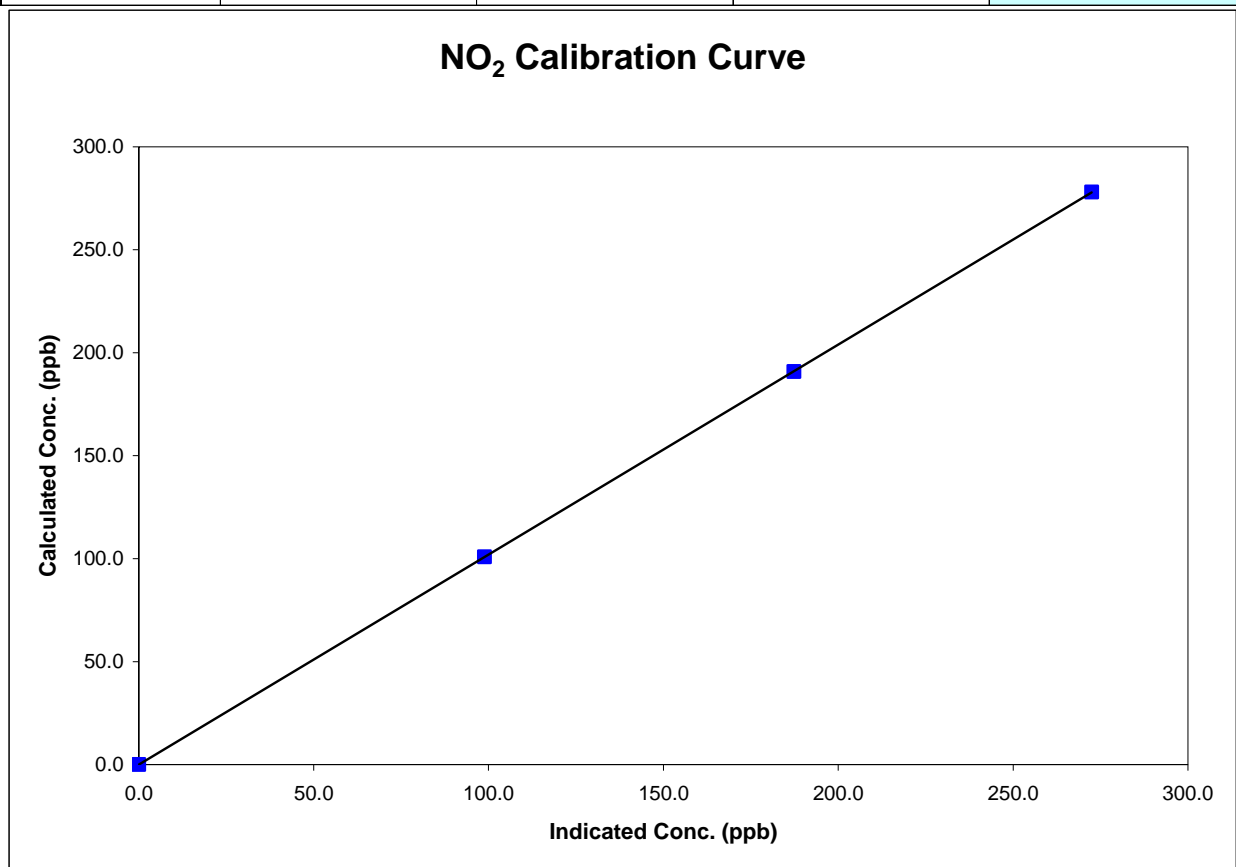
Parameter **NO<sub>2</sub>**Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 6, 2008	Previous Calibration	April 9th, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	15:20
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	0.0000		
277.9	272.5	1.0199	Correlation Coefficient	0.999998
190.8	187.4	1.0183		
100.9	98.9	1.0209	Slope	1.019407
			Intercept	0.025816



## Calibration Summary

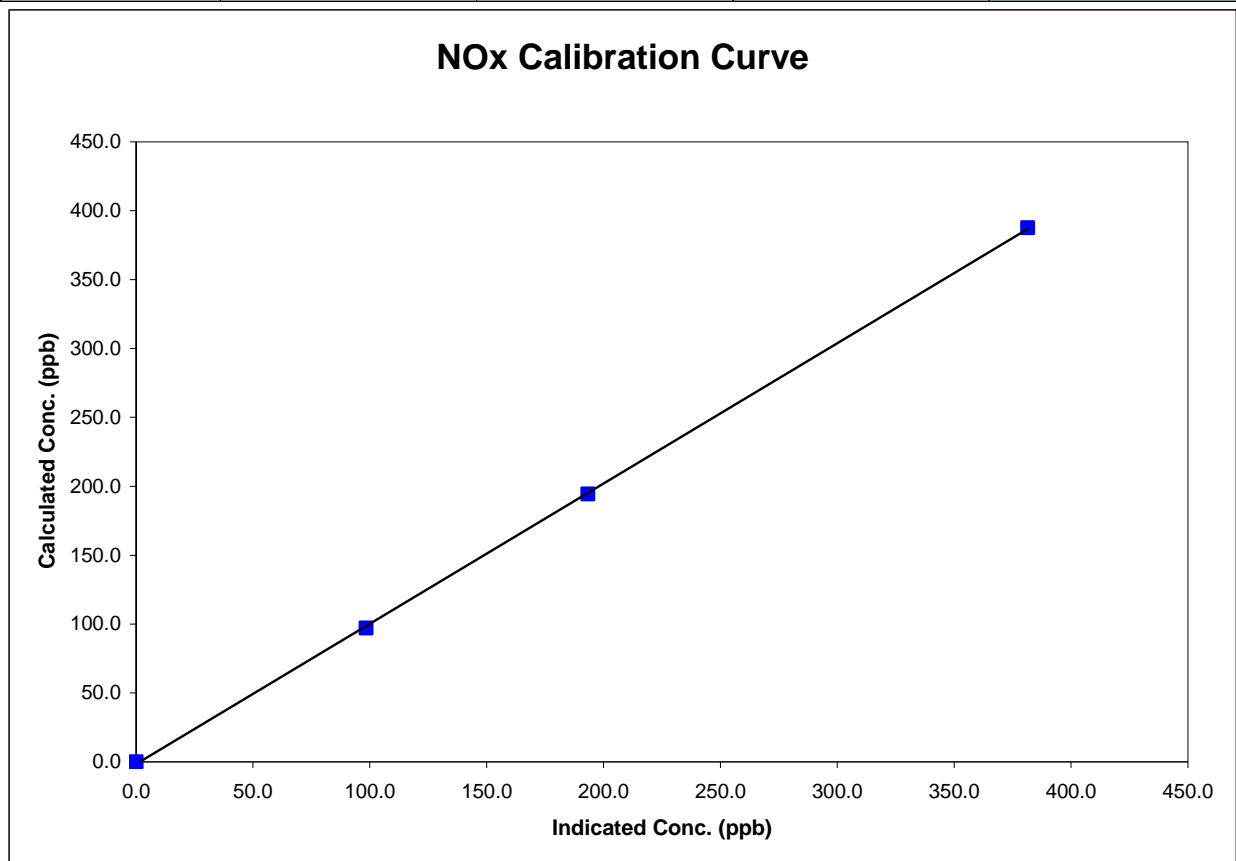
Parameter **NO<sub>x</sub>**Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 6, 2008	Previous Calibration	April 9th, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	15:20
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	0.0000	Correlation Coefficient	0.999930
387.7	381.5	1.0163		
194.4	193.3	1.0056		
97.2	98.4	0.9870		
			Slope	1.018414
			Intercept	-1.632066



## Calibration Summary

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

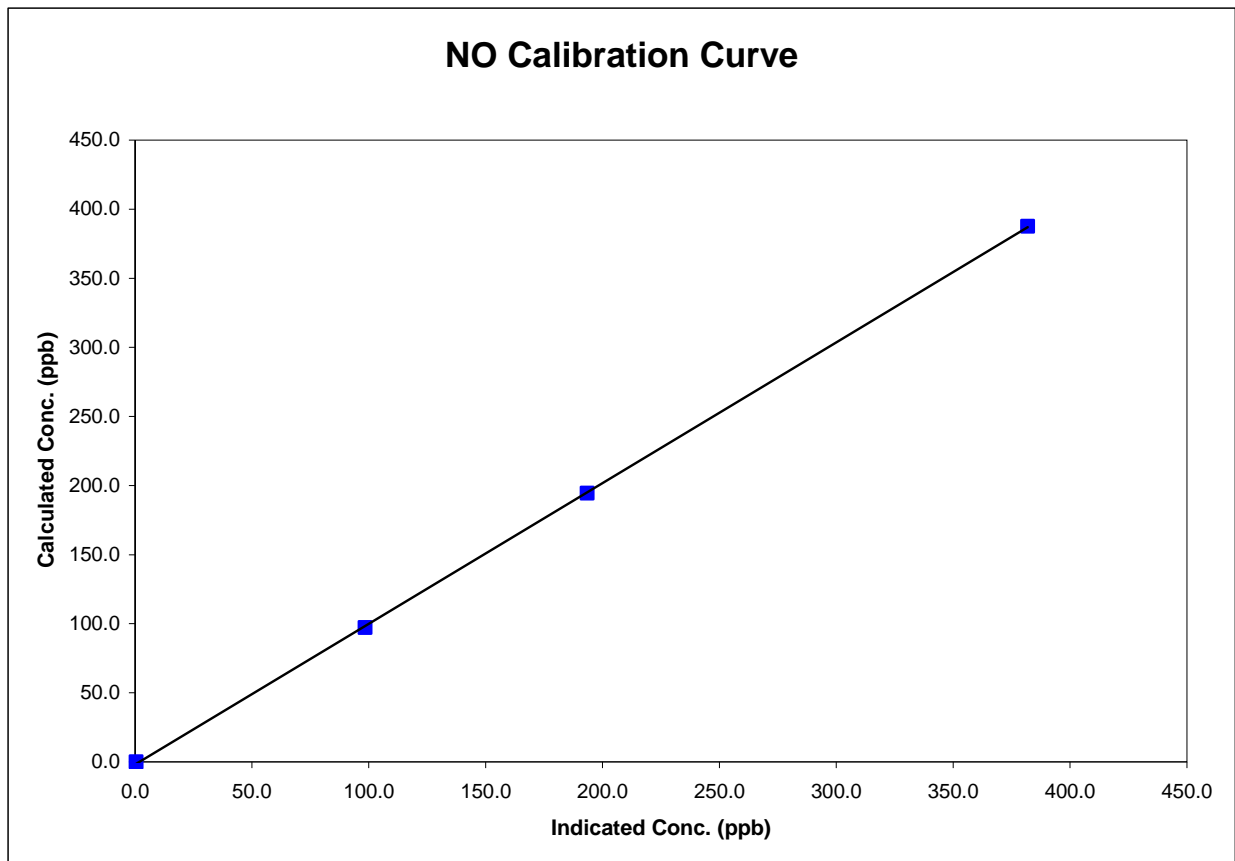


### Station Information

Calibration Date	May 6, 2008	Previous Calibration	April 9th, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	15:20
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999946
387.7	381.9	1.0151		
194.4	193.4	1.0050	Slope	1.018011
97.2	98.5	0.9865		
			Intercept	-1.803434



**Calibration Report**Parameter **O3**Air Monitoring Network **PASZA****Station Information**

Calibration Date	May 7, 2008	Previous Calibration	April 23, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:

Start Time (MST)	9:30	End Time (MST)	11:55
Barometric Pressure	0.920 atm	Station Temperature	20.0 Deg C
Calibrator	Enviroics 6103	Serial Number	2844
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>

Calculated slope	1.032449	Calculated slope	1.007435
Calculated intercept	5.202457	Calculated intercept	0.260668

Analyzer make	TECO 49C	Analyzer serial #	607415761
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	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.6	ppb	-0.6	ppb
slope	1.023		1.023	
O3 Lamp temp	71.1	Deg C	71	Deg C
Intensities	100377/80071	mV	101412/820071	mV
Pressure	709.1	inches Hg	709.1	inches Hg
Flow A	678	ccm	678	ccm
Flow B	696	Deg C	696	Deg C

**Calibration Data**

Referenced concentration (ppb)	Dilution air flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0	4990	0.0	0.3	N/A
300	4990	277.9	276.4	1.0055
200	4990	190.8	188.2	1.0137
100	4990	100.9	99.5	1.0148
0	4990	0.0	0.3	As found zero
300	4990	277.9	276.4	As found span
Average Correction Factor				1.0113

Calculated value of As Found Response: 290.2 ppm Percent Change of As Found: 4.4%

	before calibration		after calibration	
Auto zero	5.4	ppb	1.1	ppb
Auto span	520.2	ppb	166.9	ppb

Notes: \_\_\_\_\_

Calibration Performed By: C Whiteley

## Calibration Summary

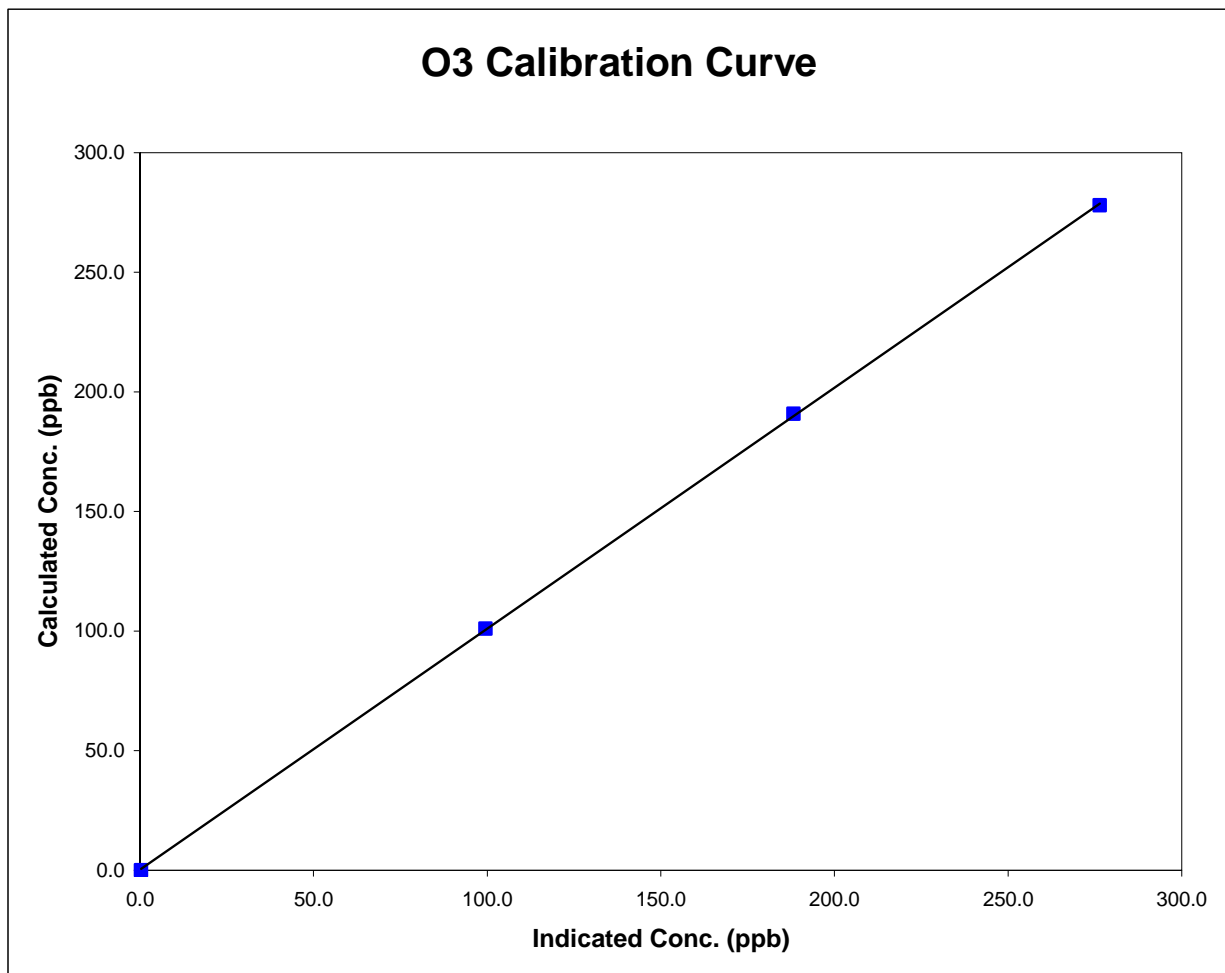
Parameter **O3**Air Monitoring Network **PASZA**

### Station Information

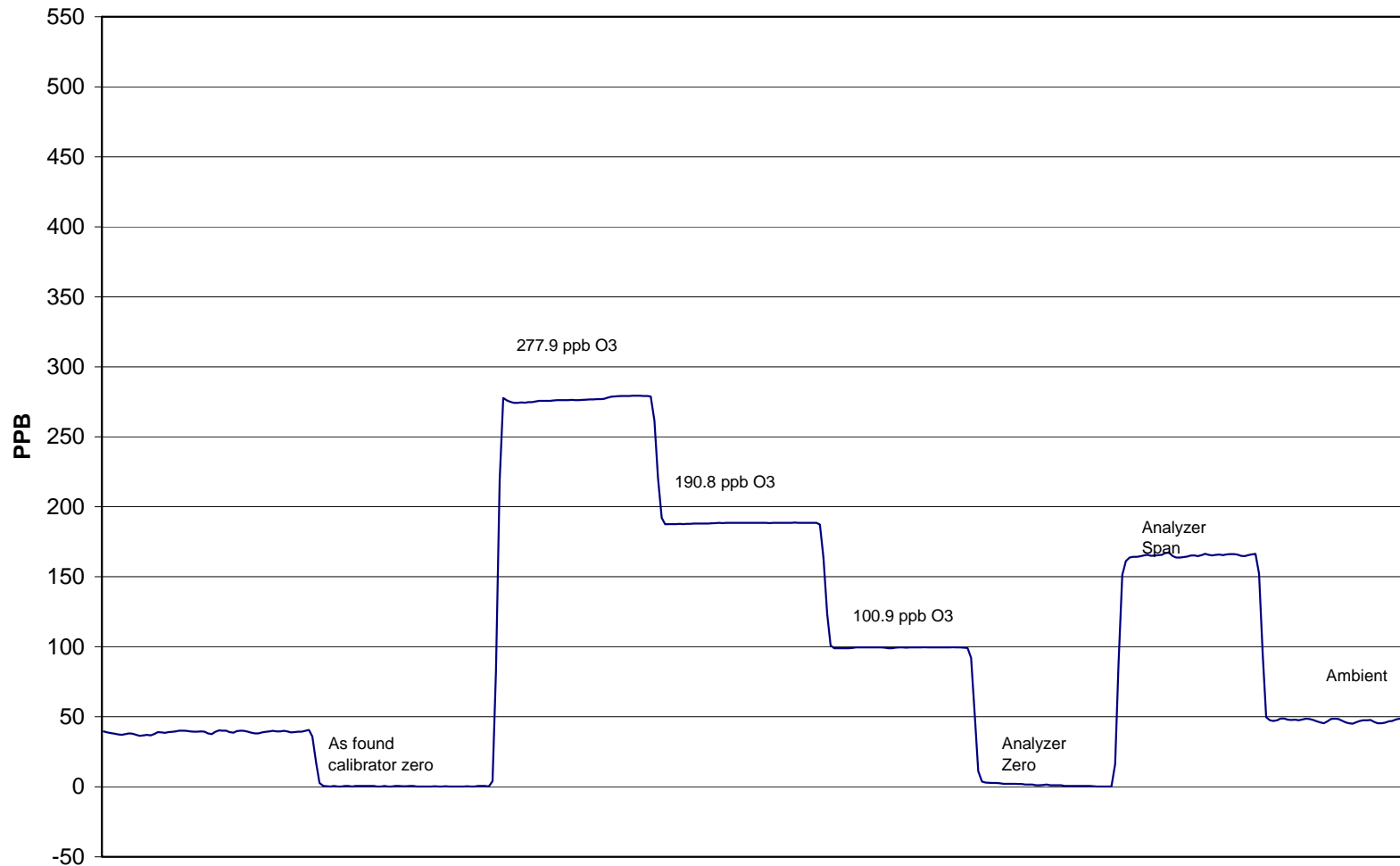
Calibration Date	May 7, 2008	Previous Calibration	April 23, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:30	End Time (MST)	11:55
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	NA		
277.9	276.4	1.0055	Correlation Coefficient	0.999952
190.8	188.2	1.0137		
100.9	99.5	1.0148	Slope	1.007435
			Intercept	0.260668



### Henry Pirker O<sub>3</sub> Calibration



May 7, 2008

**Calibration Report**
 Parameter **CO**  
 Air Monitoring Network **PASZA**
**Station Information**

Calibration Date	May 7, 2008	Previous Calibration	April 10, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	14:20	End Time (MST)	16:50
Barometric Pressure	0.919 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.006779	Calculated slope	0.985651
Calculated intercept	-0.039969	Calculated intercept	-0.570672
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.017		1.017	
CO zero setting	-0.095		.808	
Sample pressure	683.1	mm Hg	687.9	mm Hg
Sample Flow	1.13	LPM	1.13	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)
4991	0.00	0.00	0.56	N/A
4991	39.91	23.80	24.73	0.9625
4991	19.92	11.93	12.65	0.9428
4991	9.92	5.95	6.66	0.8931
4991	0.00	0.00	0.56	As Found Zero
4991	39.86	23.77	24.73	As Found Span
Average Correction Factor				0.9328

Calculated value of As Found Response: 24.292 ppm      Percent Change of As Found: -2.2%

	before calibration		after calibration	
Auto zero	-0.03	ppm	0.03	ppm
Auto span	20.12	ppm	17.46	ppm

Notes: \_\_\_\_\_

Calibration Performed By: Conor Whiteley



## Calibration Summary

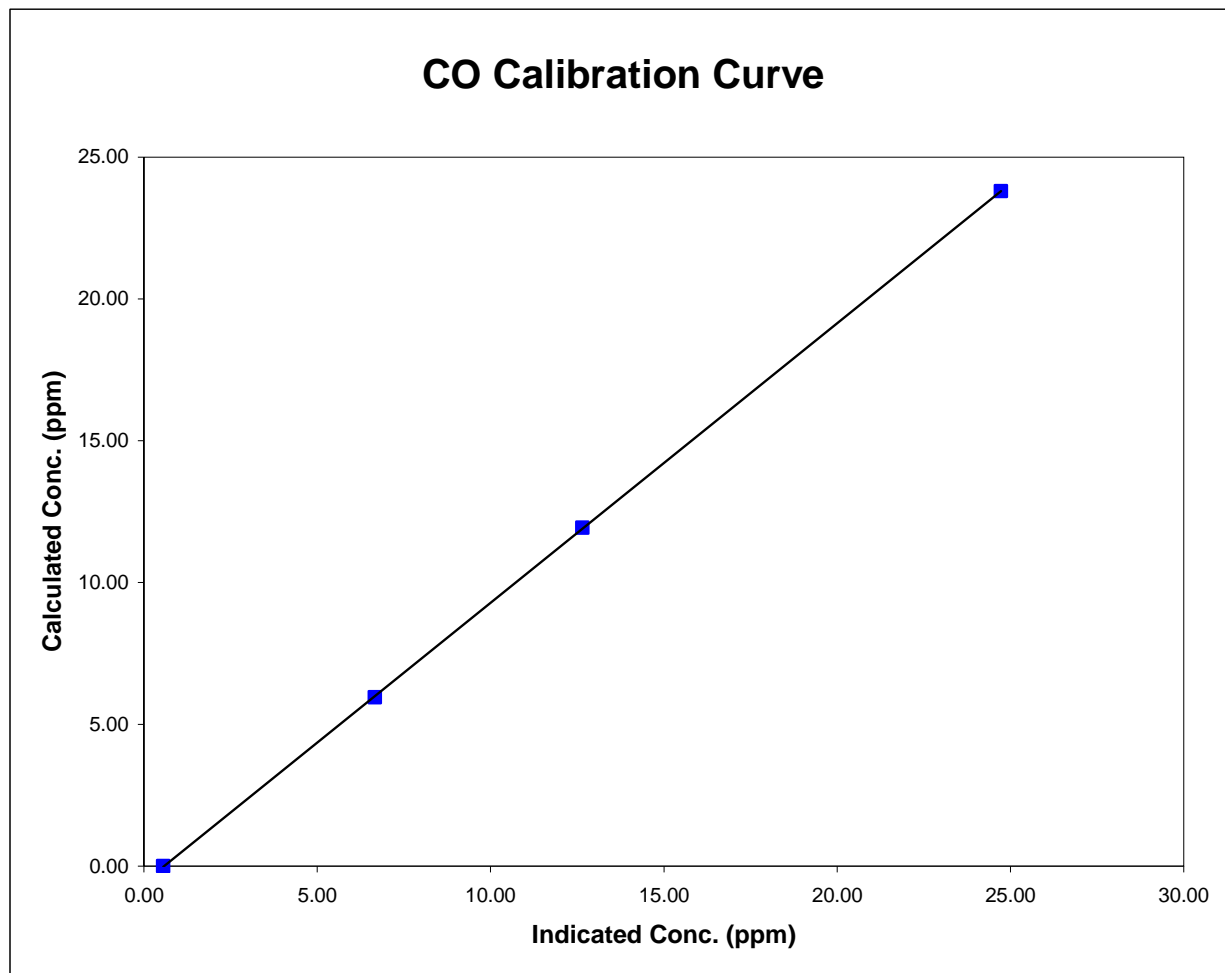
Parameter **CO**Air Monitoring Network **PASZA**

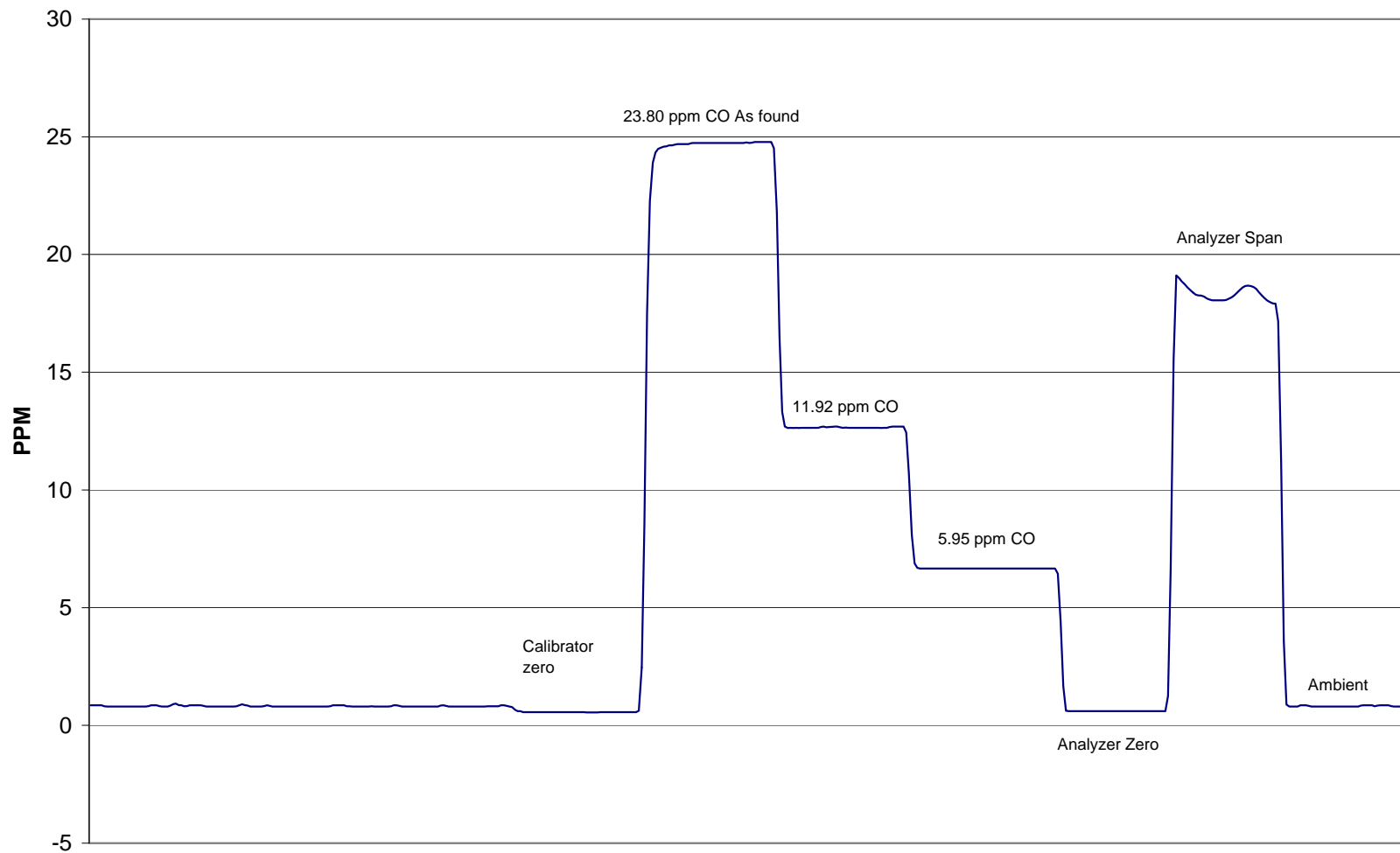
### Station Information

Calibration Date	May 7, 2008	Previous Calibration	April 10, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:20	End Time (MST)	16:50
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	0.558	N/A		
23.799	24.727	0.9625	Correlation Coefficient	0.999989
11.926	12.650	0.9428		
5.951	6.664	0.8931	Slope	0.985651
			Intercept	-0.570672



**Henry Pirker CO Calibration****May 7, 2008**

**Calibration Report**Parameter **THC**Air Monitoring Network **PASZA****Station Information**

Calibration Date	May 8, 2008	Previous Calibration	April 11, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:50	End Time (MST)	14:50
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	701 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1523.25 ppm	Cal Gas Cylinder #	ALM 005412
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.995056	Calculated slope	0.997090
Calculated intercept	-0.053949	Calculated intercept	-0.005710
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

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

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.00	0.02	N/A
4990	69.82	21.02	21.11	0.9959
4990	29.88	9.07	9.05	1.0019
4990	9.92	3.02	3.05	0.9898
4990	0.00	0.00	0.02	As Found Zero
4990	69.82	21.02	21.11	As Found Span
Average Correction Factor				0.9959

Calculated value of As Found Response: 20.927 ppm Percent Change of As Found: 0.4%

	before calibration		after calibration	
Auto zero	-0.01	ppm	-0.01	ppm
Auto span	23.58	ppm	24.92	ppm

Notes: Regulator Outflow accidentally left closed on initial AIC

Calibration Performed By: Conor Whiteley

## Calibration Summary

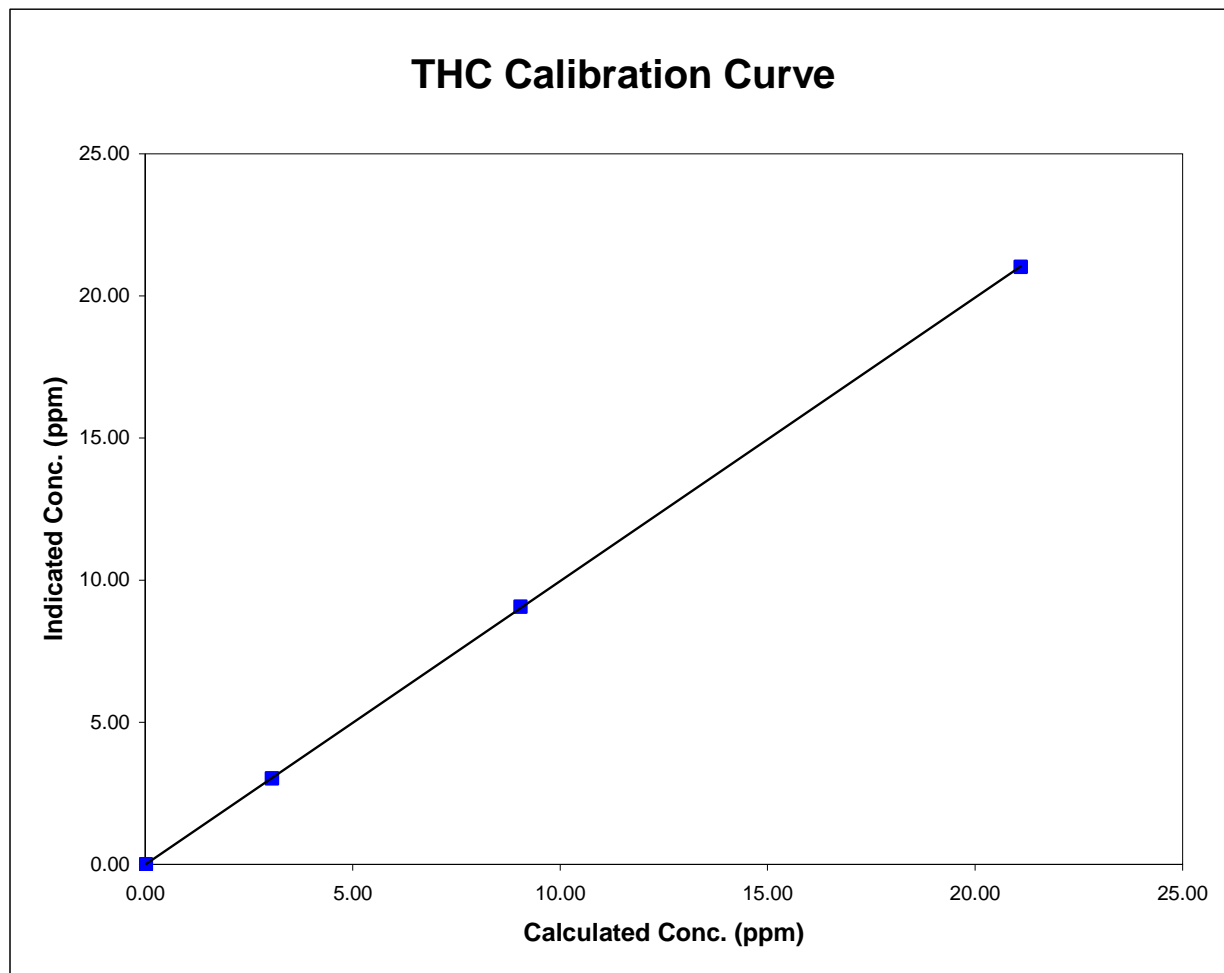
Parameter **THC**Air Monitoring Network **PASZA**

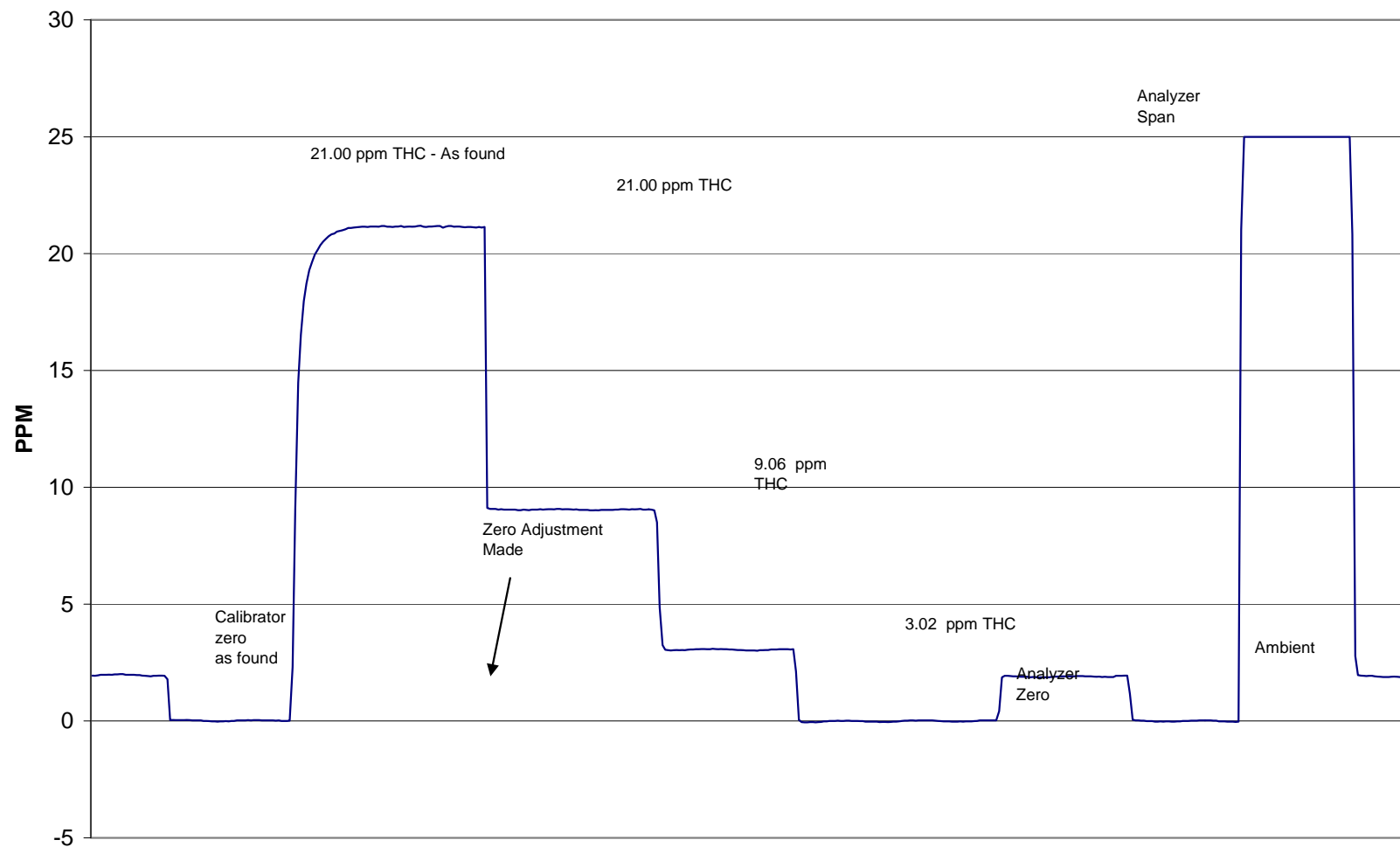
### Station Information

Calibration Date	May 8, 2008	Previous Calibration	April 11, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:50	End Time (MST)	14:50
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	0.020	N/A		
21.019	21.105	0.9959	Correlation Coefficient	0.999987
9.067	9.050	1.0019		
3.022	3.053	0.9898	Slope	0.997090
			Intercept	-0.005710



**Henry Pirker THC Calibration****May 8, 2008**

# Calibration Report

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

## Station Information

Calibration Date	May 7, 2008	Previous Calibration	April 10, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	11:00	End Time (MST)	14:45
Barometric Pressure	0.919 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	5.1 ppb	Cal Gas Expiry Date	4/2/2009
		Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.986664	Calculated slope	0.975725
Calculated intercept	0.339240	Calculated intercept	0.728797
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.871		0.871	
Background	17.7		17.9	
Pressure	668.8	mm Hg	657	mm Hg
Flow	464	ccm	459	ccm
Lamp Voltage	851	V	851	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	-0.82	N/A
4988	79.76	80.27	81.42	0.9859
4988	39.85	40.42	40.89	0.9886
4988	9.93	10.13	9.60	1.0554
4988	0.00	0.00	-0.82	As Found Zero
4988	79.76	80.27	81.42	As Found Span
Average Correction Factor				1.0100

Calculated value of As Found Response: 81.5 ppb      Percent Change of As Found: -1.5%

	before calibration		after calibration	
Auto zero	-0.17	ppb	0.02	ppb
Auto span	35.67	ppb	34.81	ppb

Notes:

Calibration Performed By: Conor Whiteley

## Calibration Summary

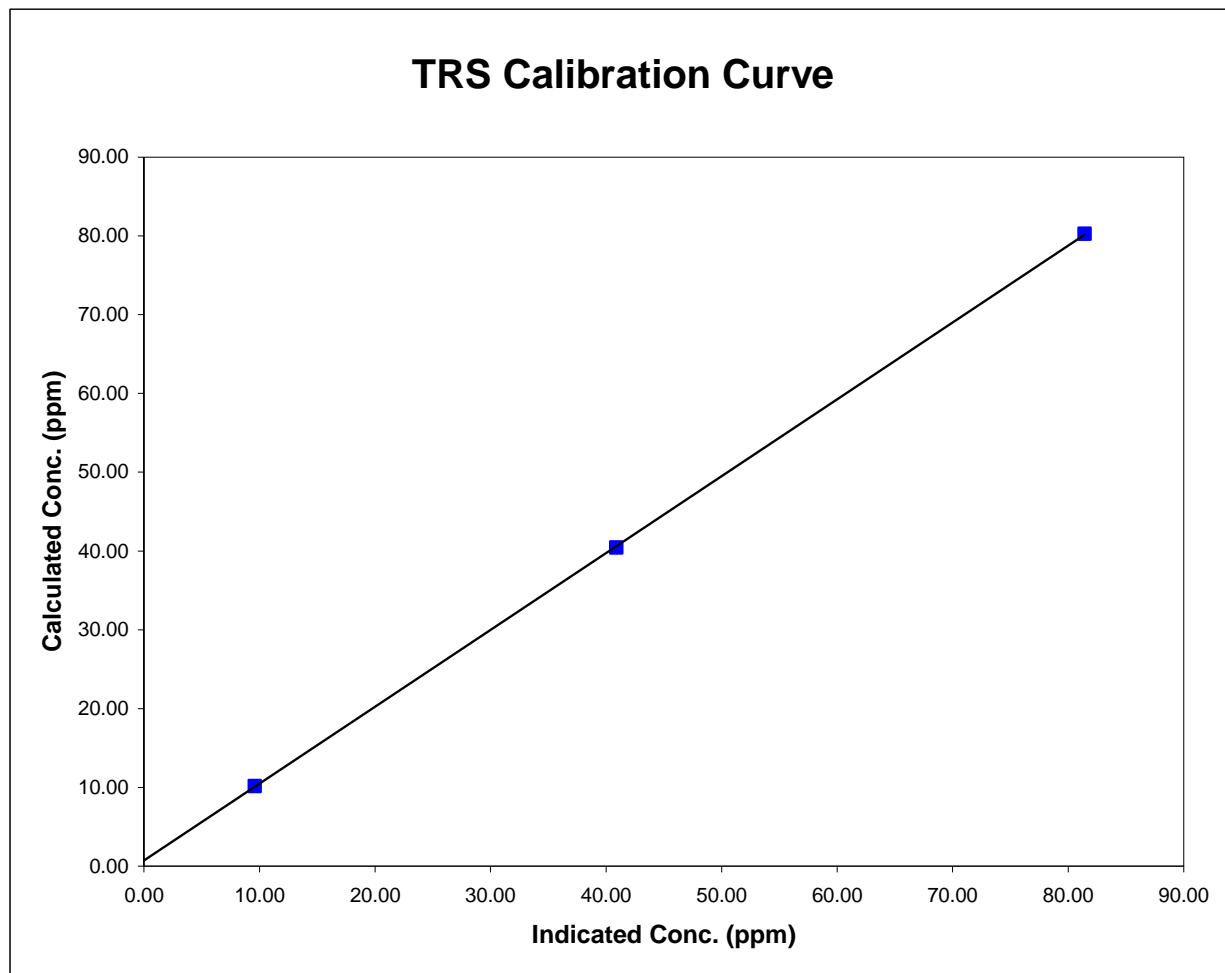
Parameter **TRS**Air Monitoring Network **PASZA**

### Station Information

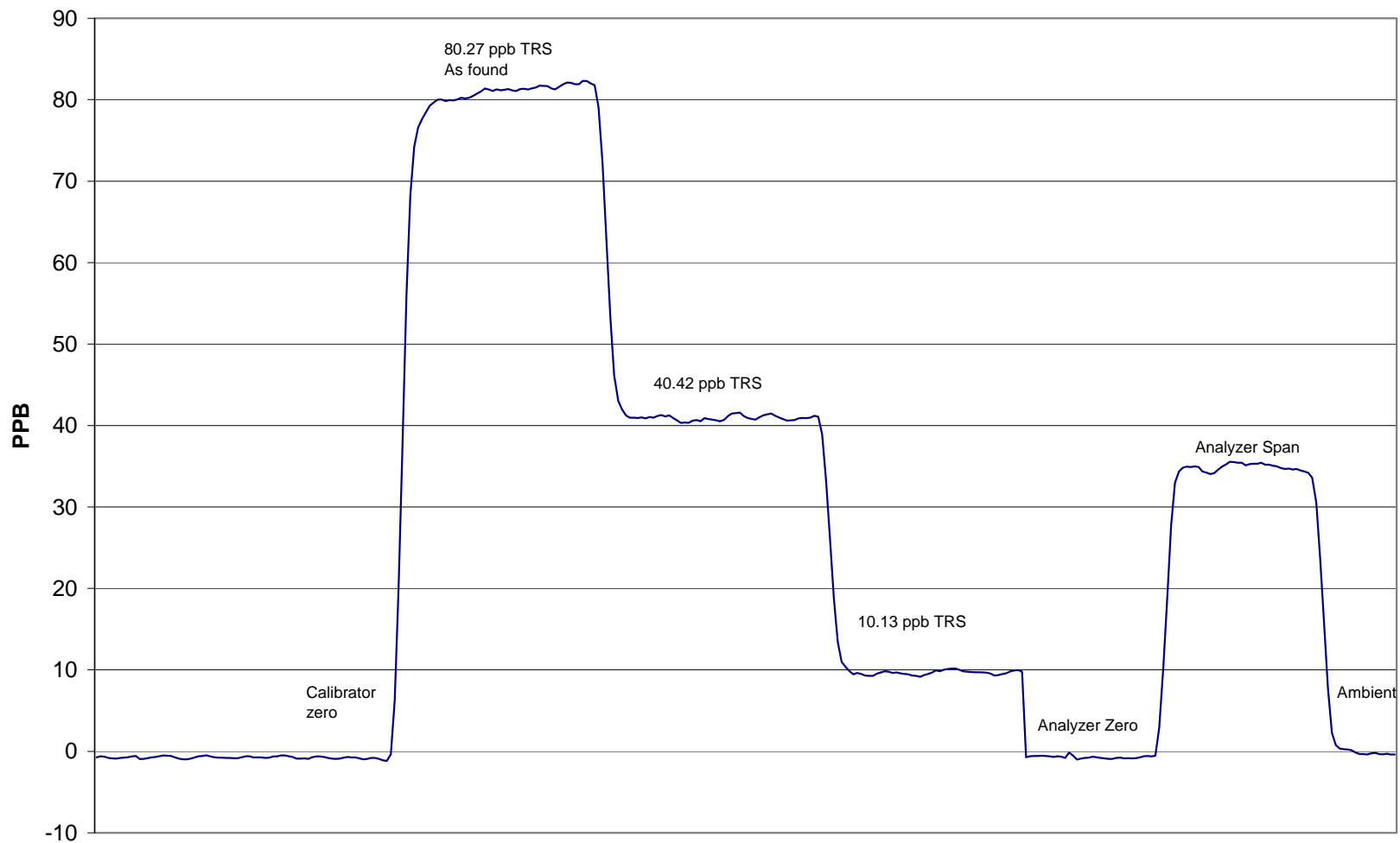
Calibration Date	May 7, 2008	Previous Calibration	April 10, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	14:45
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.816	N/A		
80.267	81.417	0.9859	Correlation Coefficient	0.999986
40.422	40.887	0.9886		
10.133	9.601	1.0554	Slope	0.975725
			Intercept	0.728797



### Henry Pirker TRS Calibration



May 7, 2008



# Calibration Report



Parameter

SO<sub>2</sub>

Air Monitoring Network

PASZA

## Station Information

Calibration Date	May 9, 2008	Previous Calibration	April 16, 2008
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:05	End Time (MST)	15:15
Barometric Pressure	0.915 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	0.031103	Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	<b>Before</b>		<b>After</b>
Calculated slope	1.022118	Calculated slope	1.002706
Calculated intercept	-2.224314	Calculated intercept	-2.207150
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	9		9	
coefficient	0.928		0.928	
Lamp Voltage	837	volts	837	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	44.25	Deg C	44.25	Deg C
Pressure	659.5	mm Hg	659.5	mm Hg
Sample Flow	440	ccm	440	ccm
Lamp Intensity	89	%	89	%

## Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.00	1.2	N/A
4990	39.82	398.21	399.0	0.9981
4990	19.93	200.10	201.9	0.9913
4990	9.91	99.70	102.8	0.9694
4990	0.0	0.00	1.2	As Found Zero
4990	39.8	398.21	389.5	As Found Span
Average Correction Factor				0.9862

Calculated value of As Found Response: 394.666 ppm

Percent Change of As Found: 0.9%

	before calibration		after calibration	
Auto zero	-1.2	ppm	-1.3	ppm
Auto span	275.3	ppm	271.1	ppm

Notes: Adjusted SO<sub>2</sub>Calibration Performed By: Conor Whiteley

## Calibration Summary

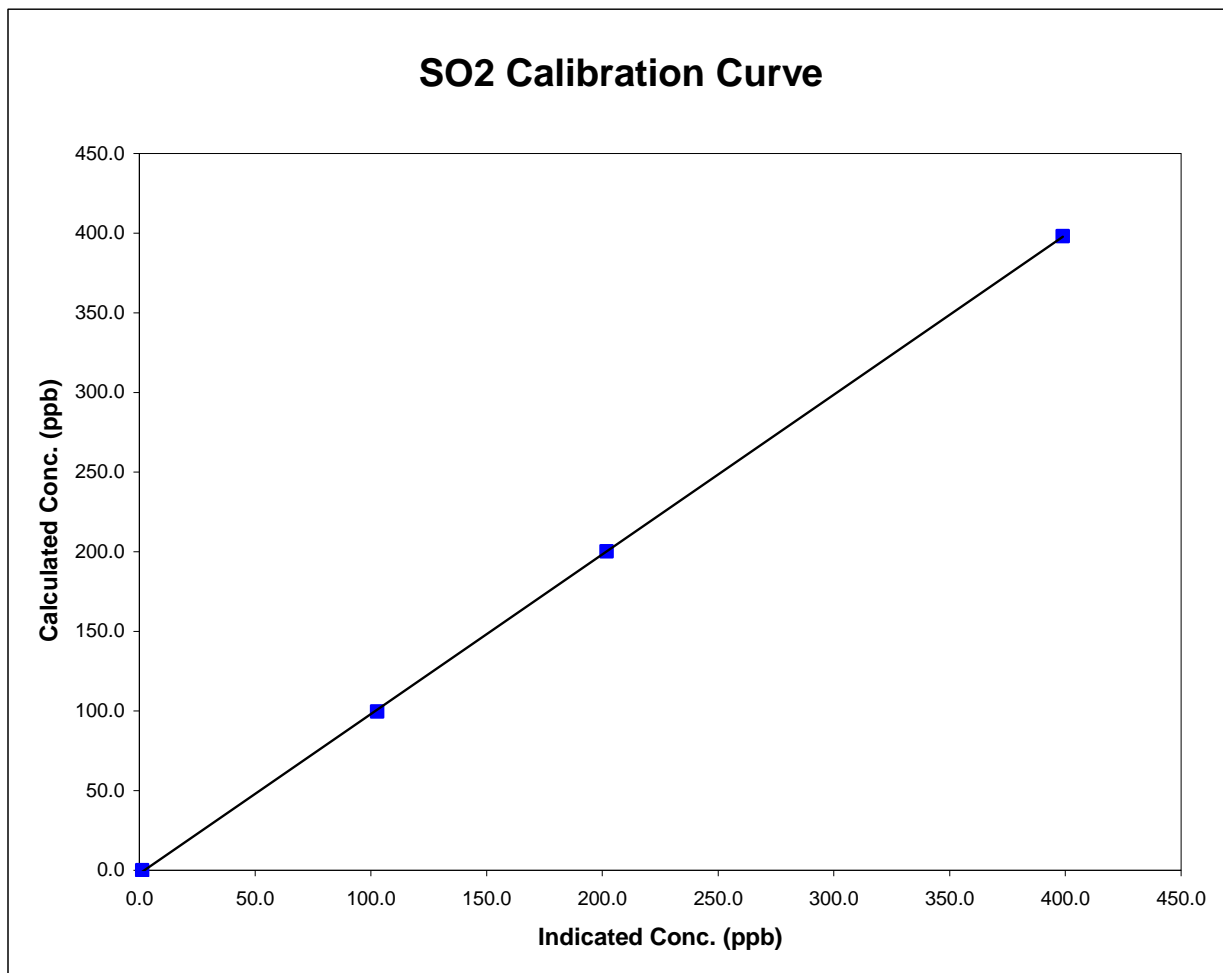
Parameter **SO2**Air Monitoring Network **PASZA**

### Station Information

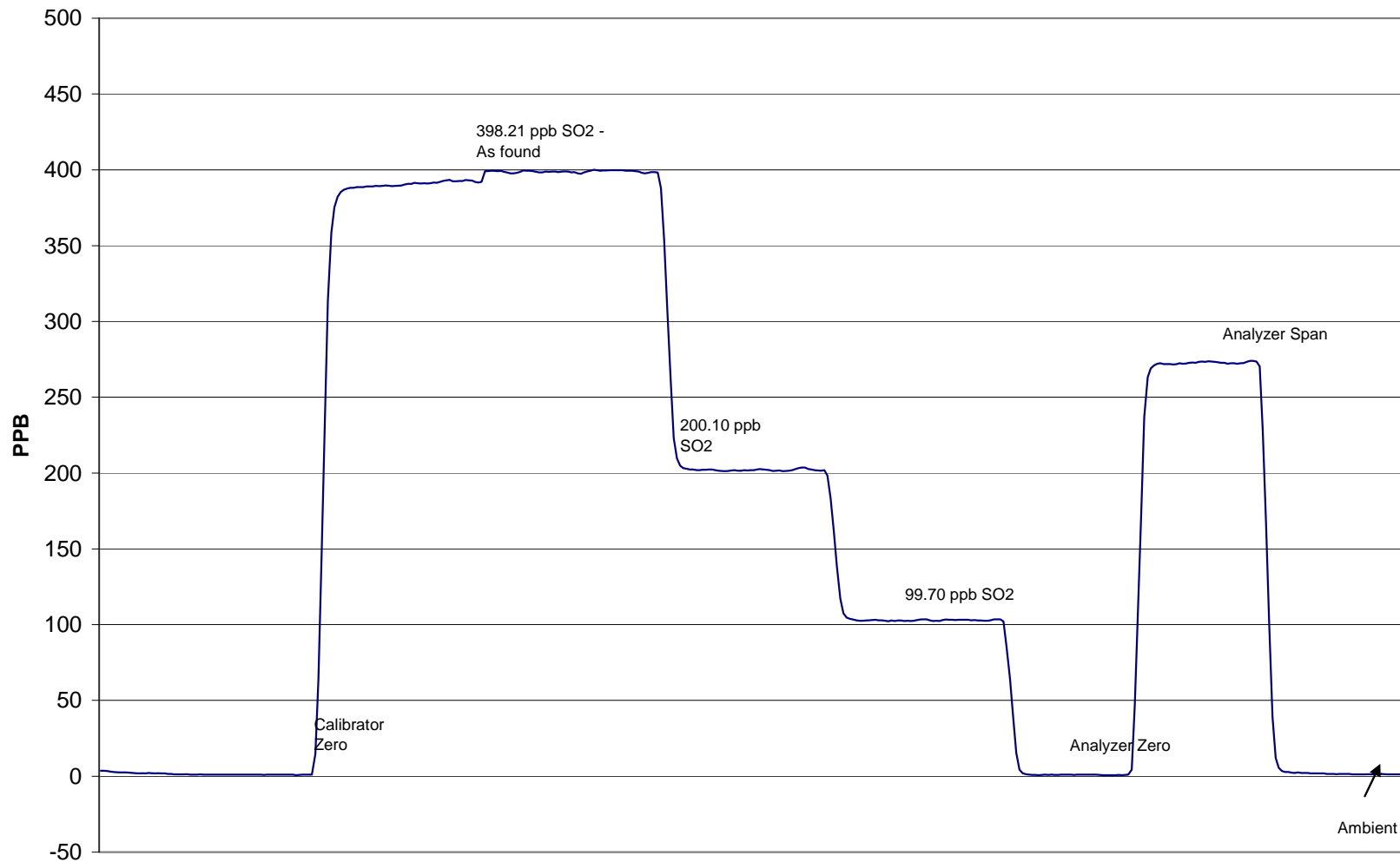
Calibration Date	May 9, 2008	Previous Calibration	April 16, 2008
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:05	End Time (MST)	15:15
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.2	N/A		
398.2	399.0	0.9981	Correlation Coefficient	0.999971
200.1	201.9	0.9913		
99.7	102.8	0.9694	Slope	1.002706
			Intercept	-2.207150



### Evergreen Park SO<sub>2</sub> Calibration



May 9, 2008

# Calibration Report

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

## Station Information

Calibration Date	May 9, 2007	Previous Calibration	April 16, 2007
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:00	End Time (MST)	13:00
Barometric Pressure	0.915 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	5.1 ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.031103	Cal Gas Cylinder #	ALM 013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	0.996670	Calculated slope	0.971076
Calculated intercept	1.039243	Calculated intercept	0.838816
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.2	ppb	15.2	ppb
coefficient	0.616		0.616	
Lamp Voltage	825	volts	823	volts
Chamber Temp	44.3	Deg C	44.2	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	628.6	mm Hg	626.4	mm Hg
Sample Flow	464	ccm	462	ccm
Lamp Intensity	45,749	mv	45,127	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	-0.7	N/A
4989	79.76	80.25	81.8	0.9809
4991	39.84	40.39	40.7	0.9922
4990	9.92	10.12	9.3	1.0829
4990	0.00	0.00	-0.7	As Found Zero
4989	79.76	80.25	81.8	As Found Span
Average Correction Factor				1.0187

Calculated value of As Found Response: 83.25 ppm      Percent Change of As Found: -3.7%

	before calibration		after calibration	
Auto zero	-0.1	ppm	-0.2	ppm
Auto span	71.1	ppm	68.5	ppm

Notes: \_\_\_\_\_

Calibration Performed By: Conor Whiteley

## Calibration Summary

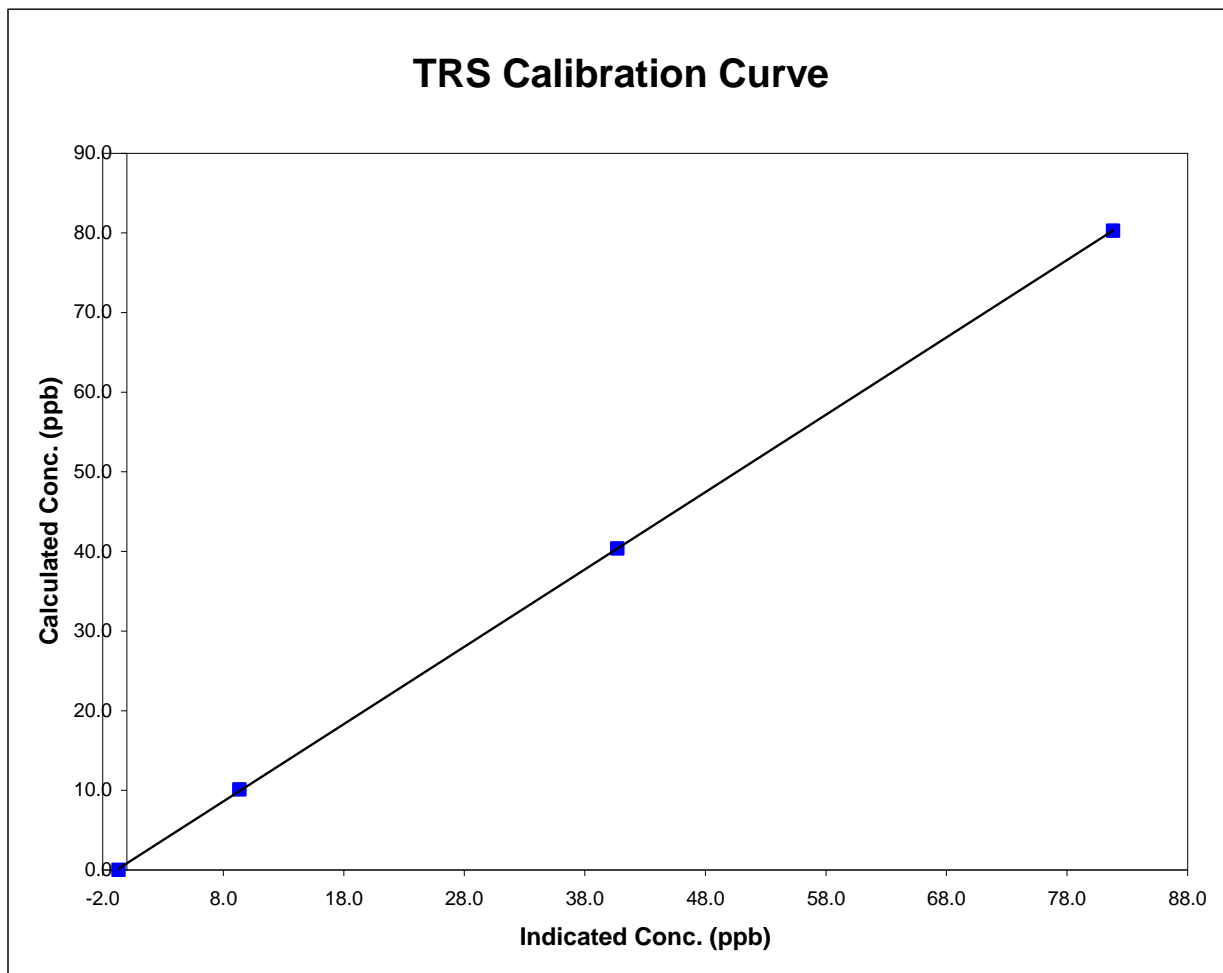
Parameter **TRS**Air Monitoring Network **PASZA**

### Station Information

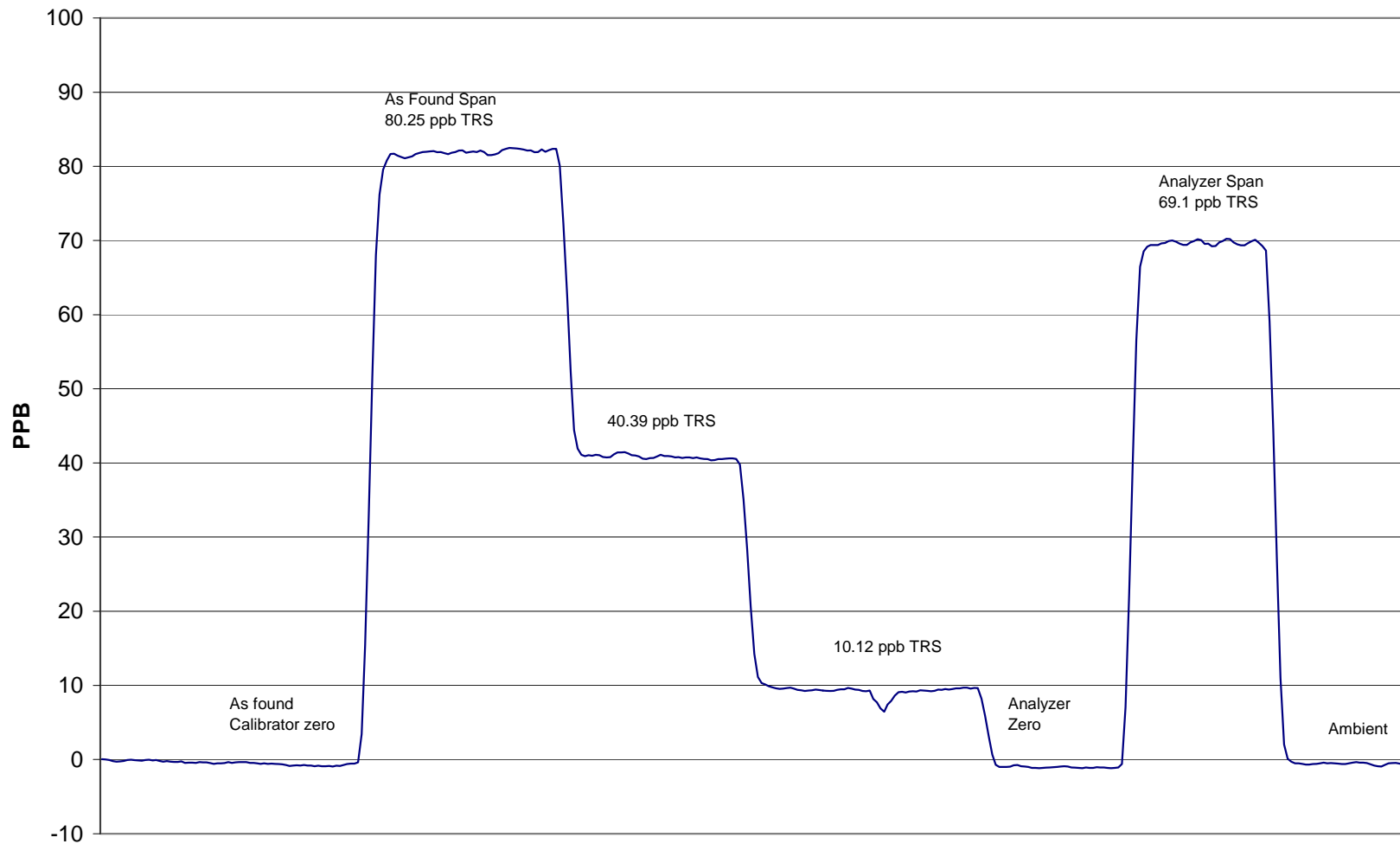
Calibration Date	May 9, 2007	Previous Calibration	April 16, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:00	End Time (MST)	13:00
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.7	N/A		
80.3	81.8	0.9809	Correlation Coefficient	0.999979
40.4	40.7	0.9922		
10.1	9.3	1.0829	Slope	0.971076
			Intercept	0.838816



### Evergreen Park TRS Calibration



April 16, 2007

# Calibration Report



Parameter

SO<sub>2</sub>

Air Monitoring Network

PASZA

## Station Information

Calibration Date	May 23, 2008	Previous Calibration	April 18, 2008
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:35	End Time (MST)	14:25
Barometric Pressure	0.932 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	0.031681	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	0.998342	Calculated slope	0.996186
Calculated intercept	-1.802778	Calculated intercept	-1.464891
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	6.4		6.4	
coefficient	0.722		0.722	
Lamp Voltage	937	volts	937	volts
Chamber Temp	45.1	Deg C	45.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	678	mm Hg	678	mm Hg
Sample Flow	450	ccm	450	ccm
Lamp Intensity	87	%	87	%

## Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.0	0.00	0.4	N/A
4988	39.82	398.37	400.8	0.9939
4989	19.91	199.94	202.8	0.9859
4988	9.96	100.24	103.1	0.9724
4988	0.0	0.00	0.4	As Found Zero
4988	39.92	399.37	404.3	As Found Span
Average Correction Factor				0.9841

Calculated value of As Found Response: 401.436 ppm      Percent Change of As Found: -0.5%

	before calibration		after calibration	
Auto zero	-1.5	ppm	-1.1	ppm
Auto span	303.8	ppm	304.5	ppm

Notes:

Calibration Performed By: Conor Whiteley

# Calibration Summary



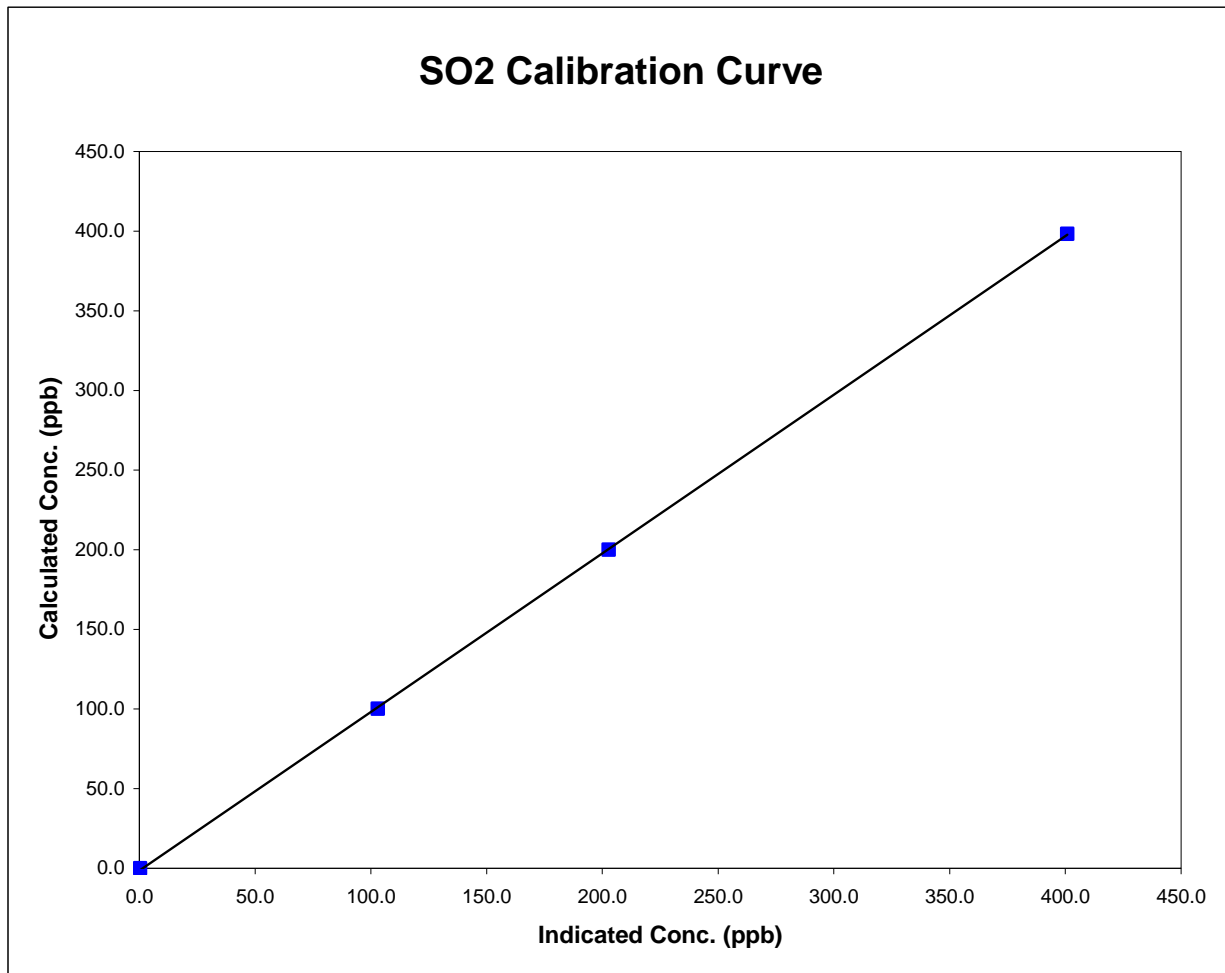
Parameter **SO2**  
 Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 23, 2008	Previous Calibration	April 18, 2008
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:35	End Time (MST)	14:25
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

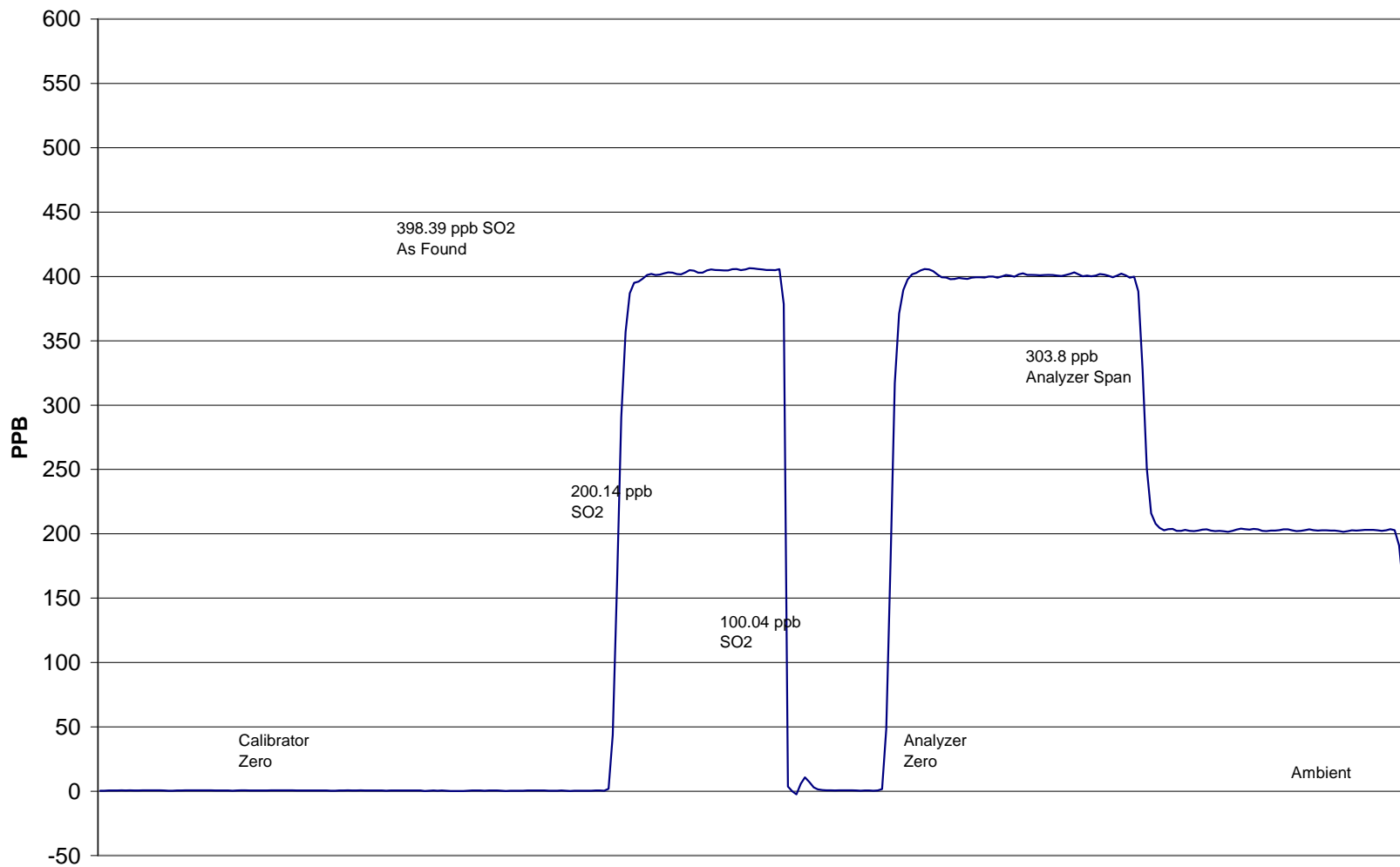
### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A		
398.4	400.8	0.9939	Correlation Coefficient	0.999968
199.9	202.8	0.9859		
100.2	103.1	0.9724	Slope	0.996186
			Intercept	-1.464891





### Smoky Heights SO<sub>2</sub> Calibration



May 23, 2008

# Calibration Report

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

## Station Information

Calibration Date	May 23, 2008	Previous Calibration	April 18, 2008
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	13:00	End Time (MST)	15:30
Barometric Pressure	0.932 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	5.1 ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.031681	Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	1.008691	Calculated slope	1.002826
Calculated intercept	-0.916765	Calculated intercept	-0.895616
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	11.5	ppb	11.5	ppb
coefficient	1.006		1.006	
Lamp Voltage	772	volts	772	volts
Chamber Temp	43.9	Deg C	43.9	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	482.4	mm Hg	482.4	mm Hg
Sample Flow	750	ccm	750	ccm
Lamp Intensity	32,422	mv	32,422	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	1.0	N/A
4991	79.72	80.18	80.8	0.9918
4988	39.83	40.40	41.2	0.9803
4990	9.95	10.15	10.9	0.9295
4988	0.0	0.00	0.9	As Found Zero
4990	79.76	80.24	80.8	As Found Span
Average Correction Factor				0.9672

Calculated value of As Found Response: 79.68 ppm      Percent Change of As Found: 0.7%

	before calibration		after calibration	
Auto zero	-0.1	ppm	0.0	ppm
Auto span	41.7	ppm	42.3	ppm

Notes: \_\_\_\_\_

Calibration Performed By: Conor Whiteley

## Calibration Summary

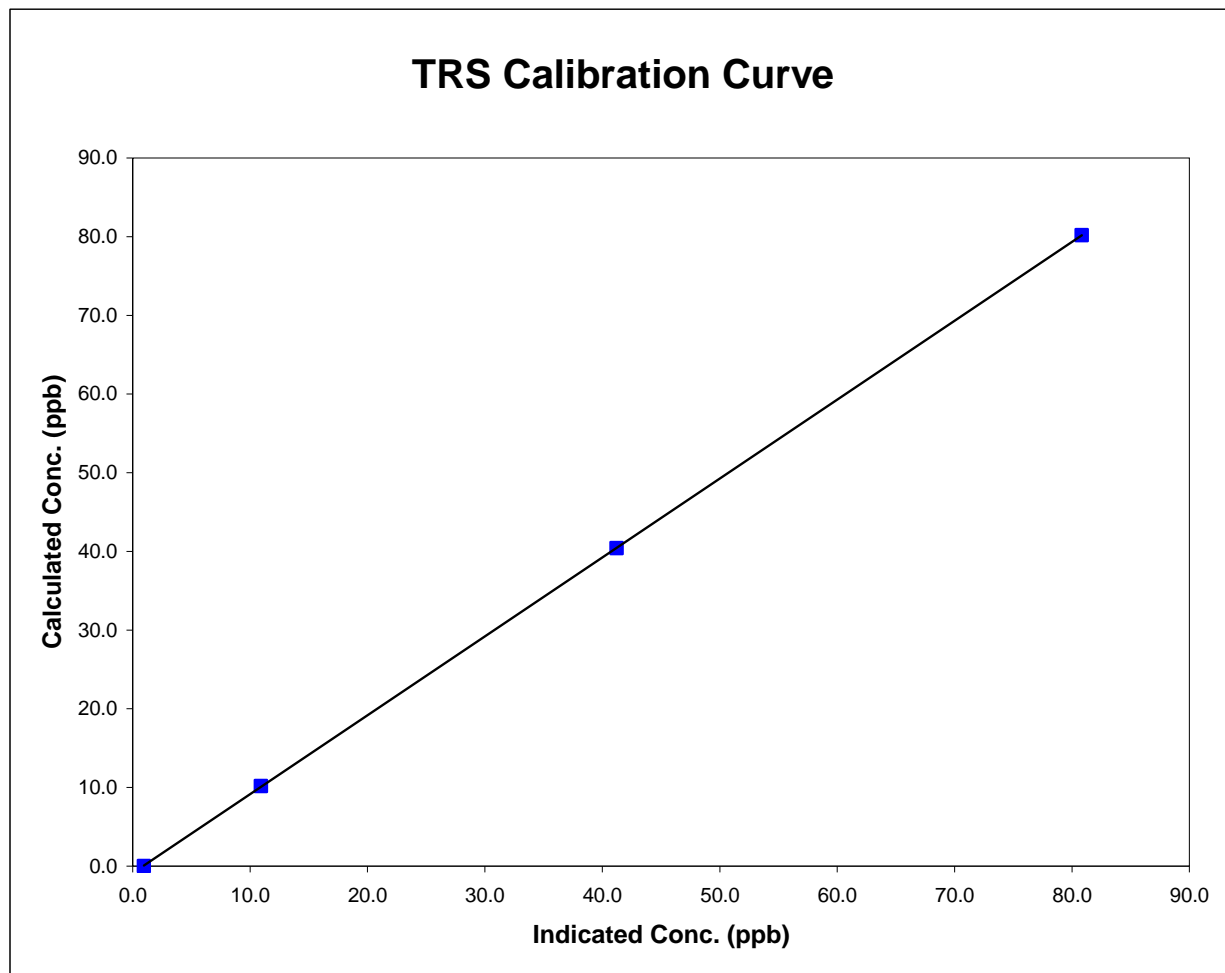
Parameter **TRS**Air Monitoring Network **PASZA**

### Station Information

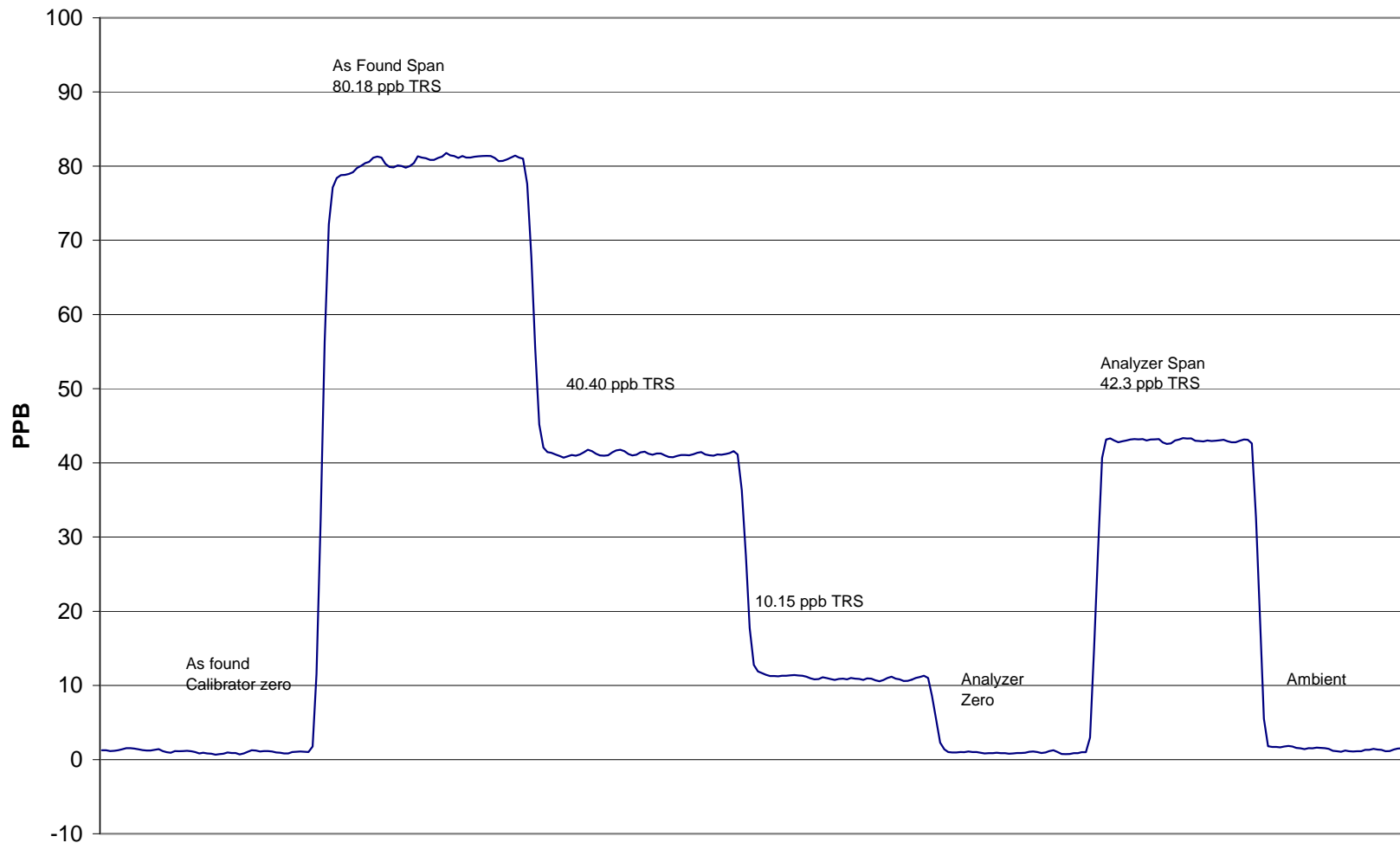
Calibration Date	May 23, 2008	Previous Calibration	April 18, 2008
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	13:00	End Time (MST)	15:30
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.0	N/A		
80.2	80.8	0.9918	Correlation Coefficient	0.999996
40.4	41.2	0.9803		
10.1	10.9	0.9295	Slope	1.002826
			Intercept	-0.895616



### Smoky Heights TRS Calibration



May 23, 2008

**Calibration Report**
 Parameter **SO2**  
 Air Monitoring Network **PASZA**
**Station Information**

Calibration Date	May 12, 2008	Previous Calibration	April 21, 2008
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	11:20	End Time (MST)	14:00
Barometric Pressure	0.910 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	10.06 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	CC 114395		
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.999539	Calculated slope	0.996265
Calculated intercept	-0.289721	Calculated intercept	-0.172236
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.57		2.56	
Coefficient	0.95		0.95	
PMT	-812	V	-812	V
UV Lamp Voltage	1040	V	1038	V
Chamber Temp	44.8	Deg C	45	Deg C
Pressure	667	mm Hg	660.7	mm Hg
Sample Flow	0.472	LPM	0.469	LPM
Lamp Intesity	85%	%	84%	%

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	-0.2	N/A
4990	39.82	79.6	79.9	0.9971
4990	19.88	39.9	40.6	0.9832
4990	9.93	20.0	20.5	0.9766
4990	0.00	0.0	-0.2	As found zero
4990	39.82	79.6	79.9	As found span
Average Correction Factor				0.9857

Calculated value of As Found Response: 79.720 ppm      Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	-0.4	ppm	-0.4	ppm
Auto span	54.1	ppm	55.3	ppm

Notes: \_\_\_\_\_

Calibration Performed By: Conor Whiteley

## Calibration Summary

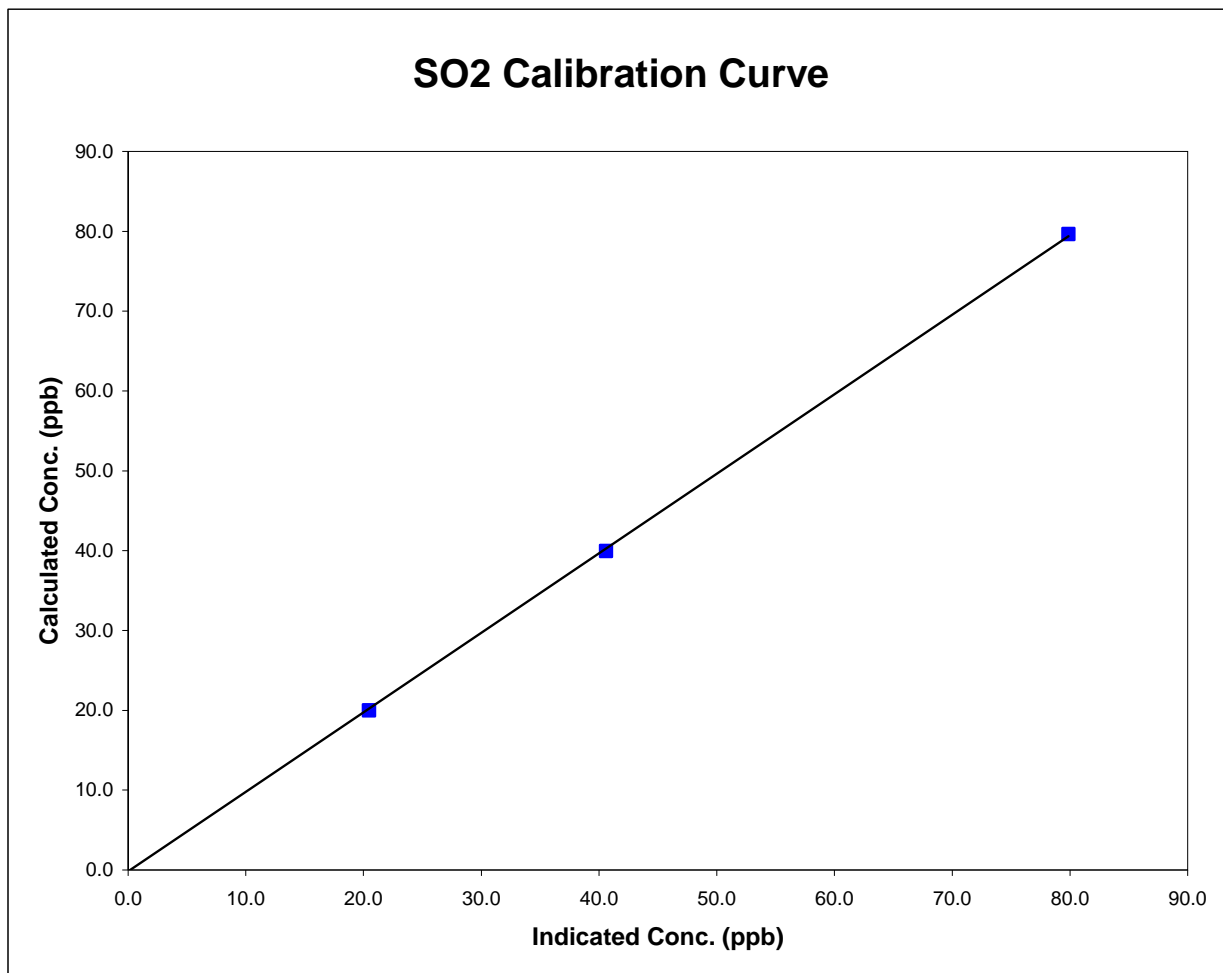
Parameter **SO2**Air Monitoring Network **PASZA**

### Station Information

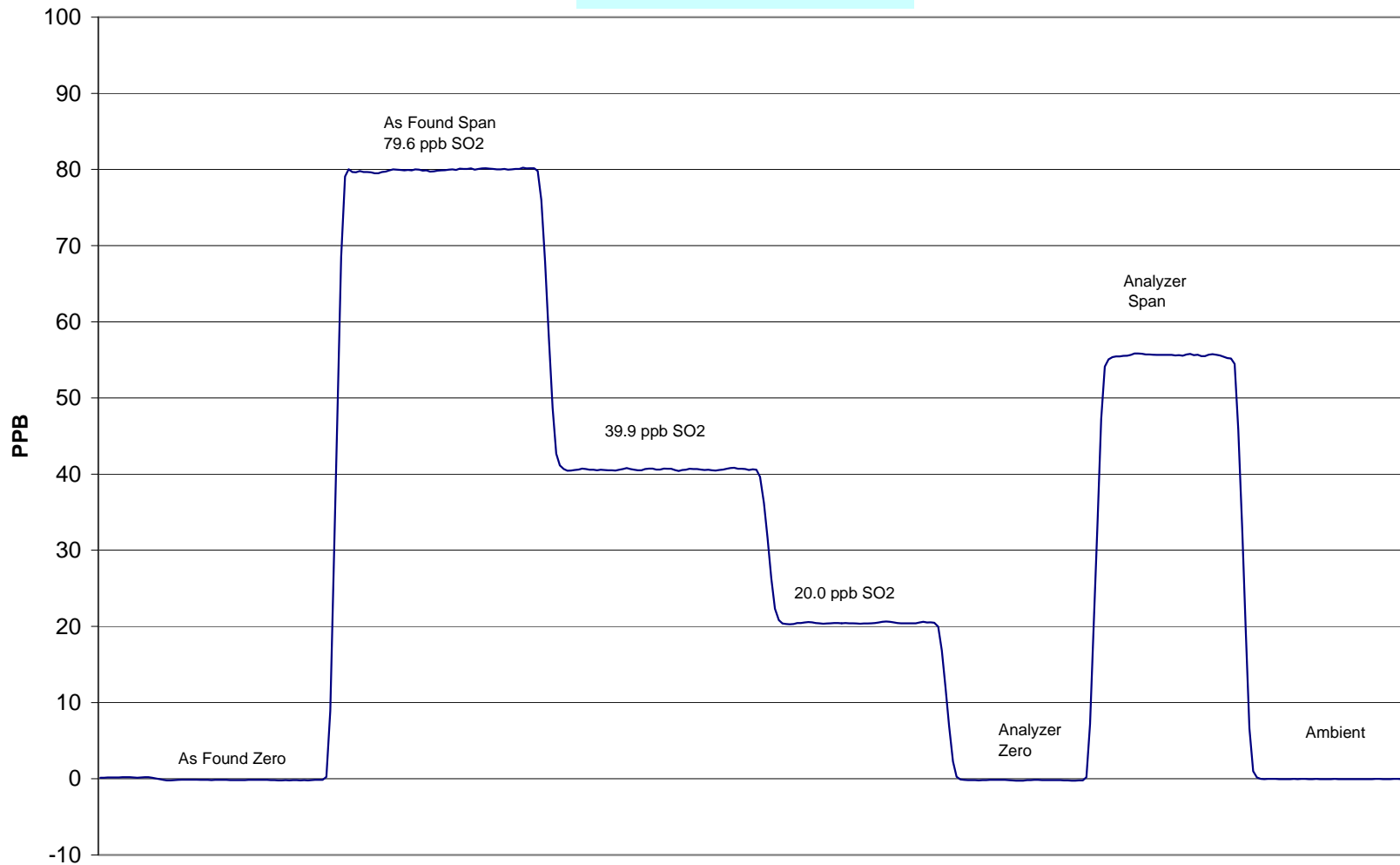
Calibration Date	May 12, 2008	Previous Calibration	April 21, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:20	End Time (MST)	14:00
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
79.6	79.9	0.9971	Correlation Coefficient	0.999897
39.9	40.6	0.9832		
20.0	20.5	0.9766	Slope	0.996265
			Intercept	-0.172236



### Beaverlodge SO<sub>2</sub> Calibration



May 12, 2008

**Calibration Report**

Parameter

**NOx-NO-NO<sub>2</sub>**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	May 12, 2008	Previous Calibration	April 21, 2008
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal
Start Time (MST)	11:20:00	End Time (MST)	15:50:00
Barometric Pressure	0.910 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
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Parameter		NO <sub>2</sub>	NO <sub>x</sub>	NO
Before	Data Slope	1.011158	1.003492	0.995705
	Data Offset	0.421096	-1.940839	-1.827959
After	Data Slope	1.007093	1.003976	0.993529
	Data Offset	1.423461	-1.037129	-0.850922
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
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Test Point	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
NO background	1.3	ppb	1.3	mV
NO <sub>x</sub> background	1.3	ppb	1.3	mV
NO coefficient	1.074		1.074	
NO <sub>x</sub> coefficient	0.999		0.999	
PMT Voltage	-636	V	-636	V
Chamber Temp	49.2	Deg C	49.2	Deg C
Cooler Temp	-2.1	Deg C	-2.1	Deg C
Converter Temp	324.0	Deg C	322.0	Deg C
Sample Flow	0.798	LPM	0.780	LPM
Ozonator Flow	0.085	LPM	0.084	LPM
Pressure	176.2	mm Hg	173.7	mm Hg

Notes:

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# Calibration Report

Parameter **NO<sub>x</sub>-NO-NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**



## Station Information

Calibration Date: **May 12, 2008** Station Location: **Beaverlodge**

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor
zero	4990	0.00	0.0	0.0	0.0	-0.2	-0.2	-0.2	N/A	N/A
1	4990	39.82	397.4	396.6	0.8	396.3	399.4	-3.4	1.0029	0.9931
2	4990	19.88	199.2	198.8	0.4	200.0	201.9	-2.1	0.9959	0.9847
3	4990	9.93	99.7	99.5	0.2	101.6	101.9	-0.8	0.9817	0.9769
AFZ	4990	0.00	0.0	0.0	0.0	-0.2	-0.2	-0.2	0.0000	0.0000
AFS	4990	39.86	397.8	397.0	0.8	396.3	399.4	-3.4	1.0039	0.9941
Average Correction Factor									0.9935	0.9849

As Found Concentrations: NO<sub>x</sub>= 394.5 NO= 397.8 As Found Percent Change NO<sub>x</sub>= -0.8% NO= 0.2%

### GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.82 ccm

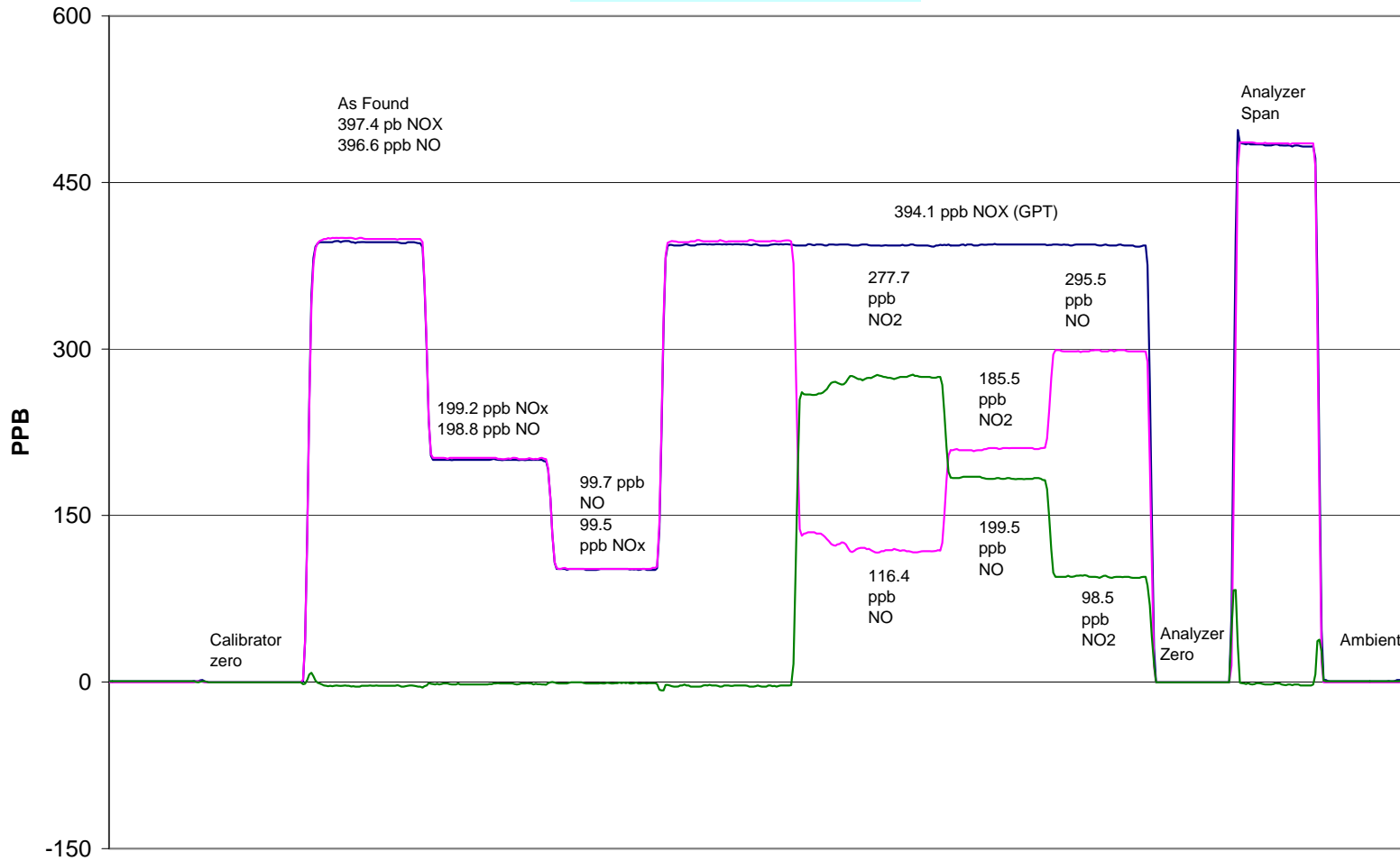
O3 Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	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	394.1	393.5	0.6	393.9	396.9	-3.4	1.0004	0.9914	N/A	N/A
300	394.1	116.4	277.7	393.2	118.0	274.8	1.0021	0.9863	1.0104	99.0%
200	394.1	208.5	185.5	394.2	210.7	183.1	0.9996	0.9895	1.0134	98.7%
100	394.1	295.5	98.5	393.2	298.3	94.5	1.0023	0.9907	1.0431	95.9%
Average Correction Factor							1.0013	0.9888	1.0223	97.8%

### AIC Data

Parameter	Previous calibration				Current calibration			
	NO <sub>x</sub>	NO <sub>2</sub>	NO		NO <sub>x</sub>	NO <sub>2</sub>	NO	
Auto zero	-2.1	0.2	-2.1	ppb	-1.2	1.2	-1.1	ppb
Auto span	488.3	-0.4	484.7	ppb	484.4	-0.6	481.2	ppb

Calibration Performed By: Conor Whiteley

### Beaverlodge NOx Calibration



May 12, 2008

## Calibration Summary

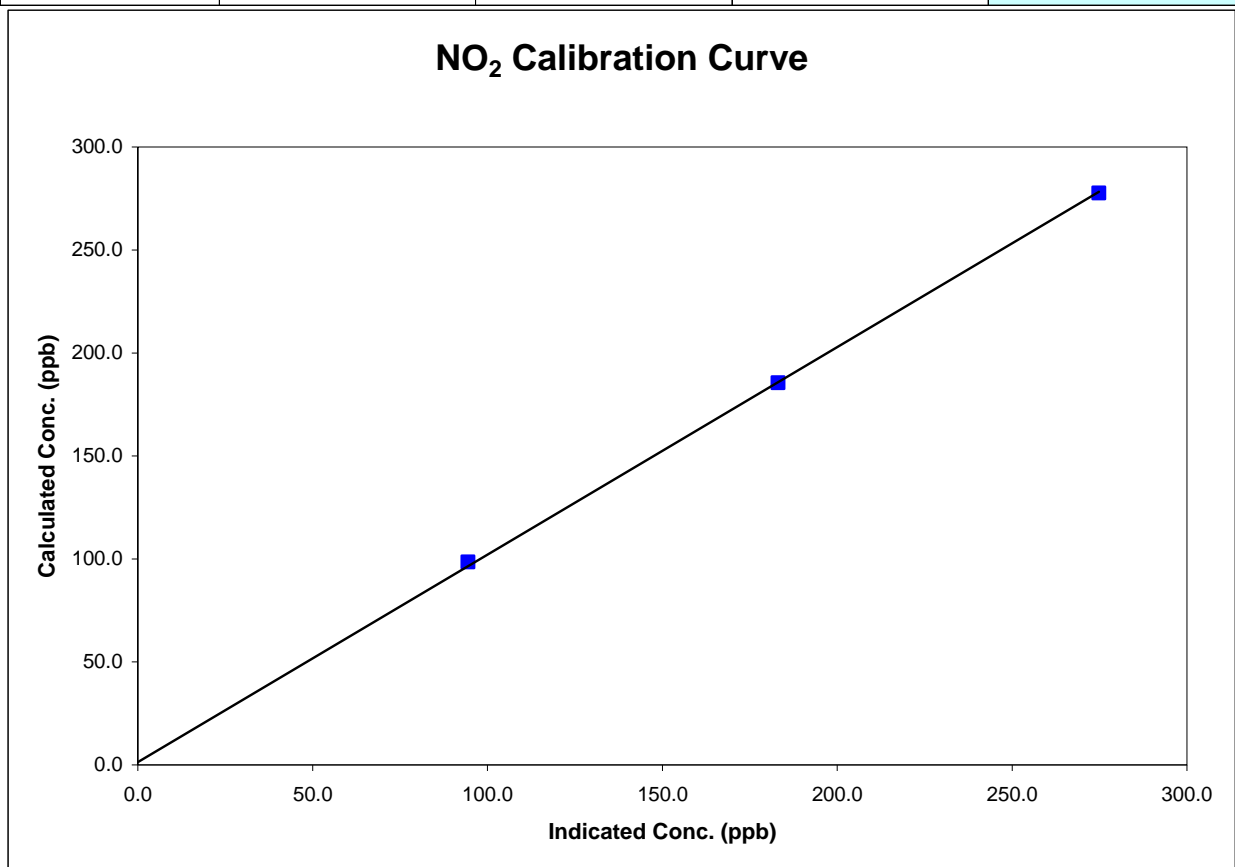
Parameter **NO<sub>2</sub>**Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 12, 2008	Previous Calibration	April 21, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:20	End Time (MST)	15:50
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	0.0000	Correlation Coefficient	0.999865
277.7	274.8	1.0104		
185.5	183.1	1.0134	Slope	1.007093
98.5	94.5	1.0431		
			Intercept	1.423461



## Calibration Summary



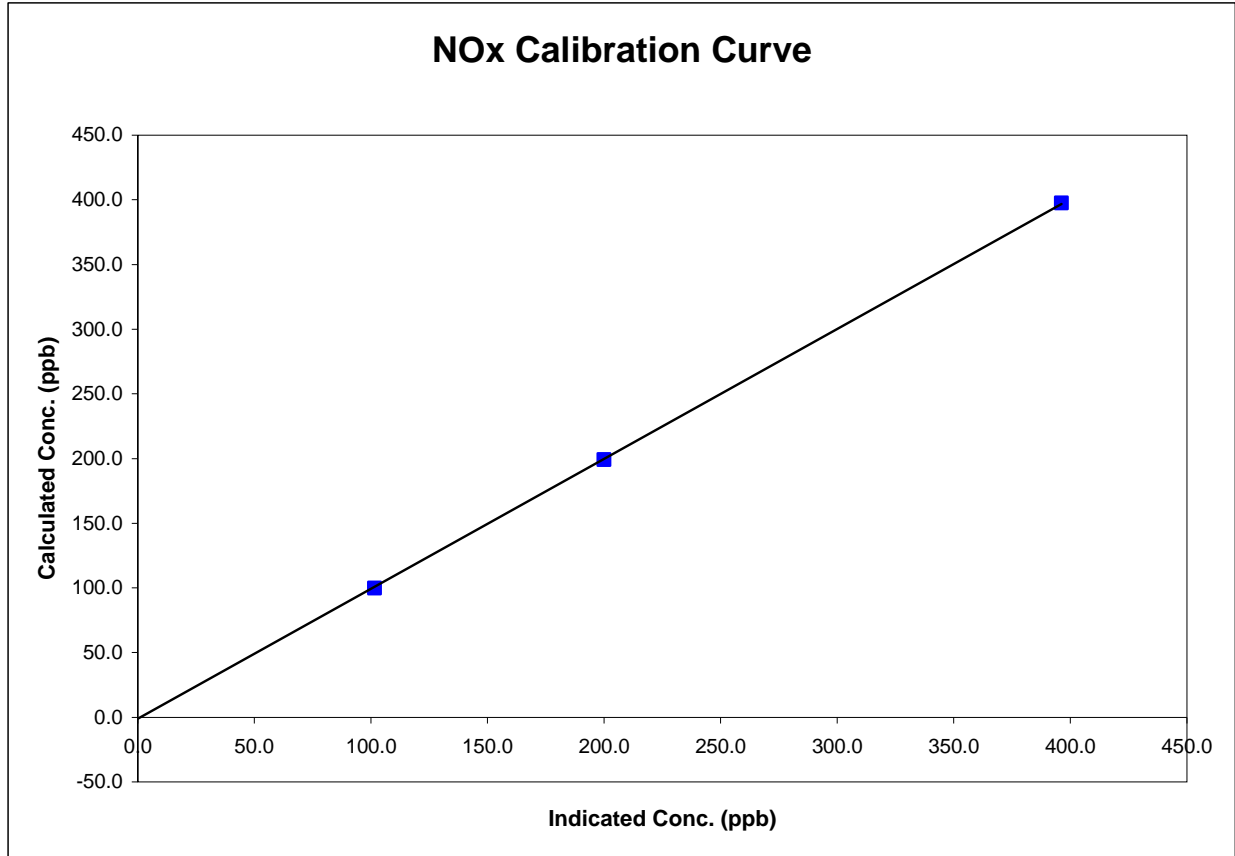
Parameter **NO<sub>x</sub>**  
 Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 12, 2008	Previous Calibration	April 21, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:20	End Time (MST)	15:50
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	0.0000	Correlation Coefficient	0.999958
397.4	396.3	1.0029		
199.2	200.0	0.9959		
99.7	101.6	0.9817		
			Slope	1.003976
			Intercept	-1.037129



## Calibration Summary

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

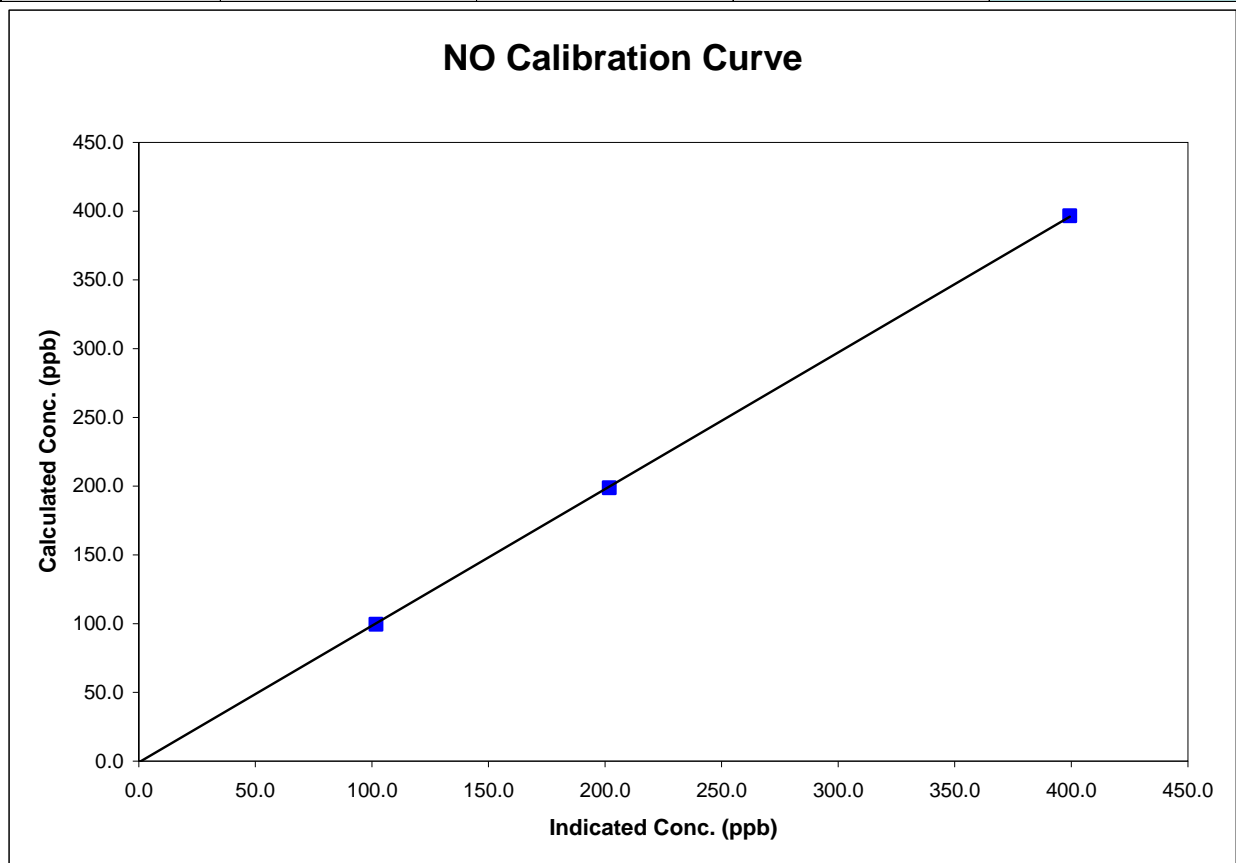


### Station Information

Calibration Date	May 12, 2008	Previous Calibration	April 21, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:20	End Time (MST)	15:50
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
396.6	399.4	0.9931	Correlation Coefficient	0.999962
198.8	201.9	0.9847		
99.5	101.9	0.9769	Slope	0.993529
			Intercept	-0.850922



**Calibration Report**Parameter           O3          Air Monitoring Network                   PASZA                  **Station Information**

Calibration Date	<u>          May 13, 2008          </u>	Previous Calibration	<u>          April 22, 2008          </u>
Station Number	<u>                  4                  </u>	Station Location	<u>          Beaverlodge          </u>
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other: <u>                                  </u>
Start Time (MST)	<u>          9:30          </u>	End Time (MST)	<u>          11:35          </u>
Barometric Pressure	<u>          0.905 atm          </u>	Station Temperature	<u>          20.0 Deg C          </u>
Calibrator	<u>          Enviroics 6100          </u>	Serial Number	<u>          3474          </u>
Cal Gas Concentration	<u>          NA          </u>	Cal Gas Expiry Date	<u>          NA          </u>
DACS make	<u>          Focus AP1000          </u>	DACS serial No.	<u>          45269          </u>
DACS voltage range	<u>          0 - 1 volt          </u>	DACS channel #	<u>                  5                  </u>
	<u>          Before          </u>		<u>          After          </u>
Calculated slope	<u>          1.003666          </u>	Calculated slope	<u>          0.997887          </u>
Calculated intercept	<u>          -2.130487          </u>	Calculated intercept	<u>          -0.585641          </u>
Analyzer make	<u>          Teco 49C          </u>	Analyzer serial #	<u>          49C-76443-383          </u>

	before		after	
Concentration range	<u>          0 - 500          </u>	<u>          ppb          </u>	<u>          0 - 500          </u>	<u>          ppb          </u>
offset	<u>          -0.20          </u>	<u>          ppb          </u>	<u>          -0.20          </u>	<u>          ppb          </u>
slope	<u>          1.080          </u>		<u>          1.023          </u>	
Lamp temp	<u>          56.4          </u>	<u>          mV          </u>	<u>          56.4          </u>	<u>          mV          </u>
Lamp Intensity A/B	<u>          78177/76619          </u>	<u>          mV          </u>	<u>          79324/77530          </u>	<u>          mV          </u>
Pressure	<u>          655.7          </u>	<u>          mm Hg          </u>	<u>          662.2          </u>	<u>          mm Hg          </u>
Flow A	<u>          719          </u>	<u>          ccm          </u>	<u>          730          </u>	<u>          ccm          </u>
Flow B	<u>          676          </u>	<u>          ccm          </u>	<u>          682          </u>	<u>          ccm          </u>

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	-0.4	N/A
4990	0.00	277.7	277.5	1.0006
4990	0.00	185.5	188.1	0.9862
4990	0.00	98.5	100.0	0.9853
4990	0.00	0.0	-0.4	As found zero
4990	0.00	277.7	290.9	As found span
Average Correction Factor				0.9907

Calculated value of As Found Response:           290.2 ppm           Percent Change of As Found:           4.5%          

	before calibration		after calibration	
Auto zero	<u>          -2.3          </u>	<u>          ppb          </u>	<u>          -0.7          </u>	<u>          ppb          </u>
Auto span	<u>          121.8          </u>	<u>          ppb          </u>	<u>          117.2          </u>	<u>          ppb          </u>

Notes:           I accidentally turned off the calibrator during 1st point of calibration          Calibration Performed By:           Conor Whiteley

## Calibration Summary

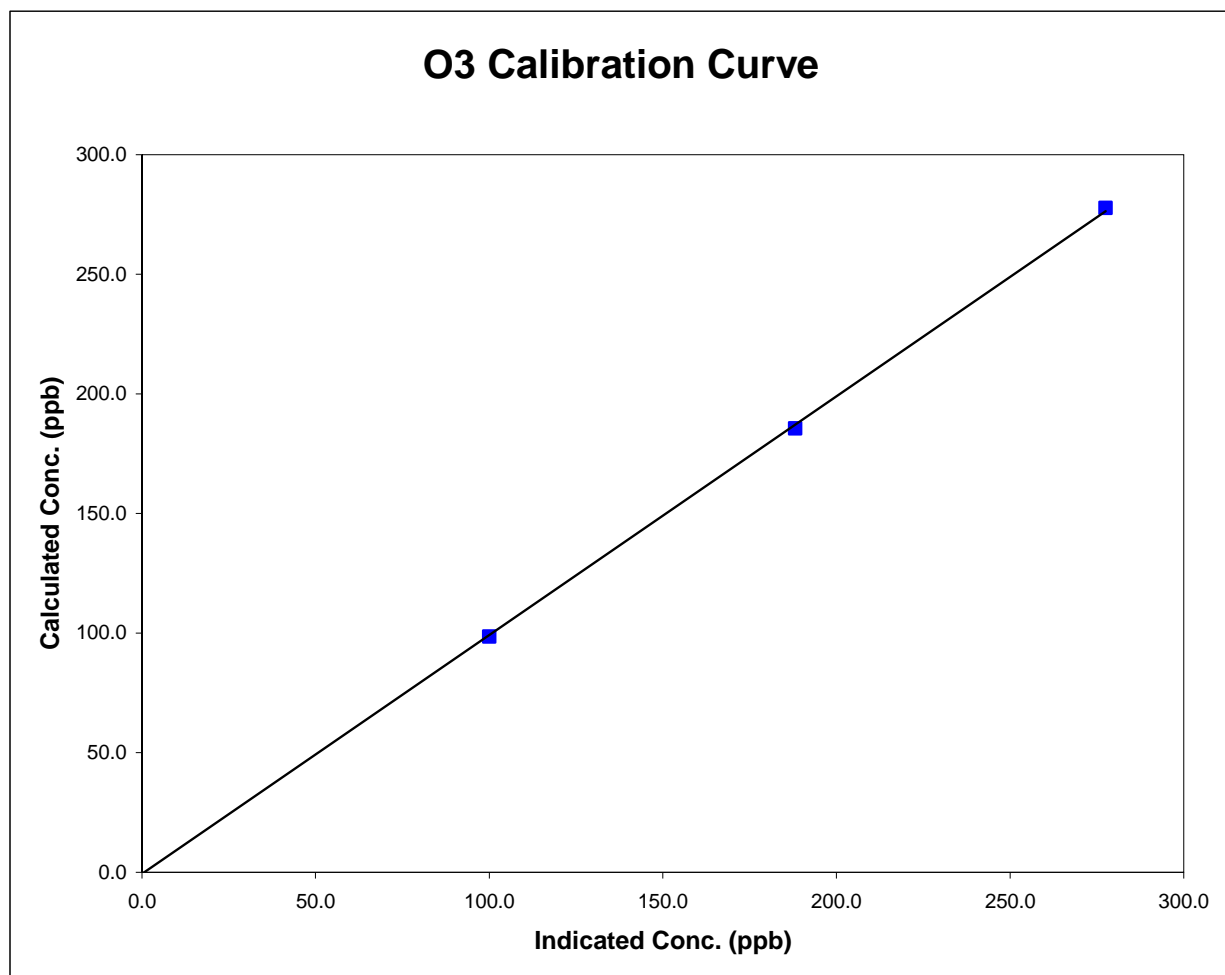
Parameter **O3**Air Monitoring Network **PASZA**

### Station Information

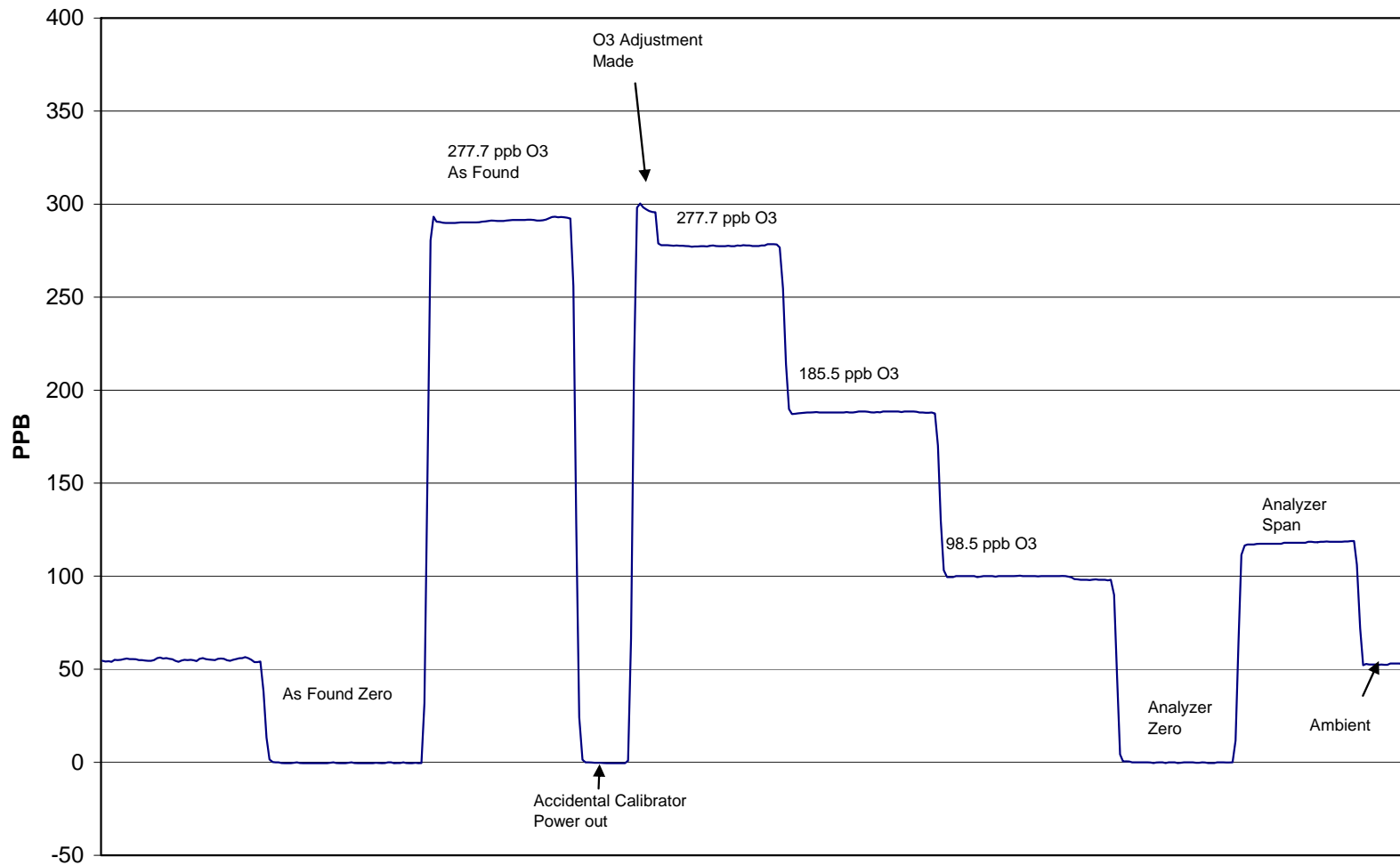
Calibration Date	May 13, 2008	Previous Calibration	April 22, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:30	End Time (MST)	11:35
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	NA		
277.7	277.5	1.0006	Correlation Coefficient	0.999865
185.5	188.1	0.9862		
98.5	100.0	0.9853	Slope	0.997887
			Intercept	-0.585641



### Beaverlodge O<sub>3</sub> Calibration



May 13, 2008



**Calibration Report**
 Parameter **SO2**  
 Air Monitoring Network **PASZA**
**Station Information**

Calibration Date	May 14, 2008	Previous Calibration	April 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:05	End Time (MST)	13:10
Barometric Pressure	27.72 inches Hg	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL 16161		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.003828	Calculated slope	1.013553
Calculated intercept	-1.107866	Calculated intercept	-1.645856
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	7.9		7.9	
Coefficient	1.137		1.137	
UV Lamp Voltage	740	V	733	V
Chamber Temp	44.5	C	44.6	C
Perm Gas Temp	45	C	44.99	C
Pressure	672.7	mm Hg	678	mm Hg
Sample Flow	485	LPM	488	LPM
Lamp Intesity	34494	Hz	34390	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	39.89	399.1	394.4	1.0118
4988	19.83	199.2	199.4	0.9991
4988	9.90	99.6	101.2	0.9845
4988	0.00	0.0	0.1	As found zero
4988	39.89	399.1	394.4	As found span
Average Correction Factor				0.9985

Calculated value of As Found Response: 394.744 ppm      Percent Change of As Found: 1.1%

	before calibration		after calibration	
Auto zero	-0.7	ppm	-1.5	ppm
Auto span	265.7	ppm	258.1	ppm

Notes: \_\_\_\_\_

Calibration Performed By: Conor Whiteley

## Calibration Summary

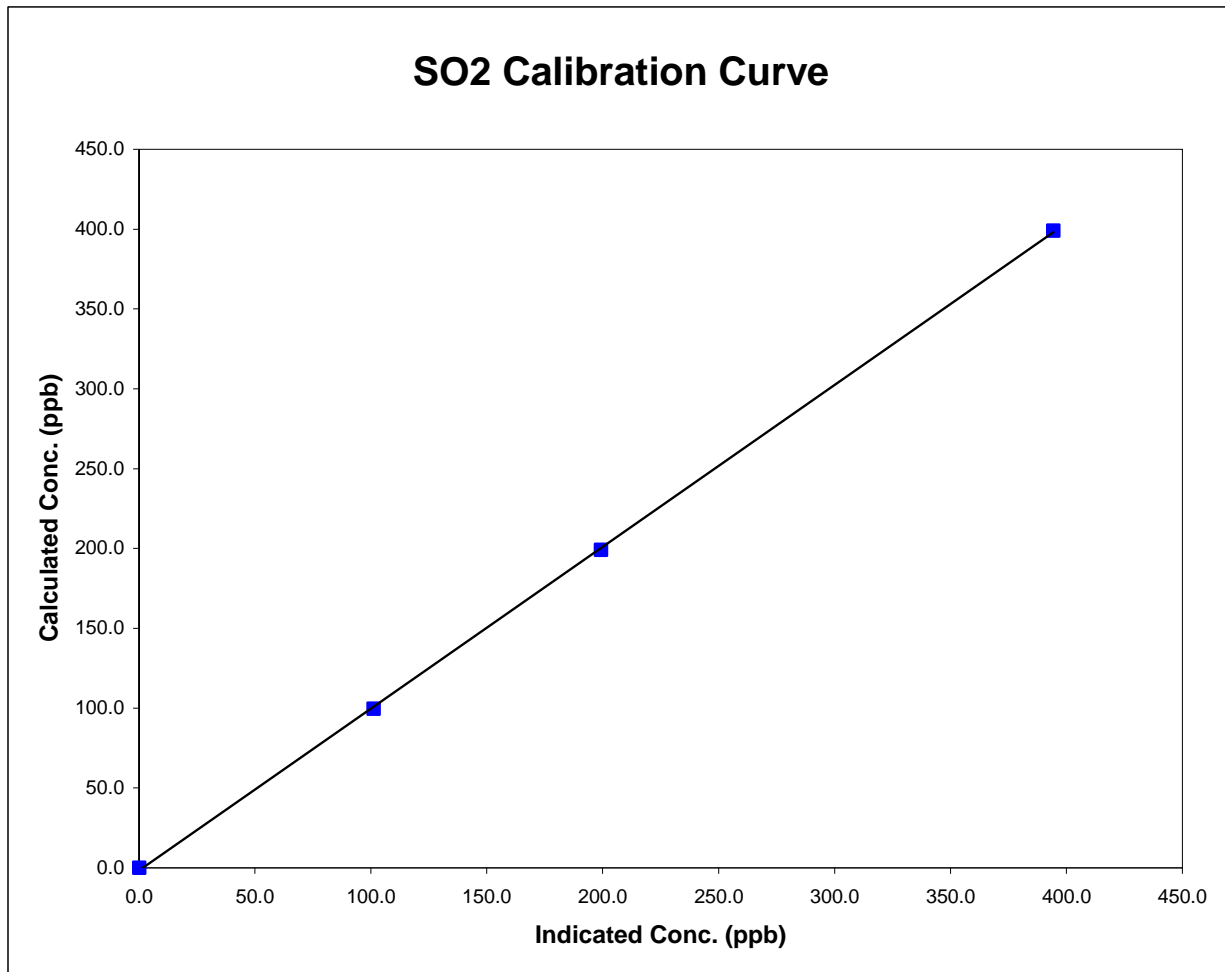
Parameter **SO2**Air Monitoring Network **PASZA**

### Station Information

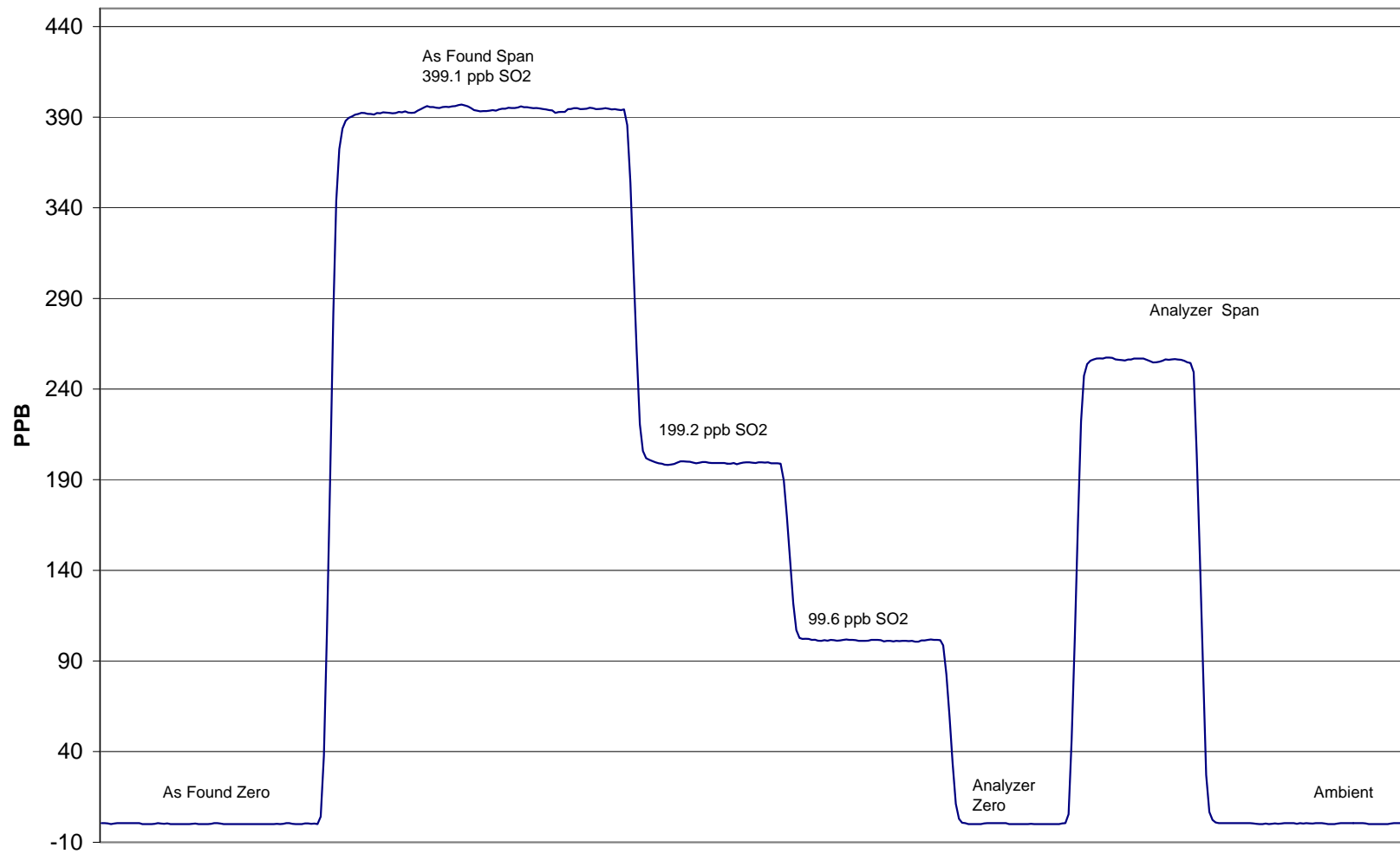
Calibration Date	May 14, 2008	Previous Calibration	April 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:05	End Time (MST)	13:10
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
399.1	394.4	1.0118	Correlation Coefficient	0.999924
199.2	199.4	0.9991		
99.6	101.2	0.9845	Slope	1.013553
			Intercept	-1.645856



### Spirit River SO<sub>2</sub> Calibration



May 14, 2008

# Calibration Report

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

## Station Information

Calibration Date	May 15, 2008	Previous Calibration	April 2, 2008
Station Number	6	Station Location	Portable Spirit River
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:05	End Time (MST)	12:50
Barometric Pressure	27.9 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	5.1 ppm	Cal Gas Expiry Date	4/2/2009
Gas Cert Reference	ALM013295		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 5 volt	DACS channel #	8
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.030136	Calculated slope	0.994830
Calculated intercept	0.116273	Calculated intercept	-0.046760
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	8.8	ppb	9.0	ppb
Coefficient	1.416		1.454	
Lamp Voltage	813	V	804	V
Chamber Temp	44	C	43.8	C
Perm gas Temp	45	C	44.90	C
Pressure	418	mmHg	667	mmHg
Sample Flow	421	ccm	438	ccm
Lamp Intensity	39044.0	Hz	38844.0	Hz

## Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4986	0.0	0.0	0.2	N/A
4986	79.72	80.3	80.7	0.9947
4986	39.81	40.4	40.8	0.9907
4986	9.92	10.1	10.0	1.0109
4986	0.00	0.0	0.2	As found zero
4986	79.72	80.3	80.7	As found span
Average Correction Factor				0.9988

Calculated value of As Found Response: 83.06 ppm Percent Change of As Found: -3.5%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.3	ppm
Auto span	75.3	ppm	71.1	ppm

Notes:

Calibration Performed By: Conor Whiteley

## Calibration Summary



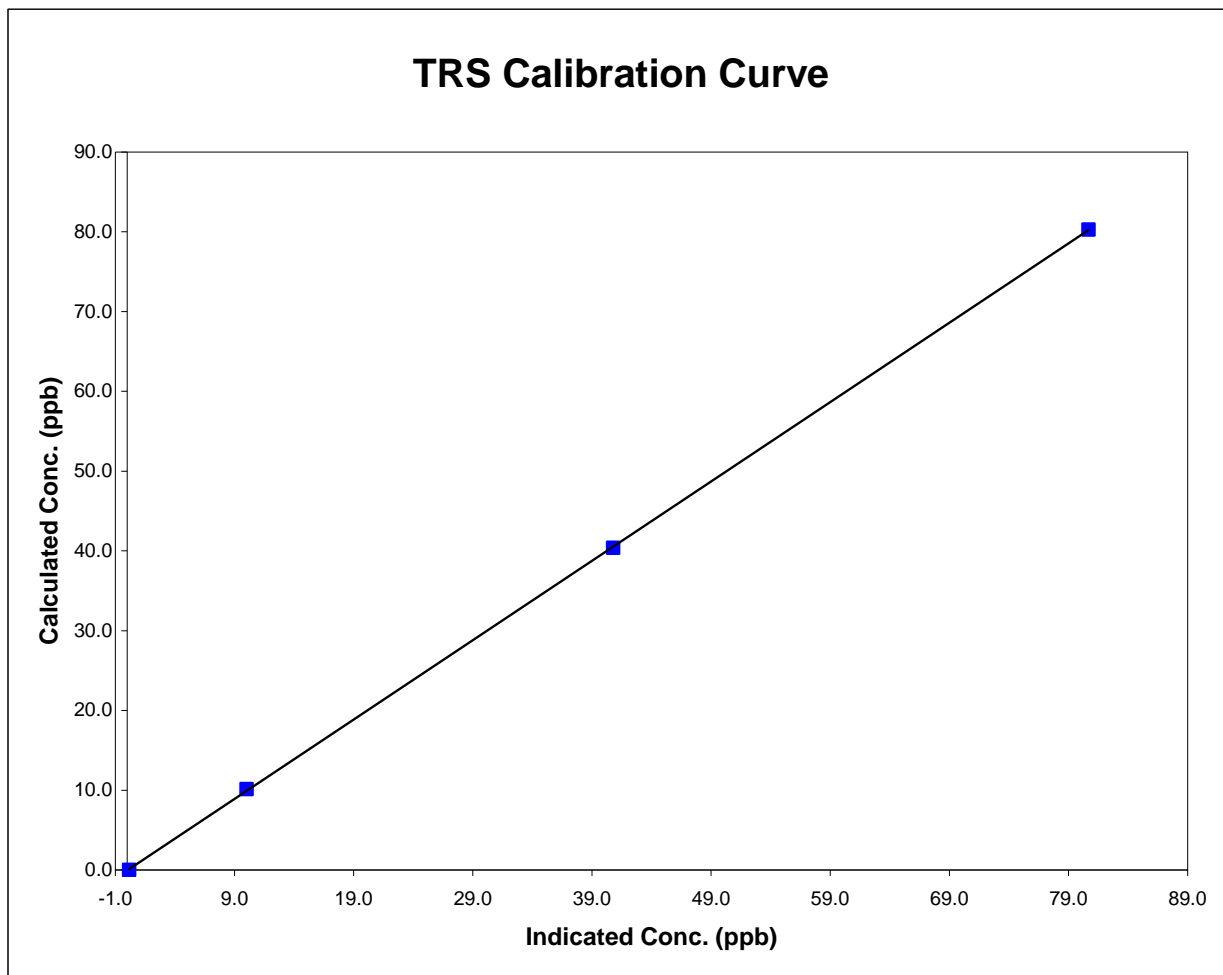
Parameter **TRS**  
 Air Monitoring Network **PASZA**

### Station Information

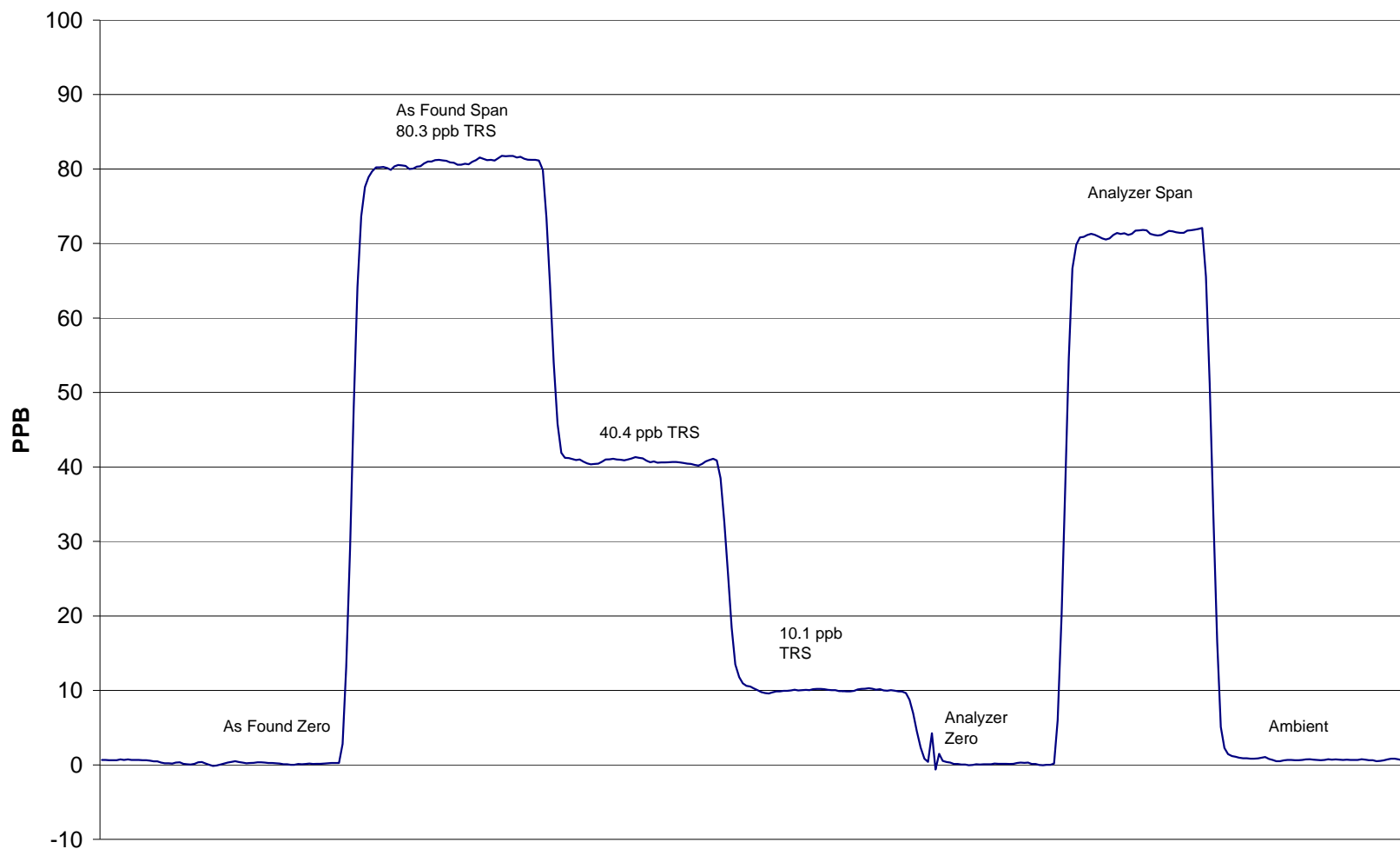
Calibration Date	May 15, 2008	Previous Calibration	April 2, 2008
Station Number	6	Station Location	Portable Spirit River
Start Time (MST)	10:05	End Time (MST)	12:50
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
80.3	80.7	0.9947	Correlation Coefficient	0.999981
40.4	40.8	0.9907		
10.1	10.0	1.0109	Slope	0.994830
			Intercept	-0.046760



### Spirit River TRS Calibration



May 15, 2008



# Calibration Summary



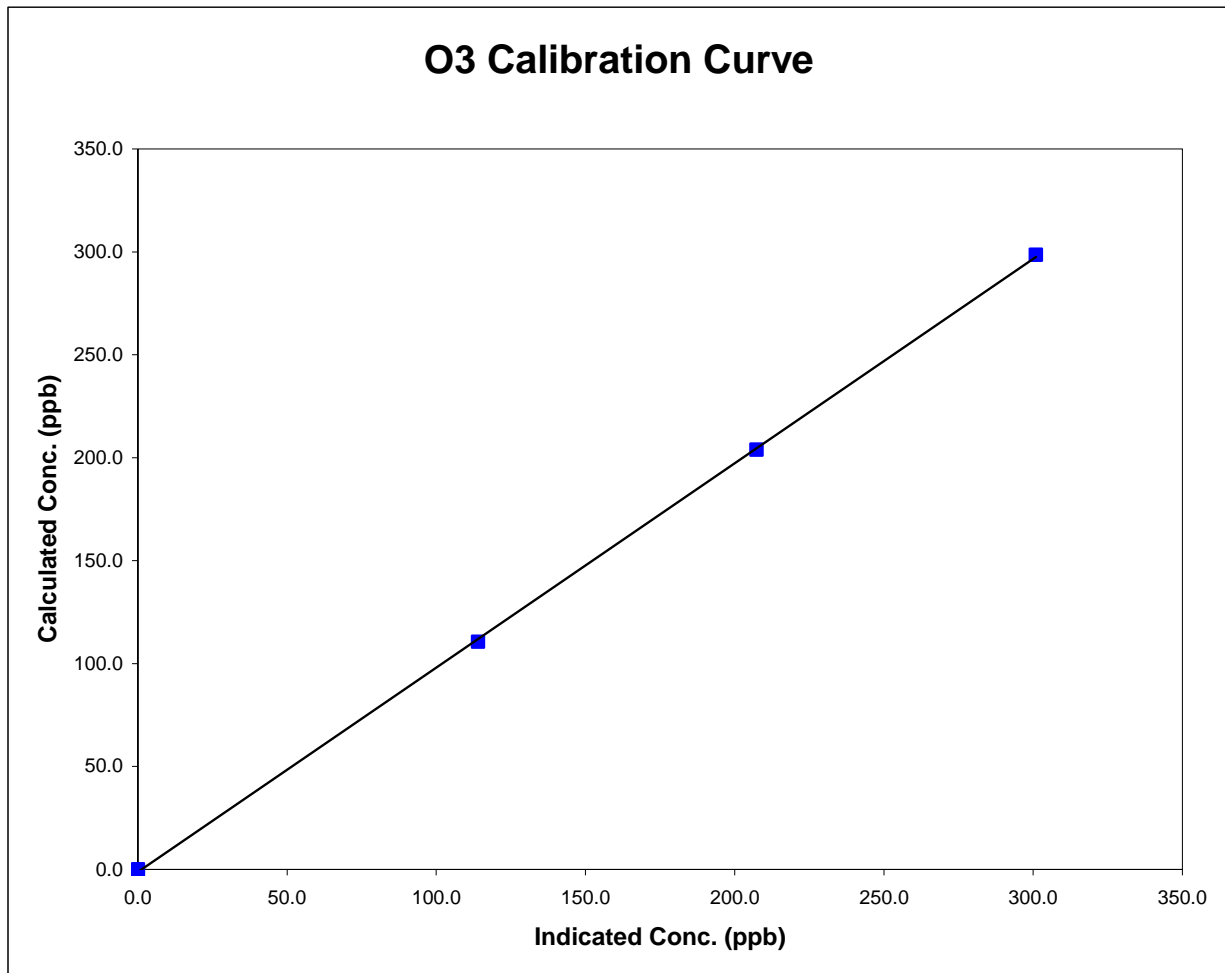
Parameter **O3**  
 Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 15, 2008	Previous Calibration	April 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	8:00	End Time (MST)	10:55
Analyzer make/model	TEI Model 49C	Analyzer serial #	609-716240

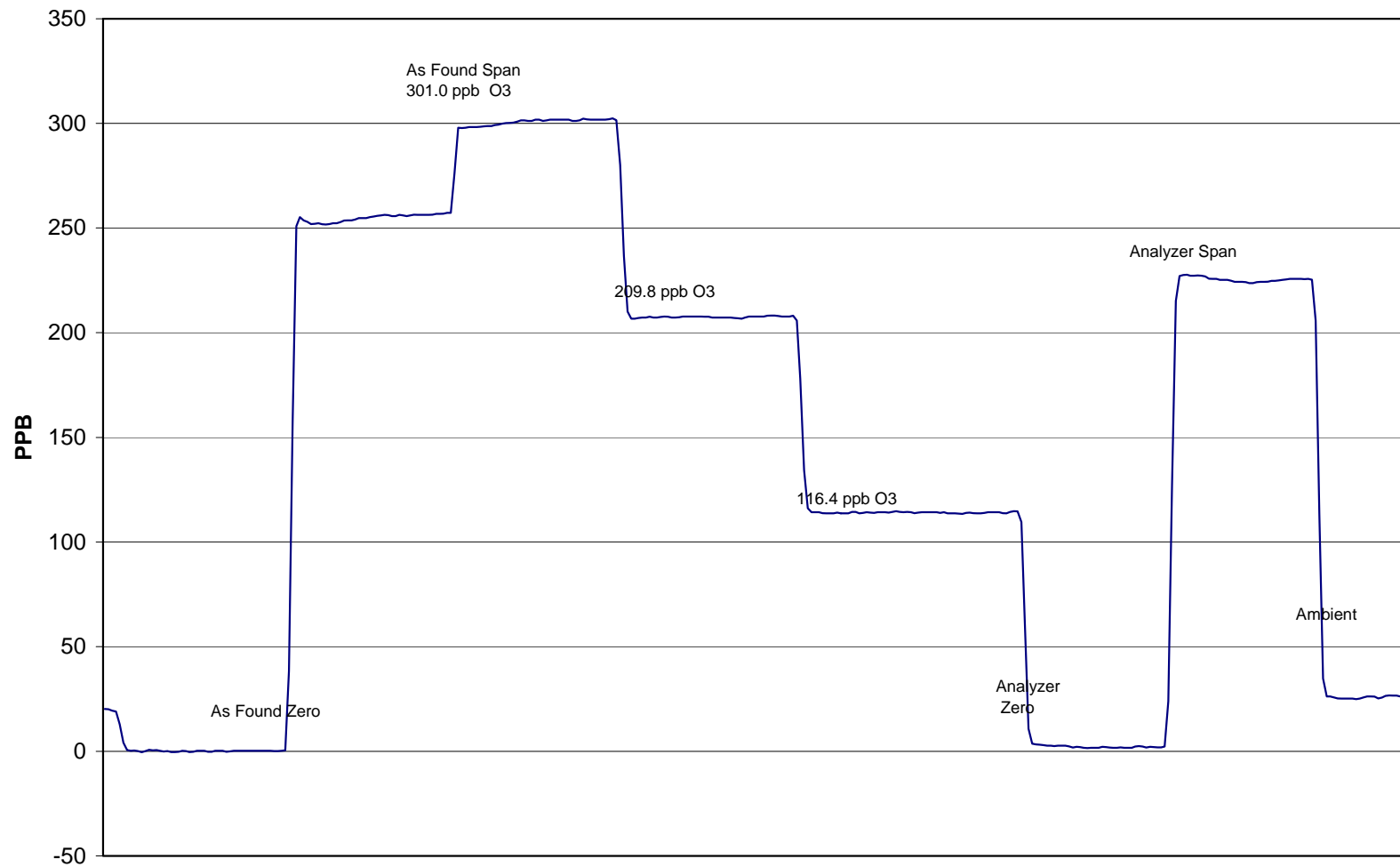
### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
298.6	301.0	0.9920	Correlation Coefficient	0.999900
204.0	207.4	0.9836		
110.5	114.0	0.9693	Slope	0.992479
			Intercept	-1.174572





### Spirit River O<sub>3</sub> Calibration



May 15, 2008

**Calibration Report**

Parameter

**NOx-NO-NO<sub>2</sub>**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	<b>May 14, 2008</b>	Previous Calibration	<b>April 3, 2008</b>
Station Number	<b>8</b>	Station Location	<b>Rover - Spirit River</b>
Reason:	<b>Routine</b>	Installation	Removal
Start Time (MST)	<b>10:05</b>	End Time (MST)	<b>15:30</b>
Barometric Pressure	<b>27.72</b> Inches Hg	Station Temperature	<b>22.0</b> Deg C
Calibrator	<b>EnviroNics 6100</b>	Serial Number	<b>3474</b>
NO Cal Gas Conc	<b>48.9</b> ppm	Cal Gas Expiry Date	<b>2-Jan-09</b>
NOx Cal Gas Conc	<b>48.9</b> ppm	Cal Gas Serial #	<b>LL-16161</b>

**DACS Information**

DACS make	<b>FOCUS AP1000</b>	DACS serial No.	<b>52662</b>
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Parameter		NO <sub>2</sub>	NO <sub>x</sub>	NO
Before	Data Slope	1.001375	1.002795	1.002165
	Data Offset	-0.296556	-1.900754	-1.937235
After	Data Slope	<b>1.003080</b>	<b>1.004790</b>	<b>1.005349</b>
	Data Offset	<b>-0.181210</b>	<b>-2.118204</b>	<b>-2.373005</b>
Channel #		<b>8</b>	<b>6</b>	<b>7</b>
Voltage Range		<b>0 - 10 VDC</b>	<b>0 - 10 VDC</b>	<b>0 - 10 VDC</b>

**Analyzer Information**

Analyzer make/model	<b>TECO 42i</b>	Analyzer serial #	<b>701120011</b>
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Test Point	before		after	
Concentration range	0-1000	ppb	0-1000	ppb
NO background	4.7	ppb	5.2	mV
NO <sub>x</sub> background	5.0	ppb	5.5	mV
NO coefficient	0.795		0.910	
NO <sub>x</sub> coefficient	0.996		0.996	
Chamber Temp	50.3	Deg C	50.2	Deg C
Cooler Temp	-3.0	Deg C	-3.1	Deg C
NO <sub>2</sub> Converter Temp	325.3	Deg C	323.9	Deg C
Sample Flow	0.6	ccm	0.5	ccm
Ozonator Flow	OK	LPM	OK	LPM
Pressure	175.7	mm Hg	192.6	mm Hg

Notes:

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Calibration Performed By: Conor Whiteley

# Calibration Report



Parameter **NOx-NO-NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

## Station Information

Calibration Date: **May 14, 2008** Station Location: **Rover - Spirit River**

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor
zero	4988	0.00	0.0	0.0	0.0	0.0	0.0	0.2	N/A	N/A
1	4988	39.89	388.0	388.0	0.0	387.0	386.8	0.9	1.0025	1.0029
2	4988	19.83	193.6	193.6	0.0	196.3	196.7	0.5	0.9865	0.9845
3	4988	9.90	96.9	96.9	0.0	100.4	100.8	0.4	0.9650	0.9612
AFZ	4988	0.00	0.0	0.0	0.0	0.0	0.0	0.2	0.0000	0.0000
AFS	4988	39.89	388.0	388.0	0.0	356.1	356.5	0.9	1.0895	1.0881
Average Correction Factor									0.9847	0.9829

As Found Concentrations: NO<sub>x</sub>= 354.2 NO= 354.6 As Found Percent Change NO<sub>x</sub>= -8.7% NO= -8.6%

### GPT Calibration Data

Dilution Flow 4988 ccm Source Gas Flow 39.82 ccm

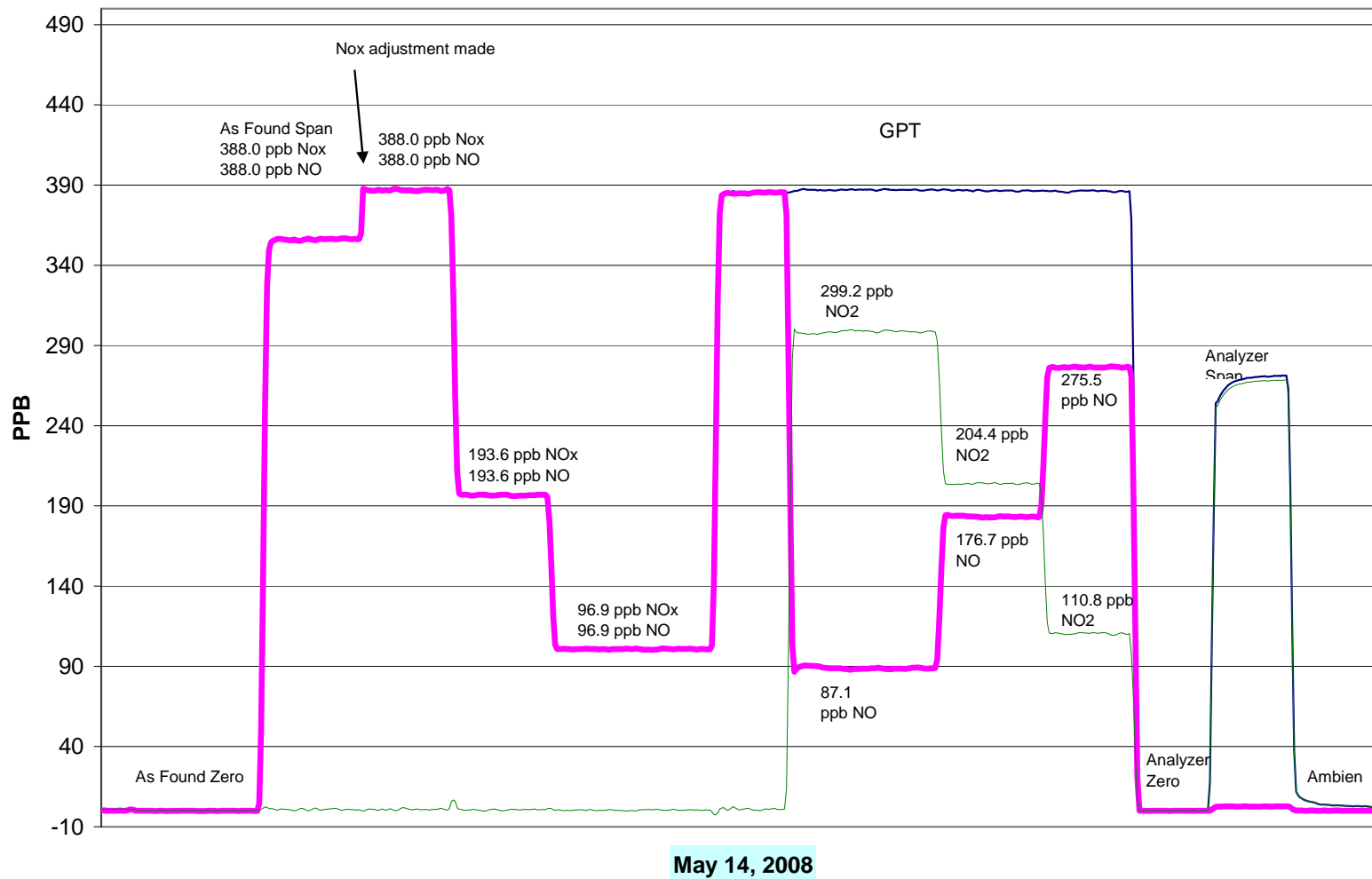
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	386.3	384.8	1.5	385.3	385.1	1.0	1.0027	0.9992	N/A	N/A
300	386.3	87.1	299.2	386.9	89.0	298.5	0.9984	0.9787	1.0025	99.7%
200	386.3	181.9	204.4	386.6	183.3	204.0	0.9993	0.9924	1.0020	99.8%
100	386.3	275.5	110.8	386.2	276.4	110.6	1.0002	0.9968	1.0018	99.8%
Average Correction Factor							0.9993	0.9893	1.0021	99.8%

### AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO <sub>2</sub>	NO		NOx	NO <sub>2</sub>	NO	
Auto zero	0.3	0.9	0.6	ppb	1.0	1.0	1.0	ppb
Auto span	270.3	268.6	1.0	ppb	269.1	267.9	0.3	ppb

Calibration Performed By: Conor Whiteley

### Spirit River NOx Calibration



# Calibration Summary



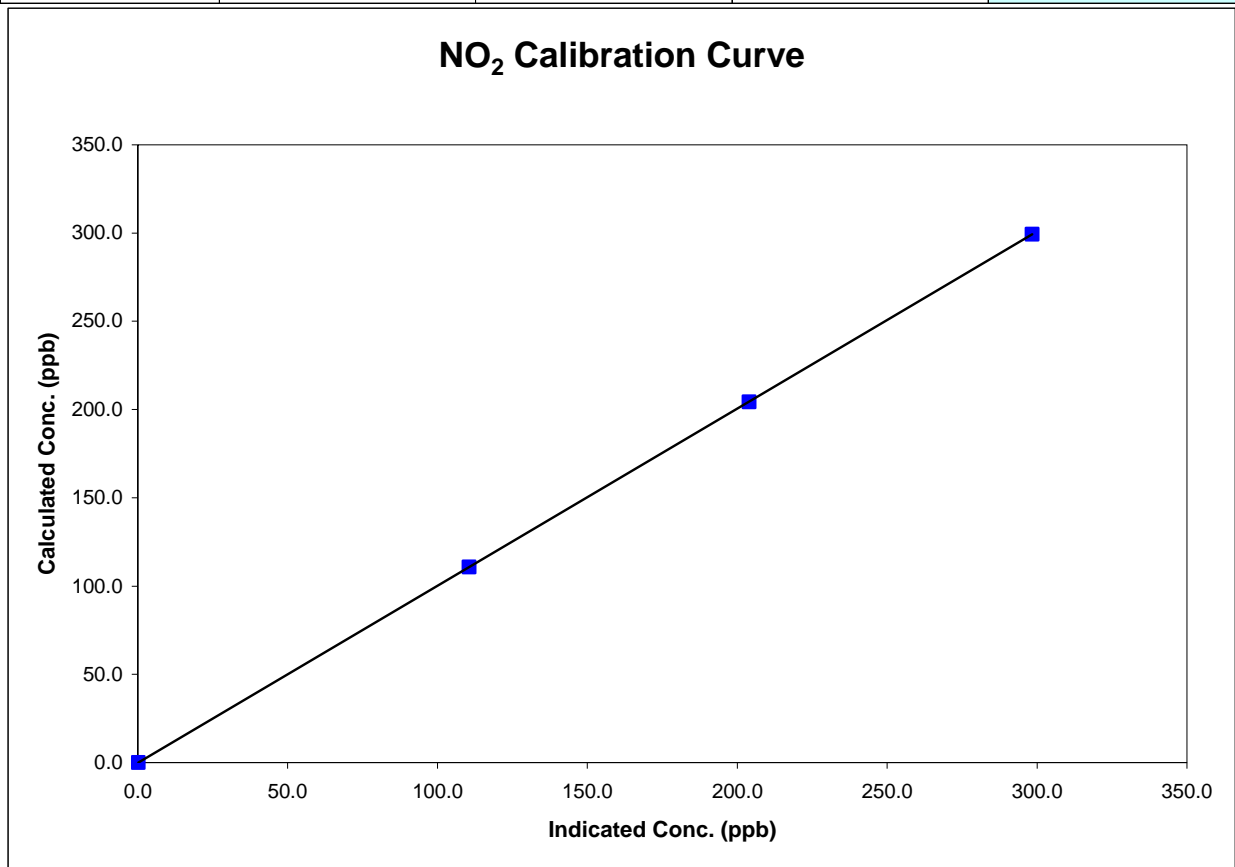
Parameter **NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 14, 2008	Previous Calibration	April 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:05	End Time (MST)	15:30
Analyzer make	TECO 42i	Analyzer serial #	701120011

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	0.0000	Correlation Coefficient	1.000000
299.2	298.5	1.0025		
204.4	204.0	1.0020		
110.8	110.6	1.0018		
			Slope	1.003080
			Intercept	-0.181210



# Calibration Summary



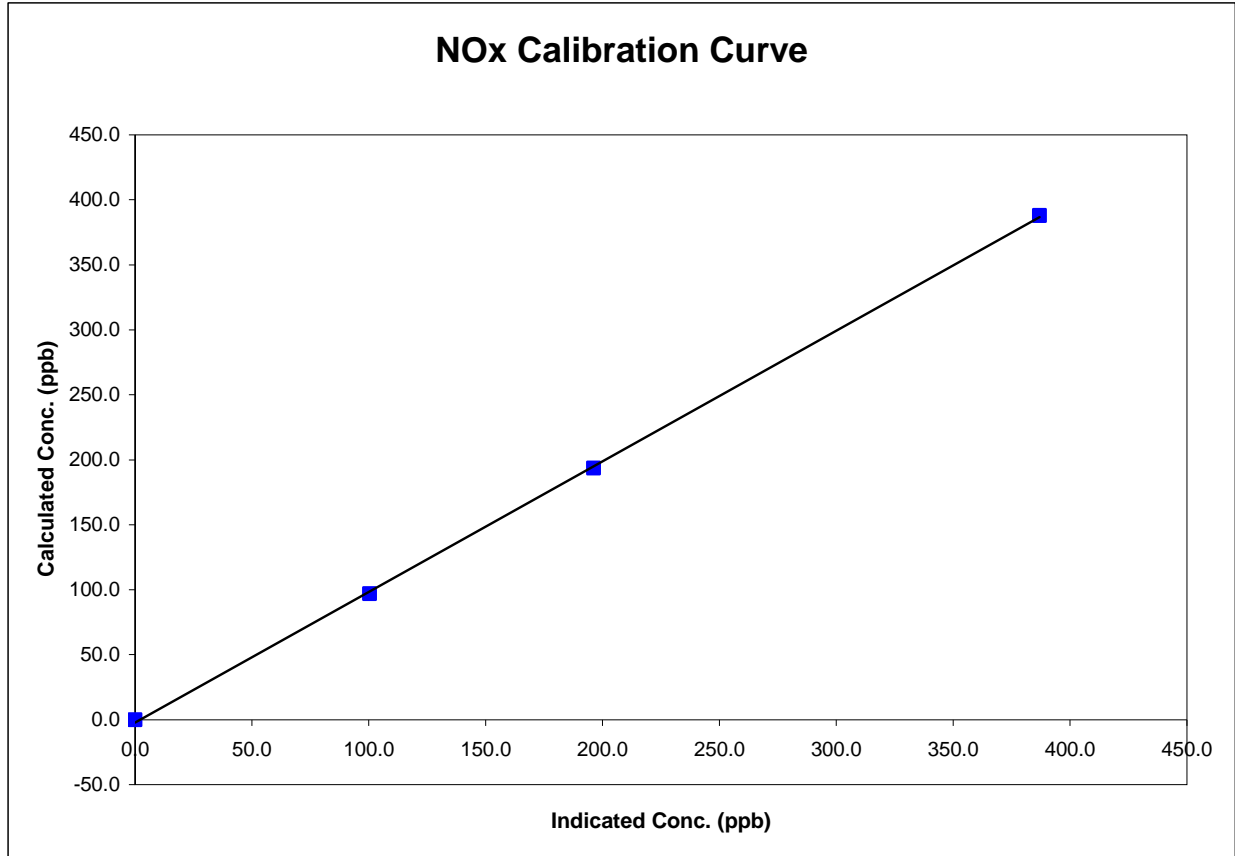
Parameter **NO<sub>x</sub>**  
 Air Monitoring Network **PASZA**

### Station Information

Calibration Date	May 14, 2008	Previous Calibration	April 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:05	End Time (MST)	15:30
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	0.0000	Correlation Coefficient	0.999858
388.0	387.0	1.0025		
193.6	196.3	0.9865		
96.9	100.4	0.9650		
			Slope	1.004790
			Intercept	-2.118204



## Calibration Summary

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

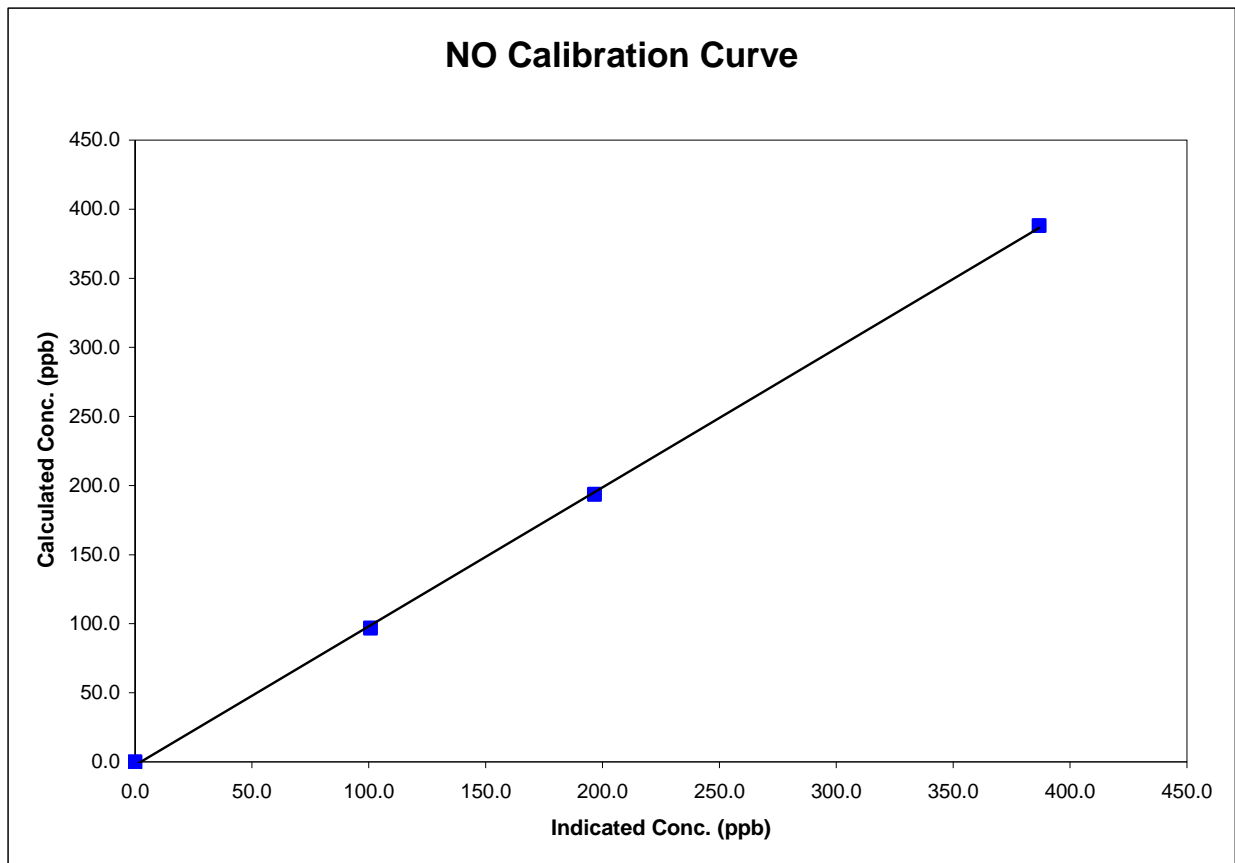


### Station Information

Calibration Date	May 14, 2008	Previous Calibration	April 3, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:05	End Time (MST)	15:30
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		
388.0	386.8	1.0029	Correlation Coefficient	0.999819
193.6	196.7	0.9845		
96.9	100.8	0.9612	Slope	1.005349
			Intercept	-2.373005



# Calibration Report



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

### Station Information

Calibration Date	May 2, 2008	Previous Calibration	April 17, 2008
Station Number	6	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	11:15	End Time (MST)	14:00
Barometric Pressure	27.78 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL16161		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.997963	Calculated slope	0.994759
Calculated intercept	-1.663723	Calculated intercept	-0.791060
Analyzer make	TEI 43i	Analyzer serial #	43C-57351-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	27.9		27.8	
Coefficient	0.74		0.74	
UV Lamp Voltage	698	LPM	693	LPM
Chamber Temp	44.2	V	44.2	V
Perm Gas Temp	26	C	25.2	C
Pressure	628.1	in Hg	633.9	in Hg
Sample Flow	0.47	LPM	0.473	LPM
Lamp Intesity	45568	Hz	45518	Hz

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	-0.2	N/A
4988	39.89	399.1	401.4	0.9943
4988	19.91	200.0	202.6	0.9870
4988	9.92	99.8	102.0	0.9790
4988	0.00	0.0	-0.2	As found zero
4988	39.89	399.1	401.4	As found span
Average Correction Factor				0.9868

Calculated value of As Found Response: 399.083 ppm      Percent Change of As Found: 0.0%

	before calibration		after calibration	
Auto zero	-1.8	ppm	-1.0	ppm
Auto span	165.2	ppm	161.6	ppm

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Calibration Performed By: Conor Whiteley



## Calibration Summary

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

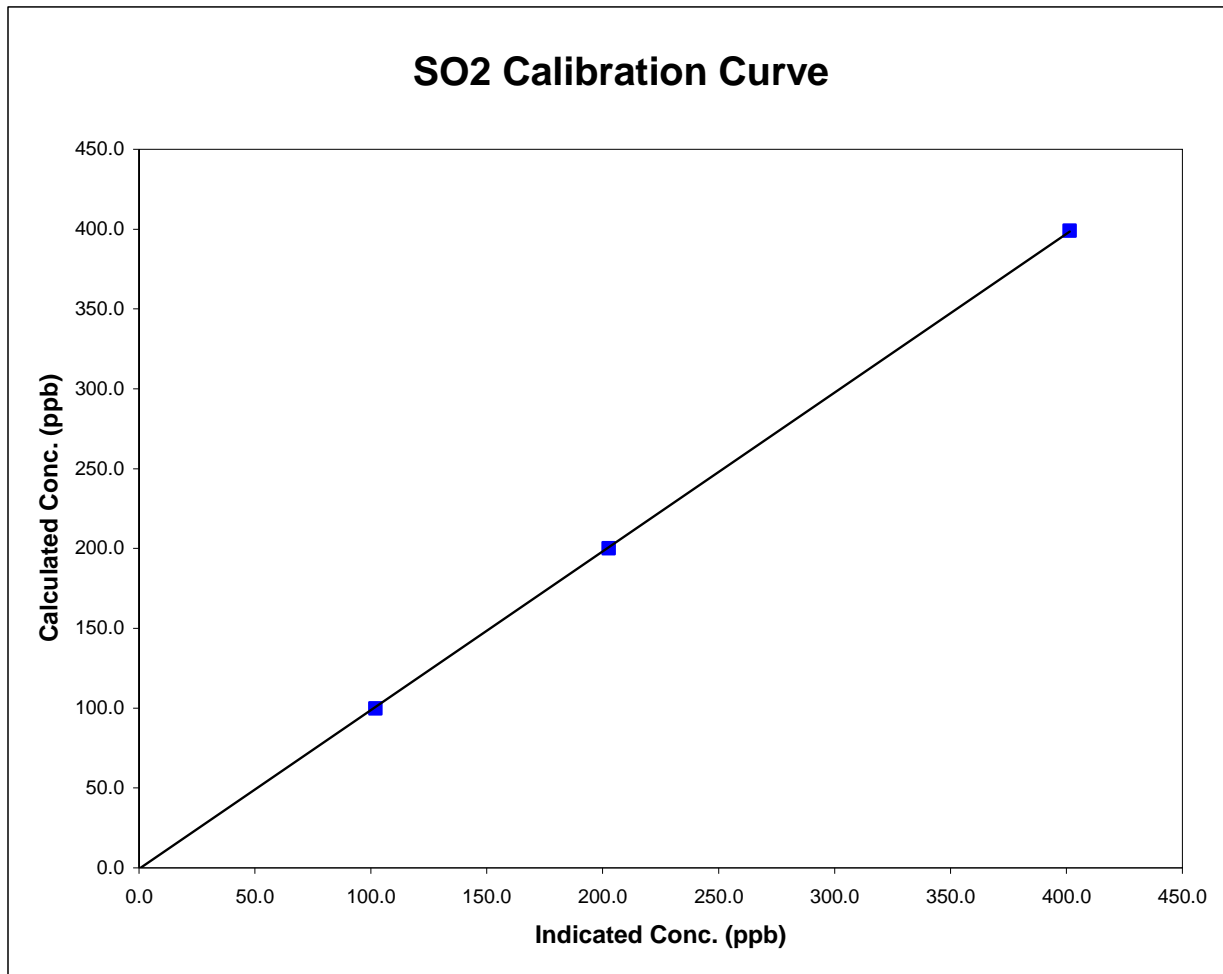


### Station Information

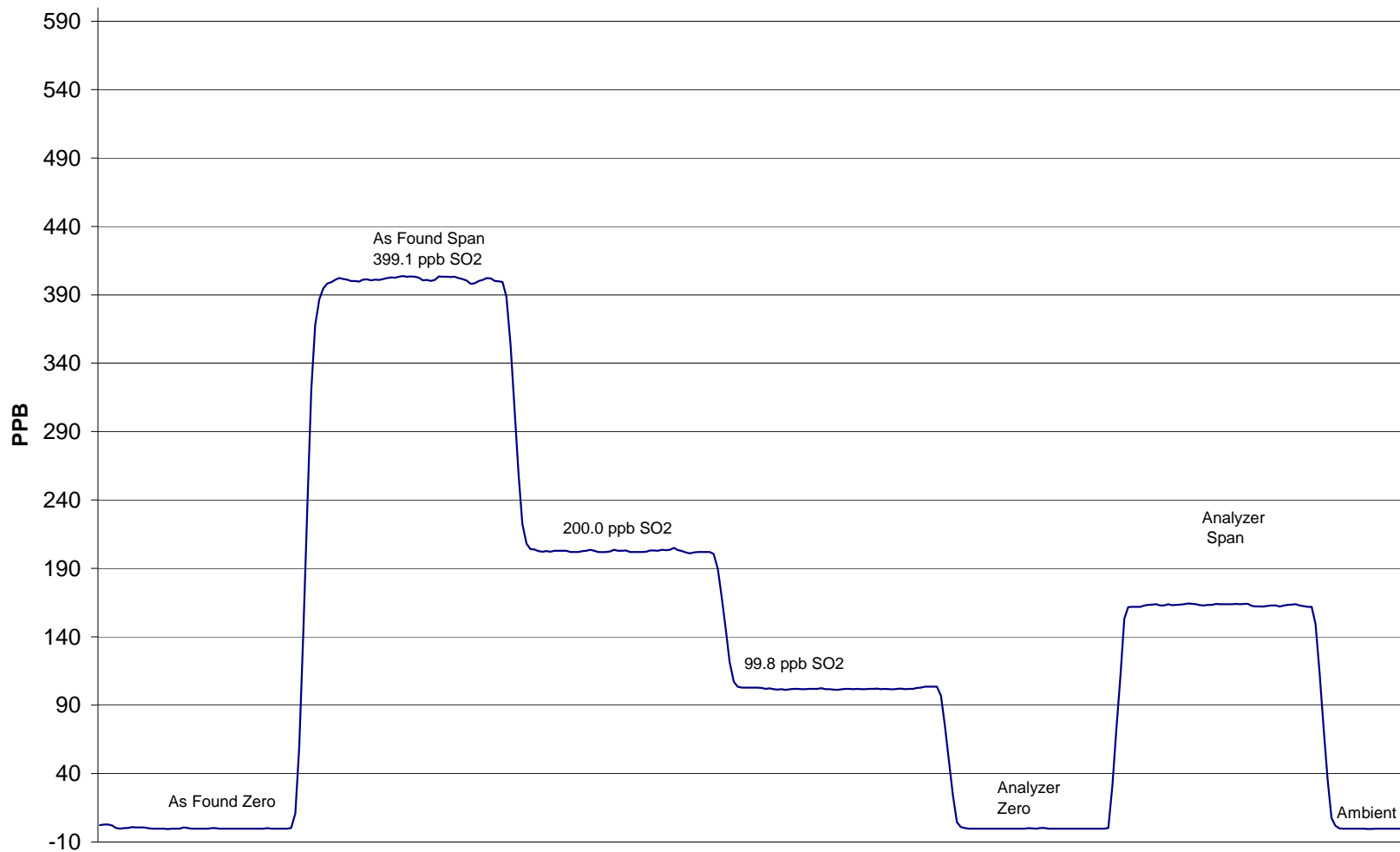
Calibration Date	May 2, 2008	Previous Calibration	April 17, 2008
Station Number	6	Station Location	Valleyview
Start Time (MST)	11:15	End Time (MST)	14:00
Analyzer make/model	TEI 43i	Analyzer serial #	43C-57351-313

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
399.1	401.4	0.9943	Correlation Coefficient	0.999970
200.0	202.6	0.9870		
99.8	102.0	0.9790	Slope	0.994759
			Intercept	-0.791060



### Valleyview SO<sub>2</sub> Calibration



May 2, 2008

# Calibration Report



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

## Station Information

Calibration Date	May 2, 2008	Previous Calibration	April 17, 2008
Station Number	5	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:00	End Time (MST)	15:40
Barometric Pressure	27.78 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	5.14 ppm	Cal Gas Expiry Date	11/29/2006
Gas Cert Reference	LL 74274		
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.033805	Calculated slope	1.033761
Calculated intercept	-0.071646	Calculated intercept	0.279329
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	4.7	ppb
Coefficient	1.026		1.026	
Lamp Voltage	803	V	798	V
Chamber Temp	45.1	c	45	c
Perm Oven Temp	45.01	c	44.99	c
Pressure	640	mm Hg	642	mm Hg
Sample Flow	427	ccm	428	ccm
Lamp Intensity	91.0	%	91.0	%

## Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.0	N/A
4988	79.79	80.9	78.0	1.0370
4988	39.86	40.7	39.2	1.0402
4988	9.91	10.2	9.3	1.1001
4988	0.00	0.0	0.0	As found zero
4988	79.79	80.9	78.0	As found span
Average Correction Factor				1.0591

Calculated value of As Found Response: 80.60 ppm      Percent Change of As Found: 0.4%

	before calibration		after calibration	
Auto zero	-0.1	ppm	0.2	ppm
Auto span	66.1	ppm	65.7	ppm

Notes:

Calibration Performed By: Conor Whiteley

# Calibration Summary



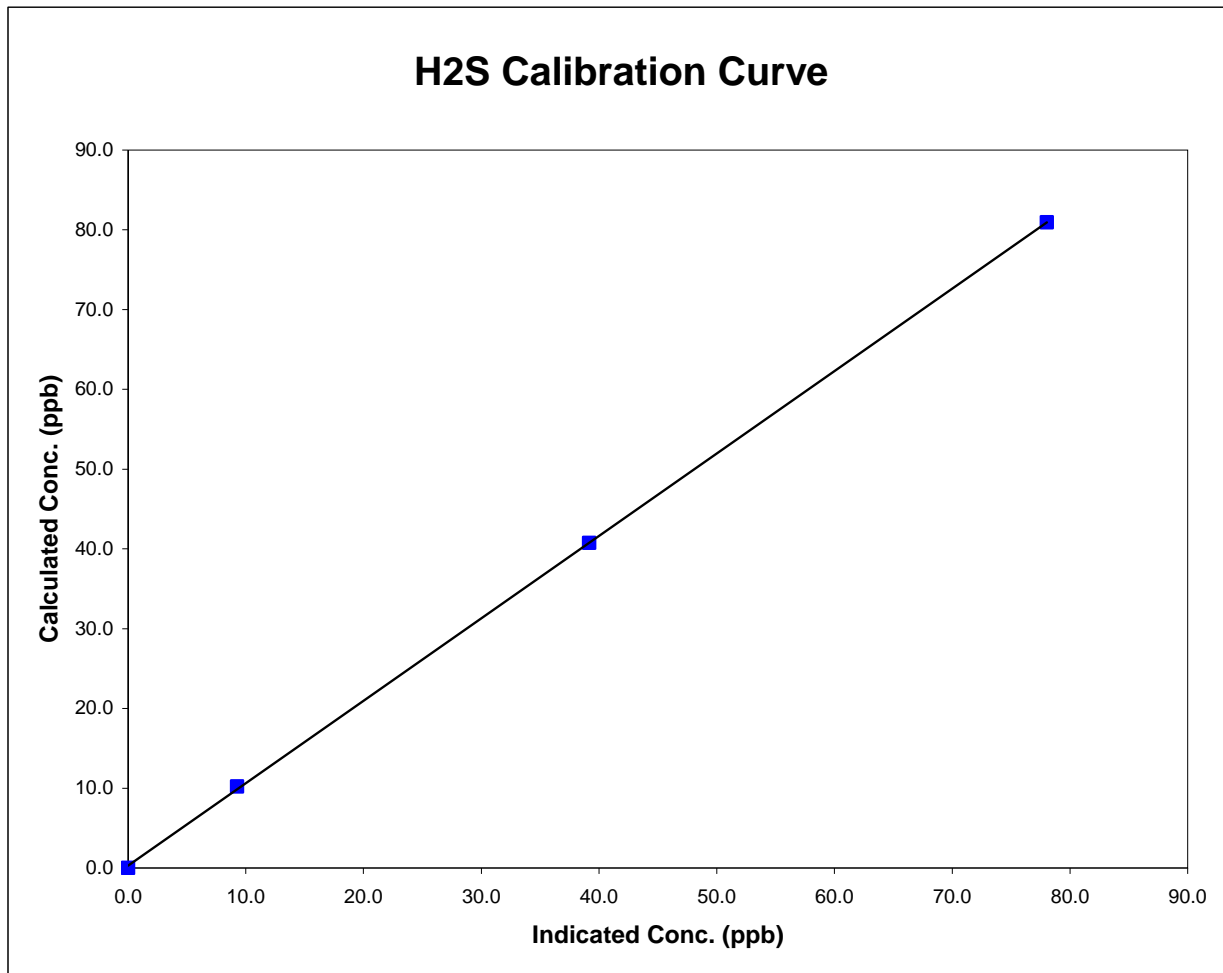
Parameter **H2S**  
 Air Monitoring Network **PASZA**

### Station Information

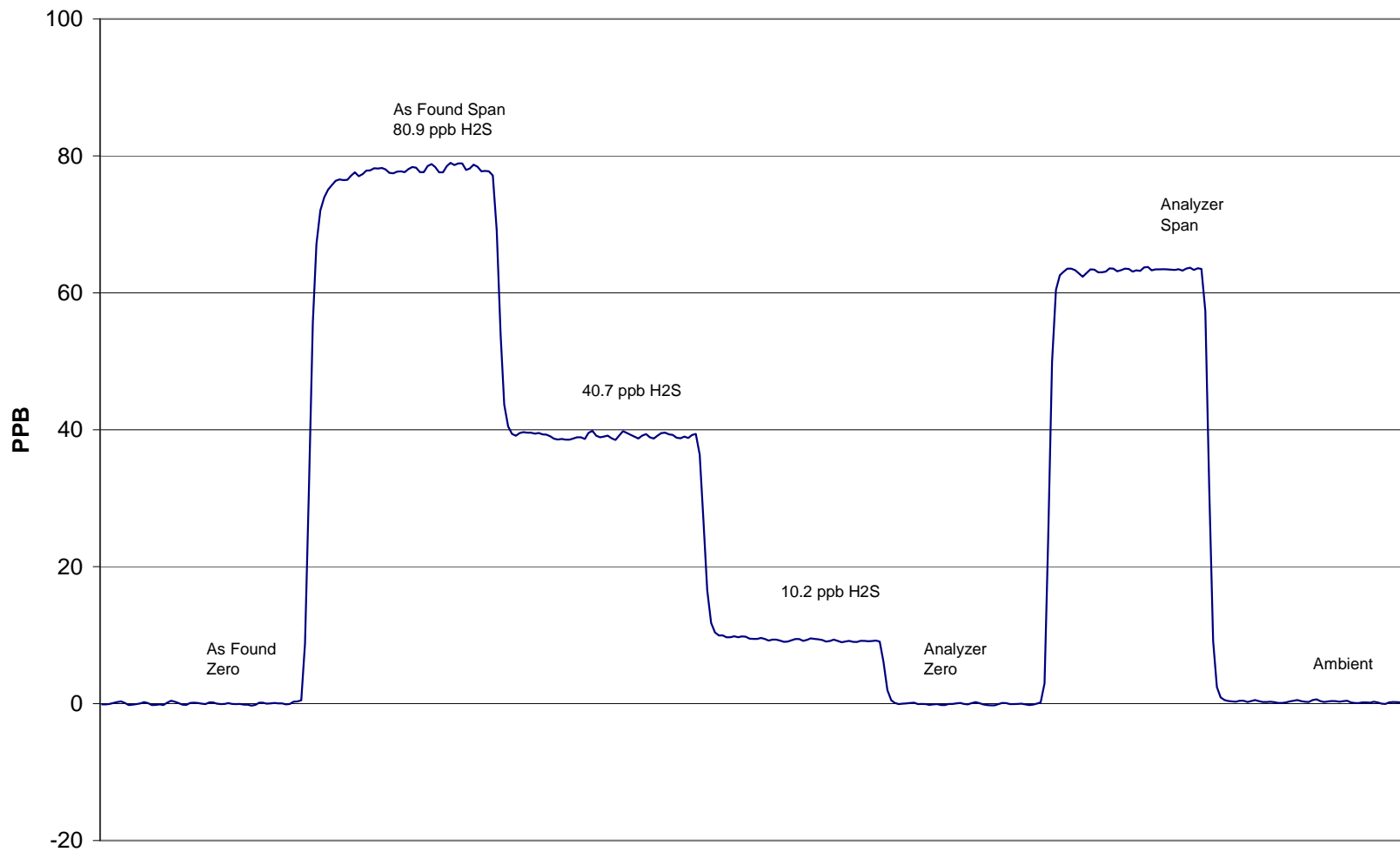
Calibration Date	May 2, 2008	Previous Calibration	April 17, 2008
Station Number	5	Station Location	Valleyview
Start Time (MST)	13:00	End Time (MST)	15:40
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-25575-221

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
80.9	78.0	1.0370	Correlation Coefficient	0.999951
40.7	39.2	1.0402		
10.2	9.3	1.1001	Slope	1.033761
			Intercept	0.279329



### Valleyview H<sub>2</sub>S Calibration



May 2, 2008