



# Air Quality Monitoring Network for August 2007

Prepared by  
**FOCUS**  
AMBIENT AIR MONITORING

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

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

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

A follow-up audit of the network by Alberta Environment was conducted on August 21<sup>st</sup> (Valleyview), August 22<sup>nd</sup> (Henry Pirker and Evergreen Park) and August 23<sup>rd</sup> (Beaverlodge, Falher and Valleyview). For specific questions regarding the audit results contact Michael Bisaga, PASZA Program Manager.

During the month of August the following events were noted:

**Henry Pirker Station:**

- ◆ All analyzers / sensors at the Henry Pirker station had an operational uptime greater than 90%.
- ◆ The AQI for the month resulted in 699 hours of Good readings.

**Evergreen Park Station:**

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

**Smoky Heights Station:**

- ◆ The SO<sub>2</sub> TECO 43I was removed from service (to be sent back to factory for repairs) on August 8<sup>th</sup> and replaced with a 43C analyzer. The TECO 43C analyzer was installed and allowed to stabilize over night with a start-up calibration performed on August 9<sup>th</sup>.
- ◆ A total of six (6) hours were flagged invalid for all parameters due to power failures on August 1<sup>st</sup> and 14<sup>th</sup>.
- ◆ A total of five (5) hours were flagged invalid for all parameters due to communication and server errors. These issues are currently being addressed.
- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90%.

**Beaverlodge Station:**

- ◆ All analyzers / sensors at the Beaverlodge station had an operational uptime greater than 90%.
- ◆ The AQI for the month resulted in 677 hours of Good readings.

**Portable - Falher Station:**

- ◆ On August 25<sup>th</sup> the temperature and relative humidity sensors failed, resulting in less than 90% operational uptime for the month of August. Several attempts were made to repair but they were sent back to factory for repair. Alberta Environment reference # 192650.
- ◆ Removal calibrations were performed on August 28<sup>th</sup> and 29<sup>th</sup>, and the station was moved to the Spirit River site on August 31<sup>st</sup>.
- ◆ All analyzers / sensors at the Falher station (with the exception of the temperature and relative humidity gauges) had an operational uptime greater than 90%.

**Valleyview Station:**

- ◆ Power failures resulted in a total of twenty-eight (28) hours of invalid data for SO<sub>2</sub> and H<sub>2</sub>S parameter and twenty-six (26) hours of invalid data for the meteorological sensors.
- ◆ Note that on August 21<sup>st</sup>, 28<sup>th</sup> and 30<sup>th</sup>, there were several 30-second (instantaneous) H<sub>2</sub>S readings greater than 10 ppb – however they did not exceed the one-hour average Alberta Environment Objective of 10 ppb.
- ◆ All analyzers / sensors at the Valleyview station had an operational uptime greater than 90%.

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

Field notes during collection noted the following: all three samples (SO<sub>2</sub>, O<sub>3</sub> and NO<sub>2</sub>) from the Cadotte Lake School site were vandalized; subsequently there are no lab results for all three samples. There are no lab results for the SO<sub>2</sub> and O<sub>3</sub> samples from Beaverlodge; and the NO<sub>2</sub> sample from Grande Prairie I, because all three samples were found broken. There were six duplicate sites sampled in the month of August; Shaftesbury, Eaglesham, Jean Cote, McLennan, Bear Canyon 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 0.2 ppb to 0.7 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 0.0 ppb to 3.8 ppb, with a mean of 0.7 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 12.0 ppb to 24.8 ppb, with a mean of 18.6 ppb.

If you have any questions, please contact the Focus office at 1-888-869-2252 (Gary Cross or Kelly Baragar).

On Behalf of the,  
Peace Airshed Zone Association

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PASZA Program Manager

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## PASZA Monthly Continuous Data Summary

Aug-2007 Peace Airshed Zone Association					Maximum Recorded Values										
					1-hr		24-hr / 8-hr		Conc		Day		WSPD (km/hr)	WDIR (Sector)	
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	Operational Time (%)
SO <sub>2</sub> (ppb)	172	57	Henry Pirker	0.2	0	0	13.7		Aug-03 20:00	13.7	WSW	2.0	Aug-03	100.0%	
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	0.4	0	0	21.5		Aug-10 10:00	6.5	SSE	1.7	Aug-10	100.0%	
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.2	0	0	5.4		Aug-01 05:00	20.5	W	1.1	Aug-01	96.1%	
SO <sub>2</sub> (ppb)	172	57	Beaverlodge	0.3	0	0	10.1		Aug-06 09:00	8.7	SW	0.9	Aug-03	100.0%	
SO <sub>2</sub> (ppb)	172	57	Portable-Falher	0.1	0	0	1.1		Aug-06 09:00	11.5	S	0.4	Aug-02	100.0%	
SO <sub>2</sub> (ppm)	172	57	Valleyview	0.44	0	0	15.92		Aug-01 01:00	11.4	WNW	3.05	Aug-01	96.2%	
NO (ppb)			Henry Pirker	1.8	-	-	52.5		Aug-28 06:00	5.6	NW	5.5	Aug-28	100.0%	
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	5.0	0	0	16.4		Aug-27 21:00	6.6	NW	7.9	Aug-29	100.0%	
NO <sub>x</sub> (ppb)			Henry Pirker	6.8	-	-	66.7		Aug-28 06:00	5.6	NW	12.9	Aug-27	100.0%	
NO (ppb)			Beaverlodge	0.4	-	-	11.9		Aug-30 08:00	3.4	SW	1.8	Aug-30	100.0%	
NO <sub>2</sub> (ppb)	212	106	Beaverlodge	2.3	0	0	10.5		Aug-18 06:00	4.1	N	4.2	Aug-18	100.0%	
NO <sub>x</sub> (ppb)			Beaverlodge	2.7	-	-	17.2		Aug-22 08:00	1.1	SSE	5.4	Aug-30	100.0%	
NO (ppb)			Portable-Falher	0.5	-	-	5.5		Aug-10 07:00	3.4	E	1.7	Aug-10	100.0%	
NO <sub>2</sub> (ppb)	212	106	Portable-Falher	1.6	0	0	8.8		Aug-02 22:00	4.8	SSE	2.6	Aug-02	100.0%	
NOX (ppb)			Portable-Falher	1.8	-	-	9.2		Aug-02 22:00	4.8	SSE	3.5	Aug-10	100.0%	
O <sub>3</sub> (ppb)	82		Henry Pirker	21.7	0	-	48.5		Aug-02 17:00	11.2	E	29.2	Aug-07	100.0%	
O <sub>3</sub> (ppb) - 8-hr		65	Henry Pirker		0							41.6	Aug-02		
O <sub>3</sub> (ppb)	82		Beaverlodge	21.1	0	-	45.4		Aug-16 14:00	16.5	E	30.9	Aug-07	100.0%	
O <sub>3</sub> (ppb) - 8-hr		65	Beaverlodge		0							38.8	Aug-16		
O <sub>3</sub> (ppb)	82		Portable-Falher	17.9	0	-	42.7		Aug-19 16:00	6.8	W	24.8	Aug-17	100.0%	
O <sub>3</sub> (ppb) - 8-hr		65	Portable-Falher		0							39.0	Aug-19		
CO (ppm)	13		Henry Pirker	0.11	0	-	0.3		Aug-22 08:00	5.7	SSW	0.2	Aug-30	100.0%	
CO (ppm) - 8-hr		5	Henry Pirker		0							0.2	Aug-02		
THC (ppm)			Henry Pirker	1.97	-	-	2.7		Aug-02 12:00	7.7	W	2.2	Aug-02	100.0%	
TRS (ppb)			Henry Pirker	0.3	-	-	1.0		Aug-10 09:00	6.8	ESE	0.4	Aug-24	100.0%	
TRS (ppb)			Evergreen Park	0.4	-	-	2.5		Aug-24 07:00	3.8	S	0.6	Aug-10	100.0%	
TRS (ppb)			Smoky Heights	0.3	-	-	1.3		Aug-20 03:00	13.9	WSW	0.5	Aug-02	98.5%	
TRS (ppb)			Portable-Falher	0.5	-	-	2.0		Aug-10 06:00	4.7	E	0.7	Aug-10	100.0%	
H <sub>2</sub> S (ppb)	10	3	Valleyview	0.1	0	0	9.4		Aug-29 16:00	2.3	N	0.7	Aug-29	96.2%	
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Henry Pirker	2.5	0	0	16.0		Aug-10 09:00	6.8	ESE	6.4	Aug-02	98.1%	
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Evergreen Park	2.9	0	0	25.8		Aug-07 10:00	21.4	W	8.8	Aug-07	99.3%	
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Smoky Heights	1.6	0	0	13.5		Aug-06 08:00	10.3	SSE	5.1	Aug-02	97.4%	
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Beaverlodge	2.2	0	0	24.8		Aug-01 20:00	5.0	E	6.7	Aug-02	96.1%	

## PASZA Monthly Continuous Data Summary - continued

Aug-2007 Peace Airshed Zone Association						Maximum Recorded Values						
						1-hr			24-hr / 8-hr			
RH (%)		Henry Pirker	74.4	-	-	-	-	-	-	-	-	100.0%
RH (%)		Beaverlodge	72.5	-	-	-	-	-	-	-	-	100.0%
RH (%)		Portable-Falher	78.0	-	-	-	-	-	-	-	-	86.2%
RH (%)		Valleyview	77.4	-	-	-	-	-	-	-	-	96.5%
SR (W/m <sup>2</sup> )		Henry Pirker	157.9	-	-	-	-	-	-	-	-	100.0%
Temp (°C)		Henry Pirker	13.8	-	-	-	-	-	-	-	-	100.0%
Temp (°C)		Evergreen Park	13.4	-	-	-	-	-	-	-	-	100.0%
Temp (°C)		Smoky Heights	13.2	-	-	-	-	-	-	-	-	98.5%
Temp (°C)		Beaverlodge	13.4	-	-	-	-	-	-	-	-	100.0%
Temp (°C)		Portable-Falher	14.0	-	-	-	-	-	-	-	-	86.2%
Temp (°C)		Valleyview	13.5	-	-	-	-	-	-	-	-	96.5%
WSPD v (km/hr)		Henry Pirker	9.9	-	-	30.9	Aug-20 10:00	30.9	WSW	17.9	Aug-20	100.0%
WSPD v (km/hr)		Evergreen Park	5.9	-	-	26.4	Aug-20 11:00	26.4	W	13.0	Aug-20	100.0%
WSPD v (km/hr)		Smoky Heights	2.2	-	-	17.1	Aug-03 03:00	17.1	WSW	22.3	Aug-20	98.5%
WSPD v (km/hr)		Beaverlodge	7.4	-	-	32.5	Aug-20 11:00	32.5	W	15.6	Aug-07	100.0%
WSPD v (km/hr)		Portable-Falher	8.6	-	-	28.5	Aug-17 16:00	28.5	E	16.4	Aug-17	99.1%
WSPD v (km/hr)		Valleyview	4.6	-	-	16.9	Aug-14 17:00	16.9	WNW	11.6	Aug-21	96.5%
WSPD s (km/hr)		Henry Pirker	10.8	-	-	31.2	Aug-20 10:00	31.2	WSW	19.0	Aug-20	100.0%
WSPD s (km/hr)		Evergreen Park	6.8	-	-	26.7	Aug-20 12:00	26.7	W	14.2	Aug-20	100.0%
WSPD s (km/hr)		Smoky Heights	10.2	-	-	36.2	Aug-20 14:00	36.2	W	23.0	Aug-20	98.5%
WSPD s (km/hr)		Beaverlodge	7.9	-	-	32.7	Aug-20 11:00	32.7	W	16.9	Aug-07	100.0%
WSPD s (km/hr)		Portable-Falher	9.1	-	-	28.7	Aug-17 16:00	28.7	E	16.9	Aug-17	99.1%
WSPD s (km/hr)		Valleyview	5.1	-	-	17.3	Aug-14 17:00	17.3	WNW	12.1	Aug-21	96.5%
WDIR		Henry Pirker	W	-	-	-	-	-	-	-	-	100.0%
WDIR		Evergreen Park	W	-	-	-	-	-	-	-	-	100.0%
WDIR		Smoky Heights	W	-	-	-	-	-	-	-	-	98.5%
WDIR		Beaverlodge	WNW	-	-	-	-	-	-	-	-	100.0%
WDIR		Portable-Falher	NNW	-	-	-	-	-	-	-	-	99.1%
WDIR		Valleyview	NW	-	-	-	-	-	-	-	-	96.5%

Note: <sup>a</sup> the draft 24-hr Alberta Ambient Air Quality Objective

# Continuous Network Equipment Summary

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## PASZA – Henry Pirker Station

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**General Station Issues**

Routine monthly calibrations were performed on August 1<sup>st</sup> (NO<sub>x</sub> and O<sub>3</sub>) and August 2<sup>nd</sup> (SO<sub>2</sub>, TRS, THC, CO and TEOM). A follow-up Alberta Environment audit was performed on the NO<sub>x</sub> analyzer on August 22<sup>nd</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43	No operational issues observed.
NOx/NO/NO <sub>2</sub>	TECO	42C	No operational issues observed.
O <sub>3</sub>	API	400	No operational issues observed.
CO	TECO	48C	No operational issues observed.
THC	TEI	51-CLT	No operational issues observed.
TRS	TEI	42C	No operational issues observed.
PM <sub>2.5</sub>	R&P	1400AB	Eleven (11) hours were removed 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	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

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## PASZA – Evergreen Park Station

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**General Station Issues**

Routine monthly calibrations were performed on August 7<sup>th</sup> (SO<sub>2</sub>, TRS and TEOM). A follow-up Alberta Environment audit was performed on the TEOM analyzer on August 22<sup>nd</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	API	100	No operational issues observed.
TRS	TEI	42C	No operational issues observed.
PM <sub>2.5</sub>	R&P	1400AB	A power bump on August 16 <sup>th</sup> resulted in one (1) hour of invalid data. Four (4) hours were removed due to excessive baseline drift.
AT	Met One	083D	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

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### PASZA – Smoky Heights Station

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**General Station Issues**

Routine monthly calibrations were performed on August 8<sup>th</sup> (TRS) and 9<sup>th</sup> (TEOM). Removal (TECO 43I) and installation (TECO 43C) calibrations were performed on August 8<sup>th</sup> and 9<sup>th</sup> for the SO<sub>2</sub> analyzers. Two power failures (Aug 1<sup>st</sup> and 14<sup>th</sup>) resulted in a total of six (6) hours of invalid data for all parameters. A total of five (5) hours were flagged invalid due to communication and server errors for all parameters. A follow-up Alberta Environment audit was performed on the TEOM analyzer on August 23<sup>rd</sup>.

<b>Parameter</b>	<b>Make</b>	<b>Model</b>	<b>Notes</b>
SO <sub>2</sub>	API	100A	On August 8 <sup>th</sup> and 9 <sup>th</sup> the TECO 43I analyzer was replaced with the TECO 43C analyzer (the 43I analyzer sent back to factory for repair). Seventeen (17) hours were attributed to maintenance while analyzer stabilized overnight. As noted above six hours attributed to power failures and five hours to communication errors.
TRS	TEI	42C	As noted above six hours attributed to power failures and five hours to communication error.
PM <sub>2.5</sub>	R&P	1400AB	Six (6) hours were removed due to excessive baseline drift. The TEOM had a total eight (8) hours of invalid data due to power failures and five hours to communication error.
AT	Met One	083D	As noted above six hours attributed to power failures and five hours to communication and processing errors.
WS	Met One	010C	As noted above six hours attributed to power failures and five hours to communication errors .
WD	Met One	020C	As noted above six hours attributed to power failures and five hours to communication errors..

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### PASZA – Beaverlodge Station

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**General Station Issues**

Routine monthly calibrations were performed on August 23<sup>rd</sup> (NO<sub>x</sub>) and 24<sup>th</sup> (SO<sub>2</sub>, O<sub>3</sub> and TEOM). A follow-up Alberta Environment audit was performed on the SO<sub>2</sub> analyzer on August 23<sup>rd</sup>.

<b>Parameter</b>	<b>Make</b>	<b>Model</b>	<b>Notes</b>
SO <sub>2</sub>	TECO	43CTL	No operational issues observed.
NOx/NO/NO <sub>2</sub>	TECO	42C	No operational issues observed.
O <sub>3</sub>	API	400	No operational issues observed.
PM <sub>2.5</sub>	R&P	1400AB	Twenty-nine (29) hours were removed due to excessive baseline drift.
AT	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS	Blue Sky	857	No operational issues observed.
WD	Blue Sky	857	No operational issues observed.

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### PASZA – Falher (Portable) Station

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**General Station Issues**

Final removal calibrations were performed on August 28<sup>th</sup> (NO<sub>x</sub>) and August 29<sup>th</sup> (SO<sub>2</sub>, TRS and O<sub>3</sub>). The station was powered off on August 29<sup>th</sup> and was moved to the Spirit River Site on August 31<sup>st</sup>. A follow-up Alberta Environment audit was performed on the TRS analyzer on August 23<sup>rd</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43C	No operational issues observed.
NOx/NO/NO <sub>2</sub>	TECO	43C	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		The temperature & relative humidity sensors failed on August 25 <sup>th</sup> and were sent back to the factory to be repaired – Alberta Environment reference # 192650.
RH	Gill Met Pak 3		The temperature & relative humidity sensors failed on August 25 <sup>th</sup> and were sent back to the factory to be repaired – Alberta Environment reference # 192650.
WS	Gill Met Pak 3		Total of five (5) hours was flagged for maintenance while attempting to repair the temperature and relative humidity sensors.
WD	Gill Met Pak 3		Total of five (5) hours was flagged for maintenance while attempting to repair the temperature and relative humidity sensors.

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### PASZA – Valleyview Station

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**General Station Issues**

Routine monthly calibrations were performed on August 15<sup>th</sup> and 16<sup>th</sup> SO<sub>2</sub> and H<sub>2</sub>S (SO<sub>2</sub> calibration was started on August 15<sup>th</sup> but cylinder ran out so it was completed on August 16<sup>th</sup>). Power failures resulted in twenty-eight (28) hours of invalid data for the SO<sub>2</sub> and H<sub>2</sub>S analyzers and twenty-six (26) hours of invalid data for the meteorological sensors. A follow-up Alberta Environment audit was performed on the H<sub>2</sub>S analyzer on August 1<sup>st</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	ML	332	As noted above twenty-eight hours attributed to power failures.
H <sub>2</sub> S	TEI	43C	As noted above twenty-eight hours attributed to power failures.
AT	Gill Met Pak 3		As noted above twenty-six hours attributed to power failures.
RH	Gill Met Pak 3		As noted above twenty-six hours attributed to power failures.
WS	Gill Met Pak 3		As noted above twenty-six hours attributed to power failures.
WD	Gill Met Pak 3		As noted above twenty-six hours attributed to power failures.

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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: August 1, 2007 to September 1, 2007

#### Alberta's Air Quality Index

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

#### Summary

Number of 1-hr Good Readings:	699
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

#### Status Flag Characters

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

#### Day Mountain Standard Time

Hour Start	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-Aug-07	6	5	6	6	5	3	4	5	6	7	8	10	12	14	17	N	3	3	5	14	12	10	10	10	
2-Aug-07	7	7	5	4	3	N	8	9	7	11	11	15	17	19	22	20	N	N	N	18	15	12	13	16	
3-Aug-07	16	15	14	17	19	N	9	9	11	15	14	10	8	14	19	19	21	18	16	16	14	11	11	11	
4-Aug-07	9	9	9	9	N	7	7	7	8	8	8	8	9	13	15	16	15	13	12	11	9	6	6	5	
5-Aug-07	6	6	6	N	5	N	4	N	5	9	13	14	16	18	17	N	16	17	15	14	16	N	N	N	
6-Aug-07	9	9	N	7	6	5	4	N	7	10	14	16	16	16	17	18	19	18	17	15	13	11	11	11	
7-Aug-07	7	N	6	5	5	10	18	17	16	16	17	17	18	19	20	20	19	20	19	17	13	9	12	13	
8-Aug-07	N	13	11	10	11	11	11	11	13	14	13	14	13	14	14	13	14	12	12	12	10	9	9	N	
9-Aug-07	10	6	5	6	9	8	7	7	8	9	9	11	12	13	14	16	18	16	17	16	12	10	N	10	
10-Aug-07	9	8	8	8	6	3	3	6	7	13	13	18	19	20	21	20	18	15	15	14	15	N	N	11	
11-Aug-07	8	9	8	7	5	3	3	4	6	8	12	14	14	16	16	16	15	15	15	13	N	9	9	8	
12-Aug-07	9	9	11	10	10	11	12	13	12	12	11	10	11	12	12	10	9	9	9	N	9	9	9	8	
13-Aug-07	7	7	7	6	5	3	3	5	7	8	10	11	12	12	13	14	14	14	N	12	9	6	6	5	
14-Aug-07	4	4	4	3	4	4	4	5	8	10	11	13	14	15	14	14	13	N	11	10	10	7	4	4	
15-Aug-07	3	2	3	2	2	3	4	4	6	6	6	10	13	14	14	14	15	N	15	14	11	9	8	9	10
16-Aug-07	9	10	9	8	5	3	4	6	9	9	11	15	19	23	23	N	22	19	17	15	14	13	12	14	
17-Aug-07	14	14	13	13	12	11	9	10	11	12	14	17	19	21	N	23	18	16	16	16	12	10	6		
18-Aug-07	9	9	8	6	5	6	3	4	3	3	6	6	11	N	18	20	21	22	21	17	15	11	11	10	
19-Aug-07	12	10	8	8	9	6	4	5	7	9	13	16	N	21	20	21	21	20	N	11	14	12	12	10	
20-Aug-07	10	10	10	10	9	6	6	8	12	13	15	N	15	15	14	14	14	12	12	10	12	13	13	13	
21-Aug-07	13	12	12	11	11	10	9	8	8	9	N	9	10	10	11	13	12	12	10	9	7	7	11	9	
22-Aug-07	8	6	6	4	4	2	2	5	5	5	7	10	11	12	14	14	13	15	13	11	9	6	7	7	
23-Aug-07	5	4	4	3	3	N	2	2	6	10	13	16	16	18	17	17	17	17	15	13	13	13	11	8	
24-Aug-07	6	5	4	5	N	3	3	4	4	6	8	11	13	14	15	14	14	14	13	12	10	13	13	15	
25-Aug-07	13	13	13	N	11	10	8	7	9	9	13	13	15	17	17	16	16	17	16	12	11	9	8	8	
26-Aug-07	7	8	N	9	10	10	9	9	10	10	10	9	9	12	14	16	16	17	16	15	13	8	8	6	
27-Aug-07	4	N	6	5	4	3	3	3	6	6	12	12	15	17	17	18	18	18	16	16	9	7	7	5	
28-Aug-07	N	5	4	4	3	2	7	5	5	8	11	14	15	18	20	20	21	20	18	14	10	11	11	N	
29-Aug-07	13	13	12	10	7	8	5	11	10	9	10	12	15	18	17	16	15	13	10	9	8	8	N	8	
30-Aug-07	7	7	7	7	6	5	4	4	6	8	10	10	10	11	11	11	10	9	9	5	12	N	16	14	
31-Aug-07	12	11	13	12	13	10	9	9	10	12	14	15	18	18	17	15	14	13	13	12	N	10	8	N	

# PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

**Summary**

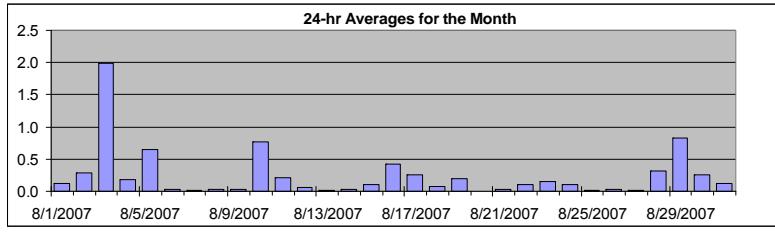
Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	13.7 ppb 3-Aug 20:00 21:00
Maximum 24-hr Average:	2.0 ppb 3-Aug

AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 3.3	95 0.9	75 0.2	50 0.0	25 0.0	5 0.0	1 0.0	Average 0.2 ppb	Median 0.0 ppb

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-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.1	1.0
2-Aug-07	0	0	0	0	0	A	0	C	C	A	1	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0.3	1.0
3-Aug-07	0	0	0	0	0	A	1	1	0	4	5	3	2	1	0	0	0	0	0	1	14	8	3	1	2.0	13.7	
4-Aug-07	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	0.2	0.8
5-Aug-07	0	0	0	A	0	1	1	1	1	1	2	1	2	1	1	0	0	1	1	0	0	0	0	0	0	0.6	2.0
6-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
7-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
8-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4
9-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.2
10-Aug-07	0	1	0	0	0	0	0	1	1	2	2	3	3	1	1	1	1	0	0	0	0	A	0	0	0	0.8	2.9
11-Aug-07	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	A	1	0	0	0.2	1.3	
12-Aug-07	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	0.7	
13-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.2	
14-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.2	
15-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.5	
16-Aug-07	0	0	0	0	0	0	0	0	1	1	1	2	3	1	A	1	0	0	0	0	0	0	0	0	0	0.4	2.5
17-Aug-07	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0.3	0.9
18-Aug-07	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0	
19-Aug-07	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0.2	0.6	
20-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
21-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
22-Aug-07	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	0.6	
23-Aug-07	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9	
24-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1	1.4	
25-Aug-07	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
26-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
27-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
28-Aug-07	A	0	0	0	0	0	0	0	1	2	1	1	1	0	0	0	0	0	2	0	0	0	0	A	0.3	1.8	
29-Aug-07	0	0	0	0	0	0	0	0	1	1	6	2	2	5	0	0	0	0	0	0	0	0	A	0	0.8	6.0	
30-Aug-07	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	0	0	A	0	0	0.3	0.8		
31-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0.1	0.5	

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

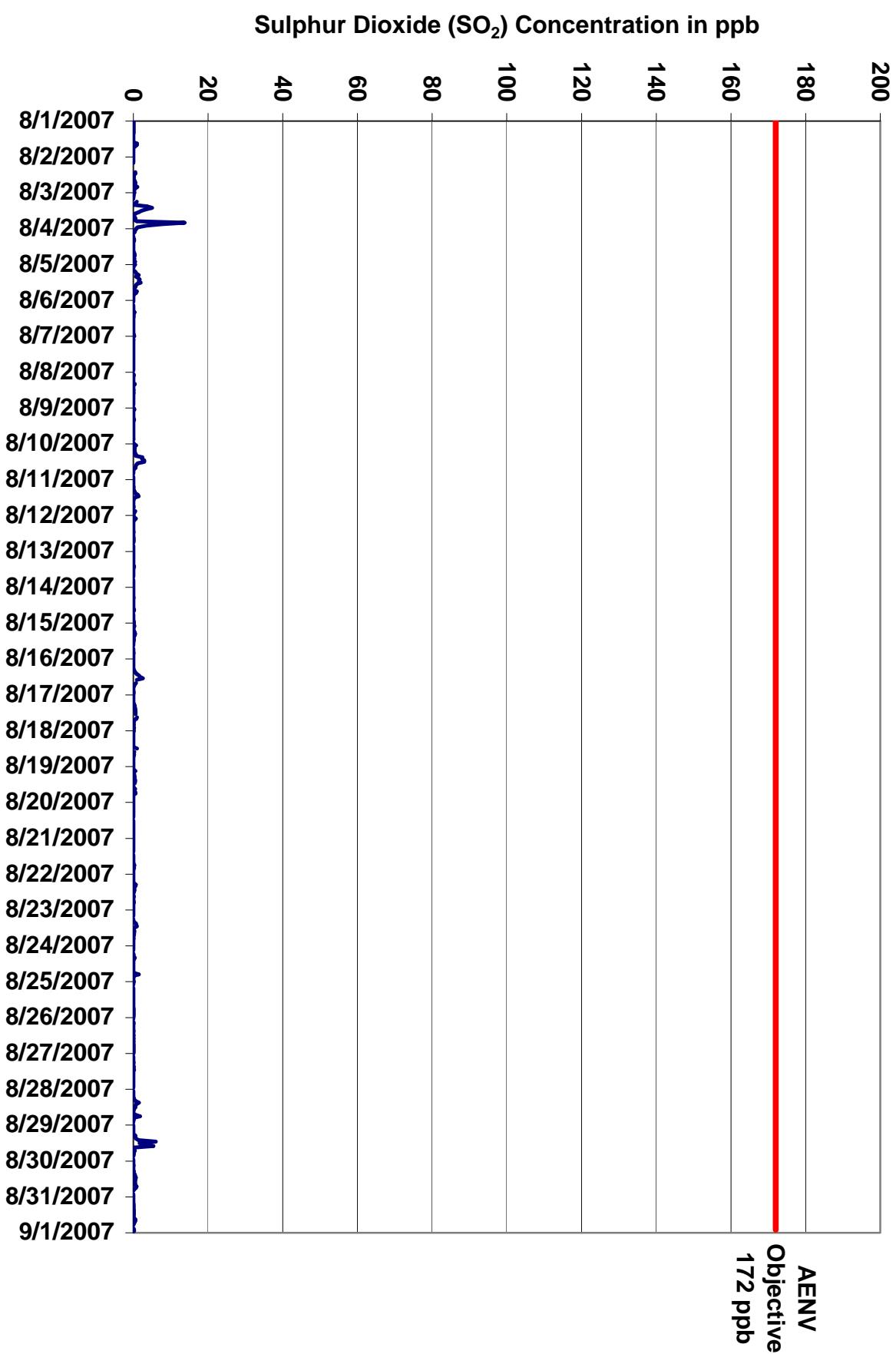


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

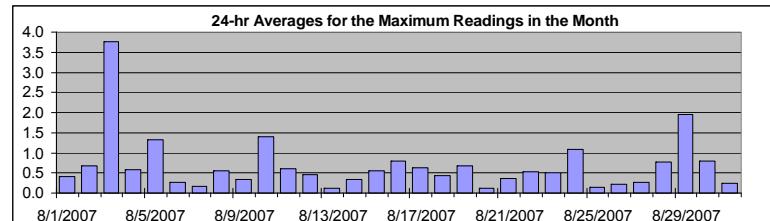
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	21.4 ppb	3-Aug 20:00	21:00
Maximum 24-hr Value:	3.8 ppb	3-Aug	



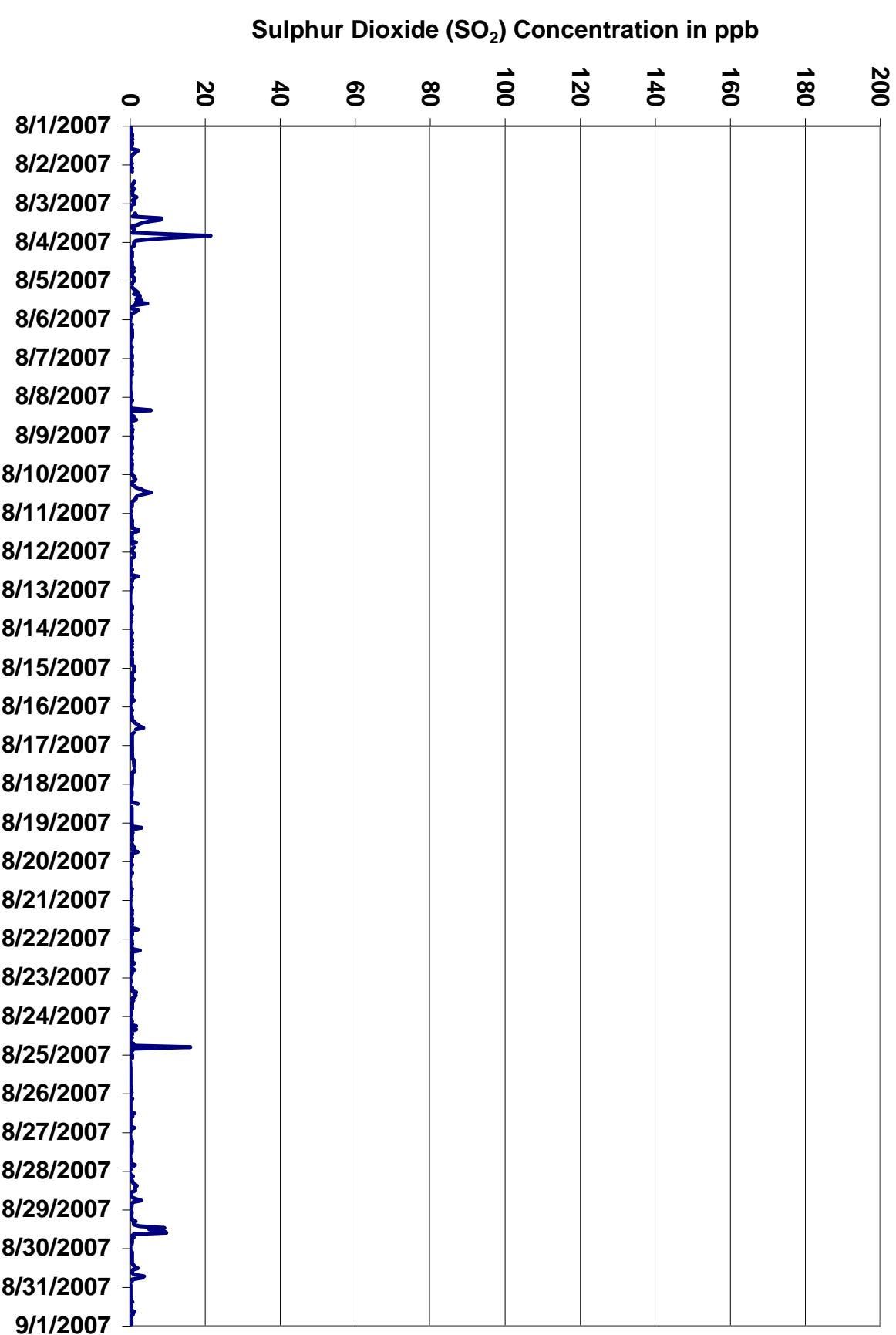
#### Status Flag Characters

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

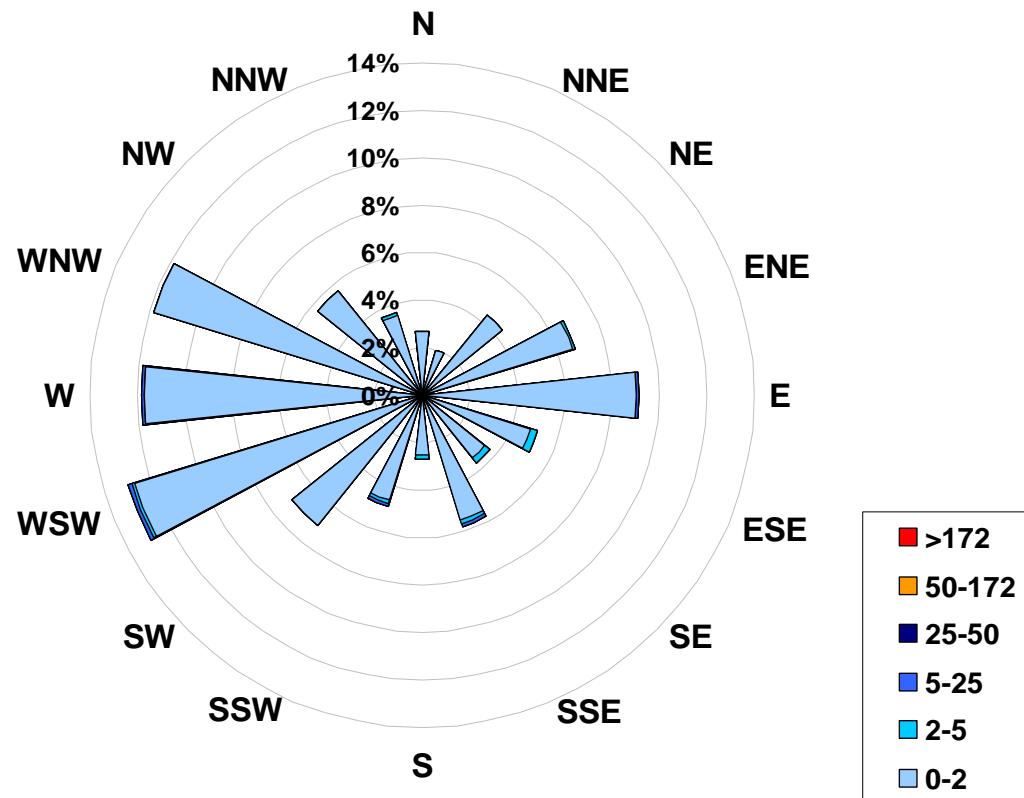
#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	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	Daily Maximum	
1-Aug-07	0:00 1:00	0	0	0	0	0	1	1	0	1	0	1	1	0	0	0	2	2	1	1	0	0	0	0	0	0.4	2.1	
2-Aug-07	0:00 1:00	0	0	1	0	1	A	1	C	C	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	0.7	1.7	
3-Aug-07	1:00 0:00	1	0	0	0	0	A	1	2	1	8	8	5	3	2	1	1	1	1	1	11	21	12	5	1	3.8	21.4	
4-Aug-07	1:00 0:00	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1	0.6	1.0
5-Aug-07	1:00 0:00	1	0	0	A	0	1	2	2	1	3	3	2	3	2	5	1	1	1	2	2	1	0	0	0	1.3	4.5	
6-Aug-07	0:00 A:00	0	0	A	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
7-Aug-07	0:00 A:00	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
8-Aug-07	A:00 0:00	0	1	0	0	0	0	0	1	5	0	0	0	0	1	0	2	0	0	0	0	0	1	1	A	0.6	5.5	
9-Aug-07	1:00 0:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.5	
10-Aug-07	0:00 1:00	0	1	1	1	1	0	0	1	1	3	4	6	4	2	1	1	1	1	0	0	0	0	A	0	0	1.4	5.6
11-Aug-07	0:00 0:00	0	0	0	0	0	0	0	1	0	2	2	1	1	0	0	0	0	0	2	1	A	1	1	1	0.6	2.0	
12-Aug-07	0:00 1:00	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	2	1	1	1	A	0	0	1	0	0.5	2.0	
13-Aug-07	0:00 0:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.5	
14-Aug-07	0:00 0:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	1.0	
15-Aug-07	1:00 0:00	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	A	1	0	0	1	0	0	0.5	1.0	
16-Aug-07	0:00 0:00	0	0	0	0	0	0	0	0	1	1	2	2	4	2	A	1	0	0	0	0	0	0	0	0	0.8	3.5	
17-Aug-07	0:00 0:00	0	0	0	0	0	0	1	0	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0.6	1.0	
18-Aug-07	0:00 0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	A	0	0	0	0	0	0	0	0.4	2.0	
19-Aug-07	0:00 3:00	0	0	0	3	0	0	1	0	0	0	0	0	0	0	A	0	0	1	0	1	2	0	1	1	0.7	3.0	
20-Aug-07	0:00 0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.5	
21-Aug-07	0:00 0:00	0	0	0	0	0	0	1	0	0	0	0	A	0	1	1	0	0	0	1	2	1	1	0	0	0.4	2.0	
22-Aug-07	0:00 1:00	0	0	0	1	0	0	1	3	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	0	0.5	2.5	
23-Aug-07	0:00 0:00	0	0	0	0	0	A	1	1	1	2	1	2	1	0	1	1	1	1	1	1	0	0	0	0	0.5	1.5	
24-Aug-07	0:00 1:00	0	0	0	1	A	0	2	0	2	1	0	1	0	0	0	0	0	0	1	1	16	1	1	0	1.1	16.0	
25-Aug-07	1:00 1:00	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
26-Aug-07	0:00 A:00	0	0	A	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0.2	1.1	
27-Aug-07	0:00 A:00	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.2	
28-Aug-07	A:00 0:00	A	0	0	1	0	0	0	1	1	1	2	1	1	0	0	0	0	1	3	1	0	0	0	0	0.8	2.9	
29-Aug-07	0:00 0:00	0	0	0	0	0	0	1	1	1	1	2	9	5	9	10	1	0	1	0	0	0	0	A	0	2.0	9.6	
30-Aug-07	0:00 0:00	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	1	4	3	1	1	1	A	0	0	0.8	3.7	
31-Aug-07	0:00 0:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	1	0	0	A	0	0	0.2	1.1	
	Hourly Avg	0.3	0.3	0.4	0.4	0.2	0.3	0.5	0.6	0.7	0.9	1.0	1.3	1.1	0.8	0.9	0.6	0.5	0.6	0.8	1.3	1.2	0.8	0.4	0.4			
	Hourly Max	1.1	1.0	1.0	3.0	0.9	1.0	1.5	2.5	5.5	8.2	8.1	9.1	5.0	8.9	9.6	2.1	1.6	3.7	3.1	16.0	21.4	12.2	5.2	1.5			

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 August 2007**



Calms:	0%
--------	----

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	695
2	to	5	10
5	to	25	5
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			710

PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

## **HOURLY AVERAGE TABLE**

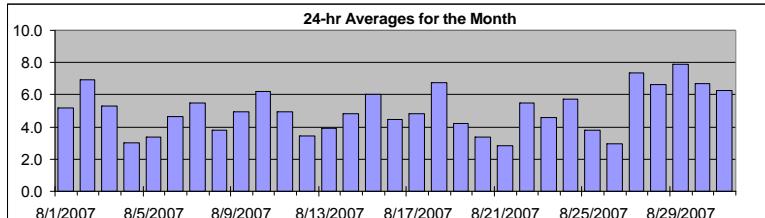
## Nitrogen Dioxide ( $\text{NO}_2$ )

**Monitoring Dates:** August 1, 2007 to September 1, 2007

**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:	16.4 ppb
Maximum 24-hr Average:	7.9 ppb



## Status Flag Characters

Status Flag Description		Action	
C	Calibration	A	AIC - 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:	31 hrs			Operational Time:				704 hrs	
Calibration Time:	9 hrs			AMD Operational Uptime:				100.0%	
Percentile	99	95	75	50	25	5	1	Average	Median
	14.2	11.2	6.7	4.1	2.7	1.6	1.1	5.0 ppb	4.1 ppb

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-Aug-07	3	3	3	3	4	9	8	5	4	3	4	C	C	C	C	6	4	4	4	7	9	9	9	8	5.2	9.4
2-Aug-07	10	8	9	5	10	A	16	12	9	12	8	7	4	3	3	3	3	3	3	5	7	11	6	3	6.9	15.6
3-Aug-07	3	2	3	2	3	A	15	11	7	5	10	10	7	7	3	3	2	3	3	5	6	5	4	3	5.3	15.2
4-Aug-07	3	2	2	2	A	5	4	3	3	2	2	2	2	1	1	1	1	2	2	2	5	9	5	6	3.0	9.4
5-Aug-07	4	3	2	A	6	5	3	3	4	3	2	2	2	2	1	2	2	1	3	2	3	4	10	8	3.4	10.5
6-Aug-07	7	5	A	8	7	6	6	3	4	4	3	2	2	2	2	2	2	2	3	5	8	10	7	7	4.7	9.9
7-Aug-07	9	A	11	8	10	10	5	4	4	4	3	3	3	2	2	2	2	2	3	4	10	15	6	3	5.5	14.7
8-Aug-07	A	5	2	2	2	5	6	4	3	4	4	5	3	4	5	2	4	4	4	4	6	4	A	3.8	5.6	
9-Aug-07	5	8	4	3	3	4	8	8	6	5	4	2	3	4	4	3	2	4	3	3	7	9	A	8	4.9	9.3
10-Aug-07	6	7	6	6	7	11	11	10	12	15	9	3	3	2	1	2	2	3	4	6	5	A	8	6	6.2	15.2
11-Aug-07	8	4	4	5	6	11	10	8	8	5	3	3	3	2	2	2	3	2	3	4	A	8	6	5	4.9	10.8
12-Aug-07	3	3	2	2	1	2	2	2	3	3	5	3	3	3	5	6	6	5	A	7	5	4	3	3.4	7.3	
13-Aug-07	2	2	2	3	6	7	4	5	5	3	3	3	2	1	1	2	2	A	6	8	9	7	6	3.9	9.4	
14-Aug-07	6	6	6	5	4	4	7	7	4	3	3	3	2	2	2	3	3	A	7	5	5	7	8	7	4.8	8.4
15-Aug-07	8	10	11	9	9	10	11	12	7	5	3	3	2	1	2	2	A	6	4	4	6	6	4	4	6.0	11.8
16-Aug-07	4	4	3	3	8	13	10	6	3	2	3	3	3	4	3	A	6	4	3	3	4	4	4	2	4.5	13.3
17-Aug-07	2	2	2	3	4	8	6	4	3	3	3	3	3	3	A	7	10	7	7	4	5	5	8	12	4.8	12.0
18-Aug-07	5	4	5	7	7	6	10	11	13	12	9	5	5	A	5	4	4	2	3	4	5	11	9	9	6.7	13.2
19-Aug-07	4	6	5	4	3	4	6	6	4	4	4	3	A	5	3	5	3	3	3	7	4	5	3	3	4.2	6.6
20-Aug-07	2	2	2	2	2	7	10	8	3	3	2	A	5	5	3	2	3	2	2	3	4	2	2	1	3.4	10.4
21-Aug-07	1	1	1	1	1	2	4	4	3	1	A	4	2	2	2	2	2	3	6	9	8	3	2	2.8	9.1	
22-Aug-07	3	4	3	3	4	6	7	C	C	C	C	6	5	5	2	4	8	2	3	6	12	10	8	8	5.5	12.2
23-Aug-07	8	9	4	5	4	A	8	9	6	3	3	1	1	1	2	2	3	4	6	6	5	6	7	4.6	9.3	
24-Aug-07	7	9	10	8	A	12	11	10	10	6	3	2	2	2	3	4	4	6	6	8	4	3	2	5.7	11.6	
25-Aug-07	3	4	3	A	5	5	9	12	5	4	3	4	2	2	2	2	2	2	2	5	5	3	2	3.8	12.2	
26-Aug-07	1	1	A	3	2	2	2	3	2	2	2	2	4	2	2	3	2	2	2	4	11	7	8	3.0	11.2	
27-Aug-07	10	A	8	6	6	11	12	10	12	12	5	5	3	2	2	2	2	2	4	14	16	15	8	7.4	16.4	
28-Aug-07	A	10	9	7	10	10	14	12	10	5	4	3	3	2	1	1	1	2	4	7	13	10	8	A	6.6	14.1
29-Aug-07	5	4	5	5	6	8	14	14	13	9	12	9	5	5	6	3	4	9	11	10	10	9	A	7	7.9	14.0
30-Aug-07	4	3	3	3	4	7	12	12	7	4	4	7	9	5	5	5	7	10	15	12	5	A	6	4	6.7	15.3
31-Aug-07	3	4	3	2	4	8	10	12	11	7	6	4	3	3	4	6	8	7	6	4	A	10	10	8	6.3	12.1

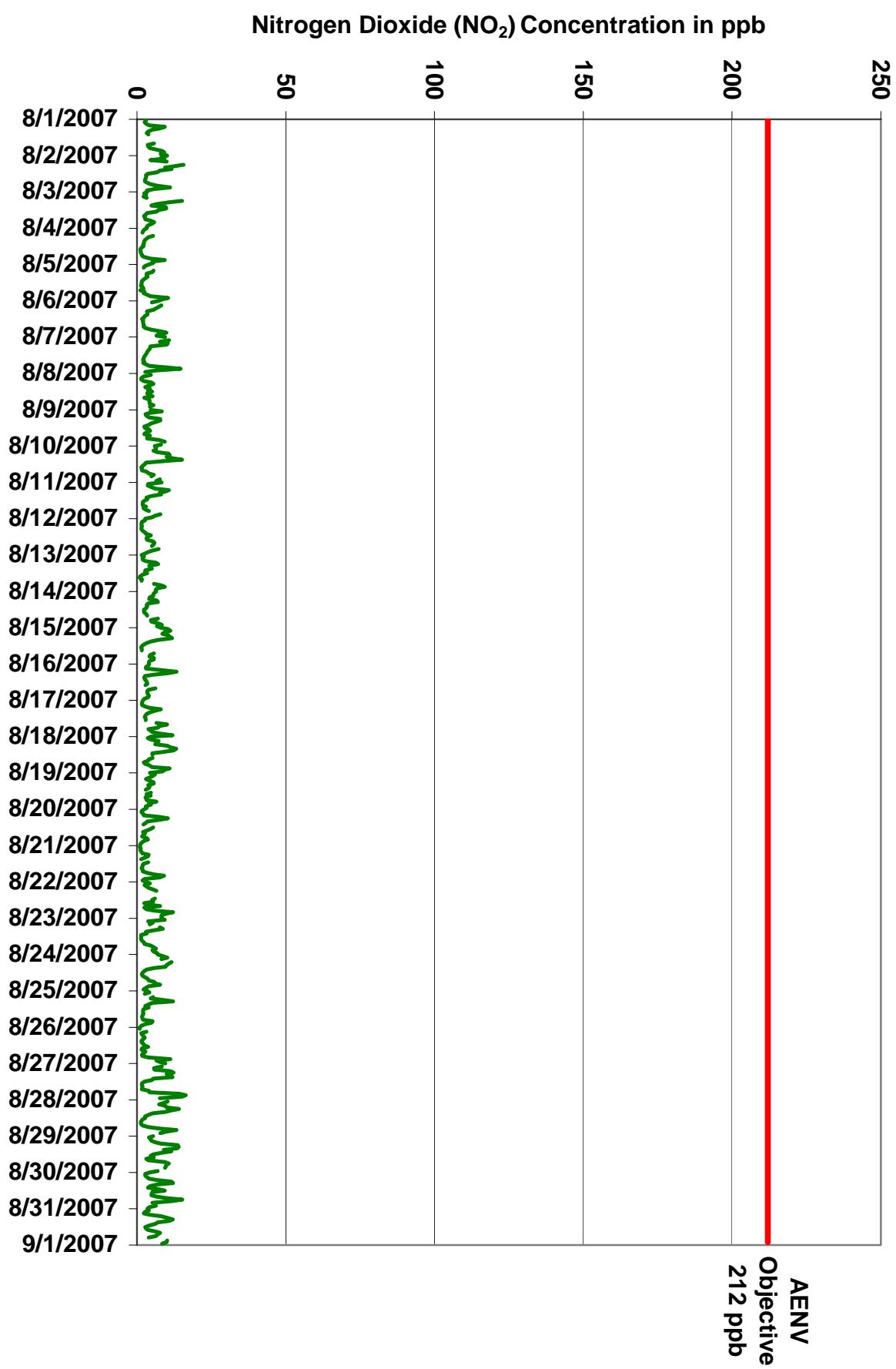


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

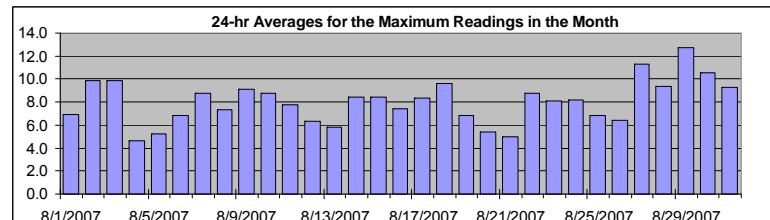
Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	45.5 ppb	29-Aug 7:00	8:00
Maximum 24-hr Value:	12.8 ppb	29-Aug	

AIC Time:	31 hrs	Operational Time:	704 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	21.2 16.3 10.8 6.9 4.4 2.5 2.0	8.0 ppb	6.9 ppb

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-Aug-07	3	4	4	4	7	11	11	7	5	5	5	C	C	C	C	C	C	8	5	6	8	8	10	12	10	7.0	12.0
2-Aug-07	13	12	14	6	13	A	20	17	11	14	9	8	6	4	4	7	4	4	6	7	10	14	13	8	9.9	19.6	
3-Aug-07	7	4	5	4	4	A	21	22	11	30	18	16	11	12	5	5	4	4	3	9	9	10	5	5	9.9	30.0	
4-Aug-07	5	5	2	2	A	9	4	4	4	3	3	3	3	2	2	3	2	2	2	5	8	13	9	8	4.7	13.5	
5-Aug-07	7	3	3	A	9	7	4	4	5	4	3	2	2	2	2	4	4	1	4	3	7	7	15	14	5.2	15.2	
6-Aug-07	10	7	A	12	8	7	7	4	4	5	4	4	2	4	4	4	4	4	5	7	12	12	12	13	6.8	12.5	
7-Aug-07	16	A	17	8	15	14	7	6	6	5	5	5	6	4	5	4	6	4	5	6	15	19	18	5	8.8	19.1	
8-Aug-07	A	8	3	2	3	7	9	8	6	7	7	8	12	9	9	8	4	9	8	7	10	8	10	A	7.3	11.7	
9-Aug-07	8	14	8	5	6	12	14	14	16	7	8	8	4	6	7	5	6	7	6	6	18	13	A	11	9.1	18.0	
10-Aug-07	8	8	8	9	9	13	13	15	14	18	15	4	4	3	2	3	3	6	7	9	10	A	12	9	8.7	17.6	
11-Aug-07	14	7	4	7	10	13	12	13	9	8	5	5	4	3	4	5	5	5	7	6	A	11	10	8	7.7	13.8	
12-Aug-07	4	3	2	4	4	5	5	4	5	5	5	7	5	13	5	10	10	9	8	A	11	8	5	5	6.3	13.1	
13-Aug-07	2	4	2	3	4	8	10	6	9	9	5	4	4	4	3	2	3	3	A	9	10	12	8	8	5.8	11.8	
14-Aug-07	9	10	10	7	6	6	11	10	6	19	5	11	4	4	4	5	5	5	A	11	9	10	11	12	8.4	19.1	
15-Aug-07	11	12	13	13	11	15	14	15	10	7	4	3	3	2	3	3	9	6	10	7	7	7	7	8.4	14.8		
16-Aug-07	6	9	5	4	13	20	12	8	7	7	3	5	4	5	5	A	10	6	6	5	6	7	10	5	7.4	20.1	
17-Aug-07	4	3	6	3	4	7	13	11	6	6	6	4	7	4	A	9	17	13	12	10	8	7	15	17	8.3	17.3	
18-Aug-07	7	5	9	11	9	9	15	18	16	15	11	9	6	A	8	5	4	3	5	6	8	16	12	11	9.6	17.8	
19-Aug-07	7	9	8	10	4	7	9	7	5	9	8	6	A	8	4	7	4	6	5	10	7	7	4	4	6.8	10.4	
20-Aug-07	3	2	3	4	4	10	13	10	5	5	4	A	9	6	6	4	5	3	3	9	6	3	3	5.4	12.8		
21-Aug-07	2	2	2	2	3	4	7	7	5	2	A	6	3	2	3	3	3	3	5	11	15	13	6	4.9	14.7		
22-Aug-07	6	11	3	5	5	7	8	C	C	C	C	7	8	9	3	10	12	7	6	9	19	13	13	15	8.8	19.4	
23-Aug-07	15	13	8	7	6	A	11	12	14	5	6	2	3	3	4	6	5	8	10	10	14	8	8	9	8.1	15.3	
24-Aug-07	10	12	11	13	A	14	16	12	11	8	4	4	3	2	4	4	6	7	7	11	12	6	4	8.2	15.6		
25-Aug-07	5	11	4	A	7	7	14	17	9	5	4	7	5	4	3	4	4	3	4	5	12	12	4	3	6.8	16.9	
26-Aug-07	1	2	A	6	2	2	3	5	3	3	3	4	10	11	5	6	8	6	4	8	7	19	18	9	6.4	18.9	
27-Aug-07	14	A	12	8	11	14	14	13	16	8	8	5	3	4	3	5	4	4	8	9	26	26	19	16	11.3	26.5	
28-Aug-07	A	13	12	10	12	12	19	15	12	9	6	3	4	3	2	3	2	3	7	13	17	12	14	A	9.4	19.4	
29-Aug-07	9	6	6	9	11	13	26	45	18	13	20	11	8	6	7	4	6	12	13	14	12	14	A	9	12.8	45.5	
30-Aug-07	7	3	3	7	8	12	15	15	10	7	5	11	12	9	6	8	16	17	22	19	11	A	10	5	10.6	22.1	
31-Aug-07	4	5	4	4	7	12	18	17	16	10	8	7	4	5	6	11	15	10	8	6	A	12	12	11	9.3	17.8	
	Hourly Avg	7.6	7.3	6.7	6.5	7.5	9.9	12.1	12.0	9.1	9.0	6.9	6.3	5.7	5.4	4.6	5.5	6.4	6.2	7.1	8.5	11.3	11.4	10.4	8.5		
	Hourly Max	15.9	14.3	17.3	13.3	15.1	20.1	25.6	45.5	18.4	30.0	19.7	16.3	12.3	13.1	8.7	11.4	16.6	17.5	22.1	19.2	25.7	26.5	19.3	17.3		



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

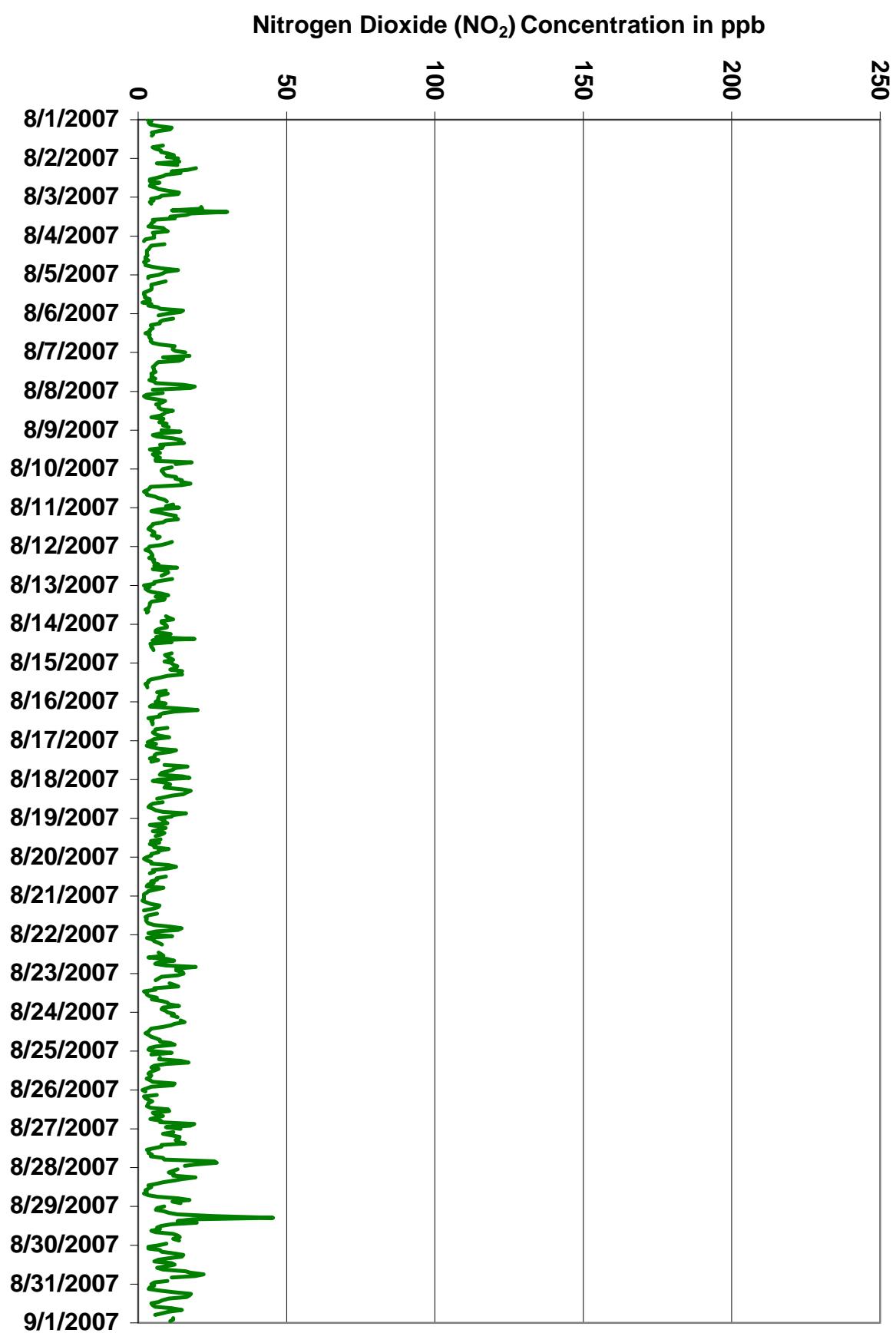
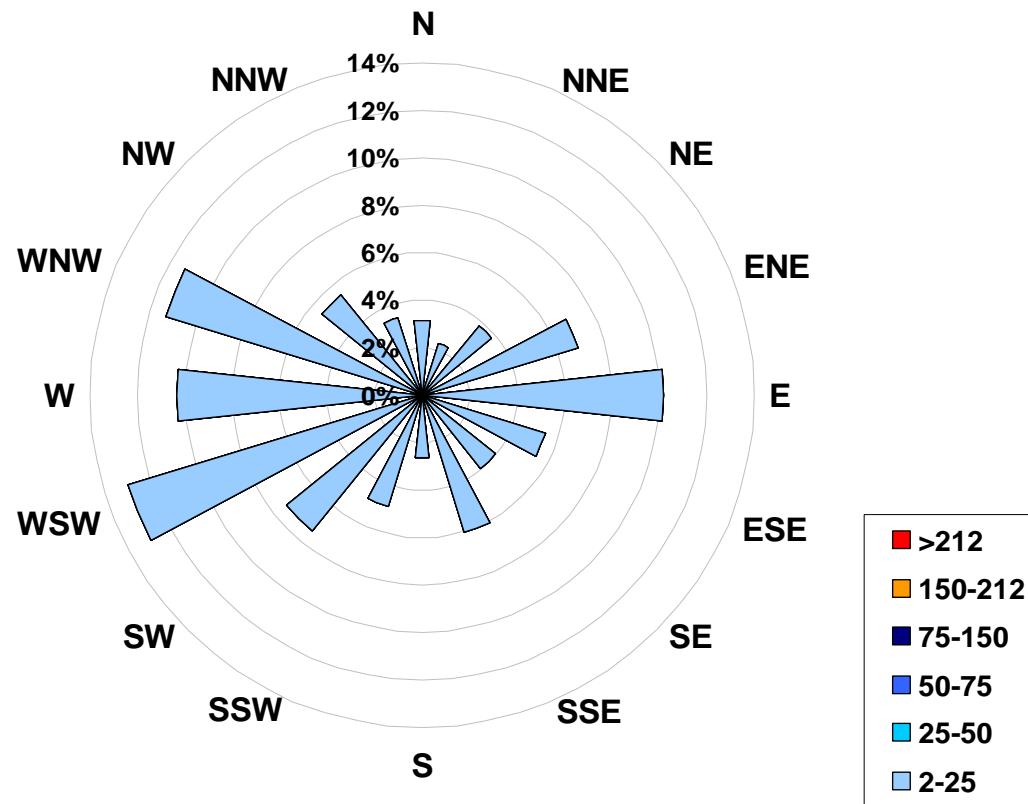


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms:	0%
--------	----

Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range			
2.0	<	25	701
25	to	50	2
50	to	75	1
75	to	150	0
150	to	212	0
> 212			0
Total Non-Zero Values			704

# PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

Summary

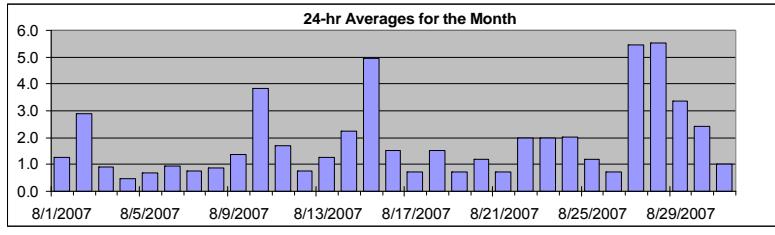
Maximum 1-hr Average:	52.5	ppb	28-Aug	6:00 7:00
Maximum 24-hr Average:	5.5	ppb	28-Aug	

AIC Time:	31 hrs		Operational Time:	704 hrs							
Calibration Time:	9 hrs		AMD Operational Uptime:	100.0%							
Percentile	99	95	75	50	25	5	1	Average	1.8 ppb	Median	0.7 ppb
	22.0	6.9	1.6	0.7	0.3	0.0	0.0				

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-Aug-07	0	0	0	0	0	4	6	5	4	3	2	C	C	C	C	C	0	0	0	0	0	0	0	0	0	1.3	5.9	
2-Aug-07	0	1	1	0	5	A	16	14	9	9	4	3	1	1	1	1	0	0	0	0	0	0	0	0	0	2.9	15.6	
3-Aug-07	0	0	0	0	0	A	1	2	2	3	2	2	3	2	1	1	1	1	0	1	0	0	0	0	0	0	0.9	2.9
4-Aug-07	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9
5-Aug-07	1	0	0	A	0	1	1	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	3.3
6-Aug-07	0	0	A	0	0	1	4	3	4	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1.0	3.6
7-Aug-07	1	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.8	1.4
8-Aug-07	A	0	0	0	0	1	2	2	2	1	1	1	2	1	1	1	1	1	1	1	0	0	0	0	0	A	0.9	1.9
9-Aug-07	0	0	0	0	1	1	3	3	3	2	2	1	2	3	2	1	1	2	1	1	1	1	1	A	0	1.4	3.3	
10-Aug-07	0	0	1	0	1	4	14	20	21	15	6	1	1	1	0	0	1	1	0	0	0	A	0	0	0	3.8	21.3	
11-Aug-07	0	0	0	0	1	5	7	6	5	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.7	6.7
12-Aug-07	0	0	0	0	0	1	0	1	1	1	1	2	1	2	1	1	1	1	1	1	A	1	1	0	0	0.8	1.6	
13-Aug-07	0	0	0	0	0	3	6	2	3	3	1	2	2	1	1	0	1	1	A	0	0	1	0	0	0	1.3	6.4	
14-Aug-07	1	2	2	1	1	1	7	10	4	4	3	2	2	1	1	2	2	A	2	1	0	1	2	1	0	2.2	10.2	
15-Aug-07	3	7	6	5	7	16	25	24	4	4	4	1	1	1	1	1	1	A	1	1	1	1	1	1	0	4.9	25.2	
16-Aug-07	0	0	0	0	1	6	7	5	2	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1.5	7.3	
17-Aug-07	0	0	0	0	0	1	2	2	2	2	1	1	1	1	1	1	A	1	0	1	1	0	0	0	0	0.7	2.2	
18-Aug-07	0	0	0	1	0	1	2	4	5	6	5	4	3	A	1	0	0	0	0	0	0	0	0	0	0	0	1.5	6.5
19-Aug-07	0	0	0	0	0	1	1	2	2	3	2	1	A	0	0	1	0	0	0	1	0	0	0	0	0	0	0.7	3.2
20-Aug-07	0	0	0	0	0	2	6	5	2	2	1	A	2	1	1	1	1	1	1	1	1	1	1	0	0	0	1.2	5.5
21-Aug-07	0	0	0	0	0	1	1	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.7	1.8	
22-Aug-07	0	2	0	1	1	3	16	C	C	C	C	4	3	3	3	1	1	2	1	1	1	1	1	0	0	2.0	15.5	
23-Aug-07	1	2	0	1	1	A	12	13	6	2	2	0	1	1	1	1	1	1	1	1	0	0	0	0	0	2.0	12.9	
24-Aug-07	0	0	1	1	A	2	6	7	11	5	3	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	2.0	11.1
25-Aug-07	0	0	0	A	0	0	3	8	3	3	2	1	1	1	1	1	1	1	1	0	0	1	0	0	0	1.2	8.0	
26-Aug-07	0	0	A	0	0	0	0	1	1	1	1	2	4	1	1	1	1	1	0	0	0	1	1	0	0	0.7	3.5	
27-Aug-07	3	A	0	0	1	9	24	23	27	17	3	2	1	1	1	1	1	0	1	0	2	5	4	2	5.5	26.8		
28-Aug-07	A	0	1	1	2	10	52	22	16	6	3	1	1	1	0	0	0	0	0	1	1	1	0	A	0	5.5	52.5	
29-Aug-07	0	0	0	0	0	1	11	22	18	5	7	4	2	1	1	1	1	1	1	1	1	1	A	0	0	3.4	22.0	
30-Aug-07	0	0	0	1	1	2	5	9	5	2	3	4	4	1	1	1	5	3	3	3	0	A	0	0	2.4	9.5		
31-Aug-07	0	0	0	0	0	1	2	4	2	3	2	1	1	1	2	2	1	1	0	A	0	0	0	1.0	3.8			

## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)



### Status Flag Characters

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

# PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

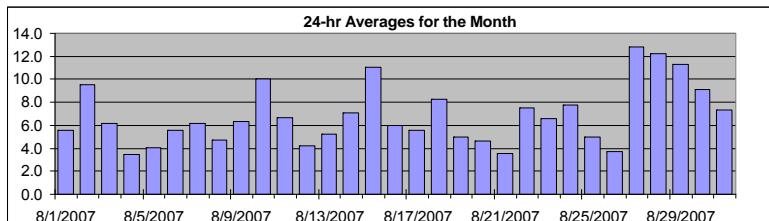
Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
Summary

Maximum 1-hr Average:	66.7	ppb	28-Aug	6:00 7:00
Maximum 24-hr Average:	12.9	ppb	27-Aug	

AIC Time:	31 hrs	Operational Time:	704 hrs						
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	33.3	17.8	8.1	5.0	3.3	1.9	1.4	6.8 ppb	5.0 ppb

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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-Aug-07	2	2	2	2	3	12	12	8	6	5	5	C	C	C	C	C	5	3	4	4	6	8	9	7	5.6	12.3
2-Aug-07	10	9	9	4	15	A	31	26	18	21	11	9	4	3	3	3	3	3	5	7	11	6	3	9.5	30.8	
3-Aug-07	3	2	3	2	3	A	16	12	8	8	11	12	10	9	4	3	3	3	3	5	6	5	4	4	6.2	16.2
4-Aug-07	3	3	2	2	A	6	4	4	3	3	3	3	3	2	2	2	2	2	3	5	10	6	6	3.5	9.9	
5-Aug-07	5	3	3	A	6	6	4	6	7	5	3	2	2	2	2	2	2	3	1	3	3	4	5	11	4.1	10.6
6-Aug-07	7	5	A	8	8	7	9	6	7	6	4	3	2	3	3	3	3	3	5	8	10	7	7	5.5	9.9	
7-Aug-07	10	A	11	8	11	11	5	5	5	5	4	4	4	3	3	3	3	3	4	5	10	15	7	3	6.2	15.1
8-Aug-07	A	5	2	2	2	3	6	7	5	4	6	5	7	5	5	6	3	5	5	5	6	5	5	A	4.7	7.4
9-Aug-07	5	9	5	3	4	5	11	11	9	7	6	4	4	7	7	4	3	6	4	4	8	10	A	8	6.3	11.2
10-Aug-07	6	7	7	6	8	15	25	30	33	30	15	4	3	2	2	2	2	4	4	6	5	A	8	7	10.0	33.3
11-Aug-07	8	4	4	5	7	15	16	14	13	8	5	5	4	3	3	3	4	3	3	5	A	9	7	6	6.6	16.3
12-Aug-07	3	3	2	2	2	2	2	2	3	4	4	6	5	5	5	7	7	6	A	8	6	4	3	4.2	7.8	
13-Aug-07	2	3	2	2	3	9	14	7	8	8	4	4	6	3	2	1	2	2	A	6	9	10	7	7	5.2	13.6
14-Aug-07	7	7	7	7	5	6	14	17	8	8	6	5	4	4	5	5	5	A	9	5	5	8	10	7.1	17.3	
15-Aug-07	11	18	17	14	16	26	36	35	11	9	7	4	3	2	2	2	2	A	7	5	6	7	5	4	11.0	36.3
16-Aug-07	5	4	3	3	9	20	18	11	5	4	4	4	4	4	4	4	4	A	7	5	4	5	5	4	6.0	19.8
17-Aug-07	2	2	2	2	3	5	10	7	6	5	4	3	4	4	4	A	7	11	8	8	4	5	5	5.6	12.7	
18-Aug-07	5	4	5	8	7	7	12	15	18	19	14	9	8	A	6	4	4	3	3	5	5	5	11	9	8.3	18.8
19-Aug-07	5	6	6	4	3	5	7	8	6	8	6	4	A	5	4	5	3	3	4	7	4	5	3	5.0	7.6	
20-Aug-07	3	2	2	2	2	9	16	13	6	5	3	A	7	6	4	3	4	3	2	4	4	2	2	4.6	15.9	
21-Aug-07	1	1	1	1	2	2	5	6	4	2	A	5	3	3	3	2	3	3	4	7	10	9	3	3.6	10.3	
22-Aug-07	3	6	3	4	5	9	22	C	C	C	10	8	8	8	3	5	10	3	4	7	13	10	9	7.5	22.1	
23-Aug-07	9	11	4	6	5	A	20	22	12	5	5	2	2	2	2	2	3	3	5	6	7	5	6	6.6	21.6	
24-Aug-07	7	9	11	9	A	14	17	17	21	10	6	4	3	2	3	4	5	5	7	7	8	4	3	7.8	20.8	
25-Aug-07	4	4	3	A	6	5	11	20	8	7	4	5	3	3	3	3	3	2	2	6	5	3	2	5.0	20.2	
26-Aug-07	1	1	A	3	2	2	3	3	3	2	2	3	5	7	3	2	4	3	2	2	4	12	7	8	3.7	12.2
27-Aug-07	12	A	9	6	7	20	37	33	38	29	8	7	4	2	2	3	2	2	5	4	17	21	19	9	12.9	38.3
28-Aug-07	A	11	10	8	12	20	67	34	25	11	7	4	4	3	2	2	2	2	4	8	14	10	8	A	12.2	66.7
29-Aug-07	6	4	5	5	6	9	24	36	31	14	19	12	8	6	7	4	4	4	10	12	11	10	10	A	11.3	36.0
30-Aug-07	4	3	3	4	5	9	17	22	12	7	6	11	13	7	6	6	12	13	19	15	6	A	6	4	9.1	21.6
31-Aug-07	4	4	3	2	4	8	11	14	15	9	9	6	4	4	5	8	10	8	7	4	A	10	10	9	7.3	14.6

Hourly Avg	5.3	5.2	5.0	4.7	5.8	9.5	16.2	15.0	11.8	8.9	6.7	5.6	4.9	4.1	3.5	3.7	4.5	4.3	5.0	5.4	7.3	8.5	6.7	5.8
Hourly Max	12.2	17.7	17.4	14.0	15.5	26.3	66.7	36.0	38.3	29.8	19.0	12.3	12.9	8.6	6.7	7.6	11.7	13.4	18.7	15.1	16.6	21.2	18.8	12.7

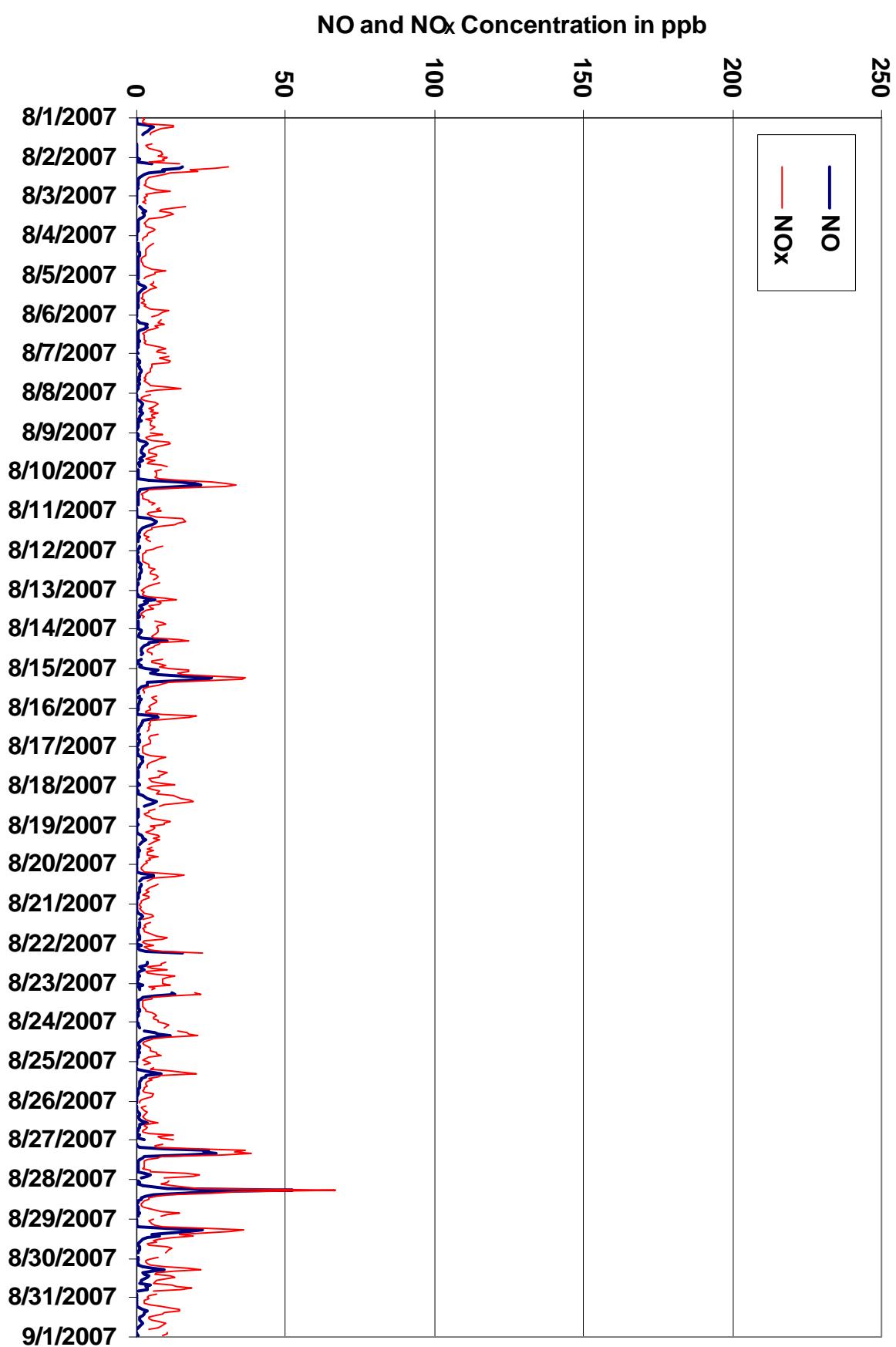


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Nitric Oxide (NO)

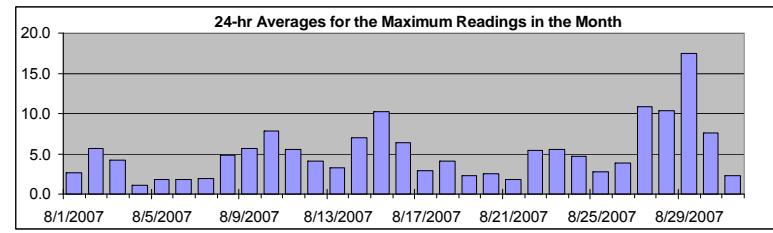
Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	203.7 ppb	29-Aug 7:00	8:00
Maximum 24-hr Value:	17.5 ppb	29-Aug	

AIC Time:	31 hrs	Operational Time:	704 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	42.1 18.1 4.9 2.3 1.0 0.5 0.0	5.1 ppb	2.3 ppb

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-Aug-07	0	0	1	0	2	11	9	8	5	6	3	C	C	C	C	C	C	1	0	2	1	1	1	1	0	2.7	10.6
2-Aug-07	2	5	1	1	16	A	26	27	12	13	6	4	6	1	1	4	2	0	0	0	0	0	0	0	5.7	26.8	
3-Aug-07	0	2	0	2	0	A	2	8	15	33	5	6	6	5	1	1	1	1	1	1	1	2	0	0	0	4.2	32.8
4-Aug-07	0	0	0	0	0	A	0	2	1	1	1	1	1	2	1	1	2	1	1	0	1	1	1	1	1	1.0	2.0
5-Aug-07	1	1	1	A	0	1	2	4	6	4	3	2	0	0	4	1	1	0	1	0	2	1	0	2	1.8	5.7	
6-Aug-07	0	0	A	0	0	3	5	4	5	5	2	2	1	1	1	1	2	1	1	1	1	1	0	0	1.8	4.9	
7-Aug-07	2	A	0	0	4	3	1	1	3	2	3	3	3	2	2	1	2	1	1	1	1	2	1	1	0	2.0	4.3
8-Aug-07	A	0	0	2	1	7	9	6	7	15	4	9	11	11	4	2	2	8	1	1	1	2	1	1	A	4.8	15.3
9-Aug-07	0	1	0	1	4	12	16	13	15	7	9	11	3	4	5	3	3	5	3	1	8	4	A	1	5.7	15.5	
10-Aug-07	1	0	2	3	2	10	23	43	43	23	13	2	1	1	1	1	1	1	1	1	1	3	A	1	1	7.8	43.4
11-Aug-07	0	1	1	1	1	14	14	27	7	9	3	4	2	3	3	3	3	2	2	4	A	6	10	7	5.5	27.2	
12-Aug-07	1	1	1	4	6	7	6	6	8	7	4	3	5	8	3	6	6	2	1	A	2	3	2	2	4.1	8.1	
13-Aug-07	0	1	1	0	1	6	12	5	12	10	3	2	3	3	4	2	1	1	A	1	1	1	0	1	3.2	12.4	
14-Aug-07	4	6	12	2	1	4	24	18	8	34	4	10	3	3	3	3	3	A	3	2	1	2	5	3	7.0	34.2	
15-Aug-07	6	12	16	9	15	29	42	50	6	8	5	3	2	1	1	2	A	3	2	9	4	5	4	1	10.3	49.5	
16-Aug-07	4	10	2	3	4	20	12	14	13	12	2	3	2	1	1	A	1	1	2	2	6	9	15	5	6.3	20.3	
17-Aug-07	5	2	9	1	2	2	6	4	4	5	5	3	4	1	A	1	1	1	1	1	0	1	3	3	2.9	9.3	
18-Aug-07	1	0	0	1	1	5	8	13	12	16	12	9	4	A	1	1	1	1	0	1	1	0	3	4.1	15.9		
19-Aug-07	1	0	1	2	0	7	7	4	4	8	7	3	A	1	0	2	1	1	1	1	1	0	0	0	2.3	8.3	
20-Aug-07	0	0	0	3	0	4	9	8	3	3	3	A	3	3	2	2	3	1	1	1	1	2	0	0	2.5	8.8	
21-Aug-07	1	0	1	0	1	2	3	4	3	1	A	2	3	1	2	1	1	1	1	2	4	4	0	0	1.8	3.8	
22-Aug-07	1	21	0	1	1	7	31	C	C	C	C	5	6	6	2	5	9	2	1	3	2	1	1	2	5.4	31.4	
23-Aug-07	3	5	1	3	1	A	28	24	27	4	5	1	1	1	3	2	3	6	2	2	1	1	0	1	5.5	28.2	
24-Aug-07	1	3	1	12	A	6	18	11	16	9	4	3	2	1	2	2	2	1	2	4	3	3	0	0	4.8	18.2	
25-Aug-07	0	1	0	A	0	0	7	17	6	5	3	3	2	2	2	3	2	1	1	3	1	1	0	0	2.8	17.3	
26-Aug-07	0	0	A	0	0	0	0	2	3	3	1	2	18	15	5	5	9	3	5	2	1	5	4	2	3.8	18.3	
27-Aug-07	9	A	1	1	4	22	36	34	33	28	5	3	3	2	2	1	2	1	2	1	19	22	10	7	10.8	36.0	
28-Aug-07	A	1	7	1	10	27	78	38	25	17	7	2	3	1	1	1	0	1	1	2	2	2	2	A	10.4	78.0	
29-Aug-07	2	0	1	4	1	4	102	204	32	9	17	6	4	2	1	1	1	2	1	3	2	1	A	1	17.5	203.7	
30-Aug-07	1	1	1	2	4	11	12	13	13	4	4	7	5	3	2	2	42	17	13	13	2	A	0	0	7.6	42.5	
31-Aug-07	0	0	0	0	0	0	3	6	8	5	4	4	2	2	2	3	6	2	1	0	A	0	0	0	2.3	7.8	
Hourly Avg	1.8	2.7	2.2	2.2	3.0	8.0	17.9	20.6	11.8	10.2	5.1	4.1	3.9	3.1	2.2	2.4	3.9	2.5	2.0	2.3	2.6	2.8	2.3	1.7			
Hourly Max	8.8	21.4	16.2	11.8	16.4	28.8	101.7	203.7	42.6	34.2	16.8	10.6	18.3	14.7	4.9	5.7	42.5	16.9	12.5	13.2	18.7	22.0	15.3	7.2			



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

Station: Henry Pirker  
Station Owner: PASZA

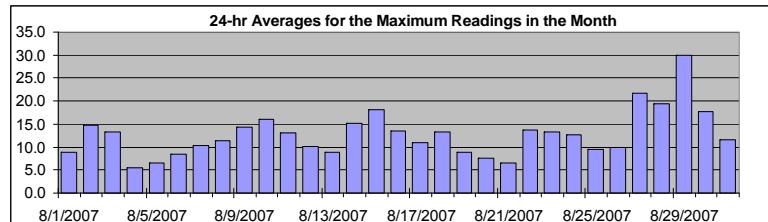
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	245.3 ppb	29-Aug 7:00 8:00
Maximum 24-hr Value:	29.9 ppb	29-Aug



AIC Time:	31 hrs	Operational Time:	704 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	55.6 34.2 14.7 9.3 6.3 3.4 2.2	12.7 ppb	9.3 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	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	Daily Maximum
1-Aug-07	1:00	3	4	3	3	8	21	18	14	8	9	7	C	C	C	C	C	9	5	7	8	8	10	12	9	8.8	20.5
2-Aug-07	1:00	15	16	15	6	29	A	45	43	22	25	15	12	8	5	5	11	6	4	6	7	10	14	14	8	14.8	44.7
3-Aug-07	1:00	8	6	5	5	4	A	23	29	18	58	22	22	16	17	6	7	6	6	4	10	10	12	5	6	13.3	58.0
4-Aug-07	1:00	5	6	2	2	A	9	6	4	5	4	4	4	5	3	4	5	3	3	3	5	9	15	10	10	5.6	14.9
5-Aug-07	1:00	8	4	4	A	9	8	6	8	10	8	5	4	3	2	3	5	5	2	5	4	8	8	15	16	6.6	16.2
6-Aug-07	1:00	10	7	A	12	9	10	11	8	9	10	6	6	3	5	5	5	6	5	6	8	13	12	12	14	8.4	13.6
7-Aug-07	1:00	17	A	17	9	19	16	8	7	7	8	8	9	7	6	6	8	5	7	7	17	19	18	5	10.3	19.4	
8-Aug-07	1:00	A	8	3	3	4	13	18	12	13	15	11	16	23	18	13	9	6	17	9	8	11	9	11	A	11.4	22.7
9-Aug-07	1:00	8	15	8	6	9	24	30	25	30	14	17	19	7	9	12	7	9	13	9	7	22	16	A	12	14.2	30.3
10-Aug-07	1:00	10	8	10	11	10	22	35	58	57	37	28	6	5	5	2	4	4	7	8	10	11	A	12	10	16.0	58.0
11-Aug-07	1:00	14	7	4	8	11	25	26	41	17	17	7	8	6	6	7	9	9	7	10	10	A	17	20	15	13.0	40.7
12-Aug-07	1:00	4	5	4	8	10	12	11	9	13	12	8	10	9	21	7	15	16	11	10	A	13	10	6	10.1	20.8	
13-Aug-07	1:00	2	5	3	4	5	14	22	11	20	18	8	6	7	6	7	4	5	4	A	10	11	13	8	9	8.9	22.0
14-Aug-07	1:00	13	15	22	9	7	10	35	28	14	53	9	21	7	7	7	8	8	A	15	11	11	13	17	11	15.3	53.4
15-Aug-07	1:00	17	21	29	21	23	42	56	64	15	16	10	5	6	4	4	5	A	12	8	19	10	12	11	17.1	64.2	
16-Aug-07	1:00	10	19	7	7	17	40	24	21	20	19	6	8	6	6	6	A	11	7	7	7	12	16	26	13.6	40.4	
17-Aug-07	1:00	9	5	15	3	5	10	19	14	10	10	10	6	11	6	A	10	18	13	13	11	8	8	17	10.9	19.7	
18-Aug-07	1:00	7	5	10	12	11	13	21	31	28	29	23	18	11	A	9	5	5	4	5	7	8	17	12	13	13.3	30.7
19-Aug-07	1:00	8	9	10	11	4	12	16	11	8	17	15	9	A	8	5	9	5	7	6	11	7	7	4	8.9	17.1	
20-Aug-07	1:00	3	2	3	8	5	14	20	17	8	8	7	A	12	9	9	7	8	5	4	10	8	3	3	7.6	19.7	
21-Aug-07	1:00	2	2	2	2	4	7	11	10	7	4	A	7	7	4	5	4	4	4	4	6	13	18	17	6.5	18.2	
22-Aug-07	1:00	6	27	3	6	7	13	39	C	C	C	C	12	13	14	5	14	20	9	6	11	21	14	14	13.6	38.8	
23-Aug-07	1:00	18	18	9	9	7	A	38	36	40	9	11	3	4	4	7	8	7	13	11	11	15	8	8	11	13.3	40.5
24-Aug-07	1:00	11	15	13	25	A	17	34	22	27	17	8	7	6	4	5	7	8	9	9	13	15	10	4	4	12.6	33.7
25-Aug-07	1:00	5	12	4	A	8	8	21	34	14	10	7	10	7	6	5	7	6	4	5	8	13	13	5	3	9.4	34.3
26-Aug-07	1:00	1	3	A	6	2	3	4	7	6	6	4	7	26	24	9	11	18	10	9	9	8	24	21	11	9.9	25.6
27-Aug-07	1:00	23	A	12	9	14	35	50	44	45	44	13	11	8	5	5	5	7	5	10	9	44	48	22	21.6	49.8	
28-Aug-07	1:00	A	14	19	11	20	38	94	53	37	26	13	5	7	5	3	4	2	4	8	16	20	13	16	A	19.4	94.4
29-Aug-07	1:00	11	7	7	12	11	17	127	245	51	22	37	17	12	8	9	5	6	14	14	17	13	14	A	11	29.9	245.3
30-Aug-07	1:00	8	4	4	10	12	23	26	28	23	10	9	18	17	12	8	10	55	34	34	33	13	A	10	5	17.7	54.6
31-Aug-07	1:00	5	5	4	4	7	12	21	24	23	15	12	11	7	7	8	15	21	13	10	6	A	12	12	11	11.5	23.6
Hourly Avg		9.1	9.5	8.7	8.4	10.0	17.4	29.4	32.0	20.3	18.4	11.8	10.2	9.2	8.1	6.5	7.6	10.0	8.5	8.8	10.6	13.4	13.9	12.4	9.9		
Hourly Max		22.6	27.0	28.7	25.0	28.9	41.5	127.4	245.3	57.1	58.0	36.9	21.6	25.6	23.8	13.1	15.4	54.6	34.5	34.0	32.7	44.5	47.9	28.9	21.6		

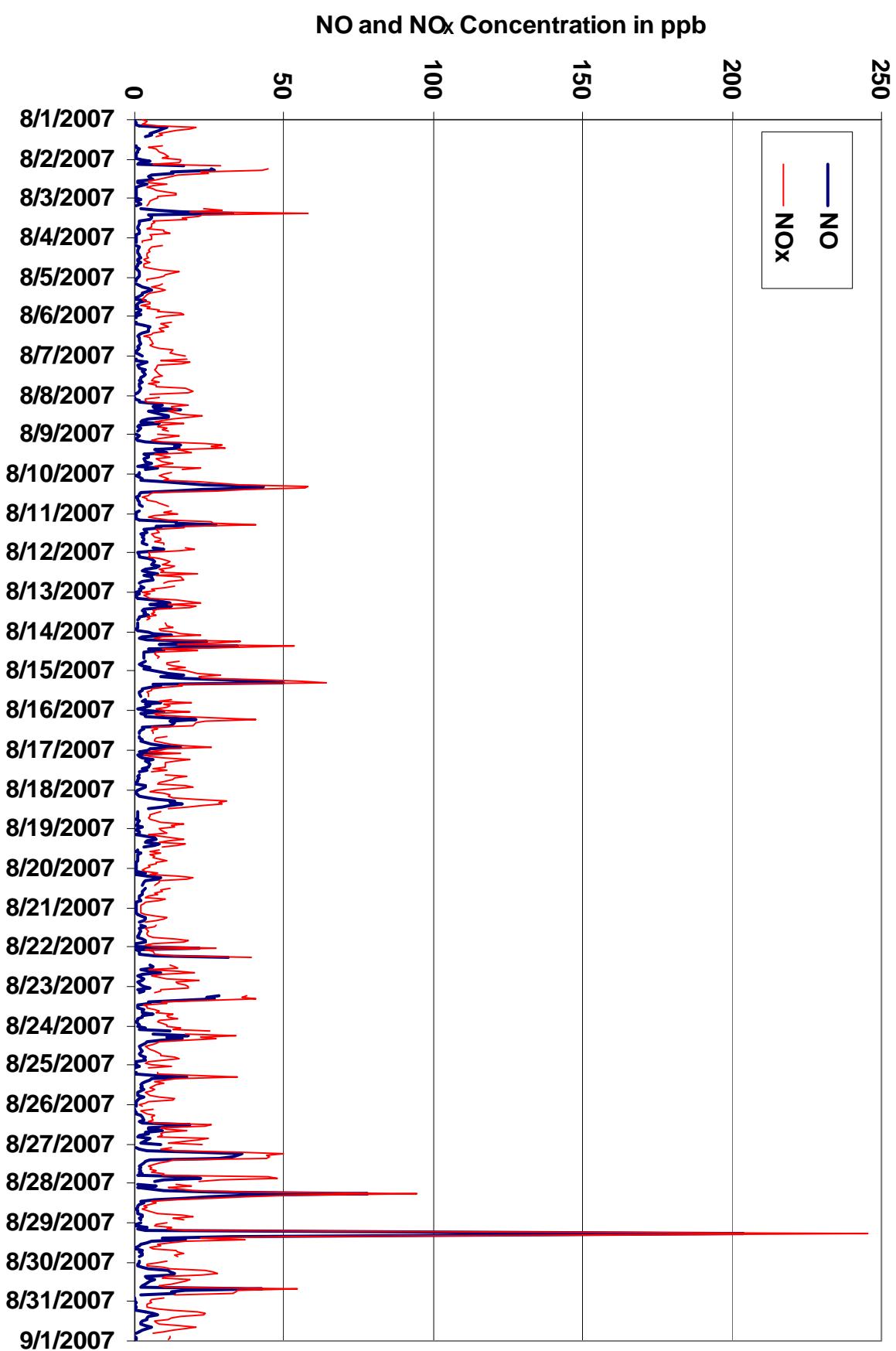


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

# PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

**Summary**

Number of 1-hr Exceedances:	0
Maximum 1-hr Average:	48.5 ppb 2-Aug 17:00 18:00
Maximum 24-hr Average:	29.2 ppb 7-Aug

AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	43.2	38.4	28.2	21.4	14.8	6.1	4.1	21.7 ppb	21.4 ppb

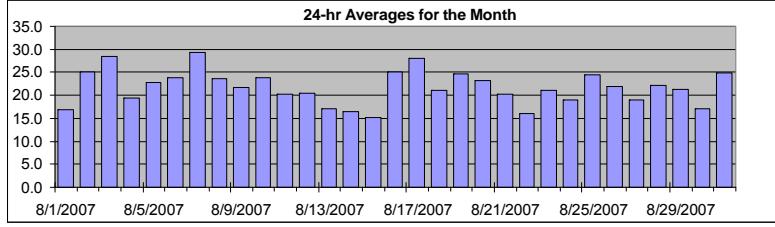
Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Aug-07	12	11	11	11	10	5	7	10	13	14	16	21	25	28	33	C	C	C	A	28	23	20	20	20	16.9	33.3
2-Aug-07	14	5	5	7	4	A	5	9	13	16	23	30	35	39	45	41	42	48	47	36	31	23	26	32	25.1	48.5
3-Aug-07	33	29	28	34	38	A	17	18	22	30	28	21	16	28	39	39	42	35	33	32	27	22	22	21	28.4	41.9
4-Aug-07	18	19	19	19	A	15	14	15	17	17	16	17	19	25	29	32	30	26	25	22	18	11	12	10	19.3	32.0
5-Aug-07	11	13	12	A	11	9	9	10	11	11	25	29	31	36	34	34	32	33	30	28	32	32	23	21	22.8	36.1
6-Aug-07	18	18	A	13	11	9	8	11	14	21	28	33	32	33	34	36	37	37	34	31	26	21	22	21	23.8	37.2
7-Aug-07	15	A	11	10	10	20	36	35	32	32	34	34	36	38	40	41	39	39	38	35	26	19	25	26	29.2	41.0
8-Aug-07	A	26	22	20	21	21	22	22	26	27	26	27	25	28	27	26	27	24	23	24	21	17	18	A	23.7	28.0
9-Aug-07	20	13	11	13	18	16	14	14	16	18	19	23	24	26	28	32	35	32	34	32	24	20	A	20	21.7	35.0
10-Aug-07	19	16	16	15	12	7	6	8	10	19	25	36	38	39	41	41	36	31	30	29	29	A	27	21	23.9	41.3
11-Aug-07	16	19	17	13	9	5	6	8	12	17	23	28	28	31	32	33	31	31	29	25	A	18	17	16	20.2	33.0
12-Aug-07	18	18	21	21	20	22	24	25	25	24	22	20	22	23	23	20	18	18	18	A	18	17	19	16	20.5	25.3
13-Aug-07	15	15	14	13	10	6	5	11	14	16	20	22	24	25	26	27	28	28	A	25	18	12	12	10	17.0	27.8
14-Aug-07	8	7	7	6	8	9	9	10	15	21	22	26	28	29	29	28	27	A	22	20	19	15	7	8	16.5	29.1
15-Aug-07	5	3	4	4	3	3	3	3	6	12	11	13	19	26	29	29	29	A	31	27	21	19	17	19	15.3	30.5
16-Aug-07	19	19	17	16	10	5	8	13	18	18	22	30	38	46	46	A	43	38	34	31	28	25	25	27	25.1	45.9
17-Aug-07	29	27	26	27	24	22	18	20	21	24	28	34	39	42	A	46	35	31	32	32	31	25	20	12	28.0	45.7
18-Aug-07	18	17	15	11	10	12	7	8	5	6	11	12	22	A	36	39	41	44	42	35	30	22	23	20	21.1	44.0
19-Aug-07	24	19	16	16	17	13	8	10	13	18	25	31	A	42	41	42	41	40	34	22	27	24	21	24	24.7	42.0
20-Aug-07	19	21	21	20	19	13	11	17	24	27	29	A	29	30	28	28	28	25	23	21	23	25	25	26	23.1	29.6
21-Aug-07	25	24	23	23	22	21	17	15	16	17	A	19	20	20	21	25	24	24	20	19	14	13	23	20.3	25.4	
22-Aug-07	17	12	12	9	7	5	4	4	5	10	15	19	22	24	28	28	26	31	27	23	18	13	14	14	16.0	31.0
23-Aug-07	10	7	7	6	6	A	3	5	13	20	26	31	33	35	35	35	34	33	30	25	25	26	23	17	21.1	35.1
24-Aug-07	12	10	7	10	A	5	6	8	9	13	17	21	27	28	29	28	27	28	25	24	20	25	27	30	19.0	30.5
25-Aug-07	27	26	25	A	22	20	15	14	18	17	26	27	30	34	34	31	33	34	32	25	22	18	16	16	24.4	34.0
26-Aug-07	15	15	A	19	20	19	18	19	20	20	19	19	23	28	32	32	34	32	30	27	17	16	11	11	21.9	33.6
27-Aug-07	8	A	12	9	8	4	4	6	7	12	24	31	34	35	35	36	33	32	32	18	12	6	9	18.9	35.8	
28-Aug-07	A	11	9	9	7	4	5	8	11	17	23	28	30	36	40	40	41	41	36	28	19	22	22	A	22.1	41.2
29-Aug-07	27	26	23	21	15	16	8	9	12	17	21	24	31	35	34	33	30	25	20	19	15	16	A	15	21.3	35.1
30-Aug-07	15	15	15	14	13	10	8	7	11	17	19	19	20	23	21	22	20	18	10	10	23	A	32	28	17.0	32.4
31-Aug-07	25	23	25	25	26	20	18	18	20	24	27	31	36	36	34	31	27	26	26	24	A	19	15	14	24.8	36.3

Hourly Avg 17.6 16.7 15.6 14.8 14.2 12.0 11.0 12.6 15.2 18.6 22.4 25.2 27.8 31.5 32.6 32.9 32.5 31.7 29.2 26.3 23.2 19.6 19.9 18.7

Hourly Max 32.7 29.4 27.9 33.9 37.7 22.1 35.7 34.5 32.3 32.3 33.6 36.0 38.6 45.9 45.9 45.7 43.3 48.5 46.8 36.0 31.8 32.4 32.4 31.8

## HOURLY AVERAGE TABLE

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



## Status Flag Characters

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

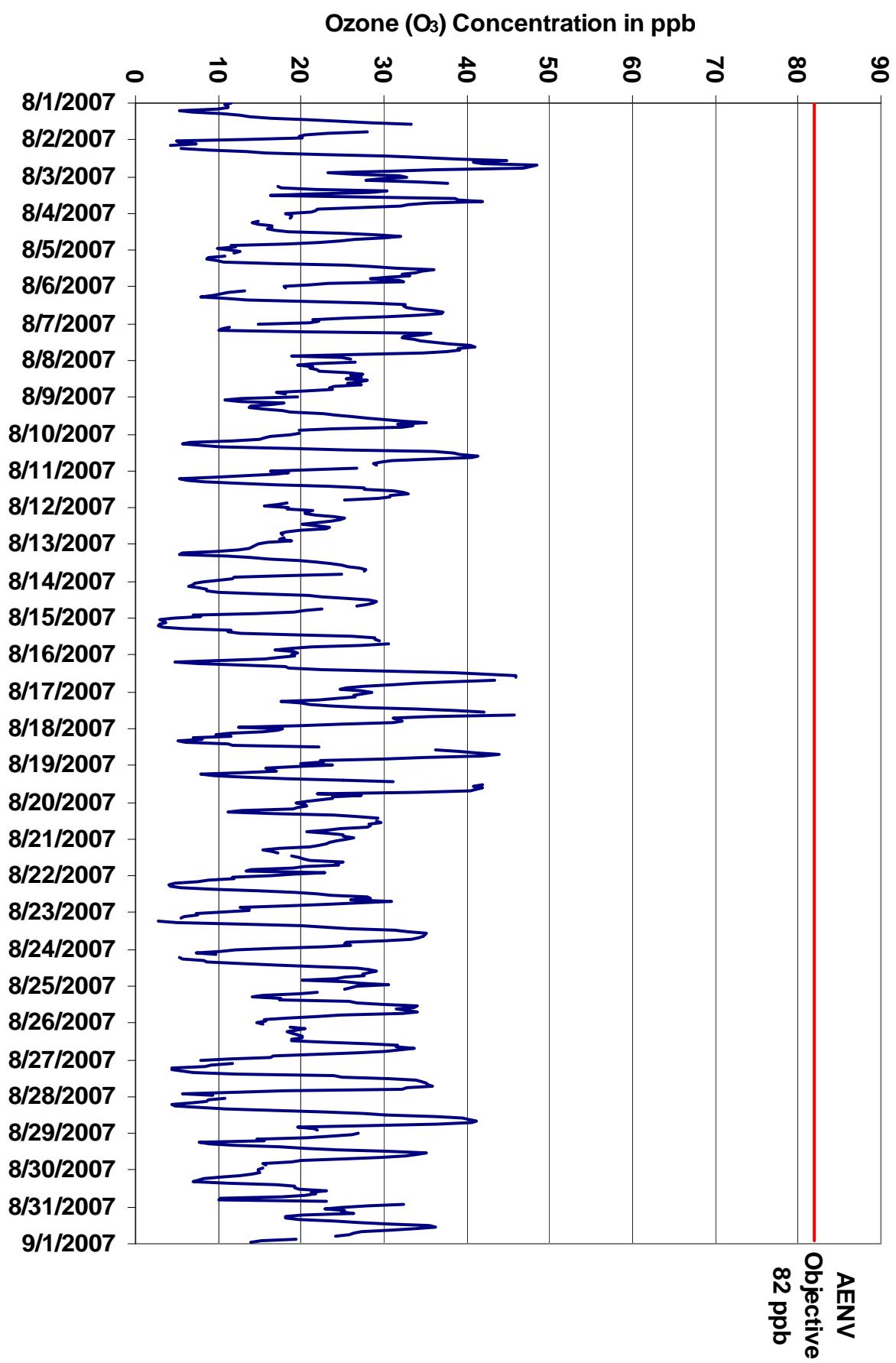


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

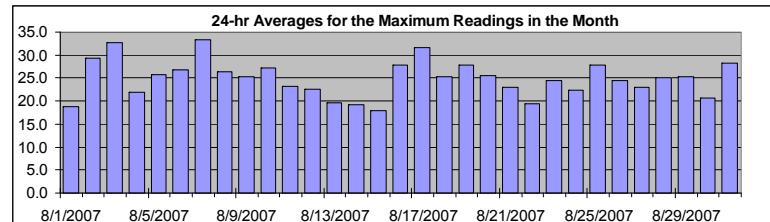
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone ( $O_3$ )

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	55.4 ppb	2-Aug 17:00 18:00
Maximum 24-hr Value:	33.3 ppb	7-Aug



#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	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	Daily Maximum
1-Aug-07	12 1:00	12	12	12	11	8	9	13	13	15	18	24	27	32	36	C	C	C	A	31	26	22	22	22	18.9	35.8	
2-Aug-07	20 2:00	7	8	10	10	A	8	12	16	19	27	34	38	44	48	44	48	55	52	40	36	29	31	39	29.3	55.4	
3-Aug-07	37 3:00	32	30	40	42	A	22	20	31	34	34	29	20	35	42	43	46	40	36	36	31	26	24	24	32.8	46.1	
4-Aug-07	20 4:00	21	20	20	A	16	16	17	18	18	18	18	24	28	32	34	32	31	28	26	22	17	15	12	21.8	34.0	
5-Aug-07	13 5:00	13	13	13	A	11	10	9	11	13	24	30	31	36	38	36	36	35	35	30	40	36	27	28	25.7	39.6	
6-Aug-07	23 6:00	24	A	16	15	11	10	14	16	25	32	34	34	37	35	38	39	39	36	33	32	26	25	24	26.8	39.3	
7-Aug-07	22 7:00	A	15	14	12	39	39	37	34	34	36	37	38	41	43	43	41	41	38	33	29	30	28	33.3	43.1		
8-Aug-07	A 8:00	28	25	21	23	22	24	25	28	30	29	30	29	31	31	28	30	29	27	25	25	20	21	A	26.5	31.3	
9-Aug-07	22 9:00	21	13	21	20	19	18	17	21	21	23	25	25	29	31	37	37	34	36	35	29	22	A	22	25.2	37.4	
10-Aug-07	21 10:00	17	18	17	15	11	8	9	13	25	31	38	41	41	43	43	40	34	37	37	31	A	30	27	27.2	42.8	
11-Aug-07	22 11:00	21	19	16	12	11	12	12	16	22	27	29	30	34	34	36	33	33	32	28	A	21	19	18	23.3	35.8	
12-Aug-07	19 12:00	22	22	22	21	23	26	26	26	23	22	24	25	25	25	23	22	21	20	A	20	20	20	22.5	25.9		
13-Aug-07	17 13:00	17	20	19	11	8	7	15	17	20	22	24	25	27	27	29	30	29	A	27	23	13	13	13	19.6	29.6	
14-Aug-07	10 14:00	9	9	8	9	11	12	15	19	22	26	28	30	31	30	30	29	A	25	23	22	19	10	12	19.2	30.5	
15-Aug-07	12 15:00	4	7	6	4	3	4	13	14	13	16	24	29	31	30	31	A	33	31	23	21	18	21	21	17.8	33.3	
16-Aug-07	21 16:00	21	18	17	16	8	11	17	20	20	27	35	44	49	48	A	46	42	37	33	29	27	26	28	27.8	48.8	
17-Aug-07	29 17:00	28	27	27	26	24	20	23	23	26	31	38	41	46	A	49	44	38	37	37	35	29	29	19	31.6	48.8	
18-Aug-07	20 18:00	19	20	13	12	15	10	12	8	10	17	17	32	A	42	42	44	48	46	42	34	28	26	23	25.2	47.9	
19-Aug-07	26 19:00	23	18	19	19	16	10	12	16	24	28	36	A	44	44	44	43	42	27	31	27	25	22	27.8	44.3		
20-Aug-07	21 20:00	22	23	22	21	17	13	21	28	30	31	A	31	32	30	31	31	26	25	23	25	26	26	28	25.4	31.6	
21-Aug-07	27 21:00	25	24	24	23	22	20	17	18	18	A	20	20	22	24	27	26	27	24	24	19	25	27	23.0	27.3		
22-Aug-07	19 22:00	15	13	10	9	7	5	6	7	13	18	21	25	29	30	32	32	34	31	27	26	15	20	19	19.4	34.3	
23-Aug-07	14 23:00	13	10	8	7	A	4	7	17	25	31	34	35	38	38	38	37	36	35	31	30	28	26	22	24.4	37.8	
24-Aug-07	14 00	14	12	14	A	12	8	11	10	17	21	26	30	30	31	30	30	27	27	26	28	31	32	22.3	31.9		
25-Aug-07	30 01	31	28	A	24	23	23	22	20	30	30	34	36	35	34	35	36	34	36	30	26	22	18	17	27.8	36.3	
26-Aug-07	16 02	16	A	20	22	21	21	21	21	20	23	26	32	34	34	36	34	36	33	32	23	19	16	24.4	35.6		
27-Aug-07	14 03	A	13	10	10	9	5	6	7	10	19	30	28	35	36	36	37	37	38	38	37	31	25	12	23.0	38.4	
28-Aug-07	A 04	13	10	10	9	5	6	10	14	22	29	35	39	42	42	42	42	42	41	36	22	24	27	A	25.0	42.4	
29-Aug-07	28 05	28	25	23	20	21	12	16	18	20	25	28	34	37	38	35	34	31	24	25	21	21	A	19	25.3	37.7	
30-Aug-07	16 06	16	16	16	14	13	11	9	17	19	21	21	23	27	24	25	23	25	18	19	34	A	37	30	20.6	36.9	
31-Aug-07	27 07	26	28	28	30	26	23	24	25	26	30	36	38	39	37	34	33	30	29	26	A	21	17	17	28.3	39.0	
Hourly Avg		20.4	19.2	17.8	17.4	16.5	15.4	13.7	15.8	18.4	21.9	26.1	28.3	31.0	34.5	35.2	35.5	35.7	35.2	33.0	30.4	28.0	23.6	23.3	21.9		
Hourly Max		36.9	31.7	30.2	39.6	41.6	39.2	38.7	36.6	34.1	34.1	35.9	37.9	44.3	48.8	48.1	48.8	47.7	55.4	52.0	42.5	39.6	35.8	36.9	39.0		

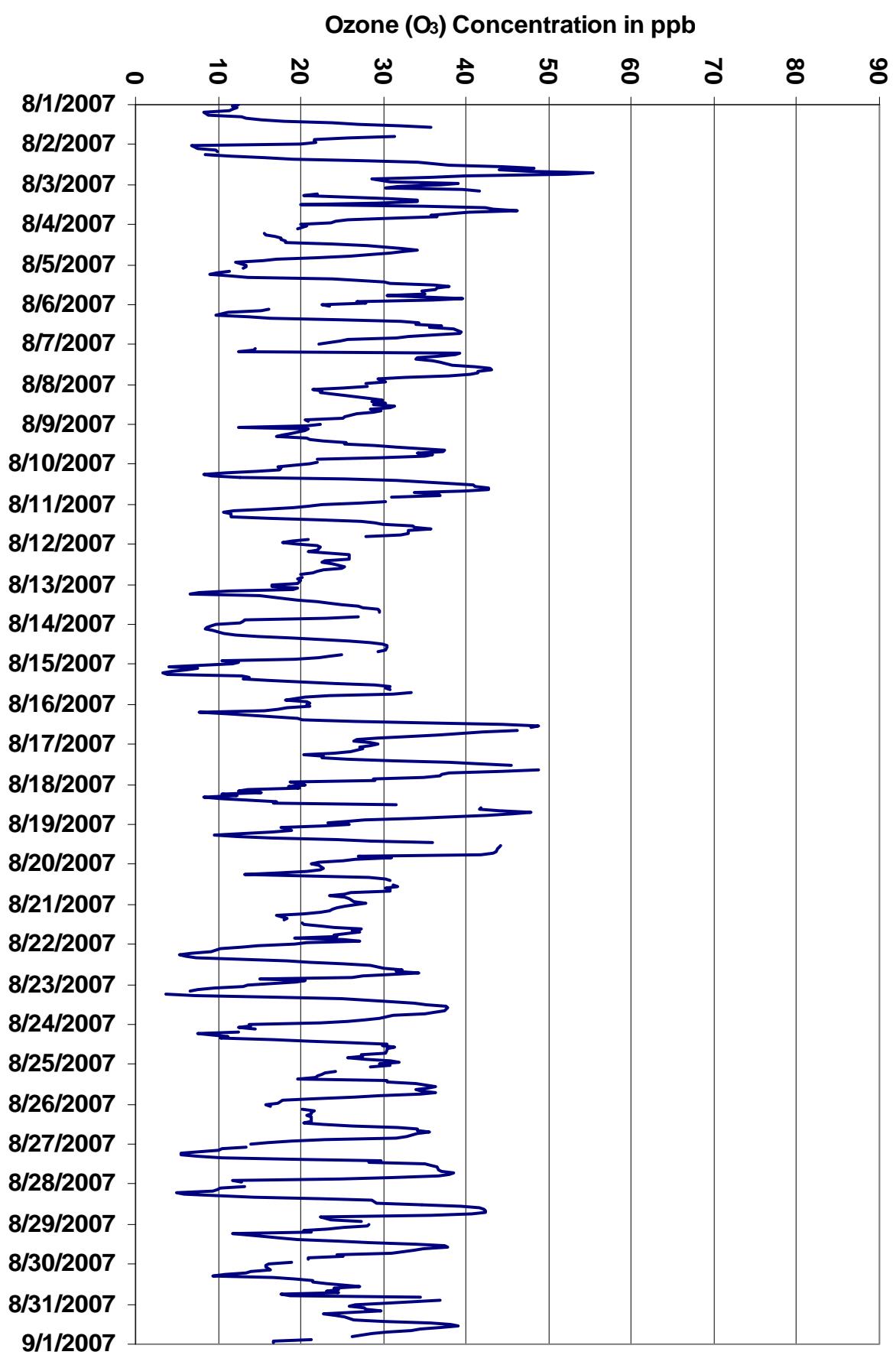
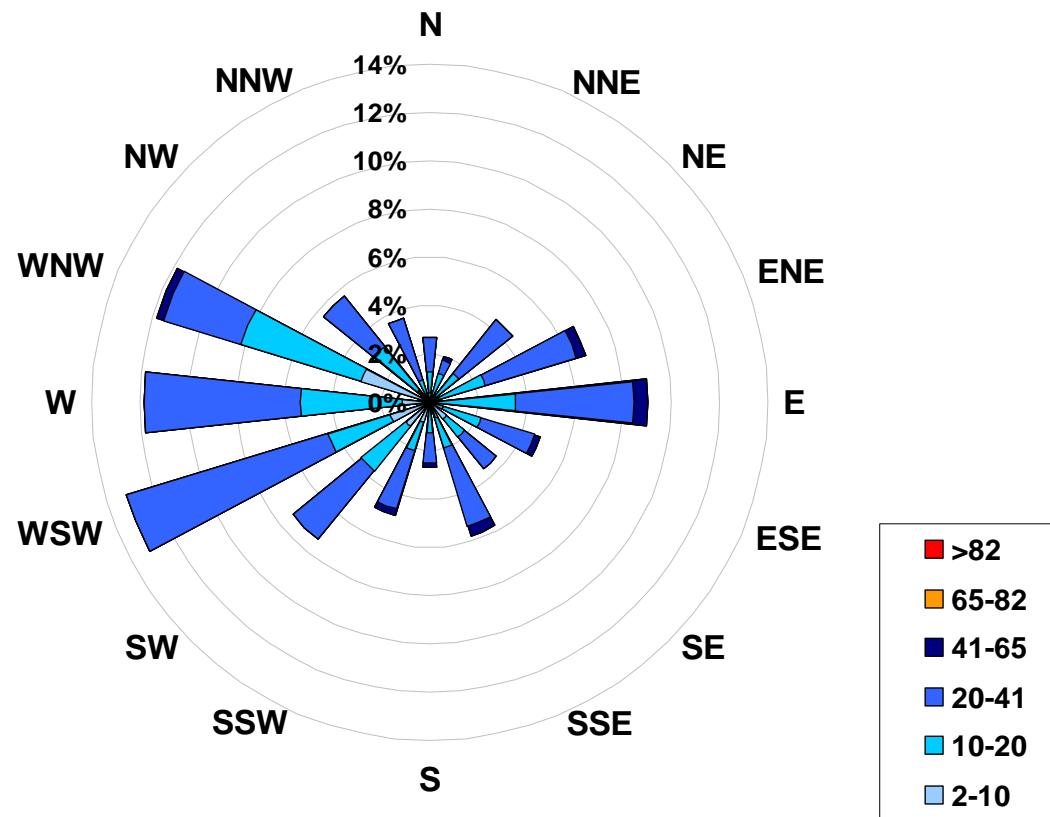


Figure 8. PASZA - Henry Piiker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	91
10	to	20	228
20	to	41	372
41	to	65	18
65	to	82	0
> 82			0
Total Non-Zero Values			709

## PASZA - Henry Pirker Ozone Eight Hour Average Summary

Station: Henry Pirker  
 Station Owner: PASZA

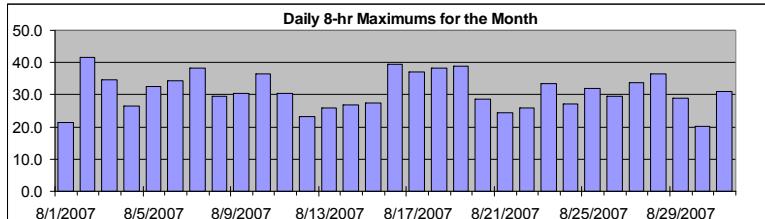
### EIGHT HOUR RUNNING AVERAGE TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

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

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	41.6 ppb 2-Aug 19:00 20:00



#### Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S 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 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 0:00	
1-Aug-07	13	13	12	12	11	11	10	10	10	10	11	12	14	17	20	21	N	N	N	N	N	N	N	N	21.4
2-Aug-07	N	19	17	14	12	11	9	7	7	9	11	14	19	21	26	30	34	38	41	42	41	39	37	36	41.6
3-Aug-07	34	32	30	29	30	31	30	28	26	27	27	25	22	23	25	28	30	31	32	33	34	32	29	34.5	
4-Aug-07	26	24	23	21	20	19	18	17	17	16	16	16	16	17	19	21	23	24	25	26	26	24	22	19	26.4
5-Aug-07	17	15	14	12	11	11	11	11	10	11	13	15	18	21	24	27	30	32	33	32	33	32	31	29	32.5
6-Aug-07	27	25	25	23	20	16	14	13	12	12	14	17	19	22	26	29	32	34	34	34	33	32	30	29	34.5
7-Aug-07	26	24	21	18	16	16	18	20	22	23	26	29	32	35	35	36	37	38	38	37	35	33	31	31	38.3
8-Aug-07	30	28	26	23	23	23	23	22	22	23	23	24	25	25	26	27	27	26	26	26	25	24	23	22	29.6
9-Aug-07	21	19	18	16	16	16	15	15	14	15	16	17	18	19	21	23	26	27	29	30	30	30	30	28	30.4
10-Aug-07	26	23	21	18	17	15	14	12	11	11	13	15	19	23	27	31	34	36	37	36	34	34	32	29	36.5
11-Aug-07	26	24	23	20	17	16	13	12	11	11	12	14	16	19	22	26	28	30	30	30	29	26	24	30.4	
12-Aug-07	22	20	19	19	19	19	20	21	22	23	23	23	23	23	23	22	22	21	20	20	20	19	18	18	23.1
13-Aug-07	17	17	16	16	15	13	12	11	11	11	12	13	15	17	20	22	23	25	25	26	25	23	21	19	25.9
14-Aug-07	16	13	12	10	9	8	8	8	9	11	12	15	17	20	23	25	26	27	27	26	25	23	20	17	27.0
15-Aug-07	14	12	10	8	6	4	4	4	5	6	7	9	12	15	18	21	22	25	27	27	26	25	23	22	27.5
16-Aug-07	22	20	19	18	17	16	14	13	13	13	14	16	19	24	29	31	35	38	39	40	38	35	32	31	39.5
17-Aug-07	30	28	27	27	26	26	25	24	23	23	23	24	26	28	30	33	35	36	37	37	36	33	31	27	36.9
18-Aug-07	25	23	21	19	16	14	13	12	11	9	9	9	10	10	14	19	24	29	34	37	38	36	34	32	38.2
19-Aug-07	30	27	24	21	20	18	17	15	14	14	15	17	17	21	26	30	34	37	39	37	36	34	32	29	38.7
20-Aug-07	26	24	22	22	21	20	18	17	18	19	20	20	21	24	26	28	28	28	28	27	26	25	25	25	28.5
21-Aug-07	24	24	24	24	24	23	22	20	19	19	18	18	18	18	20	21	22	22	22	21	20	20	20	20	24.5
22-Aug-07	19	17	16	15	14	13	11	9	7	7	7	9	11	13	16	19	21	24	26	26	26	24	22	21	26.0
23-Aug-07	19	16	13	11	10	9	8	6	7	8	11	15	19	21	25	28	31	33	33	33	32	31	29	27	33.3
24-Aug-07	24	21	18	16	15	12	10	8	8	8	10	11	13	16	19	21	24	26	27	27	26	26	26	26	27.1
25-Aug-07	26	26	26	26	25	24	21	20	19	19	20	21	23	25	27	29	31	32	32	31	29	26	24	24	31.8
26-Aug-07	22	20	18	17	17	17	17	18	19	19	19	19	19	20	21	23	24	26	27	29	30	29	27	25	29.6
27-Aug-07	22	20	17	14	12	10	8	7	7	8	9	11	14	18	22	25	29	32	33	34	32	30	26	23	33.8
28-Aug-07	21	17	14	11	9	8	8	7	8	9	10	13	16	20	24	28	32	35	37	37	35	33	31	30	36.6
29-Aug-07	28	26	24	23	22	21	19	18	16	15	15	15	17	20	23	26	28	29	29	28	26	24	22	20	29.0
30-Aug-07	18	16	16	15	15	14	13	12	12	12	13	14	16	17	19	20	20	19	18	18	18	19	20	20	20.3
31-Aug-07	21	22	24	26	26	26	24	23	22	22	23	24	26	28	30	31	31	31	30	29	27	24	22	22	30.9

Hourly Max 34.5 32.1 29.7 29.5 30.4 31.4 30.1 28.0 26.5 26.6 26.7 29.1 32.4 34.6 35.2 36.0 36.9 37.8 40.9 41.6 41.0 39.1 36.7 35.6

## PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

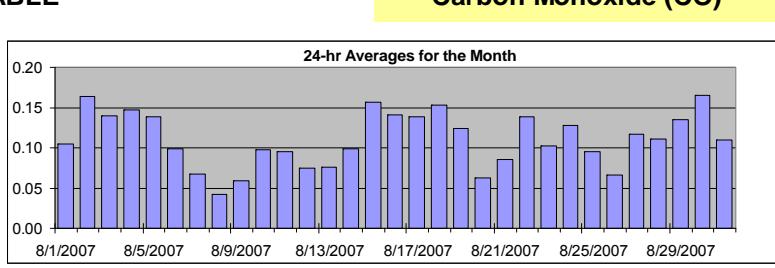
**Summary**

Number of 1-hr Exceedances:	0
Maximum 1-hr Average:	0.3 ppm
Maximum 24-hr Value:	0.2 ppm

22-Aug 8:00 9:00  
30-Aug

AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 0.3	95 0.2	75 0.1	50 0.1	25 0.1	5 0.1	1 0.0	Average 0.1 ppm	Median 0.1 ppm

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-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10	0.15	
2-Aug-07	0.1	0.1	0.1	0.1	0.1	A	0.2	0.1	0.1	0.1	0.1	C	C	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.16	0.25
3-Aug-07	0.2	0.2	0.2	0.1	0.1	A	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.14	0.19
4-Aug-07	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.15	0.22
5-Aug-07	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	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	0.2	0.2	0.2	0.14	0.20
6-Aug-07	0.2	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.10	0.19
7-Aug-07	0.1	A	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.07	0.13
8-Aug-07	A	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	A	0.04	0.07
9-Aug-07	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	A	0.1	0.06	0.13
10-Aug-07	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	A	0.1	0.1	0.1	0.10	0.24
11-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.1	0.10	0.16	
12-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.07	0.12
13-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.08	0.14
14-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.2	0.2	0.10	0.18	
15-Aug-07	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.16	0.29	
16-Aug-07	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.21	
17-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.14	0.21	
18-Aug-07	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	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.15	0.24	
19-Aug-07	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.16	
20-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.06	0.11	
21-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09	0.13	
22-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.14	0.34	
23-Aug-07	0.1	0.1	0.1	0.1	0.1	A	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10	0.19	
24-Aug-07	0.1	0.1	0.2	0.1	A	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.13	0.17	
25-Aug-07	0.1	0.1	0.1	A	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10	0.17	
26-Aug-07	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.07	0.13	
27-Aug-07	0.1	A	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.12	0.27	
28-Aug-07	A	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.11	0.28	
29-Aug-07	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	A	0.14	0.32	
30-Aug-07	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	A	0.16	0.29	
31-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.11	0.16	



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

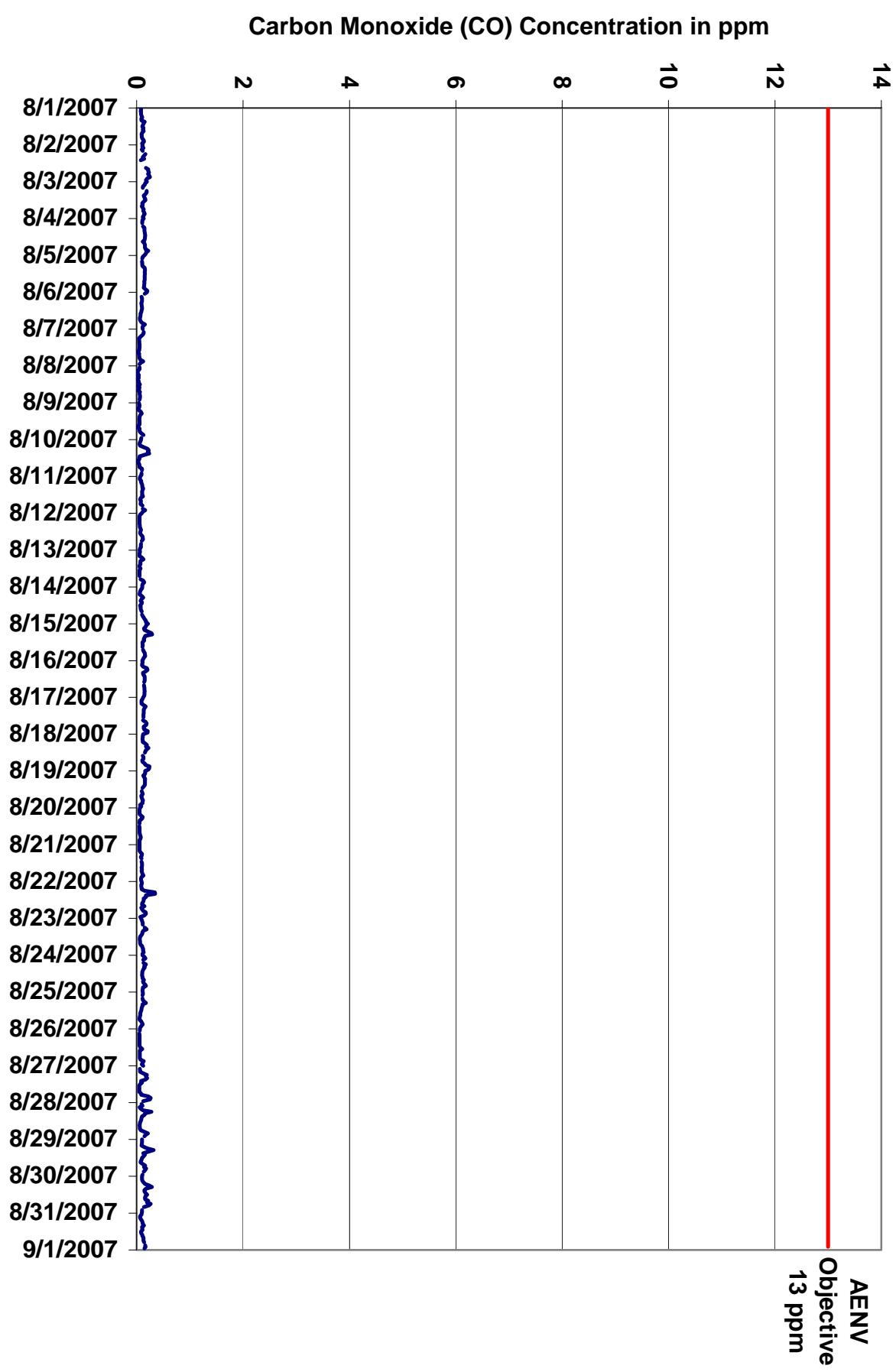


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

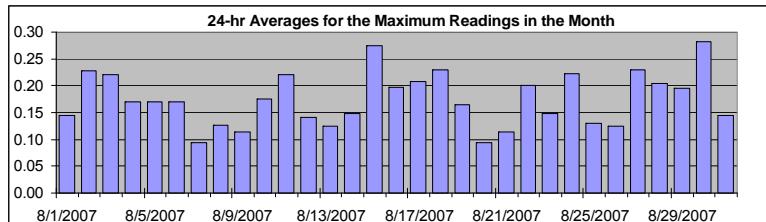
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Carbon Monoxide (CO)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	1.2	ppm	11-Aug	22:00 23:00
Maximum 24-hr Value:	0.3	ppm	30-Aug	



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 0.6	95 0.4	75 0.2	50 0.2	25 0.1	5 0.1	1 0.1	Average 0.2 ppm	Median 0.2 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 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-Aug-07	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.14	0.27	
2-Aug-07	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.1	0.2	0.1	C	C	C	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.23	0.46	
3-Aug-07	0.2	0.2	0.2	0.1	0.2	A	0.2	0.4	0.4	0.6	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.63	
4-Aug-07	0.2	0.2	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	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	0.2	0.17	0.26	
5-Aug-07	0.2	0.2	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.17	0.38	
6-Aug-07	0.2	0.2	A	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.4	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.17	0.52	
7-Aug-07	0.2	A	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.09	0.21	
8-Aug-07	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.2	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.13	0.40	
9-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	A	0.1	0.1	0.1	0.11	0.57	
10-Aug-07	0.2	0.1	0.1	0.1	0.3	0.2	0.3	0.7	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	A	0.1	0.2	0.18	0.65
11-Aug-07	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.8	0.2	0.1	0.2	0.1	0.1	0.2	A	0.2	1.2	0.2	0.2	0.22	1.22		
12-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.14	0.40	
13-Aug-07	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.12	0.21	
14-Aug-07	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.1	0.1	0.15	0.32	
15-Aug-07	0.4	0.3	0.4	0.2	0.2	0.9	0.4	0.5	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.28	0.86	
16-Aug-07	0.1	0.2	0.2	0.1	0.2	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.20	0.36	
17-Aug-07	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.3			
18-Aug-07	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.23	0.50		
19-Aug-07	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.16	0.30		
20-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09	0.16	
21-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	A	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.29		
22-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.5	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.20	0.53		
23-Aug-07	0.1	0.1	0.1	0.2	0.1	A	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.15	0.26	
24-Aug-07	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.5	0.3	0.2	0.1	0.1	0.5	0.2	0.5	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.22	0.47	
25-Aug-07	0.2	0.2	0.1	A	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.13	0.21		
26-Aug-07	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.12	0.31	
27-Aug-07	0.3	A	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.23	0.71	
28-Aug-07	A	0.1	0.7	0.1	0.2	0.5	0.5	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	0.2	0.3	0.2	0.2	A	0.20	0.70
29-Aug-07	0.1	0.2	0.2	0.1	0.4	0.3	0.5	0.3	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	A	0.1	0.20	0.50	
30-Aug-07	0.1	0.1	0.2	0.2	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.2	1.0	0.2	0.4	0.4	0.2	A	0.1	0.1	0.1	0.28	0.97		
31-Aug-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.15	0.26
Hourly Avg	0.15	0.14	0.15	0.11	0.13	0.22	0.21	0.25	0.20	0.20	0.17	0.17	0.16	0.16	0.16	0.14	0.17	0.15	0.15	0.15	0.18	0.20	0.21	0.24	0.17			
Hourly Max	0.41	0.35	0.70	0.21	0.31	0.86	0.46	0.65	0.49	0.63	0.40	0.40	0.52	0.84	0.52	0.46	0.97	0.31	0.36	0.36	0.71	0.61	1.22	0.44				

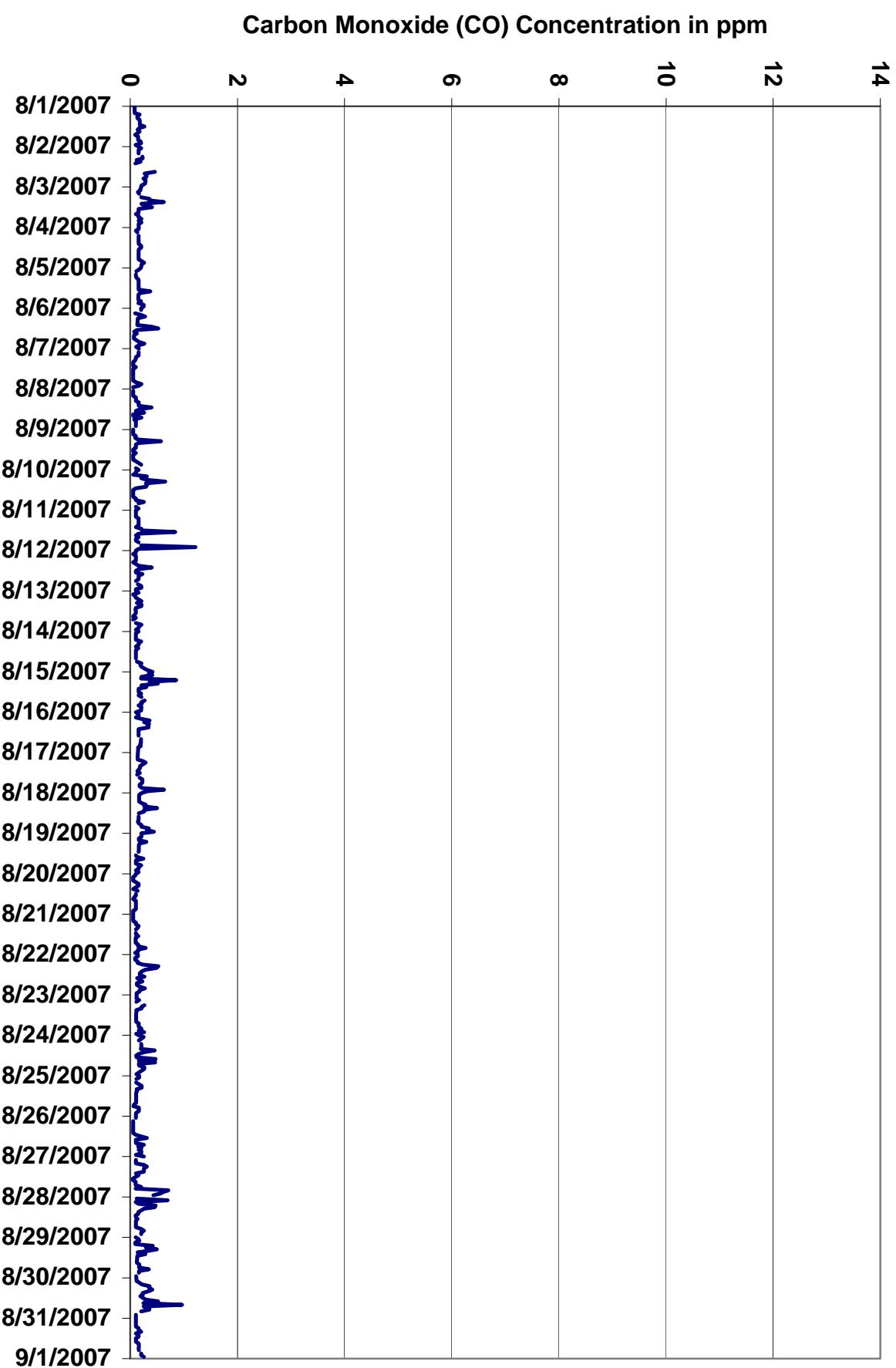
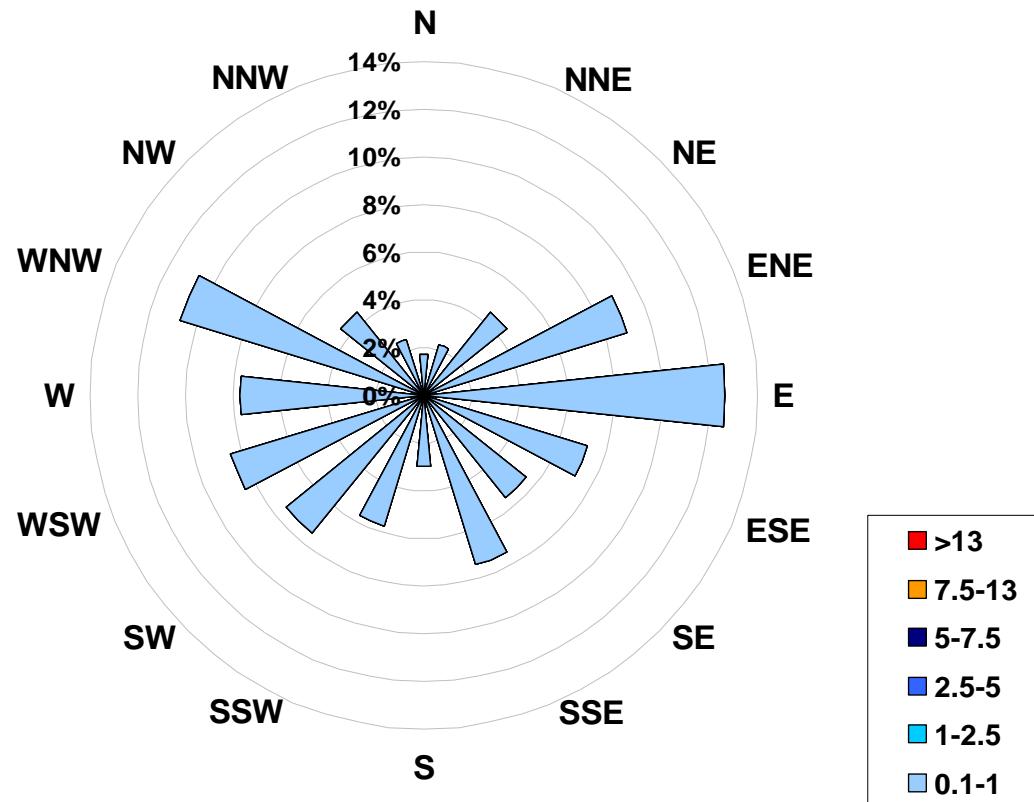


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	<	1	709
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			709

PASZA - Henry Pirker Carbon Monoxide Eight Hour Average Summary

Station: Henry Pirker  
Station Owner: PASZA

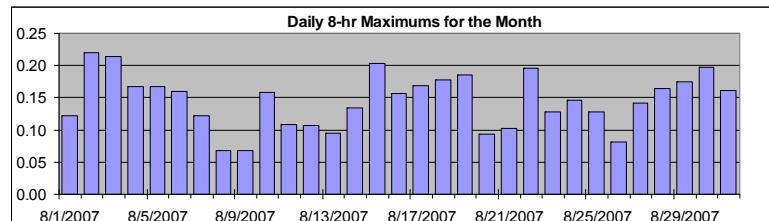
## **EIGHT HOUR RUNNING AVERAGE TABLE**

## **Carbon Monoxide (CO)**

**Monitoring Dates:** August 1, 2007 to September 1, 2007

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

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	0.2 ppm 2-Aug 21:00 22:00



## Status Flag Characters

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

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Hourly Max 0.21 0.21 0.20 0.19 0.18 0.17 0.19 0.20 0.20 0.19 0.19 0.19 0.19 0.19 0.20 0.19 0.16 0.17 0.18 0.19 0.20 0.19 0.22 0.22

# PASZA - Henry Pirker Total Hydrocarbons Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

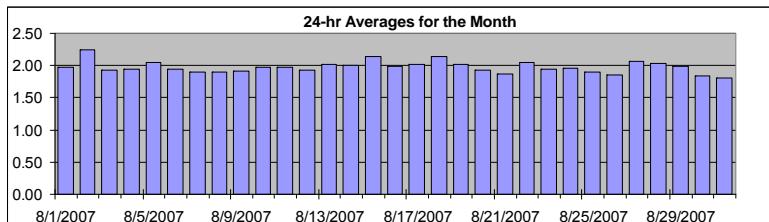
Objective Limit: Alberta Environment: 1-hr na ppm 24-hr na ppm  
Summary

Maximum 1-hr Average:	2.7	ppm	2-Aug	12:00 13:00
Maximum 24-hr Value:	2.2	ppm	2-Aug	

AIC Time:	31 hrs		Operational Time:	710 hrs					
Calibration Time:	3 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average	Median
	2.5	2.3	2.0	1.9	1.9	1.8	1.7	2.0 ppm	1.9 ppm

## HOURLY AVERAGE TABLE

## Total Hydrocarbons (THC)



## Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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-Aug-07	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	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	2.0	2.0	2.0	1.98	2.05	
2-Aug-07	2.1	2.3	2.3	2.3	2.5	A	2.4	2.3	2.2	C	C	C	2.7	2.6	2.6	2.5	2.3	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.24	2.65
3-Aug-07	2.0	2.0	1.9	1.9	1.8	A	1.9	1.9	2.0	1.8	2.0	2.0	2.1	2.0	1.9	1.9	1.8	1.8	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.93	2.05
4-Aug-07	2.0	2.0	1.9	1.9	A	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.8	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.2	1.95	2.21	
5-Aug-07	2.4	2.5	2.6	A	2.1	2.0	2.0	2.1	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.1	2.05	2.55	
6-Aug-07	2.4	2.2	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.8	1.9	2.1	2.1	2.4	1.95	2.44	
7-Aug-07	2.2	A	2.4	2.6	2.3	2.0	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0	1.9	1.9	1.90	2.62	
8-Aug-07	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	1.8	1.9	1.9	1.9	2.0	2.0	A	1.90	1.98		
9-Aug-07	1.9	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	1.92	2.08		
10-Aug-07	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.1	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.9	1.9	1.98	2.21	
11-Aug-07	2.0	2.0	2.0	2.1	2.1	2.2	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	A	2.0	2.0	2.0	1.97	2.16	
12-Aug-07	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.93	2.02		
13-Aug-07	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.2	2.02	2.23	
14-Aug-07	2.2	2.2	2.1	2.2	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	1.9	1.9	1.9	2.0	2.0	2.1	2.2	2.00	2.22		
15-Aug-07	2.5	2.5	2.4	2.5	2.5	2.4	2.4	2.4	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.14	2.53		
16-Aug-07	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.99	2.08			
17-Aug-07	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.2	2.1	2.0	2.1	2.02	2.25			
18-Aug-07	2.3	2.2	2.3	2.3	2.4	2.2	2.3	2.3	2.3	2.4	2.2	2.1	2.1	2.1	A	1.9	2.0	1.9	1.9	1.9	2.0	2.1	2.1	2.14	2.43			
19-Aug-07	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.02	2.15			
20-Aug-07	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.92	2.02			
21-Aug-07	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	1.9	2.0	1.9	1.9	1.87	1.92			
22-Aug-07	1.9	1.9	1.8	1.9	1.9	1.9	2.0	2.1	2.4	2.2	2.2	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.04	2.42		
23-Aug-07	2.1	2.1	2.0	2.1	2.1	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.11		
24-Aug-07	2.2	2.2	2.2	2.2	A	2.1	2.1	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.95	2.23		
25-Aug-07	2.0	2.0	1.9	A	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.90	2.01		
26-Aug-07	2.0	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.85	2.16		
27-Aug-07	2.5	A	2.0	2.1	2.1	2.1	2.2	2.3	2.3	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.06	2.45		
28-Aug-07	A	2.3	2.2	2.3	2.2	2.2	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.03	2.29		
29-Aug-07	2.0	2.0	1.9	1.9	2.0	2.0	2.1	2.3	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.1	A	1.8	1.98	2.25		
30-Aug-07	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.1	1.9	1.9	1.8	1.84	2.11		
31-Aug-07	1.8	1.8	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	A	1.9	2.0	1.81	1.96		

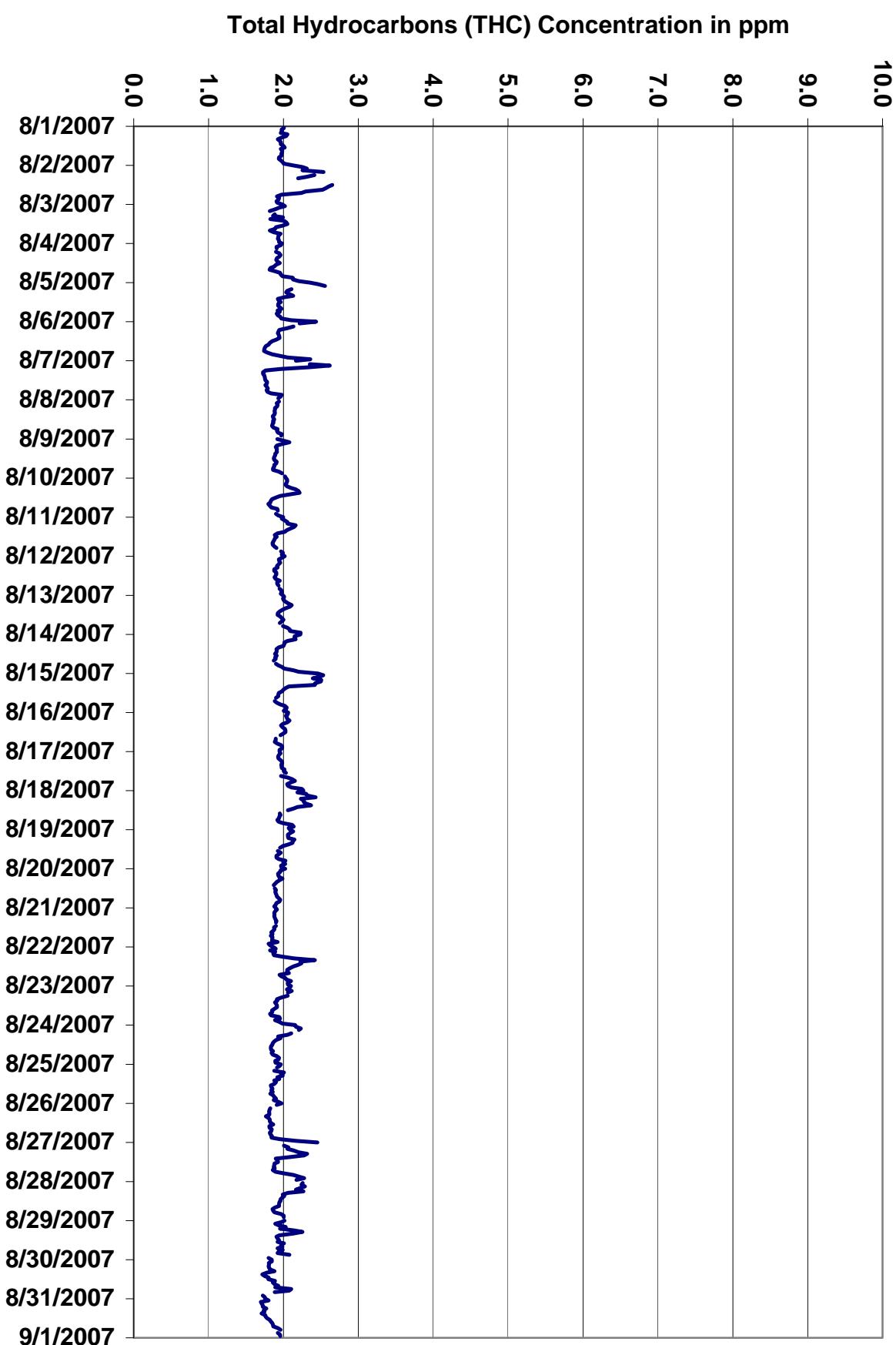


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

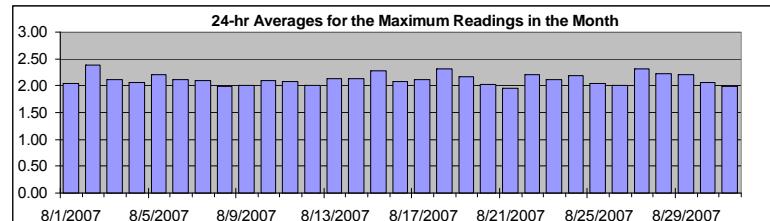
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Hydrocarbons (THC)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	3.4	ppm	30-Aug	18:00	19:00
Maximum 24-hr Value:	2.4	ppm	2-Aug		



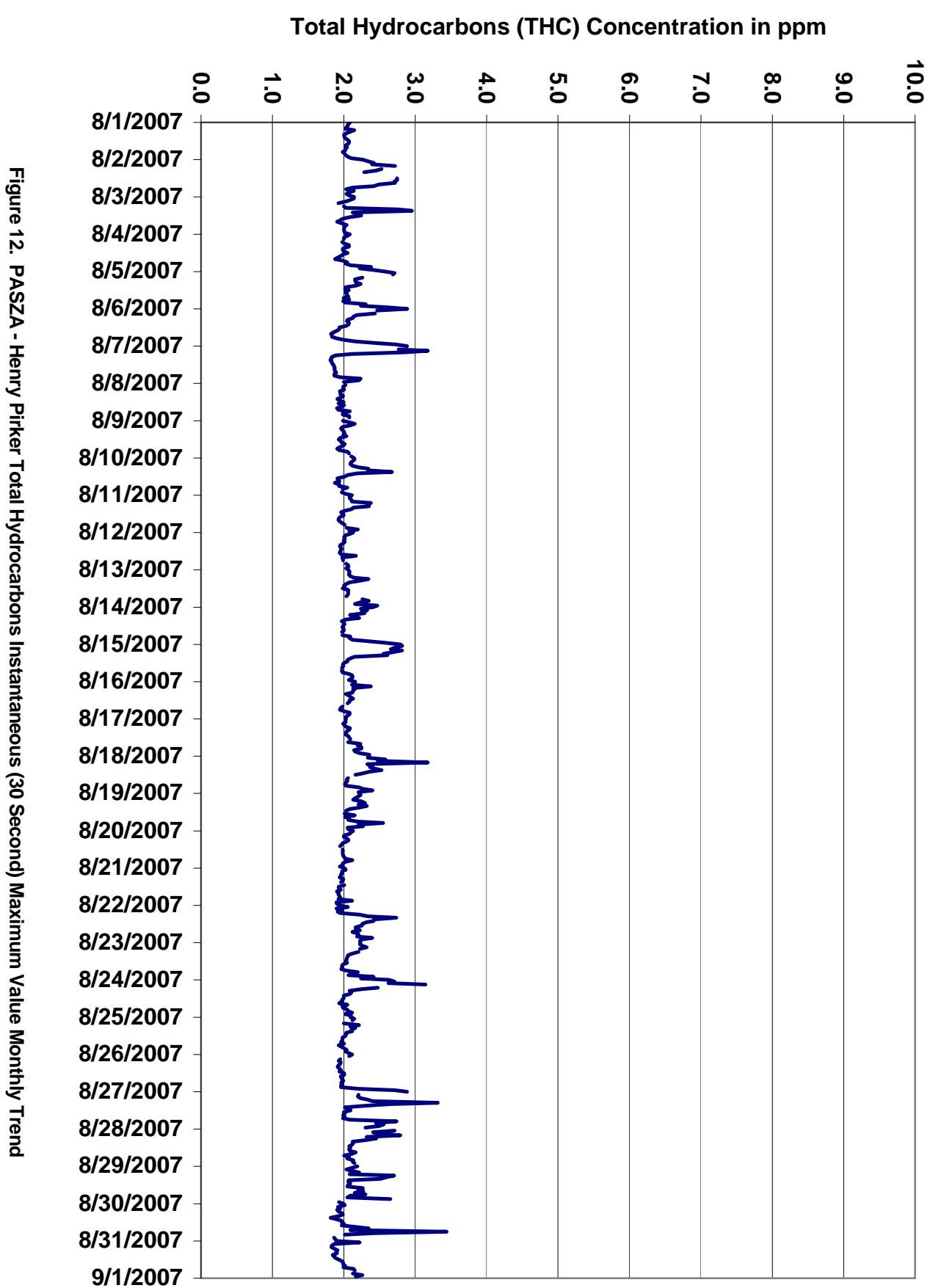
AIC Time:	31 hrs						Operational Time:						710 hrs						
	Calibration Time:			3 hrs			AMD Operational Uptime:			100.0%									
Percentile	99	95	75	50	25	5	1	Average			Median								
	2.9	2.6	2.2	2.1	2.0	1.9	1.8	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0
Percentile	99	95	75	50	25	5	1	Average			Median								
	2.9	2.6	2.2	2.1	2.0	1.9	1.8	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0

#### Status Flag Characters

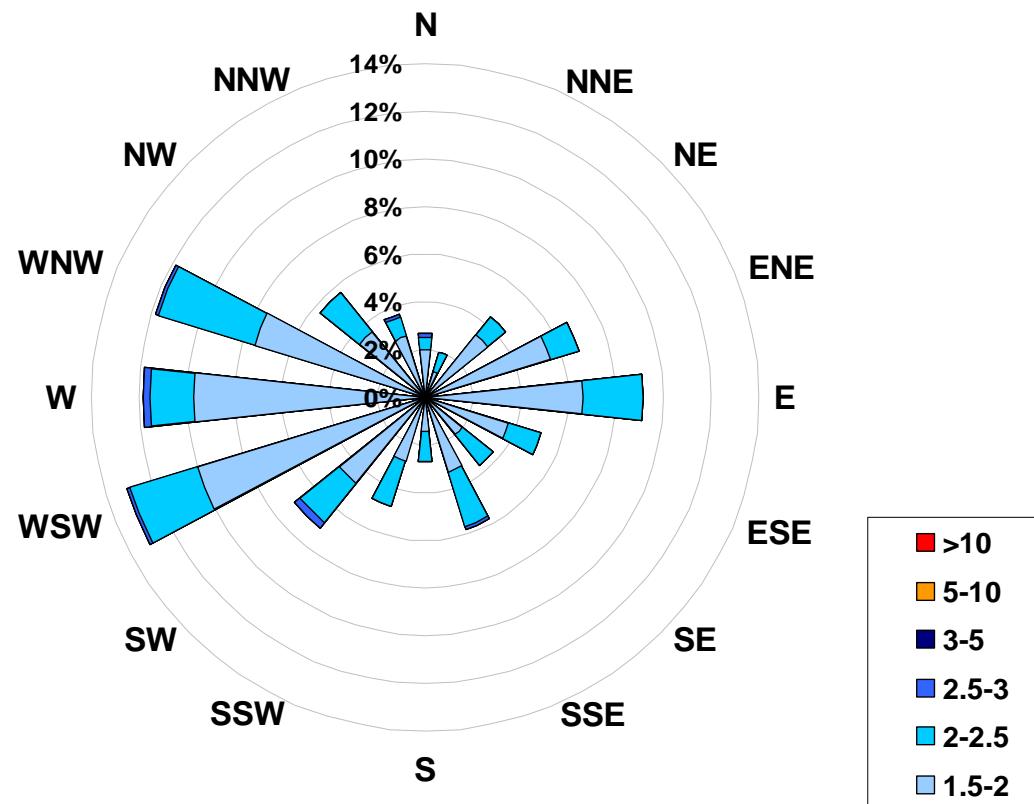
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 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-Aug-07	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.04	2.15	
2-Aug-07	2.3	2.3	2.4	2.4	2.7	A	2.5	2.5	2.3	C	C	C	C	2.7	2.7	2.7	2.5	2.4	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.38	2.75
3-Aug-07	2.1	2.1	2.1	2.0	1.9	A	2.0	2.0	2.8	3.0	2.1	2.2	2.2	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.11	2.95	
4-Aug-07	2.1	2.1	2.0	2.0	A	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.4	2.0	2.05	2.42	
5-Aug-07	2.6	2.7	2.7	A	2.3	2.2	2.2	2.2	2.2	2.2	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.3	2.2	2.6	2.0	2.20	2.71	
6-Aug-07	2.9	2.5	A	2.4	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	2.0	2.2	2.5	2.7	2.12	2.89		
7-Aug-07	2.9	A	2.8	3.2	2.8	2.1	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.2	2.0	2.0	2.09	3.18	
8-Aug-07	A	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.1	2.0	2.1	2.1	2.1	2.0	1.98	2.08	
9-Aug-07	2.0	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.1	2.1	A	2.1	2.1	2.0	2.00	2.15	
10-Aug-07	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.7	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.09	2.68	
11-Aug-07	2.1	2.1	2.1	2.1	2.1	2.4	2.3	2.4	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.2	2.1	2.0	2.08	2.38	
12-Aug-07	2.1	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	2.0	2.0	A	2.0	2.1	2.0	2.0	2.01	2.17	
13-Aug-07	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	A	2.3	2.3	2.2	2.2	2.13	2.47	
14-Aug-07	2.4	2.2	2.3	2.3	2.3	2.1	2.1	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	2.0	2.1	2.1	2.3	2.13	2.59	
15-Aug-07	2.8	2.8	2.7	2.7	2.8	2.7	2.6	2.6	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.28	2.82	
16-Aug-07	2.2	2.1	2.1	2.4	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	1.9	2.0	2.1	2.1	2.1	2.0	2.0	2.09	2.38	
17-Aug-07	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.4	2.11	2.36	
18-Aug-07	2.3	2.3	2.6	2.5	3.2	2.3	2.4	2.4	2.5	2.5	2.4	2.3	2.3	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.4	2.31	3.17	
19-Aug-07	2.2	2.2	2.2	2.2	2.1	2.2	2.3	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.2	2.6	2.2	2.3	2.1	2.1	2.17	2.55	
20-Aug-07	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.02	2.13	
21-Aug-07	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.1	1.96	2.12	
22-Aug-07	1.9	2.1	1.9	2.0	1.9	1.9	2.2	2.3	2.7	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.20	2.74	
23-Aug-07	2.2	2.2	2.3	2.3	2.2	A	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.2	2.12	2.42	
24-Aug-07	2.6	2.7	2.6	3.1	A	2.5	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.19	3.14	
25-Aug-07	2.1	2.1	2.1	A	2.0	2.2	2.1	2.2	2.1	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	2.05	2.21	
26-Aug-07	2.1	2.1	A	2.0	1.9	2.0	2.0	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.71	
27-Aug-07	2.9	A	2.2	2.2	2.2	2.3	2.4	3.3	2.7	2.3	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.7	2.4	2.6	2.5	2.32	3.32	
28-Aug-07	A	2.7	2.4	2.5	2.8	2.3	2.5	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.0	2.1	2.0	2.1	2.1	2.1	A	2.23	2.79	
29-Aug-07	2.2	2.1	2.0	2.1	2.2	2.1	2.7	2.6	2.5	2.1	2.1	2.1	2.1	2.0	2.3	2.2	2.3	2.2	2.3	2.1	2.0	2.7	A	1.9	1.9	2.21	2.70	
30-Aug-07	2.0	2.0	1.9	2.0	1.9	2.0	2.0	1.9	1.8	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.2	2.3	2.1	3.4	2.4	2.0	A	1.9	1.9	2.06	3.44	
31-Aug-07	1.9																											



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



Calms:	0%	
<b>Frequency Distribution of THC in ppm</b> <b>Range</b> <b>Frequency (hrs)</b>		
1.5	< 2	493
2	to 2.5	206
2.5	to 3	9
3	to 5	0
5	to 10	0
>	10	0
Total Non-Zero Values		710

# PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

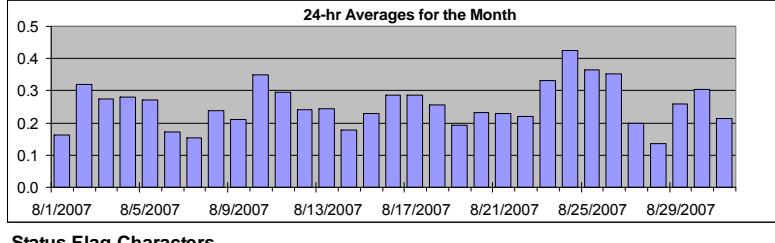
Maximum 1-hr Average:	1.0	ppb	10-Aug	9:00 10:00
Maximum 24-hr Value:	0.4	ppb	24-Aug	

AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.7	0.5	0.3	0.2	0.2	0.1	0.0	0.3 ppb	0.2 ppb

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-Aug-07	0:00 1:00	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	
2-Aug-07	0:00 1:00	0	0	0	0	1	A	1	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0.3	0.6
3-Aug-07	0:00 1:00	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
4-Aug-07	0:00 1:00	0	0	0	0	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
6-Aug-07	0:00 1:00	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Aug-07	0:00 1:00	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-Aug-07	0:00 1:00	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
9-Aug-07	0:00 1:00	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	0.2	0.3
10-Aug-07	0:00 1:00	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	1.0
11-Aug-07	0:00 1:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.6
12-Aug-07	0:00 1:00	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	0.2	0.4
13-Aug-07	0:00 1:00	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	0.2	0.3
14-Aug-07	0:00 1:00	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	0.2	0.3
15-Aug-07	0:00 1:00	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	0.2	0.5
16-Aug-07	0:00 1:00	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	0.3	0.4
17-Aug-07	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
18-Aug-07	0:00 1:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.5
19-Aug-07	0:00 1:00	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	0.2	0.3
20-Aug-07	0:00 1:00	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	0.2	0.3
21-Aug-07	0:00 1:00	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	0.2	0.3
22-Aug-07	0:00 1:00	0	0	0	0	0	0	1	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
23-Aug-07	0:00 1:00	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.5
24-Aug-07	0:00 1:00	0	1	1	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
25-Aug-07	0:00 1:00	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
26-Aug-07	0:00 1:00	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0.4	0.5
27-Aug-07	0:00 1:00	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	0.2	0.5
28-Aug-07	0:00 1:00	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
29-Aug-07	0:00 1:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
30-Aug-07	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0.3	0.5
31-Aug-07	0:00 1:00	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	0.2	0.3
Hourly Avg	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
Hourly Max	0.5	0.4	0.6	0.6	0.5	0.7	0.7	0.7	0.7	1.0	0.8	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.4	0.4	0.4		

## HOURLY AVERAGE TABLE

## Total Reduced Sulphur (TRS)



## Status Flag Characters

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

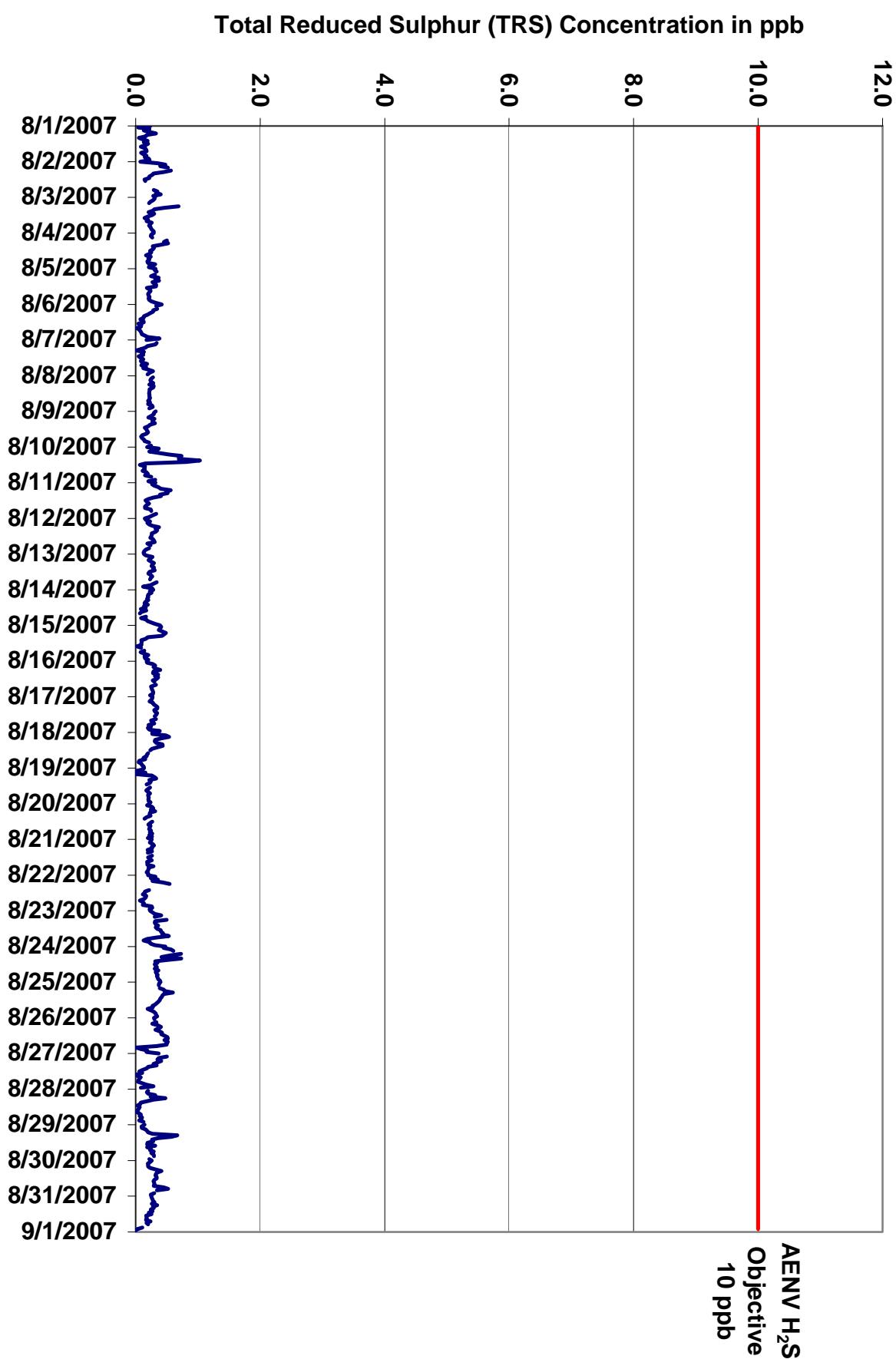


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

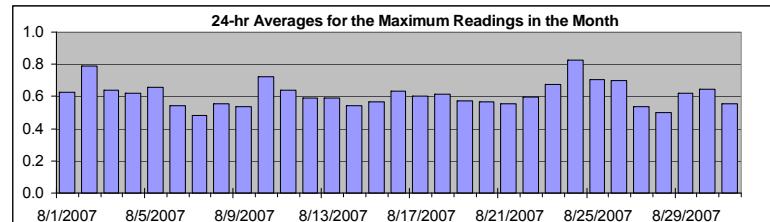
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Reduced Sulphur (TRS)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

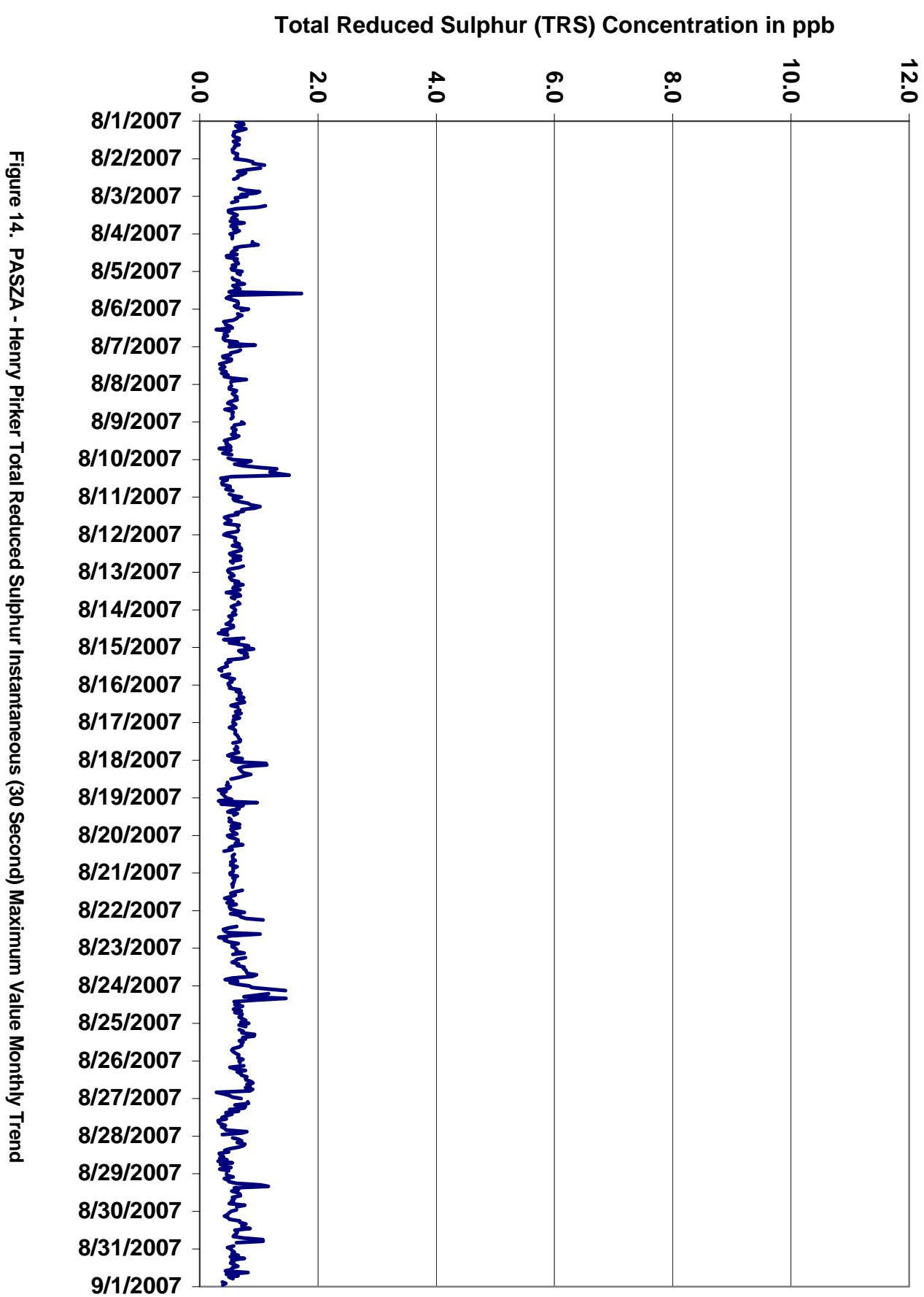
Maximum 1-hr Value:	1.7	ppb	5-Aug	14:00 15:00
Maximum 24-hr Value:	0.8	ppb	24-Aug	



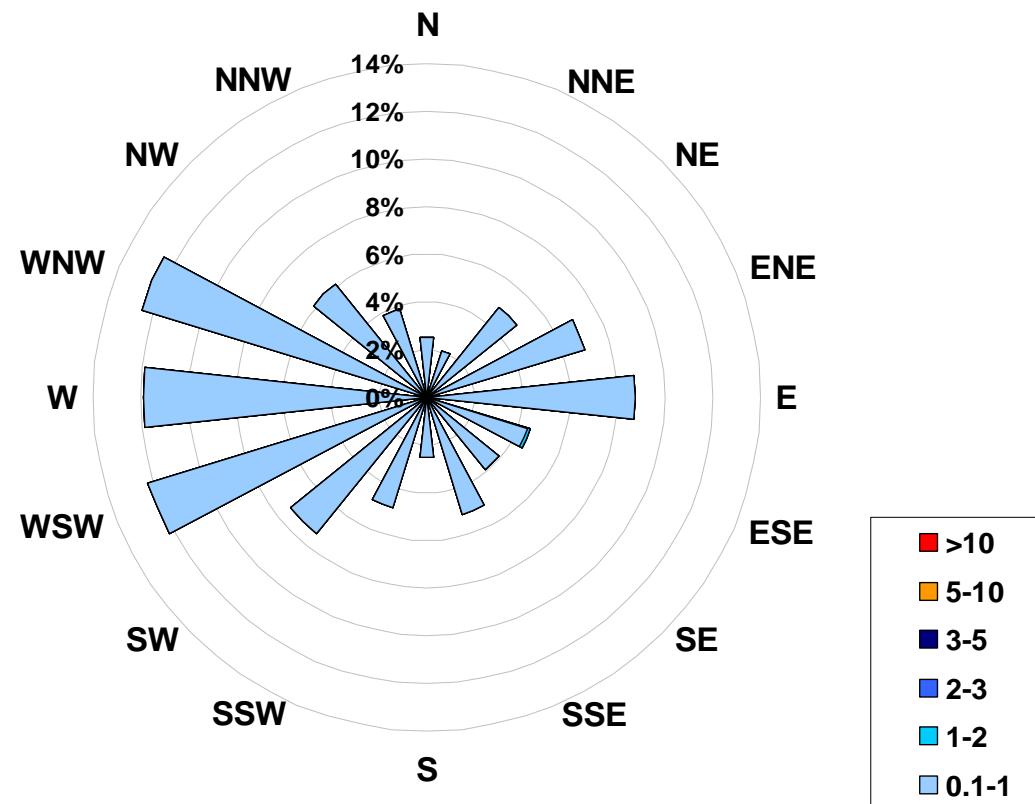
Percentile	AIC Time: 32 hrs							Operational Time: 705 hrs						
	Calibration	7 hrs	AMD Operational Uptime:						100.0%					
99	95	75	50	25	5	1	Average			Median				
1.2	0.9	0.7	0.6	0.5	0.4	0.3	0.6	ppb	0.6	ppb	0.6	ppb	0.6	ppb

#### Day Mountain Standard Time

	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	24:00	Daily Average	Daily Maximum	
1-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
2-Aug-07	1:00	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	C	C	C	C	A	1	1	1	1	1	1	0.8	1.1
3-Aug-07	1:00	1	1	1	1	1	A	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1	
4-Aug-07	1:00	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0.6	1.0	
5-Aug-07	1:00	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	2	1	1	0	1	1	1	1	1	0.7	1.7	
6-Aug-07	1:00	1	1	A	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1	0.5	0.9		
7-Aug-07	0:00	A	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	0.8		
8-Aug-07	1:00	A	1	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	A	0.6	0.6	
9-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	1	0	0	1	A	0	0.5	0.8	
10-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	2	1	0	0	0	0	0	0	1	1	0	1	A	1	1	0.7	1.5	
11-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	A	1	1	0	0.6	1.0		
12-Aug-07	0:00	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0.6	0.7		
13-Aug-07	1:00	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	0.6	0.7		
14-Aug-07	1:00	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	A	1	0	1	1	1	1	0.5	0.8		
15-Aug-07	1:00	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	A	1	0	0	1	1	1	0	0.6	0.9		
16-Aug-07	0:00	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8		
17-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.7		
18-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0.6	1.1		
19-Aug-07	0:00	0	1	0	1	0	1	1	1	0	1	1	1	1	1	1	0	A	0	1	0	1	1	1	1	0.6	1.0		
20-Aug-07	0:00	0	0	1	1	1	1	1	0	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7		
21-Aug-07	1:00	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0	1	1	1	1	0.6	0.7		
22-Aug-07	1:00	1	1	1	1	1	1	1	1	A	C	C	C	1	1	0	0	0	1	1	0	0	0	0	0	0.6	1.1		
23-Aug-07	1:00	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0		
24-Aug-07	1:00	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5		
25-Aug-07	1:00	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		
26-Aug-07	1:00	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	0.9		
27-Aug-07	1:00	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8		
28-Aug-07	1:00	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8		
29-Aug-07	0:00	0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	1	0.6	1.2	
30-Aug-07	1:00	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.1	
31-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	A	0	0	0.6	0.8	
Hourly Avg		0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
Hourly Max		0.8	0.9	1.1	1.5	1.1	1.2	1.3	1.2	1.5	1.3	1.5	0.9	0.8	0.9	1.7	1.0	0.9	1.0	1.1	1.1	0.8	1.0	1.0	1.0	0.9	0.9		



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



Calms: 0%

**Frequency Distribution of TRS in ppb**

Range	Frequency (hrs)
-------	-----------------

0.1	<	1	704
1	to	2	1
2	to	3	0
3	to	5	0
5	to	10	0
>	10		0
Total Non-Zero Values			705

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

Draft Objective Limit: Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr 30  $\mu\text{g}/\text{m}^3$

**Summary**

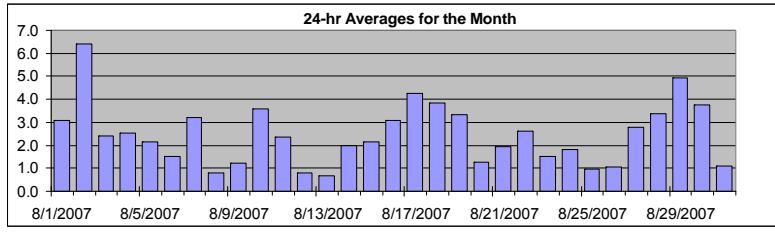
Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	16.0 $\mu\text{g}/\text{m}^3$ 10-Aug 9:00 10:00
Maximum 24-hr Value:	6.4 $\mu\text{g}/\text{m}^3$ 2-Aug

AIC Time:	0 hrs	Operational Time:	730 hrs							
Calibration Time:	3 hrs	AMD Operational Uptime:	98.5%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	10.6	6.6	3.5	1.9	0.8	0.0	0.0	2.5	2 $\mu\text{g}/\text{m}^3$	2.1 $\mu\text{g}/\text{m}^3$

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-Aug-07	1	0	0	1	0	1	4	2	3	5	4	1	1	3	3	6	4	4	5	7	6	4	4	4	3.1	6.9
2-Aug-07	7	8	6	1	4	5	10	10	9	14	13	11	4	9	9	0	C	C	C	0	3	5	4	5	6.4	13.7
3-Aug-07	3	0	3	1	0	5	5	4	1	2	4	4	4	1	1	1	1	4	2	1	4	5	2	1	2.4	5.0
4-Aug-07	2	1	1	1	1	2	3	3	3	3	5	4	5	2	2	1	4	4	1	1	2	3	4	1	2.5	4.6
5-Aug-07	1	0	0	1	1	D	2	D	3	4	5	4	4	2	3	D	2	1	2	3	2	D	D	D	2.2	4.5
6-Aug-07	4	0	0	0	0	0	0	D	2	1	1	1	2	0	1	0	0	2	2	3	3	3	4	4	1.5	4.5
7-Aug-07	4	5	5	5	5	4	1	2	2	2	2	1	2	1	2	4	4	3	4	5	6	6	3	3.2	5.8	
8-Aug-07	2	2	1	0	0	0	0	1	1	0	2	0	1	1	1	1	1	1	1	1	1	1	1	0	0.8	2.4
9-Aug-07	0	0	0	0	0	0	0	1	1	1	0	0	0	2	0	0	2	2	2	3	6	5	3	1.2	5.6	
10-Aug-07	3	3	2	2	2	4	7	8	16	10	1	1	1	0	1	2	2	5	4	3	2	D	1	3.6	16.0	
11-Aug-07	0	1	1	1	2	3	3	3	3	4	3	3	3	2	1	2	2	2	5	4	3	3	1	2.3	4.8	
12-Aug-07	0	0	0	0	1	0	0	0	0	0	0	1	1	0	2	2	2	2	2	1	1	0	2	0.8	2.4	
13-Aug-07	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	2	4	2	2	1	0.7	4.0
14-Aug-07	1	0	1	0	0	1	2	2	1	1	1	1	1	2	2	3	3	4	6	4	4	3	4	2.0	6.0	
15-Aug-07	3	3	4	2	2	3	4	5	2	3	3	2	0	0	3	1	1	2	2	2	2	1	1	0	2.2	5.2
16-Aug-07	0	0	0	1	1	2	3	3	2	4	5	6	5	6	4	4	4	5	4	3	2	3	3	4	3.1	5.9
17-Aug-07	3	2	1	1	1	3	4	4	4	5	5	5	5	4	3	6	13	9	10	3	3	2	3	2	4.3	13.5
18-Aug-07	2	0	0	2	1	3	1	3	4	3	2	5	8	5	5	6	5	3	3	4	5	9	7	6	3.8	8.7
19-Aug-07	3	2	4	5	3	4	4	4	6	6	6	4	2	1	4	3	2	4	D	3	4	3	0	1	3.3	5.9
20-Aug-07	1	1	0	0	1	1	2	2	1	1	1	1	1	1	3	1	1	5	3	1	0	0	1	2	1.2	5.0
21-Aug-07	1	0	0	1	2	2	2	1	2	3	3	2	2	3	3	2	2	3	3	1	2	2	1	2	1.9	3.5
22-Aug-07	1	1	1	2	3	2	3	6	6	4	3	3	2	2	1	2	0	3	4	2	6	2	1	2	2.6	6.3
23-Aug-07	1	2	2	2	1	1	2	2	3	2	2	1	0	0	0	0	2	2	3	4	3	0	2	1	1.5	3.8
24-Aug-07	2	2	3	1	2	0	2	1	4	2	1	2	1	1	0	0	1	2	2	5	5	1	1	2	1.8	5.2
25-Aug-07	1	2	1	2	2	0	2	2	2	1	0	0	0	0	0	0	0	1	4	1	2	1	0	1.0	4.1	
26-Aug-07	0	0	0	0	0	0	0	0	0	1	0	1	2	1	1	2	2	2	1	2	2	4	3	2	1.1	3.5
27-Aug-07	1	1	1	1	1	2	3	3	7	5	2	4	1	0	0	0	1	1	4	3	5	8	8	5	2.8	8.1
28-Aug-07	8	0	1	1	2	3	8	6	6	5	4	3	3	2	1	1	1	2	2	4	6	5	3	2	3.4	8.5
29-Aug-07	1	2	2	2	3	2	6	13	11	7	9	10	8	5	10	4	5	4	4	3	3	1	1	4.9	13.3	
30-Aug-07	0	1	0	0	2	1	2	4	3	3	5	7	7	7	5	6	5	10	11	6	0	D	0	0	3.7	10.8
31-Aug-07	0	0	0	0	0	0	1	2	1	2	0	0	0	1	1	2	2	4	4	2	2	3	D	1.1	4.0	

**HOURLY AVERAGE TABLE**

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



**Status Flag Characters**

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

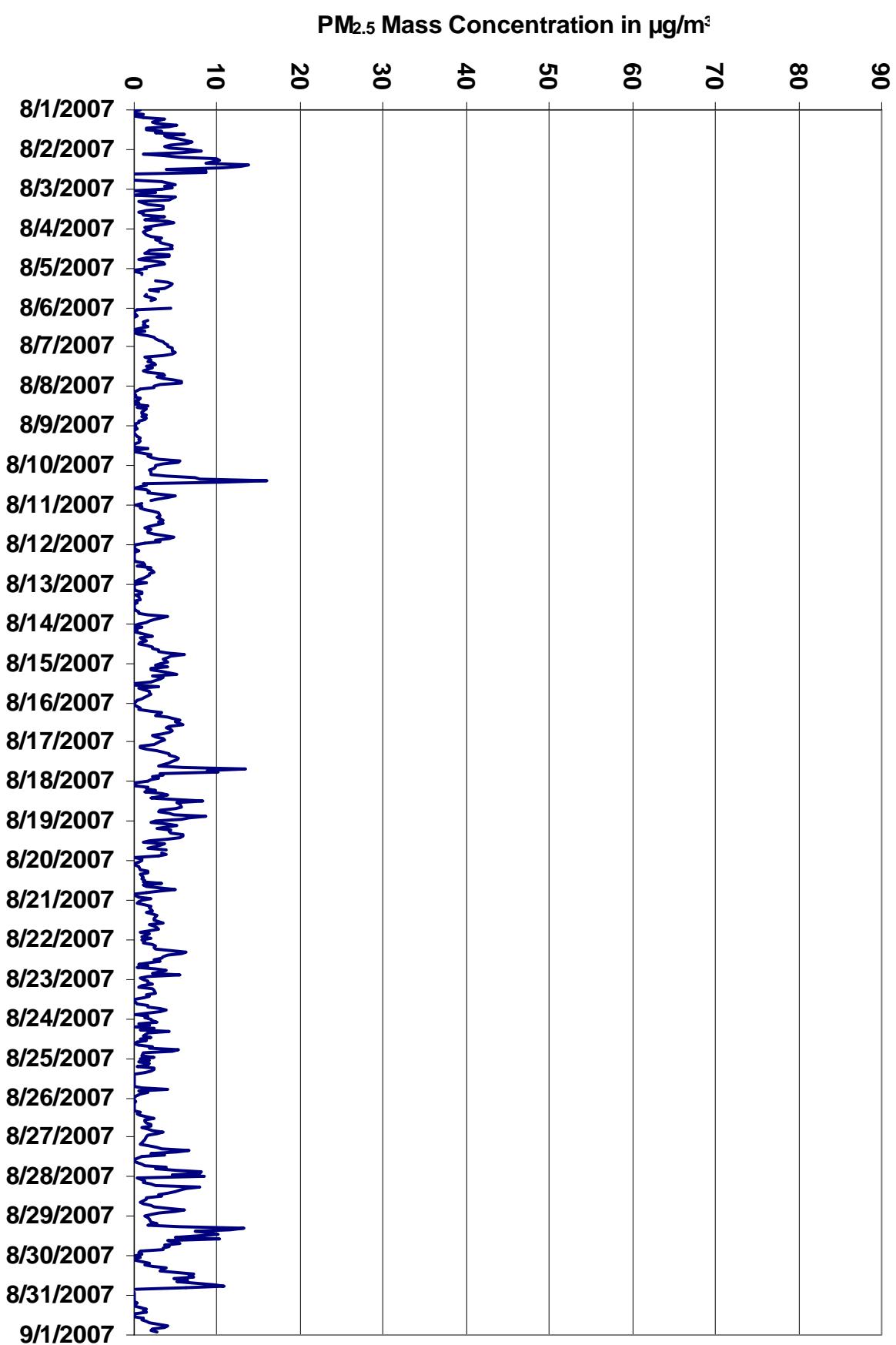


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

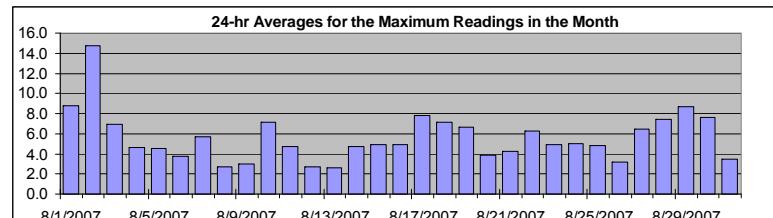
#### Summary

Maximum 1-hr Average:	29.4	µg/m <sup>3</sup>	28-Aug	0:00 1:00
Maximum 24-hr Value:	14.7	µg/m <sup>3</sup>	2-Aug	

AIC Time:	0 hrs	Operational Time:	739 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%						
Percentile	99 22.5	95 13.8	75 6.7	50 4.6	25 3.1	5 1.7	1 1.1	Average / Median 5.6	Geomean 5.2 µg/m <sup>3</sup>

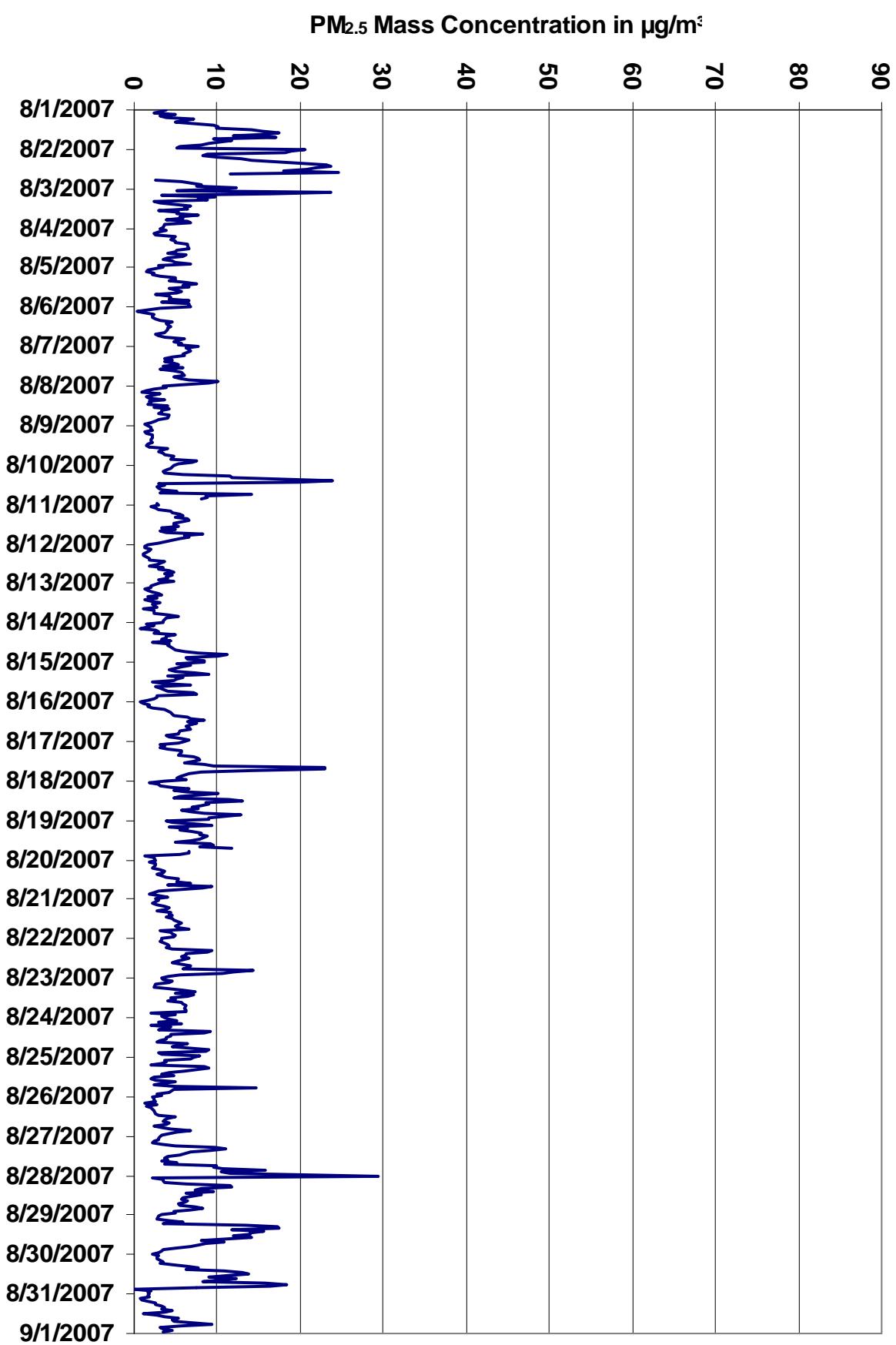
#### Day Mountain Standard Time

	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	24-hour Average	Daily Maximum
1-Aug-07	4	3	2	5	3	4	7	5	7	10	10	10	14	15	17	16	12	17	9	12	9	8	5	5	8.8	17.4	
2-Aug-07	21	19	18	9	8	10	13	14	17	23	24	22	21	18	25	12	C	C	C	3	6	8	7	12	14.7	24.6	
3-Aug-07	10	5	24	16	3	10	8	9	2	3	7	6	6	3	5	5	8	5	6	4	6	7	4	3	6.9	23.6	
4-Aug-07	3	4	3	2	3	5	5	4	5	5	7	6	7	5	5	4	6	6	4	4	4	5	5	7	3	4.6	6.8
5-Aug-07	3	2	1	2	2	3	5	5	4	6	8	6	7	4	6	5	3	4	4	4	7	3	7	7	4.5	7.5	
6-Aug-07	7	3	0	1	2	2	2	3	3	5	4	4	4	4	4	4	4	3	3	4	6	5	5	6	3.7	6.8	
7-Aug-07	8	6	7	7	6	6	5	4	5	4	5	5	4	6	3	5	6	6	5	5	7	10	9	6	5.7	10.2	
8-Aug-07	4	4	2	1	1	3	1	2	4	2	2	2	2	4	2	4	3	3	3	4	4	3	3	2	1	2.7	4.2
9-Aug-07	2	2	2	2	1	1	2	2	2	2	2	2	2	2	4	3	3	3	4	4	5	4	7	7	5	3.0	7.5
10-Aug-07	5	5	4	4	3	4	6	12	12	24	20	3	4	3	3	3	5	3	14	9	9	8	D	3	7.1	23.9	
11-Aug-07	3	2	3	3	4	5	5	6	5	6	7	5	5	5	3	5	3	4	8	6	7	5	5	3	4.7	8.2	
12-Aug-07	2	1	1	2	2	2	1	1	1	2	2	4	3	2	3	3	4	5	4	5	4	4	3	5	2.7	4.9	
13-Aug-07	3	2	2	1	2	2	3	3	2	3	1	2	3	2	3	1	2	2	2	4	5	4	4	3	2.6	5.4	
14-Aug-07	3	1	2	1	3	3	2	5	4	4	3	4	2	4	4	4	4	5	6	8	11	10	6	6	4.7	11.3	
15-Aug-07	8	5	7	6	4	5	7	9	4	6	5	5	2	4	7	3	3	4	7	7	3	3	2	2	4.9	9.0	
16-Aug-07	1	1	2	2	2	4	4	5	5	6	7	8	6	8	7	6	7	6	5	4	4	6	7	4.9	8.4		
17-Aug-07	6	5	3	4	3	4	6	6	5	7	8	8	7	6	8	10	23	23	14	8	7	5	5	6	7.8	23.0	
18-Aug-07	4	2	3	3	4	7	5	6	10	6	5	11	13	9	9	8	7	8	6	7	8	13	9	9	7.1	13.0	
19-Aug-07	4	5	7	9	4	6	5	7	8	8	9	8	7	5	9	10	8	12	D	7	7	6	1	2	6.7	11.7	
20-Aug-07	3	2	3	3	2	2	3	4	4	3	3	4	5	5	7	4	9	8	5	3	2	2	3	4	3.8	9.3	
21-Aug-07	3	3	2	3	4	4	4	3	4	4	5	4	5	5	6	5	5	5	7	3	4	5	5	5	4.2	6.7	
22-Aug-07	3	3	3	4	4	4	5	9	9	6	6	6	7	6	5	5	7	7	6	14	12	11	6	4	6.3	14.3	
23-Aug-07	3	3	5	4	3	2	4	6	7	5	7	6	4	5	4	6	6	6	6	6	6	2	5	3	4.9	7.4	
24-Aug-07	4	4	5	3	6	2	4	3	9	8	4	4	4	4	3	3	6	6	5	9	9	3	3	8	5.0	9.1	
25-Aug-07	7	7	4	4	3	2	9	9	6	4	3	5	2	2	3	5	4	2	5	15	5	4	3	3	4.8	14.8	
26-Aug-07	2	2	2	3	1	3	2	2	2	3	3	3	5	4	4	3	4	4	2	3	4	7	5	3	3.2	6.7	
27-Aug-07	3	3	3	2	2	3	5	10	11	9	7	5	4	4	4	3	5	4	10	9	11	16	10	12	6.5	15.7	
28-Aug-07	29	2	4	3	4	6	12	12	8	7	10	6	8	6	6	6	6	5	5	7	8	7	5	5	7.4	29.4	
29-Aug-07	3	3	3	4	6	4	13	17	17	12	16	14	14	12	14	8	11	9	8	7	5	3	3	8.7	17.5		
30-Aug-07	2	3	3	3	4	3	5	6	8	6	11	13	14	11	9	12	8	16	18	16	7	0	2	2	7.6	18.3	
31-Aug-07	2	2	2	1	1	2	3	3	4	3	5	4	1	3	4	5	5	5	9	6	3	4	5	4	3.5	9.4	
Hourly Avg	5.3	3.7	4.3	3.8	3.3	4.0	5.2	6.2	6.3	6.5	6.9	6.3	6.2	5.6	6.4	5.7	6.2	6.6	6.8	6.9	6.2	5.7	5.0	4.9			
Hourly Max	29.4	18.9	23.6	16.3	8.3	10.2	13.5	17.3	17.5	23.9	23.7	21.8	20.7	18.0	24.6	15.9	22.9	23.0	18.3	16.3	11.9	15.7	10.5	12.2			

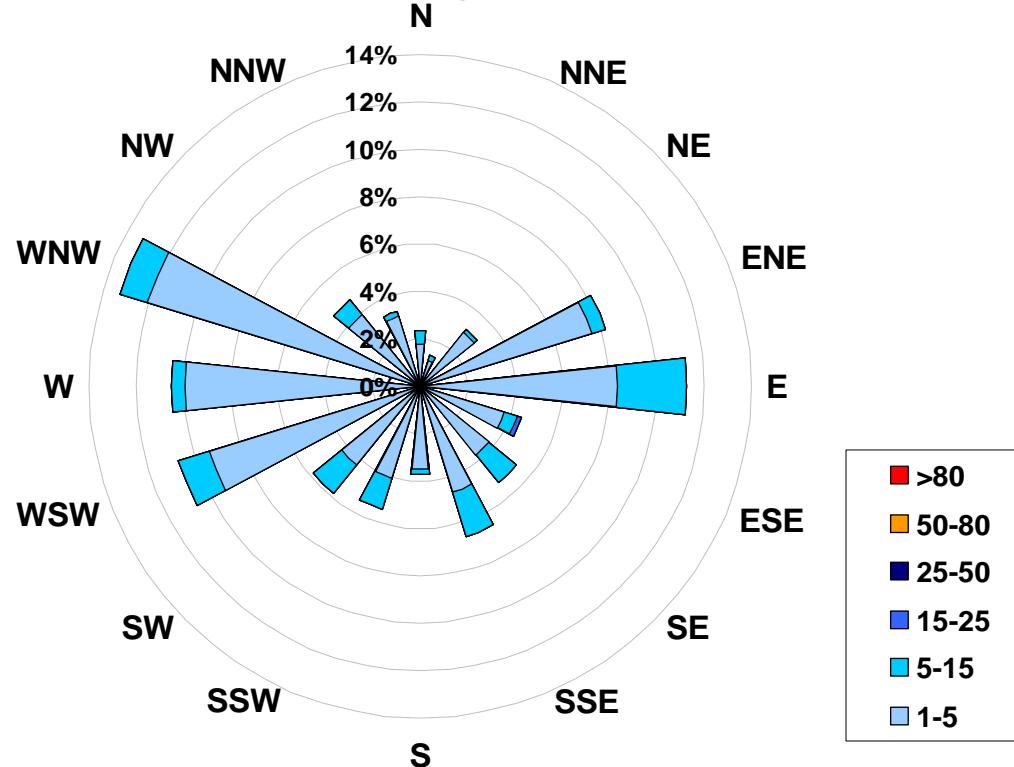


C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

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 August 2007**



Calms: 0%

Frequency Distribution of PM<sub>2.5</sub> in µg/m<sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	648
5	to	15	81
15	to	25	1
25	to	50	0
50	to	80	0
>	80		0
Total Non-Zero Values			730

## PASZA - Henry Pirker Relative Humidity Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### Summary

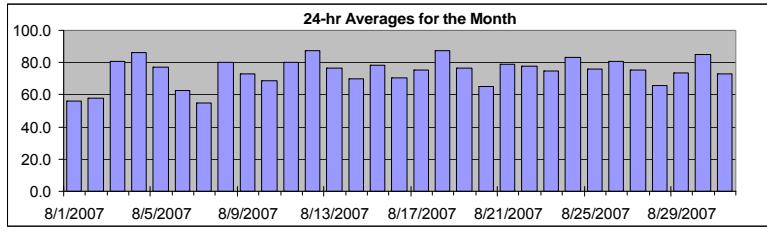
Maximum 1-hr Average:	95.9	%	19-Aug	5:00 6:00
Maximum 24-hr Value:	87.4	%	12-Aug	

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
	95.4	94.0	88.5	78.2	62.7	42.2	34.6	74.4 %	78.2 %

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-Aug-07	73	75	76	76	79	81	75	65	61	59	52	47	44	38	36	35	33	35	37	44	51	55	57	60	56.0	80.7
2-Aug-07	69	83	82	87	88	88	81	70	64	56	57	49	40	36	34	30	33	36	39	40	49	54	58	65	58.0	88.4
3-Aug-07	85	84	82	85	84	91	91	90	86	75	73	79	85	77	69	65	57	74	78	77	81	86	88	89	80.4	91.1
4-Aug-07	90	89	90	91	94	94	93	93	91	91	94	92	91	79	71	61	66	75	77	80	86	91	93	93	86.0	93.6
5-Aug-07	93	92	92	91	91	90	84	84	78	69	69	64	57	59	63	68	61	66	68	70	74	84	89	77.0	93.1	
6-Aug-07	92	93	93	93	94	92	86	80	76	68	60	54	49	42	36	34	33	34	37	42	46	53	57	63	62.8	93.8
7-Aug-07	69	78	80	83	78	64	51	49	52	51	49	46	43	41	37	36	38	38	37	41	50	57	65	78	54.7	83.3
8-Aug-07	82	85	84	82	80	79	79	78	75	75	74	77	74	73	72	72	80	80	83	90	90	91	88	80.1	91.0	
9-Aug-07	87	89	91	90	85	86	90	89	87	84	82	72	66	57	58	48	44	50	48	55	65	73	77	80	73.0	91.2
10-Aug-07	82	84	87	88	90	92	89	80	70	65	59	46	43	39	34	35	39	43	53	80	86	87	89	91	68.9	91.6
11-Aug-07	92	93	94	94	94	94	93	91	87	85	75	68	71	64	63	60	62	62	64	71	86	87	88	89	80.3	94.3
12-Aug-07	90	89	85	85	88	90	89	88	87	85	85	83	85	86	86	89	89	90	91	92	87	86	85	88	87.4	91.6
13-Aug-07	90	88	88	89	91	90	89	86	83	78	75	68	62	62	61	59	56	58	60	63	71	83	89	91	76.3	91.3
14-Aug-07	92	94	95	94	92	88	81	76	72	61	56	49	43	42	42	45	45	49	66	83	86	92	94	69.9	94.5	
15-Aug-07	95	95	95	94	94	93	93	90	87	88	84	78	66	59	60	56	55	58	63	70	75	79	79	78.5	95.5	
16-Aug-07	80	80	84	87	89	91	85	78	75	73	70	65	61	58	54	51	50	53	57	62	67	72	76	76	70.6	90.9
17-Aug-07	74	73	75	75	77	80	84	81	77	71	67	62	59	57	53	53	63	90	86	87	87	90	92	75.1	92.0	
18-Aug-07	93	94	94	94	93	93	95	95	95	95	94	92	88	83	76	72	69	68	73	80	85	89	89	90	87.1	95.1
19-Aug-07	91	92	94	95	96	96	96	95	93	82	73	65	59	55	64	60	54	58	58	63	72	77	69	75	76.3	95.9
20-Aug-07	78	77	75	76	76	79	77	69	60	55	49	48	46	45	51	51	51	64	75	80	71	69	69	75	65.3	80.4
21-Aug-07	86	83	80	79	85	87	90	88	85	83	81	79	77	76	74	68	68	67	72	74	75	78	78	79.2	90.0	
22-Aug-07	87	91	92	92	93	94	94	92	86	80	72	68	62	61	60	62	58	66	71	73	84	83	84	77.8	94.4	
23-Aug-07	87	90	92	94	94	95	95	93	82	73	68	61	56	52	50	49	48	50	59	71	81	84	85	92	75.0	94.7
24-Aug-07	92	93	94	95	95	95	96	95	95	93	86	78	72	68	65	63	62	64	68	76	84	88	89	90	83.1	95.5
25-Aug-07	94	94	93	95	96	95	95	95	95	95	93	86	78	66	67	62	55	50	49	51	49	52	75	77	75.7	95.8
26-Aug-07	88	88	86	83	81	82	81	79	77	77	77	70	80	81	74	73	76	75	74	76	79	85	91	92	80.6	92.3
27-Aug-07	94	94	93	93	93	93	92	91	85	76	71	64	56	52	52	51	50	55	59	69	74	87	89	75.0	93.6	
28-Aug-07	90	89	91	94	92	92	90	77	71	69	63	56	50	45	43	42	40	41	42	48	58	64	68	66	65.9	93.6
29-Aug-07	67	69	72	75	81	79	84	82	70	67	56	57	54	51	55	62	73	75	83	88	91	90	91	93	73.6	92.8
30-Aug-07	93	94	93	91	92	92	89	86	86	82	75	71	71	74	78	78	80	88	92	90	87	89	90	85.0	93.8	
31-Aug-07	91	90	86	88	83	85	84	80	78	73	68	63	52	50	52	53	55	55	57	70	79	83	85	83	72.7	91.2

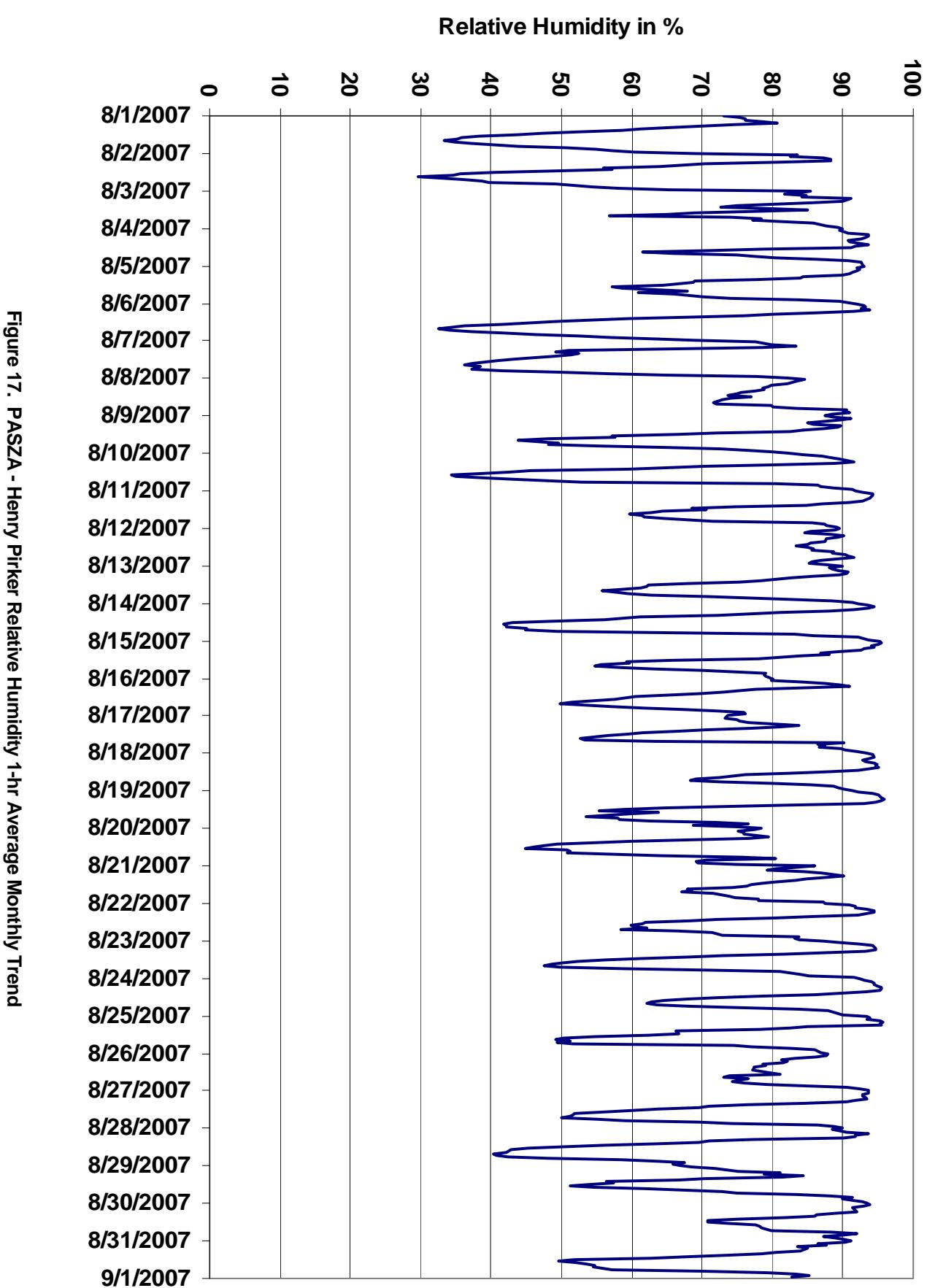
### HOURLY AVERAGE TABLE

### Relative Humidity (RH)



### Status Flag Characters

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



# PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	27.7 °C	2-Aug 14:00 15:00
Maximum 24-hr Value:	19.7 °C	2-Aug

AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 26.4	95 21.8	75 17.0	50 13.3	25 10.4	5 7.7	1 4.7	Average 13.8 °C	Median 13.3 °C

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-Aug-07	11 1:00	10 2:00	10 3:00	10 4:00	9 5:00	8 6:00	11 7:00	14 8:00	15 9:00	18 10:00	20 11:00	22 12:00	23 13:00	24 14:00	25 15:00	25 16:00	25 17:00	24 18:00	24 19:00	22 20:00	21 21:00	19 22:00	18 23:00	17 0:00	17.7	25.0	
2-Aug-07	15 1:00	12 2:00	13 3:00	11 4:00	11 5:00	10 6:00	13 7:00	16 8:00	18 9:00	21 10:00	21 11:00	24 12:00	26 13:00	27 14:00	27 15:00	28 16:00	27 17:00	27 18:00	27 19:00	26 20:00	24 21:00	21 22:00	20 23:00	19 0:00	19.7	27.7	
3-Aug-07	16 1:00	15 2:00	16 3:00	14 4:00	14 5:00	13 6:00	14 7:00	14 8:00	15 9:00	17 10:00	17 11:00	16 12:00	16 13:00	17 14:00	18 15:00	18 16:00	20 17:00	21 18:00	18 19:00	17 20:00	16 21:00	15 22:00	14 23:00	13 0:00	15.9	21.2	
4-Aug-07	13 1:00	14 2:00	14 3:00	14 4:00	13 5:00	13 6:00	14 7:00	14 8:00	14 9:00	14 10:00	14 11:00	15 12:00	15 13:00	14 14:00	15 15:00	16 16:00	18 17:00	20 18:00	22 19:00	19 20:00	17 21:00	15 22:00	14 23:00	13 0:00	15.5	21.8	
5-Aug-07	12 1:00	12 2:00	12 3:00	12 4:00	11 5:00	11 6:00	12 7:00	12 8:00	15 9:00	17 10:00	20 11:00	20 12:00	21 13:00	23 14:00	21 15:00	23 16:00	22 17:00	21 18:00	19 19:00	19 20:00	17 21:00	15 22:00	14 23:00	13 0:00	16.4	22.9	
6-Aug-07	12 1:00	12 2:00	11 3:00	11 4:00	10 5:00	10 6:00	11 7:00	13 8:00	15 9:00	17 10:00	20 11:00	22 12:00	24 13:00	26 14:00	27 15:00	27 16:00	26 17:00	26 18:00	25 19:00	23 20:00	22 21:00	20 22:00	19 23:00	17 0:00	18.7	27.1	
7-Aug-07	16 1:00	15 2:00	14 3:00	13 4:00	14 5:00	16 6:00	18 7:00	18 8:00	18 9:00	18 10:00	19 11:00	21 12:00	21 13:00	23 14:00	21 15:00	23 16:00	22 17:00	22 18:00	21 19:00	20 20:00	18 21:00	16 22:00	13 23:00	11 0:00	18.0	22.9	
8-Aug-07	10 1:00	10 2:00	11 3:00	10 4:00	9 5:00	9 6:00	8 7:00	8 8:00	9 9:00	9 10:00	10 11:00	10 12:00	11 13:00	11 14:00	12 15:00	11 16:00	11 17:00	10 18:00	10 19:00	9 20:00	9 21:00	8 22:00	9 23:00	9 0:00	9.6	11.6	
9-Aug-07	9 1:00	9 2:00	9 3:00	9 4:00	9 5:00	8 6:00	8 7:00	8 8:00	9 9:00	9 10:00	10 11:00	12 13:00	14 15:00	15 16:00	17 17:00	17 18:00	16 19:00	17 20:00	15 21:00	13 22:00	11 23:00	10 0:00	11.6	17.2			
10-Aug-07	9 1:00	9 2:00	8 3:00	8 4:00	7 5:00	7 6:00	8 7:00	8 8:00	10 9:00	13 10:00	15 11:00	16 12:00	17 13:00	19 14:00	20 15:00	21 16:00	21 17:00	20 18:00	18 19:00	16 20:00	12 21:00	11 22:00	10 23:00	10 0:00	13.2	20.8	
11-Aug-07	10 1:00	9 2:00	8 3:00	8 4:00	8 5:00	8 6:00	9 7:00	9 8:00	10 9:00	11 10:00	12 11:00	14 12:00	15 13:00	15 14:00	15 15:00	16 16:00	16 17:00	16 18:00	16 19:00	15 20:00	13 21:00	12 22:00	12 23:00	12 0:00	12.3	16.4	
12-Aug-07	11 1:00	11 2:00	10 3:00	9 4:00	9 5:00	9 6:00	8 7:00	8 8:00	8 9:00	9 10:00	9 11:00	10 12:00	10 13:00	9 14:00	9 15:00	10 16:00	10 17:00	10 18:00	10 19:00	10 20:00	10 21:00	9 22:00	9 23:00	9 0:00	9.4	11.2	
13-Aug-07	8 1:00	8 2:00	8 3:00	8 4:00	8 5:00	8 6:00	8 7:00	8 8:00	9 9:00	10 10:00	10 11:00	12 13:00	13 14:00	13 15:00	14 16:00	15 17:00	15 18:00	14 19:00	13 20:00	12 21:00	10 22:00	8 23:00	8 0:00	10.6	15.2		
14-Aug-07	7 1:00	6 2:00	6 3:00	5 4:00	6 5:00	6 6:00	7 7:00	7 8:00	9 9:00	12 10:00	15 11:00	16 12:00	18 13:00	19 14:00	19 15:00	20 16:00	20 17:00	20 18:00	20 19:00	20 20:00	17 21:00	14 22:00	12 23:00	12 0:00	13.3	20.3	
15-Aug-07	11 1:00	11 2:00	11 3:00	11 4:00	10 5:00	10 6:00	11 7:00	12 8:00	13 9:00	13 10:00	15 11:00	15 12:00	16 13:00	18 14:00	18 15:00	18 16:00	20 17:00	20 18:00	20 19:00	20 20:00	18 21:00	14 22:00	13 23:00	13 0:00	14.6	20.5	
16-Aug-07	12 1:00	11 2:00	10 3:00	9 4:00	9 5:00	9 6:00	10 7:00	11 8:00	14 9:00	16 10:00	17 11:00	19 12:00	20 13:00	21 14:00	22 15:00	23 16:00	23 17:00	22 18:00	20 19:00	18 20:00	16 21:00	15 22:00	15 23:00	15 0:00	16.0	23.1	
17-Aug-07	15 1:00	15 2:00	14 3:00	14 4:00	13 5:00	13 6:00	12 7:00	13 8:00	15 9:00	17 10:00	19 11:00	21 12:00	21 13:00	23 14:00	22 15:00	22 16:00	20 17:00	20 18:00	16 19:00	16 20:00	14 21:00	13 22:00	12 23:00	11 0:00	16.0	22.6	
18-Aug-07	10 1:00	9 2:00	9 3:00	9 4:00	9 5:00	9 6:00	10 7:00	10 8:00	10 9:00	10 10:00	10 11:00	11 12:00	11 13:00	13 14:00	16 15:00	16 16:00	17 17:00	17 18:00	16 19:00	15 20:00	14 21:00	13 22:00	13 23:00	13 0:00	12.4	17.3	
19-Aug-07	12 1:00	12 2:00	12 3:00	11 4:00	11 5:00	11 6:00	11 7:00	11 8:00	12 9:00	15 10:00	17 11:00	19 12:00	19 13:00	19 14:00	19 15:00	18 16:00	18 17:00	18 18:00	18 19:00	17 20:00	17 21:00	15 22:00	14 23:00	13 0:00	15.1	20.0	
20-Aug-07	12 1:00	11 2:00	12 3:00	11 4:00	10 5:00	10 6:00	11 7:00	13 8:00	15 9:00	17 10:00	17 11:00	13 12:00	15 13:00	15 14:00	15 15:00	16 16:00	17 17:00	17 18:00	17 19:00	13 20:00	13 21:00	13 22:00	13 23:00	13 0:00	14.0	17.8	
21-Aug-07	11 1:00	12 2:00	12 3:00	12 4:00	12 5:00	12 6:00	11 7:00	11 8:00	12 9:00	14 10:00	14 11:00	11 12:00	12 13:00	14 14:00	14 15:00	15 16:00	17 17:00	17 18:00	17 19:00	15 20:00	14 21:00	13 22:00	12 23:00	12 0:00	13.7	17.2	
22-Aug-07	12 1:00	11 2:00	11 3:00	11 4:00	11 5:00	11 6:00	11 7:00	12 8:00	13 9:00	14 10:00	12 11:00	12 12:00	13 13:00	14 14:00	16 15:00	16 16:00	18 17:00	16 18:00	17 19:00	16 20:00	15 21:00	14 22:00	13 23:00	12 0:00	14.1	18.9	
23-Aug-07	11 1:00	11 2:00	11 3:00	11 4:00	10 5:00	10 6:00	10 7:00	11 8:00	14 9:00	17 10:00	18 11:00	19 12:00	19 13:00	19 14:00	19 15:00	19 16:00	20 17:00	20 18:00	20 19:00	17 20:00	15 21:00	13 22:00	12 23:00	11 0:00	14.5	20.0	
24-Aug-07	11 1:00	11 2:00	9 3:00	9 4:00	9 5:00	8 6:00	8 7:00	8 8:00	9 9:00	10 10:00	12 11:00	14 12:00	14 13:00	18 14:00	18 15:00	18 16:00	18 17:00	18 18:00	18 19:00	17 20:00	17 21:00	14 22:00	13 23:00	12 0:00	12.9	18.3	
25-Aug-07	12 1:00	11 2:00	11 3:00	11 4:00	10 5:00	10 6:00	10 7:00	13 8:00	13 9:00	10 10:00	12 11:00	16 13:00	16 14:00	16 15:00	16 16:00	18 17:00	18 18:00	18 19:00	18 20:00	18 21:00	15 22:00	13 23:00	12 0:00	13.2	18.2		
26-Aug-07	7 1:00	8 2:00	8 3:00	8 4:00	7 5:00	7 6:00	8 7:00	8 8:00	8 9:00	9 10:00	10 11:00	9 12:00	10 13:00	14 15:00	16 17:00	18 19:00	18 20:00	19 21:00	19 22:00	17 23:00	15 0:00	8.2	10.4				
27-Aug-07	4 1:00	5 2:00	5 3:00	5 4:00	5 5:00	5 6:00	5 7:00	5 8:00	8 9:00	11 10:00	11 11:00	12 13:00	14 15:00	16 17:00	15 16:00	15 17:00	15 18:00	15 19:00	14 20:00	13 21:00	10 22:00	9 23:00	7 0:00	9.5	15.8		
28-Aug-07	5 1:00	5 2:00	4 3:00	4 4:00	3 5:00	3 6:00	3 7:00	8 8:00	10 9:00	12 10:00	12 11:00	13 12:00	13 13:00	15 14:00	17 15:00	17 16:00	17 17:00	17 18:00	17 19:00	17 20:00	16 21:00	14 22:00	13 23:00	11 0:00	11.6	18.8	
29-Aug-07	11 1:00	1																									

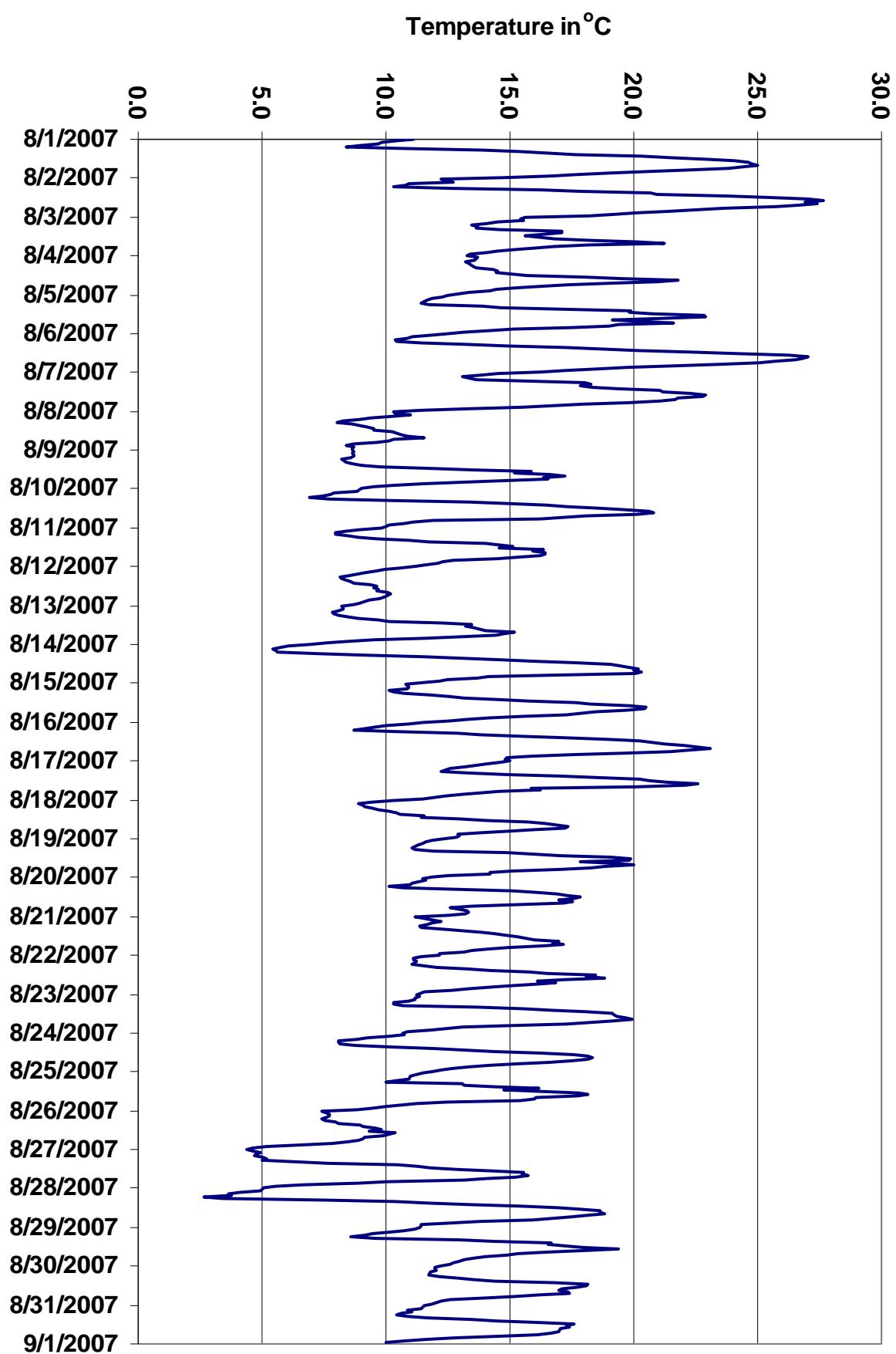


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

# PASZA - Henry Pirker Solar Radiation Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	716.9	W/m <sup>2</sup>	1-Aug	12:00 13:00
Maximum 24-hr Value:	270.0	W/m <sup>2</sup>	1-Aug	

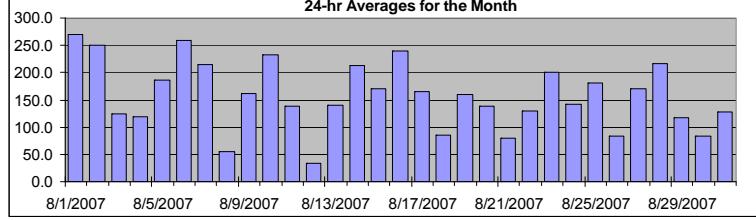
AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	689.2	604.5	278.1	49.1	0.0	0.0	0.0	157.9 W/m <sup>2</sup>	49.1 W/m <sup>2</sup>

## Day Mountain Standard Time

	Hour Start 1:00	0:00	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-Aug-07	0	0	0	0	1	13	127	232	399	522	615	681	717	715	667	595	479	366	240	87	26	0	0	0	270.0	716.9	
2-Aug-07	0	0	0	0	0	11	127	225	380	418	508	677	712	710	589	507	467	383	203	82	11	0	0	0	250.5	712.3	
3-Aug-07	0	0	0	0	0	2	17	32	191	337	156	103	143	283	427	407	471	225	107	59	15	0	0	0	123.9	471.2	
4-Aug-07	0	0	0	0	0	3	13	35	84	36	87	138	222	445	468	600	362	204	99	48	13	0	0	0	119.0	599.9	
5-Aug-07	0	0	0	0	0	7	68	182	226	402	440	363	484	637	571	270	212	366	125	96	34	0	0	0	186.8	637.1	
6-Aug-07	0	0	0	0	0	9	120	206	369	496	592	659	696	696	665	586	484	355	203	85	14	0	0	0	259.7	695.8	
7-Aug-07	0	0	0	0	0	14	84	98	140	308	392	611	532	699	639	531	401	369	234	97	15	0	0	0	215.2	699.4	
8-Aug-07	0	0	0	0	0	5	50	68	148	115	100	101	100	170	117	77	172	49	44	15	8	0	0	0	55.8	172.2	
9-Aug-07	0	0	0	0	0	2	13	35	59	83	143	297	448	672	445	555	463	327	226	82	10	0	0	0	160.8	671.7	
10-Aug-07	0	0	0	0	0	9	92	214	349	484	585	659	700	605	680	607	478	97	32	3	2	0	0	0	233.1	699.8	
11-Aug-07	0	0	0	0	0	4	33	70	144	282	483	367	273	586	285	267	245	191	89	15	3	0	0	0	139.0	586.1	
12-Aug-07	0	0	0	0	0	2	18	40	56	50	54	87	114	121	82	55	48	47	31	18	3	0	0	0	34.4	121.1	
13-Aug-07	0	0	0	0	0	2	23	56	108	143	176	341	443	286	396	337	458	329	215	66	6	0	0	0	141.1	458.1	
14-Aug-07	0	0	0	0	0	5	101	189	354	471	408	570	652	626	520	458	274	270	164	31	2	0	0	0	212.3	651.5	
15-Aug-07	0	0	0	0	0	2	26	65	105	190	346	310	528	422	645	548	447	271	102	73	6	0	0	0	170.3	644.6	
16-Aug-07	0	0	0	0	0	4	88	182	337	459	558	627	661	659	622	548	444	319	187	56	5	0	0	0	239.8	660.8	
17-Aug-07	0	0	0	0	0	2	28	144	262	438	539	629	452	475	613	284	20	36	36	17	4	0	0	0	165.8	628.8	
18-Aug-07	0	0	0	0	0	0	4	5	5	27	95	151	294	206	339	247	217	300	104	54	6	0	0	0	85.6	339.2	
19-Aug-07	0	0	0	0	0	1	15	49	143	366	459	550	632	315	220	423	351	184	117	24	1	0	0	0	160.5	632.4	
20-Aug-07	0	0	0	0	0	3	60	189	347	393	392	356	426	263	239	296	195	89	42	15	0	0	0	0	137.6	426.2	
21-Aug-07	0	0	0	0	0	0	8	51	78	106	143	163	228	224	241	261	203	151	52	13	2	0	0	0	80.2	261.4	
22-Aug-07	0	0	0	0	0	1	19	77	128	210	317	328	544	339	399	170	191	241	120	19	1	0	0	0	129.4	543.7	
23-Aug-07	0	0	0	0	0	2	13	58	263	411	489	627	586	657	521	446	423	239	62	6	0	0	0	0	200.1	656.8	
24-Aug-07	0	0	0	0	1	3	26	75	130	203	374	539	581	495	368	287	197	82	31	4	0	0	0	0	141.5	580.9	
25-Aug-07	0	0	0	0	0	1	46	185	262	405	425	199	557	582	554	420	304	292	111	12	0	0	0	0	181.5	582.5	
26-Aug-07	0	0	0	0	0	1	28	67	119	191	118	129	180	233	394	247	129	104	60	13	0	0	0	0	83.9	394.2	
27-Aug-07	0	0	0	0	0	1	19	64	159	277	285	288	505	621	615	483	410	262	83	31	1	0	0	0	171.0	620.7	
28-Aug-07	0	0	0	0	0	1	47	162	297	418	521	592	624	630	575	511	389	270	130	29	0	0	0	0	216.5	630.2	
29-Aug-07	0	0	0	0	0	1	19	98	227	238	362	298	549	489	200	149	90	70	32	11	0	0	0	0	118.0	548.9	
30-Aug-07	0	0	0	0	0	0	22	62	106	189	441	319	193	161	167	120	140	49	17	3	0	0	0	0	82.9	440.6	
31-Aug-07	0	0	0	0	0	0	18	62	148	211	287	524	558	398	307	197	144	104	84	36	1	0	0	0	128.3	557.7	
Hourly Avg	0.0	0.0	0.0	0.0	0.1	3.6	44.3	105.7	197.5	286.4	351.3	396.2	462.4	465.2	437.7	370.5	300.3	214.2	109.1	38.7	6.1	0.0	0.0	0.0			
Hourly Max	0.0	0.0	0.0	0.0	0.9	14.1	127.1	231.6	399.0	521.5	615.3	680.6	716.9	715.2	679.6	606.7	484.3	383.0	240.0	96.8	33.9	0.5	0.0	0.0			

## HOURLY AVERAGE TABLE

## Solar Radiation (SR)



## Status Flag Characters

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

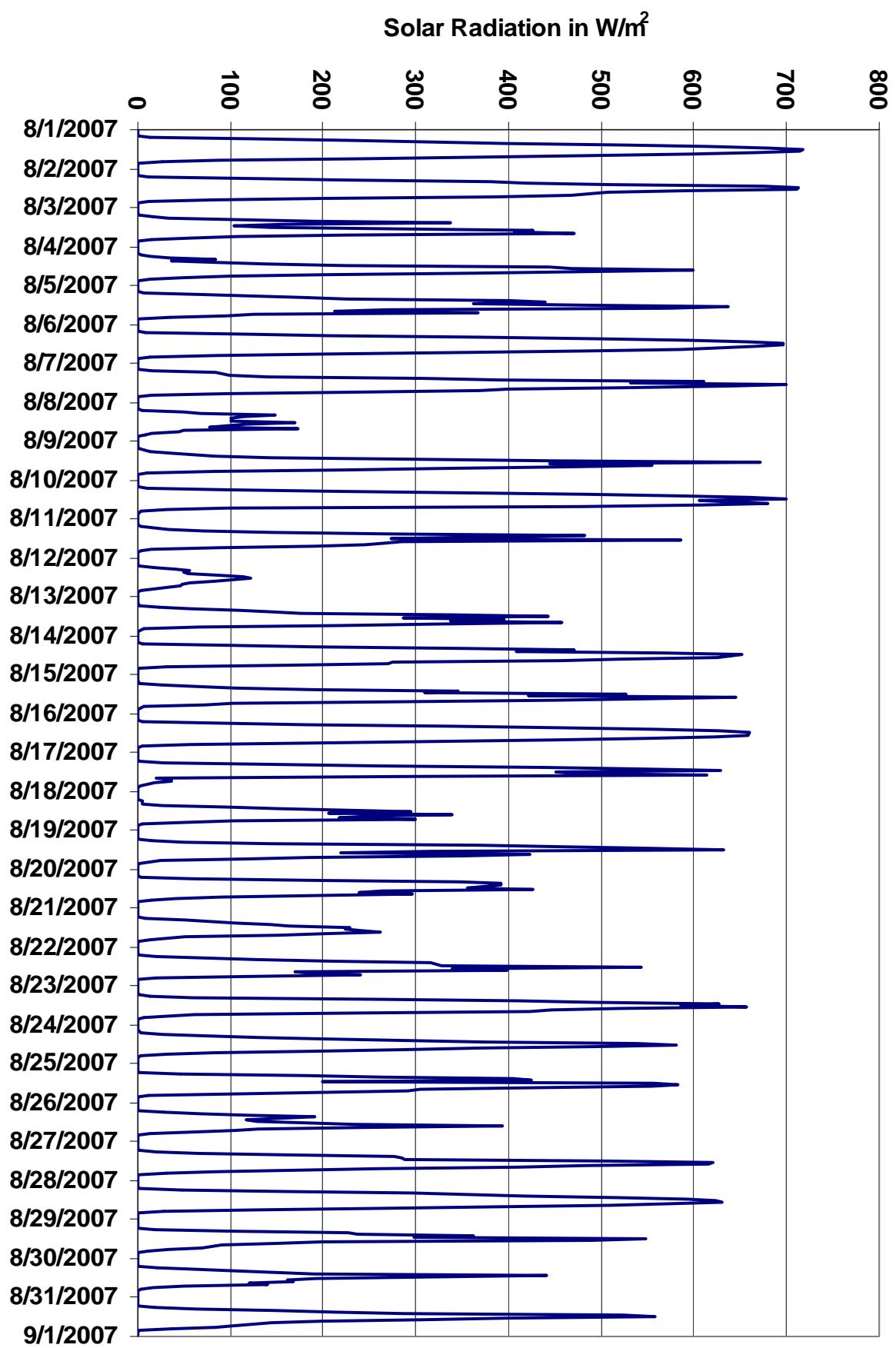


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

## PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### Summary

Maximum 1-hr Average:	31.2 km/hr	20-Aug 10:00 11:00
Maximum 24-hr Value:	19.0 km/hr	20-Aug

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
	28.3	21.7	12.4	9.4	7.4	6.0	5.3	10.8 km/hr

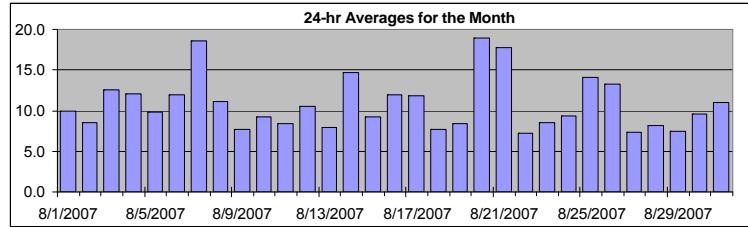
### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	6:00 7:00	7:00 8:00	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	Daily Max
	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			
1-Aug-07	13	11	10	9	10	8	10	12	13	11	8	9	9	8	8	9	9	10	12	13	11	9	8	8	10.0	13.2	
2-Aug-07	6	7	7	7	7	7	7	7	8	7	9	7	8	8	8	10	10	11	10	13	10	10	10	10	8.6	13.4	
3-Aug-07	11	16	12	20	10	10	10	12	13	10	7	10	10	13	13	11	14	16	15	15	15	14	13	14	12.5	19.6	
4-Aug-07	11	11	12	12	13	12	11	12	15	17	16	15	15	14	11	10	13	15	13	10	7	7	9	7	12.0	16.6	
5-Aug-07	8	10	10	11	11	11	10	10	10	9	8	9	8	8	11	15	10	9	15	12	12	7	6	6	9.8	14.8	
6-Aug-07	6	6	6	7	6	8	8	10	9	11	11	13	13	15	17	22	24	24	20	16	11	9	8	8	12.0	24.0	
7-Aug-07	8	8	7	7	9	15	24	29	27	27	27	24	24	21	22	24	24	24	27	24	19	14	9	12	11	18.5	29.2
8-Aug-07	12	13	16	16	17	17	17	14	13	11	11	9	9	8	8	7	8	10	9	8	9	8	8	8	11.1	16.7	
9-Aug-07	8	8	7	5	6	6	7	7	8	8	7	6	7	8	8	8	8	9	8	10	11	8	10	9	7.7	10.5	
10-Aug-07	8	7	8	8	7	6	7	6	6	7	9	12	11	9	8	9	12	13	16	11	11	14	11	10	9.2	15.5	
11-Aug-07	10	9	9	6	6	6	7	7	6	9	7	7	9	10	10	9	10	11	12	9	9	9	8	7	8.5	12.2	
12-Aug-07	10	12	12	13	13	11	12	13	12	13	11	11	13	17	14	9	5	6	7	7	8	8	8	7	10.5	16.5	
13-Aug-07	8	7	7	7	6	7	7	8	8	7	6	6	6	9	10	10	9	9	10	10	9	8	8	7	7.9	10.5	
14-Aug-07	7	7	7	7	10	10	12	10	13	16	22	25	29	28	26	24	21	21	16	11	9	7	6	5	14.7	29.3	
15-Aug-07	6	7	6	6	5	6	5	6	8	10	11	11	12	12	11	13	13	12	11	10	10	9	10	9	9.2	12.8	
16-Aug-07	8	8	7	6	6	6	7	9	11	10	10	12	14	15	17	18	17	19	18	16	14	13	11	14	12.0	18.6	
17-Aug-07	12	12	12	12	10	10	9	12	10	12	11	11	12	12	13	15	13	17	15	17	10	8	7	9	11.8	17.1	
18-Aug-07	8	7	7	6	7	7	9	7	8	7	9	10	9	8	7	6	6	8	10	10	9	6	6	7	7.7	10.4	
19-Aug-07	6	6	8	6	7	7	7	8	9	8	8	8	8	7	10	8	8	9	10	9	13	9	12	9	8.4	13.0	
20-Aug-07	10	11	12	9	9	10	12	15	20	25	31	29	28	29	24	22	26	19	17	16	19	20	20	22	19.0	31.2	
21-Aug-07	20	21	22	21	22	22	19	19	20	20	22	23	23	21	18	20	17	14	11	12	11	11	10	8	17.7	23.0	
22-Aug-07	7	7	7	7	6	6	5	6	6	6	7	6	8	8	11	9	9	8	9	8	6	7	7	7.2	10.7		
23-Aug-07	7	6	6	7	6	7	7	6	7	8	9	9	12	13	13	11	9	10	10	11	8	8	7	6	8.5	13.1	
24-Aug-07	5	5	5	5	7	6	6	7	6	7	9	10	13	12	13	13	14	13	13	11	9	12	13	10	9.4	13.7	
25-Aug-07	12	9	7	8	10	9	7	6	10	10	17	18	17	18	24	28	30	29	24	12	10	8	7	10	14.1	30.1	
26-Aug-07	12	15	14	16	17	12	12	15	18	17	16	14	15	17	19	18	15	14	11	7	7	7	6	13.3	19.0		
27-Aug-07	7	6	5	6	6	7	7	5	6	7	8	9	9	8	10	11	11	11	10	8	5	5	7	5	7.3	11.4	
28-Aug-07	7	6	7	6	7	7	6	7	7	8	9	9	9	9	10	9	9	9	10	9	10	10	8	8.2	9.9		
29-Aug-07	8	7	7	6	6	6	6	6	6	7	7	9	9	9	10	10	7	6	6	7	8	7	7	7.4	10.2		
30-Aug-07	10	11	11	11	8	7	8	7	9	10	9	7	7	9	10	10	8	9	8	11	15	14	10	10	9.6	15.1	
31-Aug-07	10	9	9	7	9	7	8	9	12	12	14	16	20	20	16	14	11	10	9	8	8	7	8	11.0	20.3		

1-hr Average	9.0	9.3	9.2	9.1	9.0	8.9	9.4	10.0	10.7	11.1	11.7	12.0	12.7	13.1	13.2	13.2	12.9	13.1	12.5	11.2	10.3	9.4	9.0	8.9
Hourly Max	19.7	21.4	21.6	21.4	21.9	21.7	23.6	29.2	26.7	27.2	31.2	29.3	29.0	26.5	27.8	30.1	29.0	24.3	19.3	19.2	20.0	20.3	21.8	

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

# PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

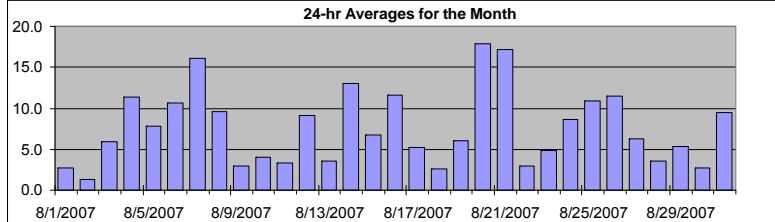
Maximum 1-hr Average:	30.9	km/hr	20-Aug	10:00 11:00
Maximum 24-hr Value:	17.9	km/hr	20-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				AverageV
99	95	75	50	25 5 1
28.0	21.6	11.9	8.7	6.4 3.7 2.6
				9.7 km/hr

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 24:00	23:00 0:00	
1-Aug-07	12	11	10	9	10	8	10	12	13	11	6	8	6	4	4	4	7	8	12	13	11	9	8	8	2.7	12.9
2-Aug-07	4	6	4	6	7	6	7	7	7	6	8	5	3	7	6	9	5	10	10	13	9	10	9	8	1.3	12.6
3-Aug-07	4	15	3	10	7	10	9	9	12	5	6	8	10	13	13	6	13	16	15	15	14	13	14	13	5.9	15.7
4-Aug-07	11	11	12	12	13	12	11	12	15	16	16	15	14	14	10	9	13	15	13	9	6	6	8	7	11.4	16.5
5-Aug-07	8	10	9	11	10	11	11	9	9	7	7	8	7	6	10	13	10	9	14	11	4	6	4	6	7.8	14.3
6-Aug-07	5	6	6	7	6	7	8	9	9	10	10	12	12	14	16	22	24	23	19	16	11	9	7	7	10.6	23.7
7-Aug-07	7	8	7	7	9	15	23	29	27	27	27	24	24	21	22	23	24	26	24	19	14	9	11	11	16.0	29.1
8-Aug-07	12	13	16	16	16	17	16	14	13	10	9	8	9	8	7	4	7	10	7	6	8	7	8	8	9.6	16.6
9-Aug-07	8	8	6	4	6	6	7	7	7	8	5	3	4	6	3	3	3	7	6	9	10	8	9	9	3.0	10.4
10-Aug-07	8	7	8	7	7	6	6	4	3	5	8	10	10	7	5	7	11	13	2	8	13	10	5	4	4.1	13.4
11-Aug-07	9	9	9	5	5	5	5	7	6	4	9	5	3	9	9	8	7	9	10	12	8	8	7	7	3.3	11.9
12-Aug-07	10	12	12	13	12	11	12	13	12	13	11	10	13	16	13	8	2	6	6	7	8	8	7	7	9.1	16.3
13-Aug-07	8	7	5	6	6	6	7	8	8	5	5	4	4	7	10	9	8	7	9	10	8	8	8	7	3.6	10.0
14-Aug-07	7	7	6	7	9	9	11	10	12	16	22	25	29	28	26	24	21	21	16	10	9	6	5	3	13.0	28.9
15-Aug-07	4	6	4	4	2	5	4	5	8	10	10	10	10	12	11	10	12	12	12	11	10	10	10	9	6.8	12.4
16-Aug-07	8	8	7	5	6	6	6	8	11	10	10	11	13	15	17	17	17	18	18	16	14	13	11	14	11.6	18.3
17-Aug-07	12	12	12	12	10	10	9	11	10	11	11	10	12	11	13	14	10	15	13	16	10	8	7	9	5.2	16.4
18-Aug-07	7	7	7	6	6	2	6	5	4	2	4	9	9	6	6	1	3	7	10	10	8	5	5	7	2.6	10.2
19-Aug-07	6	4	7	6	7	6	7	8	9	7	6	6	5	3	10	3	6	8	7	9	13	9	12	9	6.0	12.8
20-Aug-07	9	11	11	7	9	10	12	15	20	25	31	29	28	29	23	22	25	18	17	15	19	20	20	22	17.9	30.9
21-Aug-07	20	21	21	21	22	22	19	18	20	20	21	23	23	21	18	20	16	14	11	12	11	11	9	7	17.1	22.8
22-Aug-07	7	6	6	6	5	5	5	3	5	5	4	4	3	5	6	10	7	9	7	5	5	4	6	7	2.9	10.2
23-Aug-07	7	5	3	4	6	7	6	6	6	8	8	7	11	12	11	9	4	8	9	6	4	8	5	3	4.9	12.4
24-Aug-07	3	3	5	4	6	6	5	7	5	5	8	9	12	11	12	13	13	13	10	9	12	13	7	8.7	13.4	
25-Aug-07	4	6	7	7	10	8	6	6	10	9	16	18	17	17	23	27	30	29	24	12	10	8	7	10	10.9	29.9
26-Aug-07	11	15	14	16	17	12	12	15	17	16	15	13	14	17	19	18	14	14	11	7	7	6	6	5	11.4	18.7
27-Aug-07	6	6	4	5	4	6	6	5	3	4	3	7	10	9	9	10	10	9	7	4	3	3	3	7	6.3	9.9
28-Aug-07	4	5	7	6	7	6	4	6	7	8	8	7	5	8	8	8	7	5	9	9	9	10	10	8	3.6	9.8
29-Aug-07	8	7	7	3	2	5	6	6	5	6	6	9	8	7	9	10	7	5	6	7	7	6	6	10	5.3	10.1
30-Aug-07	10	11	11	11	7	7	7	8	10	8	3	4	8	10	8	6	7	4	9	14	14	10	10	10	2.8	14.4
31-Aug-07	10	9	7	4	9	7	8	9	11	11	14	15	20	20	15	14	11	10	10	9	8	8	6	8	9.4	20.0

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

## PASZA - Henry Pirker Wind Direction Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data 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					
	351.5	326.2	277.9	228.2	107.0	45.6	9.6	260 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	0:00
1-Aug-07	259	263	274	259	273	282	277	267	247	240	232	220	238	203	149	137	114	107	80	83	85	85	92	100	216	SW
2-Aug-07	357	300	354	287	280	226	237	255	234	221	206	219	280	246	287	350	18	89	108	125	137	118	88	146	212	SSW
3-Aug-07	132	334	118	248	112	156	133	268	320	326	196	209	169	172	166	199	281	301	287	269	257	260	248	251	240	WSW
4-Aug-07	250	279	277	281	285	286	289	285	280	284	293	297	307	324	310	298	280	284	280	290	271	229	249	236	284	WNW
5-Aug-07	240	242	233	239	241	245	247	265	252	251	254	267	269	246	269	312	314	270	238	223	290	103	156	156	253	WSW
6-Aug-07	184	221	225	246	282	252	201	211	194	186	202	207	203	225	229	253	249	250	246	253	239	214	166	150	227	SW
7-Aug-07	140	145	157	166	212	240	261	249	245	252	261	265	262	270	273	275	273	269	261	253	254	260	322	317	258	WSW
8-Aug-07	314	306	307	323	330	335	347	349	353	338	347	350	336	325	297	265	278	300	217	258	274	301	291	309	318	NW
9-Aug-07	292	293	305	345	50	27	64	69	75	63	55	115	202	199	149	243	316	358	68	88	85	91	97	100	66	ENE
10-Aug-07	95	97	98	108	100	105	134	194	141	118	115	139	154	188	200	163	108	95	202	5	343	332	25	276	121	ESE
11-Aug-07	270	289	327	300	282	302	243	289	145	170	153	93	55	60	54	56	57	59	68	47	7	53	21	36	33	NNE
12-Aug-07	33	28	34	46	41	40	44	46	44	47	39	22	1	357	1	26	31	303	301	310	8	0	4	303	20	NNE
13-Aug-07	301	317	322	315	311	313	308	309	321	11	105	215	157	266	281	270	230	230	206	193	185	156	159	172	255	WSW
14-Aug-07	163	152	197	225	236	269	227	226	232	248	232	237	244	244	255	257	265	264	271	295	309	308	291	287	249	WSW
15-Aug-07	190	349	358	287	230	345	136	44	81	88	109	97	102	87	66	71	83	71	66	48	48	65	68	67	72	ENE
16-Aug-07	54	36	26	38	28	31	39	61	79	78	81	80	65	74	75	77	79	71	64	58	52	54	56	68	64	ENE
17-Aug-07	65	69	60	68	75	70	71	79	69	76	83	82	75	57	67	81	196	308	259	293	312	318	288	279	53	NE
18-Aug-07	292	295	287	228	284	147	300	8	145	68	181	203	145	133	158	104	192	117	98	88	102	160	136	64	143	SE
19-Aug-07	44	108	113	82	122	134	127	131	164	169	183	221	199	163	163	163	171	140	219	229	189	197	239	217	170	S
20-Aug-07	218	221	243	286	237	217	226	235	244	246	251	248	250	246	270	281	272	298	295	269	256	244	253	258	255	WSW
21-Aug-07	254	255	257	257	260	264	268	267	274	283	291	287	292	294	296	292	292	294	285	270	265	287	287	291	277	W
22-Aug-07	287	307	302	328	284	292	250	209	197	225	198	244	312	334	344	22	84	142	291	91	162	288	274	289	WNW	
23-Aug-07	289	293	278	280	300	313	298	309	280	256	266	279	283	295	312	298	320	337	70	165	40	90	100	239	297	WNW
24-Aug-07	342	110	96	102	82	152	149	116	106	84	99	104	98	104	92	86	80	82	73	78	87	91	106	109	95	E
25-Aug-07	54	149	161	190	218	263	285	225	202	196	244	247	250	240	245	259	261	251	248	318	310	295	304	281	250	WSW
26-Aug-07	283	274	277	279	276	279	277	266	268	260	273	272	313	338	333	337	353	341	331	332	335	319	302	289	298	WNW
27-Aug-07	255	252	184	284	255	209	218	237	226	243	249	233	226	217	245	224	254	265	293	236	173	317	284	298	245	WSW
28-Aug-07	277	269	286	258	257	280	306	236	232	201	187	165	163	173	179	160	165	133	121	92	97	100	97	79	172	S
29-Aug-07	73	78	87	95	88	87	141	154	283	334	34	93	124	135	165	162	159	90	143	77	100	120	117	104	110	ESE
30-Aug-07	96	103	99	107	95	39	58	65	67	78	100	196	360	82	99	112	85	291	219	247	268	264	227	219	107	ESE
31-Aug-07	213	194	235	268	246	242	238	252	238	260	253	238	243	245	232	219	218	206	182	156	155	145	155	233	226	SW

Hourly Avg 272 280 279 274 273 274 263 263 247 249 237 234 247 250 260 260 269 271 291 244 244 274 296 244 250 245

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

### 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 80.5 66.2 33.9 18.0 10.5 6.2 5.2							

Determined by the Yamartino 15-min interval calculation

### Status Flag Characters

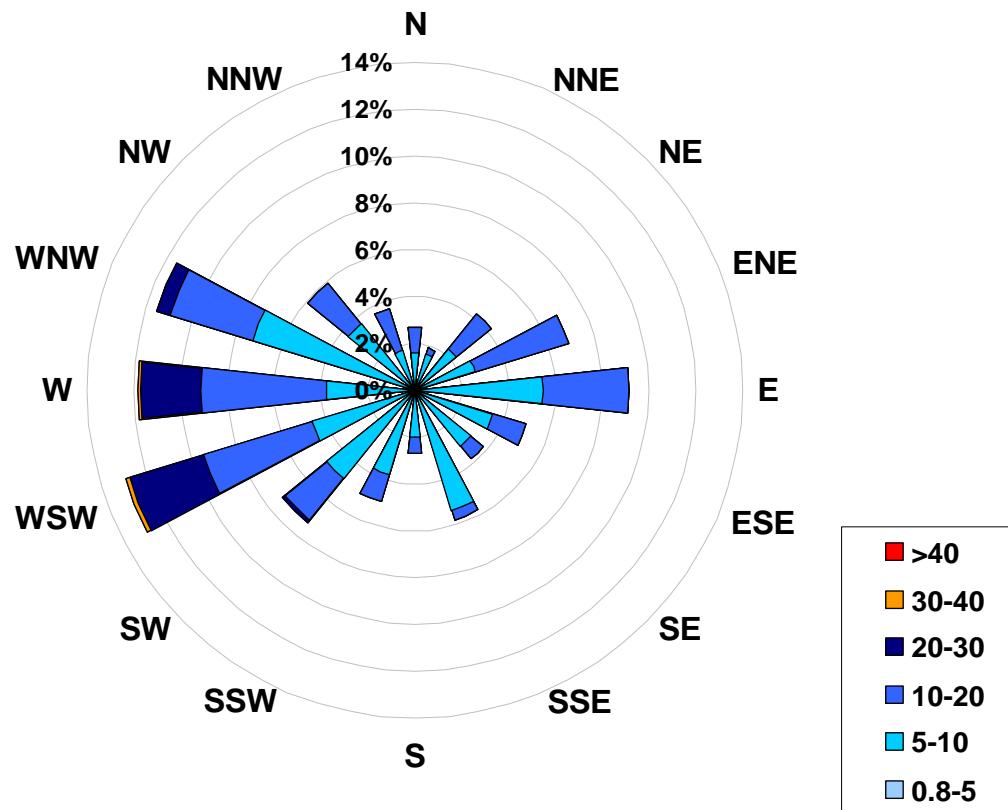
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

### Day Mountain Standard Time

	Hour Start 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-Aug-07	25	16	14	17	5	11	6	12	14	16	39	34	49	70	77	80	43	36	17	10	8	6	10	7	79.7
2-Aug-07	52	29	53	29	12	20	18	21	16	40	21	53	75	33	50	32	66	23	21	19	19	14	15	51	74.6
3-Aug-07	81	15	73	62	55	17	28	47	12	81	31	38	10	16	13	56	20	8	9	10	7	12	6	7	81.2
4-Aug-07	14	6	6	6	5	5	6	5	7	8	6	14	13	25	27	16	8	6	11	31	29	22	22	31.4	
5-Aug-07	17	14	11	13	8	8	12	18	19	37	36	21	21	51	29	30	22	18	15	12	81	43	61	15	80.9
6-Aug-07	43	13	20	24	21	25	20	16	18	20	17	19	18	19	18	11	9	8	6	8	17	15	19	14	43.1
7-Aug-07	15	7	9	19	6	19	11	5	5	7	6	7	8	10	9	9	6	7	7	8	7	8	26	8	26.1
8-Aug-07	6	8	8	9	7	7	10	12	15	26	31	28	21	28	38	54	23	13	36	45	13	18	12	12	53.6
9-Aug-07	8	9	13	35	18	18	25	16	18	50	67	60	47	77	73	78	45	41	20	7	7	5	6	6	77.8
10-Aug-07	6	8	6	19	13	17	31	49	67	50	37	28	35	51	61	44	39	13	83	46	10	29	60	54	83.2
11-Aug-07	19	8	16	49	38	37	28	30	48	25	50	70	17	31	37	35	25	20	13	16	31	27	24	18	70.4
12-Aug-07	13	12	10	8	9	12	11	11	13	10	11	15	13	9	11	15	69	25	17	14	20	12	24	27	69.4
13-Aug-07	11	17	34	20	8	9	10	12	15	37	43	57	58	37	24	27	31	40	25	11	16	5	5	13	58.4
14-Aug-07	10	12	41	22	28	31	17	17	19	18	10	9	9	9	10	10	8	8	10	18	23	30	39	67	66.9
15-Aug-07	46	23	74	57	74	47	57	27	20	16	19	18	19	16	20	22	20	15	13	11	9	10	7	9	74.5
16-Aug-07	10	15	13	39	15	15	15	18	15	20	24	23	15	16	14	13	13	11	9	8	8	7	10	8	38.9
17-Aug-07	10	10	10	9	10	9	11	17	19	20	22	22	23	17	18	44	29	32	18	15	22	22	15	43.5	
18-Aug-07	10	19	26	26	36	91	69	51	71	80	77	36	21	32	40	96	66	37	16	12	27	36	22	20	96.0
19-Aug-07	23	50	30	25	21	28	17	14	17	35	37	50	61	77	18	72	49	39	45	19	11	15	9	10	76.7
20-Aug-07	8	8	34	41	15	11	7	9	7	9	8	7	7	9	12	10	12	7	8	9	6	6	5	6	41.4
21-Aug-07	7	7	5	6	5	5	6	7	5	6	6	7	7	7	8	9	7	7	9	12	15	18	19	19.3	
22-Aug-07	23	40	20	28	35	24	26	53	34	46	66	59	66	62	49	24	37	21	31	63	73	62	27	16	73.3
23-Aug-07	21	31	62	54	20	8	14	17	25	21	35	41	24	20	33	39	72	42	30	55	68	16	54	65	71.7
24-Aug-07	55	60	34	40	14	16	29	20	34	52	29	22	20	24	18	15	12	9	10	19	14	8	7	60.2	
25-Aug-07	80	42	19	20	17	15	26	32	16	22	18	8	12	14	12	11	7	8	12	9	8	10	16	11	80.2
26-Aug-07	9	6	6	7	4	7	11	8	8	11	9	14	22	9	10	8	15	11	14	19	9	14	18	33	32.8
27-Aug-07	35	28	40	36	53	15	17	43	61	45	69	49	23	23	34	33	25	24	34	41	57	81	57	24	80.8
28-Aug-07	56	31	16	28	21	31	55	20	23	17	31	42	59	39	44	46	40	61	20	8	6	6	6	12	61.0
29-Aug-07	11	17	16	63	78	48	18	29	38	37	37	21	36	42	18	7	15	37	24	16	17	31	42	8	78.1
30-Aug-07	7	7	9	11	27	18	12	13	18	12	24	68	66	31	16	34	60	38	83	39	18	12	16	11	83.2
31-Aug-07	13	13	48	65	14	19	13	25	17	17	12	12	10	10	16	13	12	12	13	7	7	8	41	31	64.9

Hourly Max 81 60 74 65 78 91 69 53 71 81 77 70 75 77 77 96 78 61 83 63 81 81 61 67

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



<b>Calms:</b>	<b>0%</b>	<b>Frequency Distribution of Wind in km/hr</b>		
<b>Range</b>	<	to	>	<b>Frequency (hrs)</b>
0.8		5		5
5		10		421
10		20		266
20		30		50
30		40		2
		> 40		0
<b>Total Non-Zero Values</b>				<b>744</b>

# PASZA – Evergreen Park Station

## Monthly Summary Tables, Graphs and Roses

# PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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:	21.5 ppb 10-Aug 10:00 11:00
Maximum 24-hr Average:	1.7 ppb 10-Aug

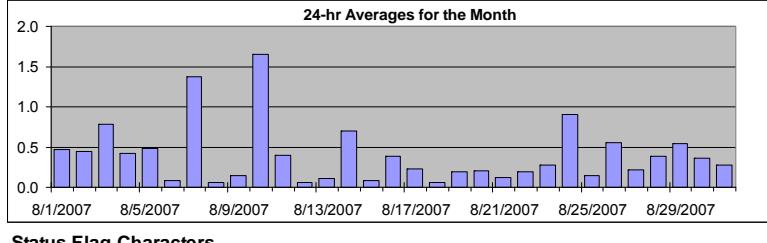
AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 4.3	95 1.6	75 0.3	50 0.1	25 0.0	5 0.0	1 0.0	Average 0.4 ppb	Median 0.1 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start 0:00 1:00	1:00 2:00 3:00	2:00 3:00 4:00	3:00 4:00 5:00	4:00 5:00 6:00	5:00 6:00 7:00	6:00 7:00 8:00	7:00 8:00 9:00	8:00 9:00 10:00	9:00 10:00 11:00	10:00 11:00 12:00	11:00 12:00 13:00	12:00 13:00 14:00	13:00 14:00 15:00	14:00 15:00 16:00	15:00 16:00 17:00	16:00 17:00 18:00	17:00 18:00 19:00	18:00 19:00 20:00	19:00 20:00 21:00	20:00 21:00 22:00	21:00 22:00 23:00	22:00 23:00 24:00					
1-Aug-07	0	A	0	0	0	0	0	0	0	2	1	0	0	0	1	1	2	1	0	0	0	0	0	0	0.5	1.9		
2-Aug-07	A	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	1	1	0	A	0.4	2.0		
3-Aug-07	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	2	4	2	1	A	0.8	4.3	
4-Aug-07	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	2.2	
5-Aug-07	0	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	1	0	0	0	1	1	A	0	0	0.5	1.8	
6-Aug-07	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.6		
7-Aug-07	0	0	0	0	0	0	3	10	2	3	8	C	C	A	1	0	0	1	0	0	0	0	0	0	0	1.4	10.2	
8-Aug-07	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2		
9-Aug-07	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.1	0.9	
10-Aug-07	0	0	0	0	A	0	0	0	0	4	22	6	2	1	0	0	1	0	0	0	0	0	0	0	0	1.7	21.5	
11-Aug-07	0	0	0	A	0	0	0	0	0	1	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.8	
12-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
13-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.1	0.6	
14-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	3	2	3	1	0	0	A	0.7	3.3	
15-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.1		
16-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	A	0	0	0.4	2.1
17-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	A	0	0	0.2	0.6		
18-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2		
19-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	0	0	0	0	0.2	1.4		
20-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	A	0	0	0	0	0.2	1.7	
21-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2		
22-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0.2	1.1	
23-Aug-07	0	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.3	
24-Aug-07	0	0	0	0	A	0	1	11	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	10.7	
25-Aug-07	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.1	0.8	
26-Aug-07	0	0	A	0	0	0	1	2	1	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.3	
27-Aug-07	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	1.1	
28-Aug-07	A	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	1	1	0	0	0	0	0	0	A	0.4	1.6	
29-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	2	0	0	0	0	0	0	0	0	A	0.5	5.5	
30-Aug-07	0	0	1	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	A	0	0.4	2.0	
31-Aug-07	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	A	0	0	0	0.3	2.4		

Hourly Avg	0.2	0.1	0.1	0.1	0.1	0.2	0.9	0.6	0.7	1.7	0.8	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.1
Hourly Max	2.2	1.8	1.1	0.7	0.4	0.3	2.7	10.7	6.7	3.7	21.5	6.3	2.2	5.5	3.3	3.3	2.2	3.2	1.9	4.3	2.1	1.3	0.4	1.6

## HOURLY AVERAGE TABLE

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



**Status Flag Characters**

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

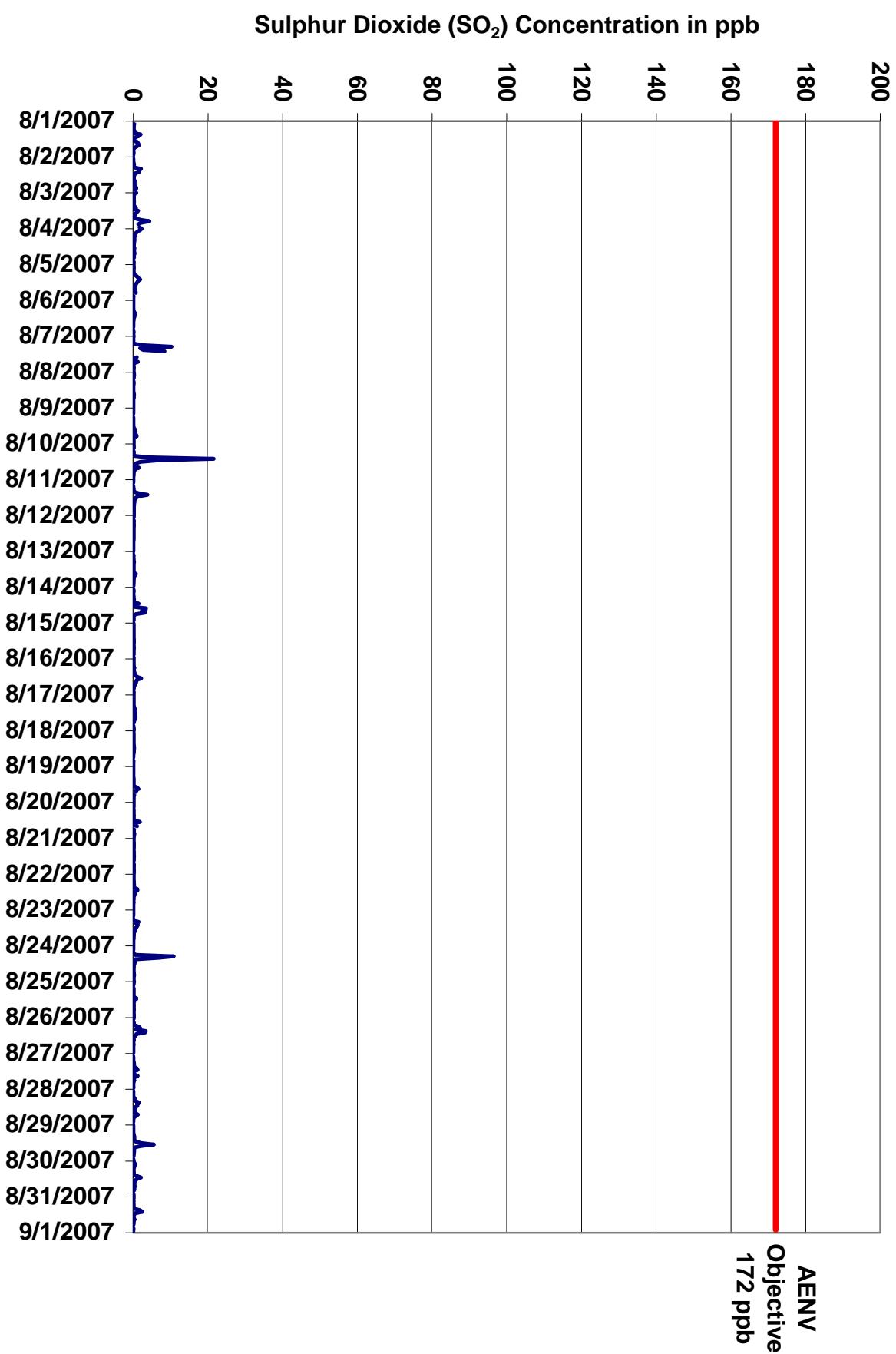


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

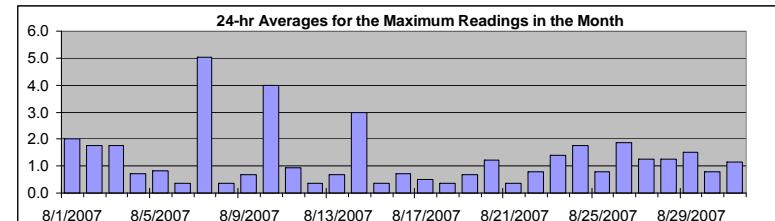
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	40.2 ppb	10-Aug 10:00	11:00
Maximum 24-hr Value:	5.0 ppb	7-Aug	



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

14.1 6.4 0.6 0.4 0.3 0.2 0.2 1.2 ppb 0.4 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-07	0:00 1:00	A	1	0	1	0	1	1	3	9	10	5	0	0	2	3	2	2	5	0	0	0	0	0	0	2.0	9.8
2-Aug-07	A 0:00	0	0	0	0	0	0	0	1	9	8	7	1	1	0	0	1	1	1	1	2	4	1	A	1.7	8.5	
3-Aug-07	2 1:00	1	0	0	0	0	0	0	1	0	1	1	1	2	2	1	1	0	1	7	11	4	3	A	1.8	11.4	
4-Aug-07	3 2:00	2	1	1	1	1	0	0	1	0	0	0	0	0	1	0	1	1	1	1	1	1	A	0	0	0.7	2.7
5-Aug-07	0 0:00	0	0	0	0	0	0	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	0	0	0.8	2.3	
6-Aug-07	0 0:00	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0.3	0.8	
7-Aug-07	0 0:00	0	0	0	0	0	3	12	19	17	16	17	C	C	A	6	1	3	8	0	0	0	0	0	0	5.0	18.7
8-Aug-07	0 0:00	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0.4	0.8
9-Aug-07	0 0:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	2	3	2	2	1	1	1	0	0	0	0.7	2.8
10-Aug-07	0 0:00	0	0	0	0	A	0	0	0	1	18	40	17	3	2	1	1	3	1	1	0	0	0	0	0	4.0	40.2
11-Aug-07	0 0:00	0	A	0	0	1	0	0	0	4	6	2	1	1	1	1	1	1	0	0	0	0	0	0	0.9	6.4	
12-Aug-07	0 0:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.5	
13-Aug-07	0 0:00	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	3	1	0	0	0	0	1	0	0.7	5.5
14-Aug-07	A 0:00	0	1	0	0	0	0	0	0	2	0	0	6	0	0	13	12	9	12	6	0	0	0	0	A	3.0	12.6
15-Aug-07	0 0:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
16-Aug-07	0 0:00	0	0	0	0	0	0	0	0	1	1	1	1	3	2	1	1	1	1	0	0	0	0	0	0	0.7	2.7
17-Aug-07	0 0:00	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	0.9	
18-Aug-07	0 0:00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0.4	0.7	
19-Aug-07	0 0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	1	1	A	1	0	0	0	0	0	0.7	3.6
20-Aug-07	1 0:00	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	A	0	0	0	1	0	0	1.2	10.2	
21-Aug-07	0 0:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0.4	0.6	
22-Aug-07	0 0:00	0	0	0	0	0	0	0	0	1	3	4	1	4	1	0	0	0	0	0	1	0	0	0	0.8	4.1	
23-Aug-07	0 0:00	0	0	0	0	0	A	0	1	11	1	5	4	4	1	1	0	0	0	0	0	0	0	0	1.4	10.9	
24-Aug-07	0 0:00	0	0	0	0	A	1	5	14	12	1	1	1	1	0	0	0	0	0	0	0	1	0	0	1.7	14.3	
25-Aug-07	1 0:00	0	A	0	0	0	0	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0	0	0	0.8	6.5	
26-Aug-07	0 0:00	A	0	0	0	0	0	3	5	3	8	11	5	3	1	0	0	0	0	0	0	0	0	0	1.9	10.7	
27-Aug-07	0 0:00	A	0	0	0	0	0	1	1	1	3	6	2	2	1	0	4	5	2	0	2	0	0	0	1.3	7.0	
28-Aug-07	A 0:00	0	0	0	0	0	1	3	3	6	2	2	1	0	1	0	3	2	2	0	0	0	0	0	A	1.3	5.7
29-Aug-07	0 0:00	0	0	0	0	0	0	1	1	1	1	2	10	10	5	1	0	0	0	0	0	0	0	0	A	1.5	10.3
30-Aug-07	0 0:00	1	1	1	0	0	0	0	2	3	2	1	1	1	1	0	0	0	0	A	0	0	0	0	0.8	3.3	
31-Aug-07	0 0:00	0	0	0	0	0	0	0	1	2	9	7	2	1	0	0	1	0	0	0	0	A	0	0	1.2	9.0	
Hourly Avg	0.5	0.4	0.4	0.4	0.3	0.4	1.0	1.8	2.3	2.9	4.0	2.5	1.3	1.4	1.6	1.5	1.6	1.3	1.1	0.8	0.5	0.5	0.3	0.4			
Hourly Max	2.7	2.1	1.5	0.9	0.8	2.6	12.1	18.7	16.6	18.3	40.2	16.7	10.0	10.3	12.6	12.3	10.2	11.7	6.9	11.4	3.6	3.5	1.4	2.1			

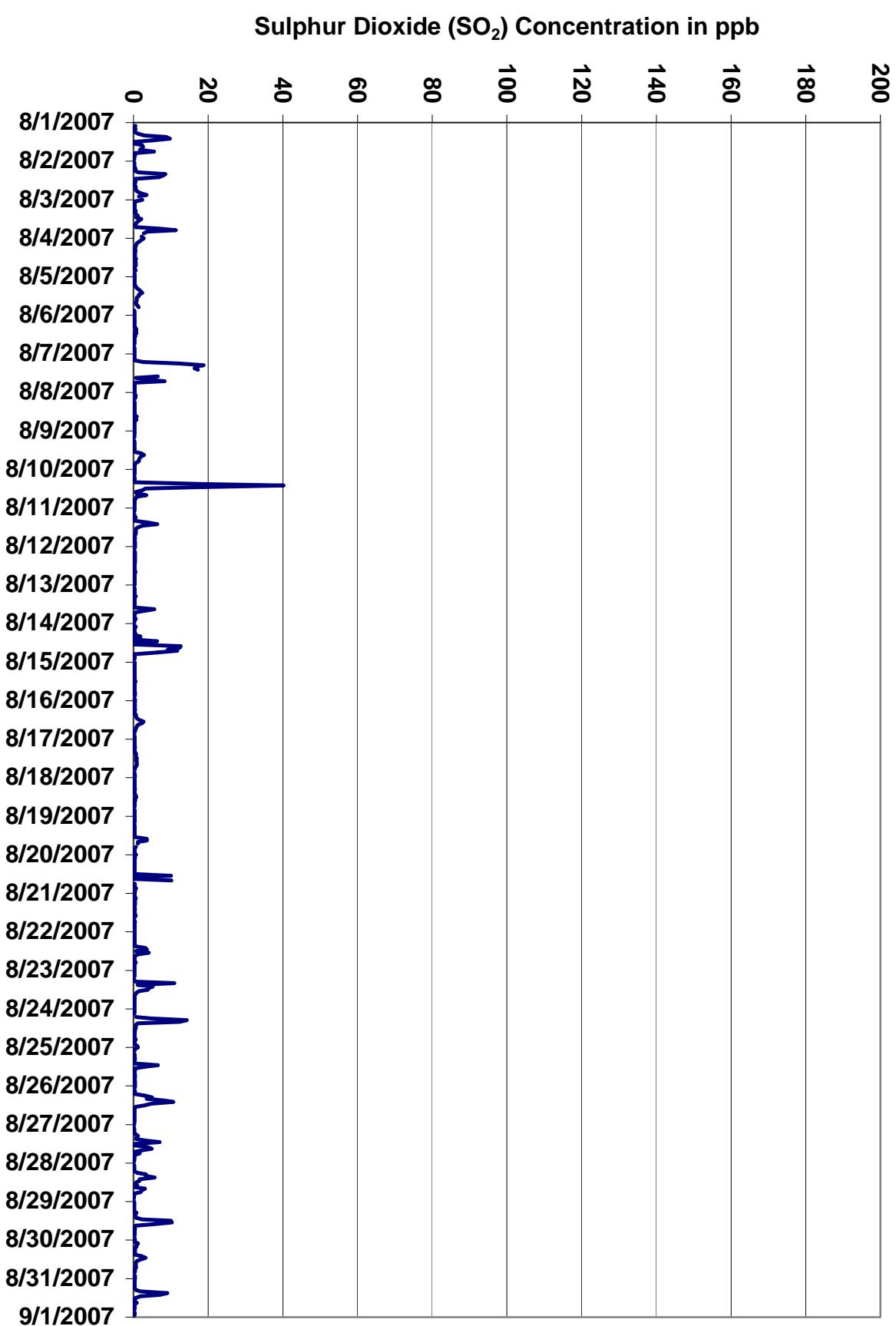
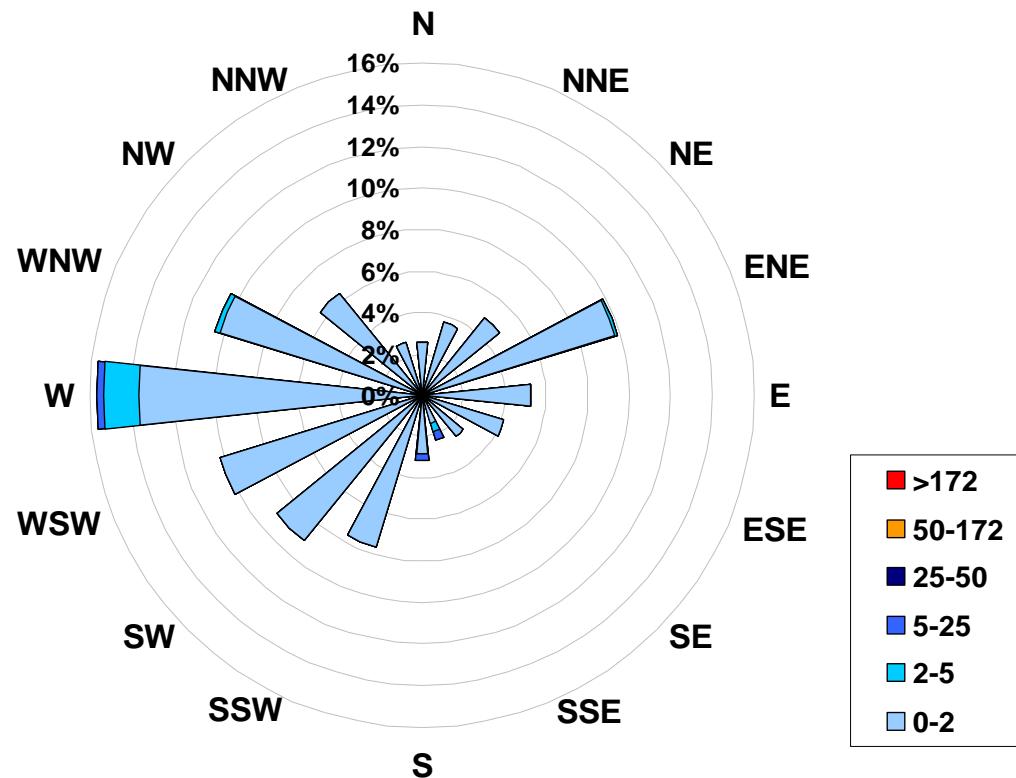


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	684
2	to	5	18
5	to	25	7
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			709

## PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

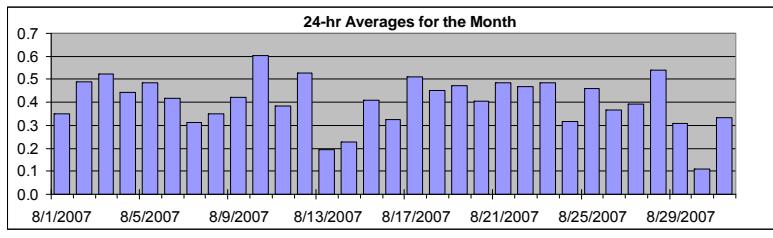
Maximum 1-hr Average:	2.5	ppb	24-Aug	7:00 8:00
Maximum 24-hr Value:	0.6	ppb	10-Aug	

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
1.0	0.7	0.7	0.5	0.4	0.3	0.0	0.0	0.4 ppb	0.4 ppb

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-Aug-07	0:00 1:00	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
2-Aug-07	0:00 1:00	A	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0.5	0.9	
3-Aug-07	0:00 1:00	1	1	0	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.1	
4-Aug-07	0:00 1:00	0	1	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	1	A	0	0	0.4	0.9
5-Aug-07	0:00 1:00	0	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	0.5	0.8	
6-Aug-07	0:00 1:00	1	1	1	1	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	A	1	1	1	0.4	0.6	
7-Aug-07	0:00 1:00	0	0	0	0	0	0	0	1	0	0	1	1	C	C	C	A	0	1	0	0	0	0	0	0	0.3	1.0	
8-Aug-07	0:00 1:00	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8	
9-Aug-07	0:00 1:00	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0.4	0.6	
10-Aug-07	0:00 1:00	0	0	0	0	A	0	1	1	0	0	0	2	1	1	1	1	1	1	1	1	1	1	1	0	0.6	2.5	
11-Aug-07	0:00 1:00	0	1	1	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.4	1.0	
12-Aug-07	0:00 1:00	0	0	A	1	1	1	1	1	0	1	1	0	0	1	0	0	0	0	0	1	0	1	1	1	0.5	0.8	
13-Aug-07	0:00 1:00	1	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
14-Aug-07	0:00 1:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.5	
15-Aug-07	0:00 1:00	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.7	
16-Aug-07	0:00 1:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0.3	0.6
17-Aug-07	0:00 1:00	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0.5	0.7	
18-Aug-07	0:00 1:00	0	0	0	0	0	1	1	1	0	1	1	0	0	0	1	1	0	0	0	A	1	1	0	1	0.5	0.7	
19-Aug-07	0:00 1:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	A	1	1	0	0	0	0.5	0.8	
20-Aug-07	0:00 1:00	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.6	
21-Aug-07	0:00 1:00	1	0	0	0	0	0	0	0	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0.5	0.7	
22-Aug-07	0:00 1:00	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.2	
23-Aug-07	0:00 1:00	0	0	0	0	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	0	0.5	0.8	
24-Aug-07	0:00 1:00	0	0	0	0	A	1	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.5	
25-Aug-07	0:00 1:00	0	0	0	A	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	1.1	
26-Aug-07	0:00 1:00	1	0	A	0	0	1	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
27-Aug-07	0:00 1:00	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
28-Aug-07	0:00 1:00	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	A	0.5	0.8	
29-Aug-07	0:00 1:00	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	1	0	0	0	0	A	0	0.3	0.8	
30-Aug-07	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.6	
31-Aug-07	0:00 1:00	0	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.7	

**HOURLY AVERAGE TABLE**

**Total Reduced Sulphur (TRS)**



**Status Flag Characters**

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

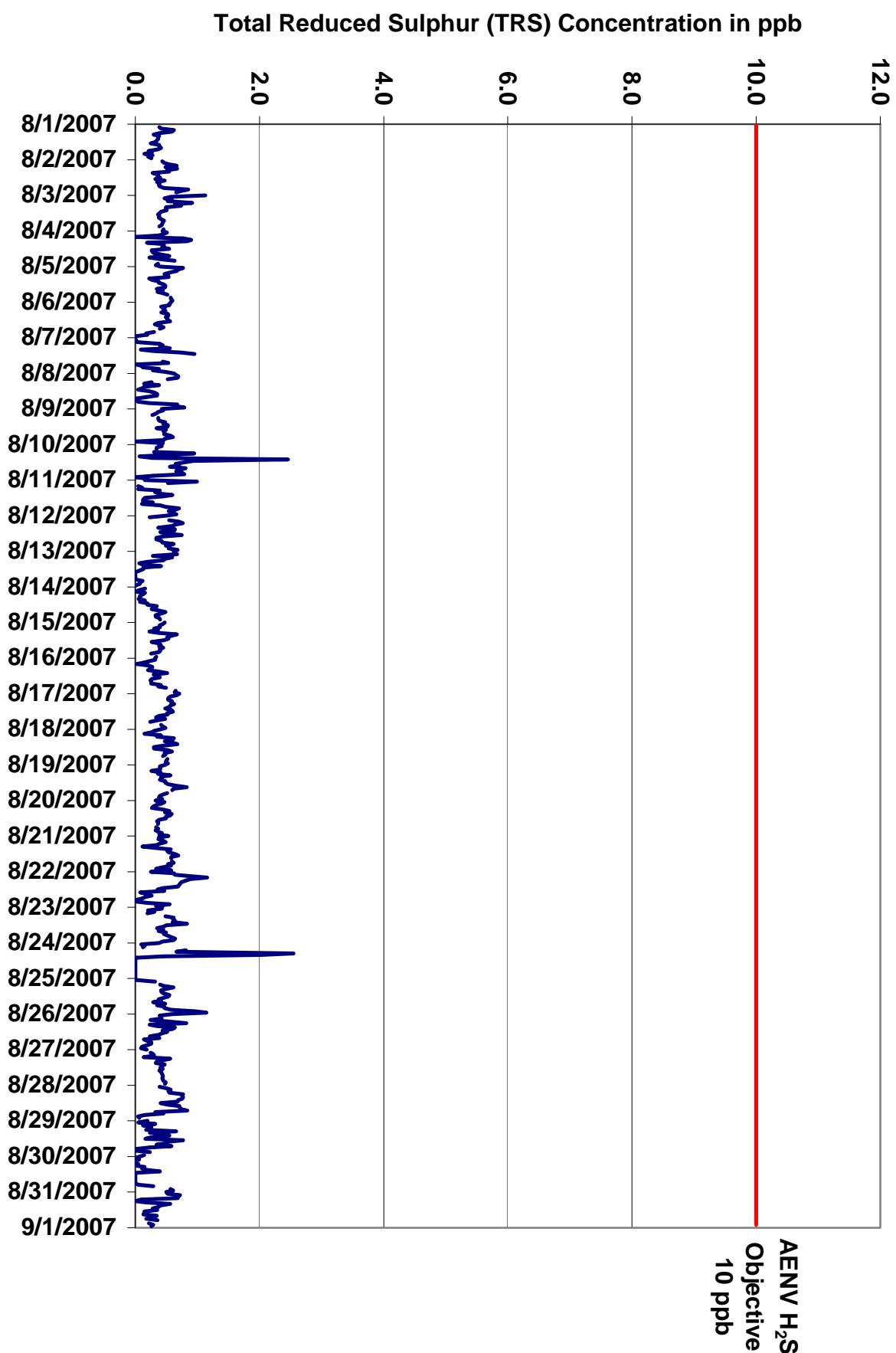


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

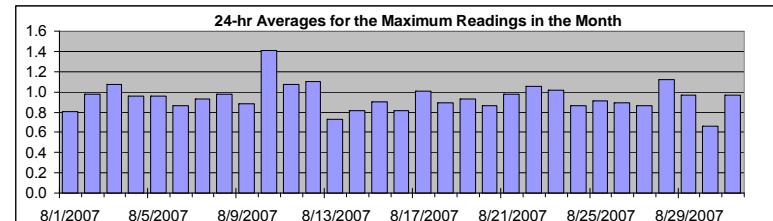
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	5.2 ppb	10-Aug 10:00	11:00
Maximum 24-hr Value:	1.4 ppb	10-Aug	



#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	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	Daily Maximum	
1-Aug-07	1:00	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
2-Aug-07		A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3	
3-Aug-07		2	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8	
4-Aug-07		1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
5-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
6-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
7-Aug-07		0	1	1	1	1	1	1	2	1	1	2	2	C	C	C	A	1	1	1	1	1	1	1	1	0.9	2.0	
8-Aug-07		1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7	
9-Aug-07		1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
10-Aug-07		1	1	1	1	1	A	1	3	2	1	1	5	3	1	1	1	1	1	1	1	1	1	1	1	1	1.4	5.2
11-Aug-07		1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5	
12-Aug-07		1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4	
13-Aug-07		1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1	1	1	0.7	1.5	
14-Aug-07		A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
15-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
16-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
17-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3	
18-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
19-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
20-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0	
21-Aug-07		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.4	
22-Aug-07		1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6	
23-Aug-07		1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
24-Aug-07		1	1	1	1	A	2	2	3	3	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0.9	3.4	
25-Aug-07		0	0	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6	
26-Aug-07		1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7	
27-Aug-07		1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
28-Aug-07		A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0	
29-Aug-07		1	0	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1.0	1.6	
30-Aug-07		0	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	A	1	0.7	1.2	
31-Aug-07		1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	1.3
	Hourly Avg	0.9	0.9	0.9	0.9	0.9	1.0	1.1	1.2	1.0	1.0	1.2	1.0	0.9	0.9	0.8	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9		
	Hourly Max	1.8	1.5	1.5	1.7	1.6	2.0	2.5	3.4	3.0	1.5	5.2	2.6	1.2	1.6	1.4	1.4	1.4	1.3	1.2	1.4	1.3	1.3	1.6	1.7			

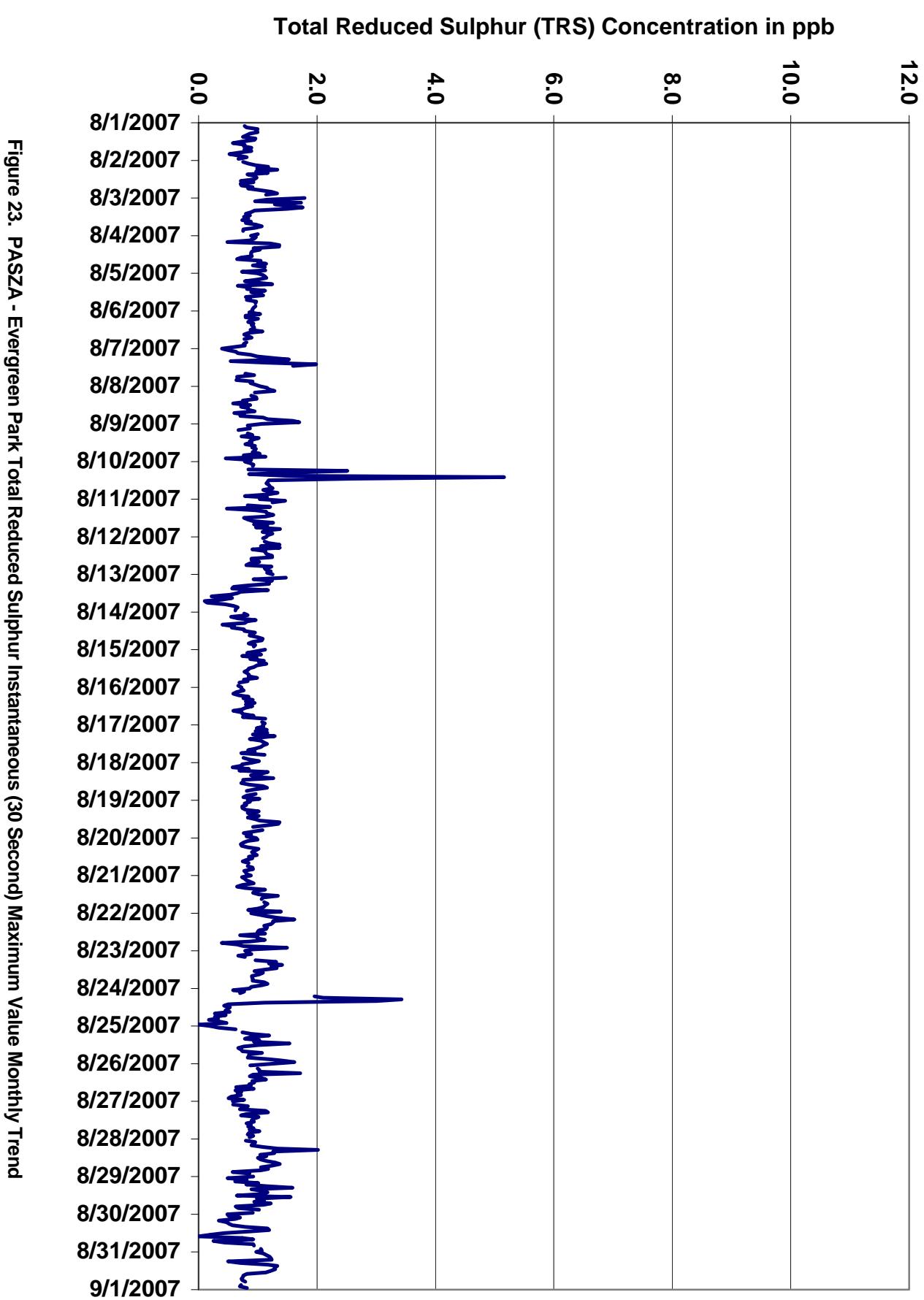
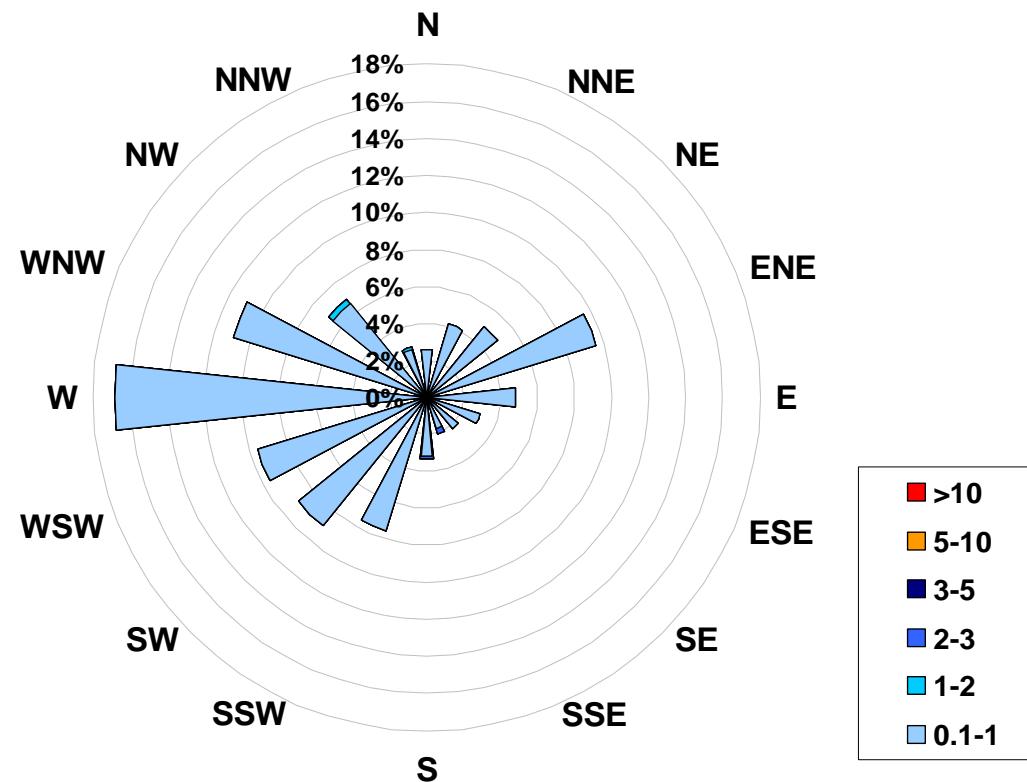


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

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

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

Station: Evergreen Park  
Station Owner: PASZA

## HOURLY AVERAGE TABLE

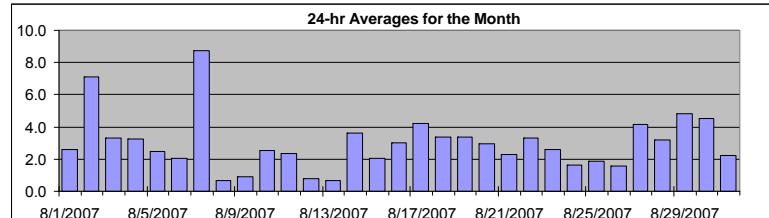
#### **Particulate Matter (PM<sub>2.5</sub>)**

**Monitoring Dates:** August 1, 2007 to September 1, 2007

Draft Objective Limit: Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr 30  $\mu\text{g}/\text{m}^3$

### **Summary**

Number of 24-hr Exceedances (draft):	0			
Maximum 1-hr Average:	25.8	µg/m <sup>3</sup>	7-Aug	10:00 11:00
Maximum 24-hr Value:	8.8	µg/m <sup>3</sup>	7-Aug	



## Status Flag Characters

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

D. Monthly Statistics (%)

Calibration Time:		5 hrs			AMD Operational Uptime:			99.3%	
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	13.1	8.6	4.0	2.2	0.8	0.0	0.0	2.9	2 µg/m³

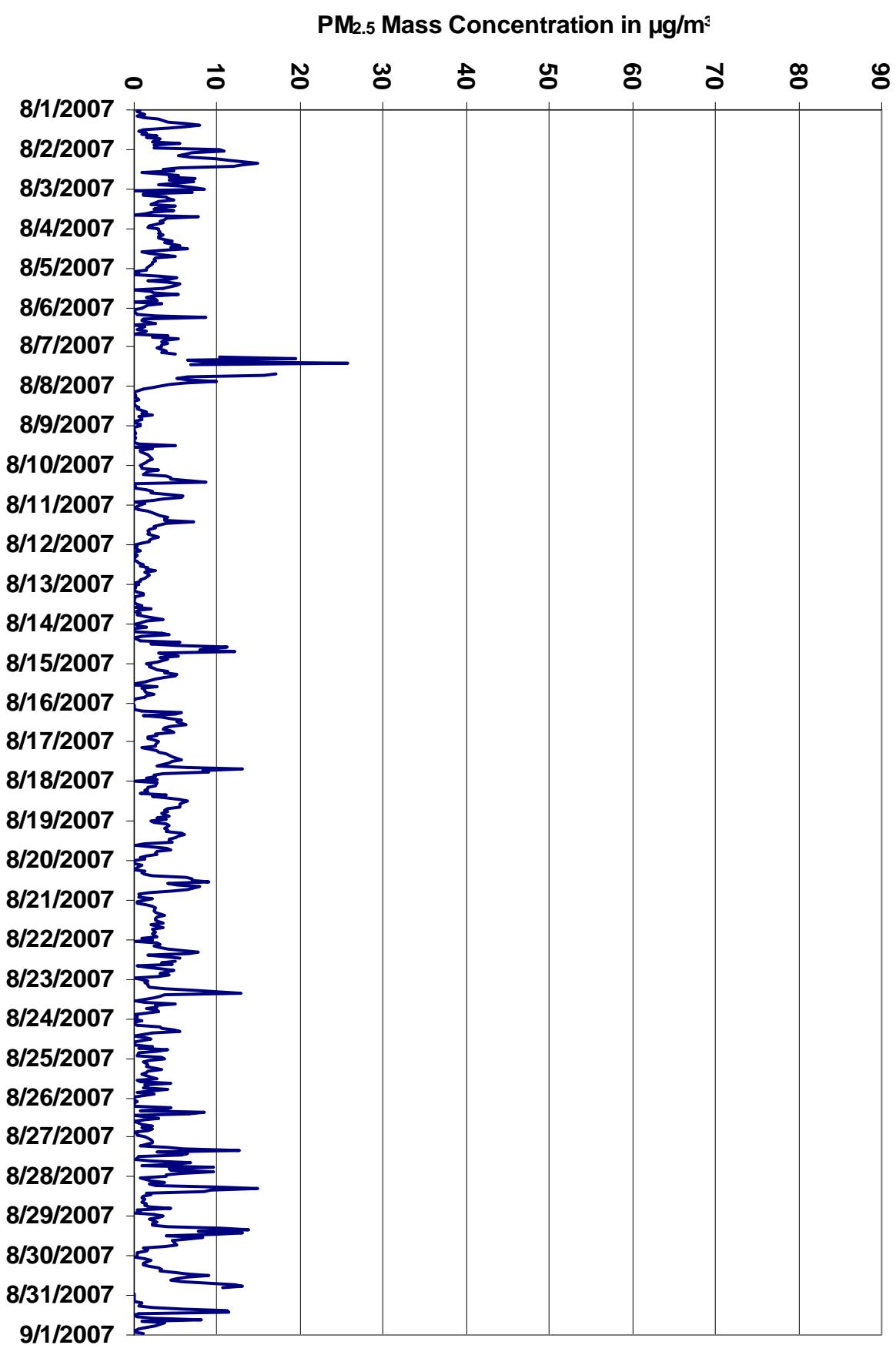


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

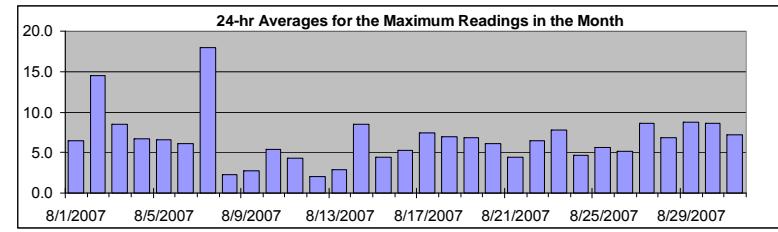
#### Summary

Maximum 1-hr Average:	43.1	µg/m <sup>3</sup>	2-Aug	0:00 1:00
Maximum 24-hr Value:	17.9	µg/m <sup>3</sup>	7-Aug	

AIC Time:	0 hrs	Operational Time:	734 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.3%						
Percentile	99 30.0	95 17.7	75 8.3	50 4.9	25 3.2	5 1.3	1 0.6	Average / Median 6.6	Geomean 6.0 µg/m <sup>3</sup>

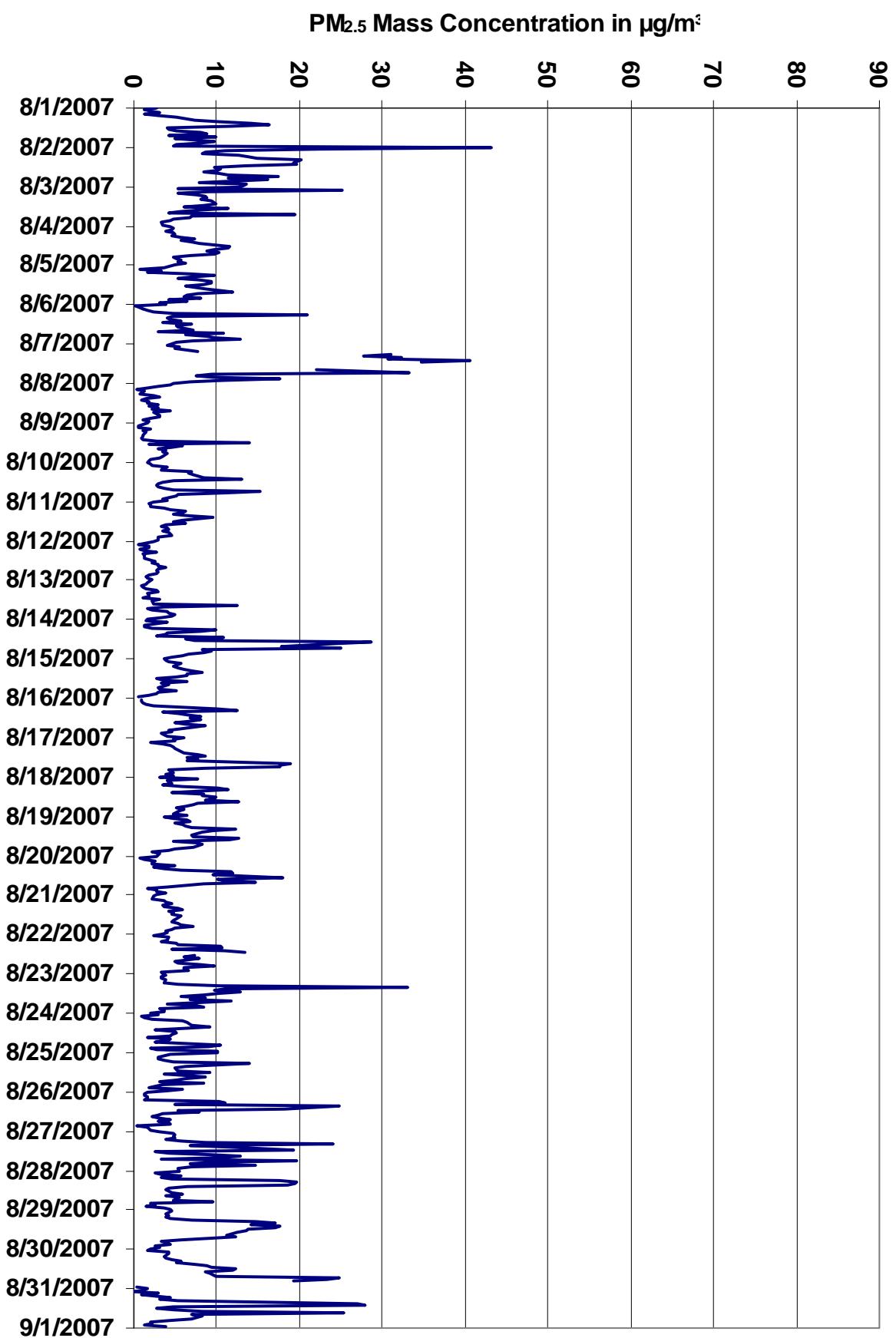
#### Day Mountain Standard Time

	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	24-hour Average	Daily Maximum			
1-Aug-07	3 1:00	1 2	2 3	3 1	1 3	5 7	10 14	14 16	12 12	4 4	4 4	5 5	8 9	9 4	10 10	5 5	10 10	8 8	5 5	10 10	8 8	5 5	10 10	8 8	5 5	6.5	16.3			
2-Aug-07	43 22	22 11	9 8	8 13	14 15	20 19	19 20	13 13	10 10	10 10	10 10	10 10	8 8	10 11	17 11	11 11	16 16	8 8	14 14	13 13					14.5	43.1				
3-Aug-07	13 5	5 25	9 5	5 8	9 9	9 8	8 9	9 10	8 10	8 8	6 6	11 11	8 8	6 4	19 19	7 7	7 5	5 4	4 3	3 3					8.5	25.1				
4-Aug-07	4 5	5 5	4 5	5 5	5 5	6 6	7 7	6 7	7 8	11 11	11 11	11 11	10 10	9 10	10 12	7 8	7 6	5 8	5 4	6 6	5 5	6 6	5 5	6 6	6.7	11.5				
5-Aug-07	5 4	4 1	1 3	2 2	7 7	10 7	7 5	8 8	9 9	9 9	8 8	6 6	9 9	10 12	12 8	7 7	6 6	8 8	4 4	6 6	3 3					6.6	11.9			
6-Aug-07	4 0	0 1	2 2	2 2	5 5	21 5	5 4	4 4	6 6	3 3	7 7	5 5	5 5	7 3	11 11	6 6	9 9	10 10	13 13	7 7	5 5					6.1	20.9			
7-Aug-07	5 4	4 6	5 5	8 8	D D	31 28	28 32	31 31	41 41	35 35	C C	C C	C C	C C	22 33	33 9	8 8	10 10	18 18	11 11	7 7					17.9	40.6			
8-Aug-07	5 4	4 3	2 0	0 1	1 1	2 2	3 3	1 1	1 1	2 2	2 3	3 3	2 2	3 3	2 2	4 4	2 2	3 3	3 3	2 2	1 1	2 2					2.3	4.8		
9-Aug-07	2 1	1 1	1 2	1 2	1 1	2 1	1 1	1 1	1 1	3 3	14 14	2 2	6 6	5 3	3 4	4 3	4 4	4 4	3 3	2 2	2 2	2 2					2.8	13.9		
10-Aug-07	2 2	2 2	2 4	3 3	3 7	7 7	7 9	9 13	5 5	3 3	3 3	3 3	3 3	3 4	5 5	15 11	11 11	5 5	5 5	3 3	4 4	3 3					5.4	15.3		
11-Aug-07	2 2	2 2	2 4	4 4	6 6	6 6	5 5	7 7	10 10	6 6	5 5	6 6	4 4	3 3	4 4	3 3	4 4	4 4	5 5	5 5	3 3	3 3	5 5					4.4	9.6	
12-Aug-07	2 1	1 1	2 2	2 1	1 1	3 3	1 1	1 1	1 1	3 3	2 2	3 3	3 3	4 3	3 3	3 3	3 3	3 3	3 3	2 2	1 1	2 2					2.0	3.8		
13-Aug-07	2 2	2 1	1 1	1 1	1 1	3 3	3 3	2 2	2 2	2 1	3 3	2 2	2 2	12 4	2 2	2 2	2 4	2 2	4 4	4 4	5 5	5 5	3 3					2.9	12.5	
14-Aug-07	2 1	1 4	1 1	1 2	10 10	8 8	4 4	4 4	3 3	11 11	6 7	29 29	24 24	18 18	25 25	8 8	9 9	8 8	7 7	6 6	5 5	5 5	3 3					8.5	28.7	
15-Aug-07	4 4	4 4	4 6	5 5	5 6	6 7	8 8	6 6	7 7	5 5	3 3	4 4	6 6	3 3	4 3	3 3	5 5	3 3	3 3	2 2	1 1	2 2					4.4	8.4		
16-Aug-07	P 1	1 1	1 1	1 1	2 2	10 10	13 13	3 3	5 7	8 8	7 7	8 8	7 7	5 5	6 6	9 9	7 7	4 4	5 5	3 3	4 4	4 4					5.3	12.5		
17-Aug-07	6 5	5 5	2 2	4 4	4 4	5 5	5 6	6 6	8 8	9 9	6 8	8 8	6 6	13 13	19 19	18 18	9 9	4 4	5 5	4 4	5 5	4 4					7.4	18.9		
18-Aug-07	3 8	8 4	4 4	5 5	4 6	6 10	11 11	5 8	8 8	10 10	10 10	9 9	13 13	8 8	7 7	6 6	5 5	6 6	6 6	5 5	6 6	5 5					6.9	12.6		
19-Aug-07	4 5	5 6	7 5	5 6	6 6	7 7	12 12	10 10	8 8	7 7	13 13	12 12	5 7	8 8	8 8	7 7	5 5	4 4	2 2	3 3	2 2	3 3	2 2					6.8	12.7	
20-Aug-07	3 1	1 1	3 2	2 2	5 5	2 4	4 4	6 6	12 12	12 12	10 10	18 18	10 10	11 11	15 15	8 8	6 6	4 4	2 2	3 3	3 3	4 4					6.1	18.0		
21-Aug-07	3 2	2 2	4 4	4 4	5 5	4 4	5 5	6 6	4 4	5 5	5 5	6 6	5 5	5 5	5 5	5 5	6 7	5 5	5 5	4 4	4 4	4 4					4.5	7.2		
22-Aug-07	3 2	2 4	4 4	3 3	5 5	5 10	11 11	5 5	11 18	13 13	7 7	C C	7 7	6 6	8 8	5 5	5 5	8 8	10 10	6 6	6 6	7 7	3 3					6.5	13.5	
23-Aug-07	3 3	4 3	3 3	4 4	4 5	10 10	33 11	11 10	13 13	10 10	8 8	6 6	9 9	7 7	12 12	4 4	7 7	8 8	3 3	4 4	4 4	11 11	9 9	2 2	3 3			7.7	33.0	
24-Aug-07	2 3	3 1	1 1	2 2	6 6	6 7	9 9	6 6	3 3	5 5	5 5	5 5	4 4	2 2	4 4	4 4	3 3	11 11	9 9	2 2	3 3	10 10					4.7	10.5		
25-Aug-07	10 4	4 4	3 3	3 4	4 5	14 14	6 6	5 5	5 5	9 9	4 4	6 6	9 9	6 6	5 5	3 3	8 8	3 3	2 2	6 6	4 4	0 0	2 2			5.6	14.0			
26-Aug-07	2 1	1 1	2 2	2 1	1 10	11 11	5 5	25 18	18 18	5 5	8 8	3 3	3 3	2 2	3 3	4 4	3 3	4 4	4 4	0 0	2 2					5.1	24.9			
27-Aug-07	3 5	5 5	5 5	4 4	6 6	9 9	24 24	7 7	11 11	19 19	3 3	4 4	9 9	13 13	10 10	3 3	20 20	9 9	7 7	15 15	7 7					8.7	24.1			
28-Aug-07	6 3	3 3	6 3	3 5	5 18	20 20	19 19	19 19	6 6	4 4	4 4	5 5	6 6	4 4	6 6	5 5	5 5	10 10	2 2	3 3	1 1	4 4					6.8	19.6		
29-Aug-07	5 5	5 4	4 4	4 4	4 7	15 15	17 17	14 14	18 18	17 17	14 14	14 14	12 12	11 11	12 12	9 9	6 6	3 3	4 4	4 4	3 3	3 3					8.7	17.7		
30-Aug-07	2 2	2 4	4 4	4 4	4 5	6 6	5 7	9 9	9 9	12 12	12 12	9 9	9 9	10 10	25 25	23 23	19 19	D D	D D	D D	0 0					8.6	24.8			
31-Aug-07	2 1	1 0	3 1	1 4	3 3	5 5	16 16	27 27	28 28	5 5	3 3	5 8	25 25	7 7	8 8	7 7	4 4	2 2	2 2	1 1	4 4					7.2	27.9			
Hourly Avg	5.1	3.6	3.8	3.5	3.3	4.1	7.6	8.4	9.9	9.2	10.0	8.7	6.8	6.9	7.4	8.3	7.8	9.1	7.6	7.0	5.7	5.2	4.3	4.2						
Hourly Max	43.1	22.4	25.1	8.9	8.3	12.7	31.0	27.6	33.0	30.6	40.6	34.8	13.9	18.0	28.7	25.3	22.0	33.3	23.3	19.3	16.1	17.7	13.6	13.3						

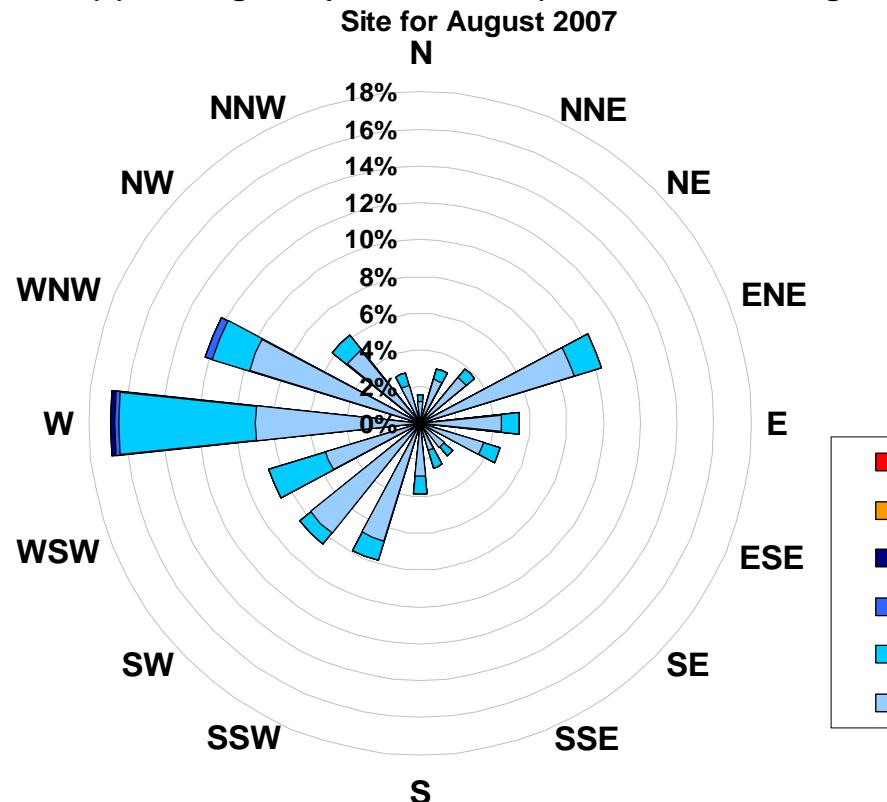


C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

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**



>80
50-80
25-50
15-25
5-15
1-5

Calms:	0%
--------	----

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>		
Range	Frequency (hrs)	
1.0 < 5	605	
5 to 15	125	
15 to 25	3	
25 to 50	1	
50 to 80	0	
> 80	0	
Total Non-Zero Values	734	

# PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

### Summary

Maximum 1-hr Average:	27.6 °C	2-Aug 16:00	17:00
Maximum 24-hr Value:	18.8 °C	2-Aug	

AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 26.3	95 21.9	75 16.7	50 12.8	25 10.1	5 6.0	1 3.2	Average 13.4 °C	Median 12.8 °C

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-Aug-07	12 1:00	11 2:00	11 3:00	10 4:00	10 5:00	9 6:00	11 7:00	13 8:00	15 9:00	17 10:00	19 11:00	21 12:00	22 13:00	23 14:00	24 15:00	25 16:00	25 17:00	25 18:00	25 19:00	23 20:00	23 21:00	19 22:00	15 23:00	13 0:00	12 1:00	17.1 25.1
2-Aug-07	11 1:00	11 2:00	11 3:00	11 4:00	11 5:00	12 6:00	12 7:00	15 8:00	17 9:00	19 10:00	21 11:00	23 12:00	24 13:00	26 14:00	27 15:00	27 16:00	28 17:00	27 18:00	27 19:00	24 20:00	23 21:00	20 22:00	19 23:00	18 0:00	17 1:00	18.8 27.6
3-Aug-07	15 1:00	15 2:00	15 3:00	14 4:00	14 5:00	14 6:00	13 7:00	14 8:00	14 9:00	17 10:00	17 11:00	16 12:00	15 13:00	16 14:00	18 15:00	20 16:00	20 17:00	19 18:00	18 19:00	18 20:00	16 21:00	15 22:00	15 23:00	14 0:00	14 1:00	15.7 20.2
4-Aug-07	14 1:00	14 2:00	14 3:00	14 4:00	14 5:00	14 6:00	14 7:00	14 8:00	15 9:00	15 10:00	15 11:00	15 12:00	15 13:00	15 14:00	18 15:00	19 16:00	20 17:00	21 18:00	19 19:00	20 20:00	17 21:00	16 22:00	14 23:00	13 0:00	12 1:00	15.5 20.6
5-Aug-07	12 1:00	12 2:00	11 3:00	11 4:00	11 5:00	11 6:00	12 7:00	14 8:00	15 9:00	16 10:00	18 11:00	20 12:00	22 13:00	22 14:00	20 15:00	22 16:00	22 17:00	20 18:00	19 19:00	19 20:00	19 21:00	18 22:00	15 23:00	13 0:00	12 1:00	16.0 21.8
6-Aug-07	11 1:00	10 2:00	9 3:00	8 4:00	8 5:00	9 6:00	9 7:00	12 8:00	14 9:00	17 10:00	19 11:00	22 12:00	24 13:00	26 14:00	27 15:00	27 16:00	26 17:00	26 18:00	25 19:00	25 20:00	21 21:00	21 22:00	17 23:00	15 0:00	13 1:00	17.6 27.0
7-Aug-07	12 1:00	11 2:00	11 3:00	11 4:00	11 5:00	15 6:00	19 7:00	19 8:00	18 9:00	19 10:00	20 11:00	21 12:00	22 13:00	23 14:00	23 15:00	22 16:00	22 17:00	22 18:00	21 19:00	21 20:00	18 21:00	18 22:00	14 23:00	12 0:00	12 1:00	17.5 22.9
8-Aug-07	11 1:00	11 2:00	12 3:00	11 4:00	10 5:00	9 6:00	9 7:00	8 8:00	9 9:00	9 10:00	10 11:00	10 12:00	10 13:00	10 14:00	11 15:00	11 16:00	11 17:00	11 18:00	10 19:00	10 20:00	10 21:00	9 22:00	9 23:00	9 0:00	9 1:00	9.9 11.6
9-Aug-07	9 1:00	9 2:00	9 3:00	8 4:00	8 5:00	8 6:00	8 7:00	8 8:00	9 9:00	9 10:00	10 11:00	12 12:00	14 13:00	15 14:00	16 15:00	16 16:00	17 17:00	17 18:00	16 19:00	16 20:00	16 21:00	15 22:00	14 23:00	11 0:00	10 1:00	11.0 17.0
10-Aug-07	5 1:00	4 2:00	3 3:00	4 4:00	5 5:00	7 6:00	11 7:00	11 8:00	14 9:00	16 10:00	18 11:00	18 12:00	19 13:00	19 14:00	19 15:00	20 16:00	20 17:00	21 18:00	18 19:00	16 20:00	11 21:00	11 22:00	11 23:00	10 0:00	10 1:00	11.7 20.6
11-Aug-07	10 1:00	9 2:00	7 3:00	7 4:00	7 5:00	7 6:00	8 7:00	8 8:00	10 9:00	11 10:00	11 11:00	13 12:00	14 13:00	14 14:00	16 15:00	16 16:00	17 17:00	17 18:00	15 19:00	14 20:00	13 21:00	12 22:00	12 23:00	12 0:00	12 1:00	12.1 17.0
12-Aug-07	11 1:00	11 2:00	10 3:00	10 4:00	9 5:00	8 6:00	8 7:00	8 8:00	9 9:00	9 10:00	9 11:00	10 12:00	12 13:00	12 14:00	9 15:00	9 16:00	10 17:00	10 18:00	10 19:00	10 20:00	10 21:00	9 22:00	9 23:00	9 0:00	9 1:00	9.4 11.3
13-Aug-07	9 1:00	9 2:00	9 3:00	8 4:00	8 5:00	8 6:00	8 7:00	8 8:00	9 9:00	10 10:00	11 11:00	12 12:00	13 13:00	13 14:00	14 15:00	14 16:00	13 17:00	13 18:00	14 19:00	14 20:00	10 21:00	8 22:00	7 23:00	6 0:00	6 1:00	10.1 14.4
14-Aug-07	5 1:00	4 2:00	4 3:00	2 4:00	1 5:00	3 6:00	7 7:00	7 8:00	11 9:00	14 10:00	16 11:00	18 12:00	19 13:00	20 14:00	20 15:00	20 16:00	21 17:00	21 18:00	21 19:00	21 20:00	12 21:00	12 22:00	12 23:00	12 0:00	12 1:00	12.5 21.1
15-Aug-07	10 1:00	9 2:00	9 3:00	9 4:00	9 5:00	10 6:00	11 7:00	11 8:00	12 9:00	13 10:00	15 11:00	15 12:00	15 13:00	15 14:00	18 15:00	18 16:00	18 17:00	18 18:00	18 19:00	18 20:00	15 21:00	13 22:00	12 23:00	10 0:00	10 1:00	14.1 20.8
16-Aug-07	9 1:00	8 2:00	8 3:00	7 4:00	6 5:00	6 6:00	7 7:00	11 8:00	13 9:00	15 10:00	17 11:00	19 12:00	21 13:00	23 14:00	23 15:00	23 16:00	23 17:00	23 18:00	20 19:00	20 20:00	17 21:00	16 22:00	14 23:00	14 0:00	14 1:00	15.1 23.1
17-Aug-07	14 1:00	14 2:00	13 3:00	13 4:00	13 5:00	13 6:00	13 7:00	13 8:00	15 9:00	17 10:00	19 11:00	20 12:00	21 13:00	22 14:00	22 15:00	22 16:00	22 17:00	22 18:00	20 19:00	20 20:00	17 21:00	15 22:00	13 23:00	11 0:00	11 1:00	15.8 22.5
18-Aug-07	10 1:00	9 2:00	10 3:00	10 4:00	10 5:00	10 6:00	10 7:00	10 8:00	10 9:00	10 10:00	10 11:00	11 12:00	13 13:00	14 14:00	15 15:00	16 16:00	17 17:00	17 18:00	17 19:00	16 20:00	15 21:00	13 22:00	12 23:00	12 0:00	12 1:00	12.3 17.0
19-Aug-07	12 1:00	11 2:00	11 3:00	11 4:00	11 5:00	11 6:00	11 7:00	11 8:00	12 9:00	15 10:00	16 11:00	16 12:00	19 13:00	19 14:00	19 15:00	19 16:00	17 17:00	19 18:00	19 19:00	19 20:00	19 21:00	16 22:00	14 23:00	13 0:00	13 1:00	14.6 19.3
20-Aug-07	12 1:00	12 2:00	12 3:00	10 4:00	9 5:00	8 6:00	10 7:00	13 8:00	15 9:00	16 10:00	18 11:00	18 12:00	18 13:00	18 14:00	18 15:00	18 16:00	18 17:00	18 18:00	18 19:00	15 20:00	13 21:00	13 22:00	13 23:00	12 0:00	12 1:00	14.2 18.4
21-Aug-07	11 1:00	12 2:00	12 3:00	12 4:00	11 5:00	11 6:00	11 7:00	11 8:00	12 9:00	14 10:00	15 11:00	15 12:00	15 13:00	14 14:00	15 15:00	16 16:00	17 17:00	17 18:00	17 19:00	15 20:00	14 21:00	13 22:00	13 23:00	13 0:00	13 1:00	13.8 17.4
22-Aug-07	13 1:00	11 2:00	10 3:00	11 4:00	11 5:00	11 6:00	11 7:00	12 8:00	13 9:00	14 10:00	15 11:00	15 12:00	13 13:00	13 14:00	17 15:00	18 16:00	18 17:00	18 18:00	14 19:00	15 20:00	14 21:00	13 22:00	12 23:00	12 0:00	12 1:00	13.7 18.4
23-Aug-07	10 1:00	10 2:00	11 3:00	11 4:00	11 5:00	11 6:00	11 7:00	11 8:00	12 9:00	15 10:00	17 11:00	18 12:00	18 13:00	18 14:00	18 15:00	18 16:00	18 17:00	18 18:00	17 19:00	16 20:00	14 21:00	12 22:00	11 23:00	11 0:00	11 1:00	13.7 19.0
24-Aug-07	10 1:00	9 2:00	8 3:00	7 4:00	7 5:00	7 6:00	7 7:00	8 8:00	9 9:00	11 10:00	11 11:00	11 12:00	12 13:00	12 14:00	17 15:00	18 16:00	18 17:00	18 18:00	17 19:00	16 20:00	14 21:00	12 22:00	11 23:00	11 0:00	11 1:00	12.8 18.9
25-Aug-07	12 1:00	12 2:00	11 3:00	11 4:00	11 5:00	11 6:00	12 7:00	12 8:00	15 9:00	15 10:00	15 11:00	15 12:00	15 13:00	15 14:00	16 15:00	18 16:00	18 17:00	18 18:00	17 19:00	16 20:00	14 21:00	12 22:00	11 23:00	11 0:00	11 1:00	13.3 18.2
26-Aug-07	8 1:00	8 2:00	8 3:00	8 4:00	8 5:00	8 6:00	8 7:00	8 8:00	8 9:00	10 10:00	10 11:00	10 12:00	13 13:00	14 14:00	18 15:00	18 16:00	18 17:00	18 18:00	17 19:00	16 20:00	14 21:00	12 22:00	11 23:00	11 0:00	11 1:00	8.2 10.1
27-Aug-07	2 1:00	2 2:00	3 3:00	4 4:00	5 5:00	5 6:00	7 7:00	7 8:00	9 9:00	10 10:00	11 11:00	12 12:00	13 13:00	14 14:00	14 15:00	15 15:00	15 16:00	15 17:00	13 18:00	13 19:00	1					

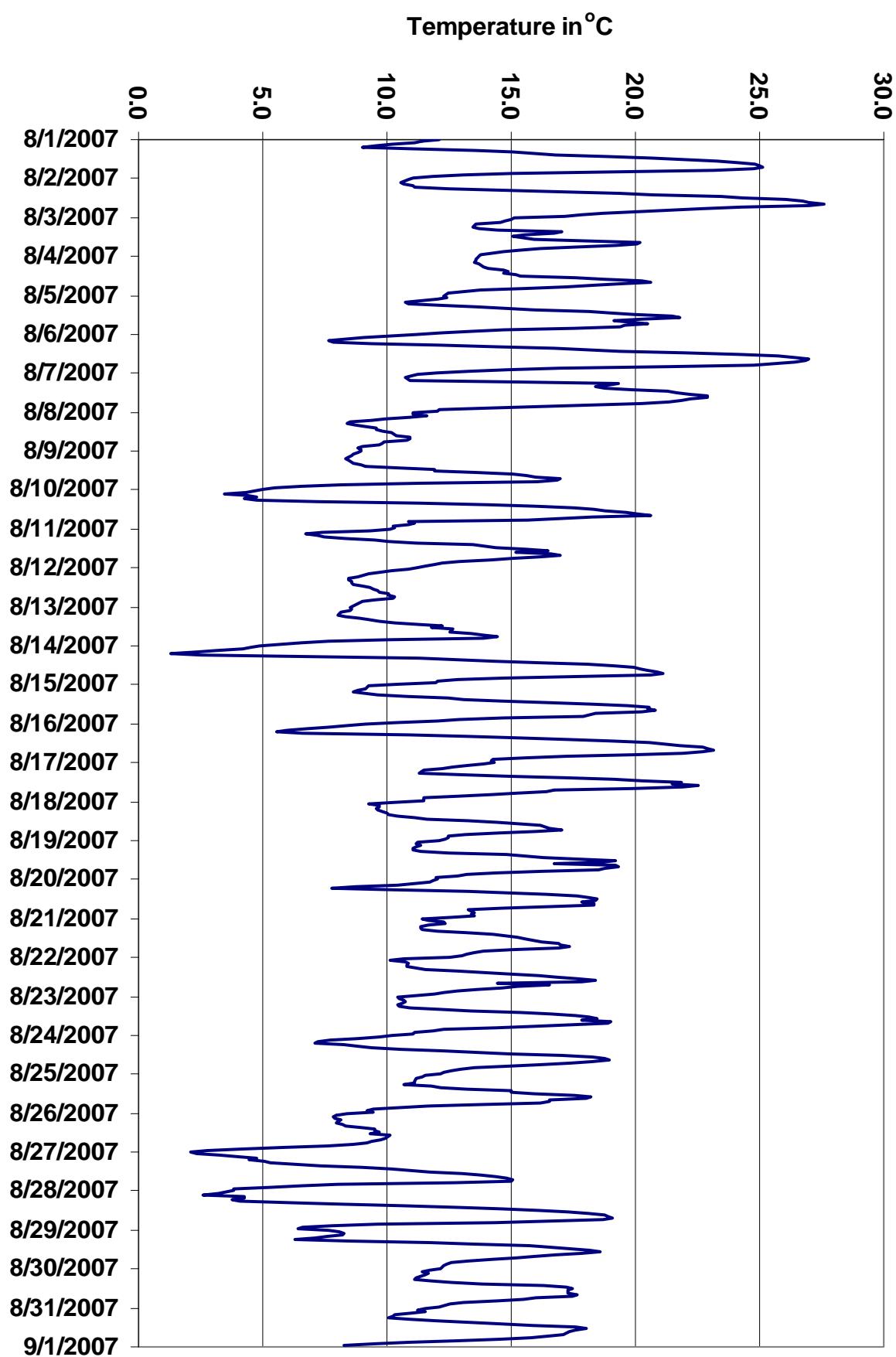


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

# PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

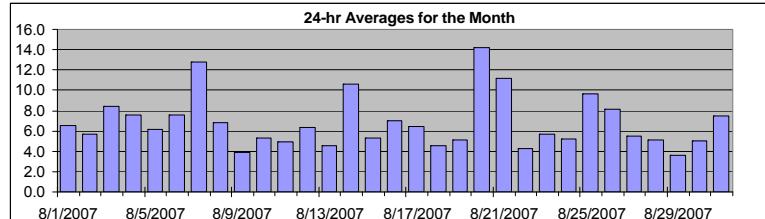
## Summary

Maximum 1-hr Average:	26.7	km/hr	20-Aug	12:00 13:00
Maximum 24-hr Value:	14.2	km/hr	20-Aug	

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
	21.8	15.3	8.1	5.7	3.8	2.7	2.2	6.8 km/hr

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)



## Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	6:00 7:00	7:00 8:00	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	Daily Max
	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	0:00	24-hr Scalar Average	
1-Aug-07	12	8	7	5	6	5	7	9	11	11	6	7	8	6	7	6	6	6	7	7	4	2	2	2	2	6.5	11.6
2-Aug-07	3	3	3	4	5	5	7	8	8	5	7	5	7	5	7	7	6	7	7	5	5	4	5	5	11	5.7	10.9
3-Aug-07	8	9	11	10	6	5	6	7	5	4	5	7	8	9	9	9	10	9	12	12	11	9	11	9	9	8.4	12.0
4-Aug-07	9	9	8	8	7	7	8	9	9	10	11	10	8	8	8	6	9	9	10	8	6	3	4	4	5	7.6	10.8
5-Aug-07	4	6	5	6	4	4	5	8	8	8	6	7	6	6	9	8	4	8	11	9	6	4	3	3	3	6.2	11.0
6-Aug-07	4	2	2	2	3	5	5	6	6	7	9	10	12	13	12	14	18	15	13	7	6	3	4	3	3	7.6	17.8
7-Aug-07	3	2	2	3	3	13	18	21	22	21	21	18	17	16	16	18	20	18	16	9	3	5	5	5	5	12.8	21.7
8-Aug-07	5	8	12	13	12	9	10	9	8	8	6	6	6	3	3	4	4	4	7	6	4	6	5	5	4	6.8	12.9
9-Aug-07	4	4	3	3	3	3	3	3	4	4	5	5	4	5	6	5	5	5	5	4	3	2	2	2	3	3.9	6.5
10-Aug-07	3	2	3	3	3	3	3	3	4	4	4	7	7	6	8	6	7	8	6	10	6	7	6	6	5	5.3	9.9
11-Aug-07	5	3	3	2	4	3	3	5	5	6	5	5	7	8	7	8	6	7	5	4	5	4	3	6	4.9	7.8	
12-Aug-07	7	7	6	9	8	8	8	8	8	8	8	9	11	10	5	3	3	3	3	3	4	2	3	3	3	6.3	10.6
13-Aug-07	4	3	4	4	2	2	3	2	3	4	4	4	4	4	8	7	7	6	7	6	6	5	5	5	3	4.5	7.9
14-Aug-07	3	4	5	3	2	3	2	5	7	20	24	22	24	22	22	19	20	14	12	6	5	3	4	3	3	10.6	24.5
15-Aug-07	4	4	2	4	3	3	4	2	4	4	6	7	8	8	9	9	9	8	6	6	5	5	4	3	3	5.3	9.4
16-Aug-07	3	3	3	3	3	3	2	3	4	5	6	7	9	9	10	9	11	12	11	12	10	9	9	8	7	7.0	12.0
17-Aug-07	6	5	6	5	5	4	3	5	5	6	7	7	7	7	9	6	11	11	11	10	6	5	4	5	5	6.4	10.6
18-Aug-07	4	4	6	5	5	5	7	5	5	3	7	7	5	4	4	4	4	4	4	5	4	3	3	3	3	4.6	7.3
19-Aug-07	3	3	3	3	3	3	3	4	6	4	5	7	6	4	6	4	5	6	6	8	10	6	7	7	7	5.1	10.4
20-Aug-07	7	10	9	7	3	3	11	13	15	18	25	27	27	22	18	17	20	13	11	9	12	13	14	15	14.2	26.7	
21-Aug-07	14	14	15	16	15	14	14	11	13	12	12	14	15	13	12	12	12	9	6	6	5	5	4	4	11.2	15.6	
22-Aug-07	4	3	4	4	3	4	3	3	4	4	4	4	4	4	6	6	7	6	6	5	4	3	4	4	4	4.3	7.1
23-Aug-07	3	4	4	5	3	3	4	4	5	7	7	7	10	10	11	9	8	5	6	7	4	4	5	3	5.7	11.2	
24-Aug-07	3	3	3	3	3	3	4	4	4	4	5	7	7	7	8	9	6	6	5	5	7	7	5	5	5.2	8.9	
25-Aug-07	7	5	7	6	7	5	6	6	8	8	11	12	12	12	18	21	21	19	18	9	3	3	4	5	9.7	21.0	
26-Aug-07	6	7	8	7	7	9	10	12	13	13	12	11	11	10	10	9	7	6	4	3	3	3	5	5	8.1	13.0	
27-Aug-07	3	3	4	3	5	4	7	5	4	7	6	7	9	8	9	10	9	8	7	4	2	4	3	3	5.5	9.7	
28-Aug-07	5	3	3	5	6	5	6	6	7	5	6	6	7	7	6	6	6	5	5	5	2	3	2	3	5.1	7.3	
29-Aug-07	3	3	3	2	3	3	3	4	4	4	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3.6	6.3
30-Aug-07	4	3	4	4	4	4	3	5	5	4	4	4	4	5	5	4	4	6	5	8	9	8	6	6	6	5.0	9.4
31-Aug-07	4	5	10	5	4	4	4	6	9	9	9	10	12	15	14	11	9	7	7	7	5	4	3	3	3	7.5	14.9

1-hr Average	5.0	4.9	5.5	5.2	4.8	4.9	5.8	6.5	7.2	7.7	8.5	8.8	9.1	9.1	9.3	8.9	9.0	8.3	7.9	6.6	5.6	4.7	4.7	4.9
Hourly Max	13.6	14.3	15.4	15.6	15.1	14.2	18.1	21.1	21.7	20.5	25.3	26.7	22.3	21.9	21.0	20.5	20.2	18.1	16.2	12.2	13.3	13.7	15.1	

# PASZA - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	26.4	km/hr	20-Aug	11:00 12:00
Maximum 24-hr Value:	13.0	km/hr	20-Aug	

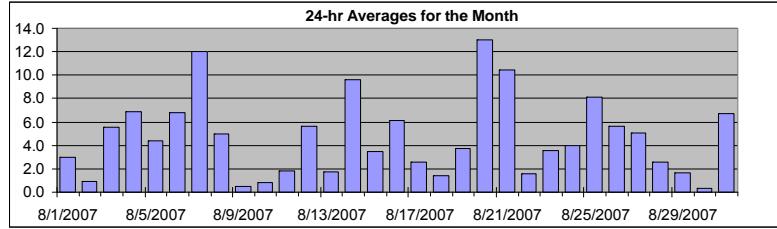
Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				AverageV
99	95	75	50	25 5 1
21.5	15.2	7.6	4.9	2.8 1.3 0.6
				7.1 km/hr

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	
1-Aug-07	12	8	7	5	5	5	6	9	11	11	5	5	6	3	5	3	4	4	6	7	4	1	1	1	3.0	11.5
2-Aug-07	3	2	0	4	5	5	6	8	8	4	6	1	6	3	5	6	6	6	5	4	3	3	2	9	0.9	8.9
3-Aug-07	2	8	6	5	4	4	5	6	4	2	4	7	8	9	9	9	9	9	10	11	10	9	11	9	5.6	11.1
4-Aug-07	8	9	8	8	6	7	8	8	9	10	11	10	7	7	8	4	8	10	8	6	3	4	3	4	6.9	10.6
5-Aug-07	4	6	5	5	4	4	5	7	7	7	6	6	5	5	8	4	2	7	11	9	3	2	1	1	4.4	10.7
6-Aug-07	3	2	2	1	3	5	5	5	5	7	8	10	11	13	12	14	18	15	13	7	5	2	4	3	6.8	17.5
7-Aug-07	1	1	1	2	2	13	18	21	22	20	21	17	16	16	15	15	17	20	18	16	9	2	3	4	12.0	21.5
8-Aug-07	5	8	11	13	12	8	10	9	7	7	5	5	5	2	1	3	4	6	5	4	5	5	5	4	5.0	12.6
9-Aug-07	3	3	2	2	2	2	2	2	3	3	4	3	0	3	4	2	1	2	4	4	3	1	2	1	0.5	4.4
10-Aug-07	2	1	1	1	2	1	2	4	3	3	5	6	5	7	2	5	4	6	4	6	7	6	1	4	0.8	7.1
11-Aug-07	5	3	2	1	3	2	1	3	4	5	1	4	6	6	6	7	6	6	5	3	4	3	1	5	1.8	7.0
12-Aug-07	6	6	6	9	8	8	8	8	8	7	8	9	10	9	5	2	3	2	2	4	1	2	3	5.7	10.5	
13-Aug-07	3	3	4	4	1	1	3	2	3	4	4	2	1	8	4	6	6	6	6	5	5	5	3	1.7	7.6	
14-Aug-07	2	4	5	3	1	2	2	5	6	20	23	21	24	22	21	18	20	14	11	6	4	0	1	2	9.6	24.1
15-Aug-07	3	0	2	3	1	1	2	1	3	3	6	7	6	7	9	9	9	7	6	6	5	5	4	3	3.5	9.1
16-Aug-07	3	3	2	2	1	2	1	4	5	5	6	8	8	9	8	11	11	10	11	10	9	9	8	7	6.2	11.4
17-Aug-07	6	5	6	5	5	3	3	5	4	5	5	6	5	5	8	5	10	10	10	9	5	2	3	4	2.5	10.3
18-Aug-07	4	4	5	5	4	3	5	1	2	2	6	5	3	1	2	3	4	2	4	5	1	2	2	3	1.4	6.0
19-Aug-07	1	2	2	3	2	2	1	3	6	3	4	5	4	3	5	2	4	5	6	7	10	6	6	7	3.8	10.0
20-Aug-07	7	10	8	6	2	2	10	13	14	18	25	26	26	22	18	17	20	12	11	9	12	13	14	15	13.0	26.4
21-Aug-07	14	14	15	15	15	14	13	11	13	12	12	14	14	13	11	12	12	9	6	5	5	5	4	4	10.5	15.4
22-Aug-07	4	2	4	4	2	3	3	2	3	3	2	2	3	3	6	5	5	1	2	4	1	3	3	3	1.5	6.4
23-Aug-07	2	2	2	4	2	3	3	4	4	6	6	6	8	10	10	9	7	2	6	5	2	2	4	3.6	9.6	
24-Aug-07	0	1	1	2	1	2	1	3	1	2	5	6	6	6	7	7	8	6	6	4	4	6	7	4.0	8.5	
25-Aug-07	1	4	6	6	7	4	5	5	8	7	10	11	12	11	18	20	20	19	18	7	3	2	3	5	8.1	20.4
26-Aug-07	6	7	8	7	7	9	9	12	12	12	10	10	10	9	9	10	9	6	5	3	3	2	2	4	5.7	12.4
27-Aug-07	2	3	3	2	5	4	6	4	3	7	6	7	8	7	7	9	8	7	6	2	2	1	1	2	5.1	8.8
28-Aug-07	5	2	3	5	6	4	6	5	7	5	6	5	4	5	3	4	4	5	5	4	1	3	2	3	2.6	7.1
29-Aug-07	3	2	2	1	0	1	2	3	4	2	3	3	5	4	4	3	2	3	2	3	3	1	1	4	1.6	4.6
30-Aug-07	4	3	3	3	3	3	3	5	5	4	2	3	2	4	4	3	3	3	6	2	7	9	8	6	0.3	9.0
31-Aug-07	3	5	10	3	1	3	3	6	8	9	9	10	12	14	13	11	9	6	6	7	6	5	4	3	6.7	14.4

1-hr Vector	1.8	2.3	2.7	2.4	2.1	2.4	2.7	3.4	3.6	3.8	4.1	3.6	3.9	3.1	3.7	3.0	3.2	2.8	3.1	1.9	1.0	1.2	1.3	1.8
Hourly Max	13.5	14.1	15.2	15.4	15.0	14.0	17.6	20.9	21.5	20.2	24.9	26.4	26.3	21.9	21.5	20.4	20.1	19.8	17.7	16.1	12.1	13.1	13.6	14.9

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

## PASZA - Evergreen Park Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Hourly Average Wind Data													

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	321.3	275.7	227.2	104.3	35.0	11.7		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	0:00
1-Aug-07	256	277	276	303	311	315	291	283	282	282	279	292	201	201	213	185	119	125	92	105	81	199	10	356	263	W
2-Aug-07	28	288	18	263	265	262	270	276	269	241	258	359	339	46	18	28	51	58	178	129	180	146	116	184	282	WNW
3-Aug-07	330	27	209	283	165	197	175	282	335	310	272	214	210	214	203	204	269	305	291	277	282	283	278	275	261	W
4-Aug-07	279	283	281	284	292	304	308	296	280	297	314	323	325	343	335	295	307	308	307	298	264	225	224	236	298	WNW
5-Aug-07	256	260	246	237	232	263	266	299	277	277	257	291	295	351	288	29	43	300	257	246	329	171	199	178	275	W
6-Aug-07	221	215	221	266	216	200	197	216	197	200	205	219	226	253	248	272	264	268	257	259	236	200	195	202	237	WSW
7-Aug-07	90	349	219	237	246	271	280	271	271	273	281	284	288	280	286	287	283	282	267	258	228	334	356	278	W	
8-Aug-07	330	317	334	347	358	22	33	27	28	17	45	11	19	54	352	260	303	253	245	307	289	310	303	312	346	NNW
9-Aug-07	234	244	233	227	158	160	99	98	98	74	82	28	295	213	263	259	320	235	110	113	91	358	247	17	203	SSW
10-Aug-07	47	1	56	33	67	38	209	215	159	160	162	164	194	216	278	230	175	89	275	34	5	17	64	248	179	S
11-Aug-07	302	310	219	209	221	227	310	296	210	209	152	85	82	103	60	61	69	79	77	66	57	87	63	62	82	E
12-Aug-07	64	54	65	67	68	65	69	66	62	65	55	40	39	38	41	48	24	13	317	276	56	21	1	327	50	NE
13-Aug-07	336	299	328	44	272	235	311	49	69	41	64	130	76	219	244	272	238	239	229	228	200	198	196	206	237	WSW
14-Aug-07	229	210	207	201	227	213	221	208	241	254	253	259	265	270	269	280	267	274	270	314	352	218	286	224	261	W
15-Aug-07	217	222	272	214	279	298	100	66	71	89	114	109	102	130	58	54	60	74	72	66	65	66	79	68	83	E
16-Aug-07	61	42	309	307	350	333	344	67	91	65	51	60	70	73	82	89	89	84	78	75	72	72	73	74	70	ENE
17-Aug-07	75	67	65	79	79	66	56	82	64	89	105	58	87	68	68	99	249	336	270	331	336	296	233	290	46	NE
18-Aug-07	237	267	271	279	282	170	319	211	208	30	234	215	158	132	144	100	123	136	127	101	31	190	50	87	194	SSW
19-Aug-07	34	225	39	76	143	182	157	197	203	221	207	214	250	159	169	273	121	175	218	206	218	218	217	210	201	SSW
20-Aug-07	238	230	238	216	116	187	237	252	254	262	269	273	277	285	278	302	328	289	264	258	263	269	266	266	W	
21-Aug-07	264	268	272	275	272	274	285	282	284	286	308	311	314	314	321	323	323	321	300	283	258	273	293	284	292	WNW
22-Aug-07	259	2	273	311	305	262	248	231	242	224	237	130	321	273	241	50	74	81	202	298	158	254	318	288	265	W
23-Aug-07	261	208	251	215	286	282	307	271	256	278	258	298	301	321	304	252	284	41	115	246	78	60	210	292	279	W
24-Aug-07	210	244	54	54	217	205	120	172	162	72	58	113	122	120	115	97	87	88	81	93	78	109	128	160	110	ESE
25-Aug-07	76	191	218	215	235	284	284	260	228	235	249	257	260	278	273	277	285	279	267	304	358	314	297	315	268	W
26-Aug-07	321	291	263	287	288	263	272	276	275	282	277	257	294	16	8	15	25	27	2	17	22	269	259	234	301	WNW
27-Aug-07	248	228	228	290	226	246	256	252	283	249	246	256	266	275	278	269	274	315	253	190	236	245	255	213	259	W
28-Aug-07	240	244	302	291	267	287	263	271	258	260	218	209	204	215	178	159	194	142	121	91	80	124	42	73	219	SW
29-Aug-07	67	39	101	342	254	323	160	214	321	31	87	108	162	183	190	174	175	123	116	69	116	144	77	127	SE	
30-Aug-07	113	127	109	131	75	40	67	75	78	73	174	280	65	87	119	106	57	292	266	262	297	298	249	233	77	ENE
31-Aug-07	217	215	238	260	310	255	215	232	251	260	265	247	259	257	263	253	236	219	194	192	193	200	199	279	242	WSW

Hourly Avg 276 272 262 279 273 269 277 269 263 272 259 265 272 272 280 288 286 302 265 278 296 241 254 251

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

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### 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
	90.2	79.6	49.1	27.9	16.3	9.8	6.7

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

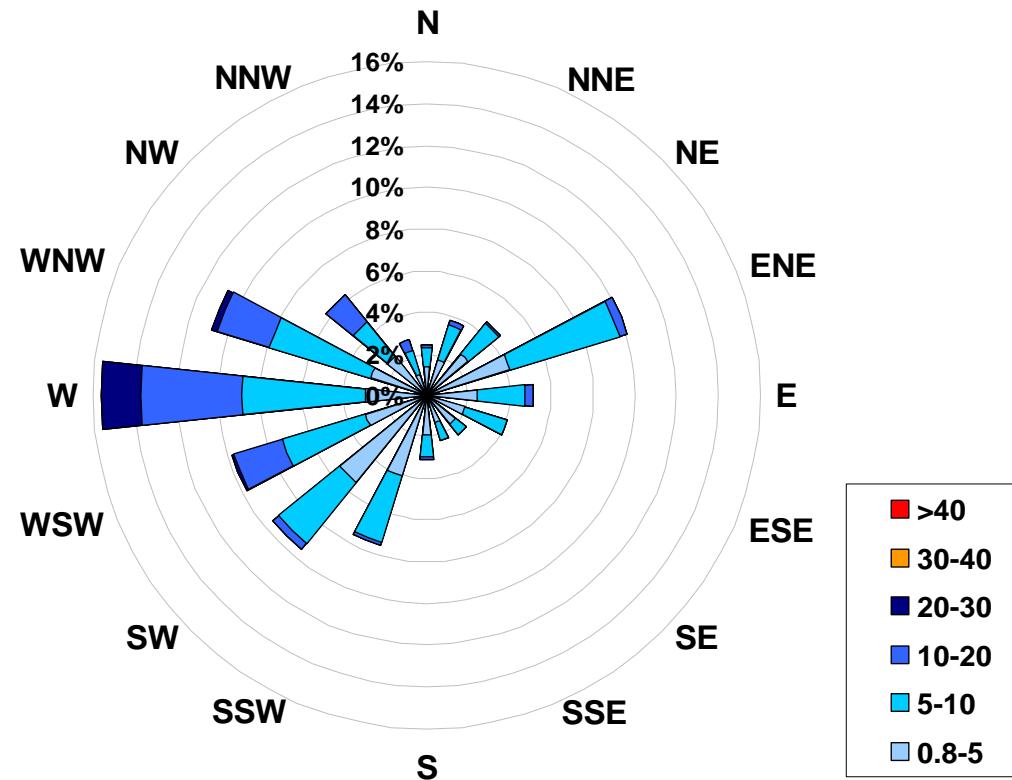
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### 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-Aug-07	6	21	16	22	15	17	20	15	13	21	36	58	47	72	59	73	66	57	39	12	25	68	79	38	79.2	
2-Aug-07	25	44	87	30	16	14	16	18	20	48	33	85	29	71	46	33	32	35	62	47	50	36	65	48	86.6	
3-Aug-07	90	27	76	89	53	67	37	33	40	71	33	12	13	21	16	23	27	24	30	18	13	12	11	12	89.9	
4-Aug-07	12	10	10	11	17	16	13	13	12	18	12	14	33	25	32	63	23	19	19	16	37	24	22	20	62.7	
5-Aug-07	13	11	18	15	38	22	16	29	20	20	29	35	43	44	31	64	64	25	13	11	62	75	90	72	90.4	
6-Aug-07	44	22	46	50	22	5	7	23	18	14	19	17	22	18	14	13	10	13	9	16	13	64	19	31	64.0	
7-Aug-07	88	61	78	60	45	12	14	8	8	10	10	15	17	15	16	18	13	12	11	7	12	65	62	30	87.7	
8-Aug-07	17	13	14	13	21	18	15	19	21	24	31	34	33	62	86	46	24	22	16	21	26	17	10	12	85.9	
9-Aug-07	34	30	52	54	66	56	39	54	35	39	47	66	96	75	56	86	81	80	37	32	36	70	51	61	96.2	
10-Aug-07	37	77	62	80	55	61	72	26	61	60	42	43	47	32	70	54	63	17	92	27	25	29	87	34	91.6	
11-Aug-07	15	33	84	84	25	68	83	48	30	22	87	51	25	47	31	29	32	27	19	29	20	45	80	18	86.6	
12-Aug-07	18	16	27	14	16	12	17	15	18	16	20	12	10	10	11	25	37	31	49	42	32	56	45	22	55.6	
13-Aug-07	30	15	32	21	47	60	27	28	31	32	36	69	97	17	53	35	31	30	18	12	4	4	6	24	96.9	
14-Aug-07	45	17	15	14	66	24	22	18	38	9	7	13	10	11	11	14	10	13	10	32	51	95	78	69	95.2	
15-Aug-07	64	86	49	43	72	79	74	82	34	36	35	26	39	34	22	19	22	26	19	20	11	10	19	13	86.1	
16-Aug-07	14	28	44	40	69	34	61	34	40	46	34	28	31	29	31	21	18	22	18	15	14	12	13	15	68.7	
17-Aug-07	27	16	15	21	16	21	36	27	35	45	45	36	59	49	23	47	14	32	24	24	27	71	48	53	70.8	
18-Aug-07	18	18	22	17	35	65	51	87	86	70	52	53	52	87	60	57	40	75	24	20	86	52	76	36	87.4	
19-Aug-07	74	44	39	23	57	58	76	57	25	49	48	50	50	55	39	79	47	25	25	18	18	11	14	8	78.9	
20-Aug-07	9	7	10	42	63	70	17	6	11	12	11	9	10	10	12	13	11	26	15	16	7	9	7	9	69.8	
21-Aug-07	7	9	8	10	7	10	9	12	10	12	14	14	15	15	17	15	17	16	22	21	13	26	31	27	31.1	
22-Aug-07	23	51	17	20	40	24	17	30	24	45	49	73	61	66	75	28	42	25	89	56	49	74	42	37	89.0	
23-Aug-07	49	71	59	31	62	31	29	19	28	35	48	48	36	23	33	24	28	66	12	63	53	53	30	51	71.3	
24-Aug-07	94	79	74	72	78	46	68	38	72	58	36	42	45	36	27	23	17	16	13	56	45	19	21	71	94.5	
25-Aug-07	90	28	14	14	14	50	20	30	21	25	18	12	13	22	15	15	12	11	9	46	42	52	35	19	89.9	
26-Aug-07	14	26	11	20	16	11	10	12	13	22	14	22	27	21	19	18	16	26	31	26	17	63	47	32	62.6	
27-Aug-07	33	23	19	37	12	19	11	30	42	20	15	24	22	35	42	28	28	21	27	67	24	84	61	69	83.6	
28-Aug-07	18	53	32	20	10	28	20	24	16	30	32	42	58	48	76	56	75	41	20	12	64	25	50	17	76.1	
29-Aug-07	21	44	63	69	96	81	65	72	30	63	67	66	53	47	41	43	54	21	42	30	56	94	80	33	95.7	
30-Aug-07	24	38	37	51	52	17	23	22	20	35	77	59	54	43	35	81	48	25	78	27	17	17	14	10	80.8	
31-Aug-07	48	13	9	80	85	43	55	15	12	12	15	18	16	15	12	12	10	13	9	10	8	6	33	41	85.4	

Hourly Max	94	86	87	89	96	81	83	87	86	71	87	85	97	87	86	86	81	80	92	67	86	95	90	72
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**1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for  
August 2007**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	304
5	to	10	319
10	to	20	104
20	to	30	17
30	to	40	0
> 40			0
Total Non-Zero Values			744

# PASZA – Smoky Heights Station

## Monthly Summary Tables, Graphs and Roses

# PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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:	5.4 ppb 1-Aug 5:00 6:00
Maximum 24-hr Average:	1.1 ppb 1-Aug

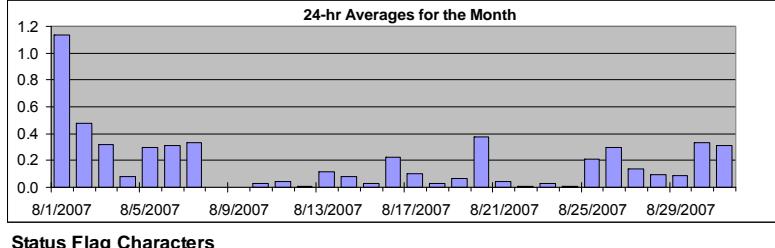
AIC Time:	31 hrs	Operational Time:	677 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	96.1%						
Percentile	99 2.3	95 0.8	75 0.2	50 0.1	25 0.0	5 0.0	1 0.0	Average 0.2 ppb	Median 0.1 ppb

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-Aug-07	1	3	P	2	3	5	3	A	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	5.4
2-Aug-07	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.4
3-Aug-07	0	0	0	0	0	0	A	0	0	0	0	0	N	1	1	1	0	1	1	0	0	0	0	0	0	0	0.3	1.1
4-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
5-Aug-07	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	1.0
6-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.9
7-Aug-07	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	0	0.3	1.5
8-Aug-07	A	0	0	0	0	0	0	0	0	C	C	C	M	M	M	M	M	M	M	M	M	M	M	M	M	N	0.2	
9-Aug-07	M	M	M	M	M	M	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0.0
10-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
11-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
12-Aug-07	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
13-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.5
14-Aug-07	0	A	0	0	0	0	P	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
15-Aug-07	0	0	0	N	0	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
16-Aug-07	0	0	A	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.9
17-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
18-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
19-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.2
20-Aug-07	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4
21-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
22-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
23-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
24-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
25-Aug-07	0	0	0	0	A	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.9
26-Aug-07	0	0	0	A	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.1
27-Aug-07	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
28-Aug-07	0	A	0	0	0	0	0	0	0	0	0	N	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
29-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
30-Aug-07	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0.3	1.5
31-Aug-07	0	0	0	0	0	0	0	0	1	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	2.6

Hourly Avg	0.1	0.2	0.1	0.3	0.2	0.3	0.2	0.3	0.3	0.4	0.3	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	0.1
Hourly Max	1.4	3.3	0.4	4.0	3.1	5.4	2.9	2.1	1.7	2.6	1.4	1.9	1.1	1.0	0.8	0.7	0.6	0.6	0.4	0.6	1.3	2.9	0.4	1.5		

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

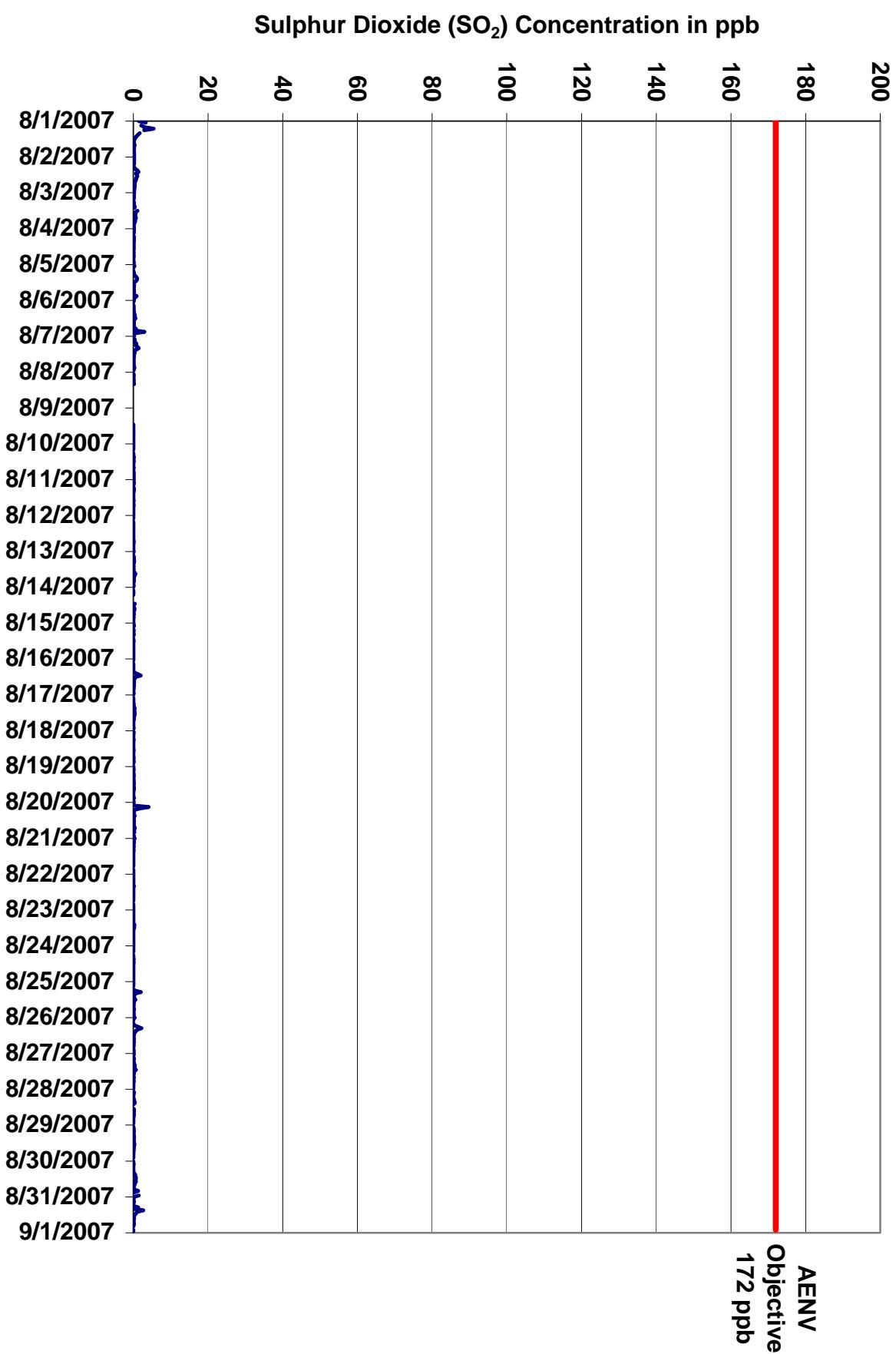


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

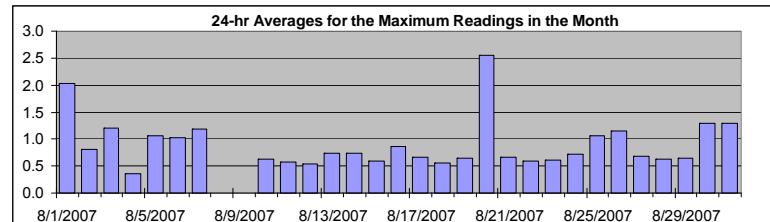
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	26.3 ppb	20-Aug 3:00 4:00
Maximum 24-hr Value:	2.5 ppb	20-Aug



#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	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	Daily Maximum
1-Aug-07	3 1:00	4 P	4 2:00	6 3:00	9 4:00	6 5:00	A 6:00	3 7:00	2 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	0 15:00	1 16:00	0 17:00	1 18:00	0 19:00	0 20:00	0 21:00	0 22:00	1 23:00	1 24:00	2.0	9.0
2-Aug-07	0 1:00	0 2:00	0 3:00	0 4:00	0 5:00	0 6:00	A 7:00	1 8:00	1 9:00	2 10:00	2 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	0 21:00	0 22:00	0 23:00	0 24:00	0.8	2.2	
3-Aug-07	0 1:00	0 2:00	0 3:00	1 4:00	0 5:00	A 6:00	0 7:00	0 8:00	0 9:00	1 10:00	1 11:00	N 12:00	4 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	10 21:00	1 22:00	1 23:00	1 24:00	1.2	10.3	
4-Aug-07	0 1:00	0 2:00	0 3:00	0 4:00	A 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 24:00	0.4	0.4	
5-Aug-07	1 1:00	1 2:00	A 3:00	0 4:00	0 5:00	0 6:00	0 7:00	1 8:00	2 9:00	1 10:00	1 11:00	10 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 24:00	1.1	10.2	
6-Aug-07	0 1:00	A 2:00	0 3:00	0 4:00	0 5:00	0 6:00	0 7:00	0 8:00	1 9:00	0 10:00	1 11:00	1 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 24:00	1.0	10.1	
7-Aug-07	1 1:00	A 2:00	1 3:00	1 4:00	2 5:00	2 6:00	6 7:00	6 8:00	2 9:00	1 10:00	1 11:00	1 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 24:00	1.2	6.2	
8-Aug-07	A 1:00	0 2:00	0 3:00	0 4:00	0 5:00	0 6:00	0 7:00	0 8:00	2 9:00	C 10:00	C 11:00	C 12:00	C 13:00	C 14:00	M 15:00	M 16:00	M 17:00	M 18:00	M 19:00	M 20:00	M 21:00	M 22:00	M 23:00	M 24:00	N	2.1	
9-Aug-07	M 1:00	M 2:00	M 3:00	M 4:00	M 5:00	M 6:00	C 7:00	C 8:00	C 9:00	A 10:00	1 11:00	0 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	N	1.7	
10-Aug-07	1 1:00	1 2:00	0 3:00	1 4:00	A 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.6	0.9	
11-Aug-07	0 1:00	1 2:00	1 3:00	A 4:00	1 5:00	0 6:00	0 7:00	1 8:00	0 9:00	1 10:00	0 11:00	1 12:00	0 13:00	1 14:00	0 15:00	0 16:00	1 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 24:00	0.6	0.8	
12-Aug-07	0 1:00	1 2:00	A 3:00	0 4:00	0 5:00	0 6:00	0 7:00	0 8:00	0 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	0 15:00	1 16:00	1 17:00	1 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 24:00	0.5	0.8	
13-Aug-07	1 1:00	A 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	0 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.7	1.3	
14-Aug-07	1 1:00	A 2:00	0 3:00	0 4:00	P 5:00	P 6:00	P 7:00	P 8:00	P 9:00	P 10:00	P 11:00	P 12:00	P 13:00	P 14:00	1 15:00	2 16:00	2 17:00	1 18:00	1 19:00	1 20:00	0 21:00	1 22:00	1 23:00	1 24:00	0.7	1.6	
15-Aug-07	1 1:00	1 2:00	1 3:00	N 4:00	0 5:00	1 6:00	1 7:00	1 8:00	N 9:00	0 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	0 19:00	0 20:00	0 21:00	1 22:00	1 23:00	1 24:00	0.6	0.7	
16-Aug-07	0 1:00	A 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	2 10:00	3 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.9	2.8	
17-Aug-07	1 1:00	A 2:00	0 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.7	1.0	
18-Aug-07	A 1:00	1 2:00	0 3:00	0 4:00	1 5:00	0 6:00	1 7:00	0 8:00	1 9:00	0 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 24:00	0.6	0.8	
19-Aug-07	1 1:00	0 2:00	1 3:00	0 4:00	1 5:00	0 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.6	0.8	
20-Aug-07	1 1:00	1 2:00	1 3:00	26 4:00	15 5:00	1 6:00	1 7:00	1 8:00	0 9:00	1 10:00	1 11:00	0 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	2.5	26.3	
21-Aug-07	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.7	1.0	
22-Aug-07	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.6	0.9	
23-Aug-07	0 1:00	0 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.6	1.0	
24-Aug-07	4 1:00	1 2:00	1 3:00	1 4:00	A 5:00	0 6:00	0 7:00	0 8:00	0 9:00	1 10:00	1 11:00	1 12:00	1 13:00	0 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.7	4.0	
25-Aug-07	1 1:00	0 2:00	1 3:00	A 4:00	0 5:00	3 6:00	3 7:00	1 8:00	2 9:00	1 10:00	2 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	1.1	3.2	
26-Aug-07	1 1:00	1 2:00	A 3:00	1 4:00	4 5:00	3 6:00	2 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	1.1	4.1	
27-Aug-07	1 1:00	A 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	2 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.7	1.5	
28-Aug-07	0 1:00	A 2:00	1 3:00	0 4:00	0 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	N 11:00	N 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 24:00	0.6	1.0	
29-Aug-07	A 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1													

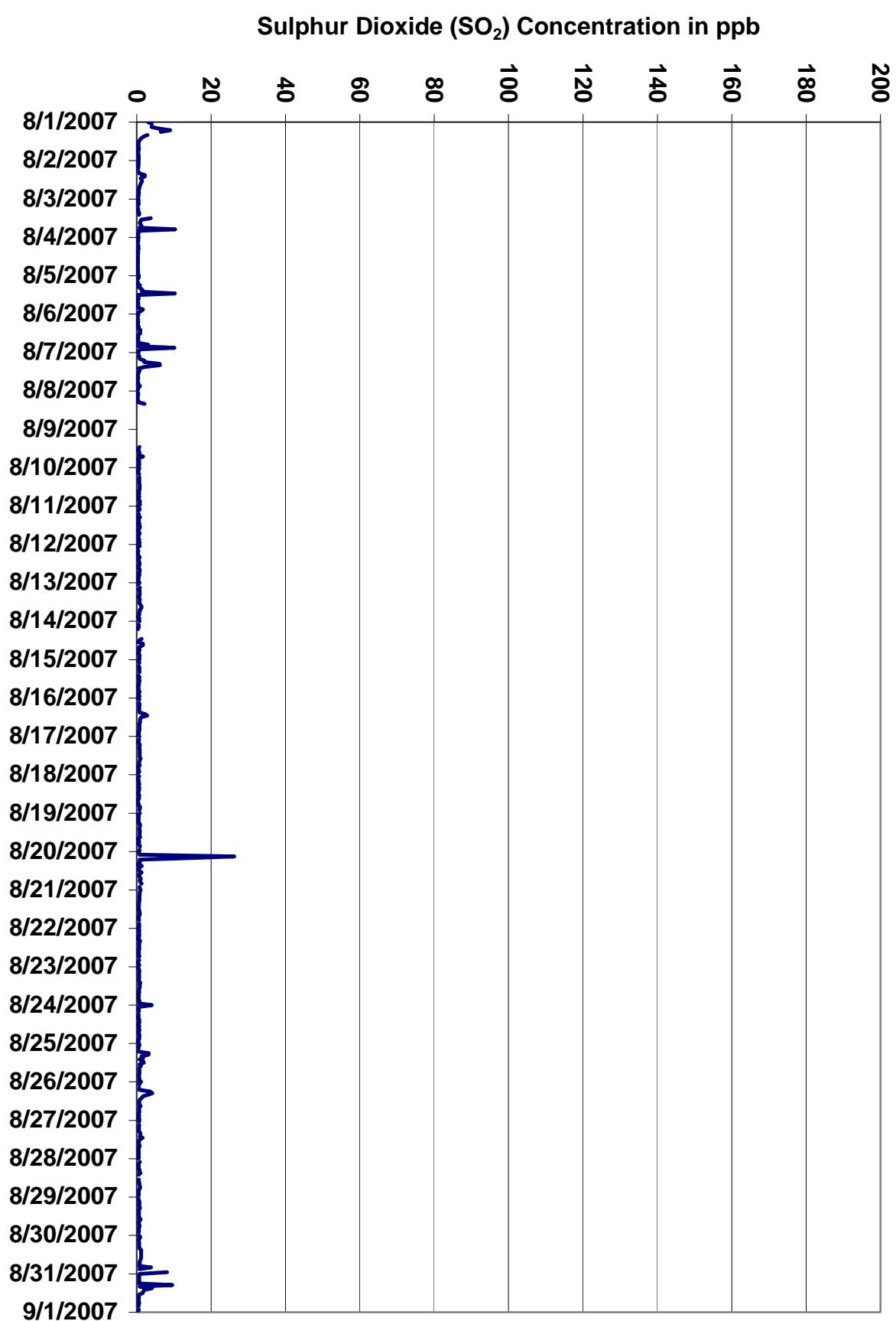
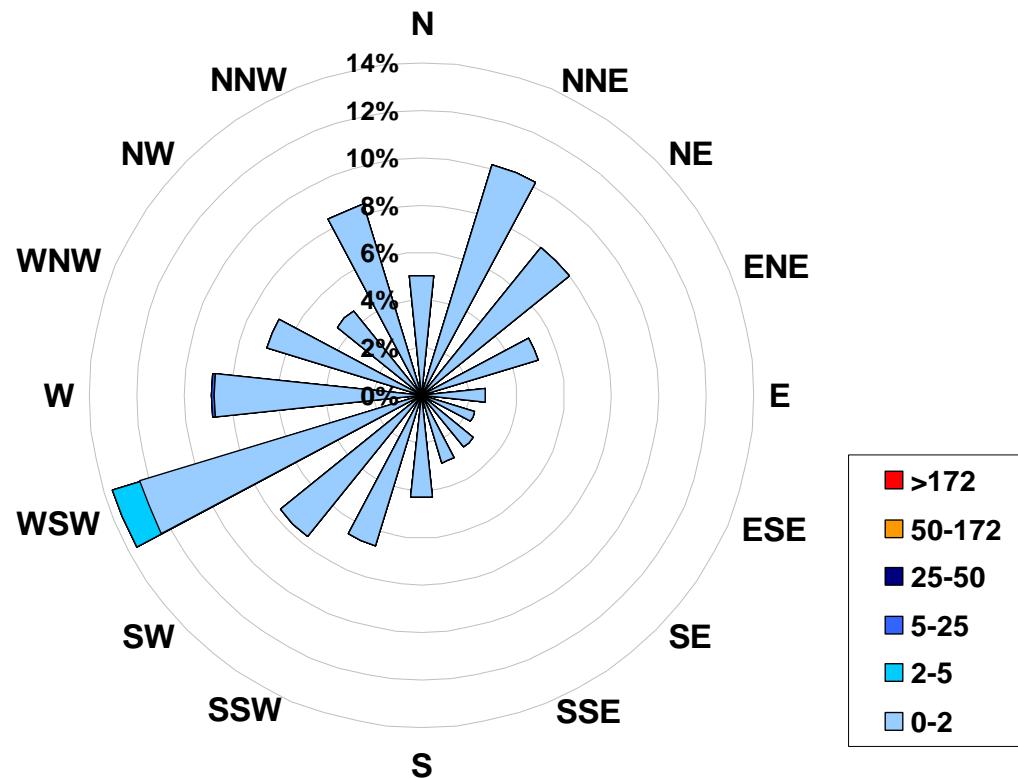


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms:** 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	668
2	to	5	8
5	to	25	1
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			677

# PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

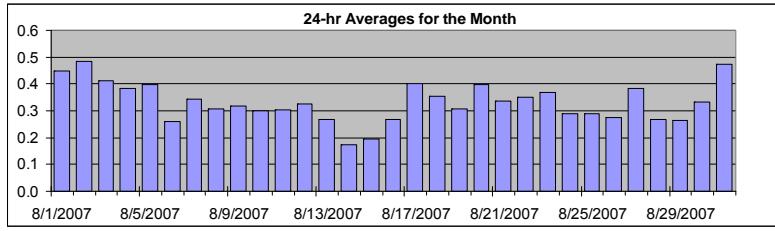
Maximum 1-hr Average:	1.3	ppb	20-Aug	3:00 4:00
Maximum 24-hr Value:	0.5	ppb	2-Aug	

AIC Time:	32 hrs	Operational Time:	695 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	98.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.7	0.5	0.4	0.3	0.3	0.2	0.1	0.3 ppb	0.3 ppb

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-Aug-07	1	1	P	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.6
2-Aug-07	1	0	0	1	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	0.9	
3-Aug-07	1	0	1	1	0	A	0	1	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
4-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.8
5-Aug-07	1	1	1	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	0.7
6-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
7-Aug-07	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
8-Aug-07	A	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0.3	0.5
9-Aug-07	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	0.3	0.4
10-Aug-07	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	0.3	0.5
11-Aug-07	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
12-Aug-07	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
13-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
14-Aug-07	0	A	0	0	0	0	P	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
15-Aug-07	0	0	0	N	0	0	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
16-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
17-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
18-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
19-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.5
20-Aug-07	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	1.3
21-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4
22-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5
23-Aug-07	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
24-Aug-07	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	0.3	0.4
25-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
26-Aug-07	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
27-Aug-07	0	0	A	0	1	0	0	1	0	0	0	0	0	0	N	N	0	0	0	0	0	0	0	0	0	0	0.4	0.7
28-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	N	N	0	0	0	0	0	0	0	0	0	0	0.3	0.4
29-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
30-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0.3	1.0
31-Aug-07	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	1	0	0	0	1	A	1	1	0.5	0.8		

**HOURLY AVERAGE TABLE**

**Total Reduced Sulphur (TRS)**



**Status Flag Characters**

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

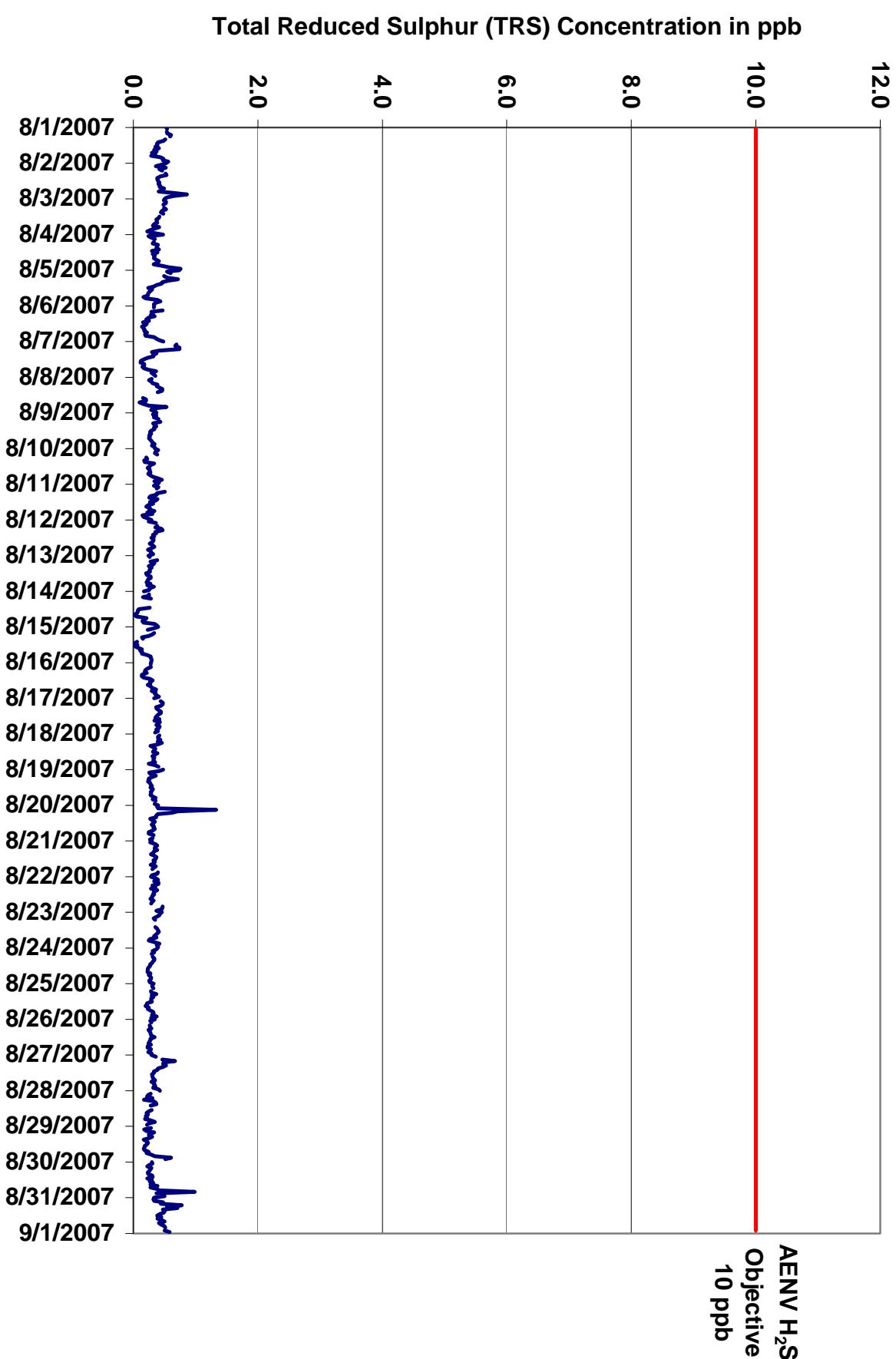


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

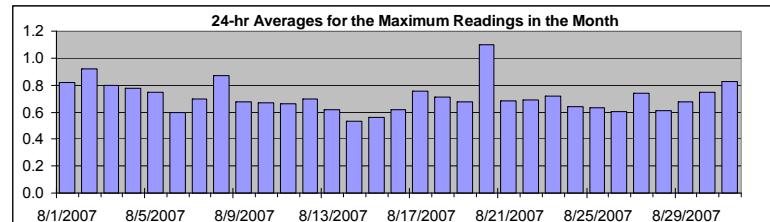
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Reduced Sulphur (TRS)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	7.1 ppb	20-Aug 3:00 4:00
Maximum 24-hr Value:	1.1 ppb	20-Aug



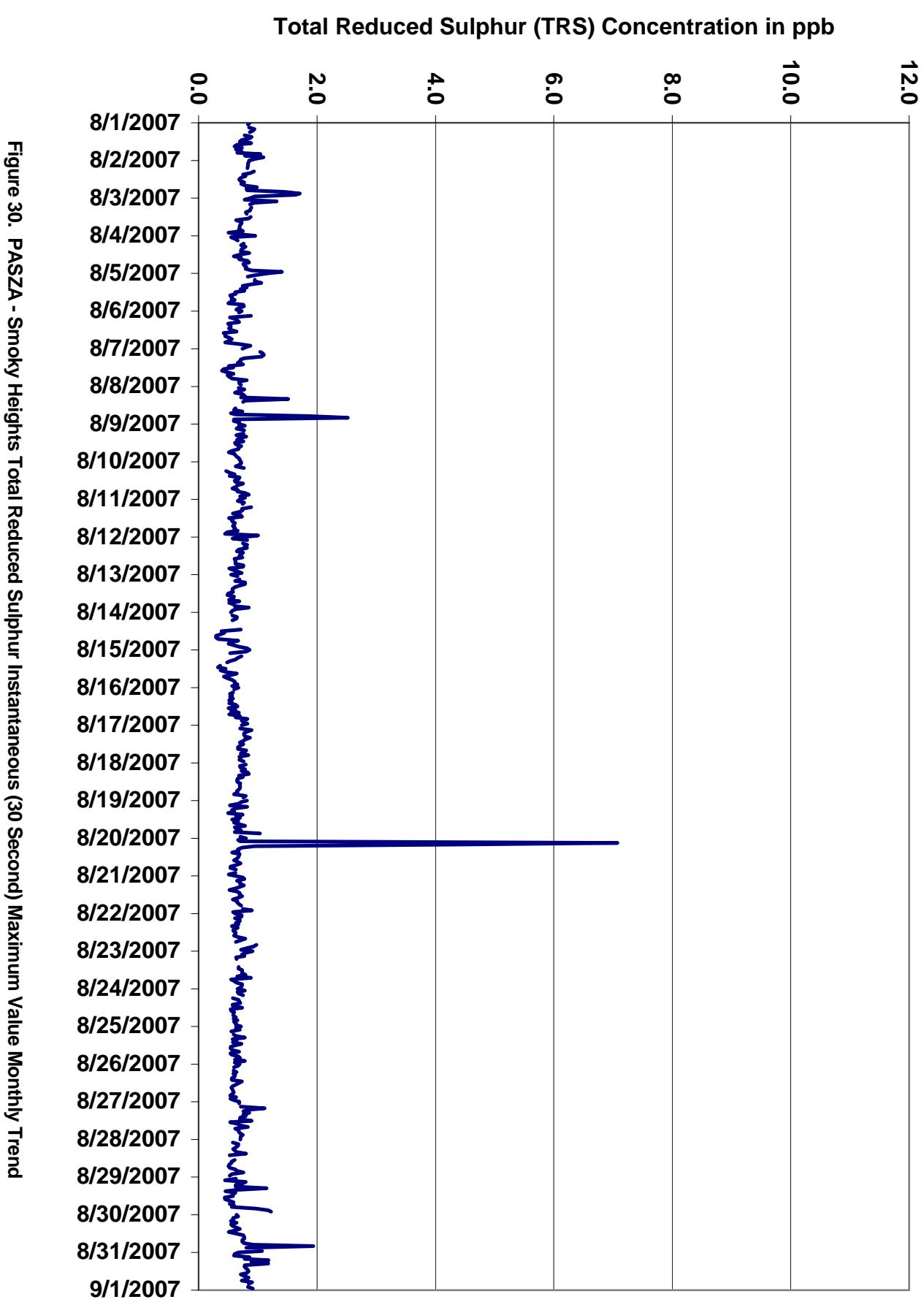
AIC Time:	32 hrs	Operational Time:	695 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	98.5%						
Percentile	99 1.5	95 0.9	75 0.8	50 0.7	25 0.6	5 0.5	1 0.4	Average 0.7 ppb	Median 0.7 ppb

#### Status Flag Characters

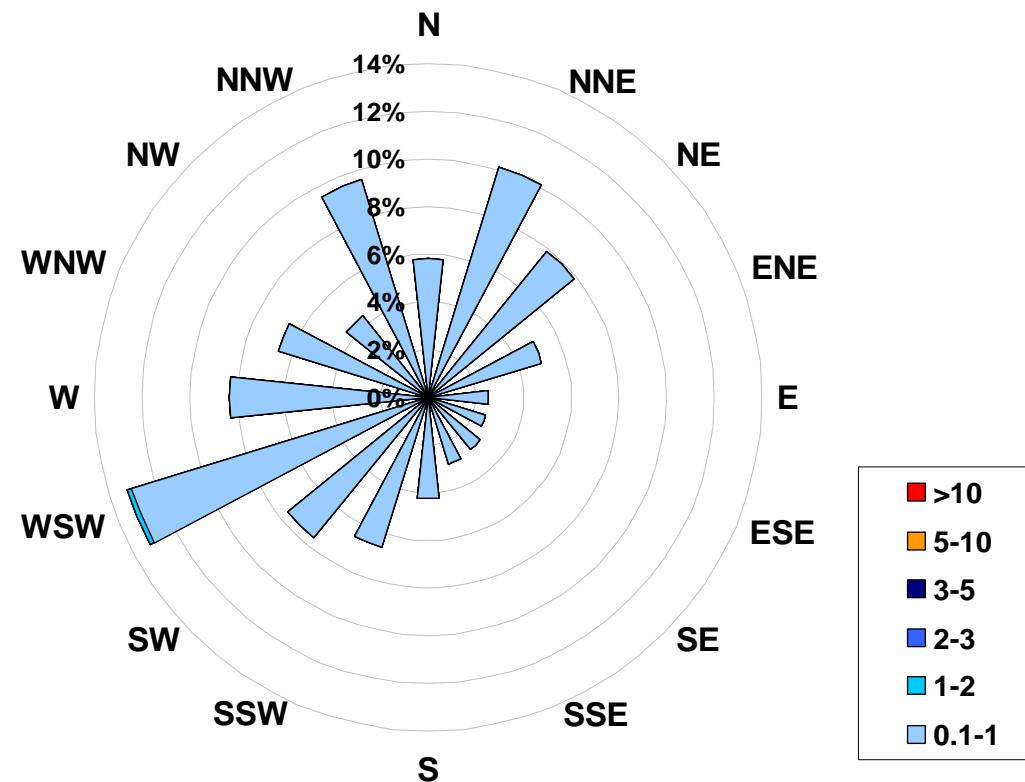
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	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	Daily Maximum		
1-Aug-07	1:00	1	1	P	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1		
2-Aug-07	1:00	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	0.9	1.7		
3-Aug-07	1:00	1	1	1	1	1	A	1	1	1	1	1	1	N	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
4-Aug-07	1:00	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	0.8	1.4	
5-Aug-07	1:00	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	
6-Aug-07	1:00	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1	0	1	1	0.6	0.9	
7-Aug-07	1:00	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	1	0	1	1	1	1	1	0.7	1.1	
8-Aug-07	1:00	A	1	1	1	1	1	1	2	1	1	C	C	A	1	1	1	1	1	2	3	1	1	1	1	0.9	2.5		
9-Aug-07	1:00	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	
10-Aug-07	1:00	1	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8	
11-Aug-07	1:00	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	1	0.7	1.0
12-Aug-07	1:00	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	
13-Aug-07	1:00	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
14-Aug-07	1:00	A	1	1	1	1	1	P	P	P	P	P	1	0	0	0	0	0	0	0	1	1	1	1	1	0.5	0.8		
15-Aug-07	1:00	1	1	1	N	1	1	1	0	N	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	0.6	0.9		
16-Aug-07	1:00	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	0.6	0.8	
17-Aug-07	1:00	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	0.9	
18-Aug-07	1:00	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	0.7	0.8	
19-Aug-07	1:00	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0		
20-Aug-07	1:00	1	1	1	7	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.1	7.1		
21-Aug-07	1:00	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		
22-Aug-07	1:00	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	1.0		
23-Aug-07	1:00	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9		
24-Aug-07	1:00	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	0.6	0.8	
25-Aug-07	1:00	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	0.6	0.8	
26-Aug-07	1:00	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	0.6	0.7	
27-Aug-07	1:00	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	1.1	
28-Aug-07	1:00	A	1	1	1	1	1	1	1	1	1	1	1	N	N	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
29-Aug-07	1:00	A	1	0	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0.7	1.2	
30-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.9	
31-Aug-07	1:00	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	1.2		
Hourly Avg		0.7	0.7	0.7	1.0	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8			
Hourly Max		1.2	1.0	1.3	7.1	4.3	1.2	1.1	1.2	1.5	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.9	2.5	1.7	1.6	1.4		



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



Calms: 0%

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	694
1	to	2	1
2	to	3	0
3	to	5	0
5	to	10	0
>	10		0
Total Non-Zero Values			695

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

Station: Smoky Heights  
Station Owner: PASZA

## HOURLY AVERAGE TABLE

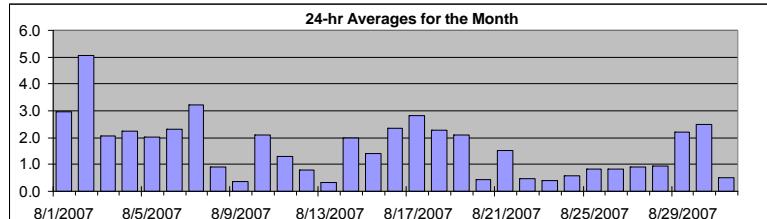
#### **Particulate Matter (PM<sub>2.5</sub>)**

**Monitoring Dates:** August 1, 2007 to September 1, 2007

**Draft Objective Limit:** Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr 30  $\mu\text{g}/\text{m}^3$

## Summary

Number of 24-hr Exceedances (draft): 0  
Maximum 1-hr Average: 13.5  $\mu\text{g}/\text{m}^3$  6-Aug 8:00 9:00  
Maximum 24-hr Value: 5.1  $\mu\text{g}/\text{m}^3$  2-Aug



## Status Flag Characters

C	Calibration	A	AIC - 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:				721 hrs
Calibration Time:	4 hrs			AMD Operational Uptime:				97.4%
Percentile	99	95	75	50	25	5	1	Average / Median
	8.1	5.4	2.4	1.1	0.2	0.0	0.0	1 $\mu\text{g}/\text{m}^3$
								1.3 $\mu\text{g}/\text{m}^3$

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-Aug-07	1	1	P	2	1	2	4	3	4	3	3	8	0	4	1	3	3	1	6	6	2	4	4	2	3.0	8.2
2-Aug-07	1	0	3	4	0	4	8	5	5	6	12	10	6	6	3	6	5	3	5	2	12	3	4	7	5.1	12.3
3-Aug-07	8	0	0	3	0	0	1	2	2	0	3	N	4	1	3	0	3	5	2	4	4	1	0	3	2.1	8.0
4-Aug-07	3	2	2	2	3	1	1	2	4	3	5	3	3	2	1	0	3	7	7	0	0	0	0	0	2.3	7.1
5-Aug-07	0	0	0	0	0	5	7	3	8	3	2	D	0	D	3	0	0	4	2	0	5	1	0	0	2.0	7.8
6-Aug-07	0	0	D	0	1	0	2	3	13	0	3	0	2	7	0	D	0	1	4	5	1	3	1	3	2.3	13.5
7-Aug-07	2	5	3	5	6	6	0	2	3	1	5	5	2	4	0	0	0	3	2	4	3	10	4	1	3.2	9.8
8-Aug-07	1	3	0	0	D	0	1	1	0	0	0	0	1	0	1	1	0	2	0	2	6	0	1	0	0.9	6.3
9-Aug-07	0	0	0	1	1	0	0	C	C	C	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0.3	2.1
10-Aug-07	0	0	2	3	6	6	4	3	2	3	2	0	0	0	0	1	1	2	4	5	3	2	0	1	2.1	6.4
11-Aug-07	1	1	1	0	2	2	2	2	1	1	1	1	0	1	1	1	1	2	3	2	2	1	2	1.3	2.7	
12-Aug-07	0	0	0	1	1	0	0	0	0	0	0	1	0	1	2	2	2	2	2	0	1	1	0	0	0.8	2.2
13-Aug-07	0	1	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.0
14-Aug-07	0	0	0	0	0	0	P	P	P	P	P	9	3	2	2	2	3	4	2	2	3	2	2	1	2.0	9.1
15-Aug-07	0	0	2	N	1	2	2	3	2	N	3	3	3	2	1	2	1	1	1	0	1	1	0	1	1.4	3.3
16-Aug-07	1	0	1	1	1	1	3	2	3	3	3	4	4	4	4	3	4	4	3	2	2	2	1	2	2.3	4.5
17-Aug-07	1	1	1	0	1	1	2	2	2	4	4	3	4	3	3	3	6	5	7	6	4	2	2	1	2.8	7.0
18-Aug-07	2	2	1	1	2	3	P	2	P	1	2	1	5	4	4	4	6	1	2	2	3	1	3	1	2.3	5.8
19-Aug-07	1	1	0	1	1	3	2	1	3	6	4	3	2	1	2	4	2	4	1	2	2	1	2	1	2.1	5.9
20-Aug-07	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	2	1	1	1	1	1	1	0.4	1.6
21-Aug-07	1	1	1	1	2	1	1	1	1	2	2	2	1	2	2	1	1	2	1	2	2	2	2	2	1.5	2.2
22-Aug-07	1	1	0	1	0	0	1	1	1	0	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0.5	1.5
23-Aug-07	0	0	0	0	0	0	3	0	1	0	1	C	1	0	0	0	0	1	0	0	0	1	0	0	0.4	2.6
24-Aug-07	0	0	0	0	0	1	1	1	2	3	1	1	0	0	0	1	0	0	3	1	0	0	0	0	0.6	2.9
25-Aug-07	3	0	0	1	0	1	1	3	3	2	0	0	0	0	0	0	2	1	1	1	1	0	1	0	0.8	2.8
26-Aug-07	0	0	1	0	0	0	0	1	0	1	2	1	1	1	2	2	2	1	2	1	1	1	0	0	0.8	2.0
27-Aug-07	1	0	1	0	0	0	0	4	3	3	2	0	0	0	0	1	2	0	2	2	2	0	0	0	0.9	3.7
28-Aug-07	0	0	0	0	1	1	5	1	3	1	N	N	1	1	0	0	1	2	1	0	1	1	1	1	1.0	5.5
29-Aug-07	1	2	1	1	2	2	2	2	3	3	2	3	4	3	2	4	5	3	2	1	1	1	1	0	2.2	5.3
30-Aug-07	0	2	0	0	1	1	1	3	2	2	4	2	5	5	4	5	5	2	5	4	2	D	0	0	2.5	5.5
31-Aug-07	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	3	2	2	1	0	0	0	0.5	2.8

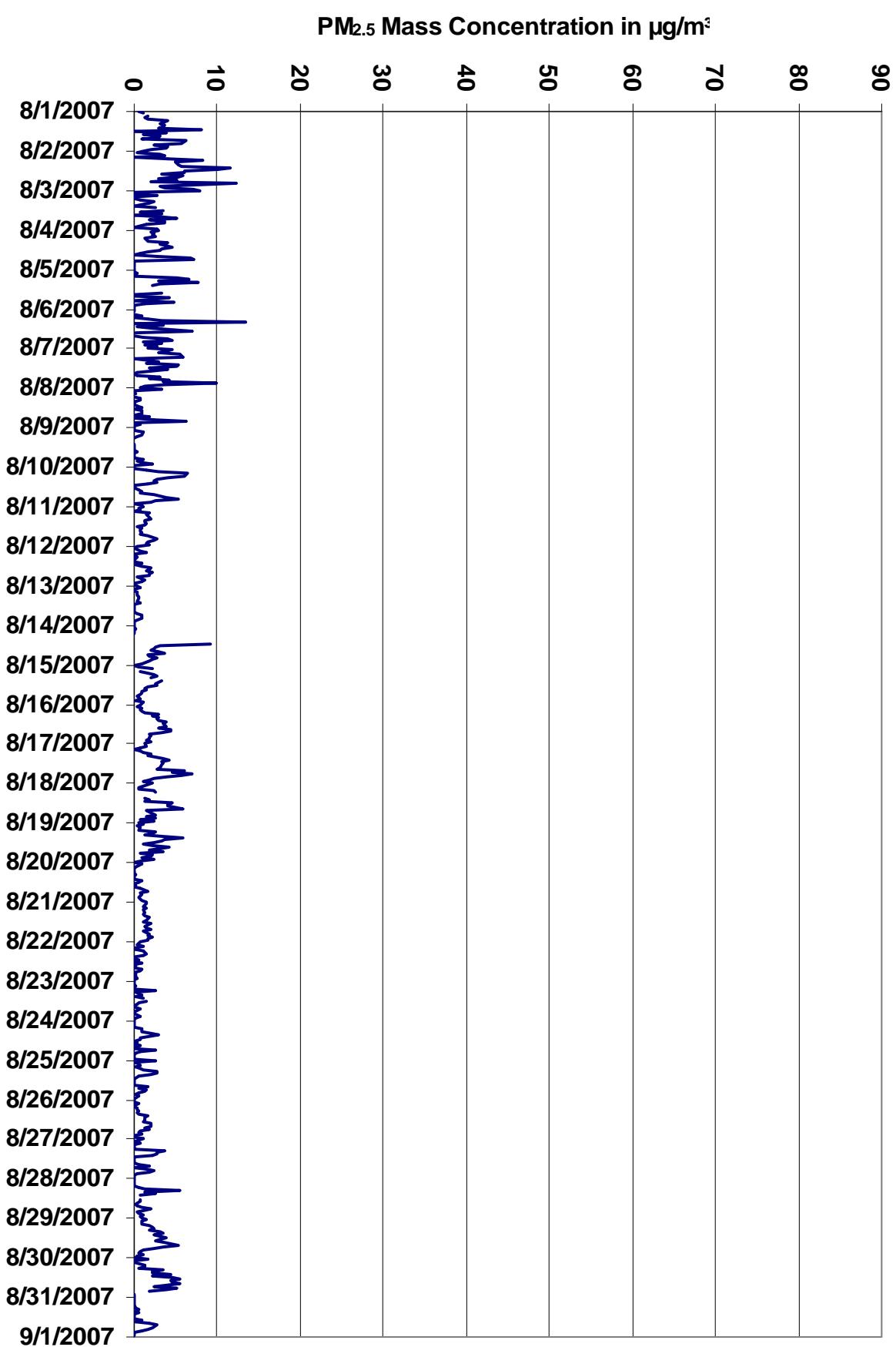


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

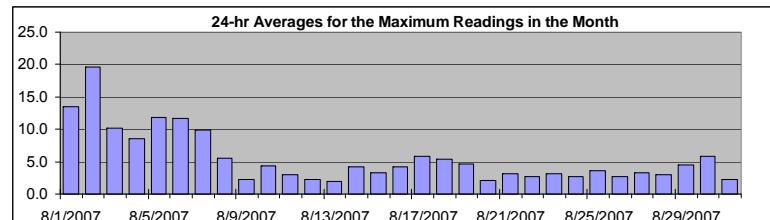
Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Average:	39.6	µg/m <sup>3</sup>	2-Aug	20:00 21:00
Maximum 24-hr Value:	19.7	µg/m <sup>3</sup>	2-Aug	

AIC Time:	0 hrs	Operational Time:	727 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	97.7%						
Percentile	99 32.4	95 18.6	75 6.0	50 3.6	25 2.3	5 1.1	1 0.3	Average / Median 5.5	Geomean 4.5 µg/m <sup>3</sup>

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-Aug-07	2	3	P	3	2	3	6	6	9	15	12	26	11	20	20	23	16	14	33	29	29	11	9	5	13.4	32.5
2-Aug-07	4	6	12	13	4	7	14	8	13	17	37	32	24	19	13	29	31	15	24	20	40	33	33	24	19.7	39.6
3-Aug-07	15	5	4	17	5	3	12	5	9	8	11	N	25	9	12	9	17	23	9	10	9	9	1	7	10.2	25.3
4-Aug-07	6	4	5	4	5	3	4	4	6	5	9	11	12	13	12	11	16	25	25	14	2	4	4	4	8.6	25.4
5-Aug-07	4	0	4	2	7	8	18	7	37	12	19	9	24	16	20	8	10	21	23	11	12	5	2	5	11.8	37.0
6-Aug-07	2	2	1	5	5	5	6	8	25	22	22	19	19	34	14	14	16	11	15	12	7	7	3	6	11.6	33.7
7-Aug-07	5	7	5	9	9	10	4	5	7	8	13	14	8	16	9	10	12	11	7	8	8	33	14	4	9.8	33.1
8-Aug-07	3	7	5	5	0	2	3	4	4	4	5	4	7	6	5	8	4	7	5	10	28	4	2	0	5.6	27.8
9-Aug-07	3	1	1	5	4	2	3	C	C	C	0	2	1	2	1	3	2	1	2	4	2	2	6	2	2.2	5.9
10-Aug-07	1	1	3	7	11	8	7	6	4	5	5	1	2	2	2	3	2	4	5	9	9	4	1	3	4.4	11.0
11-Aug-07	3	2	2	2	4	3	4	4	3	3	4	2	3	3	3	3	3	2	3	5	4	3	3	3	3.0	4.7
12-Aug-07	3	1	2	2	3	1	1	1	1	2	3	2	3	4	4	2	4	3	3	1	3	3	1	1	2.2	3.8
13-Aug-07	3	3	2	1	2	1	2	2	2	2	2	1	1	1	1	1	1	3	3	3	3	1	1	1	1.9	3.4
14-Aug-07	1	1	2	2	1	1	P	P	P	P	P	16	6	5	5	3	5	6	6	5	5	5	4	3	4.2	16.0
15-Aug-07	3	4	3	N	2	4	4	5	4	N	5	5	6	3	4	3	3	2	2	2	3	2	1	3	3.3	6.0
16-Aug-07	2	2	3	2	3	3	4	4	5	5	5	6	6	6	5	8	7	5	3	3	4	3	2	4	4.2	8.2
17-Aug-07	3	3	3	3	3	3	4	3	5	6	6	5	5	6	6	9	9	9	16	10	9	5	6	3	5.9	16.4
18-Aug-07	4	5	3	3	4	5	P	6	P	6	5	5	7	7	7	19	4	5	5	4	4	4	5	5.4	18.9	
19-Aug-07	2	4	2	3	3	5	4	3	6	7	6	6	6	6	5	8	7	7	3	6	4	3	5	4.7	8.1	
20-Aug-07	1	3	2	1	2	0	3	2	2	1	2	2	2	2	2	2	2	5	3	3	3	2	2	2	2.2	5.1
21-Aug-07	3	3	2	2	3	2	2	3	3	4	4	3	3	4	4	3	4	4	4	3	3	4	3	3	3.1	4.3
22-Aug-07	3	3	1	3	1	2	3	3	1	2	3	2	4	2	2	4	7	4	2	1	3	2	2	2	2.7	6.9
23-Aug-07	1	2	1	1	1	2	11	3	11	4	3	C	3	4	2	2	3	7	3	3	2	2	2	0	3.2	11.5
24-Aug-07	0	2	3	1	1	3	3	2	4	6	4	3	2	3	3	4	1	3	4	3	3	2	2	4	2.7	6.0
25-Aug-07	6	4	3	2	2	2	4	5	6	5	4	2	1	3	3	7	10	5	3	3	2	2	2	1	3.6	10.0
26-Aug-07	0	2	2	2	2	2	1	2	2	2	8	6	2	3	4	4	3	3	4	2	2	3	1	1	2.7	7.5
27-Aug-07	3	1	2	1	1	0	1	8	6	5	4	1	3	3	3	4	6	4	6	6	4	2	2	1	3.2	7.8
28-Aug-07	1	3	3	1	1	2	4	8	4	4	3	N	N	2	2	2	3	3	6	3	3	2	2	2	3.0	8.1
29-Aug-07	3	3	2	3	4	5	4	4	5	5	5	6	6	6	7	8	7	6	3	2	3	3	3	4.5	8.1	
30-Aug-07	4	4	3	5	4	3	2	7	7	6	7	6	8	11	10	7	10	5	9	8	8	0	1	2	5.8	11.1
31-Aug-07	1	1	1	3	1	2	2	2	2	2	2	2	3	2	3	2	4	5	4	4	2	1	1	0	2.2	5.5
Hourly Avg	3.0	2.9	3.0	3.7	3.2	3.3	4.8	4.5	7.0	6.1	7.1	7.2	7.0	7.2	6.1	7.2	7.3	7.6	8.0	6.8	7.0	5.4	4.1	3.4		
Hourly Max	14.5	6.9	12.1	16.7	11.0	10.4	17.6	8.2	37.0	22.5	36.8	32.1	25.3	33.7	19.9	28.8	30.8	25.4	32.5	29.5	39.6	33.1	33.2	24.0		



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

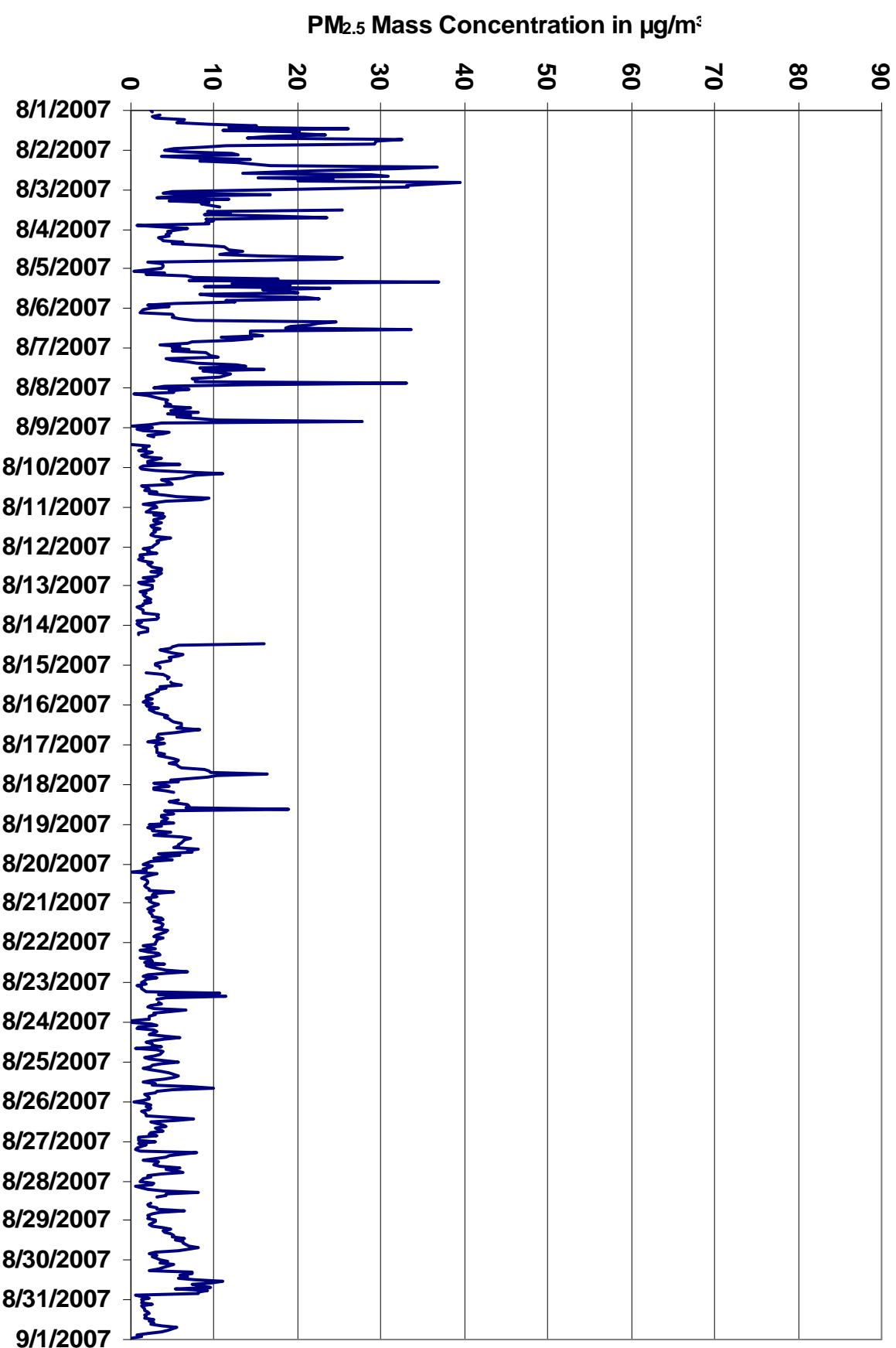
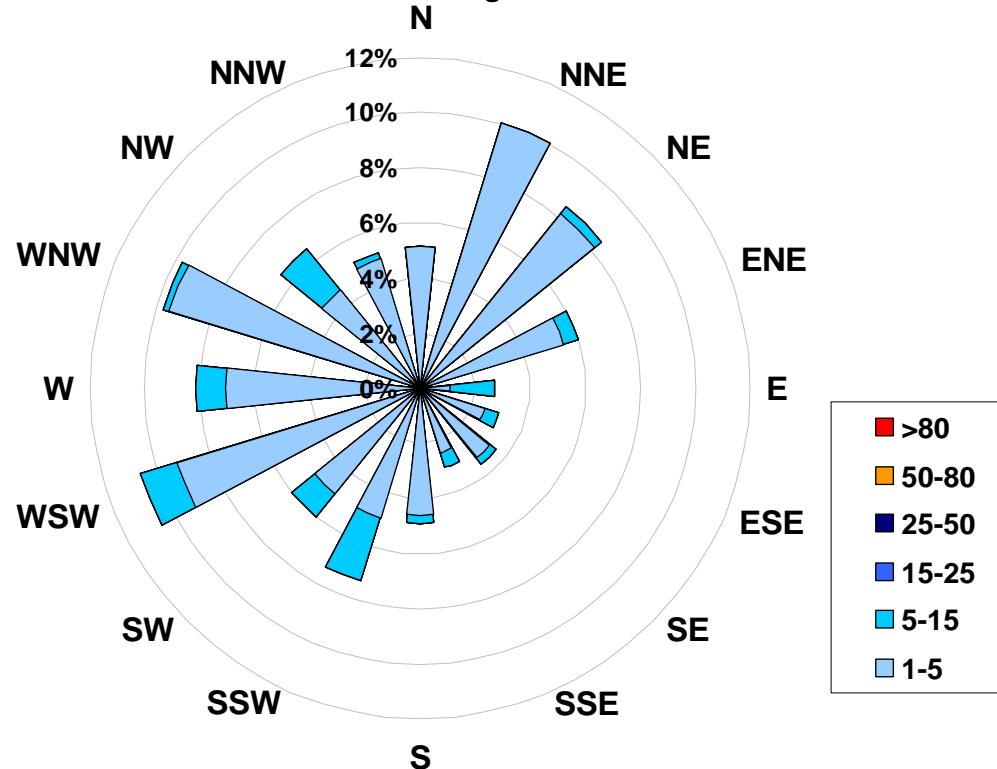


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**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 August 2007**



**Calms:** 0%

Frequency Distribution of PM<sub>2.5</sub> in µg/m<sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	675
5	to	15	46
15	to	25	0
25	to	50	0
50	to	80	0
>	80		0
Total Non-Zero Values			721

# PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	26.1 °C	2-Aug 15:00 16:00
Maximum 24-hr Value:	18.8 °C	2-Aug

AIC Time:	0 hrs	Operational Time:	733 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	98.5%						
Percentile	99 25.1	95 21.5	75 16.4	50 12.6	25 10.1	5 5.8	1 2.7	Average 13.2 °C	Median 12.6 °C

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-Aug-07	11 1:00	10 P	10 2:00	9 3:00	9 4:00	10 5:00	10 6:00	10 7:00	13 8:00	15 9:00	17 10:00	18 11:00	20 12:00	21 13:00	22 14:00	23 15:00	23 16:00	23 17:00	23 18:00	22 19:00	22 20:00	21 21:00	19 22:00	19 23:00	15 24:00	14 0:00	13 1:00	16.6 23.3
2-Aug-07	12 1:00	12 2:00	12 3:00	11 4:00	11 5:00	12 6:00	12 7:00	14 8:00	17 9:00	20 10:00	22 11:00	22 12:00	24 13:00	25 14:00	26 15:00	26 16:00	25 17:00	26 18:00	25 19:00	23 20:00	23 21:00	21 22:00	19 23:00	19 24:00	18 0:00	18 1:00	18.8 26.1	
3-Aug-07	16 1:00	15 2:00	14 3:00	15 4:00	14 5:00	14 6:00	13 7:00	13 8:00	14 9:00	16 10:00	17 11:00	N 12:00	20 13:00	19 14:00	19 15:00	19 16:00	20 17:00	20 18:00	19 19:00	17 20:00	17 21:00	16 22:00	15 23:00	15 24:00	14 0:00	14 1:00	16.1 20.3	
4-Aug-07	14 1:00	14 2:00	14 3:00	14 4:00	14 5:00	14 6:00	14 7:00	14 8:00	14 9:00	14 10:00	14 11:00	14 12:00	16 13:00	18 14:00	18 15:00	16 16:00	18 17:00	20 18:00	21 19:00	19 20:00	19 21:00	17 22:00	16 23:00	16 24:00	15.7 21.3			
5-Aug-07	12 1:00	11 2:00	10 3:00	10 4:00	9 5:00	10 6:00	10 7:00	10 8:00	12 9:00	14 10:00	16 11:00	18 12:00	20 13:00	21 14:00	22 15:00	21 16:00	22 17:00	22 18:00	21 19:00	20 20:00	18 21:00	16 22:00	14 23:00	12 24:00	15.5 22.1			
6-Aug-07	11 1:00	11 2:00	10 3:00	10 4:00	9 5:00	10 6:00	10 7:00	10 8:00	12 9:00	15 10:00	18 11:00	19 12:00	21 13:00	24 14:00	25 15:00	26 16:00	26 17:00	25 18:00	25 19:00	23 20:00	20 21:00	17 22:00	15 23:00	14 24:00	16.9 26.1			
7-Aug-07	13 1:00	13 2:00	12 3:00	13 4:00	13 5:00	13 6:00	17 7:00	17 8:00	18 9:00	19 10:00	21 11:00	21 12:00	22 13:00	22 14:00	22 15:00	22 16:00	22 17:00	22 18:00	21 19:00	19 20:00	16 21:00	15 22:00	14 23:00	12 24:00	17.3 22.4			
8-Aug-07	12 1:00	12 2:00	11 3:00	10 4:00	9 5:00	8 6:00	8 7:00	8 8:00	8 9:00	10 10:00	10 11:00	11 12:00	11 13:00	12 14:00	11 15:00	11 16:00	11 17:00	11 18:00	11 19:00	10 20:00	10 21:00	10 22:00	9 23:00	8 24:00	5 0:00	10.1 12.1		
9-Aug-07	9 1:00	9 2:00	8 3:00	8 4:00	8 5:00	8 6:00	8 7:00	9 8:00	9 9:00	9 10:00	11 11:00	12 12:00	13 13:00	14 14:00	15 15:00	15 16:00	15 17:00	15 18:00	15 19:00	14 20:00	14 21:00	12 22:00	9 23:00	8 24:00	5 0:00	10.6 15.4		
10-Aug-07	4 1:00	4 2:00	4 3:00	3 4:00	4 5:00	6 6:00	8 7:00	9 8:00	9 9:00	11 10:00	13 11:00	16 12:00	17 13:00	18 14:00	19 15:00	19 16:00	19 17:00	18 18:00	18 19:00	15 20:00	14 21:00	11 22:00	10 23:00	10 24:00	10 0:00	11.7 19.2		
11-Aug-07	10 1:00	9 2:00	9 3:00	9 4:00	9 5:00	9 6:00	9 7:00	9 8:00	9 9:00	10 10:00	10 11:00	11 12:00	13 13:00	14 14:00	15 15:00	16 16:00	16 17:00	17 18:00	15 19:00	14 20:00	13 21:00	12 22:00	12 23:00	12 24:00	12.1 16.8			
12-Aug-07	11 1:00	10 2:00	10 3:00	9 4:00	9 5:00	8 6:00	8 7:00	8 8:00	8 9:00	10 10:00	11 11:00	11 12:00	11 13:00	11 14:00	11 15:00	11 16:00	11 17:00	11 18:00	10 19:00	9 20:00	9 21:00	9 22:00	9 23:00	9 24:00	9.7 11.3			
13-Aug-07	9 1:00	8 2:00	8 3:00	8 4:00	8 5:00	8 6:00	8 7:00	8 8:00	9 9:00	10 10:00	11 11:00	12 12:00	13 13:00	13 14:00	14 15:00	14 16:00	14 17:00	14 18:00	13 19:00	13 20:00	10 21:00	7 22:00	6 23:00	5 24:00	9.8 13.8			
14-Aug-07	4 1:00	3 2:00	3 3:00	3 4:00	3 5:00	P 6:00	P 7:00	P 8:00	P 9:00	P 10:00	P 11:00	P 12:00	P 13:00	P 14:00	P 15:00	P 16:00	P 17:00	P 18:00	P 19:00	P 20:00	P 21:00	P 22:00	P 23:00	P 24:00	12.8 20.4			
15-Aug-07	9 1:00	8 2:00	9 3:00	9 4:00	9 5:00	N 6:00	8 7:00	9 8:00	9 9:00	10 10:00	11 11:00	13 12:00	15 13:00	17 14:00	17 15:00	18 16:00	18 17:00	18 18:00	17 19:00	16 20:00	16 21:00	14 22:00	12 23:00	11 24:00	10 0:00	13.0 18.3		
16-Aug-07	10 1:00	10 2:00	9 3:00	8 4:00	8 5:00	9 6:00	9 7:00	9 8:00	11 9:00	13 10:00	15 11:00	17 12:00	20 13:00	20 14:00	20 15:00	20 16:00	20 17:00	20 18:00	19 19:00	19 20:00	17 21:00	15 22:00	14 23:00	13 24:00	15.3 22.1			
17-Aug-07	14 1:00	13 2:00	13 3:00	12 4:00	12 5:00	12 6:00	12 7:00	12 8:00	12 9:00	14 10:00	16 11:00	18 12:00	20 13:00	21 14:00	22 15:00	22 16:00	22 17:00	21 18:00	20 19:00	18 20:00	17 21:00	15 22:00	13 23:00	13 24:00	16.0 22.0			
18-Aug-07	13 1:00	12 2:00	10 3:00	9 4:00	9 5:00	10 6:00	10 7:00	11 8:00	11 9:00	11 10:00	11 11:00	12 12:00	13 13:00	15 14:00	15 15:00	16 16:00	17 17:00	18 18:00	17 19:00	17 20:00	15 21:00	13 22:00	12 23:00	11 24:00	12.6 17.6			
19-Aug-07	11 1:00	10 2:00	9 3:00	10 4:00	10 5:00	10 6:00	11 7:00	11 8:00	11 9:00	11 10:00	11 11:00	12 12:00	14 13:00	16 14:00	18 15:00	19 16:00	19 17:00	19 18:00	18 19:00	18 20:00	16 21:00	15 22:00	13 23:00	12 24:00	13.9 19.9			
20-Aug-07	11 1:00	10 2:00	10 3:00	10 4:00	10 5:00	10 6:00	10 7:00	10 8:00	12 9:00	14 10:00	16 11:00	18 12:00	20 13:00	22 14:00	22 15:00	22 16:00	22 17:00	22 18:00	20 19:00	19 20:00	17 21:00	15 22:00	14 23:00	13 24:00	13.5 17.2			
21-Aug-07	12 1:00	11 2:00	11 3:00	12 4:00	12 5:00	12 6:00	12 7:00	12 8:00	13 9:00	14 10:00	14 11:00	14 12:00	13 13:00	14 14:00	14 15:00	15 16:00	15 17:00	15 18:00	15 19:00	15 20:00	14 21:00	13 22:00	13 23:00	13 24:00	13.5 15.6			
22-Aug-07	12 1:00	12 2:00	12 3:00	11 4:00	11 5:00	11 6:00	11 7:00	11 8:00	12 9:00	12 10:00	11 11:00	11 12:00	12 13:00	14 15:00	14 16:00	16 17:00	16 18:00	16 19:00	16 20:00	16 21:00	12 22:00	12 23:00	12 24:00	13.3 16.8				
23-Aug-07	11 1:00	11 2:00	11 3:00	10 4:00	10 5:00	10 6:00	10 7:00	10 8:00	13 9:00	13 10:00	10 11:00	12 13:00	15 17:00	17 18:00	18 19:00	18 20:00	17 21:00	17 22:00	17 23:00	17 24:00	15 25:00	14 26:00	13 27:00	12 28:00	13.4 18.1			
24-Aug-07	8 1:00	7 2:00	6 3:00	6 4:00	7 5:00	7 6:00	7 7:00	8 8:00	9 9:00	9 10:00	10 11:00	11 12:00	12 13:00	15 16:00	17 18:00	18 19:00	19 20:00	19 21:00	17 22:00	17 23:00	15 24:00	13 25:00	12 26:00	12 27:00	12.3 18.8			
25-Aug-07	12 1:00	11 2:00	11 3:00	11 4:00	11 5:00	11 6:00	11 7:00	11 8:00	13 9:00	13 10:00	11 11:00	12 13:00	15 16:00	15 17:00	17 18:00	17 19:00	17 20:00	17 21:00	15 22:00	15 23:00	13 24:00	12 25:00	10 26:00	10 27:00	12.9 17.3			
26-Aug-07	9 1:00	8 2:00	8 3:00	8 4:00	8 5:00	8 6:00	8 7:00	8 8:00	8 9:00	9 10:00	9 11:00	9 12:00	12 13:00	13 14:00	15 16:00	14 15:00	14 16:00	13 17:00	13 18:00	13 19:00	12 20:00	11 21:00	10 22:00	9 23:00	7.9 9.3			
27-Aug-07	5 1:00	4 2:00	4 3:00	3 4:00	3 5:00	3 6:00	3 7:00	5 8:00	6 9:00	7 10:00	9 11:00	12 13:00	13 14:00	14 15:00	14 16:00	13 17:00	13 18:00	13 19:00	12 20:00	12 21:00	11 22:00	10 23:00	9 24:00	8.2 14.5				
28-Aug-07	3 1:00	3 2:00	2 3:00	1 4:00	1 5:00	1 6:00	1 7:00	5 8:00	7 9:00	11 10:00	11 11:00	13 12:00	13 13:00	15 16:00	17 18:00	18 19:00	18 20:00	17 21:00	17 22:00	17 23:00	15 24:00	14 25:00</td						

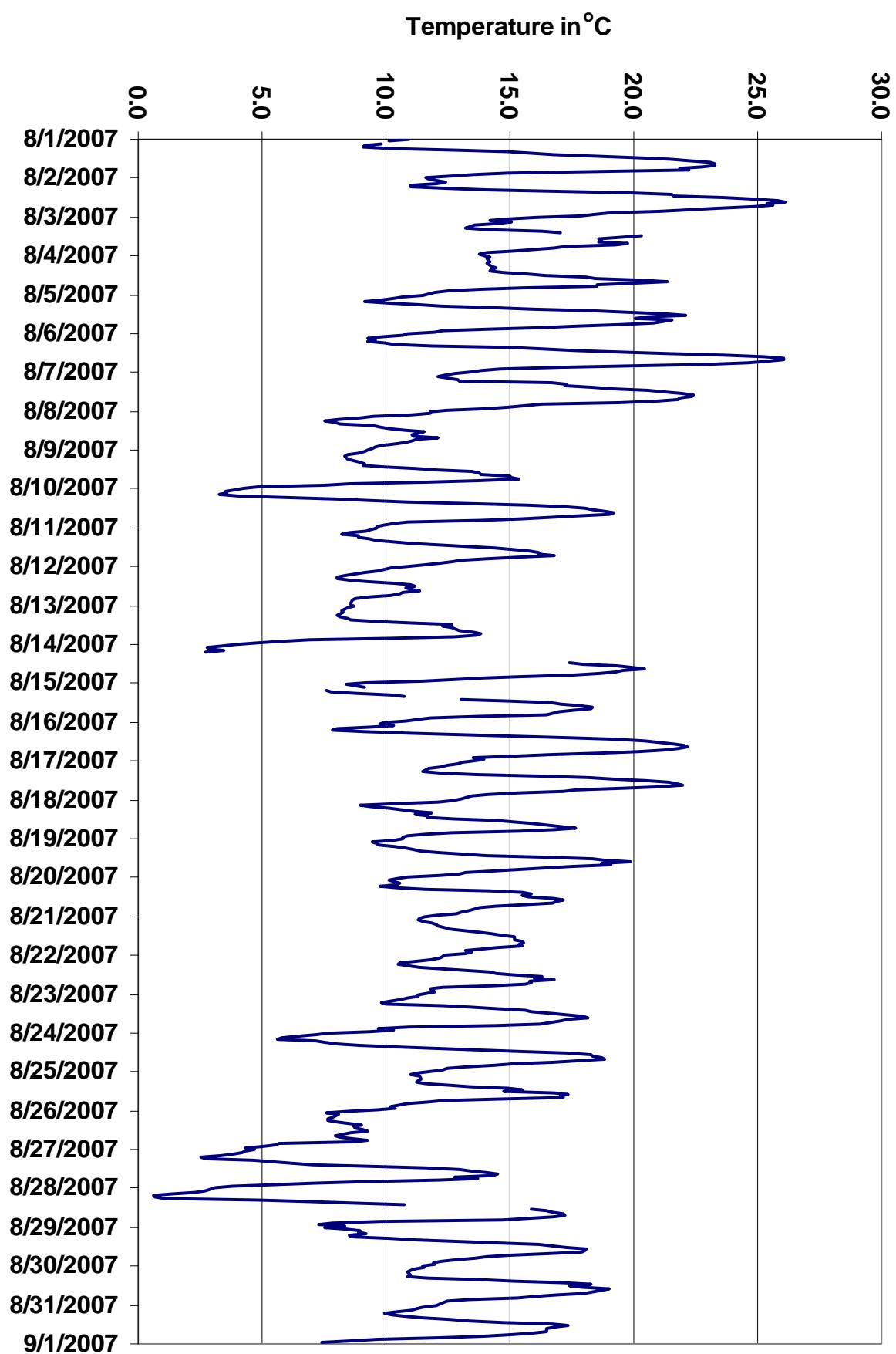


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

# PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

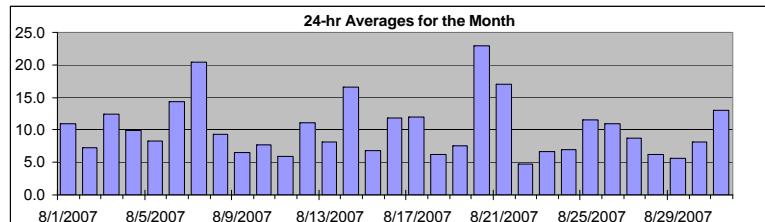
## Summary

Maximum 1-hr Average:	36.2 km/hr	20-Aug 14:00 15:00
Maximum 24-hr Value:	23.0 km/hr	20-Aug

Calm Time:	0 hrs	0% calms	Operational Time:	733 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	98.5%				
Percentile	99	95	75	50	25	5	1	AverageS
	31.9	24.2	12.4	8.3	6.0	3.7	2.8	10.2 km/hr

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)



## Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	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-Aug-07	19	18	P	20	20	20	11	12	13	11	11	11	11	10	8	9	11	9	6	6	3	5	5	3	11.0	20.5
2-Aug-07	4	5	7	6	6	5	8	10	11	8	8	12	8	7	7	8	10	9	6	4	5	3	11	7	7.2	11.9
3-Aug-07	23	12	7	24	19	14	7	11	10	11	9	N	15	15	12	15	12	11	9	8	6	12	12	11	12.4	24.1
4-Aug-07	8	11	10	13	10	13	12	15	14	12	12	11	12	10	9	7	5	5	8	7	6	6	10	11	9.8	15.3
5-Aug-07	10	7	7	6	6	6	5	6	8	10	7	6	7	10	13	14	11	9	10	12	9	7	6	5	8.2	14.1
6-Aug-07	8	6	7	7	7	10	11	10	14	16	16	18	17	18	24	27	27	25	17	14	12	12	13	14.3	27.4	
7-Aug-07	9	11	8	8	7	13	23	28	25	36	32	25	26	27	27	28	27	29	29	21	14	13	15	11	20.4	36.1
8-Aug-07	11	15	15	15	14	13	10	11	9	9	12	12	9	7	8	7	7	4	2	4	6	7	8	9.4	15.4	
9-Aug-07	8	8	9	8	5	4	4	4	7	7	7	5	5	7	6	14	10	7	5	6	4	6	5	4	6.5	13.8
10-Aug-07	4	3	4	4	5	4	5	6	7	7	8	9	8	8	9	8	12	13	7	20	16	8	6	5	7.7	19.9
11-Aug-07	3	5	5	5	5	4	3	3	4	5	5	5	5	6	9	9	10	9	8	7	7	8	7	9	6.0	10.1
12-Aug-07	11	14	12	14	10	14	12	13	14	14	16	18	16	12	10	8	7	3	6	10	6	6	9	9	11.1	17.5
13-Aug-07	10	11	4	5	9	9	9	12	11	10	6	4	5	7	11	12	10	8	7	7	7	6	8	7	8.1	12.2
14-Aug-07	7	6	7	8	8	10	P	P	P	P	29	27	32	32	30	25	19	13	13	15	14	13	7	16.6	32.1	
15-Aug-07	7	6	6	N	5	3	3	5	6	N	4	6	6	8	8	11	11	12	10	8	7	6	6	5	6.8	12.2
16-Aug-07	5	5	8	8	6	8	8	9	8	8	11	12	15	14	16	18	19	20	19	16	16	13	11	12	11.9	19.6
17-Aug-07	11	12	12	12	11	8	9	10	10	11	12	16	17	16	16	20	13	6	10	8	15	10	12	10	12.0	19.9
18-Aug-07	10	7	4	5	3	4	6	8	11	7	8	13	6	5	6	5	6	4	6	6	6	4	5	6.3	12.8	
19-Aug-07	5	6	5	3	4	5	3	4	6	10	10	8	7	6	8	11	8	11	10	6	7	10	14	7.5	14.1	
20-Aug-07	14	14	14	14	13	8	13	9	17	32	35	28	21	30	36	33	30	31	34	28	22	23	25	26	23.0	36.2
21-Aug-07	27	23	20	18	17	16	17	20	19	22	23	24	24	22	21	18	14	10	9	7	8	9	10	8	17.0	26.6
22-Aug-07	4	6	7	7	7	4	4	2	4	4	3	6	5	4	5	4	5	5	4	3	4	6	5	4.8	7.2	
23-Aug-07	4	3	3	6	6	7	4	3	3	5	6	7	10	11	10	11	11	12	8	6	5	7	6	5.6	11.5	
24-Aug-07	5	4	6	4	4	6	5	4	4	4	6	5	7	8	7	8	12	10	5	8	9	10	12	6.9	13.2	
25-Aug-07	8	9	8	6	4	4	8	9	7	10	10	22	23	24	20	31	23	11	11	7	6	5	4	7	11.6	30.8
26-Aug-07	9	8	10	15	13	12	12	15	16	15	13	12	11	12	11	12	9	6	4	8	8	10	6	10.9	15.5	
27-Aug-07	11	11	8	7	6	8	8	7	8	8	7	10	13	14	13	15	14	11	7	8	4	4	4	4	8.8	14.5
28-Aug-07	5	5	4	4	3	3	4	7	7	9	10	N	N	8	10	12	10	8	6	5	2	3	6	6	6.2	11.6
29-Aug-07	8	8	7	6	5	7	2	4	7	5	5	7	8	6	5	8	8	9	5	3	3	2	5	5.7	8.8	
30-Aug-07	6	5	4	6	5	6	3	5	6	5	7	9	6	7	8	9	5	7	10	10	17	16	17	14	8.1	17.2
31-Aug-07	14	13	13	14	13	12	14	14	15	16	17	19	20	22	17	14	11	9	8	10	7	6	7	7	13.0	21.6
1-hr Average	9.3	9.0	7.9	9.2	8.3	8.3	8.1	9.3	10.0	11.2	11.1	12.6	12.5	12.7	13.0	13.9	12.8	11.4	10.0	9.1	8.5	8.2	9.2	8.5		
Hourly Max	26.6	23.4	19.5	24.1	20.0	20.5	22.8	27.6	25.0	36.1	35.2	29.2	26.8	32.1	36.2	33.2	30.1	30.8	33.9	27.7	22.1	22.6	25.4	26.2		

# PASZA - Smoky Heights Vector Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

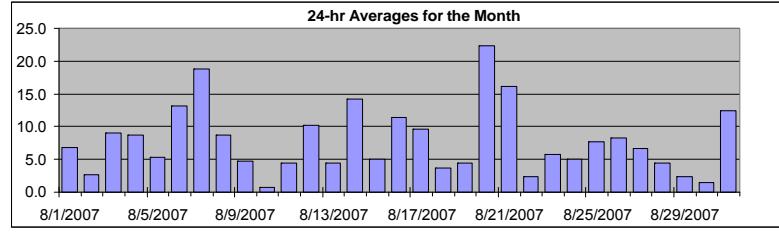
Maximum 1-hr Average:	17.1	km/hr	3-Aug	3:00 4:00
Maximum 24-hr Value:	22.3	km/hr	20-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	733 hrs								
Calibration Time:	0 hrs		AMD Operational Uptime:	98.5%								
Percentile	99	95	75	50	25	5	1	AverageV				
	6.1	4.3	2.8	2.0	1.4	0.9	0.6		13.7 km/hr			

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		
1-Aug-07	2	2	P	2	2	2	5	4	2	2	2	3	3	3	3	3	3	3	2	1	1	1	1	2	1	1	6.8	5.1
2-Aug-07	2	1	2	1	1	2	2	2	2	3	3	2	2	3	3	3	3	2	2	2	2	1	3	3	2	2.7	3.5	
3-Aug-07	4	5	3	17	8	4	3	3	4	3	2	N	5	3	2	3	3	3	2	2	2	2	2	2	2	9.0	17.1	
4-Aug-07	2	2	2	2	2	3	3	2	2	2	3	3	3	2	2	2	4	2	2	2	2	1	1	1	1	8.7	4.3	
5-Aug-07	3	1	1	1	2	1	1	2	2	1	3	2	3	5	3	3	3	3	4	4	3	2	2	2	2	5.3	4.7	
6-Aug-07	2	2	1	1	1	1	1	2	1	2	2	3	4	3	3	4	4	4	4	2	2	2	2	1	2	13.1	4.5	
7-Aug-07	2	3	1	1	2	3	3	3	3	6	5	3	4	4	4	4	4	5	3	4	2	2	3	1	1	18.8	5.5	
8-Aug-07	4	3	4	3	4	3	3	2	3	3	2	3	3	3	2	2	3	2	1	1	1	1	1	1	1	8.7	3.7	
9-Aug-07	2	2	2	2	1	1	1	1	2	1	2	2	2	3	2	6	3	2	2	1	1	0	1	1	1	4.7	5.5	
10-Aug-07	1	1	1	2	1	1	1	1	1	1	2	3	3	3	3	3	3	3	14	8	3	3	1	1	0.7	13.7		
11-Aug-07	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	2	1	1	1	1	4.4	2.3	
12-Aug-07	2	2	2	3	2	2	3	3	3	3	3	3	3	3	2	2	2	2	1	3	3	1	1	1	2	10.1	3.4	
13-Aug-07	2	2	1	1	2	2	3	2	2	2	1	2	2	2	2	3	2	3	2	1	1	1	1	1	1	4.4	2.7	
14-Aug-07	1	1	1	2	1	1	P	P	P	P	P	5	4	4	5	4	4	3	4	3	4	3	2	2	14.2	5.0		
15-Aug-07	4	2	2	N	2	1	1	2	2	2	N	2	2	2	2	2	2	2	2	1	1	1	2	1	1	5.1	3.6	
16-Aug-07	1	2	2	2	1	1	2	2	2	2	2	3	4	4	4	4	4	3	3	3	3	3	2	2	2	11.4	4.0	
17-Aug-07	2	2	2	2	2	1	2	2	2	2	3	4	3	3	3	4	4	3	3	2	5	3	3	2	9.6	4.9		
18-Aug-07	1	2	1	1	1	2	2	4	3	2	2	3	2	2	2	2	2	2	1	2	1	1	1	1	1	3.7	4.4	
19-Aug-07	2	1	1	1	1	1	1	2	1	1	2	3	3	3	3	4	2	1	1	3	3	6	2	1	4.4	6.0		
20-Aug-07	1	1	1	2	2	1	2	2	2	6	7	5	6	3	4	5	5	4	6	5	4	3	2	3	22.3	6.5		
21-Aug-07	2	3	2	2	2	3	3	3	3	4	5	4	4	4	4	3	2	2	2	1	1	1	2	1	16.2	4.5		
22-Aug-07	2	1	1	1	2	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	2	1	1	2.4	1.9	
23-Aug-07	1	1	1	1	2	2	1	1	2	2	3	3	4	3	3	3	2	1	2	2	2	2	1	1	1	5.7	3.6	
24-Aug-07	1	2	2	1	1	1	2	1	1	1	2	2	3	3	3	2	2	3	1	1	2	2	2	4	5.0	4.4		
25-Aug-07	3	3	2	3	2	1	2	2	2	2	3	5	3	3	4	8	11	4	4	3	2	1	1	1	7.6	10.8		
26-Aug-07	3	2	3	4	2	2	2	2	2	3	2	2	3	3	3	3	2	2	2	1	1	2	1	1	8.2	3.6		
27-Aug-07	1	1	2	1	1	1	2	1	1	1	1	3	3	4	4	4	4	3	4	1	2	2	1	1	6.6	3.7		
28-Aug-07	1	1	1	2	2	1	1	1	1	1	2	N	N	3	3	3	3	2	2	1	1	1	1	1	4.5	3.4		
29-Aug-07	0	1	1	1	1	0	2	1	2	1	1	2	2	2	2	2	2	1	1	1	0	2	1	1	2.4	2.4		
30-Aug-07	2	2	1	3	2	2	1	1	2	2	3	2	2	2	1	3	3	3	6	4	2	2	1	1	1.5	6.1		
31-Aug-07	2	2	1	2	1	2	1	2	2	2	3	4	3	3	2	1	1	1	1	2	1	1	1	1	12.4	3.9		
	1-hr Vector	5.6	4.4	2.9	4.3	4.1	3.9	3.6	3.3	2.8	3.6	2.8	2.6	3.4	4.4	4.7	4.5	3.4	2.8	3.2	3.6	3.9	4.3	3.8	3.8			
	Hourly Max	3.7	4.8	3.6	17.1	7.6	3.7	5.1	4.4	5.6	6.5	5.4	5.6	5.1	4.7	5.0	8.0	10.8	5.6	5.5	13.7	8.4	6.0	3.4	4.4			

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

## PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary													

Calm Time:	0 hrs	0% calms	Operational Time:	733 hrs									
Calibration Time:	0 hrs	AMD Operational Uptime:		98.5%									
Percentile	99	95	75	50	25	5	1	Average					
	356.8	344.3	277.1	225.3	71.9	19.7	3.1		280 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	0:00
1-Aug-07	254	250	P	251	253	259	243	223	224	192	186	189	199	197	179	167	135	156	94	96	61	26	36	11	219	SW
2-Aug-07	294	307	22	280	200	229	209	206	209	227	164	140	113	107	102	87	82	59	45	83	65	59	144	206	143	SE
3-Aug-07	227	290	46	257	296	60	350	282	302	292	253	N	245	244	231	223	232	308	324	229	219	281	269	258	265	W
4-Aug-07	275	282	283	294	311	311	309	303	307	310	339	341	338	340	338	342	314	324	315	300	223	247	256	263	306	NW
5-Aug-07	252	215	209	189	200	209	237	208	205	198	240	275	305	330	342	331	316	295	227	272	284	239	191	222	258	WSW
6-Aug-07	247	225	206	181	203	234	194	188	167	182	188	185	201	219	215	229	243	244	245	239	237	237	206	220	218	SW
7-Aug-07	231	215	258	243	228	250	253	250	251	258	266	262	260	260	263	253	263	263	264	256	262	314	345	355	261	W
8-Aug-07	343	316	343	339	345	358	357	354	349	2	0	347	345	26	339	9	11	29	122	36	311	329	336	343	350	N
9-Aug-07	342	345	342	349	343	353	13	24	1	61	73	39	71	124	144	332	28	52	70	56	29	37	22	344	22	NNE
10-Aug-07	340	330	293	335	284	250	185	168	166	146	131	114	134	119	195	157	75	49	38	270	275	302	64	37	157	SSE
11-Aug-07	162	192	355	360	9	17	132	105	104	97	119	47	333	55	36	41	52	40	29	26	17	12	3	27	38	NE
12-Aug-07	21	25	23	26	32	27	25	28	24	30	25	28	29	17	21	72	120	306	7	22	360	342	330	338	23	NNE
13-Aug-07	339	338	7	303	343	339	332	341	344	349	33	26	158	251	232	239	205	281	225	228	282	227	232	247	295	WNW
14-Aug-07	247	207	198	197	187	209	P	P	P	P	P	245	250	259	253	260	275	284	300	322	320	302	276	250	261	W
15-Aug-07	216	235	285	N	33	7	32	22	36	N	81	68	63	62	48	32	47	52	48	49	43	42	62	20	43	NE
16-Aug-07	29	18	27	18	17	12	20	26	38	49	51	68	72	61	70	62	60	60	55	53	49	46	40	47	49	NE
17-Aug-07	24	30	31	35	31	28	29	32	33	35	29	43	51	54	54	57	80	72	322	308	281	347	334	332	28	NNE
18-Aug-07	345	354	64	281	191	188	224	353	355	134	13	40	104	298	4	62	24	38	33	58	35	19	343	4	18	NNE
19-Aug-07	3	359	29	27	277	217	202	109	129	195	202	179	187	256	270	271	212	140	158	195	179	208	231	229	208	SSW
20-Aug-07	241	231	237	245	241	254	227	204	231	252	261	261	260	260	266	266	275	277	265	257	254	253	258	257	WSW	
21-Aug-07	258	254	255	260	280	284	277	282	291	294	303	302	299	305	299	299	302	298	286	263	286	283	312	323	286	WNW
22-Aug-07	333	346	347	340	350	332	2	22	20	1	13	71	146	148	54	82	325	133	207	218	311	310	359	330	358	N
23-Aug-07	300	24	74	357	350	336	324	12	323	12	349	344	338	335	343	340	334	26	46	16	351	268	302	322	346	NNW
24-Aug-07	4	18	276	0	38	18	22	39	108	110	147	112	87	77	85	57	88	81	38	35	49	85	114	131	74	ENE
25-Aug-07	302	63	64	99	104	167	227	256	197	199	223	245	252	258	249	247	267	330	332	291	258	230	304	204	253	WSW
26-Aug-07	285	286	253	253	270	262	248	248	244	261	283	339	345	337	339	357	357	352	353	331	275	280	263	245	290	WNW
27-Aug-07	256	260	251	227	248	250	189	187	180	165	166	226	229	235	233	222	243	285	253	321	37	340	331	264	237	WSW
28-Aug-07	260	250	245	41	32	236	224	206	169	170	172	N	164	175	175	179	169	155	130	68	211	228	245	186	S	
29-Aug-07	260	263	241	226	247	250	314	136	158	159	70	60	45	34	174	207	198	178	191	250	89	224	245	231	210	SSW
30-Aug-07	166	185	213	120	298	290	2	33	31	86	46	124	130	95	39	67	343	20	278	280	261	275	250	240	277	W
31-Aug-07	228	210	223	247	251	247	244	247	246	250	244	250	243	252	252	238	216	192	192	196	215	242	209	222	236	SW

Hourly Avg 274 281 296 280 291 288 274 273 268 249 267 281 268 276 275 272 282 318 290 287 290 292 282 274

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

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

### Summary

|--|--|--|--|--|--|--|

Calm Time:	0 hrs	0% calms	Operational Time:	733 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	98.5%			
Percentile	99	95	75	50	25	5	1
	84.2	65.0	31.0	16.3	9.0	5.1	3.1

Determined by the Yamartino 15-min interval calculation

### Status Flag Characters

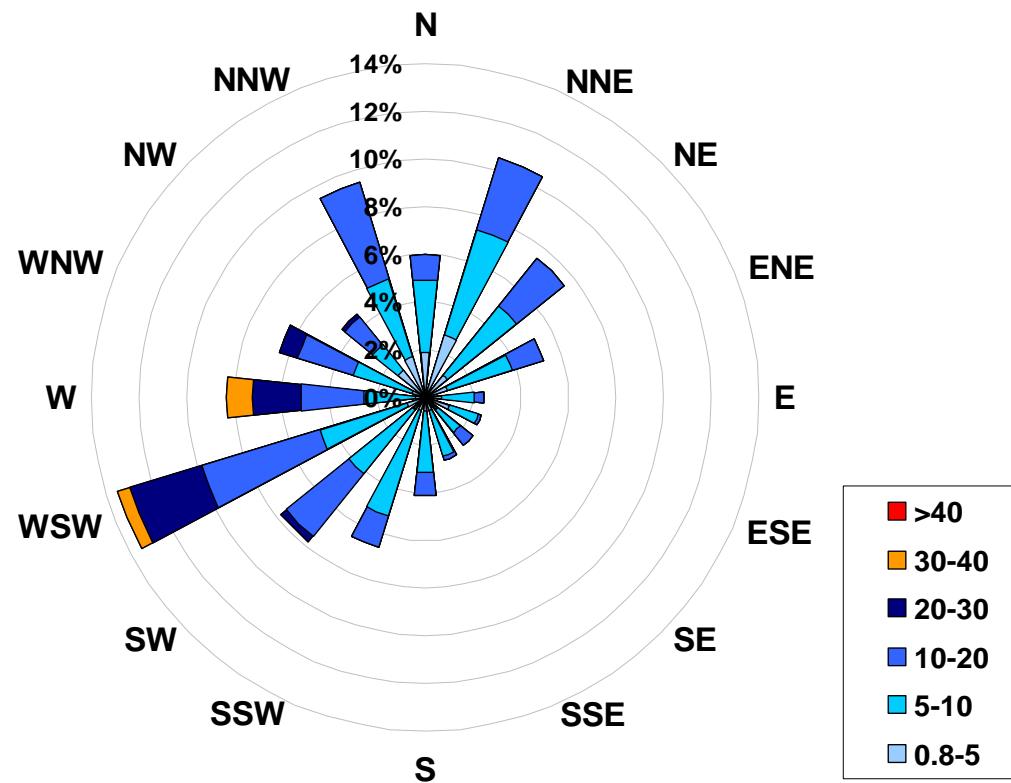
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

### 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
	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-Aug-07	4	11	P	2	2	4	30	13	10	13	16	19	22	35	54	36	21	17	15	8	63	5	10	53		
2-Aug-07	18	20	10	43	11	19	6	7	9	30	27	14	30	43	52	43	18	18	18	39	53	47	9	47		
3-Aug-07	16	62	44	66	56	19	73	26	37	39	11	N	19	6	19	15	25	23	12	61	60	21	10	6		
4-Aug-07	17	7	9	7	9	5	7	6	8	12	9	11	12	22	18	33	66	34	23	13	35	28	10	5		
5-Aug-07	13	18	21	8	20	13	40	23	13	15	47	43	50	31	13	16	16	18	19	60	38	17	31	43		
6-Aug-07	12	37	14	9	14	9	11	6	15	16	10	13	15	15	13	12	8	8	4	8	3	24	11	10		
7-Aug-07	15	12	17	20	33	10	3	3	5	6	5	7	10	10	10	7	9	7	5	4	9	26	11	9		
8-Aug-07	16	17	11	9	13	11	14	13	13	18	19	14	21	22	37	22	20	24	31	44	14	14	8	7		
9-Aug-07	8	7	7	18	21	22	16	19	17	18	20	52	47	45	50	59	22	32	33	13	8	6	9	33		
10-Aug-07	16	21	10	82	16	61	13	17	20	20	32	33	43	58	26	49	14	7	10	84	47	24	60	41		
11-Aug-07	76	23	22	25	17	26	79	73	38	25	24	53	69	44	17	18	16	17	9	9	10	6	11	6		
12-Aug-07	6	5	5	5	7	5	6	7	7	6	6	4	6	11	10	32	20	87	34	11	11	11	7	6		
13-Aug-07	6	8	37	28	6	7	7	9	12	27	84	81	63	19	25	29	38	9	19	22	17	8	8	8		
14-Aug-07	10	11	20	11	10	7	P	P	P	P	10	12	12	8	10	11	13	27	9	10	19	5	46	46.3		
15-Aug-07	45	37	87	N	57	62	18	20	13	N	58	49	52	34	20	12	12	8	6	6	10	18	17	21		
16-Aug-07	17	26	19	12	8	5	8	9	12	16	15	16	14	22	16	12	9	9	7	7	5	5	7	7		
17-Aug-07	12	6	5	6	10	12	6	10	8	10	10	10	12	11	13	11	15	35	89	28	26	17	10	10		
18-Aug-07	6	13	80	91	87	65	39	57	78	67	36	8	76	31	37	42	34	29	28	19	21	27	35	47		
19-Aug-07	41	35	13	77	45	13	29	43	27	10	14	27	36	68	39	15	54	11	10	69	28	27	7	3		
20-Aug-07	4	3	5	3	4	10	5	20	9	12	6	6	6	7	6	6	7	7	6	5	5	4	3	3		
21-Aug-07	3	4	3	5	7	6	4	5	7	6	7	7	7	7	8	8	8	10	4	15	7	35	10			
22-Aug-07	30	10	8	6	13	45	18	25	17	38	54	33	86	65	36	65	71	58	24	27	54	54	22	63		
23-Aug-07	64	39	78	11	8	34	84	70	78	60	39	33	23	23	25	19	14	20	9	8	15	70	48	44		
24-Aug-07	27	24	65	35	33	8	14	33	46	46	44	65	33	31	45	24	18	20	21	10	23	9	9	22		
25-Aug-07	60	69	26	30	44	24	24	16	31	20	23	12	7	12	10	10	52	19	15	45	54	23	38	28		
26-Aug-07	26	17	19	11	8	8	4	7	11	13	31	10	12	9	11	17	12	14	26	37	9	17	7	9		
27-Aug-07	4	4	9	22	12	14	12	9	16	9	21	24	20	21	18	20	28	28	10	68	33	36	41	51		
28-Aug-07	11	17	42	87	43	24	9	11	16	12	16	N	28	30	20	23	20	12	19	46	53	9	12			
29-Aug-07	3	5	11	8	7	7	66	49	23	34	60	22	15	50	32	14	9	7	15	22	55	57	15	50		
30-Aug-07	57	21	43	45	45	28	25	18	31	33	22	16	36	45	37	23	60	22	28	24	6	10	6	5		
31-Aug-07	6	9	6	8	5	6	5	7	7	6	7	13	12	12	8	9	7	5	4	22	14	9	6			

Hourly Max	76	69	87	91	87	65	84	73	78	67	60	84	86	68	54	65	71	87	89	84	63	70	60	63	
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**1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for  
August 2007**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	122
5	to	10	323
10	to	20	229
20	to	30	47
30	to	40	12
> 40			0
Total Non-Zero Values			733

# 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: August 1, 2007 to September 1, 2007

### Alberta's Air Quality Index

<b>Good</b>	<b>1</b>	<b>to</b>	<b>25</b>
<b>Fair</b>	<b>26</b>	<b>to</b>	<b>50</b>
<b>Poor</b>	<b>51</b>	<b>to</b>	<b>100</b>
<b>Very Poor</b>		<b>&gt;</b>	<b>&gt; 100</b>

### Summary

Number of 1-hr Good Readings:	677
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

### Status Flag Characters

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

### Day Mountain Standard Time

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

# PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

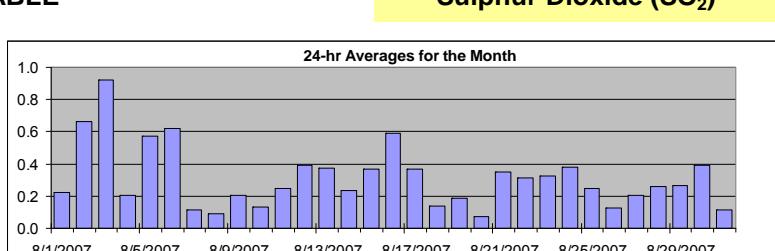
Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

**Summary**

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	10.1 ppb 6-Aug 9:00 10:00
Maximum 24-hr Average:	0.9 ppb 3-Aug

AIC Time:	32 hrs	Operational Time:	707 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 3.2	95 1.0	75 0.3	50 0.2	25 0.1	5 0.0	1 0.0	Average 0.3 ppb	Median 0.2 ppb

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-Aug-07	0	0	0	0	A	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.1
2-Aug-07	0	0	0	0	A	0	0	1	5	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.8
3-Aug-07	0	0	0	0	A	0	0	5	3	1	1	2	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0.9	4.6
4-Aug-07	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	0.2	0.5
5-Aug-07	0	0	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.3
6-Aug-07	0	0	1	0	A	0	0	0	0	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	10.1
7-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
8-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
9-Aug-07	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
10-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
11-Aug-07	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
12-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	3	0.4	3.1
13-Aug-07	1	0	0	1	A	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2
14-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7
15-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0.4	1.7
16-Aug-07	0	0	0	0	A	0	0	0	0	0	1	1	2	1	1	2	1	1	0	0	0	0	0	0	0	0	0.6	1.7
17-Aug-07	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.4	0.7
18-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
19-Aug-07	0	1	1	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	1.3
20-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
21-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0.4	3.7
22-Aug-07	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
23-Aug-07	0	1	0	0	A	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	C	C	0	0	0	0	0.3	1.1
24-Aug-07	0	0	0	0	A	0	0	0	C	C	C	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0.4	1.4
25-Aug-07	0	0	0	3	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	3.0
26-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
27-Aug-07	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
28-Aug-07	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
29-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
30-Aug-07	0	0	0	0	A	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
31-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
Hourly Avg	0.2	0.2	0.2	0.2	N	0.2	0.3	0.4	0.6	0.7	0.4	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.3				
Hourly Max	1.2	1.3	0.6	3.0	0.0	0.9	2.1	4.6	4.8	10.1	1.6	2.1	3.8	1.4	1.7	0.9	0.8	0.7	1.7	0.5	3.3	1.0	3.7	1.7				



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

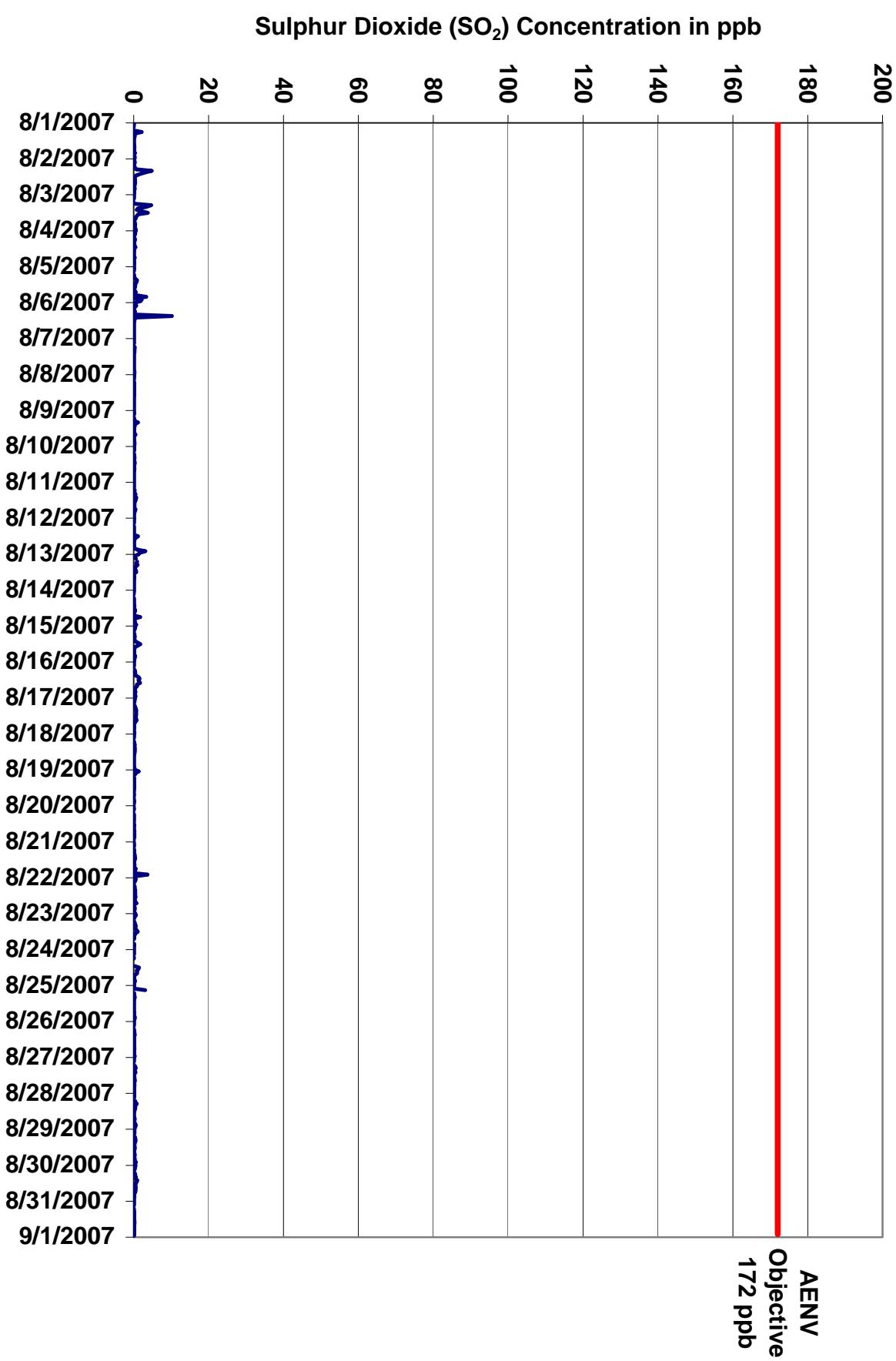


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

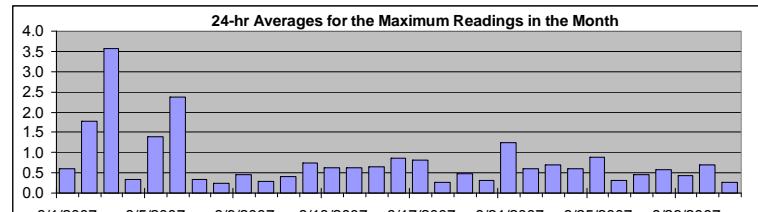
Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	44.9 ppb	6-Aug 9:00	10:00
Maximum 24-hr Value:	3.6 ppb	3-Aug	

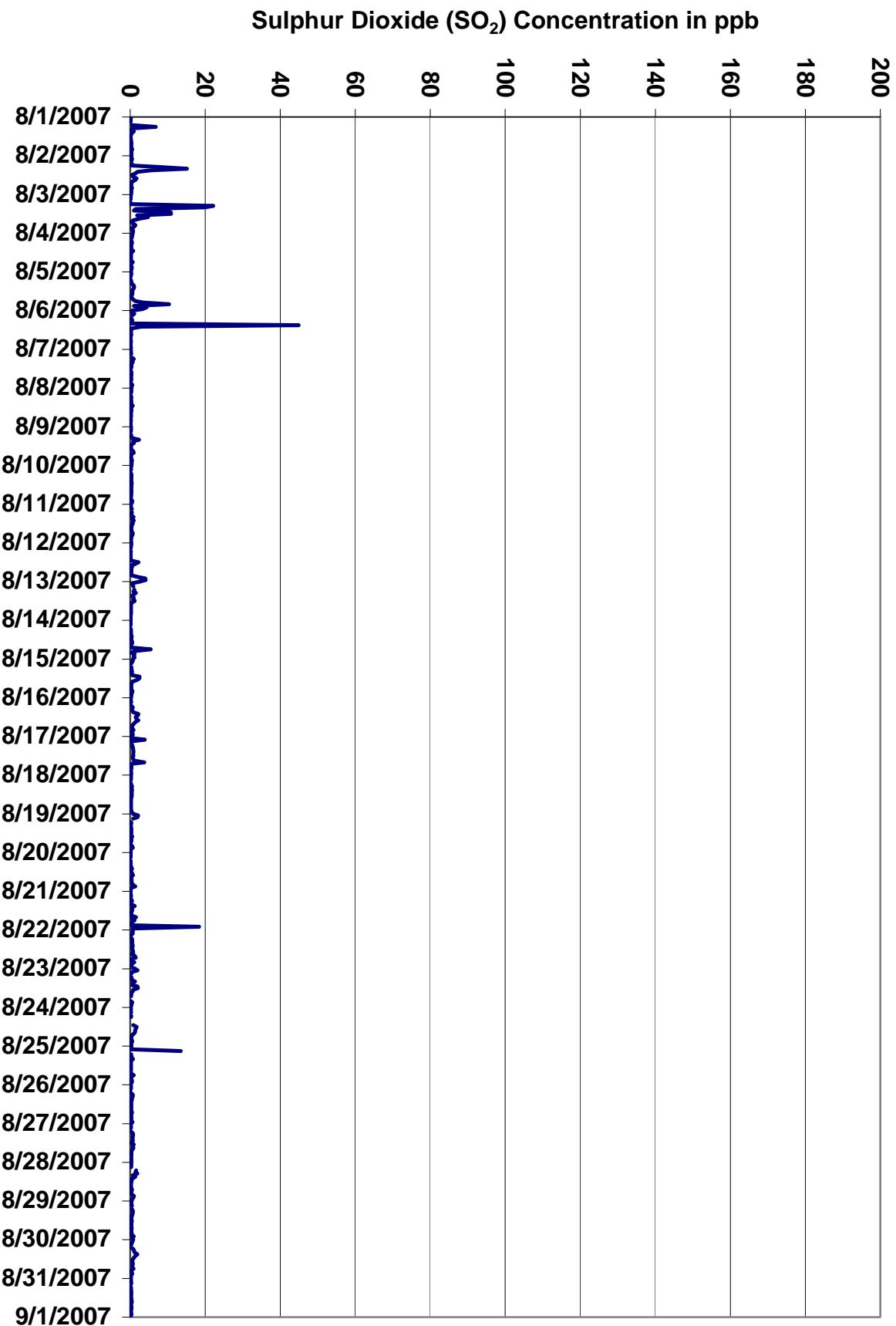
AIC Time:	32 hrs	Operational Time:	707 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	10.8 1.9 0.6 0.3 0.2 0.1 0.1	0.8 ppb	0.3 ppb

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-Aug-07	0	0	0	0	A	1	7	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.6	6.7
2-Aug-07	0	0	0	0	A	0	0	8	15	6	2	1	1	1	2	1	1	0	0	0	0	0	0	0	0	1.8	15.1
3-Aug-07	0	0	0	0	A	0	0	22	20	1	1	11	11	2	5	3	1	0	1	1	1	1	0	1	1	3.6	22.1
4-Aug-07	1	1	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	0.8
5-Aug-07	0	0	0	0	A	0	0	0	1	1	1	1	1	1	0	0	0	0	1	1	3	10	1	4	3	1.4	10.4
6-Aug-07	1	0	1	1	A	0	0	0	0	45	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	44.9
7-Aug-07	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.9
8-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
9-Aug-07	0	0	0	0	A	0	0	0	2	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.5	2.3
10-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.5
11-Aug-07	0	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0.4	0.9
12-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	2	4	4.1
13-Aug-07	3	1	1	1	A	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.5
14-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	1	0	1	1	1	0.6	5.4
15-Aug-07	1	1	0	0	A	0	0	0	0	0	1	2	2	2	1	0	0	0	0	0	0	1	0	0	0	0.6	2.5
16-Aug-07	0	0	0	0	A	0	1	1	1	1	2	2	1	2	2	1	1	1	1	1	0	1	1	1	1	0.9	2.1
17-Aug-07	0	0	4	0	A	0	1	1	1	1	1	1	1	1	1	1	1	4	0	0	0	0	0	0	0	0.8	3.9
18-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
19-Aug-07	1	2	2	1	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0.5	2.1
20-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	0	0.3	1.3
21-Aug-07	0	0	0	0	A	0	0	0	0	1	1	1	1	0	0	0	1	0	1	1	0	0	0	18	1	1.3	18.3
22-Aug-07	1	1	1	0	A	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0	0	1	0	0	0.6	1.5
23-Aug-07	1	2	0	0	A	0	0	0	1	1	1	2	2	1	1	0	0	0	C	C	0	0	0	0	0	0.7	2.0
24-Aug-07	0	0	0	0	A	0	0	C	C	C	A	1	2	1	1	1	1	1	0	0	0	1	0	0	0.6	1.7	
25-Aug-07	0	0	0	13	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.9	13.4
26-Aug-07	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.7
27-Aug-07	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.5	0.9
28-Aug-07	0	0	0	0	A	2	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.9
29-Aug-07	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.9
30-Aug-07	1	1	0	0	A	0	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.7	1.9
31-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
Hourly Avg	0.4	0.4	0.5	0.7	N	0.4	0.7	1.5	1.7	2.3	0.7	1.0	1.0	0.6	0.7	0.5	0.6	0.4	0.6	0.5	0.7	0.5	1.2	0.6			
Hourly Max	2.5	2.1	3.9	13.4	0.0	1.6	6.7	22.1	20.0	44.9	2.9	10.8	10.9	1.8	4.8	2.6	3.7	1.5	5.4	3.4	10.4	1.7	18.3	4.1			

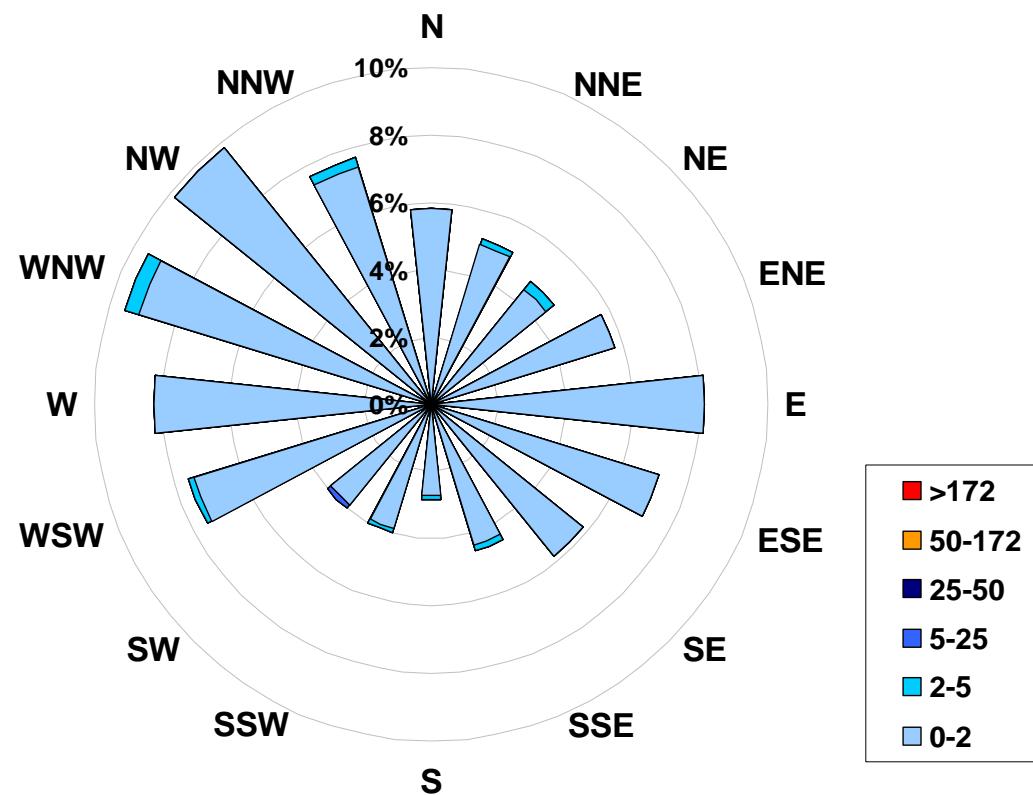


C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

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 August 2007**



<b>Calms:</b>	<b>0%</b>
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Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	694
2	to	5	12
5	to	25	1
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			707

# PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

**Summary**

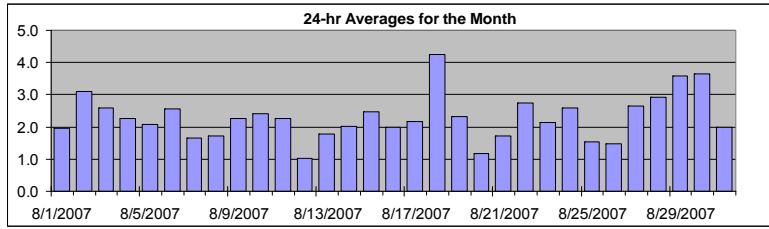
Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	10.5 ppb 18-Aug 6:00 7:00
Maximum 24-hr Average:	4.2 ppb 18-Aug

AIC Time:	32 hrs	Operational Time:	708 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 7.6	95 5.7	75 3.0	50 1.9	25 1.0	5 0.8	1 0.4	Average 2.3 ppb	Median 1.9 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 0:00 1:00	1:00 2:00 3:00	2:00 3:00 4:00	3:00 4:00 5:00	4:00 5:00 6:00	5:00 6:00 7:00	6:00 7:00 8:00	7:00 8:00 9:00	8:00 9:00 10:00	9:00 10:00 11:00	10:00 11:00 12:00	11:00 12:00 13:00	12:00 13:00 14:00	13:00 14:00 15:00	14:00 15:00 16:00	15:00 16:00 17:00	16:00 17:00 18:00	17:00 18:00 19:00	18:00 19:00 20:00	19:00 20:00 21:00	20:00 21:00 22:00	21:00 22:00 23:00	22:00 23:00 23:00			
1-Aug-07	1	1	1	1	A	5	4	4	2	1	1	1	1	1	1	1	1	1	1	2	4	3	4	4	2.0	4.5
2-Aug-07	2	2	3	8	A	7	5	4	3	4	2	1	1	1	1	1	1	1	1	2	3	5	4	5	3.1	7.6
3-Aug-07	2	1	2	2	A	4	5	5	4	3	3	2	2	2	2	3	2	2	3	3	4	2	3	2	2.6	5.2
4-Aug-07	2	3	2	2	A	2	2	2	2	1	1	1	1	1	1	1	3	2	3	3	3	6	5	3	2.3	5.9
5-Aug-07	2	4	3	3	A	2	2	2	2	1	1	1	1	1	1	1	1	1	1	2	3	2	4	2.1	4.1	
6-Aug-07	4	3	4	6	A	6	5	4	2	2	1	1	1	1	1	1	1	1	1	2	4	3	2	4	2.6	6.3
7-Aug-07	3	2	3	4	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	5	2	2	1.7	5.0
8-Aug-07	4	2	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	2	1.7	6.0
9-Aug-07	5	4	3	5	A	4	5	3	2	1	2	1	1	1	1	1	1	1	1	2	2	3	2	2	2.3	4.8
10-Aug-07	2	2	6	4	A	7	4	3	2	1	1	1	2	1	1	1	1	1	2	2	2	2	3	3	2.4	6.7
11-Aug-07	2	2	2	3	A	7	6	6	3	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2.3	6.6
12-Aug-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2	1	1	3	1.0	2.7
13-Aug-07	2	3	3	3	A	3	2	1	1	1	0	0	1	1	1	1	1	1	1	1	4	4	4	3	1.8	4.3
14-Aug-07	3	4	4	4	A	4	3	2	1	0	1	1	1	1	1	1	1	1	1	1	2	2	3	3	2.0	4.5
15-Aug-07	3	2	5	5	A	4	4	4	4	3	4	4	2	1	2	1	1	1	1	1	1	1	1	1	2.5	5.1
16-Aug-07	1	1	1	2	A	3	7	3	4	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2.0	7.4
17-Aug-07	2	1	1	1	A	1	2	2	2	2	2	2	2	2	2	4	4	4	2	2	2	1	4	3	2.2	4.4
18-Aug-07	4	9	7	3	A	8	10	6	9	6	5	4	3	3	2	2	2	2	2	2	2	4	2	2	4.2	10.5
19-Aug-07	3	4	5	3	A	4	3	3	4	3	2	2	1	1	1	1	1	1	1	1	3	2	3	1	2.3	5.5
20-Aug-07	1	1	1	1	A	3	4	3	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1.2	4.0
21-Aug-07	1	1	1	1	A	1	2	2	2	1	2	1	1	1	1	1	1	1	3	3	3	3	2	1.7	3.1	
22-Aug-07	2	2	1	3	A	9	7	5	7	4	2	2	1	1	1	1	1	1	1	2	3	2	2	2	2.7	8.7
23-Aug-07	2	4	3	2	A	3	2	3	2	2	2	1	1	2	1	2	2	2	C	C	C	C	A	2.1	4.2	
24-Aug-07	3	3	3	3	A	4	4	4	3	3	2	2	4	2	2	1	2	2	2	2	2	2	2	1	2.6	4.3
25-Aug-07	1	1	2	6	A	2	3	2	1	1	0	0	1	1	0	1	0	1	2	3	3	2	1	1.5	5.8	
26-Aug-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	6	1.5	5.6
27-Aug-07	3	2	2	2	A	4	4	5	4	4	4	2	1	1	1	1	1	1	1	5	4	3	3	2.7	5.1	
28-Aug-07	5	4	6	6	A	7	8	4	4	2	2	1	1	1	1	1	1	1	1	3	3	2	1	2.9	8.0	
29-Aug-07	3	4	5	4	A	8	7	6	6	3	2	2	2	1	1	1	2	4	4	3	3	6	3	2	3.6	8.5
30-Aug-07	2	3	2	3	A	3	8	6	5	3	3	5	6	4	2	3	4	6	5	3	1	2	2	1	3.6	7.7
31-Aug-07	1	1	1	1	A	3	6	5	3	2	1	1	1	1	1	1	1	2	4	2	2	2	3	2.0	6.1	

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

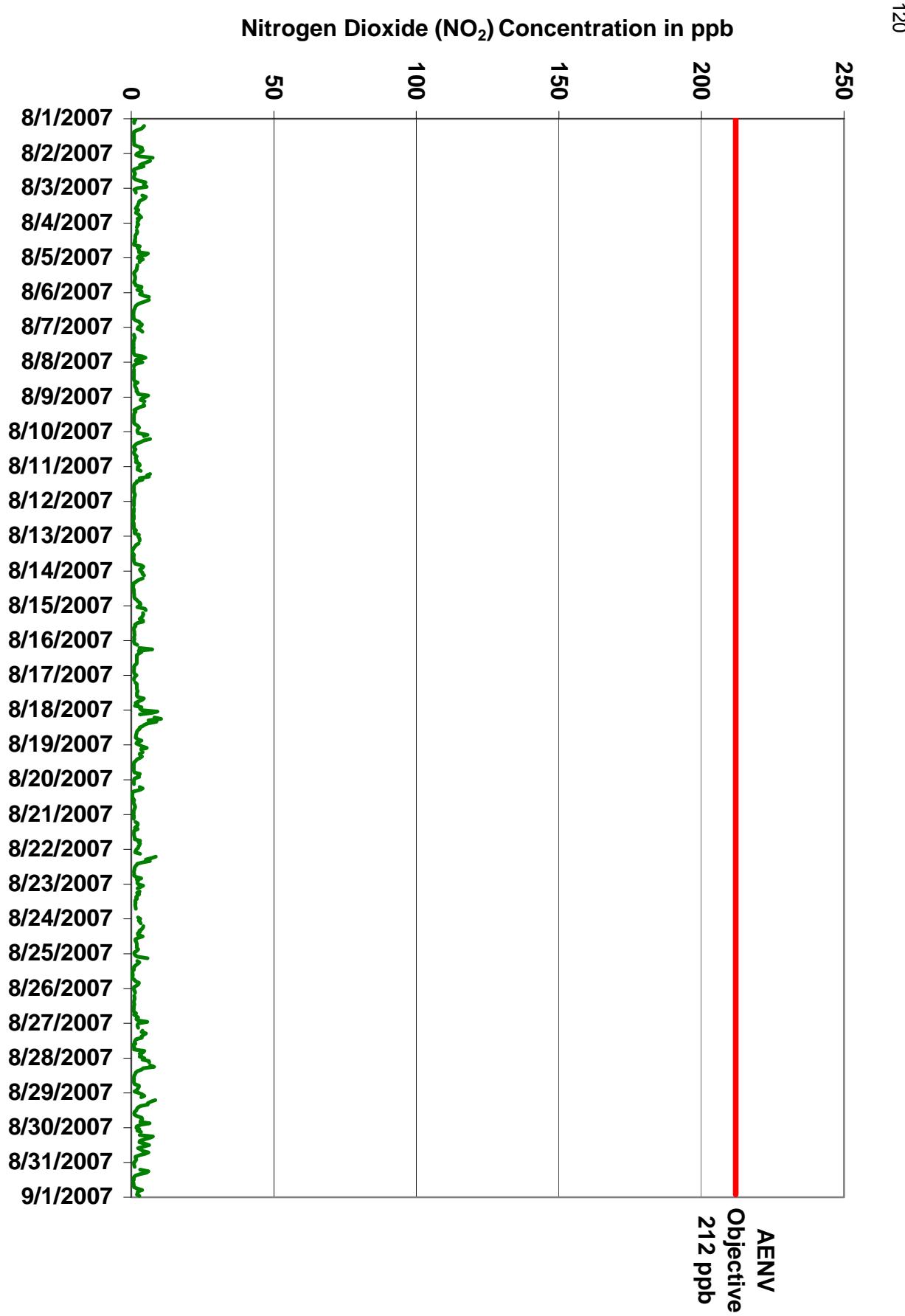


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

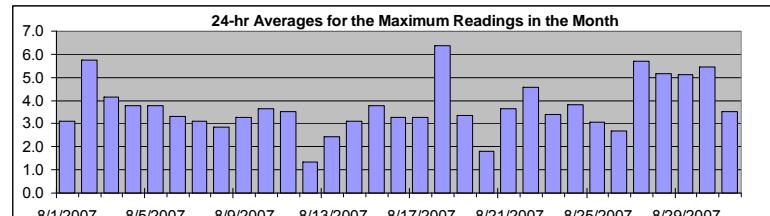
Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	19.0 ppb	5-Aug 20:00 21:00
Maximum 24-hr Value:	6.4 ppb	18-Aug

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
	13.7 9.2 5.0 3.0 2.0 1.0 1.0	3.7 ppb	3.0 ppb

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-Aug-07	2	4	2	2	A	6	6	6	8	1	1	1	1	1	1	1	1	2	2	2	4	5	4	5	5	3.1	8.0
2-Aug-07	4	4	5	11	A	13	6	7	6	7	3	2	1	4	10	10	1	1	3	4	8	7	6	10	5.8	13.0	
3-Aug-07	5	2	2	3	A	7	8	7	6	5	4	4	3	3	3	5	3	3	3	4	6	4	3	3	4.1	8.0	
4-Aug-07	3	4	3	2	A	2	3	3	2	2	2	2	2	2	1	2	6	3	4	3	9	14	9	5	3.8	13.7	
5-Aug-07	6	9	4	3	A	3	3	2	2	2	2	2	1	2	2	2	2	2	2	2	3	19	5	4	5	3.8	19.0
6-Aug-07	4	4	5	7	A	7	7	5	3	2	2	2	2	1	1	1	1	1	1	2	3	4	5	5	4	3.3	7.0
7-Aug-07	3	3	4	7	A	2	2	2	2	1	1	1	1	1	3	1	1	1	1	3	13	13	3	2	3.1	13.0	
8-Aug-07	7	4	1	1	A	1	2	1	1	1	1	1	2	1	4	4	3	2	2	3	3	3	4	4	11	2.8	11.0
9-Aug-07	6	4	4	6	A	5	5	4	3	2	13	2	1	1	1	1	1	1	1	1	2	3	3	3	3	3.3	13.1
10-Aug-07	3	3	11	7	A	9	5	5	2	2	2	1	2	2	1	1	1	4	4	4	2	2	2	5	5	3.6	11.0
11-Aug-07	5	5	3	8	A	9	7	8	7	6	3	2	2	1	1	1	1	1	1	1	2	2	2	2	1	3.5	9.0
12-Aug-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	1.3	4.7
13-Aug-07	4	4	4	3	A	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	5	6	4	2.4	6.0
14-Aug-07	4	4	4	5	A	6	4	2	2	1	1	1	1	1	2	3	1	2	2	3	3	4	6	8	3.1	8.0	
15-Aug-07	3	3	8	8	A	5	6	8	5	4	6	6	3	2	2	2	1	2	2	2	3	2	2	2	3.8	8.0	
16-Aug-07	1	1	2	4	A	12	12	7	6	3	2	2	2	2	3	2	2	1	2	2	2	2	1	2	3.2	12.0	
17-Aug-07	2	2	2	1	A	2	3	3	2	2	3	3	3	3	3	2	5	7	8	4	2	3	3	6	3.3	8.0	
18-Aug-07	10	15	10	4	A	14	14	9	10	8	8	6	3	3	3	3	2	2	2	3	3	7	6	3	6.4	15.0	
19-Aug-07	4	7	9	5	A	5	3	4	5	4	3	2	2	1	1	1	1	1	1	1	2	5	6	4	2	3.4	9.0
20-Aug-07	1	1	1	1	A	4	5	5	2	1	1	1	1	1	2	1	1	2	2	3	2	2	1	1	1.8	5.0	
21-Aug-07	1	2	2	1	A	3	4	3	3	4	5	2	2	1	1	2	7	2	10	8	6	6	4	5	3.6	10.3	
22-Aug-07	3	2	2	4	A	12	10	10	10	5	3	2	2	8	8	1	1	2	2	4	5	3	3	4.6	12.0		
23-Aug-07	4	9	5	4	A	3	2	3	7	2	3	2	2	2	2	2	2	2	C	C	C	C	A	3.4	9.0		
24-Aug-07	5	4	5	9	A	7	5	5	4	4	4	4	5	3	2	2	2	2	3	3	2	3	3	2	3.8	9.1	
25-Aug-07	2	2	3	17	A	3	5	5	3	2	1	1	1	1	1	1	1	1	2	3	5	4	4	1	3.1	17.2	
26-Aug-07	1	2	3	3	A	3	3	2	2	2	1	3	1	2	1	2	1	3	2	3	4	3	4	10	2.7	10.2	
27-Aug-07	6	4	5	5	A	11	5	7	8	7	6	3	2	3	7	1	1	7	1	13	8	7	8	4	5.7	13.3	
28-Aug-07	9	7	8	9	A	17	11	17	4	6	3	2	2	1	1	1	1	1	2	4	4	3	3	2	5.2	17.4	
29-Aug-07	4	6	7	4	A	9	8	9	7	6	3	3	2	2	2	2	2	3	6	6	6	5	8	6	5.1	9.2	
30-Aug-07	2	3	3	4	A	3	11	13	7	6	4	6	7	6	3	5	6	8	7	7	3	3	3	3	5.5	13.3	
31-Aug-07	3	2	2	4	A	6	11	8	7	3	2	1	1	1	1	1	2	6	6	6	3	3	3	3	3.5	11.0	
Hourly Avg	3.7	4.1	4.2	4.9	N	6.2	5.8	5.6	4.4	3.3	3.1	2.3	2.0	2.2	2.4	2.0	2.2	2.5	2.9	3.8	5.0	4.6	4.0	4.0			
Hourly Max	10.0	15.0	11.0	17.2	0.0	16.9	14.0	17.4	10.0	8.0	13.1	6.2	7.2	8.0	10.2	9.8	7.4	8.2	10.3	13.3	19.0	13.7	9.0	11.0			



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

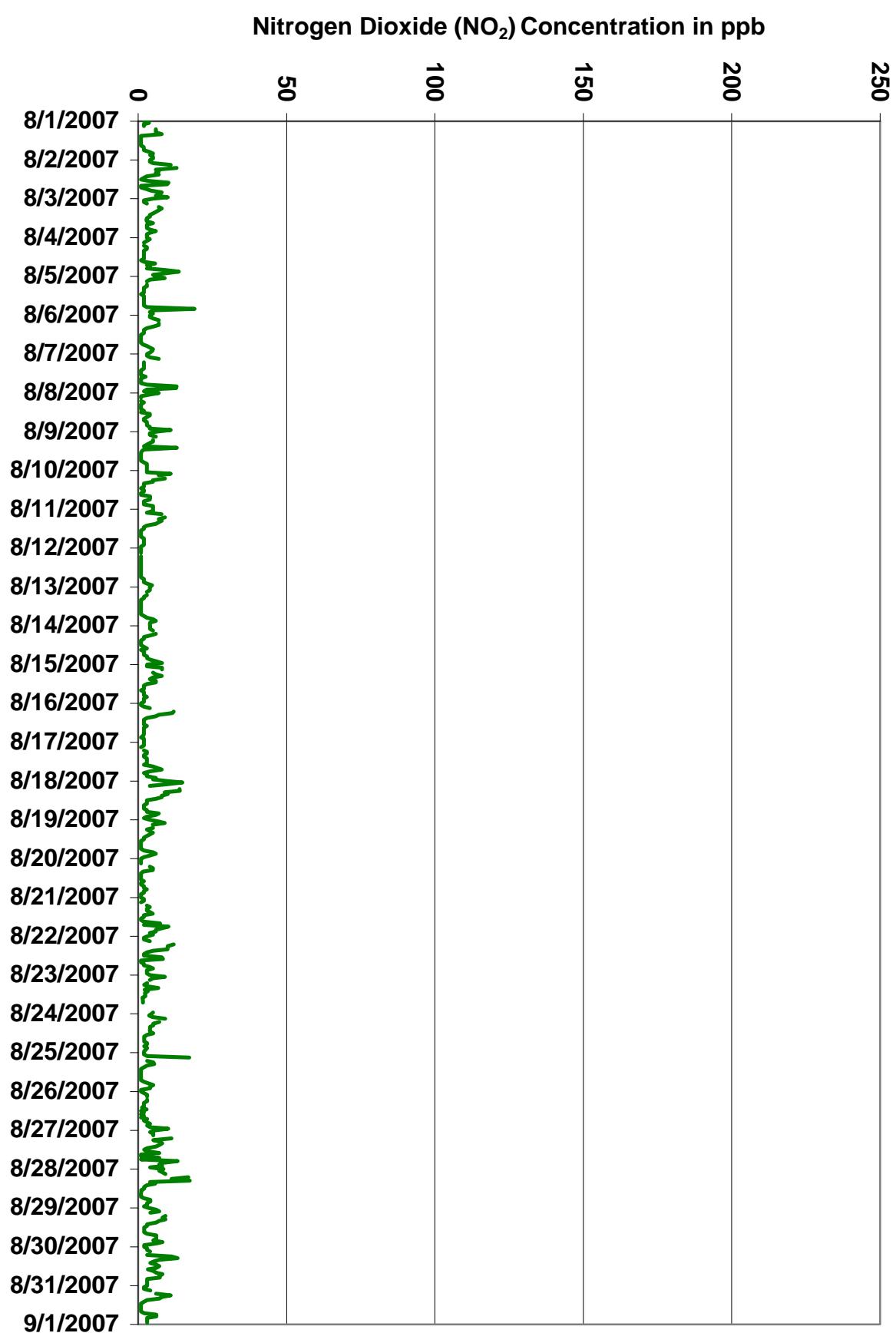
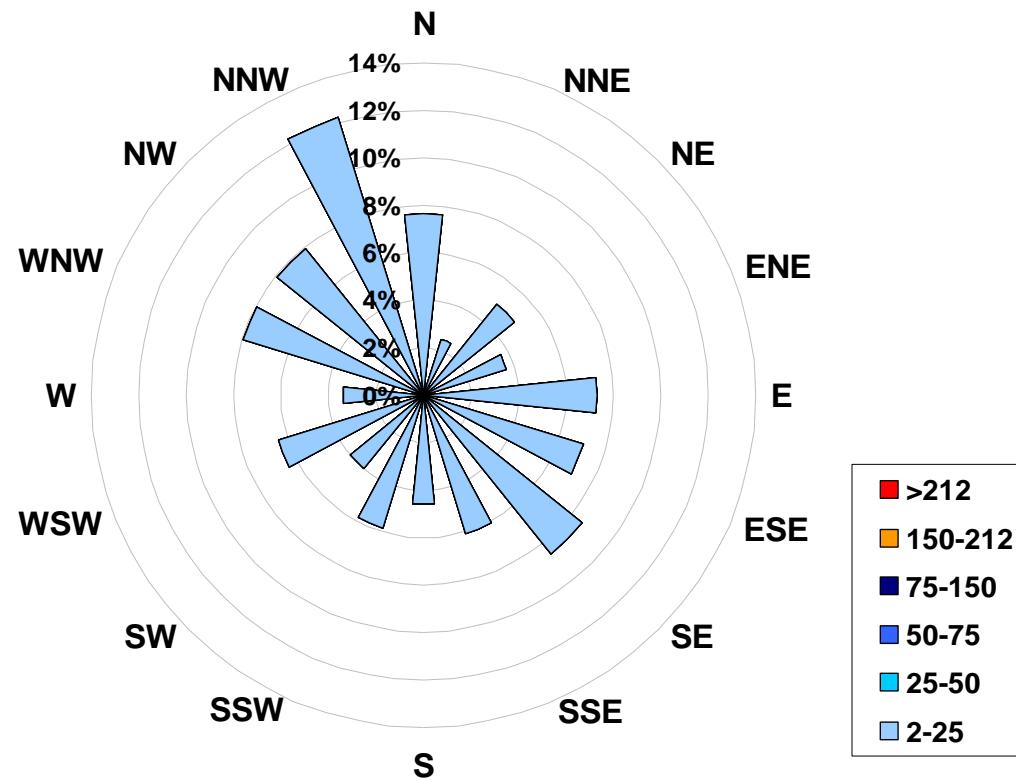


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of NO <sub>2</sub> in ppb		Frequency (hrs)
Range		
2.0	< 25	708
25	to 50	0
50	to 75	0
75	to 150	0
150	to 212	0
>	212	0
Total Non-Zero Values		708

# PASZA - Beaverlodge Nitric Oxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

Summary

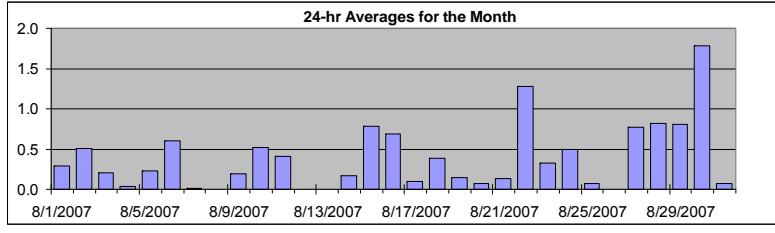
Maximum 1-hr Average:	11.9	ppb	30-Aug	8:00 9:00
Maximum 24-hr Average:	1.8	ppb	30-Aug	

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
	5.9	2.3	0.1	0.0	0.0	0.0	0.0	0.4 ppb	0.0 ppb

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-Aug-07	0:00 1:00	0	0	0	0	A	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6	
2-Aug-07	0:00 1:00	0	0	0	0	A	0	2	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.6	
3-Aug-07	0:00 1:00	0	0	0	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9	
4-Aug-07	0:00 1:00	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
5-Aug-07	0:00 1:00	0	0	0	0	A	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
6-Aug-07	0:00 1:00	0	0	0	0	A	1	5	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	5.0
7-Aug-07	0:00 1:00	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	0.1
8-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
9-Aug-07	0:00 1:00	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
10-Aug-07	0:00 1:00	0	0	0	0	A	1	2	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.8
11-Aug-07	0:00 1:00	0	0	0	0	A	1	1	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.4
12-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
13-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
14-Aug-07	0:00 1:00	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
15-Aug-07	0:00 1:00	0	0	0	0	A	0	1	2	4	3	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0.8	4.0
16-Aug-07	0:00 1:00	0	0	0	0	A	0	9	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	8.8
17-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
18-Aug-07	0:00 1:00	0	0	0	0	A	0	1	0	2	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
19-Aug-07	0:00 1:00	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	0.1	0.9
20-Aug-07	0:00 1:00	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	0.1	0.9
21-Aug-07	0:00 1:00	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	0.1	1.1
22-Aug-07	0:00 1:00	0	0	0	0	A	1	6	5	10	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	10.4
23-Aug-07	0:00 1:00	0	0	0	0	A	0	0	2	1	1	1	0	0	0	0	0	0	C	C	C	C	A	0	0	0.3	1.6	
24-Aug-07	0:00 1:00	0	0	0	0	A	1	1	2	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.0
25-Aug-07	0:00 1:00	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	0.1	0.9
26-Aug-07	0:00 1:00	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	0.1
27-Aug-07	0:00 1:00	0	0	0	0	A	0	1	8	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.8	7.5
28-Aug-07	0:00 1:00	0	0	0	0	A	3	4	3	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	4.5
29-Aug-07	0:00 1:00	0	0	0	0	A	2	6	5	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	6.0
30-Aug-07	0:00 1:00	0	0	0	0	A	0	7	7	12	4	1	3	3	1	0	1	1	1	0	0	0	0	0	0	0	1.8	11.9
31-Aug-07	0:00 1:00	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	0.1	0.8

## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)



## Status Flag Characters

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

# PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

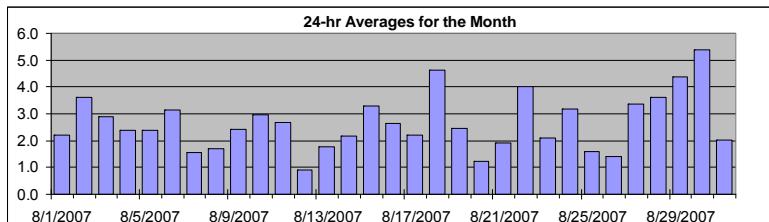
Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
Summary

Maximum 1-hr Average:	17.2	ppb	22-Aug	8:00 9:00
Maximum 24-hr Average:	5.4	ppb	30-Aug	

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
	12.7	7.2	3.4	2.0	1.0	0.7	0.4	2.7 ppb	2.0 ppb

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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-Aug-07	1	1	1	1	A	5	6	6	3	2	1	0	1	1	1	1	1	1	1	1	2	4	3	4	3	2.2	6.4
2-Aug-07	2	2	3	8	A	7	8	7	5	6	3	1	1	2	3	1	1	1	2	3	5	4	4	5	5	3.6	7.7
3-Aug-07	2	1	2	2	A	4	6	5	5	3	3	3	3	2	2	3	2	2	3	3	4	2	3	2	2	2.9	5.8
4-Aug-07	2	3	2	2	A	2	2	2	2	2	2	2	2	2	1	1	3	2	3	3	3	6	5	3	3	2.4	6.0
5-Aug-07	2	4	3	3	A	3	3	4	4	2	1	1	1	2	2	1	1	1	1	2	4	3	2	4	3	2.4	4.3
6-Aug-07	4	3	4	6	A	7	10	8	5	2	2	1	1	1	1	1	1	1	1	1	2	4	3	3	3	3.1	10.2
7-Aug-07	2	2	3	4	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	5	2	1	1.6	4.9
8-Aug-07	4	2	1	1	A	1	1	1	1	1	1	1	1	1	3	1	1	1	1	2	2	2	2	2	6	1.7	5.9
9-Aug-07	5	3	3	5	A	4	6	4	3	2	2	1	1	1	1	1	1	1	1	2	2	3	2	2	2	2.4	6.0
10-Aug-07	2	2	6	4	A	8	7	7	5	3	1	1	2	1	1	1	1	1	2	2	2	2	2	3	3	3.0	7.6
11-Aug-07	2	2	2	3	A	7	7	10	4	6	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2.7	9.7
12-Aug-07	1	1	1	1	A	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	2	1	1	3	0.9	2.7	
13-Aug-07	2	3	3	3	A	3	2	2	1	1	0	0	0	1	1	0	1	1	1	1	4	4	3	3	3	1.8	4.1
14-Aug-07	3	4	4	5	A	4	4	3	2	1	1	1	1	1	1	1	1	1	1	1	2	2	3	3	3	2.2	4.7
15-Aug-07	3	2	5	5	A	4	5	7	7	6	8	7	3	2	2	1	1	1	1	1	1	1	1	1	1	3.3	8.2
16-Aug-07	1	1	1	2	A	3	16	4	6	4	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2.6	16.4
17-Aug-07	2	1	1	1	A	1	2	2	2	2	3	3	2	2	2	2	4	4	2	2	2	1	4	3	2.2	4.4	
18-Aug-07	4	9	7	3	A	8	12	7	11	7	6	6	4	3	3	2	2	2	2	2	2	4	2	2	2	4.6	11.7
19-Aug-07	3	4	5	3	A	4	3	3	5	4	3	2	1	1	1	1	1	1	1	1	3	2	3	1	2.5	5.5	
20-Aug-07	1	1	1	1	A	3	5	4	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1.2	4.7
21-Aug-07	0	1	1	1	A	2	3	3	2	2	3	2	1	1	1	1	2	2	3	3	3	2	2	2	1.9	3.5	
22-Aug-07	2	1	1	3	A	10	14	10	17	8	3	3	2	1	1	1	1	1	2	3	3	3	2	2	4.0	17.2	
23-Aug-07	2	4	3	2	A	3	2	4	3	2	2	1	1	1	1	1	1	1	1	C	C	C	C	A	2.1	4.4	
24-Aug-07	4	3	3	3	A	6	6	6	4	5	4	3	5	3	2	2	2	2	2	2	2	2	2	1	3.2	5.7	
25-Aug-07	1	1	2	6	A	2	3	3	2	1	1	0	0	0	0	0	0	0	1	1	3	2	2	1	1.6	5.8	
26-Aug-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	6	1.4	5.6	
27-Aug-07	2	2	2	2	A	4	5	13	7	5	5	3	2	2	2	2	1	1	1	1	5	4	3	3	3	3.4	12.7
28-Aug-07	5	4	6	6	A	10	12	7	8	4	3	2	1	1	1	1	1	1	1	3	3	2	2	1	3.6	12.4	
29-Aug-07	3	4	5	3	A	11	13	11	8	5	3	2	2	2	1	1	2	4	4	3	3	6	3	2	4.4	12.9	
30-Aug-07	2	3	2	3	A	3	15	13	17	7	4	8	9	6	3	4	4	7	5	3	1	1	2	1	5.4	16.8	
31-Aug-07	1	1	1	1	A	3	6	6	4	2	1	1	1	0	1	1	1	1	2	2	2	2	3	3	2.0	6.3	
	Hourly Avg	2.3	2.5	2.8	3.1	N	4.4	6.0	5.3	4.8	3.2	2.4	2.0	1.8	1.4	1.3	1.2	1.4	1.5	1.7	2.0	2.6	2.6	2.4	2.5		
	Hourly Max	4.7	9.1	7.0	7.7	0.0	10.6	16.4	13.5	17.2	8.2	8.2	7.6	9.3	5.7	2.7	4.0	4.4	6.6	5.2	4.5	5.0	6.3	5.0	5.9		

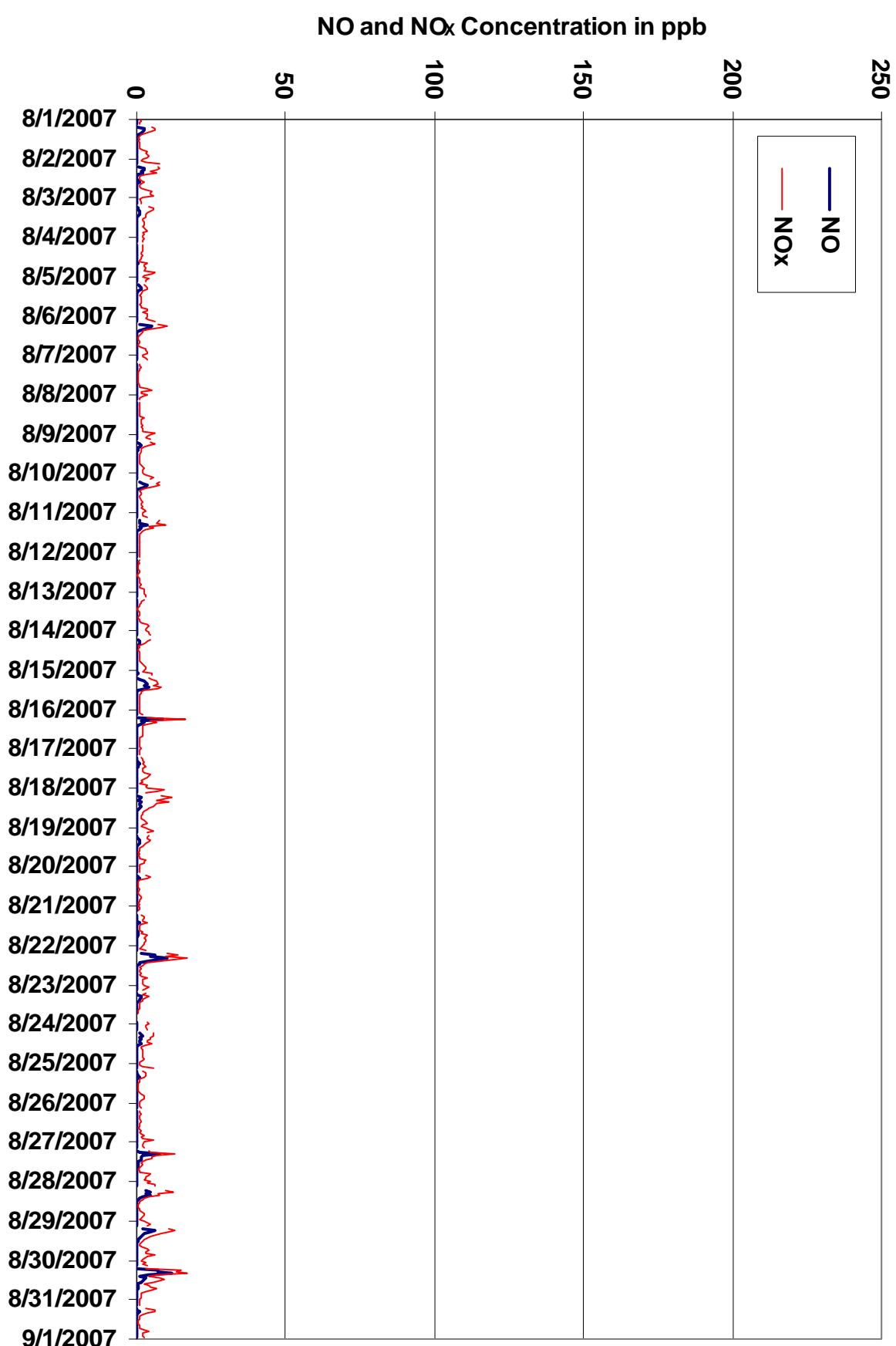


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Nitric Oxide (NO)

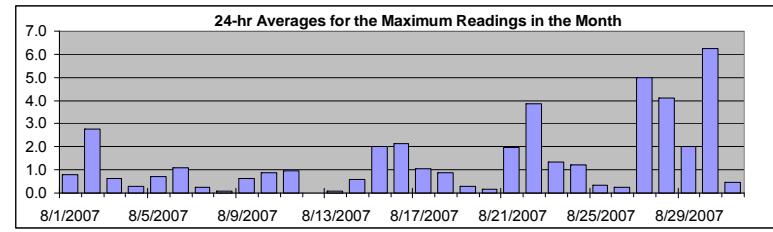
Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	50.6 ppb	28-Aug 5:00	6:00
Maximum 24-hr Value:	6.2 ppb	30-Aug	

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
	17.7 6.7 1.0 0.0 0.0 0.0	1.4 ppb	0.0 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-Aug-07	0:00 1:00	0	1	0	0	A	1	6	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	5.9	
2-Aug-07	0:00 1:00	0	0	0	0	A	2	4	7	14	4	2	0	6	6	11	9	0	0	0	0	0	0	0	0	2.8	13.8	
3-Aug-07	0:00 1:00	0	0	0	0	A	0	1	1	2	1	2	1	1	3	0	1	1	0	0	0	0	0	0	0	0.6	2.9	
4-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	0	1	0	1	0	1	0	0	1	1	0	0	0	0	1	0	0.3	1.0	
5-Aug-07	0:00 1:00	0	3	1	1	A	2	2	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.9	
6-Aug-07	0:00 1:00	0	0	0	0	A	3	9	6	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.1	8.8	
7-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	2	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	2.0	
8-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.1	0.9	
9-Aug-07	0:00 1:00	0	0	0	0	A	1	2	2	2	1	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	4.0	
10-Aug-07	0:00 1:00	0	0	0	0	A	2	4	6	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	5.9	
11-Aug-07	0:00 1:00	0	0	0	0	A	2	3	5	6	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.0	5.9	
12-Aug-07	0:00 1:00	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	
13-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9	
14-Aug-07	0:00 1:00	0	0	0	1	A	1	2	2	2	0	0	0	0	0	0	2	0	1	1	1	0	0	0	1	0.6	2.0	
15-Aug-07	0:00 1:00	0	0	1	1	A	1	5	10	10	4	6	6	1	1	0	0	0	0	0	0	0	0	1	0	2.0	9.8	
16-Aug-07	0:00 1:00	0	0	0	0	A	6	23	11	6	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2.1	22.9	
17-Aug-07	0:00 1:00	0	0	10	0	A	0	0	0	1	1	1	1	1	0	0	0	8	1	0	0	0	0	0	0	1.1	10.4	
18-Aug-07	0:00 1:00	0	0	0	0	A	2	3	1	3	2	2	4	2	1	1	0	0	0	0	0	0	0	0	0	0.9	3.9	
19-Aug-07	0:00 1:00	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
20-Aug-07	0:00 1:00	0	0	0	0	A	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.9	
21-Aug-07	0:00 1:00	0	0	0	0	A	0	1	1	1	2	4	1	2	0	0	0	13	12	6	2	0	1	0	0	2.0	12.8	
22-Aug-07	0:00 1:00	0	0	0	0	A	7	18	20	16	7	2	5	3	3	8	0	0	0	0	0	0	0	0	3.8	19.7		
23-Aug-07	0:00 1:00	0	2	0	0	A	0	1	2	11	1	2	1	1	1	1	0	0	0	C	C	C	C	A	1.3	10.8		
24-Aug-07	0:00 1:00	0	0	0	1	A	7	4	5	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	1.2	7.0	
25-Aug-07	0:00 1:00	0	0	0	2	A	0	1	1	1	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0.4	2.0	
26-Aug-07	0:00 1:00	0	0	0	0	A	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0.3	2.0	
27-Aug-07	0:00 1:00	0	0	0	0	A	8	11	15	6	4	3	18	1	13	14	16	0	3	0	0	0	0	2	0	0	5.0	18.1
28-Aug-07	0:00 1:00	1	0	0	0	A	51	17	5	6	6	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4.1	50.6
29-Aug-07	0:00 1:00	0	0	0	0	A	6	15	14	3	3	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	2.0	15.5
30-Aug-07	0:00 1:00	0	0	0	0	A	0	17	29	31	47	2	4	4	2	1	1	2	1	1	0	0	0	0	0	0	6.2	47.4
31-Aug-07	0:00 1:00	0	0	0	0	A	0	1	3	2	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0.5	3.0
Hourly Avg	0.1	0.2	0.4	0.2	N	3.3	4.9	5.0	4.6	3.4	1.5	1.7	0.9	1.1	1.3	1.0	0.8	0.7	0.4	0.1	0.1	0.0	0.0	0.1				
Hourly Max	1.0	2.7	10.4	2.0	0.0	50.6	22.9	28.9	31.3	47.4	6.0	18.1	5.9	13.1	14.1	16.1	12.8	11.9	5.9	2.4	1.0	2.0	0.0	1.0				



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

Station: Beaverlodge  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

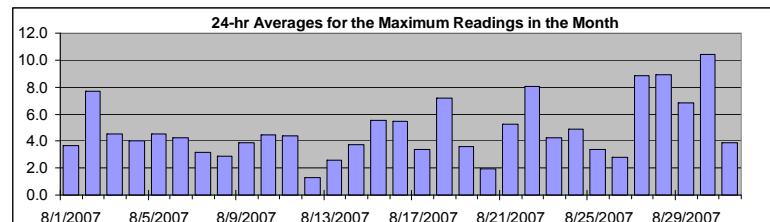
### Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	65.4 ppb	28-Aug	5:00 6:00
Maximum 24-hr Value:	10.4 ppb	30-Aug	

AIC Time:	32 hrs	Operational Time:	708 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 28.0	95 14.5	75 5.9	50 3.0	25 2.0	5 1.0	1 0.9	Average 4.8 ppb	Median 3.0 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

	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	Daily Maximum	
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			
1-Aug-07	2	4	2	2	A	6	12	10	9	2	2	1	1	1	1	1	2	2	2	4	5	4	5	5	3.6	12.0	
2-Aug-07	4	4	4	11	A	15	10	13	12	10	4	2	1	8	21	18	1	1	3	5	8	7	6	10	7.7	20.9	
3-Aug-07	5	2	2	3	A	7	9	8	7	7	5	4	3	3	3	6	4	3	3	4	7	4	3	3	4.5	8.9	
4-Aug-07	3	4	3	2	A	2	3	3	2	3	2	2	2	2	1	2	7	4	4	4	9	14	9	6	4.0	14.3	
5-Aug-07	6	12	4	4	A	5	4	5	5	4	2	2	2	2	3	2	2	2	3	20	5	4	5	4.5	19.9		
6-Aug-07	4	4	5	7	A	9	16	11	6	4	2	2	1	1	1	1	1	1	1	2	3	5	5	4	4.2	15.9	
7-Aug-07	3	3	4	7	A	2	2	2	2	2	2	1	2	1	3	1	1	1	1	3	13	13	3	2	3.2	13.0	
8-Aug-07	7	4	1	1	A	1	2	1	1	1	1	2	1	4	5	3	2	3	3	3	3	3	4	11	2.9	10.9	
9-Aug-07	6	4	4	6	A	6	8	5	5	3	17	3	2	2	1	1	2	1	1	2	3	3	3	3	3.9	16.6	
10-Aug-07	3	3	11	7	A	10	9	10	7	5	3	1	3	2	1	1	4	4	4	2	2	2	5	5	4.5	10.9	
11-Aug-07	5	5	3	8	A	10	10	12	13	10	4	3	2	1	2	1	1	1	2	2	2	2	2	1	4.4	12.9	
12-Aug-07	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	4	1.3	4.3
13-Aug-07	4	4	4	3	A	4	2	3	2	1	1	2	1	1	1	1	1	1	1	2	4	5	6	4	4	2.6	6.0
14-Aug-07	4	5	4	6	A	6	7	5	4	1	1	1	2	2	3	2	2	3	3	4	3	4	6	9	3.7	9.0	
15-Aug-07	3	3	9	8	A	6	11	17	14	7	11	12	4	2	2	2	2	2	2	3	2	2	2	2	5.5	17.3	
16-Aug-07	1	1	2	4	A	17	35	18	12	5	3	2	2	2	4	3	2	2	2	2	2	2	2	2	5.4	34.6	
17-Aug-07	2	2	1	1	A	2	3	3	3	3	3	4	3	3	2	5	7	9	4	2	3	3	6	5	3.4	9.0	
18-Aug-07	10	15	10	4	A	15	17	10	13	10	10	10	5	4	3	2	2	2	3	3	7	6	3	2	7.2	17.0	
19-Aug-07	4	7	10	5	A	5	4	5	6	5	4	3	2	1	1	1	1	1	1	2	5	6	4	2	3.6	9.5	
20-Aug-07	1	1	1	1	A	4	7	6	2	1	1	1	1	1	2	1	1	2	3	3	2	2	1	1	1.9	6.9	
21-Aug-07	1	2	2	1	A	3	5	4	4	6	8	3	3	2	2	2	2	20	5	16	10	6	7	4	5.2	20.0	
22-Aug-07	3	2	2	5	A	17	27	30	26	12	5	3	3	10	16	1	1	3	2	4	5	3	3	8.1	30.0		
23-Aug-07	4	10	5	4	A	4	3	5	16	3	5	2	2	4	1	1	1	1	C	C	C	C	A	4.2	15.9		
24-Aug-07	6	4	5	9	A	14	8	10	6	6	5	5	6	4	2	2	2	2	3	3	2	3	2	4.9	14.1		
25-Aug-07	2	2	3	19	A	3	6	7	4	2	2	1	1	1	1	2	1	2	2	3	5	4	4	3.3	18.6		
26-Aug-07	1	2	3	3	A	3	3	2	2	2	2	3	1	4	1	2	1	4	2	3	4	3	4	2.8	10.1		
27-Aug-07	5	4	5	5	A	19	15	22	14	11	9	7	3	15	16	2	1	8	1	13	8	7	8	4	8.8	21.7	
28-Aug-07	9	7	8	9	A	65	28	22	10	11	7	3	3	1	1	1	1	1	2	4	4	3	2	2	8.9	65.4	
29-Aug-07	3	6	7	4	A	14	23	22	10	8	4	4	3	2	2	2	3	7	6	6	5	8	6	6.8	22.6		
30-Aug-07	2	3	3	4	A	3	28	39	38	29	5	10	11	8	4	7	8	9	8	8	3	3	3	3	10.4	39.4	
31-Aug-07	3	2	2	4	A	6	11	10	9	4	2	2	1	1	1	2	2	7	7	3	3	3	3	3.9	11.1		
Hourly Avg	3.7	4.2	4.1	5.0	N	9.2	10.6	10.3	8.5	5.8	4.2	3.2	2.5	3.1	3.5	2.5	2.8	2.9	3.2	4.0	5.1	4.6	3.9	4.1			
Hourly Max	9.9	14.6	10.9	18.6	0.0	65.4	34.6	39.4	38.4	29.3	16.6	12.0	11.0	14.7	20.9	17.8	20.0	9.1	16.3	13.1	19.9	14.3	9.0	10.9			

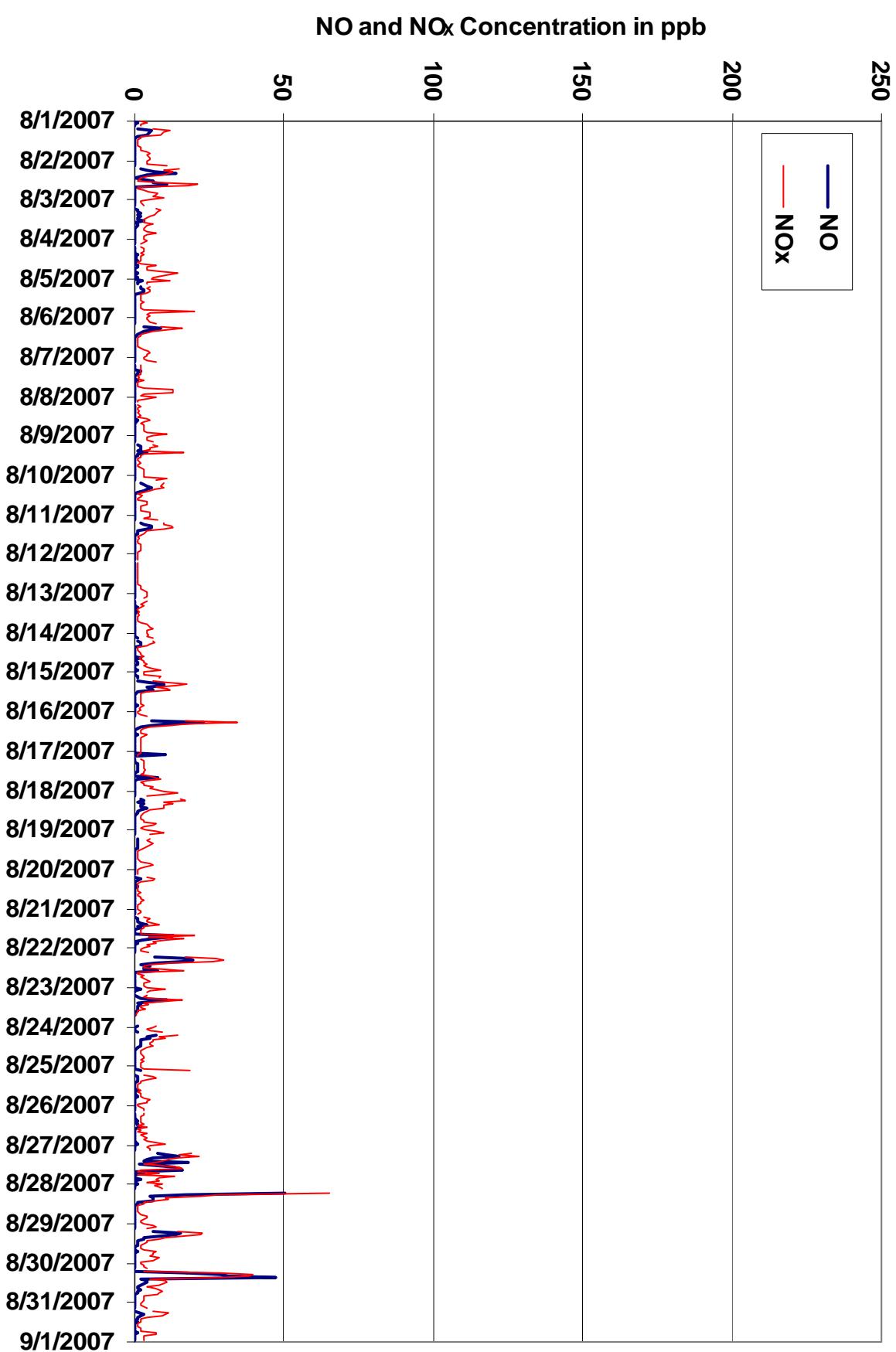


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

## PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

Summary

Number of 1-hr Exceedances: 0

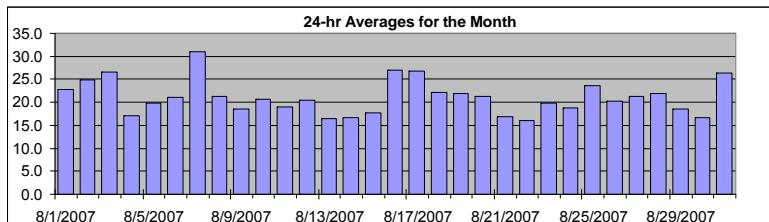
Maximum 1-hr Average: 45.4 ppb 16-Aug 14:00 15:00

Maximum 24-hr Average: 30.9 ppb 7-Aug

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
	38.5	35.1	27.3	21.4	14.8	6.7	3.3	21.1 ppb	21.4 ppb

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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-Aug-07	13	11	12	11	A	10	9	12	14	17	21	25	30	29	32	34	35	36	37	34	35	25	22	22	22.7	36.8	
2-Aug-07	24	25	19	9	A	10	9	11	16	18	26	29	33	35	35	37	37	35	35	36	27	23	23	21	25.0	37.1	
3-Aug-07	31	32	31	36	A	22	18	18	20	24	29	29	24	28	32	36	37	35	30	24	17	23	19	17	26.6	36.9	
4-Aug-07	16	14	13	14	A	14	14	15	15	16	17	18	20	23	24	27	24	24	19	17	16	11	11	11	17.0	26.7	
5-Aug-07	12	7	6	6	A	6	5	7	10	16	20	23	27	29	27	26	26	27	41	35	28	25	26	21	19.8	40.9	
6-Aug-07	18	17	12	6	A	4	4	7	12	18	23	26	27	31	32	32	31	31	33	29	25	24	22	21	21.1	32.5	
7-Aug-07	21	22	20	22	A	37	33	31	30	31	32	34	35	37	38	37	36	36	35	34	30	27	29	26	30.9	37.6	
8-Aug-07	23	20	17	18	A	18	19	21	23	23	26	27	27	26	23	24	24	25	23	22	21	17	14	8	21.3	27.3	
9-Aug-07	10	9	8	7	A	7	5	7	13	17	19	21	26	28	29	28	27	29	30	28	22	20	19	19	18.5	29.5	
10-Aug-07	20	19	14	13	A	5	4	5	7	11	19	27	31	34	34	34	34	29	27	25	25	25	24	18	20.7	34.4	
11-Aug-07	12	16	14	13	A	4	4	6	14	10	16	22	23	26	27	29	30	28	26	25	25	23	21	21	19.0	29.9	
12-Aug-07	20	18	20	20	A	21	23	22	23	23	21	20	21	25	27	22	22	24	23	21	16	16	16	10	20.5	27.1	
13-Aug-07	11	8	7	8	A	8	10	12	15	19	21	22	23	24	24	24	23	24	23	21	15	14	13	12	16.4	24.2	
14-Aug-07	9	7	5	3	A	4	8	10	14	20	22	23	24	26	26	24	23	23	21	18	16	15	16	16.7	26.1		
15-Aug-07	13	16	8	5	A	5	8	8	7	9	10	18	26	30	31	31	30	29	26	21	19	21	20	20	17.8	31.1	
16-Aug-07	21	22	22	19	A	17	7	15	14	17	24	32	36	39	45	44	44	38	32	29	27	25	25	27	27.0	45.4	
17-Aug-07	27	26	24	23	A	22	20	19	20	21	24	26	30	32	35	39	31	26	31	35	30	31	23	25	26.8	38.5	
18-Aug-07	28	18	15	15	A	12	6	13	7	8	10	13	21	24	31	38	41	40	35	33	30	21	23	28	22.1	41.2	
19-Aug-07	25	22	14	13	A	7	8	11	19	21	25	28	29	32	33	33	31	28	26	24	20	18	16	18	21.9	33.2	
20-Aug-07	17	17	18	18	A	13	13	17	21	25	26	26	26	25	26	26	23	19	20	21	21	22	22	21.3	26.5		
21-Aug-07	21	20	19	18	A	15	13	14	15	15	14	15	18	20	22	22	22	20	18	15	15	12	13	12	16.9	22.3	
22-Aug-07	11	11	11	9	A	3	3	5	3	10	16	19	21	24	25	25	26	26	27	24	19	18	18	16	16.1	26.7	
23-Aug-07	13	8	10	14	A	9	10	10	17	21	23	26	27	28	29	31	31	29	28	26	20	21	11	12	19.7	31.2	
24-Aug-07	11	16	17	17	A	6	4	7	12	C	C	A	22	28	28	27	25	21	20	21	22	20	24	30	18.8	29.8	
25-Aug-07	28	28	26	19	A	12	15	15	14	24	24	25	31	32	31	32	32	30	27	21	18	15	14	14	23.6	32.3	
26-Aug-07	14	16	16	17	A	18	18	15	19	19	18	18	22	24	28	30	29	23	26	22	20	20	22	11	20.2	30.3	
27-Aug-07	15	10	12	9	A	10	8	5	10	15	19	25	31	33	33	32	33	33	34	29	27	25	29	22	21.4	37.3	
28-Aug-07	15	15	9	10	A	8	5	10	10	15	19	25	31	33	33	32	33	33	34	29	27	28	27	27	22.0	33.6	
29-Aug-07	24	20	12	13	A	2	2	7	13	14	15	19	23	28	29	29	28	26	25	23	21	17	19	19	18.6	29.1	
30-Aug-07	17	13	12	9	A	10	2	4	2	6	14	14	15	17	18	18	18	16	19	29	38	36	30	27	16.7	38.3	
31-Aug-07	28	31	33	30	A	23	19	15	21	26	30	32	32	33	34	34	32	30	25	21	22	20	19	15	26.3	34.4	

Hourly Avg 18.4 17.2 15.3 14.3 N 11.6 10.5 12.1 14.5 17.6 20.7 23.4 26.0 28.3 29.5 30.4 29.9 28.5 27.8 25.8 23.1 21.2 20.1 18.8

Hourly Max 30.6 32.1 32.9 36.1 0.0 36.9 33.1 30.7 29.6 30.8 32.4 33.9 35.6 39.3 45.4 44.2 44.3 40.4 40.9 35.9 38.3 36.0 30.1 29.8

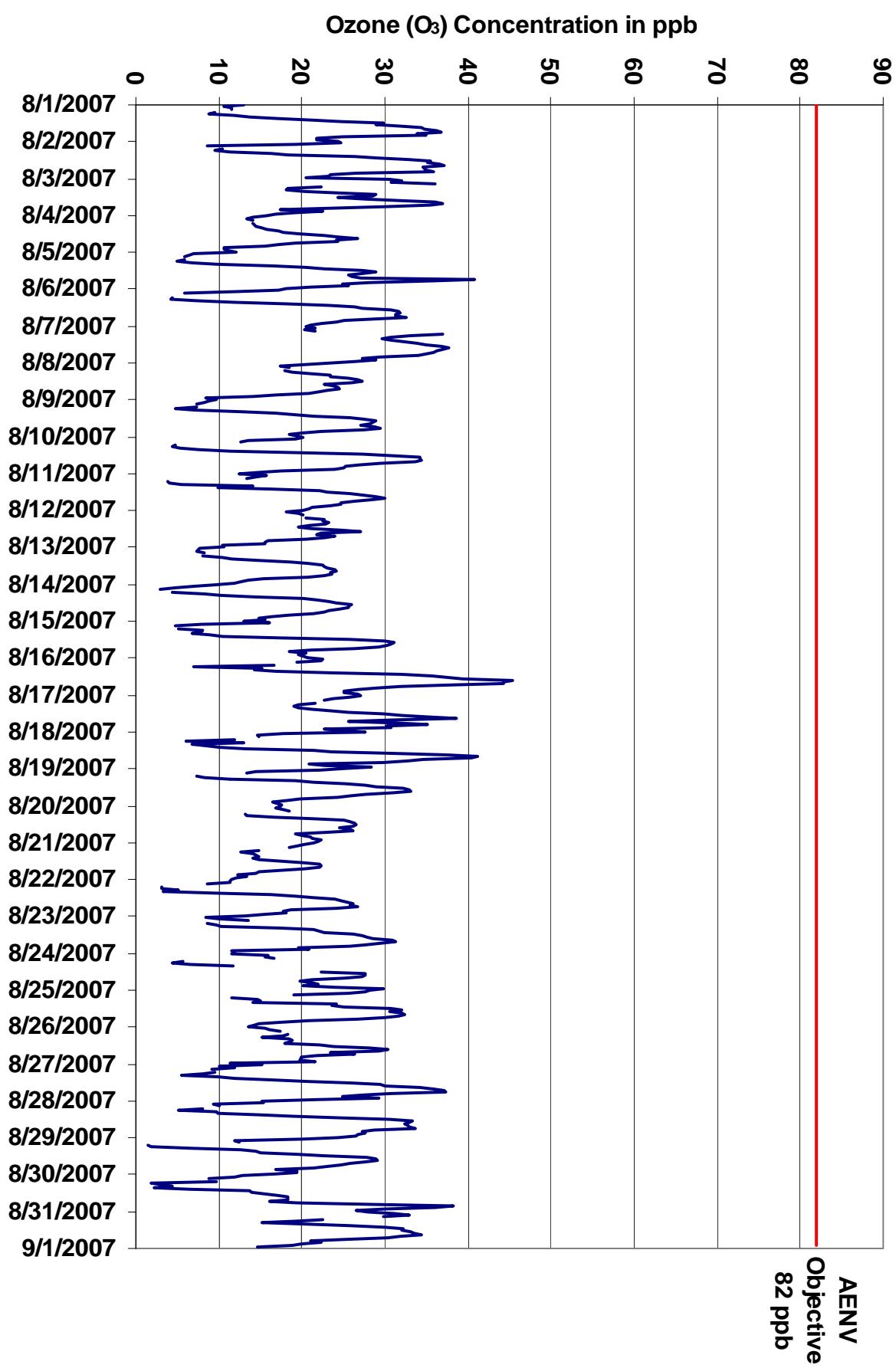


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

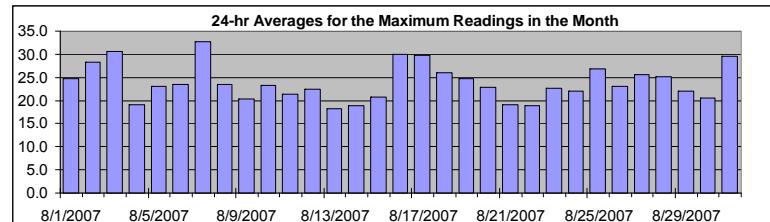
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Ozone ( $O_3$ )

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	47.7 ppb	16-Aug 14:00 15:00
Maximum 24-hr Value:	32.7 ppb	7-Aug



#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	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	Daily Maximum	
1-Aug-07	14 1:00	14	13	12	12	A	12	11	14	15	19	24	28	32	30	33	36	35	37	38	37	38	30	23	24	24.8	38.3	
2-Aug-07	25 2:00	25	26	23	23	A	14	12	15	18	22	30	31	36	37	37	38	38	37	39	40	34	27	25	24	28.3	40.5	
3-Aug-07	38 3:00	38	34	36	44	A	29	21	23	24	26	32	34	27	30	35	40	39	39	34	29	21	25	22	19	30.5	44.1	
4-Aug-07	4:00	17	15	14	15	A	15	15	15	17	17	18	19	22	25	26	30	28	28	22	19	19	14	14	15	19.2	29.5	
5-Aug-07	5:00	16	9	8	7	A	8	7	8	14	20	22	26	29	31	32	29	28	35	43	42	31	28	30	27	23.1	43.4	
6-Aug-07	6:00	20	19	16	9	A	5	6	10	15	22	26	28	28	33	33	33	34	34	32	27	27	25	22	23.4	33.8		
7-Aug-07	7:00	22	22	22	26	A	39	35	32	31	32	34	35	37	38	39	39	37	38	36	36	32	30	31	28	32.7	39.4	
8-Aug-07	8:00	25	23	19	19	A	19	19	24	25	25	27	29	29	27	26	26	28	27	25	25	24	20	16	11	23.4	29.3	
9-Aug-07	9:00	11	10	9	9	A	9	8	9	16	19	21	25	28	29	30	30	30	29	30	31	31	25	21	20	20.4	30.7	
10-Aug-07	10:00	21	21	18	15	A	8	6	7	9	15	25	30	33	36	35	36	36	33	33	28	26	26	24	17	23.3	35.7	
11-Aug-07	11:00	17	17	17	15	A	6	6	10	18	13	20	25	26	27	29	31	32	30	29	27	27	26	24	22	21.5	31.6	
12-Aug-07	12:00	22	19	21	21	A	22	23	23	24	24	23	21	23	30	31	25	25	25	24	23	18	17	17	17	22.5	31.1	
13-Aug-07	13:00	15	11	9	10	A	10	12	14	18	21	22	25	24	25	25	25	25	24	25	24	24	18	15	13	13	18.3	25.1
14-Aug-07	14:00	11	8	5	4	A	8	11	14	19	21	24	25	26	28	26	27	26	24	24	24	21	20	18	21	18.9	27.6	
15-Aug-07	15:00	19	19	18	9	A	7	10	13	10	11	13	24	29	32	33	33	31	31	28	25	20	22	21	21	20.8	33.2	
16-Aug-07	16:00	22	25	26	22	A	21	19	20	17	19	30	35	37	44	48	47	46	42	35	31	29	26	26	28	30.0	47.7	
17-Aug-07	17:00	29	27	26	25	A	22	21	21	21	23	25	27	32	34	37	43	44	29	40	38	34	33	29	29.9	43.7		
18-Aug-07	18:00	30	26	18	18	A	15	13	16	11	11	13	20	25	26	35	41	44	44	39	35	32	27	32	26.0	43.7		
19-Aug-07	19:00	28	27	23	18	A	9	12	17	22	24	28	31	31	37	35	33	30	27	26	22	22	18	19	24.8	36.7		
20-Aug-07	20:00	18	18	20	20	A	16	15	20	25	26	27	27	27	27	26	27	28	26	21	21	23	22	24	23	22.9	28.1	
21-Aug-07	21:00	23	21	20	19	A	16	15	15	15	16	15	16	20	22	23	24	24	22	26	18	18	18	15	16	19.0	26.1	
22-Aug-07	22:00	13	12	12	12	A	7	7	8	5	16	21	21	23	25	26	28	27	27	30	30	24	20	21	18.9	30.4		
23-Aug-07	23:00	16	15	14	15	A	10	10	12	21	23	24	28	30	31	33	32	32	32	30	29	26	25	15	15	22.5	32.6	
24-Aug-07	0:00	14	22	19	20	A	13	7	9	15	C	C	A	26	30	30	29	28	24	22	23	25	23	27	36	22.1	35.9	
25-Aug-07	1:00	30	30	30	29	A	16	18	20	19	28	26	29	34	34	32	34	33	32	30	27	21	16	15	15	26.8	33.6	
26-Aug-07	2:00	14	17	18	18	A	20	19	19	20	20	19	22	24	27	30	33	32	29	28	27	22	22	24	25	23.0	32.7	
27-Aug-07	3:00	18	17	18	13	A	14	13	11	13	16	19	26	28	32	34	36	38	40	39	36	32	31	33	33	25.6	39.6	
28-Aug-07	4:00	23	18	14	14	A	14	11	13	14	18	26	30	34	34	34	34	34	34	36	32	29	29	28	25.2	35.7		
29-Aug-07	5:00	26	25	20	19	A	6	6	12	16	16	17	23	26	30	31	31	31	29	27	28	24	23	21	20	22.1	31.3	
30-Aug-07	6:00	18	15	13	11	A	11	9	9	7	12	15	15	18	19	20	20	21	21	33	34	43	43	34	31	20.6	43.2	
31-Aug-07	7:00	30	35	36	33	A	28	26	21	28	28	33	34	33	34	35	36	34	32	30	25	23	24	22	18	29.6	36.2	
Hourly Avg		20.8	19.9	18.5	17.5	N	14.5	13.7	15.3	17.5	20.1	23.3	26.3	28.3	30.3	31.6	32.5	32.2	31.2	30.8	29.2	26.2	24.5	22.7	22.2			
Hourly Max		37.6	35.0	36.4	44.1	0.0	38.8	35.4	32.3	30.7	32.0	33.7	35.1	37.3	43.7	47.7	46.7	45.7	43.7	43.4	41.8	43.2	42.6	34.5	35.9			

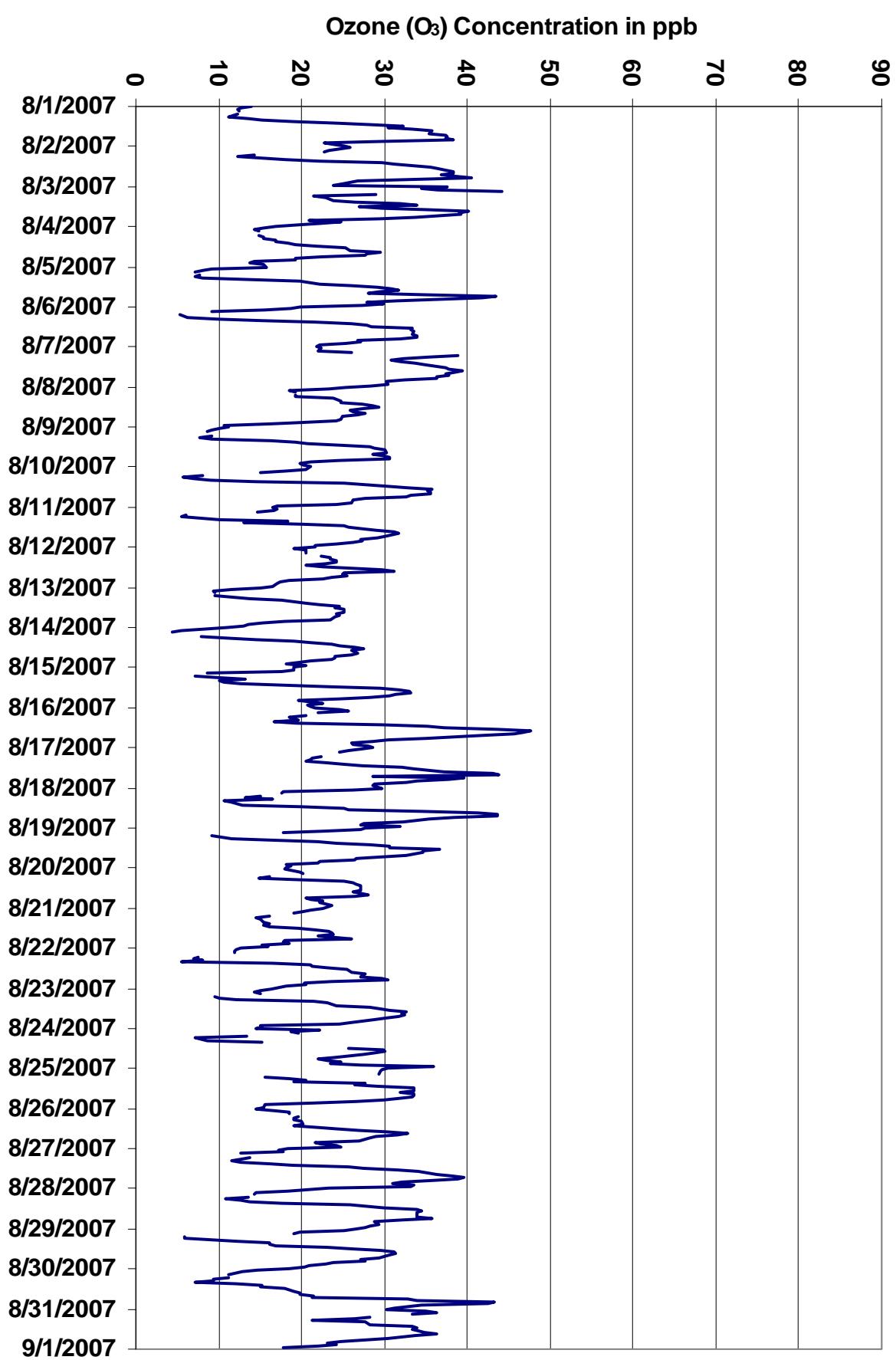
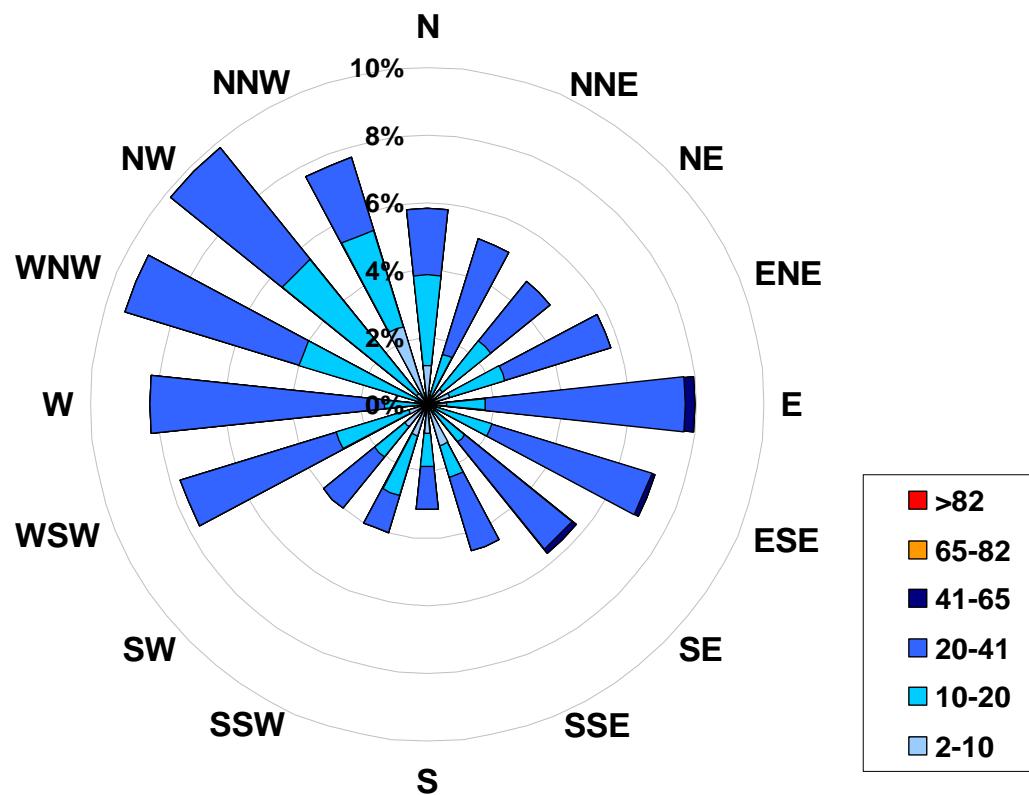


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	85
10	to	20	223
20	to	41	398
41	to	65	4
65	to	82	0
>	82		0
Total Non-Zero Values			710

## PASZA - Beaverlodge Ozone Eight Hour Average Summary

Station: Beaverlodge  
Station Owner: PASZA

### EIGHT HOUR RUNNING AVERAGE TABLE

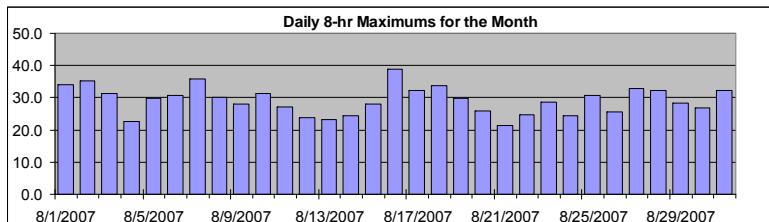
### Ozone (O<sub>3</sub>)

Monitoring Dates: August 1, 2007 to September 1, 2007

Objective Limit: Alberta Environment: 8-hr 65 ppb

**Summary**

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	38.8 ppb 16-Aug 18:00 19:00



**Status Flag Characters**

C Calibration	A AIC - Zero / Span Check
S 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 1:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	Daily Maximum
1-Aug-07	16	15	15	14	13	12	11	11	11	12	13	15	17	19	22	25	28	30	32	33	34	33	32	31								33.9		
2-Aug-07	29	28	26	23	21	19	17	15	14	13	14	17	19	22	26	29	31	33	34	35	35	33	32	30								35.3		
3-Aug-07	29	28	28	28	28	28	27	27	25	24	24	23	23	24	25	28	30	31	31	31	30	29	28	25								31.3		
4-Aug-07	23	20	18	17	17	15	15	14	14	14	15	16	16	17	18	20	21	22	22	22	22	20	19	17								22.6		
5-Aug-07	15	13	11	10	9	8	8	7	7	8	10	12	14	17	20	22	24	26	28	30	30	29	29	29								29.9		
6-Aug-07	28	26	23	19	18	15	12	10	9	9	11	14	15	19	22	25	27	29	30	31	30	30	28	27								30.6		
7-Aug-07	26	25	23	22	22	23	25	26	28	29	31	32	33	33	34	35	36	36	36	36	35	34	33	32								35.9		
8-Aug-07	30	28	26	24	23	22	20	20	20	20	21	22	23	24	25	25	25	25	25	24	23	22	21	19								30.1		
9-Aug-07	17	15	14	12	10	9	8	8	8	9	11	13	14	17	20	23	24	26	27	28	27	27	25	24								27.9		
10-Aug-07	23	22	20	18	18	15	13	11	10	8	9	11	14	18	21	25	28	30	31	31	30	29	27	25								31.4		
11-Aug-07	22	20	19	17	16	13	11	10	10	9	10	11	12	15	18	21	23	25	26	27	27	27	26	25								27.0		
12-Aug-07	24	22	22	21	20	20	20	21	21	22	22	22	22	22	23	23	23	23	23	23	23	22	21	20	18							23.7		
13-Aug-07	17	15	13	11	11	10	9	9	10	11	13	15	16	18	20	21	22	23	23	23	22	21	19	18							23.2			
14-Aug-07	16	14	12	10	9	8	7	7	7	9	12	15	16	19	21	23	24	24	24	24	23	22	21	20								24.4		
15-Aug-07	18	17	15	13	13	11	10	9	8	7	7	9	11	14	17	20	23	26	28	28	27	26	25	23								28.0		
16-Aug-07	22	21	20	21	20	18	18	17	16	16	18	20	20	23	28	31	35	38	39	38	37	36	33	31								38.8		
17-Aug-07	29	27	26	25	25	24	23	22	21	21	23	24	26	28	30	30	31	32	32	32	31	29								32.4				
18-Aug-07	29	28	25	23	22	19	17	15	12	11	10	10	11	13	16	19	23	27	30	33	34	33	32	31								33.8		
19-Aug-07	29	27	24	22	21	19	17	15	14	14	15	17	19	22	25	28	29	30	30	30	28	27	25	23								29.9		
20-Aug-07	21	20	19	18	18	17	16	16	17	18	19	20	21	23	24	25	26	26	25	24	23	23	22	22								25.8		
21-Aug-07	21	21	21	21	21	20	18	17	16	15	15	14	15	15	16	18	18	19	20	20	19	18	17	16								21.3		
22-Aug-07	15	13	13	12	12	10	9	8	7	6	7	9	10	13	15	18	21	23	24	25	24	24	23	22								24.8		
23-Aug-07	20	18	16	14	14	13	11	11	13	15	17	18	20	23	25	27	28	29	29	28	27	25	22	21								28.6		
24-Aug-07	20	18	17	15	15	13	12	11	11	N	N	N	N	N	N	N	N	N	N	24	24	24	23	23	23									24.5
25-Aug-07	23	24	25	25	25	24	22	20	18	18	17	18	20	22	24	27	29	30	31	31	29	28	26	24								30.7		
26-Aug-07	21	19	17	16	16	16	16	16	17	17	18	18	19	20	22	24	24	25	26	25	25	24	22	22								25.7		
27-Aug-07	20	18	16	15	14	13	11	10	9	9	10	12	13	16	19	22	26	29	31	33	33	32	32	30								32.7		
28-Aug-07	28	25	22	19	18	16	12	10	10	11	13	15	18	22	25	28	30	32	32	32	31	30	30	30								32.2		
29-Aug-07	28	27	24	22	21	18	14	11	10	9	9	10	12	15	18	21	23	25	26	26	26	25	23	22								28.4		
30-Aug-07	21	19	18	16	15	14	12	9	7	6	7	7	8	9	11	13	15	16	17	19	22	24	26	27								26.7		
31-Aug-07	28	30	31	32	31	29	27	26	25	24	23	24	25	26	28	30	32	32	32	30	29	27	25	23								32.2		

Hourly Max 30.1 29.8 31.5 31.6 30.6 28.7 27.2 26.9 27.7 29.0 30.7 32.5 32.8 32.8 33.4 34.1 35.2 37.8 38.8 38.4 37.3 35.5 33.0 31.6

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

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

Draft Objective Limit: Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr  $\mu\text{g}/\text{m}^3$

**Summary**

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	24.8 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	6.7 $\mu\text{g}/\text{m}^3$

1-Aug 20:00 21:00  
2-Aug

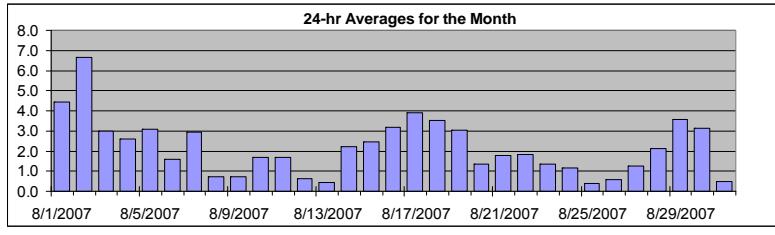
AIC Time:	0 hrs	Operational Time:	711 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	96.1%
Percentile	99 95 75 50 25 5 1	Average / Median	Geomean
	11.9 7.1 3.3 1.4 0.0 0.0	2.2 $1 \mu\text{g}/\text{m}^3$	1.7 $\mu\text{g}/\text{m}^3$

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-Aug-07	1	0	0	0	0	1	5	4	6	4	0	0	2	2	11	13	4	5	2	8	25	8	3	3	4.5	24.8	
2-Aug-07	3	4	4	7	7	5	9	8	9	10	4	D	4	2	3	9	2	1	3	18	20	6	5	11	6.7	20.0	
3-Aug-07	0	D	12	D	3	4	5	3	1	2	5	5	4	4	0	0	0	2	2	7	1	1	2	3	3.0	12.0	
4-Aug-07	2	2	2	3	3	2	3	2	3	5	3	7	5	2	3	D	3	7	1	0	1	0	0	0	2.6	7.3	
5-Aug-07	2	D	0	0	0	1	6	14	D	4	4	4	3	5	D	5	1	0	D	9	2	0	1	0	3.1	13.6	
6-Aug-07	0	0	0	0	D	0	10	D	1	1	2	0	0	D	0	0	2	0	2	6	2	2	3	3	1.6	9.7	
7-Aug-07	4	3	3	5	D	0	3	2	2	0	1	0	0	2	1	1	2	1	6	4	5	5	13	4	2.9	13.5	
8-Aug-07	3	2	0	0	0	0	1	0	0	2	D	0	0	3	3	0	1	0	1	0	0	1	0	0	0.7	3.3	
9-Aug-07	0	0	0	0	0	0	0	0	0	0	D	D	0	0	2	0	0	0	4	1	3	3	2	0.7	3.6		
10-Aug-07	0	0	0	2	2	1	0	1	3	1	0	0	0	1	1	1	9	7	7	1	0	2	0	0	1.7	8.8	
11-Aug-07	0	1	0	0	1	3	3	5	3	4	1	0	2	0	0	1	1	3	4	2	3	0	2	0	1.7	4.7	
12-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	D	1	3	0	0	3	2	0	0	0.6	3.6	
13-Aug-07	0	0	0	0	0	0	1	1	0	0	0	D	D	1	D	1	0	0	0	0	1	2	1	0	0.4	1.6	
14-Aug-07	0	0	0	D	0	0	5	2	1	0	0	0	0	D	D	3	2	2	4	5	9	5	6	3	0	2.2	8.5
15-Aug-07	2	0	3	2	0	2	2	6	2	10	5	2	1	0	5	0	1	3	5	5	0	D	1	0	2.5	10.1	
16-Aug-07	0	0	0	1	0	1	4	4	5	5	5	7	8	5	5	3	4	6	7	2	0	0	3	3	3.2	8.1	
17-Aug-07	2	1	2	2	2	2	4	4	3	4	5	7	4	8	2	7	15	12	D	0	0	2	2	0	3.9	15.2	
18-Aug-07	1	0	0	0	1	0	1	1	1	3	4	2	6	5	4	7	6	5	8	6	8	7	6	3	3.5	8.2	
19-Aug-07	5	4	7	7	3	5	6	4	7	5	0	0	1	D	0	0	0	3	0	3	2	3	2	2	3.0	6.8	
20-Aug-07	1	1	0	1	0	1	0	1	0	0	0	0	1	1	2	0	1	10	5	2	0	1	1	3	1.3	10.4	
21-Aug-07	1	0	2	2	2	1	1	4	4	4	2	3	1	0	0	1	2	2	6	3	1	2	0	1	1.8	5.9	
22-Aug-07	0	2	4	3	2	1	4	3	5	3	0	0	0	D	0	1	1	3	0	3	4	2	0	0	1.8	5.2	
23-Aug-07	3	2	0	0	1	1	5	3	2	1	0	0	3	D	0	0	0	4	1	3	0	2	1	0	1.3	4.8	
24-Aug-07	0	1	0	2	D	0	3	C	C	C	C	0	4	3	0	1	1	0	1	2	0	1	3	0	1.1	3.9	
25-Aug-07	0	0	0	0	0	1	2	0	0	0	0	D	0	0	0	0	0	1	1	1	2	1	0	0.4	2.1		
26-Aug-07	0	0	0	0	0	0	0	0	0	0	1	2	1	1	1	1	1	1	0	1	2	1	1	0.6	1.9		
27-Aug-07	1	0	0	1	1	0	1	4	1	2	1	1	1	0	0	1	1	0	1	2	4	4	2	2	1.2	4.3	
28-Aug-07	2	2	2	2	2	2	3	3	2	2	2	1	0	0	0	0	0	0	3	3	7	8	3	3	2.1	7.5	
29-Aug-07	3	4	4	3	4	4	4	5	4	3	3	4	3	1	3	3	6	6	4	3	3	4	3	1	3.6	6.1	
30-Aug-07	2	2	2	2	3	2	3	4	4	4	4	4	5	5	5	5	5	9	5	0	0	0	0	0	3.1	9.1	
31-Aug-07	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	2	1	1	1	1	2	0.5	2.4		

Hourly Avg	1.1	1.1	1.6	1.5	1.3	1.3	2.8	3.0	2.5	2.7	1.9	1.8	2.0	2.1	1.9	2.2	2.1	3.0	3.0	3.7	3.4	2.3	2.2	1.6
Hourly Max	4.7	4.0	12.0	7.1	6.5	5.3	9.7	13.6	8.8	10.1	5.0	7.3	8.1	7.7	10.8	12.8	15.2	11.7	8.1	17.9	24.8	8.2	13.5	11.3

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

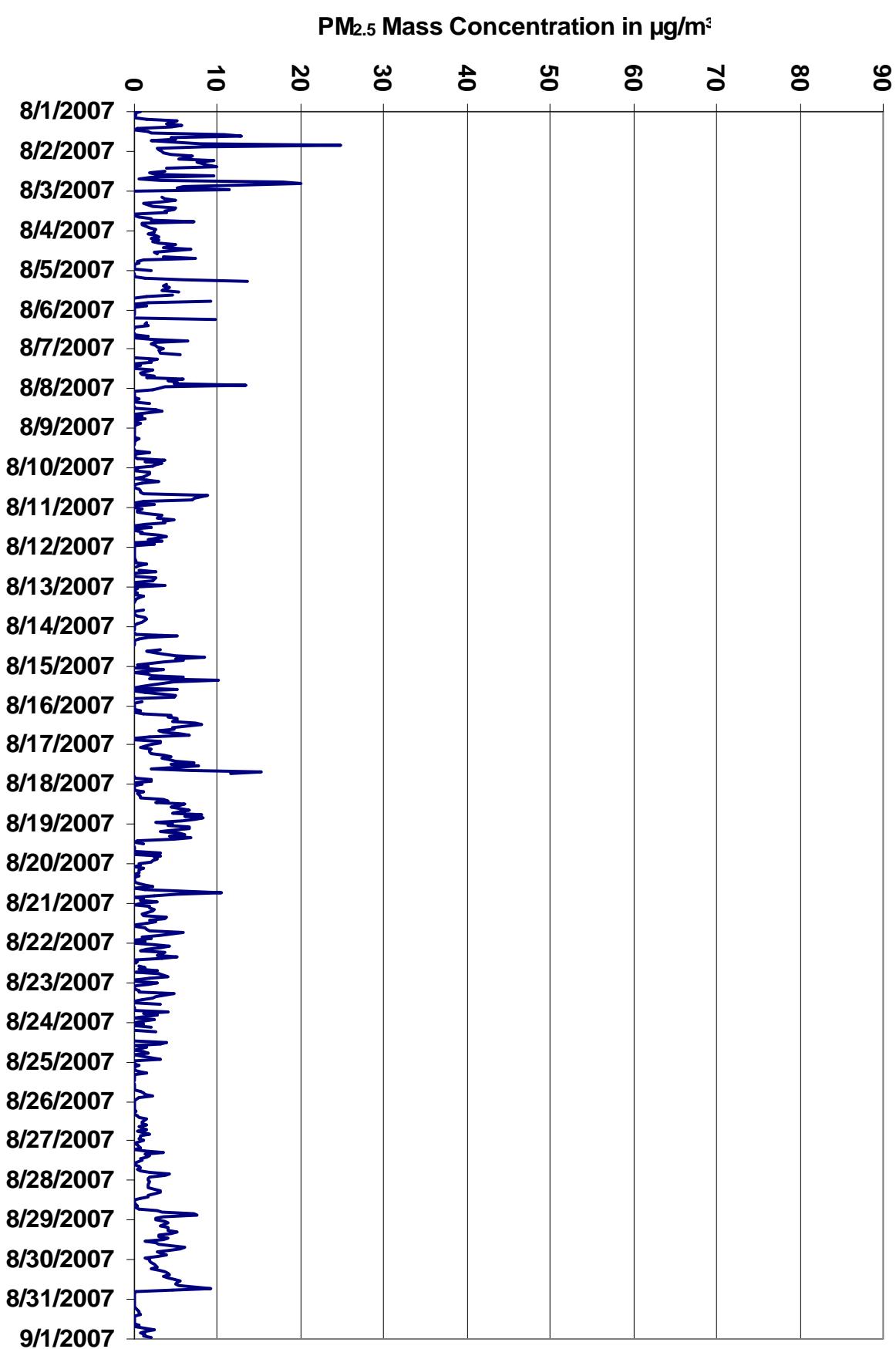


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

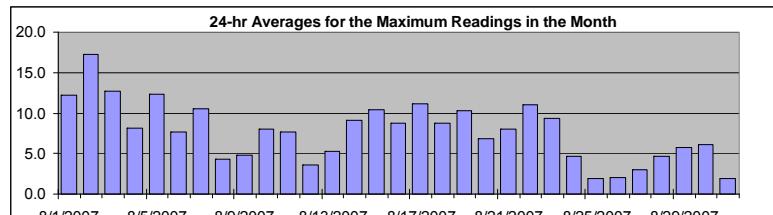
#### Summary

Maximum 1-hr Average:	57.2	µg/m <sup>3</sup>	2-Aug	19:00 20:00
Maximum 24-hr Value:	17.3	µg/m <sup>3</sup>	2-Aug	

AIC Time:	0 hrs	Operational Time:	710 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	96.0%						
Percentile	99 33.0	95 18.5	75 9.8	50 5.9	25 3.3	5 1.2	1 0.2	Average / Median 7.7	Geomean 6.7 µg/m <sup>3</sup>

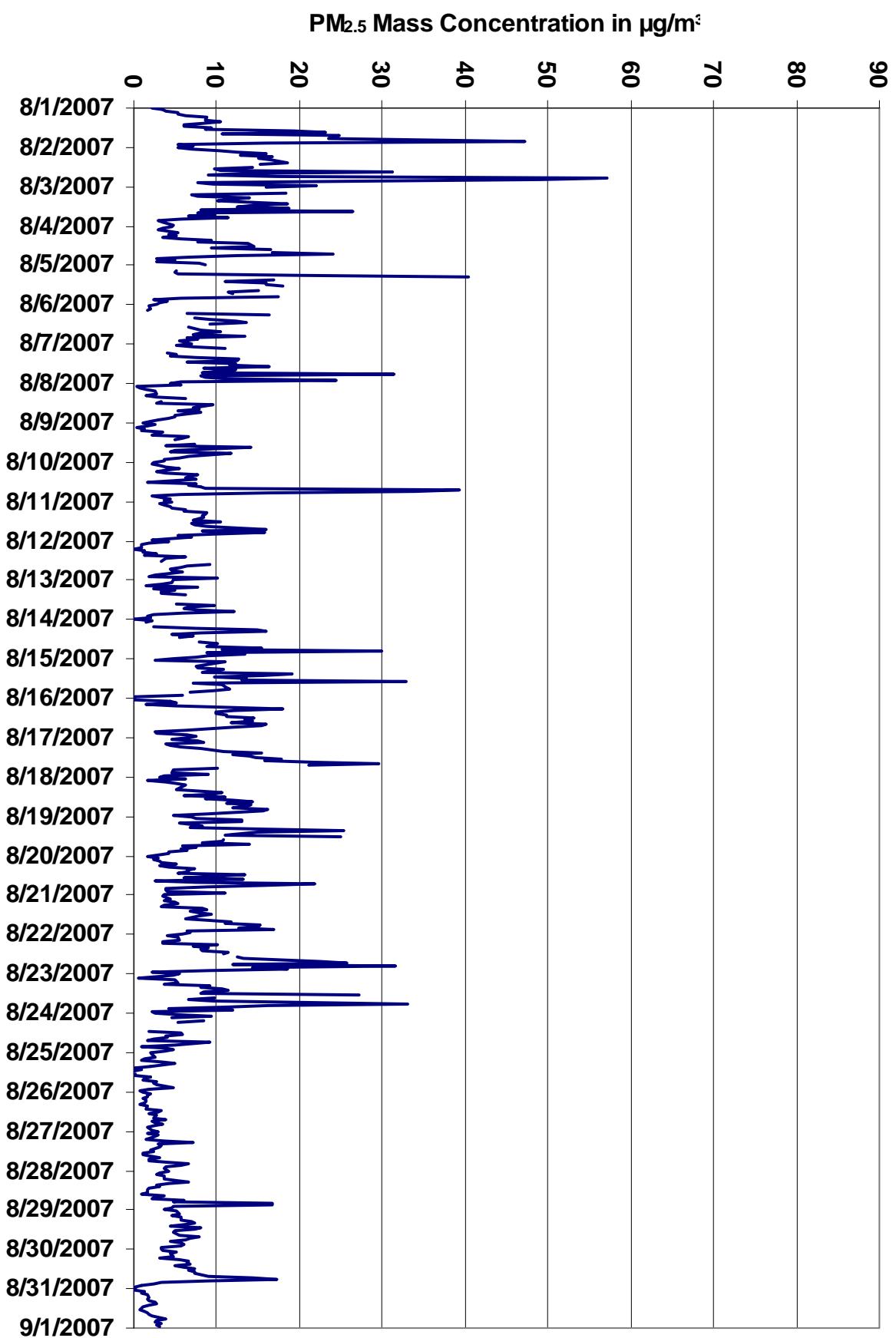
#### Day Mountain Standard Time

	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	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-Aug-07	2	3	4	5	5	6	9	9	10	8	6	6	9	9	19	23	11	25	24	24	47	16	5	7	12.2	47.1
2-Aug-07	5	7	10	12	16	13	17	15	17	19	15	D	14	10	10	31	14	9	17	57	49	8	10	22	17.3	57.2
3-Aug-07	16	D	45	D	18	7	8	14	11	10	18	14	12	19	8	27	8	10	7	11	6	3	3	5	12.7	45.2
4-Aug-07	5	3	3	4	5	4	5	3	6	9	8	14	14	9	16	D	17	24	12	7	3	5	3	8	8.2	24.0
5-Aug-07	9	D	D	5	5	5	20	40	D	17	11	16	16	18	D	15	11	12	D	17	6	2	4	3	12.3	40.4
6-Aug-07	3	2	2	2	D	6	16	D	7	9	12	14	9	D	7	8	11	8	7	13	6	8	6	6	7.7	16.4
7-Aug-07	7	5	7	11	D	4	5	4	8	13	12	6	12	12	16	8	12	8	31	8	9	11	24	6	10.5	31.4
8-Aug-07	4	6	0	1	1	3	3	1	3	6	D	3	3	10	8	7	8	5	8	5	5	4	3	2	4.3	9.5
9-Aug-07	1	3	2	0	1	1	3	2	7	6	5	D	D	7	4	14	10	5	4	12	7	5	4	4	4.8	14.2
10-Aug-07	2	2	3	4	6	4	3	4	8	6	8	5	2	8	7	8	9	39	34	16	6	2	4	4	8.0	39.3
11-Aug-07	5	3	4	4	5	6	6	9	9	8	8	7	10	7	7	9	12	16	8	16	10	5	7	2	7.7	16.0
12-Aug-07	4	2	1	1	1	0	1	1	3	1	6	4	3	D	9	6	6	4	5	6	4	3	2	10	3.6	10.0
13-Aug-07	5	5	3	2	8	2	5	3	3	6	D	D	10	D	5	10	7	6	8	12	6	2	2	2	5.3	12.2
14-Aug-07	0	2	1	D	2	8	15	16	8	5	7	6	D	D	8	10	9	15	11	30	9	13	9	8	9.1	29.9
15-Aug-07	5	3	11	10	7	8	11	9	8	19	16	10	14	13	33	7	11	11	12	10	7	D	6	0	10.4	32.8
16-Aug-07	0	0	4	5	1	5	18	12	10	10	11	11	15	13	14	12	16	15	12	6	3	3	6	7	8.8	18.0
17-Aug-07	6	5	8	9	4	4	6	8	11	16	12	14	15	18	16	22	30	21	D	10	5	5	9	4	11.1	29.7
18-Aug-07	3	6	2	4	5	6	6	6	5	11	10	6	11	9	12	14	11	14	13	12	16	16	9	5	8.8	16.1
19-Aug-07	7	8	13	13	5	7	8	7	16	25	15	11	25	D	11	11	8	14	6	7	6	6	4	4	10.3	25.3
20-Aug-07	2	3	2	3	3	5	3	4	7	6	7	5	13	6	13	3	7	22	16	9	4	4	4	11	6.8	21.8
21-Aug-07	4	4	4	4	5	5	4	3	8	9	7	8	9	8	6	9	12	11	15	15	13	17	6	7	8.0	16.8
22-Aug-07	6	4	5	5	4	4	10	7	9	8	8	11	11	D	13	13	22	26	12	32	14	18	9	2	11.1	31.6
23-Aug-07	6	5	3	1	5	5	4	9	8	11	11	8	8	27	D	10	7	10	33	16	11	4	12	2	9.3	33.0
24-Aug-07	3	6	9	5	D	8	5	C	C	C	C	2	6	6	4	4	2	2	9	5	1	4	5	4	4.7	9.4
25-Aug-07	2	2	2	3	1	1	3	5	2	0	1	0	D	0	0	2	1	1	3	2	3	5	2	1	1.9	4.9
26-Aug-07	1	2	2	2	1	2	1	1	2	1	3	3	2	2	3	2	2	4	2	3	4	2	2	2	2.1	3.9
27-Aug-07	3	2	3	3	2	1	4	7	3	3	3	2	2	1	1	2	3	2	2	4	7	6	4	4	3.0	7.2
28-Aug-07	4	3	3	4	4	4	5	7	4	3	3	2	2	2	1	4	3	2	6	5	17	17	5	5	4.6	16.8
29-Aug-07	4	5	6	5	6	6	6	7	7	6	4	8	7	5	5	5	8	7	6	4	6	6	6	3	5.7	8.1
30-Aug-07	3	3	5	4	5	3	5	7	6	7	5	6	7	7	7	7	9	14	17	9	3	2	1	0	6.1	17.2
31-Aug-07	0	0	1	1	2	2	2	2	3	3	2	1	1	1	1	2	2	4	3	3	3	3	3	3	1.9	3.9
Hourly Avg	4.1	3.5	5.7	4.5	4.8	4.7	7.0	7.7	7.2	8.7	8.3	7.3	9.5	9.0	9.1	10.2	9.6	11.8	11.9	12.5	9.4	6.9	5.7	4.9		
Hourly Max	16.0	7.6	45.2	13.0	18.3	12.8	19.8	40.4	16.6	25.3	18.5	16.1	24.9	27.2	32.8	31.3	29.7	39.3	33.9	57.2	49.0	18.5	24.5	22.0		

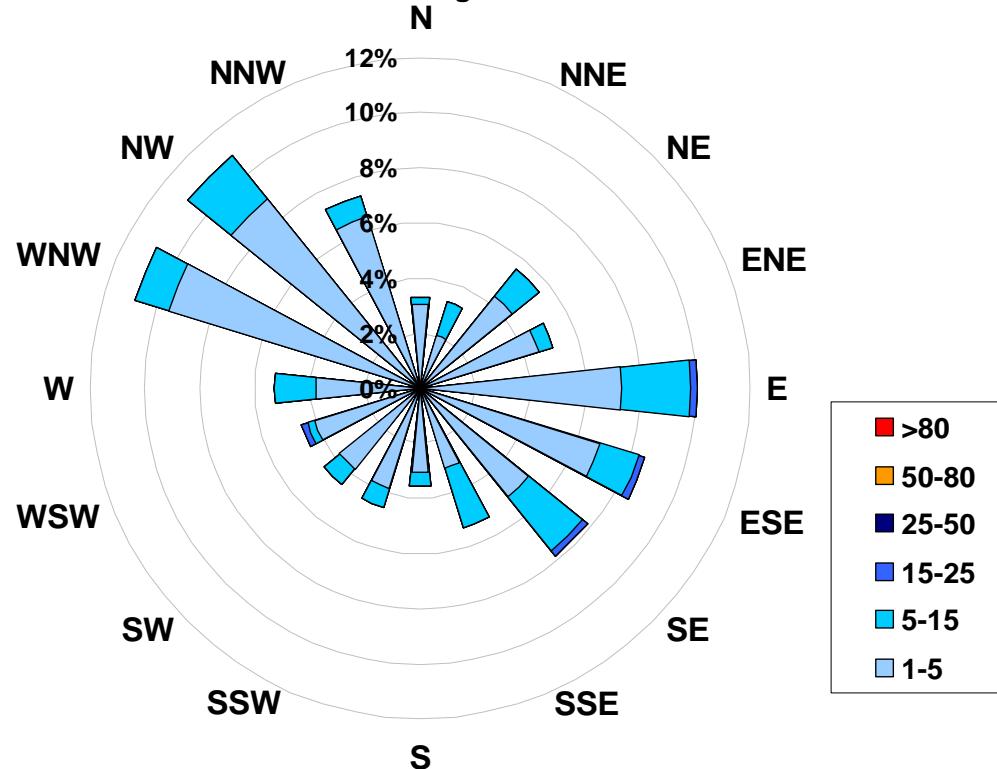


C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Figure 43. PASZA - Beaverton 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 August 2007**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>		
Range	Frequency (hrs)	
1.0 < 5	628	
5 to 15	79	
15 to 25	4	
25 to 50	0	
50 to 80	0	
> 80	0	
Total Non-Zero Values	711	

## PASZA - Beaverlodge Relative Humidity Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### Summary

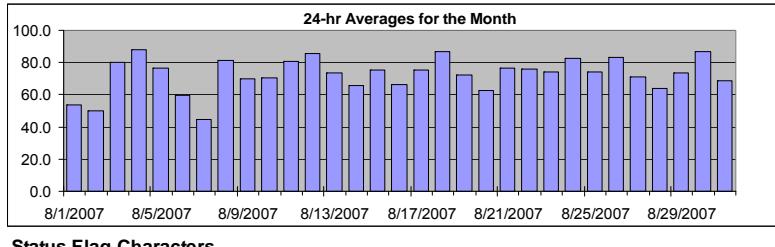
Maximum 1-hr Average:	96.6	%	19-Aug	7:00 8:00
Maximum 24-hr Value:	87.7	%	4-Aug	

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
	96.2	94.8	88.3	78.1	59.6	34.8	28.7		

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-Aug-07	77	82	82	83	84	79	70	65	58	49	40	34	31	30	30	32	36	35	39	51	58	59	59	59	53.9	83.5
2-Aug-07	54	57	68	83	84	85	76	64	52	51	36	28	25	25	25	32	31	29	29	36	49	58	59	67	50.1	85.5
3-Aug-07	79	77	80	86	80	93	92	88	83	73	65	70	76	70	64	69	72	74	80	91	93	91	92	93	80.3	93.3
4-Aug-07	91	92	92	94	95	94	94	94	91	88	88	88	83	74	69	77	82	78	85	87	89	93	94	95	87.7	94.9
5-Aug-07	94	95	96	96	96	95	95	88	80	73	69	66	59	61	62	65	60	57	45	60	76	83	82	85	76.6	96.4
6-Aug-07	90	93	95	96	96	96	96	91	82	74	63	55	46	36	30	29	28	30	30	35	45	51	55	58	59.6	96.1
7-Aug-07	63	64	65	61	51	40	45	48	48	42	36	34	32	29	28	29	29	29	30	32	43	50	65	77	44.6	76.9
8-Aug-07	80	82	81	80	82	82	82	80	81	84	75	69	66	76	91	83	77	77	82	82	87	90	91	92	81.4	91.6
9-Aug-07	91	92	92	92	91	91	92	88	81	72	65	59	49	45	42	43	49	45	46	51	65	74	79	79	69.7	91.9
10-Aug-07	78	80	87	89	88	89	87	81	72	61	53	45	38	34	33	34	38	64	83	87	90	90	94	94	70.4	94.4
11-Aug-07	94	93	91	90	92	94	94	92	88	90	79	70	69	63	64	64	64	67	70	74	81	85	85	85	80.8	94.5
12-Aug-07	85	87	89	88	88	89	89	90	90	89	90	89	88	84	76	80	80	76	77	82	87	85	83	90	85.4	90.2
13-Aug-07	88	90	90	88	88	88	88	88	83	73	66	60	60	54	51	49	55	52	57	59	74	84	87	90	73.4	90.0
14-Aug-07	93	95	96	96	96	95	86	81	72	56	48	42	39	35	36	35	38	41	42	51	71	78	83	79	66.0	95.8
15-Aug-07	86	83	89	92	91	95	86	88	87	84	84	72	62	54	53	49	51	56	63	70	78	77	79	77	75.3	94.5
16-Aug-07	76	71	72	78	82	84	80	68	68	63	63	62	60	57	54	51	49	52	57	63	66	69	71	72	66.1	83.8
17-Aug-07	70	70	77	81	79	79	82	82	71	67	67	66	64	64	61	60	80	89	78	73	81	82	90	89	75.0	89.5
18-Aug-07	88	91	94	94	94	92	93	92	93	92	92	88	83	85	80	73	71	72	77	79	84	89	91	90	86.5	94.4
19-Aug-07	93	93	95	95	95	96	96	97	96	88	74	62	57	50	43	40	41	45	46	53	64	69	75	77	72.5	96.6
20-Aug-07	78	79	75	75	78	81	76	67	58	46	42	40	40	43	46	41	42	58	72	72	69	70	72	79	62.4	81.4
21-Aug-07	79	77	76	81	87	91	89	84	81	78	76	74	71	66	61	60	58	60	78	83	81	85	82	82	76.7	91.4
22-Aug-07	84	83	85	87	90	93	92	89	86	79	70	65	61	53	53	50	50	58	72	80	86	85	83	88	75.9	92.7
23-Aug-07	89	91	91	88	93	94	90	83	78	72	63	56	57	53	52	41	41	48	68	78	84	82	91	92	73.8	93.7
24-Aug-07	93	95	95	95	95	96	96	96	96	95	83	70	67	62	58	57	61	67	71	77	85	88	90	93	82.5	96.4
25-Aug-07	93	93	95	96	96	96	96	95	84	84	69	73	68	53	46	45	47	50	49	52	63	77	83	85	74.0	96.2
26-Aug-07	87	85	84	81	80	81	82	86	82	77	79	85	84	82	83	74	76	81	77	84	89	91	93	83.2	93.4	
27-Aug-07	95	94	95	95	95	94	92	83	84	83	76	69	57	50	55	45	42	42	43	49	62	71	62	76	71.3	95.5
28-Aug-07	85	88	93	93	94	94	93	81	75	66	58	50	42	38	33	33	33	33	40	56	64	61	64	64	63.8	94.0
29-Aug-07	65	70	80	81	86	88	90	81	72	63	58	53	48	42	47	54	69	78	84	88	88	91	92	92	73.3	92.0
30-Aug-07	92	93	92	92	93	91	94	91	91	90	83	78	75	72	76	76	79	84	89	90	89	89	91	91	86.7	93.5
31-Aug-07	88	86	82	84	89	88	88	89	83	76	64	54	52	46	44	40	46	46	53	61	66	72	76	82	68.9	88.9

### HOURLY AVERAGE TABLE

### Relative Humidity (RH)



### Status Flag Characters

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

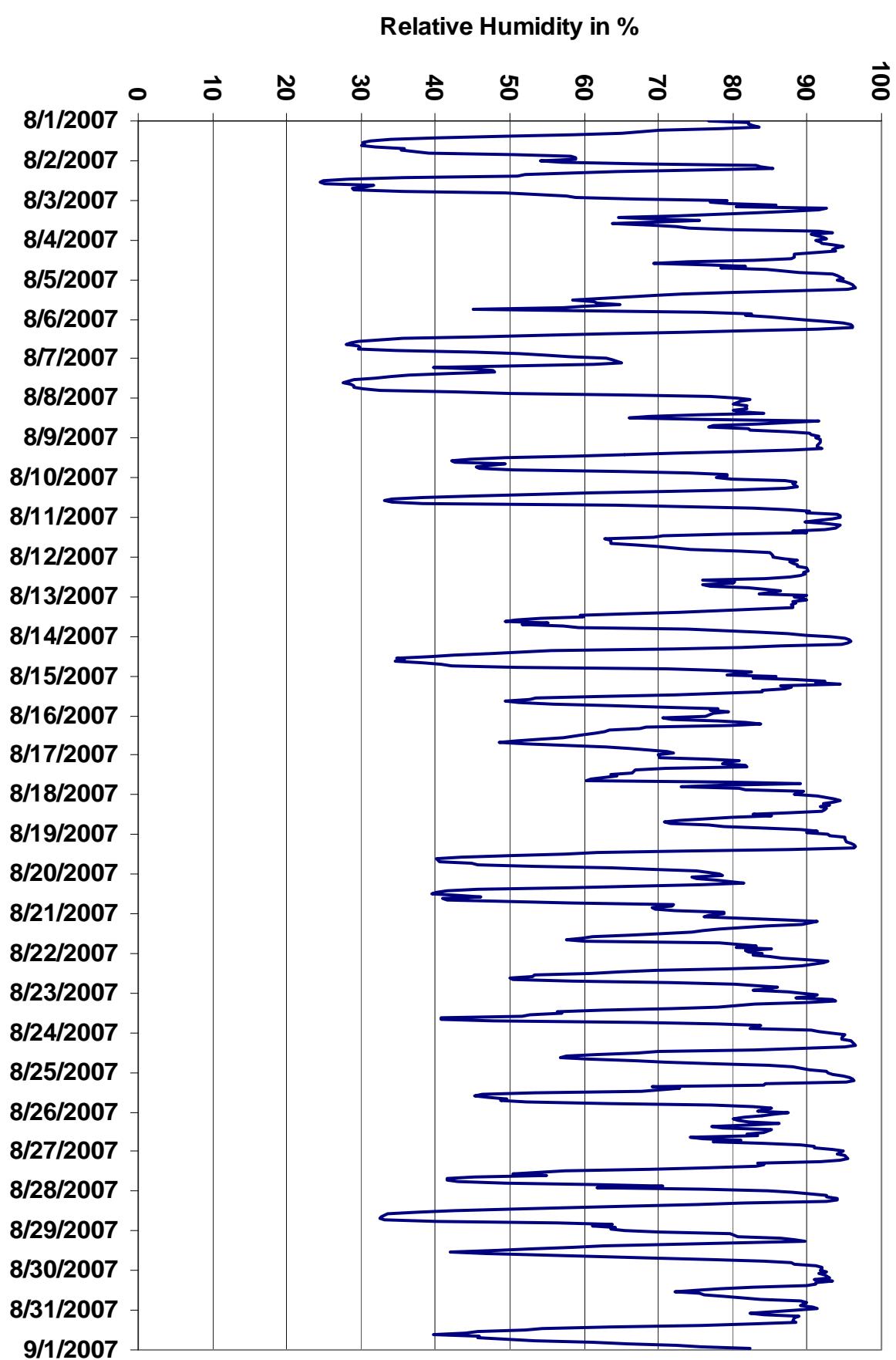


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

# PASZA - Beaverlodge Temperature Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

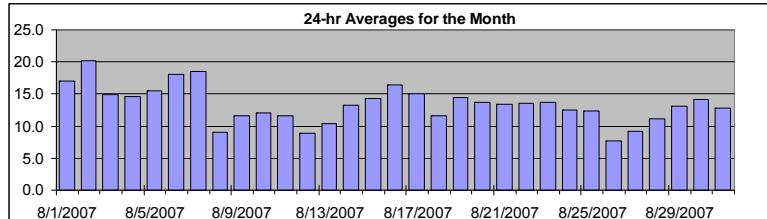
Monitoring Dates: August 1, 2007 to September 1, 2007

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

### Summary

Maximum 1-hr Average:	27.3 °C	2-Aug 13:00 14:00
Maximum 24-hr Value:	20.2 °C	2-Aug



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
	26.1	21.3	16.8	12.8	10.0	7.1	4.0		

### 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

	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	100:00	101:00	102:00	103:00	104:00	105:00	106:00	107:00	108:00	109:00	110:00	111:00	112:00	113:00	114:00	115:00	116:00	117:00	118:00	119:00	120:00	121:00	122:00	123:00	124:00	125:00	126:00	127:00	128:00	129:00	130:00	131:00	132:00	133:00	134:00	135:00	136:00	137:00	138:00	139:00	140:00	141:00	142:00	143:00	144:00	145:00	146:00	147:00	148:00	149:00	150:00	151:00	152:00	153:00	154:00	155:00	156:00	157:00	158:00	159:00	160:00	161:00	162:00	163:00	164:00	165:00	166:00	167:00	168:00	169:00	170:00	171:00	172:00	173:00	174:00	175:00	176:00	177:00	178:00	179:00	180:00	181:00	182:00	183:00	184:00	185:00	186:00	187:00	188:00	189:00	190:00	191:00	192:00	193:00	194:00	195:00	196:00	197:00	198:00	199:00	200:00	201:00	202:00	203:00	204:00	205:00	206:00	207:00	208:00	209:00	210:00	211:00	212:00	213:00	214:00	215:00	216:00	217:00	218:00	219:00	220:00	221:00	222:00	223:00	224:00	225:00	226:00	227:00	228:00	229:00	230:00	231:00	232:00	233:00	234:00	235:00	236:00	237:00	238:00	239:00	240:00	241:00	242:00	243:00	244:00	245:00	246:00	247:00	248:00	249:00	250:00	251:00	252:00	253:00	254:00	255:00	256:00	257:00	258:00	259:00	260:00	261:00	262:00	263:00	264:00	265:00	266:00	267:00	268:00	269:00	270:00	271:00	272:00	273:00	274:00	275:00	276:00	277:00	278:00	279:00	280:00	281:00	282:00	283:00	284:00	285:00	286:00	287:00	288:00	289:00	290:00	291:00	292:00	293:00	294:00	295:00	296:00	297:00	298:00	299:00	300:00	301:00	302:00	303:00	304:00	305:00	306:00	307:00	308:00	309:00	310:00	311:00	312:00	313:00	314:00	315:00	316:00	317:00	318:00	319:00	320:00	321:00	322:00	323:00	324:00	325:00	326:00	327:00	328:00	329:00	330:00	331:00	332:00	333:00	334:00	335:00	336:00	337:00	338:00	339:00	340:00	341:00	342:00	343:00	344:00	345:00	346:00	347:00	348:00	349:00	350:00	351:00	352:00	353:00	354:00	355:00	356:00	357:00	358:00	359:00	360:00	361:00	362:00	363:00	364:00	365:00	366:00	367:00	368:00	369:00	370:00	371:00	372:00	373:00	374:00	375:00	376:00	377:00	378:00	379:00	380:00	381:00	382:00	383:00	384:00	385:00	386:00	387:00	388:00	389:00	390:00	391:00	392:00	393:00	394:00	395:00	396:00	397:00	398:00	399:00	400:00	401:00	402:00	403:00	404:00	405:00	406:00	407:00	408:00	409:00	410:00	411:00	412:00	413:00	414:00	415:00	416:00	417:00	418:00	419:00	420:00	421:00	422:00	423:00	424:00	425:00	426:00	427:00	428:00	429:00	430:00	431:00	432:00	433:00	434:00	435:00	436:00	437:00	438:00	439:00	440:00	441:00	442:00	443:00	444:00	445:00	446:00	447:00	448:00	449:00	450:00	451:00	452:00	453:00	454:00	455:00	456:00	457:00	458:00	459:00	460:00	461:00	462:00	463:00	464:00	465:00	466:00	467:00	468:00	469:00	470:00	471:00	472:00	473:00	474:00	475:00	476:00	477:00	478:00	479:00	480:00	481:00	482:00	483:00	484:00	485:00	486:00	487:00	488:00	489:00	490:00	491:00	492:00	493:00	494:00	495:00	496:00	497:00	498:00	499:00	500:00	501:00	502:00	503:00	504:00	505:00	506:00	507:00	508:00	509:00	510:00	511:00	512:00	513:00	514:00	515:00	516:00	517:00	518:00	519:00	520:00	521:00	522:00	523:00	524:00	525:00	526:00	527:00	528:00	529:00	530:00	531:00	532:00	533:00	534:00	535:00	536:00	537:00	538:00	539:00	540:00	541:00	542:00	543:00	544:00	545:00	546:00	547:00	548:00	549:00	550:00	551:00	552:00	553:00	554:00	555:00	556:00	557:00	558:00	559:00	560:00	561:00	562:00	563:00	564:00	565:00	566:00	567:00	568:00	569:00	570:00	571:00	572:00	573:00	574:00	575:00	576:00	577:00	578:00	579:00	580:00	581:00	582:00	583:00	584:00	585:00	586:00	587:00	588:00	589:00	590:00	591:00	592:00	593:00	594:00	595:00	596:00	597:00	598:00	599:00	600:00	601:00	602:00	603:00	604:00	605:00	606:00	607:00	608:00	609:00	610:00	611:00	612:00	613:00	614:00	615:00	616:00	617:00	618:00	619:00	620:00	621:00	622:00	623:00	624:00	625:00	626:00	627:00	628:00	629:00	630:00	631:00	632:00	633:00	634:00	635:00	636:00	637:00	638:00	639:00	640:00	641:00	642:00	643:00	644:00	645:00	646:00	647:00	648:00	649:00	650:00	651:00	652:00	653:00	654:00	655:00	656:00	657:00	658:00	659:00	660:00	661:00	662:00	663:00	664:00	665:00	666:00	667:00	668:00	669:00	670:00	671:00	672:00	673:00	674:00	675:00	676:00	677:00	678:00	679:00	680:00	681:00	682:00	683:00	684:00	685:00	686:00	687:00	688:00	689:00	690:00	691:00	692:00	693:00	694:00	695:00	696:00	697:00	698:00	699:00	700:00	701:00	702:00	703:00	704:00	705:00	706:00	707:00	708:00	709:00	710:00	711:00	712:00	713:00	714:00	715:00	716:00	717:00	718:00	719:00	720:00	721:00	722:00	723:00	724:00	725:00	726:00	727:00	728:00	729:00	730:00	731:00	732:00	733:00	734:00	735:00	736:00	737:00	738:00	739:00	740:00	741:00	742:00	743:00	744:00	745:00	746:00	747:00	748:00	749:00	750:00	751:00	752:00	753:00	754:00	755:00	756:00	757:00	758:00	759:00	760:00	761:00	762:00	763:00	764:00	765:00	766:00	767:00	768:00	769:00	770:00	771:00	772:00	773:00	774:00	775:00	776:00	777:00	778:00	779:00	780:00	781:00	782:00	783:00	784:00	785:00	786:00	787:00	788:00	789:00	790:00	791:00	792:00	793:00	794:00	795:00	796:00	797:00	798:00	799:00	800:00	801:00	802:00	803:00	804:00	805:00	806:00	807:00	808:00	809:00	810:00	811:00	812:00	813:00	814:00	815:00	816:00	817:00	818:00	819:00	820:00	821:00	822:00	823:00	824:00	825:00	826:00	827:00	828:00	829:00	830:00	831:00	832:00	833:00	834:00	835:00	836:00	837:00	838:00	839:00	840:00	841:00	842:00	843:00	844:00	845:00	846:00	847:00	848:00	849:00	850:00	851:00	852:00	853:00	854:00	855:00	856:00	857:00	858:00	859:00	860:00	861:00	862:00	863:00	864:00	865:00	866:00	867:00	868:00	869:00	870:00	871:00	872:00	873:00	874:00	875:00	876:00	877:00	878:00	879:00	880:00	881:00	882:

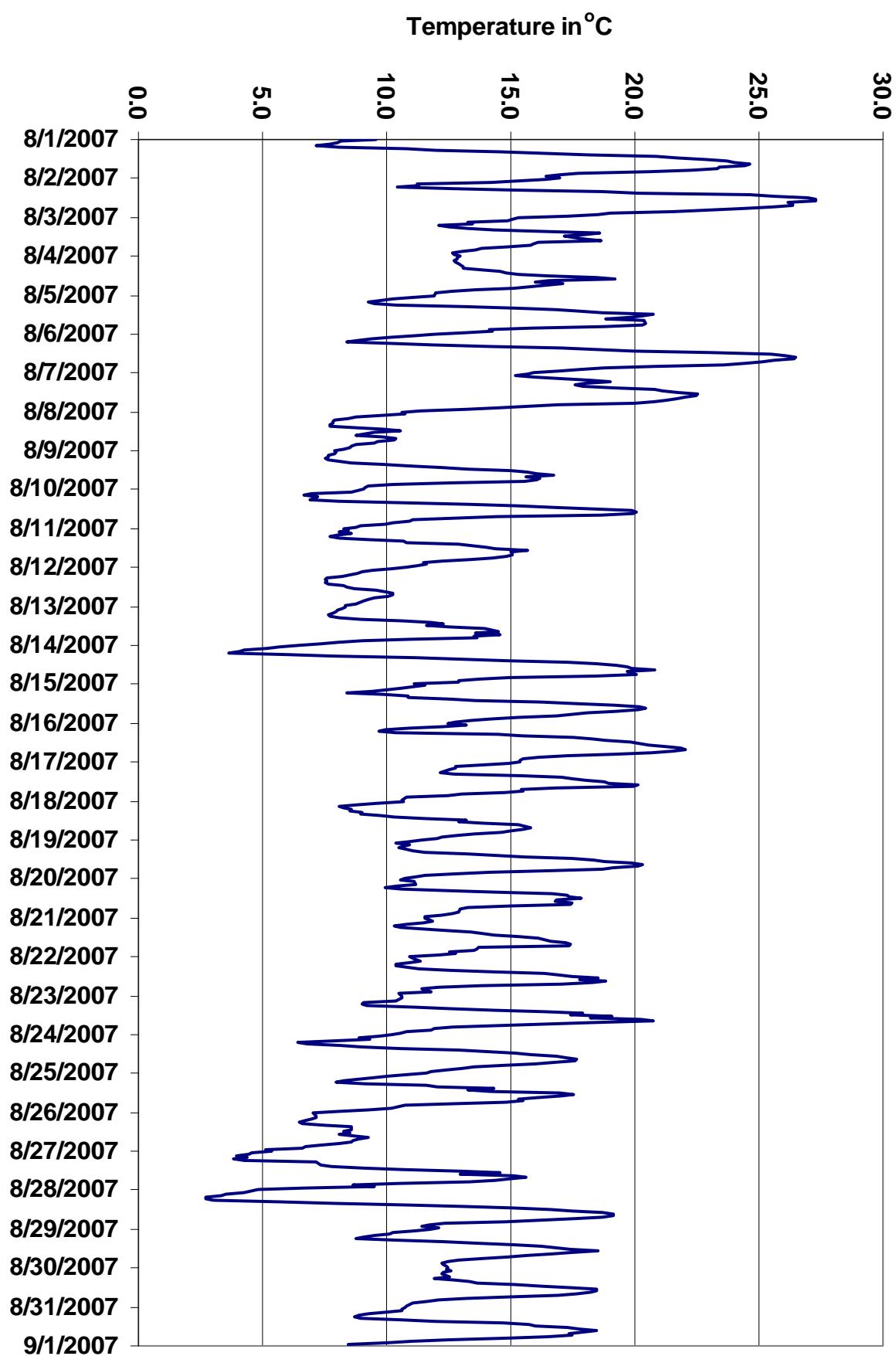


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

# PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

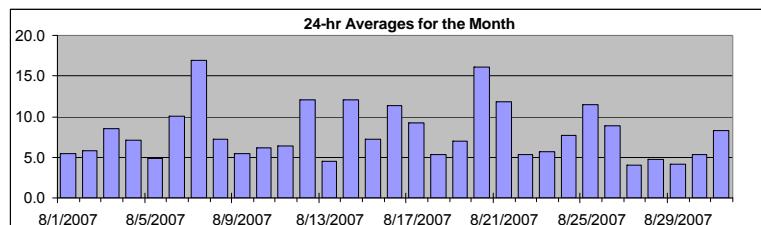
## Summary

Maximum 1-hr Average:	32.7	km/hr	20-Aug	11:00 12:00
Maximum 24-hr Value:	16.9	km/hr	7-Aug	

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
	27.4	21.6	9.9	6.1	4.0	2.1	1.2	7.9 km/hr

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)



## Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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 1:00	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-Aug-07	2	3	2	2	3	3	1	4	5	5	6	7	7	7	8	7	10	10	11	8	5	7	4	2	5.5	11.3
2-Aug-07	5	6	8	6	7	2	2	2	3	5	4	6	5	7	7	9	10	8	7	5	7	5	5	8	5.8	9.9
3-Aug-07	16	10	19	13	9	6	8	3	5	5	5	8	8	9	10	10	14	10	8	6	6	6	5	5	8.5	19.1
4-Aug-07	6	6	7	8	8	8	9	9	12	11	12	11	10	7	3	8	6	4	6	5	2	4	5	3	7.0	12.2
5-Aug-07	3	3	2	1	3	2	1	2	3	5	6	5	3	6	9	7	8	12	10	10	6	2	5	2	4.9	11.9
6-Aug-07	3	2	2	2	2	1	3	5	7	9	9	10	15	23	25	25	26	25	22	11	6	3	3	3	10.1	25.8
7-Aug-07	2	2	1	4	15	25	20	25	22	28	26	23	21	21	22	25	27	25	23	16	8	7	11	7	16.9	28.0
8-Aug-07	8	9	10	11	11	10	10	11	8	8	7	8	6	4	5	3	6	6	5	4	5	6	6	6	7.2	11.3
9-Aug-07	6	5	5	6	6	5	4	4	4	3	3	3	5	5	8	7	8	6	5	7	6	7	7	6	5.4	7.9
10-Aug-07	4	3	2	4	3	4	4	4	4	4	7	9	7	7	9	9	9	14	9	9	8	5	7	6	6.1	14.1
11-Aug-07	2	6	6	8	4	3	3	4	4	4	4	3	5	8	8	9	9	9	9	9	10	6	7	13	6.4	12.6
12-Aug-07	15	15	17	15	18	20	19	17	15	15	11	13	16	15	13	9	7	6	9	7	5	5	5	4	12.0	20.0
13-Aug-07	5	4	3	3	4	7	6	4	5	5	6	4	4	5	6	5	5	4	5	5	3	2	3	4.5	7.0	
14-Aug-07	2	2	2	3	4	2	4	6	11	24	24	26	27	26	23	22	19	16	14	12	4	5	5	5	12.0	26.9
15-Aug-07	3	5	5	5	4	4	2	6	4	6	9	8	10	11	10	10	10	11	9	8	10	8	7	7	7.3	11.2
16-Aug-07	7	8	4	3	2	0	1	1	3	3	6	9	12	14	17	18	20	18	20	20	23	22	22	19	11.3	23.3
17-Aug-07	22	20	16	13	10	9	8	6	5	5	3	4	3	3	12	8	12	11	14	8	7	6	8	9.2	21.8	
18-Aug-07	7	6	7	5	4	5	4	7	4	4	4	3	6	8	6	7	6	8	6	4	2	3	6	5.3	8.3	
19-Aug-07	3	2	5	5	5	2	3	5	3	3	5	7	6	13	11	12	15	14	14	12	8	6	4	5	7.0	14.8
20-Aug-07	6	4	6	7	7	6	9	13	18	28	31	33	28	24	15	24	25	15	12	13	14	14	17	16	16.1	32.7
21-Aug-07	17	19	20	18	13	12	10	12	14	16	15	13	16	16	17	10	9	9	8	3	5	5	3	5	11.9	19.7
22-Aug-07	6	7	7	7	5	1	3	3	1	2	3	3	4	5	6	5	4	11	13	8	8	6	4	4	5.3	13.2
23-Aug-07	5	5	3	6	6	8	8	6	7	6	5	5	4	5	7	6	5	5	12	5	5	6	3	5.7	12.3	
24-Aug-07	3	2	3	5	4	1	2	3	4	4	8	12	13	13	13	12	11	9	11	14	11	5	6	7.7	14.1	
25-Aug-07	6	7	3	4	2	3	3	3	7	11	12	12	20	26	30	28	28	23	13	8	5	6	7	11.5	29.8	
26-Aug-07	10	12	13	11	9	7	7	8	12	15	15	13	10	9	11	10	8	7	5	5	4	4	5	3	8.8	15.1
27-Aug-07	6	4	2	3	4	1	2	2	3	3	3	3	4	4	8	6	7	9	7	4	2	3	4	4.0	8.7	
28-Aug-07	3	4	3	2	2	3	2	3	4	3	4	5	6	7	6	6	6	5	7	6	7	8	6	4.7	7.7	
29-Aug-07	3	3	3	3	2	2	3	3	3	4	3	3	3	5	4	5	7	6	7	5	4	4	8	4.2	8.9	
30-Aug-07	9	8	6	4	2	3	1	5	3	6	6	4	5	2	3	5	7	6	8	7	8	9	6	5.3	9.1	
31-Aug-07	8	10	10	3	3	5	5	2	3	8	13	21	18	16	13	12	14	12	7	5	4	2	1	2	8.2	20.5
1-hr Average	6.6	6.5	6.5	6.2	5.8	5.4	5.3	6.1	6.7	8.4	8.8	9.5	9.9	10.7	11.0	11.0	11.6	10.8	10.2	8.0	6.8	6.2	6.2	6.0		
Hourly Max	21.8	19.7	19.7	18.2	17.6	24.9	19.6	24.6	22.4	28.0	31.4	32.7	27.8	26.4	29.8	27.9	27.8	25.4	22.5	19.8	23.3	21.8	21.6	18.9		

# PASZA - Beaverlodge Vector Wind Speed Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	32.5	km/hr	20-Aug	11:00 12:00
Maximum 24-hr Value:	15.6	km/hr	7-Aug	

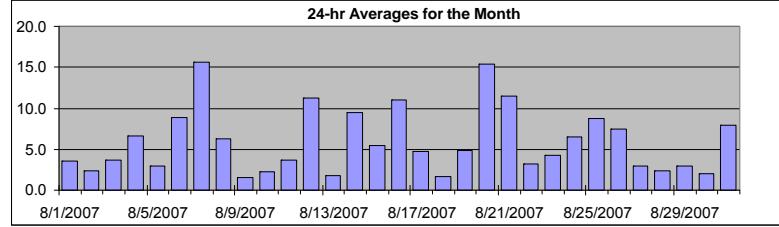
Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				AverageV
99	95	75	50	25 5 1
27.1	21.5	9.4	5.6	3.2 1.1 0.6
				3.4 km/hr

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	
1-Aug-07	2	3	2	2	2	1	1	4	4	5	5	6	6	6	7	6	9	10	11	7	5	7	4	2	3.6	11.2
2-Aug-07	5	5	7	5	6	1	2	2	3	5	2	4	3	5	6	8	9	8	7	5	7	5	5	7	2.4	9.5
3-Aug-07	10	10	14	4	3	5	7	1	5	5	3	8	8	8	7	9	14	9	8	5	6	6	5	5	3.7	14.0
4-Aug-07	6	5	7	8	8	8	9	9	12	11	12	11	10	6	2	7	5	4	5	4	2	4	4	1	6.6	12.1
5-Aug-07	2	3	1	1	3	2	1	1	3	5	6	4	3	5	9	7	8	12	9	10	6	1	5	2	2.9	11.7
6-Aug-07	3	1	2	2	1	1	3	5	6	8	9	10	14	23	24	25	26	25	21	11	6	3	1	3	8.9	25.7
7-Aug-07	2	2	1	3	14	25	20	25	22	28	26	23	21	21	25	26	24	22	16	8	6	11	7		15.6	27.9
8-Aug-07	8	9	10	11	10	10	10	11	7	8	7	8	6	4	5	3	5	5	6	5	4	5	6	6	6.2	10.8
9-Aug-07	6	5	5	6	6	5	4	4	3	2	2	1	4	4	6	1	7	5	5	7	6	7	7	6	1.5	7.5
10-Aug-07	4	3	1	4	3	3	3	4	3	4	7	8	5	6	5	8	9	8	8	9	7	4	7	5	2.3	9.0
11-Aug-07	1	6	6	8	3	3	3	1	3	3	4	3	3	5	7	7	9	8	9	9	7	8	5	7	3.7	12.5
12-Aug-07	15	15	17	15	18	20	19	17	15	15	11	13	16	15	13	9	7	6	8	7	4	5	5	4	11.2	19.9
13-Aug-07	5	3	3	3	4	7	6	4	5	4	6	2	4	4	5	4	4	3	4	5	5	2	2	3	1.8	6.8
14-Aug-07	2	2	2	3	4	2	3	5	11	24	24	26	26	26	22	22	19	16	14	9	2	5	5	3	9.4	26.5
15-Aug-07	3	5	2	3	1	4	2	4	4	5	8	7	10	11	9	10	10	10	11	9	8	10	8	7	5.5	10.8
16-Aug-07	7	8	1	1	1	0	1	1	3	1	5	9	12	14	16	18	19	18	20	20	23	22	22	19	11.0	23.2
17-Aug-07	22	20	15	13	10	8	7	6	5	3	2	4	2	2	12	7	7	10	14	8	8	6	6	8	4.7	21.7
18-Aug-07	7	5	6	4	3	5	3	7	4	3	3	3	5	8	6	6	6	8	6	4	1	3	6	3	1.7	8.1
19-Aug-07	3	1	5	4	3	2	3	3	5	3	3	5	6	5	12	11	12	14	14	14	12	8	6	4	4.8	14.4
20-Aug-07	6	4	5	7	7	5	9	13	18	28	31	33	28	23	15	24	25	15	12	12	14	14	17	16	15.4	32.5
21-Aug-07	17	19	20	18	13	12	10	12	14	16	14	13	16	16	16	10	9	9	7	3	5	5	2	4	11.5	19.7
22-Aug-07	6	7	7	7	5	1	2	3	1	2	1	3	4	4	5	4	2	10	9	5	8	4	4	4	3.1	10.4
23-Aug-07	4	3	3	6	5	8	8	6	7	6	4	4	3	3	5	5	3	4	12	3	3	6	2	3	4.3	11.9
24-Aug-07	3	1	2	5	2	1	2	2	3	4	7	12	12	13	13	13	12	11	8	11	14	11	3	4	6.5	13.8
25-Aug-07	6	7	2	3	1	3	2	1	6	11	12	12	20	26	30	28	28	23	12	7	5	5	7	11	8.7	29.7
26-Aug-07	10	11	12	11	9	7	7	8	12	14	15	12	10	9	11	9	7	7	4	5	4	4	5	2	7.4	15.0
27-Aug-07	6	2	1	1	4	1	2	1	3	3	3	3	2	3	7	4	7	8	7	4	2	3	3	1	2.9	8.4
28-Aug-07	1	3	1	0	0	1	1	3	3	3	4	4	5	6	5	7	6	6	6	7	8	6	6	6	2.4	7.7
29-Aug-07	2	2	2	2	0	1	3	2	2	3	1	3	3	4	3	5	6	6	6	5	4	3	8	9	3.0	8.8
30-Aug-07	9	8	6	4	2	3	1	4	3	6	6	3	4	1	2	3	7	5	7	6	8	9	6	5	2.0	8.9
31-Aug-07	8	10	10	2	2	4	4	1	3	8	13	20	18	15	13	11	14	11	7	5	4	1	1	2	7.9	20.4

1-hr Vector	1.0	2.1	2.3	2.1	1.7	1.5	1.7	3.0	4.3	4.6	4.0	3.3	3.2	2.8	2.7	3.2	3.2	2.5	1.9	1.3	1.4	1.8	1.6	
Hourly Max	21.7	19.6	19.7	18.2	17.5	24.8	19.6	24.5	22.3	27.9	31.3	32.5	27.6	26.1	29.7	27.7	27.6	25.3	22.3	19.8	23.2	21.8	21.5	18.8

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

## PASZA - Beaverlodge Wind Direction Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Calm Time:	0 hrs							0% calms							Operational Time: 744 hrs								
Calibration Time:	0 hrs							AMD Operational Uptime: 100.0%															
Percentile	99 95 75 50 25 5 1							Average															
	356.6 345.0 293.0 215.0 100.4 28.0 6.7							300 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	0:00	
1-Aug-07	237	73	129	114	107	184	147	206	223	258	272	226	223	186	152	156	145	134	134	127	92	101	122	109	158	SSE	
2-Aug-07	90	41	351	330	336	34	91	160	288	286	345	14	68	83	73	101	117	110	159	105	125	128	125	232	81	E	
3-Aug-07	205	70	221	125	209	150	270	48	338	326	168	186	209	187	214	329	312	296	288	281	279	295	290	299	245	WSW	
4-Aug-07	308	298	304	309	321	322	320	310	305	315	322	326	332	354	36	357	314	304	302	322	297	254	289	355	318	NW	
5-Aug-07	345	247	237	95	60	72	58	128	301	313	317	341	339	332	316	287	287	281	245	238	138	52	158	303	WNW		
6-Aug-07	172	199	143	173	179	99	209	206	213	221	230	239	253	257	261	259	259	260	259	266	255	219	146	115	248	WSW	
7-Aug-07	93	136	96	266	286	270	278	276	276	275	280	279	280	285	290	282	282	277	282	287	298	309	18	355	283	WNW	
8-Aug-07	350	347	358	348	360	9	7	30	29	42	32	33	33	15	286	358	326	315	308	319	322	318	328	328	357	N	
9-Aug-07	329	328	333	328	346	6	334	360	350	4	301	90	185	237	181	134	74	96	114	127	114	98	108	107	68	ENE	
10-Aug-07	104	123	138	117	170	187	232	194	192	177	170	165	167	155	142	136	125	273	52	15	47	84	279	315	148	SSE	
11-Aug-07	353	331	343	345	326	319	276	25	48	230	201	101	61	65	79	88	105	97	93	119	121	89	77	70	72	ENE	
12-Aug-07	60	60	57	71	79	74	71	70	72	77	60	50	46	47	46	40	10	20	14	13	39	19	28	328	56	NE	
13-Aug-07	355	356	356	11	354	28	27	1	32	20	31	88	330	343	293	265	234	247	203	217	229	148	93	100	350	N	
14-Aug-07	129	114	152	157	193	149	188	194	228	256	260	265	264	279	277	283	292	281	275	298	348	42	34	16	270	W	
15-Aug-07	69	60	343	50	217	76	87	36	192	181	190	144	125	124	112	112	111	95	90	93	74	90	86	94	105	ESE	
16-Aug-07	88	85	117	253	126	234	242	257	264	108	116	115	102	94	96	98	109	96	89	88	87	91	90	98	96	E	
17-Aug-07	108	106	100	95	95	79	76	64	41	61	183	260	86	109	62	91	246	320	307	356	33	33	338	353	68	ENE	
18-Aug-07	350	358	326	12	359	337	10	345	344	56	296	211	143	132	143	158	138	147	99	27	49	97	73	103	59	ENE	
19-Aug-07	145	180	307	50	6	191	148	211	210	170	169	212	221	260	288	285	280	287	290	288	290	249	238	247	266	W	
20-Aug-07	260	257	254	245	251	230	239	245	261	270	277	276	274	279	290	278	289	311	317	287	287	278	284	284	277	W	
21-Aug-07	290	288	293	289	293	296	296	305	303	305	300	311	320	317	313	326	326	305	306	321	332	265	343	296	303	WNW	
22-Aug-07	324	329	342	341	356	41	329	334	150	164	167	316	292	324	327	23	54	155	46	344	305	323	350	37	347	NNW	
23-Aug-07	7	332	354	355	330	344	335	323	328	321	348	320	4	11	17	310	325	28	275	243	34	38	201	87	339	NNW	
24-Aug-07	157	83	36	39	79	204	244	186	187	142	146	140	138	127	114	134	117	102	82	87	92	114	125	79	115	ESE	
25-Aug-07	23	46	294	291	118	67	65	95	228	260	254	254	258	265	268	271	262	259	284	294	19	345	341	326	275	W	
26-Aug-07	318	318	314	309	307	291	273	273	299	305	297	317	7	9	29	12	28	331	14	315	334	3	349	305	325	NW	
27-Aug-07	329	351	308	331	41	351	310	335	283	302	289	252	251	209	250	241	298	308	317	314	274	43	329	309	300	WNW	
28-Aug-07	209	62	310	342	353	69	66	235	224	201	186	200	207	215	221	199	166	127	128	116	92	98	95	106	154	SSE	
29-Aug-07	162	283	360	37	226	287	82	153	103	160	162	79	164	110	162	78	98	133	146	113	120	145	112	109	120	ESE	
30-Aug-07	122	130	113	147	135	102	279	355	215	224	194	182	106	1	31	140	132	159	243	301	274	259	255	230	189	S	
31-Aug-07	247	248	248	270	225	249	241	198	225	254	262	263	256	258	247	263	248	253	255	236	250	225	256	78	252	WSW	

Hourly Avg 9 17 327 355 336 343 316 309 282 276 268 267 266 276 283 283 271 276 300 319 29 59 39 29

# PASZA - Beaverlodge Standard Deviation of Wind Direction Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

### 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 85.4 71.9 38.1 18.1 9.4 4.6 3.5							

Determined by the Yamartino 15-min interval calculation

### Status Flag Characters

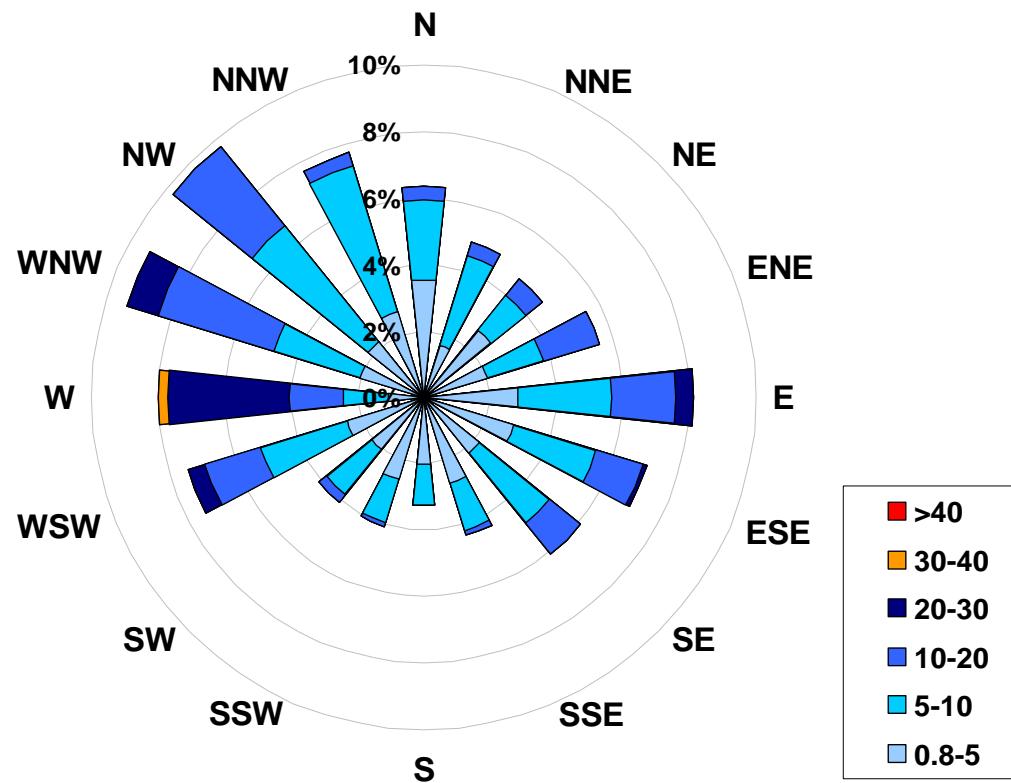
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

### Day Mountain Standard Time

	Hour Start 1:00	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
1-Aug-07	47	20	43	31	19	64	44	30	22	26	34	39	35	36	41	43	26	12	8	18	5	4	13	31	64.3		
2-Aug-07	11	26	27	42	60	61	21	44	37	23	73	62	78	67	41	32	17	13	12	13	22	15	10	42	77.7		
3-Aug-07	59	13	75	75	72	21	20	87	23	26	48	22	13	21	51	23	13	14	18	21	12	9	8	9	86.7		
4-Aug-07	5	6	6	4	6	6	5	6	5	6	7	7	11	39	86	29	13	17	20	53	64	17	24	55	86.5		
5-Aug-07	60	11	82	58	21	23	69	55	46	21	16	37	50	25	14	13	20	11	17	6	10	49	38	24	81.7		
6-Aug-07	18	44	38	18	53	11	21	14	12	13	15	18	14	8	9	6	5	5	6	4	5	34	58	13	57.9		
7-Aug-07	18	18	72	85	12	5	5	3	4	5	7	10	10	11	8	7	6	9	8	7	6	32	11	15	84.9		
8-Aug-07	11	10	15	11	14	10	12	17	19	11	14	21	26	28	22	37	17	11	16	12	15	8	6	7	36.9		
9-Aug-07	4	5	5	6	10	11	11	16	37	62	66	86	50	54	44	87	16	47	25	12	13	8	4	4	86.9		
10-Aug-07	6	12	46	20	22	16	12	17	33	25	18	22	44	42	50	29	18	75	40	17	27	29	16	22	75.2		
11-Aug-07	70	7	9	6	69	24	60	48	66	20	53	45	33	23	18	18	12	10	8	41	39	27	47	7	70.2		
12-Aug-07	7	6	5	6	4	4	3	4	5	7	8	8	3	4	5	15	10	10	8	16	19	9	7	21	21.4		
13-Aug-07	10	46	30	16	24	11	20	18	14	29	30	59	22	39	43	44	27	43	21	27	13	50	12	17	58.5		
14-Aug-07	18	29	35	26	17	37	34	23	13	5	9	9	10	9	9	10	6	5	6	51	55	23	13	51	55.0		
15-Aug-07	21	9	68	55	87	12	21	56	27	21	13	19	17	16	21	14	14	8	6	7	7	5	5	7	87.1		
16-Aug-07	12	17	83	87	71	63	36	87	27	82	35	16	15	11	9	9	10	8	5	4	3	3	3	5	87.4		
17-Aug-07	5	5	11	4	11	14	6	12	18	62	67	59	62	47	13	38	67	22	10	23	21	30	27	17	67.4		
18-Aug-07	14	40	52	41	44	41	52	16	19	52	75	42	52	15	25	24	19	14	26	24	71	21	23	23	75.4		
19-Aug-07	21	76	23	21	60	43	21	11	26	37	19	28	30	13	17	15	13	11	7	4	7	14	10	8	75.8		
20-Aug-07	7	34	25	15	4	14	3	6	7	6	5	7	7	8	8	7	11	9	9	10	4	4	4	4	33.8		
21-Aug-07	4	4	3	4	4	4	7	5	4	5	6	6	8	8	7	9	7	13	17	22	15	12	38	38.0			
22-Aug-07	25	5	6	10	34	24	62	44	70	37	89	53	24	36	30	47	69	10	54	52	10	47	31	16	88.9		
23-Aug-07	38	41	41	9	36	6	4	7	10	19	35	41	51	53	48	46	67	25	25	52	72	38	63	31	71.7		
24-Aug-07	21	81	57	4	75	42	36	54	30	26	18	13	12	11	12	9	8	8	36	9	12	3	81	72	81.4		
25-Aug-07	12	10	63	45	48	39	30	78	19	11	7	9	10	10	7	7	6	6	15	25	13	16	15	5	77.6		
26-Aug-07	6	7	8	5	6	14	8	19	8	7	7	28	12	10	10	24	15	23	22	13	7	20	5	60.5			
27-Aug-07	5	77	76	75	20	72	68	82	45	18	19	31	77	62	19	55	31	15	11	8	65	28	45	74	82.3		
28-Aug-07	70	39	65	72	82	80	17	32	14	37	30	31	33	35	44	52	44	27	9	12	5	3	7	8	81.5		
29-Aug-07	26	55	63	52	75	65	20	42	58	34	62	29	39	41	45	34	14	18	12	15	6	30	8	6	75.4		
30-Aug-07	10	11	20	25	23	22	43	31	68	18	19	35	20	63	51	81	18	33	34	26	13	9	13	16	80.7		
31-Aug-07	14	6	7	48	66	37	23	67	27	10	9	7	8	14	15	18	8	8	8	7	14	68	75	51	74.8		

Hourly Max 70 81 83 87 87 80 69 87 70 82 89 86 78 67 86 87 69 75 54 53 72 68 81 74

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



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	277
5	to	10	282
10	to	20	140
20	to	30	43
30	to	40	2
> 40			0
Total Non-Zero Values			744

# PASZA – Portable-Falher Station

## Monthly Summary Tables, Graphs and Roses

# PASZA - Portable-Falher Sulphur Dioxide Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

**Summary**

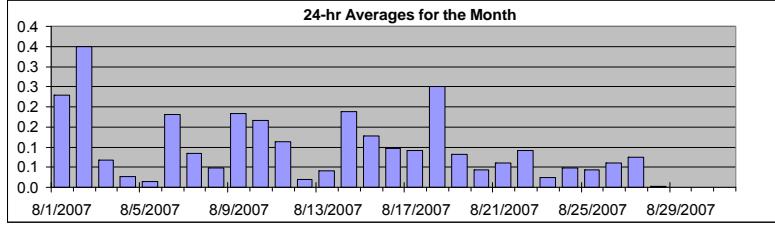
Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	1.1 ppb 6-Aug 9:00 10:00
Maximum 24-hr Average:	0.4 ppb 2-Aug

AIC Time:	30 hrs	Operational Time:	651 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 0.8	95 0.3	75 0.1	50 0.1	25 0.0	5 0.0	1 0.0	Average 0.1 ppb	Median 0.1 ppb

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-Aug-07	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.6
2-Aug-07	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	1.0
3-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
4-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
5-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
6-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
7-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2
8-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
9-Aug-07	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	1.0
10-Aug-07	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.6
11-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
12-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
13-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
14-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.3
15-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.7
16-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4
17-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2
18-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	1.1
19-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.5
20-Aug-07	0	A	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	0.2
21-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2
22-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
23-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.2
24-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.2
25-Aug-07	0	0	A	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
26-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2
27-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4
28-Aug-07	0	0	0	A	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0.0	0.0
29-Aug-07	0	0	0	A	0	0	0	0	0	0	0	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.1
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0

## HOURLY AVERAGE TABLE

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



**Status Flag Characters**

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

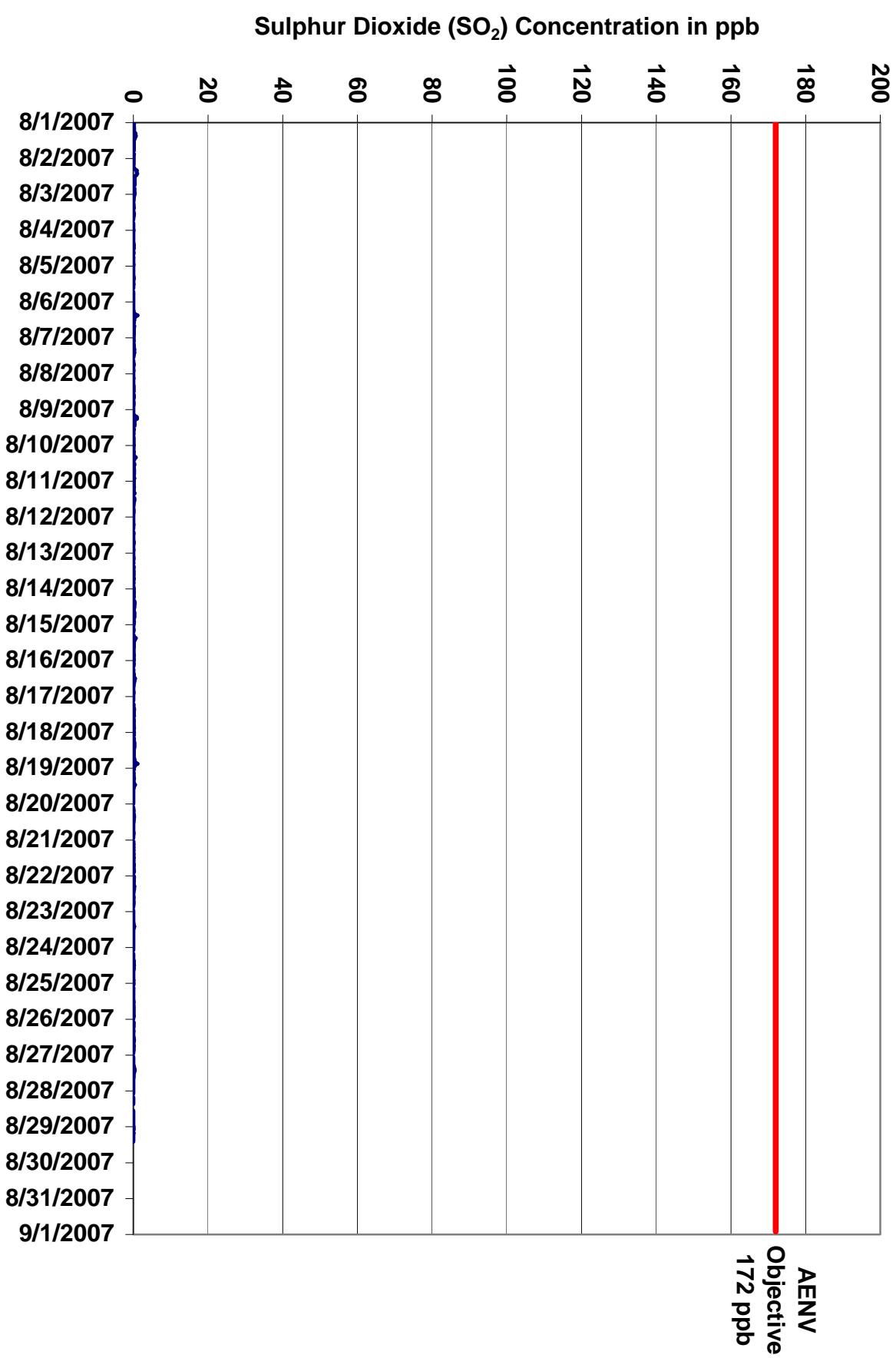


Figure 46. PASZA - Portable-Falher Sulphur Dioxide 1-hr Average Monthly Trend

Station: Portable-Falher  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

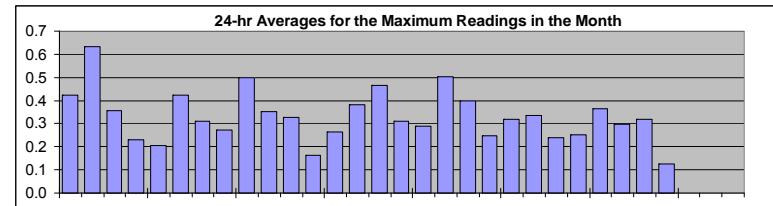
Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	2.3 ppb	15-Aug 9:00	10:00
Maximum 24-hr Value:	0.6 ppb	2-Aug	

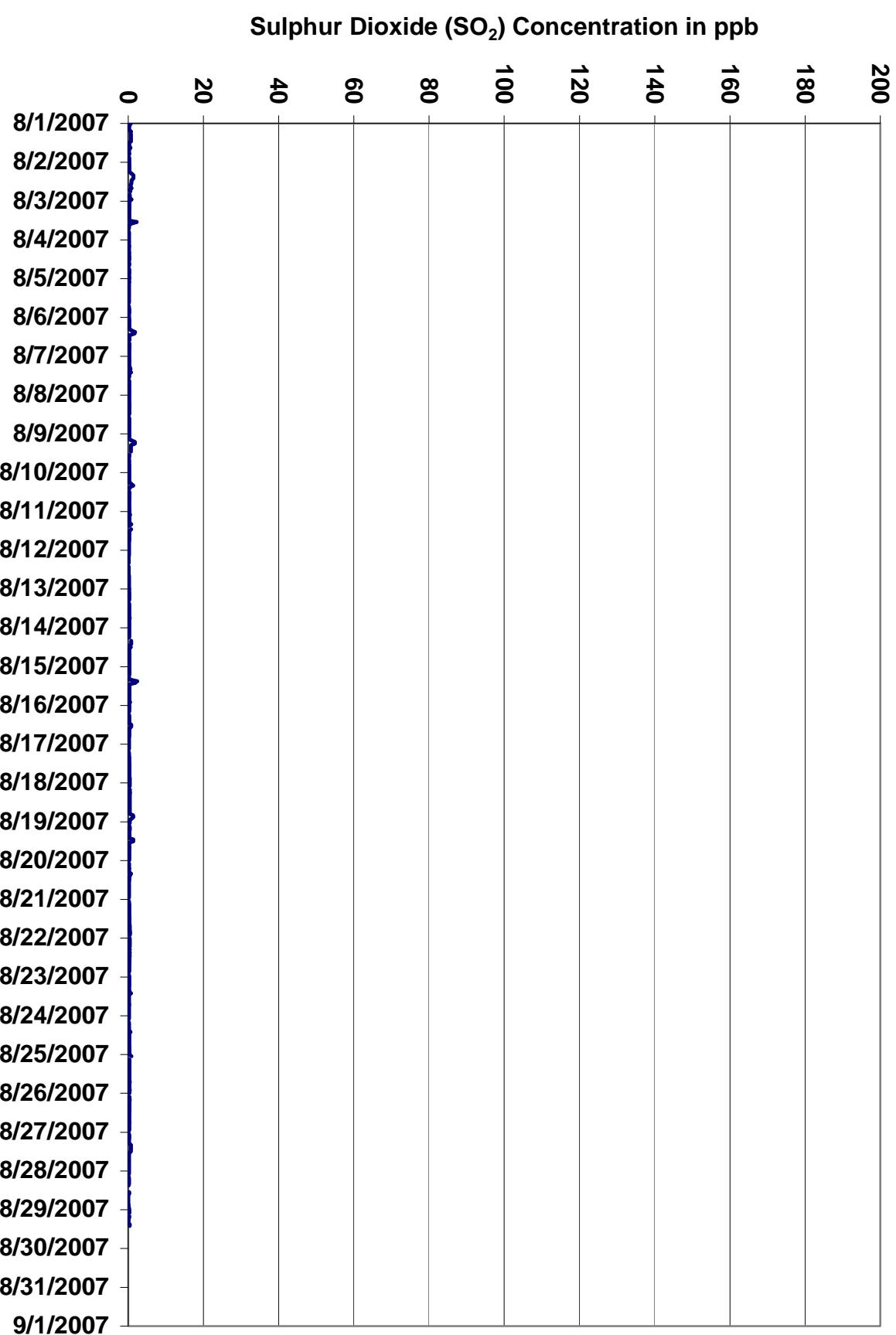
AIC Time:	30 hrs	Operational Time:	651 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	1.5 0.7 0.3 0.3 0.2 0.2 0.0	0.3 ppb	0.3 ppb

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-Aug-07	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	A	0	0	0	0.4	0.7
2-Aug-07	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	A	0	0	0	0	0.6	1.4
3-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	A	0	0	0	0	0	0.4	2.2
4-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3
5-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.2
6-Aug-07	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	1.8
7-Aug-07	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.7
8-Aug-07	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.3
9-Aug-07	0	0	0	0	0	1	2	2	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.5	1.7
10-Aug-07	0	0	0	0	0	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
11-Aug-07	0	0	0	0	0	0	0	0	1	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
12-Aug-07	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	0.2	0.2
13-Aug-07	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	0.3	0.4
14-Aug-07	0	0	0	0	0	0	0	A	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
15-Aug-07	0	0	0	0	0	0	A	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.3
16-Aug-07	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
17-Aug-07	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
18-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.4
19-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
20-Aug-07	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
21-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
22-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
23-Aug-07	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
24-Aug-07	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
25-Aug-07	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	0.4	0.8
26-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
27-Aug-07	A	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	0.7
28-Aug-07	0	0	0	A	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Aug-07	0	0	0	A	0	0	0	0	0	0	C	C	C	A	S	S	S	S	S	S	S	S	S	S	N	0.4	
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
Hourly Avg	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
Hourly Max	0.7	0.8	0.5	0.4	0.7	1.7	1.7	0.8	1.4	2.3	1.8	1.3	1.3	2.2	0.7	0.6	0.9	0.4	0.6	0.4	1.2	1.4	0.9	0.9	0.9		

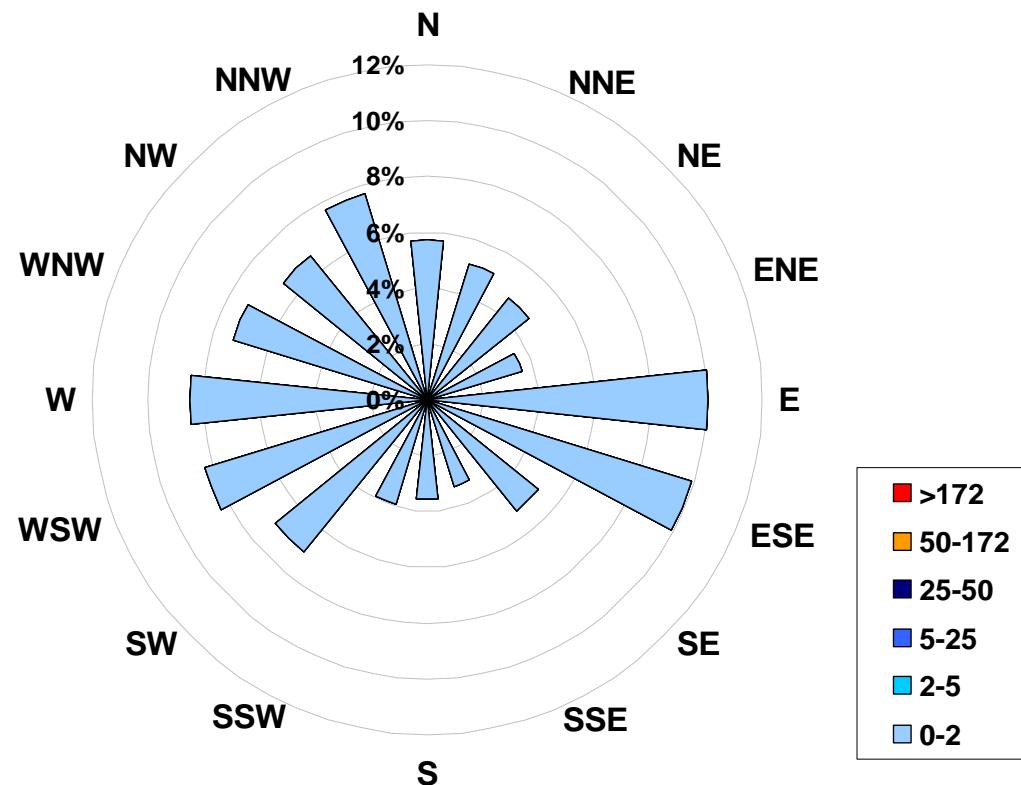


C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

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



**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at  
the Portable-Falher Site for August 2007**



**Calms:** 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	651
2	to	5	0
5	to	25	0
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			651

# PASZA - Portable-Falher Nitrogen Dioxide Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

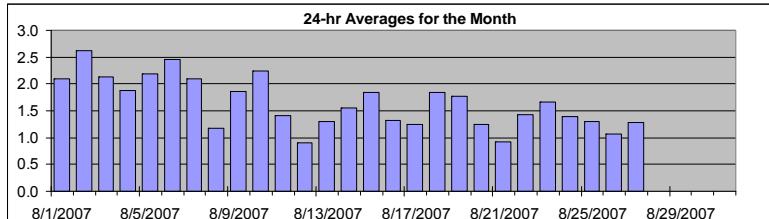
Objective Limit: Alberta Environment: 1-hr 212 ppb 24-hr 106 ppb

**Summary**

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	8.8 ppb 2-Aug 22:00 23:00
Maximum 24-hr Average:	2.6 ppb 2-Aug

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	100:00	101:00	102:00	103:00	104:00	105:00	106:00	107:00	108:00	109:00	110:00	111:00	112:00	113:00	114:00	115:00	116:00	117:00	118:00	119:00	120:00	121:00	122:00	123:00	124:00	125:00	126:00	127:00	128:00	129:00	130:00	131:00	132:00	133:00	134:00	135:00	136:00	137:00	138:00	139:00	140:00	141:00	142:00	143:00	144:00	145:00	146:00	147:00	148:00	149:00	150:00	151:00	152:00	153:00	154:00	155:00	156:00	157:00	158:00	159:00	160:00	161:00	162:00	163:00	164:00	165:00	166:00	167:00	168:00	169:00	170:00	171:00	172:00	173:00	174:00	175:00	176:00	177:00	178:00	179:00	180:00	181:00	182:00	183:00	184:00	185:00	186:00	187:00	188:00	189:00	190:00	191:00	192:00	193:00	194:00	195:00	196:00	197:00	198:00	199:00	200:00	201:00	202:00	203:00	204:00	205:00	206:00	207:00	208:00	209:00	210:00	211:00	212:00	213:00	214:00	215:00	216:00	217:00	218:00	219:00	220:00	221:00	222:00	223:00	224:00	225:00	226:00	227:00	228:00	229:00	230:00	231:00	232:00	233:00	234:00	235:00	236:00	237:00	238:00	239:00	240:00	241:00	242:00	243:00	244:00	245:00	246:00	247:00	248:00	249:00	250:00	251:00	252:00	253:00	254:00	255:00	256:00	257:00	258:00	259:00	260:00	261:00	262:00	263:00	264:00	265:00	266:00	267:00	268:00	269:00	270:00	271:00	272:00	273:00	274:00	275:00	276:00	277:00	278:00	279:00	280:00	281:00	282:00	283:00	284:00	285:00	286:00	287:00	288:00	289:00	290:00	291:00	292:00	293:00	294:00	295:00	296:00	297:00	298:00	299:00	300:00	301:00	302:00	303:00	304:00	305:00	306:00	307:00	308:00	309:00	310:00	311:00	312:00	313:00	314:00	315:00	316:00	317:00	318:00	319:00	320:00	321:00	322:00	323:00	324:00	325:00	326:00	327:00	328:00	329:00	330:00	331:00	332:00	333:00	334:00	335:00	336:00	337:00	338:00	339:00	340:00	341:00	342:00	343:00	344:00	345:00	346:00	347:00	348:00	349:00	350:00	351:00	352:00	353:00	354:00	355:00	356:00	357:00	358:00	359:00	360:00	361:00	362:00	363:00	364:00	365:00	366:00	367:00	368:00	369:00	370:00	371:00	372:00	373:00	374:00	375:00	376:00	377:00	378:00	379:00	380:00	381:00	382:00	383:00	384:00	385:00	386:00	387:00	388:00	389:00	390:00	391:00	392:00	393:00	394:00	395:00	396:00	397:00	398:00	399:00	400:00	401:00	402:00	403:00	404:00	405:00	406:00	407:00	408:00	409:00	410:00	411:00	412:00	413:00	414:00	415:00	416:00	417:00	418:00	419:00	420:00	421:00	422:00	423:00	424:00	425:00	426:00	427:00	428:00	429:00	430:00	431:00	432:00	433:00	434:00	435:00	436:00	437:00	438:00	439:00	440:00	441:00	442:00	443:00	444:00	445:00	446:00	447:00	448:00	449:00	450:00	451:00	452:00	453:00	454:00	455:00	456:00	457:00	458:00	459:00	460:00	461:00	462:00	463:00	464:00	465:00	466:00	467:00	468:00	469:00	470:00	471:00	472:00	473:00	474:00	475:00	476:00	477:00	478:00	479:00	480:00	481:00	482:00	483:00	484:00	485:00	486:00	487:00	488:00	489:00	490:00	491:00	492:00	493:00	494:00	495:00	496:00	497:00	498:00	499:00	500:00	501:00	502:00	503:00	504:00	505:00	506:00	507:00	508:00	509:00	510:00	511:00	512:00	513:00	514:00	515:00	516:00	517:00	518:00	519:00	520:00	521:00	522:00	523:00	524:00	525:00	526:00	527:00	528:00	529:00	530:00	531:00	532:00	533:00	534:00	535:00	536:00	537:00	538:00	539:00	540:00	541:00	542:00	543:00	544:00	545:00	546:00	547:00	548:00	549:00	550:00	551:00	552:00	553:00	554:00	555:00	556:00	557:00	558:00	559:00	560:00	561:00	562:00	563:00	564:00	565:00	566:00	567:00	568:00	569:00	570:00	571:00	572:00	573:00	574:00	575:00	576:00	577:00	578:00	579:00	580:00	581:00	582:00	583:00	584:00	585:00	586:00	587:00	588:00	589:00	590:00	591:00	592:00	593:00	594:00	595:00	596:00	597:00	598:00	599:00	600:00	601:00	602:00	603:00	604:00	605:00	606:00	607:00	608:00	609:00	610:00	611:00	612:00	613:00	614:00	615:00	616:00	617:00	618:00	619:00	620:00	621:00	622:00	623:00	624:00	625:00	626:00	627:00	628:00	629:00	630:00	631:00	632:00	633:00	634:00	635:00	636:00	637:00	638:00	639:00	640:00	641:00	642:00	643:00	644:00	645:00	646:00	647:00	648:00	649:00	650:00	651:00	652:00	653:00	654:00	655:00	656:00	657:00	658:00	659:00	660:00	661:00	662:00	663:00	664:00	665:00	666:00	667:00	668:00	669:00	670:00	671:00	672:00	673:00	674:00	675:00	676:00	677:00	678:00	679:00	680:00	681:00	682:00	683:00	684:00	685:00	686:00	687:00	688:00	689:00	690:00	691:00	692:00	693:00	694:00	695:00	696:00	697:00	698:00	699:00	700:00	701:00	702:00	703:00	704:00	705:00	706:00	707:00	708:00	709:00	710:00	711:00	712:00	713:00	714:00	715:00	716:00	717:00	718:00	719:00	720:00	721:00	722:00	723:00	724:00	725:00	726:00	727:00	728:00	729:00	730:00	731:00	732:00	733:00	734:00	735:00	736:00	737:00	738:00	739:00	740:00	741:00	742:00	743:00	744:00	745:00	746:00	747:00	748:00	749:00	750:00	751:00	752:00	753:00	754:00	755:00	756:00	757:00	758:00	759:00	760:00	761:00	762:00	763:00	764:00	765:00	766:00	767:00	768:00	769:00	770:00	771:00	772:00	773:00	774:00	775:00	776:00	777:00	778:00	779:00	780:00	781:00	782:00	783:00	784:00	785:00	786:00	787:00	788:00	789:00	790:00	791:00	792:00	793:00	794:00	795:00	796:00	797:00	798:00	799:00	800:00	801:00	802:00	803:00	804:00	805:00	806:00	807:00	808:00	809:00	810:00	811:00	812:00	813:00	814:00	815:00	816:00	817:00	818:00	819:00	820:00	821:00	822:00	823:00	824:00	825:00	826:00	827:00	828:00	829:00	830:00	831:00	832:00	833:00	834:00	835:00	836:00	837:00	838:00	839:00	840:00	841:00	842:00	843:00	844:00	845:00	846:00	847:00	848:00	849:00	850:00	851:00	852:00	853:00	854:00	855:00	856:00	857:00	858:00	859:00	860:00	861:00	862:00	863:00	864:00	865:00	866:00	867:00	868:00	869:00	870:00	871:00	872:00	873:00	874:00	875:00	876:00	877:00	878:00	879:00	880:00	881:00	882:00	883:00	884:00	885:00	886:00	887:00	888:00	889:00	890:00	891:00	892:00	893:00	894:00	895:00	896:00	897:00	898:00	899:00	900:00	901:00	902:

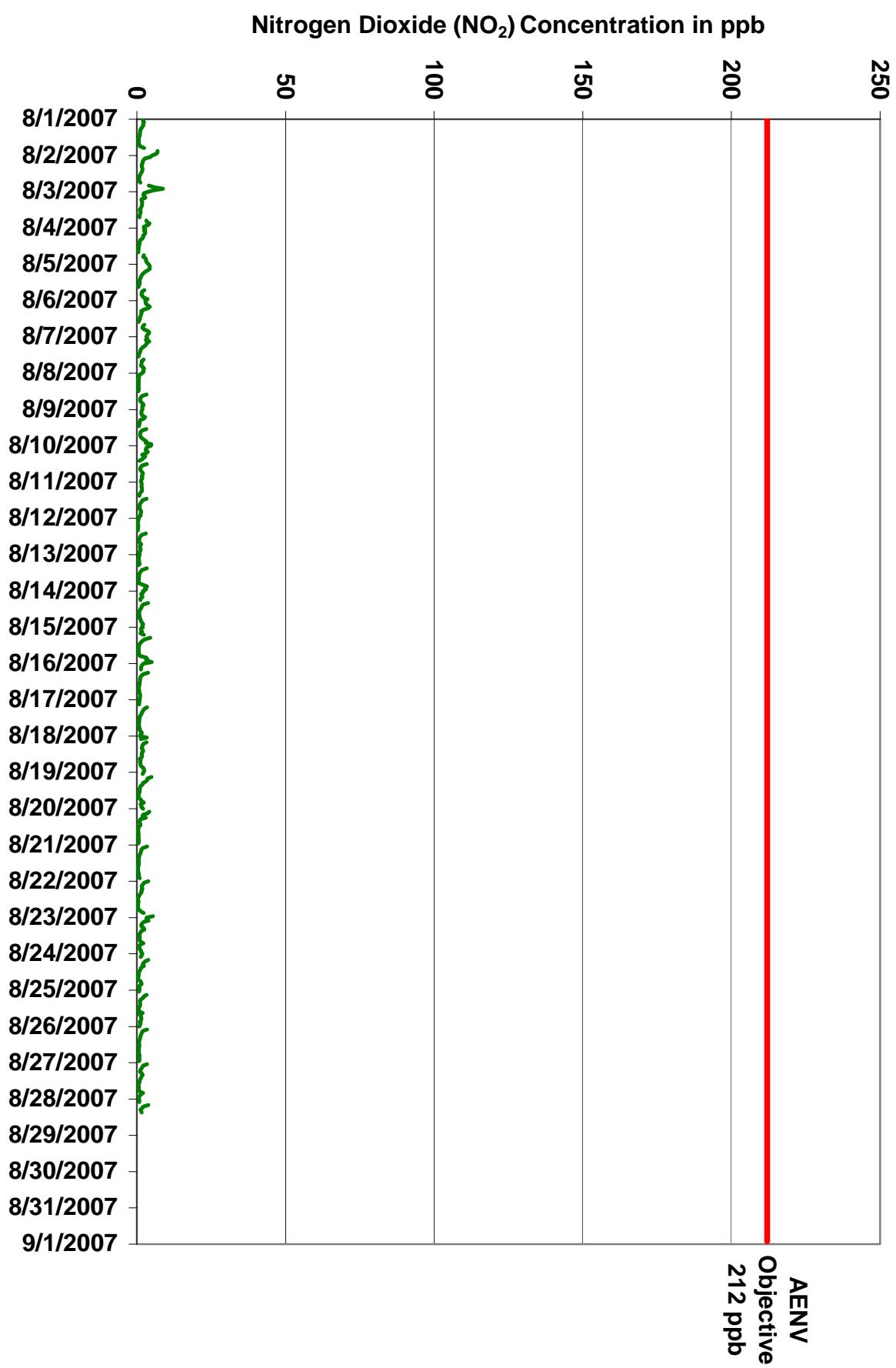


Figure 48. PASZA - Portable-Falher Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Portable-Falher  
 Station Owner: PASZA

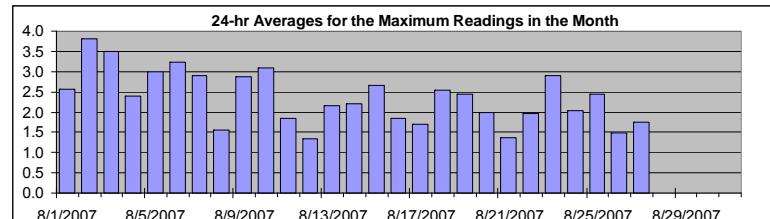
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	15.5 ppb	25-Aug 15:00 16:00
Maximum 24-hr Value:	3.8 ppb	2-Aug



AIC Time:	29 hrs	Operational Time:	630 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 8.0	95 6.0	75 2.9	50 1.8	25 1.2	5 0.6	1 0.6	Average 2.4 ppb	Median 1.8 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	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	Daily Maximum
1-Aug-07	2 1:00	3	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	3	A	8	8	8	2.6	8.0
2-Aug-07	6 2:00	6	3	3	2	3	2	2	2	2	2	2	2	2	1	2	1	1	1	3	A	8	10	14	3.8	14.3	
3-Aug-07	5 3:00	4	4	4	3	4	2	2	3	3	3	2	2	1	7	4	3	1	1	A	5	5	6	6	3.5	6.5	
4-Aug-07	3 4:00	3	3	3	3	3	3	3	2	1	1	1	1	1	1	1	1	1	1	A	3	3	4	4	2.4	5.7	
5-Aug-07	6 5:00	6	6	6	7	5	4	4	2	2	2	1	1	1	1	1	1	1	1	A	4	2	2	2	3.0	6.5	
6-Aug-07	4 6:00	4	4	4	5	5	5	3	2	2	2	2	2	1	1	1	1	1	A	4	3	3	4	6	3.2	6.0	
7-Aug-07	4 7:00	4	4	3	7	5	5	5	3	2	1	2	1	1	1	A	3	2	3	2	2	2	3	3	2.9	6.9	
8-Aug-07	2 8:00	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	6	2	2	1	2	2	2	3	1.6	5.8	
9-Aug-07	2 9:00	2	2	2	2	2	4	4	1	1	1	1	1	1	1	A	6	2	1	3	2	2	3	2	2.9	7.8	
10-Aug-07	6 10:00	6	5	4	4	5	4	3	4	4	3	1	A	6	2	2	1	1	2	3	3	2	2	2	3.1	6.3	
11-Aug-07	2 11:00	2	2	2	2	2	3	2	1	1	1	A	5	3	2	1	1	1	1	1	2	2	1	2	1.8	5.1	
12-Aug-07	1 12:00	1	1	1	1	1	1	0	1	0	A	6	2	1	1	1	1	1	1	2	2	2	1	1	1.3	5.7	
13-Aug-07	1 13:00	1	1	1	1	1	1	1	6	1	A	6	2	2	1	1	1	1	1	1	1	1	1	1	2.2	6.2	
14-Aug-07	3 14:00	3	4	2	3	3	1	2	A	6	3	2	2	2	1	1	1	1	1	3	1	2	2	3	2.2	5.7	
15-Aug-07	4 15:00	4	2	2	3	1	4	A	6	3	2	2	1	1	1	1	1	1	1	1	1	1	7	4	2.6	7.4	
16-Aug-07	3 16:00	3	3	2	2	2	A	6	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1.8	6.0	
17-Aug-07	1 17:00	1	1	1	1	1	A	6	4	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.7	5.7	
18-Aug-07	1 18:00	1	6	3	A	5	3	2	2	2	2	3	2	2	3	3	1	1	1	2	2	2	3	3	2.5	5.9	
19-Aug-07	3 19:00	3	3	A	7	4	4	3	2	2	2	2	1	1	1	1	1	1	1	4	3	5	2	2	2.4	6.6	
20-Aug-07	4 20:00	4	A	7	7	2	2	6	1	1	1	4	2	1	1	1	1	1	1	1	1	1	1	1	2.0	6.9	
21-Aug-07	A 21:00	A	6	3	2	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1.4	5.8	
22-Aug-07	6 22:00	6	3	2	2	2	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2.0	6.7	
23-Aug-07	4 23:00	4	5	5	3	2	2	2	3	3	2	2	1	1	1	1	1	1	7	8	8	1	1	1	2.9	8.3	
24-Aug-07	2 00:00	2	2	2	A	6	4	3	2	3	2	2	2	1	1	1	1	1	1	2	4	3	1	2	2.0	5.8	
25-Aug-07	1 01:00	1	1	A	5	3	3	2	2	1	2	2	1	1	1	1	1	16	2	2	2	2	1	3	2.4	15.5	
26-Aug-07	1 02:00	1	A	6	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	6.1	
27-Aug-07	A 03:00	A	6	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.7	5.7	
28-Aug-07	1 04:00	1	1	2	A	6	3	2	2	2	2	C	C	C	C	C	C	C	A	S	S	S	S	S	N	6.4	
29-Aug-07	S 05:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
30-Aug-07	S 06:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
31-Aug-07	S 07:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
	Hourly Avg	3.0	3.1	2.9	3.2	3.0	2.8	2.8	2.2	2.1	1.9	1.8	1.5	1.4	1.5	1.5	1.7	1.7	1.5	1.7	2.0	2.1	2.9	3.2	3.5	3.4	
	Hourly Max	6.3	5.9	6.6	6.9	6.4	5.7	6.0	6.2	5.7	6.0	5.7	5.1	5.8	6.5	5.8	15.5	7.0	8.3	7.9	4.7	8.0	10.0	14.3	8.5		

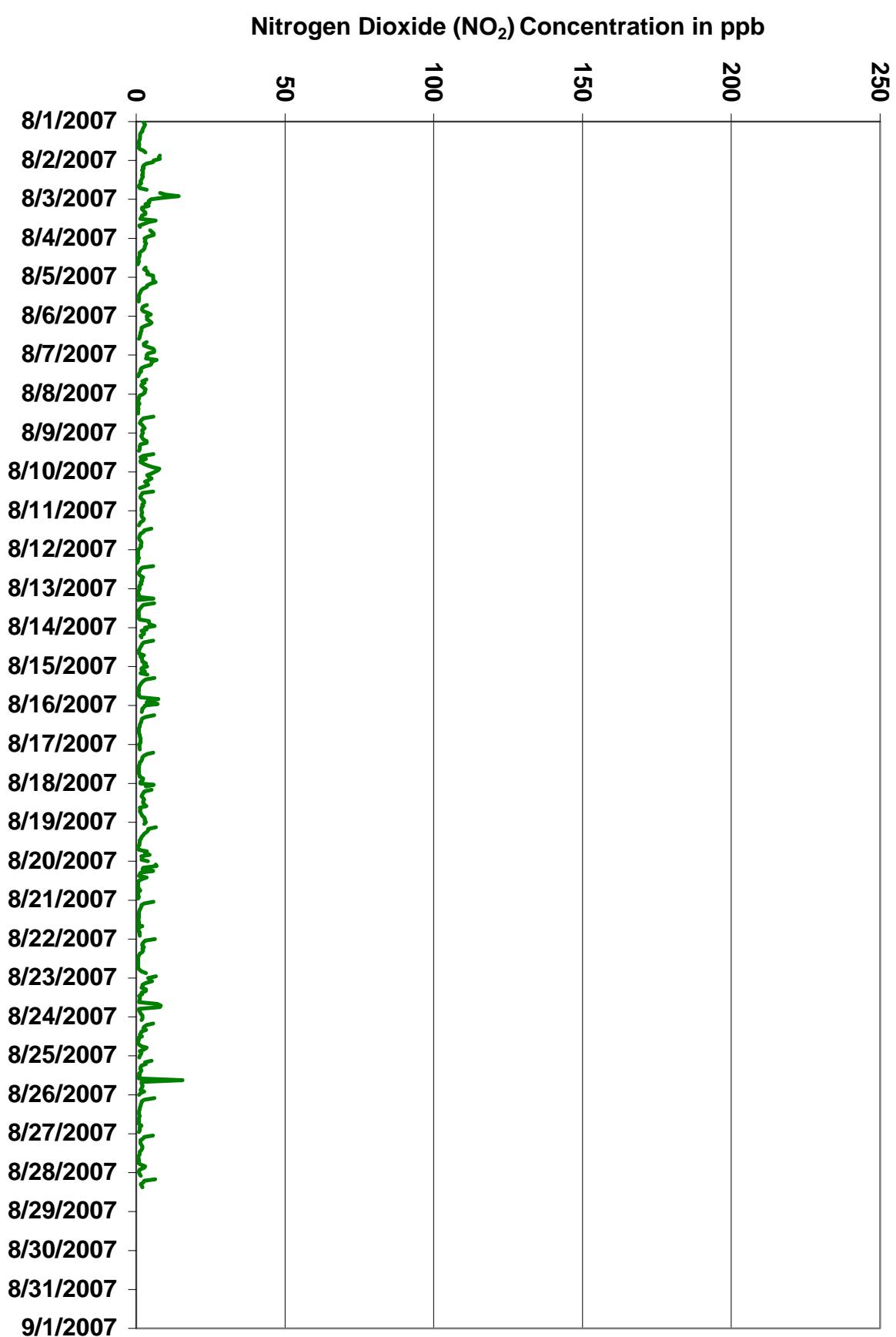
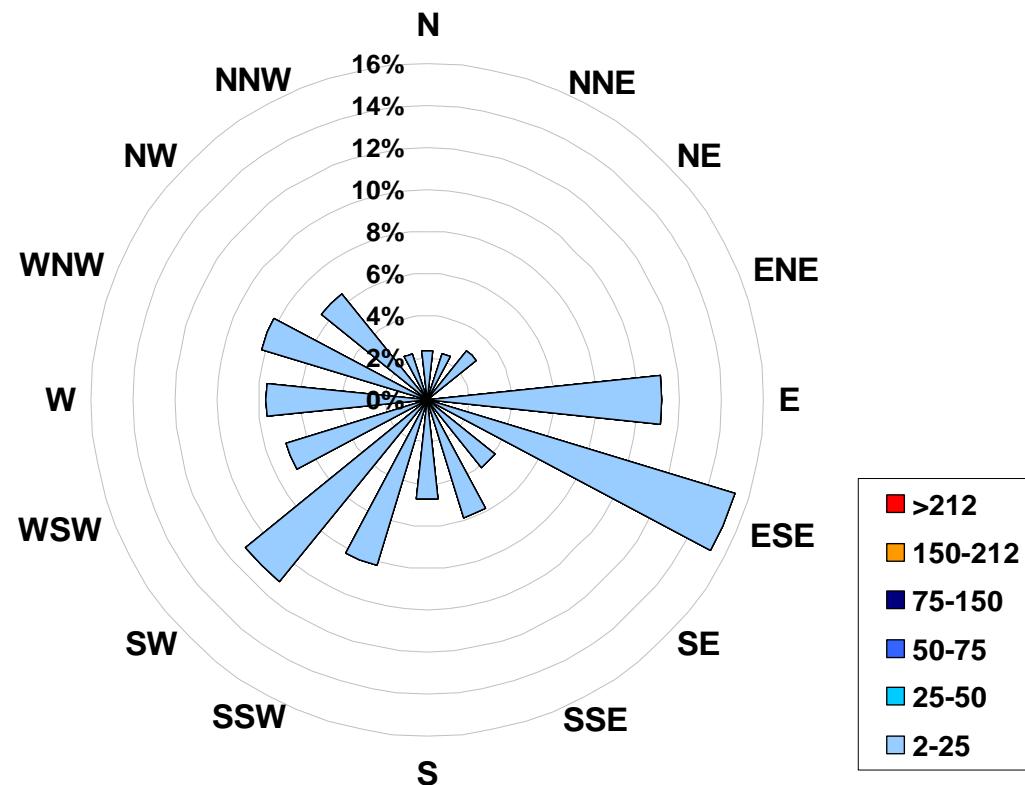


Figure 49. PASZA - Portable-Falher Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at  
the Portable-Falher Site for August 2007**



Calms: 0%

Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range			
2.0	<	25	630
25	to	50	0
50	to	75	0
75	to	150	0
150	to	212	0
> 212			0
Total Non-Zero Values			630

# PASZA - Portable-Falher Nitric Oxide Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

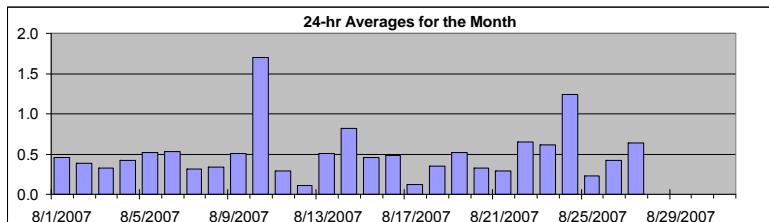
Summary

Maximum 1-hr Average:	5.5	ppb	10-Aug	7:00 8:00
Maximum 24-hr Average:	1.7	ppb	10-Aug	

AIC Time:	29 hrs		Operational Time:	630 hrs					
Calibration Time:	6 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average	Median
	3.8	1.6	0.5	0.3	0.2	0.0	0.0	0.5 ppb	0.3 ppb

## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)



## Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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-Aug-07	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	1	0.5	1.1
2-Aug-07	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
3-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
4-Aug-07	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4	0.7	
5-Aug-07	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.5	1.4	
6-Aug-07	0	1	1	1	0	1	2	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	1.7	
7-Aug-07	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.8	
8-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.6	
9-Aug-07	1	0	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	2.8	
10-Aug-07	4	3	3	3	5	3	5	5	3	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7	5.5	
11-Aug-07	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9	
12-Aug-07	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
13-Aug-07	0	0	0	0	1	1	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.4	
14-Aug-07	2	2	2	2	2	2	2	A	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	2.4	
15-Aug-07	0	1	1	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.4	
16-Aug-07	1	1	1	2	1	A	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.7	
17-Aug-07	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
18-Aug-07	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.0	
19-Aug-07	2	2	A	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.4	
20-Aug-07	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4	
21-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5	
22-Aug-07	0	1	1	1	1	1	2	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.7	2.6	
23-Aug-07	1	1	1	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.6	1.3	
24-Aug-07	1	2	2	A	4	4	4	3	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	
25-Aug-07	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0.2	1.7	
26-Aug-07	1	A	1	0	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1	
27-Aug-07	A	1	1	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.8
28-Aug-07	0	0	0	A	1	2	2	2	1	1	C	C	C	C	C	A	S	S	S	S	S	S	S	S	S	N	1.8		
29-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		

Hourly Avg	0.6	0.8	0.7	0.7	0.9	0.9	1.2	1.0	0.9	0.6	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	0.4	0.5
Hourly Max	4.1	3.2	3.1	3.5	4.6	3.9	4.7	5.5	3.2	1.9	1.3	0.6	0.6	0.6	0.6	1.7	1.2	1.2	0.5	0.5	0.5	0.5	0.9	0.9	2.8	

# PASZA - Portable-Falher Oxides of Nitrogen Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

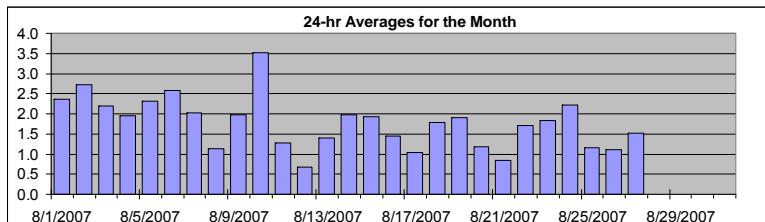
Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
Summary

Maximum 1-hr Average:	9.2	ppb	2-Aug	22:00 23:00
Maximum 24-hr Average:	3.5	ppb	10-Aug	

AIC Time:	29 hrs	Operational Time:	630 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	7.6	4.7	2.3	1.3	0.7	0.3	0.2	1.8 ppb	1.3 ppb

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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-Aug-07	2	2	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	3	A	8	8	7	2.4	7.8
2-Aug-07	6	5	3	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	A	4	6	9	6	2.7	9.2
3-Aug-07	4	2	2	3	3	1	2	2	2	2	2	2	1	1	1	1	1	1	1	A	3	4	5	4	2.2	4.6
4-Aug-07	2	3	3	3	3	2	2	2	1	1	1	1	1	1	0	0	0	A	2	2	3	3	3	4	1.9	3.7
5-Aug-07	4	5	5	5	4	3	3	3	2	1	1	1	1	1	0	0	0	A	2	2	2	2	2	3	2.3	5.4
6-Aug-07	3	3	3	4	4	5	3	3	2	2	2	1	1	1	1	0	0	A	2	2	2	4	4	4	2.6	4.6
7-Aug-07	3	3	3	4	3	3	3	2	1	1	1	1	0	0	0	A	2	1	2	1	1	2	2	2	2.0	4.3
8-Aug-07	2	1	1	1	1	1	1	0	0	1	1	1	0	A	3	2	1	1	1	1	2	3	2	2	1.1	3.2
9-Aug-07	2	2	2	2	3	2	1	1	1	1	1	1	A	3	2	1	1	1	1	2	2	3	3	7	2.0	7.3
10-Aug-07	9	6	6	6	8	6	6	8	5	2	1	A	3	2	1	1	1	1	2	2	1	2	1	1	3.5	8.6
11-Aug-07	1	1	1	1	2	2	2	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1.3	3.2
12-Aug-07	0	0	0	0	0	0	0	0	0	A	3	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	2.8
13-Aug-07	1	1	1	0	1	1	2	1	A	3	2	1	1	1	1	0	1	1	0	1	2	3	3	4	1.4	4.2
14-Aug-07	3	3	3	3	3	2	3	A	6	3	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2.0	5.8
15-Aug-07	2	2	2	2	2	3	A	6	3	2	1	1	1	1	0	0	0	0	1	1	3	3	5	1.9	5.6	
16-Aug-07	3	3	2	3	2	A	5	3	2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1.5	5.1
17-Aug-07	0	1	0	1	A	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.2
18-Aug-07	1	3	1	A	3	2	2	2	1	2	2	2	2	2	2	1	1	1	1	1	1	2	2	3	1.8	3.2
19-Aug-07	3	4	A	5	4	4	4	2	2	1	1	1	1	1	0	0	0	1	1	2	1	1	1	1	1.9	5.3
20-Aug-07	2	A	4	4	2	2	4	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.2	4.1
21-Aug-07	A	3	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	A	0.8	3.3
22-Aug-07	4	3	3	2	2	3	3	4	2	1	1	0	0	0	0	0	0	0	0	1	1	2	A	6	1.7	6.0
23-Aug-07	4	4	4	2	2	1	2	3	3	2	2	1	1	1	1	2	3	1	1	1	1	1	1	1	1.8	4.4
24-Aug-07	2	3	3	A	8	6	6	5	5	3	2	1	1	0	0	0	0	0	0	1	1	1	1	0	2.2	7.7
25-Aug-07	1	1	A	3	2	2	1	1	1	1	1	1	1	0	0	0	3	0	1	1	1	1	1	1	1.2	3.3
26-Aug-07	1	A	4	2	2	2	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1.1	3.7
27-Aug-07	A	4	3	3	2	2	2	3	3	2	2	1	1	1	0	0	0	1	0	0	1	2	1	1	1.5	4.2
28-Aug-07	1	1	1	A	5	3	3	2	2	2	C	C	C	C	C	A	S	S	S	S	S	S	S	N	4.8	
29-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	

Hourly Avg	2.5	2.6	2.4	2.6	2.8	2.6	2.6	2.3	2.0	1.6	1.3	1.0	0.9	0.8	0.8	0.8	0.8	0.9	1.0	1.2	1.7	2.2	2.3	2.6
Hourly Max	8.6	6.2	5.8	6.0	7.9	6.1	6.0	7.8	5.8	3.4	2.8	3.2	3.2	3.1	3.2	3.3	2.4	3.0	2.1	3.3	4.1	7.7	9.2	7.5

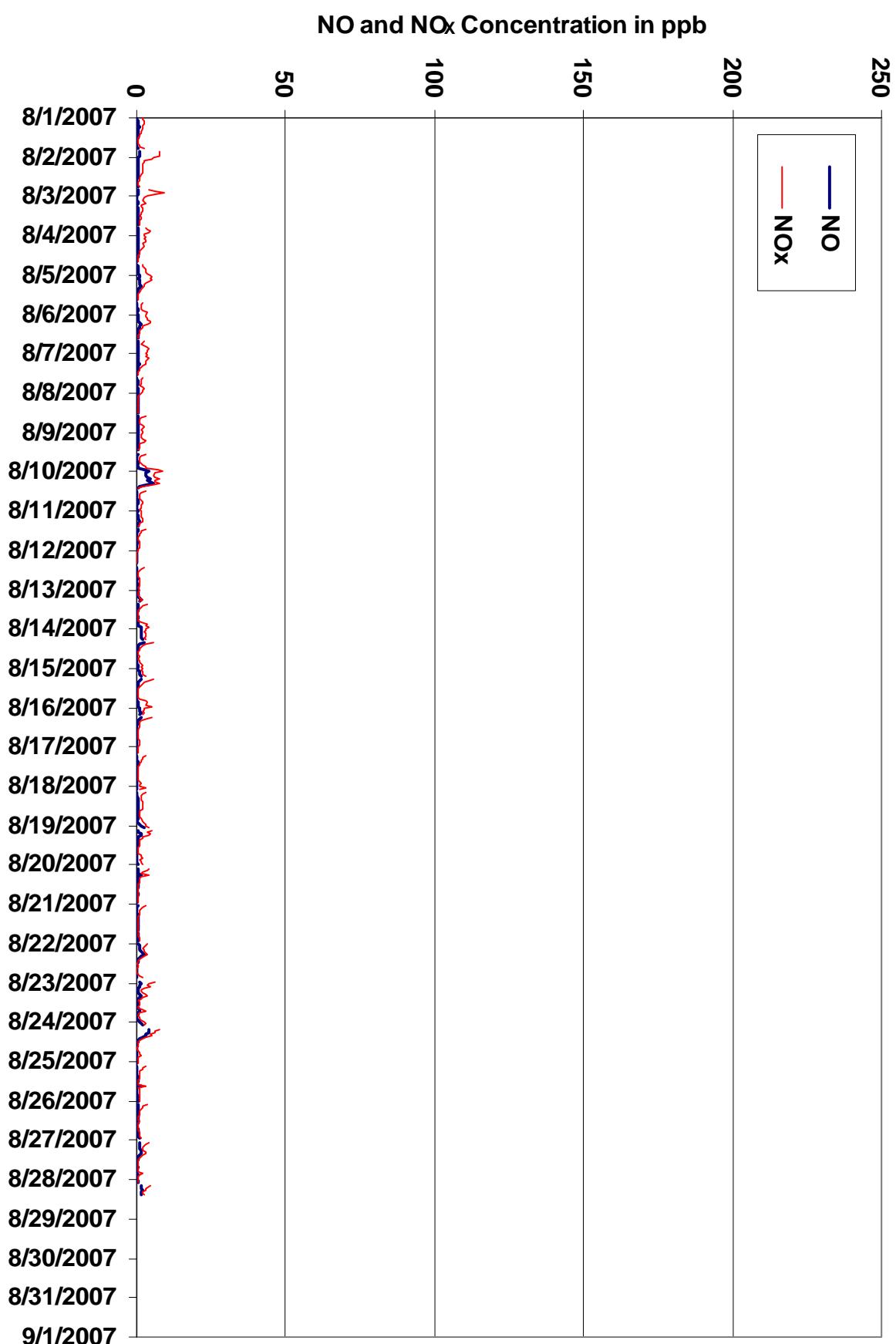


Figure 50. PASZA - Portable-Falher Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Portable-Falher  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Nitric Oxide (NO)

Monitoring Dates: August 1, 2007 to September 1, 2007

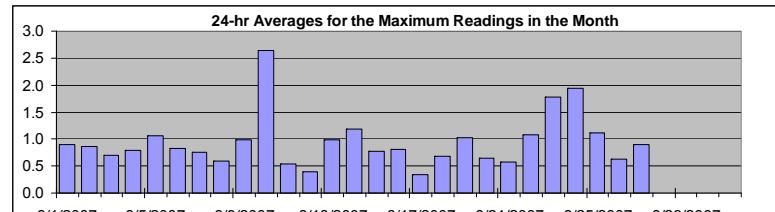
#### Summary

Maximum 1-hr Value:	16.9	ppb	25-Aug	15:00	16:00
Maximum 24-hr Value:	2.6	ppb	10-Aug		

AIC Time:	29 hrs	Operational Time:	630 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 6.4	95 2.7	75 1.0	50 0.6	25 0.4	5 0.3	1 0.3	Average 1.0 ppb	Median 0.6 ppb

#### Day Mountain Standard Time

	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	24-hour Average	Daily Maximum		
1-Aug-07	0:00 1:00	0	0	0	1	1	1	2	1	1	1	1	1	1	0	0	0	0	0	1	1	1	A	3	2	2	0.9	3.0	
2-Aug-07	1:00 2:00	1	1	1	0	0	1	1	1	1	1	0	0	0	0	1	0	0	0	1	A	3	1	2	1	0.9	3.3		
3-Aug-07	2:00 3:00	0	0	0	1	1	0	0	1	0	1	1	1	0	1	2	1	0	1	A	0	1	1	1	0.7	2.1			
4-Aug-07	3:00 4:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	A	0	0	0	1	0.8	1.5			
5-Aug-07	4:00 5:00	2	2	2	3	2	2	1	2	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0	1.1	2.7			
6-Aug-07	5:00 6:00	1	1	1	1	1	2	2	2	1	1	1	1	0	0	0	0	0	0	A	0	0	1	1	0.8	2.1			
7-Aug-07	6:00 7:00	0	0	0	1	1	1	2	1	1	1	1	0	0	0	0	0	0	0	A	0	2	3	0	0.8	3.0			
8-Aug-07	7:00 8:00	1	0	1	1	0	0	1	0	0	0	1	1	1	1	A	1	0	0	0	0	0	0	2	1	1	1	0.6	1.7
9-Aug-07	8:00 9:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	1	0	0	1	1	1	1	1	1.0	4.5
10-Aug-07	9:00 10:00	6	4	4	4	8	5	7	7	8	2	1	A	0	0	0	0	0	0	0	0	1	1	0	0	0	2.6	7.9	
11-Aug-07	10:00 11:00	0	0	1	0	1	1	2	1	1	1	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0.5	1.5		
12-Aug-07	11:00 12:00	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0.4	1.5		
13-Aug-07	12:00 13:00	0	0	0	0	1	2	6	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1.0	6.4		
14-Aug-07	13:00 14:00	2	2	2	2	2	2	3	A	3	2	1	1	1	0	0	0	0	0	0	0	1	0	0	0	1.2	2.7		
15-Aug-07	14:00 15:00	1	1	1	2	2	2	A	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0.8	1.9	
16-Aug-07	15:00 16:00	1	2	2	2	2	A	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	2.1	
17-Aug-07	16:00 17:00	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	0.6		
18-Aug-07	17:00 18:00	0	0	0	A	0	0	0	0	0	1	1	1	1	1	2	0	1	1	1	1	1	0	1	2	0.7	2.1		
19-Aug-07	18:00 19:00	3	4	A	1	1	3	3	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1.0	4.2		
20-Aug-07	19:00 20:00	0	A	1	1	0	1	3	1	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0.6	3.3		
21-Aug-07	20:00 21:00	A	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	A	0.6	2.1		
22-Aug-07	21:00 22:00	1	2	2	1	2	2	2	3	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1.1	3.0		
23-Aug-07	22:00 23:00	2	2	1	1	1	1	1	1	2	2	2	0	1	1	0	0	0	11	5	6	1	0	0	1	1.8	11.3		
24-Aug-07	23:00 00:00	2	3	2	A	6	6	6	5	4	2	2	1	2	1	0	0	0	0	0	0	0	0	0	0	1.9	6.2		
25-Aug-07	00:00 01:00	0	0	A	0	0	0	0	0	1	1	1	1	0	0	0	17	0	0	0	0	0	0	0	0	1.1	16.9		
26-Aug-07	01:00 02:00	1	A	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	0	1	1	1	1	1	0.6	1.2			
27-Aug-07	02:00 03:00	A	2	1	1	2	1	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.9	2.1		
28-Aug-07	03:00 04:00	1	1	1	A	2	2	2	2	2	C	C	C	C	C	C	C	C	A	S	S	S	S	S	S	N	2.5		
29-Aug-07	04:00 05:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0			
30-Aug-07	05:00 06:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0			
31-Aug-07	06:00 07:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0			
Hourly Avg		1.1	1.2	1.1	1.1	1.4	1.4	2.0	1.5	1.4	0.9	0.7	0.5	0.5	0.4	0.5	1.0	0.9	0.8	0.8	0.5	0.7	0.7	0.8	1.0				
Hourly Max		6.2	4.2	4.3	4.0	7.8	6.0	6.7	7.2	7.9	2.4	2.1	1.0	1.8	1.0	2.1	16.9	11.3	5.3	5.8	0.9	3.3	3.0	2.1	4.5				



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

Station: Portable-Falher  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### Summary

Maximum 1-hr Value:	32.2 ppb	25-Aug 15:00	16:00
Maximum 24-hr Value:	5.0 ppb	10-Aug	

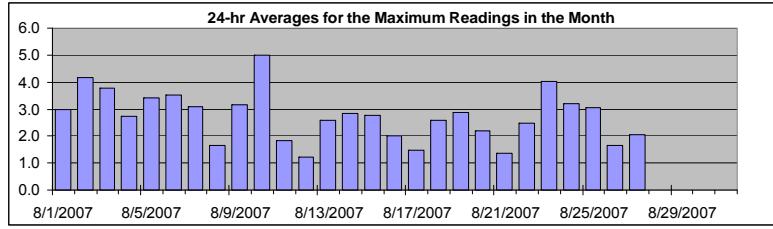
AIC Time:	29 hrs	Operational Time:	630 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	11.2 7.5 3.4 2.0 1.1 0.6 0.3	2.7 ppb	2.0 ppb

### Day Mountain Standard Time

	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	24-hour Average	Daily Maximum	
1-Aug-07	1:00	3	3	3	3	3	3	4	2	2	2	1	1	1	1	1	1	1	2	3	4	A	9	9	8	3.0	9.3	
2-Aug-07	2	6	6	3	3	2	3	2	3	3	2	2	2	2	1	2	1	1	1	4	A	11	10	15	4.2	14.7		
3-Aug-07	3	5	4	5	3	5	2	2	3	3	4	2	2	2	1	7	5	3	1	1	A	5	5	6	6	4	3.8	7.2
4-Aug-07	4	3	3	3	4	3	3	3	4	2	1	1	1	1	1	1	1	1	1	A	3	3	3	4	4	2.7	6.7	
5-Aug-07	5	7	7	6	9	5	5	4	4	2	2	1	1	1	1	1	1	1	1	A	3	2	2	2	4	3.4	8.9	
6-Aug-07	6	4	4	4	5	5	6	4	3	2	2	2	1	1	1	1	1	A	3	3	3	4	6	6	6	3.5	6.4	
7-Aug-07	7	3	4	3	8	5	6	6	3	2	1	2	1	1	1	1	A	3	2	3	4	2	2	3	3	3.1	7.9	
8-Aug-07	8	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	6	2	2	1	1	2	3	4	1.7	6.1	
9-Aug-07	9	3	3	2	3	3	4	4	2	1	1	2	1	1	1	1	A	6	2	1	4	1	1	3	4	3.2	8.7	
10-Aug-07	10	11	8	6	8	12	8	9	10	11	5	1	A	6	2	1	1	1	1	2	3	3	2	2	2	5.0	11.6	
11-Aug-07	11	2	2	2	2	2	3	3	2	1	1	A	5	2	3	1	1	1	1	1	1	2	1	1	2	1.9	5.1	
12-Aug-07	12	1	0	0	0	0	1	0	0	0	A	5	2	1	1	1	1	1	3	2	3	2	1	1	1	1.2	5.4	
13-Aug-07	13	1	1	1	1	1	2	11	1	A	6	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2.6	11.5	
14-Aug-07	14	4	5	3	4	4	3	4	A	8	4	3	2	1	1	1	1	1	1	4	1	2	2	2	3	2.9	8.2	
15-Aug-07	15	4	2	2	3	3	5	A	7	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	7	2.8	7.8	
16-Aug-07	16	3	3	3	3	3	A	8	5	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2.0	7.5	
17-Aug-07	17	1	1	1	1	A	6	4	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	5.7	
18-Aug-07	18	1	6	3	A	5	2	2	2	2	3	3	3	3	3	3	4	1	1	1	2	2	2	3	3	2.6	5.8	
19-Aug-07	19	5	5	A	7	4	6	7	3	3	2	2	1	1	1	1	1	1	1	1	4	3	4	1	2	2.9	7.2	
20-Aug-07	20	4	A	7	8	2	2	9	2	1	1	3	2	1	1	1	1	1	1	2	2	1	1	1	0	2.2	8.7	
21-Aug-07	21	A	6	2	1	1	1	3	1	1	1	1	1	1	1	1	3	0	1	1	2	1	1	1	A	1.4	5.8	
22-Aug-07	22	6	4	3	3	3	5	4	5	5	2	1	1	1	1	1	1	0	1	1	1	1	2	3	A	2.5	7.0	
23-Aug-07	23	5	5	6	3	2	2	2	4	5	3	3	1	1	1	1	1	18	11	13	1	1	1	1	3	4.0	17.9	
24-Aug-07	24	3	3	3	A	9	8	8	6	7	4	3	1	3	1	1	1	0	1	2	3	2	1	1	1	3.2	8.7	
25-Aug-07	25	1	1	A	5	3	3	2	1	1	2	2	1	1	1	1	32	1	1	2	2	1	1	2	1	3.0	32.2	
26-Aug-07	26	1	A	7	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1.6	6.7	
27-Aug-07	27	A	6	3	3	2	2	3	3	3	3	2	1	1	1	0	1	1	1	1	1	1	1	3	2	1	2.1	6.4
28-Aug-07	28	1	2	2	A	7	4	4	3	3	3	C	C	C	C	C	C	C	A	S	S	S	S	S	S	N	6.7	
29-Aug-07	29	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
30-Aug-07	30	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
31-Aug-07	31	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
Hourly Avg		3.4	3.7	3.3	3.7	3.6	3.6	4.2	3.1	2.9	2.3	2.0	1.5	1.4	1.5	1.4	2.3	1.9	1.9	2.3	2.0	3.0	3.1	3.6	3.8			
Hourly Max		10.7	8.4	6.7	8.9	11.6	8.4	11.5	10.2	11.3	6.4	5.4	5.1	5.8	7.2	6.1	32.2	17.9	11.0	13.4	5.1	11.1	10.1	14.7	9.6			

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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



### Status Flag Characters

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

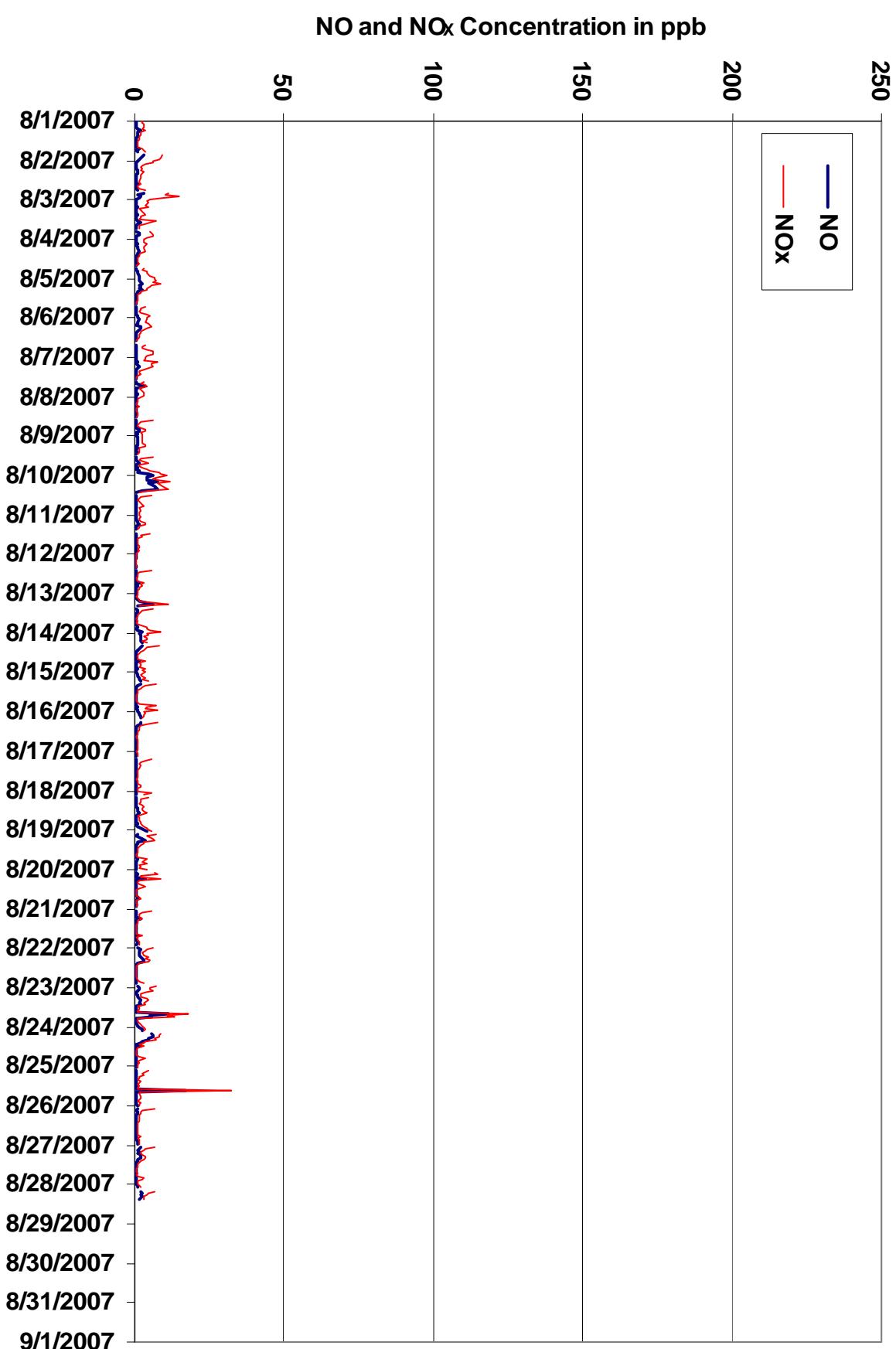


Figure 51. PASZA - Portable-Falher Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

## PASZA - Portable-Falher Ozone Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

**Summary**

Number of 1-hr Exceedances: 0

Maximum 1-hr Average: 42.7 ppb 19-Aug 16:00 17:00

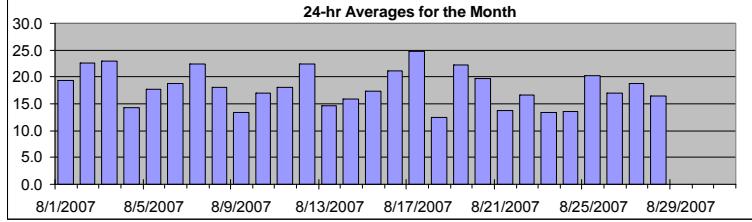
Maximum 24-hr Average: 24.8 ppb 17-Aug

AIC Time:	30 hrs							Operational Time: 652 hrs							
Calibration Time:	3 hrs							AMD Operational Uptime: 100.0%							
Percentile	99	95	75	50	25	5	1	Average 17.9 ppb							
	36.8	32.6	25.3	18.1	9.7	3.9	1.2								Median 18.1 ppb

		Day		Mountain		Standard		Time																										
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	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
1-Aug-07	21	19	15	12	9	9	9	12	15	18	22	24	27	29	30	32	33	34	33	24	A	8	6	5	19.4	34.0								
2-Aug-07	6	8	10	11	11	9	12	14	25	30	34	33	34	35	33	35	34	33	33	A	29	18	12	17	22.5	35.3								
3-Aug-07	23	24	24	20	19	25	23	18	25	22	25	29	31	31	30	30	28	27	A	29	17	9	9	10	23.0	31.3								
4-Aug-07	9	7	7	6	6	7	7	9	12	15	18	20	24	24	26	26	27	A	25	19	9	8	8	9	14.3	26.8								
5-Aug-07	6	5	4	4	3	4	5	6	11	19	26	32	32	32	36	35	A	32	28	23	25	18	14	11	17.8	36.2								
6-Aug-07	9	6	1	2	2	5	8	13	17	22	28	31	35	35	31	A	33	32	29	26	19	18	15	12	18.8	35.4								
7-Aug-07	14	12	13	9	12	13	14	20	26	28	28	27	32	34	A	32	31	29	32	32	26	19	16	15	22.4	34.1								
8-Aug-07	14	18	20	21	22	24	23	23	21	20	20	20	20	A	20	21	21	20	20	16	10	6	8	7	18.1	23.9								
9-Aug-07	5	8	5	5	6	7	7	8	12	13	15	19	A	22	24	26	27	24	22	18	15	11	8	2	13.4	26.6								
10-Aug-07	1	2	1	1	1	2	3	7	12	23	30	A	33	33	33	33	30	26	21	20	22	20	19	18	17.0	33.5								
11-Aug-07	16	16	11	11	10	6	7	12	17	22	A	23	25	26	27	27	27	27	27	25	19	17	17	14	18	18.1	27.3							
12-Aug-07	20	23	28	29	27	24	24	23	26	A	27	27	27	27	27	27	27	24	20	19	17	14	11	13	12	22.4	28.6							
13-Aug-07	9	9	10	8	8	6	6	11	A	15	16	19	20	20	21	21	23	24	28	21	12	10	9	8	14.6	27.8								
14-Aug-07	8	7	5	4	4	6	6	A	10	15	18	19	21	23	25	28	27	26	26	22	20	17	16	14	16.0	27.5								
15-Aug-07	17	16	12	7	4	2	A	8	14	16	23	26	27	29	30	31	31	27	27	21	14	7	6	5	17.4	31.1								
16-Aug-07	4	5	9	7	7	A	9	13	18	22	27	29	32	32	32	31	30	30	29	28	25	24	22	23	21.2	32.4								
17-Aug-07	23	24	24	23	A	24	23	22	25	24	25	26	27	30	30	31	30	30	27	25	24	21	16	16	24.8	30.6								
18-Aug-07	17	15	18	A	17	16	15	14	13	11	9	7	9	9	15	18	15	16	15	10	9	8	6	3	12.4	18.0								
19-Aug-07	2	1	A	1	2	1	3	10	13	18	26	37	40	40	39	41	43	41	31	30	24	27	21	19	22.2	42.7								
20-Aug-07	18	A	13	12	12	12	9	15	20	21	22	21	22	22	25	25	25	24	25	24	24	23	20	20	19.7	25.1								
21-Aug-07	A	16	15	15	15	14	12	11	11	11	12	14	17	19	19	17	18	17	12	12	11	9	6	A	13.7	19.0								
22-Aug-07	6	9	8	6	7	7	5	7	14	19	24	25	28	28	29	29	30	30	28	19	11	10	A	4	16.7	29.7								
23-Aug-07	5	4	3	7	5	6	4	6	7	10	21	27	27	24	21	22	23	23	22	14	13	11	7	5	13.3	27.5								
24-Aug-07	4	2	1	A	0	0	1	4	7	8	13	20	23	23	26	26	24	26	24	20	18	13	16	18	15	13.5	26.9							
25-Aug-07	16	22	A	27	29	23	14	13	15	16	20	21	25	25	25	24	23	27	23	20	17	17	12	9	20.2	29.0								
26-Aug-07	8	A	9	9	8	10	14	14	13	15	18	18	20	23	25	30	30	28	25	19	14	15	14	11	11.2	16.9	30.1							
27-Aug-07	A	8	8	8	7	5	5	10	14	19	24	29	32	33	34	34	32	30	22	15	11	9	9	18.9	34.3									
28-Aug-07	6	4	4	A	5	4	7	8	11	16	23	33	27	30	30	28	28	29	28	24	14	7	6	6	16.4	33.1								
29-Aug-07	8	9	10	A	10	10	10	10	11	C	C	C	A	S	S	S	S	S	S	S	S	S	S	S	N	10.8								
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0									
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0									

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

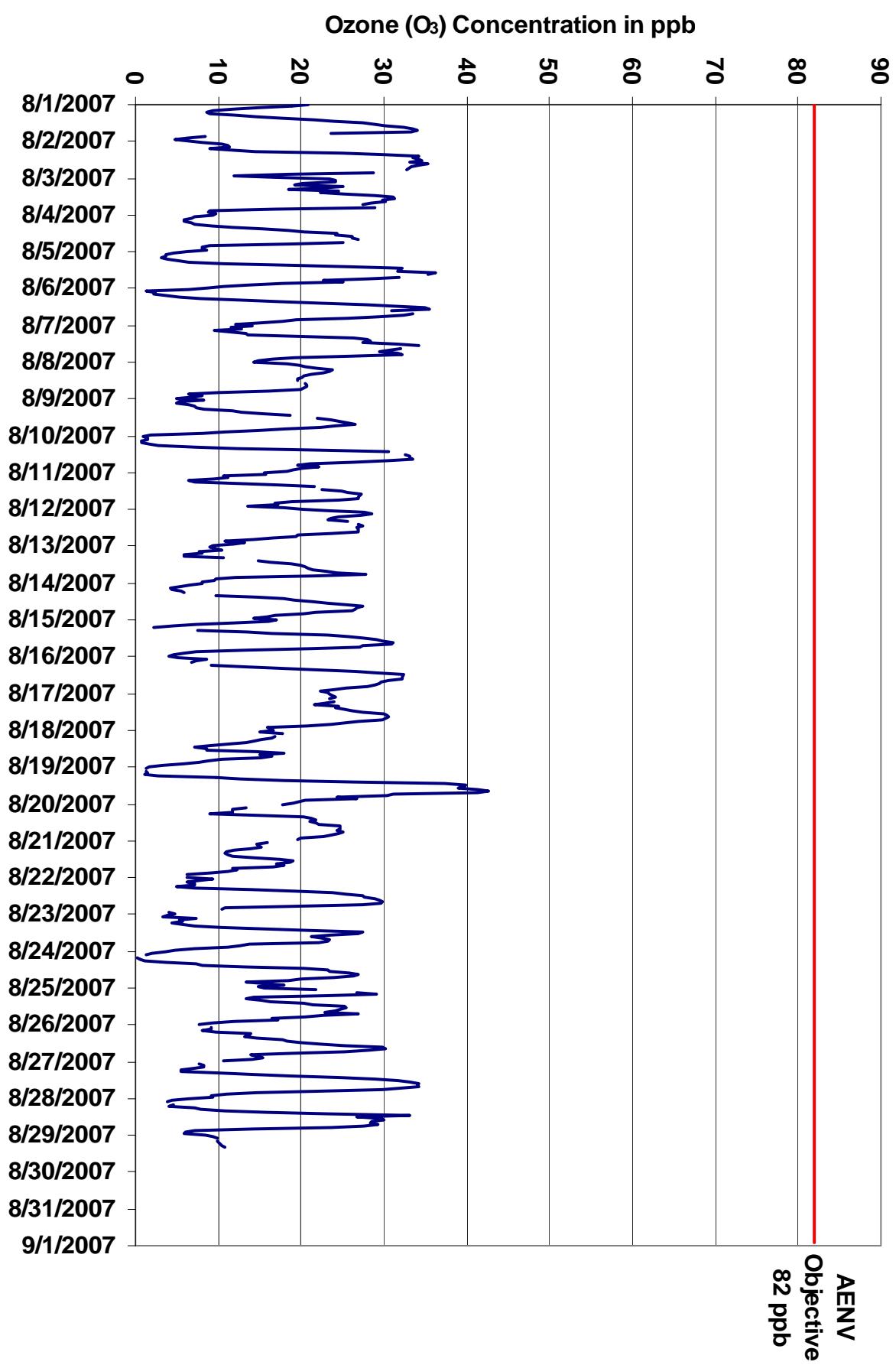


Figure 52. PASZA - Portable-Fallher Ozone 1-hr Average Monthly Trend

Station: Portable-Falher  
 Station Owner: PASZA

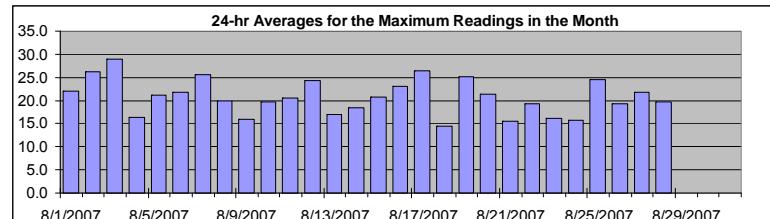
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	50.2 ppb	3-Aug 13:00 14:00
Maximum 24-hr Value:	28.8 ppb	3-Aug



#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	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	Daily Maximum
1-Aug-07	22 1:00	20	17	14	11	10	11	14	17	20	24	26	29	31	33	34	35	36	36	36	A	13	9	6	21.9	36.2	
2-Aug-07	9 2:00	12	12	12	13	11	14	19	29	33	37	35	36	37	35	37	36	36	36	36	A	35	33	19	26	26.2	37.1
3-Aug-07	26 3:00	30	28	24	27	27	28	22	35	34	34	34	33	50	39	37	32	30	A	33	26	11	12	10	28.8	50.2	
4-Aug-07	11 4:00	9	8	7	7	8	10	11	16	17	20	23	26	26	29	28	29	A	26	24	13	11	10	12	16.4	28.8	
5-Aug-07	8 5:00	6	7	6	4	6	6	10	13	25	33	34	34	34	39	38	A	36	33	28	30	25	20	14	21.2	38.7	
6-Aug-07	15 6:00	12	3	4	3	8	10	16	20	26	31	34	37	37	36	A	35	35	31	29	23	20	18	16	21.7	37.4	
7-Aug-07	18 7:00	14	14	13	13	17	16	25	29	30	31	30	34	37	A	35	35	33	35	35	30	24	21	17	25.6	37.5	
8-Aug-07	17 8:00	20	22	22	24	25	25	24	23	22	22	21	21	A	22	23	22	22	22	20	13	9	9	9	19.8	25.2	
9-Aug-07	6 9:00	10	7	6	7	8	9	10	13	15	18	21	A	23	25	27	28	27	24	23	17	17	16	8	15.9	28.4	
10-Aug-07	2 10:00	3	4	1	2	3	5	10	17	28	33	A	34	34	35	36	32	30	24	25	25	27	22	20	19.7	35.5	
11-Aug-07	17 11:00	18	15	14	12	9	11	17	20	25	A	24	26	27	29	28	28	28	28	21	19	19	17	21	20.6	28.9	
12-Aug-07	21 12:00	27	28	30	28	26	25	25	27	A	28	29	28	28	28	28	27	23	22	20	19	13	15	14	24.4	29.5	
13-Aug-07	10 1:00	10	12	10	10	8	9	13	A	18	20	20	21	22	22	23	26	27	29	28	16	13	11	12	16.9	29.1	
14-Aug-07	9 2:00	8	6	5	5	6	7	A	13	17	19	21	23	26	27	29	28	30	31	26	23	20	21	21	18.4	30.6	
15-Aug-07	25 3:00	19	15	11	8	3	A	13	15	21	27	28	31	31	31	33	32	31	25	18	12	7	6	20.7	32.7		
16-Aug-07	5 4:00	8	10	9	8	A	11	16	20	24	28	32	37	36	33	33	31	31	29	27	24	23	25	23.0	37.4		
17-Aug-07	24 5:00	25	25	25	A	25	24	24	25	26	26	28	30	31	32	32	31	31	29	27	25	23	22	18	26.4	32.0	
18-Aug-07	19 6:00	19	19	19	A	17	17	16	15	15	13	11	8	10	11	20	21	17	18	18	14	11	9	8	14.4	20.9	
19-Aug-07	5 7:00	3	A	2	2	2	6	12	18	21	36	40	42	42	41	44	44	45	39	33	28	29	24	21	25.2	45.3	
20-Aug-07	20 8:00	A	14	13	13	13	18	22	22	23	25	23	25	26	26	26	25	26	25	25	25	24	23	21	21.4	26.4	
21-Aug-07	A 9:00	18	16	15	16	15	14	12	12	13	16	19	22	20	19	20	20	20	14	14	14	11	9	A	15.4	21.8	
22-Aug-07	9 10:00	13	10	8	9	9	8	11	17	24	27	27	29	30	31	31	31	30	24	13	12	A	7	19.2	31.4		
23-Aug-07	7 11:00	6	6	10	6	7	6	8	10	12	27	30	29	27	26	25	26	26	26	17	15	15	10	6	16.0	29.7	
24-Aug-07	5 12:00	3	2	A	1	2	2	6	9	10	18	25	25	25	28	29	28	27	21	20	17	19	20	17	15.7	29.0	
25-Aug-07	22 1:00	25	A	30	31	28	18	18	17	18	25	25	28	28	27	32	37	31	30	28	22	21	14	10	24.5	37.2	
26-Aug-07	9 2:00	A	12	10	9	13	16	15	15	17	19	20	22	25	28	35	32	32	28	23	15	17	16	13	19.2	35.1	
27-Aug-07	A 3:00	9	10	9	9	7	8	13	17	23	29	31	34	35	36	37	37	36	33	28	19	13	12	15	21.7	37.2	
28-Aug-07	12 4:00	8	9	A	11	7	8	9	13	21	30	36	30	32	32	30	30	31	31	27	24	9	8	7	19.8	36.4	
29-Aug-07	10 5:00	10	10	11	A	11	11	11	12	12	C	C	C	A	S	S	S	S	S	S	S	S	S	S	12.0		
30-Aug-07	S 6:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		
31-Aug-07	S 7:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		
Hourly Avg		13.4	13.5	12.6	12.4	11.4	12.0	12.3	14.9	18.2	21.3	25.5	26.7	28.6	30.2	30.0	30.7	30.3	30.0	28.3	25.2	20.8	17.6	15.4	14.0		
Hourly Max		26.2	29.8	28.5	30.1	30.8	28.2	27.7	25.2	35.4	34.3	37.1	39.8	41.7	50.2	41.0	44.0	44.4	45.3	39.0	35.5	35.1	32.7	24.2	25.6		

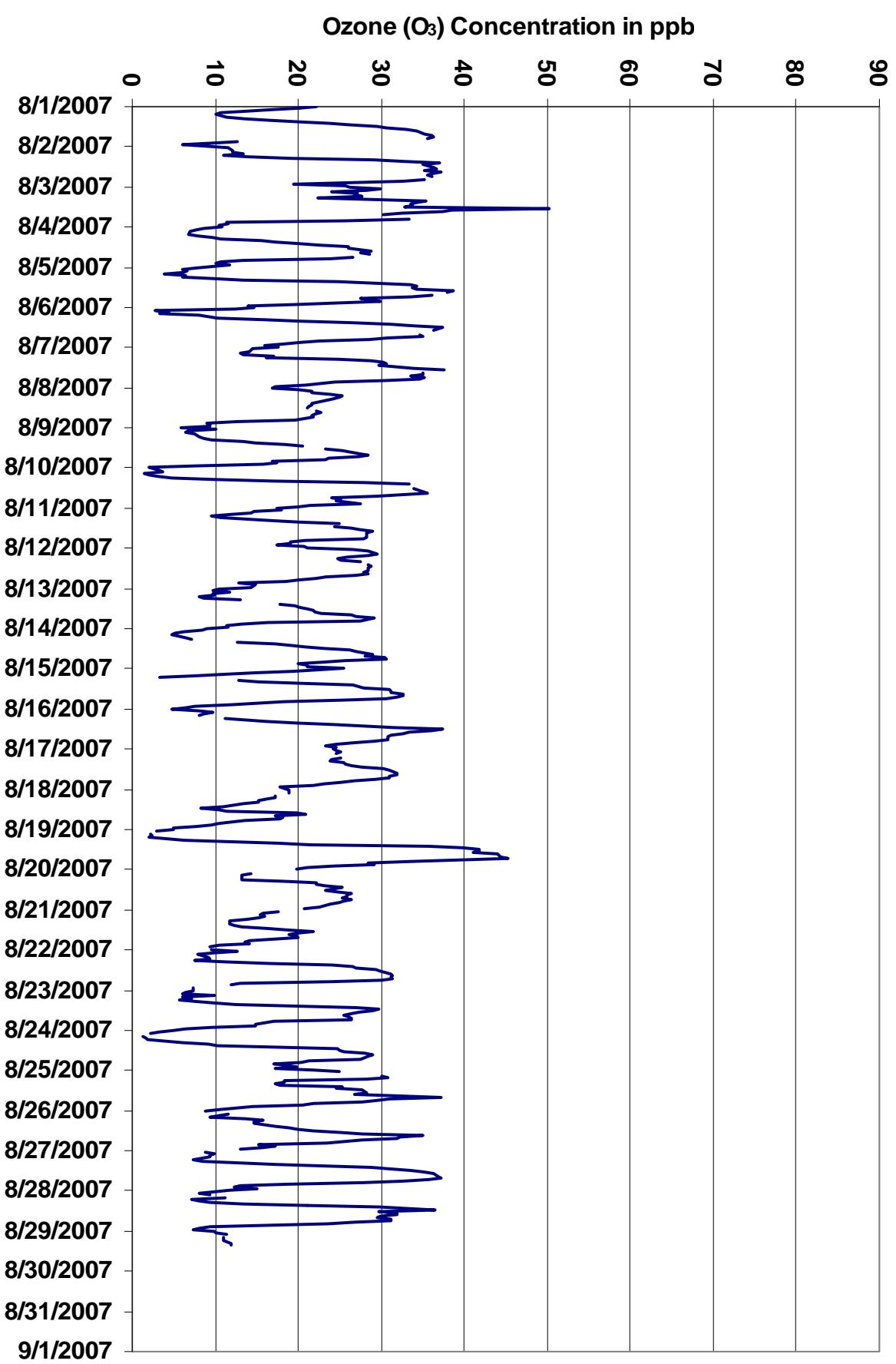
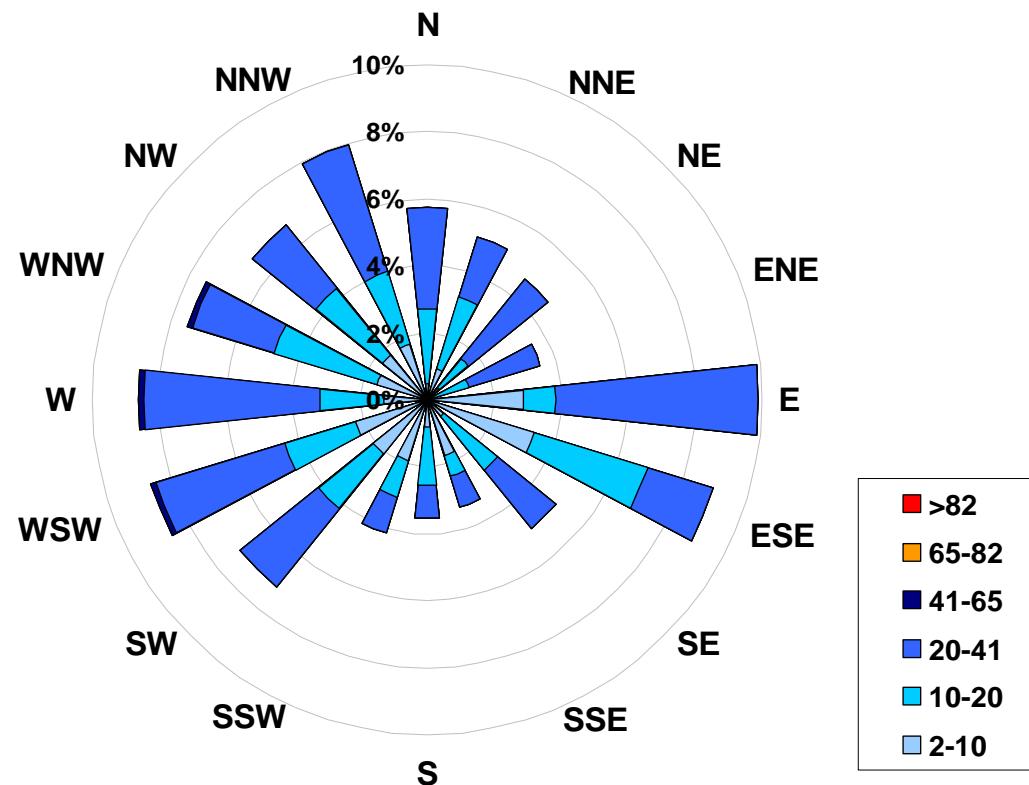


Figure 53. PASZA - Portable-Falher Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Ozone (in ppb) Located at the  
Portable-Falher Site for August 2007**



Calms: 0%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	169
10	to	20	194
20	to	41	286
41	to	65	3
65	to	82	0
> 82			0
Total Non-Zero Values			652

# PASZA - Portable-Falher Ozone Eight Hour Average Summary

Station: Portable-Falher  
 Station Owner: PASZA

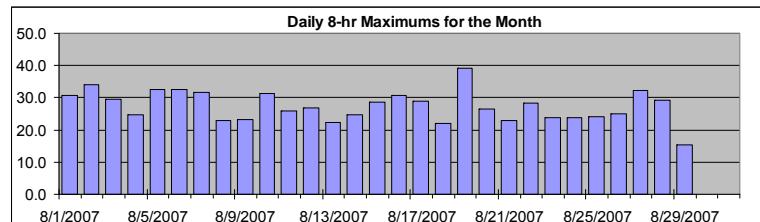
## EIGHT HOUR RUNNING AVERAGE TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

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

Number of 8-hr Exceedances: 0  
 Maximum 8-hr Average: 39.0 ppb 19-Aug 18:00 19:00



### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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 1:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00

## PASZA - Portable-Falher Total Reduced Sulphur Monthly Summary

Station: Portable-Falher  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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

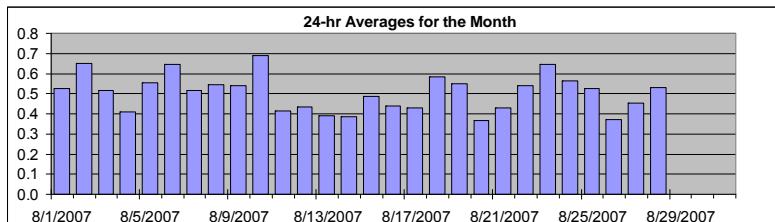
Maximum 1-hr Average:	2.0	ppb	10-Aug	6:00 7:00
Maximum 24-hr Value:	0.7	ppb	10-Aug	

AIC Time:	30 hrs	Operational Time:	650 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.2	0.9	0.6	0.5	0.4	0.3	0.3	0.5 ppb	0.5 ppb

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-Aug-07	0	0	0	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	A	1	1	1	0.5	1.1
2-Aug-07	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	0.6	1.2
3-Aug-07	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	1	1	0.5	0.7
4-Aug-07	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0.4	0.6
5-Aug-07	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	0.6	0.8
6-Aug-07	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	0.6	1.3
7-Aug-07	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	1	0	1	1	1	0.5	0.7
8-Aug-07	1	1	0	0	1	0	0	0	0	1	1	1	1	1	A	1	1	0	1	0	1	1	1	1	1	0.5	0.7
9-Aug-07	1	1	0	0	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8
10-Aug-07	1	1	1	1	1	1	2	2	1	1	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0.7	2.0
11-Aug-07	1	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.4	0.6
12-Aug-07	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0.4	0.6
13-Aug-07	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0.4	0.8
14-Aug-07	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.2
15-Aug-07	0	0	0	0	0	0	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.8
16-Aug-07	1	1	1	0	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
17-Aug-07	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.7
18-Aug-07	1	1	1	A	1	1	0	0	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0.6	0.8
19-Aug-07	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.3
20-Aug-07	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.9
21-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	0.4	0.6
22-Aug-07	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0.5	0.7
23-Aug-07	1	1	1	1	1	1	1	1	1	1	0	C	C	1	0	0	0	0	0	0	0	0	0	0	0	0.6	1.0
24-Aug-07	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.6	1.0
25-Aug-07	1	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0.5	1.1
26-Aug-07	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	0.4	0.7
27-Aug-07	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.5	0.7
28-Aug-07	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	0.9
29-Aug-07	1	1	0	A	1	1	1	1	0	C	C	C	A	S	S	S	S	S	S	S	S	S	S	S	S	1.0	
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		

**HOURLY AVERAGE TABLE**

**Total Reduced Sulphur (TRS)**



**Status Flag Characters**

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

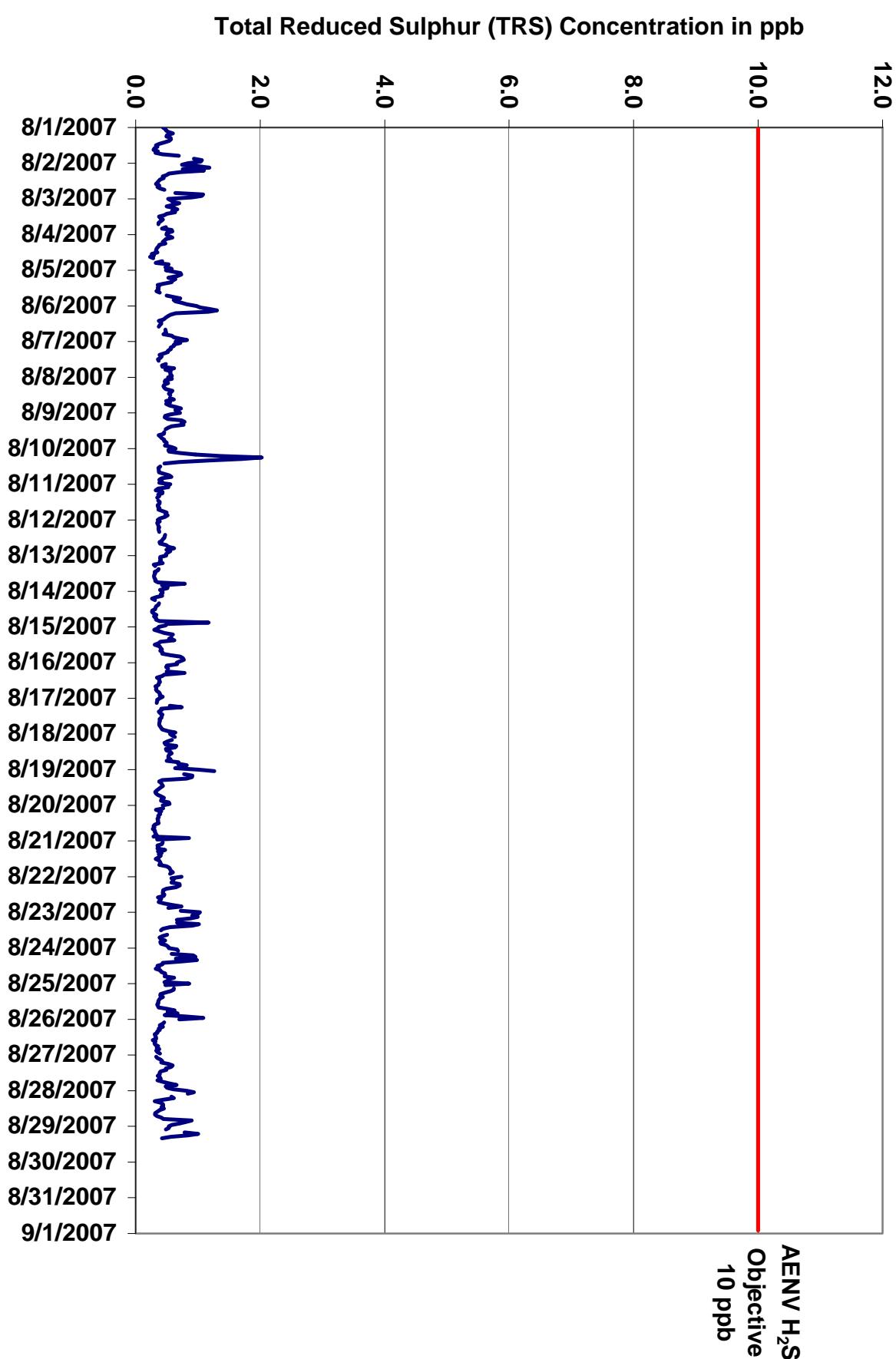


Figure 54. PASZA - Portable-Falher Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Portable-Falher  
 Station Owner: PASZA

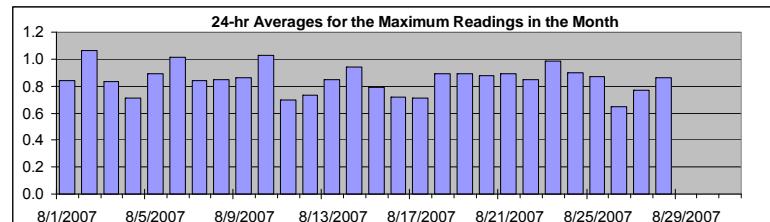
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Reduced Sulphur (TRS)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	7.3	ppb	14-Aug	21:00 22:00
Maximum 24-hr Value:	1.1	ppb	2-Aug	



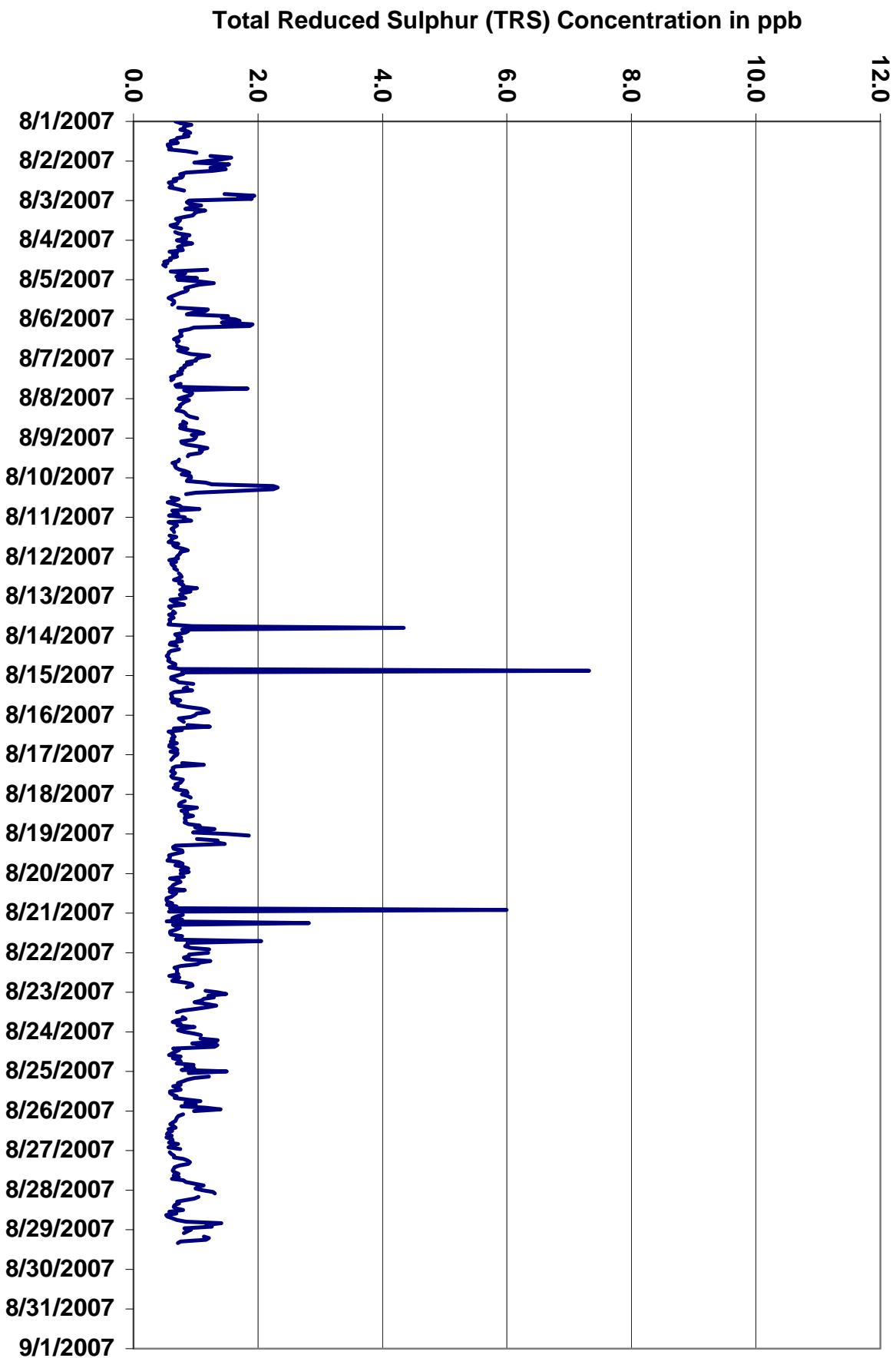
#### Status Flag Characters

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

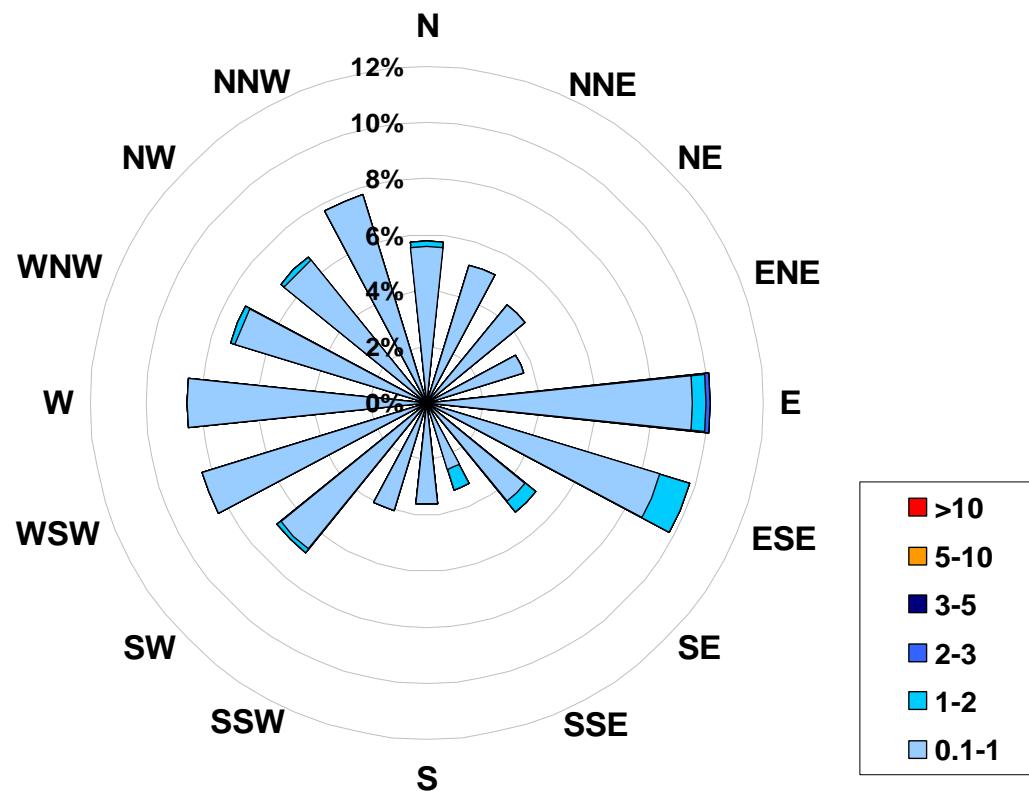
#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	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	Daily Maximum
1-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	1	0.8	1.6
2-Aug-07	1:00	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	2	1.1	1.9	
3-Aug-07	1:00	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	1.2	
4-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	A	1	1	1	1	0.7	1.2	
5-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.5	
6-Aug-07	1:00	2	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.9
7-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	1	1	0.8	1.8	
8-Aug-07	1:00	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	
9-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.2	
10-Aug-07	1:00	1	1	1	1	1	2	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.3
11-Aug-07	1:00	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
12-Aug-07	1:00	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	
13-Aug-07	1:00	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	4.3	
14-Aug-07	1:00	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	7.3	
15-Aug-07	1:00	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
16-Aug-07	1:00	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	1.2	
17-Aug-07	1:00	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1	
18-Aug-07	1:00	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
19-Aug-07	1:00	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	1.9	
20-Aug-07	1:00	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	0.9	6.0	
21-Aug-07	1:00	A	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	0.9	2.8	
22-Aug-07	1:00	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	
23-Aug-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	1	1	1	1	1	1	1	1.0	1.5	
24-Aug-07	1:00	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	1.4	
25-Aug-07	1:00	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	1.5	
26-Aug-07	1:00	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
27-Aug-07	1:00	A	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	
28-Aug-07	1:00	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	1.4	
29-Aug-07	1:00	1	1	1	A	1	1	1	1	1	1	C	C	C	A	S	S	S	S	S	S	S	S	S	N	1.2	
30-Aug-07	1:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
31-Aug-07	1:00	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
Hourly Avg	1.0	1.0	0.9	0.9	0.9	0.9	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.9	0.9	0.9	1.2	1.2	0.9	
Hourly Max	1.6	1.9	1.5	1.9	1.9	2.2	2.8	2.2	1.7	1.3	1.0	0.9	1.0	1.0	0.8	0.8	0.8	2.1	1.8	4.3	1.5	7.3	6.0	1.9			

Figure 55. PASZA - Portable-Falher 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-Falher Site for August 2007**



Calms: 0%

Frequency Distribution of TRS in ppb		
Range		Frequency (hrs)
0.1	<	1
1	to	2
2	to	3
3	to	5
5	to	10
>	10	0
Total Non-Zero Values		650

# PASZA - Portable-Falher Relative Humidity Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	100.0	%	6-Aug	3:00 4:00
Maximum 24-hr Value:	93.1	%	21-Aug	

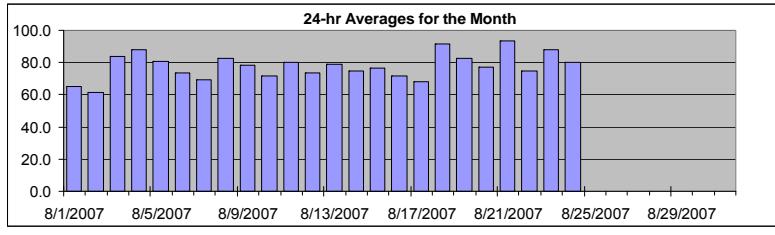
AIC Time:	0 hrs	Operational Time:	592 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	86.2%						
Percentile	99	95	75	50	25	5	1	Average	Median
	100.0	98.8	93.0	81.4	64.2	48.2	39.1	78.0 %	81.4 %

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-Aug-07	78	77	80	83	87	87	83	74	69	65	62	59	51	47	45	42	40	40	42	51	66	71	76	86	65.1	87.1
2-Aug-07	87	89	90	92	92	95	91	82	66	60	57	55	49	42	37	36	34	35	35	42	39	47	57	64	61.5	95.2
3-Aug-07	61	77	92	93	91	91	93	92	87	90	87	81	77	73	70	68	70	71	79	85	94	97	98	99	83.8	98.6
4-Aug-07	98	99	99	99	98	98	98	96	93	90	89	82	78	73	66	62	69	71	83	92	94	95	95	88.2	98.9	
5-Aug-07	97	96	98	99	99	99	99	97	92	79	70	60	62	62	52	54	57	64	64	75	84	92	89	96	80.7	99.2
6-Aug-07	98	100	100	100	100	99	99	95	89	82	71	60	53	47	46	48	48	46	47	52	63	66	71	76	73.2	100.0
7-Aug-07	77	79	82	83	79	75	77	69	61	59	60	63	55	51	51	68	58	58	51	69	80	84	90	90	69.6	90.1
8-Aug-07	91	89	85	86	88	88	93	94	88	83	84	90	80	73	67	66	70	70	69	76	81	87	90	90	82.4	94.1
9-Aug-07	93	91	94	93	93	93	93	92	86	83	79	73	67	63	54	49	49	60	64	67	74	84	89	93	78.2	93.6
10-Aug-07	95	96	98	98	99	99	99	96	91	80	61	47	44	40	39	39	38	46	55	57	59	77	80	90	71.7	98.9
11-Aug-07	98	97	98	96	97	97	98	95	87	82	78	75	68	67	60	59	58	56	61	72	80	80	85	79	80.0	98.1
12-Aug-07	79	74	66	65	75	80	74	71	65	62	60	58	58	56	55	54	67	85	86	90	94	96	94	95	73.4	96.4
13-Aug-07	96	95	93	95	95	96	96	91	88	83	78	71	67	65	62	61	62	60	50	62	72	78	83	88	78.6	96.2
14-Aug-07	93	95	97	98	98	98	95	93	85	72	65	64	60	54	48	45	52	56	54	63	70	75	78	82	74.6	98.0
15-Aug-07	79	83	91	95	96	97	98	97	93	87	76	69	62	56	55	51	50	54	54	63	71	81	86	85	76.3	98.3
16-Aug-07	92	92	91	90	93	94	92	87	77	68	62	58	55	54	52	51	51	52	52	57	64	72	81	77	71.4	93.8
17-Aug-07	75	72	70	69	71	69	71	76	73	71	68	63	58	54	53	53	55	57	64	69	75	77	82	83	67.9	82.9
18-Aug-07	88	88	88	86	88	89	90	88	88	89	95	96	93	93	87	86	94	92	92	95	96	96	98	99	91.4	99.5
19-Aug-07	100	100	100	100	100	100	100	100	100	100	95	78	68	61	56	49	47	49	58	71	80	85	89	92	82.5	100.0
20-Aug-07	90	89	88	88	89	89	89	78	66	63	64	75	91	79	68	62	62	60	63	69	72	74	90	92	77.1	91.6
21-Aug-07	92	94	95	96	96	95	96	96	95	94	96	94	94	92	92	90	85	86	92	92	91	92	94	95	93.1	96.4
22-Aug-07	96	94	95	98	99	100	99	95	88	75	63	58	53	55	53	51	49	48	51	65	74	77	79	85	75.0	99.8
23-Aug-07	90	93	91	93	94	93	95	94	93	91	80	74	74	74	87	91	83	81	77	89	92	96	95	96	88.2	96.3
24-Aug-07	98	100	100	100	100	99	95	95	92	92	83	71	62	58	55	51	50	55	66	70	80	80	81	91	80.3	99.9
25-Aug-07	97	97	98	98	97	97	98	96	95	93	86	84	78	75	77	76	N	N	N	N	N	N	N	N	98.2	
26-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
27-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
28-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
29-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	S	S	S	S	S	S	S	S	S	
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	

Hourly Avg	89.5	90.2	91.1	91.7	92.6	92.7	92.5	89.5	84.0	79.0	74.2	70.5	66.3	62.7	59.7	58.6	58.3	60.9	62.5	70.2	77.5	81.7	85.8	88.6
Hourly Max	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.7	96.1	93.9	93.2	91.7	91.2	94.1	91.8	92.4	94.6	96.3	97.4	98.0	99.5

## HOURLY AVERAGE TABLE

## Relative Humidity (RH)



## Status Flag Characters

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

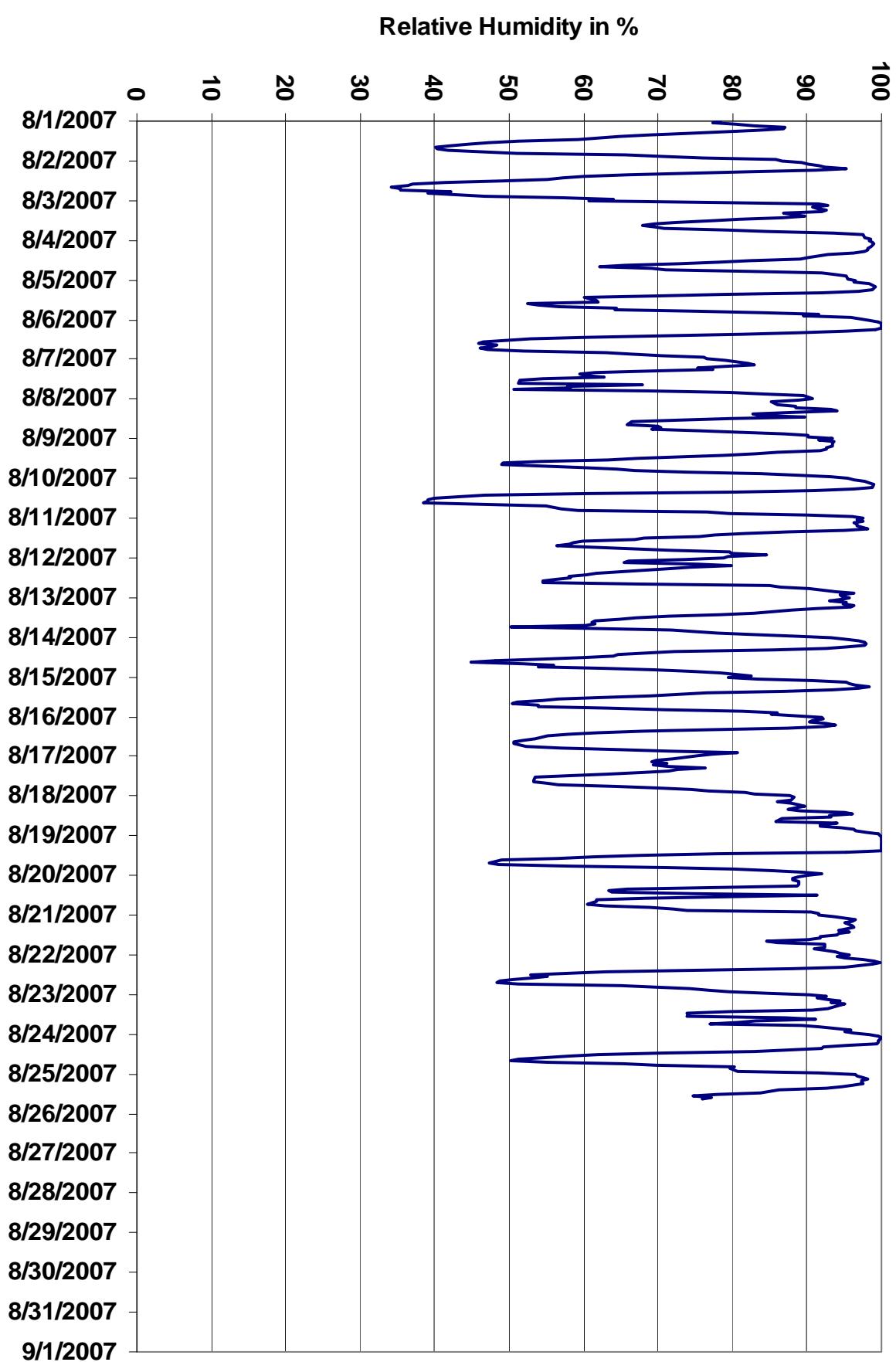


Figure 56. PASZA - Portable-Falher Relative Humidity 1-hr Average Monthly Trend

# PASZA - Portable-Falher Temperature Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	26.5 °C	2-Aug 18:00 19:00
Maximum 24-hr Value:	19.9 °C	2-Aug

AIC Time:	0 hrs	Operational Time:	592 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	86.2%
Percentile	99 95 75 50 25 5 1	Average	Median
	25.4 21.3 16.6 13.5 11.2 7.8 4.6	14.0 °C	13.5 °C

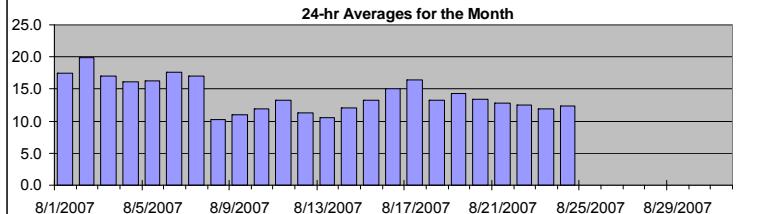
## Day Mountain Standard Time

	Hour Start 1:00	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	24-hour Average	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	24:00					
1-Aug-07	13	13	12	11	10	10	12	14	15	17	19	20	21	22	23	23	24	24	24	23	20	18	16	14	17.4	24.0		
2-Aug-07	13	12	13	13	13	12	14	16	18	20	21	22	23	24	25	26	26	26	26	25	25	23	21	19	19.9	26.5		
3-Aug-07	19	17	16	15	15	15	15	15	16	16	17	18	18	20	20	20	20	20	18	17	16	15	14	14	17.0	20.3		
4-Aug-07	14	13	13	13	13	14	14	14	15	15	16	16	17	18	19	21	21	21	20	18	17	16	14	14	16.2	21.2		
5-Aug-07	13	12	12	12	11	11	12	13	15	18	19	20	20	20	21	21	21	19	20	18	18	16	15	15	16.2	21.5		
6-Aug-07	13	12	10	10	9	9	11	13	15	17	19	21	22	23	24	24	25	26	25	23	20	18	17	15	17.6	25.5		
7-Aug-07	15	14	13	13	14	15	15	17	18	19	19	20	21	21	21	19	22	22	21	17	15	13	12	12	17.0	21.7		
8-Aug-07	11	11	10	9	8	8	8	8	9	9	9	9	11	11	12	13	12	12	12	12	11	11	10	9	10.2	12.5		
9-Aug-07	9	9	9	8	8	8	8	9	9	10	10	11	12	13	15	15	15	14	14	14	14	11	10	8	11.0	15.2		
10-Aug-07	7	5	5	4	3	3	4	9	13	15	16	17	18	18	18	18	17	17	17	16	13	12	11	11	11.9	18.5		
11-Aug-07	11	11	11	11	11	10	10	11	12	13	14	14	15	15	16	17	17	17	16	15	14	13	12	12	13.2	17.0		
12-Aug-07	11	11	11	11	10	9	10	10	11	12	13	13	14	14	15	15	14	14	12	11	10	10	9	9	9.9	9.9		
13-Aug-07	9	9	9	8	8	7	8	8	9	10	11	12	13	13	13	14	14	14	14	14	13	11	9	8	7	10.5	14.5	
14-Aug-07	6	6	5	5	4	4	6	8	10	12	14	15	16	18	19	20	18	18	18	18	17	15	13	13	11	12.0	19.6	
15-Aug-07	12	11	9	8	8	7	8	10	11	12	13	15	16	17	18	19	19	19	18	18	18	16	13	11	11	13.3	18.8	
16-Aug-07	9	8	8	8	8	8	9	12	15	17	18	19	20	21	21	21	21	21	20	19	17	15	13	13	13	15.1	21.1	
17-Aug-07	14	14	14	14	13	13	13	14	15	15	16	18	19	20	21	21	21	21	20	19	18	16	16	15	14	16.4	20.8	
18-Aug-07	13	12	12	13	13	13	13	14	14	14	13	12	13	13	14	14	13	14	14	14	14	13	13	10	13.3	14.4		
19-Aug-07	10	9	9	10	11	11	10	11	12	13	14	16	18	19	20	20	21	21	19	16	14	14	13	12	14.3	20.5		
20-Aug-07	12	12	12	11	11	11	10	13	15	15	15	14	12	14	15	16	16	16	15	14	14	13	12	12	13.4	16.2		
21-Aug-07	12	12	12	12	12	12	12	12	12	13	13	13	14	14	15	15	15	15	14	14	13	12	11	11	12.8	15.5		
22-Aug-07	10	10	10	10	9	8	7	9	11	13	15	15	16	16	16	17	17	18	17	15	12	11	10	8	12.5	17.7		
23-Aug-07	8	8	9	9	9	9	10	10	11	11	14	15	15	15	14	14	15	15	15	16	14	13	12	11	9	11.9	15.8	
24-Aug-07	9	7	6	6	5	6	6	9	11	11	13	15	17	18	18	18	18	18	18	16	15	14	13	12	12.3	18.2		
25-Aug-07	12	12	12	11	11	12	12	12	12	12	14	14	15	15	15	15	N	N	N	N	N	N	N	N	N	N	15.3	
26-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
27-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
28-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
29-Aug-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	M	S	S	S	S	S	S	S	S	S	S	S		
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		

Hourly Avg	11.4	10.9	10.5	10.2	9.9	9.9	10.3	11.6	12.9	14.0	15.0	15.8	16.6	17.4	17.9	18.2	18.4	18.2	17.8	16.4	14.9	13.8	12.7	11.8	
Hourly Max	19.2	17.1	15.8	15.4	15.5	15.0	15.5	17.4	18.4	19.6	20.7	21.9	23.1	24.5	25.4	25.8	26.2	26.3	26.5	25.4	24.6	22.9	21.1	19.3	

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)



## Status Flag Characters

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

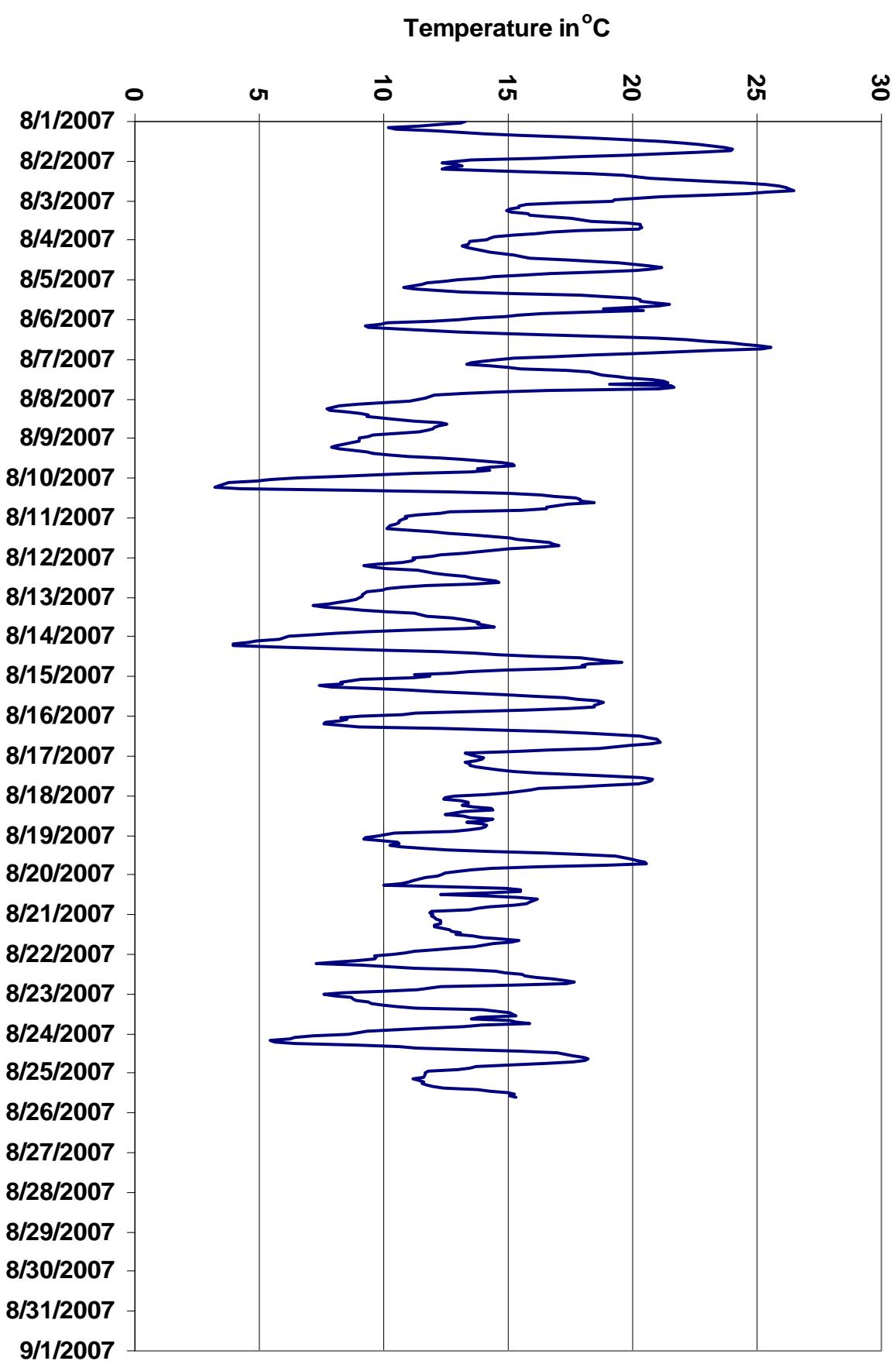


Figure 57. PASZA - Portable-Falher Temperature 1-hr Average Monthly Trend

# PASZA - Portable-Falher Scalar Wind Speed Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

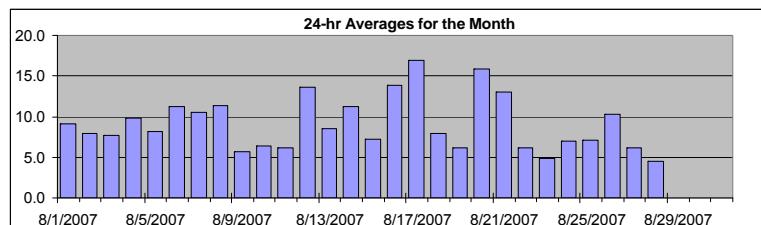
## Summary

Maximum 1-hr Average:	28.7	km/hr	17-Aug	16:00 17:00
Maximum 24-hr Value:	16.9	km/hr	17-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	681 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.1%				
Percentile	99	95	75	50	25	5	1	AverageS
	23.6	18.8	11.7	7.9	5.5	3.0	1.9	9.1 km/hr

## HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S 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 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	6:00 7:00	7:00 8:00	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-Aug-07	16	15	11	10	10	8	7	10	10	8	10	11	10	11	10	10	7	5	5	2	5	9	9	9	10	10	9	9.1	16.2
2-Aug-07	9	10	9	10	13	11	13	12	12	11	10	9	9	8	7	7	6	3	2	2	2	4	5	5	9	8.0	12.9		
3-Aug-07	7	17	8	8	14	15	6	6	8	9	5	4	6	5	7	7	9	7	8	5	5	5	5	7	7	7.7	17.3		
4-Aug-07	7	7	7	6	5	5	7	8	10	13	17	19	17	14	10	11	11	12	15	8	8	8	6	6	6	9.8	18.6		
5-Aug-07	8	8	5	7	6	6	7	7	8	6	10	13	14	14	15	13	12	9	4	7	6	4	5	4	8.2	14.8			
6-Aug-07	2	4	5	7	6	7	6	8	10	12	13	16	18	19	19	17	16	16	14	13	12	12	10	10	11.3	19.5			
7-Aug-07	10	9	9	9	10	12	12	14	18	15	16	14	10	9	10	6	5	8	15	15	7	6	5	7	10.5	18.1			
8-Aug-07	7	21	16	15	15	15	13	15	15	14	11	11	12	11	10	10	15	14	9	5	4	4	5	5	11.4	20.6			
9-Aug-07	5	4	5	5	6	7	5	4	8	10	10	8	6	5	5	8	7	9	6	2	1	2	5	5	5.7	10.4			
10-Aug-07	7	6	7	7	8	7	5	3	3	3	4	6	5	5	5	5	12	7	5	8	10	9	8	10	6.4	11.6			
11-Aug-07	5	7	5	5	2	3	4	3	3	5	4	5	4	3	5	7	8	10	9	7	9	10	9	14	6.2	14.5			
12-Aug-07	12	19	19	17	16	12	15	15	19	20	21	21	20	18	18	18	12	7	6	3	2	4	7	6	13.7	21.4			
13-Aug-07	6	7	8	5	7	6	4	6	7	7	8	6	12	12	12	13	15	12	11	7	7	8	9	9	8.5	14.6			
14-Aug-07	9	7	7	8	8	9	9	12	15	14	17	19	18	18	16	16	13	11	12	6	8	6	5	6	11.2	18.6			
15-Aug-07	5	8	8	3	5	5	4	7	9	10	10	10	9	9	7	5	5	6	7	8	8	9	10	7.3	9.9				
16-Aug-07	9	9	8	10	9	10	9	10	14	14	15	14	14	16	19	20	19	20	20	15	14	14	13	15	13.8	20.1			
17-Aug-07	16	16	19	19	19	19	14	10	17	17	19	19	22	24	25	28	29	23	11	12	11	4	5	9	16.9	28.7			
18-Aug-07	9	10	12	12	11	12	13	11	7	4	9	9	6	7	10	14	4	5	5	4	4	5	4	7.9	13.7				
19-Aug-07	2	3	4	3	3	2	5	7	3	4	5	8	8	9	9	8	7	6	7	10	9	10	8	6.2	10.4				
20-Aug-07	9	11	9	7	8	10	10	12	17	16	13	14	17	19	23	25	27	26	20	19	17	16	17	19	15.8	27.4			
21-Aug-07	18	15	13	13	12	14	17	18	19	20	17	18	17	15	13	9	13	13	8	8	6	6	5	13.0	20.0				
22-Aug-07	3	5	4	6	5	5	3	4	5	5	8	11	11	9	8	6	8	5	5	6	8	4	8	6.2	11.1				
23-Aug-07	8	4	4	7	5	3	4	5	5	5	3	3	3	4	7	5	3	4	4	5	5	5	7	4.8	8.0				
24-Aug-07	4	6	6	6	2	3	3	3	4	6	5	7	6	8	8	7	9	10	10	10	8	11	13	7.0	13.0				
25-Aug-07	11	7	4	8	11	9	6	7	6	7	3	4	6	6	6	6	15	5	9	6	7	6	6	6	7.0	15.3			
26-Aug-07	8	10	8	8	8	8	9	8	6	8	16	17	19	19	17	15	14	10	6	5	5	7	7	10.2	19.4				
27-Aug-07	6	5	4	4	6	3	3	6	7	5	7	10	M	M	M	7	7	17	10	7	4	6	3	3	6.1	16.6			
28-Aug-07	2	2	2	2	5	2	3	2	3	5	4	M	M	7	9	7	8	7	5	4	7	7	5	5	4.5	8.6			
29-Aug-07	6	7	7	7	7	7	7	8	8	9	8	9	10	11	M	S	S	S	S	S	S	S	S	S	S	10.7			
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S			
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S			
	1-hr Average	7.8	8.9	8.1	8.0	8.4	8.0	7.6	8.3	9.5	9.7	10.2	11.3	11.4	11.3	11.6	11.1	11.1	10.2	8.7	7.6	7.2	7.1	7.4	8.0				
	Hourly Max	17.7	20.6	19.4	18.9	19.4	18.6	17.0	17.9	18.9	20.5	21.4	20.8	22.3	24.1	25.4	27.9	28.7	26.1	20.4	18.6	16.9	16.1	17.0	19.3				

# PASZA - Portable-Falher Vector Wind Speed Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

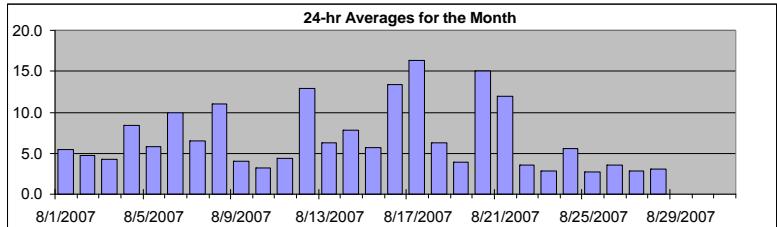
Maximum 1-hr Average:	28.5	km/hr	17-Aug	16:00 17:00
Maximum 24-hr Value:	16.4	km/hr	17-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	681 hrs								
Calibration Time:	0 hrs		AMD Operational Uptime:	99.1%								
Percentile	99	95	75	50	25	5	1	AverageV				
	23.5	18.6	11.3	7.5	4.9	2.1	0.9					0.6 km/hr

Day	Mountain Standard Time																									24-hr Vector Average	Daily Max
	Hour Start 1:00	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-Aug-07	16	15	11	10	10	8	7	10	9	8	10	11	10	10	9	6	3	4	2	5	9	9	10	10	9	5.5	16.1
2-Aug-07	9	9	9	10	13	11	13	11	12	10	10	8	8	7	5	6	5	2	1	1	1	3	2	8	4.7	12.9	
3-Aug-07	6	16	3	5	9	15	4	5	3	2	3	3	5	4	6	7	8	6	7	5	5	5	7	7	4.3	16.3	
4-Aug-07	7	7	7	6	5	5	7	8	9	12	16	18	16	14	10	11	11	12	14	8	7	8	6	5	8.4	18.5	
5-Aug-07	7	8	4	7	6	6	7	7	7	6	9	12	14	14	13	10	9	4	3	2	3	2	3	3	5.8	14.5	
6-Aug-07	1	2	5	7	6	7	5	8	10	11	12	16	17	19	19	17	16	16	14	13	12	12	10	10	10.0	19.2	
7-Aug-07	10	9	9	9	9	12	12	14	18	15	15	14	9	9	9	5	5	8	13	15	7	6	4	7	6.5	18.0	
8-Aug-07	7	20	16	15	15	15	13	15	15	14	11	11	12	11	10	10	15	13	9	5	4	4	5	5	11.0	20.4	
9-Aug-07	5	4	5	5	6	7	5	4	8	10	10	8	4	4	3	6	5	9	6	2	1	1	4	5	4.0	10.3	
10-Aug-07	7	6	7	7	8	7	5	3	3	2	1	5	2	2	4	1	11	7	4	7	10	5	8	9	3.2	11.2	
11-Aug-07	5	7	5	5	2	3	4	3	2	4	3	4	3	2	5	6	8	9	9	7	9	10	9	14	4.3	14.4	
12-Aug-07	12	19	19	17	16	12	15	15	19	20	21	21	19	18	18	18	9	2	5	3	2	4	7	5	12.9	21.2	
13-Aug-07	6	7	8	5	6	6	4	6	7	7	4	12	12	12	12	14	11	11	7	7	8	9	9	6.3	14.1		
14-Aug-07	9	7	7	8	8	9	9	12	14	14	17	18	17	18	15	15	12	11	11	6	7	6	4	4	7.8	18.4	
15-Aug-07	4	8	8	2	5	5	4	7	8	10	9	10	9	8	8	6	5	5	6	7	8	8	9	10	5.6	9.8	
16-Aug-07	9	9	8	10	9	10	9	10	14	14	15	14	13	16	18	20	19	20	20	15	14	14	13	15	13.3	19.9	
17-Aug-07	16	16	19	19	19	19	14	10	17	16	19	19	22	24	25	28	29	23	11	12	11	2	4	9	16.4	28.5	
18-Aug-07	9	10	12	12	11	11	13	11	7	1	9	9	6	6	10	14	3	5	5	3	3	4	4	4	6.2	13.6	
19-Aug-07	1	2	2	2	2	2	5	7	2	4	5	8	7	7	9	8	6	4	7	10	9	10	7	8	3.9	10.2	
20-Aug-07	9	11	9	7	8	10	10	12	17	15	12	13	17	19	22	25	27	26	20	18	17	16	17	19	15.1	27.1	
21-Aug-07	18	15	13	13	12	14	17	18	19	20	16	17	17	15	13	9	13	13	6	8	7	5	6	4	12.0	19.9	
22-Aug-07	1	5	4	6	5	5	3	4	5	4	7	10	10	9	8	5	7	4	5	6	7	4	8	3.6	10.3		
23-Aug-07	8	4	3	7	5	3	3	5	5	5	2	3	2	4	6	5	2	3	3	5	5	5	7	2.8	7.8		
24-Aug-07	4	5	6	5	1	2	3	2	4	5	4	6	5	7	8	7	9	9	10	10	8	10	13	5.6	12.9		
25-Aug-07	11	7	3	8	11	8	6	7	6	7	2	3	5	6	6	5	6	3	7	6	6	6	5	6	2.7	11.1	
26-Aug-07	8	10	8	8	8	9	8	6	7	16	17	19	19	17	15	14	9	6	5	5	7	6	7	3.6	19.2		
27-Aug-07	6	5	4	4	6	2	3	5	6	4	6	10	M	M	M	4	6	12	10	6	4	6	2	2.9	11.9		
28-Aug-07	1	1	1	1	4	1	3	2	2	4	4	M	M	6	7	6	7	5	4	7	7	5	4	3.0	7.3		
29-Aug-07	6	7	7	7	7	7	8	8	8	9	8	10	10	M	S	S	S	S	S	S	S	S	S	S	10.2		
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	18.5			
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	16.0			

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

1-hr Vector	0.5	0.7	1.8	1.7	1.2	0.5	0.2	0.9	0.8	0.2	0.9	1.6	1.9	1.7	2.4	2.4	2.4	2.8	2.4	1.6	0.5	0.4	0.3	1.0
Hourly Max	17.6	20.4	19.3	18.8	19.4	18.6	17.0	17.9	18.8	20.3	21.2	20.6	21.9	23.7	25.1	27.6	28.5	26.0	20.3	18.5	16.8	16.0	16.7	19.1

## PASZA - Portable-Falher Wind Direction Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary							

Calm Time:	0 hrs	0% calms	Operational Time:	681 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	99.1%
Percentile	99	95	75	50
	357.1	345.8	278.6	199.1
			25	20.2
			5	2.5
			1	
			Average	
				336 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		
1-Aug-07	280	283	276	271	270	266	262	253	260	248	256	254	254	260	259	242	260	232	4	81	96	100	107	104	259	W	
2-Aug-07	108	105	113	119	120	121	125	129	164	188	228	241	239	246	269	249	261	243	180	146	167	148	150	187	165	SSE	
3-Aug-07	196	241	84	45	268	292	329	315	89	337	193	267	324	350	0	350	322	334	330	3	280	302	289	299	311	NW	
4-Aug-07	304	298	308	312	305	303	311	313	335	345	353	348	346	343	333	324	320	284	290	278	246	257	261	242	316	NW	
5-Aug-07	255	219	225	201	200	228	230	230	257	270	265	296	278	295	307	302	319	11	40	348	264	329	286	184	277	W	
6-Aug-07	342	139	131	158	147	164	157	169	191	189	195	206	216	217	230	236	222	222	235	226	216	208	199	174	206	SSW	
7-Aug-07	173	175	180	189	203	216	240	244	254	269	283	306	313	302	289	308	275	275	289	8	18	336	315	307	269	W	
8-Aug-07	324	357	356	354	348	347	346	347	348	0	0	357	358	0	9	7	9	25	22	30	32	22	21	46	0	N	
9-Aug-07	17	359	338	340	346	0	26	3	9	13	7	16	336	318	252	251	278	335	346	335	160	300	79	111	351	N	
10-Aug-07	114	89	109	108	119	96	89	98	142	82	360	89	13	143	3	312	25	30	42	34	35	305	318	287	51	NE	
11-Aug-07	13	33	342	346	322	248	278	294	336	301	279	268	360	32	59	54	56	46	32	35	65	58	34	40	24	NNE	
12-Aug-07	49	57	61	61	59	59	47	46	58	56	56	56	48	46	54	52	80	23	32	41	308	320	358	347	51	NE	
13-Aug-07	319	335	344	326	342	342	311	327	326	309	304	286	248	257	249	253	245	255	278	265	240	213	210	201	273	W	
14-Aug-07	202	191	160	156	159	174	186	209	219	220	236	233	237	255	272	283	303	301	325	297	299	295	297	276	243	WSW	
15-Aug-07	297	353	23	156	65	83	59	96	122	130	134	134	130	137	94	86	91	117	125	119	124	111	105	98	106	ESE	
16-Aug-07	93	86	84	85	87	76	84	119	124	127	123	108	106	97	121	89	92	96	95	90	83	86	81	98	E		
17-Aug-07	94	90	86	93	91	93	107	107	104	101	94	86	89	91	89	90	93	91	73	71	72	20	346	63	89	E	
18-Aug-07	79	102	108	120	124	126	122	121	114	144	198	239	127	84	132	142	129	170	160	110	118	114	45	299	126	SE	
19-Aug-07	324	359	82	119	97	262	193	216	221	119	122	143	206	213	265	295	271	245	232	218	222	189	188	189	211	SSW	
20-Aug-07	217	224	228	228	231	233	224	241	253	246	238	263	271	277	268	272	277	276	276	266	265	263	261	260	259	W	
21-Aug-07	268	275	278	282	293	290	290	293	299	303	307	312	312	315	334	322	314	303	339	19	351	348	281	306	303	WNW	
22-Aug-07	294	332	281	260	293	315	346	339	3	1	347	348	340	347	314	326	308	298	43	49	101	108	86	116	347	NNW	
23-Aug-07	98	147	130	120	109	105	100	80	105	123	140	116	140	223	42	98	73	335	9	358	14	2	19	17	77	ENE	
24-Aug-07	45	25	78	57	172	118	40	155	155	193	187	126	162	161	134	135	136	113	102	95	91	89	110	125	116	ESE	
25-Aug-07	131	121	139	85	100	89	11	54	88	92	82	17	328	329	324	28	58	58	157	227	192	226	216	233	90	E	
26-Aug-07	230	277	254	248	238	249	258	254	242	62	60	53	57	45	39	29	7	347	332	317	294	284	281	349	N		
27-Aug-07	235	237	282	242	224	210	206	248	296	257	263	259	M	M	M	297	148	349	20	95	193	234	298	173	264	W	
28-Aug-07	170	124	107	282	240	251	234	218	214	195	197	M	M	215	221	240	226	227	221	178	123	119	107	103	198	SSW	
29-Aug-07	97	102	104	108	121	121	119	119	125	123	136	117	108	121	M	S	S	S	S	S	S	S	S	S	N	-	
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	-		
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	-		

Hourly Avg 175 22 74 103 130 133 169 229 218 251 268 320 320 309 319 326 340 329 340 22 108 252 2 159

## PASZA - Portable-Falher Standard Deviation of Wind Direction Monthly Summary

Station: Portable-Falher  
 Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

**Summary**

|--|--|--|--|--|--|--|

Calm Time:	0 hrs	0% calms	Operational Time:	681 hrs		
Calibration Time:	0 hrs			AMD Operational Uptime:	99.1%	
Percentile	99	95	75	50	25	5
	86.7	63.5	25.2	12.5	7.2	3.8
						2.8

Determined by the Yamartino 15-min interval calculation

**Status Flag Characters**

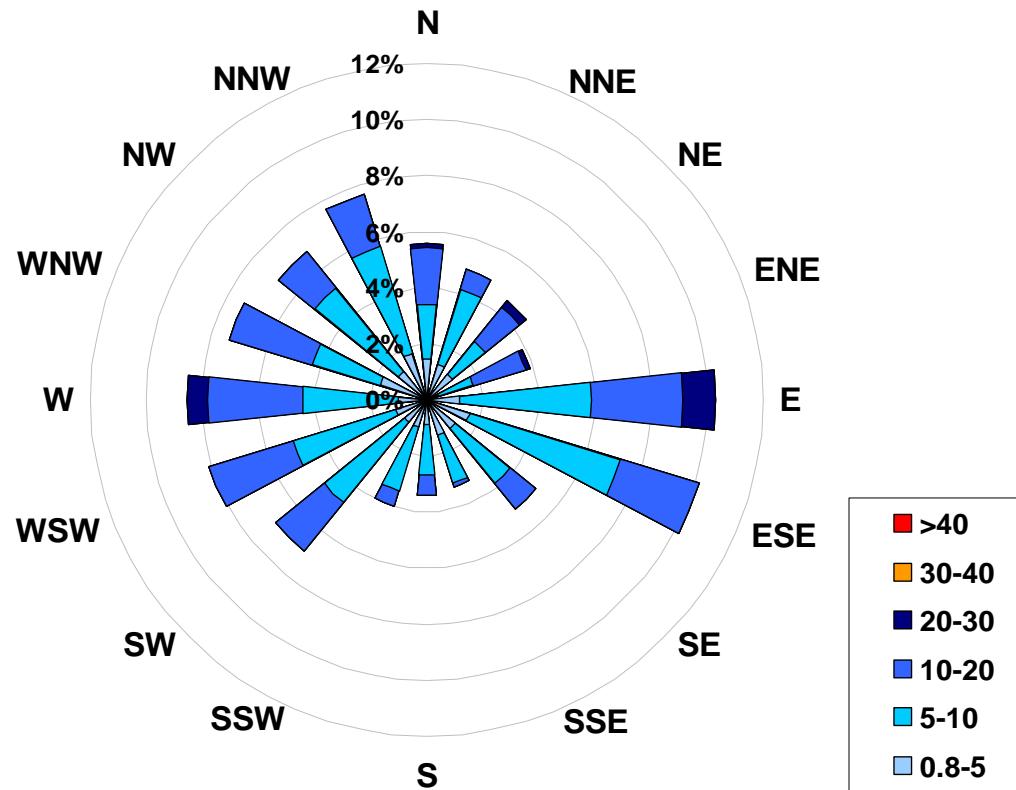
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

**Day Mountain Standard Time**

	Hour Start 1:00	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
1-Aug-07	7	4	3	12	3	10	9	9	12	18	16	17	18	24	29	40	62	40	52	27	9	3	6	3	61.7		
2-Aug-07	8	4	6	3	3	3	3	3	12	12	22	15	20	21	34	52	43	46	41	82	57	76	59	76	34	82.1	
3-Aug-07	49	28	80	64	89	11	61	35	73	88	44	40	30	33	30	15	18	22	36	27	19	11	6	12	89.1		
4-Aug-07	8	7	4	7	7	6	6	11	7	9	6	8	14	14	16	18	13	7	10	12	14	8	23	23.5			
5-Aug-07	8	8	42	18	9	12	11	14	13	31	20	16	12	16	13	17	27	14	36	67	88	53	78	75	88.2		
6-Aug-07	73	84	18	14	8	9	6	13	10	11	10	12	15	10	13	12	11	6	7	4	4	3	9	6	83.9		
7-Aug-07	4	3	4	4	7	7	8	5	5	5	6	10	9	19	16	22	24	22	12	22	10	7	13	37	12	37.2	
8-Aug-07	10	7	7	8	6	5	7	7	8	10	15	14	12	11	16	12	7	9	9	10	16	21	9	19	21.4		
9-Aug-07	8	20	8	7	8	7	9	21	9	9	14	16	41	56	58	45	47	17	12	28	50	68	44	13	68.1		
10-Aug-07	5	8	17	11	13	13	12	14	38	55	85	43	87	78	52	90	14	6	12	15	6	59	21	24	89.6		
11-Aug-07	24	9	15	16	14	18	16	26	70	24	49	43	64	49	24	32	14	16	10	6	15	4	12	6	70.0		
12-Aug-07	4	4	3	3	3	5	5	4	7	7	6	7	8	7	8	8	46	84	28	14	16	15	11	17	84.0		
13-Aug-07	10	4	6	12	5	11	19	13	12	15	29	48	15	15	21	17	17	21	12	9	17	4	3	3	48.1		
14-Aug-07	2	11	3	3	3	3	6	9	6	7	9	8	7	11	10	11	25	21	14	21	19	16	21	57	56.7		
15-Aug-07	39	12	21	64	20	18	13	11	16	11	12	12	18	31	30	33	32	18	9	7	7	6	6	3	63.5		
16-Aug-07	6	7	7	5	13	7	5	8	10	12	12	15	20	17	11	10	7	7	5	6	3	3	4	4	20.1		
17-Aug-07	4	4	4	5	3	4	10	8	4	7	7	6	10	10	9	7	7	5	12	4	5	74	46	8	73.7		
18-Aug-07	8	5	3	9	3	3	3	5	27	83	14	16	21	27	16	9	27	24	24	42	56	24	33	42	83.4		
19-Aug-07	87	35	60	33	28	55	11	9	39	16	31	19	34	37	27	34	26	39	10	11	6	8	15	7	86.7		
20-Aug-07	8	2	3	4	3	4	5	9	8	11	18	16	8	11	8	6	8	5	5	6	5	5	11	8	18.4		
21-Aug-07	5	4	6	4	6	5	5	5	6	4	10	6	5	7	9	10	6	5	40	10	9	17	13	40	39.9		
22-Aug-07	95	9	23	6	4	11	29	19	18	31	24	22	24	25	24	37	32	53	12	22	21	9	9	14	94.9		
23-Aug-07	13	32	31	8	10	18	21	8	12	13	60	46	59	58	33	28	51	29	37	11	5	11	5	18	59.8		
24-Aug-07	16	18	8	28	72	50	45	28	23	29	36	25	43	32	22	19	10	18	7	5	9	8	7	4	71.9		
25-Aug-07	10	23	56	12	5	20	12	11	17	14	60	53	36	25	20	38	69	59	29	34	25	7	12	5	69.2		
26-Aug-07	6	15	15	12	6	11	8	8	16	51	5	6	7	8	7	11	5	12	6	13	5	6	11	10	51.4		
27-Aug-07	16	13	13	22	7	39	9	30	18	44	32	18	M	M	M	61	17	69	27	27	35	12	70	23	69.7		
28-Aug-07	60	74	65	90	54	82	16	48	43	32	39	M	M	51	36	32	26	20	9	19	10	5	13	21	90.1		
29-Aug-07	6	4	4	8	4	4	7	4	7	13	15	19	15	17	M	S	S	S	S	S	S	S	S	S	S	18.6	
30-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	18.6		
31-Aug-07	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	18.6		

Hourly Max 95 84 80 90 89 82 61 48 73 88 85 53 87 78 58 90 69 84 82 67 88 74 78 75

**1-hr Average Wind Rose (in km/hr) Located at the Portable-Falher Site for  
August 2007**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	135
5	to	10	322
10	to	20	207
20	to	30	17
30	to	40	0
> 40			0
Total Non-Zero Values			681

# PASZA – Valleyview Station

## Monthly Summary Tables, Graphs and Roses

## PASZA - Valleyview Sulphur Dioxide Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

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:	15.9 ppb 1-Aug 1:00 2:00
Maximum 24-hr Average:	3.1 ppb 1-Aug

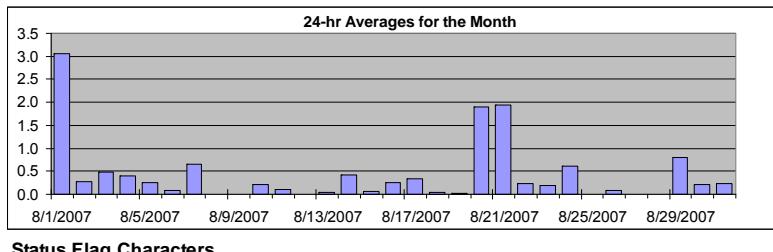
AIC Time:	30 hrs	Operational Time:	680 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	96.2%						
Percentile	99 7.6	95 1.9	75 0.3	50 0.1	25 0.0	5 0.0	1 0.0	Average 0.4 ppb	Median 0.1 ppb

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-Aug-07	A	16	12	9	5	3	2	9	3	3	1	1	1	1	1	0	0	0	0	0	1	1	0	0	0	3.1	15.9
2-Aug-07	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7
3-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	1	0	0	0	1	2	0.5	3.2
4-Aug-07	A	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0.4	1.8
5-Aug-07	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.4
6-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.2
7-Aug-07	A	0	0	0	0	0	0	0	3	1	2	3	1	1	0	1	1	0	0	0	0	0	0	1	0	0.7	3.0
8-Aug-07	A	0	0	0	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	0.5	
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	2.2
10-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
11-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
12-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
13-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.0	0.5
14-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	2	1	1	0	0	0	0.4	1.9
15-Aug-07	A	0	0	0	0	0	0	0	0	C	C	C	C	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
16-Aug-07	A	0	0	0	0	0	0	0	0	C	C	C	C	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.4
17-Aug-07	A	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
18-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
19-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-Aug-07	A	0	0	0	0	0	0	0	0	2	3	5	7	2	1	1	1	0	0	0	0	0	0	0	6	7.8	1.9
21-Aug-07	A	15	10	5	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	15.2
22-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0.2	3.0
23-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0.2	3.5
24-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	4	2	1	0	1	1	0	0	0	0	0	0	0.6	4.0
25-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
26-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
27-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
28-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
29-Aug-07	A	0	0	0	0	0	0	0	0	0	2	1	7	4	1	1	0	1	0	0	0	0	0	0	0	0.8	7.2
30-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
31-Aug-07	A	0	0	0	0	0	0	0	P	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0

Hourly Avg	N	1.2	0.9	0.6	0.3	0.3	0.2	0.5	0.3	0.4	0.5	0.7	1.1	0.5	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.4
Hourly Max	0.0	15.9	11.9	9.5	4.5	3.2	2.2	8.6	3.2	3.3	3.0	4.6	7.2	4.1	1.9	1.1	2.1	3.2	2.2	0.7	1.8	6.5	7.6	7.8

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

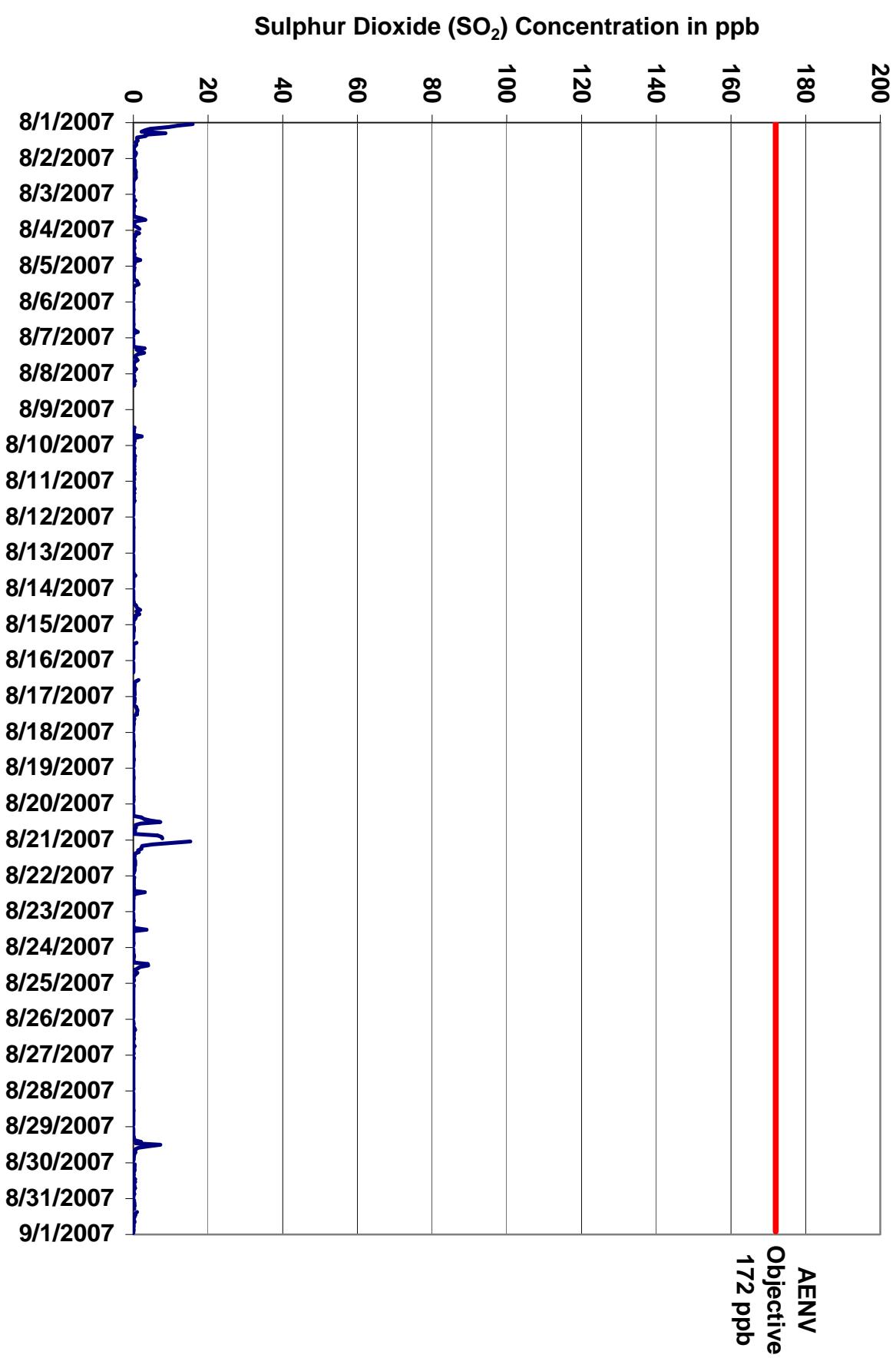


Figure 58. PASZA - Valleyview Sulphur Dioxide 1-hr Average Monthly Trend

Station: Valleyview  
 Station Owner: PASZA

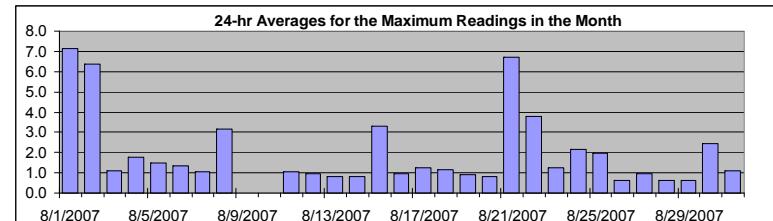
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	32.3 ppb	24-Aug 12:00 13:00
Maximum 24-hr Value:	7.1 ppb	1-Aug



#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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	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	Daily Maximum	
1-Aug-07	A 1:00	1	1	1	1	1	1	1	1	4	9	8	11	5	6	10	16	17	4	5	4	22	22	17	7.1	22.1		
2-Aug-07	A 23:00	23	24	16	8	5	7	14	11	11	2	5	5	2	2	2	1	1	1	1	2	1	1	1	6.4	23.9		
3-Aug-07	A 1:00	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.1	1.9		
4-Aug-07	A 1:00	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	2	4	8	2	1	1	1	1	3	1.8	8.0	
5-Aug-07	A 2:00	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	1	1	1.5	4.2		
6-Aug-07	A 1:00	1	1	1	1	1	1	1	1	1	4	2	4	1	1	1	1	1	1	1	1	1	0	1	1	1.3	4.1	
7-Aug-07	A 1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	2	1	1	1	1	3	3	1	1	1.0	3.3	
8-Aug-07	A 1:00	1	1	1	1	1	1	12	5	6	8	6	5	3	6	8	2	1	1	1	1	2	1	1	3.2	12.2		
9-Aug-07	A 1:00	1	1	1	1	1	1	1	1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	1.4		
10-Aug-07	P 1:00	P	P	P	P	P	P	P	P	P	P	P	P	P	1	1	1	1	1	4	4	1	1	1	1	1	N	4.0
11-Aug-07	A 1:00	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7		
12-Aug-07	A 1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0.9	1.8	
13-Aug-07	A 1:00	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	
14-Aug-07	A 1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	0.8	2.7	
15-Aug-07	A 1:00	1	1	0	1	1	1	1	1	5	4	9	6	13	7	4	6	9	3	2	2	1	1	1	1	3.3	12.6	
16-Aug-07	A 1:00	1	1	1	1	1	1	1	1	C	C	C	3	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.3	
17-Aug-07	A 1:00	1	1	1	1	1	1	1	1	C	C	C	C	2	2	1	1	1	1	1	1	1	1	1	2	1.2	2.5	
18-Aug-07	A 2:00	2	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1.2	2.4	
19-Aug-07	A 1:00	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.9	1.1	
20-Aug-07	A 1:00	1	1	1	1	0	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
21-Aug-07	A 0:00	0	1	1	1	0	1	1	9	14	16	16	15	2	4	5	1	1	1	1	1	1	21	22	20	6.7	22.2	
22-Aug-07	A 25:00	25	20	7	4	3	3	2	3	1	1	1	0	1	2	2	1	1	1	1	1	2	1	1	3.8	25.3		
23-Aug-07	A 1:00	1	1	0	1	1	1	1	0	1	0	7	4	1	0	1	0	1	0	1	0	0	1	1	1.2	7.3		
24-Aug-07	A 0:00	0	1	1	1	1	1	1	1	0	1	1	32	1	1	1	1	0	0	0	1	1	1	1	2.2	32.3		
25-Aug-07	A 1:00	1	1	1	1	1	1	1	0	1	2	7	7	4	4	1	1	2	1	1	1	0	0	0	1.9	7.3		
26-Aug-07	A 1:00	1	0	1	1	1	0	0	1	1	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0.6	1.4		
27-Aug-07	A 1:00	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8		
28-Aug-07	A 1:00	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0	0	1	1	0.6	1.4		
29-Aug-07	A 0:00	0	1	0	1	0	0	0	0	0	1	1	0	1	1	0	0	1	0	1	1	1	1	1	0.6	1.3		
30-Aug-07	A 0:00	0	1	0	0	0	1	1	2	4	2	26	7	3	2	2	2	2	1	1	1	1	1	1	2.5	25.9		
31-Aug-07	A 2:00	2	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1.1	1.8		
	Hourly Avg	N	2.5	2.3	1.6	1.3	1.1	1.2	1.8	1.5	2.1	2.5	2.9	4.7	2.4	1.7	1.9	1.9	2.1	1.2	1.2	1.2	2.3	2.4	2.2			
	Hourly Max	0.0	25.3	23.9	15.8	8.5	4.9	7.1	14.3	10.9	11.0	13.9	15.6	32.3	14.8	6.8	9.7	15.7	17.1	4.0	4.7	4.2	21.8	22.2	20.3			

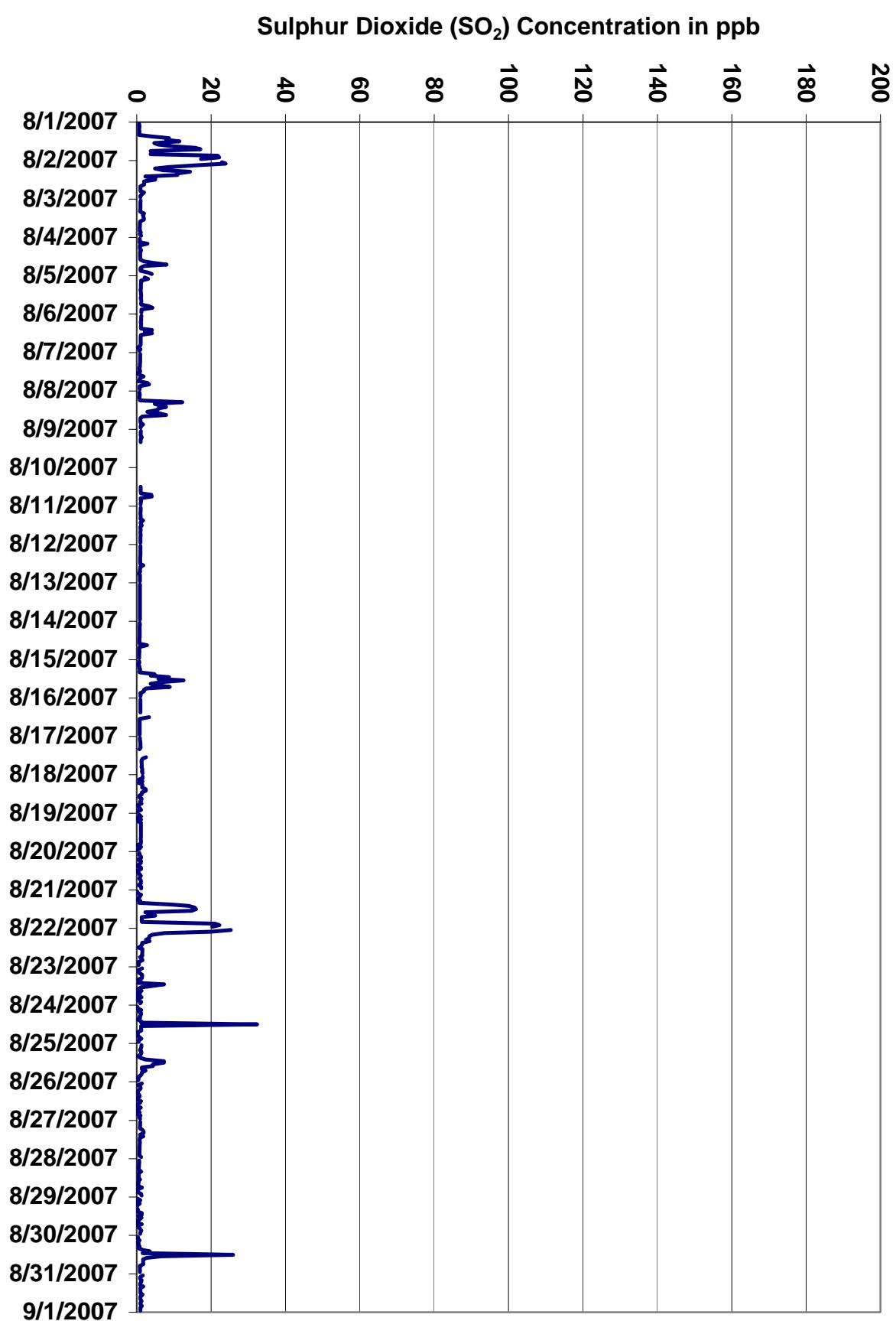
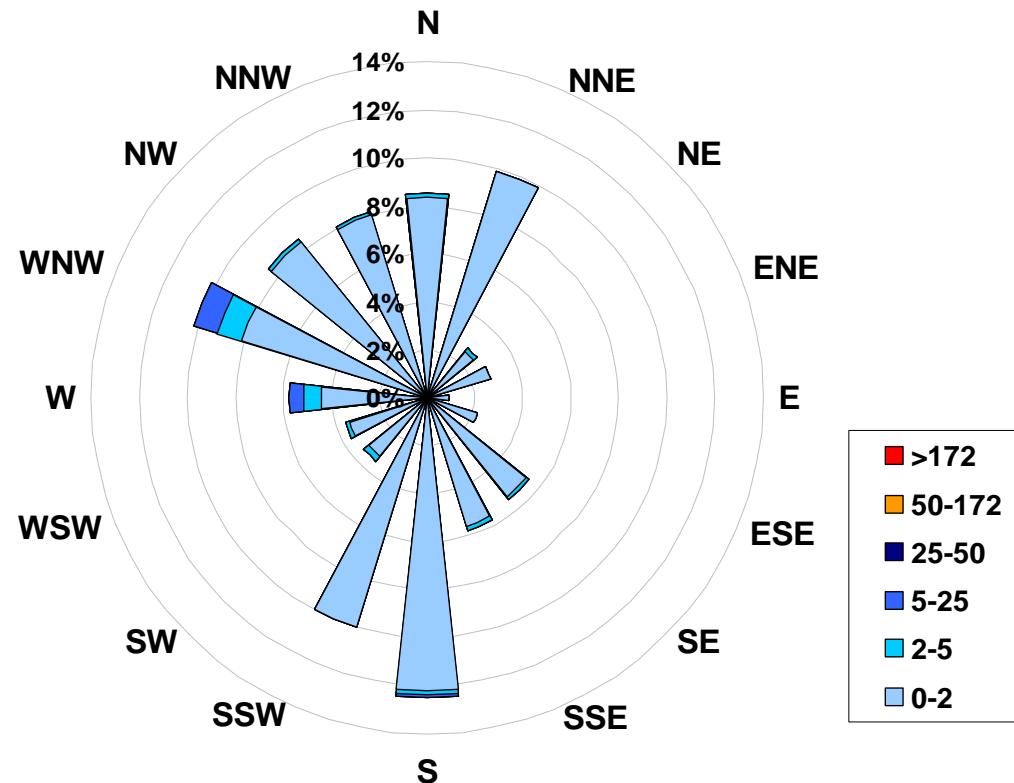


Figure 59. PASZA - Valleyview Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms:** 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	646
2	to	5	22
5	to	25	12
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			680

# PASZA - Valleyview Hydrogen Sulphide Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

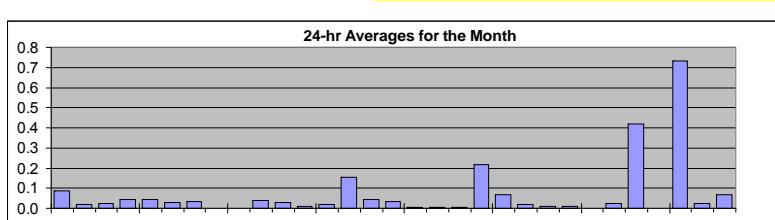
Objective Limit: Alberta Environment: 1-hr 10 ppb 24-hr 3 ppb

**Summary**

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	9.4 ppb 29-Aug 16:00 17:00
Maximum 24-hr Value:	0.7 ppb 29-Aug

AIC Time:	31 hrs	Operational Time:	678 hrs
Calibration Time:	7 hrs	AMD Operational Uptime:	96.2%
Percentile	99 95 75 50 25 5 1	Average	Median
	0.9 0.1 0.0 0.0 0.0 0.0 0.0	0.1 ppb	0.0 ppb

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-Aug-07	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
2-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
3-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
4-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
5-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
6-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
7-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
8-Aug-07	A	0	0	0	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	0.0	
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	0.0
10-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
11-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
12-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
13-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
14-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
15-Aug-07	A	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	C	C	C	C	C	C	C	0.0	0.2	
16-Aug-07	A	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	0.2
17-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
18-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
19-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
20-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0.2	3.9
21-Aug-07	A	0	0	0	0	1	0	0	0	0	0	0	C	C	C	C	C	C	C	C	C	C	C	C	C	0.1	0.9
22-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
23-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
24-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
25-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
26-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4
27-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0.4	8.9
28-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
29-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	9	0	0	0	0	0	0	0	0	0.7	9.4
30-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
31-Aug-07	A	0	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1



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

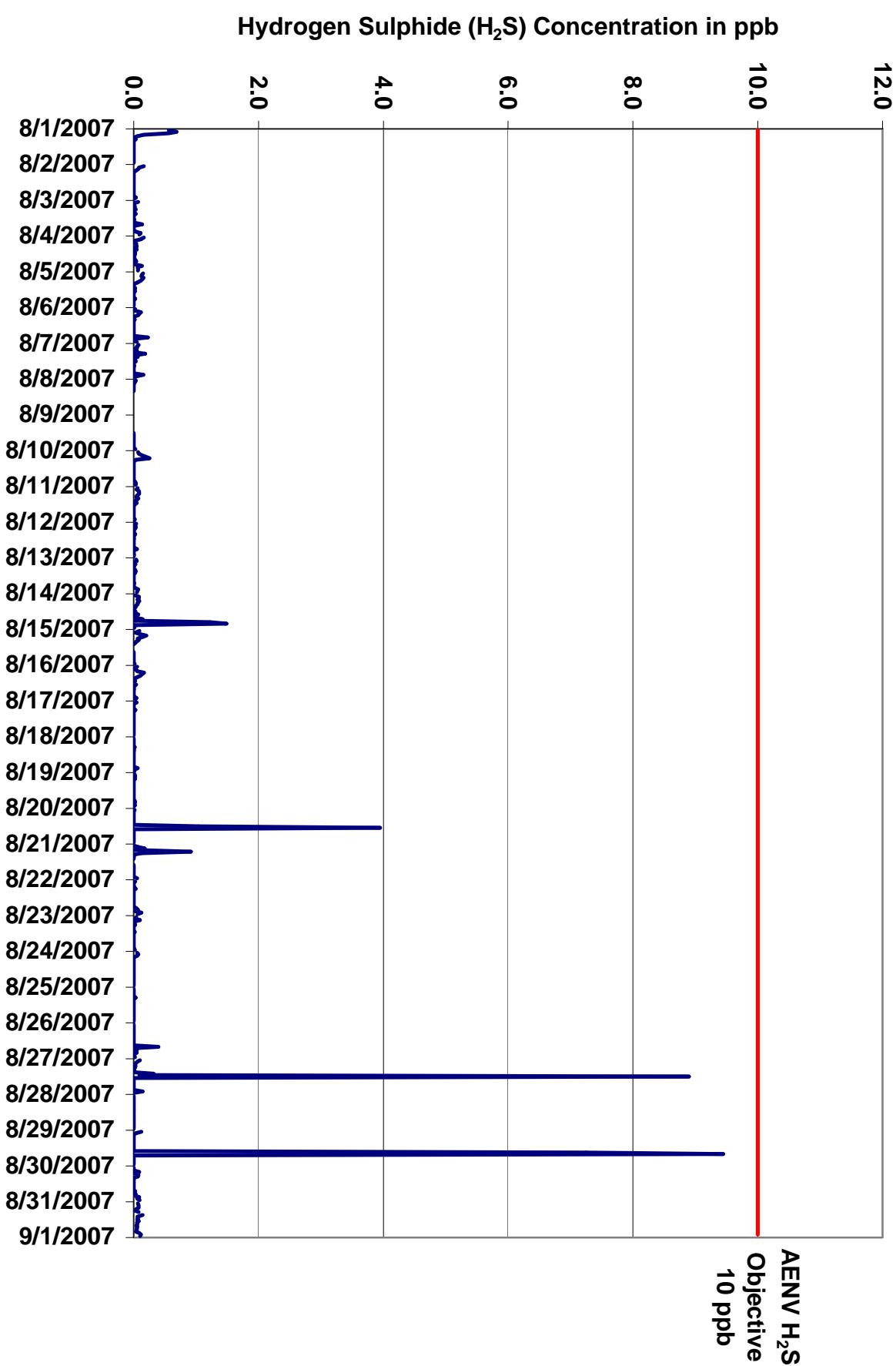


Figure 60. PASZA - Valleyview Hydrogen Sulphide 1-hr Average Monthly Trend

Station: Valleyview  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

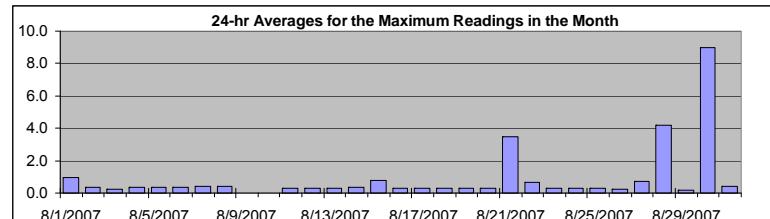
### Hydrogen Sulphide (H<sub>2</sub>S)

Monitoring Dates: August 1, 2007 to September 1, 2007

#### Summary

Maximum 1-hr Value:	100.8 ppb	30-Aug 15:00 16:00
Maximum 24-hr Value:	9.0 ppb	30-Aug

AIC Time:	31 hrs	Operational Time:	679 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	96.4%						
Percentile	99 6.6	95 0.7	75 0.4	50 0.3	25 0.2	5 0.1	1 0.1	Average 0.9 ppb	Median 0.3 ppb



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00				
1-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	2	1	1	6	6	1.0	6.3		
2-Aug-07	A	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2	
3-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
4-Aug-07	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	0.4	1.2	
5-Aug-07	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.4	0.7	
6-Aug-07	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
7-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2	
8-Aug-07	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.4	1.4	
9-Aug-07	A	0	0	0	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	0.3		
10-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	0.6		
11-Aug-07	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
12-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
13-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
14-Aug-07	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.6	
15-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	4	7	0	0	0	0.8	6.5	
16-Aug-07	A	1	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
17-Aug-07	A	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
18-Aug-07	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
19-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
20-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
21-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	18	57	1	0	0	0	0	0	0	0	0	0	0	0	3.5	56.8
22-Aug-07	A	0	0	1	0	7	1	0	1	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.7	6.8
23-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
24-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
25-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
26-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
27-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	9.7	
28-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	5	2	83	0	0	0	0	0	0	0	0	0	0	0	4.2	82.9
29-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
30-Aug-07	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	101	1	0	0	0	0	0	0	9.0	100.8	
31-Aug-07	A	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.5	
Hourly Avg	N	0.4	0.4	0.3	0.4	0.6	0.3	0.3	0.3	0.3	0.3	0.4	0.4	4.0	2.3	0.3	3.6	3.9	0.3	0.3	0.4	0.5	0.4	0.5	0.5				
Hourly Max	0.0	1.1	1.2	1.1	1.5	6.8	0.7	0.8	1.3	1.2	4.8	1.9	82.9	56.8	0.9	100.8	100.8	0.8	1.4	4.1	6.5	1.2	5.6	6.3					

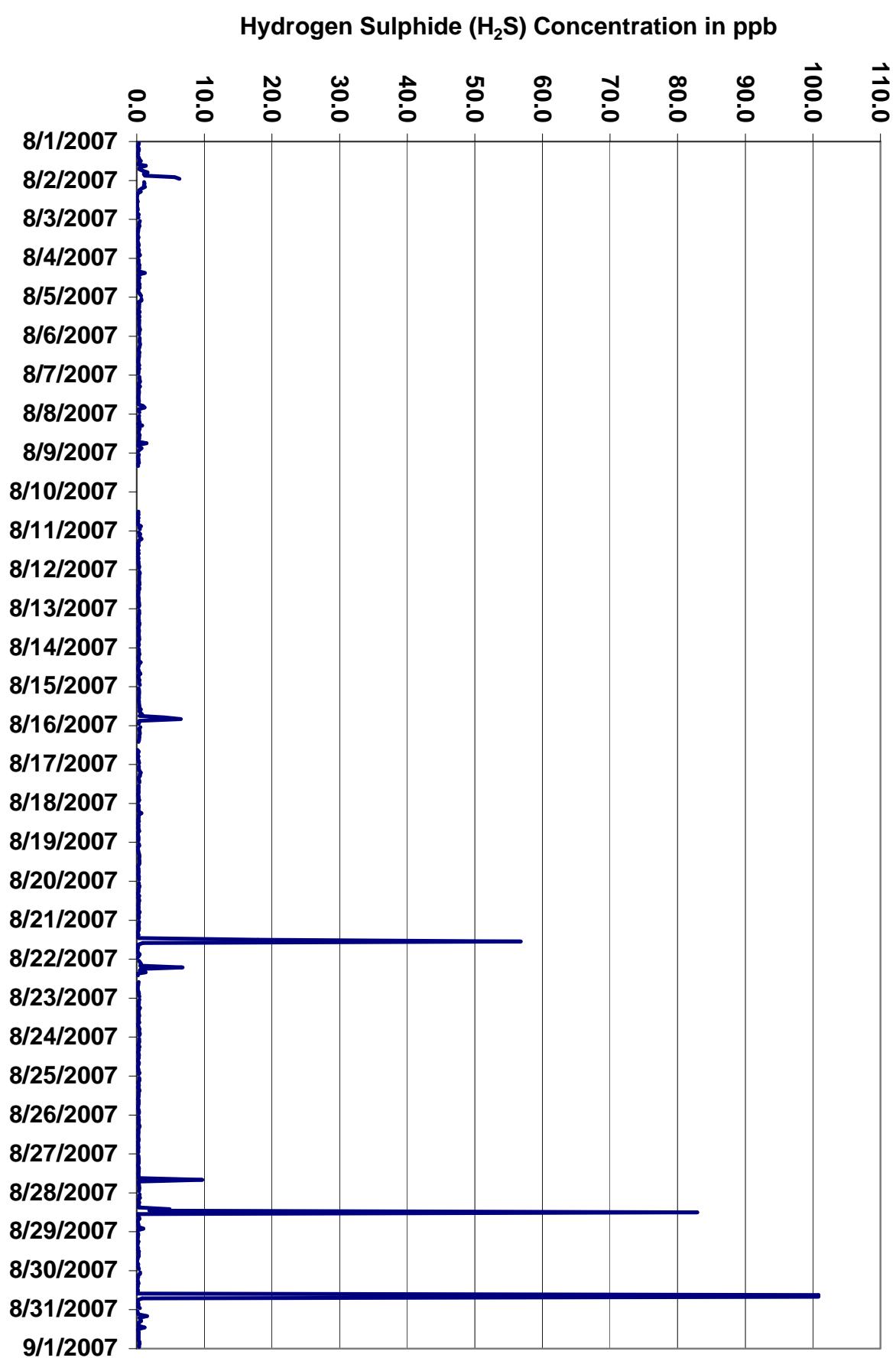
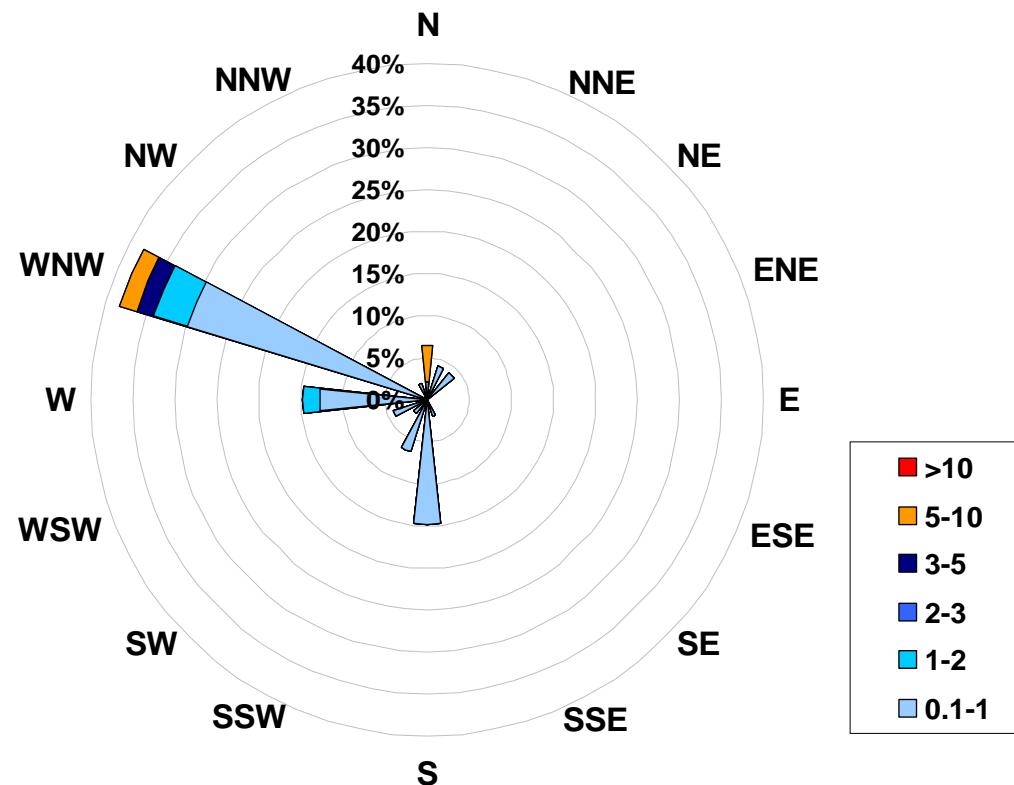


Figure 61. PASZA - Valleyview Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms:** 0%

Frequency Distribution of H <sub>2</sub> S in ppb			Frequency (hrs)
Range			
0.1	<	1	671
1	to	2	3
2	to	3	0
3	to	5	1
5	to	10	3
>	10		0
Total Non-Zero Values			678

## PASZA - Valleyview Relative Humidity Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### Summary

Maximum 1-hr Average:	99.3	%	24-Aug	8:00 9:00
Maximum 24-hr Value:	94.2	%	18-Aug	

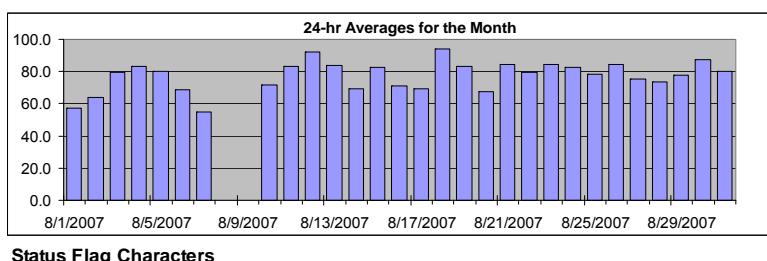
AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	96.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	99.1	98.5	93.8	82.5	63.6	40.6	34.4		

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-Aug-07	64	65	67	70	74	75	73	63	57	54	52	49	44	40	37	38	35	33	34	41	57	76	87	92	57.3	91.9		
2-Aug-07	94	94	96	95	96	95	87	78	68	57	51	47	46	41	36	31	30	30	36	46	56	70	76	78	63.9	96.2		
3-Aug-07	81	81	81	83	78	85	89	86	84	78	71	78	69	65	66	77	72	68	83	87	91	92	83	85	79.7	92.0		
4-Aug-07	88	90	93	93	93	92	90	87	89	92	89	82	76	71	66	61	57	65	71	79	90	96	97		83.4	97.2		
5-Aug-07	98	98	99	99	99	99	99	93	86	73	67	62	60	61	56	49	59	74	76	81	83	84	95		80.4	98.6		
6-Aug-07	97	98	98	98	99	99	96	91	84	76	67	62	51	42	39	39	36	35	36	38	48	61	78	86		68.9	98.6	
7-Aug-07	85	81	81	80	79	82	76	57	45	45	45	45	43	43	39	35	32	34	39	38	41	47	51	67		54.6	85.1	
8-Aug-07	79	84	87	87	85	84	85	86	80	78	P	P	P	P	P	P	P	P	P	P	P	P	P		N	86.9		
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		N	96.9		
10-Aug-07	98	98	98	98	98	98	99	99	99	98	73	47	45	40	37	35	33	34	38	50	77	79	69	79		71.6	98.7	
11-Aug-07	89	94	96	97	97	97	97	95	93	94	90	93	94	80	70	68	66	60	63	65	70	79	79	84	85		83.3	97.4
12-Aug-07	86	88	90	90	93	92	93	91	91	92	93	90	89	91	94	94	93	95	95	94	92	92	95	95		92.1	95.3	
13-Aug-07	95	95	95	95	94	95	94	91	88	86	81	79	77	78	71	68	71	66	63	63	80	92	97	97		83.8	97.3	
14-Aug-07	98	98	98	98	98	97	91	81	61	52	49	45	40	38	38	38	38	42	53	65	72	78	89		69.0	98.3		
15-Aug-07	92	96	97	97	98	98	99	99	97	92	90	87	79	62	62	58	56	59	66	69	74	79	85	90		82.6	98.7	
16-Aug-07	92	96	97	98	99	99	98	91	76	70	59	54	51	48	47	46	47	49	52	57	63	68	75	81		71.3	98.7	
17-Aug-07	81	72	76	79	85	87	92	87	75	63	58	52	50	48	47	52	53	58	57	66	69	76	85	90		69.1	91.5	
18-Aug-07	94	97	97	98	98	99	99	99	99	98	97	93	90	95	97	88	82	83	83	85	94	97	99	99		94.2	99.1	
19-Aug-07	99	99	99	99	99	99	99	99	98	92	82	73	66	57	49	46	44	51	81	92	93	94	96	97		83.4	99.2	
20-Aug-07	96	97	96	96	96	97	95	87	73	57	49	47	47	47	45	42	43	45	49	61	67	69	67	61		67.8	97.0	
21-Aug-07	62	71	84	91	90	92	94	94	94	93	93	89	85	83	79	76	73	73	76	80	82	84	89	90		84.1	93.8	
22-Aug-07	91	91	89	89	92	94	92	86	80	73	67	69	65	63	63	61	62	64	69	79	91	94	95	95		79.7	95.2	
23-Aug-07	96	97	98	98	98	97	98	94	89	80	73	65	75	66	70	61	66	62	72	87	94	97	98	98		84.5	98.1	
24-Aug-07	98	98	99	99	99	99	99	99	99	99	94	78	65	55	51	48	55	59	66	71	81	89	91	94		82.7	99.3	
25-Aug-07	94	92	92	93	95	97	98	96	93	84	70	65	59	57	53	51	55	52	56	69	78	87	94	96		78.2	97.6	
26-Aug-07	98	98	97	94	91	91	89	84	80	78	74	69	68	65	65	71	77	87	93	92	91	91	91	91		84.5	97.7	
27-Aug-07	91	90	91	90	92	92	95	91	89	87	76	68	59	54	52	50	48	49	50	58	73	81	91	95		75.5	95.1	
28-Aug-07	96	97	97	97	97	97	97	97	89	80	73	65	58	53	49	46	42	40	38	43	62	77	89	92	95		73.7	97.2
29-Aug-07	94	95	91	91	91	93	91	87	76	66	61	55	45	46	45	49	57	67	82	93	95	94	96	97		77.4	97.4	
30-Aug-07	97	98	98	99	99	98	98	98	93	87	82	80	78	73	70	75	74	77	80	83	90	95	92	87		87.4	98.5	
31-Aug-07	88	91	93	95	96	95	95	92	77	67	61	59	60	59	65	65	69	73	79	78	85	91	95		80.1	95.7		

Hourly Avg	90.4	91.3	92.3	92.9	93.3	93.9	93.3	89.5	84.2	78.2	72.0	67.4	63.0	59.7	57.1	56.1	55.8	58.5	62.4	68.8	77.0	83.2	86.7	89.8	
Hourly Max	99.2	99.1	99.0	99.0	99.1	99.0	99.1	99.2	99.2	99.3	99.2	96.9	93.7	90.3	94.9	96.7	93.7	93.4	94.8	94.7	94.4	95.0	97.4	98.7	99.1

### HOURLY AVERAGE TABLE

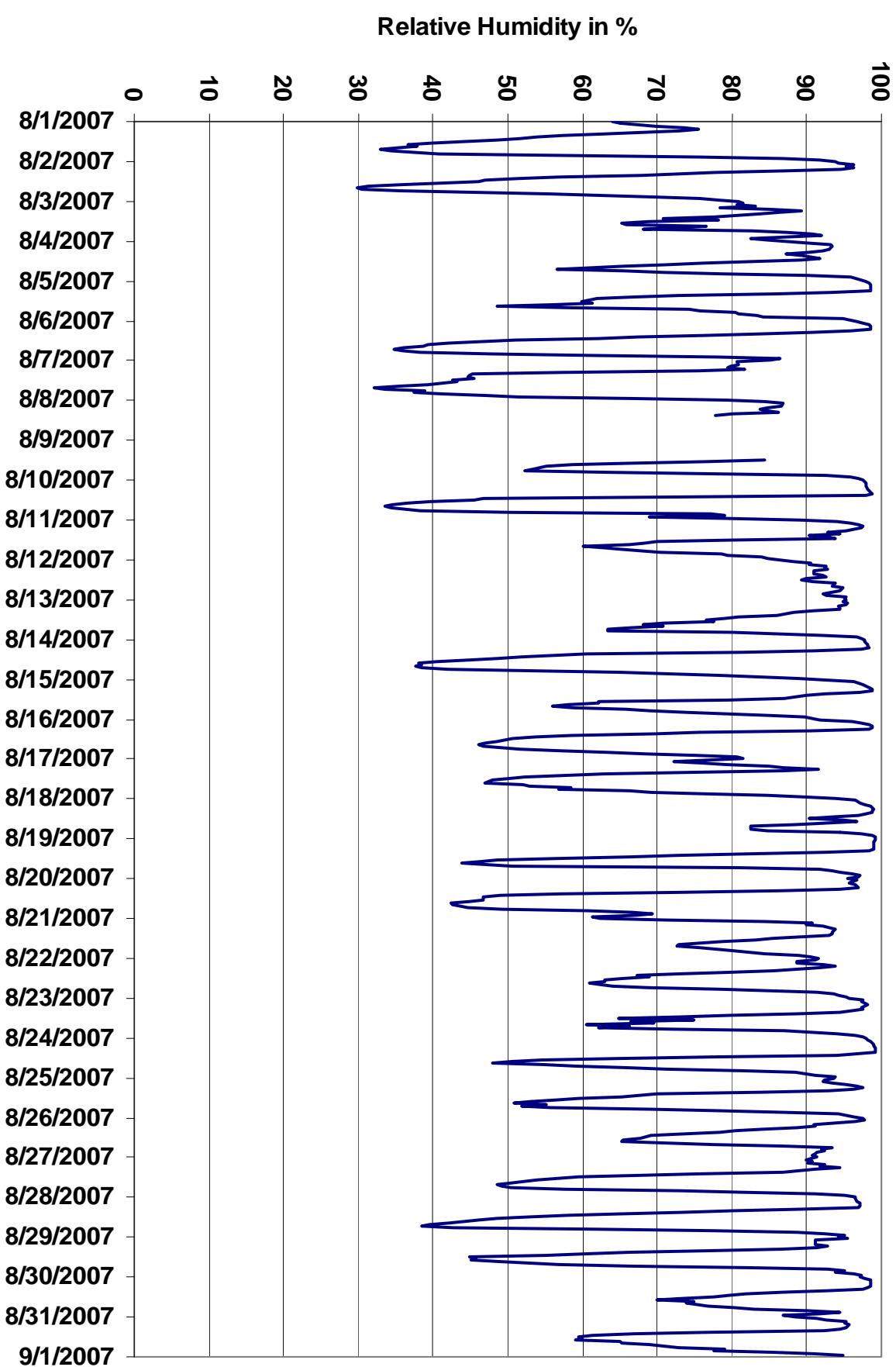
### Relative Humidity (RH)



### Status Flag Characters

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

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



# PASZA - Valleyview Temperature Monthly Summary

Station: Valleyview  
Station Owner: PASZA

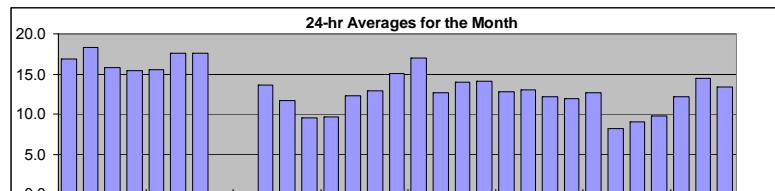
Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	27.2 °C	2-Aug 17:00 18:00
Maximum 24-hr Value:	18.4 °C	2-Aug

AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	96.5%						
Percentile	99 25.3	95 21.8	75 16.5	50 13.0	25 10.5	5 6.5	1 3.8	Average 13.5 °C	Median 13.0 °C

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-Aug-07	13	12	12	11	10	10	11	13	15	17	18	20	21	22	23	23	23	23	23	23	23	20	16	14	12	16.8	23.2
2-Aug-07	12	11	10	9	9	9	11	14	17	19	21	23	24	25	25	26	27	27	26	23	21	18	17	17	18.4	27.2	
3-Aug-07	16	16	15	15	15	14	14	15	15	16	17	17	18	19	19	17	17	17	16	15	14	14	15	14	15.8	18.9	
4-Aug-07	14	14	13	13	13	13	14	14	14	14	14	15	16	17	18	19	19	20	19	18	17	15	14	13	15.5	20.1	
5-Aug-07	12	12	11	11	10	10	10	12	14	17	18	20	20	20	20	21	20	17	18	18	17	15	14	13	15.5	21.2	
6-Aug-07	12	12	11	10	10	9	10	12	14	16	18	20	22	23	24	25	26	26	26	25	22	19	16	15	17.6	26.3	
7-Aug-07	14	14	13	13	13	12	14	18	20	20	19	19	20	20	21	22	22	22	21	20	19	17	16	14	17.6	22.2	
8-Aug-07	12	11	11	10	10	9	8	8	9	9	P	P	P	P	P	P	P	P	P	P	P	P	P	N	12.2		
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	22.9		
10-Aug-07	13	12	11	10	9	9	10	11	13	16	18	15	16	16	17	17	18	18	18	17	15	12	11	11	13.6	17.9	
11-Aug-07	10	10	9	9	8	7	8	9	9	10	11	11	13	14	15	15	16	16	16	15	13	12	11	11	11.7	16.4	
12-Aug-07	11	10	10	10	9	9	9	10	10	11	11	11	11	10	10	9	9	9	9	9	9	9	8	8	9.6	10.9	
13-Aug-07	8	8	8	8	8	8	8	8	8	9	10	10	11	11	12	12	12	13	13	13	11	9	7	6	9.6	13.3	
14-Aug-07	6	5	5	4	4	3	4	7	10	14	15	16	17	18	19	19	19	20	19	17	15	14	13	12	12.3	19.6	
15-Aug-07	12	11	10	9	8	7	7	9	11	12	13	14	15	17	18	18	18	18	18	17	16	15	14	12	11	12.9	17.9
16-Aug-07	10	9	8	8	7	7	7	10	13	15	18	19	20	21	22	22	22	21	21	19	18	16	14	13	15.0	22.3	
17-Aug-07	13	13	13	13	13	12	12	13	15	17	18	19	21	22	23	23	22	21	21	19	18	17	16	15	17.0	23.2	
18-Aug-07	13	13	12	11	11	11	12	12	12	13	13	12	13	12	12	14	15	15	15	15	13	12	10	11	12.6	15.3	
19-Aug-07	11	12	12	11	11	12	12	12	13	15	16	17	19	19	20	21	19	14	12	12	12	11	11	11	14.0	20.6	
20-Aug-07	11	11	11	11	10	9	9	11	13	15	16	17	17	17	18	18	18	18	18	17	15	14	13	13	14.1	18.4	
21-Aug-07	13	13	11	11	11	11	11	11	11	11	12	13	13	14	15	15	15	15	15	15	14	14	13	12	12.7	15.2	
22-Aug-07	12	12	12	11	11	11	11	12	12	13	13	14	15	15	15	16	16	16	16	15	15	13	12	12	13.0	16.0	
23-Aug-07	11	10	10	9	9	9	9	9	11	12	14	15	16	14	16	16	17	16	16	15	15	13	11	10	9	12.2	16.9
24-Aug-07	8	7	7	7	7	6	6	6	7	9	11	14	17	18	19	19	19	18	18	17	15	14	13	13	12.0	19.2	
25-Aug-07	12	11	11	11	11	10	10	11	11	13	15	16	16	16	17	17	17	16	17	15	12	11	9	8	7	12.7	17.3
26-Aug-07	6	6	6	7	7	7	7	7	8	8	9	10	10	11	11	11	10	9	8	7	7	7	7	7	8.1	11.2	
27-Aug-07	7	7	7	6	6	6	6	6	7	8	10	11	11	12	13	13	14	14	14	12	9	8	6	5	9.1	14.2	
28-Aug-07	4	4	3	3	3	3	3	3	5	8	10	12	14	15	15	16	17	17	17	17	15	11	9	8	6	9.8	17.5
29-Aug-07	6	5	6	6	6	6	6	6	8	10	13	15	16	18	19	20	19	19	17	15	14	13	12	12	12.1	19.6	
30-Aug-07	12	11	11	10	10	10	10	11	12	14	15	16	18	19	19	20	20	19	19	18	17	16	15	14	13	14.5	19.9
31-Aug-07	13	12	12	11	11	11	11	12	12	14	15	16	16	16	16	17	16	16	16	15	14	13	12	11	10	13.4	16.5



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

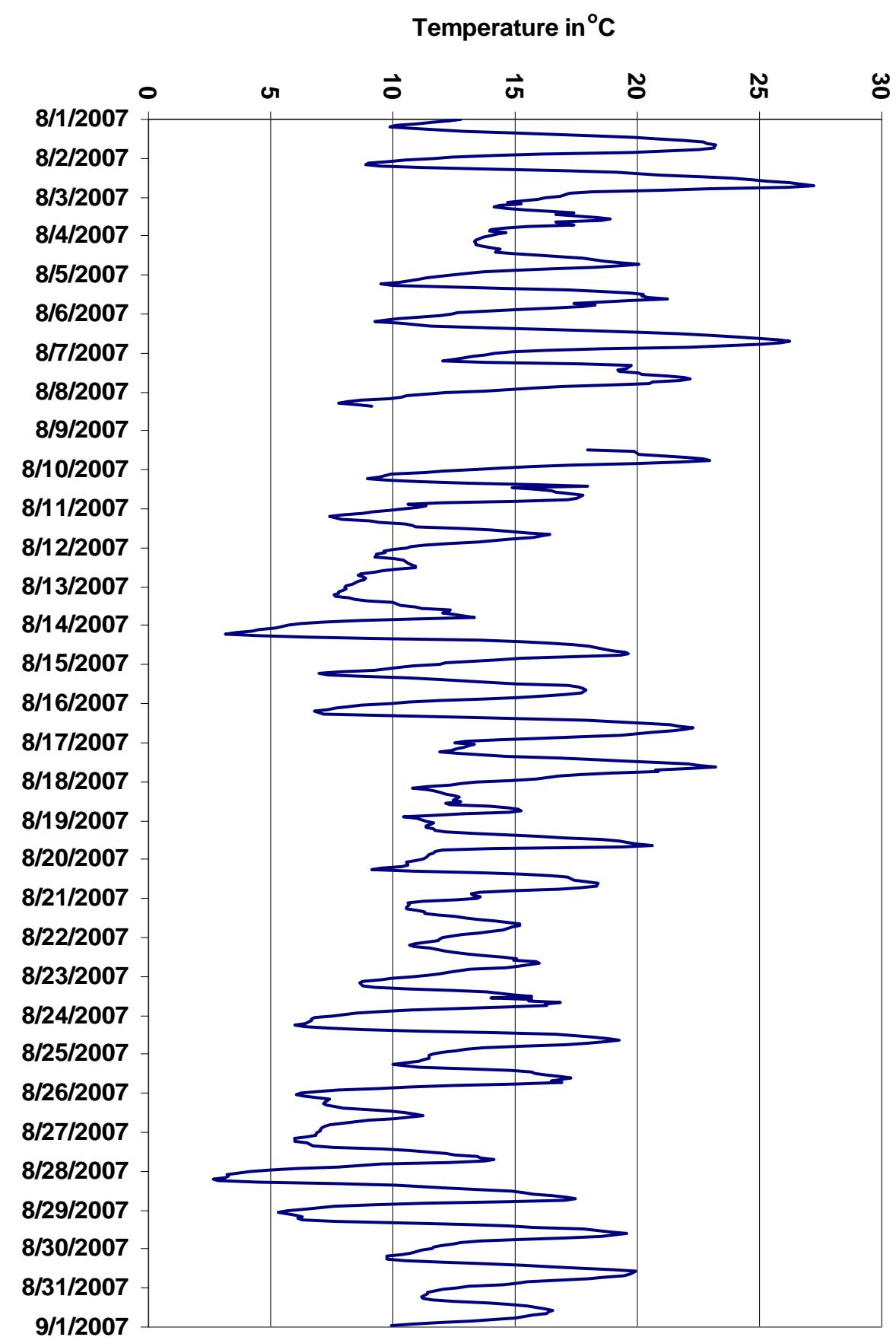


Figure 63. PASZA - Valleyview Temperature 1-hr Average Monthly Trend

# PASZA - Valleyview Scalar Wind Speed Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

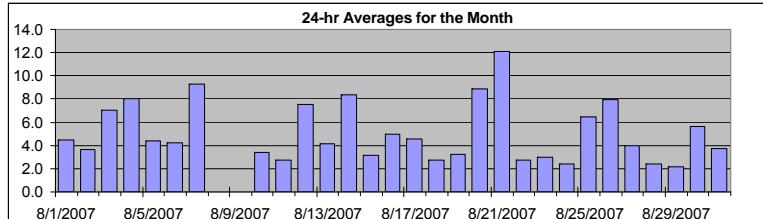
## Summary

Maximum 1-hr Average:	17.3 km/hr	14-Aug 17:00 18:00
Maximum 24-hr Value:	12.1 km/hr	21-Aug

Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs				
Calibration Time:	0 hrs	AMD Operational Uptime:		96.5%				
Percentile	99	95	75	50	25	5	1	AverageS
	15.7	13.2	6.8	3.7	2.3	1.3	1.0	5.1 km/hr

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)



## Status Flag Characters

C Calibration	A AIC - Zero / Span Check
S 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	6:00 7:00	7:00 8:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	15:00 16:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00 0:00	
1-Aug-07	13	11	10	5	4	3	3	6	6	4	4	4	6	5	3	3	4	3	3	2	1	2	1	2	4.5	13.2		
2-Aug-07	1	2	1	1	1	2	2	3	4	5	4	3	4	4	5	4	4	3	3	5	7	9	6	5	3.6	8.9		
3-Aug-07	4	7	5	4	10	4	3	5	8	9	14	11	11	12	12	12	10	3	5	4	3	2	6	8	7.1	13.5		
4-Aug-07	5	7	6	7	7	8	10	11	11	10	11	12	12	12	10	9	9	10	8	8	5	2	2	2	8.0	12.4		
5-Aug-07	2	2	3	2	2	1	2	4	4	4	4	6	7	7	9	11	10	10	3	3	2	3	2	4	4.4	10.6		
6-Aug-07	2	1	2	1	2	3	3	5	4	5	6	6	6	7	6	7	6	5	6	7	4	3	2	3	4.2	7.2		
7-Aug-07	4	4	4	3	4	3	4	9	16	12	13	13	17	15	15	15	16	13	9	11	6	5	5	6	9.3	16.7		
8-Aug-07	5	2	3	6	11	12	12	11	11	13	P	P	P	P	P	P	P	P	P	P	P	P	P	N	12.8			
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	5	3	5	6	6	4	3	2	2	1	1	2	N	6.0
10-Aug-07	1	1	1	1	1	2	2	2	2	2	3	6	6	8	7	6	5	5	4	2	2	2	5	6	3.4	7.6		
11-Aug-07	2	2	3	1	2	1	2	1	3	3	2	2	2	3	3	3	3	6	6	3	4	2	4	4	2.8	6.4		
12-Aug-07	2	4	2	3	5	7	5	5	5	7	9	10	10	10	10	11	12	11	9	10	10	9	8	8	7.5	12.1		
13-Aug-07	5	6	4	3	2	2	4	3	6	4	4	6	3	4	2	6	8	7	6	3	2	2	2	2	4.1	8.5		
14-Aug-07	4	3	4	3	2	3	4	4	5	8	10	11	13	13	15	15	15	17	13	10	6	7	8	6	8.4	17.3		
15-Aug-07	3	2	2	2	2	1	2	1	1	2	3	4	5	5	5	4	4	4	5	5	3	3	4	4	3.1	4.8		
16-Aug-07	3	3	3	4	3	2	1	1	1	2	6	8	7	7	8	8	9	10	10	9	5	3	3	3	5.0	10.2		
17-Aug-07	4	5	3	8	7	3	2	2	5	7	6	7	5	6	7	6	4	4	2	3	3	4	4	2	4.5	7.5		
18-Aug-07	3	2	1	1	2	1	2	1	3	3	3	7	4	3	4	4	4	3	2	1	2	3	2	2.7	7.2			
19-Aug-07	3	2	2	3	3	2	2	2	3	5	6	5	4	3	2	2	4	8	5	5	3	2	2	3	3.3	8.2		
20-Aug-07	2	2	3	2	2	2	3	3	6	13	13	13	14	13	14	14	15	14	10	11	9	10	11	13	8.9	14.5		
21-Aug-07	15	16	14	15	15	16	13	13	13	13	12	14	15	15	15	16	17	15	10	5	3	3	3	3	12.1	16.6		
22-Aug-07	1	2	3	3	2	2	1	2	3	3	3	5	5	5	5	5	4	5	2	1	2	1	1	2	2.8	5.3		
23-Aug-07	1	2	1	1	2	2	3	3	2	3	4	4	6	8	5	4	4	4	5	2	1	2	1	2	3.0	8.3		
24-Aug-07	1	1	1	2	1	1	3	2	2	3	2	3	3	2	4	2	3	3	3	5	2	2	2	3	2.4	5.2		
25-Aug-07	8	8	4	7	2	2	2	3	4	5	10	10	10	10	10	9	9	9	15	9	5	2	2	1	6.4	15.1		
26-Aug-07	2	3	3	3	6	4	7	9	10	10	9	11	9	12	14	16	12	10	11	10	5	6	6	4	8.0	15.6		
27-Aug-07	2	2	2	3	2	2	1	2	5	3	6	7	7	7	8	8	5	4	5	4	4	2	2	1	4.0	8.0		
28-Aug-07	3	4	2	1	1	1	2	3	3	3	3	3	3	3	3	4	4	3	3	2	2	1	1	1	2.4	4.1		
29-Aug-07	1	1	1	1	1	1	1	2	3	3	2	3	2	2	4	2	3	3	3	3	2	1	1	2	2.1	3.8		
30-Aug-07	2	2	2	1	2	1	2	1	2	3	1	3	6	8	10	9	10	6	7	12	10	9	13	10	5.6	13.0		
31-Aug-07	5	2	3	4	3	3	3	2	2	4	8	8	6	4	5	4	4	4	3	2	2	2	1	3.7	8.5			
1-hr Average	3.7	3.8	3.3	3.4	3.7	3.3	3.5	4.1	5.0	5.6	6.2	7.0	7.1	7.2	7.5	7.6	7.3	6.6	5.9	5.3	3.9	3.5	3.9	3.9				
Hourly Max	15.0	15.9	14.0	14.9	15.4	16.0	13.5	12.6	15.8	13.1	13.5	14.2	16.7	15.2	15.5	16.0	16.6	17.3	15.1	11.8	10.3	9.6	13.0	13.2				

# PASZA - Valleyview Vector Wind Speed Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## Summary

Maximum 1-hr Average:	16.9	km/hr	14-Aug	17:00 18:00
Maximum 24-hr Value:	11.6	km/hr	21-Aug	

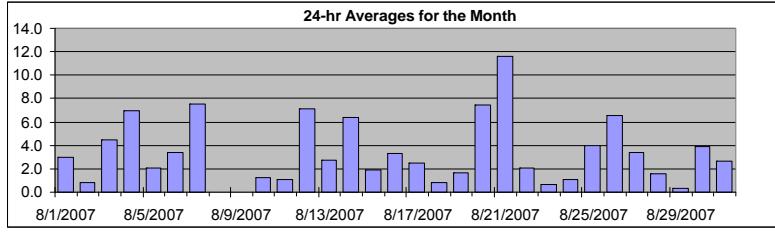
Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	96.5%
Percentile				AverageV
99	95	75	50	25 5 1
15.5	13.0	6.3	3.2	1.8 0.7 0.2
				3.7 km/hr

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
	Hour Start 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-Aug-07	13	11	10	5	4	2	2	6	5	2	3	3	4	2	1	3	3	3	3	2	1	1	1	1	3.0	13.1
2-Aug-07	0	1	1	1	1	1	2	3	4	5	4	3	3	2	4	3	3	3	2	4	5	8	5	5	0.8	8.3
3-Aug-07	1	6	4	3	8	3	2	4	8	8	13	10	10	11	12	12	10	2	5	4	3	1	5	8	4.4	13.3
4-Aug-07	5	6	6	7	7	8	9	11	11	10	11	12	12	10	9	8	10	8	8	8	5	2	2	2	7.0	12.0
5-Aug-07	2	2	3	2	1	1	2	4	4	3	4	6	6	8	10	10	10	2	3	1	3	2	4	2	2.1	9.8
6-Aug-07	2	1	2	1	2	3	3	5	4	4	5	6	6	5	6	5	5	5	6	6	3	2	2	3	3.4	6.4
7-Aug-07	4	4	4	3	4	3	4	8	16	11	13	13	16	15	15	15	15	13	8	11	6	5	4	6	7.6	16.4
8-Aug-07	5	2	2	5	11	12	12	11	10	12	P	P	P	P	P	P	P	P	P	P	P	P	P	N	12.5	
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	5.3	
10-Aug-07	1	1	1	1	0	1	2	2	1	1	4	3	6	6	4	4	4	4	4	2	1	1	5	6	1.2	6.4
11-Aug-07	0	1	3	1	1	1	1	1	2	2	1	2	2	2	1	2	2	6	5	3	3	0	3	3	1.1	6.2
12-Aug-07	1	4	2	3	4	7	5	5	4	6	9	9	9	10	11	12	11	8	10	10	9	8	8	7.1	11.9	
13-Aug-07	5	6	4	3	2	2	4	2	5	4	4	5	2	4	1	5	8	7	5	2	2	2	2	2.7	8.2	
14-Aug-07	4	3	4	3	2	3	4	4	5	7	10	10	13	13	15	15	15	17	13	10	6	7	7	5	6.4	16.9
15-Aug-07	2	2	2	1	1	0	1	1	1	2	2	4	4	4	4	3	4	4	5	3	3	4	4	4	1.9	4.7
16-Aug-07	3	3	3	4	2	1	0	1	1	1	5	8	7	6	8	8	9	10	10	9	5	2	3	3	3.3	10.0
17-Aug-07	4	4	1	7	6	2	1	2	4	7	6	7	4	5	7	4	4	3	2	3	3	4	2	1	2.5	7.3
18-Aug-07	2	1	1	1	2	0	1	1	1	3	2	6	3	2	4	3	3	1	1	2	1	1	3	2	0.9	6.4
19-Aug-07	2	2	2	2	3	2	2	1	3	4	5	4	3	2	1	2	2	6	3	5	2	2	2	2	1.7	5.9
20-Aug-07	2	2	2	2	2	2	3	3	3	5	13	12	13	13	14	14	14	13	10	11	8	9	11	13	7.5	14.1
21-Aug-07	15	16	14	15	15	16	13	12	13	13	12	14	15	15	14	16	16	15	10	5	3	3	2	2	11.6	16.4
22-Aug-07	0	1	3	3	2	2	1	2	2	2	2	4	3	5	4	3	4	2	0	1	0	1	2	2.1	4.9	
23-Aug-07	1	1	1	1	1	1	3	3	2	3	2	5	8	4	4	3	3	5	2	1	1	1	1	0.7	8.0	
24-Aug-07	1	1	1	1	1	1	3	2	1	2	1	2	2	0	2	1	2	3	2	5	0	1	1	1.1	4.9	
25-Aug-07	8	8	1	5	1	1	2	3	3	9	10	9	9	10	9	9	9	9	15	8	5	1	2	4.0	14.8	
26-Aug-07	2	3	3	2	6	4	6	9	10	9	8	10	9	12	13	15	11	9	11	10	5	6	6	4	6.6	15.3
27-Aug-07	2	2	2	3	1	1	1	2	5	2	6	6	7	6	7	7	4	4	5	4	3	2	2	3.4	7.4	
28-Aug-07	3	4	0	1	1	1	2	3	2	3	2	1	1	1	2	3	3	2	2	2	2	1	1	1.6	4.0	
29-Aug-07	1	1	1	1	1	1	1	1	3	1	2	2	2	1	1	4	2	2	2	2	3	1	0	0.4	3.6	
30-Aug-07	1	2	2	0	1	1	1	0	2	3	1	2	6	8	9	9	10	6	7	10	9	9	13	10	3.9	12.8
31-Aug-07	4	2	2	4	3	3	3	2	2	4	8	7	6	4	4	4	5	4	4	3	2	2	2	1	2.6	8.2

1-hr Vector	1.2	1.0	1.3	1.2	1.4	1.1	0.8	1.3	1.7	2.2	2.9	3.6	3.6	3.5	4.0	4.6	4.0	3.3	2.3	2.1	1.4	1.6	2.1	1.5
Hourly Max	14.8	15.7	13.8	14.7	15.3	15.9	13.3	12.5	15.6	12.9	13.3	14.1	16.4	15.0	15.0	15.8	16.4	16.9	14.8	11.3	10.0	9.4	12.8	12.9

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

## PASZA - Valleyview Wind Direction Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Daily Summary													

Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs									
Calibration Time:	0 hrs		AMD Operational Uptime:	96.5%									
Percentile	99	95	75	50	25	5	1	Average					
	356.7	348.5	294.5	195.3	136.8	14.5	3.0		314 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	0:00
1-Aug-07	286	284	291	283	265	245	233	279	308	266	251	247	289	254	264	157	146	141	127	102	108	357	215	188	268	W
2-Aug-07	37	220	212	299	192	221	200	191	195	185	198	189	146	65	27	56	87	80	60	30	329	15	11	25	56	NE
3-Aug-07	349	20	30	86	309	344	60	40	31	27	351	325	311	315	306	294	286	229	187	182	171	231	293	300	327	NNW
4-Aug-07	307	289	303	298	306	313	325	334	340	337	329	333	350	357	7	333	335	318	306	302	280	200	190	200	325	NW
5-Aug-07	188	190	185	193	182	195	190	195	194	238	261	287	295	326	332	348	349	336	209	219	241	243	354	176	286	WNW
6-Aug-07	183	185	181	159	186	186	183	180	184	187	184	189	193	243	246	259	249	258	269	290	256	215	196	197	220	SW
7-Aug-07	198	193	195	195	196	202	193	286	301	299	294	297	300	306	305	301	308	320	326	318	305	275	323	17	298	WNW
8-Aug-07	6	1	271	331	11	17	16	16	13	7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
10-Aug-07	230	214	201	248	289	350	208	186	192	133	127	351	3	24	22	18	33	129	138	162	159	32	324	335	22	NNE
11-Aug-07	108	73	28	202	262	43	327	220	113	303	189	178	179	156	132	119	31	18	30	58	93	157	173	105	92	E
12-Aug-07	94	9	352	324	5	19	25	40	44	52	45	49	54	35	27	28	31	28	32	11	13	14	5	5	27	NNE
13-Aug-07	1	3	343	346	329	356	355	338	4	349	4	4	60	172	160	328	345	347	340	303	222	202	185	174	348	NNW
14-Aug-07	177	184	188	193	190	197	185	187	195	263	268	270	268	270	287	308	299	294	295	299	290	343	343	305	279	W
15-Aug-07	259	137	232	179	17	182	175	155	2	353	12	35	62	105	70	62	67	61	61	69	31	8	10	15	52	NE
16-Aug-07	33	358	350	348	15	47	273	29	138	328	147	144	138	118	128	129	139	145	142	134	128	61	15	360	119	ESE
17-Aug-07	47	30	286	130	136	187	161	160	163	166	158	142	125	151	159	96	168	245	165	163	273	307	21	312	148	SSE
18-Aug-07	286	195	214	195	257	107	28	273	156	348	1	350	209	68	294	350	167	67	17	107	23	332	321	344	NNW	
19-Aug-07	318	289	146	20	192	200	169	186	165	183	187	185	165	144	188	197	109	348	255	137	207	195	206	192	187	S
20-Aug-07	178	192	187	188	195	196	187	188	252	277	274	278	281	302	303	305	306	309	304	333	313	289	275	287	304	NW
21-Aug-07	284	282	286	286	290	291	289	292	292	305	311	312	319	317	318	316	321	325	330	321	304	292	342	359	8	N
22-Aug-07	316	326	22	31	346	322	327	10	40	34	353	299	332	3	23	24	28	22	50	167	155	168	50	176	357	N
23-Aug-07	179	164	150	150	184	139	186	191	198	201	253	331	328	8	16	359	360	63	28	25	132	344	213	187	145	SE
24-Aug-07	148	165	120	299	225	165	157	172	173	163	147	354	40	230	141	313	40	102	133	182	197	131	357	103	313	NW
25-Aug-07	135	136	275	345	51	343	235	265	249	275	308	327	303	305	299	315	290	319	333	19	20	217	194	192	311	NW
26-Aug-07	198	191	199	257	303	272	286	284	279	275	281	290	311	316	318	325	328	346	354	359	348	332	345	330	303	WNW
27-Aug-07	312	267	288	287	262	262	195	256	289	283	294	289	298	318	321	302	331	355	324	300	16	337	207	186	177	S
28-Aug-07	191	189	78	181	211	177	193	192	180	183	178	225	214	224	13	119	141	174	138	128	159	246	208	353	216	SW
29-Aug-07	222	262	241	215	231	201	200	179	180	173	167	178	169	133	32	350	350	279	335	20	24	82	211	259	351	N
30-Aug-07	198	184	181	166	156	182	14	356	141	147	132	21	17	351	357	11	20	14	352	357	336	321	323	318	229	SW
31-Aug-07	301	234	178	189	195	192	183	188	164	267	291	289	292	253	221	196	197	194	204	198	183	191	179	229	SW	

Hourly Avg 281 270 270 281 286 292 269 282 288 290 289 304 315 320 330 330 335 336 334 344 326 325 322 316

# PASZA - Valleyview Standard Deviation of Wind Direction Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: August 1, 2007 to September 1, 2007

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

|--|--|--|--|--|--|--|

Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	96.5%			
Percentile	99	95	75	50	25	5	1
	92.6	78.3	47.1	25.9	13.9	8.6	6.4

Determined by the Yamartino 15-min interval calculation

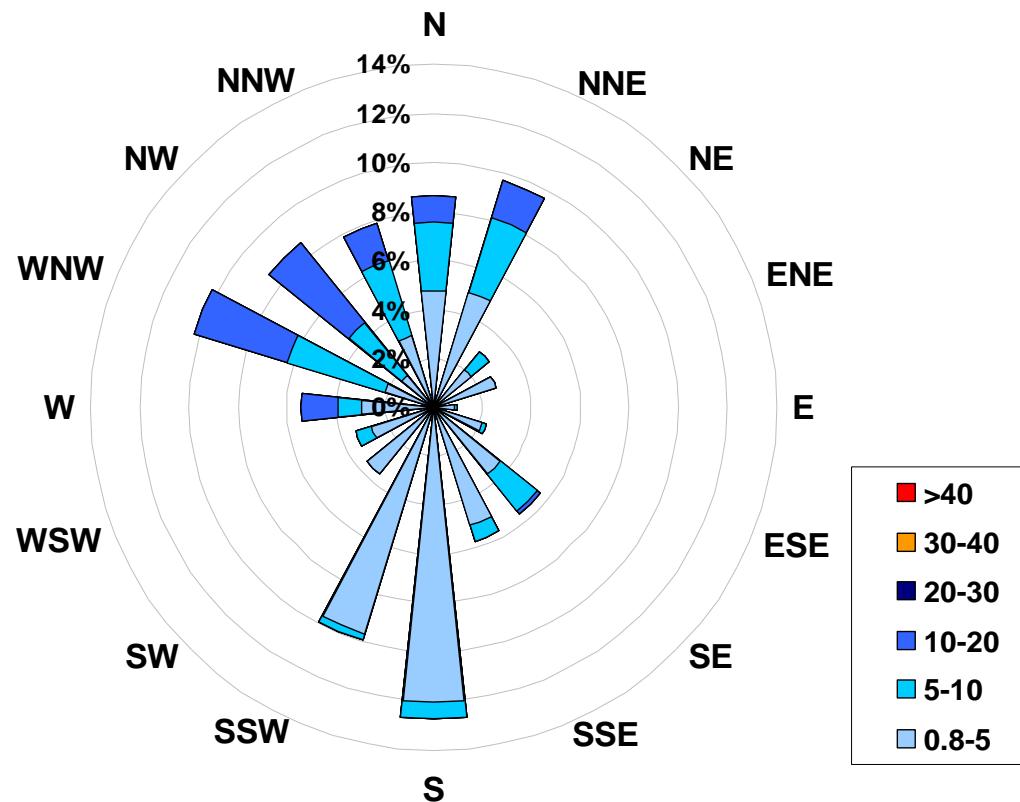
#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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 1:00	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-Aug-07	8	9	9	20	24	50	56	21	31	68	55	50	55	65	86	38	52	24	16	32	42	36	63	69	86.4
2-Aug-07	96	61	25	63	47	49	30	15	12	17	24	61	30	64	42	70	47	36	30	13	40	19	21	16	96.5
3-Aug-07	78	54	33	37	38	50	51	28	18	22	12	14	12	14	10	8	13	44	12	12	28	40	12	12	78.4
4-Aug-07	14	13	15	9	11	10	9	12	6	9	9	11	15	14	19	21	15	20	14	10	14	25	19	14	24.9
5-Aug-07	19	13	16	16	35	19	14	11	14	48	40	43	40	30	24	21	18	53	26	51	39	42	65	50	65.4
6-Aug-07	12	16	17	20	12	10	9	14	15	17	17	15	24	30	37	28	37	27	13	17	39	13	11	7	39.1
7-Aug-07	6	5	7	7	13	17	15	31	10	17	13	13	11	14	14	16	17	12	13	13	12	11	45	13	45.2
8-Aug-07	12	67	34	25	12	9	9	12	13	14	P	P	P	P	P	P	P	P	P	P	P	P	P	66.9	
9-Aug-07	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	93.7
10-Aug-07	65	57	45	31	55	90	35	22	37	72	74	57	80	38	32	55	59	27	19	41	42	53	41	23	90.4
11-Aug-07	91	78	26	54	57	74	81	74	51	61	74	36	40	44	70	48	59	16	25	31	47	82	65	45	91.0
12-Aug-07	73	23	24	39	17	9	11	20	29	13	11	14	14	12	9	11	10	11	14	9	8	8	9	10	72.5
13-Aug-07	9	14	14	45	30	19	9	46	18	29	26	29	58	28	73	40	14	21	15	30	23	13	9	11	73.5
14-Aug-07	8	6	6	6	12	6	8	9	11	30	19	21	15	12	13	16	12	12	10	19	19	19	22	26	30.2
15-Aug-07	52	39	57	43	84	91	61	66	53	43	58	23	26	42	41	39	25	26	14	23	18	9	10	5	90.6
16-Aug-07	10	8	15	8	39	51	82	27	74	66	32	22	23	35	21	21	13	12	12	7	13	52	17	37	82.0
17-Aug-07	16	41	72	13	43	34	46	33	20	17	26	20	37	33	20	40	20	29	29	33	23	16	64	87	87.0
18-Aug-07	47	52	59	44	36	95	54	83	80	29	76	30	73	65	33	52	46	44	62	25	51	67	23	47	95.1
19-Aug-07	35	47	63	59	14	17	18	37	22	18	17	30	47	66	83	46	51	50	66	20	20	25	32	21	83.1
20-Aug-07	22	14	16	16	10	8	11	12	37	13	15	16	14	13	13	15	15	11	12	10	14	15	11	12	37.1
21-Aug-07	9	8	10	7	8	7	8	7	11	10	10	9	7	8	9	10	7	10	10	11	16	12	61	53	60.7
22-Aug-07	70	57	37	17	33	27	31	42	42	39	52	72	36	61	27	46	41	16	36	92	42	86	82	35	92.5
23-Aug-07	21	27	49	70	47	51	23	16	24	26	42	78	44	23	54	32	61	29	13	19	78	74	55	88	88.1
24-Aug-07	75	72	75	52	47	58	23	31	63	36	85	67	72	94	61	75	47	17	38	22	97	74	83	46	96.6
25-Aug-07	14	9	81	44	60	86	32	26	47	48	19	17	20	17	16	19	13	23	11	10	19	55	26	65	86.1
26-Aug-07	18	12	15	42	14	27	14	12	12	17	23	15	17	14	14	11	13	17	12	9	10	13	15	17	42.3
27-Aug-07	27	36	58	16	45	31	50	32	31	56	29	21	21	32	22	29	52	31	20	23	37	50	33	31	58.1
28-Aug-07	9	7	89	59	20	78	15	15	38	30	55	81	73	78	71	40	27	28	19	13	18	55	62	57	89.1
29-Aug-07	64	41	20	31	63	20	45	47	18	29	62	39	36	61	95	17	39	48	38	63	35	49	99	91	99.0
30-Aug-07	50	35	24	91	39	69	56	93	60	23	61	35	22	18	10	10	10	10	23	30	29	8	8	12	92.6
31-Aug-07	63	37	48	11	18	9	22	14	39	34	15	22	28	31	29	16	10	8	6	15	18	18	13	23	63.3

Hourly Max 96 78 89 91 84 95 82 93 80 72 85 81 80 94 95 75 61 69 94 92 97 88 99 91

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



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	455
5	to	10	163
10	to	20	100
20	to	30	0
30	to	40	0
>	40		0
Total Non-Zero Values			718

# PASZA

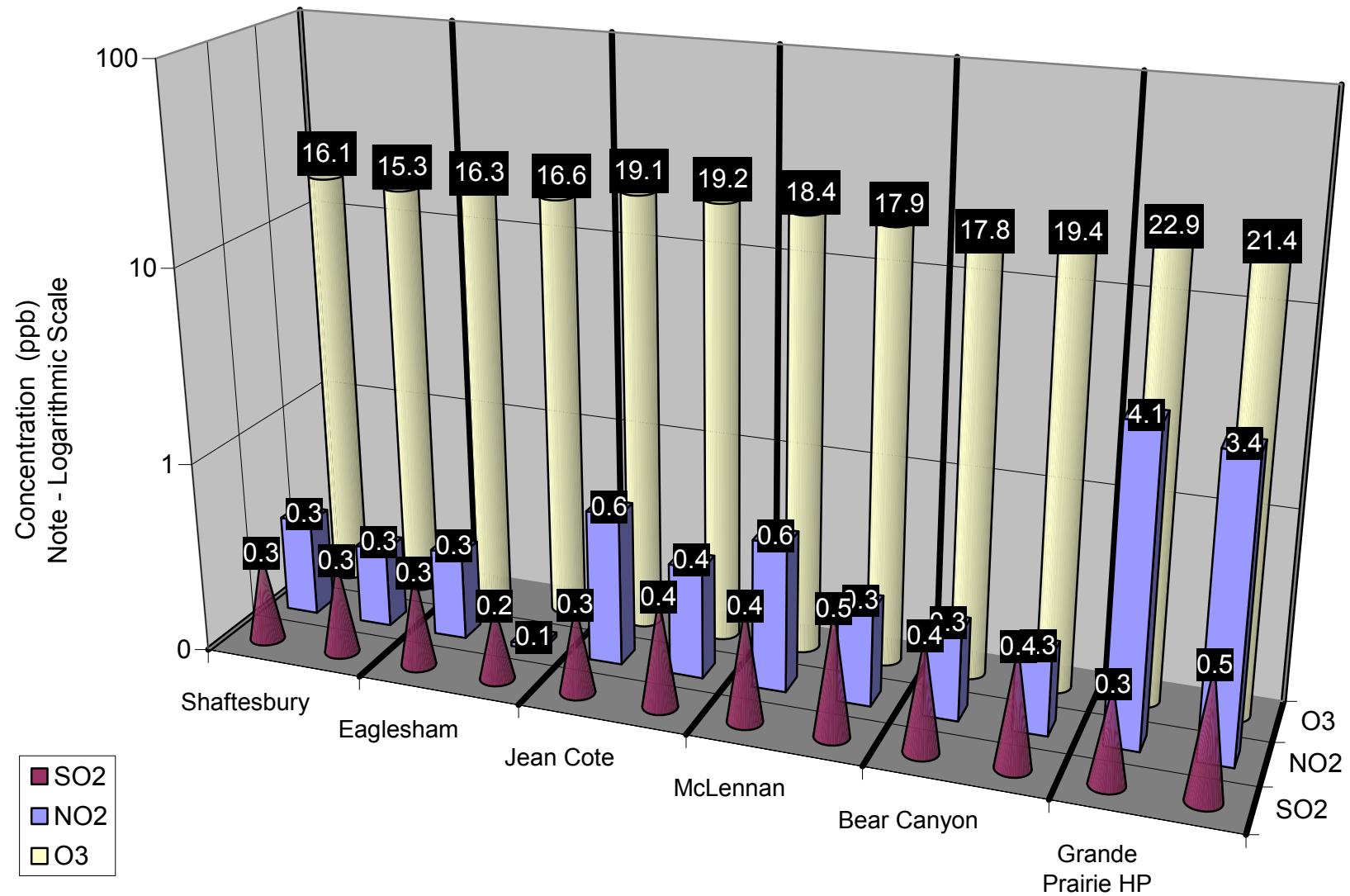
## Monthly Passive Data Summary

**Table 1. PASZA Passive Stations for August 2007**

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
<b>Duplicates</b>					
20a	Shaftesbury	0.3	16.1	0.3	
20b	Shaftesbury	0.3	15.3	0.3	
21a	Eaglesham	0.3	16.3	0.3	
21b	Eaglesham	0.2	16.6	0.1	
35a	Jean Cote	0.3	19.1	0.6	
35b	Jean Cote	0.4	19.2	0.4	
40a	McLennan	0.4	18.4	0.6	
40b	McLennan	0.5	17.9	0.3	
51a	Bear Canyon	0.4	17.8	0.3	
51b	Bear Canyon	0.4	19.4	0.3	
49a	Grande Prairie HP	0.3	22.9	4.1	
49b	Grande Prairie HP	0.5	21.4	3.4	
1	Silver Valley	0.4	18.2	1.2	08-27-081-11 W6M
2	Bay Tree	0.3	17.7	0.0	13-16-078-13 W6M
3	Forth Creek	0.2	21.3	0.3	04-13-082-07 W6M
4	Gordondale	0.7	21.5	0.6	04-34-078-10 W6M
5	Boone Creek	0.3	19.3	0.6	01-23-076-11 W6M
7	Steeprock Creek	0.4	20.1	0.5	09-35-072-13 W6M
9	Spirit River	0.4	20.2	0.6	08-12-079-07 W6M
10	Woking	0.5	17.8	0.5	01-13-076-07 W6M
11	Webber Creek	0.4	20.1	0.7	09-36-074-09 W6M
12	Hythe	0.6	20.8	1.0	14-36-072-11 W6M
14	Sylvester	0.2	16.0	0.7	08-06-069-12 W6M
16	Beaverlodge	N/A	N/A	1.9	15-36-071-10 W6M
17	Poplar	0.4	19.3	0.7	13-06-073-08 W6M
18	Saddle Hills	0.3	18.5	0.7	04-25-074-07 W6M
19	Wanham	0.3	21.6	0.2	16-22-077-03 W6M
20	Shaftesbury	0.3	15.7	0.3	04-03-082-23 W5M
21	Eaglesham	0.3	16.4	0.2	16-21-079-25 W5M
23	Bear Lake	0.3	17.7	0.7	15-31-072-06 W6M

**Table 1. PASZA Passive Stations for July 2007 (Continued)**

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	0.3	18.3	1.2	12-31-070-08 W6M
25	Pinto Creek	0.2	18.4	0.8	04-24-069-11 W6M
26	Flyingshot	0.5	17.9	0.9	15-36-070-07 W6M
27	Grande Prairie I	0.5	20.4	2.8	08-15-071-06 W6M
28	Clairmont Lake	0.3	20.8	0.8	09-06-073-04 W6M
29	Smoky Heights	0.4	24.8	1.0	04-06-075-02 W6M
30	Fitzsimmons	0.2	15.8	0.6	15-36-072-03 W6M
32	Gold Creek	0.3	12.0	1.0	06-33-067-05 W6M
33	Wapiti	0.6	18.5	0.8	02-25-071-03 W6M
34	Puskwaskau	0.3	14.5	0.2	15-35-074-25 W5M
35	Jean Cote	0.3	19.2	0.5	12-35-079-21 W5M
36	Guy	0.3	18.9	0.9	03-04-076-22 W5M
37	Crooked Creek	0.3	17.4	0.8	16-01-071-26 W5M
38	Karr Creek	N/A	N/A	N/A	10-16-065-02 W6M
39	Clouston Creek	0.3	19.1	0.3	12-01-073-22 W5M
40	McLennan	0.4	18.1	0.5	03-29-077-19 W5M
41	Valleyview	0.4	22.4	0.7	09-30-069-22 W5M
42	Sunset House	0.3	22.9	0.2	05-32-070-19 W5M
43	High Prairie	0.2	17.5	0.6	16-13-074-17 W5M
44	Peavine	0.3	16.9	0.3	03-05-079-15 W5M
45	Gift Lake	0.3	14.3	0.3	10-07-079-12 W5M
46	Little Smoky	0.4	19.2	0.8	12-01-065-21 W5M
47	Kinuso	0.4	15.5	0.1	12-10-073-10 W5M
48	Deer Mountain	0.3	14.9	0.1	15-22-068-09 W5M
49	Grande Prairie HP	0.4	22.1	3.8	17-26-071-06 W6M
50	Clear River	0.4	17.8	0.6	SE-03-084-12 W6M
51	Bear Canyon	0.4	18.6	0.3	SE-28-085-12 W6M
52	Worsley	0.3	19.2	0.5	NE-34-085-07 W6M
53	Hines Creek	0.2	16.7	0.2	SW-09-084-04 W6M
54	Ronan	0.3	19.6	1.1	SE-03-082-04 W6M
55	Cadotte Lake School	N/A	N/A	N/A	NE-23-086-16 W5M
56	Simon Lake Store	0.5	16.0	0.4	SE-32-086-17 W5M
57	Dixonville	0.3	18.8	0.3	SE-14-087-24 W5M
58	Queen Elizabeth Park	0.3	20.5	0.8	NW-19-083-23 W5M
59	Blue Sky	0.3	19.6	0.6	SW-35-081-02 W6M
60	Gerry Lake	0.3	17.7	0.1	SW-22-084-02 W6M
61	Musreau Lake	0.3	18.2	0.4	NE-22-064-05 W6M



**Figure 64. Duplicate Summary Chart**

**Table 2. Passive Summary Results for August 2007**

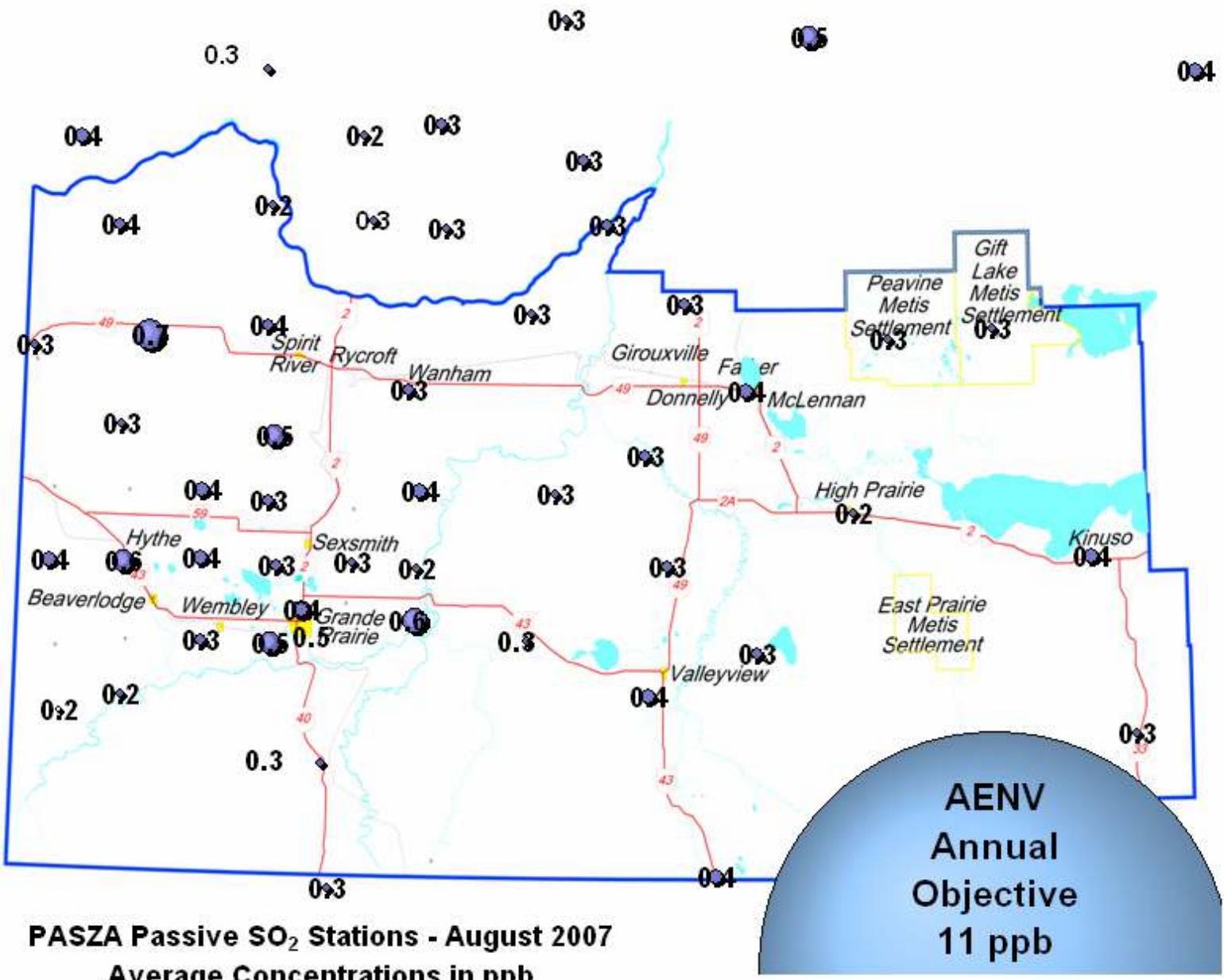
Stats	Sulphur Dioxide SO <sub>2</sub>	Ozone O <sub>3</sub>	Nitrogen Dioxide NO <sub>2</sub>
	ppb	ppb	ppb
Passive Summary for August 2007 (PASZA Zone)			
Mean	0.3	18.6	0.7
Standard Deviation	0.1	2.4	0.6
Minimum	0.2	12.0	0.0
Minimum At	Sylvester (#14)	Gold Creek (#32)	Bay Tree (#2)
Maximum	0.7	24.8	6.0
Maximum At	Gordondale (#4)	Smoky Heights (#29)	Grande Prairie HP (#49)

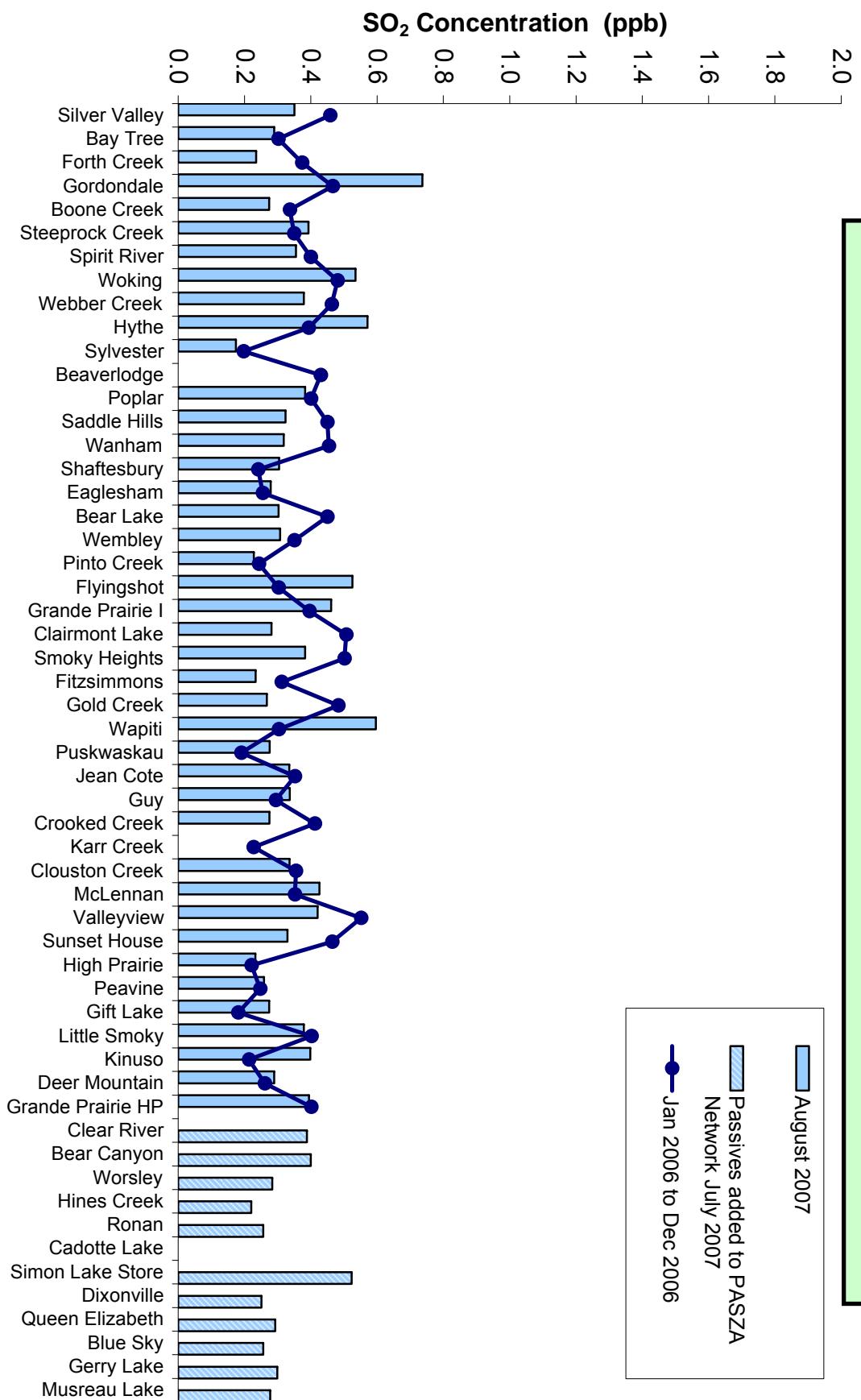
**Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)**

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
AENV Beaverlodge station	0.3	21.1	2.3
PASZA Beaverlodge passive	N/A	N/A	1.9

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

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Henry Pirker station	0.2	21.7	5.0
PASZA Grande Prairie passive	0.4	22.1	3.8

Figure 65.  $\text{SO}_2$  Bubble Chart



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

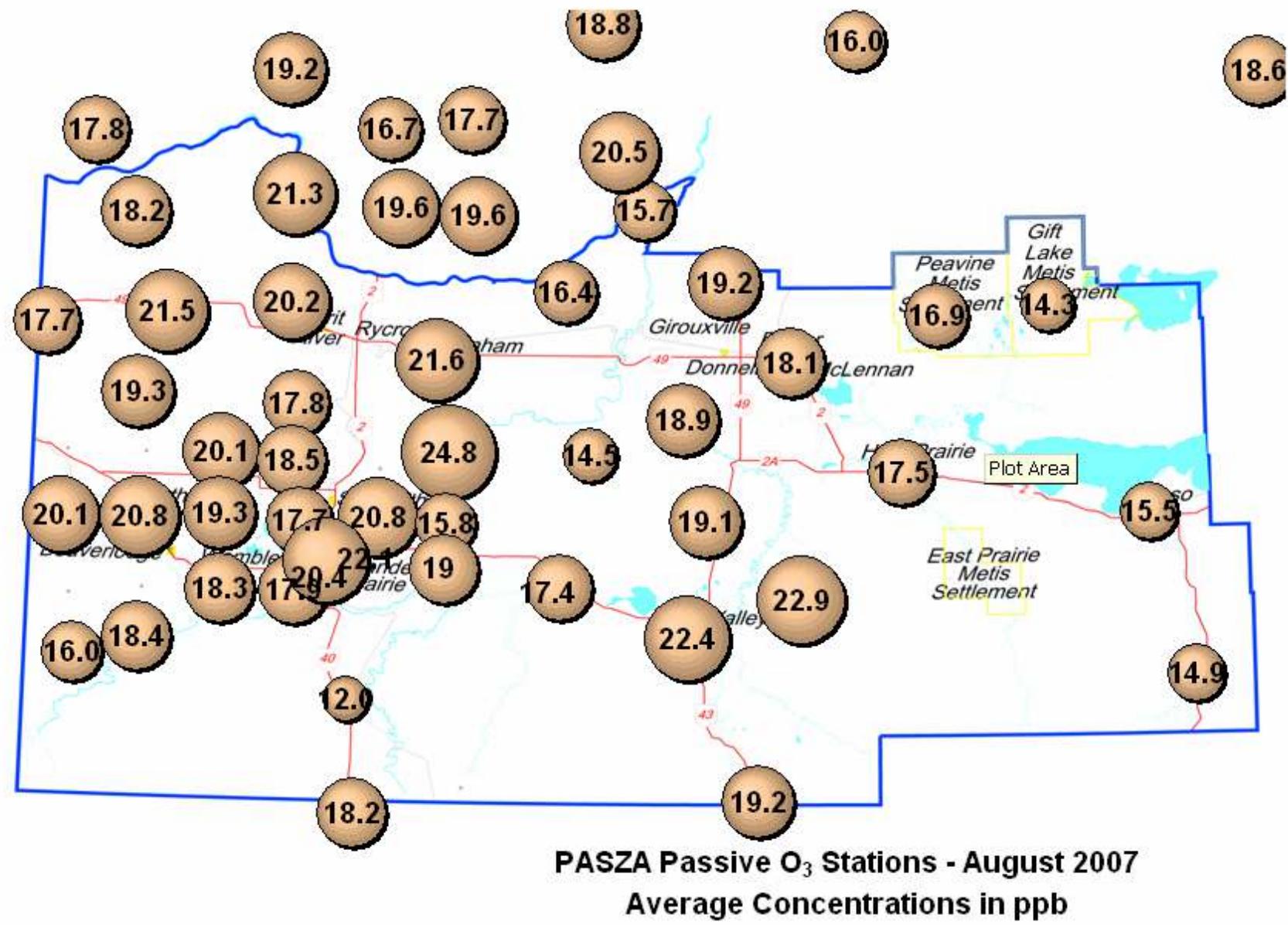
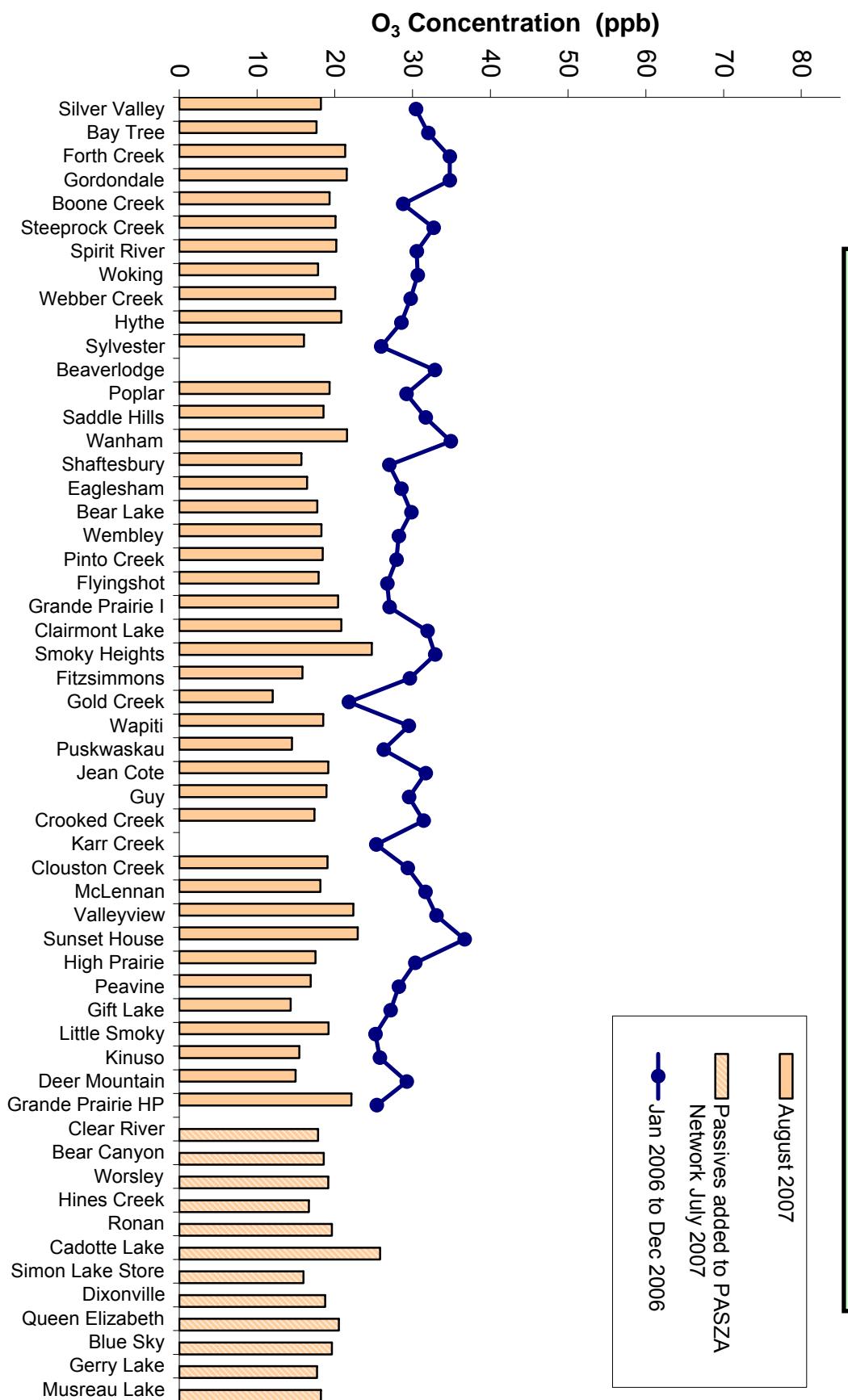
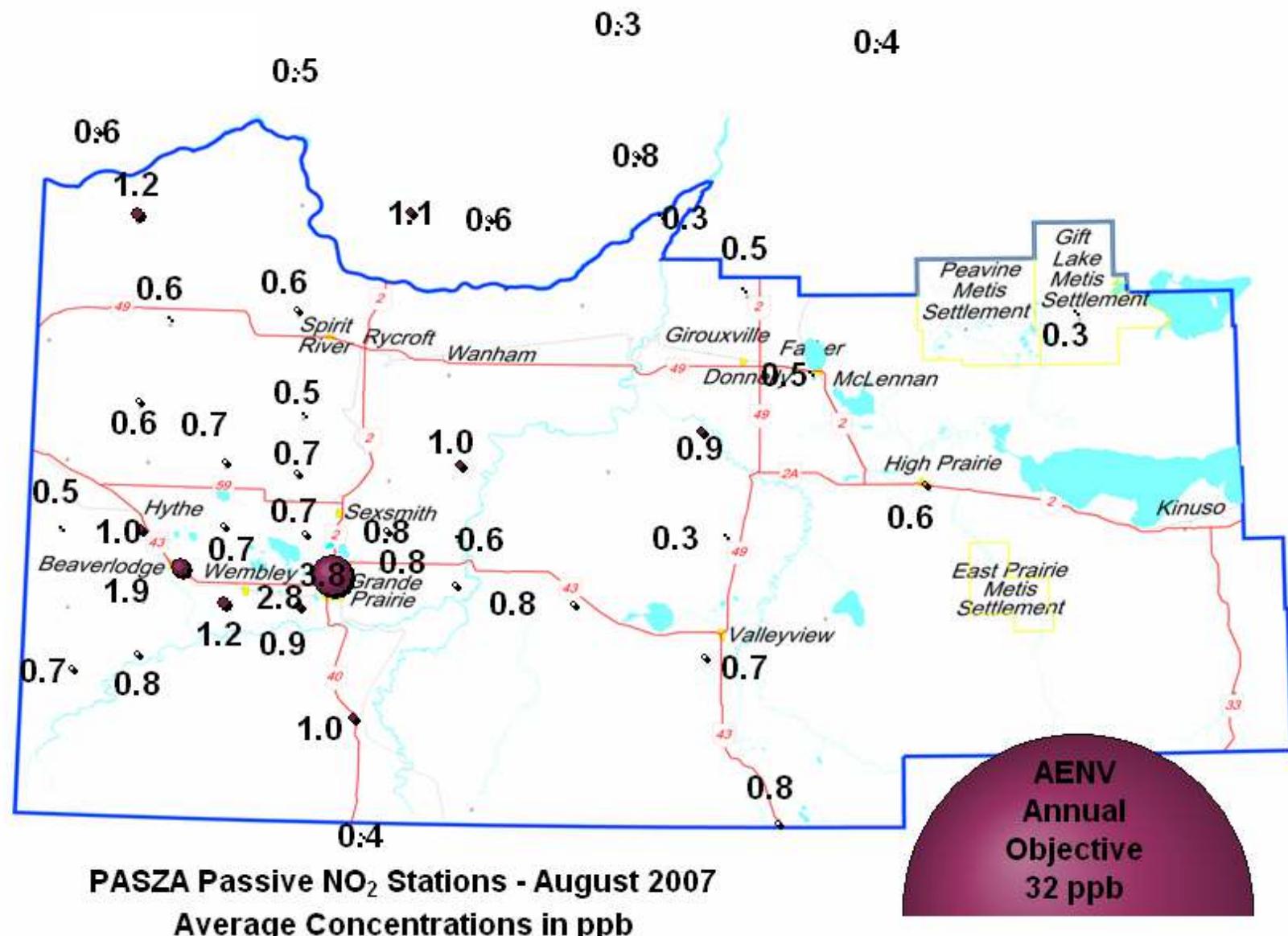


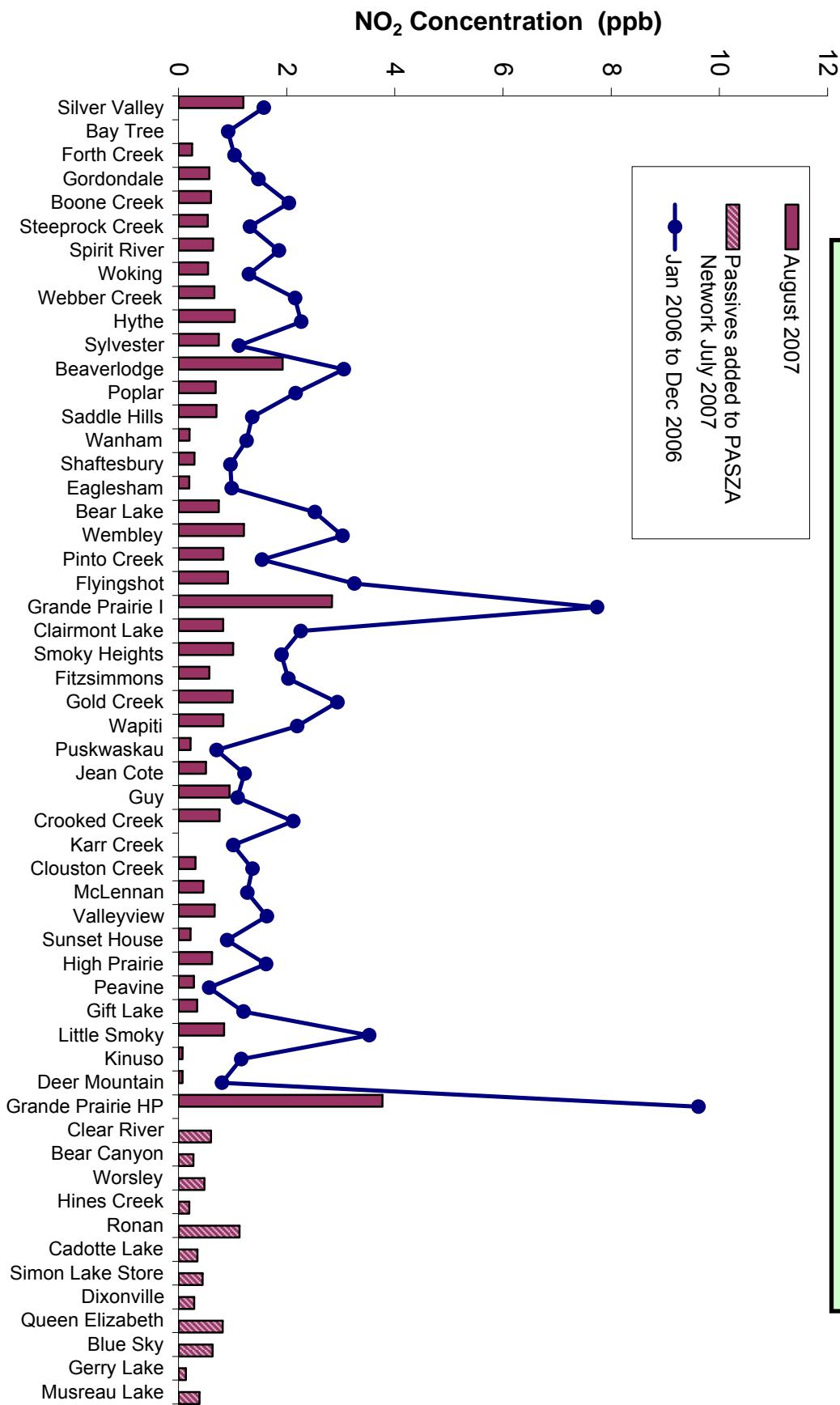
Figure 67. O<sub>3</sub> Bubble Chart



**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**

## **August 2007 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, TRS and TEOM**

**PASZA – Evergreen Park Station with the following calibrations:**

**SO<sub>2</sub>, TRS**

**PASZA – Smoky Heights Station with the following calibrations:**

**SO<sub>2</sub>, 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> and TEOM**

**PASZA – Falher (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	August 2, 2007		Previous Calibration	July 6, 2007
Station Number	1		Station Location	Henry Pirker
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	7:30		End Time (MST)	9:52
Barometric Pressure	0.924	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103		Serial Number	2488
Cal Gas Conc	49.6	ppb	Cal Gas Expiry Date	Jan 2 2009
DACS make	Focus AP1000		Cal Gas Cylinder #	FF-5013
DACS voltage range	0 - 1 volt		DACS serial No.	1
	<u>Before</u>		DACS channel #	10
				<u>After</u>
Calculated slope	1.035076		Calculated slope	1.022539
Calculated intercept	-1.016890		Calculated intercept	-1.725110
Analyzer make	TEI 43C		Analyzer serial #	610816292
Concentration range	before		after	
	0 - 500	ppb	0 - 500	ppb
	7.4		7.3	
	0.785		0.785	
	642.0	mm Hg	650.4	mm Hg
	0.459	lpm	0.455	lpm
Lamp Voltage	815	v	809	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)
4994	0.00	0.0	0.3	N/A
4994	39.93	393.4	385.7	1.0199
4994	19.96	197.5	195.5	1.0099
4994	9.98	98.9	99.8	0.9916
4994	0.00	0.0	0.3	As Found Zero
4994	39.93	393.4	385.7	As Found Span
Average Correction Factor				1.0072

Calculated value of As Found Response: 397.9 ppb Percent Change of As Found: -1.1%

Auto zero	before calibration		after calibration	
	-1.0	ppb	-1.6	ppb
	352.2	ppb	348.0	ppb

Notes: No adjustments or maintenance required

Calibration Performed By: Kelly Baragar, Conor Whiteley

## Calibration Summary

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

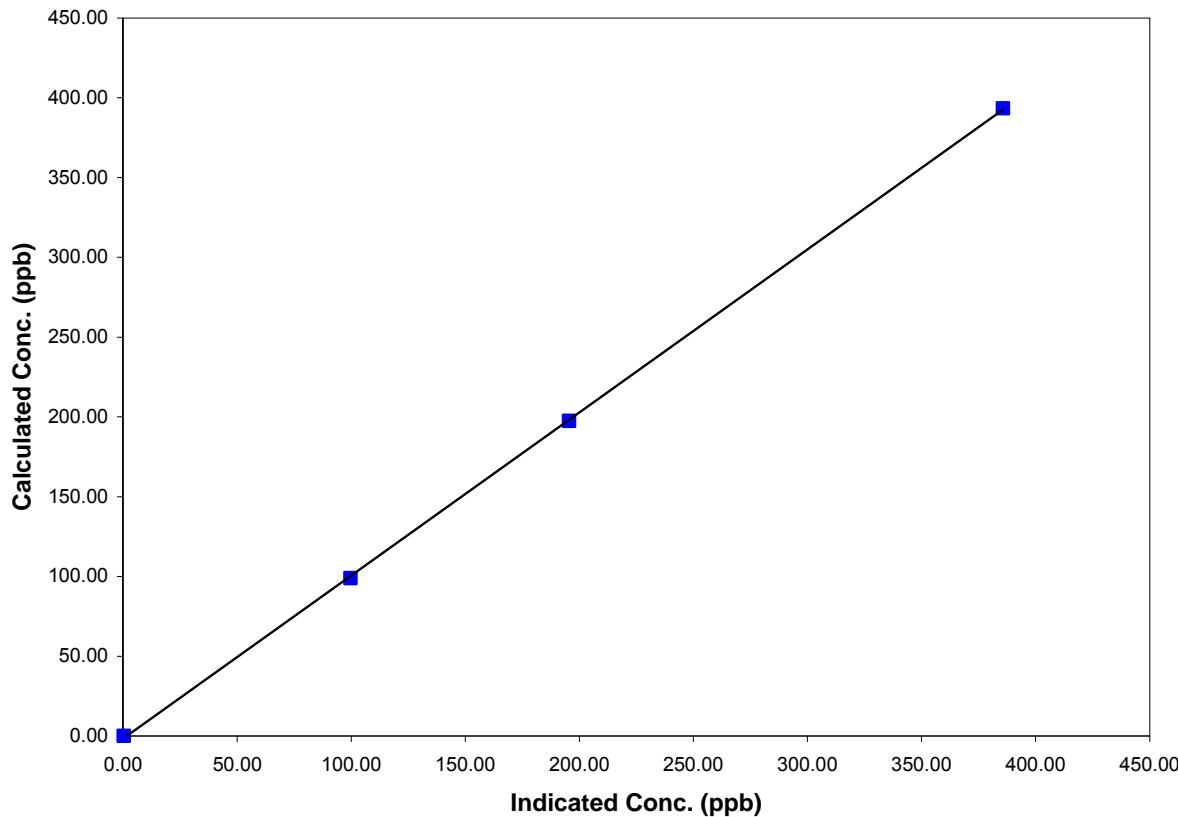


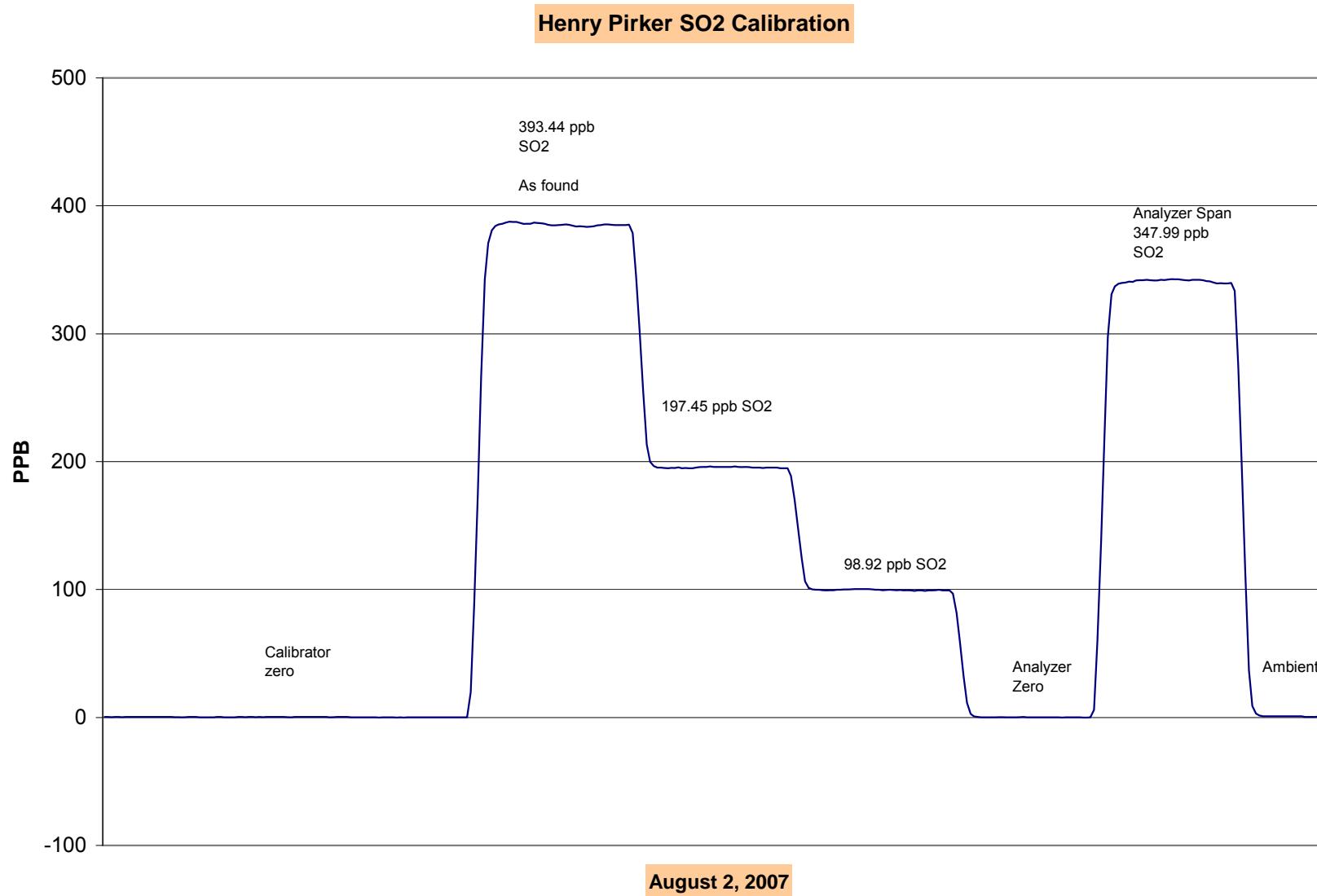
<b>Station Information</b>			
Calibration Date	August 2, 2007	Previous Calibration	July 6, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:30	End Time (MST)	9:52
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
393.4	385.7	1.0199	Correlation Coefficient	0.999943
197.5	195.5	1.0099	Slope	1.022539
98.9	99.8	0.9916	Intercept	-1.725110

### SO2 Calibration Curve





# Calibration Report

Parameter

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

Air Monitoring Network

PASZA



## Station Information

Calibration Date	August 1, 2007		Previous Calibration	July 4, 2007
Station Number	1		Station Location	Henry Pirker
Reason:	Routine   Installation   Removal   Other: _____			
Start Time (MST)	11:00		End Time (MST)	16:10
Barometric Pressure	0.931	Atm	Station Temperature	21.0      Deg C
Calibrator	Environics 6103		Serial Number	2844
NO Cal Gas Conc	49.5	ppm	Cal Gas Expiry Date	2-Jan-09
NOx Cal Gas Conc	49.6	ppm	Cal Gas Serial #	FF-5013

## DACS Information

DACS make	FOCUS AP1000		DACS serial No.	45269
Parameter	NO2	NOx	NO	
	1.029535	1.027672	1.027195	
	-0.494487	-0.906270	-0.631709	
	0.988622	0.985996	0.983626	
	-0.032458	-1.428598	-1.485390	
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	10.6	ppb	7.8	mV
NOx background	11.1	ppb	8.2	mV
NO coefficient	0.678		0.678	
NOx coefficient	1.000		1.000	
Chamber Temp	49.8	Deg C	49.6	Deg C
Cooler Temp	-2.4	Deg C	-2.5	Deg C
Converter Temp	319.0	Deg C	318.0	Deg C
Vacuum	162.1	mm Hg	161.9	mm Hg

Notes:      Made a zero adjustment. No other maintenance performed.

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## Calibration Report

Parameter

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

Air Monitoring Network

**PASZA**

### Station Information

Calibration Date: **August 1, 2007**

Station Location:

**Henry Pirker**

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated 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	4993	0.00	0.0	0.0	0.0	0.1	0.0	0.0	N/A	N/A	
	4993	39.93	393.5	392.7	0.8	399.9	400.0	-0.2	0.9841	0.9818	
	4993	19.96	197.5	197.1	0.4	202.3	202.6	-0.3	0.9762	0.9730	
	4993	9.97	98.9	98.7	0.2	103.2	103.5	-0.3	0.9580	0.9540	
AFZ	4993	0.00	0.0	0.0	0.0	-2.9	-3.0	-0.3	0.0000	0.0000	
	4993	39.93	393.5	392.7	0.8	395.4	395.8	-0.4	0.9954	0.9923	
							Average Correction Factor	0.9728	0.9696		

As Found Concentrations:

NO<sub>x</sub>= 397.5

NO= 398.2

As Found Percent Change

NO<sub>x</sub>= 1.0%

NO= 1.4%

### GPT Calibration Data

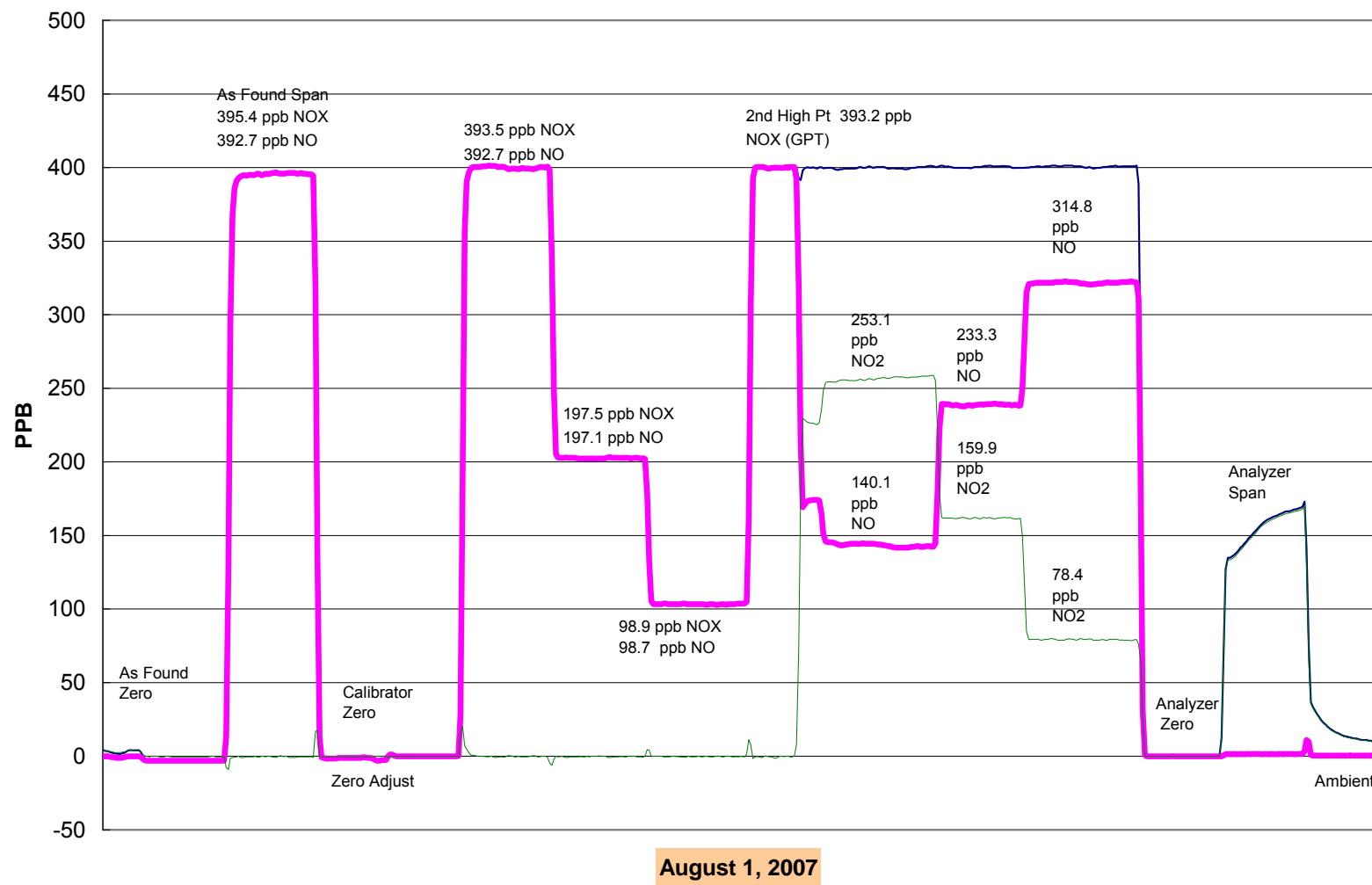
Dilution Flow **4993** ccm      Source Gas Flow **39.97** ccm

O <sub>3</sub> 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	393.2	391.9	1.3	399.6	400.0	-0.4	0.9842	0.9799	N/A	N/A
300	393.2	140.1	253.1	399.8	144.0	256.0	0.9835	0.9733	0.9886	101.2%
200	393.2	233.3	159.9	400.4	238.7	161.9	0.9822	0.9774	0.9881	101.2%
100	393.2	314.8	78.4	400.6	321.5	79.3	0.9816	0.9790	0.9887	101.1%
						Average Correction Factor	0.9824	0.9766	0.9885	101.2%

### AIC Data

	Previous calibration				Current calibration				
Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb	
Auto zero	3.7	1.0	2.9	ppb	0.9	1.0	1.0	ppb	
Auto span	163.1	165.3	-2.2	ppb	155.8	156.1	0.0	ppb	

Calibration Performed By: **Kelly Baragar, Conor Whiteley**

**Henry Pirker - NOx Calibration****August 1, 2007**

## Calibration Summary

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



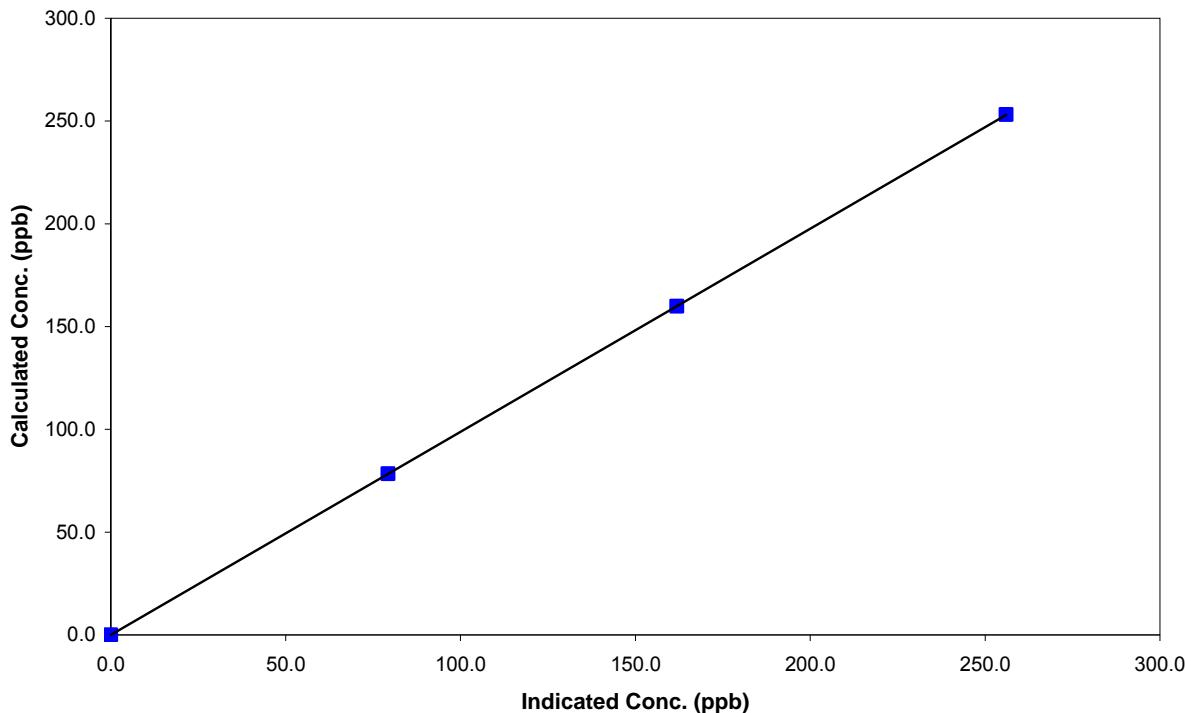
### Station Information

Calibration Date	August 1, 2007	Previous Calibration	July 4, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	16:10
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	0.0000	Correlation Coefficient	1.000000
253.1	256.0	0.9886		
159.9	161.9	0.9881		
78.4	79.3	0.9887		
			Slope	0.988622
			Intercept	-0.032458

### NO<sub>2</sub> Calibration Curve



## Calibration Summary

Parameter

**NO<sub>x</sub>**

Air Monitoring Network

**PASZA**

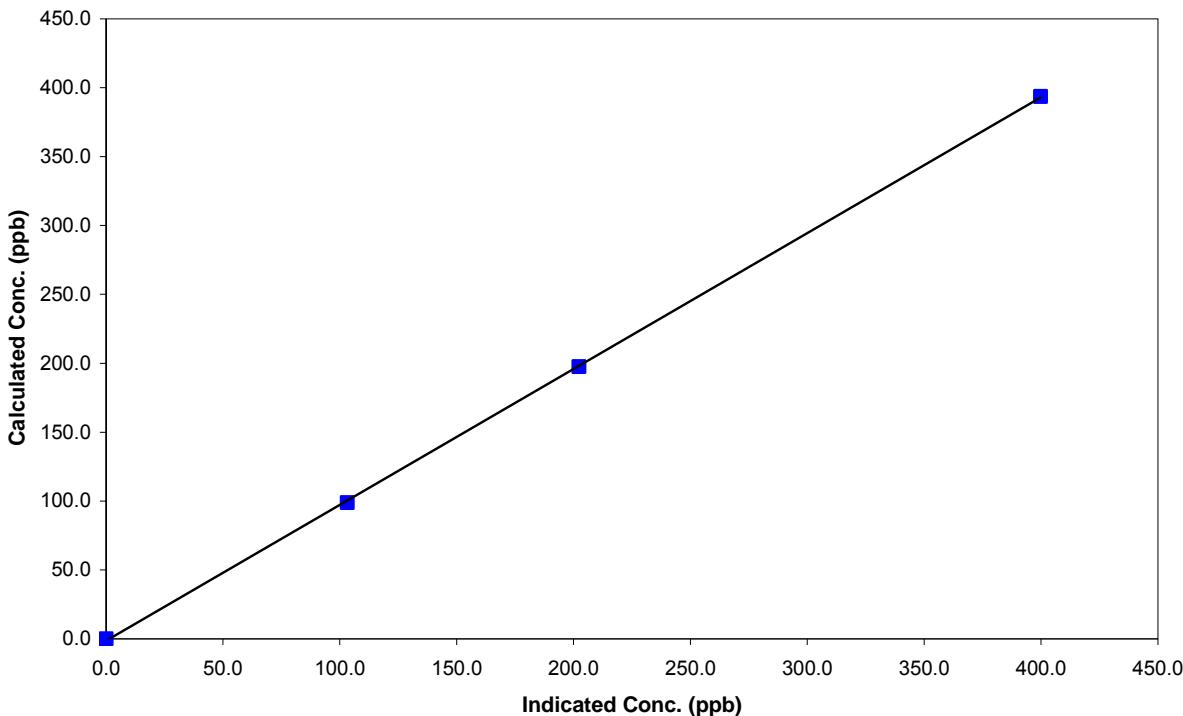
### Station Information

Calibration Date	August 1, 2007	Previous Calibration	July 4, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	16:10
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	0.0000	Correlation Coefficient	0.999944
393.5	399.9	0.9841		
197.5	202.3	0.9762		
98.9	103.2	0.9580		
			Slope	0.985996
			Intercept	-1.428598

### NOx Calibration Curve



## Calibration Summary

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



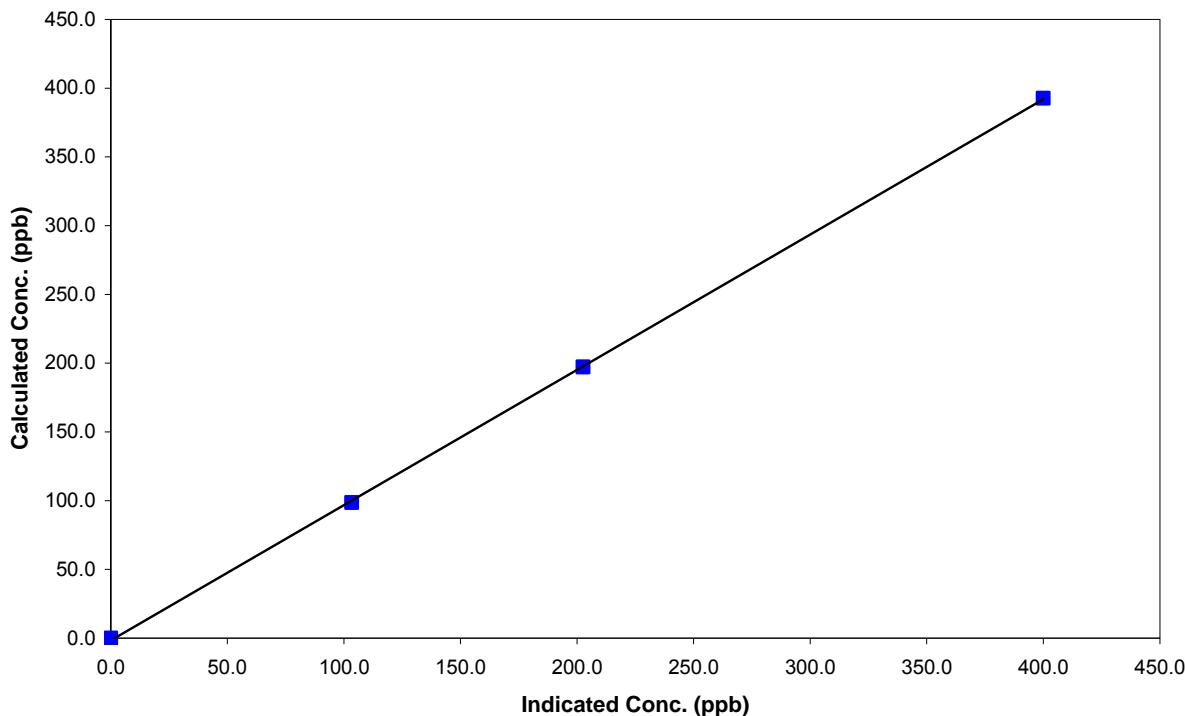
### Station Information

Calibration Date	August 1, 2007	Previous Calibration	July 4, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:00	End Time (MST)	16:10
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999932
392.7	400.0	0.9818		
197.1	202.6	0.9730		
98.7	103.5	0.9540		
			Slope	0.983626
			Intercept	-1.485390

### NO Calibration Curve



## Calibration Report

Parameter

O3

Air Monitoring Network

PASZA



### Station Information

Calibration Date	August 1, 2007	Previous Calibration	July 6, 2007
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
Start Time (MST)	15:10	End Time (MST)	18:30
Barometric Pressure	0.920 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	1.005890	Calculated slope	0.990585
Calculated intercept	2.131849	Calculated intercept	0.521140
Analyzer make	TECO 49C	Analyzer serial #	607415761
Concentration range offset slope O3 Lamp temp Intensities Pressure Flow A Flow B	before	after	
	500	ppb	500 ppb
	-0.5	ppb	-0.7 ppb
	0.861		1.103
	71	mV	71 mV
	97300/75000	mV	94900/72800 mV
	699.4	inches Hg	692.6 inches Hg
	664	ccm	664 ccm
	680	Deg C	674 Deg C

### Calibration Data

Referenced concentration (ppb)	Dilution air flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0	4992	0.0	0.6	N/A
300	4992	300.0	303.2	0.9895
200	4992	200.0	200.7	0.9964
100	4992	95.0	94.1	1.0101
0	4992	0.0	0.6	As found zero
300	4992	303.0	235.8	As found span
Average Correction Factor				0.9987

Calculated value of As Found Response: 238.7 ppm Percent Change of As Found: -21.2%

Auto zero Auto span	before calibration		after calibration	
	2.7	ppb	-1.5	ppb
	280.8	ppb	312.6	ppb

Notes: Span Adjustment made, as found difference caused by calibrator deficiencies during July calibration.  
Calibration points based on reference detector in calibrator.

Calibration Performed By: Kelly Baragar, Conor Whiteley

**Calibration Summary**

Parameter

**O3**

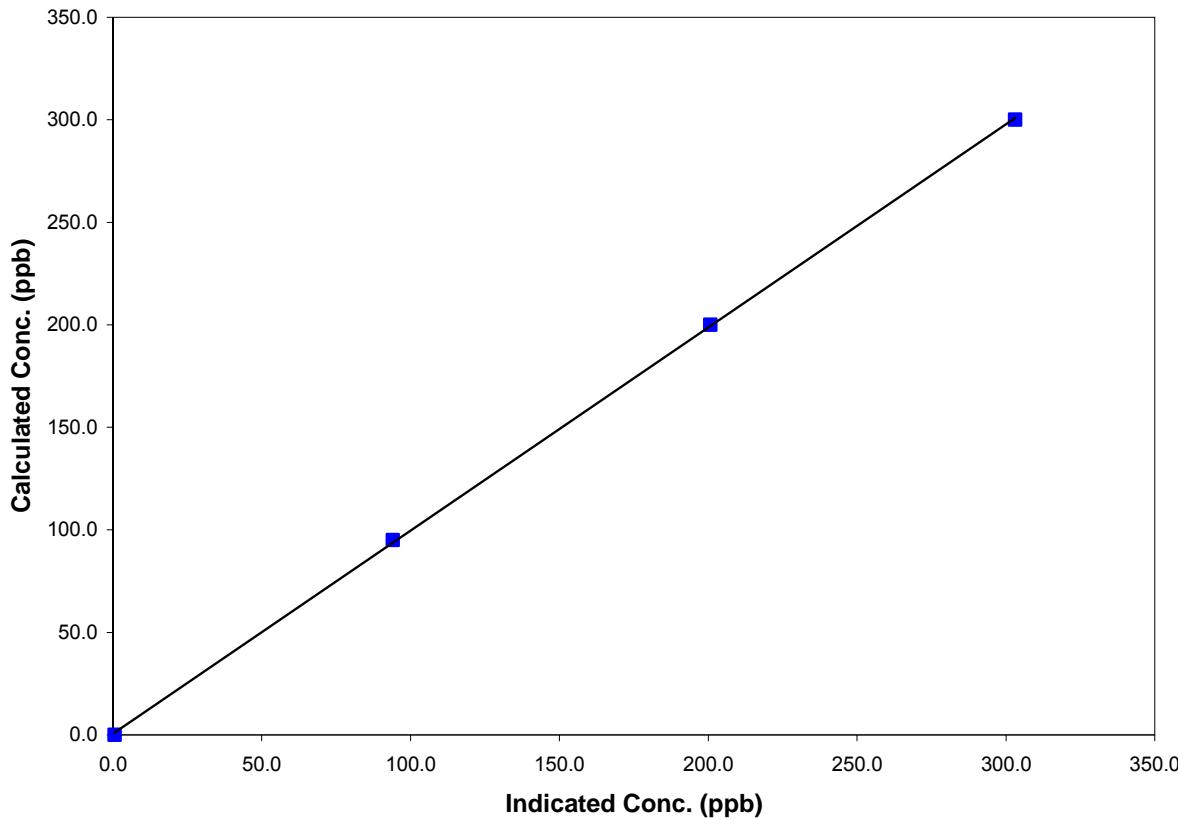
Air Monitoring Network

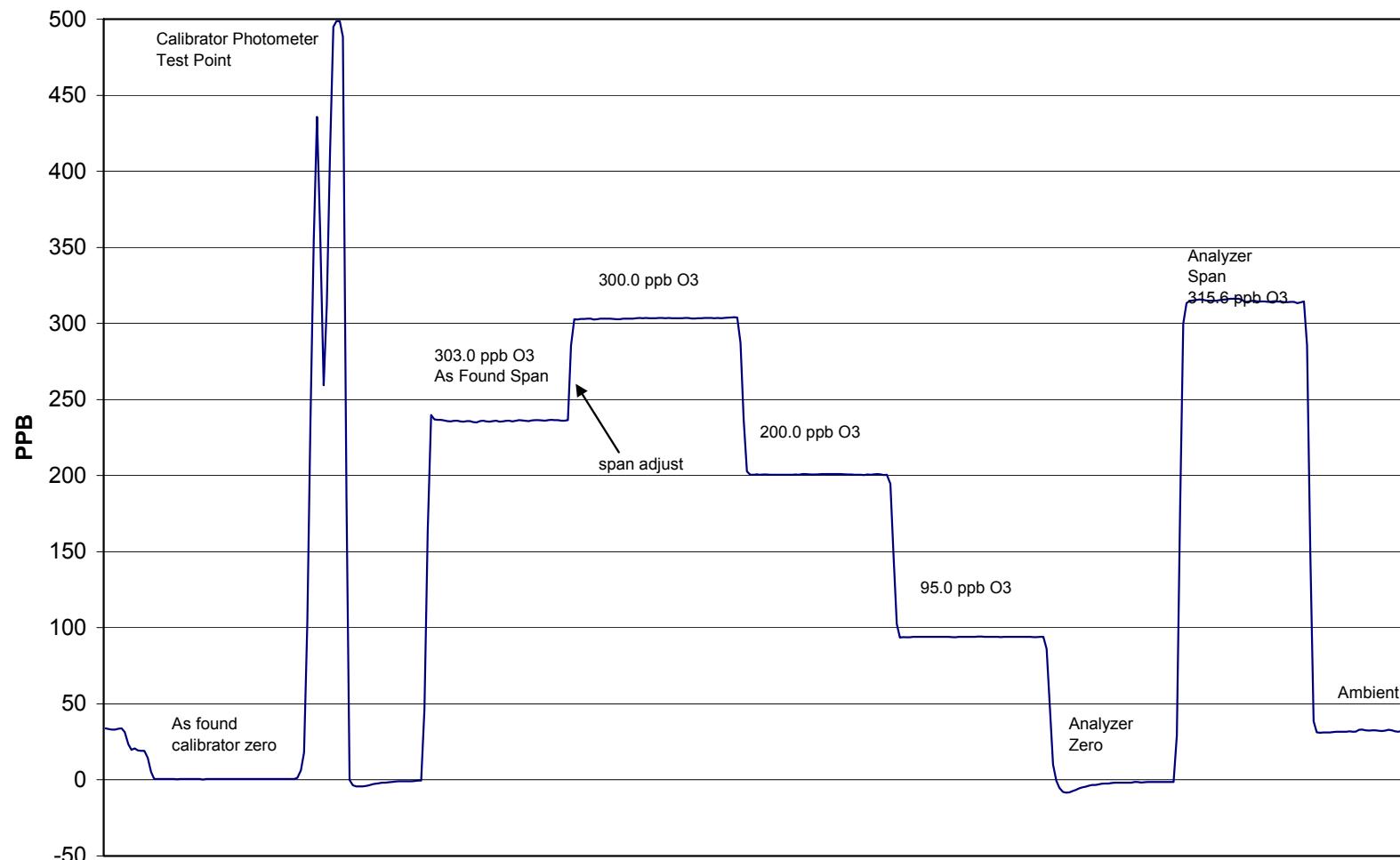
**PASZA****Station Information**

Calibration Date	August 1, 2007	Previous Calibration	July 6, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	15:10	End Time (MST)	18:30
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	0.6	NA		
300.0	303.2	0.9895	Correlation Coefficient	0.999919
200.0	200.7	0.9964	Slope	0.990585
95.0	94.1	1.0101	Intercept	0.521140

**O3 Calibration Curve**

**Henry Pirker - O3 Calibration****August 1, 2007**

**Calibration Report**

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

**Station Information**

Calibration Date	August 2, 2007		Previous Calibration	July 3, 2007
Station Number	1		Station Location	Henry Pirker
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	11:20		End Time (MST)	14:20
Barometric Pressure	0.920	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103		Serial Number	2488
Cal Gas Conc	3000	ppm	Cal Gas Expiry Date	AUG 28/05
DACS make	Focus AP1000		Cal Gas Cylinder #	AAL20565
DACS voltage range	0 - 1 volt		DACS serial No.	1
	Before		DACS channel #	9
Calculated slope	1.023566		Calculated slope	1.026012
Calculated intercept	-0.179696		Calculated intercept	-0.161590
Analyzer make	TEI Model 48C		Analyzer serial #	508011062
Concentration range CO span setting CO zero setting Sample pressure Sample Flow	before		after	
	0 - 25	ppm	0 - 25	ppm
	1.049		1.049	
	9.913		9.913	
	681.7	mm Hg	686.7	mm Hg
	1.092	LPM	1.092	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)
4994	0.00	0.00	0.05	N/A
4994	39.94	23.80	23.30	1.0215
4994	19.91	11.91	11.82	1.0079
4994	9.98	5.98	6.10	0.9812
4994	0.00	0.00	0.05	As Found Zero
4994	39.94	23.80	23.30	As Found Span
Average Correction Factor				1.0035

Calculated value of As Found Response: 23.619 ppm Percent Change of As Found: 0.8%

Auto zero Auto span	before calibration		after calibration	
	-0.04	ppm	0.03	ppm
	19.77	ppm	19.83	ppm

Notes: No adjustments or maintenance performed.

Calibration Performed By: Kelly Baragar, Conor Whiteley

## Calibration Summary

Parameter

CO

Air Monitoring Network

PASZA



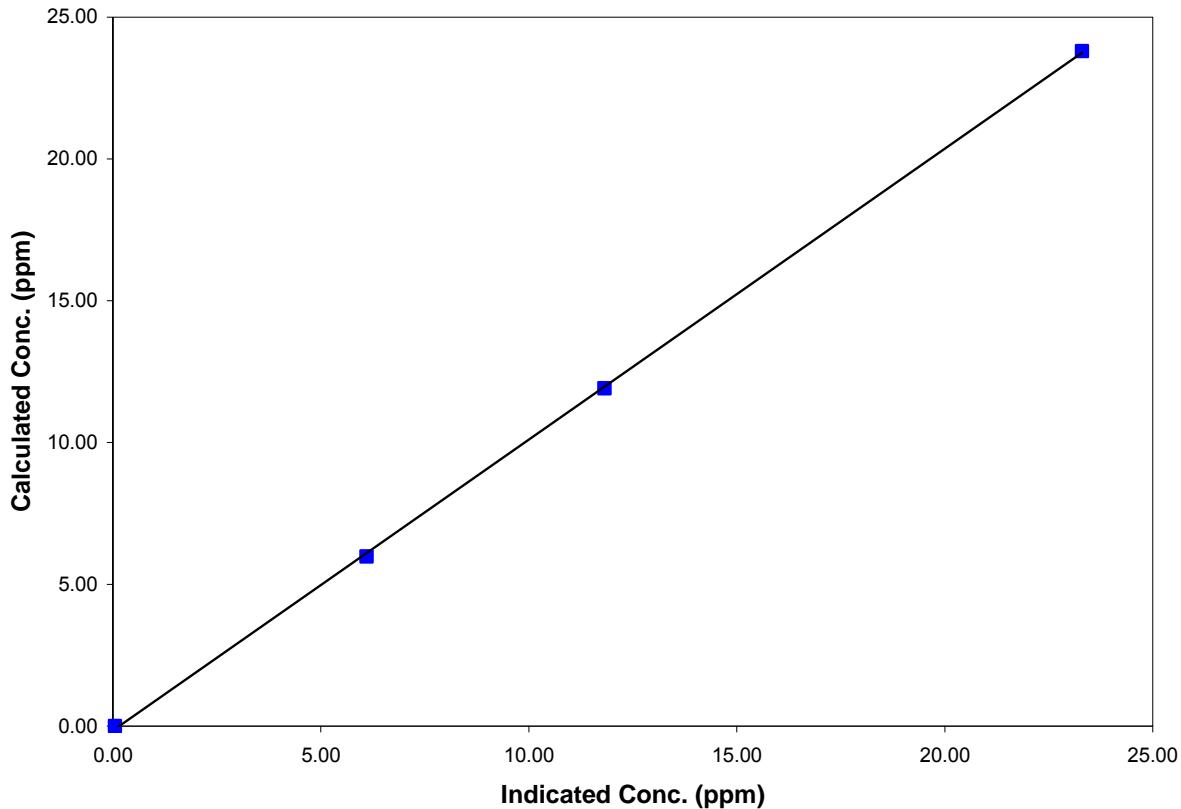
### Station Information

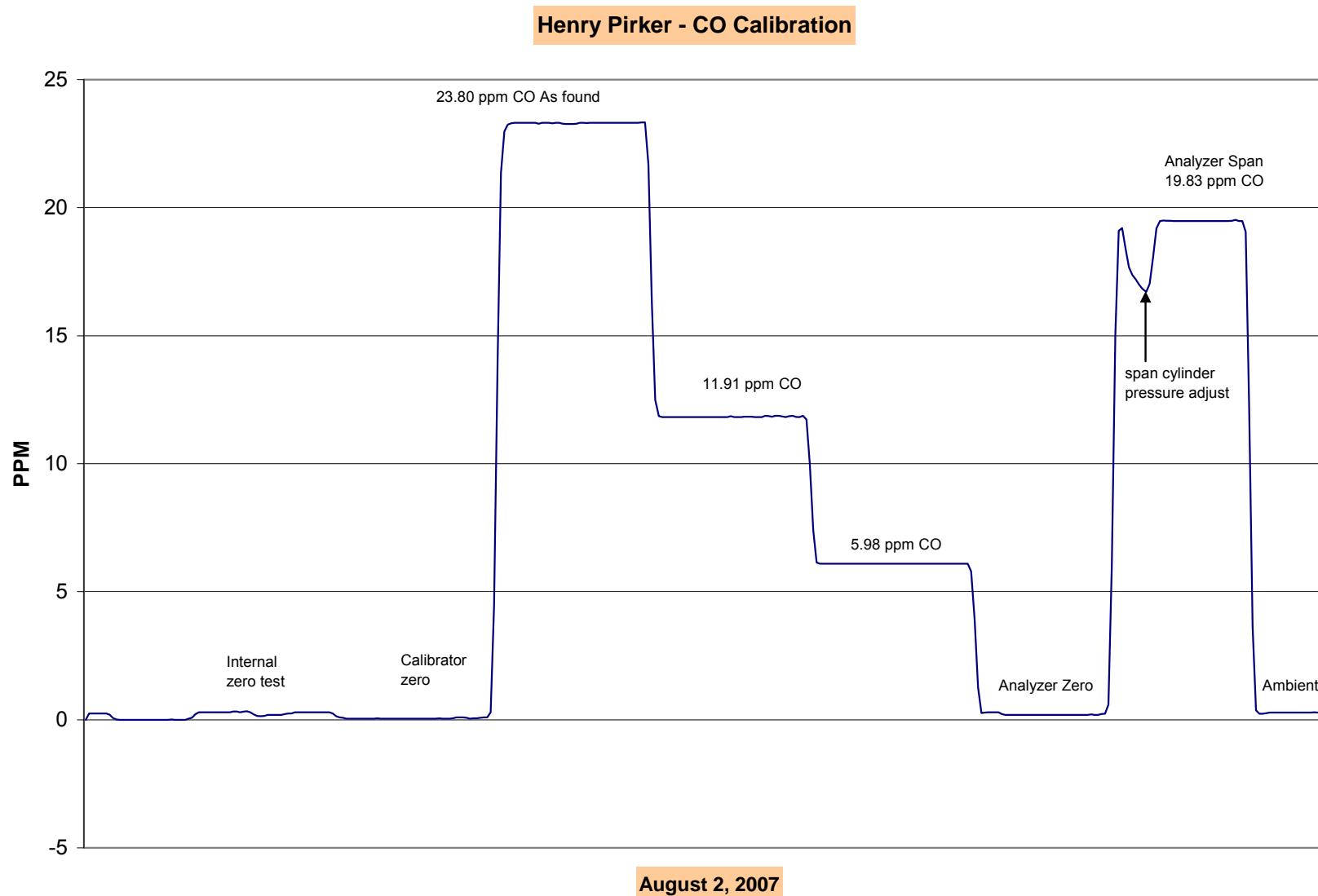
Calibration Date	August 2, 2007	Previous Calibration	July 3, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:20	End Time (MST)	14:20
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.052	N/A		
23.802	23.302	1.0215	Correlation Coefficient	0.999903
11.913	11.819	1.0079	Slope	1.026012
5.983	6.098	0.9812	Intercept	-0.161590

### CO Calibration Curve





## Calibration Report



Parameter	THC
Air Monitoring Network	PASZA

### Station Information

Calibration Date	August 2, 2007		Previous Calibration	July 3, 2007
Station Number	1		Station Location	Muskoseipi Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	9:05		End Time (MST)	12:04
Barometric Pressure	0.924	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103		Serial Number	2844
Cal Gas Concentration	700 ppm CH4/ 299 ppm C3H8		Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1522.25	ppm	Cal Gas Cylinder #	ALM 030358
DACS make	Focus AP1000		DACS serial No.	1
DACS voltage range	0 - 1 volt		DACS channel #	9
	<u>Before</u>			<u>After</u>
Calculated slope	1.002325		Calculated slope	1.005146
Calculated intercept	-0.104200		Calculated intercept	-0.031518
Analyzer make	TEI Model 51C-LT		Analyzer serial #	51CLT-79009-390
Concentration range	before		after	
THC sample pressure	0 - 25	ppm	0 - 25	ppm
THC span counts	6.1	psi	6.1	psi
THC zero counts	7465	capture	6889	capture
	432	capture	879	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)
4992	0.00	0.00	-0.01	N/A
4994	64.90	19.53	19.46	1.0038
4994	29.96	9.08	9.05	1.0026
4994	9.98	3.04	3.11	0.9770
4992	0.00	0.00	-0.01	As Found Zero
4992	64.92	19.54	19.95	As Found Span
Average Correction Factor				0.9945

Calculated value of As Found Response: 19.902 ppm      Percent Change of As Found: -1.8%

Auto zero	before calibration		after calibration	
	-0.51	ppm	0.12	ppm
	20.45	ppm	21.48	ppm

Notes: Minor Span adjustment made, no other maintenance required.

Calibration Performed By: Kelly Baragar, Conor Whiteley

## Calibration Summary

Parameter

**THC**

Air Monitoring Network

**PASZA**

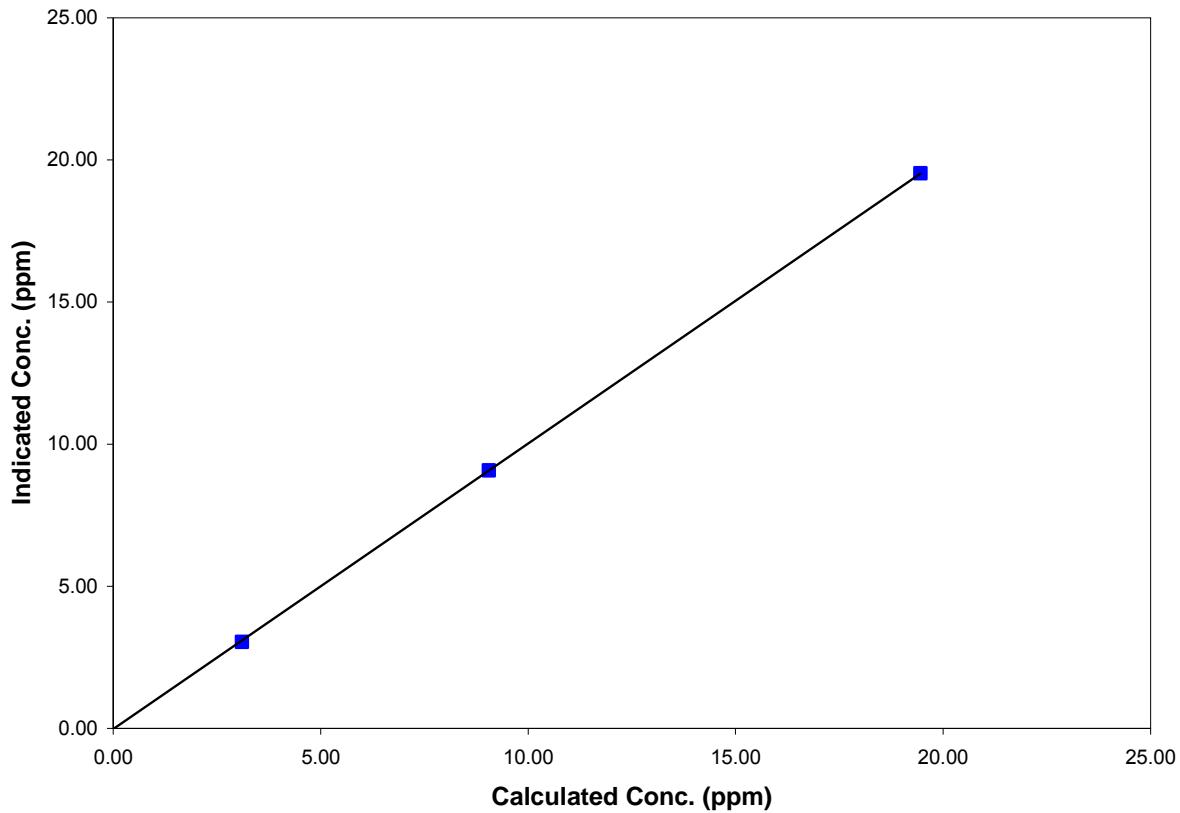
### *Station Information*

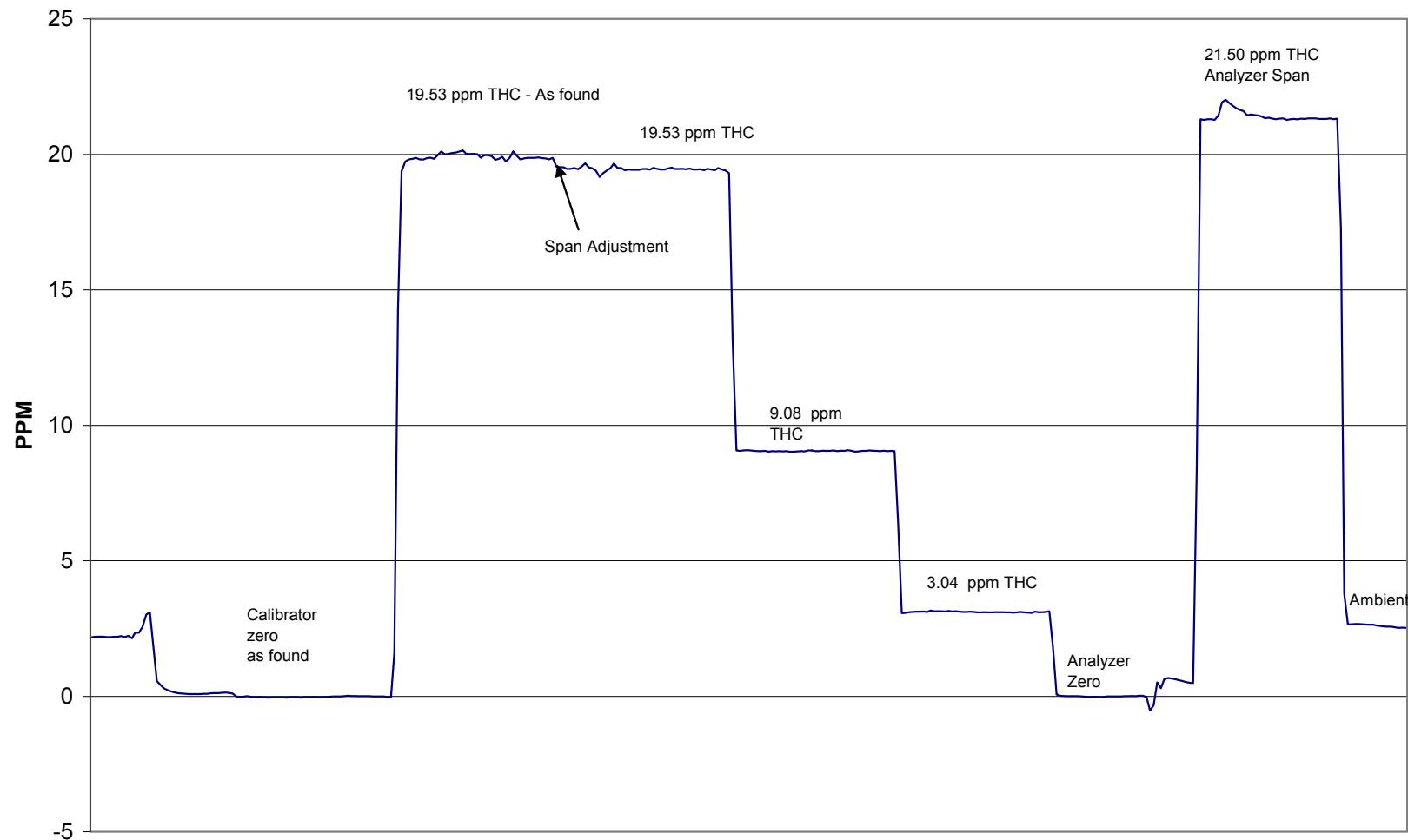
Calibration Date	August 2, 2007	Previous Calibration	July 3, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:05	End Time (MST)	12:04
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

### *Calibration Data*

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.011	N/A		
19.529	19.456	1.0038	Correlation Coefficient	0.999977
9.078	9.054	1.0026	Slope	1.005146
3.037	3.109	0.9770	Intercept	-0.031518

### THC Calibration Curve



**Henry Pirker - THC Calibration****August 2, 2007**

## Calibration Report



Parameter	TRS
Air Monitoring Network	PASZA

### Station Information

Calibration Date	August 2, 2007		Previous Calibration	July 20, 2007
Station Number	1		Station Location	Henry Pirker
Reason:	Routine	Install	Removal	
Start Time (MST)	13:45		End Time (MST)	18:30
Barometric Pressure	0.924	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103		Serial Number	2488
Cal Gas Conc	5.02	ppb	Cal Gas Expiry Date	11/1/2005
DACS make	Focus AP1000		Cal Gas Cylinder #	BLM003489
DACS voltage range	0 - 1 volt		DACS serial No.	1
	<u>Before</u>		DACS channel #	9
				<u>After</u>
Calculated slope	0.975306		Calculated slope	0.990325
Calculated intercept	0.562541		Calculated intercept	-0.118128
Analyzer make	TEI 45C		Analyzer serial #	630718528
Concentration range	before		after	
	0 - 100	ppb	0 - 100	ppb
	0.852		0.871	
	14.9		16.9	
	656.8	mm Hg	665.0	mm Hg
	459	ccm	461	ccm
	849	V	848	V

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4994	0.00	0.00	0.30	N/A
4994	69.89	69.29	70.24	0.9865
4994	39.94	39.83	40.09	0.9935
4994	9.97	10.01	10.14	0.9872
4994	0.00	0.00	-1.10	As Found Zero
4994	70.00	69.39	74.02	As Found Span
Average Correction Factor				0.9890

Calculated value of As Found Response: 73.8 ppb Percent Change of As Found: -6.4%

Auto zero	before calibration		after calibration	
	0.28	ppb	0.17	ppb
	38.91	ppb	36.20	ppb

Notes: Performed as found, Replaced Lamp Socket as lamp frequency was not consistent.  
Zero adjustment made, Span Adjustment made, no other maintenance done.

Calibration Performed By: Kelly Baragar Conor Whiteley

## Calibration Summary

Parameter	<b>TRS</b>
Air Monitoring Network	<b>PASZA</b>



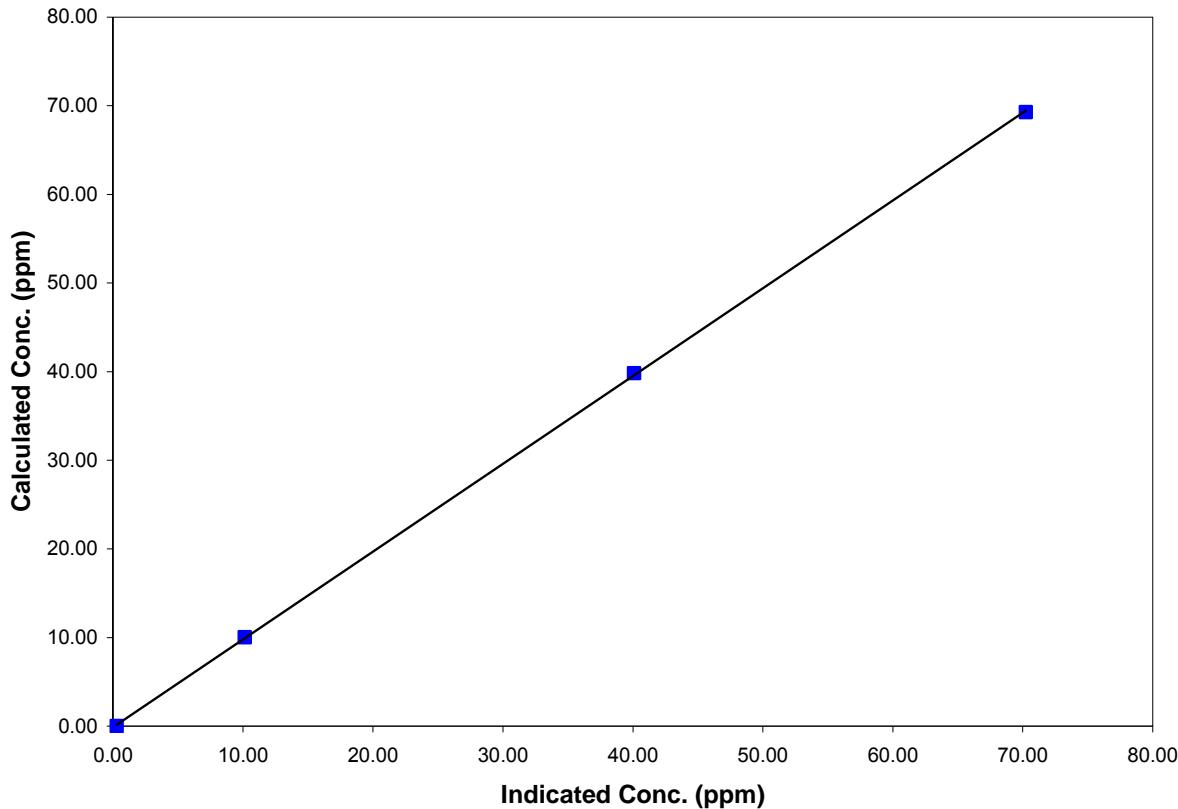
### Station Information

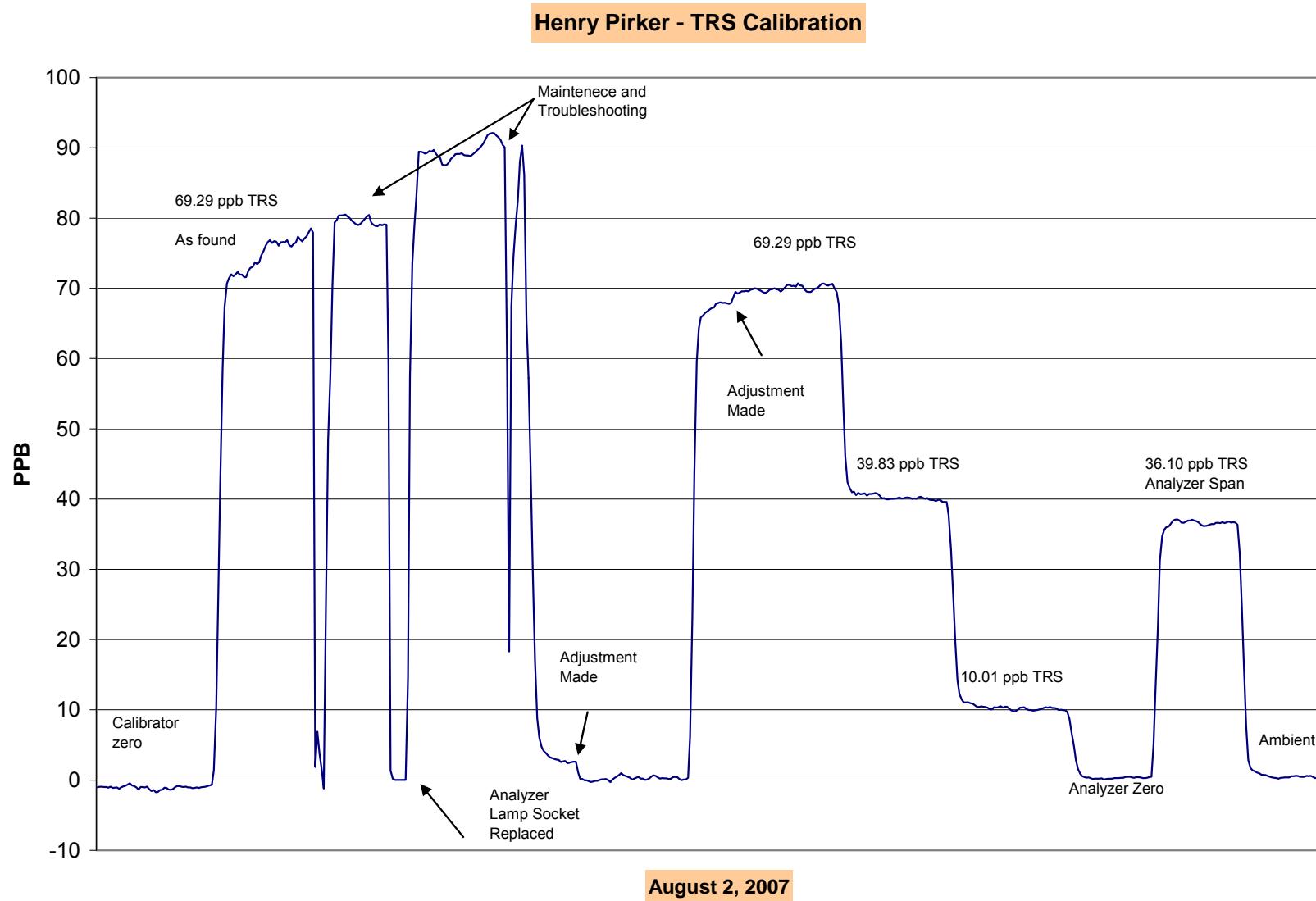
Calibration Date	August 2, 2007	Previous Calibration	July 20, 2007
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:45	End Time (MST)	18:30
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.300	N/A		
69.288	70.237	0.9865	Correlation Coefficient	0.999958
39.829	40.091	0.9935	Slope	0.990325
10.006	10.136	0.9872	Intercept	-0.118128

### TRS Calibration Curve





**Calibration Report**

Parameter

**PM2.5**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	August 2, 2007		Previous Calibration	June 19, 2007
Station Number	1		Station Location	Henry Pirker
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	16:15		End Time (MST)	18:00
Barometric Pressure	0.924	ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH		Serial Number	101780
DACS make	AP 1000		DACS serial No.	45269
DACS voltage range	0 - 1 V		DACS channel #	15

**Analyzer Information**

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	67	%	14	%
Ko Factor	13020		13020	
Temperature	27.1	Deg C	27.1	Deg C
Pressure	0.921	ATM	0.924	ATM

**Calibration Data**

Parameter	Set Point	As Found	Tolerance	TEOM Reading
zero flow - main	0.0	0.10		0.10
zero flow - auxillary	0.0	0.29		0.29
flow recovery - main	45 - 60 Seconds	33	45 - 60 Seconds	33
flow recovery - aux	46 - 60 Seconds	50	46 - 60 Seconds	50
Temperature	measured	26.9	+/- 1.0 Deg C	27.1
Pressure	measured	0.921	+/- 1.5% ΔATM	0.924
Total Flow	16.67 SLPm	16.50		16.50
Main Flow	13.67 SLPm	13.70	+/- 1.0 SLPm	13.70
Auxillary Flow	3.0 SLPm	2.995	+/- 0.2 SLPm	2.995
Leak Check - main	0.0	0.13	<0.15 SLPm	0.13
Leak Check - aux	0.0	0.32	<0.15 SLPm	0.32
Ko Factor (w/o filter)	measured	337.814	filter weight (g)	0.11347
Ko Factor (w/ filter)	measured	239.339	% Ko difference	-0.24%

Notes: As found indicates flows were accurate; no adjustments made. BP sensor was adjusted.

Audit filter indicates accurate analyzer response. Replaced sample filter with new one.

Calibration Performed By: Kelly Baragar, Conor Whiteley

## Calibration Report



Parameter

**SO<sub>2</sub>**

Air Monitoring Network

**PASZA**

### Station Information

Calibration Date	August 7, 2007	Previous Calibration	July 12, 2007
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
Start Time (MST)	10:45	End Time (MST)	13:35
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2488
Perm-tube Conc	49.6 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.031443	Cal Gas Cylinder #	FF-5013
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	0.999416	Calculated slope	0.989955
Calculated intercept	1.258980	Calculated intercept	-0.390730

Analyzer make	Teco 43i	Analyzer serial #	701120008
before		after	
Concentration range	1000	ppb	0 - 1000 ppb
Background coefficient	8.9		8.9
Lamp Voltage	0.928		0.928
Chamber Temp	837	volts	834 volts
Perm Gas Temp	45.4	Deg C	45.2 Deg C
Pressure	45.01	Deg C	44.99 Deg C
Sample Flow	670.1	mm Hg	667.7 mm Hg
Lamp Intensity	448	ccm	446 ccm
	89	%	91 %

### 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)
4994	0.0	0.0	0.6	N/A
4994	39.9	393.2	397.7	0.9888
4994	19.9	197.3	199.6	0.9882
4994	10.0	99.0	100.1	0.9885
zero	0.0	0.0	0.6	As Found Zero
4994	39.9	393.2	397.7	As Found Span
Average Correction Factor				0.9885

Calculated value of As Found Response: 398.132 ppm Percent Change of As Found: -1.2%

	before calibration		after calibration
Auto zero	1.7 ppm		0.1 ppm
Auto span	283.5 ppm		284.8 ppm

Notes:

Calibration Performed By: Lenin Flores, Conor Whiteley

**Calibration Summary**

Parameter

**SO2**

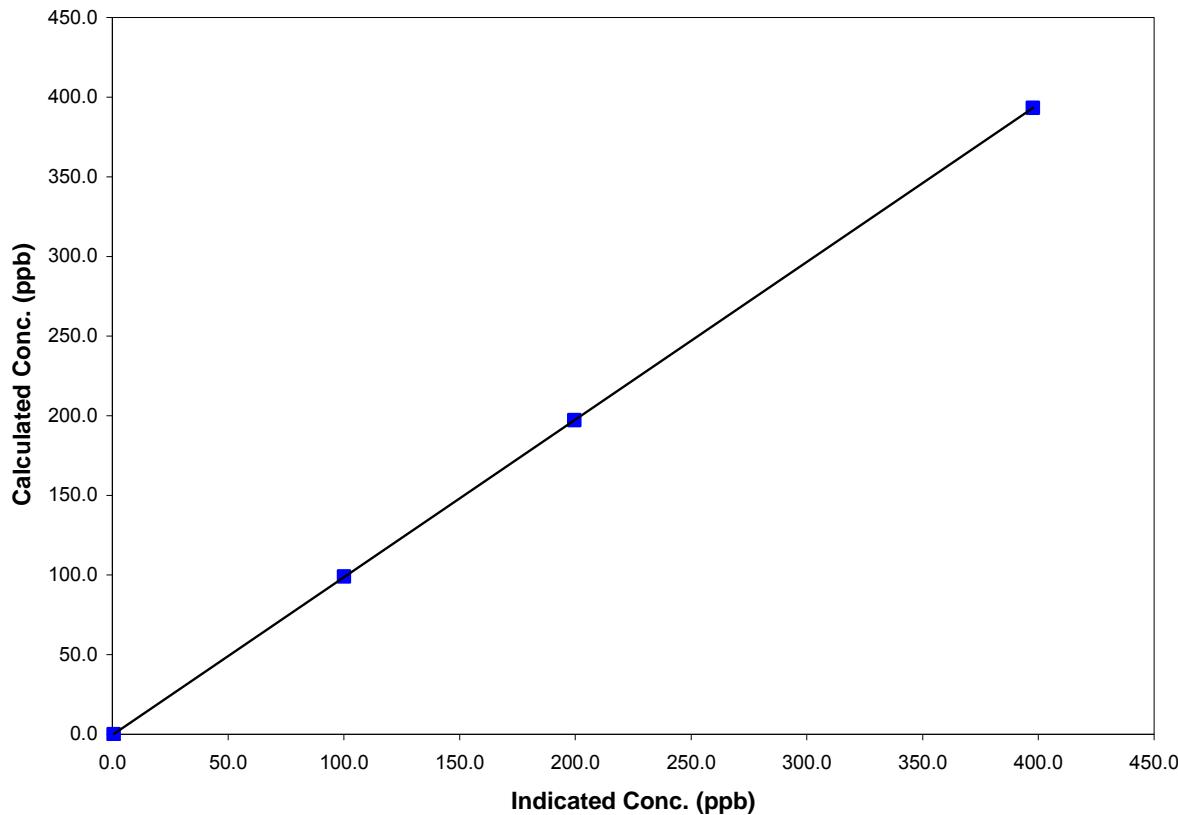
Air Monitoring Network

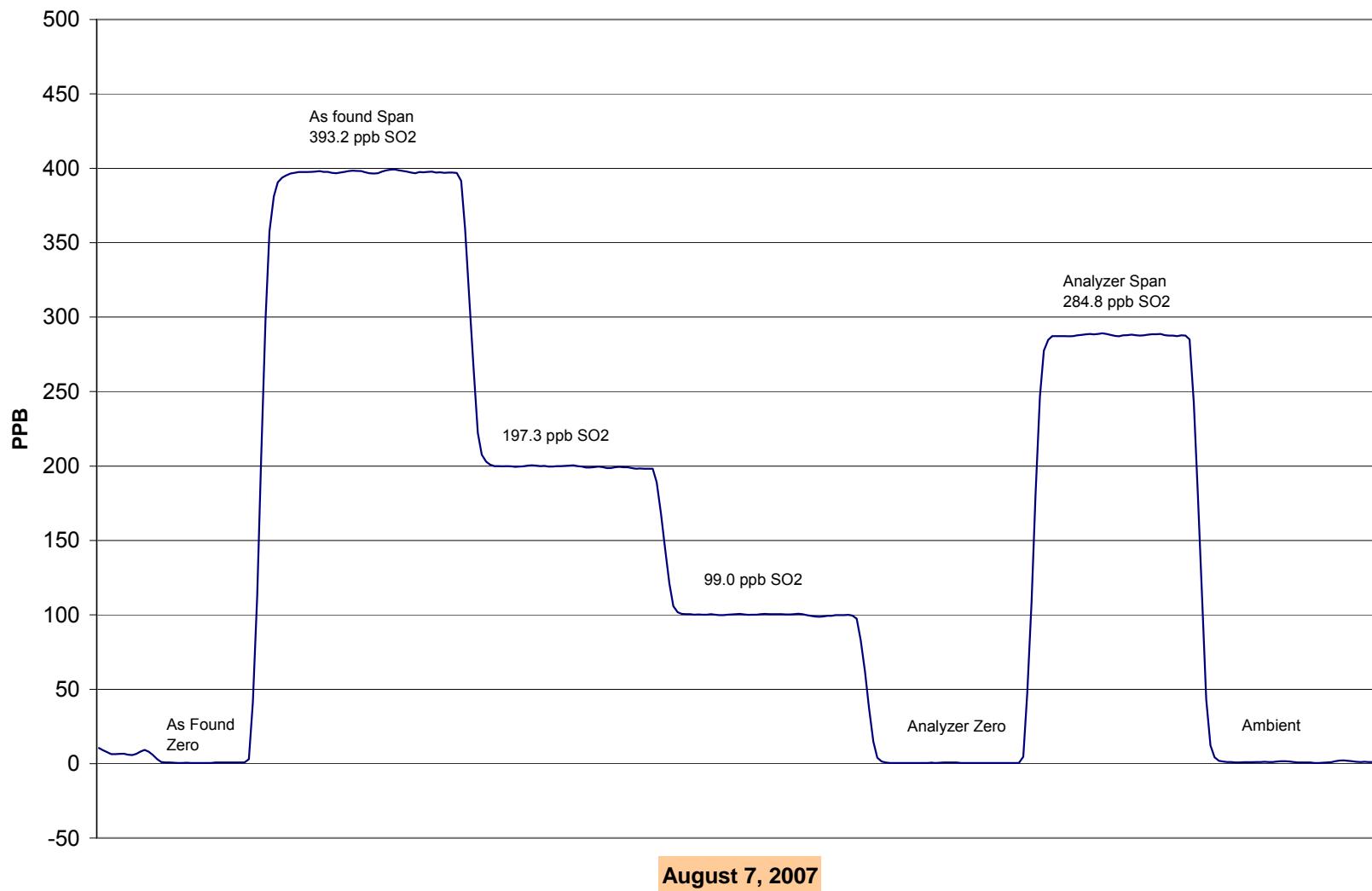
**PASZA**

<b>Station Information</b>			
Calibration Date	August 7, 2007	Previous Calibration	July 12, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:45	End Time (MST)	13:35
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A		
393.2	397.7	0.9888	Correlation Coefficient	0.999999
197.3	199.6	0.9882	Slope	0.989955
99.0	100.1	0.9885	Intercept	-0.390730

**SO2 Calibration Curve**

**Evergreen Park - SO2 Calibration**

**Calibration Report**

Parameter

**TRS**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	August 7, 2007		Previous Calibration	July 12, 2007
Station Number	2		Station Location	Evergreen Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	12:30	End Time (MST)	15:30	
Barometric Pressure	0.92	ATM	20.0	Deg C
Calibrator	Environics 6103	Serial Number	2488	
Cal Gas Conc	5.02	ppm	Nov 15 2005	
Correction factor	0.031341	Cal Gas Cylinder #	BLM003489	
DACS make	Focus AP1000	DACS serial No.	52620	
DACS voltage range	0 - 10 volt	DACS channel #	5	
Calculated slope	Before	Calculated slope	After	
Calculated intercept	0.977102	Calculated intercept	0.982718	
	1.878498		1.430907	

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
before			after
Concentration range	100	ppb	100
Background coefficient	17.5	ppb	17.4
Lamp Voltage	0.976		0.976
Chamber Temp	787	volts	787
Perm Gas Temp	44.2	Deg C	44.3
Pressure	45	Deg C	45
Sample Flow	630.9	mm Hg	634
Lamp Intensity	466	ccm	466
	45,700	mv	45,746

**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)
4996	0.0	0.0	-1.6	N/A
4996	79.5	78.7	78.4	1.0038
4996	39.9	39.8	39.5	1.0071
4996	20.0	20.0	18.8	1.0620
zero	0.0	0.0	-1.6	As Found Zero
4996	80.0	79.1	78.4	As Found Span
Average Correction Factor				1.0243

Calculated value of As Found Response: 80.05 ppm Percent Change of As Found: -1.2%

	before calibration		after calibration	
Auto zero	0.3	ppm	-0.2	ppm
Auto span	66.3	ppm	69.0	ppm

Notes:

Calibration Performed By: Lenin Flores, Conor Whiteley

## Calibration Summary

Parameter **TRS**

Air Monitoring Network

**PASZA**

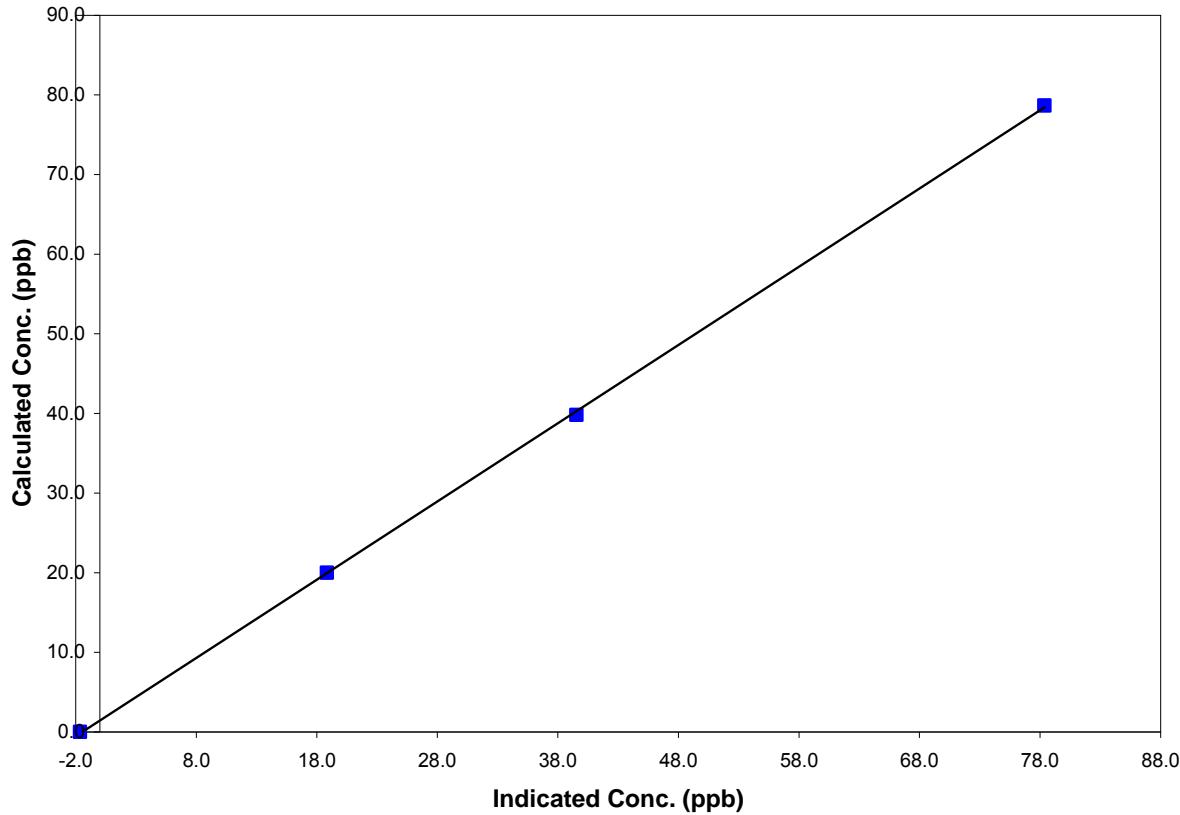


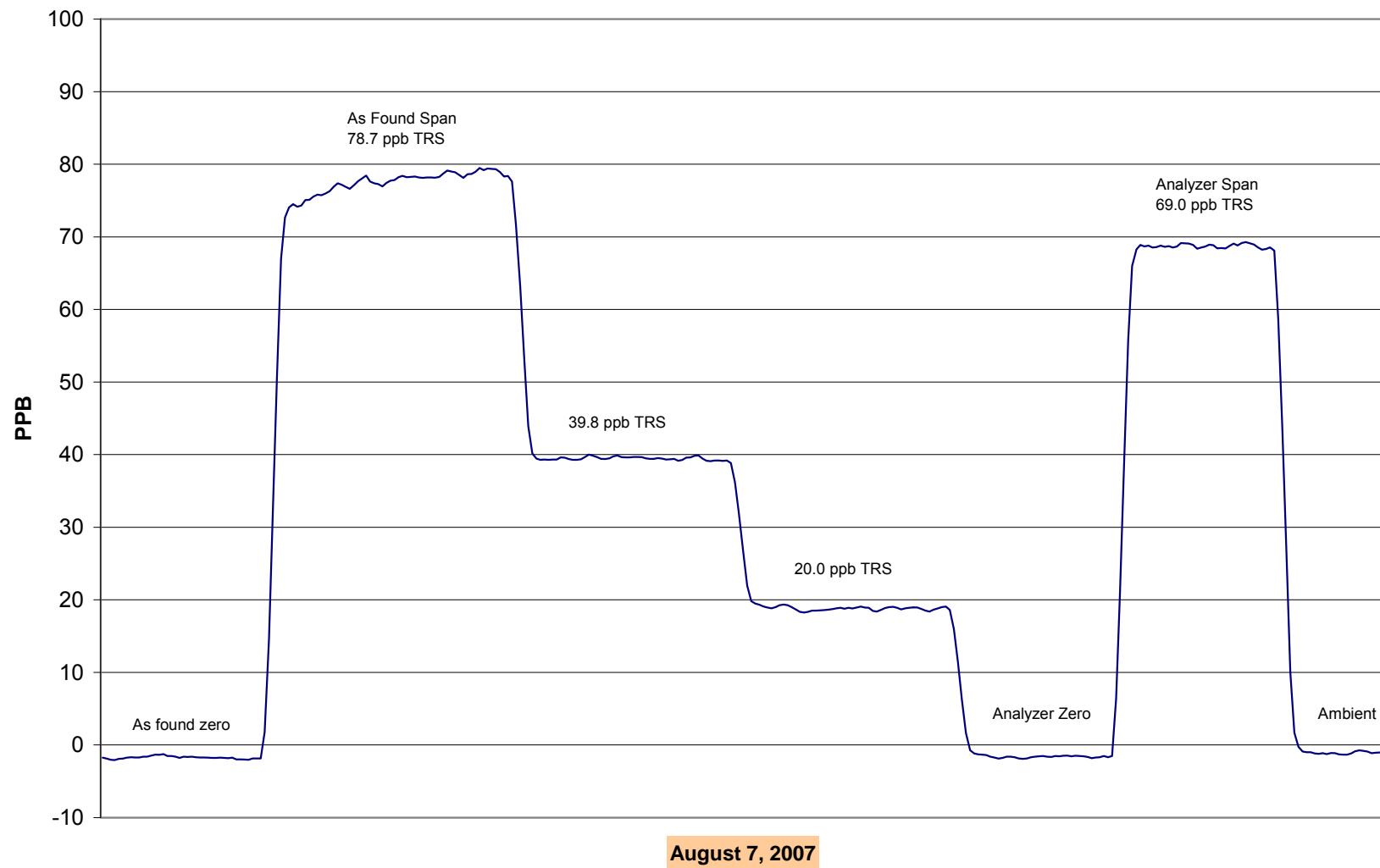
<b>Station Information</b>			
Calibration Date	August 7, 2007	Previous Calibration	July 12, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:30	End Time (MST)	15:30
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.6	N/A		
78.7	78.4	1.0038	Correlation Coefficient	0.999910
39.8	39.5	1.0071	Slope	0.982718
20.0	18.8	1.0620	Intercept	1.430907

### TRS Calibration Curve



**Evergreen Park - TRS Calibration**

**Calibration Report**

Parameter

**PM2.5**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	August 7, 2007		Previous Calibration	June 21, 2007
Station Number	2		Station Location	Evergreen Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	12:36	End Time (MST)	15:15	
Barometric Pressure	0.918	ATM	25.0	Deg C
Flow Calibrator	BIOS Drycal DCL-MH		101780	
DACS make	AP 1000	DACS serial No.	45269	
DACS voltage range	0 - 1 V	DACS channel #	15	
	Before		After	
DACS slope	0.050000	DACS slope	0.050000	
DACS intercept	-50.000000	DACS intercept	-50.000000	

**Analyzer Information**

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

	before		after
Main Flow Set Point	3.000	SLPM	3.000
Aux Flow Set Point	13.67	SLPM	13.67
Filter Load	35	%	17
Ko Factor	NA		NA
Temperature	20.0	Deg C	20.0
Pressure	0.927	ATM	0.927

**Calibration Data**

Parameter	Set Point	As Found	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.00
zero flow - auxillary	0.0	-0.01		-0.01
flow recovery - main	45 - 60 Seconds	45	45 - 60 Seconds	45
flow recovery - aux	46 - 60 Seconds	55	46 - 60 Seconds	55
Temperature	measured	21.50	+/- 1.0 Deg C	21.50
Pressure	measured	0.92	+/- 1.5% ΔATM	0.92
Total Flow	16.67 SLPm	16.53		16.53
Main Flow	3.00 SLPm	2.97	+/- 1.0 SLPm	2.97
Auxillary Flow	13.67 SLPm	13.58	+/- 0.2 SLPm	13.58
Leak Check - main	0.0	0.00	<0.15 SLPm	0.00
Leak Check - aux	0.0	0.12	<0.15 SLPm	0.12
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	NA

Notes: No adjustments performed...Calibration Performed By: Lenin Flores, Conor Whiteley

**Calibration Report**

Parameter

**SO<sub>2</sub>**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	August 8, 2007	Previous Calibration	July 10, 2007
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
Start Time (MST)	10:20	End Time (MST)	11:30
Barometric Pressure	0.9 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2488
Perm-tube Conc	49.6 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.031273	Cal Gas Cylinder #	FF-5013
DACS make	Focus AP1000	DACS serial No.	45272
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	0.999416	Calculated slope	1.009859
Calculated intercept	1.258980	Calculated intercept	-0.193202
Analyzer make	Teco 43i	Analyzer serial #	701120009
Concentration range Background coefficient Lamp Voltage Chamber Temp Perm Gas Temp Pressure Sample Flow Lamp Intensity	before	after	
	0 -1000	ppb	NA
	8.9		NA
	0.928		NA
	834	volts	NA
	45.2	Deg C	NA
	44.99	Deg C	NA
	667.7	mm Hg	NA
	446	ccm	NA
	91	%	NA

**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)
zero	0.0	0.00	0.2	As Found Zero
4994	39.9	393.2	389.6	As Found Span
Average Correction Factor				

Calculated value of As Found Response: 390.433 ppm      Percent Change of As Found: 0.7%

Auto zero Auto span	before calibration		after calibration	
	1.7	ppm	NA	ppm
	283.5	ppm	NA	ppm

Notes:

Calibration Performed By: Lenin Flores, Conor Whiteley

**Calibration Summary**

Parameter

**SO2**

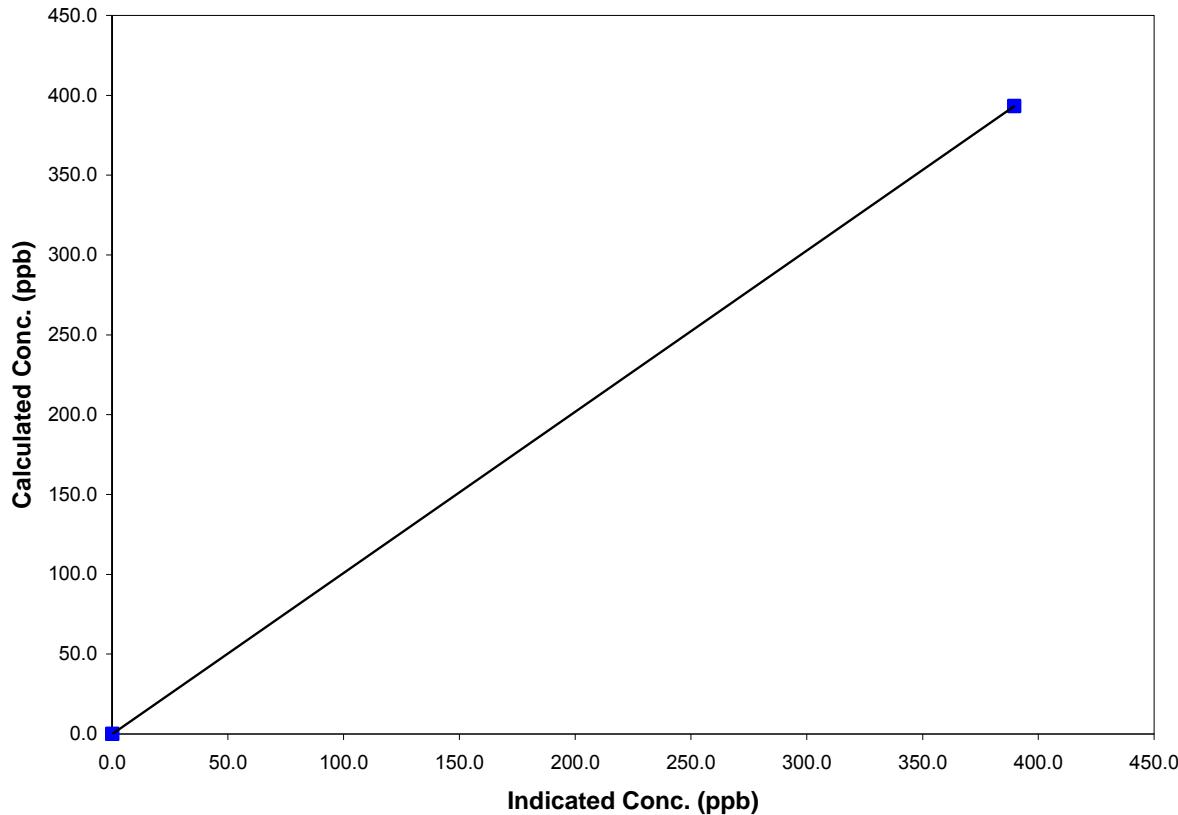
Air Monitoring Network

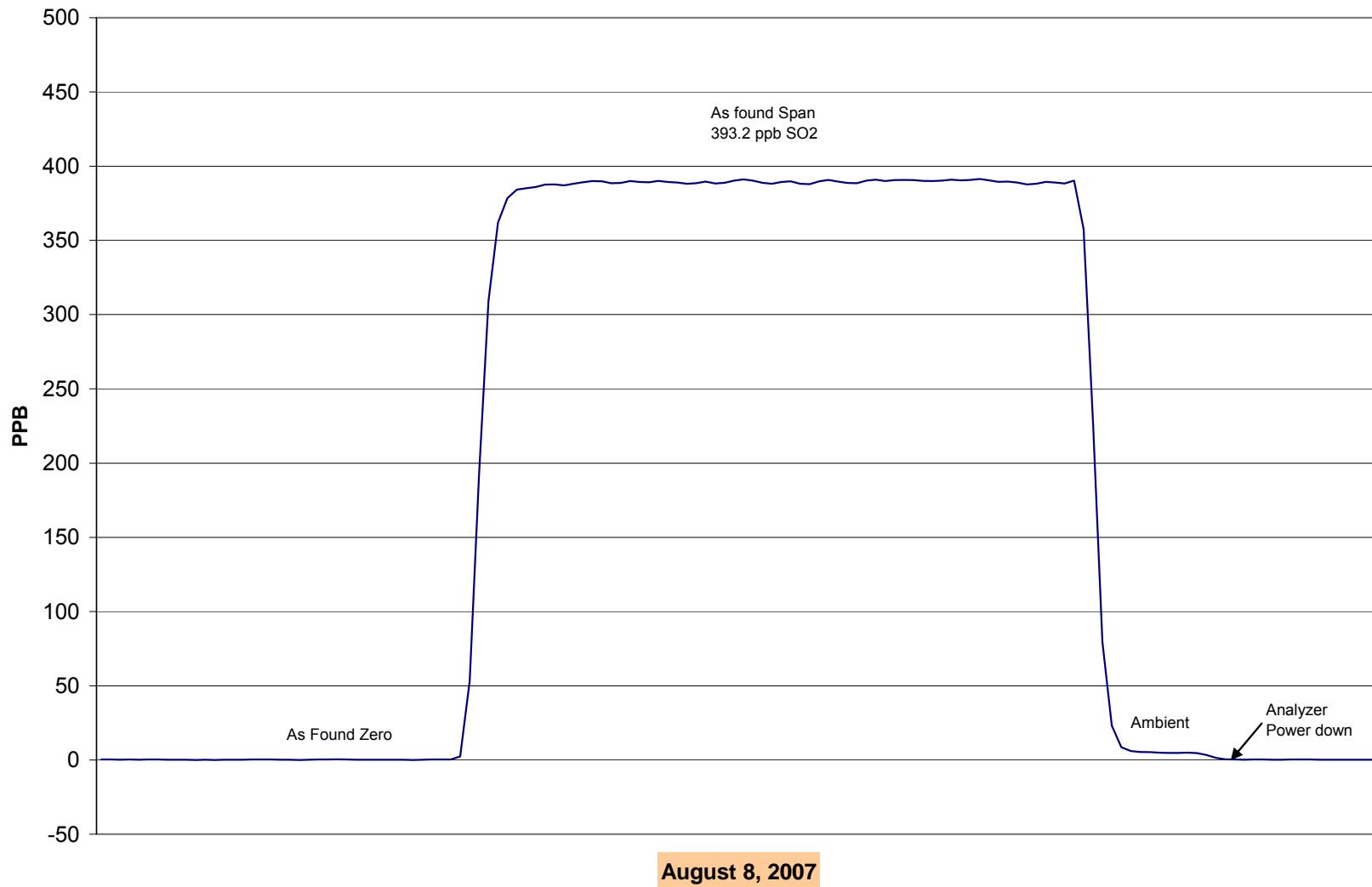
**PASZA**

<b>Station Information</b>			
Calibration Date	August 8, 2007	Previous Calibration	July 10, 2007
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:20	End Time (MST)	11:30
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA		
393.2	389.6	1.0094	Correlation Coefficient	1.000000
			Slope	1.009859
			Intercept	-0.193202

**SO2 Calibration Curve**

**Smoky Heights - SO<sub>2</sub> Removal Calibration**

**Calibration Report**

Parameter

**SO<sub>2</sub>**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	August 9, 2007	Previous Calibration	July 10, 2007
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
Start Time (MST)	9:30	End Time (MST)	
Barometric Pressure	0.9 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2488
Perm-tube Conc	49.6 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.031273	Cal Gas Cylinder #	FF-5013
DACS make	Focus AP1000	DACS serial No.	45272
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.009859	Calculated slope	0.995805
Calculated intercept	-0.193202	Calculated intercept	-4.735123
Analyzer make	TECO 43C	Analyzer serial #	31990000000491
Concentration range Background coefficient Lamp Voltage Chamber Temp Perm Gas Temp Pressure Sample Flow Lamp Intensity	before	after	
	NA	ppb	0 - 1000 ppb
	NA		8.9
	NA		0.928
	NA	volts	834 volts
	NA	Deg C	45.2 Deg C
	NA	Deg C	44.99 Deg C
	NA	mm Hg	667.7 mm Hg
	NA	ccm	446 ccm
	NA	%	91 %

**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)
4994	0.0	0.00	3.2	N/A
4994	39.9	393.24	398.0	0.9880
4998	19.9	197.10	205.9	0.9575
4993	10.0	99.00	104.2	0.9505
Average Correction Factor				0.9653

Calculated value of As Found Response: NA

Percent Change of As Found: NA

Auto zero Auto span	before calibration		after calibration	
	1.7	ppm	-1.0	ppm
	283.5	ppm	225.2	ppm

Notes:

Calibration Performed By: Lenin Flores, Conor Whiteley

**Calibration Summary**

Parameter

**SO2**

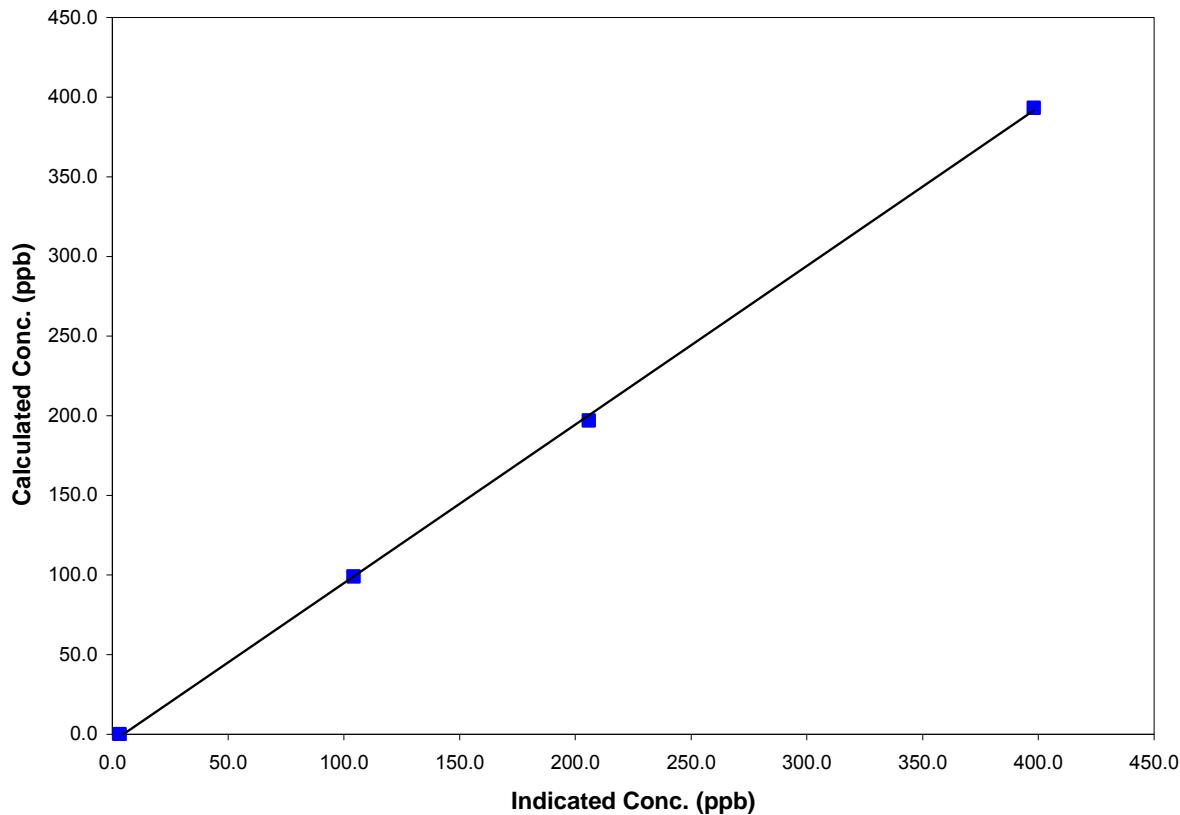
Air Monitoring Network

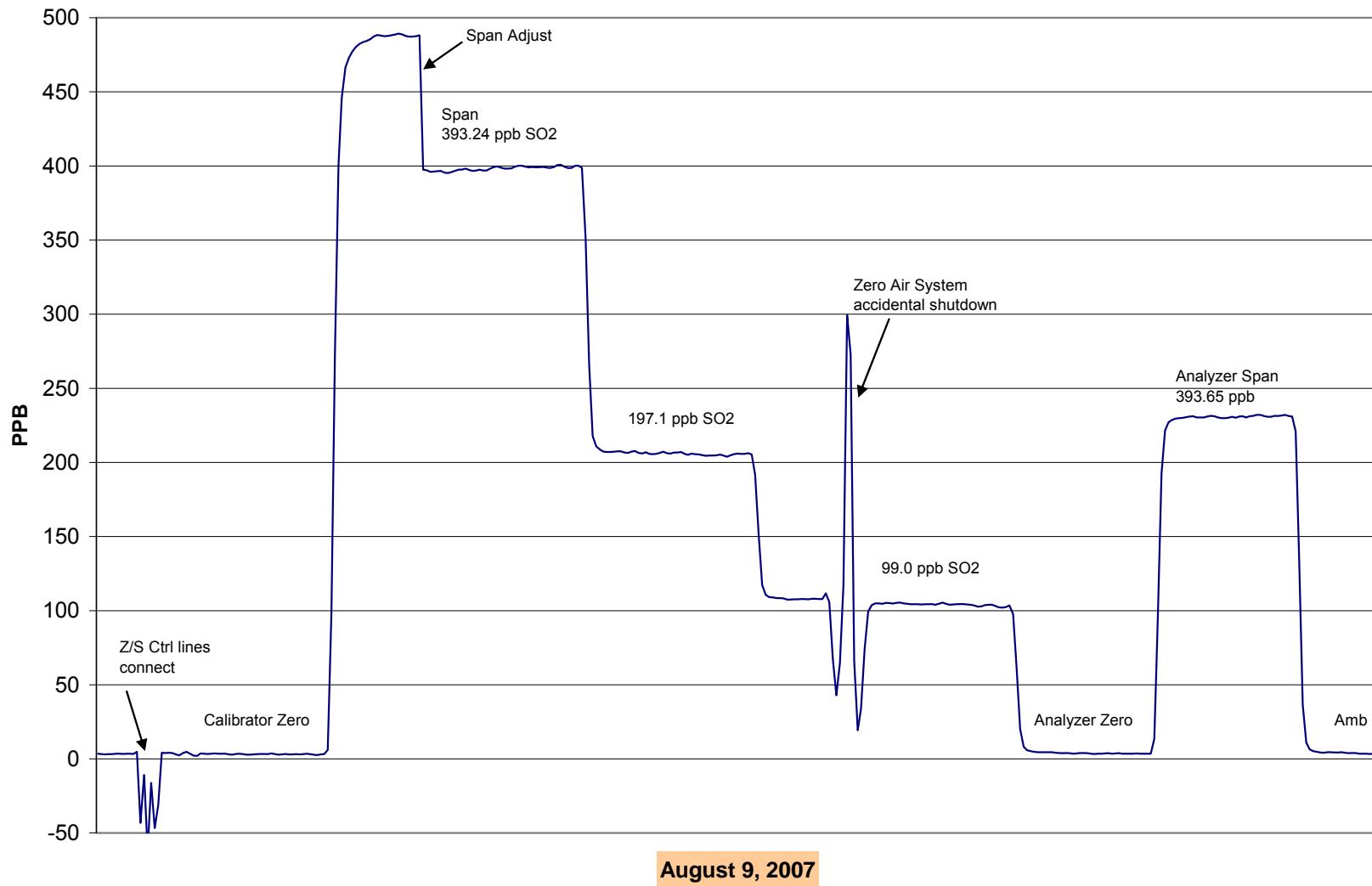
**PASZA**

<b>Station Information</b>			
Calibration Date	August 9, 2007	Previous Calibration	July 10, 2007
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:30	End Time (MST)	0:00
Analyzer make/model	TECO 43C	Analyzer serial #	3.199E+13

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	3.2	N/A		
393.2	398.0	0.9880	Correlation Coefficient	0.999824
197.1	205.9	0.9575	Slope	0.995805
99.0	104.2	0.9505	Intercept	-4.735123

**SO2 Calibration Curve**

**Smoky Heights - SO2 Installation Calibration**

**Calibration Report**

Parameter	<b>TRS</b>
Air Monitoring Network	<b>PASZA</b>

**Station Information**

Calibration Date	August 8, 2007	Previous Calibration	July 12, 2007
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	11:18	End Time (MST)	13:49
Barometric Pressure	0.922 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2488
Cal Gas Conc	5.02 ppm	Cal Gas Expiry Date	Nov 15 2005
Correction factor	0.031341	Cal Gas Cylinder #	BLM003489
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	0.995901	Calculated slope	0.991309
Calculated intercept	-0.115270	Calculated intercept	-0.304696

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
before			after
Concentration range	100	ppb	100 ppb
Background coefficient	17.5	ppb	11.2 ppb
Lamp Voltage	0.976		1.006
Chamber Temp	787	volts	765 volts
Perm Gas Temp	44.2	Deg C	44 Deg C
Pressure	45	Deg C	45.01 Deg C
Sample Flow	630.9	mm Hg	503.3 mm Hg
Lamp Intensity	466	ccm	781 ccm
	45,700	mv	45,746 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)
4996	0.0	0.0	0.3	N/A
4996	79.5	78.7	79.7	0.9873
4996	40.0	39.8	40.4	0.9848
4996	10.0	10.0	10.5	0.9576
zero	0.0	0.0	0.3	As Found Zero
4996	79.5	78.7	79.7	As Found Span
Average Correction Factor				0.9766

Calculated value of As Found Response: 78.96 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	0.3	ppm	-0.1	ppm
Auto span	66.3	ppm	42.7	ppm

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

Calibration Performed By: Lenin Flores, Conor Whiteley

## Calibration Summary

Parameter      TRS  
Air Monitoring Network      PASZA

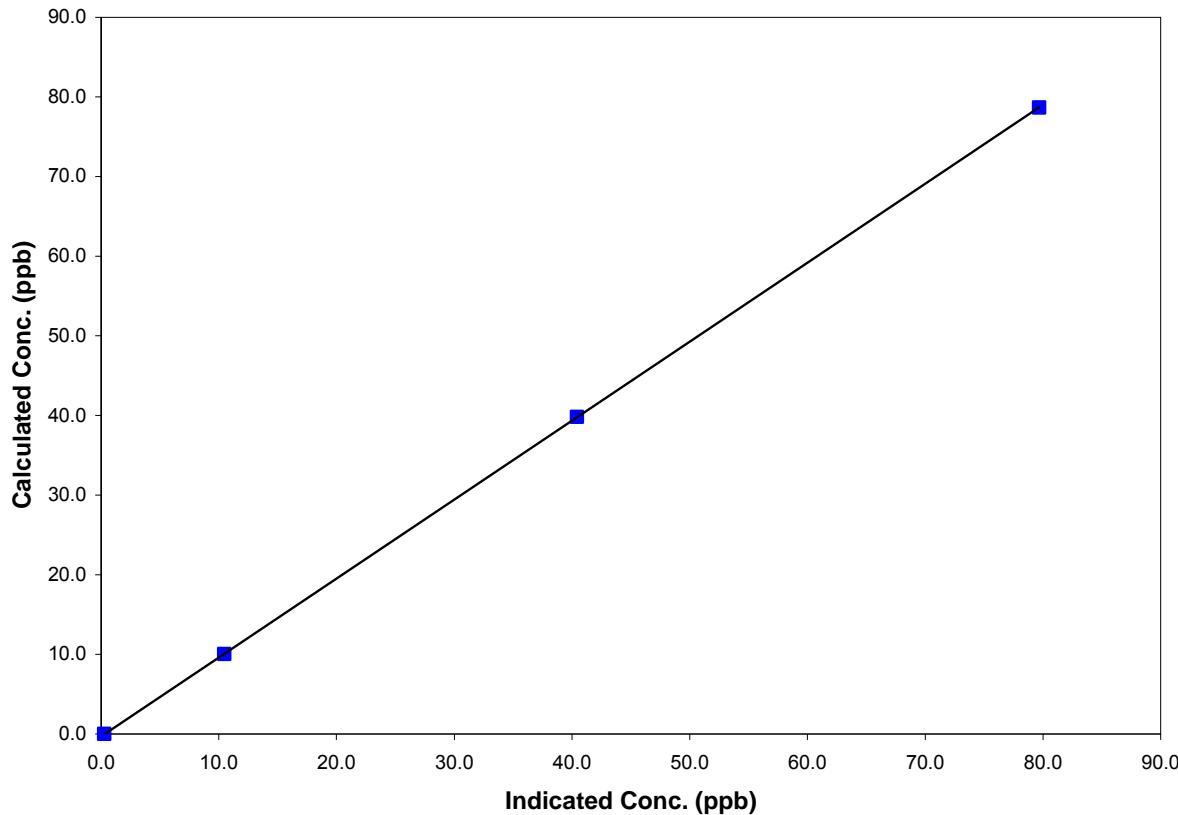


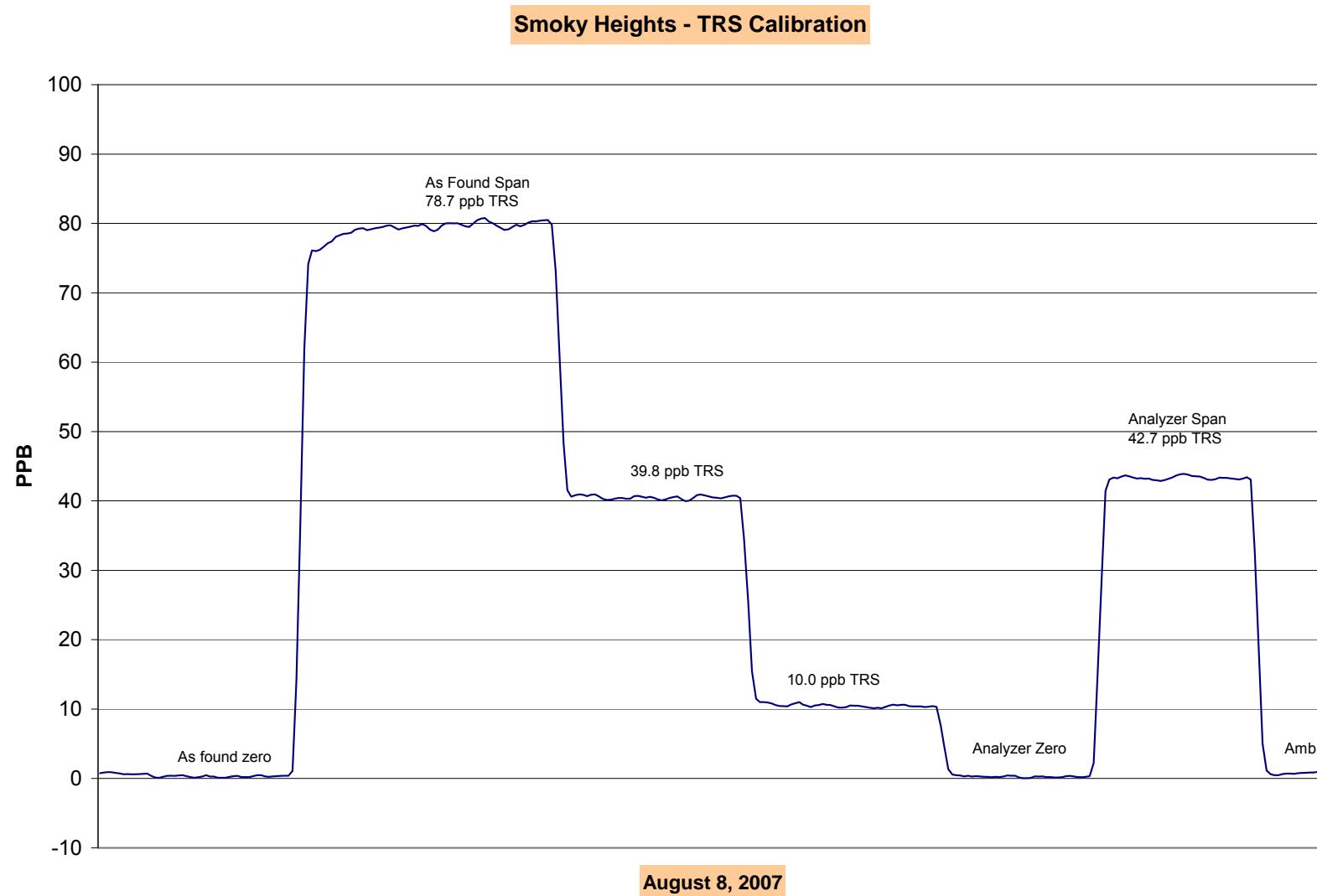
<b>Station Information</b>			
Calibration Date	August 8, 2007	Previous Calibration	July 12, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	11:18	End Time (MST)	13:49
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
78.7	79.7	0.9873	Correlation Coefficient	0.999999
39.8	40.4	0.9848	Slope	0.991309
10.0	10.5	0.9576	Intercept	-0.304696

### TRS Calibration Curve





## Calibration Report



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

<b>Station Information</b>			
Calibration Date	August 7, 2007	Previous Calibration	June 21, 2007
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
Start Time (MST)	7:20	End Time (MST)	9:15
Barometric Pressure	0.931 ATM	Station Temperature	24.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
<b>Analyzer Information</b>			
Analyzer make	R&P	Control Unit serial #	140AB246340305
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB246340305
before		after	
Main Flow Set Point	3.000	SLPM	3.000
Aux Flow Set Point	13.67	SLPM	13.67
Filter Load	32	%	16
Ko Factor	na		na
Temperature	9.3	Deg C	9.3
Pressure	0.921	ATM	0.93
Main Fadj	1.000		1.000
Aux Fadj	1.000		1.000

### Calibration Data

Parameter	Set Point	As Found	Tolerance	New Reading
zero flow - main	0.0	0.11	zero flow - main	0.00
zero flow - auxillary	0.0	0.29	zero flow - auxillary	0.01
flow recovery - main	45 - 60 Seconds	30	45 - 60 Seconds	33
flow recovery - aux	46 - 60 Seconds	42	46 - 60 Seconds	45
Temperature	measured	9.5	+/- 1.0 Deg C	9.3
Pressure	measured	0.930	+/- 1.5% ΔATM	0.930
Total Flow	16.67 SLPm	16.18		16.52
Main Flow	3.0 SLPm	2.93	+/- 1.0 SLPm	3.01
Auxillary Flow	13.67SLPM	13.210	+/- 0.2 SLPm	13.530
Leak Check - main	0.0	0.11	<0.15 SLPm	0.00
Leak Check - aux	0.0	0.28	<0.15 SLPm	0.00
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	NA

Notes: Adjusted Flows, Adjusted Zero Flow  
 Replaced aux line filter

Calibration Performed By: Lenin Flores, Conor Whiteley

## Calibration Report

Parameter

**SO2**

Air Monitoring Network

**PASZA**

### Station Information

Calibration Date	August 23, 2007	Previous Calibration	July 13, 2007
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	7:10	End Time (MST)	9:20
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	7/27/2009
Gas Cert Reference	LL16161		
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.032451	Calculated slope	1.047022
Calculated intercept	5.202191	Calculated intercept	5.275609
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376
Concentration range	before	after	
	0-100	ppb	0 - 100
	1.97		3.13
	0.756		0.813
	N/A	V	-705
	896.0	LPM	897
	44.4	V	44.1
	626.1	mm Hg	664
	0.576	LPM	0.616
	45370	Hz	29551

### 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)
5000	0.00	0.0	-0.8	N/A
5000	7.94	79.7	79.3	1.0060
5000	4.96	49.8	52.3	0.9539
5000	2.00	20.1	23.4	0.8590
5000	0.00	0.0	-0.8	As found zero
5000	8.00	80.4	79.3	As found span
Average Correction Factor				0.9396

Calculated value of As Found Response: 87.891 ppm Percent Change of As Found: -9.4%

Auto zero	before calibration		after calibration	
	-3.6	ppm	4.1	ppm
	991.4	ppm	32.9	ppm

Notes: Second Point dropped like rock, sourcing problem...  
Possibly a software issue, analyzer is recording as normal...

Calibration Performed By: Lenin Flores, Conor Whiteley

## Calibration Summary

Parameter

**SO2**

Air Monitoring Network

**PASZA**

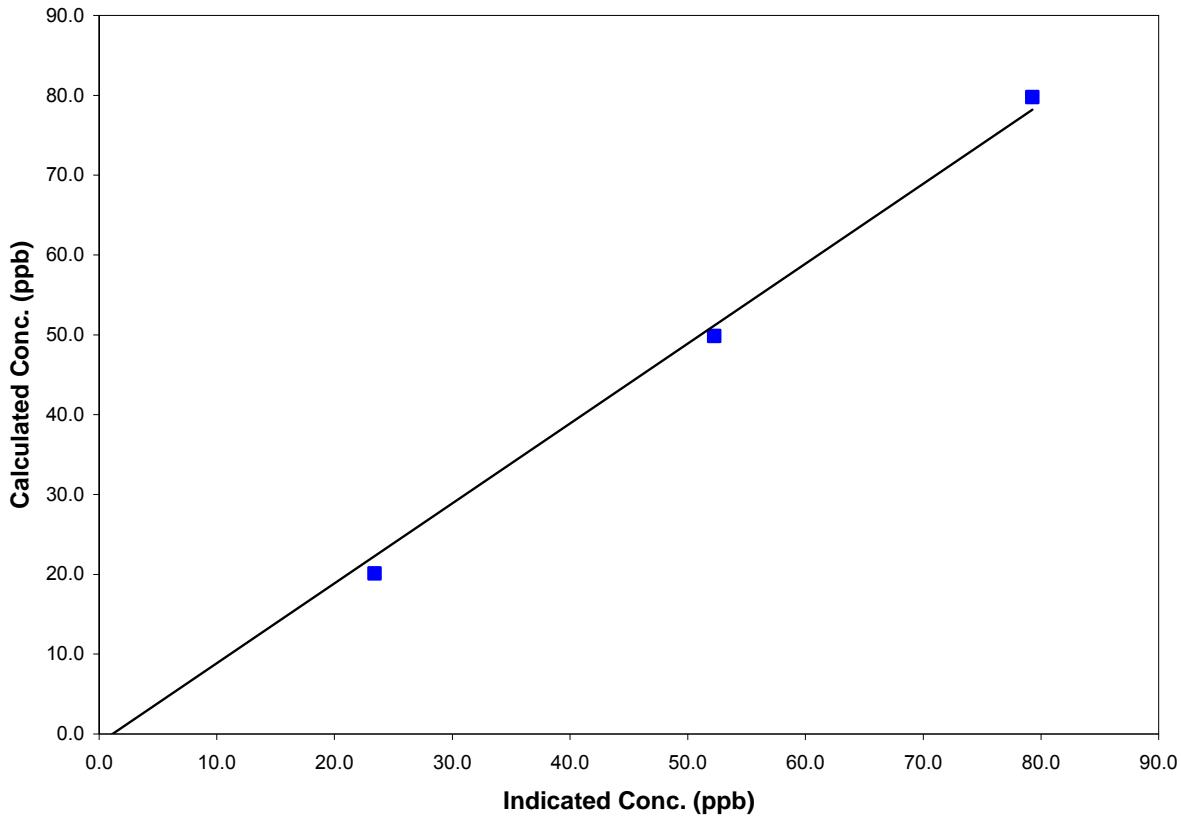
### *Station Information*

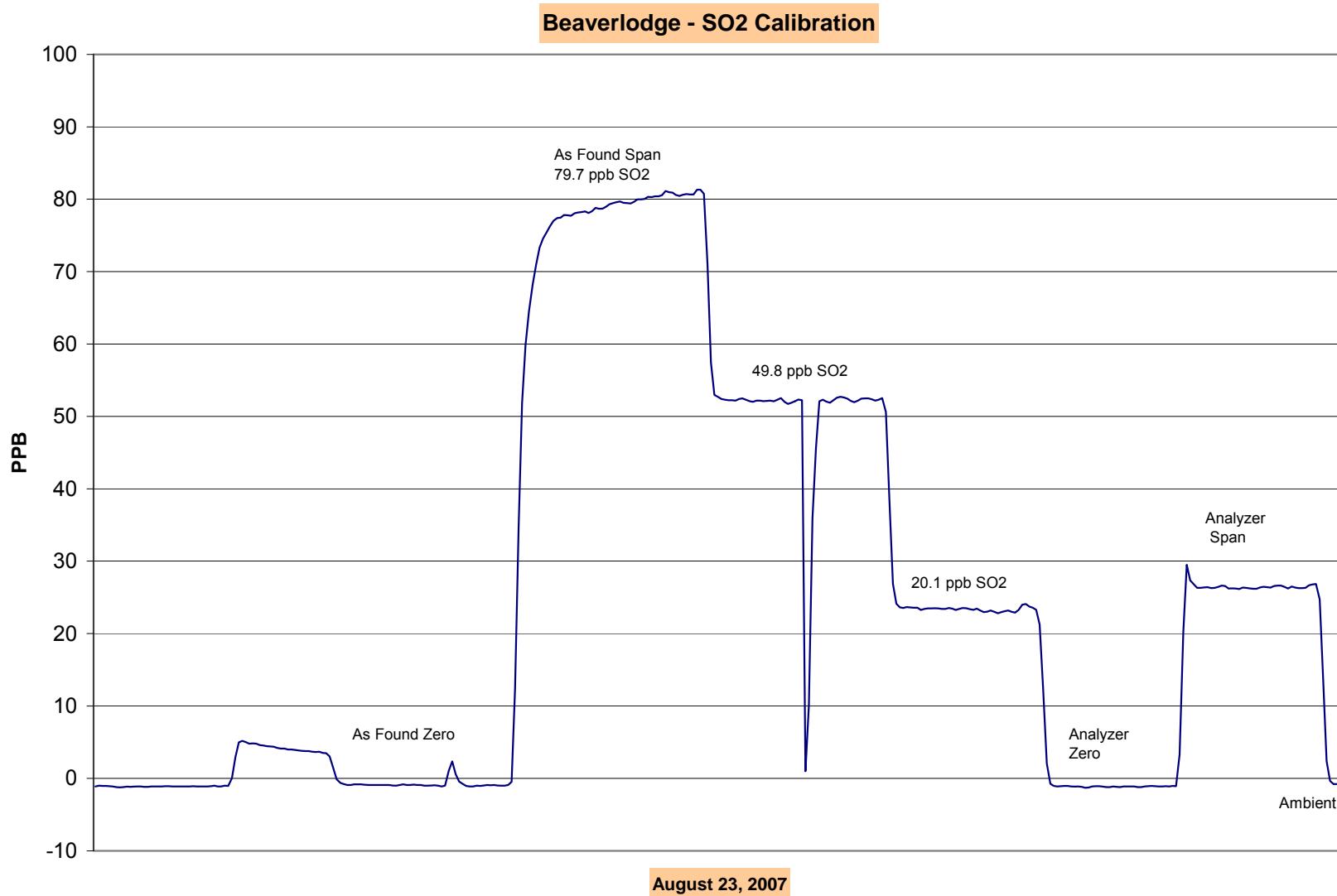
Calibration Date	August 23, 2007	Previous Calibration	July 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	7:10	End Time (MST)	9:20
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

### *Calibration Data*

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.8	N/A		
79.7	79.3	1.0060	Correlation Coefficient	0.996508
49.8	52.3	0.9539	Slope	1.001141
20.1	23.4	0.8590	Intercept	-1.147463

### SO2 Calibration Curve





# Calibration Report

Parameter

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

Air Monitoring Network

PASZA



## Station Information

Calibration Date	August 23, 2007		Previous Calibration	July 13, 2007
Station Number	4		Station Location	Beaverlodge
Reason:	Routine	Installation	Removal	Other: _____
Start Time (MST)	18:40:00		End Time (MST)	22:00:00
Barometric Pressure	0.915	Atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103		Serial Number	2488
NO Cal Gas Conc	48.9	ppm	Cal Gas Expiry Date	2-Jan-09
NOx Cal Gas Conc	48.9	ppm	Cal Gas Serial #	LL 16161

## DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269
Parameter	NO2	NOx	NO
Before	Data Slope	1.001682	1.001337
	Data Offset	-0.042277	0.354810
After	Data Slope	1.027895	1.013103
	Data Offset	0.023815	-0.928142
Channel #	8	6	7
Voltage Range	0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

## Analyzer Information

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

Test Point	before		after	
Concentration range	0-1000	ppb	0 - 1000	ppb
NO background	1.3	ppb	1.3	mV
NOx background	1.4	ppb	1.4	mV
NO coefficient	1.102		1.102	
NOx coefficient	0.999		0.999	
PMT Voltage	n/a	V	-635	V
Chamber Temp	49.3	Deg C	49.3	Deg C
Cooler Temp	-2.1	Deg C	-2.2	Deg C
Converter Temp	323.0	Deg C	324.0	Deg C
Sample Flow	0.768	LPM	0.779	LPM
Ozonator Flow	0.086	LPM	0.870	LPM
Pressure	172.4	inches HG	176.1	inches Hg

Notes:      Calibrating at 40ccm as we initially started calibrating both SO2 and NOx

## Calibration Report

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



### Station Information

Calibration Date: **August 23, 2007** Station Location: **Beaverlodge**

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4996	0.00	0.0	0.0	0.0	-0.2	-0.3	-0.3	N/A	N/A
	4996	39.92	387.6	387.6	0.0	382.8	383.9	-1.6	1.0126	1.0098
	4996	19.95	194.5	194.5	0.0	193.9	194.5	-1.0	1.0031	1.0000
	4996	9.97	97.4	97.4	0.0	97.9	98.6	-0.4	0.9945	0.9873
AFZ	4996	0.00	0.0	0.0	0.0	-0.2	-0.3	-0.3	0.0000	0.0000
	4996	79.86	769.4	769.4	0.0	382.8	383.9	-1.6	2.0098	2.0042
							Average Correction Factor	1.0034	0.9990	

As Found Concentrations: NO<sub>x</sub>= 383.4 NO= 385.1 As Found Percent Change NO<sub>x</sub>= -50.2% NO= -49.9%

### GPT Calibration Data

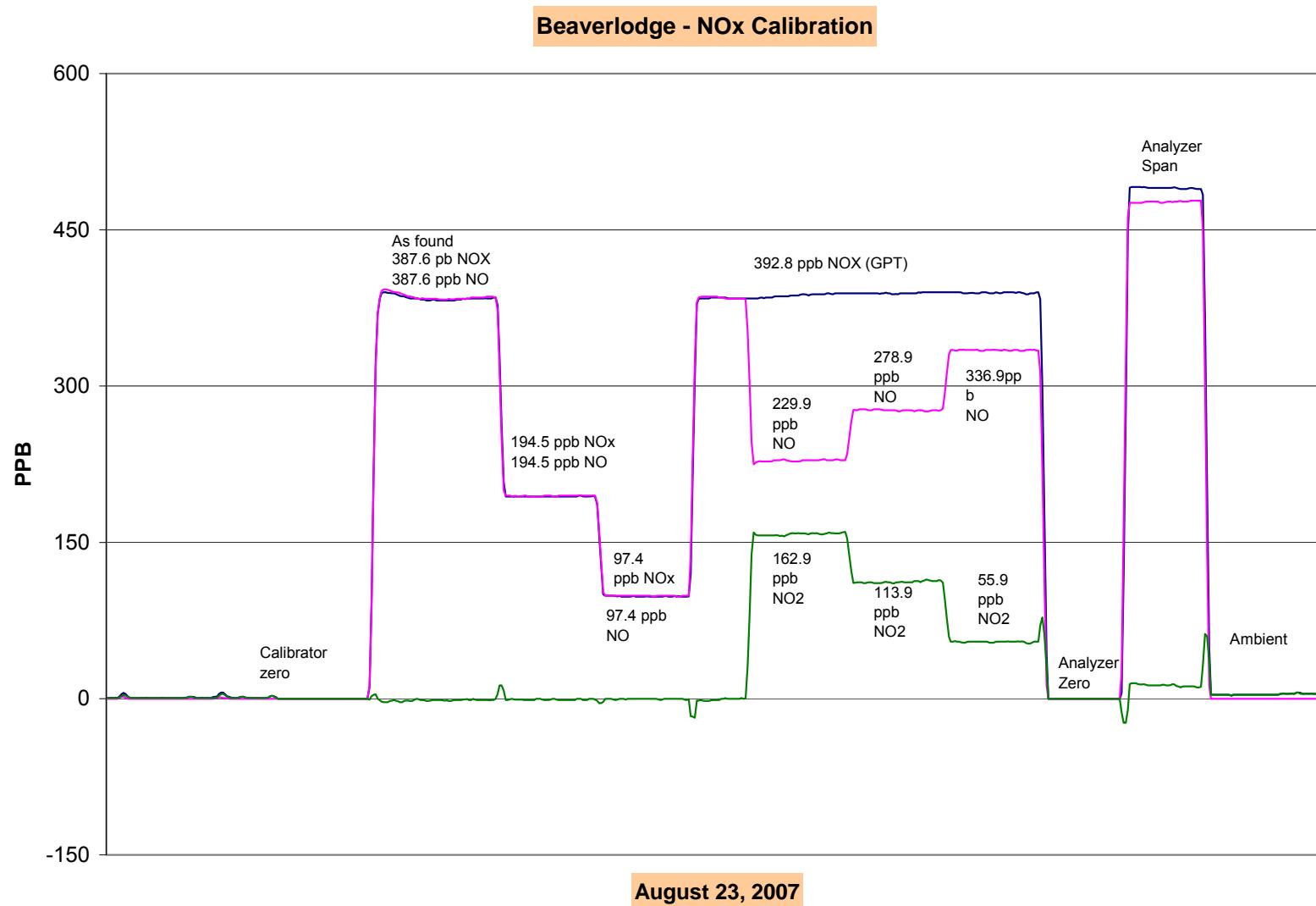
Dilution Flow **4993** ccm Source Gas Flow **39.97** ccm

O <sub>3</sub> 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	392.8	387.5	5.3	384.5	384.5	-0.5	1.0214	1.0077	N/A	N/A	
300	392.8	229.9	162.9	387.2	228.6	158.0	1.0144	1.0058	1.0310	97.0%	
200	392.8	278.9	113.9	388.9	277.0	111.3	1.0099	1.0066	1.0230	97.8%	
100	392.8	336.9	55.9	389.7	334.5	54.5	1.0078	1.0073	1.0248	97.6%	
							Average Correction Factor	1.0107	1.0066	1.0263	97.4%

### AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb
Auto zero	0.1	-0.4	0.6	ppb	-1.1	-0.2	-1.3	ppb
Auto span	506.6	13.1	493.3	ppb	495.8	13.3	480.7	ppb

Calibration Performed By: **Lenin Flores, Conor Whiteley**



## Calibration Summary

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



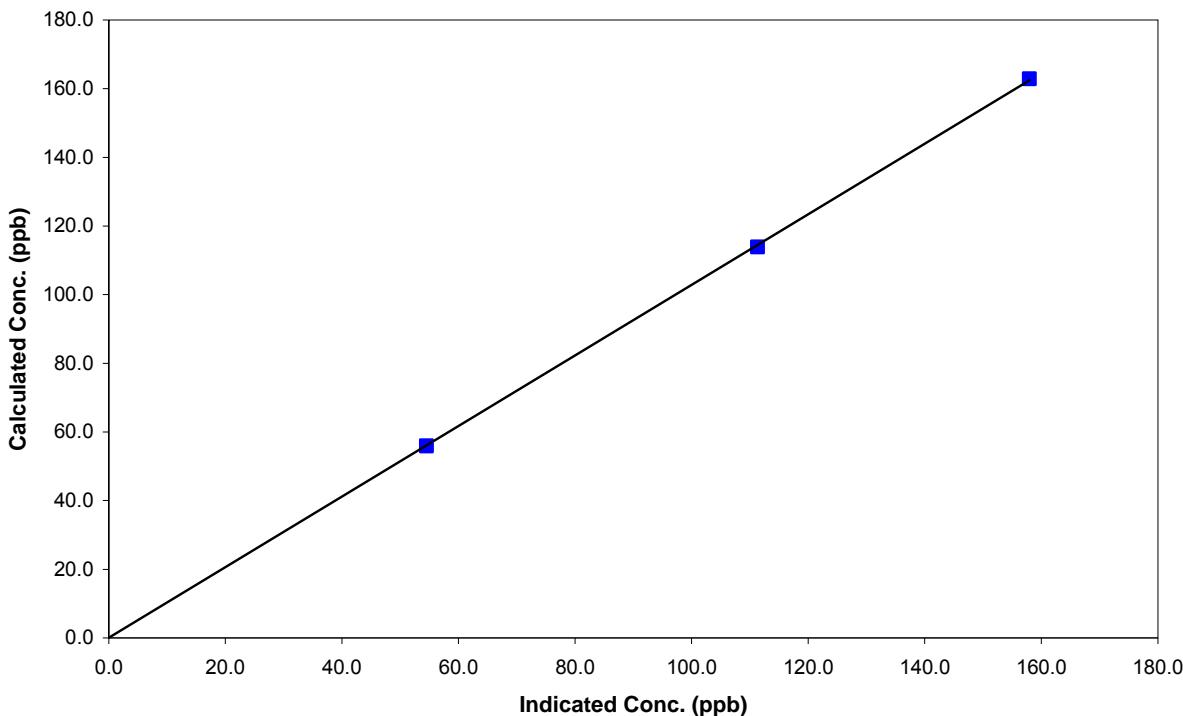
### Station Information

Calibration Date	August 23, 2007	Previous Calibration	July 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	18:40	End Time (MST)	22:00
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000	Correlation Coefficient	0.999955
162.9	158.0	1.0310		
113.9	111.3	1.0230		
55.9	54.5	1.0248		
			Slope	1.027895
			Intercept	0.023815

### NO<sub>2</sub> Calibration Curve



## Calibration Summary

Parameter

**NO<sub>x</sub>**

Air Monitoring Network

**PASZA**

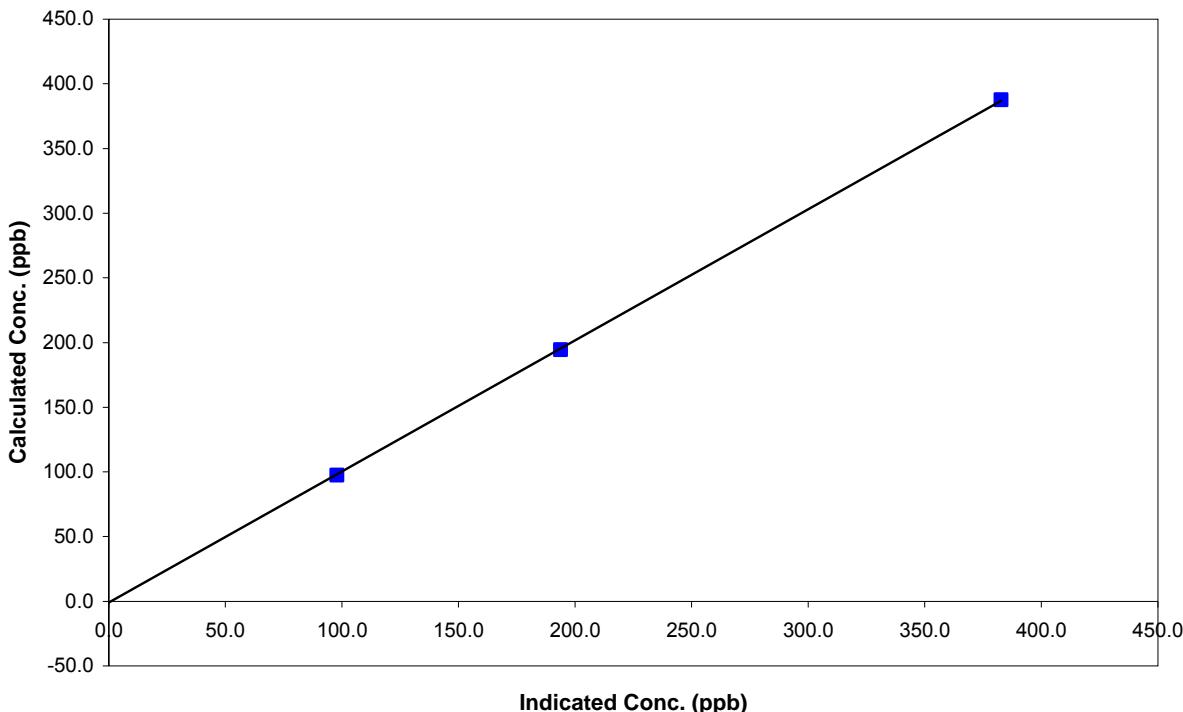
### Station Information

Calibration Date	August 23, 2007	Previous Calibration	July 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	18:40	End Time (MST)	22:00
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	0.0000	Correlation Coefficient	0.999954
387.6	382.8	1.0126		
194.5	193.9	1.0031		
97.4	97.9	0.9945		
			Slope	1.013103
			Intercept	-0.928142

### NO<sub>x</sub> Calibration Curve



## Calibration Summary



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

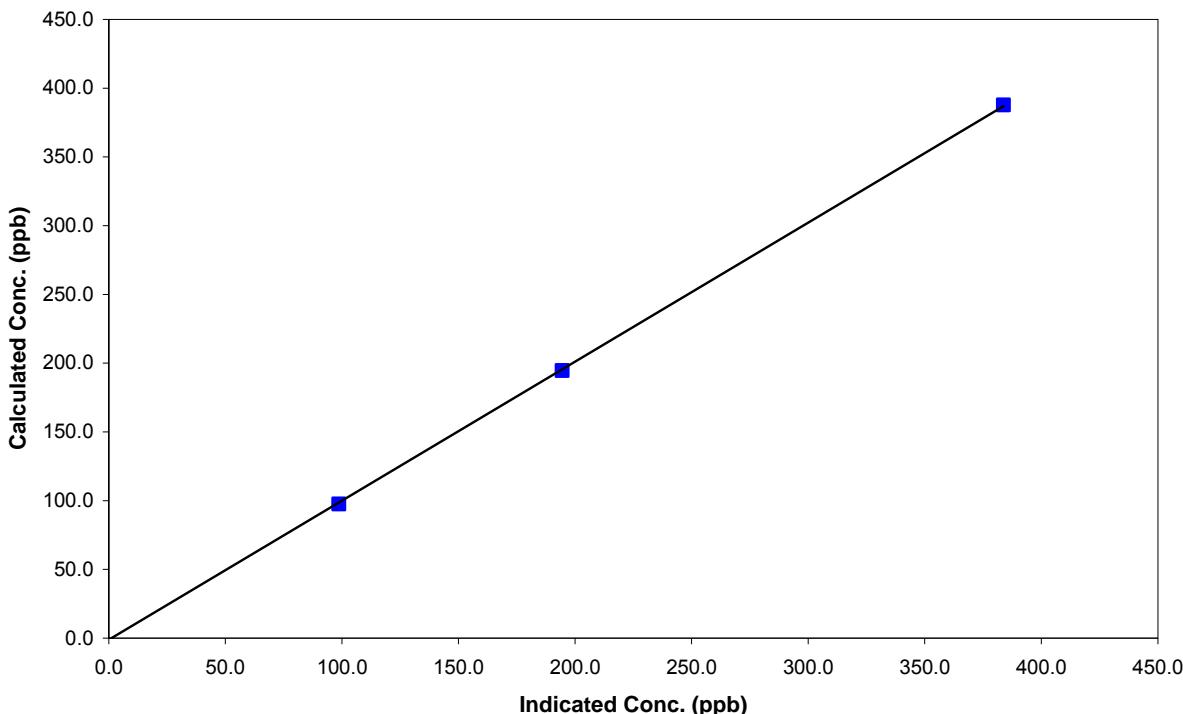
### Station Information

Calibration Date	August 23, 2007	Previous Calibration	July 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	18:40	End Time (MST)	22:00
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A	Correlation Coefficient	0.999939
387.6	383.9	1.0098		
194.5	194.5	1.0000		
97.4	98.6	0.9873		
			Slope	1.010483
			Intercept	-1.064740

### NO Calibration Curve



**Calibration Report**

Parameter

O3

Air Monitoring Network

PASZA

**Station Information**

Calibration Date	August 24, 2007	Previous Calibration	July 13, 2007
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Start Time (MST)	9:20	End Time (MST)	11:30
Barometric Pressure	0.908 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	1633
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
Calculated slope	Before	Calculated slope	After
	1.003356		1.146396
Calculated intercept	2.491021	Calculated intercept	-6.167398
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383
Concentration range offset slope Lamp temp Lamp Intensity A/B Pressure Flow A Flow B	before	after	
	0 - 500	ppb	0 - 500 ppb
	-0.20	ppb	-0.20 ppb
	0.995		0.995
	71	mV	56.3 mV
	84200/82100	mV	80176/77508 mV
	581.4	mm Hg	650 mm Hg
	750	ccm	730 ccm
	705	ccm	684 ccm

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.0	-0.1	N/A
4992	0.00	300.00	272.4	1.1013
4992	0.00	200.00	180.7	1.1067
4992	0.00	100.00	84.2	1.1873
4992	0.00	0.0	-0.1	As found zero
4992	0.00	316.8	272.4	As found span
		Average Correction Factor	1.1318	

Calculated value of As Found Response: 275.9 ppm Percent Change of As Found: -12.9%

Auto zero Auto span	before calibration		after calibration	
	2.5	ppb	-6.4	ppb
	114.2	ppb	116.2	ppb

Notes: No Adjustments.

Calibration Performed By: Lenin Flores, Conor Whiteley

## Calibration Summary

Parameter

**O3**

Air Monitoring Network

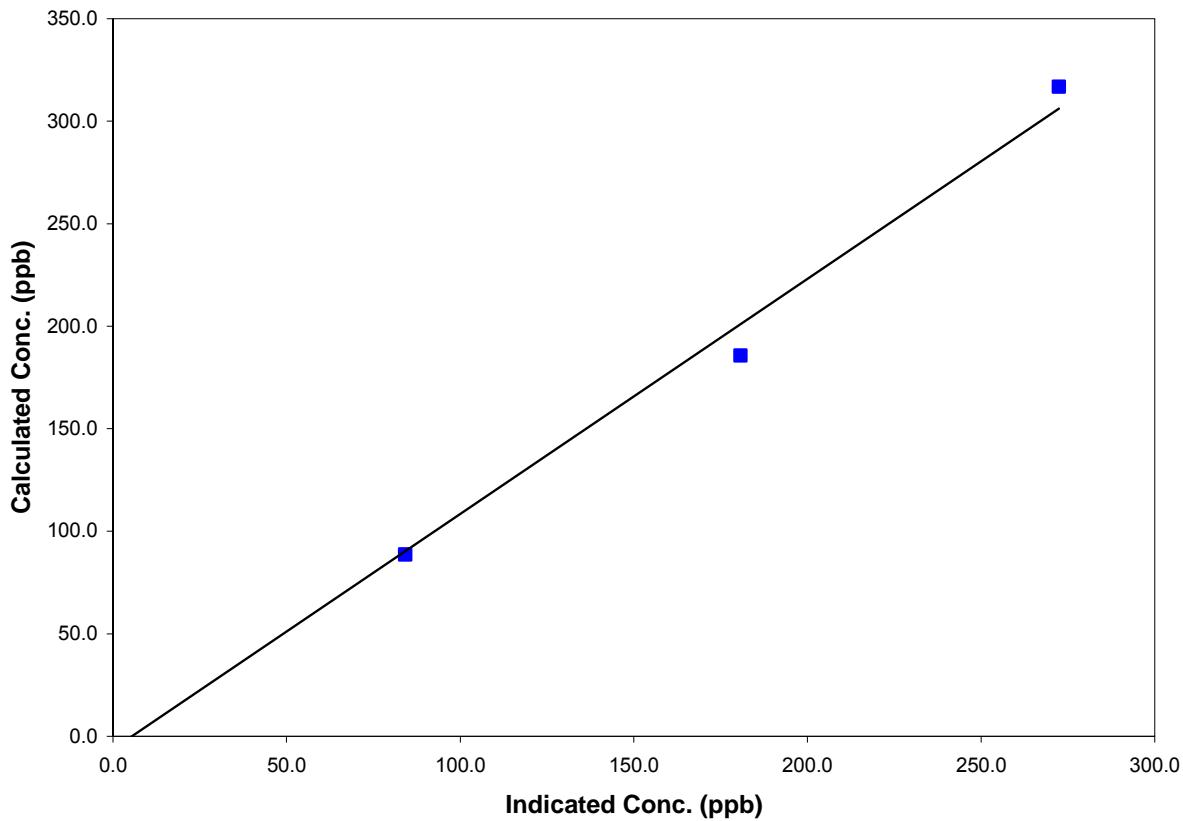
**PASZA**

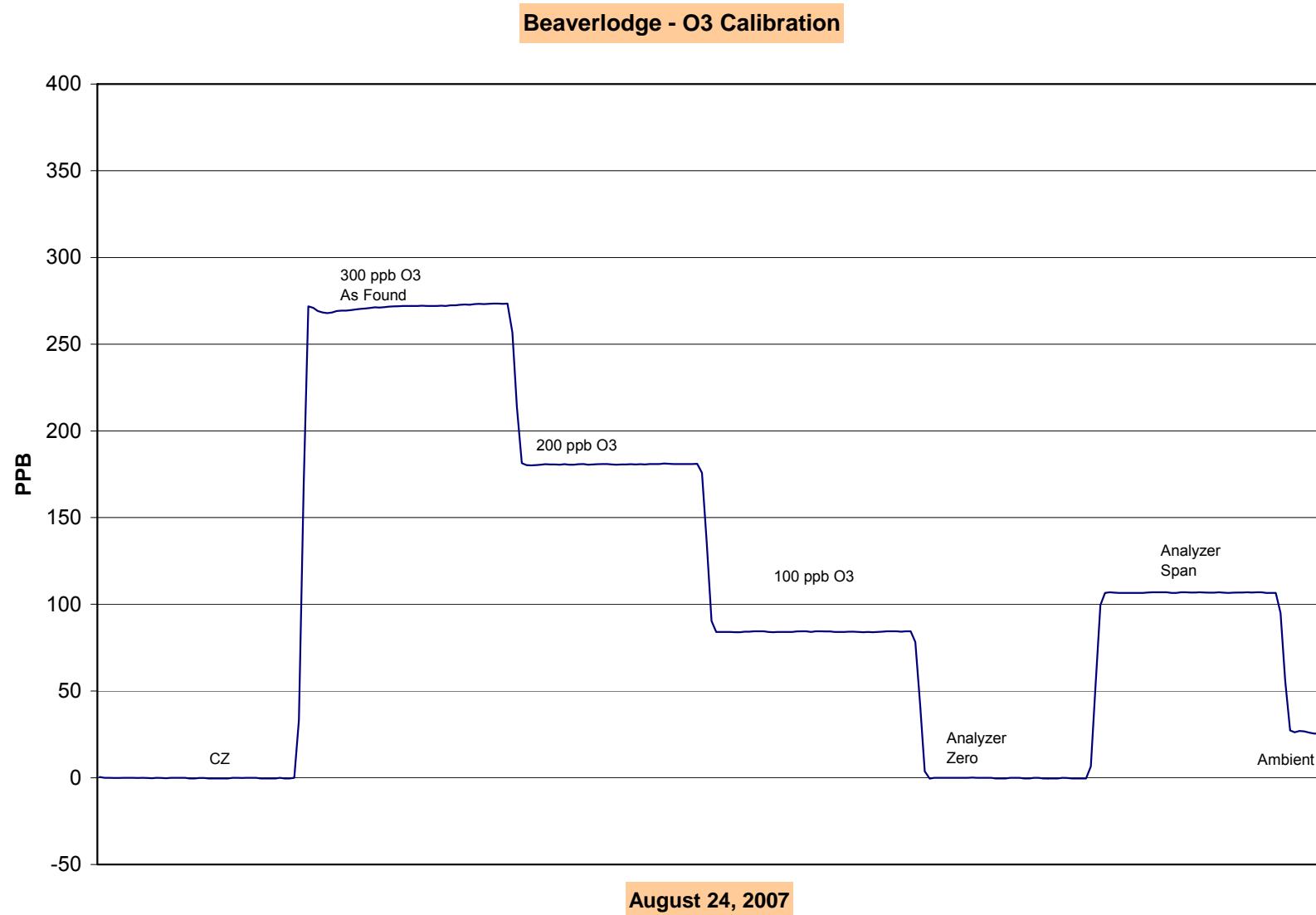
<b>Station Information</b>			
Calibration Date	August 24, 2007	Previous Calibration	July 13, 2007
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:20	End Time (MST)	11:30
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	NA		
316.8	272.4	1.1629	Correlation Coefficient	0.992937
185.7	180.7	1.0276	Slope	1.146396
88.7	84.2	1.0531	Intercept	-6.167398

### O3 Calibration Curve





## Calibration Report

Parameter

**PM2.5**

Air Monitoring Network



<b>Station Information</b>			
Calibration Date	August 24, 2007	Previous Calibration	May 29, 2007
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Start Time (MST)	7:15	End Time (MST)	10:37
Barometric Pressure	0.913 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	10

<b>Analyzer Information</b>			
Analyzer make	R&P	Control Unit serial #	140AB246340305
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB246340305
	before	after	
Main Flow Set Point	3.000	SLPM	3.000
Aux Flow Set Point	13.68	SLPM	13.68
Filter Load	16	%	16
Ko Factor	14287		14287
Temperature	19.6	Deg C	19.6
Pressure	0.919	ATM	0.919

### Calibration Data

Parameter	Set Point	Teom Reading (As Found)	Tolerance	Teom Reading (After Adjustments)
zero flow - main	0.0	0.08		0.01
zero flow - auxillary	0.0	-0.05		0.01
flow recovery - main	45 - 60 Seconds	36.00	45 - 60 Seconds	34.00
flow recovery - aux	46 - 60 Seconds	48.00	46 - 60 Seconds	48.00
Temperature	measured	9.3	+/- 1.0 Deg C	9.3
Pressure	measured	0.913	+/- 1.5% ΔATM	0.913
Total Flow	16.67 SLPM	17.10		16.45
Auxillary Flow	13.67 SLPM	13.97	+/- 1.0 SLPM	13.44
Main Flow	3.0 SLPM	3.160	+/- 0.2 SLPM	3.010
Leak Check - main	0.0	0.15	<0.15 SLPM	0.01
Leak Check - aux	0.0	0.84	<0.15 SLPM	0.06
Ko Factor (w/o filter)	measured	350.047	filter weight (g)	0.10931
Ko Factor (w/ filter)	measured	251.277	% Ko difference	0.3%

Notes: Adjusted Zero and Span, detected significant leak in both Main and Aux line repaired both  
 Adjusted Flow as necessary, temp/pressure both exactly on

Calibration Performed By: Lenin Flores, Conor Whiteley

## Calibration Report



Parameter

**SO2**

Air Monitoring Network

**PASZA**

### Station Information

Calibration Date	August 28, 2007	Previous Calibration	July 25, 2007	
Station Number	6	Station Location	Portable - Falher	
Reason:	Routine	Install	Removal	
Start Time (MST)	11:00	End Time (MST)	14:20	
Barometric Pressure	28.05 inches Hg	Station Temperature	29.0 Deg C	
Calibrator	Environics 6100	Serial Number	3474	
Cal Gas Concentration	49.6 ppm	Cal Gas Expiry Date	12/5/2007	
Gas Cert Reference	BAL786	DACS serial No.	52662	
DACS make	Focus AP1000	DACS channel #	9	
DACS voltage range	0 - 10 volt			
	<u>Before</u>		<u>After</u>	
DACS Scale High	500	DACS slope	500	
DACS Scale Low	0	DACS intercept	0	
Calculated slope	0.981359	Calculated slope	1.036126	
Calculated intercept	8.147592	Calculated intercept	11.558994	
Analyzer make	TEI 43C APS1AB	Analyzer serial #	609716238	
Concentration range	before		after	
	0-500	ppb	0-500	ppb
	8		8.1	
	1.137		1.137	
	742	LPM	739	LPM
	44.3	V	44.4	V
	45	C	45	C
	695.2	in Hg	680	in Hg
	0.498	LPM	0.49	LPM
	34500	Hz	33792	Hz

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.0	0.0	N/A
4992	39.94	393.7	374.8	1.0503
4992	19.96	197.6	169.4	1.1663
4992	9.98	99.0	77.3	1.2806
4992	0.00	0.0	0.0	As found zero
4992	39.94	393.7	374.8	As found span
Average Correction Factor				1.1657

Calculated value of As Found Response: 375.961 ppm      Percent Change of As Found: 4.5%

	before calibration		after calibration	
Auto zero	4.7	ppm	12.0	ppm
Auto span	35.0	ppm	309.0	ppm

Notes: Issues with possible contamination of Calibrator  
Restarted zero and high point after spikeCalibration Performed By: Reid Balawyder, Conor Whiteley

## Calibration Summary

Parameter

**SO2**

Air Monitoring Network

**PASZA**

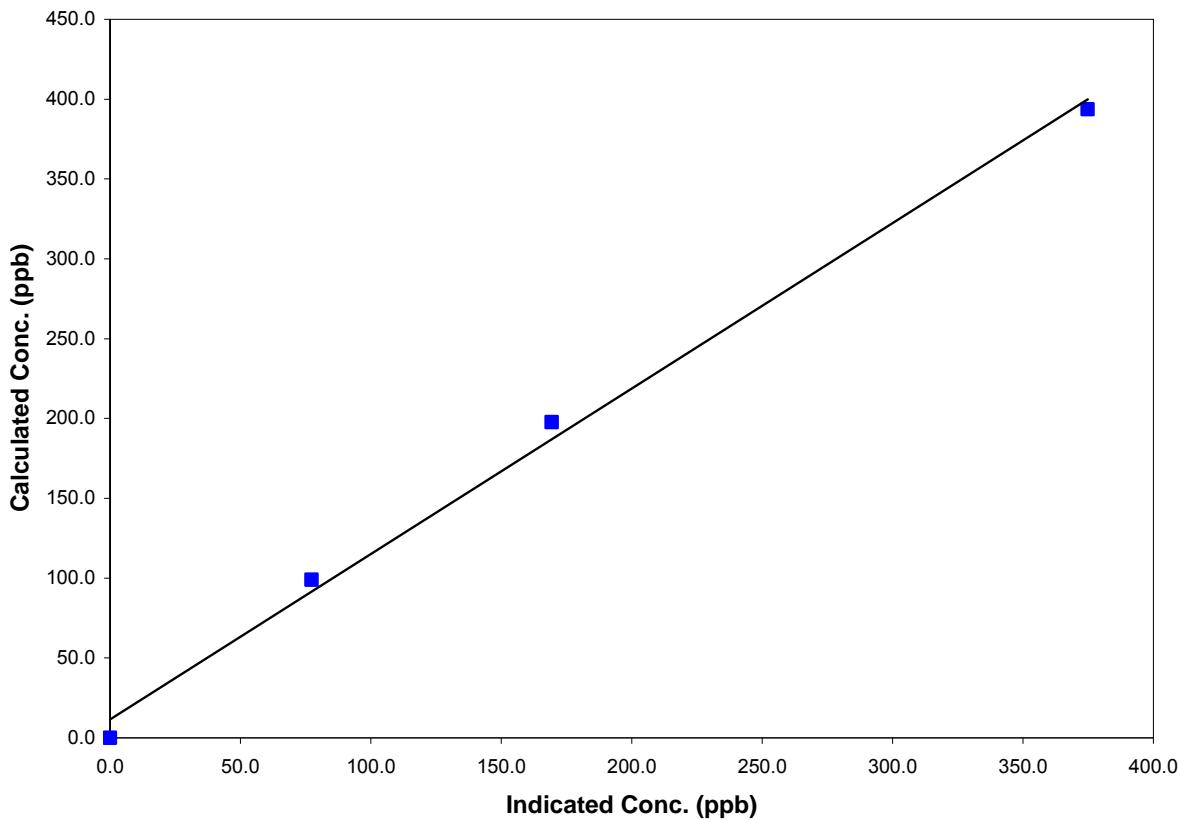
### Station Information

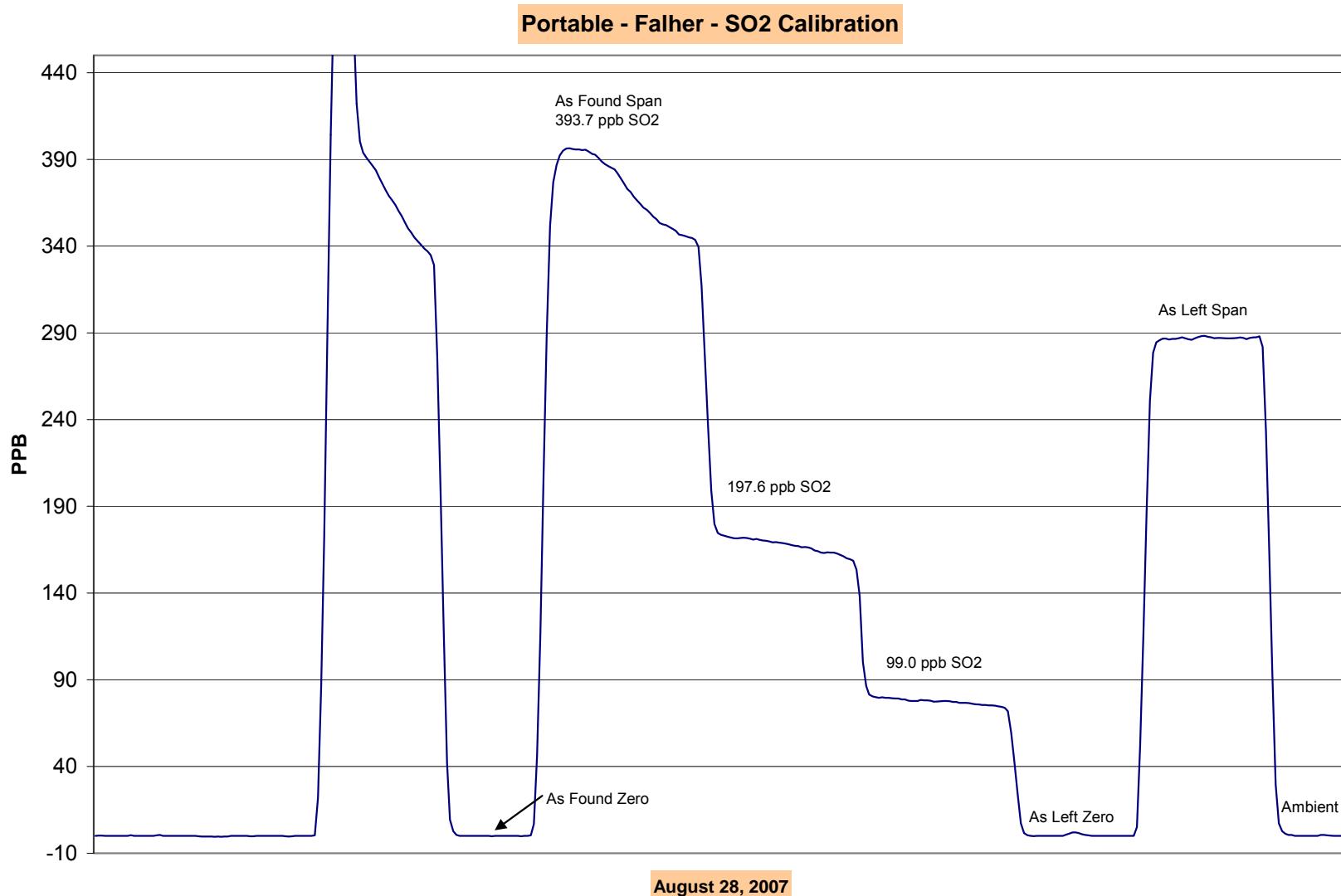
Calibration Date	August 28, 2007	Previous Calibration	July 25, 2007
Station Number	6	Station Location	Portable - Falher
Start Time (MST)	11:00	End Time (MST)	14:20
Analyzer make/model	TEI 43C APS1AB	Analyzer serial #	609716238

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
393.7	374.8	1.0503	Correlation Coefficient	0.996022
197.6	169.4	1.1663	Slope	1.036126
99.0	77.3	1.2806	Intercept	11.558994

### SO2 Calibration Curve





## Calibration Report

Parameter	TR5
Air Monitoring Network	PASZA



### Station Information

Calibration Date	August 29, 2007	Previous Calibration	July 25, 2006
Station Number	6	Station Location	Portable - Falher Rover
Reason:	Routine	Install	Removal
Start Time (MST)	9:00	End Time (MST)	12:30
Barometric Pressure	28.0 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	5.14 ppm	Cal Gas Expiry Date	11/15/2005
Gas Cert Reference	LL 74274	DACS serial No.	52662
DACS make	Focus AP1000	DACS channel #	8
DACS voltage range	0 - 5 volt		
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.020770	Calculated slope	1.008925
Calculated intercept	0.141693	Calculated intercept	0.396422
Analyzer make	TEI 43C MOD	Analyzer serial #	609716238

	before		after	
	0-100	ppb	0 - 100	ppb
Concentration range	8.7	ppb	4.8	ppb
Background	1.496		1.055	
Coefficient	801	V	801	V
Lamp Voltage	43.9	C	43.9	C
Chamber Temp	45	C	45	C
Perm gas Temp	663.9	mmHg	675	mmHg
Pressure	437	ccm	441	ccm
Sample Flow	38756	Hz	38522.0	Hz
Lamp Intensity				

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.0	0.0	-0.3	N/A
4992	69.85	70.9	69.8	1.0156
4992	39.93	40.8	40.2	1.0146
4992	9.96	10.2	9.6	1.0694
4992	0.00	0.0	-0.3	As found zero
4992	79.86	80.9	69.8	As found span
Average Correction Factor				1.0332

Calculated value of As Found Response: 71.75 ppm Percent Change of As Found: 11.3%

	before calibration		after calibration	
	-0.2	ppm	0.1	ppm
	77.1	ppm	76.3	ppm

Notes:

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Calibration Performed By: Reid Balawyder, Conor Whiteley

## Calibration Summary

Parameter      TRS  
 Air Monitoring Network      PASZA

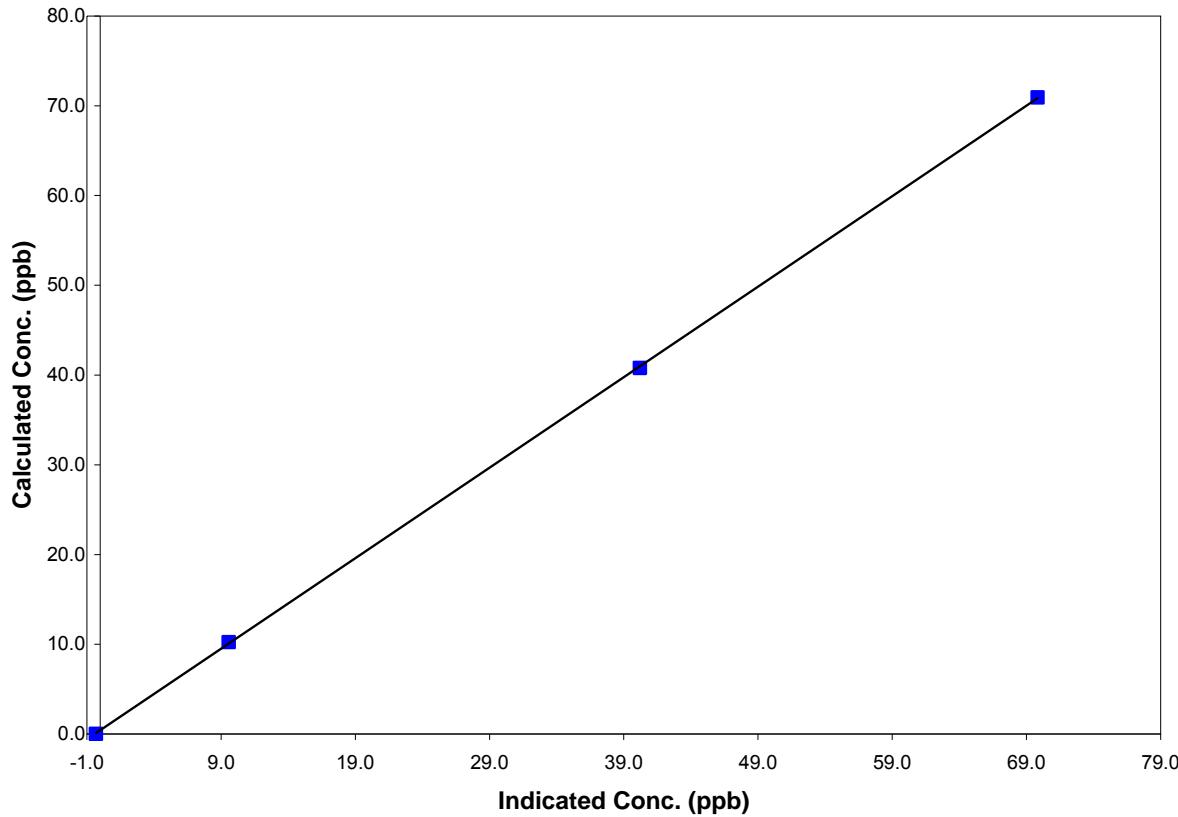


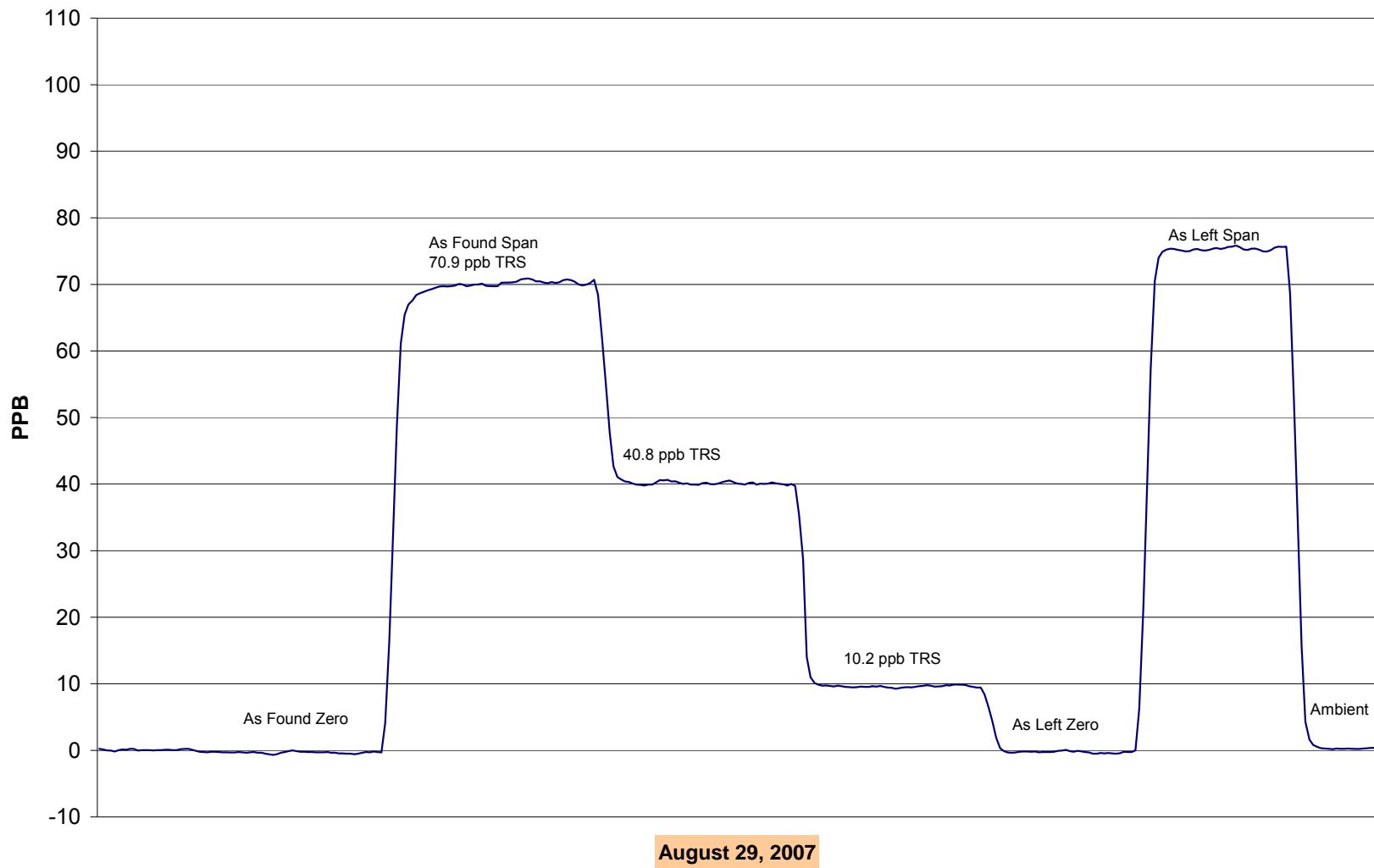
<b>Station Information</b>			
Calibration Date	August 29, 2007	Previous Calibration	July 25, 2006
Station Number	6	Station Location	Portable - Falher Rover
Start Time (MST)	9:00	End Time (MST)	12:30
Analyzer make/model	TEI 43C MOD	Analyzer serial #	609716238

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
70.9	69.8	1.0156	Correlation Coefficient	0.999976
40.8	40.2	1.0146	Slope	1.008925
10.2	9.6	1.0694	Intercept	0.396422

### TRS Calibration Curve



**Portable - Falher - TRS Calibration**

## Calibration Report



Parameter	O3
Air Monitoring Network	PASZA

### Station Information

Calibration Date	August 28, 2007	Previous Calibration	July 25, 2007
Station Number	6	Station Location	Portable - Falher
Reason:	Routine	Install	Removal
Start Time (MST)	9:00	End Time (MST)	12:00
Barometric Pressure	0.937 atm	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0-5	DACS channel #	7
Calculated slope	Before 0.991835	Calculated slope	After 0.951964
Calculated intercept	6.255458	Calculated intercept	-6.727298
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240
Concentration range	before 0-500	ppb	after 0-500
Offset	0.2	ppb	0.2
Span	1.022		1.022
Cell A	81360	Hz	81360
Cell B	80,638	Hz	80,638
Pressure	688	in Hg	688
CellA Flow	667	ccm	667
Cell B Flow	669	cmm	669

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.0	0.2	N/A
4992	0.00	350.0	367.0	0.9536
4992	0.00	200.0	227.3	0.8798
4992	0.00	100.0	116.5	0.8581
4992	0.00	0.0	0.2	As found zero
4992	0.00	300.0	367.0	As found span
Average Correction Factor				0.8972

Calculated value of As Found Response: 370.1 ppm Percent Change of As Found: 23.4%

Auto zero	before calibration		after calibration	
	-1.6	ppb	-7.8	ppb
	47.1	ppb	288.3	ppb

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

Calibration Performed By: Reid Balawyder, Conor Whiteley

## Calibration Summary

Parameter

**O3**

Air Monitoring Network

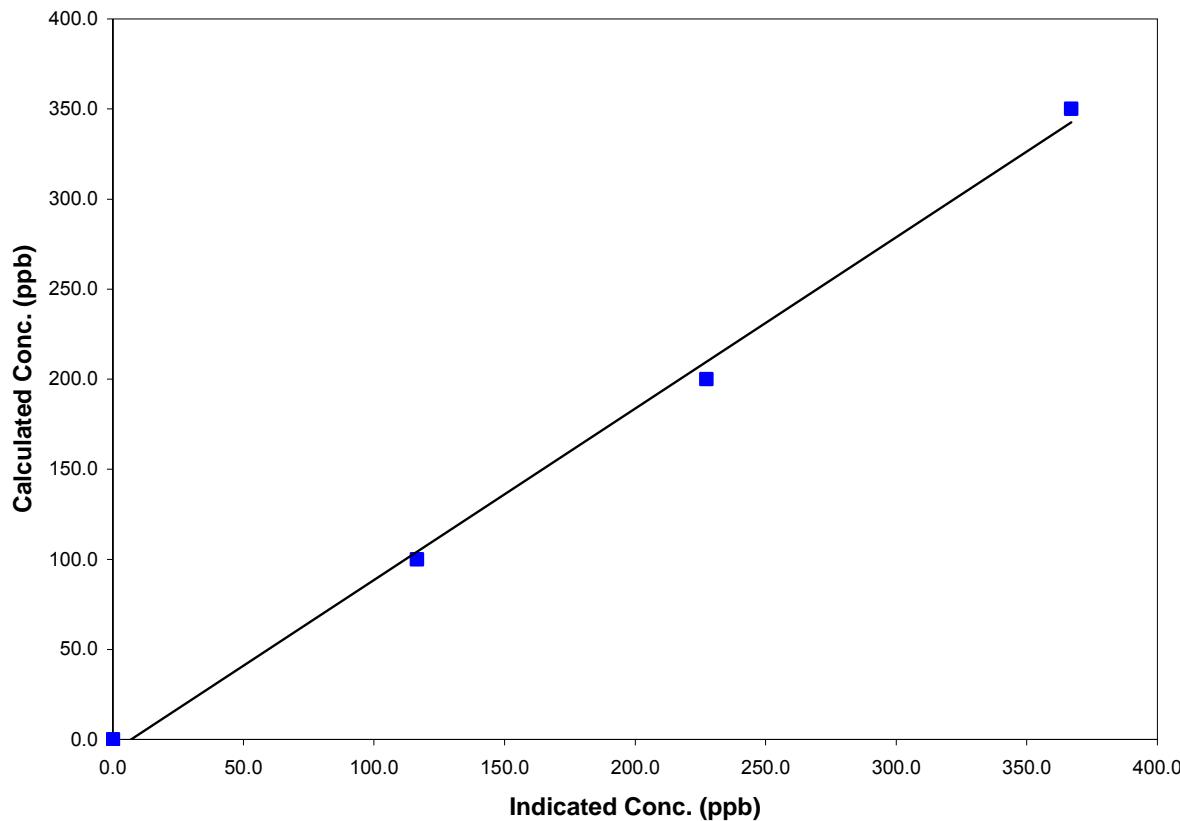
**PASZA**

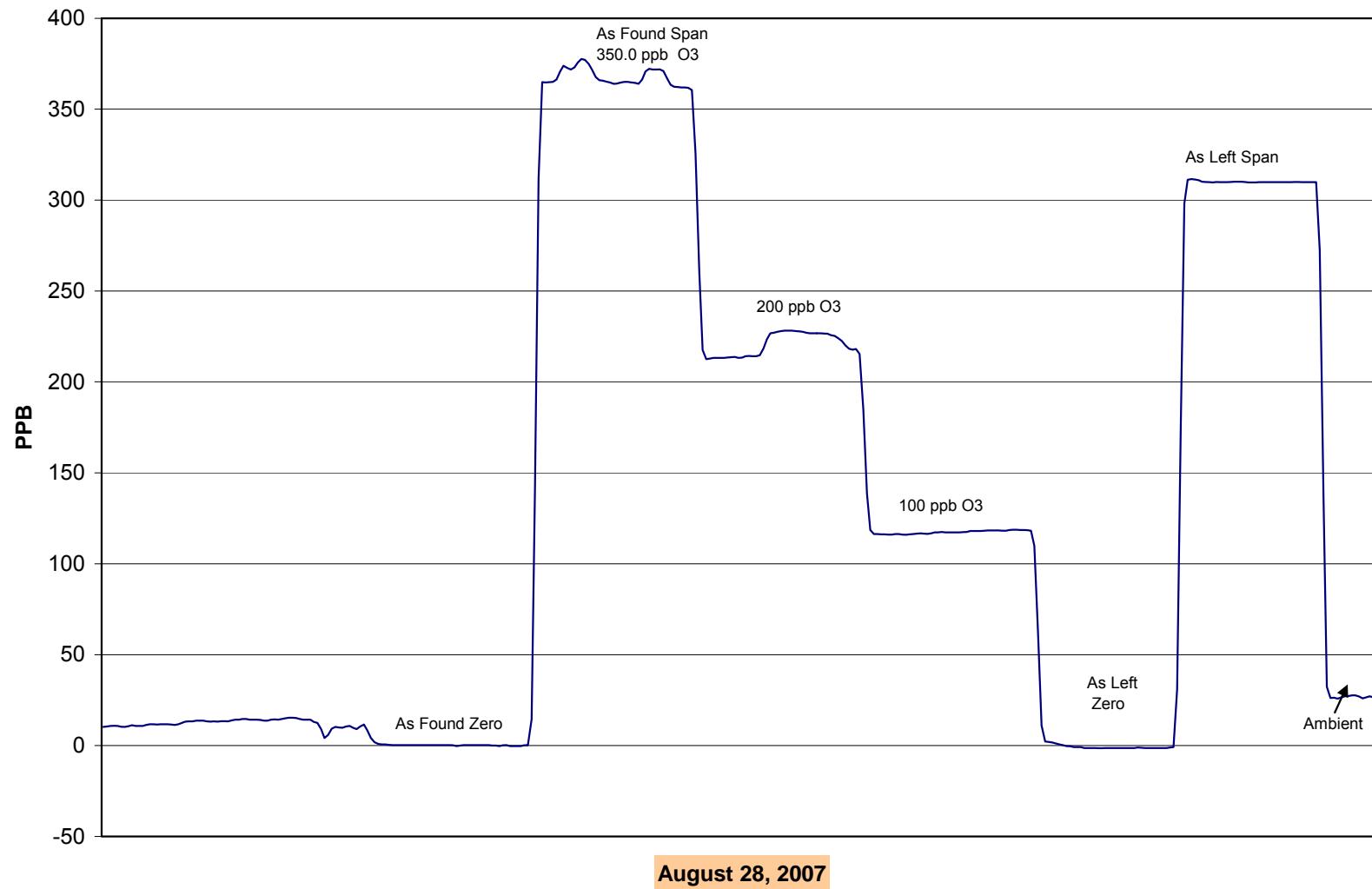
<b>Station Information</b>			
Calibration Date	August 28, 2007	Previous Calibration	July 25, 2007
Station Number	6	Station Location	Portable - Falher
Start Time (MST)	9:00	End Time (MST)	12:00
Analyzer make/model	TEI Model 49C	Analyzer serial #	609-716240

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA		
350.0	367.0	0.9536	Correlation Coefficient	0.996881
200.0	227.3	0.8798	Slope	0.951964
100.0	116.5	0.8581	Intercept	-6.727298

### O3 Calibration Curve



**Portable - Falher - O3 Calibration**

# Calibration Report

Parameter

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

Air Monitoring Network

PASZA



## Station Information

Calibration Date	August 28, 2007		Previous Calibration	July 25, 2006
Station Number	6		Station Location	Portable - Falher
Reason:	Routine Installation Removal Other: _____			
Start Time (MST)	11:17		End Time (MST)	15:20
Barometric Pressure	0.930	Atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100		Serial Number	3474
NO Cal Gas Conc	48.9	ppm	Cal Gas Expiry Date	2-Jan-09
NOx Cal Gas Conc	48.9	ppm	Cal Gas Serial #	LL-16161

## DACS Information

DACS make	FOCUS AP1000		DACS serial No.	52662
Parameter	NO2	NOx	NO	
Before	Data Slope	0.996721	1.000107	1.000921
	Data Offset	-1.394613	-3.692769	-3.317014
After	Data Slope	0.994826	1.016569	1.031642
	Data Offset	-2.946945	-0.577758	-0.453136
Channel #	8	6	7	
Voltage Range	0 - 10 VDC	0 - 10 VDC	0 - 10 VDC	

## Analyzer Information

Analyzer make/model	API Model 200E	Analyzer serial #	219
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Test Point	before		after	
Concentration range	0-1000	ppb	0-1000	ppb
NO background	4.6	ppb	4.6	mV
NOx background	4.8	ppb	4.8	mV
NO coefficient	0.643		0.643	
NOx coefficient	1.013		0.996	
Chamber Temp	50.3	Deg C	50.0	Deg C
Cooler Temp	-2.9	Deg C	-3.1	Deg C
NO2 Converter Temp	324.2	Deg C	325.0	Deg C
Sample Flow	701.0	ccm	702.0	ccm
Ozonator Flow	0.087	LPM	0.087	LPM
Pressure	157.2	mm Hg	156.9	mm Hg

Notes: Due to operational error, during the time of data recording from point 343 to 503 data was being captured at half the correct voltage rate and subsequently data between those points was half of its true value, the data has been corrected (see NOX data M345 - S502) however, there are points that are midway between the error that could not be doubled, 343 and 503

Calibration Performed By: Conor Whiteley

## Calibration Report

Parameter

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

Air Monitoring Network

PASZA



### Station Information

Calibration Date:

August 28, 2007

Station Location:

Portable - Falher

### 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	4992	0.00	0.0	0.0	0.0	0.3	-0.5	1.1	N/A	N/A	
	4992	79.95	770.8	770.8	0.0	758.5	746.9	13.2	1.0162	1.0320	
	4992	39.93	388.0	388.0	0.0	382.9	377.7	7.0	1.0133	1.0275	
	4992	19.91	194.3	194.3	0.0	191.6	189.3	3.8	1.0137	1.0262	
AFZ	4992	0.00	0.0	0.0	0.0	0.3	-0.5	1.1	0.0000	0.0000	
	4992	80.00	771.3	771.3	0.0	758.5	746.9	13.2	1.0169	1.0326	
							Average Correction Factor	1.0144	1.0286		

As Found Concentrations:

NO<sub>x</sub>= 754.5

NO= 744.1

As Found Percent Change NO<sub>x</sub>= -2.2%

NO= -3.5%

### GPT Calibration Data

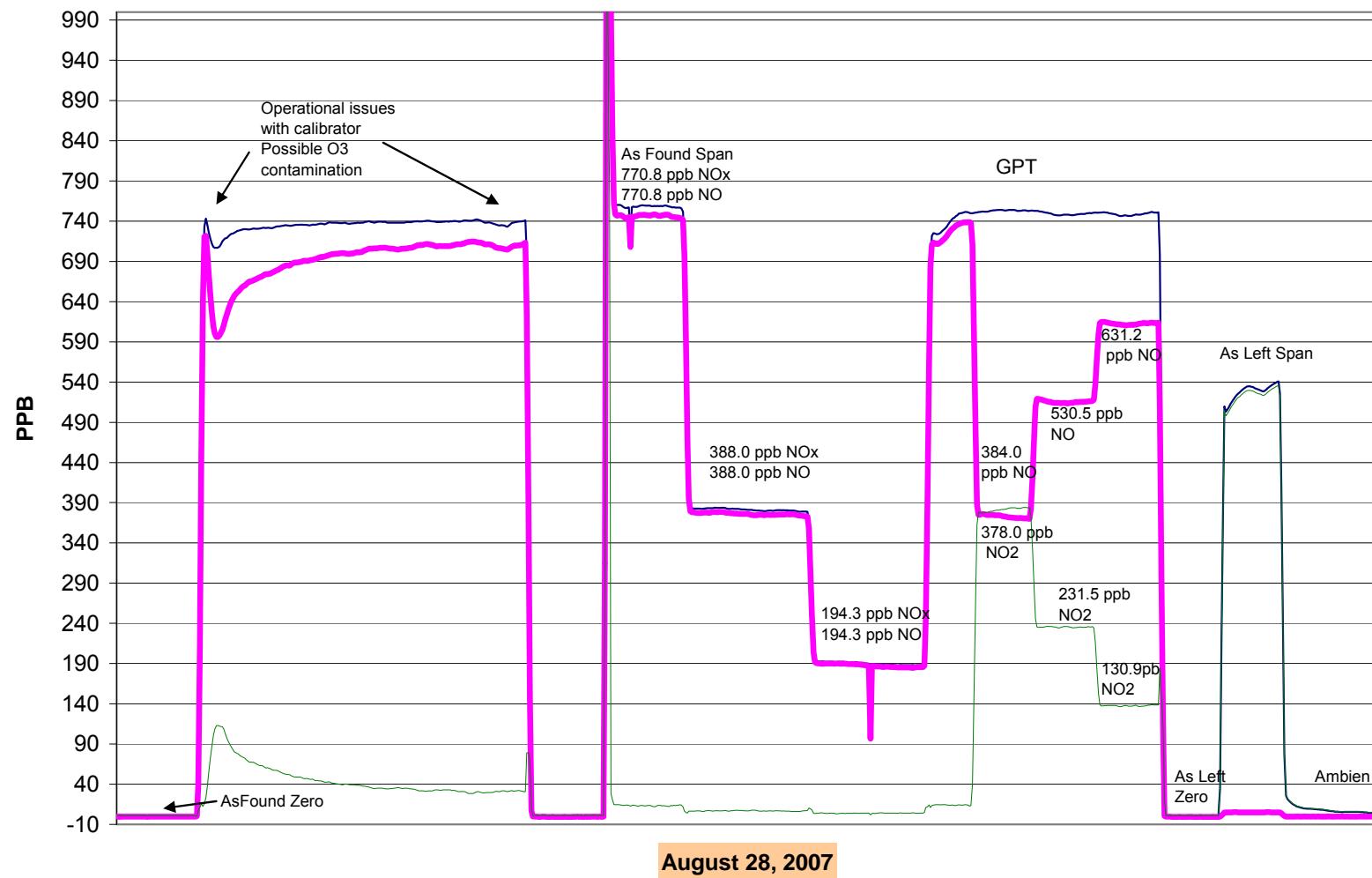
Dilution Flow	4993	ccm
---------------	------	-----

O <sub>3</sub> 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	762.0	749.0	13.0	738.6	726.5	14.2	1.0316	1.0310	N/A	N/A
350	762.0	384.0	378.0	753.4	372.7	382.0	1.0114	1.0304	0.9896	101.0%
200	762.0	530.5	231.5	748.5	514.7	235.4	1.0180	1.0308	0.9833	101.7%
100	762.0	631.2	130.9	748.5	612.2	137.6	1.0180	1.0309	0.9509	105.2%
						Average Correction Factor	1.0158	1.0307	0.9746	102.6%

### AIC Data

	Previous calibration				Current calibration				
	Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	
Auto zero	1.2	0.7	0.8		ppb	0.3	-0.2	2.7	ppb
Auto span	342.0	20.9	320.1	ppb		541.3	522.3	4.7	ppb

Calibration Performed By: Conor Whiteley

**Portable - Falher - NOx Calibration**

## Calibration Summary

Parameter

**NO<sub>2</sub>**

Air Monitoring Network

**PASZA**

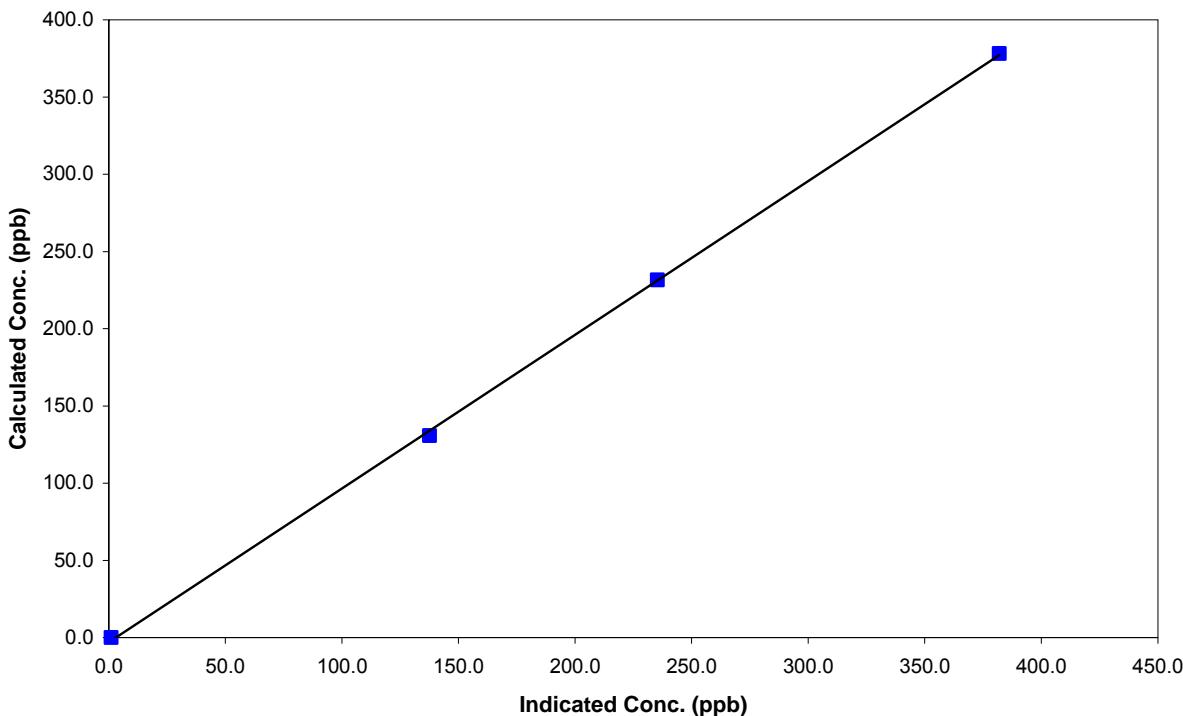
### Station Information

Calibration Date	August 28, 2007	Previous Calibration	July 25, 2006
Station Number	6	Station Location	Portable - Falher
Start Time (MST)	11:17	End Time (MST)	15:20
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.1	0.0000	Correlation Coefficient	0.999815
378.0	382.0	0.9896		
231.5	235.4	0.9833		
130.9	137.6	0.9509		
			Slope	0.994826
			Intercept	-2.946945

### NO<sub>2</sub> Calibration Curve



## Calibration Summary

Parameter

**NO<sub>x</sub>**

Air Monitoring Network

**PASZA**

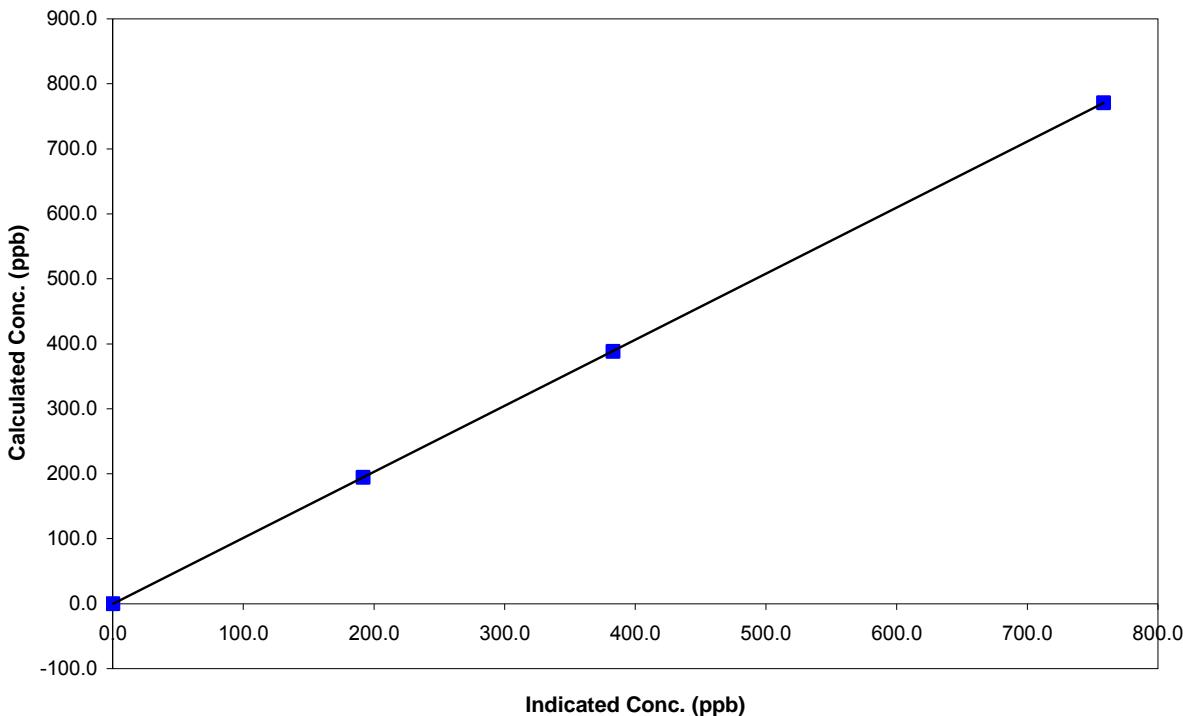
### **Station Information**

Calibration Date	August 28, 2007	Previous Calibration	July 25, 2006
Station Number	6	Station Location	Portable - Falher
Start Time (MST)	11:17	End Time (MST)	15:20
Analyzer make	API Model 200E	Analyzer serial #	219

### **Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	0.0000	Correlation Coefficient	0.999998
770.8	758.5	1.0162		
388.0	382.9	1.0133		
194.3	191.6	1.0137		
			Slope	1.016569
			Intercept	-0.577758

### **NO<sub>x</sub> Calibration Curve**



## Calibration Summary

Parameter

**NO**

Air Monitoring Network

**PASZA**

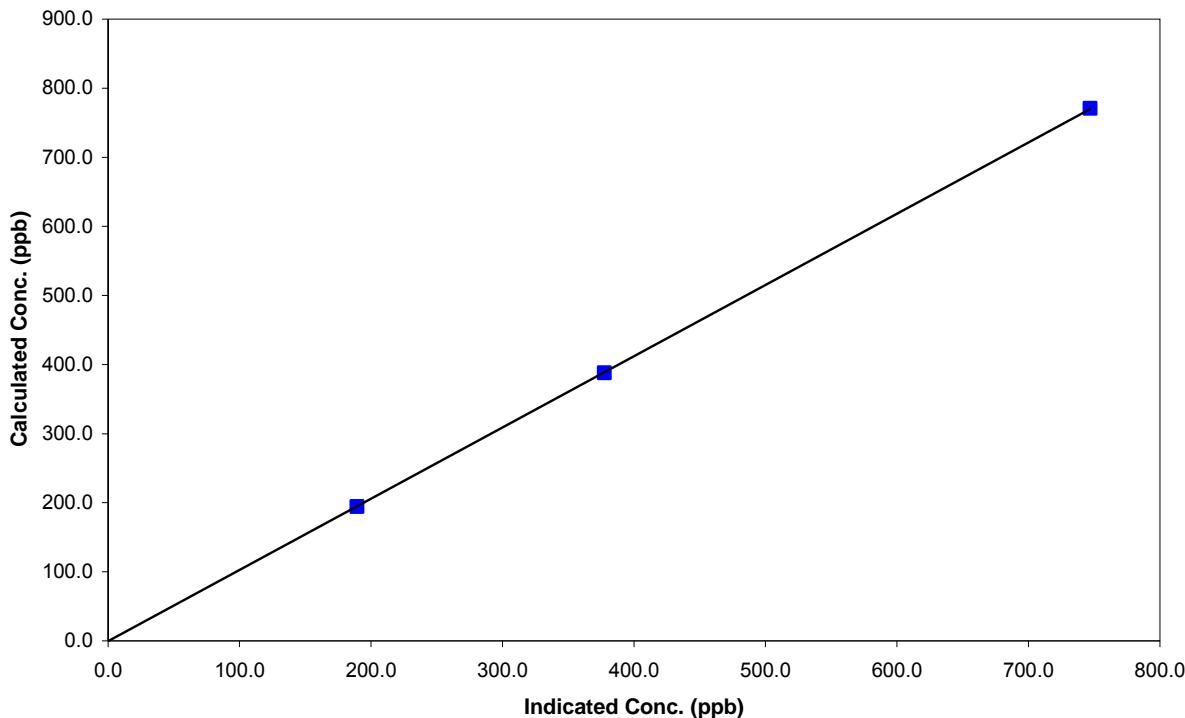
### Station Information

Calibration Date	August 28, 2007	Previous Calibration	July 25, 2006
Station Number	6	Station Location	Portable - Falher
Start Time (MST)	11:17	End Time (MST)	15:20
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.5	N/A		
770.8	746.9	1.0320	Correlation Coefficient	0.999991
388.0	377.7	1.0275	Slope	1.031642
194.3	189.3	1.0262	Intercept	-0.453136

### NO Calibration Curve



## Calibration Report

Parameter

**SO2**

Air Monitoring Network

**PASZA**

### Station Information

Calibration Date	August 16, 2007	Previous Calibration	July 26, 2007
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	9:15	End Time (MST)	12:55
Barometric Pressure	27.81 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL16161		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.002309	Calculated slope	0.993487
Calculated intercept	-2.952907	Calculated intercept	-3.158269
Analyzer make	TEI 43i	Analyzer serial #	43C-57351-313
before		after	
Concentration range	0-1000 ppb	0 - 1000	ppb
Background	29.1	28.1	
Coefficient	0.778	0.797	
UV Lamp Voltage	691 LPM	691	LPM
Chamber Temp	44.4 V	44.1	V
Perm Gas Temp	30? C	30.5(?)	C
Pressure	626.1 in Hg	630.5	in Hg
Sample Flow	0.468 LPM	0.469	LPM
Lamp Intesity	45370 Hz	44915	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)
4993	0.00	0.0	0.6	N/A
4993	39.93	399.1	403.2	0.9897
4993	19.96	200.3	206.8	0.9684
4992	9.99	100.5	106.5	0.9433
4992	0.00	0.0	0.6	As found zero
4992	39.94	399.2	455.4	As found span
Average Correction Factor				0.9671

Calculated value of As Found Response: 452.971 ppm      Percent Change of As Found: -13.5%

Auto zero	before calibration		after calibration	
	-3.6	ppm	-2.5	ppm
	991.4	ppm	990.3	ppm

Notes: Adjusted Span  
 \_\_\_\_\_  
 \_\_\_\_\_

Calibration Performed By: Conor Whiteley

## Calibration Summary

Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**



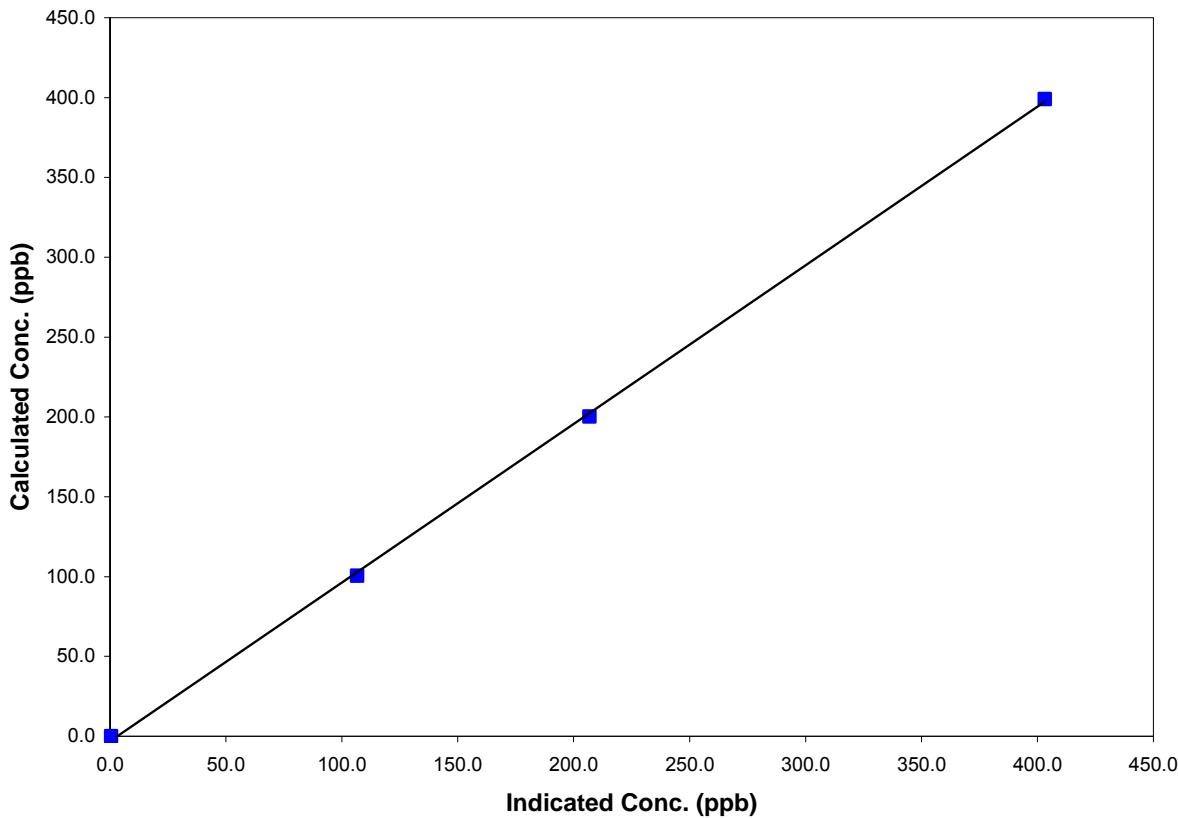
### Station Information

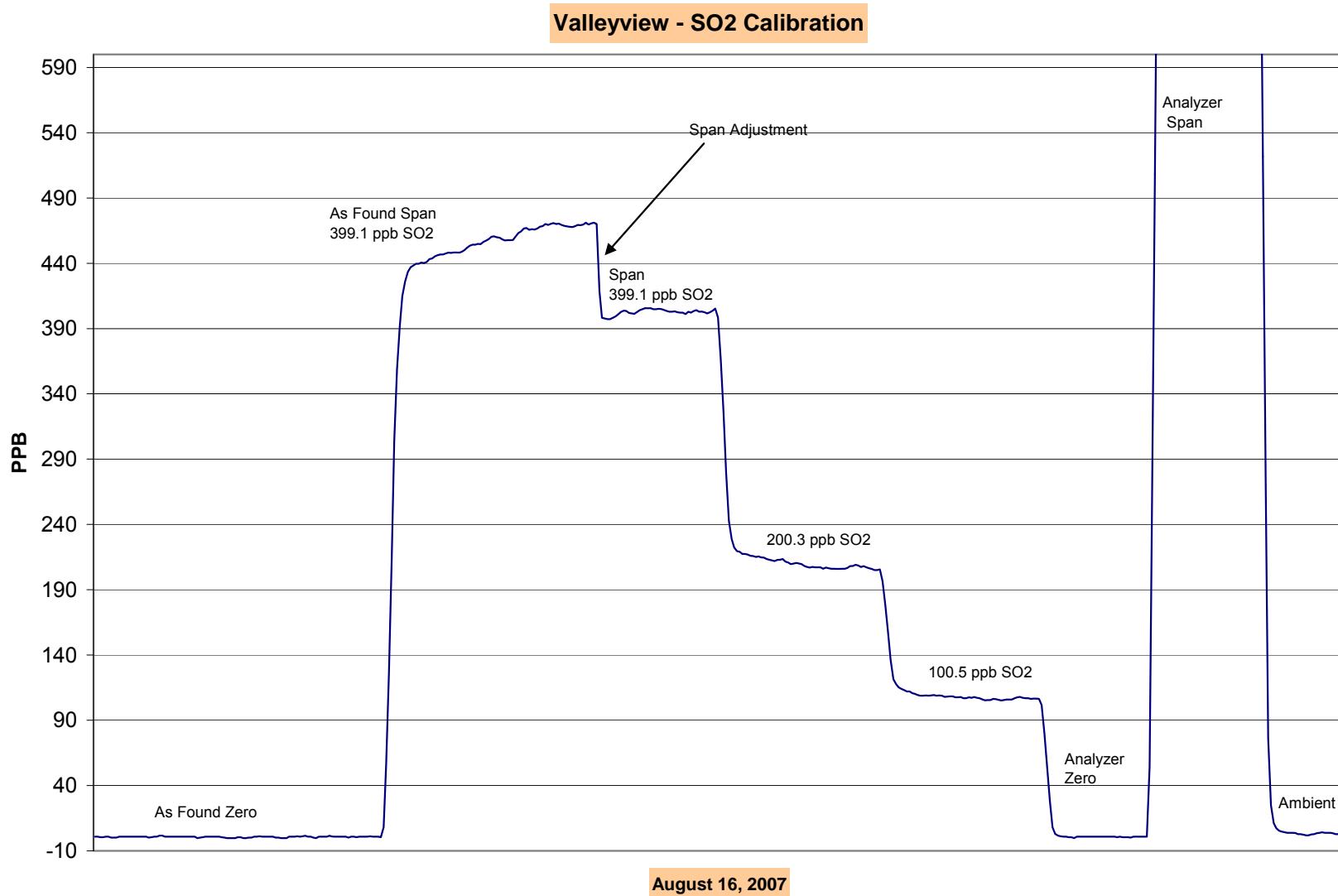
Calibration Date	August 16, 2007	Previous Calibration	July 26, 2007
Station Number	6	Station Location	Valleyview
Start Time (MST)	9:15	End Time (MST)	12:55
Analyzer make/model	TEI 43i	Analyzer serial #	43C-57351-313

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A		
399.1	403.2	0.9897	Correlation Coefficient	0.999789
200.3	206.8	0.9684	Slope	0.993487
100.5	106.5	0.9433	Intercept	-3.158269

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





## Calibration Report

Parameter

H2S

Air Monitoring Network



Station Information			
Calibration Date	August 15, 2007	Previous Calibration	July 26, 2007
Station Number	5	Station Location	Valleyview
Reason:	Routine	Install	Removal
Start Time (MST)	11:45	End Time (MST)	14:10:00 PM
Barometric Pressure	27.8 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	5.1 ppm	Cal Gas Expiry Date	11/29/2006
Gas Cert Reference	BLM003489	DACS serial No.	1
DACS make	Focus AP1000	DACS channel #	9
DACS voltage range	0 - 10 volt		
DACS Scale High	100	DACS slope	After
DACS Scale Low	0	DACS intercept	100
Calculated slope	0.997227	Calculated slope	0
Calculated intercept	0.236935	Calculated intercept	1.008197
Analyzer make	TEI Model 43A	Analyzer serial #	0.031722
Concentration range	before		after
	0 - 100	ppb	0 - 100
	4.8	ppb	4.8
	1.055		1.055
	811	V	805
	45	c	45
	45	c	45
	639	mm Hg	653
	428	ccm	436
	91.0	%	90.0

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.0	-0.2	N/A
4992	69.92	70.4	69.7	1.0108
4992	39.90	40.4	40.3	1.0031
4992	9.96	10.2	10.1	1.0033
4992	0.00	0.0	-0.2	As found zero
4992	69.88	70.4	69.7	As found span
Average Correction Factor				1.0057

Calculated value of As Found Response: 69.93 ppm Percent Change of As Found: 0.7%

Auto zero	before calibration		after calibration	
	0.1	ppm	0.0	ppm
	66.4	ppm	67.3	ppm

Notes: No adjustments made

ESC triggered Zero seemed to click out while I was checking diagnostics, won't use ESC again  
Instead will only use internal analyzer zero and span.

Calibration Performed By: Conor Whiteley

## Calibration Summary

Parameter

**H2S**

Air Monitoring Network

**PASZA**

### *Station Information*

Calibration Date	August 15, 2007	Previous Calibration	July 26, 2007
Station Number	5	Station Location	Valleyview
Start Time (MST)	11:45	End Time (MST)	14:10:00 PM
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-25575-221

### *Calibration Data*

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
70.4	69.7	1.0108	Correlation Coefficient	0.999963
40.4	40.3	1.0031	Slope	1.008197
10.2	10.1	1.0033	Intercept	0.031722

### **H2S Calibration Curve**

