



# Air Quality Monitoring Network for November 2006

Prepared by  
**FOCUS**  
AMBIENT AIR MONITORING

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## Peace AirShed Zone Association

January 15, 2007

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) – November Ambient Air Report**

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

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

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the "Monthly Summary" and "Continuous Monitoring" pages of the report. The measured ambient air quality was within the Provincial and Federal objectives.

During the month of November the following events were noted:

#### **Henry Pirker Station:**

- ◆ Temperature fluctuations in the station appear to have continued affect on the spans of many of the analyzers in the station (TRS, THC, CO and O<sub>3</sub>):
  - There were no THC and CO spans until November 6<sup>th</sup>.
  - From November 8<sup>th</sup> to 13<sup>th</sup> the THC analyzer span cylinder pressure was low.
  - TRS spans unstable throughout month, investigation of problem ongoing.
  - O<sub>3</sub> span unstable until November 17<sup>th</sup>, (station temperature became stable after the 17<sup>th</sup>).
- ◆ Air conditioner contractor was involved in repairs and adjustments throughout several periods of November.
- ◆ Maintenance activity at the staton resulted in one (1) hour of invalid data on November 20<sup>th</sup> for the NO<sub>x</sub> analyzer.
- ◆ The wind speed and wind direction sensors were down for one (1) hour on November 20<sup>th</sup> for maintenance.
- ◆ The TEOM analyzer had nine (9) hours of data invalidated on November 10<sup>th</sup> (the station temperature reached 50°C on November 10<sup>th</sup>).
- ◆ All analyzers / sensors at the Henry Pirker station were above 90% uptime.
- ◆ The AQI for the month resulted in 675 hours of Good readings.

#### **Evergreen Park Station:**

- ◆ Ten (10) hours data were invalidated on November 1<sup>st</sup> (a continuation from October, when the power bar at the station tripped due to a power surge, which resulted in the pumps from the SO<sub>2</sub>, TRS and TEOM to fail - AENV reference #179107).

- ◆ The TRS analyzer had an additional four (4) hours of data removed on November 1<sup>st</sup> as the analyzer was slow to respond after the power was restored and the spans were triggered.
- ◆ The spans on the SO<sub>2</sub> analyzer slowly declined throughout the month.
- ◆ All analyzers / sensors at the Evergreen Park station were above 90% uptime.

### **Smoky Heights Station:**

- ◆ On November 8<sup>th</sup> there was an instantaneous (30 second) reading of 24 ppb (hour average of 5 ppb) at 14:00. The wind direction was from the west-southwest (WSW) at 11 km/hr.
- ◆ The wind speed sensor was frozen from November 15<sup>th</sup> to November 19<sup>th</sup>. An attempt was made on November 17 to try and get the sensor working again but to no avail. The non-compliance of less than 90% has been assigned AENV reference number 181686.
- ◆ There was an elevated TRS reading (5 ppb) on November 8<sup>th</sup> with winds coming from the west-southwest.
- ◆ All analyzers / sensors (except the wind sensor) at the Smoky Heights station were above 90% uptime.

### **Beaverlodge Station:**

- ◆ All analyzers / sensors at the Beaverlodge station were above 90% uptime.
- ◆ The AQI for the month resulted in 684 hours of Good readings.

### **Portable - Falher Station:**

- ◆ Data capture was extremely intermittent during the month of November; the PC was infected with viruses. In addition, the original modem that was commissioned with the station was utilized to replace the problematic modem at Beaverlodge and Telus was unable to provide a new modem in a timely fashion. The original Beaverlodge modem did not operate to transmit data regularly from the Falher station. Both the PC and the modem have been replaced in order to ensure ongoing real-time communication with modified security access.
- ◆ On November 6<sup>th</sup> a power spike caused the ultrasonic wind sensor to freeze up. This problem was rectified when the technician was on site on November 17<sup>th</sup> and the system was reset. This situation would have been caught earlier had continuous communications been available. The non-compliance of less than 90% has been assigned AENV reference number 181588. The ultrasonic has since then been powered through the uninterruptible power supply (UPS) at the station.
- ◆ A number of events transpired which resulted in the non-compliance of less than 90% uptime for all parameters (SO<sub>2</sub>, TRS, O<sub>3</sub>, wind speed, wind direction and temperature). On November 21<sup>st</sup> a transformer went down just outside the station, creating a power failure at the station (the transformer has since been repaired by ATCO Electric). When power was restored all the equipment restarted except the DACS. Thus the data was not being recorded. This issue was not caught due to the modem being disconnected and communication was not available to indicate an issue. A new modem was installed on November 27<sup>th</sup>, and the DACS / PC were repaired and operating by November 28<sup>th</sup>. A new UPS backup has been incorporated to prevent future occurrence. The non-compliance has been assigned AENV reference number 181549.

### **Valleyview Station:**

- ◆ The SO<sub>2</sub> internal span system remained affected by station temperature until November 9<sup>th</sup> when new perm tube was installed, along with other maintenance activities, and the analyzer was allowed to stabilize over night. By evening of November 10<sup>th</sup> the analyzer was operating better, however the spans were offscale. On November 17<sup>th</sup> a calibration along with further adjustment was brought the spans to scale. All SO<sub>2</sub> functions since then have been consistent and stable.
- ◆ The SO<sub>2</sub> data was reported to the nearest 0.01 ppm due to the condition of the analyzer. This analyzer will be replaced with a new one (with a target of early February, 2007).
- ◆ A new perm tube was installed on November 9<sup>th</sup> in the H<sub>2</sub>S analyzer.
- ◆ All analyzers / sensors at the Valleyview station were above 90% uptime.

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

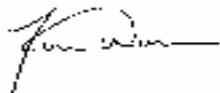
There were two sample sites, Sylvester and Karr Creek, where the passive samples were not retrieved in the month of October due to road closures, these samples were retrieved in November. The results for these two samples were over a two month period.

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

- Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.2 ppb to 1.0 ppb, with a mean of 0.6 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 1.1 ppb to 13.5 ppb, with a mean of 3.0 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 20.6 ppb to 42.7 ppb, with a mean of 34.6 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



December 21, 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 # 181549**

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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). A number of events transpired which resulted in the non-compliance of less than 90% uptime for all parameters (SO<sub>2</sub>, TRS, O<sub>3</sub>, wind speed, wind direction and temperature) at the Falher (portable) air monitoring station. On November 21<sup>st</sup> a transformer went down just outside the station, creating a power failure at the station (the transformer has since been repaired by ATCO Electric). When power was restored all the equipment restarted except the DACS. Thus the data was not being recorded. This issue was not caught due to the modem being disconnected and communication was not available to indicate an issue. A new modem had been ordered and was to be installed upon arrival; it was at this time that the issue was caught. The new modem was installed on November 27<sup>th</sup>, and the DACS was repaired and operating by November 28<sup>th</sup>. This station is owned by PASZA and operated on their behalf by FOCUS. The non-compliance has been assigned AENV reference number 181549.

If there are any questions or concerns please call Sharon Whiteley or Kelly Baragar at your convenience at (403) 269-2252.

Sincerely,

THE FOCUS CORPORATION

Sharon Whiteley, B.Sc.  
AQM Data Specialist



December 21, 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 # 181588**

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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). A number of events transpired which resulted in the non-compliance of less than 90% uptime for the wind speed and wind direction sensors at the Falher (portable) air monitoring station. On November 6<sup>th</sup> a power spike caused the ultrasonic wind sensor to freeze up. This problem was rectified when the technician was on site on November 17<sup>th</sup> and the system was reset. It was at this time that it was discovered that the DACS (Data Acquisition System) had problems with viruses, compounded with a faulty modem. This situation would have been caught earlier had continuous communications been available. Both the DACS and the modem have been replaced in order to ensure ongoing communication. This station is owned by PASZA and operated on their behalf by FOCUS. The non-compliance has been assigned AENV reference number 181588.

If there are any questions or concerns please call Sharon Whiteley or Kelly Baragar at your convenience at (403) 269-2252.

Sincerely,

THE FOCUS CORPORATION

Sharon Whiteley, B.Sc.  
AQM Data Specialist



## Peace AirShed Zone Association

January 4, 2007

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

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**RE:                   PASZA Air Monitoring Directive Non-compliance Report Ref # 181686**

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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 November 2006 for the wind speed parameter. This situation occurred at the Smoky Heights air monitoring station (located NE of Teepee Creek) from November 15<sup>th</sup> to November 19<sup>th</sup>. The wind speed sensor at this location became frozen due to rain, snow and freezing temperatures. An attempt was made on November 17<sup>th</sup> to free the anemometer but it was met with no success, it was eventually freed on November 19<sup>th</sup>. The station is owned by PASZA and operated on their behalf by Focus. The non-compliance has been assigned AENV reference number 181686.

If there are any questions or concerns please call Sharon Whiteley or Kelly Baragar at your convenience at (403) 269-2252.

Sincerely,

THE FOCUS CORPORATION

Sharon Whiteley, B.Sc.  
AQMD Data Specialist

## PASZA Monthly Continuous Data Summary

Nov-2006 Peace Airshed Zone Association							Maximum Recorded Values						
							1-hr			24-hr / 8-hr			
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	Operational Time (%)
	1-hr	24-hr			1-hr	24-hr							
SO <sub>2</sub> (ppb)	172	57	Henry Pirker	0.8	0	0	5.6	Nov-15 03:00	12.4	SW	1.6	Nov-30	100.0%
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	1.1	0	0	8.6	Nov-10 12:00	3.9	SW	2.0	Nov-10	98.6%
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.6	0	0	13.9	Nov-08 14:00	11.4	WSW	2.3	Nov-29	100.0%
SO <sub>2</sub> (ppb)	172	57	Beaverlodge	1.1	0	0	9.1	Nov-04 22:00	7.8	NNE	2.2	Nov-13	100.0%
SO <sub>2</sub> (ppb)	172	57	Portable-Fahler	0.4	0	0	2.8	Nov-04 10:00	11.3	NE	0.8	Nov-29	76.4%
SO <sub>2</sub> (ppm)	0.172	0.057	Valleyview	0.00	0	0	0.01	Nov-19 20:00	18.9	W	0.00	Nov-19	96.4%
NO (ppb)			Henry Pirker	15.8	-	-	219.3	Nov-20 18:00	6.6	NNE	62.0	Nov-17	99.9%
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	17.2	0	0	57.6	Nov-20 16:00	6.0	E	35.7	Nov-20	99.9%
NO <sub>x</sub> (ppb)			Henry Pirker	33.1	-	-	276.6	Nov-20 18:00	6.6	NNE	93.1	Nov-20	99.9%
NO (ppb)			Beaverlodge	3.3	-	-	84.9	Nov-29 14:00	1.5	SW	15.0	Nov-29	100.0%
NO <sub>2</sub> (ppb)	212	106	Beaverlodge	8.8	0	0	38.8	Nov-29 14:00	1.5	SW	21.1	Nov-29	100.0%
NO <sub>x</sub> (ppb)			Beaverlodge	12.4	-	-	124.5	Nov-29 14:00	1.5	SW	36.7	Nov-29	100.0%
O <sub>3</sub> (ppb)	82		Henry Pirker	14.4	0	-	39.1	Nov-19 21:00	26.2	E	25.8	Nov-22	99.9%
O <sub>3</sub> (ppb) - 8-hr		65	Henry Pirker		0						37.3	Nov-20	
O <sub>3</sub> (ppb)	82		Beaverlodge	22.6	0	-	45.9	Nov-19 20:00	40.3	W	37.8	Nov-20	100.0%
O <sub>3</sub> (ppb) - 8-hr		65	Beaverlodge		0						44.3	Nov-20	
O <sub>3</sub> (ppb)	82		Portable-Fahler	21.9	0	-	44.0	Nov-19 23:00	31.7	SW	33.7	Nov-20	76.4%
O <sub>3</sub> (ppb) - 8-hr		65	Portable-Fahler		0						42.1	Nov-20	
CO (ppm)	13		Henry Pirker	0.26	0	-	2.0	Nov-17 08:00	6.1	W	0.8	Nov-20	99.9%
CO (ppm) - 8-hr		5	Henry Pirker		0						1.3	Nov-20	
THC (ppm)			Henry Pirker	2.29	-	-	3.6	Nov-29 12:00	6.1	WNW	3.1	Nov-29	100.0%
TRS (ppb)			Henry Pirker	0.3	-	-	1.4	Nov-26 03:00	6.4	WNW	0.6	Nov-17	100.0%
TRS (ppb)			Evergreen Park	0.8	-	-	2.8	Nov-01 12:00	3.6	NW	1.4	Nov-09	98.6%
TRS (ppb)			Smoky Heights	0.4	-	-	4.5	Nov-08 14:00	11.4	WSW	0.8	Nov-12	100.0%
TRS (ppb)			Portable-Fahler	0.3	-	-	0.5	Nov-28 19:00	10.0	SE	0.4	Nov-30	76.4%
H <sub>2</sub> S (ppb)	10	3	Valleyview	0.2	0	0	1.2	Nov-05 21:00	2.3	N	0.5	Nov-06	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 a	Henry Pirker	4.8	0	0	25.6	Nov-12 11:00	6.1	NE	15.0	Nov-12	98.8%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 a	Evergreen Park	5.1	0	0	29.8	Nov-29 11:00	3.7	WSW	14.6	Nov-12	97.2%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 a	Smoky Heights	5.4	0	0	51.2	Nov-20 16:00	3.1	NW	16.2	Nov-12	99.9%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 a	Beaverlodge	4.1	0	0	26.9	Nov-10 23:00	14.5	NNW	13.1	Nov-12	99.7%

## PASZA Monthly Continuous Data Summary - continued

Nov-2006 Peace Airshed Zone Association					Maximum Recorded Values								
					1-hr			24-hr / 8-hr					
RH (%)			Henry Pirker	73.8	-	-	-	-	-	-	-	100.0%	
RH (%)			Beaverlodge	77.3	-	-	-	-	-	-	-	100.0%	
RH (%)			Portable-Fahler	81.5	-	-	-	-	-	-	-	76.3%	
RH (%)			Valleyview	77.7	-	-	-	-	-	-	-	100.0%	
SR (W/m <sup>2</sup> )			Henry Pirker	29.5	-	-	-	-	-	-	-	100.0%	
Temp (°C)			Henry Pirker	-14.2	-	-	-	-	-	-	-	100.0%	
Temp (°C)			Evergreen Park	-14.6	-	-	-	-	-	-	-	100.0%	
Temp (°C)			Smoky Heights	-14.0	-	-	-	-	-	-	-	100.0%	
Temp (°C)			Beaverlodge	-14.0	-	-	-	-	-	-	-	100.0%	
Temp (°C)			Portable-Fahler	-10.6	-	-	-	-	-	-	-	76.3%	
Temp (°C)			Valleyview	-13.1	-	-	-	-	-	-	-	100.0%	
WSPD v (km/hr)			Henry Pirker	9.4	-	-	35.2	Nov-15 22:00	35.2	NE	16.1	Nov-24	99.9%
WSPD v (km/hr)			Evergreen Park	5.4	-	-	24.2	Nov-19 00:00	24.2	WSW	9.3	Nov-24	100.0%
WSPD v (km/hr)			Smoky Heights	9.3	-	-	39.9	Nov-19 19:00	39.9	WSW	14.9	Nov-06	100.0%
WSPD v (km/hr)			Beaverlodge	6.8	-	-	40.2	Nov-19 20:00	40.2	W	9.8	Nov-24	100.0%
WSPD v (km/hr)			Portable-Fahler	15.1	-	-	41.9	Nov-19 08:00	41.9	SE	25.5	Nov-19	40.6%
WSPD v (km/hr)			Valleyview	6.1	-	-	23.2	Nov-16 01:00	23.2	WNW	11.8	Nov-15	100.0%
WSPD s (km/hr)			Henry Pirker	10.1	-	-	35.3	Nov-15 22:00	35.3	NE	16.3	Nov-24	99.9%
WSPD s (km/hr)			Evergreen Park	5.8	-	-	24.3	Nov-19 00:00	24.3	WSW	9.6	Nov-24	100.0%
WSPD s (km/hr)			Smoky Heights	9.5	-	-	40.1	Nov-19 19:00	40.1	WSW	15.4	Nov-15	100.0%
WSPD s (km/hr)			Beaverlodge	7.0	-	-	40.3	Nov-19 20:00	40.3	W	14.0	Nov-19	100.0%
WSPD s (km/hr)			Portable-Fahler	15.3	-	-	41.9	Nov-19 08:00	41.9	SE	33.5	Nov-19	40.6%
WSPD s (km/hr)			Valleyview	6.4	-	-	23.4	Nov-16 01:00	23.4	WNW	13.1	Nov-19	100.0%
WDIR			Henry Pirker	NNW	-	-	-	-	-	-	-	-	99.9%
WDIR			Evergreen Park	NNW	-	-	-	-	-	-	-	-	100.0%
WDIR			Smoky Heights	NNW	-	-	-	-	-	-	-	-	100.0%
WDIR			Beaverlodge	N	-	-	-	-	-	-	-	-	100.0%
WDIR			Portable-Fahler	ESE	-	-	-	-	-	-	-	-	40.6%
WDIR			Valleyview	NW	-	-	-	-	-	-	-	-	100.0%

Note:

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

# Continuous Network Equipment Summary

## PASZA – Henry Pirker Station

### General Station Issues

Calibrations were performed on November 6<sup>th</sup> (THC, SO<sub>2</sub>, TRS & CO), November 7<sup>th</sup> (NO<sub>x</sub>) and November 13<sup>th</sup> (THC, O<sub>3</sub> and TEOM). From November 1<sup>st</sup> to 17<sup>th</sup> temperatures in the station continued to fluctuate with station temperature reaching a high of 50°C on November 10<sup>th</sup>. Maintenance was performed on wind sensor on November 20<sup>th</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43	No operational problems observed.
NOx/NO/NO <sub>2</sub>	TECO	42C	One (1) hour was flagged due to the maintenance activity on November 20 <sup>th</sup> .
O <sub>3</sub>	API	400	O <sub>3</sub> spans unstable until November 17 <sup>th</sup> , after the 17 <sup>th</sup> the station temperature is more stable. The O <sub>3</sub> analyzer had one (1) hour of excessive baseline drift on November 18 <sup>th</sup> .
CO	TECO	48C	No CO spans until November 6 <sup>th</sup> . The CO analyzer had one (1) hour of excessive baseline drift on November 10 <sup>th</sup> .
THC	TEI	51-CLT	No THC spans until November 6 <sup>th</sup> .
TRS	TEI	42C	TRS spans unstable throughout the month.
PM <sub>2.5</sub>	R&P	1400AB	Nine (9) hours of data was invalidated on November 10 <sup>th</sup> (possibly due to high station temperature).
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	One (1) hour was flagged due to the maintenance activity on November 20 <sup>th</sup> .
WD	Met One	020C	One (1) hour was flagged due to the maintenance activity on November 20 <sup>th</sup> .

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### PASZA – Evergreen Park Station

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**General Station Issues**

Calibrations were performed on November 2<sup>nd</sup> (SO<sub>2</sub>, TRS and PM<sub>2.5</sub>).

<b>Parameter</b>	<b>Make</b>	<b>Model</b>	<b>Notes</b>
SO <sub>2</sub>	API	100	Ten (10) hours data were invalidated on November 1 <sup>st</sup> (a continuation from October, when the power bar at the station tripped due to a power surge, which resulted in the pumps from the SO <sub>2</sub> , TRS and TEOM to fail - AENV reference #179107).
TRS	TEI	42C	Ten (10) hours data were invalidated on November 1 <sup>st</sup> (a continuation from October, when the power bar at the station tripped due to a power surge, which resulted in the pumps from the SO <sub>2</sub> , TRS and TEOM to fail - AENV reference #179107). Four (4) hours of data were invalidated after spans on November 1 <sup>st</sup> as the analyzer was slow to respond after the power was restored and the spans were triggered
PM <sub>2.5</sub>	R&P	1400AB	Seven (7) hours were removed due to baseline drift. A total of thirteen (13) hours data were invalidated on November 1 <sup>st</sup> (a continuation from October, when the power bar at the station tripped due to a power surge, which resulted in the pumps from the SO <sub>2</sub> , TRS and TEOM to fail - AENV reference #179107). Two of the thirteen hours were for maintenance – the filter was changed out on the TEOM.
AT	Met One	083D	No operational problems observed.
WS	Met One	010C	No operational problems observed.
WD	Met One	020C	No operational problems observed.

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### PASZA – Smoky Heights Station

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**General Station Issues**

Calibrations were performed on November 29<sup>th</sup> (SO<sub>2</sub>, TRS and PM<sub>2.5</sub>).

<b>Parameter</b>	<b>Make</b>	<b>Model</b>	<b>Notes</b>
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	One (1) hour was removed due to baseline drift.
AT	Met One	083D	No operational problems observed.
WS	Met One	010C	Wind speed sensor frozen, eighty-six (86) hours flagged invalid. (AENV reference # 181686)
WD	Met One	020C	No operational problems observed.

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### PASZA – Beaverlodge Station

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**General Station Issues**

Calibrations were performed on November 1<sup>st</sup> (SO<sub>2</sub>), November 21<sup>st</sup> (NO<sub>x</sub> and PM<sub>2.5</sub>) and November 24<sup>th</sup> (O<sub>3</sub>).

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43CTL	No operational problems observed.
NOx/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	Two (2) hours were removed due to baseline drift.
AT	n/a	n/a	No operational problems observed.
RH	n/a	n/a	No operational problems observed.
WS	Blue Sky	857	No operational problems observed. Fourteen (14) hours of calm were observed.
WD	Blue Sky	857	No operational problems observed.

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### PASZA – Falher (Portable) Station

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**General Station Issues**

Calibrations were performed on November 17<sup>th</sup> (SO<sub>2</sub>, TRS and O<sub>3</sub>). An attempt to install a new modem on November 17<sup>th</sup> ended unsuccessfully due to a faulty modem, a new modem was sent out and was successfully installed on November 27<sup>th</sup>.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TEI	43C	A power failure and an unresponsive DACS resulted in one hundred and seventy hours (170) of invalid data for month of November. (AENV reference # 181549)
TRS	TEI	43C	A power failure and an unresponsive DACS resulted in one hundred and seventy hours (170) of invalid data for month of November. (AENV reference # 181549)
O <sub>3</sub>	TEI	49C	A power failure and an unresponsive DACS resulted in one hundred and seventy hours (170) of invalid data for month of November. (AENV reference # 181549)
AT	Gill Met Pak 3		A power failure and an unresponsive DACS resulted in one hundred and seventy hours (170) of invalid data for month of November. (AENV reference # 181549)
RH	Gill Met Pak 3		A power failure and an unresponsive DACS resulted in one hundred and seventy hours (170) of invalid data for month of November. (AENV reference # 181549)
WS	Gill Met Pak 3		On November 6 <sup>th</sup> a power spike caused the ultrasonic wind sensor to electronically freeze up, compounded with the DACS failure to record the wind data – two hundred and fifty-eight (258) hours were flagged invalid. (AENV reference # 181588). A power failure on November 21 <sup>st</sup> and an unresponsive DACS resulted in another one hundred and seventy hours (170) of invalid data (AENV reference # 181549) for a combined total of four hundred and twenty-eight (428) hours of invalid data for month of November.
WD	Gill Met Pak 3		On November 6 <sup>th</sup> a power spike caused the ultrasonic wind sensor to electronically freeze up, compounded with the DACS failure to record the wind data – two hundred and fifty-eight (258) hours were flagged invalid. (AENV reference # 181588). A power failure on November 21 <sup>st</sup> and an unresponsive DACS resulted in another one hundred and seventy hours (170) of invalid data (AENV reference # 181549) for a combined total of four hundred and twenty-eight (428) hours of invalid data for month of November.

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**PASZA – Valleyview Station**

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**General Station Issues**

Calibrations were performed on November 17<sup>th</sup> (SO<sub>2</sub>, H<sub>2</sub>S).

Parameter	Make	Model	Notes
SO <sub>2</sub>	ML	332	A new perm tube installed and maintenance on November 9 <sup>th</sup> , analyzer allowed to stabilize overnight: two (2) hours attributed to maintenance and twenty-four (24) hours of invalid data.
H <sub>2</sub> S	TEI	43C	A new perm tube installed on November 9 <sup>th</sup> .
AT	Gill Met Pak 3		No operational problems observed.
RH	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.

# 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: November 1, 2006 to December 1, 2006

### Alberta's Air Quality Index

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

### Summary

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

### Status Flag Characters

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

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

# PASZA - Henry Pirker - Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 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:	5.6 ppb	15-Nov	3:00 4:00
Maximum 24-hr Average:	1.6 ppb	30-Nov	

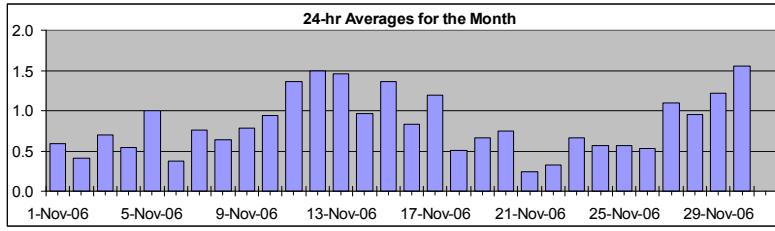
AIC Time:	31 hrs	Operational Time:	686 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 2.8	95 1.9	75 1.1	50 0.7	25 0.4	5 0.2	1 0.0	Average 0.8 ppb	Median 0.7 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Nov-06	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0.6	1.4	
2-Nov-06	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	0	0	0	1	1	1	1	0.4	1.0	
3-Nov-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	0.7	1.2	
4-Nov-06	0	0	0	0	0	0	0	1	1	1	1	1	0	1	1	A	1	0	0	0	1	1	0	0	0.5	1.3		
5-Nov-06	0	1	2	2	1	2	2	1	1	1	1	3	2	1	A	1	1	1	1	1	1	0	0	1	1	1.0	2.9	
6-Nov-06	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0.4	1.3
7-Nov-06	0	1	1	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
8-Nov-06	0	0	0	0	0	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.0	
9-Nov-06	0	0	0	0	A	0	0	1	0	0	0	0	1	1	1	2	2	1	1	1	1	1	1	1	1	0.8	2.1	
10-Nov-06	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	2	1	0.9	1.8	
11-Nov-06	2	2	A	1	1	1	1	1	1	1	1	2	2	2	1	1	2	2	1	2	1	1	1	1	1	1.4	1.9	
12-Nov-06	3	A	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1.5	2.8	
13-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	2	2	2	2	2	1	1	1	1.5	2.8	
14-Nov-06	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1.0	2.7	
15-Nov-06	2	4	5	6	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1.4	5.6	
16-Nov-06	0	0	1	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
17-Nov-06	1	1	A	1	1	1	1	1	1	2	1	2	1	1	1	1	2	1	1	1	1	1	1	2	1	1.2	2.5	
18-Nov-06	1	A	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0.5	0.8	
19-Nov-06	A	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.7	1.1	
20-Nov-06	0	0	0	0	0	1	1	1	1	0	1	2	1	1	1	1	2	2	2	1	0	0	0	0	0	0.7	1.8	
21-Nov-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	0.4	
22-Nov-06	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9	
23-Nov-06	0	0	1	A	0	1	1	1	0	0	0	0	0	0	1	1	2	1	0	1	1	1	1	0	1	0.7	1.6	
24-Nov-06	0	1	A	1	2	1	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	1.8	
25-Nov-06	0	A	1	1	1	1	1	1	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.5	
26-Nov-06	A	0	0	0	0	1	1	1	1	0	1	0	1	1	1	1	1	1	0	0	0	0	0	1	A	0.5	0.8	
27-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	A	1	1.1	2.5	
28-Nov-06	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	A	1	1.0	3.3	
29-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	A	2	2	2	2	1.2	2.3		
30-Nov-06	2	2	1	1	1	2	2	2	2	1	2	2	2	1	2	2	2	1	1	1	A	1	1	1	1	1.6	2.5	

Hourly Avg	0.8	0.8	0.9	0.9	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.8
Hourly Max	2.8	3.7	5.1	5.6	1.8	2.3	1.7	1.7	1.6	1.7	2.9	2.5	2.4	3.3	2.8	2.8	2.5	1.8	2.3	1.7	1.9	2.2	2.7	2.3		

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

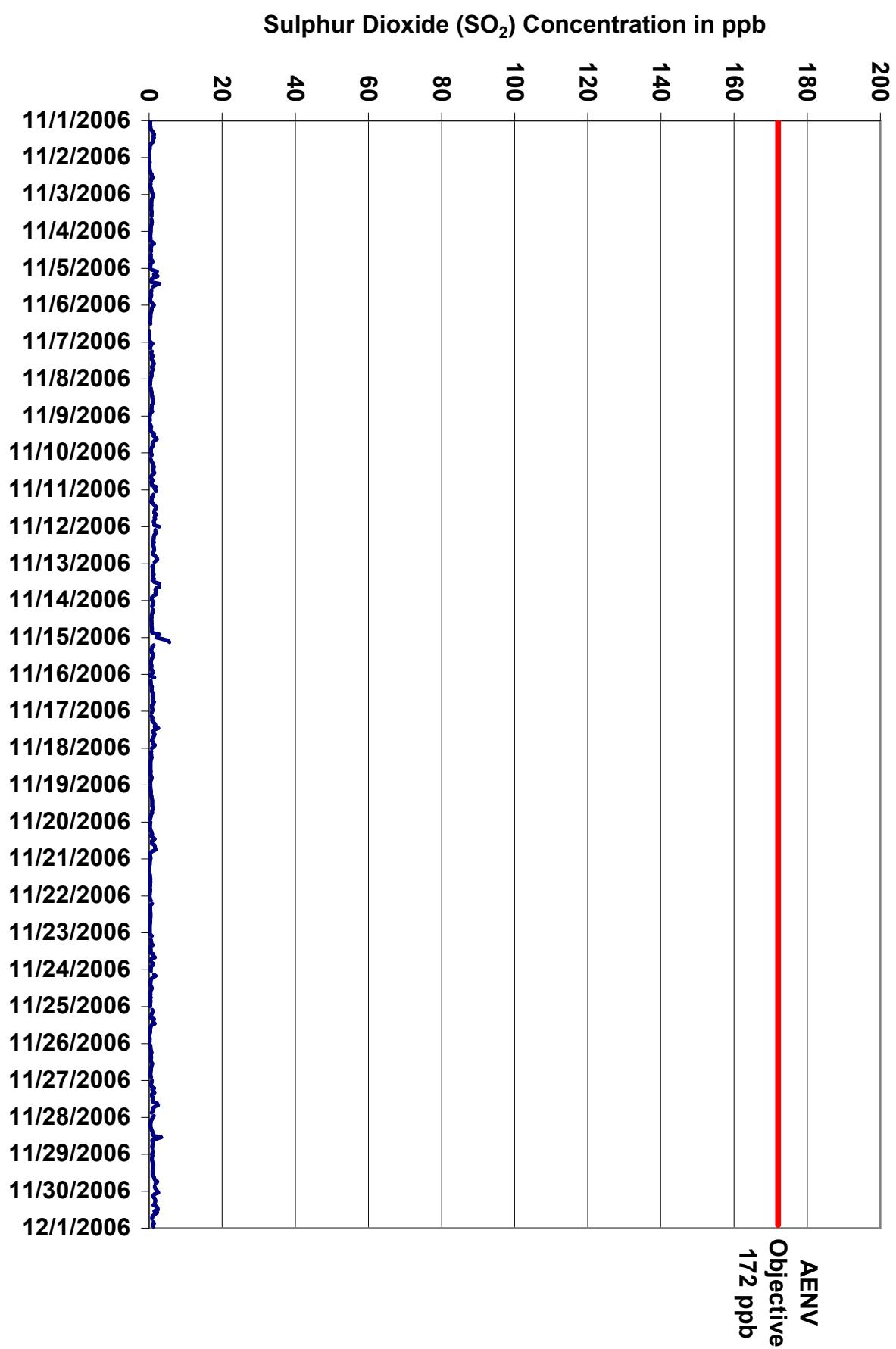


Figure 1. PASZA - Henry Pirkler Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

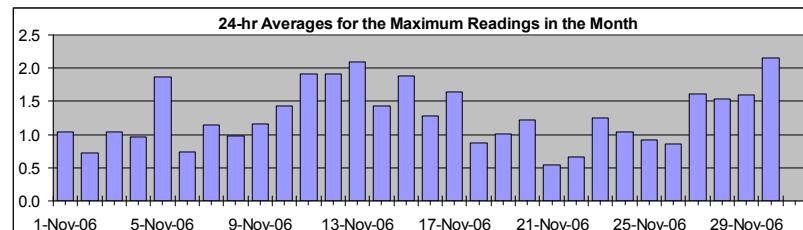
#### Summary

Maximum 1-hr Value:	7.1	ppb	15-Nov	3:00 4:00
Maximum 24-hr Value:	2.2	ppb	30-Nov	

AIC Time:	31 hrs	Operational Time:	686 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	4.9 2.7 1.5 1.1 0.8 0.5 0.3	1.3 ppb	1.1 ppb

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	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 24:00	24:00 25:00	25:00 26:00	26:00 27:00	27:00 28:00	28:00 29:00	29:00 30:00			
1-Nov-06	1	1	1	1	1	1	1	1	2	2	1	2	2	2	1	1	1	A	1	0	0	0	0	0	0	0	0	1.0	2.1				
2-Nov-06	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.3				
3-Nov-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	1	1	1	1.0	1.5				
4-Nov-06	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	2.5				
5-Nov-06	1	3	4	3	2	6	2	1	1	1	5	4	1	1	A	1	1	1	1	1	1	1	1	1	1	1.9	5.8						
6-Nov-06	2	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	A	0	0	0	0	0	0	1	0	0	0.7	2.2				
7-Nov-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1.2	1.8		
8-Nov-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	1	1	1	1.0	1.5		
9-Nov-06	0	0	1	1	A	0	1	1	1	1	1	1	1	1	2	2	3	2	2	1	1	2	1	1	1	1	1	1	1	1.2	2.5		
10-Nov-06	1	1	1	A	1	1	1	1	1	2	2	2	1	2	2	1	2	1	1	2	2	1	1	1	1	4	2	1.4	3.6				
11-Nov-06	3	3	A	2	1	1	1	1	2	3	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.9	3.5			
12-Nov-06	3	A	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	1	1	2	2	2	3	2	2	1.9	3.4					
13-Nov-06	A	1	1	1	1	1	2	2	2	2	2	1	3	3	4	5	2	2	2	2	2	2	2	1	1	2.1	5.2						
14-Nov-06	1	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	1.4	4.4				
15-Nov-06	3	5	6	7	A	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.9	7.1				
16-Nov-06	1	1	4	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1.3	4.2			
17-Nov-06	2	1	A	1	1	1	1	1	2	2	2	3	2	2	2	2	2	2	2	2	1	1	1	1	1	2	2	1.6	3.5				
18-Nov-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	1	1	0.9	1.4				
19-Nov-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	1	1	1	1	1.0	1.7			
20-Nov-06	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	2	2	2	3	2	2	1	1	1	1	1	1.2	2.7				
21-Nov-06	1	1	0	1	1	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.5	0.8				
22-Nov-06	1	0	0	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	1.6				
23-Nov-06	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	4	2	3	1	1	1	2	2	1	1	1	1.3	3.7				
24-Nov-06	1	1	A	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.1			
25-Nov-06	1	A	1	1	1	1	1	1	2	2	1	2	1	1	1	1	0	1	0	1	0	1	1	0	1	1	1	0.9	2.1				
26-Nov-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	1	1	1	1	0.9	1.2			
27-Nov-06	1	1	1	1	1	1	2	1	2	2	1	1	1	1	1	1	4	3	2	1	2	2	1	1	A	2	1.6	3.7					
28-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	6	5	1	1	1	1	1	1	1	A	1	1.5	5.7				
29-Nov-06	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	2	2	3	2	1	1	1	1	1	1	1	1.6	2.7			
30-Nov-06	3	3	2	1	2	2	2	2	2	2	3	3	4	2	3	2	2	1	1	A	2	3	2	2	2	2	2	2.2	3.8				



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

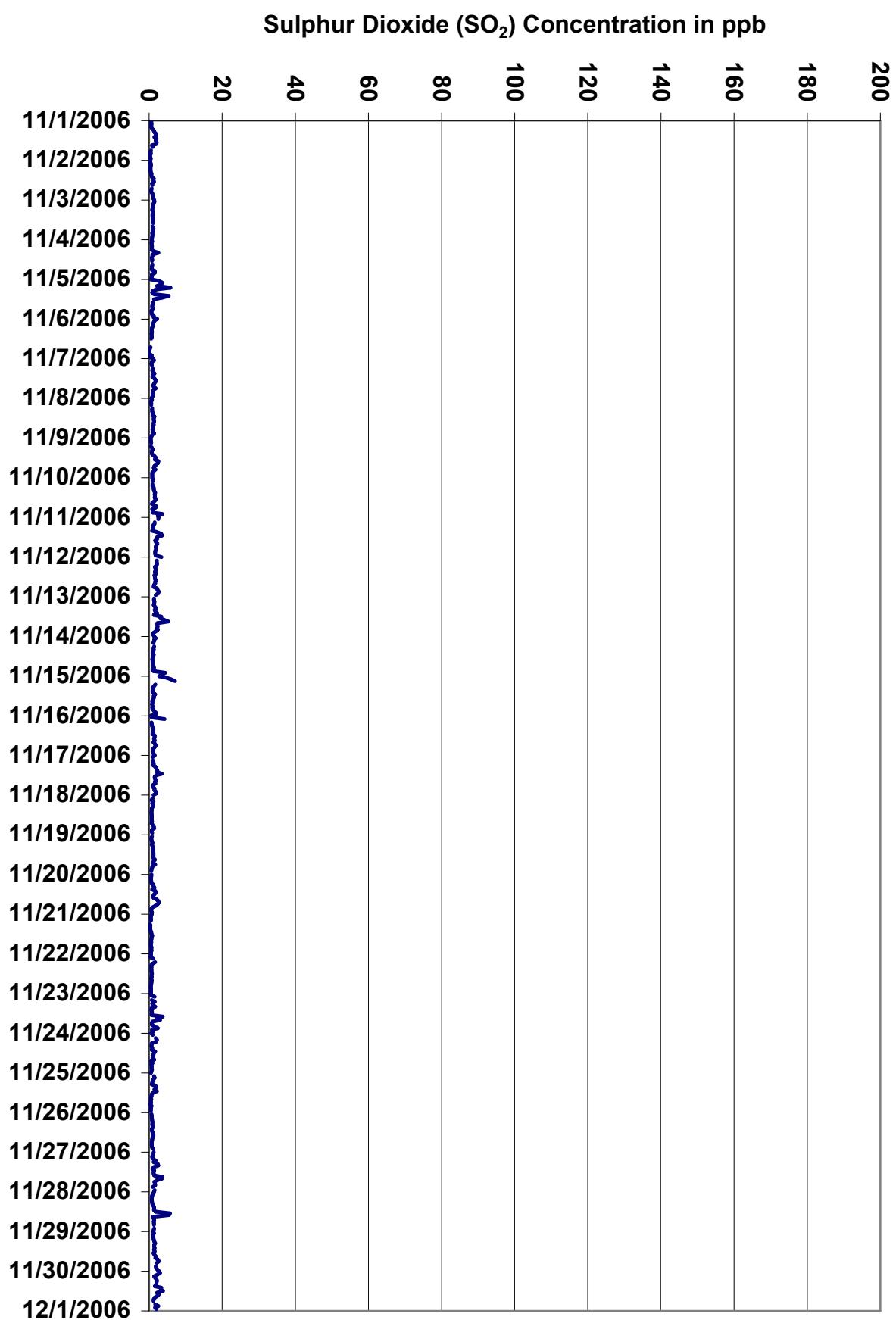
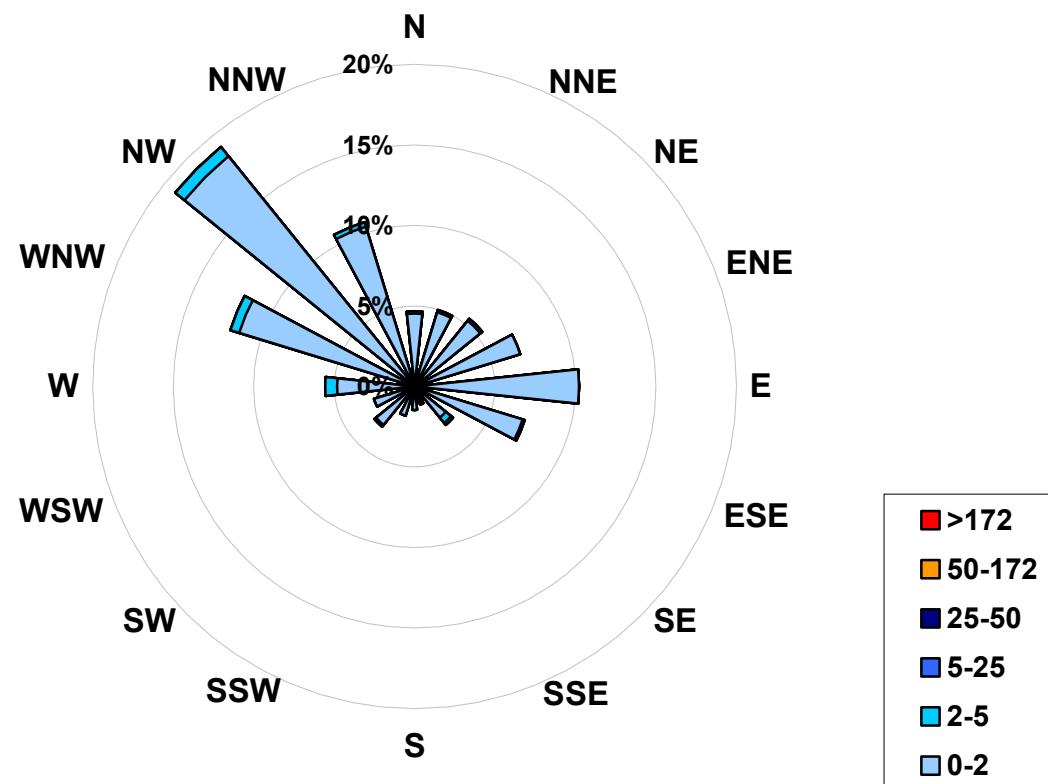


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	660
2	to	5	24
5	to	25	2
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			686

PASZA - Henry Pirker - Nitrogen Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

## HOURLY AVERAGE TABLE

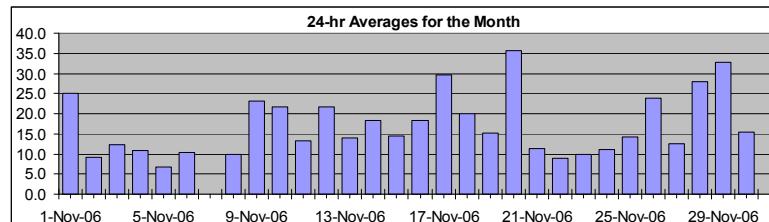
### Nitrogen Dioxide ( $\text{NO}_2$ )

**Monitoring Dates:** November 1, 2006 to December 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:	57.6 ppb
Maximum 24-hr Average:	35.7 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

AIC Time:	31 hrs			Operational Time:				682 hrs
Calibration Time:	6 hrs			AMD Operational Uptime:				99.9%
Percentile	99	95	75	50	25	5	1	Average
	49.1	36.3	25.0	14.8	8.2	3.2	1.9	17.2 ppb

Day	Mountain Standard Time		Executive Instrument Data																								Power Grid	
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Nov-06	30	26	13	17	19	23	36	39	44	48	36	43	27	11	8	15	21	A	28	27	23	19	13	8	25.0	47.5		
2-Nov-06	7	6	5	5	6	5	8	13	15	10	8	7	8	8	9	12	A	13	12	9	10	10	11	10	9.1	15.0		
3-Nov-06	9	8	6	6	6	7	12	17	19	15	11	10	8	13	17	A	17	14	14	15	15	13	14	12.4	19.2			
4-Nov-06	15	12	10	12	9	10	14	14	13	12	10	10	9	11	A	10	11	11	11	11	9	10	9	10.9	14.8			
5-Nov-06	5	3	3	3	3	5	8	5	4	3	3	2	3	A	4	4	5	8	11	14	17	15	17	9	6.8	17.4		
6-Nov-06	9	7	6	6	6	7	10	13	15	10	9	7	9	8	7	10	11	17	14	13	13	17	10	11	10.3	17.0		
7-Nov-06	14	12	13	14	24	A	35	31	31	31	C	C	C	C	C	C	A	31	30	26	18	8	5	3	N	35.2		
8-Nov-06	2	2	2	2	1	A	5	5	7	5	4	4	4	4	4	5	6	9	19	25	25	25	22	26	22	10.0	26.4	
9-Nov-06	21	18	18	15	A	21	25	27	26	20	13	20	20	15	21	29	27	31	30	30	28	26	26	26	23.2	31.4		
10-Nov-06	26	27	26	A	24	25	25	24	24	22	22	21	21	34	29	27	19	19	19	18	16	12	10	10	21.6	33.8		
11-Nov-06	10	8	A	7	6	5	6	5	6	6	5	5	3	6	9	13	27	31	31	23	18	19	27	27	13.2	31.1		
12-Nov-06	27	A	17	19	23	21	23	25	26	25	28	21	18	11	11	16	22	23	21	21	23	25	25	25	21.6	28.4		
13-Nov-06	A	24	22	23	21	21	23	23	19	17	12	9	8	8	7	7	8	7	7	6	5	5	17	20	13.9	24.2		
14-Nov-06	18	14	13	21	19	A	30	21	22	16	11	10	10	11	13	14	19	25	27	23	18	19	29	19	18.2	29.8		
15-Nov-06	16	19	17	16	A	9	13	14	12	9	9	15	14	24	17	16	17	20	16	15	20	20	3	2	14.5	23.5		
16-Nov-06	2	1	1	A	2	4	12	20	22	25	22	19	10	15	14	13	21	32	38	32	28	28	28	32	18.3	37.8		
17-Nov-06	31	26	A	21	16	25	27	34	40	40	27	36	31	17	21	30	30	31	28	28	32	33	40	35	29.5	40.4		
18-Nov-06	28	A	32	25	31	27	12	9	8	8	8	7	7	6	9	14	23	22	32	36	34	31	23	28	20.1	36.3		
19-Nov-06	A	29	28	25	13	14	28	31	15	11	10	10	11	13	13	13	15	20	17	4	3	3	6	A	15.1	31.1		
20-Nov-06	4	3	6	6	13	31	45	49	49	39	51	M	39	41	39	55	58	54	57	49	41	36	26	33	35.7	57.6		
21-Nov-06	10	16	17	3	2	A	9	9	17	19	21	15	9	8	12	15	11	14	14	10	10	7	6	6	11.3	21.4		
22-Nov-06	6	6	5	5	A	8	8	10	11	8	8	7	6	6	7	11	13	14	13	11	12	10	10	11	8.9	14.2		
23-Nov-06	9	9	7	A	10	14	18	11	17	12	7	6	5	5	5	8	10	18	17	17	9	5	3	3	9.9	17.8		
24-Nov-06	3	2	A	3	3	3	4	5	4	3	3	2	3	4	4	12	15	19	28	32	38	33	30	11.2	37.8			
25-Nov-06	29	A	14	8	10	12	16	14	13	12	8	6	8	9	5	5	8	9	11	18	32	34	25	23	14.3	34.2		
26-Nov-06	A	20	14	11	24	32	31	32	27	21	21	24	29	25	25	30	33	30	26	19	14	9	A	23.8	32.7			
27-Nov-06	7	6	5	5	6	9	9	14	13	12	8	6	10	8	13	24	26	14	29	25	9	A	27	12.6	29.1			
28-Nov-06	31	28	25	23	17	21	20	29	38	33	34	26	23	17	18	25	35	36	35	36	31	A	32	29	27.9	37.6		
29-Nov-06	29	26	23	22	30	34	38	44	38	33	23	19	24	24	32	42	46	45	49	36	A	32	33	29	32.7	49.5		
30-Nov-06	17	17	32	27	29	36	45	41	28	17	5	4	3	4	6	5	5	8	4	A	5	4	4	10	15.5	44.6		

Hourly Avg	15.3	13.9	14.1	12.9	13.8	16.3	19.7	20.8	20.9	18.3	15.2	13.3	12.8	13.1	13.4	16.4	19.8	22.3	22.6	21.9	19.7	18.1	17.9	18.3
Hourly Max	31.2	28.9	31.7	26.9	31.4	36.0	45.3	49.0	49.3	47.5	51.0	43.3	38.9	40.6	38.8	54.7	57.6	54.5	57.4	48.5	40.9	37.8	39.7	34.8

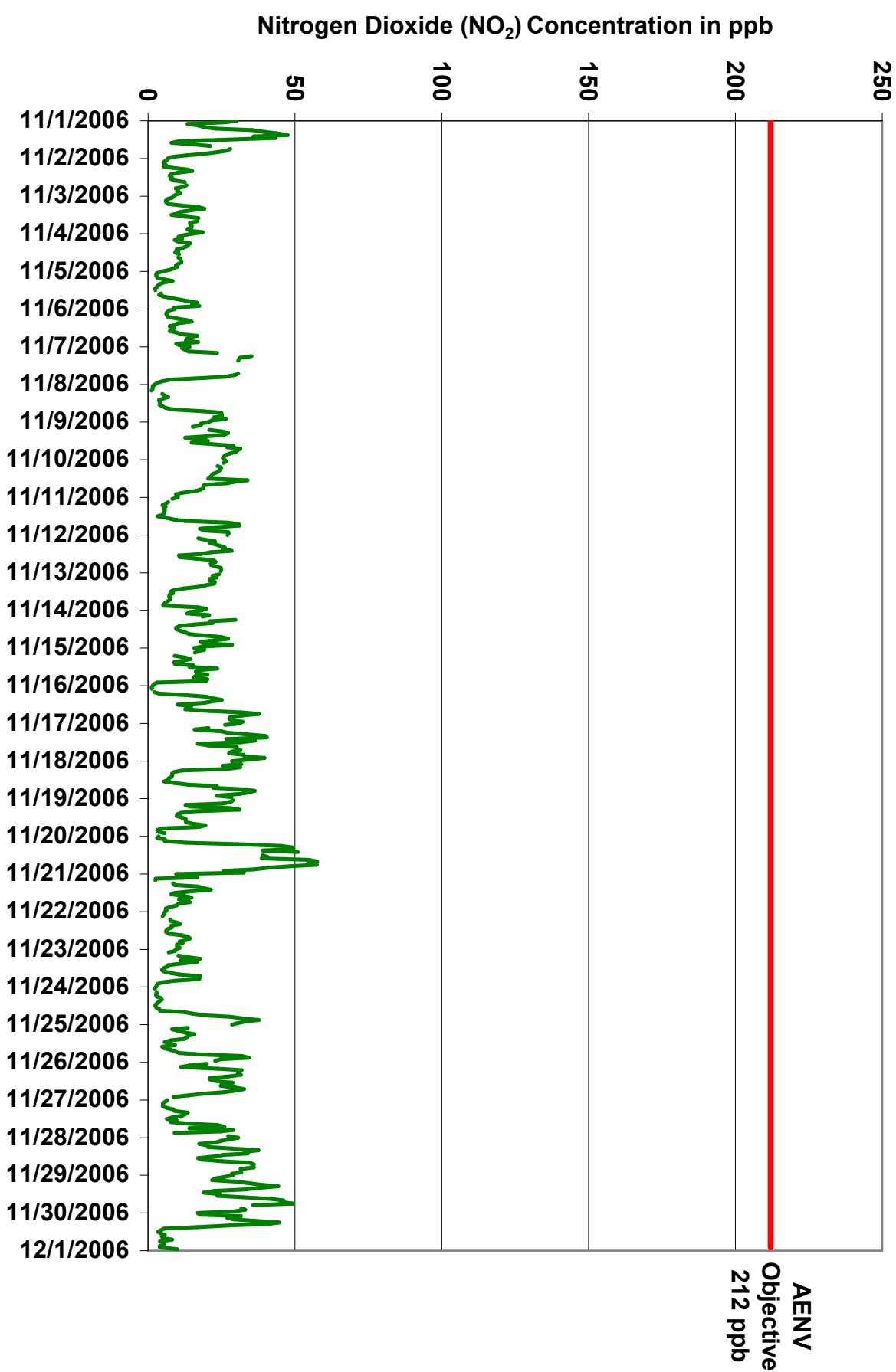


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

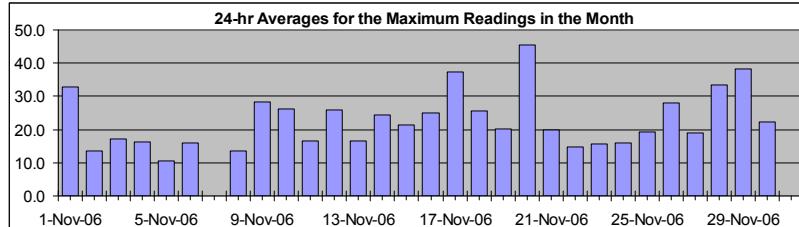
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	77.8 ppb	20-Nov 17:00 18:00
Maximum 24-hr Value:	45.5 ppb	20-Nov



AIC Time:	31 hrs	Operational Time:	682 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	99.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	60.3 44.4 30.5 21.8 12.6 5.2 2.5	22.8 ppb	21.8 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

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily 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			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Nov-06	34	34	21	26	30	36	43	48	58	53	43	50	47	19	11	25	30	A	34	31	28	25	21	11	32.9	58.0	
2-Nov-06	9	8	7	12	11	7	12	20	22	13	17	11	13	12	15	18	A	20	17	15	16	14	13	13	13.6	21.9	
3-Nov-06	11	10	8	9	10	12	21	23	24	22	16	16	13	18	22	A	21	19	21	20	19	19	19	19	23	17.1	23.8
4-Nov-06	19	18	15	15	14	18	19	18	22	20	16	17	15	17	A	14	16	15	17	15	13	16	12	11	16.2	21.8	
5-Nov-06	7	4	4	4	4	8	20	10	6	5	5	4	4	A	7	5	9	14	16	23	22	19	29	12	10.5	29.0	
6-Nov-06	14	11	12	11	12	11	15	20	20	15	14	14	14	13	12	14	19	24	23	19	16	27	16	18	16.0	27.0	
7-Nov-06	22	17	23	22	29	A	42	35	37	37	C	C	C	C	C	C	A	37	38	31	23	11	6	5	N	42.0	
8-Nov-06	4	2	2	2	2	A	6	9	14	9	6	5	6	5	8	8	16	24	33	30	30	30	30	30	13.7	33.2	
9-Nov-06	25	20	22	22	A	24	27	30	31	26	16	28	26	24	42	42	34	35	32	33	31	28	27	26	28.4	41.9	
10-Nov-06	28	29	31	A	26	28	37	27	27	25	25	34	28	40	34	30	29	22	23	23	20	17	11	11	26.3	39.7	
11-Nov-06	11	10	A	9	9	10	10	8	8	8	7	9	5	9	12	26	31	35	35	27	21	27	29	29	16.7	35.2	
12-Nov-06	30	A	26	25	25	23	24	26	32	32	37	27	27	14	16	21	26	26	24	24	26	27	28	27	25.9	36.7	
13-Nov-06	A	26	26	25	23	23	27	25	29	22	17	12	11	10	9	9	9	8	8	7	6	8	21	23	16.6	28.7	
14-Nov-06	21	19	19	23	22	A	37	25	28	23	20	27	31	15	17	20	23	27	30	28	20	26	33	27	24.5	36.8	
15-Nov-06	19	26	25	25	A	13	23	20	15	12	12	31	22	37	28	23	22	25	25	18	31	34	4	3	21.5	36.8	
16-Nov-06	2	2	2	A	3	11	43	32	31	32	24	29	15	28	29	18	25	37	45	37	32	30	32	36	25.0	44.9	
17-Nov-06	44	30	A	26	28	27	29	68	47	44	40	52	50	20	24	36	33	35	32	31	37	40	44	44	37.5	68.1	
18-Nov-06	32	A	35	33	40	38	20	13	11	14	10	9	10	8	12	19	33	30	36	43	45	35	30	33	25.6	44.5	
19-Nov-06	A	32	30	28	26	27	30	34	24	14	13	12	15	17	15	20	28	26	30	7	5	6	8	A	20.2	34.4	
20-Nov-06	6	4	9	9	22	46	52	52	56	47	61	M	61	60	56	65	64	78	63	60	48	40	44	42	45.5	77.8	
21-Nov-06	17	37	36	6	8	A	12	17	23	34	28	25	16	16	24	33	19	19	22	16	16	11	11	12	19.8	36.8	
22-Nov-06	12	11	8	11	A	19	12	22	17	15	14	9	12	11	12	17	21	21	20	14	17	13	16	12	14.7	22.1	
23-Nov-06	14	14	10	A	22	24	24	19	36	19	12	11	9	9	8	13	17	20	23	23	14	8	4	4	15.6	36.0	
24-Nov-06	4	3	A	4	4	4	5	7	8	19	6	4	4	5	6	6	29	29	31	36	37	40	37	36	15.9	40.4	
25-Nov-06	35	A	17	10	14	16	21	20	21	19	11	7	12	13	8	8	13	17	15	32	39	38	30	26	19.3	39.2	
26-Nov-06	A	27	18	13	31	34	36	34	34	32	24	24	27	32	30	31	35	34	33	29	24	17	17	A	28.0	35.9	
27-Nov-06	11	10	9	9	9	11	16	14	19	17	16	18	14	18	14	18	34	34	23	38	37	13	A	19.1	37.8		
28-Nov-06	34	34	29	27	21	28	26	37	42	40	40	34	29	25	26	31	39	41	42	40	34	A	36	33	33.3	41.8	
29-Nov-06	32	32	28	26	34	40	46	52	44	41	29	30	30	29	38	48	49	49	60	38	A	36	35	34	38.3	59.9	
30-Nov-06	21	29	35	31	34	42	53	50	37	29	11	9	5	7	10	7	10	19	8	A	17	7	10	27	22.2	53.3	

Hourly Avg 19.2 18.5 18.8 17.2 19.1 22.3 26.3 27.2 27.4 24.5 20.3 19.9 19.8 19.0 19.5 22.4 26.3 28.3 28.6 27.2 25.0 22.8 22.5 23.0

Hourly Max 43.6 36.8 35.5 32.9 39.7 46.2 53.3 68.1 58.0 52.5 60.5 52.2 61.2 59.7 55.5 65.2 64.4 77.8 62.9 60.2 48.3 40.4 44.4 43.6

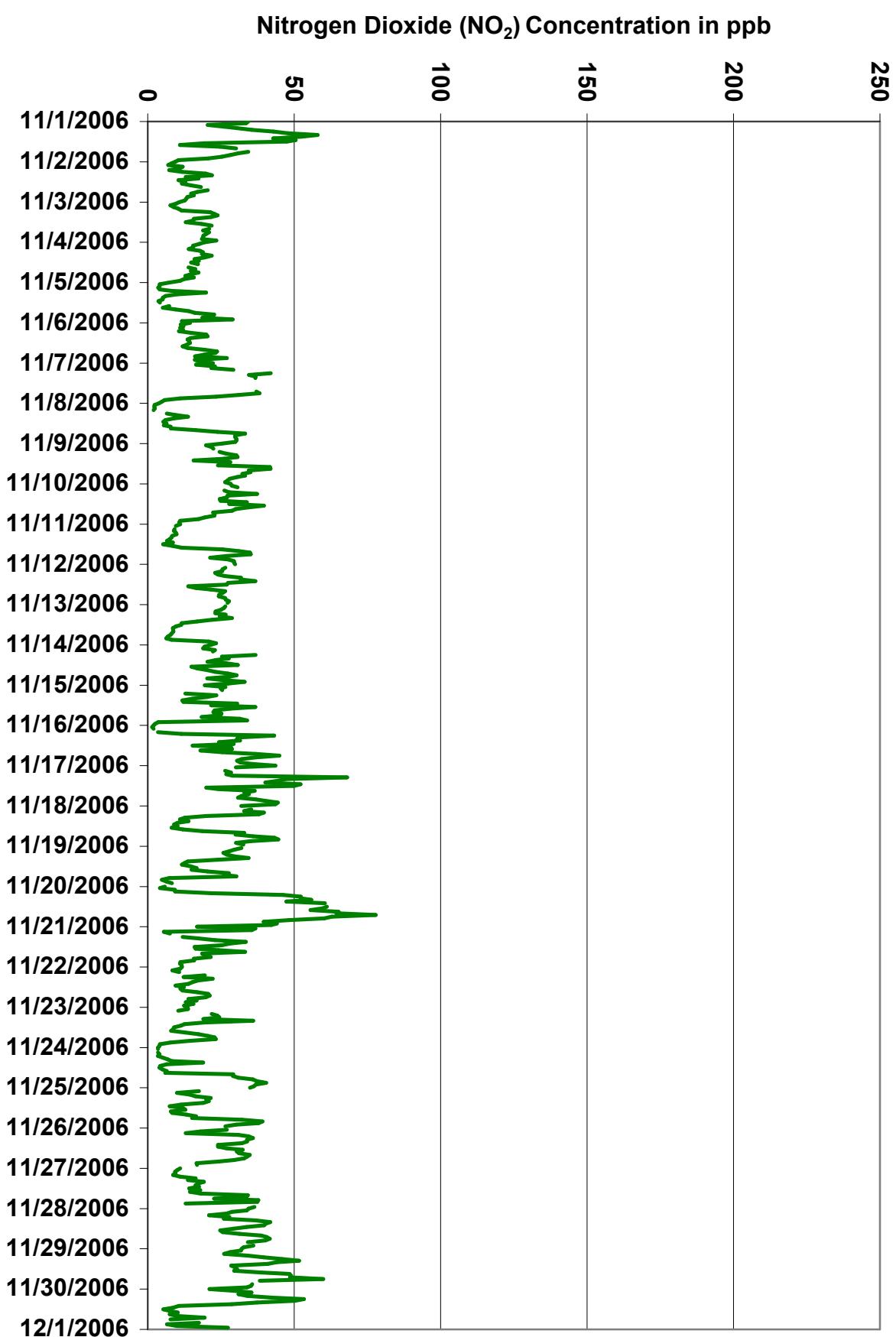
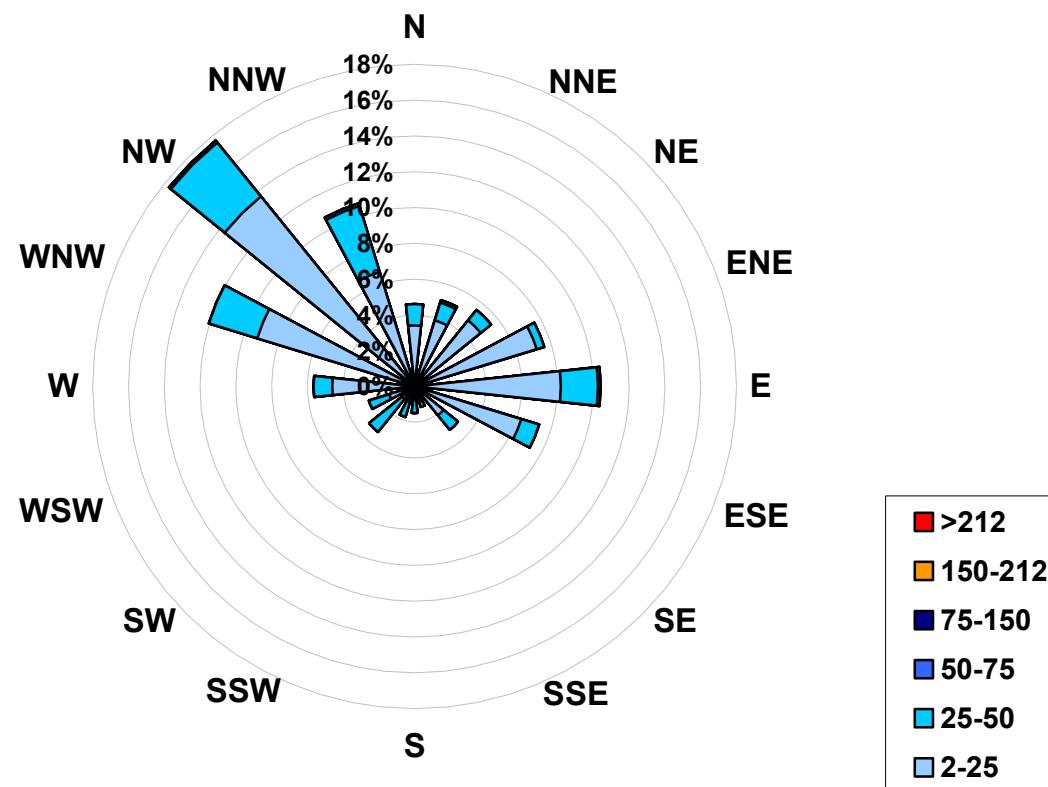


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



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

Frequency Distribution of NO <sub>2</sub> in ppb		Frequency (hrs)
Range		
2.0	< 25	544
25	to 50	75
50	to 75	29
75	to 150	31
150	to 212	2
	> 212	1
Total Non-Zero Values		682

# PASZA - Henry Pirker - Nitric Oxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

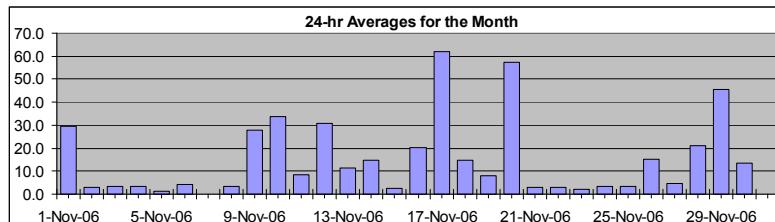
## Summary

Maximum 1-hr Average:	219.3	ppb	20-Nov	18:00 19:00
Maximum 24-hr Average:	62.0	ppb	17-Nov	

AIC Time:	31 hrs	Operational Time:	682 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	138.1	73.1	16.7	4.3	1.7	0.3	0.1	15.8 ppb	4.3 ppb

## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)



## Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Nov-06	6	4	0	1	1	3	35	80	144	144	76	94	47	7	4	7	7	A	5	4	3	4	2	1	29.5	144.2
2-Nov-06	1	1	1	1	1	1	2	3	5	4	5	5	6	5	6	7	A	4	3	2	2	2	1	1	2.9	6.9
3-Nov-06	1	1	1	1	1	1	3	4	7	6	6	8	5	9	12	A	2	1	3	2	1	2	1	1	3.4	11.9
4-Nov-06	0	0	0	0	1	1	2	3	4	6	7	7	8	7	A	5	6	4	4	3	2	3	1	1	3.3	7.6
5-Nov-06	0	0	0	0	0	0	1	0	1	1	2	2	2	A	2	1	1	1	2	3	3	2	3	1	1.3	3.2
6-Nov-06	1	2	3	2	3	3	4	7	9	7	7	6	7	6	5	5	4	5	4	3	1	3	1	1	4.2	8.9
7-Nov-06	1	0	0	0	3	A	47	33	68	106	C	C	C	C	C	A	42	41	14	5	1	0	0	N	106.1	
8-Nov-06	0	0	0	0	0	A	0	1	3	2	2	2	2	2	2	2	2	6	6	6	4	18	10		3.2	17.5
9-Nov-06	3	2	2	2	A	9	27	30	30	31	15	38	37	19	35	52	29	58	54	52	42	32	23	18	27.8	58.2
10-Nov-06	16	27	35	A	8	21	33	31	39	46	57	55	47	99	79	60	31	24	22	16	11	8	5	4	33.7	99.0
11-Nov-06	2	1	A	0	0	0	1	1	1	2	4	4	2	5	7	10	21	23	32	8	4	7	19	35	8.2	34.6
12-Nov-06	36	A	3	6	11	6	13	27	63	63	86	53	36	12	11	17	26	16	11	10	31	56	58	57	30.7	85.7
13-Nov-06	A	42	37	40	11	9	14	16	14	14	11	7	6	8	5	4	2	1	1	1	1	1	8	10	11.4	42.0
14-Nov-06	6	4	3	10	4	A	61	21	34	19	16	20	13	13	14	11	12	28	37	7	2	2	5	2	14.9	61.0
15-Nov-06	1	1	0	1	A	1	2	2	2	2	2	4	4	11	5	4	3	4	2	2	2	3	0	0	2.5	11.2
16-Nov-06	0	0	0	A	0	0	3	10	13	30	27	27	10	16	14	7	10	35	101	46	19	15	20	57	20.1	100.9
17-Nov-06	58	18	A	3	5	10	21	84	139	147	57	95	76	26	32	67	63	60	36	25	91	90	138	86	62.0	147.0
18-Nov-06	16	A	12	2	12	8	2	2	3	3	3	3	3	3	4	5	12	6	27	71	63	49	6	30	14.9	71.2
19-Nov-06	A	33	26	16	2	1	25	41	1	1	3	3	3	4	3	4	3	2	2	0	0	0	0	A	7.9	41.0
20-Nov-06	0	0	0	0	1	5	46	52	79	26	97	M	54	42	38	130	172	208	219	98	31	10	5	9	57.5	219.3
21-Nov-06	0	1	2	1	1	A	2	2	1	4	8	7	4	3	5	8	2	3	3	2	1	3	2	2	2.9	8.1
22-Nov-06	2	2	1	1	A	3	3	4	3	3	3	3	4	4	4	4	5	5	4	5	3	3	2	2	3.1	5.3
23-Nov-06	1	1	1	A	1	2	4	2	6	3	2	3	3	2	2	3	2	2	1	3	1	1	0	0	2.0	5.6
24-Nov-06	0	0	A	0	0	0	1	1	1	6	1	1	1	2	2	2	3	3	4	8	11	17	8	5	3.5	16.7
25-Nov-06	5	A	1	0	0	1	1	1	3	3	3	4	5	2	1	1	1	2	2	13	24	5	2	3.5	23.8	
26-Nov-06	A	2	0	0	3	13	13	11	12	18	20	25	35	50	34	24	24	26	14	6	2	0	1	A	15.2	50.0
27-Nov-06	2	2	1	1	2	2	4	3	4	4	6	6	7	8	4	6	10	10	1	10	9	1	A	6	4.7	10.5
28-Nov-06	8	5	4	4	2	4	5	10	27	28	48	36	31	20	19	24	38	39	36	52	19	A	16	11	21.1	52.0
29-Nov-06	13	5	2	2	12	37	73	109	88	72	28	27	46	43	67	99	98	79	103	19	A	10	12	3	45.5	109.5
30-Nov-06	0	2	19	9	11	33	97	99	18	6	2	2	1	2	2	1	1	2	1	A	1	0	0	0	13.4	99.0

Hourly Avg	6.7	5.8	5.7	3.8	3.7	6.7	18.1	22.9	27.3	26.9	20.8	19.6	17.4	15.5	15.0	20.4	21.2	23.9	26.0	16.4	13.1	12.1	12.5	12.7
Hourly Max	58.0	42.0	37.0	39.5	12.3	36.5	96.8	109.5	144.2	147.0	96.9	95.4	75.7	99.0	78.8	129.8	172.5	208.2	219.3	97.8	91.2	90.5	137.9	86.1

# PASZA - Henry Pirker - Oxides of Nitrogen Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

Maximum 1-hr Average:	276.6	ppb	20-Nov	18:00 19:00
Maximum 24-hr Average:	93.1	ppb	20-Nov	

AIC Time:	31 hrs	Operational Time:	682 hrs										
Calibration Time:	6 hrs	AMD Operational Uptime:	99.9%										
Percentile	99	95	75	50	25	5	1	Average	33.1	ppb	Median	19.0	ppb
	180.0	107.5	43.2	19.0	10.6	4.4	1.9						

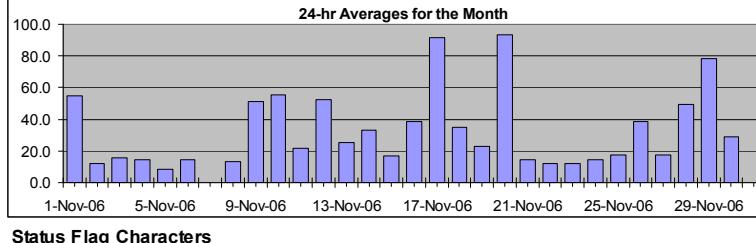
Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00			
1-Nov-06	37	31	14	18	21	26	70	120	188	192	113	137	74	18	12	22	28	A	33	31	26	23	15	9	54.7	191.7		
2-Nov-06	7	7	6	7	8	6	10	17	20	15	13	13	14	13	15	20	A	17	16	12	12	12	12	11	12.3	19.9		
3-Nov-06	9	9	7	7	7	8	14	21	26	21	17	18	13	22	29	A	19	16	17	17	16	15	15	20	15.8	29.0		
4-Nov-06	15	12	11	12	10	11	16	17	17	18	17	18	17	18	A	15	17	15	16	14	12	13	10	8	14.2	18.0		
5-Nov-06	5	3	3	3	3	6	9	6	5	5	5	5	5	5	A	7	6	7	9	13	17	20	17	21	10	8.3	20.9	
6-Nov-06	11	9	9	9	9	10	14	21	24	18	17	13	16	15	13	15	15	22	18	16	14	20	11	11	14.6	23.9		
7-Nov-06	16	12	13	14	27	A	82	64	99	137	C	C	C	C	C	C	A	73	71	41	22	9	5	4	N	137.0		
8-Nov-06	3	2	2	2	1	A	5	6	10	8	6	6	7	6	7	9	11	21	31	31	31	26	44	32	13.2	43.9		
9-Nov-06	24	20	19	17	A	30	52	57	56	51	27	58	58	34	57	81	56	90	85	82	70	59	49	43	51.0	89.6		
10-Nov-06	42	54	61	A	32	46	58	55	63	68	79	76	68	133	108	88	51	44	41	34	28	20	15	14	55.5	133.0		
11-Nov-06	13	9	A	7	6	5	7	6	7	8	9	10	6	12	16	23	48	54	63	31	22	26	47	62	21.7	63.4		
12-Nov-06	64	A	20	25	34	27	37	52	90	88	114	75	54	23	22	33	49	40	32	31	54	81	83	81	52.6	114.4		
13-Nov-06	A	66	59	63	32	30	37	38	33	32	23	16	14	16	12	11	10	9	8	7	6	6	25	30	25.3	66.2		
14-Nov-06	24	18	16	30	22	A	91	42	56	34	27	30	22	24	26	25	31	53	64	30	20	21	33	20	33.0	90.6		
15-Nov-06	17	20	18	17	A	10	14	17	14	10	11	19	18	35	22	20	20	24	18	17	22	22	3	2	16.9	34.6		
16-Nov-06	1	1	1	A	2	4	15	30	35	55	49	46	20	31	28	20	31	67	139	78	47	43	49	90	38.4	138.8		
17-Nov-06	90	44	A	24	21	35	48	118	179	188	84	132	107	43	53	97	93	92	64	52	124	123	178	121	91.7	187.6		
18-Nov-06	45	A	43	27	43	35	13	11	10	11	11	10	10	8	13	19	36	28	59	108	97	80	29	58	35.0	107.5		
19-Nov-06	A	62	54	42	15	15	53	72	16	13	12	12	15	17	16	17	18	21	19	4	3	3	6	A	23.0	72.1		
20-Nov-06	4	3	6	6	13	35	91	101	128	65	148	M	93	82	77	184	230	263	277	146	72	46	31	41	93.1	276.6		
21-Nov-06	10	17	19	4	4	A	10	11	18	23	30	22	13	11	18	22	13	16	17	12	11	10	8	8	14.2	29.5		
22-Nov-06	8	8	6	6	A	10	10	14	14	11	11	10	10	10	11	17	18	18	18	14	15	12	12	12	11.9	18.4		
23-Nov-06	11	11	8	A	12	16	21	13	22	15	9	9	8	7	7	11	13	20	19	20	10	6	4	3	11.9	22.4		
24-Nov-06	3	3	A	3	3	3	4	5	6	10	5	4	4	4	5	5	16	18	23	36	43	54	41	35	14.5	54.3		
25-Nov-06	33	A	14	8	10	13	16	14	14	15	10	8	12	14	7	7	9	10	12	21	45	58	30	25	17.5	57.9		
26-Nov-06	A	21	14	11	27	44	44	42	44	45	41	46	58	79	59	49	53	58	44	31	20	14	9	A	38.8	78.6		
27-Nov-06	8	7	6	6	8	12	12	17	17	18	14	13	18	12	19	34	36	15	39	34	10	A	34	17.3	39.3			
28-Nov-06	39	34	29	27	20	25	26	39	64	62	82	62	54	38	38	50	73	75	72	88	50	A	48	40	49.3	88.4		
29-Nov-06	42	31	25	24	43	71	112	154	126	106	51	46	71	66	99	141	144	124	153	55	A	42	45	32	78.4	154.0		
30-Nov-06	17	19	50	36	40	69	142	140	46	23	8	6	5	6	8	6	6	10	5	A	6	4	5	10	29.0	141.5		

Hourly Avg	22.0	19.7	19.8	16.8	17.5	23.1	37.9	43.8	48.2	45.3	36.0	32.9	30.3	28.6	28.5	36.8	41.0	46.3	48.7	38.4	32.8	30.2	30.4	31.0
Hourly Max	89.5	66.2	60.9	62.8	43.2	70.8	141.5	154.0	188.3	191.7	147.8	137.5	107.2	133.0	108.5	184.4	230.0	262.6	276.6	146.3	123.7	123.2	177.5	120.8

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

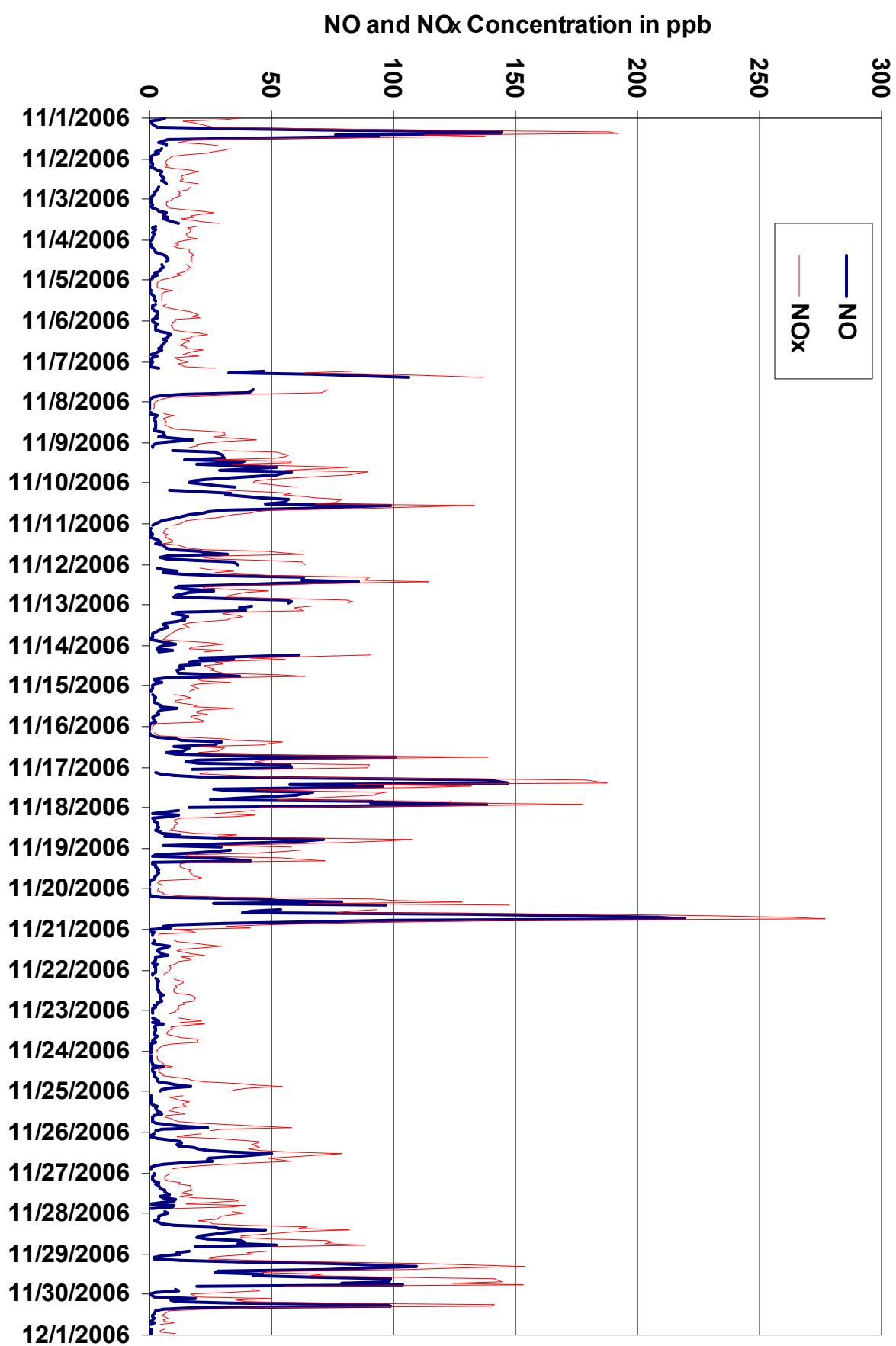


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

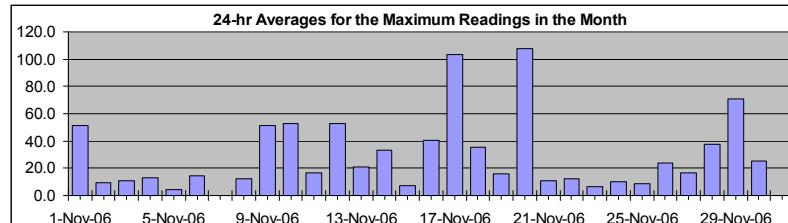
### Nitric Oxide (NO)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	367.7 ppb	20-Nov 17:00 18:00
Maximum 24-hr Value:	107.9 ppb	20-Nov

AIC Time:	31 hrs	Operational Time:	682 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	99.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	180.8 123.9 36.6 13.4 4.9 0.9 0.3	30.6 ppb	13.4 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 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
1-Nov-06	24	15	1	3	10	38	83	148	212	176	105	121	106	18	6	25	17	A	14	14	12	17	11	2	51.1	211.7
2-Nov-06	1	1	5	13	8	3	4	5	7	7	27	8	17	13	16	24	A	15	14	11	4	8	5	3	9.5	27.4
3-Nov-06	1	2	2	8	4	11	24	14	21	19	14	16	19	17	20	A	5	4	9	13	3	8	6	9	10.9	24.1
4-Nov-06	3	1	2	3	13	13	5	13	23	24	28	17	18	20	A	12	20	18	19	12	9	12	4	16	13.2	27.9
5-Nov-06	2	1	1	0	1	1	8	1	2	4	5	3	4	A	5	2	3	3	7	9	8	6	15	6	4.2	15.3
6-Nov-06	14	12	16	14	11	12	17	21	25	19	19	21	15	16	13	16	9	13	21	13	5	16	4	8	14.5	25.3
7-Nov-06	7	1	4	2	11	A	89	60	114	159	C	C	C	C	C	A	108	122	34	9	3	1	1	N	158.5	
8-Nov-06	1	1	1	1	0	A	1	2	33	6	27	3	5	4	4	4	4	3	17	16	17	33	49	46	12.0	48.5
9-Nov-06	7	4	5	7	A	27	68	67	50	56	20	72	55	32	107	107	57	79	67	101	69	54	33	30	51.1	107.5
10-Nov-06	29	45	59	A	19	40	80	48	64	62	77	114	75	124	103	75	65	40	33	25	20	14	6	5	53.1	124.0
11-Nov-06	3	3	A	1	1	2	3	2	2	4	5	8	4	8	11	33	34	53	60	19	8	26	37	54	16.6	59.8
12-Nov-06	56	A	24	18	23	15	20	36	124	112	115	72	90	20	21	28	47	38	32	27	68	86	78	70	53.0	124.1
13-Nov-06	A	76	57	52	28	20	36	33	47	20	18	16	10	10	7	6	4	3	2	3	2	2	12	16	20.8	76.1
14-Nov-06	12	8	8	17	13	A	74	40	63	45	55	110	85	24	27	31	19	46	62	15	4	5	8	3	33.6	110.4
15-Nov-06	3	3	1	2	A	3	6	8	3	3	3	13	9	28	12	7	9	15	6	7	5	13	1	1	7.0	28.0
16-Nov-06	1	0	1	A	1	2	43	58	29	53	34	54	18	45	46	12	17	70	159	83	48	28	34	99	40.7	159.3
17-Nov-06	145	39	A	15	44	23	34	155	172	184	139	180	140	37	52	118	94	78	62	55	132	127	179	168	103.2	184.0
18-Nov-06	52	A	23	10	51	36	3	4	10	12	4	5	6	5	6	7	31	32	51	141	157	79	40	53	35.6	157.1
19-Nov-06	A	53	35	30	16	9	81	65	8	4	4	5	5	6	5	9	11	5	5	1	0	1	0	A	16.2	81.4
20-Nov-06	0	0	0	0	6	25	108	75	155	57	180	M	146	93	93	216	308	368	296	197	78	26	29	26	107.9	367.7
21-Nov-06	1	4	8	8	8	A	10	12	5	17	20	17	7	15	17	30	8	9	7	5	4	11	10	12	10.7	29.7
22-Nov-06	14	16	6	6	A	16	14	18	12	20	5	5	11	9	16	15	24	13	15	13	11	7	9	3	12.1	23.8
23-Nov-06	7	9	9	A	5	5	15	5	28	9	5	8	5	5	4	6	7	7	5	5	1	3	2	1	6.7	28.3
24-Nov-06	1	1	A	0	1	1	2	3	3	92	3	2	2	4	3	3	11	12	10	17	17	26	14	11	10.4	92.0
25-Nov-06	12	A	2	1	1	2	2	2	2	5	5	5	8	11	4	3	11	10	8	9	44	42	12	5	9.0	44.2
26-Nov-06	A	9	1	1	8	21	29	18	20	25	30	31	47	64	53	42	40	38	31	12	4	1	5	A	23.9	63.6
27-Nov-06	8	8	12	6	7	10	17	9	7	13	11	18	82	24	13	9	25	28	4	32	29	2	A	15	16.8	81.7
28-Nov-06	14	11	7	6	3	8	10	19	39	57	60	56	42	38	33	39	62	66	102	95	38	A	42	19	37.7	101.6
29-Nov-06	26	11	5	6	29	50	118	144	142	126	46	53	76	72	91	136	116	117	178	28	A	23	30	11	71.0	177.9
30-Nov-06	1	8	33	20	23	71	140	149	80	12	7	8	3	3	4	3	2	7	2	A	3	1	3	4	25.5	149.3

Hourly Avg	16.4	12.6	12.0	9.2	12.7	17.8	38.1	41.2	50.1	46.8	36.9	37.2	38.3	27.3	28.3	36.3	37.9	44.8	47.3	34.9	28.0	23.5	23.5	24.8
Hourly Max	144.6	76.1	58.9	52.3	50.7	71.5	140.3	155.2	211.7	184.0	180.1	179.7	145.6	124.0	107.5	216.2	308.2	367.7	295.9	196.9	157.1	126.7	179.4	168.4

Station: Henry Pirker  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

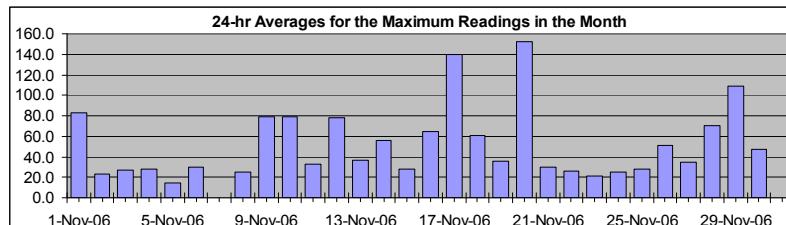
### Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	445.3	ppb	20-Nov	17:00 18:00
Maximum 24-hr Value:	152.0	ppb	20-Nov	

AIC Time:	31 hrs	Operational Time:	682 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	99.9%
Percentile	99	95	75
	237.4	165.5	66.7
	95	55	50
	33.3	19.1	
	25	5	1
	19.1	7.5	3.1
	Average		Average
	52.6 ppb		33.3 ppb
	Median		



#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
1-Nov-06	56	48	21	29	40	73	126	195	269	227	146	171	154	36	16	47	39	A	48	45	40	36	32	12	82.8	269.2
2-Nov-06	11	9	12	25	19	10	16	25	28	20	44	19	29	24	31	40	A	36	30	25	20	17	14	22.7	43.8	
3-Nov-06	12	11	9	16	14	19	46	37	42	41	30	31	32	33	40	A	23	22	30	31	22	23	22	32	26.9	45.6
4-Nov-06	22	18	16	16	27	30	23	29	44	43	44	33	28	36	A	25	31	32	36	25	18	28	16	27	28.3	44.5
5-Nov-06	9	5	5	4	4	9	28	12	7	8	10	7	8	A	13	7	12	17	21	32	28	24	42	16	14.2	41.7
6-Nov-06	26	23	28	25	21	20	32	39	46	33	31	35	29	30	25	28	28	36	44	32	20	43	20	21	29.8	45.9
7-Nov-06	30	17	25	24	40	A	127	93	149	195	C	C	C	C	C	C	A	144	161	62	32	14	7	6	N	194.5
8-Nov-06	5	3	3	3	2	A	8	12	47	15	31	8	11	9	12	12	20	27	50	45	47	63	78	76	25.5	78.1
9-Nov-06	32	24	26	30	A	51	95	95	80	81	36	99	80	56	149	149	91	111	97	134	98	81	59	56	78.7	149.2
10-Nov-06	55	74	90	A	46	68	118	73	91	86	101	148	103	164	137	104	93	58	56	48	39	31	17	15	78.9	163.8
11-Nov-06	14	12	A	11	10	12	13	11	10	10	12	17	10	17	23	58	63	88	95	45	30	54	66	83	33.2	94.7
12-Nov-06	86	A	50	44	48	38	44	62	156	142	151	99	117	34	38	49	73	63	57	50	95	110	103	97	78.5	155.7
13-Nov-06	A	99	82	77	51	42	62	57	76	41	35	27	22	19	16	14	12	11	10	9	8	10	32	39	37.0	99.2
14-Nov-06	33	27	27	39	35	A	105	65	89	68	71	111	108	38	42	51	42	73	91	40	24	30	40	29	55.5	110.9
15-Nov-06	22	29	25	27	A	15	29	25	17	15	15	44	30	64	40	30	30	40	30	25	36	40	4	3	27.6	64.5
16-Nov-06	2	2	2	A	4	12	83	77	58	83	58	83	34	74	75	29	41	105	202	119	78	58	66	134	64.3	202.3
17-Nov-06	187	65	A	42	73	50	63	212	219	228	179	232	186	57	76	153	127	110	94	85	168	166	224	211	139.4	231.8
18-Nov-06	83	A	54	43	90	74	22	17	20	26	14	14	15	13	17	26	64	59	87	182	202	113	70	86	60.5	201.6
19-Nov-06	A	85	64	58	41	36	109	98	32	17	16	17	20	23	20	29	38	31	34	8	5	6	8	A	36.1	109.4
20-Nov-06	6	4	9	9	22	66	160	125	208	103	239	M	203	153	148	281	368	445	358	256	124	66	73	68	152.0	445.3
21-Nov-06	18	41	44	13	16	A	21	29	27	51	48	42	23	32	41	63	22	25	28	18	18	21	21	21	29.7	62.8
22-Nov-06	24	26	13	16	A	35	23	41	28	35	19	15	23	20	25	30	43	32	29	26	26	19	23	16	25.6	42.8
23-Nov-06	18	22	19	A	26	28	36	22	63	26	17	19	14	14	12	18	22	25	27	29	16	9	6	5	21.4	63.4
24-Nov-06	4	4	A	4	4	4	7	9	11	98	9	6	6	8	9	8	40	41	41	52	54	66	50	46	25.4	98.2
25-Nov-06	46	A	19	10	15	17	22	21	22	24	16	12	20	21	12	10	24	27	22	41	83	78	41	31	27.6	82.6
26-Nov-06	A	35	19	14	39	54	64	51	54	57	53	53	74	96	83	69	74	72	64	41	28	17	18	A	51.3	95.9
27-Nov-06	16	16	20	14	15	21	33	23	26	29	26	35	79	41	27	27	58	62	26	69	67	15	A	51	34.6	78.9
28-Nov-06	48	45	35	33	24	35	36	57	80	98	100	90	72	63	57	68	97	105	143	135	72	A	78	53	70.7	143.4
29-Nov-06	58	43	32	32	61	88	162	189	183	167	75	83	106	102	129	184	163	166	237	67	A	59	65	45	108.5	237.0
30-Nov-06	21	38	68	50	56	114	189	198	117	41	17	17	8	11	14	10	12	26	10	A	21	7	13	31	47.4	198.1

Hourly Avg 35.0 30.6 30.3 26.2 31.3 39.3 63.5 66.6 76.7 70.3 56.6 56.0 56.7 46.0 47.3 57.9 62.7 72.0 75.3 61.2 52.3 45.1 45.3 47.2

Hourly Max 187.0 99.2 89.5 77.3 89.9 114.1 188.8 212.3 269.2 228.2 239.4 231.8 203.2 163.8 149.2 281.3 368.3 445.3 358.5 255.9 201.6 165.6 223.5 211.3

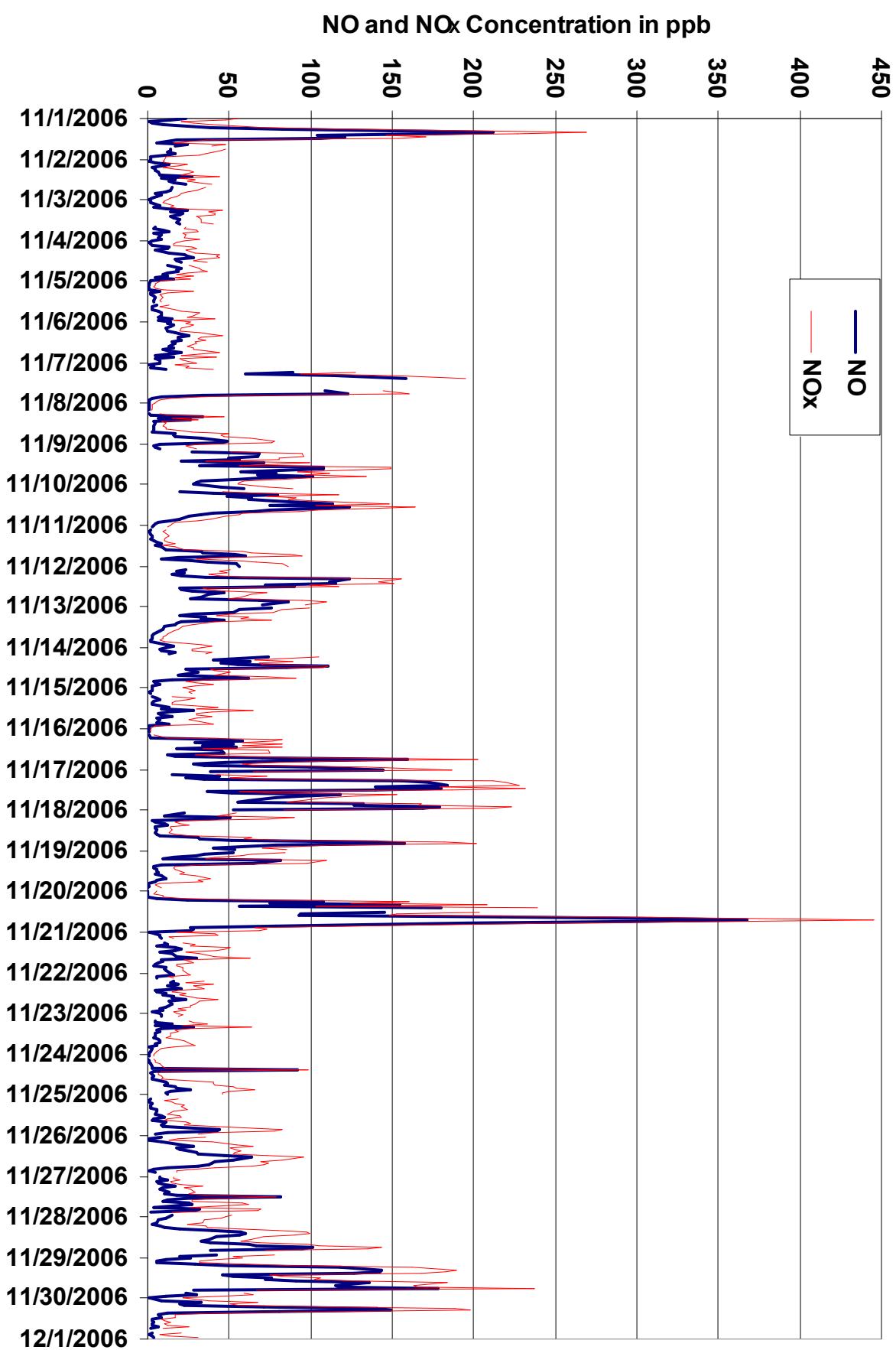


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

# PASZA - Henry Pirker - Ozone Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 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:	39.1 ppb	19-Nov 21:00 22:00
Maximum 24-hr Average:	25.8 ppb	22-Nov

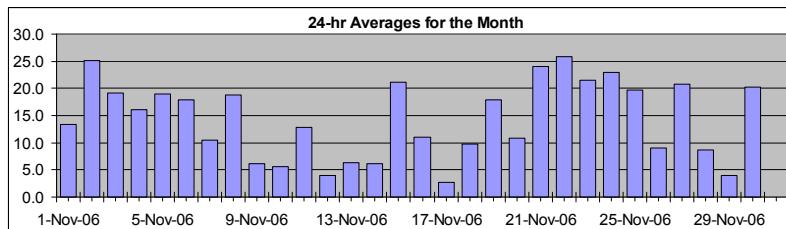
AIC Time:	31 hrs	Operational Time:	684 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	34.9 29.2 22.2 15.3 5.6 0.4 0.0	14.4 ppb	15.3 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Nov-06	3	6	17	14	11	8	1	1	2	3	7	9	17	28	30	22	18	A	13	13	13	16	19	23	26	13.3	29.7
2-Nov-06	28	28	28	29	28	29	25	20	19	23	26	27	27	28	25	22	A	23	23	25	24	24	22	23	25.1	29.2	
3-Nov-06	23	23	25	25	25	24	21	16	14	18	21	22	23	19	16	A	17	18	18	16	16	17	15	10	19.2	25.3	
4-Nov-06	12	15	16	16	19	17	13	13	14	14	18	18	19	20	A	20	16	15	15	15	16	16	16	18	16.2	20.3	
5-Nov-06	20	22	23	23	22	21	18	20	21	21	21	21	21	A	22	22	20	18	17	15	15	11	12	10	17	19.1	22.6
6-Nov-06	19	21	21	20	20	19	17	14	13	17	19	21	21	22	22	22	20	19	15	15	15	15	11	17	16	17.9	22.2
7-Nov-06	14	16	14	12	5	A	1	1	2	4	8	14	18	17	18	16	12	2	2	3	8	18	20	20	10.5	19.8	
8-Nov-06	21	23	24	25	26	A	23	22	21	23	26	28	26	26	26	25	22	13	6	6	5	7	2	6	18.8	27.6	
9-Nov-06	6	7	7	10	A	3	1	1	3	7	14	13	14	17	14	8	6	2	2	2	2	2	2	6.2	16.9		
10-Nov-06	2	2	2	A	3	2	2	2	3	5	6	8	8	6	5	4	7	6	7	7	7	10	12	12	5.6	12.3	
11-Nov-06	11	12	A	17	17	18	17	18	17	18	19	20	22	21	20	17	6	2	2	5	8	6	2	2	12.9	22.1	
12-Nov-06	2	A	7	5	2	2	1	1	2	4	5	7	9	13	12	9	3	1	2	2	2	1	1	1	4.0	12.6	
13-Nov-06	A	1	1	1	1	1	1	1	5	7	11	C	C	C	A	14	13	13	13	13	13	14	4	6.3	13.7		
14-Nov-06	2	6	6	1	1	A	0	2	0	5	9	10	10	9	8	8	4	0	0	6	14	15	9	17	6.1	17.1	
15-Nov-06	19	17	18	20	A	27	24	22	23	26	28	25	27	19	23	23	22	18	21	20	15	12	18	20	21.1	27.8	
16-Nov-06	21	22	22	A	23	22	14	7	7	6	11	14	20	18	17	17	8	1	0	0	1	1	0	0	11.0	23.3	
17-Nov-06	1	0	A	4	8	1	0	1	2	2	6	6	7	12	9	4	1	0	0	0	0	0	1	0	2.8	11.8	
18-Nov-06	D	A	1	7	1	2	11	14	17	19	19	21	22	24	22	17	9	8	0	0	0	0	2	0	9.8	23.8	
19-Nov-06	A	0	0	0	14	13	0	0	14	19	21	21	20	21	23	21	17	19	36	39	39	36	A	17.8	39.1		
20-Nov-06	38	38	35	35	27	11	0	0	0	7	4	5	13	11	10	2	0	0	0	0	0	0	15	7	10.8	38.2	
21-Nov-06	27	21	17	29	31	A	28	27	19	18	17	22	26	27	23	22	24	21	20	24	25	28	29	29	24.1	30.8	
22-Nov-06	30	30	30	30	A	29	28	26	25	27	27	28	28	27	24	21	20	22	23	22	24	23	22	22	25.8	30.0	
23-Nov-06	23	23	25	A	22	19	15	21	17	20	25	25	26	27	27	24	22	14	14	13	21	23	23	25	21.4	26.9	
24-Nov-06	25	25	A	26	26	26	26	26	27	29	31	32	33	33	32	32	24	21	17	11	7	4	6	8	22.9	33.1	
25-Nov-06	7	A	20	25	23	20	17	20	21	22	25	28	27	26	30	29	27	25	24	17	5	1	8	9	19.8	29.5	
26-Nov-06	A	10	15	17	8	1	3	3	2	7	12	14	13	12	11	9	3	1	2	6	12	16	23	A	9.1	22.9	
27-Nov-06	26	26	27	27	27	26	25	24	20	21	22	25	26	24	25	20	11	8	19	7	10	22	A	8	20.8	27.3	
28-Nov-06	5	8	10	12	16	14	13	7	2	7	10	15	17	19	17	11	3	2	2	1	2	A	2	4	8.6	18.9	
29-Nov-06	2	5	6	8	3	2	1	2	1	3	9	12	9	9	6	3	2	1	1	0	A	2	0	3	3.9	12.1	
30-Nov-06	12	12	1	3	2	0	0	0	7	16	27	33	34	33	31	31	29	34	A	34	35	34	29	20.3	34.7		

Hourly Avg	15.3	15.5	15.4	16.2	15.3	13.7	11.6	11.1	11.4	13.9	16.8	18.7	20.2	20.2	19.6	17.2	13.5	10.9	11.0	10.4	12.0	13.0	12.9	11.9
Hourly Max	38.2	37.9	34.9	35.1	30.8	28.7	28.1	27.2	27.3	29.5	30.7	32.8	34.4	32.8	31.8	31.6	30.5	29.4	34.3	36.3	38.9	39.1	35.5	29.0

## HOURLY AVERAGE TABLE

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



## Status Flag Characters

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

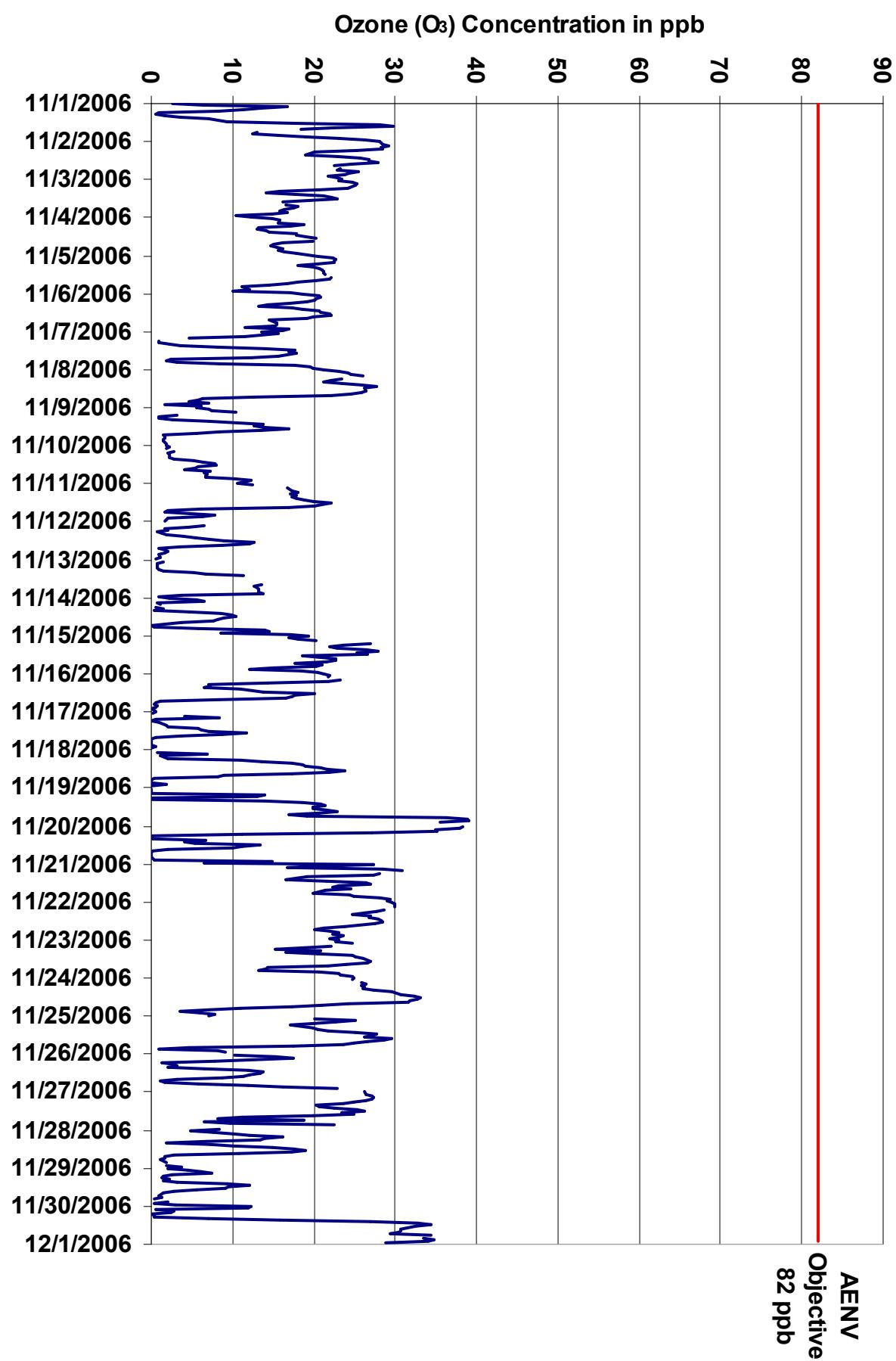


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

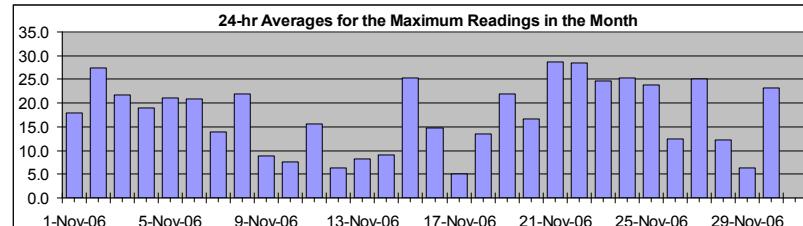
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	41.5 ppb	19-Nov 21:00 22:00
Maximum 24-hr Value:	28.7 ppb	21-Nov



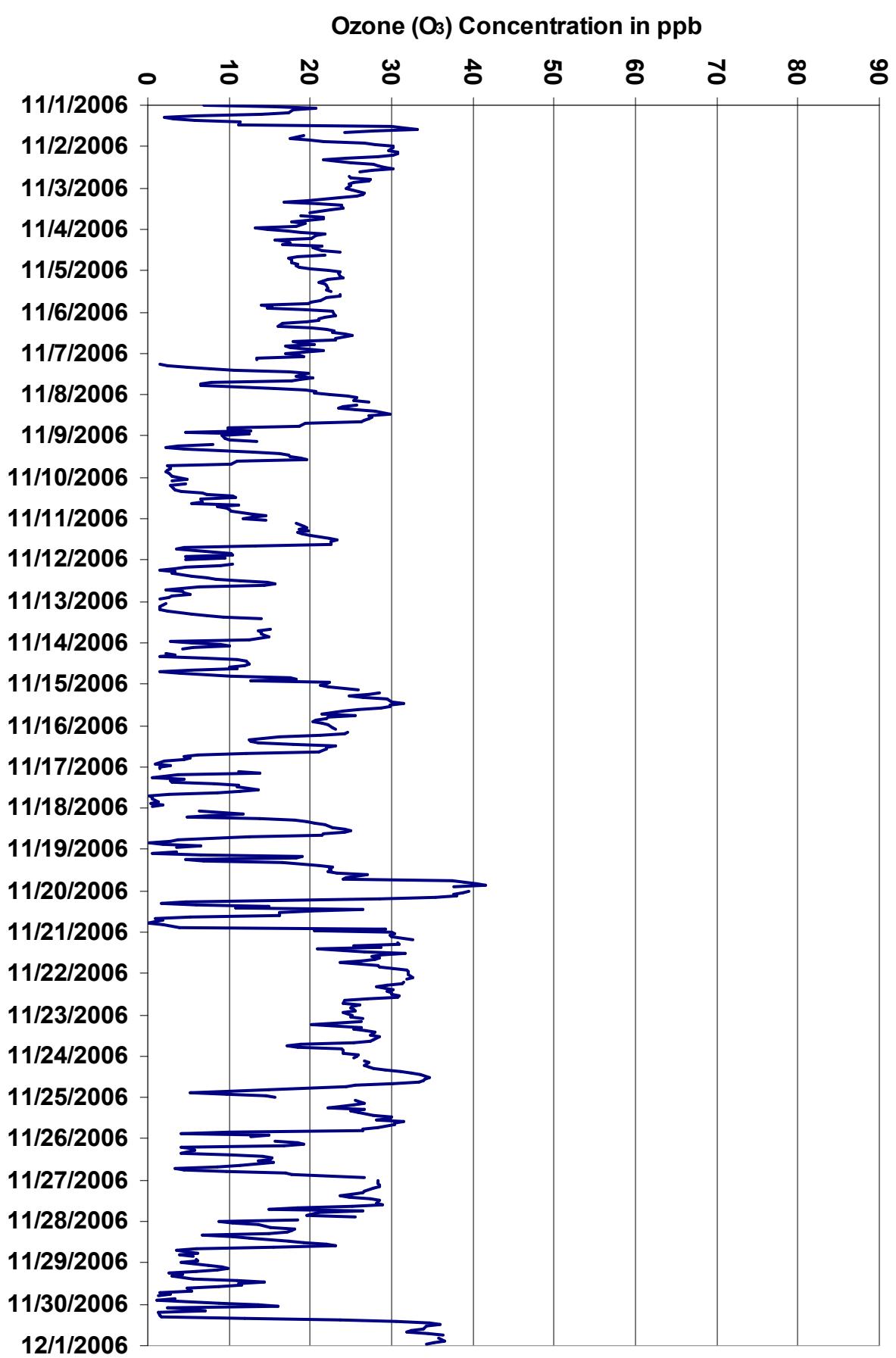
AIC Time:	31 hrs	Operational Time:	684 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	37.6 31.9 25.3 18.9 9.3 1.9 0.6	17.6 ppb	18.9 ppb

#### Day Mountain Standard Time

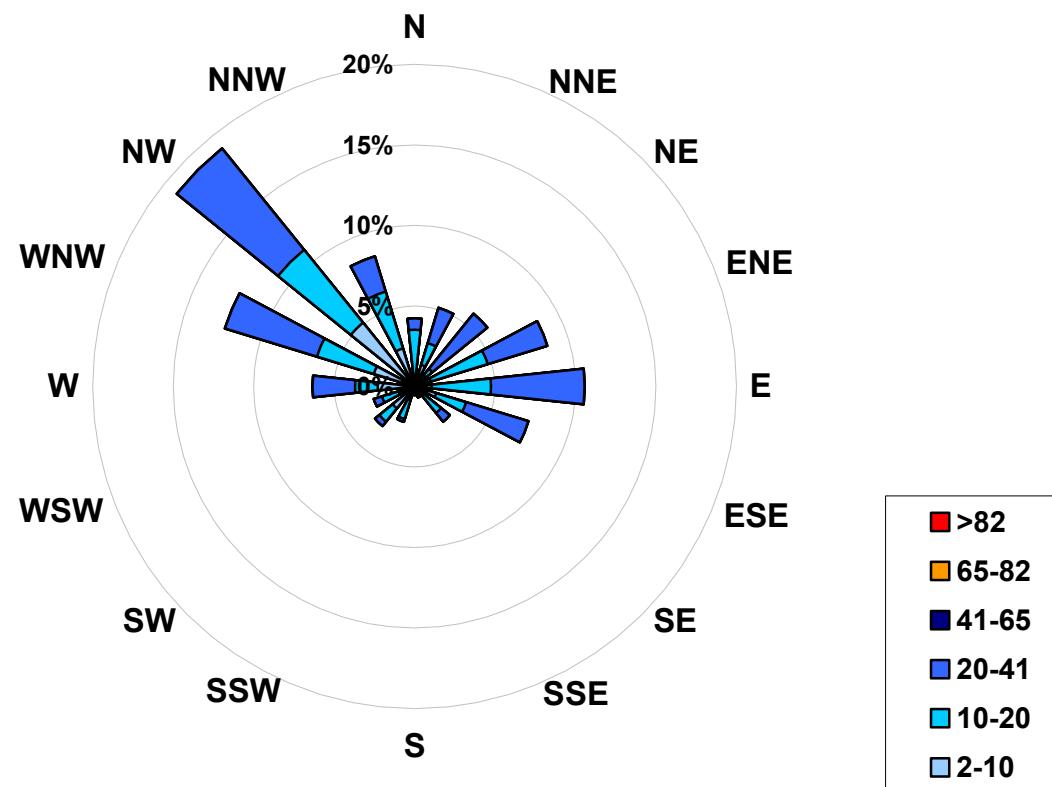
	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00		
1-Nov-06	7	16	21	18	17	14	6	2	3	6	11	11	30	31	33	28	24	A	19	17	20	22	27	28	17.9	33.2	
2-Nov-06	30	30	30	31	31	30	28	25	22	25	28	28	29	30	28	26	A	25	25	27	27	25	25	27.4	30.8		
3-Nov-06	24	25	26	27	27	26	24	20	17	21	24	24	24	23	20	A	19	22	22	20	18	19	18	13	21.7	26.6	
4-Nov-06	15	17	19	22	21	20	16	17	17	21	20	21	21	24	A	22	18	17	18	18	18	19	20	18.9	23.7		
5-Nov-06	22	24	24	24	24	22	22	21	22	22	22	23	23	A	24	24	22	21	20	20	14	15	15	19	21.1	24.1	
6-Nov-06	23	23	23	22	21	21	20	17	16	20	22	23	23	24	25	23	23	18	19	20	17	18	22	19	20.8	25.1	
7-Nov-06	17	19	19	13	13	A	2	2	5	8	11	17	20	18	20	19	18	8	7	7	15	19	21	21	13.8	20.7	
8-Nov-06	22	25	26	25	27	A	26	24	23	25	28	30	27	28	27	27	26	19	19	10	10	10	13	5	12	21.9	29.9
9-Nov-06	9	10	10	13	A	8	4	2	5	13	16	17	18	19	20	11	10	2	3	3	2	2	3	3	8.8	19.6	
10-Nov-06	4	5	3	A	5	3	3	3	4	7	7	10	11	6	7	5	11	9	10	10	10	13	15	13	7.5	14.5	
11-Nov-06	12	14	A	18	19	20	19	20	18	19	20	22	23	23	23	22	13	4	4	8	10	10	5	9	15.5	23.3	
12-Nov-06	5	A	10	9	5	3	1	3	3	5	7	8	11	15	16	14	6	2	4	5	5	3	3	2	6.4	15.7	
13-Nov-06	A	2	2	1	1	1	2	5	7	9	14	C	C	C	A	15	14	14	14	14	15	12	3	8.2	15.1		
14-Nov-06	5	9	10	6	4	A	2	3	1	7	11	12	12	12	10	11	5	1	4	10	18	18	13	22	9.1	22.4	
15-Nov-06	22	21	22	26	A	29	27	25	26	29	30	31	30	30	29	26	24	22	25	22	22	21	20	21	25.2	31.4	
16-Nov-06	22	23	23	A	25	24	21	16	13	13	14	18	23	22	22	21	12	6	5	5	4	2	1	3	14.7	24.6	
17-Nov-06	1	1	A	11	14	4	0	5	3	3	8	11	11	14	11	9	3	0	0	1	1	0	2	1	5.0	13.7	
18-Nov-06	D	A	6	12	8	5	14	18	20	20	22	23	24	25	24	22	21	13	4	3	0	2	6	4	13.4	25.0	
19-Nov-06	A	4	1	7	19	18	5	7	17	21	23	22	23	23	27	24	24	37	39	40	41	38	A	21.9	41.5		
20-Nov-06	39	39	38	38	35	28	5	2	6	15	11	26	20	16	16	5	1	2	1	0	2	4	29	21	16.6	39.4	
21-Nov-06	30	30	30	30	33	A	31	31	25	29	21	27	32	29	28	28	28	26	24	28	28	30	32	32	28.7	32.6	
22-Nov-06	32	32	33	32	A	31	31	29	28	30	29	30	30	31	31	27	24	24	26	25	25	26	24	28.5	32.6		
23-Nov-06	25	25	26	A	26	23	20	26	25	27	28	28	27	28	28	27	25	19	17	18	24	24	26	24	24.7	28.5	
24-Nov-06	26	25	A	27	27	27	28	29	31	32	34	35	34	34	33	30	25	24	15	10	5	10	15	25.4	34.7		
25-Nov-06	16	A	25	27	25	24	22	27	25	26	28	30	30	28	32	30	30	28	26	27	10	4	15	13	23.8	31.5	
26-Nov-06	A	16	18	19	17	4	6	6	4	10	14	15	15	14	15	11	9	3	5	10	17	18	27	A	12.4	26.6	
27-Nov-06	28	28	28	29	29	28	27	27	25	24	25	27	28	28	29	25	18	15	27	21	20	25	A	25.2	28.9		
28-Nov-06	9	10	14	15	18	18	17	15	7	10	13	17	19	22	23	15	6	4	6	4	6	A	6	6	12.2	23.2	
29-Nov-06	4	8	9	10	9	6	3	4	3	6	11	14	11	12	9	5	5	2	3	1	1	3	1	9	6.4	14.4	
30-Nov-06	14	16	2	5	7	1	1	2	12	24	31	35	36	34	34	32	32	34	36	A	36	36	35	34	23.1	36.5	

Hourly Avg	17.8	18.4	18.5	19.1	18.7	16.9	14.4	14.4	14.4	17.4	19.4	21.9	23.0	22.9	22.8	20.6	17.4	14.1	15.1	14.0	15.4	15.6	16.3	15.5
Hourly Max	39.4	38.8	37.7	38.1	35.3	31.4	31.4	30.9	29.3	31.1	32.4	34.7	36.0	34.3	34.0	33.3	31.9	34.4	37.4	38.9	40.5	41.5	37.6	34.3

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



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



Calms: 0%

Frequency Distribution of O <sub>3</sub> in ppb		Frequency (hrs)
Range		
2.0	< 10	252
10	to 20	194
20	to 41	238
41	to 65	0
65	to 82	0
	> 82	0
Total Non-Zero Values		684

## PASZA - Henry Pirker - Ozone Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

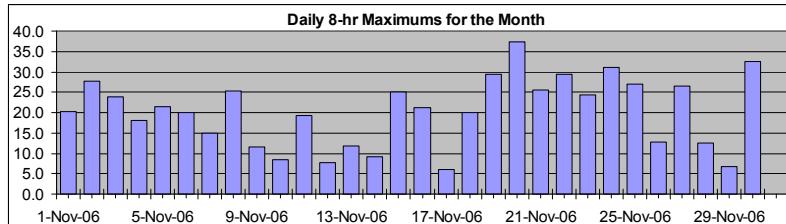
Monitoring Dates: November 1, 2006 to December 1, 2006

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

Number of 8-hr Exceedances: 0  
 Maximum 8-hr Average: 37.3 ppb 20-Nov 2:00 3:00

### EIGHT HOUR RUNNING AVERAGE TABLE

### Ozone ( $O_3$ )



### 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

### Percentile

Percentile	99	95	75	50	25	5	1
	32.0	27.2	21.5	14.9	6.5	2.0	0.6

### Day Mountain Standard Time

Day	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
1-Nov-06	N	8	9	9	8	8	8	8	7	7	6	5	6	9	12	15	17	19	20	20	20	20	19	18	18	20.2	
2-Nov-06	20	21	23	25	26	27	28	27	26	25	25	25	25	24	24	24	25	25	25	25	25	25	24	24	23	27.8	
3-Nov-06	23	23	24	24	24	24	24	23	22	21	20	20	20	20	19	19	19	19	19	19	19	19	18	17	17	16	23.8
4-Nov-06	15	15	15	15	15	15	15	15	15	15	15	16	16	16	17	18	18	18	18	18	17	17	16	16	16	18.0	
5-Nov-06	16	17	18	19	20	21	21	21	21	21	21	21	20	20	21	21	21	21	21	20	19	19	18	17	16	21.4	
6-Nov-06	15	15	16	16	17	18	19	19	18	18	18	18	18	18	19	19	20	20	19	19	19	18	17	16	16	20.1	
7-Nov-06	15	15	15	14	13	13	11	9	7	5	5	5	5	7	8	10	12	13	13	12	11	10	10	10	10	15.0	
8-Nov-06	12	14	17	20	22	23	23	24	24	24	24	24	24	24	25	25	25	25	24	21	19	16	14	11	8	25.2	
9-Nov-06	6	6	6	6	6	6	6	5	5	5	6	6	7	9	10	11	11	11	9	8	6	4	3	2	11.5		
10-Nov-06	2	2	2	2	2	2	2	2	2	3	3	4	5	5	5	6	6	6	6	6	6	7	8	9	8.5		
11-Nov-06	9	10	10	12	13	14	15	16	17	17	18	18	19	19	19	19	18	16	14	12	10	8	6	4	19.3		
12-Nov-06	3	4	4	4	4	3	3	3	3	3	3	3	3	4	5	7	8	8	7	7	6	5	4	3	2	7.8	
13-Nov-06	1	1	1	1	1	1	1	1	2	3	4	N	N	N	N	N	N	N	N	N	N	N	12	11	11.9		
14-Nov-06	9	8	7	6	4	3	3	3	2	2	2	4	5	6	7	7	8	7	6	6	6	7	7	8	9.1		
15-Nov-06	10	12	14	16	16	18	20	21	21	23	24	25	25	24	24	24	24	23	22	21	21	20	19	19	18	25.2	
16-Nov-06	18	19	19	19	20	21	21	19	17	15	13	13	13	12	13	14	14	13	12	10	8	6	4	2	21.2		
17-Nov-06	1	0	0	1	2	2	2	2	2	3	3	3	3	4	6	6	6	5	5	4	3	2	1	0	5.9		
18-Nov-06	0	N	N	N	N	N	N	N	7	9	11	13	15	18	20	20	19	18	15	13	10	7	5	2	20.0		
19-Nov-06	1	0	0	0	2	4	4	4	5	7	10	13	13	14	17	20	21	21	20	22	25	27	29	30	29.5		
20-Nov-06	32	35	37	37	35	31	26	23	18	14	11	7	5	5	6	7	7	6	5	5	3	2	2	3	37.3		
21-Nov-06	6	9	11	14	18	21	23	26	24	24	24	23	22	22	22	23	23	23	24	23	24	24	25	25	25.6		
22-Nov-06	26	27	28	29	29	29	28	28	27	27	27	27	27	26	25	25	24	24	23	22	22	22	22	22	29.5		
23-Nov-06	22	23	23	23	23	22	21	21	20	20	20	21	22	23	24	24	24	22	21	20	20	19	19	19	24.4		
24-Nov-06	20	21	22	24	25	25	26	26	26	27	27	28	29	30	30	31	31	30	28	25	22	18	15	12	31.1		
25-Nov-06	10	9	9	11	13	16	17	19	21	21	22	22	23	25	26	27	27	27	26	23	20	17	14	14	27.0		
26-Nov-06	13	11	9	9	10	10	9	8	7	7	7	6	7	8	9	10	10	9	8	7	7	9	9	9	12.7		
27-Nov-06	12	16	20	23	25	26	27	26	25	25	24	24	24	23	23	22	20	20	17	15	15	14	12	12	26.5		
28-Nov-06	11	11	10	11	12	10	11	11	10	10	10	11	11	11	12	12	12	12	11	9	7	5	3	2	1	12.4	
29-Nov-06	2	2	3	4	4	4	4	3	3	3	4	4	4	5	6	7	7	6	5	4	3	2	1	1	1	6.6	
30-Nov-06	3	4	4	5	4	4	4	4	3	4	7	11	15	19	23	26	29	31	32	32	32	32	32	32	32.4		

Hourly Max 32.0 35.0 37.3 37.1 35.4 31.4 29.2 28.8 28.1 27.7 27.3 28.0 28.9 29.7 30.5 31.1 30.7 31.0 31.9 31.8 31.7 32.0 32.4 32.2

# PASZA - Henry Pirker - Carbon Monoxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

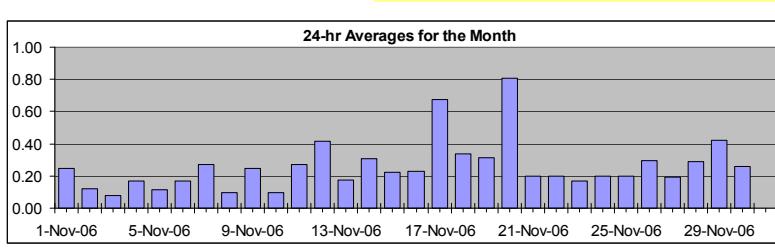
Objective Limit: Alberta Environment: 1-hr 13 ppm 24-hr na ppm

**Summary**

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	2.0	ppm	17-Nov	8:00 9:00
Maximum 24-hr Value:	0.8	ppm	20-Nov	

AIC Time:	33 hrs	Operational Time:	683 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%						
Percentile	99 1.5	95 0.6	75 0.3	50 0.2	25 0.1	5 0.1	1 0.0	Average 0.3 ppm	Median 0.2 ppm

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-06	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.4	1.0	0.6	0.5	0.6	0.3	0.2	0.1	0.2	0.2	A	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.25	1.00
2-Nov-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.25	
3-Nov-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	A	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.08	0.20	
4-Nov-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.27		
5-Nov-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	A	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.12	0.20		
6-Nov-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.2	0.2	C	C	C	A	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.17	0.30	
7-Nov-06	0.2	0.1	0.1	0.1	0.2	A	0.4	0.7	0.7	0.4	A	A	0.2	0.3	0.2	0.2	0.2	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.27	0.72	
8-Nov-06	0.0	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	0.1	0.1	0.2	0.2	0.2	0.1	0.10	0.21	
9-Nov-06	0.1	0.1	0.1	0.1	A	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.25	0.44	
10-Nov-06	0.2	0.3	0.2	A	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.29
11-Nov-06	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.27	0.64	
12-Nov-06	0.4	A	0.2	0.2	0.3	0.2	0.3	0.7	0.5	0.8	0.7	0.4	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.6	0.6	0.7	0.6	0.42	0.80	
13-Nov-06	A	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.0	0.0	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	0.17	0.48	
14-Nov-06	0.2	0.2	0.2	0.2	0.2	A	1.2	0.7	0.6	0.4	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.5	0.5	0.2	0.1	0.1	0.0	0.0	0.31	1.19	
15-Nov-06	0.0	0.0	0.0	0.1	A	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.2	0.1	0.22	0.36	
16-Nov-06	0.1	0.1	0.1	A	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.1	0.2	0.5	0.6	0.3	0.3	0.3	0.3	0.5	0.23	0.60	
17-Nov-06	0.4	0.3	A	0.2	0.3	0.2	0.3	1.4	2.0	1.6	0.6	0.6	0.7	0.4	0.4	0.6	0.6	0.6	0.4	0.4	0.8	1.2	0.8	0.67	1.97		
18-Nov-06	0.4	A	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.6	0.8	0.6	0.5	0.3	0.34	0.82	
19-Nov-06	A	0.5	0.5	0.4	0.3	0.2	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	A	0.32	0.53	
20-Nov-06	0.2	0.2	0.2	0.2	0.2	0.3	0.7	1.2	1.5	0.8	1.7	1.7	0.6	0.6	0.6	1.3	1.8	1.8	1.9	0.8	0.4	0.4	0.3	0.3	0.81	1.91	
21-Nov-06	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.28	
22-Nov-06	0.2	0.2	0.1	0.1	A	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.31	
23-Nov-06	0.1	0.1	0.1	A	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.17	0.34	
24-Nov-06	0.1	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.4	0.3	0.20	0.38	
25-Nov-06	0.3	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.20	0.33	
26-Nov-06	A	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	A	0.30	0.49	
27-Nov-06	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.19	0.30		
28-Nov-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.2	0.4	0.4	0.4	0.4	0.3	0.3	A	0.29	0.42		
29-Nov-06	0.3	0.2	0.2	0.2	0.3	0.3	0.6	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.8	0.7	0.5	0.7	0.4	A	0.3	0.3	0.2	0.42	0.81	
30-Nov-06	0.2	0.2	0.2	0.2	0.6	0.6	1.1	0.4	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	1.08	



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

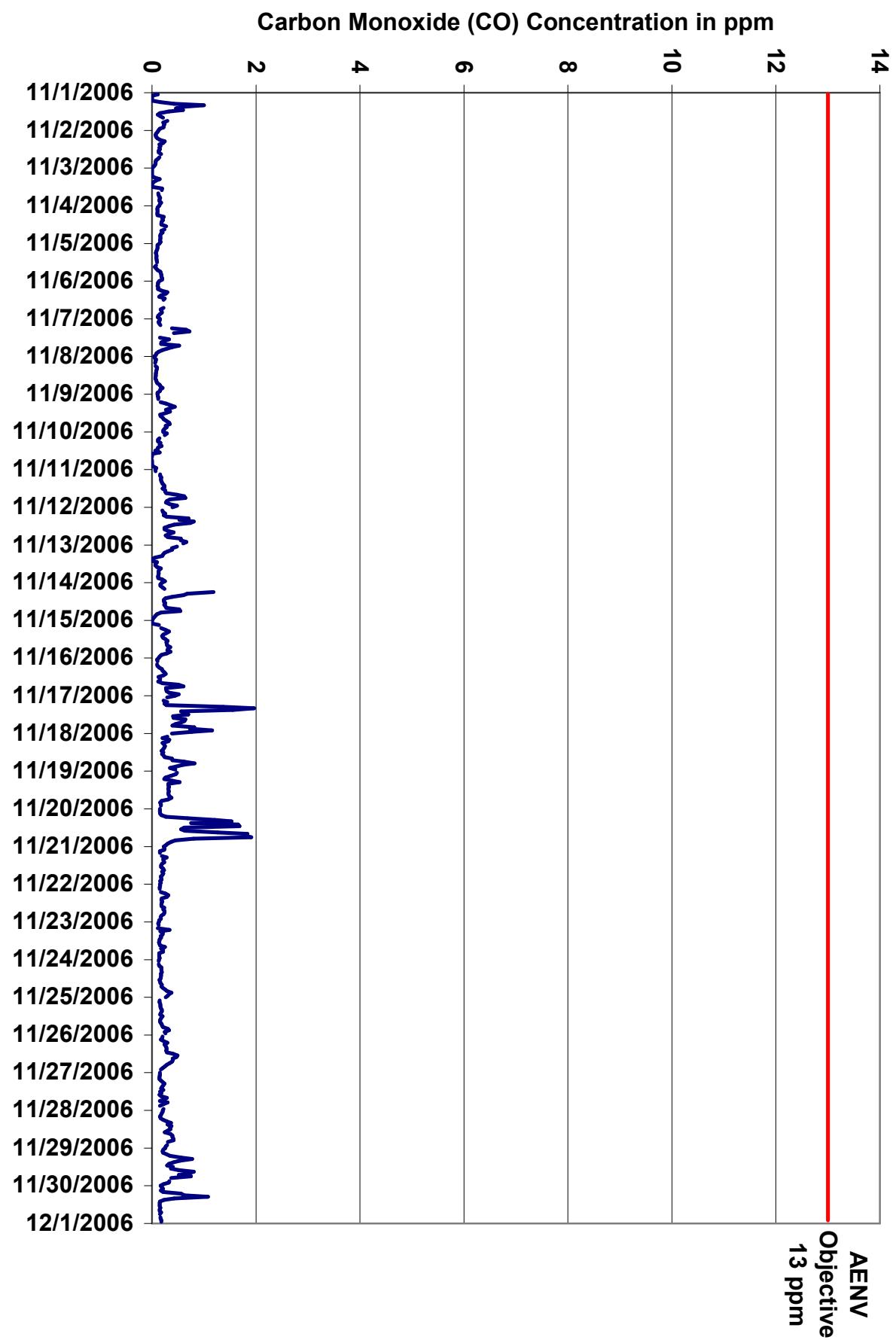


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

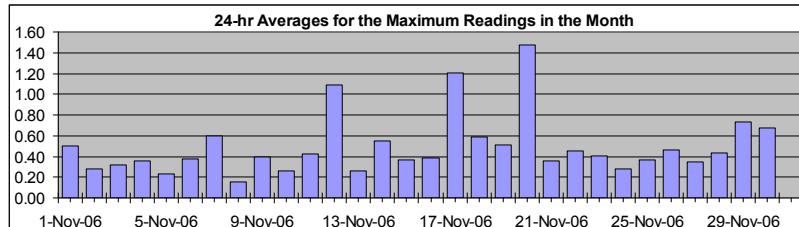
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Carbon Monoxide (CO)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	6.6	ppm	30-Nov	5:00 6:00
Maximum 24-hr Value:	1.5	ppm	20-Nov	



AIC Time:	33 hrs	Operational Time:	683 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	3.1 1.4 0.6 0.3 0.2 0.1 0.0	0.5 ppm	0.3 ppm

#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour Start Hour End	1:00 2:00	3:00 4:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	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-Nov-06	0.3 1:00	0.7 2:00	0.0 3:00	0.0 4:00	0.0 5:00	0.1 6:00	0.4 7:00	1.1 8:00	1.9 9:00	1.0 10:00	0.7 11:00	0.8 12:00	0.7 13:00	0.3 14:00	0.2 15:00	0.3 16:00	0.4 17:00	A 18:00	0.6 19:00	0.3 20:00	0.3 21:00	0.4 22:00	0.7 23:00	0.2 0:00	0.50 1.90	
2-Nov-06	0.2 1:00	0.2 2:00	0.1 3:00	0.1 4:00	0.2 5:00	0.3 6:00	0.3 7:00	0.6 8:00	0.6 9:00	0.2 10:00	1.1 11:00	0.3 12:00	0.3 13:00	0.3 14:00	0.2 15:00	0.3 16:00	0.2 17:00	A 18:00	0.2 19:00	0.3 20:00	0.1 21:00	0.3 22:00	0.1 23:00	0.1 0:00	0.28 1.10	
3-Nov-06	0.0 1:00	0.0 2:00	0.0 3:00	0.0 4:00	0.0 5:00	0.1 6:00	0.8 7:00	0.7 8:00	0.6 9:00	0.8 10:00	0.1 11:00	0.3 12:00	0.4 13:00	0.3 14:00	0.4 15:00	0.3 16:00	0.2 17:00	A 18:00	0.2 19:00	0.3 20:00	0.2 21:00	0.5 22:00	0.8 23:00	0.3 0:00	0.32 0.85	
4-Nov-06	0.2 1:00	0.3 2:00	0.2 3:00	0.2 4:00	0.2 5:00	0.3 6:00	0.2 7:00	1.1 8:00	0.4 9:00	0.7 10:00	0.3 11:00	0.3 12:00	0.3 13:00	0.3 14:00	0.6 15:00	0.2 16:00	0.2 17:00	A 18:00	0.3 19:00	0.3 20:00	0.4 21:00	0.3 22:00	0.2 23:00	0.5 0:00	0.36 1.13	
5-Nov-06	0.2 1:00	0.2 2:00	0.2 3:00	0.1 4:00	0.1 5:00	0.2 6:00	0.1 7:00	0.1 8:00	0.1 9:00	0.1 10:00	0.1 11:00	0.1 12:00	0.1 13:00	0.1 14:00	A 15:00	0.1 16:00	0.2 17:00	C 18:00	0.6 19:00	0.3 20:00	0.3 21:00	0.3 22:00	0.3 23:00	0.3 0:00	0.23 1.42	
6-Nov-06	0.2 1:00	0.2 2:00	0.2 3:00	0.2 4:00	0.2 5:00	0.2 6:00	0.5 7:00	0.8 8:00	0.7 9:00	0.6 10:00	0.2 11:00	0.4 12:00	0.4 13:00	0.4 14:00	C 15:00	C 16:00	C 17:00	A 18:00	0.6 19:00	0.3 20:00	0.6 21:00	0.9 22:00	0.3 23:00	0.2 0:00	0.38 0.87	
7-Nov-06	0.2 1:00	0.2 2:00	0.2 3:00	0.2 4:00	A 5:00	0.9 6:00	3.3 7:00	1.4 8:00	0.8 9:00	A 10:00	A 11:00	0.2 12:00	0.4 13:00	0.2 14:00	0.4 15:00	0.3 16:00	0.3 17:00	0.4 18:00	0.6 19:00	0.3 20:00	0.5 21:00	0.3 22:00	0.1 23:00	0.1 0:00	0.60 3.27	
8-Nov-06	0.1 1:00	0.1 2:00	0.1 3:00	0.1 4:00	A 5:00	0.1 6:00	0.1 7:00	0.1 8:00	0.1 9:00	0.1 10:00	0.1 11:00	0.1 12:00	0.1 13:00	0.1 14:00	0.1 15:00	0.1 16:00	0.1 17:00	0.1 18:00	0.1 19:00	0.2 20:00	0.3 21:00	0.2 22:00	0.2 23:00	0.2 0:00	0.15 0.53	
9-Nov-06	0.2 1:00	0.2 2:00	0.2 3:00	A 4:00	0.2 5:00	0.2 6:00	0.5 7:00	0.7 8:00	0.7 9:00	0.4 10:00	0.3 11:00	0.6 12:00	0.4 13:00	0.5 14:00	0.4 15:00	0.5 16:00	0.4 17:00	0.5 18:00	0.4 19:00	0.4 20:00	0.4 21:00	0.4 22:00	0.3 23:00	0.3 0:00	0.39 0.72	
10-Nov-06	0.4 1:00	0.4 2:00	0.5 3:00	A 4:00	0.2 5:00	0.2 6:00	0.7 7:00	0.4 8:00	0.6 9:00	0.6 10:00	0.3 11:00	0.4 12:00	0.4 13:00	0.5 14:00	0.4 15:00	0.5 16:00	0.4 17:00	0.5 18:00	0.4 19:00	0.4 20:00	0.0 21:00	0.0 22:00	0.0 23:00	0.26 0.68		
11-Nov-06	0.1 1:00	A 2:00	0.2 3:00	0.2 4:00	0.2 5:00	0.2 6:00	0.3 7:00	0.2 8:00	0.3 9:00	0.4 10:00	0.3 11:00	0.4 12:00	0.3 13:00	0.3 14:00	0.3 15:00	0.3 16:00	0.3 17:00	0.3 18:00	0.4 19:00	0.5 20:00	0.5 21:00	0.5 22:00	0.6 23:00	0.43 1.30		
12-Nov-06	0.7 1:00	A 2:00	0.3 3:00	0.4 4:00	0.4 5:00	0.4 6:00	5.7 7:00	0.9 8:00	4.6 9:00	1.3 10:00	0.6 11:00	0.5 12:00	0.5 13:00	0.4 14:00	0.8 15:00	0.7 16:00	0.7 17:00	0.7 18:00	0.7 19:00	0.6 20:00	0.6 21:00	0.8 22:00	0.1 23:00	1.09 5.70		
13-Nov-06	A 1:00	0.7 2:00	0.5 3:00	0.4 5:00	0.3 6:00	0.3 7:00	0.1 8:00	0.1 9:00	0.1 10:00	0.1 11:00	0.2 12:00	0.2 13:00	0.2 14:00	0.2 15:00	0.2 16:00	0.2 17:00	0.2 18:00	0.2 19:00	0.2 20:00	0.2 21:00	0.2 22:00	0.1 23:00	0.26 0.70			
14-Nov-06	0.2 1:00	0.2 2:00	0.2 3:00	A 4:00	2.7 5:00	1.6 7:00	1.0 8:00	0.6 9:00	0.4 10:00	0.3 11:00	0.3 12:00	0.5 13:00	0.5 14:00	0.4 15:00	0.4 16:00	0.5 17:00	0.4 18:00	0.9 19:00	1.0 20:00	0.3 21:00	0.2 22:00	0.1 23:00	0.55 2.75			
15-Nov-06	0.0 1:00	0.0 2:00	0.1 3:00	A 4:00	0.7 5:00	0.6 6:00	0.5 7:00	0.6 8:00	0.3 9:00	0.3 10:00	0.3 11:00	0.4 12:00	0.4 13:00	0.4 14:00	0.4 15:00	0.4 16:00	0.4 17:00	0.4 18:00	0.4 19:00	0.4 20:00	0.4 21:00	0.4 22:00	0.4 23:00	0.37 0.85		
16-Nov-06	0.1 1:00	0.1 2:00	A 3:00	0.2 4:00	0.1 5:00	0.2 6:00	0.3 7:00	0.4 8:00	0.3 9:00	0.4 10:00	0.4 11:00	0.2 12:00	0.3 13:00	0.2 14:00	0.2 15:00	0.2 16:00	0.2 17:00	0.2 18:00	0.2 19:00	0.2 20:00	0.2 21:00	0.2 22:00	0.2 23:00	0.38 1.06		
17-Nov-06	0.7 1:00	0.6 2:00	A 3:00	0.3 4:00	0.1 5:00	0.2 6:00	1.6 7:00	2.6 8:00	2.3 9:00	1.4 10:00	1.1 11:00	0.5 12:00	0.5 13:00	0.5 14:00	0.5 15:00	1.0 16:00	0.5 17:00	0.5 18:00	0.7 19:00	0.6 20:00	0.6 21:00	1.1 22:00	1.4 23:00	1.20 4.93		
18-Nov-06	0.8 1:00	A 2:00	0.4 3:00	0.5 4:00	1.0 5:00	0.3 6:00	0.6 7:00	0.3 8:00	1.1 9:00	0.5 10:00	0.5 11:00	0.5 12:00	0.5 13:00	0.5 14:00	0.4 15:00	0.4 16:00	0.4 17:00	0.7 18:00	1.0 19:00	1.2 20:00	0.7 21:00	0.9 22:00	0.7 23:00	0.59 1.20		
19-Nov-06	A 1:00	0.7 2:00	0.6 3:00	0.5 4:00	0.3 5:00	0.8 6:00	0.5 7:00	0.8 8:00	0.6 9:00	0.5 10:00	0.5 11:00	0.5 12:00	0.5 13:00	0.5 14:00	0.5 15:00	0.5 16:00	0.5 17:00	0.5 18:00	0.5 19:00	0.6 20:00	0.4 21:00	0.2 22:00	0.2 23:00	0.51 1.05		
20-Nov-06	0.2 1:00	0.2 2:00	0.2 3:00	0.3 4:00	0.5 6:00	1.9 7:00	3.3 8:00	2.8 9:00	1.5 10:00	2.5 11:00	2.6 12:00	1.2 13:00	1.1 14:00	2.7 15:00	3.1 16:00	3.5 17:00	2.7 18:00	2.7 19:00	1.5 20:00	1.5 21:00	1.0 22:00	0.8 23:00	1.48 3.48			
21-Nov-06	0.4 1:00	0.3 2:00	0.4 3:00	A 4:00	0.2 5:00	0.8 6:00	0.3 7:00	0.3 8:00	0.3 9:00	0.3 10:00	0.3 11:00	0.2 12:00	0.4 13:00	0.4 14:00	0.4 15:00	0.3 16:00	0.3 17:00	0.3 18:00	0.3 19:00	0.3 20:00	0.2 21:00	0.2 22:00	0.2 23:00	0.36 0.82		
22-Nov-06	0.2 1:00	0.2 2:00	0.2 3:00	A 4:00	0.3 5:00	1.7 6:00	0.9 7:00	0.7 8:00	0.4 9:00	0.2 10:00	0.4 11:00	0.3 12:00	0.3 13:00	0.7 14:00	0.5 15:00	0.4 16:00	0.3 17:00	0.3 18:00	0.3 19:00	0.3 20:00	0.5 21:					

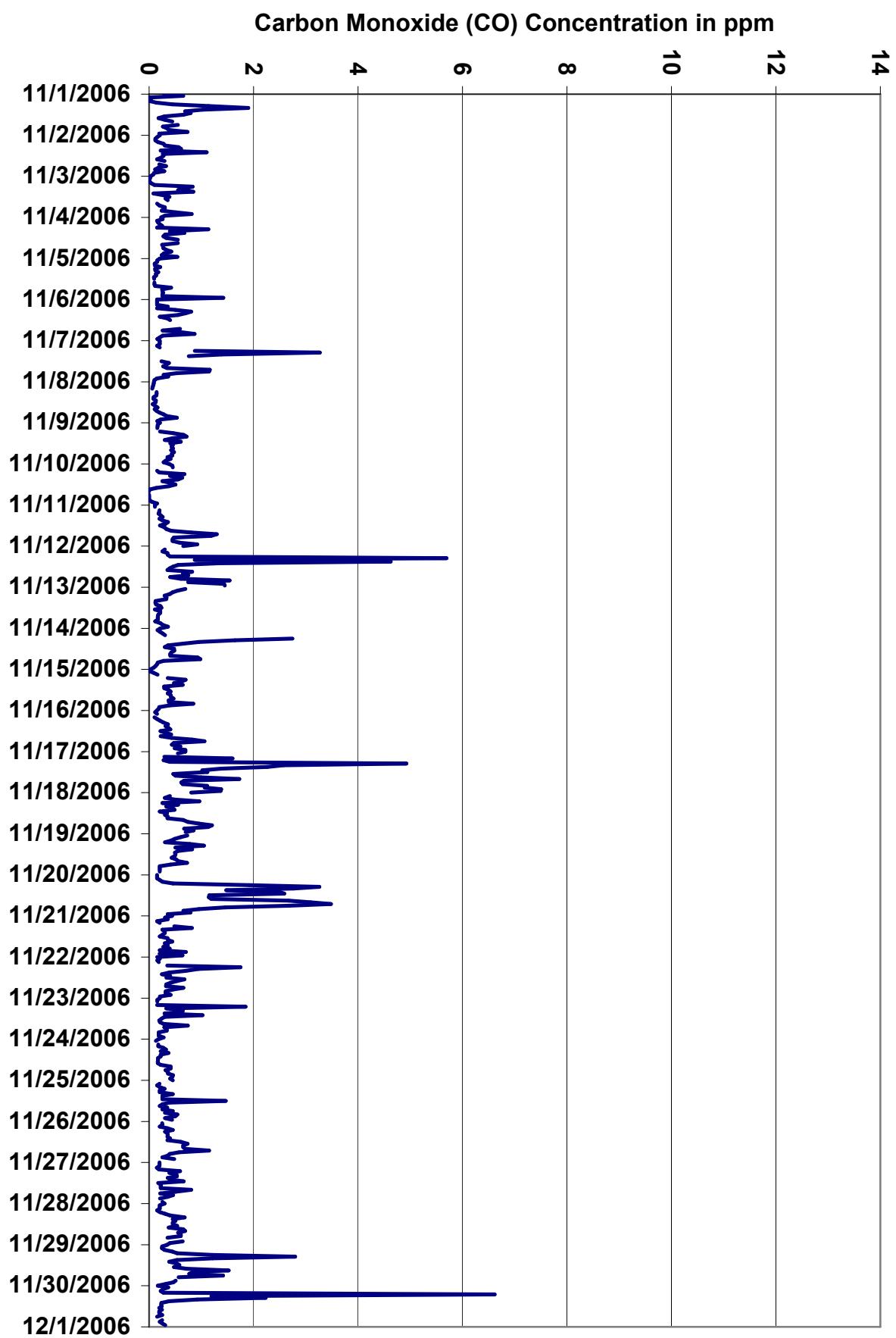
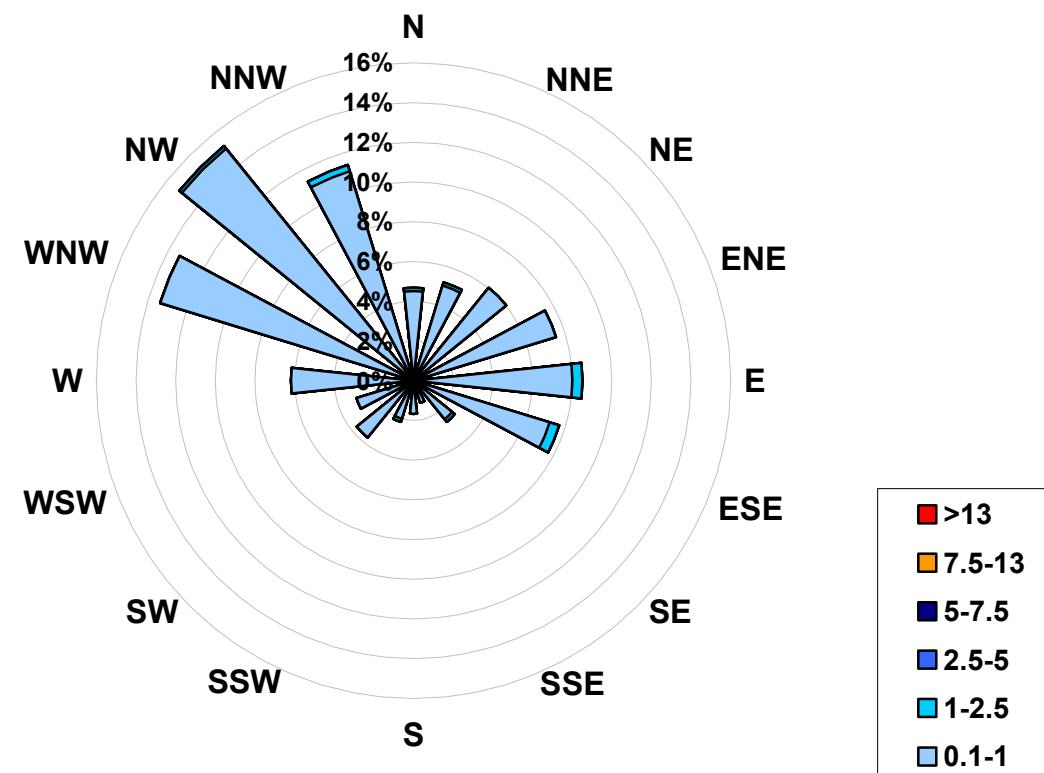


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	<	1	669
1	to	2.5	14
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
>	13		0
Total Non-Zero Values			683

# PASZA - Henry Pirker - Carbon Monoxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

## EIGHT HOUR RUNNING AVERAGE TABLE

Monitoring Dates: November 1, 2006 to December 1, 2006

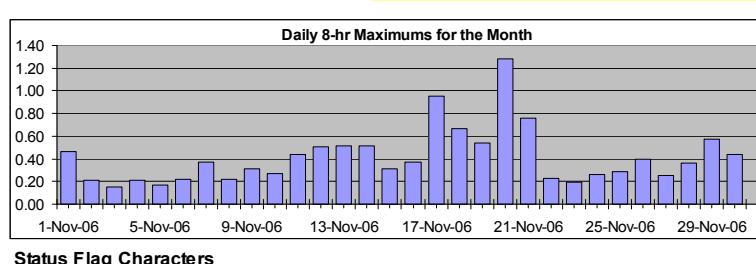
Objective Limit: Alberta Environment: 8-hr 5 ppm  
Summary

Number of 8-hr Exceedances: 0  
Maximum 8-hr Average: 1.3 ppm 20-Nov 18:00 19:00

Percentile	99	95	75	50	25	5	1
	1.1	0.6	0.3	0.2	0.2	0.1	0.0

### Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00
1-Nov-06	N N N N N N	0.0	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2-Nov-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	0.2	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
3-Nov-06	0.1 0.1 0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
4-Nov-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5-Nov-06	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	0.1	0.1	0.1	0.1	0.1	0.1
6-Nov-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	0.2
7-Nov-06	0.2 0.2 0.1 0.1 0.1 0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.2
8-Nov-06	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	0.1	0.1	0.1	0.1	0.1	0.1
9-Nov-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	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
10-Nov-06	0.3 0.3 0.3 0.3 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	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
11-Nov-06	0.0 0.0 0.0 0.0 0.1 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
12-Nov-06	0.4 0.4 0.3 0.3 0.3 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5
13-Nov-06	0.5 0.5 0.5 0.5 0.4 0.4	0.4	0.4	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	0.1	0.1	0.1	0.1
14-Nov-06	0.2 0.2 0.2 0.2 0.2 0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
15-Nov-06	0.2 0.1 0.1 0.0 0.0 0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
16-Nov-06	0.3 0.2 0.2 0.2 0.1 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4
17-Nov-06	0.4 0.4 0.3 0.3 0.3 0.3	0.3	0.3	0.4	0.7	0.8	0.8	0.9	0.9	0.9	1.0	0.9	0.7	0.6	0.6	0.5	0.5	0.6	0.7	0.7	0.95	0.95	0.95	0.95	0.95
18-Nov-06	0.7 0.7 0.6 0.6 0.6 0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.67
19-Nov-06	0.5 0.5 0.5 0.5 0.4 0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.54
20-Nov-06	0.2 0.2 0.2 0.2 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.6	0.8	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3	1.2	1.2	1.1	1.1	1.0
21-Nov-06	0.8 0.6 0.4 0.3 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.76
22-Nov-06	0.2 0.2 0.2 0.2 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
23-Nov-06	0.2 0.2 0.2 0.1 0.1 0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
24-Nov-06	0.2 0.2 0.1 0.1 0.1 0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
25-Nov-06	0.3 0.3 0.3 0.3 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.29
26-Nov-06	0.2 0.3 0.3 0.2 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.40
27-Nov-06	0.3 0.2 0.2 0.2 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
28-Nov-06	0.2 0.2 0.2 0.2 0.2 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.37
29-Nov-06	0.3 0.3 0.3 0.2 0.2 0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.58
30-Nov-06	0.4 0.3 0.3 0.2 0.2 0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.44



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

# PASZA - Henry Pirker - Total Hydrocarbons Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

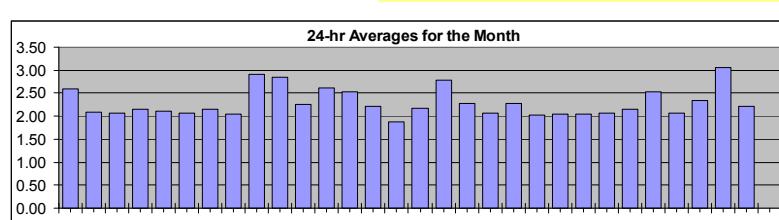
Monitoring Dates: November 1, 2006 to December 1, 2006

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

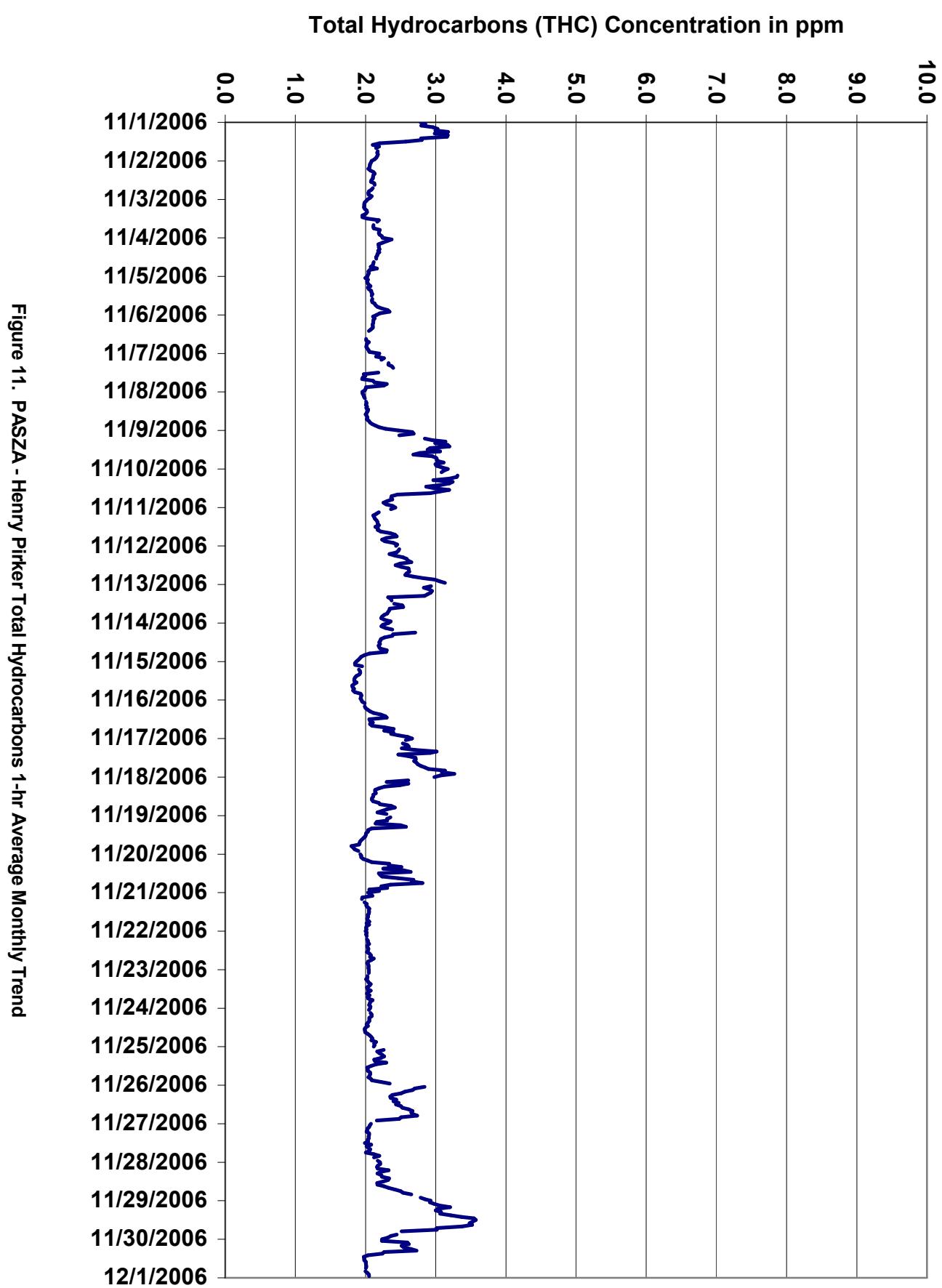
Maximum 1-hr Average:	3.6	ppm	29-Nov	12:00 13:00
Maximum 24-hr Value:	3.1	ppm	29-Nov	

AIC Time:	34 hrs	Operational Time:	683 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.3	3.1	2.4	2.2	2.0	1.9	1.8	2.3 ppm	2.2 ppm

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-06	2.8	2.8	2.8	3.0	3.0	3.0	3.2	3.0	3.2	3.2	2.8	2.8	2.6	2.2	2.1	2.2	2.1	A	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.59	3.18
2-Nov-06	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.08	2.13	
3-Nov-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	A	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.07	2.23	
4-Nov-06	2.2	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	A	2.1	2.1	2.1	2.1	2.2	2.1	2.0	2.0	2.16	2.37		
5-Nov-06	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.2	2.11	2.34	
6-Nov-06	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	C	C	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.16		
7-Nov-06	2.2	2.2	2.1	2.3	2.2	A	2.3	2.3	2.4	2.4	A	A	2.2	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.0	2.0	2.0	2.16	2.39	
8-Nov-06	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.04	2.29	
9-Nov-06	2.5	2.7	2.7	2.5	A	2.8	3.0	3.1	3.0	3.2	3.2	2.9	2.9	3.1	2.8	2.7	2.9	3.0	3.0	3.0	3.0	3.1	3.0	3.0	2.92	3.20	
10-Nov-06	3.2	3.1	3.1	A	3.3	3.3	3.2	3.0	3.2	3.2	3.1	2.9	3.0	3.2	3.1	2.9	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.4	2.85	3.31	
11-Nov-06	2.4	2.4	A	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.4	2.4	2.3	2.2	2.3	2.4	2.4	2.25	2.45	
12-Nov-06	2.4	A	2.5	2.5	2.4	2.3	2.4	2.5	2.6	2.6	2.7	2.5	2.4	2.5	2.6	2.6	2.6	2.6	2.7	2.8	3.0	3.1	3.1	2.61	3.13		
13-Nov-06	A	2.9	2.8	2.9	2.9	2.9	2.8	2.8	2.3	2.4	2.4	A	2.4	2.5	2.5	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.4	2.52	2.95		
14-Nov-06	2.3	2.2	2.2	2.3	2.4	A	2.7	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.1	2.0	1.9	1.9	1.9	2.22	2.71	
15-Nov-06	1.9	1.8	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.88	1.95	
16-Nov-06	1.9	2.0	2.0	A	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.1	2.1	2.1	2.1	2.3	2.4	2.3	2.4	2.5	2.6	2.6	2.17	2.60		
17-Nov-06	2.7	2.6	A	2.5	2.6	2.6	2.5	2.7	3.0	2.9	2.5	2.6	2.7	2.7	2.7	2.7	2.8	2.9	2.9	3.1	3.1	3.3	3.1	2.78	3.27		
18-Nov-06	3.0	A	2.6	2.3	2.6	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.4	2.3	2.2	2.2	2.3	2.29	2.98		
19-Nov-06	A	2.4	2.3	2.3	2.2	2.1	2.5	2.6	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.07	2.58		
20-Nov-06	1.9	1.9	1.9	2.0	2.0	2.1	2.3	2.3	2.5	2.3	2.5	2.6	2.2	2.2	2.2	2.5	2.7	2.7	2.8	2.4	2.2	2.3	2.1	2.2	2.29	2.81	
21-Nov-06	2.0	2.1	2.1	2.0	1.9	A	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.10	
22-Nov-06	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.04	2.11	
23-Nov-06	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.05	2.10	
24-Nov-06	2.1	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.06	2.15	
25-Nov-06	2.1	A	2.3	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.3	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.2	2.3	2.14	2.34	
26-Nov-06	A	2.8	2.7	2.7	2.6	2.5	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.5	2.5	2.6	2.7	2.7	2.7	2.5	2.5	2.2	A	2.53	2.84		
27-Nov-06	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.0	2.1	2.2	2.1	2.2	2.3	2.06	2.19	
28-Nov-06	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.5	2.5	2.7	A	2.8	2.8	2.33	2.85	
29-Nov-06	2.9	2.9	3.0	3.1	3.2	3.0	3.0	3.1	3.1	3.2	3.4	3.5	3.6	3.5	3.5	3.4	3.0	3.0	2.5	A	2.4	2.4	2.3	3.07	3.57		
30-Nov-06	2.2	2.2	2.6	2.6	2.5	2.5	2.6	2.7	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.21	2.73		



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



Station: Henry Pirker  
Station Owner: PASZA

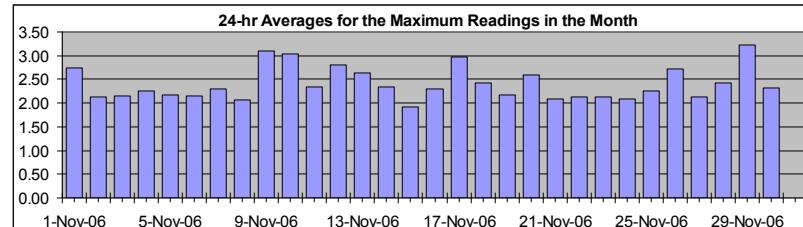
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Hydrocarbons (THC)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	3.8	ppm	10-Nov	14:00 15:00
Maximum 24-hr Value:	3.2	ppm	29-Nov	



AIC Time:	34 hrs	Operational Time:	683 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	3.6 3.3 2.6 2.2 2.1 2.0 1.9	2.4 ppm	2.2 ppm

#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily 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	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-Nov-06	3.0	3.2	3.0	3.1	3.1	3.1	3.5	3.1	3.3	3.2	3.2	2.9	2.9	2.3	2.2	2.3	2.4	A	2.2	2.2	2.3	2.2	2.3	2.1	2.1	2.74	3.52
2-Nov-06	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.2	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.34	
3-Nov-06	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.0	2.0	2.2	2.2	2.2	2.2	A	2.1	2.2	2.2	2.3	2.3	2.4	2.3	2.14	2.38	
4-Nov-06	2.3	2.5	2.4	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.1	2.1	2.8	2.3	2.1	2.1	2.26	2.81	
5-Nov-06	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.17	2.73	
6-Nov-06	2.2	2.1	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.4	2.1	C	C	A	2.2	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.4	2.7	2.15	2.38	
7-Nov-06	2.3	2.2	2.2	2.3	2.3	A	2.6	2.7	2.5	2.5	A	A	2.3	2.0	2.0	2.3	2.4	2.3	2.3	2.4	2.3	2.1	2.1	2.1	2.29	2.67	
8-Nov-06	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.3	2.2	2.4	2.0	2.07	2.36	
9-Nov-06	2.8	2.8	2.8	2.8	A	2.9	3.3	3.7	3.2	3.2	3.3	3.1	3.0	3.2	2.9	2.9	3.4	3.3	3.1	3.1	3.2	3.1	3.1	3.1	3.10	3.65	
10-Nov-06	3.3	3.3	3.2	A	3.4	3.4	3.5	3.3	3.3	3.3	3.2	3.0	3.4	3.5	3.8	3.0	2.9	2.4	2.5	2.6	2.4	2.3	2.4	2.4	3.03	3.79	
11-Nov-06	2.5	2.4	A	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.6	2.6	2.7	2.4	2.3	2.3	2.6	2.8	2.34	2.79	
12-Nov-06	2.7	A	2.6	2.5	2.7	2.4	2.5	3.1	2.9	3.2	2.9	2.6	2.5	2.7	3.0	2.8	2.8	2.6	2.6	2.8	3.0	3.1	3.2	3.4	2.81	3.40	
13-Nov-06	A	3.1	2.9	3.0	3.0	3.0	3.0	3.1	2.4	2.4	2.4	A	2.6	2.6	3.5	2.4	2.4	2.3	2.3	2.3	2.2	2.3	2.3	2.4	2.63	3.47	
14-Nov-06	2.4	2.3	2.2	2.4	2.5	A	2.9	3.0	2.6	2.3	2.3	2.2	2.3	2.3	2.5	2.2	2.3	2.7	2.5	2.1	2.1	2.0	1.9	1.9	2.35	3.03	
15-Nov-06	1.9	1.9	1.9	2.0	A	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.8	1.9	1.9	1.8	1.9	2.2	2.0	2.0	2.0	1.93	2.15	
16-Nov-06	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.2	2.4	2.9	2.8	2.2	2.2	2.2	2.1	2.2	2.6	2.5	2.3	2.5	2.4	2.6	2.7	2.30	2.87	
17-Nov-06	2.8	2.6	A	2.6	3.0	2.8	2.6	3.3	3.2	3.1	2.8	3.1	2.9	2.8	2.8	2.9	3.0	2.9	2.9	3.0	3.3	3.2	3.3	3.3	2.97	3.35	
18-Nov-06	3.1	A	2.8	2.5	3.4	2.7	2.3	2.4	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.3	2.3	2.5	2.6	2.5	2.3	2.4	2.43	3.36		
19-Nov-06	A	2.6	2.4	2.4	2.4	2.4	2.6	2.8	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	1.8	1.8	1.9	A	2.17	2.79		
20-Nov-06	1.9	2.0	2.0	2.1	2.5	2.7	2.8	2.9	2.5	2.9	3.0	2.4	2.4	2.5	3.0	3.1	3.8	3.2	2.8	2.4	2.5	2.5	2.3	2.59	3.79		
21-Nov-06	2.1	2.2	2.3	2.0	2.0	A	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.1	2.10	2.26	
22-Nov-06	2.0	2.1	2.1	2.0	A	2.1	2.6	2.3	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.1	2.1	2.1	2.1	2.1	2.14	2.57	
23-Nov-06	2.1	2.1	2.1	A	2.1	2.2	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.3	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.12	2.35	
24-Nov-06	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.10	2.22	
25-Nov-06	2.3	A	2.4	2.2	2.2	2.3	2.3	2.3	2.2	2.4	2.4	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.25	2.43		
26-Nov-06	A	3.2	3.0	2.9	2.6	2.6	2.5	2.4	2.4	2.7	3.2	3.2	2.6	2.6	2.6	2.7	2.8	2.9	2.8	2.9	2.7	2.6	2.4	A	2.73	3.24	
27-Nov-06	2.1	2.1	2.1	2.1	2.1	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.2	2.3	2.2	A	2.13	2.25	
28-Nov-06	2.2	2.3	2.2	2.2	2.4	2.4	2.3	2.2	2.3	2.3	2.5	2.4	2.3	2.2	2.2	2.2	2.3	2.4	2.5	2.7	2.6	2.7	A	2.42	2.92		
29-Nov-06	3.2	3.1	3.1	3.2	3.4	3.2	3.3	3.3	3.2	3.4	3.5	3.7	3.6	3.6	3.5	3.7	3.5	3.3	3.4	2.6	A	2.5	2.4	2.4	3.22	3.71	
30-Nov-06	2.3	2.4	2.7	2.7	2.6	3.2	2.8	3.1	2.6	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.32	3.23		

Hourly Avg 2.36 2.39 2.39 2.37 2.45 2.47 2.49 2.54 2.44 2.45 2.45 2.42 2.37 2.36 2.40 2.35 2.41 2.41 2.39 2.38 2.35 2.31 2.36 2.40

Hourly Max 3.30 3.29 3.16 3.25 3.38 3.40 3.52 3.65 3.32 3.36 3.47 3.68 3.64 3.61 3.79 3.71 3.55 3.79 3.38 3.10 3.33 3.23 3.35 3.40

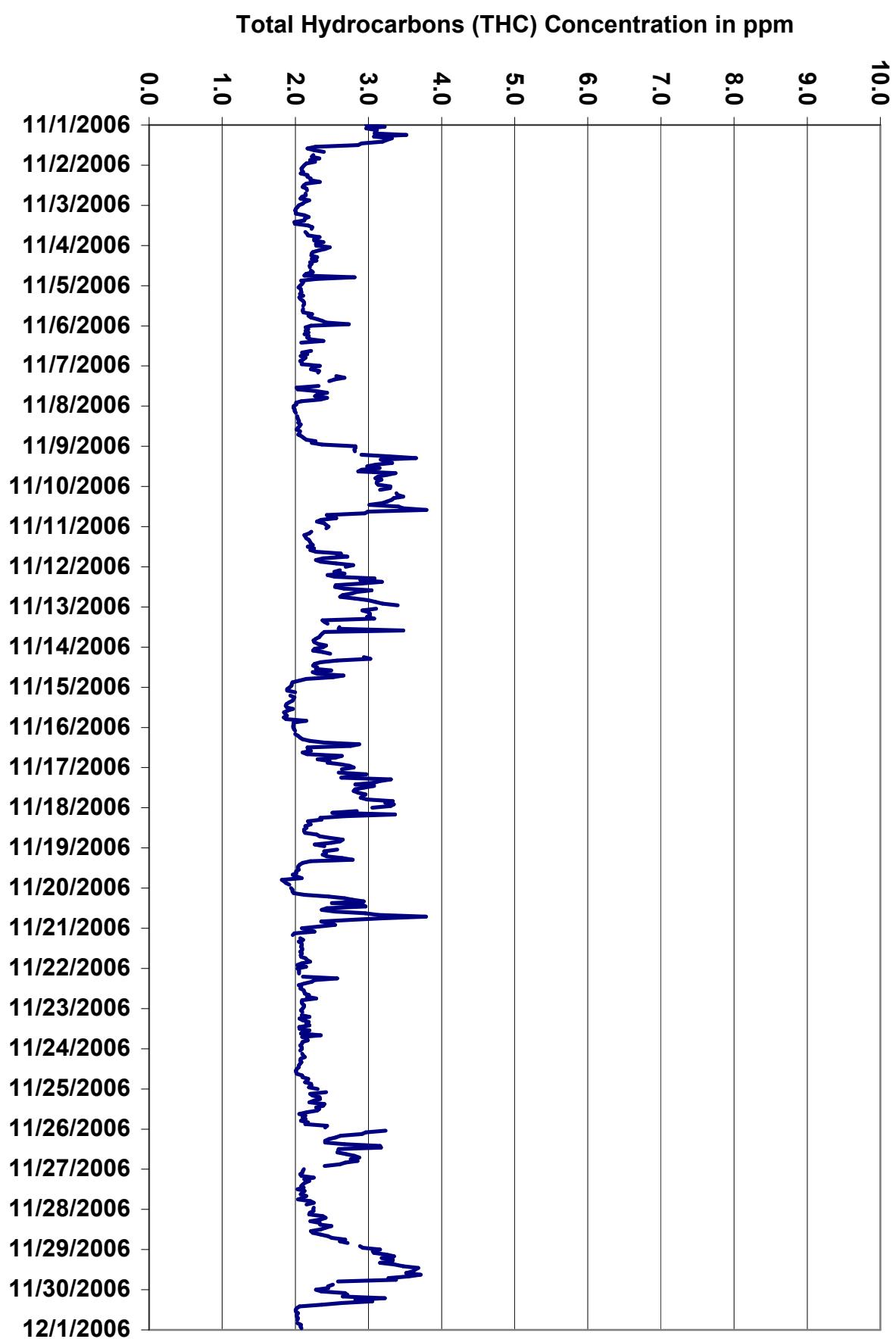
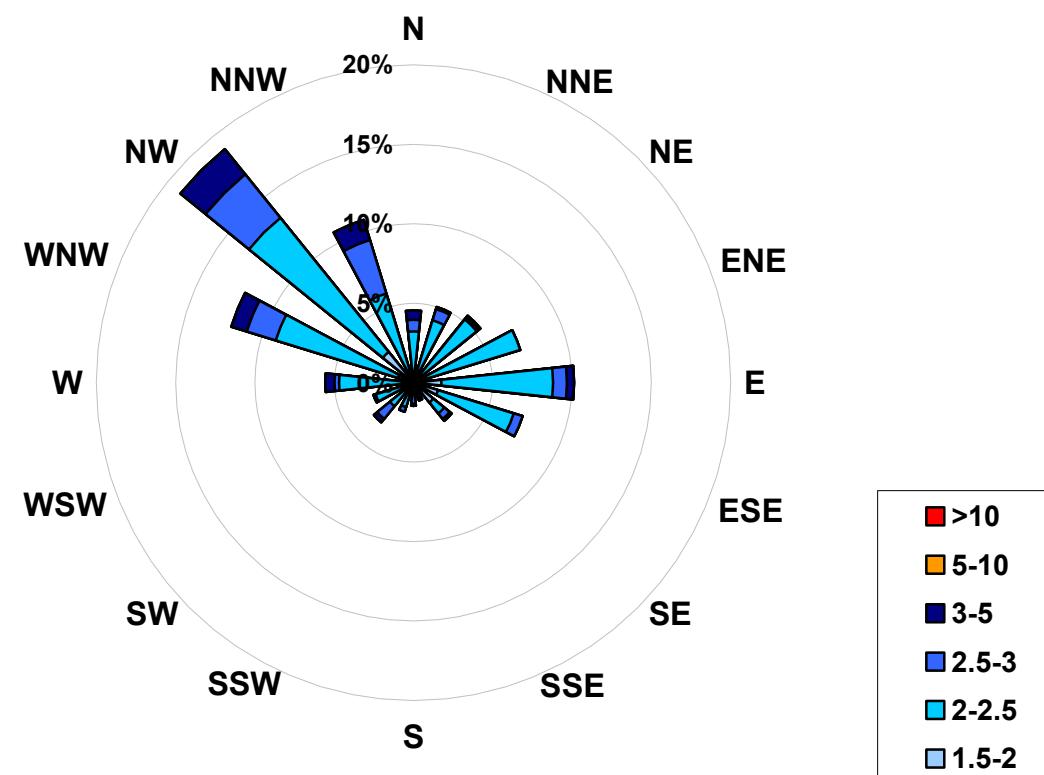


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	75
2	to	2.5	458
2.5	to	3	102
3	to	5	48
5	to	10	0
>	10		0
Total Non-Zero Values			683

# PASZA - Henry Pirker - Total Reduced Sulphur Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

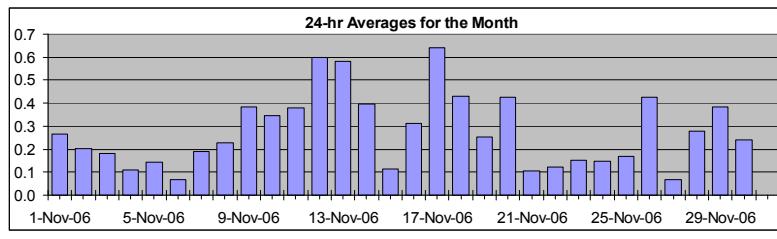
Maximum 1-hr Average:	1.4	ppb	26-Nov	3:00 4:00
Maximum 24-hr Value:	0.6	ppb	17-Nov	

AIC Time:	31 hrs	Operational Time:	686 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.9	0.7	0.4	0.2	0.1	0.0	0.0	0.3 ppb	0.2 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
1-Nov-06	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	0.3	0.6
2-Nov-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	0.2	0.3
3-Nov-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	0.2	0.3
4-Nov-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	0.1	0.2
5-Nov-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	0.1	0.2
6-Nov-06	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	0.1	0.2
7-Nov-06	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	0.2	0.5
8-Nov-06	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	0.2	0.3
9-Nov-06	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0.4	0.8
10-Nov-06	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.6
11-Nov-06	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
12-Nov-06	1	A	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0.6	0.8
13-Nov-06	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0.6	1.0
14-Nov-06	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
15-Nov-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	0.2
16-Nov-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	0.3	0.6
17-Nov-06	0	0	A	0	0	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0.6	1.0
18-Nov-06	1	A	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.4	0.7
19-Nov-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	0.3	0.5
20-Nov-06	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	1	1	1	1	1	0	0	0	0.4	1.0
21-Nov-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	0.2
22-Nov-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
23-Nov-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	0.2	0.3
24-Nov-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	0.1	0.4
25-Nov-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	0.2	0.4
26-Nov-06	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
27-Nov-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	0.1	0.3
28-Nov-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	0.3	0.7
29-Nov-06	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	1	0	A	1	0	0	0.4	0.6
30-Nov-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.5

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)



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

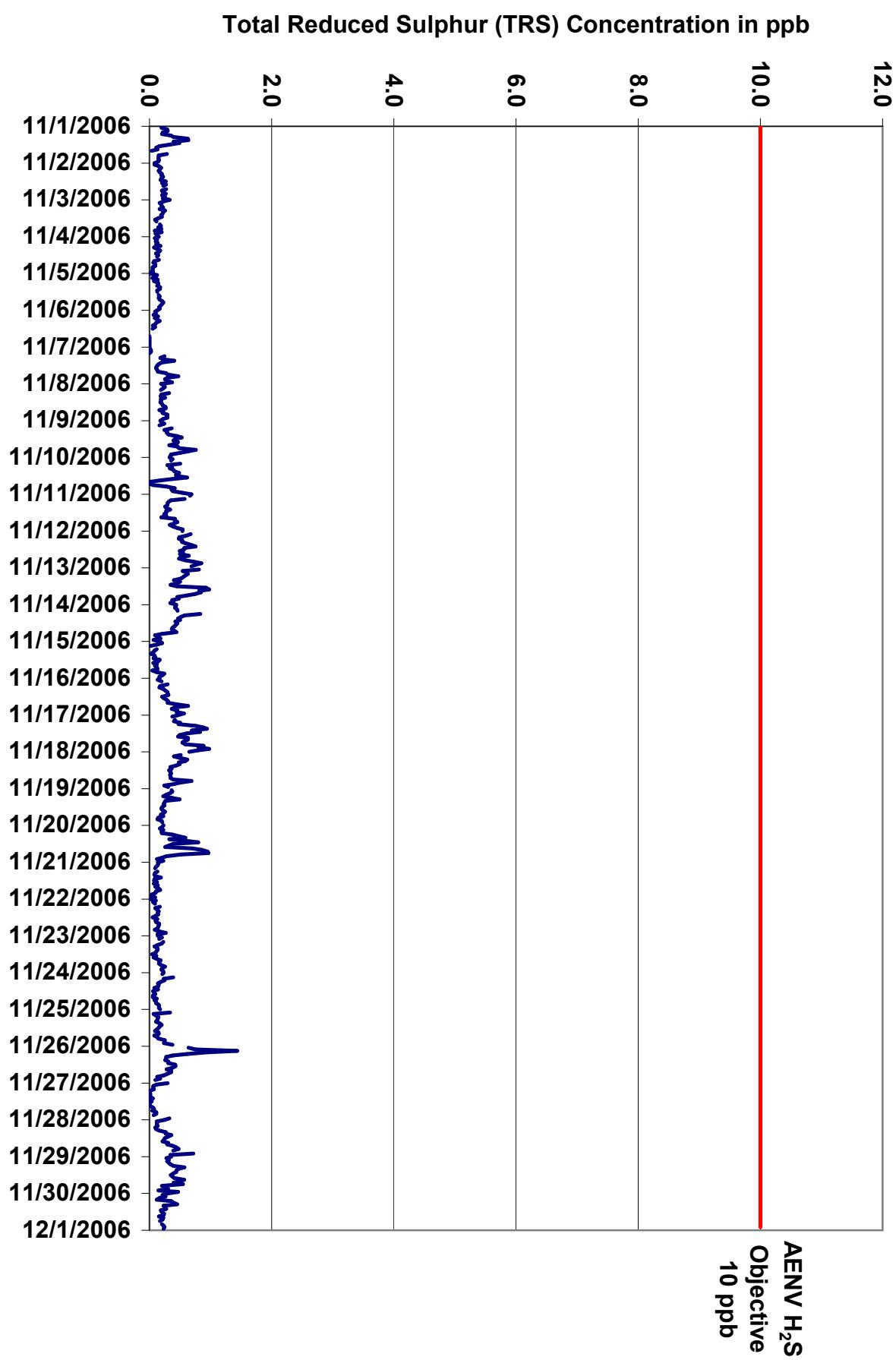


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

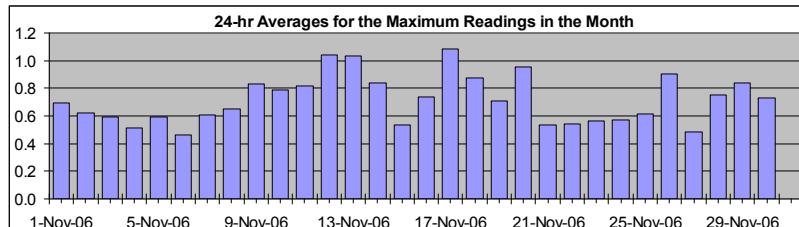
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	1.8	ppb	20-Nov	17:00 18:00
Maximum 24-hr Value:	1.1	ppb	17-Nov	



AIC Time:	31 hrs	Operational Time:	686 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.6	1.2	0.8	0.7	0.5	0.4	0.3	0.7 ppb	0.7 ppb

#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily 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	Average	Maximum			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00					
1-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	A	1	1	1	0	1	1	0	0.7	1.1	
2-Nov-06	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8		
3-Nov-06	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	0.6	0.7		
4-Nov-06	1	0	0	0	0	0	0	1	1	0	1	1	1	1	1	0	1	A	1	0	0	1	1	0	0	0.5	0.7		
5-Nov-06	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0	0	A	1	1	1	1	1	1	1	1	0.6	0.9		
6-Nov-06	0	1	1	0	1	0	1	1	1	1	1	1	1	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0.5	0.8
7-Nov-06	1	0	0	1	0	A	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0.6	0.9		
8-Nov-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.6	0.9		
9-Nov-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	0.8	1.1		
10-Nov-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	1	0.8	1.1		
11-Nov-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2		
12-Nov-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	1.0	1.2		
13-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1.0	1.5		
14-Nov-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	0.8	1.2		
15-Nov-06	1	1	1	0	A	1	0	1	0	1	0	0	0	1	1	0	1	0	1	0	1	1	1	1	1	0.5	0.7		
16-Nov-06	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2		
17-Nov-06	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5		
18-Nov-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	0.9	1.3		
19-Nov-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	1	0.7	1.0		
20-Nov-06	1	1	1	0	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	2	1	1	1	1	1	1.0	1.8		
21-Nov-06	0	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0	0	0	1	0.5	0.7		
22-Nov-06	0	0	0	0	A	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0	0.5	0.8		
23-Nov-06	0	1	1	A	1	1	1	1	0	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0.6	0.7		
24-Nov-06	1	1	A	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	1	0.6	0.9		
25-Nov-06	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.6	1.0		
26-Nov-06	A	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.8		
27-Nov-06	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.5	1.0		
28-Nov-06	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.7		
29-Nov-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	1	0.8	1.1		
30-Nov-06	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0		

Hourly Avg	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Hourly Max	1.1	1.5	1.6	1.8	1.8	1.1	1.2	1.5	1.3	1.5	1.2	1.5	1.0	1.4	1.5	1.4	1.8	1.8	1.8	1.6	1.3	1.4	1.3	1.7	1.4

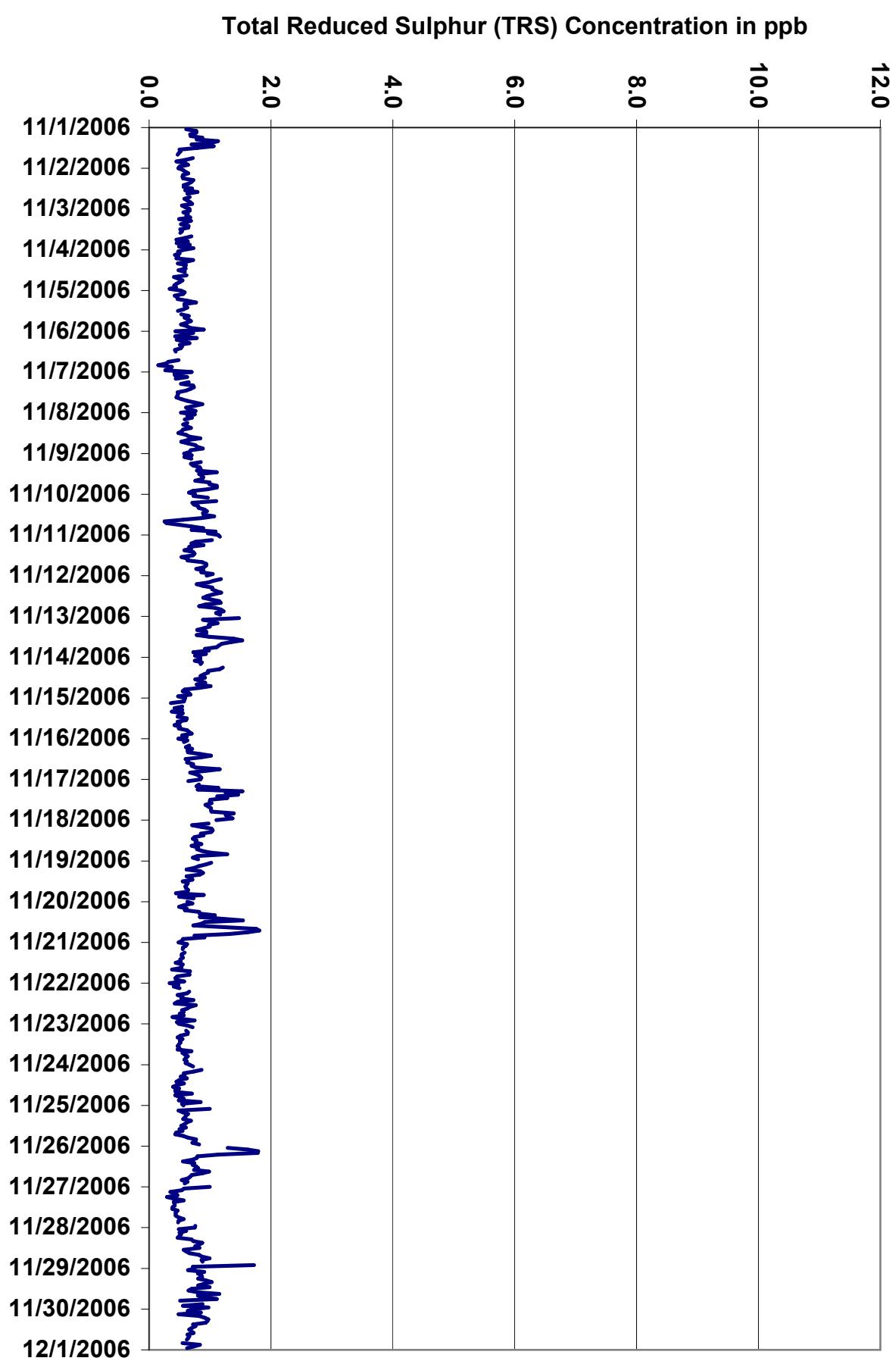
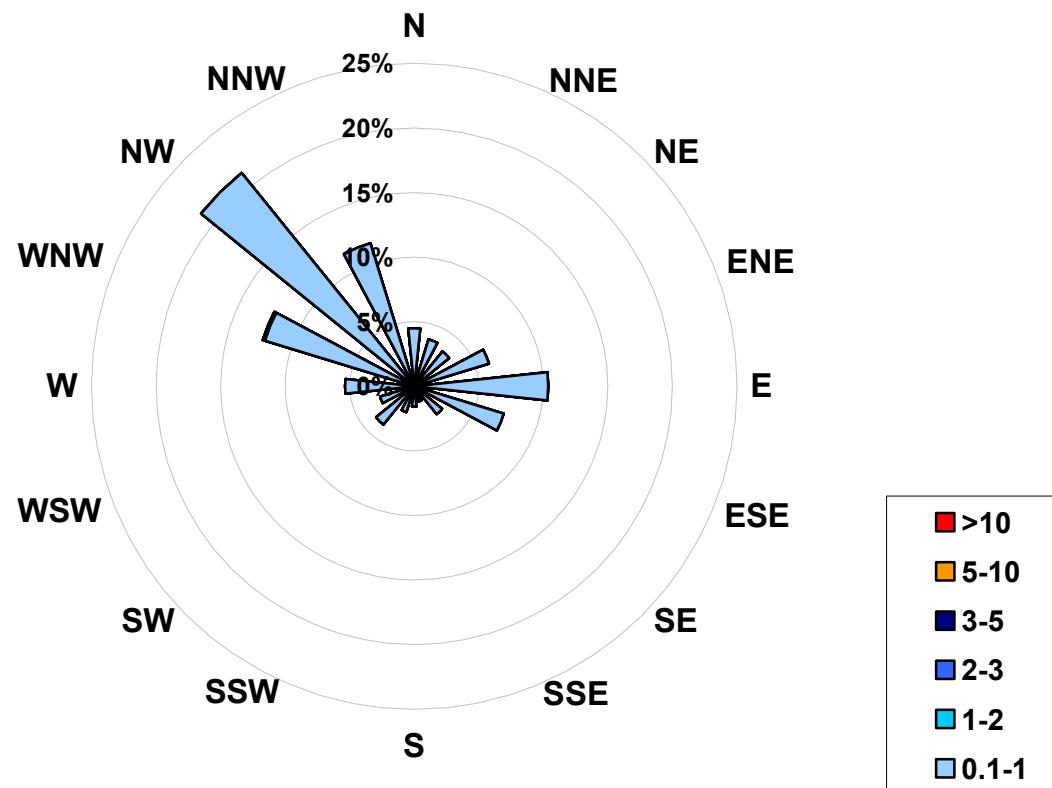


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms:	0%
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Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	685
1	to	2	1
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			686

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 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:	25.6 $\mu\text{g}/\text{m}^3$
12-Nov 11:00 12:00	
Maximum 24-hr Value:	15.0 $\mu\text{g}/\text{m}^3$
12-Nov	

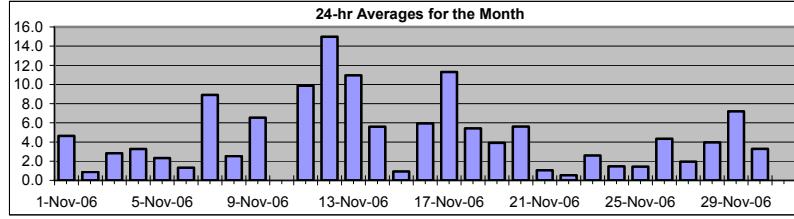
AIC Time:	0 hrs	Operational Time:	711 hrs							
Calibration Time:	0 hrs	AMD Operational Uptime:	98.8%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	19.1	14.9	6.7	3.3	1.3	0.0	0.0	4.8	3 $\mu\text{g}/\text{m}^3$	3.4 $\mu\text{g}/\text{m}^3$

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Nov-06	5	6	3	5	3	4	5	6	11	14	14	15	9	1	0	1	1	2	1	1	0	1	1	1	1	1	1	1	4.6	15.0			
2-Nov-06	1	1	0	0	0	0	0	0	1	1	1	1	0	1	0	1	1	0	1	1	1	1	2	5	4	0.9	4.7	2.8	5.7				
3-Nov-06	2	2	1	1	1	2	2	2	2	2	2	3	5	6	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3.3	12.1			
4-Nov-06	3	3	2	2	1	1	2	2	3	4	6	3	3	12	11	8	2	0	0	1	0	1	0	1	1	1	3	3	3	3.8			
5-Nov-06	2	4	3	4	3	3	3	4	2	2	1	2	1	1	0	1	1	2	3	3	3	3	3	3	3	3	3	3	1.3	4.8			
6-Nov-06	0	0	0	0	0	0	0	2	0	0	1	1	1	0	1	3	2	4	1	2	4	4	5	0	8.9	17.7	2.5	5.4					
7-Nov-06	8	8	5	4	5	5	8	7	10	12	9	6	6	10	10	10	10	18	16	13	13	9	8	5	6.5	19.2	N	18.3					
8-Nov-06	3	2	3	2	2	1	2	2	2	2	2	1	1	1	1	3	2	2	3	5	5	4	5	4	4	4	4	4	11.0	16.9			
9-Nov-06	3	3	3	2	1	2	5	5	6	6	5	8	7	7	11	19	7	9	11	9	7	7	6	5	5	5	5	5	5.6	9.5			
10-Nov-06	6	9	7	9	9	10	11	9	14	14	18	17	12	13	0	N	N	N	N	N	N	N	N	N	N	N	N	N	0.9	7.5			
11-Nov-06	16	11	6	5	5	5	5	6	6	9	9	9	9	10	11	14	15	17	12	9	10	16	15	15	15	15	15	9.9	17.2				
12-Nov-06	20	16	12	9	12	10	10	12	15	17	23	26	20	11	15	15	14	12	12	12	18	15	16	15	15	15	15	15.0	25.6				
13-Nov-06	15	16	14	15	17	14	16	15	10	11	12	13	9	12	11	12	7	7	6	6	5	5	6	7	6	6	6	6	11.0	16.9			
14-Nov-06	6	6	7	6	6	6	9	9	7	7	7	6	5	6	6	6	5	6	7	3	3	3	1	3	2	5.6	9.5	0.9	7.5				
15-Nov-06	1	1	2	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	3	0	8	5.9	12.8	11.3	23.1					
16-Nov-06	5	5	5	4	3	4	3	4	6	7	10	9	3	3	4	3	4	7	13	10	9	6	6	6	12	12	5.4	11.0					
17-Nov-06	9	5	5	5	4	4	7	11	18	18	12	20	20	7	8	12	11	12	11	11	13	12	23	14	14	14	14	5.6	17.1				
18-Nov-06	8	8	5	2	3	6	3	4	9	6	6	4	5	3	3	4	4	4	7	11	7	8	5	5	5	5	5	5	3.9	13.2			
19-Nov-06	10	9	7	6	4	4	5	6	3	2	2	3	3	4	2	3	2	3	13	1	0	1	0	0	0	0	0	5.6	17.1				
20-Nov-06	1	0	0	0	0	0	2	5	5	3	8	15	7	6	4	11	14	15	17	8	4	4	2	4	2	4	2	1.1	2.5				
21-Nov-06	2	0	0	0	2	2	2	2	2	2	2	1	0	0	0	1	1	0	2	1	1	0	1	1	0	0	0	0.5	1.3				
22-Nov-06	0	0	1	0	0	1	0	1	1	0	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2.6	5.5			
23-Nov-06	1	1	1	3	0	2	3	3	2	4	4	3	2	4	2	3	5	4	5	2	2	2	0	3	3	3	3	3	1.5	5.2			
24-Nov-06	1	1	2	2	2	1	1	1	1	0	0	0	0	0	1	0	3	1	2	2	2	3	3	5	5	5	5	5	1.4	3.8			
25-Nov-06	3	3	1	1	0	1	1	2	1	1	1	1	0	1	1	1	2	1	1	1	4	3	2	2	2	2	2	2	4.3	8.3			
26-Nov-06	2	1	1	2	4	5	4	4	4	4	4	4	8	8	8	8	7	8	7	4	3	2	2	2	0	1	1	1	1.9	4.8			
27-Nov-06	2	0	1	1	1	1	2	2	2	3	2	2	1	2	2	2	5	4	2	4	3	0	1	2	2	2	2	2	4.0	12.1			
28-Nov-06	3	2	2	2	0	1	1	3	4	5	12	6	4	4	3	5	5	6	5	6	4	3	3	3	4	4	3	3	7.2	16.5			
29-Nov-06	2	2	1	1	9	8	9	13	9	9	3	2	7	6	8	15	17	13	16	7	6	4	4	4	3	3	3	3.3	10.1				
30-Nov-06	2	4	3	2	3	5	8	10	9	4	2	1	2	2	2	1	2	1	1	3	2	3	3	3	3	3	3	3	4.5				

HOURLY AVERAGE TABLE

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



Status Flag Characters

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

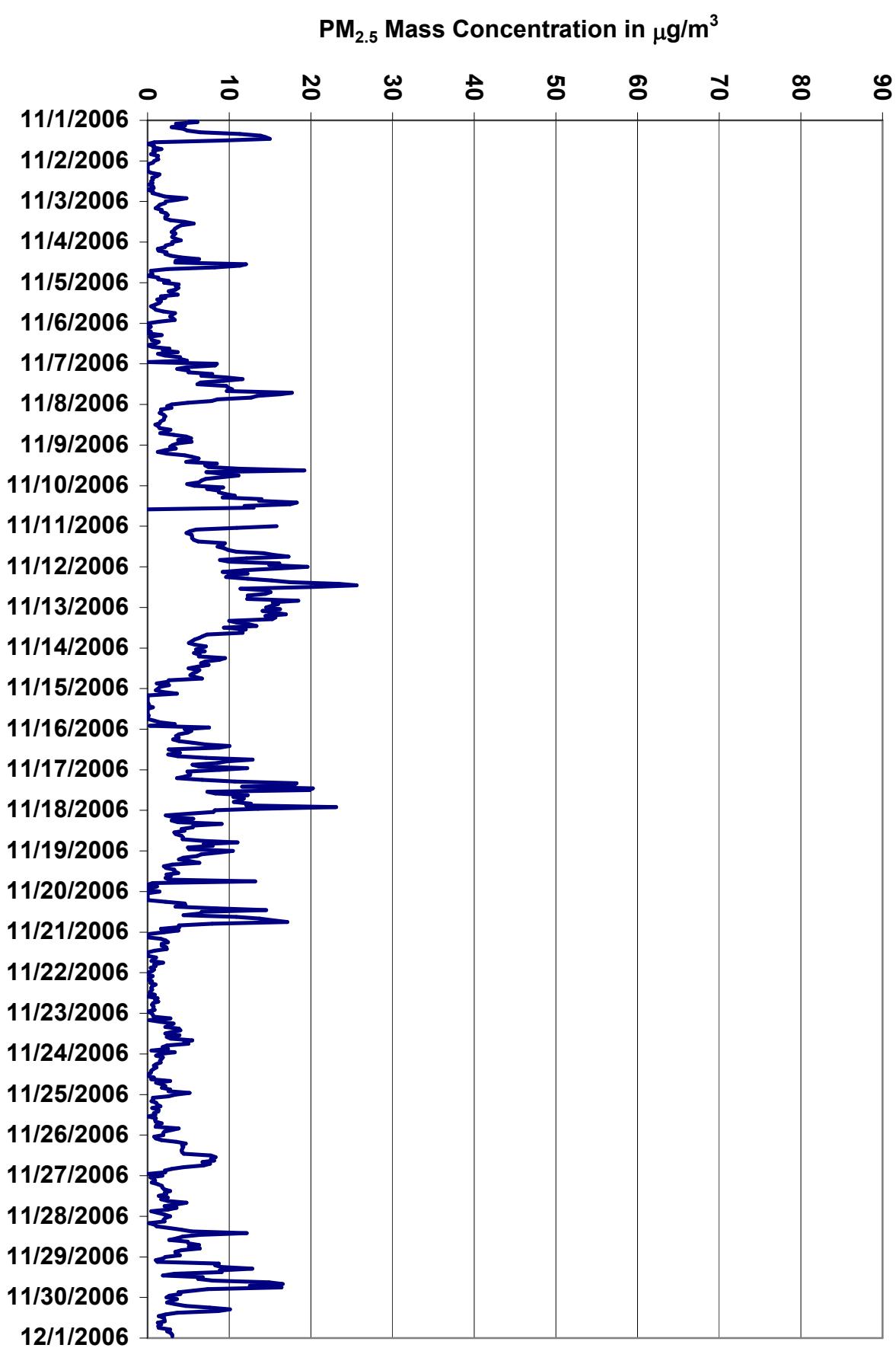


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

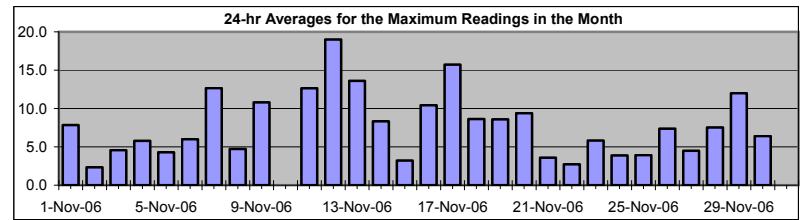
#### Summary

Maximum 1-hr Average:	39.5	µg/m <sup>3</sup>	19-Nov	18:00 19:00
Maximum 24-hr Value:	19.0	µg/m <sup>3</sup>	12-Nov	

AIC Time:	0 hrs	Operational Time:	711 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	98.8%
Percentile	99 95 75 50 25 5 1	Average / Median	Geomean
	27.0 19.4 10.6 5.9 3.6 1.9 0.8	8.0 6 µg/m <sup>3</sup>	6.8 µg/m <sup>3</sup>

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	Daily Maximum
1-Nov-06	10:00	10	5	8	5	11	9	9	17	18	19	21	19	3	1	3	3	4	2	2	2	2	2	3	2	7.8	20.9	
2-Nov-06	2:00	2	2	0	1	1	1	3	3	3	2	2	2	2	1	2	2	2	2	2	3	5	6	5	2.3	5.9		
3-Nov-06	3:00	3	4	3	3	2	3	3	4	4	4	4	4	4	8	6	6	5	5	5	6	5	5	5	4.6	7.9		
4-Nov-06	4:00	5	5	4	4	3	3	4	4	4	6	12	7	7	18	16	11	5	2	2	2	1	4	6	5.8	18.0		
5-Nov-06	5:00	5	5	5	5	6	5	5	5	4	4	4	5	3	2	2	2	3	4	6	5	5	5	5	4.3	6.0		
6-Nov-06	6:00	4	3	2	2	1	3	3	8	7	5	5	6	3	3	4	7	6	10	6	7	11	16	15	8	6.0	16.0	
7-Nov-06	7:00	19	15	9	6	8	8	10	11	13	17	12	8	8	12	13	14	15	24	20	17	15	12	12	7	12.7	24.0	
8-Nov-06	8:00	6	4	5	3	4	4	4	4	3	4	3	3	3	3	3	5	5	6	8	9	9	8	8	4.7	9.3		
9-Nov-06	9:00	7	5	6	5	3	4	6	9	8	8	7	13	14	15	27	38	12	15	15	11	9	8	8	10.8	38.0		
10-Nov-06	10:00	10	20	13	13	11	14	16	15	17	17	21	23	16	18	6	N	N	N	N	N	N	N	N	N	22.7		
11-Nov-06	11:00	18	14	9	7	6	7	7	7	9	11	11	10	12	11	13	16	19	21	15	10	12	25	26	12.6	25.7		
12-Nov-06	12:00	23	20	16	10	16	13	13	14	19	23	31	29	31	14	18	19	18	15	17	20	22	19	18	17	19.0	31.3	
13-Nov-06	13:00	17	21	18	18	20	18	18	19	12	14	16	17	12	14	14	16	9	9	7	7	8	7	9	13.6	20.7		
14-Nov-06	14:00	9	8	9	8	9	8	14	15	10	11	10	9	8	9	9	9	7	8	10	4	5	4	4	3.3	15.5		
15-Nov-06	15:00	3	3	6	7	3	1	2	1	2	2	0	4	0	2	2	1	2	1	4	3	5	8	5	12	3.2	12.3	
16-Nov-06	16:00	7	8	7	6	6	6	6	7	10	14	14	14	5	7	12	6	6	17	23	17	16	9	16	19	10.4	23.2	
17-Nov-06	17:00	11	7	8	11	7	7	10	19	21	20	19	31	32	10	10	15	14	15	15	16	17	15	26	22	15.7	31.8	
18-Nov-06	18:00	12	10	10	5	7	8	6	10	11	7	8	6	7	6	6	7	6	11	14	14	10	9	11	8.6	14.3		
19-Nov-06	19:00	14	18	11	11	7	6	7	11	13	5	8	7	6	6	5	7	4	4	39	7	2	3	2	2	8.6	39.5	
20-Nov-06	20:00	4	0	1	1	0	2	5	7	5	15	18	15	10	8	16	19	24	22	18	9	6	5	8	9.4	24.0		
21-Nov-06	21:00	4	4	6	3	4	5	5	4	4	5	6	3	4	3	0	3	4	2	4	3	2	3	3	3.6	5.6		
22-Nov-06	22:00	3	1	3	4	2	2	3	3	3	2	2	3	3	3	3	4	2	3	2	3	3	3	2.7	4.2			
23-Nov-06	23:00	4	3	4	8	4	4	6	5	4	10	6	6	5	7	4	4	4	13	10	8	4	3	11	5.8	12.7		
24-Nov-06	0:00	3	3	4	3	4	4	2	3	3	3	2	3	1	2	2	5	5	6	5	4	5	5	13	3.9	13.0		
25-Nov-06	1:00	6	4	3	3	4	3	4	5	3	2	5	4	2	2	3	3	3	3	3	5	7	6	5	3.9	6.9		
26-Nov-06	2:00	5	4	4	4	10	9	6	6	7	6	6	8	13	11	12	12	10	10	11	7	6	4	5	7.4	13.0		
27-Nov-06	3:00	4	3	3	2	2	3	3	4	5	7	4	5	4	5	4	5	8	6	5	7	4	2	4.5	8.4			
28-Nov-06	4:00	5	4	4	4	2	3	4	5	6	13	18	11	9	9	6	8	9	10	8	12	8	7	6	7.5	18.3		
29-Nov-06	5:00	4	5	3	3	21	18	13	16	13	12	6	7	9	13	11	23	20	16	27	16	9	7	8	12.0	27.1		
30-Nov-06	6:00	5	8	5	7	6	10	10	13	14	7	5	4	5	5	5	4	4	5	5	4	5	5	6.4	13.8			



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

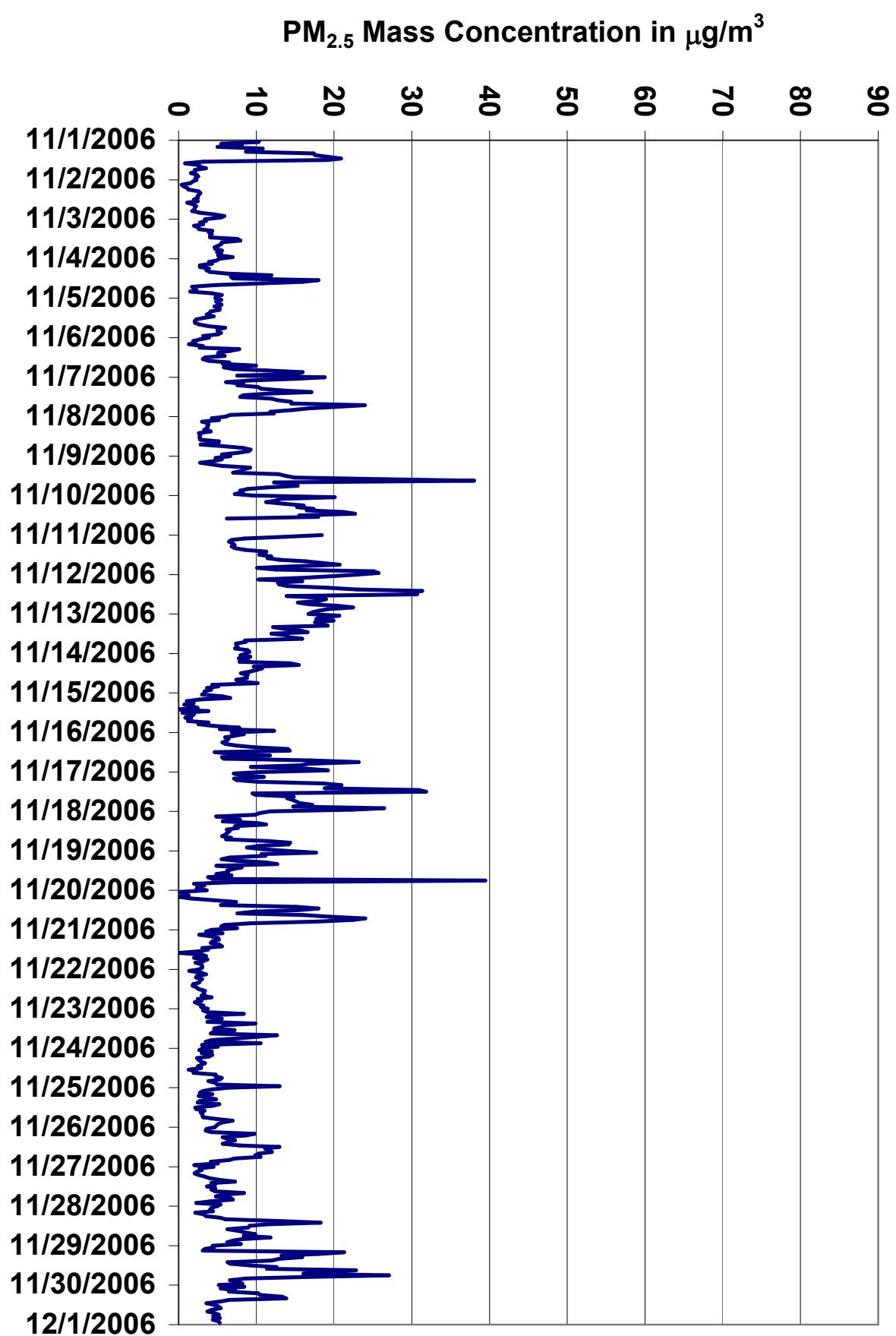
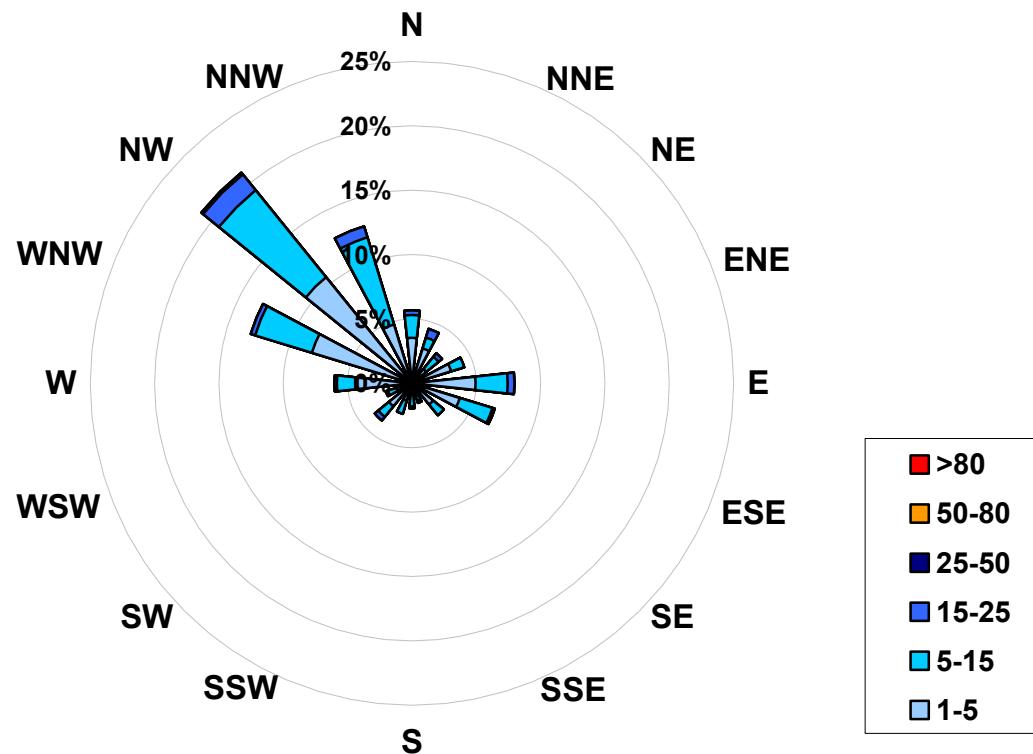


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

**Frequency Distribution of PM<sub>2.5</sub> in µg/m<sup>3</sup>**

Range	Frequency (hrs)
1.0 < 5	460
5 to 15	216
15 to 25	34
25 to 50	1
50 to 80	0
> 80	0
Total Non-Zero Values	711

# PASZA - Henry Pirker - Relative Humidity Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

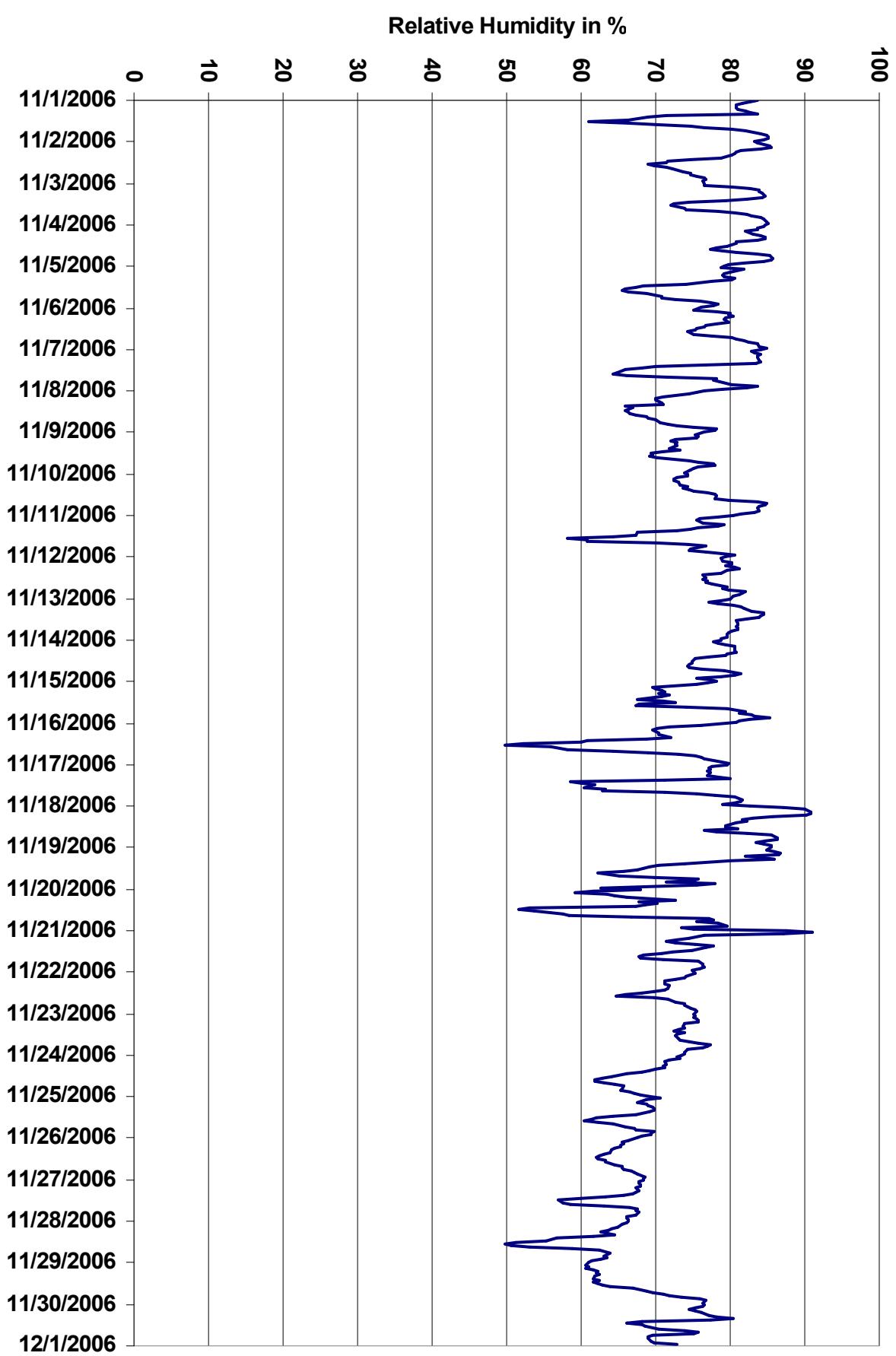
Maximum 1-hr Average:	91.1 %	21-Nov 1:00 2:00
Maximum 24-hr Value:	84.1 %	18-Nov

AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	87.1 84.6 79.6 74.7 68.3 61.5 53.1	73.8 %	74.7 %

## Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum							
1-Nov-06	84 1:00	83 2:00	82 3:00	81 4:00	81 5:00	81 6:00	82 7:00	83 8:00	84 9:00	71 10:00	69 11:00	66 12:00	61 13:00	66 14:00	70 15:00	75 16:00	77 17:00	80 18:00	82 19:00	84 20:00	85 21:00	85 22:00	85 23:00	84 0:00	78.4	85.2							
2-Nov-06	83 8:00	84 9:00	85 10:00	85 11:00	84 12:00	84 13:00	81 14:00	81 15:00	80 16:00	79 17:00	75 18:00	72 19:00	71 20:00	72 21:00	74 22:00	70 23:00	71 0:00	72 1:00	74 2:00	75 3:00	75 4:00	75 5:00	76 6:00	76 7:00	77 8:00	76 9:00	77 10:00	76 11:00	77 12:00	76 13:00	77 14:00	77.2	85.5
3-Nov-06	76 14:00	77 15:00	80 16:00	83 17:00	84 18:00	84 19:00	84 20:00	85 21:00	84 22:00	82 23:00	82 0:00	74 1:00	74 2:00	74 3:00	72 4:00	72 5:00	72 6:00	72 7:00	74 8:00	78 9:00	81 10:00	82 11:00	83 12:00	83 13:00	84 14:00	84 15:00	80.3	85.0					
4-Nov-06	85 16:00	85 17:00	84 18:00	84 19:00	82 20:00	82 21:00	83 22:00	84 23:00	85 0:00	84 1:00	84 2:00	81 3:00	80 4:00	78 5:00	77 6:00	77 7:00	79 8:00	81 9:00	83 10:00	83 11:00	85 12:00	85 13:00	85 14:00	85 15:00	82.5	85.6							
5-Nov-06	79 16:00	79 17:00	82 18:00	80 19:00	79 20:00	79 21:00	81 22:00	81 23:00	80 0:00	78 1:00	78 2:00	74 3:00	74 4:00	72 5:00	72 6:00	72 7:00	74 8:00	78 9:00	81 10:00	82 11:00	83 12:00	83 13:00	84 14:00	84 15:00	74.8	81.8							
6-Nov-06	76 16:00	75 17:00	78 18:00	80 19:00	80 20:00	80 21:00	79 22:00	79 23:00	78 0:00	78 1:00	76 2:00	75 3:00	75 4:00	75 5:00	75 6:00	75 7:00	75 8:00	76 9:00	76 10:00	76 11:00	76 12:00	76 13:00	76 14:00	79.0	84.9								
7-Nov-06	84 16:00	83 17:00	83 18:00	84 19:00	84 20:00	84 21:00	84 22:00	84 23:00	84 0:00	84 1:00	84 2:00	81 3:00	80 4:00	77 5:00	77 6:00	77 7:00	79 8:00	78 9:00	80 10:00	84 11:00	84 12:00	84 13:00	84 14:00	84 15:00	77.5	84.2							
8-Nov-06	77 16:00	75 17:00	74 18:00	71 19:00	70 20:00	70 21:00	71 22:00	71 23:00	71 0:00	66 1:00	66 2:00	66 3:00	66 4:00	67 5:00	67 6:00	67 7:00	69 8:00	69 9:00	70 10:00	71 11:00	72 12:00	73 13:00	73 14:00	75 15:00	71.0	78.1							
9-Nov-06	77 16:00	75 17:00	76 18:00	75 19:00	73 20:00	73 21:00	73 22:00	73 23:00	73 0:00	72 1:00	72 2:00	71 3:00	71 4:00	71 5:00	71 6:00	71 7:00	70 8:00	70 9:00	74 10:00	76 11:00	78 12:00	78 13:00	78 14:00	78 15:00	73.6	77.9							
10-Nov-06	74 16:00	74 17:00	73 18:00	72 19:00	73 20:00	73 21:00	74 22:00	74 23:00	74 0:00	75 1:00	77 2:00	78 3:00	78 4:00	78 5:00	78 6:00	78 7:00	78 8:00	80 9:00	84 10:00	85 11:00	85 12:00	84 13:00	84 14:00	84 15:00	77.9	84.8							
11-Nov-06	80 16:00	78 17:00	76 18:00	75 19:00	76 20:00	79 21:00	79 22:00	76 23:00	76 0:00	68 1:00	67 2:00	64 3:00	64 4:00	58 5:00	61 6:00	61 7:00	70 8:00	77 9:00	75 10:00	74 11:00	74 12:00	74 13:00	74 14:00	73.0	80.6								
12-Nov-06	79 16:00	79 17:00	79 18:00	80 19:00	79 20:00	79 21:00	81 22:00	81 23:00	80 0:00	76 1:00	77 2:00	77 3:00	77 4:00	77 5:00	77 6:00	77 7:00	77 8:00	80 9:00	80 10:00	82 11:00	81 12:00	80 13:00	80 14:00	79.1	82.0								
13-Nov-06	80 16:00	79 17:00	77 18:00	78 19:00	80 20:00	81 21:00	82 22:00	83 23:00	83 0:00	84 1:00	84 2:00	84 3:00	84 4:00	84 5:00	84 6:00	84 7:00	81 8:00	81 9:00	81 10:00	81 11:00	81 12:00	80 13:00	80 14:00	81.0	84.5								
14-Nov-06	79 16:00	78 17:00	78 18:00	79 19:00	81 20:00	81 21:00	81 22:00	81 23:00	80 0:00	79 1:00	77 2:00	75 3:00	75 4:00	75 5:00	75 6:00	75 7:00	74 8:00	76 9:00	78 10:00	78 11:00	79 12:00	79 13:00	77.9	81.5									
15-Nov-06	78 16:00	77 17:00	76 18:00	70 19:00	71 20:00	71 21:00	70 22:00	71 23:00	72 0:00	68 1:00	71 2:00	68 3:00	68 4:00	67 5:00	74 6:00	74 7:00	80 8:00	82 9:00	81 10:00	81 11:00	83 12:00	83 13:00	83 14:00	75.2	85.4								
16-Nov-06	81 16:00	76 17:00	72 18:00	70 19:00	70 20:00	70 21:00	70 22:00	70 23:00	70 0:00	61 1:00	60 2:00	52 3:00	50 4:00	56 5:00	58 6:00	64 7:00	69 8:00	73 9:00	73 10:00	75 11:00	76 12:00	76 13:00	76 14:00	68.8	80.9								
17-Nov-06	80 16:00	77 17:00	77 18:00	77 19:00	77 20:00	77 21:00	77 22:00	77 23:00	77 0:00	58 1:00	60 2:00	62 3:00	60 4:00	63 5:00	71 6:00	75 7:00	78 8:00	81 9:00	82 10:00	81 11:00	81 12:00	81 13:00	81 14:00	73.6	81.7								
18-Nov-06	83 16:00	87 17:00	90 18:00	91 19:00	90 20:00	86 21:00	83 22:00	82 23:00	82 0:00	81 1:00	79 2:00	79 3:00	79 4:00	79 5:00	79 6:00	77 7:00	78 8:00	82 9:00	86 10:00	86 11:00	85 12:00	85 13:00	85 14:00	84.1	90.9								
19-Nov-06	86 16:00	85 17:00	86 18:00	87 19:00	87 20:00	82 21:00	84 22:00	86 23:00	86 0:00	70 1:00	69 2:00	68 3:00	66 4:00	66 5:00	62 6:00	65 7:00	70 8:00	75 9:00	71 10:00	78 11:00	76 12:00	76 13:00	75.5	86.8									
20-Nov-06	68 16:00	62 17:00	59 18:00	64 19:00	64 20:00	66 21:00	63 22:00	68 23:00	67 0:00	67 1:00	53 2:00	52 3:00	54 4:00	58 5:00	58 6:00	67 7:00	77 8:00	78 9:00	76 10:00	78 11:00	78 12:00	78 13:00	67.0	79.6									
21-Nov-06	87 16:00	91 17:00	87 18:00	76 19:00	73 20:00	75 21:00	78 22:00	77 23:00	77 0:00	77 1:00	75 2:00	72 3:00	71 4:00	68 5:00	68 6:00	68 7:00	71 8:00	71 9:00	76 10:00	76 11:00	77 12:00	77 13:00	75.5	91.1									
22-Nov-06	75 16:00	75 17:00	74 18:00	74 19:00	73 20:00	71 21:00	71 22:00	72 23:00	71 0:00	70 1:00	68 2:00	68 3:00	66 4:00	65 5:00	65 6:00	70 7:00	72 8:00	73 9:00	74 10:00	74 11:00	75 12:00	75 13:00	72.1	75.6									
23-Nov-06	75 16:00	75 17:00	75 18:00	75 19:00	76 20:00	76 21:00	74 22:00	73 23:00	73 0:00	73 1:00	73 2:00	73 3:00	73 4:00	73 5:00	73 6:00	73 7:00	73 8:00	74 9:00	77 10:00	77 11:00	77 12:00	77 13:00	74.5	77.4									
24-Nov-06	73 16:00	73 17:00	73 18:00	72 19:00	71 20:00	71 21:00	71 22:00	71 23:00	70 0:00	68 1:00	66 2:00	64 3:00	63 4:00	62 5:00	62 6:00	62 7:00	63 8:00	63 9:00	66 10:00	66 11:00	67 12:00	67 13:00	67.8	73.4									
25-Nov-06	69 16:00	71 17:00	69 18:00	67 19:00	69 20:00	70 21:00	70 22:00	70 23:00	70 0:00	69 1:00	67 2:00	64 3:00	62 4:00	62 5:00	60 6:00	62 7:00	64 8:00	66 9:00	66 10:00	67 11:00	67 12:00	67 13:00	67.1	70.5									
26-Nov-06	68 16:00	66 17:00	66 18:00	65 19:00	65 20:00	64 21:00	64 22:00	63 23:00	63 0:00	63 1:00	62 2:00	62 3:00	63 4:00	63 5:00	64 6:00	65 7:00	65 8:00	65 9:00	66 10:00	66 11:00	66 12:00	66 13:00	65.2	68.6									
27-Nov-06	68 16:00	68 17:00	68 18:00	68 19:00	67 20:00	67 21:00	67 22:00	67 23:00	67 0:00	63 1:00	57 2:00	58 3:00	59 4:00	59 5:00	63 6:00	67 7:00	67 8:00	67 9:00	67 10:00	66 11:00	66 12:00	66 13:00	65.4	68.3									
28-Nov-06	66 16:00	66 17:00	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

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

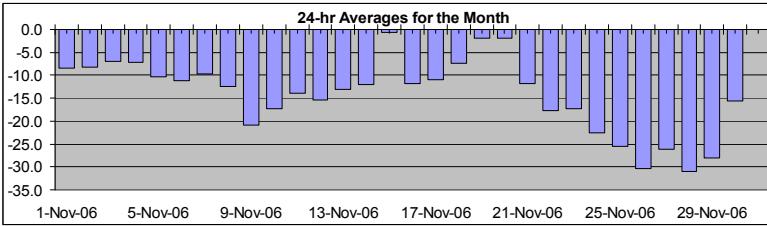
Maximum 1-hr Average:	3.9	°C	20-Nov	12:00 13:00
Maximum 24-hr Value:	-0.7	°C	15-Nov	

AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 3.0	95 -1.2	75 -8.5	50 -12.8	25 -18.2	5 -30.5	1 -34.6	Average -14.2 °C	Median -12.8 °C

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-06	-11	-11	-11	-11	-10	-10	-10	-10	-10	-7	-6	-4	-2	-4	-5	-6	-7	-8	-9	-9	-10	-10	-10	-10	-10	-8.4	-2.3
2-Nov-06	-10	-10	-10	-11	-11	-10	-11	-11	-11	-10	-9	-7	-7	-6	-6	-7	-7	-7	-7	-7	-7	-7	-6	-7	-7	-8.3	-6.0
3-Nov-06	-7	-7	-8	-8	-8	-8	-8	-8	-8	-7	-7	-5	-5	-5	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6.9	-4.6
4-Nov-06	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-7.1	-5.8
5-Nov-06	-8	-8	-9	-9	-9	-9	-10	-9	-10	-10	-10	-9	-9	-9	-9	-10	-10	-11	-12	-14	-15	-14	-13	-13	-10.3	-8.1	
6-Nov-06	-12	-12	-12	-12	-12	-13	-13	-13	-13	-12	-12	-11	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-11.1	-9.6	
7-Nov-06	-11	-11	-11	-12	-12	-12	-12	-12	-12	-11	-9	-9	-6	-5	-5	-6	-8	-9	-9	-10	-11	-10	-9	-10	-9.6	-4.9	
8-Nov-06	-11	-12	-13	-13	-13	-13	-13	-13	-13	-11	-12	-12	-11	-11	-11	-11	-12	-12	-12	-12	-12	-13	-17	-19	-12.5	-10.9	
9-Nov-06	-21	-22	-22	-22	-25	-25	-25	-25	-25	-23	-21	-17	-15	-16	-15	-17	-19	-20	-20	-22	-23	-23	-23	-23	-20.9	-14.8	
10-Nov-06	-23	-23	-24	-25	-25	-23	-23	-22	-22	-21	-19	-17	-15	-14	-14	-14	-11	-10	-10	-11	-11	-11	-12	-13	-17.2	-10.0	
11-Nov-06	-13	-13	-14	-14	-14	-15	-15	-15	-15	-15	-14	-13	-10	-12	-12	-15	-16	-16	-16	-14	-14	-13	-14	-16	-13.9	-10.3	
12-Nov-06	-18	-18	-17	-15	-14	-15	-16	-17	-18	-18	-16	-16	-15	-14	-14	-13	-13	-14	-13	-14	-15	-15	-16	-17	-15.4	-12.7	
13-Nov-06	-17	-18	-19	-17	-16	-15	-14	-13	-11	-11	-10	-9	-9	-10	-10	-11	-12	-12	-12	-13	-13	-13	-13	-15	-13.1	-8.9	
14-Nov-06	-14	-14	-15	-15	-17	-17	-17	-16	-17	-15	-14	-13	-13	-12	-11	-11	-10	-10	-9	-8	-6	-5	-4	-4	-11.9	-3.9	
15-Nov-06	-4	-3	-3	-2	-2	-2	-2	-2	-2	0	1	2	3	3	3	3	2	2	2	2	1	0	-9	-12	-0.7	3.3	
16-Nov-06	-12	-12	-12	-13	-13	-12	-13	-13	-14	-12	-9	-8	-6	-5	-8	-8	-10	-12	-14	-15	-16	-15	-16	-15	-11.8	-5.4	
17-Nov-06	-16	-17	-15	-14	-13	-12	-14	-14	-14	-11	-7	-7	-8	-6	-7	-6	-10	-10	-11	-11	-11	-10	-9	-8	-11.0	-6.4	
18-Nov-06	-7	-6	-4	-3	-4	-4	-6	-7	-8	-8	-7	-8	-7	-7	-6	-7	-9	-10	-10	-11	-12	-13	-11	-10	-7.5	-3.3	
19-Nov-06	-10	-11	-9	-9	-5	-5	-7	-7	-4	-2	-1	0	0	1	2	3	3	3	3	3	3	2	1	1	-1.9	3.4	
20-Nov-06	0	0	-1	-2	-3	-4	-5	-4	-4	-4	-3	2	4	3	2	2	0	-4	-5	-5	-6	-5	-1	-2	-1.8	3.9	
21-Nov-06	-2	-3	-5	-10	-11	-12	-12	-12	-12	-11	-11	-12	-12	-13	-14	-14	-15	-15	-15	-16	-16	-17	-17	-11.9	-2.5		
22-Nov-06	-17	-17	-18	-18	-18	-18	-18	-18	-18	-18	-17	-17	-16	-16	-16	-18	-18	-18	-18	-18	-18	-18	-18	-17.7	-16.2		
23-Nov-06	-18	-18	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-16	-16	-17	-17	-18	-18	-18	-18	-19	-19	-17.3	-16.3		
24-Nov-06	-19	-20	-20	-21	-22	-20	-20	-21	-21	-21	-22	-22	-22	-22	-23	-25	-26	-27	-26	-26	-26	-26	-26	-22.6	-19.3		
25-Nov-06	-27	-27	-26	-26	-26	-26	-25	-25	-25	-24	-23	-23	-24	-24	-24	-25	-25	-25	-26	-27	-28	-28	-29	-25.4	-23.1		
26-Nov-06	-30	-31	-32	-31	-31	-32	-32	-32	-32	-31	-29	-28	-26	-25	-27	-28	-31	-32	-33	-34	-34	-34	-35	-30.3	-26.2		
27-Nov-06	-26	-26	-26	-26	-26	-26	-26	-26	-26	-25	-25	-25	-25	-26	-27	-27	-26	-26	-27	-28	-28	-29	-29	-26.2	-24.3		
28-Nov-06	-30	-30	-31	-31	-32	-32	-32	-32	-32	-31	-29	-28	-26	-25	-27	-28	-31	-32	-33	-34	-34	-34	-35	-31.0	-25.4		
29-Nov-06	-36	-36	-36	-36	-35	-35	-35	-34	-34	-34	-30	-29	-28	-27	-26	-25	-24	-22	-21	-19	-19	-18	-16	-16	-28.0	-16.3	
30-Nov-06	-16	-16	-17	-18	-18	-18	-19	-19	-15	-14	-13	-12	-13	-14	-14	-15	-15	-15	-15	-15	-15	-15	-15	-15.5	-12.4		

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)



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

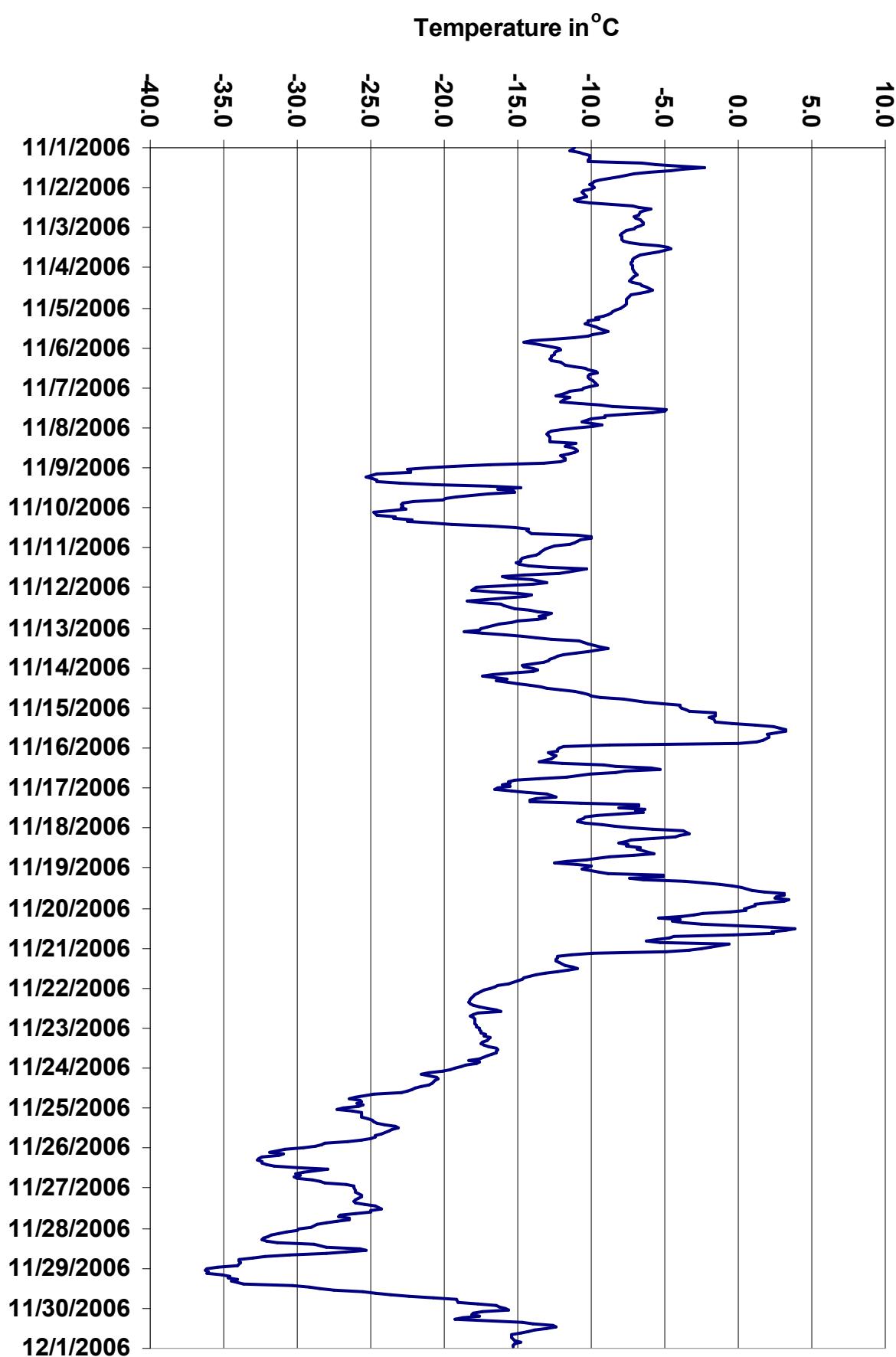


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

## PASZA - Henry Pirker - Solar Radiation Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### Summary

Maximum 1-hr Average:	336.6	W/m <sup>2</sup>	7-Nov	12:00 13:00
Maximum 24-hr Value:	65.4	W/m <sup>2</sup>	7-Nov	

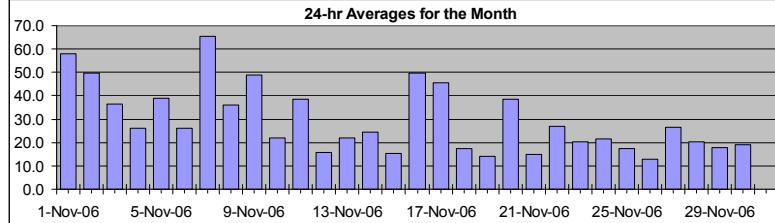
AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	230.5	152.5	38.3	0.1	0.1	0.0	0.0	29.5 W/m <sup>2</sup>	0.1 W/m <sup>2</sup>

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum		
1-Nov-06	0	0	0	0	0	0	0	0	1	48	124	178	218	320	260	152	61	27	3	0	0	0	0	0	0	0	58.0	320.3	
2-Nov-06	0	0	0	0	0	0	0	0	0	24	79	179	262	190	188	148	82	33	1	0	0	0	0	0	0	0	49.6	262.4	
3-Nov-06	0	0	0	0	0	0	0	0	0	12	57	118	188	165	149	110	60	17	1	0	0	0	0	0	0	0	36.6	188.3	
4-Nov-06	0	0	0	0	0	0	0	0	0	5	25	69	87	133	121	102	65	16	1	0	0	0	0	0	0	0	26.1	133.4	
5-Nov-06	0	0	0	0	0	0	0	0	0	14	56	81	195	166	173	145	77	22	1	0	0	0	0	0	0	0	38.9	194.9	
6-Nov-06	0	0	0	0	0	0	0	0	0	11	53	62	96	109	102	114	58	18	1	0	0	0	0	0	0	0	26.1	113.8	
7-Nov-06	0	0	0	0	0	0	0	0	0	15	119	185	249	337	294	226	115	26	1	0	0	0	0	0	0	0	65.4	336.6	
8-Nov-06	0	0	0	0	0	0	0	0	0	13	151	116	113	131	138	104	69	32	1	0	0	0	0	0	0	0	36.2	150.7	
9-Nov-06	0	0	0	0	0	0	0	0	0	13	66	120	224	231	210	188	98	24	1	0	0	0	0	0	0	0	49.0	231.4	
10-Nov-06	0	0	0	0	0	0	0	0	0	9	42	81	97	99	87	66	36	9	1	1	0	0	0	0	0	0	0	22.1	99.3
11-Nov-06	0	0	0	0	0	0	0	0	0	7	39	114	120	165	223	145	95	12	1	0	0	0	0	0	0	0	38.5	222.7	
12-Nov-06	0	0	0	0	0	0	0	0	0	4	24	50	71	61	62	60	35	10	0	0	0	0	0	0	0	0	15.8	70.9	
13-Nov-06	0	0	0	0	0	0	0	0	0	2	17	47	92	111	110	86	50	13	0	0	0	0	0	0	0	0	22.1	111.4	
14-Nov-06	0	0	0	0	0	0	0	0	0	6	43	105	104	99	93	80	46	12	0	0	0	0	0	0	0	0	24.5	105.2	
15-Nov-06	0	0	0	0	0	0	0	0	0	2	17	40	55	86	79	60	27	6	0	0	0	0	0	0	0	0	15.5	85.9	
16-Nov-06	0	0	0	0	0	0	0	0	0	6	79	167	223	249	218	152	88	12	0	0	0	0	0	0	0	0	49.7	249.0	
17-Nov-06	0	0	0	0	0	0	0	0	0	7	99	185	177	184	223	123	82	15	0	0	0	0	0	0	0	0	45.6	223.2	
18-Nov-06	0	0	0	0	0	0	0	0	0	0	1	14	41	54	70	80	96	55	8	0	0	0	0	0	0	0	0	17.5	96.2
19-Nov-06	0	0	0	0	0	0	0	0	0	1	10	38	43	39	54	54	86	12	0	0	0	0	0	0	0	0	14.1	85.5	
20-Nov-06	0	0	0	0	0	0	0	0	0	3	38	64	203	220	146	138	100	11	0	0	0	0	0	0	0	0	38.4	219.9	
21-Nov-06	0	0	0	0	0	0	0	0	0	1	11	36	68	84	70	50	32	6	0	0	0	0	0	0	0	0	14.9	84.1	
22-Nov-06	0	0	0	0	0	0	0	0	0	1	12	32	97	157	173	121	41	8	0	0	0	0	0	0	0	0	26.8	173.2	
23-Nov-06	0	0	0	0	0	0	0	0	0	1	17	39	67	99	103	81	68	13	0	0	0	0	0	0	0	0	20.4	103.1	
24-Nov-06	0	0	0	0	0	0	0	0	0	2	33	51	70	111	116	84	40	6	0	0	0	0	0	0	0	0	21.4	115.5	
25-Nov-06	0	0	0	0	0	0	0	0	0	1	16	45	85	90	77	67	32	6	0	0	0	0	0	0	0	0	17.4	89.6	
26-Nov-06	0	0	0	0	0	0	0	0	0	1	16	36	52	73	69	31	21	3	0	0	0	0	0	0	0	0	12.7	72.8	
27-Nov-06	0	0	0	0	0	0	0	0	0	1	25	89	124	139	112	105	34	6	0	0	0	0	0	0	0	0	26.5	139.0	
28-Nov-06	0	0	0	0	0	0	0	0	0	1	17	55	83	97	95	79	46	8	0	0	0	0	0	0	0	0	20.1	96.6	
29-Nov-06	0	0	0	0	0	0	0	0	0	2	25	58	78	86	85	62	24	4	0	0	0	0	0	0	0	0	17.7	86.3	
30-Nov-06	0	0	0	0	0	0	0	0	0	1	25	70	96	99	76	51	31	4	0	0	0	0	0	0	0	0	18.9	99.4	

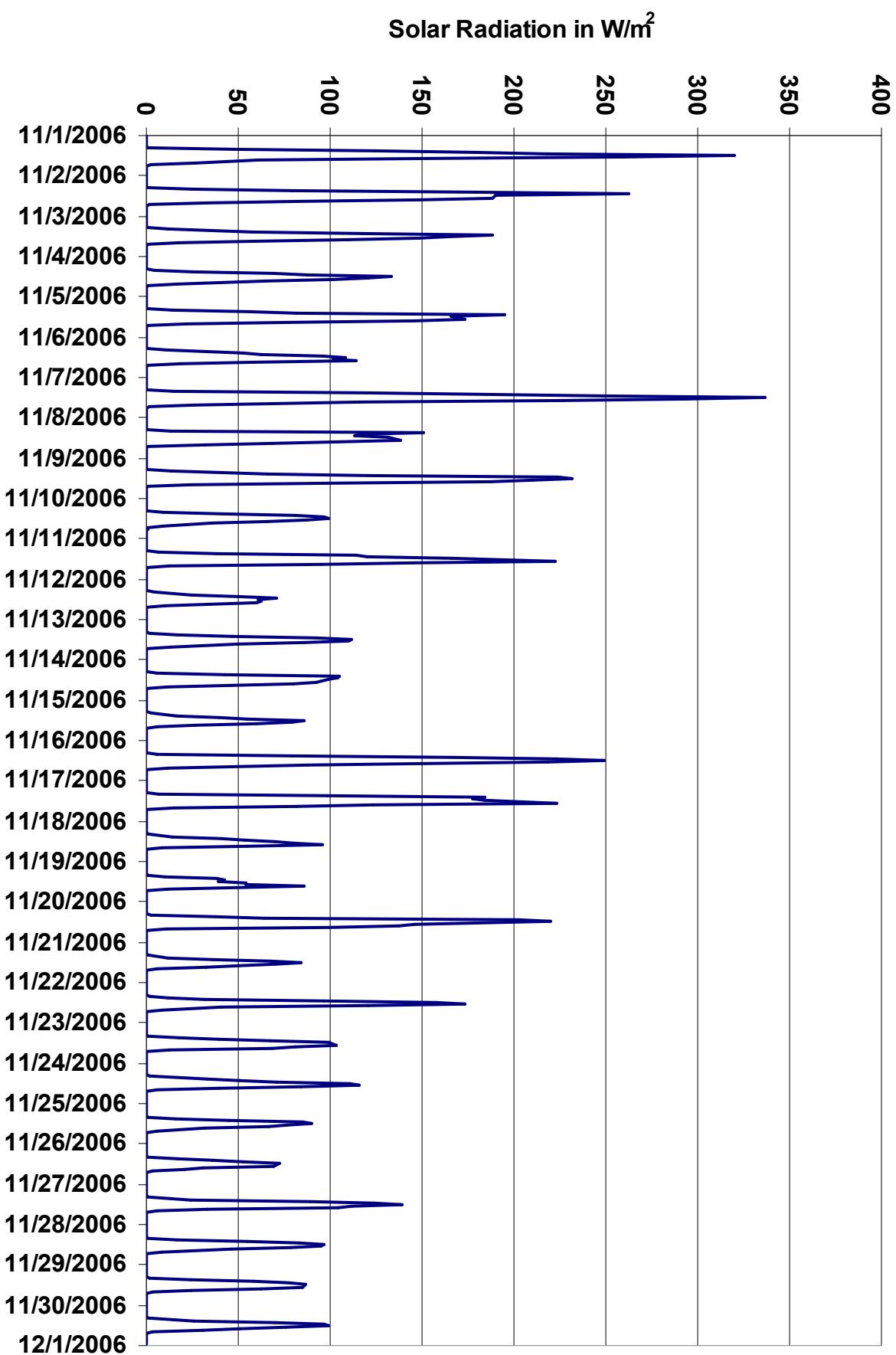
### HOURLY AVERAGE TABLE

### Solar Radiation (SR)



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

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



# PASZA - Henry Pirker - Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

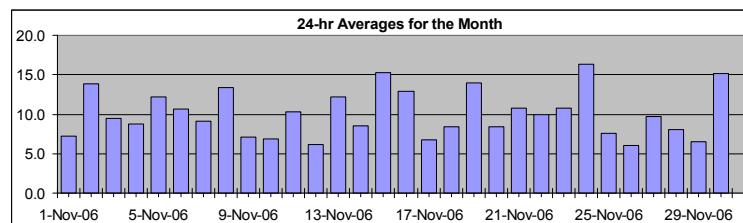
Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)

### Summary

Maximum 1-hr Average:	35.3	km/hr	15-Nov	22:00 23:00
Maximum 24-hr Value:	16.3	km/hr	24-Nov	



Calm Time:	0 hrs	0% calms	Operational Time:	719 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	AverageS
	26.2	19.8	11.9	8.8	6.6	5.2	4.0	10.1 km/hr

### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Max
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25.00	
1-Nov-06	5	6	6	7	6	5	6	5	4	5	6	6	7	11	10	10	9	9	8	7	6	8	10	12	7.2	12.4
2-Nov-06	14	13	11	11	12	15	16	16	16	17	18	16	15	15	11	11	10	11	15	13	14	13	14	14	13.9	17.7
3-Nov-06	14	13	13	12	12	11	10	10	10	10	11	9	7	7	7	8	8	9	9	8	8	9	7	6	9.4	13.7
4-Nov-06	6	7	7	6	6	6	6	7	8	9	10	10	11	9	11	12	12	11	11	10	10	10	10	9	8.8	12.4
5-Nov-06	10	11	12	14	12	11	11	12	15	17	18	17	18	14	15	14	13	10	10	10	9	7	7	10	12.2	18.0
6-Nov-06	7	9	11	11	12	12	13	12	12	13	15	16	12	13	13	8	8	9	8	7	6	10	11	8	10.7	16.1
7-Nov-06	10	8	6	5	6	5	6	6	6	8	8	9	7	9	9	9	7	5	11	9	13	17	20	20	9.1	20.0
8-Nov-06	20	22	22	20	19	16	16	15	15	15	16	15	14	15	12	12	10	7	6	6	7	5	6	7	13.3	22.5
9-Nov-06	7	7	7	7	7	6	7	7	7	8	6	6	9	8	8	8	7	7	6	7	7	7	8	6	7.1	9.3
10-Nov-06	6	6	6	6	6	5	6	6	6	5	5	5	6	5	6	5	7	8	9	8	8	9	12	14	6.9	14.3
11-Nov-06	16	15	16	14	14	15	14	14	12	11	11	12	10	7	8	7	7	5	6	7	9	7	6	6	10.3	15.8
12-Nov-06	6	7	8	6	9	6	5	5	5	5	6	6	8	7	6	6	6	7	6	6	5	4	5	6	6.2	8.6
13-Nov-06	5	4	6	6	6	6	5	7	10	11	13	11	11	14	19	21	21	22	21	19	18	16	11	9	12.2	21.8
14-Nov-06	7	10	10	5	6	6	7	9	5	10	9	10	10	8	8	9	8	6	7	10	10	11	12	11	8.5	12.4
15-Nov-06	12	11	11	12	13	14	15	15	17	19	17	16	14	13	13	14	13	12	13	9	7	15	35	35	15.2	35.3
16-Nov-06	31	31	26	24	21	17	15	15	15	12	8	8	7	6	9	11	9	7	7	9	7	6	5	6	12.9	31.0
17-Nov-06	6	7	9	8	7	8	7	6	6	5	7	6	10	7	6	6	7	8	7	4	6	7	6	6	6.8	10.3
18-Nov-06	6	5	5	5	6	10	13	13	10	11	12	13	12	13	11	9	8	6	6	6	6	6	6	6	8.5	13.1
19-Nov-06	6	6	5	6	11	8	6	6	8	11	15	15	13	15	14	16	15	12	22	28	27	26	16	30	14.0	29.9
20-Nov-06	22	21	13	8	6	7	7	7	6	6	M	5	8	5	6	6	6	6	7	6	7	7	10	11	8.4	22.1
21-Nov-06	10	7	12	16	15	13	11	9	5	7	10	10	11	12	11	11	11	12	10	10	10	12	12	12	10.8	16.0
22-Nov-06	10	10	10	10	10	11	10	11	10	10	10	11	11	11	10	10	10	10	10	10	11	9	9	8	9.9	11.4
23-Nov-06	7	8	10	11	9	11	9	8	8	12	11	10	10	11	12	11	9	8	8	9	12	18	18	18	10.8	18.0
24-Nov-06	17	17	18	16	15	17	19	19	18	20	20	21	23	24	21	19	15	13	11	12	11	10	8	7	16.3	23.6
25-Nov-06	6	5	8	10	7	7	7	7	8	9	8	9	8	9	9	8	8	7	8	7	5	7	8	5	7.5	9.8
26-Nov-06	5	7	7	6	6	6	7	6	6	6	7	7	6	5	4	4	4	4	4	4	4	8	8	9	6.1	10.0
27-Nov-06	11	10	10	10	10	10	10	9	10	10	11	11	10	9	11	10	8	8	7	9	10	11	10	8	9.8	11.5
28-Nov-06	7	7	7	7	10	10	10	13	9	8	8	8	9	8	9	7	7	9	7	7	7	7	6	7	8.1	13.4
29-Nov-06	6	7	6	7	5	5	5	5	6	7	8	7	6	7	6	7	7	8	6	7	6	6	6	8	6.5	8.4
30-Nov-06	10	9	8	10	8	6	6	8	12	15	22	23	22	19	19	21	23	22	24	18	18	17	14	10	15.2	23.5

1-hr Average	10.2	10.2	10.3	10.0	9.8	9.5	9.5	9.4	9.5	10.4	11.2	11.0	10.8	10.5	10.5	10.4	9.7	9.3	9.6	9.5	9.5	10.2	10.5	10.8
Hourly Max	30.7	31.0	26.0	24.2	21.1	17.4	18.7	19.2	17.7	20.3	21.6	23.5	23.0	23.6	21.2	21.2	22.7	21.8	23.5	27.7	26.7	26.2	35.3	34.7

# PASZA - Henry Pirker - Vector Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	35.2	km/hr	15-Nov	22:00 23:00
Maximum 24-hr Value:	16.1	km/hr	24-Nov	

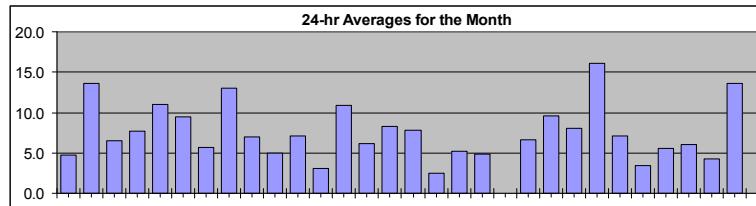
Calm Time:	4 hrs	1% calms	Operational Time:	715 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	AverageV	
	25.9	19.4	11.7	8.5	5.9	2.8	1.5		6.6 km/hr

## Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Max
	Hour End 2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00		
1-Nov-06	1	4	5	7	5	1	3	3	3	2	4	5	2	10	10	10	9	9	8	6	6	8	10	12	4.7	12.4	
2-Nov-06	14	13	11	11	12	15	16	16	16	17	18	16	15	15	11	10	11	15	13	14	13	14	14	14	13.6	17.5	
3-Nov-06	14	13	13	12	12	11	10	9	10	10	11	8	6	6	6	8	8	8	9	8	8	8	7	6	6.5	13.6	
4-Nov-06	6	6	6	4	5	6	5	6	8	9	10	10	10	8	10	12	12	11	11	10	10	10	10	9	7.7	12.3	
5-Nov-06	10	10	12	14	12	11	10	12	15	17	18	17	18	13	14	14	13	9	9	10	8	6	6	9	11.0	17.9	
6-Nov-06	7	9	10	11	12	12	12	12	12	13	15	16	12	13	13	8	7	8	8	7	2	8	8	4	9.5	15.9	
7-Nov-06	8	6	2	5	3	4	3	4	3	4	7	8	9	7	9	8	calm	1	11	7	13	17	20	20	5.6	19.9	
8-Nov-06	20	22	22	20	19	16	16	15	15	15	16	15	14	15	12	12	10	7	3	5	7	2	5	7	13.0	22.4	
9-Nov-06	6	7	7	7	6	7	7	7	6	6	5	9	8	7	7	7	6	7	7	7	7	7	6	6.9	9.2		
10-Nov-06	6	5	6	6	6	4	5	5	5	5	5	5	4	5	5	4	6	8	8	7	6	9	12	4.9	14.3		
11-Nov-06	16	15	16	14	14	15	14	14	12	11	11	10	6	8	7	6	4	6	6	8	5	6	4	7.1	15.7		
12-Nov-06	4	6	7	5	7	4	5	4	2	calm	3	5	7	7	6	4	3	3	6	3	5	2	3	3.1	7.4		
13-Nov-06	5	2	6	5	6	5	5	7	10	11	12	11	11	14	18	21	21	22	21	19	17	16	11	9	10.9	21.7	
14-Nov-06	7	10	10	4	5	5	7	9	4	9	9	10	9	7	8	8	7	6	7	10	10	12	11	6.2	12.3		
15-Nov-06	12	11	11	12	13	14	14	15	17	19	17	15	14	13	12	14	13	12	13	9	6	13	35	8.3	35.2		
16-Nov-06	31	31	26	24	21	17	15	14	15	11	8	8	6	4	8	11	9	6	5	9	7	4	1	1	7.8	31.0	
17-Nov-06	4	3	7	2	4	7	6	4	3	3	5	2	10	6	5	3	5	7	7	3	3	2	calm	4	2.5	9.7	
18-Nov-06	4	2	calm	4	5	10	12	13	9	11	12	13	12	13	11	8	6	6	2	2	4	4	5	3	5.2	13.0	
19-Nov-06	3	4	4	3	10	5	2	4	6	11	15	15	13	15	14	16	15	12	13	28	27	26	16	30	4.9	29.8	
20-Nov-06	22	21	13	6	5	3	3	4	5	3	M	3	7	3	4	2	1	2	5	4	6	6	6	10	0.0	21.9	
21-Nov-06	9	4	11	16	15	12	11	8	2	6	10	10	11	10	10	10	10	11	10	10	10	12	11	6.6	15.8		
22-Nov-06	10	10	10	10	9	10	10	11	10	10	11	11	11	10	10	10	10	9	11	9	9	8	6	9.6	11.2		
23-Nov-06	7	8	10	11	8	11	9	7	7	12	11	10	10	11	12	11	9	8	8	9	12	18	18	8.1	18.0		
24-Nov-06	17	17	18	16	15	17	19	19	18	20	20	21	23	24	21	19	15	13	11	12	11	10	7	16.1	23.6		
25-Nov-06	6	5	7	10	7	7	7	7	8	9	8	9	7	9	9	8	8	7	7	7	4	7	8	7.1	9.8		
26-Nov-06	5	6	7	6	6	5	7	6	6	6	7	7	6	4	4	4	3	4	4	4	8	8	7	3.5	9.8		
27-Nov-06	11	9	10	10	9	10	10	9	9	9	11	10	9	10	10	8	8	7	6	6	6	5	10	5.5	11.4		
28-Nov-06	7	7	7	7	10	10	13	9	8	8	8	9	8	8	7	6	7	3	5	5	5	4	8	6.1	13.1		
29-Nov-06	6	7	5	6	4	4	1	1	6	7	7	7	6	5	6	6	7	3	5	5	5	4	8	4.3	8.2		
30-Nov-06	10	9	7	8	6	3	5	8	12	15	22	23	22	19	19	21	23	22	23	18	18	17	13	10	13.6	23.5	

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

# PASZA - Henry Pirker - Wind Direction Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary													

Percentile	Calm Time: 0 hrs							Operational Time: 719 hrs							
	99	95	75	50	25	5	1	AMD Operational Uptime: 99.9%							
	356.8	340.9	310.9	254.5	89.9	24.8	4.9		Average 340 deg						

#### Status Flag Characters

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

#### Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	WD Sector
1-Nov-06	91	348	318	324	5	349	351	84	130	80	22	185	138	94	106	110	94	90	80	82	77	75	91	99	79	E
2-Nov-06	100	108	98	84	88	101	98	97	102	101	105	108	100	98	73	70	69	73	76	85	96	90	94	98	93	
3-Nov-06	101	102	101	94	90	92	89	88	89	91	98	100	82	35	9	352	339	347	357	359	3	2	354	8	62	ENE
4-Nov-06	336	342	12	32	83	74	80	78	79	81	72	72	71	65	63	76	75	69	64	62	48	29	18	5	56	ENE
5-Nov-06	342	327	326	326	330	317	309	310	317	329	330	323	307	302	303	308	310	329	325	334	339	360	48	99	324	NW
6-Nov-06	69	82	75	80	73	74	83	78	79	72	80	81	73	71	78	78	64	60	87	97	126	4	329	17	71	ENE
7-Nov-06	287	181	195	157	346	45	53	118	124	296	306	305	295	305	335	315	2	43	346	0	339	334	320	321	329	NNW
8-Nov-06	312	315	312	315	309	305	311	312	311	308	308	318	313	311	316	322	318	317	257	332	343	26	345	319	314	NW
9-Nov-06	316	330	348	336	305	330	337	327	332	321	306	333	315	333	329	336	349	318	343	345	335	334	336	333	331	NNW
10-Nov-06	334	358	332	313	326	315	314	336	320	305	285	307	283	225	274	316	78	76	54	33	331	320	316	321	329	NNW
11-Nov-06	324	322	306	298	296	304	302	305	311	323	311	298	312	261	310	314	48	95	81	98	98	60	31	51	320	NW
12-Nov-06	357	341	306	54	249	282	169	174	305	221	248	320	319	339	343	19	301	11	341	359	319	53	148	177	322	NW
13-Nov-06	175	274	334	308	319	328	311	343	26	20	3	359	335	316	319	320	325	328	329	325	309	307	299	300	327	NNW
14-Nov-06	279	264	264	176	165	149	117	116	104	104	120	116	117	106	122	112	124	129	122	130	133	134	136	122	131	SE
15-Nov-06	127	128	152	135	123	117	113	119	118	122	124	126	115	130	114	93	89	85	101	93	62	345	323	315	104	ESE
16-Nov-06	308	308	305	295	304	297	278	276	263	254	236	207	213	327	90	96	95	66	354	342	342	16	185	81	299	WNW
17-Nov-06	27	319	347	326	12	173	186	86	101	122	148	232	340	335	293	286	331	342	339	120	47	83	9	324	N	
18-Nov-06	344	50	288	180	134	101	94	107	82	81	102	107	118	104	108	107	60	65	94	246	306	311	309	162	96	E
19-Nov-06	214	337	292	185	116	149	286	138	112	123	122	120	113	117	120	123	129	128	253	267	266	261	241	260	194	SSW
20-Nov-06	236	233	253	308	88	254	69	124	111	107	M	212	234	308	13	340	83	308	16	298	297	326	25	236	270	W
21-Nov-06	267	271	49	49	48	31	28	42	321	265	224	246	279	331	27	23	22	9	9	24	24	52	44	52	15	NNE
22-Nov-06	55	45	38	31	31	49	55	65	69	67	78	76	76	76	47	59	61	59	58	60	44	30	37	42	55	NE
23-Nov-06	36	37	35	53	36	8	356	25	23	328	330	311	313	295	291	312	339	289	285	294	288	294	297	298	327	NNW
24-Nov-06	295	289	289	292	298	303	303	304	296	293	292	286	280	281	286	288	279	281	282	268	272	275	269	281	288	WNW
25-Nov-06	301	301	312	320	315	304	305	301	317	313	291	298	337	340	334	312	317	320	5	12	312	314	315	312	318	NW
26-Nov-06	323	307	284	299	288	233	217	207	203	206	209	211	214	233	293	304	305	293	292	319	293	285	18	34	271	W
27-Nov-06	40	48	33	34	39	55	46	29	23	6	357	331	313	288	280	280	292	284	278	256	278	286	279	254	335	NNW
28-Nov-06	218	224	224	225	239	240	257	253	222	229	205	194	243	278	299	300	317	307	325	314	315	335	295	309	262	W
29-Nov-06	321	309	280	297	315	325	283	226	307	305	305	284	285	277	279	289	297	279	19	99	117	73	255	292	298	WNW
30-Nov-06	281	274	226	219	199	221	358	330	324	312	303	303	297	284	279	283	279	275	278	277	285	290	297	267	285	N

Hourly Avg 319 317 320 336 353 350 360 29 18 1 346 315 316 330 342 346 4 360 350 346 329 338 332 322

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

### Summary

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

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	719 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%			
Percentile	99	95	75	50	25	5	1
	64.4	50.0	20.4	11.1	7.0	4.1	3.2

### Status Flag Characters

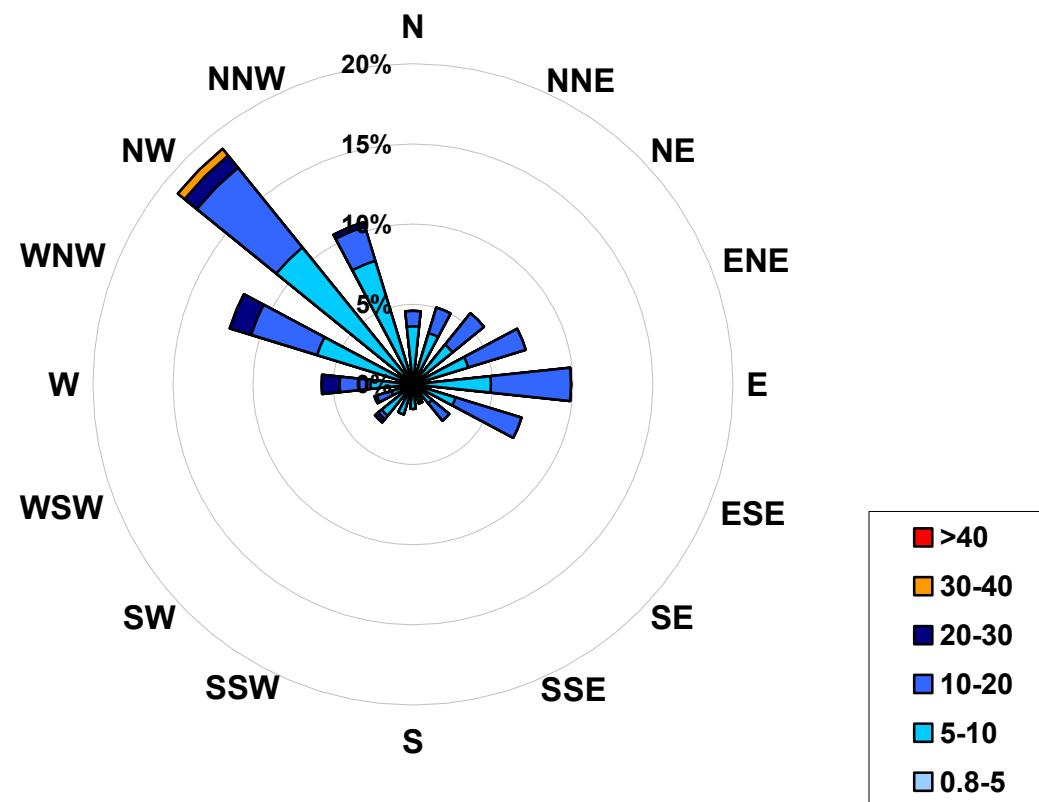
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

### Day Mountain Standard Time

	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	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	24:00	0:00
1-Nov-06	62	50	25	11	20	41	49	36	26	44	51	26	45	13	13	10	7	8	9	13	15	8	7	5		
2-Nov-06	6	7	11	8	8	6	6	6	7	7	7	8	8	8	9	10	10	8	8	7	7	6	6	8		
3-Nov-06	7	7	7	8	8	9	9	10	8	9	10	15	20	29	26	13	16	9	9	11	13	12	12	23		
4-Nov-06	23	18	13	23	17	17	20	15	11	11	10	9	10	13	11	9	10	10	10	12	14	16	12	11		
5-Nov-06	7	7	6	6	6	5	6	7	7	5	6	5	8	5	6	6	7	8	5	13	48	27	9			
6-Nov-06	16	11	9	9	9	10	9	11	9	8	11	9	10	10	10	19	18	16	14	23	67	31	38	34		
7-Nov-06	26	43	60	25	61	34	52	52	66	65	15	15	7	23	15	22	74	70	16	24	7	6	5	4		
8-Nov-06	5	5	3	4	4	5	5	5	5	5	5	7	6	6	8	8	6	18	50	32	20	34	26	15		
9-Nov-06	16	7	7	6	5	9	12	11	10	12	14	13	24	7	12	26	17	11	8	9	10	8	8	26		
10-Nov-06	15	18	13	12	9	25	15	13	13	15	11	11	29	15	16	40	27	19	20	22	49	7	5	5		
11-Nov-06	7	5	5	6	6	5	5	4	5	7	5	7	40	7	14	14	34	17	15	9	21	20	46			
12-Nov-06	50	33	35	29	29	42	20	23	37	61	38	45	23	20	41	48	36	40	30	63	41	36	25	23		
13-Nov-06	11	23	15	20	10	13	13	11	8	5	7	8	9	7	4	4	4	4	4	6	5	3	4	5		
14-Nov-06	21	6	6	30	13	21	7	8	54	13	13	12	13	27	26	26	20	12	7	12	7	8	6	4		
15-Nov-06	5	6	8	7	4	7	5	5	4	5	5	7	7	8	9	5	6	6	6	9	18	12	4	4		
16-Nov-06	4	4	3	3	4	6	7	6	6	8	13	16	34	56	18	11	10	27	31	7	17	58	61	47		
17-Nov-06	38	68	33	54	43	24	29	51	53	52	29	46	16	34	45	38	41	28	23	51	58	25	25	50		
18-Nov-06	52	50	44	42	18	15	8	9	14	11	9	8	10	9	11	14	31	21	59	66	34	51	24	30		
19-Nov-06	33	42	32	34	9	52	50	37	40	11	6	8	7	10	8	7	6	11	17	4	5	8	7	4		
20-Nov-06	6	5	10	18	32	37	45	27	18	57	M	38	15	37	29	44	34	53	37	56	27	27	21	20		
21-Nov-06	20	26	26	10	15	15	12	18	39	23	9	11	9	17	11	19	14	13	10	15	14	10	10	9		
22-Nov-06	12	12	13	12	17	12	12	11	12	13	11	10	12	11	12	10	11	10	12	8	13	13	19	25		
23-Nov-06	19	14	11	10	15	10	12	20	17	7	7	8	10	8	6	8	9	8	4	6	5	4	4	4		
24-Nov-06	5	3	4	3	4	4	4	4	4	4	5	5	4	4	5	4	4	3	3	4	4	4	4	12		
25-Nov-06	13	14	13	4	11	10	9	8	5	5	7	10	17	11	11	9	8	12	20	11	17	10	7	6		
26-Nov-06	7	9	8	10	12	16	10	9	11	13	11	10	8	15	10	14	19	8	10	11	7	4	20	12		
27-Nov-06	12	15	14	14	18	16	12	18	18	19	11	10	7	9	7	6	5	6	4	8	4	4	7	10		
28-Nov-06	7	12	23	25	8	8	5	13	10	12	16	13	11	10	10	19	20	9	26	25	14	22	17	7		
29-Nov-06	21	15	45	11	42	38	47	67	9	12	9	12	15	13	19	18	16	13	30	43	24	26	36	11		
30-Nov-06	7	13	36	37	32	60	38	15	4	5	6	4	4	5	5	3	3	4	3	3	4	5	6	6		

Hourly Max	62	68	60	54	61	60	52	67	66	65	51	46	45	56	45	48	74	70	59	66	67	58	61	50
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**1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for November 2006**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	25
5	to	10	402
10	to	20	258
20	to	30	30
30	to	40	4
> 40			0
Total Non-Zero Values			719

# PASZA – Evergreen Park Station

## Monthly Summary Tables, Graphs, and Roses

# PASZA - Evergreen Park - Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 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:	8.6 ppb 10-Nov 12:00 13:00
Maximum 24-hr Average:	2.0 ppb 10-Nov

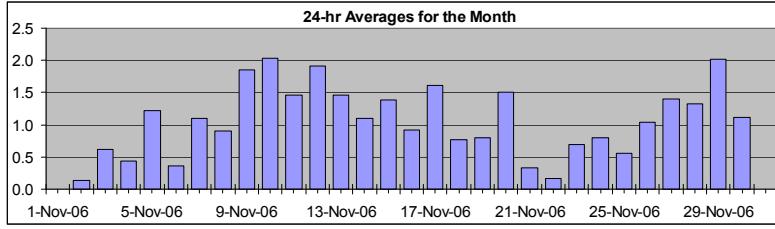
AIC Time:	33 hrs	Operational Time:	674 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	98.6%
Percentile	99 95 75 50 25 5 1	Average	Median
	4.4 2.5 1.4 0.8 0.5 0.1 0.0	1.1 ppb	0.8 ppb

Day	Mountain Standard Time																									24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Nov-06	N	N	N	N	N	N	N	N	N	N	A	A	1	1	0	0	0	0	0	0	0	0	0	0	0	N	0.7	
2-Nov-06	0	0	0	0	0	A	0	0	0	0	0	1	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
3-Nov-06	1	1	1	1	0	A	0	0	0	0	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	1.1
4-Nov-06	1	0	0	1	A	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	0	0.4	0.9
5-Nov-06	0	1	2	A	5	7	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	7.5
6-Nov-06	1	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
7-Nov-06	1	A	1	0	0	0	0	0	1	1	1	2	2	1	2	2	2	2	2	1	1	1	1	1	1	1	1.1	2.0
8-Nov-06	A	0	0	1	0	0	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1	0	A	0.9	2.1
9-Nov-06	1	1	1	1	1	1	2	2	2	1	2	2	3	3	2	3	3	4	2	2	2	A	1	1	1	1.9	3.6	
10-Nov-06	2	1	1	1	1	1	1	1	2	2	4	9	3	2	2	2	2	2	2	1	2	A	1	1	1	2.0	8.6	
11-Nov-06	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	2	2	2	A	1	1	1	1	1.5	3.2	
12-Nov-06	1	1	2	2	2	1	1	3	2	2	2	2	2	2	2	2	3	2	2	A	2	3	2	2	1.9	2.9		
13-Nov-06	1	1	1	1	2	2	2	1	1	1	1	1	1	2	2	2	2	2	A	1	1	1	1	1	1	1.5	2.3	
14-Nov-06	1	2	2	1	1	0	0	0	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1	3	2	1.1	2.6	
15-Nov-06	2	2	5	2	4	5	1	1	1	1	2	1	1	1	1	1	1	0	A	0	0	0	1	1	0	1.4	4.9	
16-Nov-06	1	2	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	0.9	2.2
17-Nov-06	1	1	1	1	1	1	1	0	1	1	1	2	2	3	A	2	2	3	2	2	4	2	2	2	2	1.6	4.3	
18-Nov-06	2	1	1	0	0	1	1	1	1	0	0	0	0	A	1	1	0	1	1	1	1	1	2	1	1	0.8	1.8	
19-Nov-06	1	1	1	1	1	1	1	1	2	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0.8	2.5	
20-Nov-06	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	1	2	2	3	3	6	6	3	3	2	1.5	6.1	
21-Nov-06	1	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8	
22-Nov-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	0.2	0.3	
23-Nov-06	0	0	0	0	0	0	1	1	A	0	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	0.7	1.7	
24-Nov-06	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	2	1	1	1	1	1	0.8	1.6
25-Nov-06	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	1	1	0.6	1.2
26-Nov-06	1	2	2	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1.0	2.2
27-Nov-06	0	0	0	0	A	1	1	1	2	1	1	1	1	1	1	2	4	3	2	1	2	1	1	1	1	1	1.4	3.8
28-Nov-06	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1.3	2.2
29-Nov-06	1	1	A	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2.0	4.3
30-Nov-06	3	A	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.7

Hourly Avg	0.9	0.9	1.1	0.8	1.0	1.2	0.8	0.8	0.9	0.9	1.1	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.3	1.1	1.0	0.9
Hourly Max	2.7	2.2	4.9	1.9	5.3	7.5	2.1	1.5	2.8	2.2	3.2	4.3	8.6	2.6	2.9	2.9	3.8	3.2	3.0	6.1	5.7	3.5	2.9	2.3

## HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

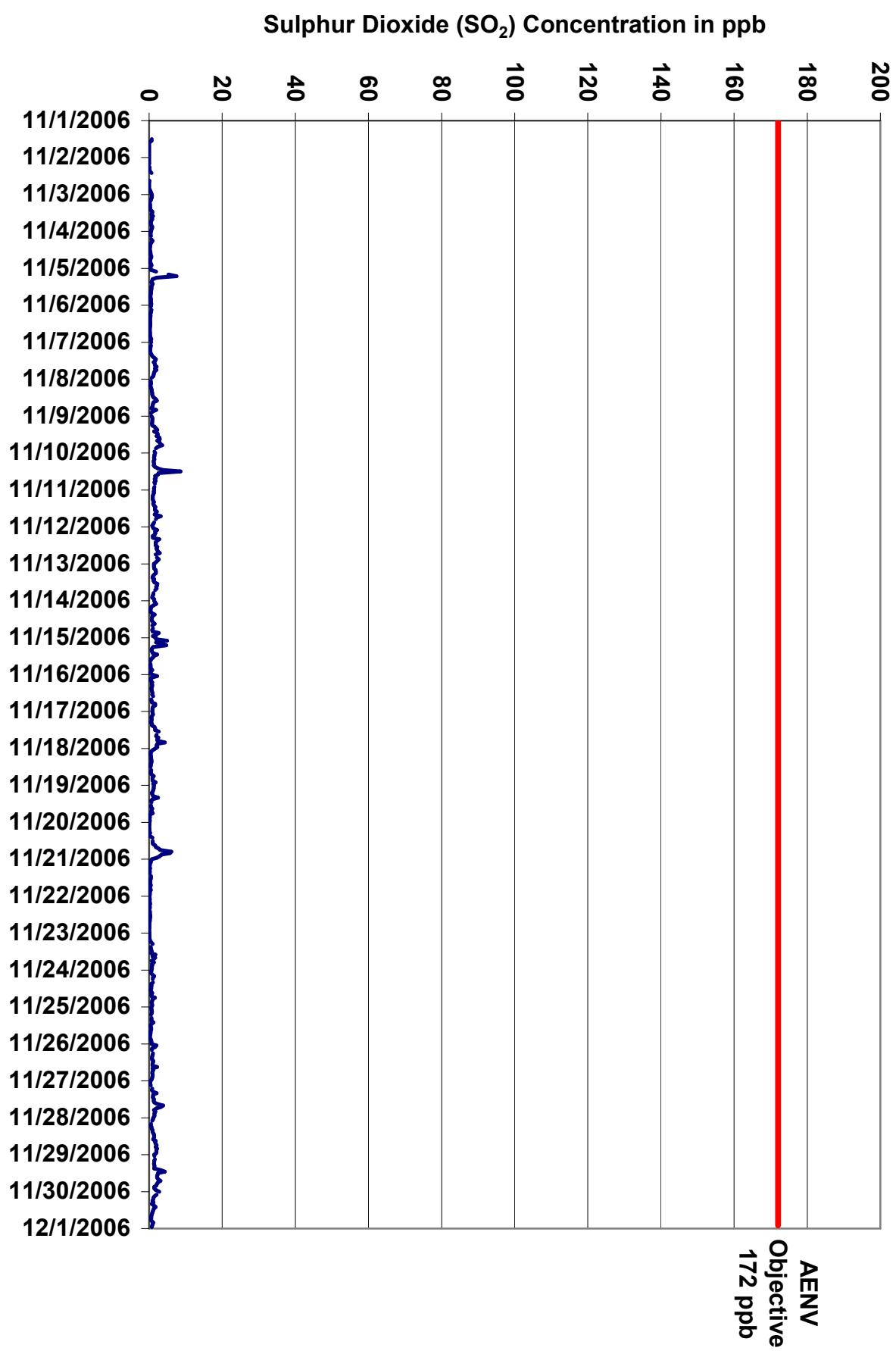


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

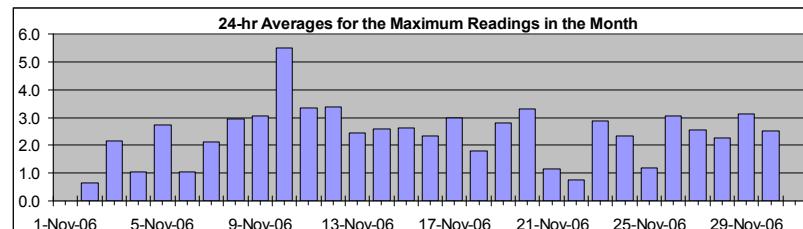
Maximum 1-hr Value:	36.0	ppb	10-Nov	12:00 13:00
Maximum 24-hr Value:	5.5	ppb	10-Nov	

AIC Time:	33 hrs	Operational Time:	674 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	98.6%
Percentile	99 95 75 50 25 5 1	Average	Median
	15.0 7.0 2.6 1.6 1.1 0.7 0.4	2.4 ppb	1.6 ppb

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
1-Nov-06	N	N	N	N	N	N	N	N	N	N	N	A	A	1	1	1	0	0	0	0	0	0	1	1	0	0	N	1.3						
2-Nov-06	0	0	0	0	1	A	1	1	1	1	1	C	C	C	A	1	1	0	0	1	0	1	1	1	1	0.6	1.3							
3-Nov-06	1	1	2	1	1	A	1	1	1	1	1	1	2	1	1	19	1	4	1	1	1	1	1	1	2	2	2	2.1	18.8					
4-Nov-06	1	1	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8						
5-Nov-06	1	2	3	A	9	10	3	2	2	1	3	2	1	1	5	3	2	6	1	1	1	1	1	1	1	1	2.7	9.9						
6-Nov-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4						
7-Nov-06	1	A	1	1	1	1	1	1	2	1	3	2	2	2	2	2	3	3	3	2	2	7	2	2	2	2.1	7.0							
8-Nov-06	A	1	1	6	1	1	1	1	1	4	1	2	2	15	9	2	2	2	2	1	4	3	2	A	2	2.9	15.3							
9-Nov-06	1	1	1	1	1	1	2	3	3	3	3	5	3	3	4	4	3	3	8	7	4	2	A	3	3.1	7.6								
10-Nov-06	3	2	2	2	2	2	2	2	2	3	7	8	36	4	4	3	3	5	14	2	12	A	2	7	5.5	36.0								
11-Nov-06	2	2	2	2	1	2	2	2	2	2	3	2	4	3	21	2	2	10	3	3	A	2	2	2	3.4	21.1								
12-Nov-06	2	2	3	3	2	2	2	2	12	4	3	3	3	3	3	3	6	4	3	A	3	5	4	3	3.4	11.8								
13-Nov-06	2	2	2	2	3	3	2	2	2	1	2	2	2	2	3	3	3	7	3	A	3	1	1	2	3	2.4	6.7							
14-Nov-06	2	2	5	3	1	1	1	1	1	4	1	1	1	1	1	2	15	2	A	2	1	2	4	3	2.6	14.9								
15-Nov-06	3	3	8	4	5	7	3	1	1	1	2	4	2	2	1	1	1	A	1	1	1	1	5	2	1	2.6	8.0							
16-Nov-06	3	4	1	1	1	1	13	1	2	2	1	1	1	1	2	2	A	1	1	2	3	4	2	2	2	2.3	13.1							
17-Nov-06	2	1	2	1	1	1	1	1	1	2	3	2	3	4	A	3	3	4	6	5	11	4	3	4	3.0	10.8								
18-Nov-06	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5	3	2	2	5	2	1.8	4.9								
19-Nov-06	2	2	2	2	2	1	2	2	13	2	1	2	A	1	3	3	2	1	18	1	1	1	1	1	2.8	17.7								
20-Nov-06	1	1	1	1	1	1	1	1	1	1	6	A	2	2	2	4	3	6	8	12	9	7	4	4	3.3	11.6								
21-Nov-06	2	1	1	1	1	1	1	1	1	1	1	A	1	4	1	1	1	1	1	1	1	1	1	1	1	1.1	4.4							
22-Nov-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	0.9								
23-Nov-06	1	1	1	1	1	2	1	2	A	1	1	1	1	1	6	2	2	2	1	31	2	2	1	2	2.9	30.9								
24-Nov-06	1	2	1	4	5	2	2	A	2	1	1	1	1	1	1	1	1	1	1	16	2	2	1	1	2	2.3	15.7							
25-Nov-06	1	1	1	2	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.7							
26-Nov-06	1	8	6	1	1	A	2	2	2	2	1	13	9	1	2	6	2	2	2	1	2	2	2	1	3.1	12.7								
27-Nov-06	1	1	1	1	1	A	1	1	3	3	2	2	2	2	2	2	8	5	5	3	2	7	2	2	2	2.6	7.6							
28-Nov-06	2	3	1	A	1	1	1	1	2	2	2	3	2	2	2	2	3	2	3	3	6	3	3	3	2.3	5.8								
29-Nov-06	2	3	A	2	2	2	2	3	3	2	5	9	3	3	3	3	4	4	4	3	3	2	2	3	3.1	9.1								
30-Nov-06	5	A	4	3	2	2	2	3	1	2	3	2	4	2	2	1	1	1	3	8	3	1	1	2.5	7.9									

Hourly Avg	1.7	1.9	2.1	1.8	1.9	2.4	1.5	1.6	2.3	1.8	2.3	2.8	3.5	2.5	3.6	2.7	2.4	2.4	3.8	3.2	3.3	2.4	1.9	2.0	
Hourly Max	5.0	8.5	8.0	6.1	9.4	13.1	2.9	3.4	13.1	4.2	7.0	12.7	36.0	15.3	21.1	14.9	6.7	10.1	17.7	30.9	11.9	7.1	4.8	6.6	



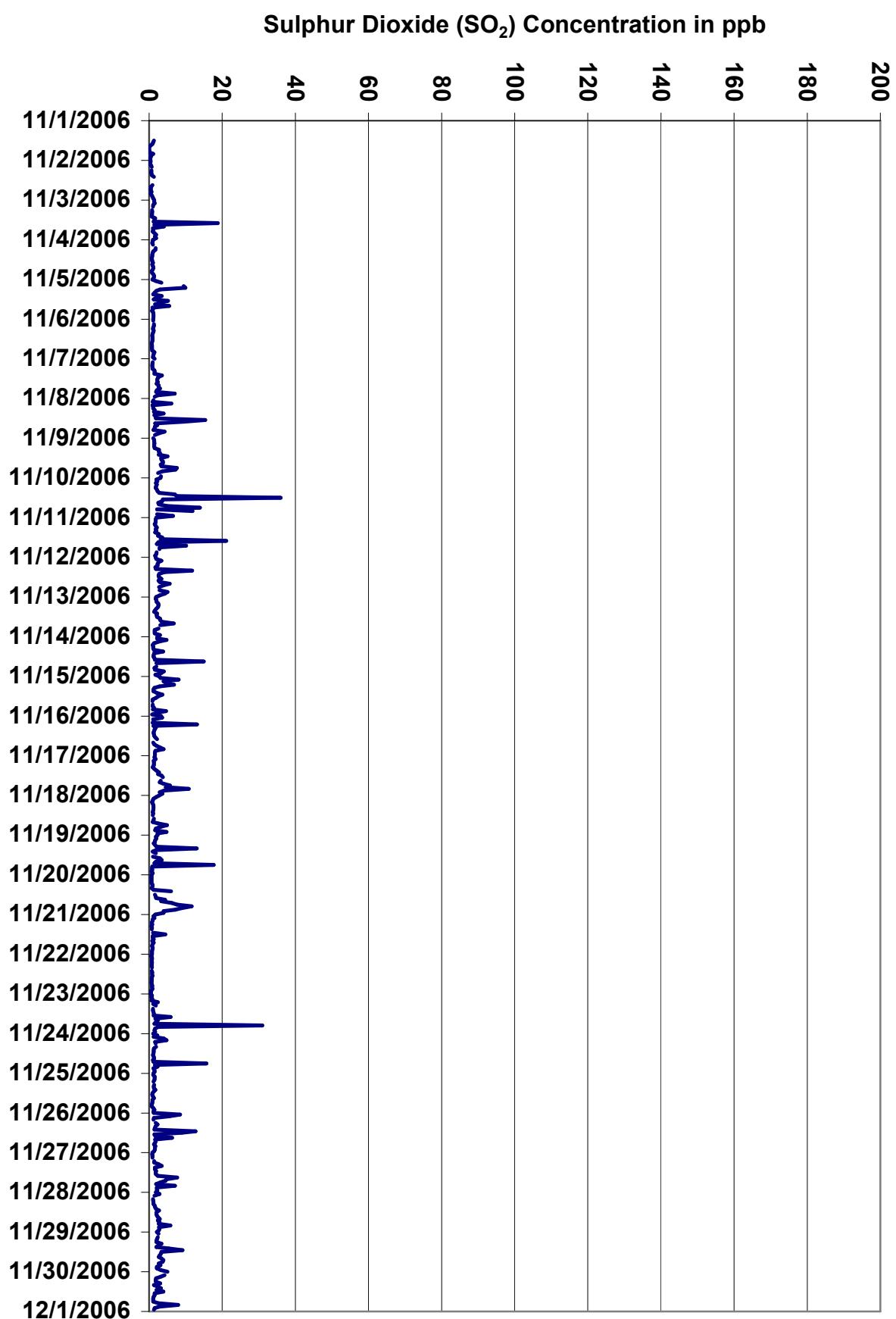
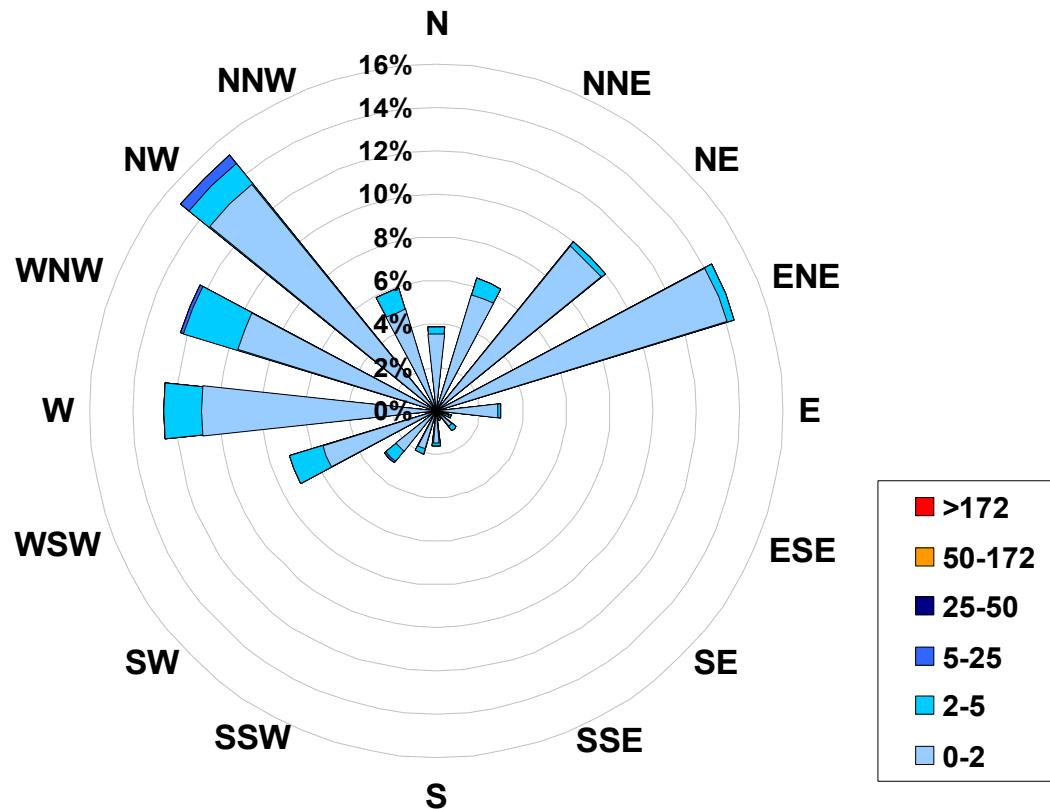


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	592
2	to	5	77
5	to	25	5
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			674

# PASZA - Evergreen Park - Total Reduced Sulphur Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

Maximum 1-hr Average: 2.5 ppb 17-Nov 17:00 18:00  
 Maximum 24-hr Value: 1.4 ppb 9-Nov

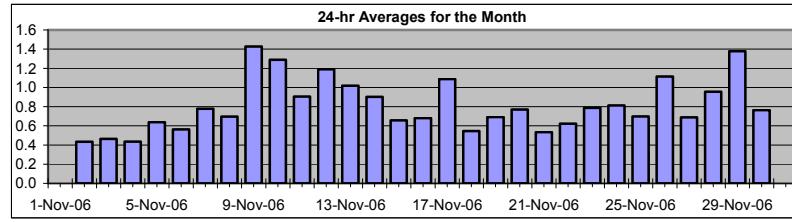
AIC Time: 33 hrs Operational Time: 670 hrs  
 Calibration Time: 3 hrs AMD Operational Uptime: 98.1%  
 Percentile 99 95 75 50 25 5 1 Average 0.8 ppb Median 0.7 ppb

Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00		
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	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Nov-06	N	N	N	N	N	N	N	N	N	N	A	A	N	N	N	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	N	1.3	1.3
2-Nov-06	1	1	1	0	1	A	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	0.7	
3-Nov-06	0	0	0	0	0	A	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.6	0.6	
4-Nov-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	0	0	0.4	0.5	0.5	
5-Nov-06	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	0.8	
6-Nov-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	0	1	1	1	1	0.6	0.6	0.6	
7-Nov-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	1	1	1	1	0.8	1.2	1.2	
8-Nov-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	1	1	1	1	1	0.7	1.0	1.0	
9-Nov-06	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	2	2	2	2	2	A	2	2	2	2	1.4	2.1	2.1		
10-Nov-06	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.3	1.5	1.5		
11-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.3	1.3		
12-Nov-06	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1.2	1.8	1.8		
13-Nov-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	1	1	1	1.0	1.4	1.4		
14-Nov-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	1	0.9	1.2	1.2			
15-Nov-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	1	0.7	1.0	1.0			
16-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	1	1	1	1	1	1	1	1	0.7	1.0	1.0				
17-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	3	2	1	1	1	1	1	1	1.1	2.5	2.5				
18-Nov-06	1	1	1	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0.5	1.3	1.3		
19-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	1	0	1	0	1	0	0.7	1.0	1.0		
20-Nov-06	0	0	0	0	0	0	0	0	0	0	1	A	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	0.8	1.9	1.9		
21-Nov-06	1	1	1	0	0	1	0	0	0	1	A	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.5	0.7	0.7			
22-Nov-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	1	1	1	0.6	0.7	0.7		
23-Nov-06	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9	0.9		
24-Nov-06	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	1.1		
25-Nov-06	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	1.0		
26-Nov-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1.1	1.6	1.6		
27-Nov-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	1	1	0.7	0.9	0.9		
28-Nov-06	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	2	1	1	1.0	1.7	1.7		
29-Nov-06	1	2	A	1	1	1	1	1	1	1	2	2	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1.4	2.1	2.1		
30-Nov-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	1	1	1	0.8	1.2	1.2		

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)



Status Flag Characters

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

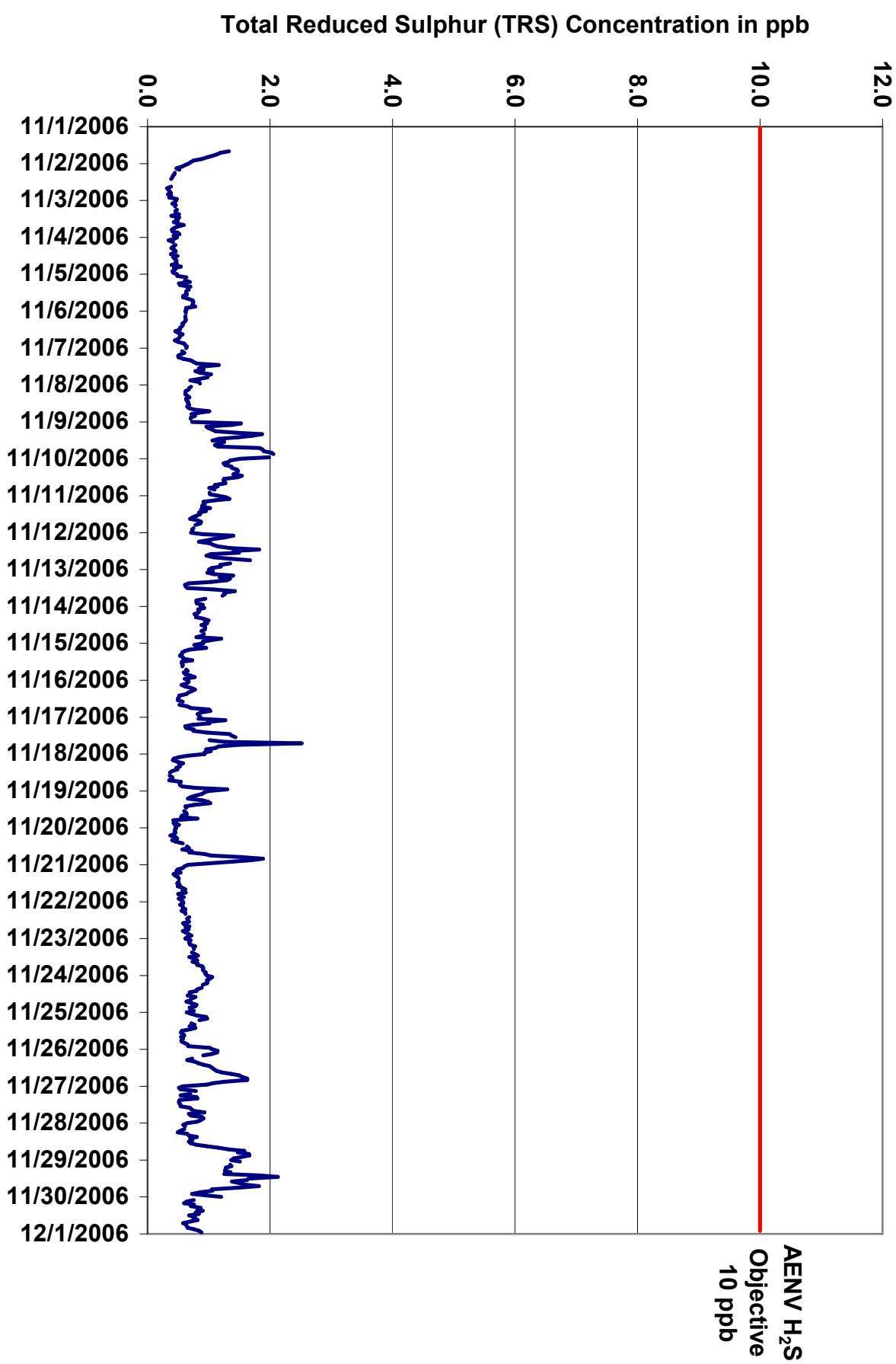


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

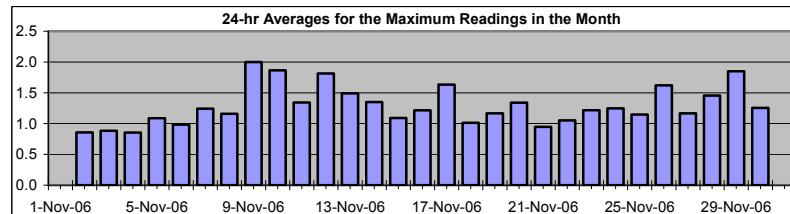
Total Reduced Sulphur (TRS)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	4.1	ppb	17-Nov	17:00 18:00
Maximum 24-hr Value:	2.0	ppb	9-Nov	

AIC Time:	33 hrs	Operational Time:	670 hrs								
Calibration Time:	3 hrs	AMD Operational Uptime:	98.1%								
Percentile	99	95	75	50	25	5	1	Average	1.3 ppb	Median	1.2 ppb
	2.8	2.1	1.5	1.2	1.0	0.8	0.7				



#### 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																								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-Nov-06	N	N	N	N	N	N	N	N	N	N	N	A	A	N	N	N	N	2	2	1	1	1	1	1	1	1.9
2-Nov-06	1	1	1	1	1	A	1	1	1	1	1	1	C	C	C	A	1	1	1	1	1	1	1	1	0.9	
3-Nov-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	0.9	
4-Nov-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	0.9	
5-Nov-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	1.1	
6-Nov-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	
7-Nov-06	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1.2	
8-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1.2	
9-Nov-06	1	3	2	1	1	1	2	2	3	2	2	2	1	2	2	2	2	3	3	3	2	3	A	3	2.0	
10-Nov-06	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	1	2	A	2	2	1.9	
11-Nov-06	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.3		
12-Nov-06	1	2	2	2	2	1	1	2	2	2	2	3	2	2	1	1	2	2	3	A	2	2	2	1	1.8	
13-Nov-06	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2	2	A	1	1	1	1	1	1	1.5	
14-Nov-06	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	A	1	1	1	2	1	1	1	1.4	
15-Nov-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	1.1	
16-Nov-06	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	A	1	1	1	2	2	1	1	1.2	
17-Nov-06	1	1	2	2	1	1	1	1	1	1	1	2	2	2	A	2	2	4	2	2	2	1	1	1	1.6	
18-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	2	1.0		
19-Nov-06	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.2	
20-Nov-06	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	2	2	3	3	2	2		
21-Nov-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	0.9	
22-Nov-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	1.1	
23-Nov-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	1.1	
24-Nov-06	1	2	1	1	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	
25-Nov-06	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	
26-Nov-06	1	2	2	2	1	A	1	1	1	1	1	1	2	1	1	2	2	2	2	2	2	2	1	1	1.6	
27-Nov-06	1	1	1	2	A	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1.2	
28-Nov-06	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	2	3	2	2	1.5	
29-Nov-06	2	2	A	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1	1	1	2	
30-Nov-06	2	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.3	

Hourly Avg	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.4	1.5	1.3	1.4	1.4	1.3	1.4	
Hourly Max	2.1	2.6	2.3	1.8	2.1	2.8	1.9	2.2	2.5	2.2	2.8	2.7	2.4	2.1	1.9	2.1	2.2	4.1	2.9	2.6	3.1	2.7	1.9	2.9

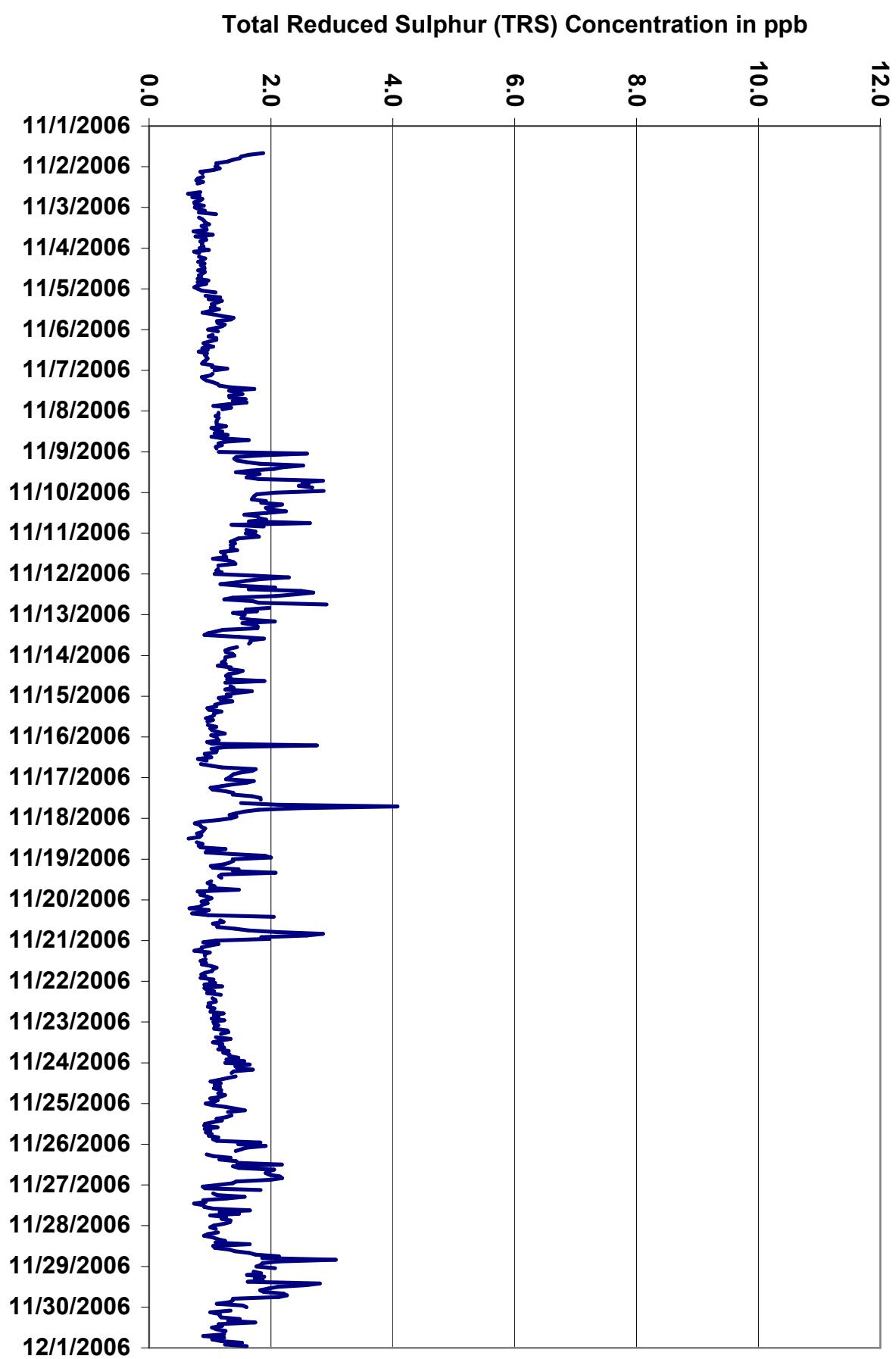
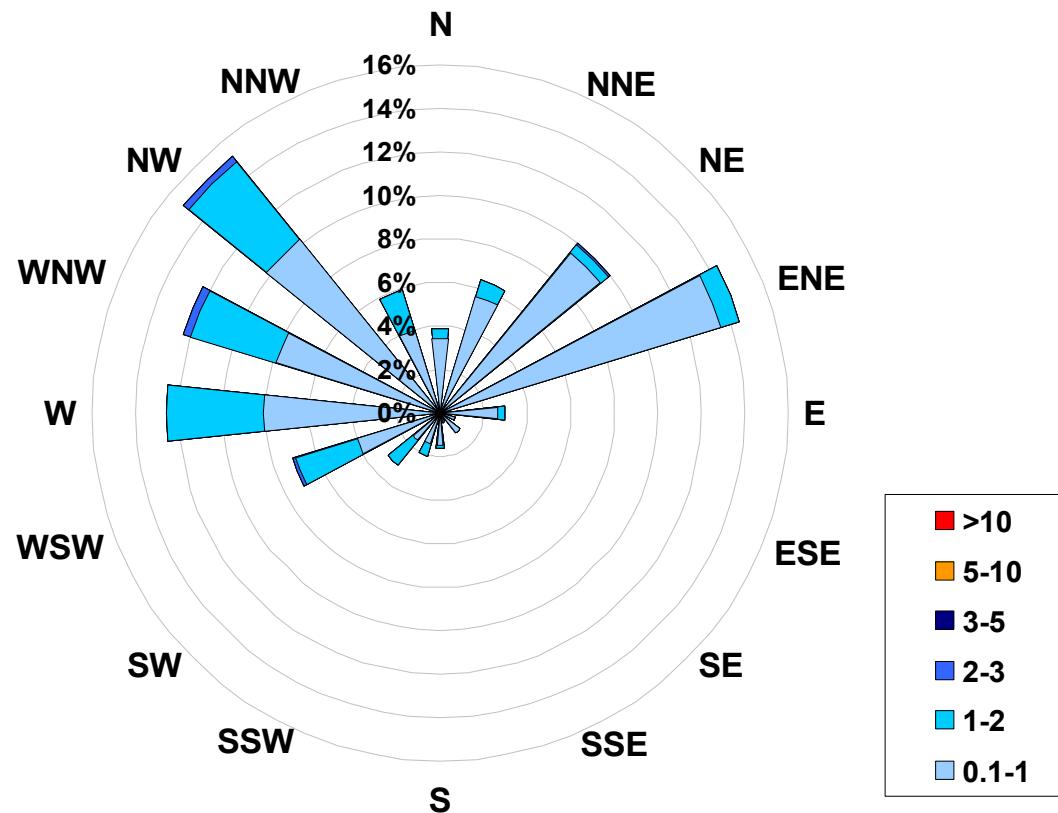


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	512
1	to	2	156
2	to	3	6
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			674

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

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

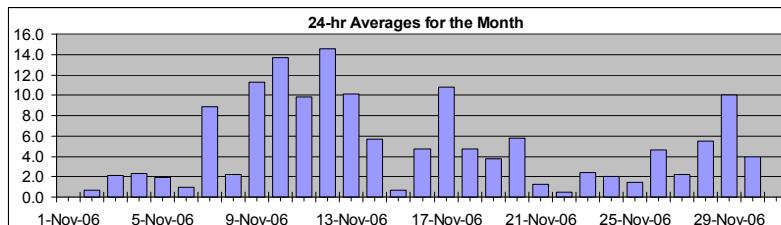
Draft Objective Limit: Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr 30  $\mu\text{g}/\text{m}^3$   
Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	29.8 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	14.6 $\mu\text{g}/\text{m}^3$
29-Nov	11:00 12:00
12-Nov	

AIC Time:	0 hrs	Operational Time:	696 hrs								
Calibration Time:	4 hrs	AMD Operational Uptime:	97.2%								
Percentile	99	95	75	50	25	5	1	Average / Median	3 $\mu\text{g}/\text{m}^3$	Geomean	3.5 $\mu\text{g}/\text{m}^3$
	22.2	16.0	7.1	3.2	1.3	0.0	0.0				

## HOURLY AVERAGE TABLE

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



## Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	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-Nov-06	N	N	N	N	N	N	N	N	N	N	M	M	2	6	3	0	0	0	0	0	0	0	0	2	2	N	5.8
2-Nov-06	1	1	0	0	0	0	0	0	1	1	1	1	0	C	C	C	C	D	D	0	0	0	0	3	3	0.7	3.4
3-Nov-06	3	1	1	1	0	1	0	1	2	1	1	1	2	2	3	3	4	3	2	2	3	3	5	5	2.1	5.0	
4-Nov-06	5	4	2	2	1	0	1	1	3	1	2	2	1	3	4	4	7	5	3	2	0	1	1	1	2.3	6.7	
5-Nov-06	2	3	3	3	3	3	3	4	3	2	1	1	2	1	1	1	1	1	1	1	1	3	4	2	3	2.0	3.8
6-Nov-06	0	0	0	0	0	1	0	1	0	0	0	0	2	1	0	2	1	2	0	1	2	3	9	0	1.0	8.7	
7-Nov-06	4	3	2	1	2	1	4	2	5	10	8	14	14	11	14	14	19	18	19	14	11	9	8	5	8.8	18.8	
8-Nov-06	2	2	2	1	2	2	3	2	2	2	1	1	2	2	2	2	2	3	3	5	3	2	1	2	2.2	5.3	
9-Nov-06	2	5	5	5	6	6	5	10	13	18	12	8	11	16	23	22	16	21	15	16	13	10	8	7	11.3	22.7	
10-Nov-06	9	8	9	9	10	10	11	10	11	14	21	23	26	17	21	17	17	13	13	12	12	12	12	12	13.7	25.6	
11-Nov-06	15	12	11	6	5	5	6	6	8	6	7	8	8	9	11	11	12	20	18	14	9	10	11	9	9.8	19.8	
12-Nov-06	9	13	16	12	12	10	8	9	12	12	14	17	17	25	16	17	16	28	18	16	15	14	13	11	14.6	28.2	
13-Nov-06	10	10	11	11	14	15	18	20	16	11	12	12	10	10	11	9	7	6	5	5	5	5	5	6	10.1	19.6	
14-Nov-06	5	8	7	4	4	4	3	2	6	10	8	5	4	6	9	6	5	7	6	4	5	9	7	2	5.7	9.9	
15-Nov-06	2	1	0	0	0	0	0	0	0	0	0	0	D	D	0	0	0	0	0	0	0	4	0	7	0.7	6.7	
16-Nov-06	6	6	5	4	4	5	4	5	5	6	4	3	4	2	3	2	3	4	3	8	9	6	5	6	4.7	9.4	
17-Nov-06	6	7	8	6	6	5	6	4	7	9	11	11	14	24	15	15	16	17	15	10	12	10	12	12	10.8	23.6	
18-Nov-06	14	10	4	1	1	5	5	3	8	6	5	3	4	3	3	2	3	3	3	3	5	10	4	4.7	13.6		
19-Nov-06	6	6	5	4	4	5	6	6	10	5	4	3	0	2	1	2	0	1	13	1	0	2	D	3.8	12.9		
20-Nov-06	1	D	0	1	0	D	0	0	0	1	4	10	2	5	5	6	7	9	10	19	18	11	11	10	5.8	18.6	
21-Nov-06	4	3	3	0	1	1	2	1	1	1	3	3	1	0	0	0	1	0	1	1	0	0	0	1	1.2	4.0	
22-Nov-06	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	1	1	0	1	1	1	0	0	0.4	1.0	
23-Nov-06	0	0	0	3	0	1	3	2	2	2	4	4	4	3	3	3	4	4	4	3	3	3	0	1	2.4	4.4	
24-Nov-06	1	2	2	2	2	1	1	1	0	1	1	0	0	0	3	6	2	2	2	5	4	3	3	4	2.0	6.0	
25-Nov-06	3	3	2	2	2	2	2	2	2	2	1	2	0	0	0	1	1	1	1	0	1	2	3	3	1.5	3.3	
26-Nov-06	2	5	6	4	2	4	5	4	5	5	4	5	5	2	4	6	6	8	6	7	6	5	5	3	4.7	8.0	
27-Nov-06	2	1	1	1	1	1	1	2	2	2	1	3	3	2	3	4	5	3	3	4	3	3	3	2.2	5.0		
28-Nov-06	3	2	2	2	1	1	1	2	4	5	7	3	4	5	2	3	3	10	12	11	9	15	11	9	5.5	15.3	
29-Nov-06	7	7	6	7	7	6	5	5	6	6	22	30	12	12	11	12	15	19	13	9	7	5	5	6	10.0	29.8	
30-Nov-06	14	11	7	4	3	4	3	5	4	10	5	1	1	2	1	2	2	1	3	3	2	2	3	3.9	14.4		

Hourly Avg	4.7	4.8	4.2	3.4	3.2	3.5	3.7	3.8	4.7	5.2	5.6	6.0	5.4	6.0	6.0	6.1	6.2	7.4	6.6	5.7	5.6	5.2	5.3	4.6
Hourly Max	15.0	12.6	16.3	11.8	13.6	14.7	18.5	19.6	15.9	17.9	22.2	29.8	25.6	24.9	22.7	21.7	18.8	28.2	18.8	18.6	17.7	13.6	13.0	12.2

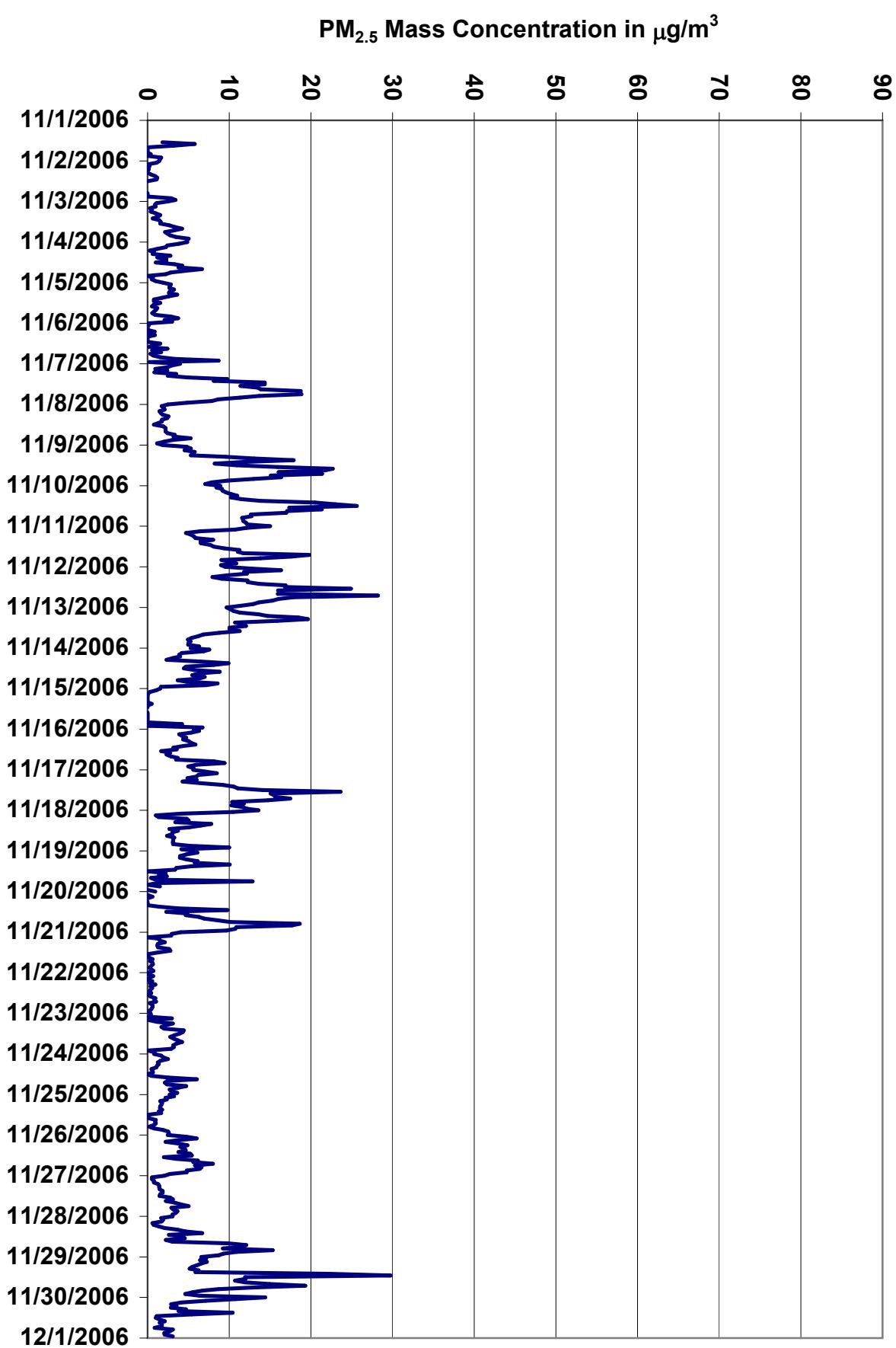


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

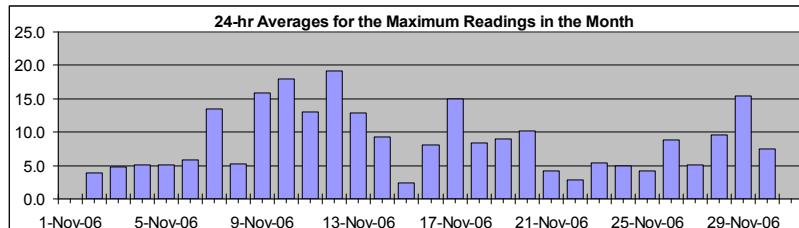
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Average:	43.6	µg/m <sup>3</sup>	19-Nov	18:00 19:00
Maximum 24-hr Value:	19.1	µg/m <sup>3</sup>	12-Nov	



AIC Time:	0 hrs	Operational Time:	696 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	97.2%
Percentile	99 95 75 50 25 5 1	Average / Median	Geomean
	28.9 21.5 11.2 6.6 4.3 2.4 0.9	8.7	7 µg/m³

#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
	Hour Start 1:00	Hour End 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-Nov-06	N	N	N	N	N	N	N	N	N	N	M	M	10	10	7	2	1	2	2	6	4	6	6	N	10.5	
2-Nov-06	5	5	2	4	3	3	2	4	4	4	6	9	2	C	C	C	D	D	2	1	3	5	6	3.9	8.9	
3-Nov-06	5	3	4	4	3	3	3	4	4	4	4	5	4	4	5	7	7	6	5	5	6	7	7	4.8	7.7	
4-Nov-06	7	7	4	5	3	3	3	4	6	4	5	5	3	7	9	6	9	8	5	5	1	4	4	5.0	9.3	
5-Nov-06	5	5	5	5	6	6	6	6	6	5	6	6	5	4	3	3	5	4	3	4	6	8	6	5.1	7.5	
6-Nov-06	4	3	3	2	3	5	5	7	7	3	7	5	4	4	3	6	3	6	7	6	8	16	16	5.8	16.3	
7-Nov-06	17	10	9	3	6	3	6	7	9	13	13	18	17	15	17	18	26	25	22	17	16	14	12	9	13.4	25.7
8-Nov-06	8	5	5	6	4	5	4	5	6	5	4	4	4	5	5	4	5	5	7	6	10	8	5	4	5.2	9.8
9-Nov-06	6	8	9	7	9	9	9	15	18	23	17	12	17	21	27	27	27	30	19	22	16	14	11	10	15.9	29.6
10-Nov-06	12	11	13	13	13	14	17	14	16	21	27	27	33	24	29	20	21	16	18	14	16	15	14	16	18.0	32.9
11-Nov-06	18	17	13	10	7	8	8	10	10	10	10	10	10	11	16	14	15	26	20	19	11	13	14	11	13.0	26.1
12-Nov-06	14	17	21	16	15	13	11	12	22	19	17	21	24	28	24	19	25	31	28	19	18	16	16	15	19.1	31.4
13-Nov-06	12	13	12	14	18	18	24	23	21	13	14	14	12	13	13	11	10	8	7	7	9	7	8	12.9	24.1	
14-Nov-06	7	10	11	7	7	6	6	9	18	12	8	6	12	12	10	10	11	10	6	8	13	9	6	9.3	18.0	
15-Nov-06	5	5	3	3	2	1	0	1	2	5	0	2	D	D	0	0	0	0	1	1	1	8	5	2.5	9.3	
16-Nov-06	9	9	8	6	7	7	7	8	9	10	9	8	8	4	5	4	7	6	6	15	15	11	8	8.1	15.1	
17-Nov-06	8	10	11	11	12	8	10	8	10	14	17	15	23	28	19	22	18	20	20	14	16	14	16	15.0	28.2	
18-Nov-06	17	15	7	4	4	10	8	8	10	9	8	5	8	5	6	5	6	6	7	7	6	11	20	8.4	19.6	
19-Nov-06	9	9	9	6	6	8	9	10	22	8	7	7	5	6	6	7	3	4	44	10	3	4	D	9.0	43.6	
20-Nov-06	5	D	2	7	7	D	2	3	1	5	16	21	5	10	9	10	9	15	14	21	22	14	13	13	10.1	21.7
21-Nov-06	6	6	10	1	5	4	5	6	5	4	7	5	4	3	3	3	3	2	3	3	3	3	4	4.2	9.8	
22-Nov-06	2	3	3	4	2	4	3	3	3	3	3	3	3	3	3	3	4	4	3	3	3	3	2	2.9	3.8	
23-Nov-06	3	3	3	10	3	5	6	5	5	5	7	6	7	7	5	5	6	6	7	8	5	7	2	5.4	10.3	
24-Nov-06	3	4	5	4	5	4	4	4	4	3	3	3	2	3	6	9	5	5	6	9	7	6	7	4.9	8.6	
25-Nov-06	5	6	6	6	4	4	4	5	4	5	4	5	2	2	2	3	4	3	4	3	3	5	5	4.2	5.7	
26-Nov-06	5	14	11	7	5	8	8	7	9	10	9	9	19	6	7	9	9	11	9	9	9	8	8	8.8	19.2	
27-Nov-06	4	3	3	4	4	4	4	3	3	5	4	5	4	6	9	5	6	6	8	6	6	6	5.0	8.7		
28-Nov-06	7	5	5	4	3	3	5	5	10	7	11	7	9	8	4	7	15	16	14	15	31	18	12	9.6	30.6	
29-Nov-06	10	11	10	11	10	9	9	9	10	9	9	42	41	26	16	15	16	18	24	20	13	10	9	8	15.4	42.2
30-Nov-06	17	14	12	14	6	6	5	13	7	17	10	4	4	4	3	4	4	3	6	6	4	4	5	7.4	17.3	

Hourly Avg	8.1	8.3	7.5	6.8	6.3	6.5	6.6	7.3	8.7	9.0	10.3	10.0	9.7	9.5	9.1	9.7	10.7	11.0	9.1	9.2	9.1	8.8	7.9	
Hourly Max	17.9	16.6	20.7	15.7	17.7	18.0	24.1	22.7	22.2	23.3	42.2	40.8	32.9	28.2	28.8	27.0	27.2	31.4	43.6	21.7	30.6	17.7	19.6	15.9

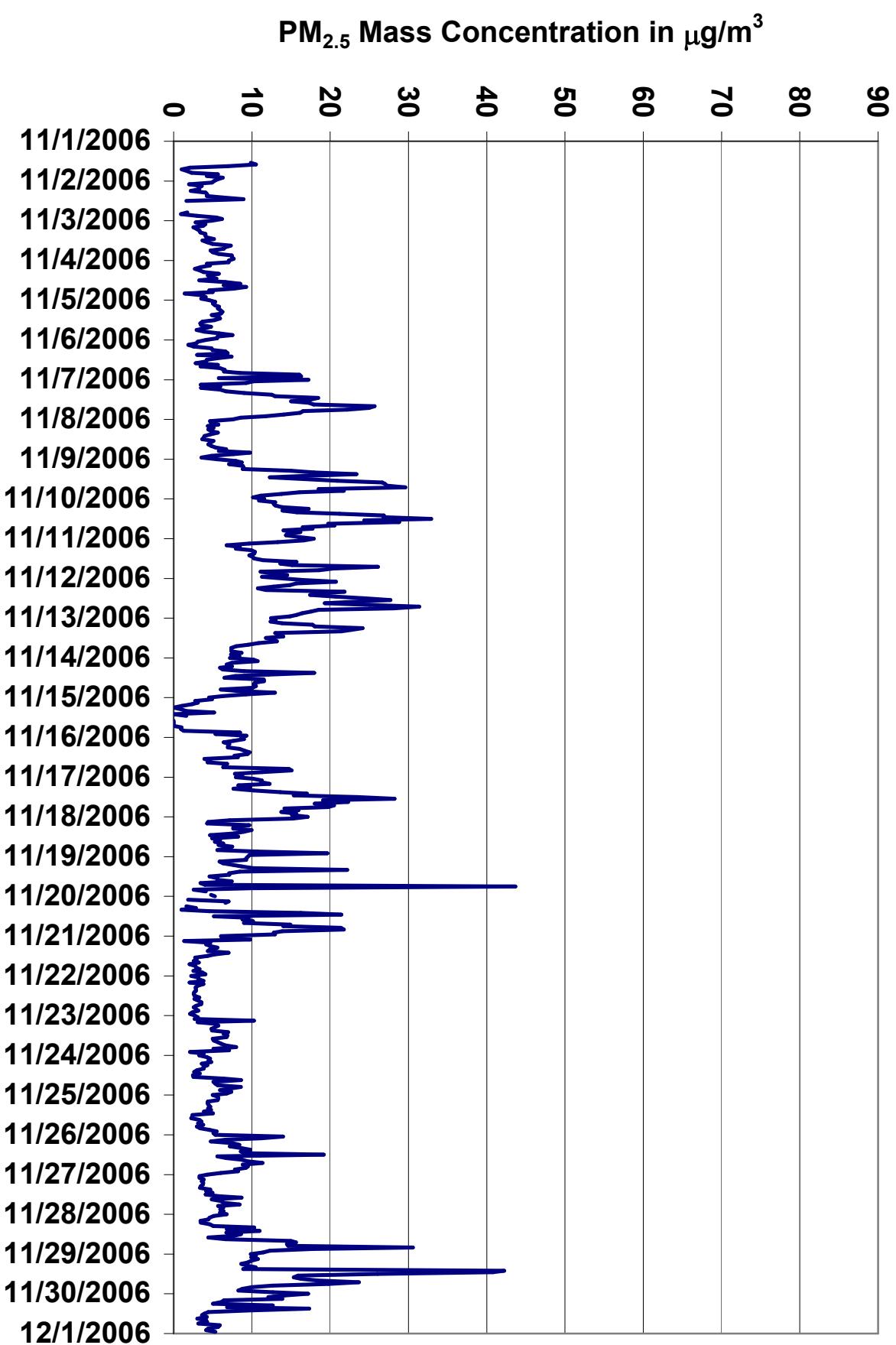
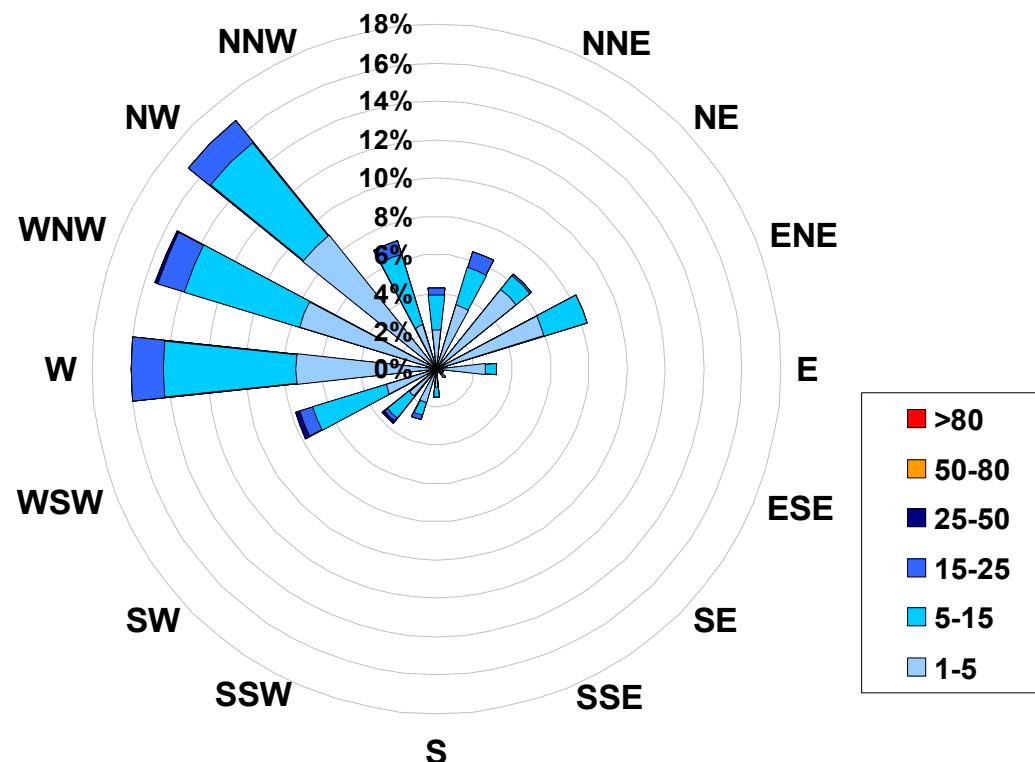


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**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 November 2006**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$			Frequency (hrs)
Range			
1.0	<	5	444
5	to	15	206
15	to	25	43
25	to	50	3
50	to	80	0
> 80			0
Total Non-Zero Values			696

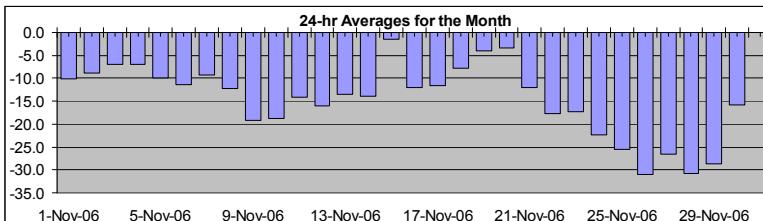
# PASZA - Evergreen Park - Temperature Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)



### Summary

Maximum 1-hr Average:	3.9	°C	20-Nov	15:00 16:00
Maximum 24-hr Value:	-1.5	°C	15-Nov	

AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.4	-2.6	-8.9	-13.0	-19.2	-30.9	-36.1		

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
1-Nov-06	-12	-12	-12	-12	-11	-11	-11	-11	-13	-10	-8	-6	-4	-4	-5	-6	-7	-9	-11	-12	-13	-14	-15	-13	-10.1	-3.6	
2-Nov-06	-13	-12	-11	-12	-12	-12	-12	-12	-12	-11	-8	-7	-6	-5	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-8.8	-5.0	
3-Nov-06	-7	-7	-7	-8	-8	-8	-8	-8	-8	-7	-6	-5	-5	-5	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6.9	-5.1	
4-Nov-06	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-6	-6	-7	-7	-7	-8	-8	-8	-8	-8	-7.0	-5.7	
5-Nov-06	-8	-8	-8	-8	-9	-9	-9	-9	-10	-10	-10	-10	-9	-9	-9	-9	-10	-10	-11	-13	-13	-13	-13	-13	-10.0	-7.8	
6-Nov-06	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-12	-11	-11	-10	-9	-10	-10	-10	-10	-10	-10	-10	-10	-10	-11.3	-9.5	
7-Nov-06	-10	-11	-11	-12	-12	-13	-12	-12	-13	-11	-8	-7	-6	-5	-4	-5	-6	-8	-9	-9	-9	-9	-9	-9	-9.2	-3.6	
8-Nov-06	-10	-11	-12	-13	-13	-13	-13	-13	-13	-12	-12	-12	-11	-11	-11	-11	-11	-12	-13	-13	-13	-13	-13	-13	-12.3	-10.3	
9-Nov-06	-18	-19	-20	-21	-21	-23	-23	-23	-22	-21	-20	-17	-15	-14	-14	-13	-15	-17	-18	-20	-20	-21	-22	-22	-19.2	-13.5	
10-Nov-06	-23	-24	-25	-25	-25	-24	-25	-24	-24	-22	-19	-18	-16	-16	-16	-15	-15	-15	-14	-13	-13	-13	-13	-13	-18.8	-12.6	
11-Nov-06	-13	-13	-14	-14	-14	-14	-15	-15	-15	-14	-14	-14	-13	-11	-11	-11	-11	-14	-17	-17	-16	-15	-14	-15	-14.2	-10.7	
12-Nov-06	-19	-18	-16	-15	-15	-15	-15	-18	-20	-21	-20	-17	-15	-15	-14	-13	-12	-13	-14	-13	-13	-15	-17	-18	-19	-16.1	-12.2
13-Nov-06	-20	-20	-19	-18	-17	-16	-15	-14	-13	-11	-10	-9	-10	-10	-11	-11	-12	-12	-12	-12	-12	-13	-14	-14	-13.4	-8.7	
14-Nov-06	-13	-13	-14	-16	-19	-20	-21	-21	-21	-19	-16	-14	-12	-12	-11	-11	-11	-11	-12	-13	-13	-13	-13	-8	-14.0	-4.4	
15-Nov-06	-4	-3	-3	-3	-3	-3	-4	-5	-5	-1	1	2	2	3	2	2	1	1	1	0	0	-8	-11	-1.5	2.9		
16-Nov-06	-12	-11	-11	-12	-12	-12	-13	-14	-15	-15	-11	-9	-8	-6	-7	-8	-11	-13	-14	-15	-14	-15	-16	-17	-12.0	-6.2	
17-Nov-06	-17	-17	-15	-15	-15	-14	-15	-17	-17	-16	-10	-7	-6	-6	-5	-7	-9	-10	-11	-12	-12	-11	-9	-11.6	-4.8		
18-Nov-06	-7	-5	-4	-5	-6	-6	-6	-7	-8	-7	-7	-7	-6	-6	-6	-8	-9	-10	-11	-13	-13	-12	-11	-7.8	-4.0		
19-Nov-06	-12	-12	-11	-11	-11	-11	-10	-9	-8	-6	-5	-3	-2	0	0	1	1	1	1	3	4	2	2	-4.0	3.6		
20-Nov-06	1	1	1	-1	-5	-7	-8	-9	-10	-10	-8	-2	1	2	4	4	-1	-4	-5	-5	-5	-4	-4	-3.3	3.9		
21-Nov-06	-3	-4	-6	-10	-11	-12	-13	-13	-12	-12	-11	-11	-12	-12	-13	-14	-14	-15	-15	-15	-16	-16	-17	-12.1	-3.1		
22-Nov-06	-17	-17	-17	-18	-18	-18	-18	-18	-18	-18	-17	-17	-15	-17	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-17.6	-15.3	
23-Nov-06	-18	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-17	-17	-17	-18	-18	-18	-18	-18	-18	-19	-19	-17.2	-16.4	
24-Nov-06	-19	-19	-20	-20	-21	-20	-20	-21	-21	-21	-21	-22	-22	-22	-23	-23	-24	-25	-25	-26	-26	-26	-27	-27	-22.3	-19.1	
25-Nov-06	-28	-28	-27	-26	-25	-25	-25	-25	-24	-24	-23	-23	-24	-24	-24	-24	-25	-25	-27	-28	-29	-28	-29	-29	-25.5	-23.2	
26-Nov-06	-31	-32	-32	-31	-32	-32	-33	-33	-33	-33	-32	-31	-31	-31	-31	-30	-30	-30	-29	-29	-28	-28	-28	-29	-30.9	-27.2	
27-Nov-06	-26	-26	-26	-26	-26	-26	-26	-26	-26	-26	-25	-25	-25	-25	-25	-26	-26	-26	-26	-27	-28	-28	-28	-29	-26.5	-24.9	
28-Nov-06	-30	-29	-30	-31	-31	-32	-32	-33	-33	-34	-31	-28	-27	-25	-25	-26	-28	-31	-32	-33	-34	-34	-35	-36	-30.8	-25.1	
29-Nov-06	-36	-36	-37	-37	-36	-36	-36	-36	-36	-35	-31	-29	-27	-26	-25	-24	-23	-22	-21	-21	-20	-19	-18	-17	-28.6	-17.4	
30-Nov-06	-17	-17	-18	-19	-20	-20	-20	-21	-21	-17	-12	-12	-13	-14	-14	-15	-15	-15	-15	-14	-15	-15	-15	-15.9	-12.0		

Hourly Avg -15.4 -15.4 -15.5 -15.9 -16.2 -16.3 -16.6 -16.7 -17.0 -16.0 -14.4 -13.2 -12.3 -11.8 -11.7 -11.9 -12.9 -13.7 -14.1 -14.4 -14.6 -14.8 -15.1 -15.3  
 Hourly Max 1.5 1.4 0.8 -1.1 -2.6 -2.5 -4.4 -4.8 -4.7 -0.7 1.0 2.1 2.4 2.9 3.7 3.9 1.5 1.4 1.2 3.5 3.6 2.4 1.8 1.9

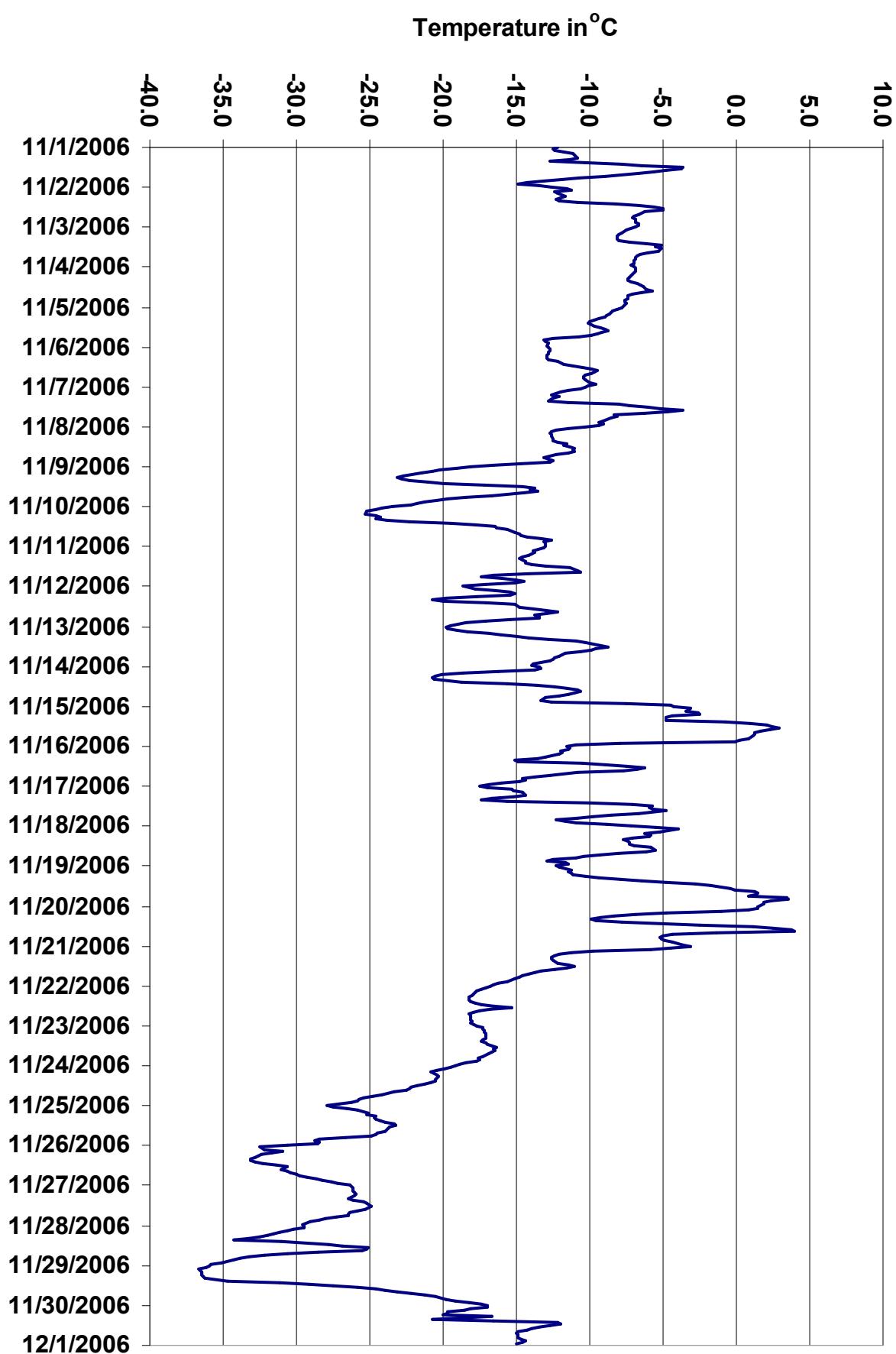


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

## PASZA - Evergreen Park - Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### Summary

Maximum 1-hr Average:	24.3	km/hr	20-Nov	0:00 1:00
Maximum 24-hr Value:	9.6	km/hr	24-Nov	

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageS	
	18.3	11.9	7.3	5.0	3.2	2.2	1.8		5.8 km/hr

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	100:00	101:00	102:00	103:00	104:00	105:00	106:00	107:00	108:00	109:00	110:00	111:00	112:00	113:00	114:00	115:00	116:00	117:00	118:00	119:00	120:00	121:00	122:00	123:00	124:00	125:00	126:00	127:00	128:00	129:00	130:00	131:00	132:00	133:00	134:00	135:00	136:00	137:00	138:00	139:00	140:00	141:00	142:00	143:00	144:00	145:00	146:00	147:00	148:00	149:00	150:00	151:00	152:00	153:00	154:00	155:00	156:00	157:00	158:00	159:00	160:00	161:00	162:00	163:00	164:00	165:00	166:00	167:00	168:00	169:00	170:00	171:00	172:00	173:00	174:00	175:00	176:00	177:00	178:00	179:00	180:00	181:00	182:00	183:00	184:00	185:00	186:00	187:00	188:00	189:00	190:00	191:00	192:00	193:00	194:00	195:00	196:00	197:00	198:00	199:00	200:00	201:00	202:00	203:00	204:00	205:00	206:00	207:00	208:00	209:00	210:00	211:00	212:00	213:00	214:00	215:00	216:00	217:00	218:00	219:00	220:00	221:00	222:00	223:00	224:00	225:00	226:00	227:00	228:00	229:00	230:00	231:00	232:00	233:00	234:00	235:00	236:00	237:00	238:00	239:00	240:00	241:00	242:00	243:00	244:00	245:00	246:00	247:00	248:00	249:00	250:00	251:00	252:00	253:00	254:00	255:00	256:00	257:00	258:00	259:00	260:00	261:00	262:00	263:00	264:00	265:00	266:00	267:00	268:00	269:00	270:00	271:00	272:00	273:00	274:00	275:00	276:00	277:00	278:00	279:00	280:00	281:00	282:00	283:00	284:00	285:00	286:00	287:00	288:00	289:00	290:00	291:00	292:00	293:00	294:00	295:00	296:00	297:00	298:00	299:00	300:00	301:00	302:00	303:00	304:00	305:00	306:00	307:00	308:00	309:00	310:00	311:00	312:00	313:00	314:00	315:00	316:00	317:00	318:00	319:00	320:00	321:00	322:00	323:00	324:00	325:00	326:00	327:00	328:00	329:00	330:00	331:00	332:00	333:00	334:00	335:00	336:00	337:00	338:00	339:00	340:00	341:00	342:00	343:00	344:00	345:00	346:00	347:00	348:00	349:00	350:00	351:00	352:00	353:00	354:00	355:00	356:00	357:00	358:00	359:00	360:00	361:00	362:00	363:00	364:00	365:00	366:00	367:00	368:00	369:00	370:00	371:00	372:00	373:00	374:00	375:00	376:00	377:00	378:00	379:00	380:00	381:00	382:00	383:00	384:00	385:00	386:00	387:00	388:00	389:00	390:00	391:00	392:00	393:00	394:00	395:00	396:00	397:00	398:00	399:00	400:00	401:00	402:00	403:00	404:00	405:00	406:00	407:00	408:00	409:00	410:00	411:00	412:00	413:00	414:00	415:00	416:00	417:00	418:00	419:00	420:00	421:00	422:00	423:00	424:00	425:00	426:00	427:00	428:00	429:00	430:00	431:00	432:00	433:00	434:00	435:00	436:00	437:00	438:00	439:00	440:00	441:00	442:00	443:00	444:00	445:00	446:00	447:00	448:00	449:00	450:00	451:00	452:00	453:00	454:00	455:00	456:00	457:00	458:00	459:00	460:00	461:00	462:00	463:00	464:00	465:00	466:00	467:00	468:00	469:00	470:00	471:00	472:00	473:00	474:00	475:00	476:00	477:00	478:00	479:00	480:00	481:00	482:00	483:00	484:00	485:00	486:00	487:00	488:00	489:00	490:00	491:00	492:00	493:00	494:00	495:00	496:00	497:00	498:00	499:00	500:00	501:00	502:00	503:00	504:00	505:00	506:00	507:00	508:00	509:00	510:00	511:00	512:00	513:00	514:00	515:00	516:00	517:00	518:00	519:00	520:00	521:00	522:00	523:00	524:00	525:00	526:00	527:00	528:00	529:00	530:00	531:00	532:00	533:00	534:00	535:00	536:00	537:00	538:00	539:00	540:00	541:00	542:00	543:00	544:00	545:00	546:00	547:00	548:00	549:00	550:00	551:00	552:00	553:00	554:00	555:00	556:00	557:00	558:00	559:00	560:00	561:00	562:00	563:00	564:00	565:00	566:00	567:00	568:00	569:00	570:00	571:00	572:00	573:00	574:00	575:00	576:00	577:00	578:00	579:00	580:00	581:00	582:00	583:00	584:00	585:00	586:00	587:00	588:00	589:00	590:00	591:00	592:00	593:00	594:00	595:00	596:00	597:00	598:00	599:00	600:00	601:00	602:00	603:00	604:00	605:00	606:00	607:00	608:00	609:00	610:00	611:00	612:00	613:00	614:00	615:00	616:00	617:00	618:00	619:00	620:00	621:00	622:00	623:00	624:00	625:00	626:00	627:00	628:00	629:00	630:00	631:00	632:00	633:00	634:00	635:00	636:00	637:00	638:00	639:00	640:00	641:00	642:00	643:00	644:00	645:00	646:00	647:00	648:00	649:00	650:00	651:00	652:00	653:00	654:00	655:00	656:00	657:00	658:00	659:00	660:00	661:00	662:00	663:00	664:00	665:00	666:00	667:00	668:00	669:00	670:00	671:00	672:00	673:00	674:00	675:00	676:00	677:00	678:00	679:00	680:00	681:00	682:00	683:00	684:00	685:00	686:00	687:00	688:00	689:00	690:00	691:00	692:00	693:00	694:00	695:00	696:00	697:00	698:00	699:00	700:00	701:00	702:00	703:00	704:00	705:00	706:00	707:00	708:00	709:00	710:00	711:00	712:00	713:00	714:00	715:00	716:00	717:00	718:00	719:00	720:00	721:00	722:00	723:00	724:00	725:00	726:00	727:00	728:00	729:00	730:00	731:00	732:00	733:00	734:00	735:00	736:00	737:00	738:00	739:00	740:00	741:00	742:00	743:00	744:00	745:00	746:00	747:00	748:00	749:00	750:00	751:00	752:00	753:00	754:00	755:00	756:00	757:00	758:00	759:00	760:00	761:00	762:00	763:00	764:00	765:00	766:00	767:00	768:00	769:00	770:00	771:00	772:00	773:00	774:00	775:00	776:00	777:00	778:00	779:00	780:00	781:00	782:00	783:00	784:00	785:00	786:00	787:00	788:00	789:00	790:00	791:00	792:00	793:00	794:00	795:00	796:00	797:00	798:00	799:00	800:00	801:00	802:00	803:00	804:00	805:00	806:00	807:00	808:00	809:00	810:00	811:00	812:00	813:00	814:00	815:00	816:00	817:00	818:00	819:00	820:00	821:00	822:00	823:00	824:00	825:00	826:00	827:00	828:00	829:00	830:00	831:00	832:00	833:00	834:00	835:00	836:00	837:00	838:00	839:00	840:00	841:00	842:00	843:00	844:00	845:00	846:00	847:00	848:00	849:00	850:00	851:00	852:00	853:00	854:00	855:00	856:00	857:00	858:00	859:00	860:00	861:00	862:00	863:00	864:00	865:00	866:00	867:00	868:00	869:00	870:00	871:00	872:00	873:00	874:00	875:00	876:00	877:00	878:00	879:00	880:00	881:00	882:00	883:00	884:00	885:00	886:00	887:00	888:00	889:00	890:00	891:00	892:00	893:00	894:00	895:00	896:00	897:00	898:00	899:00	900:00	901:00	902:00	903:00	904:00	905:00	906:00	907:00	908:00	909:00	910:00	911:00	912:00	913:00	914:00	915:00	916:00	917:00	918:00	919:00	920:00	921:00	922:00	923:00	924:00	925:00	926:00	927:00	928:00	929:00	930:00	931:00	932:00	933:00	934:00	935:00	936:00	937:00	938:00	939:00	940:00	941:00	942:00	943:00	944:00	945:00	946:00	947:00	948:00	949:00	950:00	951:00	952

PASZA - Evergreen Park - Vector Wind Speed Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

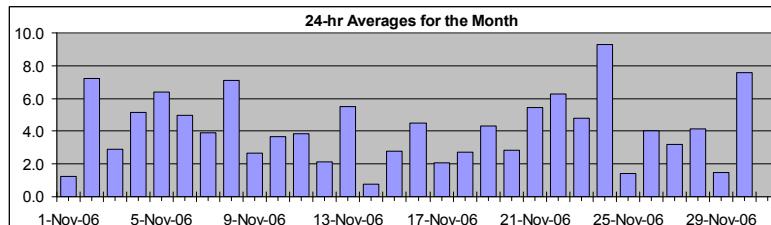
**Monitoring Dates:** November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

## Summary

Maximum 1-hr Average: 24.2 km/hr 20-Nov 0:00 1:00  
Maximum 24-hr Value: 9.3 km/hr 24-Nov



Calm Time:	27 hrs	4% calms	Operational Time:	693 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile	99	95	75	50
	25	5	1	AverageV
	18.0	11.7	7.1	4.8
	2.6	1.4	1.0	3.3 km/hr

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

Day	Mountain Standard Time																								Executive Mountain Drive												Power Failure											
	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-hr Vector Average	Daily Max																						
Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00																									
1-Nov-06	1	calm	2	3	2	3	4	2	3	4	2	3	2	7	7	7	6	5	4	3	2	3	6	6	1.2	6.9																						
2-Nov-06	6	5	5	5	6	7	8	8	7	9	9	9	8	8	7	8	8	9	8	8	6	6	7	7	7.2	9.3																						
3-Nov-06	6	6	6	5	5	4	4	4	5	5	4	2	4	4	4	4	4	2	3	2	2	2	2	2	2.9	6.3																						
4-Nov-06	1	1	2	3	3	4	4	4	4	6	6	7	7	7	7	8	7	8	7	6	7	5	5	4	5.2	8.3																						
5-Nov-06	5	6	8	8	8	7	6	8	8	9	9	10	10	9	12	7	6	5	3	3	4	2	3	5	6.4	11.5																						
6-Nov-06	6	6	6	6	8	7	6	5	7	9	10	9	8	9	8	5	5	3	2	calm	1	4	4	2	5.0	9.7																						
7-Nov-06	7	5	2	1	1	2	2	calm	calm	2	3	5	7	5	5	6	3	2	4	4	10	9	13	12	3.9	12.8																						
8-Nov-06	12	12	13	13	10	9	9	9	8	9	11	10	9	8	9	8	5	calm	2	2	1	2	2	1	7.1	13.1																						
9-Nov-06	2	3	3	2	2	2	3	3	3	2	3	3	4	5	5	4	2	3	2	2	3	3	3	2	2.7	5.5																						
10-Nov-06	3	1	1	2	1	1	1	calm	calm	2	2	2	2	5	4	4	6	6	5	6	6	7	8	8	3.7	8.1																						
11-Nov-06	7	6	9	8	10	8	7	6	7	5	7	6	5	3	3	2	4	3	2	3	3	2	calm	1	3.9	9.5																						
12-Nov-06	1	1	3	2	5	2	calm	2	1	calm	2	3	4	3	4	2	3	1	3	3	4	1	1	3	2.1	4.7																						
13-Nov-06	calm	1	2	1	2	2	3	4	5	6	6	5	6	9	10	12	13	9	11	10	9	8	7	8	5.5	12.7																						
14-Nov-06	7	6	6	2	1	calm	1	3	3	3	3	3	3	3	3	3	1	calm	2	2	4	6	6	6	0.7	6.5																						
15-Nov-06	6	7	6	6	6	6	5	4	6	10	9	7	7	6	7	8	7	7	6	5	4	8	21	21	2.8	21.1																						
16-Nov-06	18	15	16	17	15	9	7	8	4	5	5	5	4	1	6	6	5	3	2	3	4	2	1	1	4.5	17.7																						
17-Nov-06	calm	1	3	3	3	6	calm	2	2	2	2	2	4	4	4	2	3	4	3	2	3	2	2	3	2.1	6.1																						
18-Nov-06	3	4	4	3	1	6	10	8	6	7	7	7	6	6	6	6	4	3	2	calm	1	2	2	2	2.7	10.0																						
19-Nov-06	1	1	2	1	2	3	2	calm	calm	2	2	4	5	5	4	3	4	5	15	24	22	18	17	24	4.3	23.9																						
20-Nov-06	24	23	14	7	2	calm	calm	2	3	2	1	3	3	2	2	2	2	calm	3	2	2	3	1	5	2.8	24.2																						
21-Nov-06	5	4	8	16	12	15	11	9	1	3	6	5	6	8	11	10	7	8	7	8	7	10	8	8	5.5	15.6																						
22-Nov-06	6	7	7	8	8	7	6	6	6	5	5	7	7	7	8	7	6	5	6	7	6	6	3	3	6.3	8.0																						
23-Nov-06	3	3	6	4	5	4	4	4	3	5	5	7	7	8	9	8	6	3	4	5	6	9	12	10	4.8	11.7																						
24-Nov-06	10	10	9	9	8	9	11	9	9	10	13	13	14	14	14	12	9	8	6	7	6	6	5	3	9.3	14.1																						
25-Nov-06	2	2	3	3	2	2	calm	2	2	2	4	3	4	5	5	4	3	2	calm	2	1	1	2	3	1.4	5.3																						
26-Nov-06	2	2	3	4	4	4	5	7	7	7	6	6	6	5	5	4	3	3	3	4	2	2	2	calm	4.0	7.1																						
27-Nov-06	5	4	6	8	6	6	7	7	7	6	5	5	6	6	7	6	4	4	5	7	6	6	7	7	3.2	7.5																						
28-Nov-06	7	9	7	8	8	8	7	8	3	3	3	3	3	3	4	4	3	2	2	2	2	1	2	1	4.2	8.7																						
29-Nov-06	1	2	1	2	2	1	calm	1	2	2	2	4	2	2	2	2	2	1	4	calm	2	2	2	4	1.5	4.0																						
30-Nov-06	5	7	7	3	1	3	calm	3	2	9	13	10	13	13	11	11	10	10	10	9	9	9	9	4	7.6	13.2																						

## PASZA - Evergreen Park - Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary



Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs									
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%									
Percentile	99	95	75	50	25	5	1	Average					
	352.4	333.6	300.4	249.9	65.4	24.1	4.8		329 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	1:00 2:00	2:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	
1-Nov-06	270	248	244	218	239	215	223	234	221	240	339	349	324	55	58	62	67	57	55	36	349	28	68	67	38	NE
2-Nov-06	69	82	75	65	71	81	76	76	75	76	91	93	86	94	86	61	65	64	66	74	80	78	85	86	78	ENE
3-Nov-06	84	86	86	74	64	58	55	53	65	71	101	142	330	14	17	344	318	10	38	28	357	352	329	305	48	NE
4-Nov-06	338	323	28	20	41	46	51	50	58	63	67	64	60	60	66	70	60	55	56	48	37	29	26	9	50	NE
5-Nov-06	352	313	322	312	302	310	292	280	310	310	316	300	313	314	326	313	321	308	326	316	322	278	56	65	315	NW
6-Nov-06	57	69	67	62	60	64	71	62	57	62	72	67	58	69	62	53	42	13	36	167	274	339	306	294	53	NE
7-Nov-06	277	203	205	63	78	32	48	348	60	324	284	275	268	301	348	335	270	344	0	351	338	328	328	319	322	NW
8-Nov-06	310	309	303	310	301	297	297	294	299	307	313	322	324	300	288	323	319	255	191	41	254	144	14	313	306	NW
9-Nov-06	312	311	313	317	281	320	318	310	287	275	310	316	327	344	17	24	340	287	279	303	302	284	292	282	316	NW
10-Nov-06	215	286	287	209	290	323	276	329	308	36	253	298	225	202	263	292	251	249	240	252	281	261	263	273	263	W
11-Nov-06	277	287	264	273	265	272	269	273	273	303	323	291	286	265	249	281	32	20	38	64	50	30	336	2	291	WNW
12-Nov-06	293	310	272	75	239	271	191	215	346	230	329	317	288	281	355	13	278	284	320	299	256	291	227	202	282	WNW
13-Nov-06	89	324	355	239	260	306	247	311	28	27	10	7	344	324	311	321	318	301	308	305	300	297	273	280	315	NW
14-Nov-06	276	270	272	219	228	358	21	54	7	64	44	27	39	12	64	37	48	21	265	20	354	200	181	177	357	N
15-Nov-06	178	173	172	165	142	130	56	66	78	120	125	122	110	128	85	74	69	75	79	64	31	334	317	301	90	E
16-Nov-06	304	300	290	280	292	276	273	269	243	210	251	223	205	128	66	67	59	28	347	308	278	274	72	13	289	WNW
17-Nov-06	19	311	300	247	298	190	225	77	4	15	30	295	322	337	316	292	316	313	255	259	222	73	246	284	297	WNW
18-Nov-06	274	244	235	184	120	73	71	80	69	73	72	68	76	53	62	57	43	42	109	300	308	266	321	221	67	ENE
19-Nov-06	321	317	232	223	242	243	334	187	85	77	85	86	83	95	86	81	142	162	254	255	255	247	239	252	241	WSW
20-Nov-06	243	238	237	234	83	177	39	177	61	71	29	282	2	255	2	336	354	297	4	314	314	339	246	253	260	W
21-Nov-06	246	214	61	60	55	49	47	47	12	204	214	247	276	330	34	39	49	42	35	40	43	63	60	70	44	NE
22-Nov-06	65	56	55	50	47	53	67	71	71	67	66	60	53	43	58	65	62	55	57	60	51	40	26	11	56	NE
23-Nov-06	25	17	40	60	43	20	43	38	16	21	356	331	330	320	327	329	328	317	299	307	285	297	316	312	339	NNW
24-Nov-06	321	313	302	303	301	302	312	310	305	312	313	307	317	309	316	314	306	290	295	268	273	272	258	289	305	NW
25-Nov-06	270	283	317	288	289	352	98	207	195	233	298	11	26	39	34	40	46	311	349	3	232	286	277	295	339	NNW
26-Nov-06	248	270	290	260	280	265	263	270	265	266	262	269	267	272	266	268	320	287	304	313	278	263	240	196	270	W
27-Nov-06	58	38	35	37	44	49	46	40	43	38	34	12	27	339	314	306	297	297	253	264	264	263	267	265	354	N
28-Nov-06	268	269	264	262	270	268	269	265	255	209	240	262	303	313	308	315	329	306	308	306	293	295	257	293	276	W
29-Nov-06	330	266	267	285	229	249	294	230	2	344	236	249	289	254	276	322	27	273	62	340	32	88	291	275	295	WNW
30-Nov-06	256	261	246	251	248	226	54	283	292	331	330	310	313	303	305	301	289	279	278	284	302	322	281	295	WNW	

Hourly Avg 293 284 296 306 318 337 0 338 5 12 355 336 339 344 359 360 356 338 329 316 304 308 304 291

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

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

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

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	66.1	53.1	29.2	16.9	12.3	8.0	5.6

#### Status Flag Characters

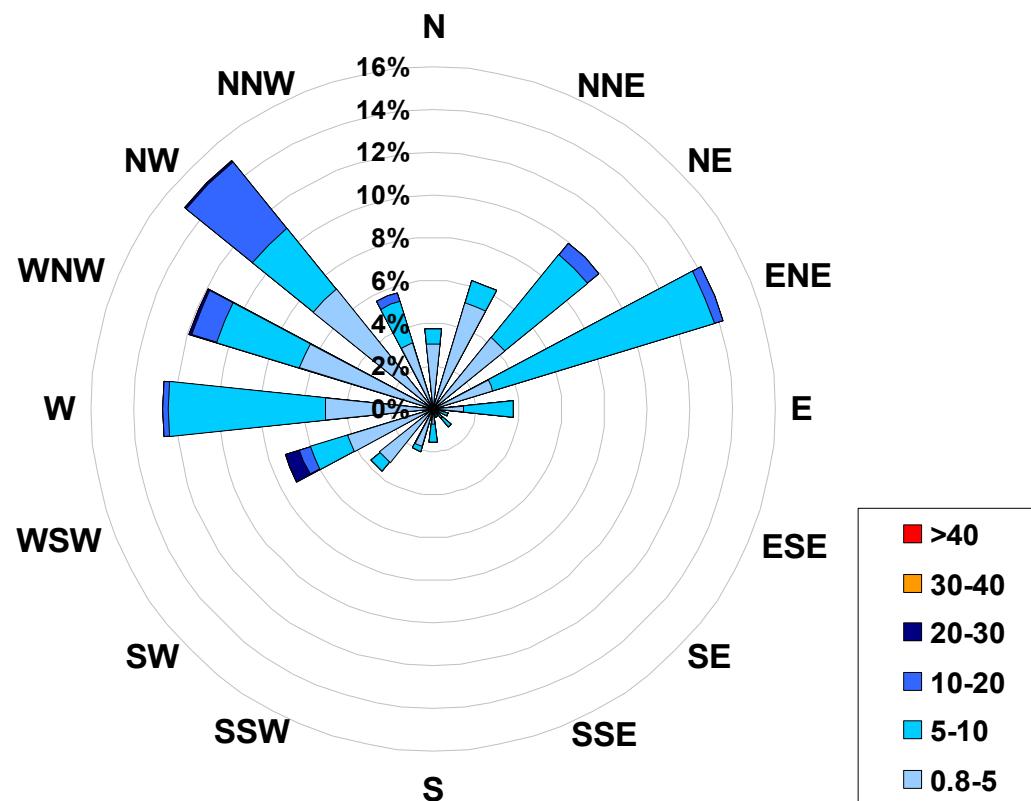
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	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 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-Nov-06	37	59	22	12	20	17	12	35	27	15	46	22	36	15	15	14	11	8	7	9	16	22	6	5	
2-Nov-06	6	15	15	9	12	12	9	10	11	14	15	18	18	18	23	13	15	10	11	11	11	16	17	13	
3-Nov-06	14	14	18	17	14	17	14	11	11	21	28	62	28	25	28	16	16	24	15	25	29	23	20	19	
4-Nov-06	36	22	23	18	13	11	13	11	14	15	19	15	15	16	17	13	12	10	11	11	12	17	17	23	
5-Nov-06	19	13	11	13	14	13	13	11	15	19	15	17	14	21	11	15	14	14	34	27	17	34	29	16	
6-Nov-06	12	15	14	15	11	16	22	26	15	18	15	14	18	15	18	28	20	26	48	49	51	51	53	53	
7-Nov-06	26	43	46	60	43	43	54	81	76	57	35	24	14	26	24	28	34	50	29	36	9	14	10	12	
8-Nov-06	13	13	12	13	15	11	12	13	13	14	16	17	15	19	15	16	16	43	43	40	51	42	32	33	
9-Nov-06	17	17	12	16	19	14	12	13	18	22	15	17	10	13	18	15	13	11	18	18	12	12	25	13	
10-Nov-06	16	30	38	28	26	49	22	53	42	59	37	30	46	14	20	17	8	9	11	13	14	7	7	9	
11-Nov-06	13	12	5	8	7	8	7	10	9	14	13	20	17	23	30	19	15	29	34	21	21	23	62	38	
12-Nov-06	49	57	33	45	22	44	59	48	32	79	42	27	30	29	28	42	17	50	32	36	11	53	37	22	
13-Nov-06	39	22	22	9	15	27	17	22	10	9	15	19	16	12	14	12	12	14	12	11	12	13	10	9	
14-Nov-06	15	9	9	53	50	39	40	23	25	38	34	32	31	51	48	43	23	57	26	32	26	23	8	8	
15-Nov-06	8	8	21	11	16	16	11	17	7	10	13	15	16	26	9	9	9	12	26	17	12	10	13	10	
16-Nov-06	13	15	11	7	12	8	8	10	16	20	18	19	39	58	18	15	9	20	17	21	22	30	64	37	
17-Nov-06	62	51	29	28	43	36	53	54	62	31	32	41	36	40	26	40	35	18	30	26	41	28	52	38	
18-Nov-06	37	11	9	58	48	20	11	16	16	14	17	16	19	19	19	13	18	31	37	63	66	46	33	56	
19-Nov-06	51	48	46	71	57	28	32	55	67	66	34	37	17	24	23	48	32	20	14	6	7	8	8	6	
20-Nov-06	6	5	6	39	36	70	37	30	50	76	32	35	34	38	44	24	45	53	39	40	44	20	48	23	
21-Nov-06	12	24	22	9	11	11	11	14	47	38	9	16	15	15	9	12	11	8	11	10	12	11	11	16	
22-Nov-06	19	12	12	11	12	11	16	17	17	15	19	16	16	21	12	14	13	16	10	10	11	11	21	21	
23-Nov-06	17	18	10	21	16	19	20	22	17	17	21	12	10	19	16	15	10	20	8	15	12	13	11	13	
24-Nov-06	13	11	11	14	13	12	12	13	15	13	13	14	12	12	13	15	12	10	12	7	9	10	8	13	
25-Nov-06	12	19	8	12	20	35	31	48	23	28	23	25	28	17	21	23	22	22	39	10	14	33	31	14	
26-Nov-06	17	11	14	12	16	11	10	17	8	6	8	8	8	12	8	14	30	22	14	13	19	19	30	34	
27-Nov-06	14	16	10	10	15	13	14	13	11	13	18	20	21	20	17	14	12	12	10	6	10	23	5	6	
28-Nov-06	7	7	8	8	7	6	9	9	18	15	17	28	29	18	12	12	17	20	45	30	19	31	16	21	
29-Nov-06	32	23	32	25	27	41	40	48	33	25	15	19	21	32	24	26	55	53	33	44	51	42	35	21	
30-Nov-06	14	15	23	61	47	36	59	34	54	9	10	17	14	12	13	11	13	11	9	10	14	11	16	11	

Hourly Max	62	59	46	71	57	70	59	81	76	79	46	62	46	58	48	48	55	57	48	48	63	66	53	64	56
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**1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for November 2006**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	357
5	to	10	301
10	to	20	55
20	to	30	7
30	to	40	0
>	40		0
Total Non-Zero Values			720

# PASZA – Smoky Heights Station

## Monthly Summary Tables, Graphs, and Roses

# PASZA - Smoky Heights - Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 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:	13.9 ppb 8-Nov 14:00 15:00
Maximum 24-hr Average:	2.3 ppb 29-Nov

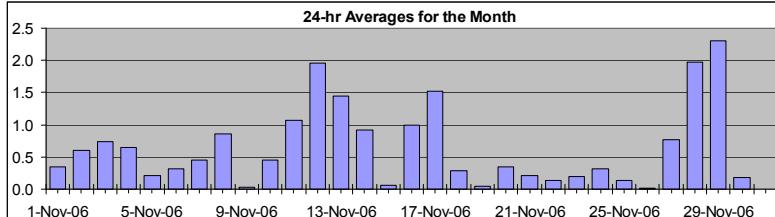
AIC Time:	31 hrs	Operational Time:	685 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 4.1	95 2.3	75 1.0	50 0.2	25 0.0	5 0.0	1 0.0	Average 0.6 ppb	Median 0.2 ppb

Day	Mountain Standard Time																									24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Nov-06	0	0	1	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	A	0	1	0	0.3	0.9	
2-Nov-06	0	0	1	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	1	A	1	1	1	2	1	0.6	1.6	
3-Nov-06	1	1	1	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1	1	A	0	1	0	0	1	0.7	1.4	
4-Nov-06	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	0	A	1	0	0	0	0	1	0.6	1.4	
5-Nov-06	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	A	0	0	0	0	1	0	0.2	0.8		
6-Nov-06	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	2.0	
7-Nov-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	4	3	2	0	0	0	1	0.5	3.7	
8-Nov-06	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	14	2	0	0	0	0	0	0.9	13.9	
9-Nov-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	0.4	
10-Nov-06	0	0	0	0	0	0	0	0	0	0	0	1	A	1	0	0	1	0	1	1	0	1	2	1	0	0.5	1.8	
11-Nov-06	0	0	1	2	1	1	0	1	1	A	0	1	1	1	0	1	0	1	3	4	2	1	0	2	1.1	4.2		
12-Nov-06	1	1	0	1	0	1	1	1	0	A	0	12	8	6	0	1	1	2	2	1	1	1	1	1	1	2.0	12.1	
13-Nov-06	1	0	2	1	2	0	1	1	A	1	2	1	1	1	0	2	2	1	3	2	2	2	2	2	1.5	2.5		
14-Nov-06	3	2	2	1	1	2	2	A	1	2	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0.9	2.7	
15-Nov-06	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	0.1	0.4	
16-Nov-06	1	0	0	1	1	A	1	1	0	1	2	1	2	3	2	2	2	1	0	1	1	1	0	0	0	1.0	2.6	
17-Nov-06	1	1	0	1	A	1	0	1	2	1	1	1	2	2	1	3	4	4	2	2	2	1	1	1	1.5	4.2		
18-Nov-06	1	1	1	A	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3	
19-Nov-06	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.0	0.7	
20-Nov-06	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0.3	2.1	
21-Nov-06	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	0	0.2	1.2	
22-Nov-06	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.9
23-Nov-06	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	A	0	0	0	0.2	1.0	
24-Nov-06	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	A	1	0	0.3	1.3	
25-Nov-06	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	A	0	0	0	0.1	1.0	
26-Nov-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.2	
27-Nov-06	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	2	1	2	A	2	2	1	2	1	0.8	2.0	
28-Nov-06	2	2	2	2	2	2	2	1	0	1	1	2	2	3	3	A	2	2	2	3	2	2	2	2	2	2.0	3.3	
29-Nov-06	1	1	2	2	2	3	1	2	3	4	C	C	C	C	A	5	4	3	2	2	2	1	0	1	2.3	4.7		
30-Nov-06	0	0	0	0	0	A	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3	

Hourly Avg	0.6	0.5	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.7	0.8	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.5	0.6	
Hourly Max	2.7	2.1	2.4	2.3	2.4	3.0	1.8	2.2	2.9	3.7	3.0	12.1	8.4	6.2	13.9	3.7	4.7	4.1	3.4	4.2	3.0	2.2	2.4	2.3

## HOURLY AVERAGE TABLE

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



## Status Flag Characters

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

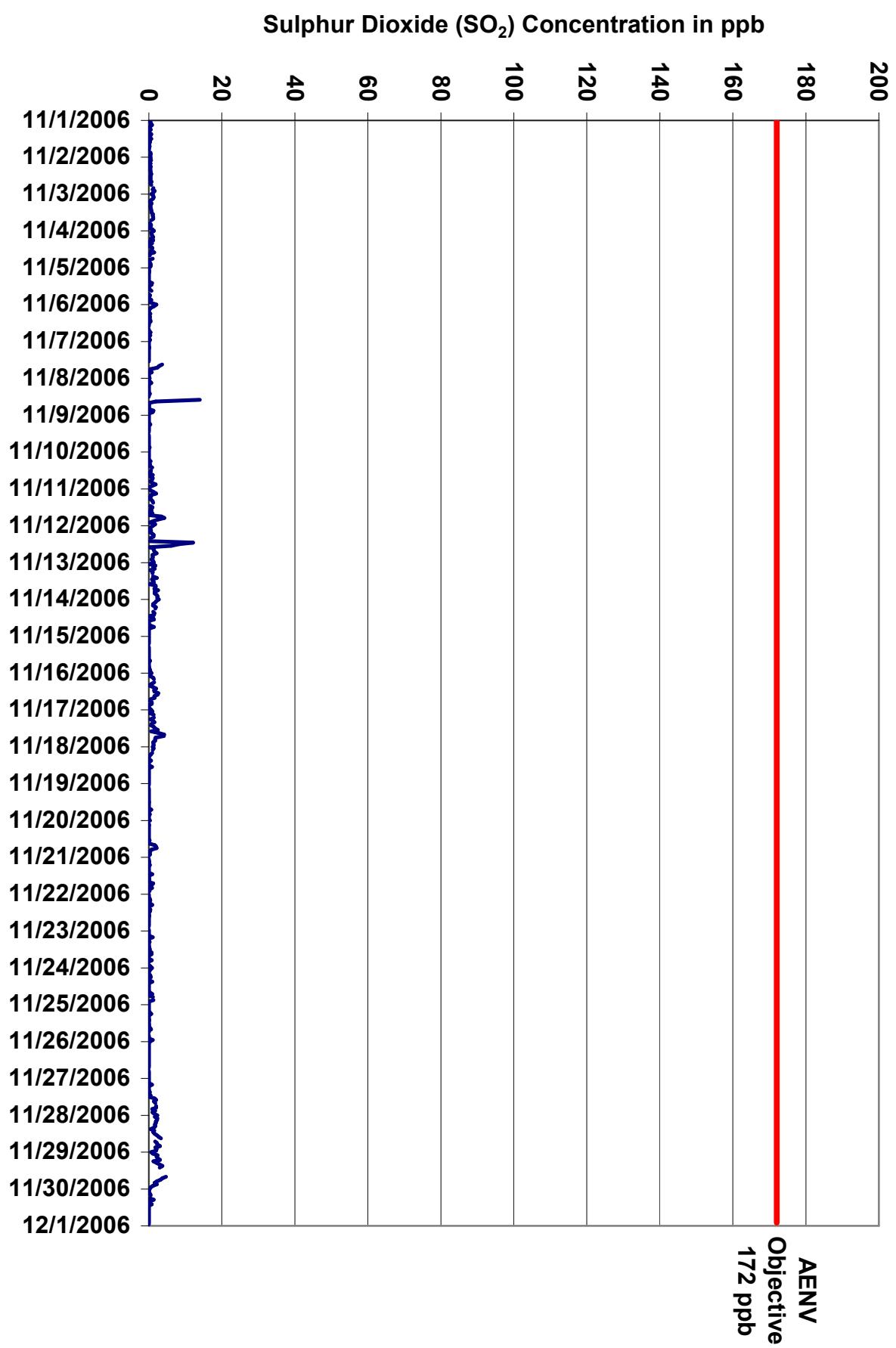


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

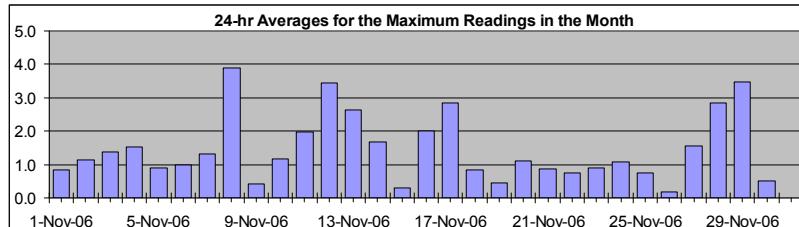
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	67.4	ppb	8-Nov	14:00 15:00
Maximum 24-hr Value:	3.9	ppb	8-Nov	



AIC Time:	31 hrs	Operational Time:	685 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	6.4 3.5 1.9 1.0 0.5 0.0 0.0	1.4 ppb	1.0 ppb

#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily 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	Average	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0.8	
1-Nov-06	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1	A	1	1	1	1	1.3
2-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2.1	
3-Nov-06	1	2	2	2	1	1	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1.4	
4-Nov-06	2	1	2	2	2	2	2	1	1	1	1	2	2	1	2	2	2	1	1	1	1	1	1	1	1.5	
5-Nov-06	1	1	1	0	0	1	0	0	0	1	2	2	2	1	0	2	2	A	2	1	1	1	1	1	2.2	
6-Nov-06	3	2	2	1	0	0	2	0	2	1	1	1	0	0	1	A	0	0	2	1	1	1	0	0	0.9	
7-Nov-06	0	0	0	1	1	0	0	0	0	0	0	1	0	0	1	A	8	5	4	1	1	1	2	1	1.0	
8-Nov-06	1	0	1	1	1	0	1	1	0	0	1	0	0	0	0	A	67	5	1	1	0	1	0	3	3	1
9-Nov-06	0	1	1	0	0	1	1	0	1	0	0	1	A	0	1	0	1	0	0	0	0	1	1	0	0.4	
10-Nov-06	0	0	1	0	0	0	2	1	1	1	2	A	1	1	1	2	1	1	2	1	1	1	3	2	1.2	
11-Nov-06	0	1	3	3	1	1	1	2	2	A	2	2	2	1	1	2	1	1	6	6	3	3	1	3	2.0	
12-Nov-06	2	1	1	2	2	2	2	2	1	A	1	18	13	10	1	3	3	3	3	1	2	2	1	2	18.3	
13-Nov-06	2	1	3	3	4	2	2	2	A	2	3	2	3	3	2	3	3	2	4	2	2	3	4	4	2.6	
14-Nov-06	3	3	3	2	2	2	3	A	2	2	2	1	2	2	1	1	0	2	3	0	0	0	0	0	1.7	
15-Nov-06	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0.3	
16-Nov-06	1	2	1	2	2	A	3	1	1	2	3	3	2	5	4	2	3	3	1	1	1	1	1	1	1	4.7
17-Nov-06	2	2	1	3	A	3	1	3	2	2	2	2	4	4	2	5	6	5	3	3	3	2	3	2	6.4	
18-Nov-06	2	2	2	A	2	1	1	1	1	2	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0.8	
19-Nov-06	1	1	A	0	0	0	0	0	0	1	0	1	1	0	2	0	0	0	1	1	0	0	0	0.5		
20-Nov-06	2	A	2	1	1	0	0	0	1	0	0	1	1	0	1	1	4	3	3	1	1	1	1	0	1.1	
21-Nov-06	A	1	1	1	1	1	1	0	0	0	0	2	0	0	1	1	0	2	2	2	1	A	0	0.9		
22-Nov-06	1	1	0	1	1	1	1	2	1	1	2	1	0	1	1	1	0	0	0	0	0	A	0	0.8		
23-Nov-06	1	0	0	2	2	1	1	1	0	0	0	1	1	1	1	2	0	1	1	1	1	A	1	1.8		
24-Nov-06	2	1	1	0	1	2	2	0	2	2	1	1	0	1	1	0	2	2	0	2	A	2	0	1	2.3	
25-Nov-06	0	1	0	1	0	2	2	0	0	0	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0.8	
26-Nov-06	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	
27-Nov-06	0	0	0	1	2	0	0	1	1	2	1	1	1	2	3	2	3	A	4	4	1	3	2	2	3.8	
28-Nov-06	3	3	3	3	3	3	3	2	2	2	2	2	2	2	3	3	4	A	3	3	4	3	3	3	4.4	
29-Nov-06	1	3	3	3	4	4	2	3	4	5	4	C	C	C	A	7	7	4	3	3	3	2	1	3.5		
30-Nov-06	1	1	0	1	1	A	1	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	

Hourly Avg	1.3	1.2	1.3	1.2	1.1	1.1	1.2	1.0	1.0	1.2	1.2	1.7	1.5	1.7	3.6	1.8	1.8	1.8	1.7	1.3	1.3	1.4	1.1	1.3	
Hourly Max	3.3	3.1	3.5	3.4	3.8	4.2	2.9	2.8	4.0	4.8	3.9	18.3	13.3	10.5	67.4	8.5	7.1	6.6	5.8	5.6	4.4	3.4	3.6	4.0	

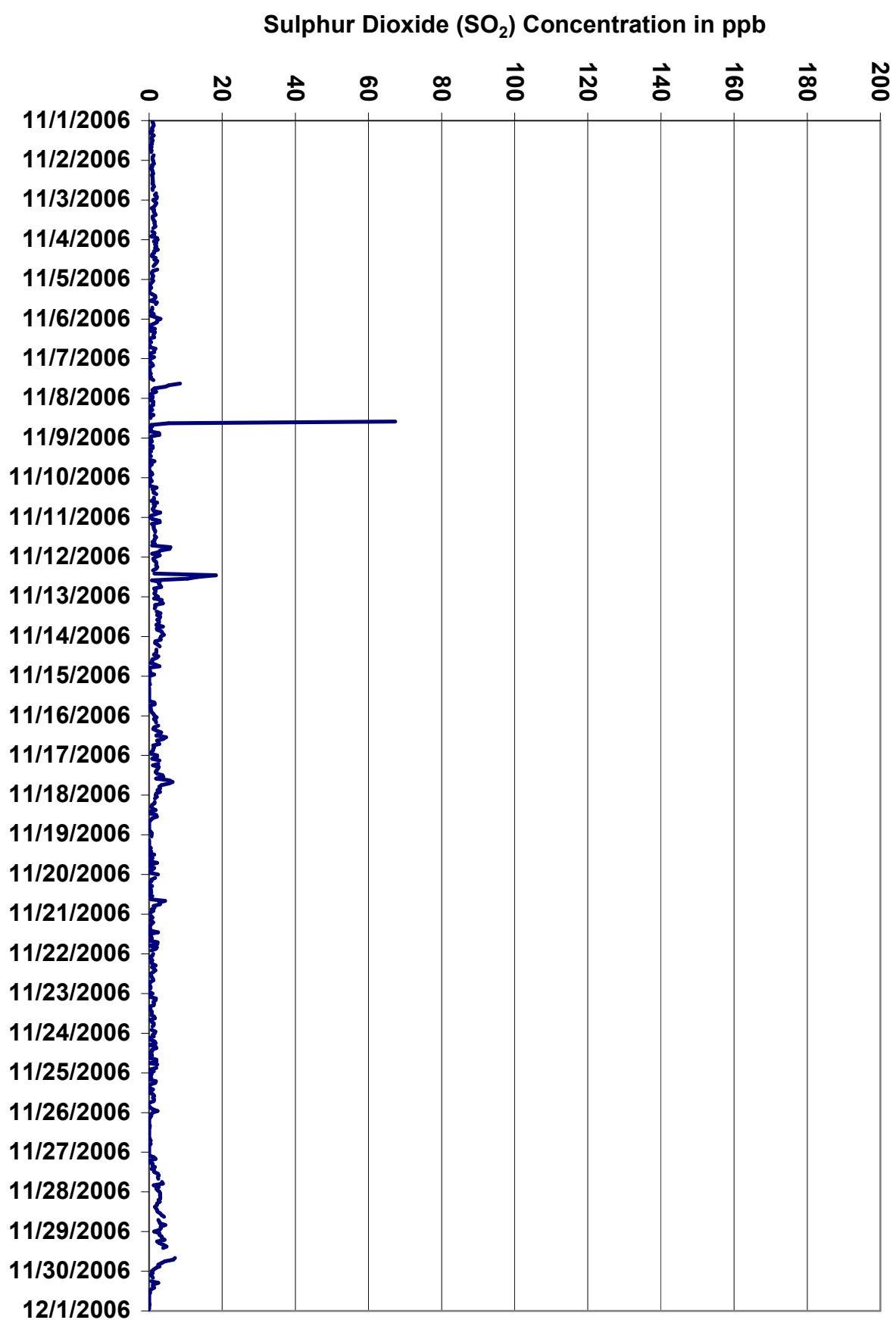
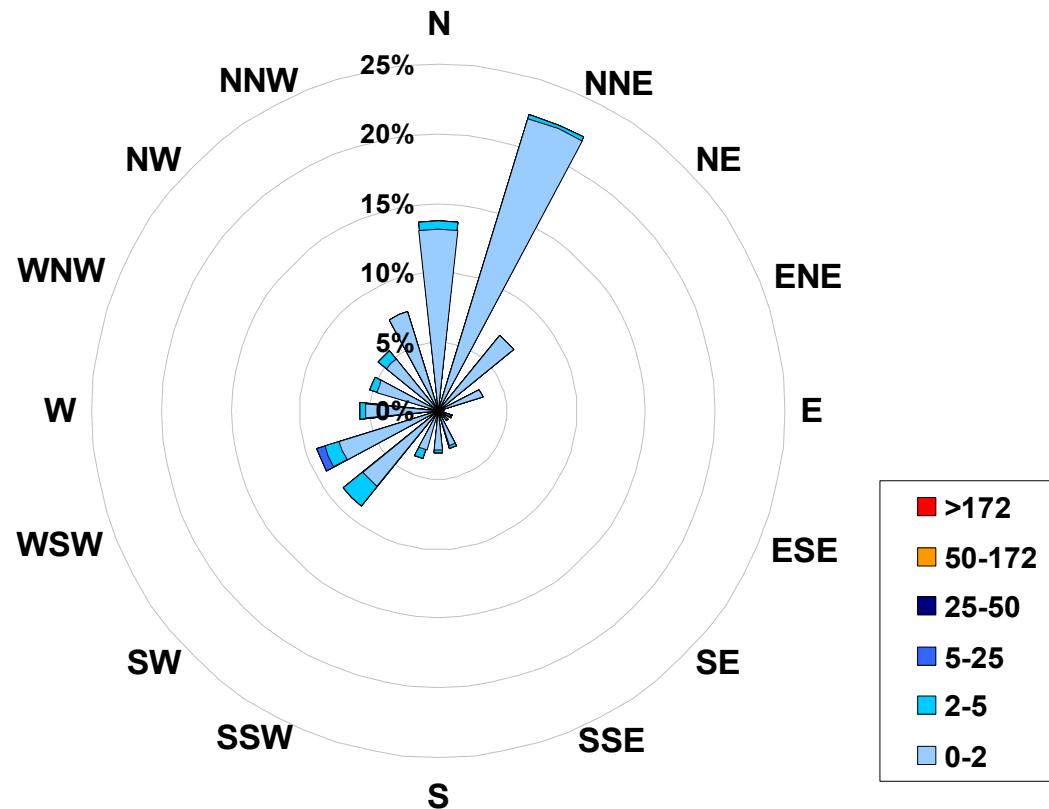


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	635
2	to	5	46
5	to	25	4
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			685

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

Station: Smoky Heights  
Station Owner: PASZA

**Monitoring Dates:** November 1, 2006 to December 1, 2006

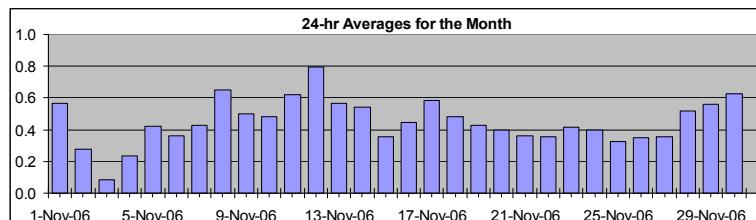
**Objective Limit:** Alberta Environment: 1-hr na ppb 24-hr na ppb  
**Summary**

Maximum 1-hr Average: 4.5 ppb 8-Nov 14:00 15:00  
Maximum 24-hr Value: 0.8 ppb 12-Nov

AIC Time:	31 hrs				Operational Time:			685 hrs	
Calibration Time:	4 hrs				AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	Average	Median
	0.9	0.7	0.5	0.4	0.3	0.2	0.0	0.4 ppb	0.4 ppb

## HOURLY AVERAGE TABLE

## Total Reduced Sulphur (TRS)



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## Status Flag Characters

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

Day Mountain Standard Time

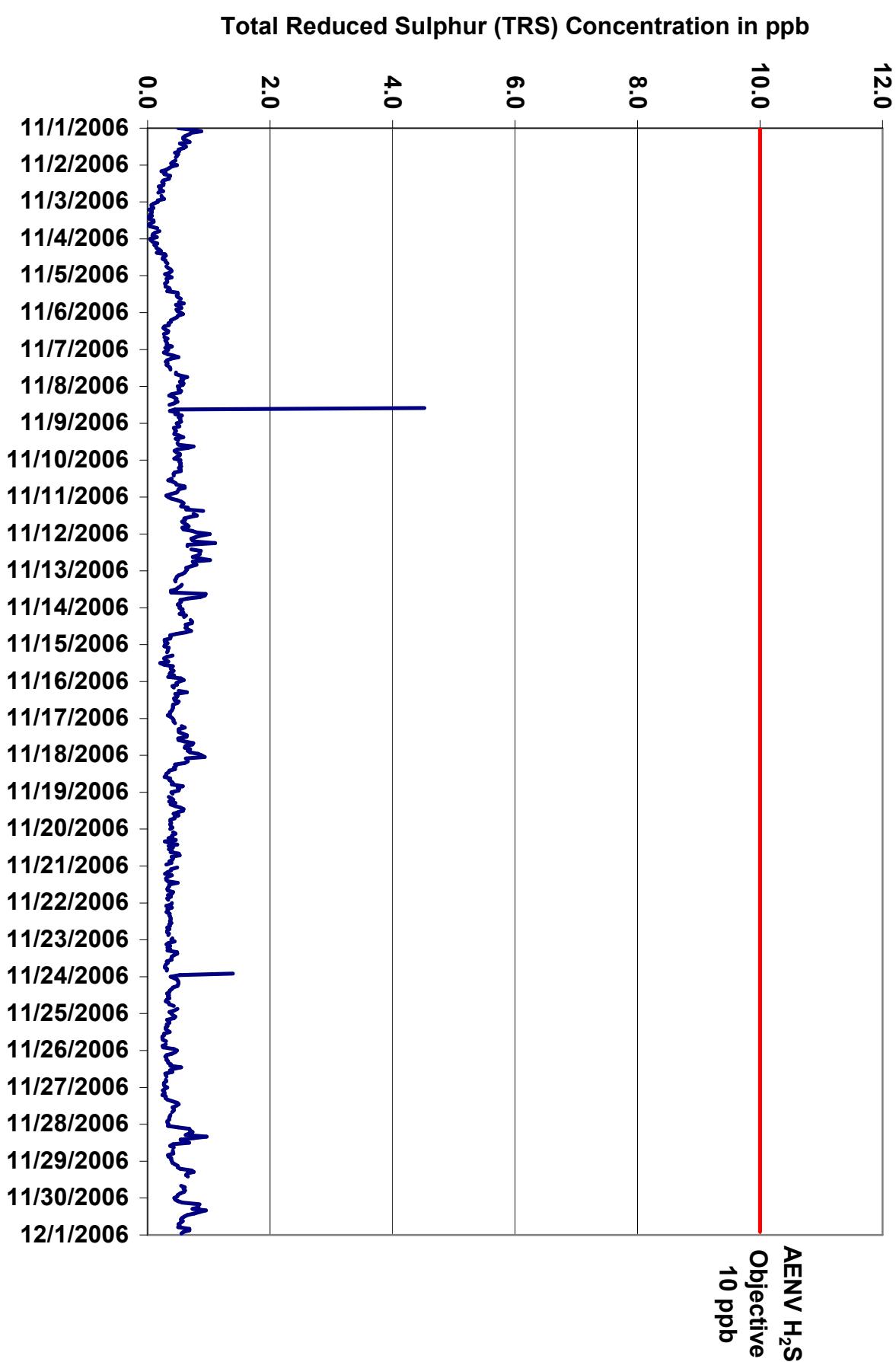


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

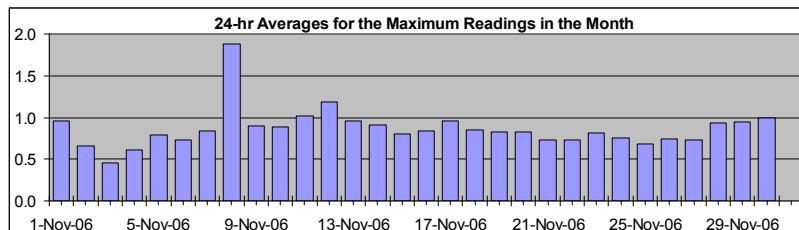
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	23.6	ppb	8-Nov	14:00 15:00
Maximum 24-hr Value:	1.9	ppb	8-Nov	



AIC Time:	31 hrs	Operational Time:	685 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	1.5 1.2 0.9 0.8 0.7 0.6 0.4	0.9 ppb	0.8 ppb

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00				
1-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.5	
2-Nov-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	0.7	0.9		
3-Nov-06	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	A	1	1	1	0	0.5	0.6	
4-Nov-06	0	0	0	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.6	0.8		
5-Nov-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	1.0		
6-Nov-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	0.7	0.9		
7-Nov-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		
8-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	24	1	1	1	1	1.9	23.6	
9-Nov-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	0.9	1.3	
10-Nov-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	0.9	1.1	
11-Nov-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	1.0	1.4	
12-Nov-06	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.2	1.6	
13-Nov-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	1.0	1.4	
14-Nov-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	0.9	1.2	
15-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	0.8	1.5	
16-Nov-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	0.8	1.0	
17-Nov-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	1.0	1.3	
18-Nov-06	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.4	
19-Nov-06	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0	
20-Nov-06	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0.8	1.5	
21-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	0.9	
22-Nov-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	0.7	1.0	
23-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	0.8	2.2	
24-Nov-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	0.8	1.0	
25-Nov-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	0.7	0.9	
26-Nov-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	0.7	0.9	
27-Nov-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	0.7	0.9	
28-Nov-06	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.6	
29-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	A	1	1	1	1	1	0.9	1.2	
30-Nov-06	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	1.5	

Hourly Avg	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.8	0.8	
Hourly Max	1.6	1.4	1.5	1.1	1.2	1.2	1.6	1.2	1.6	1.4	1.1	1.2	1.2	1.2	1.2	23.6	1.4	1.5	1.5	1.2	1.1	1.2	1.2	2.2	1.3

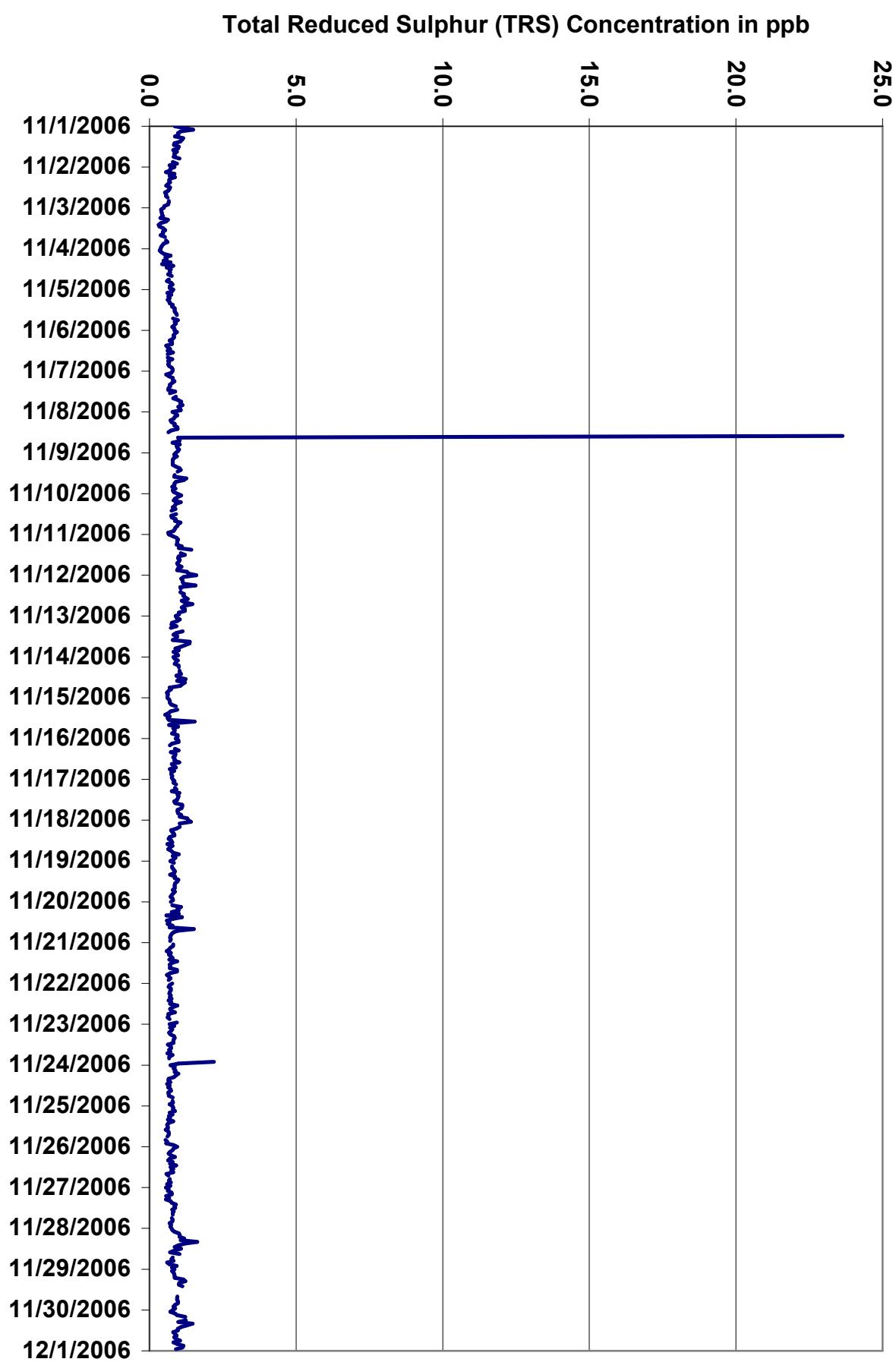
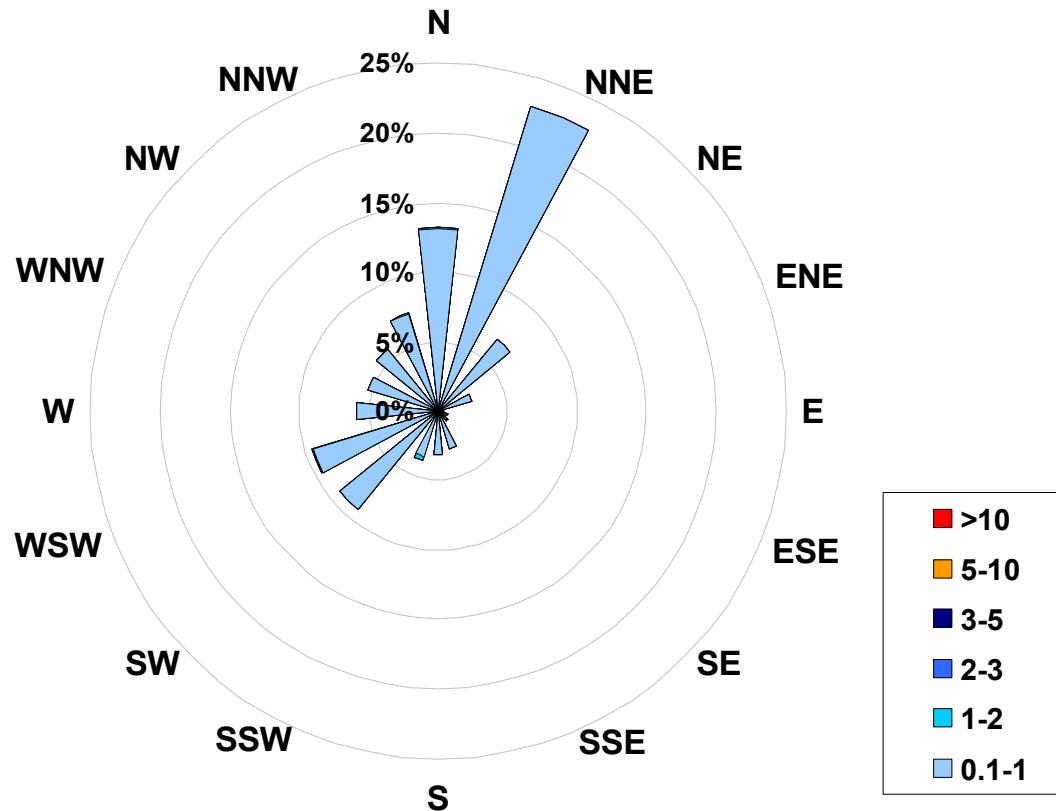


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	680
1	to	2	4
2	to	3	0
3	to	5	1
5	to	10	0
	>	10	0
Total Non-Zero Values			685

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

Station: Smoky Heights  
Station Owner: PASZA

## **HOURLY AVERAGE TABLE**

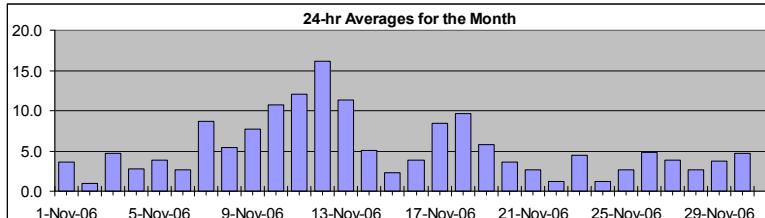
#### **Particulate Matter (PM<sub>2.5</sub>)**

**Monitoring Dates:** November 1, 2006 to December 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: 51.2 µg/m<sup>3</sup> 20-Nov 16:00 17:00  
Maximum 24-hr Value: 16.2 µg/m<sup>3</sup> 12-Nov



## Status Flag Characters

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

39.3 18.8 7.2 2.7 1.1 0.0 0.0 3.4 3  $\mu\text{g}/\text{m}^3$  4.5  $\mu\text{g}/\text{m}^3$

## **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

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
----------	------	------	------	------	------	------	------	------	------	-------	-------	-------

1-Nov-06 3 7 5 3 6 5 4 3 5 6 7 8

Hourly Avg	6.5	5.9	5.2	3.5	3.2	3.5	3.7	4.1	6.8	6.4	5.3	5.2	4.3	4.6	3.8	4.1	7.2	9.0	7.5	7.3	7.1	5.2	4.9	4.8
Hourly Max	42.2	45.4	39.7	13.8	13.8	13.5	15.4	17.7	36.7	25.3	15.1	14.7	24.3	20.3	12.9	14.1	51.2	37.8	36.6	48.5	44.7	21.2	44.9	48.6

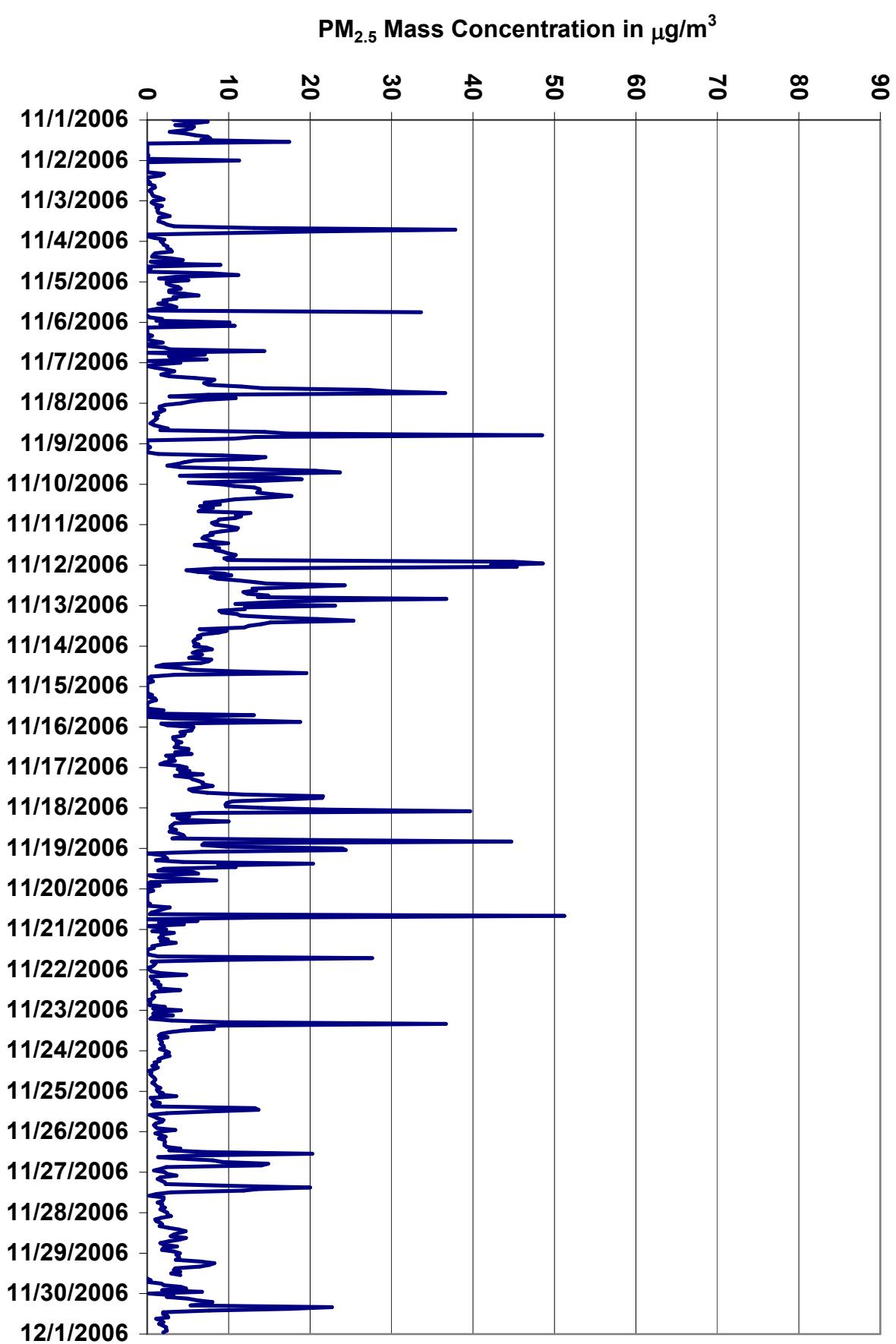


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

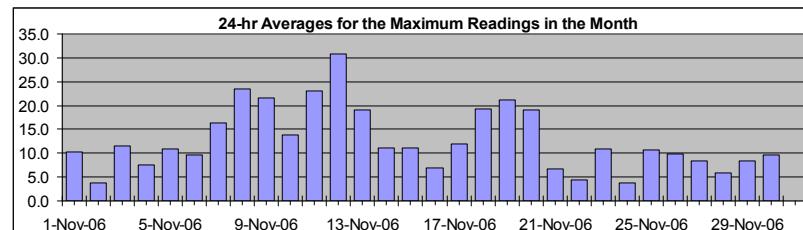
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Average:	256.5	$\mu\text{g}/\text{m}^3$	20-Nov	16:00 17:00
Maximum 24-hr Value:	30.8	$\mu\text{g}/\text{m}^3$	12-Nov	



AIC Time:	0 hrs	Operational Time:	718 hrs
Calibration Time:	1 hrs	AMD Operational Uptime:	99.9%
Percentile	99 95 75 50 25 5 1	Average / Median	Geomean
	101.0 47.7 11.7 6.3 3.6 1.7 0.7	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$

#### 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

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily 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		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
1-Nov-06	5	11	8	7	8	7	7	5	9	10	13	10	56	76	2	1	2	2	2	2	1	2	1	1	10.3	76.3
2-Nov-06	24	4	2	2	1	2	1	2	9	7	2	3	1	2	2	2	3	3	2	2	2	5	4	3.7	23.5	
3-Nov-06	2	2	3	3	3	3	3	5	6	3	3	3	3	4	5	6	34	95	36	46	2	1	4	4	11.6	94.9
4-Nov-06	4	4	5	4	4	5	5	3	3	2	6	9	3	11	24	4	3	2	3	27	25	7	6	11	7.5	27.1
5-Nov-06	8	5	5	5	6	5	5	8	9	8	8	4	5	4	13	9	3	2	111	D	6	5	12	6	11.0	111.4
6-Nov-06	32	14	25	1	3	1	4	4	4	2	4	6	7	3	4	5	8	34	3	16	9	16	17	8	9.6	34.4
7-Nov-06	10	8	3	5	7	7	6	7	7	10	11	11	8	9	22	30	40	57	56	19	5	24	21	9	16.3	56.6
8-Nov-06	7	4	4	4	4	3	3	4	3	3	3	3	2	3	3	8	19	101	90	176	61	42	11	2	23.5	175.6
9-Nov-06	2	2	4	4	5	3	6	19	19	17	9	7	6	6	21	70	63	45	12	53	68	63	8	21.6	70.0	
10-Nov-06	12	14	16	17	17	17	19	21	19	13	13	9	11	10	12	9	8	19	14	14	14	15	11	11	13.8	21.0
11-Nov-06	10	13	13	13	11	9	9	9	8	11	10	16	10	11	12	11	11	13	16	14	12	25	155	132	23.0	155.2
12-Nov-06	113	101	31	17	10	11	12	11	10	15	16	21	31	24	17	16	17	15	17	16	112	50	37	20	30.8	113.3
13-Nov-06	99	20	15	11	13	13	14	31	27	54	22	17	15	22	8	12	11	9	7	8	8	7	8	8	19.0	99.2
14-Nov-06	8	10	10	10	8	9	9	8	11	10	9	9	4	7	8	23	96	6	2	3	4	3	1	4	11.2	96.0
15-Nov-06	1	1	2	2	2	1	3	3	2	3	0	0	0	2	19	0	1	77	42	11	38	39	6	10	11.2	77.3
16-Nov-06	11	9	9	6	7	7	5	6	5	7	6	6	7	8	9	6	8	4	6	5	4	6	6	9	6.8	10.6
17-Nov-06	8	8	9	9	11	6	9	10	11	11	9	12	10	11	7	12	17	26	24	22	13	12	13	12	12.0	26.1
18-Nov-06	17	40	82	28	9	8	7	7	18	5	6	6	6	6	5	6	9	8	5	66	62	24	11	21	19.3	82.0
19-Nov-06	98	99	30	1	6	4	4	4	27	37	25	47	7	7	13	24	2	3	29	30	4	3	3	1	21.2	99.4
20-Nov-06	2	2	1	1	0	1	1	1	3	2	1	12	3	3	2	2	256	89	2	32	12	18	4	5	19.0	256.5
21-Nov-06	8	2	10	6	4	5	5	7	8	5	4	3	3	4	3	3	4	46	20	2	3	3	3	2	6.8	45.5
22-Nov-06	2	3	4	10	2	4	2	4	3	4	4	4	23	3	3	3	3	3	2	2	3	2	6	3	4.3	23.3
23-Nov-06	11	3	4	11	3	3	7	43	49	30	12	21	18	9	5	4	5	4	4	3	4	5	3	11.0	49.1	
24-Nov-06	5	5	4	5	5	3	4	4	3	3	3	4	3	3	3	3	3	3	3	3	3	3	4	5	3.7	5.2
25-Nov-06	3	5	5	9	2	3	3	4	2	4	59	62	25	15	9	3	3	8	8	4	3	4	4	8	10.7	61.8
26-Nov-06	5	5	4	5	4	5	5	5	5	5	8	5	18	34	15	4	6	19	20	26	19	7	5	4	9.9	34.3
27-Nov-06	5	7	9	5	3	5	5	4	23	28	25	19	12	4	4	6	5	4	4	4	5	4	5	5	8.3	28.4
28-Nov-06	6	6	6	5	4	4	5	6	4	5	7	7	6	6	7	7	6	4	5	8	5	5	6	5.8	8.0	
29-Nov-06	9	7	7	8	7	11	10	12	11	6	6	6	5	6	C	3	3	3	7	5	13	15	8	23	8.4	23.3
30-Nov-06	4	8	5	9	9	9	10	8	65	35	10	7	4	5	5	3	4	4	3	5	5	5	4	9.6	65.2	

Hourly Avg 17.7 14.1 11.3 7.4 5.9 5.8 6.1 8.8 12.7 11.9 10.5 11.6 10.4 10.6 8.5 8.2 22.0 24.2 19.7 20.0 17.1 14.0 14.8 11.6  
Hourly Max 113.3 101.1 82.0 27.9 16.7 17.2 18.7 43.3 65.2 53.9 58.9 61.8 55.6 76.3 24.2 29.5 256.5 100.7 111.4 175.6 112.0 67.6 155.2 132.2

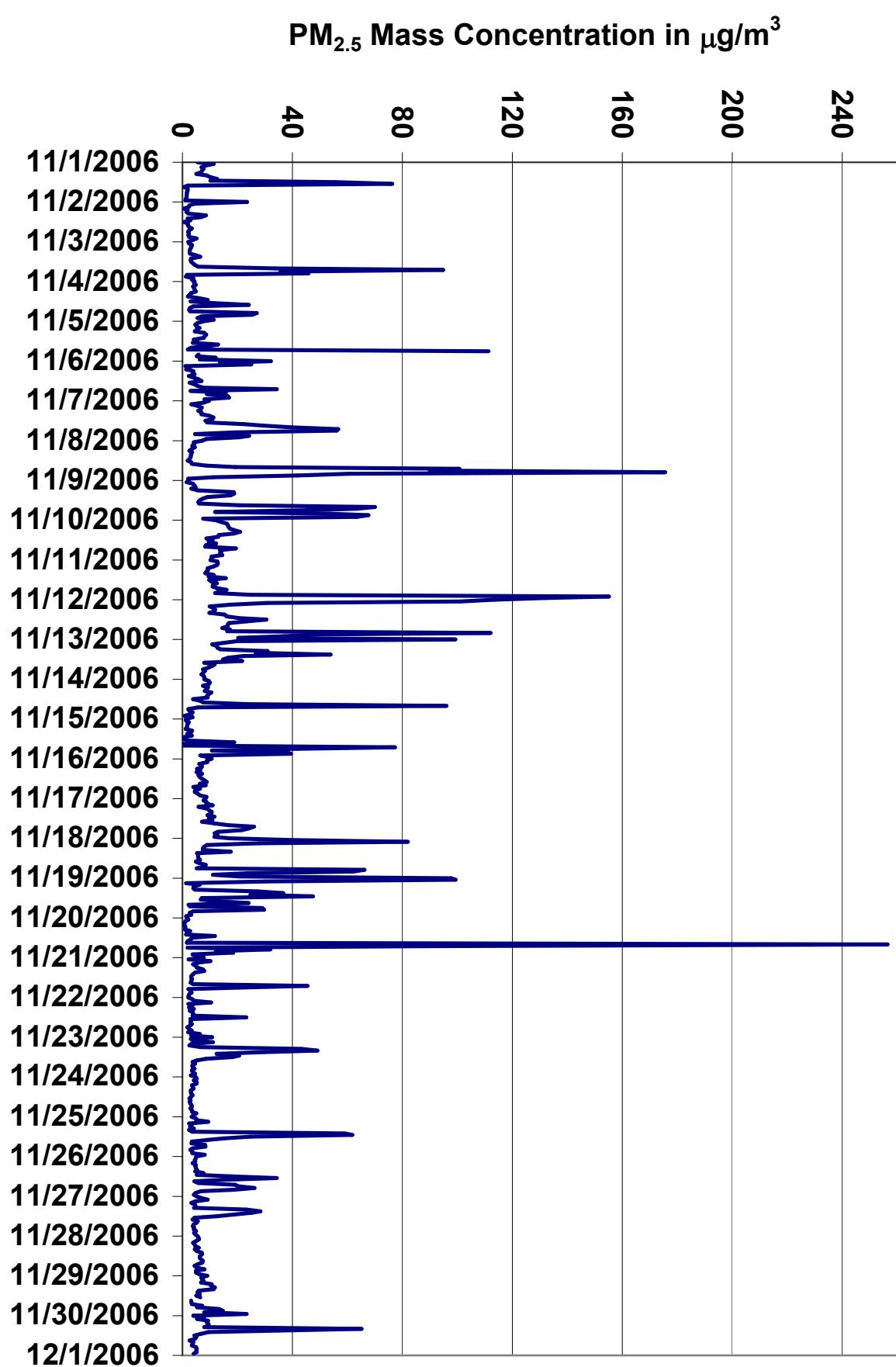
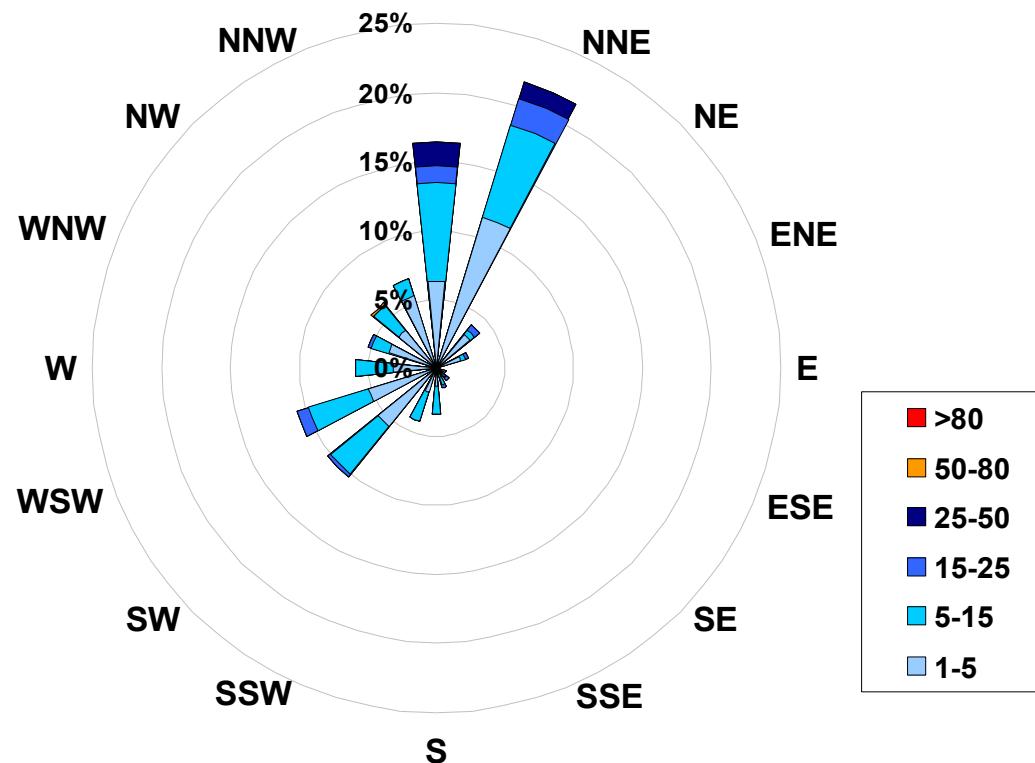


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

**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 November 2006**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range		Frequency (hrs)	
1.0	<	5	468
5	to	15	202
15	to	25	31
25	to	50	16
50	to	80	1
	>	80	0
Total Non-Zero Values		718	

# PASZA - Smoky Heights - Temperature Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

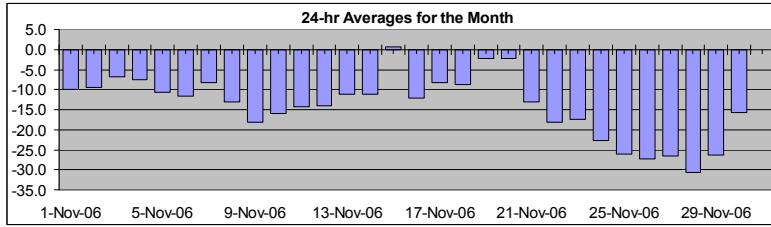
Maximum 1-hr Average:	5.1	°C	19-Nov	18:00 19:00
Maximum 24-hr Value:	0.7	°C	15-Nov	

AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 3.4	95 -0.7	75 -8.2	50 -12.7	25 -18.3	5 -29.2	1 -33.0	Average -14.0 °C	Median -12.7 °C

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-06	-15	-14	-13	-13	-13	-12	-13	-13	-14	-13	-10	-8	-7	-5	-5	-6	-7	-7	-7	-7	-8	-8	-8	-8	-9	-9.8	-5.0
2-Nov-06	-11	-12	-12	-12	-13	-13	-13	-12	-12	-11	-10	-9	-9	-8	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-9.5	-6.6
3-Nov-06	-8	-8	-8	-8	-8	-8	-8	-8	-8	-7	-7	-6	-5	-5	-5	-5	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6.8	-4.6
4-Nov-06	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-7	-7	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	-7.5	-6.9
5-Nov-06	-9	-9	-9	-9	-9	-10	-10	-10	-10	-9	-9	-8	-8	-8	-9	-9	-10	-12	-14	-15	-15	-15	-16	-15	-15	-10.7	-8.2
6-Nov-06	-14	-14	-13	-14	-14	-14	-14	-13	-13	-13	-12	-12	-11	-11	-10	-10	-10	-10	-10	-10	-9	-9	-10	-10	-10	-11.6	-9.3
7-Nov-06	-10	-10	-11	-11	-11	-11	-11	-11	-11	-9	-7	-6	-5	-5	-4	-5	-5	-7	-8	-8	-8	-9	-9	-8	-8	-8.3	-4.0
8-Nov-06	-9	-11	-12	-12	-13	-13	-13	-13	-13	-13	-12	-12	-11	-11	-11	-11	-12	-12	-13	-15	-17	-18	-20	-20	-20	-13.2	-9.4
9-Nov-06	-19	-20	-21	-22	-22	-23	-22	-23	-19	-17	-16	-15	-13	-12	-12	-12	-14	-16	-17	-18	-20	-20	-20	-21	-18.1	-12.0	
10-Nov-06	-20	-20	-20	-22	-22	-22	-23	-22	-21	-19	-18	-15	-14	-13	-12	-11	-11	-11	-12	-12	-12	-11	-11	-11	-16.0	-10.6	
11-Nov-06	-11	-11	-11	-11	-11	-12	-12	-13	-15	-16	-16	-12	-12	-15	-14	-15	-16	-18	-19	-17	-16	-16	-15	-14	-14	-14.2	-10.9
12-Nov-06	-16	-17	-16	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-14	-14	-14	-14	-13	-13	-12	-12	-12	-12	-12	-13	-14.1	-11.5
13-Nov-06	-14	-15	-13	-13	-13	-12	-12	-12	-12	-11	-11	-10	-9	-9	-9	-9	-10	-10	-10	-10	-10	-11	-11	-12	-11.2	-8.8	
14-Nov-06	-14	-15	-14	-17	-18	-18	-19	-18	-18	-17	-15	-13	-12	-11	-10	-9	-7	-5	-4	-3	-2	-1	-1	-1	-11.2	-1.0	
15-Nov-06	-1	-1	-1	-1	-1	0	0	0	1	2	4	4	2	3	2	2	2	1	1	0	0	-1	-4	0.7	3.7		
16-Nov-06	-8	-10	-11	-12	-13	-13	-14	-13	-14	-15	-14	-11	-11	-10	-9	-11	-13	-12	-11	-11	-14	-15	-14	-14	-12.0	-7.9	
17-Nov-06	-14	-13	-12	-10	-7	-10	-11	-11	-12	-11	-11	-9	-6	-5	-4	-5	-6	-7	-6	-6	-6	-7	-7	-7	-8.4	-4.4	
18-Nov-06	-6	-6	-5	-5	-7	-9	-9	-10	-10	-10	-10	-9	-9	-9	-9	-9	-10	-10	-10	-10	-9	-9	-9	-8	-8.7	-5.0	
19-Nov-06	-8	-8	-8	-8	-7	-7	-7	-8	-7	-6	-4	-3	0	0	-1	1	4	4	5	4	4	4	3	2	-2.3	5.1	
20-Nov-06	1	0	-1	-2	-2	-3	-3	-4	-3	-2	-4	-4	-2	-1	-2	-2	-3	-5	-4	-4	-3	-1	0	1	-2.3	1.2	
21-Nov-06	-3	-9	-11	-12	-13	-13	-13	-13	-13	-13	-12	-12	-12	-13	-13	-14	-14	-15	-15	-15	-16	-17	-17	-17	-13.1	-3.2	
22-Nov-06	-18	-18	-18	-18	-18	-19	-19	-19	-19	-19	-18	-18	-18	-18	-18	-18	-18	-18	-19	-18	-18	-18	-18	-18	-18.2	-17.5	
23-Nov-06	-18	-18	-18	-17	-17	-17	-18	-18	-18	-18	-18	-17	-17	-17	-17	-17	-18	-18	-18	-17	-18	-18	-17	-18	-17.5	-16.9	
24-Nov-06	-18	-19	-19	-20	-20	-20	-20	-20	-20	-20	-20	-20	-21	-21	-21	-23	-24	-25	-27	-28	-28	-29	-29	-29	-22.6	-18.3	
25-Nov-06	-30	-31	-31	-27	-25	-26	-26	-26	-26	-25	-25	-24	-24	-25	-25	-25	-25	-25	-25	-26	-26	-27	-27	-26	-26.1	-24.1	
26-Nov-06	-28	-28	-27	-27	-27	-28	-28	-29	-29	-28	-27	-26	-26	-26	-26	-26	-28	-28	-28	-27	-27	-27	-26	-26	-27.4	-25.6	
27-Nov-06	-26	-26	-26	-26	-26	-26	-26	-26	-26	-26	-25	-25	-25	-26	-26	-26	-26	-27	-27	-27	-28	-28	-27	-28	-26.5	-24.9	
28-Nov-06	-29	-29	-28	-29	-30	-32	-33	-33	-34	-34	-32	-31	-30	-29	-28	-28	-29	-30	-31	-32	-31	-31	-32	-32	-30.7	-27.9	
29-Nov-06	-32	-33	-32	-33	-33	-33	-34	-34	-32	-30	-29	-27	-26	-25	-23	-22	-20	-20	-19	-19	-18	-18	-17	-17	-26.3	-17.4	
30-Nov-06	-17	-16	-16	-17	-18	-19	-19	-18	-20	-19	-15	-11	-12	-12	-13	-14	-15	-15	-15	-16	-16	-16	-16	-16	-15.8	-10.9	

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)



## Status Flag Characters

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

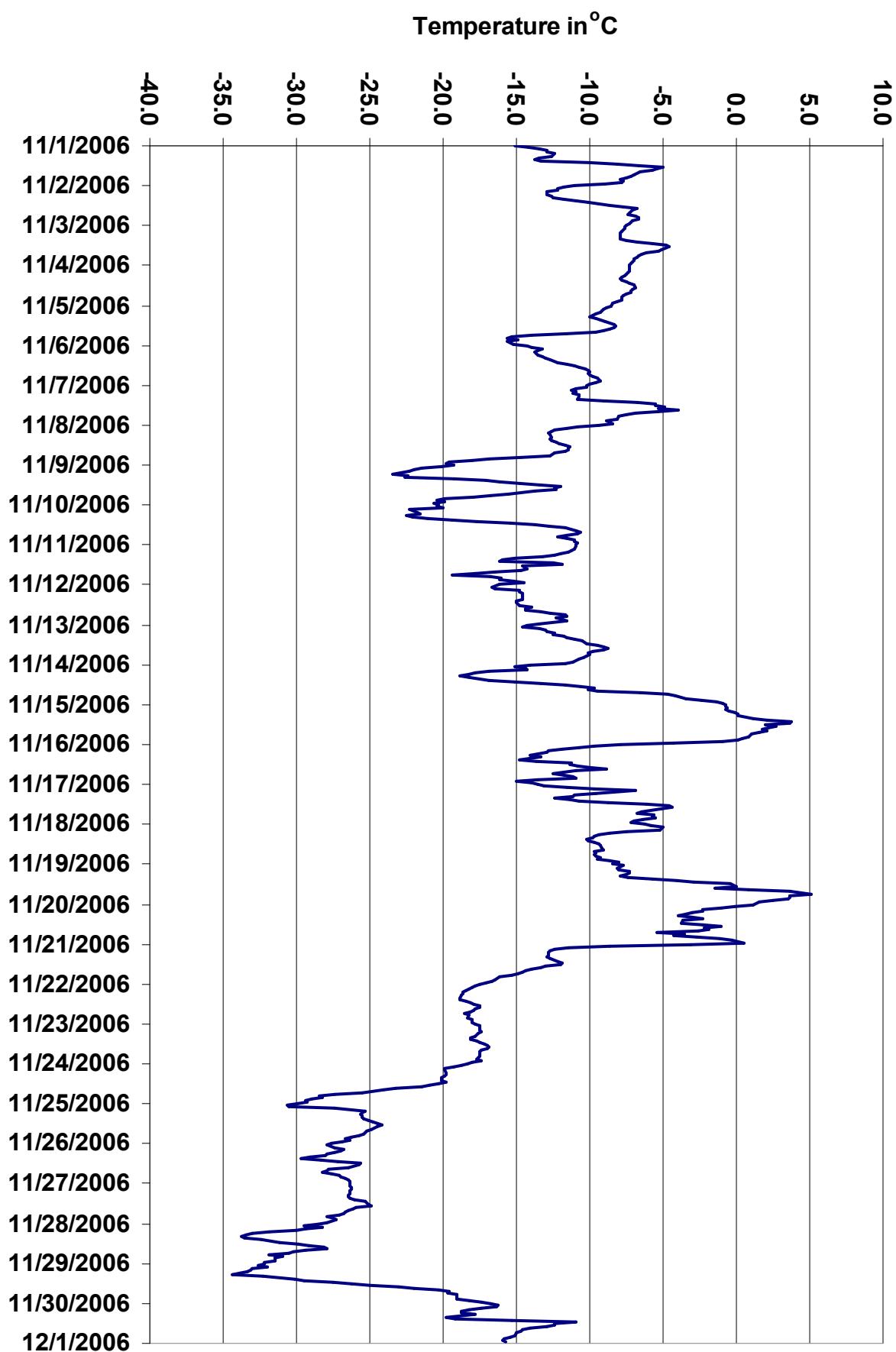


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

# PASZA - Smoky Heights - Scalar Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	40.1	km/hr	19-Nov	19:00 20:00
Maximum 24-hr Value:	16.7	km/hr	15-Nov	

Calm Time:	0 hrs	0% calms	Operational Time:	634 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	88.1%				
Percentile	99	95	75	50	25	5	1	AverageS
	28.1	22.0	13.6	9.7	6.2	3.4	2.3	10.6 km/hr

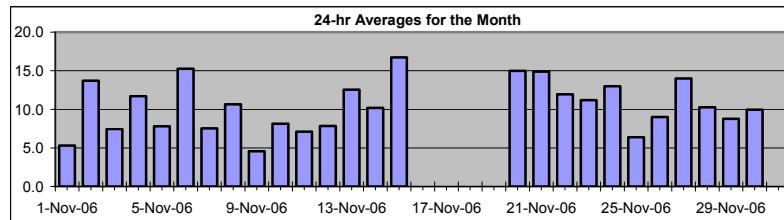
## Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
	Hour End 2:00	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-Nov-06	7	10	6	5	4	4	4	4	5	5	4	3	3	4	3	5	5	6	5	7	8	8	6	7	5.3	9.6	
2-Nov-06	6	7	8	12	11	11	11	9	11	12	12	17	18	19	17	19	20	18	18	18	16	13	12	12	13.7	20.1	
3-Nov-06	11	10	11	12	13	11	9	8	8	8	8	6	3	3	4	4	5	6	6	4	6	7	8	8	7.5	13.0	
4-Nov-06	7	6	6	6	8	8	9	10	10	12	11	12	13	12	14	15	14	15	16	16	16	17	16	14	11.7	16.9	
5-Nov-06	13	14	13	11	7	7	4	5	4	9	7	6	8	9	10	7	8	8	7	4	8	6	6	6	7.8	14.4	
6-Nov-06	8	11	12	15	16	20	22	21	17	19	20	19	18	18	17	16	13	14	11	9	10	11	13	15	15.3	22.2	
7-Nov-06	10	7	6	6	5	3	5	5	5	5	6	7	8	6	6	6	6	11	12	10	10	16	12	8	9	7.5	15.6
8-Nov-06	13	19	18	22	18	14	14	13	11	10	11	11	10	9	11	10	6	4	6	5	5	6	5	5	10.7	21.9	
9-Nov-06	5	4	3	3	4	2	2	2	5	4	3	6	7	5	5	8	3	6	6	5	6	5	4	4	4.6	7.8	
10-Nov-06	2	4	4	2	2	2	1	2	3	3	4	4	6	9	8	11	13	12	17	20	20	16	15	13	8.1	20.3	
11-Nov-06	13	15	13	14	10	4	3	3	4	5	6	4	4	8	7	8	7	5	7	7	3	6	6	9	7.1	14.6	
12-Nov-06	6	6	5	7	3	8	9	10	9	9	8	7	6	11	12	10	7	6	5	5	9	8	10	11	7.8	12.3	
13-Nov-06	10	9	12	15	14	13	11	11	10	10	12	12	10	8	9	10	16	19	18	16	14	15	14	12	12.5	18.9	
14-Nov-06	8	8	7	6	5	5	4	3	5	6	4	6	8	7	3	5	5	15	20	18	20	22	26	28	10.2	28.3	
15-Nov-06	27	26	25	24	25	21	19	19	25	22	24	24	19	4	6	8	9	7	9	12	12	2	N	N	16.7	26.5	
16-Nov-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	0.0		
17-Nov-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	0.0		
18-Nov-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	0.0		
19-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	2	9	10	8	19	19	23	40	27	32	30	40.1		
20-Nov-06	34	28	25	23	27	23	17	14	18	19	13	14	17	14	13	7	3	5	5	5	7	8	10	11	15.0	33.8	
21-Nov-06	18	23	26	32	27	21	20	13	6	3	4	8	12	14	12	10	9	13	11	13	14	15	16	18	14.9	32.2	
22-Nov-06	15	14	12	11	13	13	13	10	10	9	8	8	10	10	10	11	12	14	12	12	14	16	14	14	11.9	16.3	
23-Nov-06	13	14	13	11	11	13	14	13	12	12	10	10	11	11	11	9	10	9	11	10	8	7	11	11	11.2	14.3	
24-Nov-06	14	13	15	17	19	19	18	19	19	21	11	8	11	15	13	12	10	11	10	12	6	6	6	6	13.0	20.8	
25-Nov-06	6	5	3	7	10	8	6	7	8	7	8	9	7	7	7	7	7	6	5	4	3	5	7	6	6.4	9.7	
26-Nov-06	3	7	6	4	7	7	7	7	6	6	7	4	6	8	9	10	9	9	11	14	16	17	19	9.0	19.3		
27-Nov-06	23	22	23	22	19	21	19	17	14	13	14	14	14	11	14	11	10	9	6	7	6	6	5	5	14.0	22.8	
28-Nov-06	4	8	7	11	11	8	5	10	9	8	9	11	14	16	14	12	10	12	11	11	13	10	9	11	10.3	16.4	
29-Nov-06	11	13	14	11	6	8	10	10	13	13	12	11	8	9	9	7	5	4	3	6	5	7	7	9.8	13.5		
30-Nov-06	5	3	9	12	11	10	10	15	4	3	5	10	8	7	8	8	7	9	15	17	15	16	16	9.9	17.1		

1-hr Average	11.2	11.7	11.6	12.4	11.8	11.1	10.3	10.1	9.6	9.6	9.4	9.7	9.6	9.8	9.9	9.4	9.6	10.1	10.6	11.3	11.2	11.0	11.7	11.7	11.7
Hourly Max	33.8	27.6	25.8	32.2	27.1	22.6	22.2	21.0	25.0	22.3	23.8	24.3	18.8	18.9	17.2	18.8	20.1	19.1	22.6	40.1	26.9	32.0	32.0	29.9	

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)



## Status Flag Characters

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

# PASZA - Smoky Heights - Vector Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

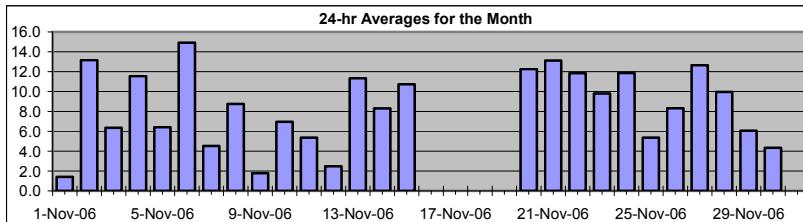
## Summary

Maximum 1-hr Average:	39.9 km/hr	19-Nov 19:00 20:00
Maximum 24-hr Value:	14.9 km/hr	6-Nov

Calm Time:	3 hrs	0% calms	Operational Time:	631 hrs				
Calibration Time:			AMD Operational Uptime:	88.1%				
Percentile	99	95	75	50	25	5	1	AverageV
	28.0	21.8	13.5	9.6	5.9	2.4	1.5	4.2 km/hr

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

## Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hr Vector Average	Daily Max
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00		
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	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Nov-06	7	10	6	4	4	3	4	4	4	5	2	2	1	2	2	4	2	6	5	7	8	8	6	6	6	6	6	6	1.4	9.5			
2-Nov-06	6	7	8	12	11	11	11	9	11	12	12	17	18	19	17	19	20	18	18	18	16	12	12	12	12	12	12	13.2	20.0				
3-Nov-06	11	10	11	12	13	11	9	8	8	8	8	5	3	2	3	4	4	6	6	4	6	7	8	7	7	7	7	6.3	12.9				
4-Nov-06	6	6	5	8	8	9	10	10	12	11	12	13	12	14	15	14	15	16	16	16	16	17	16	14	14	14	14	11.5	16.9				
5-Nov-06	13	14	13	11	6	6	3	4	4	8	7	5	8	9	10	7	8	8	7	4	7	6	6	5	5	5	5	6.4	14.2				
6-Nov-06	8	11	12	15	16	20	22	21	16	19	20	19	18	18	17	16	13	14	11	9	10	11	12	14	14	14	14	14.9	22.2				
7-Nov-06	9	2	4	4	2	3	3	4	5	6	7	7	6	6	3	11	12	10	10	15	12	8	8	8	8	8	8	4.5	15.5				
8-Nov-06	12	19	18	22	17	14	14	13	11	10	11	10	10	9	11	7	6	4	4	5	5	5	2	5	5	5	5	8.7	21.7				
9-Nov-06	5	4	3	3	2	1	5	4	3	6	7	5	5	8	2	6	6	5	6	5	4	3	3	3	3	3	3	1.8	7.8				
10-Nov-06	calm	4	4	calm	2	2	calm	1	3	3	4	4	6	9	8	11	13	12	17	20	19	16	15	13	13	13	7.0	20.2					
11-Nov-06	13	15	13	14	10	4	2	2	3	4	6	4	3	8	7	7	7	5	7	7	2	5	5	5	9	5	5.4	14.5					
12-Nov-06	6	6	5	6	2	7	9	10	9	9	8	7	6	11	12	10	7	5	5	3	9	8	10	11	11	11	2.5	12.1					
13-Nov-06	10	9	12	15	14	13	11	11	10	10	12	12	10	8	9	10	15	19	18	16	14	15	14	12	12	11.3	18.9						
14-Nov-06	7	8	7	5	4	4	2	4	6	2	6	8	7	2	5	3	15	20	18	20	22	26	28	28	28	8.3	28.2						
15-Nov-06	26	26	25	24	25	21	19	19	25	22	22	24	18	3	4	7	9	6	9	11	12	2	N	N	N	N	N	N	10.7	26.5			
16-Nov-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	0.0			
17-Nov-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	0.0			
18-Nov-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	0.0			
19-Nov-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	39.9	39.9			
20-Nov-06	34	28	25	23	27	23	17	13	18	19	12	14	17	14	13	7	1	5	5	4	6	5	10	11	12	12	12	12	12.3	33.6			
21-Nov-06	18	22	26	32	27	21	20	13	5	2	4	7	12	14	12	9	8	12	11	13	14	15	16	18	18	18	18	18	18	13.1	32.1		
22-Nov-06	15	14	11	11	13	13	13	10	10	9	8	8	10	10	10	11	12	14	12	12	14	16	14	14	14	14	14	14	11.8	16.3			
23-Nov-06	13	14	13	11	11	13	14	13	12	12	10	10	11	11	11	9	10	9	11	10	8	7	11	11	11	11	11	9.8	14.3				
24-Nov-06	14	13	15	17	19	19	18	19	19	20	11	8	11	15	12	12	10	10	10	12	6	6	6	6	6	6	6	11.9	20.5				
25-Nov-06	6	5	3	6	10	8	6	7	8	6	8	9	7	7	6	7	7	6	5	4	2	5	7	5	5	5	5	5.4	9.7				
26-Nov-06	2	7	6	4	7	7	6	6	6	7	3	5	8	9	10	9	9	11	14	16	17	17	19	19	19	19	19	19	8.3	19.3			
27-Nov-06	23	22	23	22	19	21	19	17	14	13	14	14	13	11	14	13	11	10	9	6	7	6	6	6	5	5	5	5	5	12.7	22.8		
28-Nov-06	4	8	7	11	11	8	5	10	9	8	9	11	14	16	14	12	10	11	11	11	13	10	9	11	11	11	11	11	10.0	16.3			
29-Nov-06	10	13	13	11	6	8	10	10	13	13	12	11	8	9	9	8	7	4	4	1	6	5	7	7	7	7	6.1	13.4					
30-Nov-06	5	1	8	12	10	10	10	11	2	1	2	6	8	5	7	7	6	8	15	17	15	15	16	16	16	16	4.3	16.8					

1-hr Vector    3.5    3.2    3.5    3.7    3.6    2.9    2.8    2.3    2.1    2.1    1.8    2.1    2.6    3.6    4.5    4.2    3.7    3.4    3.5    4.7    5.2    4.6    4.5    4.2

Hourly Max    33.6    27.6    25.7    32.1    27.1    22.6    22.2    20.9    24.8    22.2    22.5    23.8    18.4    18.8    17.1    18.8    20.0    19.0    20.2    39.9    26.5    32.0    31.7    29.8

# PASZA - Smoky Heights - Wind Direction Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

### Summary

Calm Time: 0 hrs 0% calms							Operational Time: 720 hrs							
Calibration Time: 0 hrs							AMD Operational Uptime: 100.0%							
Percentile	99	95	75	50	25	5	1	Average						
	356.9	349.5	272.1	194.7	27.8	8.1	2.2	344 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 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	WD Sector
	Hour End 2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	WD Sector			
1-Nov-06	251	257	242	245	178	170	176	198	238	184	146	141	129	70	116	38	63	112	83	46	41	67	74	63	118	ESE		
2-Nov-06	18	25	27	20	25	26	27	22	28	41	36	30	28	35	37	42	46	49	56	71	73	61	62	65	42	NE		
3-Nov-06	64	72	66	59	57	56	45	36	31	42	57	78	103	110	3	8	4	9	12	354	345	342	346	5	39	NE		
4-Nov-06	357	355	0	4	8	11	16	30	23	30	30	25	27	20	18	19	20	19	20	18	8	8	5	356	15	NNE		
5-Nov-06	348	344	334	330	335	340	257	249	274	327	344	342	21	29	20	23	24	31	23	8	25	28	33	65	358	N		
6-Nov-06	26	22	21	27	28	35	35	34	41	38	37	42	32	32	37	31	24	15	26	17	19	6	351	2	28	NNE		
7-Nov-06	336	70	260	220	271	236	25	35	310	292	256	244	233	228	254	295	8	4	10	359	342	350	324	311	322	NW		
8-Nov-06	316	295	312	308	294	286	295	286	294	293	289	292	289	265	240	274	24	60	48	14	10	21	15	270	301	WNW		
9-Nov-06	278	291	306	42	3	331	295	254	232	232	204	184	159	262	265	242	32	16	359	353	4	31	352	345	304	NW		
10-Nov-06	321	259	264	149	236	231	285	45	27	28	22	23	19	25	22	23	25	10	358	358	1	358	357	346	3	N		
11-Nov-06	334	338	328	315	302	304	277	236	210	277	257	221	256	259	271	263	271	285	272	278	350	20	13	12	302	WNW		
12-Nov-06	8	8	18	252	49	212	193	186	198	217	237	250	257	238	236	210	196	208	286	58	16	16	20	24	244	WSW		
13-Nov-06	20	18	16	10	8	9	5	6	10	358	355	357	3	353	342	328	307	311	319	319	321	317	318	313	344	NNW		
14-Nov-06	229	259	255	214	207	156	235	183	215	234	239	225	190	204	244	25	223	172	164	156	158	162	163	169	182	S		
15-Nov-06	166	167	167	168	171	170	168	167	158	154	175	211	193	100	55	57	111	36	30	22	18	13	349	330	161	SSE		
16-Nov-06	278	274	276	280	250	237	229	216	237	232	237	248	272	276	282	324	250	260	280	267	263	287	221	242	259	WSW		
17-Nov-06	249	240	252	229	231	209	230	229	194	214	237	248	227	223	185	219	231	240	258	253	253	184	214	196	227	SW		
18-Nov-06	154	127	12	19	38	33	38	30	16	32	32	31	31	29	28	27	22	19	17	14	11	14	7	16	28	NNE		
19-Nov-06	17	6	19	13	12	11	6	3	11	20	8	32	136	50	33	133	157	160	174	259	240	232	222	227	217	SW		
20-Nov-06	235	230	236	247	242	232	226	217	230	238	236	262	254	244	259	270	311	248	252	15	11	10	335	347	247	WSW		
21-Nov-06	30	35	20	23	29	30	27	21	7	232	191	234	339	343	344	357	356	16	17	49	34	27	34	34	20	NNE		
22-Nov-06	38	33	30	13	18	21	29	37	33	35	39	28	28	28	26	32	42	44	35	29	26	25	25	23	30	NNE		
23-Nov-06	17	23	22	33	13	10	12	18	9	6	4	1	352	356	350	335	332	321	308	312	287	274	331	320	354	N		
24-Nov-06	320	319	316	309	298	300	301	310	306	305	303	314	305	303	309	279	292	267	240	231	244	241	247	266	296	WNW		
25-Nov-06	256	222	225	353	340	344	354	350	348	352	2	0	354	354	346	346	347	354	344	297	261	301	340	345	339	NNW		
26-Nov-06	279	327	340	350	340	335	334	354	32	34	31	92	9	10	1	356	6	12	8	4	10	17	21	8	N			
27-Nov-06	18	19	18	19	13	15	17	16	11	7	2	6	359	345	347	334	320	312	315	329	327	333	284	263	231	SW		
28-Nov-06	253	237	234	227	247	254	244	224	217	189	202	221	230	234	231	216	236	240	229	248	249	236	231	218	231			
29-Nov-06	217	195	198	207	204	189	187	201	243	238	201	216	215	233	249	250	229	187	152	117	45	25	30	20	213	SSW		
30-Nov-06	49	108	186	193	178	191	218	251	55	166	295	45	73	65	354	300	267	280	303	299	303	307	301	304	285	WNW		

Hourly Avg 339 341 336 338 339 346 349 339 335 331 333 327 339 342 338 345 358 358 354 342 353 352 348 347

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

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

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

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	49.7	32.0	11.0	6.8	4.4	2.9	2.2

#### Status Flag Characters

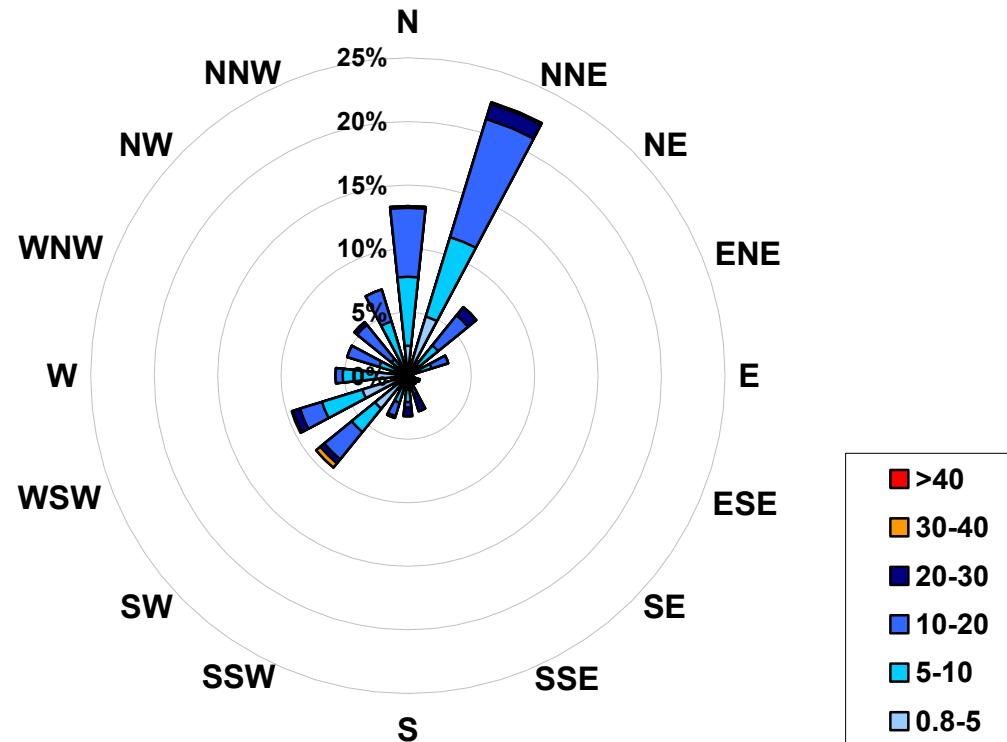
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	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-Nov-06	15	4	13	18	7	17	7	8	10	11	27	31	37	52	37	33	43	18	18	8	4	6	6	8	52.1	
2-Nov-06	4	2	2	3	3	2	4	6	5	6	4	3	3	4	4	4	3	4	4	6	8	8	10	10	10.4	
3-Nov-06	11	13	11	7	6	6	5	3	3	5	9	13	19	20	27	16	12	7	8	13	10	7	7	8	26.5	
4-Nov-06	10	9	8	10	7	6	5	4	3	3	4	4	4	3	3	3	3	2	3	3	4	5	5	8	9.7	
5-Nov-06	7	8	6	7	13	13	11	10	10	9	17	23	9	5	6	6	5	7	4	10	15	9	14	23	23.2	
6-Nov-06	6	4	4	3	3	3	3	3	4	6	5	5	4	4	5	5	5	3	5	5	10	10	15	13	13	14.5
7-Nov-06	13	25	20	22	24	55	19	28	24	12	12	7	8	7	13	35	5	10	6	9	7	9	12	9	55.4	
8-Nov-06	11	5	8	6	5	5	6	6	7	7	7	7	7	5	17	7	11	16	6	5	11	26	8	26.0		
9-Nov-06	7	11	23	14	12	25	45	6	9	11	8	5	50	30	4	32	7	4	5	5	6	10	23	19	49.9	
10-Nov-06	68	28	7	47	13	32	34	16	6	6	3	4	4	4	4	3	3	4	6	5	5	7	6	7	67.7	
11-Nov-06	6	5	5	4	9	15	48	27	14	11	36	32	33	4	4	8	5	8	4	7	24	8	12	10	48.3	
12-Nov-06	12	9	33	26	29	24	7	5	7	10	7	5	12	7	6	7	14	11	30	28	11	8	5	3	33.0	
13-Nov-06	3	4	3	3	3	3	6	4	5	7	8	8	8	8	7	6	4	4	5	6	5	4	5	8.4		
14-Nov-06	17	6	5	16	13	14	22	25	13	7	21	10	8	8	34	7	25	5	2	3	2	3	3	2	33.9	
15-Nov-06	2	2	2	3	2	2	3	3	4	6	11	7	6	16	25	9	6	11	6	6	4	5	7	8	24.9	
16-Nov-06	8	8	6	6	5	11	4	5	6	7	5	10	8	7	10	43	21	18	25	18	11	55	18	6	55.2	
17-Nov-06	10	10	20	21	28	17	9	12	10	13	10	11	11	8	9	8	7	12	6	5	5	21	12	7	27.5	
18-Nov-06	40	73	5	8	4	4	6	7	4	5	4	4	4	4	3	2	3	3	2	5	4	5	8	4	73.0	
19-Nov-06	5	7	5	9	7	7	9	14	21	34	38	26	35	46	11	18	5	5	19	4	5	4	3	3	45.7	
20-Nov-06	3	3	3	4	3	3	4	4	3	4	8	3	4	5	4	13	43	20	22	21	39	46	9	8	45.5	
21-Nov-06	9	5	4	3	3	4	3	5	27	19	12	9	17	5	7	10	10	4	6	8	5	3	4	5	27.0	
22-Nov-06	5	4	6	5	5	4	4	5	5	5	8	7	6	4	4	4	4	4	4	4	3	3	4	4	7.7	
23-Nov-06	3	3	3	5	6	5	4	4	5	6	8	8	8	8	9	8	6	5	5	4	7	8	7	8.6		
24-Nov-06	6	5	6	5	3	4	4	5	5	7	17	27	16	8	7	5	6	7	12	6	9	14	10	13	26.7	
25-Nov-06	11	15	24	41	6	8	10	8	6	9	8	9	10	12	8	8	7	8	7	9	18	7	5	8	41.1	
26-Nov-06	43	4	8	13	5	4	3	7	9	4	4	21	32	6	7	6	6	6	6	6	4	3	3	3	42.7	
27-Nov-06	3	3	3	3	3	3	4	3	4	5	6	7	8	8	6	5	3	3	3	5	4	10	10	12	12.5	
28-Nov-06	15	6	8	3	4	4	8	4	5	11	7	4	3	4	3	5	6	12	6	4	3	4	7	4	14.7	
29-Nov-06	6	4	5	5	9	7	6	4	6	4	9	3	6	7	7	6	11	26	10	35	10	15	7	8	35.4	
30-Nov-06	16	53	14	11	12	6	7	28	32	47	53	40	21	28	49	22	29	14	9	9	7	8	8	5	53.1	

Hourly Max 68 73 33 47 29 55 48 28 32 47 53 40 50 52 49 43 43 26 30 35 39 55 26 23

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



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	96
5	to	10	235
10	to	20	257
20	to	30	41
30	to	40	4
> 40			1
Total Non-Zero Values			634

# 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: November 1, 2006 to December 1, 2006

### Alberta's Air Quality Index

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

### Summary

Number of 1-hr Good Readings:	684
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

### Status Flag Characters

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

### Day Mountain Standard Time

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

# PASZA - Beaverlodge - Sulphur Dioxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 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	4-Nov	22:00 23:00
Maximum 24-hr Average:	2.2 ppb	13-Nov	

AIC Time:	31 hrs	Operational Time:	685 hrs								
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%								
Percentile	99	95	75	50	25	5	1	Average	1.1 ppb	Median	0.9 ppb
	3.9	2.7	1.4	0.9	0.5	0.2	0.1				

## Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Nov-06	1 0:00	0 1:00	0 2:00	0 3:00	0 4:00	A 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	C 13:00	C 14:00	C 15:00	C 16:00	A 17:00	1 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.7	1.5
2-Nov-06	0 0:00	0 1:00	0 2:00	0 3:00	0 4:00	A 5:00	0 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	2 13:00	2 14:00	2 15:00	2 16:00	1 17:00	1 18:00	1 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	1.0	2.3
3-Nov-06	1 0:00	2 1:00	2 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.6	4.0
4-Nov-06	1 0:00	0 1:00	0 2:00	0 3:00	A 4:00	1 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	1.3	9.1
5-Nov-06	0 0:00	0 1:00	0 2:00	0 3:00	A 4:00	1 5:00	2 6:00	2 7:00	1 8:00	1 9:00	1 10:00	1 11:00	2 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.9	1.7
6-Nov-06	1 0:00	2 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	1 22:00	1 23:00	1 0:00	1.1	2.0
7-Nov-06	1 0:00	1 1:00	1 2:00	0 3:00	A 4:00	0 5:00	1 6:00	1 7:00	2 8:00	2 9:00	2 10:00	2 11:00	2 12:00	2 13:00	2 14:00	2 15:00	2 16:00	2 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.1	2.1
8-Nov-06	1 0:00	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.9	1.4
9-Nov-06	1 0:00	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	2 13:00	2 14:00	2 15:00	2 16:00	2 17:00	2 18:00	2 19:00	2 20:00	2 21:00	2 22:00	2 23:00	2 0:00	1.6	2.6
10-Nov-06	2 0:00	1 1:00	1 2:00	1 3:00	A 4:00	2 5:00	2 6:00	2 7:00	3 8:00	3 9:00	3 10:00	3 11:00	3 12:00	3 13:00	3 14:00	3 15:00	3 16:00	2 17:00	2 18:00	2 19:00	2 20:00	2 21:00	2 22:00	2 23:00	2 0:00	1.9	3.1
11-Nov-06	1 0:00	1 1:00	1 2:00	1 3:00	A 4:00	2 5:00	2 6:00	2 7:00	2 8:00	2 9:00	2 10:00	2 11:00	2 12:00	3 13:00	3 14:00	3 15:00	3 16:00	2 17:00	2 18:00	2 19:00	2 20:00	2 21:00	2 22:00	2 23:00	2 0:00	2.2	3.6
12-Nov-06	3 0:00	3 1:00	2 2:00	2 3:00	A 4:00	1 5:00	2 6:00	2 7:00	1 8:00	1 9:00	1 10:00	1 11:00	2 12:00	2 13:00	2 14:00	2 15:00	2 16:00	2 17:00	3 18:00	3 19:00	3 20:00	3 21:00	2 22:00	2 23:00	2 0:00	2.0	2.9
13-Nov-06	2 0:00	2 1:00	2 2:00	2 3:00	A 4:00	2 5:00	1 6:00	1 7:00	2 8:00	2 9:00	2 10:00	2 11:00	2 12:00	2 13:00	4 14:00	4 15:00	4 16:00	4 17:00	3 18:00	3 19:00	3 20:00	3 21:00	3 22:00	3 23:00	3 0:00	2.2	4.4
14-Nov-06	1 0:00	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.2	2.1
15-Nov-06	0 0:00	0 1:00	0 2:00	0 3:00	A 4:00	0 5:00	0 6:00	0 7:00	1 8:00	1 9:00	1 10:00	1 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.6	1.6
16-Nov-06	1 0:00	0 1:00	0 2:00	0 3:00	A 4:00	0 5:00	0 6:00	0 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.9	2.0
17-Nov-06	1 0:00	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	2 14:00	2 15:00	2 16:00	2 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.9	1.9
18-Nov-06	0 0:00	1 1:00	0 2:00	0 3:00	A 4:00	0 5:00	1 6:00	1 7:00	2 8:00	2 9:00	2 10:00	2 11:00	2 12:00	2 13:00	2 14:00	2 15:00	2 16:00	2 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.5	1.6
19-Nov-06	0 0:00	0 1:00	0 2:00	0 3:00	A 4:00	0 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.5	1.1
20-Nov-06	0 0:00	1 1:00	1 2:00	1 3:00	A 4:00	0 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.4	1.2
21-Nov-06	1 0:00	0 1:00	1 2:00	1 3:00	A 4:00	0 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.5	2.0
22-Nov-06	0 0:00	0 1:00	0 2:00	0 3:00	A 4:00	0 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.4	1.1
23-Nov-06	0 0:00	1 1:00	2 2:00	2 3:00	A 4:00	2 5:00	1 6:00	1 7:00	0 8:00	1 9:00	1 10:00	1 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.8	2.3
24-Nov-06	1 0:00	1 1:00	2 2:00	1 3:00	A 4:00	1 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.7	1.7
25-Nov-06	1 0:00	0 1:00	0 2:00	0 3:00	A 4:00	0 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.6	1.5
26-Nov-06	1 0:00	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	2 18:00	2 19:00	2 20:00	2 21:00	2 22:00	2 23:00	2 0:00	1.6	4.5
27-Nov-06	3 0:00	2 1:00	3 2:00	4 3:00	A 4:00	1 5:00	1 6:00	1 7:00	2 8:00	2 9:00	2 10:00	2 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	2 22:00	2 23:00	2 0:00	1.8	4.2
28-Nov-06	1 0:00	1 1:00	1 2:00	1 3:00	A 4:00	0 5:00	0 6:00	0 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 				

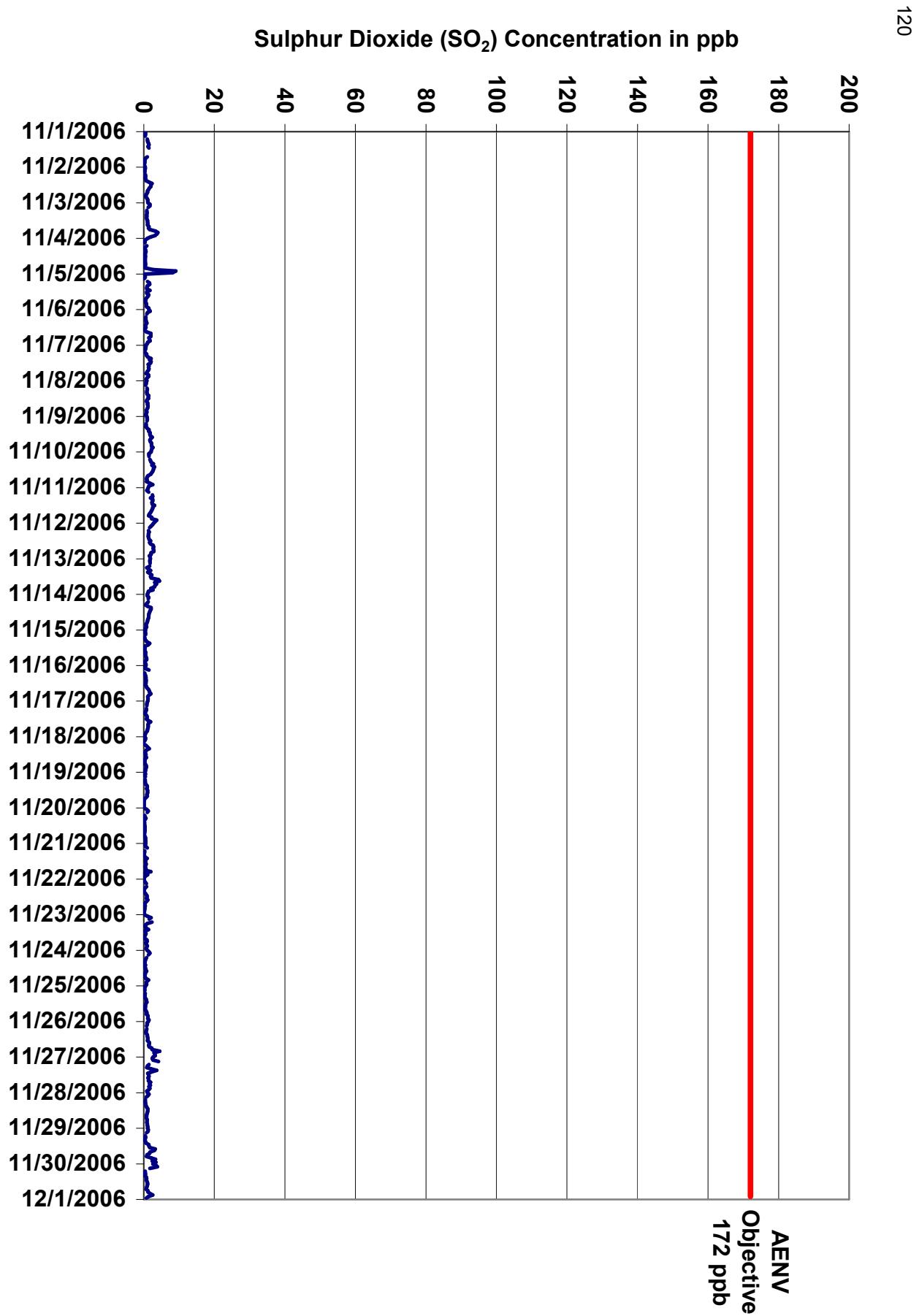


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

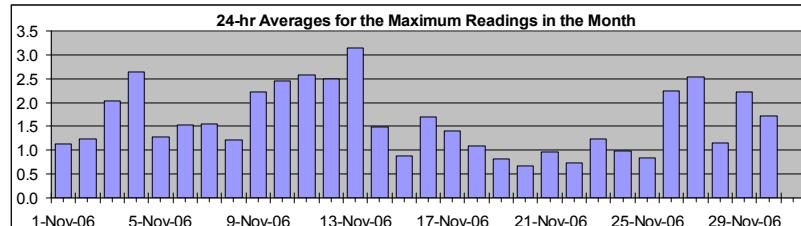
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	21.7	ppb	4-Nov	23:00 0:00
Maximum 24-hr Value:	3.1	ppb	13-Nov	



AIC Time:	31 hrs	Operational Time:	685 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	5.5 3.7 2.1 1.3 0.7 0.4 0.2	1.6 ppb	1.3 ppb

#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
1-Nov-06	1	1	1	1	A	2	1	2	2	2	2	2	C	C	C	C	A	1	1	1	0	0	0	0	0	0
2-Nov-06	1	1	0	1	A	1	1	1	1	1	2	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1
3-Nov-06	1	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	3	2	3	4	5	4	4	4	3
4-Nov-06	1	1	0	0	A	2	0	0	1	1	1	1	0	1	0	1	0	1	1	1	1	1	5	20	22	
5-Nov-06	1	1	1	0	A	2	2	2	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	2	
6-Nov-06	2	2	2	1	A	1	1	1	1	1	1	1	1	1	1	0	2	2	3	3	2	2	2	2	1	
7-Nov-06	1	1	1	1	A	1	1	1	2	3	2	3	2	2	2	1	2	2	1	1	2	2	2	1		
8-Nov-06	1	1	1	1	A	1	1	1	1	1	2	2	2	2	1	1	1	1	2	1	1	1	1	1	1	
9-Nov-06	1	1	1	1	A	1	1	1	3	3	2	3	3	2	3	3	2	3	3	3	3	2	3	3	3	
10-Nov-06	3	2	2	2	A	3	3	3	4	3	4	3	3	3	3	3	2	1	1	1	1	2	3	2	2	
11-Nov-06	1	1	1	2	A	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	3	3	4	4		
12-Nov-06	4	3	3	2	A	2	2	2	2	2	2	2	3	2	3	3	3	3	3	4	4	2	2	2	2	
13-Nov-06	3	2	2	3	A	3	1	2	3	1	2	3	2	2	11	5	5	5	4	4	3	3	2	2		
14-Nov-06	1	1	2	1	A	2	1	1	2	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	
15-Nov-06	1	1	1	1	A	0	0	1	2	2	2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	
16-Nov-06	1	1	1	3	A	0	0	8	1	1	1	1	1	1	1	1	2	2	2	2	3	2	2	1	1	
17-Nov-06	1	1	1	1	A	1	1	1	0	1	2	2	1	1	3	3	2	1	2	1	1	1	0	1		
18-Nov-06	0	1	1	0	A	0	1	2	9	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	
19-Nov-06	0	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	
20-Nov-06	0	1	2	1	A	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	
21-Nov-06	1	1	1	2	A	0	0	0	0	2	2	1	1	1	1	1	1	1	1	1	3	1	2	1	0	
22-Nov-06	0	0	1	1	A	1	1	0	0	0	1	2	1	1	2	2	1	0	1	1	0	0	0	0	0	
23-Nov-06	0	2	3	2	A	3	2	1	1	1	4	1	1	1	0	0	1	1	1	1	1	1	1	1	1	
24-Nov-06	1	2	2	2	A	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	1	2	1	1	
25-Nov-06	1	0	0	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
26-Nov-06	1	1	1	1	A	1	1	1	1	2	2	1	1	1	2	2	2	2	2	3	3	5	4	7	4	
27-Nov-06	3	3	4	6	A	2	2	1	4	5	4	1	2	2	2	2	2	2	2	2	2	3	2	1		
28-Nov-06	1	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	
29-Nov-06	1	2	1	1	A	1	1	1	1	1	1	2	3	3	4	4	4	4	3	2	1	1	3	4	4	
30-Nov-06	3	4	5	3	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	3	1	1.7	4.6

Hourly Avg	1.3	1.4	1.4	1.5	N	1.2	1.1	1.3	1.6	1.6	1.6	1.8	1.6	1.6	1.5	1.9	1.7	1.6	1.6	1.5	1.6	1.7	1.9	2.4	2.2
Hourly Max	3.6	4.2	4.6	5.6	0.0	3.2	3.1	8.1	8.9	5.4	4.1	3.5	3.4	4.3	11.4	5.3	4.6	4.6	4.3	4.2	5.5	5.0	19.8	21.7	

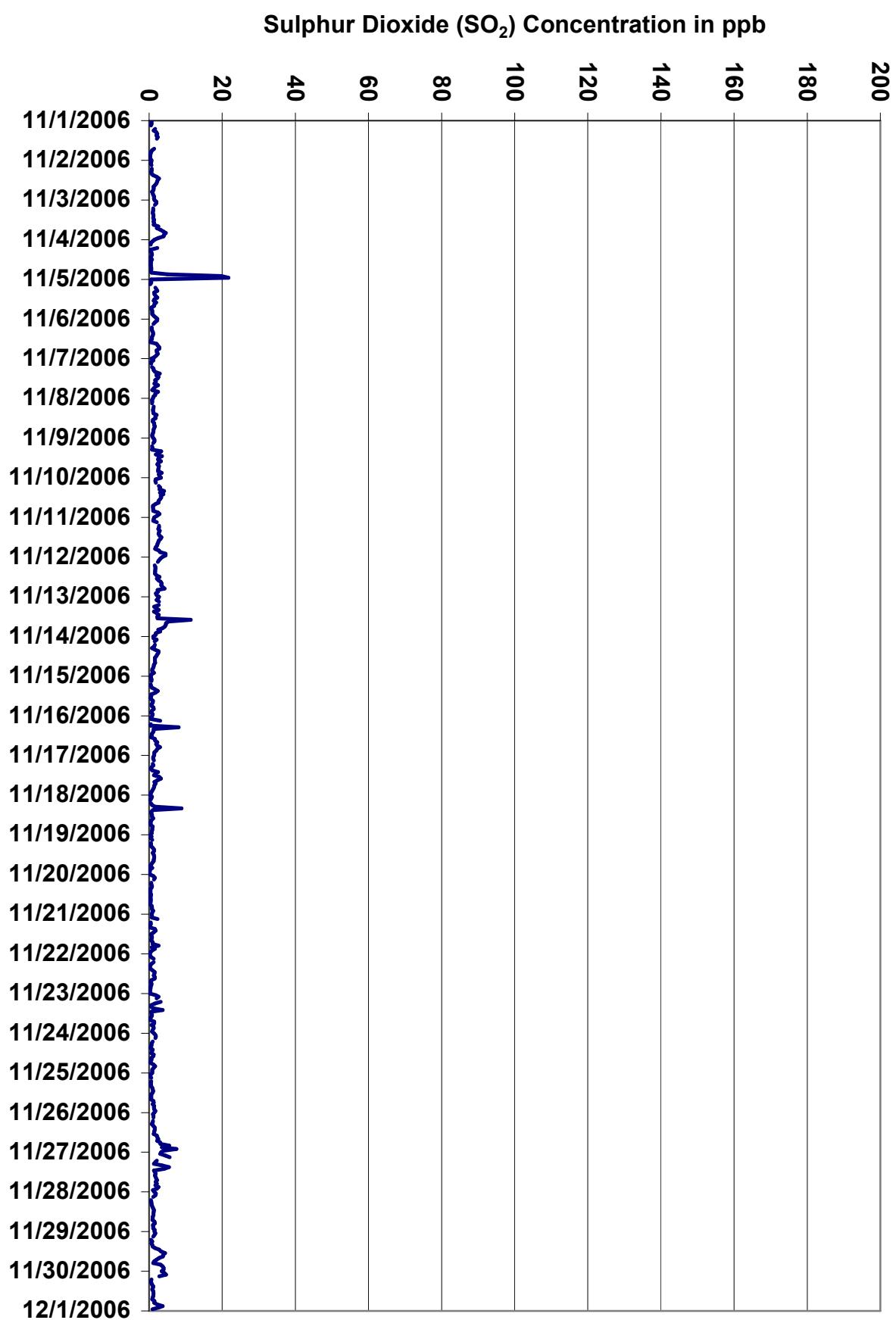
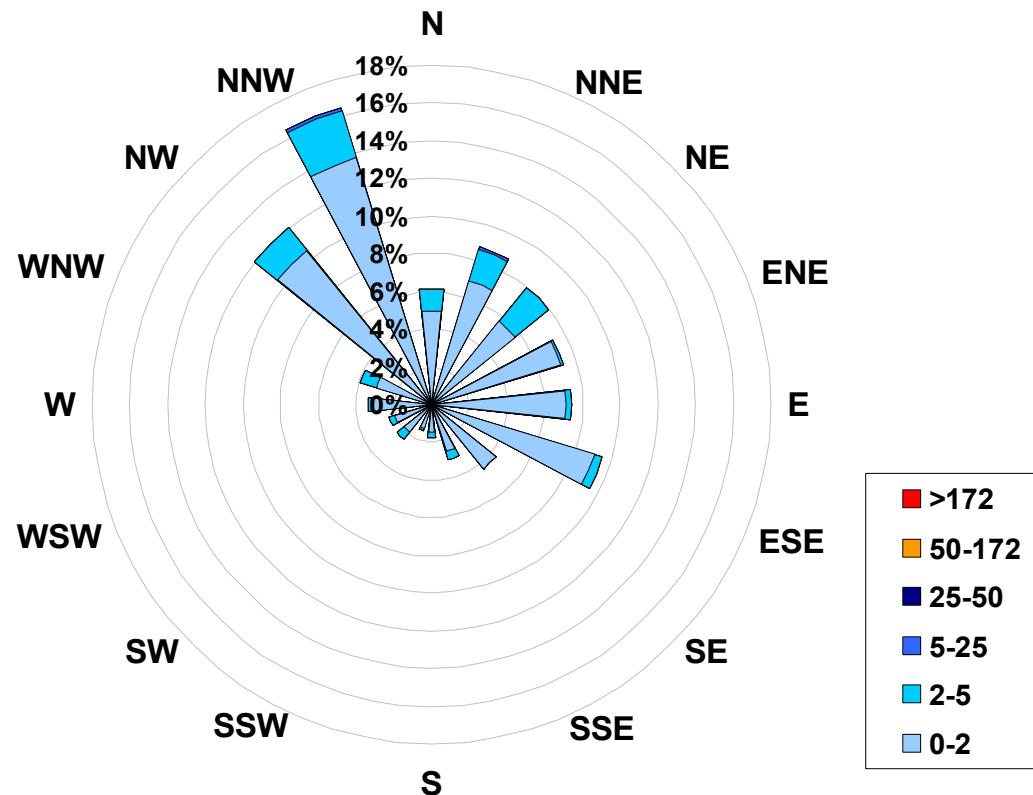


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 2%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	594
2	to	5	89
5	to	25	2
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			685

## PASZA - Beaverlodge - Nitrogen Dioxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

**Summary**

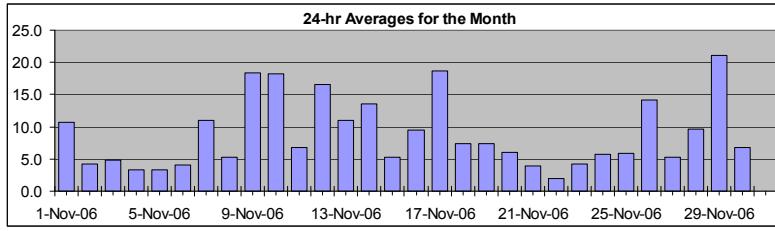
Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	38.8 ppb 29-Nov 14:00 15:00
Maximum 24-hr Average:	21.1 ppb 29-Nov

AIC Time:	31 hrs	Operational Time:	685 hrs								
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%								
Percentile	99	95	75	50	25	5	1	Average	8.8 ppb	Median	6.0 ppb
	30.3	23.6	12.8	6.0	3.2	1.4	0.9				

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 0:00 1:00	1:00 2:00 3:00	2:00 3:00 4:00	3:00 4:00 5:00	4:00 5:00 6:00	5:00 6:00 7:00	6:00 7:00 8:00	7:00 8:00 9:00	8:00 9:00 10:00	9:00 10:00 11:00	10:00 11:00 12:00	11:00 12:00 13:00	12:00 13:00 14:00	13:00 14:00 15:00	14:00 15:00 16:00	15:00 16:00 17:00	16:00 17:00 18:00	17:00 18:00 19:00	18:00 19:00 20:00	19:00 20:00 21:00	20:00 21:00 22:00	21:00 22:00 23:00				
1-Nov-06	5	14	10	13	A	10	18	24	28	23	17	20	8	5	9	6	6	5	4	5	5	6	2	2	10.7	27.6
2-Nov-06	2	2	2	2	A	1	2	3	4	5	5	5	4	4	4	4	4	4	14	6	3	3	5	6	4.2	14.2
3-Nov-06	6	6	5	4	A	3	3	3	6	7	6	5	5	4	3	4	4	5	5	6	6	5	5	5	4.9	6.9
4-Nov-06	5	5	5	5	A	3	3	4	6	3	3	2	3	2	3	2	3	3	3	3	3	3	2	3	3.3	5.5
5-Nov-06	3	5	3	4	A	4	4	4	3	2	2	2	1	1	1	2	2	3	7	7	7	3	2	3	3.3	7.3
6-Nov-06	4	7	4	4	A	2	2	2	2	2	2	1	1	1	2	2	3	4	5	9	14	5	7	9	4.1	14.5
7-Nov-06	6	7	5	7	A	6	9	16	14	18	11	15	14	7	12	11	18	20	17	14	9	6	4	3	10.9	19.8
8-Nov-06	3	3	3	2	A	3	5	6	5	4	3	2	2	2	2	4	13	18	7	6	6	7	13	5.3	18.4	
9-Nov-06	10	7	6	8	A	10	12	16	17	18	11	16	16	18	17	23	24	27	30	29	29	29	24	26	18.4	29.6
10-Nov-06	30	23	22	23	A	25	24	26	28	20	20	18	13	11	12	13	17	18	16	16	11	11	12	11	18.2	29.7
11-Nov-06	8	5	4	5	A	5	6	6	5	4	5	3	4	3	3	4	5	5	7	10	16	16	14	14	6.8	15.9
12-Nov-06	13	15	16	16	A	17	16	19	17	12	11	10	10	12	14	17	21	23	21	19	22	23	21	20	16.6	23.0
13-Nov-06	20	23	22	22	A	22	15	13	10	6	6	7	6	5	5	5	7	7	7	6	5	5	13	15	10.9	22.9
14-Nov-06	12	7	7	5	A	6	7	13	12	12	13	12	11	11	13	15	19	23	24	24	22	19	14	12	13.5	23.8
15-Nov-06	10	9	6	4	A	4	9	8	12	6	6	4	4	4	3	4	5	4	4	4	6	3	2	2	5.3	11.6
16-Nov-06	2	2	2	2	A	4	7	19	18	7	6	3	5	8	4	3	7	9	10	10	27	23	22	17	9.4	26.5
17-Nov-06	16	17	20	18	A	24	22	16	9	13	14	13	11	16	22	19	26	30	26	23	24	22	19	9	18.7	30.1
18-Nov-06	9	5	7	10	A	3	8	6	6	5	3	5	6	5	6	6	10	13	11	13	7	8	8	8	7.4	13.0
19-Nov-06	8	9	10	10	A	10	11	11	14	10	10	11	11	10	6	6	8	9	3	1	1	1	1	1	7.4	14.2
20-Nov-06	1	2	2	2	A	3	3	6	7	11	12	4	6	5	3	4	9	3	3	5	8	15	17	6.1	17.1	
21-Nov-06	18	12	7	7	A	1	1	1	2	2	4	C	C	C	C	A	3	3	2	3	1	1	1	3.9	17.9	
22-Nov-06	0	0	0	1	A	1	0	1	1	2	3	3	3	3	5	4	2	2	2	2	3	2	2	1.9	5.2	
23-Nov-06	3	2	2	3	A	4	7	4	3	1	2	2	4	3	4	5	9	10	7	5	5	3	3	4.2	10.1	
24-Nov-06	3	2	1	2	A	2	2	2	3	2	2	1	1	1	2	4	6	8	12	10	27	20	11	5.7	26.6	
25-Nov-06	5	8	3	2	A	4	6	6	5	4	5	3	2	2	2	3	3	10	9	8	7	9	18	5.8	18.4	
26-Nov-06	15	7	7	7	A	9	13	16	21	24	17	16	15	14	18	21	26	33	17	7	5	5	10	3	14.2	33.4
27-Nov-06	3	3	2	2	A	1	1	2	2	1	1	1	2	5	9	13	12	11	9	15	7	7	7	5.3	15.3	
28-Nov-06	3	5	9	6	A	5	6	5	9	8	8	5	2	3	4	9	16	20	24	20	17	14	17	9.7	23.6	
29-Nov-06	19	17	11	9	A	5	12	14	13	13	22	19	25	39	39	36	37	32	31	27	17	18	17	21.1	38.8	
30-Nov-06	19	25	24	17	A	3	2	9	5	3	2	2	2	3	2	3	5	7	6	3	3	4	3	6.8	25.2	

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

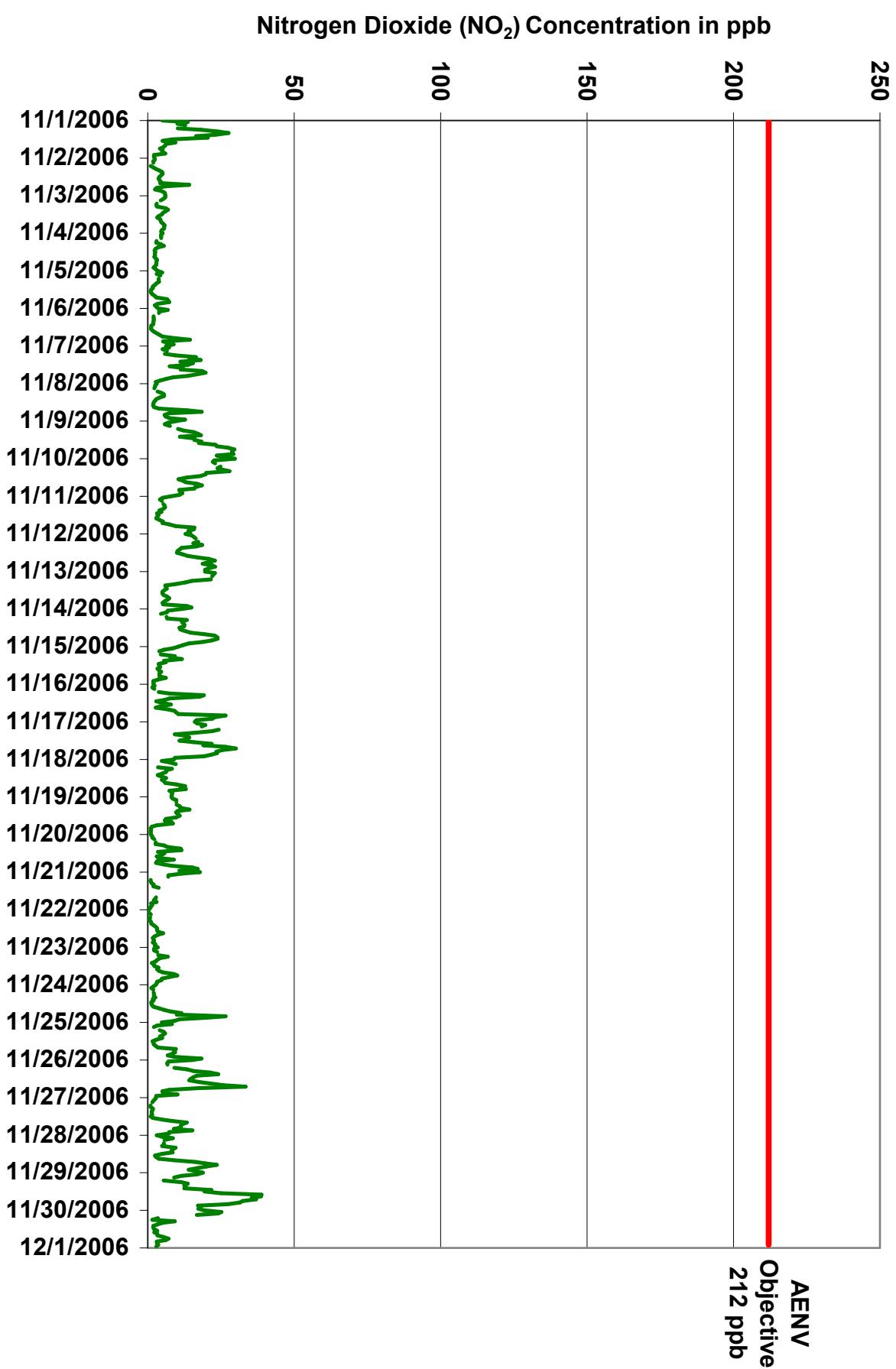


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

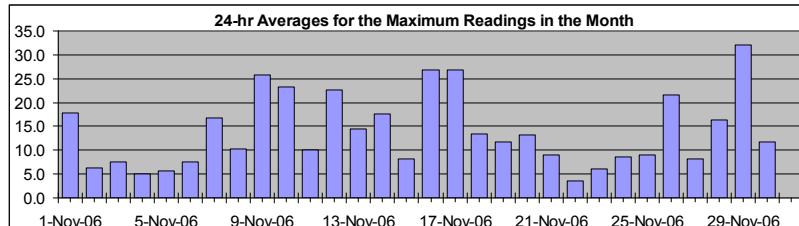
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	301.2 ppb	16-Nov 7:00 8:00
Maximum 24-hr Value:	32.2 ppb	29-Nov



AIC Time:	31 hrs	Operational Time:	685 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	43.0 35.4 20.0 9.7 5.0 2.5 1.6	13.9 ppb	9.7 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

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily 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	Average	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Maximum	
1-Nov-06	7	36	23	26	A	15	31	35	37	32	29	28	15	7	18	9	8	7	8	7	7	16	4	3	17.8	36.9
2-Nov-06	3	3	2	2	A	2	3	4	5	7	6	5	5	4	5	6	11	28	18	4	3	7	7	6	6.3	27.8
3-Nov-06	7	7	6	6	A	4	4	7	15	15	14	7	7	6	5	10	6	8	7	8	7	7	6	6	7.5	15.3
4-Nov-06	6	5	8	6	A	4	6	8	12	5	3	3	4	5	5	4	4	5	5	3	4	3	3	4	5.0	11.6
5-Nov-06	6	7	4	7	A	5	6	5	4	3	3	3	2	2	2	2	5	7	9	19	15	6	5	4	5.6	18.8
6-Nov-06	4	16	10	5	A	3	3	3	3	3	2	2	2	3	3	4	5	8	12	17	26	8	11	20	7.5	26.1
7-Nov-06	11	21	7	10	A	8	17	23	26	35	19	20	17	14	16	14	31	29	20	18	11	9	7	3	16.8	35.2
8-Nov-06	4	3	3	3	A	5	9	9	10	7	6	4	3	4	4	3	7	31	29	14	13	15	23	26	10.2	30.5
9-Nov-06	11	8	7	17	A	22	18	21	39	33	21	32	25	24	20	27	29	37	33	30	30	37	30	41	25.8	41.4
10-Nov-06	42	27	28	28	A	32	37	36	36	30	29	21	19	15	13	15	21	20	18	19	13	12	13	12	23.3	41.9
11-Nov-06	10	6	5	7	A	7	7	9	7	6	7	4	6	4	4	6	12	10	16	21	19	21	18	20	10.1	21.0
12-Nov-06	20	26	24	23	A	18	22	25	21	18	16	19	24	23	24	20	25	26	24	25	23	25	24	22	22.6	26.4
13-Nov-06	26	26	37	25	A	26	18	19	12	7	8	8	7	5	6	7	8	9	8	7	6	7	22	28	14.4	37.4
14-Nov-06	22	12	8	7	A	11	15	20	17	16	18	17	16	13	15	17	22	25	25	25	25	23	18	16	17.6	25.1
15-Nov-06	12	12	9	5	A	6	14	15	24	7	9	5	6	6	5	6	7	5	5	5	5	18	4	3	8.2	23.9
16-Nov-06	2	4	3	4	A	8	16	301	25	17	12	4	10	11	9	5	11	16	14	15	43	31	28	25	26.7	301.2
17-Nov-06	20	19	28	31	A	26	27	23	17	18	29	24	17	38	32	22	31	39	34	34	35	29	28	17	26.9	38.8
18-Nov-06	14	13	13	40	A	6	10	7	7	6	7	9	6	7	13	14	21	23	39	10	11	12	14	13.4	39.8	
19-Nov-06	10	10	15	16	A	14	20	16	25	15	15	14	18	18	8	8	10	13	10	3	3	4	3	3	11.7	25.5
20-Nov-06	5	4	2	3	A	6	5	9	12	21	23	6	11	6	5	7	23	6	8	13	29	26	43	32	13.2	43.1
21-Nov-06	41	39	10	15	A	2	3	3	6	7	7	C	C	C	C	A	6	3	3	6	3	3	2	1	8.9	40.9
22-Nov-06	1	1	1	1	A	2	1	3	1	3	4	4	4	4	4	6	9	9	4	3	5	4	3	6	3.6	9.1
23-Nov-06	5	3	3	4	A	5	12	6	5	4	2	4	3	5	4	6	7	12	13	12	7	7	5	4	6.0	13.0
24-Nov-06	4	3	2	3	A	3	3	3	4	3	3	3	2	3	5	7	8	11	17	16	33	37	14	10	8.5	36.9
25-Nov-06	10	17	5	3	A	5	8	7	7	8	8	6	2	2	3	4	5	17	12	13	15	10	18	22	9.1	22.3
26-Nov-06	18	11	9	8	A	12	25	21	36	35	26	22	17	17	32	35	41	39	37	9	7	18	19	3	21.6	40.6
27-Nov-06	3	3	2	2	A	2	2	4	5	2	6	4	2	7	7	15	19	14	14	14	11	27	11	14	8.2	26.7
28-Nov-06	4	8	19	9	A	7	16	12	18	13	11	13	8	4	4	5	18	28	35	46	26	22	19	30	16.3	45.8
29-Nov-06	34	23	13	12	A	17	33	17	32	34	34	35	38	56	52	43	44	41	39	33	35	33	22	20	32.2	55.8
30-Nov-06	35	34	41	27	A	7	6	15	13	6	3	3	3	5	4	6	7	8	12	13	5	5	5	5	11.7	41.2

Hourly Avg	13.3	13.5	11.6	11.8	N	9.7	13.2	22.9	16.1	13.9	12.6	11.2	10.5	10.9	11.1	11.6	15.1	17.5	17.0	16.4	16.2	15.5	14.2	14.0
Hourly Max	41.9	38.9	41.2	39.8	0.0	32.1	37.2	301.2	39.1	35.2	33.7	34.6	37.9	55.8	52.0	43.0	43.7	41.4	39.0	45.8	43.0	37.2	43.1	41.4

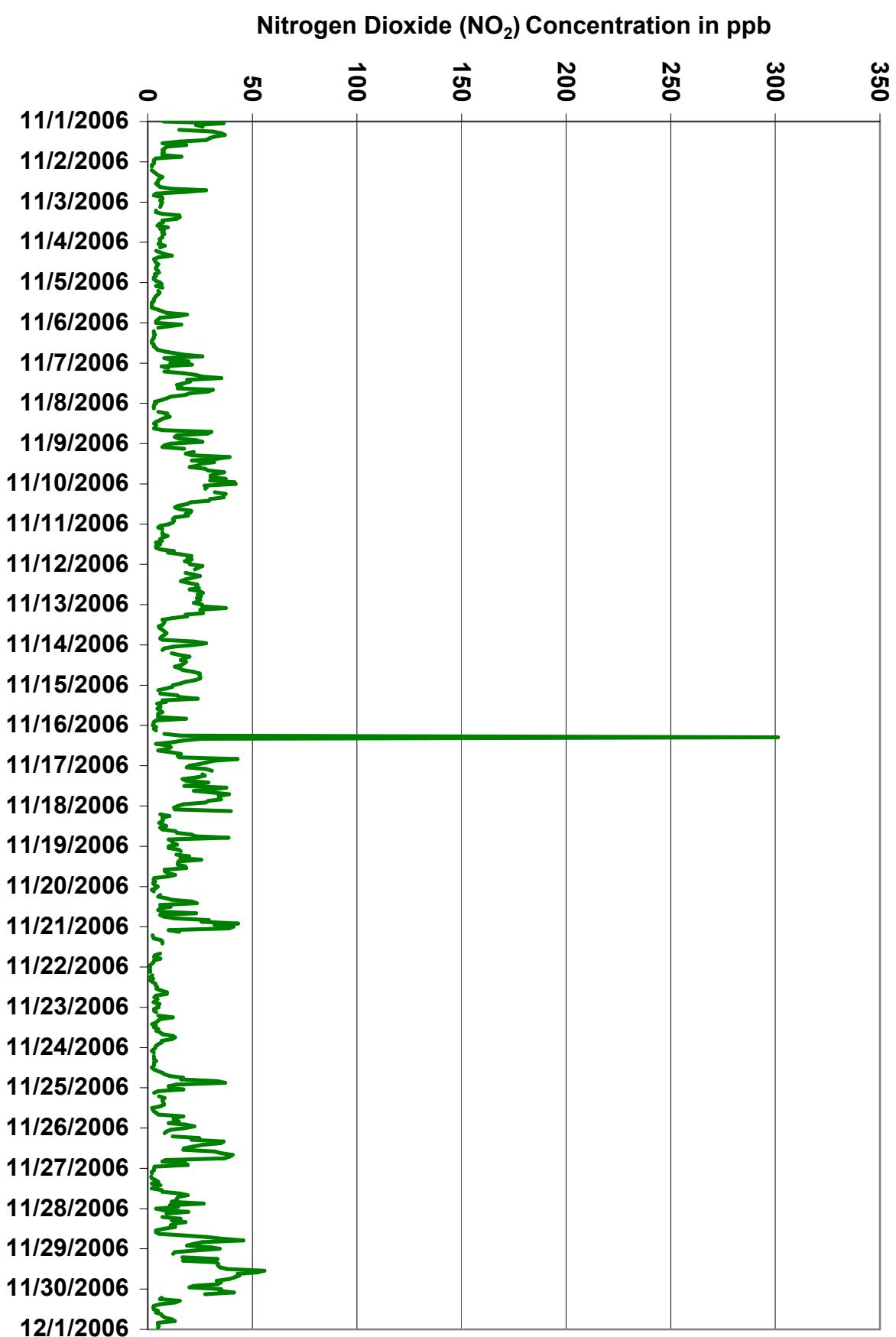
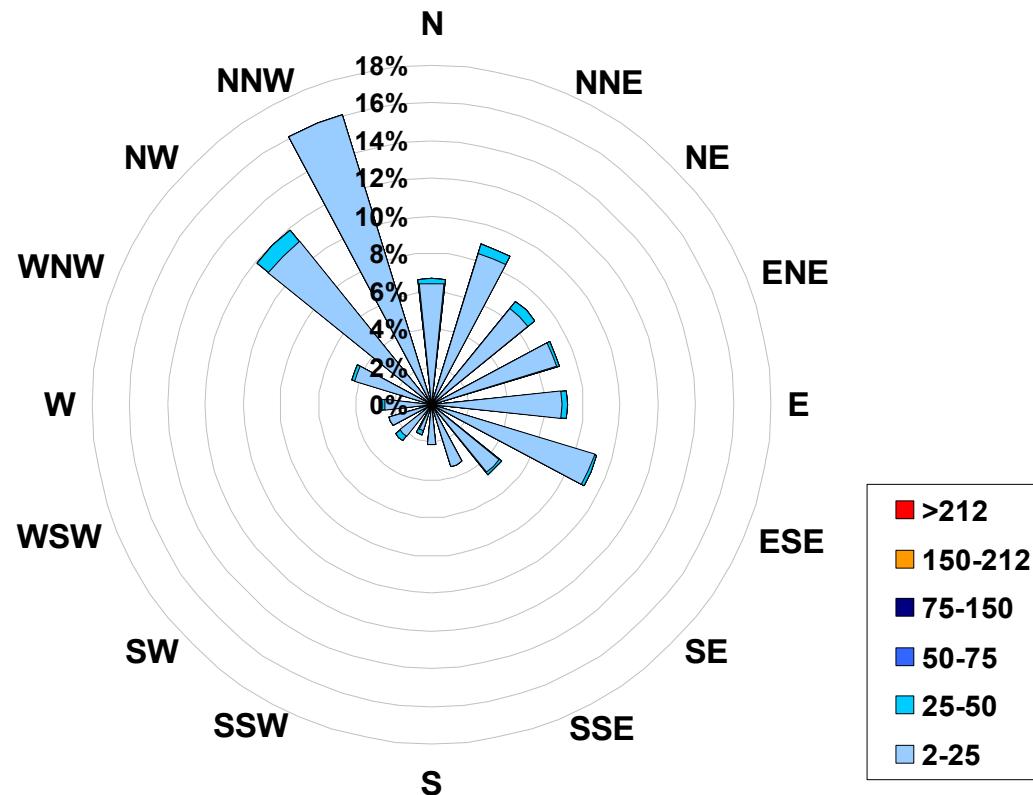


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 2%

		Frequency Distribution of NO <sub>2</sub> in ppb	
		Range	Frequency (hrs)
2.0	<	25	661
25	to	50	21
50	to	75	2
75	to	150	1
150	to	212	0
>		212	0
Total Non-Zero Values			685

# PASZA – Beaverlodge - Nitric Oxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

Maximum 1-hr Average:	84.9	ppb	29-Nov	14:00 15:00
Maximum 24-hr Average:	15.0	ppb	29-Nov	

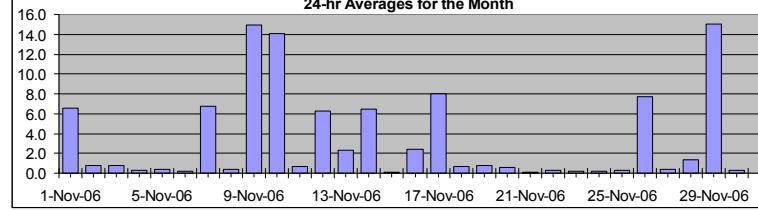
AIC Time:	31 hrs	Operational Time:	685 hrs										
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%										
Percentile	99	95	75	50	25	5	1	Average	3.3	ppb	Median	0.1	ppb
	38.9	19.7	1.6	0.1	0.0	0.0	0.0						

## Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Nov-06	0 1:00	0 1	0 0	0 0	A A	0 0	1 0	10 0	30 2	28 3	24 4	36 3	8 2	3 2	6 2	2 1	0 0	0 0	6.6	36.2							
2-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 2	2 3	4 3	3 2	2 1	2 1	1 0	0 0	0.7	3.6									
3-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 3	3 4	3 3	3 2	2 1	1 1	1 0	0 0	0.7	3.5									
4-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 0	0 0	0.3	1.0								
5-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 1	1 1	1 1	1 1	1 1	1 1	1 1	1 0	0 0	0.4	1.2								
6-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 0	0 1	0 1	0 0	0 0	0 0	0 0	0 1	0 0	0.1	0.6								
7-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	1 1	4 25	25 19	30 30	27 10	10 16	16 9	9 11	11 3	3 0	0 0	6.7	29.9							
8-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 1	1 1	1 1	1 1	1 1	1 1	1 1	1 0	0 2	2 1	0 0	0 0	0 0	0 0	0 0	0 0	0.4	1.9	
9-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	13 24	24 18	39 35	35 42	42 31	31 36	36 20	20 14	14 18	18 11	11 10	10 13	13 2	2 16	14.9	42.5			
10-Nov-06	35 2	2 2	2 2	A A	8 17	17 24	24 56	56 32	44 44	39 22	22 13	13 11	11 6	6 2	6 0	2 1	0 1	0 0	14.0	56.2							
11-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 1	2 2	2 2	3 2	2 2	2 1	1 1	0 0	0.7	3.2									
12-Nov-06	0 0:00	2 1	1 0	0 0	A A	0 0	0 2	2 4	10 13	13 13	17 15	15 16	16 17	17 16	16 8	8 2	2 2	2 1	4 1	1 0	0 0	0 0	0 0	0 0	6.3	16.7	
13-Nov-06	3 0:00	5 1	1 2	2 A	9 0	0 0	0 0	0 1	4 4	6 6	5 4	4 3	2 2	1 1	0 0	2.3	9.2										
14-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 2	3 9	9 16	16 18	18 15	15 15	15 14	14 11	11 11	11 10	10 13	13 9	1 1	1 0	0 0	0 0	0 0	0 0	0 0	6.5	17.8
15-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 1	0 0	0 0	0 1	0 0	0.1	0.8												
16-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 9	2 2	2 2	4 2	2 6	8 8	3 1	1 0	0 0	2.4	12.5										
17-Nov-06	0 0:00	0 3	4 4	A A	3 4	4 0	0 0	6 6	21 20	20 15	25 25	37 37	37 18	18 15	15 7	7 2	1 1	1 2	0 0	0 0	0 0	0 0	0 0	8.0	37.2		
18-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	1 1	1 2	4 4	2 2	2 1	1 1	1 0	0 0	0 1	0 0	0.6	3.6							
19-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	1 1	3 3	4 3	3 3	3 1	1 1	1 0	0 0	0.8	3.5									
20-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 1	4 4	1 1	2 2	1 1	1 0	0 1	0 0	0.6	3.7									
21-Nov-06	1 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 0	1 C	C C	C C	C C	C A	0 0	0.1	0.5										
22-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 0	1 2	2 2	1 1	1 1	1 1	0 0	0.3	1.8										
23-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 0	0 1	1 1	1 1	1 1	1 1	0 0	0.2	1.3										
24-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.2	1.1	
25-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 0	0 2	1 5	1 9	1 5	2 2	2 1	1 0	0 0	0 0	2 4	0 0	0 0	0 0	0 0	0 0	0.3	1.5	
26-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	3 2	17 18	21 21	20 20	20 20	20 18	18 16	16 19	19 7	7 0	0 0	0 0	0 0	0 0	0 0	0 0	7.7	21.1	
27-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 0	0 0	0 1	0 1	0 3	3 3	3 1	1 0	0 0	0.4	2.7								
28-Nov-06	0 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 2	5 5	9 9	5 5	2 2	2 1	1 0	0 0	0 0	0 2	4 4	0 0	0 0	0 0	0 0	0 0	1.4	8.6	
29-Nov-06	1 0:00	0 0	0 0	0 0	A A	0 0	0 0	0 0	0 3	9 31	33 39	39 85	85 74	74 36	36 26	26 6	6 1	1 0	0 0	0 0	0 0	0 0	0 0	0 0	15.0	84.9	
30-Nov-06	0 0:00	1 2	2 0	A A	0 0	0 0	0 0	0 0	0 0	0 1	1 1	0 0	0.2	2.4													

## HOURLY AVERAGE TABLE

## Nitric Oxide (NO)



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

# PASZA - Beaverlodge - Oxides of Nitrogen Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

Maximum 1-hr Average:	124.5	ppb	29-Nov	14:00 15:00
Maximum 24-hr Average:	36.7	ppb	29-Nov	

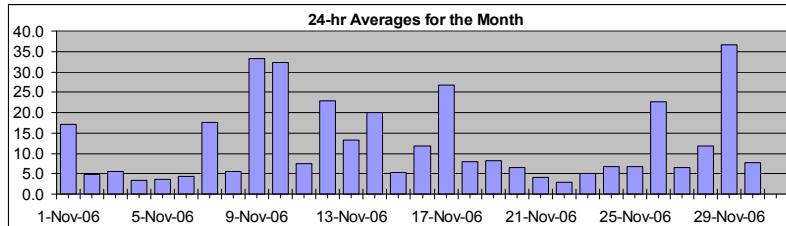
AIC Time:	31 hrs	Operational Time:	685 hrs							
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%							
Percentile	99	95	75	50	25	5	1	Average	Median	
	63.5	40.9	15.9	6.8	3.7	1.9	1.0			
								12.4 ppb	6.8 ppb	

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	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-Nov-06	5	15	10	13	A	10	19	34	57	51	40	57	17	8	16	8	7	5	4	5	5	6	2	2	17.2	57.0	
2-Nov-06	2	2	2	2	A	1	2	3	4	6	9	8	6	6	5	6	5	14	6	3	2	5	5	6	4.8	14.4	
3-Nov-06	6	6	5	4	A	3	3	3	7	10	10	8	8	6	4	5	5	5	5	6	5	5	5	5	5.5	9.6	
4-Nov-06	5	4	5	4	A	3	3	4	6	4	3	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3.4	6.1
5-Nov-06	3	5	3	4	A	4	4	4	3	3	3	3	2	2	2	2	3	3	6	8	8	4	2	3	3.6	8.1	
6-Nov-06	3	7	4	4	A	2	2	2	2	2	2	2	2	2	2	3	4	4	5	9	15	5	7	9	4.3	14.7	
7-Nov-06	6	8	5	6	A	6	9	17	18	43	30	45	41	18	28	20	30	22	17	14	8	6	4	3	17.6	45.4	
8-Nov-06	3	2	2	2	A	3	5	6	6	5	4	4	3	3	2	3	4	15	19	7	6	6	7	13	5.7	19.0	
9-Nov-06	10	7	6	7	A	10	12	16	30	43	29	55	51	61	49	59	44	41	47	39	38	42	26	42	33.2	60.8	
10-Nov-06	64	25	24	25	A	33	41	49	84	52	64	57	36	24	23	19	22	20	17	17	11	11	12	11	32.2	84.0	
11-Nov-06	8	5	4	5	A	5	6	6	6	5	7	5	7	6	5	5	6	5	7	10	16	16	14	14	7.5	16.0	
12-Nov-06	13	17	17	16	A	17	16	21	20	21	24	24	27	27	30	34	37	31	23	21	23	27	21	20	22.9	37.1	
13-Nov-06	22	28	24	24	A	31	15	13	10	7	10	13	11	9	8	8	8	7	7	6	5	5	15	19	13.3	30.8	
14-Nov-06	12	7	6	4	A	6	7	16	14	21	29	30	26	26	27	26	31	33	37	33	23	20	14	12	20.0	36.6	
15-Nov-06	10	8	5	4	A	4	9	8	12	6	7	4	4	5	4	4	5	4	4	4	6	3	2	2	5.4	11.7	
16-Nov-06	2	2	1	2	A	4	8	27	20	10	10	5	11	16	8	3	7	9	10	10	39	25	23	17	11.8	39.0	
17-Nov-06	16	17	22	22	A	27	26	16	10	19	36	33	25	41	59	37	41	37	27	24	24	24	20	9	26.6	59.0	
18-Nov-06	9	5	7	9	A	3	8	6	6	6	4	7	10	7	8	7	11	13	11	14	7	8	8	8	7.9	14.1	
19-Nov-06	8	8	10	10	A	10	11	11	15	11	13	14	14	13	8	7	8	8	3	1	1	1	1	1	8.1	15.0	
20-Nov-06	1	1	1	2	A	3	3	6	7	12	15	5	8	6	4	4	10	3	3	5	8	15	19	11	6.6	18.6	
21-Nov-06	18	12	7	7	A	1	1	1	2	2	4	C	C	C	C	A	4	3	3	4	2	2	1	4.2	18.3		
22-Nov-06	1	1	1	2	A	1	1	1	2	2	3	4	6	6	6	7	4	3	2	2	3	2	3	2.9	7.3		
23-Nov-06	4	3	3	4	A	4	8	5	4	4	2	4	4	6	5	5	6	10	11	8	6	5	4	5.1	10.9		
24-Nov-06	4	2	2	3	A	3	3	3	3	3	3	3	3	3	4	6	7	9	12	11	29	21	12	6.8	28.6		
25-Nov-06	6	9	4	3	A	5	6	6	6	5	7	5	3	4	4	4	4	10	10	10	9	8	10	6.8	19.5		
26-Nov-06	16	8	7	7	A	10	14	16	25	42	36	38	36	35	39	40	42	53	25	8	6	6	11	3	22.7	52.8	
27-Nov-06	3	3	2	2	A	2	2	3	2	2	3	3	2	4	8	12	16	13	12	12	10	16	8	8	6.5	16.5	
28-Nov-06	3	5	9	6	A	6	6	6	10	11	14	18	11	6	5	6	10	17	22	28	21	18	15	18	11.8	28.2	
29-Nov-06	21	17	12	9	A	6	12	14	17	23	53	53	65	124	113	72	63	40	33	28	18	19	18	18	36.7	124.5	
30-Nov-06	20	26	27	17	A	4	2	10	6	4	3	3	4	5	3	4	6	8	7	4	4	4	4	7.8	27.0		

Hourly Avg	10.1	8.8	7.9	7.7	N	7.6	8.8	11.1	13.7	14.3	14.9	17.7	15.0	14.5	17.0	15.9	15.3	15.7	13.5	12.1	12.3	11.2	9.8	9.9
Hourly Max	64.3	28.0	27.0	25.4	0	33.3	40.9	49.3	84.0	52.5	63.7	57.3	53.1	64.7	124.5	113.1	72.3	63.5	47.4	39.3	39.0	42.0	25.9	42.3

## HOURLY AVERAGE TABLE

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



## Status Flag Characters

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

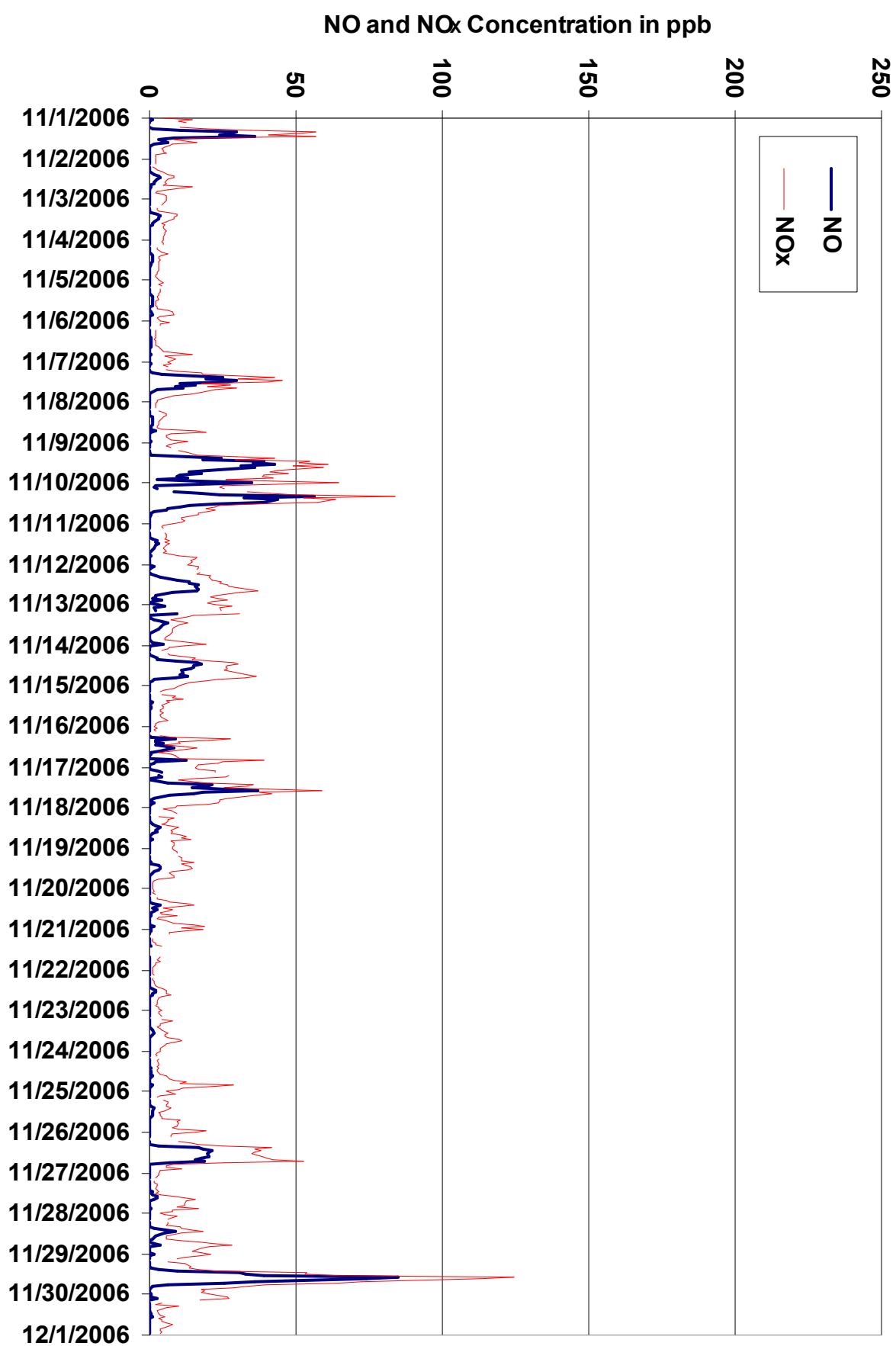


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

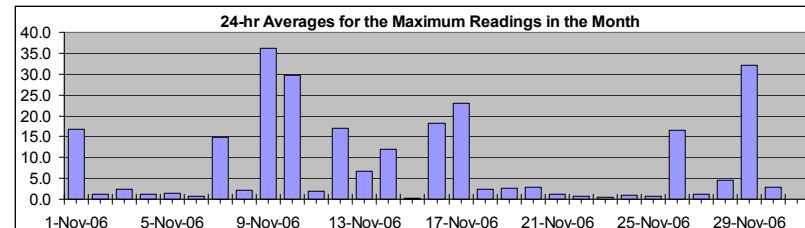
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	265.5 ppb	16-Nov 7:00	8:00
Maximum 24-hr Value:	36.1 ppb	9-Nov	



AIC Time:	31 hrs	Operational Time:	685 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	93.6 49.0 5.8 1.0 0.0 0.0 0.0	8.6 ppb	1.0 ppb

#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Nov-06	0	11	2	2	A	1	12	57	70	58	70	57	25	6	11	3	2	0	1	0	0	0	0	0	0	16.9	69.8
2-Nov-06	0	0	0	0	A	0	0	0	1	4	4	4	3	3	2	2	1	4	0	0	0	0	0	0	0	1.2	4.0
3-Nov-06	0	0	0	0	A	0	0	1	2	10	11	5	7	3	2	11	1	1	0	0	0	0	0	0	0	2.3	10.6
4-Nov-06	0	0	1	0	A	0	1	2	6	1	1	2	2	3	2	2	0	1	3	0	0	0	0	0	0	1.1	5.6
5-Nov-06	0	0	0	0	A	0	0	0	1	1	2	2	2	2	1	1	1	1	1	13	5	2	1	0	0	1.6	13.0
6-Nov-06	1	0	0	0	A	0	0	1	0	1	1	1	1	1	2	1	1	1	0	0	1	4	0	1	2	0.8	3.9
7-Nov-06	0	6	0	0	A	0	0	4	21	57	36	42	40	22	24	24	41	18	2	1	0	0	0	0	0	14.8	57.4
8-Nov-06	0	0	0	0	A	0	1	1	2	3	2	2	3	2	1	1	14	8	0	0	0	1	2	8	0	2.2	14.2
9-Nov-06	0	0	0	0	A	0	4	2	101	77	44	98	69	69	42	50	39	45	29	18	13	54	11	65	0	36.1	101.2
10-Nov-06	70	13	12	10	A	33	73	69	104	72	64	52	39	20	17	9	14	5	1	2	1	0	0	1	0	29.7	104.0
11-Nov-06	0	0	0	0	A	0	0	0	1	3	4	3	6	3	3	2	7	2	2	3	1	1	1	1	0	1.8	6.7
12-Nov-06	5	17	5	3	A	0	4	12	11	24	23	38	65	29	49	22	25	16	13	10	4	11	6	1	0	17.0	64.8
13-Nov-06	18	19	11	9	A	27	2	2	1	2	7	8	6	4	4	3	2	1	0	0	1	1	5	24	0	6.7	27.0
14-Nov-06	3	1	0	0	A	2	2	8	21	16	31	31	32	18	17	15	18	22	15	12	5	5	1	0	0	11.9	32.0
15-Nov-06	0	0	0	0	A	0	0	0	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.7
16-Nov-06	0	0	0	0	A	1	2	265	7	5	14	5	13	12	9	1	1	0	0	0	1	54	14	10	2	18.1	265.5
17-Nov-06	0	1	13	25	A	6	17	5	7	16	71	49	28	82	71	42	21	28	8	10	10	15	5	0	0	23.1	81.9
18-Nov-06	0	0	0	2	A	0	0	0	1	2	2	4	6	4	4	4	2	1	1	21	0	0	0	0	0	2.3	20.6
19-Nov-06	0	0	0	0	A	0	4	1	5	2	8	7	8	9	2	2	1	0	0	0	1	8	1	1	1	2.6	8.9
20-Nov-06	1	0	0	0	A	0	0	0	1	4	8	2	6	2	1	2	5	0	0	0	5	2	25	2	2.9	25.2	
21-Nov-06	6	12	0	0	A	0	0	0	0	1	1	C	C	C	A	1	0	0	1	0	1	0	0	1.2	12.3		
22-Nov-06	0	0	0	0	A	0	0	0	0	0	1	1	3	2	3	4	1	0	0	0	0	0	0	0	0.6	3.9	
23-Nov-06	0	0	0	0	A	0	0	0	0	1	0	1	1	2	1	2	1	0	0	0	0	0	0	0	0.4	2.0	
24-Nov-06	0	0	0	0	A	0	0	0	0	1	1	1	1	2	2	2	1	1	1	0	3	6	0	0	1.0	5.8	
25-Nov-06	0	0	0	0	A	0	0	0	0	2	3	3	1	1	1	2	0	0	1	1	0	1	1	3	0.8	2.9	
26-Nov-06	0	0	1	0	A	0	5	1	13	28	38	26	24	23	44	42	55	44	38	0	0	0	0	0	16.6	55.4	
27-Nov-06	0	0	0	0	A	0	0	1	1	0	2	2	1	3	5	5	6	1	0	1	0	2	0	0	1.3	5.9	
28-Nov-06	0	0	1	0	A	0	3	1	1	3	9	14	9	3	4	2	1	3	19	29	0	0	0	4	4.6	28.9	
29-Nov-06	20	0	0	0	A	2	5	0	14	16	47	74	93	124	104	98	68	42	22	4	4	1	2	0	32.1	123.8	
30-Nov-06	10	15	31	2	A	0	0	0	0	1	1	1	1	2	1	1	0	1	1	0	0	0	0	0	3.0	31.4	

Hourly Avg 4.5 3.2 2.6 1.7 N 2.4 4.4 14.4 13.0 13.6 17.0 18.4 17.0 15.8 14.8 12.2 10.6 8.3 5.5 4.2 4.0 3.9 2.4 3.8

Hourly Max 70.2 18.8 31.4 24.7 0.0 33.4 72.8 265.5 104.0 77.1 70.9 97.8 92.8 123.8 104.2 97.9 67.9 44.6 37.8 28.9 54.1 54.4 25.2 64.8

Station: Beaverton  
Station Owner: PASZA

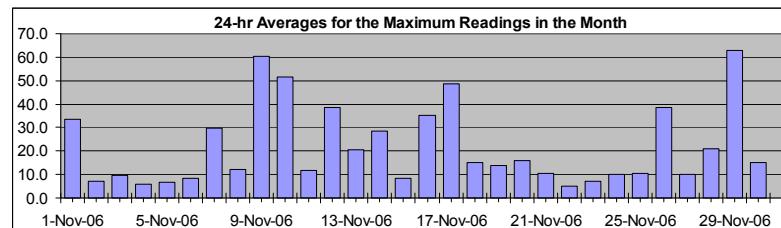
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	378.0 ppb	16-Nov 7:00 8:00
Maximum 24-hr Value:	63.1 ppb	29-Nov



AIC Time:	31 hrs	Operational Time:	685 hrs								
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%								
Percentile	99	95	75	50	25	5	1	Average	21.9 ppb	Median	10.9 ppb
	128.7	77.3	26.9	10.9	5.9	2.9	2.0				

#### Status Flag Characters

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Nov-06	7	45	26	28	A	15	41	86	99	85	100	85	39	14	29	11	10	7	8	7	7	7	16	4	3	33.6	99.6
2-Nov-06	2	3	2	2	A	1	3	5	5	11	10	9	8	6	6	8	12	31	18	4	3	6	7	6	7	7.3	31.0
3-Nov-06	6	6	6	6	A	4	4	7	17	25	23	12	14	9	7	20	7	8	7	8	7	7	7	5	7	9.6	25.0
4-Nov-06	6	5	9	7	A	5	6	9	17	6	4	5	6	7	7	5	4	5	8	3	4	3	3	4	6.0	17.2	
5-Nov-06	6	6	4	7	A	5	5	5	4	4	5	5	4	3	3	3	5	7	9	32	20	7	7	4	6.8	31.6	
6-Nov-06	5	16	10	5	A	3	3	4	3	4	4	3	3	4	4	5	5	8	12	18	30	9	12	21	8.2	29.7	
7-Nov-06	11	27	6	10	A	8	17	27	38	86	55	61	56	35	40	25	71	47	21	18	11	9	6	3	30.0	85.7	
8-Nov-06	4	3	3	3	A	5	10	10	11	10	8	6	5	7	6	4	7	45	36	14	13	15	26	33	12.3	44.7	
9-Nov-06	11	8	7	17	A	22	22	22	138	110	62	129	94	92	61	75	67	75	61	47	43	89	40	97	60.4	137.8	
10-Nov-06	112	40	40	36	A	64	102	103	140	98	87	73	55	35	30	24	33	25	19	21	13	12	13	12	51.6	139.6	
11-Nov-06	10	6	5	7	A	7	7	10	7	8	11	7	11	7	7	8	18	12	17	23	20	21	18	21	11.6	22.9	
12-Nov-06	25	41	29	24	A	18	26	37	32	40	38	51	88	53	71	41	47	42	35	35	27	35	30	23	38.6	87.6	
13-Nov-06	40	43	48	33	A	52	19	20	12	8	15	15	13	10	9	9	9	10	9	7	6	8	27	51	20.4	51.9	
14-Nov-06	25	13	8	7	A	12	16	27	36	30	46	48	48	30	32	31	39	45	39	35	31	28	19	16	28.7	47.8	
15-Nov-06	12	11	9	5	A	6	14	15	25	8	10	5	7	7	5	6	7	5	5	5	18	4	3	2	8.4	24.7	
16-Nov-06	2	4	3	4	A	9	18	378	31	21	23	9	21	23	18	6	11	16	14	15	82	41	38	27	35.3	378.0	
17-Nov-06	21	19	39	53	A	32	42	28	23	35	99	69	45	116	96	63	50	60	41	44	45	43	32	17	48.4	116.3	
18-Nov-06	14	12	13	42	A	6	10	7	8	8	8	11	15	10	11	17	14	22	24	53	10	11	12	14	15.2	52.8	
19-Nov-06	10	10	15	16	A	14	23	16	29	17	23	21	25	27	10	9	11	13	10	4	6	4	3	3	13.9	29.0	
20-Nov-06	5	4	2	3	A	6	5	8	12	24	30	8	17	8	6	8	28	6	8	13	34	27	68	33	15.7	67.9	
21-Nov-06	45	51	10	15	A	3	3	3	6	8	8	C	C	C	C	A	7	4	4	7	4	4	3	10.3	50.8		
22-Nov-06	1	1	1	2	A	3	2	4	2	4	5	6	8	8	9	14	11	5	4	6	5	4	6	5.0	14.0		
23-Nov-06	6	4	4	5	A	6	13	7	6	5	4	6	5	8	6	8	8	12	14	12	8	8	6	7.2	13.9		
24-Nov-06	4	4	3	4	A	4	4	4	5	5	5	4	4	5	8	10	10	12	18	17	36	44	14	10.2	43.6		
25-Nov-06	11	18	6	4	A	6	9	8	8	10	12	9	5	5	5	6	6	18	14	14	16	11	19	25	10.6	25.4	
26-Nov-06	19	12	10	9	A	12	30	22	50	61	65	47	41	40	77	77	95	82	73	9	8	19	20	5	38.4	94.6	
27-Nov-06	4	4	3	3	A	2	3	5	7	4	9	6	4	10	13	20	26	16	15	15	12	29	11	16	10.2	29.1	
28-Nov-06	5	9	20	10	A	8	19	14	19	15	21	28	18	7	9	8	20	31	56	70	26	23	19	34	21.2	70.2	
29-Nov-06	56	24	14	13	A	19	38	17	47	50	71	106	129	174	147	141	108	84	60	37	40	35	23	20	63.1	173.5	
30-Nov-06	47	48	73	30	A	7	6	17	14	6	4	4	5	8	6	8	8	9	13	14	6	5	6	5	15.1	72.9	

Hourly Avg	17.7	16.5	14.2	13.6	N	12.1	17.3	30.8	28.3	26.8	28.8	29.1	27.3	26.4	25.4	23.1	25.1	25.4	22.3	20.2	19.7	19.2	16.7	17.5
Hourly Max	112.1	50.8	72.9	53.0	0.0	63.9	101.6	378.0	139.6	109.9	99.6	128.6	129.0	173.5	147.1	140.6	107.6	83.6	72.7	70.2	81.6	89.2	67.9	96.9

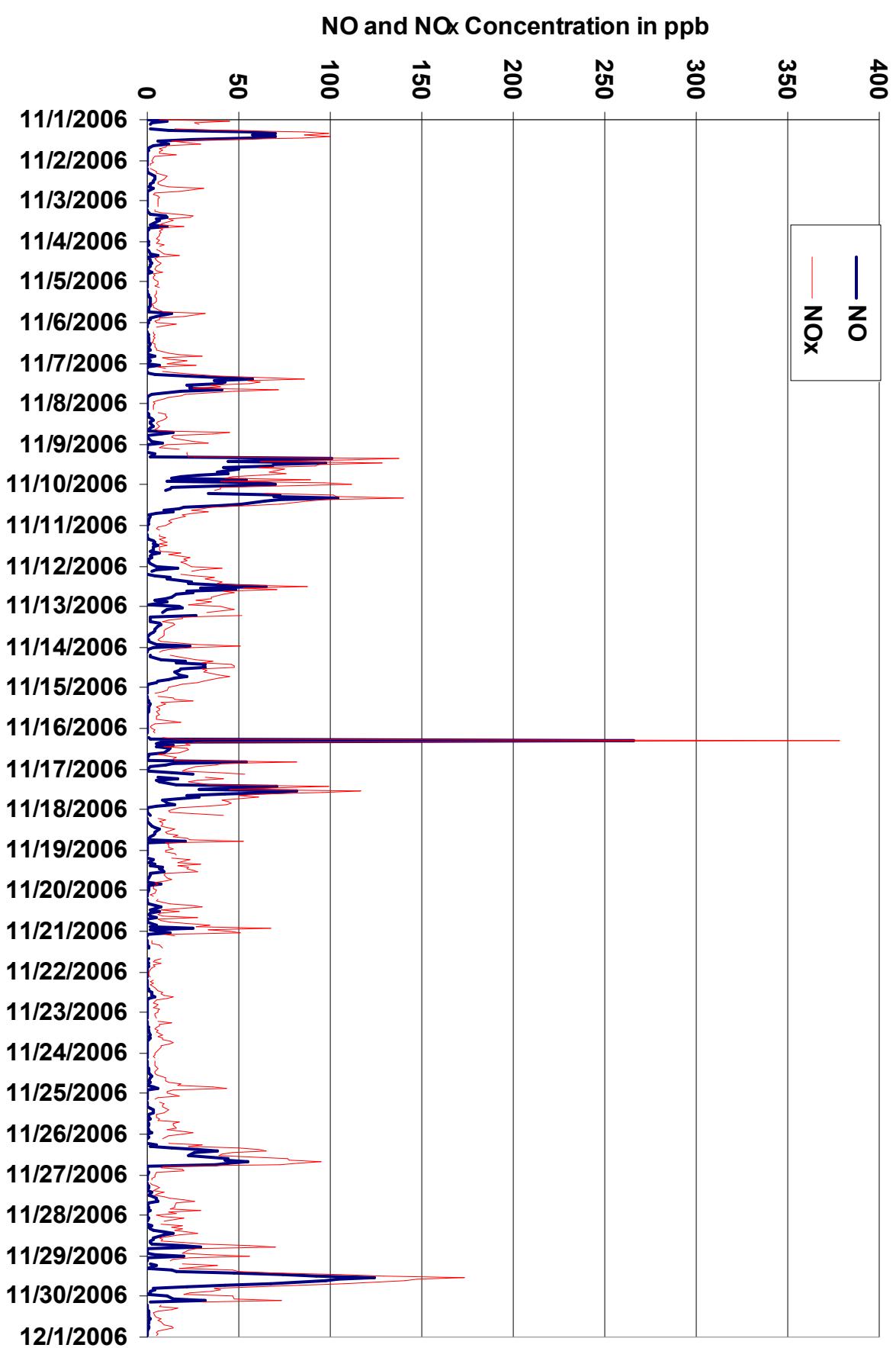


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

## PASZA - Beaverlodge - Ozone Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

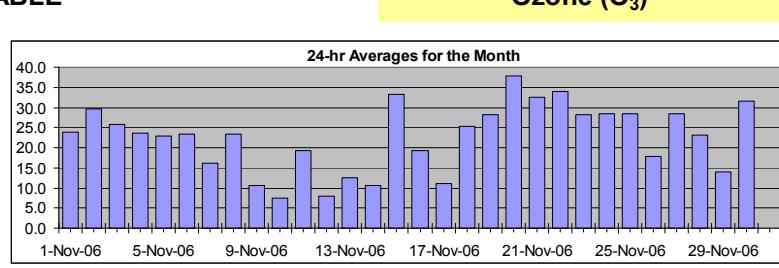
**Summary**

Number of 1-hr Exceedances:	0
Maximum 1-hr Average:	45.9 ppb 19-Nov 20:00 21:00
Maximum 24-hr Average:	37.8 ppb 20-Nov

AIC Time:	31 hrs	Operational Time:	686 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 41.6	95 37.7	75 29.8	50 23.6	25 15.1	5 4.4	1 1.6	Average 22.6 ppb	Median 23.6 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 24:00	23:00 0:00	
1-Nov-06	30	21	24	21	A	22	13	8	5	10	15	12	26	30	33	32	32	33	31	31	29	34	34	23.9	33.8	
2-Nov-06	33	33	33	33	A	33	32	30	28	27	27	28	29	30	30	30	30	20	28	31	31	29	27	26	29.6	33.4
3-Nov-06	25	25	25	27	A	28	28	27	24	23	25	26	26	28	28	27	27	25	25	24	24	25	24	25	25.8	28.2
4-Nov-06	23	23	22	21	A	22	22	20	19	21	24	25	26	27	28	27	26	24	24	23	23	24	24	24	23.5	27.7
5-Nov-06	23	21	23	23	A	23	22	22	23	23	23	24	24	24	24	24	24	23	19	19	20	24	26	26	22.8	25.9
6-Nov-06	24	20	23	22	A	23	24	25	25	25	26	26	26	27	27	26	25	25	24	19	15	23	21	19	23.5	26.8
7-Nov-06	20	19	20	19	A	19	16	9	11	10	15	15	16	22	19	20	13	10	10	12	18	20	20	21	16.2	22.3
8-Nov-06	23	24	25	26	A	24	23	23	24	26	27	27	27	27	28	26	17	11	22	23	23	21	15	23.4	28.0	
9-Nov-06	18	21	22	20	A	16	14	10	10	11	16	14	15	13	14	9	7	2	1	1	1	1	5	4	10.7	21.9
10-Nov-06	2	4	5	3	A	2	3	2	3	6	7	8	11	13	13	14	9	6	7	8	13	12	11	12	7.4	13.6
11-Nov-06	16	20	21	20	A	19	18	19	19	21	21	23	24	24	25	25	23	23	20	17	12	11	12	11	19.2	25.2
12-Nov-06	11	9	8	8	A	7	8	5	7	11	13	14	14	13	12	9	5	3	4	7	3	3	4	5	8.0	14.0
13-Nov-06	5	2	3	3	A	4	12	13	13	16	15	15	18	20	20	18	16	15	15	16	16	16	10	8	12.6	20.0
14-Nov-06	10	14	14	16	A	13	13	6	8	9	10	10	12	12	12	11	5	1	1	1	9	13	20	22	10.6	22.0
15-Nov-06	24	27	33	37	A	37	32	34	29	35	34	38	41	40	41	40	38	38	38	37	29	21	22	21	33.3	40.6
16-Nov-06	22	22	24	24	A	23	22	14	13	21	22	25	23	21	27	29	24	21	20	18	4	6	7	11	19.3	29.0
17-Nov-06	11	10	7	9	A	2	4	10	19	14	14	15	18	17	12	12	6	4	9	11	8	5	11	27	11.2	27.2
18-Nov-06	31	39	37	34	A	35	17	22	22	24	28	26	24	26	26	25	22	19	20	19	23	22	21	21	25.3	38.9
19-Nov-06	20	19	17	17	A	16	14	13	14	21	22	20	22	28	35	35	34	33	40	45	46	46	45	45	28.1	45.9
20-Nov-06	44	42	42	41	A	40	41	39	38	33	34	41	39	41	41	41	35	41	42	38	35	28	24	29	37.8	43.7
21-Nov-06	23	26	30	27	A	34	35	35	34	34	33	33	34	34	33	33	33	33	33	34	32	35	34	36	32.6	36.2
22-Nov-06	36	37	36	35	A	36	36	36	35	35	34	34	33	34	33	31	33	33	34	33	33	33	32	32	34.1	36.9
23-Nov-06	30	32	31	30	A	29	25	29	30	30	32	31	31	29	30	29	28	24	23	25	25	24	26	27	28.3	31.7
24-Nov-06	27	29	29	29	A	30	31	32	33	35	35	C	C	C	A	33	31	29	25	27	13	18	26	27	28.3	35.3
25-Nov-06	30	27	32	33	A	31	29	29	29	30	30	31	33	32	32	32	31	25	25	24	24	26	23	14	28.3	32.7
26-Nov-06	17	25	25	24	A	22	17	14	10	9	14	16	17	17	17	13	8	3	15	24	27	27	23	29	17.9	29.5
27-Nov-06	29	30	31	32	A	32	32	31	31	32	32	32	32	32	30	26	22	23	24	23	25	20	27	27	28.5	32.4
28-Nov-06	31	29	25	26	A	26	27	27	23	23	24	24	28	30	30	29	24	17	14	11	13	16	18	15	23.0	30.8
29-Nov-06	13	14	19	21	A	27	21	18	20	19	21	14	17	16	7	4	4	2	3	4	8	17	15	16	13.9	26.7
30-Nov-06	13	9	10	15	A	34	37	30	33	32	35	38	38	35	36	35	36	36	34	36	39	39	38	40	31.7	39.6

Hourly Avg	22.2	22.4	23.2	23.2	N	23.7	22.2	21.0	21.0	22.2	23.6	23.6	24.9	25.6	25.4	25.0	22.6	20.3	20.7	21.3	20.8	21.1	21.8	22.3
Hourly Max	43.7	42.0	41.5	40.8	0.0	40.5	40.8	38.6	37.7	35.1	35.4	41.3	40.6	40.7	41.4	40.6	38.2	41.2	41.5	45.1	45.9	45.6	45.5	45.0



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

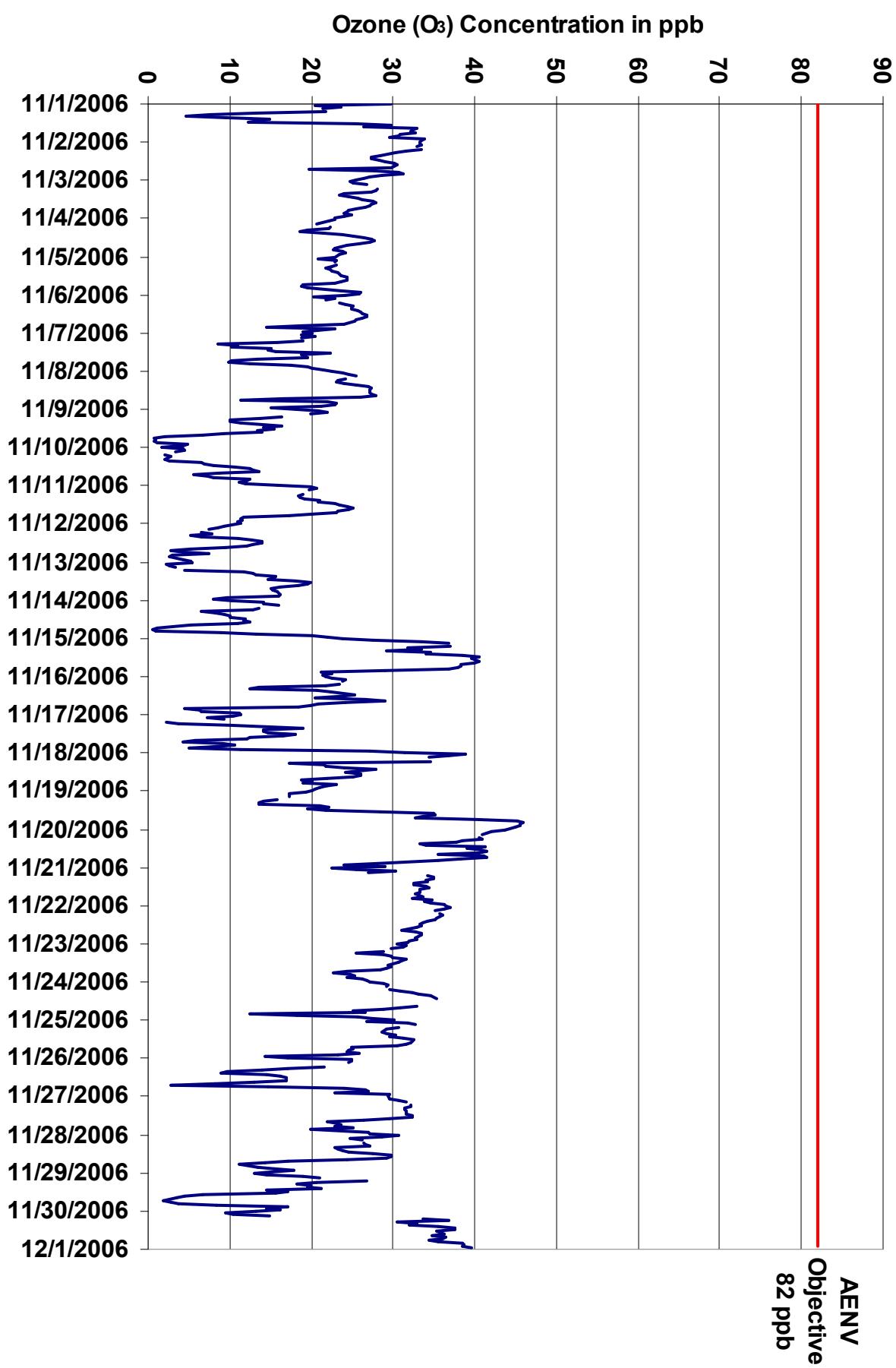


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

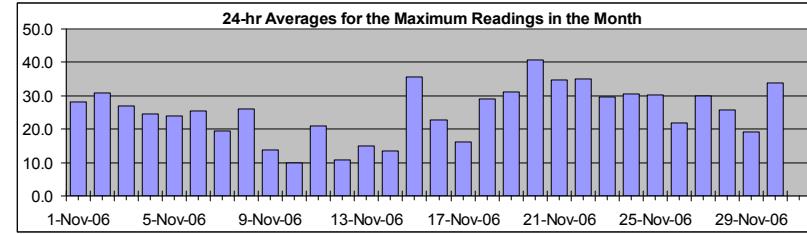
Maximum 1-hr Value:	47.4	ppb	19-Nov	20:00 21:00
Maximum 24-hr Value:	40.6	ppb	20-Nov	

AIC Time:	31 hrs	Operational Time:	686 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	44.7 39.5 31.7 25.7 19.4 8.6 3.2	25.2 ppb	25.7 ppb

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00
	Hour Start 1:00	Hour End 2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
1-Nov-06	31	30	28	26	A	26	22	18	11	15	21	18	33	34	34	36	34	33	35	33	32	32	35	34	28.3	35.7
2-Nov-06	34	34	34	34	A	34	33	31	29	28	28	29	30	31	31	31	31	29	31	32	32	31	28	27	30.9	34.2
3-Nov-06	26	25	26	28	A	29	29	28	27	26	27	27	28	29	29	29	28	28	27	26	25	25	26	25	27.0	29.1
4-Nov-06	24	24	23	21	A	23	23	21	20	23	25	28	28	28	29	28	27	25	24	24	23	25	25	25	24.6	28.8
5-Nov-06	24	23	24	25	A	24	24	23	23	23	24	24	24	25	25	25	24	24	22	21	23	25	27	27	24.0	26.8
6-Nov-06	26	24	25	23	A	24	25	25	25	26	26	26	27	27	27	27	26	26	25	25	21	23	27	23	25.3	27.4
7-Nov-06	22	22	21	21	A	20	19	14	14	17	17	17	20	25	22	21	23	17	12	16	21	22	22	22	19.5	25.4
8-Nov-06	24	24	26	26	A	25	25	25	26	27	28	28	28	28	28	29	28	27	20	27	28	26	25	19	26.0	28.5
9-Nov-06	21	23	23	22	A	20	17	13	15	20	20	19	18	17	16	13	8	8	1	2	1	2	9	9	13.9	22.9
10-Nov-06	4	7	6	6	A	5	6	5	5	11	9	9	13	14	14	17	16	7	8	11	13	13	12	13	9.8	16.8
11-Nov-06	19	21	21	21	A	20	19	20	21	22	23	24	24	25	26	26	25	25	22	22	14	13	13	14	20.9	26.2
12-Nov-06	15	14	13	12	A	7	10	7	9	13	15	16	16	15	14	12	9	5	6	16	5	5	7	7	10.8	16.0
13-Nov-06	9	3	6	9	A	12	14	17	15	17	17	16	20	20	20	19	17	16	16	17	17	17	17	15	15.1	20.4
14-Nov-06	15	17	15	17	A	16	15	11	10	11	12	12	14	12	14	12	9	3	1	2	16	20	29	26	13.5	28.9
15-Nov-06	28	32	37	39	A	38	37	37	35	36	37	40	42	41	42	42	39	39	38	38	37	22	23	22	35.7	42.2
16-Nov-06	23	24	25	25	A	25	26	24	18	24	25	26	26	22	30	30	28	22	22	20	17	14	11	18	22.8	30.4
17-Nov-06	14	12	12	15	A	5	7	19	21	20	20	18	19	21	17	17	10	12	22	14	11	9	24	34	16.3	33.6
18-Nov-06	45	43	42	41	A	36	25	24	27	28	30	28	26	27	28	27	25	24	26	26	24	24	23	22	29.1	44.7
19-Nov-06	21	20	19	19	A	18	17	16	26	26	28	23	27	35	37	38	35	35	45	47	47	47	46	46	31.2	47.4
20-Nov-06	45	43	43	42	A	42	42	40	41	38	39	42	41	42	43	42	41	43	43	41	41	33	33	36	40.6	45.0
21-Nov-06	35	31	33	32	A	35	36	36	35	34	34	35	35	34	35	35	33	34	34	35	35	36	37	34.6	36.8	
22-Nov-06	37	37	36	36	A	36	37	37	36	36	35	34	34	34	33	34	34	34	34	34	33	33	32	34.9	37.3	
23-Nov-06	32	32	32	31	A	30	30	31	31	32	32	31	31	30	30	30	28	24	27	27	26	27	27	29.7	32.3	
24-Nov-06	28	30	30	30	A	31	32	34	35	36	36	C	C	C	A	35	33	32	29	29	23	25	28	28	30.7	36.3
25-Nov-06	31	31	33	33	A	31	31	30	31	32	31	32	33	33	32	31	31	27	26	27	28	27	19	30.3	33.5	
26-Nov-06	21	27	26	25	A	23	19	17	15	14	18	18	18	23	20	18	14	24	25	28	29	30	30	21.8	30.1	
27-Nov-06	30	30	31	33	A	33	33	32	32	32	32	33	33	33	29	27	25	25	25	27	25	30	30	30.0	32.9	
28-Nov-06	32	31	28	27	A	28	28	28	27	25	26	27	29	30	31	30	30	23	21	18	20	19	20	25.8	31.6	
29-Nov-06	19	18	22	24	A	28	27	21	24	24	24	23	24	26	14	5	10	9	7	8	23	19	18	20	19.1	27.6
30-Nov-06	16	13	14	20	A	37	38	36	35	34	37	39	39	37	37	36	38	38	36	39	39	39	40	33.9	40.5	

Hourly Avg	25.1	24.8	25.2	25.4	N	25.5	24.8	24.0	24.0	25.0	25.9	25.6	26.9	27.4	27.4	26.8	25.7	23.8	23.7	24.0	24.5	23.7	24.9	24.9
Hourly Max	45.0	43.0	42.5	41.5	0.0	42.1	42.0	40.1	41.0	38.1	38.9	42.3	41.8	41.6	42.6	42.1	41.1	42.6	45.5	47.4	47.4	46.5	46.0	45.5



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

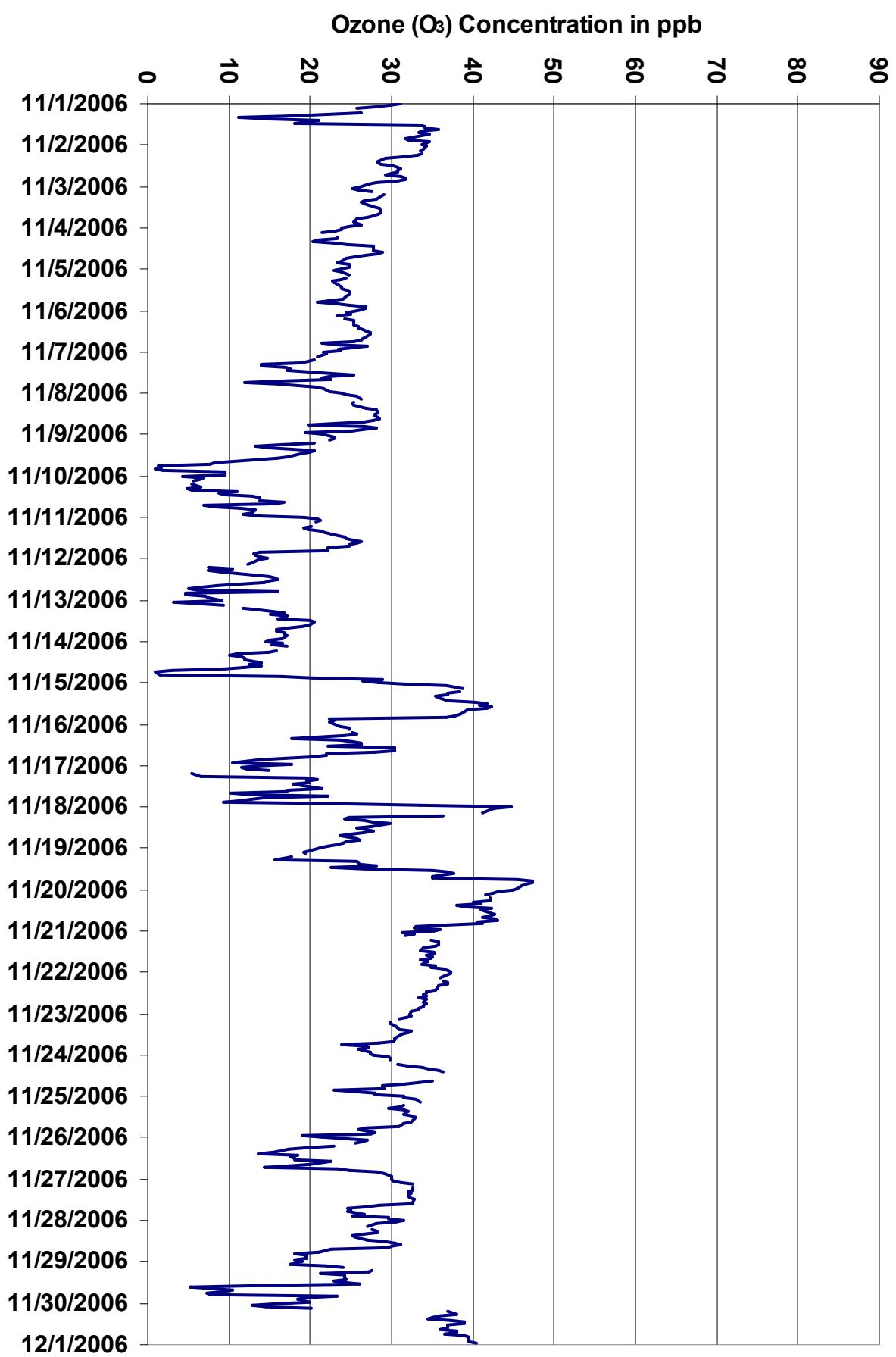
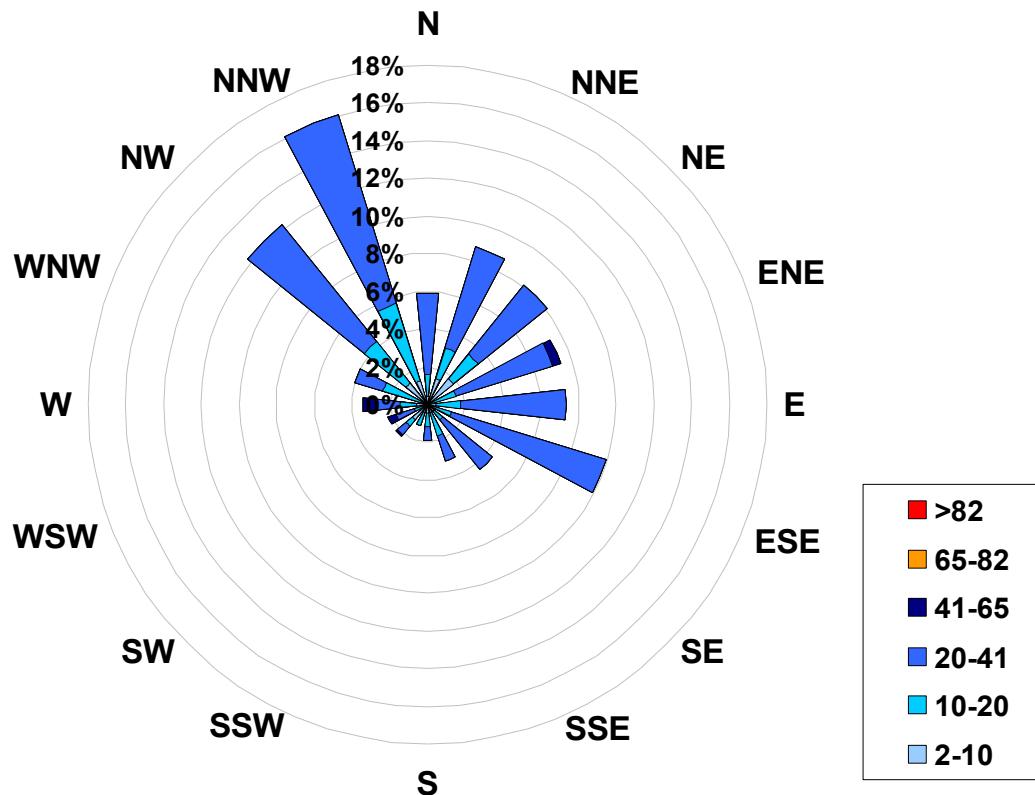


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 2%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	86
10	to	20	163
20	to	41	425
41	to	65	12
65	to	82	0
> 82			0
Total Non-Zero Values			686

## PASZA – Beaverlodge - Ozone Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

Objective Limit: Alberta Environment: 8-hr 65 ppb

**Summary**

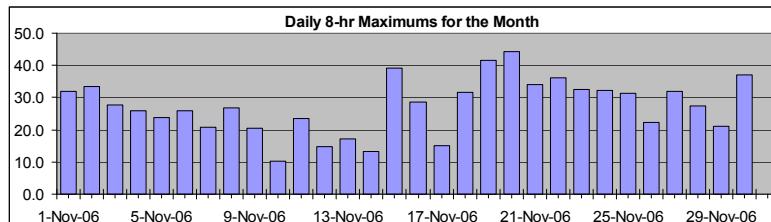
Number of 8-hr Exceedances:

0

Maximum 8-hr Average: 44.3 ppb 20-Nov 2:00 3:00

### EIGHT HOUR RUNNING AVERAGE TABLE

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



### Status Flag Characters

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

### Day Mountain Standard Time

	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	24:00	0:00	
1-Nov-06	30	28	27	26	25	25	22	20	16	15	13	12	14	15	16	19	23	26	28	30	31	31	32	32	32	
2-Nov-06	32	32	32	33	33	33	33	33	32	31	30	30	29	29	29	29	29	28	28	28	29	29	28	28	28	
3-Nov-06	27	28	27	27	26	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	26	26	26	25	
4-Nov-06	25	24	24	23	23	23	22	22	21	21	21	22	22	23	24	25	25	26	26	26	26	25	25	24	24	
5-Nov-06	24	23	23	23	23	23	23	22	22	23	23	23	23	23	24	24	24	24	23	23	23	22	22	22	22	
6-Nov-06	22	22	23	23	24	23	23	23	24	24	25	25	25	26	26	26	26	26	26	25	23	23	22	22	21	
7-Nov-06	21	20	19	19	20	20	19	17	16	15	14	13	14	14	15	16	16	16	16	15	16	15	15	16	20.7	
8-Nov-06	17	18	20	22	22	23	24	24	24	24	25	25	25	26	26	27	27	26	24	23	23	22	21	21	20	26.9
9-Nov-06	19	19	21	20	20	19	18	17	16	15	14	13	13	13	13	13	11	9	8	6	4	3	3	3	20.6	
10-Nov-06	2	2	3	3	3	4	3	3	3	3	4	4	5	6	8	9	10	10	10	10	10	10	10	10	10	
11-Nov-06	11	12	14	15	16	17	18	19	19	19	19	20	20	21	22	23	23	23	23	23	21	20	18	16	23.5	
12-Nov-06	15	13	12	10	10	9	9	8	7	8	8	9	10	10	11	12	11	10	9	9	7	6	5	4	14.7	
13-Nov-06	4	4	4	4	4	4	5	6	7	9	11	13	13	15	16	17	17	17	17	17	17	17	15	14	17.3	
14-Nov-06	13	13	13	13	13	13	12	13	12	11	11	10	10	10	10	11	10	9	8	7	7	7	8	9	13.3	
15-Nov-06	11	15	19	23	25	29	30	32	33	34	34	34	35	35	36	37	38	39	39	39	38	35	33	31	39.2	
16-Nov-06	29	27	25	23	22	23	23	22	20	20	20	20	20	21	23	24	24	24	23	20	19	16	14	28.6		
17-Nov-06	12	11	9	8	9	8	8	8	9	9	10	11	12	14	15	15	13	12	12	11	10	8	8	10	15.2	
18-Nov-06	13	18	21	24	26	31	31	29	27	26	25	25	24	25	25	24	24	24	23	23	22	21	21	21	31.5	
19-Nov-06	21	21	20	20	20	19	18	17	16	16	17	17	18	19	22	25	27	29	31	34	37	39	40	42	41.7	
20-Nov-06	43	44	44	44	43	43	42	41	40	39	38	38	38	38	38	38	38	39	40	40	39	38	36	34	44.3	
21-Nov-06	33	31	29	28	27	28	29	30	32	33	33	34	34	34	34	34	33	33	33	34	33	34	34	34	34.0	
22-Nov-06	34	35	35	36	36	36	36	36	36	35	35	35	35	35	35	34	33	33	33	33	33	33	33	33	36.1	
23-Nov-06	32	32	32	31	31	30	29	29	29	29	29	30	30	30	30	30	29	28	27	27	26	26	25	25	32.5	
24-Nov-06	25	26	27	27	28	29	30	30	31	32	N	N	N	N	N	N	N	N	N	N	25	25	24	32.1		
25-Nov-06	24	24	25	26	28	29	30	30	30	30	30	30	31	31	31	31	30	29	28	27	26	26	24	31.3		
26-Nov-06	22	22	22	22	22	21	21	20	17	16	15	15	14	14	14	14	14	13	13	14	15	17	17	19	22.4	
27-Nov-06	22	25	27	28	29	29	31	31	32	32	32	32	32	31	30	29	28	27	26	24	24	24	24	31.8		
28-Nov-06	25	26	26	26	27	27	27	26	25	25	25	25	26	26	26	27	26	25	23	21	19	18	16	27.3		
29-Nov-06	15	14	15	16	17	18	19	19	20	21	21	20	20	20	18	17	15	13	11	8	7	6	7	9	21.0	
30-Nov-06	10	11	12	13	14	16	19	21	24	27	31	34	35	35	35	36	36	36	36	36	37	37	37	37.2		

Hourly Max 42.9 44.1 44.3 43.8 43.4 42.7 42.1 41.1 40.3 39.0 37.9 38.0 38.1 38.2 38.2 38.5 38.3 39.2 40.1 39.8 39.3 39.1 40.4 41.7

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

Station: Beaverlodge  
Station Owner: PASZA

**Monitoring Dates:** November 1, 2006 to December 1, 2006

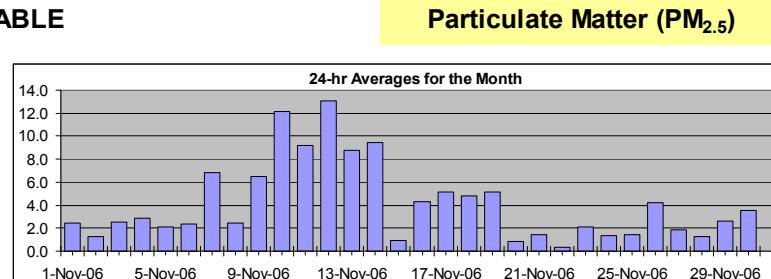
**Draft Objective Limit:** Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr 30  $\mu\text{g}/\text{m}^3$

## Summary

Number of 24-hr Exceedances (draft):	0			
Maximum 1-hr Average:	26.9	µg/m <sup>3</sup>	10-Nov	23:00 0:00
Maximum 24-hr Value:	13.1	µg/m <sup>3</sup>	12-Nov	

AIC Time:	0 hrs			Operational Time:				714 hrs	
Calibration Time:	4 hrs			AMD Operational Uptime:				99.7%	
Percentile	99	95	75	50	25	5	1	Average / Median	
	15.6	12.8	6.1	2.7	1.3	0.0	0.0	4.1	3 µg/m <sup>3</sup>

## HOURLY AVERAGE TABLE



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

## Status Flag Characters

Status Flag Descriptions		
C	Calibration	A AIC - Zero / Span Check
S	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 1:00	2:00 2:00	3:00 3:00	4:00 4:00	5:00 5:00	6:00 6:00	7:00 7:00	8:00 8:00	9:00 9:00	10:00 10:00	11:00 11:00	12:00 12:00	13:00 13:00	14:00 14:00	15:00 15:00	16:00 16:00	17:00 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		
1-Nov-06	3	3	3	3	3	3	2	4	4	7	4	8	5	0	3	0	1	0	0	0	0	1	0	2	2.5	7.7
2-Nov-06	1	0	1	3	0	0	1	0	1	2	1	2	1	1	0	0	1	2	1	2	1	3	5	1.2	4.7	
3-Nov-06	4	3	2	2	3	1	2	2	1	3	2	3	3	3	2	3	3	3	2	3	3	3	3	2.6	4.0	
4-Nov-06	3	2	2	2	3	2	2	1	1	2	1	4	11	10	8	5	3	2	1	1	0	2	3	2.9	10.8	
5-Nov-06	3	2	5	7	3	2	2	2	2	2	0	2	1	1	2	2	1	1	0	2	3	2	1	2.1	6.7	
6-Nov-06	2	1	2	3	0	2	1	0	0	0	0	1	2	1	2	3	2	3	3	4	7	7	5	2.4	7.1	
7-Nov-06	4	4	4	2	3	2	5	4	6	8	8	12	10	10	13	10	8	11	8	9	10	7	4	6.9	12.8	
8-Nov-06	3	3	4	2	2	3	2	2	2	1	2	2	2	2	3	2	3	3	3	2	2	3	3	2.4	3.7	
9-Nov-06	2	2	3	3	4	3	4	3	5	8	8	11	13	9	10	9	8	6	8	7	6	8	8	6.5	12.6	
10-Nov-06	9	7	6	6	6	8	9	7	14	10	12	13	13	12	16	15	12	11	15	16	14	16	19	12.1	26.9	
11-Nov-06	11	6	5	7	6	8	9	11	10	9	10	10	8	7	7	7	6	7	11	10	14	16	14	9.2	15.6	
12-Nov-06	12	14	14	13	13	12	11	10	11	11	14	15	14	13	14	12	13	15	13	13	12	14	15	13.1	15.4	
13-Nov-06	13	15	14	12	12	10	4	5	8	9	8	12	10	8	8	8	7	6	8	7	6	5	8	8.8	15.2	
14-Nov-06	9	7	6	6	5	6	6	9	8	7	8	10	16	13	18	20	15	11	11	12	9	5	4	9.4	20.4	
15-Nov-06	2	2	1	0	0	0	0	0	0	2	0	0	0	0	D	0	0	0	0	0	0	0	5	3	1.0	6.6
16-Nov-06	6	6	5	3	4	4	4	4	4	5	4	5	4	4	4	2	2	3	4	3	7	4	5	4.3	7.2	
17-Nov-06	6	6	7	9	4	5	6	6	1	3	4	7	6	6	7	8	6	5	3	5	3	3	6	5.1	8.7	
18-Nov-06	2	3	1	0	0	1	5	5	6	6	8	8	6	7	6	6	6	5	5	7	4	6	5	4.8	8.5	
19-Nov-06	7	10	11	10	10	9	8	8	4	2	7	5	3	2	1	3	4	5	2	1	0	0	0	5.2	10.9	
20-Nov-06	2	0	0	0	0	0	0	0	1	1	3	1	0	0	0	1	0	0	0	0	0	2	5	0.9	5.2	
21-Nov-06	3	1	3	2	2	1	4	3	4	2	0	0	D	1	C	C	C	C	0	0	0	0	0	1	1.4	4.2
22-Nov-06	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0.3	1.3	
23-Nov-06	0	1	1	3	0	1	3	2	3	2	2	3	3	3	2	3	3	4	3	3	1	1	1	2.1	3.5	
24-Nov-06	2	3	2	2	1	1	1	1	1	1	2	1	0	1	1	1	2	2	1	2	3	1	2	1.3	2.6	
25-Nov-06	1	0	0	1	0	0	1	1	1	1	1	2	3	2	2	1	2	3	3	2	2	3	2	1.4	2.7	
26-Nov-06	3	2	2	2	2	2	2	3	5	5	7	8	7	6	8	7	7	9	4	2	1	2	4	4.2	9.2	
27-Nov-06	2	1	1	2	1	2	2	1	2	2	2	1	2	1	2	2	2	3	2	2	3	2	2	1.9	3.0	
28-Nov-06	1	1	1	2	1	1	2	1	1	2	2	3	1	1	1	0	1	1	2	2	1	1	2	1.3	2.6	
29-Nov-06	1	2	3	1	1	0	0	0	1	2	3	3	6	13	11	6	3	1	0	1	0	1	1	2.6	13.1	
30-Nov-06	3	7	6	3	6	3	3	1	2	3	4	3	3	3	4	4	4	4	4	3	3	3	4	3.5	6.6	
Hourly Avg	4.0	3.8	3.9	3.7	3.1	3.2	3.4	3.2	3.8	4.0	3.9	5.2	5.3	4.5	5.6	5.0	4.3	4.4	4.1	4.0	4.2	4.3	4.6			
Hourly Max	12.9	15.2	14.4	12.6	12.5	12.2	11.5	11.1	13.5	10.9	14.1	15.4	16.4	13.5	19.5	20.4	15.1	15.3	15.1	16.5	14.3	15.8	19.5	26.9		

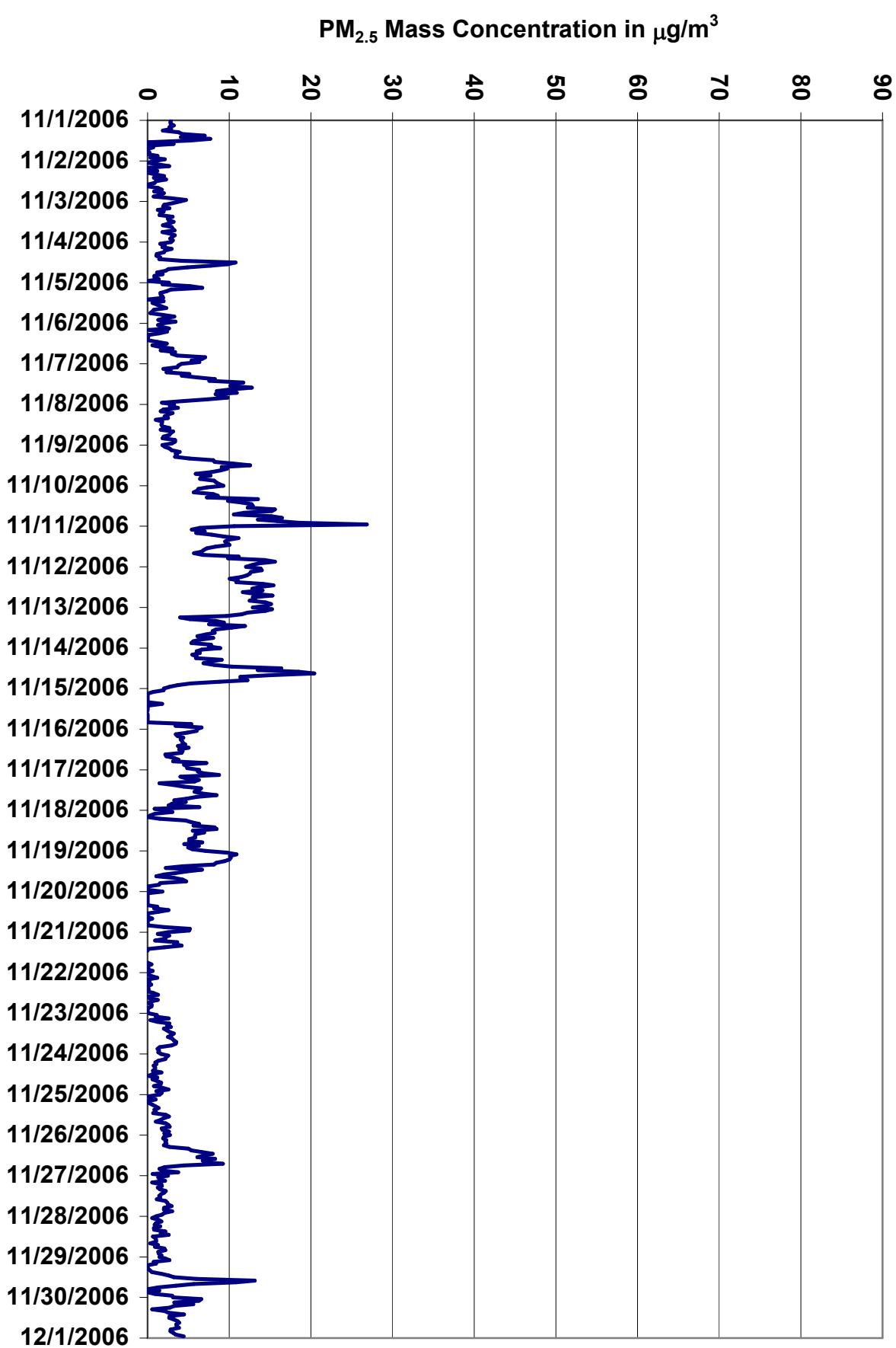


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

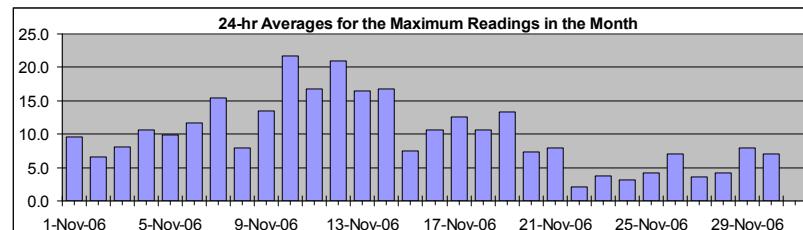
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Average:	51.8	$\mu\text{g}/\text{m}^3$	10-Nov	23:00 0:00
Maximum 24-hr Value:	21.8	$\mu\text{g}/\text{m}^3$	10-Nov	



AIC Time:	0 hrs	Operational Time:	714 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.7%
Percentile	99 95 75 50 25 5 1	Average / Median	Geomean
	27.7 21.5 13.8 8.5 4.9 2.4 1.5	10.0	8.6 $\mu\text{g}/\text{m}^3$

#### 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

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
1-Nov-06	13	13	13	14	13	17	12	13	14	11	8	13	17	5	7	4	7	3	4	5	5	6	6	6	9.6	16.7
2-Nov-06	5	6	6	13	4	5	7	4	6	7	6	7	8	5	7	4	6	7	5	7	7	8	10	6.6	13.3	
3-Nov-06	9	10	7	7	11	10	9	10	7	8	7	7	7	7	6	7	8	9	8	8	8	8	8	8.1	10.6	
4-Nov-06	9	8	9	7	10	9	8	8	6	6	6	15	20	19	16	13	12	12	10	10	10	11	11	9	10.6	20.3
5-Nov-06	12	11	14	14	11	11	10	10	14	10	7	8	6	7	6	10	6	7	8	8	12	11	8	9.8	14.9	
6-Nov-06	10	11	8	8	6	10	8	8	10	7	9	7	8	10	9	10	9	14	10	16	20	30	23	18	11.7	30.3
7-Nov-06	17	12	12	10	12	12	16	10	18	15	14	20	19	21	19	15	17	18	18	16	21	14	16	8	15.4	20.9
8-Nov-06	10	8	8	9	9	10	10	7	7	6	8	7	6	6	5	7	8	6	8	11	9	11	9	7.9	10.8	
9-Nov-06	7	8	7	8	10	11	8	8	17	18	18	18	21	17	16	15	14	12	15	13	12	17	16	16	13.5	21.4
10-Nov-06	16	15	15	13	12	15	14	23	23	22	21	20	17	18	26	24	21	19	26	28	23	27	32	52	21.8	51.8
11-Nov-06	25	16	14	13	15	18	16	18	18	18	17	16	11	11	11	12	16	19	17	23	22	20	23	16.7	25.2	
12-Nov-06	19	22	21	19	18	19	22	18	20	21	19	21	22	18	21	16	19	22	21	28	18	25	24	28	20.9	28.3
13-Nov-06	22	22	22	18	18	17	12	15	17	17	16	17	17	16	18	19	18	13	15	16	12	13	13	12	16.5	22.5
14-Nov-06	14	12	12	16	13	17	12	17	16	12	13	16	28	22	25	29	28	18	16	18	18	12	9	9	16.7	29.0
15-Nov-06	8	9	6	6	8	6	4	5	6	8	7	6	6	4	D	4	7	6	7	7	7	11	15	15	7.6	16.0
16-Nov-06	13	14	11	10	10	10	10	8	9	10	12	11	12	11	9	6	6	8	10	14	12	12	11	10.6	15.1	
17-Nov-06	16	15	15	17	10	9	14	14	13	11	12	12	15	18	16	14	11	10	10	8	8	14	6	12.6	18.4	
18-Nov-06	8	7	7	7	5	10	10	12	12	15	15	13	10	13	12	11	10	11	13	13	10	11	11	10.7	15.1	
19-Nov-06	13	16	19	15	17	17	19	12	15	12	11	11	6	7	12	17	28	12	9	10	12	8	13.4	27.5		
20-Nov-06	13	12	13	7	4	3	7	7	5	10	6	9	5	5	6	5	4	5	5	6	7	14	13	7.3	13.7	
21-Nov-06	7	7	10	9	8	9	10	10	17	9	14	22	D	7	C	C	C	C	2	3	1	2	2	3	8.0	21.7
22-Nov-06	3	1	2	4	2	2	1	3	1	2	2	1	2	3	3	2	3	2	2	2	2	1	1	2.1	4.5	
23-Nov-06	3	2	3	8	2	4	4	4	5	3	3	4	5	5	4	4	4	4	5	4	3	3	3	3.7	7.8	
24-Nov-06	3	4	4	3	3	2	3	2	2	3	3	5	6	3	6	2	3	3	3	2	3	4	2	3.2	6.3	
25-Nov-06	3	3	5	5	3	4	6	6	5	2	4	4	4	6	4	4	2	4	4	5	3	4	5	4.1	6.3	
26-Nov-06	4	5	4	4	3	3	4	4	9	8	12	15	10	8	14	12	13	13	8	3	3	4	6	2.1	14.6	
27-Nov-06	5	3	3	5	3	4	4	3	3	4	4	3	3	3	2	4	4	4	4	3	3	5	5	3.6	4.6	
28-Nov-06	3	2	5	4	3	3	4	3	5	5	5	7	7	5	3	3	2	3	3	8	5	3	4	4.1	7.8	
29-Nov-06	4	6	6	4	6	3	2	2	3	4	7	9	13	20	22	18	14	7	7	6	8	5	6	7.9	22.5	
30-Nov-06	8	10	13	8	16	8	8	5	4	8	9	7	7	5	5	5	6	6	6	4	5	5	6	7.0	16.4	

Hourly Avg	10.1	9.7	9.8	9.5	8.8	9.3	9.1	8.9	10.2	9.8	9.7	11.1	10.2	11.0	9.8	9.9	9.7	9.8	10.1	9.8	10.3	10.6	11.0	
Hourly Max	25.2	22.5	22.1	18.9	18.2	19.1	21.6	22.8	23.2	22.0	20.8	21.7	28.3	22.1	26.2	29.0	28.2	22.3	27.5	28.3	23.1	30.3	32.0	51.8

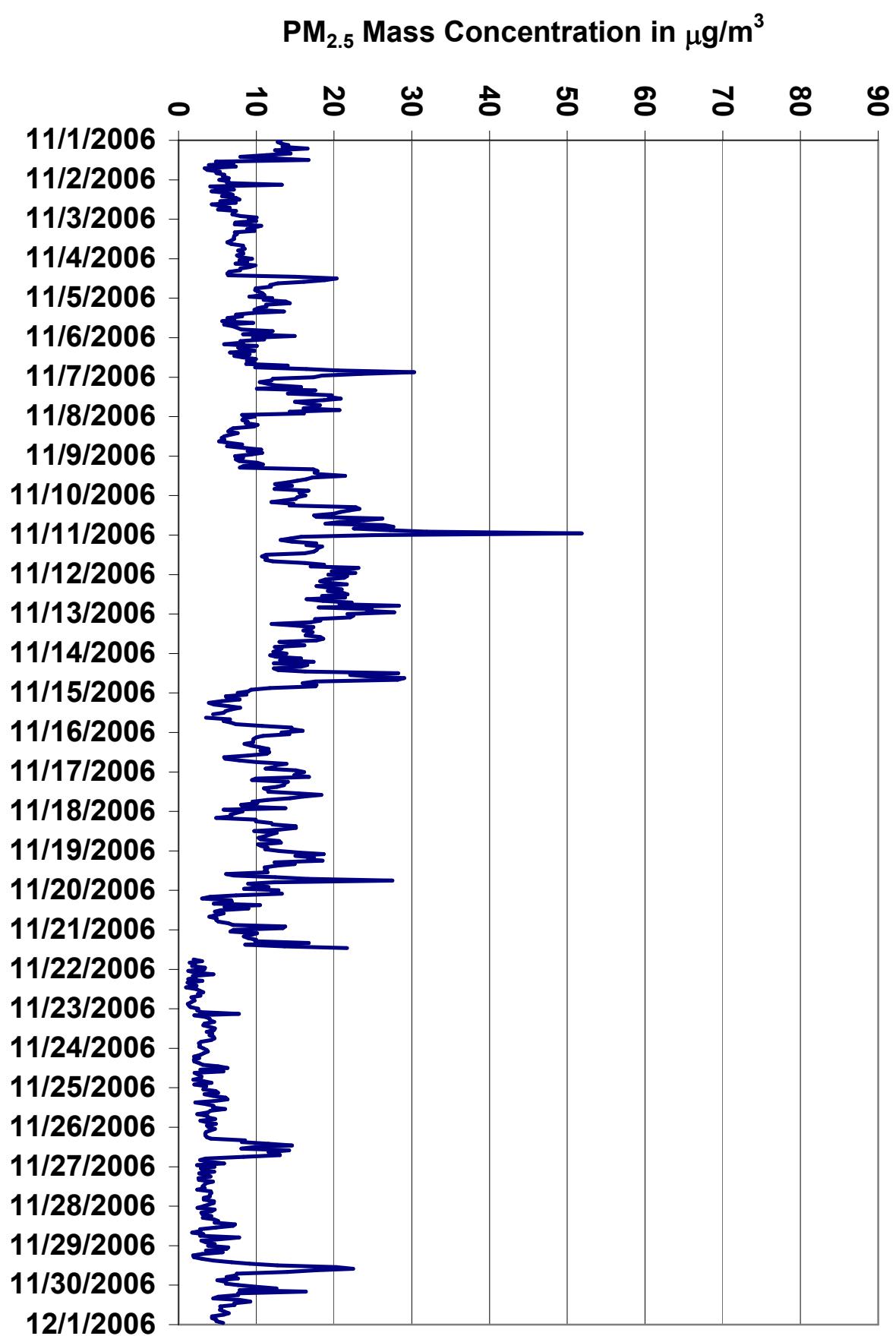
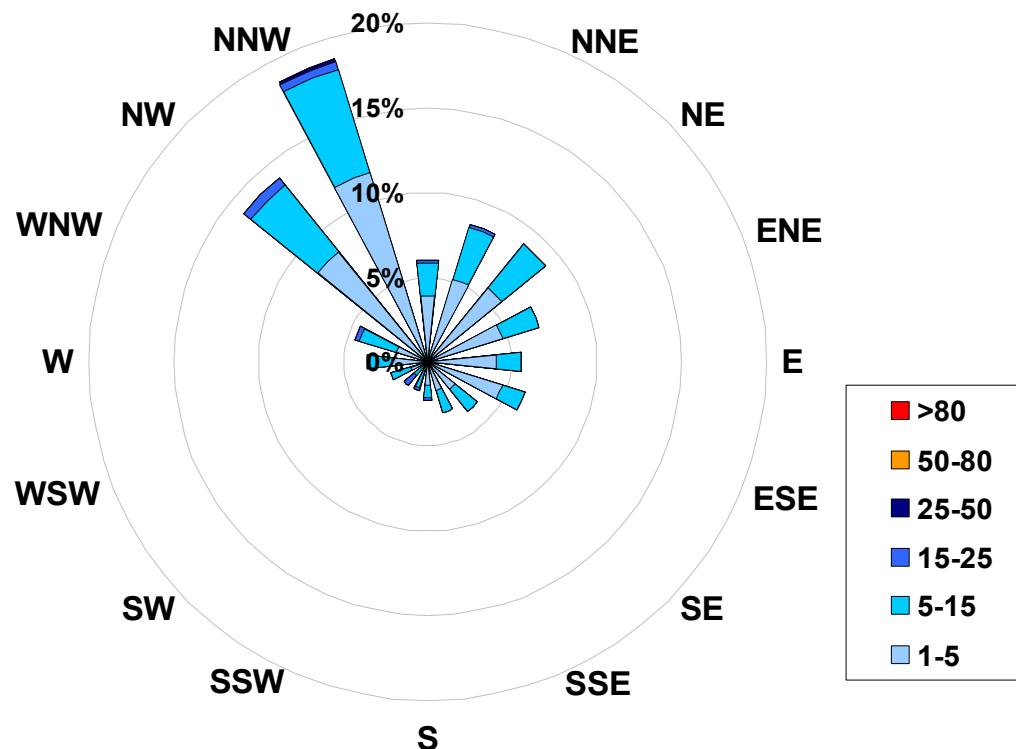


Figure 43. PASZA - Beaverton Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms:** 2%

Frequency Distribution of PM<sub>2.5</sub> in µg/m<sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	492
5	to	15	206
15	to	25	15
25	to	50	1
50	to	80	0
>	80		0
Total Non-Zero Values			714

## PASZA – Beaverlodge - Relative Humidity Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### Summary

Maximum 1-hr Average:	95.9	%	18-Nov	3:00 4:00
Maximum 24-hr Value:	92.2	%	18-Nov	

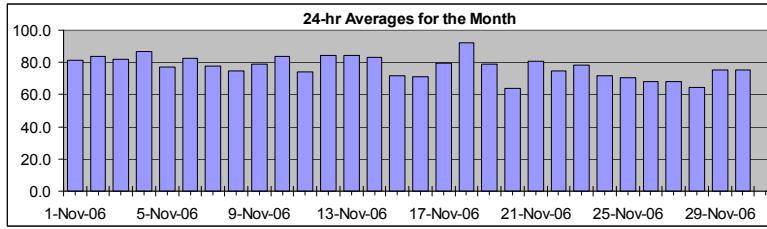
AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	93.5	90.7	84.5	78.7	71.8	58.2	51.1	77.3 %	78.7 %

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
1-Nov-06	75	80	81	76	79	83	86	86	85	80	77	66	72	69	75	78	81	84	86	88	90	91	89	89	81.1	91.4	
2-Nov-06	89	89	91	91	91	88	87	88	87	84	79	78	81	79	78	78	81	85	80	80	80	81	82	83	83.7	91.1	
3-Nov-06	83	83	84	86	85	86	86	87	85	79	72	69	72	73	74	79	82	84	85	87	88	88	87	88	82.1	87.7	
4-Nov-06	88	88	89	88	89	89	90	91	90	87	82	83	84	83	81	84	84	85	89	87	87	87	86	86	86.5	90.6	
5-Nov-06	85	86	84	84	83	83	81	85	84	81	72	71	66	61	59	60	70	76	80	82	80	81	79	77	77.0	86.2	
6-Nov-06	80	83	86	87	85	83	82	82	83	80	80	77	76	77	77	77	83	83	83	86	87	87	88	88	82.5	88.1	
7-Nov-06	88	88	88	88	88	88	88	87	87	79	60	59	58	54	56	57	71	77	80	83	90	90	86	83	78.0	90.1	
8-Nov-06	81	79	76	74	74	75	74	74	73	72	70	70	67	67	63	66	76	80	80	80	81	86	87	74.9	87.2		
9-Nov-06	87	88	87	87	85	86	85	82	82	79	76	66	57	62	60	67	74	81	82	83	86	86	87	84	79.2	87.7	
10-Nov-06	83	86	86	86	85	85	83	82	81	81	80	79	81	81	84	86	86	86	86	85	84	84	83	83.7	86.4		
11-Nov-06	81	80	81	82	81	80	79	77	77	74	73	67	55	54	44	57	73	73	75	76	81	84	87	87	74.1	87.4	
12-Nov-06	87	86	86	86	85	86	87	86	86	84	82	80	77	78	81	82	83	84	87	89	90	88	88	88	84.4	89.6	
13-Nov-06	87	87	88	86	86	88	88	89	88	87	86	84	81	79	78	79	81	84	83	84	83	84	85	86	84.6	88.7	
14-Nov-06	85	85	86	87	87	86	86	86	85	84	83	82	80	79	79	81	83	84	85	84	82	78	78	83.2	86.9		
15-Nov-06	79	77	72	68	59	57	57	57	61	65	68	66	66	68	73	67	76	84	80	82	87	87	84	83	71.8	86.9	
16-Nov-06	79	74	73	74	74	76	79	80	69	66	54	51	57	55	59	67	72	74	76	81	81	82	82	71.2	82.4		
17-Nov-06	80	77	79	78	83	84	86	90	92	89	88	84	64	58	62	62	76	81	82	84	84	78	85	82	79.5	91.6	
18-Nov-06	76	90	95	96	96	95	94	94	93	90	91	93	93	92	92	92	93	92	92	93	93	93	93	92	92.2	95.9	
19-Nov-06	92	92	92	93	93	93	93	93	93	94	91	84	84	77	67	60	59	61	64	77	66	70	77	62	60	78.8	93.5
20-Nov-06	65	74	73	69	67	67	66	67	72	74	63	57	52	59	56	49	58	57	54	58	57	60	69	90	63.9	89.8	
21-Nov-06	93	94	95	90	83	79	79	77	79	79	79	77	72	72	72	74	74	80	81	83	83	83	79	78	80.5	95.0	
22-Nov-06	76	73	74	77	71	73	71	73	75	75	74	73	69	63	68	76	78	78	79	77	78	78	80	82	74.6	81.6	
23-Nov-06	81	80	80	80	81	80	81	80	79	78	76	75	74	76	77	78	79	80	79	80	77	77	76	76	78.4	80.9	
24-Nov-06	75	74	74	75	75	76	72	71	71	70	68	66	66	65	65	67	69	71	72	74	74	75	75	75	71.4	75.6	
25-Nov-06	74	74	73	72	72	73	73	73	73	71	68	66	63	62	63	65	70	73	74	74	73	73	73	73	70.7	74.4	
26-Nov-06	73	73	72	72	71	71	70	69	68	66	63	56	54	55	61	66	70	72	71	71	71	73	72	67.9	72.9		
27-Nov-06	71	71	71	71	71	71	70	70	69	68	65	61	53	55	58	64	68	70	71	72	72	74	73	72	68.0	73.7	
28-Nov-06	70	70	71	71	71	70	70	69	68	66	59	48	45	44	45	50	58	67	71	72	73	74	74	74	64.6	74.4	
29-Nov-06	73	74	73	73	75	76	75	76	76	75	71	66	70	72	72	73	76	78	77	77	82	83	83	82	75.3	82.7	
30-Nov-06	82	83	83	84	83	73	66	67	70	73	66	66	70	71	73	76	77	79	79	76	75	77	77	73	75.0	84.1	

Hourly Avg	80.6	81.3	81.3	81.0	80.3	79.9	79.4	79.6	79.8	77.8	74.3	70.9	68.2	68.2	67.7	68.2	70.0	74.8	77.9	78.9	79.5	80.7	81.2	80.9	81.1
Hourly Max	92.9	94.0	95.1	95.9	95.8	95.4	93.6	93.5	93.5	90.6	91.4	93.1	92.7	91.8	92.3	92.4	92.6	92.3	92.1	93.1	92.9	92.8	92.7	92.3	

### HOURLY AVERAGE TABLE

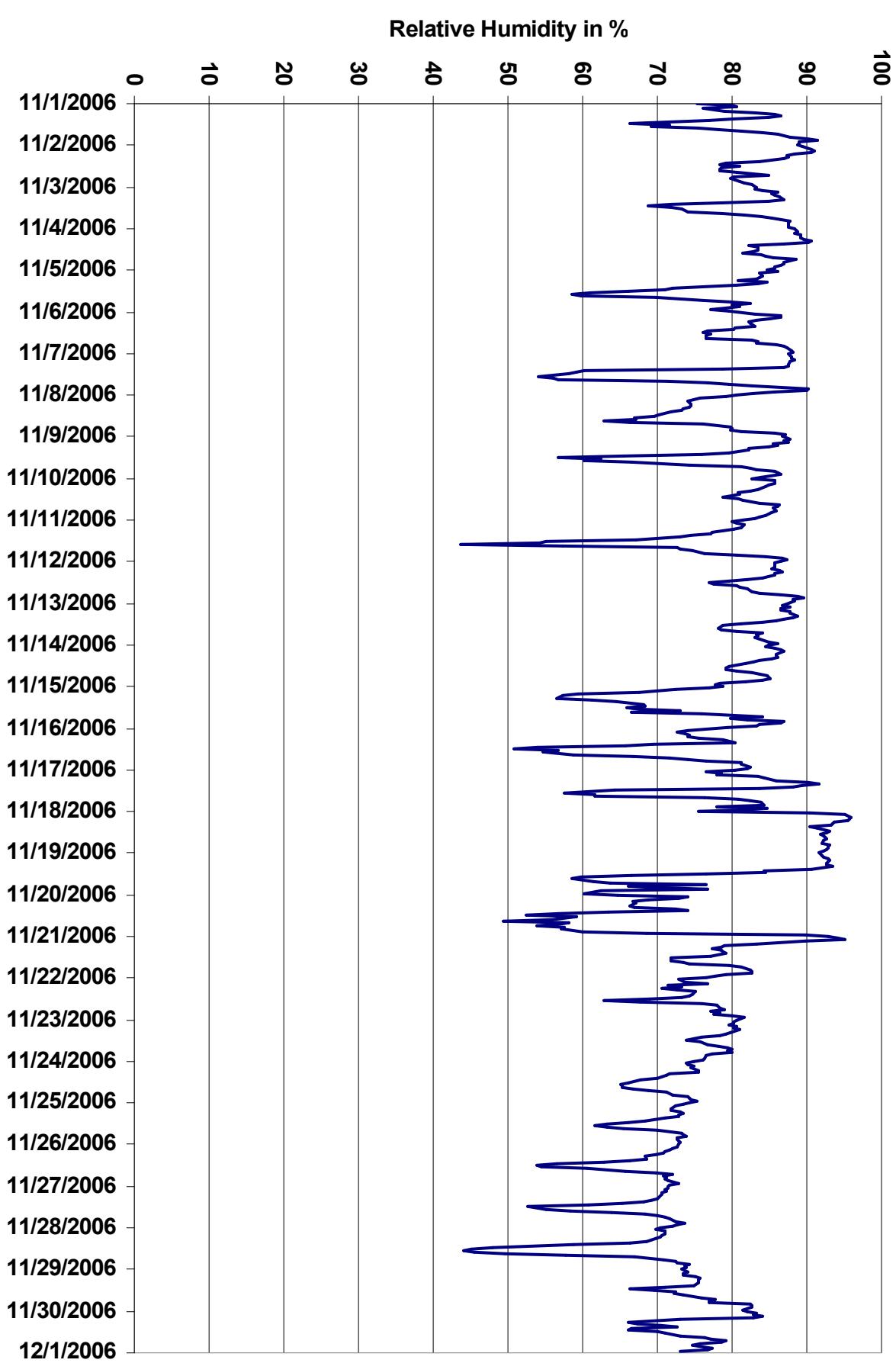
### Relative Humidity (RH)



### Status Flag Characters

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

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



# PASZA – Beaverlodge - Temperature Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	4.7 °C	19-Nov 15:00 16:00
Maximum 24-hr Value:	-1.2 °C	15-Nov

AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	-2.6 -0.4 -8.1 -13.3 -18.3 -28.8 -33.9	-14.0 °C	-13.3 °C

## Day Mountain Standard Time

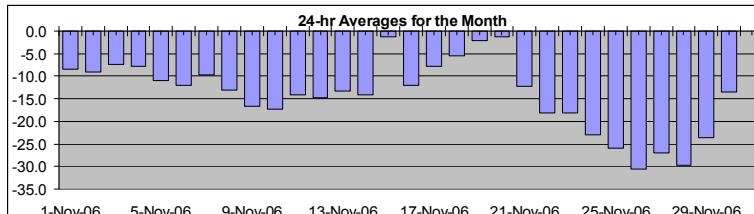
	Hour Start Hour End	24-hour Average	Daily Maximum
1-Nov-06	-8 -9 -9 -8 -9 -10 -11 -11 -10 -9 -8 -5 -6 -5 -6 -6 -7 -8 -9 -9 -10 -11 -10 -10	-8.5	-4.7
2-Nov-06	-10 -10 -10 -11 -10 -10 -11 -12 -12 -11 -10 -9 -9 -8 -8 -7 -8 -8 -8 -7 -7 -7 -7	-9.1	-7.2
3-Nov-06	-7 -8 -8 -8 -9 -9 -9 -8 -7 -5 -5 -5 -6 -7 -7 -7 -7 -8 -8 -8 -8 -8 -8 -8	-7.3	-4.8
4-Nov-06	-8 -8 -8 -8 -8 -8 -8 -8 -7 -7 -7 -7 -7 -7 -7 -7 -7 -8 -8 -8 -8 -9 -9 -9	-7.8	-6.9
5-Nov-06	-9 -9 -9 -9 -10 -10 -11 -11 -11 -12 -11 -11 -10 -9 -9 -9 -11 -12 -14 -14 -13 -13 -13	-11.0	-8.5
6-Nov-06	-13 -12 -13 -13 -12 -12 -13 -13 -13 -13 -13 -12 -11 -11 -10 -10 -12 -12 -12 -12 -12 -12 -12	-12.0	-10.3
7-Nov-06	-12 -13 -13 -13 -13 -14 -13 -14 -13 -11 -6 -6 -5 -4 -3 -3 -6 -7 -9 -10 -10 -10 -11	-9.7	-3.3
8-Nov-06	-13 -13 -14 -14 -14 -13 -13 -13 -13 -13 -12 -12 -11 -11 -10 -11 -13 -14 -14 -14 -14 -15 -17	-13.2	-10.1
9-Nov-06	-16 -17 -17 -18 -19 -19 -20 -21 -21 -21 -17 -15 -9 -13 -12 -14 -15 -16 -16 -16 -16 -17 -17 -16	-16.7	-9.3
10-Nov-06	-21 -19 -18 -19 -19 -20 -21 -21 -23 -20 -20 -18 -17 -16 -14 -12 -13 -14 -14 -14 -14 -14 -15	-17.2	-12.3
11-Nov-06	-15 -15 -15 -15 -15 -15 -15 -15 -16 -16 -15 -14 -12 -11 -8 -12 -15 -15 -15 -14 -14 -14 -15	-14.2	-8.0
12-Nov-06	-17 -16 -15 -15 -16 -16 -16 -16 -17 -16 -17 -16 -14 -13 -13 -13 -13 -12 -12 -13 -14 -15 -16	-14.9	-12.2
13-Nov-06	-15 -16 -15 -15 -15 -14 -13 -13 -12 -12 -11 -12 -12 -12 -13 -13 -13 -13 -13 -13 -13 -14 -15	-13.3	-11.1
14-Nov-06	-15 -15 -16 -16 -18 -17 -19 -18 -17 -16 -15 -15 -15 -15 -14 -14 -14 -14 -14 -14 -14 -9 -6	-14.2	-5.4
15-Nov-06	-5 -4 -3 -2 0 0 0 1 0 0 0 1 2 2 2 3 2 2 2 0 -10 -12 -12	-1.2	2.8
16-Nov-06	-12 -12 -13 -13 -12 -12 -13 -14 -14 -12 -12 -8 -7 -9 -8 -9 -11 -11 -12 -13 -15 -15 -15	-12.1	-7.5
17-Nov-06	-14 -12 -12 -11 -11 -12 -12 -11 -9 -10 -9 -9 -3 -2 -3 -4 -7 -6 -6 -5 -6 -6 -4	-7.8	-0.6
18-Nov-06	-1 -1 -2 -2 -3 -4 -5 -5 -5 -6 -7 -7 -6 -4 -2 -1 -4 -5 -4 -4 -2 -8 -7 -8 -8 -8	-5.6	-0.5
19-Nov-06	-9 -8 -8 -7 -7 -7 -7 -6 -4 -3 -4 -2 -1 -1 -1 -2 -3 -4 -2 -4 -3 -1 -2 -1	-2.0	4.7
20-Nov-06	0 -2 -4 -4 -3 -4 -4 -3 -4 -4 -1 -1 -3 -1 -2 -3 -0 -0 -0 -0 -0 -0 -1 -2 -3	-1.3	3.0
21-Nov-06	-3 -4 -5 -6 -10 -11 -12 -12 -12 -12 -13 -13 -13 -13 -14 -14 -14 -15 -15 -15 -16 -16 -17	-12.2	-3.2
22-Nov-06	-17 -18 -18 -18 -18 -18 -18 -18 -18 -19 -18 -18 -17 -16 -17 -19 -19 -19 -18 -18 -18 -18 -20	-18.1	-15.7
23-Nov-06	-19 -19 -19 -19 -19 -19 -19 -18 -18 -18 -18 -17 -17 -17 -17 -17 -18 -18 -18 -18 -18 -19 -20	-18.2	-16.9
24-Nov-06	-20 -21 -21 -21 -21 -21 -22 -22 -22 -22 -22 -23 -23 -23 -23 -23 -24 -25 -25 -26 -26 -26 -26	-23.0	-20.3
25-Nov-06	-26 -25 -25 -25 -25 -25 -26 -26 -26 -26 -25 -25 -25 -24 -24 -24 -24 -25 -25 -26 -26 -27 -27	-25.8	-23.9
26-Nov-06	-30 -30 -30 -31 -31 -32 -33 -33 -35 -36 -35 -33 -32 -31 -31 -29 -29 -29 -29 -28 -28 -28 -27	-30.5	-26.7
27-Nov-06	-27 -27 -27 -27 -27 -27 -27 -27 -27 -27 -26 -25 -24 -25 -25 -25 -27 -27 -28 -28 -28 -28 -29 -29	-26.9	-24.1
28-Nov-06	-30 -30 -32 -33 -34 -34 -34 -34 -34 -34 -30 -27 -26 -26 -26 -25 -25 -26 -28 -27 -29 -28 -28 -29	-29.7	-24.8
29-Nov-06	-30 -30 -29 -28 -27 -26 -28 -28 -27 -27 -24 -25 -25 -23 -22 -22 -21 -19 -20 -19 -17 -17 -16 -16	-23.7	-15.7
30-Nov-06	-16 -17 -17 -18 -15 -7 -5 -6 -7 -10 -13 -13 -14 -15 -15 -16 -16 -15 -14 -15 -14 -14	-13.4	-5.5

Hourly Avg -14.6 -14.8 -14.8 -14.9 -14.9 -15.0 -15.2 -15.4 -15.3 -14.9 -14.1 -13.3 -12.4 -12.2 -11.8 -12.1 -12.9 -13.4 -13.6 -13.7 -13.8 -14.2 -14.4 -14.5

Hourly Max -0.5 -1.3 -1.6 -1.8 0.3 0.1 0.2 0.5 0.1 -0.1 0.0 1.2 2.6 2.3 3.8 4.7 4.2 3.9 2.5 3.6 2.6 1.5 1.6 0.8

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)



## Status Flag Characters

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

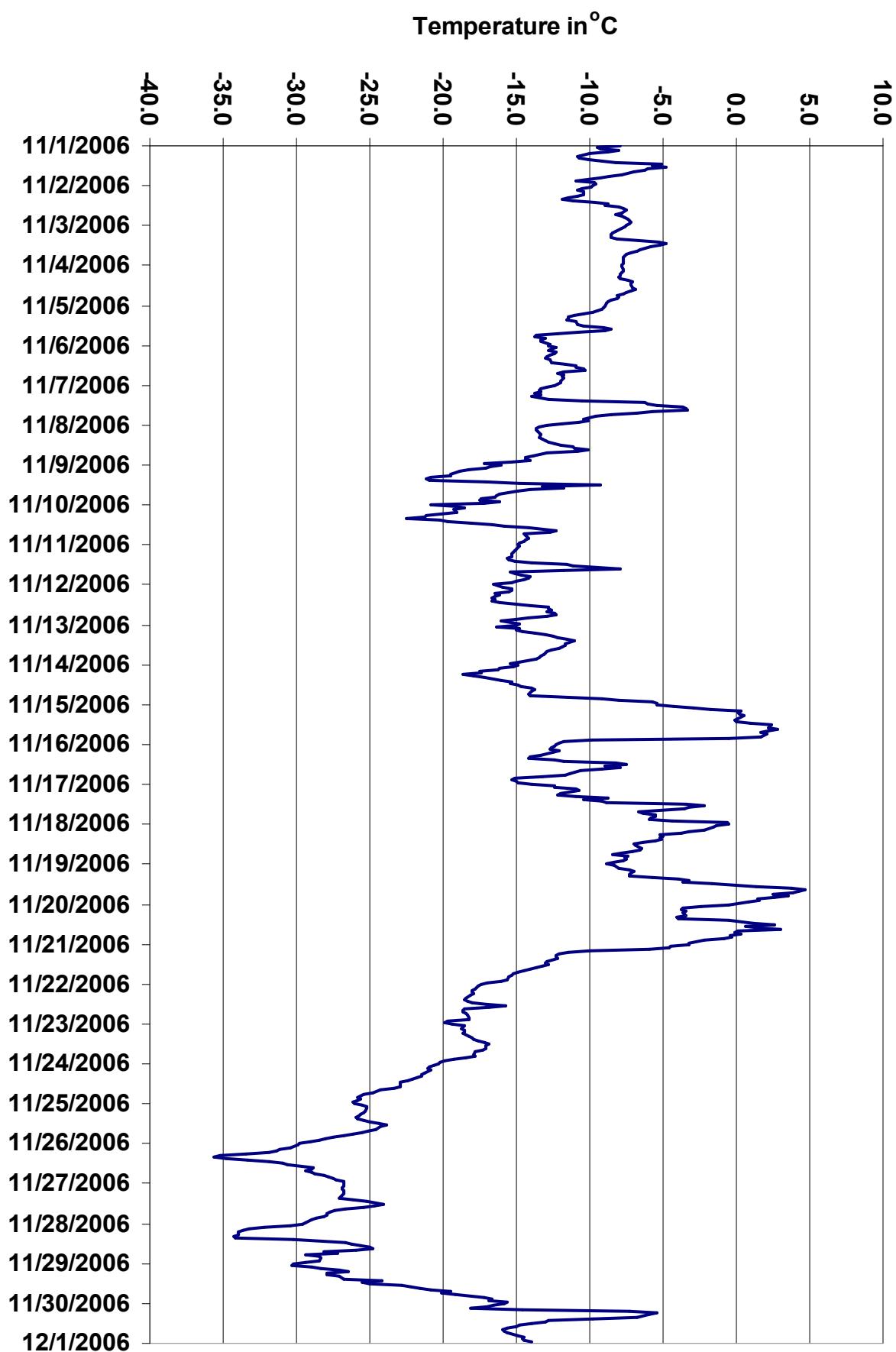


Figure 45. PASZA - Beaverton Lake Temperature 1-hr Average Monthly Trend

# PASZA - Beaverlodge - Scalar Wind Speed Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	40.3 km/hr	19-Nov 20:00 21:00
Maximum 24-hr Value:	14.0 km/hr	19-Nov

Calm Time:	14 hrs	2% calms	Operational Time:	706 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	27.8	14.6	9.4	5.9	3.3	1.6	1.1	7.0 km/hr

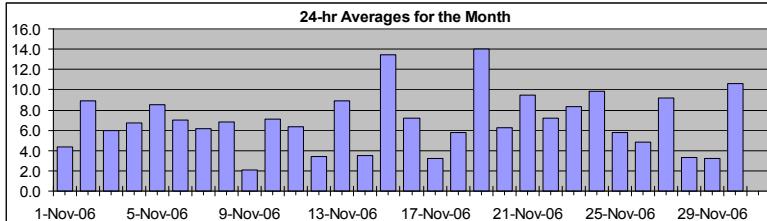
## Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	6:00 7:00	7:00 8:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hr Scalar Average	Daily Max
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00			
1-Nov-06	calm	1	3	5	4	6	3	2	1	2	3	1	4	4	4	7	9	7	7	7	5	1	6	8	4.3	9.0		
2-Nov-06	12	11	10	8	8	8	8	8	8	7	8	10	10	7	6	5	5	3	8	13	15	12	12	13	8.9	14.6		
3-Nov-06	14	13	12	10	8	8	6	6	1	calm	calm	2	4	5	4	4	4	5	5	4	4	4	4	4	6.0	13.6		
4-Nov-06	5	4	4	4	5	5	5	4	3	3	6	7	8	8	9	9	8	11	11	9	9	8	8	7	6.7	11.3		
5-Nov-06	7	9	10	8	7	9	11	12	12	10	9	10	12	10	9	7	5	5	3	5	9	9	9	10	7	8.5	12.0	
6-Nov-06	7	3	3	5	3	7	9	12	13	17	12	7	5	6	4	4	6	7	2	3	5	10	10	8	7.0	16.9		
7-Nov-06	3	4	4	4	3	5	5	4	3	3	1	3	2	4	5	3	5	13	14	12	11	12	12	13	6.2	14.0		
8-Nov-06	13	11	10	10	11	10	10	9	9	9	9	10	9	6	6	4	2	2	4	4	3	2	2	2	6.8	13.0		
9-Nov-06	2	1	1	calm	calm	calm	calm	calm	1	3	calm	2	2	3	3	2	1	2	3	2	1	1	4	2	2.1	3.7		
10-Nov-06	3	3	3	3	calm	1	4	3	3	2	3	2	3	2	6	8	13	15	14	13	14	14	16	14	7.1	15.7		
11-Nov-06	14	15	12	12	13	9	9	8	7	7	6	5	4	2	2	1	5	4	3	3	3	3	3	3	6.4	14.5		
12-Nov-06	3	3	4	5	3	1	3	2	1	2	2	1	2	2	6	5	4	6	6	8	2	2	4	4	3.4	7.7		
13-Nov-06	4	2	2	2	2	2	6	6	9	11	11	13	15	15	15	18	16	12	12	13	11	10	5	3	8.9	17.6		
14-Nov-06	2	3	1	2	calm	2	3	2	2	2	2	3	3	3	4	3	4	5	4	3	5	6	8	8	3.5	8.4		
15-Nov-06	7	5	6	6	8	9	9	8	10	16	18	18	15	12	12	15	16	15	13	9	13	27	29	28	13.4	28.6		
16-Nov-06	26	21	14	14	10	11	9	7	4	2	4	2	3	5	6	5	4	3	5	4	3	4	5	3	7.2	25.8		
17-Nov-06	4	3	2	9	2	3	3	5	2	3	3	3	1	2	3	2	3	1	calm	2	3	3	7	7	3.2	8.5		
18-Nov-06	6	9	6	3	3	5	9	10	5	4	6	9	10	8	8	7	4	4	3	5	5	3	3	5	5.8	9.8		
19-Nov-06	3	3	3	3	4	4	2	2	7	9	7	5	4	11	18	17	15	14	36	30	40	29	36	34	14.0	40.3		
20-Nov-06	28	17	8	5	3	7	4	7	8	4	6	6	3	2	3	4	4	6	5	3	3	1	6	8	6.3	27.7		
21-Nov-06	5	5	5	14	19	14	13	9	4	3	11	11	11	11	12	11	9	9	9	8	9	8	11	9	9.5	18.8		
22-Nov-06	12	11	10	9	8	6	4	8	9	8	8	7	7	5	4	5	6	8	9	9	8	7	5	2	7.2	11.6		
23-Nov-06	4	6	8	7	5	7	8	5	5	7	7	8	7	8	9	8	8	7	9	11	14	13	14	14	8.3	14.1		
24-Nov-06	11	11	11	9	9	11	12	12	13	12	15	16	14	14	14	12	8	6	6	5	4	5	5	4	9.9	15.7		
25-Nov-06	5	5	6	8	8	6	4	3	4	6	6	6	6	5	5	4	3	4	7	8	9	8	6	6	5.7	9.4		
26-Nov-06	8	10	10	10	9	7	4	1	2	1	3	1	1	1	calm	2	2	2	3	4	6	6	5	4	4.8	10.1		
27-Nov-06	10	8	11	14	13	15	13	10	10	10	5	7	8	6	6	6	7	7	7	9	8	8	10	10	9.2	14.5		
28-Nov-06	10	6	2	2	3	3	4	4	2	4	3	3	4	3	3	3	3	2	4	2	3	1	2	3.3	9.9			
29-Nov-06	2	1	calm	1	1	3	2	2	1	3	2	2	4	3	1	2	4	6	7	4	6	7	6	3	3.2	6.9		
30-Nov-06	3	4	5	4	5	9	16	10	9	13	16	15	16	16	15	12	12	11	9	10	12	13	11	9	10.6	16.3		

1-hr Average	8.0	6.8	6.4	6.6	6.5	6.7	6.8	6.2	5.7	6.4	6.8	6.4	6.5	6.5	6.9	6.5	6.7	7.8	7.6	8.0	7.9	8.7	8.3	
Hourly Max	27.7	20.5	13.8	14.4	18.8	14.5	16.3	12.0	13.3	16.9	18.1	17.8	16.1	15.5	17.7	17.6	16.2	15.5	35.9	30.0	40.3	29.2	36.2	34.2

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)



## Status Flag Characters

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

# PASZA - Beaverlodge - Vector Wind Speed Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

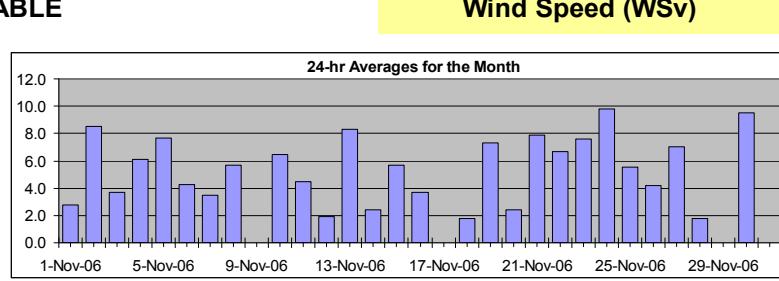
Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	40.2	km/hr	19-Nov	20:00 21:00
Maximum 24-hr Value:	9.8	km/hr	24-Nov	

Calm Time:	47 hrs	7% calms	Operational Time:	673 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				AverageV
99	95	75	50	25 5 1
28.0	14.7	9.5	5.9	2.9 1.2 0.9
				2.8 km/hr

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max	
	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 24:00	23:00 0:00		
1-Nov-06	calm	calm	3	5	4	6	2	2	calm	1	2	1	4	3	4	7	9	6	7	7	4	1	6	8	2.8	9.0	
2-Nov-06	12	11	9	8	8	8	8	7	8	7	8	10	10	7	6	5	5	2	7	13	15	12	12	13	8.6	14.6	
3-Nov-06	14	13	12	10	8	8	6	6	1	calm	calm	2	4	5	4	4	4	5	4	4	3	4	4	3.7	13.6		
4-Nov-06	5	4	4	4	5	5	5	4	3	3	6	7	8	8	9	9	8	11	11	9	9	8	8	6.1	11.2		
5-Nov-06	7	9	10	8	7	9	11	12	12	10	9	10	11	10	9	7	5	4	2	5	9	9	10	7.7	12.0		
6-Nov-06	7	2	2	3	1	7	9	11	13	17	12	7	4	6	4	3	6	7	1	1	5	7	8	4.2	16.8		
7-Nov-06	2	3	3	3	3	4	4	4	2	2	1	3	calm	2	3	2	3	13	13	11	11	12	12	13	3.5	13.1	
8-Nov-06	13	11	10	10	11	10	10	9	9	9	10	9	9	6	5	3	1	2	4	4	3	1	1	5.7	12.9		
9-Nov-06	2	1	1	1	calm	calm	calm	calm	calm	1	2	calm	calm	1	2	3	1	1	2	2	2	calm	1	4	N	3.5	
10-Nov-06	2	2	1	1	calm	calm	calm	3	2	2	1	2	1	2	2	6	8	13	15	14	13	14	14	16	6.4	15.6	
11-Nov-06	14	14	12	11	13	9	9	8	7	6	6	5	4	1	2	1	4	3	3	3	3	3	2	2	4.5	14.5	
12-Nov-06	2	2	2	3	3	1	1	2	calm	2	2	2	calm	calm	2	3	1	3	5	5	5	5	calm	1	2	1.9	5.1
13-Nov-06	1	calm	1	calm	calm	1	6	6	8	11	10	13	15	15	15	18	16	12	12	13	11	10	5	2	8.3	17.6	
14-Nov-06	1	2	1	2	calm	2	3	2	2	2	2	2	2	3	3	3	4	5	4	3	5	6	8	8	2.4	8.3	
15-Nov-06	7	5	6	6	8	8	8	8	10	16	18	18	15	12	12	15	16	15	13	9	12	27	29	28	5.7	28.6	
16-Nov-06	26	20	14	14	10	11	9	7	4	1	4	2	3	4	6	5	4	2	4	3	2	4	5	2	3.7	25.8	
17-Nov-06	4	1	calm	8	calm	2	2	5	1	1	1	1	1	calm	calm	1	calm	calm	calm	2	2	2	4	7	N	7.7	
18-Nov-06	6	8	6	1	2	2	8	10	5	3	6	8	10	8	8	6	2	2	calm	3	5	3	2	3	1.8	9.8	
19-Nov-06	3	1	2	2	4	3	calm	calm	4	8	5	3	4	10	18	16	14	14	36	30	40	29	36	34	7.3	40.2	
20-Nov-06	28	17	6	4	2	5	3	7	8	2	6	6	2	2	1	3	3	6	5	3	2	calm	6	7	2.4	27.7	
21-Nov-06	2	4	4	13	19	14	13	9	4	2	11	11	11	10	12	11	9	9	8	8	8	10	9	7.9	18.7		
22-Nov-06	12	11	10	9	8	6	4	8	9	8	8	7	7	5	4	5	6	8	9	9	8	7	5	6.7	11.5		
23-Nov-06	4	6	8	6	4	7	8	5	5	7	7	7	7	8	9	8	8	7	9	11	14	13	14	7.6	14.1		
24-Nov-06	10	11	11	9	9	11	11	12	13	12	15	16	14	13	14	12	8	6	6	5	4	5	5	9.8	15.6		
25-Nov-06	5	4	6	8	8	6	4	3	4	6	6	6	6	5	5	4	3	4	7	8	9	8	6	6	5.5	9.4	
26-Nov-06	8	10	10	10	9	7	3	1	1	1	2	1	calm	calm	1	2	2	3	4	6	6	5	3	8	4.2	10.1	
27-Nov-06	10	8	11	14	13	14	13	10	10	10	5	7	8	6	6	6	7	7	7	9	8	8	10	7.0	14.5		
28-Nov-06	10	5	1	2	3	3	4	4	2	4	3	3	3	4	3	2	2	1	1	1	3	1	1	1.8	9.9		
29-Nov-06	calm	calm	calm	1	1	3	2	2	1	1	calm	calm	1	1	calm	calm	1	6	4	6	5	2	N	6.4			
30-Nov-06	2	3	3	3	1	8	16	10	9	13	16	15	16	15	15	12	12	11	9	10	12	13	10	9	9.5	16.3	



# PASZA - Beaverlodge - Wind Direction Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

### Summary

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

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs									
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%									
Percentile	99	95	75	50	25	5	1	Average					
	356.0	344.6	321.3	148.2	72.6	17.1	3.2		3 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	1:00 2:00	2:00 3:00	2:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	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-Nov-06	49	82	350	339	2	11	52	263	128	50	50	296	46	75	173	123	123	109	91	100	57	26	80	96	78	ENE
2-Nov-06	99	103	107	113	105	111	117	106	108	115	119	122	115	120	114	105	115	291	95	105	108	96	94	104	107	ESE
3-Nov-06	110	105	95	93	75	79	64	71	74	286	311	288	269	294	324	340	5	21	18	15	20	10	17	19	59	ENE
4-Nov-06	32	33	31	21	34	38	48	57	62	72	88	83	74	74	73	62	80	74	53	51	33	24	11	343	52	NE
5-Nov-06	349	332	339	339	328	312	318	320	327	336	337	328	326	331	335	341	351	7	20	33	28	32	43	32	344	NNW
6-Nov-06	38	306	153	103	36	111	108	95	103	86	92	92	58	64	60	358	351	35	70	242	320	358	342	319	62	ENE
7-Nov-06	257	199	92	157	59	85	116	164	153	240	289	305	13	44	316	74	34	334	339	354	355	349	344	339	354	N
8-Nov-06	333	329	324	324	317	309	309	311	312	319	320	313	323	306	322	344	0	183	77	44	72	83	106	95	325	NW
9-Nov-06	101	111	137	144	256	59	250	12	320	30	289	24	41	267	309	66	276	317	350	46	83	32	46	203	21	NNE
10-Nov-06	355	26	44	1	94	254	46	326	21	29	341	50	286	256	338	2	327	327	329	324	327	323	326	329	334	NNW
11-Nov-06	332	328	330	324	325	329	325	326	337	345	337	327	294	336	103	95	57	74	89	114	160	170	148	282	335	NNW
12-Nov-06	0	338	14	304	290	94	33	50	145	143	197	296	60	54	340	337	283	333	5	34	158	176	28	37	1	N
13-Nov-06	37	227	21	54	27	19	339	11	9	12	346	325	322	324	328	327	327	331	329	331	327	323	305	313	335	NNW
14-Nov-06	281	301	54	65	68	97	109	175	115	214	236	195	205	223	214	215	221	216	213	195	132	148	171	191	186	S
15-Nov-06	189	154	150	127	141	147	129	126	139	120	123	119	124	121	109	109	105	102	104	94	335	332	329	325	102	ESE
16-Nov-06	321	314	325	318	316	305	294	285	295	269	59	79	110	135	128	100	110	111	331	48	272	87	192	111	322	NW
17-Nov-06	69	352	17	350	188	195	146	62	150	79	151	189	51	95	258	129	83	30	189	112	190	229	334	313	44	NE
18-Nov-06	280	312	301	252	143	40	38	117	110	78	142	140	154	132	135	142	237	297	310	172	125	254	47	237	139	SE
19-Nov-06	279	19	346	280	295	316	153	261	87	157	172	209	160	141	131	126	134	143	274	265	261	264	262	260	241	WSW
20-Nov-06	255	242	230	83	166	216	229	249	235	157	231	240	148	92	61	98	103	63	62	84	92	251	309	15	233	SW
21-Nov-06	350	272	352	30	32	39	45	56	50	310	319	325	8	25	24	25	28	27	18	27	37	52	77	99	27	NNE
22-Nov-06	107	94	89	68	71	62	116	127	114	111	115	116	110	128	103	110	88	113	103	92	74	63	41	22	96	E
23-Nov-06	25	42	36	40	328	356	339	360	9	355	13	4	343	328	327	335	333	327	327	323	325	329	328	329	343	NNW
24-Nov-06	330	328	324	324	329	333	341	343	336	333	330	331	334	334	327	324	330	335	325	318	302	320	331	330	330	NNW
25-Nov-06	344	3	17	16	10	8	359	355	340	351	347	357	346	355	13	3	19	324	328	326	343	345	349	3	354	N
26-Nov-06	341	339	342	336	335	331	334	360	346	325	264	283	329	73	297	279	316	322	23	28	16	16	8	44	347	NNW
27-Nov-06	41	42	42	46	56	55	53	47	47	50	34	18	17	348	330	320	311	321	322	320	325	320	324	323	15	NNE
28-Nov-06	327	321	286	82	63	65	64	64	73	74	110	122	85	75	72	75	129	135	146	346	37	78	105	253	59	ENE
29-Nov-06	115	92	125	79	79	73	144	151	185	16	290	323	62	349	228	106	36	66	273	214	41	283	289	45	14	NNE
30-Nov-06	264	325	304	85	21	275	281	300	328	359	345	342	343	339	335	330	326	317	301	301	322	322	311	309	324	NW

Hourly Avg 341 341 6 16 13 16 18 28 37 39 19 1 15 18 12 31 25 15 345 357 345 338 337 332

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

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

### Summary

Summary							
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Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	61.3	49.1	24.7	9.3	5.3	3.2	2.4

### Status Flag Characters

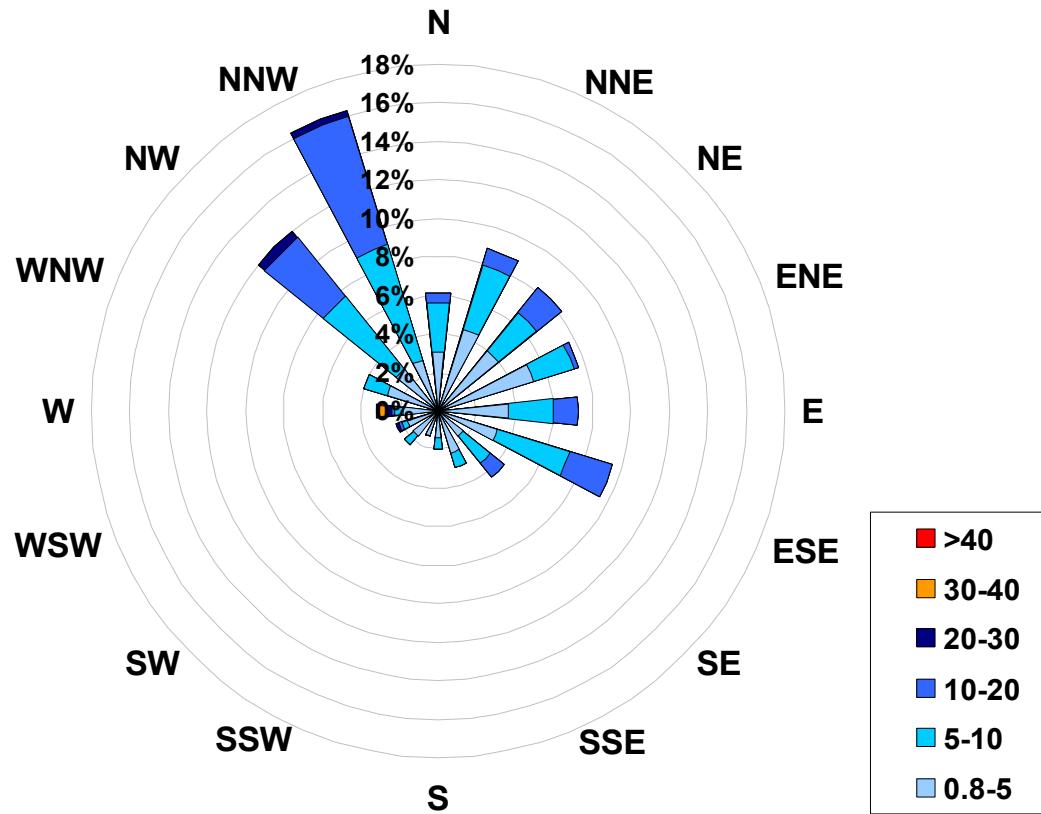
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

### Day Mountain Standard Time

	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum	
1-Nov-06	39	50	19	5	13	11	27	22	37	32	28	44	17	14	17	4	3	4	4	5	8	26	10	7	49.7	
2-Nov-06	12	4	4	5	6	6	5	4	3	4	5	5	5	6	7	8	18	36	47	4	3	3	4	4	47.4	
3-Nov-06	3	4	5	5	5	5	7	8	58	32	42	9	5	8	13	9	12	5	7	7	11	9	7	7	58.3	
4-Nov-06	5	5	7	8	4	3	3	3	3	7	7	5	6	5	6	5	9	6	3	6	7	6	10	7	9.6	
5-Nov-06	9	5	6	6	6	5	4	4	6	6	7	6	5	7	8	9	11	10	33	34	3	4	3	4	33.8	
6-Nov-06	8	23	28	12	50	12	8	7	5	5	7	20	31	10	17	19	7	6	35	55	11	34	23	20	54.5	
7-Nov-06	23	23	23	24	11	9	11	14	31	38	50	31	26	26	40	61	57	15	19	21	10	8	7	7	61.4	
8-Nov-06	7	8	7	6	5	4	5	6	5	6	7	8	6	9	12	11	29	13	9	9	21	19	20	18	28.7	
9-Nov-06	15	16	11	28	47	55	32	34	42	19	33	44	28	12	48	26	29	40	30	38	44	43	16	26	55.4	
10-Nov-06	21	25	44	34	39	66	55	53	26	33	18	43	22	12	6	9	7	4	3	3	3	3	3	3	66.2	
11-Nov-06	3	3	5	5	4	5	5	7	9	10	9	11	10	31	8	35	9	9	12	19	20	17	44	30	43.8	
12-Nov-06	54	35	31	21	32	16	30	49	61	30	34	54	55	53	29	17	38	44	22	19	23	34	37	30	61.0	
13-Nov-06	41	21	32	52	46	43	14	11	6	4	7	3	4	4	4	4	3	5	5	4	5	6	7	16	52.1	
14-Nov-06	46	14	28	9	24	26	9	26	51	17	30	31	24	18	14	16	7	8	9	30	10	7	7	12	50.6	
15-Nov-06	12	16	15	11	5	13	5	7	5	3	2	3	5	4	4	3	3	3	3	3	10	18	4	3	4	18.0
16-Nov-06	4	4	5	4	5	5	5	8	10	48	17	14	19	9	8	13	12	15	50	39	66	33	12	44	65.9	
17-Nov-06	42	54	42	23	76	45	35	17	32	18	22	79	40	34	32	28	41	57	47	41	26	37	30	12	78.9	
18-Nov-06	16	6	5	22	34	31	14	5	22	53	15	8	6	6	8	8	25	47	54	29	20	17	38	40	53.5	
19-Nov-06	23	21	51	28	16	33	63	49	46	17	23	44	20	14	6	13	16	11	10	6	3	3	3	2	63.0	
20-Nov-06	2	3	27	34	47	15	59	13	25	38	32	12	30	20	43	11	10	4	8	26	43	44	33	9	59.3	
21-Nov-06	24	45	19	17	4	5	4	6	19	33	4	5	8	7	5	5	5	4	6	4	3	5	6	8	45.0	
22-Nov-06	5	6	8	5	5	7	8	7	6	5	5	5	6	5	11	6	8	4	5	5	6	7	10	12	11.7	
23-Nov-06	5	5	3	9	30	9	6	10	16	8	8	12	10	6	5	6	7	5	4	3	4	5	4	4	29.9	
24-Nov-06	6	7	5	5	7	6	6	6	6	7	5	7	8	9	5	5	5	9	7	5	5	5	5	6	9.2	
25-Nov-06	6	9	6	5	6	9	13	25	8	10	9	11	11	13	14	13	9	7	3	4	3	5	7	6	25.3	
26-Nov-06	4	3	2	2	2	4	12	20	16	31	38	17	24	16	42	12	15	13	14	5	6	13	9	4	41.6	
27-Nov-06	4	5	3	3	3	4	5	5	5	13	13	12	10	6	6	3	3	3	3	5	3	2	1	12.6		
28-Nov-06	6	26	16	10	6	8	5	4	14	6	12	25	25	13	6	8	15	26	46	47	42	11	42	59	59.0	
29-Nov-06	25	36	48	46	60	9	16	19	37	18	71	47	48	29	51	73	45	60	11	23	45	8	10	18	72.9	
30-Nov-06	21	46	56	21	37	9	4	5	6	8	5	5	5	5	5	7	6	5	4	5	4	3	4	4	55.9	

Hourly Max 54 54 56 52 76 66 63 53 61 53 71 79 55 53 51 73 57 60 54 55 66 44 44 59

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



Calms: 2%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	314
5	to	10	243
10	to	20	137
20	to	30	8
30	to	40	3
	>	40	1
Total Non-Zero Values			706

# PASZA – Portable-Falher Station

## Monthly Summary Tables, Graphs, and Roses

# PASZA - Portable-Falher - Sulphur Dioxide Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 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:	2.8 ppb
Maximum 24-hr Average:	0.8 ppb

4-Nov 10:00 11:00  
29-Nov

AIC Time:	24 hrs	Operational Time:	523 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	76.4%
Percentile	99 95 75 50 25 5 1	Average	0.4 ppb

1.8 1.1 0.5 0.3 0.1 0.0 Median 0.3 ppb

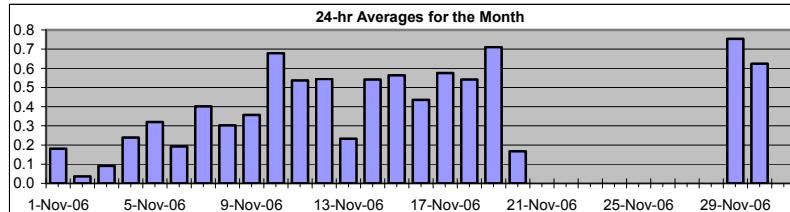
Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00		
1-Nov-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	
2-Nov-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	
3-Nov-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	
4-Nov-06	0	0	0	0	0	0	0	0	0	1	3	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	
5-Nov-06	0	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	0	
6-Nov-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	
7-Nov-06	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	1	0	0	0	
8-Nov-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	
9-Nov-06	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10-Nov-06	2	1	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	
11-Nov-06	0	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	
12-Nov-06	0	0	0	0	0	A	0	0	0	0	1	2	1	1	1	0	1	1	0	0	0	0	0	0	0	0	
13-Nov-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
14-Nov-06	0	0	0	A	0	0	0	0	1	2	1	0	0	0	0	0	0	1	2	1	0	0	1	1	0	0	
15-Nov-06	1	1	A	1	1	1	1	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	
16-Nov-06	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	
17-Nov-06	A	0	0	0	1	1	1	1	1	1	1	2	1	0	C	C	C	A	0	0	0	0	0	0	0	0	
18-Nov-06	0	0	0	A	1	2	2	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	
19-Nov-06	1	2	A	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	
20-Nov-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	
21-Nov-06	A	0	0	0	0	0	0	0	0	0	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
22-Nov-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	
23-Nov-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	
24-Nov-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	
25-Nov-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	
26-Nov-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	
27-Nov-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	
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	1	1	1	1	1
29-Nov-06	1	1	A	1	0	0	1	1	1	1	1	1	2	1	1	0	0	0	0	0	1	1	1	1	1	1	
30-Nov-06	1	A	1	1	1	1	0	0	1	1	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0	

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	N
Hourly Max	1.7	2.2	1.2	1.4	1.0	2.5	1.6	1.4	1.1	1.4	2.8	1.5	1.9	1.1	1.0	0.9	1.2	1.1	1.7	0.8	0.9	1.1	0.9	0.9	0.6	1.4

## HOURLY AVERAGE TABLE

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



## Status Flag Characters

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

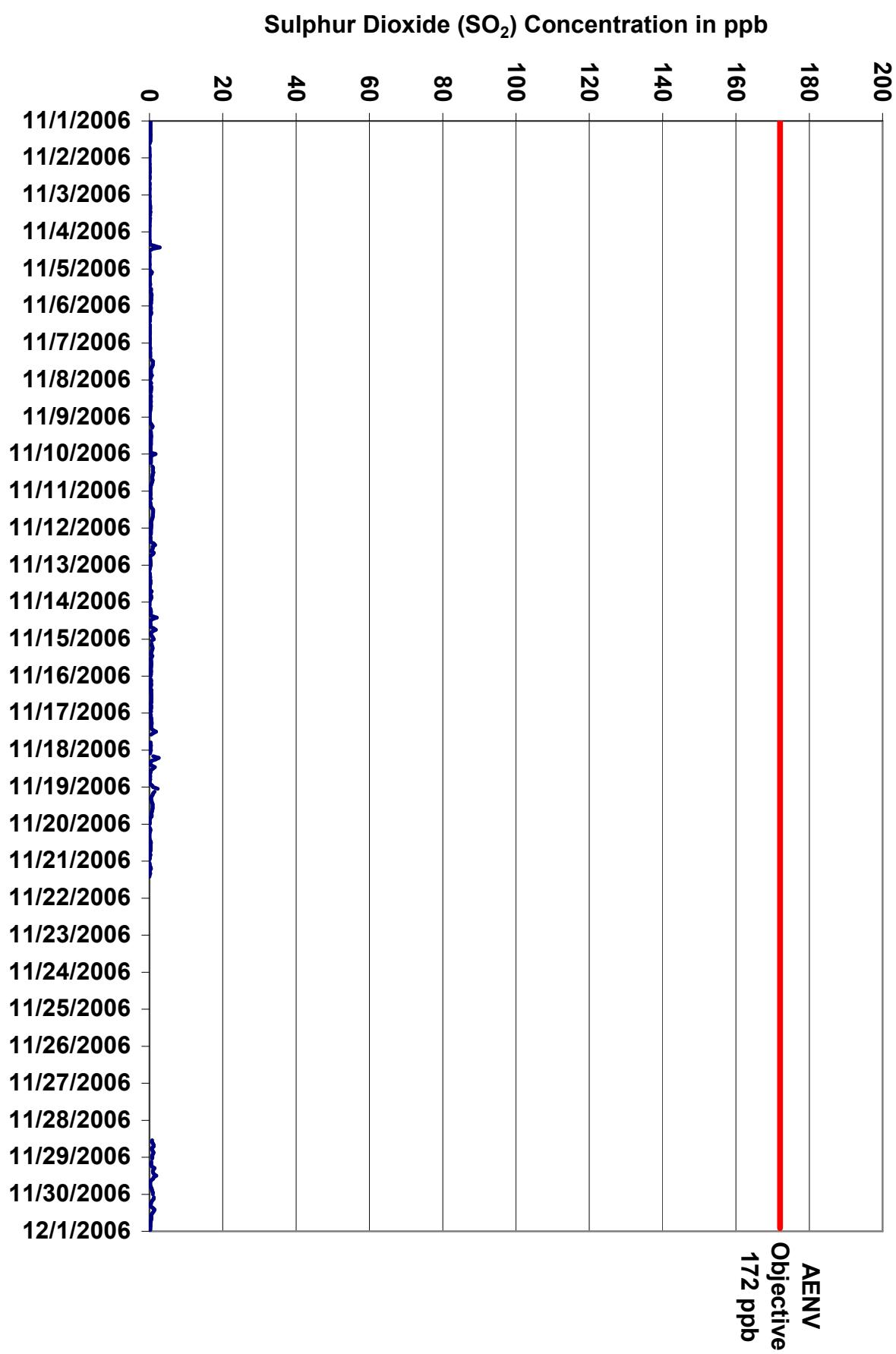


Figure 46. PASZA - Portable-Falher Sulphur Dioxide 1-hr Average Monthly Trend

Station: Portable-Falher  
Station Owner: PASZA

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

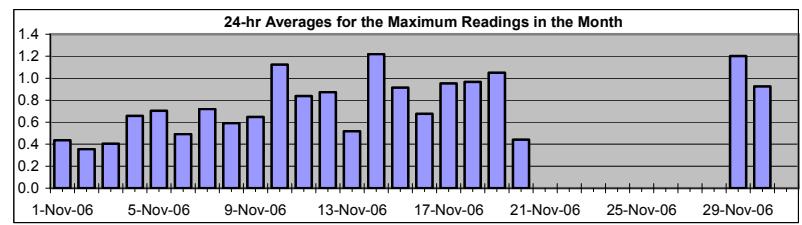
#### Summary

Maximum 1-hr Value:	5.1 ppb	14-Nov 10:00 11:00
Maximum 24-hr Value:	1.2 ppb	14-Nov

AIC Time:	24 hrs	Operational Time:	523 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	76.4%
Percentile	99 95 75 50 25 5 1	Average	Median
	3.0 1.7 1.0 0.5 0.4 0.3 0.3	0.8 ppb	0.5 ppb

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Nov-06	1:00	0	1	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
2-Nov-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	0.4	0.4	
3-Nov-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	0.4	0.4	
4-Nov-06	0	0	0	0	0	0	0	0	0	0	2	3	2	0	A	0	0	0	0	0	0	0	0	0	0	0.7	3.5	
5-Nov-06	0	0	1	1	0	0	0	0	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.5	
6-Nov-06	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0	
7-Nov-06	0	0	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2	
8-Nov-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	0.6	1.1	
9-Nov-06	1	0	0	0	0	1	2	1	A	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0.6	1.5	
10-Nov-06	3	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1.1	3.0	
11-Nov-06	0	0	0	0	0	1	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
12-Nov-06	0	0	0	0	0	A	0	0	0	1	2	2	2	1	1	1	3	1	1	0	0	0	0	0	0	0.9	2.8	
13-Nov-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0.5	1.0	
14-Nov-06	0	0	0	A	0	0	0	0	1	1	5	1	0	0	0	0	0	1	3	3	2	1	1	1	3	1.2	5.1	
15-Nov-06	2	1	A	1	1	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	1	1	1	1	1	0.9	2.5	
16-Nov-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	0.7	1.0	
17-Nov-06	A	1	1	1	1	1	1	1	1	1	1	2	2	2	1	C	C	C	A	1	1	1	1	0	0	0	1.0	2.5
18-Nov-06	1	1	0	A	2	3	2	1	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1.0	3.0	
19-Nov-06	1	3	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1.0	3.4	
20-Nov-06	0	A	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
21-Nov-06	A	0	0	0	0	1	0	0	0	0	0	0	P	N	N	N	N	N	N	N	N	N	N	N	N	N	0.9	0.0
22-Nov-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
23-Nov-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
24-Nov-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
25-Nov-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
26-Nov-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
27-Nov-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
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1	2	2	2	1	1	1	1	1.7	2.7
29-Nov-06	1	1	A	1	1	1	1	3	2	2	2	2	2	1	1	1	0	0	1	1	1	1	1	1	1	1.2	2.7	
30-Nov-06	1	A	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0.9	1.8	



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

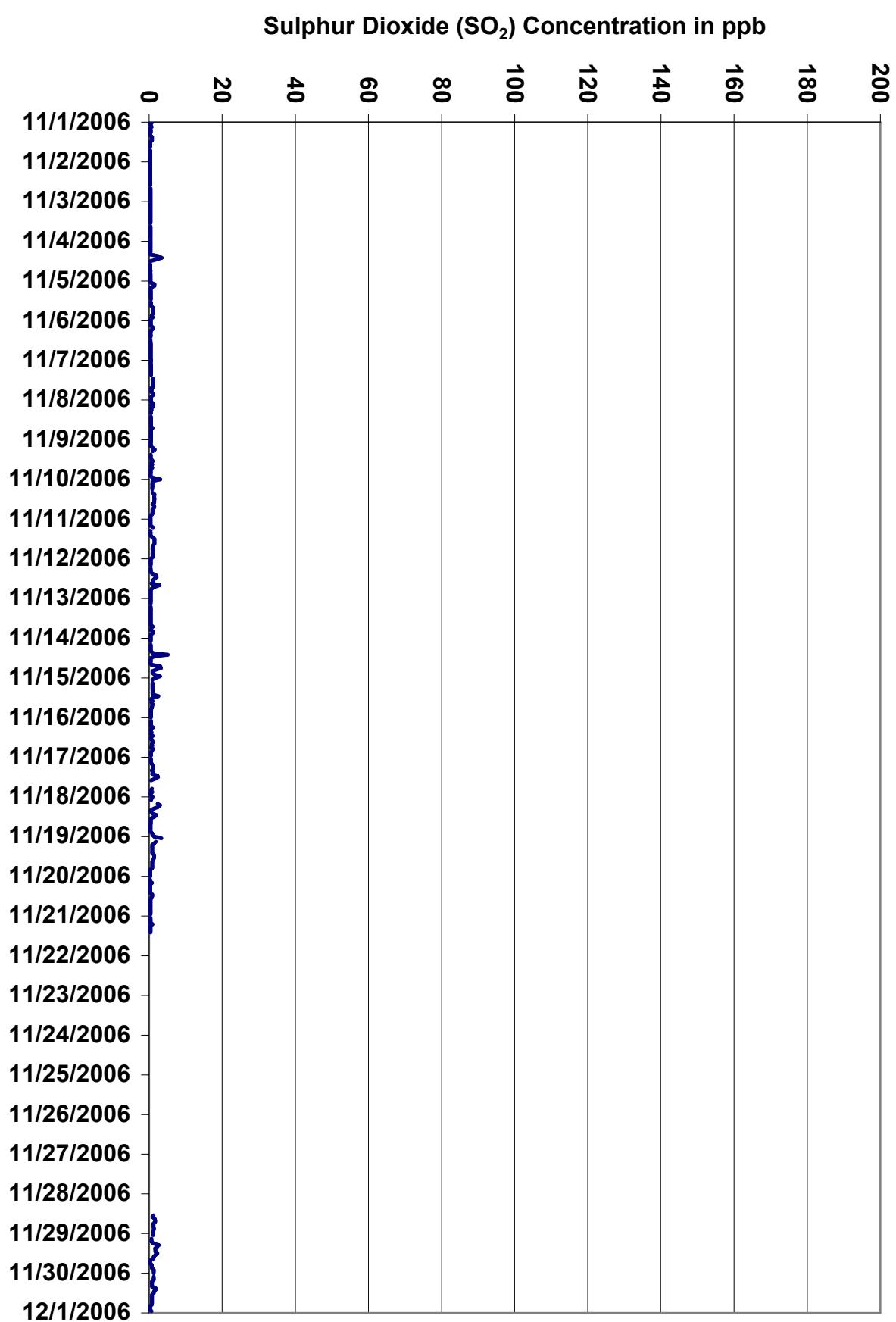
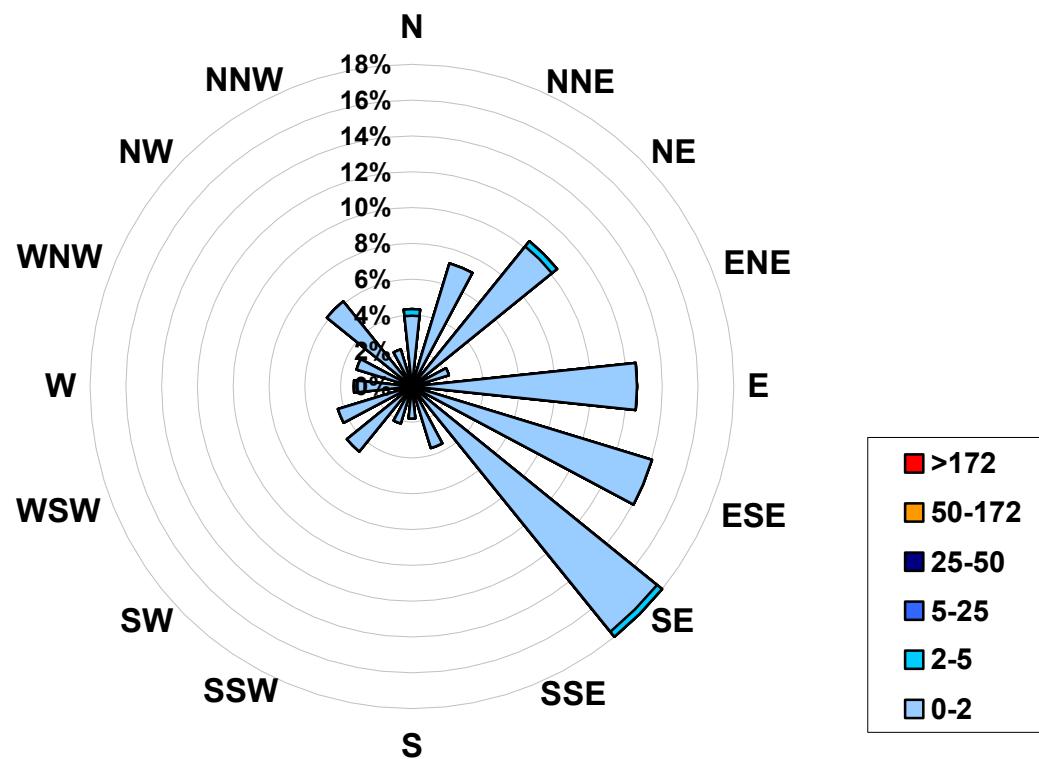


Figure 47. PASZA - Portable-Falher Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Portable-Falher Site for November 2006**



Calms: 0%

Frequency Distribution of SO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
0.0	< 2	520	
2	to 5	3	
5	to 25	0	
25	to 50	0	
50	to 172	0	
	> 172	0	
Total Non-Zero Values			523

# PASZA - Portable-Falher - Ozone Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

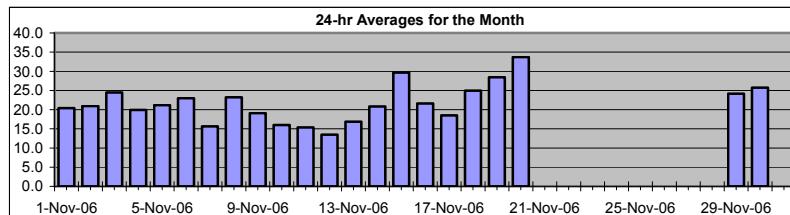
Number of 1-hr Exceedances: 0  
Maximum 1-hr Average: 44.0 ppb 19-Nov 23:00 0:00  
Maximum 24-hr Average: 33.7 ppb 20-Nov

AIC Time:	24 hrs	Operational Time:	523 hrs								
Calibration Time:	3 hrs	AMD Operational Uptime:	76.4%								
Percentile	99	95	75	50	25	5	1	Average	21.9 ppb	Median	21.6 ppb
	40.7	34.2	25.9	21.6	17.5	10.9	4.2				

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-06	25	22	24	23	21	22	21	19	21	22	22	24	24	25	28	30	A	26	23	24	12	4	4	2	20.4	30.1	
2-Nov-06	3	5	5	8	12	15	20	21	22	23	23	25	26	27	28	30	A	28	27	27	25	26	26	28	27	21.0	29.9
3-Nov-06	27	27	27	27	26	26	25	25	25	25	26	26	27	A	26	24	24	22	22	20	21	19	19	19	24.5	27.4	
4-Nov-06	19	20	19	17	19	19	20	20	20	20	20	19	20	A	21	21	21	21	20	20	20	19	20	21	19.9	21.4	
5-Nov-06	21	21	22	23	24	24	23	23	24	25	26	A	27	27	26	20	19	18	18	18	16	11	11	15	21.2	27.4	
6-Nov-06	17	16	17	19	19	21	23	26	25	26	27	A	26	26	25	25	25	25	24	23	22	22	22	22	23.0	26.9	
7-Nov-06	21	20	19	20	19	19	17	16	16	16	A	14	14	15	13	12	11	9	13	11	13	16	17	18	15.6	21.1	
8-Nov-06	18	23	22	24	25	24	25	25	26	A	28	29	29	29	29	27	25	24	20	20	21	12	1	23.2	29.5		
9-Nov-06	3	11	17	12	13	14	15	17	A	18	19	20	21	23	26	26	22	24	24	25	24	23	21	21	19.1	26.0	
10-Nov-06	20	20	20	19	19	20	17	A	14	17	17	16	16	15	13	12	12	13	13	13	14	15	16	16.0	20.3		
11-Nov-06	17	18	17	18	19	19	A	20	20	20	17	18	19	19	19	18	14	10	8	4	6	8	6	15.4	20.4		
12-Nov-06	9	11	15	16	15	A	14	13	13	13	12	14	14	15	15	14	10	6	9	15	18	19	17	14	13.5	18.6	
13-Nov-06	14	14	12	15	A	16	15	12	14	13	14	15	16	17	17	19	19	19	21	21	22	22	21	21	16.8	21.6	
14-Nov-06	21	20	20	A	16	15	14	14	14	13	14	16	20	21	21	20	20	22	27	28	30	30	30	31	20.8	30.5	
15-Nov-06	30	32	A	31	32	33	33	34	35	36	36	33	39	38	27	26	25	24	24	24	22	22	21	21	29.7	38.6	
16-Nov-06	19	A	19	21	23	24	25	25	25	26	27	27	28	27	23	14	9	15	15	18	19	20	21	21	21.6	27.5	
17-Nov-06	A	20	21	21	22	19	19	18	18	17	17	18	20	24	25	C	C	A	19	19	12	11	12	18.5	25.4		
18-Nov-06	18	22	23	A	24	24	25	27	27	30	29	28	28	27	25	24	25	26	24	24	22	24	27	25.0	29.5		
19-Nov-06	28	27	A	24	24	24	26	26	26	25	25	25	26	24	25	26	26	26	26	29	38	41	43	44	28.4	44.0	
20-Nov-06	43	A	42	42	40	40	38	39	38	39	38	36	40	39	37	36	24	10	20	27	26	29	27	25	33.7	43.2	
21-Nov-06	A	29	30	31	33	34	34	34	34	34	34	P	N	N	N	N	N	N	N	N	N	N	N	N	34.3		
22-Nov-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	0.0		
23-Nov-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	0.0		
24-Nov-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	0.0		
25-Nov-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	0.0		
26-Nov-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	0.0		
27-Nov-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	0.0		
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	25	24	20	18	14	15	19	20	21	24	25	25.3	
29-Nov-06	25	25	A	24	24	25	21	20	20	23	24	24	26	26	25	27	27	26	25	24	22	22	22	22	24.2	27.5	
30-Nov-06	24	A	19	17	20	19	18	16	9	12	21	24	28	33	34	33	33	32	33	33	34	34	34	34	25.7	34.4	

**HOURLY AVERAGE TABLE**

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



**Status Flag Characters**

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

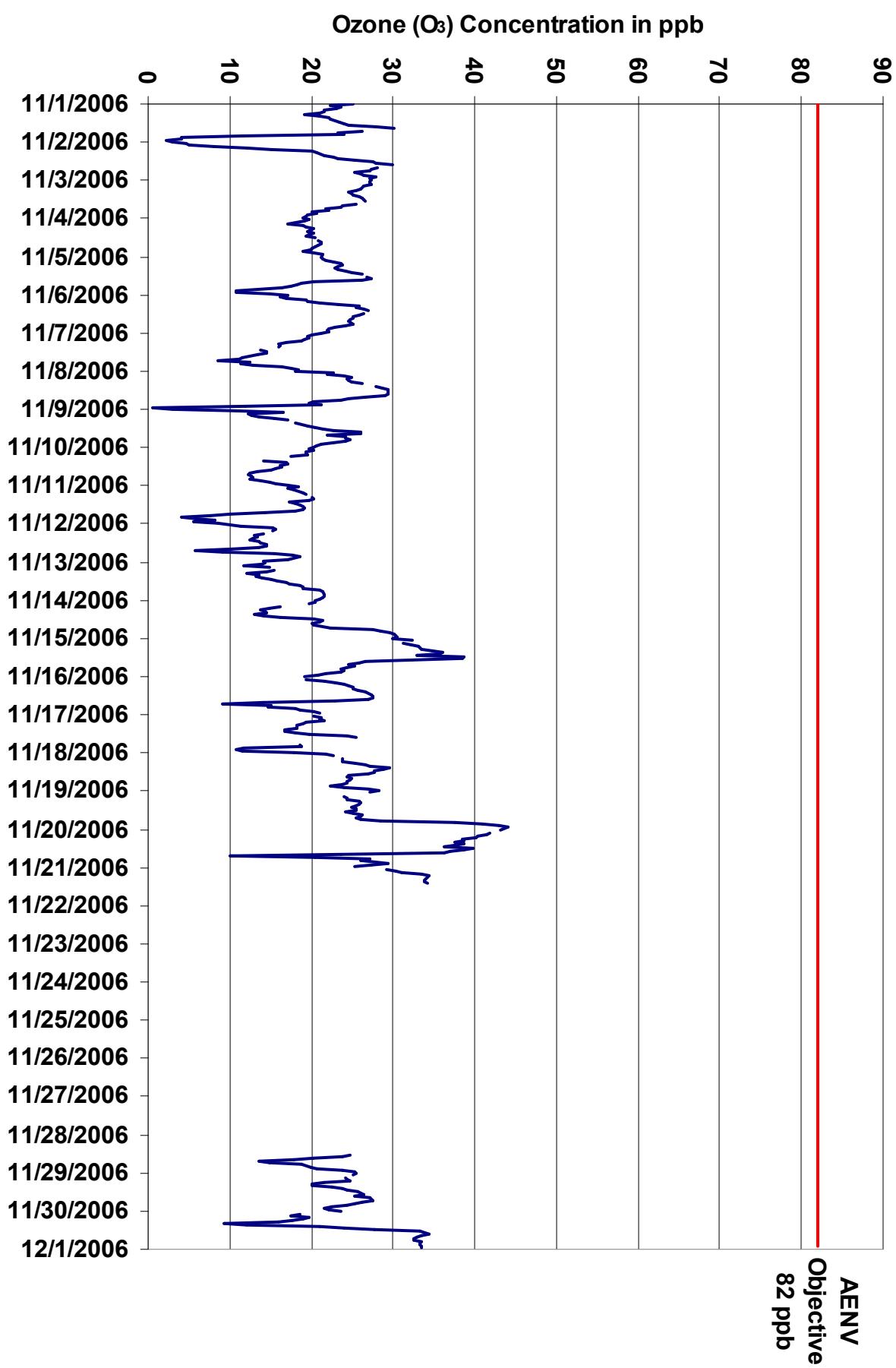


Figure 48. PASZA - Portable-Falher Ozone 1-hr Average Monthly Trend

Station: Portable-Falher  
 Station Owner: PASZA

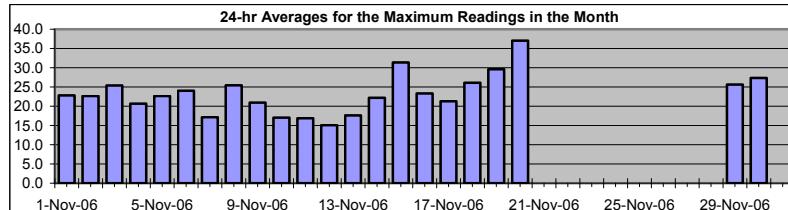
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	44.7 ppb	19-Nov 23:00 0:00
Maximum 24-hr Value:	37.0 ppb	20-Nov



AIC Time:	24 hrs	Operational Time:	523 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	76.4%
Percentile	99 95 75 50 25 5 1	Average	Median
	42.3 35.1 27.1 23.2 19.3 13.5 6.7	23.5 ppb	23.2 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	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	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-Nov-06	31	24	26	24	24	23	23	22	22	23	23	24	24	25	25	26	31	31	A	29	27	26	19	7	11	4
2-Nov-06	5	9	7	12	13	17	22	22	22	24	24	24	29	28	29	32	A	30	28	28	27	27	27	30	28	
3-Nov-06	28	28	28	28	28	27	26	26	26	26	27	27	27	27	A	26	26	25	24	23	22	21	21	21		
4-Nov-06	20	21	20	19	20	20	21	21	21	21	20	20	22	A	22	22	22	22	21	21	21	20	20	21	22	
5-Nov-06	22	22	23	24	24	24	24	24	24	25	26	27	A	28	28	28	22	20	19	20	19	15	15	18		
6-Nov-06	18	17	18	22	22	22	25	27	26	28	28	A	27	27	26	26	25	26	26	26	24	23	23	23		
7-Nov-06	22	22	20	20	20	19	19	17	17	17	A	14	15	15	14	13	12	10	19	17	15	17	18	19		
8-Nov-06	19	24	24	25	25	25	25	26	27	A	28	30	30	30	30	30	29	29	26	24	25	25	24	3		
9-Nov-06	6	15	19	17	15	16	17	19	A	20	20	21	23	25	27	27	24	26	25	25	25	25	23	22		
10-Nov-06	22	22	22	22	20	20	20	A	17	17	18	17	17	17	16	15	13	13	13	14	14	15	16	17		
11-Nov-06	18	19	18	19	20	20	A	21	21	21	18	19	19	20	20	20	19	18	13	11	7	7	10	11		
12-Nov-06	11	14	16	16	16	A	15	14	14	14	13	14	14	16	16	14	15	8	14	17	19	20	19	15		
13-Nov-06	15	15	16	15	A	16	16	13	14	14	15	16	17	17	18	19	20	20	22	22	22	22	22	22		
14-Nov-06	21	21	21	A	18	15	15	15	13	15	21	22	22	22	21	22	26	29	29	30	31	31	31			
15-Nov-06	31	33	A	32	33	34	34	34	36	37	37	37	40	40	32	26	26	29	25	25	27	27	23	21		
16-Nov-06	21	A	20	23	24	24	25	25	26	26	27	28	28	28	28	27	20	16	17	17	20	21	22	22		
17-Nov-06	A	22	22	23	23	20	20	30	20	18	19	21	23	26	27	C	C	C	A	20	20	16	17	17		
18-Nov-06	20	23	23	A	24	24	26	28	29	30	30	29	28	29	27	25	26	26	26	26	25	23	25	28		
19-Nov-06	29	29	A	25	25	26	27	27	26	26	26	26	25	26	27	27	26	27	34	40	42	44	45			
20-Nov-06	44	A	42	42	41	41	40	40	39	40	39	40	41	43	40	39	35	26	27	30	30	31	35	27		
21-Nov-06	A	30	31	33	35	35	35	35	34	35	P	N	N	N	N	N	N	N	N	N	N	N	N			
22-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
23-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
24-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
25-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
26-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
27-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	26	25	24	22	18	19	22	23		
29-Nov-06	27	26	A	25	25	26	25	23	23	25	25	26	27	28	28	27	28	27	26	25	24	22	23			
30-Nov-06	24	A	20	19	21	20	20	19	15	17	23	26	31	35	35	34	33	33	33	34	34	34	34			

Hourly Avg	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	23.3	23.1	22.6	23.2	21.7
Hourly Max	43.8	33.5	42.3	42.3	41.3	41.2	40.3	40.3	39.2	40.2	38.7	40.2	40.7	42.9	39.6	38.5	34.7	33.0	33.5	34.2	39.9	42.2	44.2	44.7	

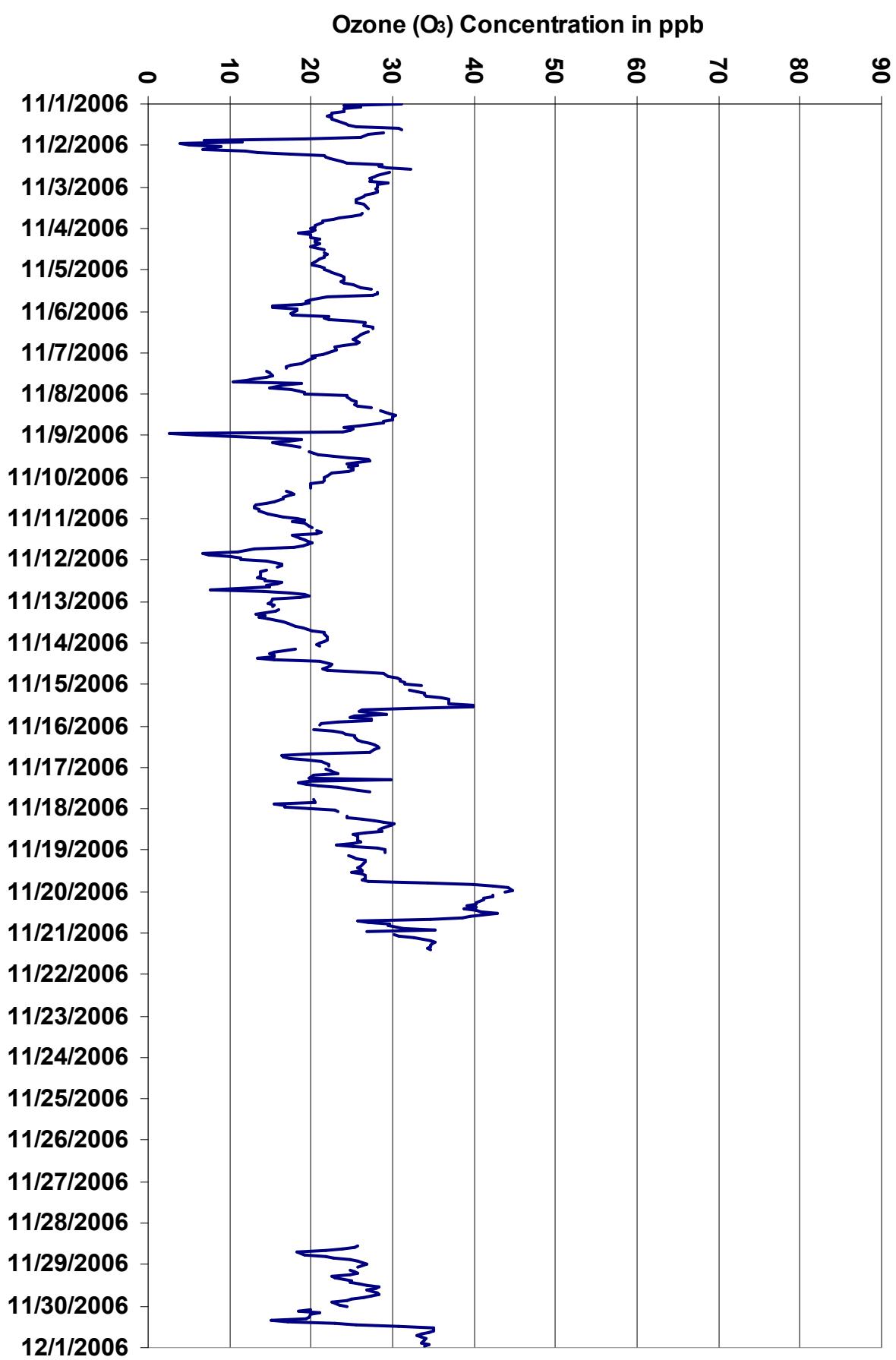
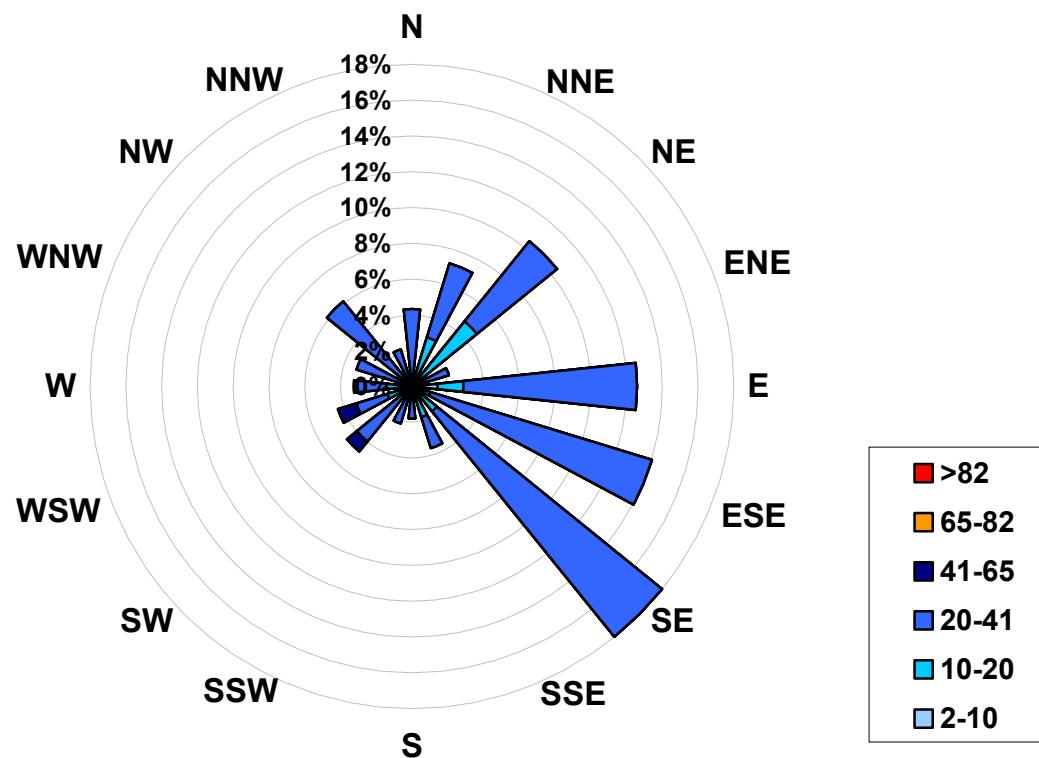


Figure 49. PASZA - Portable-Falher Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Ozone (in ppb) Located at the Portable-Falher Site for November 2006**



Calms: 0%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	21
10	to	20	178
20	to	41	319
41	to	65	5
65	to	82	0
	>	82	0
<b>Total Non-Zero Values</b>			<b>523</b>

## PASZA - Portable-Falher - Ozone Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

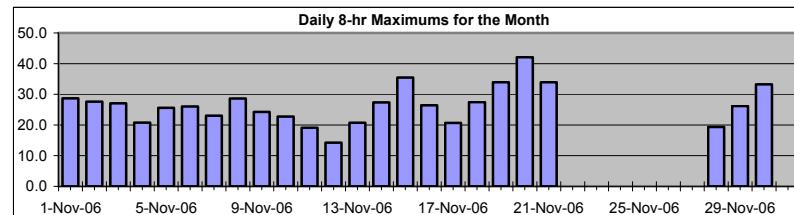
Objective Limit: Alberta Environment: 8-hr 65 ppb  
Summary

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 42.1 ppb 20-Nov 4:00 5:00

### EIGHT HOUR RUNNING AVERAGE TABLE

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



### Status Flag Characters

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

Percentile	99	95	75	50	25	5	1
	39.8	33.3	25.6	21.8	17.5	12.3	8.1

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00
1-Nov-06	29	28	27	26	25	24	23	22	22	22	21	22	22	23	24	25	26	26	26	26	24	21	18	14	28.7	
2-Nov-06	12	10	7	5	5	7	9	11	13	16	18	20	22	24	25	25	26	27	28	28	27	27	27	27	27	27.6
3-Nov-06	27	27	27	27	27	27	26	26	26	26	26	26	26	26	26	26	26	25	25	25	24	23	23	22	21	27.1
4-Nov-06	21	20	20	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	21	21	21	20	20	20	20	20.8
5-Nov-06	20	20	21	21	22	22	23	23	23	24	24	24	24	25	25	26	25	24	23	22	21	19	17	16	16	25.6
6-Nov-06	16	15	15	15	16	17	19	20	21	22	23	24	24	25	26	26	26	26	25	25	25	24	24	24	23	26.0
7-Nov-06	23	22	22	21	21	20	20	19	18	18	18	17	16	15	15	14	14	12	12	12	12	13	14	14	14	23.0
8-Nov-06	14	16	17	19	20	21	22	23	24	24	25	26	27	27	28	29	29	28	28	27	25	24	22	19	19	28.6
9-Nov-06	16	14	13	12	11	10	11	13	14	15	16	17	18	19	21	22	22	23	23	24	24	24	23	23	23	24.2
10-Nov-06	23	22	22	21	20	20	20	19	19	18	18	17	17	16	16	16	15	15	14	14	13	13	13	13	13	22.8
11-Nov-06	14	15	15	16	17	17	18	18	19	19	19	19	19	19	19	19	19	18	17	16	14	12	11	9	19.1	
12-Nov-06	8	8	8	9	11	11	12	13	14	14	14	14	13	13	14	14	13	12	12	12	13	13	14	14	14	14.2
13-Nov-06	14	15	15	15	15	15	14	14	14	14	14	14	14	14	15	16	16	17	18	19	19	20	20	21	21	20.7
14-Nov-06	21	21	21	21	20	19	18	17	16	15	14	15	15	16	17	18	18	19	21	23	24	25	26	27	27.4	
15-Nov-06	29	30	30	31	31	31	32	32	33	33	34	34	35	35	35	34	32	31	30	28	27	25	24	23	35.4	
16-Nov-06	23	22	22	21	21	21	22	22	23	24	24	25	26	26	26	25	23	21	20	19	17	17	16	16	26.4	
17-Nov-06	17	18	19	20	21	21	20	20	19	19	18	18	19	20	20	N	N	N	N	N	N	N	N	N	20.7	
18-Nov-06	N	16	17	16	17	19	21	23	24	26	26	27	27	27	27	27	26	26	25	25	24	24	24	24	27.5	
19-Nov-06	25	25	25	25	25	26	26	26	25	25	25	25	25	25	25	25	25	25	25	26	27	29	32	34	33.9	
20-Nov-06	36	38	40	42	42	42	41	41	40	40	39	38	38	38	38	38	36	32	30	29	27	26	25	24	42.1	
21-Nov-06	24	26	28	28	29	30	31	32	33	33	34	34	N	N	N	N	N	N	N	N	N	N	N	N	34.0	
22-Nov-06	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		
23-Nov-06	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		
24-Nov-06	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		
25-Nov-06	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		
26-Nov-06	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		
27-Nov-06	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		
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	19.3		
29-Nov-06	20	22	23	23	24	25	24	24	23	23	23	23	24	24	24	25	26	26	26	26	25	25	25	25	26.2	
30-Nov-06	24	24	23	21	21	20	20	19	17	16	17	17	18	20	22	24	27	30	31	33	33	33	33	33	33.3	

Hourly Max 36.1 37.6 39.8 41.7 42.1 42.0 41.4 40.6 39.8 39.7 39.1 38.5 38.4 38.2 38.0 37.7 36.0 32.4 31.4 32.5 33.3 33.2 33.1 33.9

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

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

Maximum 1-hr Average:	0.5	ppb	28-Nov	19:00 20:00
Maximum 24-hr Value:	0.4	ppb	30-Nov	

AIC Time:	24 hrs	Operational Time:	523 hrs										
Calibration Time:	3 hrs	AMD Operational Uptime:	76.4%										
Percentile	99	95	75	50	25	5	1	Average	0.3	ppb	Median	0.3	ppb
	0.5	0.5	0.4	0.3	0.3	0.2	0.2						

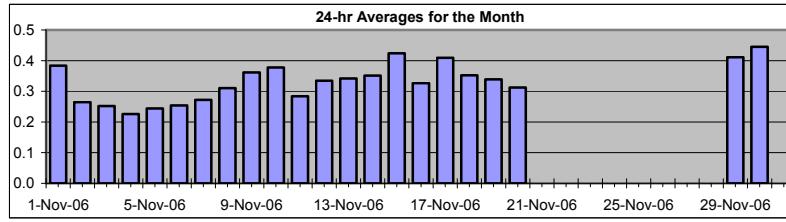
Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Nov-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	0	0.4	0.4		
2-Nov-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	0	0.3	0.3		
3-Nov-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	0	0.3	0.3		
4-Nov-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	0	0.2	0.3		
5-Nov-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	0	0.2	0.3		
6-Nov-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	0	0.3	0.3		
7-Nov-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	0	0.3	0.3		
8-Nov-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	0	0.3	0.4		
9-Nov-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	0	0.4	0.4		
10-Nov-06	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5			
11-Nov-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	0	0.3	0.4			
12-Nov-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	0	0.3	0.4			
13-Nov-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	0.3	0.4			
14-Nov-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	0	0.4	0.5			
15-Nov-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	0.4	0.5			
16-Nov-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	0	0.3	0.4			
17-Nov-06	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0.4	0.5			
18-Nov-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	0	0.4	0.4			
19-Nov-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	0.3	0.4			
20-Nov-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	0	0.3	0.4			
21-Nov-06	A	0	0	0	0	0	0	0	0	0	0	0	0	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.3	0.3			
22-Nov-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	0.0			
23-Nov-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	0.0			
24-Nov-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	0.0			
25-Nov-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	0.0			
26-Nov-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	0.0			
27-Nov-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	0.0			
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	O	O	O	O	O	O	O	O	O	O	O	0.5	0.5			
29-Nov-06	O	O	A	0	0	0	0	0	0	0	0	0	0	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	0.4	0.5			
30-Nov-06	O	A	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5			

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	N	N	N	0.3	0.3	
Hourly Max	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

## HOURLY AVERAGE TABLE

## Total Reduced Sulphur (TRS)



## Status Flag Characters

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

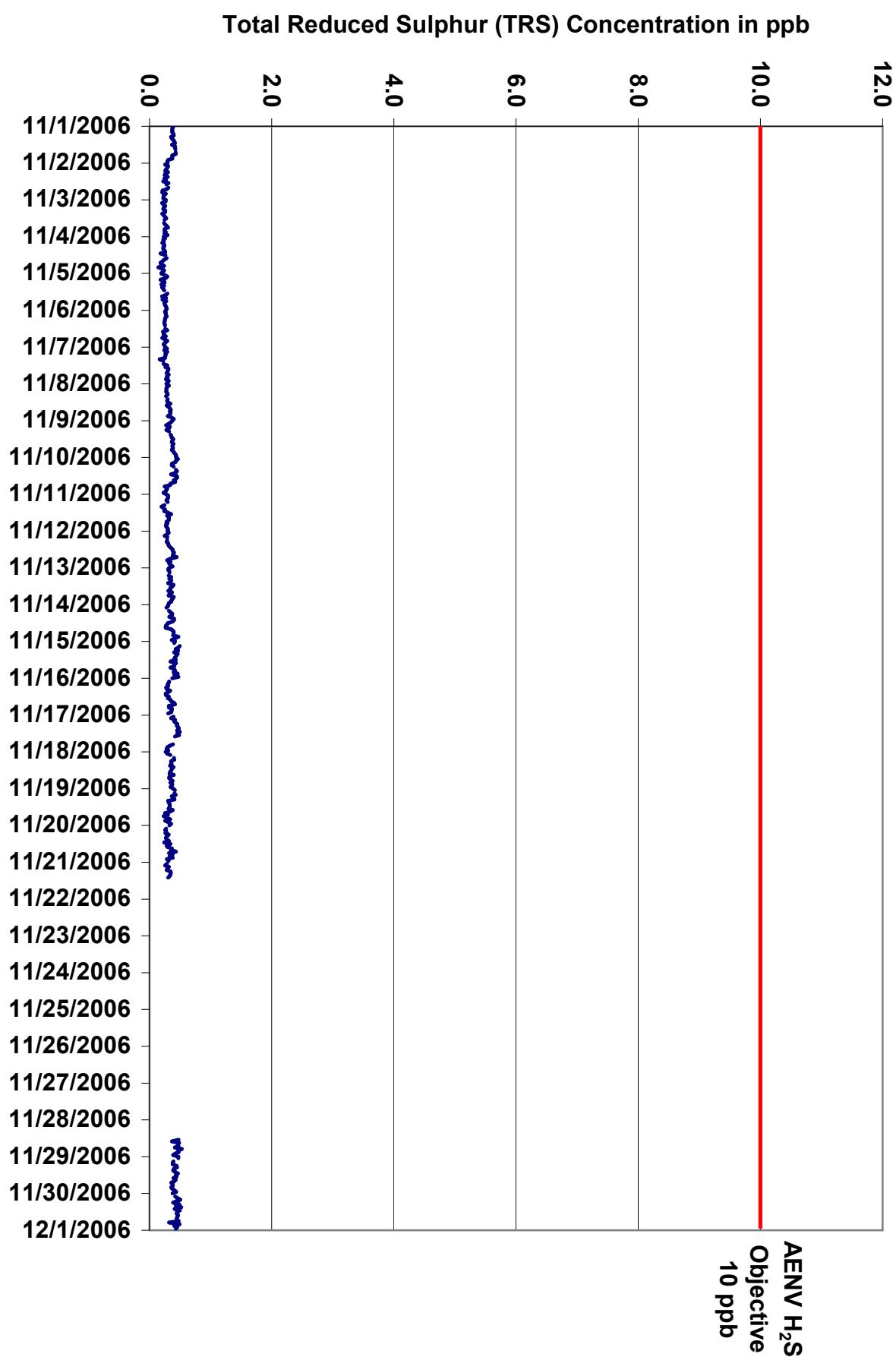


Figure 50. PASZA - Portable-Falher Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Portable-Falher  
Station Owner: PASZA

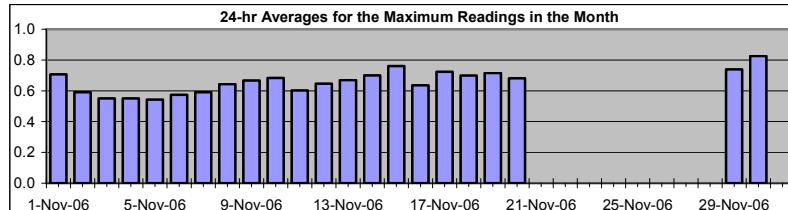
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	1.1	ppb	14-Nov	22:00 23:00
Maximum 24-hr Value:	0.8	ppb	30-Nov	



AIC Time:	24 hrs	Operational Time:	523 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	76.4%						
Percentile	99 1.0	95 0.8	75 0.7	50 0.7	25 0.6	5 0.5	1 0.5	Average 0.7 ppb	Median 0.7 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum	
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-Nov-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	0.7	0.8
2-Nov-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	0	1	1	0	1	1	0.6	0.7
3-Nov-06	0	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	0.6	0.7	
4-Nov-06	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	0	1	1	1	0	0	0	1	0.6	0.8
5-Nov-06	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	0	1	1	0.5	0.7
6-Nov-06	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	0.6	0.8
7-Nov-06	1	1	0	1	1	1	1	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7	
8-Nov-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	0.6	0.8	
9-Nov-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	0.7	0.8	
10-Nov-06	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	0.9
11-Nov-06	1	1	1	1	1	1	A	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
12-Nov-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	0.6	0.8
13-Nov-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	0.7	0.9
14-Nov-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	1	1	0.7	1.1
15-Nov-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
16-Nov-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	1	0.6	0.8
17-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	A	1	1	1	1	1	1	0.7	0.9
18-Nov-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	1	1	0.7	0.9
19-Nov-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
20-Nov-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	1	0.7	1.1
21-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	P	N	N	N	N	N	N	N	N	N	0.8	0.8
22-Nov-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
23-Nov-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
24-Nov-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
25-Nov-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
26-Nov-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
27-Nov-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
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	0.9	0.9
29-Nov-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
30-Nov-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	1	0.8	1.0

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	0.7	0.7	0.7	0.7
Hourly Max	0.8	0.8	0.8	0.9	0.8	0.9	0.8	1.1	0.8	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	1.0	0.9	1.1	1.1	0.8	0.9	

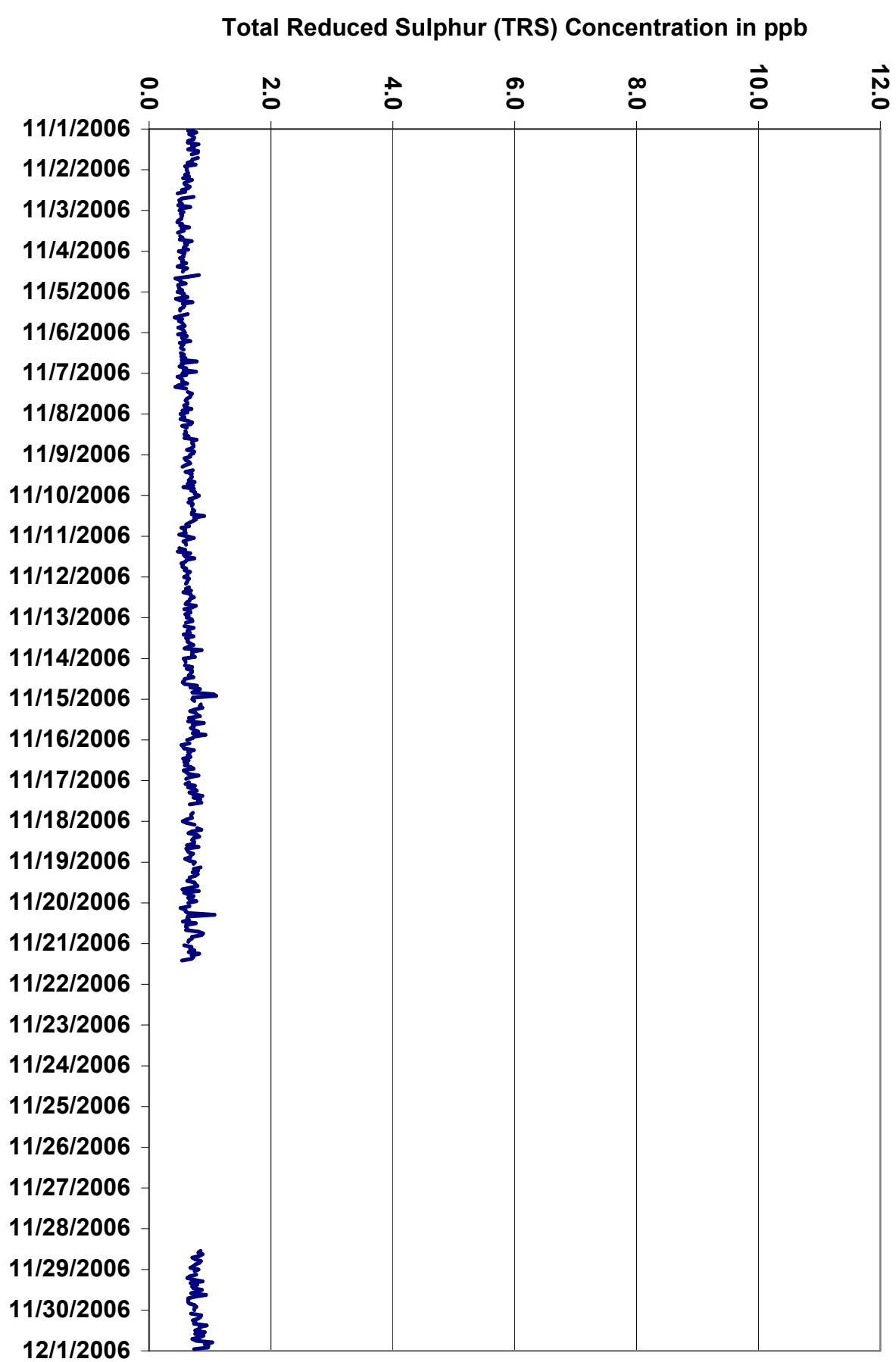
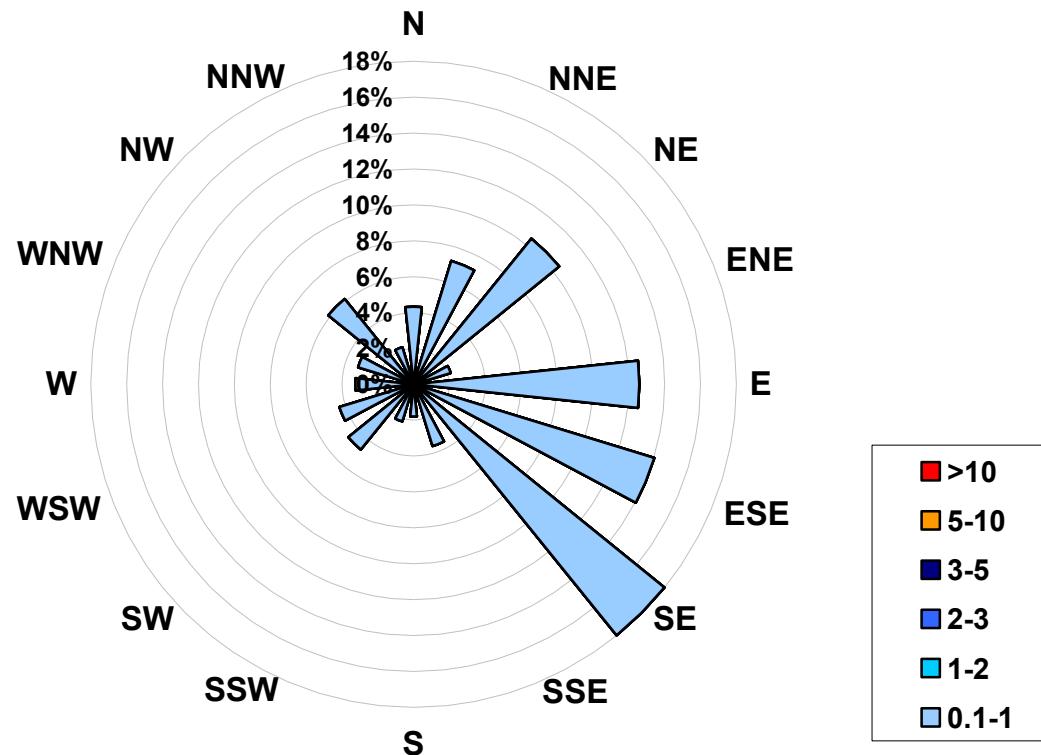


Figure 51. PASZA - Portable-Falher Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb) Located at the Portable-Falher Site for November 2006**



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

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	523
1	to	2	0
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			523

PASZA - Portable-Falher - Relative Humidity Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

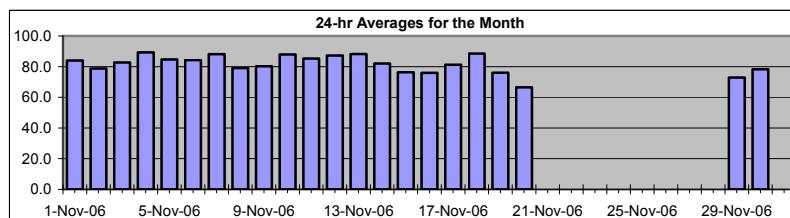
**Monitoring Dates:** November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Relative Humidity (RH)

## Summary

Maximum 1-hr Average: 94.6 % 18-Nov 18:00 19:00  
Maximum 24-hr Value: 89.2 % 4-Nov

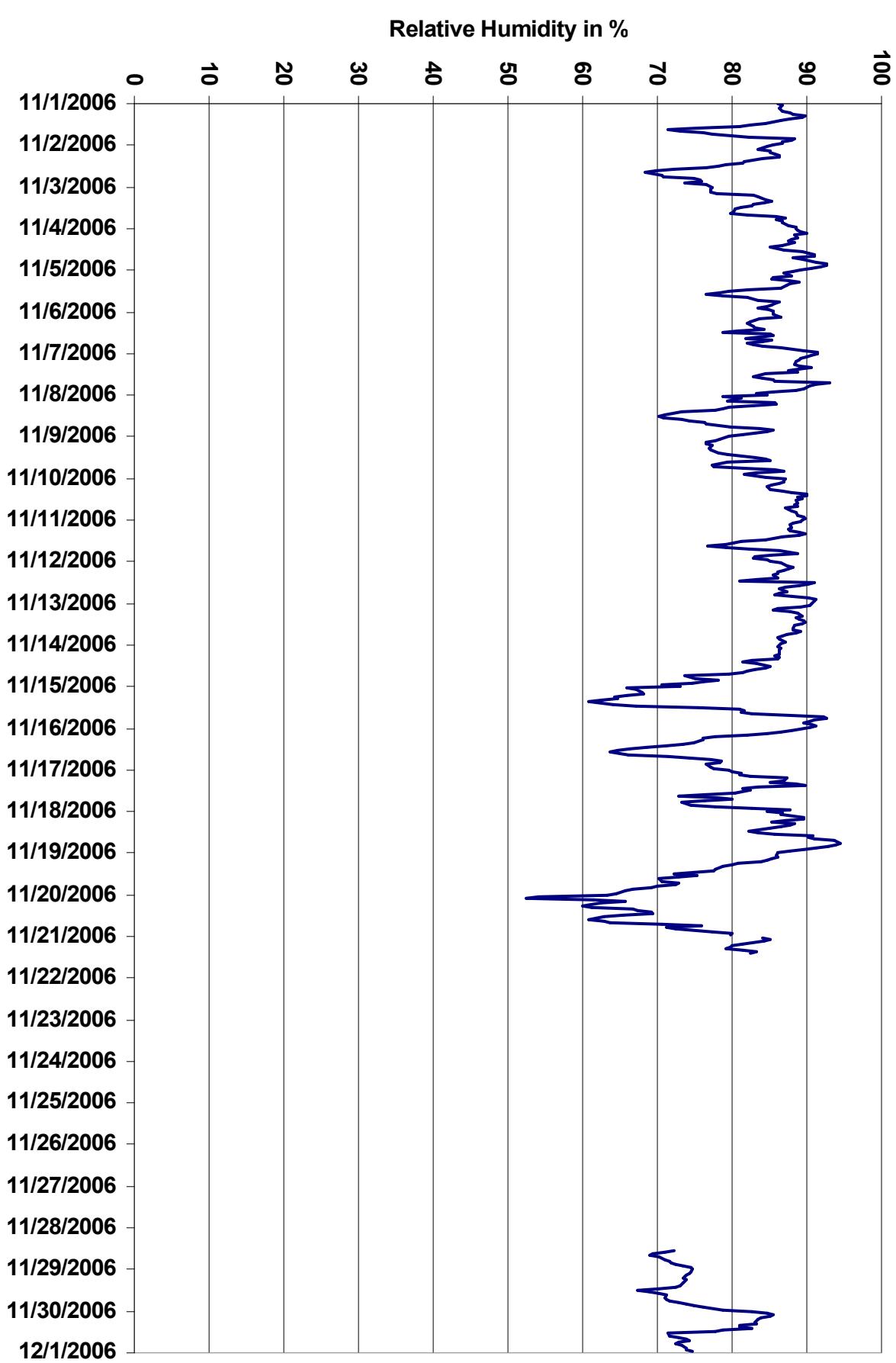


## Status Flag Characters

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

**Day**      **Mountain Standard Time**

Figure 52. PASZA - Portable-Falher Relative Humidity 1-hr Average Monthly Trend



# PASZA - Portable-Falher - Temperature Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

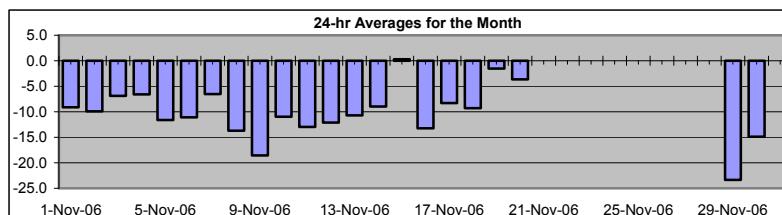
Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	4.3	°C	19-Nov	21:00 22:00
Maximum 24-hr Value:	0.3	°C	15-Nov	

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)



## Status Flag Characters

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

## Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00			
1-Nov-06	-9	-10	-10	-9	-9	-9	-9	-10	-10	-9	-8	-7	-6	-6	-5	-5	-6	-7	-8	-10	-12	-14	-15	-15	-9.1	-5.3		
2-Nov-06	-15	-16	-17	-15	-15	-14	-14	-13	-12	-11	-10	-8	-7	-6	-5	-5	-5	-6	-7	-7	-7	-7	-7	-7	-9.9	-4.9		
3-Nov-06	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-7	-7	-7	-6	-6	-6	-6	-6	-6	-6	-7	-7	-7	-6.9	-5.7		
4-Nov-06	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-7	-7	-6	-6	-5	-5	-6	-6	-6	-6	-6	-6	-7	-7	-6.6	-5.4		
5-Nov-06	-7	-8	-9	-9	-10	-10	-11	-12	-11	-11	-11	-11	-10	-10	-9	-10	-11	-13	-15	-16	-16	-16	-17	-16	-11.6	-7.4		
6-Nov-06	-15	-15	-14	-13	-13	-13	-12	-12	-12	-12	-12	-11	-11	-10	-10	-9	-9	-9	-9	-9	-9	-9	-9	-9	-11.1	-8.6		
7-Nov-06	-9	-8	-8	-8	-9	-9	-8	-8	-8	-8	-7	-6	-5	-3	-2	-2	-2	-3	-7	-8	-8	-7	-7	-8	-6.5	-1.5		
8-Nov-06	-8	-9	-10	-10	-12	-12	-12	-13	-13	-13	-12	-12	-12	-12	-12	-14	-16	-15	-17	-18	-18	-19	-20	-22	-13.7	-8.3		
9-Nov-06	-23	-24	-24	-26	-26	-24	-25	-25	-24	-23	-20	-18	-16	-14	-13	-13	-13	-13	-14	-14	-14	-12	-13	-14	-18.5	-12.3		
10-Nov-06	-13	-13	-15	-16	-16	-16	-16	-14	-13	-10	-9	-10	-10	-10	-10	-9	-7	-7	-7	-8	-9	-9	-9	-9	-11.0	-6.7		
11-Nov-06	-9	-9	-10	-11	-11	-11	-12	-12	-12	-12	-13	-13	-13	-14	-13	-12	-13	-13	-14	-15	-18	-19	-18	-16	-13.0	-9.0		
12-Nov-06	-15	-14	-13	-12	-12	-12	-12	-11	-11	-12	-12	-11	-10	-10	-11	-13	-14	-13	-14	-15	-13	-10	-9	-9	-12.1	-9.1		
13-Nov-06	-10	-10	-11	-14	-15	-13	-12	-11	-12	-11	-10	-10	-9	-9	-9	-9	-10	-10	-10	-10	-10	-10	-11	-11	-10.7	-8.9		
14-Nov-06	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-11	-11	-10	-10	-10	-10	-8	-6	-4	-4	-4	-4	-3	-2	-9.0	-1.7		
15-Nov-06	-2	-1	0	0	1	2	2	3	3	2	1	2	2	0	-1	-1	-1	0	0	-1	-1	-2	-2	0.3	3.1			
16-Nov-06	-5	-11	-12	-12	-13	-13	-13	-14	-14	-14	-14	-13	-12	-12	-11	-12	-13	-15	-17	-16	-15	-15	-15	-15	-13.2	-5.0		
17-Nov-06	-14	-14	-13	-10	-9	-9	-9	-10	-11	-11	-11	-10	-7	-5	-4	-4	-5	-6	-5	-4	-4	-5	-7	-9	-8.3	-3.5		
18-Nov-06	-10	-11	-10	-10	-11	-11	-11	-13	-15	-13	-12	-12	-11	-9	-8	-7	-6	-6	-6	-7	-7	-6	-5	-5	-9.3	-5.0		
19-Nov-06	-5	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-2	-2	-1	0	0	0	1	4	4	4	3	-1.5	4.3			
20-Nov-06	2	2	1	-1	-3	-3	-3	-4	-5	-5	-5	-3	-2	-2	-2	-2	-2	-5	-8	-6	-5	-5	-7	-11	-3.6	2.2		
21-Nov-06	N	-12	-13	-13	-13	-13	-13	-13	-13	-13	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-12.3		
22-Nov-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		
23-Nov-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		
24-Nov-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		
25-Nov-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		
26-Nov-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		
27-Nov-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	-26.6		
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-27	-27	-27	-28	-28	-29	-29	-28	-28	-28	-28	-23.3		
29-Nov-06	-29	-28	-29	-30	-30	-30	-29	-29	-29	-28	-27	-25	-22	-22	-21	-20	-20	-19	-18	-17	-16	-15	-14	-14	-13.6			
30-Nov-06	-13	-12	-11	-11	-13	-14	-15	-16	-18	-17	-14	-13	-12	-13	-14	-14	-15	-16	-16	-17	-18	-19	-19	-19	-14.9			

Hourly Avg	N	-10.9	-11.1	-11.4	-11.6	-11.5	-11.8	-11.9	-11.4	-10.8	N	N	-9.3	-9.0	-9.0	-9.3	-9.9	-10.4	-10.4	-10.4	-10.5	-10.7	-10.8	
Hourly Max	2.2	1.7	1.3	0.0	0.4	1.1	1.6	1.9	2.5	3.1	2.5	1.5	2.2	2.2	-0.3	-0.2	0.0	-0.4	-0.3	0.9	4.3	4.3	3.9	3.4

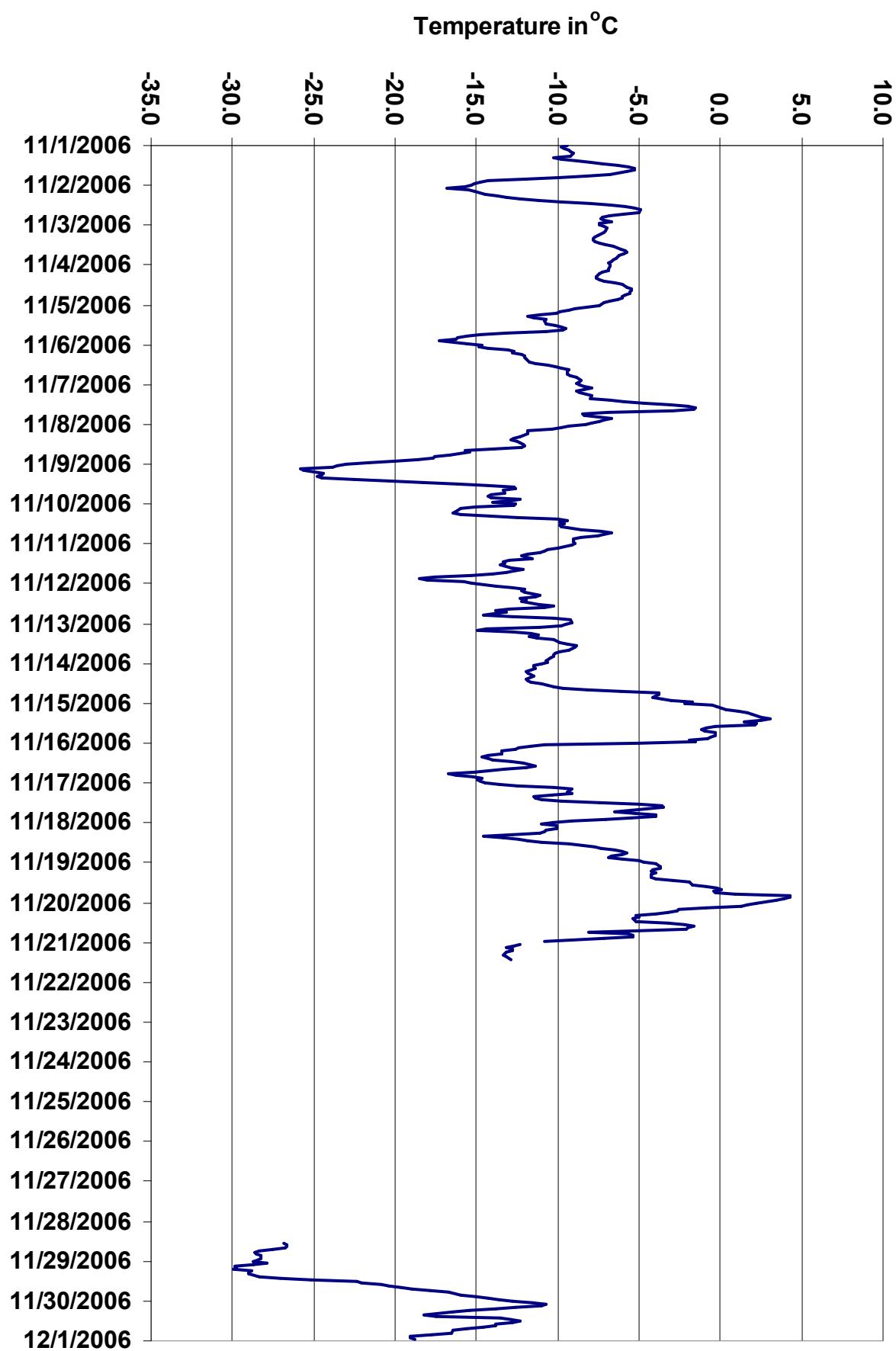


Figure 53. PASZA - Portable-Falther Temperature 1-hr Average Monthly Trend

# PASZA - Portable-Falher - Scalar Wind Speed Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	41.9	km/hr	19-Nov	8:00 9:00
Maximum 24-hr Value:	33.5	km/hr	19-Nov	

Calm Time:	0 hrs	0% calms	Operational Time:	292 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	40.6%				
Percentile	99	95	75	50	25	5	1	AverageS
	37.3	34.0	22.7	12.6	7.9	3.9	2.6	15.3 km/hr

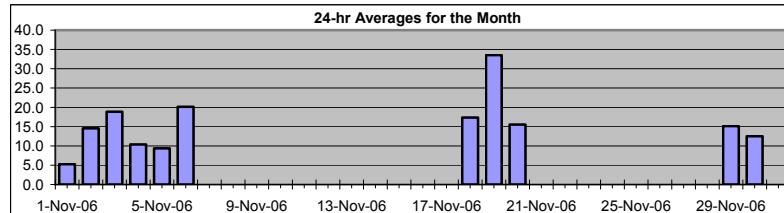
## Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Nov-06	3	4	3	2	4	5	4	5	5	4	5	5	4	5	6	6	7	6	8	5	6	9	7	8	
2-Nov-06	6	5	4	6	5	6	8	9	11	11	6	7	19	18	16	15	22	24	26	24	24	23	27	27	
3-Nov-06	27	28	31	31	29	29	27	28	28	28	30	26	22	18	13	13	9	6	7	6	4	5	4	4	
4-Nov-06	4	4	3	4	8	7	9	9	9	11	11	9	9	10	10	11	14	14	15	17	14	13	16	17	
5-Nov-06	16	17	16	16	16	13	7	6	6	7	13	13	10	9	7	6	10	11	5	4	3	5	5	4	
6-Nov-06	2	4	3	11	19	17	15	16	21	23	21	26	23	27	28	25	27	30	31	24	24	20	P		
7-Nov-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	
8-Nov-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	
9-Nov-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	
10-Nov-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	
11-Nov-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	
12-Nov-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	
13-Nov-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	
14-Nov-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	
15-Nov-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	
16-Nov-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	
17-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	3	5	9	11	5	8	
18-Nov-06	17	18	9	14	16	14	11	6	8	10	15	9	11	17	15	18	20	21	27	33	28	29	26	28	
19-Nov-06	29	34	35	36	33	35	35	37	42	41	39	36	36	27	30	33	34	31	25	30	36	32	29	32	
20-Nov-06	28	36	35	19	13	14	14	10	10	13	13	9	11	10	12	7	9	11	12	13	11	8	25	30	
21-Nov-06	35	30	24	28	23	16	15	12	7	6	6	P	N	N	N	N	N	N	N	N	N	N	N	N	
22-Nov-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	
23-Nov-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	
24-Nov-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	
25-Nov-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	
26-Nov-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	
27-Nov-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	
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	8	8	9	10	9	9	10	10	9	8
29-Nov-06	8	7	10	10	10	13	13	11	17	14	11	12	10	10	13	16	22	22	24	22	21	23	24	22	
30-Nov-06	22	18	11	10	9	8	3	9	9	12	13	17	19	21	19	20	17	13	12	11	8	8	7	6	

1-hr Average	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	34.7	36.1	34.7	35.7	33.0	34.9	35.4	37.1	41.9	41.1	38.8	36.0	36.1	26.6	29.7	33.2	33.8	30.7	29.6	32.6	36.4	31.6	28.5	31.7

## HOURLY AVERAGE TABLE

## Wind Speed (WSs)



## Status Flag Characters

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

# PASZA - Portable-Falher - Vector Wind Speed Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	41.9	km/hr	19-Nov	8:00 9:00
Maximum 24-hr Value:	25.5	km/hr	19-Nov	

Calm Time:	0 hrs	0% calms	Operational Time:	292 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	40.6%
Percentile				AverageV
99	95	75	25	5
37.2	33.9	22.5	12.4	7.5
			3.5	2.4
				52.0 km/hr

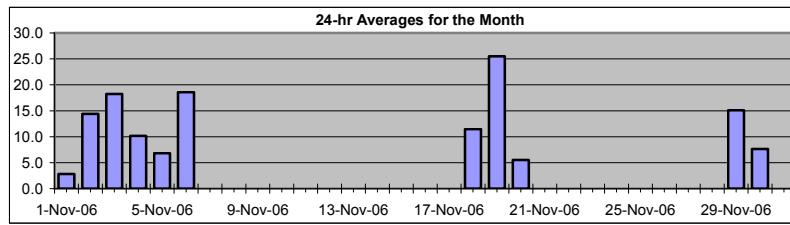
## Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	0:00	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-Nov-06	3	3	2	2	4	5	4	5	5	4	5	4	4	5	6	6	7	6	8	5	6	9	7	7	2.8	9.0			
2-Nov-06	6	5	4	4	5	5	8	9	11	11	6	7	19	18	15	15	22	24	26	24	24	23	27	26	14.4	27.3			
3-Nov-06	27	28	31	31	29	29	27	28	27	28	30	26	21	18	13	13	9	6	7	6	3	5	4	4	18.2	30.8			
4-Nov-06	4	4	3	4	8	7	9	9	9	10	11	9	9	10	10	11	14	14	15	17	14	13	16	17	10.2	17.4			
5-Nov-06	16	17	16	16	13	7	6	6	7	12	13	10	9	7	6	10	11	5	3	1	5	5	4	6.8	16.9				
6-Nov-06	2	4	2	11	19	17	15	16	21	23	21	26	26	23	27	28	25	27	29	31	24	24	19	P	18.6	30.8			
7-Nov-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			
8-Nov-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			
9-Nov-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			
10-Nov-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			
11-Nov-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			
12-Nov-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			
13-Nov-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			
14-Nov-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			
15-Nov-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			
16-Nov-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			
17-Nov-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	10.5			
18-Nov-06	16	18	9	14	15	14	11	6	8	10	15	9	11	16	15	17	19	20	27	33	28	29	25	28	11.5	32.6			
19-Nov-06	29	34	35	36	33	35	35	37	42	41	39	36	36	27	30	33	34	31	25	22	36	31	28	32	25.5	41.9			
20-Nov-06	27	36	35	19	12	14	14	10	8	13	13	8	11	10	12	6	9	10	12	13	11	7	25	29	5.5	36.1			
21-Nov-06	35	30	24	28	23	16	15	11	7	6	6	P	N	N	N	N	N	N	N	N	N	N	N	N	34.6				
22-Nov-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			
23-Nov-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			
24-Nov-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			
25-Nov-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			
26-Nov-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			
27-Nov-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			
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	7	8	9	10	9	9	10	10	9	8	10.4			
29-Nov-06	8	7	10	10	10	13	13	11	17	14	11	12	10	10	13	16	22	22	24	21	21	23	24	22	15.1	23.9			
30-Nov-06	21	18	11	8	9	7	3	8	9	12	13	17	19	21	19	20	17	13	12	11	8	8	7	6	7.6	21.5			

1-hr Vector	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	34.6	36.1	34.6	35.7	32.9	34.9	35.3	37.0	41.9	40.9	38.8	36.0	36.0	26.5	29.6	33.2	33.7	30.6	29.4	32.6	36.3	31.4	28.4	31.6

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



## Status Flag Characters

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

PASZA - Portable-Falher - Wind Direction Monthly Summary

Station: Portable-Falher  
Station Owner: PASZA

**Monitoring Dates:** November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

## Wind Direction (WD)

## Summary

A horizontal bar divided into three equal sections: light blue at the top, yellow in the middle, and white at the bottom.

Calm Time:	0 hrs	0% calms	Operational Time:	292 hrs	
Calibration Time:	0 hrs		AMD Operational Uptime:	40.6%	
Percentile	99	95	75	50	
	349.4	313.8	212.6	123.9	Average
	25	5	1		104 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

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

Station: Portable-Falher  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time:	0 hrs	0% calms	Operational Time:	292 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	40.6%			
Percentile	99	95	75	50	25	5	1
	37.4	24.1	6.6	4.0	2.5	1.7	1.5

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

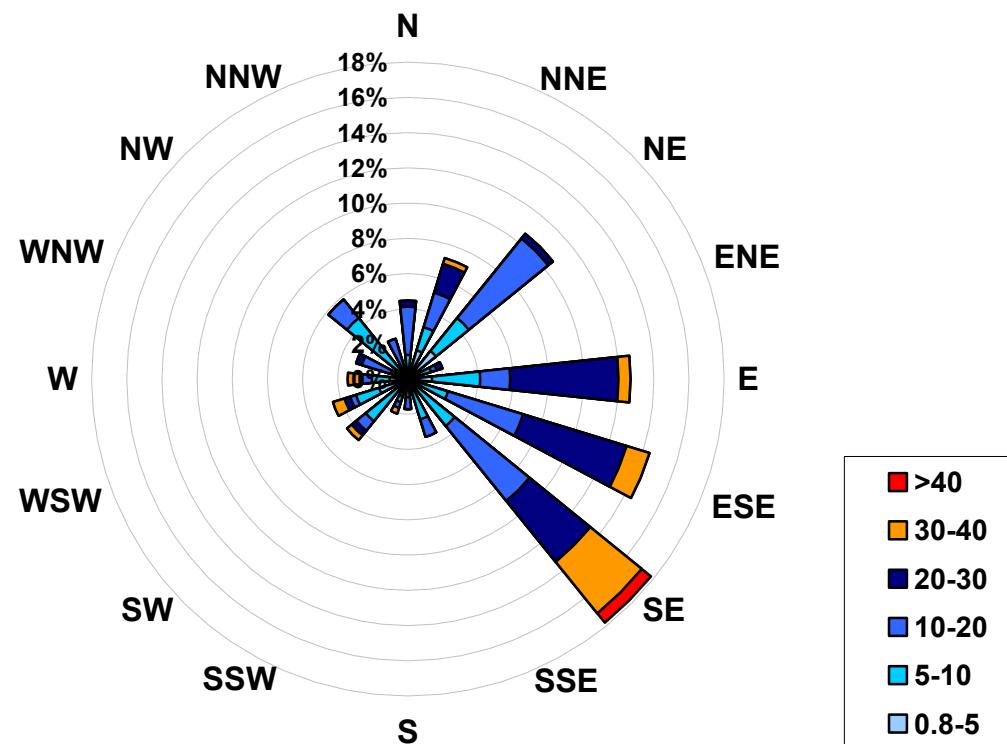
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

Hour Start	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-Nov-06	9	22	27	23	10	11	10	4	12	16	12	24	14	9	7	10	12	12	2	6	6	2	3	4	26.8
2-Nov-06	3	2	8	45	3	4	2	2	3	2	6	11	4	4	4	4	4	2	3	1	2	2	4	2	45.3
3-Nov-06	11	2	2	2	2	8	2	3	3	3	3	4	4	4	3	4	3	3	4	4	11	2	2	9	11.5
4-Nov-06	6	7	7	6	5	4	6	5	3	4	3	5	7	5	5	7	2	5	3	2	2	2	2	2	7.5
5-Nov-06	5	4	5	4	5	4	6	9	7	8	6	7	9	8	6	6	3	4	27	27	37	19	7	22	37.2
6-Nov-06	25	4	25	4	2	2	3	3	2	4	7	3	3	3	2	3	2	4	3	3	3	2	19	P	24.8
7-Nov-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	0.0
8-Nov-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	0.0
9-Nov-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	0.0
10-Nov-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	0.0
11-Nov-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	0.0
12-Nov-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	0.0
13-Nov-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	0.0
14-Nov-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	0.0
15-Nov-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	0.0
16-Nov-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	0.0
17-Nov-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	42.7
18-Nov-06	4	5	8	7	5	3	5	7	7	4	4	6	4	8	6	5	3	4	3	2	3	3	3	3	8.1
19-Nov-06	3	2	1	1	2	2	2	2	3	2	2	3	4	3	2	3	2	3	16	3	3	3	3	3	15.7
20-Nov-06	4	2	2	3	6	3	6	31	13	4	2	10	4	3	2	6	4	11	10	4	7	19	5	4	31.2
21-Nov-06	2	3	4	3	4	6	5	4	8	7	6	P	N	N	N	N	N	N	N	N	N	N	N	N	7.7
22-Nov-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	0.0
23-Nov-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	0.0
24-Nov-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	0.0
25-Nov-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	0.0
26-Nov-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	0.0
27-Nov-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	0.0
28-Nov-06	N	N	N	N	N	N	N	N	N	N	N	N	N	39	5	3	4	5	3	4	5	4	4	5	39.2
29-Nov-06	5	5	2	3	2	2	5	5	3	4	5	2	6	3	4	3	1	1	1	2	2	2	2	4	5.8
30-Nov-06	6	3	8	13	7	11	34	12	7	4	5	6	4	2	2	2	2	2	3	2	2	2	3	4	34.4

Hourly Max	25	22	27	45	10	11	34	31	13	16	12	24	14	39	7	10	12	43	30	31	37	29	30	22
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**1-hr Average Wind Rose (in km/hr) Located at the Portable-Falher Site for November 2006**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	34
5	to	10	81
10	to	20	91
20	to	30	60
30	to	40	24
	>	40	2
Total Non-Zero Values			292

# PASZA – Valleyview Station

## Monthly Summary Tables, Graphs, and Roses

# PASZA - Valleyview - Sulphur Dioxide Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

Objective Limit: Alberta Environment: 1-hr 0.172 ppm 24-hr 0.057 ppm  
Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	0.01 ppm 19-Nov 20:00 21:00
Maximum 24-hr Average:	0.00 ppm 1-Nov

AIC Time:	30 hrs	Operational Time:	660 hrs								
Calibration Time:	4 hrs	AMD Operational Uptime:	96.4%								
Percentile	99 0.00	95 0.00	75 0.00	50 0.00	25 0.00	5 0.00	1 0.00	Average 0.00	Median 0.00	ppm	ppm

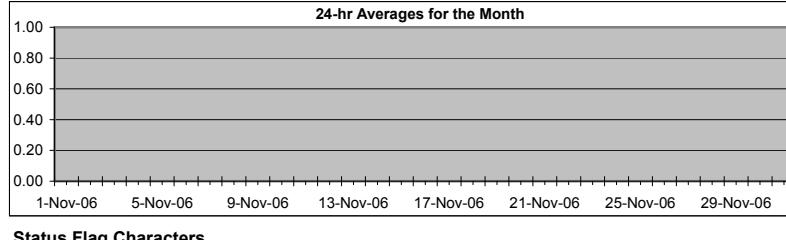
Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00	0:00			
1-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
5-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
6-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
7-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
9-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	M	M	N	N	N	N	N	N	N	N	0.00	0.00	
10-Nov-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	0.00	0.00	
11-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
13-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
16-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
17-Nov-06	A	0.00	0.00	0.00	0.00	0.00	C	C	C	C	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
19-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	
20-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Nov-06	A	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
29-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hourly Avg	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hourly Max	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

## HOURLY AVERAGE TABLE

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



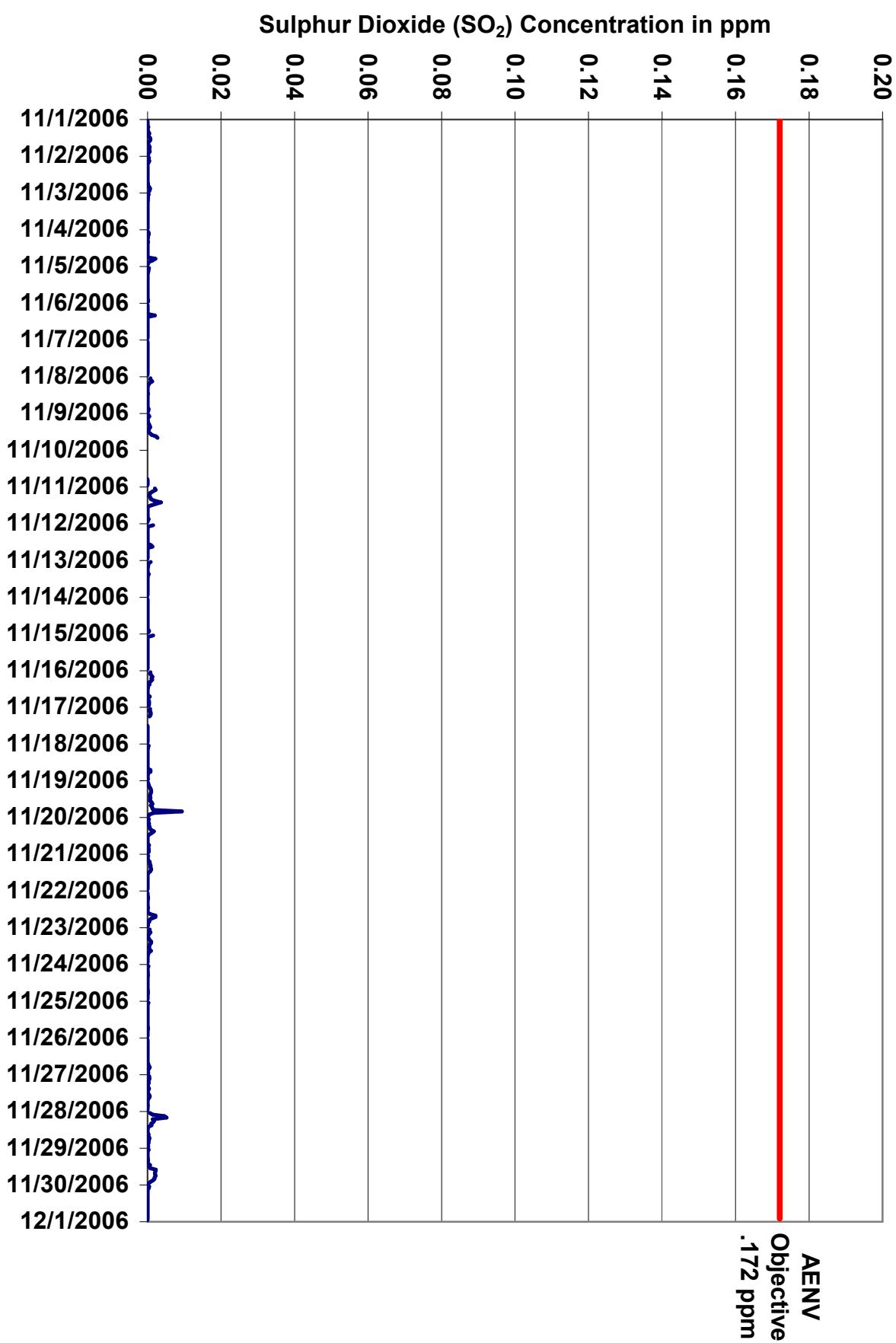


Figure 54. PASZA - Valleyview Sulphur Dioxide 1-hr Average Monthly Trend

Station: Valleyview  
Station Owner: PASZA

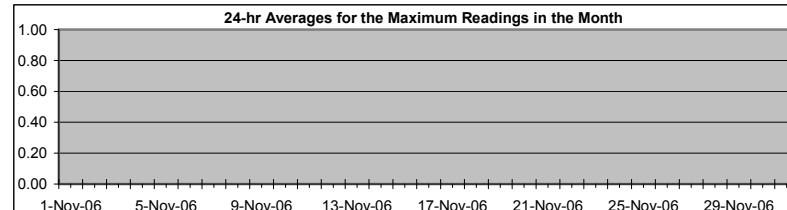
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	0.03	ppm	19-Nov	20:00 21:00
Maximum 24-hr Value:	0.00	ppm	1-Nov	



AIC Time:	30 hrs	Operational Time:	660 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	96.4%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00 ppm	0.00 ppm

C	Calibration	A	AIC - Zero / Span Check
S	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	Daily Maximum	
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	M	M	N	N	N	N	N	N	0.00
10-Nov-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	0.00	
11-Nov-06	A	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12-Nov-06	A	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
13-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15-Nov-06	A	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
16-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17-Nov-06	A	0.00	0.00	0.00	0.00	0.00	C	C	C	C	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
19-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
20-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Nov-06	A	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
29-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-Nov-06	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hourly Avg N 0.00

Hourly Max 0.00 0.01 0.00 0.01 0.01 0.00 0.00 0.00 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.02 0.01 0.00 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00

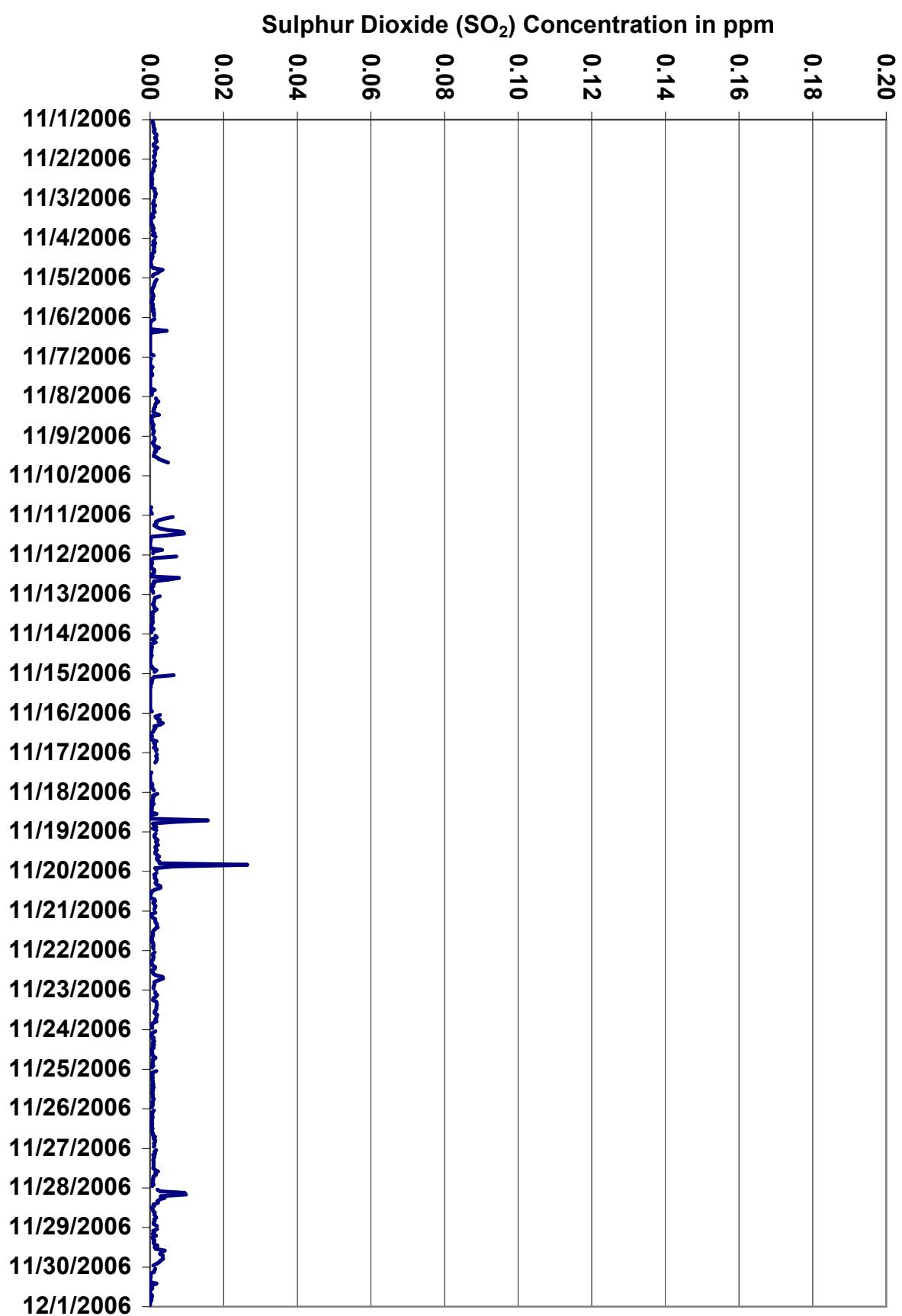
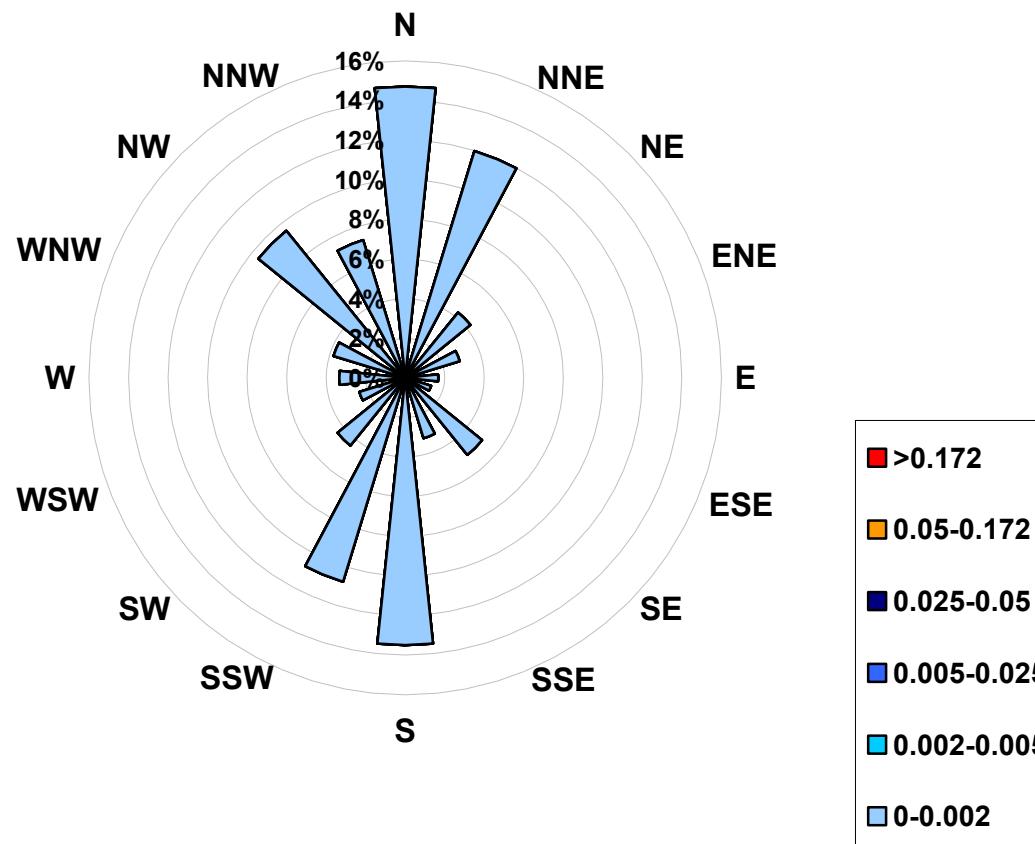


Figure 55. PASZA - Valleyview Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppm) Located at the Valleyview Site for November 2006**



**Calms:** 0%

Frequency Distribution of SO <sub>2</sub> in ppm			Frequency (hrs)
Range			
0.0	<	0.002	645
0.002	to	0.005	13
0.005	to	0.025	2
0.025	to	0.05	0
0.05	to	0.172	0
> 0.172			0
Total Non-Zero Values			660

# PASZA - Valleyview - Hydrogen Sulphide Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

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

Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	1.2 ppb	5-Nov	21:00 22:00
Maximum 24-hr Value:	0.5 ppb	6-Nov	

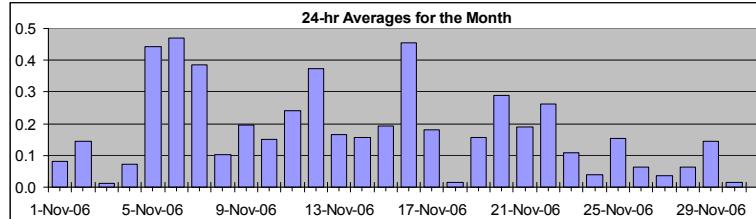
AIC Time:	31 hrs	Operational Time:	685 hrs								
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%								
Percentile	99	95	75	50	25	5	1	Average	0.2 ppb	Median	0.1 ppb
	0.6	0.5	0.3	0.1	0.0	0.0	0.0				

## Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Nov-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	0.1	0.2
2-Nov-06	A 0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
3-Nov-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	0.0	0.2
4-Nov-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	0.1	0.4
5-Nov-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	0.4	1.2
6-Nov-06	A 0	1	0	0	0	0	0	1	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.5	0.6
7-Nov-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	0.4	0.5
8-Nov-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	0.1	0.3
9-Nov-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	0.2	0.6
10-Nov-06	A 0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
11-Nov-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	0.2	0.4
12-Nov-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	0.4	0.6
13-Nov-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	0.2	0.3
14-Nov-06	A 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
15-Nov-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	0.2	0.5
16-Nov-06	A 0	0	0	0	0	0	1	0	1	0	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0.5	0.6
17-Nov-06	A 0	0	0	0	0	0	0	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Nov-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	0.0	0.1
19-Nov-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	0.2	0.3
20-Nov-06	A 0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0.3	0.7
21-Nov-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	0.2	0.4
22-Nov-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	0.5
23-Nov-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	0.1	0.4
24-Nov-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	0.0	0.3
25-Nov-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	0.2	0.3
26-Nov-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	0.1	0.2
27-Nov-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	0.0	0.3
28-Nov-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	0.1	0.2
29-Nov-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	0.1	0.3
30-Nov-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	0.0	0.2

**HOURLY AVERAGE TABLE**

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



**Status Flag Characters**

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

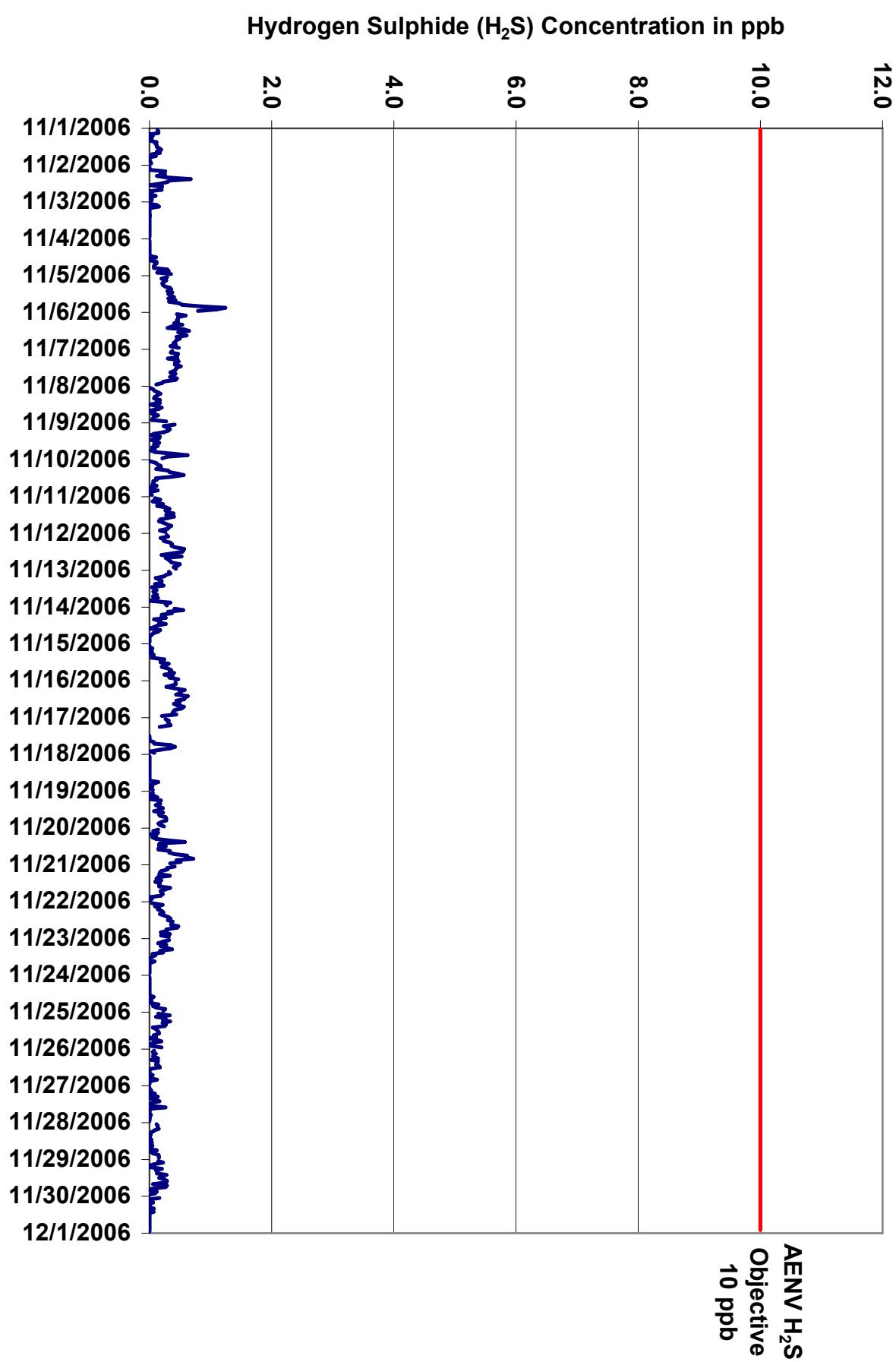


Figure 56. PASZA - Valleyview Hydrogen Sulphide 1-hr Average Monthly Trend

Station: Valleyview  
Station Owner: PASZA

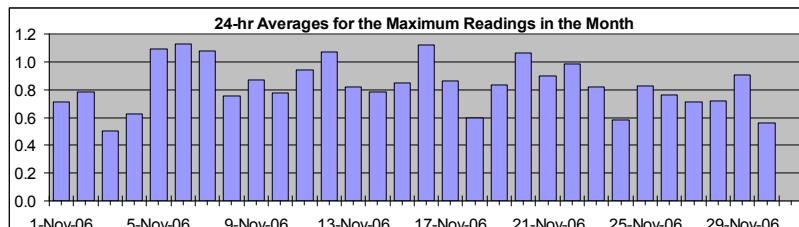
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: November 1, 2006 to December 1, 2006

#### Summary

Maximum 1-hr Value:	1.9	ppb	5-Nov	21:00 22:00
Maximum 24-hr Value:	1.1	ppb	6-Nov	



AIC Time:	31 hrs	Operational Time:	685 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 1.5	95 1.3	75 1.0	50 0.8	25 0.7	5 0.4	1 0.2	Average 0.8 ppb	Median 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

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
Hour Start Hour End	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 24:00	24:00 25:00	25:00 26:00	26:00 27:00	27:00 28:00	28:00 29:00	29:00 30:00				
1-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	0.7	0.9		
2-Nov-06	A	1	1	0	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0.8	1.5			
3-Nov-06	A	1	1	1	0	0	1	0	1	1	1	1	0	0	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0.5	0.9			
4-Nov-06	A	1	0	0	0	1	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0			
5-Nov-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	1	1	1	1	1.1	1.9			
6-Nov-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	1	1	1	1	1	1.1	1.5		
7-Nov-06	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6		
8-Nov-06	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0		
9-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.9	1.3			
10-Nov-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	1	1	1	0	1	0.8	1.5		
11-Nov-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	1	1	1	1	1	0.9	1.3		
12-Nov-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	1	1	1	1	1	1.1	1.4		
13-Nov-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	1	1	1	1	1	0.8	1.2		
14-Nov-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	1	1	1	0	1	0.8	1.1		
15-Nov-06	A	1	1	1	0	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	1.5			
16-Nov-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	1	1	1	1	1	1.1	1.4		
17-Nov-06	A	1	1	1	1	1	1	C	C	C	A	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4			
18-Nov-06	A	1	1	1	1	0	0	1	1	0	0	0	1	1	0	0	1	1	0	0	1	1	1	1	1	1	1	1	0.6	1.0			
19-Nov-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	1	1	1	1	0.8	1.2			
20-Nov-06	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9			
21-Nov-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	1	1	1	1	0.9	1.4			
22-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.0	1.7			
23-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	0.8	1.5			
24-Nov-06	A	0	0	0	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0			
25-Nov-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	1	1	1	1	0.8	1.4			
26-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.8	1.1			
27-Nov-06	A	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1	0	1	1	1	0	1	1	1	0.7	1.4			
28-Nov-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0			
29-Nov-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	1	1	1	1	0.9	1.3			
30-Nov-06	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0.6	1.1			

Hourly Avg	N	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9
Hourly Max	0.0	1.3	1.3	1.1	1.1	1.4	1.3	1.6	1.2	1.9	1.5	1.3	1.5	1.3	1.3	1.4	1.7	1.4	1.5	1.3	1.4	1.9	1.8	1.5			

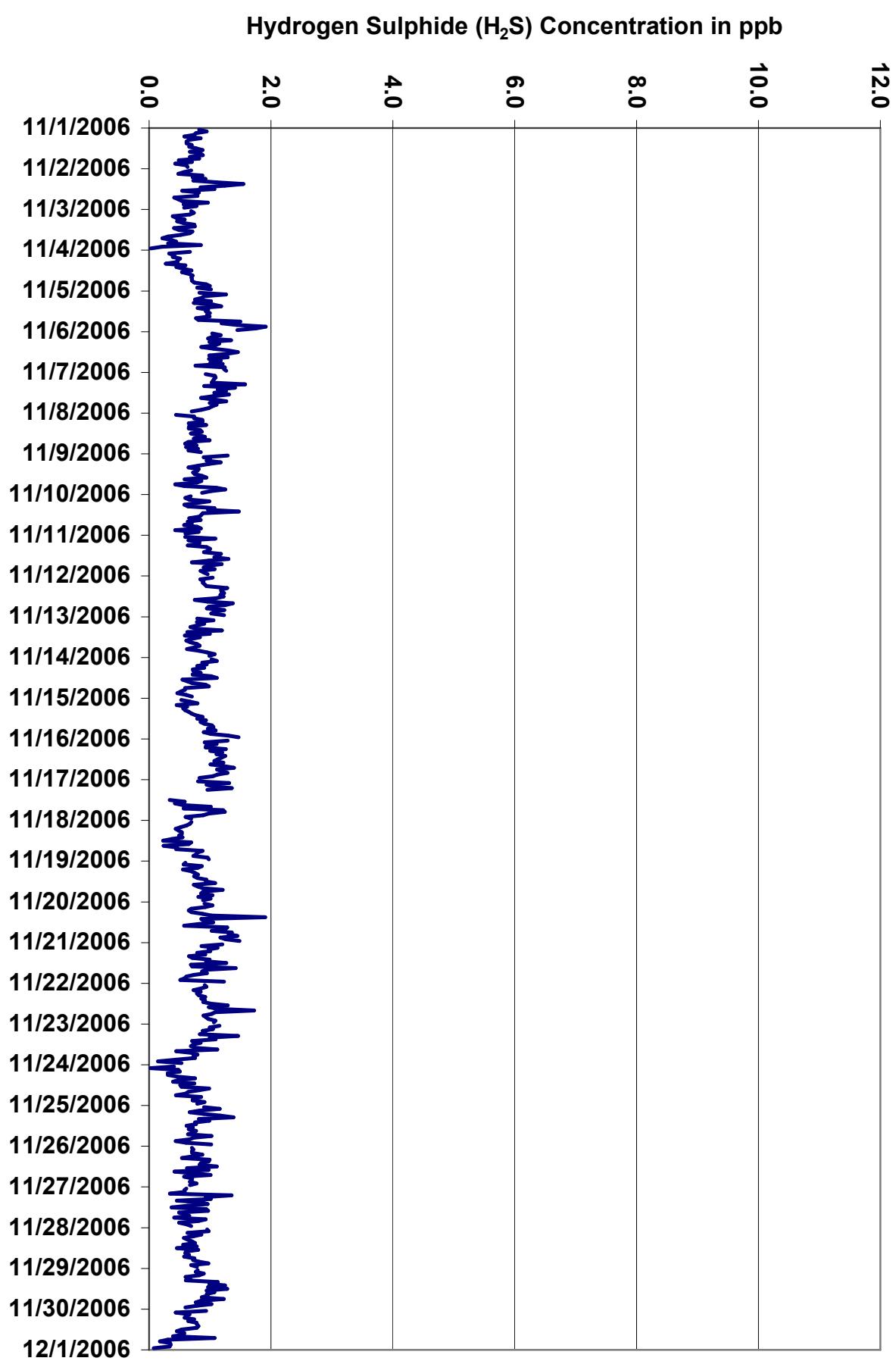
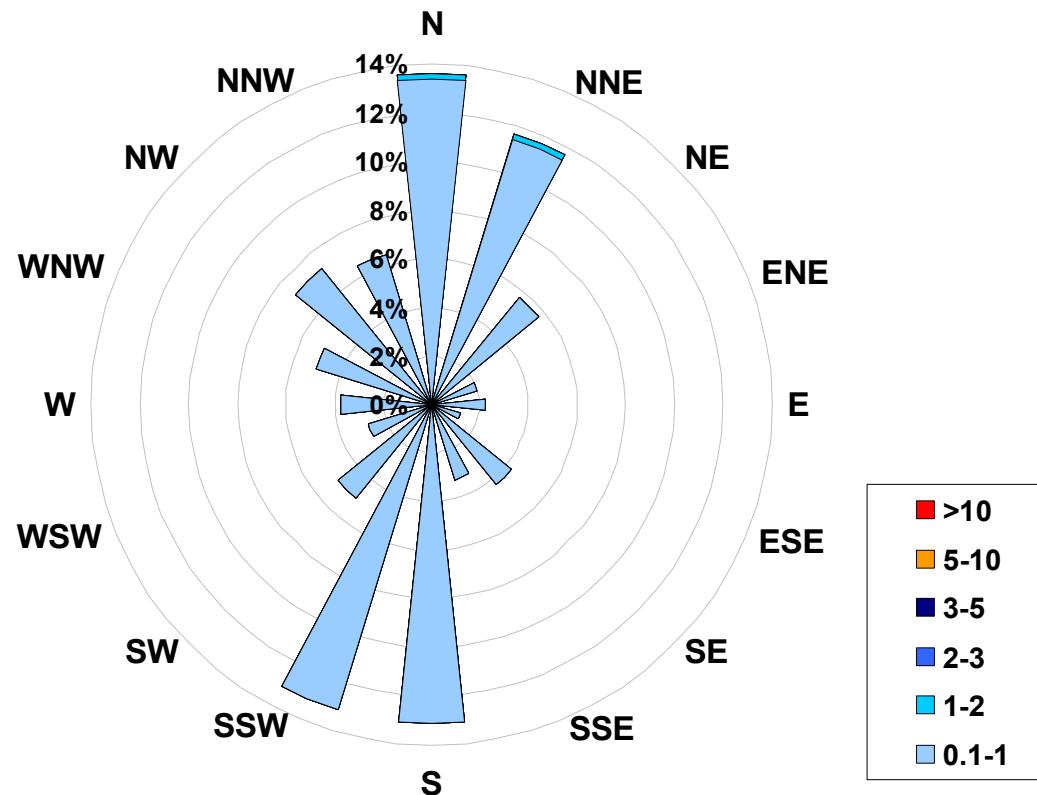


Figure 57. PASZA - Valleyview Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Hydrogen Sulphide (in ppb) Located  
at the Valleyview Site for November 2006**



Calms: 0%

Frequency Distribution of H <sub>2</sub> S in ppb			Frequency (hrs)
Range			
0.1	<	1	683
1	to	2	2
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			685

## PASZA – Valleyview - Relative Humidity Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### Summary

Maximum 1-hr Average:	94.1 %	12-Nov 21:00 22:00
Maximum 24-hr Value:	88.9 %	4-Nov

AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	92.6 90.1 84.6 78.1 72.6 61.7 54.1	77.7 %	78.1 %

### Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Nov-06	87 86	86 85	85 86	85 86	85 85	85 86	85 86	85 86	81 81	79 79	79 79	79 79	76 76	76 74	74 75	75 76	76 77	77 79	79 80	80 81	81 82	82 82	82 82	81.1 87.5	87.5 87.5		
2-Nov-06	83 87	86 87	86 84	84 89	89 89	88 88	87 87	86 86	85 85	82 82	70 70	63 63	62 62	61 61	62 62	62 63	63 65	65 69	71 71	73 73	73 73	73 73	73 73	75.6 89.3	89.3 89.3		
3-Nov-06	75 79	79 78	78 82	82 89	89 89	90 90	90 90	89 89	89 89	86 86	83 83	77 77	75 75	75 75	76 76	80 80	82 83	83 84	85 85	87 87	89 89	89 89	89 89	83.4 89.8	89.8 89.8		
4-Nov-06	90 90	90 91	91 91	91 92	92 92	92 92	92 91	91 91	89 89	85 85	84 84	84 84	83 83	85 85	85 86	86 86	88 88	88 88	91 91	92 92	93 93	93 93	93 93	88.9 92.9	92.9 92.9		
5-Nov-06	93 92	92 91	91 93	94 94	87 87	84 84	83 83	87 87	85 85	78 78	84 84	78 78	73 73	75 75	78 78	80 80	81 81	82 82	85 85	84 84	85 85	85 85	85 85	83.6 93.7	93.7 93.7		
6-Nov-06	86 84	85 85	87 88	88 88	88 87	87 87	84 84	86 86	87 87	83 83	78 78	75 75	78 78	77 77	78 78	79 79	80 80	82 82	84 85	85 89	86 86	85 85	85 85	83.3 88.6	88.6 88.6		
7-Nov-06	86 88	88 90	90 90	91 91	87 87	87 87	87 87	88 88	85 85	81 81	79 79	78 78	76 76	75 75	76 76	75 75	84 84	89 89	85 85	86 86	84 86	86 90	84.3 91.2	91.2 91.2			
8-Nov-06	89 89	89 88	88 88	86 86	77 77	76 76	78 78	76 76	73 73	71 71	67 67	66 66	66 67	67 67	70 70	72 72	72 74	74 79	82 82	87 87	88 88	88 88	77.0 89.2	89.2 89.2			
9-Nov-06	87 86	86 84	83 83	81 81	81 81	80 80	81 81	77 77	77 77	74 74	69 69	66 66	65 65	66 66	66 67	75 75	83 83	87 87	91 91	89 89	89 89	88 88	79.9 91.3	91.3 91.3			
10-Nov-06	91 92	92 88	86 86	84 84	83 83	82 82	83 83	84 84	85 85	87 87	88 88	89 89	87 87	78 78	77 77	89 89	92 92	93 93	93 93	91 91	91 91	91 91	86.8 92.8	92.8 92.8			
11-Nov-06	85 85	86 86	85 85	85 83	83 83	83 83	83 83	82 82	80 80	79 79	76 76	72 72	70 70	71 71	72 72	73 73	78 78	84 84	89 89	86 86	84 85	84 84	80.9 89.0	89.0 89.0			
12-Nov-06	85 84	84 84	83 83	84 83	83 84	84 84	84 83	83 81	81 81	80 80	82 82	79 79	79 79	80 80	78 78	78 78	81 81	88 88	92 93	94 94	91 92	91 92	84.3 94.1	94.1 94.1			
13-Nov-06	88 89	89 89	89 88	88 88	89 89	89 89	89 89	90 90	90 90	89 89	88 89	89 89	89 89	89 89	89 89	89 89	89 89	87 87	87 86	85 85	85 84	84 84	88.2 90.2	90.2 90.2			
14-Nov-06	83 83	83 83	82 82	82 83	83 82	81 81	81 81	80 80	77 77	72 72	71 71	72 72	73 73	74 74	73 73	74 74	71 71	69 69	70 70	69 69	68 68	63 63	75.6 83.4	83.4 83.4			
15-Nov-06	61 63	63 64	61 61	59 58	58 56	56 52	55 57	57 65	79 79	83 83	76 76	72 72	75 75	75 67	71 71	74 74	76 76	78 78	80 80	80 80	80 80	80 80	68.2 71.1	82.6 88.0			
16-Nov-06	83 85	85 80	75 75	71 70	70 70	72 72	73 73	70 70	66 66	63 63	58 58	57 57	54 54	52 52	56 56	63 63	71 71	77 77	81 81	85 87	87 88	88 88	71.1 76.5	88.0 88.0			
17-Nov-06	88 87	87 84	83 83	83 84	84 84	84 84	86 86	87 87	82 82	75 75	65 65	61 61	59 59	56 56	54 54	61 61	70 70	75 75	77 77	79 84	84 84	84 88	76.5 84.7	88.0 93.5			
18-Nov-06	86 83	83 82	92 93	90 90	87 87	89 89	89 89	89 89	87 87	84 84	81 81	80 80	79 79	82 82	86 86	89 89	89 89	81 81	79 79	77 77	76 76	76 76	67.9 76.7	76.7 76.7			
19-Nov-06	76 77	77 76	76 74	74 74	74 74	74 74	74 74	70 70	67 67	64 64	67 67	63 63	64 64	62 62	62 62	62 62	60 60	64 64	67 67	71 71	75 75	60 60	61.4 71.4	75.5 75.5			
20-Nov-06	63 64	64 56	57 64	64 63	62 62	62 66	66 70	69 69	61 61	51 51	45 45	44 44	45 45	44 45	52 52	60 60	63 63	66 66	69 69	72 72	76 76	74 74	68.2 77.3	82.6 83.4			
21-Nov-06	68 77	77 83	82 83	83 83	82 81	81 79	79 78	73 73	69 69	69 70	70 72	74 74	75 75	73 73	76 76	82 82	81 81	81 81	82 82	81 81	80 80	80 80	77.6 77.3	81.3 83.4			
22-Nov-06	81 80	80 81	81 81	81 81	80 80	80 81	81 81	80 80	81 81	80 80	76 76	74 74	72 72	75 75	76 76	77 77	79 79	80 80	79 79	77 77	71 71	69 69	77.2 77.6	80.5 81.3			
23-Nov-06	72 73	73 73	74 74	74 74	78 78	80 80	80 80	78 79	80 80	80 80	80 80	78 78	78 78	81 81	79 79	77 77	79 79	77 77	77 77	76 76	76 76	76 76	72.7 77.2	79.4 80.5			
24-Nov-06	75 75	75 77	77 79	78 76	76 75	75 74	74 73	72 73	69 69	66 66	66 68	66 70	70 70	70 71	74 74	75 75	73.6 73.6	75.6 75.6									
25-Nov-06	73 73	73 73	75 75	75 74	74 74	75 75	75 75	73 73	71 71	70 70	70 70	70 71	71 71	74 74	75 75	73.3 73.3	75.7 75.7										
26-Nov-06	76 76	76 76	76 76	76 76	75 75	74 74	74 74	73 73	70 70	68 68	68 68	68 70	70 72	73 73	74 74	74 74	74 74	74 74	74 74	74 74	75 75	75 75	73.4 73.4	75.9 75.9			
27-Nov-06	75 75	75 75	75 75	75 75	75 76	76 76	75 75	74 73	73 73	71 71	71 71	73 73	74 74	73 73	73 73	72 72	72 72	73 73	73 73	72 72	73 73	73 73	69.1 73.4	78.0 75.9			
28-Nov-06	73 73	73 72	71 71	71 70	70 70	70 70	70 70	68 68	65 65	62 60	60 58	58 60	56 56	56 56	64 64	69 69	74 74	77 77	78 78	77 77	77 77	76 76	76 76	73.0 69.1	87.9 78.0		
29-Nov-06	76 75	75 75	74 74	74 74	73 73	73 74	73 74	72 72	70 70	68 68	68 68	65 65	67 67	68 68	72 72	72 72	68 68	68 68	78 78	86 86	88 88	88 88	81.1 69.1	87.1 78.0			
30-Nov-06	87 87	84 84	83 84	84 86	86 84	80 80	85 85	87 87	84 84	79 79	71 71	78 78	83 83	81 83	83 83	82 82	77 77	73 73	72 72	78 78	78 78	78 78	78 78	81.1 73.0	87.1 87.9		

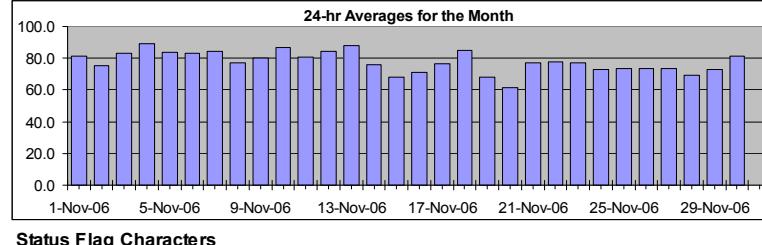
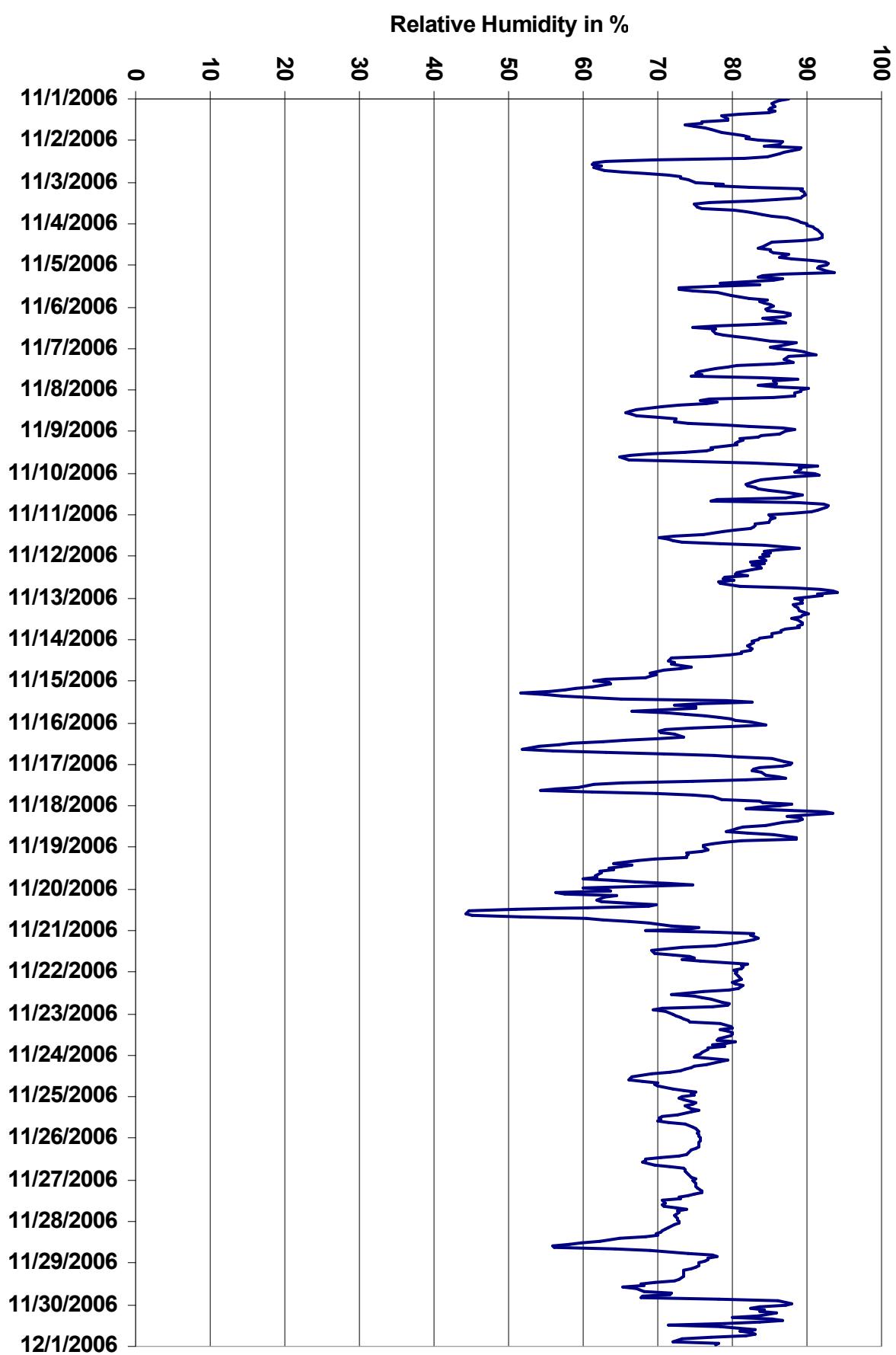


Figure 58. PASZA - Valleyview Relative Humidity 1-hr Average Monthly Trend



# PASZA - Valleyview - Temperature Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## Summary

Maximum 1-hr Average:	4.1	°C	7-Nov	16:00 17:00
Maximum 24-hr Value:	1.2	°C	15-Nov	

AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 3.0	95 1.0	75 -6.6	50 -11.6	25 -18.1	5 -31.7	1 -37.0	Average -13.1 °C	Median -11.6 °C

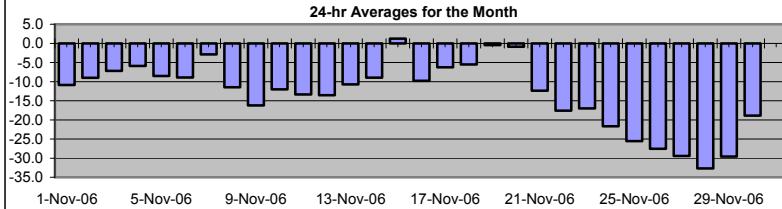
## Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	6:00 7:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00			
1-Nov-06	-15	-16	-16	-17	-16	-15	-15	-15	-14	-12	-11	-9	-8	-7	-7	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-10.9	-6.5	
2-Nov-06	-9	-10	-12	-12	-14	-15	-15	-15	-15	-14	-10	-7	-5	-4	-4	-4	-4	-5	-6	-7	-7	-7	-7	-7	-7	-9.0	-3.9	
3-Nov-06	-7	-8	-8	-8	-8	-8	-9	-9	-8	-8	-8	-7	-6	-6	-6	-6	-6	-6	-6	-6	-7	-7	-7	-7	-7	-7.2	-5.7	
4-Nov-06	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5.9	-4.7	
5-Nov-06	-6	-6	-6	-6	-8	-8	-9	-9	-9	-9	-9	-8	-8	-8	-8	-8	-8	-8	-8	-9	-10	-11	-12	-11	-11	-8.5	-5.7	
6-Nov-06	-11	-11	-11	-11	-11	-11	-11	-11	-11	-10	-9	-8	-7	-7	-6	-6	-6	-6	-7	-7	-8	-7	-7	-7	-7	-8.9	-5.9	
7-Nov-06	-7	-7	-7	-7	-7	-7	-6	-6	-6	-5	-3	-2	0	2	3	3	4	2	1	1	1	-1	-3	-5	-6	-2.9	4.1	
8-Nov-06	-7	-7	-8	-9	-10	-11	-12	-13	-13	-13	-12	-11	-11	-11	-11	-11	-11	-12	-12	-12	-13	-14	-15	-16	-11.5	-6.6		
9-Nov-06	-17	-18	-19	-20	-21	-22	-23	-23	-23	-21	-19	-17	-15	-13	-11	-10	-10	-10	-11	-13	-14	-13	-13	-12	-10	-16.2	-9.8	
10-Nov-06	-13	-14	-15	-16	-17	-18	-19	-19	-18	-17	-16	-14	-11	-9	-6	-5	-5	-7	-8	-7	-7	-8	-8	-10	-12.0	-4.9		
11-Nov-06	-12	-12	-12	-12	-13	-13	-13	-13	-13	-13	-14	-13	-12	-12	-12	-11	-11	-13	-14	-16	-17	-18	-16	-16	-13.4	-11.4		
12-Nov-06	-17	-18	-18	-18	-18	-17	-16	-17	-17	-15	-13	-12	-10	-10	-9	-8	-9	-9	-9	-10	-10	-11	-12	-12	-12	-13.6	-8.4	
13-Nov-06	-13	-12	-10	-11	-13	-13	-12	-12	-11	-10	-10	-10	-10	-10	-9	-9	-9	-9	-10	-10	-10	-11	-11	-12	-12	-10.7	-9.0	
14-Nov-06	-12	-13	-14	-14	-14	-14	-14	-14	-14	-13	-11	-10	-8	-7	-6	-5	-4	-4	-4	-3	-3	-2	-1	-1	-9.0	-1.4		
15-Nov-06	-1	-1	-1	0	0	1	1	2	2	2	2	2	3	3	3	3	3	2	2	1	0	0	0	-1	1.2	3.0		
16-Nov-06	-1	-8	-10	-11	-11	-11	-12	-13	-13	-12	-11	-10	-9	-8	-7	-6	-7	-8	-9	-11	-11	-12	-12	-12	-9.8	-1.4		
17-Nov-06	-12	-12	-11	-11	-10	-10	-11	-11	-12	-10	-8	-5	-2	0	1	2	0	-2	-3	-4	-4	-5	-5	-6	-6.2	2.5		
18-Nov-06	-6	-6	-5	-3	-3	-5	-7	-7	-8	-8	-9	-8	-7	-6	-5	-5	-6	-7	-7	-5	-3	-2	-2	-2	-5.5	-2.2		
19-Nov-06	-2	-3	-3	-3	-3	-3	-4	-3	-2	-2	-2	-1	-1	-1	0	1	1	1	2	1	4	3	3	3	-0.4	4.0		
20-Nov-06	2	1	1	-1	-2	-2	-2	-3	-3	-4	-3	-1	1	3	3	3	1	-1	-2	-3	-3	-2	-2	-2	-0.9	3.3		
21-Nov-06	-1	-1	-7	-11	-12	-12	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-14	-15	-16	-16	-16	-17	-12.4	-0.7		
22-Nov-06	-17	-17	-18	-18	-18	-18	-18	-19	-19	-20	-20	-19	-18	-18	-17	-17	-18	-17	-17	-17	-16	-16	-16	-17	-17.6	-15.9		
23-Nov-06	-17	-16	-16	-16	-16	-16	-16	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-18	-18	-18	-19	-19	-17.0	-15.5		
24-Nov-06	-19	-19	-20	-20	-21	-21	-21	-21	-21	-20	-20	-20	-20	-20	-20	-21	-21	-22	-23	-24	-25	-26	-26	-27	-21.7	-18.7		
25-Nov-06	-26	-26	-26	-26	-26	-26	-26	-26	-26	-26	-25	-25	-25	-25	-25	-25	-25	-25	-26	-26	-26	-26	-26	-26	-25.6	-24.7		
26-Nov-06	-26	-26	-26	-27	-27	-29	-29	-29	-29	-29	-28	-27	-27	-27	-27	-27	-27	-27	-28	-28	-28	-28	-27	-27	-27.5	-26.0		
27-Nov-06	-26	-26	-26	-25	-26	-25	-25	-26	-26	-28	-31	-31	-31	-31	-31	-31	-32	-32	-33	-33	-33	-33	-33	-33	-29.4	-25.4		
28-Nov-06	-33	-33	-33	-33	-33	-33	-33	-33	-33	-34	-33	-33	-32	-31	-30	-29	-29	-30	-31	-32	-34	-35	-36	-36	-32.7	-28.8		
29-Nov-06	-37	-37	-37	-38	-38	-38	-38	-38	-38	-36	-33	-30	-29	-28	-26	-26	-26	-26	-26	-26	-26	-26	-26	-26	-29.6	-17.4		
30-Nov-06	-17	-16	-16	-17	-17	-18	-18	-18	-19	-21	-20	-18	-16	-16	-17	-18	-19	-19	-20	-22	-22	-23	-23	-23	-18.9	-16.1		

Hourly Avg -13.1 -13.5 -13.9 -14.2 -14.6 -14.9 -15.1 -15.2 -15.3 -15.0 -14.3 -13.1 -12.1 -11.4 -10.9 -10.6 -10.9 -11.5 -11.9 -12.3 -12.5 -12.8 -12.9 -13.0

## HOURLY AVERAGE TABLE

## Ambient Temperature (T)



## Status Flag Characters

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

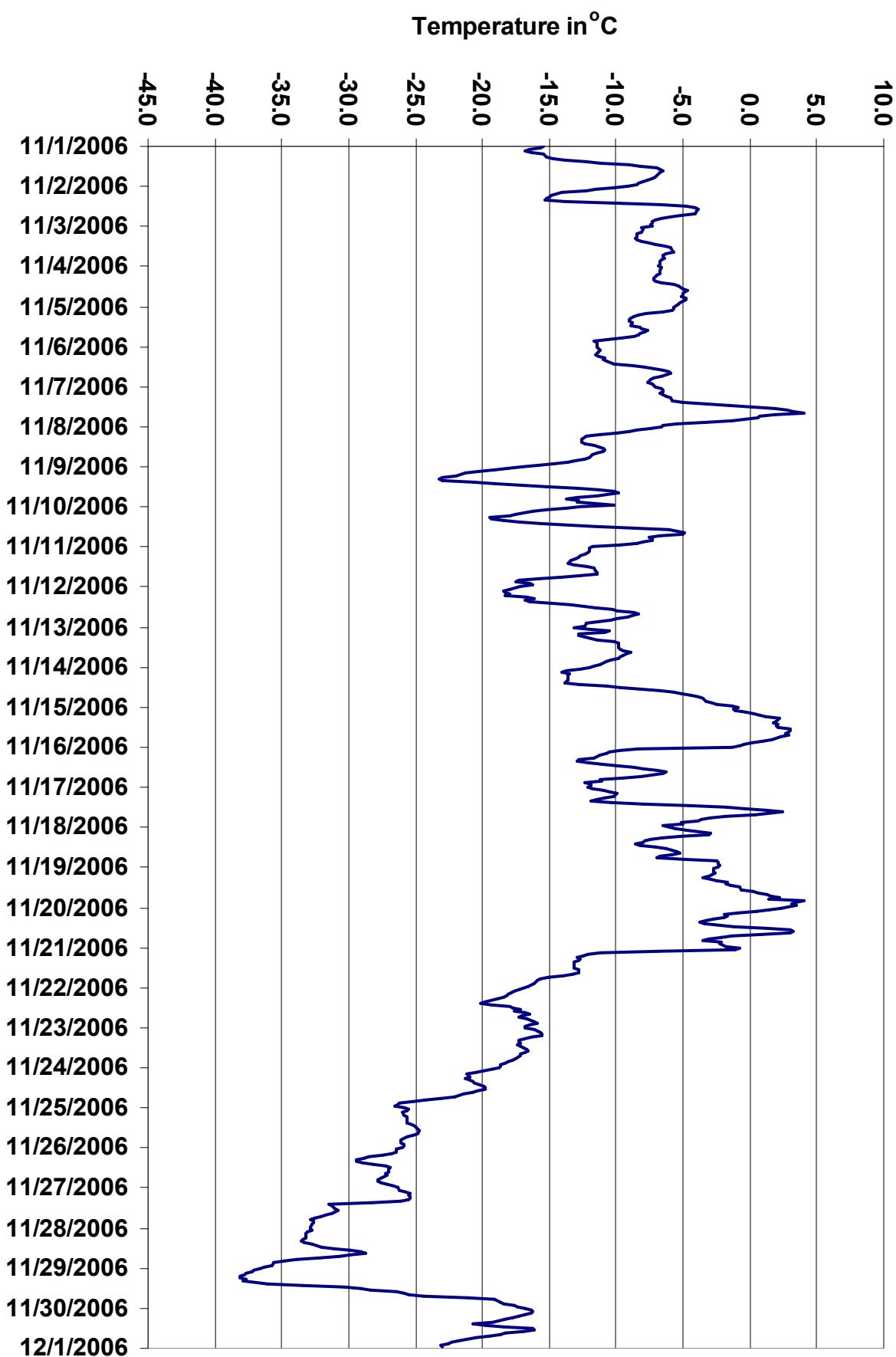


Figure 59. PASZA - Valleyview Temperature 1-hr Average Monthly Trend

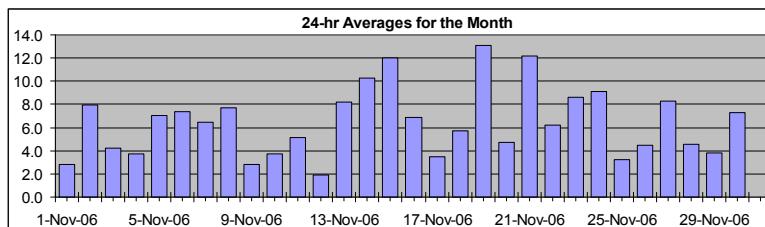
# PASZA - Valleyview - Scalar Wind Speed Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

## HOURLY AVERAGE TABLE

### Wind Speed (WSs)



#### Summary

Maximum 1-hr Average:	23.4	km/hr	16-Nov	1:00 2:00
Maximum 24-hr Value:	13.1	km/hr	19-Nov	

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile	99	95	75	50

Percentile      99    95    75    50    25    5    1    AverageS

18.8    14.8    9.0    5.5    2.9    1.3    0.9    6.4 km/hr

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	6:00 7:00	7:00 8:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Max	
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00	24-hr Scalar Average		
1-Nov-06	3	3	2	1	2	1	2	3	2	2	1	1	2	2	3	5	4	2	3	2	4	5	6	7	2.8	6.6		
2-Nov-06	5	3	3	2	4	5	5	4	4	4	2	8	12	13	13	13	12	14	14	15	11	8	9	8	8.0	14.8		
3-Nov-06	5	6	7	6	6	6	5	5	4	3	5	5	5	5	5	3	5	4	2	1	2	3	2	1	4.2	6.7		
4-Nov-06	2	1	1	1	2	3	3	3	4	4	4	5	4	6	5	5	7	6	5	5	7	3	3	3	3.8	6.9		
5-Nov-06	6	6	6	12	12	9	8	6	5	6	11	8	8	9	8	10	8	4	5	6	5	2	4	5	7.1	12.1		
6-Nov-06	6	7	7	8	8	8	11	4	7	9	7	8	10	5	6	6	8	8	6	9	10	8	5	7	7.4	10.8		
7-Nov-06	7	8	5	4	4	8	7	3	2	8	10	10	8	9	7	3	4	3	5	6	6	8	12	10	6.5	11.8		
8-Nov-06	9	14	14	13	14	15	12	9	8	9	8	7	7	7	7	6	8	7	3	2	2	1	1	1	7.7	15.1		
9-Nov-06	1	2	2	2	2	1	2	2	3	2	4	3	5	5	4	5	4	1	1	1	1	3	9	4	2.9	8.9		
10-Nov-06	3	2	1	1	1	1	1	1	2	2	4	3	3	2	2	9	8	7	5	5	5	7	6	11	3.7	10.6		
11-Nov-06	8	8	6	7	8	9	8	8	10	8	7	5	3	4	2	4	3	2	2	2	1	4	2	2	5.1	9.6		
12-Nov-06	2	2	2	2	3	2	1	2	1	1	1	2	1	2	3	2	1	2	4	1	1	3	2	3	1.9	3.6		
13-Nov-06	1	4	4	2	2	3	3	3	5	6	9	12	14	15	13	11	12	10	12	12	11	11	10	10	8.2	15.0		
14-Nov-06	11	11	7	5	3	4	5	7	5	5	3	9	13	14	14	14	14	14	14	10	8	16	16	17	17	19	10.3	18.9
15-Nov-06	21	19	18	19	18	19	18	18	13	11	18	18	13	11	14	5	4	5	2	5	4	6	5	5	5	12.0	21.0	
16-Nov-06	12	23	14	15	14	11	8	5	3	3	4	5	5	7	6	5	3	3	2	3	4	4	4	3	6.9	23.4		
17-Nov-06	4	3	5	4	2	3	7	6	3	4	3	3	5	4	5	1	3	2	2	3	4	4	2	3	3.5	6.8		
18-Nov-06	3	3	6	6	3	8	7	7	3	7	8	5	4	4	4	7	7	3	3	3	8	7	11	5.7	11.2			
19-Nov-06	7	8	13	16	16	13	18	15	9	7	12	16	19	15	13	14	12	14	16	17	19	7	8	11	13.1	19.0		
20-Nov-06	5	9	4	8	7	6	6	4	6	5	6	6	4	5	6	3	3	1	3	2	3	4	2	4	4.7	8.9		
21-Nov-06	4	7	12	13	17	16	17	20	20	16	16	11	10	10	10	7	8	12	11	12	12	12	11	10	12.2	19.5		
22-Nov-06	8	8	9	9	9	7	5	5	6	3	1	4	6	7	5	6	6	5	3	7	9	9	6	6.2	9.5			
23-Nov-06	4	7	7	8	3	3	6	6	6	9	10	11	14	14	13	12	8	9	11	9	8	8	9	8.6	14.5			
24-Nov-06	13	10	6	4	7	11	9	10	9	10	11	12	15	14	11	11	12	12	11	7	7	3	2	3	9.1	14.6		
25-Nov-06	5	4	1	1	2	3	2	3	3	4	2	4	5	4	3	4	6	6	5	5	3	2	1	1	3.2	6.1		
26-Nov-06	1	1	1	1	1	2	2	2	2	2	2	2	4	7	7	6	8	8	9	9	8	7	7	8	4.5	9.2		
27-Nov-06	10	11	10	9	10	9	9	9	10	10	12	10	13	12	8	6	4	3	5	5	6	4	6	6	8.2	13.3		
28-Nov-06	7	6	8	9	8	7	5	6	6	6	4	4	4	4	4	4	4	2	1	1	2	2	2	2	4.6	8.5		
29-Nov-06	2	1	2	3	2	2	3	3	3	2	1	3	3	1	1	1	1	1	3	10	10	12	10	9	3.8	11.5		
30-Nov-06	8	6	4	7	4	2	4	5	2	4	2	5	10	6	11	10	9	11	17	15	13	5	6	7	7.3	16.5		

1-hr Average	6.1	6.8	6.2	6.5	6.4	6.7	6.6	6.1	5.5	5.8	6.3	6.6	7.7	7.5	7.3	6.7	6.4	6.0	5.9	6.5	6.6	5.9	6.1	6.4
Hourly Max	21.0	23.4	17.6	18.5	18.2	19.2	18.3	19.5	19.5	15.6	17.9	18.5	19.0	15.4	14.3	14.3	13.9	14.2	16.5	16.9	18.9	16.6	17.0	18.9

# PASZA - Valleyview - Vector Wind Speed Monthly Summary

Station: Valleyview  
Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

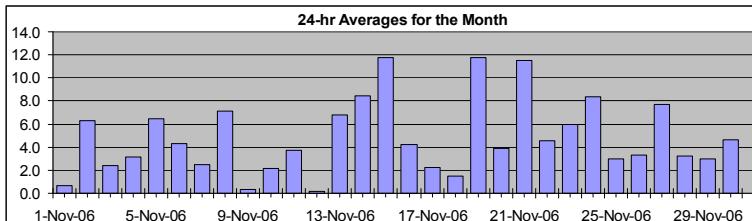
## Summary

Maximum 1-hr Average:	23.2 km/hr	16-Nov 1:00 2:00
Maximum 24-hr Value:	11.8 km/hr	15-Nov

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	18.5	14.5	8.9	5.2	2.6	0.7	0.3	1.1 km/hr

## HOURLY AVERAGE TABLE

### Wind Speed (WSv)



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	100:00	101:00	102:00	103:00	104:00	105:00	106:00	107:00	108:00	109:00	110:00	111:00	112:00	113:00	114:00	115:00	116:00	117:00	118:00	119:00	120:00	121:00	122:00	123:00	124:00	125:00	126:00	127:00	128:00	129:00	130:00	131:00	132:00	133:00	134:00	135:00	136:00	137:00	138:00	139:00	140:00	141:00	142:00	143:00	144:00	145:00	146:00	147:00	148:00	149:00	150:00	151:00	152:00	153:00	154:00	155:00	156:00	157:00	158:00	159:00	160:00	161:00	162:00	163:00	164:00	165:00	166:00	167:00	168:00	169:00	170:00	171:00	172:00	173:00	174:00	175:00	176:00	177:00	178:00	179:00	180:00	181:00	182:00	183:00	184:00	185:00	186:00	187:00	188:00	189:00	190:00	191:00	192:00	193:00	194:00	195:00	196:00	197:00	198:00	199:00	200:00	201:00	202:00	203:00	204:00	205:00	206:00	207:00	208:00	209:00	210:00	211:00	212:00	213:00	214:00	215:00	216:00	217:00	218:00	219:00	220:00	221:00	222:00	223:00	224:00	225:00	226:00	227:00	228:00	229:00	230:00	231:00	232:00	233:00	234:00	235:00	236:00	237:00	238:00	239:00	240:00	241:00	242:00	243:00	244:00	245:00	246:00	247:00	248:00	249:00	250:00	251:00	252:00	253:00	254:00	255:00	256:00	257:00	258:00	259:00	260:00	261:00	262:00	263:00	264:00	265:00	266:00	267:00	268:00	269:00	270:00	271:00	272:00	273:00	274:00	275:00	276:00	277:00	278:00	279:00	280:00	281:00	282:00	283:00	284:00	285:00	286:00	287:00	288:00	289:00	290:00	291:00	292:00	293:00	294:00	295:00	296:00	297:00	298:00	299:00	300:00	301:00	302:00	303:00	304:00	305:00	306:00	307:00	308:00	309:00	310:00	311:00	312:00	313:00	314:00	315:00	316:00	317:00	318:00	319:00	320:00	321:00	322:00	323:00	324:00	325:00	326:00	327:00	328:00	329:00	330:00	331:00	332:00	333:00	334:00	335:00	336:00	337:00	338:00	339:00	340:00	341:00	342:00	343:00	344:00	345:00	346:00	347:00	348:00	349:00	350:00	351:00	352:00	353:00	354:00	355:00	356:00	357:00	358:00	359:00	360:00	361:00	362:00	363:00	364:00	365:00	366:00	367:00	368:00	369:00	370:00	371:00	372:00	373:00	374:00	375:00	376:00	377:00	378:00	379:00	380:00	381:00	382:00	383:00	384:00	385:00	386:00	387:00	388:00	389:00	390:00	391:00	392:00	393:00	394:00	395:00	396:00	397:00	398:00	399:00	400:00	401:00	402:00	403:00	404:00	405:00	406:00	407:00	408:00	409:00	410:00	411:00	412:00	413:00	414:00	415:00	416:00	417:00	418:00	419:00	420:00	421:00	422:00	423:00	424:00	425:00	426:00	427:00	428:00	429:00	430:00	431:00	432:00	433:00	434:00	435:00	436:00	437:00	438:00	439:00	440:00	441:00	442:00	443:00	444:00	445:00	446:00	447:00	448:00	449:00	450:00	451:00	452:00	453:00	454:00	455:00	456:00	457:00	458:00	459:00	460:00	461:00	462:00	463:00	464:00	465:00	466:00	467:00	468:00	469:00	470:00	471:00	472:00	473:00	474:00	475:00	476:00	477:00	478:00	479:00	480:00	481:00	482:00	483:00	484:00	485:00	486:00	487:00	488:00	489:00	490:00	491:00	492:00	493:00	494:00	495:00	496:00	497:00	498:00	499:00	500:00	501:00	502:00	503:00	504:00	505:00	506:00	507:00	508:00	509:00	510:00	511:00	512:00	513:00	514:00	515:00	516:00	517:00	518:00	519:00	520:00	521:00	522:00	523:00	524:00	525:00	526:00	527:00	528:00	529:00	530:00	531:00	532:00	533:00	534:00	535:00	536:00	537:00	538:00	539:00	540:00	541:00	542:00	543:00	544:00	545:00	546:00	547:00	548:00	549:00	550:00	551:00	552:00	553:00	554:00	555:00	556:00	557:00	558:00	559:00	560:00	561:00	562:00	563:00	564:00	565:00	566:00	567:00	568:00	569:00	570:00	571:00	572:00	573:00	574:00	575:00	576:00	577:00	578:00	579:00	580:00	581:00	582:00	583:00	584:00	585:00	586:00	587:00	588:00	589:00	590:00	591:00	592:00	593:00	594:00	595:00	596:00	597:00	598:00	599:00	600:00	601:00	602:00	603:00	604:00	605:00	606:00	607:00	608:00	609:00	610:00	611:00	612:00	613:00	614:00	615:00	616:00	617:00	618:00	619:00	620:00	621:00	622:00	623:00	624:00	625:00	626:00	627:00	628:00	629:00	630:00	631:00	632:00	633:00	634:00	635:00	636:00	637:00	638:00	639:00	640:00	641:00	642:00	643:00	644:00	645:00	646:00	647:00	648:00	649:00	650:00	651:00	652:00	653:00	654:00	655:00	656:00	657:00	658:00	659:00	660:00	661:00	662:00	663:00	664:00	665:00	666:00	667:00	668:00	669:00	670:00	671:00	672:00	673:00	674:00	675:00	676:00	677:00	678:00	679:00	680:00	681:00	682:00	683:00	684:00	685:00	686:00	687:00	688:00	689:00	690:00	691:00	692:00	693:00	694:00	695:00	696:00	697:00	698:00	699:00	700:00	701:00	702:00	703:00	704:00	705:00	706:00	707:00	708:00	709:00	710:00	711:00	712:00	713:00	714:00	715:00	716:00	717:00	718:00	719:00	720:00	721:00	722:00	723:00	724:00	725:00	726:00	727:00	728:00	729:00	730:00	731:00	732:00	733:00	734:00	735:00	736:00	737:00	738:00	739:00	740:00	741:00	742:00	743:00	744:00	745:00	746:00	747:00	748:00	749:00	750:00	751:00	752:00	753:00	754:00	755:00	756:00	757:00	758:00	759:00	760:00	761:00	762:00	763:00	764:00	765:00	766:00	767:00	768:00	769:00	770:00	771:00	772:00	773:00	774:00	775:00	776:00	777:00	778:00	779:00	780:00	781:00	782:00	783:00	784:00	785:00	786:00	787:00	788:00	789:00	790:00	791:00	792:00	793:00	794:00	795:00	796:00	797:00	798:00	799:00	800:00	801:00	802:00	803:00	804:00	805:00	806:00	807:00	808:00	809:00	810:00	811:00	812:00	813:00	814:00	815:00	816:00	817:00	818:00	819:00	820:00	821:00	822:00	823:00	824:00	825:00	826:00	827:00	828:00	829:00	830:00	831:00	832:00	833:00	834:00	835:00	836:00	837:00	838:00	839:00	840:00	841:00	842:00	843:00	844:00	845:00	846:00	847:00	848:00	849:00	850:00	851:00	852:00	853:00	854:00	855:00	856:00	857:00	858:00	859:00	860:00

## PASZA - Valleyview - Wind Direction Monthly Summary

Station: Valleyview  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary											

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs							
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%							
Percentile	99	95	75	50	25	5	1	Average			
	358.4	352.4	293.8	189.5	60.3	7.0	0.8	323 deg			

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-06	200	208	214	206	193	228	211	192	164	211	342	79	0	36	349	343	323	331	28	126	131	134	134	132	150	SSE
2-Nov-06	112	107	144	119	7	3	7	24	1	6	44	125	133	133	129	128	131	134	134	133	134	127	123	121	120	ESE
3-Nov-06	93	69	81	87	79	76	67	69	60	69	140	149	168	187	181	325	351	8	47	15	358	357	13	2	79	ENE
4-Nov-06	343	340	308	26	22	25	25	25	19	58	60	74	78	62	67	55	59	52	88	130	113	43	46	17	57	ENE
5-Nov-06	7	3	337	321	299	312	310	295	312	325	333	324	311	312	317	339	354	330	330	349	357	358	28	36	330	NNW
6-Nov-06	27	37	29	34	36	44	54	58	24	66	80	112	135	126	126	143	171	143	147	151	156	152	169	341	94	E
7-Nov-06	165	202	159	198	174	186	184	142	202	191	189	190	193	187	193	206	261	345	185	336	23	26	22	2	186	S
8-Nov-06	328	344	328	325	323	328	321	320	308	308	316	311	321	318	335	333	0	358	8	28	176	124	20	21	328	NNW
9-Nov-06	33	247	188	38	10	229	184	214	208	205	5	29	353	336	358	359	357	165	339	359	187	155	181	180	323	NW
10-Nov-06	356	329	334	11	44	258	13	26	356	25	8	7	7	24	127	140	142	55	30	39	35	27	24	308	32	NNE
11-Nov-06	285	285	279	291	297	298	292	293	293	290	281	278	273	258	134	108	89	92	74	349	330	3	27	11	295	WNW
12-Nov-06	190	338	1	129	346	168	127	202	197	276	78	357	168	202	13	108	189	232	213	311	2	360	15	351	333	NNW
13-Nov-06	202	201	202	81	78	22	9	22	1	358	354	356	1	357	356	335	333	325	330	330	320	314	312	308	340	NNW
14-Nov-06	304	297	291	270	191	190	182	173	162	177	199	185	189	190	188	190	187	186	184	188	186	182	183	184	194	SSW
15-Nov-06	183	181	183	182	176	180	180	177	185	182	186	187	181	184	179	189	155	162	180	197	197	193	196	266	183	S
16-Nov-06	301	296	306	307	304	304	293	234	174	172	191	194	175	184	189	174	183	199	216	207	213	206	218	222	264	W
17-Nov-06	204	210	217	206	233	219	44	199	225	210	209	200	202	213	207	179	352	6	253	328	202	214	250	144	212	SSW
18-Nov-06	258	206	343	324	150	39	11	25	32	19	28	27	44	21	1	351	346	354	38	169	191	189	187	180	18	NNE
19-Nov-06	186	185	180	185	189	191	187	189	192	184	192	188	187	190	191	188	198	196	194	233	281	222	244	200	SSW	
20-Nov-06	219	179	180	205	211	206	178	180	200	205	203	207	187	187	182	193	43	219	307	298	312	202	251	205	202	SSW
21-Nov-06	199	357	27	26	18	20	15	12	10	11	5	13	30	28	35	56	52	28	18	6	20	22	26	46	21	NNE
22-Nov-06	39	25	27	14	20	24	28	16	7	12	10	16	0	353	9	18	39	17	21	27	106	140	138	133	34	NE
23-Nov-06	137	147	152	147	89	99	11	21	3	9	359	359	357	352	360	4	354	335	335	323	321	318	323	337	355	N
24-Nov-06	344	350	6	350	322	329	327	324	319	305	306	314	326	326	318	328	333	329	325	314	271	231	203	188	323	NW
25-Nov-06	291	285	273	347	319	347	8	330	335	5	42	3	3	8	37	17	19	10	20	2	1	346	182	285	356	N
26-Nov-06	256	240	148	276	236	211	193	207	197	209	211	326	354	356	3	350	7	11	14	18	25	31	26	31	9	N
27-Nov-06	27	18	27	26	13	14	10	2	1	359	358	357	355	1	8	4	15	322	308	316	314	325	329	321	360	N
28-Nov-06	318	290	296	283	296	297	279	271	271	269	232	235	153	170	206	209	179	190	197	225	223	199	220	239	260	W
29-Nov-06	216	263	268	257	247	261	243	238	226	225	218	255	321	351	257	274	164	76	192	193	197	193	196	196	214	SW
30-Nov-06	199	214	231	249	214	192	298	250	149	187	263	336	317	302	321	323	329	331	353	3	354	342	322	333	316	NW

Hourly Avg 285 290 310 300 317 325 338 302 321 328 320 303 337 320 352 2 13 4 359 325 287 173 180 295

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

Station: Valleyview  
 Station Owner: PASZA

Monitoring Dates: November 1, 2006 to December 1, 2006

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

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

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	62.1	50.1	21.3	11.4	7.5	4.8	3.5

#### Status Flag Characters

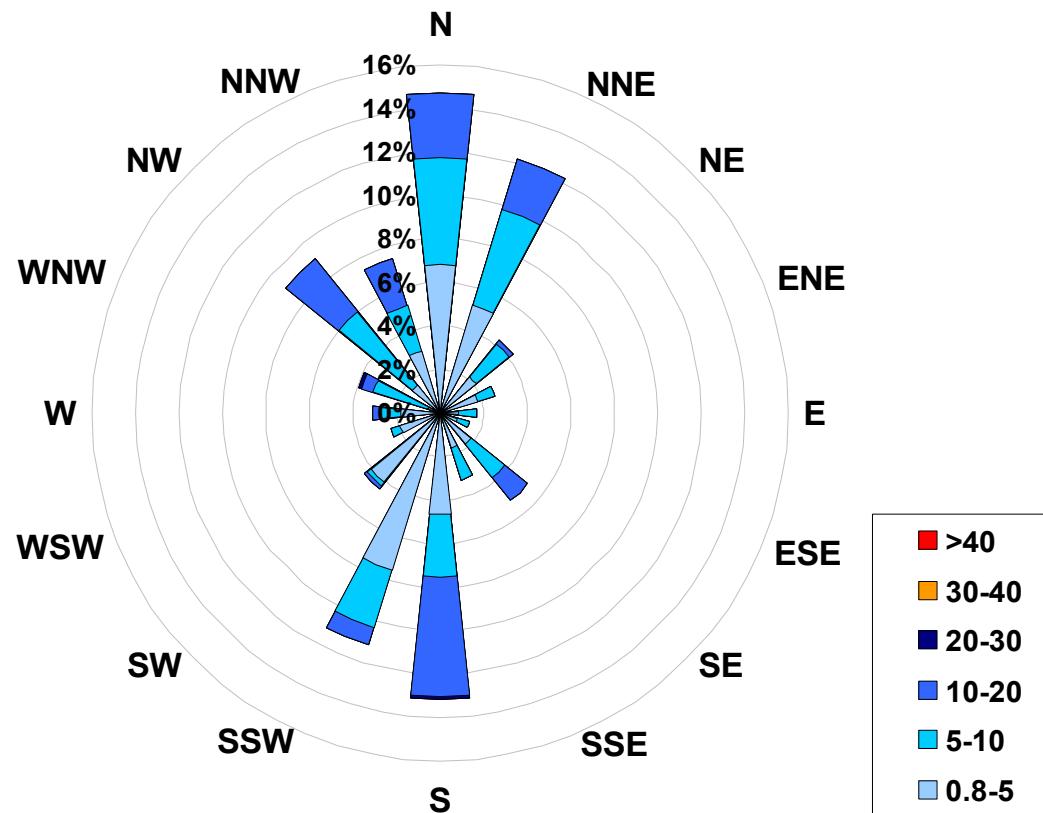
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 1:00	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 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-Nov-06	12	13	19	22	10	43	11	17	18	51	50	59	24	51	20	20	13	46	51	33	16	12	14	13	58.6
2-Nov-06	13	16	12	24	17	5	4	9	5	8	36	26	11	9	9	7	7	6	6	7	10	11	8	10	35.8
3-Nov-06	15	11	8	10	11	11	10	12	11	13	13	14	21	15	14	44	8	10	25	19	16	21	20	27	44.2
4-Nov-06	24	63	37	23	21	11	10	10	11	14	13	23	14	17	14	11	10	10	22	8	41	23	19	10	63.0
5-Nov-06	8	20	22	9	9	11	12	10	12	15	11	17	10	9	12	9	7	12	9	8	8	28	10	9	28.0
6-Nov-06	9	9	8	7	8	8	7	45	8	14	13	14	11	23	13	17	13	13	13	12	12	18	46	55	55.4
7-Nov-06	49	43	34	23	37	11	28	46	51	20	8	7	7	11	9	10	22	32	33	51	16	16	7	10	50.8
8-Nov-06	10	8	6	9	7	6	6	8	12	10	11	12	11	12	11	10	4	5	15	32	26	50	42	35	50.1
9-Nov-06	54	33	27	26	25	55	10	12	8	6	33	11	4	7	5	4	6	40	57	45	63	64	7	30	64.4
10-Nov-06	16	24	25	32	61	77	40	28	21	23	20	8	8	23	44	10	12	39	8	7	8	12	16	10	77.0
11-Nov-06	13	11	14	16	11	11	17	12	10	11	15	19	43	20	50	21	19	28	33	29	48	18	38	45	49.7
12-Nov-06	46	48	51	51	21	57	48	56	51	52	50	62	39	38	37	52	48	41	18	53	55	18	15	20	61.7
13-Nov-06	53	12	7	15	15	10	43	17	7	6	5	4	5	3	4	5	6	7	6	6	8	9	8	9	52.6
14-Nov-06	7	7	10	29	29	12	11	9	10	10	20	12	6	6	7	6	7	8	7	5	6	6	5	5	29.4
15-Nov-06	6	5	5	5	5	6	6	6	8	7	6	7	10	8	9	24	56	15	17	8	14	8	12	29	55.6
16-Nov-06	16	6	12	11	10	12	20	19	17	18	21	20	19	12	15	19	41	16	40	25	7	32	8	6	41.5
17-Nov-06	14	12	32	17	37	18	29	8	8	10	9	41	14	7	5	27	49	46	32	30	12	19	58	39	58.3
18-Nov-06	58	71	65	21	37	13	8	9	26	9	9	14	20	20	13	6	10	34	30	34	6	7	6	7	71.2
19-Nov-06	17	13	7	6	6	7	6	5	9	15	16	8	7	6	7	7	6	7	8	7	17	10	9	17.0	
20-Nov-06	19	8	33	5	5	4	8	16	4	5	5	14	13	10	8	17	17	49	29	40	59	62	39	17	62.2
21-Nov-06	25	38	11	9	6	9	8	5	5	7	5	11	9	11	10	19	9	9	7	5	6	6	6	8	37.6
22-Nov-06	10	8	8	6	7	8	8	6	5	5	26	46	10	5	7	9	11	8	11	14	22	10	7	9	46.3
23-Nov-06	22	20	20	10	15	18	26	12	5	6	5	4	4	5	4	6	7	6	7	8	7	7	6	5	25.6
24-Nov-06	4	2	6	12	8	5	5	5	7	8	7	9	8	8	8	7	6	6	6	7	7	12	18	33.3	
25-Nov-06	14	9	30	40	31	20	17	13	14	10	22	7	7	14	20	16	8	6	10	4	10	22	49	37	48.6
26-Nov-06	40	27	56	30	22	17	14	5	6	8	21	63	18	4	5	4	4	8	5	8	8	8	9	9	62.5
27-Nov-06	7	7	7	9	5	6	4	3	3	3	3	4	4	4	5	6	9	23	7	9	11	26	13	10	25.7
28-Nov-06	9	13	10	9	11	12	13	9	9	9	26	22	13	19	12	15	7	16	29	29	16	23	19	26	29.4
29-Nov-06	30	41	13	12	12	18	23	11	5	11	21	48	13	10	40	41	41	49	40	8	6	6	7	7	48.6
30-Nov-06	6	8	17	26	11	43	32	21	34	23	27	45	12	11	13	8	9	7	3	6	7	18	15	9	44.8

Hourly Max 58 71 65 51 61 77 48 56 51 52 50 63 43 51 50 52 56 49 57 53 63 64 58 55

**1-hr Average Wind Rose (in km/hr) Located at the Valleyview Site for November 2006**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	336
5	to	10	242
10	to	20	140
20	to	30	2
30	to	40	0
	>	40	0
Total Non-Zero Values			720

# PASZA

## Monthly Passive Data Summary

**Table 1. PASZA Passive Stations for November 2006**

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
<b>Duplicates</b>					
39a	Clouston Creek	0.6	37.8	1.9	
39b	Clouston Creek	0.6	37.9	1.8	
41a	Valleyview	0.8	37.1	2.7	
41b	Valleyview	0.8	36.4	2.6	
42a	Sunset House	0.6	42.6	1.2	
42b	Sunset House	0.5	42.9	1.3	
49a	Grande Prairie HP	0.8	30.3	11.1	
49b	Grande Prairie HP	0.8	25.6	13.9	
1	Silver Valley	0.8	35.7	2.2	08-27-081-11 W6M
2	Bay Tree	0.6	29.8	2.1	13-16-078-13 W6M
3	Forth Creek	0.5	33.4	1.5	04-13-082-07 W6M
4	Gordondale	0.6	37.6	2.1	04-34-078-10 W6M
5	Boone Creek	0.5	29.3	2.6	01-23-076-11 W6M
7	Steeprock Creek	0.8	38.1	2.2	09-35-072-13 W6M
9	Spirit River	0.7	36.2	2.3	08-12-079-07 W6M
10	Woking	0.6	33.1	1.7	01-13-076-07 W6M
11	Webber Creek	0.9	40.7	2.5	09-36-074-09 W6M
12	Hythe	0.8	31.4	3.5	14-36-072-11 W6M
14	Sylvester	0.2	28.7	1.7	08-06-069-12 W6M
16	Beaverlodge	0.8	33.3	4.7	15-36-071-10 W6M
17	Poplar	0.9	32.5	3.3	13-06-073-08 W6M
18	Saddle Hills	0.7	42.3	1.7	04-25-074-07 W6M
19	Wanham	0.6	40.9	1.9	16-22-077-03 W6M
20	Shaftesbury	0.3	32.7	1.4	04-03-082-23 W5M

**Table 1. PASZA Passive Stations for November 2006 (Continued)**

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
21	Eaglesham	0.4	34.4	1.2	16-21-079-25 W5M
23	Bear Lake	1.0	42.7	3.4	15-31-072-06 W6M
24	Wembley	0.6	36.4	4.6	12-31-070-08 W6M
25	Pinto Creek	0.5	31.7	2.9	04-24-069-11 W6M
26	Flyingshot	0.7	28.8	6.4	15-36-070-07 W6M
27	Grande Prairie I	0.7	24.2	13.5	08-15-071-06 W6M
28	Clairmont Lake	0.9	38.9	2.9	09-06-073-04 W6M
29	Smoky Heights	0.6	37.0	2.8	04-06-075-02 W6M
30	Fitzsimmons	0.5	37.2	3.2	15-36-072-03 W6M
32	Gold Creek	0.5	20.6	4.8	06-33-067-05 W6M
33	Wapiti	0.6	35.1	4.2	02-25-071-03 W6M
34	Puskwaskau	0.3	33.2	1.1	15-35-074-25 W5M
35	Jean Cote	0.4	42.5	1.5	12-35-079-21 W5M
36	Guy	0.4	37.2	1.4	03-04-076-22 W5M
37	Crooked Creek	0.7	38.3	3.8	16-01-071-26 W5M
38	Karr Creek	0.3	23.6	1.2	10-16-065-02 W6M
39	Clouston Creek	0.6	37.8	1.9	12-01-073-22 W5M
40	McLennan	0.4	38.0	1.8	03-29-077-19 W5M
41	Valleyview	0.8	36.8	2.7	09-30-069-22 W5M
42	Sunset House	0.6	42.7	1.2	05-32-070-19 W5M
43	High Prairie	0.4	34.4	2.7	16-13-074-17 W5M
44	Peavine	0.2	33.6	1.2	03-05-079-15 W5M
45	Gift Lake	0.2	33.3	1.3	10-07-079-12 W5M
46	Little Smoky	0.7	33.0	4.3	12-01-065-21 W5M
47	Kinuso	0.2	34.0	1.9	12-10-073-10 W5M
48	Deer Mountain	0.4	40.2	1.2	15-22-068-09 W5M
49	Grande Prairie HP	0.8	27.9	12.5	17-26-071-06 W6M

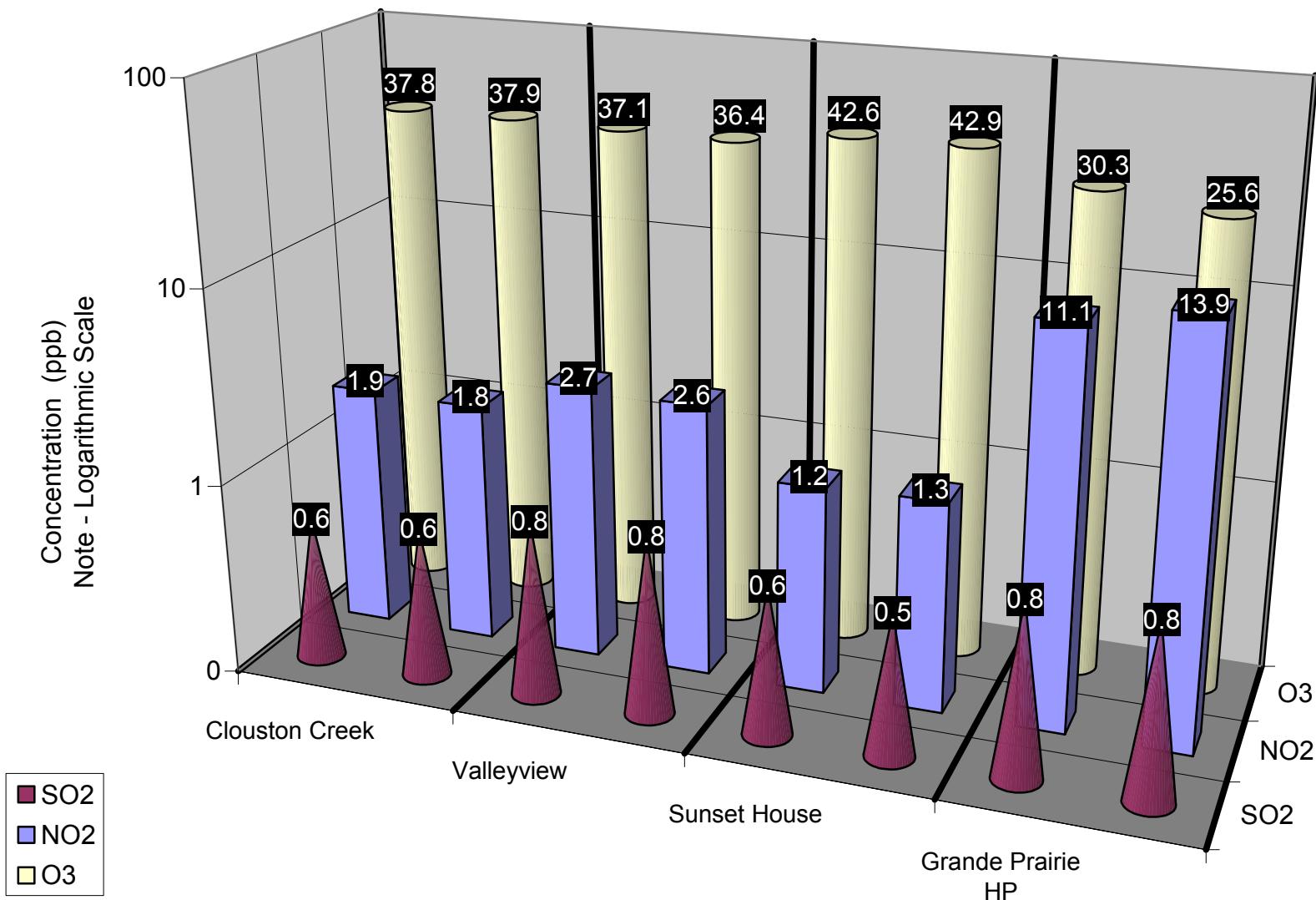


Figure 60. Duplicate Summary Chart

**Table 2. Passive Summary Results for November 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 November 2006 (PASZA Zone)			
Mean	0.6	34.6	3.0
Standard Deviation	0.2	5.1	2.5
Minimum	0.2	20.6	1.1
	Gift Lake (#45)	Gold Creek (#32)	Puskwaskau (#34)
Maximum	1.0	42.7	13.5
	Bear Lake (#23)	Sunset House (#42)	Grande Prairie I (#27)

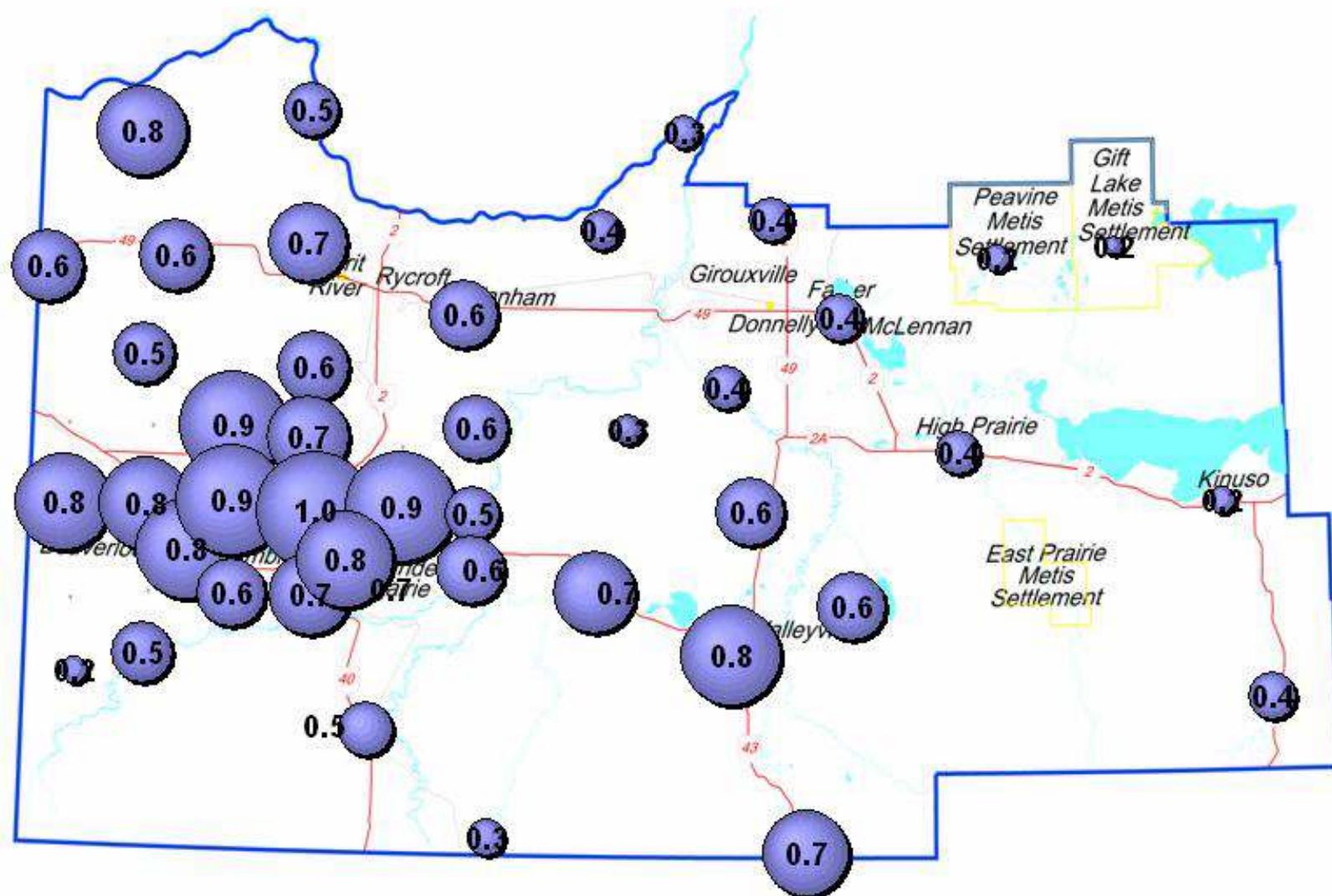
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
AENV Beaverlodge station	1.1	22.6	8.8
PASZA Beaverlodge passive	0.8	33.3	4.7

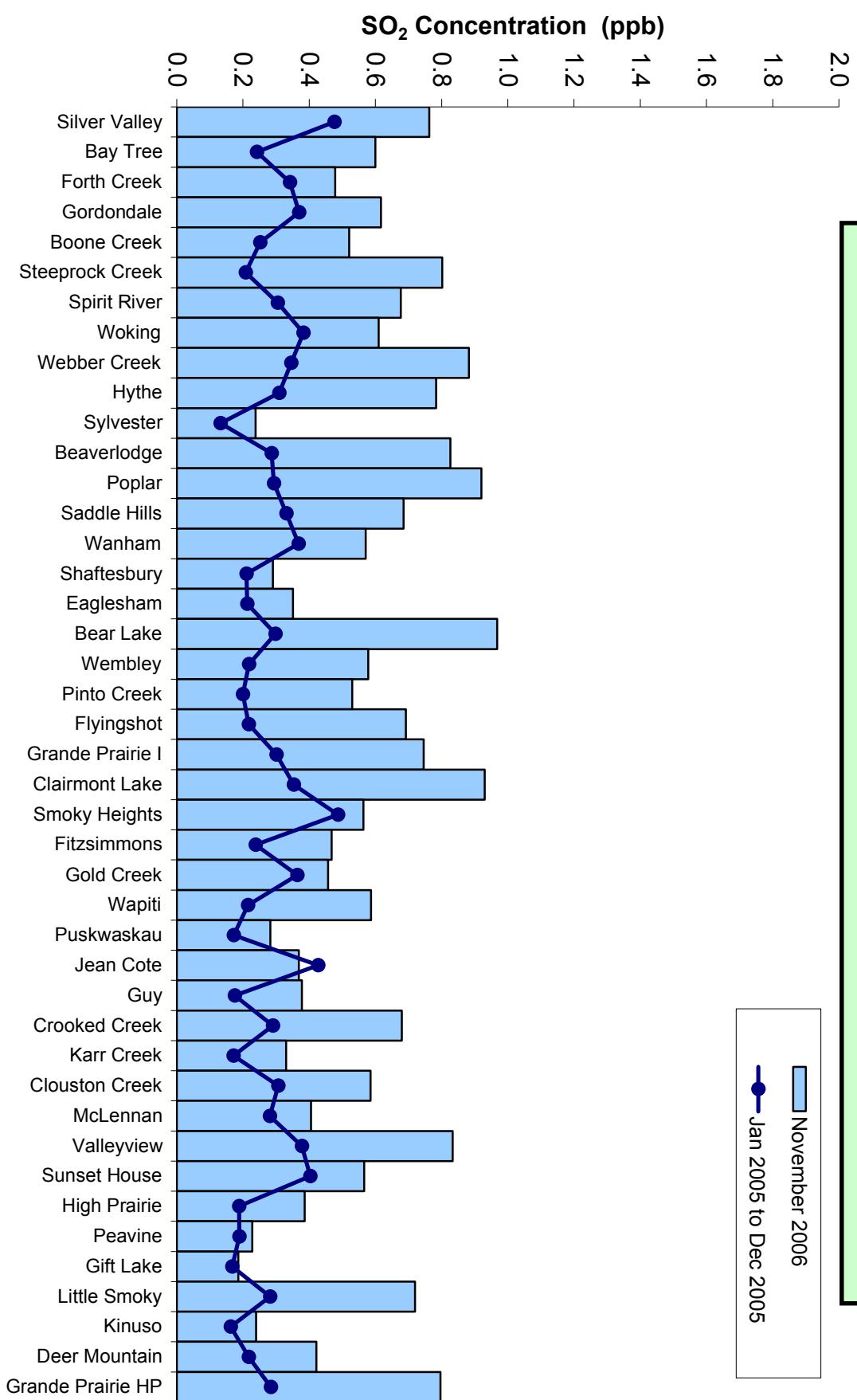
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Henry Pirker station	0.8	14.4	17.2
PASZA Grande Prairie passive	0.8	27.9	12.5

## PASZA Passive SO<sub>2</sub> Stations - November 2006 Average Concentrations in ppb



**Figure 61. SO<sub>2</sub> Bubble Chart**



**Figure 62. SO<sub>2</sub> Summary Chart**

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

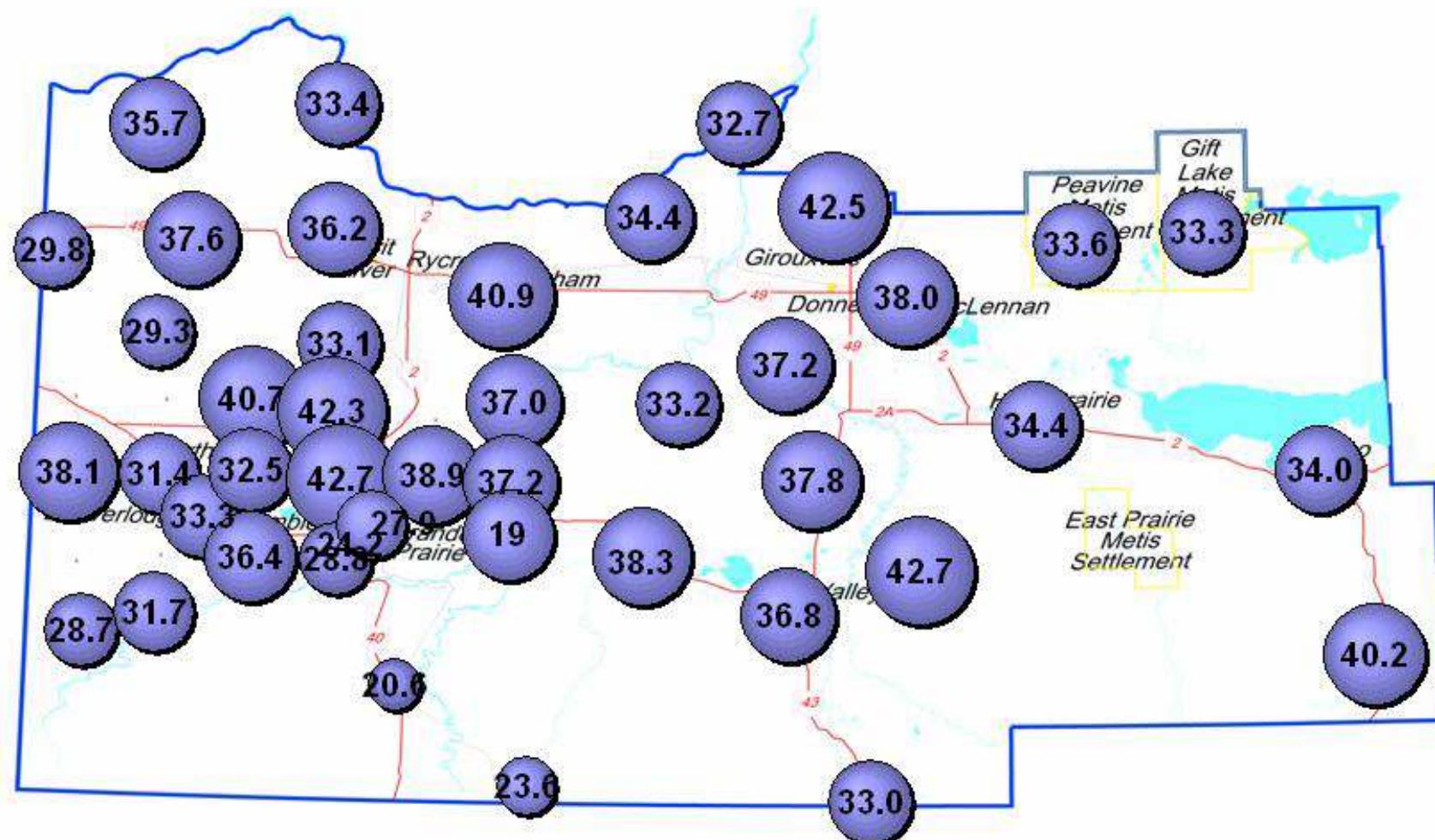
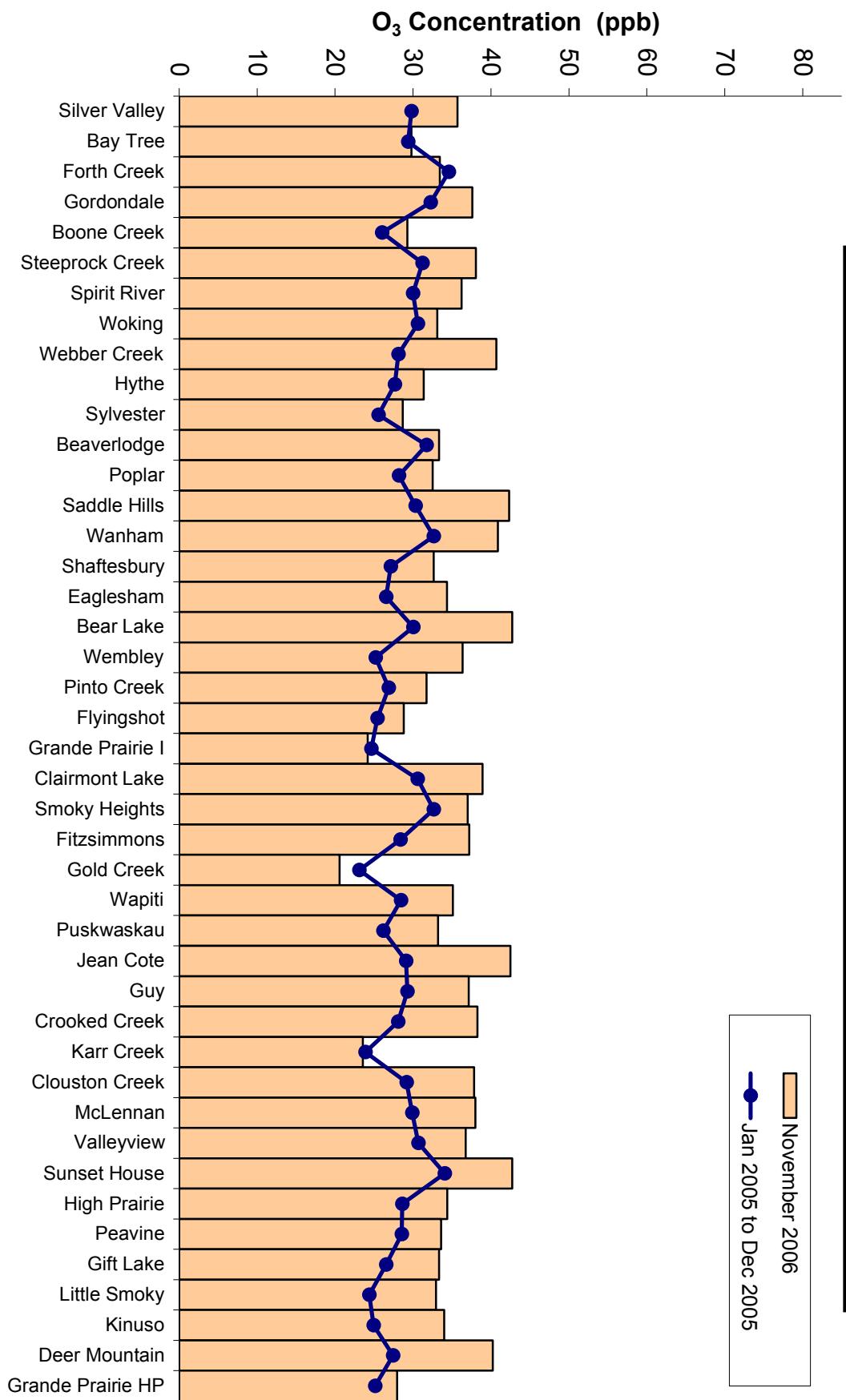


Figure 63. O<sub>3</sub> Bubble Chart

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



**Figure 64. O<sub>3</sub> Summary Chart**

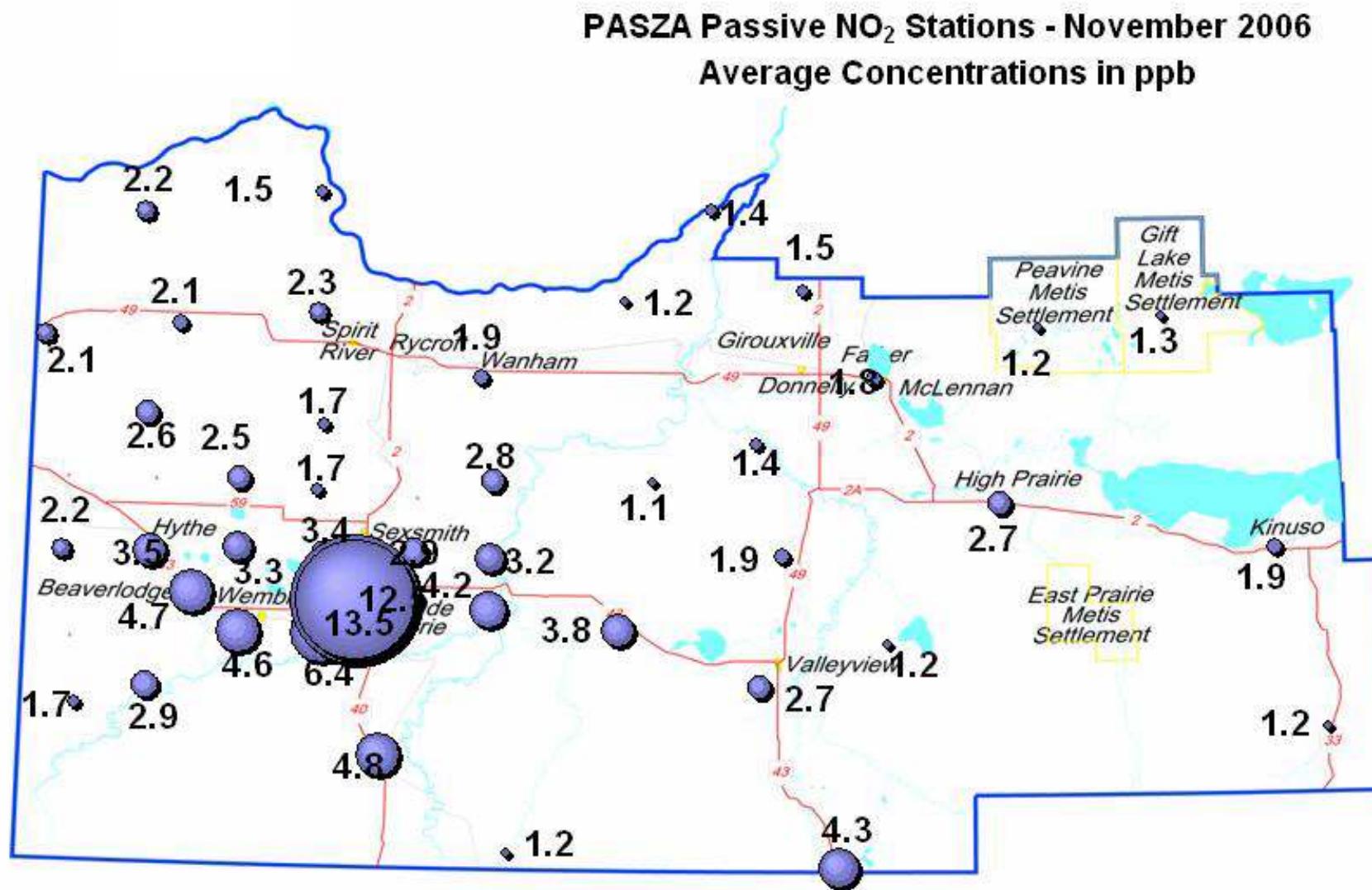
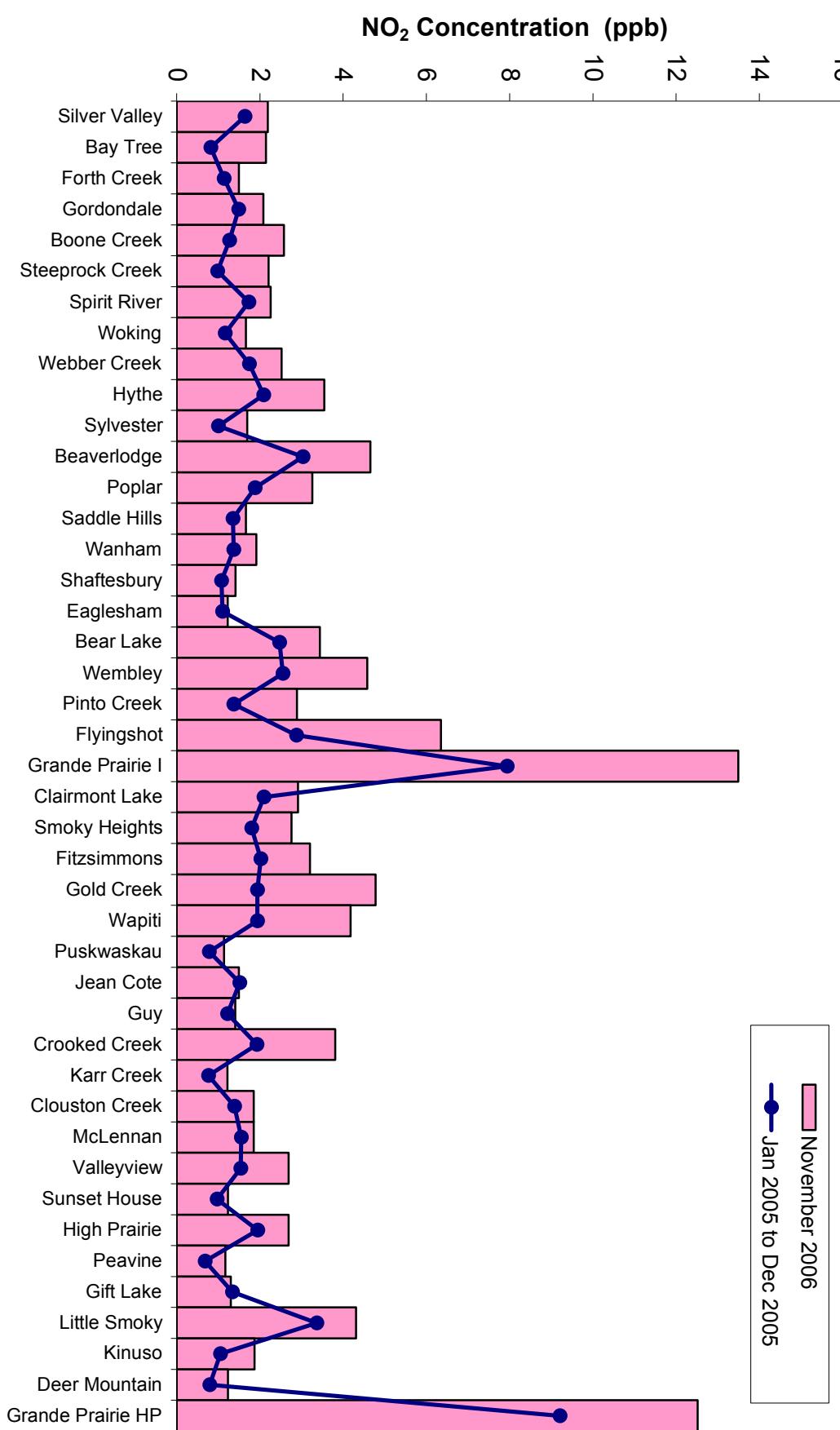
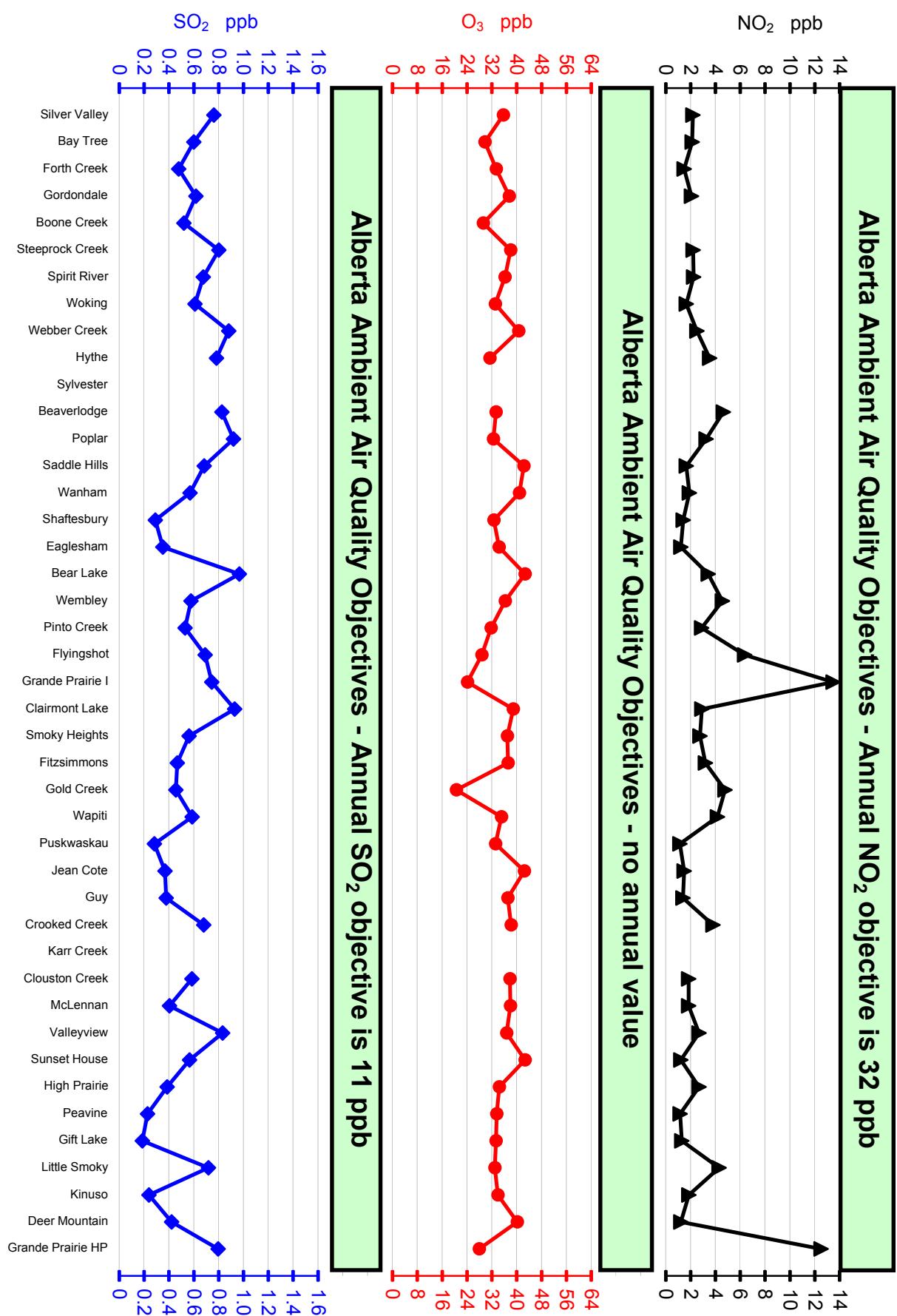


Figure 65. NO<sub>2</sub> Bubble Chart



**Figure 66. NO<sub>2</sub> Summary Chart**



**Figure 67. Overview Summary**

## **November 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,**

**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 (Portable) Station with the following calibrations:**

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

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

**SO<sub>2</sub>, H<sub>2</sub>S**

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

Calibration Date	November 6, 2006	Previous Calibration	October 5, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	12:51	End Time (MST)	16:40
Barometric Pressure	27.3 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	0.928684	Perm-tube Cert #	19-25218
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	4
	<u>Before</u>		<u>After</u>
Calculated slope	0.969066	Calculated slope	0.983175
Calculated intercept	-0.374166	Calculated intercept	2.127025
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195
Concentration range	before	after	
	0 - 500	ppb	0 - 500
	170		180
	233		001
	947	v	950
	22.2	" Hg	22
Sample Flow	425	ccm	425

**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	2321.7	0.0	-0.6	N/A
2500	2321.7	319.9	323.9	0.9878
5000	4643.4	160.0	160.4	0.9975
9000	8358.2	88.9	86.2	1.0315
zero	2321.7	0.0	1.9	As Found Zero
2500	2321.7	319.9	343.2	As Found Span
Average Correction Factor				1.0056

Calculated value of As Found Response: 330.365 ppm      Percent Change of As Found: -3.3%

Auto zero	before calibration		after calibration	
	-0.7	ppm	0.5	ppm
	276.3	ppm	270.4	ppm

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

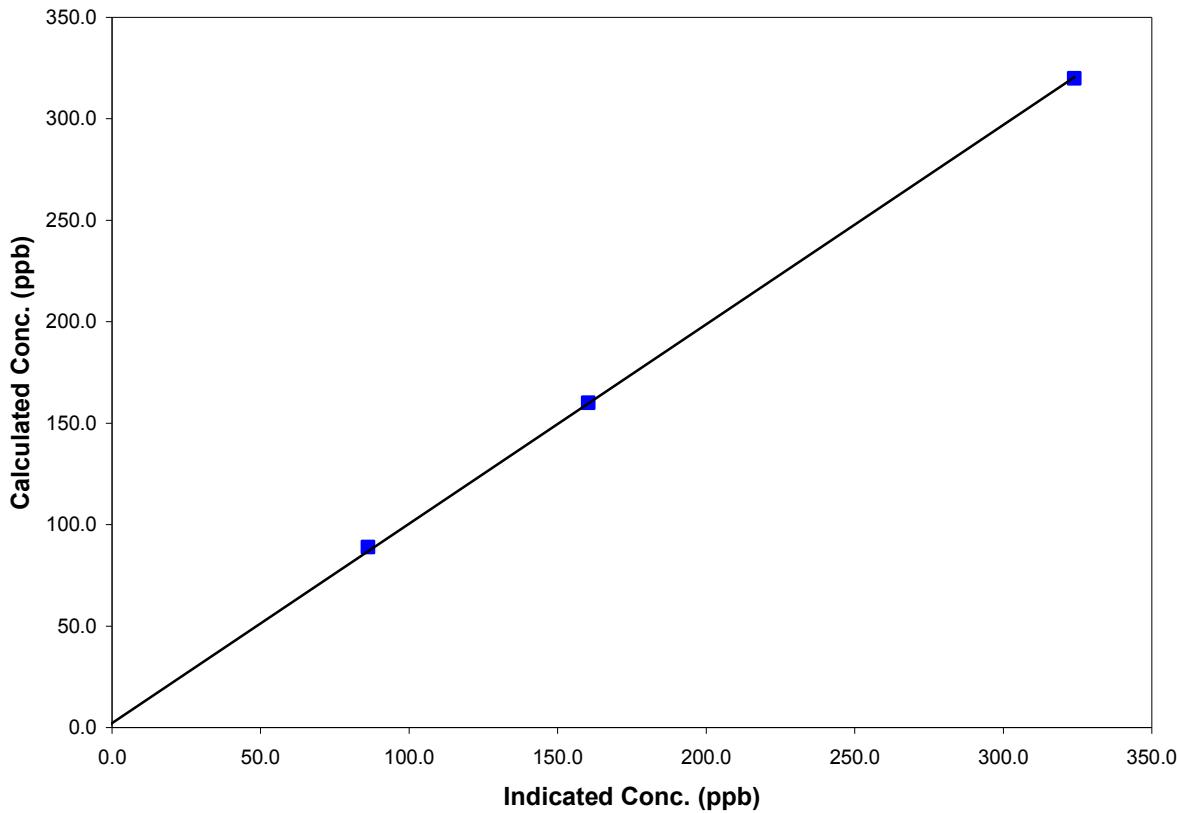
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

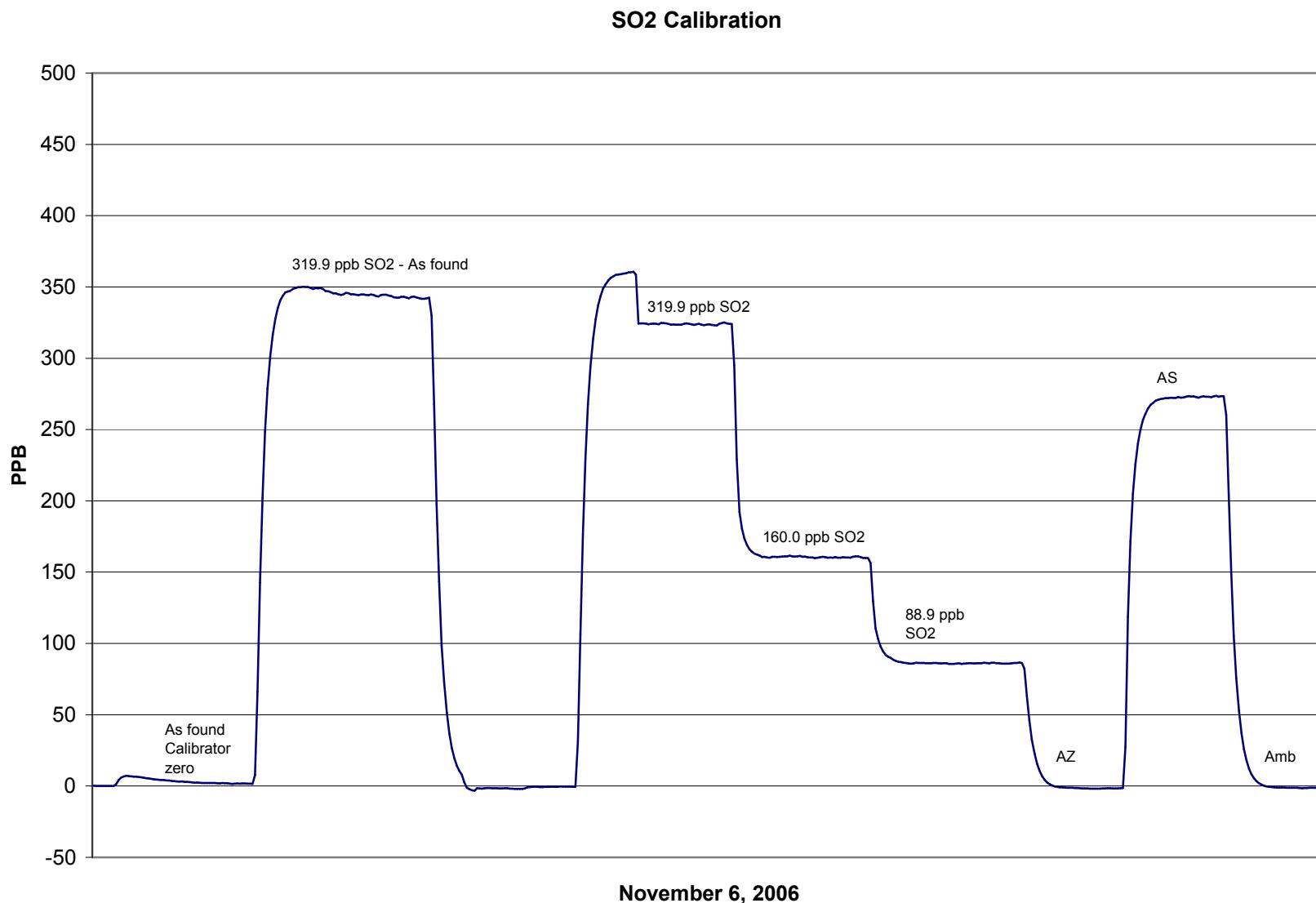
**Station Information**

Calibration Date	November 6, 2006	Previous Calibration	October 5, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:51	End Time (MST)	16:40
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	-0.6	N/A		
319.9	323.9	0.9878	Correlation Coefficient	0.999871
160.0	160.4	0.9975	Slope	0.983175
88.9	86.2	1.0315	Intercept	2.127025

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



# Calibration Report

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



## Station Information

Calibration Date	November 7, 2006			Previous Calibration	October 24, 2006	
Station Number	1			Station Location	Muskoosepi Park	
Reason:	Routine			Other:		
Start Time (MST)	10:32			End Time (MST)	16:44	
Barometric Pressure	0.902	Atm		Station Temperature	20.0	Deg C
Calibrator	Environics 6103			Serial Number	2844	
NO Cal Gas Conc	50.3	ppm		Cal Gas Expiry Date	22-Nov-06	
NOx Cal Gas Conc	50.5	ppm		Cal Gas Serial #	BAL786	

## DACS Information

DACS make	FOCUS AP1000			DACS serial No.	45269	
Parameter	NO2	NOx	NO			
Before	Data Slope	1.000846	0.999882	0.997306		
	Data Offset	0.328645	2.203904	1.928013		
After	Data Slope	0.999173	1.000796	1.001160		
	Data Offset	-0.232501	-0.097040	0.193158		
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	9.4	ppb	8.1	mV
NOx background	10.9	ppb	8.2	mV
NO coefficient	0.874		0.775	
NOx coefficient	0.981		0.983	
Chamber Temp	50.0	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	194.5	mm Hg	176.2	mm Hg

Notes: Adjusted zero and span.

## Calibration Report

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



### Station Information

Calibration Date: November 7, 2006 Station Location: Muskoseepi Park

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4992	0.00	0.0	0.0	0.0	0.1	0.0	0.0	N/A	N/A
1	4992	39.93	400.7	399.1	1.6	400.2	398.3	1.9	1.0013	1.0021
2	4992	19.91	200.6	199.8	0.8	201.4	200.1	1.3	0.9963	0.9988
3	4992	10.00	101.0	100.6	0.4	100.5	99.6	0.9	1.0048	1.0098
AFZ	4992	0.00	0.0	0.0	0.0	-1.5	-0.5	-1.0	0.0000	0.0000
AFS	4992	39.93	400.7	399.1	1.6	449.7	450.2	-0.6	0.8911	0.8867
							Average Correction Factor	1.0008	1.0035	

As Found Concentrations: NO<sub>x</sub>= 453.4 NO= 452.6 As Found Percent Change NO<sub>x</sub>= 13.1% NO= 13.4%

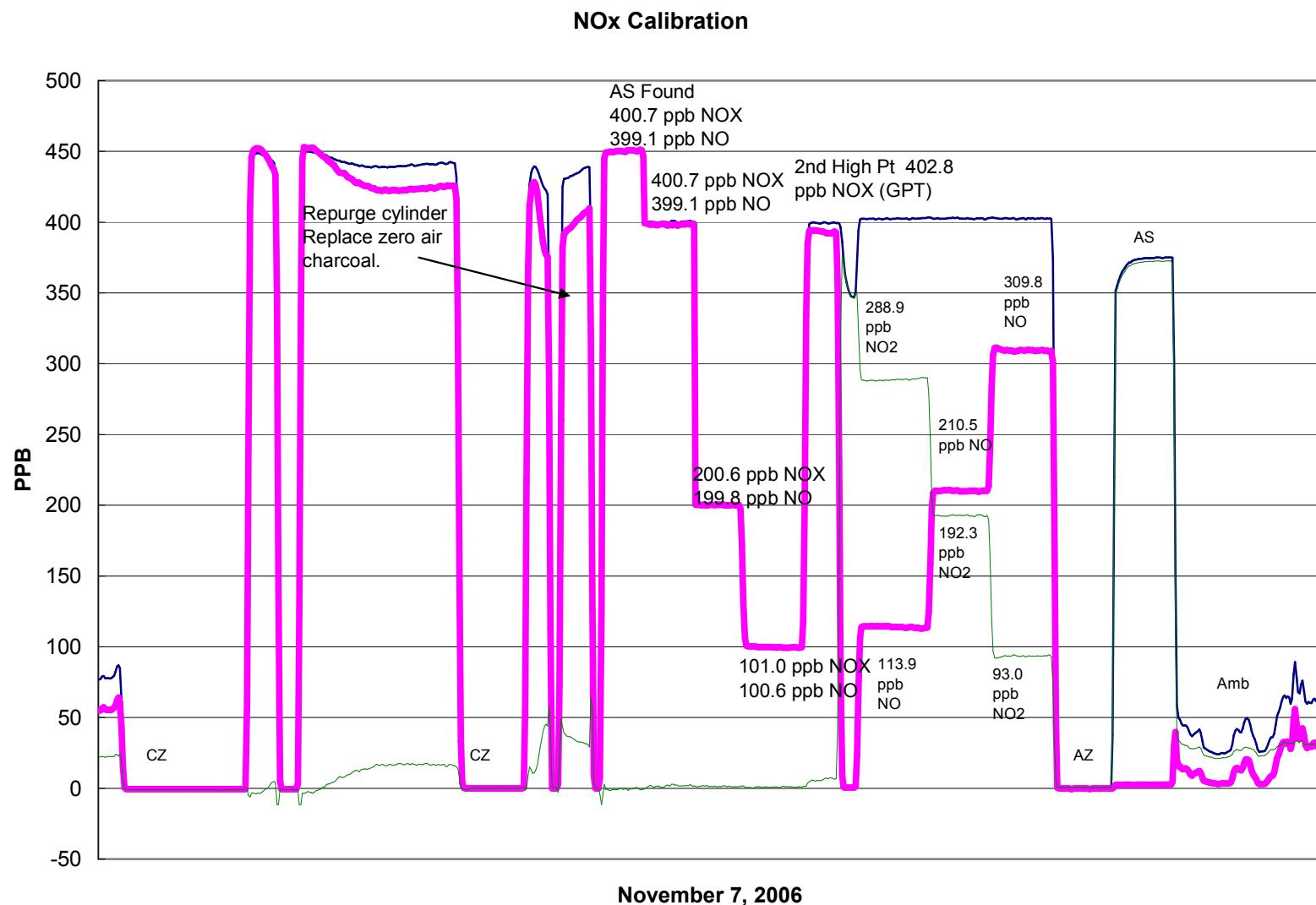
### GPT Calibration Data

Dilution Flow	4993	ccm	Source Gas Flow	39.97	ccm					
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	402.8	393.9	8.9	399.5	393.2	6.2	1.0082	1.0017	N/A	N/A
350	402.8	113.9	288.9	402.6	113.5	289.3	1.0005	1.0029	0.9988	100.1%
200	402.8	210.5	192.3	402.6	210.1	192.7	1.0005	1.0021	0.9976	100.2%
100	402.8	309.8	93.0	402.5	309.2	93.6	1.0006	1.0018	0.9939	100.6%
						Average Correction Factor	1.0006	1.0022	0.9968	100.3%

### AIC Data

Parameter	Previous calibration				Current calibration				
	NOx	NO2	NO	ppb	NOx	NO2	NO	ppb	
Auto zero	4.2	1.5	1.0	ppb	1.2	1.2	0.8	ppb	
Auto span	350.9	347.0	4.4	ppb	375.0	371.8	2.7	ppb	

Calibration Performed By: Dawn Ewan



**Calibration Summary**

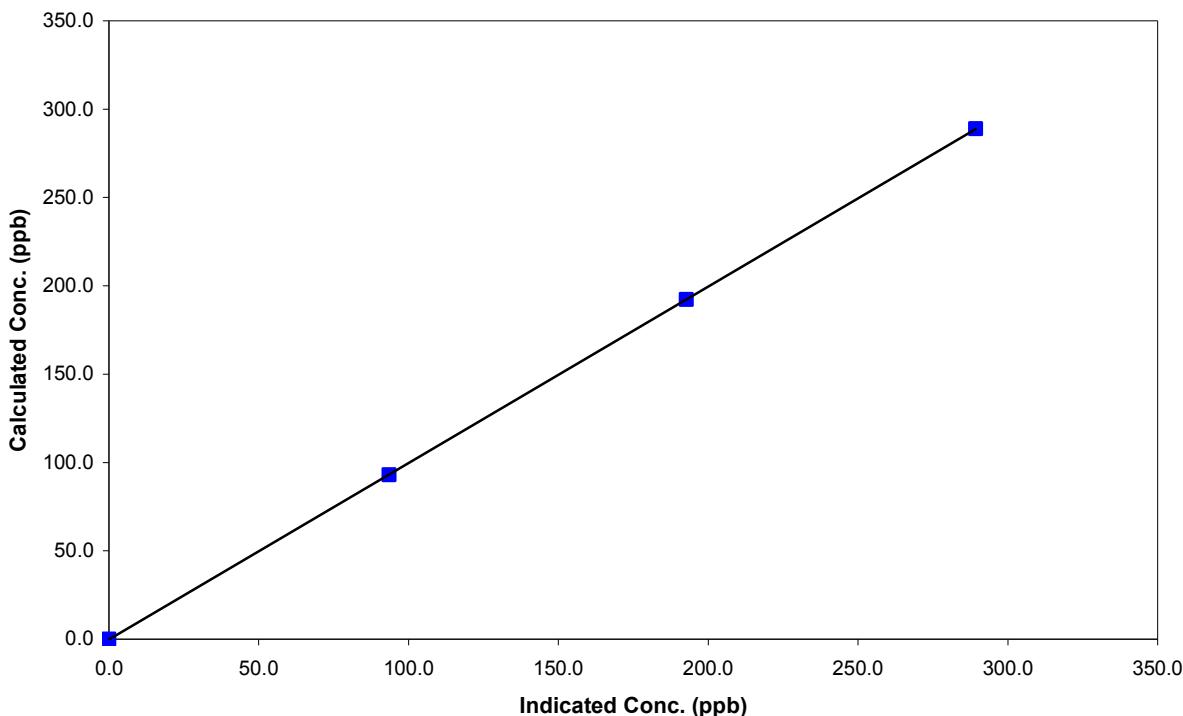
Parameter **NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	November 7, 2006	Previous Calibration	October 24, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:32	End Time (MST)	16:44
Analyzer make	Teco 42C	Analyzer serial #	508011073

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	0.0000	Correlation Coefficient	0.999997
288.9	289.3	0.9988		
192.3	192.7	0.9976		
93.0	93.6	0.9939		
			Slope	0.999173
			Intercept	-0.232501

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

**Calibration Summary**

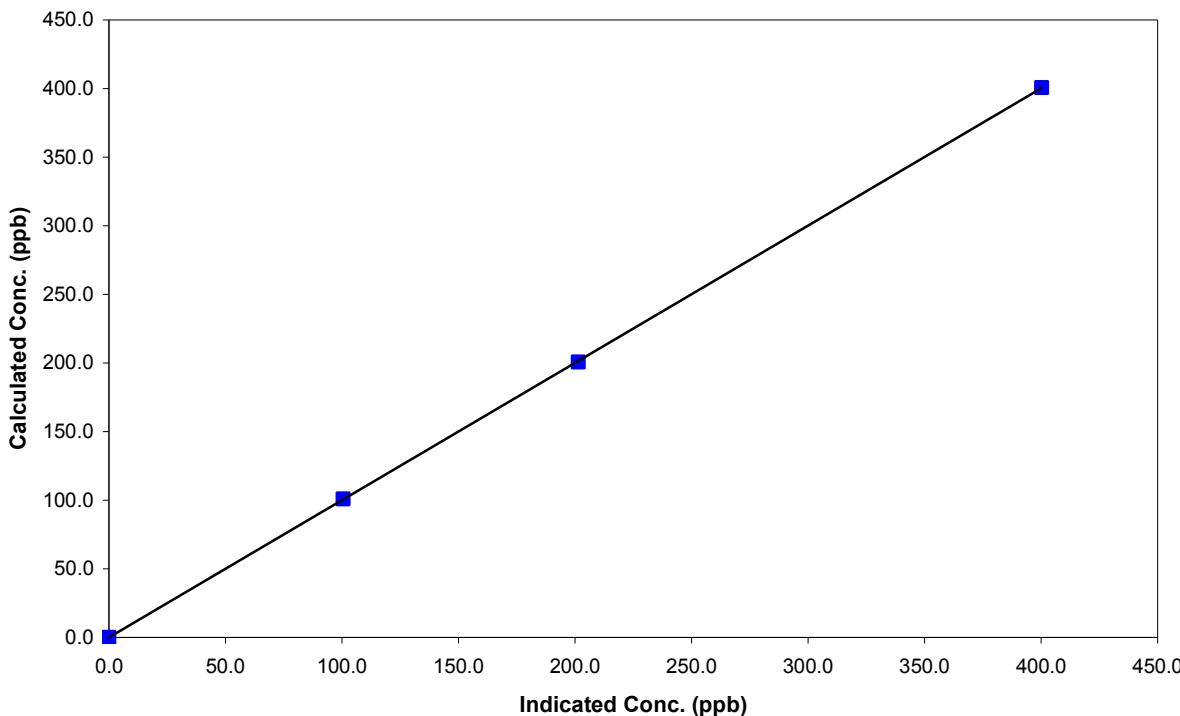
Parameter **NO<sub>x</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	November 7, 2006	Previous Calibration	October 24, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:32	End Time (MST)	16:44
Analyzer make	Teco 42C	Analyzer serial #	508011073

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	0.0000	Correlation Coefficient	0.999989
400.7	400.2	1.0013		
200.6	201.4	0.9963		
101.0	100.5	1.0048		
			Slope	1.000796
			Intercept	-0.097040

**NOx Calibration Curve**

**Calibration Summary**

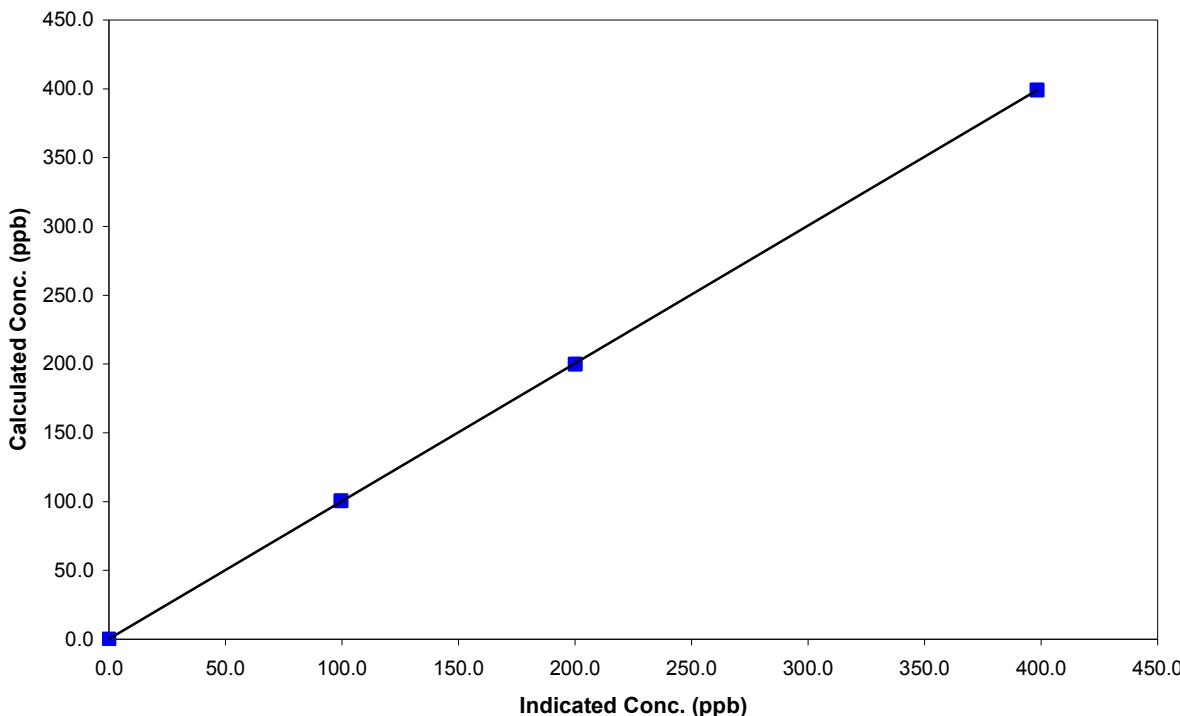
Parameter **NO**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	November 7, 2006	Previous Calibration	October 24, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:32	End Time (MST)	16:44
Analyzer make	Teco 42C	Analyzer serial #	508011073

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999989
399.1	398.3	1.0021		
199.8	200.1	0.9988		
100.6	99.6	1.0098		
			Slope	1.001160
			Intercept	0.193158

**NO Calibration Curve**

**Calibration Report**

Parameter O3  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	November 13, 2006	Previous Calibration	October 26, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
Start Time (MST)	10:57	End Time (MST)	15:13
Barometric Pressure	0.919 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	0.996937	Calculated slope	0.991201
Calculated intercept	1.220767	Calculated intercept	1.550260
Analyzer make	API Model 400	Analyzer serial #	383
Concentration range offset slope Lamp measure Lamp Reference Pressure Sample Flow ANA Lamp temp	before	after	
	0 - 500	ppb	0 - 500 ppb
	-0.9	ppb	-0.9 ppb
	1.083		1.083
	3675	mV	3649 mV
	3675	mV	3650 mV
	27.5	inches Hg	27.3 inches Hg
	670	ccm	675 ccm
	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	0.4	N/A
4992	0.00	288.9	290.8	0.9935
4992	0.00	192.3	192.4	0.9994
4992	0.00	93.0	89.5	1.0396
4992	0.00	0.0	1.1	As found zero
4992	0.00	288.9	287.2	As found span
Average Correction Factor				1.0108

Calculated value of As Found Response: 286.5 ppm Percent Change of As Found: -0.8%

Auto zero Auto span	before calibration		after calibration	
	1.7	ppb	2.2	ppb
	220.2	ppb	255.9	ppb

Notes:

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Calibration Performed By: Dawn Ewan

**Calibration Summary**

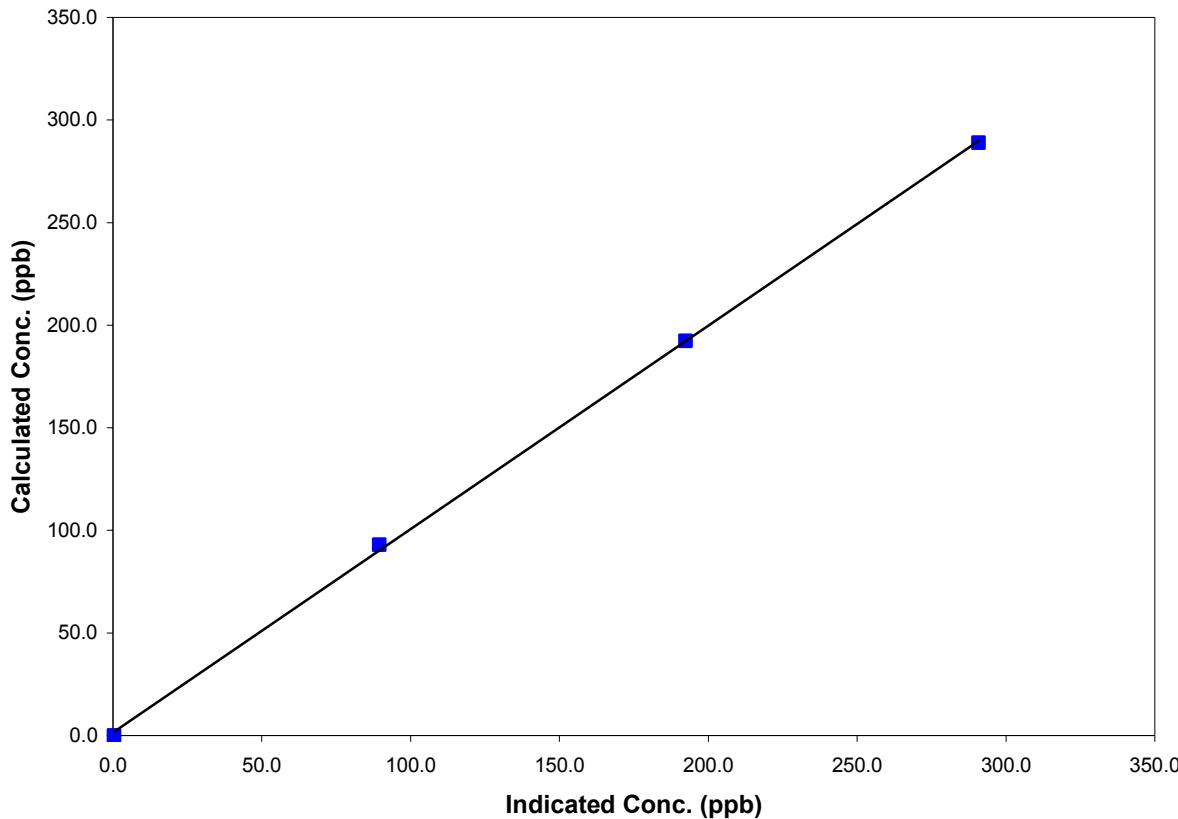
Parameter O3  
 Air Monitoring Network PASZA

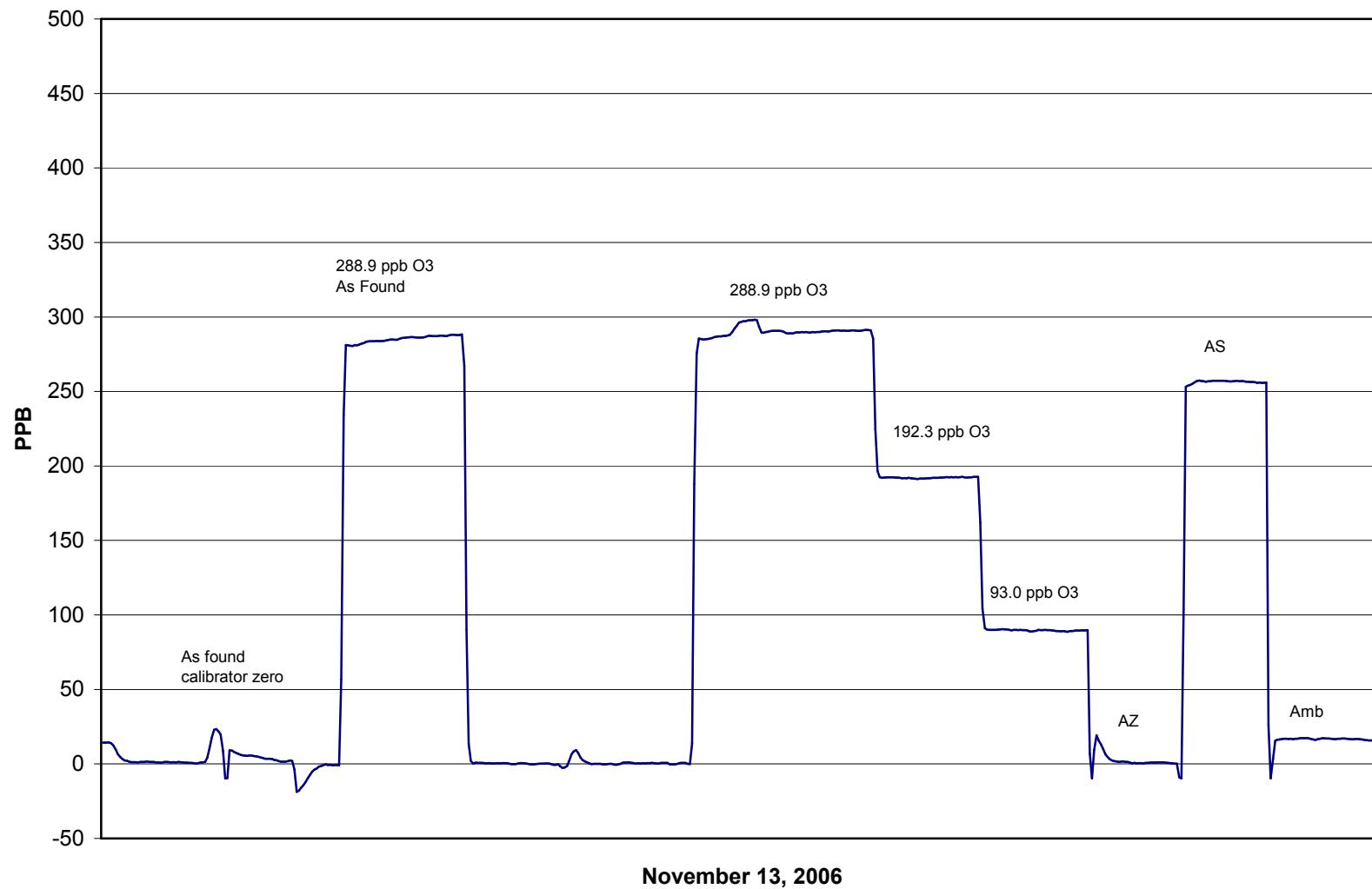
**Station Information**

Calibration Date	November 13, 2006	Previous Calibration	October 26, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:57	End Time (MST)	15:13
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	0.4	NA		
288.9	290.8	0.9935	Correlation Coefficient	0.999738
192.3	192.4	0.9994	Slope	0.991201
93.0	89.5	1.0396	Intercept	1.550260

**O3 Calibration Curve**

**O3 Calibration**

**Calibration Report**

Parameter CO  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	November 6, 2006	Previous Calibration	October 5, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	13:31	End Time (MST)	16:56
Barometric Pressure	0.913 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2488
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
DACS make	Focus AP1000	Cal Gas Cylinder #	AAL20565
DACS voltage range	0 - 1 volt	DACS serial No.	1
	Before	DACS channel #	9
			After
Calculated slope	1.003034	Calculated slope	1.002887
Calculated intercept	-0.009012	Calculated intercept	-0.005864
Analyzer make	TEI Model 48C	Analyzer serial #	508011062
Concentration range	before	after	
CO span setting	0 - 25 ppm	0 - 25 ppm	
CO zero setting	1.053	1.053	
Sample pressure	6.987	7.569	
Sample Flow	685.9 mm Hg	663.4 mm Hg	
	1.084 LPM	1.059 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	0.00	N/A
4994	39.94	23.80	23.78	1.0010
4994	19.91	11.91	11.76	1.0128
4994	9.50	5.70	5.77	0.9868
4994	0.00	0.00	0.45	As Found Zero
4994	39.94	23.80	24.63	As Found Span
Average Correction Factor				1.0002

Calculated value of As Found Response: 24.245 ppm Percent Change of As Found: -1.9%

Auto zero Auto span	before calibration		after calibration	
	0.16	ppm	0.03	ppm
	21.19	ppm	20.99	ppm

Notes: Adjusted zero.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

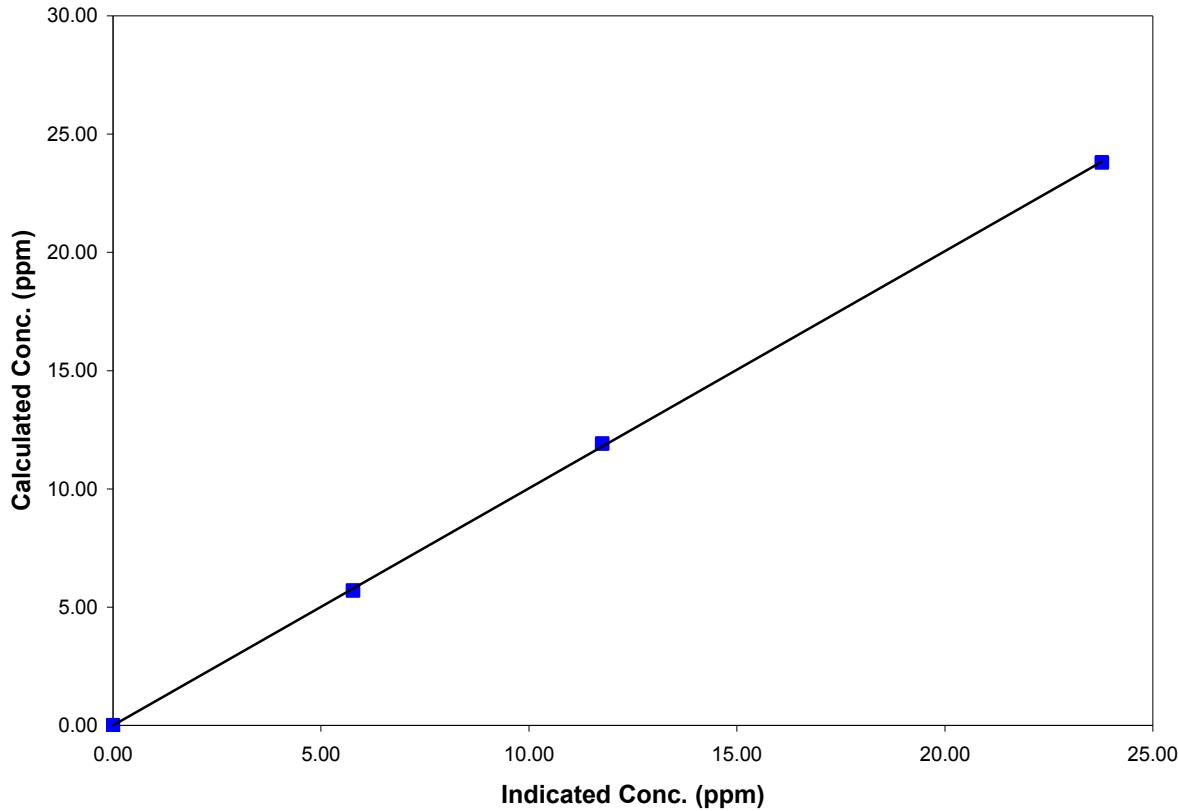
Parameter CO  
 Air Monitoring Network PASZA

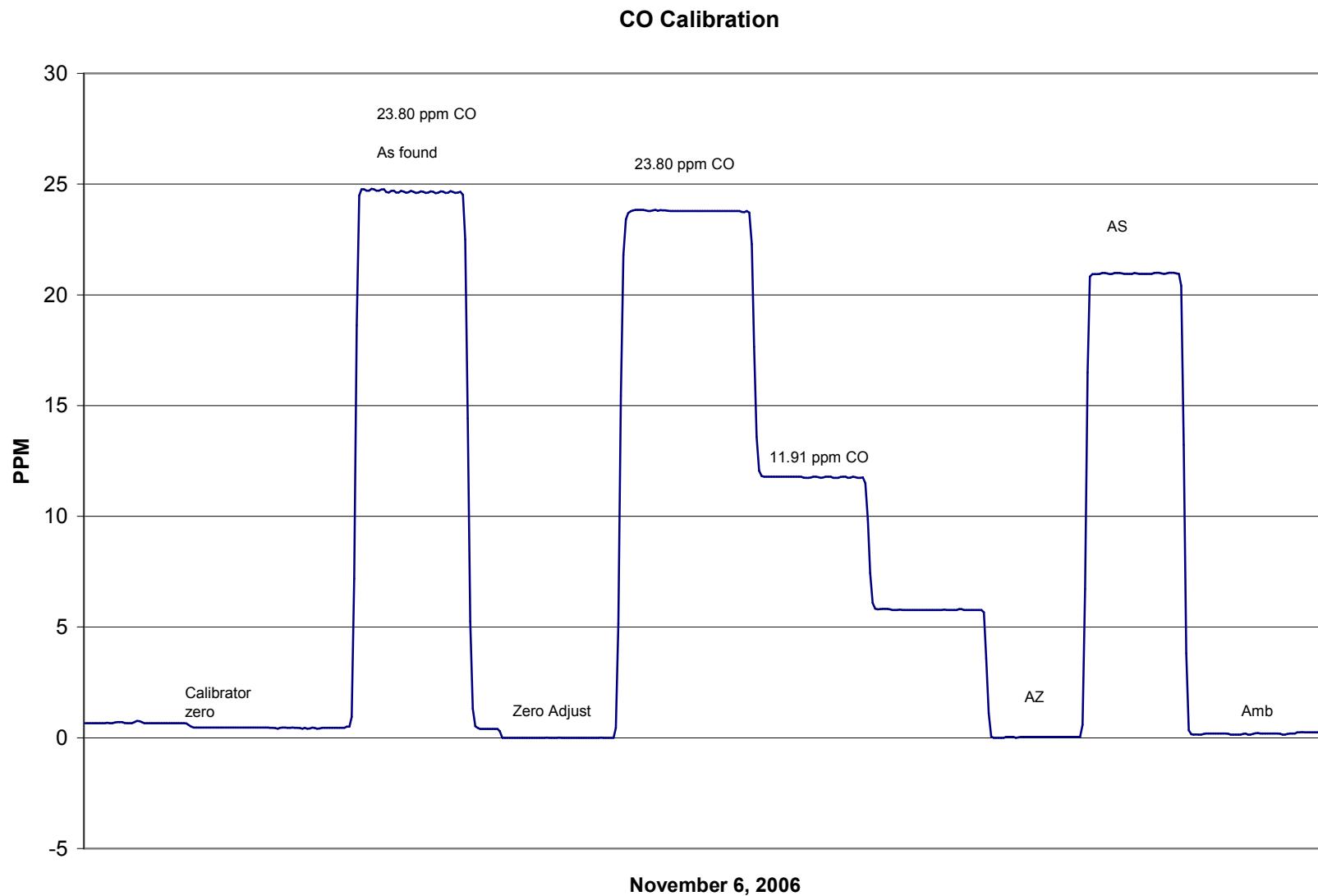
**Station Information**

Calibration Date	November 6, 2006	Previous Calibration	October 5, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	13:31	End Time (MST)	16:56
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	0.002	N/A		
23.802	23.779	1.0010	Correlation Coefficient	0.999923
11.913	11.762	1.0128	Slope	1.002887
5.696	5.772	0.9868	Intercept	-0.005864

**CO Calibration Curve**



**Calibration Report**

Parameter THC  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	November 6, 2006	Previous Calibration	October 26, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	11:11	End Time (MST)	14:12
Barometric Pressure	0.919	ATM	20.0
Calibrator	Environics 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 #
DACS make	Focus AP1000	DACS serial No.	ALM 030358
DACS voltage range	0 - 1 volt	DACS channel #	1
	<u>Before</u>		<u>After</u>
Calculated slope	0.997997	Calculated slope	1.000499
Calculated intercept	0.169557	Calculated intercept	0.057916
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390
Concentration range	before	after	
THC sample pressure	0 - 25	ppm	0 - 25
THC span counts	6.1	psi	6.1
THC zero counts	6874	capture	6874
	1268	capture	1002

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.00	-0.01	N/A
4992	64.92	19.54	19.51	1.0018
4992	34.95	10.58	10.47	1.0109
4993	9.92	3.02	2.93	1.0294
4992	0.00	0.00	-0.92	As Found Zero
4992	64.92	19.54	19.49	As Found Span
Average Correction Factor				1.0141

Calculated value of As Found Response: 20.542 ppm      Percent Change of As Found: -5.1%

Auto zero	before calibration		after calibration	
	0.13	ppm	0.02	ppm
	22.08	ppm	22.25	ppm

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

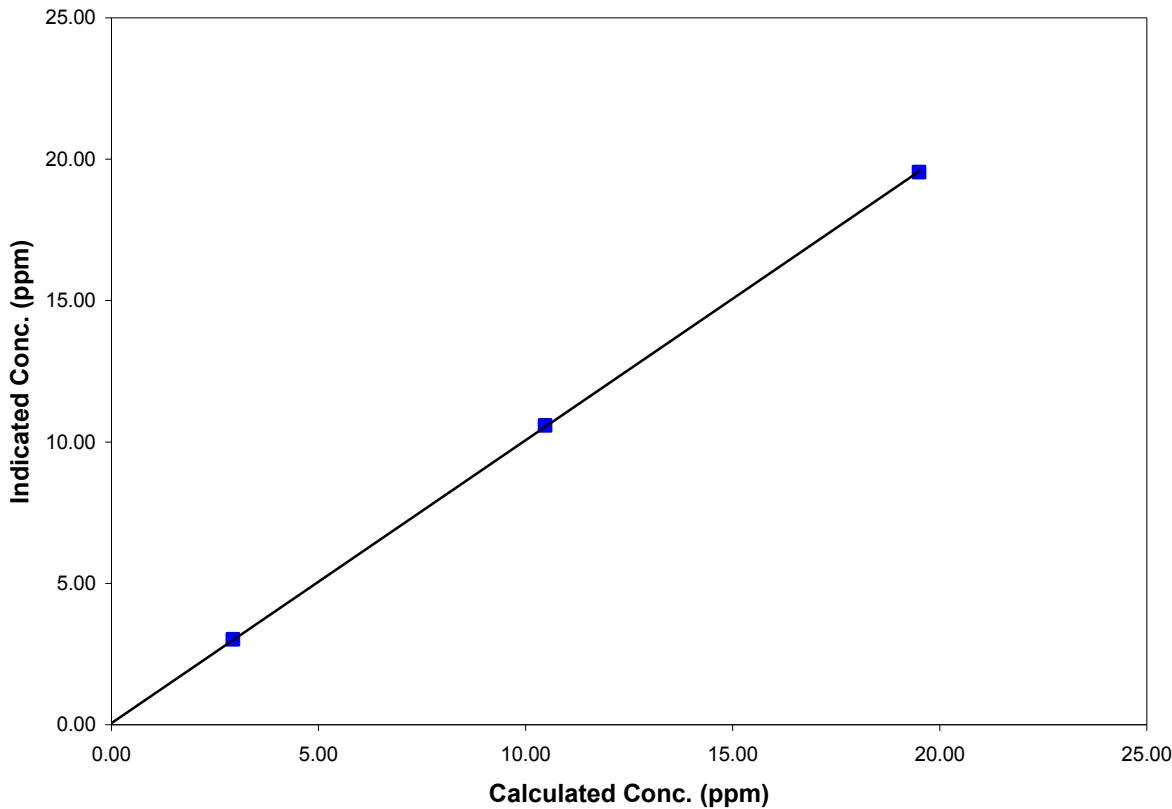
Parameter THC  
 Air Monitoring Network PASZA

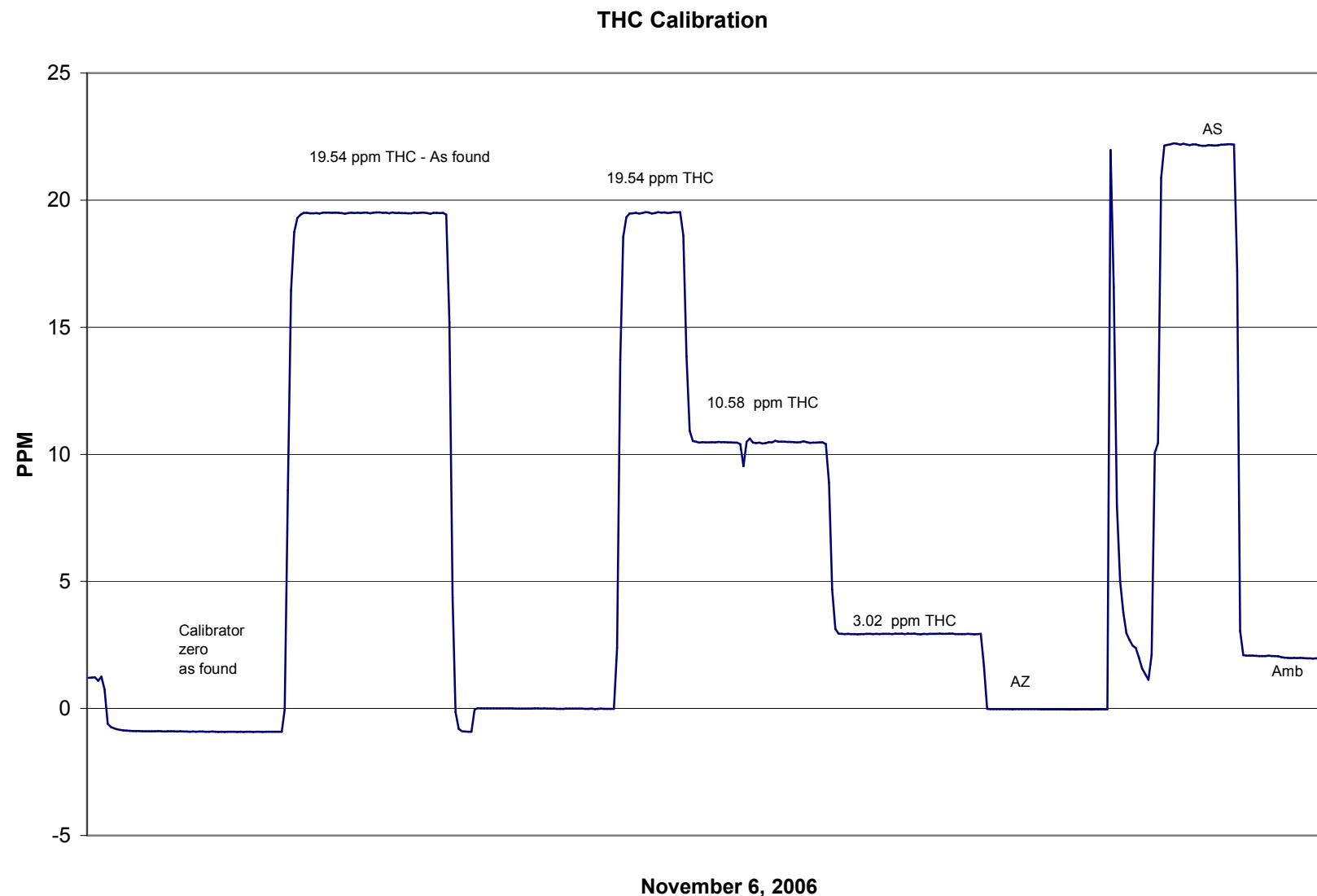
**Station Information**

Calibration Date	November 6, 2006	Previous Calibration	October 26, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	11:11	End Time (MST)	14:12
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

**Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.011	N/A		
19.542	19.505	1.0018	Correlation Coefficient	0.999971
10.583	10.469	1.0109	Slope	1.000499
3.018	2.932	1.0294	Intercept	0.057916

**THC Calibration Curve**



**Calibration Report**

Parameter

TRS

Air Monitoring Network

PASZA**Station Information**

Calibration Date	November 6, 2006	Previous Calibration	October 5, 2006
Station Number	1	Station Location	Muskoseipi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	12:51	End Time (MST)	16:40
Barometric Pressure	27.3 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	235 ng/min	Perm-tube Date	8/8/2006
Correction factor	0.928684	Perm-tube Cert #	T-25214
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.959413	Calculated slope	0.983300
Calculated intercept	0.186655	Calculated intercept	0.735313
Analyzer make	TEI Model 43C	Analyzer serial #	31990000000491
before			
Concentration range	0 - 100 ppb	0 - 100 ppb	
Background coefficient	26.6 ppb	28.6 ppb	
Lamp Voltage	1.182	1.182	
Chamber Temp	900 volts	905 volts	
Perm Gas Temp	44.6 Deg C	45 Deg C	
Pressure	45 Deg C	45 Deg C	
Sample Flow	686.8 mm Hg	628.9 mm Hg	
Lamp Intensity	550 ccm	607 ccm	
	39,100 mv	38,900 mv	

**Calibration Data**

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	2321.7	0.0	-0.1	N/A
2500	2321.7	72.8	73.6	0.9891
5000	4643.4	36.4	36.0	1.0102
9000	8358.2	20.2	19.1	1.0604
zero	2321.7	0.0	0.1	As Found Zero
2500	2321.7	72.8	69.2	As Found Span
Average Correction Factor				1.0199

Calculated value of As Found Response:

66.42 ppm

Percent Change of As Found: 8.7%

Auto zero	before calibration		after calibration	
	0.3 ppm	ppm	0.6 ppm	ppm
	69.7 ppm	ppm	67.0 ppm	ppm

Notes:

Calibration Performed By: Dawn Ewan

**Calibration Summary**

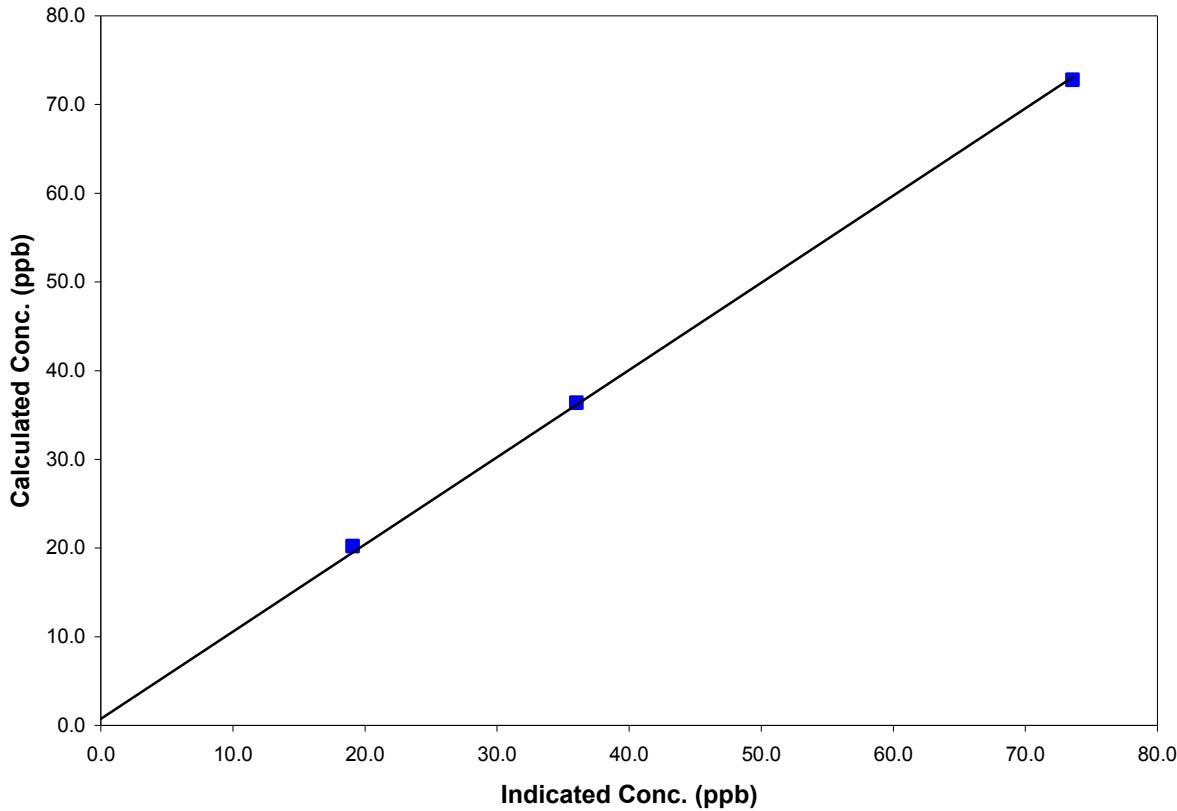
Parameter TRS  
 Air Monitoring Network PASZA

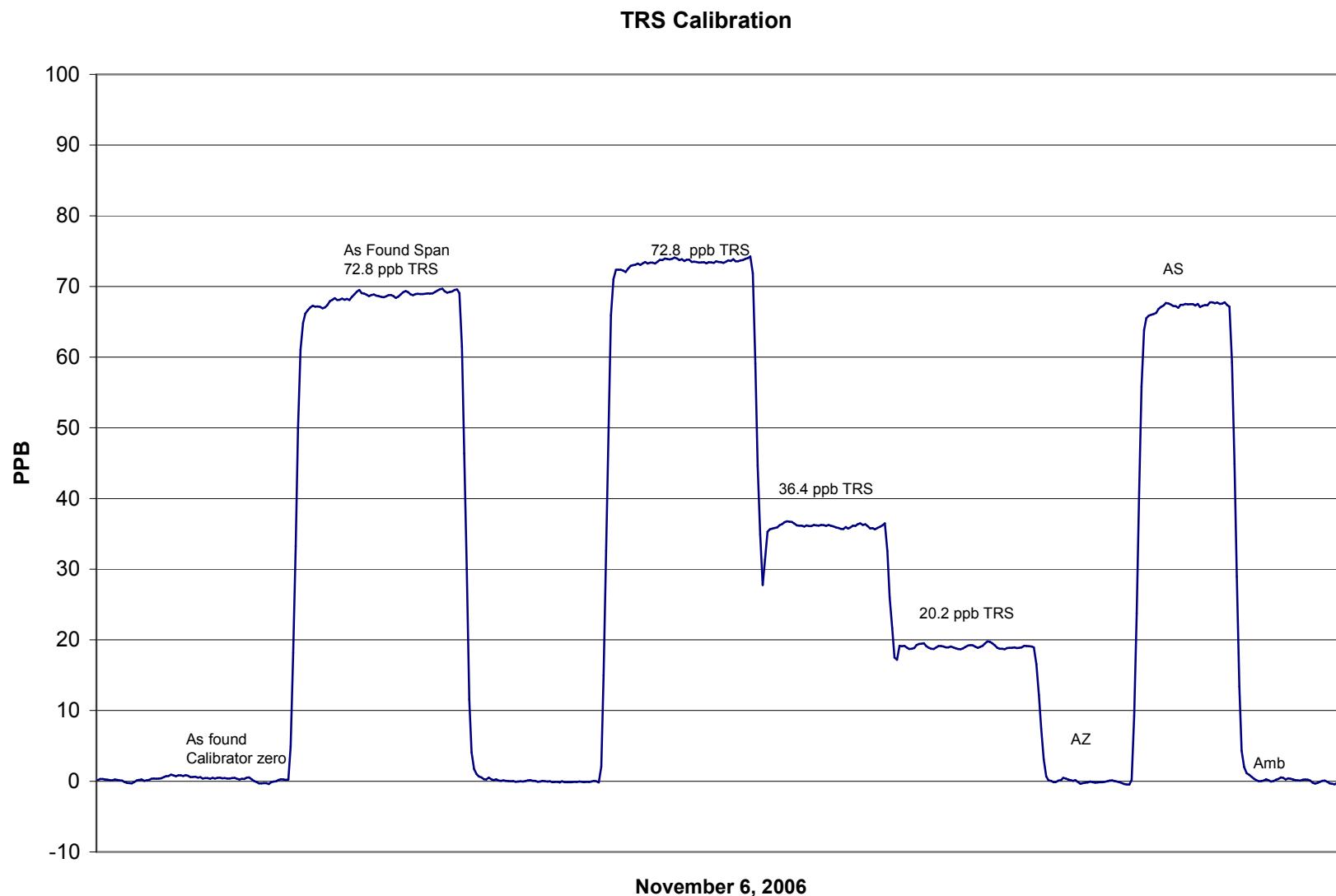
**Station Information**

Calibration Date	November 6, 2006	Previous Calibration	October 5, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:51	End Time (MST)	16:40
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999603
72.8	73.6	0.9891		
36.4	36.0	1.0102		
20.2	19.1	1.0604		
			Slope	0.983300
			Intercept	0.735313

**TRS Calibration Curve**



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

Calibration Date	November 2, 2006	Previous Calibration	October 17, 2006	
Station Number	2	Station Location	Evergreen Park	
Reason:	Routine	Install	Removal	
Other:				
Start Time (MST)	11:25	End Time (MST)	14:48	
Barometric Pressure	28.0 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	0.950099	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	1.025246	Calculated slope	0.951615	
Calculated intercept	-2.072921	Calculated intercept	0.600471	
Analyzer make	TECO	Analyzer serial #	43A-25573-221	
Concentration range	before		after	
	1000	ppb	1000	ppb
	475	ccm	475	ccm
	801	mv	830	mv
	22	" Hg	22	" Hg
	535		685	
	90		90	

**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	2534.9	0.0	0.5	N/A
2668	2534.9	293.0	308.9	0.9487
4860	4617.5	160.9	165.0	0.9747
8180	7771.8	95.6	100.5	0.9511
zero	2375.2	0.0	0.5	As Found Zero
2500	2375.2	312.7	334.0	As Found Span
Average Correction Factor				0.9582

Calculated value of As Found Response: 339.868 ppm      Percent Change of As Found: -8.7%

Auto zero	before calibration		after calibration	
	-0.3	ppm	0.9	ppm
	144.5	ppm	160.4	ppm

Notes:

Calibration Performed By: Dawn Ewan

**Calibration Summary**

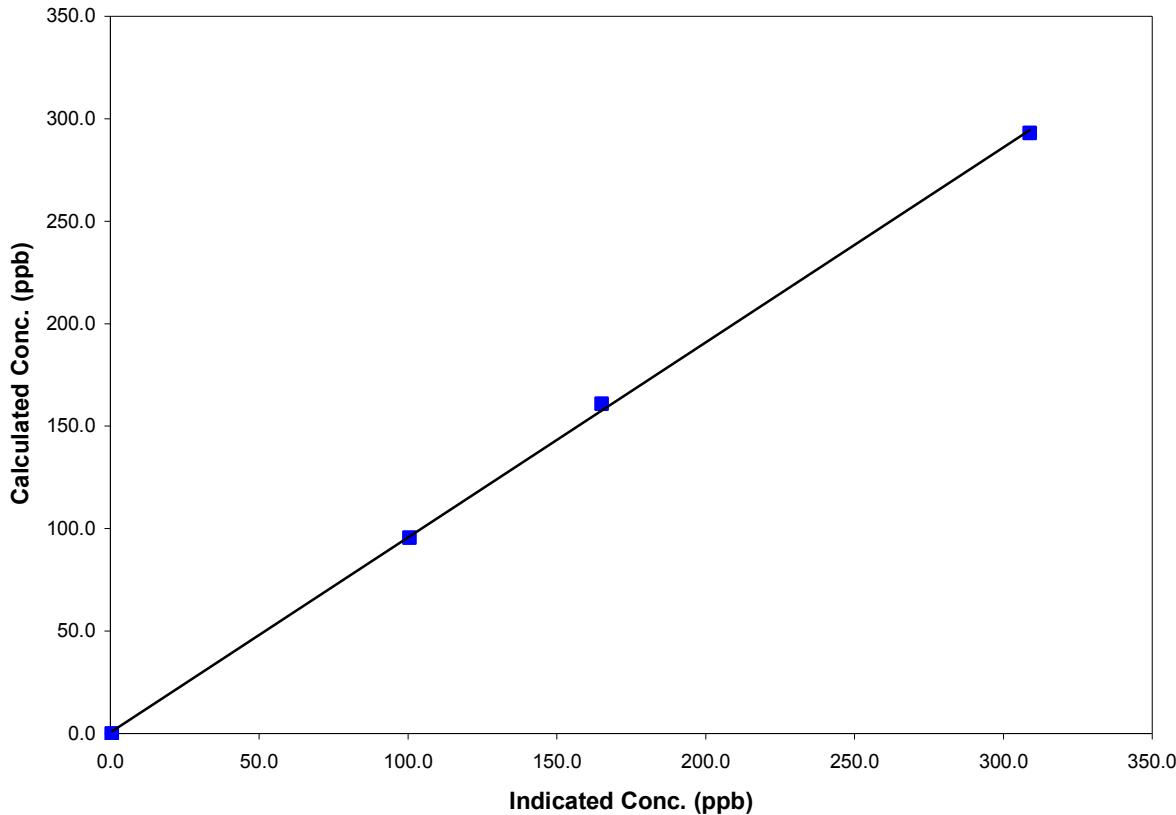
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

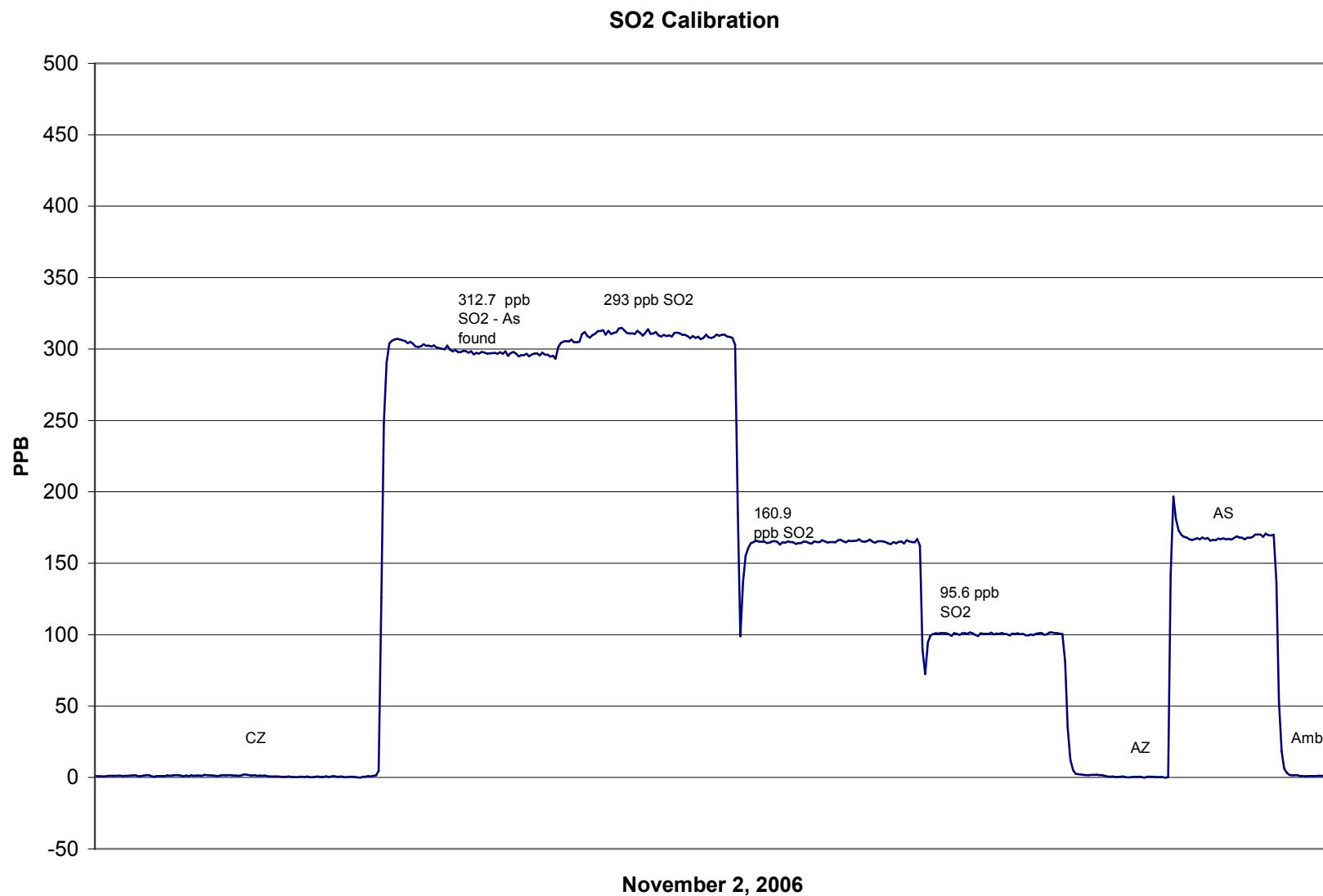
**Station Information**

Calibration Date	November 2, 2006	Previous Calibration	October 17, 2006
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	11:25	End Time (MST)	14:48
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	Correlation Coefficient	0.999689
293.0	308.9	0.9487		
160.9	165.0	0.9747		
95.6	100.5	0.9511		
			Slope	0.951615
			Intercept	0.600471

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



**Calibration Report**

Parameter

TRS

Air Monitoring Network

PASZA**Station Information**

Calibration Date	November 2, 2006	Previous Calibration	October 17, 2006
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	11:25	End Time (MST)	14:48
Barometric Pressure	27.95 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	235 ng/min	Perm-tube Expiry Date	8/8/2006
Correction factor	0.950099	Perm-tube Cert #	T-25214
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.997828	Calculated slope	0.924511
Calculated intercept	0.219891	Calculated intercept	0.338988

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005	
before		after		
Concentration range	100	ppb	100	ppb
Background	17.3	ppb	17.3	ppb
coefficient	1.033		1.033	
Lamp Voltage	819	volts	824	volts
Chamber Temp	44.2	Deg C	44.2	Deg C
Perm Gas Temp	44.99	Deg C	45	Deg C
Pressure	639.4	mm Hg	640.7	mm Hg
Sample Flow	471	ccm	472	ccm
Lamp Intensity	49,000	mv	49,000	mv

**Calibration Data**

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	2534.9	0.0	0.2	N/A
2668	2534.9	66.7	72.3	0.9220
4860	4617.5	36.6	38.2	0.9573
8180	7771.8	21.7	23.0	0.9448
zero	2375.2	0.0	0.2	As Found Zero
2500	2375.2	71.1	72.3	As Found Span
Average Correction Factor				0.9414

Calculated value of As Found Response: 72.17 ppm Percent Change of As Found: -1.4%

Auto zero	before calibration		after calibration	
	0.0	ppm	0.7	ppm
	99.8	ppm	78.5	ppm

Notes:

Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter TRS  
Air Monitoring Network

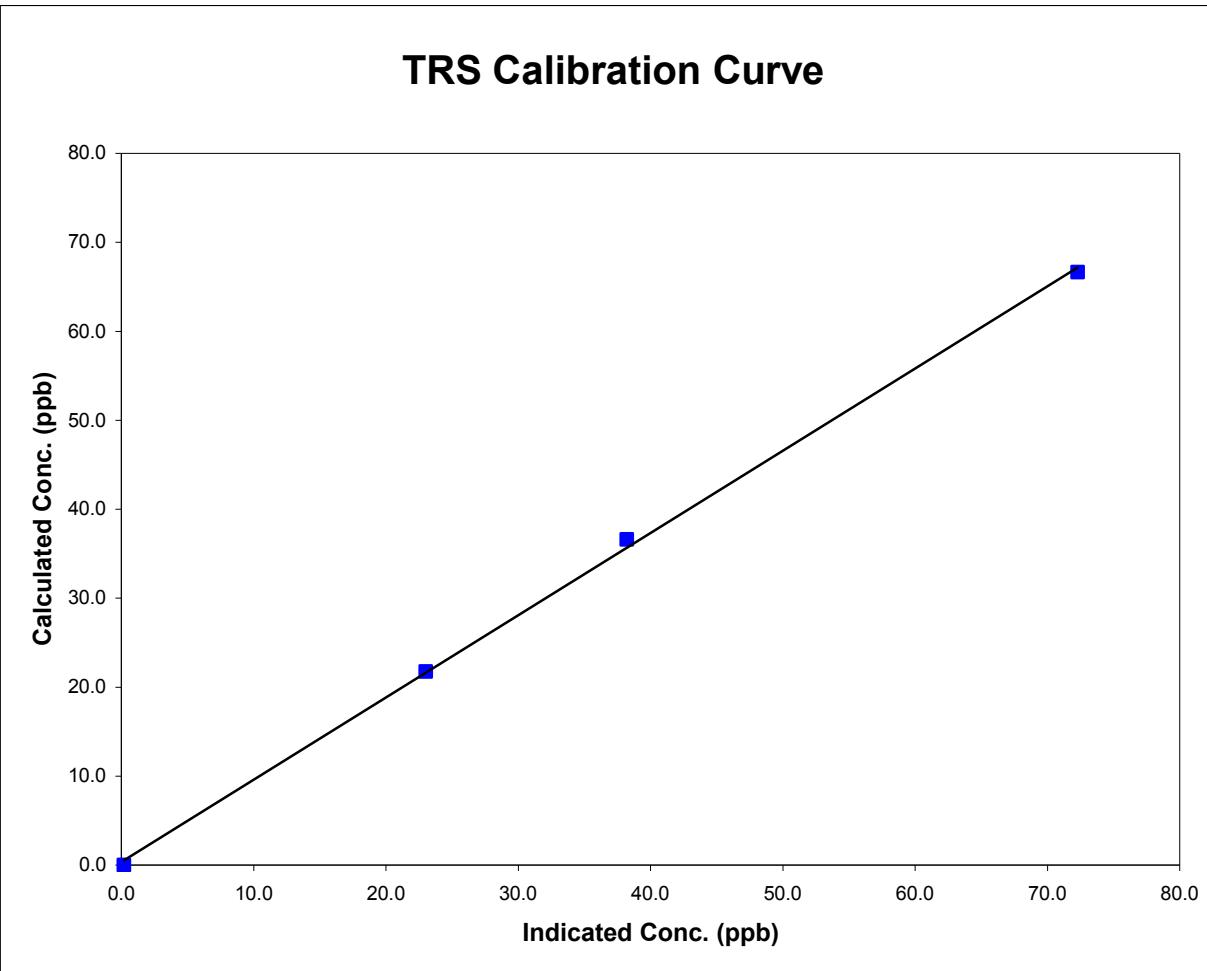


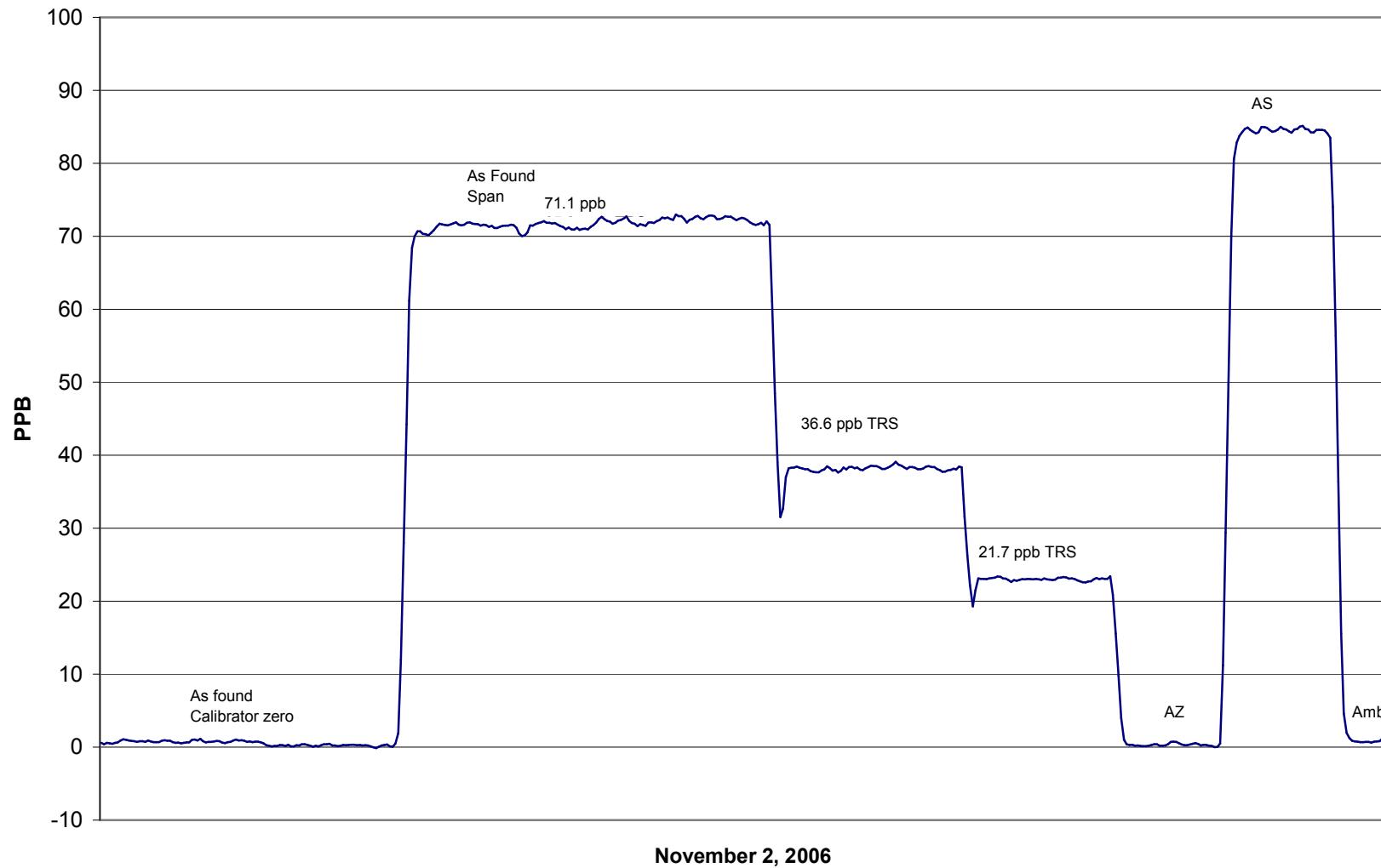
## **Station Information**

Calibration Date	November 2, 2006	Previous Calibration	October 17, 2006
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	11:25	End Time (MST)	14:48
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

## **Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
66.7	72.3	0.9220	Correlation Coefficient	0.999404
36.6	38.2	0.9573		
21.7	23.0	0.9448	Slope	0.924511
			Intercept	0.338988



**TRS Calibration**

**Calibration Report**

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

**Station Information**

Calibration Date	November 2, 2006	Previous Calibration	September 21, 2006
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	1:14	End Time (MST)	15:30
Barometric Pressure	0.934 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
	Before		After
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

**Analyzer Information**

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

	before		after	
	3.000	SLPM	3.000	SLPM
Main Flow Set Point	13.67	SLPM	13.67	SLPM
Aux Flow Set Point	22	%	22	%
Filter Load	10124		10124	
Ko Factor	7.4	Deg C	7.4	Deg C
Temperature	0.934	ATM	0.924	ATM

**Calibration Data**

Parameter	Set Point	As Found	Tolerance	TEOM Reading
zero flow - main	0.0	0.06		0.08
zero flow - auxillary	0.0	0.04		0.09
flow recovery - main	45 - 60 Seconds	35.0	45 - 60 Seconds	35.0
flow recovery - aux	46 - 60 Seconds	45.0	46 - 60 Seconds	45.0
Temperature	measured	-5.1	+/- 1.0 Deg C	-5.1
Pressure	measured	0.934	+/- 1.5% ΔATM	0.934
Total Flow	16.67 SLPM	17.10		
Main Flow	13.67 SLPM	14.80	+/- 1.0 SLPM	13.67
Auxillary Flow	3.0 SLPM	3.210	+/- 0.2 SLPM	3.000
Leak Check - main	0.0		<0.15 SLPM	0.08
Leak Check - aux	0.0		<0.15 SLPM	0.21
Ko Factor (w/o filter)	measured		filter weight (g)	0.11012
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: Adjusted flows on mass flow controllers. Aux flow slope at .960  
 Cleaned head.

Calibration Performed By: Dawn Ewan

**Calibration Report**

Parameter

SO<sub>2</sub>

Air Monitoring Network

PASZA**Station Information**

Calibration Date	November 29, 2006	Previous Calibration	October 23, 2006
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
Start Time (MST)	10:50	End Time (MST)	15:13
Barometric Pressure	27.74	inches Hg	20.0
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	1,946	ng/min	8/6/2006
Correction factor	0.942961	Perm-tube Cert #	19-25218
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
Calculated slope	0.995292	Calculated slope	0.981486
Calculated intercept	3.277126	Calculated intercept	4.143742
Analyzer make	API 102A	Analyzer serial #	212
Concentration range	before	after	
	500	ppb	500
	569	ccm	579
	3459	mv	3759
	100.5	%	109
	51.4	Deg C	51.4
	6.9	Deg C	6.9
	45	Deg C	45
	0.854		1.239
	27		39.1

**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	2357.4	0.0	-1.1	N/A
2500	2357.4	315.1	318.0	0.9907
5000	4714.8	157.5	155.8	1.0113
9000	8486.6	87.5	81.1	1.0787
zero	2357.4	0.0	1.5	As Found Zero
2500	2357.4	315.1	341.6	As Found Span
Average Correction Factor				1.0269

Calculated value of As Found Response: 341.752 ppm Percent Change of As Found: -8.5%

Auto zero	before calibration		after calibration	
	3.0	ppm	3.5	ppm
	243.3	ppm	217.5	ppm

Notes: Replaced UV filter. Adjusted PMT gain. Adjusted span and zero.

Calibration Performed By: Dawn Ewan

## Calibration Summary

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

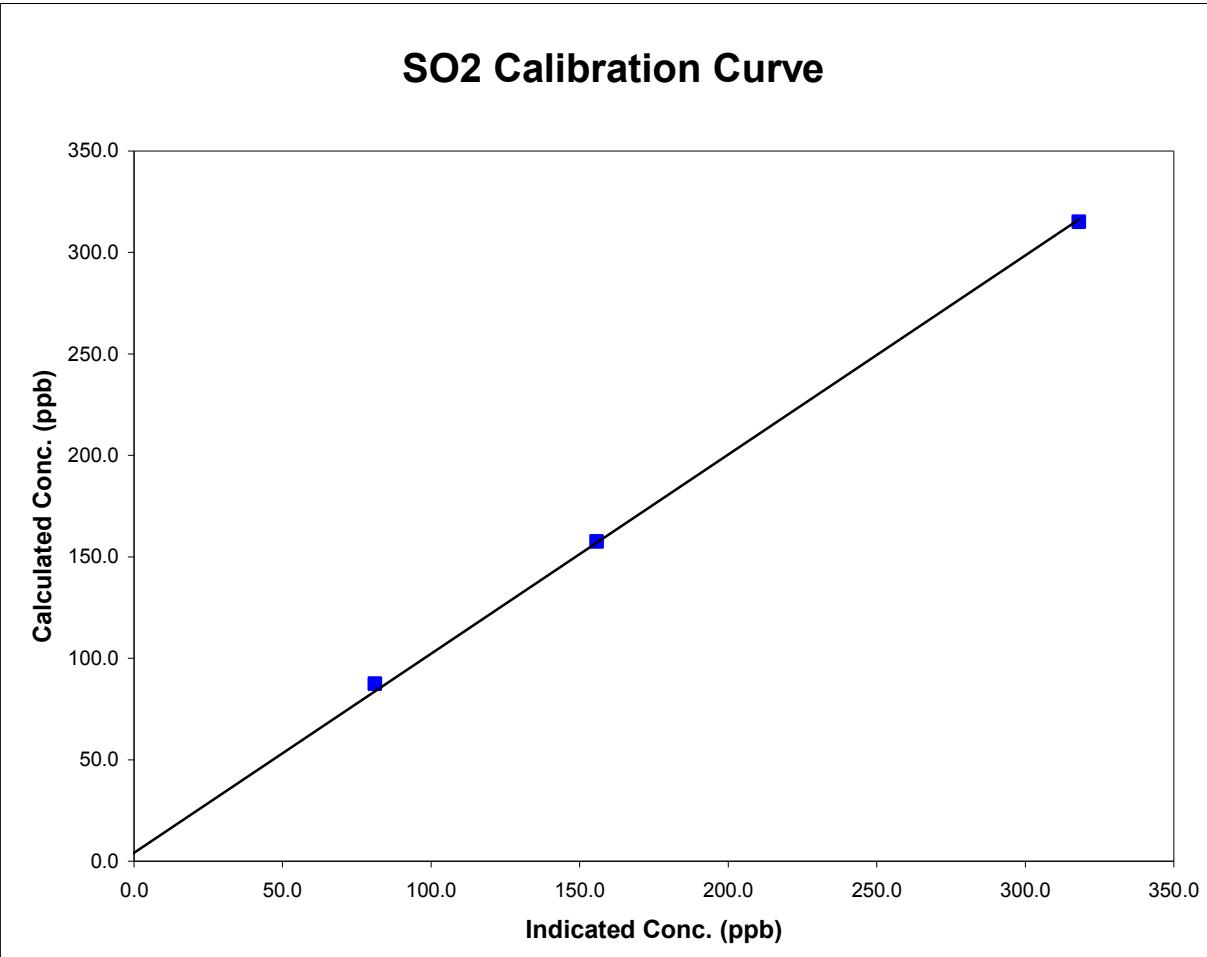


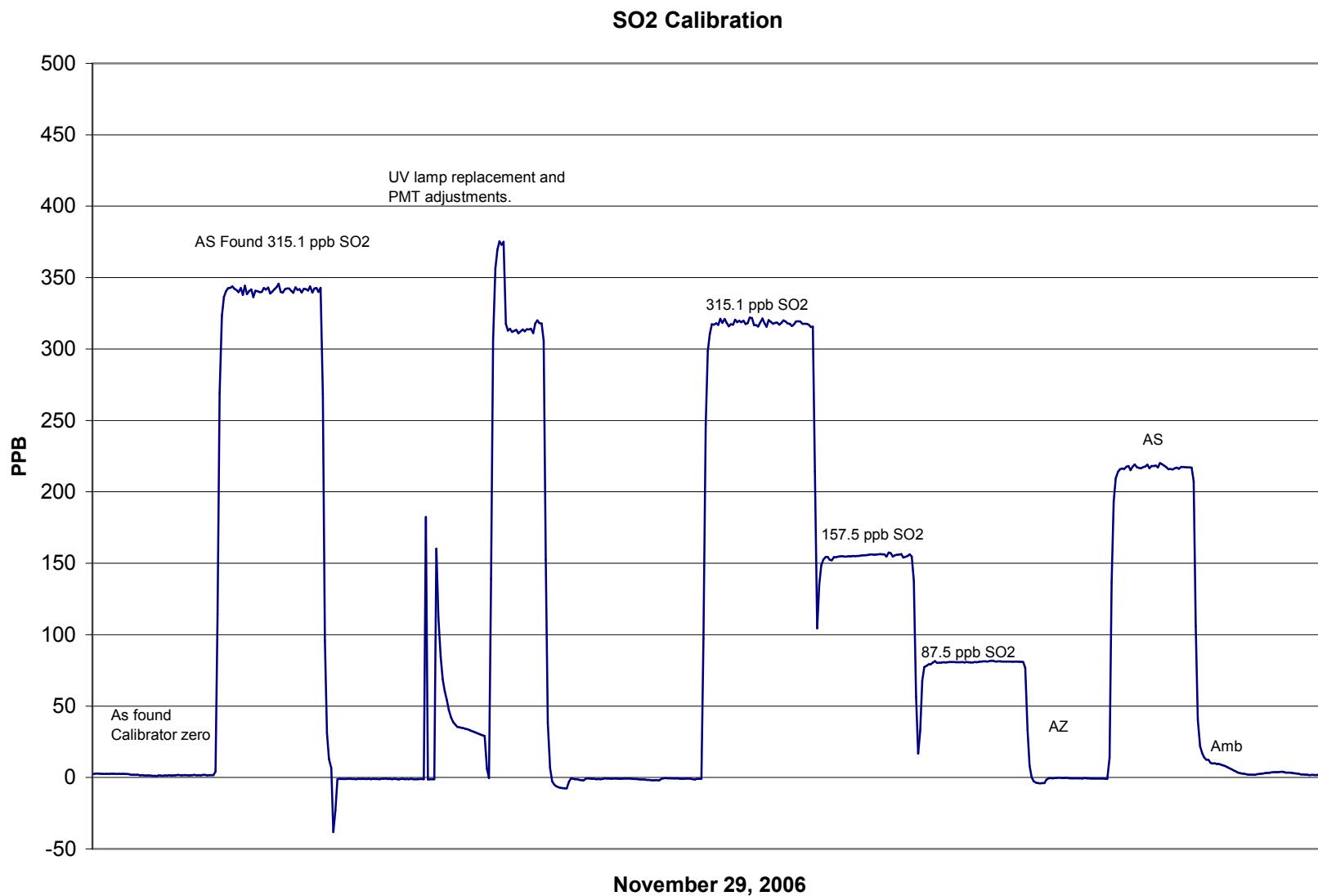
## ***Station Information***

Calibration Date	November 29, 2006	Previous Calibration	October 23, 2006
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:50	End Time (MST)	15:13
Analyzer make/model	API 102A	Analyzer serial #	212

## ***Calibration Data***

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.1	N/A		
315.1	318.0	0.9907	Correlation Coefficient	0.999532
157.5	155.8	1.0113	Slope	0.981486
87.5	81.1	1.0787		
			Intercept	4.143742





**Calibration Report**

Parameter

**TRS**

Air Monitoring Network

**PASZA****Station Information**

Calibration Date	November 29, 2006	Previous Calibration	October 23, 2006	
Station Number	3	Station Location	Smoky Heights	
Reason:	Routine	Install	Removal	
			Other:	
Start Time (MST)	10:50	End Time (MST)	15:13	
Barometric Pressure	27.74	inches Hg	20.0 Deg C	
Calibrator	VICI Metronics	Serial Number	111-1695	
Perm-tube Conc	235 ng/min	Perm-tube Date	8/6/2006	
Correction factor	0.942961	Perm-tube Cert #	T-25214	
DACS make	Focus AP1000	DACS serial No.	1	
DACS voltage range	0 - 10 volt	DACS channel #	9	
	Before		After	
Calculated slope	0.988488	Calculated slope	0.962848	
Calculated intercept	0.740499	Calculated intercept	0.412841	
Analyzer make	TEI Model 43C	Analyzer serial #	436610004	
Concentration range	before		after	
	100	ppb	100	ppb
	11.7	ppb	12.4	ppb
	1.074		1.138	
	771	volts	780	volts
	43.9	Deg C	43.9	Deg C
	44.99	Deg C	45	Deg C
	508.4	mm Hg	507.7	mm Hg
	798	ccm	795	ccm
	32,200	mv	32,200	mv

**Calibration Data**

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	2357.4	0.0	0.0	N/A
2500	2357.4	71.7	74.2	0.9660
5000	4714.8	35.8	36.7	0.9764
9000	8486.6	19.9	19.7	1.0093
zero	2357.4	0.0	-0.1	As Found Zero
2500	2357.4	71.7	71.3	As Found Span
Average Correction Factor				0.9839

Calculated value of As Found Response: 71.32 ppm Percent Change of As Found: 0.5%

Auto zero	before calibration		after calibration	
	0.5	ppm	0.3	ppm
	48.9	ppm	47.0	ppm

Notes: Adjusted zero and span.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

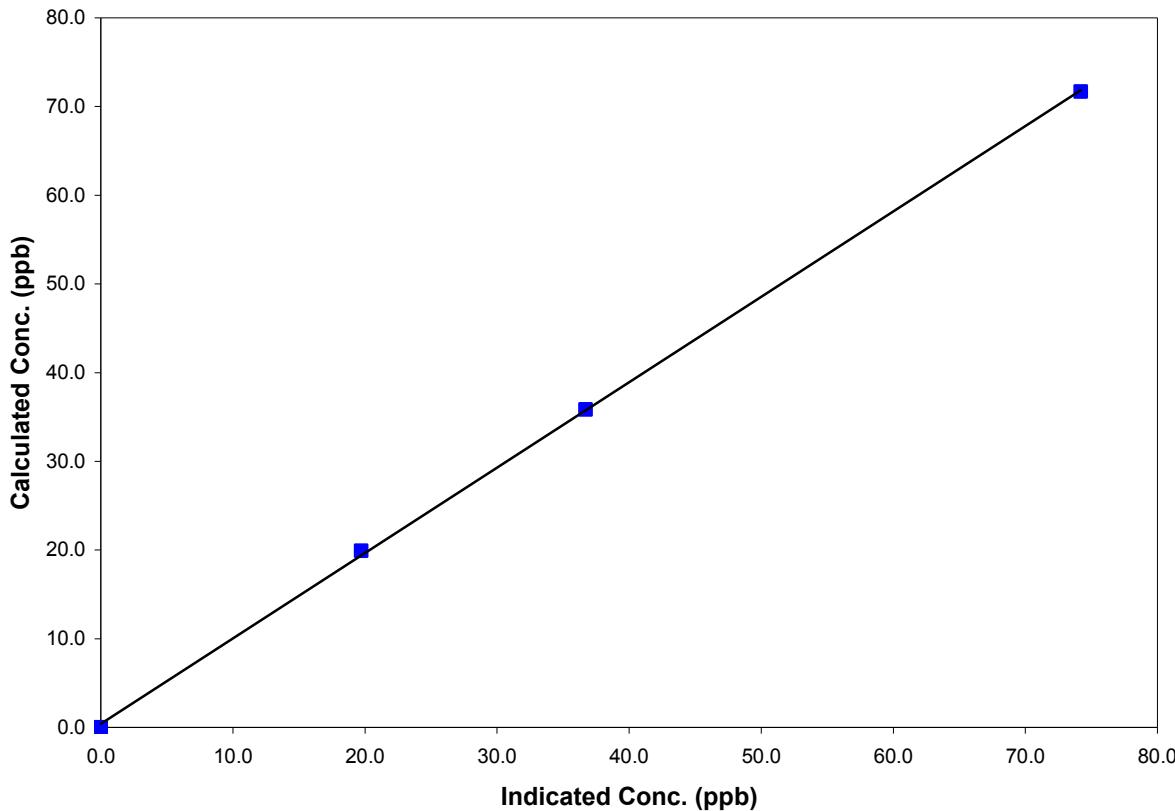
Parameter TRS  
 Air Monitoring Network PASZA

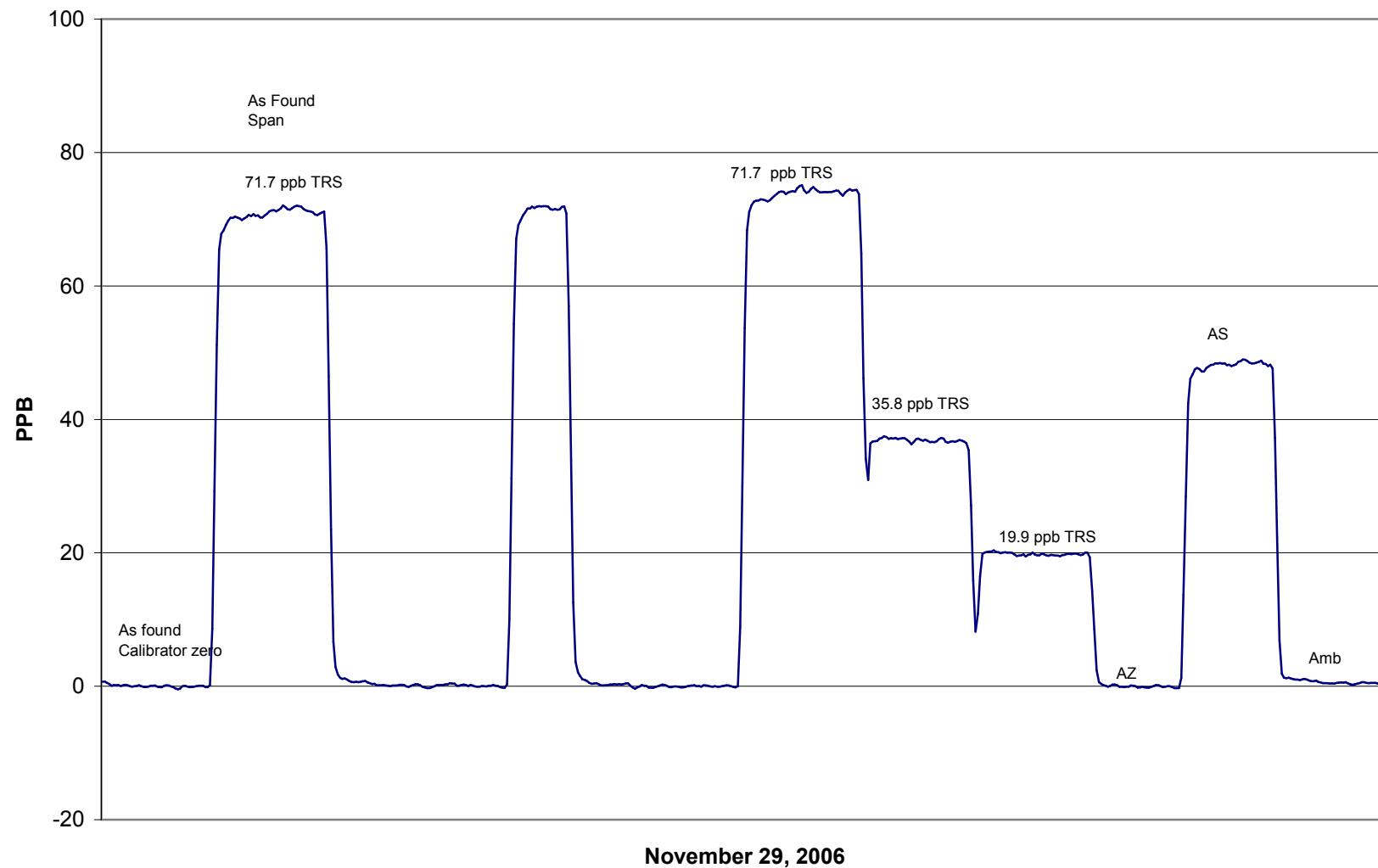


<b>Station Information</b>			
Calibration Date	November 29, 2006	Previous Calibration	October 23, 2006
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:50	End Time (MST)	15:13
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610004

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
71.7	74.2	0.9660	Correlation Coefficient	0.999832
35.8	36.7	0.9764	Slope	0.962848
19.9	19.7	1.0093	Intercept	0.412841

**TRS Calibration Curve**

**TRS Calibration**

**Calibration Report**

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



<b>Station Information</b>				
Calibration Date	November 29, 2006	Previous Calibration	October 23, 2006	
Station Number	3	Station Location	Smoky Heights	
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	13:45	End Time (MST)	14:45	
Barometric Pressure	0.927 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	

<b>Analyzer Information</b>				
Analyzer make	R&P	Control Unit serial #	140AB246340305	
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB246340305	

Main Flow Set Point	before		after	
	2.990	SLPM	3.000	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	40	%	16	%
Ko Factor	12122		12122	
Temperature	-24.6	Deg C	-24.6	Deg C
Pressure	0.929	ATM	0.929	ATM
Main Fadj	1.000		0.900	
Aux Fadj	1.000		0.900	

**Calibration Data**

Parameter	Set Point	As Found	Tolerance	New Reading
zero flow - main	0.0	0.00		0.09
zero flow - auxillary	0.0	-0.02		0.20
flow recovery - main	45 - 60 Seconds	33	45 - 60 Seconds	33
flow recovery - aux	46 - 60 Seconds	39	46 - 60 Seconds	39
Temperature	measured	-24.3	+/- 1.0 Deg C	-24.3
Pressure	measured	0.927	+/- 1.5% ΔATM	0.927
Total Flow	16.67 SLPM			
Main Flow	13.67 SLPM	15.80	+/- 1.0 SLPM	13.94
Auxillary Flow	3.0 SLPM	3.490	+/- 0.2 SLPM	3.042
Leak Check - main	0.0		<0.15 SLPM	
Leak Check - aux	0.0		<0.15 SLPM	
Ko Factor (w/o filter)	measured	324.888	filter weight (g)	0.11014
Ko Factor (w/ filter)	measured	232.501	% Ko difference	0.67

Notes: Adjusted flows via hard and software.  
 New mass filter.

Calibration Performed By: Dawn Ewan

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

Calibration Date	November 1, 2006	Previous Calibration	October 16, 2006
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	12:13	End Time (MST)	16:03
Barometric Pressure	0.926 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2488
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	1.000741	Calculated slope	1.003322
Calculated intercept	0.469201	Calculated intercept	-0.266499
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376
Concentration range Background Coefficient Lamp Voltage Chamber Temp Sample Flow	before	after	
	0 - 100 ppb	0 - 100	ppb
	2.38 ppb	2.34	ppb
	0.868	0.853	
	906.0 Volts	914.0	Volts
	43.8 Deg C	43.1	Deg C
	312 ccm	605	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)
4996	0.00	0.00	0.04	N/A
4996	39.94	81.69	81.58	1.0013
4996	19.97	41.01	41.21	0.9950
4996	9.95	20.47	20.92	0.9786
4996	0.00	0.00	0.06	As Found Zero
4996	39.94	81.69	80.45	As Found Span
Average Correction Factor				0.9916

Calculated value of As Found Response: 80.925 ppm Percent Change of As Found: 0.9%

Auto zero Auto span	before calibration		after calibration	
	0.42	ppm	-0.27	ppm
	46.95	ppm	27.67	ppm

Notes: Rebuilt pump.  
Adjust span.Calibration Performed By: Dawn Ewan

**Calibration Summary**

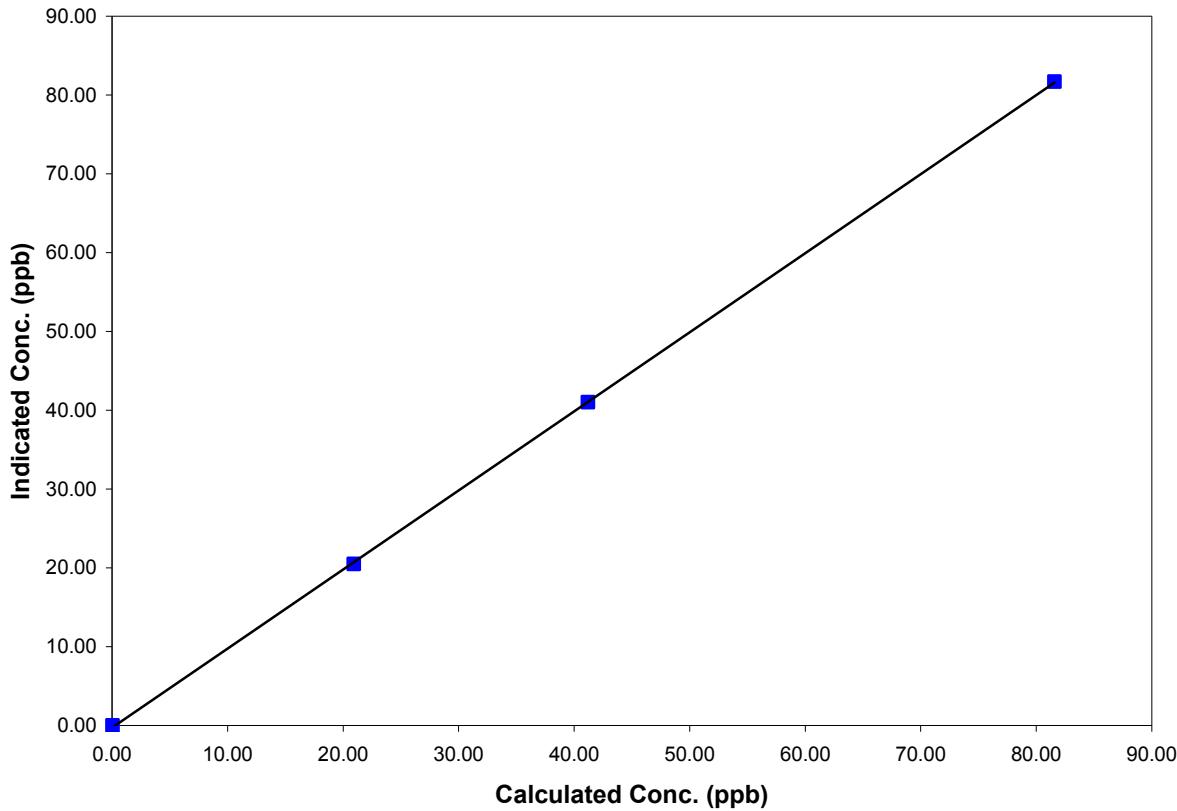
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

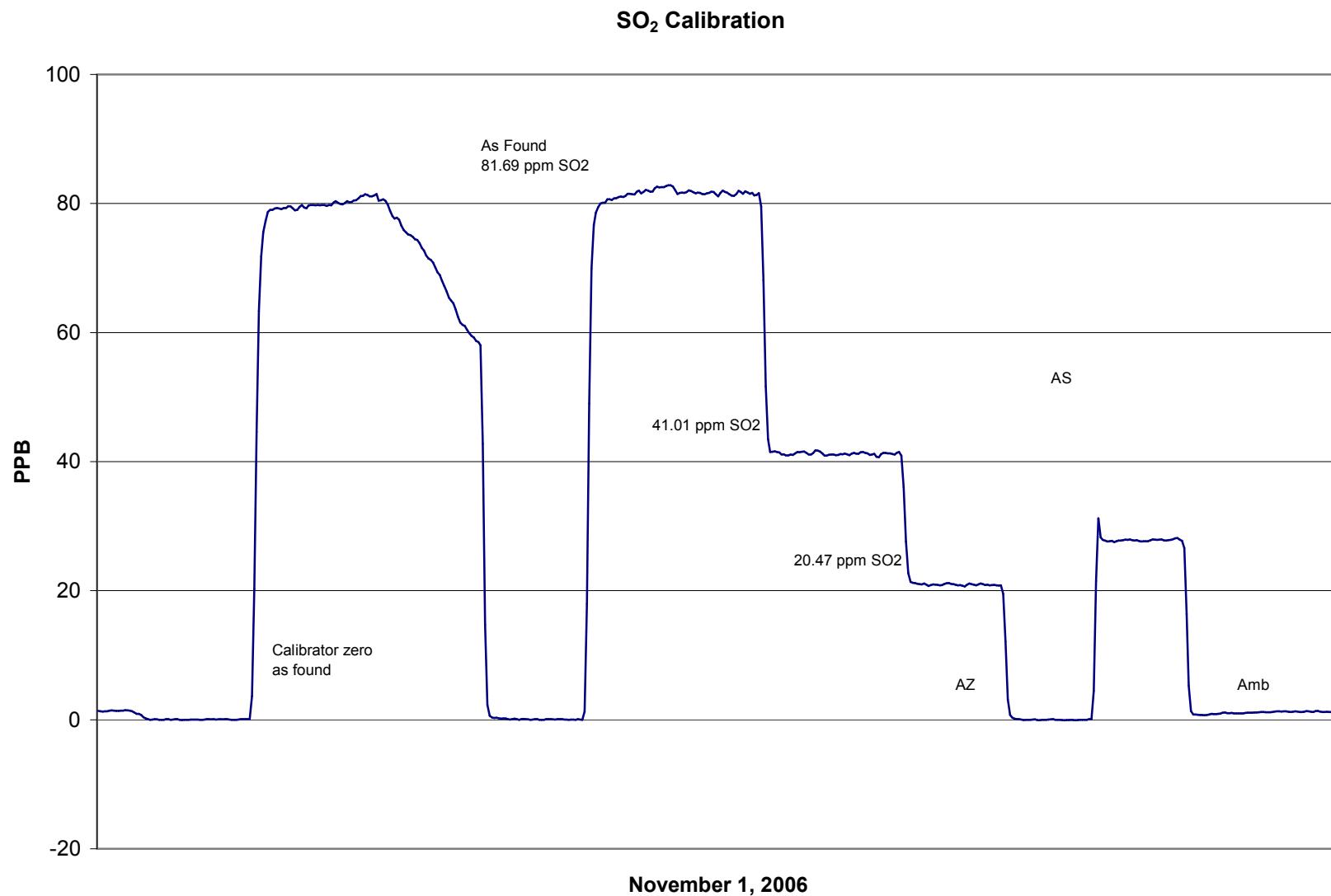
**Station Information**

Calibration Date	November 1, 2006	Previous Calibration	October 16, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:13	End Time (MST)	16:03
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	0.042	N/A		
81.689	81.582	1.0013	Correlation Coefficient	0.999965
41.007	41.212	0.9950	Slope	1.003322
20.473	20.921	0.9786	Intercept	-0.266499

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



# Calibration Report

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



## Station Information

Calibration Date	November 21, 2006			Previous Calibration	October 16, 2006
Station Number	4			Station Location	Beaverlodge
Reason:	Routine	Installation	Removal	Other:	
Start Time (MST)	11:10			End Time (MST)	15:30
Barometric Pressure	0.912	Atm		Station Temperature	20.0 Deg C
Calibrator	Environics 6103			Serial Number	2488
NO Cal Gas Conc	50.3	ppm		Cal Gas Expiry Date	Nov 22/06
NOx Cal Gas Conc	50.5	ppm		Cal Gas Serial #	BAL786

## DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269
Parameter	NO2	NOx	NO
Before	Data Slope	1.007267	1.001916
	Data Offset	-1.162457	2.404885
After	Data Slope	1.002202	0.998524
	Data Offset	-0.327911	1.089197
Channel #	8	6	7
Voltage Range	0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

## Analyzer Information

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

Test Point	before		after	
Concentration range	0-1000	ppb	0-1000	ppb
NO background	1.3	ppb	1.4	mV
NOx background	1.3	ppb	1.9	mV
NO coefficient	1.062		1.047	
NOx coefficient	0.983		0.995	
Box Temp	34.8	ccm	30.3	ccm
Chamber Temp	49.2	Deg C	49.1	Deg C
Cooler Temp	-2.2	Deg C	-2.2	Deg C
Converter Temp	323.0	Deg C	324.0	Deg C
Sample Flow	787.0	LPM	799.0	LPM
Ozonator Flow	0.086	LPM	0.086	LPM
Pressure	170.0	inches HG	167.0	inches Hg

Notes: Adjusted span and zero.

## Calibration Report

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



### Station Information

Calibration Date: November 21, 2006 Station Location: Beaverlodge

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor
zero	4996	0.00	0.0	0.0	0.0	-0.3	-0.3	-0.3	N/A	N/A
1	4996	79.86	794.5	791.4	3.1	795.2	791.8	2.4	0.9992	0.9995
2	4996	39.98	400.9	399.3	1.6	399.6	397.8	1.2	1.0034	1.0037
3	4996	20.00	201.4	200.6	0.8	200.1	198.8	0.9	1.0065	1.0091
AFZ	4996	0.00	0.0	0.0	0.0	-0.3	-0.4	-0.3	0.0000	0.0000
AFS	4996	79.86	794.5	791.4	3.1	802.0	809.5	-8.5	0.9907	0.9776
								Average Correction Factor	1.0030	1.0041

As Found Concentrations: NO<sub>x</sub>= 804.6 NO= 813.0 As Found Percent Change NO<sub>x</sub>= 1.3% NO= 2.7%

### GPT Calibration Data

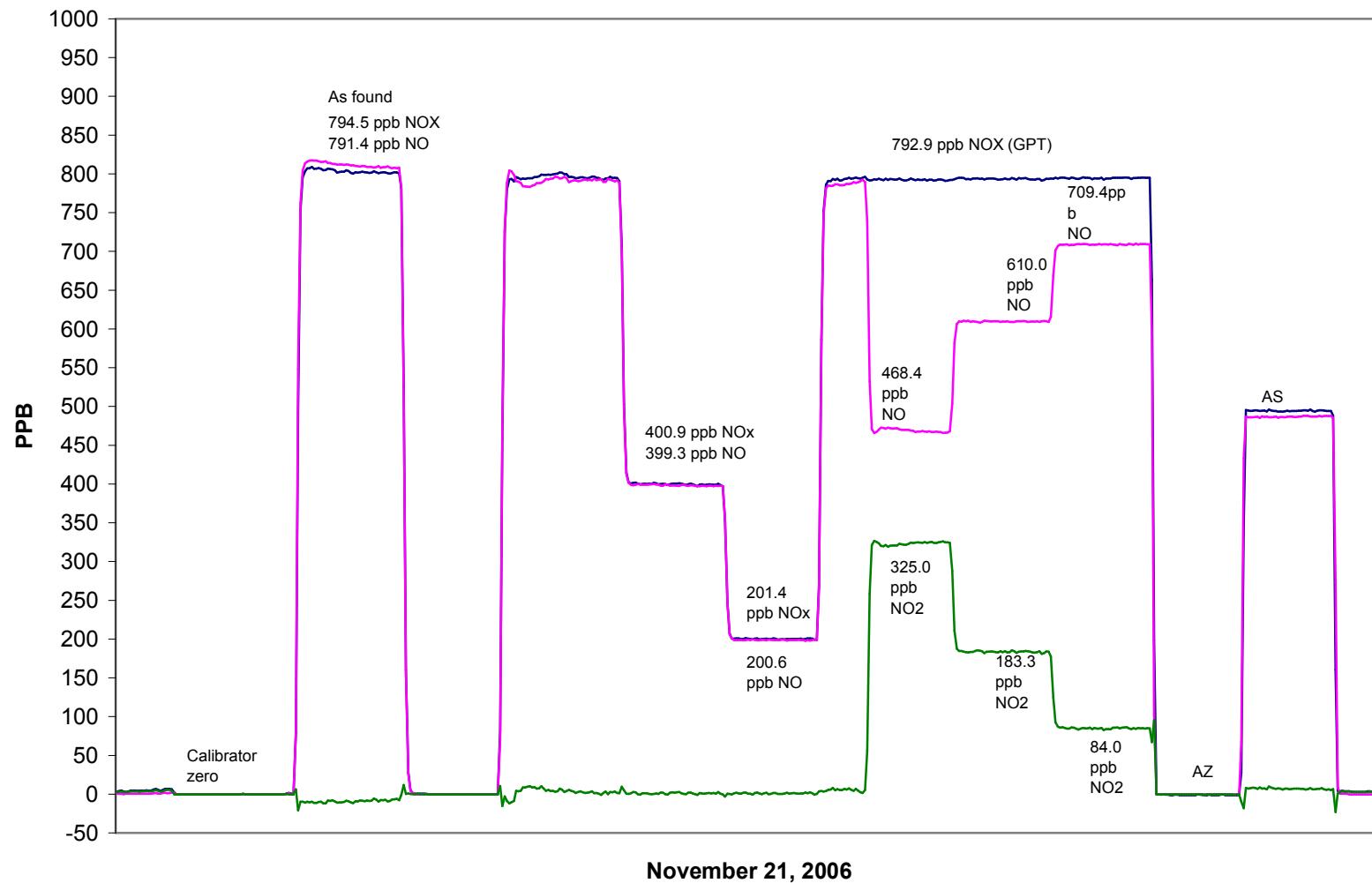
Dilution Flow **4993** ccm Source Gas Flow **39.97** ccm

O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	793.3	787.9	5.4	793.7	787.8	5.2	0.9996	1.0002	N/A	N/A
350	793.3	468.4	325.0	792.2	467.7	324.3	1.0014	1.0013	1.0022	99.8%
200	793.3	610.0	183.3	793.4	609.6	183.5	0.9999	1.0007	0.9991	100.1%
100	793.3	709.4	84.0	794.6	709.1	84.9	0.9984	1.0004	0.9894	101.1%
					Average Correction Factor		0.9999	1.0008	0.9969	100.3%

### AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb
Auto zero	2.2	-1.5	2.8	ppb	0.0	-0.7	1.0	ppb
Auto span	490.6	7.6	482.1	ppb	494.8	6.3	487.8	ppb

Calibration Performed By: Dawn Ewan

**NOx Calibration**

**Calibration Summary**

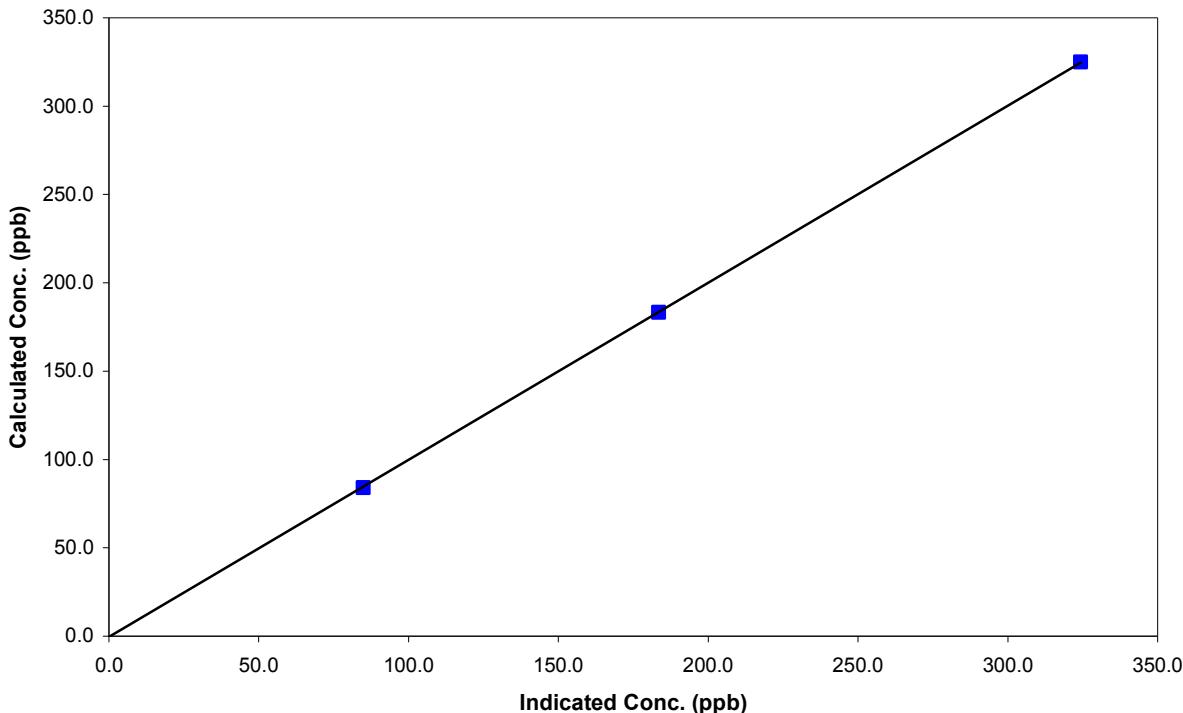
Parameter **NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	November 21, 2006	Previous Calibration	October 16, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:10	End Time (MST)	15:30
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	0.999980
325.0	324.3	1.0022		
183.3	183.5	0.9991		
84.0	84.9	0.9894		
			Slope	1.002202
			Intercept	-0.327911

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

## Calibration Summary

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



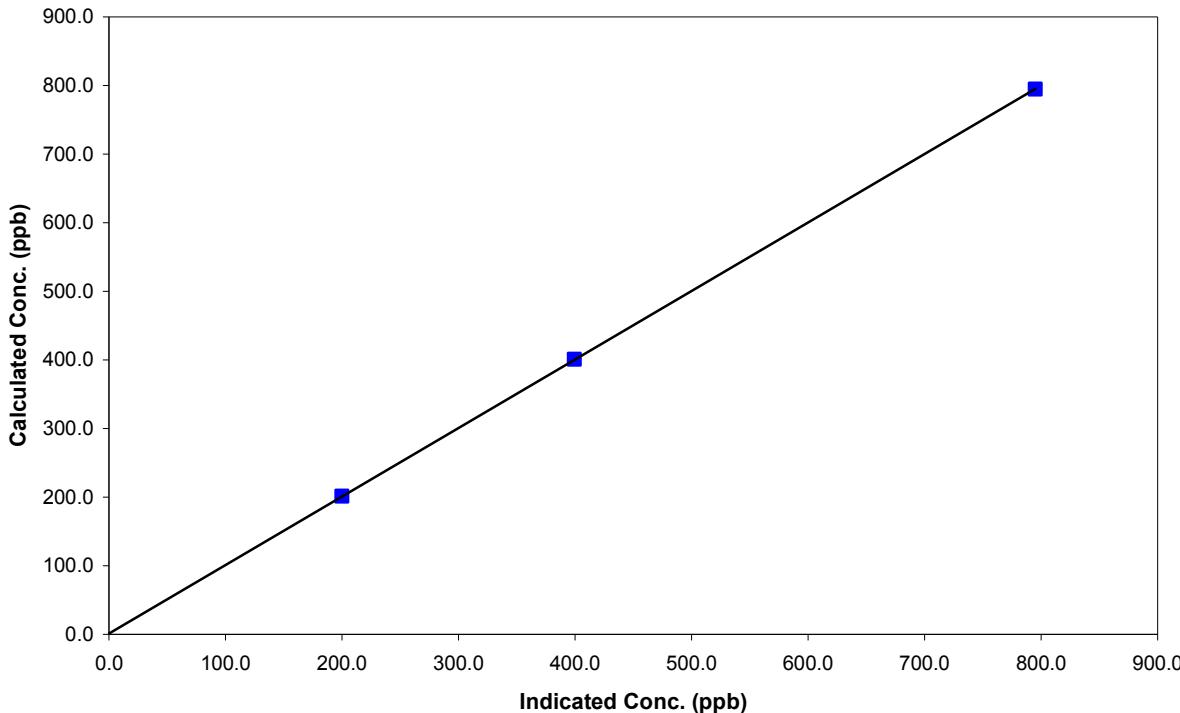
### Station Information

Calibration Date	November 21, 2006	Previous Calibration	October 16, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:10	End Time (MST)	15:30
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	0.999994
794.5	795.2	0.9992		
400.9	399.6	1.0034		
201.4	200.1	1.0065		
			Slope	0.998524
			Intercept	1.089197

### NOx Calibration Curve



## Calibration Summary

Parameter **NO**  
Air Monitoring Network

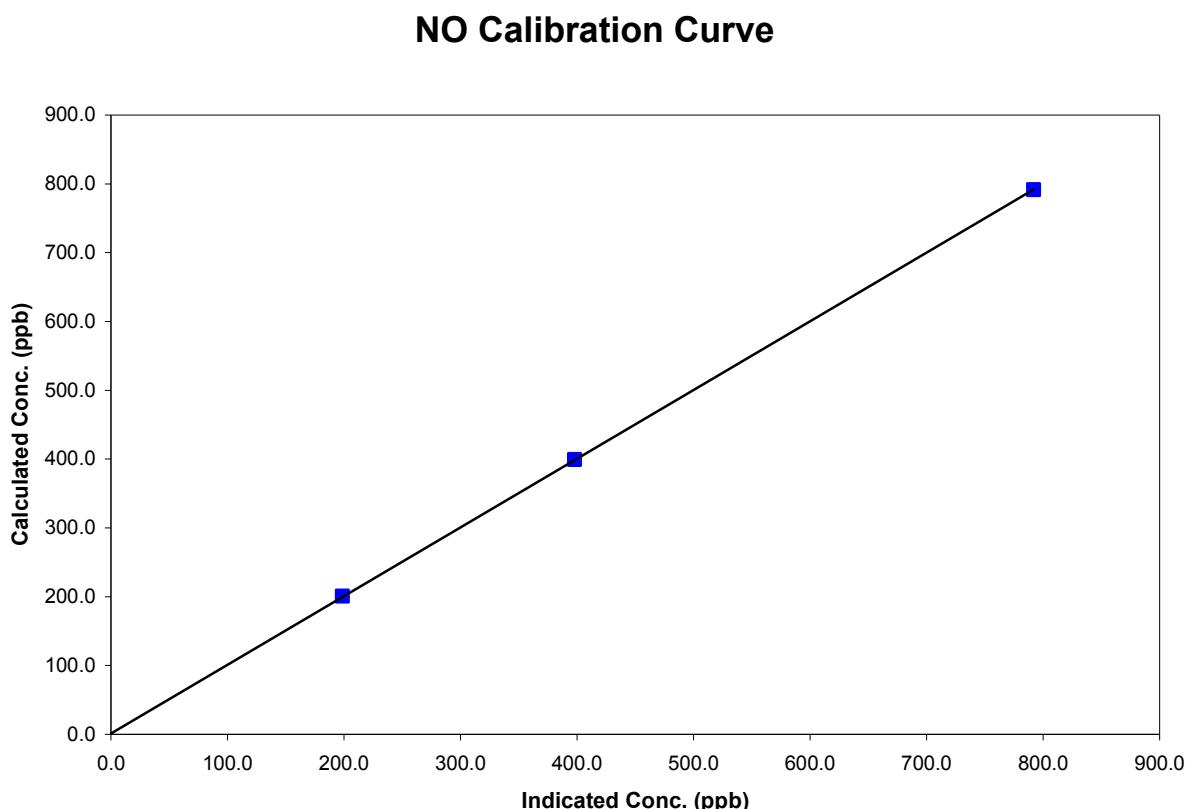


## **Station Information**

Calibration Date	November 21, 2006	Previous Calibration	October 16, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:10	End Time (MST)	15:30
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

## ***Calibration Data***

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
791.4	791.8	0.9995	Correlation Coefficient	0.999993
399.3	397.8	1.0037		
200.6	198.8	1.0091	Slope	0.998565
			Intercept	1.297218



**Calibration Report**

Parameter O3  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	November 24, 2006	Previous Calibration	October 16, 2006
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Start Time (MST)	11:07	End Time (MST)	14:18
Barometric Pressure	0.922 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
Calculated slope	Before	Calculated slope	After
	0.996060		0.998732
Calculated intercept	-0.076880	Calculated intercept	-0.048270
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383
Concentration range offset slope Lamp temp Lamp Intensity A/B Pressure Flow A Flow B	before	after	
	0 - 500	ppb	0 - 500 ppb
	-0.30	ppb	-0.70 ppb
	1.07		1.04
	71	mV	71 mV
	87000/85700	mV	84500/83000 mV
	691	inches Hg	696 inches Hg
	755	ccm	757 ccm
	710	Deg C	714 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	0.0	N/A
4992	0.00	325.0	325.5	0.9984
4992	0.00	183.3	183.4	0.9996
4992	0.00	84.0	84.3	0.9960
4992	0.00	0.0	-0.4	As found zero
4992	0.00	325.0	329.1	As found span
		Average Correction Factor	0.9980	

Calculated value of As Found Response: 328.2 ppm Percent Change of As Found: 1.0%

Auto zero Auto span	before calibration		after calibration	
	-0.1	ppb	0.4	ppb
	112.6	ppb	114.0	ppb

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

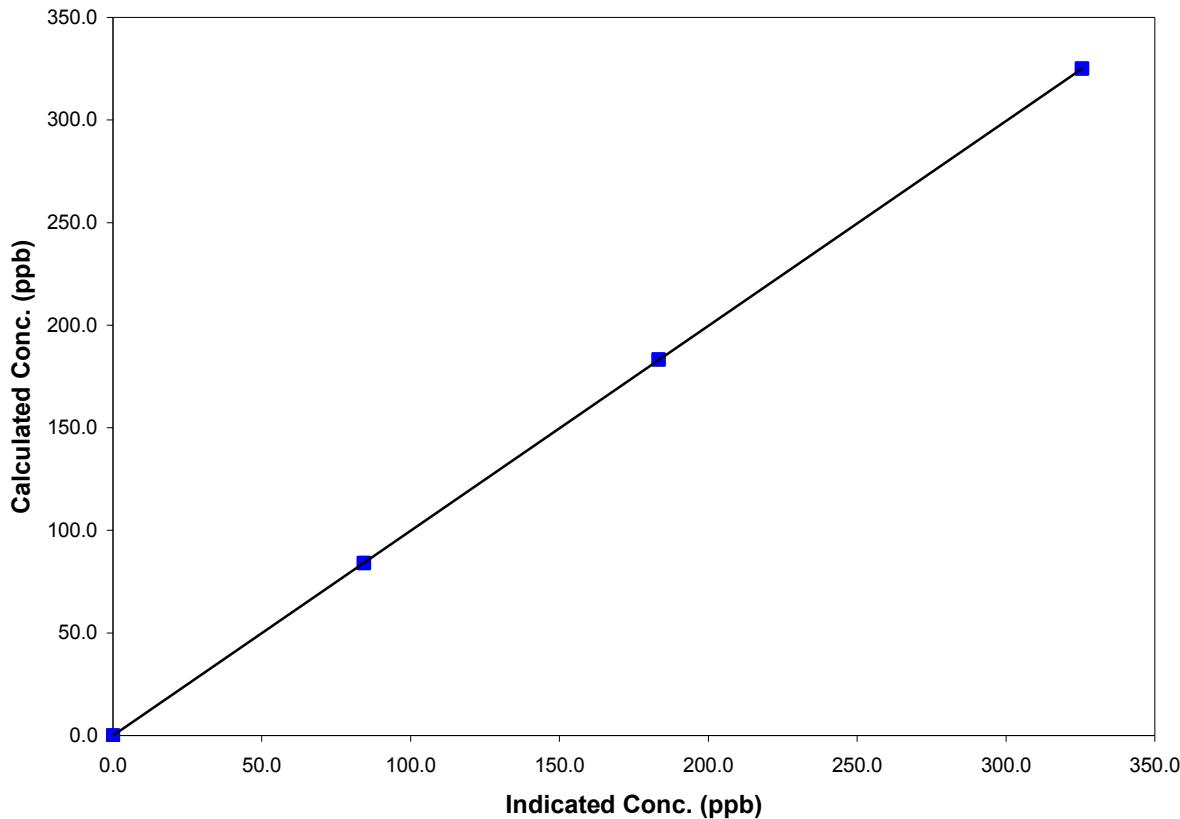
Parameter O3  
 Air Monitoring Network PASZA

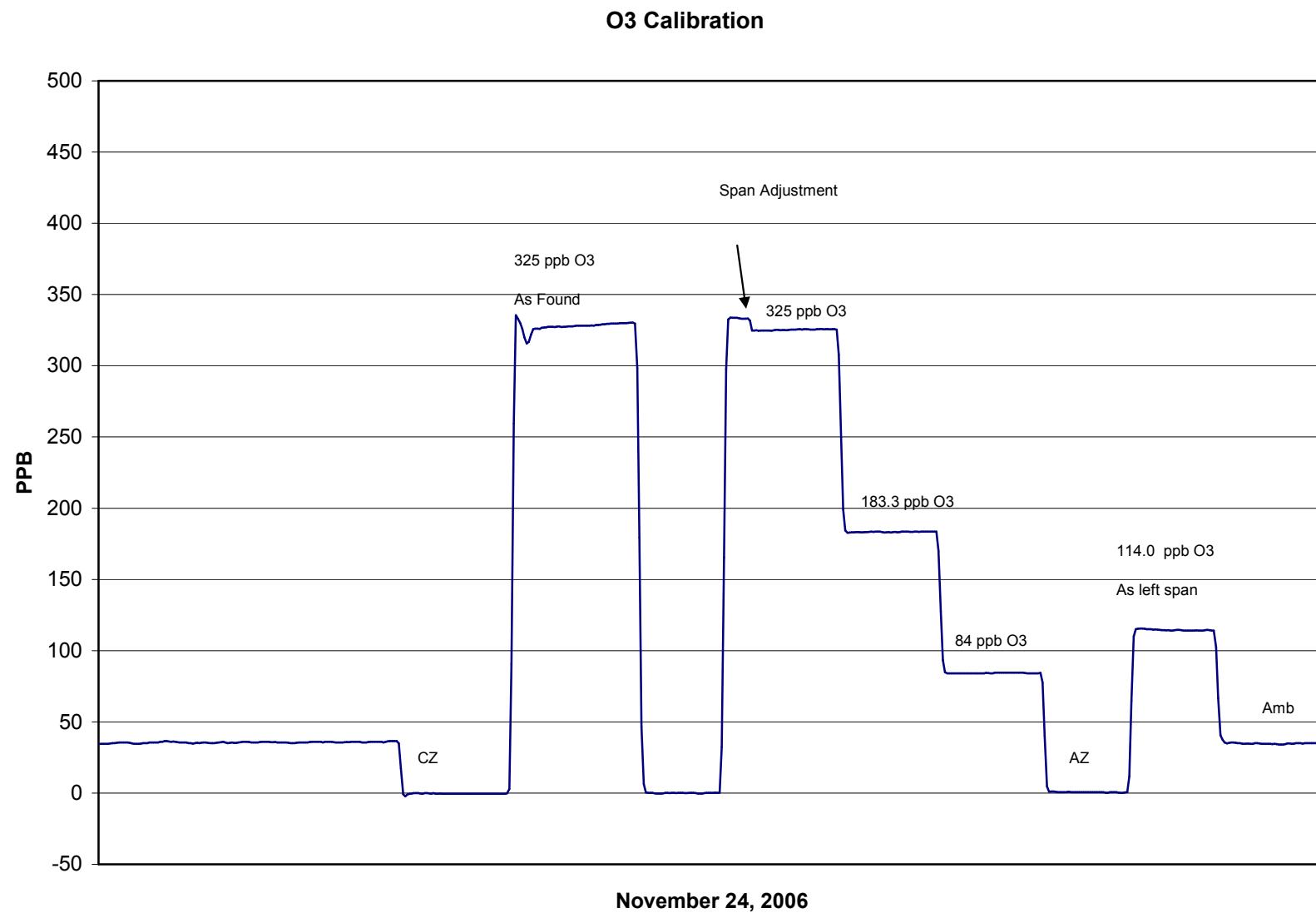
**Station Information**

Calibration Date	November 24, 2006	Previous Calibration	October 16, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:07	End Time (MST)	14:18
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

**Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	NA	Correlation Coefficient	0.999999
325.0	325.5	0.9984		
183.3	183.4	0.9996		
84.0	84.3	0.9960		
			Slope	0.998732
			Intercept	-0.048270

**O3 Calibration Curve**



**Calibration Report**

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



<b>Station Information</b>			
Calibration Date	November 21, 2006	Previous Calibration	September 18, 2006
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	14:21	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 #	10

<b>Analyzer Information</b>			
Analyzer make	R&P	Control Unit serial #	140AB246340305
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB246340305
		before	after
Main Flow Set Point	3.000	SLPM	3.000
Aux Flow Set Point	13.68	SLPM	13.67
Filter Load	43	%	19
Ko Factor	14287		14287
Temperature	-13.4	Deg C	-13.4
Pressure	0.911	ATM	0.911

Parameter	Set Point	Teom Reading (As Found)	Tolerance	Teom Reading (After Adjustments)
zero flow - main	0.0	0.03		0.09
zero flow - auxillary	0.0	0.10		0.21
flow recovery - main	45 - 60 Seconds	35.00	45 - 60 Seconds	38.00
flow recovery - aux	46 - 60 Seconds	48.00	46 - 60 Seconds	43.00
Temperature	measured	-13.8	+/- 1.0 Deg C	-13.8
Pressure	measured	0.911	+/- 1.5% ΔATM	0.911
Total Flow	16.67 SLPN			
Auxillary Flow	13.67 SLPN	14.88	+/- 1.0 SLPN	14.03
Main Flow	3.0 SLPN	3.278	+/- 0.2 SLPN	3.046
Leak Check - main	0.0		<0.15 SLPN	0.07
Leak Check - aux	0.0		<0.15 SLPN	0.26
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: New mass filter.  
 Adjusted fows aux on hardware. Had to adjust flow aux with slope .96  
 Main flows adju hardware only.

Cleaned head.  
 Calibration Performed By: Dawn Ewan

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

Calibration Date	November 17, 2006	Previous Calibration	October 3, 2006
Station Number	1	Station Location	Falher
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	15:19	End Time (MST)	18:45
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	0.936162	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	1.036074	Calculated slope	0.996123
Calculated intercept	-3.126732	Calculated intercept	-3.356822
Analyzer make	TEI Model 43C APS1AB	Analyzer serial #	609716238
before			
Concentration range	0 - 500	ppb	0 - 500
Background	7.8		7.8
Coefficient	1.131		1.131
UV Lamp voltage	758	V	758
Chamber Temperature	44.7	C	44.7
Perm gas Temp	45	C	45
Pressure	700.4	"Hg	700.4
Sample Flow	501	LPM	501
Lamp Intensity	34100	Hz	34100
after			

**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	2340.4	0.0	-0.4	N/A
2500	2340.4	317.4	319.4	0.9938
5000	4680.8	158.7	165.4	0.9597
8000	7489.3	99.2	106.6	0.9302
zero	2340.4	0.0	-0.4	As Found Zero
2500	2340.4	317.4	330.8	As Found Span
Average Correction Factor				0.9612

Calculated value of As Found Response: 339.971 ppm Percent Change of As Found: -7.1%

Auto zero	before calibration		after calibration	
	-3.0	ppm	-3.7	ppm
	304.3	ppm	278.7	ppm

Notes: Adjusted span and zero.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

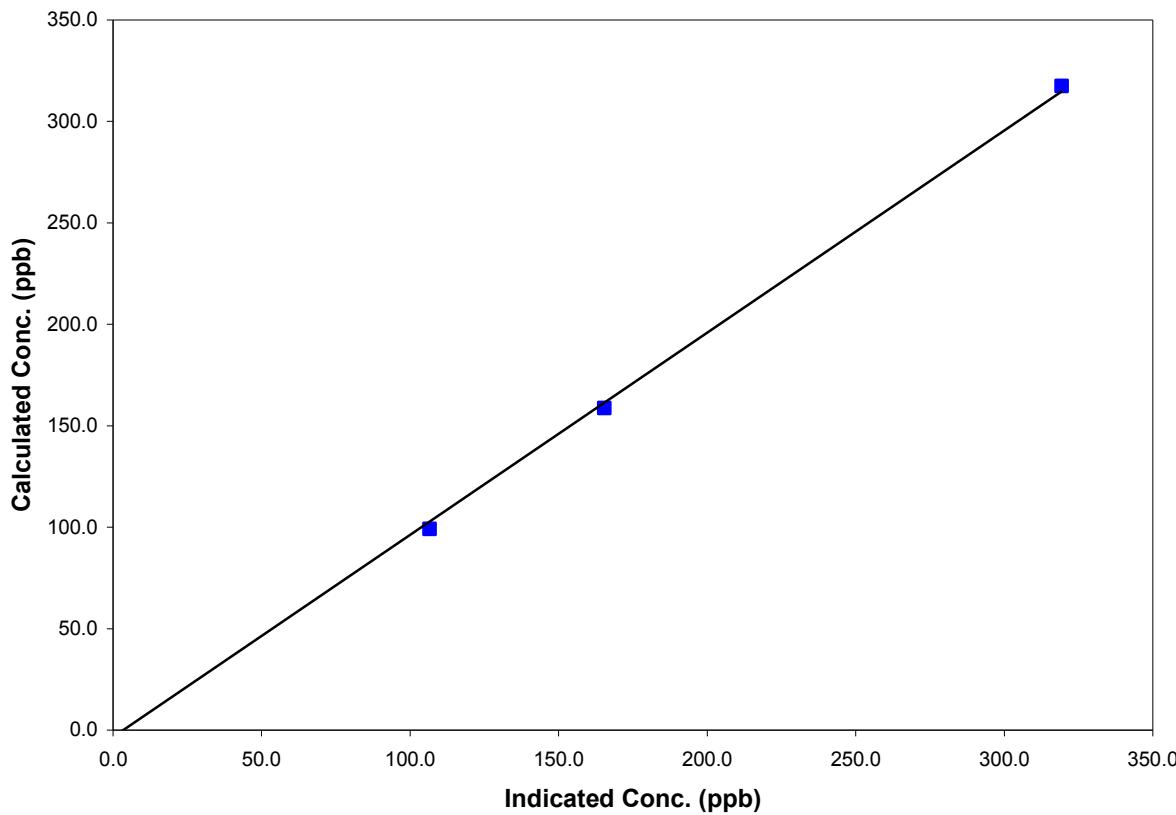
Parameter **SO2**  
 Air Monitoring Network **PASZA**

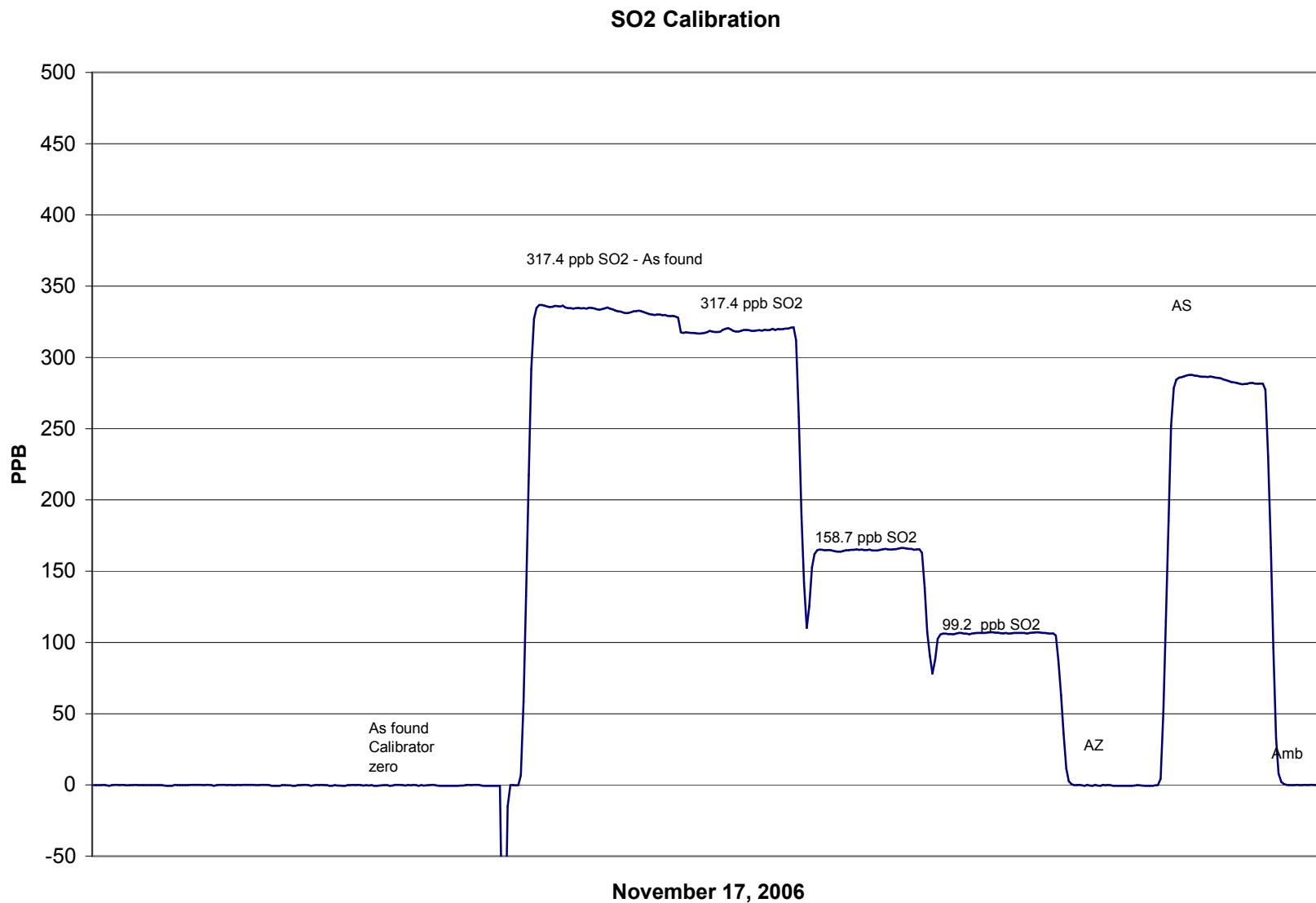
**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 3, 2006
Station Number	1	Station Location	Falher
Start Time (MST)	15:19	End Time (MST)	18:45
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		
317.4	319.4	0.9938	Correlation Coefficient	0.999221
158.7	165.4	0.9597		
99.2	106.6	0.9302	Slope	0.996123
			Intercept	-3.356822

**SO2 Calibration Curve**



**Calibration Report**

Parameter

TRS

Air Monitoring Network

PASZA**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 3, 2006
Station Number	5	Station Location	Faher
Reason:	Routine	Install	Removal Other:
Start Time (MST)	15:19	End Time (MST)	18:45
Barometric Pressure	27.5 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	235 ng/min	Perm-tube Date	8/8/2006
Correction factor	0.936162	Perm-tube Cert #	T-25214
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 1 volt	DACS channel #	6 <u>Before</u> <u>After</u>
Calculated slope	1.035347	Calculated slope	1.019240
Calculated intercept	-0.039567	Calculated intercept	-0.225159
Analyzer make	TEI Model 43C APS1AB	Analyzer serial #	609716238
before			
Concentration range	0 - 100 ppb	0 - 100 ppb	ppb
Background coefficient	10.2 ppb	10.2 ppb	ppb
Lamp Voltage	1.911	1.911	
Chamber Temp	820 volts	820 volts	volts
Perm Gas Temp	43.9 Deg C	43.9 Deg C	Deg C
Pressure	45 Deg C	45 Deg C	Deg C
Sample Flow	685.1 mm Hg	685.1 mm Hg	mm Hg
Lamp Intensity	444 ccm	444 ccm	ccm
after			

**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	2340.4	0.0	-0.1	N/A
2500	2340.4	72.2	70.9	1.0182
5000	4680.8	36.1	35.7	1.0120
8000	7489.3	22.6	22.8	0.9909
zero	2340.4	0.0	-0.1	As Found Zero
2500	2340.4	72.2	62.2	As Found Span
Average Correction Factor				1.0070

Calculated value of As Found Response:

64.41 ppm

Percent Change of As Found: 10.8%

Auto zero	before calibration		after calibration	
	-0.5	ppm	-0.1	ppm
	82.1	ppm	88.5	ppm

Notes:

Calibration Performed By: Dawn Ewan

**Calibration Summary**

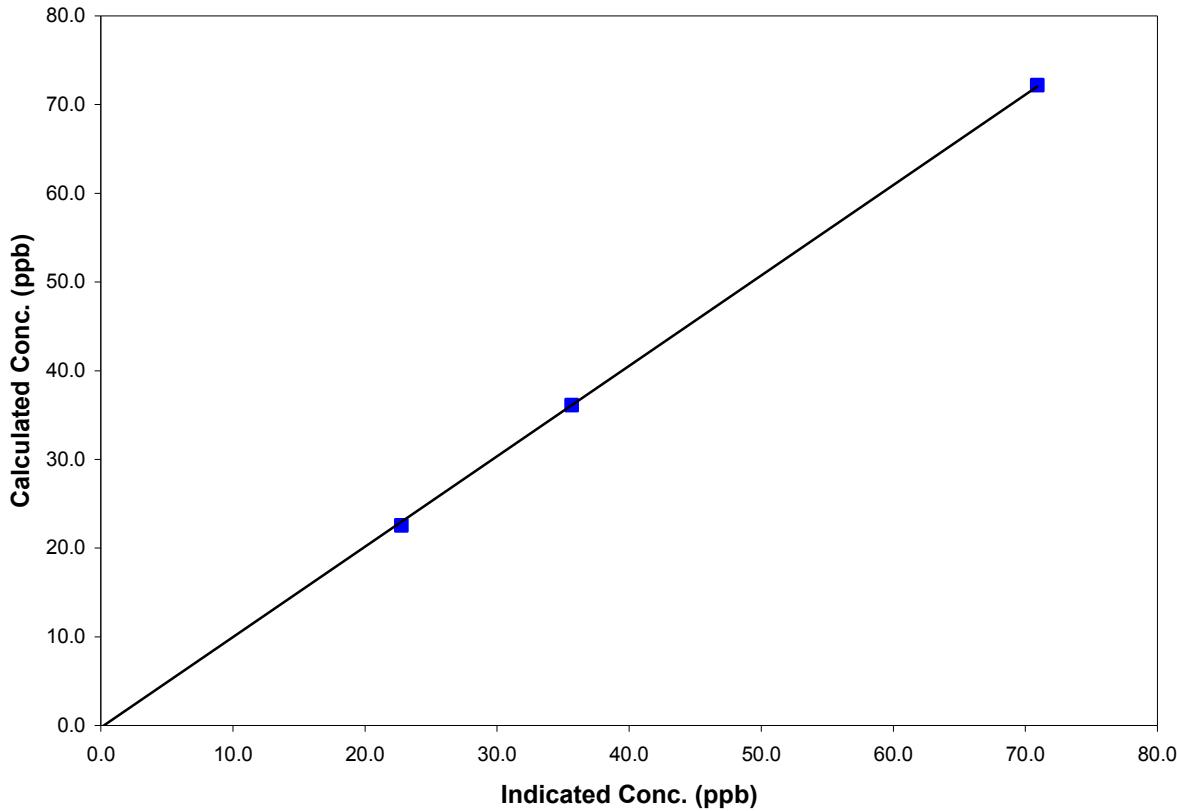
Parameter TRS  
 Air Monitoring Network PASZA

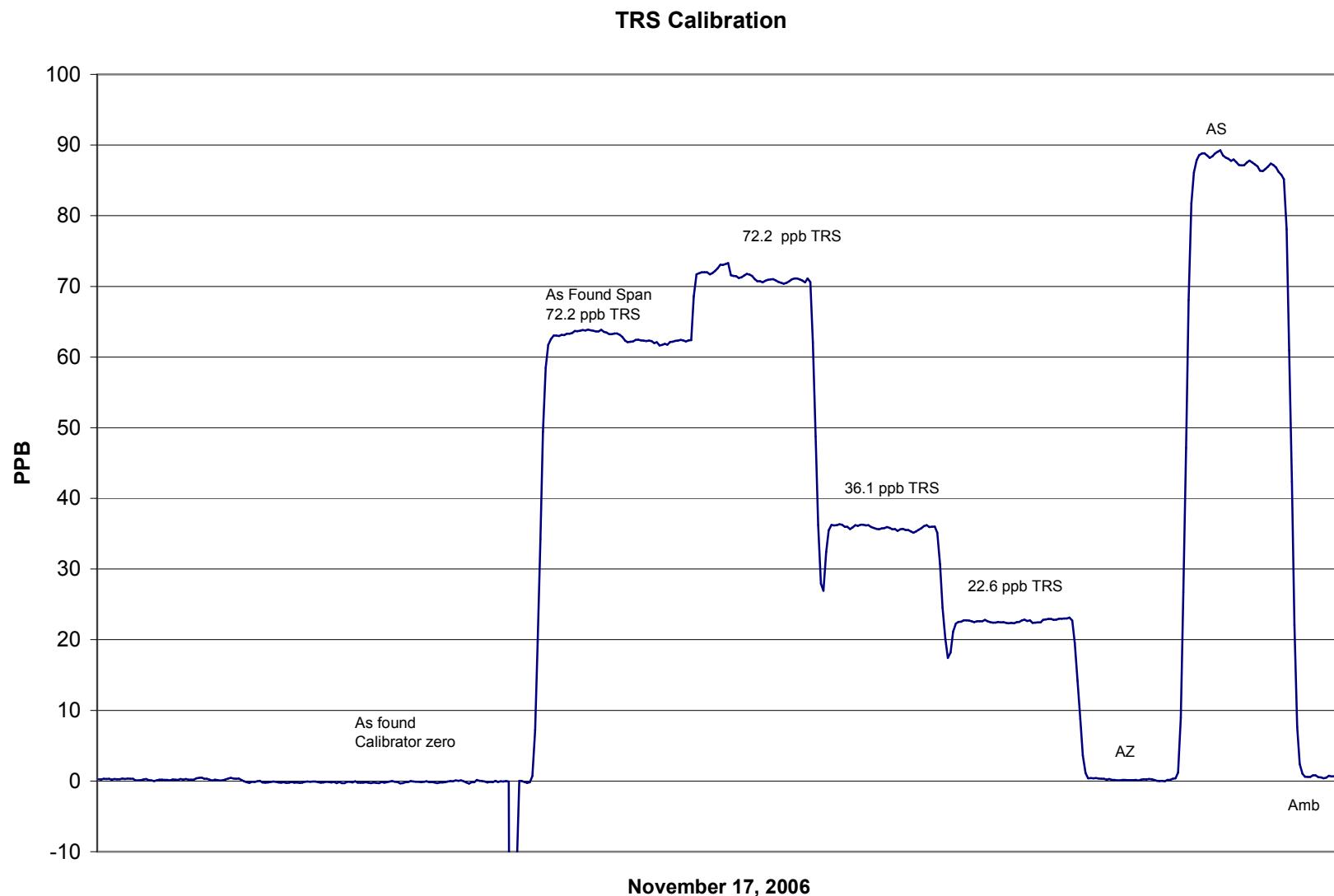
**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 3, 2006
Station Number	5	Station Location	Faher
Start Time (MST)	15:19	End Time (MST)	18:45
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	-0.1	N/A		
72.2	70.9	1.0182	Correlation Coefficient	0.999894
36.1	35.7	1.0120	Slope	1.019240
22.6	22.8	0.9909	Intercept	-0.225159

**TRS Calibration Curve**



**Calibration Report**

Parameter O3  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 3, 2006
Station Number	6	Station Location	Falher
Reason:	Routine	Install	Removal
Start Time (MST)	15:19	End Time (MST)	18:45
Barometric Pressure	0.920 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2488
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	1.003489	Calculated slope	0.996664
Calculated intercept	0.039485	Calculated intercept	2.445609
Analyzer make	TEI 49C a3C1AB	Analyzer serial #	609716240
Concentration range offset slope Cell A Cell B Pressure Cell A Flow Cell B Flow	before	after	
	0 - 500	ppb	0 - 500 ppb
	-0.3		-0.3
	1.067		1.067
	88443	mV	88443 mV
	87723	mV	87723 mV
	698.1	inches Hg	698.1 inches Hg
	665	mL/min	665 mL/min
	664	mL/min	664 mL/min

**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)
4996	0.00	0.0	0.2	N/A
4996	0.00	288.8	288.4	1.0012
4996	0.00	192.0	190.3	1.0093
4996	0.00	92.8	86.8	1.0695
4996	0.00	0.0	0.2	As found zero
4996	0.00	288.8	276.2	As found span
Average Correction Factor				1.0267

Calculated value of As Found Response: 276.9 ppm Percent Change of As Found: -4.1%

Auto zero Auto span	before calibration		after calibration	
	8.8	ppb	3.5	ppb
	274.3	ppb	331.6	ppb

Notes: Adjusted span.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

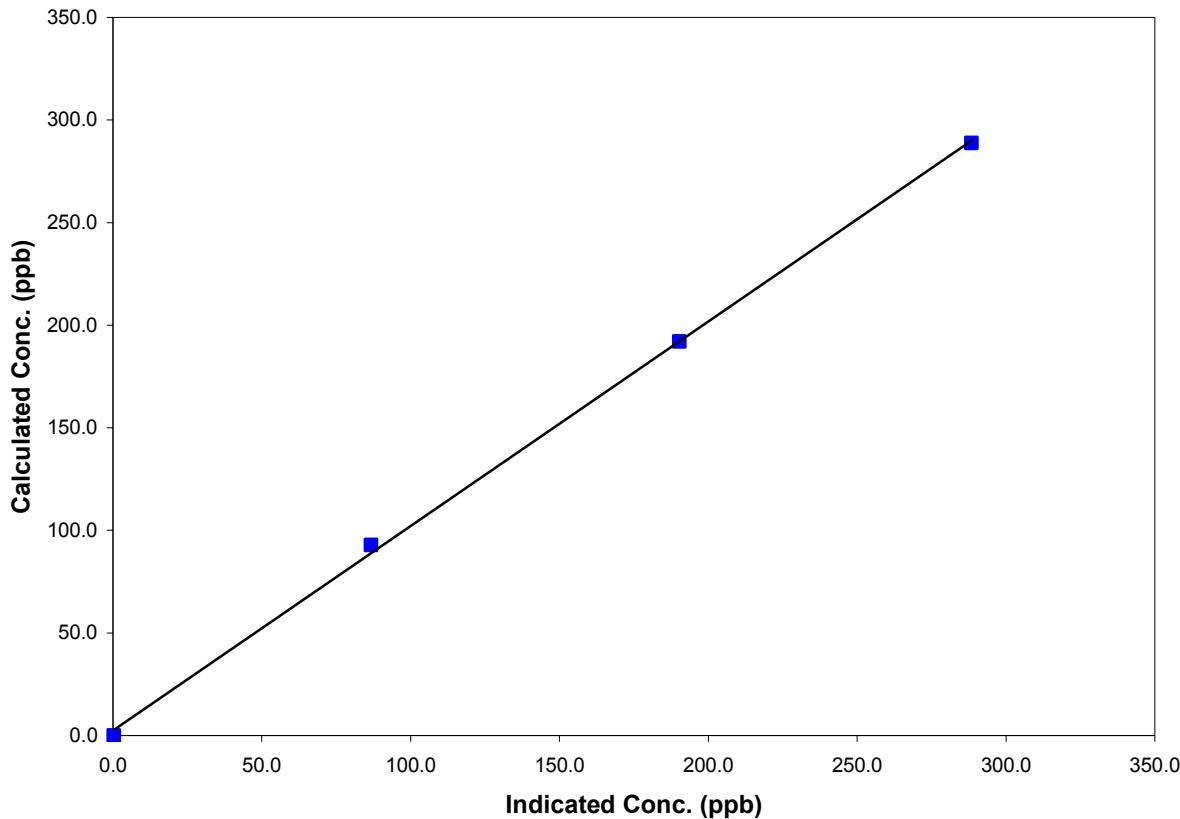
Parameter O3  
 Air Monitoring Network PASZA

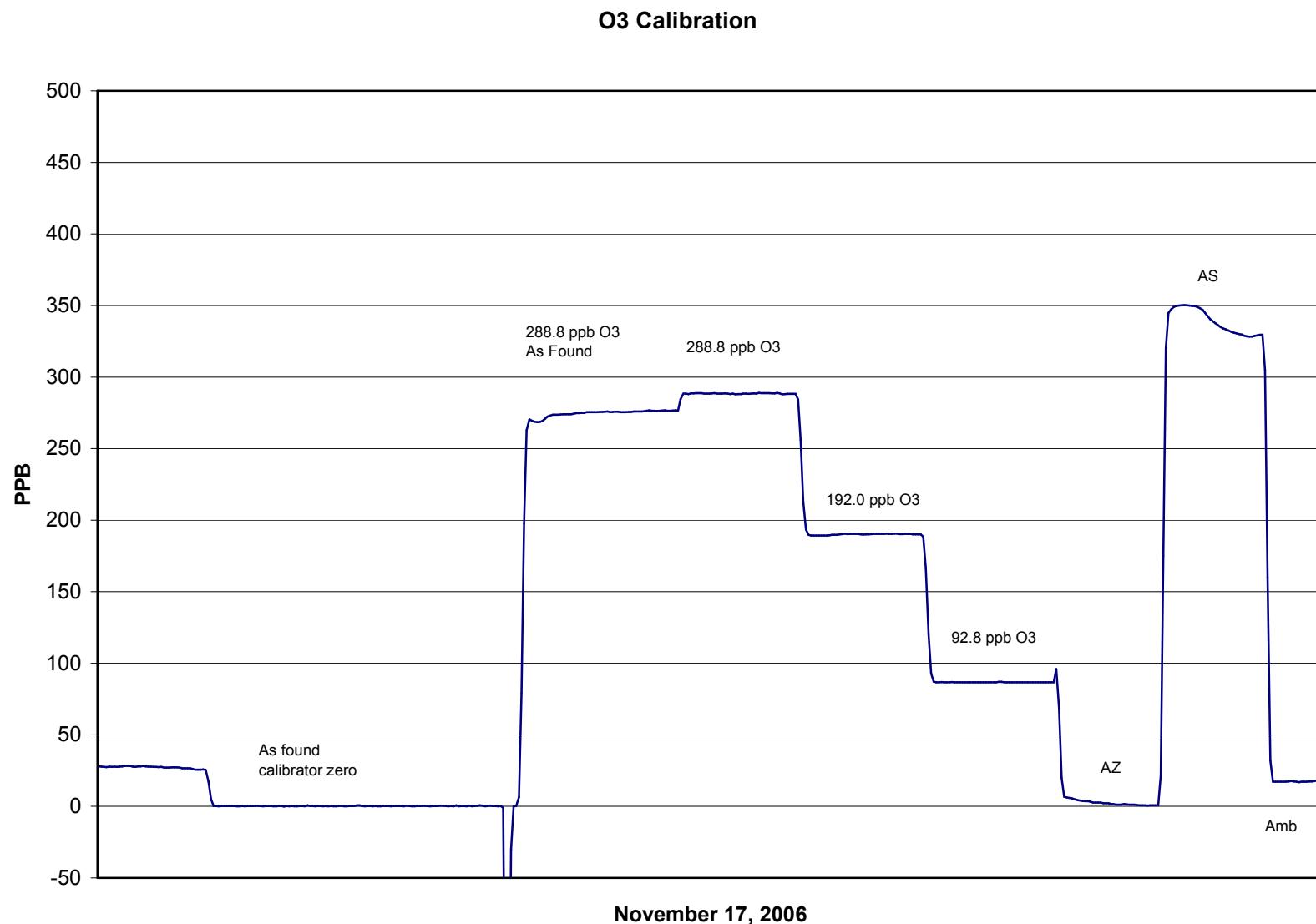
**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 3, 2006
Station Number	6	Station Location	Falher
Start Time (MST)	15:19	End Time (MST)	18:45
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		
288.8	288.4	1.0012	Correlation Coefficient	0.999495
192.0	190.3	1.0093	Slope	0.996664
92.8	86.8	1.0695	Intercept	2.445609

**O3 Calibration Curve**



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

Calibration Date	November 17, 2006	Previous Calibration	October 13, 2006
Station Number	5	Station Location	Valleyview
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	7:00	End Time (MST)	11:43
Barometric Pressure	27.9 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	0.948399	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	1.019081	Calculated slope	0.994900
Calculated intercept	-2.591743	Calculated intercept	0.912140

Analyzer make	Monitor Labs	Analyzer serial #	332
before		after	
Concentration range	1000	ppb	1000
Sample Flow	325	ccm	325
Span Pot	50		46
Zero Pot	340		348
T1	90	%	90
T2	39	%	39
T3	65	%	65

**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	2371.0	0.0	-0.4	N/A
2500	2371.0	313.3	314.0	0.9976
5020	4761.0	156.0	156.3	0.9982
9500	9009.8	82.4	80.9	1.0185
zero	2371.0	0.0	-4.7	As Found Zero
2500	2371.0	313.3	296.4	As Found Span
Average Correction Factor				1.0048

Calculated value of As Found Response: 304.271 ppm Percent Change of As Found: 2.9%

Auto zero	before calibration		after calibration	
	-0.1	ppm	0.9	ppm
	315.4	ppm	539.9	ppm

Notes:

Calibration Performed By: Dawn Ewan

**Calibration Summary**

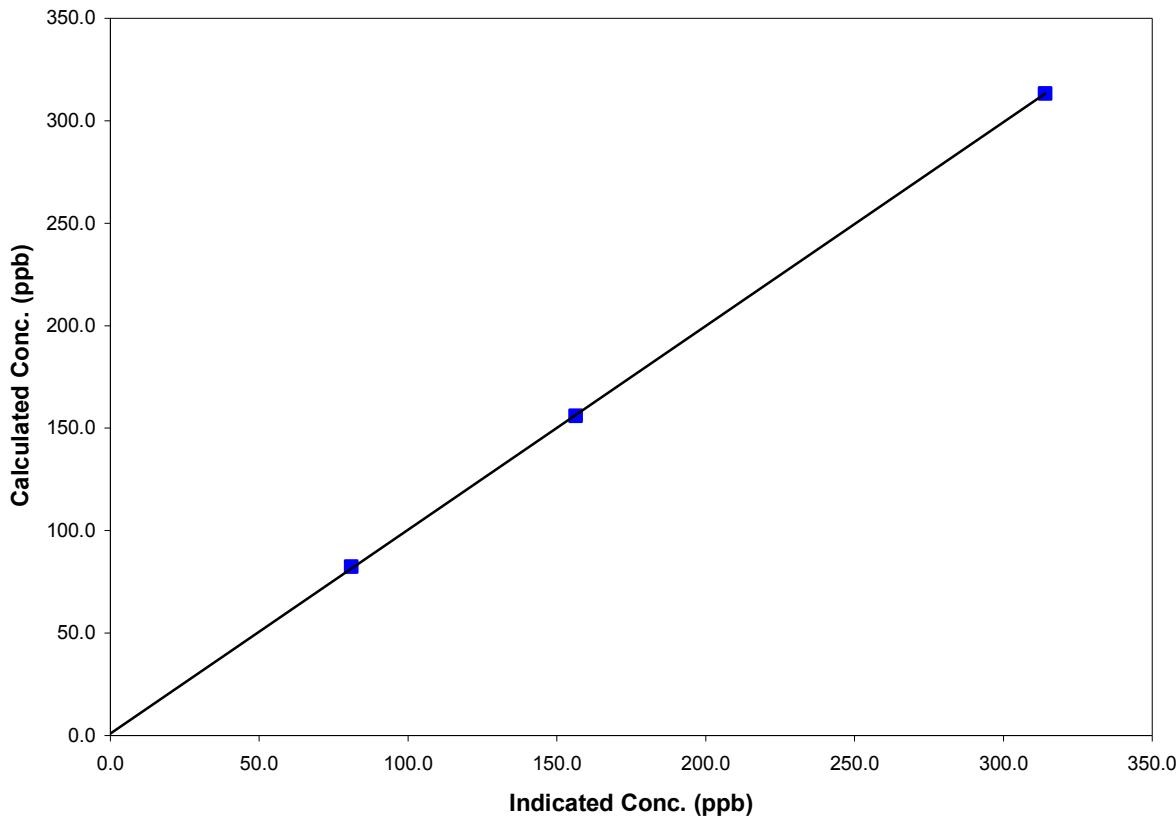
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

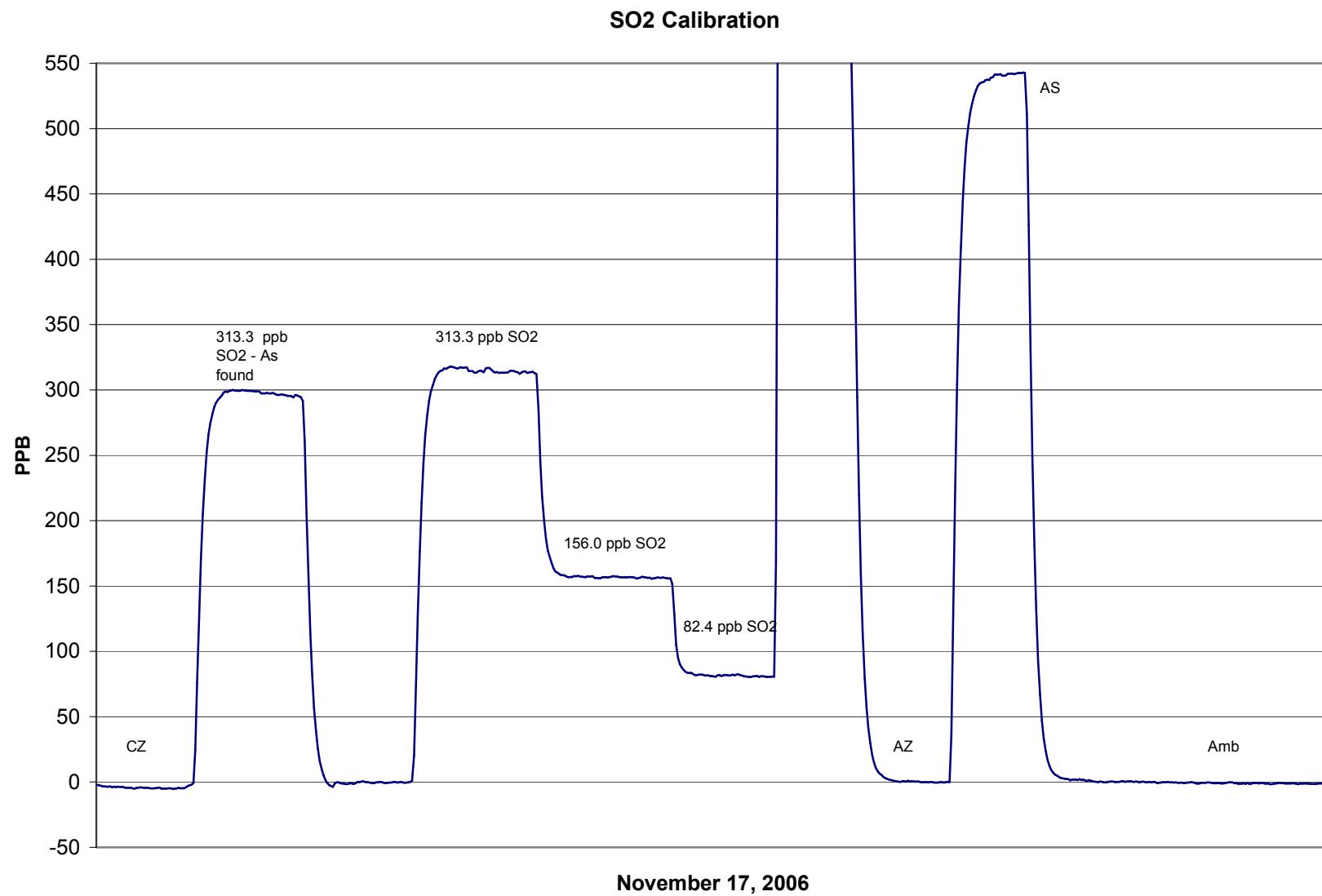
**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 13, 2006
Station Number	5	Station Location	Valleyview
Start Time (MST)	7:00	End Time (MST)	11:43
Analyzer make/model	Monitor Labs	Analyzer serial #	332

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A		
313.3	314.0	0.9976	Correlation Coefficient	0.999973
156.0	156.3	0.9982	Slope	0.994900
82.4	80.9	1.0185	Intercept	0.912140

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



**Calibration Report**

Parameter H2S  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 13, 2006
Station Number	5	Station Location	Valleyview
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	7:00	End Time (MST)	11:43
Barometric Pressure	27.90 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	235 ng/min	Perm-tube Expiry Date	8/8/2006
Correction factor	0.948399	Perm-tube Cert #	T-25214
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	1.005957	Calculated slope	1.001664
Calculated intercept	0.237375	Calculated intercept	0.220992

Analyzer make	TECO 43C	Analyzer serial #	45C-57351-313
before			after
Concentration range	100	ppb	100
Background	28.8	ppb	30.9
coefficient	0.788		0.825
Lamp Voltage	690	volts	685
Chamber Temp	44.4	Deg C	45
Pressure	609	mm Hg	600
Sample Flow	456	ccm	450
Lamp Intesity	44,900	mv	44,800

**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	2371.0	0.0	0.0	N/A
2500	2371.0	71.3	70.9	1.0051
5020	4761.0	35.5	35.5	1.0002
9500	9009.8	18.8	18.0	1.0390
zero	2371.0	0.0	0.8	As Found Zero
2500	2371.0	71.3	64.3	As Found Span
Average Correction Factor				1.0148

Calculated value of As Found Response: 64.16 ppm Percent Change of As Found: 10.0%

Auto zero	before calibration		after calibration	
	-0.2	ppm	0.3	ppm
	34.9	ppm	36.5	ppm

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

Parameter H2S  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	November 17, 2006	Previous Calibration	October 13, 2006
Station Number	5	Station Location	Valleyview
Start Time (MST)	7:00	End Time (MST)	11:43
Analyzer make/model	TECO 43C	Analyzer serial #	45C-57351-313

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
71.3	70.9	1.0051	Correlation Coefficient	0.999883
35.5	35.5	1.0002	Slope	1.001664
18.8	18.0	1.0390	Intercept	0.220992

**H2S Calibration Curve**