



# Air Quality Monitoring Network for August 2006

Prepared by  
**FOCUS**  
 AMBIENT AIR MONITORING

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October 11, 2006

Environmental Service Response Centre  
Alberta Environment  
#111 Twin Atria Building  
4999-98<sup>th</sup> Avenue  
Edmonton, Alberta T6B 2X3

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

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Enclosed is the PASZA Ambient Monitoring Network Report for the month of **August 2006**.

**Continuous Monitoring: Five (5) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge and Falher (portable).**

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.

The Falher (Portable) station was commissioned and calibrated on August 29<sup>th</sup> and 30<sup>th</sup>, 2006. The start-up calibrations are included in this report; however data collection began September 1<sup>st</sup>, 2006.

During the month of August the following events were noted:

**Henry Pirker Station:**

- ◆ On July 19<sup>th</sup>, the O<sub>3</sub> analyzer sample inlet line was disconnected from the back of the analyzer during the AENV audit. During routine calibrations on August 14<sup>th</sup> this error was discovered. All data was removed during this period resulting in less than 90% uptime. The non-compliance has been assigned AENV Reference #176014.
- ◆ All other analyzers / sensors at the Henry Pirker station were above 90% uptime.
- ◆ The AQI for the month resulted in 698 hours of Good readings and 4 hours of Fair readings.

**Evergreen Park Station:**

- ◆ The SO<sub>2</sub> analyzer was down for eleven (11) hours on August 13<sup>th</sup> and 14<sup>th</sup> due to an intermittent problem with the analyzer. This diagnosis of the problem is ongoing due to its intermittent nature.
- ◆ Continue to see elevated readings of SO<sub>2</sub> with the highest readings ranging from the West to the West Southwest. This area is indicative of an industrialized area near Grande Prairie where an asphalt plant is suspected to contribute SO<sub>2</sub>. Overall there were no SO<sub>2</sub> exceedences.
- ◆ All analyzers / sensors at the Evergreen Park station were above 90% uptime

**Smoky Heights Station:**

- ◆ A non-compliance of less than ninety (90%) percent uptime for the month of August, 2006 for all analyzers and sensors (SO<sub>2</sub>, TRS, PM2.5, wind speed, wind direction and temperature) was reported for the Smoky Heights station. Due to a PC failure, there was no data collected and/or transferred from August 4<sup>th</sup> 06:00 to August 7<sup>th</sup> 07:00. The technical issue was identified and corrected but attempts to capture the backlogged data caused a different DACS failure resulting in loss of data again between August 16<sup>th</sup> 07:00 to August 18<sup>th</sup> 11:00 MST. The non-compliance has been assigned AENV reference number 176015.

- ◆ On August 8<sup>th</sup> a power bump resulted in one (1) hour of invalid data for all analyzers and sensors (SO<sub>2</sub>, TRS, PM<sub>2.5</sub>, wind speed, wind direction and temperature).

**Beaverlodge Station:**

- ◆ All analyzers / sensors at the Beaverlodge station were above 90% uptime.
- ◆ The AQI for the month resulted in 688 hours of Good readings and 3 hours of Fair readings.

**Passive Monitoring:****43 Stations throughout the PASZA zone:**

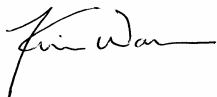
There were two samples that were not analyzed for the month of September; the Beaverlodge O<sub>3</sub> sample was damaged, and the Woking NO<sub>2</sub> sample was missing.

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

- Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.1 ppb to 0.4 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 0.3 ppb to 5.4 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 16.6 ppb to 29.8 ppb.

If you have any questions, please contact the Focus office at 1-888-869-2252 (Gary Cross) or 1-888-466-6555 (Kevin McCullum).

On Behalf of the,  
Peace Airshed Zone Association



Kevin Warren  
PASZA Technical Program Manager



Kevin McCullum, Ph.D., P.Eng.  
AQM Environmental Engineer



August 22, 2006

Alberta Environment  
Environmental Service Response Centre  
111, Twin Atria Building  
4999 - 98 Avenue  
Edmonton, Alberta, T6B 2X3

**RE: PASZA Air Monitoring Directive Non-compliance Report Ref # 176014**

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A non-compliance of the Alberta Air Monitoring Directive was recently reported by Focus to Alberta Environment (AENV) on behalf of the Peace Airshed Zone Association (PASZA). The non-compliance was less than ninety (90%) percent uptime for the month of July and August, 2006 for the Ozone analyzer (API 400) at the Henry Pirker station located in Muskoseepi Park, Grande Prairie. The sample inlet line was disconnected from the back of the analyzer during the AENV audit on July 19<sup>th</sup> 14:00 MST. It was discovered on August 14<sup>th</sup>, 2006 during routine calibrations that the line had not been re-connected. All data was removed during this period. This station is owned by PASZA and operated on their behalf by Focus. The non-compliance has been assigned AENV reference number 176014.

Operating protocols that involve station checks to ensure this does not happen have been reviewed with all FOCUS technicians.

If there are any questions or concerns please call me at your convenience at (403) 269-2252.

Sincerely,

**THE FOCUS CORPORATION**

A handwritten signature in black ink that reads "Sharon E. Whiteley". The signature is written in a cursive style.

Sharon Whiteley  
AQM Data Specialist



August 22, 2006

Alberta Environment  
Environmental Service Response Centre  
111, Twin Atria Building  
4999 - 98 Avenue  
Edmonton, Alberta, T6B 2X3

**RE: PASZA Air Monitoring Directive Non-compliance Report Ref # 176015**

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A non-compliance of the Alberta Air Monitoring Directive was recently reported by Focus to Alberta Environment (AENV) on behalf of the Peace Airshed Zone Association (PASZA). The non-compliance was less than ninety (90%) percent uptime for the month of August, 2006 for all analyzers and sensors (SO<sub>2</sub>, TRS, PM2.5, wind speed, wind direction and temperature). This situation occurred at the Smoky Heights station located NE of Teepee Creek. Due to a PC failure, there was no data collected and/or transferred from August 4<sup>th</sup> 06:00 to August 7<sup>th</sup> 07:00. The technical issue was identified and corrected but in attempts to capture the backlogged data caused a different DACS failure resulting in loss of data again between August 16<sup>th</sup> 07:00 to August 18<sup>th</sup> 11:00 MST. This station is owned by PASZA and operated on their behalf by Focus. The non-compliance has been assigned AENV reference number 176015.

Communication at this station is intermittent and FOCUS is looking at a couple of solutions; the first is to try a cell modem signal booster. Reliable communication links will permit easier identification of PC/DACS issues and quicker response time. If data capture remains intermittent then a paperless chart recorder will be installed to back up station data.

If there are any questions or concerns please call me at your convenience at (403) 269-2252.

Sincerely,

**THE FOCUS CORPORATION**

A handwritten signature in black ink that reads 'Sharon E. Whiteley'.

Sharon Whiteley  
AQM Data Specialist

## PASZA Monthly Continuous Data Summary

Aug-2006 Peace Airshed Zone Association							Maximum Recorded Values						Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr			24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	
SO <sub>2</sub> (ppb)	172	57	Henry Pirker	0.4	0	0	3.6	Aug-27 11:00	6.6	SE	0.8	Aug-21	100.0%
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	2.6	0	0	94.0	Aug-12 10:00	6.8	WSW	15.5	Aug-12	98.5%
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.4	0	0	9.1	Aug-01 03:00	21.9	W	1.5	Aug-01	83.1%
SO <sub>2</sub> (ppb)	172	57	Beaverlodge	0.5	0	0	21.7	Aug-12 09:00	5.5	W	1.7	Aug-12	100.0%
NO (ppb)			Henry Pirker	2.1	-	-	43.7	Aug-31 06:00	4.1	W	4.9	Aug-11	100.0%
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	6.7	0	0	25.0	Aug-04 21:00	2.6	SW	10.0	Aug-21	100.0%
NO <sub>x</sub> (ppb)			Henry Pirker	8.6	-	-	59.8	Aug-11 07:00	3.6	W	14.4	Aug-21	100.0%
NO (ppb)			Beaverlodge	0.5	-	-	24.8	Aug-21 07:00	1.6	S	3.0	Aug-21	100.0%
NO <sub>2</sub> (ppb)	212	106	Beaverlodge	2.4	0	0	11.2	Aug-21 06:00	1.9	SW	4.6	Aug-21	100.0%
NO <sub>x</sub> (ppb)			Beaverlodge	2.8	-	-	35.3	Aug-21 07:00	1.6	S	7.6	Aug-21	100.0%
O <sub>3</sub> (ppb)	82		Henry Pirker	21.8	0	-	55.8	Aug-21 16:00	6.8	E	25.5	Aug-29	56.2%
O <sub>3</sub> (ppb) - 8-hr		65	Henry Pirker			0					48.3	Aug-21	
O <sub>3</sub> (ppb)	82		Beaverlodge	26.7	0	-	61.4	Aug-21 18:00	10.6	SE	34.0	Aug-21	100.0%
O <sub>3</sub> (ppb) - 8-hr		65	Beaverlodge			0					50.9	Aug-21	
CO (ppm)	13		Henry Pirker	0.10	0	-	0.3	Aug-04 21:00	2.6	SW	0.2	Aug-08	100.0%
CO (ppm) - 8-hr		5	Henry Pirker			0					0.2	Aug-07	
THC (ppm)			Henry Pirker	1.96	-	-	2.6	Aug-21 08:00	3.6	WSW	2.1	Aug-21	100.0%
TRS (ppb)			Henry Pirker	0.2	-	-	0.9	Aug-21 08:00	3.6	WSW	0.4	Aug-20	100.0%
TRS (ppb)			Evergreen Park	0.4	-	-	3.3	Aug-11 02:00	2.5	NNW	0.7	Aug-31	100.0%
TRS (ppb)			Smoky Heights	0.4	-	-	1.0	Aug-20 01:00	4.0	NNE	0.5	Aug-28	83.1%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Henry Pirker	4.6	0	0	36.1	Aug-22 21:00	3.3	WSW	10.0	Aug-21	99.7%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Evergreen Park	5.6	0	0	47.2	Aug-18 16:00	23.1	W	10.4	Aug-22	99.5%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Smoky Heights	3.7	0	0	42.5	Aug-18 21:00	11.9	W	8.6	Aug-28	82.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Beaverlodge	3.7	0	0	18.9	Aug-21 19:00	8.8	SE	8.1	Aug-21	97.7%
RH (%)			Henry Pirker	55.7	-	-	-	-	-	-	-	-	100.0%
RH (%)			Beaverlodge	50.6	-	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )			Henry Pirker	202.9	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Henry Pirker	16.3	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Evergreen Park	15.2	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Smoky Heights	15.5	-	-	-	-	-	-	-	-	83.1%
Temp (°C)			Beaverlodge	16.0	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Henry Pirker	7.4	-	-	29.9	Aug-02 14:00	29.9	WSW	17.6	2-Aug	100.0%
WSPD v (km/hr)			Evergreen Park	6.2	-	-	25.0	Aug-02 09:00	25.0	WSW	15.1	1-Aug	100.0%
WSPD v (km/hr)			Smoky Heights	9.0	-	-	36.7	Aug-18 13:00	36.7	W	21.8	2-Aug	83.1%
WSPD v (km/hr)			Beaverlodge	6.2	-	-	30.8	Aug-18 11:00	30.8	W	15.7	1-Aug	100.0%
WSPD s (km/hr)			Henry Pirker	9.9	-	-	30.2	Aug-02 14:00	30.2	WSW	18.6	2-Aug	100.0%
WSPD s (km/hr)			Evergreen Park	8.1	-	-	25.4	Aug-02 09:00	25.4	WSW	15.5	2-Aug	100.0%
WSPD s (km/hr)			Smoky Heights	12.9	-	-	37.2	Aug-18 13:00	37.2	W	22.4	2-Aug	83.1%
WSPD s (km/hr)			Beaverlodge	9.2	-	-	31.2	Aug-18 11:00	31.2	W	17.0	2-Aug	100.0%
WDIR (Deg)			Henry Pirker	W	-	-	-	-	-	-	-	-	100.0%
WDIR (Deg)			Evergreen Park	W	-	-	-	-	-	-	-	-	100.0%
WDIR (Deg)			Smoky Heights	W	-	-	-	-	-	-	-	-	83.1%
WDIR (Deg)			Beaverlodge	WNW	-	-	-	-	-	-	-	-	100.0%

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

\* Wind Direction is the predominate direction for the Month

# Continuous Network Equipment Summary

## PASZA – Henry Pirker Station

### General Station Issues

Calibrations were performed on August 8<sup>th</sup> (CO & THC), August 14<sup>th</sup> (NO<sub>x</sub>), August 24<sup>th</sup> (O<sub>3</sub>) and August 28<sup>th</sup> (SO<sub>2</sub>, TRS). Annual calibrations and maintenance were also performed on the wind sensors on August 29<sup>th</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43	Spans were unstable due to instability of the oven temperature, the temperature was increased to resolve problem.
NO <sub>x</sub> /NO/NO <sub>2</sub>	TECO	42C	No operational problems observed.
O <sub>3</sub>	API	400	The sample inlet line was disconnected on July 19 <sup>th</sup> , resulting in three hundred and twenty-six (326) hours of downtime. Reconnected August 14 <sup>th</sup> .
CO	TECO	48C	No operational problems observed.
THC	TEI	51-CLT	Span cylinder changed out on August 28 <sup>th</sup> . Spans increased due to concentration of different span source.
TRS	TEI	42C	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	Two (2) hours were removed due to baseline drift. No other operational problems observed.
RH	Met One	083D	No operational problems observed.
AT	Met One	083D	No operational problems observed.
SR	Met One	096-1	No operational problems observed.
WS	Met One	010C	Bearings were replaced on August 29 <sup>th</sup> .
WD	Met One	020C	Bearings were replaced on August 29 <sup>th</sup> .

## PASZA – Evergreen Park Station

### General Station Issues

Calibrations were performed on August 28<sup>th</sup> (TRS, SO<sub>2</sub> and PM<sub>2.5</sub>). Annual calibrations and maintenance were also performed on the wind sensors on August 29<sup>th</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	API	100	Eleven (11) hours of data was flagged invalid on August 13 <sup>th</sup> and 14 <sup>th</sup> due to an intermittent problem with the analyzer. This diagnosis is ongoing due to its intermittent nature.
TRS	TEI	42C	The TRS span fluctuates greater than 10%, the issues are with the oven (flow or temperature related) and it has yet to be determined.
PM <sub>2.5</sub>	R&P	1400AB	Four (4) hours were removed due to baseline drift. No other operational problems observed.
AT	Met One	083D	No operational problems observed.
WS	Met One	010C	Bearings were replaced on August 29 <sup>th</sup> .
WD	Met One	020C	Bearings were replaced on August 29 <sup>th</sup> .

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**PASZA – Smoky Heights Station**

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**General Station Issues**

Calibrations were performed on August 30<sup>th</sup> (SO<sub>2</sub>, TRS and PM<sub>2.5</sub>). On August 8<sup>th</sup> a power bump resulted in one (1) hour of invalid data for all analyzers and sensors (SO<sub>2</sub>, TRS, PM<sub>2.5</sub>, wind speed, wind direction and temperature). Annual calibrations and maintenance were also performed on the wind sensors on August 30<sup>th</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	API	100A	No operational problems observed.
TRS	TEI	42C	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	Eight (8) hours were removed due to baseline drift. No other operational problems were observed.
AT	Met One	083D	No operational problems observed.
WS	Met One	010C	Bearings were replaced on August 30 <sup>th</sup> .
WD	Met One	020C	Bearings were replaced on August 30 <sup>th</sup> .

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**PASZA – Beaverlodge Station**

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**General Station Issues**

Calibrations were performed on August 10<sup>th</sup> (NO<sub>x</sub>) and August 11<sup>th</sup> (SO<sub>2</sub>, O<sub>3</sub> and PM<sub>2.5</sub>). Annual calibrations and maintenance were also performed on the wind sensors on August 29<sup>th</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43CTL	No operational problems observed.
NO <sub>x</sub> /NO/NO <sub>2</sub>	TECO	42C	No operational problems observed.
O <sub>3</sub>	API	400	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	Seventeen (17) hours were removed due to baseline drift. No other operational problems were observed.
AT	n/a	n/a	No operational problems observed.
RH	n/a	n/a	No operational problems observed.
WS	Blue Sky	857	Bearings were replaced on August 29 <sup>th</sup> . One (1) hour of calm observed.
WD	Blue Sky	857	Bearings were replaced on August 29 <sup>th</sup> .



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**PASZA – Falher (Portable) Station**

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**General Station Issues**

Station was commissioned on August 29<sup>th</sup> and start up calibrations were performed on August 30<sup>th</sup> (SO<sub>2</sub>, TRS and O<sub>3</sub>).

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<b>Parameter</b>	<b>Make</b>	<b>Model</b>	<b>Notes</b>
SO <sub>2</sub>	TEI	43C	No operational problems observed.
TRS	TEI	43C	No operational problems observed.
O <sub>3</sub>	TEI	49C	No operational problems observed.
AT	Gill	Met Pak 3	No operational problems observed.
WS	Gill	Met Pak 3	No operational problems observed.
WD	Gill	Met Pak 3	No operational problems observed.

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# PASZA - Henry Pirker Station

## Monthly Summary Tables, Graphs, and Roses

## PASZA - Henry Pirker - AQI Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

### Air Quality Index (AQI)

Monitoring Dates: August 1, 2006 to September 1, 2006

Alberta's Air Quality Index

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

**Summary**

Number of 1-hr Good Readings:	698
Number of 1-hr Fair Readings:	4
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**

Day	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00
1-Aug-06	1	1	0	1	1	2	2	2	1	1	0	1	1	1	1	N	1	2	2	3	4	2	4	
2-Aug-06	2	1	2	2	1	3	3	2	1	1	1	1	2	1	2	N	2	2	4	0	2	3	2	3
3-Aug-06	1	2	1	3	3	3	5	4	3	1	0	0	0	N	1	1	2	2	4	4	6	7	6	
4-Aug-06	4	3	2	2	2	2	4	5	2	1	0	1	1	N	2	2	1	1	2	8	8	7	4	
5-Aug-06	3	2	1	2	2	4	3	4	3	3	3	3	N	2	2	3	2	1	1	1	2	3	2	
6-Aug-06	2	2	3	3	3	3	3	3	4	5	1	N	2	3	3	1	2	2	3	7	9	19	16	16
7-Aug-06	15	14	9	6	4	4	6	9	6	7	N	4	4	5	4	4	6	5	5	5	4	7	7	10
8-Aug-06	6	5	4	8	3	7	5	6	5	N	N	N	N	N	9	8	3	3	5	7	2	2	2	1
9-Aug-06	1	1	2	2	3	N	6	3	2	1	1	1	1	1	1	1	0	1	1	3	2	2	2	2
10-Aug-06	2	2	2	2	N	4	4	5	4	2	1	0	0	0	0	0	0	1	4	4	4	4	3	3
11-Aug-06	5	3	1	N	3	3	6	8	7	3	2	1	1	3	0	4	5	1	5	3	4	8	4	8
12-Aug-06	7	5	N	2	3	3	8	6	4	5	1	1	0	1	2	1	4	3	4	5	6	6	4	4
13-Aug-06	4	N	2	2	2	2	3	3	1	1	0	0	0	1	1	2	2	2	2	3	8	10	7	7
14-Aug-06	N	11	8	7	5	3	3	4	3	3	N	N	N	N	N	18	N	18	16	15	13	10	13	13
15-Aug-06	13	15	14	14	13	N	8	5	6	12	14	16	16	15	16	16	14	14	12	11	6	4	4	7
16-Aug-06	8	6	6	3	N	4	6	3	5	8	10	12	13	14	14	14	14	14	13	8	9	18	4	5
17-Aug-06	8	8	8	N	8	4	7	6	8	9	12	15	16	15	15	15	14	14	14	10	6	9	9	7
18-Aug-06	7	7	N	5	3	4	6	7	7	13	15	16	16	18	19	18	17	17	16	16	14	10	7	9
19-Aug-06	10	N	4	6	5	5	8	7	8	13	15	15	16	16	16	17	18	18	17	15	10	9	10	21
20-Aug-06	N	20	14	14	11	6	8	10	11	11	15	17	17	18	19	20	21	21	21	16	11	10	11	N
21-Aug-06	9	3	3	3	2	5	13	16	10	9	12	16	25	27	25	28	30	23	22	18	16	11	N	22
22-Aug-06	12	12	9	8	7	9	11	12	9	12	17	19	20	19	19	17	17	16	17	15	17	N	13	10
23-Aug-06	11	11	11	10	10	9	6	6	9	13	16	16	16	16	16	16	15	14	13	14	N	10	11	11
24-Aug-06	11	11	12	11	9	8	7	9	10	13	0	2	3	4	8	16	14	14	14	12	12	16	14	11
25-Aug-06	9	8	8	4	5	N	10	7	5	9	12	14	15	16	15	16	16	16	15	12	11	11	11	10
26-Aug-06	10	11	10	11	N	8	7	8	12	13	14	15	15	16	18	18	17	17	16	13	18	14	15	18
27-Aug-06	16	20	15	N	8	10	11	15	10	9	13	16	19	20	21	21	21	20	18	15	13	13	10	18
28-Aug-06	12	9	N	7	6	9	10	14	7	11	11	14	N	23	26	25	20	17	14	12	11	14	15	14
29-Aug-06	14	12	11	12	12	N	5	5	6	11	15	16	16	17	18	19	19	20	16	13	13	10	9	9
30-Aug-06	8	11	11	10	7	N	6	7	9	12	13	15	15	15	15	13	13	14	10	9	7	7	9	7
31-Aug-06	6	6	3	5	N	4	6	3	6	8	9	10	11	11	12	12	12	11	12	12	12	11	9	10

# PASZA - Henry Pirker - Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

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

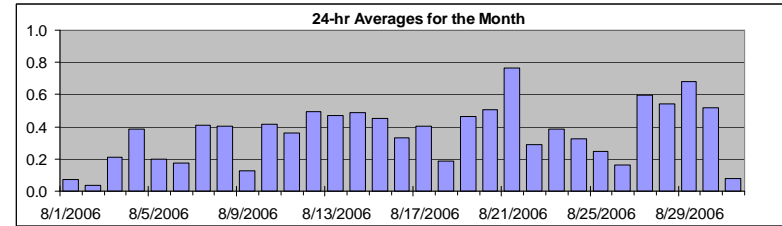
Monitoring Dates: August 1, 2006 to September 1, 2006

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

### Summary

Number of 1-hr Exceedances:	0				
Number of 24-hr Exceedances:	0				
Maximum 1-hr Average:	3.6	ppb	27-Aug	11:00	12:00
Maximum 24-hr Average:	0.8	ppb	21-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
	2.0	1.2	0.4	0.2	0.1	0.0	0.0	0.4 ppb	0.2 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2
2-Aug-06	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	0.1
3-Aug-06	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	0.4
4-Aug-06	0	0	0	0	0	0	0	0	0	1	2	1	0	1	A	1	0	0	0	0	0	0	0	0	0	0.4	1.7
5-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0.2	0.5
6-Aug-06	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	0.4
7-Aug-06	0	0	0	0	0	0	0	0	1	1	A	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0.4	0.9
8-Aug-06	0	0	0	0	0	0	0	0	0	A	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0.4	1.7
9-Aug-06	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	0.1	0.4
10-Aug-06	0	0	0	0	A	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0.4	1.0
11-Aug-06	0	0	0	A	0	0	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.9
12-Aug-06	0	0	A	0	0	0	0	1	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.2
13-Aug-06	0	A	0	0	0	0	0	0	0	1	2	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.7
14-Aug-06	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	0	1	0	0	0	0	0.5	2.8
15-Aug-06	1	0	0	0	0	A	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.8
16-Aug-06	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.9
17-Aug-06	0	0	0	A	0	0	0	0	0	1	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8
18-Aug-06	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
19-Aug-06	0	A	0	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.5	1.4
20-Aug-06	A	0	0	0	0	0	0	0	2	2	1	0	0	0	1	1	0	0	0	1	1	1	0	A	0	0.5	2.0
21-Aug-06	0	0	0	0	0	0	0	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	0	A	0	0.8	2.1
22-Aug-06	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5
23-Aug-06	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0.4	1.3
24-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7
25-Aug-06	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	0.2	1.0
26-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
27-Aug-06	0	0	0	A	0	0	0	0	1	1	1	4	2	2	0	0	0	1	0	0	0	0	0	0	0	0.6	3.6
28-Aug-06	0	0	A	0	0	0	0	0	0	2	C	C	C	A	1	2	1	0	0	0	0	1	1	1	1	0.5	2.0
29-Aug-06	0	0	0	0	0	A	0	0	1	2	2	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0.7	2.2
30-Aug-06	0	1	0	1	0	A	0	0	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.9
31-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
Hourly Avg	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.8	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2		
Hourly Max	0.8	0.7	0.5	1.0	0.5	0.4	0.5	0.8	1.8	2.1	2.2	3.6	1.9	2.1	1.2	2.2	1.4	1.3	2.8	0.7	0.7	0.6	1.0	0.7			

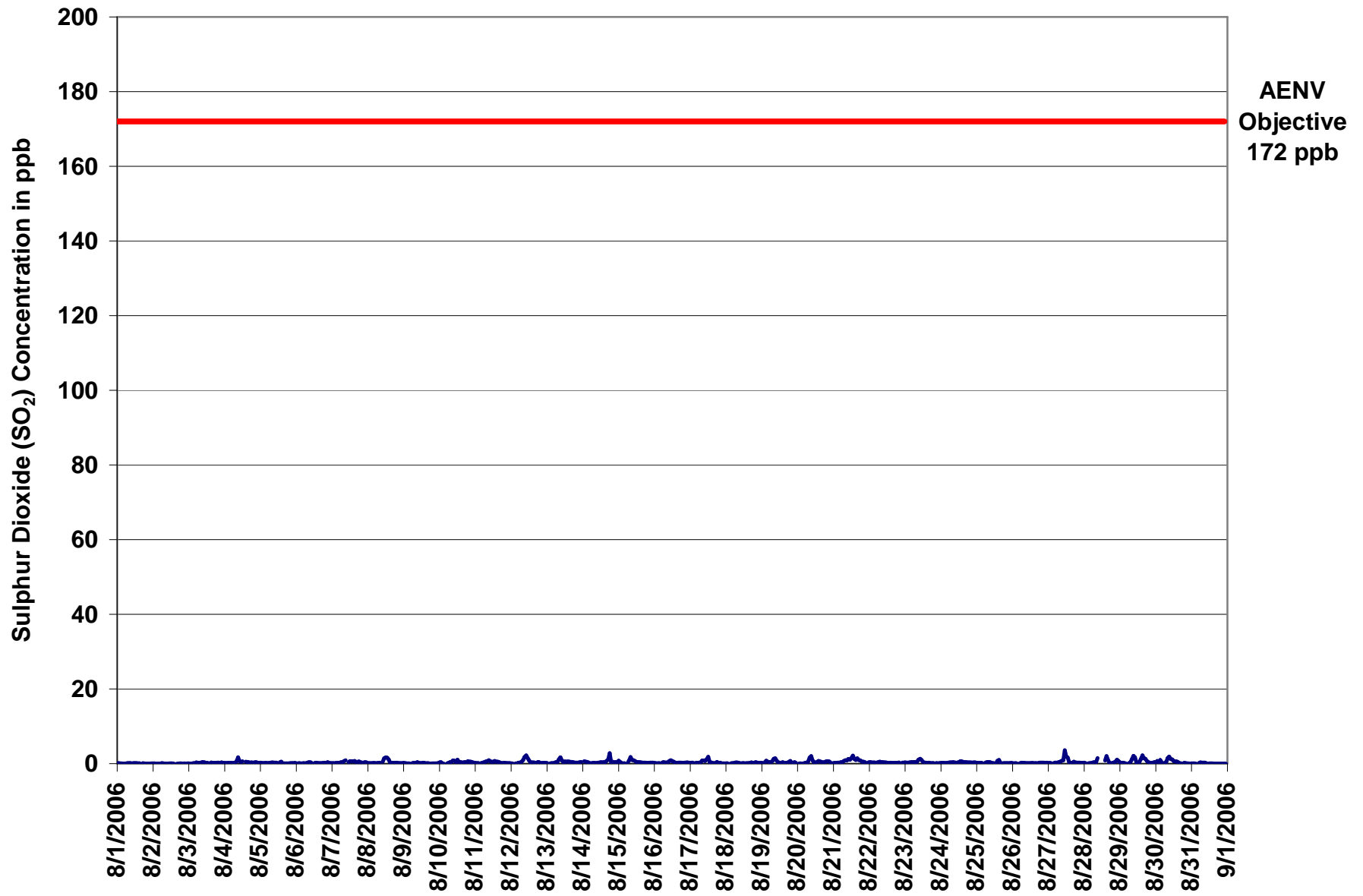


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

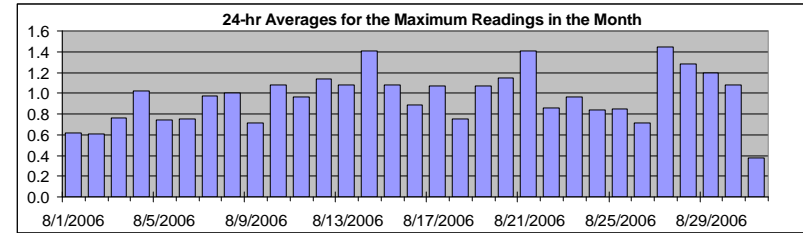
**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	6.8	ppb	14-Aug	18:00 19:00
Maximum 24-hr Value:	1.4	ppb	27-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
	3.1	2.1	1.0	0.8	0.7	0.5	0.3	1.0 ppb	0.8 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	0	1	0.6	1.0
2-Aug-06	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	A	1	1	1	1	1	1	1	1	0.6	0.9
3-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.0
4-Aug-06	1	1	1	1	1	1	1	1	2	3	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	2.6
5-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	0.7	1.1
6-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	0.7	1.8
7-Aug-06	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
8-Aug-06	1	1	1	1	1	1	1	1	1	A	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1.0	2.5
9-Aug-06	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0.7	1.6
10-Aug-06	1	2	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9
11-Aug-06	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
12-Aug-06	0	1	A	1	1	1	1	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1.1	3.1
13-Aug-06	1	A	1	1	1	1	1	1	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.9
14-Aug-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	7	2	2	1	2	1	1.4	6.8
15-Aug-06	2	2	1	1	1	A	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.3
16-Aug-06	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5
17-Aug-06	1	1	1	A	1	1	1	1	2	1	1	2	3	2	1	1	1	1	1	1	1	1	1	1	1.1	2.9
18-Aug-06	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.0
19-Aug-06	1	A	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9
20-Aug-06	A	1	1	1	1	1	1	1	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	3.5
21-Aug-06	1	1	1	1	1	1	1	1	1	2	2	3	3	2	2	2	2	2	1	1	1	1	1	A	1.4	3.0
22-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.2
23-Aug-06	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1.0	1.9
24-Aug-06	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
25-Aug-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0.9	2.0
26-Aug-06	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
27-Aug-06	1	1	1	A	1	1	1	1	1	2	2	5	4	5	1	1	1	1	1	1	1	1	1	1	1.4	5.2
28-Aug-06	1	1	A	1	1	1	1	1	1	3	C	C	C	A	2	3	3	0	0	1	1	1	2	2	1.3	3.1
29-Aug-06	1	1	0	0	0	A	1	1	2	3	2	1	0	1	2	3	2	2	1	1	1	1	1	1	1.2	2.9
30-Aug-06	1	1	1	2	1	A	0	1	4	4	2	2	1	1	1	1	1	0	0	1	0	0	0	0	1.1	4.0
31-Aug-06	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
Hourly Avg	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.9	1.3	1.5	1.3	1.2	1.2	1.2	1.1	1.0	0.9	0.9	1.1	0.8	0.8	0.8	0.8	0.8		
Hourly Max	2.2	1.6	1.3	1.7	1.1	1.3	1.1	1.6	4.0	3.8	3.1	5.2	4.2	4.9	2.3	3.1	2.5	2.5	6.8	1.8	1.6	1.8	2.4	1.6		

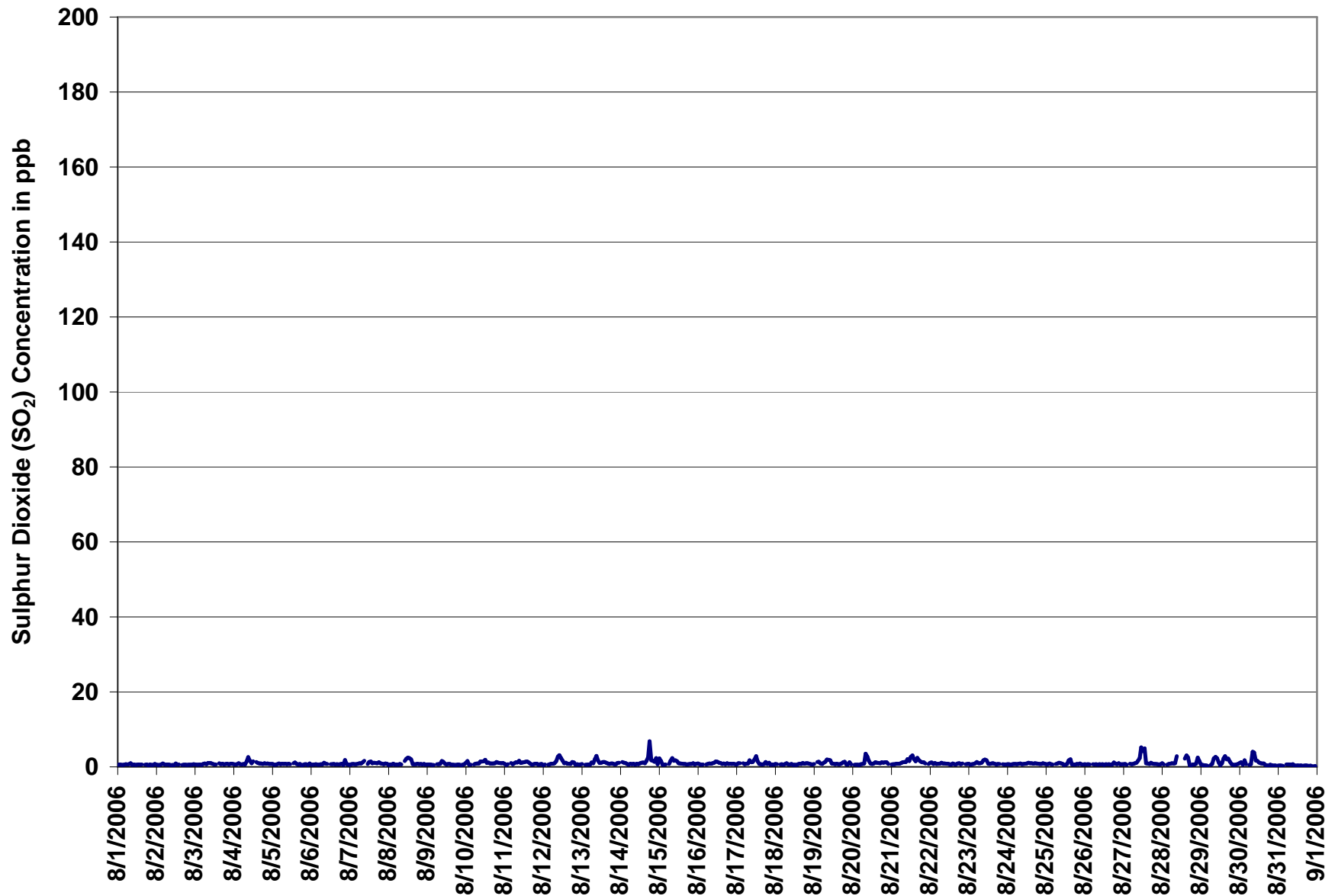
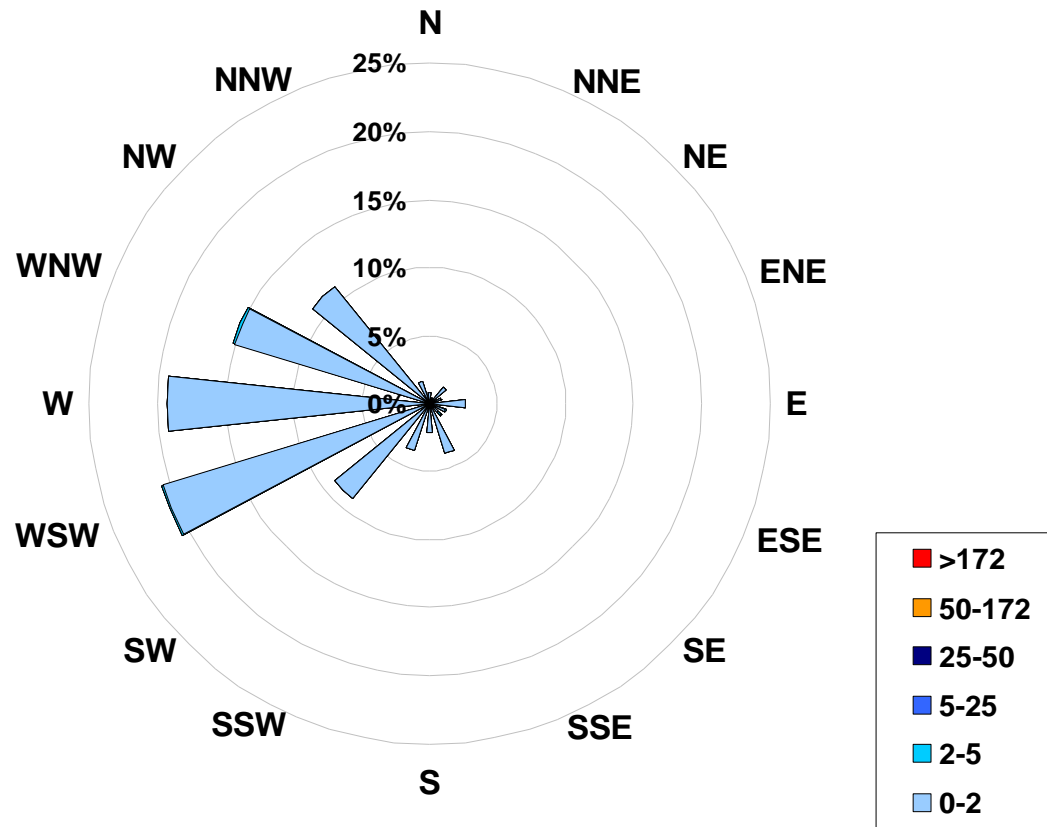


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Henry Pirker Site for August 2006**



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	< 2		701
2	to 5		8
5	to 25		0
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			709



# PASZA - Henry Pirker - Nitrogen Dioxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

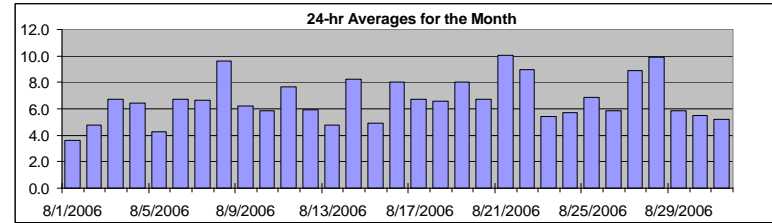
## Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: August 1, 2006 to September 1, 2006

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:	25.0	ppb	4-Aug	21:00	22:00
Maximum 24-hr Average:	10.0	ppb	21-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
	21.0	16.3	9.8	5.0	2.7	1.5	1.2	6.7 ppb	5.0 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	2	2	2	2	4	7	5	4	3	2	2	2	2	3	2	3	A	5	4	4	8	4	4	9	3.6	9.2
2-Aug-06	5	4	4	4	6	11	12	7	3	3	2	2	4	3	2	A	5	3	2	2	3	4	5	12	4.8	12.5
3-Aug-06	6	7	6	12	13	15	10	8	5	2	1	1	2	1	A	4	3	3	4	6	9	13	13	10	6.7	14.6
4-Aug-06	5	8	8	10	7	8	7	7	3	2	2	2	2	A	4	4	4	3	2	3	13	25	13	6	6.4	25.0
5-Aug-06	7	5	4	4	5	8	9	5	3	2	2	2	A	4	4	4	3	3	2	2	4	6	6	5	4.3	8.9
6-Aug-06	4	4	4	6	8	12	7	6	7	4	3	A	3	2	2	1	2	1	2	3	9	20	24	21	6.7	24.1
7-Aug-06	11	10	8	8	7	8	8	10	8	5	A	4	3	3	2	3	4	4	4	5	8	9	9	12	6.7	11.6
8-Aug-06	5	5	4	6	7	11	12	13	14	A	13	8	10	12	11	13	10	12	12	11	9	8	8	6	9.6	14.0
9-Aug-06	6	5	7	8	12	A	23	13	8	4	4	3	3	2	2	2	2	2	2	3	7	8	10	6	6.2	23.1
10-Aug-06	4	5	7	6	A	18	16	13	9	5	3	2	1	1	1	1	2	1	2	5	9	9	9	7	5.9	17.6
11-Aug-06	12	7	5	A	10	12	15	18	13	6	3	3	2	3	1	3	2	3	2	4	7	17	14	16	7.7	17.6
12-Aug-06	12	11	A	9	12	13	13	13	7	6	3	2	2	1	2	2	3	3	3	3	4	6	3	4	6.0	13.5
13-Aug-06	2	A	5	5	6	8	5	4	3	2	2	2	1	1	1	2	2	2	2	3	6	14	15	16	4.7	15.8
14-Aug-06	A	20	10	6	7	9	12	18	12	12	C	C	C	C	A	3	3	4	6	7	6	6	2	3	8.2	19.9
15-Aug-06	4	2	2	3	4	A	11	11	7	3	3	2	2	2	3	2	5	3	4	4	10	11	11	5	4.9	11.4
16-Aug-06	5	6	5	12	A	17	16	12	6	4	4	4	2	2	2	2	3	3	4	12	19	16	16	13	8.0	18.6
17-Aug-06	7	6	5	A	7	15	16	10	7	7	6	4	2	1	1	1	2	3	3	8	15	13	8	5	6.7	16.3
18-Aug-06	5	4	A	8	10	12	15	11	6	3	2	2	3	3	3	3	3	3	4	5	7	12	16	12	6.6	16.1
19-Aug-06	8	A	17	10	12	17	13	9	8	4	2	1	1	1	1	1	1	1	2	4	12	15	21	23	8.0	23.3
20-Aug-06	A	15	10	10	9	12	12	10	10	6	4	2	1	1	1	1	2	1	2	5	13	15	4	A	6.7	14.9
21-Aug-06	5	9	8	6	9	12	14	13	16	13	15	15	8	6	3	3	4	3	4	8	21	21	A	14	10.0	20.8
22-Aug-06	10	10	10	12	16	21	23	18	11	8	4	2	2	2	2	2	2	2	2	5	12	A	21	8	9.0	23.1
23-Aug-06	6	5	4	6	5	6	13	14	11	5	2	1	1	1	2	2	3	4	6	5	A	10	6	5	5.4	14.2
24-Aug-06	3	4	3	3	7	10	10	9	6	3	2	2	2	2	2	2	3	2	2	5	11	10	16	19	5.7	18.7
25-Aug-06	11	12	12	11	13	A	15	13	11	8	4	3	3	2	2	2	4	3	3	6	6	6	5	5	6.9	15.1
26-Aug-06	6	4	4	3	A	10	11	8	3	2	2	1	1	2	1	2	1	1	2	5	13	13	16	20	5.8	19.6
27-Aug-06	18	13	7	A	15	17	16	15	12	10	8	7	3	2	2	2	2	2	3	6	10	10	12	11	8.9	18.2
28-Aug-06	9	6	A	12	12	18	23	20	11	12	8	10	8	6	3	3	6	7	10	11	23	7	2	2	9.9	22.8
29-Aug-06	2	3	4	4	5	A	20	20	14	6	3	3	3	2	1	2	2	3	5	6	5	9	8	6	5.9	19.9
30-Aug-06	5	2	2	3	7	A	19	13	4	3	2	2	2	2	2	4	6	7	11	8	8	8	5	4	5.5	18.6
31-Aug-06	4	4	8	5	A	15	15	10	6	4	2	2	3	3	3	3	3	4	4	4	4	4	6	5	5.2	15.3
Hourly Avg	6.5	6.8	6.2	6.9	8.7	12.5	13.5	11.4	8.0	5.2	3.8	3.3	2.9	2.7	2.4	2.8	3.2	3.3	3.9	5.4	9.7	10.9	10.4	9.6		
Hourly Max	18.2	19.9	16.9	12.5	15.9	21.0	23.1	19.9	16.3	12.6	15.5	15.0	10.5	12.4	11.2	12.8	10.0	11.5	12.2	12.1	22.8	25.0	24.1	23.3		

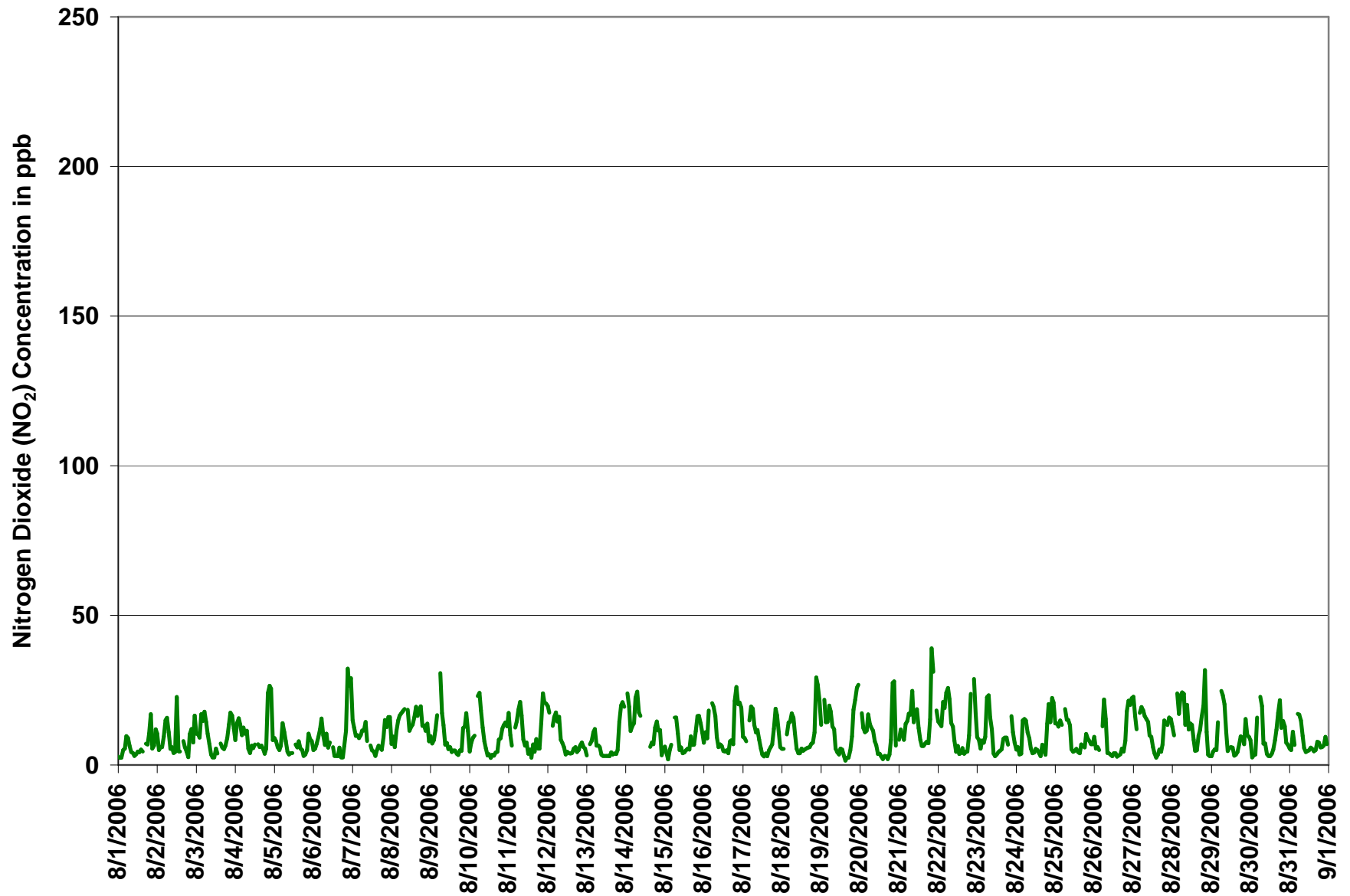


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

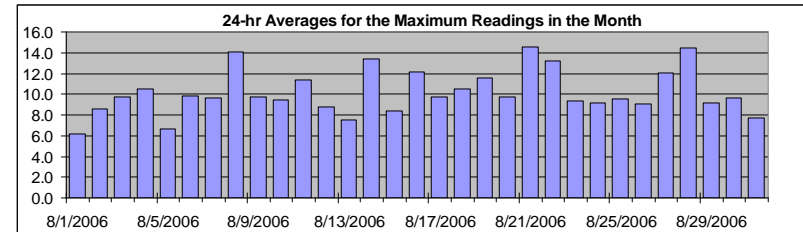
**Nitrogen Dioxide (NO<sub>2</sub>)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	39.0	ppb	21-Aug	20:00 21:00
Maximum 24-hr Value:	14.6	ppb	21-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
	28.7	22.8	14.3	8.2	5.0	3.0	2.5	10.2 ppb	8.2 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								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-06	3	2	2	5	6	10	9	6	4	4	3	4	4	4	5	4	A	7	7	10	17	5	6	12	6.2	17.0
2-Aug-06	10	5	6	6	9	15	16	11	5	6	4	4	23	5	4	A	8	6	4	3	10	12	7	17	8.6	22.7
3-Aug-06	10	10	9	17	15	18	14	10	7	4	3	2	5	4	A	7	6	5	7	9	14	17	16	12	9.7	17.8
4-Aug-06	8	14	16	13	10	12	10	11	5	4	6	6	7	A	7	6	6	6	4	6	24	26	25	8	10.6	26.5
5-Aug-06	9	8	6	5	6	14	11	8	4	4	4	4	A	7	6	8	5	5	3	4	5	10	8	8	6.6	14.0
6-Aug-06	5	5	7	9	12	15	10	7	10	6	7	A	6	3	3	3	6	2	3	6	11	32	26	29	9.8	32.2
7-Aug-06	15	12	10	10	9	10	11	11	14	8	A	7	5	4	3	5	6	6	5	9	15	13	16	16	9.6	16.0
8-Aug-06	7	9	6	11	15	16	17	18	19	A	18	11	13	13	16	19	16	18	20	13	13	11	14	8	14.1	19.6
9-Aug-06	10	7	8	12	17	A	31	17	13	7	7	5	6	4	5	5	4	3	5	5	12	13	17	11	9.8	30.8
10-Aug-06	4	7	9	10	A	23	24	18	13	8	6	3	4	2	3	3	4	4	9	9	12	13	14	13	9.4	24.1
11-Aug-06	17	10	6	A	12	15	18	21	16	8	6	7	4	5	2	7	4	9	5	5	14	24	21	20	11.4	24.0
12-Aug-06	20	17	A	13	16	18	15	16	8	7	6	3	4	4	4	4	6	6	4	5	6	7	6	6	8.8	19.7
13-Aug-06	3	A	7	8	11	12	6	7	6	3	3	3	3	3	3	4	3	4	4	5	14	20	21	19	7.5	21.0
14-Aug-06	A	24	19	11	13	14	22	24	17	16	C	C	C	C	A	6	8	7	13	15	11	12	3	5	13.4	24.5
15-Aug-06	6	4	2	5	7	A	16	16	11	5	6	4	4	5	5	10	7	7	11	16	16	14	11	8.4	16.4	
16-Aug-06	7	11	9	18	A	21	19	16	9	6	7	6	5	5	5	4	8	8	7	21	26	20	21	19	12.1	26.1
17-Aug-06	9	9	8	A	15	20	19	13	11	12	8	5	3	3	4	3	5	6	7	12	19	17	11	6	9.8	19.5
18-Aug-06	5	5	A	10	14	14	17	16	11	5	4	4	5	5	5	6	6	6	7	7	11	29	27	22	10.5	29.2
19-Aug-06	13	A	22	14	14	20	18	13	12	5	4	3	5	5	3	1	2	2	5	10	18	22	26	27	11.6	26.8
20-Aug-06	A	17	12	11	11	17	14	12	11	8	7	4	4	3	2	3	3	2	3	8	27	28	6	A	9.8	28.0
21-Aug-06	8	12	10	8	14	15	17	17	25	14	18	19	12	8	6	6	7	8	7	15	39	31	A	18	14.6	39.0
22-Aug-06	15	14	13	21	19	24	26	22	14	13	8	4	6	4	4	6	4	4	5	10	24	A	29	17	13.3	28.8
23-Aug-06	9	8	5	8	7	9	23	23	16	12	4	3	3	4	5	5	9	9	9	7	A	16	11	7	9.3	23.3
24-Aug-06	5	6	3	4	15	15	15	11	9	6	4	4	5	5	4	3	7	5	3	14	20	14	22	21	9.2	22.4
25-Aug-06	14	14	13	15	13	A	19	15	15	13	5	4	5	5	4	4	7	6	6	10	9	8	7	7	9.5	18.7
26-Aug-06	9	5	6	5	A	13	22	15	4	4	3	3	4	4	3	3	4	5	4	8	18	21	20	22	9.0	22.3
27-Aug-06	23	16	12	A	17	19	18	16	15	14	10	9	6	4	2	3	5	4	7	15	14	13	16	15	12.0	22.8
28-Aug-06	13	10	A	24	17	23	24	24	13	20	12	14	13	8	5	5	10	12	16	20	32	11	3	3	14.5	31.7
29-Aug-06	3	4	5	5	14	A	25	23	20	11	5	6	6	6	3	3	4	7	10	9	7	15	10	9	9.2	24.8
30-Aug-06	8	2	3	3	16	A	23	20	7	7	4	3	3	4	5	8	12	17	22	12	15	13	7	7	9.6	22.8
31-Aug-06	5	5	11	7	A	17	17	15	10	6	4	5	5	6	5	5	5	8	7	6	6	6	9	7	7.7	17.1
Hourly Avg	9.6	9.6	8.8	10.4	12.8	16.1	17.6	15.3	11.5	8.2	6.4	5.6	6.2	4.9	4.6	5.2	6.3	6.7	7.2	9.7	16.0	16.7	14.8	13.4		
Hourly Max	22.8	24.0	21.8	23.9	19.0	24.2	30.8	24.5	24.8	20.1	18.5	18.7	22.7	13.5	15.9	19.5	16.5	18.2	21.7	21.4	39.0	32.2	28.8	29.0		

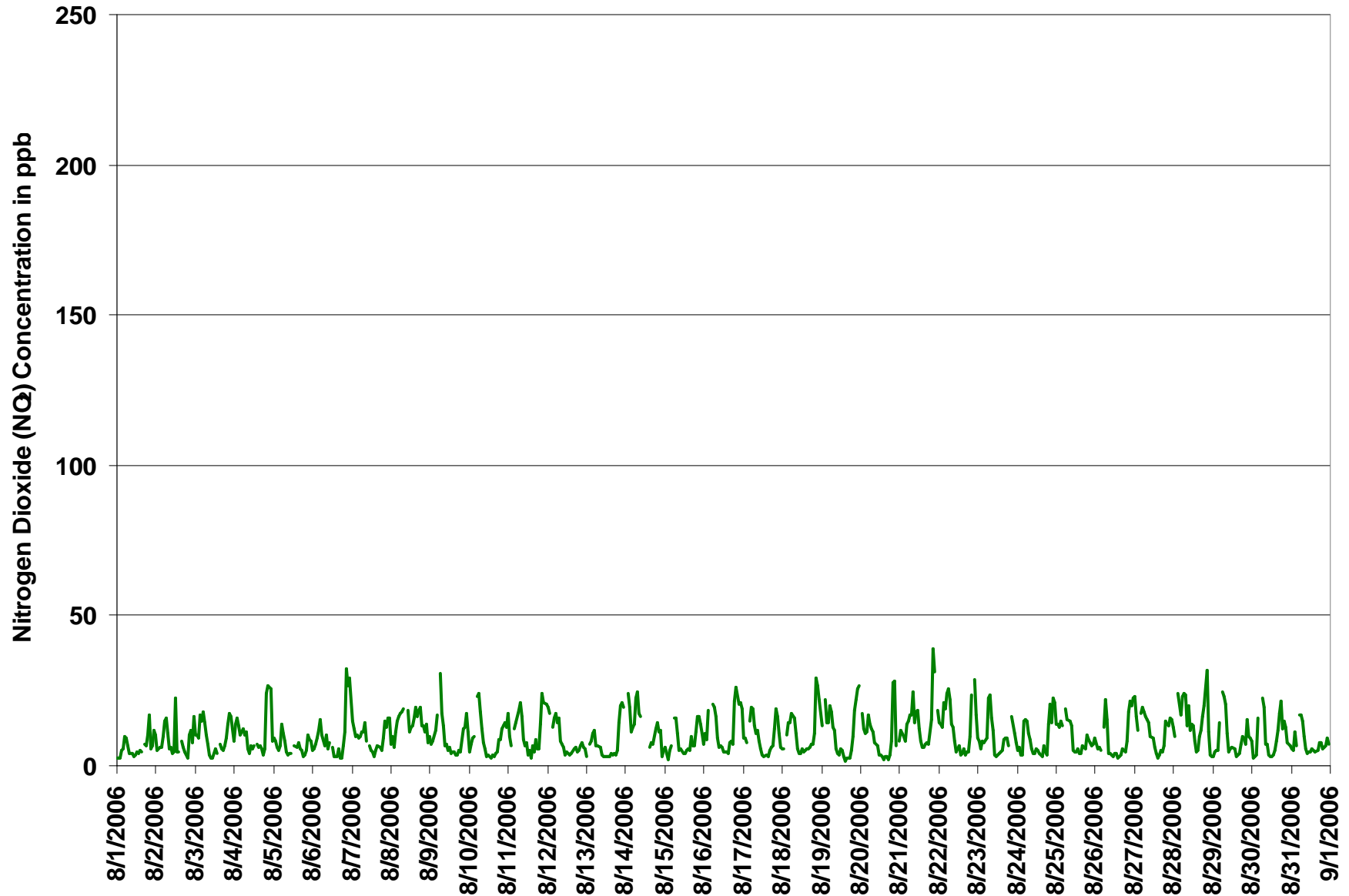
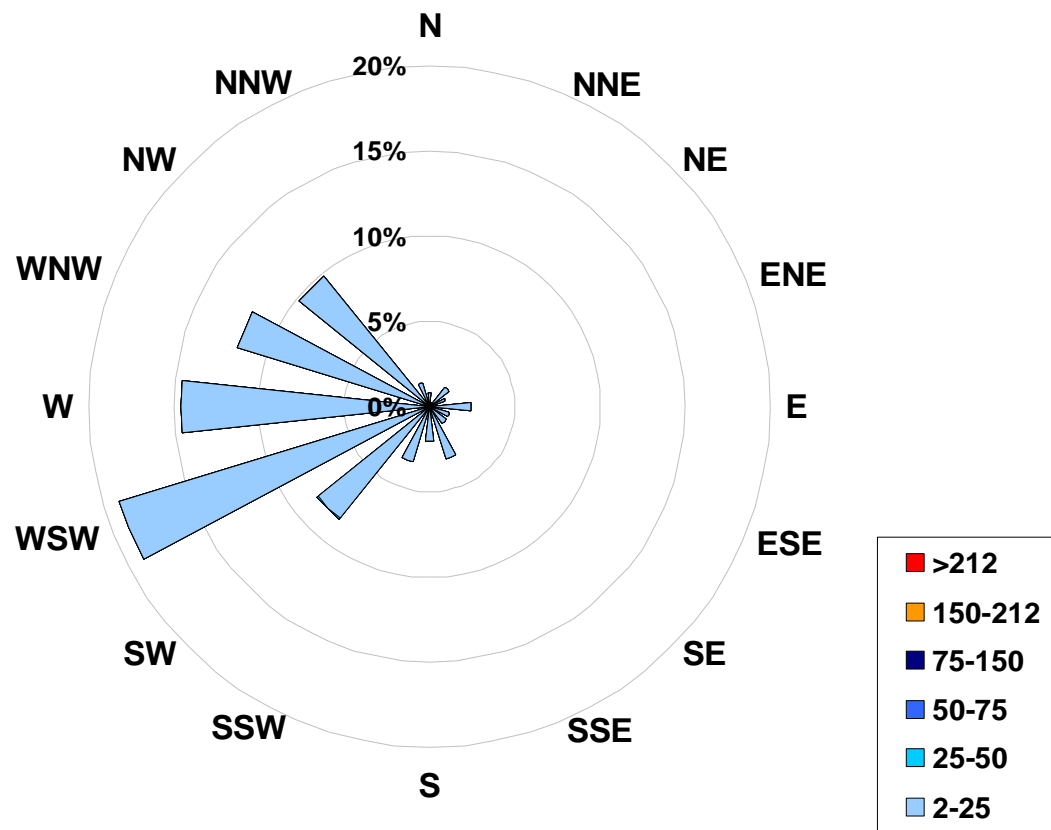


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Henry Pirker Site for August 2006**



**Calms: 0%**

Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range			
2.0	< 25		701
25	to 50		7
50	to 75		0
75	to 150		0
150	to 212		0
	> 212		0
Total Non-Zero Values			708

# PASZA - Henry Pirker - Nitric Oxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

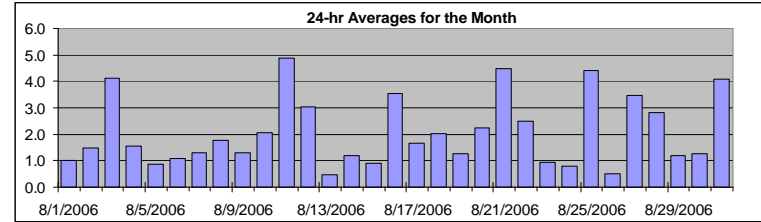
## Nitric Oxide (NO)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Maximum 1-hr Average:	43.7	ppb	31-Aug	6:00 7:00
Maximum 24-hr Average:	4.9	ppb	11-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
	22.9	9.5	1.4	0.6	0.3	0.0	0.0	2.1 ppb	0.6 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	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-06	0	0	0	0	0	1	2	2	2	2	1	2	2	2	1	1	A	1	1	1	1	0	0	0	1.0	2.5	
2-Aug-06	0	0	0	0	1	3	7	4	2	2	1	1	5	2	1	A	1	1	1	0	0	0	0	1	1.5	7.0	
3-Aug-06	0	0	0	4	2	33	19	13	5	2	1	1	1	1	A	1	1	1	1	1	1	2	3	1	4.1	32.6	
4-Aug-06	1	1	1	1	1	3	4	6	2	1	1	1	1	A	1	1	1	1	1	1	2	4	1	0	1.5	5.5	
5-Aug-06	0	0	0	0	0	1	3	3	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0.9	3.2	
6-Aug-06	0	0	0	0	0	2	3	3	6	3	2	A	0	0	0	0	0	0	0	0	2	1	1	1	1.1	5.6	
7-Aug-06	0	1	0	0	1	4	4	6	5	2	A	1	1	1	0	0	1	1	1	0	1	1	0	1	1.3	6.2	
8-Aug-06	0	0	0	0	0	2	4	7	9	A	5	2	2	2	1	2	1	1	1	0	0	0	0	0	1.8	9.3	
9-Aug-06	0	0	0	0	1	A	10	3	3	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1.3	9.9	
10-Aug-06	0	0	0	0	A	6	13	10	7	3	1	1	1	1	0	0	1	0	1	1	1	1	1	0	2.1	12.7	
11-Aug-06	1	0	0	A	1	8	31	42	17	3	1	1	0	1	0	1	1	1	0	0	0	1	1	1	4.9	42.2	
12-Aug-06	1	1	A	0	3	7	18	23	7	4	2	1	0	0	0	0	1	1	0	0	0	0	0	0	3.0	22.9	
13-Aug-06	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0.5	1.2	
14-Aug-06	A	1	0	0	0	1	1	7	4	5	C	C	C	C	A	0	0	0	0	0	0	0	0	0	1.2	6.8	
15-Aug-06	0	0	0	0	0	A	1	5	5	1	1	0	0	1	1	1	1	1	0	0	1	1	0	0	0.9	4.9	
16-Aug-06	0	0	0	2	A	16	23	17	6	3	2	2	1	1	1	1	1	1	1	0	1	2	1	2	3.5	22.7	
17-Aug-06	0	0	0	A	0	3	13	5	3	3	2	1	0	0	0	0	0	1	1	1	1	1	1	0	1.7	13.2	
18-Aug-06	0	0	A	0	0	3	17	10	4	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	2.0	16.8	
19-Aug-06	0	A	1	0	0	5	4	4	5	2	1	0	0	0	0	0	0	0	0	1	1	1	0	3	1.3	5.4	
20-Aug-06	A	4	1	2	3	5	16	8	6	3	1	0	0	0	0	0	0	0	0	0	0	1	0	A	2.3	15.6	
21-Aug-06	0	0	0	0	1	8	31	20	14	9	8	5	1	1	0	0	0	0	0	0	0	1	1	A	0	4.5	31.4
22-Aug-06	0	0	0	0	1	5	18	15	6	4	1	0	0	0	1	1	1	1	0	0	0	A	1	0	2.5	18.0	
23-Aug-06	0	0	0	0	0	0	2	6	4	2	0	0	0	0	1	1	1	1	1	0	A	0	0	0	0.9	5.6	
24-Aug-06	0	0	0	0	0	0	1	3	2	1	1	0	1	0	0	0	1	1	0	0	1	0	1	3	0.8	3.2	
25-Aug-06	1	0	1	1	6	A	36	30	14	5	2	1	1	0	0	0	1	1	0	0	0	0	0	0	4.4	36.0	
26-Aug-06	0	0	0	0	A	0	2	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0.5	3.0	
27-Aug-06	2	1	0	A	2	12	15	22	12	6	3	2	0	0	0	0	0	0	0	0	0	0	0	0	3.5	22.1	
28-Aug-06	0	0	A	0	0	5	20	15	5	7	2	3	2	1	0	0	0	0	0	0	1	0	0	0	2.8	19.7	
29-Aug-06	0	0	0	0	0	A	3	9	6	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1.2	9.1	
30-Aug-06	0	0	0	0	1	A	7	10	2	1	1	0	0	0	1	1	1	0	0	1	1	1	0	0	1.3	10.2	
31-Aug-06	0	0	1	0	A	16	44	13	5	3	1	1	1	1	1	1	1	2	1	0	0	0	0	0	4.1	43.7	
Hourly Avg	0.3	0.4	0.3	0.5	1.0	5.8	12.0	10.5	5.5	2.7	1.6	1.1	0.9	0.7	0.6	0.6	0.7	0.6	0.5	0.4	0.6	0.7	0.5	0.6			
Hourly Max	1.9	3.8	1.3	4.1	6.3	32.6	43.7	42.2	16.8	8.5	7.5	5.4	4.7	1.8	1.5	1.8	1.5	1.6	1.1	1.2	1.9	4.4	2.6	3.2			

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

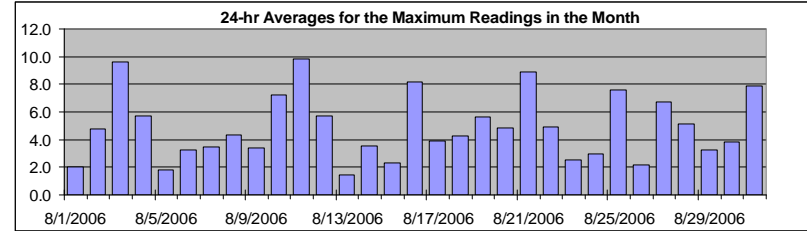
**Nitric Oxide (NO)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	72.1	ppb	11-Aug	7:00 8:00
Maximum 24-hr Value:	9.9	ppb	11-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
	46.7	20.7	4.6	2.0	1.0	0.2	0.1	4.9 ppb	2.0 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	1	1	1	1	1	4	4	4	3	3	2	3	3	3	3	A	2	2	2	2	1	1	0	0	2.0	4.4
2-Aug-06	0	0	1	1	2	8	10	8	3	4	3	3	40	3	2	A	4	2	2	1	1	1	1	11	4.7	39.9
3-Aug-06	2	1	2	13	8	72	47	19	8	3	2	2	5	2	A	2	3	2	2	2	4	8	8	3	9.6	71.5
4-Aug-06	2	3	25	6	2	8	9	13	4	2	4	11	4	A	1	2	2	2	2	1	6	10	9	1	5.7	24.7
5-Aug-06	1	1	2	1	1	3	6	5	3	2	2	2	A	1	2	2	1	2	1	1	1	1	1	1	1.8	5.5
6-Aug-06	0	1	1	1	2	5	5	3	8	5	6	A	1	1	1	1	3	1	1	0	0	20	4	5	3.2	20.1
7-Aug-06	3	3	1	1	3	9	10	10	8	3	A	2	2	1	1	1	3	2	2	1	4	5	1	4	3.5	9.5
8-Aug-06	0	0	2	2	1	6	11	19	19	A	11	3	2	2	3	5	2	2	2	1	1	1	1	1	4.3	19.1
9-Aug-06	2	1	1	2	2	A	29	6	5	3	3	3	3	2	2	3	2	2	2	2	1	0	1	0	3.4	29.1
10-Aug-06	0	1	0	1	A	25	48	19	11	6	3	2	2	1	2	1	2	2	6	3	6	9	9	7	7.2	47.6
11-Aug-06	7	1	0	A	4	18	56	72	29	7	4	3	1	2	1	2	2	4	2	2	1	3	3	4	9.9	72.1
12-Aug-06	2	8	A	1	9	16	28	34	10	5	3	2	1	1	1	1	2	1	1	0	0	0	0	0	5.7	34.2
13-Aug-06	0	A	0	0	0	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	3	6	1.4	6.5
14-Aug-06	A	3	2	1	1	1	10	20	7	9	C	C	C	C	A	1	2	1	2	1	1	2	0	1	3.6	19.6
15-Aug-06	0	0	0	0	1	A	6	7	9	3	2	2	2	2	3	2	3	2	1	2	4	4	1	0	2.3	8.5
16-Aug-06	0	1	2	19	A	26	36	30	12	6	5	4	3	2	2	2	3	1	5	8	4	7	10	8.2	35.9	
17-Aug-06	0	0	0	A	2	14	24	9	6	8	5	2	1	1	2	1	2	2	1	2	2	2	1	0	3.9	24.4
18-Aug-06	0	1	A	0	3	7	22	20	10	2	2	2	3	2	2	2	2	2	2	1	1	5	4	2	4.3	21.9
19-Aug-06	0	A	27	1	2	14	8	10	10	4	2	2	4	6	1	0	1	1	1	10	7	6	3	10	5.6	27.1
20-Aug-06	A	9	2	5	9	20	22	14	7	4	4	1	1	1	0	0	0	0	0	0	3	3	1	A	4.9	21.8
21-Aug-06	1	3	0	1	12	19	48	40	28	12	11	8	3	1	1	1	1	2	2	1	6	5	A	0	8.9	47.8
22-Aug-06	1	2	2	2	5	15	23	22	9	7	3	1	2	2	2	4	1	1	1	1	3	A	3	0	4.9	23.0
23-Aug-06	0	0	0	0	0	0	12	13	7	7	1	1	2	2	2	2	2	3	1	1	A	1	0	0	2.5	12.8
24-Aug-06	0	0	0	0	1	2	4	4	4	2	2	2	2	2	2	1	3	2	1	1	11	1	15	8	3.0	14.7
25-Aug-06	4	2	5	3	17	A	44	47	20	12	2	2	2	2	1	1	3	2	1	1	1	0	0	0	7.6	46.9
26-Aug-06	0	0	0	0	A	1	12	8	2	2	2	1	1	2	1	1	1	2	1	4	2	1	2	6	2.2	12.4
27-Aug-06	8	6	1	A	7	28	24	29	18	15	6	3	2	1	1	1	1	1	1	1	2	1	2	1	6.7	28.6
28-Aug-06	0	0	A	3	1	13	27	23	9	16	5	6	4	2	1	1	1	1	1	1	6	0	0	0	5.2	26.8
29-Aug-06	0	0	0	0	0	A	10	12	13	4	2	3	17	3	1	3	1	3	1	0	0	0	1	0	3.3	17.5
30-Aug-06	0	0	0	0	2	A	21	21	6	7	6	1	2	2	2	2	4	3	3	1	2	1	1	1	3.8	21.2
31-Aug-06	0	1	2	1	A	38	62	31	11	5	4	3	4	3	2	3	3	4	3	1	0	0	0	0	7.9	62.0
Hourly Avg	1.3	1.7	2.8	2.4	3.7	14.4	21.9	18.5	9.7	5.7	3.7	2.7	4.2	2.0	1.5	1.7	1.9	1.8	1.7	1.7	2.9	3.2	2.8	2.7		
Hourly Max	7.8	9.5	27.1	19.3	17.3	71.5	62.0	72.1	29.3	15.9	11.5	11.0	39.9	5.7	3.0	4.6	4.1	3.9	6.4	10.5	11.3	20.1	14.7	10.7		

# PASZA - Henry Pirker - Oxides of Nitrogen Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

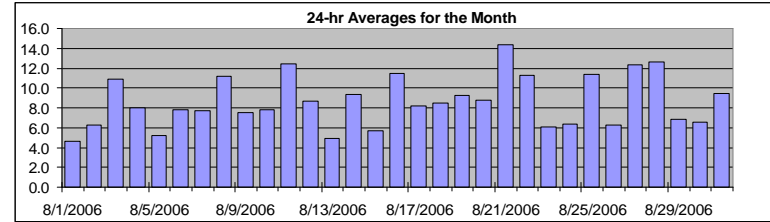
## Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Maximum 1-hr Average:	59.8	ppb	11-Aug	7:00 8:00
Maximum 24-hr Average:	14.4	ppb	21-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
	42.6	25.0	11.4	5.5	3.4	1.7	1.3	8.6 ppb	5.5 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	2	2	2	2	4	9	7	7	5	4	3	4	4	4	4	A	6	5	5	9	4	4	9	4.7	9.4	
2-Aug-06	5	4	5	4	7	14	20	11	5	4	4	3	9	4	3	A	7	5	3	2	4	4	6	12	6.3	19.5
3-Aug-06	7	7	6	17	15	47	30	21	10	4	2	3	2	A	4	4	4	5	7	11	16	15	11	10.9	47.4	
4-Aug-06	6	8	9	10	7	11	11	13	6	4	3	3	4	A	5	5	5	4	3	3	15	30	15	7	8.0	29.6
5-Aug-06	7	5	4	4	5	9	12	8	4	3	3	3	A	5	5	5	4	3	3	3	4	6	6	5	5.2	12.2
6-Aug-06	4	4	5	6	8	13	10	9	13	8	4	A	4	2	2	2	2	1	2	3	9	22	25	22	7.8	25.0
7-Aug-06	12	10	8	8	8	12	12	16	13	7	A	5	3	3	2	3	4	4	5	9	9	9	12	7.8	15.6	
8-Aug-06	5	5	4	6	7	13	15	19	23	A	17	10	12	14	12	14	11	13	13	11	9	8	8	6	11.2	23.0
9-Aug-06	6	6	7	8	13	A	33	17	11	5	5	4	5	4	3	3	3	3	3	7	8	10	6	7.5	33.2	
10-Aug-06	3	5	7	6	A	23	28	22	15	8	4	2	2	2	2	1	2	2	3	6	10	10	7	7.8	28.3	
11-Aug-06	13	7	5	A	11	20	46	60	29	9	3	4	2	4	1	3	3	4	3	4	7	17	14	16	12.4	59.8
12-Aug-06	13	11	A	10	14	20	31	36	13	9	4	3	2	1	2	2	3	4	3	3	4	6	3	4	8.7	35.9
13-Aug-06	2	A	4	5	6	8	5	5	4	3	2	2	1	2	2	2	2	3	2	3	6	14	15	16	4.9	16.4
14-Aug-06	A	21	11	6	7	9	13	25	16	17	C	C	C	C	A	4	4	4	6	7	6	7	2	3	9.4	24.8
15-Aug-06	3	2	1	3	4	A	12	16	12	4	3	2	2	3	4	3	6	4	4	5	11	12	12	5	5.7	16.0
16-Aug-06	5	6	5	15	A	34	39	29	11	7	5	5	3	3	2	2	3	4	4	13	20	17	17	14	11.5	38.8
17-Aug-06	7	6	5	A	7	18	29	14	10	10	8	4	2	2	2	2	2	3	4	9	16	13	9	5	8.2	29.4
18-Aug-06	5	4	A	8	10	16	32	22	10	4	3	3	4	3	4	4	4	4	5	5	7	12	17	12	8.5	32.1
19-Aug-06	8	A	18	10	12	21	17	13	13	5	2	2	2	2	1	1	1	1	2	5	13	15	21	26	9.2	26.2
20-Aug-06	A	19	10	12	12	16	28	17	15	9	5	2	1	1	1	1	2	1	2	5	13	15	4	A	8.8	27.6
21-Aug-06	5	9	8	6	10	20	46	33	30	21	23	20	9	6	4	4	4	3	4	8	21	22	A	14	14.4	45.8
22-Aug-06	10	10	10	12	17	26	41	33	16	12	5	2	2	2	2	3	3	3	2	5	13	A	21	8	11.3	41.0
23-Aug-06	6	5	4	6	5	6	16	20	15	6	2	2	1	1	2	3	4	5	7	5	A	10	6	5	6.1	19.6
24-Aug-06	3	3	3	3	7	10	12	11	8	4	3	2	3	2	2	2	4	3	2	5	12	10	18	22	6.4	21.9
25-Aug-06	12	12	13	13	19	A	51	43	26	13	6	4	3	3	2	3	5	4	4	6	6	6	5	4	11.3	51.4
26-Aug-06	6	4	4	3	A	11	13	11	4	3	2	2	1	2	1	2	1	1	2	5	14	14	17	21	6.3	21.4
27-Aug-06	20	14	7	A	17	29	31	37	24	16	11	9	4	2	2	2	2	2	3	6	10	10	12	11	12.3	37.1
28-Aug-06	9	6	A	12	12	23	43	35	16	19	10	13	10	7	4	3	6	7	10	11	24	7	2	2	12.6	42.7
29-Aug-06	2	3	3	4	5	A	23	29	20	8	3	3	4	3	2	2	2	3	5	6	5	9	8	6	6.8	29.0
30-Aug-06	5	2	1	2	8	A	26	23	6	4	2	2	2	2	2	5	7	7	11	9	9	8	5	4	6.6	25.7
31-Aug-06	4	4	9	5	A	32	59	24	11	7	3	4	4	4	4	4	4	6	5	4	4	4	6	6	9.4	58.9
Hourly Avg	6.7	7.1	6.4	7.3	9.5	18.2	25.5	21.8	13.4	7.8	5.3	4.3	3.8	3.3	2.9	3.2	3.8	3.9	4.3	5.7	10.2	11.5	10.7	10.1		
Hourly Max	20.0	20.7	18.1	16.7	19.1	47.4	58.9	59.8	30.2	21.0	22.9	20.2	11.8	13.9	12.3	14.4	11.1	12.8	13.0	13.0	23.9	29.6	25.0	26.2		



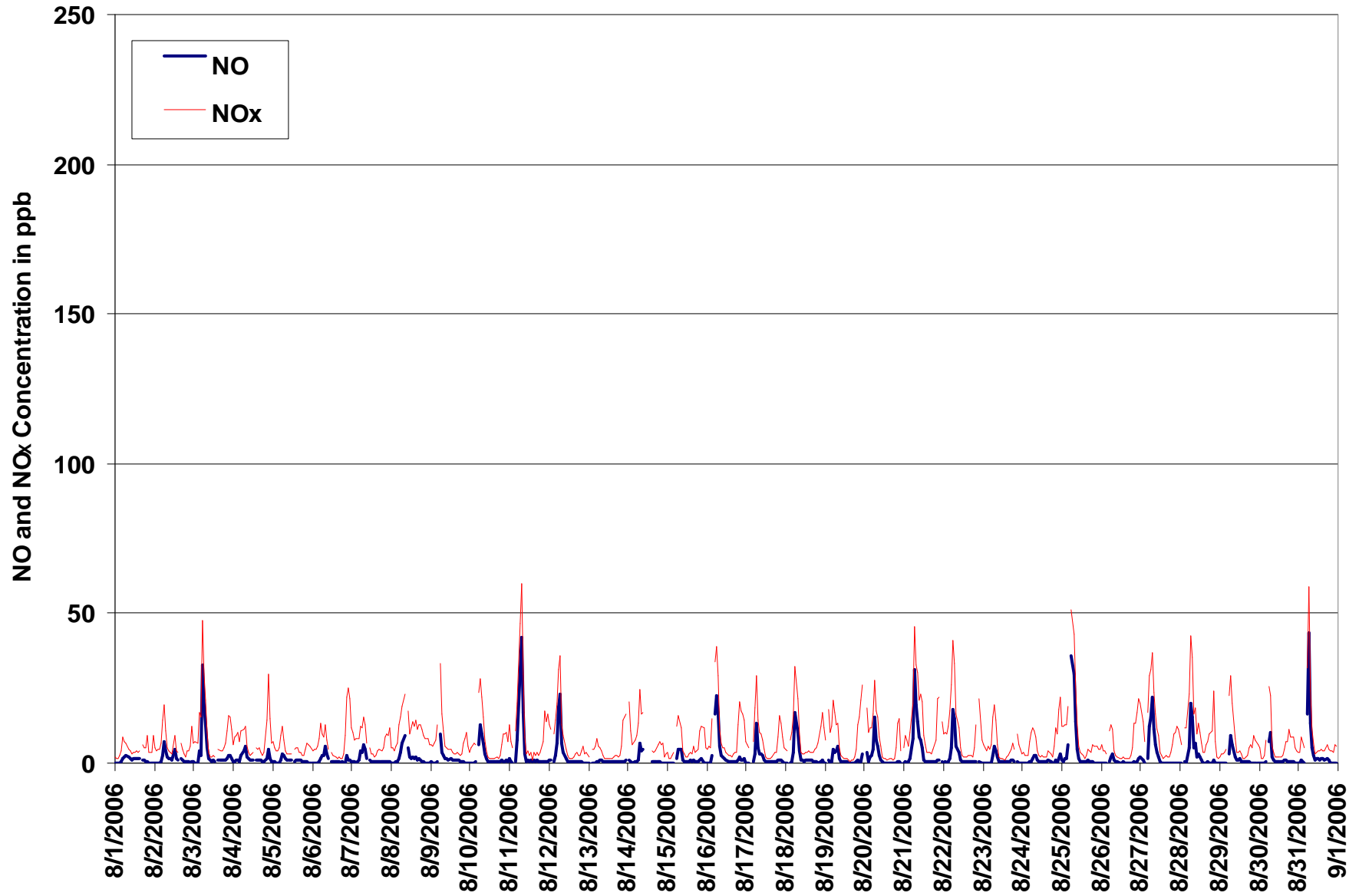


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

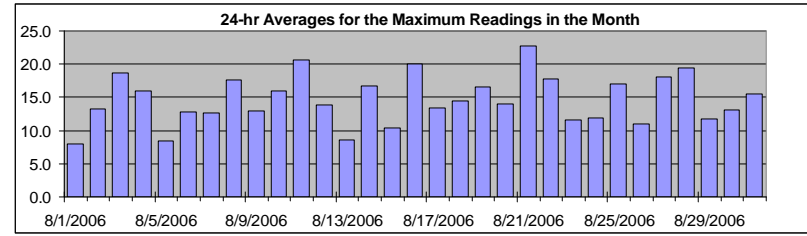
**Oxides of Nitrogen (NO<sub>x</sub>)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	92.9	ppb	11-Aug	7:00 8:00
Maximum 24-hr Value:	22.7	ppb	21-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	
	62.2	40.4	18.7	10.0	6.5	3.6	2.6	14.6 ppb				10.0 ppb	



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	3	3	3	6	7	13	13	10	8	7	5	6	7	7	8	7	A	9	9	12	18	6	7	12	8.0	18.4
2-Aug-06	11	5	7	7	11	22	25	19	9	11	7	7	62	7	7	A	12	8	7	4	11	13	8	26	13.2	62.2
3-Aug-06	11	11	10	28	22	85	61	29	15	6	4	4	10	7	A	9	9	7	8	12	17	25	24	14	18.6	84.7
4-Aug-06	10	17	40	19	12	21	20	24	10	7	10	17	11	A	9	8	9	8	5	6	30	35	31	9	15.9	40.4
5-Aug-06	10	9	8	6	7	17	17	13	7	6	6	6	A	8	8	10	7	7	4	5	6	11	9	8	8.4	17.1
6-Aug-06	5	6	8	10	14	19	15	10	19	11	14	A	6	4	4	4	9	2	3	7	11	51	29	34	12.8	50.8
7-Aug-06	18	15	11	10	12	18	21	20	22	11	A	7	7	5	3	6	9	7	7	10	16	17	18	20	12.6	21.9
8-Aug-06	7	10	7	12	16	22	28	35	36	A	29	13	14	15	18	21	19	20	22	14	14	12	15	8	17.6	35.7
9-Aug-06	11	8	9	12	18	A	59	24	18	9	10	7	9	7	7	8	6	6	7	6	13	13	18	12	12.9	59.1
10-Aug-06	5	7	9	11	A	47	71	37	23	14	9	4	6	3	5	4	5	6	15	11	15	20	22	20	16.0	71.1
11-Aug-06	24	11	7	A	16	32	73	93	45	15	10	10	5	7	3	9	6	12	6	6	14	26	22	24	20.7	92.9
12-Aug-06	21	26	A	14	25	30	42	49	18	12	9	5	5	5	4	5	7	7	5	5	7	8	6	6	13.9	49.4
13-Aug-06	3	A	7	8	11	12	7	9	8	5	4	4	4	4	4	5	4	5	5	6	15	20	23	26	8.6	25.7
14-Aug-06	A	27	21	12	14	16	32	44	24	A	C	C	C	C	A	7	9	8	15	16	12	12	3	5	16.8	44.1
15-Aug-06	6	4	2	5	7	A	22	22	19	8	8	6	6	6	8	6	12	8	7	12	20	20	14	11	10.5	22.4
16-Aug-06	7	11	10	37	A	44	56	46	21	12	12	10	7	6	7	5	10	11	7	26	34	24	26	29	20.0	55.5
17-Aug-06	9	9	8	A	17	33	43	22	17	20	14	7	4	4	5	3	6	8	8	13	21	18	12	6	13.4	43.1
18-Aug-06	6	5	A	10	17	22	39	36	20	8	6	5	8	7	7	8	8	8	9	9	11	34	30	22	14.5	38.8
19-Aug-06	14	A	46	15	16	33	26	23	22	9	6	5	10	8	4	2	3	3	6	20	25	24	28	35	16.6	46.2
20-Aug-06	A	25	14	15	20	32	35	26	18	12	10	4	5	3	2	3	3	2	3	9	30	30	7	A	14.0	35.2
21-Aug-06	8	14	10	8	25	33	65	54	45	26	28	26	16	9	7	7	8	9	9	15	44	34	A	18	22.7	65.0
22-Aug-06	15	15	15	23	23	39	49	43	23	20	11	5	9	5	6	9	5	6	5	10	24	A	32	17	17.7	48.5
23-Aug-06	9	8	5	8	7	10	34	36	23	19	5	3	5	6	6	7	10	11	10	7	A	17	11	7	11.5	35.8
24-Aug-06	5	6	3	3	15	17	18	13	12	8	5	6	7	7	5	4	9	6	4	15	32	14	37	28	11.9	37.0
25-Aug-06	18	16	17	18	28	A	63	62	34	25	8	6	7	8	5	5	10	8	7	12	9	8	7	7	16.9	63.3
26-Aug-06	9	6	6	5	A	14	34	23	5	6	5	4	5	6	3	4	5	7	5	10	19	22	22	26	11.0	34.1
27-Aug-06	29	20	12	A	23	44	42	45	33	29	15	12	7	5	3	4	6	5	7	16	14	13	17	15	18.1	45.0
28-Aug-06	13	10	A	26	18	35	51	46	22	36	17	19	17	10	5	5	10	12	17	20	37	11	3	3	19.4	50.9
29-Aug-06	3	4	5	5	14	A	33	35	33	14	6	8	17	8	4	5	5	7	11	9	7	15	10	9	11.7	35.3
30-Aug-06	8	2	3	3	17	A	41	40	13	14	9	4	4	5	7	10	15	20	24	13	16	14	8	7	13.0	40.7
31-Aug-06	5	5	13	7	A	55	77	46	20	11	8	8	8	9	8	7	8	12	11	7	6	6	9	8	15.6	77.0
Hourly Avg	10.5	10.9	11.3	12.3	16.0	29.4	39.1	33.5	20.7	13.7	10.0	8.0	9.9	6.7	6.0	6.6	8.1	8.2	8.7	11.1	18.3	19.1	17.0	15.7		
Hourly Max	28.8	27.1	46.2	36.6	28.3	84.7	77.0	92.9	45.2	36.1	29.2	26.4	62.2	15.5	18.1	21.3	18.6	20.2	24.2	25.9	44.3	50.8	37.0	34.7		

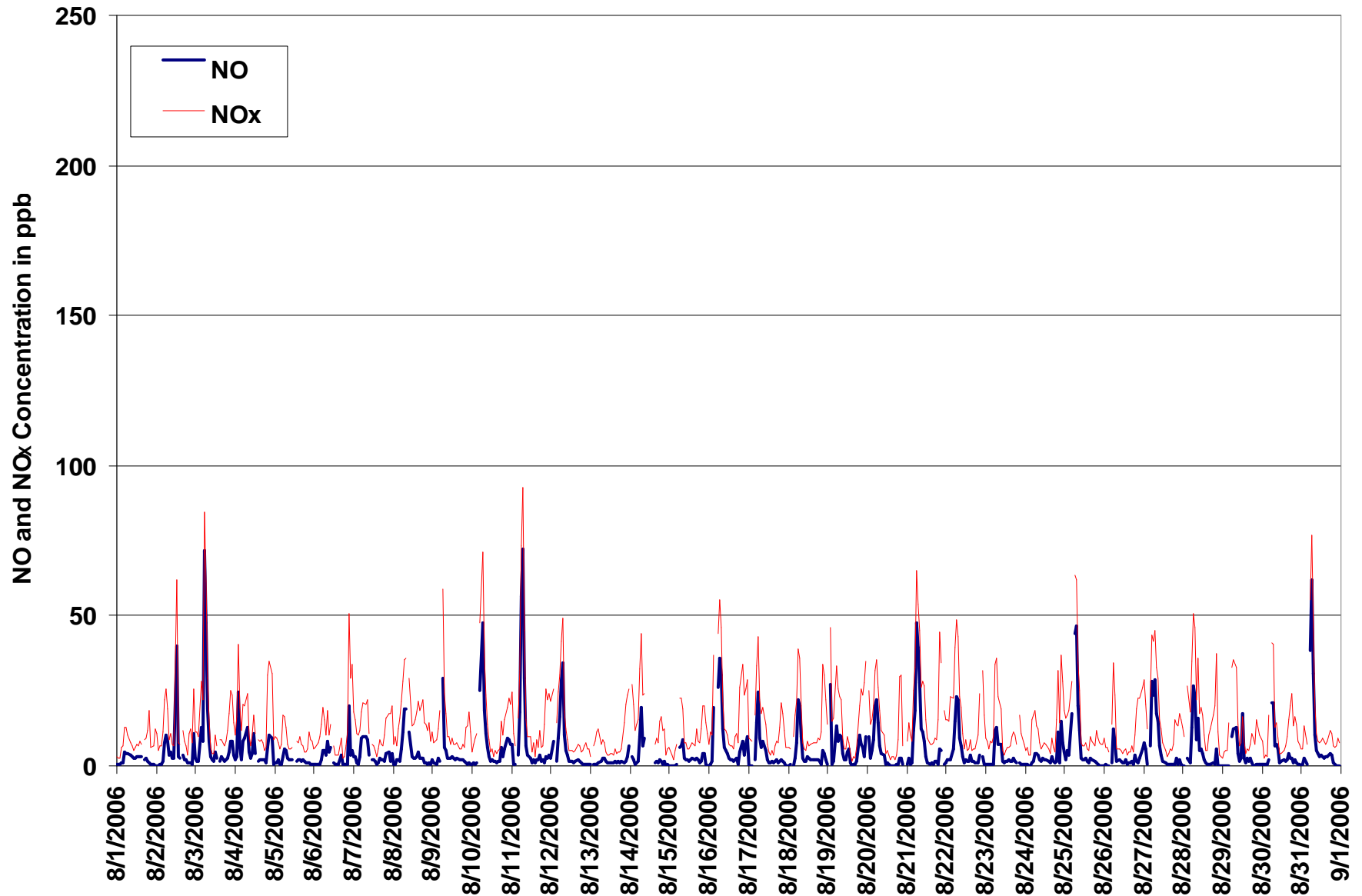


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

# PASZA - Henry Pirker - Ozone Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

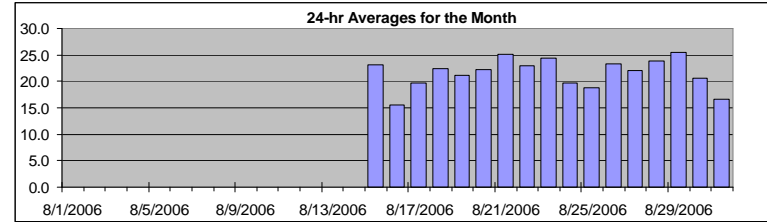
## Ozone (O<sub>3</sub>)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

**Summary**

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	55.8	ppb	21-Aug	16:00 17:00
Maximum 24-hr Average:	25.5	ppb	29-Aug	



AIC Time:	18 hrs	Operational Time:	396 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	56.2%						
Percentile	99	95	75	50	25	5	1	Average	Median
	49.8	39.7	30.4	22.4	13.3	2.4	0.6	21.8 ppb	22.4 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-06	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	0.0
2-Aug-06	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	0.0
3-Aug-06	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	0.0
4-Aug-06	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	0.0
5-Aug-06	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	0.0
6-Aug-06	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	0.0
7-Aug-06	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	0.0
8-Aug-06	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	0.0
9-Aug-06	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	0.0
10-Aug-06	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	0.0
11-Aug-06	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	0.0
12-Aug-06	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	0.0
13-Aug-06	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	0.0
14-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	36	37	38	35	32	30	25	20	26	26	N	38.3	
15-Aug-06	25	29	27	27	25	A	16	10	13	25	29	32	32	31	32	32	29	29	24	22	11	8	8	14	23.1	32.4	
16-Aug-06	16	12	12	4	A	0	2	6	10	16	20	24	26	29	28	29	28	29	27	16	8	5	5	7	15.6	28.8	
17-Aug-06	16	16	17	A	15	7	4	12	16	19	24	29	32	30	31	29	29	28	27	20	11	12	14	15	19.6	31.5	
18-Aug-06	14	15	A	11	7	2	2	8	15	26	31	33	32	35	37	37	33	33	32	31	29	20	15	19	22.4	37.2	
19-Aug-06	20	A	8	13	9	4	8	13	17	26	29	31	32	32	32	33	35	35	34	30	21	17	9	2	21.2	35.2	
20-Aug-06	A	1	3	1	2	2	1	9	16	23	29	35	35	35	38	40	41	42	43	31	22	20	22	A	22.3	42.8	
21-Aug-06	18	6	6	7	5	2	1	5	12	16	23	32	49	52	50	53	56	46	43	37	23	22	A	17	25.2	55.8	
22-Aug-06	19	17	17	12	5	3	2	8	17	25	35	38	40	39	38	35	33	32	34	29	20	A	11	21	23.0	39.5	
23-Aug-06	21	22	22	19	21	18	11	12	17	27	31	33	32	31	32	32	30	29	26	29	A	20	21	22	24.3	32.7	
24-Aug-06	22	23	23	22	17	15	14	16	21	26	C	C	C	C	A	31	28	28	28	24	15	13	5	2	19.8	31.4	
25-Aug-06	6	6	4	3	0	A	1	3	8	18	24	28	31	32	30	32	33	33	29	24	23	22	22	21	18.7	32.9	
26-Aug-06	19	21	21	22	A	15	13	16	25	27	28	30	30	33	35	35	35	34	32	26	15	13	8	3	23.3	35.1	
27-Aug-06	2	4	9	A	3	1	2	3	10	18	26	33	39	40	42	42	43	41	37	31	25	25	20	13	22.1	42.6	
28-Aug-06	18	17	A	14	10	3	1	4	11	15	22	29	38	45	51	50	41	34	28	25	11	27	30	29	23.9	50.8	
29-Aug-06	28	24	22	23	25	A	10	6	11	23	30	32	32	33	36	37	37	39	31	27	26	20	17	18	25.5	39.1	
30-Aug-06	17	23	22	20	14	A	4	8	19	23	27	29	30	30	30	26	25	27	21	18	15	14	18	15	20.6	30.2	
31-Aug-06	13	12	6	9	A	0	0	5	12	16	18	21	22	23	23	23	23	23	24	23	23	23	19	19	16.6	23.9	
Hourly Avg	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
Hourly Max	27.7	29.0	27.4	27.4	25.0	17.9	15.9	16.5	24.8	26.6	34.6	38.4	49.3	52.3	50.8	53.4	55.8	45.5	43.5	36.8	28.6	27.1	29.6	28.7			

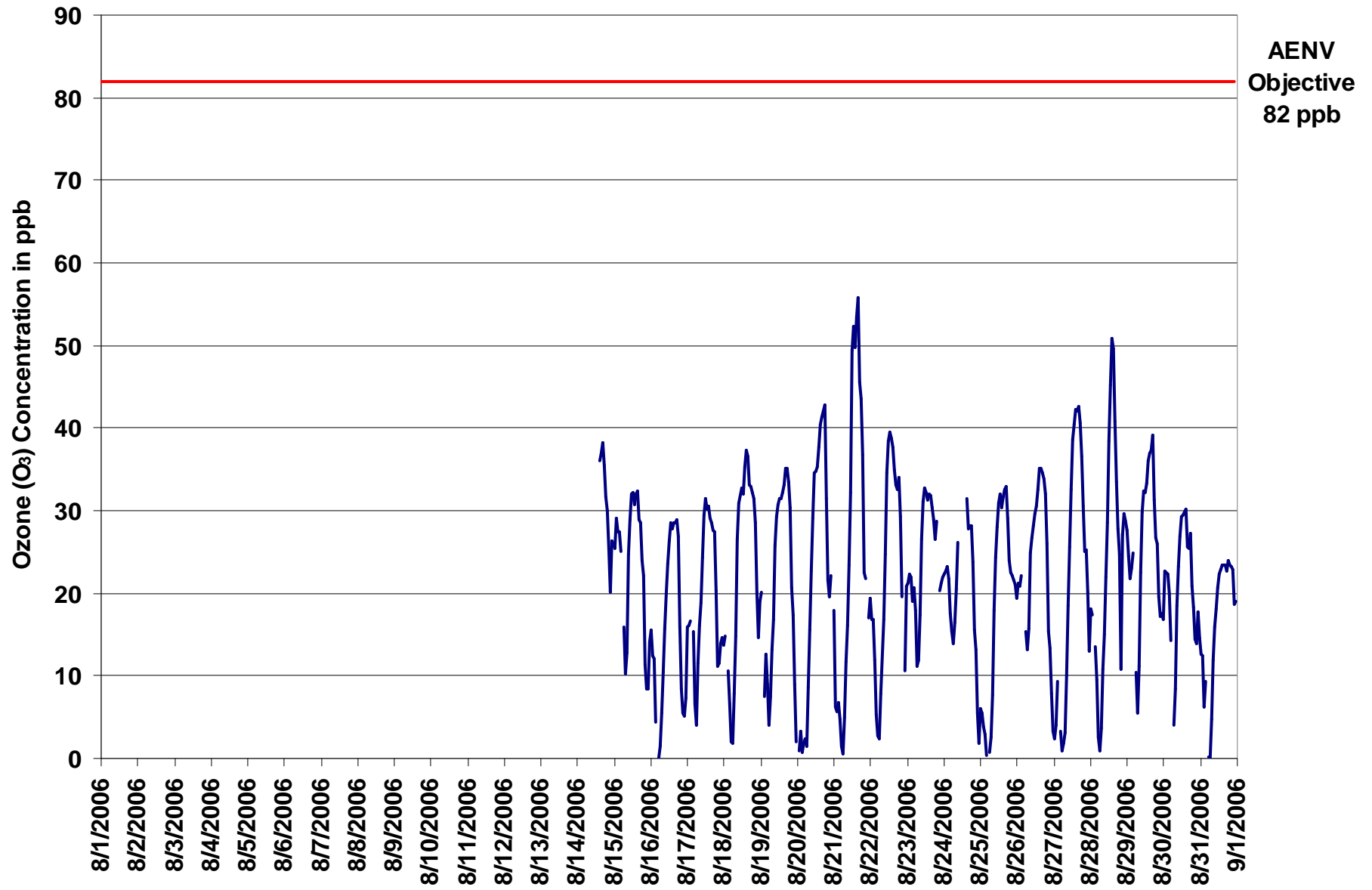


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend



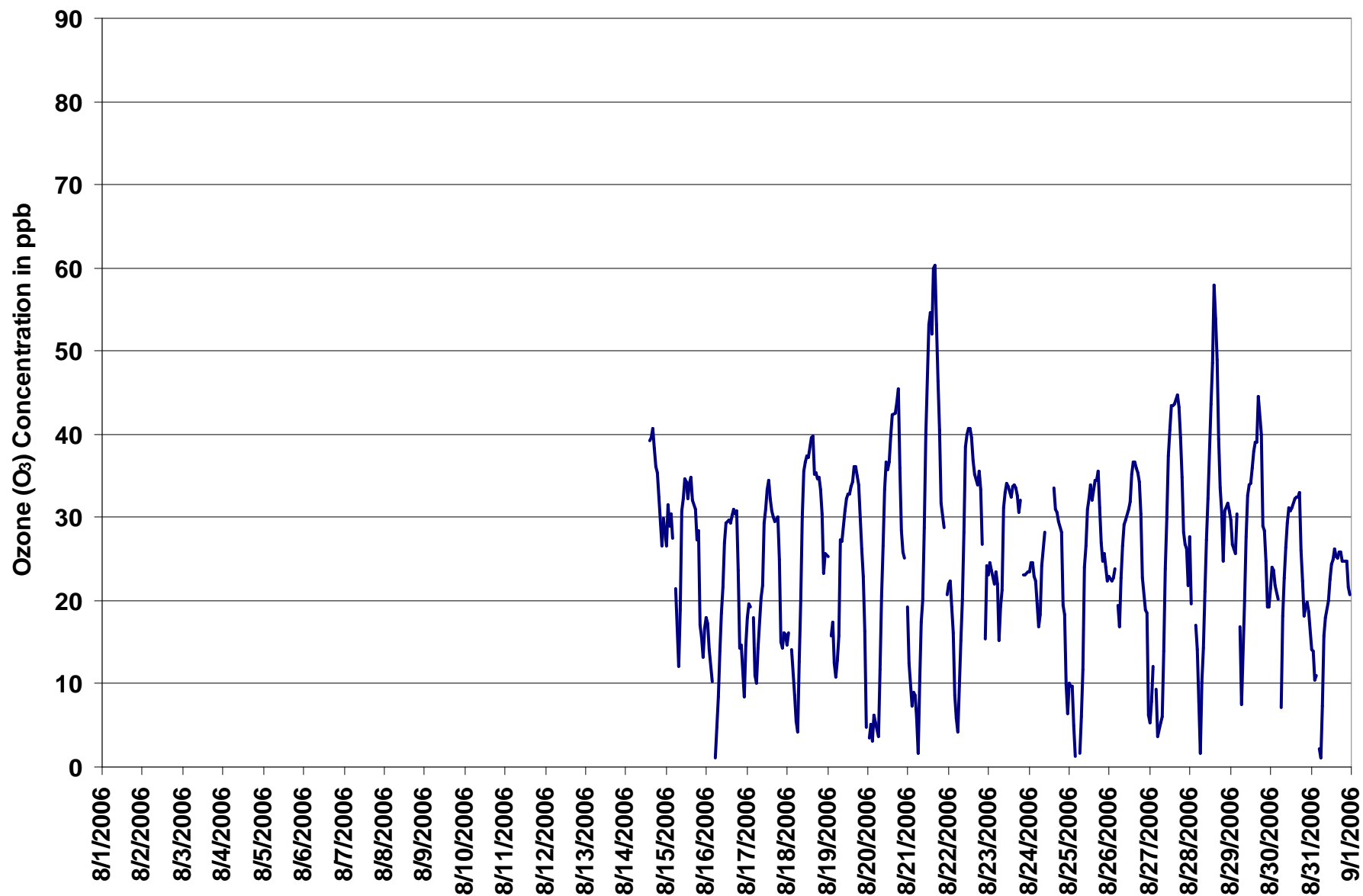
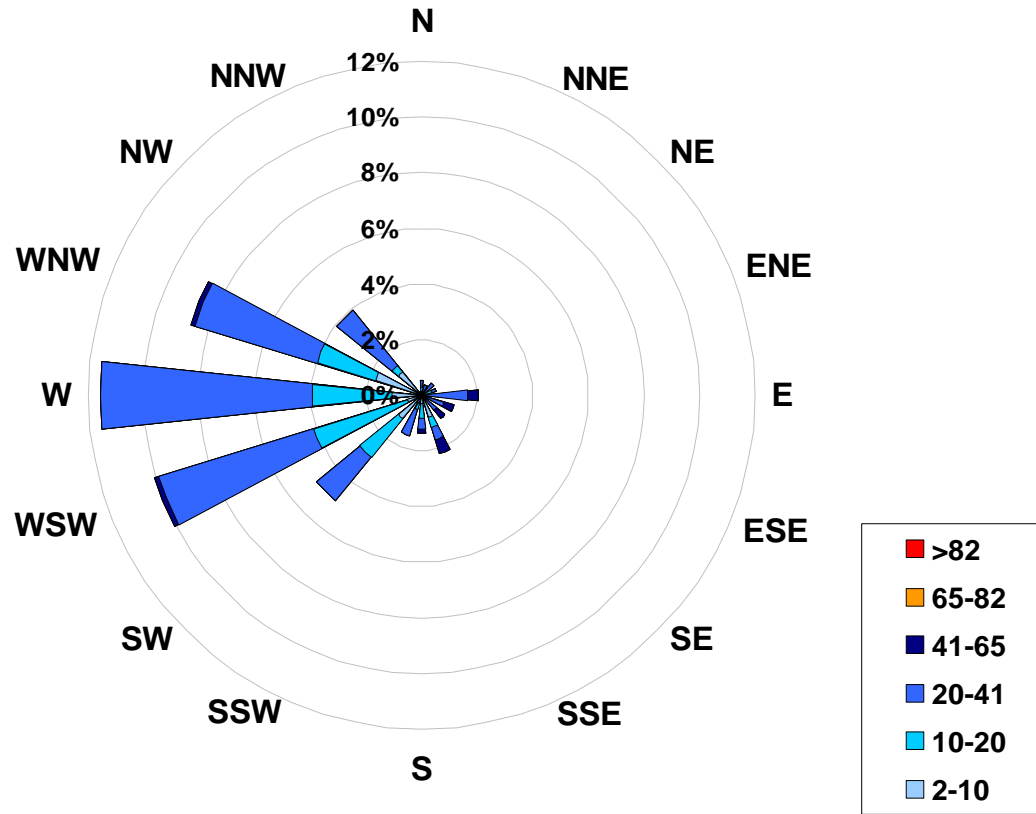


Figure 8. PASZA - Henry Pirker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Ozone (in ppb) Located at the Henry Pirker Site for August 2006**



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			
Range			Frequency (hrs)
2.0	<	10	71
10	to	20	94
20	to	41	215
41	to	65	16
65	to	82	0
	>	82	0
Total Non-Zero Values			396



# PASZA - Henry Pirker - Ozone Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

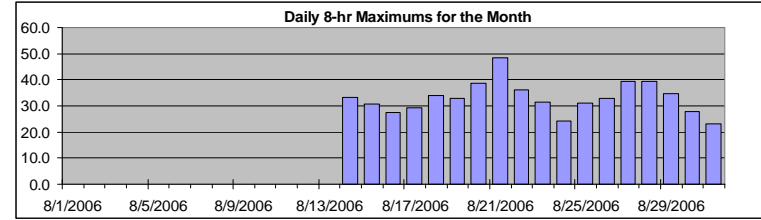
## EIGHT HOUR RUNNING AVERAGE TABLE

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

Monitoring Dates: August 1, 2006 to September 1, 2006

Objective Limit: Alberta Environment: 8-hr 65 ppb

Number of 8-hr Exceedances: 0  
 Maximum 8-hr Average: 48.3 ppb 21-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

Percentile	99	95	75	50	25	5	1
	41.5	36.1	28.1	21.4	14.5	6.5	3.1

Day	Mountain Standard Time																								Daily Maximum		
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		23:00 0:00	
1-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	
2-Aug-06	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	0.0
3-Aug-06	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	0.0
4-Aug-06	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	0.0
5-Aug-06	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	0.0
6-Aug-06	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	0.0
7-Aug-06	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	0.0
8-Aug-06	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	0.0
9-Aug-06	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	0.0
10-Aug-06	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	0.0
11-Aug-06	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	0.0
12-Aug-06	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	0.0
13-Aug-06	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	0.0
14-Aug-06	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	0.0
15-Aug-06	28	27	26	26	26	27	25	23	21	20	21	21	22	23	25	28	30	31	30	29	26	23	21	18		33.4	
16-Aug-06	17	15	13	11	11	10	9	7	7	7	8	11	13	16	20	23	25	27	27	26	24	21	18	16		30.7	
17-Aug-06	14	13	11	11	12	12	12	12	12	13	14	16	18	21	24	26	28	29	29	28	26	23	21	19		27.4	
18-Aug-06	18	16	14	13	12	11	9	8	8	10	13	15	19	23	27	31	33	34	34	34	33	32	29	26		29.3	
19-Aug-06	25	24	20	18	15	12	11	11	10	12	15	17	20	23	26	29	31	32	33	33	31	30	27	23		34.0	
20-Aug-06	21	16	12	8	5	3	2	3	4	7	10	15	19	23	27	31	34	37	39	38	37	35	33	32		32.9	
21-Aug-06	28	23	18	14	12	9	6	6	5	7	9	12	17	24	30	36	42	45	48	48	45	41	40	35		38.6	
22-Aug-06	30	25	22	18	16	13	12	10	10	11	13	17	21	25	30	33	35	36	36	35	32	32	28	26		48.3	
23-Aug-06	24	23	21	19	20	19	19	18	18	18	19	21	23	24	27	29	31	31	31	31	30	28	27	25		36.2	
24-Aug-06	24	23	23	22	21	21	20	19	19	19	N	N	N	N	N	N	N	N	N	N	N	24	22	18		31.3	
25-Aug-06	15	12	9	7	5	4	3	3	3	5	8	12	16	18	22	25	29	30	31	30	29	28	27	26		24.3	
26-Aug-06	24	23	22	21	21	20	19	18	19	20	21	22	23	25	28	30	32	32	33	32	31	28	25	21		31.0	
27-Aug-06	17	13	10	8	6	4	4	4	5	7	9	12	16	21	26	31	35	38	40	39	38	36	33	29		32.9	
28-Aug-06	26	23	21	19	17	13	11	9	8	8	10	12	15	21	27	33	36	39	39	39	35	33	31	28		39.3	
29-Aug-06	26	25	24	24	26	26	23	20	17	17	18	20	21	22	25	29	33	35	35	34	33	32	29	27		34.8	
30-Aug-06	24	22	21	20	19	19	17	15	16	16	16	18	20	21	24	27	27	28	27	26	24	22	20	19		28.0	
31-Aug-06	17	16	14	13	12	10	8	6	6	7	9	10	12	15	17	20	21	22	23	23	23	23	23	22		23.3	
Hourly Max	29.5	26.7	26.2	25.9	25.9	26.6	25.1	22.9	21.1	20.5	20.9	21.9	23.0	25.4	30.0	36.0	41.5	45.2	47.7	48.3	45.0	41.1	39.9	34.7			

# PASZA - Henry Pirker - Carbon Monoxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Carbon Monoxide (CO)

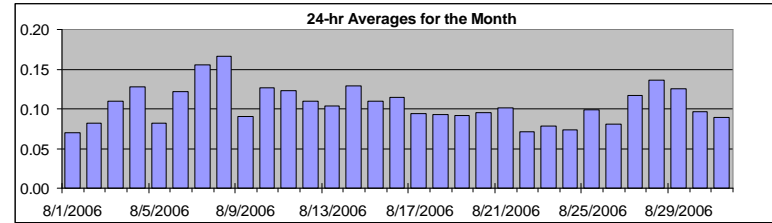
Monitoring Dates: August 1, 2006 to September 1, 2006

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	4-Aug	21:00	22:00
Maximum 24-hr Value:	0.2	ppm	8-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
	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.1 ppm	0.1 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-06	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	0.1	0.1	0.1	0.2	0.07	0.17
2-Aug-06	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	0.1	0.1	0.1	0.1	0.1	0.08	0.13
3-Aug-06	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	A	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.11	0.25
4-Aug-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.13	0.32	
5-Aug-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.08	0.12	
6-Aug-06	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	0.2	0.3	0.3	0.3	0.12	0.31	
7-Aug-06	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.21	
8-Aug-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	C	C	C	A	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.17	0.24	
9-Aug-06	0.1	0.1	0.1	0.1	0.1	A	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	0.09	0.18	
10-Aug-06	0.1	0.1	0.1	0.1	A	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	0.2	0.1	0.13	0.26	
11-Aug-06	0.2	0.1	0.1	A	0.1	0.1	0.2	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	0.2	0.2	0.12	0.30	
12-Aug-06	0.1	0.2	A	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.17	
13-Aug-06	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	0.2	0.10	0.16	
14-Aug-06	A	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.13	0.25	
15-Aug-06	0.1	0.1	0.1	0.1	0.1	A	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	0.2	0.1	0.11	0.15	
16-Aug-06	0.1	0.1	0.1	0.1	A	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	0.2	0.1	0.11	0.22	
17-Aug-06	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	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.09	0.17	
18-Aug-06	0.1	0.1	A	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09	0.21	
19-Aug-06	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.09	0.29		
20-Aug-06	A	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	A	0.10	0.21	
21-Aug-06	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.2	A	0.1	0.10	0.26	
22-Aug-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	A	0.2	0.1	0.07	0.19	
23-Aug-06	0.1	0.1	0.1	0.1	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	0.1	0.1	0.1	A	0.1	0.1	0.1	0.08	0.15	
24-Aug-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.07	0.17	
25-Aug-06	0.1	0.1	0.1	0.1	0.1	A	0.2	0.3	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	0.25	
26-Aug-06	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	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.08	0.23	
27-Aug-06	0.2	0.1	0.1	A	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.12	0.22	
28-Aug-06	0.1	0.1	A	0.1	0.1	0.2	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	0.2	0.1	0.1	0.14	0.26	
29-Aug-06	0.1	0.1	0.2	0.2	0.1	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.12	0.25	
30-Aug-06	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	0.2	0.1	0.1	0.1	0.1	0.1	0.10	0.16	
31-Aug-06	0.1	0.1	0.1	0.1	A	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	0.1	0.1	0.1	0.09	0.27	
Hourly Avg	0.10	0.11	0.09	0.09	0.09	0.13	0.16	0.15	0.12	0.10	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.10	0.14	0.16	0.14	0.13			
Hourly Max	0.20	0.25	0.19	0.16	0.15	0.26	0.27	0.30	0.22	0.17	0.15	0.13	0.14	0.18	0.15	0.17	0.16	0.18	0.17	0.20	0.26	0.32	0.31	0.29			

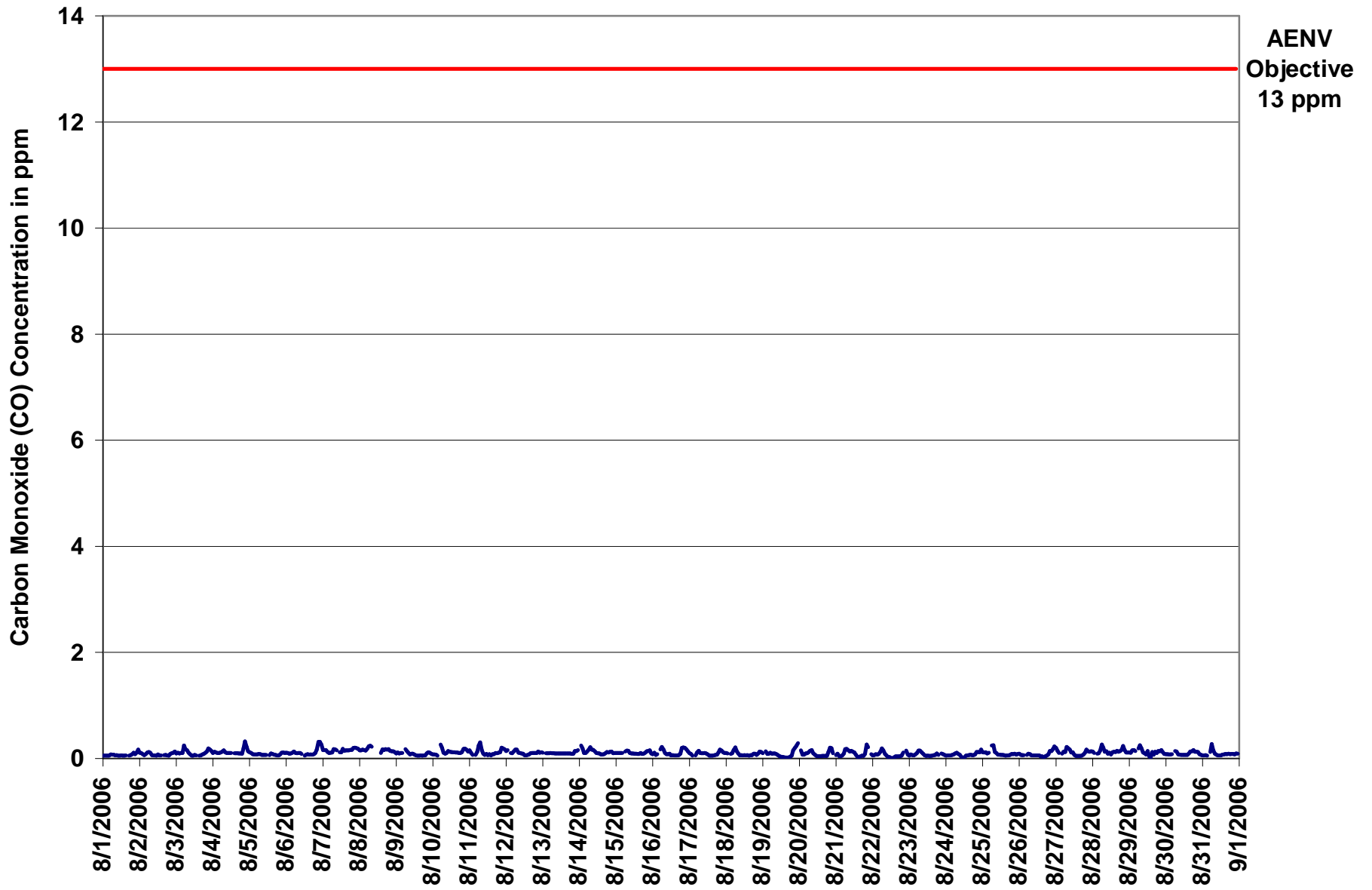


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

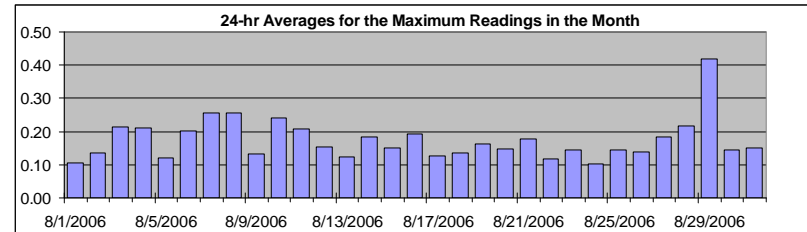
**Carbon Monoxide (CO)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	3.9	ppm	29-Aug	12:00 13:00
Maximum 24-hr Value:	0.4	ppm	29-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
	0.7	0.4	0.2	0.1	0.1	0.1	0.0	0.2 ppm	0.1 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-06	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.11	0.24	
2-Aug-06	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.1	A	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.14	0.27	
3-Aug-06	0.1	0.2	0.1	0.2	0.2	0.9	0.8	0.3	0.2	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.3	0.2	0.21	0.91	
4-Aug-06	0.1	0.2	0.4	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	A	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.2	0.21	0.43	
5-Aug-06	0.1	0.1	0.2	0.1	0.2	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	0.2	0.2	0.1	0.12	0.18	
6-Aug-06	0.2	0.1	0.1	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.8	0.5	0.6	0.20	0.81
7-Aug-06	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.4	0.3	0.2	A	0.2	0.2	1.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.26	1.15	
8-Aug-06	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3	A	C	C	C	A	0.2	0.6	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.26	0.58	
9-Aug-06	0.1	0.1	0.1	0.2	0.2	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	0.1	0.2	0.2	0.2	0.1	0.13	0.30	
10-Aug-06	0.1	0.1	0.1	0.1	A	1.4	0.7	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.24	1.41	
11-Aug-06	0.2	0.1	0.1	A	0.1	0.3	0.7	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.6	0.2	0.21	0.70
12-Aug-06	0.2	0.3	A	0.2	0.1	0.3	0.2	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	0.2	0.15	0.33	
13-Aug-06	0.2	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	0.2	0.3	0.2	0.12	0.26	
14-Aug-06	A	0.3	0.3	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.18	0.34	
15-Aug-06	0.1	0.2	0.1	0.2	0.2	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.15	0.23	
16-Aug-06	0.1	0.2	0.1	0.2	A	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.3	0.4	0.19	0.40	
17-Aug-06	0.1	0.2	0.1	A	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.13	0.25	
18-Aug-06	0.1	0.1	A	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	0.2	0.14	0.25	
19-Aug-06	0.2	A	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.16	0.49	
20-Aug-06	A	0.3	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	0.2	0.3	0.4	0.1	A	0.15	0.35
21-Aug-06	0.2	0.1	0.0	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.5	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.4	A	0.1	0.18	0.50
22-Aug-06	0.1	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	A	0.3	0.2	0.12	0.27	
23-Aug-06	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.7	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.15	0.67	
24-Aug-06	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	0.2	0.10	0.22
25-Aug-06	0.2	0.2	0.1	0.1	0.2	A	0.4	0.4	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	0.15	0.42	
26-Aug-06	0.1	0.1	0.1	0.1	A	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.2	0.2	0.3	0.3	0.14	0.63
27-Aug-06	0.3	0.3	0.2	A	0.1	0.3	0.2	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.18	0.35
28-Aug-06	0.2	0.1	A	0.1	0.1	0.2	0.8	0.3	0.4	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.22	0.80
29-Aug-06	0.2	0.1	0.2	0.2	0.2	A	0.4	0.4	0.3	0.2	0.1	0.4	3.9	0.1	0.0	1.7	0.1	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.42	3.91
30-Aug-06	0.1	0.1	0.1	0.1	0.2	A	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.15	0.27	
31-Aug-06	0.1	0.1	0.1	0.1	A	0.4	0.7	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.15	0.67	
Hourly Avg	0.14	0.16	0.13	0.13	0.14	0.28	0.31	0.23	0.18	0.15	0.14	0.12	0.25	0.13	0.10	0.16	0.13	0.12	0.14	0.17	0.22	0.24	0.21	0.19		
Hourly Max	0.26	0.34	0.36	0.30	0.29	1.41	0.80	0.46	0.42	0.67	0.50	0.38	3.91	1.15	0.20	1.67	0.33	0.29	0.33	0.63	0.46	0.81	0.65	0.63		

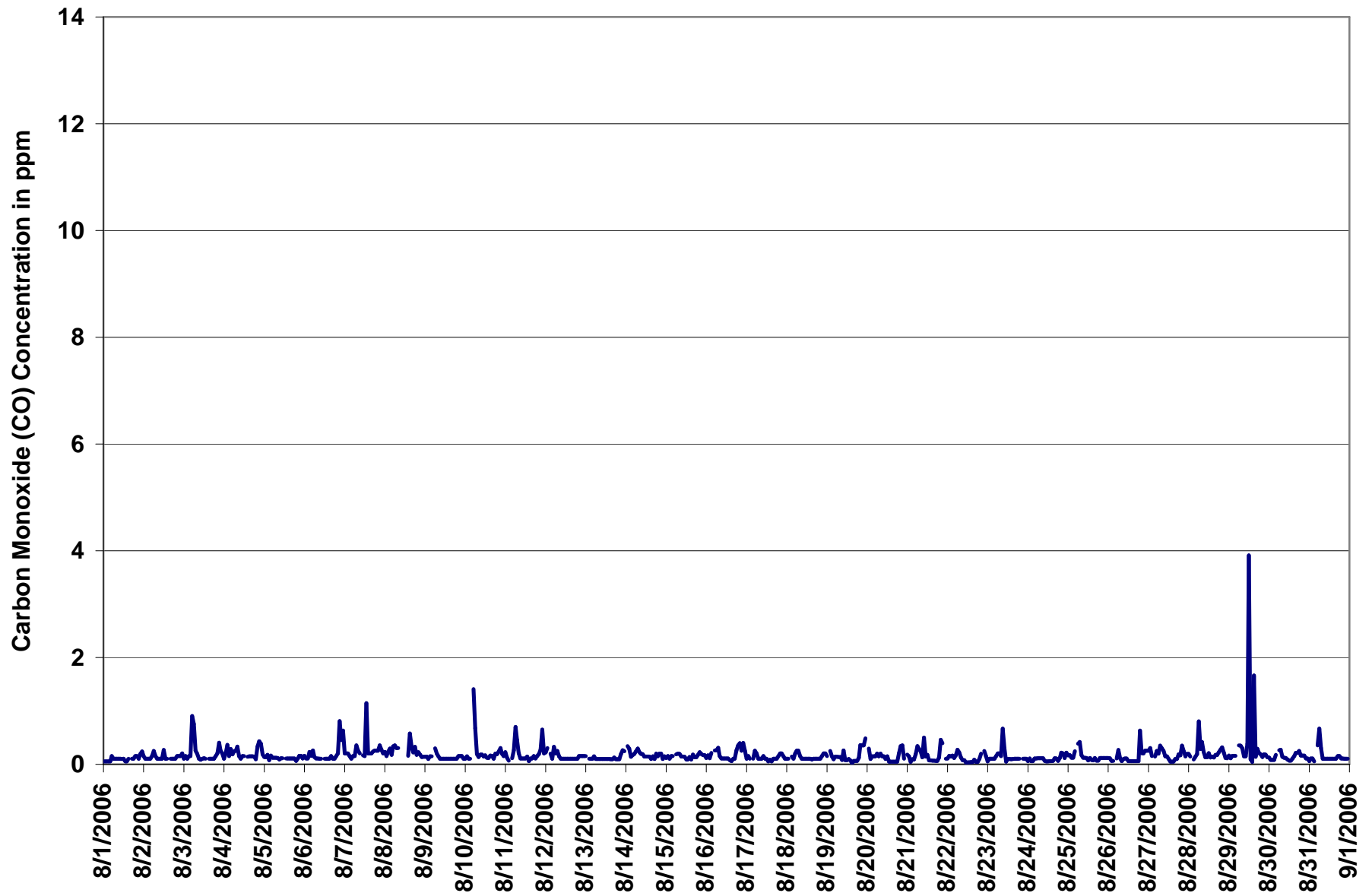
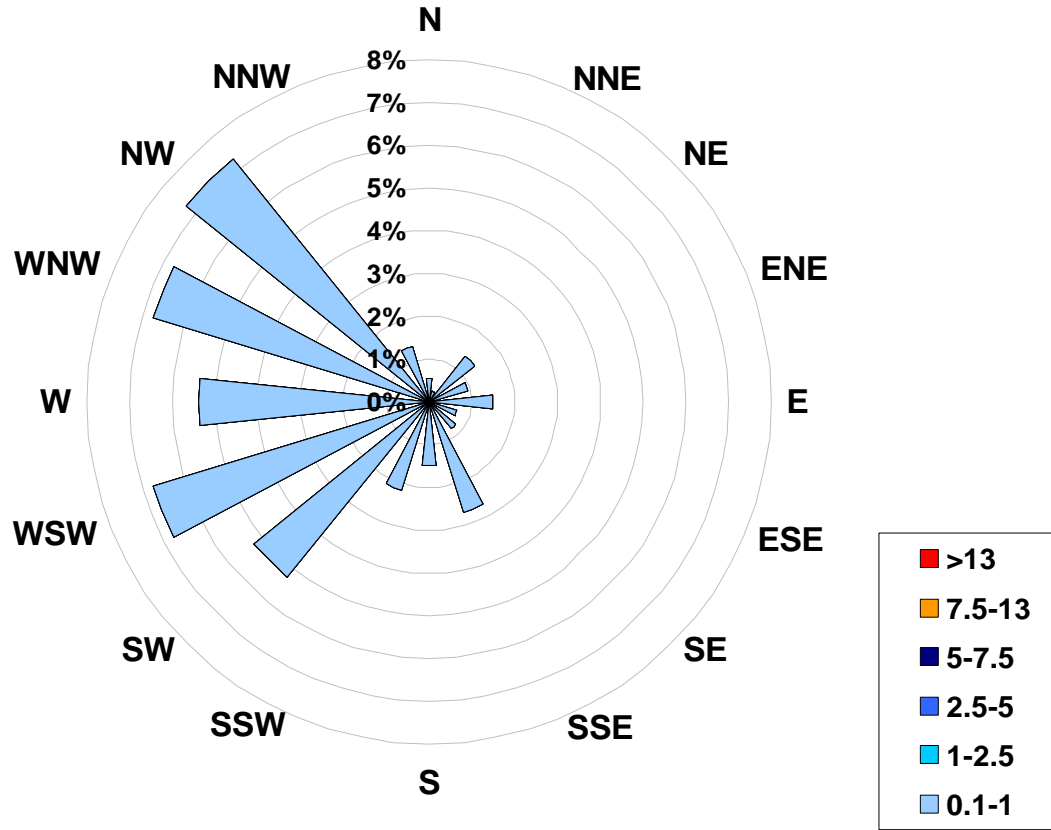


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located  
at the Henry Pirker Site for August 2006**



**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 Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

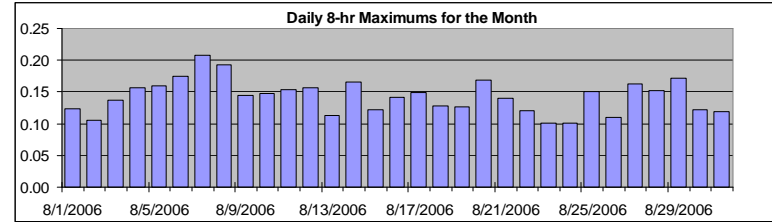
## EIGHT HOUR RUNNING AVERAGE TABLE

## Carbon Monoxide (CO)

Monitoring Dates: August 1, 2006 to September 1, 2006

Objective Limit: Alberta Environment: 8-hr 5 ppm

Summary	
Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	0.2 ppm 7-Aug 3:00 4:00



Percentile	99	95	75	50	25	5	1
	0.2	0.2	0.1	0.1	0.1	0.1	0.0

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

Day	Mountain Standard Time																								Daily Maximum		
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		23:00 0:00	
1-Aug-06	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	0.1	0.12
2-Aug-06	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	0.1	0.11
3-Aug-06	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	0.1	0.14
4-Aug-06	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	0.2	0.2	0.16	
5-Aug-06	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16
6-Aug-06	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	0.2	0.2	0.17	
7-Aug-06	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.21
8-Aug-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.2	0.19	
9-Aug-06	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	0.14	
10-Aug-06	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	0.15	
11-Aug-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	
12-Aug-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16	
13-Aug-06	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	0.11	
14-Aug-06	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	
15-Aug-06	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	0.12	
16-Aug-06	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	0.14	
17-Aug-06	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	0.15	
18-Aug-06	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	0.13	
19-Aug-06	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.13	
20-Aug-06	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.17	
21-Aug-06	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	0.14	
22-Aug-06	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.12	
23-Aug-06	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	0.10	
24-Aug-06	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	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.10	
25-Aug-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	
26-Aug-06	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	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.11	
27-Aug-06	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16	
28-Aug-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.15	
29-Aug-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	
30-Aug-06	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	0.12	
31-Aug-06	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	0.12	

Hourly Max 0.19 0.20 0.21 0.21 0.20 0.17 0.17 0.18 0.19 0.19 0.16 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.17 0.17 0.17 0.18

# PASZA - Henry Pirker - Total Hydrocarbons Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

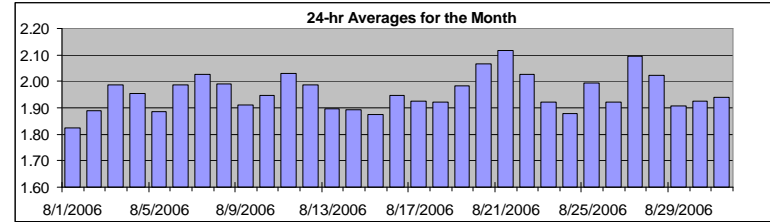
## HOURLY AVERAGE TABLE

## Total Hydrocarbons (THC)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Maximum 1-hr Average:	2.6	ppm	21-Aug	8:00 9:00
Maximum 24-hr Value:	2.1	ppm	21-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
	2.4	2.3	2.0	1.9	1.9	1.8	1.8	2.0 ppm	1.9 ppm

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-06	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	A	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.82	1.98
2-Aug-06	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	1.9	1.8	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.89	1.96
3-Aug-06	2.0	2.0	2.0	2.2	2.2	2.3	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.0	2.0	1.99	2.32
4-Aug-06	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	1.96	2.12	
5-Aug-06	2.0	2.0	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	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.89	1.99	
6-Aug-06	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.0	2.2	2.2	2.1	1.99	2.24	
7-Aug-06	2.1	2.2	2.2	2.3	2.2	2.3	2.2	2.4	2.2	2.0	A	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.2	2.0	2.0	2.03	2.39	
8-Aug-06	2.0	2.0	2.1	2.2	2.0	2.0	2.1	2.1	2.1	A	2.0	1.8	C	C	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.99	2.19	
9-Aug-06	1.9	1.9	1.9	1.9	1.9	A	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	2.0	1.9	1.91	1.98		
10-Aug-06	1.9	2.0	2.0	2.0	A	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	2.0	2.0	2.0	1.95	2.14		
11-Aug-06	2.1	2.1	2.1	A	2.2	2.4	2.4	2.3	2.2	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.2	2.03	2.44		
12-Aug-06	2.1	2.1	A	2.3	2.3	2.3	2.2	2.2	2.0	2.0	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	1.99	2.33	
13-Aug-06	1.9	A	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	2.0	2.0	2.1	1.90	2.09	
14-Aug-06	A	2.3	2.1	2.3	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.89	2.34	
15-Aug-06	1.9	1.8	1.8	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.87	1.98		
16-Aug-06	1.9	1.9	1.9	2.0	A	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	2.0	2.1	2.1	1.95	2.12		
17-Aug-06	2.0	2.0	1.9	A	1.9	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	2.0	2.0	2.0	1.9	1.92	2.03	
18-Aug-06	1.9	1.9	A	2.0	2.1	2.2	2.1	2.2	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	1.9	1.92	2.20	
19-Aug-06	2.0	A	2.1	2.0	2.1	2.2	2.3	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	2.0	2.0	2.1	2.2	1.98	2.26	
20-Aug-06	A	2.3	2.2	2.4	2.4	2.2	2.4	2.3	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	A	2.07	2.39	
21-Aug-06	2.0	2.2	2.2	2.2	2.2	2.2	2.4	2.4	2.6	2.2	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	A	2.3	2.12	2.55	
22-Aug-06	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	A	2.1	2.03	2.35	
23-Aug-06	1.9	1.9	1.9	1.9	2.0	2.0	2.3	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	A	1.9	1.9	1.9	1.92	2.26	
24-Aug-06	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.1	1.88	2.12	
25-Aug-06	2.1	2.2	2.5	2.2	2.3	A	2.3	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.99	2.46	
26-Aug-06	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.2	2.4	1.92	2.36		
27-Aug-06	2.3	2.2	2.2	A	2.4	2.4	2.3	2.5	2.5	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.1	2.10	2.51	
28-Aug-06	2.4	2.2	A	2.2	2.3	2.3	2.3	2.2	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.9	2.0	1.9	1.9	1.9	2.02	2.39	
29-Aug-06	1.9	2.0	1.9	1.9	1.9	A	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.91	2.09	
30-Aug-06	2.1	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	2.12	
31-Aug-06	1.9	1.9	2.0	1.9	A	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.94	2.15	
Hourly Avg	2.00	2.03	2.03	2.05	2.08	2.10	2.10	2.07	2.02	1.95	1.91	1.88	1.87	1.86	1.86	1.86	1.86	1.86	1.85	1.86	1.87	1.92	1.96	1.98	2.02		
Hourly Max	2.39	2.32	2.46	2.36	2.39	2.39	2.44	2.51	2.55	2.18	2.15	2.10	2.09	1.95	1.93	1.90	1.92	1.92	1.92	1.92	1.96	2.09	2.23	2.18	2.36		



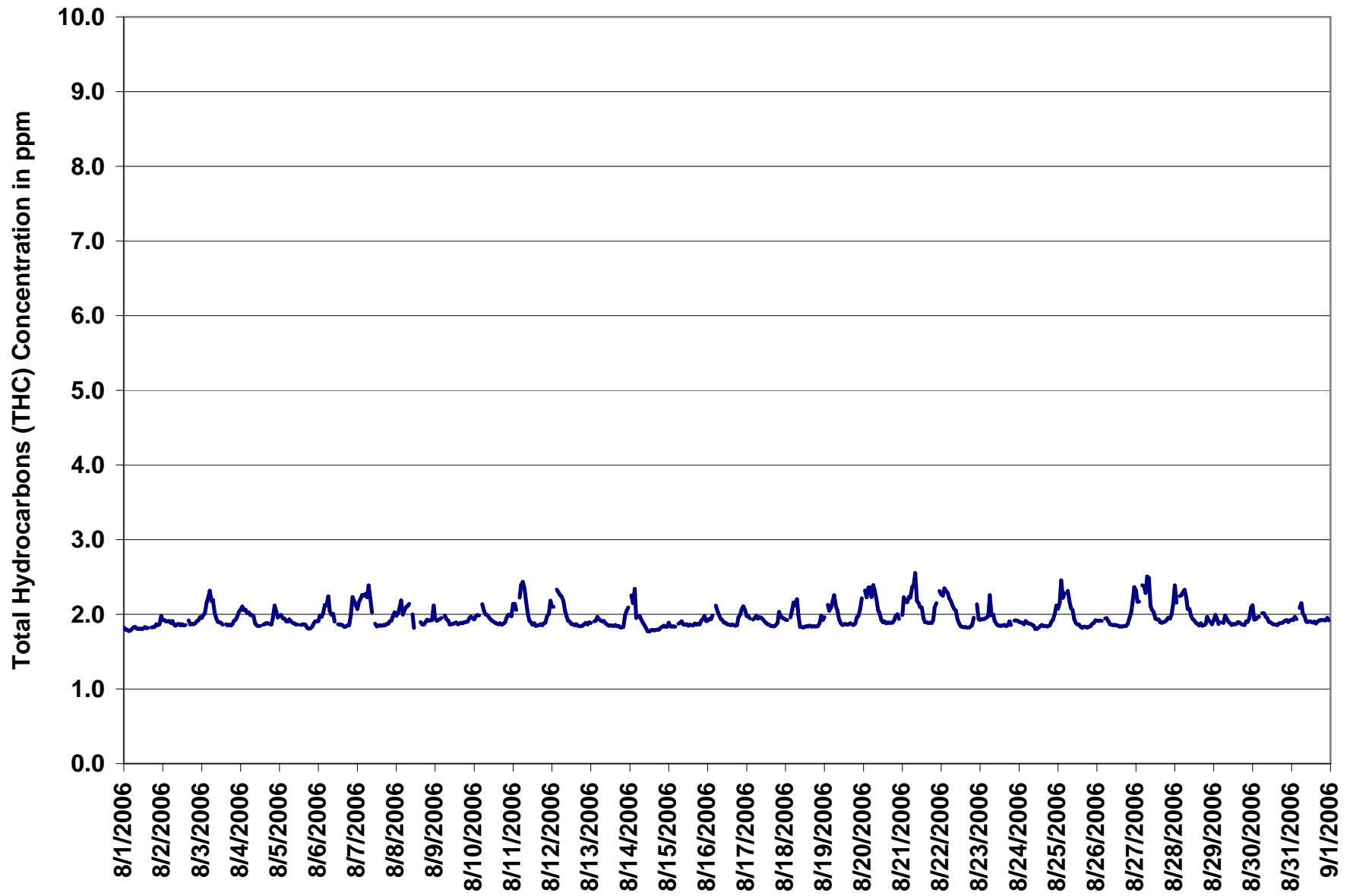


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

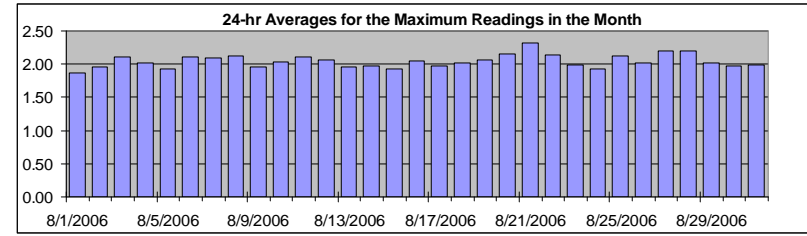
**Total Hydrocarbons (THC)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	3.7	ppm	21-Aug	8:00 9:00
Maximum 24-hr Value:	2.3	ppm	21-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
	2.7	2.5	2.1	2.0	1.9	1.9	1.8	2.0 ppm	2.0 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-06	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.86	2.05
2-Aug-06	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	A	2.4	1.9	1.9	1.9	1.9	2.0	1.9	2.1	1.96	2.43
3-Aug-06	2.1	2.0	2.1	2.4	2.3	3.0	2.6	2.3	2.1	2.0	1.9	1.9	2.1	1.9	A	1.9	1.9	2.0	1.9	1.9	2.1	2.0	2.0	2.1	2.11	3.01
4-Aug-06	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.2	2.0	2.02	2.24
5-Aug-06	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.0	2.0	1.93	2.04
6-Aug-06	2.0	2.1	2.0	2.1	2.6	2.2	2.5	2.2	2.0	2.3	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.4	2.5	2.3	2.11	2.60
7-Aug-06	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.5	2.3	2.1	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.10	2.49
8-Aug-06	2.1	2.1	2.2	2.3	2.2	2.1	2.2	2.4	2.3	A	2.4	1.9	C	C	A	2.2	1.9	1.9	2.0	2.0	2.1	2.0	2.0	2.3	2.13	2.40
9-Aug-06	2.0	2.0	2.0	2.0	2.0	A	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	2.0	2.0	2.0	2.0	1.96	2.06
10-Aug-06	2.0	2.0	2.0	2.0	A	2.7	2.4	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.0	2.0	2.04	2.66
11-Aug-06	2.2	2.2	2.1	A	2.4	2.5	2.5	2.4	2.3	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.3	2.11	2.54
12-Aug-06	2.3	2.3	A	2.6	2.4	2.4	2.3	2.3	2.3	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	2.07	2.56
13-Aug-06	1.9	A	1.9	1.9	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.3	2.3	1.96	2.32
14-Aug-06	A	2.4	2.2	2.5	2.1	2.1	2.1	2.0	2.0	1.9	2.0	1.8	1.8	1.8	1.8	2.0	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.98	2.51
15-Aug-06	2.0	1.9	1.9	1.9	1.9	A	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	2.0	2.1	2.0	1.92	2.07
16-Aug-06	2.0	2.0	2.0	2.1	A	2.2	2.1	2.0	2.0	2.1	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.2	2.2	2.4	2.1	2.04	2.43
17-Aug-06	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	1.97	2.12
18-Aug-06	2.0	2.0	A	2.1	2.1	2.2	2.2	2.9	2.4	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.01	2.90
19-Aug-06	2.2	A	2.3	2.1	2.2	2.4	2.3	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.1	2.3	2.06	2.36
20-Aug-06	A	2.4	2.3	2.5	2.6	2.4	2.6	2.5	2.3	2.1	2.0	2.0	1.9	2.0	1.9	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	A	2.16	2.60
21-Aug-06	2.2	2.3	2.2	2.2	2.4	2.5	2.5	2.5	3.7	2.2	2.2	2.2	2.2	2.0	2.0	1.9	1.9	1.9	1.9	2.0	3.0	2.7	A	2.6	2.31	3.68
22-Aug-06	2.4	2.4	2.6	2.4	2.4	2.3	2.4	2.2	2.1	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	A	2.6	2.1	2.13	2.62
23-Aug-06	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.0	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	2.0	2.0	1.9	1.99	2.40
24-Aug-06	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.4	1.93	2.39
25-Aug-06	2.2	2.2	3.4	2.5	2.4	A	2.4	2.3	2.2	2.3	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	2.12	3.39
26-Aug-06	2.0	2.0	2.0	2.0	A	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	2.1	3.0	2.6	2.01	2.95
27-Aug-06	2.5	2.3	2.3	A	2.5	2.5	2.4	2.7	2.6	2.3	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.5	2.19	2.65
28-Aug-06	3.2	2.6	A	2.5	2.5	2.5	2.5	2.5	2.1	2.2	2.1	2.0	2.0	1.9	1.9	1.9	2.1	1.9	1.9	2.0	2.2	2.0	2.0	1.9	2.19	3.19
29-Aug-06	2.0	2.1	2.0	1.9	2.0	A	2.0	2.1	2.0	1.9	2.0	1.9	2.5	1.9	1.9	2.1	2.0	1.9	1.9	1.9	2.3	1.9	2.0	2.3	2.02	2.48
30-Aug-06	2.3	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.97	2.26
31-Aug-06	2.0	2.0	2.0	2.0	A	2.1	2.2	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.23
Hourly Avg	2.12	2.11	2.13	2.15	2.19	2.24	2.22	2.18	2.16	2.03	1.97	1.92	1.94	1.91	1.90	1.91	1.93	1.90	1.90	1.94	2.04	2.05	2.11	2.13		
Hourly Max	3.19	2.60	3.39	2.56	2.60	3.01	2.62	2.90	3.68	2.30	2.40	2.18	2.48	2.04	2.01	2.20	2.43	2.04	1.99	2.43	2.99	2.74	2.95	2.60		

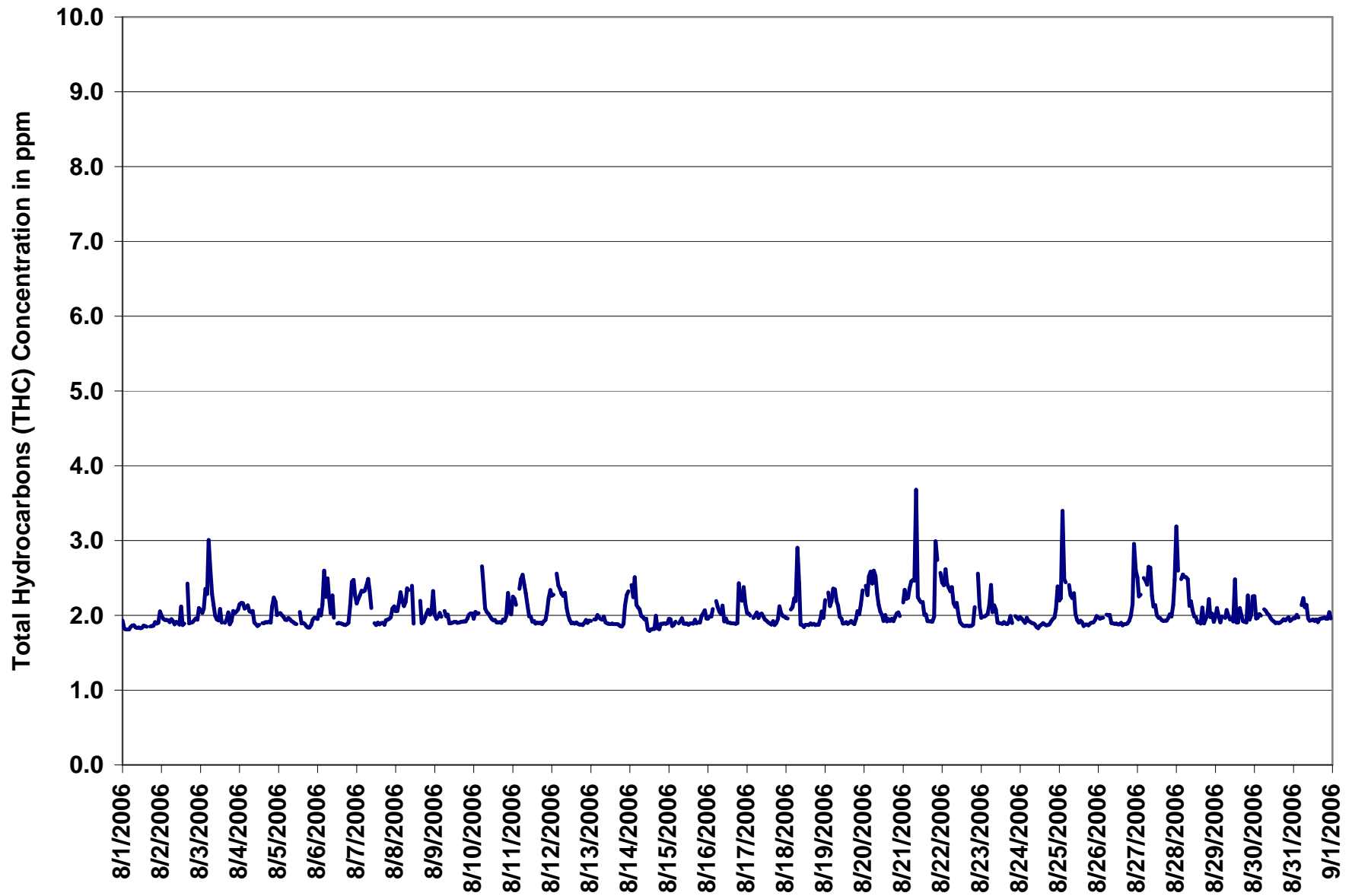
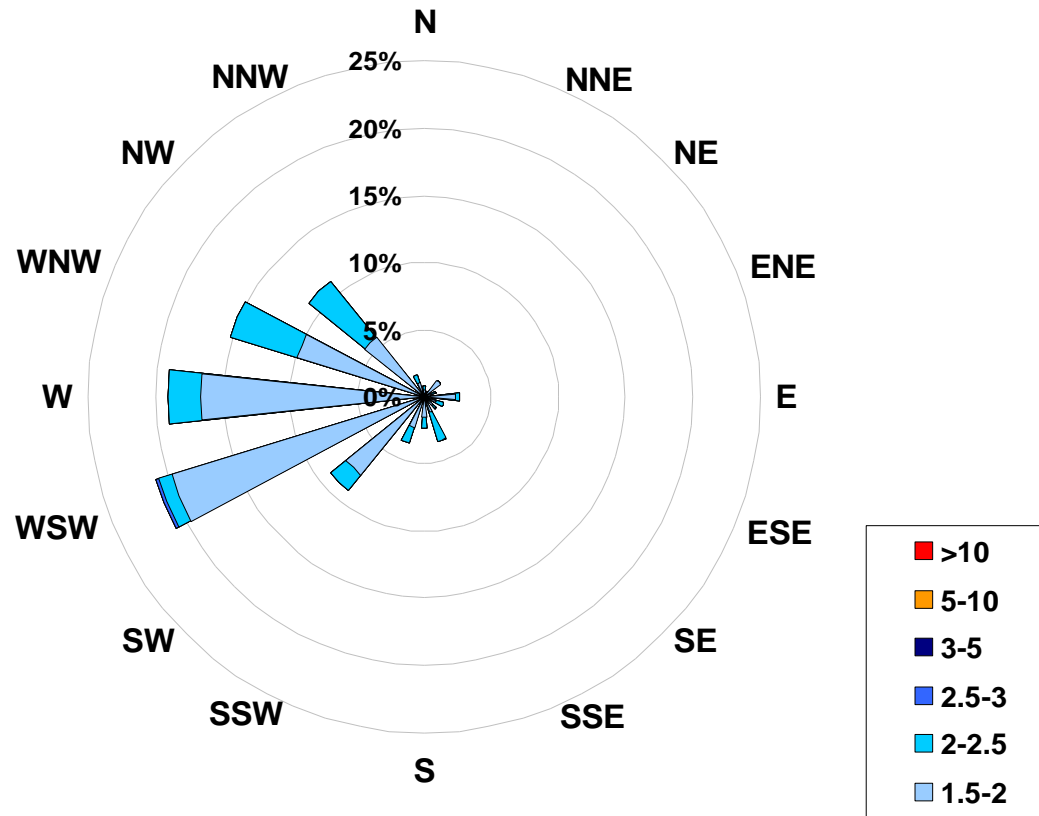


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)  
Located at the Henry Pirker Site for August 2006**



**Calms: 0%**

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	< 2		541
2	to 2.5		167
2.5	to 3		2
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

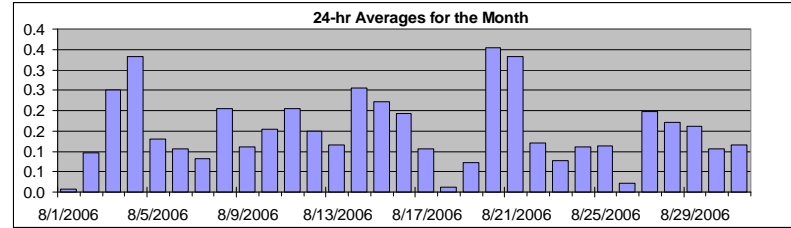
### HOURLY AVERAGE TABLE

### Total Reduced Sulphur (TRS)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Summary			
Maximum 1-hr Average:	0.9 ppb	21-Aug	8:00 9:00
Maximum 24-hr Value:	0.4 ppb	20-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
	0.6	0.4	0.2	0.1	0.1	0.0	0.0	0.2 ppb	0.1 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			24:00	
1-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.1
2-Aug-06	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	0.1	0.3
3-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4
4-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
5-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
6-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
7-Aug-06	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	0.1	0.2
8-Aug-06	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
9-Aug-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
10-Aug-06	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	0.3
11-Aug-06	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	0.2	0.5
12-Aug-06	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	0.2	0.4
13-Aug-06	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	0.2
14-Aug-06	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
15-Aug-06	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	0.2	0.4
16-Aug-06	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	0.4
17-Aug-06	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	0.3
18-Aug-06	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
19-Aug-06	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
20-Aug-06	A	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.7
21-Aug-06	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.9
22-Aug-06	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	0.1	0.3
23-Aug-06	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	0.1	0.2
24-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
25-Aug-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
26-Aug-06	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
27-Aug-06	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	0	0.2	0.6
28-Aug-06	0	0	A	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
29-Aug-06	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	0.2	0.5
30-Aug-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
31-Aug-06	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
Hourly Avg	0.2	0.2	0.2	0.2	0.2	0.2	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
Hourly Max	0.4	0.5	0.5	0.5	0.6	0.5	0.7	0.6	0.9	0.8	0.5	0.4	0.4	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4			

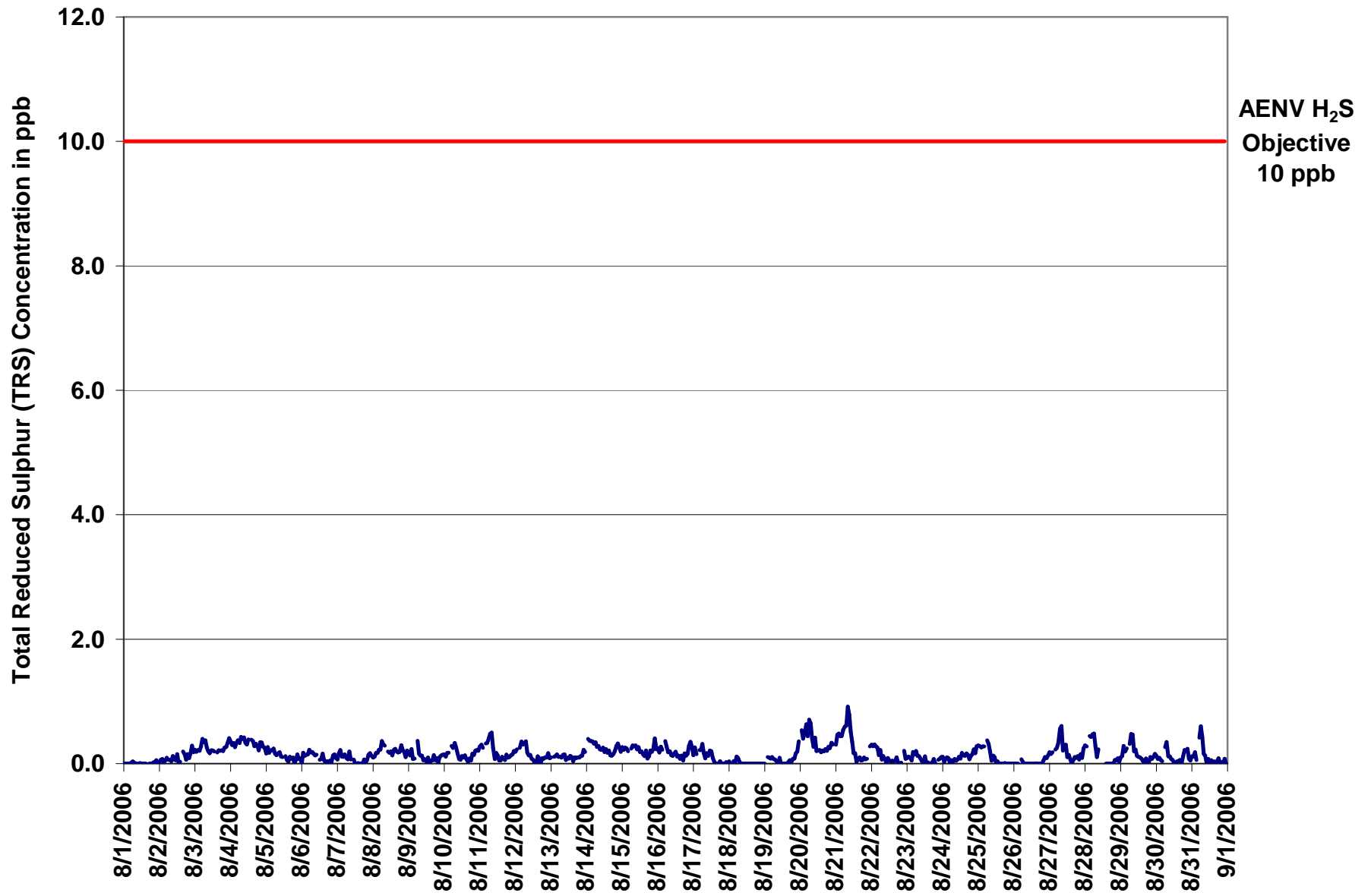


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

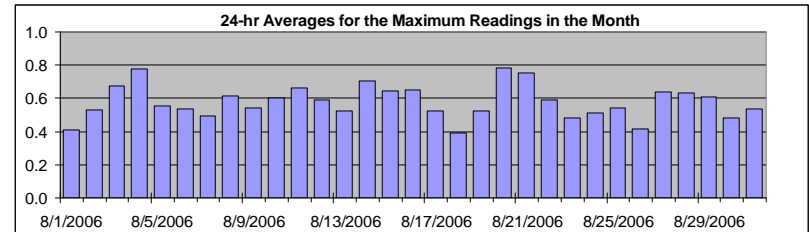
**Total Reduced Sulphur (TRS)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	1.3	ppb	28-Aug	3:00 4:00
Maximum 24-hr Value:	0.8	ppb	20-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
	1.1	0.9	0.7	0.6	0.5	0.3	0.3	0.6 ppb	0.6 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	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-06	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	A	0	0	0	0	0	1	0	0.4	0.6	
2-Aug-06	0	1	0	0	0	1	0	0	0	1	1	1	1	0	0	A	1	1	0	1	1	1	1	1	0.5	0.7	
3-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.8	
4-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
5-Aug-06	1	1	1	1	1	1	1	1	1	1	0	0	A	1	0	0	1	1	0	1	1	0	1	0	0.6	0.8	
6-Aug-06	0	1	1	1	1	1	1	1	1	1	0	A	0	1	1	0	1	0	0	0	0	1	1	1	0.5	0.8	
7-Aug-06	1	1	1	0	1	1	1	0	1	0	A	0	0	0	1	0	0	0	0	0	1	1	0	1	0.5	0.8	
8-Aug-06	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9	
9-Aug-06	1	1	1	1	0	A	1	1	1	0	0	1	0	1	0	0	0	1	1	0	0	1	1	1	0.5	0.8	
10-Aug-06	1	0	0	1	A	1	1	1	1	0	1	0	1	0	1	1	0	1	0	1	1	1	1	1	0.6	1.1	
11-Aug-06	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.0	
12-Aug-06	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	1	1	1	0	1	1	0.6	0.9	
13-Aug-06	0	A	0	0	1	1	0	0	1	1	0	0	0	0	0	0	1	1	1	0	1	1	1	1	0.5	0.8	
14-Aug-06	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	0.9	
15-Aug-06	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	0.6	1.0	
16-Aug-06	1	1	1	1	A	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0.7	1.0	
17-Aug-06	1	1	1	A	1	1	1	1	0	1	1	1	1	1	0	0	0	0	1	0	1	0	0	0	0.5	0.8	
18-Aug-06	0	0	A	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
19-Aug-06	0	A	1	1	1	1	1	0	1	0	1	0	0	1	0	0	0	0	1	0	0	1	1	1	0.5	1.0	
20-Aug-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.1	
21-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	A	1	0.8	1.3	
22-Aug-06	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	1	A	1	0	0.6	0.9	
23-Aug-06	1	1	0	1	1	1	1	0	1	0	0	1	0	0	0	0	0	0	1	0	A	1	0	0	0.5	0.7	
24-Aug-06	1	0	0	1	1	0	0	0	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	0.5	0.8	
25-Aug-06	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0.5	0.9	
26-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0.4	0.6	
27-Aug-06	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	0.6	1.1	
28-Aug-06	1	1	A	1	1	1	1	1	1	1	C	C	C	A	0	0	0	0	0	0	0	0	1	0	0	0.6	1.3
29-Aug-06	1	1	1	0	1	A	1	1	1	1	1	0	0	1	1	0	0	1	1	1	0	1	1	1	0.6	1.0	
30-Aug-06	0	0	0	0	0	A	1	1	0	1	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0.5	0.9	
31-Aug-06	0	0	1	0	A	1	1	1	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0.5	1.2	
Hourly Avg	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6		
Hourly Max	0.9	1.0	1.0	1.3	1.1	1.1	1.2	1.2	1.3	1.2	1.2	0.9	0.8	0.8	0.9	0.8	0.8	0.9	0.9	0.8	0.8	0.9	1.0	1.0			

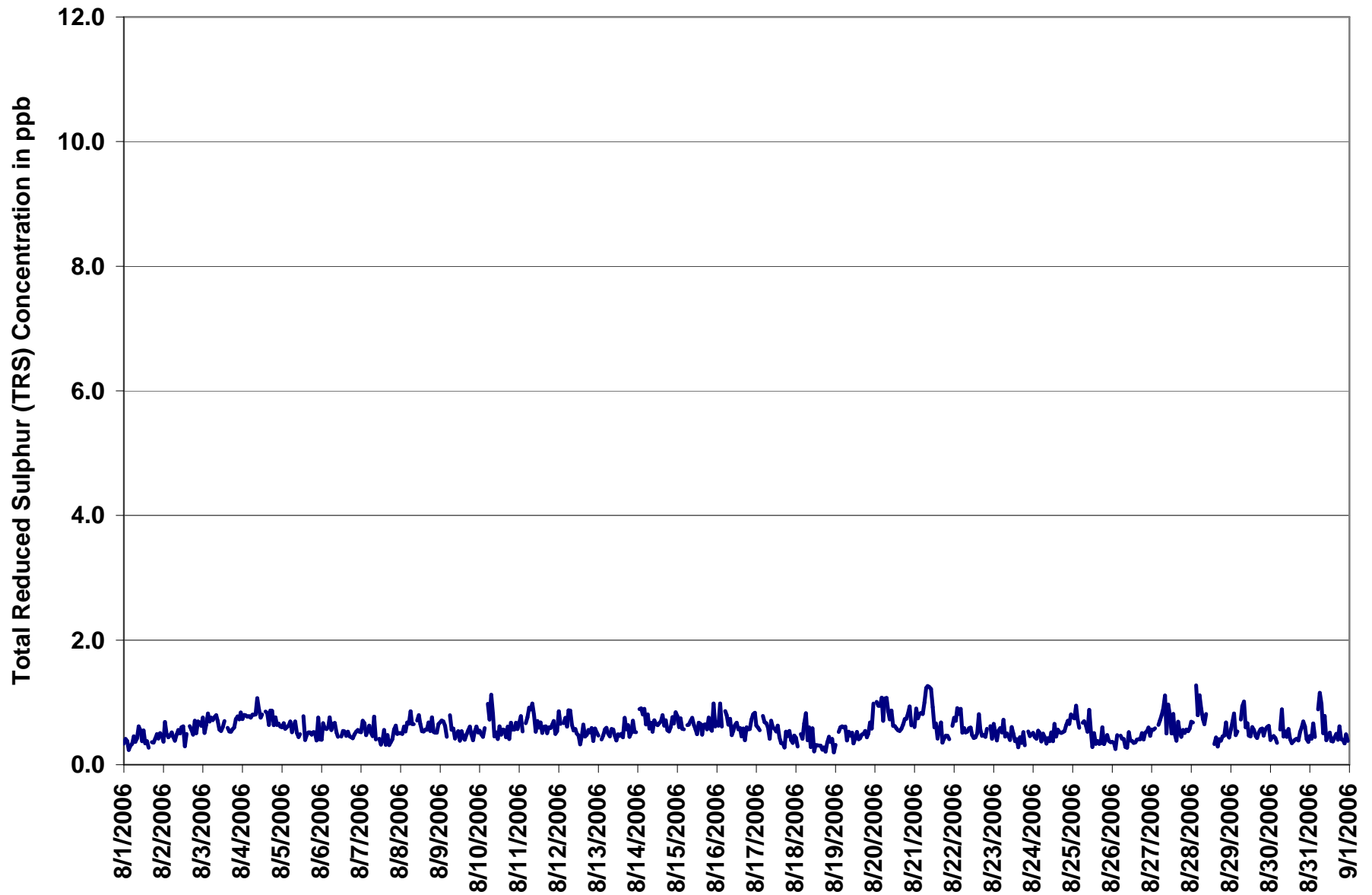
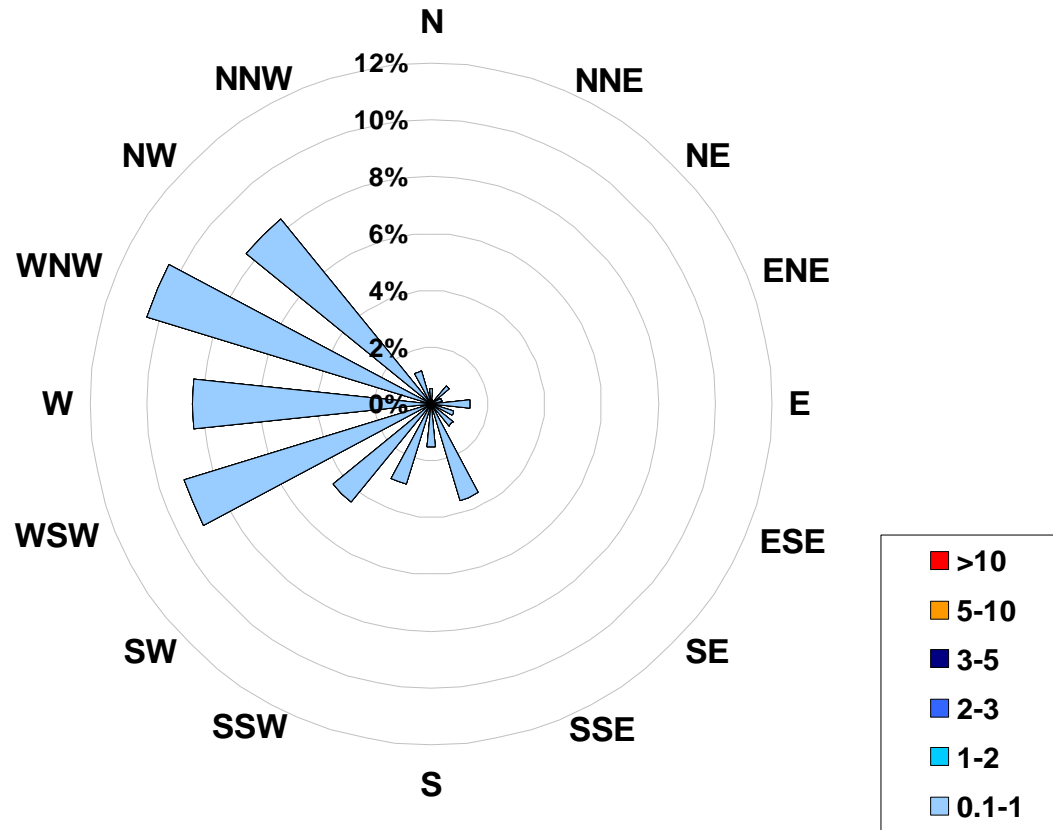


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)  
Located at the Henry Pirker Site for August 2006**



**Calms: 0%**

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

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

Station: Henry Pirker  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

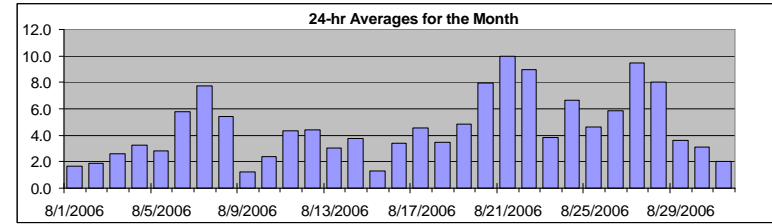
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: August 1, 2006 to September 1, 2006

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:	36.1 $\mu\text{g}/\text{m}^3$ 22-Aug 21:00 22:00
Maximum 24-hr Value:	10.0 $\mu\text{g}/\text{m}^3$ 21-Aug

AIC Time:	0 hrs	Operational Time:	741 hrs
Calibration Time:	1 hrs	AMD Operational Uptime:	99.7%
Percentile	99	95	75
	13.6	6.1	3.1
	1.5	0.0	0.0
Average / Median	4.6		3 $\mu\text{g}/\text{m}^3$
Geomean	4.0		$\mu\text{g}/\text{m}^3$



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start	Hour End	0:00	1:00	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-06	1	1	0	1	1	1	2	2	1	2	0	1	1	1	1	1	1	1	0	1	2	3	4	4	3	4	1.6	4.3
2-Aug-06	2	2	2	2	1	2	4	2	0	1	1	1	2	1	2	1	2	1	2	2	5	0	3	4	2	2	1.9	4.6
3-Aug-06	2	1	0	1	1	2	6	5	4	1	0	0	0	0	0	0	0	0	1	3	2	5	4	7	9	8	2.6	8.6
4-Aug-06	4	3	2	2	2	3	5	6	2	1	0	1	1	1	1	2	3	3	1	2	2	2	9	10	8	5	3.2	9.6
5-Aug-06	4	3	1	2	2	4	4	4	4	4	4	4	3	2	3	3	2	3	2	1	1	2	3	4	3	2.8	4.5	
6-Aug-06	3	2	3	3	4	4	4	4	4	6	2	0	2	3	4	2	2	3	4	9	10	23	19	19	19	5.8	22.8	
7-Aug-06	18	17	11	7	5	4	7	10	8	9	5	4	5	6	5	4	7	6	6	6	5	8	9	12	9	7.7	18.1	
8-Aug-06	7	6	5	10	4	8	6	7	6	8	5	2	4	7	11	10	3	2	6	8	0	2	2	1	5.4	11.3		
9-Aug-06	2	0	1	1	0	2	5	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1	3	2	3	2	1.2	5.2
10-Aug-06	2	3	2	2	2	3	5	6	4	3	1	0	0	0	0	0	0	0	0	1	4	5	5	4	3	2.4	6.0	
11-Aug-06	6	4	2	1	4	3	7	10	8	3	2	2	1	3	0	5	5	0	7	3	5	10	5	9	4.4	9.8		
12-Aug-06	8	6	5	3	4	3	9	7	5	6	2	1	0	1	2	2	5	4	5	5	7	7	5	5	4.4	9.3		
13-Aug-06	5	3	3	2	2	3	4	3	1	0	0	0	0	1	1	1	2	3	3	3	4	9	12	9	3.0	11.7		
14-Aug-06	11	13	10	9	6	4	4	4	3	2	1	0	0	0	0	0	0	0	1	4	5	5	4	3	2.4	6.0		
15-Aug-06	1	3	1	0	0	0	1	2	3	0	0	1	0	0	0	0	0	1	1	2	4	5	2	2	2	1.3	4.9	
16-Aug-06	0	0	0	0	0	2	7	2	3	3	2	3	0	1	0	0	0	0	1	3	10	11	22	5	6	3.4	21.8	
17-Aug-06	4	4	3	3	4	5	9	7	6	6	8	4	3	0	1	0	1	2	2	4	8	11	11	5	4.6	10.9		
18-Aug-06	4	2	3	4	3	5	7	8	6	0	1	3	0	3	0	3	3	2	3	3	5	8	8	2	3.5	8.4		
19-Aug-06	3	5	5	5	5	6	9	9	5	4	2	0	0	0	0	0	0	1	0	1	3	6	10	12	26	4.9	25.6	
20-Aug-06	19	24	17	16	13	7	10	12	14	7	7	0	0	1	2	3	3	1	3	7	9	9	5	1	8.0	24.4		
21-Aug-06	1	1	1	2	2	5	15	20	12	11	12	12	9	9	2	5	10	6	6	11	19	13	28	27	10.0	28.2		
22-Aug-06	14	14	11	9	8	11	13	14	11	8	1	1	0	0	3	3	3	1	1	9	21	36	16	7	9.0	36.1		
23-Aug-06	7	4	4	6	3	4	3	2	9	2	2	2	1	1	0	2	5	3	7	2	7	6	5	4	3.8	8.9		
24-Aug-06	4	3	2	2	4	3	7	11	6	4	0	2	3	5	10	6	5	3	5	8	15	19	17	13	6.6	19.4		
25-Aug-06	11	10	10	5	6	8	12	9	6	4	3	1	0	0	0	0	0	2	4	4	4	5	4	4	4.6	11.7		
26-Aug-06	3	3	3	4	4	5	8	7	4	2	3	1	1	0	0	1	1	2	3	7	21	16	18	22	5.9	22.0		
27-Aug-06	20	24	18	12	10	12	14	17	12	10	8	8	2	1	2	2	3	3	3	5	7	4	9	22	9.4	24.1		
28-Aug-06	14	10	9	1	7	11	12	17	9	14	8	9	C	2	5	4	4	4	4	10	13	9	6	3	8.1	17.3		
29-Aug-06	4	3	5	3	1	3	4	5	3	2	1	0	0	0	0	0	2	18	9	7	3	5	6	3	3.6	17.8		
30-Aug-06	4	2	2	2	2	4	7	8	6	3	1	2	2	1	2	6	6	1	4	3	2	2	1	1	3.1	8.1		
31-Aug-06	2	2	2	2	3	4	7	4	2	2	1	0	0	1	1	1	2	1	2	3	3	2	1	2	2.0	6.6		
Hourly Avg	6.1	5.7	4.6	3.9	3.6	4.5	7.0	7.3	5.4	4.0	2.7	2.0	1.4	1.6	2.0	2.2	2.9	2.7	3.6	4.9	7.2	8.9	7.7	7.5				
Hourly Max	19.5	24.4	18.4	16.4	12.9	12.0	15.3	19.7	13.6	13.6	11.8	11.8	8.9	8.5	11.3	9.9	10.1	17.8	8.9	10.7	21.2	36.1	28.2	26.6				

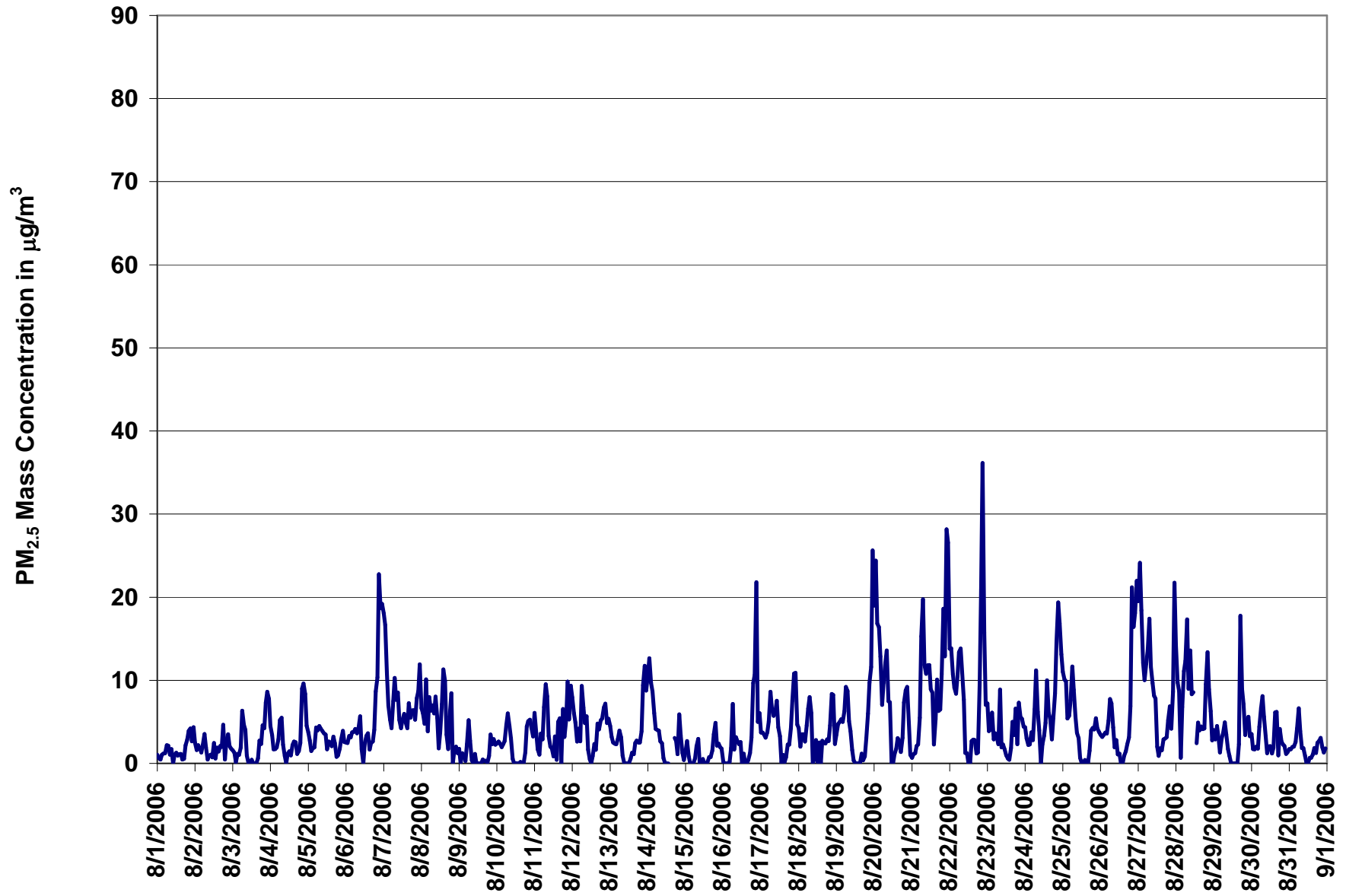


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

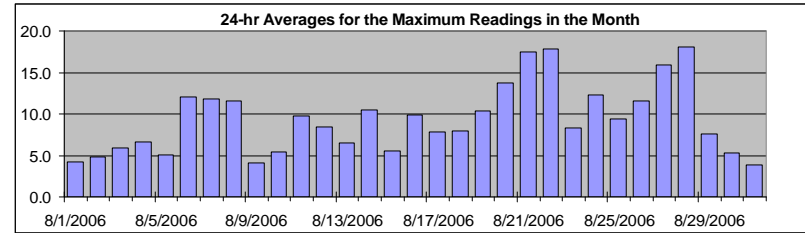
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Average:	65.6	µg/m <sup>3</sup>	22-Aug	21:00 22:00
Maximum 24-hr Value:	18.0	µg/m <sup>3</sup>	28-Aug	



AIC Time:	0 hrs	Operational Time:	741 hrs							
Calibration Time:	1 hrs	AMD Operational Uptime:	99.7%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	43.6	24.5	11.1	6.7	4.6	2.6	1.6	9.3	7 µg/m <sup>3</sup>	8.5 µg/m <sup>3</sup>

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Aug-06	2	3	2	2	3	3	3	4	3	4	4	4	5	4	4	4	4	5	5	5	6	8	7	8	4.2	7.9	
2-Aug-06	5	3	4	3	3	4	6	6	3	3	2	3	7	3	5	4	4	5	16	5	6	9	6	5	4.9	15.6	
3-Aug-06	4	5	2	3	3	5	9	8	9	4	4	2	3	4	3	4	4	8	5	8	7	14	13	12	5.9	14.4	
4-Aug-06	8	8	6	6	4	5	8	7	7	5	3	6	6	5	4	5	6	4	4	6	13	13	14	7	6.6	14.0	
5-Aug-06	5	4	3	5	3	6	6	6	6	7	5	6	3	5	6	4	7	5	4	4	4	4	7	4	5.1	7.4	
6-Aug-06	5	5	6	5	6	5	6	5	6	9	7	6	7	7	10	4	6	6	7	16	17	49	49	39	12.0	49.3	
7-Aug-06	25	21	15	11	10	8	11	17	13	12	12	7	9	8	8	8	11	7	8	11	8	11	15	17	11.8	25.4	
8-Aug-06	9	8	7	14	15	13	13	10	9	14	12	8	7	13	27	17	16	8	21	12	5	9	4	4	11.5	27.2	
9-Aug-06	3	3	3	4	3	7	7	6	5	4	7	2	2	4	2	5	3	3	3	6	5	5	4	4	4.1	7.2	
10-Aug-06	5	5	5	5	5	6	9	8	7	6	4	4	4	3	4	4	2	4	7	7	8	6	5	5	5.4	8.5	
11-Aug-06	13	6	3	2	6	5	10	13	12	7	17	12	5	7	3	17	16	4	20	5	10	15	14	12	9.8	20.2	
12-Aug-06	17	10	8	5	6	5	19	19	7	9	7	4	5	6	8	5	8	9	8	7	9	8	7	7	8.4	18.8	
13-Aug-06	7	5	5	4	4	5	5	5	4	3	2	2	4	5	6	4	5	5	6	5	7	15	24	20	6.5	23.5	
14-Aug-06	22	21	20	16	14	8	7	7	7	9	5	6	5	5	D	8	D	13	12	13	12	8	7	8	10.5	21.7	
15-Aug-06	6	6	3	1	1	2	2	4	8	5	9	10	3	3	4	6	9	8	9	12	9	5	5	5	5.6	11.8	
16-Aug-06	2	2	2	2	2	4	13	7	7	7	7	8	4	9	4	3	6	6	7	41	22	39	15	18	9.9	41.5	
17-Aug-06	7	7	5	5	5	8	13	9	8	8	11	10	8	3	5	5	5	6	6	7	10	15	15	8	7.8	14.8	
18-Aug-06	6	4	7	8	6	8	10	10	11	5	4	9	8	9	5	11	6	8	6	5	7	13	17	8	8.0	17.2	
19-Aug-06	17	18	15	12	15	10	16	12	9	7	4	3	5	4	3	3	5	7	5	7	9	13	21	31	10.4	31.2	
20-Aug-06	31	33	21	24	23	10	17	16	22	16	11	5	6	4	6	10	7	5	16	13	10	13	9	3	13.7	32.6	
21-Aug-06	2	12	5	6	5	15	22	24	18	13	15	15	17	14	7	10	18	13	10	19	47	33	40	41	17.5	47.0	
22-Aug-06	25	23	22	19	23	15	16	18	16	14	5	4	5	3	5	7	7	4	6	18	34	66	64	11	17.8	65.6	
23-Aug-06	11	11	9	11	5	5	5	8	15	11	6	7	5	5	7	6	10	9	13	7	12	8	7	6	8.3	14.7	
24-Aug-06	9	9	4	4	7	5	14	15	11	8	5	6	9	8	30	13	7	7	8	16	20	24	26	28	12.3	30.0	
25-Aug-06	23	17	19	11	8	10	16	14	8	9	7	4	6	4	5	3	4	9	7	9	7	11	6	7	9.4	22.5	
26-Aug-06	8	5	5	6	6	7	13	11	7	4	7	5	5	6	4	4	6	8	9	12	30	27	38	43	11.5	42.7	
27-Aug-06	30	32	25	18	15	25	26	26	16	15	14	15	7	5	5	4	6	6	6	8	9	6	27	37	15.9	36.6	
28-Aug-06	44	23	17	9	22	22	18	22	12	19	15	65	C	5	7	6	7	8	7	33	23	16	9	5	18.0	65.1	
29-Aug-06	6	5	7	6	4	6	7	7	5	4	3	0	0	0	0	2	5	53	23	14	5	8	8	5	7.6	53.4	
30-Aug-06	5	3	5	4	4	6	9	11	10	5	3	4	4	3	5	9	11	4	7	5	4	4	2	3	5.4	10.8	
31-Aug-06	3	4	4	3	4	7	9	6	3	4	3	3	2	2	2	3	3	3	4	4	5	4	3	4	3	3.8	9.4
Hourly Avg	11.8	10.3	8.5	7.5	7.7	8.0	11.1	10.9	9.1	8.0	7.1	7.9	5.6	5.3	6.5	6.4	7.1	8.0	8.9	11.0	12.2	15.5	15.8	13.4			
Hourly Max	44.1	32.6	25.4	23.7	23.1	24.6	25.9	26.0	22.2	18.7	16.8	65.1	17.0	14.0	30.0	17.4	17.5	53.4	23.3	41.5	47.0	65.6	63.6	42.7			

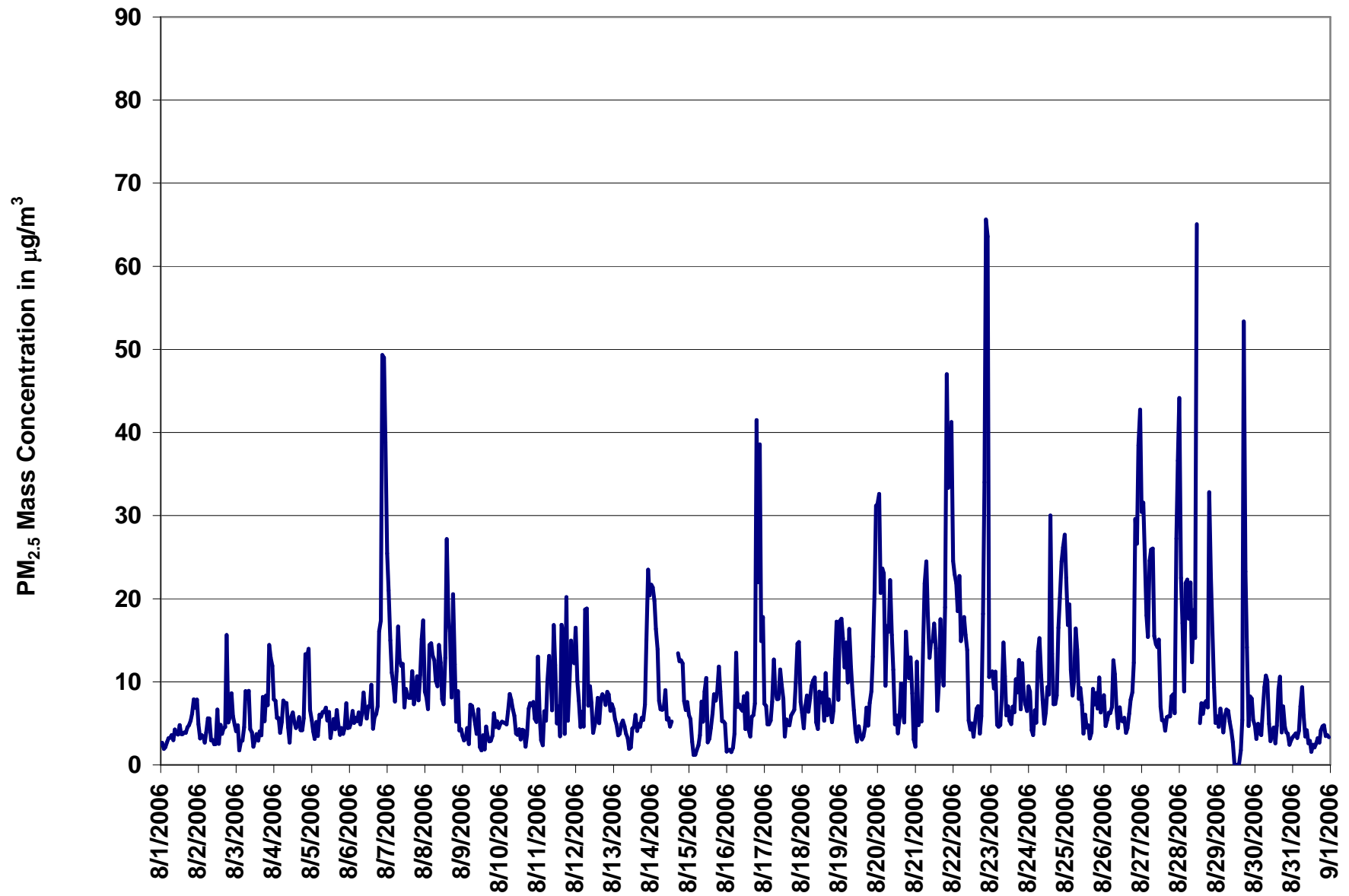
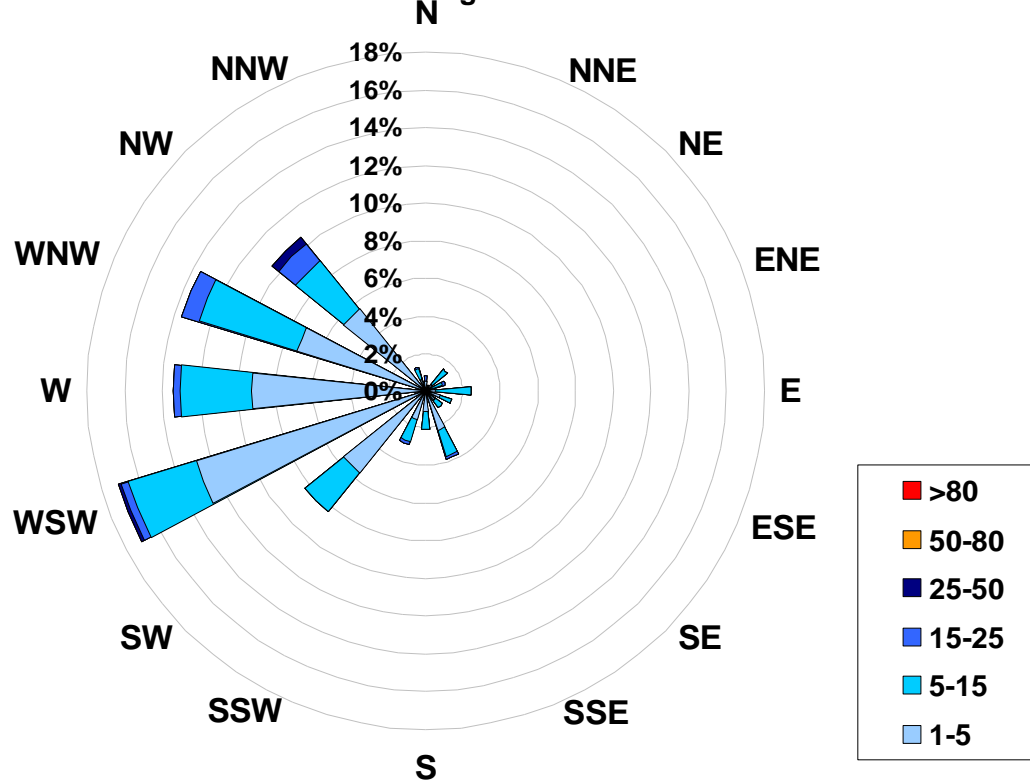


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**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 2006**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	< 5		502
5	to 15		207
15	to 25		28
25	to 50		4
50	to 80		0
	> 80		0
Total Non-Zero Values			741

# PASZA - Henry Pirker - Relative Humidity Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

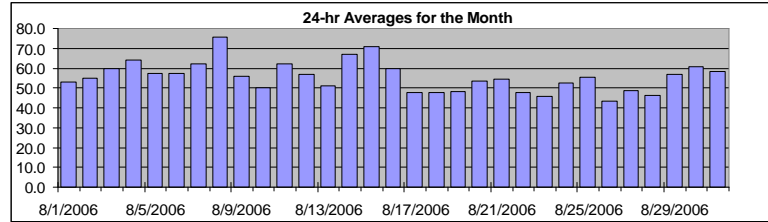
## HOURLY AVERAGE TABLE

## Relative Humidity (RH)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	94.1 %	12-Aug	5:00 6:00
Maximum 24-hr Value:	75.7 %	8-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
	92.4	88.3	72.7	54.2	38.6	27.2	22.6	55.7 %	54.2 %

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	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-06	59	60	61	62	66	72	68	62	56	52	46	42	42	41	40	41	40	38	40	41	47	54	65	73	52.8	73.3	
2-Aug-06	70	73	73	72	75	75	72	62	51	45	40	39	37	34	35	34	35	37	43	50	58	67	73	72	55.1	75.3	
3-Aug-06	75	85	88	92	91	92	89	79	64	53	44	42	40	35	37	31	31	37	39	43	50	59	66	72	59.7	92.2	
4-Aug-06	81	85	83	85	85	87	83	77	73	60	52	50	52	48	50	49	50	46	42	45	54	64	68	71	64.1	87.2	
5-Aug-06	77	80	80	78	76	76	70	64	58	51	47	44	41	40	42	42	41	42	42	45	51	58	63	68	57.3	80.2	
6-Aug-06	70	73	79	82	85	86	85	80	72	61	49	37	33	34	34	31	30	30	31	39	50	64	68	69	57.1	85.7	
7-Aug-06	71	79	84	84	87	86	82	77	62	52	47	43	43	44	45	43	46	49	53	54	57	62	68	78	62.3	87.2	
8-Aug-06	81	83	81	86	82	85	87	83	76	74	67	55	52	51	57	81	76	72	76	83	80	81	82	82	75.7	87.5	
9-Aug-06	82	82	86	89	86	84	78	76	68	55	52	46	37	32	32	32	32	33	33	35	41	47	51	52	55.9	89.0	
10-Aug-06	54	60	64	68	73	76	67	58	55	48	42	39	36	35	34	32	33	32	33	39	47	55	59	63	50.1	75.7	
11-Aug-06	75	79	80	82	84	88	87	80	65	53	42	49	45	38	35	38	47	43	43	59	64	70	73	78	62.4	87.7	
12-Aug-06	86	86	91	93	94	94	92	79	68	54	43	35	30	26	27	27	29	31	35	39	45	52	54	58	57.0	94.1	
13-Aug-06	57	61	68	73	76	78	70	62	54	47	40	37	34	32	31	31	32	35	36	40	48	57	62	65	51.1	78.1	
14-Aug-06	72	72	70	77	85	91	92	92	91	88	84	71	61	54	37	37	33	38	46	52	58	66	70	75	67.2	92.4	
15-Aug-06	76	82	91	92	92	91	90	90	84	70	63	55	50	45	42	41	46	46	56	72	78	81	80	83	70.7	92.3	
16-Aug-06	83	88	90	91	92	94	89	77	71	62	53	47	39	38	34	31	31	30	33	42	47	61	57	58	59.9	93.8	
17-Aug-06	56	60	61	65	66	68	69	63	58	52	45	38	34	31	31	29	28	30	29	34	41	47	53	57	47.7	69.1	
18-Aug-06	62	60	68	71	76	81	74	63	55	41	37	35	35	33	29	27	29	29	32	33	35	44	50	47	47.7	80.8	
19-Aug-06	56	61	70	69	73	77	73	67	53	44	40	37	34	33	29	27	27	27	28	32	40	45	55	64	48.3	77.1	
20-Aug-06	74	82	80	83	87	89	81	73	64	56	50	37	30	28	29	28	28	27	25	35	42	46	54	60	53.6	88.7	
21-Aug-06	66	78	80	85	86	88	86	75	64	54	49	44	39	34	26	23	25	28	28	33	42	47	63	67	54.6	88.4	
22-Aug-06	69	75	78	79	79	75	69	61	52	42	31	27	23	22	23	25	26	27	27	32	43	57	55	51	47.9	79.4	
23-Aug-06	53	54	55	63	68	74	75	63	56	44	36	33	30	29	27	29	30	31	31	30	38	45	50	54	45.8	75.0	
24-Aug-06	59	59	57	60	64	63	63	56	51	44	38	38	39	41	42	40	43	43	46	52	59	64	69	71	52.5	71.5	
25-Aug-06	76	84	84	88	90	93	93	81	69	54	46	40	34	30	28	28	27	27	32	37	40	44	49	53	55.4	93.0	
26-Aug-06	55	55	56	54	55	60	61	56	47	44	41	38	36	31	26	25	25	26	27	31	38	43	49	56	43.2	61.4	
27-Aug-06	65	71	73	78	83	88	83	75	62	48	43	36	29	25	23	22	22	24	26	29	34	35	40	58	48.7	87.6	
28-Aug-06	60	65	76	69	68	76	74	68	62	51	44	31	22	18	20	23	27	27	32	35	38	39	42	47	46.5	76.3	
29-Aug-06	59	68	82	90	90	90	90	86	75	65	53	39	35	30	23	22	23	24	30	59	63	66	55	54	57.1	90.1	
30-Aug-06	56	54	54	58	60	66	66	61	57	48	43	41	39	36	35	49	70	80	79	79	83	83	78	82	60.6	83.1	
31-Aug-06	84	83	87	86	87	89	88	78	66	59	53	43	38	37	36	35	36	39	39	43	44	46	52	54	58.4	88.7	
Hourly Avg	68.4	72.2	75.1	77.6	79.4	81.7	79.0	71.6	63.2	53.9	47.1	41.6	37.7	35.0	33.4	33.9	35.4	36.5	38.5	44.3	50.1	56.3	60.4	64.3			
Hourly Max	86.2	87.7	91.4	93.1	93.9	94.1	92.9	91.8	90.8	88.5	83.5	71.1	60.6	54.2	56.7	80.8	75.9	80.2	78.7	83.4	83.1	82.7	81.6	82.6			

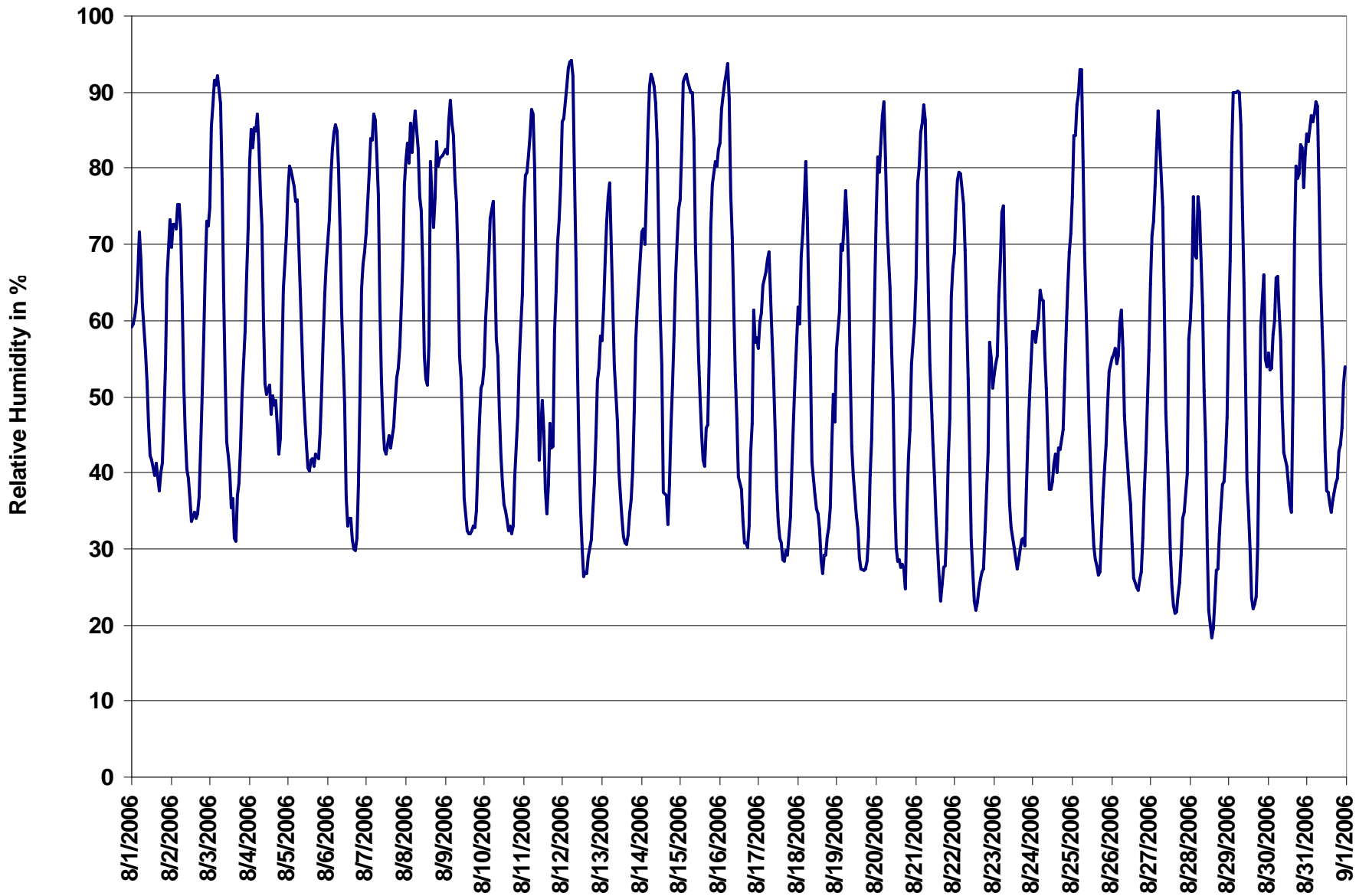


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend



# PASZA - Henry Pirker - Temperature Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

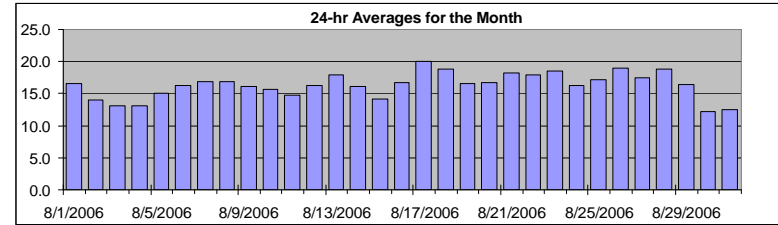
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	28.7	°C	21-Aug	15:00 16:00
Maximum 24-hr Value:	20.0	°C	17-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
	27.6	25.3	20.6	16.4	12.1	7.2	5.6	16.3 °C	16.4 °C

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	23:00
1-Aug-06	15	15	15	14	13	11	12	15	17	18	19	20	20	20	20	20	20	20	20	20	19	17	15	13	11	16.5	20.2
2-Aug-06	11	10	10	10	9	9	10	13	15	16	17	18	19	19	19	19	19	19	18	17	15	13	11	10	10	14.0	19.4
3-Aug-06	9	7	6	5	5	5	6	10	13	16	17	17	18	20	18	20	20	19	18	17	15	13	11	10	13.1	20.5	
4-Aug-06	8	7	7	6	6	6	8	11	12	15	17	17	16	18	17	17	17	18	19	18	16	13	12	12	12	13.1	19.2
5-Aug-06	10	9	9	9	8	8	10	13	15	17	18	20	20	20	19	19	20	20	20	19	17	15	14	12	12	15.0	20.3
6-Aug-06	12	11	9	8	8	7	8	10	12	16	20	22	23	24	24	24	24	24	24	23	20	18	16	15	14	16.3	24.5
7-Aug-06	12	11	9	9	8	7	8	11	16	19	20	22	23	24	24	24	24	24	23	22	21	20	19	17	15	16.9	24.0
8-Aug-06	14	13	14	14	15	14	15	16	17	18	19	21	21	21	21	17	18	19	18	17	17	16	15	15	15	16.9	21.5
9-Aug-06	14	14	13	11	11	11	12	13	15	17	18	19	19	21	21	21	21	20	20	19	18	16	14	13	13	16.1	21.1
10-Aug-06	12	10	9	8	7	6	9	13	14	17	19	20	21	22	22	22	22	22	22	21	20	18	16	14	14	15.7	22.3
11-Aug-06	11	9	9	8	8	7	8	11	15	19	22	19	19	23	23	22	19	19	19	16	14	13	11	10	10	14.7	23.3
12-Aug-06	9	8	7	7	7	6	8	12	14	19	21	22	22	23	24	24	24	24	23	22	21	19	17	17	16	16.2	24.1
13-Aug-06	16	15	13	12	11	10	12	15	17	19	21	22	23	23	24	24	24	24	24	23	21	18	16	14	13	17.9	24.3
14-Aug-06	13	14	14	13	13	12	12	12	13	14	15	17	20	20	23	22	22	22	21	20	17	16	16	14	12	16.0	22.8
15-Aug-06	12	12	10	10	9	9	10	10	12	15	16	18	19	19	20	21	19	19	17	14	13	12	12	12	12	14.1	20.9
16-Aug-06	12	10	9	8	8	7	9	12	14	16	19	21	23	23	24	24	24	24	24	23	20	19	18	17	17	16.7	24.4
17-Aug-06	17	15	15	13	13	12	12	14	16	18	21	23	26	26	27	28	28	27	27	25	22	20	19	18	18	20.0	27.8
18-Aug-06	16	16	14	13	12	11	13	16	19	22	23	23	24	24	24	24	25	23	22	21	19	17	15	16	16	18.8	24.6
19-Aug-06	13	12	11	10	9	8	9	11	16	19	21	22	22	23	24	24	24	24	23	22	21	18	16	13	11	16.6	24.0
20-Aug-06	9	8	6	6	6	6	7	11	14	16	19	22	24	25	26	26	26	26	25	26	23	21	19	17	15	16.7	26.1
21-Aug-06	14	11	9	8	7	6	8	12	16	19	21	23	25	26	28	29	28	27	27	25	22	20	16	14	14	18.3	28.7
22-Aug-06	13	12	11	10	9	10	11	14	17	20	22	24	26	26	25	26	26	25	23	20	16	14	14	15	15	17.9	25.9
23-Aug-06	15	16	15	14	14	13	13	14	15	19	21	23	24	25	25	24	23	23	23	22	19	17	15	14	14	18.5	25.3
24-Aug-06	12	13	13	12	11	12	12	15	17	19	21	21	21	20	20	21	21	20	19	17	15	14	13	13	13	16.3	21.3
25-Aug-06	11	10	9	8	7	7	7	11	14	17	20	22	24	25	26	26	26	25	24	22	21	19	17	16	16	17.1	26.2
26-Aug-06	15	15	14	15	15	14	14	16	19	20	21	22	23	24	25	25	25	25	24	22	18	17	15	13	13	19.0	25.3
27-Aug-06	12	9	8	8	7	6	7	10	14	18	20	22	24	25	27	28	27	26	25	24	22	20	18	14	14	17.5	27.7
28-Aug-06	14	12	12	11	10	9	10	12	14	18	21	24	27	28	29	27	26	25	23	22	21	20	19	18	18	18.9	28.7
29-Aug-06	16	15	13	12	12	12	12	13	15	16	18	20	20	20	22	22	21	20	19	17	16	15	14	13	13	16.4	22.5
30-Aug-06	12	13	12	11	10	8	7	10	12	15	17	18	18	19	18	16	12	10	10	10	9	9	8	8	8	12.2	18.8
31-Aug-06	7	7	5	5	5	5	6	9	12	13	15	18	17	18	18	19	18	17	17	15	15	13	12	12	12	12.5	18.9
Hourly Avg	12.5	11.5	10.7	10.0	9.4	8.8	9.8	12.3	14.8	17.3	19.3	20.7	21.6	22.4	22.8	22.8	22.3	21.7	21.0	19.3	17.4	15.8	14.4	13.3	13.3		
Hourly Max	16.6	16.3	15.3	15.5	15.2	14.5	14.6	16.3	18.9	21.7	22.8	24.3	26.6	28.0	28.7	28.7	27.8	27.3	27.0	25.0	22.3	20.3	19.3	18.3	18.3		

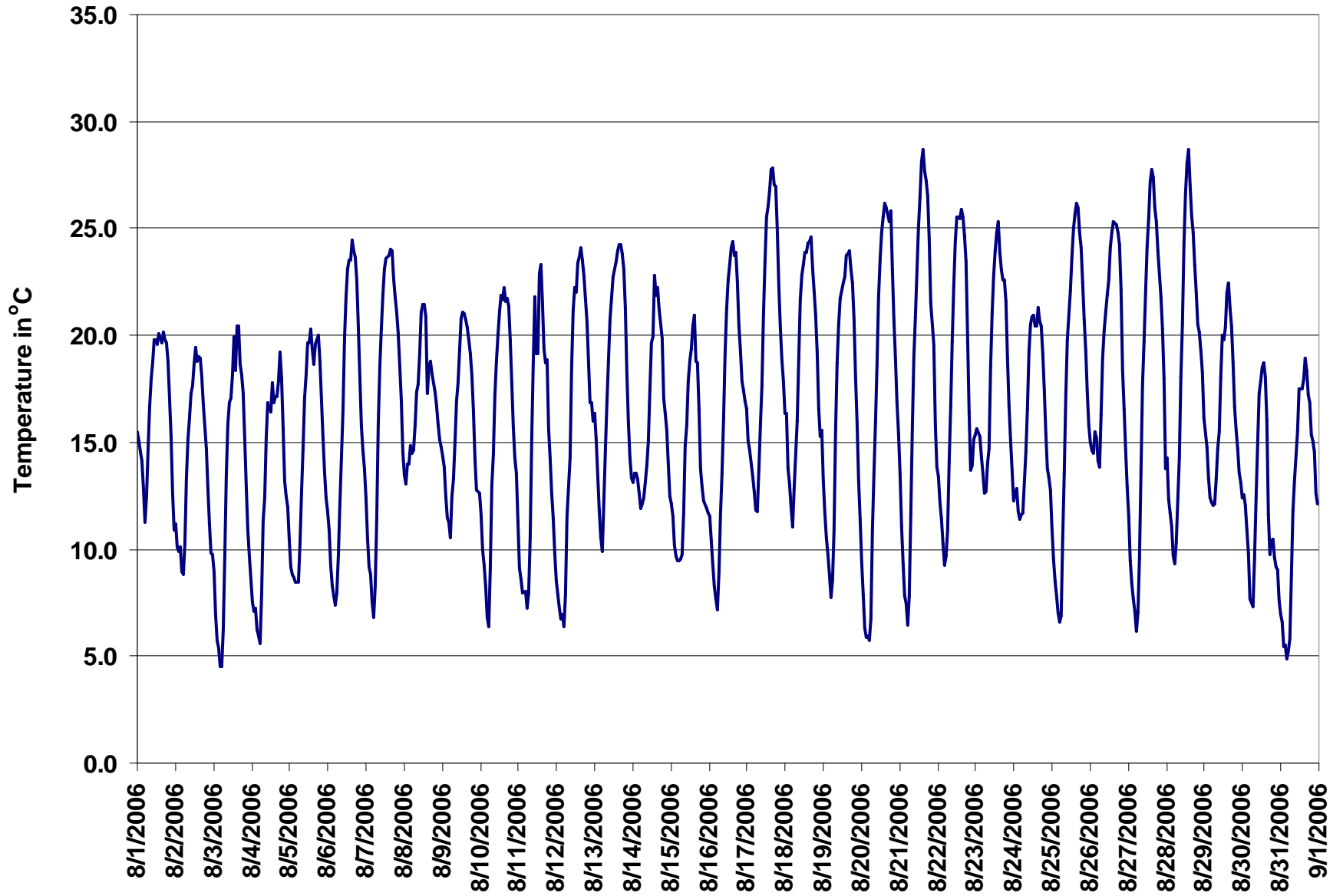


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

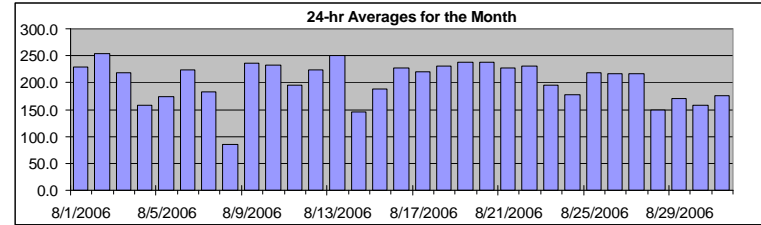
# PASZA - Henry Pirker - Solar Radiation Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Solar Radiation (SR)

Monitoring Dates: August 1, 2006 to September 1, 2006



### Summary

Maximum 1-hr Average:	726.5	W/m²	2-Aug	12:00 13:00
Maximum 24-hr Value:	254.7	W/m²	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
	691.5	638.5	416.3	89.8	0.0	0.0	0.0	202.9 W/m²	89.8 W/m²

### Status Flag Characters

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

### Day Mountain Standard Time

Day	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-06	0	0	0	0	0	10	125	231	411	441	568	629	572	438	575	386	481	294	223	106	14	0	0	0	229.4	629.1
2-Aug-06	0	0	0	0	0	11	122	225	390	518	622	629	726	712	615	575	419	250	155	119	22	0	0	0	254.7	726.5
3-Aug-06	0	0	0	0	0	10	134	224	391	524	563	408	507	650	331	629	448	187	136	73	17	0	0	0	218.1	649.5
4-Aug-06	0	0	0	0	0	24	140	198	234	474	432	328	367	497	215	172	155	190	270	90	14	0	0	0	158.4	497.1
5-Aug-06	0	0	0	0	0	12	109	214	369	475	427	493	450	441	229	136	249	208	234	101	17	0	0	0	173.6	493.4
6-Aug-06	0	0	0	0	0	16	78	120	264	464	564	635	678	540	499	577	402	299	183	53	12	0	0	0	224.3	677.7
7-Aug-06	0	0	0	0	0	15	76	144	337	471	496	615	629	466	346	282	236	126	112	35	12	0	0	0	183.3	629.3
8-Aug-06	0	0	0	0	0	7	48	99	191	163	285	331	224	194	117	120	95	109	46	16	1	0	0	0	85.3	331.0
9-Aug-06	0	0	0	0	0	10	71	101	237	405	440	612	716	695	643	590	484	357	221	77	10	0	0	0	236.2	715.6
10-Aug-06	0	0	0	0	0	2	106	205	368	484	597	656	700	639	444	489	325	297	192	78	11	0	0	0	233.0	699.7
11-Aug-06	0	0	0	0	0	7	39	119	304	503	591	308	279	719	635	357	390	238	143	34	9	0	0	0	194.8	718.6
12-Aug-06	0	0	0	0	0	7	111	196	354	485	588	661	403	573	487	577	420	280	152	66	6	0	0	0	223.6	661.0
13-Aug-06	0	0	0	0	0	6	98	197	362	475	584	654	688	695	647	569	459	324	207	59	4	0	0	0	251.2	694.6
14-Aug-06	0	0	0	0	0	0	7	17	84	102	284	571	599	321	646	304	271	182	99	23	3	0	0	0	146.4	645.9
15-Aug-06	0	0	0	0	0	2	19	68	269	404	425	684	598	505	553	540	219	174	48	10	3	0	0	0	188.3	684.2
16-Aug-06	0	0	0	0	1	4	97	182	345	470	574	644	689	648	584	506	297	282	108	24	3	0	0	0	227.3	689.2
17-Aug-06	0	0	0	0	0	3	80	146	221	236	552	594	676	641	574	575	453	289	198	49	3	0	0	0	220.4	676.0
18-Aug-06	0	0	0	0	0	5	81	190	340	425	576	613	691	621	616	559	444	221	105	33	4	0	0	0	230.1	690.8
19-Aug-06	0	0	0	0	0	3	53	148	341	464	567	639	654	618	626	562	469	322	185	54	3	0	0	0	237.8	654.1
20-Aug-06	0	0	0	0	0	3	68	181	336	464	567	639	673	668	626	533	433	308	176	51	3	0	0	0	238.7	673.0
21-Aug-06	0	0	0	0	0	3	60	174	327	427	528	627	662	650	624	547	265	323	173	49	1	0	0	0	226.7	661.9
22-Aug-06	0	0	0	0	0	2	55	170	321	447	554	581	633	669	585	567	431	326	169	22	1	1	0	0	230.6	669.0
23-Aug-06	0	0	0	0	0	1	46	94	150	427	546	615	653	692	637	299	203	133	128	41	2	0	0	0	194.5	692.0
24-Aug-06	0	0	0	0	0	3	58	157	237	415	455	557	362	494	398	393	285	268	154	27	1	0	0	0	177.6	557.5
25-Aug-06	0	0	0	0	0	2	56	168	313	439	541	606	640	627	568	515	408	236	113	29	1	0	0	0	219.2	639.6
26-Aug-06	0	0	0	0	0	1	47	166	314	440	539	476	566	651	601	520	404	279	150	39	0	0	0	0	216.4	651.3
27-Aug-06	0	0	0	0	0	2	53	113	308	430	535	613	648	629	594	482	360	225	154	40	0	0	0	0	216.0	647.8
28-Aug-06	0	0	0	0	0	0	21	56	153	298	286	446	597	662	618	273	89	53	16	5	0	0	0	0	149.0	662.2
29-Aug-06	0	0	0	0	0	1	24	100	106	215	493	485	461	463	593	532	312	250	47	11	0	0	0	0	170.5	592.7
30-Aug-06	0	0	0	0	0	1	32	163	304	428	532	590	608	501	384	166	51	14	21	11	0	0	0	0	158.6	607.7
31-Aug-06	0	0	0	0	1	0	32	151	302	428	523	520	461	312	390	426	317	207	108	20	0	0	0	0	174.9	523.1
Hourly Avg	0.0	0.0	0.0	0.0	0.1	5.6	69.2	152.2	289.7	414.2	510.8	563.3	574.5	568.8	516.2	443.7	331.4	233.9	142.8	46.6	5.6	0.1	0.0	0.0		
Hourly Max	0.1	0.1	0.2	0.1	0.6	24.2	139.6	230.9	411.2	524.2	622.4	684.2	726.5	718.6	647.1	629.1	483.8	356.8	270.3	118.8	22.1	0.7	0.1	0.1		

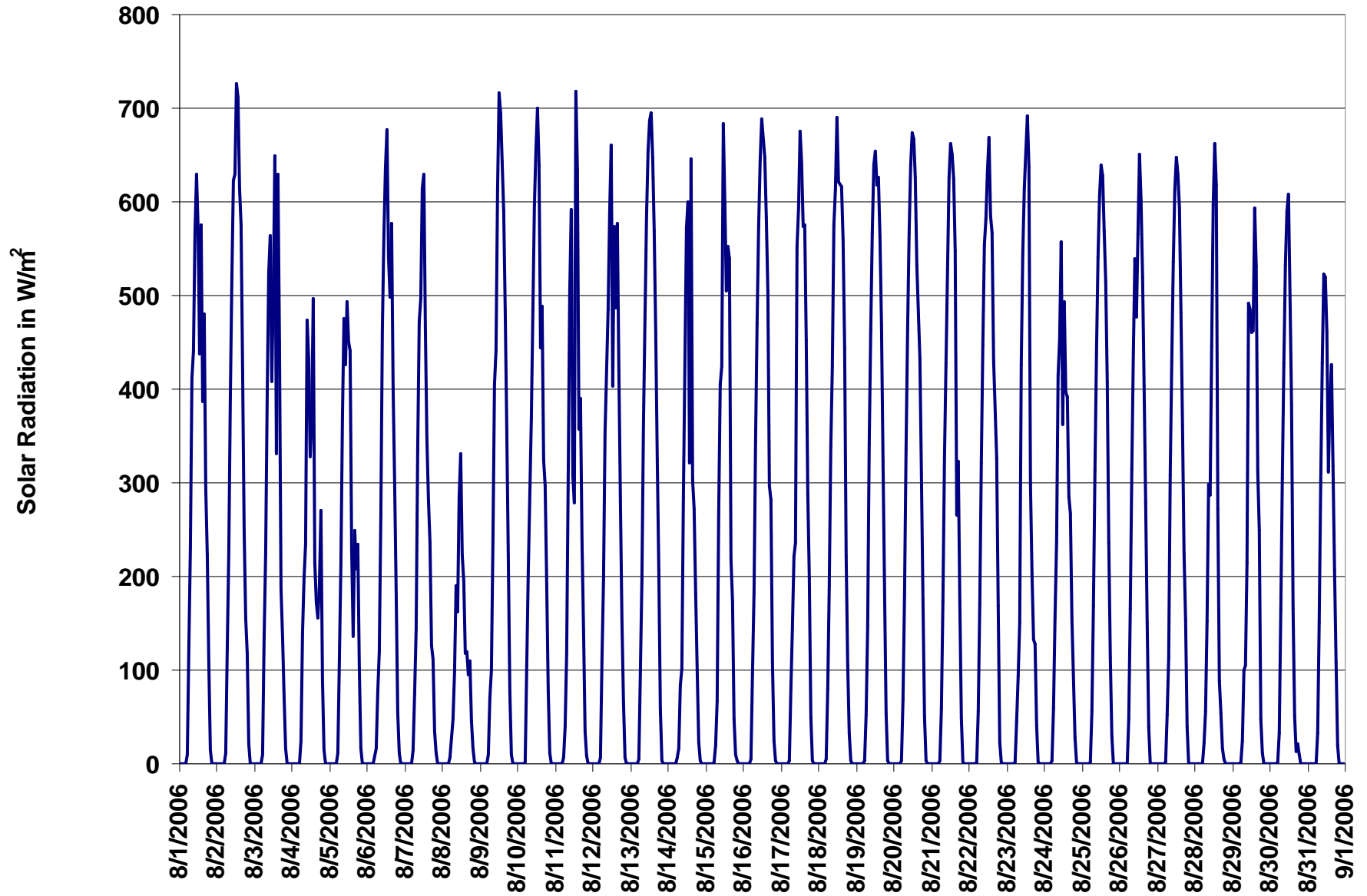


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

# PASZA - Henry Pirker - Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

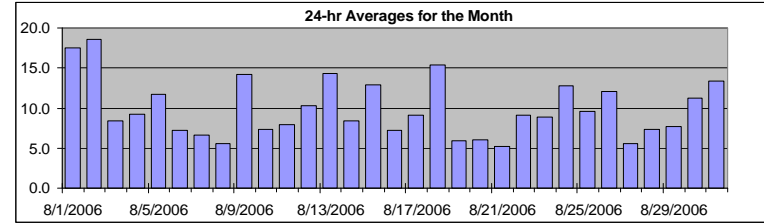
## Wind Speed (WSs)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	30.2	km/hr	2-Aug	14:00 15:00
Maximum 24-hr Value:	18.6	km/hr	2-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	739 hrs				
Calibration Time:	5 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	28.0	22.9	12.8	8.3	5.2	3.2	2.4	9.9 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-06	18	19	17	15	12	9	8	15	21	22	25	26	26	23	23	22	22	20	18	15	15	16	7	4	17.5	26.4	
2-Aug-06	7	7	9	9	9	10	11	17	26	29	29	30	29	27	30	28	26	29	28	20	12	12	6	5	18.6	30.2	
3-Aug-06	6	4	4	4	4	4	5	5	6	10	16	16	13	12	15	13	13	13	11	8	6	6	5	5	8.4	16.2	
4-Aug-06	5	3	4	5	6	9	7	6	12	12	11	13	15	17	15	13	13	13	11	6	3	6	7	9.3	17.2		
5-Aug-06	8	7	6	7	6	6	7	9	13	13	15	14	16	13	16	11	12	17	23	21	16	11	8	8	11.7	22.6	
6-Aug-06	8	6	4	2	3	4	5	6	6	7	8	10	12	11	10	12	10	11	14	10	3	2	3	4	7.2	13.7	
7-Aug-06	4	4	3	3	4	5	4	4	4	7	9	12	14	12	10	7	7	10	11	7	5	4	4	5	6.6	14.1	
8-Aug-06	6	5	3	7	9	6	4	5	6	5	7	5	4	3	9	7	3	2	6	5	8	7	6	6	5.6	9.0	
9-Aug-06	5	6	4	5	6	4	7	9	11	16	17	19	20	22	25	27	27	27	22	11	7	7	8	14.2	27.5		
10-Aug-06	6	5	6	5	5	4	6	5	7	9	11	11	12	11	9	10	8	9	10	9	6	5	5	4	7.3	11.6	
11-Aug-06	4	6	5	6	5	4	3	4	4	6	7	13	10	6	8	16	25	14	13	11	7	4	5	4	7.9	25.0	
12-Aug-06	4	4	4	5	3	4	3	4	7	5	7	12	14	13	15	16	19	19	21	19	16	12	13	9	10.3	21.5	
13-Aug-06	9	11	9	7	5	8	8	12	14	19	20	20	20	25	24	22	21	21	24	20	10	6	4	3	14.3	24.5	
14-Aug-06	2	4	4	5	8	6	4	7	7	7	11	13	13	9	13	11	11	10	10	11	8	7	13	7	8.3	13.4	
15-Aug-06	11	18	14	13	11	14	13	13	12	13	15	15	13	14	14	16	16	18	17	14	10	8	4	6	12.9	17.9	
16-Aug-06	6	5	5	4	4	3	6	7	9	9	8	7	11	12	13	12	11	12	9	4	5	4	3	5	7.2	12.7	
17-Aug-06	5	7	9	10	10	8	7	10	9	8	7	10	10	12	11	11	9	12	12	10	7	8	9	9	9.1	12.4	
18-Aug-06	8	9	4	4	3	5	5	11	14	25	25	24	24	25	25	28	23	23	21	21	17	7	8	8	15.3	27.9	
19-Aug-06	6	3	4	4	4	4	5	7	6	5	7	6	7	8	10	10	9	9	8	8	4	4	3	4	5.9	10.2	
20-Aug-06	4	3	4	2	3	4	3	4	5	6	8	9	10	9	8	7	8	7	5	7	6	7	10	7	6.0	9.8	
21-Aug-06	3	3	4	4	3	5	4	4	4	3	4	5	5	6	7	6	7	10	10	7	4	4	5	5	5.2	10.0	
22-Aug-06	6	6	5	4	3	5	4	6	7	8	12	11	11	17	17	16	17	17	17	9	6	3	3	8	9.1	17.4	
23-Aug-06	10	8	7	6	5	5	4	7	9	11	11	9	10	10	11	11	10	11	7	15	12	9	9	9	8.9	14.7	
24-Aug-06	7	9	6	5	6	8	8	6	13	18	21	21	19	25	22	21	22	23	19	10	6	6	3	2	12.7	25.5	
25-Aug-06	4	4	2	3	3	2	3	5	6	8	11	11	13	13	12	13	17	19	19	17	15	11	10	8	9.5	19.4	
26-Aug-06	7	9	8	10	13	10	8	14	23	23	19	16	15	15	17	16	16	13	12	9	7	5	3	3	12.1	23.0	
27-Aug-06	4	3	4	3	3	4	3	3	3	3	5	7	9	8	6	6	7	10	11	9	8	7	5	4	5.6	10.5	
28-Aug-06	4	6	4	5	2	4	3	7	8	7	6	4	4	5	7	7	12	14	10	9	7	11	16	16	7.3	16.3	
29-Aug-06	12	7	4	6	6	5	6	5	5	9	8	C	C	C	C	C	12	12	11	8	8	6	8	8	7.7	12.4	
30-Aug-06	9	11	13	11	11	9	10	9	11	10	8	12	16	18	18	17	14	13	7	7	5	7	14	10	11.2	18.3	
31-Aug-06	8	9	4	6	4	4	4	6	9	16	13	16	18	19	21	21	25	20	24	20	19	16	10	11	13.4	25.2	
1-hr Average	6.7	6.7	5.9	5.9	5.8	5.8	5.7	7.5	9.6	11.3	12.2	13.1	13.7	14.0	14.6	14.4	14.6	14.7	14.5	12.0	8.9	7.3	6.9	6.4			
Hourly Max	18.2	18.9	17.4	15.2	12.8	13.7	13.3	17.1	26.1	29.1	29.3	30.0	28.7	27.4	30.2	28.4	26.8	28.5	28.0	22.4	19.0	16.0	16.3	15.6			

# PASZA - Henry Pirker - Vector Wind Speed Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

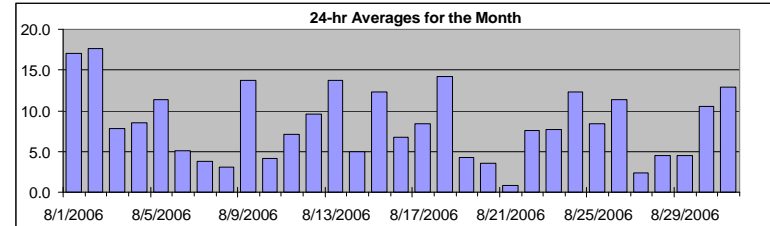
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	29.9	km/hr	2-Aug	14:00 15:00
Maximum 24-hr Value:	17.6	km/hr	2-Aug	



Calm Time:	2 hrs	0% calms	Operational Time:	737 hrs				
Calibration Time:	5 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	27.2	22.4	12.3	7.7	4.6	2.4	1.3	7.4 km/hr

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-06	18	19	17	15	12	8	7	15	20	22	25	25	26	23	22	21	22	20	18	15	14	6	4			17.1	25.9
2-Aug-06	7	7	8	9	9	10	11	17	26	29	29	30	28	27	30	28	26	28	26	20	12	12	5	3		17.6	29.9
3-Aug-06	5	3	3	2	3	3	4	5	6	9	16	16	13	10	14	12	12	12	11	8	6	5	5	5		7.8	15.8
4-Aug-06	5	2	3	4	6	9	7	6	12	11	10	13	15	17	14	13	12	13	12	10	6	2	5	7		8.5	16.7
5-Aug-06	8	6	5	6	6	6	7	9	13	12	14	13	15	12	15	11	12	16	22	21	16	11	8	8		11.3	22.4
6-Aug-06	8	6	3	calm	2	4	5	5	6	7	6	10	11	9	9	10	10	11	13	10	3	1	2	3		5.1	13.4
7-Aug-06	3	3	3	3	4	4	2	3	1	6	9	11	13	11	8	7	6	9	10	7	5	4	2	4		3.8	13.5
8-Aug-06	6	4	3	5	7	5	3	5	5	4	5	4	3	2	8	6	3	2	6	4	8	7	6	6		3.1	8.2
9-Aug-06	4	6	3	3	6	4	7	9	11	16	17	18	19	21	24	27	26	27	27	22	10	7	6	7		13.8	27.2
10-Aug-06	6	4	6	5	2	1	5	4	6	9	10	11	11	10	8	8	7	8	9	8	5	5	5	4		4.2	10.8
11-Aug-06	4	5	5	5	4	4	3	3	3	6	5	12	9	3	5	16	24	14	13	10	6	4	4	4		7.2	24.3
12-Aug-06	4	3	4	4	2	4	2	4	6	5	6	11	13	12	13	15	18	19	21	19	16	12	13	8		9.6	21.2
13-Aug-06	9	11	9	7	5	6	7	12	14	19	20	19	19	24	24	21	21	21	24	20	10	5	4	2		13.8	23.9
14-Aug-06	1	4	4	4	7	5	3	7	7	6	11	13	12	7	10	10	10	9	9	11	7	7	13	5		4.9	13.2
15-Aug-06	11	17	14	13	10	14	13	13	12	12	14	14	12	13	13	15	16	17	16	12	9	8	4	5		12.3	17.4
16-Aug-06	6	5	5	3	3	3	5	7	9	9	7	6	11	11	12	11	10	12	8	3	5	3	2	4		6.7	12.1
17-Aug-06	4	7	8	10	9	8	7	10	9	8	6	9	9	11	10	11	8	11	12	10	7	8	9	9		8.4	12.0
18-Aug-06	8	9	4	4	3	5	4	11	14	24	25	24	24	24	24	27	23	22	20	20	17	7	8	8		14.2	27.2
19-Aug-06	6	3	3	3	4	3	4	6	6	3	5	2	3	6	9	9	7	8	8	7	4	4	2	1		4.3	9.4
20-Aug-06	3	3	4	calm	2	3	2	3	4	6	7	8	9	8	7	5	6	5	2	7	6	7	10	7		3.6	9.7
21-Aug-06	3	3	4	4	3	5	4	4	3	3	4	4	3	5	5	3	5	10	10	7	3	4	5	4		0.8	9.8
22-Aug-06	5	5	5	3	2	5	4	6	7	7	12	10	11	15	16	16	17	17	17	9	6	2	3	7		7.5	17.0
23-Aug-06	10	8	7	6	5	5	3	7	8	10	11	8	8	9	11	10	9	10	7	15	11	9	9	9		7.7	14.7
24-Aug-06	6	9	6	4	6	8	7	6	13	17	21	20	18	25	22	21	21	22	19	10	6	6	3	2		12.3	25.1
25-Aug-06	4	3	1	3	3	2	2	5	6	8	10	10	12	12	9	12	16	19	19	16	15	11	10	8		8.4	19.2
26-Aug-06	6	9	8	10	13	9	6	14	23	23	19	16	14	15	17	15	16	13	12	9	7	5	1	3		11.3	22.6
27-Aug-06	2	3	3	2	3	3	2	3	3	2	4	6	7	6	3	3	5	9	10	9	8	7	2	3		2.3	10.4
28-Aug-06	2	5	4	4	2	4	1	6	6	5	5	3	3	3	5	5	11	13	10	9	7	11	16	15		4.5	16.2
29-Aug-06	12	6	1	6	5	5	6	5	5	9	8	C	C	C	C	C	11	11	10	7	7	5	8	8		4.5	12.3
30-Aug-06	9	11	12	11	11	9	10	9	11	8	6	11	15	17	18	13	11	10	7	6	5	6	14	10		10.5	17.5
31-Aug-06	8	8	4	5	3	3	4	6	9	16	13	15	17	19	21	21	25	20	24	20	19	16	10	10		12.9	24.8
1-hr Vector	5.0	5.6	4.6	4.4	4.2	4.1	4.2	6.4	8.1	9.0	9.2	9.9	9.9	10.3	11.9	12.2	11.9	11.3	11.4	8.1	5.8	4.5	3.9	4.0			
Hourly Max	18.1	18.8	17.4	15.0	12.7	13.6	13.2	16.8	25.9	28.8	29.0	29.6	28.3	27.0	29.9	27.9	26.5	28.2	27.2	22.2	19.0	15.8	16.2	15.5			

# PASZA - Henry Pirker - Wind Direction Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary


Calm Time:	0 hrs	0% calms	Operational Time:	739 hrs				
Calibration Time:	5 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	338.3	318.1	288.6	258.1	230.4	93.9	42.7	262 deg

### Status Flag Characters

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

### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	WD Sector	
1-Aug-06	242	247	251	258	258	270	274	260	256	261	254	251	252	253	249	253	257	260	263	271	252	277	314	200	256	WSW	
2-Aug-06	218	229	225	234	220	224	223	239	242	245	250	252	247	244	249	252	254	249	273	300	287	297	276	257	251	WSW	
3-Aug-06	319	287	295	286	299	292	298	311	294	296	288	287	272	276	258	253	253	294	313	309	318	326	334	320	289	WNW	
4-Aug-06	310	287	325	318	334	323	322	303	306	315	334	325	308	316	308	306	310	305	315	295	273	217	214	226	308	NW	
5-Aug-06	242	262	300	279	289	272	262	244	246	254	244	244	239	232	238	249	253	257	262	249	246	241	239	221	250	WSW	
6-Aug-06	227	230	258	121	149	141	147	191	197	200	212	238	250	253	271	269	300	281	293	296	303	309	323	321	254	WSW	
7-Aug-06	325	309	312	328	283	301	297	308	158	89	87	79	91	86	109	93	42	43	66	74	53	48	346	321	60	ENE	
8-Aug-06	319	309	322	300	311	311	310	265	225	222	208	245	161	163	280	289	298	360	258	182	205	176	159	164	253	WSW	
9-Aug-06	228	241	280	221	238	264	235	245	245	248	242	224	236	259	260	260	265	260	257	257	255	241	206	220	250	WSW	
10-Aug-06	218	195	213	259	253	309	309	232	220	234	245	250	252	254	268	272	332	311	341	3	36	48	49	54	273	W	
11-Aug-06	299	318	327	325	315	312	278	276	292	267	269	275	308	349	259	267	314	347	309	314	294	268	284	302	301	WNW	
12-Aug-06	293	327	313	294	280	306	295	254	239	236	241	249	286	280	276	260	247	247	252	250	247	242	244	226	258	WSW	
13-Aug-06	226	235	240	233	235	241	276	239	243	258	264	269	268	267	269	253	245	245	265	270	281	268	292	321	258	WSW	
14-Aug-06	291	158	159	285	195	152	176	199	182	192	197	206	188	227	255	285	272	310	296	284	310	307	327	306	246	WSW	
15-Aug-06	253	252	229	231	242	245	250	249	257	279	278	280	285	277	253	259	260	271	270	298	280	278	218	272	262	W	
16-Aug-06	255	269	292	292	299	215	210	224	242	242	242	239	254	264	277	261	269	271	292	282	297	272	291	226	261	W	
17-Aug-06	233	234	232	240	253	255	262	248	245	229	209	219	271	292	280	288	262	254	255	231	226	226	226	230	248	WSW	
18-Aug-06	221	227	267	187	165	158	177	225	250	261	263	267	263	264	253	249	263	275	270	269	282	300	276	279	259	W	
19-Aug-06	290	294	291	262	294	298	308	273	250	356	46	16	317	324	308	291	291	303	307	352	48	69	147	305	312	NW	
20-Aug-06	307	288	284	328	159	181	307	145	119	123	104	99	98	102	167	186	152	169	249	97	100	86	94	78	123	ESE	
21-Aug-06	37	319	311	302	307	279	307	253	248	228	195	200	147	131	170	123	91	98	92	99	71	43	315	316	118	ESE	
22-Aug-06	322	299	302	284	236	220	207	226	230	212	248	265	277	308	323	317	310	304	302	297	295	249	239	252	286	WNW	
23-Aug-06	247	237	236	172	165	148	155	263	243	258	276	246	270	267	261	278	285	276	266	251	242	235	230	230	250	WSW	
24-Aug-06	290	246	260	313	262	260	270	260	257	260	277	281	288	290	291	289	271	284	303	305	299	302	288	274	281	W	
25-Aug-06	306	276	314	297	312	247	177	158	168	191	197	209	212	234	233	240	244	249	253	245	251	244	234	233	235	SW	
26-Aug-06	222	221	221	238	245	251	268	245	261	269	277	282	278	261	281	281	280	287	275	280	281	241	314	4	267	W	
27-Aug-06	289	277	296	307	284	288	310	150	149	74	101	126	135	146	166	291	107	102	90	93	89	91	29	356	103	ESE	
28-Aug-06	64	302	291	259	312	191	155	208	275	190	252	242	180	119	131	143	246	228	230	271	271	280	291	304	251	WSW	
29-Aug-06	315	320	31	135	170	246	255	271	283	286	286	C	C	C	C	C	295	304	303	117	155	247	298	300	285	WNW	
30-Aug-06	298	277	283	286	272	253	253	277	296	296	245	284	289	293	301	238	278	251	272	268	292	252	238	261	274	W	
31-Aug-06	246	247	216	232	283	281	274	278	259	248	273	271	256	263	252	260	250	255	248	248	245	245	206	203	251	WSW	
Hourly Avg	265	258	264	261	257	255	259	246	248	253	255	257	259	267	264	263	269	271	276	273	266	263	264	263			

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

Station: Henry Pirker  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**


Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	739 hrs			
Calibration Time:	5 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	58.1	42.5	21.4	13.8	9.3	5.9	4.7

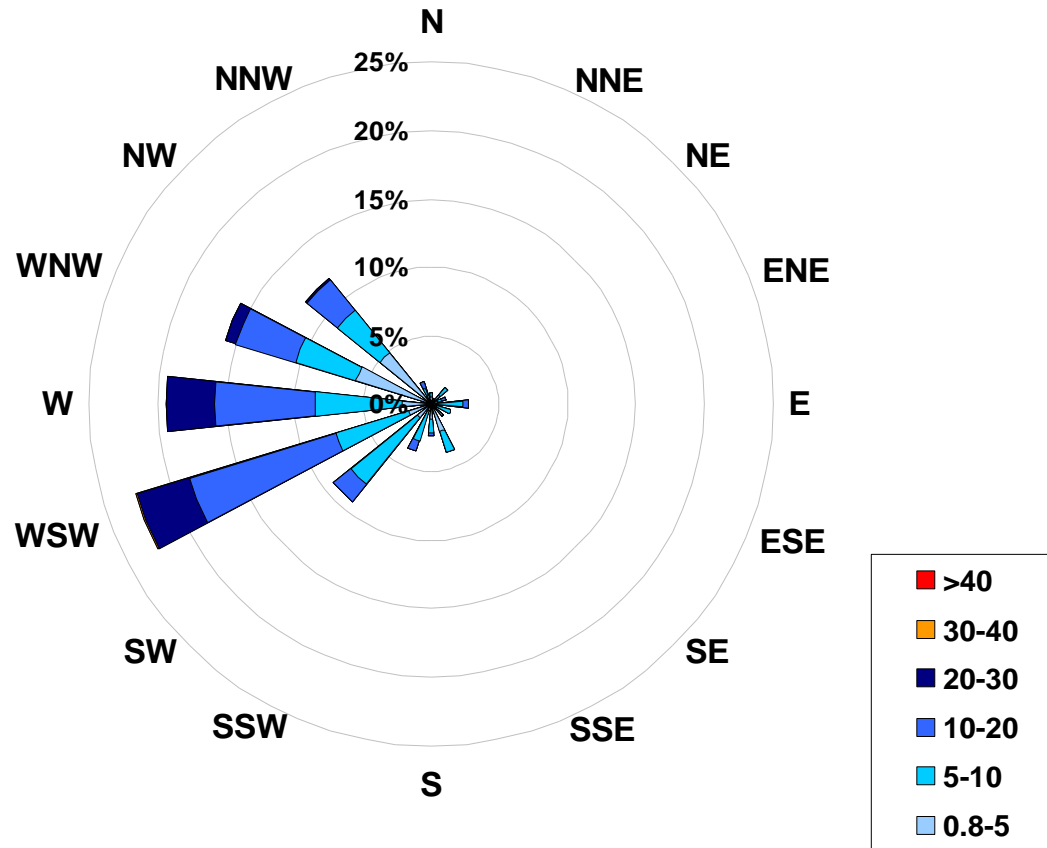
**Status Flag Characters**

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

Day	Mountain Standard Time																								Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	
1-Aug-06	5	10	5	6	8	12	14	7	9	8	7	11	10	10	9	8	9	8	7	8	6	8	13	10	13.8
2-Aug-06	8	13	8	9	6	6	7	7	7	8	8	8	9	9	9	9	9	7	12	7	6	7	11	17	17.1
3-Aug-06	23	38	33	35	29	28	15	17	23	19	12	11	17	28	16	19	17	15	9	8	8	5	8	13	37.5
4-Aug-06	11	44	21	17	11	8	11	13	8	15	18	14	9	13	12	12	10	10	13	9	11	17	13	9	44.4
5-Aug-06	12	14	22	11	12	7	8	10	10	12	12	15	17	17	11	11	11	14	8	6	5	6	8	6	21.6
6-Aug-06	7	32	32	62	38	17	9	11	16	18	26	19	24	29	27	23	20	15	11	6	20	38	45	50	61.5
7-Aug-06	39	23	22	14	10	41	24	24	41	28	17	15	16	16	25	26	34	12	11	16	17	23	43	21	43.1
8-Aug-06	19	13	44	35	32	21	30	25	24	55	20	29	34	44	23	24	34	43	9	12	9	11	8	13	55.1
9-Aug-06	16	15	75	38	13	15	12	11	9	10	13	12	16	13	13	10	9	8	6	11	10	9	7		74.8
10-Aug-06	9	16	11	19	36	43	21	24	16	16	18	18	24	24	25	27	37	18	22	10	13	13	12	21	42.5
11-Aug-06	22	10	8	7	10	21	25	37	22	22	50	12	20	52	43	17	8	10	14	9	7	34	18	13	51.9
12-Aug-06	17	18	14	9	17	15	21	19	13	30	32	21	12	18	20	18	16	10	8	6	4	6	8	7	31.7
13-Aug-06	8	7	10	10	19	21	14	9	9	8	12	11	17	12	11	12	12	11	9	6	4	18	21	34	33.9
14-Aug-06	34	16	19	34	20	23	33	10	10	17	11	16	20	26	35	14	18	11	7	16	11	17	9	39	39.4
15-Aug-06	7	8	7	7	12	7	5	4	8	10	13	13	17	17	15	13	11	10	11	20	13	8	14	23	23.1
16-Aug-06	9	15	10	17	19	16	12	11	10	14	20	32	32	17	18	15	16	14	10	15	15	26	42	31	41.6
17-Aug-06	15	12	5	5	9	9	8	7	10	16	27	24	27	20	22	20	23	15	12	7	6	5	6	6	27.5
18-Aug-06	5	7	25	13	21	8	12	7	8	8	9	11	10	9	11	12	11	7	6	5	4	11	5	11	25.2
19-Aug-06	15	27	21	19	20	27	33	14	19	58	46	58	48	51	29	25	36	28	12	14	12	17	18	52	58.4
20-Aug-06	19	17	21	68	37	26	36	17	26	23	22	22	25	30	46	39	34	35	47	9	5	6	6	10	68.3
21-Aug-06	19	18	16	19	13	9	12	14	31	21	36	39	61	51	34	48	47	17	11	9	32	14	14	14	60.6
22-Aug-06	19	21	16	33	20	12	14	15	15	20	14	21	18	19	12	16	12	11	9	4	10	30	21	8	33.1
23-Aug-06	11	9	11	13	13	14	21	9	11	13	14	27	31	27	13	15	20	10	12	6	6	6	7	7	30.6
24-Aug-06	23	10	21	14	6	8	12	14	10	9	10	9	11	8	10	11	10	7	6	9	6	7	18	29	29.1
25-Aug-06	17	18	48	14	21	29	16	9	19	15	17	22	21	26	36	20	16	8	8	7	7	9	8	9	48.2
26-Aug-06	15	6	8	7	6	19	23	8	7	8	11	11	20	15	14	17	13	14	8	6	6	18	43	36	42.9
27-Aug-06	50	33	27	35	30	33	36	13	43	66	32	32	35	35	52	61	38	15	10	7	6	5	26	37	65.8
28-Aug-06	39	13	31	22	45	23	31	20	27	22	14	44	41	67	56	39	19	10	11	14	10	9	4	5	67.3
29-Aug-06	5	11	41	18	20	23	12	10	10	10	20	C	C	C	C	C	26	19	34	31	23	17	13	6	40.7
30-Aug-06	8	6	11	6	11	12	9	9	18	41	47	26	17	16	15	42	20	21	16	11	10	10	6	9	46.6
31-Aug-06	7	9	13	13	19	13	9	6	9	9	14	21	12	11	8	10	10	7	7	5	6	6	7	8	20.5
Hourly Max	50	44	75	68	45	43	36	37	43	66	50	58	61	67	56	61	47	43	47	31	32	38	45	52	



1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for August 2006



Calms: 0%

Frequency Distribution of Wind in km/hr Range			Frequency (hrs)
0.8	<	5	172
5	to	10	282
10	to	20	221
20	to	30	63
30	to	40	1
	>	40	0
Total Non-Zero Values			739

# PASZA - Evergreen Park Station

## Monthly Summary Tables, Graphs, and Roses

# PASZA - Evergreen Park - Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

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

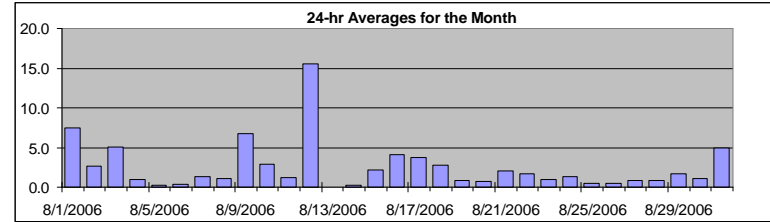
Monitoring Dates: August 1, 2006 to September 1, 2006

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:	94.0 ppb 12-Aug 10:00 11:00
Maximum 24-hr Average:	15.5 ppb 12-Aug

AIC Time:	33 hrs	Operational Time:	697 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	98.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	37.5	11.8	1.0	0.6	0.4	0.1	0.0	2.6 ppb	0.6 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	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-06	0	1	0	0	0	0	10	12	36	18	38	27	1	1	0	A	23	1	1	1	1	0	0	0	7.5	38.3	
2-Aug-06	0	0	0	0	0	0	0	1	0	0	1	0	0	1	A	2	8	42	1	0	0	0	0	0	2.6	41.9	
3-Aug-06	0	0	0	0	0	0	9	18	13	49	1	1	1	A	21	1	1	1	1	1	0	0	0	0	5.1	48.8	
4-Aug-06	0	1	0	0	0	0	0	0	10	7	1	1	A	1	0	0	0	0	0	0	0	0	0	0	1.0	9.6	
5-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0.3	0.6	
6-Aug-06	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	1	0	0	1	1	1	1	1	1	0.4	1.5	
7-Aug-06	9	2	2	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	9.4	
8-Aug-06	1	1	1	1	1	1	1	3	A	4	1	2	2	2	2	1	0	0	1	1	1	0	0	0	1.1	4.1	
9-Aug-06	0	0	0	0	0	0	0	A	26	1	1	3	34	12	1	1	33	35	3	1	1	1	1	0	6.7	35.4	
10-Aug-06	0	1	1	0	0	0	A	7	8	5	2	19	6	1	3	8	1	1	1	1	1	0	0	0	2.9	18.9	
11-Aug-06	1	1	0	0	0	A	1	1	4	2	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1.2	5.3	
12-Aug-06	1	1	0	0	A	0	0	2	12	14	94	60	73	10	27	2	11	40	4	1	1	1	1	1	15.5	94.0	
13-Aug-06	1	1	1	A	1	1	1	33	37	1	1	1	1	1	N	N	N	N	N	N	N	N	N	N	N	N	37.4
14-Aug-06	N	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	0.3	0.8	
15-Aug-06	1	A	0	0	0	0	1	1	1	1	1	3	10	1	1	8	1	1	15	1	1	1	1	0	2.1	15.1	
16-Aug-06	A	0	0	0	0	0	0	0	10	31	7	1	15	10	2	0	2	7	0	1	1	1	1	A	4.1	30.7	
17-Aug-06	26	0	0	0	0	1	1	9	6	1	8	3	3	1	8	11	1	4	1	1	1	1	A	0	3.8	26.2	
18-Aug-06	0	0	0	0	0	0	1	11	9	1	13	7	4	7	0	0	6	1	0	0	0	A	1	1	2.7	12.7	
19-Aug-06	0	0	0	0	0	0	0	3	2	1	4	1	0	0	0	3	1	0	0	0	A	0	0	0	0.9	4.5	
20-Aug-06	0	0	0	0	0	1	1	1	1	1	0	0	1	1	3	1	1	1	1	A	1	1	0	0	0.7	3.4	
21-Aug-06	0	0	0	0	0	1	1	6	1	6	7	5	4	2	4	2	2	1	A	1	1	1	1	1	2.0	7.3	
22-Aug-06	1	1	1	1	1	1	1	4	5	1	7	11	0	0	0	0	A	0	0	1	1	1	1	0	1.7	10.6	
23-Aug-06	0	1	1	0	0	0	1	1	1	1	3	6	1	1	0	1	A	1	1	1	0	1	0	1	0.9	6.0	
24-Aug-06	1	1	0	0	0	0	0	1	1	16	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.3	15.9	
25-Aug-06	0	0	0	0	0	0	0	1	1	1	1	0	0	A	1	1	0	0	1	0	0	1	1	1	0.5	1.0	
26-Aug-06	0	0	0	0	1	1	1	1	1	1	0	0	0	A	0	0	0	0	1	0	1	1	1	1	0.5	0.8	
27-Aug-06	0	0	0	0	0	0	0	0	0	1	4	5	A	1	1	0	1	1	1	0	0	0	0	0	0.8	4.7	
28-Aug-06	0	1	0	0	0	0	0	1	2	1	1	A	4	C	C	C	A	0	0	0	0	0	1	2	0.9	3.7	
29-Aug-06	0	0	0	0	0	A	0	0	1	4	2	7	12	1	2	3	3	1	0	1	1	0	1	0	1.7	11.7	
30-Aug-06	0	0	0	0	0	A	1	4	1	4	4	1	1	2	2	1	1	0	1	0	1	0	0	0	1.1	4.2	
31-Aug-06	0	0	0	0	A	0	2	2	25	28	10	2	1	18	8	10	3	1	1	1	0	0	0	1	5.0	28.0	
Hourly Avg	1.6	0.5	0.4	0.3	0.3	0.4	1.2	4.1	7.2	6.7	7.2	6.0	6.2	2.8	3.2	2.3	3.7	4.9	1.3	0.6	0.5	0.6	0.5	0.5			
Hourly Max	26.2	1.6	1.7	1.4	1.6	1.2	10.0	33.3	37.4	48.8	94.0	60.4	72.8	18.4	27.3	11.0	32.5	41.9	15.1	1.5	0.9	1.1	1.2	1.8			

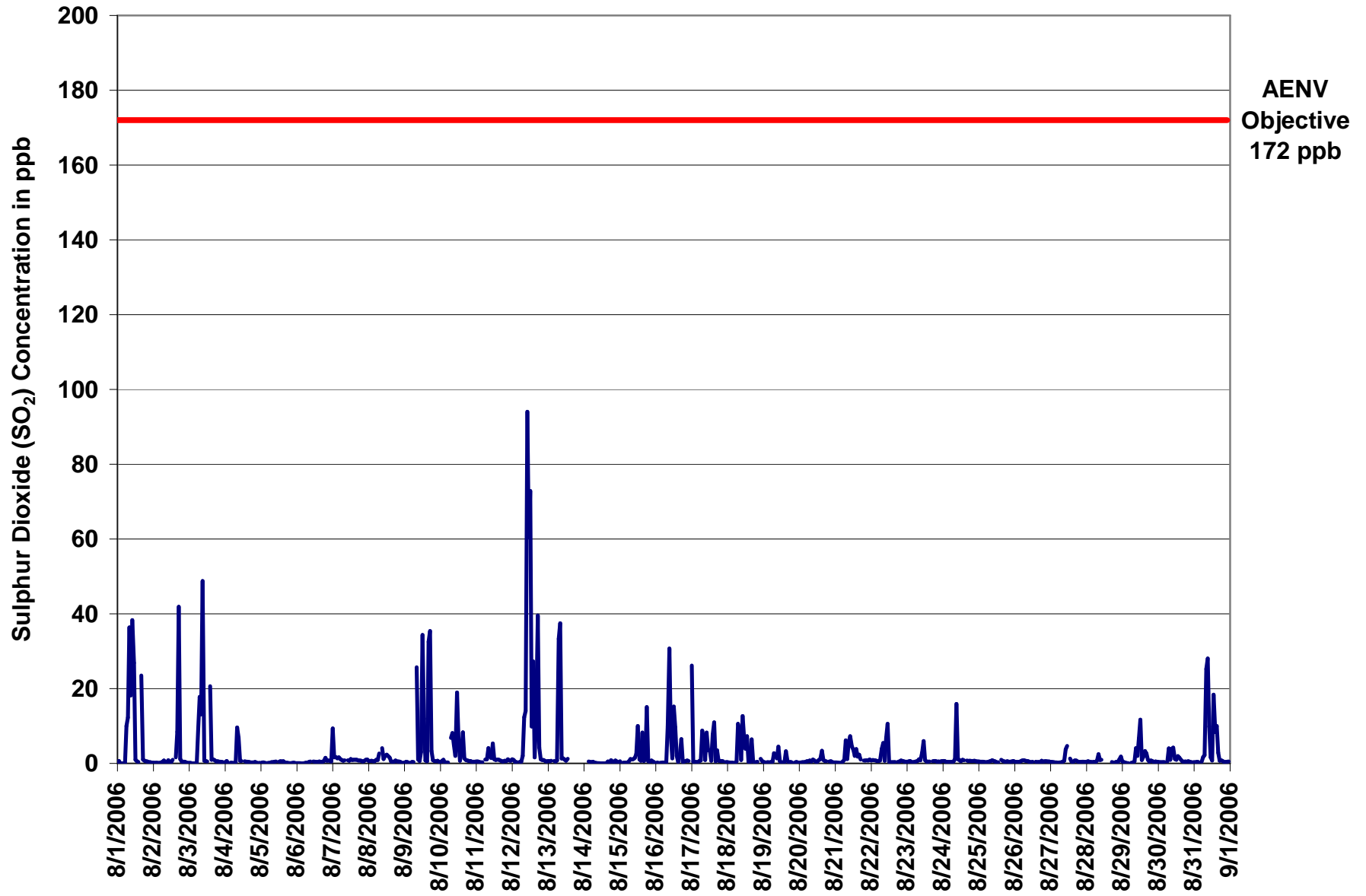


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

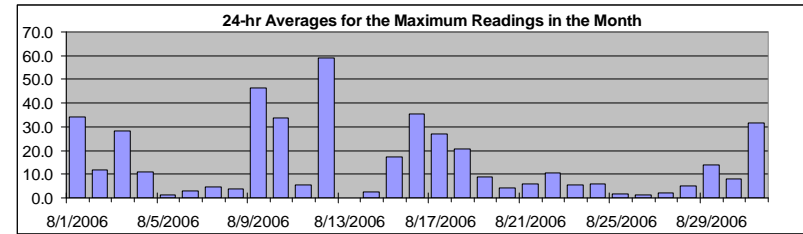
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	241.9	ppb	12-Aug	10:00 11:00
Maximum 24-hr Value:	59.1	ppb	12-Aug	



AIC Time:	33 hrs	Operational Time:	697 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	98.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	174.8	105.4	4.7	1.4	1.0	0.7	0.6	15.4 ppb	1.4 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Aug-06	0	3	1	0	1	0	90	82	118	124	82	105	6	3	1	A	126	15	18	2	1	1	1	1	34.0	125.6	
2-Aug-06	1	1	1	1	1	1	2	9	4	2	15	2	3	12	A	12	88	108	3	1	4	3	1	1	11.9	108.2	
3-Aug-06	1	1	1	1	1	1	115	118	103	138	1	3	5	A	123	5	18	5	1	4	1	1	1	1	28.2	137.5	
4-Aug-06	1	44	1	1	1	1	1	1	84	99	2	7	A	2	1	2	2	1	1	1	1	1	1	1	11.1	99.0	
5-Aug-06	1	1	1	1	1	1	1	1	1	1	6	A	1	1	1	3	1	1	1	1	1	1	1	1	1.3	5.5	
6-Aug-06	1	1	1	9	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	31	1	2	2	1	2.8	30.6	
7-Aug-06	64	3	3	2	2	2	2	1	1	A	2	1	2	1	2	2	2	2	1	1	1	1	6	2	4.6	63.5	
8-Aug-06	1	1	1	1	1	7	2	28	A	16	4	5	3	3	1	1	1	4	1	1	1	1	1	1	4.0	27.9	
9-Aug-06	1	5	2	1	1	1	3	A	177	5	4	61	204	126	2	4	162	238	60	4	4	1	1	1	46.4	238.5	
10-Aug-06	1	34	40	1	1	1	A	119	65	54	69	163	56	2	35	89	34	3	2	1	2	1	1	1	33.6	163.0	
11-Aug-06	1	1	1	1	1	A	2	2	27	7	5	40	19	2	2	2	2	2	1	4	1	6	2	1	5.6	40.0	
12-Aug-06	3	2	1	1	A	1	2	19	92	120	242	194	175	94	123	12	75	129	51	10	1	11	1	1	59.1	241.9	
13-Aug-06	1	1	1	A	1	1	7	153	233	10	5	2	3	14	N	N	N	N	N	N	N	N	N	N	N	N	233.3
14-Aug-06	N	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	18	5	6	2	1	8	3	1	2.5	17.7	
15-Aug-06	1	A	1	1	1	1	6	4	2	2	32	109	19	3	65	3	13	123	2	1	5	1	1	1	17.3	123.1	
16-Aug-06	A	1	1	1	1	2	1	1	80	238	65	2	110	108	18	1	30	116	1	1	1	2	1	A	35.5	237.9	
17-Aug-06	106	1	1	1	1	1	3	131	64	2	43	25	32	2	69	86	4	47	2	2	1	1	A	1	27.2	131.0	
18-Aug-06	1	1	1	1	1	1	2	58	53	4	92	61	37	81	1	1	50	9	1	5	1	A	13	1	20.7	92.1	
19-Aug-06	1	1	1	1	1	1	2	29	24	2	53	1	1	1	1	51	22	1	1	1	A	1	1	1	8.7	53.2	
20-Aug-06	1	1	1	1	1	1	1	3	2	2	2	1	1	5	4	61	2	1	1	A	1	1	1	1	4.2	60.7	
21-Aug-06	1	1	1	1	1	1	4	24	2	21	23	6	5	3	8	14	4	2	A	1	1	2	2	2	5.7	23.7	
22-Aug-06	2	2	1	1	1	2	2	28	38	1	62	85	1	1	1	1	A	2	2	3	1	1	1	1	10.5	84.8	
23-Aug-06	1	1	1	2	1	1	1	2	4	3	43	39	2	1	2	1	A	2	3	2	1	6	1	1	5.3	43.3	
24-Aug-06	1	1	1	1	1	1	1	2	3	81	3	2	1	5	2	A	2	1	16	1	2	2	1	1	5.8	81.1	
25-Aug-06	1	1	1	1	1	1	1	1	1	2	1	1	1	1	A	2	8	6	1	3	1	1	1	1	1.8	8.1	
26-Aug-06	1	1	1	1	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1	2	2	2	1	2	1	1.3	2.0
27-Aug-06	1	1	1	1	1	1	1	1	1	1	10	7	A	5	1	1	2	2	1	1	1	1	1	1	1.9	10.2	
28-Aug-06	1	1	1	1	1	1	1	2	29	2	2	A	35	C	C	C	A	1	1	1	2	7	3	3	5.0	34.8	
29-Aug-06	1	1	1	1	1	A	1	1	1	25	16	79	91	11	18	28	34	2	1	3	1	1	1	1	13.8	90.7	
30-Aug-06	1	1	1	1	1	A	1	22	4	55	33	2	2	17	12	17	4	1	2	1	1	1	1	1	7.8	54.5	
31-Aug-06	1	1	1	1	A	1	12	9	135	130	50	10	2	112	110	100	30	4	12	3	1	1	1	1	31.6	135.2	
Hourly Avg	6.9	3.9	2.4	1.3	1.0	1.3	9.0	28.5	45.1	38.3	31.3	32.4	31.3	22.6	20.1	20.9	25.9	24.8	11.0	3.3	1.6	2.5	1.9	1.2			
Hourly Max	105.8	44.2	40.4	9.0	2.4	6.8	114.9	152.9	233.3	237.9	241.9	194.0	203.7	125.6	122.8	99.6	161.7	238.5	123.1	30.6	4.0	11.0	12.6	3.1			

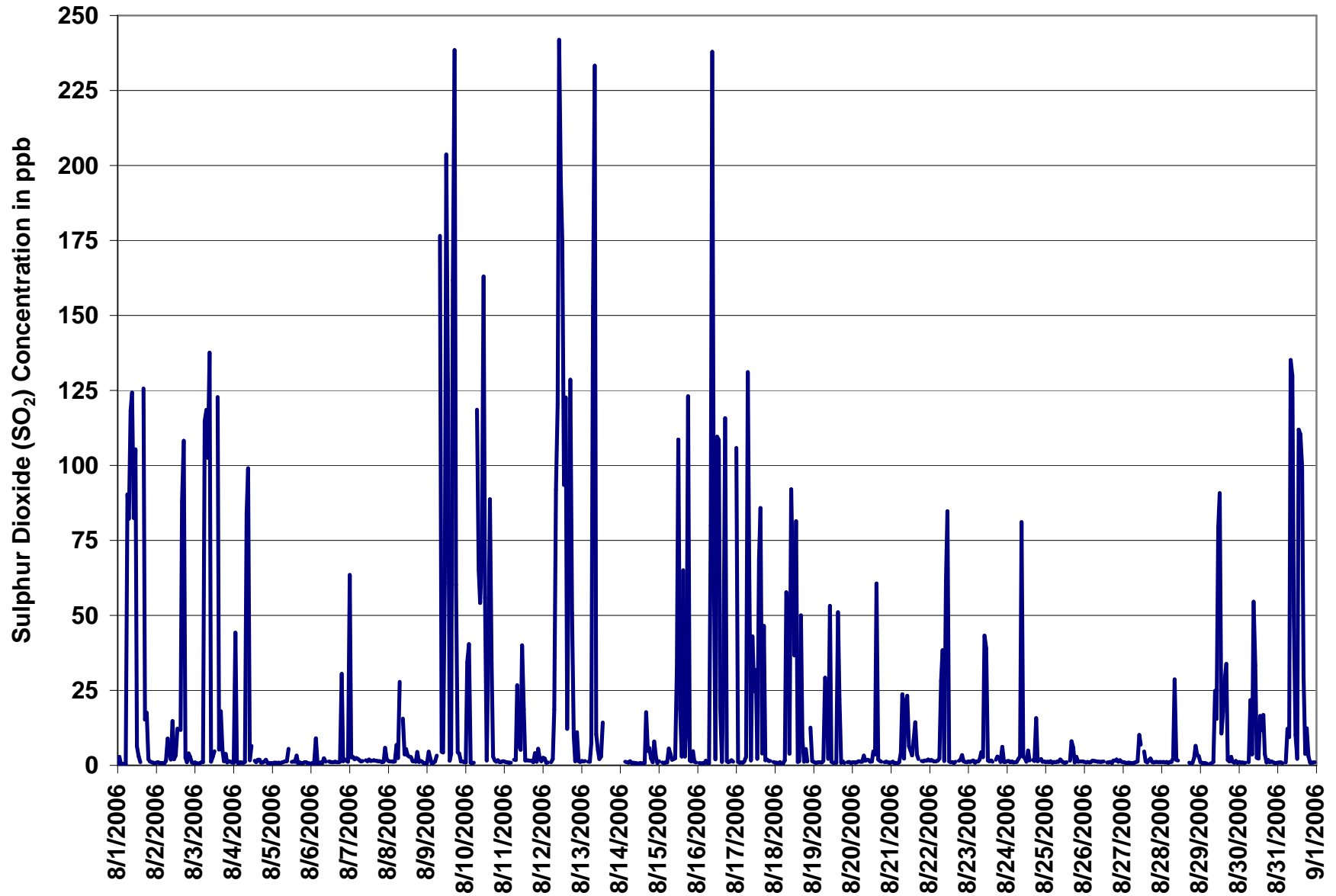
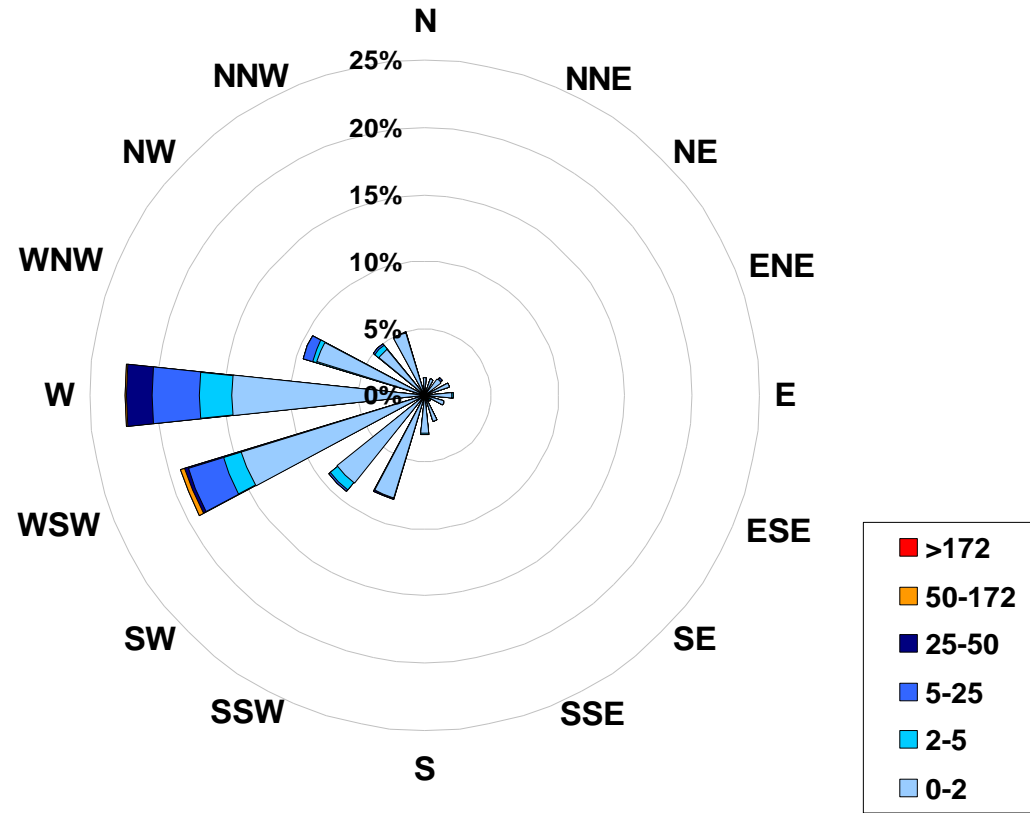


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Evergreen Park Site for August 2006**



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
0.0	< 2	578	
2	to 5	43	
5	to 25	56	
25	to 50	17	
50	to 172	3	
	> 172	0	
Total Non-Zero Values			697

## PASZA - Evergreen Park - Total Reduced Sulphur Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

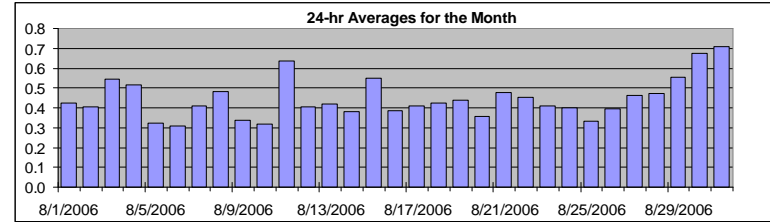
### HOURLY AVERAGE TABLE

### Total Reduced Sulphur (TRS)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Maximum 1-hr Average:	3.3	ppb	11-Aug	2:00 3:00
Maximum 24-hr Value:	0.7	ppb	31-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
	1.1	0.8	0.5	0.4	0.3	0.3	0.2	0.4 ppb	0.4 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum				
	Hour Start	Hour End	0:00	1:00	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-06	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0.4	0.6
2-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	1	0	0	0	0	1	1	0	0.4	0.7	
3-Aug-06	0	0	1	1	0	1	1	1	1	0	0	1	0	0	1	0	A	2	0	0	0	0	0	0	0	0	1	0.5	2.0	
4-Aug-06	1	1	1	1	1	1	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9	
5-Aug-06	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	0.4	
6-Aug-06	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	0.3	0.4	
7-Aug-06	1	1	1	1	1	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9	
8-Aug-06	1	1	1	1	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.1	
9-Aug-06	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
10-Aug-06	0	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	0.3	0.6	
11-Aug-06	0	1	3	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.6	3.3	
12-Aug-06	0	1	0	0	A	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6	
13-Aug-06	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
14-Aug-06	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	0	0	0.4	0.8	
15-Aug-06	0	A	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0.5	2.1		
16-Aug-06	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.6		
17-Aug-06	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	A	0	0.4	0.6		
18-Aug-06	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	A	1	0	0.4	1.0		
19-Aug-06	0	0	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.8		
20-Aug-06	0	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	0.4	0.6		
21-Aug-06	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0.5	1.5		
22-Aug-06	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0.5	0.8		
23-Aug-06	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.6		
24-Aug-06	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0.4	0.9		
25-Aug-06	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.6		
26-Aug-06	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0.4	0.6		
27-Aug-06	1	0	1	1	1	1	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	0.7		
28-Aug-06	0	1	1	0	0	0	0	0	0	0	0	0	A	0	C	C	C	A	0	1	1	1	1	1	0	0.5	0.7			
29-Aug-06	0	0	1	1	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0.6	1.1		
30-Aug-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8		
31-Aug-06	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.5		
Hourly Avg	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
Hourly Max	1.0	1.1	3.3	1.5	1.5	0.8	1.0	2.1	1.5	1.4	0.7	0.7	0.7	0.8	2.0	0.7	0.8	0.6	0.6	0.7	0.7	0.8	0.7	1.1	1.1	1.1	1.1	1.1		



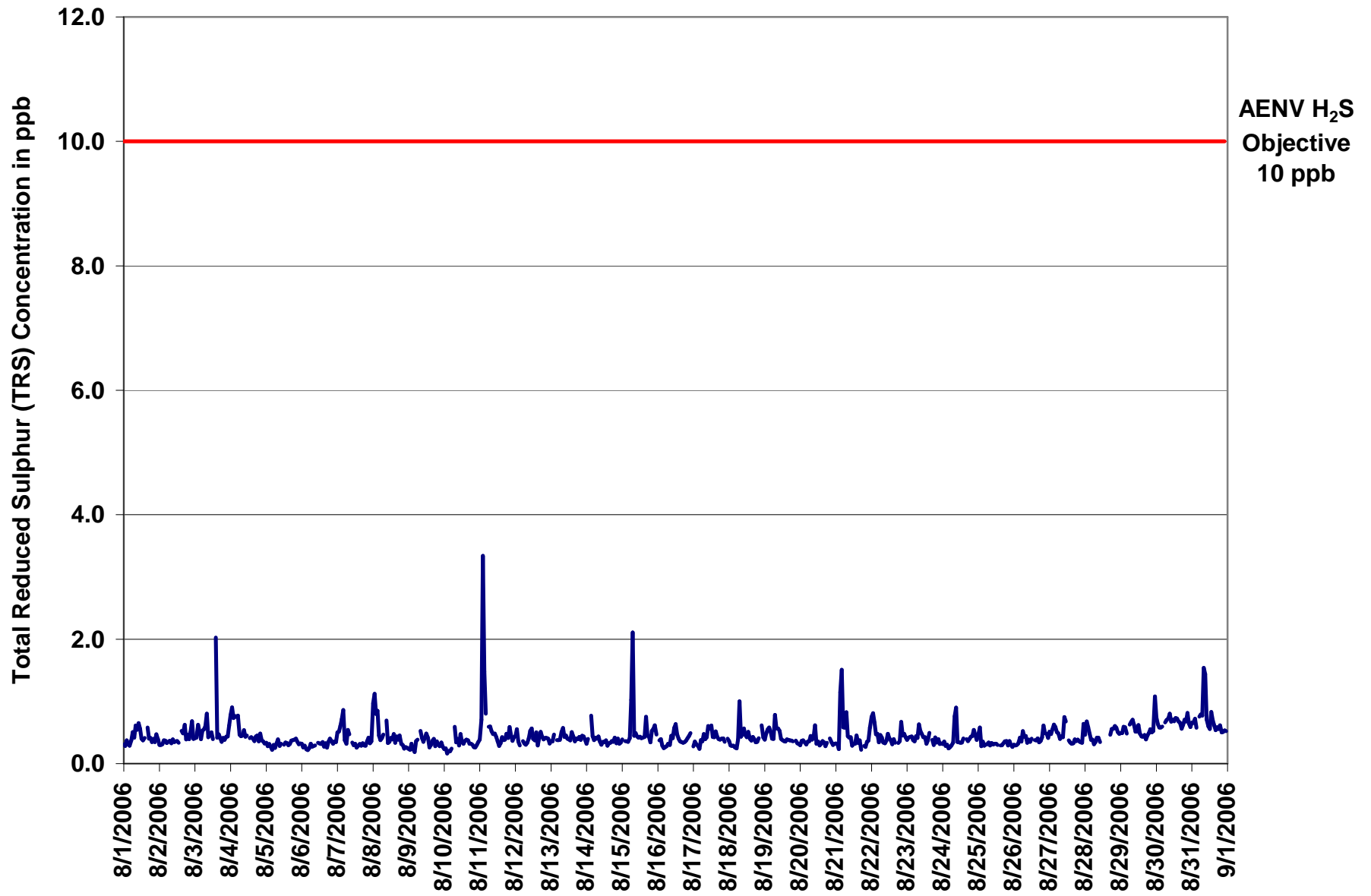


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

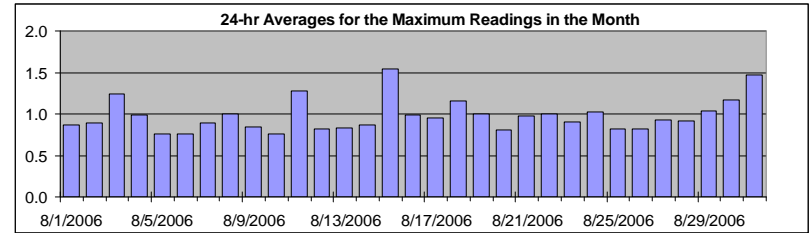
**Total Reduced Sulphur (TRS)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	7.9	ppb	3-Aug	14:00 15:00
Maximum 24-hr Value:	1.5	ppb	15-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
	4.1	1.5	1.0	0.8	0.7	0.7	0.6	1.0 ppb	0.8 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.4
2-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	1	1	1	1	1	1	1	0.9	2.0
3-Aug-06	1	1	1	1	1	1	1	1	2	1	1	1	1	A	8	1	1	1	1	1	1	1	1	1	1.2	7.9
4-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5
5-Aug-06	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
6-Aug-06	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
7-Aug-06	1	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.0
8-Aug-06	2	2	1	2	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7
9-Aug-06	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.7
10-Aug-06	1	1	0	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.8
11-Aug-06	1	3	5	3	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	4.9
12-Aug-06	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
13-Aug-06	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
14-Aug-06	1	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0.9	1.5
15-Aug-06	1	A	1	1	1	1	6	7	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1.5	7.3
16-Aug-06	A	1	1	1	1	1	1	1	1	1	1	2	4	1	1	1	1	1	1	1	1	1	1	A	1.0	4.1
17-Aug-06	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	A	0.9	2.0
18-Aug-06	1	1	1	1	1	1	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.2	7.1
19-Aug-06	1	1	1	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.0	4.0
20-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.1
21-Aug-06	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	2.7
22-Aug-06	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	1	1.0	1.7
23-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	0.9	1.8
24-Aug-06	1	1	1	1	1	1	1	1	3	4	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	3.7
25-Aug-06	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.5
26-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.3
27-Aug-06	1	1	1	1	1	1	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5
28-Aug-06	1	1	1	1	1	1	1	1	1	1	1	A	1	C	C	C	A	1	1	1	1	1	1	1	0.9	1.3
29-Aug-06	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.0	1.9
30-Aug-06	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6
31-Aug-06	1	1	1	1	A	1	1	1	4	5	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1.5	5.2
Hourly Avg	0.9	1.0	1.0	1.0	0.9	0.8	1.1	1.5	1.1	1.1	1.0	1.0	1.0	0.9	1.1	0.9	1.0	0.9	0.8	0.8	0.9	0.9	0.9	0.9		
Hourly Max	1.7	3.3	4.9	3.2	2.6	1.4	5.8	7.3	4.2	5.2	2.0	1.9	4.1	1.5	7.9	1.8	2.9	2.0	1.1	1.2	1.7	1.4	1.4	1.9		

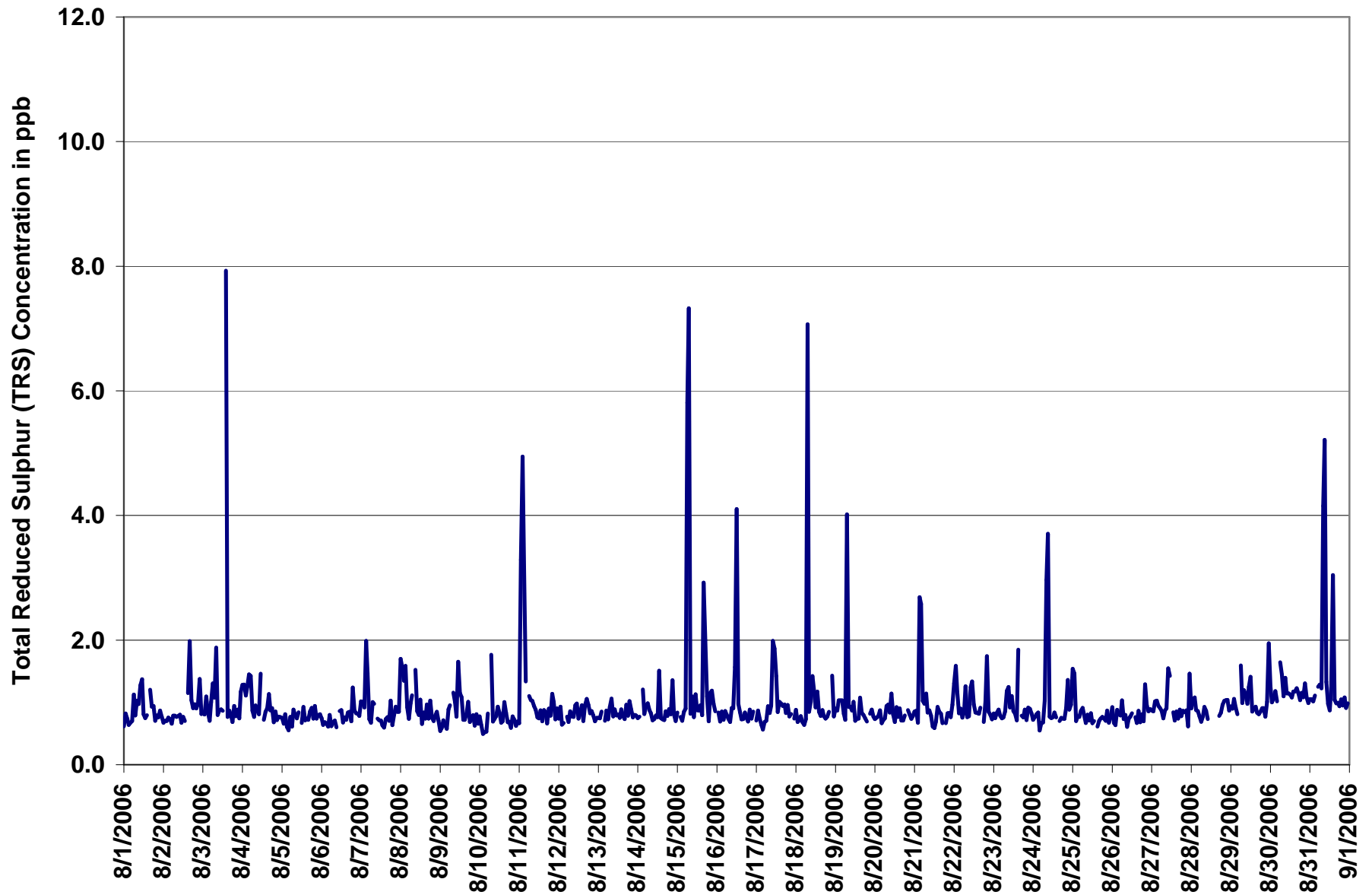
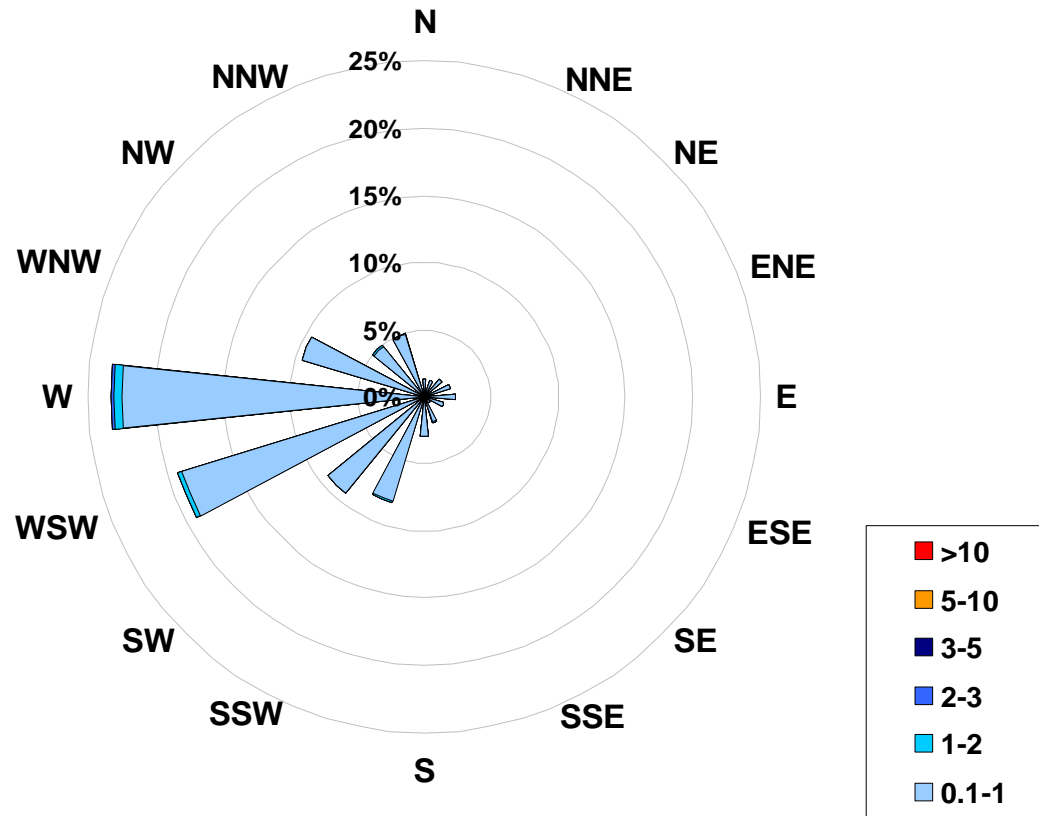


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)  
Located at the Evergreen Park Site for August 2006**



**Calms: 0%**

Frequency Distribution of TRS in ppb		Frequency (hrs)
Range		
0.1	< 1	696
1	to 2	9
2	to 3	2
3	to 5	1
5	to 10	0
	> 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

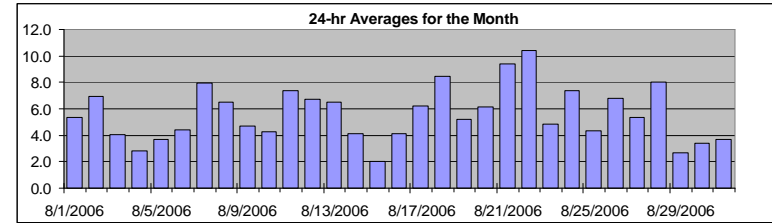
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: August 1, 2006 to September 1, 2006

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:	47.2 $\mu\text{g}/\text{m}^3$ 18-Aug 16:00 17:00
Maximum 24-hr Value:	10.4 $\mu\text{g}/\text{m}^3$ 22-Aug

AIC Time:	0 hrs	Operational Time:	738 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.5%
Percentile	99	95	75
	23.5	14.5	7.7
	4.3	2.2	0.0
	0.0	0.0	0.0
Average / Median	5.6		4 $\mu\text{g}/\text{m}^3$
Geomean	5.2		$\mu\text{g}/\text{m}^3$



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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00		
1-Aug-06	0	0	0	0	1	1	4	5	13	9	13	11	6	5	6	7	10	4	6	5	7	5	4	4	5.3	13.4
2-Aug-06	1	0	1	1	1	1	3	2	2	7	8	16	13	11	28	14	12	25	11	1	2	4	1	0	6.9	27.9
3-Aug-06	2	1	2	0	1	1	13	11	8	3	3	3	1	5	11	0	2	4	2	4	8	6	5	3	4.0	12.5
4-Aug-06	4	2	2	3	2	5	6	5	4	1	0	4	1	0	2	1	2	1	1	2	8	6	4	2	2.8	7.7
5-Aug-06	4	2	0	0	1	4	8	4	5	5	5	3	4	4	5	8	6	4	3	4	3	2	3	2	3.7	8.4
6-Aug-06	1	0	2	1	1	3	9	3	3	4	3	0	3	4	5	2	2	3	5	8	10	12	12	10	4.4	12.0
7-Aug-06	16	16	14	14	14	11	12	10	5	6	3	5	4	5	4	3	4	7	5	5	7	6	8	7	7.9	16.1
8-Aug-06	8	8	7	11	6	5	7	7	7	13	4	4	7	4	12	9	6	7	7	5	1	2	D	2	6.5	12.6
9-Aug-06	0	0	1	0	0	5	5	4	6	0	0	0	10	6	6	12	21	13	4	4	5	5	4	2	4.7	20.5
10-Aug-06	2	2	4	2	1	1	7	18	8	6	2	9	3	2	2	5	3	2	0	5	6	4	4	4	4.3	17.7
11-Aug-06	5	3	4	3	4	4	11	24	22	7	6	15	1	1	1	13	11	2	3	5	5	9	9	8	7.4	23.7
12-Aug-06	4	3	2	2	2	3	10	5	11	10	7	0	5	9	16	1	11	24	10	6	6	6	4	3	6.8	23.7
13-Aug-06	3	3	3	3	3	3	5	18	13	3	5	1	4	6	23	10	7	6	5	4	4	7	7	8	6.5	23.4
14-Aug-06	7	9	10	11	8	4	5	3	2	2	2	D	D	0	0	0	D	0	11	6	0	4	4	0	4.1	10.9
15-Aug-06	1	6	0	0	0	0	1	3	3	1	2	3	0	0	1	3	0	3	7	4	1	3	3	3	2.0	7.3
16-Aug-06	0	0	0	0	0	1	9	4	4	7	6	0	7	3	1	0	2	3	4	17	6	10	9	7	4.1	16.5
17-Aug-06	2	2	2	2	4	6	10	12	9	5	10	5	6	4	5	9	5	9	8	7	11	13	4	3	6.2	13.1
18-Aug-06	2	0	2	1	1	2	13	11	12	7	14	9	6	10	16	12	47	4	3	5	4	8	8	6	8.5	47.2
19-Aug-06	9	4	5	4	3	6	9	8	8	5	6	1	0	0	0	1	1	1	4	4	6	12	21	7	5.2	21.5
20-Aug-06	6	7	11	10	8	12	15	18	5	6	4	1	0	3	1	6	3	3	5	7	5	6	2	2	6.1	17.9
21-Aug-06	2	1	1	1	1	6	15	24	12	25	28	13	6	5	2	5	12	4	3	10	12	8	10	19	9.4	28.2
22-Aug-06	19	11	9	9	8	11	13	23	15	10	16	14	6	7	11	5	3	2	0	2	8	18	16	10	10.4	23.3
23-Aug-06	8	2	4	14	3	0	5	3	2	8	6	7	2	1	1	2	8	9	14	0	7	4	3	3	4.8	14.4
24-Aug-06	3	4	4	2	2	2	5	9	21	18	13	4	7	9	4	3	14	8	3	4	7	12	10	8	7.3	20.5
25-Aug-06	6	3	2	2	3	3	6	14	1	4	3	1	0	0	3	7	8	7	10	7	6	4	2	2	4.3	14.2
26-Aug-06	2	2	4	3	5	14	20	10	11	15	3	2	1	0	2	3	2	3	4	6	9	18	14	9	6.8	20.3
27-Aug-06	11	8	8	8	6	6	10	12	6	4	9	4	1	0	1	3	3	3	3	2	7	4	4	4	5.4	12.0
28-Aug-06	4	11	9	7	6	9	8	12	14	10	15	20	5	7	C	C	1	0	9	6	8	7	5	2	8.0	19.5
29-Aug-06	2	1	4	3	1	2	2	3	5	6	2	1	3	0	0	0	1	5	4	5	7	3	5	0	2.7	6.8
30-Aug-06	1	2	2	1	1	4	6	7	6	5	3	2	2	3	4	7	6	3	5	4	5	3	0	0	3.4	7.5
31-Aug-06	1	1	1	1	2	2	5	7	10	7	3	0	2	9	6	8	5	4	5	4	2	2	1	1	3.7	10.3
Hourly Avg	4.4	3.8	3.8	3.9	3.1	4.4	8.3	9.6	8.1	7.1	6.5	5.3	4.0	4.0	6.0	5.3	7.3	5.6	5.4	5.1	5.9	6.9	6.2	4.6		
Hourly Max	19.1	16.1	14.0	14.4	13.9	14.0	20.3	23.7	21.6	25.2	28.2	19.5	13.2	10.8	27.9	13.9	47.2	25.1	14.1	16.5	11.6	18.1	21.5	19.3		

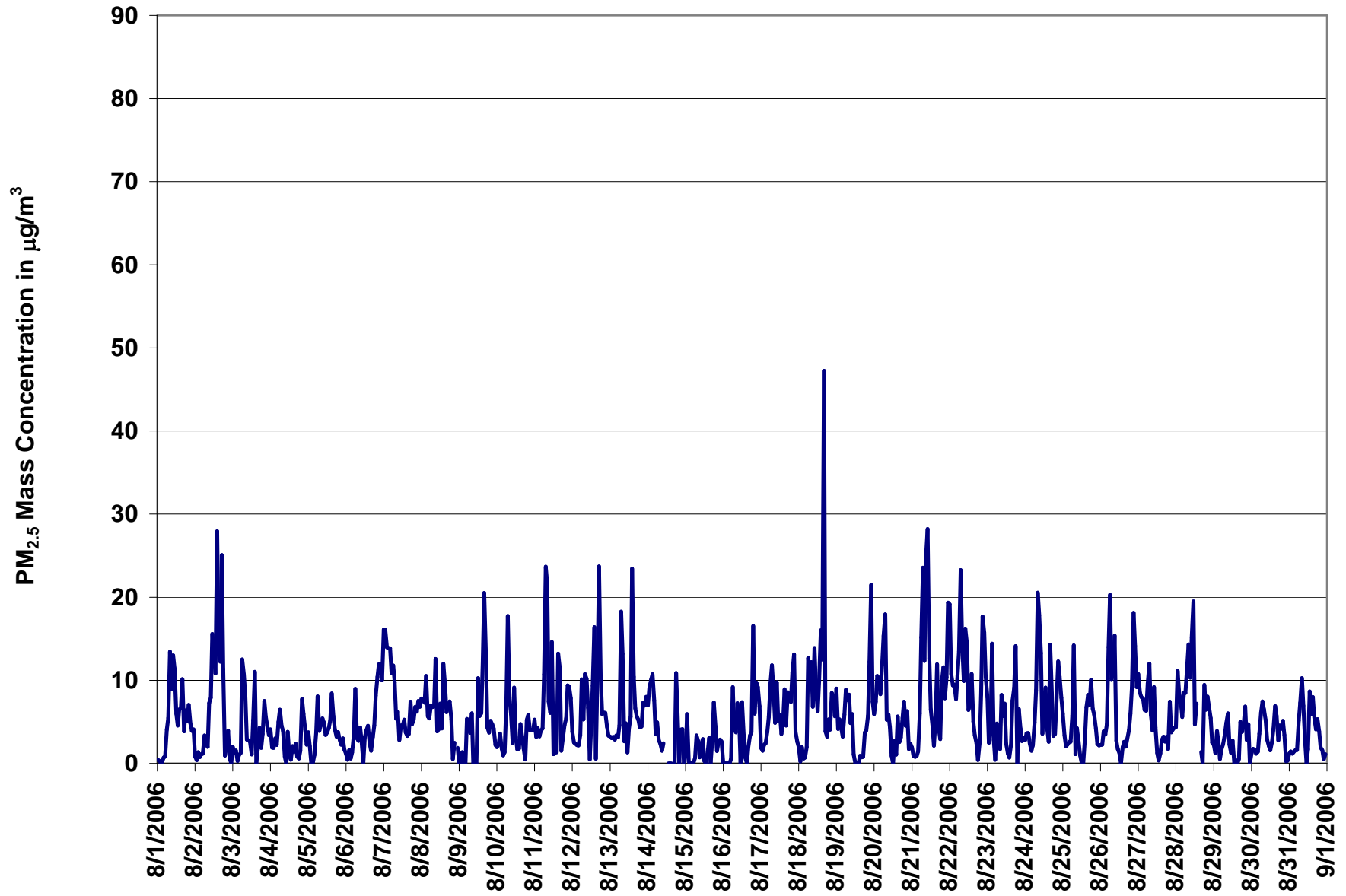


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

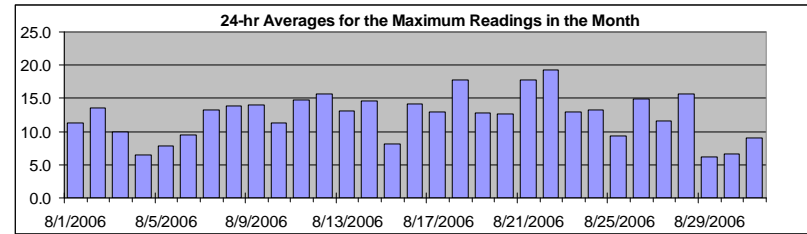
**Particulate Matter (PM<sub>2.5</sub>)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Average:	90.1	µg/m <sup>3</sup>	18-Aug	16:00 17:00
Maximum 24-hr Value:	19.2	µg/m <sup>3</sup>	22-Aug	

AIC Time:	0 hrs	Operational Time:	738 hrs							
Calibration Time:	2 hrs	AMD Operational Uptime:	99.5%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	44.0	30.1	16.0	9.7	6.1	2.8	1.2	12.4	10 µg/m <sup>3</sup>	11.9 µg/m <sup>3</sup>



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	1	2	1	2	2	2	17	19	27	20	24	23	11	8	9	13	26	8	11	7	11	8	10	10	11.3	27.3
2-Aug-06	3	3	5	2	2	3	5	4	5	14	25	29	22	15	46	23	28	37	20	13	6	13	2	2	13.6	46.1
3-Aug-06	6	4	4	2	3	5	20	23	21	7	8	6	5	30	31	2	5	7	6	9	13	8	7	6	9.9	30.8
4-Aug-06	6	4	3	6	4	9	10	8	9	3	2	17	5	6	5	6	4	4	7	13	8	7	6	6	6.5	17.5
5-Aug-06	7	9	1	2	3	7	14	15	6	8	10	8	8	9	12	14	12	9	7	7	5	5	6	5	7.9	14.8
6-Aug-06	3	4	6	2	3	8	12	10	7	9	6	8	9	8	8	5	6	7	9	27	24	18	17	12	9.5	26.6
7-Aug-06	27	20	16	16	17	13	16	23	9	10	7	10	8	10	9	10	18	14	8	13	13	10	11	9	13.3	27.0
8-Aug-06	11	10	11	16	13	12	11	11	13	22	11	13	13	14	30	24	15	25	13	11	8	7	D	5	13.8	29.5
9-Aug-06	2	3	4	0	3	9	19	17	29	4	6	5	37	30	11	19	37	48	8	9	8	13	8	8	14.1	48.5
10-Aug-06	8	5	6	4	3	3	18	35	17	14	6	26	12	6	10	21	18	8	8	10	12	9	8	7	11.3	34.9
11-Aug-06	8	5	6	5	6	7	18	33	29	15	12	27	15	10	8	23	20	6	21	19	12	19	16	13	14.7	32.5
12-Aug-06	10	8	8	7	4	5	16	12	20	20	14	12	12	27	33	21	29	42	36	10	8	9	6	6	15.6	42.2
13-Aug-06	5	5	5	4	5	5	11	35	44	7	10	7	11	15	36	25	15	11	9	6	10	11	9	13	13.1	44.1
14-Aug-06	11	13	17	17	17	7	7	5	8	5	8	D	D	4	5	12	D	8	49	48	42	9	10	4	14.6	48.8
15-Aug-06	4	11	2	1	2	1	2	8	5	12	9	11	18	4	8	12	17	9	23	9	9	6	5	7	8.2	22.8
16-Aug-06	2	0	1	1	3	4	21	25	16	26	17	4	24	26	7	5	8	8	13	35	27	26	19	21	14.2	35.4
17-Aug-06	17	9	5	4	8	10	15	17	18	11	19	16	16	12	15	17	10	15	16	13	17	18	8	5	13.0	18.5
18-Aug-06	4	3	5	3	4	4	31	21	21	11	30	21	12	17	24	45	90	21	6	10	6	12	11	15	17.7	90.1
19-Aug-06	17	8	7	6	5	9	18	13	12	9	14	7	5	4	8	8	9	7	12	13	16	48	41	12	12.7	48.0
20-Aug-06	8	10	12	14	12	15	28	34	11	9	12	9	6	13	7	19	8	8	13	16	13	13	8	4	12.7	34.3
21-Aug-06	5	3	2	3	4	8	35	36	18	44	42	28	12	15	13	17	22	14	10	26	21	13	12	25	17.8	43.8
22-Aug-06	24	22	12	12	17	17	34	37	26	23	28	38	11	15	21	13	8	6	7	6	13	26	27	17	19.2	37.9
23-Aug-06	19	11	12	41	7	7	8	8	8	15	11	18	9	10	7	12	13	16	26	24	9	7	5	5	12.9	41.4
24-Aug-06	4	6	8	8	3	5	8	16	31	34	17	11	25	23	8	5	21	15	6	6	13	18	16	14	13.3	33.8
25-Aug-06	10	9	4	4	4	4	13	29	9	9	7	6	5	9	7	13	17	14	15	9	9	7	6	4	9.3	29.0
26-Aug-06	8	5	9	8	8	35	41	11	18	39	9	6	9	10	13	8	6	6	10	14	21	27	21	14	14.9	41.3
27-Aug-06	13	12	10	10	9	9	17	23	9	11	15	17	9	10	8	13	11	7	9	7	20	9	10	9	11.5	23.4
28-Aug-06	7	17	13	13	7	13	11	17	22	23	21	30	16	16	C	C	26	7	28	16	16	14	7	5	15.7	29.6
29-Aug-06	4	3	6	5	3	4	6	5	7	9	6	9	11	1	5	5	5	12	7	9	11	4	9	3	6.1	12.2
30-Aug-06	4	3	5	3	4	6	8	11	11	11	6	4	5	7	8	13	10	5	10	7	9	6	3	1	6.7	13.0
31-Aug-06	5	5	4	4	5	4	12	15	20	16	12	5	5	18	20	24	12	8	8	6	5	3	1	3	9.1	24.1
Hourly Avg	8.5	7.5	6.8	7.3	6.1	8.1	16.2	18.6	16.4	15.2	13.7	14.4	12.2	12.9	14.4	14.8	17.5	13.3	13.8	13.5	13.5	13.0	10.9	8.8		
Hourly Max	27.0	22.2	16.8	41.4	17.0	35.4	41.3	36.7	44.1	43.8	42.5	37.9	37.1	29.7	46.1	44.8	90.1	48.5	48.8	47.7	41.9	48.0	41.1	24.7		

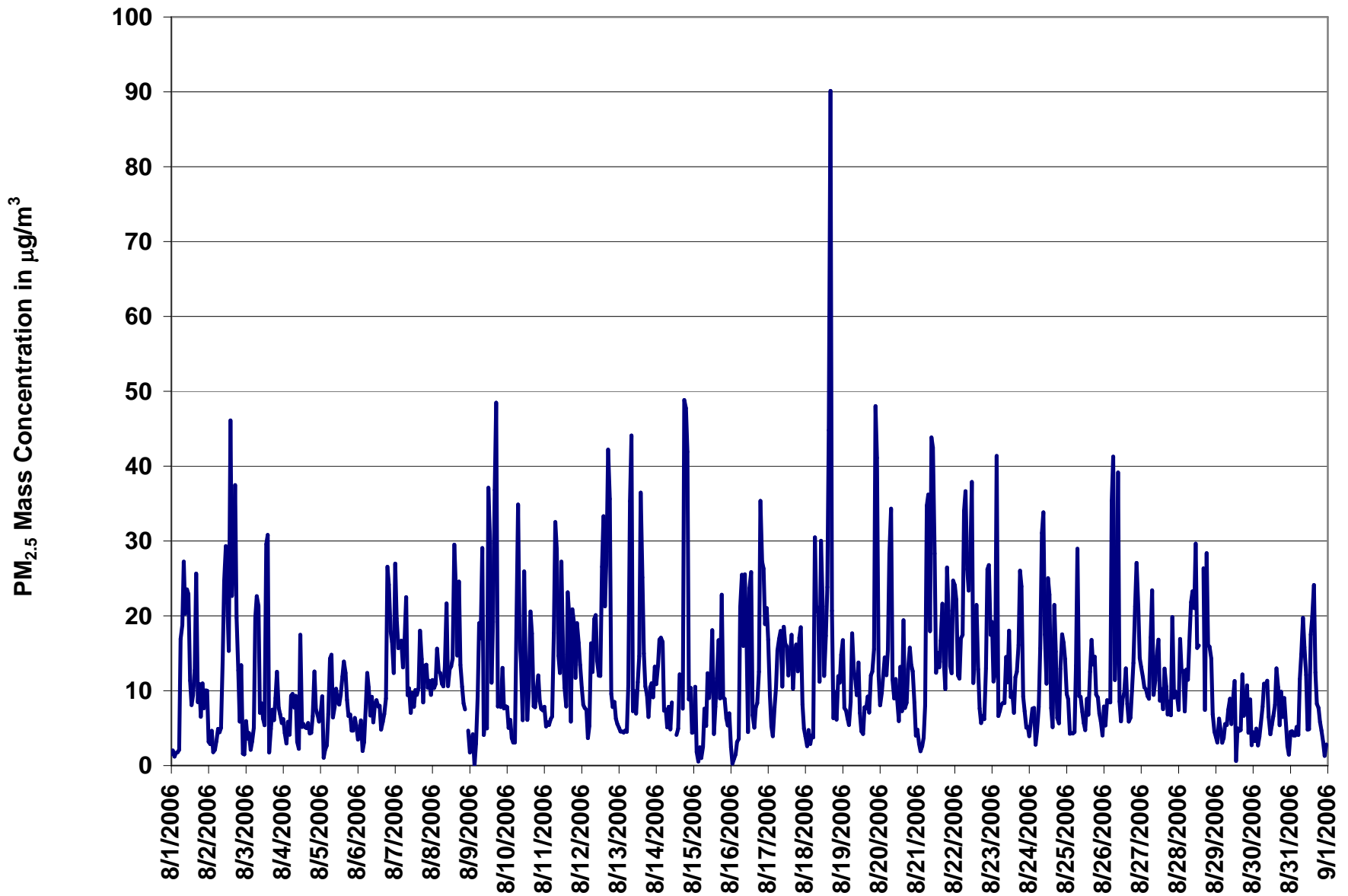
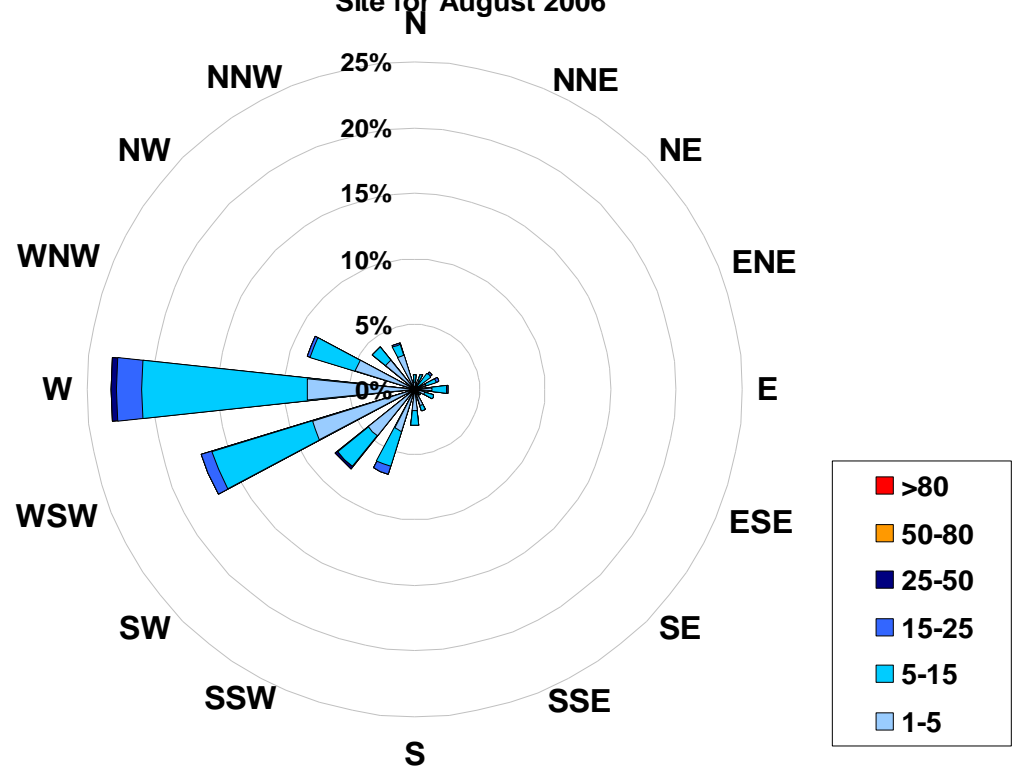


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Evergreen Park Site for August 2006**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>		
Range	Frequency (hrs)	
1.0 < 5	414	
5 to 15	288	
15 to 25	31	
25 to 50	5	
50 to 80	0	
> 80	0	
<b>Total Non-Zero Values</b>	<b>738</b>	

# PASZA - Evergreen Park - Temperature Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

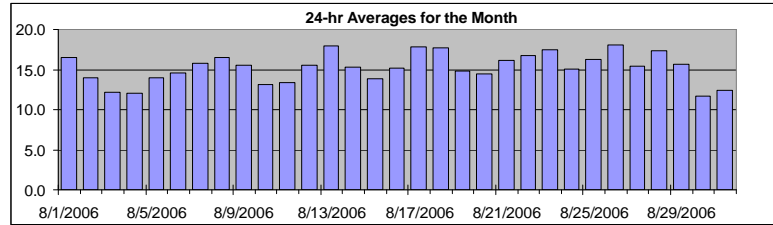
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	27.4	°C	21-Aug	15:00 16:00
Maximum 24-hr Average:	18.1	°C	26-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
	26.5	24.6	19.8	15.5	10.6	5.4	3.2	15.2 °C	15.5 °C

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-06	16	15	15	14	13	12	13	15	16	17	19	20	20	19	19	19	19	20	20	19	17	16	14	10	16.6	19.8	
2-Aug-06	9	10	8	11	9	9	11	13	15	16	17	18	18	19	19	19	19	19	18	15	14	12	11	8	14.0	18.9	
3-Aug-06	7	6	5	4	3	2	5	10	12	14	16	17	18	18	18	19	19	19	18	18	15	11	8	7	12.1	19.4	
4-Aug-06	6	6	5	4	4	5	8	10	13	14	16	17	16	17	17	17	17	18	18	18	16	11	9	8	12.1	18.4	
5-Aug-06	8	10	10	6	4	4	6	10	14	16	18	19	19	20	19	19	19	20	20	19	17	15	13	10	14.0	20.4	
6-Aug-06	9	8	7	5	4	4	6	9	11	15	19	21	22	22	23	23	23	23	22	21	18	14	12	11	14.6	23.3	
7-Aug-06	10	8	7	7	6	6	8	11	14	18	20	21	23	23	24	24	24	22	21	20	18	16	14	13	15.8	23.8	
8-Aug-06	13	13	13	13	14	14	14	15	16	17	19	20	21	21	21	18	18	18	18	17	17	16	15	15	16.5	21.5	
9-Aug-06	14	14	13	10	9	9	12	13	15	17	17	19	20	21	21	21	20	20	19	19	17	14	10	9	15.5	21.0	
10-Aug-06	7	6	5	4	3	2	3	10	13	15	17	19	20	20	21	22	22	21	21	20	16	12	10	8	13.1	22.0	
11-Aug-06	8	7	7	6	6	6	6	9	13	16	19	17	18	20	22	21	19	19	19	16	15	12	10	8	13.4	22.0	
12-Aug-06	9	8	7	6	5	6	7	9	12	16	19	21	22	22	23	22	23	23	22	21	19	18	18	17	15.6	22.9	
13-Aug-06	17	16	15	14	12	12	13	15	17	18	20	21	22	23	24	24	24	24	23	22	19	15	12	10	17.9	24.0	
14-Aug-06	10	11	11	12	12	12	12	12	13	13	15	17	19	20	21	21	22	21	20	16	15	16	14	13	15.3	21.9	
15-Aug-06	13	11	10	10	10	9	9	10	11	14	15	15	18	18	19	20	19	20	17	15	14	13	12	11	13.9	19.8	
16-Aug-06	11	9	7	6	5	5	6	10	12	15	17	19	21	22	22	23	23	23	23	19	17	17	16	15	15.2	23.2	
17-Aug-06	14	12	11	10	9	8	8	13	16	17	19	22	24	25	25	26	26	27	27	25	19	15	17	15	17.8	26.8	
18-Aug-06	14	13	11	9	8	7	9	14	18	21	22	23	23	24	24	24	24	23	22	21	20	18	16	14	17.7	24.2	
19-Aug-06	11	9	8	9	10	8	8	11	13	16	18	20	21	21	22	23	21	22	22	21	14	11	9	7	14.9	22.6	
20-Aug-06	6	5	4	3	3	2	3	8	11	14	18	21	23	24	25	25	25	26	25	23	16	13	12	11	14.5	25.6	
21-Aug-06	9	8	7	6	5	5	5	10	13	15	18	20	23	25	27	27	27	27	27	24	18	15	13	13	16.1	27.4	
22-Aug-06	11	13	12	11	8	6	6	12	15	18	20	22	24	25	26	26	25	25	23	21	17	13	11	10	16.7	25.6	
23-Aug-06	12	16	16	13	11	11	11	12	14	16	19	21	22	23	22	23	24	22	21	21	19	18	16	15	17.4	23.8	
24-Aug-06	14	12	9	9	7	7	7	11	16	19	19	20	20	20	20	20	21	20	19	18	15	13	13	11	15.1	20.9	
25-Aug-06	10	8	7	6	5	4	5	9	13	16	18	21	23	24	25	25	25	25	24	23	21	19	18	17	16.3	25.4	
26-Aug-06	14	16	13	12	13	12	13	15	18	20	21	22	23	24	24	25	25	24	22	18	15	13	11	11	18.1	24.7	
27-Aug-06	9	7	6	5	4	3	3	7	12	15	18	22	23	25	26	26	27	26	26	23	18	15	13	11	15.4	26.6	
28-Aug-06	10	10	9	8	7	8	7	10	14	17	19	22	24	26	26	26	26	25	23	22	19	21	20	19	17.4	26.4	
29-Aug-06	18	16	14	12	12	12	12	13	14	15	16	18	18	19	20	20	20	20	17	16	15	13	12	14	15.6	20.4	
30-Aug-06	14	13	12	11	10	8	8	9	11	14	15	16	17	18	17	15	12	10	9	10	9	8	9	8	11.7	17.6	
31-Aug-06	7	6	6	5	5	6	6	8	11	12	15	17	17	18	19	19	18	17	17	16	15	14	12	12	12.4	18.7	
Hourly Avg	11.0	10.4	9.3	8.4	7.6	7.2	8.1	11.1	13.7	16.0	17.9	19.5	20.7	21.5	21.9	22.0	21.9	21.6	20.9	19.4	16.6	14.5	13.0	11.7			
Hourly Max	17.6	16.3	15.7	14.3	13.8	13.6	14.1	15.4	18.3	21.1	22.5	23.1	24.3	26.3	26.5	27.4	26.7	27.0	26.8	25.0	20.8	20.7	20.3	19.1			

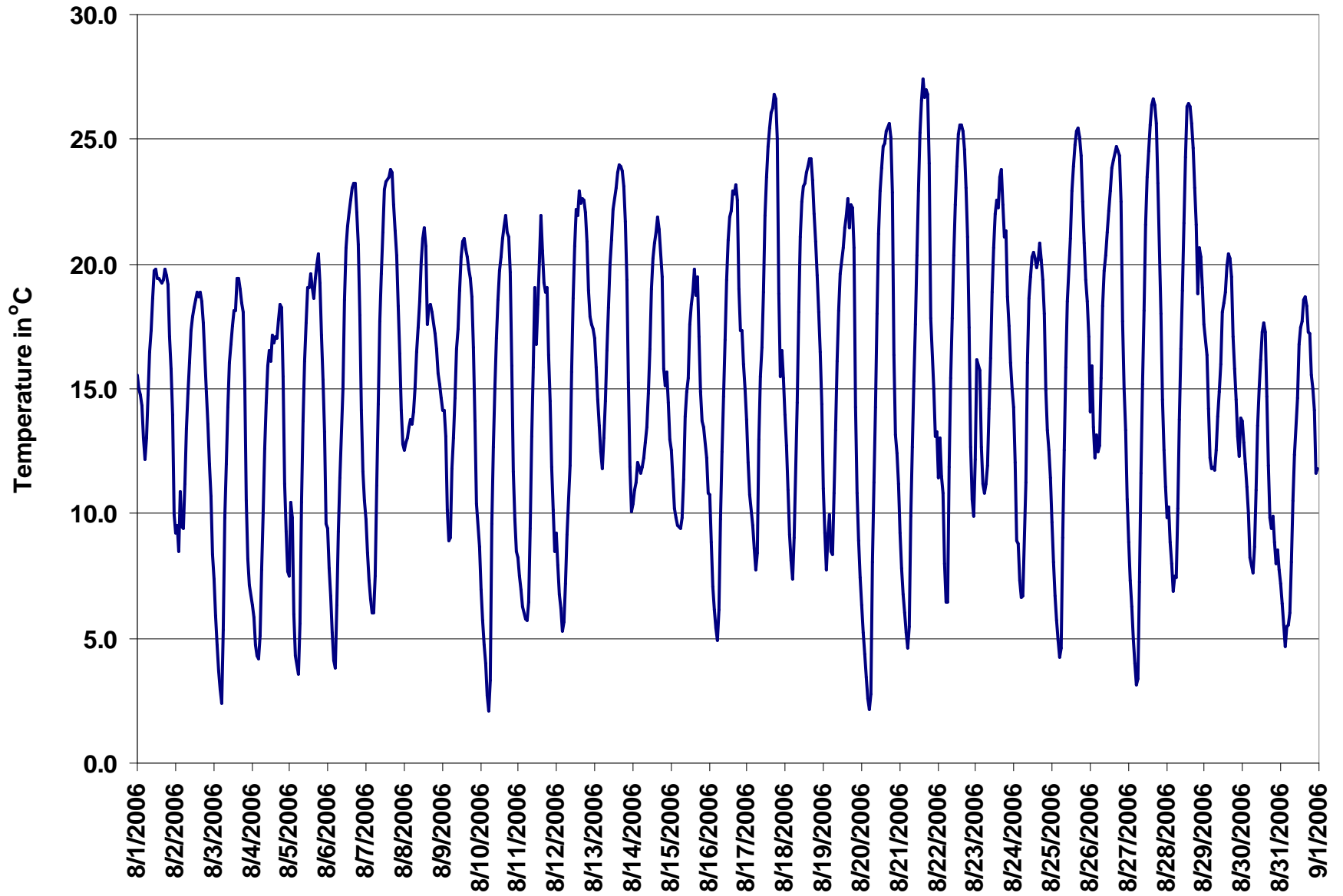


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

# PASZA - Evergreen Park - Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

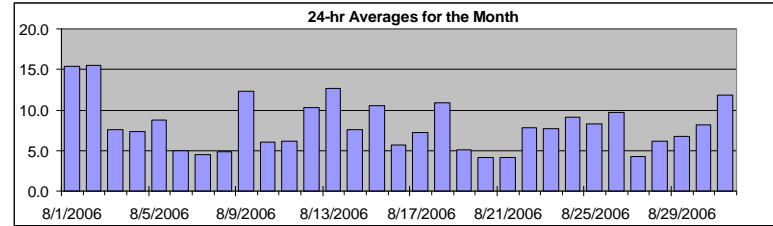
## Wind Speed (WSs)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	25.4	km/hr	2-Aug	9:00 10:00
Maximum 24-hr Value:	15.5	km/hr	2-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	742 hrs				
Calibration Time:	2 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	22.6	18.4	11.3	6.9	4.0	2.1	1.5	8.1 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-06	16	16	17	16	15	13	14	11	18	19	22	20	22	19	20	18	18	14	16	11	11	12	6	4	15.3	21.6	
2-Aug-06	6	7	7	10	9	10	10	17	20	25	23	24	23	23	24	23	24	22	21	15	11	9	5	5	15.5	25.4	
3-Aug-06	4	3	3	4	3	2	4	8	9	10	13	12	13	16	15	13	12	11	10	7	4	2	1	2	7.6	15.9	
4-Aug-06	3	2	2	3	2	5	6	4	9	9	9	10	12	15	15	12	11	11	11	8	5	4	3	3	7.3	15.0	
5-Aug-06	4	8	6	2	2	2	1	7	12	12	13	15	12	13	14	8	8	12	15	15	11	8	5	4	8.8	15.3	
6-Aug-06	6	3	4	2	2	3	4	5	5	5	8	10	9	6	7	8	6	9	7	8	2	2	2	2	5.0	9.6	
7-Aug-06	3	2	2	2	2	3	3	3	4	5	7	9	8	8	7	6	5	7	6	5	3	3	2	2	4.5	9.1	
8-Aug-06	3	2	2	5	5	4	3	7	7	4	7	5	3	4	8	7	3	2	5	5	8	5	6	6	4.8	8.3	
9-Aug-06	9	9	4	4	5	4	9	9	11	13	18	17	20	18	19	22	21	20	19	17	11	6	5	5	12.3	22.3	
10-Aug-06	3	3	2	3	2	3	2	5	9	10	10	10	12	12	12	10	8	8	5	6	4	2	2	1	6.1	11.9	
11-Aug-06	2	2	3	2	3	2	4	5	5	7	7	11	8	6	7	14	18	10	8	11	4	4	3	3	6.1	17.5	
12-Aug-06	4	3	4	5	5	6	4	7	8	8	7	13	14	12	15	12	15	17	19	16	12	14	14	14	10.3	18.6	
13-Aug-06	12	11	11	9	6	9	8	9	15	18	19	19	16	19	20	19	18	18	17	15	8	3	2	2	12.7	19.6	
14-Aug-06	2	2	2	4	6	6	6	6	4	6	8	10	12	13	9	12	11	11	7	7	9	9	11	8	7.5	13.3	
15-Aug-06	8	15	16	14	8	10	8	11	12	10	12	11	11	10	15	15	14	13	10	10	6	6	4	3	10.5	16.1	
16-Aug-06	4	2	3	3	3	3	4	6	7	11	7	7	11	10	7	9	8	9	6	3	3	4	3	3	5.7	11.3	
17-Aug-06	3	3	5	5	3	3	4	7	9	9	8	10	11	11	11	11	10	12	11	7	4	5	5	6	7.2	11.9	
18-Aug-06	4	5	4	1	2	2	4	9	12	15	16	17	16	19	21	21	23	17	13	11	9	7	7	5	10.8	23.1	
19-Aug-06	3	2	3	5	7	5	5	6	7	5	5	7	7	8	10	8	6	5	5	4	2	2	2	3	5.1	9.7	
20-Aug-06	1	1	2	2	3	2	2	2	4	5	6	6	7	7	6	8	6	5	5	4	3	3	5	3	4.1	7.7	
21-Aug-06	3	1	2	1	2	2	3	6	6	4	4	5	5	5	8	5	5	6	7	5	3	2	3	4	4.1	8.1	
22-Aug-06	3	6	5	6	3	3	3	6	8	11	12	12	12	11	12	12	12	14	15	9	4	2	2	3	7.8	15.0	
23-Aug-06	5	8	8	4	2	4	4	4	8	11	11	10	10	9	9	8	14	7	3	8	9	10	9	10	7.7	14.1	
24-Aug-06	9	5	2	2	2	2	3	3	9	16	18	14	15	17	17	14	18	17	14	9	4	3	3	2	9.2	18.4	
25-Aug-06	2	3	2	3	2	3	3	5	5	6	7	8	12	13	14	14	13	15	15	13	12	11	11	9	8.3	14.9	
26-Aug-06	5	9	5	5	7	6	7	12	16	19	15	14	14	16	14	14	12	12	10	7	4	4	5	3	9.8	18.7	
27-Aug-06	3	4	4	3	2	3	2	3	2	4	5	5	7	7	6	6	6	7	7	6	4	2	3	2	4.3	7.1	
28-Aug-06	2	4	3	5	3	5	2	6	5	7	5	4	5	5	7	7	14	12	9	6	3	8	11	12	6.2	14.1	
29-Aug-06	14	9	4	5	5	5	4	4	5	7	7	8	13	13	8	8	7	C	C	6	4	2	4	6	6.7	13.8	
30-Aug-06	7	6	8	8	9	7	8	8	7	7	10	12	12	12	11	15	9	9	4	4	4	5	9	7	8.2	15.5	
31-Aug-06	7	7	5	5	5	6	6	11	14	12	18	18	17	17	20	19	15	18	14	13	11	10	11	11.8	19.6		
1-hr Average	5.1	5.4	4.8	4.7	4.3	4.5	4.8	6.7	8.7	10.0	10.7	11.4	11.9	12.0	12.5	12.1	12.1	11.7	10.6	8.7	6.3	5.5	5.3	5.0			
Hourly Max	16.4	16.1	16.6	16.2	14.6	13.3	13.9	16.6	19.5	25.4	22.8	24.4	23.1	22.7	24.3	22.5	24.5	22.2	21.5	16.7	12.8	13.9	13.6	14.0			

# PASZA - Evergreen Park - Vector Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

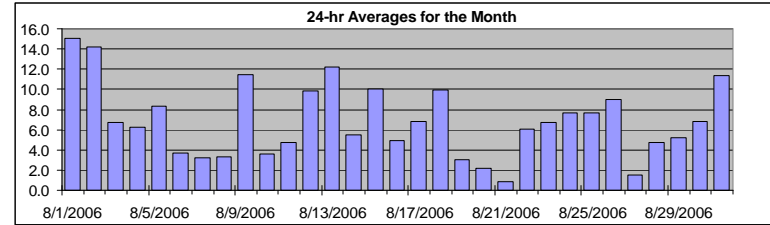
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	25.0	km/hr	2-Aug	9:00 10:00
Maximum 24-hr Value:	15.1	km/hr	1-Aug	



Calm Time:	24 hrs	3% calms	Operational Time:	718 hrs				
Calibration Time:	2 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	21.9	18.0	10.9	6.3	3.4	1.2	0.9	6.2 km/hr

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max	
Hour Start 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-06	16	16	17	16	15	13	14	11	17	19	21	19	21	18	19	18	17	14	16	11	11	12	5	4	15.1	21.1
2-Aug-06	5	7	7	9	9	10	10	16	19	25	22	24	22	22	24	22	24	22	19	15	10	9	4	5	14.2	25.0
3-Aug-06	2	3	1	4	1	1	3	8	8	9	12	12	13	15	14	12	12	10	10	6	3	1	calm	2	6.8	14.9
4-Aug-06	2	1	calm	calm	1	5	6	4	9	8	8	10	12	15	11	11	11	11	8	4	4	4	3	3	6.2	14.6
5-Aug-06	4	8	6	calm	1	2	1	6	11	12	13	14	12	12	14	8	7	12	15	14	11	8	4	3	8.3	14.7
6-Aug-06	5	3	2	1	1	3	4	5	4	4	7	9	8	4	6	5	5	7	6	7	1	2	calm	calm	3.7	9.2
7-Aug-06	calm	calm	1	1	1	3	calm	1	2	4	6	8	7	7	6	6	4	7	6	4	3	1	calm	2	3.2	8.4
8-Aug-06	2	1	1	3	1	3	2	5	6	2	6	4	1	3	7	6	2	2	4	5	8	4	6	6	3.3	7.8
9-Aug-06	9	9	4	1	4	3	8	9	11	13	18	16	19	17	19	22	20	20	18	16	11	6	5	5	11.5	21.5
10-Aug-06	1	2	1	1	2	1	calm	5	9	10	10	9	11	11	11	7	7	6	4	6	4	1	1	calm	3.6	11.3
11-Aug-06	1	2	2	2	2	1	3	4	4	7	4	10	7	3	6	13	15	10	7	10	4	3	1	3	4.7	15.4
12-Aug-06	4	3	4	5	4	6	4	7	7	7	6	12	13	11	14	11	14	17	18	16	12	14	14	14	9.8	18.1
13-Aug-06	12	11	11	9	6	9	7	8	15	18	19	18	15	18	19	18	17	18	17	15	7	3	2	2	12.2	19.0
14-Aug-06	1	1	2	4	5	5	5	6	4	5	8	10	11	13	8	11	11	11	5	5	7	8	10	3	5.5	12.6
15-Aug-06	7	15	16	14	8	10	8	11	12	10	12	10	9	9	14	14	13	12	9	9	6	6	4	1	10.1	16.0
16-Aug-06	3	1	3	3	3	2	4	6	7	10	7	7	11	9	5	8	7	8	6	1	3	4	3	2	4.9	10.7
17-Aug-06	3	2	5	5	3	3	4	7	9	9	8	9	10	10	10	10	9	11	11	7	4	4	5	5	6.8	11.3
18-Aug-06	4	5	2	1	1	1	4	9	12	15	16	16	16	18	21	20	23	16	13	11	9	7	6	4	10.0	22.7
19-Aug-06	2	1	1	4	7	4	2	6	7	3	3	3	3	6	9	5	6	4	4	4	2	1	1	2	3.1	8.9
20-Aug-06	1	calm	1	1	1	1	2	2	4	4	3	5	6	5	3	4	3	3	4	4	2	1	5	3	2.2	6.1
21-Aug-06	3	1	2	calm	calm	2	2	6	6	3	3	3	4	3	6	calm	4	6	6	5	3	1	2	3	0.9	6.3
22-Aug-06	2	5	5	4	2	2	2	6	8	11	11	11	11	10	9	10	11	14	15	9	4	2	2	2	6.1	14.7
23-Aug-06	4	8	8	4	calm	4	4	3	8	11	11	9	7	7	8	5	13	6	1	8	9	10	9	10	6.7	13.4
24-Aug-06	9	4	calm	1	1	1	1	calm	8	15	17	13	13	16	16	14	18	16	14	9	3	3	3	1	7.7	17.8
25-Aug-06	1	3	2	2	2	3	3	5	5	6	6	7	11	12	14	13	12	14	15	13	12	11	11	9	7.7	14.7
26-Aug-06	5	9	5	4	7	5	7	11	15	18	14	13	12	14	13	12	11	11	9	7	3	4	3	3	9.0	18.0
27-Aug-06	calm	calm	2	calm	1	1	2	3	2	2	3	1	5	2	4	1	3	6	6	6	4	calm	2	2	1.5	6.4
28-Aug-06	calm	3	2	4	2	4	1	5	3	6	5	3	4	2	5	4	14	12	9	4	2	7	11	11	4.7	13.6
29-Aug-06	14	8	3	4	4	5	4	4	4	7	6	7	12	12	6	5	4	C	C	6	4	2	4	6	5.2	13.6
30-Aug-06	6	6	6	8	8	7	7	8	7	6	8	10	11	11	10	13	5	8	1	3	3	4	9	7	6.8	13.3
31-Aug-06	7	7	4	5	4	4	6	6	10	13	12	17	17	17	17	19	18	14	18	13	13	10	10	11	11.4	19.1
1-hr Vector	3.5	4.0	3.5	3.5	3.1	3.5	3.7	6.0	7.8	8.5	8.9	9.0	9.5	9.6	10.1	10.4	9.7	9.0	7.8	5.8	4.5	4.3	3.5	3.0		
Hourly Max	16.3	16.0	16.6	16.1	14.5	13.2	13.8	16.4	19.3	25.0	22.2	23.5	22.4	21.9	23.8	21.7	24.0	21.8	19.5	16.5	12.7	13.9	13.5	13.9		

## PASZA - Evergreen Park - Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Calm Time:	0 hrs	0% calms	Operational Time:	742 hrs				
Calibration Time:	2 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	343.5	329.1	276.3	253.6	213.9	71.5	20.1	265 deg

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	WD Sector
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-06	250	249	251	251	251	251	257	280	263	261	260	270	272	274	267	265	262	271	262	267	257	275	284	206	262	W
2-Aug-06	233	214	225	233	221	225	237	244	251	250	259	268	274	269	272	275	264	270	274	321	314	318	289	209	263	W
3-Aug-06	341	214	262	198	277	209	253	267	261	266	259	277	268	260	264	266	270	276	327	312	329	291	343	355	272	W
4-Aug-06	342	306	78	297	327	319	341	337	322	334	342	331	338	341	331	325	335	332	325	318	253	199	192	200	327	NNW
5-Aug-06	228	251	251	56	181	207	190	242	255	247	249	250	259	253	255	255	263	252	265	261	251	246	243	180	251	WSW
6-Aug-06	218	196	158	165	144	182	202	207	222	225	262	248	259	220	250	279	260	296	305	319	287	202	10	260	250	WSW
7-Aug-06	40	49	75	335	213	199	263	322	39	75	67	72	97	121	102	65	80	54	62	75	31	99	0	343	70	ENE
8-Aug-06	317	279	234	290	333	299	223	241	240	243	266	264	274	334	303	312	292	24	229	203	221	192	189	199	259	WSW
9-Aug-06	212	226	246	147	226	271	246	251	261	269	252	253	252	257	269	275	275	278	272	261	250	228	228	208	257	WSW
10-Aug-06	176	172	148	242	57	77	105	244	244	260	263	260	248	256	253	282	284	295	342	37	42	58	29	166	264	W
11-Aug-06	332	351	329	258	202	224	240	267	276	281	277	278	295	333	345	269	318	16	352	327	299	235	235	263	300	WNW
12-Aug-06	263	242	227	221	194	200	218	243	255	264	248	257	261	285	263	293	266	261	260	258	254	254	256	247	256	WSW
13-Aug-06	246	245	245	241	252	243	259	259	267	266	256	262	275	270	270	278	272	271	272	272	280	241	201	84	263	W
14-Aug-06	70	191	199	298	222	186	210	214	201	198	207	213	228	227	207	243	253	248	282	288	313	260	335	333	243	WSW
15-Aug-06	261	261	253	251	251	253	279	261	270	295	263	271	294	299	259	254	273	277	287	302	292	265	253	232	269	W
16-Aug-06	233	349	194	226	213	193	198	227	254	258	259	253	248	280	249	307	295	289	284	202	270	267	251	215	258	WSW
17-Aug-06	203	257	230	230	230	225	219	248	251	243	248	245	266	285	260	257	266	254	250	240	203	210	242	235	248	WSW
18-Aug-06	233	202	162	159	179	174	220	251	258	262	270	276	280	278	262	272	268	289	288	283	285	256	257	249	267	W
19-Aug-06	271	214	314	281	263	269	240	280	275	297	230	106	334	295	326	292	327	297	12	35	58	206	92	72	297	WNW
20-Aug-06	80	161	157	96	113	219	71	203	217	183	107	68	107	167	144	225	224	234	53	98	102	109	88	82	138	SE
21-Aug-06	4	13	8	193	153	232	268	262	250	229	218	236	214	186	227	356	84	89	90	94	38	19	292	289	230	SW
22-Aug-06	331	275	277	280	211	186	203	250	250	244	257	273	263	268	267	351	328	321	326	323	300	202	191	249	283	WNW
23-Aug-06	247	250	246	180	194	195	196	285	259	257	264	252	274	322	333	262	240	298	286	253	249	251	243	246	257	WSW
24-Aug-06	248	252	119	168	109	174	152	288	257	263	266	302	302	306	314	303	273	274	312	321	304	264	225	252	284	WNW
25-Aug-06	343	225	191	205	182	200	200	199	197	205	201	221	226	247	244	249	261	259	257	260	250	253	240	229	239	WSW
26-Aug-06	226	230	218	247	255	257	259	262	272	278	291	277	282	272	280	303	292	296	276	262	288	256	288	25	274	W
27-Aug-06	245	46	202	169	146	106	190	205	196	40	42	136	164	176	291	332	98	90	81	91	86	192	25	338	115	ESE
28-Aug-06	282	264	200	246	219	218	157	212	317	222	253	282	215	181	178	196	248	234	250	251	280	277	301	323	247	WSW
29-Aug-06	325	332	282	160	200	246	293	312	310	273	279	256	261	254	274	275	253	C	C	188	214	231	261	305	271	W
30-Aug-06	293	276	288	277	272	277	288	272	296	319	312	303	317	298	308	244	41	344	22	288	289	259	251	253	292	WNW
31-Aug-06	274	279	285	256	277	281	259	266	271	269	275	270	253	264	261	263	266	263	268	265	247	237	216	221	261	W
Hourly Avg	262	251	241	241	235	235	243	254	261	261	263	266	267	270	271	276	275	281	287	282	271	251	258	250		

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

Station: Evergreen Park  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

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Determined by the Yamartino 15-min interval calculation

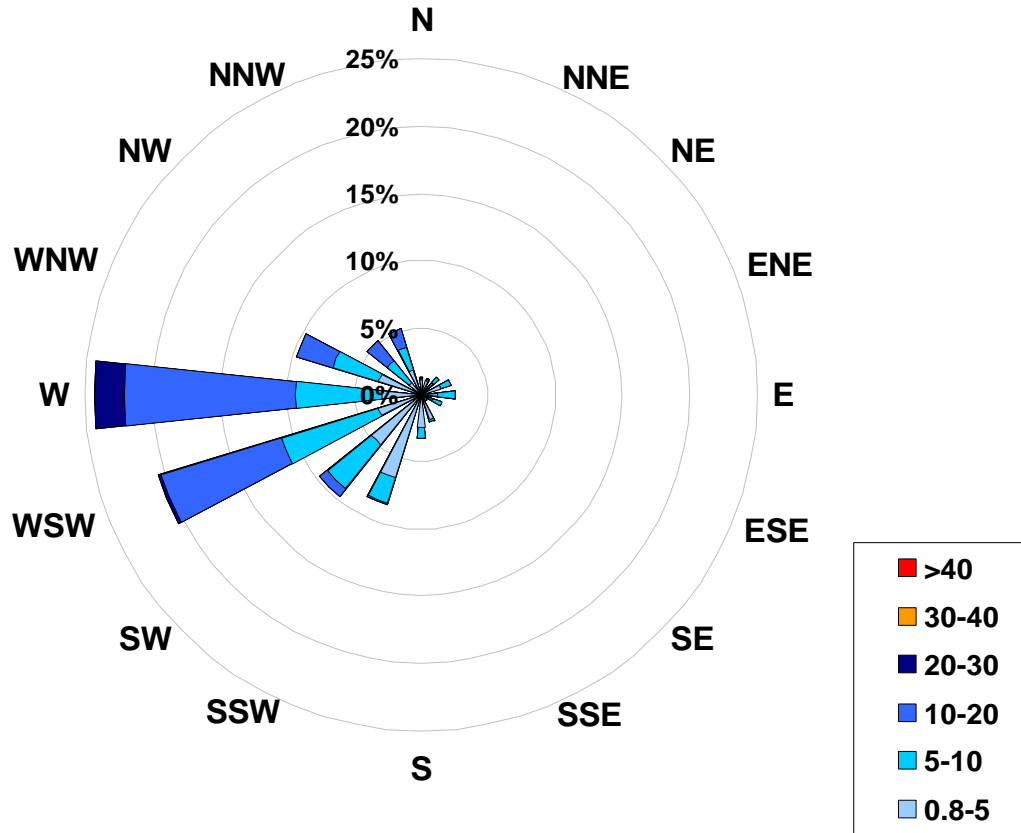
Calm Time:	0 hrs	0% calms	Operational Time:	742 hrs			
Calibration Time:	2 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	66.2	55.8	32.7	17.8	12.1	6.6	4.9

**Status Flag Characters**

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

Day	Mountain Standard Time																								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	
1-Aug-06	6	6	5	6	5	5	8	14	11	10	10	12	13	13	11	11	12	12	13	10	10	13	20	17	20.3
2-Aug-06	54	5	7	7	4	6	8	8	9	10	11	14	14	14	12	15	11	11	16	14	14	16	17	8	53.8
3-Aug-06	43	20	39	11	46	49	25	14	17	19	17	21	16	18	16	21	21	17	11	14	19	22	56	28	56.3
4-Aug-06	37	52	66	39	69	15	10	17	18	26	22	22	13	16	12	17	11	15	13	13	11	5	10	10	68.9
5-Aug-06	11	6	8	55	33	44	50	16	11	12	11	16	14	13	9	16	25	11	13	10	8	8	13	36	54.5
6-Aug-06	13	31	44	46	41	16	10	9	20	45	21	18	28	41	43	56	36	26	14	12	18	10	70	62	70.2
7-Aug-06	40	59	34	50	27	12	36	54	39	31	31	22	29	27	42	27	43	15	23	25	26	46	59	41	58.9
8-Aug-06	43	32	63	57	66	46	40	59	14	60	27	44	58	40	16	28	30	41	35	8	4	15	8	9	66.2
9-Aug-06	6	7	18	39	16	17	7	8	11	12	11	17	12	17	17	13	14	13	11	8	7	15	14	8	39.2
10-Aug-06	48	35	41	53	28	62	66	23	14	15	20	23	24	17	23	36	34	27	34	10	10	53	32	62	66.2
11-Aug-06	46	11	19	23	35	51	29	19	31	24	52	13	22	45	43	16	17	18	25	18	23	26	37	20	52.0
12-Aug-06	15	25	12	7	12	7	13	9	14	25	28	20	21	18	16	19	13	12	12	7	6	5	6	6	28.5
13-Aug-06	7	6	6	7	11	7	19	13	12	11	10	15	20	16	17	16	14	12	12	11	13	30	39	31	38.6
14-Aug-06	43	28	58	14	36	27	26	11	27	22	13	16	14	17	41	28	16	12	51	29	23	15	16	31	58.3
15-Aug-06	12	9	7	7	15	7	16	10	12	17	13	24	26	20	14	13	15	18	17	25	18	13	21	45	44.5
16-Aug-06	11	36	12	11	18	25	12	12	15	14	26	30	17	29	43	27	20	18	17	37	40	18	14	47	46.8
17-Aug-06	19	36	10	5	15	12	8	9	12	11	18	22	26	27	26	17	22	19	10	7	4	8	6	8	36.3
18-Aug-06	13	6	36	18	38	28	13	7	10	11	15	17	15	14	13	12	9	14	11	10	12	11	9	12	37.6
19-Aug-06	36	65	40	18	14	35	40	20	19	60	53	62	75	51	27	61	20	35	41	13	20	36	33	35	75.1
20-Aug-06	33	41	33	49	25	19	9	18	17	38	47	47	41	49	72	49	66	57	31	12	20	32	9	17	72.4
21-Aug-06	15	50	39	49	45	48	23	14	20	47	47	53	51	62	35	70	40	23	18	12	27	61	27	34	70.3
22-Aug-06	48	19	16	19	35	41	25	8	11	11	16	21	24	30	50	27	30	16	13	10	40	10	43	47	49.6
23-Aug-06	16	7	12	24	44	39	17	24	14	14	18	19	41	44	22	56	18	19	34	12	5	5	6	5	55.8
24-Aug-06	6	33	49	18	36	22	62	38	20	15	14	19	19	15	17	17	14	15	11	11	16	19	13	40	61.9
25-Aug-06	48	14	9	12	14	8	13	9	18	20	22	29	22	21	14	17	21	14	9	9	6	6	6	6	48.0
26-Aug-06	19	5	15	17	11	16	12	9	10	13	16	22	20	20	24	23	22	20	15	12	19	12	28	22	27.8
27-Aug-06	48	55	51	37	42	38	21	11	46	46	45	68	45	56	51	56	58	25	16	12	9	54	22	46	68.2
28-Aug-06	64	36	60	17	36	42	31	20	44	34	29	55	40	71	45	42	15	9	9	42	27	15	12	11	71.1
29-Aug-06	9	15	34	22	17	22	20	15	17	17	25	52	17	18	32	52	54	C	C	16	24	59	22	9	58.9
30-Aug-06	15	12	27	12	11	15	12	14	20	28	30	29	22	20	20	15	47	24	40	27	25	20	5	8	47.0
31-Aug-06	14	14	15	12	14	17	10	15	13	11	21	16	15	13	13	13	14	10	10	9	7	6	4	4	20.6
Hourly Max	64	65	66	57	69	62	66	59	46	60	53	68	75	71	72	70	66	57	51	42	40	61	70	62	

1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for August 2006



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	< 5		263
5	to 10		244
10	to 20		217
20	to 30		18
30	to 40		0
	> 40		0
Total Non-Zero Values			742



# PASZA - Smoky Heights Station

## Monthly Summary Tables, Graphs, and Roses

# PASZA - Smoky Heights - Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

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

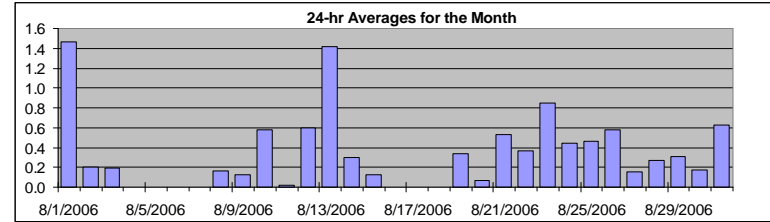
Monitoring Dates: August 1, 2006 to September 1, 2006

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

### Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	9.1 ppb 1-Aug 3:00 4:00
Maximum 24-hr Average:	1.5 ppb 1-Aug

AIC Time:	27 hrs	Operational Time:	588 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	83.1%						
Percentile	99	95	75	50	25	5	1	Average	Median
	4.4	1.6	0.6	0.2	0.0	0.0	0.0	0.4 ppb	0.2 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																								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-06	5	4	1	9	5	2	2	2	0	0	0	0	0	1	0	1	0	A	0	0	1	0	0	0	1.5	9.1		
2-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0.2	0.6		
3-Aug-06	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	A	0	0	0	0	0	0	0	0	0.2	0.8		
4-Aug-06	0	0	0	0	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.3	0.0	
5-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	0.0	
6-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	0.0	
7-Aug-06	N	N	N	N	N	N	N	1	1	1	1	A	2	1	1	1	2	1	1	1	0	1	1	0	N	1.6	0.0	
8-Aug-06	1	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	P	0	0.2	0.7		
9-Aug-06	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1	1.2		
10-Aug-06	1	1	1	0	1	0	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.6	1.2		
11-Aug-06	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3		
12-Aug-06	0	0	0	0	0	0	A	0	0	0	0	2	3	1	0	0	0	0	0	0	0	1	2	3	0.6	3.2		
13-Aug-06	1	2	4	2	1	A	0	3	1	1	5	6	1	0	0	0	0	0	0	1	1	2	1	1	1.4	5.5		
14-Aug-06	0	1	1	1	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2		
15-Aug-06	0	0	0	A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.8		
16-Aug-06	0	0	A	0	0	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	0.0	
17-Aug-06	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	0.0	0.0
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0	0	0	0	0	1	1	N	0.8	0.0	
19-Aug-06	1	1	1	1	2	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5		
20-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4		
21-Aug-06	0	0	0	A	0	0	0	0	1	0	1	0	1	1	2	1	1	0	1	1	1	1	1	1	0.5	1.6		
22-Aug-06	1	1	A	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2		
23-Aug-06	0	A	0	1	0	0	0	0	3	3	2	2	1	1	0	0	1	0	1	0	0	2	1	1	0.8	3.2		
24-Aug-06	A	1	1	0	0	0	0	0	1	1	1	1	0	1	1	1	0	0	0	0	0	0	A	0	0.4	1.3		
25-Aug-06	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	A	6	0.5	6.2		
26-Aug-06	0	0	0	0	0	3	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.6	3.8		
27-Aug-06	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5		
28-Aug-06	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0.3	1.5		
29-Aug-06	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0.3	1.1		
30-Aug-06	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0.2	0.7		
31-Aug-06	0	0	1	1	1	A	1	1	2	2	2	2	1	0	0	0	0	0	1	1	1	0	0	0	0.6	1.9		
Hourly Avg	0.4	0.5	0.5	0.7	0.5	N	0.4	0.4	0.5	0.6	0.7	0.7	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.6				
Hourly Max	4.8	4.4	3.8	9.1	4.7	2.7	3.8	2.6	2.7	3.2	5.1	5.5	2.8	1.3	1.6	1.2	1.6	1.2	0.8	1.3	1.2	2.3	1.7	6.2				

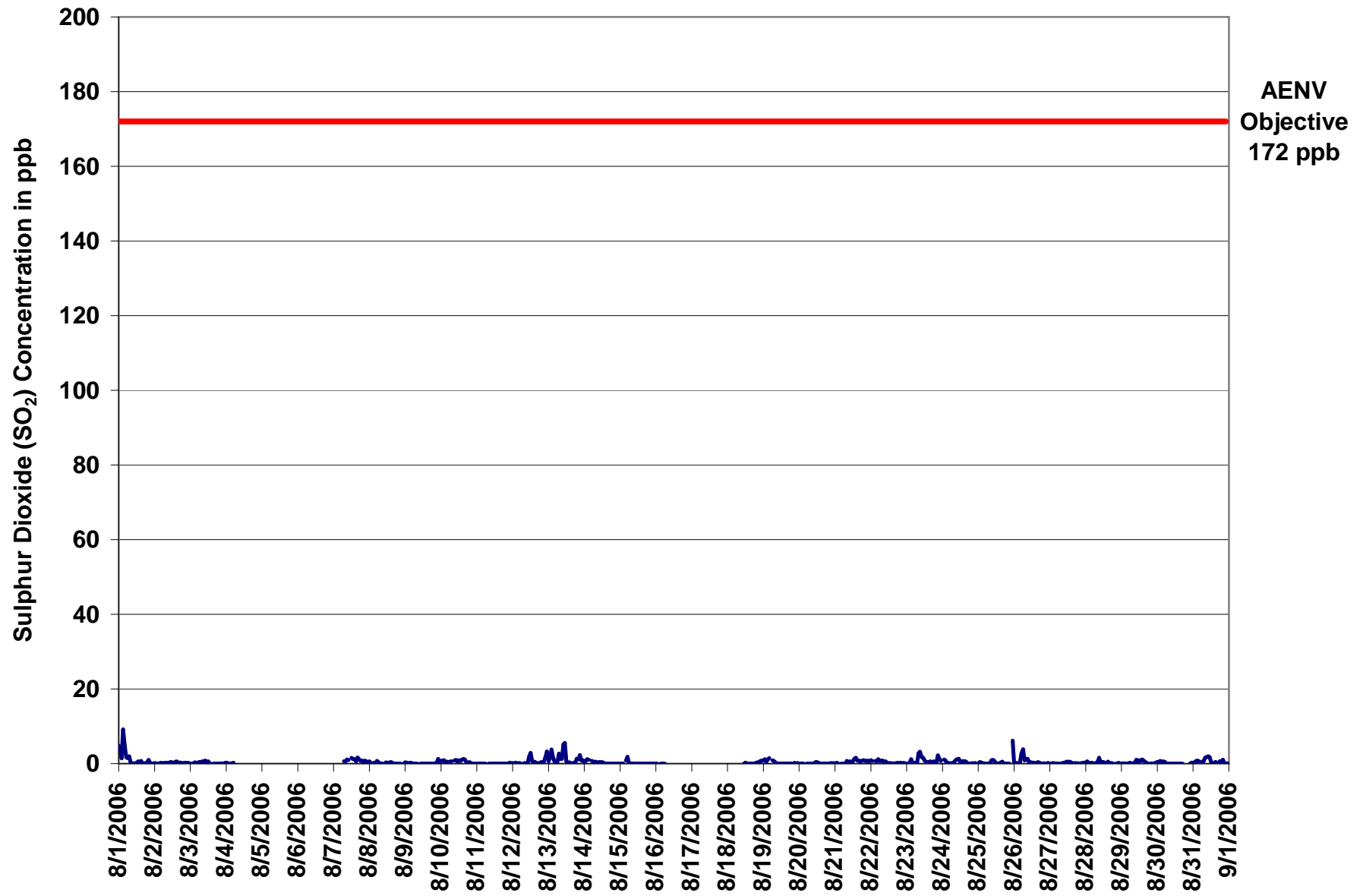


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights  
 Station Owner: PASZA

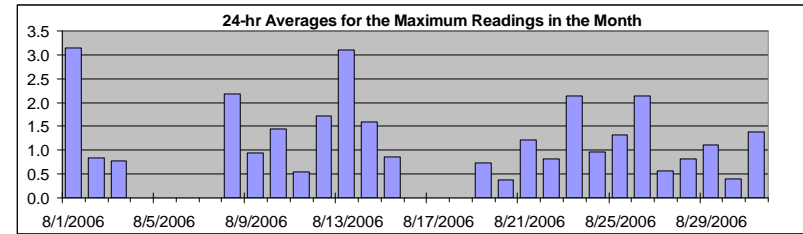
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	16.4	ppb	26-Aug	6:00 7:00
Maximum 24-hr Value:	3.1	ppb	1-Aug	



AIC Time:	27 hrs	Operational Time:	588 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	83.1%						
Percentile	99	95	75	50	25	5	1	Average	Median
	8.5	3.1	1.5	0.9	0.5	0.1	0.0	1.3 ppb	0.9 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								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-06	8	7	3	15	10	3	2	3	2	1	1	1	1	2	2	2	1	A	1	1	2	1	1	1	3.1	14.8		
2-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	0.8	1.1		
3-Aug-06	0	0	0	1	1	1	1	1	1	1	2	1	1	1	1	A	1	0	0	1	1	0	0	1	0.8	2.1		
4-Aug-06	1	1	0	0	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.7	0.0	
5-Aug-06	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	0.0	0.0
6-Aug-06	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	0.0	0.0
7-Aug-06	N	N	N	N	N	N	N	1	2	2	2	A	3	2	3	3	3	3	2	2	2	2	2	2	N	3.1	3.1	
8-Aug-06	3	2	2	3	2	3	2	1	2	2	A	2	2	2	3	2	2	2	3	3	3	2	P	3	2.2	3.5		
9-Aug-06	3	3	1	2	1	1	0	1	1	A	1	0	1	0	0	0	0	0	0	0	0	1	3	1	0.9	2.9		
10-Aug-06	3	3	3	1	1	1	1	2	A	1	2	1	2	1	2	2	2	1	1	1	1	1	0	0	1.4	3.0		
11-Aug-06	0	0	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0.6	1.0		
12-Aug-06	1	1	1	1	1	0	A	1	1	1	2	4	5	3	1	1	1	1	1	1	1	3	5	6	1.7	6.4		
13-Aug-06	1	3	8	6	1	A	1	7	2	3	10	7	3	1	1	1	1	1	1	3	4	5	1	1	3.1	10.3		
14-Aug-06	1	2	2	2	A	2	2	2	2	3	3	3	2	2	1	1	1	1	1	1	1	1	1	0	1.6	3.0		
15-Aug-06	0	0	1	A	2	5	1	0	2	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0.9	4.6		
16-Aug-06	0	0	A	0	0	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.4	0.4	
17-Aug-06	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	0.0	0.0
18-Aug-06	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	0.0	0.0
19-Aug-06	1	2	1	2	2	A	2	1	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0.7	2.3		
20-Aug-06	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0.4	1.0		
21-Aug-06	0	1	1	A	1	0	0	1	1	1	1	1	2	2	2	2	1	1	1	1	2	2	2	1	1.2	2.3		
22-Aug-06	2	2	A	1	1	2	1	2	2	1	1	0	1	1	0	0	0	1	1	1	0	0	1	0	0.8	1.7		
23-Aug-06	1	A	1	8	1	1	1	1	6	5	3	2	2	1	1	1	1	1	2	1	1	5	3	4	2.1	7.6		
24-Aug-06	A	1	1	1	0	0	0	0	1	2	2	2	1	1	1	1	1	1	1	0	1	0	1	A	1.0	2.0		
25-Aug-06	0	1	1	1	1	0	0	0	0	1	2	2	1	1	1	0	1	1	0	0	0	0	0	A	14	1.3	14.0	
26-Aug-06	1	1	1	2	1	13	16	2	2	3	1	1	1	1	0	1	1	1	0	0	0	0	A	1	2.1	16.4		
27-Aug-06	0	0	1	0	1	0	0	0	1	1	1	1	1	1	1	0	1	0	1	0	1	A	0	1	0.6	1.2		
28-Aug-06	1	1	1	0	1	0	1	1	1	4	1	1	1	0	1	1	1	1	1	A	0	1	1	0	0.8	3.6		
29-Aug-06	0	1	1	1	1	2	1	1	1	2	2	1	2	1	2	1	1	1	A	1	1	1	1	1	1.1	2.0		
30-Aug-06	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	1	1	1	0.4	1.2		
31-Aug-06	1	1	1	2	1	A	1	1	3	3	2	3	1	0	1	1	0	1	2	2	3	0	0	0	1.4	3.1		
Hourly Avg	1.2	1.3	1.3	2.1	1.4	N	1.5	1.3	1.5	1.8	1.8	1.5	1.4	1.0	1.0	1.0	0.8	0.7	0.9	1.0	1.1	1.3	1.2	1.7				
Hourly Max	8.0	6.9	8.2	14.8	10.4	13.4	16.4	7.0	5.8	5.1	10.3	6.8	4.6	2.7	2.7	3.1	3.1	2.8	3.2	3.5	3.9	5.1	4.7	14.0				

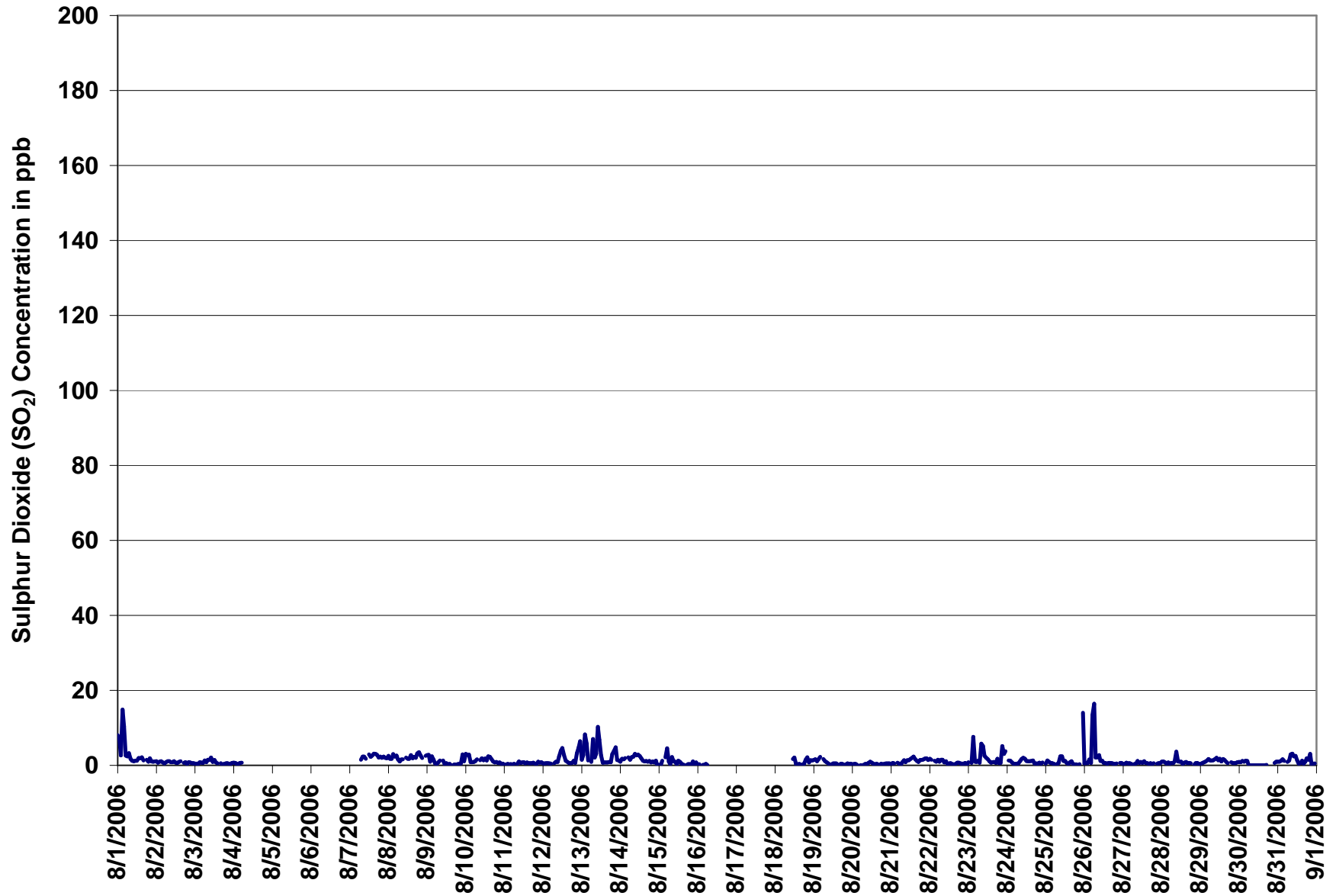
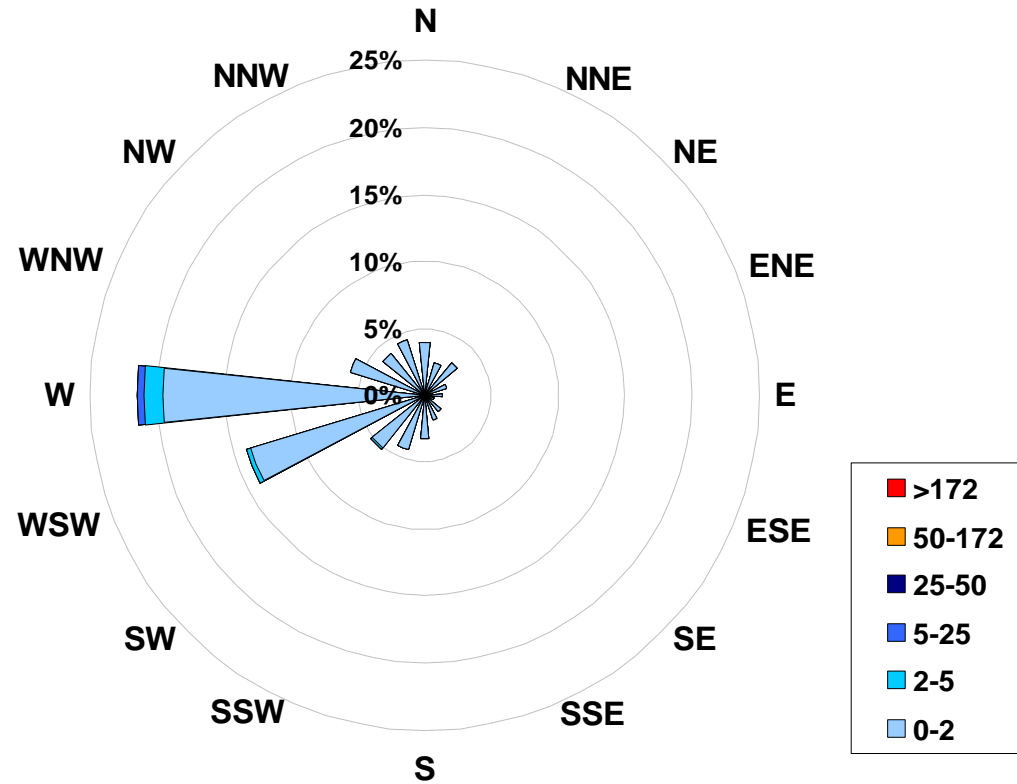


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Smoky Heights Site for August 2006**



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
0.0	< 2	571	
2	to 5	13	
5	to 25	4	
25	to 50	0	
50	to 172	0	
	> 172	0	
Total Non-Zero Values			588

## PASZA - Smoky Heights - Total Reduced Sulphur Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

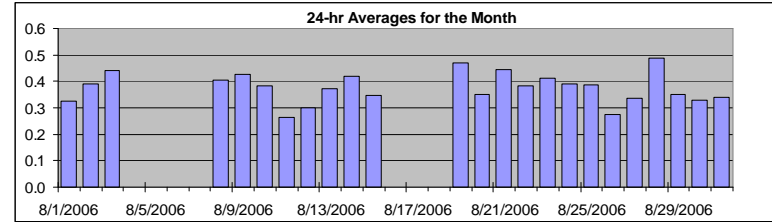
### Total Reduced Sulphur (TRS)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Maximum 1-hr Average:	1.0	ppb	20-Aug	1:00 2:00
Maximum 24-hr Value:	0.5	ppb	28-Aug	

AIC Time:	27 hrs	Operational Time:	588 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	83.1%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.8	0.7	0.5	0.3	0.3	0.2	0.1	0.4 ppb	0.3 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00		
1-Aug-06	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	0.3	0.5	
2-Aug-06	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.7	
3-Aug-06	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.8	
4-Aug-06	0	0	1	1	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.6	
5-Aug-06	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	0.0	
6-Aug-06	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	0.0	
7-Aug-06	N	N	N	N	N	N	N	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0.4	
8-Aug-06	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	P	0	0.4	0.7	
9-Aug-06	0	0	1	0	1	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.7	
10-Aug-06	1	0	1	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.8	
11-Aug-06	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
12-Aug-06	0	0	1	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
13-Aug-06	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.9		
14-Aug-06	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	0	0.4	0.7	
15-Aug-06	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.7		
16-Aug-06	1	1	A	1	1	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.9	
17-Aug-06	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	N	0.0
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0	0	0	0	0	0	0	1	N	0.5		
19-Aug-06	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.5	0.8		
20-Aug-06	1	1	0	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	1.0		
21-Aug-06	0	1	1	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.8		
22-Aug-06	1	1	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7		
23-Aug-06	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.6		
24-Aug-06	A	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.6		
25-Aug-06	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.9		
26-Aug-06	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		
27-Aug-06	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	0.5		
28-Aug-06	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.5	0.8		
29-Aug-06	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.7		
30-Aug-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0.3	0.5		
31-Aug-06	1	1	0	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6		
Hourly Avg	0.5	0.5	0.5	0.5	0.5	N	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4			
Hourly Max	0.8	1.0	0.8	0.9	0.9	0.8	0.9	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.7	0.7	0.8			

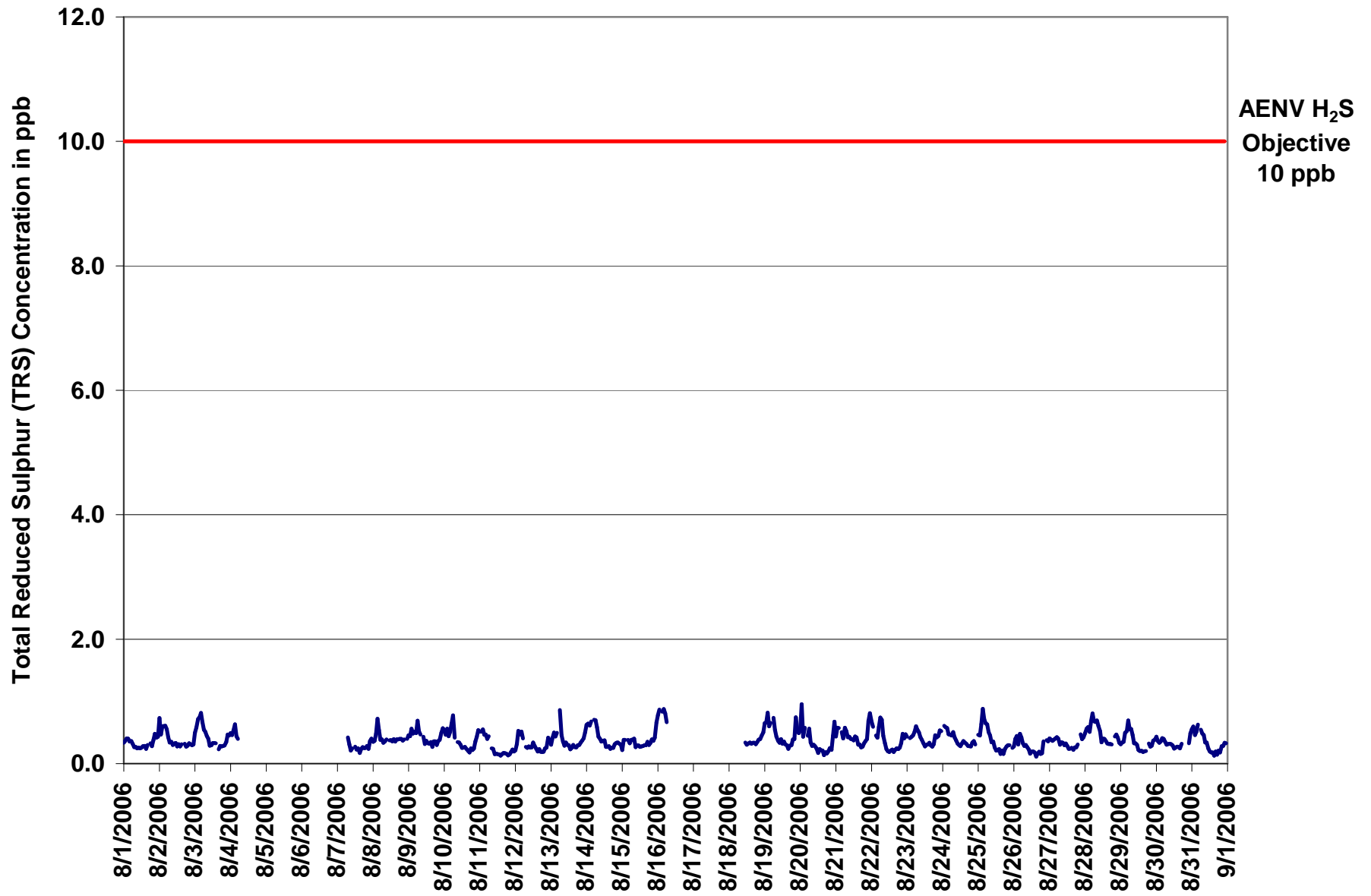


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend



Station: Smoky Heights  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

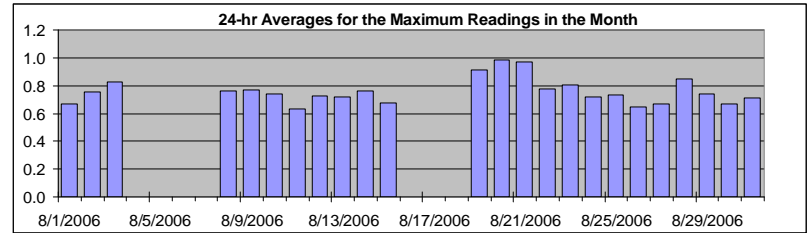
**Total Reduced Sulphur (TRS)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	5.0	ppb	20-Aug	1:00 2:00
Maximum 24-hr Value:	1.0	ppb	20-Aug	

AIC Time:	27 hrs	Operational Time:	588 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	83.1%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.6	1.1	0.8	0.7	0.6	0.5	0.5	0.8 ppb	0.7 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																									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-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9	
2-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.3	
3-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.3	
4-Aug-06	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1.1	
5-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	
6-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	
7-Aug-06	N	N	N	N	N	N	N	1	1	1	1	A	1	1	1	1	0	1	1	1	1	1	1	1	N	0.8	
8-Aug-06	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	P	1.3		
9-Aug-06	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2		
10-Aug-06	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1.3		
11-Aug-06	1	1	1	1	1	1	1	A	1	1	1	0	1	0	0	0	1	1	1	0	0	1	1	1	1.0		
12-Aug-06	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	0	1	1	1	1	1	1.6		
13-Aug-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3		
14-Aug-06	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1		
15-Aug-06	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1.1		
16-Aug-06	1	1	A	1	1	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1.3		
17-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	1	1	1	1	1	N	0.8	
19-Aug-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	2.7		
20-Aug-06	1	5	1	2	A	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	5.0		
21-Aug-06	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.9		
22-Aug-06	2	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1.6		
23-Aug-06	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		
24-Aug-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0		
25-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	A	1.2		
26-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0	1	1	A	1	1	0.9		
27-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	A	1	1	1	0.8		
28-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.2		
29-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.1		
30-Aug-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	A	1	1	1	0.9		
31-Aug-06	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	1.1		
Hourly Avg	0.9	1.1	0.9	1.0	0.9	N	1.0	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8			
Hourly Max	1.6	5.0	1.9	2.2	1.3	1.2	1.4	1.1	1.0	1.0	0.9	0.8	1.0	1.6	0.7	0.7	0.8	0.7	1.3	0.9	2.7	1.3	1.5				

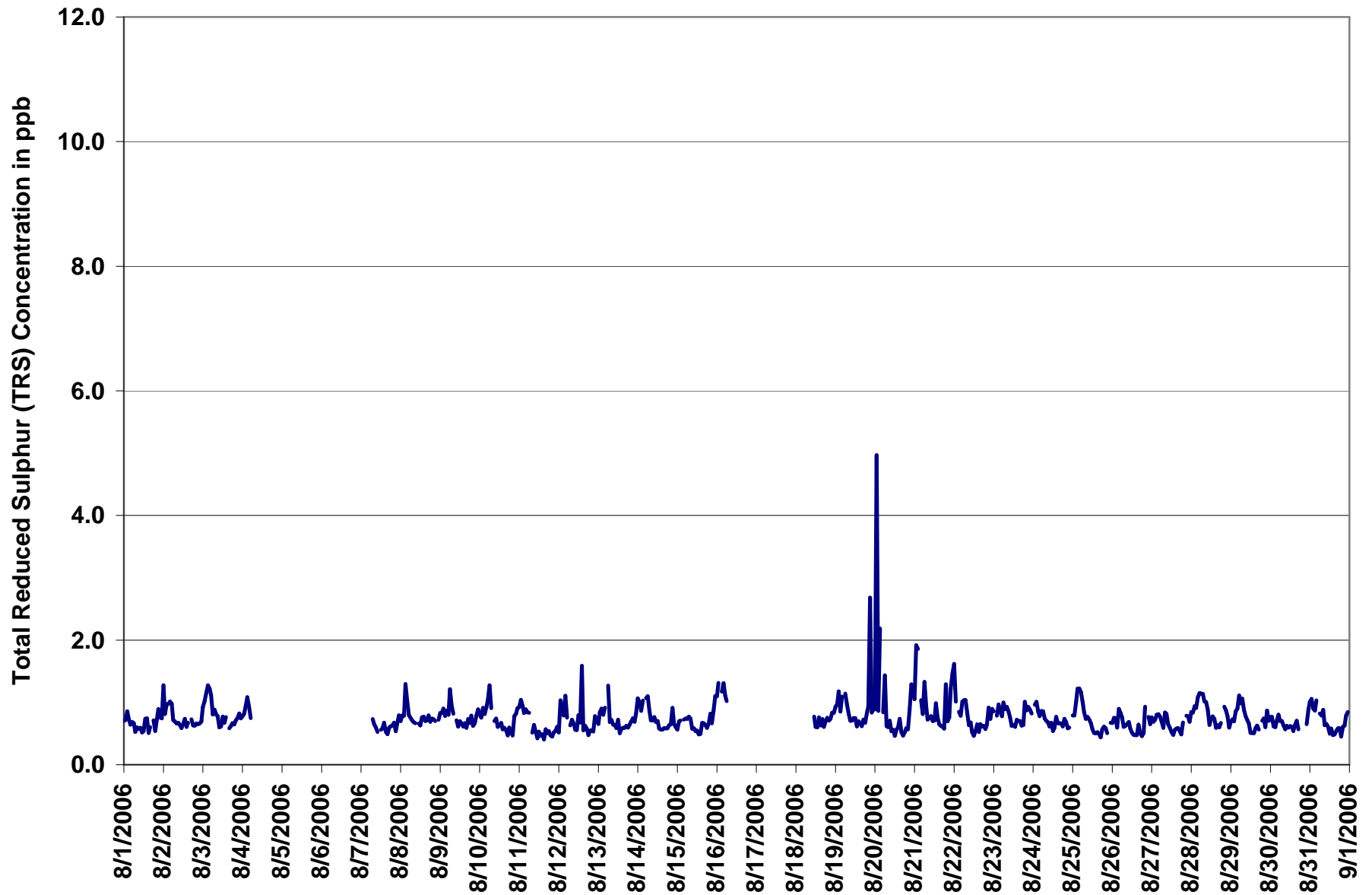
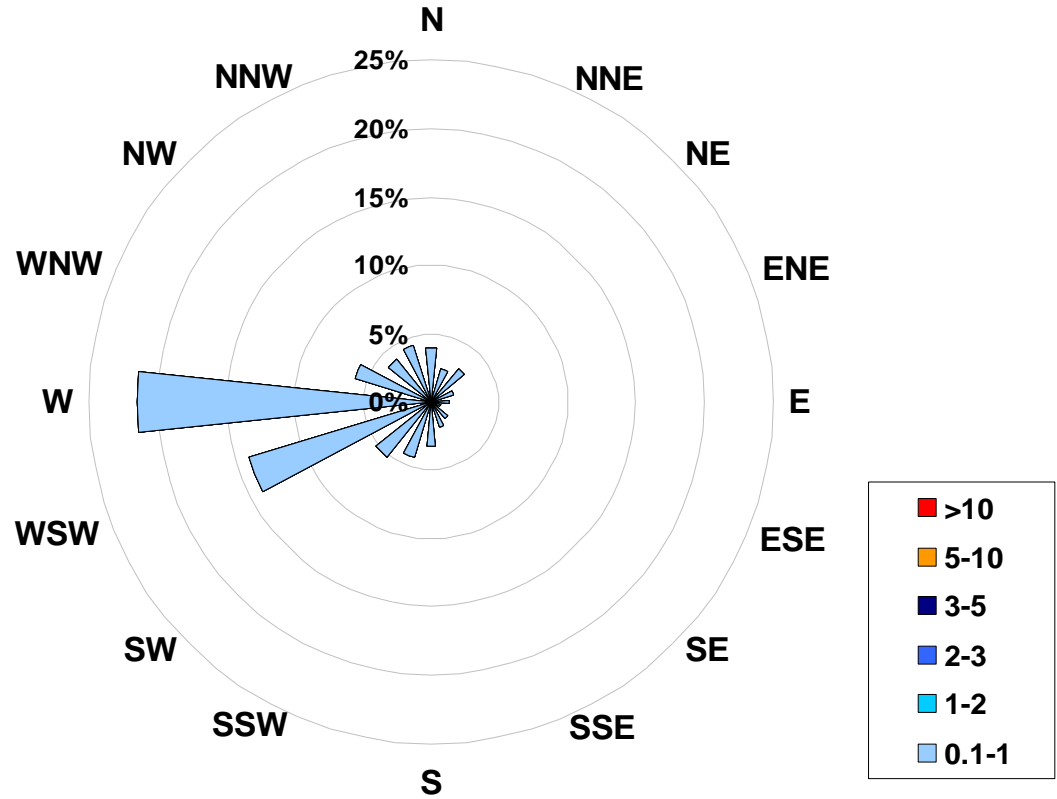


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)  
Located at the Smoky Heights Site for August 2006**



**Calms: 0%**

Frequency Distribution of TRS in ppb			
Range		Frequency (hrs)	
0.1	< 1	588	
1	to 2	0	
2	to 3	0	
3	to 5	0	
5	to 10	0	
	> 10	0	
Total Non-Zero Values		588	

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

Station: Smoky Heights  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

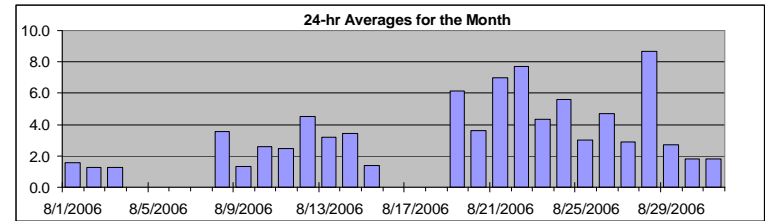
### Particulate Matter (PM<sub>2.5</sub>)

**Monitoring Dates:** August 1, 2006 to September 1, 2006

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

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	42.5 µg/m <sup>3</sup> 18-Aug 21:00 22:00
Maximum 24-hr Value:	8.6 µg/m <sup>3</sup> 28-Aug

AIC Time:	0 hrs	Operational Time:	610 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	82.0%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	18.8	10.8	4.9	2.6	1.0	0.0	0.0	3.7 3 µg/m <sup>3</sup>	3.1 µg/m <sup>3</sup>



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Aug-06	1	1	2	3	3	0	1	2	2	1	0	0	0	1	0	2	2	1	1	2	3	9	0	1	1.6	9.1
2-Aug-06	0	0	3	2	1	2	2	2	0	0	0	0	0	0	0	1	2	1	4	4	0	2	0	2	1.3	4.5
3-Aug-06	1	0	0	0	1	1	2	2	1	0	0	0	0	0	0	0	1	2	3	5	7	2	1	1.2	7.0	
4-Aug-06	2	1	0	0	3	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.5
5-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
6-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
7-Aug-06	N	N	N	N	N	N	N	8	6	2	5	4	3	4	6	3	5	5	4	4	5	6	7	4	N	7.6
8-Aug-06	3	5	4	6	5	0	1	2	5	4	1	3	2	5	0	8	6	3	8	3	3	4	P	2	3.5	8.3
9-Aug-06	0	2	3	1	0	0	6	2	0	0	D	2	0	0	0	1	1	0	0	2	2	3	2	2	1.3	5.6
10-Aug-06	3	2	2	2	2	4	5	3	1	0	0	0	0	1	2	1	2	2	3	5	14	3	3	2.6	13.9	
11-Aug-06	1	1	0	1	3	5	4	6	5	2	2	2	0	0	1	2	1	10	5	2	2	0	2	0	2.5	10.5
12-Aug-06	0	2	1	2	4	5	11	5	6	6	4	1	0	1	14	8	2	3	6	7	4	6	5	5	4.5	14.3
13-Aug-06	5	5	4	3	3	3	5	2	0	1	3	5	2	0	1	2	3	4	4	3	4	5	6	3	3.2	5.9
14-Aug-06	3	2	2	6	7	7	4	4	2	3	4	0	D	D	0	1	1	0	0	4	11	9	0	2	3.4	10.9
15-Aug-06	1	1	0	0	0	1	2	1	1	0	0	3	D	1	0	1	0	9	1	5	3	0	0	0	1.4	8.8
16-Aug-06	0	0	0	0	0	0	6	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5.5
17-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	2	1	7	1	3	0	19	6	6	16	43	9	4	N	42.5
19-Aug-06	4	4	4	3	4	6	8	5	4	3	37	5	1	1	6	2	0	1	6	11	2	13	10	5	6.1	36.6
20-Aug-06	4	6	0	3	2	2	10	5	3	3	1	0	0	1	1	2	2	4	4	4	5	4	10	11	3.6	11.2
21-Aug-06	1	2	0	1	4	4	15	4	5	5	5	6	7	8	7	1	5	7	7	20	18	13	13	9	7.0	20.0
22-Aug-06	9	4	3	4	5	10	37	8	9	3	0	0	2	3	3	5	9	7	14	9	6	15	10	8	7.7	36.9
23-Aug-06	11	3	4	6	11	1	5	2	3	4	3	3	3	3	0	2	0	1	3	6	18	4	5	5	4.4	17.9
24-Aug-06	5	5	6	6	3	4	5	5	6	4	4	6	3	4	10	6	11	5	6	2	5	12	10	2	5.6	12.2
25-Aug-06	1	4	3	2	1	3	6	8	7	2	2	2	0	1	0	0	4	0	4	6	7	5	3	2	3.0	7.9
26-Aug-06	3	4	4	3	4	5	5	7	2	5	4	1	0	0	3	3	2	4	11	7	12	10	11	6	4.7	12.5
27-Aug-06	3	2	1	0	1	8	8	1	5	5	3	1	1	0	0	1	2	2	3	3	2	5	5	9	2.9	9.0
28-Aug-06	6	4	5	2	10	20	16	10	11	11	9	0	2	0	4	3	8	8	10	16	31	12	6	3	8.6	30.9
29-Aug-06	9	1	4	7	4	0	1	2	0	D	0	D	0	0	0	0	1	0	0	19	4	1	3	1	2.7	18.8
30-Aug-06	D	D	2	2	0	2	3	3	3	1	0	0	0	2	0	1	3	10	4	2	0	0	1	1	1.8	10.0
31-Aug-06	2	1	1	1	1	1	5	4	4	0	2	0	0	0	1	0	3	0	1	4	4	4	4	2	1.8	5.1
Hourly Avg	3.1	2.4	2.2	2.6	3.1	3.6	6.8	4.3	3.7	2.7	3.7	1.8	1.2	1.7	2.3	2.3	2.9	4.1	4.6	6.1	6.8	7.9	5.1	3.5		
Hourly Max	11.3	5.7	5.8	6.9	10.8	19.5	36.9	9.7	11.1	11.4	36.6	6.0	7.1	8.4	14.3	8.1	11.1	18.6	14.4	20.0	30.9	42.5	12.7	11.2		

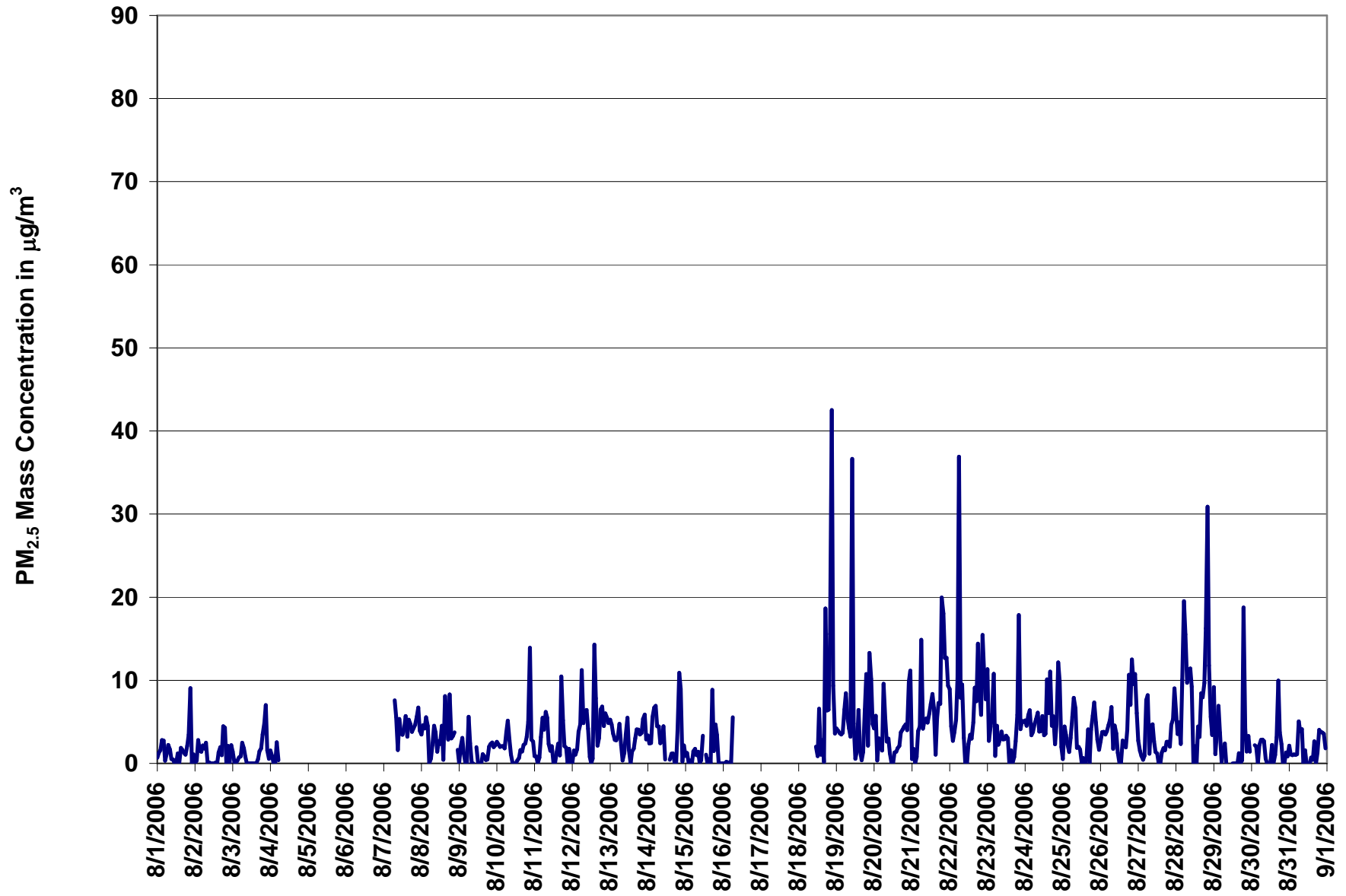


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



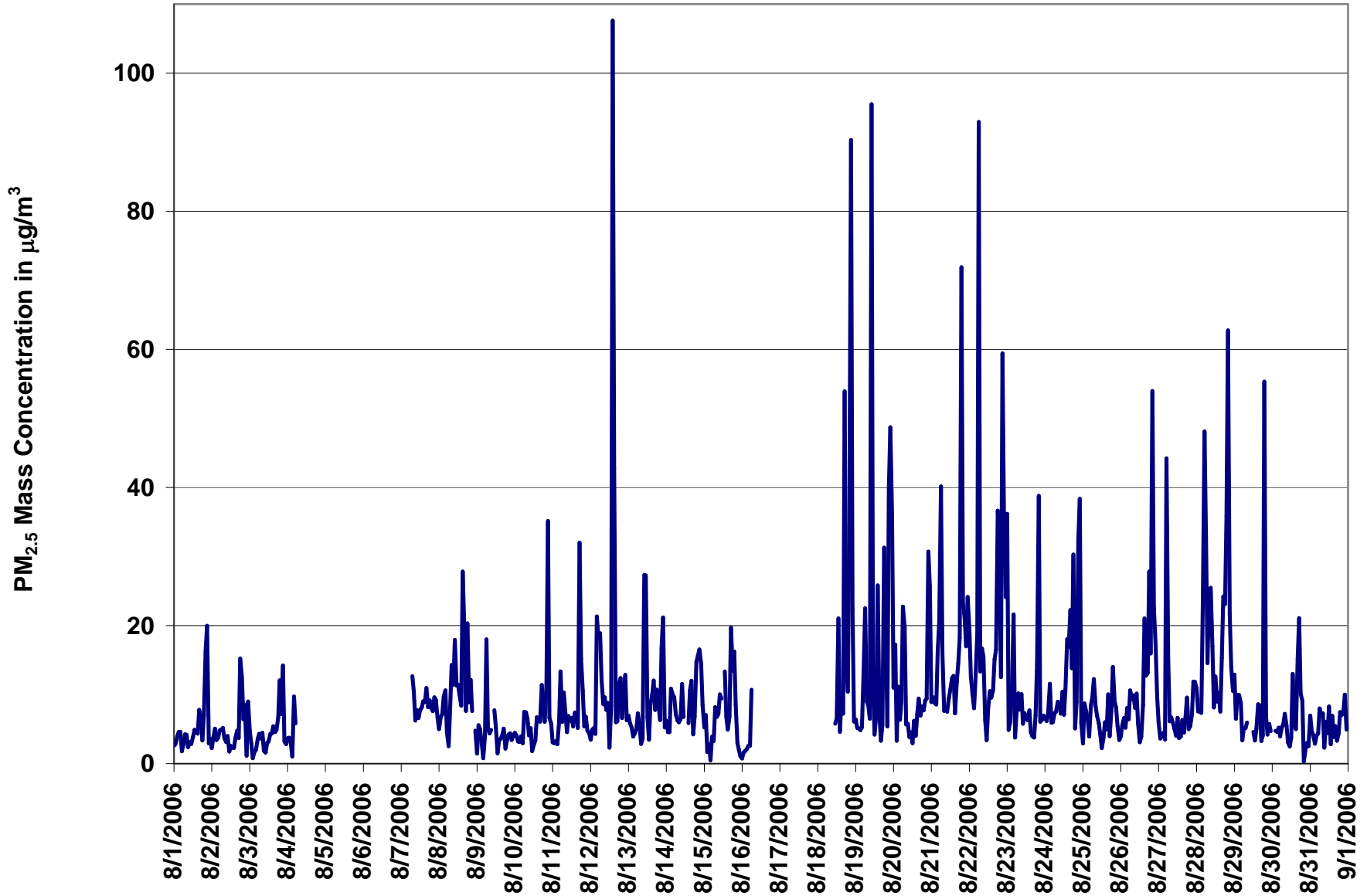
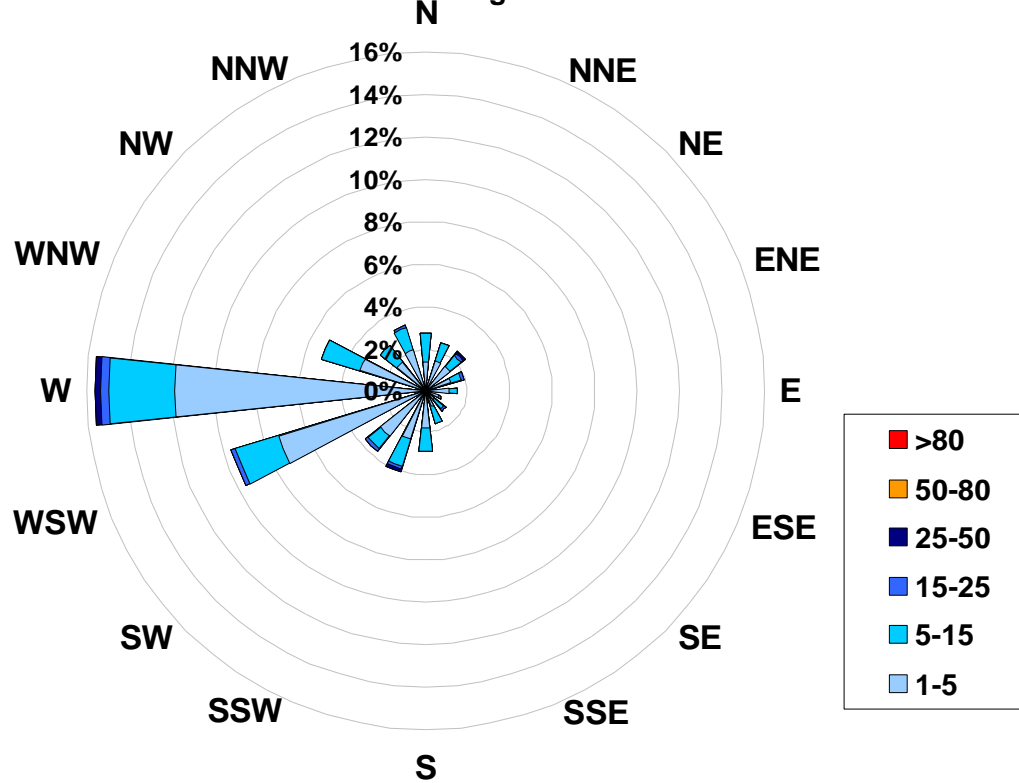


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**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 2006**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range			Frequency (hrs)
1.0	<	5	464
5	to	15	132
15	to	25	10
25	to	50	4
50	to	80	0
	>	80	0
Total Non-Zero Values			610



# PASZA - Smoky Heights - Temperature Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

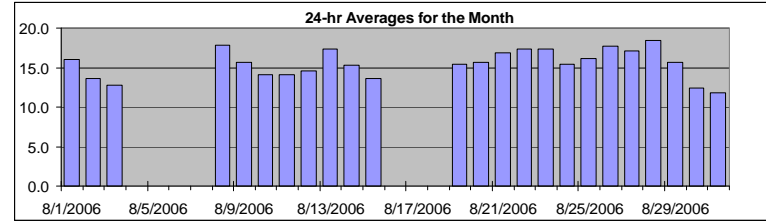
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	27.1 °C	21-Aug	16:00 17:00
Maximum 24-hr Value:	18.4 °C	28-Aug	



AIC Time:	0 hrs	Operational Time:	618 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	83.1%						
Percentile	99	95	75	50	25	5	1	Average	Median
Day	26.0	24.3	19.9	15.6	11.4	6.3	4.5	15.5 °C	15.6 °C

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start 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-06	14	14	14	13	13	13	12	13	15	17	19	20	20	20	19	20	20	19	19	19	16	14	11	10	16.0	20.2
2-Aug-06	8	8	9	8	7	8	9	12	15	16	17	18	19	19	20	19	19	19	18	14	14	12	11	10	13.6	19.5
3-Aug-06	8	6	5	5	5	5	7	10	12	15	16	17	18	18	18	19	19	19	18	18	15	13	11	11	12.7	19.1
4-Aug-06	8	8	6	4	6	5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	8.4
5-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
6-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
7-Aug-06	N	N	N	N	N	N	N	12	15	17	19	21	22	23	23	23	22	22	21	20	19	18	17	16	N	22.9
8-Aug-06	15	15	14	14	15	17	18	18	18	20	20	22	23	23	22	21	18	19	18	16	16	15	P	15	17.9	23.0
9-Aug-06	15	14	14	13	10	8	10	13	15	16	18	19	19	21	21	21	20	20	19	18	16	13	11	9	15.6	21.1
10-Aug-06	9	8	8	8	5	5	6	10	13	16	17	19	19	20	21	21	22	21	21	19	16	13	11	10	14.0	21.6
11-Aug-06	10	10	8	7	7	7	8	9	12	15	19	20	21	21	22	22	20	17	16	15	13	12	11	14.0	22.4	
12-Aug-06	9	7	6	6	5	5	6	9	10	14	17	20	21	22	23	22	23	22	22	20	19	16	14	13	14.6	22.8
13-Aug-06	13	15	14	12	10	9	11	14	16	18	20	21	22	23	23	24	24	24	23	22	19	16	13	11	17.4	24.0
14-Aug-06	12	12	13	12	12	12	12	12	13	14	15	16	18	19	20	21	20	19	19	18	16	15	14	13	15.3	20.7
15-Aug-06	12	11	11	11	10	10	10	12	12	14	15	15	17	16	18	18	19	18	18	16	14	12	10	9	13.6	18.8
16-Aug-06	8	8	8	7	6	6	7	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	8.1
17-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	23	24	24	24	24	24	24	23	21	17	15	14	12	N	24.3
19-Aug-06	10	10	9	9	9	8	9	13	16	18	19	20	21	20	21	22	22	22	21	20	16	12	9	8	15.4	22.5
20-Aug-06	6	6	5	4	5	4	6	11	13	15	19	22	23	24	25	25	25	25	25	22	19	18	15	13	15.7	25.2
21-Aug-06	13	11	8	7	6	6	8	12	14	16	18	21	23	25	26	27	27	26	25	22	19	15	16	14	16.8	27.1
22-Aug-06	13	11	11	10	10	9	9	13	16	19	21	23	24	25	25	25	25	24	25	22	19	14	11	12	17.3	25.0
23-Aug-06	11	13	15	15	13	12	12	15	16	17	19	21	22	22	22	22	23	24	23	21	17	15	13	13	17.4	23.6
24-Aug-06	11	10	8	9	9	8	9	12	15	17	19	21	22	22	21	21	21	20	20	18	16	15	14	11	15.4	22.3
25-Aug-06	9	9	8	7	5	5	6	9	11	16	18	21	22	23	24	25	25	25	24	22	20	18	17	16	16.1	25.1
26-Aug-06	15	13	12	13	12	12	13	16	19	20	21	22	22	23	24	24	24	24	23	21	15	12	13	13	17.7	24.3
27-Aug-06	12	12	11	9	9	6	7	9	12	14	18	21	23	24	25	26	26	26	24	22	19	18	18	17	17.1	26.2
28-Aug-06	16	14	13	11	9	7	8	11	13	17	19	23	25	27	27	27	26	25	24	22	20	19	19	20	18.4	27.0
29-Aug-06	18	16	15	13	12	12	12	13	16	17	19	23	19	19	19	20	20	20	19	16	15	13	12	11	15.7	20.4
30-Aug-06	10	12	13	12	11	11	9	11	13	14	15	17	18	15	17	18	17	13	11	11	9	7	8	7	12.4	17.8
31-Aug-06	5	5	5	4	3	2	4	7	10	13	15	16	17	18	19	19	19	18	17	16	15	14	13	12	11.8	19.0
Hourly Avg	11.2	10.7	10.1	9.3	8.7	8.1	9.2	11.8	13.9	16.2	18.1	19.8	21.0	21.3	21.9	22.2	21.9	21.3	20.6	18.8	16.5	14.5	13.1	12.1		
Hourly Max	17.7	16.3	15.2	14.6	14.8	16.5	17.7	18.1	19.1	20.5	21.3	23.3	25.3	26.6	26.8	27.0	27.1	25.8	25.2	22.1	19.9	18.8	19.3	20.0		

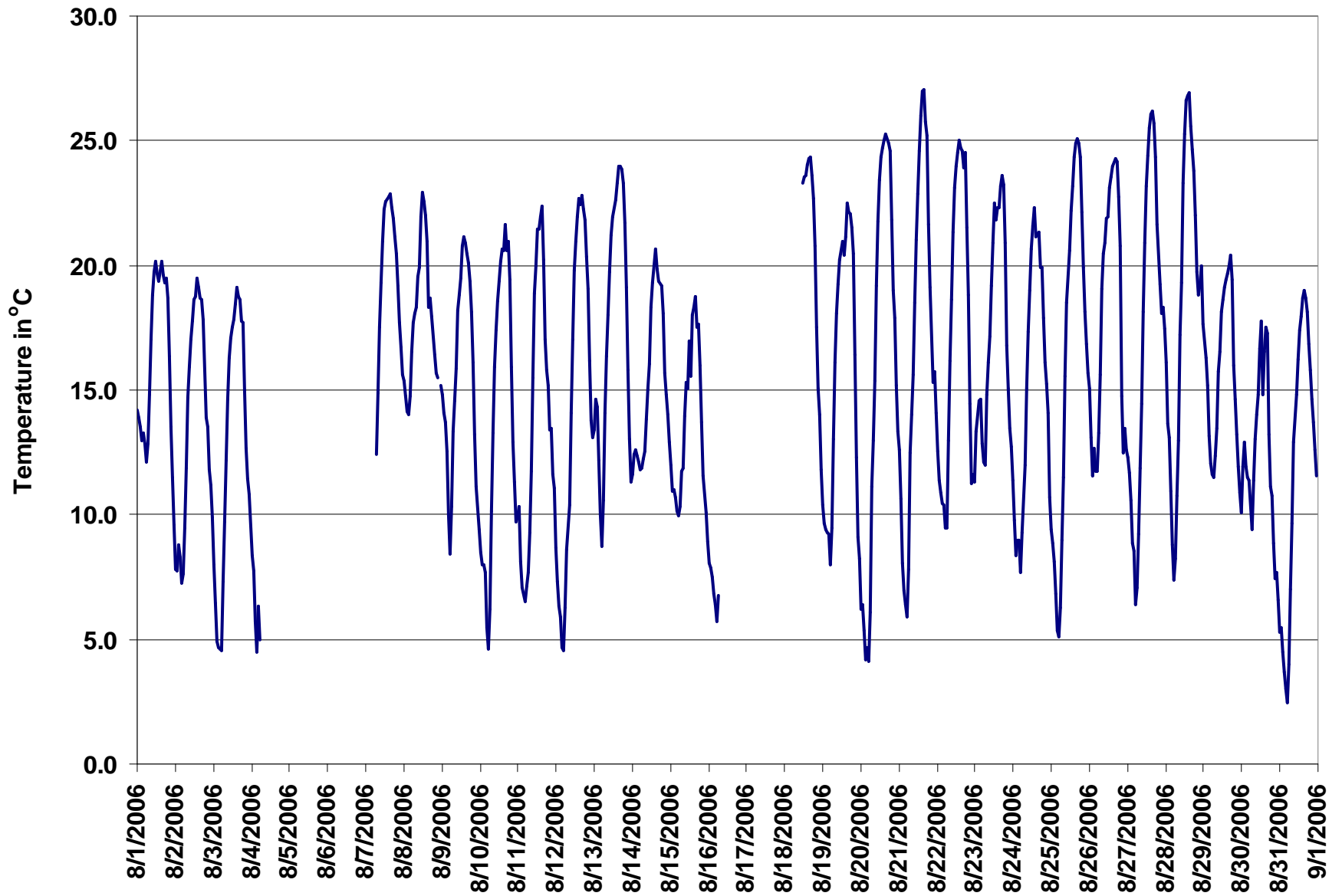


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

## PASZA - Smoky Heights - Scalar Wind Speed Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

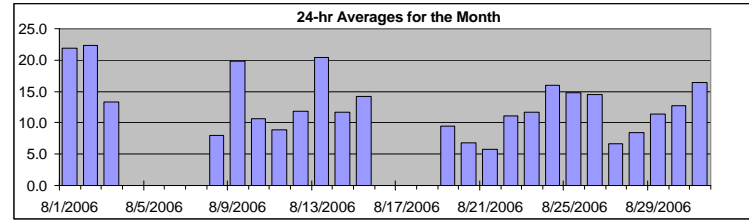
### HOURLY AVERAGE TABLE

### Wind Speed (WSs)

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Average:	37.2	km/hr	18-Aug	13:00 14:00
Maximum 24-hr Value:	22.4	km/hr	2-Aug	



Calm Time:	0 hrs	0% calms	Operational Time:	615 hrs				
Calibration Time:	3 hrs		AMD Operational Uptime:	83.1%				
Percentile	99	95	75	50	25	5	1	AverageS
	34.5	28.1	16.4	11.3	7.3	4.5	2.9	12.9 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
	Hour Start 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-06	24	23	21	22	23	22	23	23	24	28	27	27	27	28	30	25	28	21	19	17	15	13	8	6	21.9	30.2	
2-Aug-06	8	11	11	11	11	13	13	16	25	37	35	32	32	33	36	34	32	31	32	22	20	14	15	11	22.4	36.8	
3-Aug-06	8	10	9	11	13	12	11	14	16	18	19	20	16	14	18	21	17	17	12	13	8	6	8	10	13.3	21.0	
4-Aug-06	7	5	5	7	10	4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	9.6
5-Aug-06	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	0.0
6-Aug-06	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	0.0
7-Aug-06	N	N	N	N	N	N	N	3	3	7	11	11	14	15	14	15	12	12	9	9	6	8	7	7	N	14.8	
8-Aug-06	5	5	2	4	11	15	10	9	8	7	7	6	7	6	7	15	15	7	5	5	5	7	P	13	8.0	15.2	
9-Aug-06	12	12	8	6	10	6	11	14	16	24	28	31	27	34	32	34	34	32	29	26	20	13	11	6	19.8	34.5	
10-Aug-06	12	14	14	14	13	11	7	10	13	13	15	14	15	14	13	10	7	7	9	8	7	5	5	4	10.7	15.4	
11-Aug-06	5	6	5	4	5	4	4	3	3	3	8	10	9	12	11	10	8	22	17	16	17	11	11	7	8.9	21.6	
12-Aug-06	6	7	7	5	5	8	5	7	10	9	9	9	13	13	15	17	18	18	18	20	17	15	17	15	11.8	20.0	
13-Aug-06	16	15	19	17	15	16	14	18	26	26	25	23	26	25	26	28	28	26	25	27	17	12	10	10	20.4	28.1	
14-Aug-06	11	9	9	8	11	9	6	7	10	12	14	16	15	13	13	14	16	12	13	11	10	8	19	10	11.6	18.9	
15-Aug-06	12	11	22	23	24	20	14	14	15	15	16	16	12	15	15	13	15	13	6	7	8	10	12	14	14.2	24.5	
16-Aug-06	14	14	13	7	6	8	5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	14.0
17-Aug-06	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	0.0
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	32	37	37	34	33	35	30	25	19	14	12	10	13	N	37.2	
19-Aug-06	14	15	14	15	10	7	4	4	6	12	9	9	9	11	11	13	12	11	13	6	6	5	4	4	9.4	15.2	
20-Aug-06	4	4	3	3	3	5	3	5	7	8	7	10	11	9	10	9	7	7	6	9	11	13	6	7	6.9	12.8	
21-Aug-06	7	5	5	5	4	4	3	5	6	7	7	8	9	8	7	4	5	7	5	5	6	5	6	5	5.8	8.9	
22-Aug-06	5	3	6	5	5	7	9	10	8	14	16	19	20	20	19	20	16	14	13	10	9	6	8	6	11.2	20.4	
23-Aug-06	14	13	14	15	14	12	12	12	16	12	10	10	10	11	8	8	10	8	8	7	9	14	19	18	11.8	18.8	
24-Aug-06	19	16	13	11	10	9	10	12	19	22	22	15	13	17	29	26	19	25	21	17	11	12	8	10	16.0	29.0	
25-Aug-06	8	7	7	8	8	9	7	10	11	16	18	17	16	18	22	22	21	26	22	16	17	16	17	17	14.8	26.1	
26-Aug-06	17	14	12	15	16	13	14	15	21	25	20	14	13	20	22	18	20	17	13	6	5	5	7	6	14.5	25.4	
27-Aug-06	8	9	7	8	8	4	4	3	5	6	6	7	8	12	8	8	8	8	8	6	5	7	6	3	6.6	11.7	
28-Aug-06	4	5	8	5	5	6	8	7	10	9	8	6	6	6	11	11	8	11	10	7	6	5	15	25	8.4	25.3	
29-Aug-06	19	12	8	7	6	9	10	9	8	10	13	22	23	21	15	13	15	15	10	8	7	4	6	6	11.4	23.3	
30-Aug-06	7	12	11	6	10	11	8	7	C	C	C	9	8	14	6	8	13	30	28	23	15	13	14	15	12.7	29.9	
31-Aug-06	16	13	10	4	6	8	7	7	8	11	19	23	22	23	25	25	24	29	23	22	18	16	19	17	16.5	29.4	
1-hr Average	10.8	10.5	10.1	9.4	10.0	9.7	9.0	9.8	12.2	14.5	15.4	16.1	16.1	17.3	17.5	17.3	17.0	17.6	15.4	13.1	11.1	9.8	10.7	10.2			
Hourly Max	24.4	23.1	22.3	23.0	24.5	22.2	22.6	22.9	26.4	36.8	35.4	31.8	37.0	37.2	35.9	34.2	35.5	32.0	32.4	26.7	19.8	16.3	18.9	25.3			

# PASZA - Smoky Heights - Vector Wind Speed Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

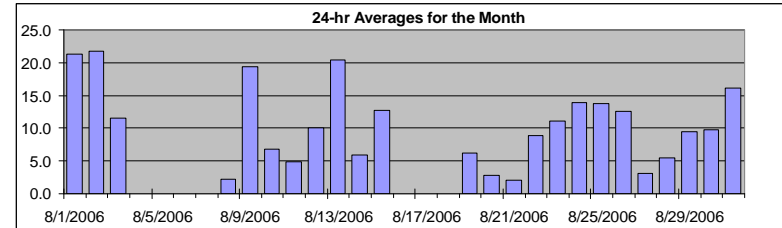
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	36.7	km/hr	18-Aug	13:00 14:00
Maximum 24-hr Value:	21.8	km/hr	2-Aug	



Calm Time:	1 hrs	0% calms	Operational Time:	614 hrs				
Calibration Time:	3 hrs		AMD Operational Uptime:	83.1%				
Percentile	99	95	75	50	25	5	1	AverageV
	33.9	27.5	15.8	10.8	6.4	3.3	1.9	9.0 km/hr

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00 0:00		
1-Aug-06	24	23	21	22	23	22	23	23	23	27	26	26	27	27	30	24	27	21	19	16	15	13	8	5		21.2	29.7
2-Aug-06	8	11	11	11	10	13	13	16	25	37	35	31	32	33	35	34	31	31	30	21	19	14	15	11		21.8	36.6
3-Aug-06	8	9	9	11	13	12	11	14	16	18	18	19	14	13	17	20	15	16	12	13	8	6	7	10		11.5	20.3
4-Aug-06	6	5	5	7	7	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		N	7.4
5-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		N	0.0
6-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		N	0.0
7-Aug-06	N	N	N	N	N	N	N	2	3	6	11	10	13	14	13	14	12	11	9	9	6	7	7	7		N	14.4
8-Aug-06	5	4	2	3	9	14	10	8	7	6	6	5	6	5	5	15	15	6	2	5	5	6	P	13	2.2	15.0	
9-Aug-06	12	11	8	6	8	3	11	14	16	24	28	30	26	34	32	33	33	32	28	26	20	13	11	5		19.4	33.9
10-Aug-06	11	14	14	14	12	11	7	10	13	13	15	13	14	12	9	8	5	5	9	8	7	5	5	4		6.8	15.0
11-Aug-06	5	6	3	4	5	3	4	3	2	1	8	9	8	11	9	9	6	21	15	14	16	7	11	5		4.9	21.3
12-Aug-06	5	7	5	2	5	8	5	7	9	8	8	8	12	11	13	16	17	18	18	20	17	15	16	15		10.0	19.8
13-Aug-06	16	15	19	17	15	16	14	18	26	26	24	22	25	24	25	27	27	26	25	27	17	12	9	9		20.3	27.4
14-Aug-06	11	9	9	8	10	8	6	7	10	12	14	16	15	12	11	13	16	12	7	11	10	8	19	7		5.9	18.7
15-Aug-06	7	10	22	23	24	20	14	14	15	14	15	15	11	13	14	12	14	13	6	6	6	9	11	14		12.8	24.4
16-Aug-06	14	14	13	6	6	7	4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		N	14.0
17-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		N	0.0
18-Aug-06	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	36.7
19-Aug-06	14	15	14	15	9	7	3	4	5	11	8	6	5	10	10	10	11	11	13	6	6	5	2	4		6.2	15.2
20-Aug-06	3	2	2	3	2	4	2	5	7	7	6	9	8	7	6	6	2	5	4	8	10	13	6	7		2.8	12.6
21-Aug-06	7	5	4	5	4	4	3	5	6	7	5	7	8	6	7	2	4	7	5	5	6	5	6	5		2.1	8.3
22-Aug-06	3	3	2	3	4	6	9	10	8	12	16	19	19	20	17	19	16	14	12	9	8	2	8	6		8.9	19.7
23-Aug-06	14	13	13	15	13	12	12	12	16	11	9	9	6	11	7	6	9	7	7	7	9	14	19	18		11.2	18.7
24-Aug-06	19	16	13	11	10	9	10	12	18	21	21	14	12	14	28	25	19	24	21	17	11	11	8	9		13.9	28.0
25-Aug-06	8	7	7	6	8	9	7	10	11	16	18	17	15	17	20	22	20	26	22	15	17	16	16	16		13.8	25.9
26-Aug-06	17	14	12	15	16	13	14	15	19	25	19	11	12	18	21	17	19	16	12	6	5	4	6	5		12.6	25.1
27-Aug-06	8	9	7	8	8	3	3	3	4	5	5	7	6	10	5	4	7	8	7	6	5	7	5	calm		3.1	9.6
28-Aug-06	3	5	8	5	4	6	7	6	8	6	6	4	5	4	9	10	6	10	10	6	5	4	13	25		5.5	24.9
29-Aug-06	19	11	7	6	6	9	10	9	7	9	12	22	23	21	14	11	14	14	9	5	6	3	5	6		9.4	22.9
30-Aug-06	6	12	11	5	9	11	8	6	C	C	C	8	5	10	2	7	11	29	28	22	15	13	14	15		9.8	29.2
31-Aug-06	15	13	10	3	5	7	7	7	7	11	19	23	21	22	24	25	23	29	23	22	18	16	19	17		16.2	29.2
1-hr Vector	8.1	8.2	8.1	7.3	7.4	7.7	7.2	6.8	9.1	10.8	10.1	10.7	11.5	12.9	12.8	13.3	12.4	12.4	10.4	7.8	6.6	5.7	7.0	7.1			
Hourly Max	24.4	23.1	22.3	22.9	24.4	22.1	22.5	22.7	26.2	36.6	34.9	31.2	36.4	36.7	35.4	33.8	34.9	31.6	29.8	26.6	19.7	16.2	18.8	24.9			

## PASZA - Smoky Heights - Wind Direction Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**


Calm Time:	0 hrs	0% calms	Operational Time:	615 hrs				
Calibration Time:	3 hrs		AMD Operational Uptime:	83.1%				
Percentile	99	95	75	50	25	5	1	Average
	356.7	338.4	273.6	257.1	202.8	28.2	6.1	266 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	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-06	264	269	269	267	264	261	259	275	268	272	273	280	271	272	271	269	286	280	271	266	268	321	332	209	272	W	
2-Aug-06	240	242	255	237	242	236	240	244	255	256	258	269	258	267	256	265	272	266	269	304	271	273	263	290	262	W	
3-Aug-06	273	285	264	273	274	268	257	252	238	248	268	267	302	306	277	275	256	267	283	294	338	359	15	10	277	W	
4-Aug-06	28	9	332	279	348	7	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-	
5-Aug-06	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	-	
6-Aug-06	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	-	
7-Aug-06	N	N	N	N	N	N	N	131	147	75	66	57	52	57	45	56	60	51	56	63	21	13	7	5	N	-	
8-Aug-06	13	350	316	323	286	307	349	10	52	92	91	101	102	101	343	288	292	278	83	190	227	178	P	215	321	NW	
9-Aug-06	227	242	230	208	225	253	239	233	244	260	257	245	248	264	257	269	257	251	256	254	251	250	257	233	251	WSW	
10-Aug-06	264	262	263	259	239	261	240	192	209	221	237	236	252	236	259	264	347	336	34	38	28	15	12	24	257	WSW	
11-Aug-06	6	357	46	46	34	43	23	123	148	151	67	75	358	328	343	88	83	283	315	339	332	344	250	302	350	N	
12-Aug-06	270	257	202	201	250	264	212	174	188	181	182	209	232	270	284	301	263	268	261	255	249	259	268	266	251	WSW	
13-Aug-06	266	261	266	271	271	270	266	250	259	263	272	268	260	261	265	262	267	264	259	265	269	271	246	267	264	W	
14-Aug-06	296	273	212	268	270	221	247	214	202	220	194	187	225	231	206	208	182	150	162	17	359	1	336	339	229	SW	
15-Aug-06	232	268	264	264	263	268	279	281	258	285	318	308	273	282	307	315	323	359	319	299	285	282	272	275	284	WNW	
16-Aug-06	269	272	274	247	194	222	237	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-
17-Aug-06	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	-
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	267	270	272	274	272	270	270	262	260	278	281	274	261	N	-
19-Aug-06	266	273	271	269	280	272	197	148	53	45	55	5	328	325	340	321	318	341	322	342	350	2	343	338	318	NW	
20-Aug-06	309	20	315	306	290	281	312	215	202	191	148	133	139	127	97	140	348	179	123	62	80	95	49	20	115	ESE	
21-Aug-06	18	10	8	34	5	357	358	64	134	178	169	137	151	167	152	268	146	99	59	68	45	355	9	356	82	E	
22-Aug-06	23	348	298	144	194	237	270	266	191	218	252	266	267	281	274	276	285	302	302	328	340	329	250	258	273	W	
23-Aug-06	275	279	282	262	267	263	268	257	263	241	225	243	253	301	274	286	316	302	296	258	260	266	273	272	269	W	
24-Aug-06	276	272	266	216	225	226	224	214	239	257	262	274	291	289	283	297	302	318	315	310	309	303	297	295	279	W	
25-Aug-06	296	266	259	244	210	218	244	197	186	204	213	216	235	239	235	245	249	257	244	239	250	263	261	260	239	WSW	
26-Aug-06	251	256	256	253	270	261	266	261	265	263	268	298	316	273	272	277	283	286	307	335	349	22	44	27	277	W	
27-Aug-06	34	28	32	35	36	56	95	155	173	183	195	167	152	173	213	205	129	116	114	70	82	46	76	195	112	ESE	
28-Aug-06	207	221	229	252	225	228	248	226	216	207	187	180	171	141	151	188	178	170	208	208	207	265	300	323	218	SW	
29-Aug-06	327	332	297	237	216	273	270	256	260	274	254	263	260	254	261	262	250	270	291	144	180	242	203	237	263	W	
30-Aug-06	279	327	341	341	4	353	326	353	C	C	C	295	279	275	43	323	291	239	253	258	259	256	267	262	283	WNW	
31-Aug-06	260	256	252	237	241	250	242	215	199	227	235	239	256	251	249	248	255	251	245	248	245	237	238	237	245	WSW	
Hourly Avg	277	280	270	261	264	264	261	242	236	244	249	256	261	266	268	270	274	270	272	280	281	290	284	283			

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

Station: Smoky Heights  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**


Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	615 hrs			
Calibration Time:	3 hrs		AMD Operational Uptime:	83.1%			
Percentile	99	95	75	50	25	5	1
	55.6	40.6	18.6	10.4	6.2	2.8	1.8

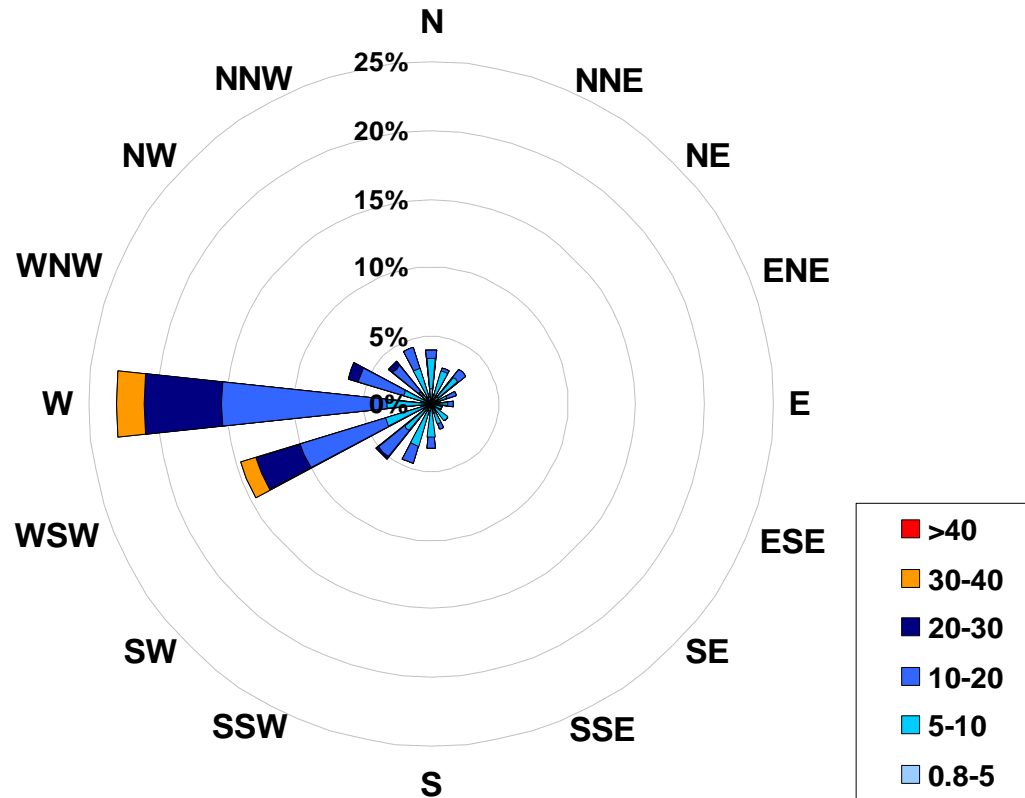
**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	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	0:00		
1-Aug-06	3	3	3	2	3	3	3	5	6	7	9	9	12	9	8	11	8	8	6	6	6	8	22	15		22.3	
2-Aug-06	8	4	5	4	7	4	3	5	8	6	9	11	10	10	9	9	7	9	14	6	6	5	8	6		13.8	
3-Aug-06	13	9	4	5	2	3	4	5	9	12	16	15	22	20	18	12	17	10	6	6	11	5	9	7		22.3	
4-Aug-06	15	9	9	6	13	47	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		46.5
5-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		0.0
6-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		0.0
7-Aug-06	N	N	N	N	N	N	N	69	29	18	11	15	14	11	13	11	10	8	10	8	15	9	10	7		68.8	
8-Aug-06	10	17	25	32	19	12	8	14	33	16	37	40	38	25	18	7	7	17	27	11	14	12	P	4		39.7	
9-Aug-06	5	4	9	27	38	15	6	5	6	6	8	8	12	10	10	9	8	7	6	4	3	3	11	15		37.9	
10-Aug-06	3	3	2	5	5	8	13	7	10	16	14	19	21	27	40	27	48	25	14	8	4	5	6	18		47.9	
11-Aug-06	7	5	29	16	12	26	25	40	29	61	31	32	35	26	29	27	28	11	9	10	11	17	12	36		60.8	
12-Aug-06	30	13	22	35	13	5	8	7	8	12	17	31	20	23	18	14	16	9	8	4	3	3	3	4		34.6	
13-Aug-06	2	3	3	2	2	1	2	6	5	7	10	12	16	14	16	12	12	9	8	4	3	5	8	8		16.0	
14-Aug-06	5	12	10	8	9	9	21	10	11	9	10	9	18	14	29	19	12	21	38	9	8	12	7	36		37.6	
15-Aug-06	35	21	3	3	3	3	5	8	7	14	15	17	23	13	14	15	12	15	32	17	17	8	10	5		34.9	
16-Aug-06	2	3	3	11	20	9	19	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		19.5
17-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		0.0
18-Aug-06	N	N	N	N	N	N	N	N	N	N	N	N	10	9	9	9	11	9	7	6	4	4	4	5	4		11.2
19-Aug-06	3	2	3	2	43	13	30	16	29	16	39	44	56	19	16	26	29	22	8	6	6	5	29	9		55.9	
20-Aug-06	19	27	25	19	14	9	23	14	15	18	25	24	49	48	41	48	62	47	40	9	11	7	12	7		62.3	
21-Aug-06	7	7	9	9	4	10	20	12	17	21	34	26	22	41	30	69	35	13	11	10	9	12	9	10		68.9	
22-Aug-06	34	41	46	46	35	26	10	11	10	9	13	16	13	15	19	12	13	8	16	10	7	21	9	13		46.4	
23-Aug-06	6	3	4	3	9	7	4	6	6	11	21	31	41	21	24	40	17	30	16	5	10	2	2	1		40.5	
24-Aug-06	1	2	5	7	4	5	4	6	5	7	10	18	20	25	8	8	11	10	8	6	4	4	3	6		24.5	
25-Aug-06	5	9	20	17	9	7	8	7	8	9	14	15	19	21	18	12	13	7	5	5	5	4	4	3		21.2	
26-Aug-06	2	3	4	4	4	3	9	5	11	9	14	23	23	14	12	18	19	15	9	8	10	37	44	35		43.6	
27-Aug-06	8	5	8	7	4	10	14	26	27	33	30	26	37	32	44	53	30	19	6	8	5	8	32	59		58.8	
28-Aug-06	43	18	6	30	25	8	15	11	26	29	18	37	50	61	26	25	35	8	10	34	33	51	14	5		61.2	
29-Aug-06	7	8	13	16	15	13	5	4	7	10	16	10	10	12	25	25	16	15	9	54	9	23	24	9		53.7	
30-Aug-06	9	7	6	12	11	5	11	17	C	C	C	41	43	40	41	24	20	6	3	4	3	4	3	3		43.4	
31-Aug-06	3	4	4	42	21	15	11	13	15	13	10	10	15	13	11	9	9	6	5	4	4	3	2	2		41.8	
Hourly Max	43	41	46	46	43	47	30	69	33	61	39	44	56	61	44	69	62	47	40	54	33	51	44	59			

1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for August 2006



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	50
5	to	10	215
10	to	20	249
20	to	30	78
30	to	40	23
	>	40	0
Total Non-Zero Values			615

# 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, 2006 to September 1, 2006

Alberta's Air Quality Index

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

**Summary**

Number of 1-hr Good Readings:	688
Number of 1-hr Fair Readings:	3
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

**Status Flag Characters**

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

Day	Mountain Standard Time																							
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00
1-Aug-06	9	10	10	10	N	10	10	11	11	11	11	12	12	11	12	13	16	16	18	18	17	16	15	12
2-Aug-06	12	12	10	11	N	9	9	11	13	14	14	15	16	16	16	16	16	15	15	14	12	12	11	10
3-Aug-06	10	9	7	6	N	7	5	8	8	N	13	13	13	14	14	14	13	13	13	12	12	11	12	9
4-Aug-06	9	11	7	8	N	6	6	5	10	12	14	13	14	14	13	14	15	15	14	13	9	8	7	8
5-Aug-06	7	6	7	8	N	8	8	9	9	12	14	14	14	15	14	15	13	13	13	13	12	11	12	11
6-Aug-06	12	11	10	9	N	7	6	6	8	12	18	20	22	23	23	24	24	24	23	21	20	20	17	17
7-Aug-06	18	15	16	18	N	11	8	7	9	14	23	23	22	21	21	21	21	21	20	18	16	15	14	14
8-Aug-06	15	14	12	11	N	13	10	7	8	14	17	20	21	22	21	19	20	19	16	N	14	15	14	12
9-Aug-06	12	14	15	12	N	10	8	13	15	16	16	16	16	15	15	15	15	15	15	15	14	14	11	11
10-Aug-06	11	11	9	9	N	8	7	7	9	11	N	13	14	14	14	14	15	15	15	14	12	13	14	13
11-Aug-06	13	10	6	7	N	5	5	3	5	5	9	11	N	N	N	N	N	N	14	17	15	12	10	10
12-Aug-06	10	8	7	6	N	4	6	5	7	11	N	18	19	20	21	21	20	20	19	18	17	16	16	16
13-Aug-06	15	14	14	13	N	11	10	11	17	18	N	19	20	20	21	20	17	16	16	15	14	14	11	12
14-Aug-06	9	9	8	6	N	7	6	6	7	9	12	N	N	19	19	20	20	19	19	17	16	17	17	15
15-Aug-06	14	13	15	14	N	9	5	7	13	13	16	16	16	17	17	16	15	13	12	10	9	9	10	11
16-Aug-06	9	9	9	9	N	6	5	4	6	8	10	13	N	14	15	15	16	16	15	12	11	6	6	9
17-Aug-06	9	9	8	8	N	8	8	10	7	12	15	15	15	14	14	15	15	15	14	12	11	7	8	8
18-Aug-06	7	7	8	7	N	5	6	8	N	16	16	16	16	17	17	18	18	18	18	18	17	14	14	15
19-Aug-06	14	14	14	11	N	13	11	11	11	14	16	17	17	18	N	17	17	N	18	17	16	15	14	15
20-Aug-06	14	13	12	13	N	6	6	6	8	14	18	21	21	22	22	24	24	23	22	21	20	21	19	14
21-Aug-06	12	11	10	8	N	3	5	12	8	15	21	24	24	23	24	24	25	27	34	27	19	18	17	18
22-Aug-06	16	15	16	15	N	12	11	11	13	16	19	20	20	19	18	17	17	18	18	17	17	15	14	12
23-Aug-06	13	13	14	13	N	11	8	9	14	15	16	16	16	17	17	16	17	18	17	15	13	14	13	11
24-Aug-06	11	11	11	9	N	9	7	9	12	15	14	14	14	15	14	14	13	14	13	12	11	10	9	8
25-Aug-06	8	8	6	6	N	6	6	6	8	10	12	14	15	N	17	17	16	16	15	13	14	14	13	13
26-Aug-06	12	12	12	12	N	11	12	13	14	14	15	15	16	17	18	17	17	16	16	14	12	12	12	12
27-Aug-06	12	11	11	11	N	10	9	8	9	12	16	19	20	20	20	20	21	20	21	19	17	16	17	15
28-Aug-06	12	13	12	10	N	8	8	13	10	10	13	18	21	22	22	22	21	18	18	18	15	15	17	16
29-Aug-06	14	12	13	10	N	5	4	6	7	N	N	N	17	18	18	18	18	18	16	15	15	14	13	13
30-Aug-06	12	12	11	11	N	8	7	6	7	11	14	14	15	15	16	14	17	16	16	15	12	12	10	9
31-Aug-06	9	8	7	7	N	7	5	5	6	N	11	12	12	12	12	13	14	14	13	13	13	12	12	11

# PASZA - Beaverlodge - Sulphur Dioxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

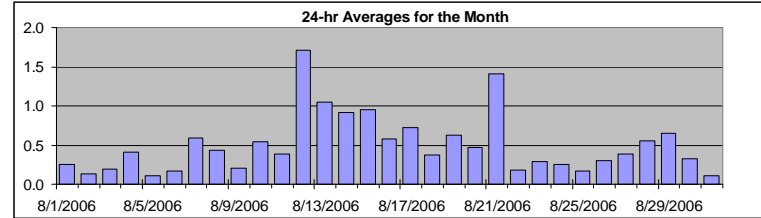
## HOURLY AVERAGE TABLE

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

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	21.7 ppb 12-Aug 9:00 10:00
Maximum 24-hr Average:	1.7 ppb 12-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
	5.1	1.4	0.5	0.2	0.1	0.1	0.0	0.5 ppb	0.2 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8
2-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
3-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	0.5	
4-Aug-06	0	1	1	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.4	1.2	
5-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
6-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	0.6	
7-Aug-06	0	0	0	0	A	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0.6	1.4	
8-Aug-06	1	1	0	0	A	0	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0.4	1.2	
9-Aug-06	0	0	0	0	A	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.1	
10-Aug-06	0	0	0	0	A	0	0	0	2	2	0	0	1	2	1	0	0	0	0	0	0	0	0	1	0.5	1.9	
11-Aug-06	2	1	0	0	A	0	1	1	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.4	2.2	
12-Aug-06	0	0	0	0	A	0	0	1	7	22	3	1	0	0	1	1	0	0	0	0	0	0	0	0	1.7	21.7	
13-Aug-06	0	0	0	0	A	0	0	1	6	1	1	1	1	1	1	0	0	0	2	0	0	8	2	1	1.1	7.5	
14-Aug-06	1	3	3	3	A	1	0	0	0	1	4	1	0	0	0	0	0	1	0	0	0	0	0	0	0.9	4.3	
15-Aug-06	0	0	5	5	A	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1.0	5.3	
16-Aug-06	0	0	0	0	A	0	0	0	1	3	3	1	0	0	0	0	1	1	0	0	0	0	0	0	0.6	3.0	
17-Aug-06	0	0	0	0	A	0	0	0	2	7	2	0	0	0	0	0	0	1	0	0	0	1	1	0	0.7	6.5	
18-Aug-06	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0.4	1.0	
19-Aug-06	1	3	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0.6	3.5	
20-Aug-06	1	1	1	1	A	0	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0.5	0.8	
21-Aug-06	2	1	1	1	A	1	1	3	7	2	2	1	1	0	0	0	0	1	1	1	1	2	1	1	1.4	6.8	
22-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
23-Aug-06	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3	
24-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
25-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
26-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	1.2	
27-Aug-06	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.4	0.9	
28-Aug-06	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	1	1	1	1	0.5	1.2	
29-Aug-06	1	1	1	1	A	1	1	1	1	0	0	0	1	2	1	1	1	1	0	1	0	0	0	0	0.6	1.8	
30-Aug-06	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.1	
31-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
Hourly Avg	0.4	0.5	0.5	0.5	N	0.2	0.3	0.5	1.2	1.6	0.9	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.3	0.4			
Hourly Max	2.2	3.5	5.3	5.2	0.0	0.6	1.1	2.8	7.3	21.7	4.3	1.3	1.8	1.8	1.1	1.1	0.9	1.1	1.6	1.2	1.5	7.5	1.6	1.3			

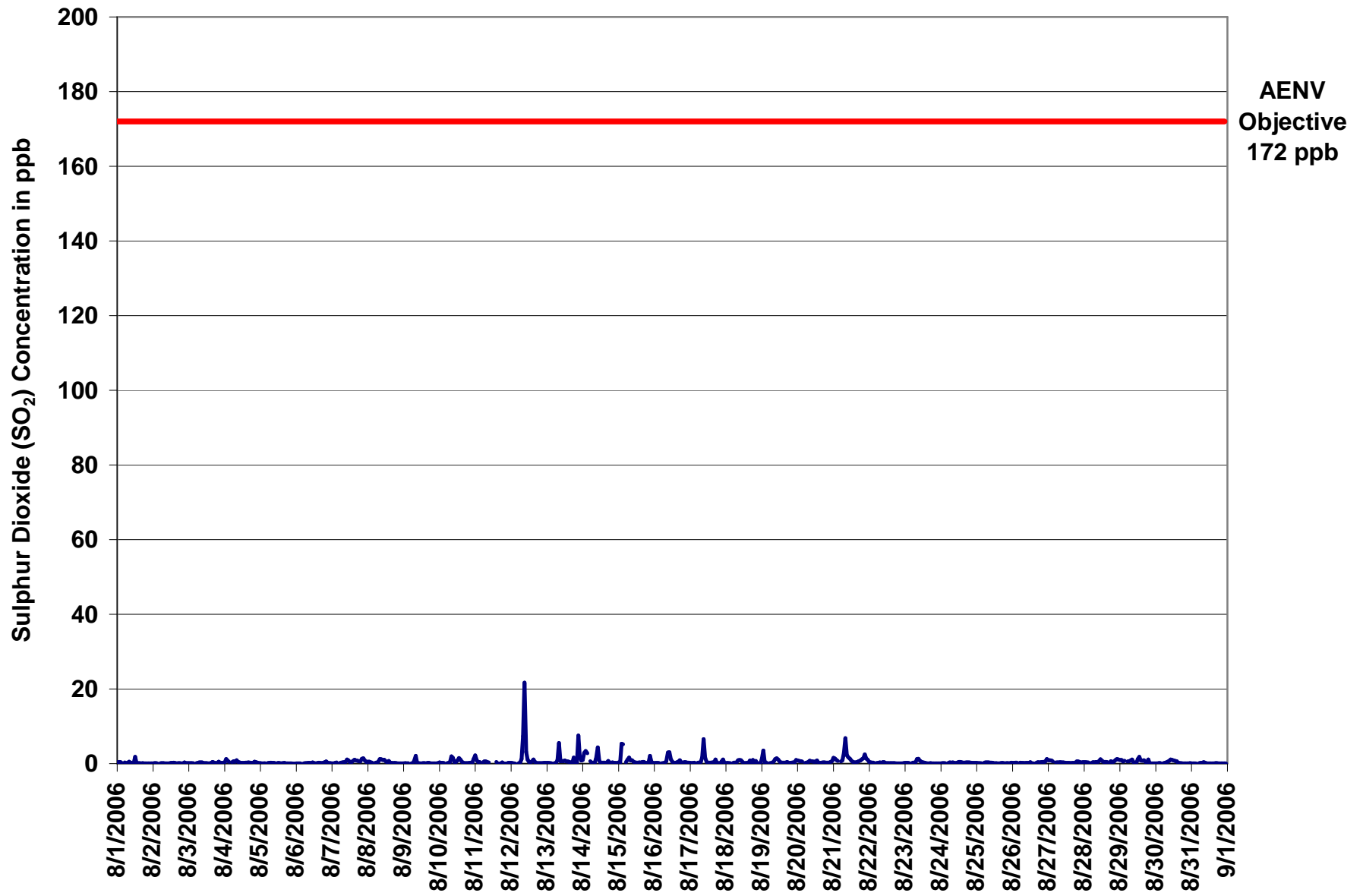


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

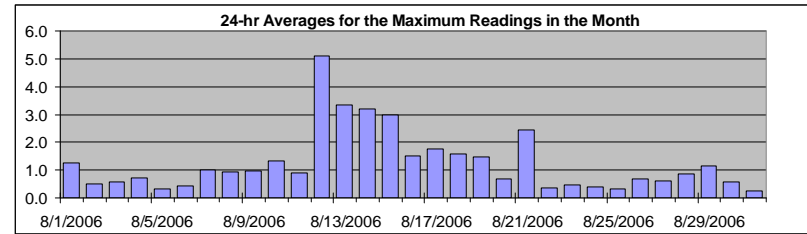
**Sulphur Dioxide (SO<sub>2</sub>)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	55.9	ppb	12-Aug	9:00 10:00
Maximum 24-hr Value:	5.1	ppb	12-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
	14.0	3.7	1.1	0.5	0.3	0.2	0.1	1.3 ppb	0.5 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Aug-06	0	1	1	0	A	0	0	0	2	1	0	0	19	0	0	1	0	0	0	0	0	0	0	0	0	1.2	19.1
2-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	1	2	2	1	0	1	0	0	0	0	0	0	0	0.5	2.0
3-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	3	2	0	0	1	0	0	0	0	0	0.6	3.0
4-Aug-06	1	3	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.7	2.7
5-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0.3	1.4
6-Aug-06	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	0	0.4	1.4
7-Aug-06	0	0	0	1	A	0	1	1	1	1	3	1	1	1	1	1	1	1	1	1	3	3	1	1	1	1.0	3.0
8-Aug-06	1	1	1	0	A	0	0	1	2	2	3	3	1	1	3	0	0	0	0	0	0	0	0	0	0	0.9	2.9
9-Aug-06	0	0	0	0	A	0	0	5	8	0	0	0	1	1	1	2	2	0	0	0	0	0	0	0	0	1.0	7.5
10-Aug-06	1	0	0	0	A	0	0	1	4	3	2	3	4	4	2	1	1	0	0	0	0	0	0	3	1.3	4.3	
11-Aug-06	3	1	1	1	A	1	1	1	1	1	C	C	C	A	3	0	0	0	1	0	0	0	1	0	0.9	3.4	
12-Aug-06	0	0	0	0	A	1	1	5	31	56	7	4	2	2	2	4	2	0	0	0	0	0	0	0	5.1	55.9	
13-Aug-06	0	0	0	0	A	0	0	3	13	4	3	2	3	2	3	2	3	1	6	0	2	24	4	2	3.3	23.5	
14-Aug-06	2	5	7	8	A	1	0	0	0	9	18	3	1	2	2	2	2	8	1	1	0	0	0	1	3.2	17.8	
15-Aug-06	1	0	0	23	A	1	3	3	1	2	1	1	0	1	1	1	1	2	0	0	0	10	2	0	3.0	22.8	
16-Aug-06	0	1	0	0	A	0	0	0	6	4	5	2	2	0	1	1	2	3	2	0	1	1	0	0	1.5	6.0	
17-Aug-06	0	0	0	0	A	1	0	1	4	13	3	1	1	1	1	1	1	5	1	0	0	1	4	0	1.7	12.8	
18-Aug-06	0	0	0	0	A	1	0	0	4	3	3	3	0	1	1	1	3	2	6	2	4	0	0	0	1.6	5.5	
19-Aug-06	4	15	0	1	A	0	0	1	1	2	2	2	1	0	0	0	0	1	0	0	0	1	1	1	1.5	14.7	
20-Aug-06	1	1	1	1	A	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	0.7	1.3	
21-Aug-06	2	2	1	1	A	1	2	11	13	3	2	2	1	1	1	1	1	1	1	2	2	3	2	1	2.4	13.3	
22-Aug-06	1	0	1	1	A	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
23-Aug-06	0	0	0	0	A	0	0	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	1.6	
24-Aug-06	0	0	0	0	A	0	0	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0.4	0.6	
25-Aug-06	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
26-Aug-06	0	0	0	1	A	0	0	0	0	0	0	0	1	1	0	0	1	1	0	1	1	1	4	2	0.7	3.8	
27-Aug-06	2	1	1	1	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.6	1.8	
28-Aug-06	1	1	1	1	A	0	1	1	1	1	1	1	2	1	1	1	1	0	0	1	1	1	2	2	0.9	2.4	
29-Aug-06	1	1	1	1	A	1	1	1	2	1	0	1	3	3	1	1	1	1	0	3	0	0	0	0	1.1	3.2	
30-Aug-06	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.6	1.4	
31-Aug-06	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9	
Hourly Avg	0.8	1.2	1.4	1.1	N	0.5	0.6	1.4	3.3	3.6	2.0	1.1	1.6	1.0	1.0	0.9	0.9	1.2	0.9	0.6	0.7	1.7	0.8	0.6			
Hourly Max	4.3	14.7	22.8	14.1	0.0	1.2	2.8	10.6	30.5	55.9	17.8	3.5	19.1	3.6	3.4	4.1	3.0	8.5	5.9	3.0	3.9	23.5	4.3	2.9			

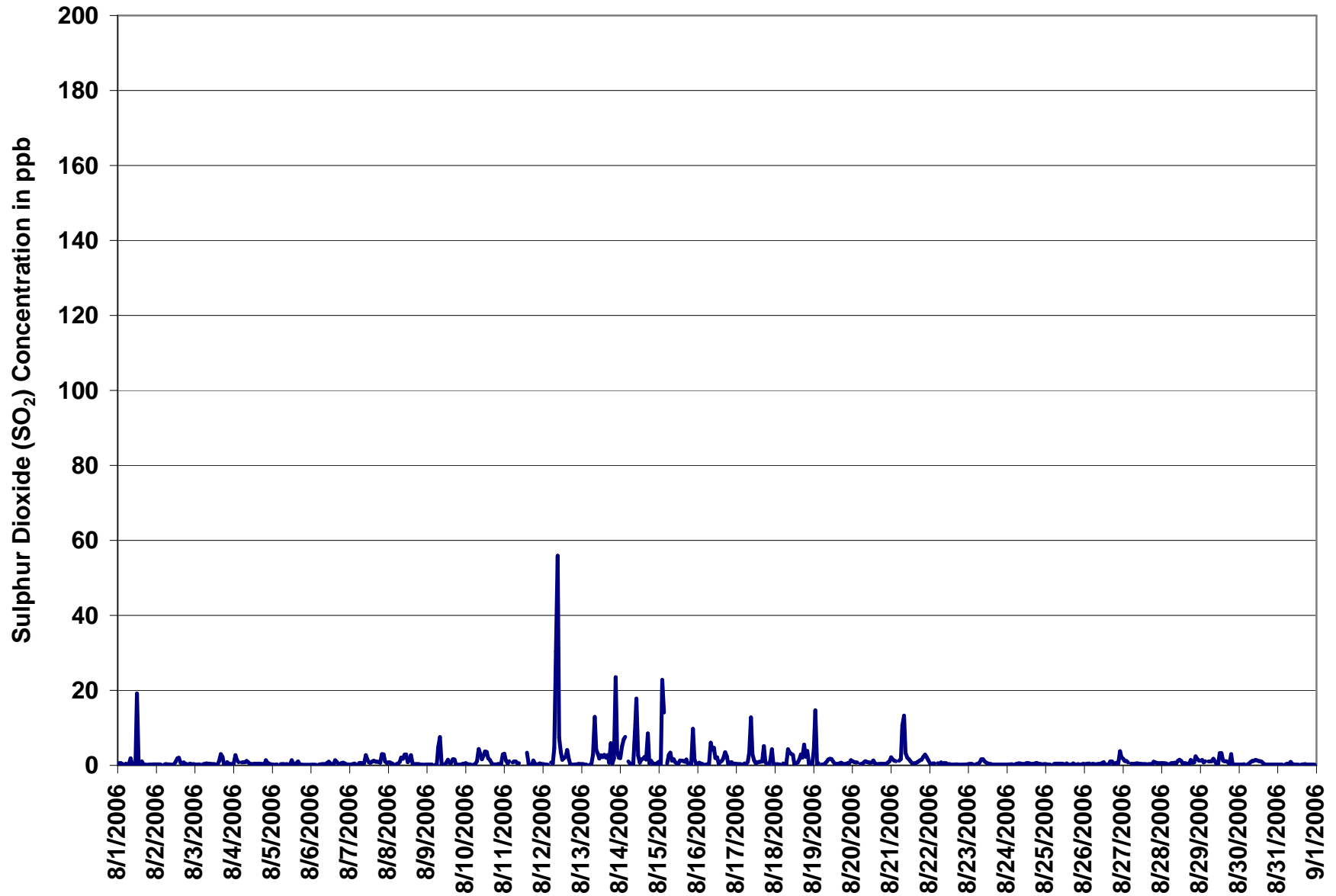
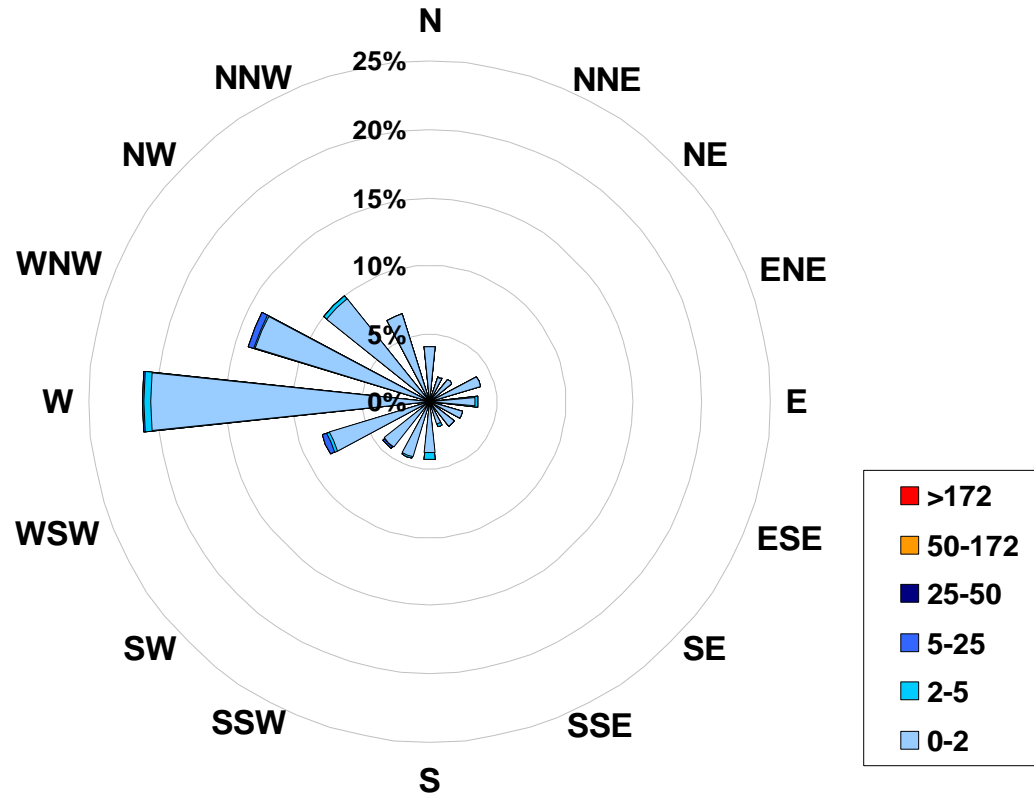


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Beaverlodge Site for August 2006**



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
0.0	< 2	687	
2	to 5	14	
5	to 25	8	
25	to 50	0	
50	to 172	0	
	> 172	0	
Total Non-Zero Values			709

# PASZA - Beaverlodge - Nitrogen Dioxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

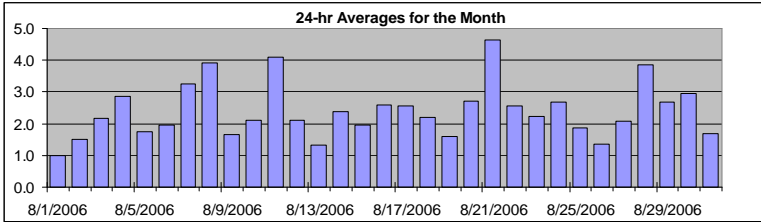
## Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: August 1, 2006 to September 1, 2006

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:	11.2 ppb 21-Aug 6:00 7:00
Maximum 24-hr Average:	4.6 ppb 21-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
	9.9	6.5	3.4	1.8	0.8	0.2	0.0	2.4 ppb	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																								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-06	2	1	1	1	A	1	1	1	2	0	0	0	0	0	0	0	0	0	0	1	1	2	3	3	1.0	3.4	
2-Aug-06	3	3	3	2	A	4	3	1	1	0	0	0	0	0	1	0	0	0	1	1	3	2	3	4	1.5	4.1	
3-Aug-06	3	3	5	5	A	4	6	3	3	1	0	0	0	0	0	0	1	1	1	2	2	2	2	4	2.2	5.8	
4-Aug-06	3	2	5	4	A	6	6	7	3	1	1	0	0	1	1	1	1	1	1	1	6	7	5	4	2.9	7.4	
5-Aug-06	5	3	3	3	A	4	4	3	2	1	1	1	1	0	1	1	0	0	0	0	2	3	1	2	1.8	4.9	
6-Aug-06	2	2	3	4	A	4	6	5	4	2	1	0	0	0	0	0	0	0	1	1	2	3	3	2	2.0	6.2	
7-Aug-06	2	3	3	3	A	6	9	9	8	6	1	2	1	1	1	1	2	1	2	2	3	3	4	3	3.2	8.6	
8-Aug-06	3	3	4	5	A	5	8	11	6	5	3	2	2	1	3	4	1	3	4	4	3	3	3	4	3.9	10.6	
9-Aug-06	3	3	2	3	A	3	7	3	1	0	0	0	0	0	0	0	0	0	0	1	1	1	4	3	1.6	7.3	
10-Aug-06	4	3	5	4	A	3	4	4	2	2	C	C	C	C	A	0	0	0	1	1	2	2	1	1	2.1	4.6	
11-Aug-06	2	5	10	5	A	9	9	11	8	5	3	2	1	1	1	1	1	1	1	1	3	6	5	3	4.1	11.0	
12-Aug-06	3	4	4	5	A	6	5	4	4	3	1	1	0	0	0	0	0	0	0	1	1	1	2	1	2.1	6.4	
13-Aug-06	1	1	1	1	A	2	3	2	0	0	0	0	0	0	0	0	0	0	0	1	3	3	6	3	1.3	5.7	
14-Aug-06	6	4	5	6	A	4	4	4	2	2	1	1	1	1	1	0	0	0	1	1	2	3	1	1	4	2.4	5.8
15-Aug-06	2	2	1	2	A	3	6	4	1	1	1	1	1	1	1	1	1	2	1	1	2	3	4	3	2	1.9	6.1
16-Aug-06	3	3	2	2	A	3	3	4	2	2	1	1	1	0	0	0	0	1	1	3	4	9	7	6	2.6	8.8	
17-Aug-06	4	3	4	3	A	4	4	5	5	3	2	1	0	0	0	0	0	0	1	1	1	2	9	4	3	2.6	8.5
18-Aug-06	4	5	3	4	A	7	5	3	1	0	0	0	1	1	0	0	0	1	1	1	1	5	4	3	2.2	7.2	
19-Aug-06	2	2	3	3	A	2	3	3	3	1	1	1	0	1	0	0	0	0	1	1	1	2	3	2	1.6	3.4	
20-Aug-06	3	4	4	3	A	6	6	6	5	4	3	3	1	1	1	1	1	1	1	1	1	2	1	3	2.7	6.4	
21-Aug-06	3	3	3	5	A	10	11	10	9	6	5	3	2	1	1	1	1	2	3	4	7	7	4	4	4.6	11.2	
22-Aug-06	4	6	3	3	A	6	6	10	6	2	1	0	0	0	0	1	1	1	1	1	1	2	2	2	2.6	9.8	
23-Aug-06	2	2	1	2	A	6	10	7	3	1	1	1	1	1	1	1	1	0	1	1	3	2	2	2	2.2	9.7	
24-Aug-06	2	3	3	4	A	6	9	5	2	1	1	1	1	1	1	1	1	1	1	2	4	3	4	5	2.7	8.7	
25-Aug-06	3	3	4	4	A	3	4	4	2	2	1	1	0	1	0	0	0	1	1	1	2	1	2	1	1.9	4.4	
26-Aug-06	2	2	2	2	A	3	2	1	1	0	0	0	0	0	0	0	0	0	1	1	1	4	3	3	2	1.4	3.8
27-Aug-06	2	2	2	2	A	3	3	4	5	3	2	1	1	1	1	1	1	1	2	2	2	2	2	4	2.1	5.3	
28-Aug-06	6	4	5	6	A	7	8	10	5	5	4	4	2	1	1	1	1	4	3	2	5	3	1	1	3.9	10.0	
29-Aug-06	2	3	3	5	A	9	10	9	6	1	1	0	0	0	0	0	0	1	1	1	2	2	2	2	2.7	9.8	
30-Aug-06	2	2	3	4	A	6	7	7	10	2	1	1	1	1	1	1	1	1	1	2	4	3	3	2	2.9	10.2	
31-Aug-06	2	2	2	3	A	3	5	4	5	2	0	0	0	0	0	0	1	1	1	1	1	1	1	2	1.7	4.6	
Hourly Avg	2.9	2.9	3.3	3.4	N	4.8	5.7	5.3	3.7	2.1	1.3	1.0	0.6	0.6	0.6	0.6	0.7	0.9	1.1	1.6	2.7	3.2	3.0	2.9			
Hourly Max	5.9	5.7	9.9	5.9	0.0	10.5	11.2	11.0	10.2	6.1	4.8	3.7	1.9	1.3	3.4	4.0	1.8	3.6	3.6	4.4	7.1	8.8	7.1	5.8			

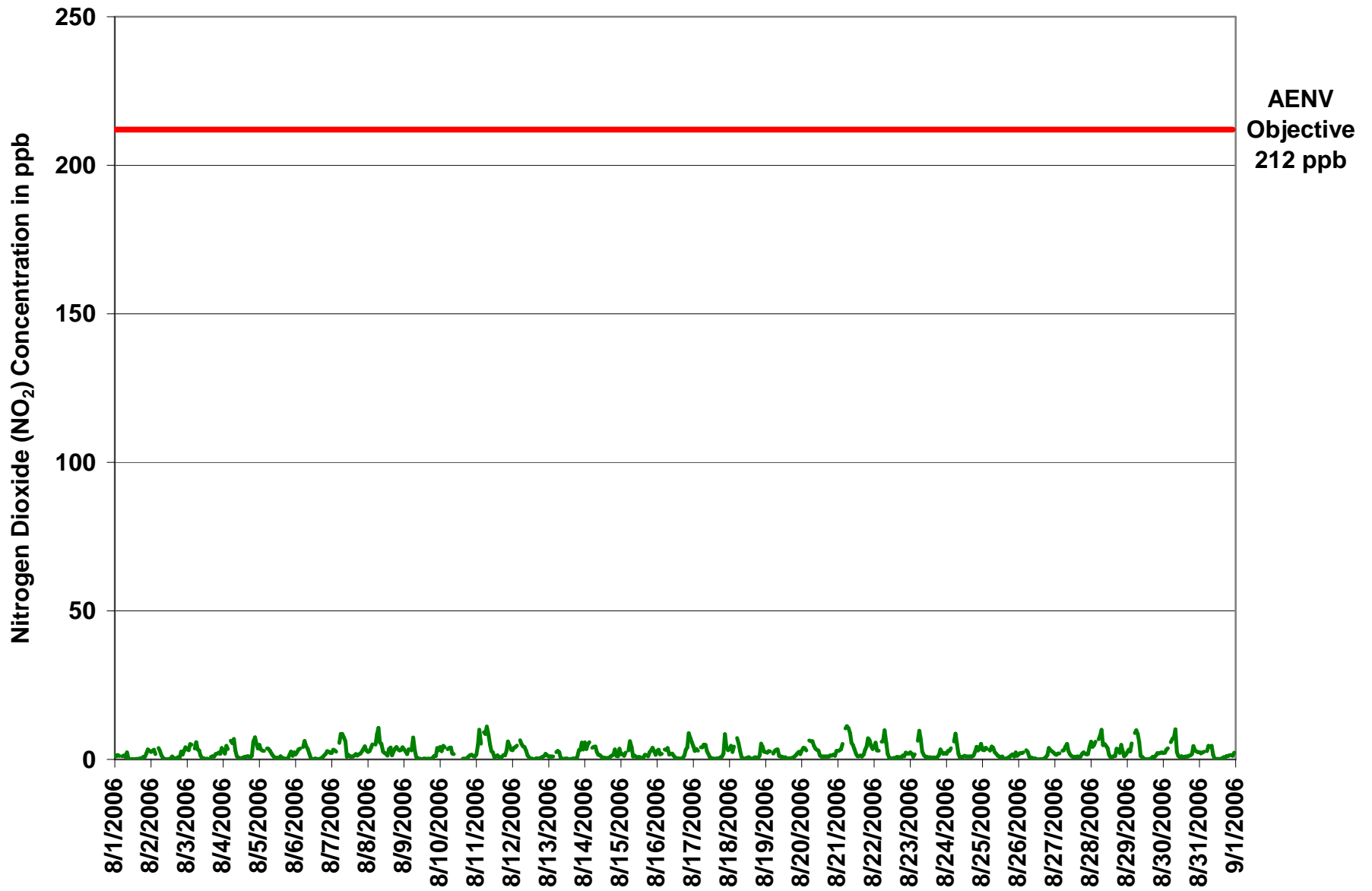


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Beaverlodge  
 Station Owner: PASZA

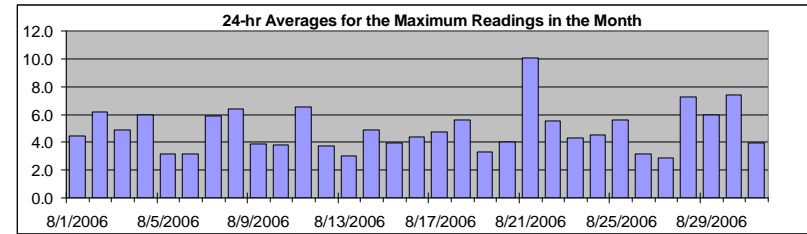
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	70.2	ppb	2-Aug	14:00 15:00
Maximum 24-hr Value:	10.1	ppb	21-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
	23.9	13.9	6.0	3.3	1.9	1.0	1.0	4.9 ppb	3.3 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																									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-06	4	2	3	3	A	3	3	2	35	11	1	1	1	2	2	1	1	1	1	2	3	5	11	5	4.4	34.8	
2-Aug-06	5	3	5	4	A	6	6	3	2	1	1	1	1	2	70	2	1	1	2	1	9	4	6	8	6.2	70.2	
3-Aug-06	6	6	10	9	A	12	11	8	4	3	2	2	1	8	2	1	3	2	2	4	4	4	2	6	4.9	12.4	
4-Aug-06	4	4	7	7	A	9	9	10	30	2	1	1	1	2	2	2	1	1	3	11	13	10	5	5.9	30.5		
5-Aug-06	11	5	3	3	A	5	4	5	2	2	2	1	1	1	3	2	1	2	2	1	4	5	2	4	3.1	10.6	
6-Aug-06	3	3	5	4	A	5	7	9	5	3	1	1	1	1	2	1	1	2	2	3	5	6	3	3.2	8.7		
7-Aug-06	3	7	4	4	A	15	17	14	13	12	1	3	1	2	2	3	2	3	2	4	9	8	6	5.9	16.6		
8-Aug-06	6	6	9	10	A	9	10	15	8	8	4	3	2	2	6	9	2	5	6	7	6	4	5	6	6.4	15.0	
9-Aug-06	6	4	4	5	A	5	11	8	2	1	2	1	1	6	1	1	1	2	1	5	3	3	9	9	3.9	10.7	
10-Aug-06	8	4	7	6	A	6	5	7	3	3	C	C	C	C	A	1	1	1	3	2	4	3	3	2	3.8	8.0	
11-Aug-06	2	13	16	8	A	12	11	14	12	7	5	4	2	2	3	2	1	2	2	3	7	10	8	5	6.5	16.0	
12-Aug-06	5	5	5	9	A	12	8	7	7	4	3	1	1	1	1	1	1	1	2	2	2	2	5	2	3.7	11.8	
13-Aug-06	1	1	2	2	A	4	4	4	2	1	1	1	1	1	1	1	1	2	1	2	7	14	11	5	3.0	14.0	
14-Aug-06	14	4	10	8	A	5	13	13	4	3	3	2	3	1	1	2	2	3	4	8	2	2	5	4.9	13.8		
15-Aug-06	3	3	4	4	A	5	9	8	2	2	2	1	3	3	2	2	5	7	3	4	4	8	6	3	4.0	9.0	
16-Aug-06	4	5	3	3	A	9	5	5	2	3	3	2	2	2	1	1	1	1	4	4	6	14	12	9	4.4	14.0	
17-Aug-06	7	4	4	4	A	8	8	8	8	3	3	1	1	1	10	1	1	1	2	3	4	15	7	5	4.7	15.0	
18-Aug-06	6	7	5	7	A	9	7	5	4	1	1	1	19	25	1	1	1	2	2	3	2	9	6	6	5.6	25.0	
19-Aug-06	5	3	5	5	A	2	4	6	6	3	3	1	3	1	1	1	1	1	1	1	3	6	10	5	3.3	10.0	
20-Aug-06	4	9	4	4	A	10	9	8	6	5	4	4	2	2	1	1	1	1	1	5	3	3	2	4	4.0	10.0	
21-Aug-06	4	4	4	9	A	20	22	14	20	14	24	4	6	5	14	9	2	3	5	7	16	11	9	8	10.1	24.0	
22-Aug-06	7	9	4	3	A	27	17	15	11	4	1	1	1	1	6	2	3	1	2	2	4	4	2	5.5	26.7		
23-Aug-06	3	6	1	4	A	12	18	13	4	3	2	1	2	2	1	1	1	1	2	5	5	5	3	3	4.3	17.7	
24-Aug-06	3	9	4	5	A	10	13	8	3	1	2	2	5	1	2	2	1	3	5	5	4	5	8	4.5	13.0		
25-Aug-06	5	4	7	5	A	4	6	5	4	3	3	2	1	53	1	1	2	2	4	4	3	6	2	5.6	52.9		
26-Aug-06	3	3	5	4	A	7	6	2	1	1	2	1	1	1	1	1	1	1	3	5	7	7	6	5	3.2	7.0	
27-Aug-06	2	4	3	3	A	3	5	6	7	4	2	2	1	1	1	1	1	1	3	4	2	3	2	6	2.9	7.0	
28-Aug-06	8	6	7	9	A	10	19	16	9	7	6	8	11	1	1	2	2	8	8	3	13	9	2	2	7.2	19.3	
29-Aug-06	4	8	7	9	A	14	18	12	9	2	30	1	1	1	2	1	1	2	2	2	3	3	3	3	6.0	29.9	
30-Aug-06	3	3	4	5	A	16	18	19	18	6	20	1	18	1	2	2	2	3	3	5	10	5	4	4	7.4	20.1	
31-Aug-06	4	3	7	4	A	4	12	11	11	3	1	1	1	1	1	1	1	2	2	4	3	4	5	2	4	3.9	11.8
Hourly Avg	4.9	5.0	5.4	5.4	N	9.0	10.1	9.0	8.2	4.1	4.5	1.9	3.1	4.4	4.5	2.0	1.5	2.1	2.5	3.4	5.4	6.4	5.7	4.7			
Hourly Max	13.8	12.9	16.0	9.7	0.0	26.7	22.1	18.7	34.8	14.0	29.9	7.8	18.8	52.9	70.2	9.0	5.0	8.0	8.0	7.5	15.5	15.0	11.7	8.8			

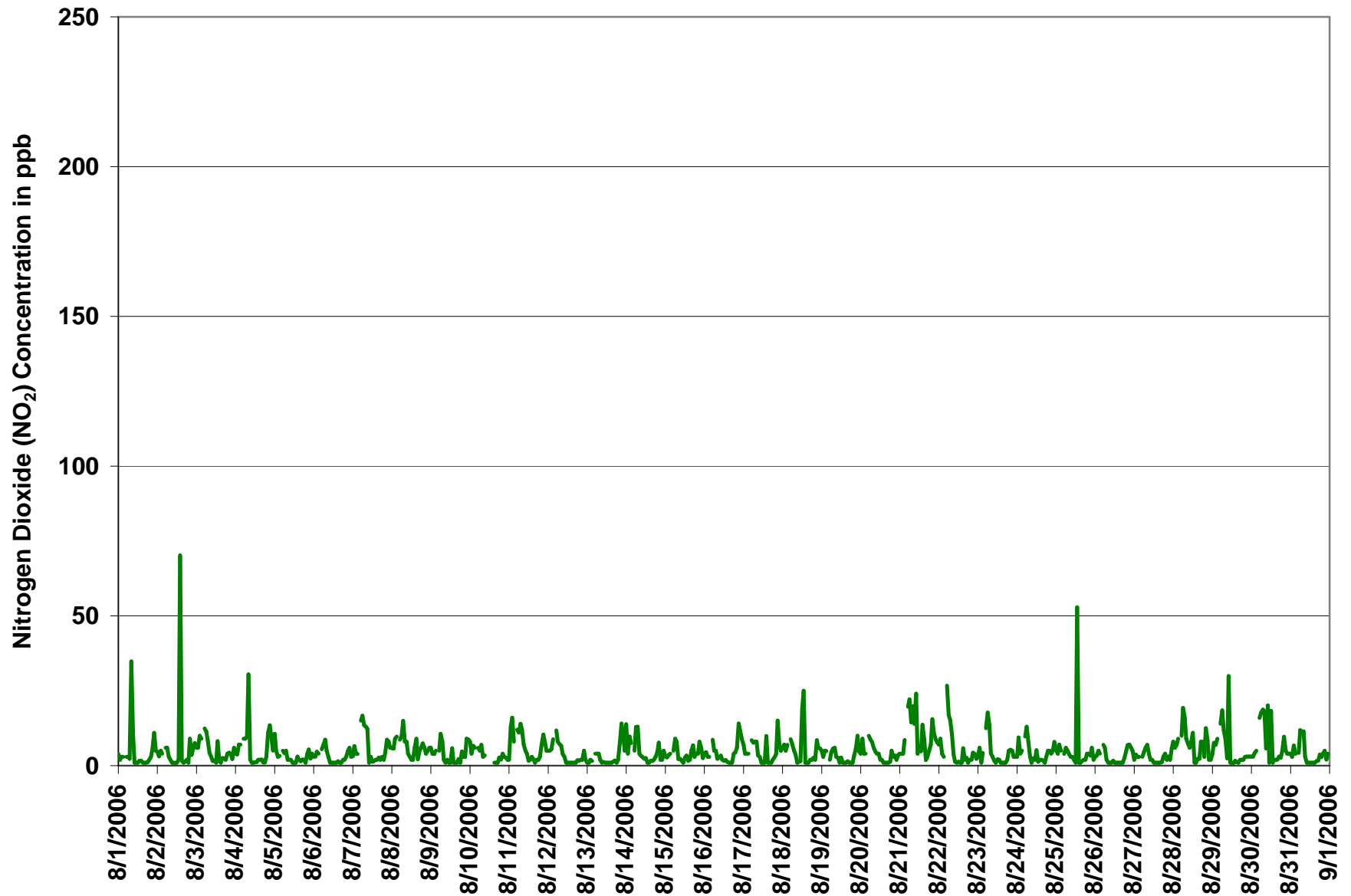
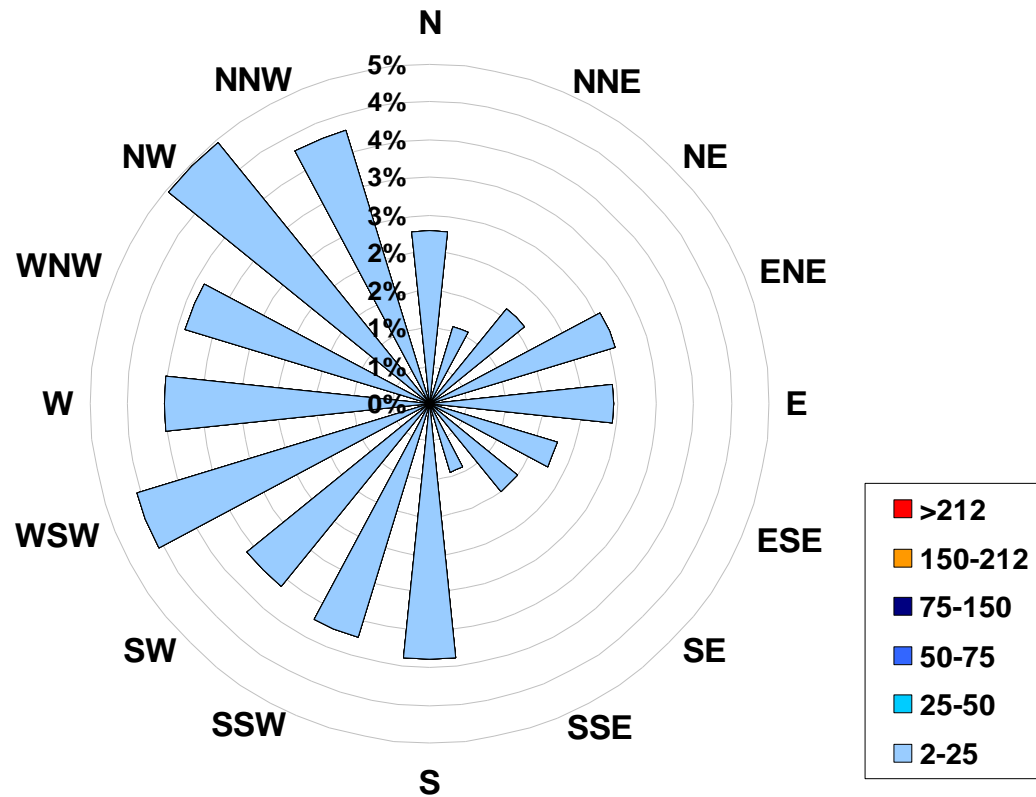


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Beaverlodge Site for August 2006



Calms: 0%

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

# PASZA – Beaverlodge - Nitric Oxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

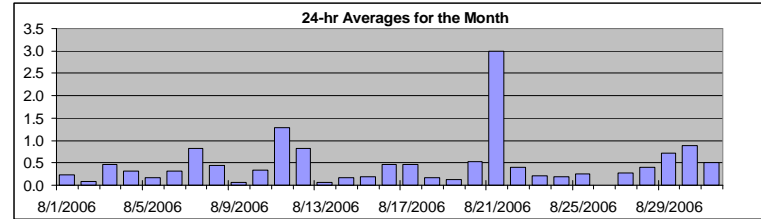
## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Maximum 1-hr Average:	24.8 ppb	21-Aug	7:00 8:00
Maximum 24-hr Average:	3.0 ppb	21-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
	6.4	2.8	0.0	0.0	0.0	0.0	0.0	0.5 ppb	0.0 ppb

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00		
1-Aug-06	0	0	0	0	A	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	4.6		
2-Aug-06	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	0.8		
3-Aug-06	0	0	0	0	A	0	4	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.6		
4-Aug-06	0	0	0	0	A	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.7		
5-Aug-06	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		
6-Aug-06	0	0	0	0	A	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.5		
7-Aug-06	0	0	0	0	A	0	5	6	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	6.4		
8-Aug-06	0	0	0	0	A	0	3	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.7		
9-Aug-06	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	0.7		
10-Aug-06	0	0	0	0	A	0	1	3	2	1	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6		
11-Aug-06	0	0	0	0	A	1	5	10	6	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	10.3		
12-Aug-06	0	0	0	0	A	3	5	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	4.7		
13-Aug-06	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		
14-Aug-06	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1		
15-Aug-06	0	0	0	0	A	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.4		
16-Aug-06	0	0	0	0	A	0	1	4	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.4		
17-Aug-06	0	0	0	0	A	0	1	4	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.5		
18-Aug-06	0	0	0	0	A	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7		
19-Aug-06	0	0	0	0	A	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.7		
20-Aug-06	0	0	0	0	A	0	1	5	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	5.4		
21-Aug-06	0	0	0	0	A	9	23	25	9	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.0	24.8		
22-Aug-06	0	0	0	0	A	1	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	5.9		
23-Aug-06	0	0	0	0	A	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.5		
24-Aug-06	0	0	0	0	A	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6		
25-Aug-06	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	0.3	2.1		
26-Aug-06	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-06	0	0	0	0	A	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.2		
28-Aug-06	0	0	0	0	A	0	1	3	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.4		
29-Aug-06	0	0	0	0	A	0	3	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	6.6		
30-Aug-06	0	0	0	0	A	0	1	6	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	11.1		
31-Aug-06	0	0	0	0	A	0	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	5.5		
Hourly Avg	0.0	0.0	0.0	0.0	N	0.5	2.1	3.8	2.7	1.0	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Hourly Max	0.1	0.2	0.1	0.2	0.0	9.4	22.9	24.8	11.1	4.2	1.6	1.0	0.2	1.7	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.1	0.0

Station: Beaverlodge  
 Station Owner: PASZA

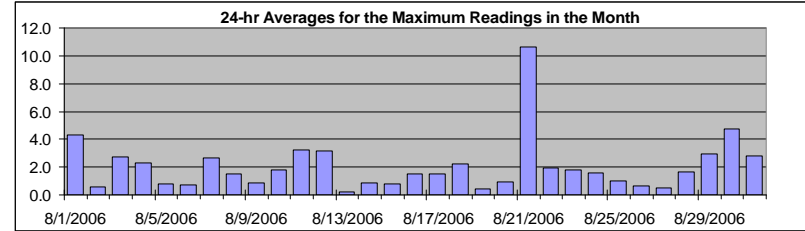
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: August 1, 2006 to September 1, 2006

Summary

Maximum 1-hr Value:	74.1	ppb	1-Aug	8:00 9:00
Maximum 24-hr Value:	10.6	ppb	21-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
	26.6	10.6	1.0	0.0	0.0	0.0	0.0	2.0 ppb	0.0 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	0	0	0	0	A	0	1	1	74	12	1	1	0	8	1	0	0	0	0	0	0	0	0	0	4.3	74.1
2-Aug-06	0	0	0	0	A	1	1	2	1	0	1	0	1	1	1	1	1	0	0	0	0	0	0	1	0.5	2.0
3-Aug-06	0	0	1	2	A	9	9	7	5	3	1	1	17	7	0	0	1	0	0	1	0	0	0	2.7	16.6	
4-Aug-06	0	0	0	1	A	1	5	9	14	1	4	1	1	12	1	1	1	0	0	0	1	0	0	2.3	13.8	
5-Aug-06	5	2	0	0	A	1	2	2	2	1	1	1	0	0	0	0	1	1	1	0	0	0	0	0.8	4.9	
6-Aug-06	0	0	0	0	A	1	3	7	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	6.9	
7-Aug-06	0	0	0	0	A	3	23	18	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6	22.5	
8-Aug-06	0	0	0	1	A	1	6	9	4	3	1	1	0	7	1	1	0	0	0	1	0	0	0	1.5	8.6	
9-Aug-06	0	0	0	0	A	1	2	2	1	1	10	0	1	0	0	1	0	1	0	1	0	0	0	0.9	10.0	
10-Aug-06	0	0	0	0	A	0	2	6	21	2	C	C	C	C	A	0	0	0	1	0	0	0	0	1.8	20.9	
11-Aug-06	0	0	1	0	A	5	17	25	9	8	5	1	1	0	1	1	0	0	1	0	0	0	1	3.2	24.7	
12-Aug-06	1	0	0	1	A	26	15	18	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	3.1	26.3	
13-Aug-06	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	1.0	
14-Aug-06	1	0	1	1	A	0	4	5	1	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0.8	4.9	
15-Aug-06	0	0	0	0	A	0	4	6	1	1	1	0	0	0	1	0	1	1	0	1	0	0	0	0.8	5.9	
16-Aug-06	0	0	0	0	A	2	2	8	5	7	3	1	1	1	0	0	0	0	0	0	0	0	2	1.5	7.9	
17-Aug-06	0	0	0	0	A	2	3	11	9	2	1	0	5	0	1	0	0	0	0	0	0	1	0	1.5	10.6	
18-Aug-06	0	0	0	0	A	1	3	2	3	1	1	0	1	40	0	0	0	0	0	0	0	0	0	2.2	40.2	
19-Aug-06	0	0	0	0	A	0	1	3	3	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0.4	2.9	
20-Aug-06	0	0	0	0	A	0	4	9	5	2	1	1	0	0	0	0	0	0	0	0	0	0	0	1.0	8.9	
21-Aug-06	0	0	0	0	A	36	56	49	46	24	16	1	1	7	4	4	0	0	0	0	0	0	0	10.6	55.8	
22-Aug-06	0	0	0	0	A	13	1	17	7	1	0	0	0	6	0	0	0	0	0	0	0	0	0	2.0	17.3	
23-Aug-06	0	0	0	0	A	0	2	12	10	1	2	0	13	1	1	0	0	0	0	0	0	0	0	1.8	12.9	
24-Aug-06	0	1	0	0	A	0	4	3	21	0	1	2	3	0	1	0	1	0	0	0	0	0	0	1.6	21.0	
25-Aug-06	0	0	0	0	A	0	2	4	3	3	2	0	7	0	0	0	0	1	1	1	0	1	0	1.0	7.0	
26-Aug-06	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0.6	12.5	
27-Aug-06	0	0	0	0	A	0	1	3	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.9	
28-Aug-06	0	0	0	0	A	0	9	8	3	3	2	3	7	0	0	2	0	0	0	0	0	0	0	1.7	9.2	
29-Aug-06	0	2	1	3	A	3	18	20	18	1	1	0	0	0	1	0	1	0	0	0	0	0	0	2.9	19.6	
30-Aug-06	0	0	0	0	A	1	10	24	33	5	14	0	2	9	11	1	0	0	0	0	0	0	0	4.8	33.4	
31-Aug-06	0	0	0	0	A	0	14	15	27	2	1	1	0	0	1	0	1	1	1	0	1	0	0	2.8	26.7	
Hourly Avg	0.2	0.2	0.1	0.3	N	3.5	7.2	9.8	11.3	3.3	2.4	0.5	2.1	3.1	1.0	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.5	0.1		
Hourly Max	4.9	1.9	1.0	3.0	0.0	36.4	55.8	49.2	74.1	23.8	15.8	2.7	16.6	40.2	10.6	4.4	1.0	1.0	1.0	1.0	1.0	2.0	12.5	0.8		

# PASZA - Beaverlodge - Oxides of Nitrogen Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

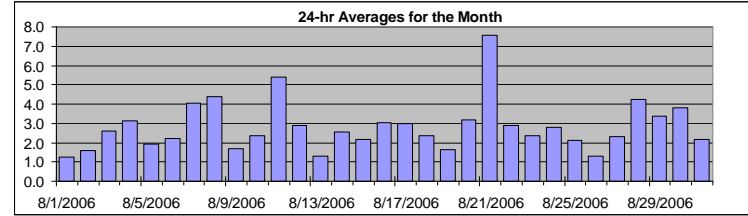
## HOURLY AVERAGE TABLE

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

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Maximum 1-hr Average:	35.3	ppb	21-Aug	7:00 8:00
Maximum 24-hr Average:	7.6	ppb	21-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
	15.3	8.9	3.6	1.8	0.8	0.2	0.0	2.8 ppb	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																								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-06	2	1	1	1	A	1	2	1	7	1	0	0	0	0	0	0	0	0	0	1	0	3	1	3	3	1.2	6.8
2-Aug-06	2	3	3	2	A	4	3	2	1	0	0	0	0	0	1	1	0	0	1	0	3	1	3	4	1.6	4.1	
3-Aug-06	3	3	5	5	A	4	9	6	6	2	1	1	0	0	0	1	1	1	1	2	2	2	2	4	2.6	9.4	
4-Aug-06	3	2	4	4	A	6	7	11	4	1	1	0	0	1	1	1	1	1	1	6	7	5	4	3.1	10.5		
5-Aug-06	5	3	3	3	A	4	5	4	3	2	1	1	1	0	1	1	0	0	0	1	3	1	2	1.9	4.9		
6-Aug-06	2	2	3	4	A	4	8	7	6	3	1	0	0	0	0	0	0	0	1	1	2	3	3	2	2.2	7.7	
7-Aug-06	2	3	3	2	A	6	13	15	12	10	1	2	1	1	1	1	2	1	2	2	3	3	4	3	4.0	15.0	
8-Aug-06	2	3	4	5	A	5	11	14	8	6	3	2	2	1	4	4	1	3	4	4	3	3	3	4	4.4	14.3	
9-Aug-06	3	2	2	3	A	3	8	4	1	1	0	0	0	0	0	0	0	0	0	1	1	1	4	3	1.7	8.0	
10-Aug-06	4	3	4	4	A	3	5	7	3	2	C	C	C	C	A	0	0	0	0	1	1	1	1	1	2.3	6.6	
11-Aug-06	2	4	10	5	A	11	14	21	15	9	4	3	1	1	2	1	1	1	2	1	3	6	5	3	5.4	21.4	
12-Aug-06	3	4	4	5	A	10	10	9	8	5	2	1	0	0	0	0	0	0	0	1	1	1	2	1	2.9	9.8	
13-Aug-06	1	1	1	1	A	2	3	3	1	0	0	0	0	0	0	0	0	0	0	1	3	3	6	3	1.3	5.5	
14-Aug-06	6	3	5	6	A	4	5	5	3	3	2	1	1	1	0	0	1	1	1	2	3	1	1	4	2.5	5.9	
15-Aug-06	2	2	1	2	A	3	7	7	1	2	1	1	1	1	1	1	2	1	1	3	3	4	3	1	2.1	7.4	
16-Aug-06	3	3	2	2	A	3	4	8	3	4	3	2	1	0	0	0	0	1	1	3	4	9	7	6	3.1	9.0	
17-Aug-06	4	3	3	3	A	4	5	9	9	4	2	1	0	0	0	0	0	0	1	1	2	9	4	3	3.0	9.4	
18-Aug-06	4	5	3	4	A	7	6	4	1	0	0	0	1	2	0	0	0	1	1	0	1	5	4	2	2.3	7.3	
19-Aug-06	2	2	3	3	A	2	3	4	5	2	1	1	0	1	0	0	0	0	0	1	1	2	2	2	1.6	5.1	
20-Aug-06	3	4	4	3	A	6	7	12	8	5	4	3	1	1	1	1	1	1	1	1	1	1	1	3	3.2	11.6	
21-Aug-06	3	3	3	5	A	20	34	35	17	8	5	4	2	1	1	1	2	3	4	7	6	4	3	7.6	35.3		
22-Aug-06	4	6	3	3	A	7	6	16	8	2	1	0	0	0	0	1	1	1	1	1	1	2	2	2	2.9	15.8	
23-Aug-06	2	2	1	2	A	6	11	9	4	2	1	1	1	1	0	1	1	0	1	1	3	2	2	2	2.4	10.5	
24-Aug-06	2	3	3	4	A	6	10	7	3	1	1	1	1	1	1	1	1	1	1	2	4	3	4	5	2.8	10.0	
25-Aug-06	3	3	4	3	A	3	5	6	4	3	2	1	0	1	0	0	0	1	1	1	2	1	2	1	2.1	6.1	
26-Aug-06	2	2	2	2	A	3	3	1	1	1	0	0	0	0	0	0	0	0	1	1	4	3	3	2	1.3	3.7	
27-Aug-06	2	1	2	2	A	3	3	6	8	4	2	1	1	1	1	1	1	1	2	2	2	2	2	4	2.3	8.5	
28-Aug-06	6	4	5	6	A	7	9	13	6	7	6	5	2	1	1	1	1	4	3	2	5	3	1	1	4.2	13.4	
29-Aug-06	2	3	3	6	A	9	13	15	12	1	1	0	0	0	0	0	1	1	1	2	2	2	2	2	3.4	15.3	
30-Aug-06	2	2	3	4	A	6	8	13	21	4	2	1	1	1	1	1	1	1	1	2	4	3	3	2	3.8	21.3	
31-Aug-06	2	2	2	3	A	3	6	8	10	3	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2.2	10.1	
Hourly Avg	2.8	2.8	3.2	3.3	N	5.4	7.9	9.1	6.4	3.1	1.6	1.1	0.6	0.6	0.6	0.6	0.7	0.8	1.1	1.5	2.6	3.1	2.9	2.8			
Hourly Max	5.9	5.6	10.0	5.9	0.0	19.9	34.2	35.3	21.3	9.5	5.9	4.6	1.9	2.4	3.6	4.3	1.8	3.6	3.7	4.3	7.0	9.0	7.3	5.7			

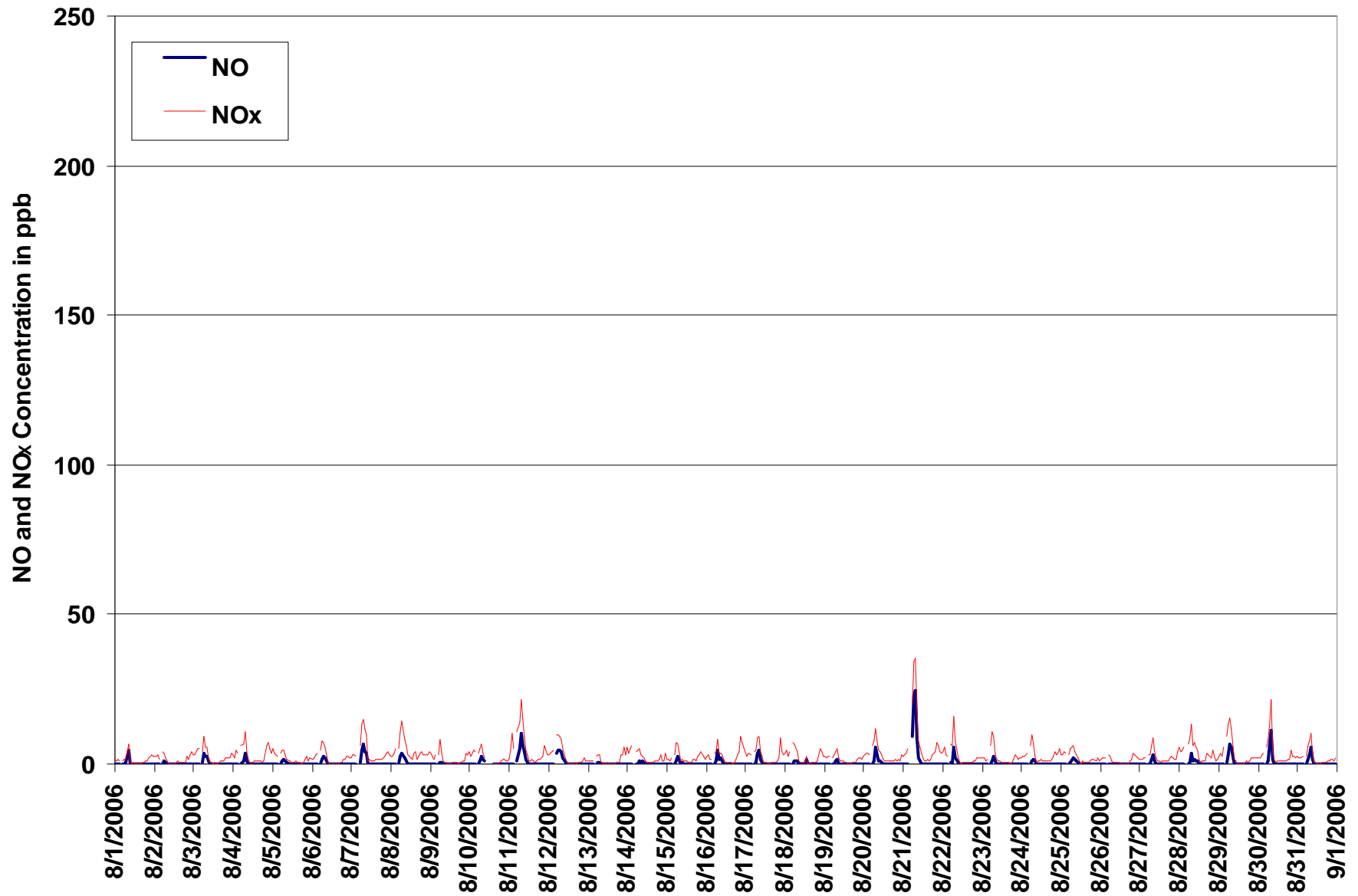


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

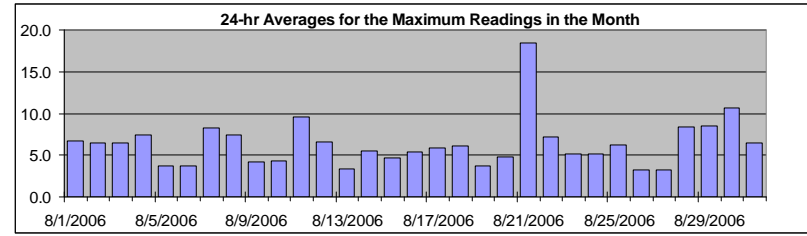
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	71.1	ppb	1-Aug	8:00 9:00
Maximum 24-hr Value:	18.4	ppb	21-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
	50.5	21.1	6.9	3.9	1.9	0.9	0.9	6.4 ppb	3.9 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-06	4	2	3	3	A	3	3	3	71	22	2	1	1	2	2	1	2	2	1	2	3	5	11	5		6.7	71.1	
2-Aug-06	4	3	5	4	A	7	7	5	3	1	1	1	1	3	70	2	2	2	2	1	9	4	6	8		6.5	70.2	
3-Aug-06	6	6	11	9	A	21	20	15	9	5	2	2	3	8	2	1	3	3	2	5	5	4	2	6		6.5	21.1	
4-Aug-06	4	4	7	7	A	10	13	18	44	3	2	2	2	5	2	2	3	1	1	3	12	13	10	5		7.5	44.1	
5-Aug-06	13	6	3	3	A	5	6	7	4	3	3	2	1	1	3	2	2	3	3	1	4	6	2	4		3.7	13.2	
6-Aug-06	3	3	4	4	A	6	10	15	8	5	1	1	1	1	1	2	1	1	2	2	3	5	6	3		3.8	14.9	
7-Aug-06	3	6	4	4	A	18	36	31	21	21	1	3	2	2	2	3	2	3	2	3	2	4	9	8	6		8.3	35.5
8-Aug-06	6	6	9	10	A	9	15	23	11	11	5	3	2	3	7	10	2	6	6	8	6	4	5	6		7.4	22.8	
9-Aug-06	6	4	4	5	A	5	12	10	2	2	3	1	2	6	1	2	1	3	1	6	3	3	9	9		4.2	11.9	
10-Aug-06	8	4	6	6	A	6	7	13	7	4	C	C	C	C	A	1	1	1	3	2	5	2	3	1		4.3	12.8	
11-Aug-06	2	13	17	8	A	17	26	36	21	15	10	5	2	2	3	3	1	2	3	3	7	10	9	5		9.5	36.3	
12-Aug-06	5	5	5	10	A	36	21	22	13	7	4	1	1	2	1	2	2	1	2	2	2	2	5	2		6.6	36.2	
13-Aug-06	1	1	2	1	A	4	5	6	3	2	2	2	2	1	1	1	2	2	1	2	7	15	11	5		3.4	14.7	
14-Aug-06	14	4	10	8	A	5	17	17	5	5	4	3	3	1	2	2	2	2	3	5	8	2	2	5		5.6	17.5	
15-Aug-06	3	3	3	4	A	5	13	14	3	3	2	2	3	3	2	2	6	8	3	5	5	8	6	2		4.7	14.0	
16-Aug-06	4	4	3	3	A	11	7	13	7	5	5	2	2	3	2	1	1	1	4	5	5	15	13	9		5.4	14.9	
17-Aug-06	6	4	4	4	A	9	11	17	17	6	4	1	1	1	10	1	1	1	3	3	4	16	7	5		5.9	16.9	
18-Aug-06	6	8	5	7	A	9	10	7	7	2	2	2	20	26	1	1	2	2	2	3	2	8	6	6		6.1	25.5	
19-Aug-06	5	3	5	5	A	2	5	8	10	3	3	1	3	2	1	1	2	1	1	1	3	7	10	4		3.7	10.0	
20-Aug-06	4	9	4	4	A	10	11	16	10	6	5	5	3	2	1	1	1	1	1	6	3	3	2	3		4.8	15.9	
21-Aug-06	3	4	4	8	A	51	67	60	59	22	40	5	8	5	18	12	2	3	5	7	15	11	9	8		18.4	66.5	
22-Aug-06	7	9	4	3	A	39	18	32	17	5	2	1	1	1	1	6	2	3	1	2	2	4	4	3		7.2	38.8	
23-Aug-06	3	6	1	4	A	12	19	24	7	5	2	1	4	2	1	2	1	1	3	5	5	5	3	3		5.2	24.4	
24-Aug-06	3	10	4	5	A	10	18	10	7	1	3	2	7	2	3	2	2	1	3	5	5	4	5	8		5.2	17.8	
25-Aug-06	5	4	7	5	A	4	7	9	6	5	4	2	2	55	1	1	2	2	3	5	4	4	6	2		6.3	54.7	
26-Aug-06	3	3	5	4	A	7	7	2	2	1	1	2	1	1	1	1	1	1	3	5	7	7	6	5		3.2	7.0	
27-Aug-06	2	4	3	3	A	3	5	10	11	6	3	2	1	1	1	1	1	1	3	4	2	3	2	5		3.3	10.9	
28-Aug-06	8	6	7	9	A	10	28	22	12	10	8	10	14	1	1	2	2	8	8	3	12	9	2	2		8.4	28.3	
29-Aug-06	4	9	7	11	A	14	34	31	26	4	30	1	2	1	2	1	2	2	3	2	3	3	3	3		8.5	34.4	
30-Aug-06	3	3	4	5	A	17	27	40	52	10	21	2	20	2	3	2	2	3	3	5	10	5	4	4		10.7	52.1	
31-Aug-06	4	3	7	4	A	5	24	25	38	5	2	2	2	1	1	2	2	2	2	4	3	4	5	2	4		6.5	38.2
Hourly Avg	4.9	5.0	5.4	5.4	N	11.9	16.4	18.0	16.5	6.5	5.9	2.3	3.9	4.8	4.8	2.3	1.8	2.3	2.7	3.5	5.5	6.4	5.7	4.6				
Hourly Max	14.3	12.9	17.0	11.5	0.0	51.0	66.5	59.6	71.1	22.3	39.8	10.5	20.0	54.7	70.2	11.6	5.6	7.9	7.9	7.8	15.5	16.0	13.3	8.8				



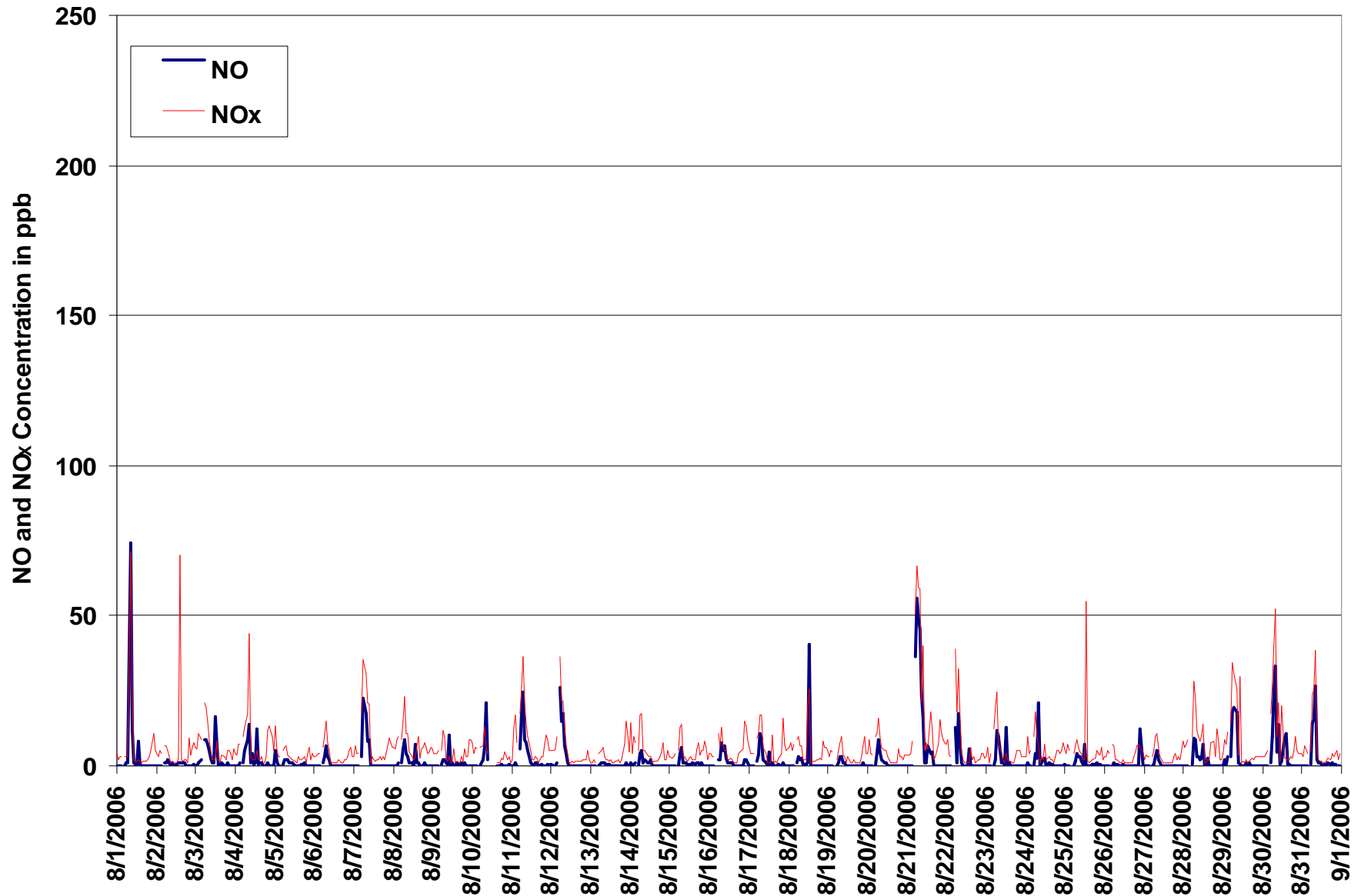


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

# PASZA - Beaverlodge - Ozone Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

## HOURLY AVERAGE TABLE

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

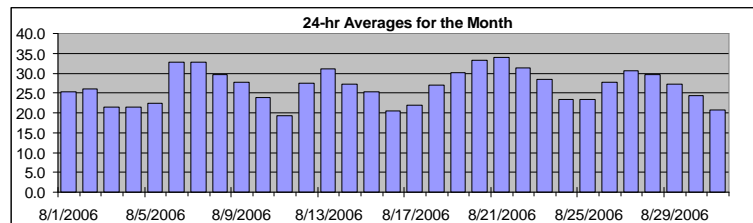
Monitoring Dates: August 1, 2006 to September 1, 2006

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

### Summary

Number of 1-hr Exceedances:	0					
Maximum 1-hr Average:	61.4	ppb	21-Aug	18:00	19:00	
Maximum 24-hr Average:	34.0	ppb	21-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
	48.3	42.1	32.7	27.2	20.0	12.0	6.7	26.7 ppb	27.2 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	18	19	19	20	A	21	20	22	22	23	22	23	24	23	24	26	33	32	36	36	33	31	29	24	25.2	35.6
2-Aug-06	24	23	20	23	A	18	19	22	26	29	29	30	31	32	32	31	30	30	29	25	25	22	19	21	26.1	32.4
3-Aug-06	20	18	13	13	A	14	9	16	17	22	25	25	26	28	28	27	26	26	24	23	22	24	19	21	21.4	27.8
4-Aug-06	18	22	14	16	A	12	12	10	19	25	27	26	27	27	27	28	30	31	28	26	18	16	15	15	21.4	30.5
5-Aug-06	13	13	15	15	A	16	15	18	19	24	28	28	29	29	28	29	26	26	26	26	24	22	23	21	22.4	29.5
6-Aug-06	24	21	20	17	A	15	12	13	17	24	36	39	44	46	46	48	48	48	45	42	40	39	35	35	32.8	48.4
7-Aug-06	36	31	32	36	A	18	7	9	17	28	45	47	44	43	42	43	41	42	40	36	32	30	28	28	32.8	46.9
8-Aug-06	30	28	25	21	A	25	7	13	17	29	35	40	42	43	42	38	39	37	32	26	28	30	28	23	29.5	43.5
9-Aug-06	24	29	30	24	A	21	16	26	31	31	32	33	32	31	30	29	30	30	29	29	28	27	23	22	27.8	32.8
10-Aug-06	22	22	18	18	A	17	14	15	19	21	26	26	27	28	28	28	29	30	29	27	25	25	27	27	23.9	29.8
11-Aug-06	25	19	12	14	A	4	3	3	5	10	17	22	C	C	C	A	41	34	28	35	30	24	20	20	19.4	41.0
12-Aug-06	20	15	13	12	A	8	5	9	14	21	32	35	38	39	42	41	41	40	39	37	34	32	31	32	27.4	42.0
13-Aug-06	30	28	27	26	A	23	20	23	34	35	37	38	39	40	42	40	35	32	32	31	28	27	22	24	31.0	42.1
14-Aug-06	18	19	16	11	A	13	12	12	14	17	24	34	37	38	39	39	40	39	38	35	31	34	34	30	27.2	40.4
15-Aug-06	28	26	30	28	A	18	11	14	26	26	31	31	33	34	34	32	29	27	25	20	17	19	20	22	25.2	34.1
16-Aug-06	17	17	19	18	A	12	10	8	12	16	20	26	27	29	30	31	31	31	30	24	22	13	12	17	20.5	31.2
17-Aug-06	19	19	16	17	A	16	15	12	14	24	29	30	30	28	28	29	30	30	28	24	21	14	16	16	22.0	30.3
18-Aug-06	14	14	16	14	A	10	12	17	28	33	32	32	32	34	35	35	35	35	36	36	33	28	28	30	26.9	36.1
19-Aug-06	28	29	27	23	A	26	22	21	23	29	32	34	33	35	35	35	35	36	36	34	31	30	29	30	30.2	36.4
20-Aug-06	28	26	24	25	A	13	12	10	17	28	35	42	43	44	44	49	48	46	44	41	40	41	38	29	33.3	48.8
21-Aug-06	23	22	20	15	A	7	3	4	17	30	43	48	48	47	47	48	50	53	61	53	37	36	34	36	34.0	61.4
22-Aug-06	32	31	31	31	A	24	22	15	26	32	38	41	39	37	36	34	34	35	36	33	33	31	27	25	31.4	40.8
23-Aug-06	25	27	29	26	A	22	16	19	27	30	32	33	33	34	33	33	34	36	34	30	26	27	27	22	28.5	36.1
24-Aug-06	22	22	22	19	A	17	14	18	24	30	29	28	28	30	28	28	27	28	26	24	21	21	17	14	23.4	30.0
25-Aug-06	17	16	12	12	A	12	11	12	15	20	24	28	30	32	34	34	33	32	30	27	27	28	26	26	23.4	34.1
26-Aug-06	24	23	24	23	A	22	23	26	27	28	29	30	32	34	35	35	34	33	31	29	25	24	24	24	27.8	35.1
27-Aug-06	24	23	22	21	A	19	19	16	18	25	33	38	40	40	39	40	41	40	42	39	33	32	33	30	30.7	41.6
28-Aug-06	25	26	23	19	A	16	16	10	16	18	24	36	42	43	45	44	42	36	36	37	30	31	33	33	29.7	44.9
29-Aug-06	28	25	27	20	A	11	7	8	15	31	33	33	34	36	36	37	36	35	33	31	29	28	27	26	27.2	37.0
30-Aug-06	25	24	23	21	A	17	14	13	13	23	28	29	29	30	31	28	34	32	32	29	24	24	19	18	24.3	33.9
31-Aug-06	18	15	15	15	A	14	10	11	13	17	23	24	25	25	25	26	27	28	26	26	25	24	23	23	20.8	27.9
Hourly Avg	23.2	22.3	21.1	19.8	N	16.1	13.2	14.3	19.4	25.1	30.0	32.7	34.0	34.6	34.9	34.9	35.2	34.6	33.7	31.5	28.3	26.9	25.6	24.4		
Hourly Max	36.1	30.8	32.3	36.5	0.0	26.5	23.3	26.2	33.6	35.1	45.2	48.3	48.2	46.6	47.5	48.8	49.8	52.6	61.4	52.7	40.5	41.2	37.8	35.9		

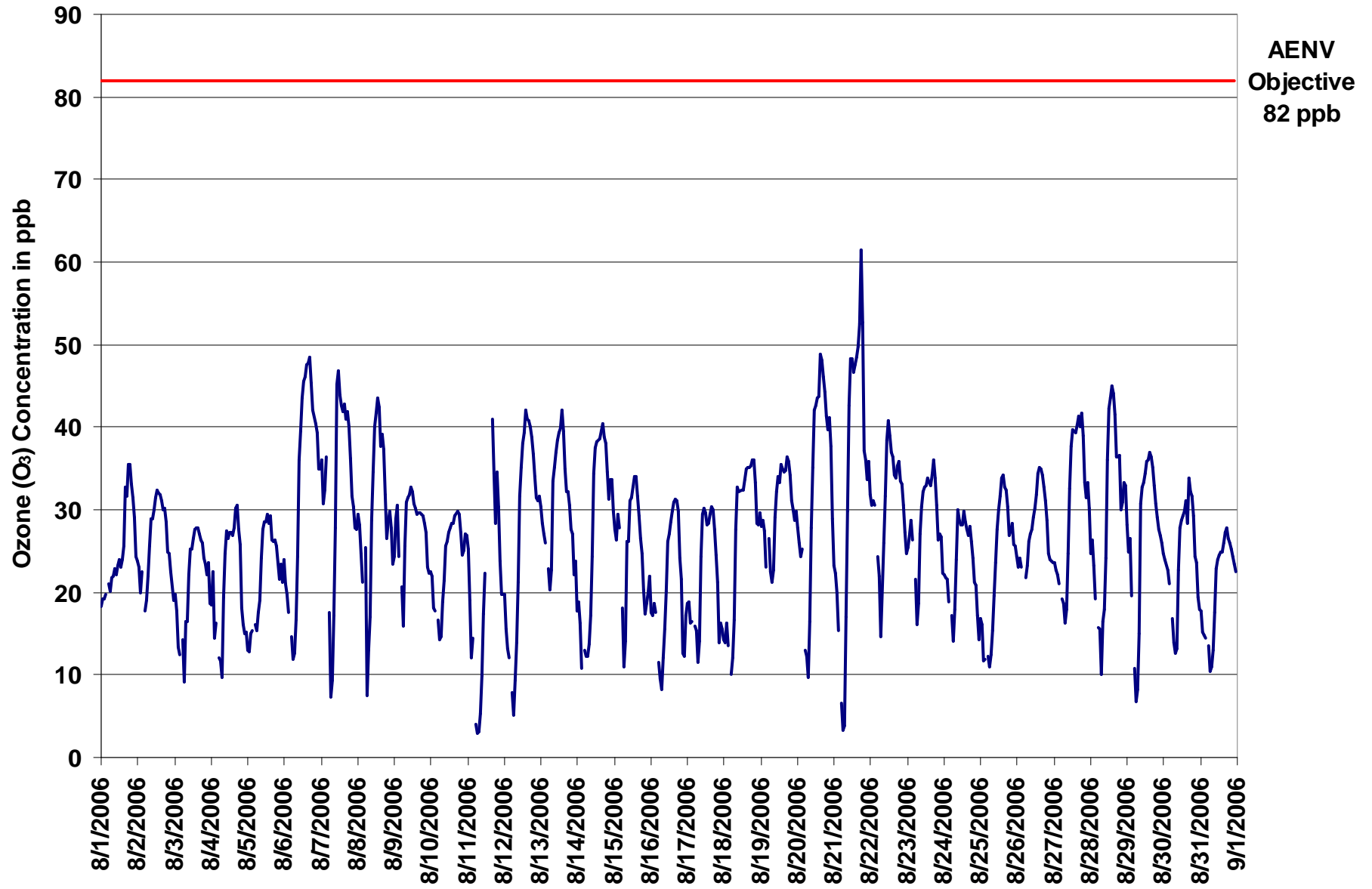


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

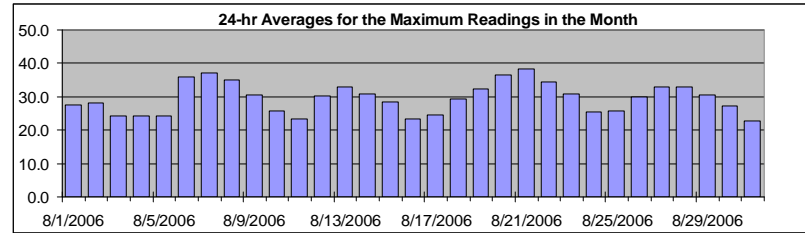
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Value:	65.0	ppb	21-Aug	18:00 19:00
Maximum 24-hr Value:	38.3	ppb	21-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
	50.0	44.2	35.2	29.3	23.6	15.5	11.5	29.6 ppb	29.3 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		
1-Aug-06	20	20	20	21	A	23	22	24	24	24	24	25	27	25	26	33	36	35	37	38	36	34	32	25	27.4	38.2
2-Aug-06	25	25	23	24	A	21	21	25	29	30	30	31	33	34	34	34	33	31	32	30	29	26	26	24	28.2	34.5
3-Aug-06	23	19	21	19	A	19	14	19	19	26	26	26	29	29	29	29	28	29	28	27	25	24	26	24	24.2	29.0
4-Aug-06	23	25	22	24	A	16	16	14	22	27	28	28	28	29	29	29	32	33	29	28	22	22	18	18	24.4	32.5
5-Aug-06	16	16	16	17	A	17	18	19	21	28	30	30	31	31	30	31	29	28	28	27	26	24	25	25	24.3	30.9
6-Aug-06	27	23	22	21	A	16	14	16	21	35	38	43	46	48	48	49	49	51	50	44	42	42	42	39	35.8	51.0
7-Aug-06	40	36	36	38	A	26	15	16	28	43	46	49	46	44	44	44	42	43	42	39	35	33	35	36	37.3	49.2
8-Aug-06	35	36	40	38	A	33	13	18	25	34	39	42	43	45	46	42	42	41	38	29	31	33	32	26	34.9	45.9
9-Aug-06	29	33	34	29	A	27	23	32	33	33	33	34	33	32	32	30	31	31	30	31	29	28	27	24	30.5	34.4
10-Aug-06	25	25	21	20	A	20	20	17	21	26	26	28	28	29	29	30	31	30	30	29	26	26	28	28	25.8	30.5
11-Aug-06	26	25	18	21	A	8	7	9	7	13	23	28	C	C	C	A	43	39	32	36	33	29	24	21	23.3	43.2
12-Aug-06	22	18	17	14	A	11	10	13	18	28	35	38	41	42	43	42	43	41	40	39	36	33	34	33	30.1	43.5
13-Aug-06	33	29	28	28	A	27	25	26	35	36	39	40	41	42	44	42	37	33	33	32	30	29	24	26	33.1	44.2
14-Aug-06	29	21	22	14	A	15	16	15	16	26	29	38	40	40	41	43	43	43	40	39	34	37	35	34	30.8	43.1
15-Aug-06	30	30	32	30	A	22	15	22	28	30	34	33	36	36	36	34	33	30	27	23	20	23	24	23	28.4	36.1
16-Aug-06	21	20	21	20	A	13	12	10	15	18	24	28	29	30	32	32	32	32	32	27	23	22	21	20	23.2	32.4
17-Aug-06	21	22	18	18	A	17	18	19	22	28	32	31	31	30	29	31	32	31	31	26	23	20	21	17	24.6	31.9
18-Aug-06	16	17	18	17	A	12	18	20	32	35	33	34	34	36	37	36	36	36	38	38	35	33	30	31	29.3	37.7
19-Aug-06	32	30	29	29	A	27	25	24	27	31	34	35	34	36	37	35	36	37	37	37	33	31	32	32	32.3	37.3
20-Aug-06	29	29	26	26	A	20	16	15	25	35	39	44	44	45	47	51	49	48	46	44	42	42	41	34	36.5	50.7
21-Aug-06	25	23	22	20	A	16	13	10	28	36	46	50	49	48	49	49	51	57	65	63	42	39	41	39	38.3	65.0
22-Aug-06	37	33	33	32	A	30	26	25	31	36	43	43	41	38	38	35	35	37	38	36	34	33	32	27	34.5	43.3
23-Aug-06	28	29	30	29	A	25	21	26	29	32	33	34	34	35	35	35	37	37	36	33	28	28	28	27	30.8	37.2
24-Aug-06	25	24	23	21	A	19	19	23	31	31	30	30	30	31	29	29	28	29	28	27	23	23	21	16	25.6	31.2
25-Aug-06	18	18	17	13	A	13	12	15	18	21	26	30	32	34	36	39	35	36	32	29	30	31	27	27	25.6	39.4
26-Aug-06	25	24	25	25	A	24	25	28	28	29	32	31	35	38	37	37	36	34	33	31	27	28	28	28	29.9	37.6
27-Aug-06	27	25	24	22	A	20	20	19	22	30	36	40	41	40	40	42	43	43	43	42	36	32	36	35	32.9	43.0
28-Aug-06	28	30	27	26	A	19	20	15	20	20	29	40	44	45	46	46	44	42	40	38	36	35	34	35	33.0	46.1
29-Aug-06	30	32	32	28	A	14	14	13	29	34	33	35	36	38	38	38	38	37	35	32	30	29	28	28	30.5	38.2
30-Aug-06	26	25	24	22	A	22	22	22	17	27	29	30	30	31	33	32	35	33	33	35	29	25	22	21	27.2	35.5
31-Aug-06	21	19	19	16	A	15	14	16	17	22	25	25	26	27	26	27	28	28	28	27	27	25	25	24	22.8	28.5
Hourly Avg	26.2	25.2	24.4	23.3	N	19.7	17.6	18.9	23.8	29.1	32.4	34.6	35.7	36.3	36.6	36.9	37.0	36.7	35.9	34.1	30.7	29.7	29.0	27.3		
Hourly Max	40.4	36.1	39.9	38.1	0.0	32.6	25.9	32.3	34.8	42.9	46.4	50.1	49.4	48.2	48.7	50.7	51.5	56.6	65.0	63.4	42.4	42.3	41.7	39.3		

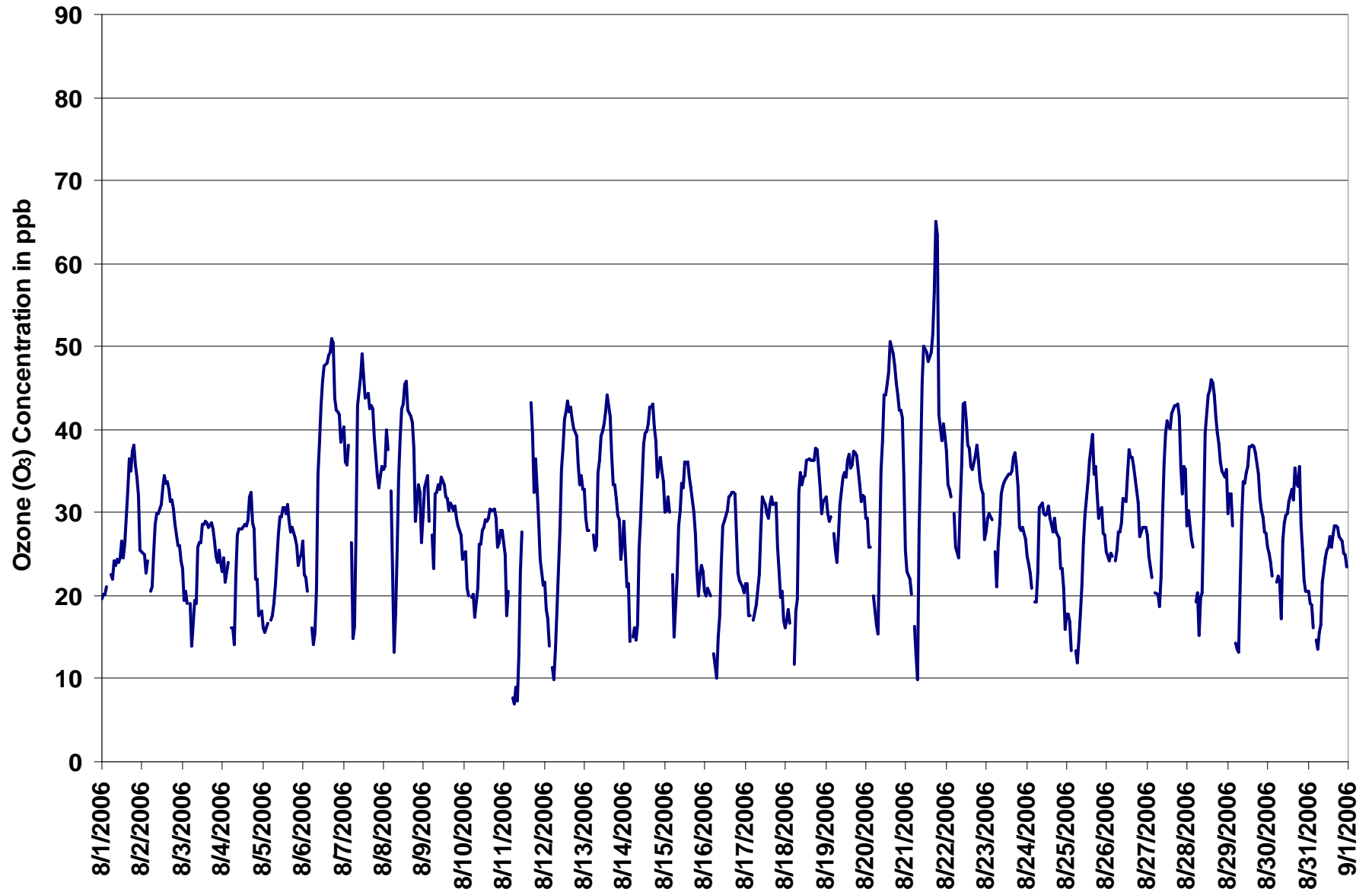
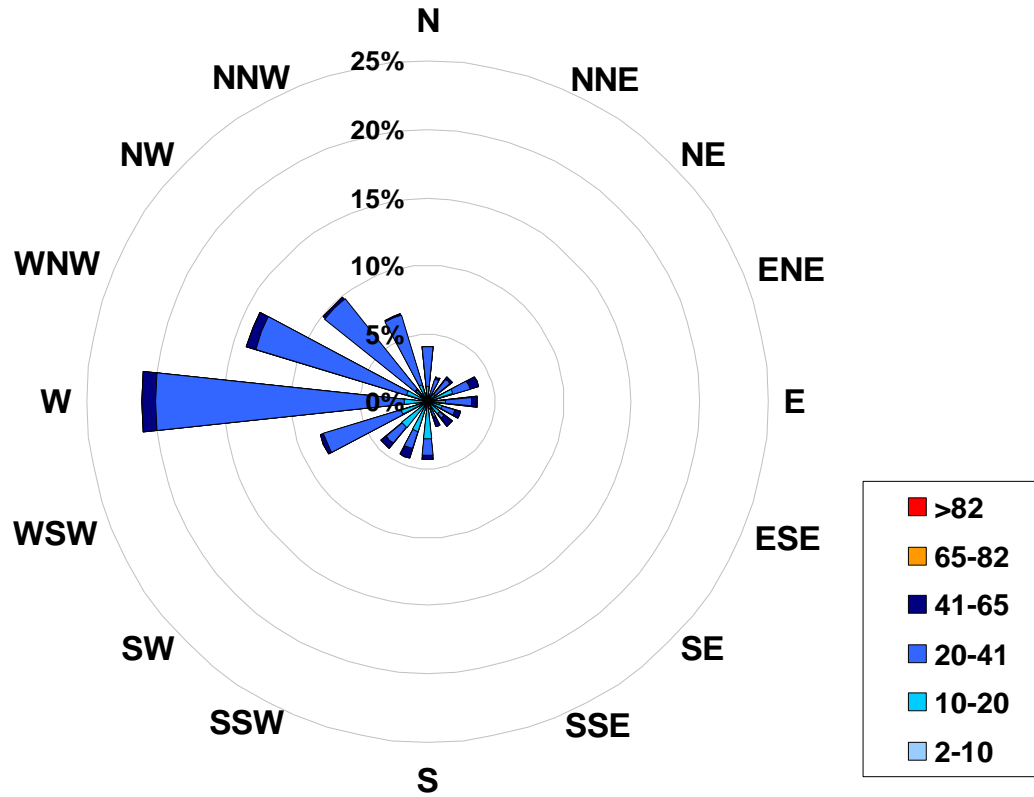


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Ozone (in ppb) Located at the Beaverlodge Site for August 2006**



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	21
10	to	20	157
20	to	41	481
41	to	65	50
65	to	82	0
	>	82	0
Total Non-Zero Values			709

## PASZA - Beaverlodge - Ozone Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

### EIGHT HOUR RUNNING AVERAGE TABLE

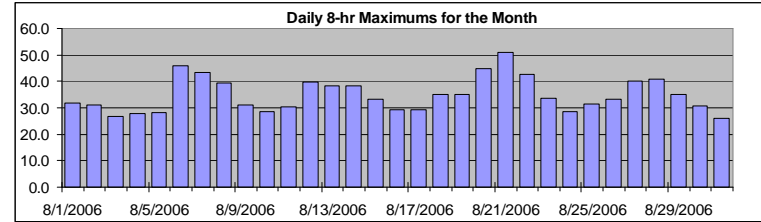
**Ozone (O<sub>3</sub>)**

Monitoring Dates: August 1, 2006 to September 1, 2006

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

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	50.9 ppb 21-Aug 19:00 20:00

Percentile	99	95	75	50	25	5	1
	45.4	39.7	31.0	26.4	21.3	14.7	11.8



**Status Flag Characters**

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

Day	Mountain Standard Time																								Daily Maximum	
	Hour Start	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-Aug-06	31	29	27	25	24	22	21	20	20	21	21	22	22	22	23	23	25	26	27	29	30	31	32	32	31.8	
2-Aug-06	31	29	28	26	25	23	21	21	21	22	23	25	25	27	29	30	31	31	31	31	30	29	28	26	31.1	
3-Aug-06	25	23	21	19	19	17	15	15	14	15	17	18	19	21	23	25	26	27	27	27	26	26	25	24	26.8	
4-Aug-06	23	22	21	20	19	18	16	15	15	15	17	19	20	22	24	26	27	28	28	28	27	25	24	22	28.0	
5-Aug-06	20	18	16	15	15	15	15	15	16	18	19	21	22	24	25	27	28	28	28	28	27	26	25	24	28.0	
6-Aug-06	24	23	23	22	21	20	19	17	16	17	19	22	25	29	33	37	41	44	45	46	45	45	43	42	45.8	
7-Aug-06	40	38	36	36	35	32	28	24	22	21	23	24	27	30	34	39	42	43	43	41	40	38	36	35	43.3	
8-Aug-06	33	31	30	28	27	26	23	21	20	20	21	24	26	28	33	36	38	40	39	38	36	34	32	31	39.6	
9-Aug-06	29	28	27	27	27	26	24	24	25	26	26	27	28	29	31	31	31	31	31	30	30	29	28	27	31.2	
10-Aug-06	26	25	24	23	22	20	19	18	17	17	18	20	21	22	24	25	27	28	28	28	28	28	28	27	28.5	
11-Aug-06	27	26	23	22	21	18	15	12	9	7	8	9	9	N	N	N	N	N	N	N	N	N	30	29	30.3	
12-Aug-06	26	24	22	19	18	15	13	12	11	12	14	18	20	24	29	33	36	38	39	40	39	38	37	36	39.6	
13-Aug-06	34	33	31	30	29	28	27	25	26	27	28	30	31	33	36	38	38	38	37	36	35	33	31	29	38.3	
14-Aug-06	27	25	23	21	20	18	16	14	14	14	15	18	21	24	27	30	34	36	38	38	37	37	36	35	38.2	
15-Aug-06	33	32	31	30	30	28	24	22	22	22	22	23	24	26	29	31	31	31	31	29	27	25	24	22	33.4	
16-Aug-06	21	20	19	19	19	18	16	14	14	13	14	15	16	18	21	24	26	28	29	29	28	26	24	23	29.3	
17-Aug-06	21	19	18	17	16	17	17	16	16	16	16	18	20	21	23	24	27	29	29	29	28	27	26	24	22	29.4
18-Aug-06	20	18	17	16	15	14	14	14	14	16	18	21	23	24	27	30	33	34	34	34	35	35	34	33	33	35.0
19-Aug-06	32	31	30	28	28	27	27	25	25	25	25	27	28	29	30	32	34	34	35	35	35	34	33	33	34.9	
20-Aug-06	32	30	29	28	27	25	23	20	18	18	20	22	25	29	33	38	41	44	45	45	44	44	43	41	44.9	
21-Aug-06	38	35	32	29	27	22	17	13	13	14	17	22	25	30	35	41	45	48	50	51	50	48	46	45	50.9	
22-Aug-06	43	40	36	33	33	31	29	26	26	26	27	28	30	31	33	35	36	37	37	36	35	34	33	32	42.6	
23-Aug-06	31	30	29	28	27	26	24	23	24	24	25	26	26	28	30	32	33	34	34	33	33	32	31	30	33.7	
24-Aug-06	28	26	25	23	23	21	20	19	19	21	22	23	24	25	27	28	28	28	28	27	27	25	24	22	28.5	
25-Aug-06	21	20	18	16	16	14	13	13	13	13	15	17	19	21	24	27	29	31	32	32	31	31	30	29	31.6	
26-Aug-06	28	27	26	25	25	24	24	24	24	25	25	26	27	29	30	31	32	33	33	33	32	31	29	28	33.1	
27-Aug-06	27	25	24	23	23	22	22	21	20	20	21	24	26	28	31	34	37	39	40	40	39	38	38	36	40.1	
28-Aug-06	34	32	30	28	27	25	22	19	18	17	17	19	22	26	29	34	37	39	41	41	39	38	36	35	40.7	
29-Aug-06	33	32	30	28	28	25	21	18	16	17	18	20	21	25	28	32	35	35	35	35	34	33	32	31	35.1	
30-Aug-06	29	28	26	25	25	23	21	19	18	18	18	19	21	22	24	26	29	30	31	31	30	29	28	27	30.7	
31-Aug-06	25	22	20	18	18	16	15	14	13	14	15	16	17	19	20	22	24	25	26	26	26	26	26	25	26.1	

Hourly Max 42.6 39.9 36.4 35.7 35.0 31.9 29.5 26.4 25.8 26.8 28.2 30.0 31.2 33.3 36.0 41.1 45.2 48.0 50.4 50.9 49.5 48.2 46.5 44.9

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

Station: Beaverlodge  
 Station Owner: PASZA

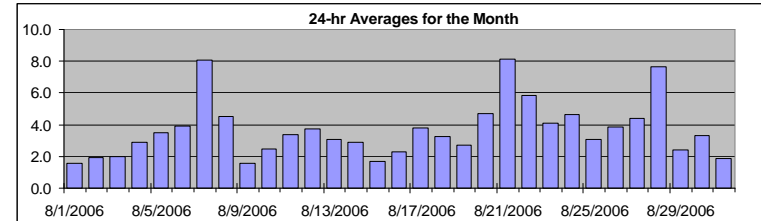
## HOURLY AVERAGE TABLE

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

Monitoring Dates: August 1, 2006 to September 1, 2006

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:	18.9	$\mu\text{g}/\text{m}^3$	21-Aug	19:00	20:00
Maximum 24-hr Value:	8.1	$\mu\text{g}/\text{m}^3$	21-Aug		



AIC Time:	0 hrs	Operational Time:	724 hrs							
Calibration Time:	3 hrs	AMD Operational Uptime:	97.7%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	13.8	9.4	5.5	3.3	1.1	0.0	0.0	3.7	3 $\mu\text{g}/\text{m}^3$	3.3 $\mu\text{g}/\text{m}^3$

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start	Hour End	0:00	1:00	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-06			1	1	1	1	1	1	4	0	1	0	1	2	1	0	1	0	0	2	2	2	4	4	3	5	1.6	5.2	
2-Aug-06			7	6	5	2	1	4	3	1	1	0	1	0	0	1	1	1	3	1	2	0	3	1	0	2	1.9	7.0	
3-Aug-06			2	3	2	2	2	3	2	2	6	D	0	0	0	0	1	0	0	1	5	0	3	4	5	3	2.0	6.4	
4-Aug-06			3	2	3	3	4	7	2	3	2	1	0	0	4	0	2	3	2	2	0	3	2	7	8	5	2.9	7.6	
5-Aug-06			6	5	4	4	4	6	6	6	6	7	3	0	0	3	2	2	5	0	3	0	2	0	4	3	8	3.5	8.1
6-Aug-06			2	2	2	2	4	4	4	5	7	5	5	0	0	0	0	5	3	2	1	4	7	6	7	11	9	3.9	11.4
7-Aug-06			6	9	8	6	6	13	9	8	11	9	6	8	6	6	6	8	8	6	8	7	14	9	10	6	8.1	14.1	
8-Aug-06			6	6	4	8	5	0	12	6	6	5	4	2	3	3	6	4	4	6	10	D	0	0	3	1	4.5	12.4	
9-Aug-06			1	0	1	2	3	7	5	0	0	0	0	0	1	0	0	0	0	0	2	0	5	4	4	4	1.6	6.6	
10-Aug-06			2	2	3	3	3	3	6	6	7	2	D	0	1	0	1	0	0	0	0	6	2	3	2	4	2.5	6.6	
11-Aug-06			4	3	5	4	4	6	5	3	6	2	0	0	9	2	C	C	C	D	0	0	1	3	4	5	3.4	8.5	
12-Aug-06			4	2	1	3	3	0	7	6	1	5	D	0	0	1	2	6	4	4	4	9	7	7	6	5	3.7	9.2	
13-Aug-06			3	4	5	5	3	2	3	6	1	0	D	0	2	1	0	1	3	3	1	3	8	6	6	6	3.1	7.9	
14-Aug-06			6	5	8	8	8	5	4	3	1	0	0	D	D	0	0	1	0	1	1	2	4	6	2	1	2.9	8.0	
15-Aug-06			5	1	1	1	0	1	2	3	3	0	0	0	0	0	2	0	6	2	4	3	4	0	0	1	1.7	5.6	
16-Aug-06			1	0	0	1	1	3	5	2	0	4	2	4	D	0	0	0	0	1	0	7	5	7	4	6	2.3	7.4	
17-Aug-06			3	7	8	5	6	6	6	12	2	5	4	3	0	0	2	0	0	0	0	2	3	3	5	5	4	3.8	12.4
18-Aug-06			3	2	3	4	4	4	5	7	D	0	1	3	2	5	2	0	0	2	2	3	5	8	6	4	3.3	7.6	
19-Aug-06			5	5	3	4	2	3	5	5	4	1	0	0	0	4	D	1	0	D	0	1	3	5	3	5	2.7	5.2	
20-Aug-06			7	4	5	5	5	5	5	7	6	5	5	2	1	5	4	0	1	3	4	4	7	5	9	11	4.7	10.6	
21-Aug-06			7	4	4	5	5	3	6	14	10	9	6	11	4	2	3	4	8	7	13	19	14	17	11	9	8.1	18.9	
22-Aug-06			10	8	6	7	9	7	10	14	7	3	0	1	14	8	3	3	1	1	1	5	4	5	8	6	5.9	13.8	
23-Aug-06			5	3	3	4	3	4	7	8	0	0	6	2	4	0	0	5	0	1	4	4	8	7	7	11	4.1	11.5	
24-Aug-06			11	5	3	3	3	4	5	8	7	0	0	1	6	6	2	4	3	2	2	4	6	6	6	10	4.6	11.4	
25-Aug-06			8	6	4	5	5	3	5	4	0	6	3	0	0	D	0	0	2	2	3	3	4	3	2	4	3.1	8.2	
26-Aug-06			3	4	4	4	4	6	7	5	2	0	0	2	0	0	0	1	0	1	1	5	11	13	14	11	3.9	14.1	
27-Aug-06			9	8	7	7	5	5	5	7	4	0	1	2	4	2	2	2	2	4	6	5	5	4	3	7	4.4	8.5	
28-Aug-06			11	6	7	8	10	9	9	15	11	13	16	3	2	4	6	3	4	7	4	5	8	8	7	8	7.7	15.6	
29-Aug-06			3	3	3	2	4	4	5	8	1	D	D	D	0	0	1	0	2	3	1	1	3	3	2	2	2.4	7.5	
30-Aug-06			2	3	4	5	4	4	5	7	8	4	0	1	1	0	3	6	0	5	5	3	2	2	4	2	3.3	8.3	
31-Aug-06			3	2	1	3	2	2	2	3	1	D	0	0	0	0	0	3	1	4	5	3	3	2	1	2	1.9	5.2	
Hourly Avg			4.9	4.0	3.9	4.0	3.9	4.3	5.2	5.9	4.0	3.0	2.1	1.6	2.3	1.8	2.0	2.1	2.0	2.6	3.2	4.0	4.9	5.3	5.1	5.5			
Hourly Max			11.4	9.1	8.2	7.9	9.7	13.0	12.4	15.5	11.5	12.6	15.6	10.5	13.8	8.0	6.4	7.6	8.2	7.4	13.3	18.9	14.1	17.0	14.1	11.5			



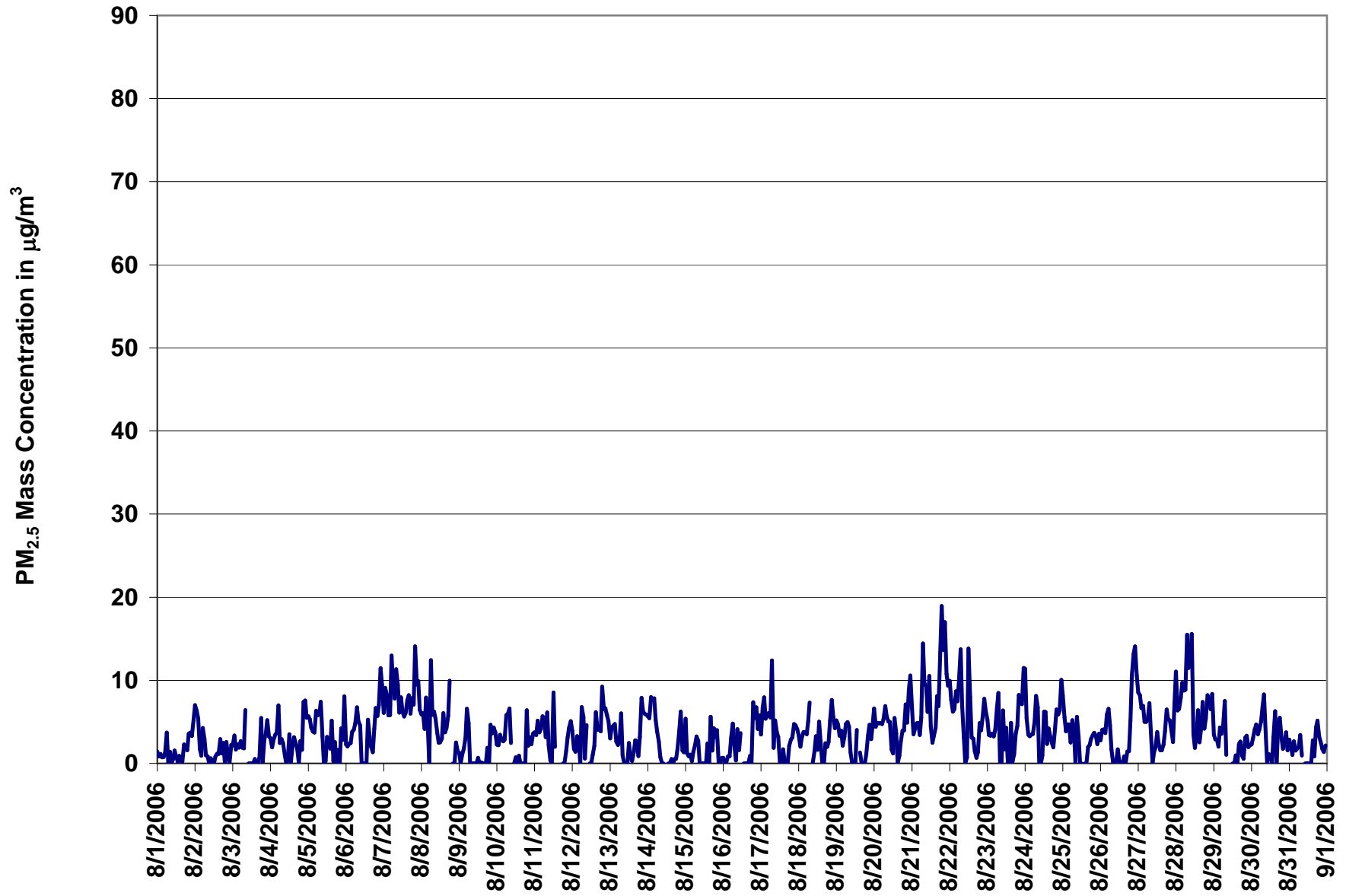


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

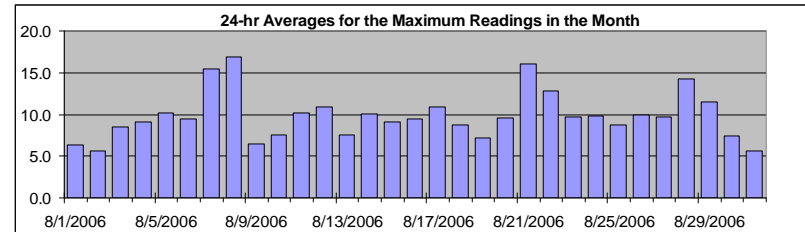
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Maximum 1-hr Average:	47.7	µg/m <sup>3</sup>	11-Aug	12:00 13:00
Maximum 24-hr Value:	16.8	µg/m <sup>3</sup>	8-Aug	



AIC Time:	0 hrs	Operational Time:	724 hrs							
Calibration Time:	3 hrs	AMD Operational Uptime:	97.7%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	35.5	22.3	11.9	8.3	5.8	3.1	1.4	9.8	8 µg/m <sup>3</sup>	9.5 µg/m <sup>3</sup>

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Aug-06	5	3	4	2	2	8	12	7	5	4	5	9	8	8	9	5	7	9	7	8	8	7	5	7	6.4	11.6
2-Aug-06	10	10	7	5	3	8	6	5	5	0	3	1	2	3	4	9	8	8	8	3	11	5	2	8	5.6	10.5
3-Aug-06	5	4	5	5	4	9	29	6	20	D	0	2	1	6	6	6	8	9	29	8	9	10	5	8.5	29.2	
4-Aug-06	6	4	6	5	6	19	5	5	7	3	2	8	24	7	9	11	6	10	9	25	10	12	11	7	9.1	24.9
5-Aug-06	10	6	6	5	5	18	38	9	29	7	5	4	11	8	9	10	6	7	7	5	5	8	4	23	10.2	38.4
6-Aug-06	4	4	5	5	5	6	8	11	7	9	3	11	4	10	12	9	8	12	13	15	13	13	23	16	9.4	23.2
7-Aug-06	10	12	11	7	8	46	13	20	19	21	16	14	13	13	19	14	13	11	15	12	22	15	14	12	15.4	46.0
8-Aug-06	11	11	21	34	17	19	36	38	21	21	10	12	7	8	17	11	14	32	27	D	4	4	5	8	16.8	38.0
9-Aug-06	6	3	2	6	6	23	10	9	3	3	4	6	6	3	8	6	8	6	7	4	8	6	7	6	6.5	23.5
10-Aug-06	5	4	5	4	4	5	8	13	11	7	D	1	7	12	6	5	4	6	15	28	9	6	5	5	7.6	28.2
11-Aug-06	7	8	7	5	8	12	7	10	11	13	10	10	48	6	C	C	C	D	2	3	4	13	14	8	10.2	47.7
12-Aug-06	7	4	6	5	4	8	14	21	10	10	D	6	17	16	19	16	9	10	13	15	11	10	10	8	10.9	20.9
13-Aug-06	6	6	6	7	5	4	7	11	8	1	D	6	15	9	5	5	9	8	8	10	14	8	8	8	7.5	14.6
14-Aug-06	9	7	14	14	12	10	7	13	11	16	16	D	D	11	13	9	5	9	6	11	8	13	4	5	10.1	16.2
15-Aug-06	8	5	4	3	2	4	4	7	22	4	3	8	5	4	13	18	29	17	21	23	7	5	3	3	9.1	29.0
16-Aug-06	2	15	2	5	4	6	14	5	6	8	10	9	D	7	18	6	9	7	6	18	17	14	14	16	9.5	18.2
17-Aug-06	11	17	17	8	8	14	11	33	16	11	14	12	5	7	13	5	5	5	7	9	9	11	8	8	10.9	33.5
18-Aug-06	7	4	6	6	5	5	7	11	D	8	13	13	10	16	11	4	9	9	14	8	11	12	8	6	8.7	15.8
19-Aug-06	9	7	7	10	5	5	7	8	7	3	4	8	10	11	D	7	5	D	7	9	9	8	7	7	7.2	10.7
20-Aug-06	9	6	7	6	7	10	9	11	9	8	9	10	7	15	20	6	7	7	9	9	16	9	13	12	9.6	20.2
21-Aug-06	10	6	6	8	8	7	13	17	14	12	12	20	11	11	9	11	36	22	35	40	25	26	15	12	16.1	39.6
22-Aug-06	14	12	10	8	13	18	19	24	20	11	11	14	24	20	11	8	6	5	7	12	7	7	14	13	12.8	24.3
23-Aug-06	9	6	6	6	5	6	9	14	6	5	16	13	12	7	13	22	7	7	6	10	13	13	9	16	9.7	21.7
24-Aug-06	14	10	5	5	5	5	9	26	10	6	2	8	14	14	10	10	9	10	8	11	10	8	14	13	9.8	26.1
25-Aug-06	14	9	11	9	7	5	8	7	6	17	21	7	8	D	7	6	6	8	6	10	10	7	5	7	8.7	20.7
26-Aug-06	6	6	5	7	10	12	6	5	2	3	9	11	10	10	6	6	4	5	5	11	18	27	39	16	10.0	38.7
27-Aug-06	13	12	9	9	7	6	7	11	10	5	6	17	16	9	7	10	9	8	12	8	10	7	7	16	9.6	17.5
28-Aug-06	17	10	10	11	13	14	13	18	18	24	23	17	10	8	19	11	14	14	10	10	16	15	15	13	14.3	24.2
29-Aug-06	13	27	25	19	21	12	11	23	24	D	D	D	7	2	6	5	7	8	6	5	6	6	4	4	11.5	26.6
30-Aug-06	3	4	5	6	5	6	7	11	11	8	3	4	14	5	12	13	6	11	10	13	4	5	6	4	7.4	13.6
31-Aug-06	6	5	7	7	5	3	6	6	6	D	7	1	2	2	0	7	4	20	9	8	5	6	3	4	5.6	20.3
Hourly Avg	8.5	8.0	7.9	7.8	7.0	10.7	11.5	13.4	11.8	8.9	8.8	9.0	11.3	9.0	10.7	9.0	9.1	10.4	11.1	11.9	10.6	10.2	9.9	9.5		
Hourly Max	16.8	26.6	25.3	33.8	21.0	46.0	38.4	38.0	28.7	24.2	22.6	19.5	47.7	19.7	20.2	21.7	35.6	31.5	35.3	39.6	25.4	27.4	38.7	22.9		

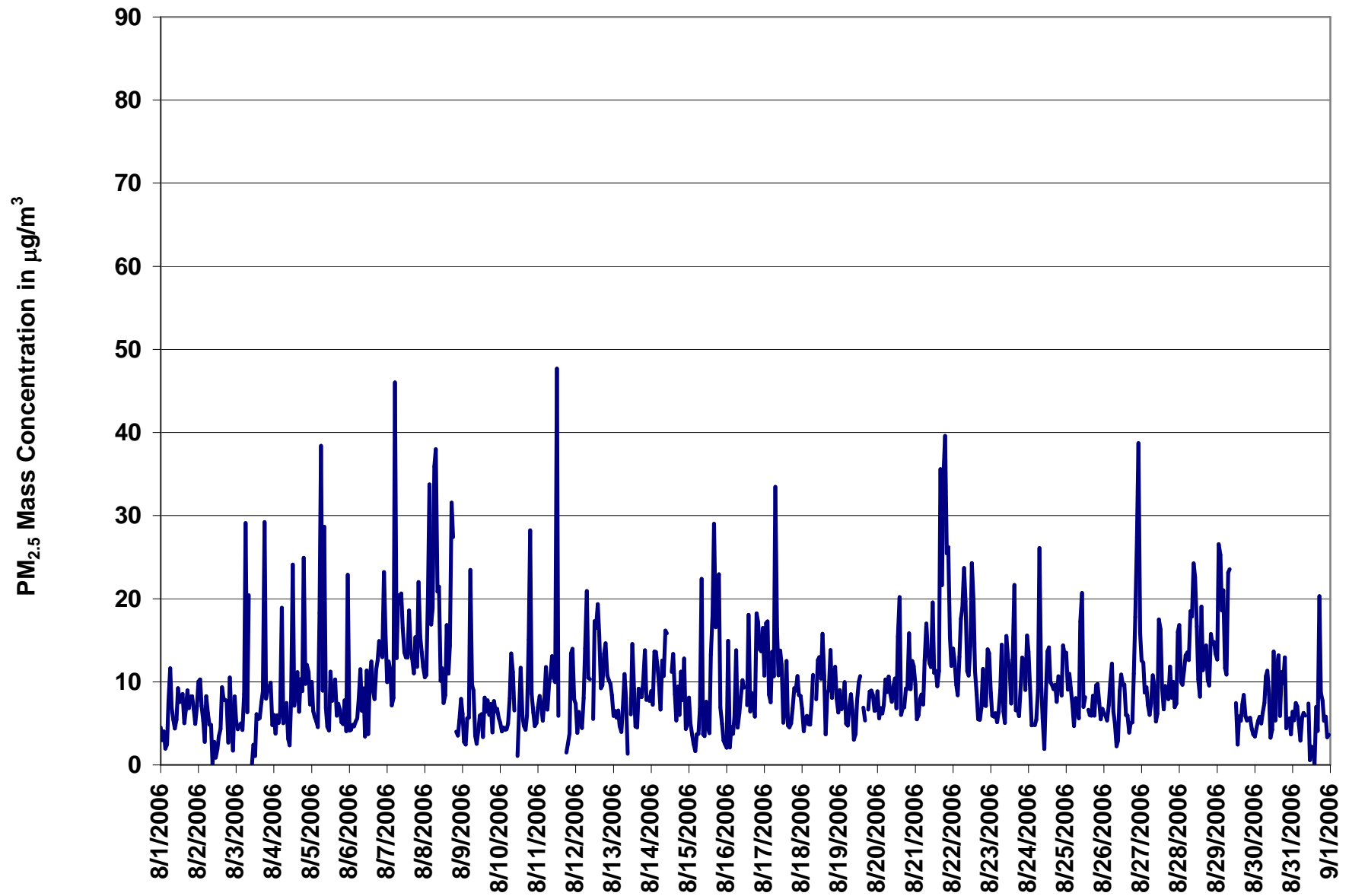
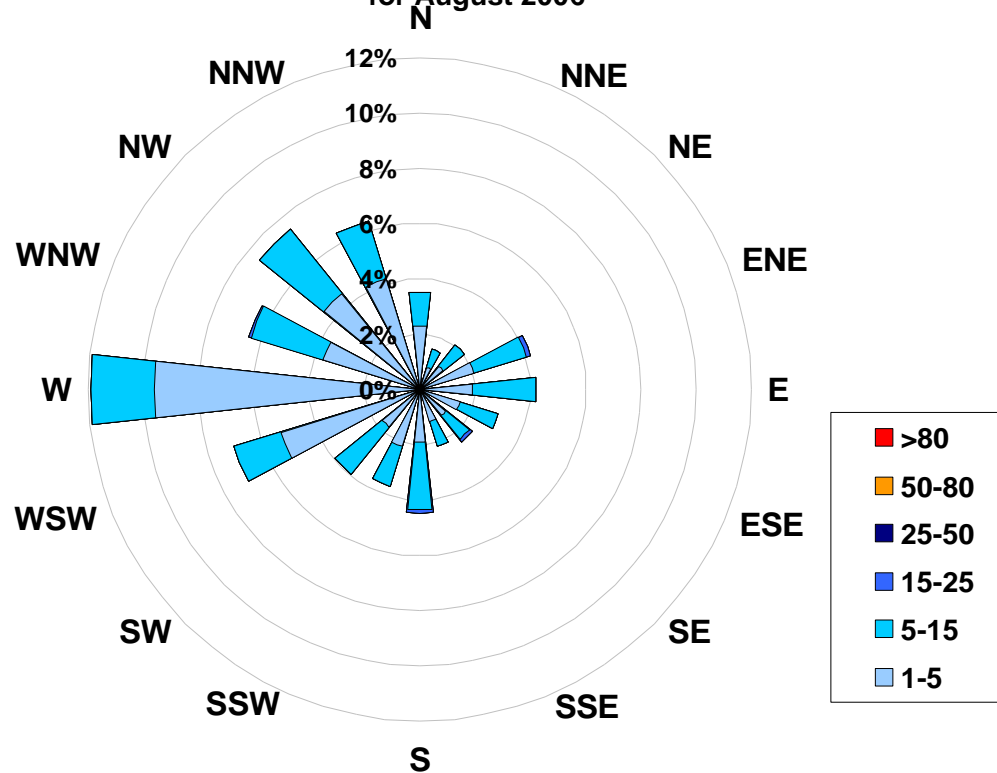


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Beaverlodge Site for August 2006**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range		Frequency (hrs)	
1.0	< 5	507	
5	to 15	213	
15	to 25	4	
25	to 50	0	
50	to 80	0	
	> 80	0	
Total Non-Zero Values			724



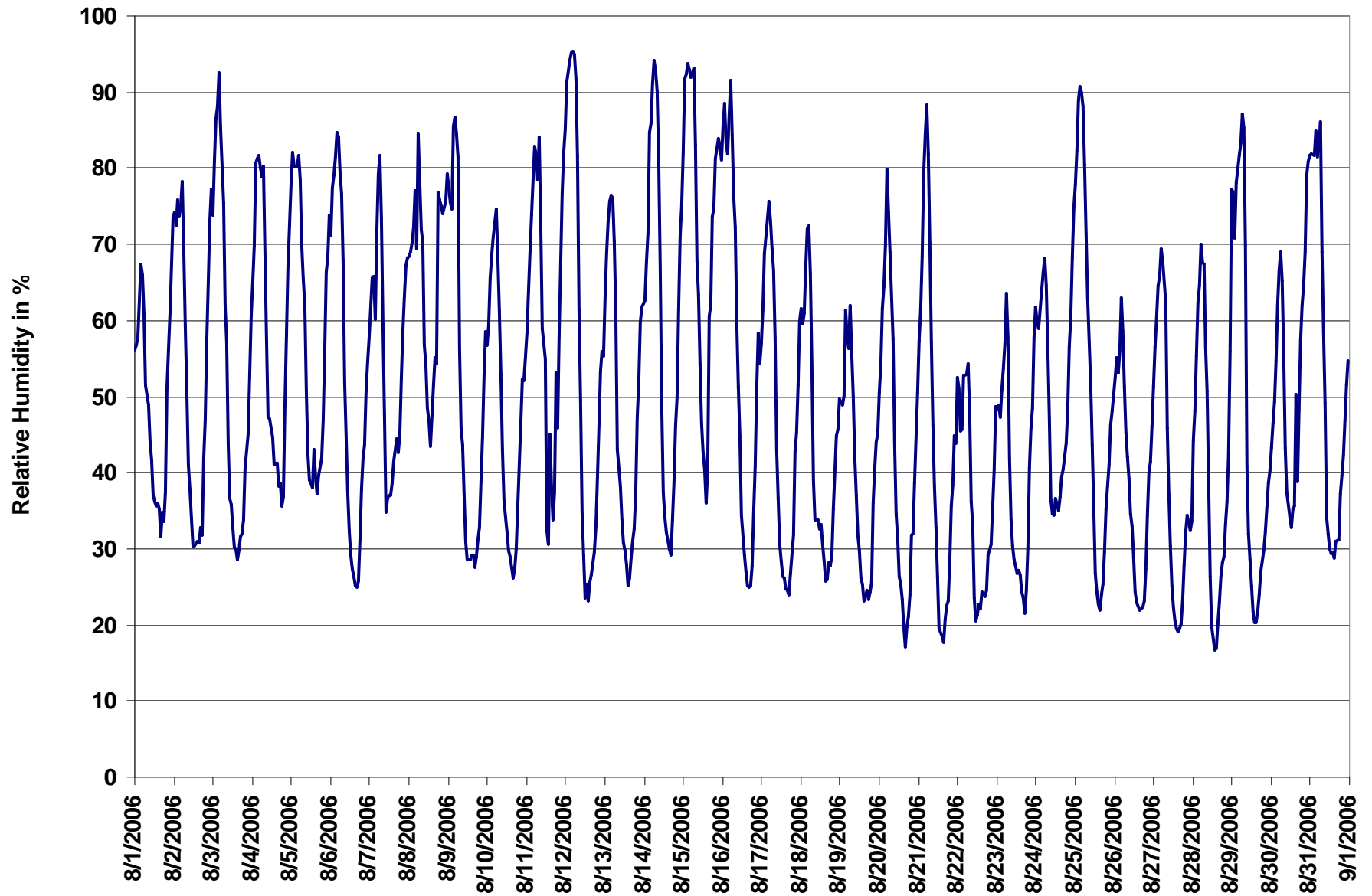


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

# PASZA - Beaverlodge - Temperature Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

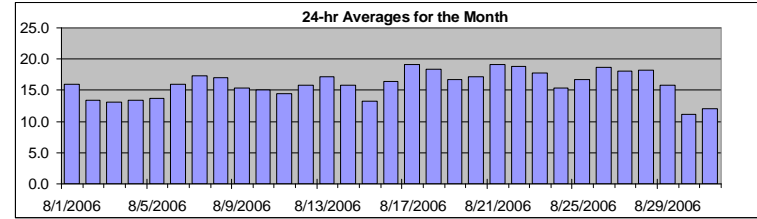
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	28.8 °C	21-Aug	15:00 16:00
Maximum 24-hr Value:	19.1 °C	17-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
	27.2	24.4	19.9	16.1	11.6	7.5	5.7	16.0 °C	16.1 °C

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 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-06	15	14	14	12	11	11	13	16	16	18	19	19	19	20	19	19	20	19	19	19	18	15	14	12	10	16.0	20.0
2-Aug-06	9	10	9	9	9	8	11	13	14	16	17	18	19	18	18	18	18	18	18	15	14	12	11	9	8	13.4	18.6
3-Aug-06	8	7	6	6	4	6	8	11	13	15	16	17	18	18	19	19	18	18	18	18	15	14	13	11	13.2	19.5	
4-Aug-06	11	10	7	7	7	8	9	9	11	14	16	17	17	17	17	17	17	18	18	19	19	16	14	11	10	13.4	19.2
5-Aug-06	9	8	8	7	7	7	9	11	13	16	18	18	18	19	18	19	20	19	19	18	15	13	12	11	13.7	19.9	
6-Aug-06	11	10	9	8	7	7	9	10	12	17	19	21	21	22	23	23	23	23	22	21	19	18	17	16	15	15.9	23.1
7-Aug-06	14	12	12	13	10	8	9	12	16	20	21	21	22	23	23	23	23	23	23	21	20	18	17	17	17.4	23.2	
8-Aug-06	16	16	15	15	14	15	13	16	17	18	19	20	21	22	21	20	20	20	18	17	15	15	14	14	17.1	21.6	
9-Aug-06	13	13	12	10	10	10	11	14	16	17	18	19	20	20	20	19	20	19	18	18	15	14	12	10	15.4	19.9	
10-Aug-06	10	9	8	7	6	6	8	11	13	17	18	19	20	21	21	22	22	22	21	20	17	15	15	14	15.0	22.4	
11-Aug-06	14	13	12	11	10	9	10	11	11	13	17	17	22	22	19	19	20	19	16	17	15	12	11	10	14.5	22.3	
12-Aug-06	10	9	8	7	7	7	7	10	15	17	20	22	23	22	23	23	23	23	22	21	19	17	16	15	16	15.8	23.4
13-Aug-06	14	12	11	11	10	9	11	14	18	19	20	21	22	23	24	24	24	23	22	20	17	16	14	14	17.2	23.8	
14-Aug-06	14	12	12	11	12	11	12	12	13	15	17	19	20	21	22	22	22	20	19	17	16	14	12	12	15.7	22.0	
15-Aug-06	11	10	9	9	9	9	9	11	13	14	16	18	18	18	20	19	16	15	13	14	13	12	11	11	13.2	19.8	
16-Aug-06	11	10	10	9	8	7	9	11	12	16	19	21	22	23	23	24	24	24	22	21	19	18	16	16	16.4	24.0	
17-Aug-06	15	14	12	11	10	10	11	13	16	19	22	24	25	26	26	27	27	27	26	24	20	19	18	16	19.1	27.2	
18-Aug-06	15	15	15	13	12	12	13	17	21	21	22	22	22	23	24	24	23	22	21	20	18	17	15	15	18.4	23.8	
19-Aug-06	13	13	13	10	10	11	9	11	14	17	19	21	21	23	22	24	23	22	22	21	17	15	14	14	16.7	23.6	
20-Aug-06	13	12	10	10	9	6	7	10	13	16	20	22	23	24	24	25	25	25	25	23	20	19	18	16	17.2	25.4	
21-Aug-06	15	14	12	9	8	7	8	10	15	19	22	24	26	28	28	29	28	27	27	24	21	20	18	18	19.1	28.8	
22-Aug-06	16	16	16	15	13	12	12	15	18	20	23	23	24	24	25	24	24	24	22	20	19	18	16	15	18.9	25.0	
23-Aug-06	15	15	16	15	14	13	11	13	16	19	20	22	23	23	23	24	24	24	22	20	16	15	14	11	17.8	23.8	
24-Aug-06	11	11	11	10	10	9	10	13	16	19	20	20	19	20	20	19	19	18	17	16	15	13	11	11	15.3	20.5	
25-Aug-06	11	10	8	8	8	7	9	11	13	16	19	22	23	24	24	25	25	25	23	21	19	18	16	16	16.7	25.1	
26-Aug-06	15	14	15	14	12	14	16	18	19	19	21	21	22	23	24	25	25	24	24	21	18	16	15	14	18.7	24.6	
27-Aug-06	13	11	10	10	9	8	9	10	14	17	20	22	24	26	27	27	27	27	25	22	20	19	19	18	18.1	27.3	
28-Aug-06	16	15	13	11	11	9	11	11	14	16	20	23	25	27	27	25	24	24	23	22	20	19	18	16	18.3	27.3	
29-Aug-06	13	13	14	13	13	12	12	11	14	17	18	18	19	20	21	21	20	20	19	17	16	15	14	13	15.9	21.1	
30-Aug-06	12	11	10	8	7	5	5	6	9	13	15	17	18	17	17	14	15	13	12	12	10	9	7	6	11.1	17.6	
31-Aug-06	6	6	6	5	6	6	5	9	12	14	16	17	18	18	18	18	17	17	15	15	14	13	11	10	12.1	18.4	
Hourly Avg	12.5	11.7	11.0	10.1	9.4	9.1	9.7	11.9	14.4	16.9	18.9	20.1	21.1	21.7	22.0	22.0	21.8	21.3	20.3	19.0	16.8	15.4	14.1	13.1			
Hourly Max	16.2	15.9	15.6	14.7	14.3	14.6	16.1	17.7	20.6	21.4	22.7	24.0	25.7	28.1	28.4	28.8	27.6	27.2	26.5	24.4	21.2	20.4	18.7	18.2			

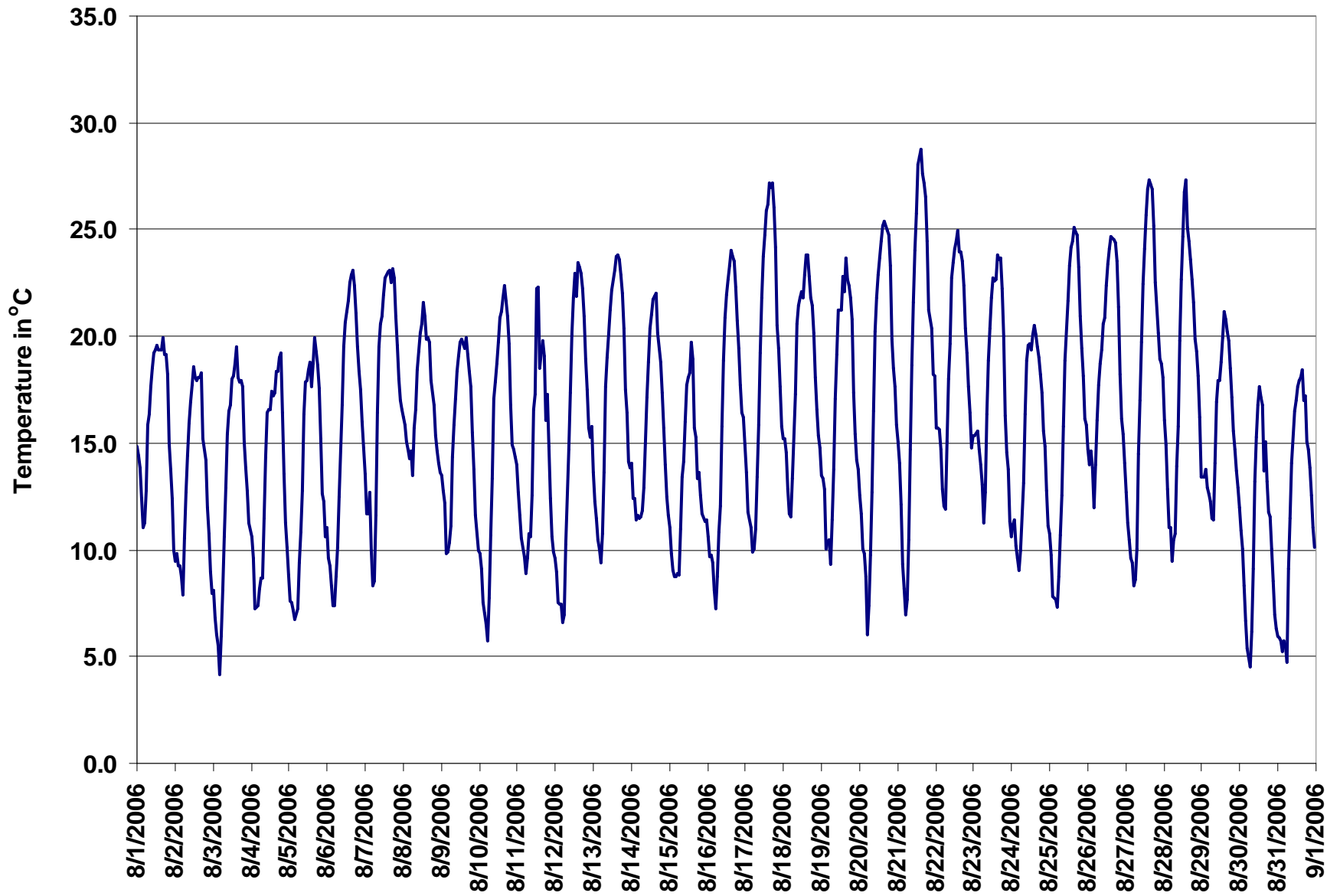


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend



# PASZA - Beaverlodge - Scalar Wind Speed Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

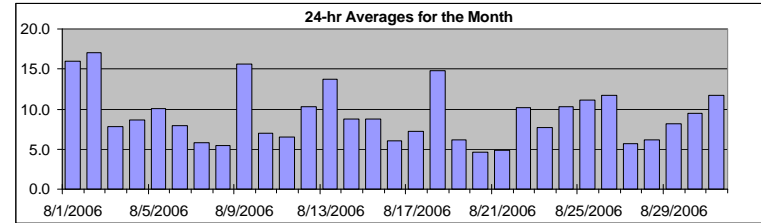
## Wind Speed (WSs)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	31.2	km/hr	18-Aug	11:00 12:00
Maximum 24-hr Value:	17.0	km/hr	2-Aug	

Calm Time:	1 hrs	0% calms	Operational Time:	740 hrs				
Calibration Time:	3 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	28.5	23.7	13.0	6.9	4.2	2.2	1.4	9.2 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start	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-06	13	14	15	11	5	7	7	9	24	25	24	23	25	24	22	24	23	19	19	14	14	7	6	7	16.0	25.1	
2-Aug-06	5	6	4	12	11	7	15	17	22	29	31	29	29	29	29	27	28	26	20	14	8	5	2	4	17.0	30.7	
3-Aug-06	3	3	4	4	2	2	1	4	4	10	15	15	14	14	10	14	14	10	11	6	5	6	7	8	7.8	15.0	
4-Aug-06	9	9	4	6	7	8	7	11	9	11	13	13	13	13	11	11	11	9	10	6	5	4	2	3	8.6	13.1	
5-Aug-06	2	3	2	2	3	3	2	5	6	9	14	19	17	13	10	14	19	21	24	19	12	8	8	4	10.0	23.8	
6-Aug-06	7	4	4	4	3	3	2	5	5	7	14	14	15	14	12	14	14	15	12	6	3	4	4	3	8.0	15.4	
7-Aug-06	2	1	4	4	2	3	5	5	4	5	12	12	11	11	7	9	9	5	6	6	5	5	3	4	5.8	11.9	
8-Aug-06	4	5	3	5	5	7	7	6	5	4	6	5	4	4	9	9	8	8	6	7	6	4	3	3	5.5	9.4	
9-Aug-06	4	7	6	2	1	2	2	14	17	22	24	29	26	24	24	26	25	25	24	21	16	14	10	9	15.6	29.2	
10-Aug-06	6	6	3	5	4	4	5	4	5	5	14	12	11	9	8	9	8	7	7	8	6	7	7	5	7.0	14.4	
11-Aug-06	2	6	10	6	5	5	2	4	5	6	5	5	4	7	12	14	10	13	12	10	5	3	2	3	6.5	14.5	
12-Aug-06	5	2	3	2	3	3	2	3	3	6	10	10	13	16	18	20	20	26	24	19	15	10	7	7	10.2	26.0	
13-Aug-06	3	6	8	5	4	4	4	5	21	24	24	22	21	22	23	25	24	25	25	16	7	5	2	3	13.7	25.1	
14-Aug-06	4	3	4	4	7	4	3	5	6	8	12	15	15	13	14	15	13	13	6	12	8	12	8	8	8.8	14.9	
15-Aug-06	14	10	10	9	8	7	5	6	9	10	11	10	8	10	11	18	11	7	7	6	6	5	7	6	8.8	18.2	
16-Aug-06	2	4	6	5	3	2	2	2	4	3	4	5	10	12	13	15	14	13	9	6	3	2	3	3	6.0	14.8	
17-Aug-06	4	3	3	2	3	4	2	2	3	4	6	9	11	11	12	12	13	14	14	14	10	8	4	4	7.2	14.4	
18-Aug-06	4	6	4	3	4	3	4	8	24	28	28	31	26	24	20	25	24	21	21	19	10	6	6	7	14.8	31.2	
19-Aug-06	5	5	5	4	5	5	5	7	10	9	6	5	6	7	8	7	8	5	5	5	6	7	6	5	6.1	9.6	
20-Aug-06	3	3	2	3	2	1	1	3	3	3	3	7	9	10	9	6	6	5	3	4	5	7	7	6	4.7	9.9	
21-Aug-06	7	2	1	1	1	1	2	2	4	3	4	4	5	4	5	6	9	13	11	9	6	4	4	8	4.8	13.3	
22-Aug-06	6	7	9	7	6	5	3	2	7	10	15	17	14	15	15	16	17	18	19	14	7	5	7	3	10.2	18.6	
23-Aug-06	5	6	7	7	4	5	2	3	5	8	9	9	8	8	8	9	10	18	17	14	10	6	6	3	7.7	17.8	
24-Aug-06	3	4	5	3	3	3	4	4	9	21	18	21	20	21	22	21	18	13	10	8	4	5	5	3	10.3	21.8	
25-Aug-06	2	4	2	2	3	2	2	4	7	8	10	12	19	19	20	23	20	19	20	15	18	16	9	10	11.2	22.5	
26-Aug-06	5	2	6	8	4	7	12	17	21	21	17	14	16	17	17	17	16	15	16	10	7	5	6	4	11.8	21.5	
27-Aug-06	3	4	4	3	3	3	3	3	2	4	5	8	9	6	5	6	6	10	12	7	9	8	7	7	5.7	11.8	
28-Aug-06	10	6	3	3	4	2	3	3	5	6	3	7	6	5	5	5	8	5	13	7	5	13	13	8	6.2	13.0	
29-Aug-06	6	5	4	3	3	1	C	C	C	14	16	15	14	13	10	10	10	9	6	5	4	7	7	8	8.1	16.4	
30-Aug-06	9	6	4	6	7	5	3	4	7	6	10	14	14	14	17	23	19	18	14	7	6	6	5	4	9.5	23.1	
31-Aug-06	4	4	3	1	2	calm	3	2	3	6	21	22	21	21	20	22	22	24	16	15	13	10	9	8	11.7	23.6	
1-hr Average	5.2	5.0	4.9	4.7	4.1	3.9	4.0	5.6	8.7	10.8	13.1	14.0	14.0	13.9	13.9	15.2	14.8	14.4	13.5	10.6	7.9	6.9	5.9	5.4			
Hourly Max	13.8	13.6	15.3	12.3	10.6	7.6	14.7	17.3	24.4	28.9	30.7	31.2	29.3	28.8	29.2	26.7	27.9	26.2	24.9	21.5	17.7	15.9	12.7	10.2			

# PASZA – Beaverlodge - Vector Wind Speed Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

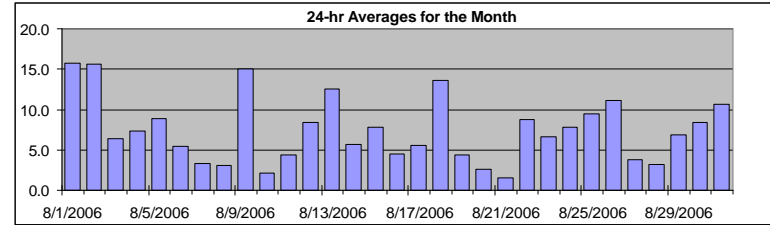
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: August 1, 2006 to September 1, 2006

### Summary

Maximum 1-hr Average:	30.8	km/hr	18-Aug	11:00 12:00
Maximum 24-hr Value:	15.7	km/hr	1-Aug	



Calm Time:	21 hrs	3% calms	Operational Time:	720 hrs				
Calibration Time:	3 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	28.2	23.5	12.5	6.5	3.6	1.5	0.9	6.2 km/hr

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-06	13	14	15	11	5	6	6	8	24	25	23	23	25	24	21	24	23	18	19	14	14	7	6	7		15.7	25.0
2-Aug-06	5	6	4	12	10	7	15	17	22	29	30	29	28	28	29	26	28	26	18	14	7	5	1	calm		15.7	30.4
3-Aug-06	2	2	2	3	2	1	1	4	4	9	15	15	13	14	10	13	14	10	10	6	5	6	7	8		6.4	14.7
4-Aug-06	9	9	3	5	7	7	7	10	9	11	12	13	12	12	10	11	11	9	10	5	5	3	1	2		7.3	12.6
5-Aug-06	2	2	2	2	2	3	2	5	6	9	14	18	16	12	10	13	19	20	24	19	12	8	8	1		8.8	23.5
6-Aug-06	6	2	4	3	3	3	2	5	5	7	14	13	15	13	12	13	14	15	12	6	3	4	2	3		5.5	15.0
7-Aug-06	2	calm	4	4	1	2	2	4	2	3	11	12	11	10	7	8	8	4	5	6	5	4	3	2		3.3	11.6
8-Aug-06	2	3	1	1	5	6	7	4	4	3	5	4	4	4	9	9	8	7	6	7	5	4	2	3		3.0	9.3
9-Aug-06	3	6	5	1	calm	2	2	14	16	22	23	29	25	24	23	26	25	24	24	21	16	14	10	9		15.1	29.0
10-Aug-06	6	5	2	5	2	3	2	3	4	4	14	12	9	8	6	8	8	6	6	8	6	7	7	5		2.1	13.9
11-Aug-06	1	6	10	6	4	5	1	3	5	5	4	4	2	5	10	7	10	12	12	9	5	1	2	2		4.4	12.0
12-Aug-06	5	1	2	2	3	1	2	3	3	5	9	9	11	15	17	20	20	26	24	19	15	10	7	7		8.4	25.8
13-Aug-06	3	6	8	5	3	2	1	4	21	23	24	22	20	22	23	25	24	24	25	16	7	5	1	3		12.5	24.9
14-Aug-06	1	3	3	3	6	2	2	5	6	7	12	14	15	12	13	14	12	12	5	11	8	11	8	7		5.7	14.6
15-Aug-06	14	9	10	9	8	7	5	6	9	10	10	9	8	10	10	17	10	5	6	5	5	5	7	5		7.9	17.1
16-Aug-06	2	3	5	4	2	2	2	2	4	3	3	4	9	11	12	14	13	13	9	6	3	calm	2	3		4.4	14.3
17-Aug-06	4	2	2	2	3	4	2	calm	2	4	6	8	10	9	11	11	12	14	14	14	10	8	2	4		5.5	14.2
18-Aug-06	4	6	4	3	4	3	calm	7	23	27	28	31	26	23	19	25	24	21	21	19	10	6	5	7		13.6	30.8
19-Aug-06	4	5	5	3	4	5	5	6	9	8	5	2	5	6	7	5	7	4	4	5	6	7	5	5		4.4	9.1
20-Aug-06	3	1	2	3	calm	calm	1	1	3	3	2	6	9	9	8	5	5	5	calm	3	5	6	7	6		2.6	8.8
21-Aug-06	7	1	calm	1	calm	calm	calm	calm	3	3	3	2	4	2	3	5	8	12	11	9	5	1	2	7		1.5	12.0
22-Aug-06	4	7	9	6	6	5	3	1	5	9	15	17	13	14	15	16	17	18	19	14	7	5	4	1		8.8	18.5
23-Aug-06	4	6	7	7	3	5	1	3	5	8	8	9	7	6	6	7	9	17	17	14	10	6	6	2		6.6	17.2
24-Aug-06	1	3	5	3	3	3	3	3	7	21	18	21	20	20	21	21	18	12	9	8	4	5	3	3		7.8	21.4
25-Aug-06	2	4	1	1	2	2	2	4	7	8	9	11	19	19	20	22	19	19	20	15	18	16	9	10		9.5	22.0
26-Aug-06	5	1	6	8	3	6	12	17	21	21	17	13	15	16	16	17	15	15	16	10	6	2	4	1		11.2	21.4
27-Aug-06	calm	3	4	3	3	3	2	3	1	4	5	7	6	1	2	5	5	9	12	7	9	8	7	3		3.8	11.6
28-Aug-06	8	5	calm	2	2	calm	calm	2	2	5	2	6	4	4	2	5	7	3	13	7	5	12	13	7		3.2	12.8
29-Aug-06	6	4	3	3	1	1	C	C	C	14	16	14	14	13	9	8	9	8	6	5	4	7	7	8		6.9	16.2
30-Aug-06	9	5	4	6	5	4	calm	2	7	6	9	14	12	14	16	23	18	17	14	6	6	5	5	2		8.4	22.9
31-Aug-06	3	3	3	calm	2	calm	3	1	2	5	21	22	20	21	20	21	22	23	16	15	13	10	9	8		10.6	23.5
1-hr Vector	2.3	1.8	2.0	1.4	0.2	0.9	1.1	2.9	6.7	8.8	10.1	10.8	10.9	11.3	12.3	12.8	12.2	11.3	10.0	7.2	4.8	4.0	2.3	2.2			
Hourly Max	13.5	13.6	15.2	12.3	10.5	7.5	14.6	17.2	24.3	28.8	30.4	30.8	28.4	28.3	28.7	26.4	27.6	25.8	24.7	21.4	17.6	15.8	12.6	10.1			

# PASZA - Beaverlodge - Wind Direction Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

Calm Time: 0 hrs 0% calms		Operational Time: 741 hrs						
Calibration Time: 3 hrs		AMD Operational Uptime: 100.0%						
Percentile	99	95	75	50	25	5	1	Average
	354.4	340.4	291.1	264.3	179.6	39.7	5.6	283 deg

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour	WD	
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	Average	Sector	
1-Aug-06	271	271	277	272	274	265	245	269	276	275	268	283	276	262	271	281	281	284	286	281	265	317	273	254	275	W	
2-Aug-06	244	228	220	261	253	255	261	255	258	262	264	270	274	276	272	275	266	280	324	325	313	22	340	242	272	W	
3-Aug-06	335	34	333	296	72	339	89	293	252	287	303	292	265	273	283	267	271	311	309	346	1	336	349	3	300	WNW	
4-Aug-06	22	40	288	354	344	6	355	348	2	9	9	8	354	348	346	0	342	338	321	305	282	259	181	181	351	N	
5-Aug-06	214	99	112	103	125	218	188	210	230	248	260	271	276	268	266	268	284	275	260	261	261	261	270	264	262	W	
6-Aug-06	243	215	199	174	117	144	128	183	208	250	263	274	272	281	286	283	292	299	316	344	344	306	22	75	276	W	
7-Aug-06	70	215	62	39	150	66	302	324	348	174	120	101	90	102	155	127	141	156	180	128	79	55	314	349	106	ESE	
8-Aug-06	19	352	8	284	26	47	307	305	252	201	227	207	197	261	262	253	255	228	192	223	208	216	162	213	250	WSW	
9-Aug-06	229	267	252	196	165	88	186	280	272	267	270	263	271	282	273	267	277	271	270	272	274	273	258	261	269	W	
10-Aug-06	253	253	180	171	118	70	61	111	203	270	285	293	266	268	305	293	318	347	13	53	60	61	69	83	312	NW	
11-Aug-06	172	320	346	27	19	290	339	323	294	326	40	88	98	329	265	321	33	345	313	343	328	245	108	69	338	NNW	
12-Aug-06	70	173	125	87	70	49	71	85	226	267	275	280	271	287	272	276	278	266	264	265	267	258	252	260	270	W	
13-Aug-06	240	261	263	262	231	254	51	173	281	285	284	284	278	284	283	274	270	280	282	293	306	287	105	54	279	W	
14-Aug-06	275	155	188	91	186	94	113	184	205	225	250	269	289	296	283	283	293	310	321	271	318	356	356	305	283	WNW	
15-Aug-06	263	251	245	249	264	272	267	274	314	295	306	305	305	290	283	268	277	337	353	323	312	261	255	267	282	WNW	
16-Aug-06	227	237	261	249	192	81	94	160	202	206	223	248	292	291	290	273	278	279	291	326	335	182	71	203	271	W	
17-Aug-06	226	170	144	125	74	61	83	191	208	251	257	284	297	285	270	290	291	277	259	260	272	285	255	215	270	W	
18-Aug-06	224	236	192	169	175	196	282	223	277	280	282	276	278	267	282	292	286	268	271	285	285	302	306	317	276	W	
19-Aug-06	288	308	300	339	329	352	350	339	334	34	72	128	344	9	316	332	13	341	24	32	46	50	74	91	3	N	
20-Aug-06	98	150	85	83	94	9	78	193	203	179	133	152	151	169	202	199	255	219	65	76	65	67	86	102	142	SE	
21-Aug-06	122	189	239	241	213	245	223	188	302	311	254	200	189	212	227	80	59	109	132	144	118	293	25	356	136	SE	
22-Aug-06	5	354	347	355	335	337	289	216	269	249	290	282	304	302	309	311	303	310	309	310	335	298	221	191	305	NW	
23-Aug-06	252	268	281	242	227	244	196	234	274	306	309	332	331	296	292	315	305	272	264	262	264	264	258	100	279	W	
24-Aug-06	158	192	184	131	125	167	185	189	255	289	301	297	311	312	305	296	302	331	329	311	336	337	340	78	301	WNW	
25-Aug-06	77	58	118	199	97	117	152	198	213	228	246	239	259	269	272	269	265	275	268	256	274	269	260	252	259	W	
26-Aug-06	255	208	255	260	36	276	293	283	285	291	295	304	279	291	297	282	277	278	277	286	301	284	302	342	286	WNW	
27-Aug-06	323	91	95	90	109	77	94	170	132	196	185	164	204	214	94	145	170	154	138	121	114	113	115	307	141	SE	
28-Aug-06	0	14	48	36	263	3	225	178	137	227	75	320	40	63	229	225	264	292	280	324	308	312	317	307	310	NW	
29-Aug-06	311	24	344	272	86	236	C	C	287	288	281	279	286	289	320	332	348	359	3	336	320	329	322	309	NW		
30-Aug-06	315	323	339	358	346	316	20	340	313	328	319	299	308	321	293	258	278	313	305	309	262	271	250	286	302	WNW	
31-Aug-06	291	357	314	55	94	85	76	110	220	269	281	280	282	275	279	277	280	272	263	255	256	257	246	248	273	W	
Hourly Avg	282	283	277	277	324	321	292	259	270	275	280	280	282	284	281	281	285	287	286	287	291	298	294	290			

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

Station: Beaverlodge  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: August 1, 2006 to September 1, 2006

**Summary**

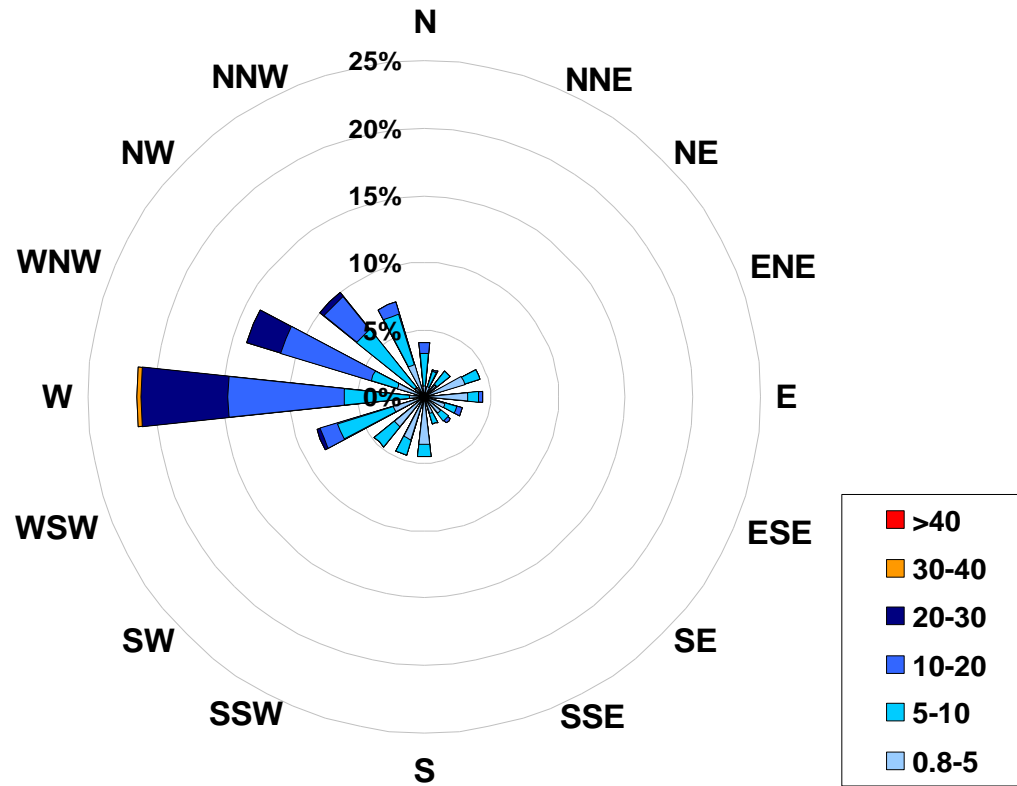

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	741 hrs			
Calibration Time:	3 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	57.8	47.2	25.1	14.4	8.4	4.0	2.7

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

Day	Mountain Standard Time																							Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00		22:00 23:00
1-Aug-06	3	4	3	5	10	20	39	39	5	5	7	8	9	8	9	9	6	12	8	7	4	17	10	6	39.4
2-Aug-06	6	16	19	4	4	33	3	4	5	5	6	6	13	9	10	8	7	8	10	6	10	12	58	33	57.8
3-Aug-06	37	34	41	35	36	18	31	27	29	22	9	13	18	14	17	13	8	8	9	10	5	8	5	15	40.7
4-Aug-06	10	5	25	28	35	10	11	6	9	11	14	12	15	19	18	18	11	18	13	12	3	8	34	25	34.8
5-Aug-06	28	41	16	12	17	35	40	14	14	13	11	6	10	13	6	10	10	6	6	4	2	4	3	34	40.9
6-Aug-06	12	36	14	13	12	15	11	15	14	17	10	15	12	10	14	15	10	9	9	7	11	12	25	16	36.5
7-Aug-06	52	65	5	11	55	34	20	44	32	31	13	12	13	19	17	15	19	20	33	6	12	15	31	40	65.0
8-Aug-06	44	63	44	40	21	10	14	24	28	42	23	24	30	23	12	6	10	10	9	7	6	12	20	15	62.9
9-Aug-06	49	9	16	36	55	41	22	8	5	6	8	6	11	8	9	7	11	12	6	3	2	3	4	4	55.3
10-Aug-06	7	44	40	14	42	65	39	20	17	40	12	19	27	25	39	33	20	37	19	5	4	5	4	16	64.7
11-Aug-06	51	15	6	10	19	10	47	44	22	19	28	38	68	43	17	23	12	13	7	9	9	45	46	41	68.1
12-Aug-06	4	29	18	9	4	48	35	14	27	17	20	24	23	11	16	9	7	6	5	13	11	5	10	6	48.5
13-Aug-06	32	14	4	13	41	52	29	27	6	7	11	8	13	11	11	7	12	8	11	4	4	18	22	30	51.9
14-Aug-06	24	12	34	33	17	46	36	10	7	17	11	12	11	17	14	15	15	17	25	9	11	9	8	10	46.4
15-Aug-06	14	8	5	6	4	5	5	9	10	11	15	23	18	15	19	16	18	23	21	16	10	6	16	9	23.4
16-Aug-06	20	18	34	14	25	8	16	22	16	38	44	50	20	22	19	15	15	11	9	6	8	29	29	25	50.4
17-Aug-06	8	30	25	24	20	8	31	33	25	22	33	28	28	37	30	18	12	12	9	2	3	3	25	13	37.2
18-Aug-06	29	20	16	25	13	16	44	15	9	6	6	8	7	8	12	6	5	5	4	3	6	7	9	6	44.4
19-Aug-06	31	7	8	28	21	12	24	15	13	17	30	70	33	25	37	38	20	51	32	6	3	3	29	20	69.9
20-Aug-06	28	30	22	7	39	22	17	28	18	21	55	38	23	25	27	45	51	35	37	9	8	4	6	8	54.8
21-Aug-06	6	56	54	37	48	24	43	55	27	35	22	56	47	64	49	31	11	9	7	4	8	40	31	20	64.4
22-Aug-06	55	21	5	7	13	17	10	41	26	18	10	13	19	16	17	14	11	9	6	5	25	19	25	29	55.5
23-Aug-06	21	6	8	13	21	6	39	14	13	14	18	20	26	33	27	42	20	14	5	3	2	7	10	37	41.9
24-Aug-06	31	25	6	15	13	15	20	22	11	5	11	7	8	9	10	9	11	12	10	5	12	6	24	11	31.1
25-Aug-06	9	9	57	38	33	15	14	13	12	13	16	23	13	11	12	10	13	15	5	5	3	3	6	4	56.8
26-Aug-06	21	74	10	11	54	41	4	5	5	6	10	13	22	16	16	14	16	9	5	4	36	40	36	33	74.0
27-Aug-06	40	17	19	16	16	18	22	15	51	32	24	21	47	51	42	42	31	14	6	5	4	3	10	18	51.2
28-Aug-06	16	14	50	40	52	42	36	18	43	38	58	28	29	52	54	15	18	24	7	17	40	15	6	12	57.8
29-Aug-06	9	23	18	12	56	32	C	C	C	8	8	11	12	13	39	23	25	18	19	8	7	4	5	4	56.0
30-Aug-06	4	14	17	13	19	29	28	28	6	16	16	15	22	14	13	6	8	9	7	19	7	11	8	44	44.2
31-Aug-06	23	15	21	22	18	48	24	27	33	19	7	8	11	9	13	8	5	6	6	4	2	3	2	4	47.9
Hourly Max	55	74	57	40	56	65	47	55	51	42	58	70	68	64	54	45	51	51	37	19	40	45	58	44	

1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for August 2006



Calms: 0%

Frequency Distribution of Wind in km/hr		Frequency (hrs)
Range		
0.8	< 5	242
5	to 10	252
10	to 20	171
20	to 30	73
30	to 40	2
	> 40	0
Total Non-Zero Values		740

# **PASZA**

## Monthly Passive Data Summary

**Table 1. PASZA Passive Stations for August 2006**  
**Peace Airshed Zone Association - PASZA Passive Stations for August 2006**

PASZA					
Station Number	Station Name	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Site Legal
<b>Duplicates</b>					
20a	Shaftsbury	0.1	20.0	0.6	
20b	Shaftsbury	0.1	19.4	0.6	
35a	Jean Cote	0.4	20.7	0.7	
35b	Jean Cote	0.4	20.6	0.7	
40a	McLennan	0.3	24.7	0.9	
40b	McLennan	0.3	24.0	0.9	
49a	Grande Prairie HP	0.2	24.5	5.6	
49b	Grande Prairie HP	0.2	25.1	5.1	

1	Silver Valley	0.3	23.4	1.3	08-27-081-11 W6M
2	Bay Tree	0.1	24.9	0.4	13-16-078-13 W6M
3	Forth Creek	0.2	27.1	1.0	04-13-082-07 W6M
4	Gordondale	0.3	27.3	1.4	04-34-078-10 W6M
5	Boone Creek	0.2	23.1	2.5	01-23-076-11 W6M
7	Steepprock Creek	0.3	27.3	0.9	09-35-072-13 W6M
9	Spirit River	0.2	24.7	1.6	08-12-079-07 W6M
10	Woking	0.3	23.6	n/a	01-13-076-07 W6M
11	Webber Creek	0.2	22.7	1.2	09-36-074-09 W6M
12	Hythe	0.3	21.6	1.3	14-36-072-11 W6M
14	Sylvester	0.1	20.9	0.7	08-06-069-12 W6M
16	Beaverlodge	0.4	n/a	1.8	15-36-071-10 W6M
17	Poplar	0.3	23.9	1.2	13-06-073-08 W6M
18	Saddle Hills	0.3	25.1	1.0	04-25-074-07 W6M
19	Wanham	0.3	27.7	0.7	16-22-077-03 W6M

Table 1. PASZA Passive Stations for August 2006 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
20	Shaftesbury	0.1	19.7	0.6	04-03-082-23 W5M
21	Eaglesham	0.1	18.7	0.7	16-21-079-25 W5M
23	Bear Lake	0.2	24.0	1.5	15-31-072-06 W6M
24	Wembley	0.1	21.6	1.7	12-31-070-08 W6M
25	Pinto Creek	0.1	21.9	0.8	04-24-069-11 W6M
26	Flyingshot	0.1	21.6	1.3	15-36-070-07 W6M
27	Grande Prairie I	0.2	25.1	4.5	08-15-071-06 W6M
28	Clairmont Lake	0.3	26.8	1.4	09-06-073-04 W6M
29	Smoky Heights	0.3	29.8	1.1	04-06-075-02 W6M
30	Fitzsimmons	0.2	23.1	1.3	15-36-072-03 W6M
32	Gold Creek	0.2	20.1	1.5	06-33-067-05 W6M
33	Wapiti	0.1	26.2	1.2	02-25-071-03 W6M
34	Puskwaskau	0.1	16.6	0.3	15-35-074-25 W5M
35	Jean Cote	0.4	20.7	0.7	12-35-079-21 W5M
36	Guy	0.1	22.0	0.5	03-04-076-22 W5M
37	Crooked Creek	0.1	26.3	1.2	16-01-071-26 W5M
38	Karr Creek	0.1	19.0	n/a	10-16-065-02 W6M
39	Clouston Creek	0.2	24.2	0.8	12-01-073-22 W5M
40	McLennan	0.3	24.4	0.9	03-29-077-19 W5M
41	Valleyview	0.2	28.8	0.9	09-30-069-22 W5M
42	Sunset House	0.2	29.6	0.6	05-32-070-19 W5M
43	High Prairie	0.1	21.1	0.8	16-13-074-17 W5M
44	Peavine	0.1	19.1	0.3	03-05-079-15 W5M
45	Gift Lake	0.1	16.9	0.7	10-07-079-12 W5M
46	Little Smoky	0.1	19.7	1.8	12-01-065-21 W5M
47	Kinuso	0.1	17.3	0.4	12-10-073-10 W5M
48	Deer Mountain	0.1	19.0	0.6	15-22-068-09 W5M
49	Grande Prairie HP	0.2	24.8	5.4	17-26-071-06 W6M



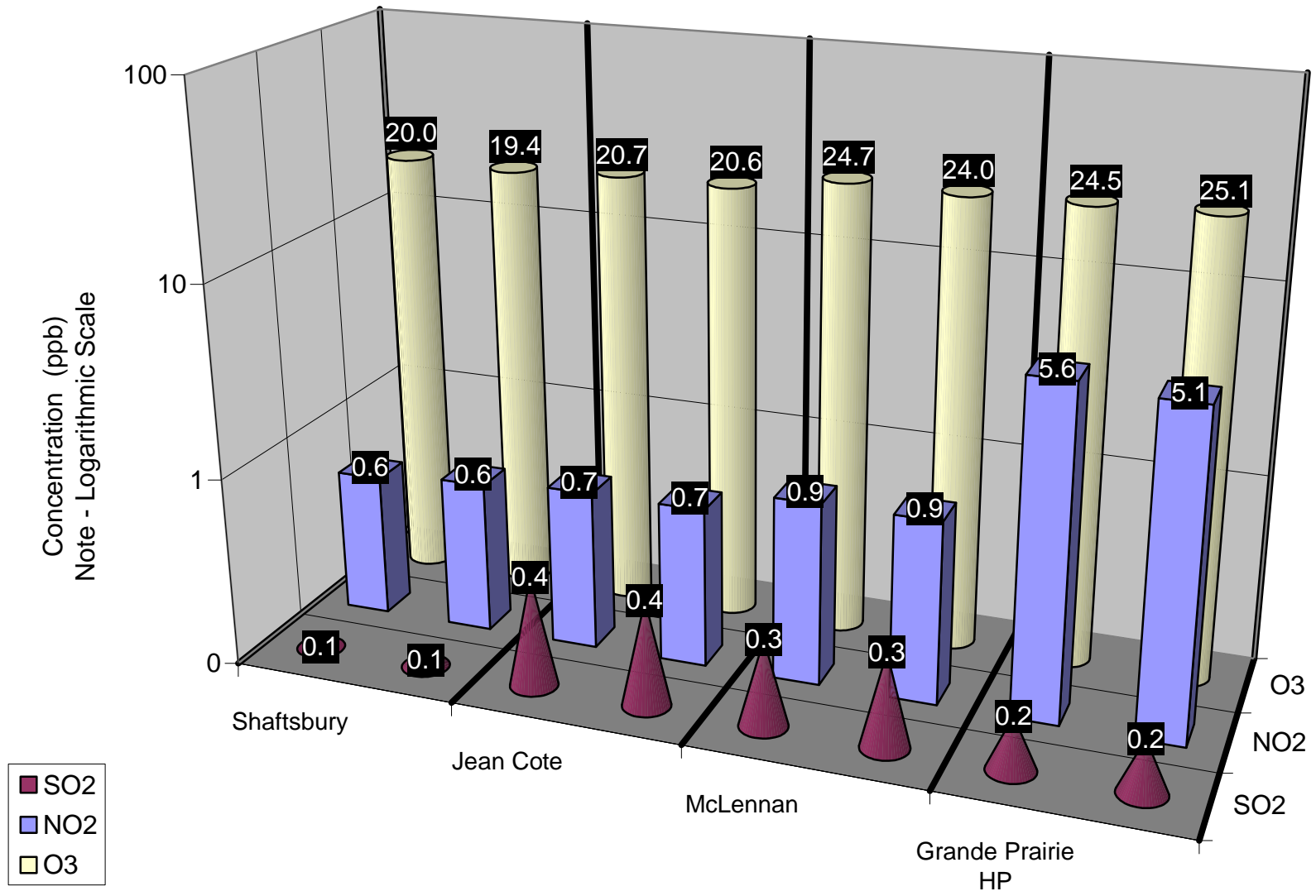


Figure 46. Duplicate Summary Chart

**Table 2. Passive Summary Results for August 2006**

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 2006 (PASZA Zone)			
Mean	0.2	23.1	1.2
Standard Deviation	0.1	3.4	1.0
Minimum	0.1	16.6	0.3
	Sylvester (#14)	Puskwaskau (#34)	Peavine (#44)
Maximum	0.4	29.8	5.4
	Jean Cote (#35)	Smoky Heights (#29)	Grande Prairie HP (#49)

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

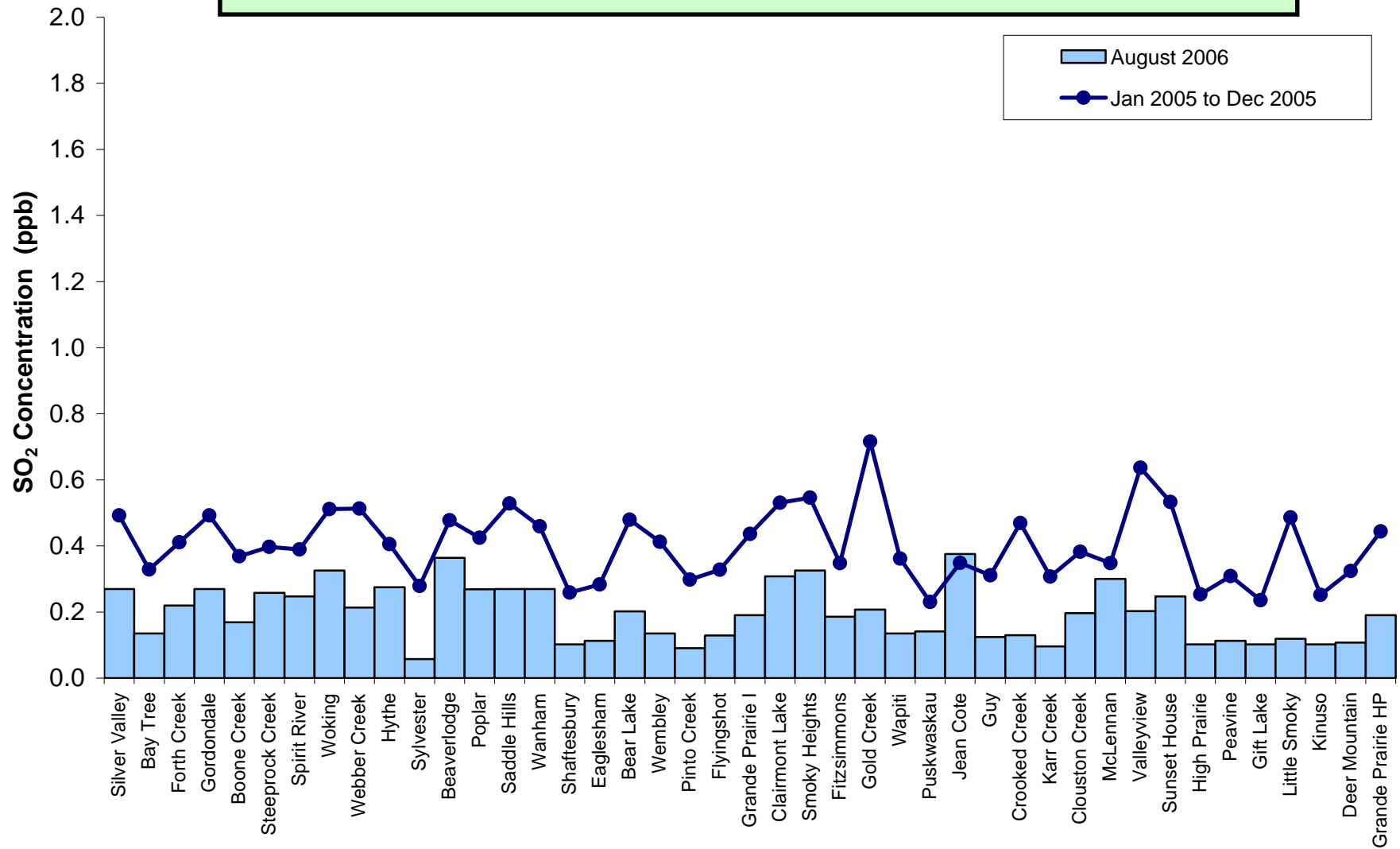
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
AENV Beaverlodge station	0.5	26.7	2.4
PASZA Beaverlodge passive	0.4	n/a	1.8

**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	0.4	21.8	6.7
PASZA Grande Prairie passive	0.2	24.8	5.4



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



**Figure 48. SO<sub>2</sub> Summary Chart**

**PASZA Passive O<sub>3</sub> Stations - August 2006**  
**Average Concentrations in ppb**

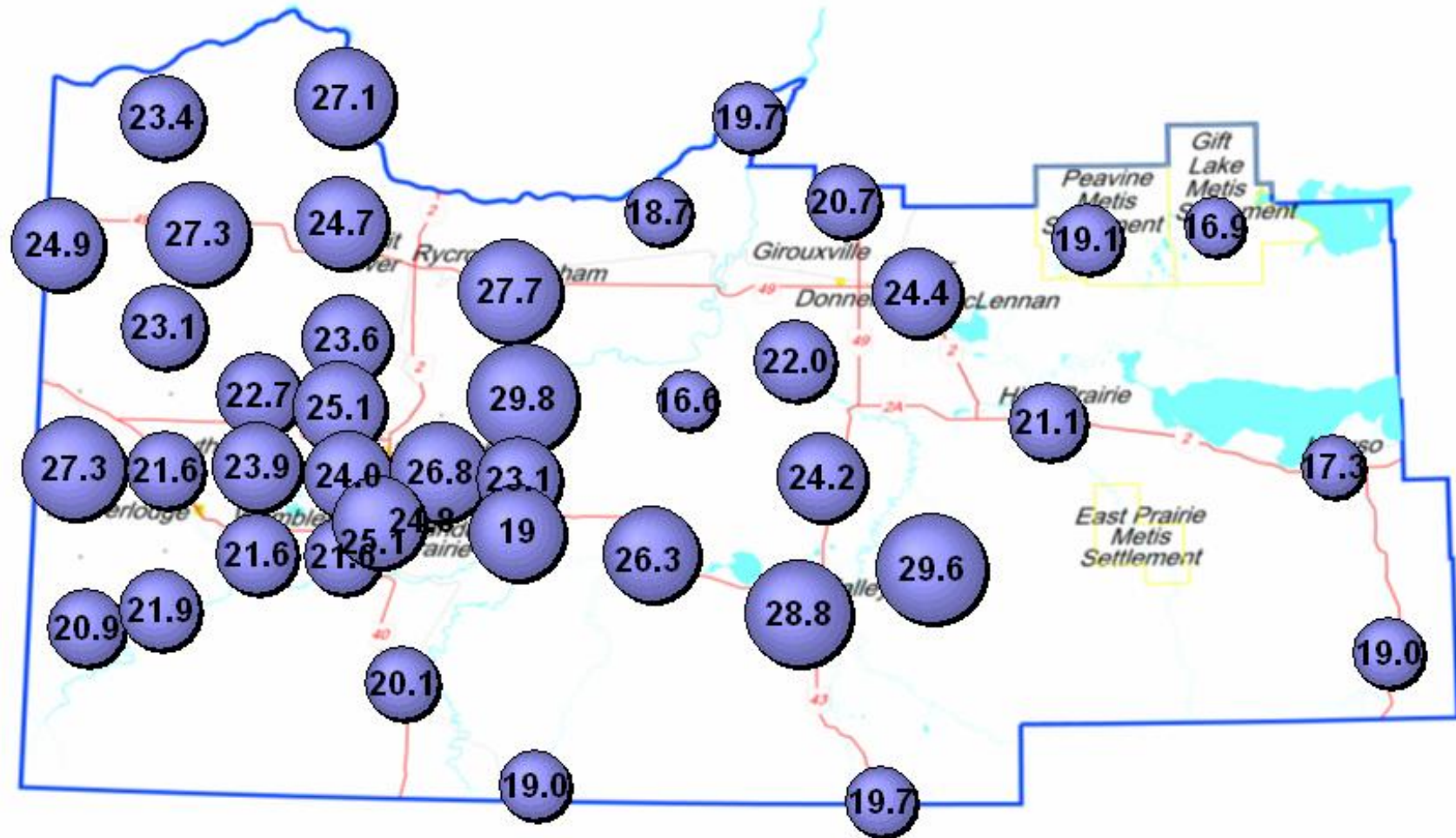
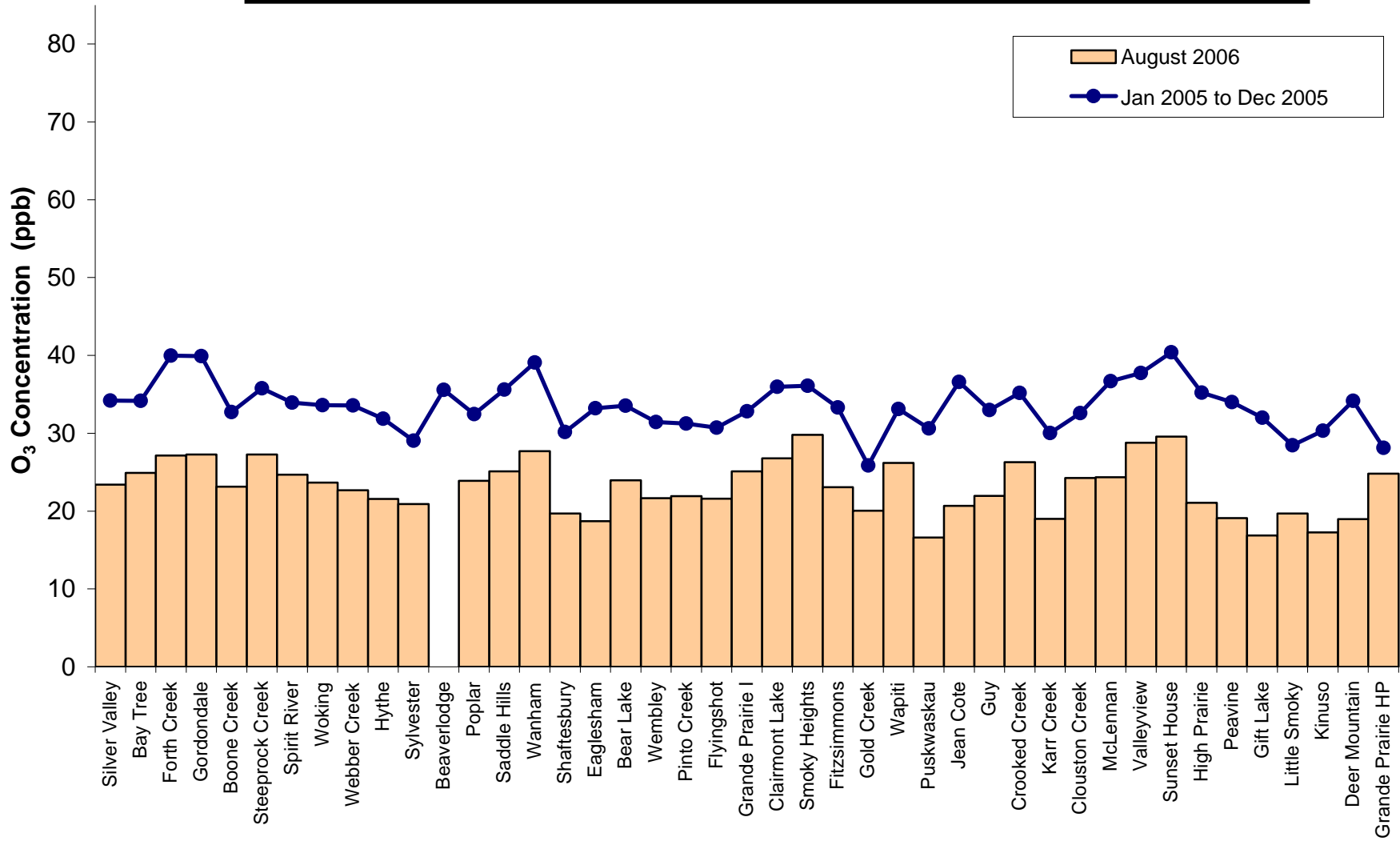


Figure 49. O<sub>3</sub> Bubble Chart

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



**Figure 50. O<sub>3</sub> Summary Chart**

### PASZA Passive NO<sub>2</sub> Stations - August 2006 Average Concentrations in ppb

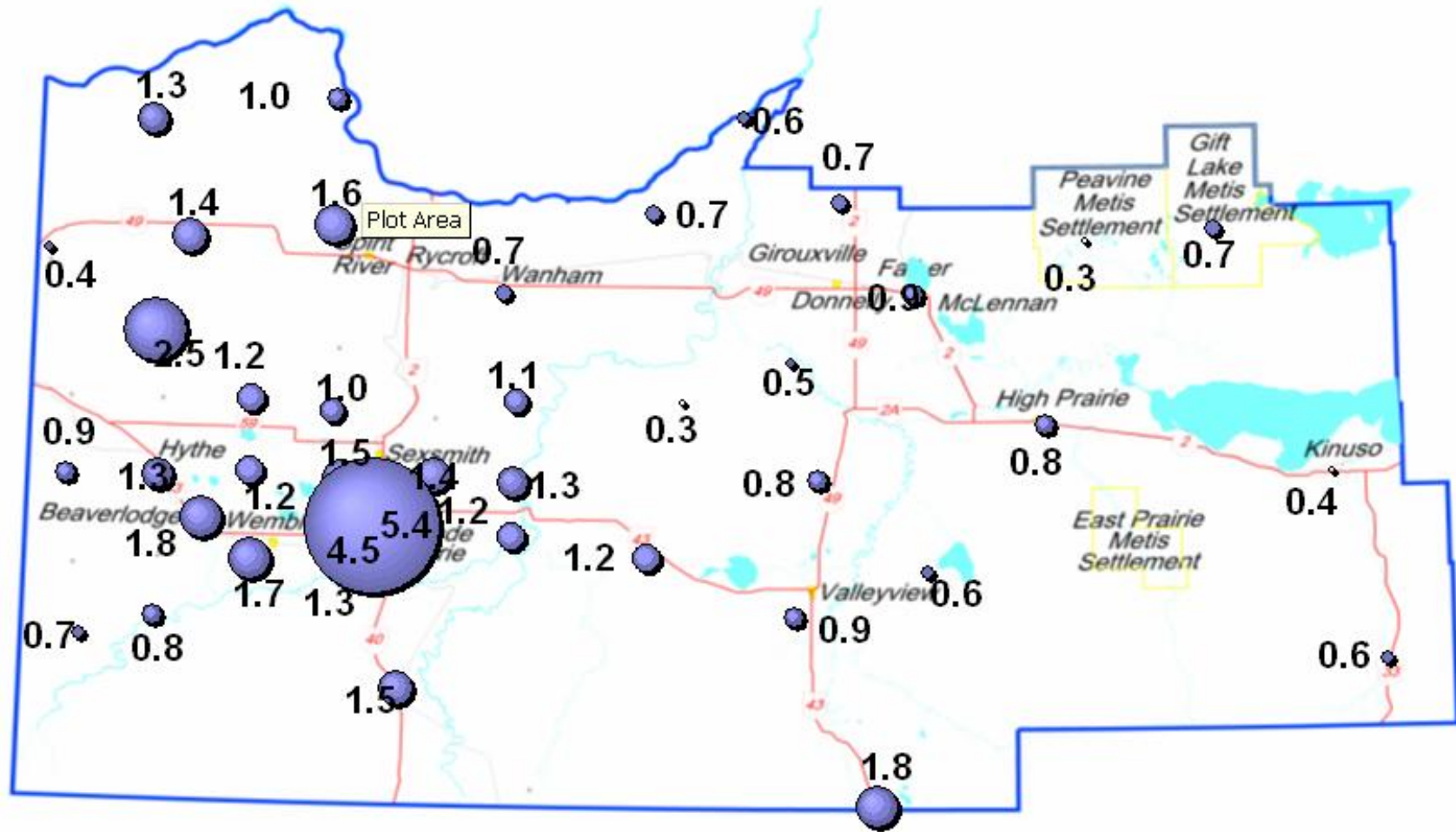
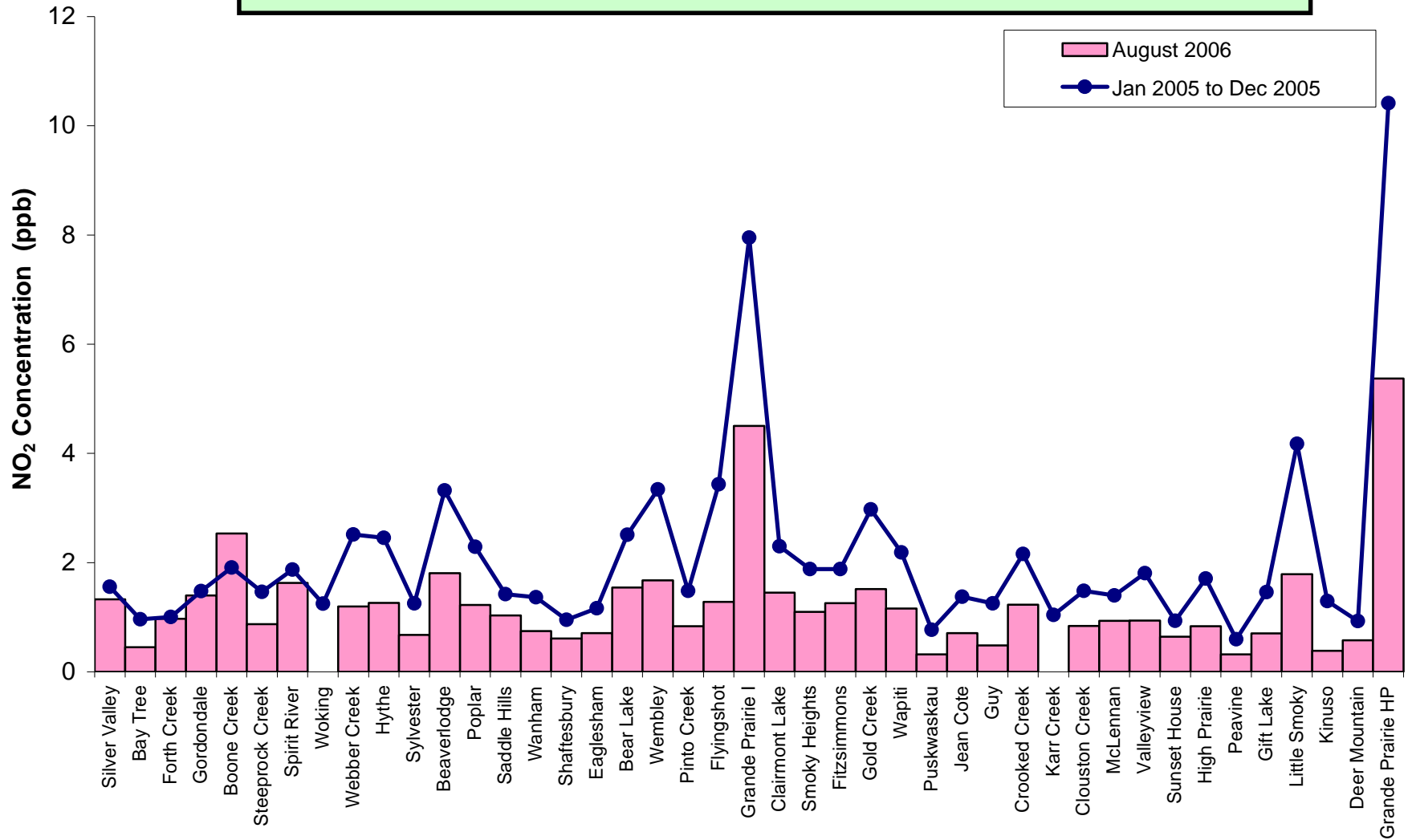


Figure 51. NO<sub>2</sub> Bubble Chart

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



**Figure 52. NO<sub>2</sub> Summary Chart**



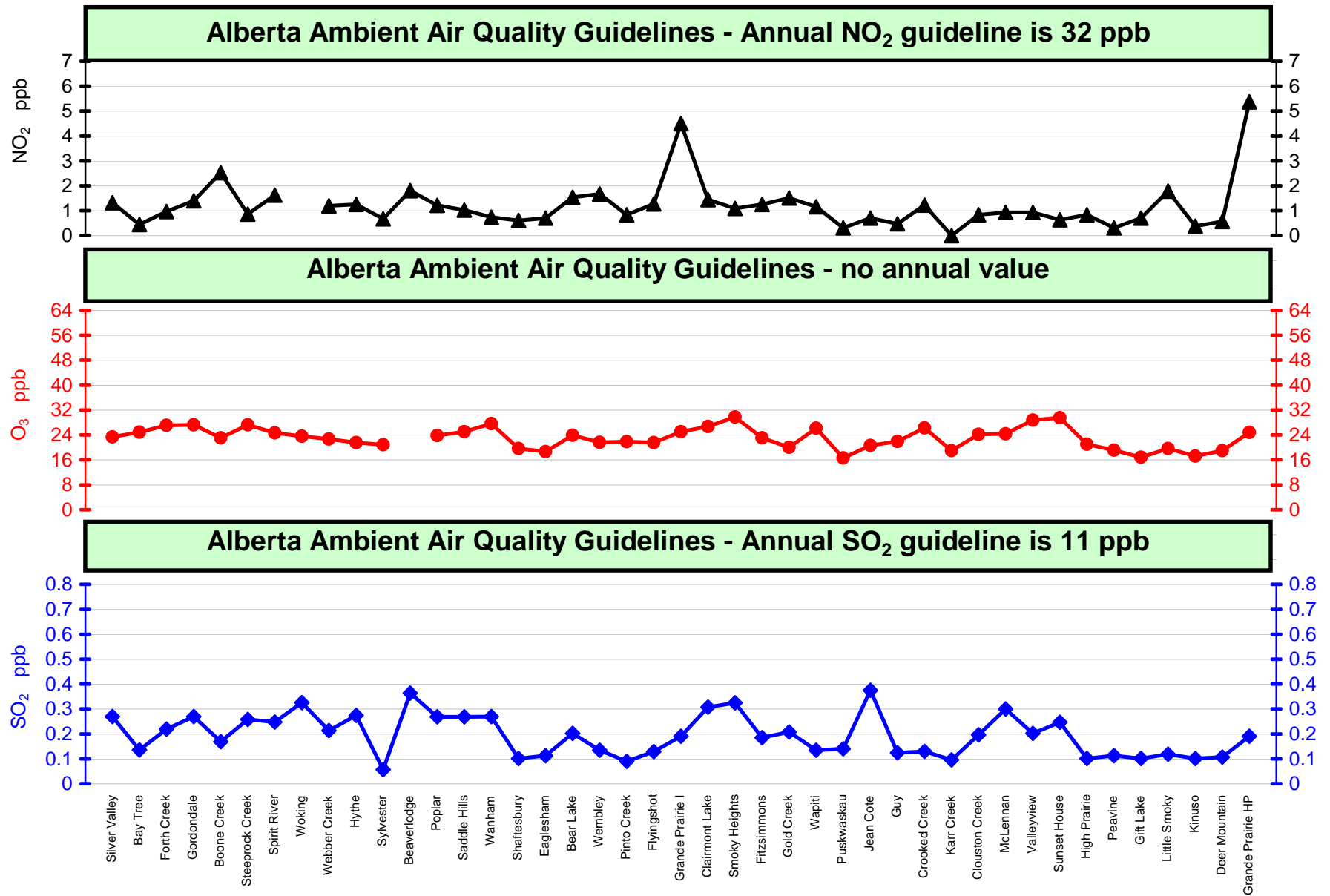


Figure 53. Overview Summary

## **August 2006 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, PM<sub>2.5</sub>**

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

**SO<sub>2</sub>, TRS, PM<sub>2.5</sub>**

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

**SO<sub>2</sub>, TRS, PM<sub>2.5</sub>**

**PASZA – Beaverlodge Station with the following calibrations:**

**SO<sub>2</sub>, NO, NO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub>, PM<sub>2.5</sub>**

**PASZA – Falher Mobile Station with the following calibrations:**

**SO<sub>2</sub>, TRS, O<sub>3</sub>,**

# Calibration Report



Parameter SO<sub>2</sub>  
 Air Monitoring Network PASZA

### Station Information

Calibration Date	August 28, 2006	Previous Calibration	July 13, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:46	End Time (MST)	13:05
Barometric Pressure	27.5 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	1,946 ng/min	Perm-tube Date	8/8/2006
Correction factor	0.934462	Perm-tube Cert #	19-25218
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	1.019149	Calculated slope	1.002876
Calculated intercept	-0.691905	Calculated intercept	-0.959281
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
SO2 zero pot	166		166	
SO2 span pot	148		138	
UV Lamp voltage	938	V	942	V
Vacuum	22.2	" Hg	22.2	" Hg
Sample Flow	425	ccm	420	ccm

### 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	2373.5	0.0	0.1	N/A
2540	2373.5	312.9	312.4	1.0017
5100	4765.8	155.9	157.2	0.9914
9000	8410.2	88.3	89.6	0.9860
zero	2373.5	0.0	0.1	As Found Zero
2540	2373.5	312.9	316.6	As Found Span
Average Correction Factor				0.9930

Calculated value of As Found Response: 321.864 ppm      Percent Change of As Found: -2.8%

	before calibration		after calibration	
Auto zero	-0.5	ppm	-0.8	ppm
Auto span	172.3	ppm	266.2	ppm

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

Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter SO2  
Air Monitoring Network PASZA

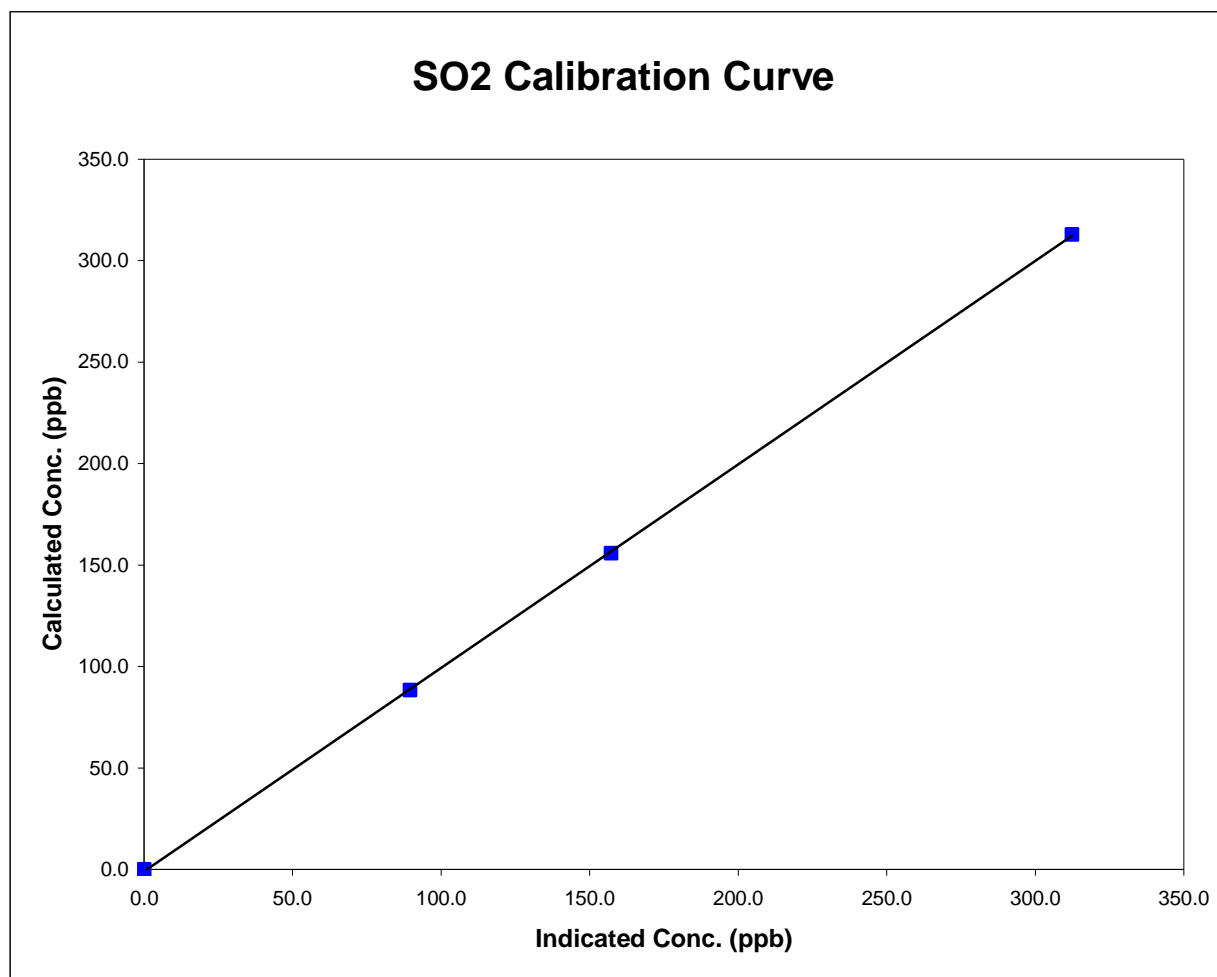


### Station Information

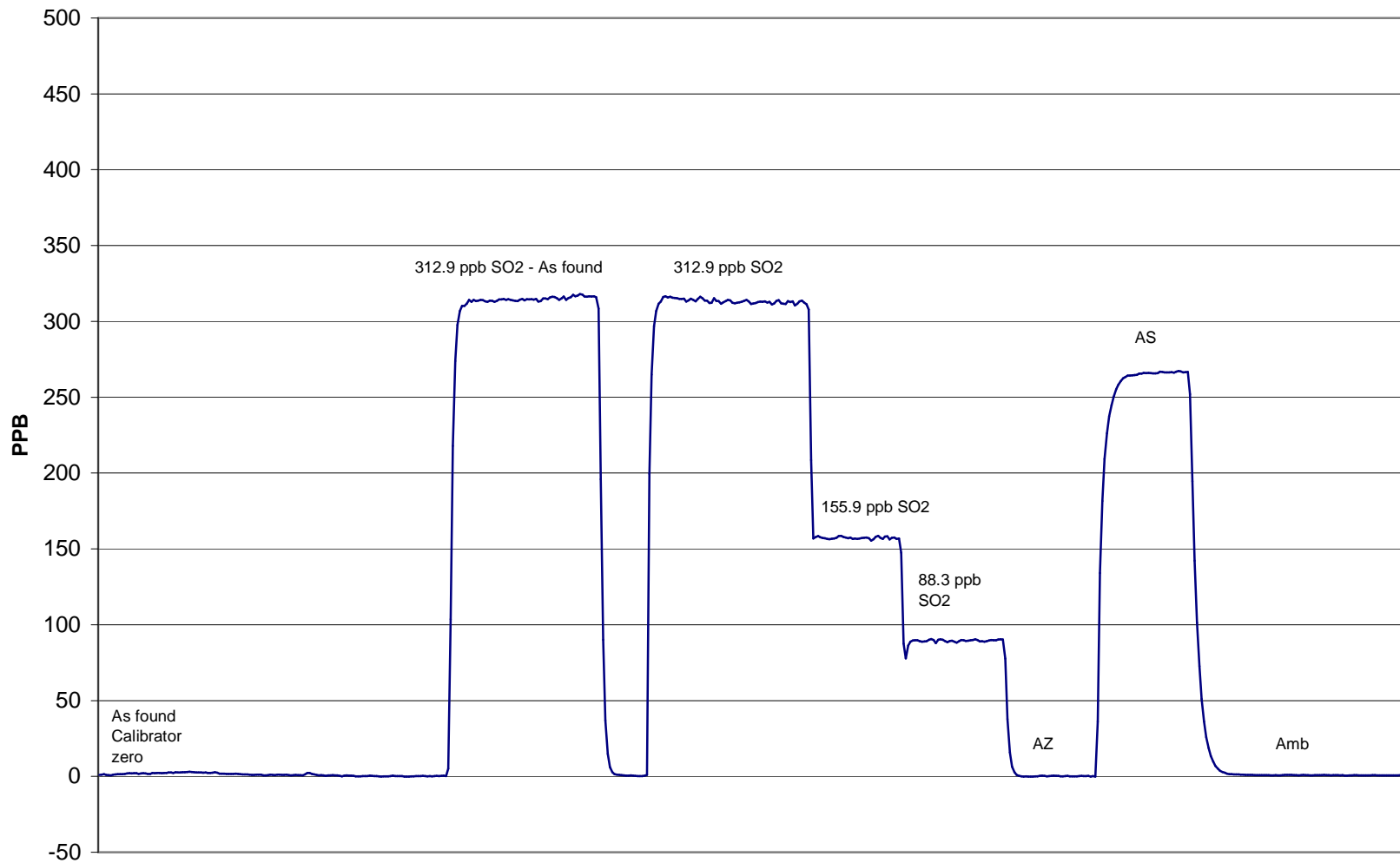
Calibration Date	August 28, 2006	Previous Calibration	July 13, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:46	End Time (MST)	13:05
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-21120-195

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
312.9	312.4	1.0017	Correlation Coefficient	0.999962
155.9	157.2	0.9914		
88.3	89.6	0.9860	Slope	1.002876
			Intercept	-0.959281



### SO2 Calibration



August 28, 2006

**Calibration Report**

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

**Station Information**

Calibration Date	<u>August 14, 2006</u>	Previous Calibration	<u>July 15, 2006</u>
Station Number	<u>1</u>	Station Location	<u>Muskoseepi Park</u>

Reason:  Routine     Installation     Removal    Other: \_\_\_\_\_

Start Time (MST)	<u>9:48</u>	End Time (MST)	<u>14:13</u>
Barometric Pressure	<u>0.922</u> Atm	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>EnviroNics 6103</u>	Serial Number	<u>2977</u>
NO Cal Gas Conc	<u>50.3</u> ppm	Cal Gas Expiry Date	<u>22-Nov-06</u>
NOx Cal Gas Conc	<u>50.5</u> ppm	Cal Gas Serial #	<u>BAL786</u>

**DACS Information**

DACS make FOCUS AP1000      DACS serial No. 45269

Parameter		NO2	NOx	NO
Before	Data Slope	1.000320	1.005654	1.003284
	Data Offset	0.670670	0.071307	0.326665
After	Data Slope	0.993430	0.994620	0.987444
	Data Offset	0.301847	0.343588	1.195965
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	8.0	ppb	8.0	mV
NOx background	8.2	ppb	8.3	mV
NO coefficient	0.807		0.807	
NOx coefficient	0.993		0.993	
Chamber Temp	49.8	Deg C	49.9	Deg C
Cooler Temp	-2.4	Deg C	-2.4	Deg C
Converter Temp	318.0	Deg C	318.0	Deg C
Vacuum	181.7	mm Hg	188.4	mm Hg

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

\_\_\_\_\_

\_\_\_\_\_

# Calibration Report

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



## Station Information

Calibration Date: August 14, 2006 Station Location: Muskosepi Park

## Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor
zero	4992	0.00	0.0	0.0	0.0	0.3	0.2	0.2	N/A	N/A
1	4992	39.93	400.7	399.1	1.6	402.9	403.9	404.9	0.9947	0.9883
2	4992	19.91	200.6	199.8	0.8	201.1	200.0	1.1	0.9975	0.9992
3	4992	10.00	101.0	100.6	0.4	100.4	99.5	0.8	1.0054	1.0103
AFZ	4992	0.00	0.0	0.0	0.0	0.3	0.2	0.2	0.0000	0.0000
AFS	4992	39.93	400.7	399.1	1.6	402.9	400.3	2.4	0.9947	0.9972
Average Correction Factor									0.9992	0.9993

As Found Concentrations: NO<sub>x</sub>= 402.6 NO= 400.4 As Found Percent Change NO<sub>x</sub>= 0.5% NO= 0.3%

## GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

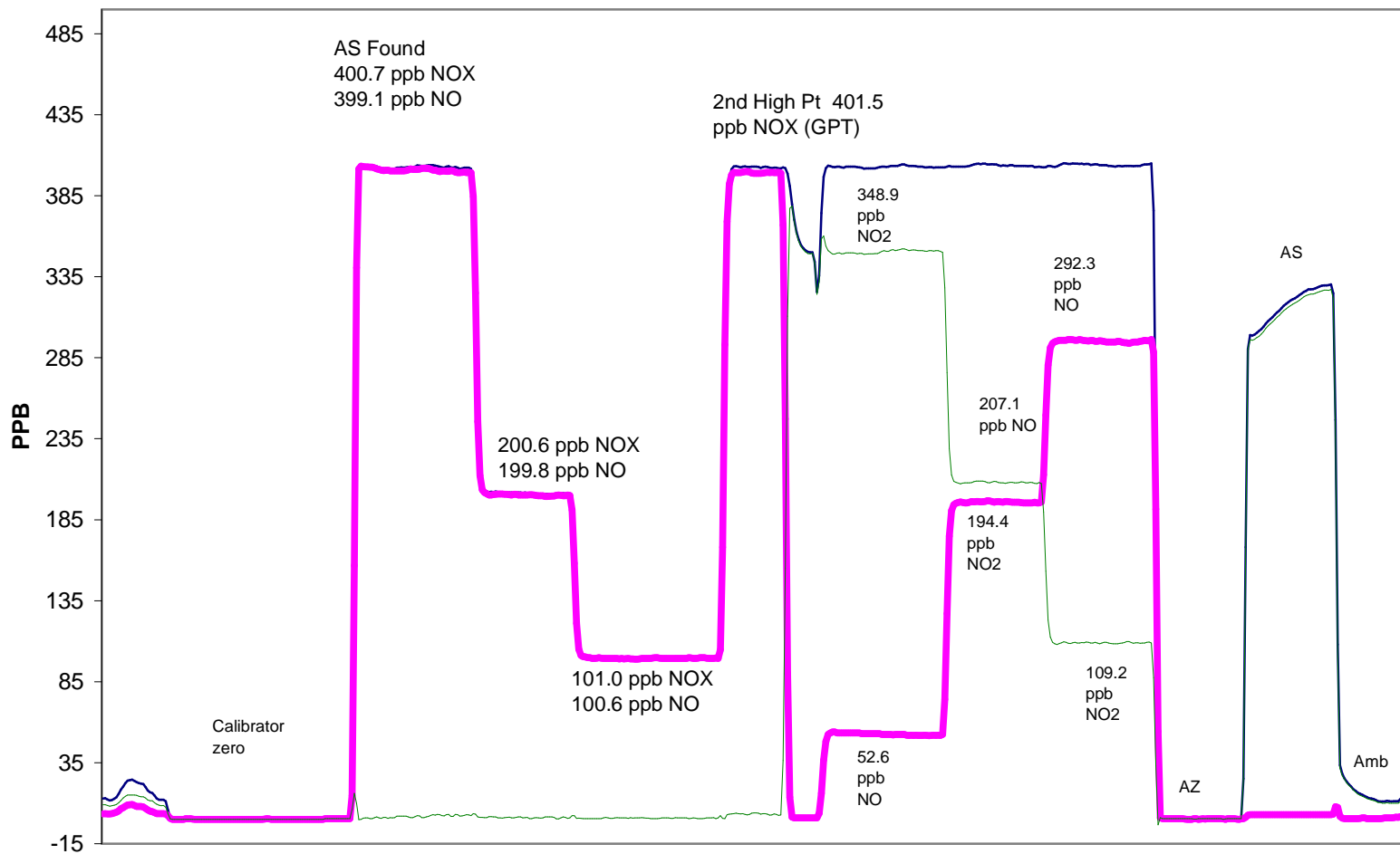
O <sub>3</sub> Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	401.5	395.4	6.1	402.6	399.2	3.3	0.9973	0.9904	N/A	N/A
350	401.5	52.6	348.9	403.1	52.0	351.3	0.9961	1.0104	0.9933	100.7%
200	401.5	194.4	207.1	403.4	195.7	207.9	0.9954	0.9936	0.9962	100.4%
100	401.5	292.3	109.2	403.5	294.8	109.0	0.9950	0.9915	1.0019	99.8%
Average Correction Factor							0.9955	0.9985	0.9971	100.3%

## AIC Data

Parameter	Previous calibration				Current calibration			
	NO <sub>x</sub>	NO <sub>2</sub>	NO		NO <sub>x</sub>	NO <sub>2</sub>	NO	
Auto zero	1.0	1.3	1.0	ppb	1.0	1.3	1.1	ppb
Auto span	344.2	340.0	3.4	ppb	325.7	322.2	4.1	ppb

Calibration Performed By: Dawn Ewan

### NOx Calibration



August 14, 2006



## Calibration Summary

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

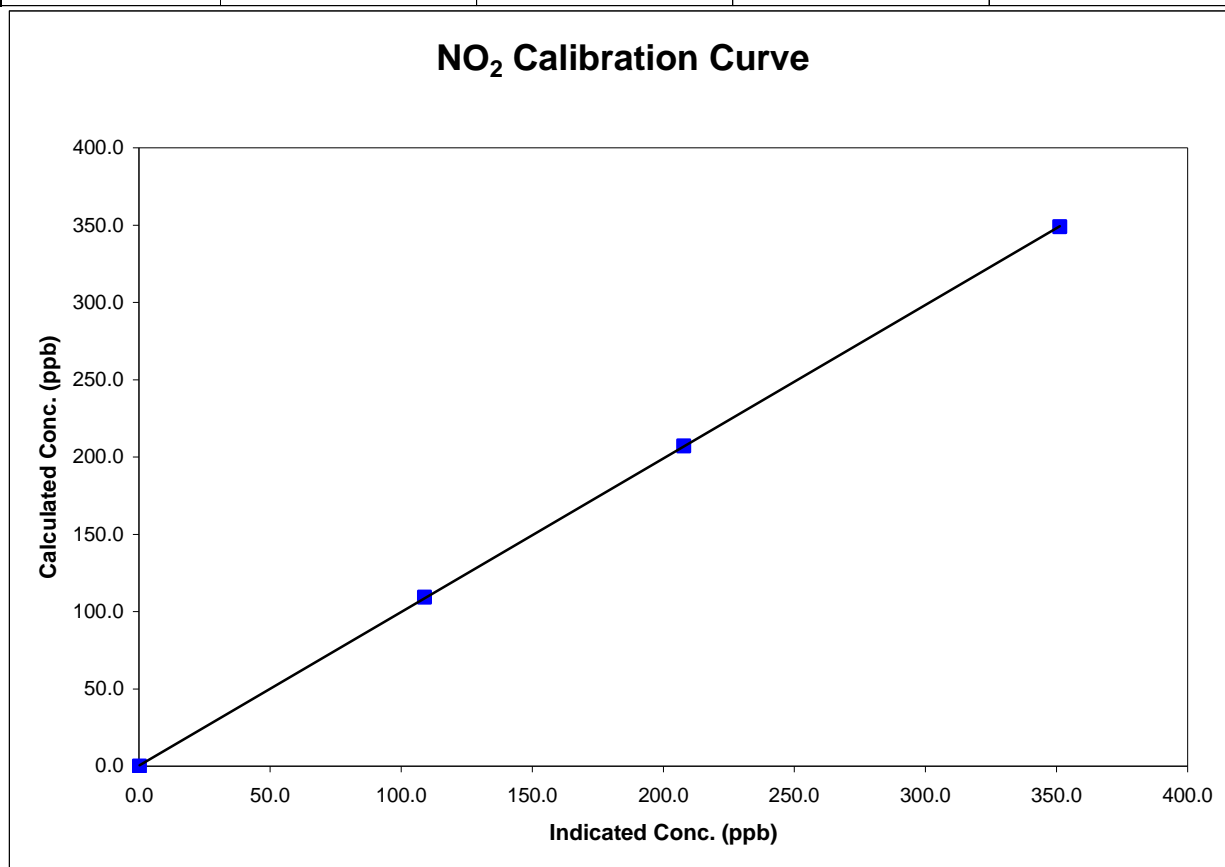


### Station Information

Calibration Date	August 14, 2006	Previous Calibration	July 15, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:48	End Time (MST)	14:13
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	0.2	0.0000	Correlation Coefficient	0.999986
348.9	351.3	0.9933		
207.1	207.9	0.9962	Slope	0.993430
109.2	109.0	1.0019		
			Intercept	0.301847



## Calibration Summary

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

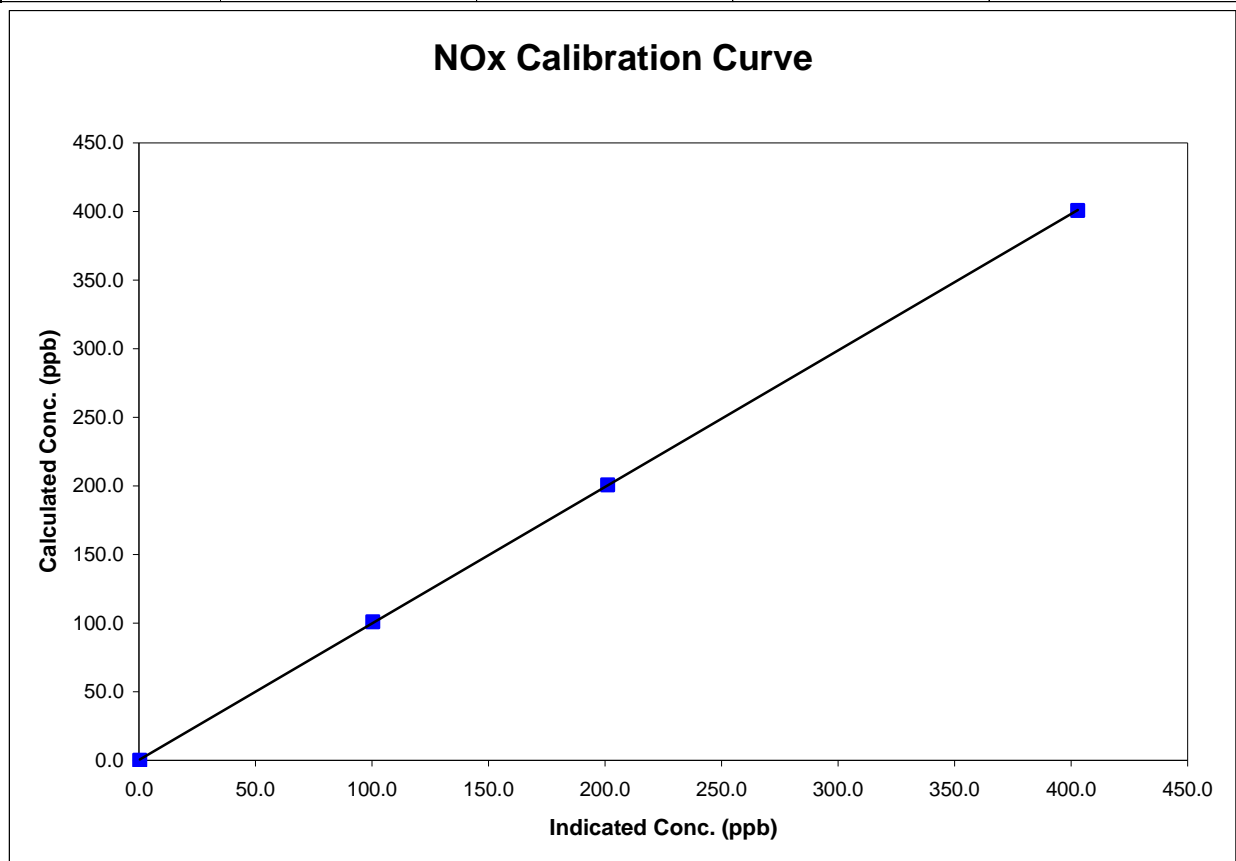


### Station Information

Calibration Date	August 14, 2006	Previous Calibration	July 15, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:48	End Time (MST)	14:13
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	0.0000	Correlation Coefficient	0.999987
400.7	402.9	0.9947		
200.6	201.1	0.9975	Slope	0.994620
101.0	100.4	1.0054		
			Intercept	0.343588



## Calibration Summary

Parameter NO  
 Air Monitoring Network PASZA

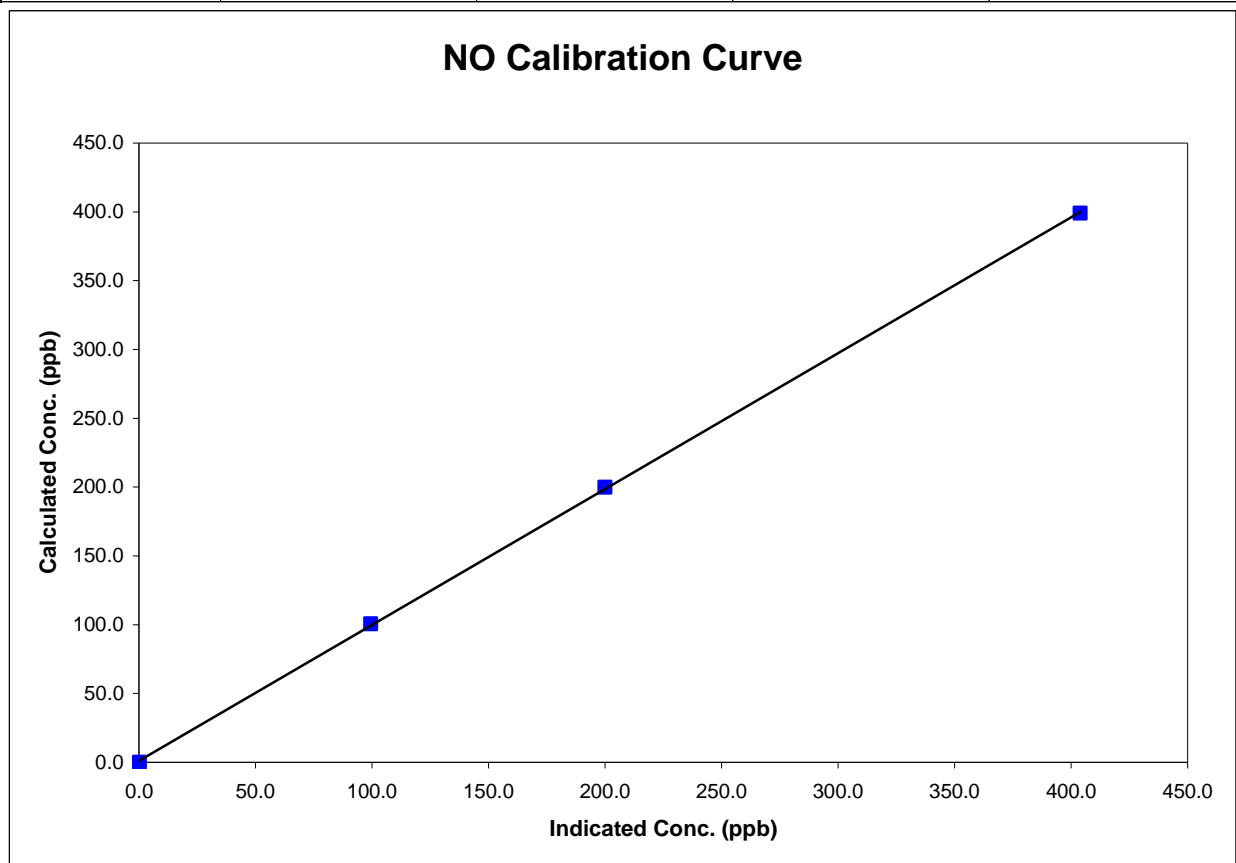


### Station Information

Calibration Date	August 14, 2006	Previous Calibration	July 15, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:48	End Time (MST)	14:13
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	0.2	N/A	Correlation Coefficient	0.999941
399.1	403.9	0.9883		
199.8	200.0	0.9992	Slope	0.987444
100.6	99.5	1.0103		
			Intercept	1.195965



**Calibration Report**Parameter \_\_\_\_\_ **03** \_\_\_\_\_Air Monitoring Network \_\_\_\_\_ **PASZA** \_\_\_\_\_**Station Information**

Calibration Date	August 24, 2006	Previous Calibration	July 15, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	10:00	End Time (MST)	14:32
Barometric Pressure	0.924 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	2977
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	0.991813	Calculated slope	0.999708
Calculated intercept	2.781152	Calculated intercept	0.100182
Analyzer make	API Model 400	Analyzer serial #	383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.6	ppb	-0.48	ppb
slope	1.012		1.085	
Lamp measure	3843	mV	3839	mV
Lamp Reference	3847	mV	3838	mV
Pressure	28	inches Hg	27.8	inches Hg
Sample Flow	684	ccm	686	ccm
ANA Lamp temp	52	Deg C	52	Deg C

**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	0.7	N/A
4992	0.00	348.9	349.8	0.9975
4992	0.00	207.1	205.7	1.0067
4992	0.00	109.2	108.8	1.0034
4992	0.00	0.0	1.2	As found zero
4992	0.00	348.9	337.2	As found span
Average Correction Factor				1.0025

Calculated value of As Found Response: 335.9 ppm      Percent Change of As Found: -3.7%

	before calibration		after calibration	
Auto zero	2.6	ppb	0.6	ppb
Auto span	203.9	ppb	204.3	ppb

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

Calibration Performed By:                     Dawn Ewan

## Calibration Summary

Parameter           O3            
 Air Monitoring Network                           PASZA                          

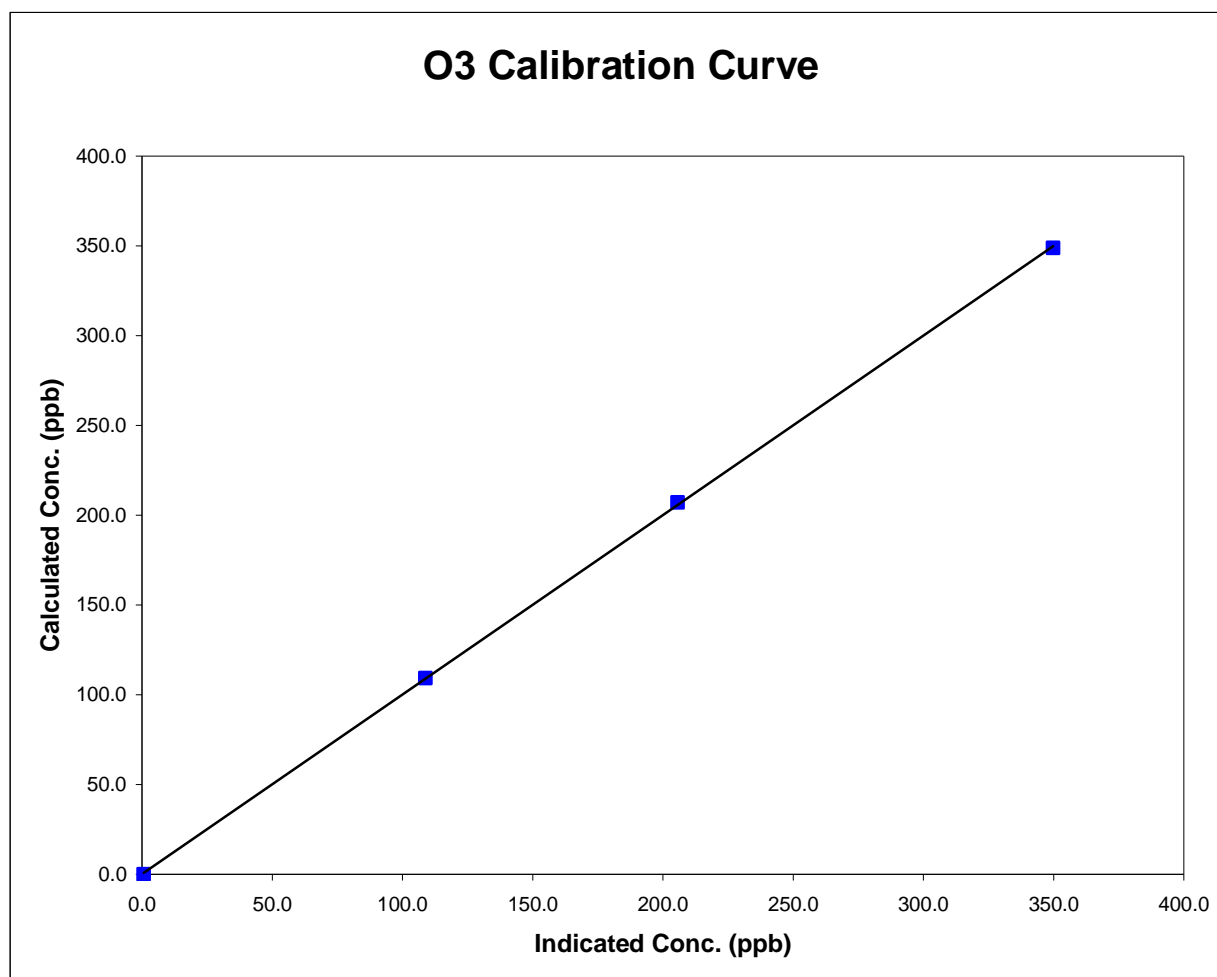


### Station Information

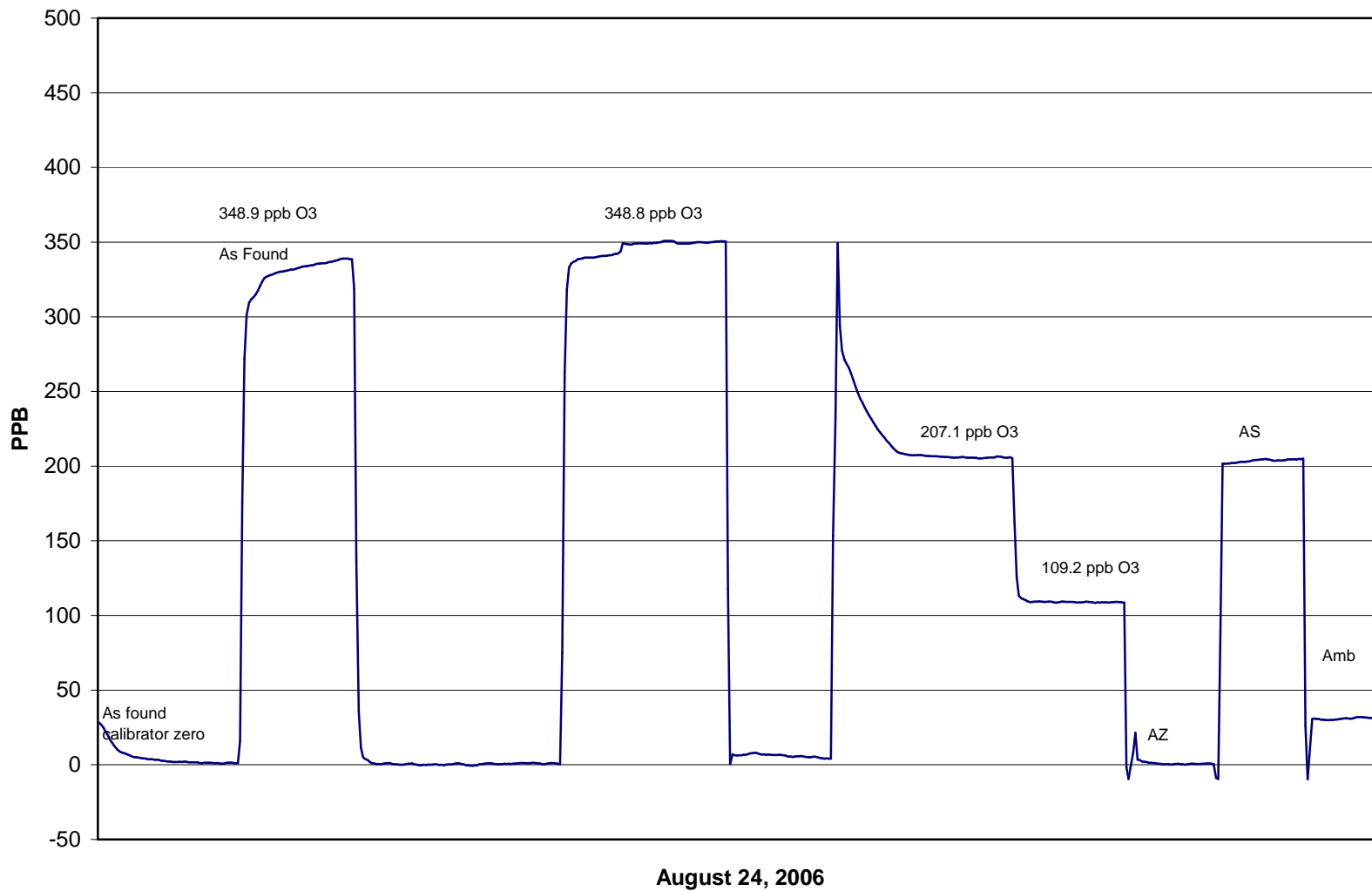
Calibration Date	August 24, 2006	Previous Calibration	July 15, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:00	End Time (MST)	14:32
Analyzer make/model	API Model 400	Analyzer serial #	383

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	NA		
348.9	349.8	0.9975	Correlation Coefficient	0.999951
207.1	205.7	1.0067		
109.2	108.8	1.0034	Slope	0.999708
			Intercept	0.100182



### O3 Calibration



**Calibration Report**Parameter COAir Monitoring Network PASZA**Station Information**

Calibration Date	August 8, 2006	Previous Calibration	July 4, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:51	End Time (MST)	13:19
Barometric Pressure	0.923 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6103	Serial Number	2977
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.000887	Calculated slope	1.005144
Calculated intercept	-0.036492	Calculated intercept	0.017192
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	1.042		1.042	
CO zero setting	6.106		6.363	
Sample pressure	681.9	mm Hg	686.2	mm Hg
Sample Flow	1.069	LPM	1.074	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	0.03	N/A
4994	39.94	23.80	23.72	1.0034
4994	19.91	11.91	11.70	1.0182
4994	9.50	5.70	5.68	1.0026
4994	0.00	0.00	0.28	As Found Zero
4994	39.94	23.80	24.36	As Found Span
Average Correction Factor				1.0081

Calculated value of As Found Response: 24.065 ppm Percent Change of As Found: -1.1%

	before calibration		after calibration	
Auto zero	0.08	ppm	0.08	ppm
Auto span	20.90	ppm	20.81	ppm

Notes: Adjusted zero.Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter CO  
Air Monitoring Network PASZA

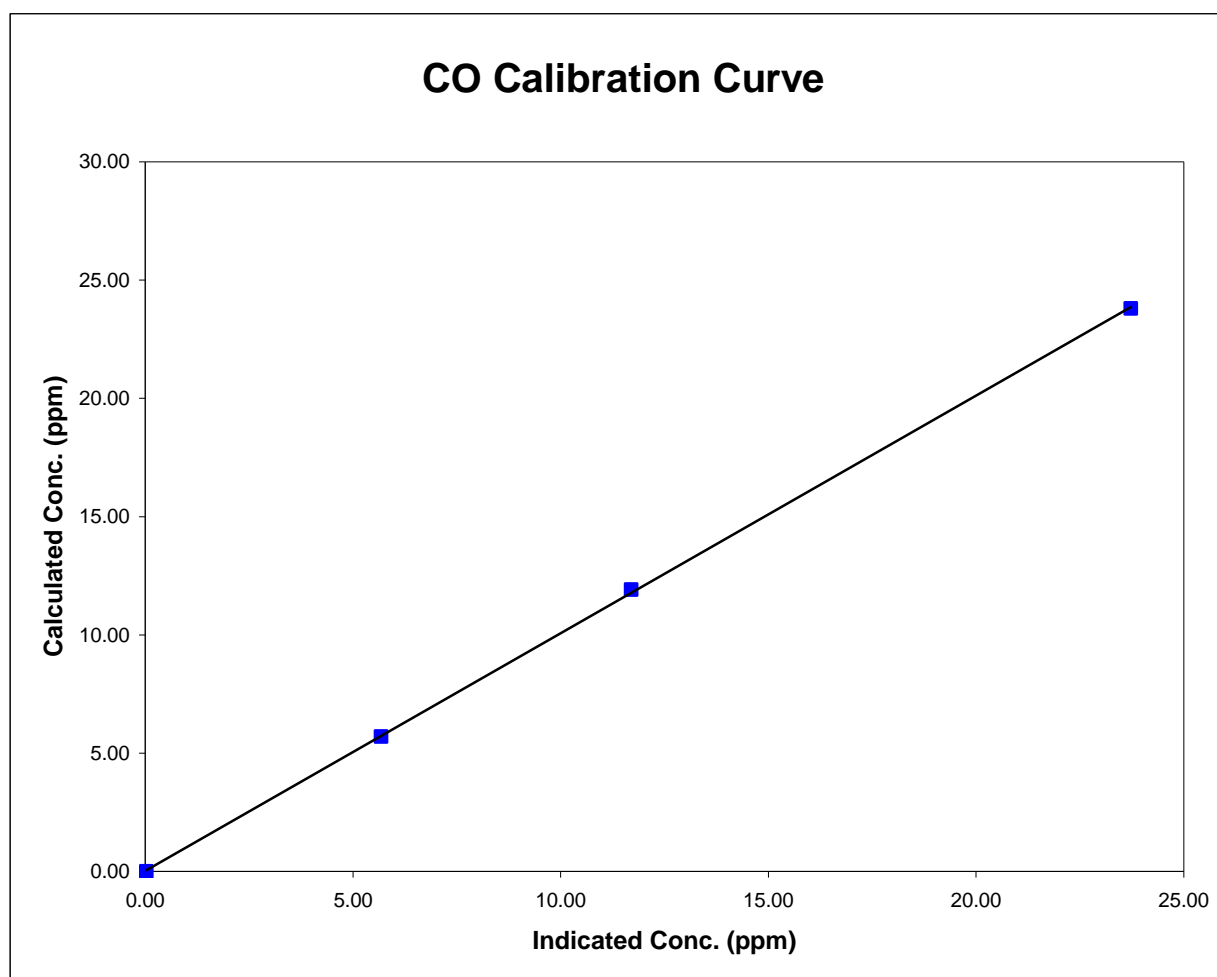


### Station Information

Calibration Date	August 8, 2006	Previous Calibration	July 4, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:51	End Time (MST)	13:19
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

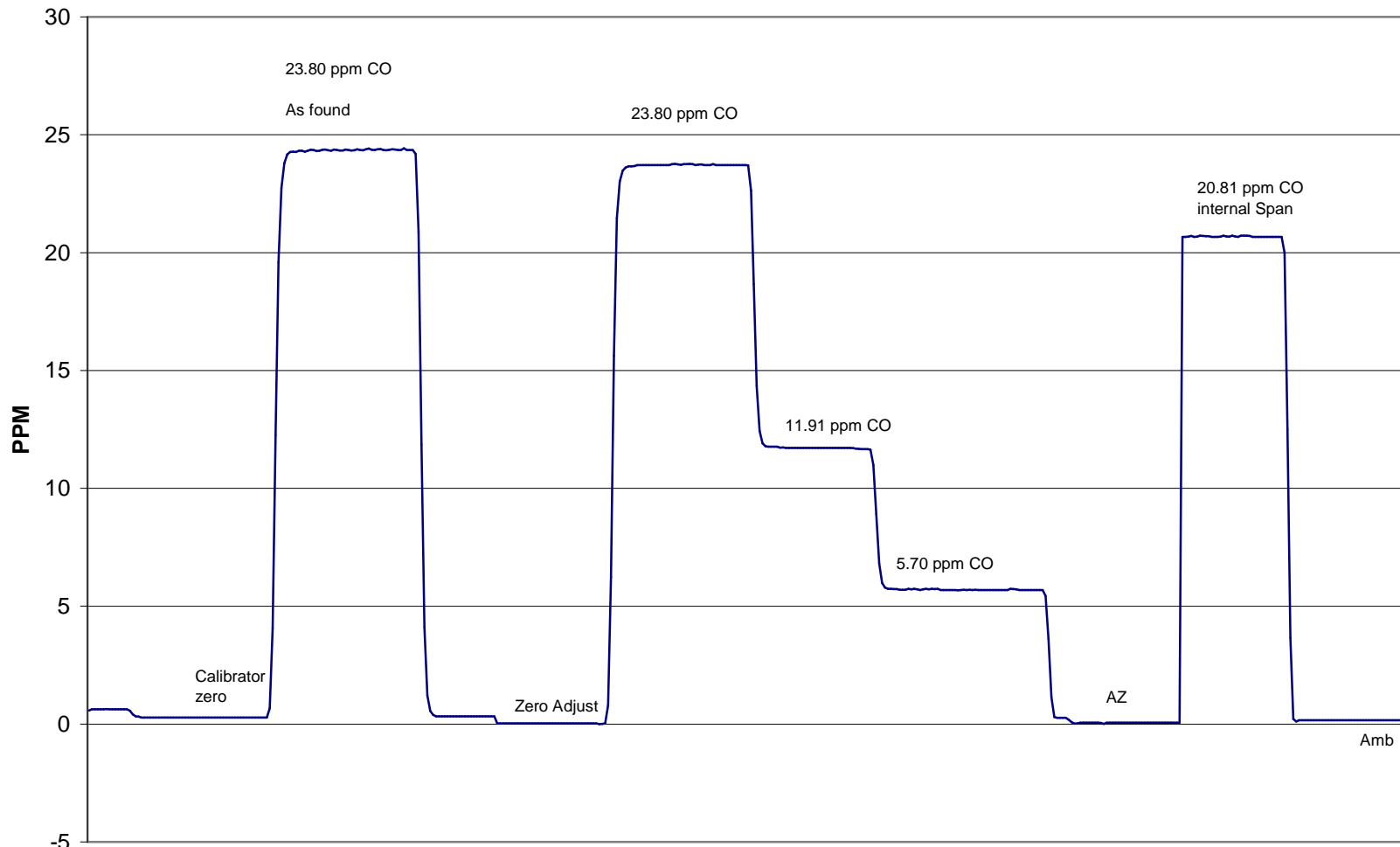
### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.028	N/A		
23.802	23.723	1.0034	Correlation Coefficient	0.999920
11.913	11.700	1.0182		
5.696	5.681	1.0026	Slope	1.005144
			Intercept	0.017192





### CO Calibration



August 8, 2006

# Calibration Report

Parameter THCAir Monitoring Network PASZA

## Station Information

Calibration Date	August 8, 2006	Previous Calibration	July 10, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:34	End Time (MST)	14:30
Barometric Pressure	0.923 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6103	Serial Number	2977
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	1.000455	Calculated slope	1.001337
Calculated intercept	0.035983	Calculated intercept	-0.026394
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.1	psi	6.1	psi
THC span counts	6909	capture	6909	capture
THC zero counts	1268	capture	1268	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	0.07	N/A
4992	64.92	19.54	19.58	0.9983
4992	34.95	10.58	10.54	1.0043
4992	9.92	3.02	3.02	0.9982
4992	0.00	0.00	0.07	As Found Zero
4992	64.92	19.54	19.58	As Found Span
Average Correction Factor				1.0003

Calculated value of As Found Response: 19.553 ppm      Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	0.04	ppm	0.04	ppm
Auto span	22.78	ppm	22.82	ppm

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

Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter THC  
 Air Monitoring Network PASZA

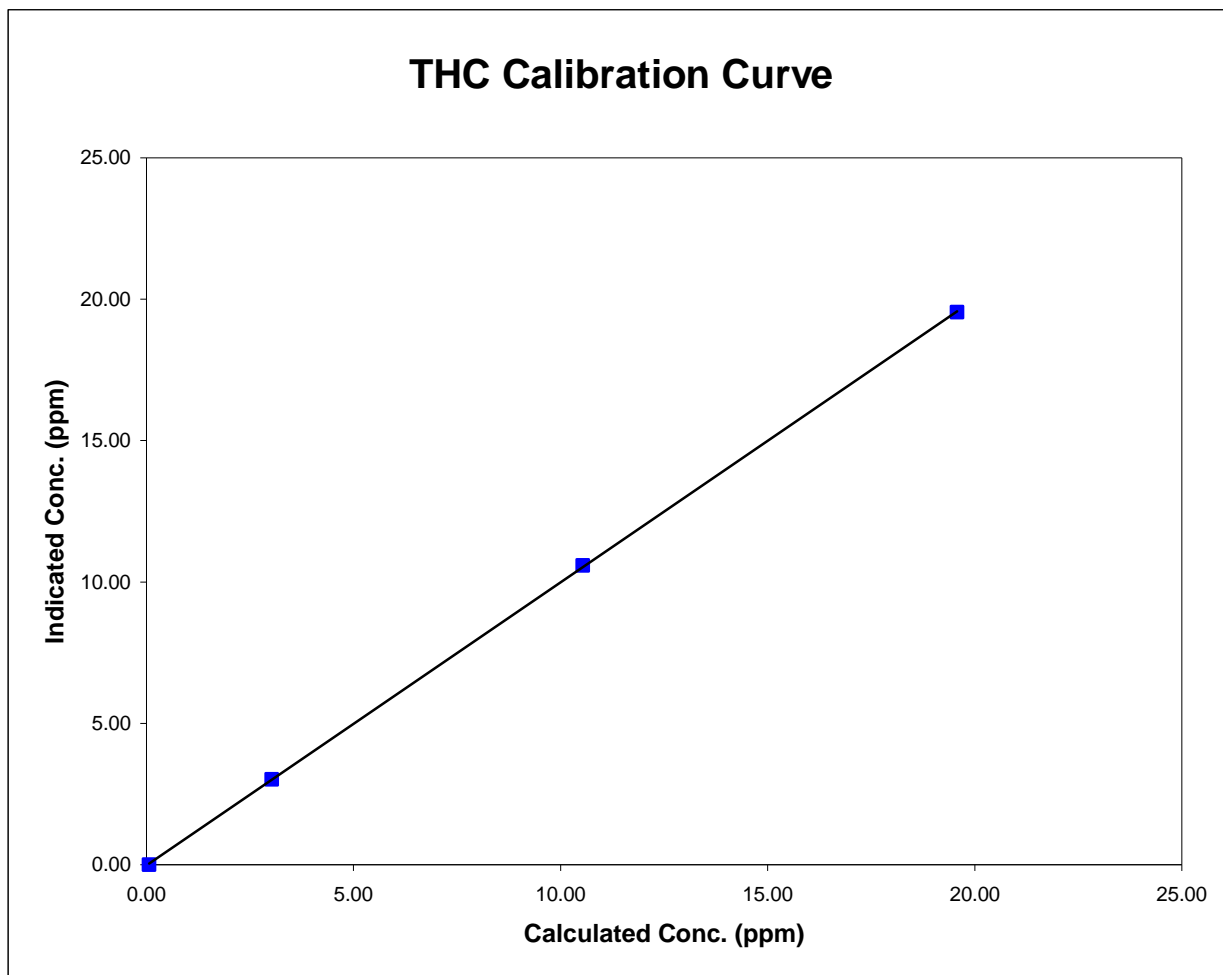


### Station Information

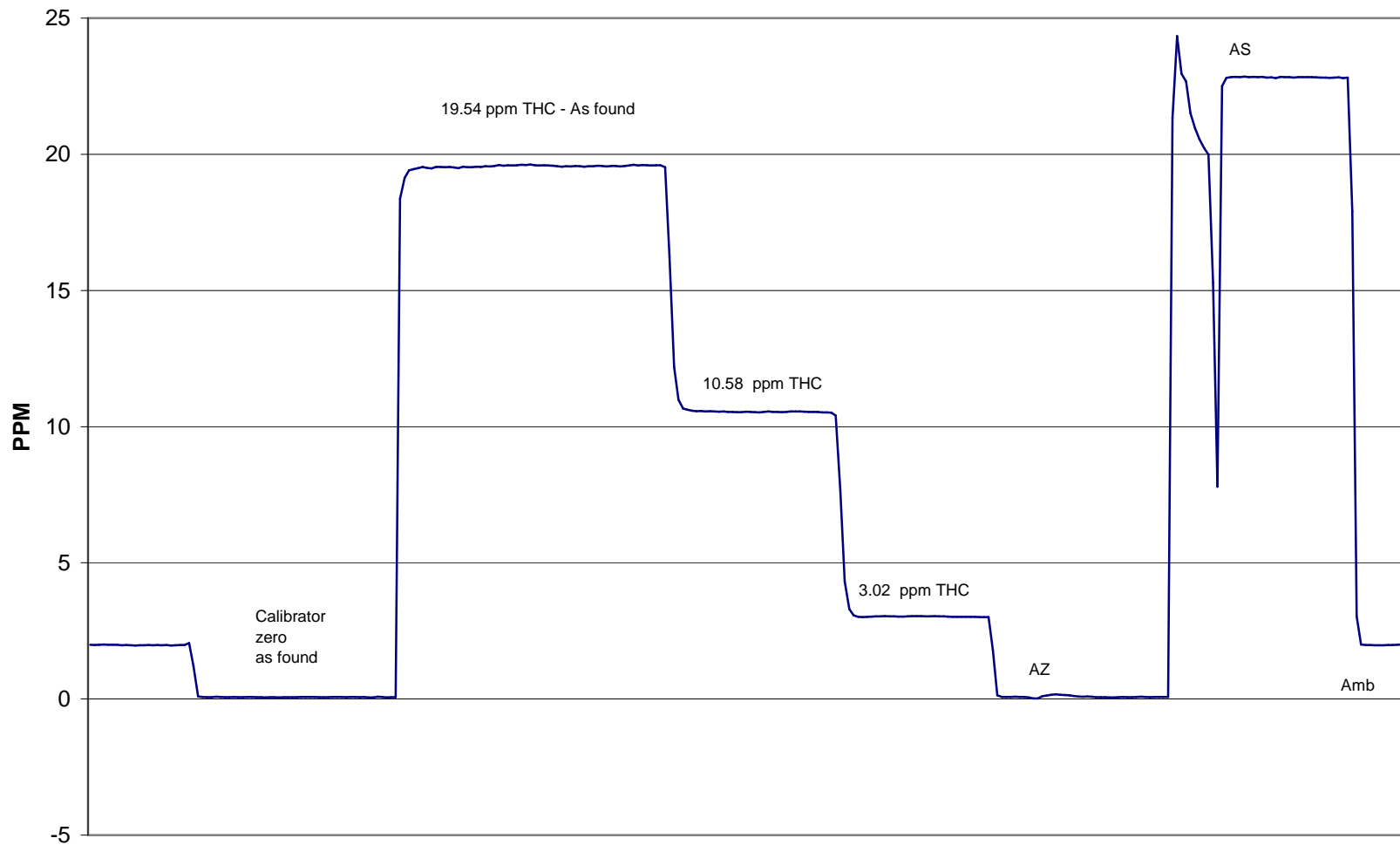
Calibration Date	August 8, 2006	Previous Calibration	July 10, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:34	End Time (MST)	14:30
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.067	N/A		
19.542	19.575	0.9983	Correlation Coefficient	0.999972
10.583	10.538	1.0043		
3.019	3.024	0.9982	Slope	1.001337
			Intercept	-0.026394



### THC Calibration



August 8, 2006



**Calibration Summary**

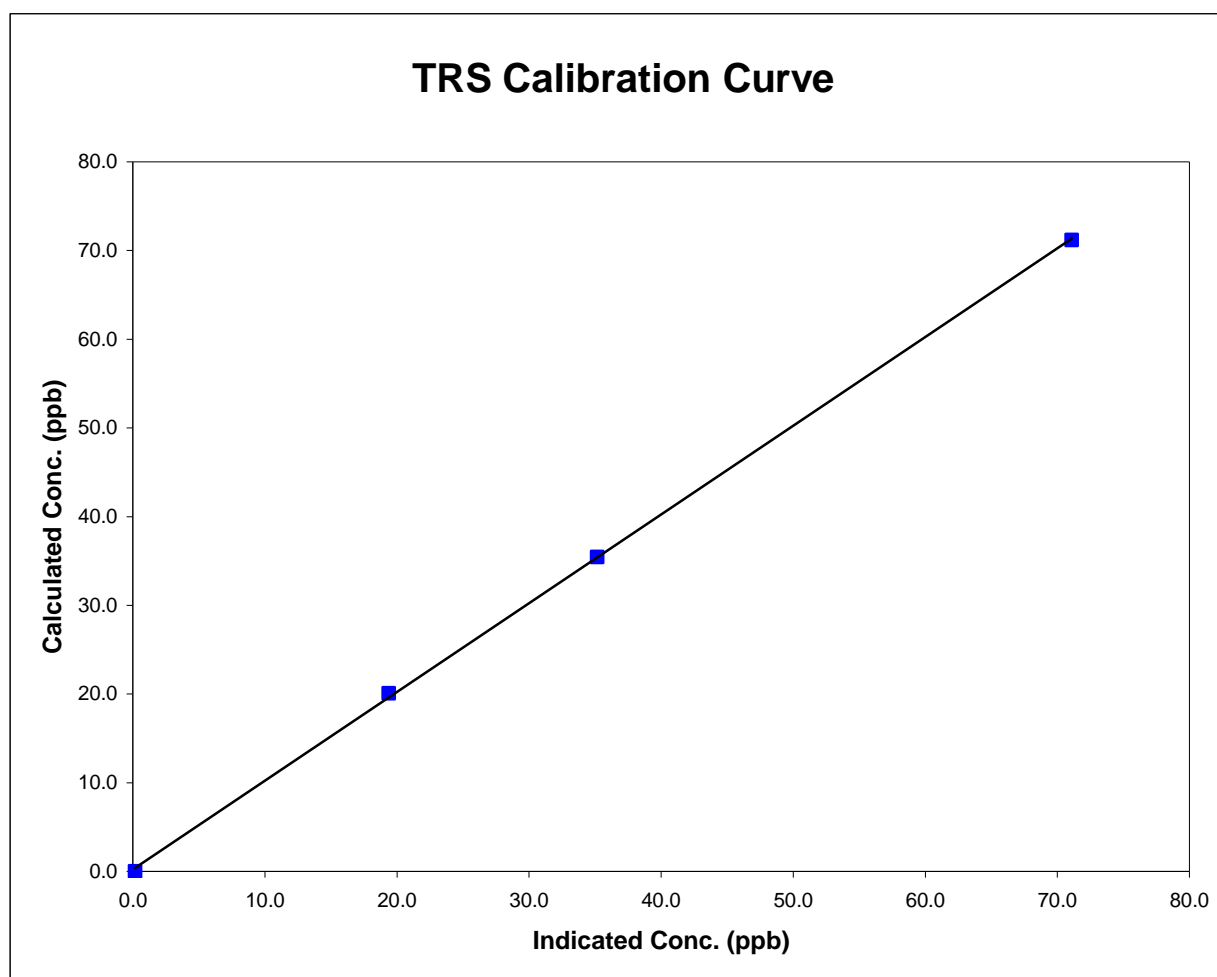
Parameter                                                                                                                                
 Air Monitoring Network                                                                                                                              

**Station Information**

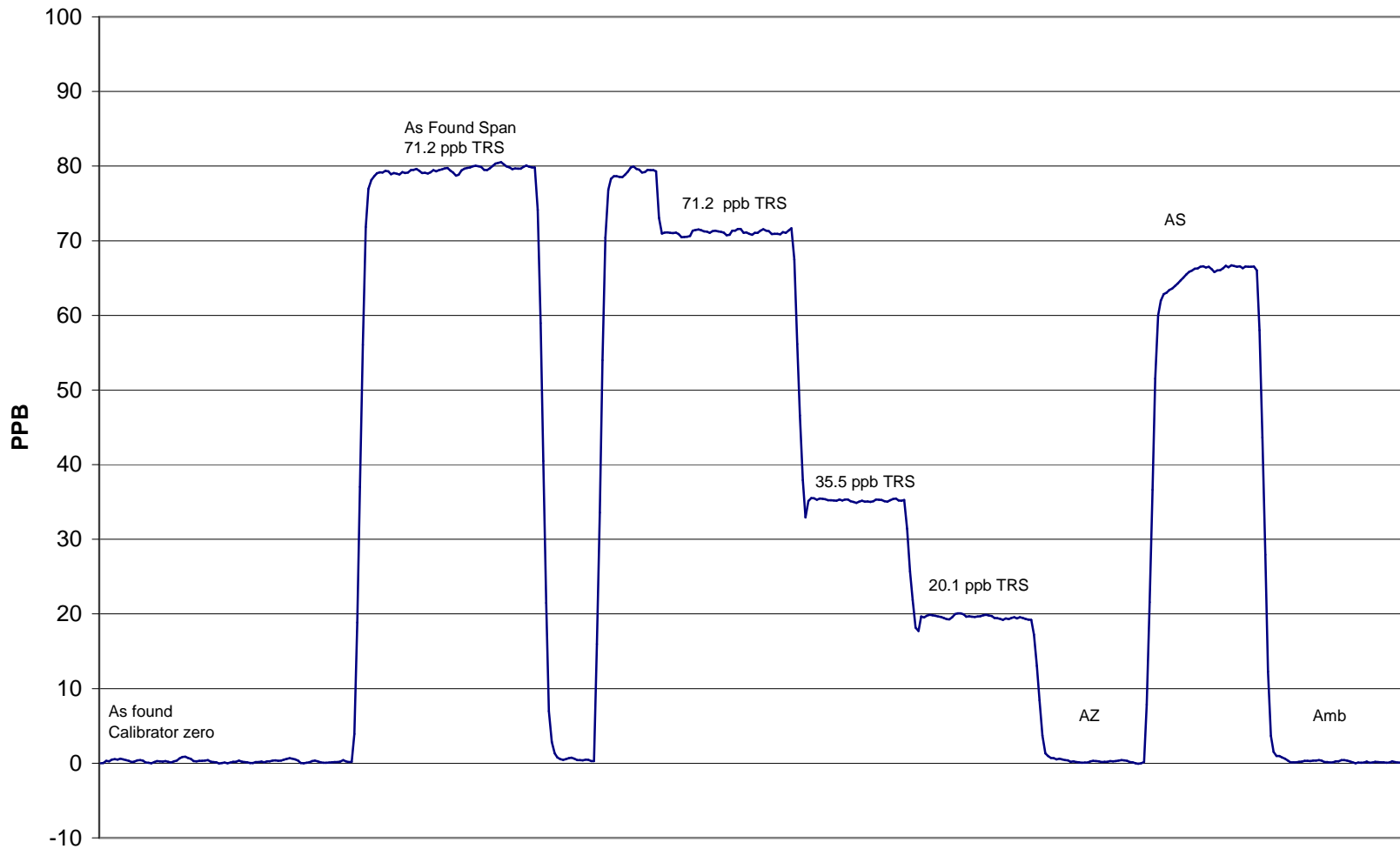
Calibration Date	<u>                    </u> August 28, 2006	Previous Calibration	<u>                    </u> July 13, 2006
Station Number	<u>                    </u> 1	Station Location	<u>                    </u> Muskoseepi Park
Start Time (MST)	<u>                    </u> 9:46	End Time (MST)	<u>                    </u> 13:05
Analyzer make/model	<u>                    </u> TEI Model 43C	Analyzer serial #	<u>                    </u> 31990000000491

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
71.2	71.1	1.0012	Correlation Coefficient	0.999846
35.5	35.2	1.0082		
20.1	19.4	1.0368	Slope	1.000502
			Intercept	0.213490



### TRS Calibration



August 28, 2006

**Calibration Report**Parameter PM2.5Air Monitoring Network PASZA**Station Information**

Calibration Date	August 28, 2006	Previous Calibration	July 15, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	11:46	End Time (MST)	16:00
Barometric Pressure	0.919 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	13.68	SLPM
Filter Load	30	%	15	%
Ko Factor	13020		13020	
Temperature	23.10	Deg C	20.85	Deg C
Pressure	0.919	ATM	0.923	ATM

**Calibration Data**

Parameter	Set Point	As Found	Tolerance	TEOM Reading
zero flow - main	0.0	0.01		0.01
zero flow - auxillary	0.0	0.04		0.04
flow recovery - main	45 - 60 Seconds	28.00	45 - 60 Seconds	28.00
flow recovery - aux	46 - 60 Seconds	43.00	46 - 60 Seconds	43.00
Temperature	measured	25.6	+/- 1.0 Deg C	25.9
Pressure	measured	0.918	+/- 1.5% $\Delta$ ATM	0.918
Total Flow	16.67 SLPM	16.80		17.08
Main Flow	13.67 SLPM	14.14	+/- 1.0 SLPM	14.39
Auxillary Flow	3.0 SLPM	3.068	+/- 0.2 SLPM	3.098
Leak Check - main	0.0	0.07	<0.15 SLPM	0.07
Leak Check - aux	0.0	0.04	<0.15 SLPM	0.01
Ko Factor (w/o filter)	measured		filter weight (g)	0.11423
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes:

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Calibration Performed By: Dawn Ewan



**Calibration Report**

Parameter Wind Speed & Direction  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		Other:	<input type="checkbox"/> Yearly Calibration
Start Time (MST)	10:46	End Time (MST)	15:28
Barometric Pressure	0.917 ATM	Ambient Temperature	21 Deg C

**DACS Information**

DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	3 & 4

**Sensor Information****Wind Direction Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)
0.0	2.2	N/A
90.0	88.0	1.0231
180.0	184.7	0.9747
270.0	273.9	0.9859
NA	NA	

Sensor Make	Met One 020C	Sensor S/N	C4769
	<u>Before</u>		<u>After</u>
Calculated slope	NA	Calculated slope	0.986715
Calculated intercept	NA	Calculated intercept	-0.361085

**Wind Speed Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (km/hr)	Indicated Value (km/hr)	Correction factor (Cc/lc)
0.960	1.1	N/A
20.162	18.1	1.1129
39.359	35.3	1.1155
77.752	82.4	0.9438

Sensor Make	Met One 010C	Sensor S/N	C4492
	<u>Before</u>		<u>After</u>
Calculated slope	NA	Calculated slope	0.933116
Calculated intercept	NA	Calculated intercept	2.619237

Notes:

Calibration Performed By: Lee Reyes, Lenin Flores

## Calibration Summary

Parameter Wind Speed

Air Monitoring Network PASZA

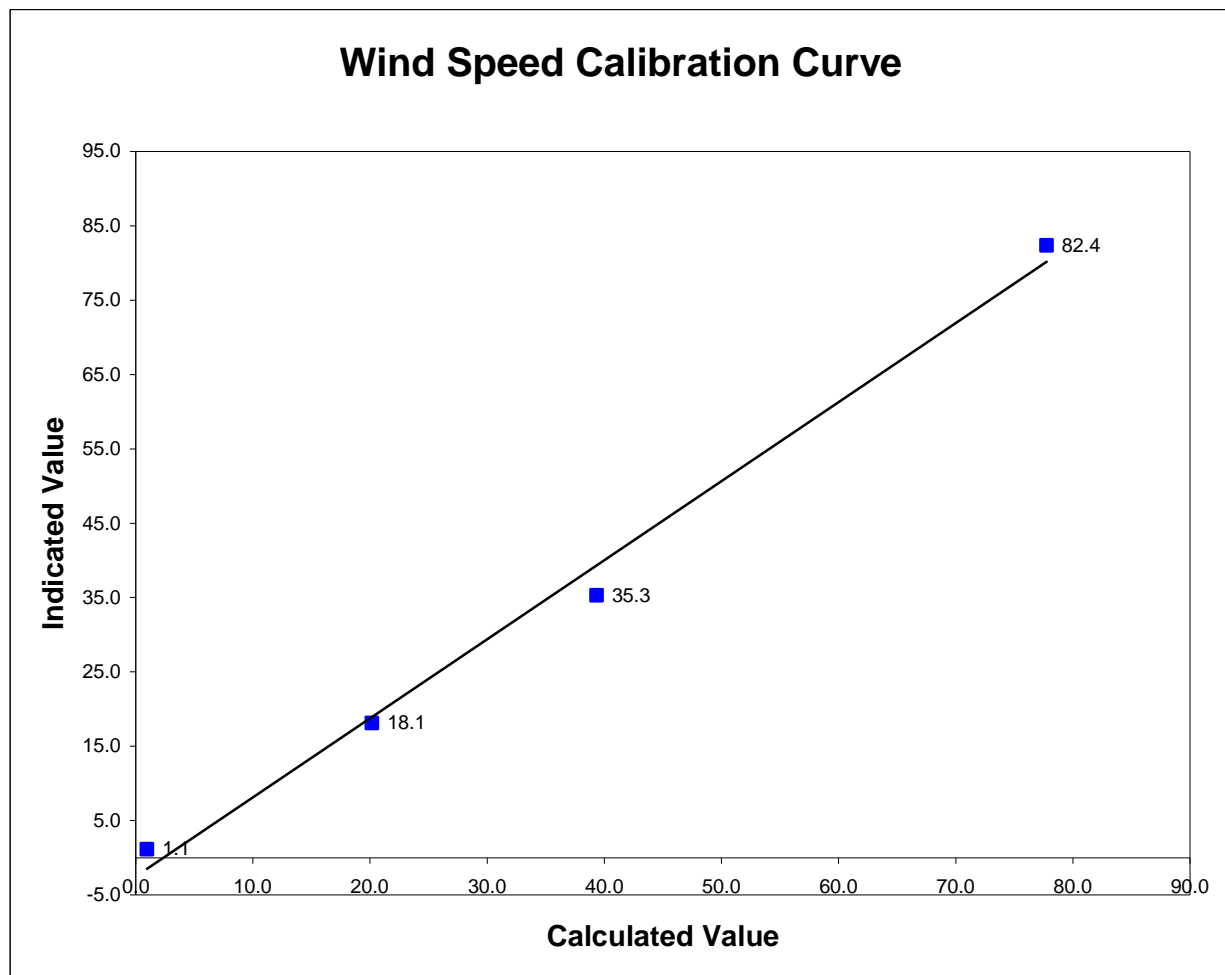


### Station Information

Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:46	End Time (MST)	15:28
Analyzer make/model	0	Analyzer serial #	0

### Calibration Data

Actual Value (km/hr)	Indicated Value (km/hr)	Correction factor (Cc/lc)	Statistical Evaluation	
1.0	1.1	N/A		
20.2	18.1	1.1129	Correlation Coefficient	0.992135
39.4	35.3	1.1155		
77.8	82.4	0.9438	Slope	0.933116
			Intercept	2.619237



# Calibration Summary



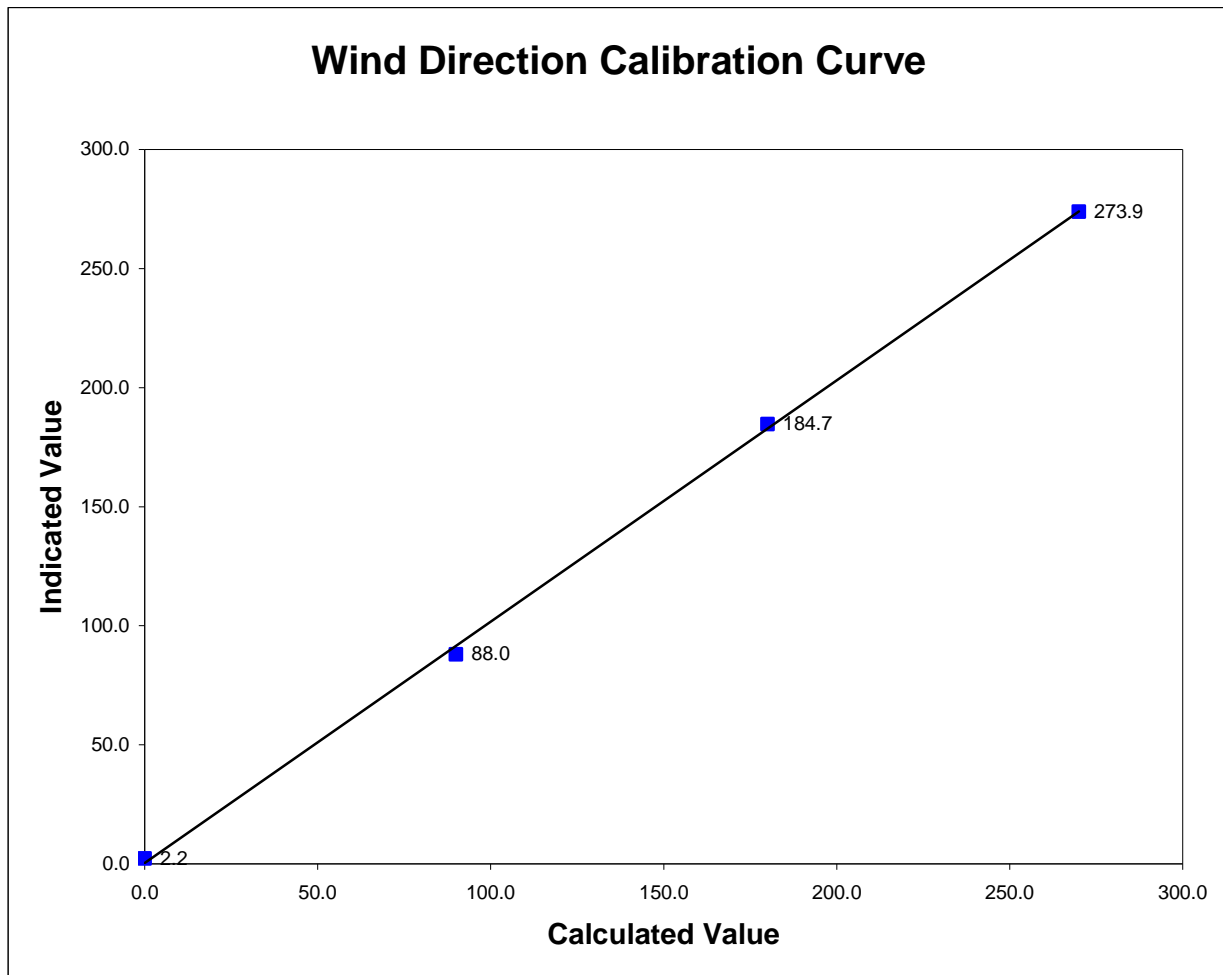
Parameter Wind Direction  
 Air Monitoring Network PASZA

### Station Information

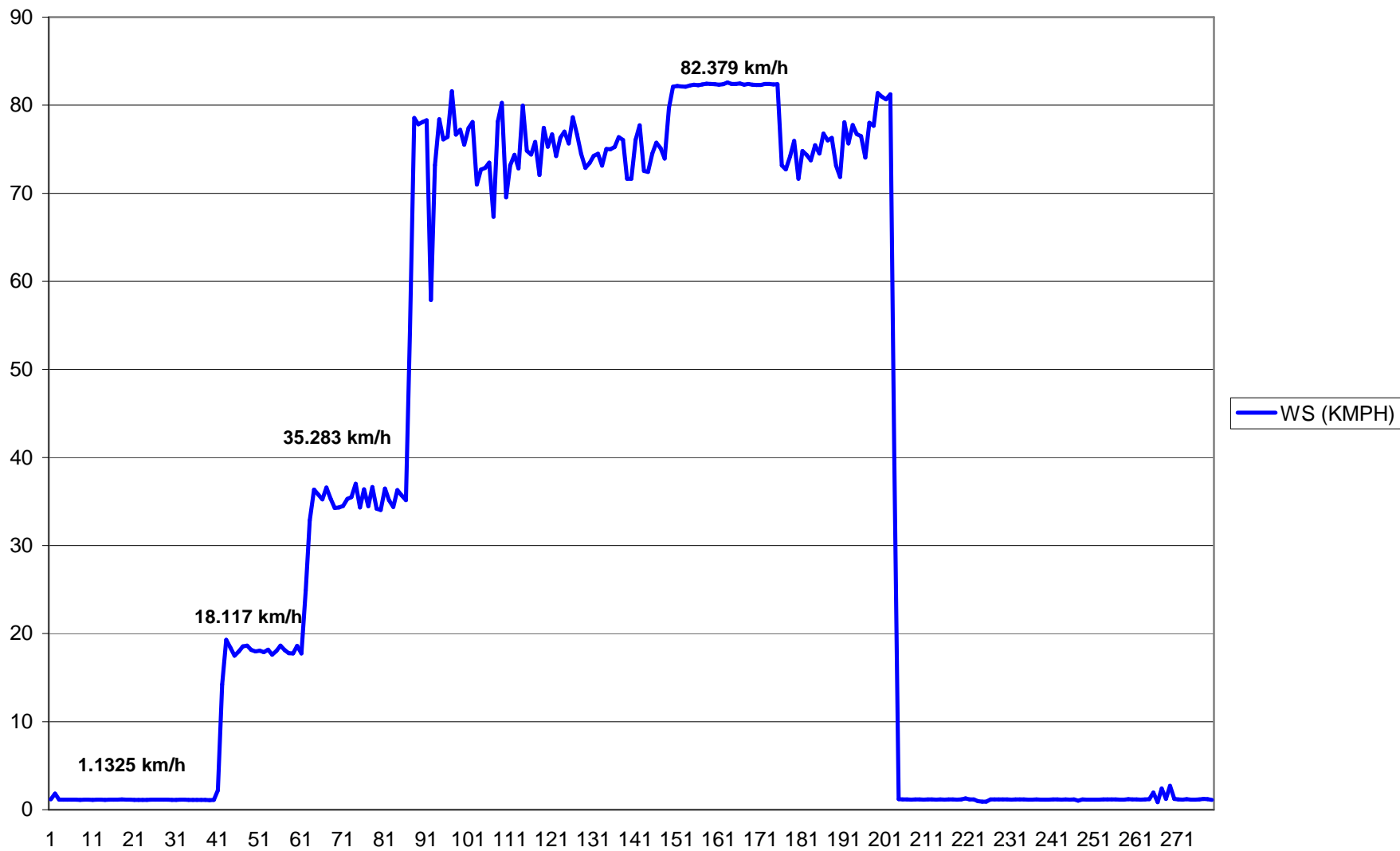
Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:46	End Time (MST)	15:28
Analyzer make/model	0	Analyzer serial #	0

### Calibration Data

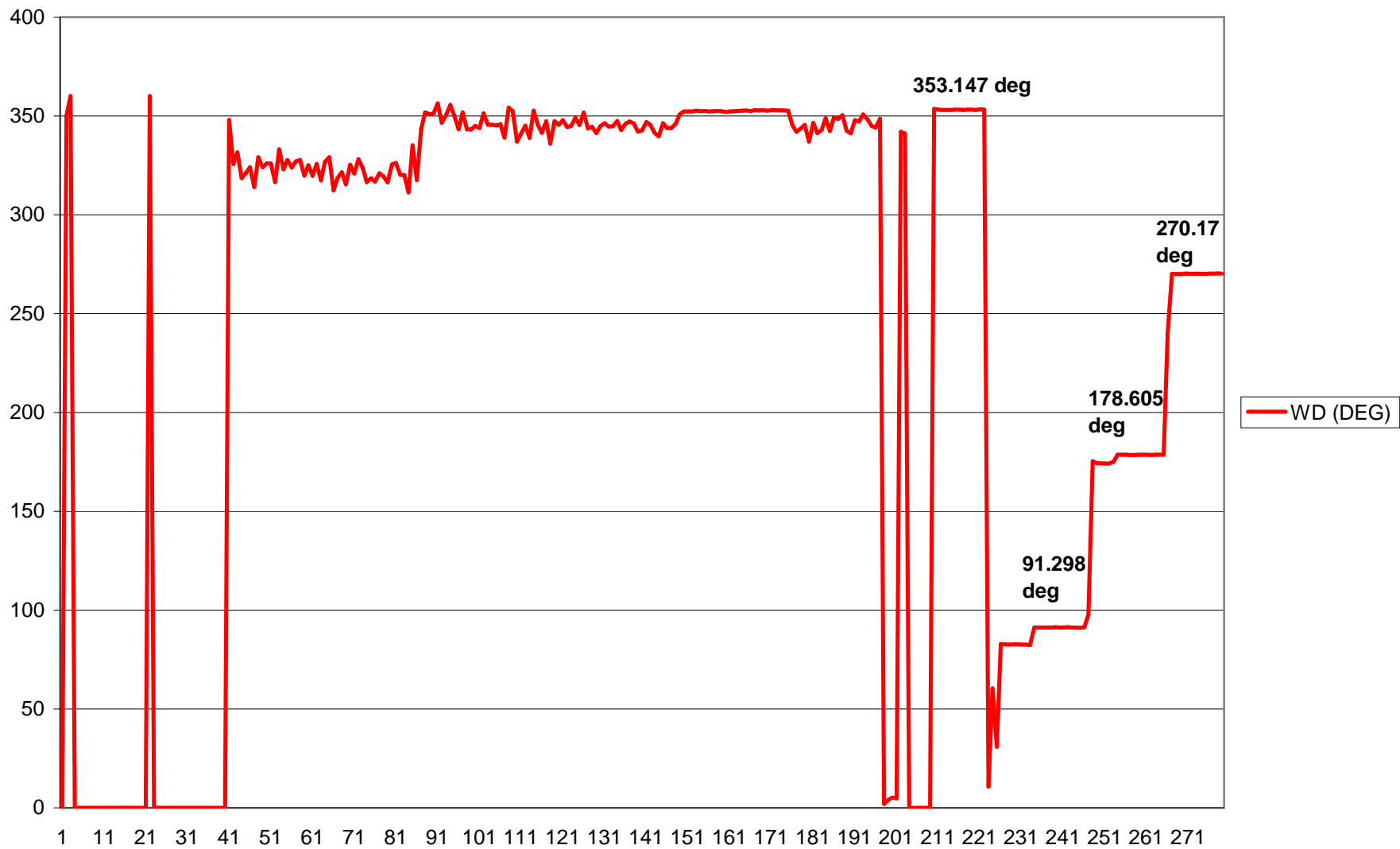
Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)	Statistical Evaluation	
0.0	2.2	N/A		
270.0	273.9	0.9859	Correlation Coefficient	0.999519
180.0	184.7	0.9747	Slope	0.986715
90.0	88.0	1.0231	Intercept	-0.361085



WS (KMPH)



WD (DEG)



# Calibration Report

Parameter SO<sub>2</sub>Air Monitoring Network PASZA

## Station Information

Calibration Date	August 28, 2006	Previous Calibration	July 13, 2006
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:20	End Time (MST)	16:40
Barometric Pressure	27.5 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	1,946 ng/min	Perm-tube Date	8/8/2006
Correction factor	0.934802	Perm-tube Cert #	19-25218
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	1.187697	Calculated slope	0.979263
Calculated intercept	3.340572	Calculated intercept	0.623751
Analyzer make	TECO	Analyzer serial #	43A-25573-221

	before		after	
Concentration range	1000	ppb	1000	ppb
Sample Flow	550	ccm	550	ccm
Lamp Voltage	792	mv	792	mv
Vacuum	22	" Hg	22	" Hg
Span Pot	87		87	
Zero Pot	114		114	

## 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	2337.0	0.0	-0.5	N/A
2500	2337.0	317.8	323.9	0.9813
5000	4674.0	158.9	162.0	0.9809
9000	8413.2	88.3	89.0	0.9917
zero	2337.0	0.0	0.2	As Found Zero
2500	2337.0	317.8	334.0	As Found Span
Average Correction Factor				0.9846

Calculated value of As Found Response: 399.809 ppm      Percent Change of As Found: -25.8%

	before calibration		after calibration	
Auto zero	2.1	ppm	0.2	ppm
Auto span	217.0	ppm	142.6	ppm

Notes: No adjustments.Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter SO2Air Monitoring Network PASZA

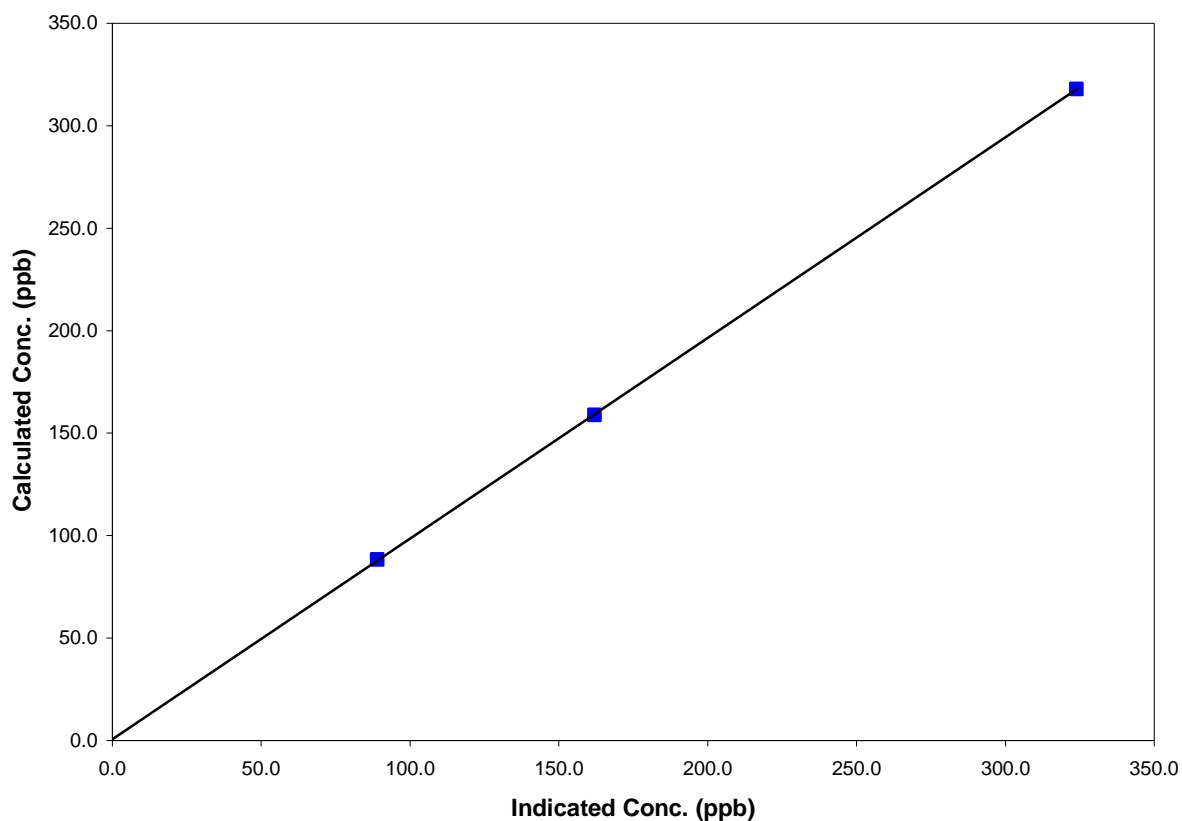
### Station Information

Calibration Date	August 28, 2006	Previous Calibration	July 13, 2006
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	13:20	End Time (MST)	16:40
Analyzer make/model	TECO	Analyzer serial #	43A-25573-221

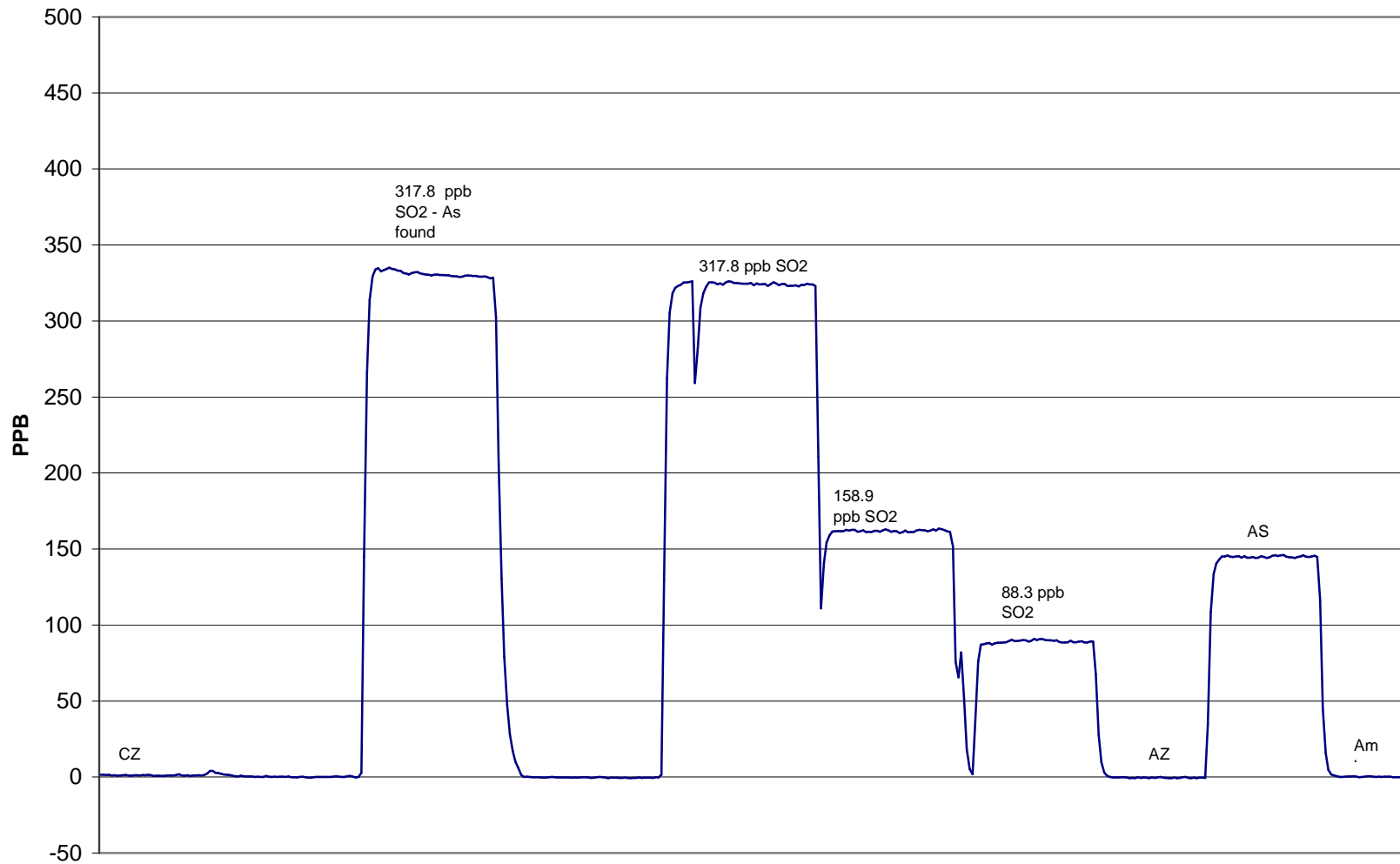
### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.5	N/A		
317.8	323.9	0.9813	Correlation Coefficient	0.999993
158.9	162.0	0.9809		
88.3	89.0	0.9917	Slope	0.979263
			Intercept	0.623751

### SO2 Calibration Curve



### SO2 Calibration



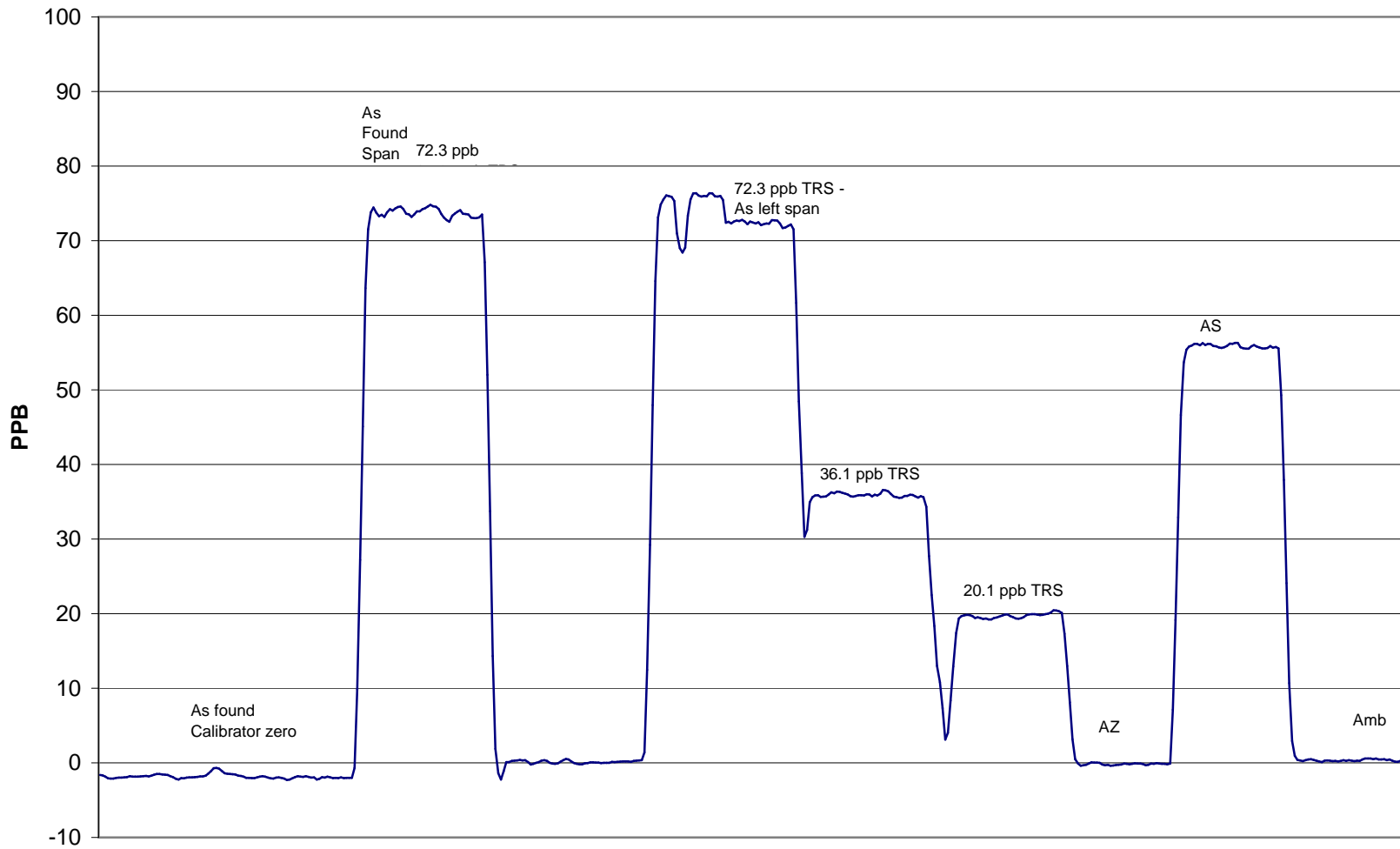
August 28, 2006







### TRS Calibration



# Calibration Report

Parameter PM2.5Air Monitoring Network PASZA

## Station Information

Calibration Date	August 28, 2006	Previous Calibration	July 6, 2006
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	14:30	End Time (MST)	16:00
Barometric Pressure	0.919 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
	<u>Before</u>		<u>After</u>
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	SLPM
Aux Flow Set Point	13.66	SLPM	13.67	SLPM
Filter Load	30	%	17	%
Ko Factor	10124		10124	
Temperature	27.7	Deg C	27.7	Deg C
Pressure	0.924	ATM	0.924	ATM

## Calibration Data

Parameter	Set Point	As Found	Tolerance	TEOM Reading
zero flow - main	0.0	0.05		0.08
zero flow - auxillary	0.0	0.00		0.06
flow recovery - main	45 - 60 Seconds	35.0	45 - 60 Seconds	35.0
flow recovery - aux	46 - 60 Seconds	48.0	46 - 60 Seconds	48.0
Temperature	measured	18.7	+/- 1.0 Deg C	18.7
Pressure	measured	0.924	+/- 1.5% ΔATM	0.924
Total Flow	16.67 SLPM	15.95		16.67
Main Flow	13.67 SLPM	13.50	+/- 1.0 SLPM	13.67
Auxillary Flow	3.0 SLPM	2.800	+/- 0.2 SLPM	3.000
Leak Check - main	0.0	0.05	<0.15 SLPM	0.08
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.17
Ko Factor (w/o filter)	measured		filter weight (g)	0.11012
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: New filter.  
Cleaned head.  
Adjusted mass flow controllers.

Calibration Performed By: Dawn Ewan

**Calibration Report**

Parameter Wind Speed & Direction  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Evergreen
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		Other:	<input type="checkbox"/> Yearly Calibration
Start Time (MST)	17:00	End Time (MST)	18:53
Barometric Pressure	0.917 ATM	Ambient Temperature	21 Deg C

**DACS Information**

DACS make	Focus AP1000	DACS serial No.	
DACS voltage range	0 - 1 volt	DACS channel #	3 & 4

**Sensor Information****Wind Direction Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)
0.0	2.2	N/A
90.0	88.0	1.0231
180.0	184.7	0.9747
270.0	273.9	0.9859
NA	NA	

Sensor Make	<u>Before</u>	Sensor S/N	<u>After</u>
Calculated slope	NA	Calculated slope	0.986715
Calculated intercept	NA	Calculated intercept	-0.361085

**Wind Speed Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (km/hr)	Indicated Value (km/hr)	Correction factor (Cc/lc)
1.0	1.0	N/A
20.2	20.3	0.9934
39.4	39.6	0.9950
77.8	79.7	0.9757

Sensor Make	<u>Before</u>	Sensor S/N	<u>After</u>
Calculated slope	NA	Calculated slope	0.975320
Calculated intercept	NA	Calculated intercept	0.287706

Notes:

Calibration Performed By: Lee Reyes, Lenin Flores

## Calibration Summary

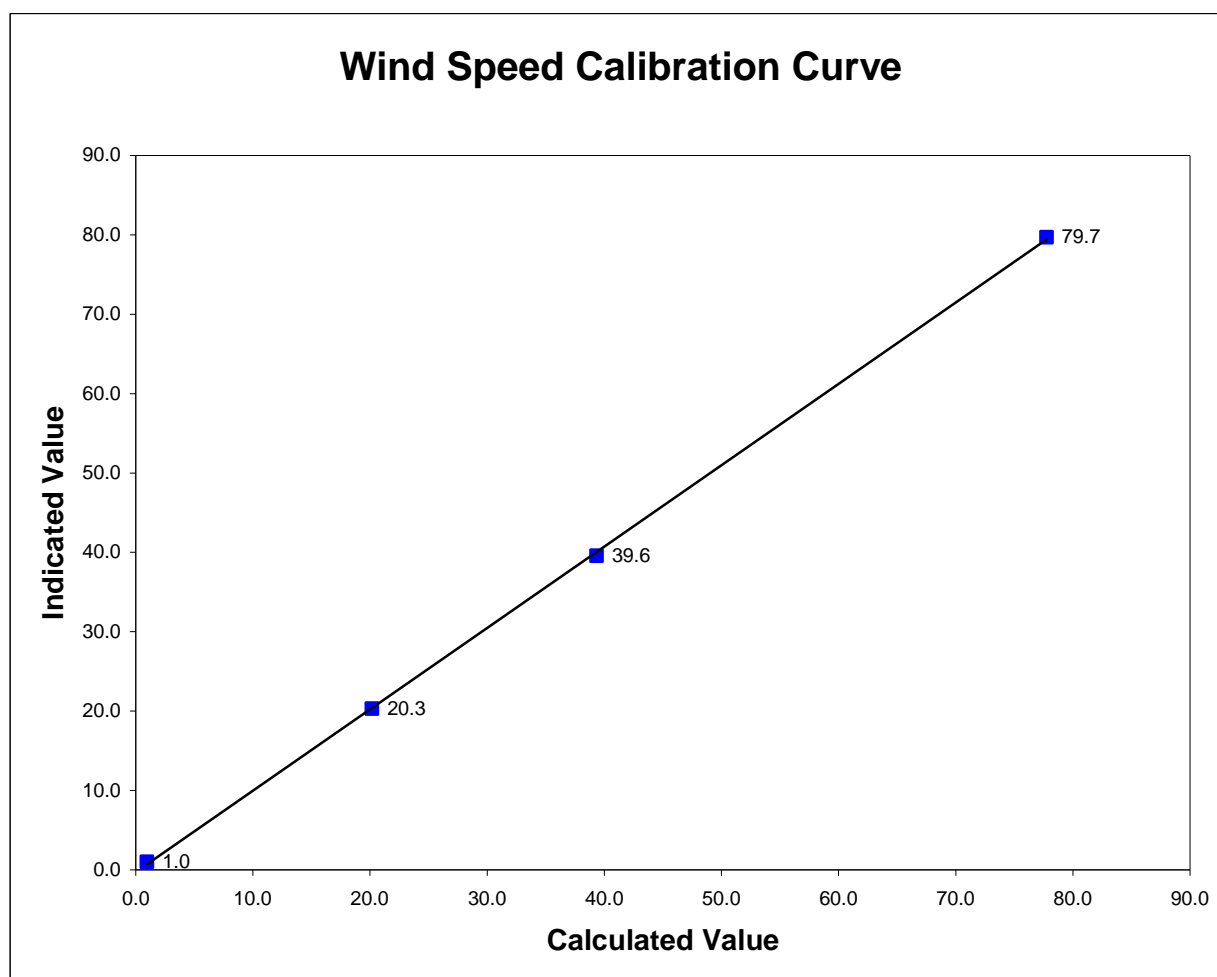
Parameter Wind SpeedAir Monitoring Network PASZA

### Station Information

Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Evergreen
Start Time (MST)	17:00	End Time (MST)	18:53
Analyzer make/model	0	Analyzer serial #	0

### Calibration Data

Actual Value (km/hr)	Indicated Value (km/hr)	Correction factor (Cc/lc)	Statistical Evaluation	
1.0	1.0	N/A		
20.2	20.3	0.9934	Correlation Coefficient	0.999872
39.4	39.6	0.9950		
77.8	79.7	0.9757		
			Slope	0.975320
			Intercept	0.287706



# Calibration Summary



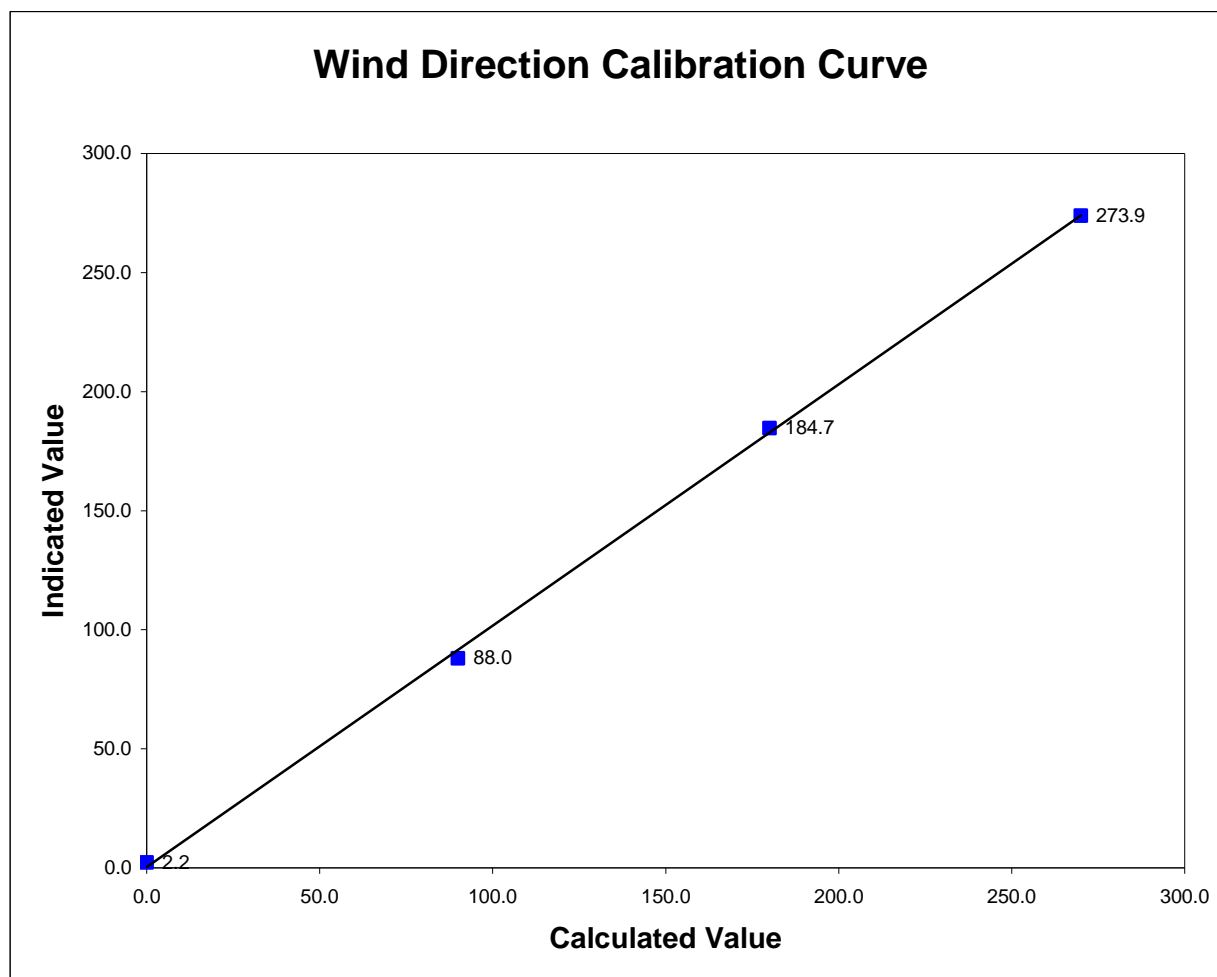
Parameter Wind Direction  
 Air Monitoring Network PASZA

### Station Information

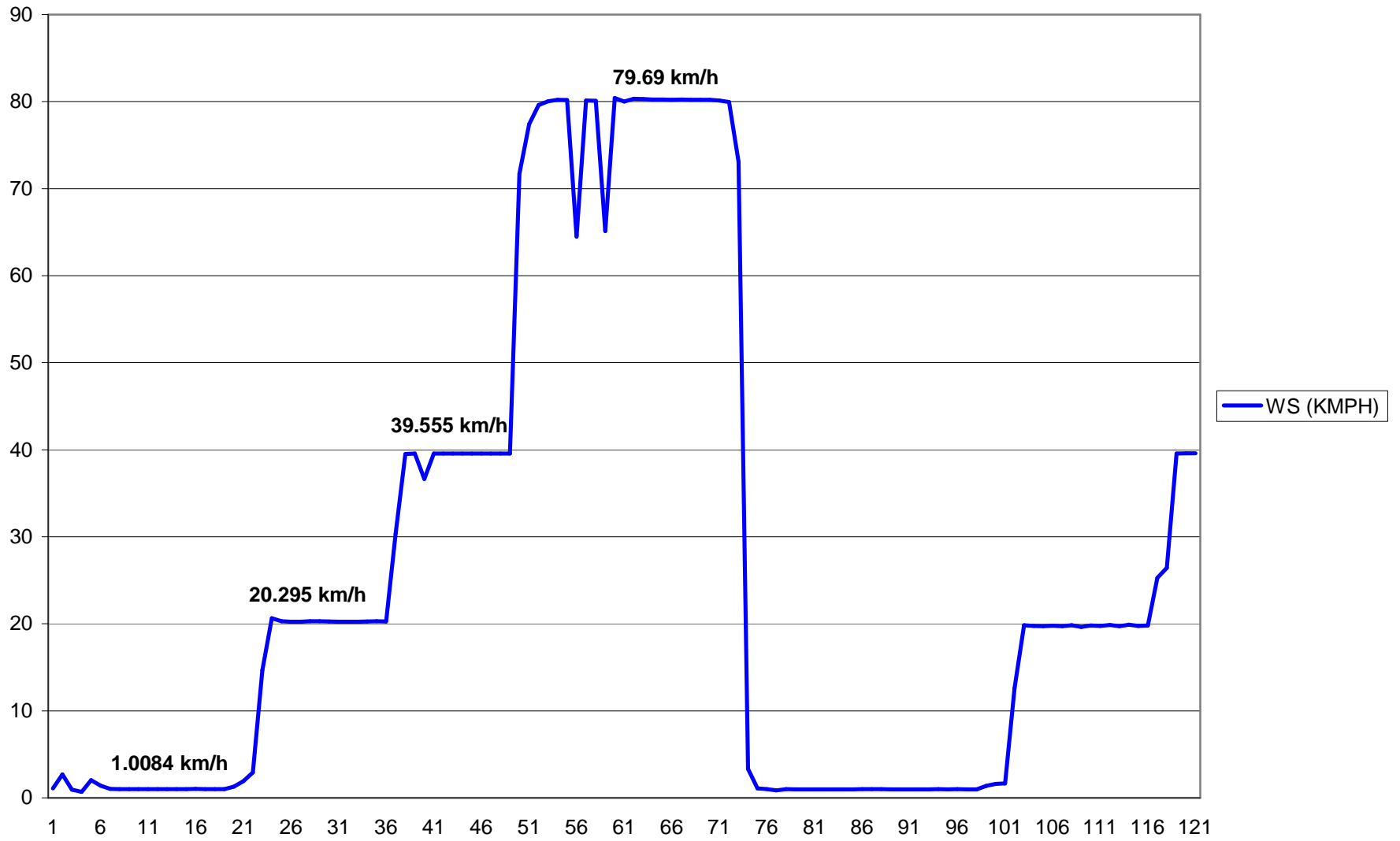
Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Evergreen
Start Time (MST)	17:00	End Time (MST)	18:53
Analyzer make/model	0	Analyzer serial #	0

### Calibration Data

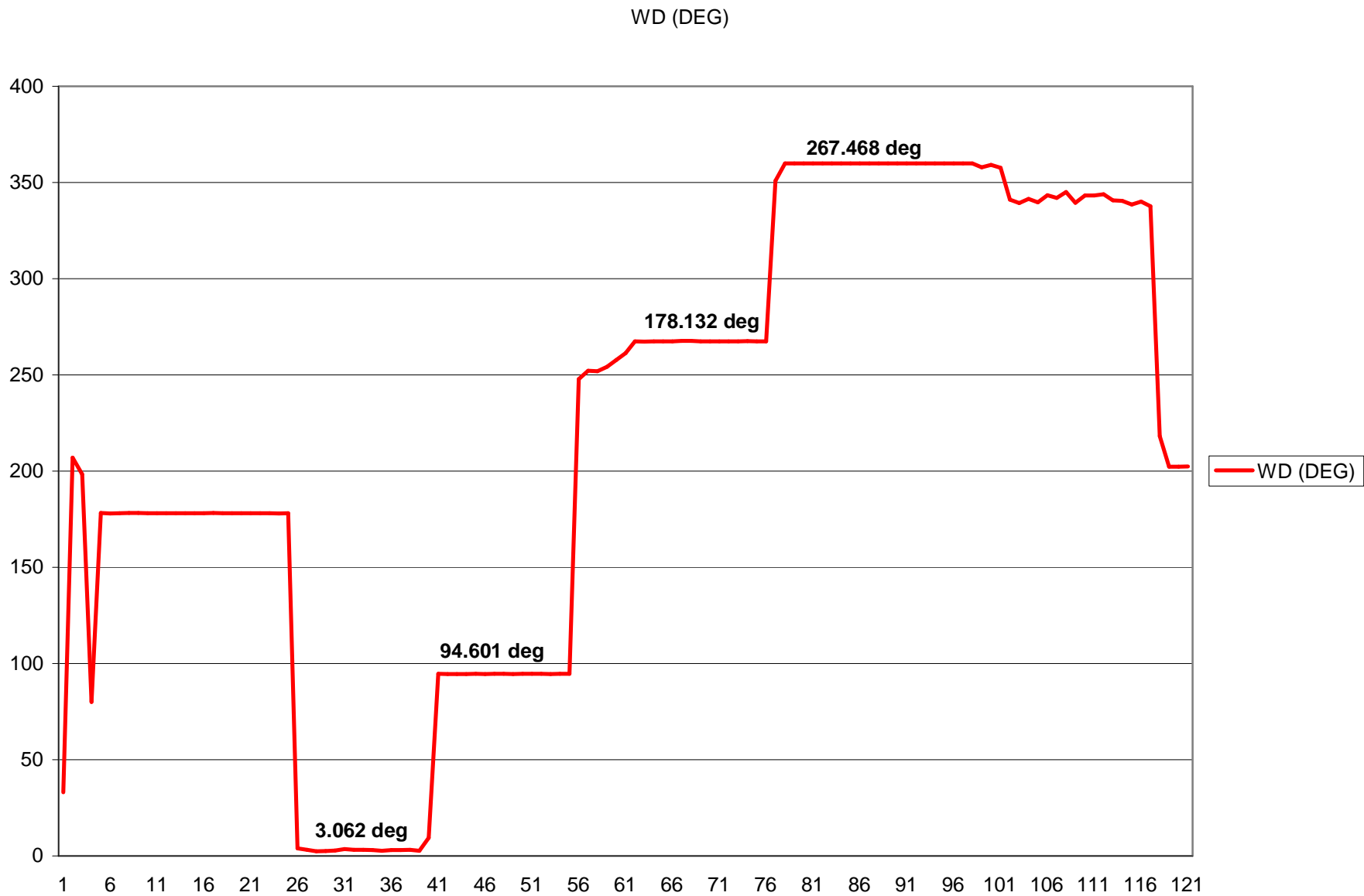
Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)	Statistical Evaluation	
0.0	2.2	N/A		
270.0	273.9	0.9859	Correlation Coefficient	0.999519
180.0	184.7	0.9747	Slope	0.986715
90.0	88.0	1.0231	Intercept	-0.361085



WS (KMPH)







**Calibration Report**Parameter SO<sub>2</sub>Air Monitoring Network PASZA**Station Information**

Calibration Date	August 30, 2006	Previous Calibration	July 16, 2006
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	5:45	End Time (MST)	21:28
Barometric Pressure	27.61 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	1,946 ng/min	Perm-tube Expiry Date	8/6/2006
Correction factor	0.938541	Perm-tube Cert #	19-25218
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	<u>Before</u>		<u>After</u>
Calculated slope	1.006173	Calculated slope	1.001420
Calculated intercept	0.667967	Calculated intercept	-0.500222
Analyzer make	API 102A	Analyzer serial #	212

	before		after	
Concentration range	500	ppb	500	ppb
Sample Flow	574	ccm	569	ccm
UV Lamp Voltage	3072	mv	2641	mv
Lamp Ratio	100	%	87.3	%
Rx Cell Temp	51	Deg C	51.4	Deg C
PMT Temp	7	Deg C	6.9	Deg C
IZS Temp	45	Deg C	45	Deg C
Slope	0.851		0.918	
Intercept	23.4		27	

**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	2346.4	0.0	0.3	N/A
2500	2346.4	316.6	316.3	1.0009
6105	5729.8	129.6	131.3	0.9872
9000	8446.9	87.9	87.5	1.0052
zero	2346.4	0.0	0.3	As Found Zero
2500	2346.4	316.6	302.7	As Found Span
Average Correction Factor				0.9978

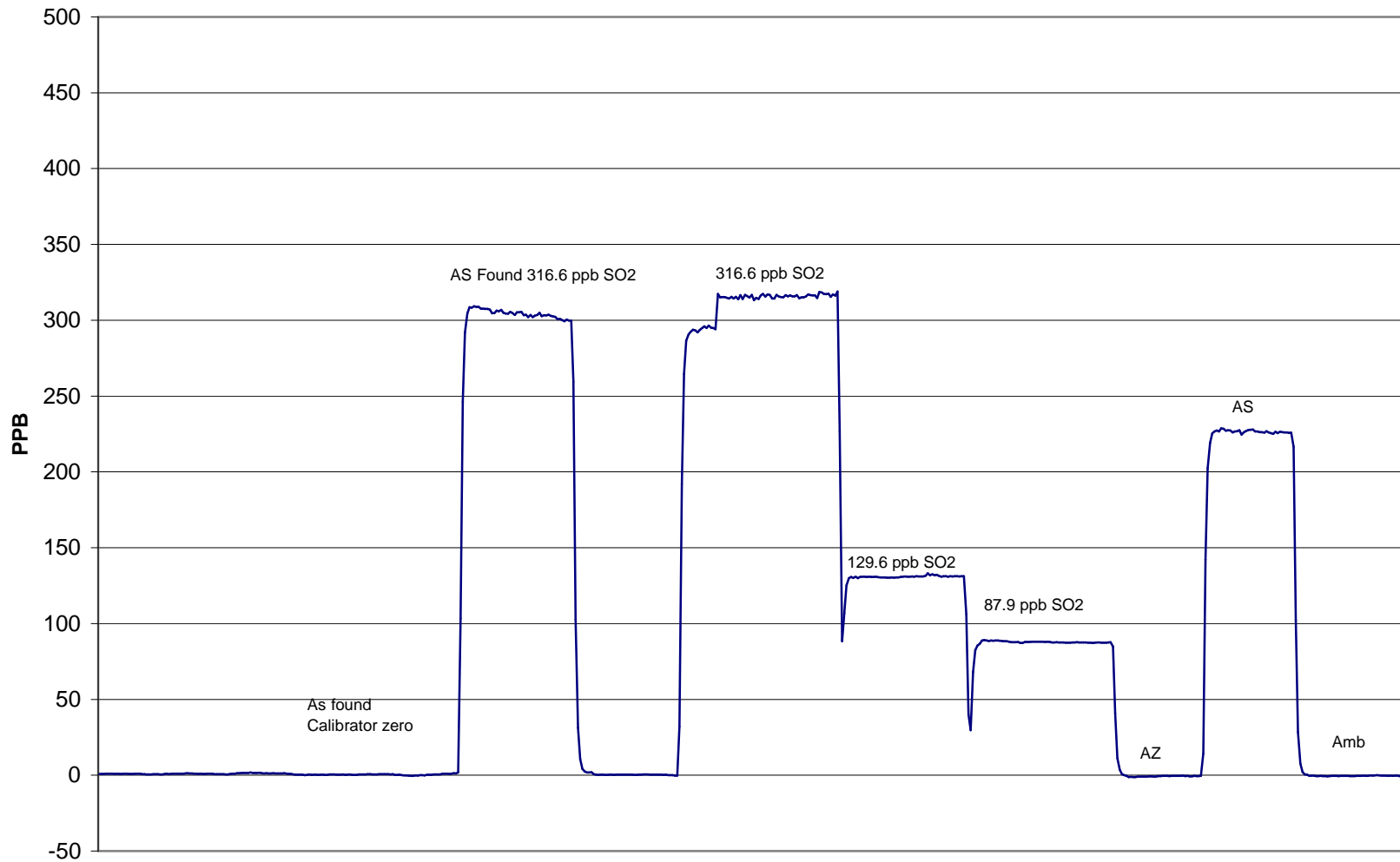
Calculated value of As Found Response: 304.936 ppm      Percent Change of As Found: 3.7%

	before calibration		after calibration	
Auto zero	0.7	ppm	-1.0	ppm
Auto span	199.0	ppm	226.2	ppm

Notes: Analyzer responded properly.  
Adjusted zero and span.Calibration Performed By: Dawn Ewan



### SO2 Calibration

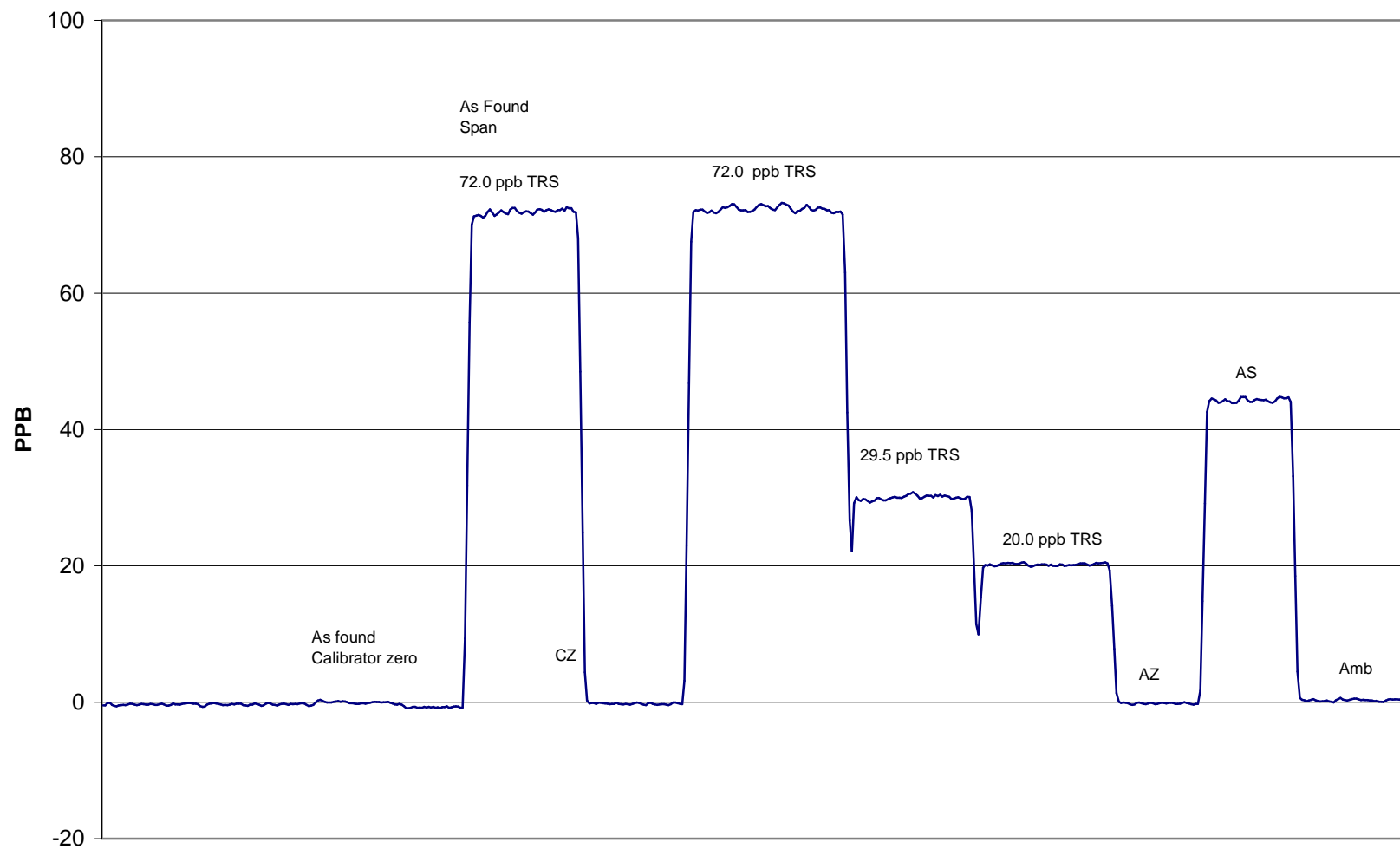


August 30, 2006





## TRS Calibration



August 30, 2006

**Calibration Report**

Parameter Wind Speed & Direction  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date August 30, 2006 Previous Calibration NA  
 Station Number 1 Station Location Smoky Heights  
 Reason:  Routine  Install  Removal  Other: \_\_\_\_\_  
 Start Time (MST) 7:50 End Time (MST) 10:30  
 Barometric Pressure 0.917 ATM Ambient Temperature 21 Deg C

**DACS Information**

DACS make Focus AP1000 DACS serial No. \_\_\_\_\_  
 DACS voltage range 0 - 1 volt DACS channel # 3 & 4

**Sensor Information****Wind Direction Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)
0.0	2.2	N/A
90.0	88.0	1.0231
180.0	184.7	0.9747
270.0	273.9	0.9859
NA	NA	

Sensor Make \_\_\_\_\_ Sensor S/N \_\_\_\_\_  
Before After  
 Calculated slope NA Calculated slope 0.986715  
 Calculated intercept NA Calculated intercept -0.361085

**Wind Speed Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (km/hr)	Indicated Value (km/hr)	Correction factor (Cc/lc)

Sensor Make \_\_\_\_\_ Sensor S/N \_\_\_\_\_  
Before After  
 Calculated slope NA Calculated slope NA  
 Calculated intercept NA Calculated intercept NA

Notes:

Calibration Performed By: Lee Reyes, Lenin Flores



# Calibration Summary



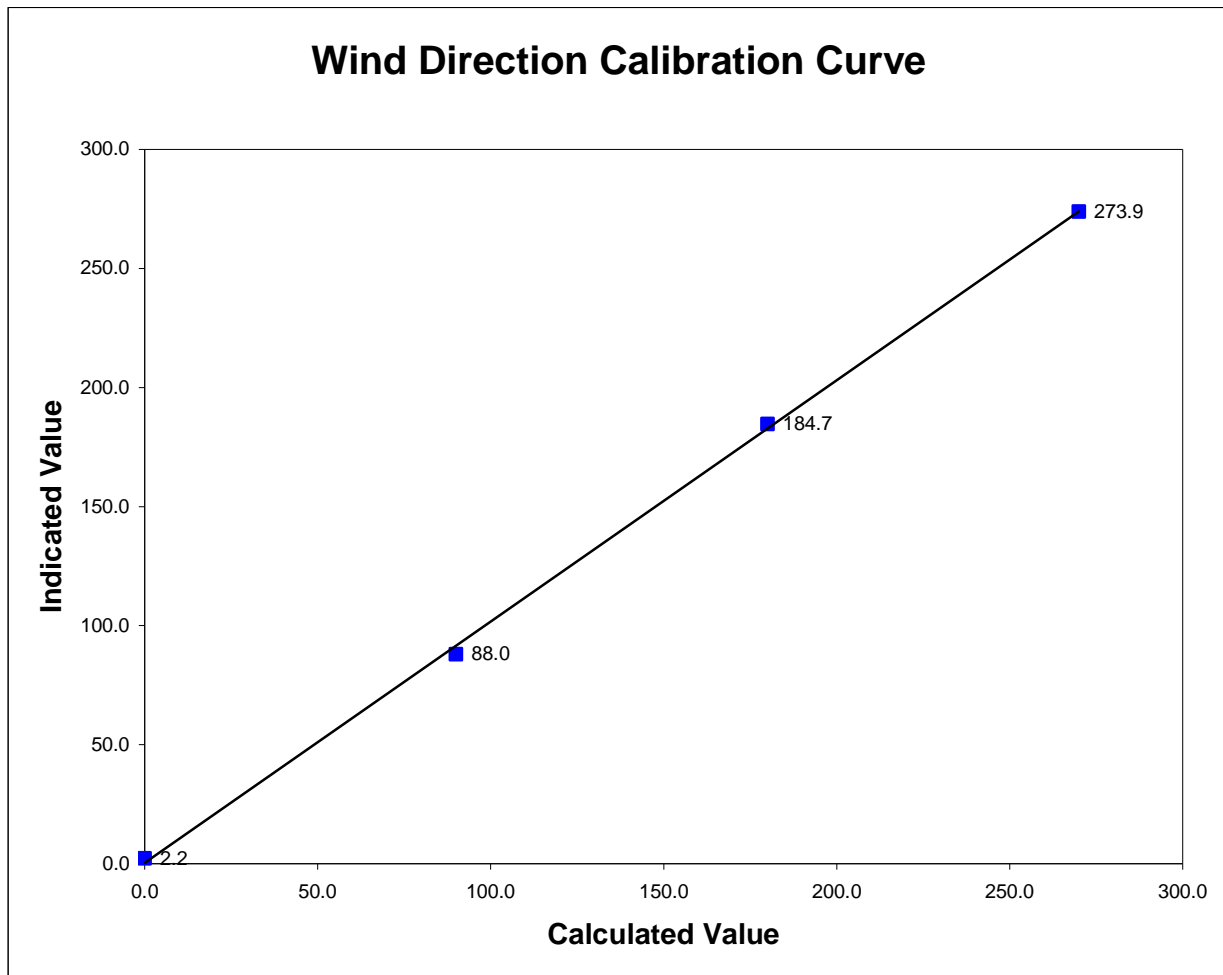
Parameter Wind Direction  
 Air Monitoring Network PASZA

### Station Information

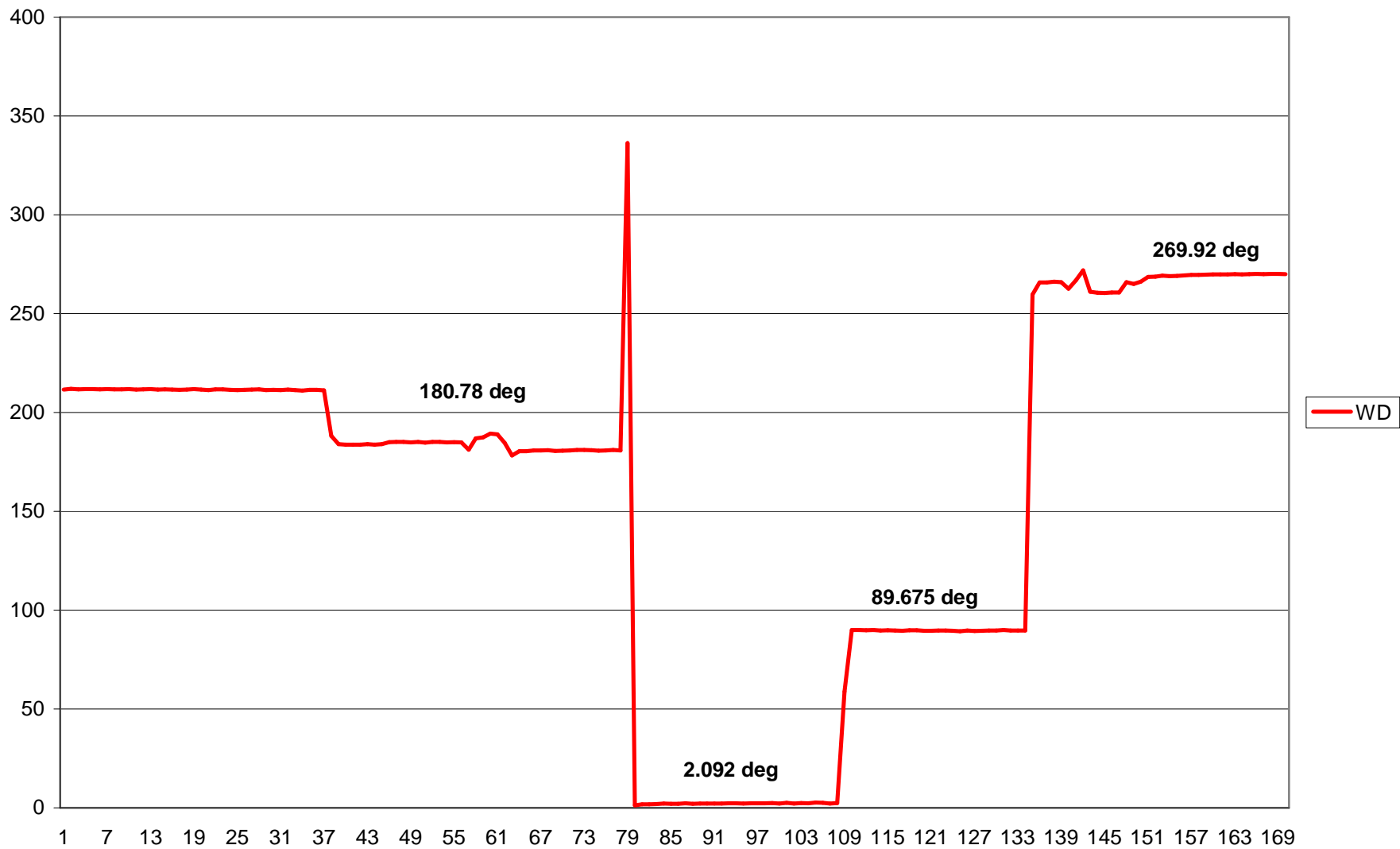
Calibration Date	August 30, 2006	Previous Calibration	NA
Station Number	1	Station Location	Smoky Heights
Start Time (MST)	7:50	End Time (MST)	10:30
Analyzer make/model	0	Analyzer serial #	0

### Calibration Data

Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)	Statistical Evaluation	
0.0	2.2	N/A		
			Correlation Coefficient	0.999519
270.0	273.9	0.9859		
180.0	184.7	0.9747	Slope	0.986715
90.0	88.0	1.0231		
			Intercept	-0.361085



WD



**Calibration Report**Parameter SO<sub>2</sub>Air Monitoring Network PASZA**Station Information**

Calibration Date	August 11, 2006	Previous Calibration	July 16, 2006
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:24	End Time (MST)	13:09
Barometric Pressure	0.914 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	2977
Cal Gas Make	Scott	Cal Gas Expiry Date	December 12, 2005
Cal Gas Conc.	10.3 ppm	Cal Gas Cylinder #	BLM002816
DACS make	Focus AP1000	DACS serial No.	45267
DACS voltage range	0 - 10 volt	DACS channel #	3
	<u>Before</u>		<u>After</u>
Calculated slope	0.992069	Calculated slope	0.997178
Calculated intercept	0.582421	Calculated intercept	0.265768
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.17	ppb	2.54	ppb
Coefficient	0.805		0.809	
Lamp Voltage	901.0	Volts	901.0	Volts
Chamber Temp	43.6	Deg C	43.6	Deg C
Sample Flow	620	ccm	618	ccm

**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)
4992	0.00	0.00	-0.05	N/A
4992	39.98	81.84	81.91	0.9991
4992	19.93	40.96	40.70	1.0062
4992	9.95	20.49	20.06	1.0213
4992	0.00	0.00	-0.05	As Found Zero
4992	39.98	81.84	79.34	As Found Span
Average Correction Factor				1.0089

Calculated value of As Found Response: 79.342 ppm Percent Change of As Found: 3.0%

	before calibration		after calibration	
Auto zero	0.55	ppm	0.18	ppm
Auto span	27.32	ppm	27.59	ppm

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Calibration Performed By: Dawn Ewan

# Calibration Summary

Parameter SO2

Air Monitoring Network PASZA

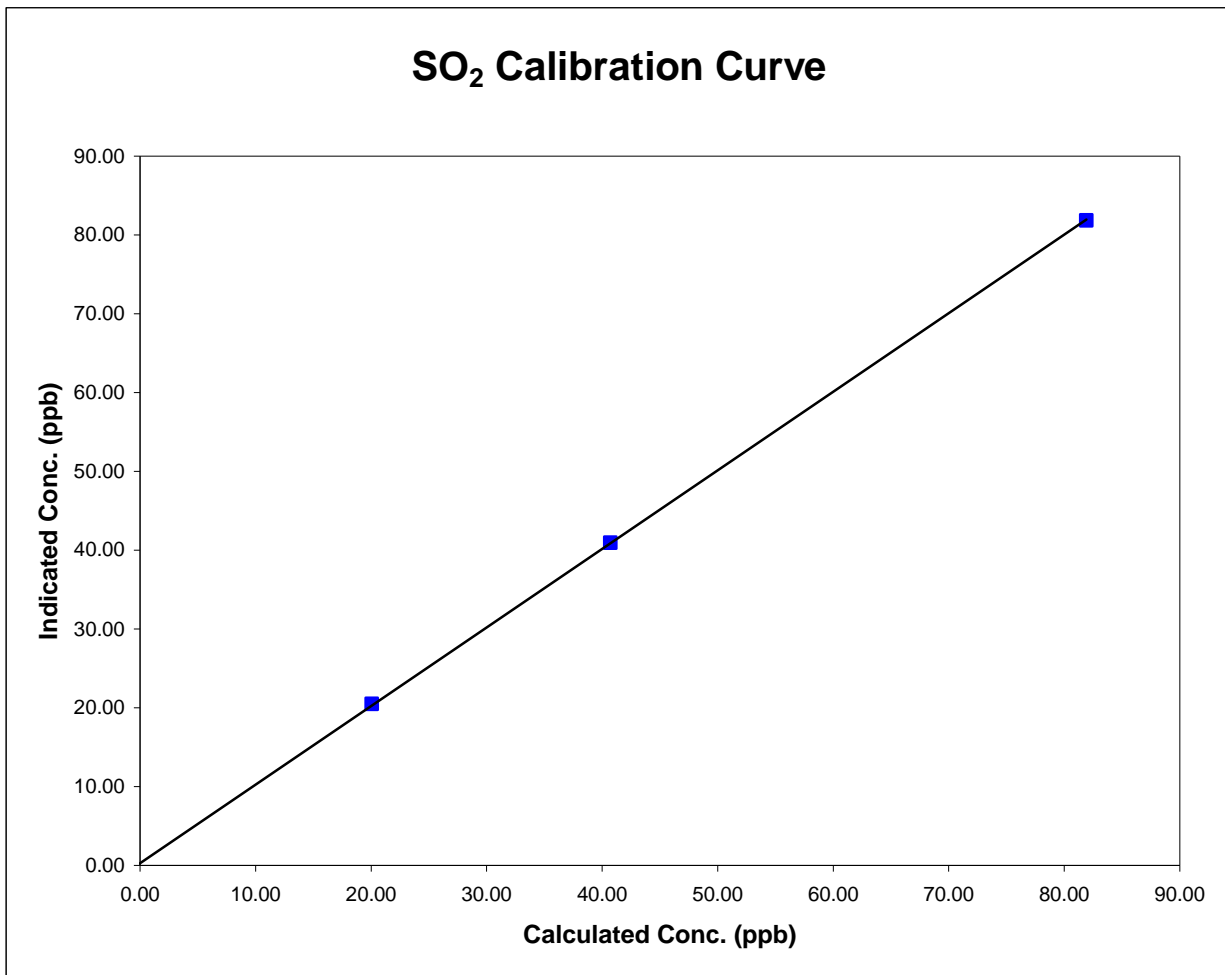


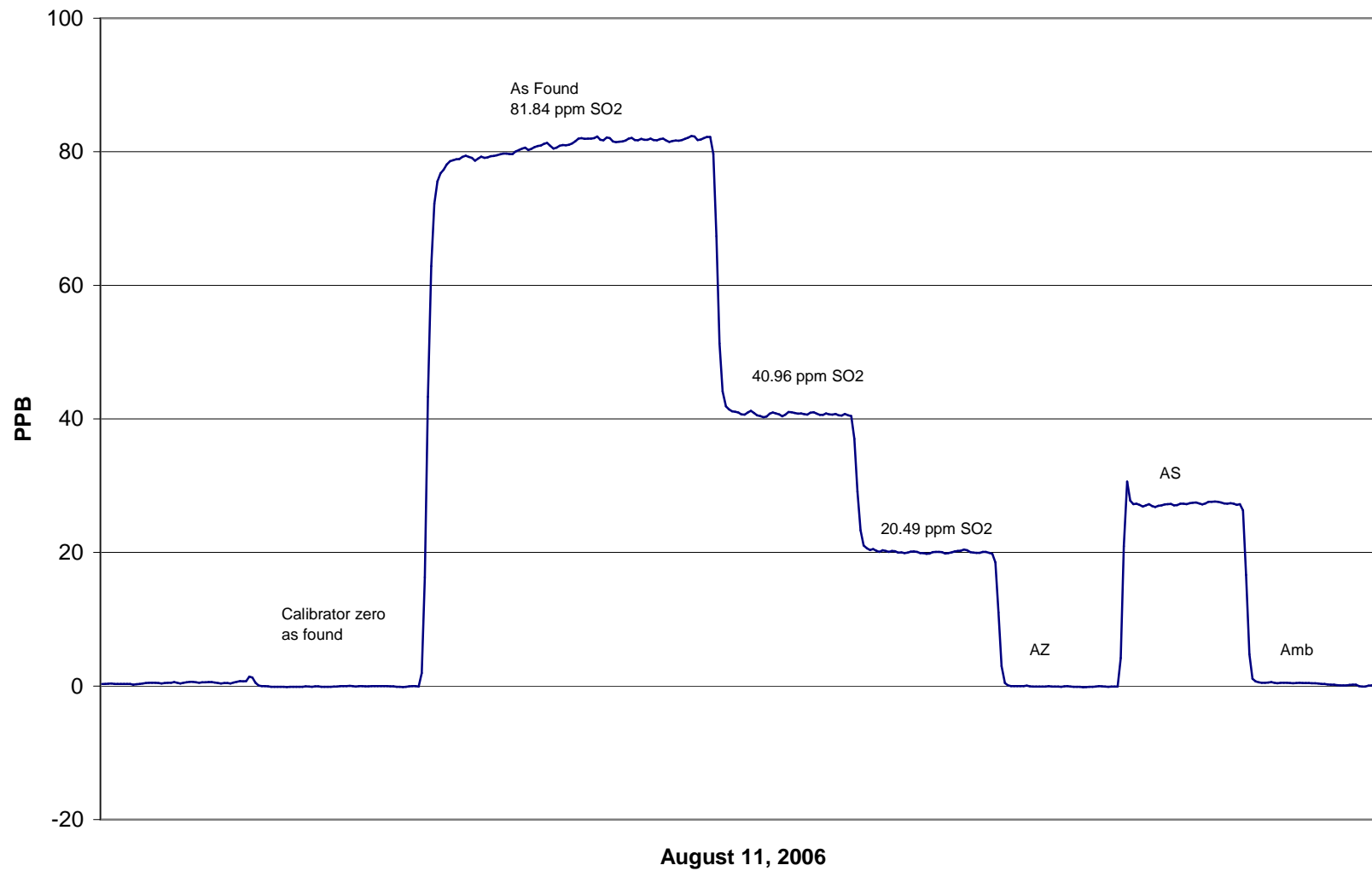
### Station Information

Calibration Date	August 11, 2006	Previous Calibration	July 16, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:24	End Time (MST)	13:09
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.049	N/A	Correlation Coefficient	0.999968
81.835	81.906	0.9991		
40.958	40.704	1.0062		
20.489	20.061	1.0213	Slope	0.997178
			Intercept	0.265768



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

**Calibration Report**

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

**Station Information**

Calibration Date	<u>August 10, 2006</u>	Previous Calibration	<u>July 16, 2006</u>
Station Number	<u>4</u>	Station Location	<u>AG Canada Research Station</u>

Reason:  Routine     Installation     Removal    Other: \_\_\_\_\_

Start Time (MST)	<u>9:51</u>	End Time (MST)	<u>14:17</u>
Barometric Pressure	<u>0.914</u> Atm	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>EnviroNics 6103</u>	Serial Number	<u>2977</u>
NO Cal Gas Conc	<u>50.3</u> ppm	Cal Gas Expiry Date	<u>Nov 22/06</u>
NOx Cal Gas Conc	<u>50.5</u> ppm	Cal Gas Serial #	<u>BAL786</u>

**DACS Information**

DACS make FOCUS AP1000      DACS serial No. 45269

Parameter		NO2	NOx	NO
Before	Data Slope	1.005827	0.997482	0.998830
	Data Offset	-1.621590	0.821713	0.132354
After	Data Slope	1.005629	1.000758	0.998218
	Data Offset	0.807509	0.412138	0.274738
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	1.2	ppb	1.2	mV
NOx background	1.4	ppb	1.4	mV
NO coefficient	1.006		1.002	
NOx coefficient	0.98		0.984	
Box Temp	32.2	ccm	31.9	ccm
Chamber Temp	49.4	Deg C	49.4	Deg C
Cooler Temp	-2.2	Deg C	-2.0	Deg C
Converter Temp	324.0	Deg C	324.0	Deg C
Sample Flow	830.0	LPM	818.0	LPM
Ozonator Flow	0.087	LPM	0.087	LPM
Pressure	165.4	inches HG	165.7	inches Hg

Notes: Adjusted span.

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# Calibration Report

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



## Station Information

Calibration Date: August 10, 2006 Station Location: AG Canada Research Station

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	
zero	4992	0.00	0.0	0.0	0.0	-0.3	-0.4	-0.4	N/A	N/A	
1	4992	79.92	795.7	792.6	3.2	794.6	793.5	0.2	1.0014	0.9989	
2	4992	39.98	401.2	399.6	1.6	400.8	400.7	-0.5	1.0011	0.9972	
3	4992	20.00	201.5	200.7	0.8	200.7	200.5	-0.4	1.0043	1.0011	
AFZ	4992	0.00	0.0	0.0	0.0	-0.3	-0.4	-0.4	0.0000	0.0000	
AFS	4992	79.92	795.7	792.6	3.2	794.9	798.6	-4.6	1.0011	0.9925	
									Average Correction Factor	1.0022	0.9991

As Found Concentrations: NO<sub>x</sub>= 796.0 NO= 799.1 As Found Percent Change NO<sub>x</sub>= 0.0% NO= 0.8%

### GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

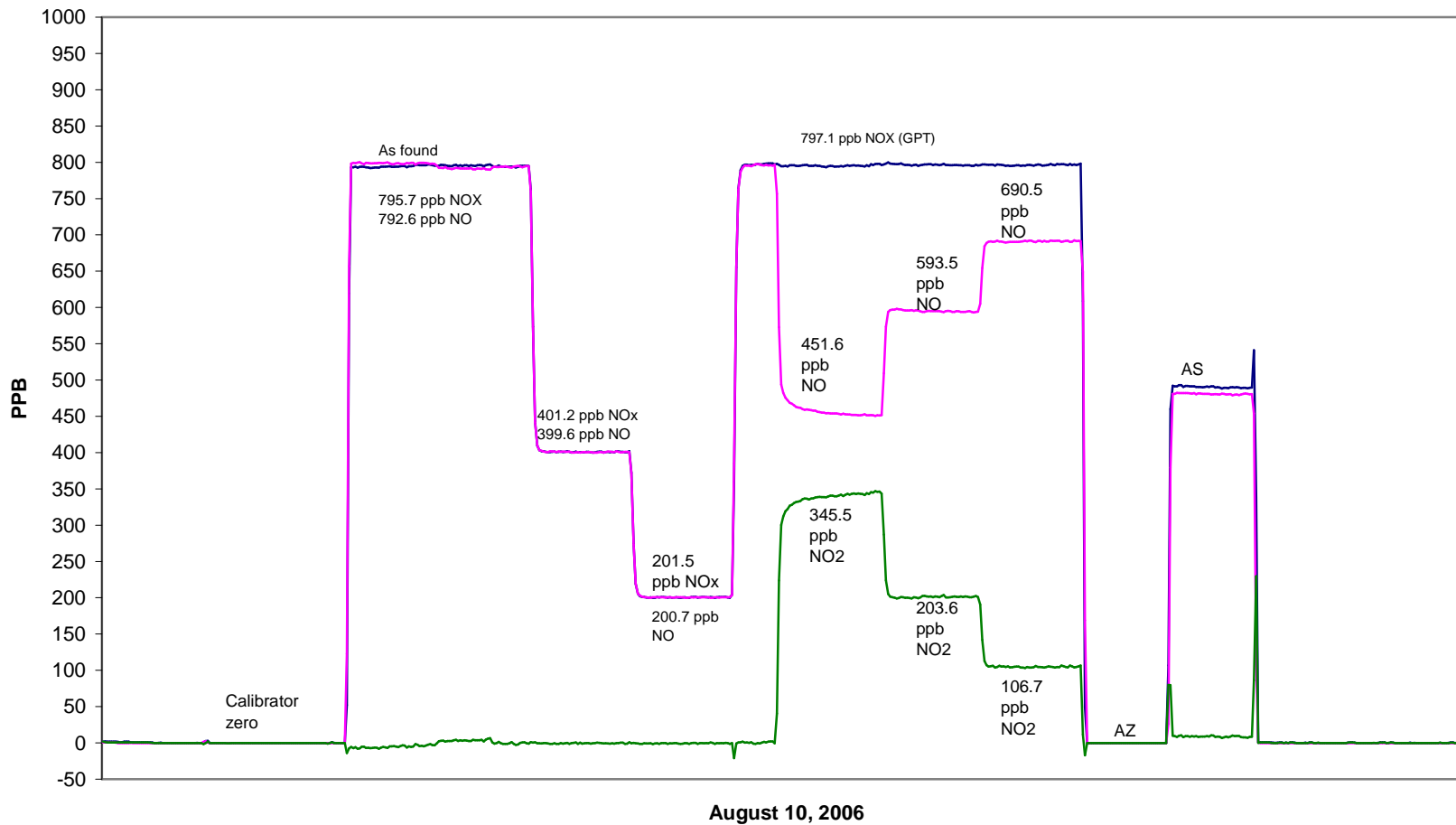
O3 Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency	
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	
NO point	797.1	794.9	2.2	797.4	796.0	0.5	0.9997	0.9986	N/A	N/A	
350	797.1	451.6	345.5	795.6	452.1	343.0	1.0020	0.9988	1.0072	99.3%	
200	797.1	593.5	203.6	796.1	594.3	201.4	1.0013	0.9987	1.0107	98.9%	
100	797.1	690.5	106.7	796.7	691.4	104.8	1.0005	0.9986	1.0176	98.3%	
							Average Correction Factor	1.0013	0.9987	1.0119	98.8%

### AIC Data

Parameter	Previous calibration				Current calibration			
	NO <sub>x</sub>	NO <sub>2</sub>	NO		NO <sub>x</sub>	NO <sub>2</sub>	NO	
Auto zero	-0.3	-0.3	-0.2	ppb	0.1	0.4	-0.1	ppb
Auto span	494.6	9.7	484.5	ppb	490.2	9.3	479.8	ppb

Calibration Performed By: Dawn Ewan

### NOx Calibration





## Calibration Summary

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

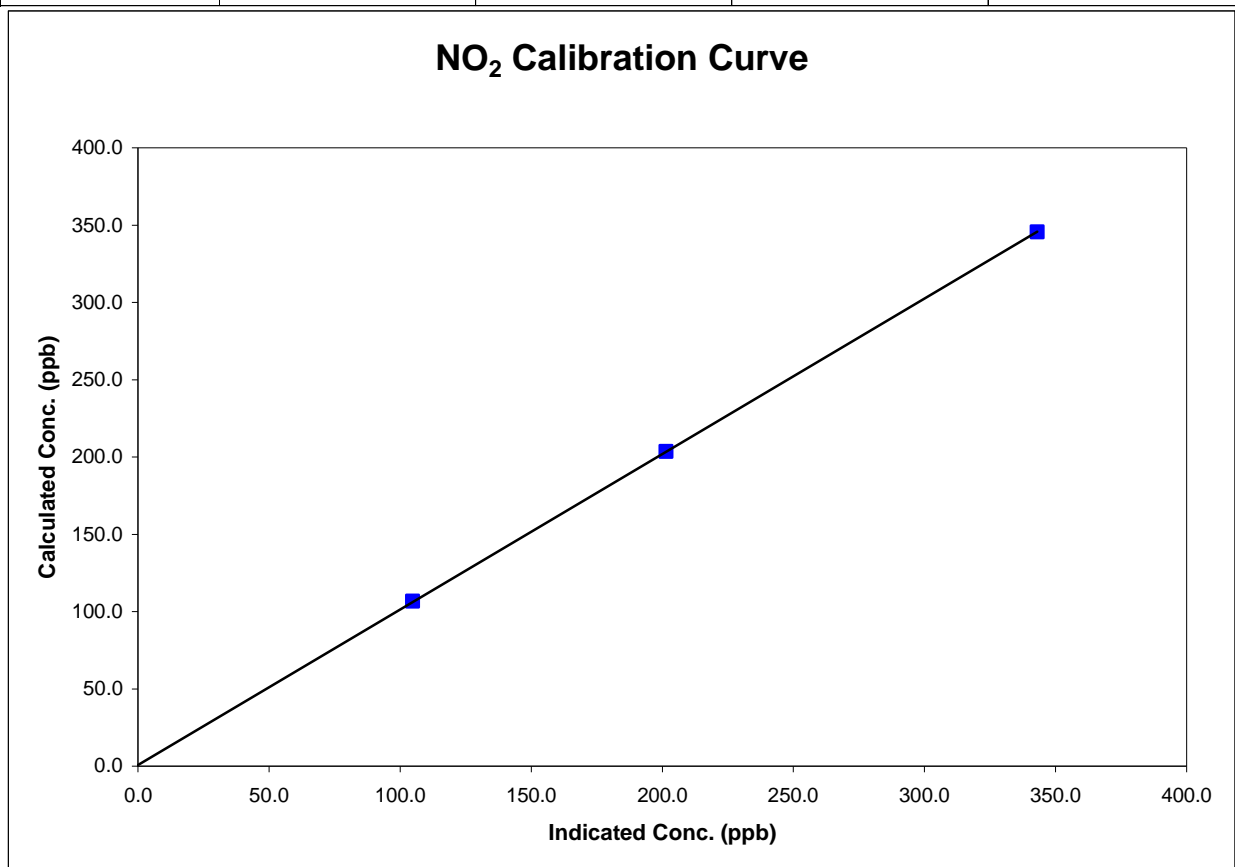


### Station Information

Calibration Date	August 10, 2006	Previous Calibration	July 16, 2006
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:51	End Time (MST)	14:17
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	0.0000		
345.5	343.0	1.0072	Correlation Coefficient	0.999992
203.6	201.4	1.0107		
106.7	104.8	1.0176	Slope	1.005629
			Intercept	0.807509



## Calibration Summary

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

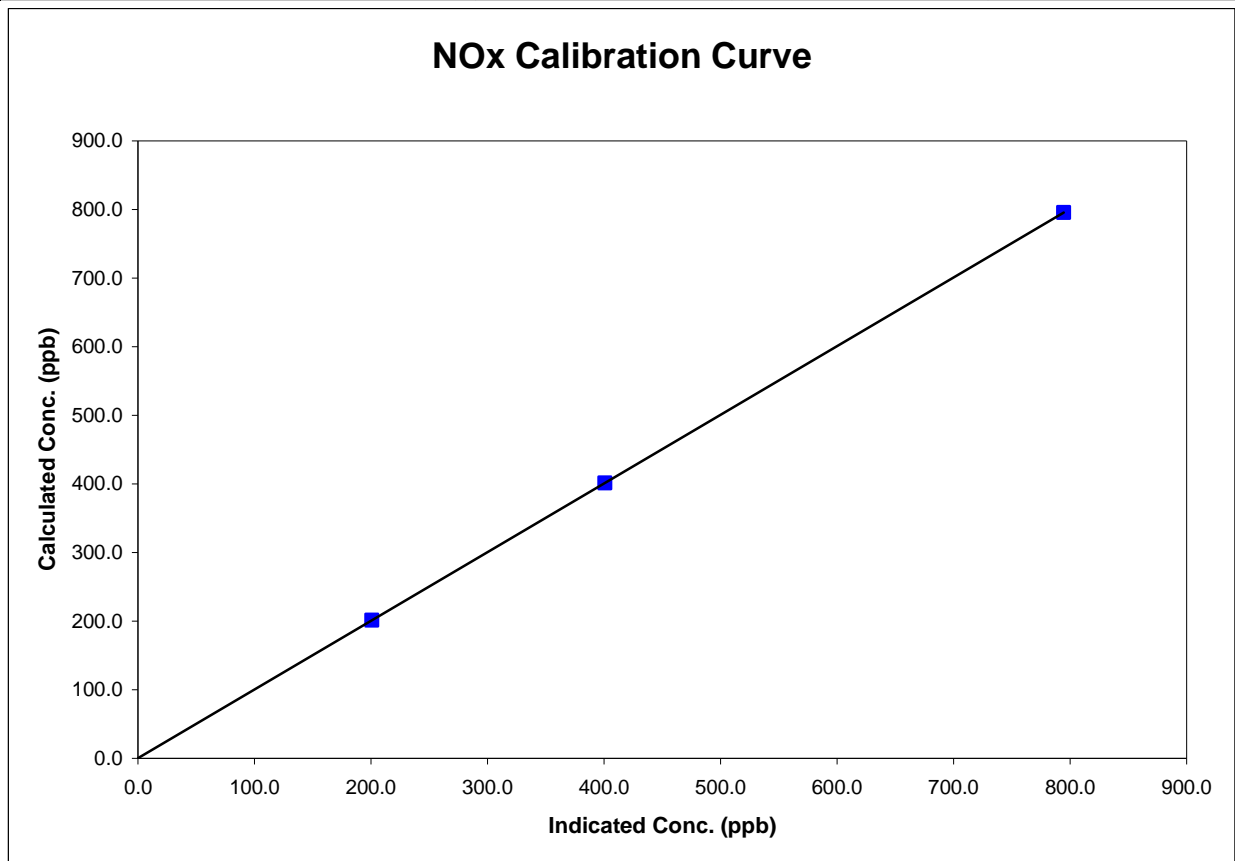


### Station Information

Calibration Date	August 10, 2006	Previous Calibration	July 16, 2006
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:51	End Time (MST)	14:17
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	0.999999
795.7	794.6	1.0014		
401.2	400.8	1.0011		
201.5	200.7	1.0043		
			Slope	1.000758
			Intercept	0.412138



## Calibration Summary

Parameter NO  
 Air Monitoring Network PASZA

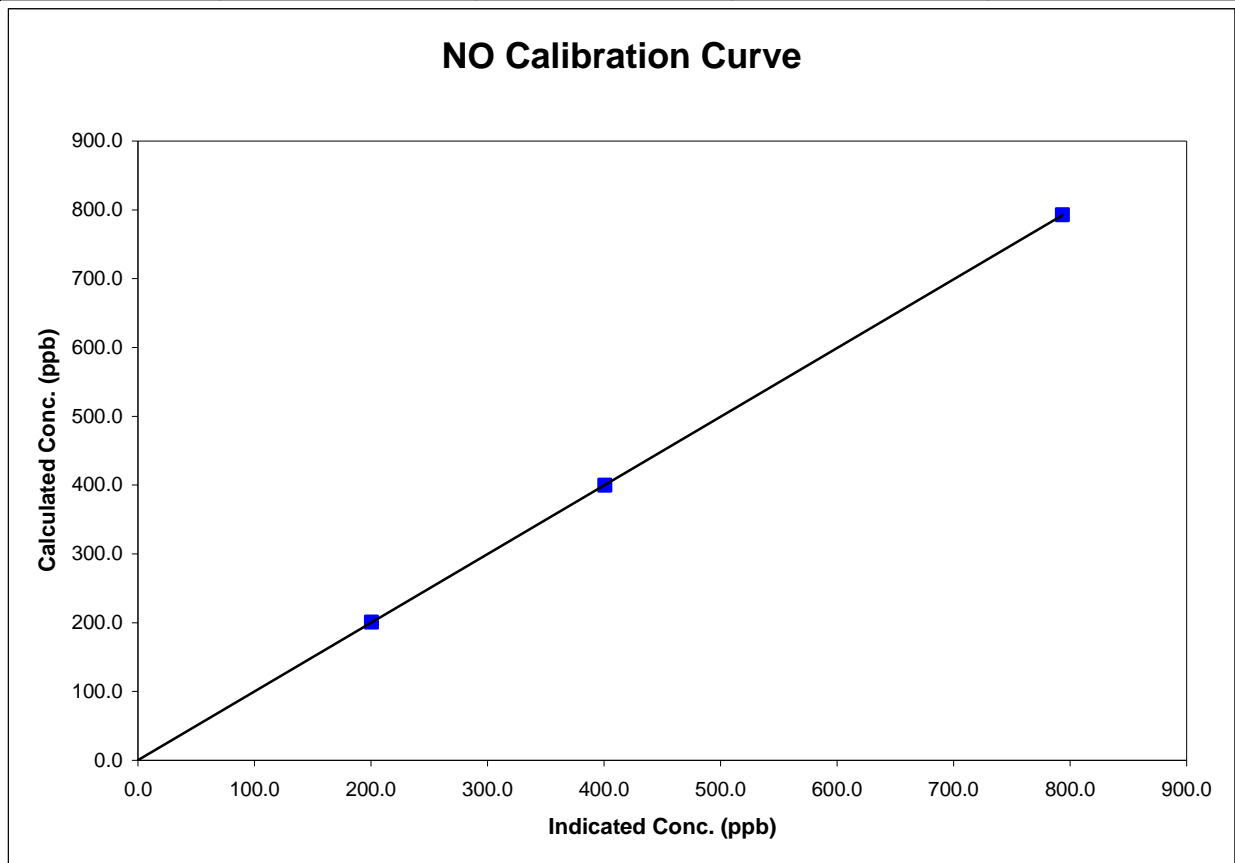


### Station Information

Calibration Date	August 10, 2006	Previous Calibration	July 16, 2006
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:51	End Time (MST)	14:17
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

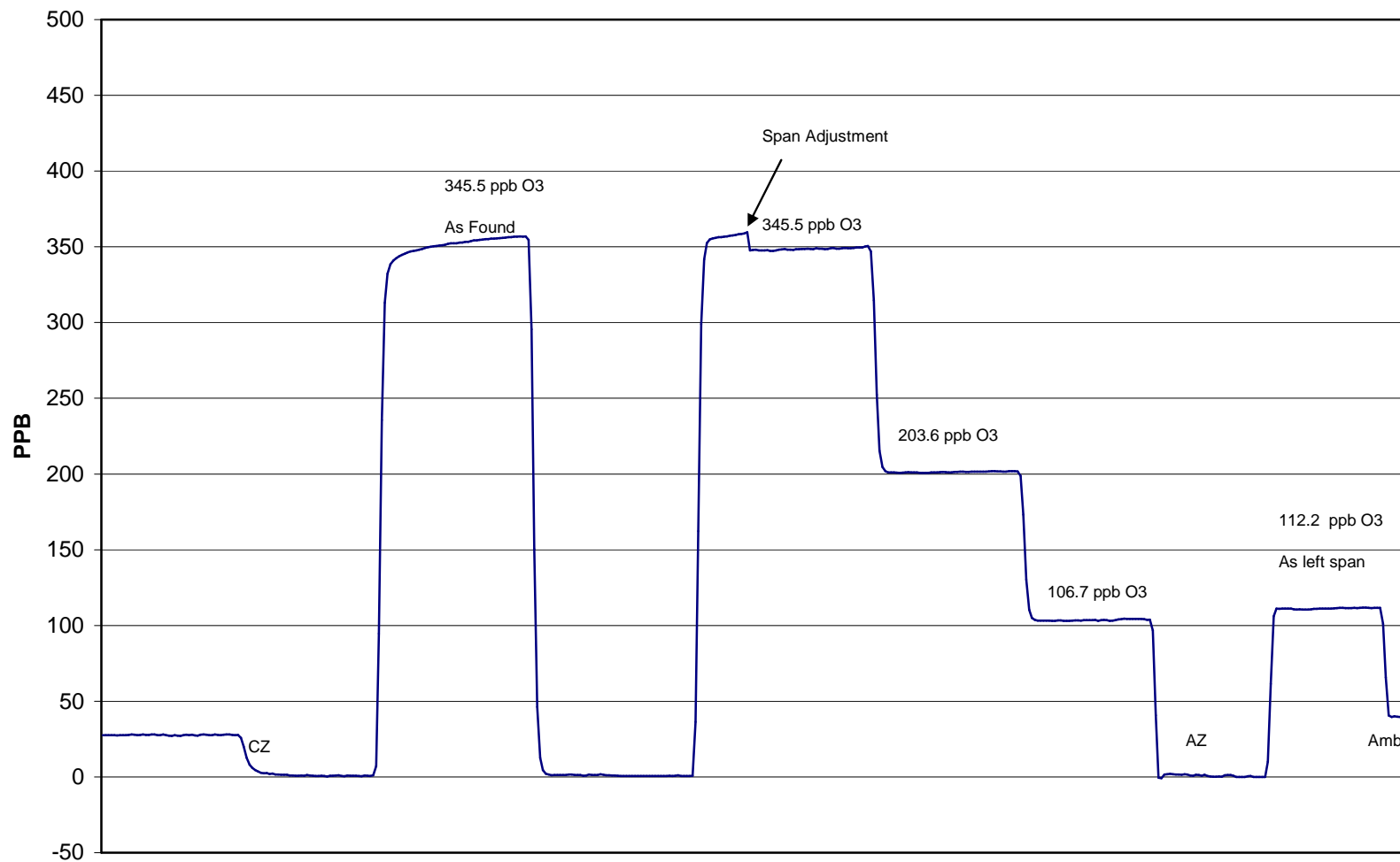
Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A		
792.6	793.5	0.9989	Correlation Coefficient	0.999998
399.6	400.7	0.9972		
200.7	200.5	1.0011	Slope	0.998218
			Intercept	0.274738







### O3 Calibration



August 11, 2006

# Calibration Report

Parameter PM2.5Air Monitoring Network PASZA

## Station Information

Calibration Date	August 11, 2006	Previous Calibration	July 16, 2006
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	14:00	End Time (MST)	15:45
Barometric Pressure	0.919 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

## 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	21	%	21	%
Ko Factor	14287		14287	
Temperature	19.6	Deg C	19.6	Deg C
Pressure	0.913	ATM	0.913	ATM

## Calibration Data

Parameter	Set Point	Teom Reading (As Found)	Tolerance	Teom Reading (After Adjustments)
zero flow - main	0.0	0.04		0.04
zero flow - auxiliary	0.0	0.08		0.08
flow recovery - main	45 - 60 Seconds	35.00	45 - 60 Seconds	35.00
flow recovery - aux	46 - 60 Seconds	45.00	46 - 60 Seconds	45.00
Temperature	measured	19.4	+/- 1.0 Deg C	19.4
Pressure	measured	0.914	+/- 1.5% ΔATM	0.914
Total Flow	16.67 SLPM	16.20		16.20
Auxillary Flow	13.67 SLPM	13.90	+/- 1.0 SLPM	13.90
Main Flow	3.0 SLPM	3.050	+/- 0.2 SLPM	3.050
Leak Check - main	0.0	-0.01	<0.15 SLPM	-0.01
Leak Check - aux	0.0	0.13	<0.15 SLPM	0.13
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes:

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Calibration Performed By: Dawn Ewan

**Calibration Report**

Parameter Wind Speed & Direction  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		Other:	<input type="checkbox"/> Yearly Calibration
Start Time (MST)	7:00	End Time (MST)	9:00
Barometric Pressure	0.917 ATM	Ambient Temperature	21 Deg C

**DACS Information**

DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	3 & 4

**Sensor Information****Wind Direction Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)
0.0	2.2	N/A
90.0	88.0	1.0231
180.0	184.7	0.9747
270.0	273.9	0.9859
NA	NA	

Sensor Make	Met One 020C	Sensor S/N	C4769
	<u>Before</u>		<u>After</u>
Calculated slope	NA	Calculated slope	0.986715
Calculated intercept	NA	Calculated intercept	-0.361085

**Wind Speed Calibration Data**

Sensor make/model		Sensor serial #
Actual Value (km/hr)	Indicated Value (km/hr)	Correction factor (Cc/lc)
0.0	0.3	N/A
13.2	13.5	0.9771
26.3	26.7	0.9875
39.5	39.9	0.9897

Sensor Make	Met One 010C	Sensor S/N	C4492
	<u>Before</u>		<u>After</u>
Calculated slope	NA	Calculated slope	0.996572
Calculated intercept	NA	Calculated intercept	-0.260627

Notes:

Calibration Performed By: Lee Reyes, Lenin Flores



## Calibration Summary

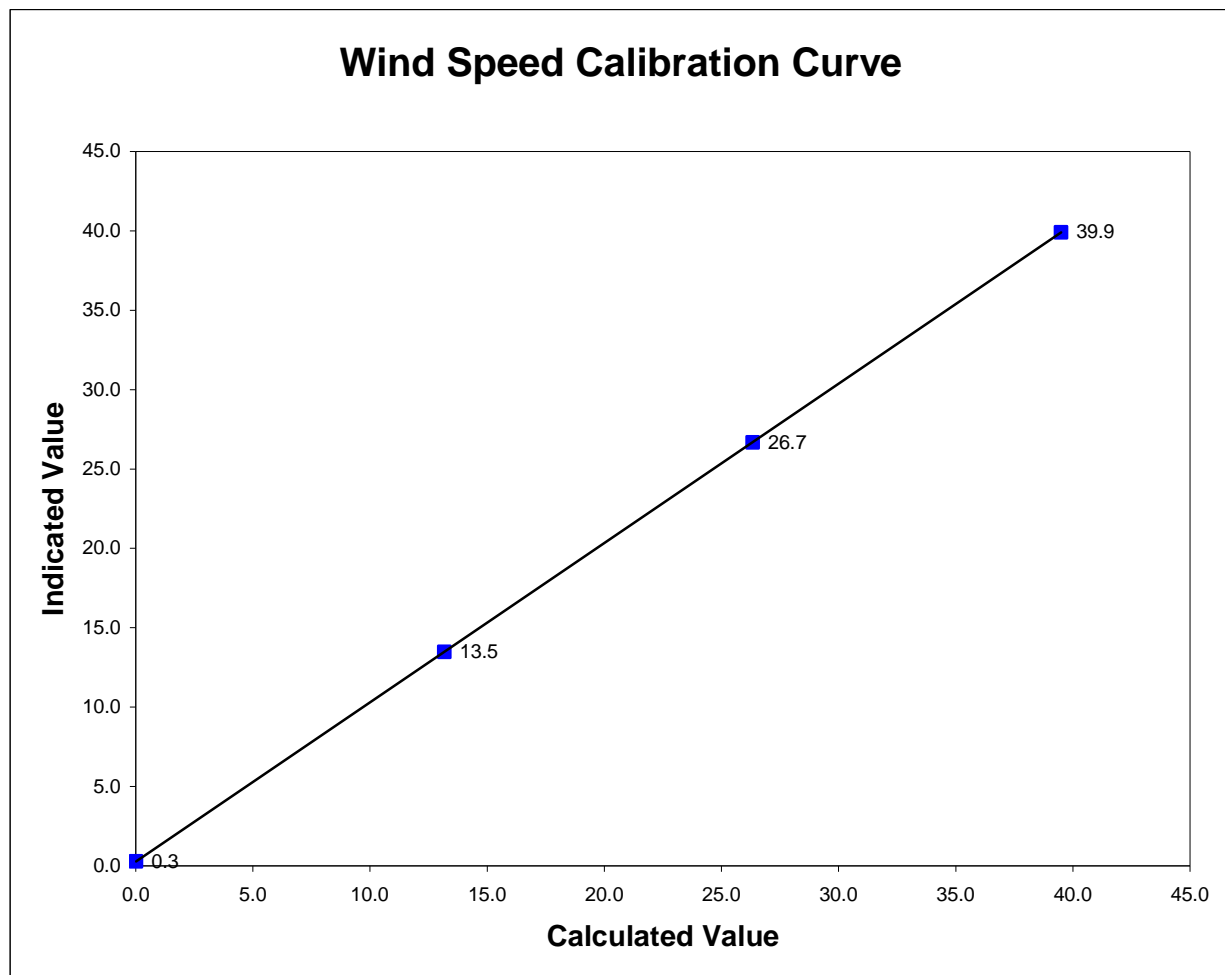
Parameter Wind SpeedAir Monitoring Network PASZA

### Station Information

Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Beaverlodge
Start Time (MST)	7:00	End Time (MST)	9:00
Analyzer make/model	0	Analyzer serial #	0

### Calibration Data

Actual Value (km/hr)	Indicated Value (km/hr)	Correction factor (Cc/lc)	Statistical Evaluation	
0.0	0.3	N/A		
13.2	13.5	0.9771	Correlation Coefficient	0.999999
26.3	26.7	0.9875		
39.5	39.9	0.9897	Slope	0.996572
			Intercept	-0.260627



## Calibration Summary

Parameter Wind Direction

Air Monitoring Network PASZA

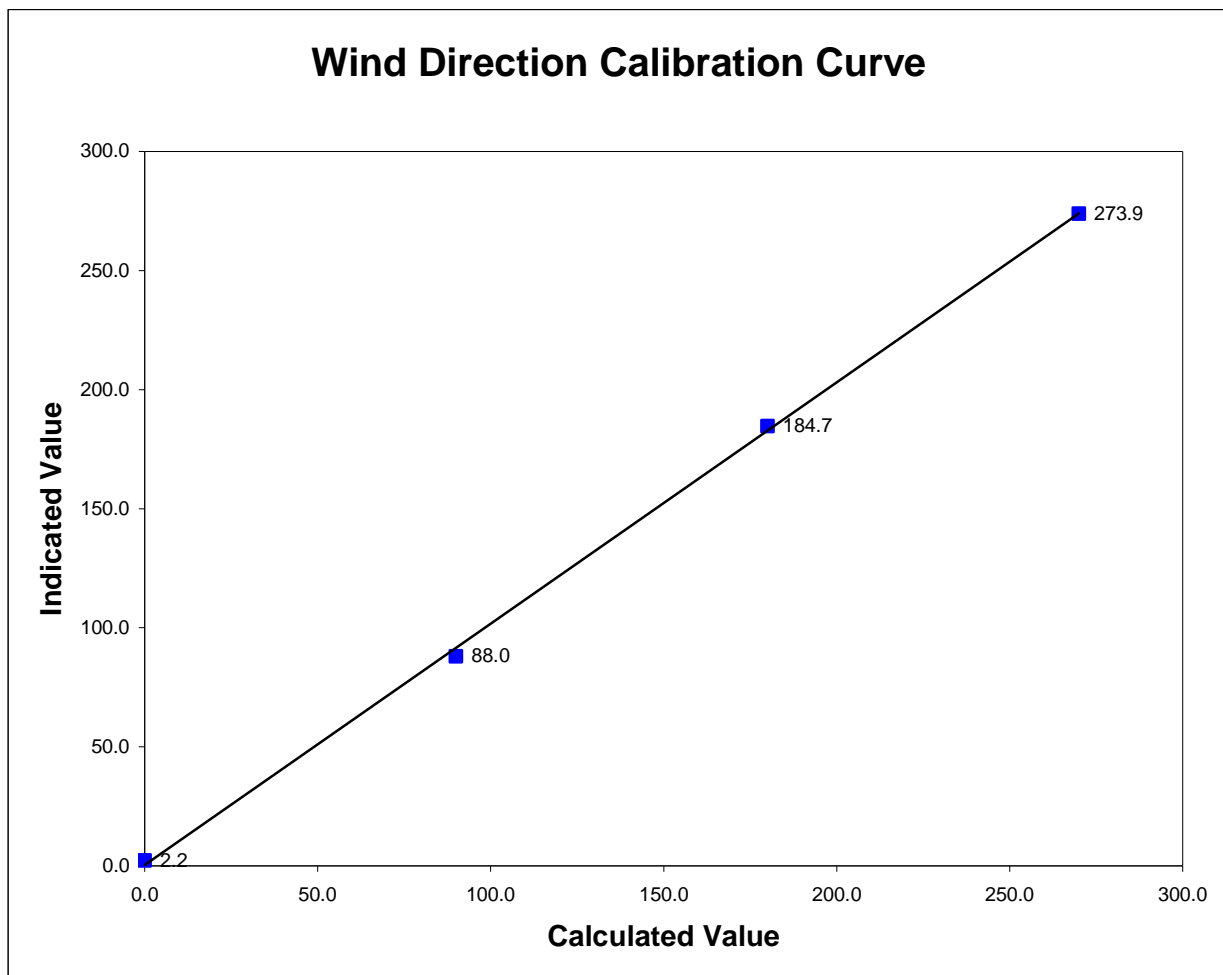


### Station Information

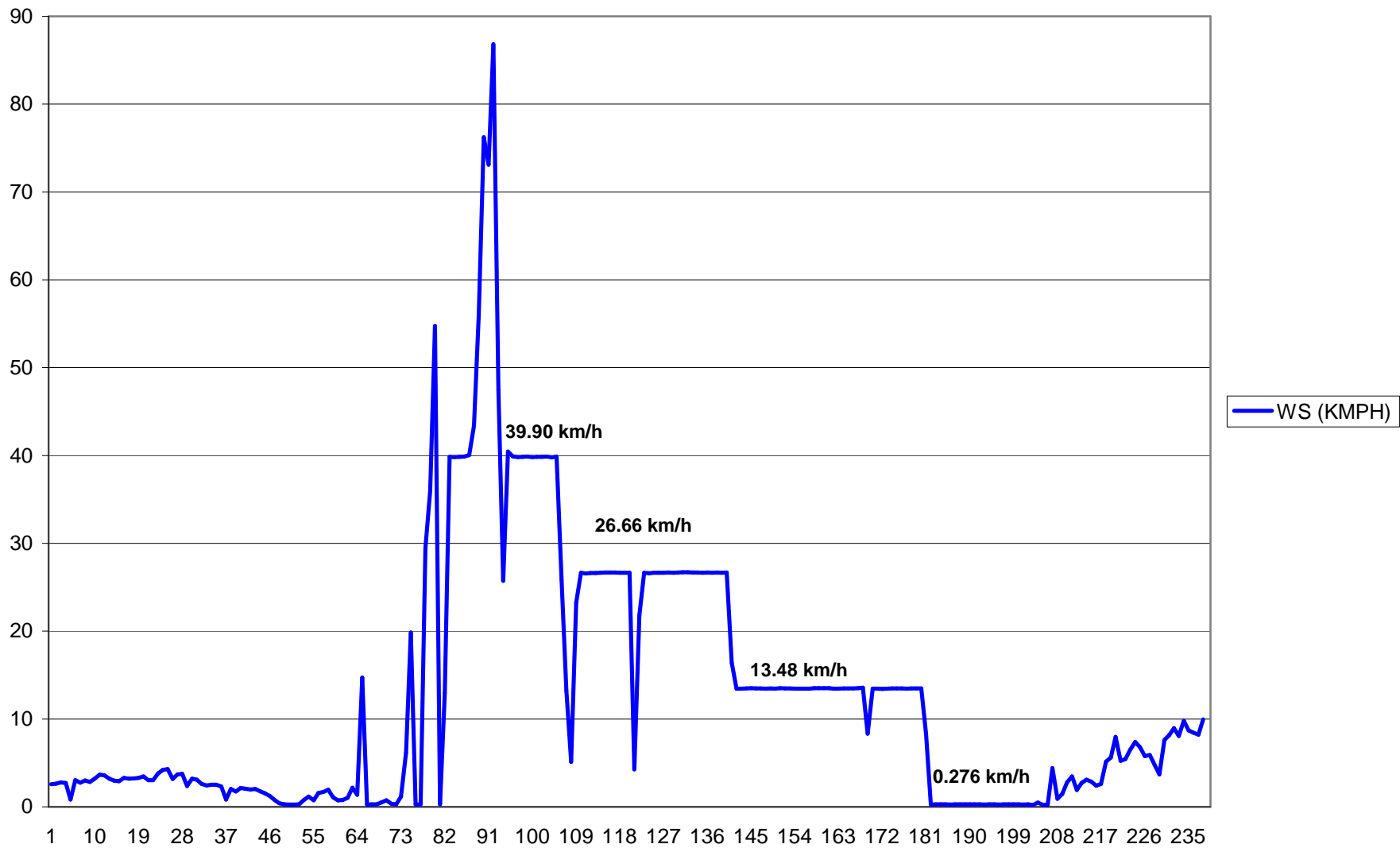
Calibration Date	August 29, 2006	Previous Calibration	NA
Station Number	1	Station Location	Beaverlodge
Start Time (MST)	7:00	End Time (MST)	9:00
Analyzer make/model	0	Analyzer serial #	0

### Calibration Data

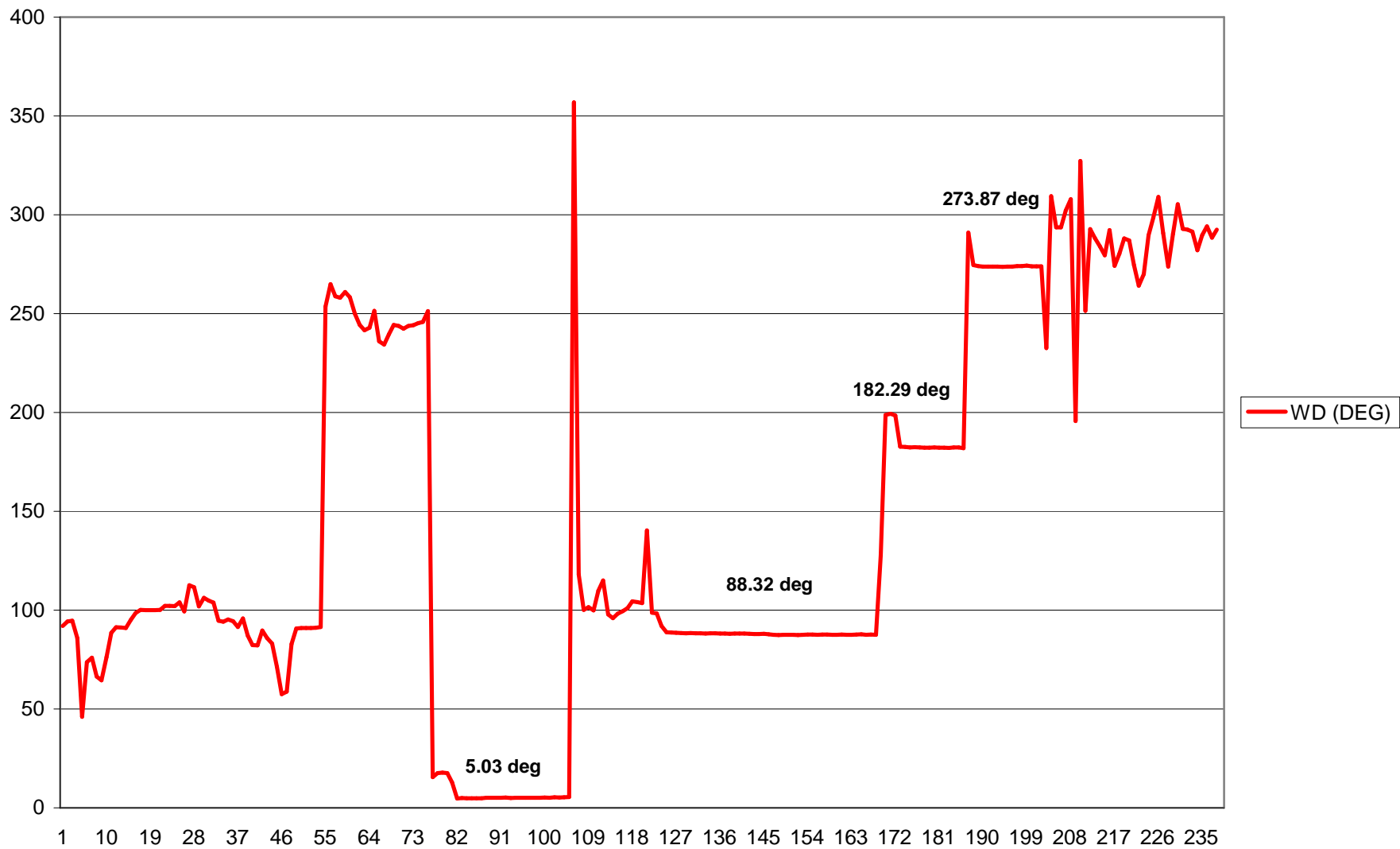
Actual Value (Degrees)	Indicated Value (Degrees)	Correction factor (Cc/lc)	Statistical Evaluation	
0.0	2.2	N/A		
			Correlation Coefficient	0.999519
270.0	273.9	0.9859		
180.0	184.7	0.9747	Slope	0.986715
90.0	88.0	1.0231		
			Intercept	-0.361085



WS (KMPH)



WD (DEG)



# Calibration Report



Parameter SO<sub>2</sub>  
 Air Monitoring Network PASZA

### Station Information

Calibration Date	August 30, 2006	Previous Calibration	
Station Number	1	Station Location	Falher
Reason:	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Install <input type="checkbox"/> Removal <input type="checkbox"/> Other:		
Start Time (MST)	10:16	End Time (MST)	14:13
Barometric Pressure	27.7 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	1,946 ng/min	Perm-tube Date	8/8/2006
Correction factor	0.942621	Perm-tube Cert #	19-25218
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 10 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope		Calculated slope	0.994857
Calculated intercept		Calculated intercept	0.166007
Analyzer make	TEI Model 43C APS1AB	Analyzer serial #	609716238

	before		after	
Concentration range		ppb	0 - 500	ppb
Background			9.8	
Coefficient			1.160	
UV Lamp voltage		V	781	V
Chamber Temperature		C	44.6	C
Perm gas Temp		C	45	C
Pressure		"Hg	676.2	"Hg
Sample Flow		LPM	486	LPM
Lamp Intensity		Hz	33900	Hz

### 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	2356.6	0.0	-0.2	N/A
2500	2356.6	315.2	316.5	0.9959
5000	4713.1	157.6	158.7	0.9929
8500	8012.3	92.7	92.8	0.9993
zero	2356.6	0.0	-0.5	As Found Zero
2500	2356.6	315.2	319.8	As Found Span
Average Correction Factor				0.9960

Calculated value of As Found Response: NA      Percent Change of As Found: NA

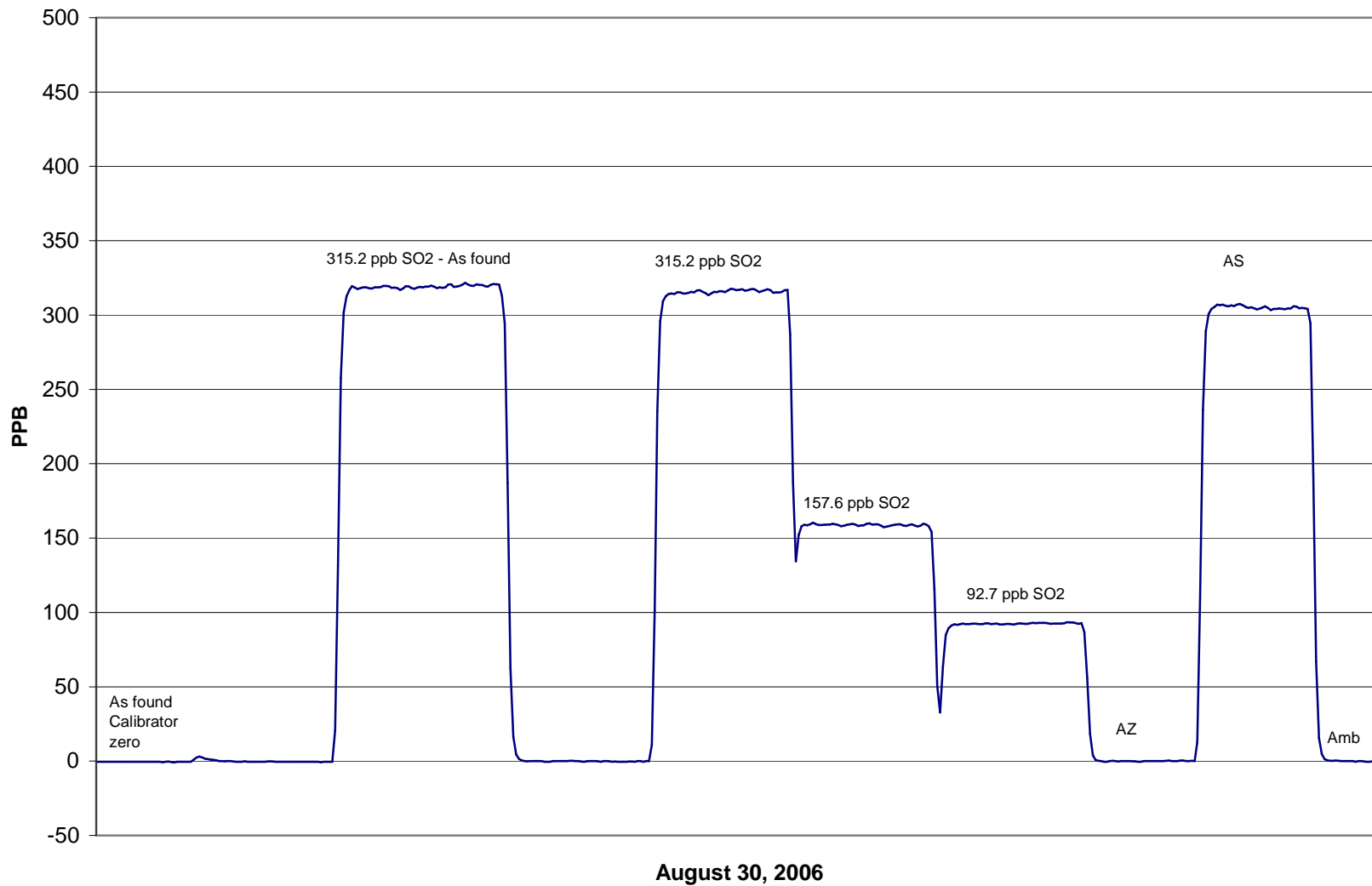
	before calibration		after calibration	
Auto zero		ppm	0.2	ppm
Auto span		ppm	303.2	ppm

Notes: \_\_\_\_\_  
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Calibration Performed By: Dawn Ewan



### SO2 Calibration







## Calibration Summary

Parameter                                                                                
 Air Monitoring Network                                                                                                      

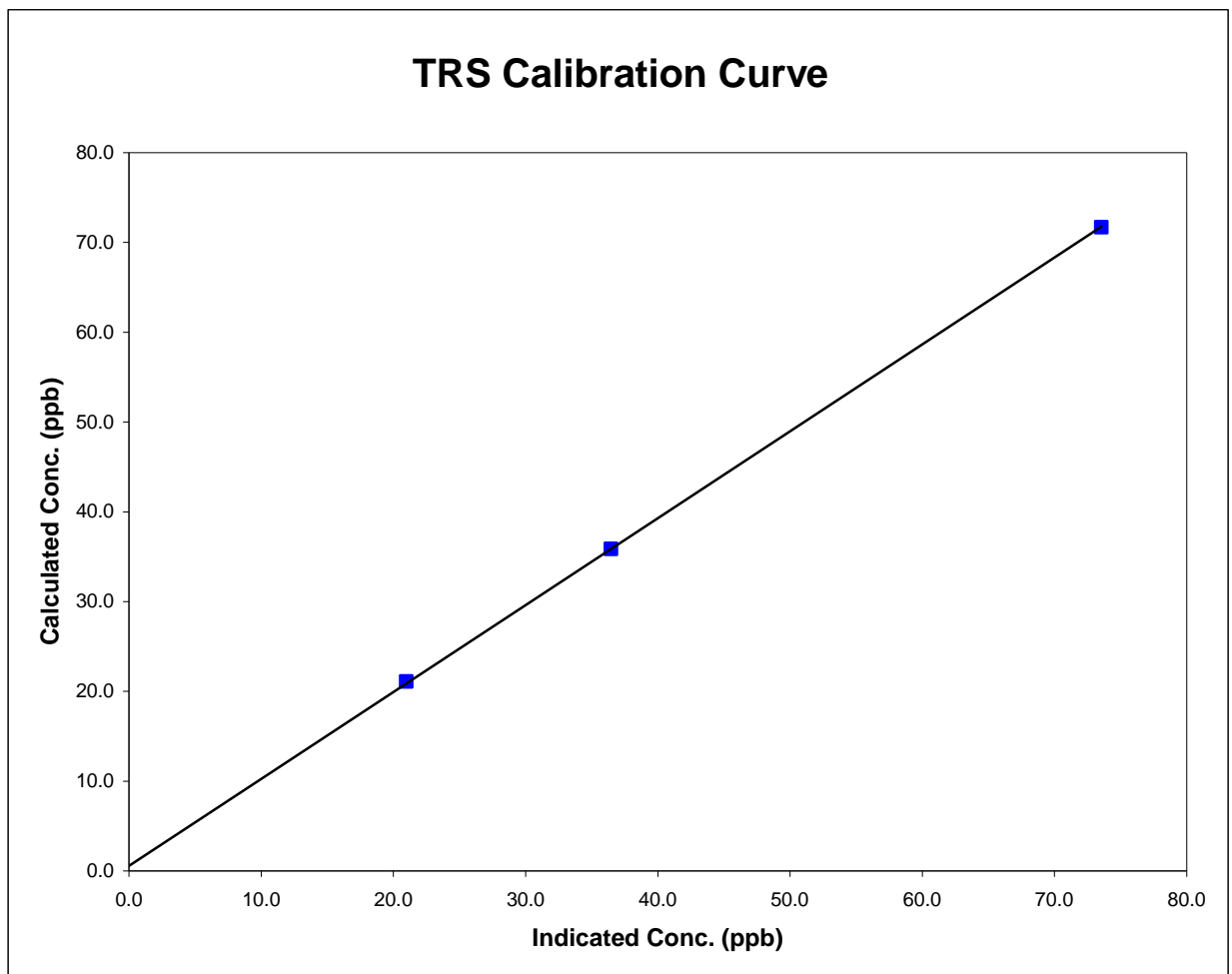


### Station Information

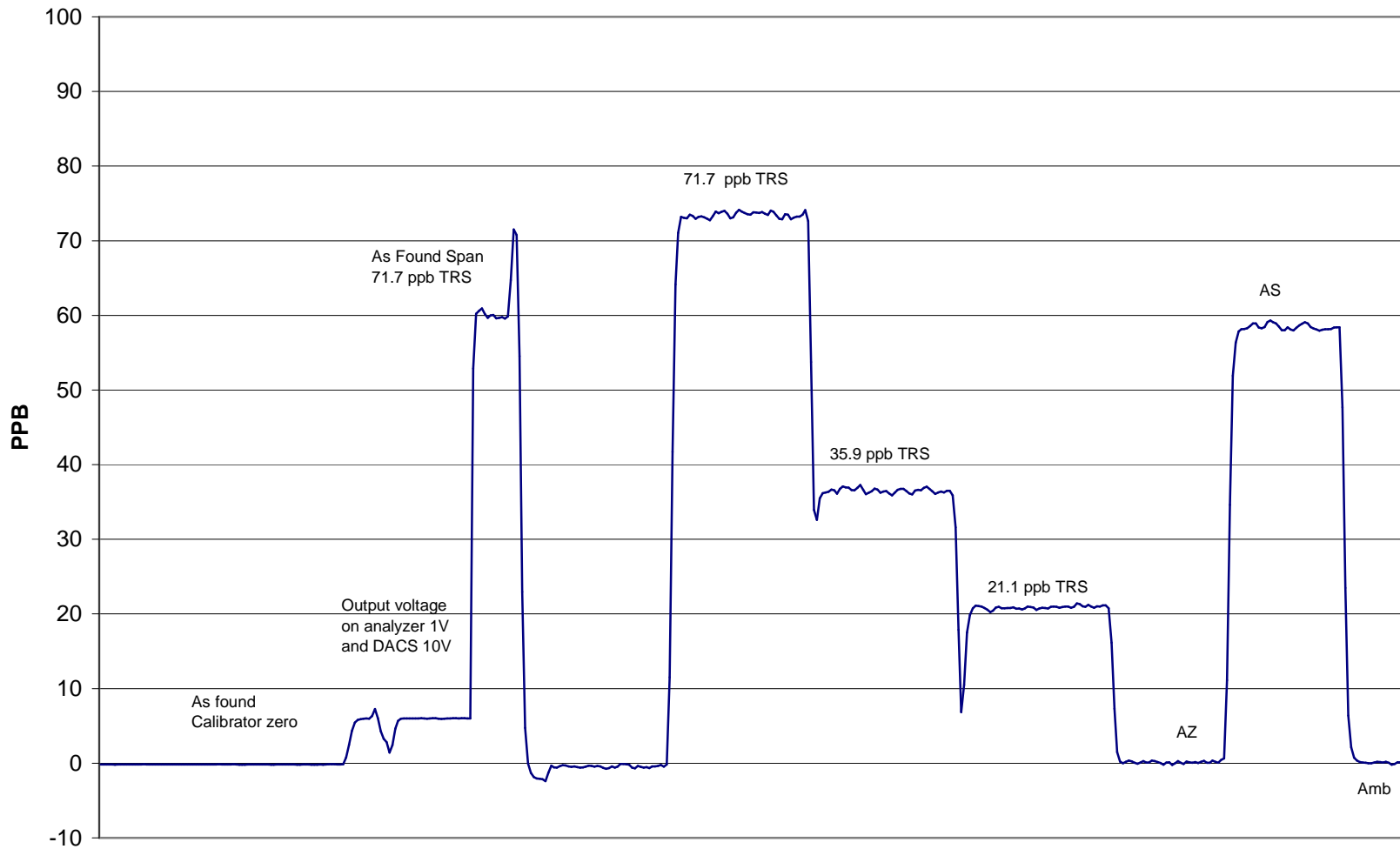
Calibration Date	August 28, 2006	Previous Calibration	January 0, 1900
Station Number	5	Station Location	Falher - Rover
Start Time (MST)	10:16	End Time (MST)	13:39
Analyzer make/model	TEI Model 43C APS1AB	Analyzer serial #	609716238

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A	Correlation Coefficient	0.999975
71.7	73.6	0.9748		
35.9	36.5	0.9834		
21.1	21.0	1.0052	Slope	0.967802
			Intercept	0.574790



### TRS Calibration



August 28, 2006

## Calibration Report



Parameter           O3            
Air Monitoring Network           PASZA          

### Station Information

Calibration Date	August 30, 2006	Previous Calibration	
Station Number	5	Station Location	Falher - Rover
Reason:	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Install <input type="checkbox"/> Removal <input type="checkbox"/> Other:		
Start Time (MST)	12:25	End Time (MST)	15:52
Barometric Pressure	0.924 atm	Station Temperature	20.0 Deg C
Calibrator	Enviroics 6103	Serial Number	2977
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 1 volt	DACS channel #	7
	Before		After
Calculated slope		Calculated slope	1.007314
Calculated intercept		Calculated intercept	0.483368
Analyzer make	TEI 49C a3C1AB	Analyzer serial #	609716240

	before		after
Concentration range		ppb	0 - 500 ppb
offset		ppb	ppb
slope			
Lamp measure		mV	mV
Lamp Reference		mV	mV
Pressure		inches Hg	inches Hg
Sample Flow		ccm	ccm
ANA Lamp temp		Deg C	Deg C

### 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	348.9	346.7	1.0062
4992	0.00	207.1	203.7	1.0166
4992	0.00	109.2	107.8	1.0128
4992	0.00	0.0	5.5	As found zero
4992	0.00	348.9	345.6	As found span
Average Correction Factor				1.0119

Calculated value of As Found Response:            NA ppm            Percent Change of As Found:            NA

	before calibration		after calibration
Auto zero		ppb	1.9 ppb
Auto span		ppb	323.7 ppb

Notes:

Calibration Performed By:           Dawn Ewan

## Calibration Summary

Parameter                 O3                  
 Air Monitoring Network                 PASZA                

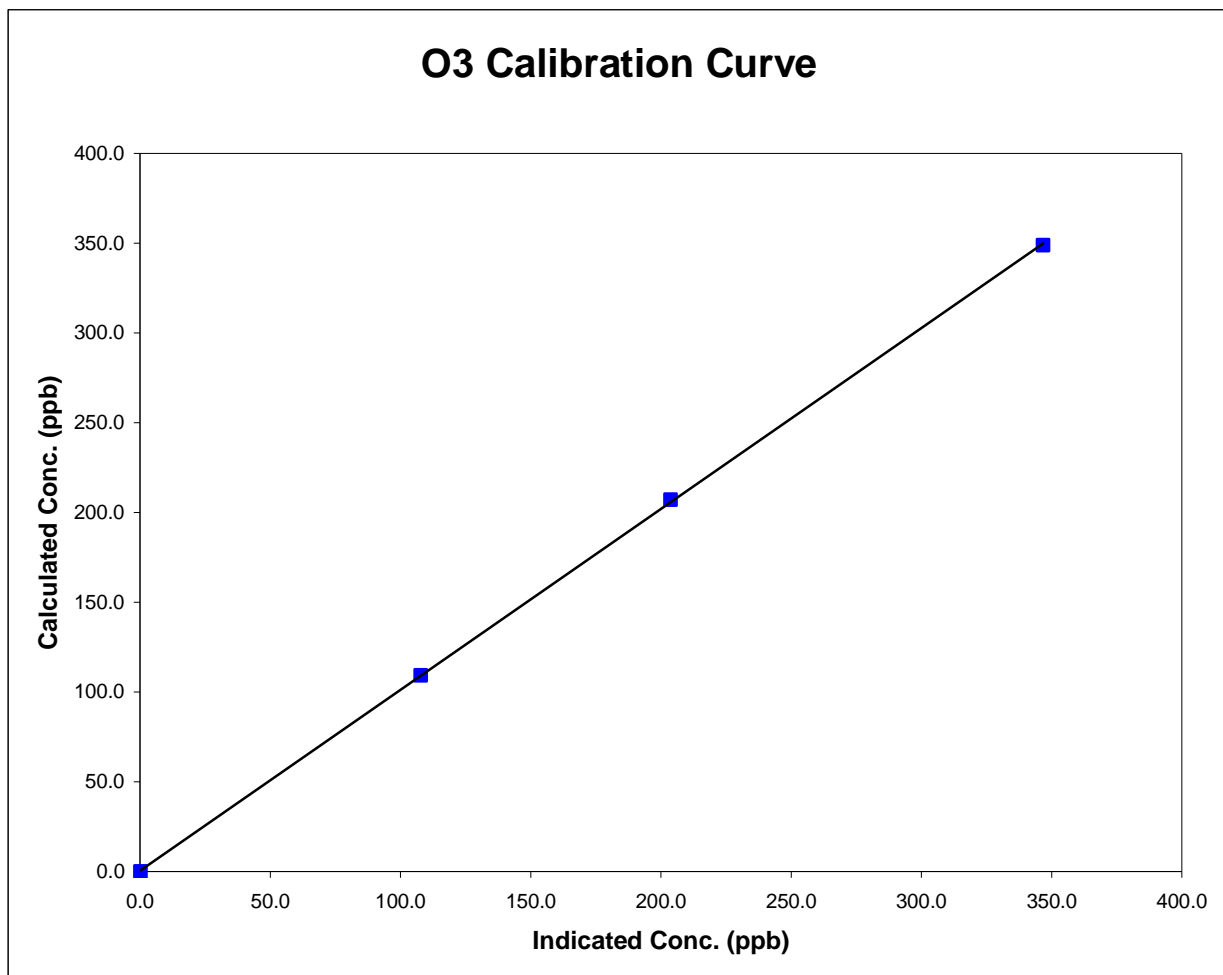


### Station Information

Calibration Date	August 30, 2006	Previous Calibration	January 0, 1900
Station Number	5	Station Location	Falher - Rover
Start Time (MST)	12:25	End Time (MST)	15:52
Analyzer make/model	TEI 49C a3C1AB	Analyzer serial #	609716240

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA	Correlation Coefficient	0.999951
348.9	346.7	1.0062		
207.1	203.7	1.0166		
109.2	107.8	1.0128	Slope	1.007314
			Intercept	0.483368



### O3 Calibration

