



# Air Quality Monitoring Network for October 2005

Prepared by  
**FOCUS**  
AMBIENT AIR MONITORING

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

## Peace AirShed Zone Association

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

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **October 2005**.

**Continuous Monitoring:** **Four (4) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights and Beaverlodge**

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 guidelines with the exception of one H<sub>2</sub>S exceedence by the TRS analyzer noted at the Smoky Heights station on October 8, 2005 (Exceedence Report Ref # 164589).

In general, the PASZA Air Monitoring Network ran well for the month of October 2005. Only one operational difficulty was encountered at the Henry Pirker monitoring stations (a continuation of the September Non-compliance report Ref# 165429). Aside from this analyzer all equipment exceeded 98 percent uptime.

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

There was one NO<sub>x</sub> passive sample at Gold Creek (#32) that was reported broken, resulting in no data for this point in the month of October. No other problems were observed with the remaining sampling sites for the month of October 2005.

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

- Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.1 ppb to 0.5 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 0.6 ppb to 10.6 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 12.9 ppb to 28.2 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

October 14, 2005

Standards & Approvals Division  
Alberta Environment  
4<sup>th</sup> Floor, Oxbridge Place  
9820 – 106 Street  
Edmonton, Alberta T5K 2J6

**ATTENTION: Director**

**RE: PASZA Air Monitoring Directive Exceedence Report Ref # 164589**

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An exceedence of the Alberta Air Quality Objective for H<sub>2</sub>S was recently reported by Focus to Alberta Environment (AENV) on behalf of the Peace Airshed Zone Association (PASZA). TRS levels exceeded the 10 ppb H<sub>2</sub>S Hourly Average Objective for a two hour period on October 8, 2005 at the Smoky Heights School Air Monitoring Station located at 13-8-074-02 W6.

The details of the exceedence are:

Date <u>Spd</u>	Hour	Hrly Average	Hrly Maximum	Wind Dir	Wind
10/08/2005	2:00	29.6 ppb	100 ppb (off scale)	264 Deg	4.7 Kph
10/08/2005	3:00	10.5 ppb	96.6 ppb	246 Deg	9.3 Kph

The station is owned by PASZA and operated on their behalf by Focus. The exceedence was called in and has been assigned AENV reference number 164589.

A follow up investigation has determined the elevated TRS concentrations to be a result of an unplanned plant shutdown at the Talisman Energy Teepee Creek Gas Plant. No elevated readings have been seen since the reported incident.

If there are any questions or concerns please call me at your convenience.

Sincerely,

**THE FOCUS CORPORATION**



Gary Cross  
AQM Technical Manager

November 15, 2005

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

**ATTENTION: Director**

**RE: PASZA Air Monitoring Directive Non-compliance Report Ref # 165429**

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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). There were two reportable incidents which were included under the same reference number as they were at the same site and occurred near the same time. Both incidents occurred at the Henry Pirker ambient air monitoring station located in Muskosepi Park in Grande Prairie, Alberta. The station is owned by PASZA and operated on their behalf by Focus. The incidents were called in to Carsten Olesen, with AENV and have been assigned AENV reference number 165429.

The first incident was no THC daily span from September 7 to October 5 2005. This was a result of a cylinder of THC span gas that leaked and the entire cylinder was lost during the two days following installation. A new cylinder was ordered, but not received until October 3. The new cylinder was then installed and tested for leaks.

Preventative measures:

- All cylinders will be properly leak checked after installation.
- Spare span gas cylinders will be ordered and kept on hand at the Henry Pirker station.

The second incident was the failure of the UV lamp power supply in the Ozone analyzer. This analyzer is owned by AENV. The power supply failed on September 29 and parts were requested from AENV to repair the problem. Parts were shipped to the site and replaced on October 5, 2005. A full calibration was completed immediately following the repair. As the analyzer was down until October 5, the uptime for the Ozone parameter will be less than 90% for the month of October 2005.

If there are any questions or concerns please call me at your convenience.

Sincerely,

**THE FOCUS CORPORATION**



Gary Cross  
AQM Technical Manager

# PASZA Monthly Continuous Data Summary

Oct-2005 Peace Airshed Zone Association						Maximum Recorded Values							
						1-hr		24-hr / 8-hr		Conc	Day		
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	0.6	0	0	5.0	Oct-16 12:00	12.8	W	1.2	Oct-22	100.0%
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	0.6	0	0	9.1	Oct-14 12:00	4.7	SE	2.3	Oct-09	100.0%
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.4	0	0	7.0	Oct-07 23:00	15.5	WSW	1.3	Oct-08	100.0%
SO <sub>2</sub> (ppb)	172	57	Beaverlodge	0.4	0	0	4.8	Oct-16 10:00	7.7	W	1.4	Oct-28	100.0%
NO (ppb)			Henry Pirker	17.8	-	-	192.5	Oct-18 20:00	3.6	ENE	88.5	Oct-06	99.7%
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	13.1	0	0	36.9	Oct-06 11:00	3.1	S	21.6	Oct-12	99.7%
NO <sub>x</sub> (ppb)			Henry Pirker	31.0	-	-	224.8	Oct-06 11:00	3.1	S	109.2	Oct-06	99.7%
NO (ppb)			Beaverlodge	1.2	-	-	31.0	Oct-28 06:00	2.9	SW	4.5	Oct-28	98.9%
NO <sub>2</sub> (ppb)	212	106	Beaverlodge	5.4	0	0	21.0	Oct-28 17:00	4.0	WNW	13.1	Oct-28	98.9%
NO <sub>x</sub> (ppb)			Beaverlodge	6.7	-	-	49.7	Oct-28 06:00	2.9	SW	17.8	Oct-28	98.9%
O <sub>3</sub> (ppb)	82		Henry Pirker	14.3	0	-	42.6	Oct-26 06:00	34.0	WSW	25.0	Oct-26	85.5%
O <sub>3</sub> (ppb) - 8-hr	65		Henry Pirker		0						37.5	Oct-26	
O <sub>3</sub> (ppb)	82		Beaverlodge	20.7	0	-	40.9	Oct-26 06:00	30.4	W	31.8	Oct-26	100.0%
O <sub>3</sub> (ppb) - 8-hr	65		Beaverlodge		0						37.3	Oct-26	
CO (ppm)	13		Henry Pirker	0.25	0	-	2.0	Oct-30 18:00	3.2	SSE	0.6	Oct-06	99.9%
CO (ppm) - 8-hr	5		Henry Pirker		0						1.1	Oct-31	
THC (ppm)			Henry Pirker	2.13	-	-	3.5	Oct-05 00:00	2.7	SE	2.7	Oct-06	99.6%
TRS (ppb)			Henry Pirker	0.2	-	-	2.6	Oct-31 21:00	3.8	ESE	0.5	Oct-31	99.9%
TRS (ppb)			Smoky Heights	0.6	-	-	29.9	Oct-08 02:00	4.8	W	2.8	Oct-08	100.0%
TRS (ppb)			Evergreen Park	0.6	-	-	6.8	Oct-19 10:00	5.8	W	0.9	Oct-19	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Henry Pirker	5.1	0		37.5	Oct-06 11:00	3.1	S	14.7	Oct-06	99.3%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Evergreen Park	4.2	0		35.1	Oct-28 08:00	2.5	SSE	10.9	Oct-28	99.5%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Smoky Heights	2.7	0		58.5	Oct-27 17:00	7.2	NE	9.4	Oct-27	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Beaverlodge	2.6	0		11.9	Oct-22 17:00	13.4	NW	7.4	Oct-05	99.7%
			Henry Pirker										
RH (%)			Henry Pirker	68.7	-	-	-	-	-	-	-	-	100.0%
RH (%)			Beaverlodge	65.7	-	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )			Henry Pirker	79.8	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Henry Pirker	4.9	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Evergreen Park	3.8	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Smoky Heights	3.8	-	-	-	-	-	-	-	-	99.9%
Temp (°C)			Beaverlodge	5.1	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Henry Pirker	7.4	-	-	-	Oct-26 12:00	35.2	WSW	15.2	26-Oct	100.0%
WSPD v (km/hr)			Evergreen Park	6.2	-	-	-	Oct-26 12:00	32.8	WSW	14.7	26-Oct	100.0%
WSPD v (km/hr)			Smoky Heights	10.0	-	-	-	Oct-26 07:00	48.9	WSW	27.9	26-Oct	99.9%
WSPD v (km/hr)			Beaverlodge	7.6	-	-	-	Oct-26 10:00	39.2	W	18.5	26-Oct	100.0%
WSPD s (km/hr)			Henry Pirker	7.9	-	-	-	Oct-26 12:00	35.3	WSW	17.0	26-Oct	100.0%
WSPD s (km/hr)			Evergreen Park	6.5	-	-	-	Oct-26 12:00	33.1	WSW	16.0	26-Oct	100.0%
WSPD s (km/hr)			Smoky Heights	10.4	-	-	-	Oct-26 07:00	49.0	WSW	28.4	26-Oct	99.9%
WSPD s (km/hr)			Beaverlodge	7.6	-	-	-	Oct-26 10:00	39.2	W	20.4	26-Oct	100.0%
WDIR (Deg)			Henry Pirker	N	-	-	-	-	-	-	-	-	100.0%
WDIR (Deg)			Evergreen Park	N	-	-	-	-	-	-	-	-	100.0%
WDIR (Deg)			Smoky Heights	N	-	-	-	-	-	-	-	-	99.9%
WDIR (Deg)			Beaverlodge	N	-	-	-	-	-	-	-	-	100.0%

Note:

<sup>a</sup> the draft 1-hr Alberta Ambient Air Quality Objectives

\* Wind Direction is the predominate direction for the Month

# Continuous Network Equipment Summary

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## PASZA – Henry Pirker Station

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**General Station Issues**

All analyzers were marked down on October 18<sup>th</sup> at 13:00 MST for ambient manifold maintenance. There were no other general station issues noted during the month.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43	No operational problems observed.
NOx/NO/NO <sub>2</sub>	TECO	42C	Calibrations were started Oct 3 <sup>rd</sup> and 4 <sup>th</sup> but aborted due to calibrator issues. One hour was flagged out of service Oct 5 <sup>th</sup> at 10:00 MST due to analog signal loss.
O <sub>3</sub>	API	400	The analyzer was flagged out of service until parts were received from AENV and installed on October 5. No operational problems observed since then.
CO	TECO	48C	Two hours were flagged on Oct 4 <sup>th</sup> to test new span cylinder installation.
THC	TEI	51-CLT	An additional Automated Internal Calibration (AIC) test was initiated Oct 16 <sup>th</sup> to repair span issues. The cylinder pressure was reset. No other operational problems observed.
TRS	TEI	42C	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	4 hours were removed due to excessive baseline drift.
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	No operational problems observed.
WD	Met One	020C	No operational problems observed.

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## PASZA – Evergreen Park Station

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**General Station Issues**

No general station issues were identified.

Parameter	Make	Model	Notes
SO <sub>2</sub>	API	100	No operational problems observed.
TRS	TEI	42C	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	4 hours were removed due to excessive baseline drift.
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 School Station

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**General Station Issues**

One (1) hour of data missing for all meteorological parameters on Oct 13<sup>th</sup> at 13:00 MST due to datalogger maintenance. No other general station issues observed.

<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	No operational problems observed.
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 – Beaverlodge Station

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**General Station Issues**

No general station issues were identified.

<b>Parameter</b>	<b>Make</b>	<b>Model</b>	<b>Notes</b>
SO <sub>2</sub>	TECO	43CTL	No operational problems observed.
NOx/NO/NO <sub>2</sub>	TECO	42C	Oct 6 <sup>th</sup> calibration was aborted due to calibrator issues. Analyzer was flagged for maintenance Oct 21 <sup>st</sup> to remove the internal span system for repairs and 28 <sup>th</sup> to re-install a new span system. No spans were performed between these periods. Excessive analyzer drift noted on Oct 19 <sup>th</sup> at 20:00 MST and was flagged out.
O <sub>3</sub>	API	400	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	2 hours were removed due to excessive baseline drift.
AT	n/a	n/a	No operational problems observed.
RH	n/a	n/a	No operational problems observed.
WS	Blue Sky	857	6 hours of data were removed due to calm wind conditions.
WD	Blue Sky	857	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: October 1, 2005 to November 1, 2005

#### Alberta's Air Quality Index

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

#### Summary

Number of 1-hr Good Readings:	694
Number of 1-hr Fair Readings:	1
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

#### Status Flag Characters

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

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
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-Oct-05	8	6	6	4	A	4	3	4	5	6	3	5	4	5	5	5	A	3	3	2	4	5	5	5	4
2-Oct-05	4	2	4	A	3	6	3	4	4	3	4	8	5	3	3	2	2	3	9	8	4	5	5	5	3
3-Oct-05	4	2	A	3	2	3	5	4	2	3	A	A	A	A	A	A	A	A	5	4	5	3	3	3	
4-Oct-05	3	3	3	3	3	A	4	4	3	A	A	3	3	A	A	3	3	4	6	5	6	5	4	3	
5-Oct-05	3	3	3	2	2	A	5	5	4	5	A	5	7	6	4	6	5	4	11	16	16	16	15	16	
6-Oct-05	19	17	12	12	A	12	19	16	16	19	29	18	6	6	9	12	6	5	8	17	16	14	14	14	
7-Oct-05	16	9	5	4	A	5	6	6	5	7	13	14	18	19	20	18	17	13	11	9	9	9	8	10	
8-Oct-05	10	9	9	A	9	9	7	5	7	9	13	14	15	16	16	16	16	13	11	9	9	9	8	8	
9-Oct-05	6	8	A	5	8	7	7	10	17	5	7	9	12	15	17	18	17	17	14	16	18	19	18	13	
10-Oct-05	15	A	10	9	4	4	5	5	5	10	12	17	18	17	17	17	17	16	15	13	12	12	14	13	14
11-Oct-05	A	13	11	11	6	5	7	9	6	5	11	16	16	17	16	16	15	6	9	24	23	6	6	11	
12-Oct-05	6	7	9	6	6	A	7	10	14	9	6	6	12	14	14	14	10	8	12	8	8	8	6	6	5
13-Oct-05	5	4	4	5	A	6	5	5	5	11	15	18	19	19	19	18	17	16	14	12	11	11	11	9	
14-Oct-05	10	11	10	A	7	6	5	9	11	16	13	9	8	13	14	15	13	13	13	14	14	13	13	13	
15-Oct-05	14	13	A	12	9	5	4	4	3	4	7	7	8	9	10	10	9	10	9	8	9	5	7	8	
16-Oct-05	10	A	8	7	6	6	3	5	8	6	12	17	17	19	19	19	18	15	11	8	8	9	10	10	
17-Oct-05	A	6	3	5	4	3	4	4	7	7	10	13	15	16	17	16	15	12	11	11	7	7	5	A	
18-Oct-05	4	4	3	3	3	2	2	3	4	8	11	A	A	A	18	17	15	6	6	10	23	17	10	3	
19-Oct-05	3	3	2	2	3	A	3	3	4	5	6	6	6	7	11	11	17	14	9	13	13	9	5	6	
20-Oct-05	12	11	11	10	A	5	5	5	5	7	10	11	15	16	17	16	15	6	14	25	18	7	6	9	
21-Oct-05	6	4	5	A	6	11	11	16	18	11	7	8	10	11	11	11	8	5	4	8	10	10	9	11	
22-Oct-05	12	12	A	11	10	7	5	6	5	7	8	9	10	11	9	7	6	4	8	5	5	9	7	6	
23-Oct-05	5	A	5	4	4	4	5	8	5	4	4	6	9	12	9	7	5	4	6	6	7	8	3	2	
24-Oct-05	A	2	2	2	5	5	6	6	5	5	8	10	4	5	5	4	4	4	8	14	10	5	7	A	
25-Oct-05	7	5	5	6	5	7	8	12	6	8	7	14	16	16	17	17	9	10	9	9	8	7	A	14	
26-Oct-05	11	7	7	10	10	17	21	21	17	17	18	19	19	18	18	18	15	11	9	9	6	A	6	7	
27-Oct-05	6	6	6	9	12	10	16	18	11	13	11	8	8	12	16	15	10	6	7	7	A	5	5	5	
28-Oct-05	5	12	7	4	3	5	6	9	14	5	9	9	12	12	12	12	5	12	18	21	A	14	13	11	11
29-Oct-05	10	11	9	8	9	11	9	12	10	6	8	8	16	17	18	17	15	11	A	9	13	14	16	16	
30-Oct-05	16	17	16	15	16	12	15	16	13	14	16	18	19	19	16	12	9	A	18	22	7	7	7	7	
31-Oct-05	13	6	6	11	12	5	6	6	7	6	7	6	4	4	4	4	A	7	9	8	9	11	9	8	

## PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

Objective Limit:	Alberta Environment:	1-hr	172	ppb	24-hr	57	ppb
<b>Summary</b>							
Number of 1-hr Exceedances:		0					
Number of 24-hr Exceedances:		0					

Maximum 1-hr Average: 5.0 ppb 16-Oct 12:00 13:00  
Maximum 24-hr Average: 1.2 ppb 22-Oct

AIC Time:	33 hrs	Operational Time:	707 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	0.6 ppb
	2.9 1.5 0.8 0.4 0.2 0.1 0.0		

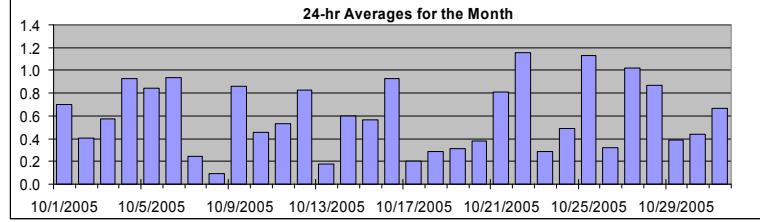
### Day Mountain Standard Time

	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	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-Oct-05	0	0	0	0	A	0	0	0	1	1	1	1	1	3	2	1	1	0	0	0	0	0	0	0	0	0.7	3.5
2-Oct-05	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.4	1.0
3-Oct-05	0	0	A	0	0	0	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	1	0.6	1.2
4-Oct-05	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	0.9	1.4
5-Oct-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
6-Oct-05	1	1	1	1	1	A	1	1	1	1	2	2	1	1	1	1	0	0	0	0	0	1	1	1	1	0.9	2.1
7-Oct-05	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
8-Oct-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
9-Oct-05	0	0	A	0	0	0	1	1	1	1	2	4	2	2	1	1	0	0	0	0	0	0	0	0	0	0.9	4.4
10-Oct-05	0	A	1	1	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.1
11-Oct-05	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0.5	2.5
12-Oct-05	4	3	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0.8	4.0
13-Oct-05	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
14-Oct-05	0	0	0	A	0	0	1	1	1	2	1	1	0	1	0	0	0	0	0	0	0	1	1	1	0	0.6	1.6
15-Oct-05	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.6	0.9
16-Oct-05	1	A	0	0	0	0	0	1	1	1	4	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0.9	5.0
17-Oct-05	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	0.2	0.6
18-Oct-05	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	1	1	0	0.3	1.1
19-Oct-05	0	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
20-Oct-05	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.4	1.4
21-Oct-05	0	0	0	A	0	1	1	2	1	1	2	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0.8	1.6
22-Oct-05	1	1	A	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.9
23-Oct-05	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.3	0.8
24-Oct-05	A	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	1	1	1	1	0	1	A	0.5	1.3
25-Oct-05	0	0	0	0	1	1	1	2	1	3	3	1	1	1	1	1	3	1	0	1	1	2	A	0	0	1.1	2.9
26-Oct-05	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	0.3	1.1
27-Oct-05	0	0	0	0	1	1	2	1	1	2	2	2	3	4	0	0	0	0	0	0	0	0	A	0	0	1.0	4.4
28-Oct-05	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	0.9	1.9	
29-Oct-05	1	0	1	0	0	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.9
30-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	2	1	1	1	1	1	1	0.4	1.5
31-Oct-05	1	1	1	1	0	0	0	0	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	1.0

Hourly Avg	0.6	0.5	0.4	0.4	0.4	0.6	0.7	0.7	0.8	0.8	1.0	1.0	0.8	0.5	0.4	0.5	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5
Hourly Max	4.0	2.6	1.2	1.3	1.3	1.3	1.7	2.3	1.9	2.8	2.9	4.5	5.0	4.4	2.2	1.1	2.9	1.3	1.5	1.6	1.6	1.7	1.3	2.5	

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

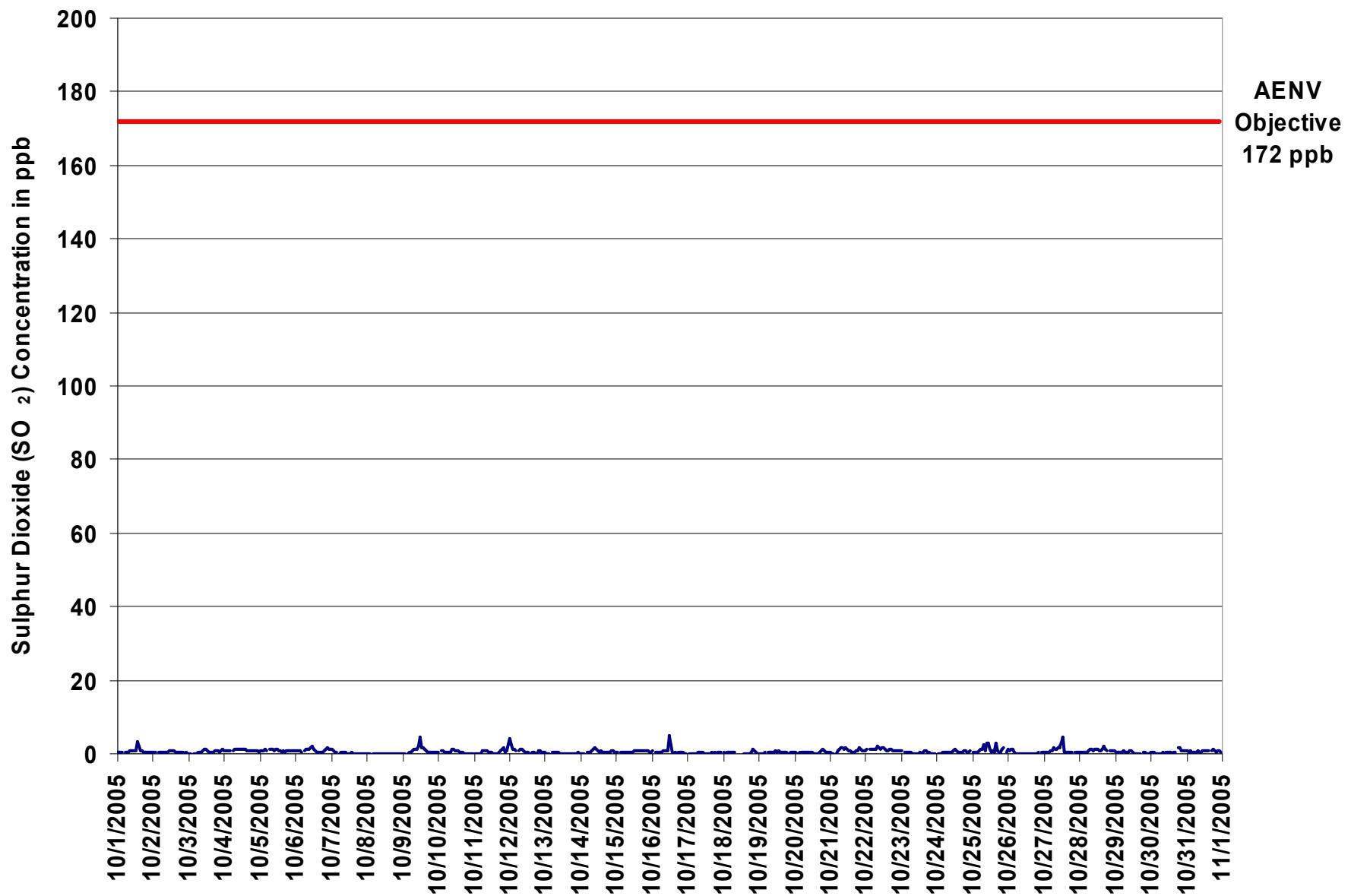


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

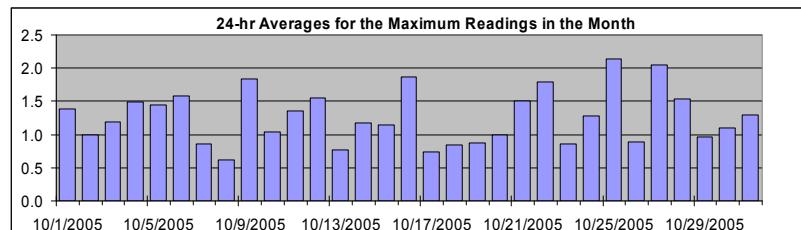
### Summary

Maximum 1-hr Value:	10.9 ppb	16-Oct 11:00 12:00
Maximum 24-hr Value:	2.1 ppb	25-Oct

AIC Time:	33 hrs	Operational Time:	707 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	
	5.1 2.5 1.5 1.1 0.8 0.6 0.5	1.3 ppb	

### HOURLY MAXIMUM 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

### 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-Oct-05	1	1	1	1	A	1	1	1	2	1	1	1	2	5	3	2	1	1	1	1	1	1	1	1	1	1.4	5.1
2-Oct-05	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
3-Oct-05	1	1	A	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1.2	2.1
4-Oct-05	1	1	1	1	1	A	1	2	2	2	2	2	2	2	2	1	2	2	1	1	1	1	1	1	1	1.5	2.1
5-Oct-05	1	1	1	2	2	A	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.4	1.8
6-Oct-05	2	2	1	1	1	A	2	2	2	2	2	2	2	3	2	1	1	1	1	1	1	2	2	2	2	1.6	2.8
7-Oct-05	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.0
8-Oct-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.9
9-Oct-05	1	1	A	1	1	1	1	2	2	2	2	2	5	8	3	3	2	2	2	1	1	1	1	1	1	1.8	8.2
10-Oct-05	1	A	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.1
11-Oct-05	A	0	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	3	6	1.4	6.3
12-Oct-05	6	3	2	2	1	A	1	3	3	2	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1.6	5.5
13-Oct-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.8	1.0
14-Oct-05	1	1	1	A	1	1	1	1	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1.2	2.4
15-Oct-05	1	1	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	1.8
16-Oct-05	1	A	1	1	1	1	1	1	2	1	2	11	7	4	1	1	1	1	1	1	1	1	1	1	1	1.9	10.9
17-Oct-05	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
18-Oct-05	1	1	1	1	1	1	1	1	C	C	C	A	0	0	0	0	0	1	1	2	2	1	1	1	0.8	1.8	
19-Oct-05	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
20-Oct-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1.0	2.1
21-Oct-05	1	1	1	A	1	2	2	2	2	3	2	2	1	1	1	1	1	1	2	2	2	1	1	1	2	1.5	3.2
22-Oct-05	1	2	A	2	2	2	2	2	2	2	2	2	3	2	1	2	2	2	1	2	1	1	1	1	1	1.8	2.6
23-Oct-05	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0.9	1.6
24-Oct-05	A	1	0	1	1	1	1	2	1	1	1	3	2	1	1	1	1	1	1	1	2	2	1	1	2	1.3	3.0
25-Oct-05	1	1	1	1	2	2	3	3	2	5	4	2	1	1	2	3	4	4	1	1	2	3	A	1	1	2.1	4.5
26-Oct-05	2	2	2	2	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0.9	1.9
27-Oct-05	1	1	1	1	1	1	3	3	2	2	4	2	6	8	1	1	1	1	1	2	A	1	1	1	1	2.0	7.9
28-Oct-05	1	1	1	1	1	1	1	2	2	1	2	2	2	1	1	2	3	2	1	A	2	2	1	1	1	1.5	2.9
29-Oct-05	1	1	1	1	1	1	1	1	1	1	1	2	1	1	0	1	0	1	A	1	1	1	1	1	1	1.0	1.6
30-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	3	2	2	1	1	1.1	2.8
31-Oct-05	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	A	2	2	1	1	1	1	1	1.3	2.0

Hourly Avg 1.2 1.0 1.0 1.0 1.0 1.2 1.4 1.4 1.5 1.5 1.9 1.9 1.6 1.1 1.1 1.1 1.1 1.2 1.3 1.1 1.1 1.1 1.2  
 Hourly Max 5.5 3.3 1.8 1.9 1.9 1.8 2.8 3.3 2.5 4.5 4.1 10.9 8.2 7.9 3.4 2.7 4.2 3.5 2.8 2.6 2.5 3.2 2.8 6.3

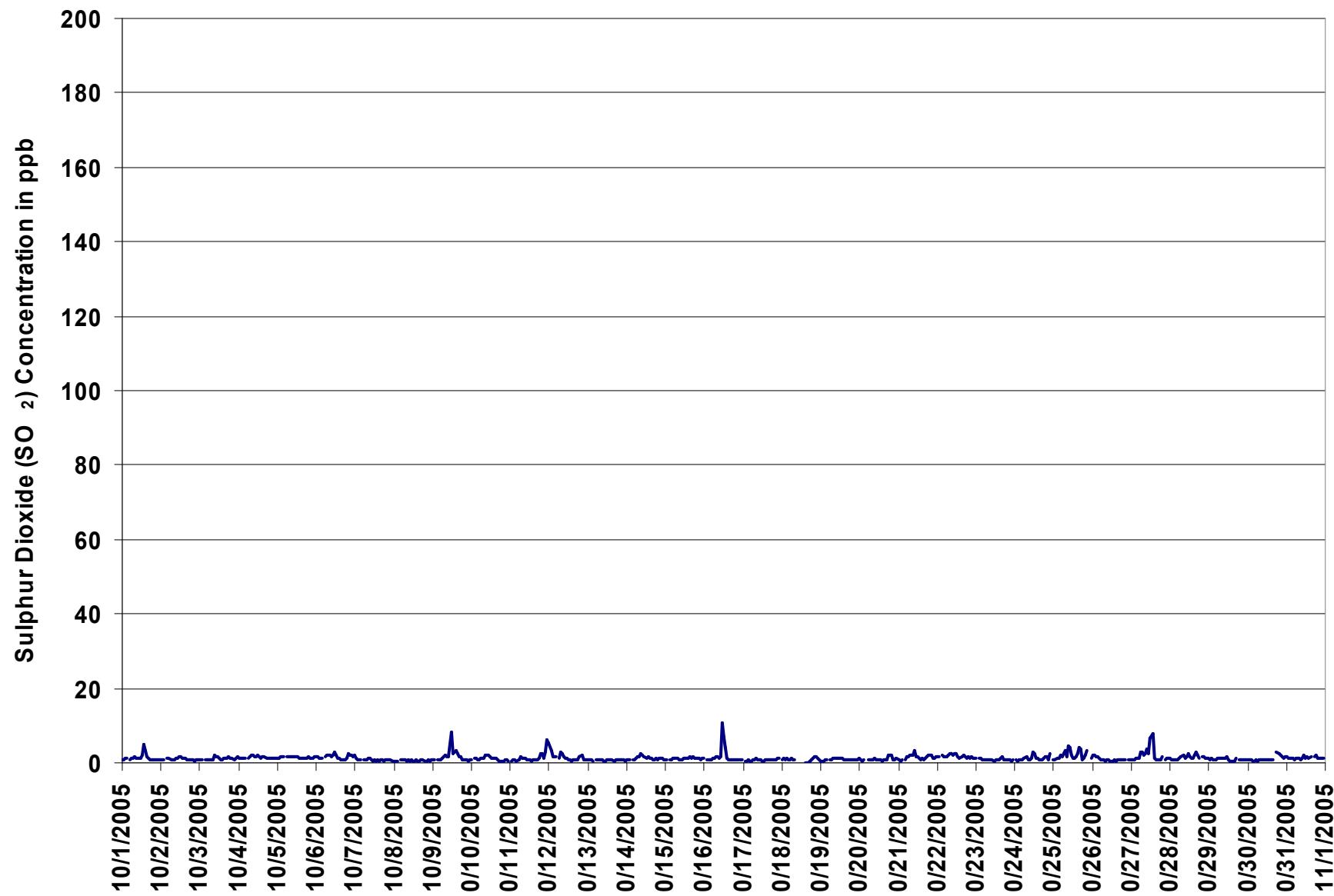
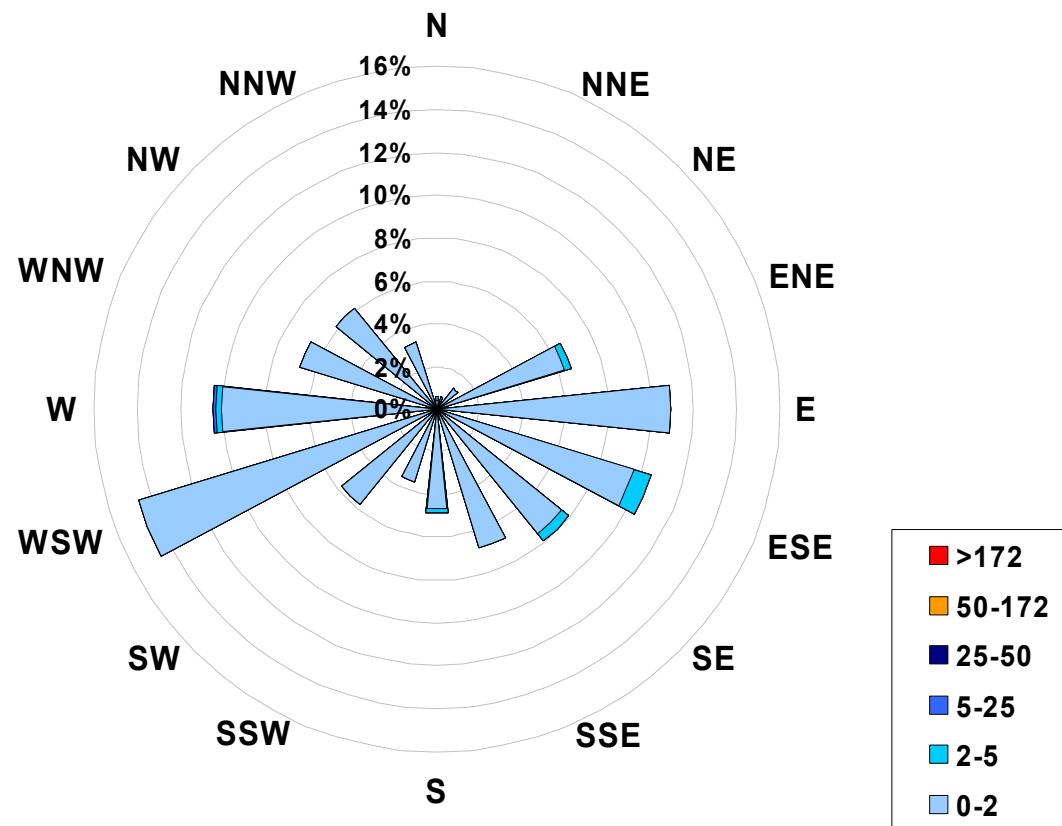


Figure 2. PASZA - Henry Pirker Sulphur Dioxide 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at  
the Henry Pirker Site for October 2005**



<b>Calms:</b>	<b>0%</b>
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Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	691
2	to	5	15
5	to	25	1
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			707

## PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

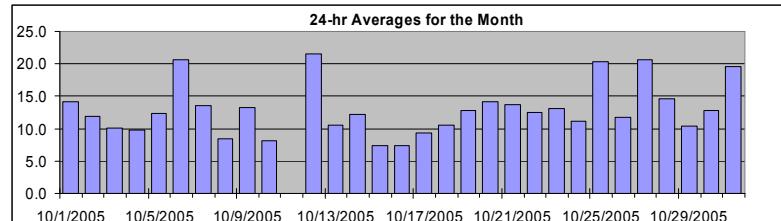
**Summary**

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	
36.9 ppb 6-Oct 11:00 12:00	
Maximum 24-hr Average:	
21.6 ppb 12-Oct	

AIC Time:	33 hrs	Operational Time:	695 hrs					
Calibration Time:	14 hrs	AMD Operational Uptime:	99.7%					
Percentile	99 31.1	95 27.2	75 17.9	50 11.6	25 7.0	5 3.6	1 2.8	Average 13.1 ppb

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 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 Maximum
1-Oct-05	21	17	17	14	A	15	14	13	16	12	11	14	11	12	10	10	13	7	10	17	23	21	17	13	14.2	22.6	
2-Oct-05	11	10	11	A	14	13	14	14	10	8	7	8	6	6	7	4	4	8	22	23	18	22	22	14	12.0	23.3	
3-Oct-05	17	9	A	11	7	14	21	18	8	5	C	C	C	C	4	5	7	10	13	11	13	7	6	7	10.0	20.6	
4-Oct-05	7	7	7	6	8	A	19	18	10	C	C	4	4	C	C	3	3	8	18	19	15	13	11	7	9.9	19.3	
5-Oct-05	9	6	7	8	10	A	21	20	16	10	S	6	9	8	8	13	14	14	16	15	15	16	15	15	12.4	21.5	
6-Oct-05	17	18	14	13	11	A	17	18	19	22	28	37	26	15	12	9	8	16	23	33	32	31	29	27	20.7	36.9	
7-Oct-05	25	24	20	15	A	19	24	27	22	14	9	8	4	4	3	4	4	11	13	14	14	11	13	9	13.6	27.2	
8-Oct-05	7	7	9	A	12	12	13	18	12	9	4	3	2	4	3	3	3	7	10	12	11	10	11	12	8.4	18.1	
9-Oct-05	13	9	A	22	27	26	28	28	31	17	11	10	7	6	5	5	8	7	11	10	6	3	4	12	13.3	31.1	
10-Oct-05	8	A	16	14	16	18	20	20	11	8	5	3	2	3	4	3	4	4	7	6	6	4	4	3	8.1	19.6	
11-Oct-05	A	5	6	6	15	21	31	30	24	C	C	C	C	C	A	11	25	29	22	19	26	20	12	N	30.5		
12-Oct-05	22	17	10	18	26	A	30	29	28	29	24	22	12	10	10	17	22	15	21	32	30	24	23	22	21.6	32.3	
13-Oct-05	20	18	15	11	A	15	22	21	20	10	5	3	3	3	4	3	5	7	9	11	11	8	7	10	10.5	22.1	
14-Oct-05	7	7	6	A	12	24	23	22	20	21	23	23	14	7	7	8	9	9	9	7	7	7	6	5	12.2	23.6	
15-Oct-05	4	4	A	6	9	21	19	16	11	10	5	7	6	3	3	3	4	4	4	5	5	5	4	4	7.3	21.3	
16-Oct-05	2	A	6	4	7	8	12	10	9	12	5	3	4	3	3	2	4	8	12	17	13	12	7	5	7.4	16.6	
17-Oct-05	A	10	15	10	15	13	17	19	11	11	9	6	5	5	4	5	7	11	9	6	6	4	5	A	9.3	18.5	
18-Oct-05	5	4	5	6	6	8	10	10	9	10	12	11	7	M	5	5	7	21	26	24	15	12	12	14	10.6	26.2	
19-Oct-05	12	11	10	8	11	A	13	13	17	15	15	17	15	16	14	10	6	7	17	9	9	13	20	15	12.7	20.4	
20-Oct-05	8	7	6	7	A	22	22	20	16	11	8	6	5	4	3	5	9	26	27	21	25	24	23	20	14.1	27.0	
21-Oct-05	20	18	18	A	17	17	18	19	16	18	14	9	7	6	6	8	14	18	18	14	11	10	10	8	13.6	20.4	
22-Oct-05	7	7	A	9	8	14	21	22	18	12	9	8	7	6	9	13	17	17	11	10	15	16	16	12.5	22.0		
23-Oct-05	16	A	15	13	13	14	12	11	20	18	18	9	8	6	10	10	11	15	18	15	15	14	13	9	13.1	20.1	
24-Oct-05	A	8	7	8	9	9	11	10	10	8	8	8	7	6	7	10	11	16	19	15	20	21	16	A	11.1	20.9	
25-Oct-05	21	17	19	23	23	28	33	28	19	16	22	10	6	5	5	7	25	29	31	33	30	27	A	20.3	33.0		
26-Oct-05	9	11	12	16	13	4	5	5	10	7	6	4	4	6	7	7	11	17	20	19	27	A	11.8	27.1			
27-Oct-05	27	25	22	25	21	19	18	21	25	23	22	21	23	10	5	8	17	27	28	26	A	23	21	20	20.7	28.4	
28-Oct-05	17	9	12	15	14	16	22	20	17	15	10	9	5	5	6	17	22	20	17	A	18	17	17	14	14.6	22.5	
29-Oct-05	15	15	14	15	13	11	8	9	13	11	13	12	5	5	3	6	8	13	A	20	10	8	6	5	10.3	19.8	
30-Oct-05	5	4	5	5	5	8	6	5	8	7	6	4	3	4	9	14	21	A	29	29	31	30	28	27	12.8	30.6	
31-Oct-05	26	27	19	10	9	19	23	24	28	19	15	16	16	18	16	19	A	25	22	25	22	19	18	16	19.6	27.6	

Hourly Avg 13.4 11.8 11.9 11.8 13.0 15.7 18.2 18.0 16.3 13.4 12.1 10.4 8.1 6.8 6.7 7.8 10.3 14.0 17.4 17.3 16.2 15.5 14.3 13.1

Hourly Max 26.5 27.3 22.1 25.1 26.5 27.9 32.8 30.1 31.1 28.9 28.1 36.9 25.7 17.6 16.1 18.6 24.6 29.3 31.0 33.0 31.6 31.4 28.8 27.4

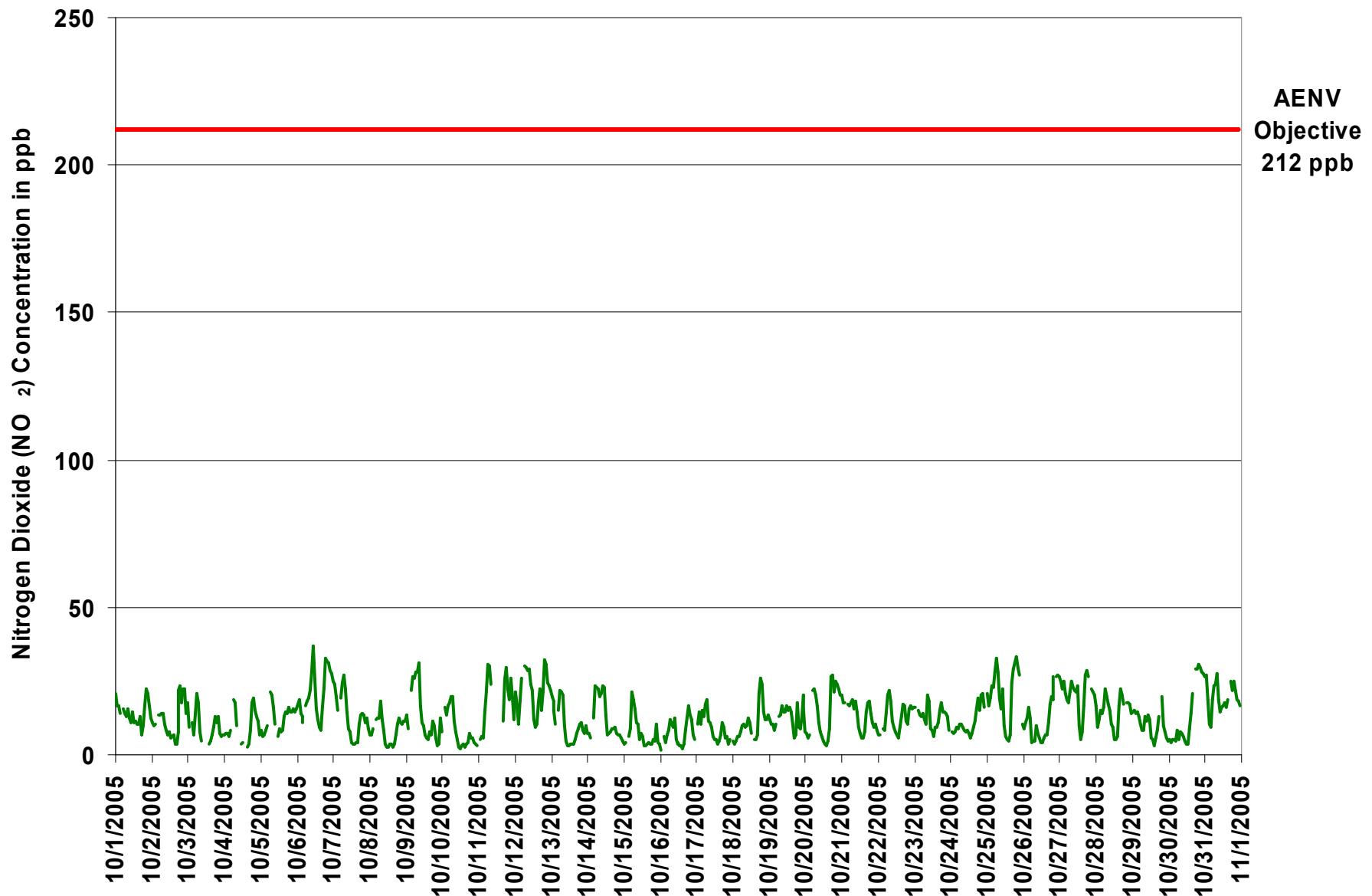


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Value:	53.8 ppb	25-Oct	7:00 8:00
Maximum 24-hr Value:	28.2 ppb	25-Oct	

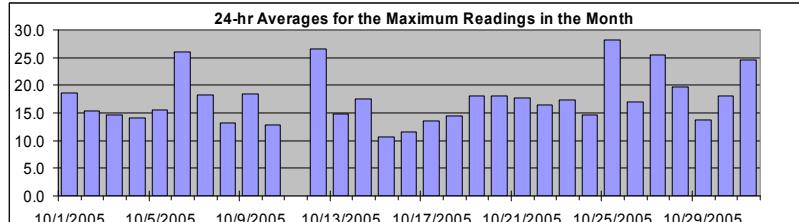
AIC Time:	33 hrs	Operational Time:	695 hrs
Calibration Time:	14 hrs	AMD Operational Uptime:	99.7%
Percentile	99 95 75 50 25 5 1	Average	
	39.1 33.0 23.6 16.6 10.9 6.0 4.5	17.7 ppb	

### 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-hour Average	Daily Maximum
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
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-Oct-05	25	22	20	18	A	18	17	16	18	17	14	22	14	15	13	13	26	15	14	26	26	24	20	14	18.6	26.3
2-Oct-05	16	12	12	A	18	15	16	15	14	13	9	10	8	11	11	6	6	18	26	26	23	25	25	21	15.4	26.0
3-Oct-05	24	14	A	19	12	22	23	23	13	6	C	C	C	C	6	9	12	13	20	13	18	12	9	9	14.6	24.1
4-Oct-05	8	10	17	8	10	A	23	21	17	C	C	7	6	C	4	6	14	25	24	21	20	17	9	14.1	25.3	
5-Oct-05	20	9	9	10	14	A	25	25	19	14	S	8	11	11	13	15	17	16	18	16	16	18	18	22	15.6	24.9
6-Oct-05	21	24	17	17	14	A	20	26	27	26	33	43	33	19	14	13	14	24	30	42	40	36	34	33	26.0	42.6
7-Oct-05	34	27	24	19	A	25	28	30	27	19	13	12	9	7	5	8	8	17	22	20	18	14	20	13	18.2	33.5
8-Oct-05	8	10	14	A	15	17	23	25	15	12	6	4	4	6	6	5	8	17	19	19	17	20	17	16	13.2	24.9
9-Oct-05	18	14	A	25	35	33	31	39	40	26	14	13	10	9	9	8	13	10	18	17	11	4	7	21	18.4	39.6
10-Oct-05	12	A	27	20	27	22	25	23	21	11	9	4	3	4	7	5	10	16	14	7	9	6	6	6	12.8	27.0
11-Oct-05	A	8	11	8	22	30	40	34	33	C	C	C	C	C	A	19	33	34	29	27	31	27	20	N	39.9	
12-Oct-05	29	23	12	27	29	A	33	35	32	32	29	26	17	12	13	24	33	24	29	36	35	27	27	26	26.6	36.2
13-Oct-05	23	21	20	16	A	24	27	24	23	16	9	5	5	6	6	6	10	15	17	16	17	13	12	13	14.9	27.1
14-Oct-05	11	10	7	A	21	27	25	39	23	23	25	27	19	11	13	11	18	13	12	22	19	9	9	8	17.6	38.5
15-Oct-05	7	9	A	11	13	24	21	20	13	11	11	10	9	6	5	8	9	5	6	9	7	15	8	8	10.7	24.3
16-Oct-05	6	A	8	6	11	12	13	15	15	15	11	7	7	6	5	4	6	16	17	24	23	20	10	6	11.6	24.3
17-Oct-05	A	14	18	15	18	15	22	24	21	17	14	10	9	9	6	9	9	14	17	11	10	6	7	A	13.5	24.3
18-Oct-05	8	4	9	8	8	9	13	11	11	12	13	15	11	M	10	10	14	30	29	30	23	21	16	16	14.4	30.4
19-Oct-05	15	13	12	13	12	A	15	19	19	18	16	20	20	22	18	19	11	11	27	20	16	26	28	24	18.0	28.0
20-Oct-05	12	11	9	9	A	25	25	23	20	16	11	8	9	7	6	10	15	32	32	29	30	26	25	23	18.0	32.0
21-Oct-05	23	22	20	A	23	20	24	23	21	22	21	14	13	9	9	13	19	21	22	18	13	12	14	12	17.7	23.5
22-Oct-05	9	9	A	13	11	28	25	24	23	16	13	11	12	9	11	18	21	21	18	13	18	17	18	16.4	27.7	
23-Oct-05	17	A	17	16	15	16	18	23	25	22	22	13	12	12	15	15	14	17	19	19	20	19	19	13	17.4	25.0
24-Oct-05	A	12	10	10	11	13	14	13	11	11	10	12	9	7	9	11	16	20	22	22	26	26	26	A	14.7	26.4
25-Oct-05	29	24	25	28	27	32	52	54	27	23	26	15	10	7	8	16	38	38	39	38	34	36	A	23	53.8	
26-Oct-05	11	17	17	24	19	12	9	10	15	11	9	6	6	10	10	12	16	24	27	26	32	A	33	32	16.9	32.6
27-Oct-05	31	30	28	28	26	24	28	29	27	27	26	23	28	14	7	13	26	30	32	30	A	26	27	26	25.5	31.8
28-Oct-05	24	12	15	17	17	25	30	35	28	23	16	17	7	8	10	23	24	23	21	A	22	19	18	17	19.7	35.4
29-Oct-05	17	17	18	17	16	14	10	12	15	15	16	15	8	8	6	9	10	17	A	26	13	12	11	10	13.7	26.3
30-Oct-05	6	6	7	7	6	23	15	10	13	12	10	7	7	8	17	23	32	A	38	36	35	33	32	32	18.1	38.4
31-Oct-05	34	30	27	14	16	27	27	29	32	29	20	24	20	21	A	28	26	27	25	24	22	21		24.6	34.2	

### HOURLY MAXIMUM 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

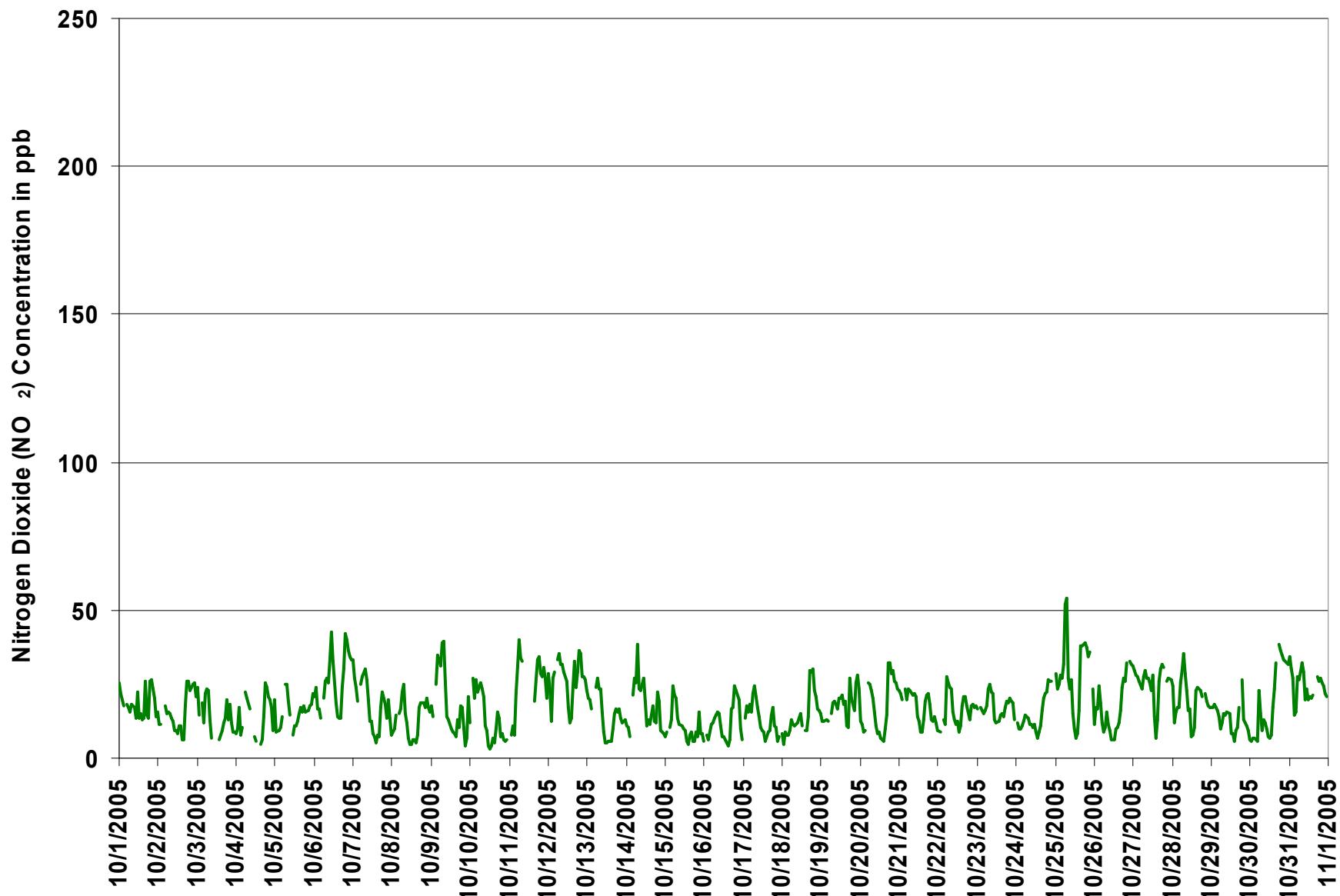
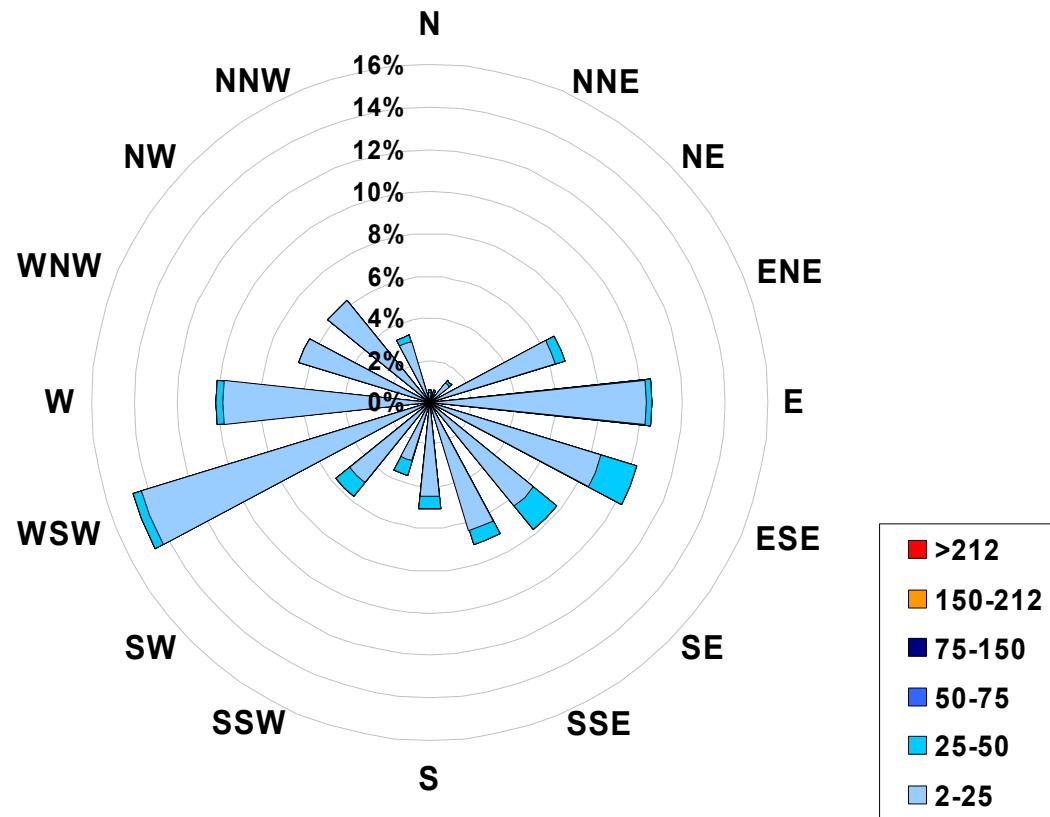


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at  
the Henry Pirker Site for October 2005**



Calms: 0%

Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range			
2.0	<	25	560
25	to	50	62
50	to	75	22
75	to	150	42
150	to	212	9
	>	212	0
Total Non-Zero Values			695

## PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

Maximum 1-hr Average: 192.5 ppb 18-Oct 20:00 21:00  
Maximum 24-hr Average: 88.5 ppb 6-Oct

AIC Time: 33 hrs Operational Time: 695 hrs  
Calibration Time: 14 hrs AMD Operational Uptime: 99.7%  
Percentile 99 95 75 50 25 5 1 Average  
153.2 88.8 16.0 4.2 1.4 0.4 0.1 17.8 ppb

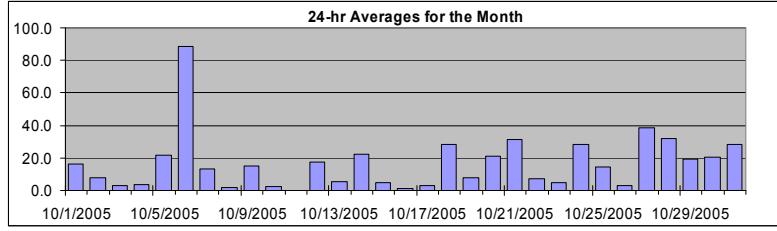
Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-Oct-05	38	32	38	15	A	10	25	31	40	29	16	18	10	6	3	2	4	1	1	1	1	8	9	16	17	16.0	39.6
2-Oct-05	21	8	13	A	17	40	11	7	4	4	4	6	3	2	2	1	1	1	7	7	3	8	5	1	7.6	39.9	
3-Oct-05	2	1	A	2	1	3	12	14	4	4	C	C	C	2	2	2	1	1	1	1	2	1	1	1	2.9	14.2	
4-Oct-05	1	1	2	1	1	A	6	11	6	C	C	3	3	C	1	1	3	7	9	3	3	3	1	3.4	11.0		
5-Oct-05	3	1	1	1	2	A	15	18	15	13	S	11	19	12	6	7	10	7	36	29	46	59	78	90	21.8	90.2	
6-Oct-05	127	109	92	82	79	A	121	143	121	111	144	188	85	26	13	4	3	6	6	39	120	161	136	121	88.5	188.1	
7-Oct-05	114	72	20	9	A	8	12	23	13	8	4	4	2	2	2	1	2	2	2	2	1	1	1	0	13.3	114.4	
8-Oct-05	0	0	0	A	1	1	2	7	6	5	3	2	2	2	2	1	2	2	1	1	1	1	1	1	1.9	6.6	
9-Oct-05	1	1	A	9	38	31	53	76	91	22	12	8	4	2	1	1	1	0	0	0	0	0	0	0	15.3	91.3	
10-Oct-05	0	A	1	1	3	7	7	17	7	2	2	1	1	1	1	1	0	1	1	1	0	0	0	0	2.3	16.6	
11-Oct-05	A	0	0	0	1	8	83	86	40	C	C	C	C	C	A	3	7	62	153	179	12	2	1	N	178.6		
12-Oct-05	2	2	1	1	6	A	20	77	79	32	9	9	3	2	2	3	5	1	0	50	39	11	24	18	17.3	79.4	
13-Oct-05	15	9	1	0	A	3	20	26	20	7	3	2	2	2	1	2	2	2	1	1	1	0	1	1	5.3	25.5	
14-Oct-05	0	0	0	A	2	12	42	80	96	127	79	40	11	3	3	3	1	2	2	1	1	1	1	1	22.2	127.4	
15-Oct-05	1	1	A	1	1	17	14	17	12	17	5	5	3	2	2	2	1	1	1	1	0	2	1	0	4.7	17.3	
16-Oct-05	0	A	0	0	1	3	4	1	2	4	4	1	1	1	1	1	0	0	0	1	1	0	0	0	1.2	4.5	
17-Oct-05	A	0	1	1	3	1	15	17	5	3	4	3	2	2	2	2	2	2	1	1	1	1	1	1	3.1	16.8	
18-Oct-05	1	1	1	1	1	2	5	5	9	16	40	14	6	M	2	2	2	9	34	81	192	151	60	22	28.6	192.5	
19-Oct-05	4	5	8	3	7	A	9	10	15	22	21	20	17	16	8	6	1	1	3	1	1	1	4	2	8.1	21.9	
20-Oct-05	0	0	0	0	A	9	14	16	14	9	7	5	3	2	1	2	2	15	70	142	89	15	25	39	20.8	142.0	
21-Oct-05	13	4	4	A	23	85	114	185	168	54	23	8	6	4	3	3	4	6	7	3	2	1	1	1	31.5	185.3	
22-Oct-05	1	1	A	1	1	3	6	24	14	7	6	5	5	3	4	6	10	6	3	2	10	27	21	8	7.5	26.9	
23-Oct-05	9	A	4	1	2	3	2	1	4	6	16	4	5	2	5	5	4	7	14	3	2	1	8	5	4.9	15.9	
24-Oct-05	A	2	2	4	21	42	52	67	43	38	43	41	15	10	12	10	9	15	40	91	49	13	4	A	28.4	91.4	
25-Oct-05	12	17	1	5	6	11	46	120	10	9	25	5	3	2	1	1	7	9	7	12	7	13	A	0	14.3	119.9	
26-Oct-05	0	0	0	2	1	0	0	0	1	2	3	2	2	3	3	2	2	3	2	1	6	A	13	17	3.0	17.4	
27-Oct-05	28	39	30	19	35	85	185	149	48	75	60	38	39	6	2	2	4	11	11	9	A	5	6	8	38.8	184.8	
28-Oct-05	7	1	1	5	15	50	53	105	123	21	9	10	4	2	2	12	37	39	44	A	41	45	60	32.0	123.0		
29-Oct-05	41	36	43	26	32	45	28	65	41	26	31	13	3	3	1	2	2	2	A	130	112	27	43	46	19.3	64.7	
30-Oct-05	0	0	0	0	0	1	0	0	1	2	2	2	1	1	2	3	10	A	130	112	27	43	46	20.2	130.3		
31-Oct-05	71	22	2	0	0	4	8	6	25	7	4	7	8	20	14	19	A	64	89	55	49	61	56	59	28.3	88.8	

Hourly Avg 18.4 13.1 10.0 7.0 11.1 18.6 31.7 45.3 34.8 23.5 21.4 16.4 9.3 5.2 3.6 3.6 4.5 7.5 19.4 27.1 29.5 21.5 18.7 19.0

Hourly Max 126.5 109.1 91.6 81.6 79.3 84.9 184.8 185.3 168.4 127.4 144.1 188.1 85.2 25.7 13.5 19.5 37.1 64.1 130.3 152.7 192.5 161.1 135.6 120.6

### 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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

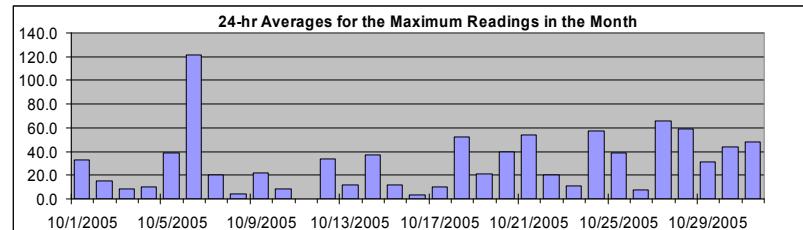
### Summary

Maximum 1-hr Value:	313.8 ppb	27-Oct 7:00	8:00
Maximum 24-hr Value:	121.9 ppb	6-Oct	

AIC Time:	33 hrs	Operational Time:	695 hrs	
Calibration Time:	14 hrs	AMD Operational Uptime:	99.7%	
Percentile	99 95 75 50 25 5 1	Average		
	236.9 144.4 34.8 11.8 3.7 1.0 0.5		32.5 ppb	

### HOURLY MAXIMUM 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

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-Oct-05	47	83	58	27	A	19	58	66	87	85	22	38	14	9	6	3	14	4	1	7	24	15	33	28	32.5	86.9
2-Oct-05	31	19	17	A	23	56	46	12	5	9	8	9	6	4	3	1	1	5	21	19	9	17	13	7	14.9	56.2
3-Oct-05	14	3	A	13	10	19	30	32	7	5	C	C	C	C	4	7	4	2	2	1	3	3	1	3	8.8	32.2
4-Oct-05	2	3	21	2	4	A	16	19	10	C	C	15	5	C	C	2	3	7	17	33	9	11	15	5	10.5	32.7
5-Oct-05	35	8	2	7	10	A	32	30	22	21	S	15	25	19	13	15	21	14	56	46	103	97	116	139	38.4	139.0
6-Oct-05	146	133	102	94	101	A	183	193	192	141	176	218	141	48	22	9	6	17	19	70	232	238	175	148	121.9	237.5
7-Oct-05	146	109	31	22	A	17	18	39	21	14	6	7	5	4	3	3	2	5	4	3	4	1	1	1	20.3	146.0
8-Oct-05	1	1	1	A	2	3	9	18	10	8	5	3	3	4	4	3	4	7	5	3	2	3	2	2	4.5	17.7
9-Oct-05	6	2	A	20	55	55	67	98	120	40	17	11	8	5	2	1	1	1	1	1	1	1	0	1	22.3	120.1
10-Oct-05	1	A	2	3	16	37	31	54	30	7	3	1	2	1	2	2	2	1	1	1	1	2	1	1	8.8	54.1
11-Oct-05	A	1	3	2	3	50	144	128	83	C	C	C	C	C	A	7	19	138	249	253	57	6	2	N	253.1	
12-Oct-05	10	15	4	4	22	A	44	137	134	49	18	15	5	3	2	5	20	2	2	89	78	26	55	34	33.7	137.5
13-Oct-05	25	19	7	1	A	29	51	41	28	15	5	4	3	3	3	4	4	7	3	2	2	1	1	1	11.4	50.6
14-Oct-05	1	1	1	A	13	21	96	99	127	192	103	66	24	16	10	10	15	6	8	8	6	4	8	11	36.8	192.0
15-Oct-05	9	13	A	11	12	34	36	32	24	23	21	8	6	4	3	5	4	3	3	5	1	6	2	1	11.7	36.5
16-Oct-05	1	A	1	1	4	7	7	6	5	7	8	3	3	2	1	1	1	1	1	4	4	1	1	0	3.1	7.8
17-Oct-05	A	1	4	3	8	2	49	60	20	7	9	5	5	3	3	3	3	3	2	14	4	2	9	A	10.0	59.9
18-Oct-05	4	3	2	2	4	4	14	11	13	33	66	29	11	M	4	4	6	27	87	196	311	217	122	34	52.3	310.5
19-Oct-05	11	12	21	11	16	A	20	33	31	55	29	36	42	57	14	18	3	3	10	4	3	10	15	22	20.7	56.6
20-Oct-05	1	1	1	1	A	21	23	27	19	18	11	7	7	4	3	4	3	56	187	196	186	32	55	56	39.9	195.6
21-Oct-05	24	16	16	A	45	143	190	237	221	144	64	28	27	12	4	7	9	13	18	7	4	3	3	2	53.8	236.9
22-Oct-05	4	1	A	15	4	12	29	60	30	13	15	10	12	6	8	21	28	24	18	5	39	58	35	18	20.2	60.0
23-Oct-05	12	A	10	3	4	6	4	5	11	10	30	5	9	7	14	15	7	12	38	7	15	2	20	11	11.1	37.7
24-Oct-05	A	7	9	11	32	63	90	162	58	55	86	75	20	15	19	16	18	35	71	178	175	44	26	A	57.5	177.8
25-Oct-05	25	66	4	18	16	26	153	177	99	17	42	10	5	3	3	3	28	30	21	31	23	94	A	1	38.9	177.5
26-Oct-05	2	2	1	21	8	4	1	1	3	4	5	4	3	5	5	4	4	6	4	5	16	A	37	36	7.8	36.8
27-Oct-05	42	60	56	45	73	113	233	314	84	110	85	43	61	16	3	7	9	25	22	29	A	36	25	27	66.0	313.8
28-Oct-05	25	3	5	16	43	79	123	194	193	86	25	31	6	6	4	28	66	59	102	A	65	68	61	59.0	194.3	
29-Oct-05	74	48	56	34	47	66	41	111	75	53	52	24	4	5	3	4	3	3	A	3	1	1	1	30.9	110.6	
30-Oct-05	1	0	0	0	0	16	4	1	10	5	4	3	3	3	6	9	63	A	244	243	108	94	75	122	44.1	243.6
31-Oct-05	102	58	7	2	4	15	17	15	54	31	9	18	17	31	25	27	A	107	122	82	70	97	112	86	48.2	122.2

Hourly Avg 28.6 24.6 16.4 14.3 21.4 35.3 60.0 77.8 58.9 43.3 34.3 25.5 16.7 10.9 6.8 8.1 11.9 16.6 41.1 51.4 58.4 41.3 34.3 30.1

Hourly Max 146.0 133.2 102.4 94.3 101.3 143.3 233.0 313.8 220.7 192.0 175.8 217.6 141.0 56.6 25.4 27.9 66.1 107.1 243.6 248.9 310.5 237.5 174.9 147.9

## PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

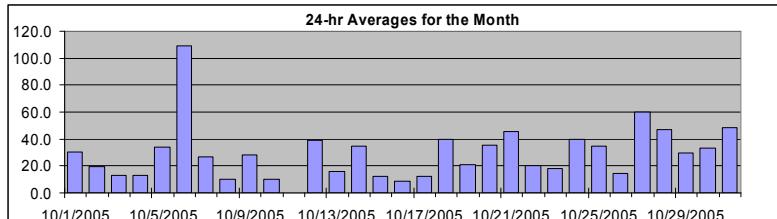
Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
Summary

Maximum 1-hr Average:	224.8	ppb	6-Oct	11:00 12:00
Maximum 24-hr Average:	109.2	ppb	6-Oct	

AIC Time:	33 hrs	Operational Time:	695 hrs					
Calibration Time:	14 hrs	AMD Operational Uptime:	99.7%					
Percentile	99 175.2	95 111.2	75 35.9	50 17.0	25 9.0	5 4.7	1 3.6	Average 31.0 ppb

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start 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-Oct-05	59	49	55	29	A	25	39	44	55	42	26	32	21	18	14	12	17	8	10	17	30	30	33	29	30.1	59.0	
2-Oct-05	32	18	24	A	30	53	25	21	14	12	11	14	9	7	8	5	4	9	29	30	20	29	27	15	19.4	52.9	
3-Oct-05	19	10	A	13	8	17	32	32	12	8	C	C	C	6	6	8	11	14	12	14	8	7	7	7	12.8	32.0	
4-Oct-05	7	8	9	7	10	A	25	29	15	C	C	6	6	C	4	5	11	24	28	18	16	14	8	8	13.2	28.7	
5-Oct-05	12	8	8	9	11	A	36	38	31	24	S	17	28	20	15	20	24	22	51	43	61	75	92	106	34.1	105.7	
6-Oct-05	144	127	106	95	91	A	138	161	140	132	172	225	111	41	26	14	12	22	28	71	152	192	164	148	109.2	224.8	
7-Oct-05	139	96	40	24	A	27	36	50	36	22	13	12	6	6	5	6	6	13	16	16	16	12	13	9	27.0	139.4	
8-Oct-05	7	7	9	A	12	14	15	24	18	14	6	4	4	5	5	4	5	8	12	13	12	11	12	12	10.2	24.5	
9-Oct-05	14	9	A	30	64	57	81	104	122	38	23	18	11	8	7	6	9	7	11	10	6	3	4	12	28.5	122.1	
10-Oct-05	8	A	16	14	19	24	26	36	18	10	7	3	3	4	4	3	4	4	8	6	7	4	4	3	10.3	35.9	
11-Oct-05	A	5	6	6	15	29	113	115	63	C	C	C	C	C	A	11	29	89	174	198	36	20	11	N	197.8		
12-Oct-05	22	18	10	19	32	A	51	108	109	61	33	31	16	12	12	20	27	16	22	83	70	36	48	40	38.9	109.0	
13-Oct-05	35	28	16	11	A	18	42	47	40	17	7	5	5	5	5	5	7	9	11	12	12	9	7	10	15.8	47.0	
14-Oct-05	8	8	6	A	14	35	65	104	117	150	104	64	25	10	11	10	12	10	11	9	8	8	7	6	34.8	150.2	
15-Oct-05	5	5	A	8	9	39	33	33	23	27	10	12	10	5	5	6	6	5	5	6	5	12	5	4	12.0	38.7	
16-Oct-05	2	A	6	4	8	11	16	12	11	17	9	5	6	4	4	3	4	9	12	18	14	12	7	5	8.6	17.6	
17-Oct-05	A	11	16	11	18	14	32	36	16	14	14	9	8	7	6	7	9	12	10	7	7	4	6	A	12.4	35.5	
18-Oct-05	6	4	6	7	7	10	15	16	18	25	53	25	14	M	7	7	9	30	61	106	210	165	73	36	39.6	210.1	
19-Oct-05	16	16	19	11	18	A	22	23	32	37	36	37	32	33	23	16	7	8	20	10	10	15	24	17	21.0	37.5	
20-Oct-05	8	8	6	7	A	31	36	36	30	20	15	11	8	6	5	7	11	42	98	166	115	39	48	60	35.3	165.6	
21-Oct-05	34	21	22	A	41	103	133	207	187	73	37	18	13	10	8	11	19	25	25	18	13	11	12	9	45.6	207.1	
22-Oct-05	8	8	A	10	9	17	26	46	32	19	16	13	12	9	13	19	27	22	14	12	26	44	37	24	20.1	45.9	
23-Oct-05	26	A	19	15	15	17	14	12	25	24	34	13	14	8	14	15	15	23	32	18	17	15	21	13	18.2	34.1	
24-Oct-05	A	10	10	13	31	52	64	78	53	47	52	50	23	16	19	19	21	31	60	108	69	34	21	A	40.0	107.5	
25-Oct-05	33	34	20	28	28	39	80	150	30	24	48	14	9	7	6	8	31	38	38	45	37	40	A	34.7	149.5		
26-Oct-05	9	11	12	18	13	5	5	5	11	9	8	6	6	9	10	9	13	20	22	20	33	A	40	45	14.8	44.9	
27-Oct-05	55	65	53	44	56	105	205	173	74	99	82	60	63	16	6	9	20	38	39	36	A	27	27	28	60.0	205.2	
28-Oct-05	23	10	13	20	29	67	76	127	142	36	19	20	9	7	8	29	60	59	61	A	60	63	68	47.0	141.9		
29-Oct-05	56	51	57	41	45	56	37	74	55	38	44	25	8	8	4	8	10	15	A	21	10	8	6	5	29.6	74.0	
30-Oct-05	5	4	5	5	4	9	6	5	8	9	8	6	5	5	11	17	31	A	161	143	58	73	75	107	33.1	161.1	
31-Oct-05	99	49	21	11	10	23	31	30	53	26	19	23	25	38	30	38	A	90	112	80	71	81	74	48.3	112.0		

Hourly Avg	31.9	24.9	21.8	18.8	24.1	34.5	50.2	63.7	51.4	37.1	33.6	26.9	17.5	12.0	10.2	11.4	14.7	21.5	36.9	44.6	45.9	37.1	33.1	32.1
Hourly Max	143.6	127.5	105.6	94.7	90.5	105.1	205.2	207.1	186.8	150.2	172.1	224.8	110.9	41.3	29.8	38.3	60.0	90.0	161.1	174.5	210.1	192.4	164.3	147.9

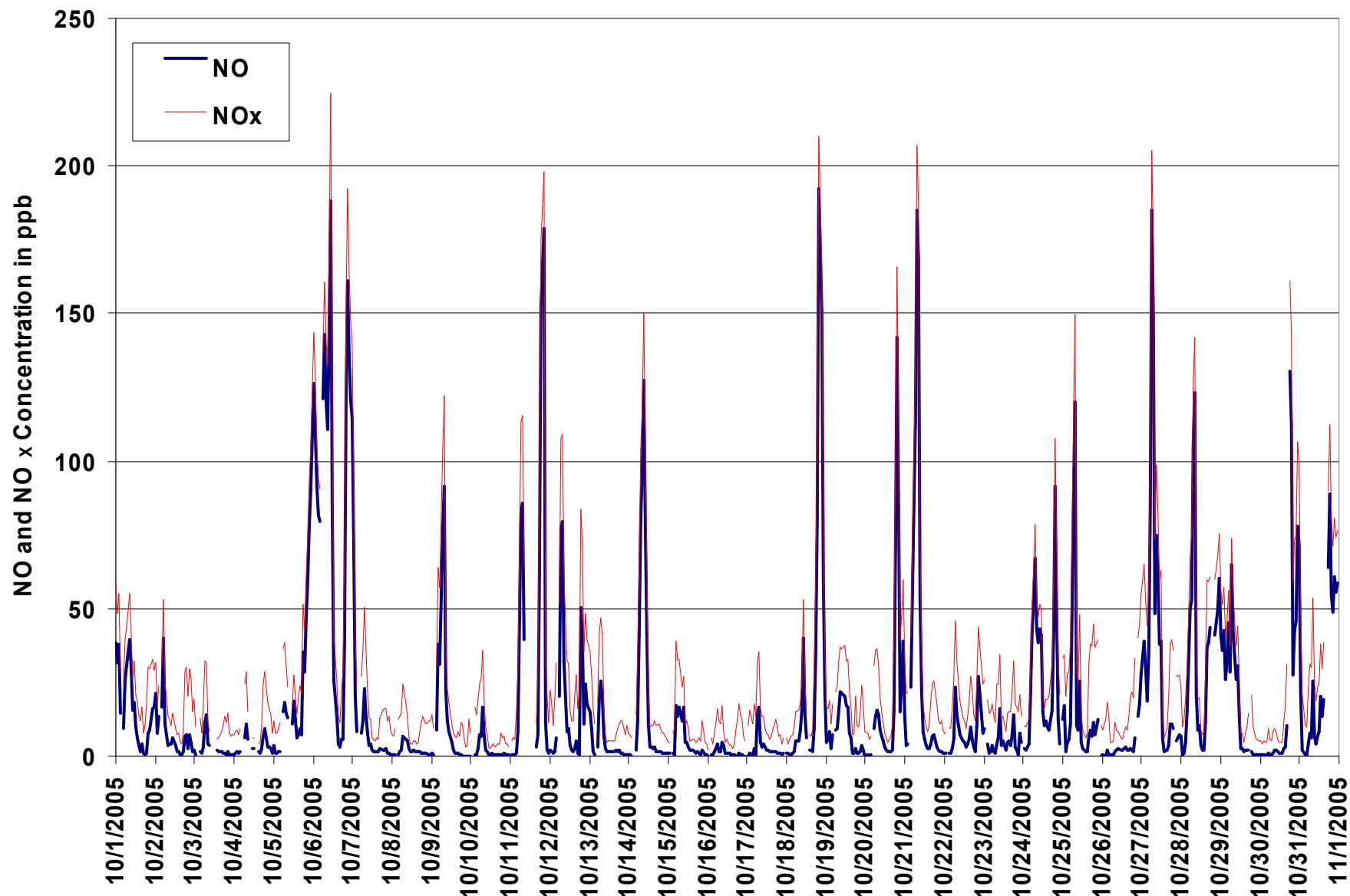


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

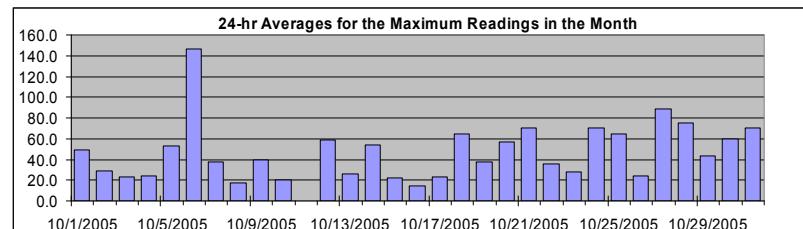
### Summary

Maximum 1-hr Value:	338.5 ppb	27-Oct	7:00 8:00
Maximum 24-hr Value:	146.1 ppb	6-Oct	

AIC Time:	33 hrs	Operational Time:	695 hrs					
Calibration Time:	14 hrs	AMD Operational Uptime:	99.7%					
Percentile	99 266.2	95 172.1	75 56.9	50 28.4	25 15.3	5 8.1	1 6.0	Average 48.9 ppb

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

### 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			
1-Oct-05	66	99	76	43	A	34	75	80	104	102	32	60	27	23	19	15	39	18	14	33	47	38	50	40	49.2	104.4	
2-Oct-05	44	29	28	A	41	70	60	26	18	22	17	19	14	14	14	7	6	21	46	43	32	39	37	24	29.2	69.9	
3-Oct-05	38	16	A	31	21	41	53	55	20	11	C	C	C	C	10	17	16	15	21	14	21	15	10	11	23.0	54.8	
4-Oct-05	11	12	38	10	14	A	38	37	27	C	C	19	11	C	7	9	20	42	56	25	31	27	14	23.6	56.3		
5-Oct-05	55	16	12	15	22	A	56	55	41	33	S	23	36	30	22	29	38	29	73	60	118	114	131	160	53.1	160.5	
6-Oct-05	166	155	118	111	112	A	203	212	214	166	209	260	173	66	35	20	19	41	48	110	268	269	203	181	146.1	268.8	
7-Oct-05	176	133	54	38	A	40	44	68	47	33	18	19	13	11	8	11	9	22	26	23	22	15	21	14	37.7	175.5	
8-Oct-05	9	11	16	A	16	20	32	42	24	19	11	8	7	10	7	12	24	23	21	19	23	18	17	17.3	41.9		
9-Oct-05	23	15	A	43	88	87	97	134	159	65	31	24	18	14	11	9	14	11	18	17	11	4	7	21	39.9	158.9	
10-Oct-05	12	A	29	22	37	56	57	76	51	14	12	5	5	5	8	8	11	16	14	8	10	7	5	8	20.7	75.6	
11-Oct-05	A	8	14	8	24	75	181	161	115	C	C	C	C	A	23	49	162	266	267	82	31	20	N	266.8	58.4	171.7	
12-Oct-05	36	31	15	30	50	A	73	172	167	81	47	41	22	14	15	28	52	26	32	119	110	50	76	55	53.7	77.6	25.7
13-Oct-05	45	38	26	17	A	48	78	64	50	31	14	9	8	8	9	9	14	19	24	17	19	15	13	14	53.6	217.1	21.9
14-Oct-05	11	11	8	A	34	47	123	131	149	217	127	90	44	27	21	20	32	18	18	31	25	14	15	19	21.9	58.1	14.4
15-Oct-05	15	22	A	21	21	58	57	52	36	34	32	18	15	10	7	12	13	8	9	14	8	21	11	9	23.2	84.0	28.0
16-Oct-05	6	A	9	7	15	18	20	20	21	22	19	10	10	9	7	5	7	17	18	28	27	21	10	6	64.3	320.2	64.3
17-Oct-05	A	14	20	18	26	17	71	84	40	24	23	15	14	12	9	12	12	17	20	25	14	7	16	A	38.1	77.5	38.1
18-Oct-05	12	7	11	9	11	13	23	22	24	45	80	42	22	M	14	14	20	57	111	211	320	230	135	48	56.5	214.3	56.5
19-Oct-05	24	22	34	24	28	A	36	49	49	73	46	56	63	78	32	37	13	14	37	25	19	32	44	44	70.2	261.9	70.2
20-Oct-05	13	12	9	10	A	46	48	50	39	34	23	15	16	11	9	14	18	86	206	214	212	58	79	77	35.6	82.0	35.6
21-Oct-05	44	36	36	A	68	161	207	262	238	166	85	37	40	18	13	17	28	33	37	25	17	15	17	14	27.6	57.4	27.6
22-Oct-05	13	10	A	26	16	40	53	82	52	28	28	19	24	14	18	38	48	45	36	18	54	74	51	34	70.2	189.7	70.2
23-Oct-05	29	A	27	19	19	21	20	27	33	32	51	18	20	20	29	30	21	29	57	26	35	21	31	20	64.6	210.7	64.6
24-Oct-05	A	19	19	21	41	72	104	175	71	63	97	87	29	21	28	26	34	56	89	190	186	67	49	A	89.0	338.5	89.0
25-Oct-05	45	81	26	44	39	56	207	211	121	39	69	25	14	10	11	19	65	68	60	68	56	129	A	74.9	224.7	74.9	
26-Oct-05	14	19	18	42	27	16	9	11	17	14	14	10	10	15	15	16	19	30	31	31	48	A	64	66.2	43.4	122.9	
27-Oct-05	69	82	81	71	95	137	255	338	113	130	110	64	89	28	9	18	35	55	50	57	A	61	51	48	59.8	268.9	59.8
28-Oct-05	44	14	19	30	55	93	139	225	206	103	41	48	13	12	14	51	89	79	118	A	81	86	79	85	70.6	144.0	70.6
29-Oct-05	86	64	71	50	62	76	51	123	88	68	68	38	12	13	8	12	12	20	A	28	13	12	10	46.1	51.3	46.1	
30-Oct-05	7	6	7	7	6	38	17	11	21	16	14	10	10	11	23	33	93	A	267	269	135	128	101	147	51.3	320.2	51.3
31-Oct-05	126	85	33	14	17	38	44	42	87	60	29	42	35	52	46	48	A	132	144	108	95	118	129	101	268.8	203.4	268.8

Hourly Avg 44.3 38.1 31.5 28.9 37.2 54.6 81.6 99.9 78.8 60.2 49.9 39.0 28.1 20.5 16.5 19.7 27.3 35.8 61.7 71.8 77.1 59.9 50.8 45.9

Hourly Max 175.5 154.5 117.8 111.1 112.0 160.7 255.3 338.5 238.4 217.1 208.5 259.9 173.2 77.5 46.1 51.3 93.2 131.9 267.4 268.9 320.2 268.8 203.4 181.2

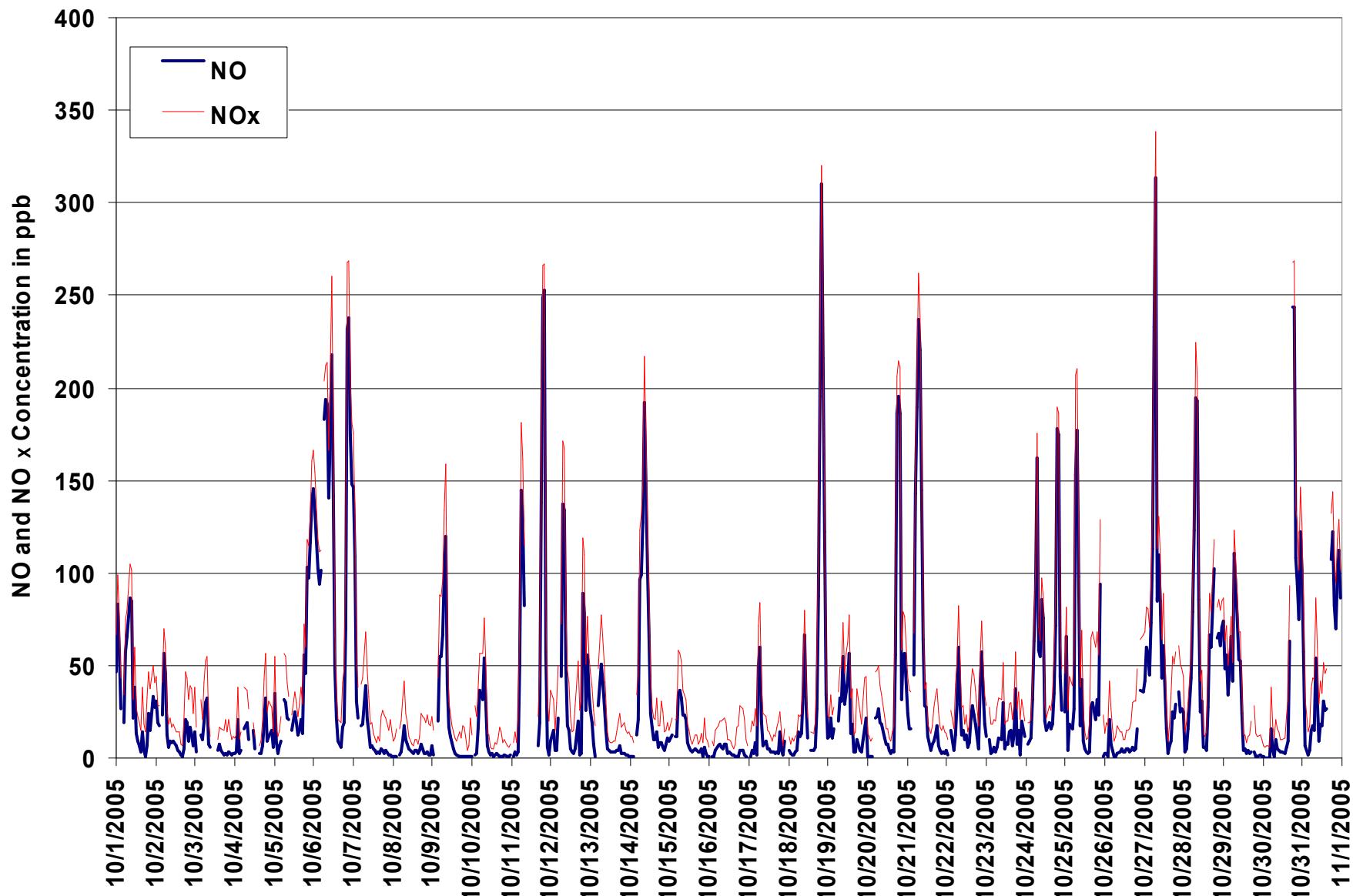


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Maximum Value Monthly Trend

## PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

**Summary**

Number of 1-hr Exceedances:	0
Maximum 1-hr Average:	42.6 ppb 26-Oct 6:00 7:00
Maximum 24-hr Average:	25.0 ppb 26-Oct

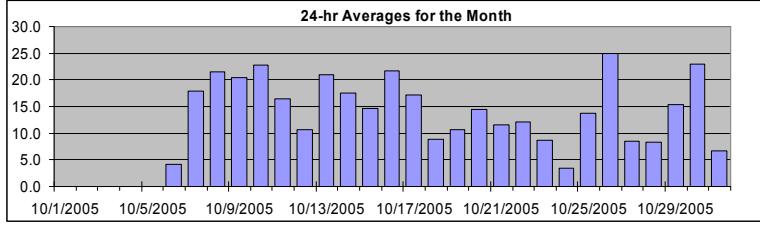
AIC Time:	28 hrs	Operational Time:	605 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	85.5%					
Percentile	99 37.9	95 35.1	75 23.4	50 12.4	25 2.3	5 0.4	1 0.0	Average 14.3 ppb

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-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 0:00	23:00 1:00	N	0.0
1-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
2-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
3-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
4-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
5-Oct-05	S	S	S	S	S	S	S	S	S	S	M	C	C	A	8	3	3	0	0	1	1	1	1	1	N	8.4	
6-Oct-05	1	1	0	1	0	A	0	1	1	1	1	2	2	5	12	19	23	13	8	1	2	1	1	1	1	4.2	23.2
7-Oct-05	1	0	0	1	A	6	3	1	6	15	26	28	37	39	39	37	35	26	21	19	17	19	16	20	18.0	39.2	
8-Oct-05	21	19	18	A	19	18	15	9	15	19	25	29	31	31	31	32	31	27	21	18	19	18	16	16	21.5	31.7	
9-Oct-05	13	17	A	2	1	1	1	3	10	15	19	24	30	34	35	33	34	29	33	36	38	37	27	20.4	37.8		
10-Oct-05	29	A	21	18	8	4	3	1	10	19	24	34	35	34	33	34	31	29	26	23	23	27	27	28	22.7	35.2	
11-Oct-05	A	26	22	21	13	7	1	1	4	11	23	32	32	34	33	32	30	11	2	3	2	6	13	21	16.4	33.6	
12-Oct-05	11	14	19	11	4	A	1	1	1	2	9	12	24	28	28	20	15	23	16	1	2	1	0	0	10.6	28.2	
13-Oct-05	0	0	9	10	A	12	3	2	6	22	31	37	38	38	37	37	33	31	28	24	21	23	23	19	21.0	38.1	
14-Oct-05	21	21	21	A	14	1	0	0	1	2	4	8	16	27	28	29	27	26	26	27	27	25	25	27	17.5	29.0	
15-Oct-05	28	27	A	23	18	3	1	2	2	2	13	14	16	18	19	20	19	21	18	17	17	9	15	16	14.7	27.5	
16-Oct-05	21	A	15	15	11	9	6	11	15	13	24	34	35	38	38	39	36	29	22	15	17	17	20	19	21.7	38.8	
17-Oct-05	A	12	6	10	2	6	0	3	13	14	20	27	31	32	34	32	30	24	23	21	14	14	9	A	17.2	34.3	
18-Oct-05	8	8	6	6	3	1	1	2	4	5	14	22	M	35	35	30	12	1	1	2	1	0	0	8.9	35.3		
19-Oct-05	1	1	1	3	1	A	2	2	2	3	3	5	6	11	14	21	33	28	17	25	26	18	8	12	10.7	33.4	
20-Oct-05	23	21	21	20	A	3	3	4	8	15	19	23	29	32	35	33	29	7	1	1	1	1	1	0	14.5	34.6	
21-Oct-05	2	6	3	A	1	1	1	2	2	5	11	16	19	21	22	22	16	10	8	15	19	20	19	22	11.5	22.4	
22-Oct-05	23	23	A	21	21	15	6	2	7	14	17	19	20	21	18	13	7	8	9	9	2	0	0	12.0	23.3		
23-Oct-05	0	A	1	3	2	3	10	16	5	5	5	12	17	24	18	15	11	4	2	11	14	16	4	2	8.7	24.0	
24-Oct-05	A	3	2	2	0	0	0	0	1	1	3	4	6	7	8	6	6	2	1	1	2	6	14	A	3.4	13.8	
25-Oct-05	0	3	8	2	5	4	1	1	12	17	12	28	31	32	35	34	18	11	10	7	8	10	A	28	13.8	34.7	
26-Oct-05	23	15	13	10	12	34	43	42	34	35	35	37	38	36	36	35	30	21	18	18	6	A	4	1	25.0	42.6	
27-Oct-05	0	0	1	1	1	2	2	3	4	6	10	12	25	32	30	20	7	7	6	A	8	8	8	8.4	32.4		
28-Oct-05	10	24	14	4	2	1	1	2	11	17	19	23	24	23	23	10	2	0	0	A	1	0	0	8.3	23.8		
29-Oct-05	1	0	0	0	0	0	0	0	1	3	6	15	33	34	36	34	31	22	A	17	27	29	32	15.4	36.4		
30-Oct-05	32	34	32	30	32	24	31	31	27	28	32	36	38	32	24	15	A	3	3	2	1	1	2	23.0	37.9		
31-Oct-05	4	2	11	23	24	9	4	6	2	12	14	11	9	7	8	6	A	1	1	1	1	0	0	6.7	24.3		

### 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

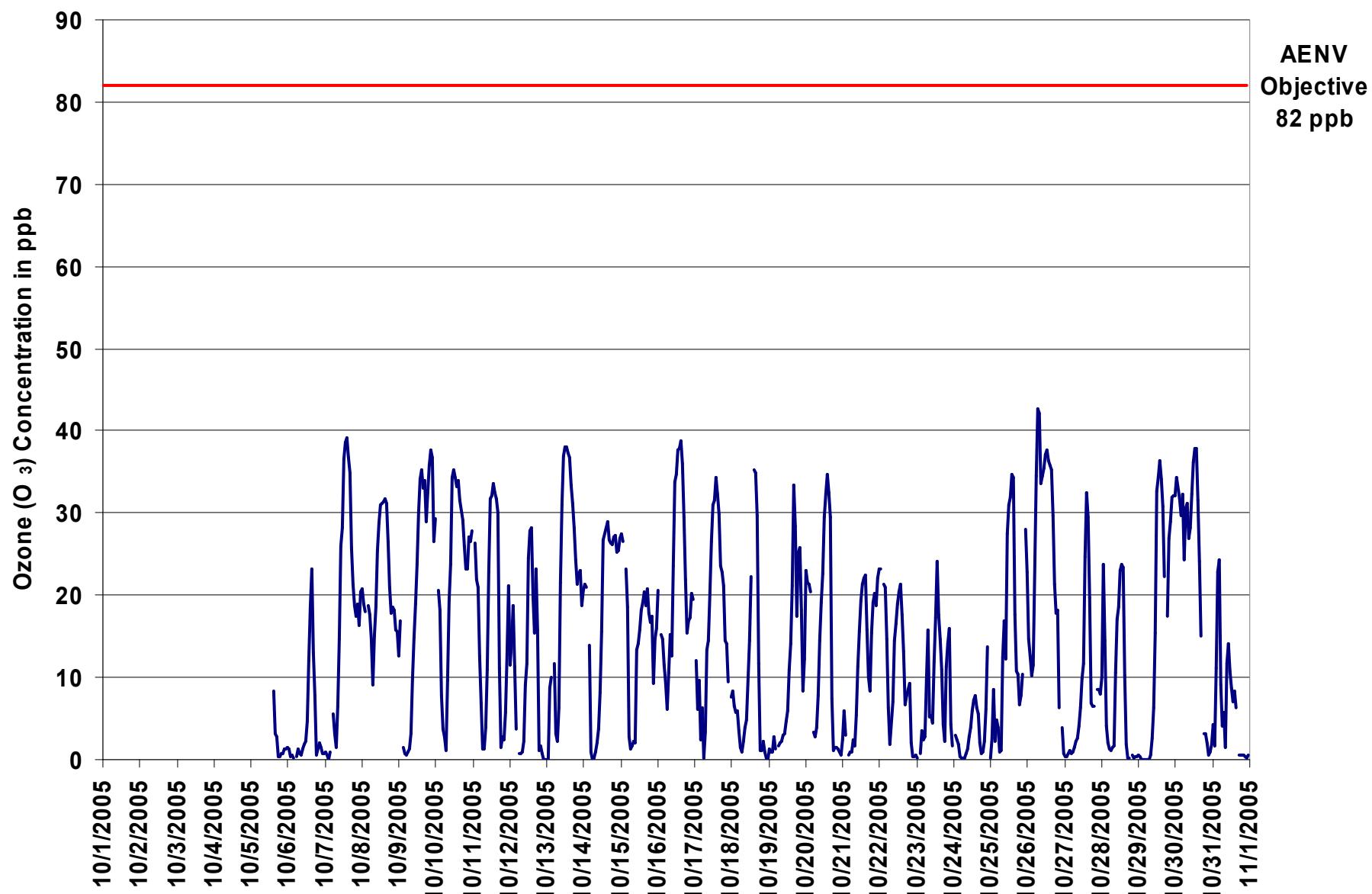


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Value:	46.4 ppb	26-Oct 7:00 8:00
Maximum 24-hr Value:	30.1 ppb	26-Oct

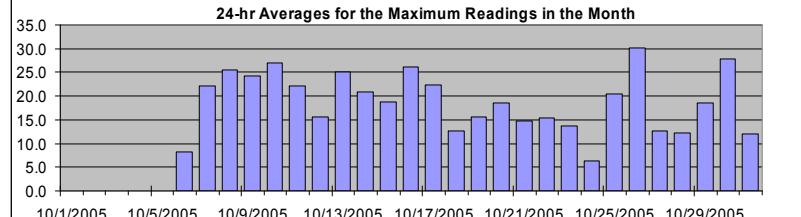
AIC Time:	28 hrs	Operational Time:	605 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	85.5%
Percentile	99 95 75 50 25 5 1	Average	
	40.7 38.5 28.7 19.4 6.4 1.7 1.0		18.6 ppb

### 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	31:00	24-hour Average	Daily Maximum
	Hour Start	Hour End																																
1-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0						
2-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0						
3-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0						
4-Oct-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0						
5-Oct-05	S	S	S	S	S	S	S	S	S	S	M	C	C	A	10	5	5	2	2	2	2	7	3	3	3	4	N	10.0						
6-Oct-05	3	3	1	4	3	A	1	5	2	2	3	3	3	9	17	24	28	21	20	14	15	3	3	3	4	8.3	27.5							
7-Oct-05	4	2	1	5	A	10	9	4	12	24	31	33	40	41	41	41	38	34	28	23	20	23	23	23	23	22.2	41.4							
8-Oct-05	23	23	25	A	23	21	19	14	18	21	30	31	34	34	34	34	34	31	24	24	25	24	23	19	25.6	34.1								
9-Oct-05	18	21	A	12	2	3	2	3	6	13	17	23	28	35	37	37	37	38	38	38	40	39	38	34	24.3	40.0								
10-Oct-05	34	A	26	23	17	10	7	3	23	23	34	36	37	36	36	36	34	32	29	26	26	29	28	34	26.9	36.9								
11-Oct-05	A	31	25	24	23	20	5	2	9	18	30	34	35	37	37	36	35	29	7	9	4	14	22	24	22.2	36.7								
12-Oct-05	18	20	21	19	8	A	3	2	3	7	14	19	30	32	32	29	26	31	21	9	9	4	2	1	15.6	32.2								
13-Oct-05	2	3	13	14	A	19	9	5	11	27	34	40	40	40	39	37	36	33	29	27	27	26	23	23	25.0	40.2								
14-Oct-05	24	25	23	A	19	4	1	2	2	3	5	12	24	30	31	34	31	31	30	31	32	28	28	29	20.9	33.6								
15-Oct-05	30	28	A	25	24	11	4	6	4	5	22	21	18	20	24	23	23	24	20	20	22	15	20	21	18.7	29.8								
16-Oct-05	23	A	20	17	15	14	8	15	19	22	30	39	38	41	40	41	39	37	28	25	23	26	23	22	26.2	40.7								
17-Oct-05	A	17	13	16	8	9	4	13	23	20	27	31	35	35	37	35	34	29	28	29	19	18	13	A	22.3	37.2								
18-Oct-05	10	10	9	8	8	5	4	3	5	6	9	21	33	M	39	39	36	27	4	3	3	3	3	1	12.6	39.3								
19-Oct-05	4	3	4	5	4	A	5	5	5	8	5	8	9	17	19	35	38	37	26	31	30	27	15	21	15.6	37.5								
20-Oct-05	26	26	23	23	A	10	9	7	11	20	22	26	33	35	38	37	36	22	3	4	4	6	4	2	18.6	38.4								
21-Oct-05	9	12	6	A	2	3	3	6	3	8	17	20	23	24	24	25	20	13	14	19	22	22	22	25	14.8	25.2								
22-Oct-05	25	25	A	23	22	19	11	4	13	18	21	21	24	24	21	17	11	12	12	12	9	1	2	2	15.3	25.4								
23-Oct-05	1	A	2	7	5	7	16	26	9	9	8	16	25	31	22	19	16	6	7	17	19	21	21	3	13.6	30.6								
24-Oct-05	A	7	5	4	2	2	2	2	2	3	4	7	8	9	10	9	8	5	2	2	8	17	22	A	6.4	21.7								
25-Oct-05	2	14	19	8	15	12	5	3	20	21	20	31	34	34	38	38	29	18	18	16	17	24	A	33	20.4	38.0								
26-Oct-05	30	22	17	18	17	44	45	46	37	37	39	39	40	38	39	39	37	28	23	22	17	A	14	3	30.1	46.4								
27-Oct-05	1	2	5	4	2	2	3	6	4	6	9	12	24	34	36	34	28	12	9	10	A	14	16	17	12.7	36.4								
28-Oct-05	21	26	23	9	10	3	3	4	4	19	21	25	26	26	26	20	5	2	2	A	2	1	1	2	12.2	26.5								
29-Oct-05	2	2	1	1	0	1	0	1	3	4	9	29	37	38	39	37	34	29	A	26	30	32	35	18.6	39.0									
30-Oct-05	34	36	34	33	34	29	36	35	30	32	36	40	41	41	38	32	23	A	7	28	7	3	3	8	27.8	40.8								
31-Oct-05	18	13	22	26	27	24	11	10	4	18	19	18	15	17	11	10	A	2	2	2	2	2	2	2	12.0	27.4								
Hourly Avg	N	N	N	N	N	N	N	8.6	9.0	10.8	15.2	19.9	24.4	28.3	30.3	31.0	29.9	27.8	22.7	16.7	18.2	16.7	16.4	16.0	15.6									
Hourly Max	34.2	35.7	34.5	32.7	34.2	43.6	45.4	46.4	37.4	37.0	38.7	40.3	40.5	41.4	41.1	40.7	38.5	37.5	37.6	38.5	40.0	39.5	38.4	35.1										

### HOURLY MAXIMUM 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

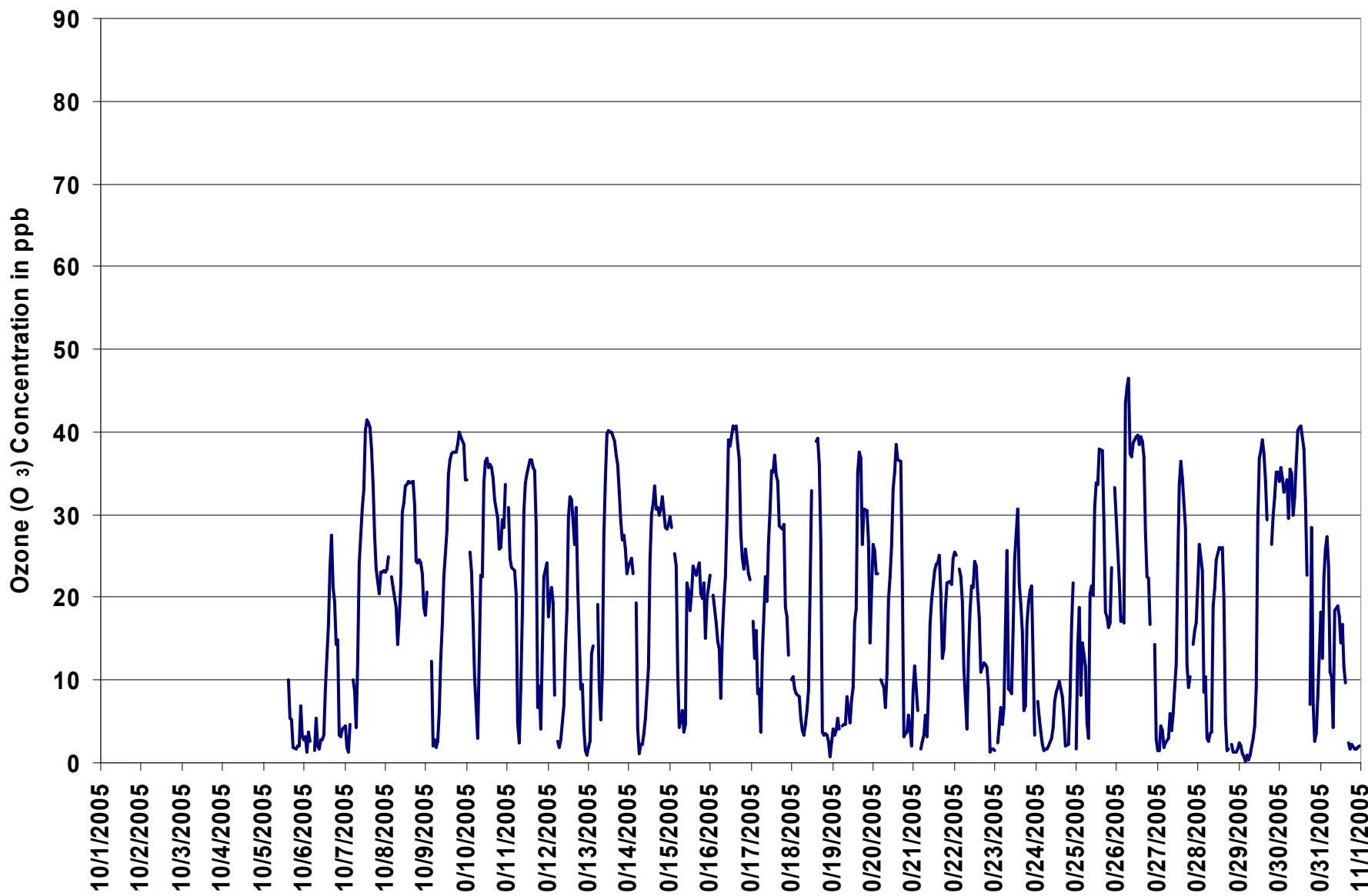
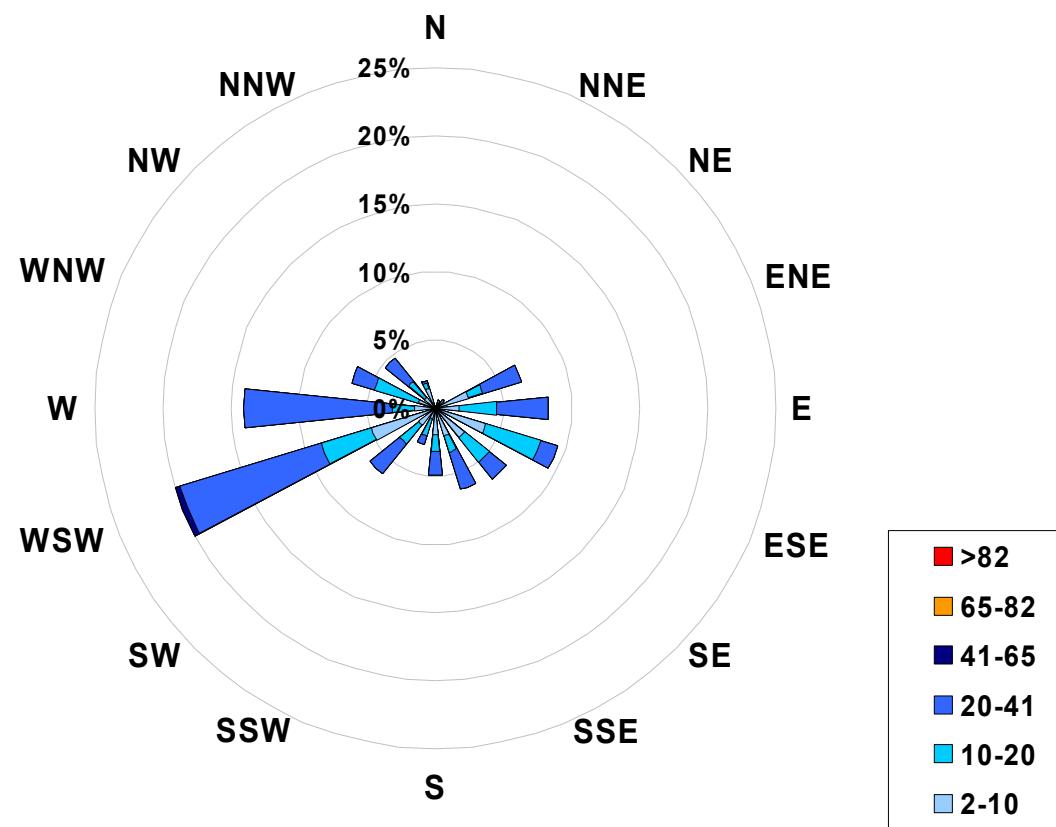


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Ozone (in ppb) Located at the Henry Pirker Site for October 2005**



**Calms:** 0%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	272
10	to	20	128
20	to	41	203
41	to	65	2
65	to	82	0
>	82		0
Total Non-Zero Values			605

## PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

### EIGHT HOUR RUNNING AVERAGE TABLE

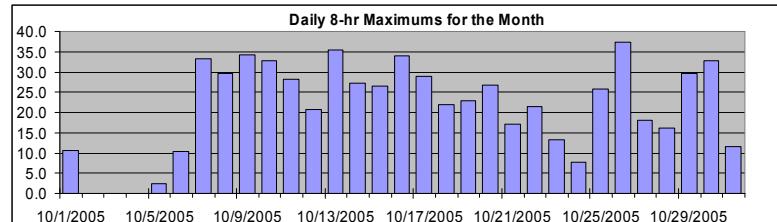
### Ozone (O<sub>3</sub>)

Monitoring Dates: October 1, 2005 to November 1, 2005

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

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 37.5 ppb 26-Oct 13:00 14:00



Percentile	99	95	75	50	25	5	1
	34.8	31.4	21.3	13.1	5.7	1.0	0.3

#### 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	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		
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-Oct-05	11	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	
2-Oct-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	
3-Oct-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	
4-Oct-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	
5-Oct-05	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	2.4	
6-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	5	8	10	10	10	10	10	8	6	10.4
7-Oct-05	3	2	1	1	1	1	1	2	2	3	5	8	12	15	19	24	28	32	33	33	32	29	27	24	22	33.3	
8-Oct-05	20	19	19	19	19	19	18	17	16	16	17	18	20	22	24	27	29	30	29	28	26	25	23	21	29.6		
9-Oct-05	18	17	16	14	12	9	7	5	4	3	4	6	9	13	17	21	25	28	30	31	33	34	34	33	34.3		
10-Oct-05	33	33	31	29	25	20	16	12	9	10	11	13	16	20	24	28	31	32	32	31	29	28	28	27	32.7		
11-Oct-05	26	26	25	25	23	20	17	13	12	10	10	11	14	17	21	25	28	28	26	22	18	15	12	11	28.2		
12-Oct-05	9	9	11	12	12	13	12	9	7	5	4	4	7	10	13	16	17	20	21	20	17	13	10	7	20.8		
13-Oct-05	5	2	2	3	3	4	5	5	6	9	12	16	19	22	26	31	34	35	35	33	31	29	28	25	35.3		
14-Oct-05	24	23	22	21	20	17	14	11	8	6	3	4	4	7	11	14	18	21	23	26	27	27	26	27.2			
15-Oct-05	26	27	27	26	25	22	18	15	11	7	8	7	7	9	11	13	15	18	18	18	19	18	17	16	26.6		
16-Oct-05	17	16	16	15	15	15	13	13	12	12	13	15	18	22	26	29	32	34	34	31	29	27	24	22	34.0		
17-Oct-05	20	18	15	15	12	11	8	6	7	7	9	11	14	18	22	25	28	29	29	28	26	24	21	19	29.0		
18-Oct-05	16	14	12	9	8	7	6	5	4	4	4	5	7	7	12	17	21	22	21	19	17	15	10	6	21.8		
19-Oct-05	2	1	1	1	1	1	1	2	2	2	2	3	3	4	6	8	12	15	17	20	22	23	22	21	23.0		
20-Oct-05	20	19	19	19	18	16	15	14	12	11	10	11	13	17	21	24	27	26	24	21	18	14	9	5	26.8		
21-Oct-05	2	2	2	2	2	2	2	2	2	2	3	5	7	10	12	15	17	17	17	17	17	16	16	16	17.2		
22-Oct-05	17	19	20	21	21	19	16	14	12	13	13	13	13	15	16	16	15	14	13	11	8	6	4	21.4			
23-Oct-05	4	3	2	1	1	1	3	5	6	6	6	7	9	12	13	13	13	13	13	12	11	10	8	13.3			
24-Oct-05	8	7	8	6	4	2	1	1	1	1	1	1	2	3	4	4	5	5	5	5	4	4	5	4	7.7		
25-Oct-05	4	4	5	5	5	3	3	5	6	7	10	13	17	21	25	26	25	25	22	19	17	14	13	13	25.7		
26-Oct-05	14	14	15	15	16	19	22	24	25	28	31	34	37	37	37	36	35	34	31	29	25	23	19	14	37.5		
27-Oct-05	10	7	4	2	1	1	1	2	2	4	5	8	12	15	17	18	18	17	17	16	12	9	8	18.0			
28-Oct-05	8	10	11	11	10	9	8	7	6	5	5	7	9	12	15	16	16	16	15	13	12	9	5	2	16.1		
29-Oct-05	0	0	0	0	0	0	0	0	0	1	3	7	11	16	20	24	27	29	30	29	28	28	27	27	29.7		
30-Oct-05	27	29	29	31	32	31	31	30	29	29	30	31	33	33	32	30	31	27	22	17	11	7	4	32.8			
31-Oct-05	2	2	3	6	8	10	10	10	11	12	10	8	8	8	9	10	8	6	5	3	2	1	0	11.7			

Hourly Max 32.7 32.5 31.4 31.0 31.6 31.1 30.9 30.8 30.2 29.4 30.6 33.9 37.2 37.5 36.6 35.7 35.2 35.3 35.0 33.4 33.0 33.9 34.3 33.2

**PASZA - Henry Pirker Carbon Monoxide Monthly Summary**

Station: Henry Pirker  
Station Owner: PASZA

## HOURLY AVERAGE TABLE

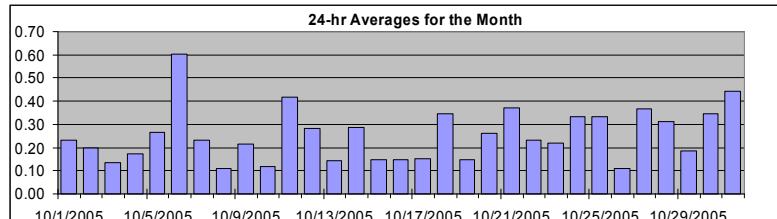
## **Carbon Monoxide (CO)**

**Monitoring Dates:** October 1, 2005 to November 1, 2005

**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
Maximum 24-hr Value:	0.6 ppm



## Status Flag Characters

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

AIC Time:	35 hrs	Operational Time:	704 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	99.9%					
Percentile	99 1.6	95 0.9	75 0.3	50 0.2	25 0.1	5 0.1	1 0.1	Average 0.3 ppm

**Day Mountain Standard Tim**

Hour Start	Mountain Standard Time																								24-hour Average	Daily Maximum		
	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00				
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-Oct-05	0.5	0.4	0.4	0.2	A	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.4	0.3	0.3	0.3	0.23	0.47	
2-Oct-05	0.2	0.1	0.2	A	0.2	0.4	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	0.4	0.4	0.2	0.3	0.3	0.2	0.20	0.40	
3-Oct-05	0.2	0.1	A	0.1	0.1	0.2	0.4	0.4	0.1	0.1	0.1	0.1	0.1	C	C	C	C	A	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.14	0.41	
4-Oct-05	0.1	0.1	0.1	0.1	0.1	A	0.3	0.3	0.2	0.1	0.1	0.1	0.1	A	A	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.17	0.34
5-Oct-05	0.1	0.1	0.1	0.1	0.1	A	0.5	0.4	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.4	0.5	0.6	0.7	0.6	0.27	0.69	
6-Oct-05	1.0	0.8	0.5	0.4	0.3	A	0.5	0.7	0.5	0.5	0.9	0.9	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.4	1.3	1.6	1.3	1.1	1.64	0.60		
7-Oct-05	1.1	0.6	0.2	0.1	A	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.23	1.08	
8-Oct-05	0.1	0.1	0.1	A	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.17	
9-Oct-05	0.1	0.1	A	0.2	0.4	0.3	0.5	0.8	0.8	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	0.22	0.80	
10-Oct-05	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.17	
11-Oct-05	A	0.1	0.1	0.1	0.1	0.2	1.1	1.2	0.7	0.4	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.8	1.7	1.9	0.3	0.2	0.1	0.1	0.42	1.92	
12-Oct-05	0.1	0.1	0.1	0.1	0.2	A	0.4	0.8	0.6	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.6	0.5	0.3	0.5	0.3	0.3	0.28	0.83	
13-Oct-05	0.2	0.2	0.1	0.1	A	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.14	0.24	
14-Oct-05	0.1	0.1	0.1	A	0.1	0.3	0.6	0.9	1.0	0.8	0.5	0.4	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.29	1.01	
15-Oct-05	0.1	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.15	0.22	
16-Oct-05	0.1	A	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.15	0.27		
17-Oct-05	A	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.32	
18-Oct-05	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	M	0.0	0.1	0.1	0.2	0.6	1.0	1.9	1.1	0.4	0.2	0.35	1.86		
19-Oct-05	0.1	0.1	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.24	
20-Oct-05	0.1	0.1	0.1	A	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.7	1.3	0.9	0.3	0.3	0.3	0.26	1.28	
21-Oct-05	0.2	0.2	0.1	A	0.2	0.4	0.9	1.9	1.5	0.5	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.37	1.93	
22-Oct-05	0.1	0.1	A	0.2	0.1	0.2	0.3	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.1	0.1	0.3	0.4	0.3	0.23	0.43	
23-Oct-05	0.2	A	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.3	0.3	0.2	0.2	0.22	0.52	
24-Oct-05	A	0.1	0.1	0.2	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	1.0	0.8	0.3	0.2	A	0.33	1.04	
25-Oct-05	0.3	0.3	0.1	0.2	0.3	0.3	1.2	1.9	0.3	0.2	0.3	0.1	0.1	0.0	0.1	0.2	0.3	0.3	0.4	0.3	0.4	0.3	A	0.1	0.1	0.33	1.88	
26-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	A	0.3	0.3	0.11	0.35	
27-Oct-05	0.4	0.6	0.4	0.3	0.3	0.6	1.1	1.2	0.3	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.2	0.3	0.3	A	0.2	0.2	0.2	0.2	0.36	1.20		
28-Oct-05	0.1	0.1	0.1	0.1	0.5	0.9	1.1	0.9	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	A	0.4	0.4	0.4	0.4	0.5	0.31	1.10		
29-Oct-05	0.4	0.3	0.3	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	A	0.2	0.1	0.1	0.1	0.1	0.1	0.18	0.39		
30-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	A	2.0	1.6	0.5	0.5	0.6	1.1	1.1	0.35	1.98			
31-Oct-05	1.2	0.5	0.2	0.1	0.1	0.1	0.2	0.4	0.7	0.2	0.1	0.2	0.2	0.2	0.2	0.3	A	0.9	0.9	0.7	0.6	0.7	0.7	0.7	0.44	1.17		
Hourly Avg	0.27	0.20	0.16	0.14	0.15	0.23	0.39	0.52	0.37	0.23	0.21	0.18	0.14	0.12	0.12	0.14	0.17	0.23	0.36	0.43	0.43	0.33	0.29	0.28				

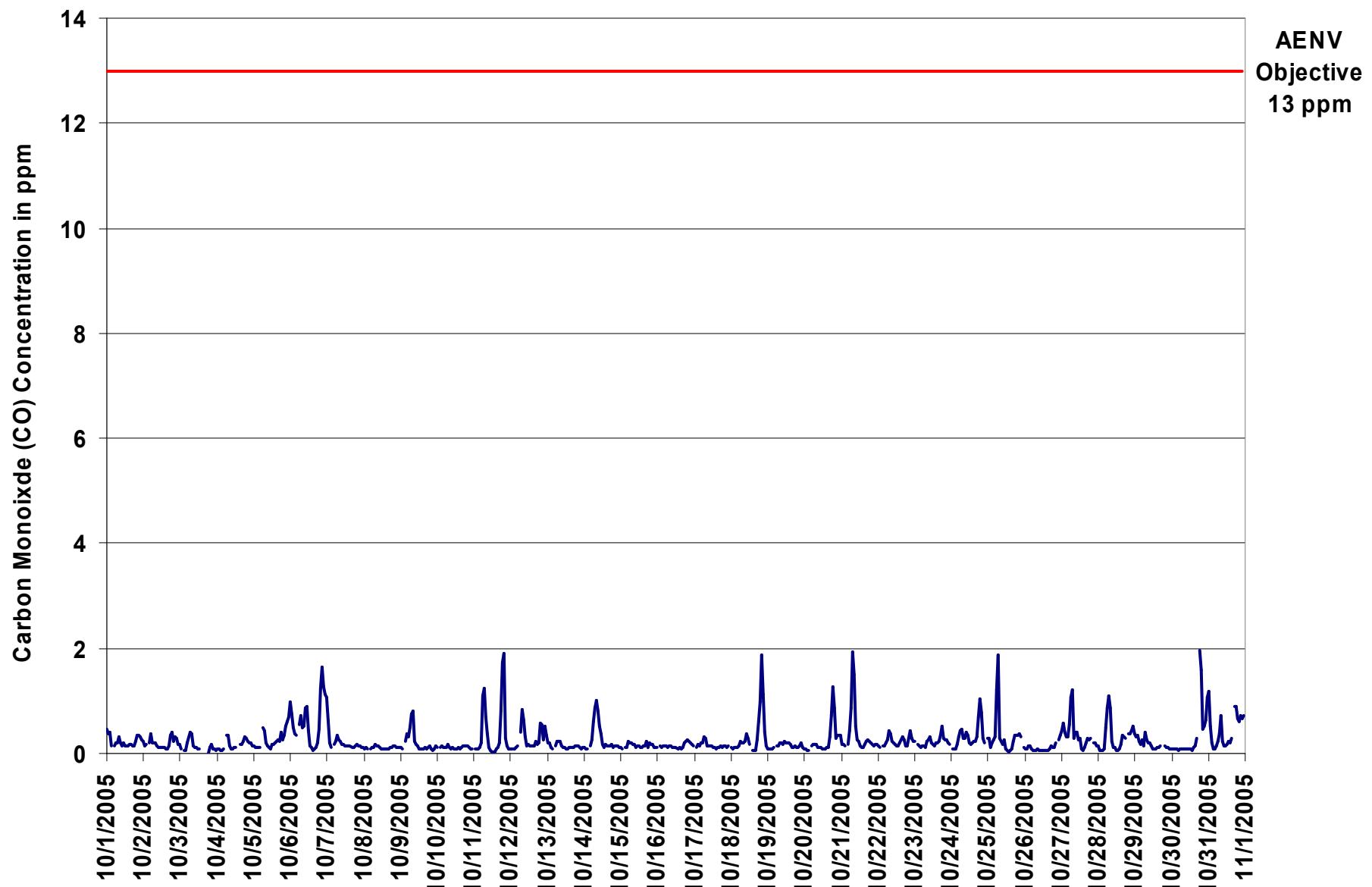


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Value:	5.9	ppm	25-Oct	6:00 7:00
Maximum 24-hr Value:	1.0	ppm	6-Oct	

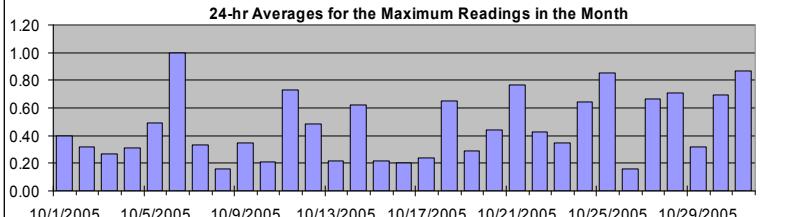
AIC Time:	35 hrs	Operational Time:	704 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	99.9%					
Percentile	99 3.1	95 1.5	75 0.5	50 0.3	25 0.2	5 0.1	1 0.1	Average 0.5 ppm

### 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 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-Oct-05	0.5	1.0	0.6	0.2	A	0.2	0.6	0.4	0.5	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.7	0.5	0.5	0.5	0.40	0.98
2-Oct-05	0.4	0.3	0.2	A	0.2	0.5	0.5	0.4	0.5	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.5	0.8	0.4	0.4	0.4	0.3	0.32	0.84
3-Oct-05	0.3	0.2	A	0.1	0.2	0.6	0.9	0.8	0.3	0.2	0.2	0.2	0.1	C	C	C	C	A	0.0	0.2	0.2	0.1	0.1	0.1	0.27	0.89
4-Oct-05	0.2	0.2	0.1	0.2	0.3	A	0.9	0.6	0.3	0.1	0.1	0.2	0.2	A	A	0.2	0.5	0.4	0.6	0.5	0.3	0.3	0.2	0.2	0.31	0.87
5-Oct-05	0.5	0.1	0.2	0.5	0.2	A	1.4	0.9	0.4	0.2	0.3	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.9	0.4	0.7	0.9	0.9	1.1	0.49	1.37
6-Oct-05	1.2	1.0	0.7	0.7	0.8	A	1.4	1.7	0.7	0.8	0.9	1.1	0.7	0.3	0.2	0.1	0.1	0.2	0.4	1.4	2.7	2.3	1.8	1.5	0.99	2.73
7-Oct-05	1.5	1.1	0.4	0.1	A	0.2	0.3	0.4	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.33	1.50
8-Oct-05	0.1	0.1	0.1	A	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.28
9-Oct-05	0.2	0.3	A	0.4	0.8	0.4	1.0	1.3	1.1	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.35	1.28
10-Oct-05	0.2	A	0.2	0.3	0.2	0.3	0.2	0.4	0.5	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.21	0.51
11-Oct-05	A	0.1	0.1	0.1	0.3	0.5	2.4	1.6	1.4	0.7	0.3	0.1	0.1	0.1	0.2	0.2	0.5	1.5	2.6	2.7	0.8	0.2	0.1	0.1	0.73	2.72
12-Oct-05	0.1	0.1	0.2	0.2	0.3	A	0.9	1.6	0.9	0.4	0.2	0.2	0.2	0.3	0.2	0.4	0.3	0.3	1.1	0.8	0.5	1.0	0.5	0.48	1.56	
13-Oct-05	0.3	0.3	0.2	0.1	A	0.5	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.22	0.46
14-Oct-05	0.1	0.1	0.1	A	0.6	0.5	2.1	3.1	1.4	1.3	0.6	0.5	0.3	0.3	0.6	0.2	0.3	0.3	0.2	0.2	0.3	0.6	0.3	0.62	3.13	
15-Oct-05	0.1	0.1	A	0.2	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	0.4	0.2	0.3	0.3	0.3	0.2	0.2	0.22	0.35
16-Oct-05	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.4	0.3	0.2	0.2	0.1	0.2	0.20	0.40
17-Oct-05	A	0.1	0.2	0.2	0.3	0.3	0.6	0.7	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.24	0.66
18-Oct-05	0.1	0.2	0.1	0.1	0.3	0.2	1.3	0.3	0.3	0.3	0.5	0.3	0.4	0.4	M	0.1	0.1	0.2	1.2	1.5	1.8	2.6	1.9	0.9	0.65	2.62
19-Oct-05	0.2	0.1	0.2	0.1	0.4	A	0.4	0.6	0.5	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.29	0.56
20-Oct-05	0.1	0.1	0.1	0.1	A	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.6	1.6	1.8	1.7	0.5	0.7	0.5	0.44	1.78
21-Oct-05	0.3	0.3	0.2	A	0.6	1.6	3.3	3.1	2.2	1.1	0.5	0.8	0.3	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.77	3.28
22-Oct-05	0.2	0.2	A	0.3	0.2	0.3	0.5	1.1	0.5	0.5	0.3	0.2	0.2	0.3	0.3	0.7	0.8	0.6	0.3	0.2	0.6	0.8	0.4	0.3	0.43	1.10
23-Oct-05	0.3	A	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.7	0.5	0.2	0.2	0.2	0.3	0.3	0.5	1.3	0.4	0.4	0.4	0.3	0.2	0.2	0.35	1.28
24-Oct-05	A	0.1	0.1	0.1	0.3	1.4	0.9	1.0	0.4	0.5	0.7	0.6	0.3	0.2	0.3	0.4	0.4	0.5	1.0	2.1	1.7	0.6	0.5	A	0.64	2.10
25-Oct-05	0.4	0.7	0.2	0.4	0.6	0.8	5.9	4.1	1.4	0.4	0.4	0.2	0.1	0.1	0.3	0.4	0.5	0.5	0.5	0.6	0.7	A	0.3	0.3	0.85	5.93
26-Oct-05	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	A	0.4	0.5	0.16	0.51
27-Oct-05	0.7	0.9	0.6	0.7	0.6	1.4	1.5	2.9	0.4	0.5	0.6	0.4	0.4	0.2	0.2	0.3	0.4	0.5	0.4	0.6	A	0.5	0.3	0.67	2.91	
28-Oct-05	0.4	0.1	0.1	0.1	0.1	2.2	2.1	2.5	1.2	0.8	0.2	0.1	0.1	0.1	0.2	0.3	1.3	0.5	0.5	A	1.2	0.6	0.6	0.71	2.52	
29-Oct-05	0.5	0.4	0.4	0.3	0.4	1.3	0.3	0.7	0.6	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.32	1.30	
30-Oct-05	0.1	0.1	0.1	0.1	0.1	0.5	0.1	0.1	0.4	0.2	0.2	0.1	0.1	0.1	0.2	0.2	1.0	A	4.1	3.2	1.4	0.8	1.1	1.6	0.69	4.14
31-Oct-05	1.7	0.9	0.4	0.2	0.2	0.4	0.4	0.7	1.1	0.5	0.3	0.2	0.3	0.4	0.4	4.9	1.4	0.9	0.9	1.0	1.1	1.4		0.87	4.95	

### HOURLY MAXIMUM TABLE

### Carbon Monoxide (CO)



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

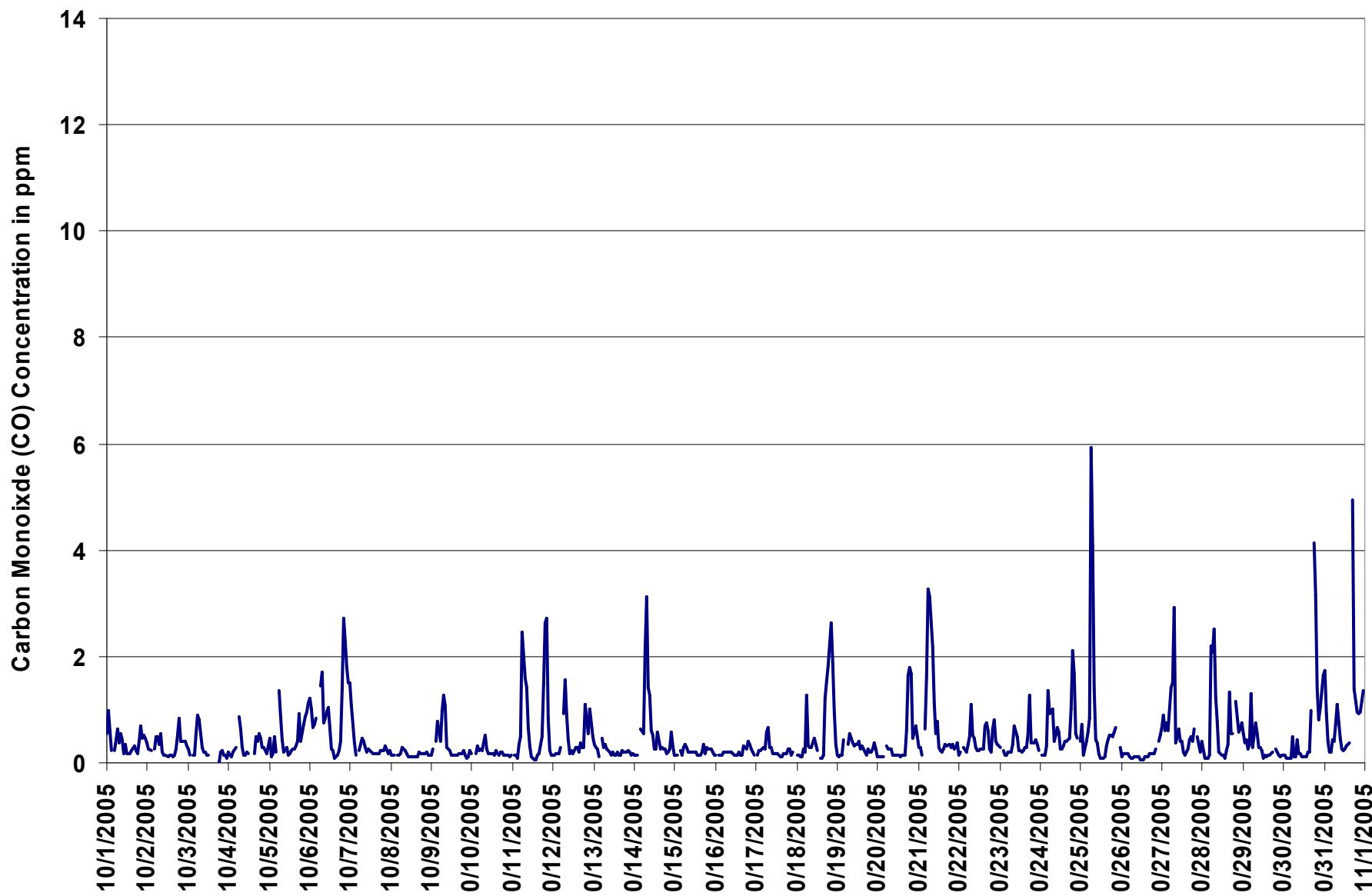
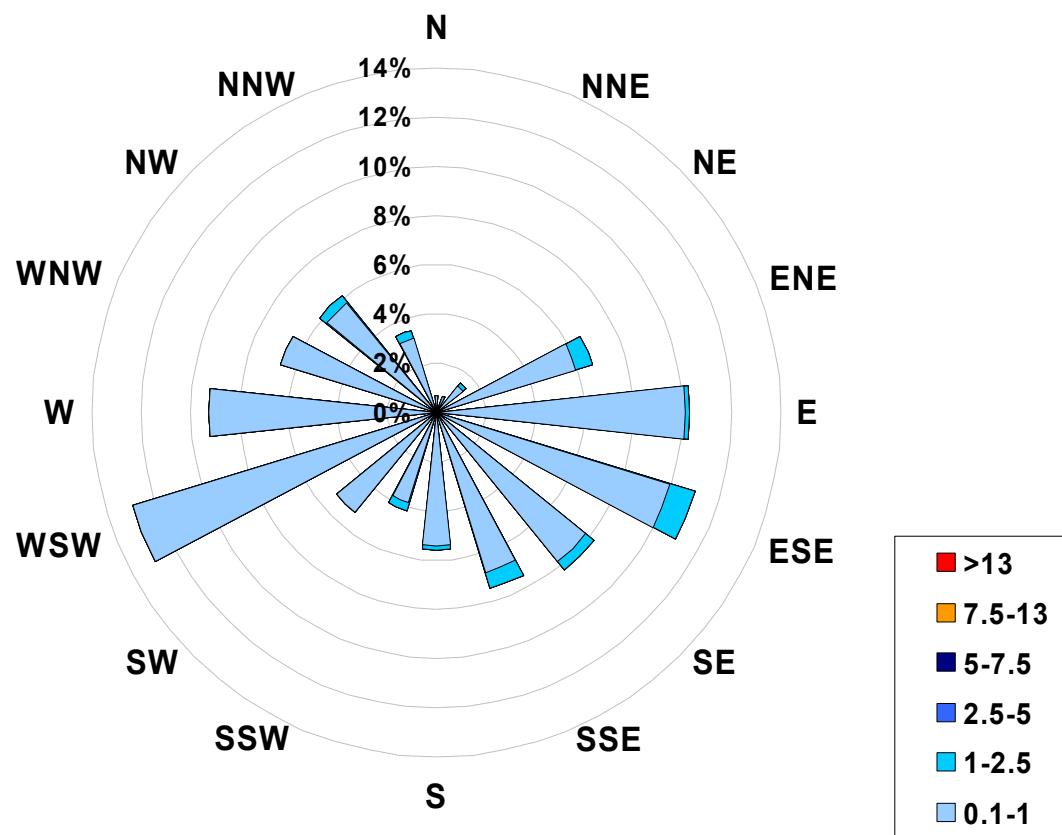


Figure 10. PASZA - Henry Pirker Carbon Monoxide 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located  
at the Henry Pirker Site for October 2005**



Calms: 0%

Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0.1	<	1	679
1	to	2.5	25
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
> 13			0
Total Non-Zero Values			704

### PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### EIGHT HOUR RUNNING AVERAGE TABLE

Monitoring Dates: October 1, 2005 to November 1, 2005

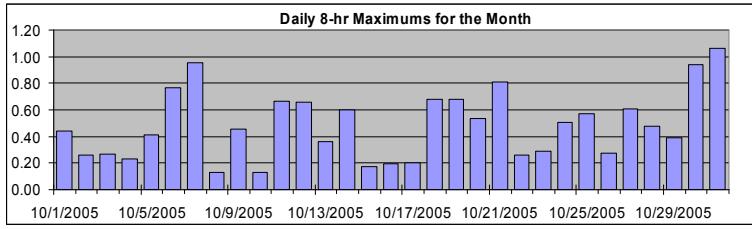
Objective Limit: Alberta Environment: 8-hr 5 ppm  
**Summary**

Number of 8-hr Exceedances: 0  
 Maximum 8-hr Average: 1.1 ppm 31-Oct 0:00 1:00

Percentile	99	95	75	50	25	5	1
	0.9	0.6	0.3	0.2	0.1	0.1	0.1

Day	Mountain Standard Time																								Daily Maximum
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
1-Oct-05	0.4	0.4	0.4	0.4	0.4	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	0.2	0.2	0.2	0.2	0.2
2-Oct-05	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
3-Oct-05	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	N	N	N	N	N	N	N	N	N
4-Oct-05	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	N	N	N	N	N	N	N	0.2	0.2	0.2
5-Oct-05	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
6-Oct-05	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.5	0.6	0.8
7-Oct-05	0.9	1.0	1.0	0.9	0.9	0.7	0.5	0.4	0.3	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
8-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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-Oct-05	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.2	0.1	0.1	0.2	0.4	0.6	0.6	0.7	0.7
12-Oct-05	0.7	0.6	0.6	0.4	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.66
13-Oct-05	0.4	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1
15-Oct-05	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.17
16-Oct-05	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	0.2	0.2	0.2	0.2
17-Oct-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.21
18-Oct-05	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	0.3	0.6	0.7	0.7
19-Oct-05	0.7	0.7	0.6	0.5	0.3	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	0.1	0.1	0.1	0.1
20-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.53
21-Oct-05	0.5	0.5	0.5	0.3	0.2	0.3	0.3	0.6	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.81
22-Oct-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.26
23-Oct-05	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	0.3	0.3	0.3	0.3	0.3	0.3	0.29
24-Oct-05	0.3	0.3	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	0.4	0.5	0.5	0.5	0.51
25-Oct-05	0.5	0.5	0.4	0.3	0.2	0.2	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.57
26-Oct-05	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.27
27-Oct-05	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.60
28-Oct-05	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.48
29-Oct-05	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
30-Oct-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
31-Oct-05	1.1	1.0	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	1.06

Hourly Max 1.06 0.99 0.96 0.91 0.87 0.87 0.65 0.60 0.60 0.74 0.79 0.81 0.74 0.73 0.69 0.60 0.44 0.39 0.34 0.40 0.61 0.67 0.73 0.81 0.94



#### Status Flag Characters

C Calibration	A AIC - 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: October 1, 2005 to November 1, 2005

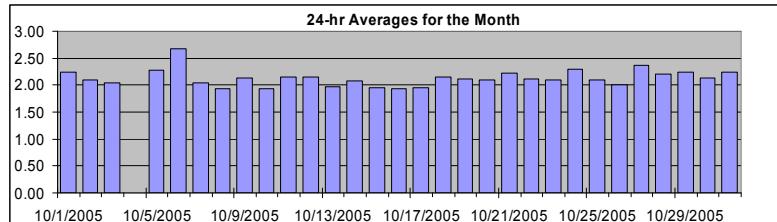
Objective Limit: Alberta Environment: 1-hr na ppm 24-hr na ppm  
Summary

Maximum 1-hr Average: 3.5 ppm 6-Oct 0:00 1:00  
Maximum 24-hr Value: 2.7 ppm 6-Oct

AIC Time:	35 hrs	Operational Time:	701 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%					
Percentile	99 3.1	95 2.7	75 2.2	50 2.0	25 1.9	5 1.9	1 1.8	Average 2.1 ppm

### HOURLY AVERAGE TABLE

### Total Hydrocarbons (THC)



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start 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-Oct-05	2.4	2.5	2.5	2.4	A	2.4	2.5	2.4	2.4	2.5	2.5	2.4	2.2	2.2	2.1	2.0	1.9	1.9	1.9	2.0	2.1	2.1	2.2	2.1	2.1	2.24	2.51	
2-Oct-05	2.2	2.2	2.3	A	2.4	2.5	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.09	2.52	
3-Oct-05	2.1	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	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	2.03	2.13	
4-Oct-05	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	C	C	C	C	A	1.9	1.9	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	N	2.09	
5-Oct-05	2.0	2.0	2.0	2.1	2.0	A	2.1	2.1	2.1	2.0	2.0	M	M	2.4	2.3	2.3	2.3	2.3	2.4	2.3	2.4	2.7	2.9	3.1	2.28	3.11		
6-Oct-05	3.5	3.4	3.2	3.1	2.9	A	2.9	2.8	2.5	2.5	2.6	2.6	2.9	2.7	2.4	2.2	2.0	1.9	1.9	2.0	2.2	2.9	2.9	3.1	2.9	2.67	3.51	
7-Oct-05	3.2	2.7	2.3	2.2	A	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.04	3.18	
8-Oct-05	1.9	1.9	2.0	A	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.92	2.02	
9-Oct-05	2.0	2.0	A	2.3	2.3	2.3	2.5	2.6	2.6	2.2	2.2	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	2.0	2.0	2.14	2.64	
10-Oct-05	2.0	A	2.0	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.93	2.17	
11-Oct-05	A	1.9	2.0	2.0	2.1	2.1	2.6	2.5	2.3	2.2	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.4	2.8	2.9	2.1	2.0	2.0	2.16	2.92
12-Oct-05	2.0	2.1	2.0	2.1	2.2	A	2.2	2.4	2.4	3.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.1	2.1	2.2	2.2	2.0	2.3	2.3	2.15	3.08	
13-Oct-05	2.1	2.2	2.0	2.0	A	2.0	2.0	2.1	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	1.97	2.37	
14-Oct-05	2.0	1.9	2.0	A	2.0	2.1	2.3	2.4	2.4	2.4	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.08	2.44	
15-Oct-05	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.18		
16-Oct-05	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	2.06		
17-Oct-05	2.0	A	2.1	2.0	2.1	2.0	2.2	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.95	2.18		
18-Oct-05	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.2	2.0	M	1.9	1.9	1.9	2.0	2.2	2.6	2.9	2.7	2.3	2.3	2.15	2.92			
19-Oct-05	2.3	2.3	2.4	2.3	2.3	A	2.3	2.5	2.4	2.3	2.1	2.1	2.1	2.1	2.0	1.9	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.11	2.50		
20-Oct-05	1.9	1.9	2.0	1.9	A	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.3	2.6	2.6	2.3	2.3	2.5	2.10	2.62		
21-Oct-05	2.3	2.2	2.3	A	2.3	2.6	2.5	2.8	2.8	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.22	2.84		
22-Oct-05	2.1	2.1	A	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.12	2.36			
23-Oct-05	2.3	A	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.1	2.2	2.2	2.0	1.9	2.0	2.0	2.0	2.1	2.1	2.0	1.9	1.9	2.1	2.09	2.29		
24-Oct-05	A	2.3	2.3	2.3	2.5	2.5	2.4	2.4	2.4	2.5	2.3	2.2	2.2	2.2	2.1	2.0	2.1	2.3	2.5	2.4	2.2	2.1	A	2.30	2.55			
25-Oct-05	2.5	2.4	2.1	2.3	2.2	2.1	2.3	2.5	2.0	2.0	2.1	1.9	1.9	1.8	1.8	1.9	1.9	1.9	2.1	2.0	2.1	2.0	A	2.09	2.55			
26-Oct-05	2.0	2.1	2.1	2.1	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	A	2.00	2.37		
27-Oct-05	2.5	2.6	2.6	2.8	2.9	3.1	3.2	2.9	2.3	2.3	2.3	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.1	2.1	A	2.1	2.2	2.1	2.37	3.20		
28-Oct-05	2.2	2.0	2.0	2.1	2.1	2.4	2.4	2.5	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.2	A	2.1	2.4	2.5	2.21	2.57		
29-Oct-05	2.5	2.6	2.7	2.6	2.5	2.6	2.7	2.8	2.5	2.4	2.4	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	A	2.25	2.84			
30-Oct-05	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	A	2.9	2.8	2.2	2.4	2.5	2.8	2.13	2.92		
31-Oct-05	3.1	2.6	2.2	2.0	1.9	2.1	2.1	2.0	2.1	1.9	1.9	2.0	2.0	2.1	2.4	2.2	A	2.3	2.4	2.4	2.4	2.4	2.5	2.6	2.24	3.10		
Hourly Avg	2.25	2.21	2.19	2.17	2.19	2.20	2.25	2.27	2.20	2.17	2.11	2.07	2.02	2.00	1.98	1.96	1.95	1.99	2.09	2.13	2.17	2.13	2.17	2.19				
Hourly Max	3.51	3.41	3.18	3.07	2.92	3.08	3.20	2.86	2.77	3.08	2.62	2.92	2.67	2.39	2.38	2.30	2.28	2.33	2.92	2.84	2.92	2.92	3.12	3.11				

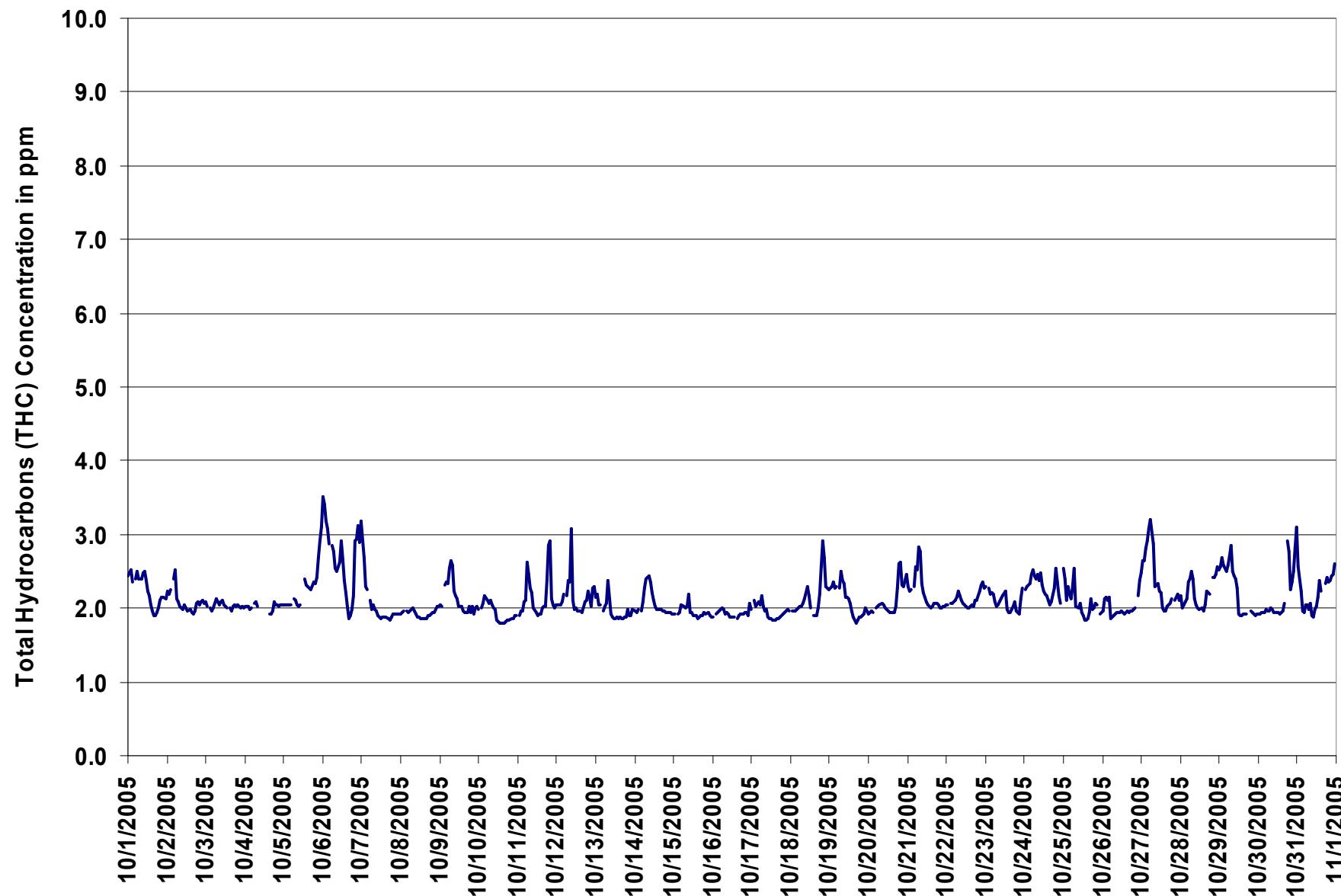


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

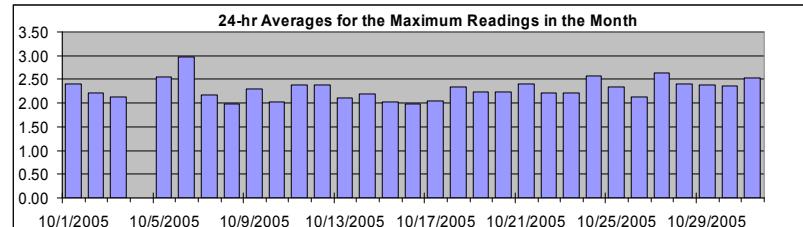
### Summary

Maximum 1-hr Value:	4.3	ppm	5-Oct	23:00 0:00
Maximum 24-hr Value:	3.0	ppm	6-Oct	

AIC Time:	35 hrs	Operational Time:	701 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%					
Percentile	99 3.8	95 3.2	75 2.5	50 2.1	25 2.0	5 1.9	1 1.9	Average 2.3 ppm

### HOURLY MAXIMUM TABLE

### Total Hydrocarbons (THC)



### Status Flag Characters

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

### Day Mountain Standard Time

	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-Oct-05	2.6	2.7	2.7	2.5	A	2.5	2.7	2.7	2.5	2.7	2.6	2.5	2.3	2.3	2.2	2.1	2.0	1.9	2.0	2.1	2.6	2.4	2.4	2.3	2.40	2.73	
2-Oct-05	2.4	2.4	2.5	A	2.5	2.6	2.6	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.20	2.63	
3-Oct-05	2.2	2.1	A	2.1	2.0	2.1	2.3	2.2	2.1	2.1	2.2	2.1	2.3	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.12	2.30	
4-Oct-05	2.1	2.1	2.0	2.0	2.1	A	2.2	2.2	2.1	C	C	C	C	C	A	2.0	2.0	2.0	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.26	
5-Oct-05	2.1	2.1	2.1	2.5	2.1	A	2.4	2.2	2.2	2.1	2.1	M	M	3.2	2.4	2.4	2.4	2.4	2.6	2.4	2.8	3.1	3.7	4.3	2.56	4.31	
6-Oct-05	3.8	3.6	3.5	3.2	3.4	A	3.3	3.2	2.7	2.7	2.7	3.1	2.9	2.6	2.4	2.1	1.9	2.0	2.2	2.6	3.9	3.7	3.6	3.1	2.97	3.91	
7-Oct-05	3.8	3.4	2.4	2.4	A	2.2	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.0	2.16	3.82	
8-Oct-05	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	1.98	2.10	
9-Oct-05	2.1	2.2	A	2.6	2.5	2.4	2.8	3.0	2.9	2.3	2.2	2.2	2.1	2.3	2.0	2.0	2.0	2.0	2.3	2.0	2.7	1.9	2.1	2.1	2.30	2.98	
10-Oct-05	2.1	A	2.1	2.3	2.4	2.4	2.2	2.4	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.03	2.44	
11-Oct-05	A	2.0	2.1	2.0	2.3	2.4	3.1	2.7	2.5	2.6	2.6	2.0	1.9	2.0	2.1	2.1	2.2	2.1	3.1	3.2	3.4	2.3	2.1	2.1	2.38	3.36	
12-Oct-05	2.1	2.1	2.1	2.2	2.4	A	2.5	2.6	2.5	3.8	2.7	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.5	2.3	2.3	2.7	2.6	2.38	3.81
13-Oct-05	2.4	2.3	2.2	2.1	A	2.1	2.1	4.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	2.10	3.96
14-Oct-05	2.0	2.0	2.0	A	2.1	2.2	2.7	2.9	2.5	2.6	2.4	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.19	2.90
15-Oct-05	2.0	2.0	A	2.0	2.2	2.1	2.1	2.1	2.5	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.02	2.52	
16-Oct-05	1.9	A	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.16	
17-Oct-05	2.1	A	2.4	2.1	2.2	2.1	2.3	2.3	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.04	2.45	
18-Oct-05	A	2.0	2.0	2.0	2.1	2.1	2.3	2.1	2.1	2.3	2.4	2.5	2.2	M	2.0	2.0	1.9	2.2	2.7	3.0	3.3	3.1	3.0	2.4	2.34	3.27	
19-Oct-05	2.4	2.4	2.5	2.4	2.5	A	2.5	2.7	2.4	2.5	2.2	2.3	2.3	2.3	2.0	2.0	1.8	1.9	1.9	2.0	1.9	2.0	2.1	2.1	2.22	2.66	
20-Oct-05	2.0	2.0	2.0	A	2.1	2.1	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.7	3.0	3.3	2.6	2.6	2.25	3.28	
21-Oct-05	2.5	2.4	2.6	A	2.5	3.1	3.2	3.3	3.2	2.7	2.4	2.3	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.41	3.27	
22-Oct-05	2.1	2.1	A	2.1	2.1	2.1	2.4	2.6	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.4	2.4	2.4	2.22	2.56	
23-Oct-05	2.5	A	2.4	2.3	2.3	2.3	2.1	2.2	2.1	2.2	2.2	2.3	2.5	2.1	2.0	2.0	2.0	2.1	2.5	2.0	2.0	2.0	2.0	2.0	2.22	2.55	
24-Oct-05	A	2.8	2.9	2.7	2.7	2.7	2.6	2.6	2.5	2.5	2.5	2.5	2.3	2.3	2.2	2.2	2.1	2.2	2.9	3.4	2.8	2.6	2.5	2.5	2.57	3.45	
25-Oct-05	3.3	2.6	2.3	2.9	2.5	2.6	2.9	2.9	2.3	2.1	2.2	2.0	2.1	1.9	1.9	1.9	2.0	2.4	2.1	2.1	2.2	2.2	A	2.0	2.33	3.27	
26-Oct-05	2.0	2.7	2.5	2.3	2.4	2.1	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.2	A	2.3	2.7	2.14	2.72	
27-Oct-05	3.2	3.0	2.9	3.0	3.2	3.8	4.2	3.5	2.4	2.4	2.5	2.3	2.3	2.1	2.0	2.0	2.1	2.1	2.1	2.2	A	2.2	2.7	2.2	2.63	4.16	
28-Oct-05	2.9	2.1	2.1	2.1	2.2	2.9	2.6	3.2	2.6	2.4	2.1	2.0	2.0	2.1	2.0	2.2	2.5	2.3	2.4	A	2.6	2.6	2.5	2.7	2.40	3.18	
29-Oct-05	2.7	2.7	2.9	2.8	2.8	2.8	3.1	3.1	2.7	2.6	2.5	2.4	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.38	3.13	
30-Oct-05	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.8	A	3.7	3.6	2.7	3.2	2.7	3.3	2.36	3.65	
31-Oct-05	4.1	3.0	2.5	2.1	2.4	2.2	2.2	2.2	2.3	2.0	2.0	2.2	2.1	2.3	2.7	2.4	A	3.4	2.8	2.6	2.5	2.5	3.1	3.0	2.53	4.11	

Hourly Avg 2.48 2.39 2.36 2.32 2.37 2.38 2.51 2.50 2.38 2.32 2.22 2.17 2.12 2.11 2.05 2.04 2.05 2.13 2.29 2.32 2.40 2.32 2.37 2.37

Hourly Max 4.11 3.57 3.51 3.18 3.38 3.77 4.16 3.53 3.96 3.81 2.73 3.15 2.95 3.20 2.65 2.42 2.85 3.35 3.65 3.59 3.91 3.66 3.65 4.31

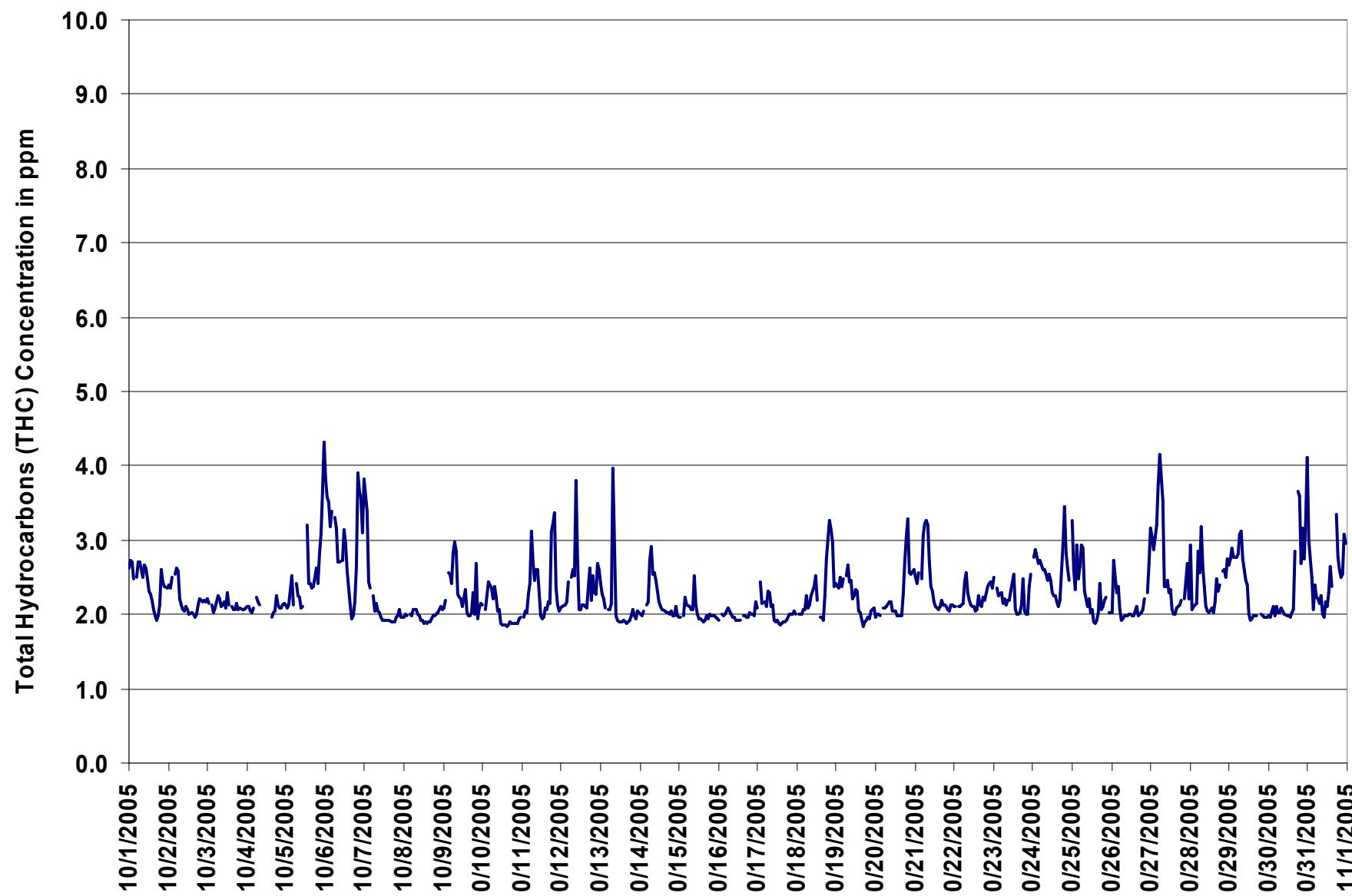
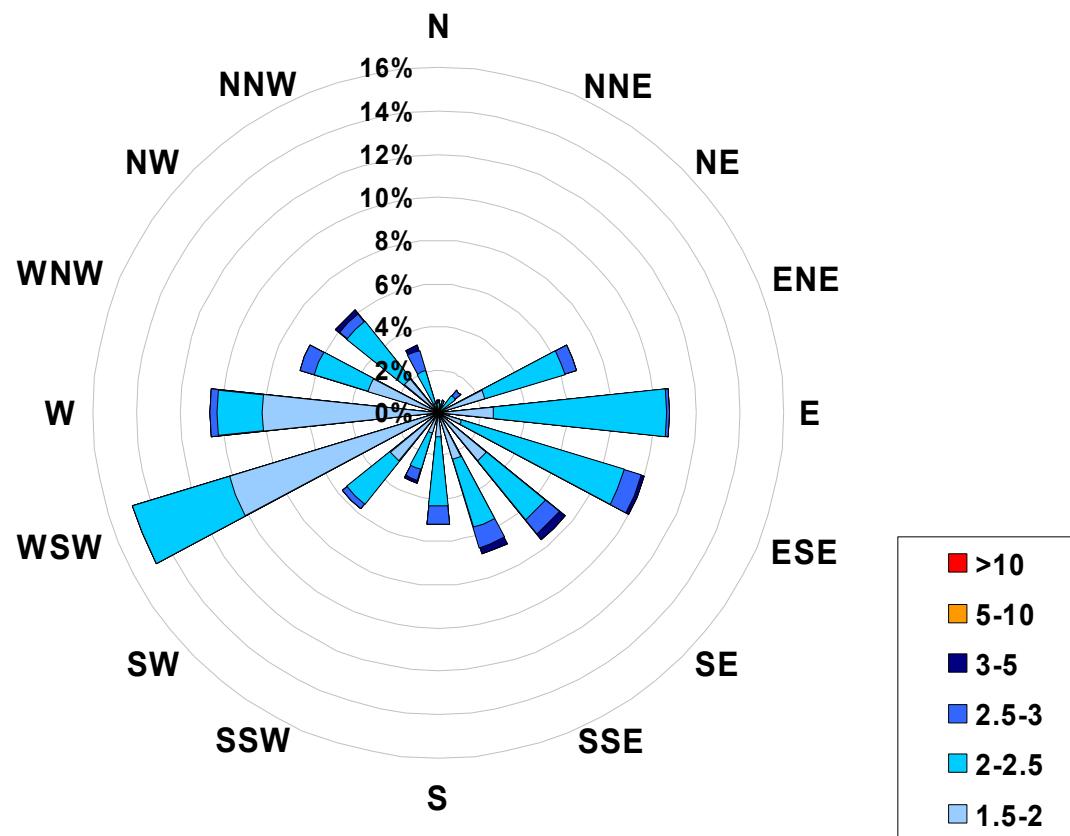


Figure 12. PASZA - Henry Pirker Total Hydrocarbons 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)**  
**Located at the Henry Pirker Site for October 2005**



Calms: 0%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	283
2	to	2.5	352
2.5	to	3	55
3	to	5	11
5	to	10	0
	>	10	0
Total Non-Zero Values			701

### PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

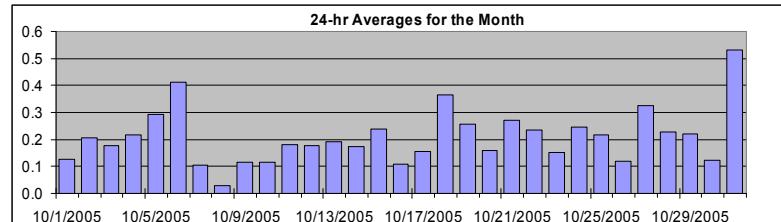
Objective Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
**Summary**

Maximum 1-hr Average:	2.6	ppb	31-Oct	21:00 22:00
Maximum 24-hr Value:	0.5	ppb	31-Oct	

AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	0.8	0.5	0.3	0.2	0.1	0.0	0.0	0.2 ppb

#### 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

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum		
1-Oct-05	0:00 1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
2-Oct-05	0:00 1:00	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
3-Oct-05	0:00 1:00	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
4-Oct-05	0:00 1:00	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	0.3	
5-Oct-05	0:00 1:00	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9	
6-Oct-05	1:00 2:00	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
7-Oct-05	0:00 1:00	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
8-Oct-05	0:00 1:00	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
9-Oct-05	0:00 1:00	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
10-Oct-05	0:00 1:00	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Oct-05	0:00 1:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.2	0.6
12-Oct-05	0:00 1:00	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
13-Oct-05	1:00 2:00	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
14-Oct-05	0:00 1:00	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
15-Oct-05	0:00 1:00	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
16-Oct-05	0:00 1:00	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
17-Oct-05	0:00 1:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Oct-05	0:00 1:00	0	0	0	0	0	1	1	0	C	C	C	A	M	0	0	0	0	0	0	0	0	1	1	1	1	0.4	0.7	
19-Oct-05	1:00 2:00	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
20-Oct-05	0:00 1:00	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	0.6
21-Oct-05	0:00 1:00	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
22-Oct-05	0:00 1:00	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
23-Oct-05	0:00 1:00	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
24-Oct-05	0:00 1:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
25-Oct-05	0:00 1:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
26-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
27-Oct-05	0:00 1:00	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.8	
28-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.5	
29-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.4	
30-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.5	
31-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	3	2	1	0.5	2.6		
	Hourly Avg	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.5		
	Hourly Max	0.7	0.7	0.7	0.6	0.6	0.5	0.7	0.8	0.7	0.7	0.9	0.8	0.4	0.3	0.2	0.3	0.3	0.4	0.5	0.6	0.9	2.6	2.0	1.5	0.5	2.6		

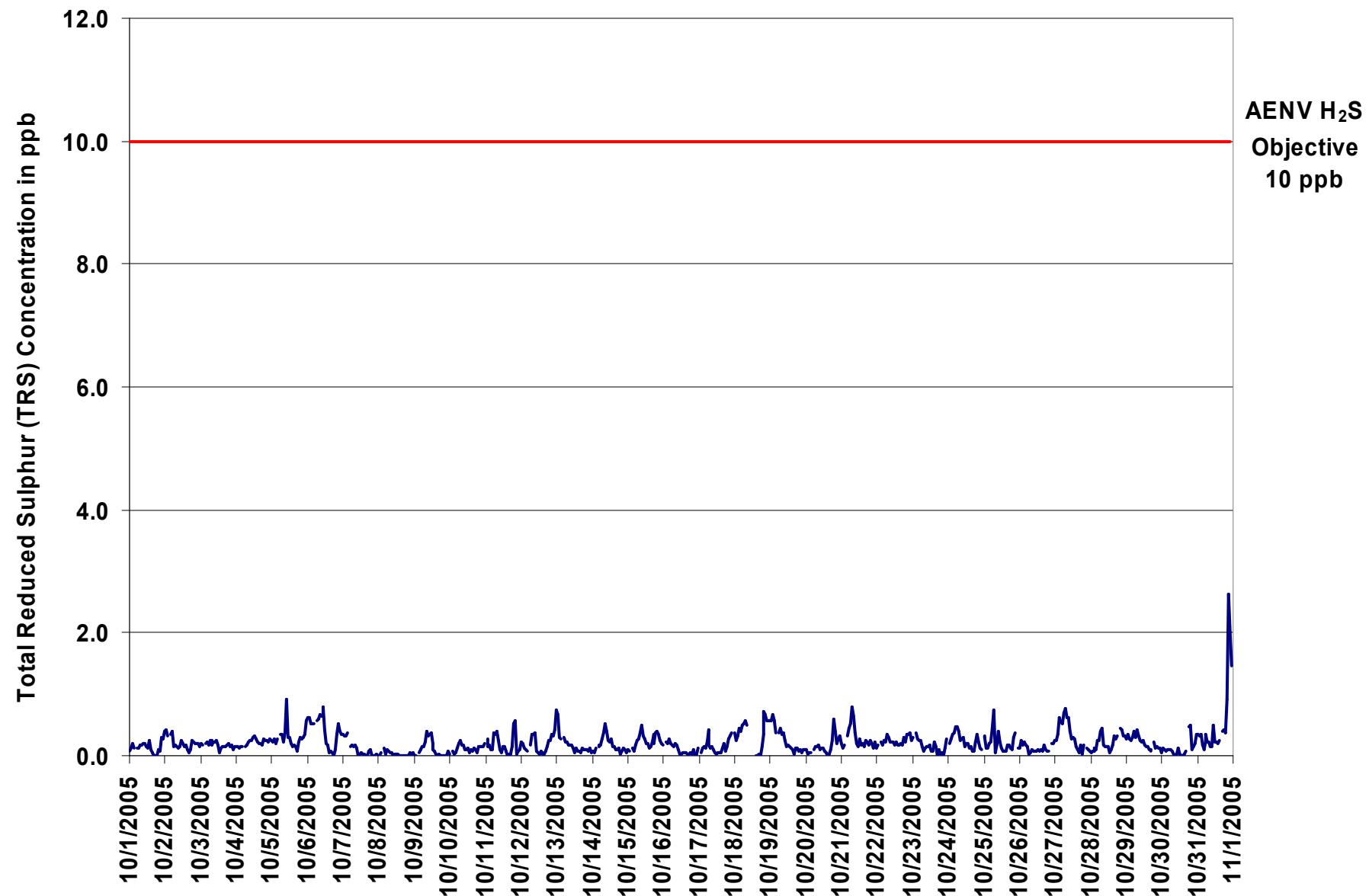


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)

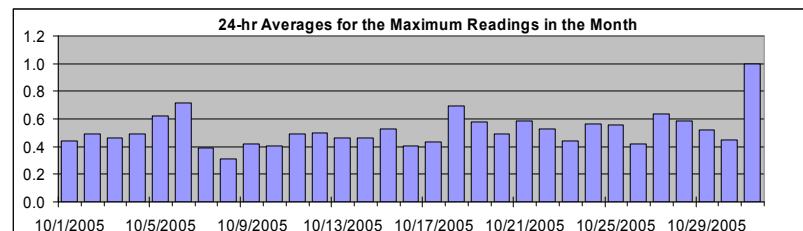
#### Summary

Maximum 1-hr Value:	3.2	ppb	31-Oct	21:00 22:00
Maximum 24-hr Value:	1.0	ppb	31-Oct	

AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%					
Percentile	99 1.2	95 0.9	75 0.6	50 0.5	25 0.4	5 0.3	1 0.2	Average 0.5 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	24-hour Average	Daily Maximum
1-Oct-05	0	1	1	0	A	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0.4	0.9	
2-Oct-05	1	1	1	1	A	1	1	1	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	1	0	0.5	0.7	
3-Oct-05	0	0	A	1	1	1	1	1	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0.5	0.7	
4-Oct-05	0	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0.5	0.6	
5-Oct-05	1	1	1	0	1	A	1	1	1	1	1	2	1	0	0	0	0	0	0	1	0	0	1	1	1	0.6	1.7	
6-Oct-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0.7	1.1	
7-Oct-05	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
8-Oct-05	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
9-Oct-05	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
10-Oct-05	1	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0.4	0.6	
11-Oct-05	A	1	1	0	0	0	1	1	1	1	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0.5	1.0	
12-Oct-05	0	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.5	1.0	
13-Oct-05	1	1	1	0	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.2	
14-Oct-05	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	0.9	
15-Oct-05	0	0	A	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0	1	1	1	0	0.5	0.8	
16-Oct-05	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
17-Oct-05	A	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.9	
18-Oct-05	1	1	1	1	1	1	1	1	C	C	C	A	M	0	0	0	0	0	0	0	0	1	1	1	1	0.7	1.1	
19-Oct-05	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.6	1.0	
20-Oct-05	0	0	0	0	A	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	0	1	0.5	0.8	
21-Oct-05	0	0	1	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	1	0	1	1	1	0.6	1.1	
22-Oct-05	0	0	A	0	1	1	1	1	1	1	1	1	0	0	1	0	1	0	0	1	0	1	1	1	1	0.5	0.7	
23-Oct-05	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.4	0.7	
24-Oct-05	A	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0.6	0.9	
25-Oct-05	1	1	0	0	0	1	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	1	1	A	0	0.6	1.1	
26-Oct-05	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	A	0	0	0.4	0.5
27-Oct-05	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	1	A	0	1	0	0.6	1.1	
28-Oct-05	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	A	1	1	1	1	1	0.6	0.8	
29-Oct-05	1	1	1	0	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	1	A	1	1	0	0	0.5	0.7	
30-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	0	1	0.4	1.2	
31-Oct-05	1	1	1	0	0	0	1	1	1	1	1	0	2	0	0	1	1	A	1	1	1	2	3	3	2	1.0	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

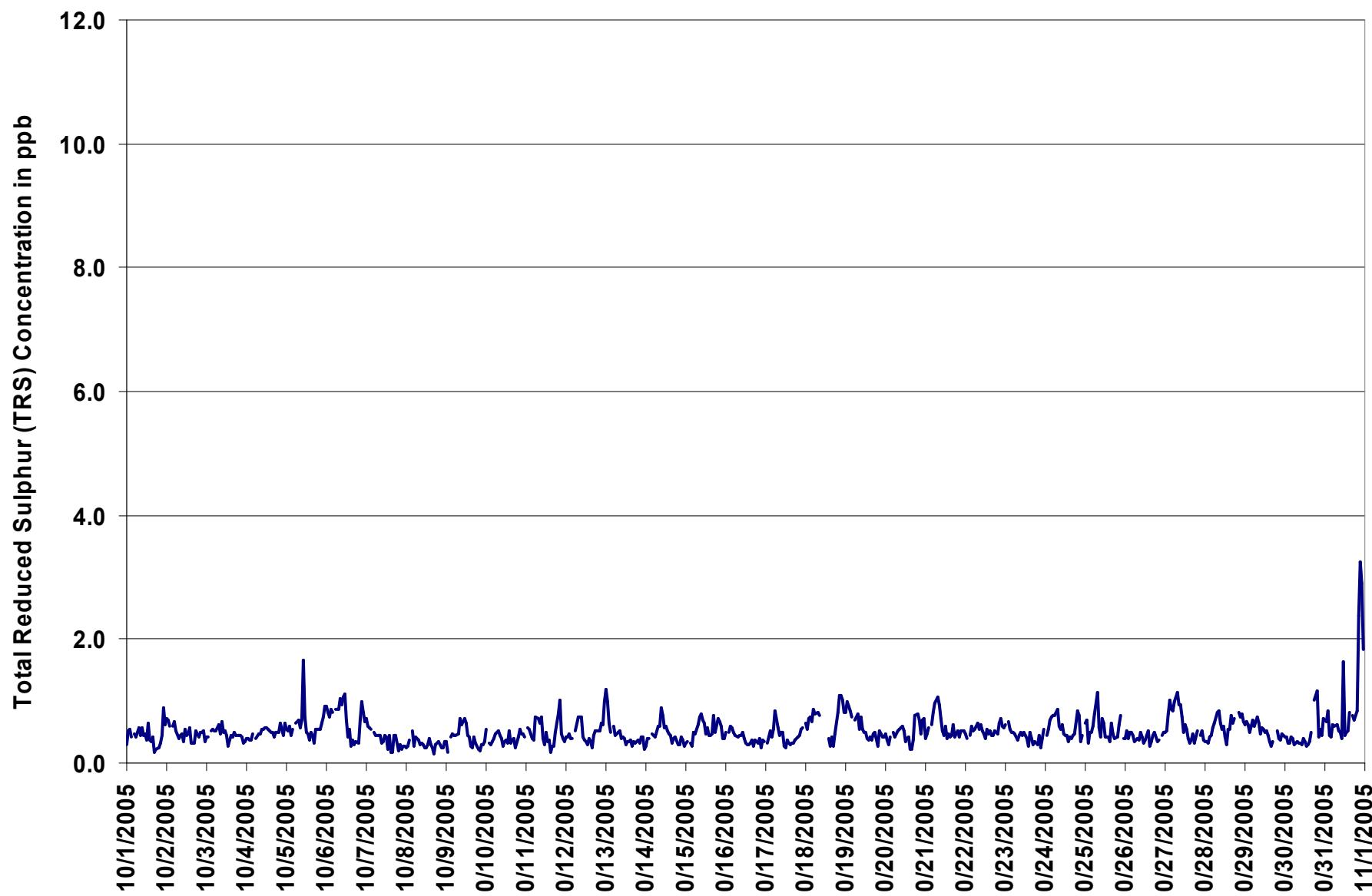
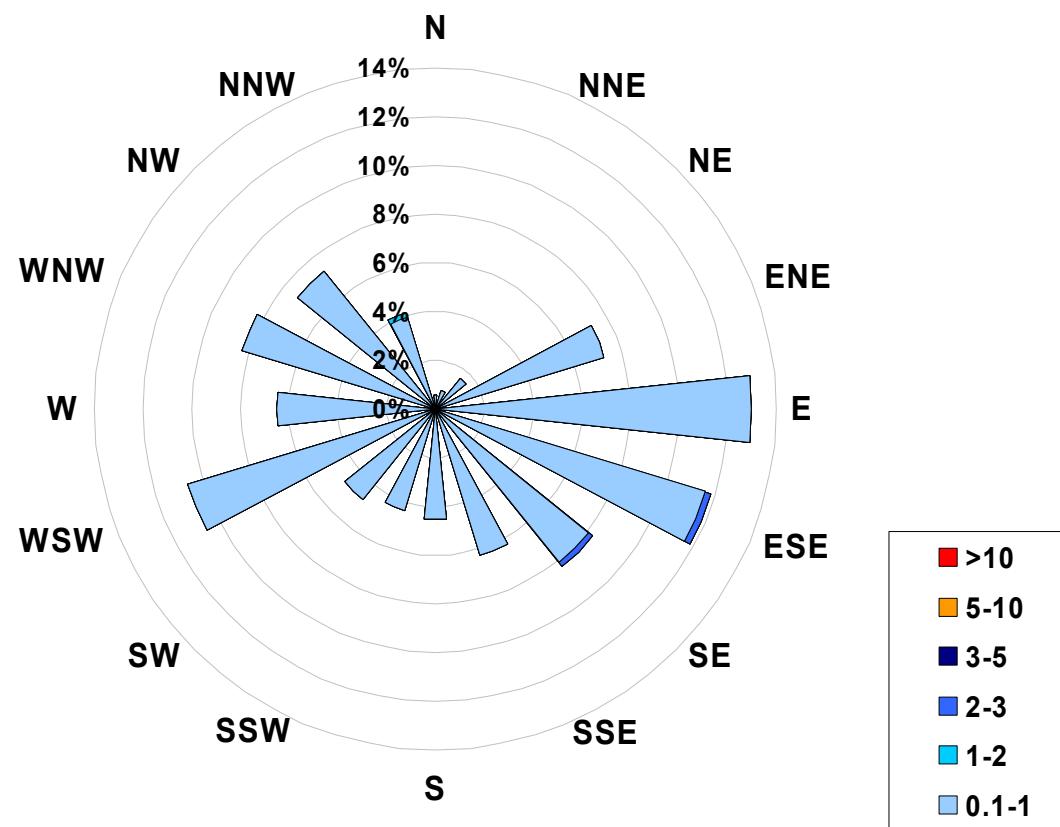


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)**  
**Located at the Henry Pirker Site for October 2005**



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

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	704
1	to	2	1
2	to	3	2
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			707

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

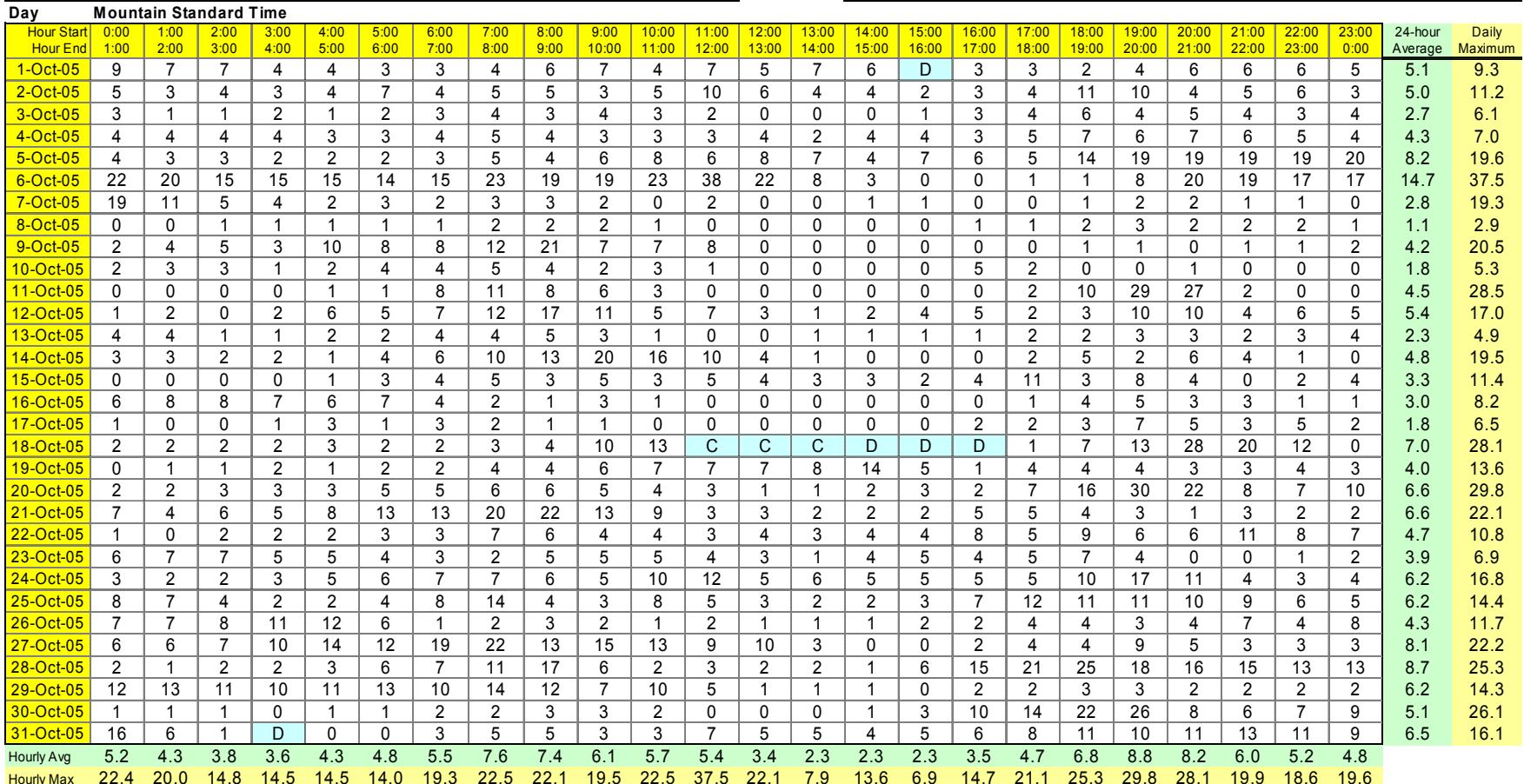
Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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:	37.5 $\mu\text{g}/\text{m}^3$
6-Oct	11:00 12:00
Maximum 24-hr Value:	14.7 $\mu\text{g}/\text{m}^3$
	6-Oct

AIC Time:	0 hrs	Operational Time:	736 hrs								
Calibration Time:	3 hrs	AMD Operational Uptime:	99.3%								
Percentile	99	95	75	50	25	5	1	Average	5.1 $\mu\text{g}/\text{m}^3$	Geomean	4.5 $\mu\text{g}/\text{m}^3$
	22.5	16.6	6.5	3.6	1.7	0.0	0.0				



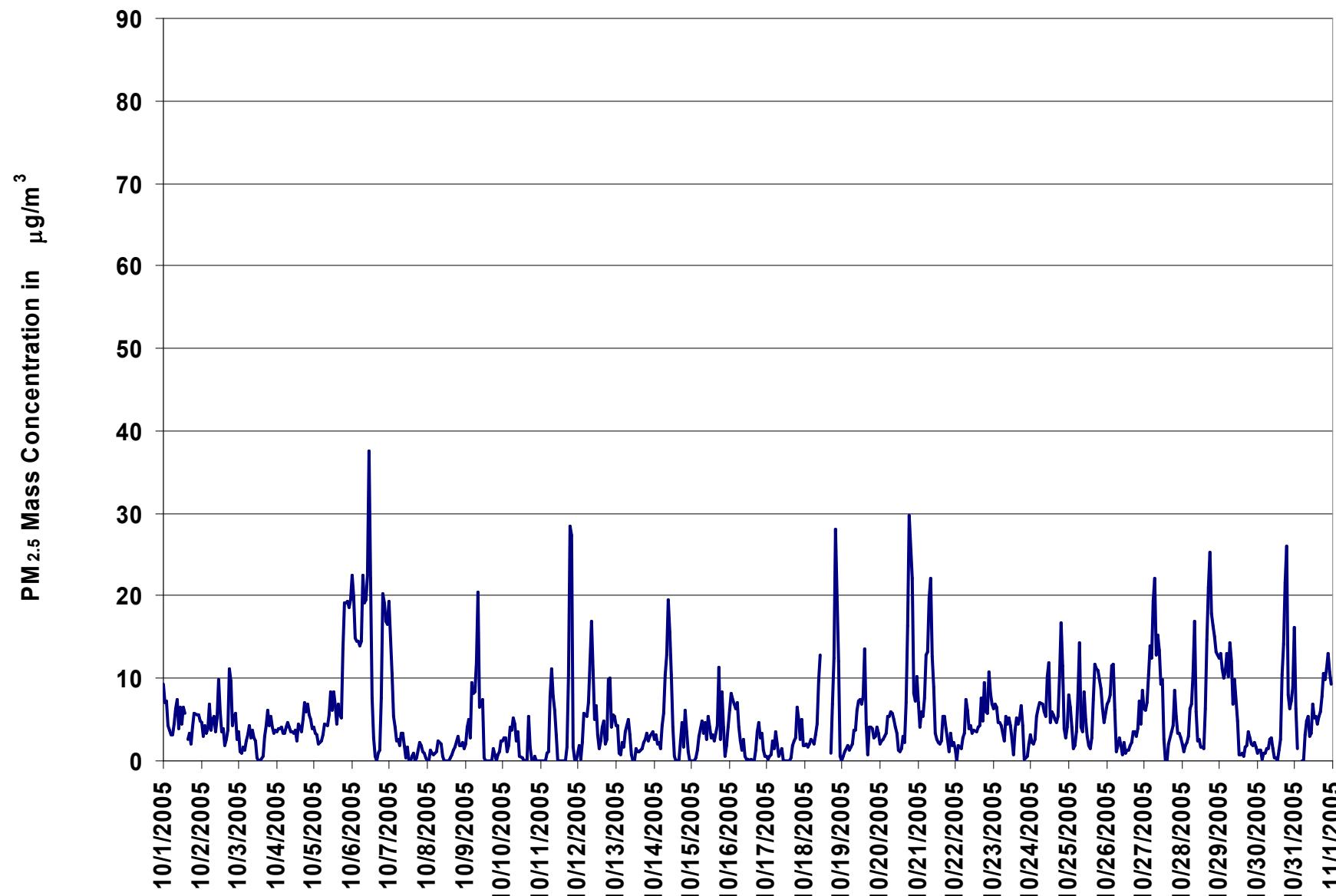


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

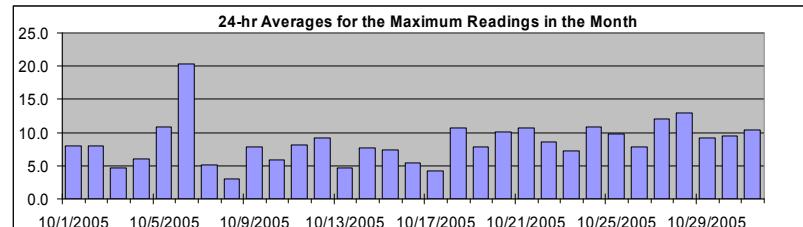
Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY MAXIMUM TABLE

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

#### Summary

Maximum 1-hr Average:	48.0	µg/m <sup>3</sup>	6-Oct	11:00 12:00
Maximum 24-hr Value:	20.3	µg/m <sup>3</sup>	6-Oct	



AIC Time:	0 hrs	Operational Time:	736 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.3%						
Percentile	99 33.2	95 23.1	75 10.7	50 6.3	25 4.1	5 2.0	1 1.1	Average 8.5 µg/m³	Geomean 8.0 µg/m³

#### Status Flag Characters

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

#### Day Mountain Standard Time

	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	12	10	11	7	6	4	5	8	9	12	6	12	6	9	8	D	8	8	4	6	8	8	10	7	8.0	12.4	
1-Oct-05	12	10	11	7	6	4	5	8	9	12	6	12	6	9	8	6	4	5	5	18	15	6	7	8	5	8.0	17.9
2-Oct-05	7	4	6	5	6	9	8	8	8	12	14	9	8	6	4	5	5	18	15	6	7	8	5	4.7	9.6		
3-Oct-05	6	3	3	3	3	4	5	6	4	6	4	6	3	3	1	3	6	6	10	5	8	6	5	5	6.0	8.5	
4-Oct-05	5	5	5	5	5	5	6	7	5	6	5	5	6	4	8	6	6	6	9	8	8	7	7	6	10.8	24.0	
5-Oct-05	6	5	5	4	4	4	7	7	6	9	11	8	10	10	7	9	7	7	21	23	23	24	21	23	20.3	48.0	
6-Oct-05	27	24	18	20	21	18	18	28	25	22	29	48	38	15	7	3	3	3	4	13	30	25	24	26	5.1	24.1	
7-Oct-05	24	15	8	7	5	4	4	7	5	6	2	4	2	1	3	4	2	2	3	5	4	2	3	3	3.0	5.0	
8-Oct-05	1	2	4	3	2	3	3	5	4	3	2	2	0	2	4	2	3	4	5	5	3	4	4	4	7.9	26.4	
9-Oct-05	4	16	9	5	12	12	12	18	26	12	10	11	5	1	3	1	2	3	5	6	3	3	4	4	5.9	17.0	
10-Oct-05	5	5	5	3	9	8	8	9	12	7	8	3	3	3	5	3	17	11	4	2	4	2	3	1	8.2	40.1	
11-Oct-05	1	2	1	1	3	4	13	14	14	11	10	2	1	1	3	4	1	4	17	40	34	12	3	1	9.3	24.7	
12-Oct-05	3	5	4	4	11	9	10	24	25	16	7	10	6	4	5	6	9	5	5	14	14	6	10	14	4.7	7.1	
13-Oct-05	6	7	4	2	6	3	7	6	7	6	3	3	2	4	4	4	3	4	4	5	6	5	6	5	7.5	22.5	
14-Oct-05	4	6	4	4	4	7	10	13	15	27	20	15	10	3	1	3	4	5	8	4	8	6	3	2	7.7	27.2	
15-Oct-05	2	2	3	3	5	8	9	8	5	6	4	9	6	5	7	5	7	23	18	17	13	2	4	6	7.5	10.3	
16-Oct-05	9	10	10	8	8	9	7	5	4	6	3	3	2	3	2	4	1	5	6	7	5	7	4	4.3	10.8		
17-Oct-05	2	3	3	3	6	3	5	8	3	4	1	2	1	2	2	3	4	4	5	11	9	4	10	4	10.7	34.8	
18-Oct-05	4	4	3	4	4	5	4	5	7	16	20	C	C	C	D	D	D	6	10	18	35	24	22	3	7.8	18.3	
19-Oct-05	4	4	5	5	7	4	7	8	6	11	11	12	14	14	18	10	2	8	7	6	5	5	7	6	10.0	37.5	
20-Oct-05	4	5	5	5	5	9	8	8	9	9	7	5	3	3	4	5	5	11	22	33	38	12	11	14	10.7	32.8	
21-Oct-05	11	7	9	7	12	18	17	33	27	23	14	8	5	4	4	5	8	11	7	5	3	6	6	6	8.6	18.7	
22-Oct-05	5	4	6	4	5	6	9	12	11	6	7	5	8	7	7	6	13	9	19	9	11	15	13	11	7.2	17.7	
23-Oct-05	10	9	10	7	6	6	6	4	16	7	7	6	5	3	7	7	7	8	9	18	2	2	4	4	10.8	26.3	
24-Oct-05	7	4	6	6	12	9	10	12	10	9	19	18	9	8	8	8	8	8	15	26	26	8	6	7	9.8	19.5	
25-Oct-05	11	12	13	5	4	6	11	20	12	6	11	7	5	3	4	4	4	13	15	15	14	12	13	11	12.1	31.6	
26-Oct-05	9	10	11	17	15	16	3	5	6	5	5	5	3	3	4	4	5	7	7	6	8	15	9	12	9.9	16.9	
27-Oct-05	9	9	10	17	17	15	26	32	21	22	17	11	14	7	1	3	4	7	7	13	8	6	8	6	13.0	32.5	
28-Oct-05	5	3	4	4	6	9	10	18	22	17	6	5	5	4	3	12	20	26	33	26	24	19	16	9.2	18.5		
29-Oct-05	15	17	14	13	13	16	14	18	17	13	13	11	3	3	3	2	3	4	6	6	5	4	5	5	9.5	46.8	
30-Oct-05	3	3	3	2	3	3	5	4	5	5	3	3	2	5	5	17	23	29	47	20	9	11	14	10.4	25.6		
31-Oct-05	26	13	7	D	1	2	7	8	9	9	7	10	10	8	7	7	8	16	14	14	16	15	12				

Hourly Avg 7.9 7.3 6.8 6.1 7.3 7.7 8.8 11.9 11.5 10.5 9.2 8.8 6.6 4.9 5.0 4.8 6.7 8.5 11.1 13.7 12.8 9.2 8.8 7.8  
 Hourly Max 26.6 23.8 18.1 19.7 20.8 17.7 26.3 32.8 27.4 27.2 28.7 48.0 37.6 15.0 18.3 12.0 20.0 26.2 32.5 46.8 37.5 25.2 23.9 25.7

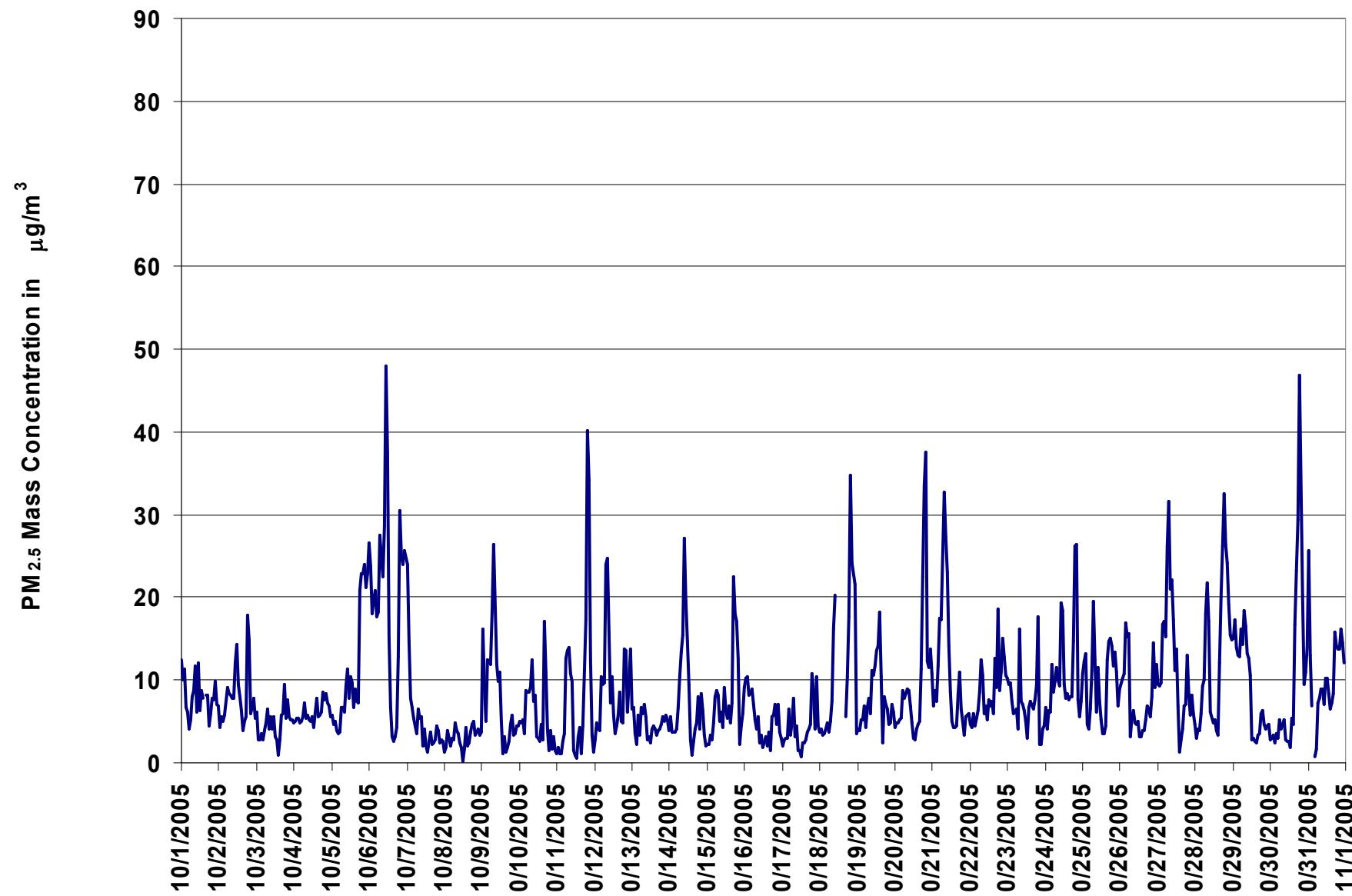
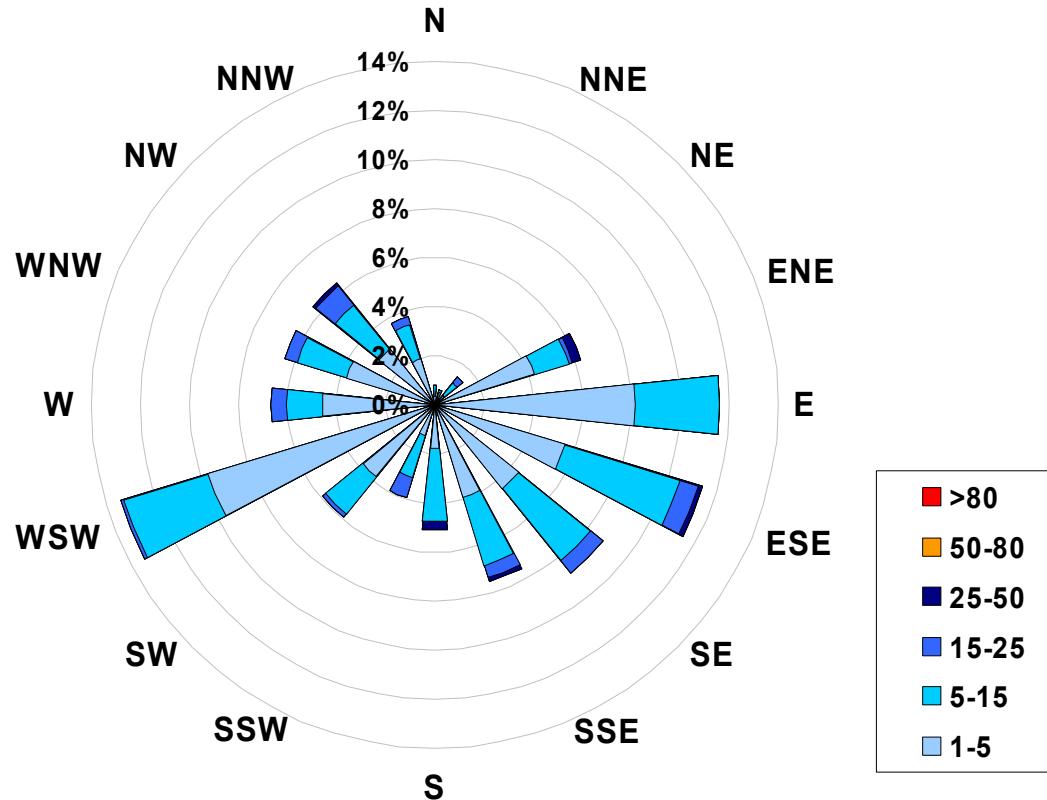


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

**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 October 2005**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>		
Range		Frequency (hrs)
1.0	< 5	475
5	to 15	217
15	to 25	37
25	to 50	7
50	to 80	0
>	80	0
Total Non-Zero Values		736

**PASZA - Henry Pirker Relative Humidity Monthly Summary**

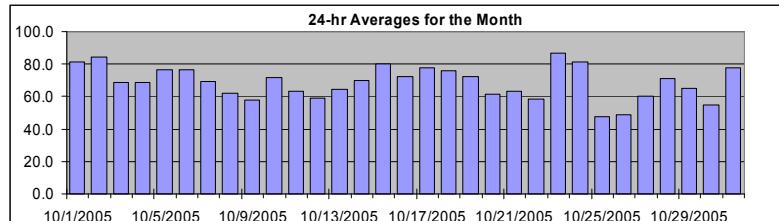
Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

**Summary**

Maximum 1-hr Average:	95.8	%	18-Oct	7:00 8:00
Maximum 24-hr Value:	87.0	%	23-Oct	

AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	95.3	92.8	82.7	71.2	55.7	38.4	30.2	68.7 %

**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

**Day Mountain Standard Time**

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Oct-05	82	87	88	84	87	87	89	88	83	80	75	70	65	61	67	83	81	78	80	83	85	88	89	92	81.4	92.4		
2-Oct-05	93	94	94	95	95	95	95	94	93	91	87	80	76	75	73	69	66	70	76	82	80	82	83	84	84.2	94.9		
3-Oct-05	89	87	86	86	84	86	87	84	79	79	74	66	57	50	46	45	47	50	55	59	62	63	66	69	69.0	88.6		
4-Oct-05	71	74	78	79	79	80	81	79	73	70	65	63	63	55	52	51	52	57	63	66	70	74	77	78	68.8	81.0		
5-Oct-05	79	81	82	81	83	85	86	85	84	83	77	74	67	62	61	60	61	62	69	74	78	83	89	91	76.6	90.6		
6-Oct-05	91	91	92	92	93	93	93	92	90	89	87	82	78	70	67	55	49	45	53	57	62	70	74	79	81	76.3	92.8	
7-Oct-05	84	81	82	85	88	93	93	92	88	81	69	63	48	42	40	41	43	50	55	61	67	70	74	75	69.3	93.0		
8-Oct-05	77	79	79	77	76	74	77	80	72	66	60	55	46	42	41	41	41	45	50	56	60	64	68	70	62.3	79.5		
9-Oct-05	74	76	79	83	88	88	87	85	76	66	62	53	46	41	38	36	35	35	38	40	37	39	43	47	58.0	87.8		
10-Oct-05	52	55	58	64	74	78	76	78	73	67	71	69	63	60	62	62	67	90	89	89	86	82	82	79	72.0	89.7		
11-Oct-05	77	79	82	84	86	84	89	87	84	69	63	56	50	42	38	35	35	43	52	64	66	54	52	49	63.3	88.7		
12-Oct-05	50	53	53	55	58	60	59	60	56	58	56	54	51	49	49	50	53	56	60	66	66	76	79	82	58.8	82.0		
13-Oct-05	83	85	81	83	83	82	80	82	78	66	57	48	43	43	43	44	46	48	52	57	63	65	68	73	64.6	85.5		
14-Oct-05	76	78	80	81	83	85	88	88	86	76	68	63	62	54	47	42	45	48	51	52	68	84	87	85	69.9	87.8		
15-Oct-05	81	78	76	74	77	82	87	90	93	93	89	84	82	79	76	73	77	75	75	77	77	79	78	77	80.3	92.8		
16-Oct-05	72	72	74	77	79	82	83	82	77	72	64	58	57	53	53	55	58	62	67	76	86	89	90	92	72.1	91.6		
17-Oct-05	91	92	93	93	94	94	94	94	90	84	82	75	66	57	53	50	51	54	58	61	74	86	90	91	77.7	94.1		
18-Oct-05	93	94	95	95	96	96	96	96	96	96	95	79	53	41	34	34	38	46	59	67	74	80	84	83	75.8	95.8		
19-Oct-05	85	85	87	86	83	82	84	83	79	78	73	72	73	66	63	56	49	59	62	63	60	66	69	71	72.3	86.6		
20-Oct-05	68	70	74	74	77	78	78	79	74	65	61	55	49	43	39	38	36	41	50	61	63	62	68	74	61.7	79.0		
21-Oct-05	78	75	78	87	87	84	82	81	77	63	59	59	53	50	48	45	47	51	53	51	51	52	56	52	63.3	87.3		
22-Oct-05	52	52	55	58	58	62	66	71	62	59	58	52	50	47	47	47	49	51	63	63	67	68	72	79	58.7	79.1		
23-Oct-05	82	85	87	89	89	91	88	85	89	92	93	91	82	79	80	79	81	87	91	89	86	88	90	93	87.0	93.2		
24-Oct-05	94	94	95	95	95	95	95	95	95	95	95	85	79	74	68	67	65	67	69	76	70	65	62	65	81.4	95.4		
25-Oct-05	78	80	71	76	73	65	67	70	57	48	44	32	28	25	23	21	22	28	31	36	39	40	44	45	47.6	79.7		
26-Oct-05	51	60	61	61	65	59	49	47	52	47	40	35	33	31	30	30	33	41	46	49	57	62	67	75	49.0	75.1		
27-Oct-05	78	78	80	78	83	83	83	79	69	59	58	51	43	37	34	36	38	42	45	51	58	59	62	63	60.2	83.2		
28-Oct-05	67	61	72	83	87	88	89	89	86	76	69	60	53	49	46	52	56	62	72	76	72	78	82	86	71.3	89.0		
29-Oct-05	88	88	87	89	87	85	87	89	83	76	63	55	45	38	37	36	39	46	54	56	56	55	60	64.8	88.9			
30-Oct-05	62	60	60	65	61	68	62	60	61	54	46	40	37	35	37	39	44	49	53	57	58	65	70	70	54.8	70.3		
31-Oct-05	72	73	72	70	69	73	74	72	72	66	70	78	85	78	78	76	77	82	84	85	89	92	93	92	78.0	93.1		
Hourly Avg	76.4	77.3	78.3	79.9	81.2	81.8	82.0	81.6	78.1	72.9	68.3	62.8	57.0	52.3	50.2	49.8	50.9	55.8	60.8	65.1	68.0	70.7	73.2	75.0				
Hourly Max	94.0	94.1	94.7	95.2	95.5	95.7	95.7	95.8	95.8	95.6	94.8	91.5	84.7	78.8	80.4	83.4	81.4	89.7	90.6	88.9	88.8	92.5	93.1	93.2				

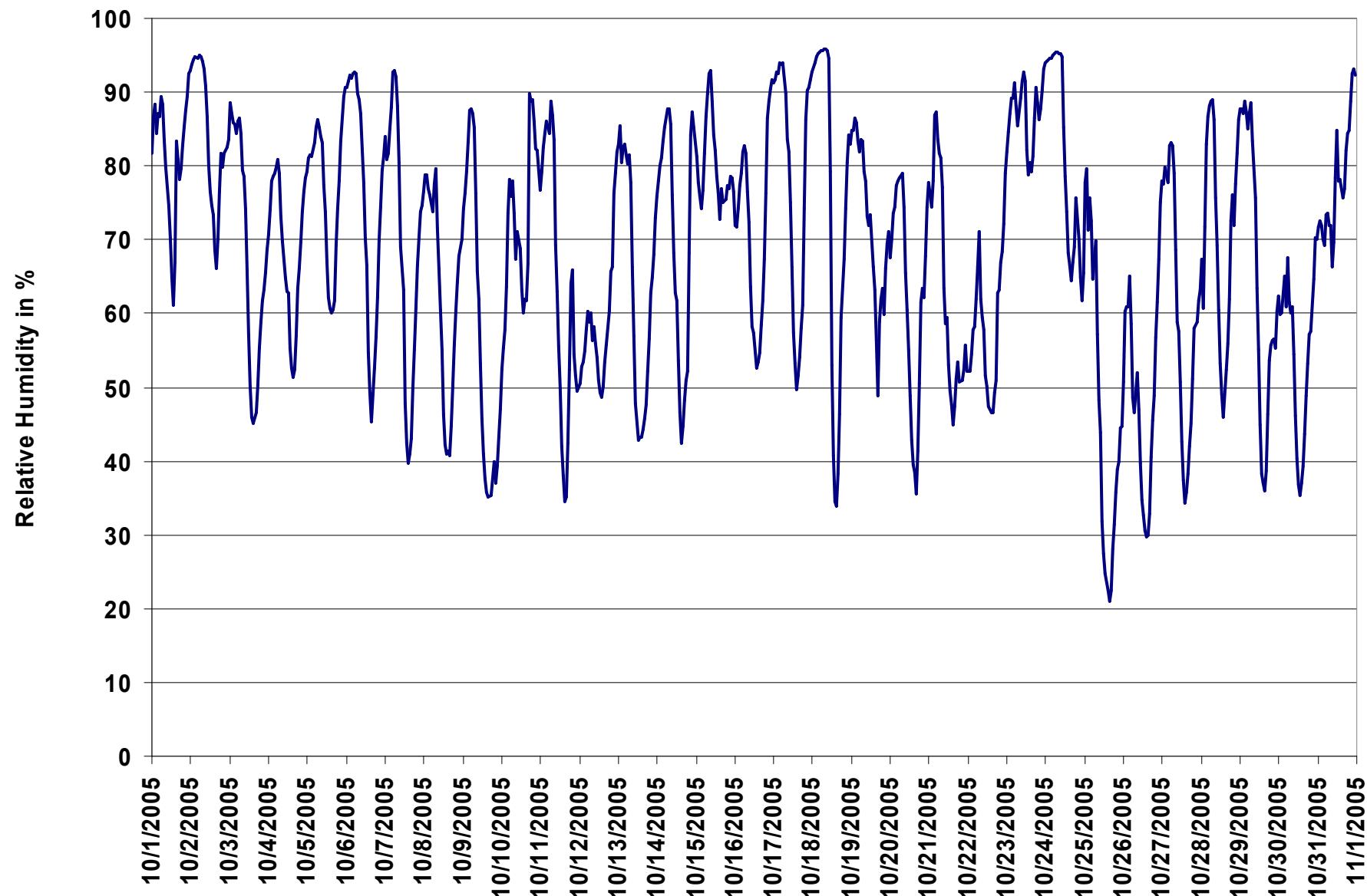


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

## PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	22.3	°C	25-Oct	15:00 16:00
Maximum 24-hr Value:	11.7	°C	25-Oct	

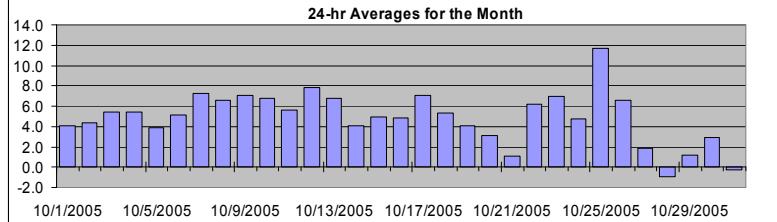
AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	15.9	12.1	7.9	4.8	1.8	-2.1	-5.2	4.9 °C

### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
1-Oct-05	1:00 2:00	2	1	0	1	0	0	-1	-1	1	3	6	7	8	9	8	6	7	8	7	6	6	5	5	5	3	4.1	8.8
2-Oct-05	2:00 3:00	3	2	2	1	1	2	2	3	3	4	5	7	8	8	8	8	7	6	5	4	3	3	2		4.3	8.1	
3-Oct-05	3:00 4:00	1	1	1	1	2	2	1	1	3	4	6	8	10	10	11	10	9	9	8	8	7	6	6	6		5.4	10.6
4-Oct-05	4:00 5:00	5	4	3	3	2	2	1	2	4	5	7	7	7	9	10	11	10	9	7	6	5	4	3	3		5.4	10.7
5-Oct-05	5:00 6:00	2	2	1	1	0	0	-1	0	0	1	4	5	7	9	9	9	9	9	8	6	5	4	3	2		3.9	8.8
6-Oct-05	6:00 7:00	1	1	0	-1	-1	-1	-1	0	2	4	5	8	9	13	15	15	13	11	9	7	6	5	4	4		5.1	15.4
7-Oct-05	7:00 8:00	4	5	5	4	5	5	6	6	7	8	10	12	12	13	12	12	10	8	7	6	5	4	4	4		7.3	12.6
8-Oct-05	8:00 9:00	3	2	2	3	4	4	3	3	5	7	9	10	12	12	12	12	11	9	7	6	5	4	3	3		6.5	12.0
9-Oct-05	9:00 10:00	2	2	1	-1	-2	-2	-1	-1	2	5	7	10	12	13	14	14	14	13	12	12	12	12	11	10		7.0	14.1
10-Oct-05	10:00 11:00	9	8	7	5	3	2	2	3	5	7	8	10	11	12	12	12	11	6	6	5	5	5	4	4		6.8	12.1
11-Oct-05	11:00 12:00	4	3	2	1	1	1	0	0	1	5	8	9	11	11	12	12	12	10	7	5	4	5	6	6		5.6	12.3
12-Oct-05	12:00 13:00	6	5	5	5	5	5	5	6	7	8	9	11	12	13	13	12	12	10	9	8	6	5	5	5		7.8	12.7
13-Oct-05	13:00 14:00	4	4	5	4	4	4	4	4	4	7	9	11	12	12	11	11	11	10	8	7	6	5	4	3		6.8	11.8
14-Oct-05	14:00 15:00	2	2	2	1	0	0	-1	-2	-1	2	5	6	7	8	8	8	8	8	7	7	6	5	4	5		4.1	8.3
15-Oct-05	15:00 16:00	5	5	5	5	4	4	3	3	3	3	5	6	6	7	7	8	7	7	6	5	5	4	4	4		4.9	8.0
16-Oct-05	16:00 17:00	5	4	4	3	3	2	1	1	2	3	6	7	7	8	8	8	8	7	6	6	5	5	4	4		4.8	8.2
17-Oct-05	17:00 18:00	5	4	4	4	4	4	4	5	6	6	8	10	11	11	12	11	11	10	9	8	7	6	5	4		7.1	11.9
18-Oct-05	18:00 19:00	3	3	3	3	3	3	2	2	2	4	7	11	13	14	14	14	13	11	7	5	3	1	0	-1		5.3	14.3
19-Oct-05	19:00 20:00	-1	-1	0	0	1	2	2	3	4	4	5	6	7	8	8	10	10	8	6	4	4	3	2	2		4.1	10.2
20-Oct-05	20:00 21:00	3	2	1	1	1	0	0	0	1	3	5	6	7	8	9	9	9	7	4	2	1	0	-1	-2		3.1	9.3
21-Oct-05	21:00 22:00	-3	-3	-4	-5	-5	-5	-5	-5	-3	0	2	2	4	5	6	6	6	6	5	5	5	4	3	3		1.1	6.3
22-Oct-05	22:00 23:00	3	3	3	3	3	2	1	0	3	4	5	7	9	11	12	12	12	12	8	9	8	7	6	6		6.2	12.1
23-Oct-05	23:00 00:00	6	6	6	6	6	6	6	6	6	6	7	7	10	10	11	10	9	8	8	7	6	3	1	1		7.0	11.3
24-Oct-05	00:00 01:00	0	-1	-1	-1	-1	0	0	0	0	1	3	6	8	9	11	12	12	11	9	7	7	7	7	7		4.7	11.7
25-Oct-05	01:00 02:00	4	3	5	4	4	6	5	4	7	10	13	17	19	21	22	22	21	18	16	15	13	13	11	11		11.7	22.3
26-Oct-05	02:00 03:00	11	9	8	9	8	10	8	7	6	6	7	8	8	9	9	9	9	6	5	4	2	1	0	-1		6.6	10.6
27-Oct-05	03:00 04:00	-2	-2	-3	-3	-4	-4	-4	-4	-2	2	3	6	8	10	10	9	8	6	5	3	2	1	0	0		1.9	10.2
28-Oct-05	04:00 05:00	-2	0	-2	-5	-5	-5	-5	-6	-6	-4	-4	-2	3	7	9	10	9	7	5	3	3	3	3	3		-0.9	5.7
29-Oct-05	05:00 06:00	-5	-5	-5	-5	-5	-5	-6	-6	-6	-4	-4	-1	1	2	4	5	6	4	3	2	-1	-2	-3	-3		1.2	9.9
30-Oct-05	06:00 07:00	2	2	1	0	1	-2	0	0	0	3	6	8	9	8	8	6	4	3	2	2	1	-1	-1		2.9	9.0	
31-Oct-05	07:00 08:00	-2	-2	-2	-1	-1	-2	-2	-1	0	0	-1	-1	1	2	3	3	1	1	1	0	-1	-1	-1	-1		-0.3	2.9
	Hourly Avg	2.6	2.2	1.9	1.5	1.3	1.2	1.0	1.0	2.1	3.8	5.6	7.3	8.8	9.7	10.2	10.3	9.8	8.5	6.9	5.9	5.1	4.3	3.5	3.0			
	Hourly Max	10.6	8.5	8.4	8.5	8.4	9.7	8.2	7.1	6.7	9.8	12.6	16.8	19.0	20.7	21.7	22.3	21.1	17.8	16.2	14.5	13.2	12.6	10.9	11.1			

### 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

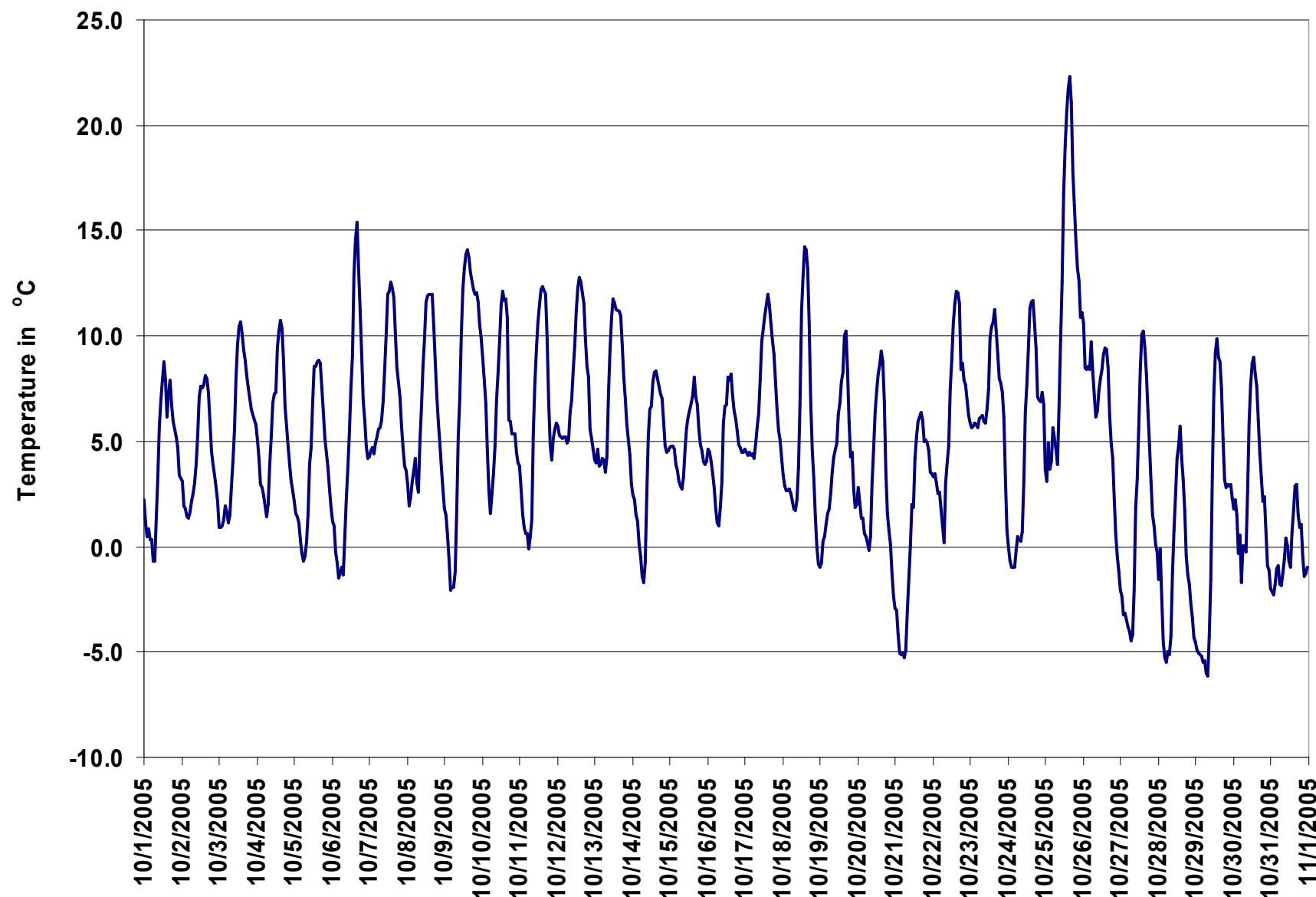


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

## PASZA - Henry Pirker Solar Radiation Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	533.8	W/m <sup>2</sup>	3-Oct	13:00 14:00
Maximum 24-hr Value:	128.8	W/m <sup>2</sup>	4-Oct	

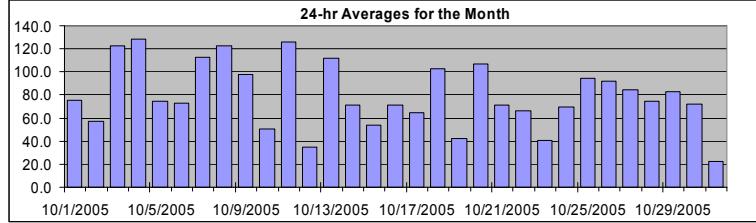
AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	456.7	363.8	131.4	0.4	0.0	0.0	0.0	79.7 W/m <sup>2</sup>

### 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 Average	Daily Maximum		
	Hour End 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-Oct-05	0	0	0	0	0	0	0	1	33	98	184	259	274	320	243	109	53	126	94	6	0	0	0	0	0	0	75.1	319.9	
2-Oct-05	0	0	0	0	0	0	0	1	8	41	104	220	288	260	116	112	126	64	26	4	0	0	0	0	0	0	57.2	288.0	
3-Oct-05	0	0	0	0	0	0	0	2	37	148	271	350	457	504	534	394	178	55	16	1	0	0	0	0	0	0	122.8	533.8	
4-Oct-05	0	0	0	0	0	0	0	0	50	185	292	385	329	339	513	418	335	195	48	2	0	0	0	0	0	0	128.8	512.9	
5-Oct-05	0	0	0	0	0	0	0	0	32	79	174	346	250	333	281	147	72	44	24	1	0	0	0	0	0	0	74.4	345.9	
6-Oct-05	0	0	0	0	0	0	0	0	1	13	33	58	87	156	233	228	399	236	242	57	3	0	0	0	0	0	0	72.8	398.9
7-Oct-05	0	0	0	0	0	0	0	0	10	57	132	238	385	527	424	429	257	192	51	3	0	0	0	0	0	0	112.8	527.1	
8-Oct-05	0	0	0	0	0	0	0	0	0	31	168	240	385	456	455	363	287	258	226	65	2	0	0	0	0	0	0	122.4	456.3
9-Oct-05	0	0	0	0	0	0	0	0	0	14	133	273	385	405	409	276	216	159	70	15	0	0	0	0	0	0	98.1	408.6	
10-Oct-05	0	0	0	0	0	0	0	0	0	4	48	73	111	186	276	192	130	118	71	6	0	0	0	0	0	0	50.7	276.0	
11-Oct-05	0	0	0	0	0	0	0	0	15	33	264	378	449	476	459	408	311	180	40	1	0	0	0	0	0	0	125.6	476.4	
12-Oct-05	0	0	0	0	0	0	0	0	21	37	48	62	110	164	153	116	56	28	36	1	0	0	0	0	0	0	34.7	164.4	
13-Oct-05	0	0	0	0	0	0	0	0	15	57	257	362	433	483	337	276	254	171	40	1	0	0	0	0	0	0	112.0	483.2	
14-Oct-05	0	0	0	0	0	0	0	0	16	81	182	262	302	241	238	179	136	59	11	0	0	0	0	0	0	0	71.2	302.2	
15-Oct-05	0	0	0	0	0	0	0	0	1	16	40	163	151	148	234	263	203	54	8	0	0	0	0	0	0	0	53.5	262.7	
16-Oct-05	0	0	0	0	0	0	0	0	4	26	90	322	227	199	312	195	248	70	10	0	0	0	0	0	0	0	71.0	322.1	
17-Oct-05	0	0	0	0	0	0	0	0	9	27	52	152	251	244	211	288	196	93	26	0	0	0	0	0	0	0	64.7	287.5	
18-Oct-05	0	0	0	0	0	0	0	0	5	42	141	269	390	433	378	386	266	139	16	0	0	0	0	0	0	0	102.8	433.1	
19-Oct-05	0	0	0	0	0	0	0	0	1	20	62	84	100	115	166	165	192	94	20	0	0	0	0	0	0	0	42.5	192.2	
20-Oct-05	0	0	0	0	0	0	0	0	4	97	222	320	388	416	401	344	243	118	18	0	0	0	0	0	0	0	107.2	416.1	
21-Oct-05	0	0	0	0	0	0	0	0	7	96	236	251	217	294	255	201	105	50	5	0	0	0	0	0	0	0	71.6	293.6	
22-Oct-05	0	0	0	0	0	0	0	0	6	79	134	195	294	346	232	143	86	61	15	0	0	0	0	0	0	0	66.3	345.7	
23-Oct-05	0	0	0	0	0	0	0	0	2	10	24	53	117	244	174	146	148	51	5	0	0	0	0	0	0	0	40.6	244.2	
24-Oct-05	0	0	0	0	0	0	0	0	2	33	95	247	329	245	292	252	109	63	8	0	0	0	0	0	0	0	69.8	328.7	
25-Oct-05	0	0	0	0	0	0	0	0	3	75	195	293	362	390	375	313	200	48	3	0	0	0	0	0	0	0	94.0	390.0	
26-Oct-05	0	0	0	0	0	0	0	0	1	23	181	297	364	388	369	311	196	77	4	0	0	0	0	0	0	0	92.1	388.0	
27-Oct-05	0	0	0	0	0	0	0	0	2	63	183	276	339	363	340	259	135	66	9	0	0	0	0	0	0	0	84.9	363.2	
28-Oct-05	0	0	0	0	0	0	0	0	2	63	193	277	342	364	241	189	61	43	7	0	0	0	0	0	0	0	74.3	364.3	
29-Oct-05	0	0	0	0	0	0	0	0	1	55	147	268	335	362	338	272	171	41	5	0	0	0	0	0	0	0	83.2	362.0	
30-Oct-05	0	0	0	0	0	0	0	0	2	53	171	266	335	345	278	131	101	38	3	0	0	0	0	0	0	0	71.8	345.4	
31-Oct-05	0	0	0	0	0	0	0	0	0	11	36	55	46	38	98	95	108	56	2	0	0	0	0	0	0	0	22.8	108.5	

### HOURLY AVERAGE TABLE

### Solar Radiation (SR)



### Status Flag Characters

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

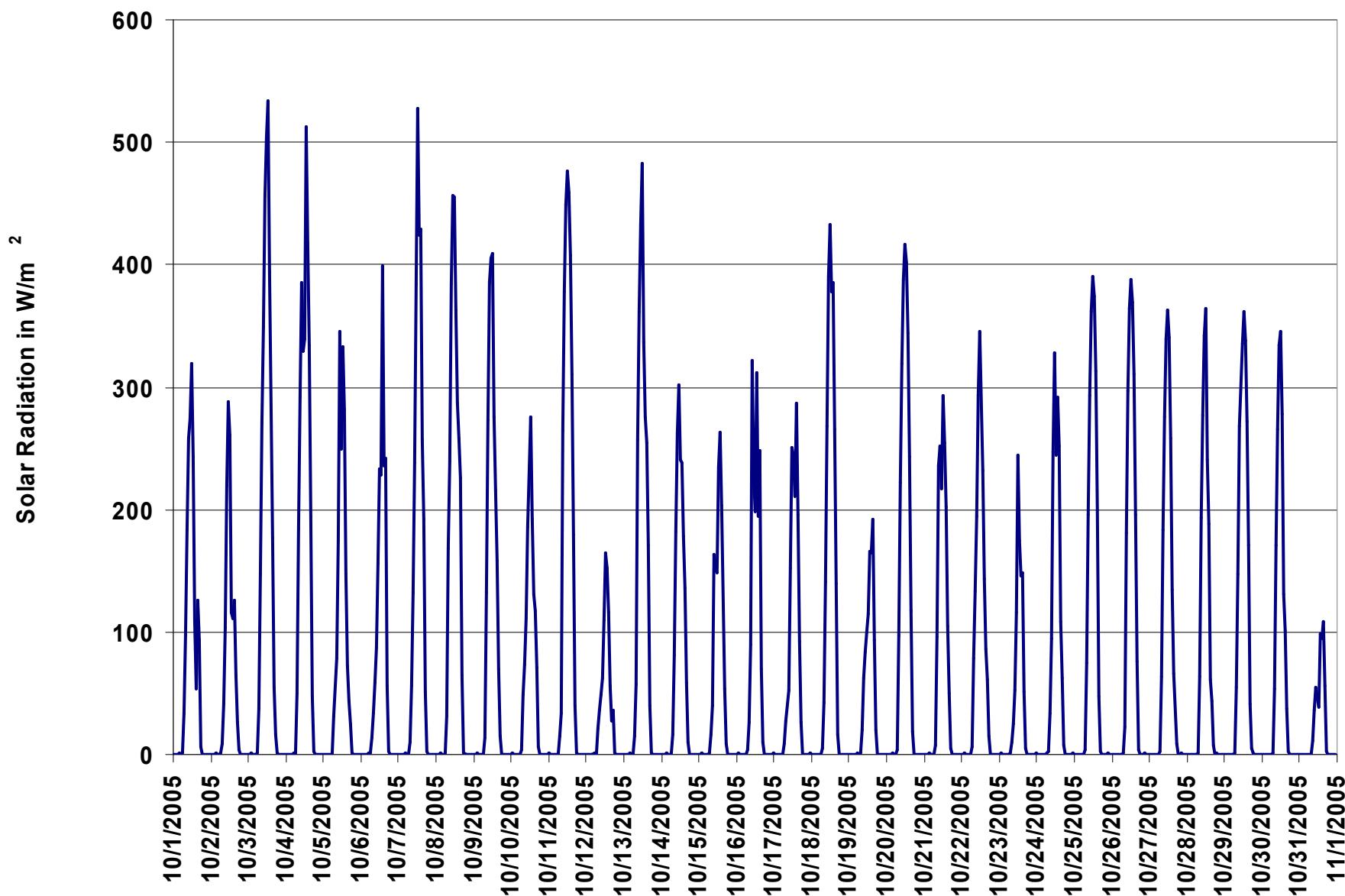


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

## PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	35.3	km/hr	26-Oct	12:00 13:00
Maximum 24-hr Value:	17.0	km/hr	26-Oct	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	29.1	19.4	9.8	6.2	4.2	2.7	2.1	7.9 km/hr

### 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-hr Scalar Average	Daily Max
1-Oct-05	3	3	3	4	5	3	4	4	3	4	3	6	8	10	12	8	8	10	8	4	3	3	3	4	3	5.3	11.8
2-Oct-05	3	3	2	3	2	2	3	2	5	6	5	5	6	5	5	5	5	5	4	3	6	5	5	4	4.2	6.2	
3-Oct-05	3	4	4	4	7	5	4	8	11	12	10	10	12	14	13	13	13	10	8	7	7	9	9	9	8.7	14.2	
4-Oct-05	8	7	7	9	10	9	7	9	10	10	9	8	8	6	6	6	6	7	5	6	8	6	6	8	7.5	10.2	
5-Oct-05	7	7	7	7	5	5	5	4	5	5	6	4	4	4	4	3	3	3	4	4	3	2	3	3	4.6	7.5	
6-Oct-05	3	3	4	2	3	3	2	4	3	2	3	3	4	6	6	7	13	10	7	4	4	3	4	3	4.4	13.0	
7-Oct-05	2	5	5	6	10	11	8	6	9	13	18	14	26	29	29	25	27	17	14	13	13	8	6	8	13.4	29.2	
8-Oct-05	8	6	5	6	9	11	11	9	9	7	17	17	19	20	23	23	24	16	12	11	12	10	7	4	12.3	23.6	
9-Oct-05	4	4	3	4	3	3	3	3	3	4	6	6	9	10	12	13	11	8	7	7	12	11	7	6	6.7	12.9	
10-Oct-05	8	6	5	3	4	6	4	3	9	9	9	9	5	3	5	3	13	15	13	16	16	16	16	10	8.4	16.4	
11-Oct-05	12	12	6	4	4	3	5	6	6	4	10	16	17	19	18	17	14	5	2	3	4	6	6	7	8.6	19.4	
12-Oct-05	8	6	6	5	3	5	4	3	5	5	7	7	8	8	7	9	8	5	5	5	6	4	3	3	5.5	9.0	
13-Oct-05	3	3	6	5	8	7	10	12	12	19	21	28	28	30	28	29	23	22	19	15	13	13	13	11	15.6	29.6	
14-Oct-05	12	12	11	9	4	4	3	4	3	2	3	5	6	7	8	11	11	12	11	12	13	9	9	9	8.0	13.5	
15-Oct-05	10	9	6	6	3	3	4	7	8	8	9	8	10	9	10	11	10	12	14	8	7	7	10	11	8.4	14.2	
16-Oct-05	13	9	8	11	11	10	8	4	5	4	9	13	13	11	11	9	7	6	6	5	7	7	4	8.2	13.3		
17-Oct-05	4	3	3	4	5	4	4	6	7	5	14	16	22	23	28	25	23	17	16	10	8	10	7	6	11.2	27.8	
18-Oct-05	7	7	6	5	5	5	5	5	5	3	3	7	12	15	15	16	11	5	4	3	4	3	4	5	6.7	15.7	
19-Oct-05	4	4	5	4	5	7	5	5	5	4	5	6	6	8	8	14	16	11	10	13	15	7	4	6	7.4	16.3	
20-Oct-05	8	11	8	10	8	6	8	10	12	9	11	11	12	12	12	10	12	6	3	3	4	5	4	4	8.3	12.4	
21-Oct-05	4	4	3	2	2	3	4	3	2	5	6	7	7	7	9	7	7	6	10	10	9	10	9	10	5.9	10.2	
22-Oct-05	9	11	8	7	8	5	4	4	4	6	5	5	7	8	6	6	5	7	15	12	5	5	3	3	6.6	15.4	
23-Oct-05	2	3	4	5	5	5	8	7	6	5	6	6	4	8	6	8	7	6	5	6	6	4	3	4	5.5	8.1	
24-Oct-05	4	4	4	5	3	3	5	4	4	5	4	5	7	7	7	9	6	4	3	5	4	6	6	5.1	9.0		
25-Oct-05	4	4	5	4	5	5	4	5	8	5	6	13	14	16	17	13	9	8	9	7	5	8	5	9	7.9	16.8	
26-Oct-05	7	4	4	6	5	5	34	34	32	23	22	29	35	35	28	23	22	18	14	9	8	5	5	4	2	17.0	35.3
27-Oct-05	2	3	5	3	3	2	3	6	5	3	5	5	4	4	5	6	7	6	6	4	3	4	3	4	4.2	6.5	
28-Oct-05	5	6	4	2	3	3	3	3	4	7	8	6	7	6	4	6	5	6	5	6	5	3	3	2	4.5	8.1	
29-Oct-05	3	2	3	3	4	5	4	4	6	4	4	7	19	23	29	29	25	13	5	8	9	12	14	14	10.3	29.1	
30-Oct-05	12	15	10	7	11	7	13	13	7	9	11	12	12	15	13	7	2	3	3	4	5	5	3	4	8.5	15.0	
31-Oct-05	4	4	5	5	4	5	4	3	3	7	7	9	10	10	7	5	3	4	4	4	4	4	4	4	5.4	10.2	
1-hr Average	6.0	6.0	5.4	5.1	5.4	6.1	6.2	6.4	6.7	7.0	8.8	9.9	11.7	12.3	12.5	12.1	11.5	9.0	7.8	7.3	7.3	6.6	6.0	6.0			
Hourly Max	13.3	15.0	11.3	10.5	10.6	34.4	34.0	31.9	22.8	22.1	28.9	34.6	35.3	29.6	29.2	29.1	27.4	21.6	18.8	15.5	16.4	15.5	14.4	13.6			

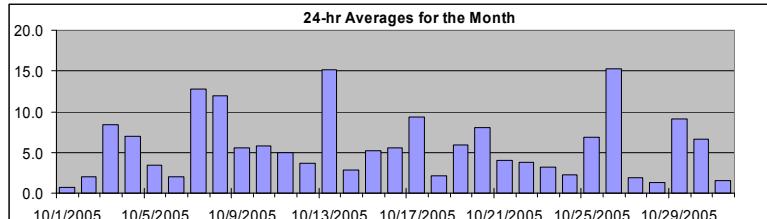
## PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Speed (WSv)



#### Summary

Maximum 1-hr Average:	35.2	km/hr	26-Oct	12:00 13:00
Maximum 24-hr Value:	15.2	km/hr	26-Oct	

Calm Time:	10 hrs	1% calms	Operational Time:	734 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	AverageV	5.8 km/hr		
	28.9	19.4	9.7	5.8	3.6	1.6	1.0

#### 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-hr Vector Average	Daily Max	
	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Oct-05	2	1	2	4	4	3	3	2	1	4	2	4	7	9	11	7	6	10	8	4	3	2	3	2	0.7	11.4	
2-Oct-05	2	2	2	2	1	1	3	2	5	6	5	4	6	4	4	4	5	4	3	6	5	5	4		2.0	6.0	
3-Oct-05	1	4	4	4	6	5	4	8	11	12	10	10	12	14	13	13	13	10	7	7	7	9	9	9		8.4	13.7
4-Oct-05	8	7	7	9	10	8	7	9	10	10	9	7	8	5	4	5	6	7	5	6	8	6	6	7		7.0	10.2
5-Oct-05	7	7	7	7	5	5	4	3	5	5	6	4	2	3	4	3	3	1	4	4	3	1	calm	3		3.5	7.4
6-Oct-05	2	1	2	calm	2	2	1	3	3	1	2	2	4	6	5	6	12	10	7	3	3	2	3	3		2.0	12.3
7-Oct-05	calm	5	2	5	10	11	8	6	9	13	18	13	26	29	29	25	27	17	13	13	13	8	6	8		12.8	28.8
8-Oct-05	8	4	5	5	8	11	11	9	9	7	17	17	19	20	22	23	23	16	12	11	12	10	7	4		11.9	23.3
9-Oct-05	4	2	2	4	3	3	2	2	3	4	5	6	9	10	12	13	11	8	7	6	12	11	7	6		5.5	12.6
10-Oct-05	8	6	4	3	4	5	3	1	8	9	9	8	4	2	4	2	13	14	13	15	16	15	9	11		5.8	16.3
11-Oct-05	12	11	6	4	4	calm	4	6	6	3	10	16	16	19	18	16	14	4	1	1	4	6	6	7		5.0	19.1
12-Oct-05	8	6	5	4	1	3	3	3	5	5	6	6	8	8	7	9	7	5	4	5	3	1	3		3.7	8.9	
13-Oct-05	3	2	5	3	4	6	10	11	12	19	21	27	27	29	28	29	23	22	19	15	13	12	12	11		15.2	29.1
14-Oct-05	12	12	11	9	2	2	1	4	3	calm	1	4	6	7	8	11	11	12	10	12	13	9	9	8		2.9	13.2
15-Oct-05	10	9	6	6	1	3	4	7	8	8	9	8	10	8	9	10	10	12	14	8	6	7	10	11		5.2	14.0
16-Oct-05	13	9	7	10	10	10	7	3	5	3	9	12	13	11	11	8	7	6	6	6	5	7	7	4		5.5	13.2
17-Oct-05	3	2	2	1	5	3	3	6	6	5	14	16	22	23	28	25	22	16	16	9	8	10	7	5		9.3	27.7
18-Oct-05	7	7	6	5	5	5	5	5	4	2	3	6	12	14	15	15	11	4	3	calm	2	2	4	5		2.1	14.6
19-Oct-05	3	4	3	1	5	6	3	4	4	5	5	5	6	8	8	13	16	11	10	13	15	6	3	6		5.9	15.8
20-Oct-05	8	11	7	10	8	6	7	10	12	9	11	11	12	12	12	9	12	6	calm	2	4	4	2	3		8.0	12.1
21-Oct-05	4	3	2	1	1	2	3	1	1	4	5	6	7	7	7	9	7	6	10	10	10	8	10		4.0	10.2	
22-Oct-05	9	11	8	7	8	5	3	3	4	6	5	5	6	8	6	6	5	4	15	12	calm	2	3	2		3.7	15.1
23-Oct-05	1	2	3	4	5	5	5	5	6	4	6	5	4	8	6	8	7	6	4	6	6	4	2	4		3.2	7.8
24-Oct-05	3	4	3	4	3	2	2	3	3	5	3	4	7	7	7	7	8	5	3	1	5	4	6	5		2.3	8.4
25-Oct-05	2	4	2	3	5	4	4	5	8	5	6	13	14	16	17	13	8	8	9	7	5	7	5	9		6.8	16.5
26-Oct-05	6	1	4	2	5	34	34	32	23	22	29	34	35	27	22	22	18	14	9	8	5	4	3	1		15.2	35.2
27-Oct-05	1	2	5	2	1	1	2	4	4	1	5	4	2	3	4	6	6	6	6	4	3	3	3	3		1.9	6.5
28-Oct-05	4	6	4	2	2	3	3	1	3	7	7	5	5	5	2	6	4	6	5	5	4	3	3	1		1.3	7.4
29-Oct-05	2	2	2	2	3	4	4	3	5	4	4	7	19	22	28	29	25	13	4	8	8	11	14	13		9.2	28.9
30-Oct-05	12	15	9	7	10	6	11	13	6	8	11	12	12	14	13	6	calm	3	3	3	4	4	3	3		6.6	14.9
31-Oct-05	3	4	5	5	4	4	2	2	2	7	6	9	10	9	10	7	5	2	3	4	4	3	3	calm		1.6	10.1
1-hr Vector	0.6	0.5	0.4	0.7	1.0	1.9	2.5	2.4	2.3	2.5	4.4	5.5	6.8	6.4	6.1	5.8	5.1	2.3	2.3	1.7	1.6	1.3	0.5	0.9			
Hourly Max	13.2	14.9	11.1	9.9	10.4	33.7	34.0	31.8	22.7	21.9	28.6	34.3	35.2	29.1	28.8	28.9	27.3	21.6	18.8	15.5	16.3	15.4	14.0	13.4			

## PASZA - Henry Pirker Wind Direction Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary									

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average	
	342.9	321.2	261.1	197.5	111.6	67.3	38.0	231 deg	

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	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-Oct-05	318	321	302	313	311	319	346	312	278	287	268	147	138	143	134	151	359	135	134	137	63	35	319	324	127	SE	
2-Oct-05	322	334	289	4	33	129	68	151	112	118	177	214	202	213	186	168	145	101	72	113	109	88	79	69	128	SE	
3-Oct-05	54	60	67	63	71	78	64	88	90	103	95	91	103	94	81	83	89	118	123	113	90	100	101	99	92	E	
4-Oct-05	86	81	70	82	87	90	88	87	95	107	122	136	148	82	126	127	96	80	60	66	102	87	84	87	95	E	
5-Oct-05	84	74	87	88	96	80	86	100	110	107	127	128	123	133	110	111	90	81	294	296	324	56	113	148	97	E	
6-Oct-05	129	143	316	331	289	107	206	314	325	210	212	180	227	183	163	177	263	269	252	220	333	107	348	138	234	SW	
7-Oct-05	196	340	259	254	240	243	239	203	210	241	249	239	259	264	261	266	260	269	268	246	241	243	239	237	253	WSW	
8-Oct-05	217	275	230	251	242	233	251	229	244	251	264	270	266	263	259	268	266	270	259	246	246	244	230	220	255	WSW	
9-Oct-05	224	266	317	120	115	132	140	105	139	144	134	109	110	122	130	128	134	169	182	167	174	173	158	134	145	SE	
10-Oct-05	157	151	90	63	330	329	337	282	321	328	322	304	289	252	311	273	289	285	244	247	246	246	252	285	282	279	W
11-Oct-05	277	290	328	311	148	208	141	168	161	177	261	266	266	260	248	250	258	251	128	71	109	115	116	118	247	WSW	
12-Oct-05	122	102	80	101	139	115	141	197	166	167	174	170	174	173	159	176	198	158	172	230	256	337	44	283	161	SSE	
13-Oct-05	314	242	226	275	245	285	241	239	239	248	253	266	265	257	260	274	269	276	273	264	255	261	258	226	260	W	
14-Oct-05	234	236	256	247	291	267	167	163	166	201	293	164	144	89	63	76	69	79	78	76	106	94	72	61	107	ESE	
15-Oct-05	64	57	53	57	129	216	211	227	247	266	285	237	262	282	291	280	294	305	319	312	283	263	288	292	288	WNW	
16-Oct-05	293	280	252	263	241	236	254	308	298	275	259	262	270	265	207	218	184	160	154	148	133	152	157	161	239	WSW	
17-Oct-05	296	283	304	239	161	170	168	251	296	318	252	249	254	260	257	256	258	262	254	307	317	302	333	78	264	W	
18-Oct-05	104	112	138	128	129	128	126	161	152	162	172	179	242	259	256	270	286	325	349	133	67	317	284	345	221	SW	
19-Oct-05	312	300	345	292	330	332	304	297	329	240	245	189	227	192	211	255	281	304	280	280	264	291	291	282	276	W	
20-Oct-05	259	252	257	252	254	256	246	247	248	254	250	247	249	253	256	254	257	261	270	163	261	257	319	255	253	WSW	
21-Oct-05	243	286	276	229	264	327	330	44	205	169	104	76	105	97	89	92	88	77	70	80	80	95	82	86	86	E	
22-Oct-05	80	89	83	79	86	71	51	54	90	103	114	124	99	102	90	74	62	73	310	311	122	237	190	184	81	E	
23-Oct-05	257	175	183	227	171	188	217	284	166	157	145	159	181	158	134	129	124	104	84	100	85	85	338	308	153	SSE	
24-Oct-05	339	302	320	298	324	278	244	224	186	152	132	79	108	100	94	102	112	117	115	68	90	106	103	166	112	ESE	
25-Oct-05	348	61	130	71	110	131	114	71	103	106	135	151	150	151	149	145	122	100	116	122	103	113	90	91	123	ESE	
26-Oct-05	88	140	111	213	307	257	251	252	233	229	238	243	247	237	234	245	251	229	235	222	256	331	145	213	241	WSW	
27-Oct-05	232	178	156	177	181	353	323	107	129	265	315	278	4	59	70	91	87	78	64	42	33	33	47	102	75	ENE	
28-Oct-05	65	86	116	96	94	91	101	87	113	101	111	124	114	134	127	281	303	313	307	282	279	243	221	185	110	ESE	
29-Oct-05	167	194	167	216	290	293	300	156	177	160	203	194	227	244	263	250	247	236	240	223	210	235	235	240	237	WSW	
30-Oct-05	209	223	254	273	238	316	276	265	309	305	268	255	254	260	267	277	328	126	156	180	215	216	155	120	254	WSW	
31-Oct-05	112	98	102	97	63	14	31	57	107	100	136	211	249	248	247	245	210	230	177	112	119	104	129	327	163	SSE	
Hourly Avg	212	228	220	249	217	252	242	231	202	207	229	225	233	230	232	237	254	249	253	234	205	208	188	172			

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

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Hourly Average Table													
<b>Calm Time:</b> 0 hrs <b>0% calms</b> <b>Operational Time:</b> 744 hrs													
<b>Calibration Time:</b> 0 hrs <b>AMD Operational Uptime:</b> 100.0%													
<b>Percentile</b>													
99 95 75 50 25 5 1													
60.5 49.3 26.7 14.0 8.4 5.3 4.1													

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

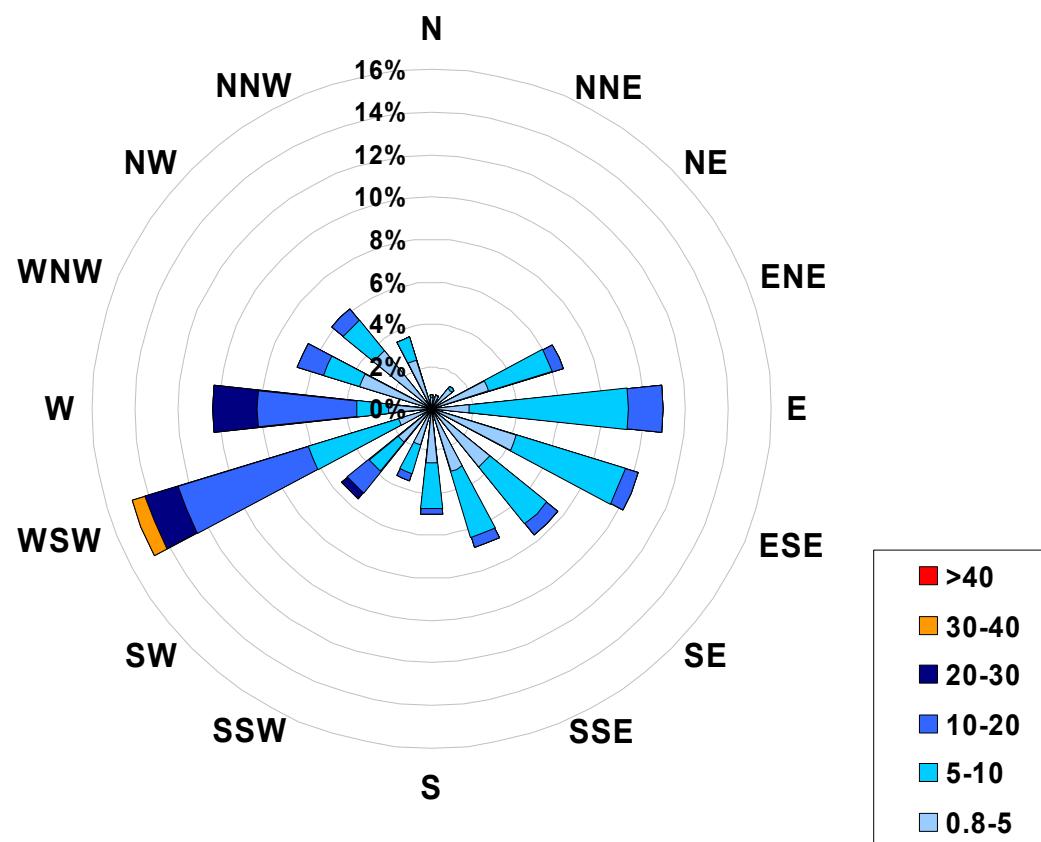
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

Day	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	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	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-Oct-05	50	52	31	21	23	27	20	38	44	20	46	32	27	11	13	25	37	9	9	11	13	35	27	28	51.7	
2-Oct-05	24	29	39	14	36	43	12	19	16	16	20	31	19	26	27	25	17	9	15	23	5	8	7	22	42.9	
3-Oct-05	43	9	13	16	10	10	17	6	7	9	13	12	16	13	14	12	7	7	9	8	8	6	7	7	43.4	
4-Oct-05	6	5	6	5	4	5	5	5	9	11	15	30	18	46	45	50	28	13	9	8	6	11	8	7	49.9	
5-Oct-05	5	6	7	7	13	8	27	20	17	16	20	40	50	58	22	32	21	33	15	12	19	27	24	40	57.8	
6-Oct-05	40	61	48	51	31	57	64	31	24	51	29	25	21	12	23	18	11	6	12	38	46	40	26	40	64.4	
7-Oct-05	60	13	39	18	7	7	7	14	7	7	5	10	8	8	9	6	5	4	6	5	6	8	10	9	60.4	
8-Oct-05	5	20	33	20	6	7	16	6	10	12	7	10	10	11	9	8	8	4	7	6	7	6	11	10	32.9	
9-Oct-05	16	39	53	13	13	15	16	27	14	27	20	23	14	15	11	10	9	8	19	25	5	6	6	10	52.9	
10-Oct-05	6	14	17	23	24	40	49	67	25	14	11	14	34	43	32	30	19	12	8	5	4	5	9	9	67.2	
11-Oct-05	8	15	19	31	21	47	16	10	19	29	11	11	12	10	11	10	8	30	19	68	21	9	8	8	67.5	
12-Oct-05	7	15	16	22	61	69	30	33	9	7	10	8	8	8	10	6	13	8	8	16	19	30	42	27	68.8	
13-Oct-05	47	29	14	28	28	15	11	7	6	4	7	7	8	8	6	6	6	4	3	4	5	5	8	4	47.2	
14-Oct-05	4	6	7	9	53	47	58	25	42	57	47	39	23	16	12	9	9	7	6	9	10	8	9	9	57.9	
15-Oct-05	9	8	17	13	36	21	19	14	8	6	10	16	12	14	13	13	8	6	6	7	9	10	8	3	35.8	
16-Oct-05	4	8	27	13	5	7	23	36	13	42	12	12	9	12	16	20	14	7	9	16	16	13	10	30	42.1	
17-Oct-05	23	19	28	38	17	9	14	21	19	14	8	8	6	7	6	5	5	5	5	17	10	5	10	12	37.6	
18-Oct-05	13	11	15	16	15	14	23	15	23	46	51	24	17	14	12	12	8	23	41	52	23	35	50	16	52.4	
19-Oct-05	51	21	41	32	18	20	50	40	33	33	13	15	30	14	11	12	10	6	6	4	6	19	27	13	51.3	
20-Oct-05	8	4	7	6	8	10	8	6	5	8	9	9	12	16	13	16	8	16	40	36	14	23	53	14	52.5	
21-Oct-05	14	18	16	22	53	19	29	47	46	14	29	13	16	17	18	13	9	13	11	6	6	7	8	5	52.7	
22-Oct-05	6	6	8	9	10	19	38	30	37	14	16	27	21	15	13	15	31	26	9	8	42	40	37	48	48.3	
23-Oct-05	37	30	25	18	10	20	48	29	13	25	10	10	24	13	19	13	11	5	20	7	7	35	46	18	47.9	
24-Oct-05	31	31	33	20	20	59	55	52	33	22	46	23	15	13	12	8	18	14	34	44	11	25	8	25	58.6	
25-Oct-05	38	26	40	25	11	41	16	17	7	15	12	8	8	7	9	9	5	4	6	16	6	8	7	41.4		
26-Oct-05	13	37	38	36	20	14	4	6	6	6	7	7	5	9	9	9	5	6	8	7	10	18	30	46	46.1	
27-Oct-05	28	32	7	34	55	55	26	36	20	41	14	21	42	42	28	15	7	7	7	14	23	41	32	31	55.0	
28-Oct-05	30	12	14	58	28	23	32	50	40	13	15	25	34	28	54	17	11	9	14	11	13	19	19	54	58.4	
29-Oct-05	32	38	27	33	29	20	30	39	17	19	33	27	10	9	6	5	4	8	28	9	10	14	13	7	39.4	
30-Oct-05	6	6	13	14	10	13	16	9	12	11	8	8	9	12	6	9	74	14	12	22	14	13	17	23	73.5	
31-Oct-05	17	20	22	14	14	9	41	48	38	16	29	10	9	10	8	10	17	39	32	11	18	29	47	66	65.7	

Hourly Max 60 61 53 58 61 69 64 67 46 57 51 40 50 58 54 50 74 39 41 68 46 41 53 66

**1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for  
October 2005**



<b>Calms:</b>	<b>0%</b>
---------------	-----------

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	276
5	to	10	291
10	to	20	141
20	to	30	31
30	to	40	5
	>	40	0
Total Non-Zero Values			744

# PASZA - Evergreen Park

## Monthly Summary Tables, Graphs, and Roses

## PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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 14-Oct 12:00 13:00
Maximum 24-hr Average:	2.3 ppb 9-Oct

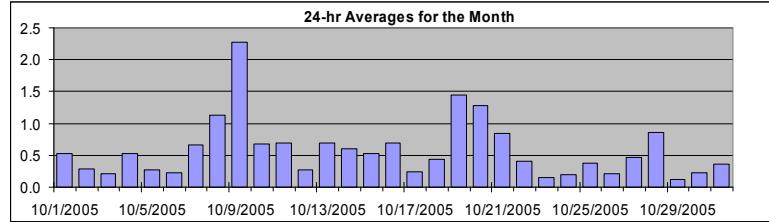
AIC Time:	33 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 4.6	95 2.3	75 0.7	50 0.2	25 0.0	5 0.0	1 0.0	Average 0.6 ppb

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	Daily Maximum	
	Hour Start 1:00	Hour End 2:00																									
1-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	5	2	2	1	0	A	0	0	0	0	0	0	0	0.5	5.4
2-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	A	1	0	0	0	0	0	0	0	0.3	1.2
3-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	1	0	0	0	0	0	0	0.2	1.0
4-Oct-05	1	0	0	0	0	0	0	0	0	0	0	1	2	1	1	A	2	1	1	1	0	0	0	0	0	0.5	2.2
5-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	0	0	0	1	1	1	1	1	0	0.3	0.7
6-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	2	A	1	0	0	2	0	0	0	0	0	0	0	0.2	1.7
7-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	A	0	2	3	0	5	0	0	1	0	0	0	0	0.7	5.0
8-Oct-05	0	0	0	0	0	0	1	0	0	0	A	1	2	2	2	1	1	2	2	2	2	2	2	2	1.1	2.4	
9-Oct-05	2	2	1	0	0	0	0	1	0	A	3	5	8	6	5	4	3	2	3	2	2	2	2	1	1	2.3	7.8
10-Oct-05	1	1	1	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3	
11-Oct-05	1	1	1	1	1	1	0	A	1	0	2	0	0	1	1	2	1	0	1	1	1	1	1	0	0	0.7	2.0
12-Oct-05	1	1	0	0	0	0	0	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
13-Oct-05	0	0	0	0	0	A	1	1	1	0	0	2	1	2	3	1	1	0	0	0	0	0	0	0	0	0.7	3.3
14-Oct-05	0	0	0	0	A	0	0	0	0	0	0	0	9	2	1	0	0	0	0	0	0	0	0	0	0	0.6	9.1
15-Oct-05	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.5	1.2
16-Oct-05	0	0	A	0	0	0	1	1	1	1	1	2	2	2	1	1	1	0	1	1	0	0	0	0	0	0.7	2.0
17-Oct-05	0	A	0	0	0	0	0	0	0	C	C	C	A	1	3	0	0	0	0	0	0	0	0	0	0	0.2	3.0
18-Oct-05	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.4	1.3
19-Oct-05	1	1	0	0	A	1	1	1	1	2	2	2	2	2	4	2	2	2	2	1	1	1	1	1	1	1.4	4.1
20-Oct-05	0	0	0	A	0	0	0	2	0	2	1	1	3	1	2	2	2	2	2	2	2	3	2	1	1	1.3	2.8
21-Oct-05	1	1	A	1	0	0	0	0	0	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	0.8	2.3
22-Oct-05	1	A	0	0	0	0	0	0	0	0	2	3	1	0	0	0	0	1	1	1	1	0	0	0	0	0.4	2.7
23-Oct-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
24-Oct-05	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	0	0	A	0	0	0.2	0.8
25-Oct-05	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	2	1	A	0	0	0	0.4	2.4
26-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	A	0	0	0.2	1.8
27-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	1	0	0	0	0	A	0	0	0	0	0.5	7.1
28-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	4	2	2	2	1	A	1	1	0	0	0.9	4.6
29-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0.1	0.9
30-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	2.3
31-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	2	2	2	1	1	0	0	0	0.4	1.9

### 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

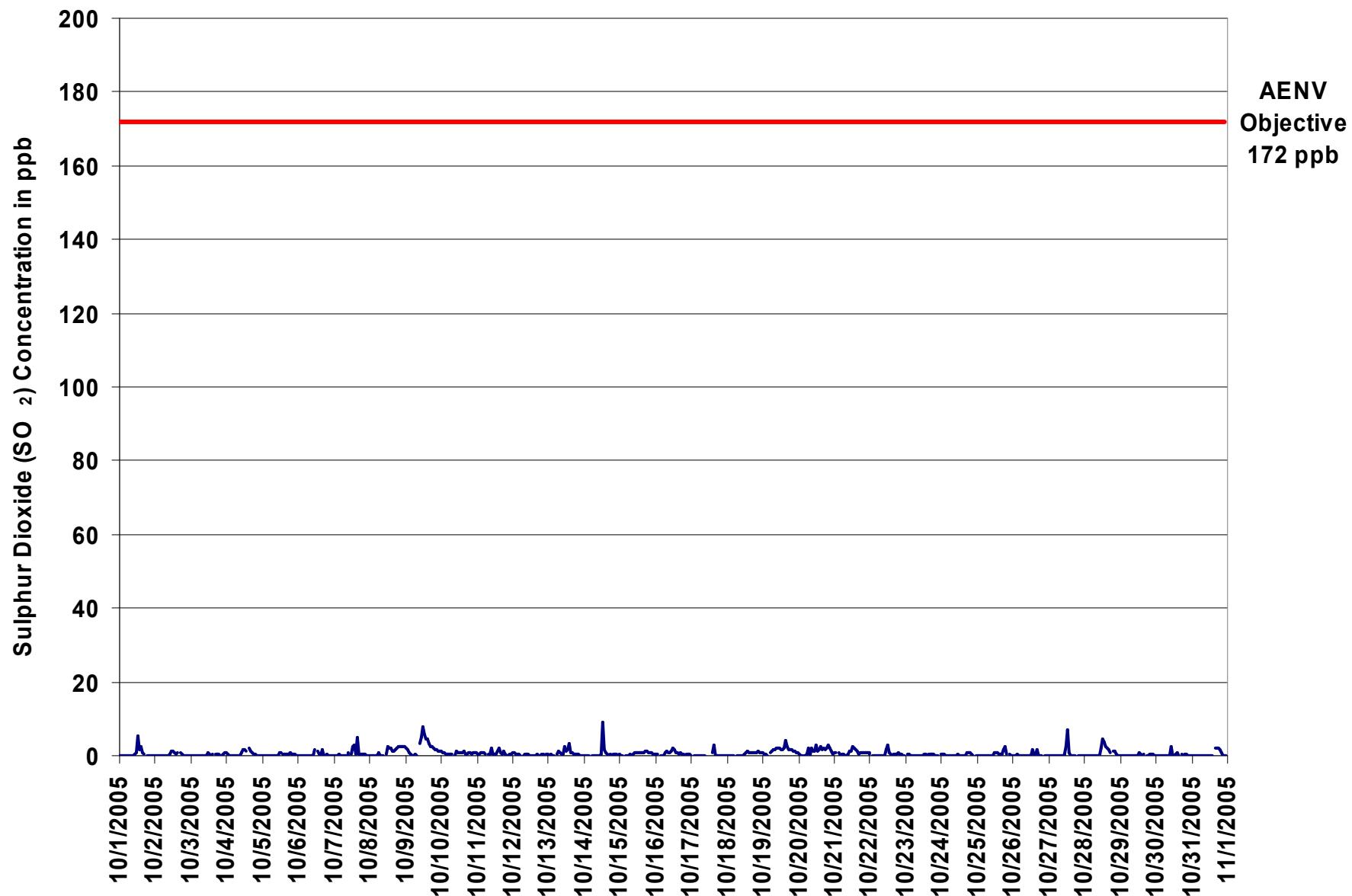


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

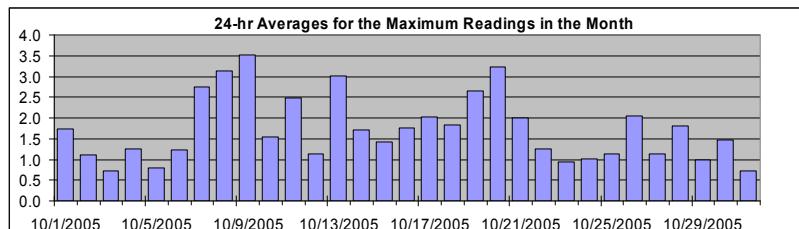
### Summary

Maximum 1-hr Value:	20.5 ppb	17-Oct 15:00	16:00
Maximum 24-hr Value:	3.5 ppb	9-Oct	

AIC Time:	33 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 11.8	95 6.8	75 1.8	50 1.1	25 0.6	5 0.0	1 0.0	Average 1.7 ppb

### HOURLY MAXIMUM 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

### 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-Oct-05	1	1	1	1	1	1	1	0	0	2	1	6	10	4	4	2	1	A	1	1	1	1	0	1	1	1.7	9.8
2-Oct-05	1	0	0	1	1	1	1	1	1	1	2	2	3	2	1	2	A	2	1	1	0	1	1	1	1.1	2.5	
3-Oct-05	1	0	0	0	0	0	0	0	0	0	1	2	1	1	1	A	1	1	1	1	1	1	1	0.7	2.0		
4-Oct-05	2	2	1	1	1	0	0	0	0	1	2	4	3	2	A	3	4	2	1	1	1	1	0	0	1.3	4.2	
5-Oct-05	0	0	0	0	0	0	0	0	1	0	0	2	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.7	
6-Oct-05	1	0	0	0	0	0	0	0	0	0	1	3	A	5	1	1	1	7	2	1	1	1	1	1	1.2	7.1	
7-Oct-05	1	1	1	1	1	1	1	1	0	4	A	1	8	12	1	20	1	1	1	2	1	1	1	1	2.7	20.0	
8-Oct-05	1	1	0	0	0	0	2	1	0	2	A	1	10	14	14	2	2	2	3	3	3	3	3	3	3.1	14.4	
9-Oct-05	3	2	2	1	1	1	2	2	1	A	5	7	10	8	7	7	5	3	3	3	2	2	2	2	3.5	9.8	
10-Oct-05	2	2	2	1	1	1	1	1	A	1	2	1	2	2	2	2	2	1	1	1	1	1	1	1	1.5	2.4	
11-Oct-05	1	2	2	1	2	2	1	A	2	1	7	2	1	2	7	11	6	1	2	1	1	1	1	1	2.5	10.7	
12-Oct-05	2	2	1	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.1	2.0	
13-Oct-05	1	1	1	1	1	1	A	2	2	2	3	1	9	6	15	12	2	2	1	2	1	1	1	1	3.0	15.3	
14-Oct-05	1	1	1	2	A	1	0	0	0	0	0	1	19	3	2	1	1	1	1	1	1	1	1	1	1.7	19.0	
15-Oct-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	3	2	2	2	2	2	2	1	1	1.4	3.1	
16-Oct-05	1	1	A	0	3	1	1	2	2	2	2	4	3	3	2	5	2	2	1	1	1	1	1	1	1.7	4.7	
17-Oct-05	1	A	1	1	1	1	1	1	0	1	C	C	A	3	20	1	1	1	1	1	1	1	1	1	2.0	20.5	
18-Oct-05	0	0	1	1	1	A	1	0	1	1	1	1	1	1	8	6	6	3	1	2	1	2	2	1	1.8	7.7	
19-Oct-05	1	1	1	1	A	2	2	2	2	3	3	3	4	3	3	10	4	2	2	2	2	2	2	2	2.7	9.7	
20-Oct-05	1	1	1	A	1	1	2	4	1	8	2	2	12	2	5	8	5	3	2	3	4	3	2	1	3.2	11.8	
21-Oct-05	3	2	A	2	2	1	2	2	2	2	2	2	3	3	2	2	2	2	1	2	2	2	1	2	2.0	3.3	
22-Oct-05	1	A	1	0	0	0	0	0	0	0	0	7	6	1	1	1	1	1	2	1	1	1	1	1	1.3	7.1	
23-Oct-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	0.9	1.4	
24-Oct-05	1	1	1	1	0	0	1	1	0	0	1	2	1	1	1	1	1	2	2	3	1	1	A	1.0	2.7		
25-Oct-05	1	1	1	1	1	0	0	0	0	0	0	2	2	2	1	1	1	1	4	4	1	A	2	1	1.1	4.1	
26-Oct-05	1	1	1	1	1	1	2	2	1	1	0	1	0	8	7	8	9	1	1	0	A	1	0	0	2.0	8.9	
27-Oct-05	0	0	0	0	0	0	0	0	0	0	1	2	6	11	3	1	1	1	1	A	1	0	0	0	1.1	10.8	
28-Oct-05	0	0	0	0	0	0	0	0	0	0	0	8	7	7	4	3	3	2	A	2	2	1	0	0	1.8	8.5	
29-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	1	10	1	1	3	A	0	1	1	1	1	1	1.0	10.3	
30-Oct-05	1	0	1	0	0	0	0	0	0	0	2	7	4	2	1	7	2	A	2	1	1	2	1	1	0	1.5	7.0
31-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	3	3	2	2	1	1	1	0.7	2.9	

Hourly Avg	1.0	0.9	0.7	0.7	0.6	0.6	0.8	0.8	0.7	1.1	1.8	2.9	4.1	4.5	3.9	3.7	3.3	1.6	1.6	1.6	1.5	1.3	1.1	1.0
Hourly Max	3.0	2.4	1.6	2.4	2.7	2.1	2.4	3.8	2.5	7.8	7.0	9.4	19.0	15.3	13.5	20.5	20.0	3.3	3.6	4.1	4.2	3.4	3.2	3.4

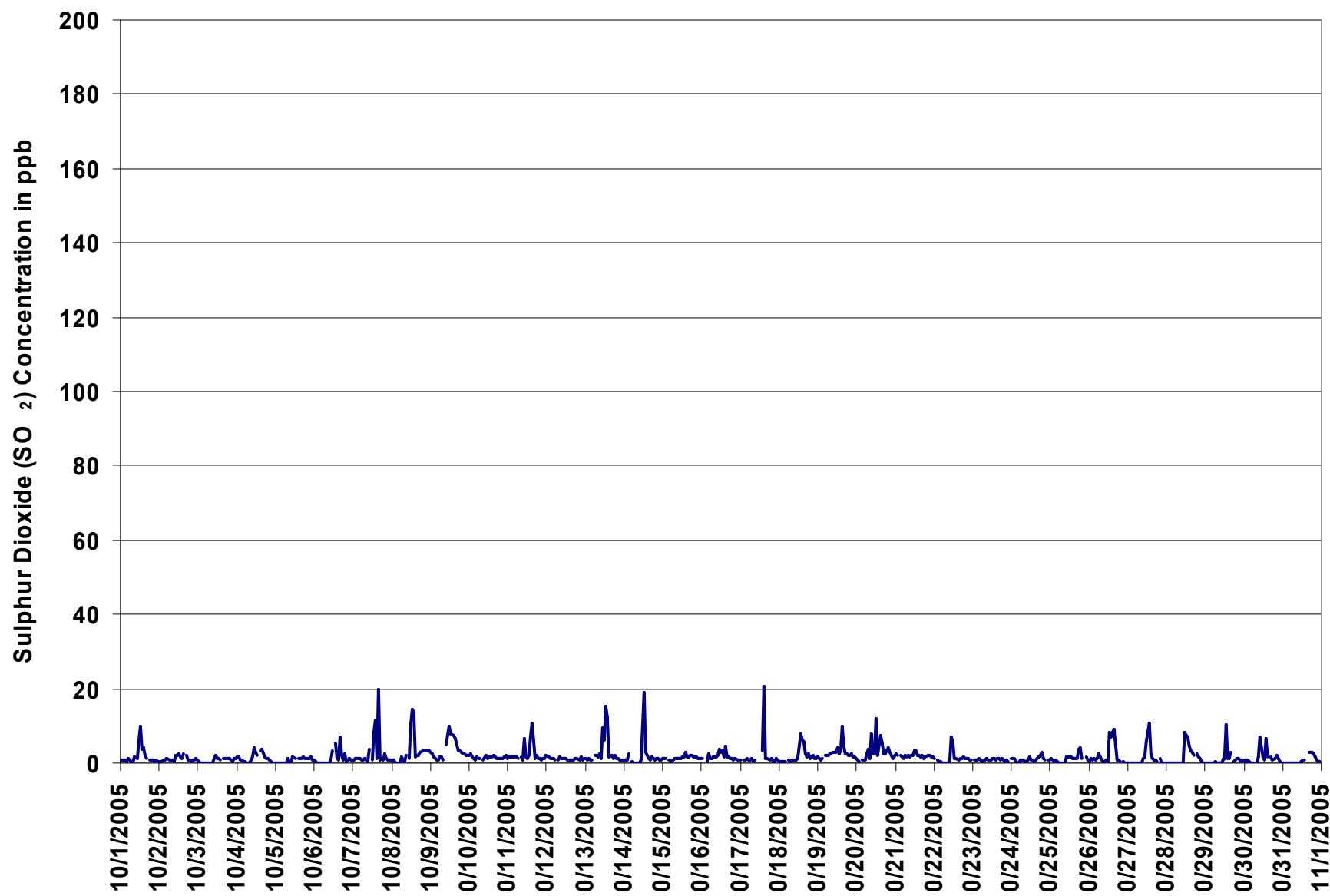
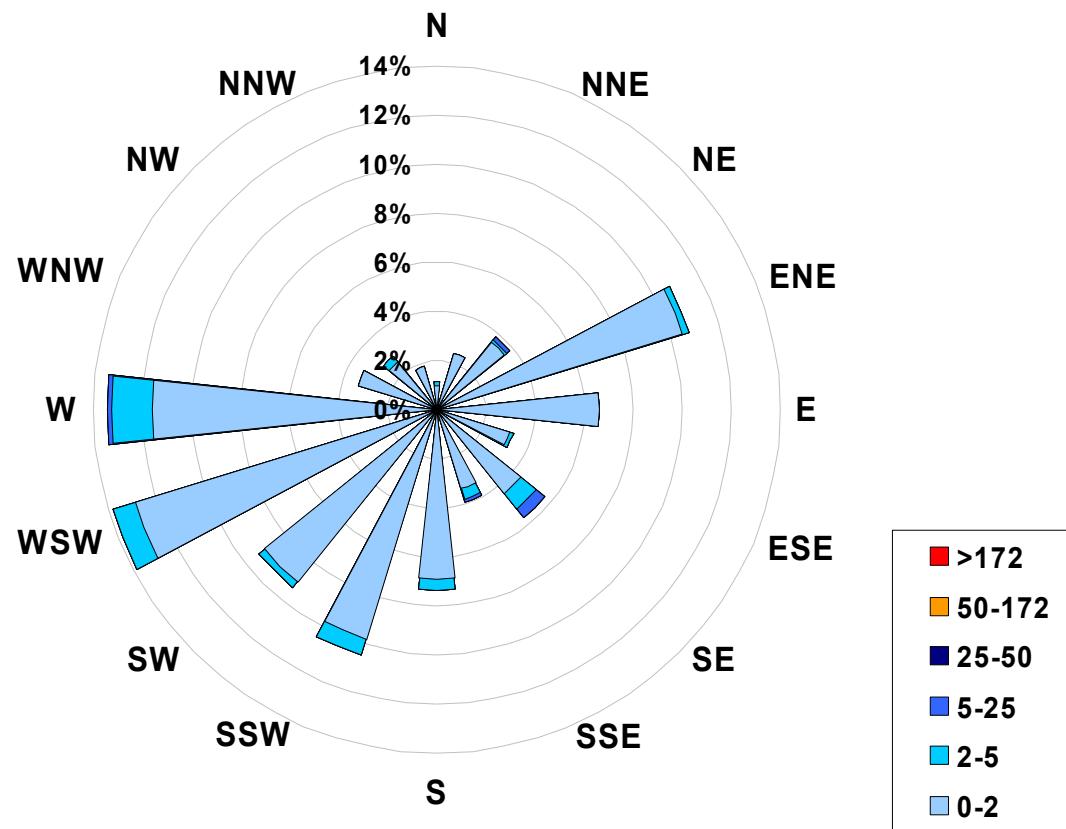


Figure 21. PASZA - Evergreen Park Sulphur Dioxide 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at  
the Evergreen Park Site for October 2005**



**Calms:** 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	657
2	to	5	45
5	to	25	6
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			708

## PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

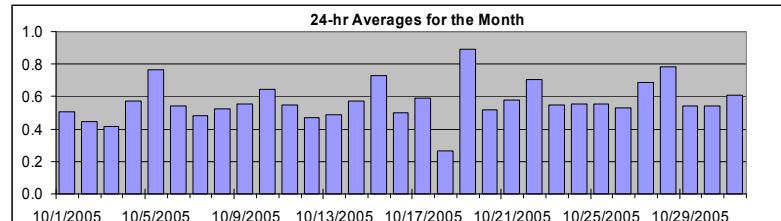
Objective Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
**Summary**

Maximum 1-hr Average:	6.8	ppb	19-Oct	10:00 11:00
Maximum 24-hr Value:	0.9	ppb	19-Oct	

AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	
	1.2	0.9	0.6	0.5	0.5	0.3	0.2		0.6 ppb

### 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

### 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		
	1:00	0	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0.5	0.9	
1-Oct-05	0:00	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0.4	0.7	
2-Oct-05	0:00	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	0	1	1	1	1	1	0	0.4	0.6	
3-Oct-05	0:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	1	1	1	1	1	1	1	0	0.6	1.4	
4-Oct-05	0:00	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.8	1.7	
5-Oct-05	0:00	0	0	0	0	0	0	0	0	1	0	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	0	0.5	1.3
6-Oct-05	0:00	1	1	1	0	0	0	0	0	0	1	1	1	A	1	1	0	1	0	1	1	1	0	0	0	0	0.5	0.6	
7-Oct-05	0:00	0	0	0	0	0	0	0	0	1	0	1	A	1	1	0	0	0	1	1	1	0	0	0	0	0	0.5	0.6	
8-Oct-05	0:00	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.5	0.6	
9-Oct-05	0:00	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.8	
10-Oct-05	0:00	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.9	
11-Oct-05	0:00	1	1	1	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	0.9	
12-Oct-05	0:00	1	1	1	1	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7	
13-Oct-05	0:00	1	0	1	1	0	A	1	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0.5	0.6	
14-Oct-05	0:00	0	0	0	0	A	0	0	0	0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.8	
15-Oct-05	0:00	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1	
16-Oct-05	0:00	1	0	A	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0.5	0.6	
17-Oct-05	0:00	A	1	0	0	0	1	1	1	1	C	C	C	A	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.9	
18-Oct-05	0:00	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
19-Oct-05	0:00	1	1	1	1	A	1	1	1	1	1	7	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0.9	6.8	
20-Oct-05	0:00	1	0	0	A	0	0	0	1	1	1	1	1	0	0	0	1	1	1	1	1	1	0	0	0	1	0.5	0.8	
21-Oct-05	0:00	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.6	0.9	
22-Oct-05	0:00	1	A	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
23-Oct-05	0:00	A	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	A	0.6	0.8	
24-Oct-05	0:00	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	1	1	1	1	0	0	0	A	0.6	1.0	
25-Oct-05	0:00	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.2	
26-Oct-05	0:00	1	1	1	1	1	1	0	1	0	0	1	1	0	1	1	0	1	1	0	0	1	A	0	1	1	0.5	0.7	
27-Oct-05	0:00	1	0	0	0	0	0	0	1	1	1	1	2	1	1	1	1	1	1	1	0	0	A	1	1	1	0.7	1.6	
28-Oct-05	0:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
29-Oct-05	0:00	1	0	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.5	0.7	
30-Oct-05	0:00	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0.5	0.7	
31-Oct-05	0:00	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	1.1	
Hourly Avg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6					
Hourly Max	0.9	0.7	0.7	0.8	0.7	0.7	1.0	0.9	1.1	1.1	6.8	1.5	1.8	1.1	1.2	1.1	1.1	1.0	0.9	1.2	1.0	0.9	0.9	1.0					

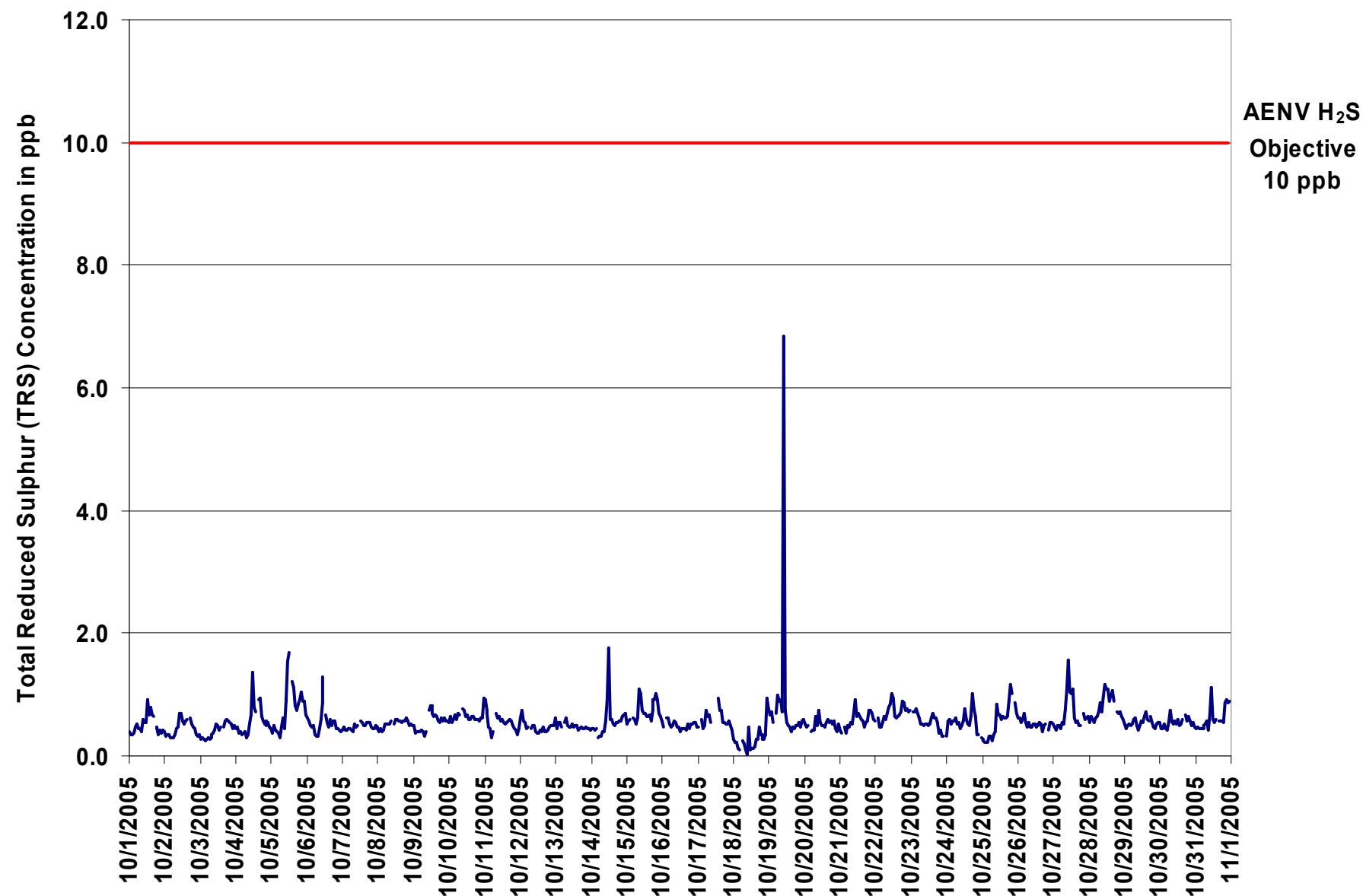


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

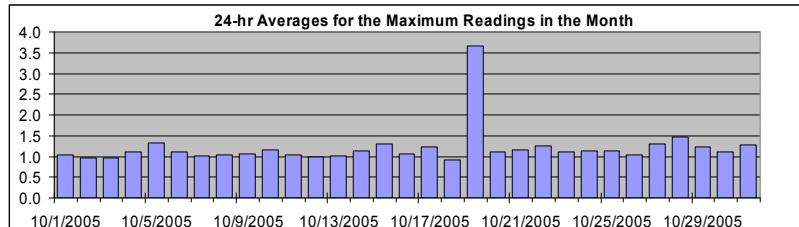
Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)

#### Summary

Maximum 1-hr Value:	57.7 ppb	19-Oct 10:00	11:00
Maximum 24-hr Value:	3.7 ppb	19-Oct	



AIC Time:	33 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 2.4	95 1.7	75 1.2	50 1.1	25 1.0	5 0.8	1 0.7	Average 1.2 ppb

#### Status Flag Characters

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

#### Day Mountain Standard Time

	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					
1-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.8		
2-Oct-05	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	1.2		
3-Oct-05	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	1.2		
4-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	2	2	1	1	1	1	1	1	1	1.1	2.3		
5-Oct-05	1	1	1	1	1	1	1	1	1	1	1	2	2	2	A	2	2	1	1	1	1	1	2	1	1	1	1.3	2.2	
6-Oct-05	1	1	1	1	1	1	1	1	1	1	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9	
7-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
8-Oct-05	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	1.0	1.3	
9-Oct-05	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1.1	1.6	
10-Oct-05	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	2	1.2	1.6	
11-Oct-05	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	1.5
12-Oct-05	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	1.4
13-Oct-05	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	1.0	1.2
14-Oct-05	1	1	1	1	A	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.8
15-Oct-05	1	1	1	A	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1.3	2.4
16-Oct-05	1	1	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	1.6	
17-Oct-05	1	A	1	1	1	1	1	1	2	1	C	C	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1.2	1.9	
18-Oct-05	1	1	1	1	A	1	1	1	1	2	1	58	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0.9	2.2	
19-Oct-05	1	1	1	1	A	1	2	1	2	1	58	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3.7	57.7	
20-Oct-05	1	1	1	A	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8	
21-Oct-05	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7	
22-Oct-05	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	1.5	
23-Oct-05	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	1.3	
24-Oct-05	1	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	1.6
25-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	A	1	1	1.1	1.8	
26-Oct-05	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	1.4
27-Oct-05	1	1	1	1	1	1	1	1	1	1	2	3	1	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1.3	2.7
28-Oct-05	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	3	2	A	1	1	1	1	1	1	1	1	1.5	2.9	
29-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1	A	1	1	1	1	1	1.2	4.1	
30-Oct-05	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6	
31-Oct-05	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	A	1	1	1	1	2	2	1	1	1.3	2.9	

Hourly Avg	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.1	1.2	1.2	1.2	3.3	1.4	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Hourly Max	1.5	1.4	1.4	1.3	1.3	1.2	1.8	1.7	2.0	2.4	57.7	2.9	2.8	4.1	1.9	1.8	2.9	1.6	1.7	1.8	1.7	1.7	1.5	2.2	

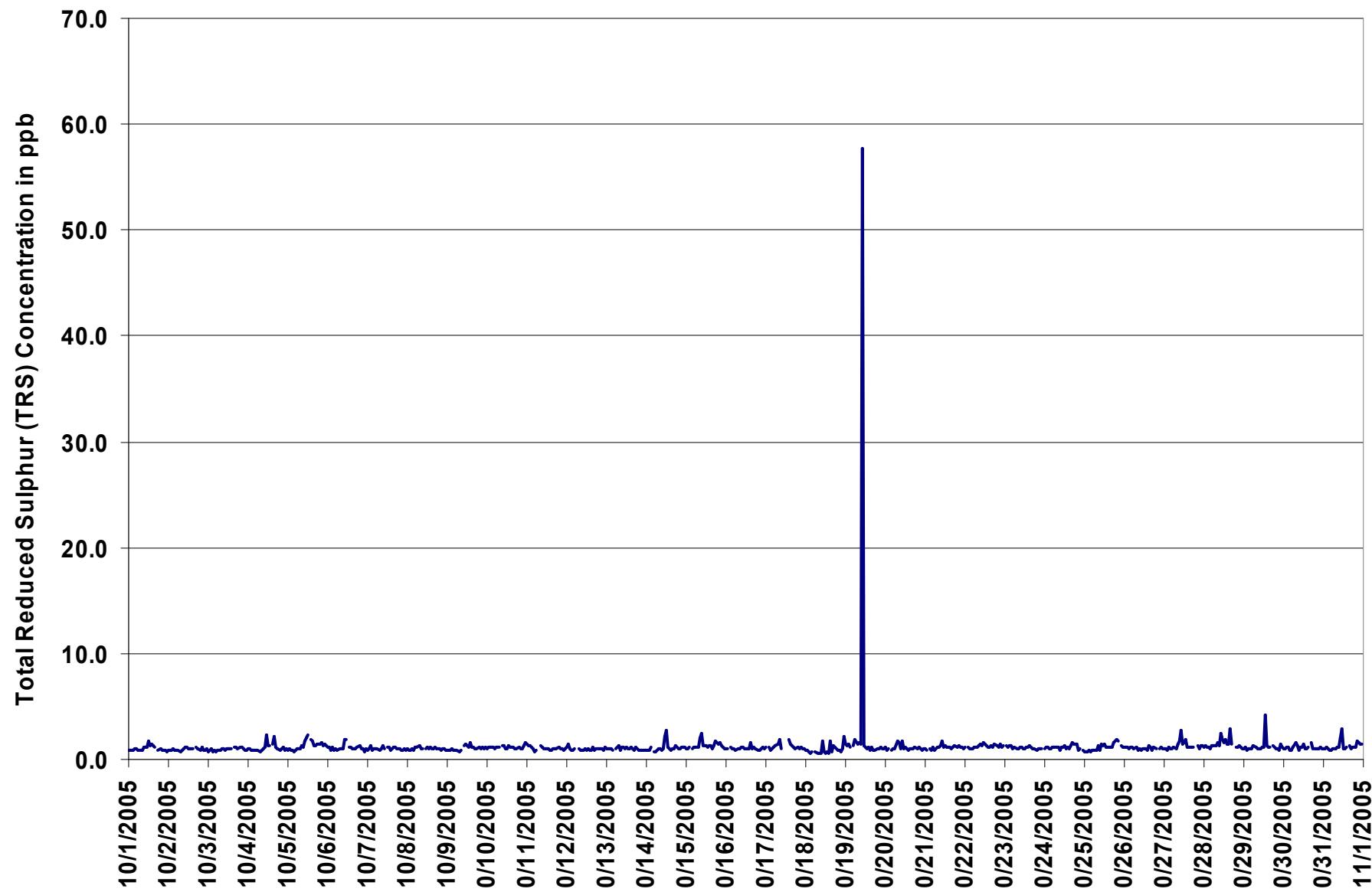
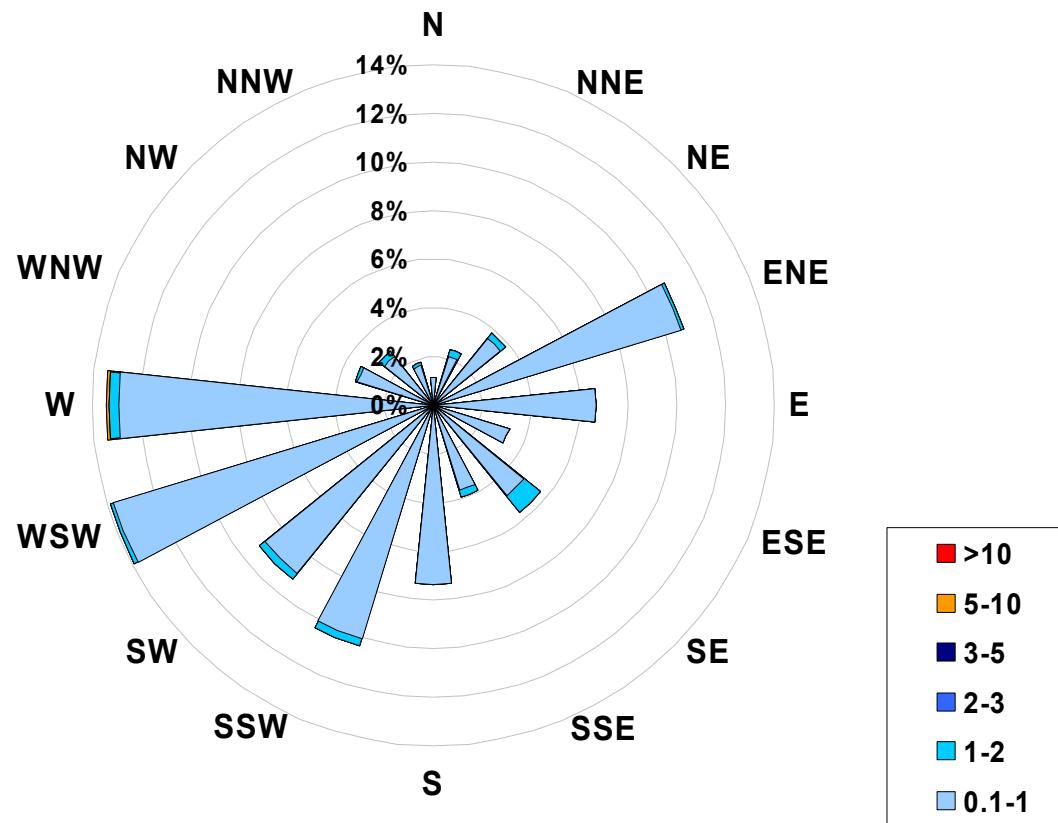


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)**  
**Located at the Evergreen Park Site for October 2005**



Calms: 0%

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	682
1	to	2	25
2	to	3	0
3	to	5	0
5	to	10	1
	>	10	0
Total Non-Zero Values			708

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

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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:	35.1 $\mu\text{g}/\text{m}^3$
28-Oct	8:00 9:00
Maximum 24-hr Value:	10.9 $\mu\text{g}/\text{m}^3$
	28-Oct

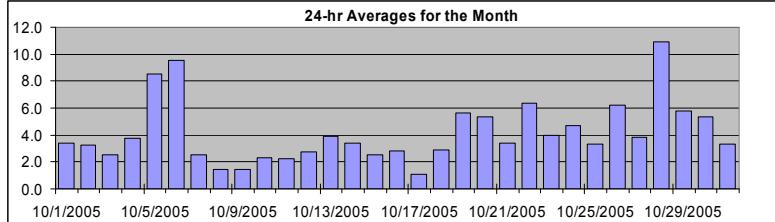
AIC Time:	0 hrs	Operational Time:	737 hrs								
Calibration Time:	3 hrs	AMD Operational Uptime:	99.5%								
Percentile	99	95	75	50	25	5	1	Average	4.2 $\mu\text{g}/\text{m}^3$	Geomean	3.6 $\mu\text{g}/\text{m}^3$
	18.2	12.7	5.5	3.1	1.6	0.0	0.0				

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-Oct-05	3	2	3	4	3	3	3	5	9	7	3	3	5	6	8	4	4	0	1	2	0	2	1	1	1	3.4	9.0	
2-Oct-05	1	1	2	1	3	4	3	4	5	8	5	7	2	2	3	3	4	5	3	3	2	1	2	3	3	3.3	7.6	
3-Oct-05	2	2	3	5	3	4	3	3	7	0	0	0	0	0	D	0	1	1	4	4	3	3	3	2	4	2.5	7.3	
4-Oct-05	3	3	2	2	2	2	3	6	10	2	3	6	5	3	4	5	4	4	5	3	4	2	3	3	3.7	10.2		
5-Oct-05	4	4	5	3	3	2	4	6	14	7	4	9	16	13	7	6	4	8	13	17	19	14	11	9	8.6	19.3		
6-Oct-05	10	8	10	8	9	8	7	10	15	14	18	31	21	10	2	0	5	8	13	14	4	2	2	1	9.6	31.1		
7-Oct-05	2	2	6	6	5	4	1	1	4	0	3	0	D	6	4	2	10	0	1	2	0	0	0	0	0	2.5	9.5	
8-Oct-05	0	2	0	1	1	0	2	2	1	1	10	0	1	0	1	0	1	1	3	3	2	3	1	1	1.5	9.6		
9-Oct-05	1	1	1	1	1	2	2	1	6	3	7	2	0	0	0	0	0	0	0	2	1	0	0	1	1.5	7.4		
10-Oct-05	3	3	3	2	2	4	4	4	3	4	5	2	1	0	2	2	5	7	0	0	0	0	0	0	2.3	6.6		
11-Oct-05	0	0	0	0	0	0	1	3	10	13	0	D	0	0	0	3	2	6	9	3	0	0	0	0	2.2	12.8		
12-Oct-05	0	0	1	3	4	2	5	6	10	1	3	2	2	2	1	2	4	0	4	1	2	3	1	5	2.7	9.7		
13-Oct-05	3	4	4	2	1	1	2	10	2	2	2	9	3	10	10	3	7	3	2	3	3	2	3	3	3.9	9.8		
14-Oct-05	2	2	2	3	2	2	4	5	7	6	7	6	11	0	0	0	0	2	2	4	10	3	1	1	3.4	11.3		
15-Oct-05	0	0	0	1	2	3	3	4	3	4	4	5	2	2	5	3	6	2	1	2	0	1	2	5	2.5	5.6		
16-Oct-05	5	8	6	8	8	5	1	2	2	3	0	0	0	1	0	6	0	1	2	4	3	1	1	0	2.8	8.4		
17-Oct-05	1	0	0	1	1	2	3	4	3	0	1	C	C	C	0	0	D	0	0	1	1	1	2	2	1.1	3.8		
18-Oct-05	1	0	2	2	3	2	2	3	2	4	5	5	2	2	2	3	1	1	4	3	4	5	6	7	2.9	7.2		
19-Oct-05	9	10	7	3	4	6	8	10	7	9	8	6	5	5	5	11	1	2	4	4	3	3	3	3	5.6	10.9		
20-Oct-05	2	3	3	4	4	5	6	11	6	7	4	3	4	2	3	6	6	15	8	5	9	4	3	5	5.3	14.8		
21-Oct-05	5	4	4	3	3	4	4	5	6	7	5	4	3	2	1	1	2	4	4	2	3	2	3	3	3.4	7.3		
22-Oct-05	2	3	2	2	2	4	13	10	18	17	7	6	4	2	2	4	5	5	15	6	4	7	7	6	6.4	18.2		
23-Oct-05	7	6	7	6	5	5	4	4	3	4	4	7	2	4	3	4	4	4	3	2	2	2	3	4	4.0	7.2		
24-Oct-05	3	5	5	4	4	5	7	6	3	4	7	3	3	4	2	3	5	13	9	7	3	2	2	4	4.7	13.0		
25-Oct-05	3	2	2	2	1	4	4	2	7	11	1	0	0	0	1	2	3	5	6	7	6	4	5	3	3.3	10.9		
26-Oct-05	5	7	6	10	11	13	4	4	3	2	3	11	6	19	5	7	8	13	3	1	3	2	2	3	6.2	18.6		
27-Oct-05	3	2	1	2	2	3	3	4	6	8	9	6	4	6	0	0	1	1	2	3	7	6	7	8	3.9	8.6		
28-Oct-05	4	7	5	4	6	7	6	15	35	16	2	5	4	6	8	18	25	14	17	14	14	15	8	10.9	35.1			
29-Oct-05	6	5	5	5	7	10	12	14	9	8	5	2	1	14	10	8	9	1	0	1	1	2	2	2	5.8	14.4		
30-Oct-05	2	2	2	1	1	2	7	19	16	10	16	1	4	3	6	5	5	6	6	8	5	1	0	0	5.3	19.3		
31-Oct-05	1	0	0	0	0	0	2	4	10	3	5	8	4	5	4	1	4	4	2	3	6	5	3.3	9.6				
Hourly Avg	3.0	3.2	3.3	3.2	3.3	3.8	4.3	6.0	7.8	5.9	5.0	5.2	4.0	4.3	3.2	3.7	4.4	4.3	4.9	4.2	3.8	3.1	2.9	3.2				
Hourly Max	9.6	9.7	9.7	10.4	10.9	12.8	12.6	19.3	35.1	17.1	17.6	31.1	21.4	18.6	9.8	18.2	24.8	14.8	16.5	16.9	19.3	14.9	11.5	9.2				

### 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

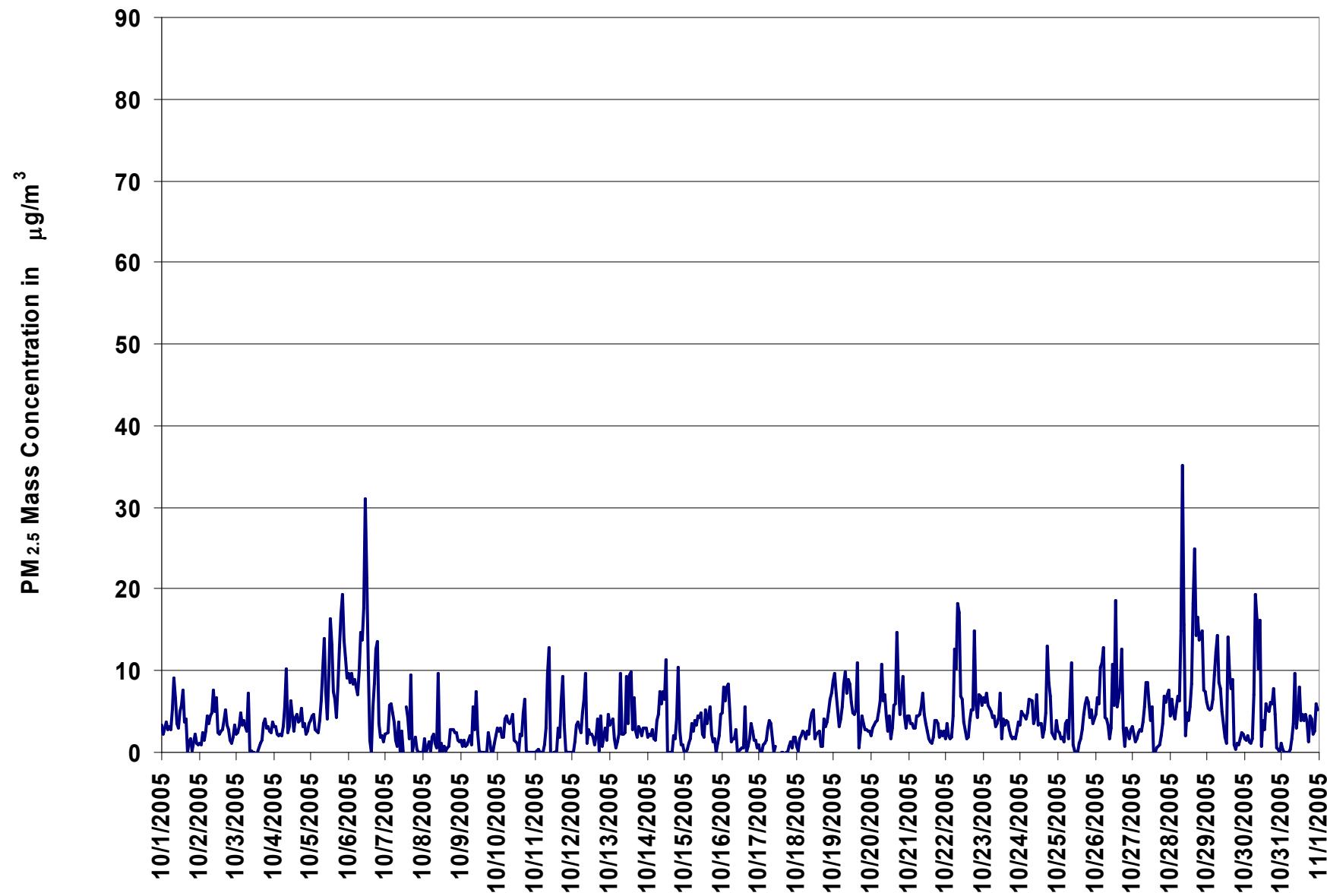


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

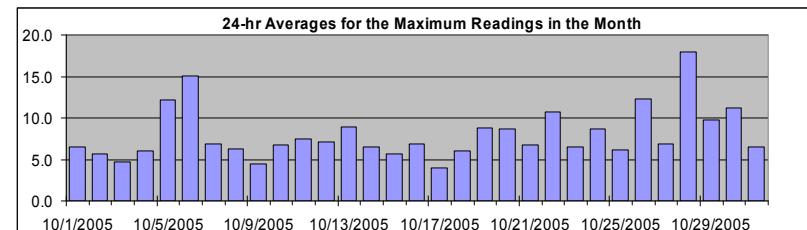
Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	46.2	$\mu\text{g}/\text{m}^3$	28-Oct	8:00 9:00
Maximum 24-hr Value:	17.9	$\mu\text{g}/\text{m}^3$	28-Oct	

### HOURLY MAXIMUM 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

	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		
1-Oct-05	7	5	6	6	5	5	6	8	11	12	6	5	7	9	15	7	10	7	3	3	1	5	4	4	6.5	15.1
2-Oct-05	4	3	4	3	6	6	5	6	6	9	11	9	7	4	4	6	6	9	9	4	3	3	3	3	5.7	10.6
3-Oct-05	3	4	5	7	5	7	5	5	10	6	5	3	2	D	2	4	4	6	6	4	5	4	4	5	4.7	9.6
4-Oct-05	4	4	5	4	4	4	5	8	16	5	6	8	7	5	6	6	7	6	9	6	6	4	5	5	6.0	16.3
5-Oct-05	5	6	7	5	5	4	8	10	20	10	9	13	20	18	9	9	7	17	19	23	22	17	14	12	12.2	23.1
6-Oct-05	12	10	14	11	11	9	14	17	16	31	39	30	18	5	4	24	22	24	23	5	5	5	4	15.0	38.7	
7-Oct-05	6	6	9	8	8	5	3	2	6	4	7	6	D	22	14	5	30	1	3	5	3	1	2	1	6.9	30.0
8-Oct-05	2	7	3	4	5	1	10	10	3	3	21	2	15	14	11	2	3	4	5	5	4	6	3	4	6.2	21.5
9-Oct-05	4	4	3	3	3	3	5	3	13	10	13	5	2	3	4	1	1	2	7	7	2	2	3	6	4.5	13.2
10-Oct-05	5	7	6	4	4	8	6	8	9	8	7	7	4	3	6	4	23	28	3	2	1	8	1	1	6.8	28.4
11-Oct-05	1	3	3	0	2	3	3	7	26	21	9	D	2	2	8	16	12	11	22	8	3	2	4	3	7.4	25.8
12-Oct-05	3	2	6	7	9	11	14	11	18	12	5	4	4	6	4	5	6	2	14	5	6	6	3	8	7.1	18.0
13-Oct-05	6	5	8	4	2	5	11	16	6	5	8	19	12	29	30	6	10	8	3	5	5	3	4	4	9.0	29.8
14-Oct-05	3	4	3	5	5	5	9	9	13	9	12	9	18	2	3	3	4	5	6	18	4	2	3	3	6.5	18.2
15-Oct-05	1	2	3	5	6	7	6	7	5	6	7	9	7	7	11	7	9	7	4	5	1	3	5	6	5.7	10.6
16-Oct-05	8	10	9	10	12	7	3	3	7	8	5	4	3	4	3	38	2	3	3	6	5	6	4	2	6.9	38.0
17-Oct-05	4	3	3	3	3	4	7	8	5	2	3	C	C	C	0	20	D	0	1	2	2	2	5	4	4.0	19.9
18-Oct-05	2	2	3	3	4	4	4	4	4	6	7	8	5	11	11	9	4	5	10	5	7	8	10	6.0	11.2	
19-Oct-05	12	11	10	10	6	7	12	13	12	14	12	13	10	7	9	19	5	4	6	5	4	4	4	8.8	18.6	
20-Oct-05	3	5	4	7	5	6	8	15	8	14	7	5	13	6	7	9	8	21	15	8	17	7	4	6	8.6	20.7
21-Oct-05	8	6	6	6	5	7	10	9	10	15	9	4	6	5	3	3	4	10	7	8	6	6	4	5	6.7	14.6
22-Oct-05	4	9	5	5	7	8	20	14	25	24	10	9	7	3	3	8	8	11	35	8	9	10	9	7	10.7	34.8
23-Oct-05	9	8	9	8	8	7	7	8	5	7	16	4	7	6	6	5	4	4	4	3	3	6	6	6.5	15.6	
24-Oct-05	5	7	8	6	7	10	10	7	7	9	8	6	5	4	5	15	19	18	19	10	5	3	7	8.7	19.5	
25-Oct-05	4	6	5	6	4	5	6	5	20	19	5	2	1	1	3	3	5	6	7	8	7	6	7	6.1	20.0	
26-Oct-05	6	9	8	14	15	21	10	8	6	4	9	20	21	33	12	16	32	18	10	2	8	5	3	5	12.3	32.8
27-Oct-05	4	5	4	4	5	5	11	17	11	15	8	6	8	1	1	3	4	4	7	9	8	9	11	6.9	17.3	
28-Oct-05	8	8	7	6	9	10	10	25	46	41	9	9	6	12	14	37	42	21	28	17	18	28	10	11	17.9	46.2
29-Oct-05	8	7	7	8	8	13	17	19	12	10	12	4	6	27	19	14	22	3	1	2	3	3	4	5	9.7	26.7
30-Oct-05	3	3	4	2	3	3	14	27	23	30	34	12	17	7	15	11	12	13	10	12	8	3	1	3	11.2	33.6
31-Oct-05	3	3	2	1	1	3	4	8	22	7	8	14	7	8	6	9	6	3	9	8	5	4	10	9	6.5	22.4

Hourly Avg	5.2	5.6	5.7	5.6	5.8	6.5	8.1	10.0	13.1	11.3	10.3	9.4	8.8	9.9	8.0	9.4	10.9	9.1	9.8	7.5	6.6	5.8	5.1	5.6
Hourly Max	11.6	11.2	14.1	13.9	15.1	21.2	19.7	27.3	46.2	40.5	33.6	38.7	29.5	32.8	29.8	38.0	42.4	28.4	34.8	23.1	21.6	28.3	14.4	12.1

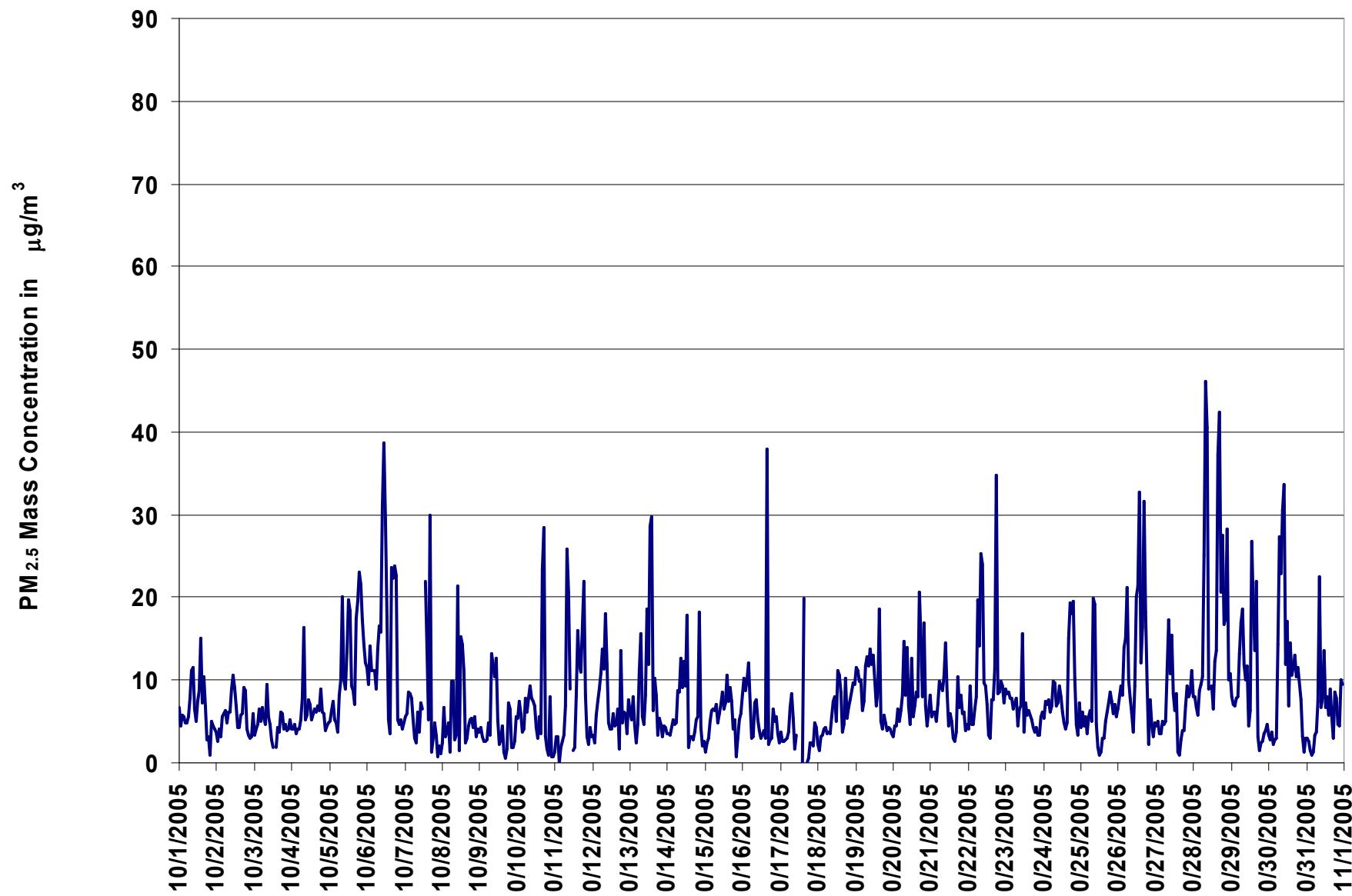
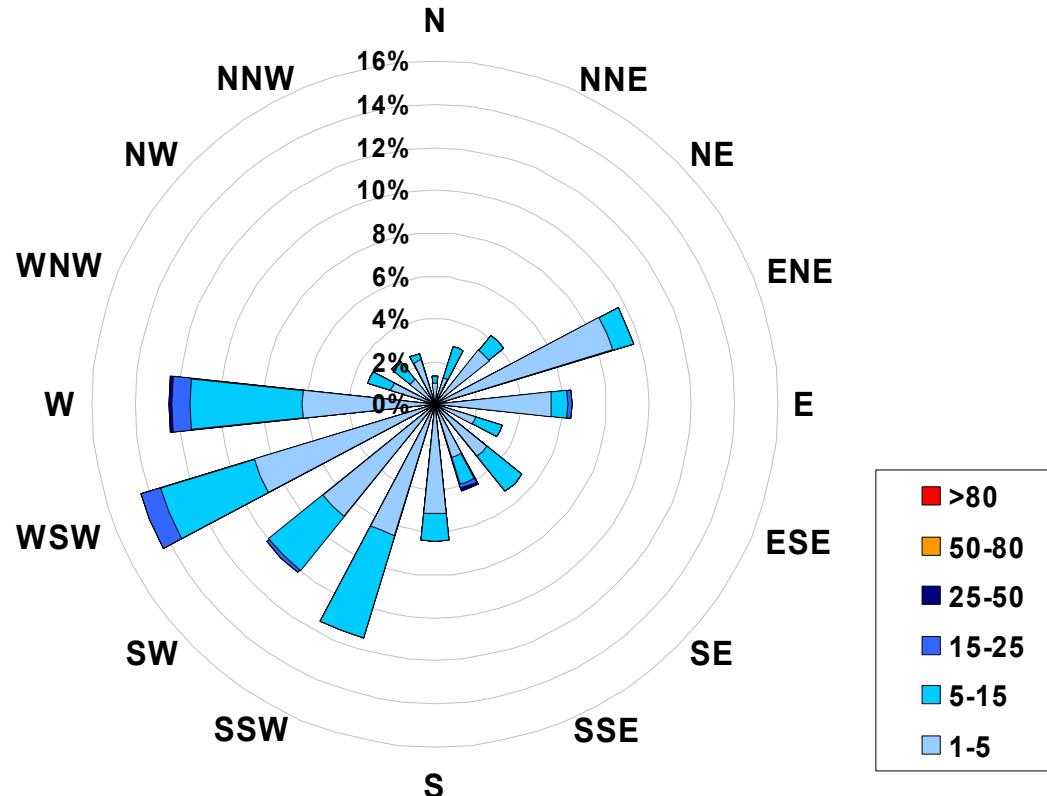


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

**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 October 2005**



Calms: 0%

Frequency Distribution of PM<sub>2.5</sub> in µg/m<sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	530
5	to	15	190
15	to	25	15
25	to	50	2
50	to	80	0
	>	80	0
Total Non-Zero Values			737

## PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

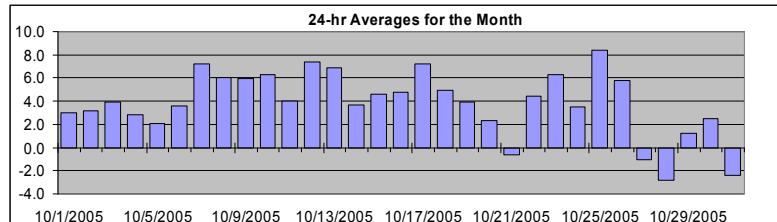
### Summary

Maximum 1-hr Average:	22.9	°C	25-Oct	15:00 16:00
Maximum 24-hr Value:	8.4	°C	25-Oct	

AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	15.2	12.1	7.6	4.1	0.0	-5.0	-7.5	3.8 °C

### 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 Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Oct-05	0	-1	-2	-1	-1	-2	-2	-2	-1	3	4	6	8	8	7	6	8	9	7	5	4	4	3	3	3	3.0	8.9
2-Oct-05	2	1	0	0	-1	0	1	1	2	3	5	6	7	8	8	8	8	8	6	3	2	0	-1	-2	3.1	8.1	
3-Oct-05	-2	-3	-3	-3	-2	-2	-2	-1	1	3	5	8	9	10	11	10	9	9	8	7	6	6	6	6	3.9	10.5	
4-Oct-05	5	3	1	-1	-2	-3	-3	-3	0	4	6	5	7	9	10	11	11	9	5	2	0	-1	-2	-3	2.9	10.7	
5-Oct-05	-3	-3	-2	-2	-3	-4	-4	-4	-3	0	3	4	6	8	9	9	9	8	7	7	5	2	1	-1	2.0	9.0	
6-Oct-05	-2	-2	-2	-3	-3	-3	-4	-3	-1	1	2	4	7	9	13	15	16	14	12	7	4	3	2	2	3.6	15.6	
7-Oct-05	2	2	3	4	5	5	6	5	6	7	8	9	12	12	13	12	12	11	9	8	7	7	5	4	7.2	12.5	
8-Oct-05	1	0	0	0	1	5	3	2	4	6	9	10	12	12	13	13	12	11	9	7	6	5	1	1	6.0	13.0	
9-Oct-05	-1	-2	-3	-3	-4	-4	-4	-4	-2	4	7	10	12	14	14	15	14	13	12	11	12	12	11	10	5.9	14.5	
10-Oct-05	9	6	4	2	1	0	1	2	4	7	8	10	11	11	11	12	12	12	7	6	6	6	6	5	6.3	11.9	
11-Oct-05	4	3	2	-1	-2	-3	-3	-2	-1	3	7	10	11	11	11	12	12	12	10	5	2	1	0	1	4.0	12.4	
12-Oct-05	3	5	6	5	4	4	3	3	4	7	9	10	12	13	13	13	12	12	9	7	8	7	4	4	7.4	13.2	
13-Oct-05	3	3	4	4	4	2	1	3	6	7	9	11	12	12	12	11	10	9	7	6	6	5	4	6.9	12.0		
14-Oct-05	4	3	3	1	-1	-3	-4	-4	-3	0	4	6	7	8	8	8	8	8	7	7	6	4	4	4	3.7	8.4	
15-Oct-05	4	4	4	3	2	2	3	3	3	3	4	5	6	7	7	8	8	8	7	6	5	5	5	4	4.6	7.6	
16-Oct-05	4	4	3	4	4	3	2	2	3	6	7	7	7	8	8	8	8	8	7	6	5	4	4	4	4.8	8.1	
17-Oct-05	4	4	4	4	4	4	4	4	5	7	8	10	11	12	12	11	10	10	9	8	7	6	5	7.2	12.0		
18-Oct-05	4	3	3	3	3	3	3	2	2	4	8	11	13	14	14	14	14	10	5	2	0	-1	-2	4.9	14.3		
19-Oct-05	-2	-2	-1	0	1	1	1	2	2	2	3	4	5	6	7	8	10	11	9	7	6	5	4	3	3.9	10.9	
20-Oct-05	2	1	2	2	1	1	1	0	0	3	4	6	7	8	8	9	9	9	6	1	-2	-3	-4	-4	2.3	9.0	
21-Oct-05	-5	-6	-6	-7	-7	-7	-8	-8	-7	-1	1	2	4	6	7	7	6	5	3	3	2	2	0	-1	-0.6	7.0	
22-Oct-05	-1	0	0	-1	-2	-2	-3	-3	-2	1	4	6	8	11	11	12	12	11	9	9	8	7	6	6	4.4	11.9	
23-Oct-05	6	5	5	5	6	5	6	5	5	6	7	8	9	10	11	10	8	7	5	4	3	1	0	6.3	11.0		
24-Oct-05	-1	-1	-1	-1	0	0	0	0	0	1	3	7	8	10	12	12	11	9	6	4	2	2	0	0	3.5	12.5	
25-Oct-05	0	0	0	-1	-2	-1	-2	-2	4	13	17	19	21	22	23	21	15	12	11	11	11	8	5	8.4	22.9		
26-Oct-05	5	5	5	5	6	11	9	8	7	7	8	9	9	10	10	9	6	5	5	2	-2	-3	-4	5.8	10.9		
27-Oct-05	-4	-5	-5	-6	-6	-6	-7	-7	-7	-3	2	4	7	9	10	9	6	3	-1	-2	-3	-4	-5	-1.1	10.0		
28-Oct-05	-6	-7	-7	-8	-8	-9	-9	-10	-9	-5	0	1	4	4	4	4	3	2	0	0	-1	-2	-3	-2.8	4.1		
29-Oct-05	-5	-6	-7	-7	-7	-7	-5	-6	-6	-2	3	7	9	10	10	9	8	6	5	5	4	4	4	1.3	9.8		
30-Oct-05	3	1	1	1	1	1	0	-1	1	3	6	7	8	9	9	8	6	2	0	-1	0	-2	-3	2.5	9.2		
31-Oct-05	-4	-5	-6	-6	-5	-5	-4	-4	-3	-2	-1	-1	-1	0	1	2	3	0	-1	-2	-3	-4	-3	-2.4	2.5		
Hourly Avg	0.9	0.4	0.1	-0.3	-0.4	-0.4	-0.6	-0.7	0.3	2.7	5.2	7.0	8.5	9.6	10.2	10.4	10.0	8.3	6.1	4.8	3.8	2.9	1.9	1.3			
Hourly Max	8.9	6.4	5.9	5.5	6.5	10.9	9.0	7.6	6.7	7.5	12.7	16.7	19.2	21.0	22.3	22.9	21.1	15.3	12.0	11.4	11.9	11.6	10.8	9.7			

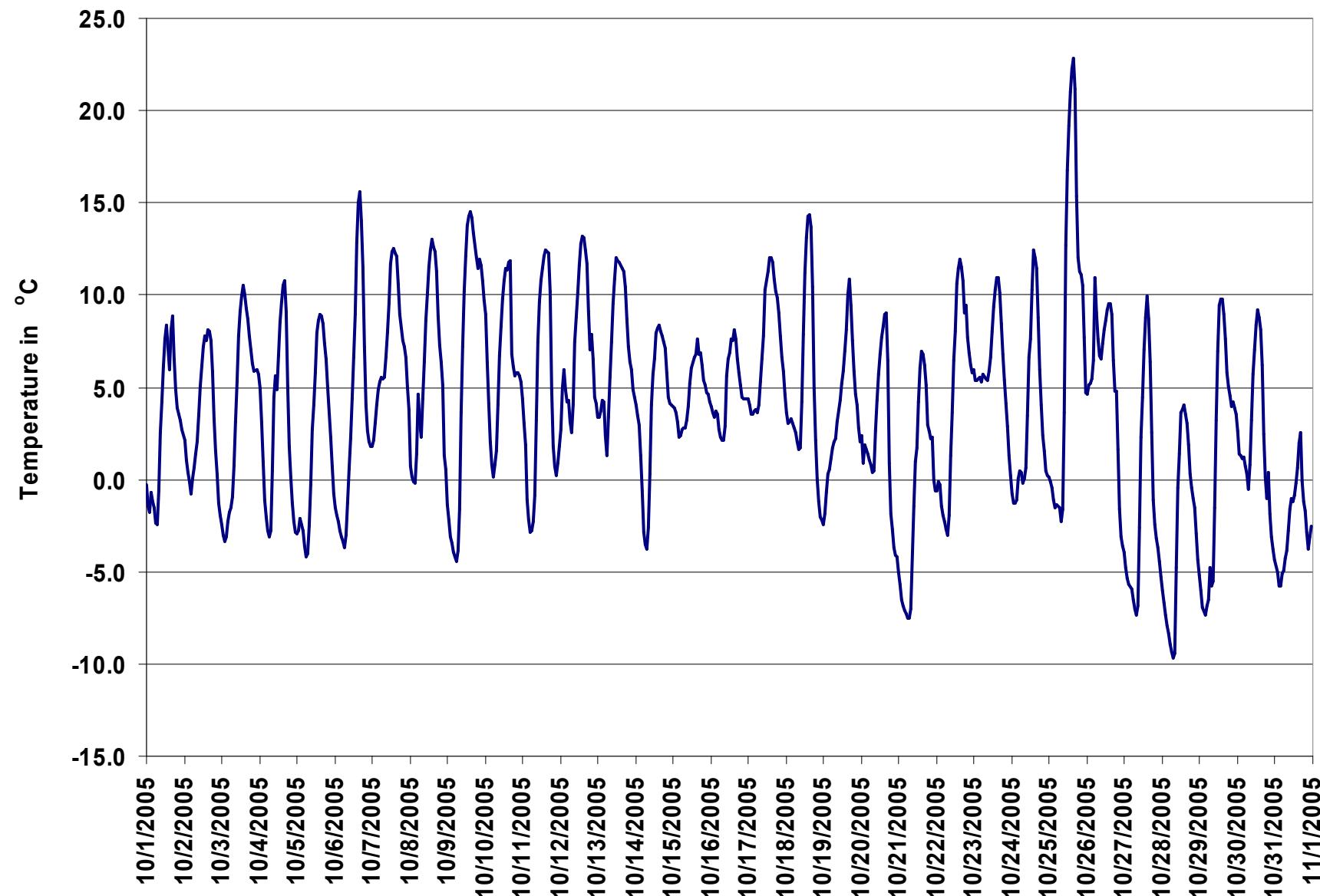


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

## PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

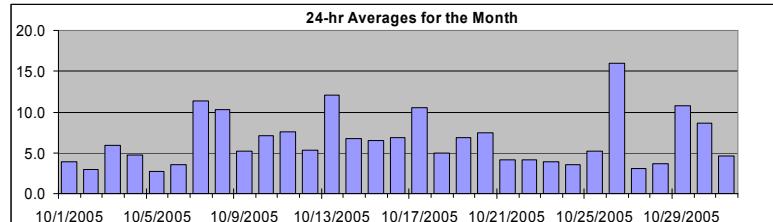
### Summary

Maximum 1-hr Average:	33.1	km/hr	26-Oct	12:00 13:00
Maximum 24-hr Value:	16.0	km/hr	26-Oct	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageS	
	26.2	18.1	7.9	4.7	3.0	1.9	1.5		6.5 km/hr

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

Day	Mountain Standard Time																									24-hr Scalar Average	Daily Max
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Oct-05	3	3	3	3	2	2	2	2	3	3	5	5	5	6	7	7	5	5	7	4	2	2	3	2	3	3.9	6.9
2-Oct-05	2	2	2	1	2	2	3	2	2	2	4	5	6	6	6	6	4	3	3	3	2	3	3	2	3	3.0	6.4
3-Oct-05	3	3	2	3	5	3	6	5	6	7	6	7	10	11	10	9	7	6	5	4	5	5	5	6	5.9	11.1	
4-Oct-05	6	5	6	5	5	2	3	4	6	4	6	7	5	6	6	5	6	5	3	5	4	4	3	4	4.7	6.9	
5-Oct-05	2	5	4	2	2	2	4	2	2	3	4	5	4	4	4	4	2	2	2	3	4	2	2	2	2.8	4.7	
6-Oct-05	3	2	2	2	2	2	2	2	2	2	2	2	3	4	4	4	6	4	11	9	6	4	3	2	3	3.5	11.5
7-Oct-05	2	3	4	5	7	10	8	5	7	9	12	13	22	24	26	23	23	13	10	8	13	12	7	7	11.4	25.7	
8-Oct-05	4	5	4	3	6	12	8	8	11	12	16	13	18	19	18	20	17	13	7	8	8	7	3	6	10.2	19.8	
9-Oct-05	2	5	3	3	2	2	2	2	2	3	3	5	8	7	9	9	8	6	6	5	9	9	8	7	5.2	9.4	
10-Oct-05	7	4	4	4	3	3	4	4	5	7	6	6	5	4	4	3	8	12	10	12	17	15	14	10	7.1	16.7	
11-Oct-05	9	6	5	3	3	3	3	2	3	3	11	17	22	21	19	19	19	12	5	3	3	2	1	2	3	7.5	21.6
12-Oct-05	4	7	8	4	2	3	3	2	3	7	8	8	7	6	7	8	9	6	5	5	6	4	2	3	5.3	9.1	
13-Oct-05	2	3	4	5	6	3	3	10	15	17	20	25	23	26	21	19	18	11	11	10	7	10	9	11	12.0	26.4	
14-Oct-05	12	10	10	6	4	3	3	3	5	4	3	4	5	7	9	10	9	9	9	9	8	6	6	6	6.7	11.7	
15-Oct-05	6	6	3	3	3	4	4	7	7	9	7	8	10	9	8	8	5	8	11	8	5	5	6	5	6.5	11.3	
16-Oct-05	5	4	8	6	8	11	7	7	5	4	7	9	10	10	11	11	6	5	4	6	7	6	5	6	6.9	11.1	
17-Oct-05	3	3	2	2	3	4	3	5	7	10	12	17	18	20	23	23	19	15	18	15	9	8	6	6	10.5	23.3	
18-Oct-05	3	3	4	3	3	3	3	4	4	3	4	7	12	10	14	13	8	4	2	2	2	2	2	3	5.0	14.1	
19-Oct-05	2	3	5	5	3	4	5	5	3	6	6	5	6	7	7	11	17	14	9	11	9	10	5	6	6.9	17.0	
20-Oct-05	6	5	8	9	8	9	8	8	9	11	12	14	12	11	11	10	8	4	2	3	3	3	2	4	7.4	13.5	
21-Oct-05	3	3	3	2	3	2	3	2	3	5	5	4	5	4	6	4	5	5	6	7	5	6	5	4.1	7.2		
22-Oct-05	6	5	3	3	2	3	2	2	2	2	3	4	6	5	4	4	4	11	11	5	4	3	3	4.2	10.6		
23-Oct-05	4	3	4	5	5	5	6	3	3	4	4	6	5	5	6	4	3	3	3	3	2	2	2	3.9	6.2		
24-Oct-05	2	2	3	4	5	4	4	5	4	3	2	4	5	4	5	5	3	3	3	3	3	2	3	3.5	5.2		
25-Oct-05	3	3	2	3	2	5	3	6	4	3	7	9	9	10	10	8	6	5	4	3	5	5	4	5.2	10.4		
26-Oct-05	2	3	4	3	4	26	29	26	29	27	29	32	33	32	26	19	18	9	11	11	4	2	2	3	16.0	33.1	
27-Oct-05	2	3	2	2	2	2	2	3	2	3	2	3	4	5	5	5	4	4	4	3	2	3	2	3.0	5.3		
28-Oct-05	2	3	2	1	1	1	1	2	3	3	5	5	5	6	4	6	4	5	4	7	6	6	4	3.7	6.9		
29-Oct-05	3	2	1	2	2	4	5	4	5	4	5	9	19	24	21	21	18	14	15	14	15	18	16	10.7	24.3		
30-Oct-05	16	13	12	10	12	11	8	9	9	14	13	13	13	16	10	6	3	2	2	3	5	3	4	8.6	15.6		
31-Oct-05	3	2	3	5	4	4	3	3	3	4	4	10	10	12	8	6	4	2	4	4	2	3	5	4.6	11.5		
	1-hr Average	4.2	4.1	4.2	3.8	4.0	4.9	4.8	5.1	5.5	6.4	7.5	9.1	10.4	11.1	10.6	10.0	8.9	6.8	6.2	6.2	5.7	5.5	4.8	4.8		
	Hourly Max	15.6	12.5	11.7	9.6	11.9	25.9	28.6	25.7	28.5	27.0	29.2	32.3	33.1	31.8	25.7	23.4	22.5	14.6	17.7	14.9	16.7	18.1	16.1	17.0		

## PASZA - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

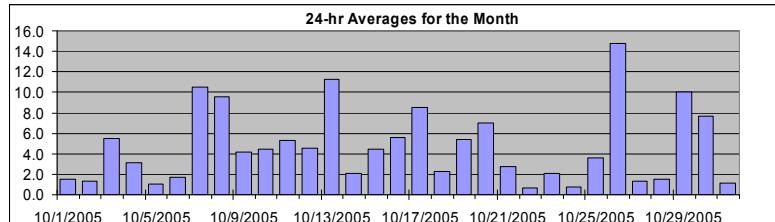
### Summary

Maximum 1-hr Average:	32.8	km/hr	26-Oct	12:00 13:00
Maximum 24-hr Value:	14.7	km/hr	26-Oct	

Calm Time:	61 hrs	8% calms	Operational Time:	683 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	26.2	18.6	8.2	4.5	2.4	1.0	0.8	9.1 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																								24-hr Vector Average	Daily Max
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Oct-05	1	calm	2	2	1	2	calm	2	3	4	4	3	5	6	7	1	3	6	4	2	2	1	calm	1	1.6	6.6
2-Oct-05	calm	calm	1	1	calm	calm	2	1	2	1	3	4	6	5	5	3	2	3	2	1	2	2	1	1	1.3	5.7
3-Oct-05	2	2	1	1	5	2	6	5	6	6	6	6	9	10	10	9	7	6	4	4	5	5	5	6	5.5	10.2
4-Oct-05	6	5	6	5	5	1	2	3	5	4	5	7	3	3	4	2	4	5	3	5	4	4	4	2	3.1	6.8
5-Oct-05	calm	5	4	1	calm	2	1	calm	calm	2	4	4	3	2	3	1	1	calm	3	3	2	1	2	2	1.0	4.6
6-Oct-05	1	calm	1	calm	calm	1	calm	2	1	calm	1	2	4	3	5	3	10	8	6	3	2	1	2	calm	1.7	10.0
7-Oct-05	1	1	3	5	7	10	8	5	7	9	12	13	21	23	25	23	22	13	10	8	13	12	7	7	10.5	25.3
8-Oct-05	4	5	3	2	6	11	7	8	11	12	16	13	17	19	17	19	17	12	7	8	8	7	3	6	9.5	19.4
9-Oct-05	calm	3	2	2	1	1	calm	calm	calm	3	4	7	7	8	9	8	6	5	5	9	9	9	8	7	4.2	9.3
10-Oct-05	6	3	1	4	2	2	1	1	3	7	6	6	4	1	3	2	7	12	10	12	17	15	14	10	4.4	16.6
11-Oct-05	9	5	4	3	1	3	2	1	3	2	11	16	21	20	19	19	12	3	calm	calm	1	1	2	2	5.3	21.1
12-Oct-05	3	7	8	4	calm	2	1	calm	3	7	8	8	7	6	7	8	9	6	4	4	6	3	calm	3	4.5	8.7
13-Oct-05	1	2	3	4	5	1	3	10	15	17	20	24	23	26	21	18	18	11	11	10	6	9	9	9	11.2	26.0
14-Oct-05	12	10	10	6	4	1	1	calm	4	4	1	3	4	6	9	10	9	9	9	9	8	6	6	6	2.1	11.7
15-Oct-05	6	6	3	1	3	3	4	6	7	9	7	8	10	9	8	7	5	7	11	7	5	5	6	5	4.5	11.0
16-Oct-05	3	4	8	6	8	10	7	5	4	2	6	9	9	10	11	10	6	5	4	5	3	6	6	4	5.6	10.8
17-Oct-05	3	1	calm	calm	3	3	3	5	7	10	12	17	17	20	23	23	19	14	18	13	8	7	6	6	8.5	23.0
18-Oct-05	3	2	3	3	3	3	3	4	3	3	3	6	11	10	13	12	8	2	1	1	calm	1	2	calm	2.2	13.4
19-Oct-05	1	3	1	1	2	2	3	4	1	6	5	4	4	7	7	11	17	13	8	11	9	9	5	5	5.4	16.8
20-Oct-05	6	5	8	9	8	9	8	8	9	11	12	13	12	10	10	9	8	4	2	2	3	2	calm	4	7.0	13.3
21-Oct-05	3	3	3	3	2	calm	1	1	calm	2	5	5	1	4	3	5	4	5	4	6	7	4	6	4	2.7	7.2
22-Oct-05	6	5	2	1	1	calm	calm	calm	calm	2	1	1	3	5	4	4	4	2	10	10	2	3	3	2	0.7	10.0
23-Oct-05	4	2	4	5	4	5	6	1	3	2	3	5	5	4	5	6	3	2	2	1	1	1	calm	1	2.0	5.9
24-Oct-05	calm	2	2	3	4	4	3	4	3	2	calm	4	5	3	5	5	2	calm	2	1	2	calm	2	0.8	5.0	
25-Oct-05	1	2	calm	2	1	1	calm	6	1	1	7	9	9	10	9	9	8	6	5	4	3	5	5	3	3.6	10.0
26-Oct-05	1	calm	2	2	2	26	28	26	28	27	29	32	33	31	25	19	17	9	11	11	3	1	1	2	14.7	32.8
27-Oct-05	calm	2	calm	2	2	calm	calm	2	calm	2	1	1	3	4	5	5	4	4	4	2	2	1	1	1	1.3	5.1
28-Oct-05	calm	3	1	1	calm	calm	calm	calm	calm	2	2	3	4	5	4	5	3	5	4	7	6	6	3	1	1.5	6.9
29-Oct-05	2	2	calm	1	1	2	4	3	5	3	4	9	19	24	20	21	18	13	15	14	15	18	16	17	10.1	24.1
30-Oct-05	15	12	12	10	12	11	7	9	9	14	13	13	12	15	9	5	1	1	1	3	5	3	3	2	7.7	15.5
31-Oct-05	2	1	2	4	4	4	3	2	2	3	3	10	10	11	8	6	4	1	4	2	calm	2	4	2	1.1	11.4
1-hr Vector	0.9	1.5	0.9	1.3	1.9	2.5	2.6	2.0	3.3	4.2	5.0	6.4	6.9	6.5	5.8	5.4	4.8	2.5	2.6	2.6	2.3	2.1	1.9	1.4		
Hourly Max	15.5	12.5	11.6	9.6	11.8	25.6	28.3	25.5	28.3	26.8	28.8	32.1	32.8	31.5	25.3	23.0	22.2	14.5	17.6	13.6	16.6	18.0	15.9	16.9		

## PASZA - Evergreen Park Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary													

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs									
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%									
<b>Percentile</b>			Average										
99	95	75	50	25	5	1							
341.6	306.4	253.8	203.3	107.5	49.1	14.7							
			242 deg										

#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	WD Sector
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-05	99	281	196	327	234	216	76	169	204	242	276	173	167	134	145	28	108	120	141	141	82	343	225	64	154	SSE	
2-Oct-05	79	112	250	200	93	141	69	83	77	140	222	240	216	221	218	207	179	102	62	189	87	47	62	140	169	S	
3-Oct-05	41	25	52	41	73	73	69	79	75	104	88	99	99	95	93	103	107	129	126	103	91	84	103	100	92	E	
4-Oct-05	97	81	81	69	72	70	38	67	63	77	151	217	223	83	349	184	123	91	49	77	105	77	78	70	89	E	
5-Oct-05	62	66	70	83	224	66	108	237	172	81	143	196	158	164	145	40	38	301	294	253	241	130	196	203	141	SE	
6-Oct-05	91	214	25	232	31	83	105	344	286	227	273	269	268	232	173	190	254	269	263	215	44	84	200	229	242	WSW	
7-Oct-05	227	69	199	233	253	250	243	213	205	238	248	242	264	274	271	271	274	279	253	256	249	247	244	229	256	WSW	
8-Oct-05	197	217	182	174	221	237	233	225	239	247	255	262	264	266	275	272	271	274	261	256	258	249	219	221	253	WSW	
9-Oct-05	357	181	91	78	157	218	125	9	132	177	150	148	135	136	140	139	161	190	210	182	198	192	186	178	164	SSE	
10-Oct-05	178	190	100	57	13	350	333	81	333	327	328	332	313	2	320	243	281	290	243	247	248	254	261	279	279	W	
11-Oct-05	267	300	314	132	132	62	106	169	171	168	250	260	262	255	255	253	266	265	103	168	139	186	141	149	250	WSW	
12-Oct-05	166	175	178	194	217	160	240	152	193	190	193	193	193	185	183	208	221	180	185	234	254	307	357	253	199	SSW	
13-Oct-05	202	203	232	242	232	54	243	252	246	252	264	268	274	264	277	277	273	291	302	284	293	254	244	245	265	W	
14-Oct-05	246	241	250	262	251	97	139	8	185	200	262	185	137	67	66	76	66	82	77	80	111	93	65	63	103	ESE	
15-Oct-05	64	59	47	214	221	257	238	229	260	268	269	242	264	269	266	324	293	318	336	328	297	285	284	280	283	WNW	
16-Oct-05	281	240	224	258	263	243	254	262	268	275	280	275	274	260	251	233	197	172	176	176	159	183	186	187	240	WSW	
17-Oct-05	316	239	99	126	177	193	208	228	239	241	245	251	255	272	268	265	271	269	260	294	321	322	335	66	266	W	
18-Oct-05	94	119	141	133	133	137	124	177	174	233	210	210	269	284	273	281	298	320	224	171	276	22	243	18	249	WSW	
19-Oct-05	237	218	5	175	339	299	212	273	236	206	261	194	249	204	213	256	276	295	279	273	266	284	283	305	262	W	
20-Oct-05	283	258	269	276	279	272	264	264	268	265	267	260	261	250	259	261	268	262	183	214	214	308	90	208	263	W	
21-Oct-05	201	198	184	185	188	185	201	82	86	208	54	52	105	68	61	72	57	73	54	70	68	81	66	84	E		
22-Oct-05	66	70	63	91	236	246	221	122	268	225	227	310	51	55	54	50	43	77	306	318	192	222	211	269	2	N	
23-Oct-05	255	202	251	266	218	198	200	80	148	193	163	196	198	159	139	154	116	66	52	89	45	45	340	251	179	S	
24-Oct-05	319	240	226	267	249	245	235	210	201	199	359	59	62	62	71	68	133	158	163	88	87	73	58	157	142	SE	
25-Oct-05	37	60	76	15	294	167	243	62	77	146	178	169	171	171	170	163	155	108	133	145	143	152	121	67	146	SE	
26-Oct-05	24	25	78	203	322	263	247	243	243	241	249	245	246	249	249	254	248	255	229	225	218	344	134	212	247	WSW	
27-Oct-05	249	168	30	196	205	20	218	83	194	18	20	340	75	47	60	53	57	72	65	11	13	326	272	190	50	NE	
28-Oct-05	28	213	201	197	224	111	236	122	160	91	93	126	137	202	314	279	308	296	275	258	254	257	227	207	232	SW	
29-Oct-05	198	196	55	202	206	260	264	209	191	206	202	203	237	250	262	260	238	226	229	224	223	233	235	246	236	SW	
30-Oct-05	224	215	226	236	234	239	254	252	246	249	259	247	258	263	277	280	272	147	136	215	232	181	180	78	242	WSW	
31-Oct-05	69	76	79	68	66	42	42	64	125	89	204	219	251	249	248	248	228	197	186	156	115	69	192	15	203	SSW	

Hourly Avg 224 198 198 219 234 242 234 227 227 234 245 238 245 249 254 256 256 262 250 244 232 247 223 222

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

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms Operational Time: 744 hrs						
Calibration Time: 0 hrs AMD Operational Uptime: 100.0%						
Percentile 99 95 75 50 25 5 1 69.8 60.1 38.1 19.7 10.5 5.6 4.3						

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

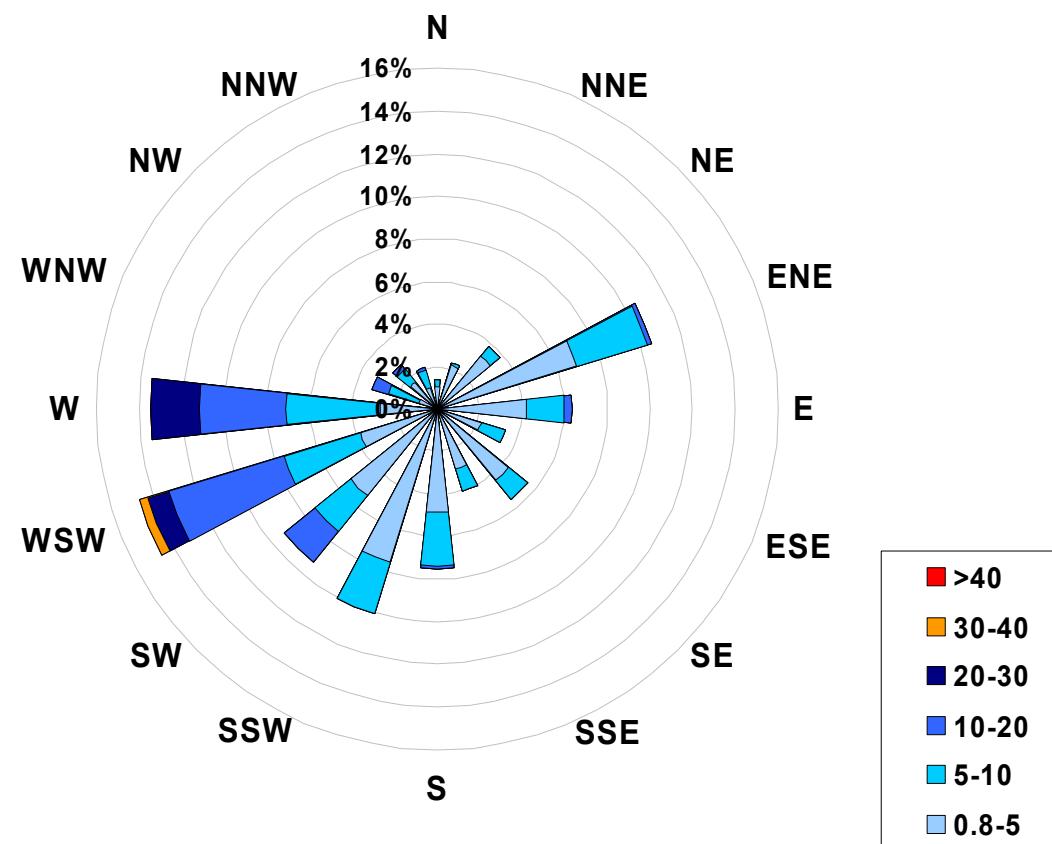
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Oct-05	63	56	52	51	57	28	57	37	13	25	24	35	31	17	17	36	30	17	15	24	25	50	35	37	63.3
2-Oct-05	59	54	27	28	10	55	19	48	26	55	30	20	23	24	25	41	28	12	29	40	41	36	37	27	58.8
3-Oct-05	26	15	29	22	22	13	7	8	14	19	27	35	26	21	20	16	16	18	18	10	9	11	14	11	35.0
4-Oct-05	8	7	6	4	5	54	17	16	7	38	26	9	50	38	53	68	34	15	9	6	14	8	22	7	68.1
5-Oct-05	55	10	17	33	40	43	49	51	36	28	30	36	45	63	40	64	35	41	13	12	26	31	16	34	64.4
6-Oct-05	66	48	53	45	49	35	64	54	28	66	41	38	20	24	25	47	28	16	8	17	34	39	33	37	66.5
7-Oct-05	38	49	30	17	9	4	5	11	5	8	7	10	12	12	9	10	10	10	5	5	4	6	11	10	48.6
8-Oct-05	12	17	35	41	24	6	26	7	6	7	9	14	16	12	15	11	10	8	6	7	6	10	25	10	40.6
9-Oct-05	48	30	43	48	29	27	36	58	45	62	46	48	23	24	23	16	15	10	20	27	6	6	5	10	62.1
10-Oct-05	9	31	41	14	19	49	59	60	61	22	20	19	35	64	32	37	33	15	10	8	6	5	8	10	63.5
11-Oct-05	9	17	18	43	34	40	30	56	41	44	10	10	11	14	11	8	12	29	67	49	36	25	51	33	66.7
12-Oct-05	19	8	7	14	52	58	38	59	33	7	5	7	10	14	13	5	12	7	35	20	12	25	67	19	67.4
13-Oct-05	48	19	15	17	35	59	26	6	4	6	9	9	9	11	11	9	13	11	11	12	11	7	5	5	58.7
14-Oct-05	5	6	5	10	22	47	70	65	28	19	41	29	28	20	15	11	13	11	11	14	15	14	12	10	69.6
15-Oct-05	12	8	29	54	12	37	19	10	9	7	13	13	12	20	19	27	15	14	12	13	14	11	13	15	54.4
16-Oct-05	38	10	6	19	7	4	12	23	29	38	25	18	17	17	13	16	12	10	12	13	30	16	7	55	54.6
17-Oct-05	43	54	56	70	21	10	10	9	5	6	6	8	9	9	7	7	7	7	6	16	13	14	12	18	69.9
18-Oct-05	27	33	25	35	25	24	41	17	20	20	35	22	15	19	17	12	15	46	60	62	39	56	37	35	62.0
19-Oct-05	61	44	58	33	55	50	44	25	64	15	18	21	36	10	9	9	9	13	10	10	7	20	16	14	64.2
20-Oct-05	12	13	8	10	10	10	8	7	6	9	10	11	16	20	15	14	16	14	12	31	16	26	60	11	60.2
21-Oct-05	8	16	11	26	24	30	28	27	60	22	45	17	60	45	47	20	27	27	14	7	5	16	10	9	60.4
22-Oct-05	9	13	63	50	45	55	56	71	62	48	60	64	53	25	22	25	34	33	11	15	47	39	45	54	71.5
23-Oct-05	20	49	16	10	11	12	17	59	50	68	18	14	17	33	19	17	29	37	26	30	46	55	33	45	67.7
24-Oct-05	76	41	39	19	19	21	36	50	25	53	58	27	16	27	19	17	59	61	54	56	38	50	38	42	76.1
25-Oct-05	63	54	71	48	25	30	59	13	51	41	12	11	15	15	15	18	15	7	19	14	11	9	16	27	71.4
26-Oct-05	62	75	51	33	48	8	7	7	7	9	7	7	8	9	10	7	5	7	7	29	54	46	33	74.5	
27-Oct-05	45	44	54	36	15	37	40	49	32	32	79	72	48	30	34	10	6	6	9	26	52	37	37	53	78.6
28-Oct-05	55	8	43	19	34	53	50	45	61	57	51	53	37	21	30	15	20	16	16	7	9	9	19	65	64.5
29-Oct-05	38	39	50	38	57	24	25	44	11	47	30	9	10	8	9	7	6	4	4	5	4	5	7	6	57.0
30-Oct-05	5	5	5	5	6	4	10	5	5	5	8	10	11	12	13	17	32	42	28	39	12	30	41	48	47.7
31-Oct-05	66	42	32	26	10	10	23	20	51	34	22	8	9	6	7	11	6	46	24	45	77	56	38	45	76.8

Hourly Max 76 75 71 70 57 59 70 71 64 68 79 72 60 64 53 68 59 61 67 62 77 56 67 65

**1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for  
October 2005**



**Calms:** 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	406
5	to	10	210
10	to	20	100
20	to	30	25
30	to	40	3
	>	40	0
Total Non-Zero Values			744

# PASZA - Smoky Heights

## Monthly Summary Tables, Graphs, and Roses

## PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

**Summary**

Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	7.0 ppb	7-Oct	23:00 0:00
Maximum 24-hr Average:	1.3 ppb	8-Oct	

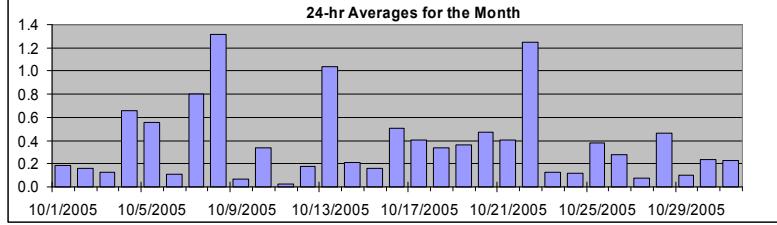
AIC Time:	33 hrs	Operational Time:	708 hrs							
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%							
Percentile	99 3.4	95 1.3	75 0.5	50 0.2	25 0.0	5 0.0	1 0.0	Average 0.4 ppb		

**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-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
2-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.4	
3-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.6	
4-Oct-05	1:00 2:00	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.0	
5-Oct-05	1:00 2:00	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	A	0	0	0	0	0	1	1	0.6	1.0		
6-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.3		
7-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	2	2	0	3	0.8	7.0		
8-Oct-05	1:00 2:00	1	0	1	0	0	0	1	0	1	7	4	2	A	1	0	0	1	4	1	1	3	2	1	0	1.3	6.9	
9-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.3		
10-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	2	1	1	0.3	1.7	
11-Oct-05	0:00 1:00	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	0.4		
12-Oct-05	0:00 1:00	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
13-Oct-05	0:00 1:00	0	0	0	0	1	0	A	0	1	C	C	C	A	6	1	1	1	3	0	1	2	1	1	1	1.0	6.0	
14-Oct-05	0:00 1:00	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.9	
15-Oct-05	0:00 1:00	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.8	
16-Oct-05	0:00 1:00	0	0	0	A	0	0	0	0	1	2	2	1	1	0	1	1	1	0	0	0	0	0	0	0	0.5	2.0	
17-Oct-05	0:00 1:00	0	0	A	0	0	0	0	0	1	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	3.5	
18-Oct-05	0:00 1:00	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0.3	1.2	
19-Oct-05	0:00 1:00	A	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0.4	0.8	
20-Oct-05	0:00 1:00	0	0	1	1	1	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0.5	1.8	
21-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	1	1	0	0	A	1	1	0.4	1.0		
22-Oct-05	1:00 2:00	1	2	4	3	2	2	1	1	1	1	1	1	1	1	0	1	1	1	A	0	0	0	0	0	1.2	3.8	
23-Oct-05	0:00 1:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.6	
24-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0.1	0.5	
25-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	2	1	1.4	1.6	
26-Oct-05	1:00 2:00	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0.3	1.2	
27-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0.1	0.5	
28-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	A	1	1	1	0	0	0	0	0.5	1.6	
29-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.8	
30-Oct-05	0:00 1:00	0	0	0	1	0	0	0	0	0	1	1	0	A	0	0	1	1	0	1	0	0	0	0	0	0.2	1.2	
31-Oct-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	2	0	0	0	0	0	0	0	0	0.2	1.7

### 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

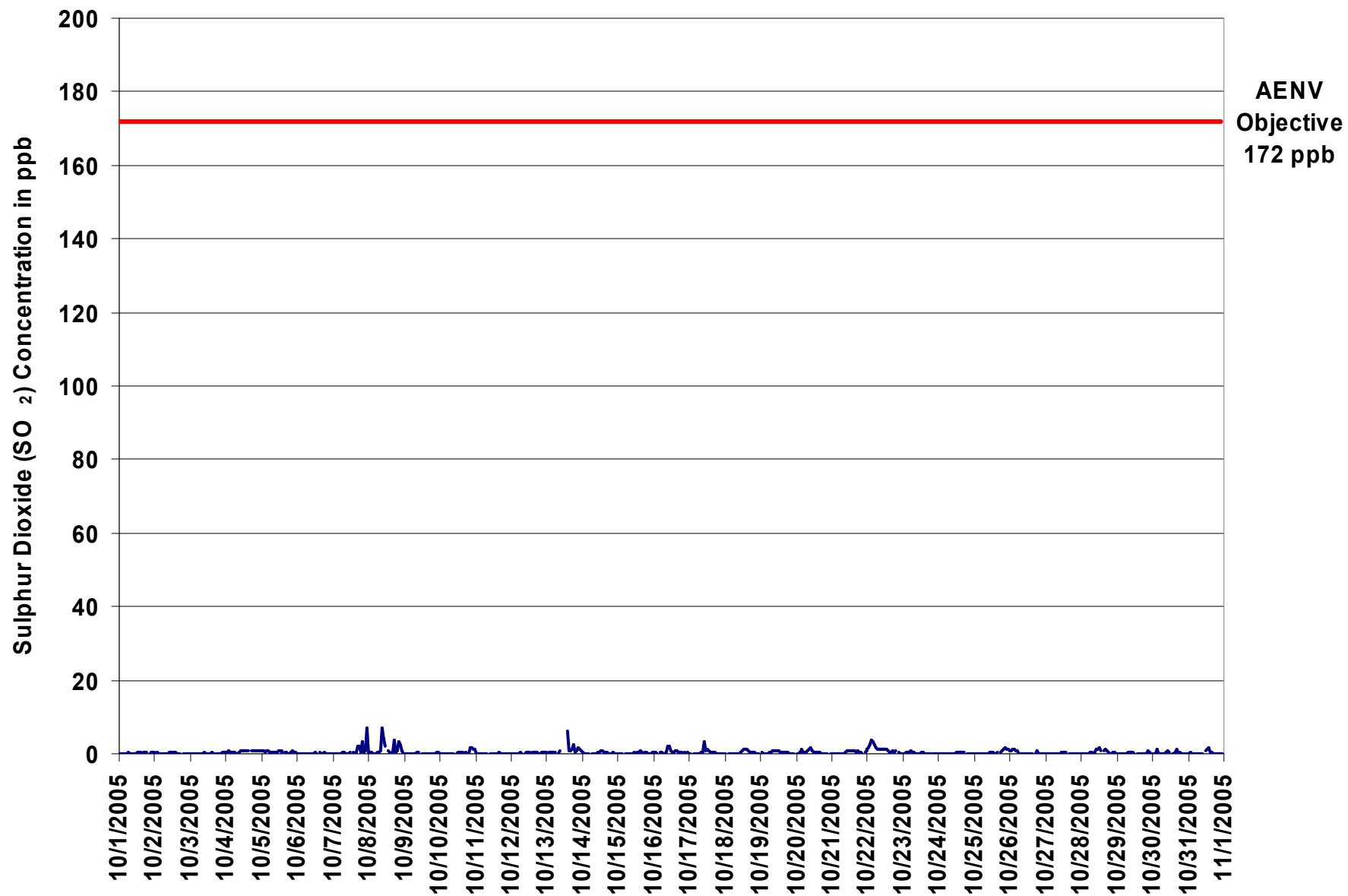


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY MAXIMUM TABLE

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

#### Summary

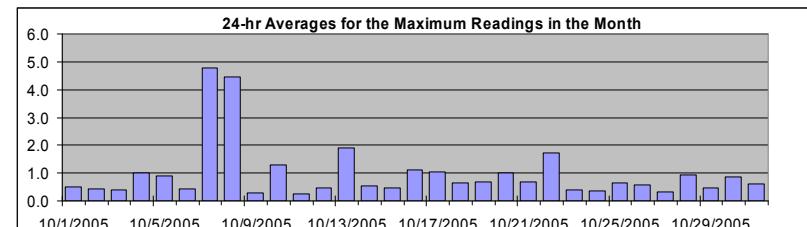
Maximum 1-hr Value:	52.6 ppb	7-Oct 23:00 0:00
Maximum 24-hr Value:	4.8 ppb	7-Oct

AIC Time:	33 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 8.3	95 2.7	75 0.9	50 0.5	25 0.3	5 0.0	1 0.0	Average 1.0 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-hour Average	Daily Maximum	
1-Oct-05	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	1	1	1	A	1	0	1	1	0.5	0.8
2-Oct-05	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0.4	0.6	
3-Oct-05	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1	0	A	0	0	0	1	1	0.4	0.8	
4-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	1	1	1	1	1.0	1.7	
5-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	1	1	0.9	1.4	
6-Oct-05	1	0	0	1	1	0	0	1	1	0	0	0	0	1	1	A	1	1	1	1	1	0	1	1	0	0.4	0.6	
7-Oct-05	0	0	0	1	1	1	1	1	1	0	0	0	1	1	A	1	1	1	1	10	6	1	19	1	10	53	4.8	52.6
8-Oct-05	3	1	3	2	0	0	1	1	2	25	8	7	A	6	2	0	2	15	2	2	8	7	3	1		4.4	25.0	
9-Oct-05	1	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0.3	0.6	
10-Oct-05	1	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	0	1	1	0	5	6	6	1.3	5.9	
11-Oct-05	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.4	
12-Oct-05	0	0	0	0	0	0	0	0	0	A	0	1	0	1	0	1	0	0	1	0	0	0	0	1	1	0.5	0.9	
13-Oct-05	1	1	0	0	1	1	1	A	0	2	C	C	A	7	2	2	3	5	1	2	3	3	3	3	1.9	6.6		
14-Oct-05	1	0	0	0	1	A	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0.5	1.3	
15-Oct-05	0	0	0	0	A	0	0	0	0	0	0	0	1	0	1	1	1	1	0	1	1	1	1	0	0	0.5	1.3	
16-Oct-05	1	1	1	A	1	1	0	1	3	5	3	2	1	1	1	1	1	1	1	1	1	1	1	0	1	1.1	4.8	
17-Oct-05	0	0	A	0	0	0	0	0	1	1	10	1	2	1	1	1	1	1	0	1	1	1	0	0	0	1.1	9.7	
18-Oct-05	0	A	1	0	0	0	0	0	0	0	0	0	1	1	2	2	1	1	1	1	1	1	1	0	0	0.7	1.6	
19-Oct-05	A	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.7	1.4	
20-Oct-05	0	1	2	2	3	1	1	1	1	3	3	1	1	1	1	1	1	1	0	0	0	0	A	0	1	1.0	3.5	
21-Oct-05	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	0.7	1.4
22-Oct-05	1	2	3	5	4	3	2	2	1	1	2	2	2	1	1	1	1	2	1	1	A	1	0	0	1.7	4.6		
23-Oct-05	0	0	1	0	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0.4	0.8		
24-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	0	0	0	0	0	0.4	1.0	
25-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	A	1	1	2	2	2	0.6	2.0		
26-Oct-05	1	1	2	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	A	0	2	0	0	0	0	0.6	2.4	
27-Oct-05	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0.3	0.9	
28-Oct-05	0	0	0	0	0	1	1	2	1	1	2	2	2	2	A	1	2	1	1	1	1	0	0	0	0	0.9	2.0	
29-Oct-05	0	0	0	0	0	1	0	0	0	1	1	1	1	1	1	A	1	1	2	2	1	1	1	0	0	0.5	2.7	
30-Oct-05	0	0	1	2	0	0	0	0	0	1	2	5	1	A	1	1	2	2	2	1	1	1	0	0	0	0.9	4.6	
31-Oct-05	0	1	1	0	0	0	0	1	0	1	0	A	1	2	3	1	1	1	1	0	0	0	0	0	0	0.6	2.8	

Hourly Avg	0.5	0.5	0.6	0.7	0.6	0.5	0.5	0.5	0.7	1.7	1.6	1.1	0.8	1.0	1.0	0.8	0.9	1.6	1.0	0.6	1.5	1.0	1.2	2.4
Hourly Max	2.8	1.7	3.3	4.6	3.8	3.2	2.2	2.0	3.0	25.0	9.7	7.4	2.1	6.2	6.6	1.7	2.4	15.1	5.9	2.1	19.4	7.0	10.3	52.6



#### 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

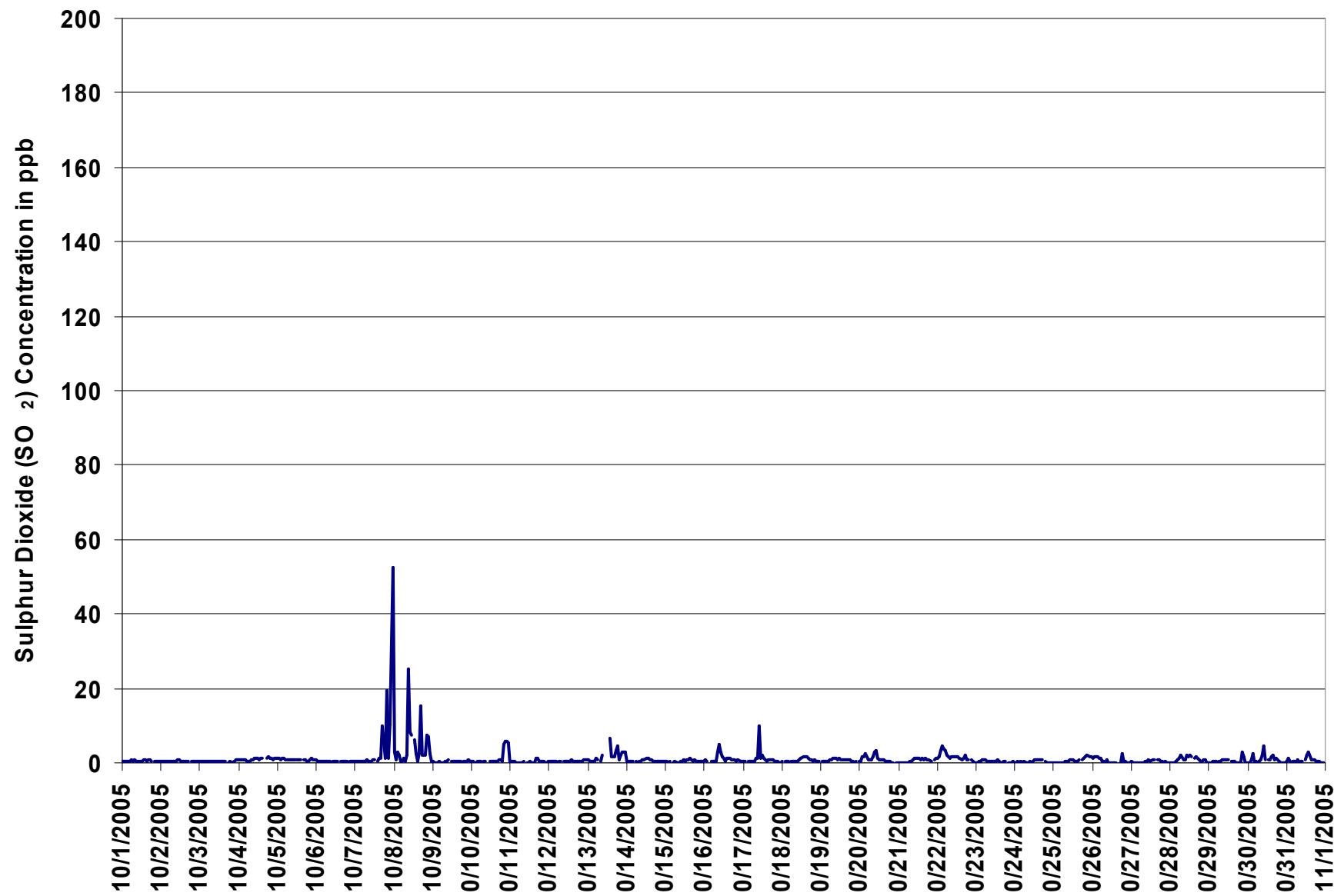
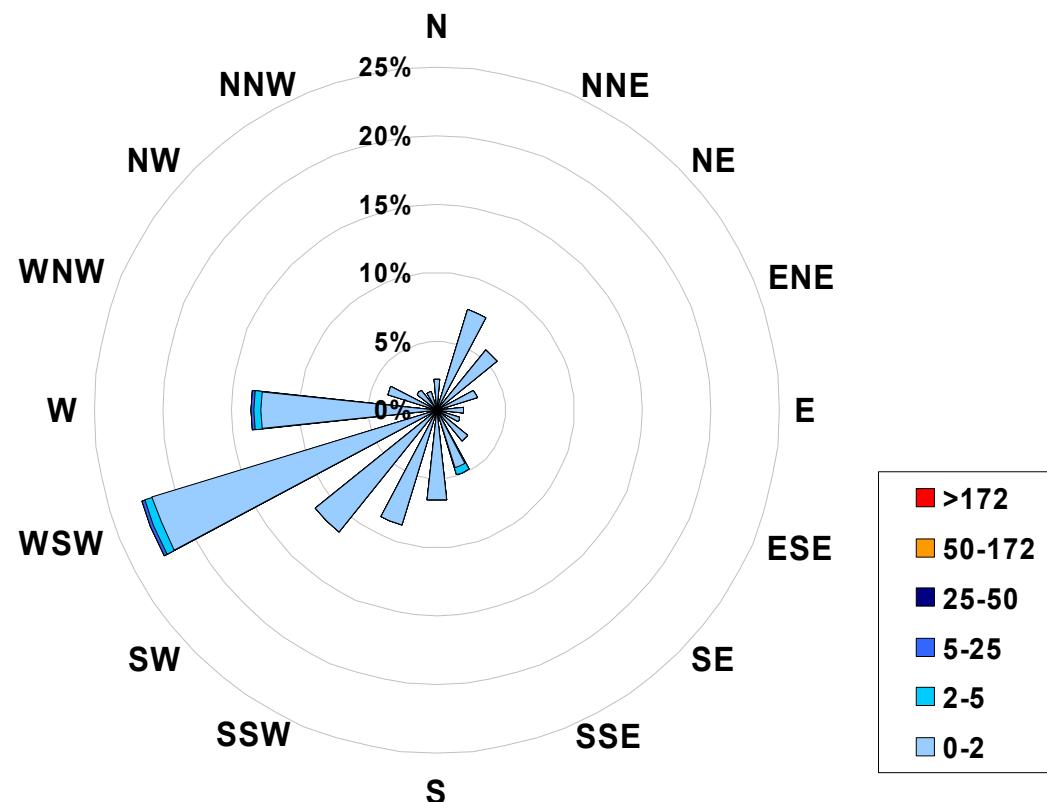


Figure 28. PASZA - Smoky Heights Sulphur Dioxide 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at  
the Smoky Heights Site for October 2005**



**Calms:** 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	693
2	to	5	12
5	to	25	3
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			708

## PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

Maximum 1-hr Average:	29.9	ppb	8-Oct	2:00 3:00
Maximum 24-hr Value:	2.8	ppb	8-Oct	

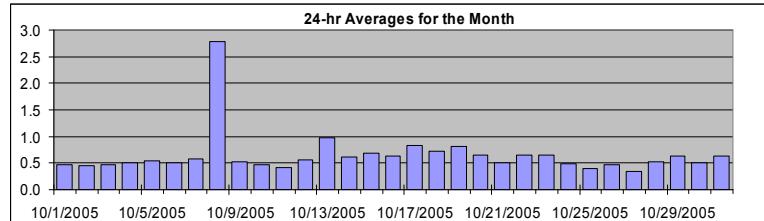
AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	0.6 ppb
	1.3	0.9	0.6	0.5	0.5	0.3	0.3		

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	Hour End																										
1-Oct-05	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.5	0.7	
2-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	0	0	0.5	0.6	
3-Oct-05	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0.5	0.6	
4-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	A	1	1	1	1	1	1	1	1	0.5	0.7	
5-Oct-05	0	0	0	1	0	0	0	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.5	0.7	
6-Oct-05	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0.5	0.7	
7-Oct-05	0	0	1	0	1	1	1	1	1	0	0	0	0	0	0	A	0	1	0	1	1	1	1	1	1	0.6	1.6	
8-Oct-05	7	5	30	11	1	1	1	1	1	0	0	0	A	1	1	0	1	1	1	1	1	1	1	1	1	2.8	29.9	
9-Oct-05	1	1	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7	
10-Oct-05	0	0	0	0	0	0	1	0	0	1	A	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0.5	0.6	
11-Oct-05	0	0	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.7	
12-Oct-05	1	0	0	0	0	0	1	1	A	0	0	0	0	0	1	1	1	1	1	1	1	1	0	1	1	0.6	1.3	
13-Oct-05	1	3	1	1	1	1	1	A	1	1	C	C	C	A	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.8
14-Oct-05	1	1	1	1	1	1	A	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
15-Oct-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
16-Oct-05	1	1	1	A	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.6	1.3	
17-Oct-05	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.3	
18-Oct-05	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2	
19-Oct-05	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	1.3	
20-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.9	
21-Oct-05	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	A	1	1	0.5	0.7	
22-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	0.8	
23-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.6	0.8	
24-Oct-05	1	0	1	0	1	0	1	0	0	0	0	1	0	0	1	1	0	0	1	0	A	0	0	0	0	0.5	0.6	
25-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0.4	0.7	
26-Oct-05	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0.5	0.7	
27-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0.3	0.6	
28-Oct-05	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	0.5	0.8	
29-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	0.6	1.1	
30-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0	1	1	1	1	1	1	1	1	0	1	0.5	0.6
31-Oct-05	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0

**HOURLY AVERAGE TABLE**

**Total Reduced Sulphur (TRS)**



**Status Flag Characters**

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

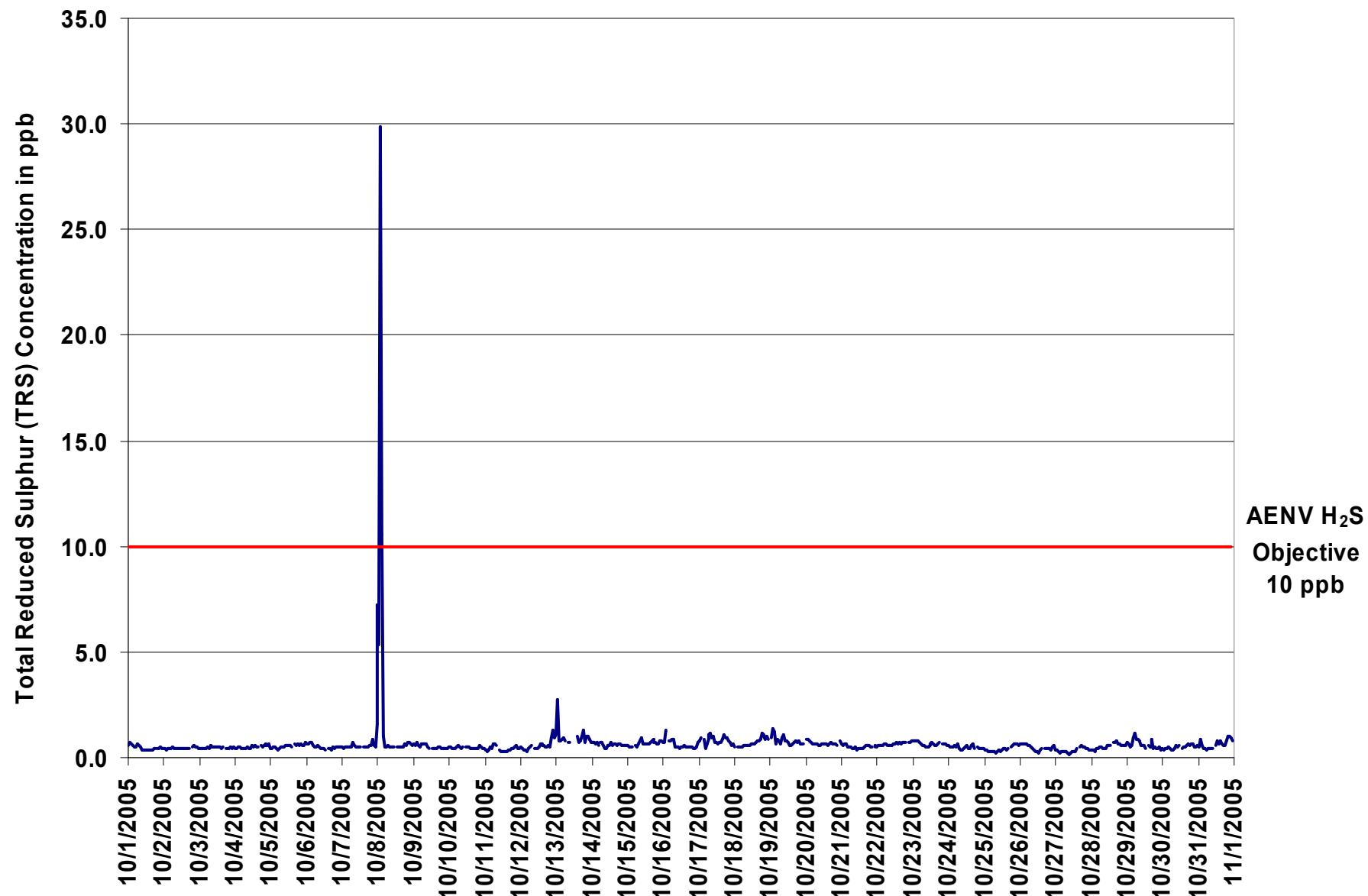


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)

#### Summary

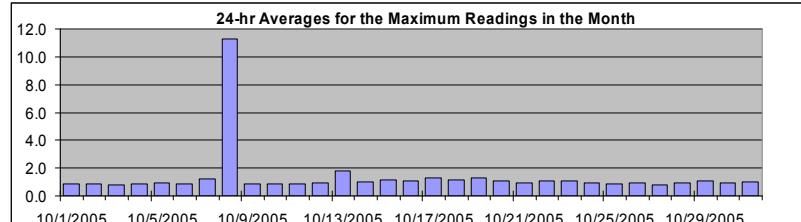
Maximum 1-hr Value:	99.5 ppb	8-Oct 2:00 3:00
Maximum 24-hr Value:	11.3 ppb	8-Oct

AIC Time:	33 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 2.5	95 1.5	75 1.1	50 0.9	25 0.8	5 0.7	1 0.6	Average 1.3 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-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		
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-Oct-05	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	1.4
2-Oct-05	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	0.8	1.0
3-Oct-05	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	0.8	0.9
4-Oct-05	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	1.1	
5-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.1	
6-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.1	
7-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.3	7.5	
8-Oct-05	22	20	99	99	3	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	11.3	99.5
9-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
10-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
11-Oct-05	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
12-Oct-05	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1.0	1.7
13-Oct-05	1	7	2	1	1	2	1	A	1	2	C	C	A	1	1	2	2	2	1	2	2	1	2	1	1	1.8	7.2
14-Oct-05	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	1.3
15-Oct-05	1	1	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	1.9
16-Oct-05	1	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0
17-Oct-05	2	2	A	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1.3	2.2
18-Oct-05	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	2	1	1	2	1	1.2	1.7
19-Oct-05	A	2	2	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.2
20-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.1	1.3
21-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.1
22-Oct-05	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	1.4
23-Oct-05	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	1.4
24-Oct-05	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
25-Oct-05	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	1.3
26-Oct-05	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	1.2
27-Oct-05	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	0.8	1.0
28-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.2	
29-Oct-05	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1.1	1.9
30-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.2	
31-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.4	

Hourly Avg	1.7	1.9	4.3	4.2	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.0	1.0	1.0	1.1	1.0	1.0	1.3
Hourly Max	21.8	19.6	99.5	99.4	2.5	1.9	1.4	1.5	1.7	1.9	1.4	1.2	1.2	1.4	1.2	1.4	1.2	1.5	2.1	1.8	1.6	2.6	1.7	1.7	7.5	



#### 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

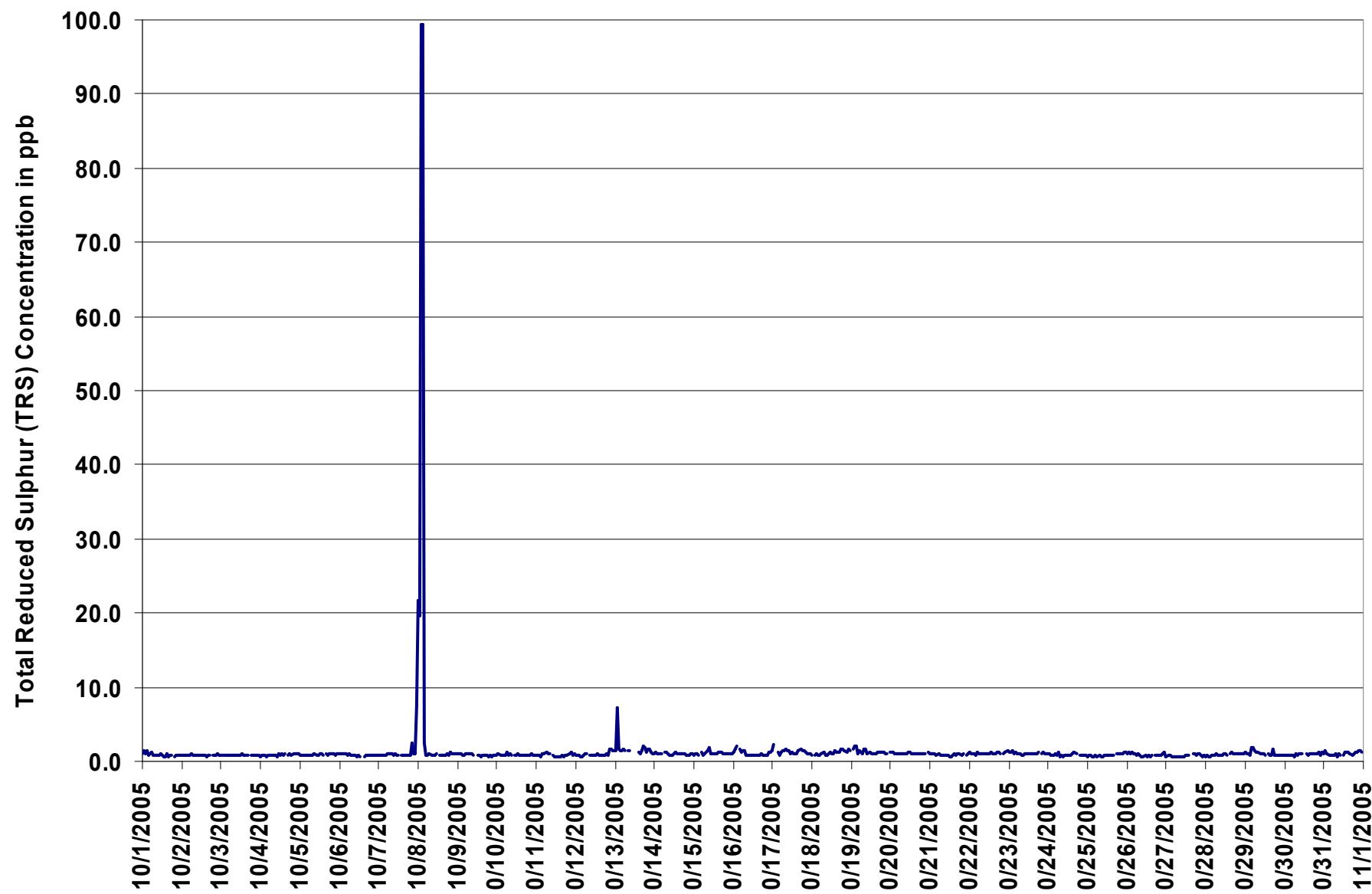
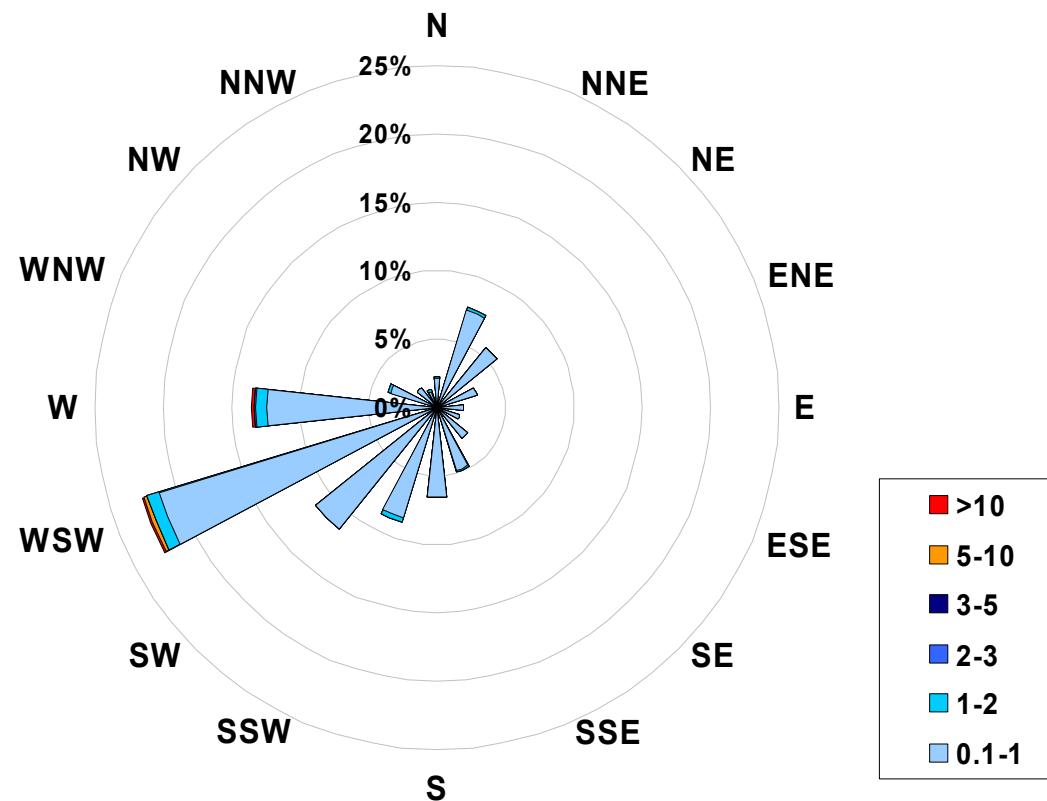


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)**  
**Located at the Smoky Heights Site for October 2005**



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

Frequency Distribution of TRS in ppb		
Range	Frequency (hrs)	
0.1 < 1	682	
1 to 2	21	
2 to 3	1	
3 to 5	0	
5 to 10	2	
> 10	2	
Total Non-Zero Values	708	

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

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	58.5 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	9.4 $\mu\text{g}/\text{m}^3$
27-Oct	17:00 18:00
27-Oct	

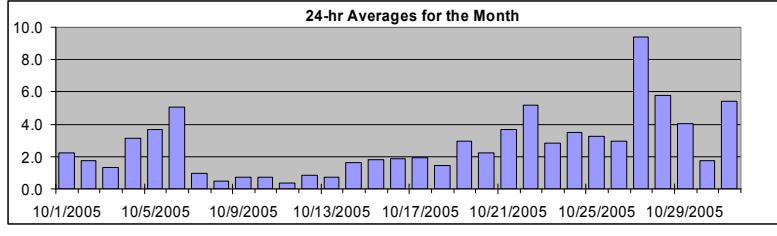
AIC Time:	0 hrs	Operational Time:	741 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 19.7	95 7.9	75 3.4	50 1.7	25 0.3	5 0.0	1 0.0	Average 2.7 $\mu\text{g}/\text{m}^3$	Geomean 2.1 $\mu\text{g}/\text{m}^3$

### 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-Oct-05	0	0	0	1	1	0	0	3	5	5	4	2	2	2	4	2	4	1	4	8	2	2	2	3	2	2.2	7.6							
2-Oct-05	2	2	3	2	3	1	1	6	4	4	1	0	0	1	1	0	0	0	0	1	6	0	1	0	1	0	1.8	6.3						
3-Oct-05	0	0	3	3	1	0	1	4	6	0	1	2	1	0	1	0	0	0	0	1	2	1	0	2	2	1.3	5.8							
4-Oct-05	3	3	3	2	1	0	2	4	8	5	2	2	3	3	4	3	3	2	7	4	4	2	2	2	2	3.2	8.2							
5-Oct-05	1	0	0	2	0	0	0	6	3	2	3	3	3	3	2	2	3	5	8	11	8	3	3	3	17	3.7	17.0							
6-Oct-05	17	8	6	2	4	9	10	15	12	5	1	2	2	3	1	2	1	3	0	7	1	4	5	0	5.0	17.1								
7-Oct-05	2	2	1	2	4	4	2	1	2	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0.9	4.0							
8-Oct-05	0	0	0	0	4	0	0	0	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.5	3.8							
9-Oct-05	0	1	0	2	0	0	0	3	4	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	3.9							
10-Oct-05	0	0	0	0	0	3	2	1	0	4	2	0	1	0	0	0	1	3	0	0	0	0	0	0	0	0.7	4.0							
11-Oct-05	0	0	0	0	0	0	0	0	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	4.6							
12-Oct-05	0	0	0	0	0	0	0	0	1	2	3	2	2	3	1	0	0	0	2	4	0	0	0	1	0	0.9	3.6							
13-Oct-05	0	0	0	0	0	0	0	0	0	2	2	1	C	C	C	0	0	0	0	1	1	3	2	2	2	0.7	3.3							
14-Oct-05	1	1	1	2	1	2	3	2	3	3	4	1	2	1	0	0	0	0	3	1	1	2	2	1	1	1.6	3.7							
15-Oct-05	0	0	1	0	1	1	2	3	3	3	3	4	3	3	4	4	4	4	2	0	0	1	1	1	0	1.8	4.3							
16-Oct-05	1	2	1	1	2	7	9	7	5	4	1	0	1	2	1	0	0	0	0	1	0	0	0	1	1	1.9	8.9							
17-Oct-05	1	1	2	2	1	0	2	2	2	3	1	0	0	0	0	1	1	8	7	4	4	2	1	0	1.9	7.9								
18-Oct-05	0	0	0	0	0	0	0	1	1	1	3	5	3	2	2	2	2	0	0	0	1	1	1	1	1.4	11.1								
19-Oct-05	0	2	2	2	3	2	3	3	2	3	4	6	4	0	3	2	7	2	3	4	5	3	2	3	2.9	6.8								
20-Oct-05	3	3	2	3	3	2	2	3	3	3	3	1	0	1	1	1	1	1	2	2	4	3	3	3	2.2	4.3								
21-Oct-05	3	4	4	4	5	5	5	5	7	5	4	6	3	4	3	3	3	6	2	2	2	1	4	1	3.7	6.9								
22-Oct-05	2	2	3	3	2	3	3	3	4	4	4	3	3	2	3	3	5	28	10	2	4	16	3	9	5.2	27.5								
23-Oct-05	11	6	5	5	7	6	5	4	3	1	1	2	3	4	1	1	1	0	0	1	1	0	0	0	2.8	10.9								
24-Oct-05	0	1	0	2	4	4	4	3	2	2	5	3	5	4	4	7	9	5	2	1	2	3	7	4	3.5	9.3								
25-Oct-05	4	2	2	1	1	3	3	1	1	1	0	0	0	1	4	3	4	4	6	6	7	9	9	6	3.2	8.9								
26-Oct-05	5	7	7	9	9	11	1	0	2	3	0	0	0	1	1	1	1	2	2	4	3	0	2	3.0	11.4									
27-Oct-05	2	1	2	2	1	3	4	3	4	4	0	0	0	0	0	1	7	58	38	44	27	18	5	0	9.4	58.5								
28-Oct-05	0	2	1	0	0	0	11	42	0	5	0	0	0	1	1	2	44	4	5	6	3	4	5	5.8	44.0									
29-Oct-05	7	8	7	7	7	7	6	7	7	7	5	0	0	0	0	4	2	1	1	1	2	3	2	4.1	8.3									
30-Oct-05	2	1	1	1	0	1	1	1	2	2	1	1	0	0	0	0	1	3	10	2	4	3	2	1.8	10.4									
31-Oct-05	3	3	2	3	3	2	2	20	20	5	3	3	2	4	6	6	5	4	4	8	9	7	3	4	5.4	19.7								
Hourly Avg	2.4	2.1	1.9	1.9	2.2	2.5	2.8	5.0	4.1	3.0	2.1	1.8	1.5	1.4	1.5	1.5	2.2	6.0	3.5	4.1	3.4	3.0	2.6	2.3										
Hourly Max	17.1	8.5	7.3	8.5	8.7	11.4	11.5	42.1	19.7	6.5	6.7	5.6	4.7	4.0	5.6	6.7	9.3	58.5	37.6	44.4	26.9	18.0	11.1	17.0										

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

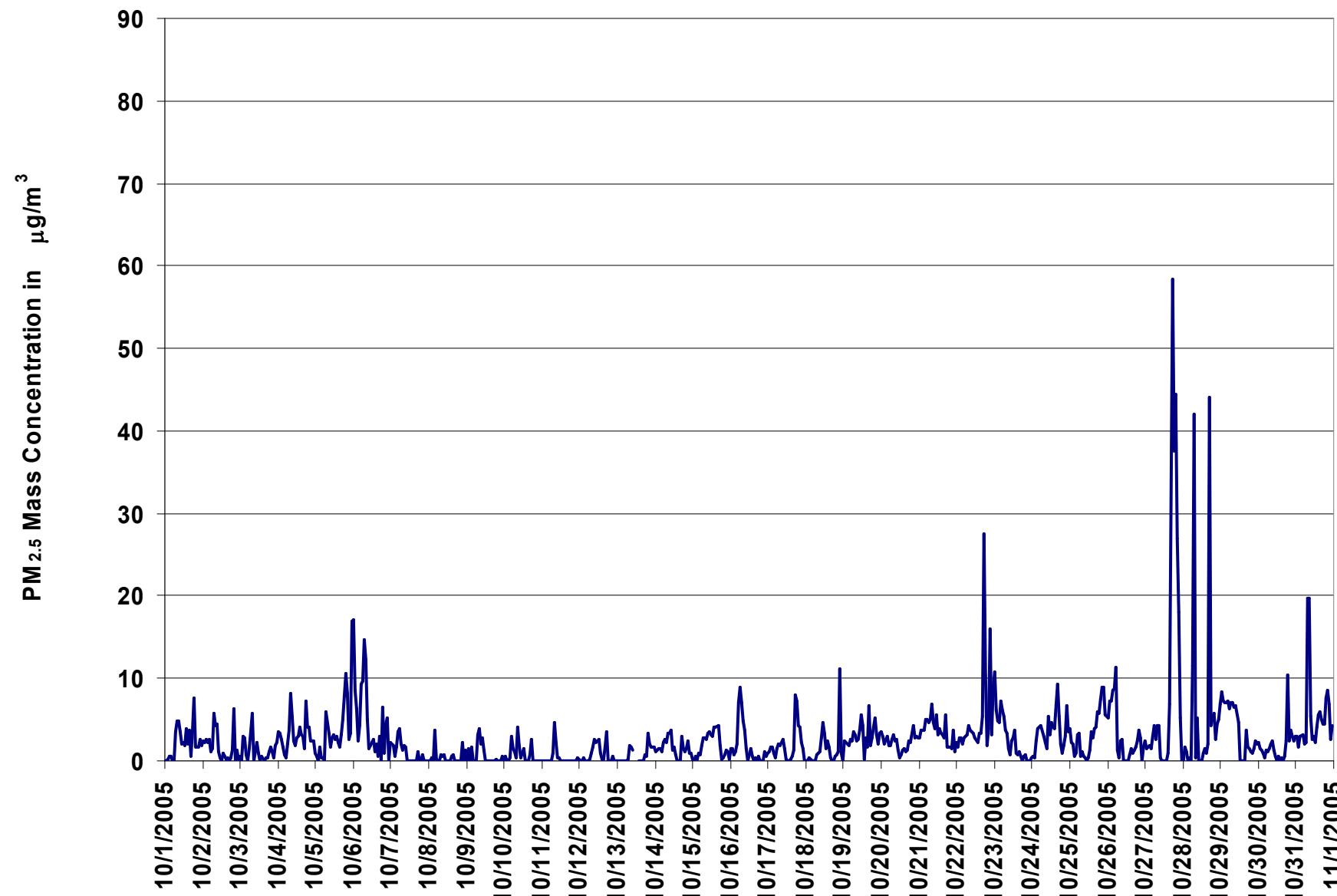


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

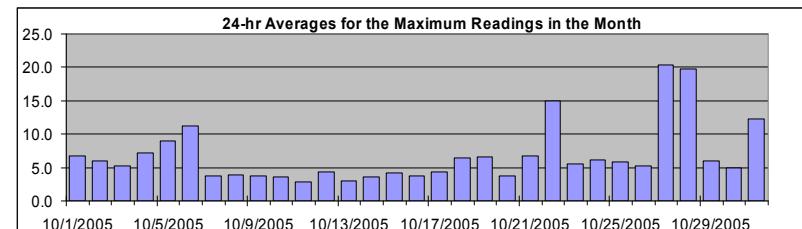
Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	125.7	$\mu\text{g}/\text{m}^3$	28-Oct	7:00 8:00
Maximum 24-hr Value:	20.3	$\mu\text{g}/\text{m}^3$	27-Oct	

### HOURLY MAXIMUM 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

	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	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-Oct-05	6	7	8	6	4	4	2	7	9	7	7	5	5	5	7	6	9	2	20	11	4	6	8	6	6.8	20.5	
2-Oct-05	5	5	6	5	5	4	9	8	5	13	5	5	4	4	4	3	2	2	3	4	19	8	8	10	6.0	18.7	
3-Oct-05	6	10	11	8	4	4	4	7	10	2	5	5	4	4	4	5	3	4	7	4	4	2	3	4	4	5.2	11.2
4-Oct-05	5	5	4	3	3	2	4	9	20	17	5	4	6	5	7	6	5	5	23	9	10	4	4	4	4	7.1	22.8
5-Oct-05	3	4	3	4	2	3	10	12	8	4	5	6	4	5	5	3	10	13	31	26	14	6	6	30	8.9	30.7	
6-Oct-05	29	15	13	9	11	15	16	19	17	12	3	3	4	4	4	5	3	17	6	25	13	12	10	4	11.3	29.0	
7-Oct-05	6	5	3	4	8	8	4	3	4	4	2	3	3	6	6	3	3	4	1	0	3	3	2	1	3.7	8.2	
8-Oct-05	5	4	6	5	10	2	1	1	2	4	7	1	3	4	4	4	7	3	2	0	2	9	3	7	4.0	10.0	
9-Oct-05	7	7	6	8	5	2	6	11	9	5	6	3	2	0	1	1	0	1	1	3	0	0	1	3	3.7	11.3	
10-Oct-05	2	3	1	2	3	8	4	6	4	11	6	2	5	3	2	2	3	16	1	2	2	1	0	0	3.6	16.4	
11-Oct-05	0	0	0	0	3	0	1	5	9	6	6	4	0	0	0	1	4	2	2	1	4	5	4	9	2.9	9.4	
12-Oct-05	11	2	0	2	3	2	3	11	7	7	6	5	4	3	2	2	4	10	3	4	2	4	2	4	4.4	11.4	
13-Oct-05	3	2	1	1	2	1	2	2	6	5	4	C	C	C	0	0	1	1	2	2	17	4	3	3	2.9	16.5	
14-Oct-05	2	4	4	3	3	4	5	4	5	5	11	3	4	2	0	1	1	6	3	2	3	4	2	3	3.5	10.7	
15-Oct-05	3	1	4	3	3	3	4	7	5	4	6	6	6	4	7	6	6	7	2	3	3	3	3	3	4.2	7.2	
16-Oct-05	4	4	2	2	4	10	10	9	9	5	4	1	2	3	2	1	2	2	2	1	1	2	3	3.8	10.3		
17-Oct-05	3	2	3	3	2	2	4	3	4	4	3	3	2	2	3	2	6	16	11	10	7	4	5	1	4.3	15.5	
18-Oct-05	2	1	2	2	1	1	0	3	2	3	7	6	6	4	5	4	1	1	2	2	3	3	3	6.4	58.1		
19-Oct-05	1	9	5	9	7	5	13	10	6	6	6	8	6	3	6	5	22	4	4	5	7	5	3	5	6.7	22.2	
20-Oct-05	5	4	4	4	4	3	3	4	4	4	4	3	2	3	3	3	2	3	4	3	6	4	7	4	3.7	6.7	
21-Oct-05	5	5	6	5	6	7	6	7	10	6	8	8	5	5	5	5	5	27	4	4	4	5	9	3	6.7	27.2	
22-Oct-05	4	4	5	5	4	5	6	5	7	6	5	6	4	4	5	7	19	97	63	5	6	66	6	17	15.0	97.3	
23-Oct-05	15	10	8	7	9	8	7	5	6	3	2	6	6	5	4	3	4	3	4	3	4	4	3	2	5.5	14.8	
24-Oct-05	3	4	3	6	6	7	6	5	4	3	8	8	9	6	8	10	10	10	4	3	5	5	9	5	6.2	10.4	
25-Oct-05	7	4	4	4	3	8	16	3	4	3	2	2	2	3	7	5	6	6	7	7	9	12	11	7	5.8	15.7	
26-Oct-05	7	9	9	11	12	15	5	4	6	6	2	3	2	2	5	3	2	2	3	5	5	4	3	5.3	15.5		
27-Oct-05	5	3	4	4	3	7	9	4	9	9	2	0	0	1	1	2	35	103	92	73	64	42	13	1	20.3	103.4	
28-Oct-05	1	6	10	2	5	1	30	126	13	24	0	1	1	3	10	3	3	122	40	25	31	5	6	7	19.8	125.7	
29-Oct-05	10	10	10	9	9	9	8	9	9	8	9	7	4	3	0	1	8	3	3	2	2	3	4	4	6.0	10.0	
30-Oct-05	4	3	2	2	1	3	2	3	4	5	5	3	1	2	1	2	6	39	4	11	6	5	5	4.9	39.3		
31-Oct-05	6	5	3	5	5	4	51	43	32	22	21	4	6	7	9	7	6	8	11	11	10	5	7	12.3	51.3		

Hourly Avg	5.6	5.1	4.9	4.7	4.9	5.1	6.6	11.7	8.3	7.6	5.6	4.7	3.6	3.6	4.1	3.6	6.4	16.2	11.6	9.5	8.7	8.3	6.8	6.4
Hourly Max	29.0	15.3	13.3	11.4	12.2	15.5	29.8	125.7	43.3	32.0	22.0	20.8	8.7	6.5	10.4	10.3	35.0	122.4	91.6	72.7	64.3	66.0	58.1	34.5

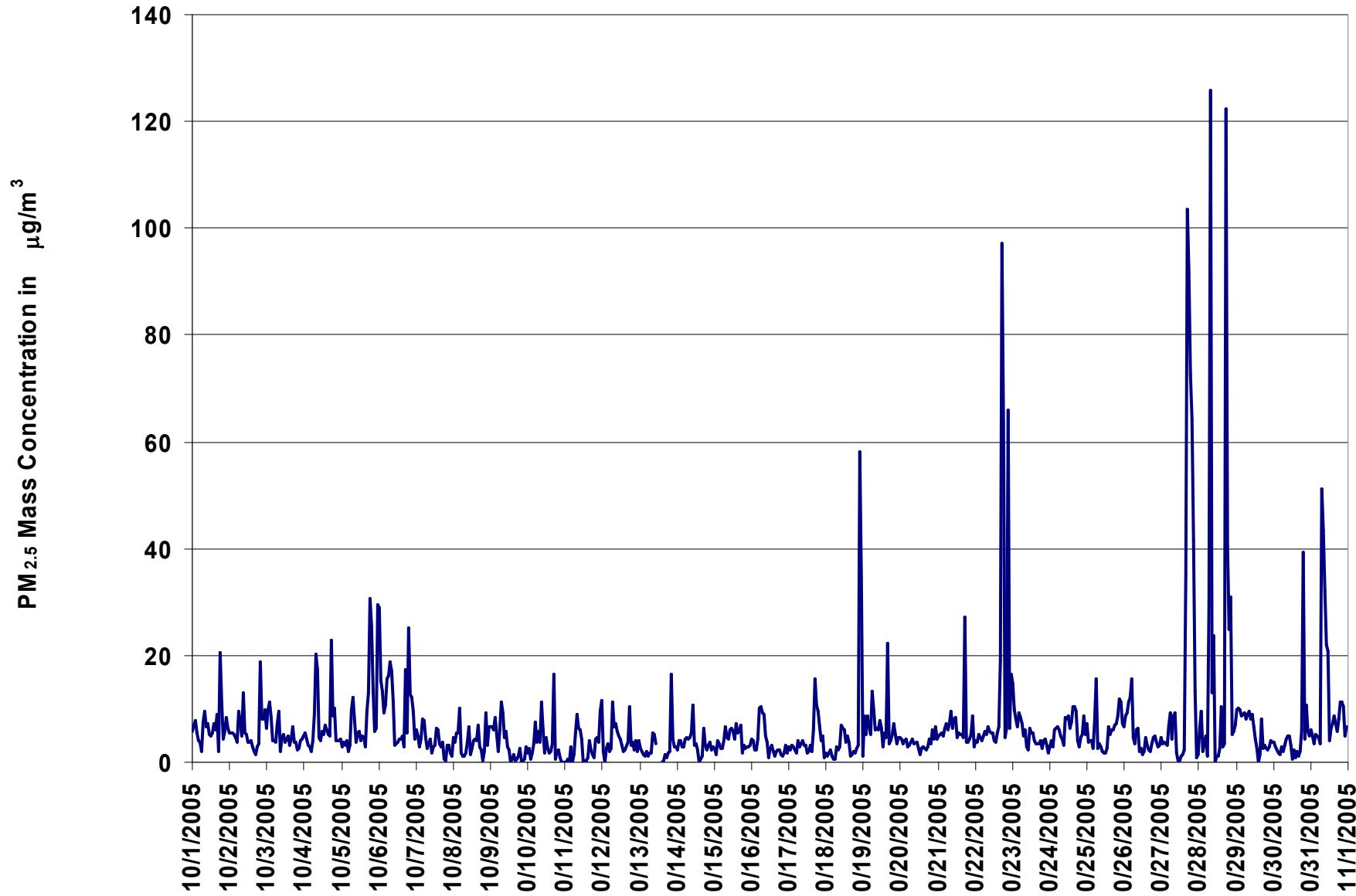
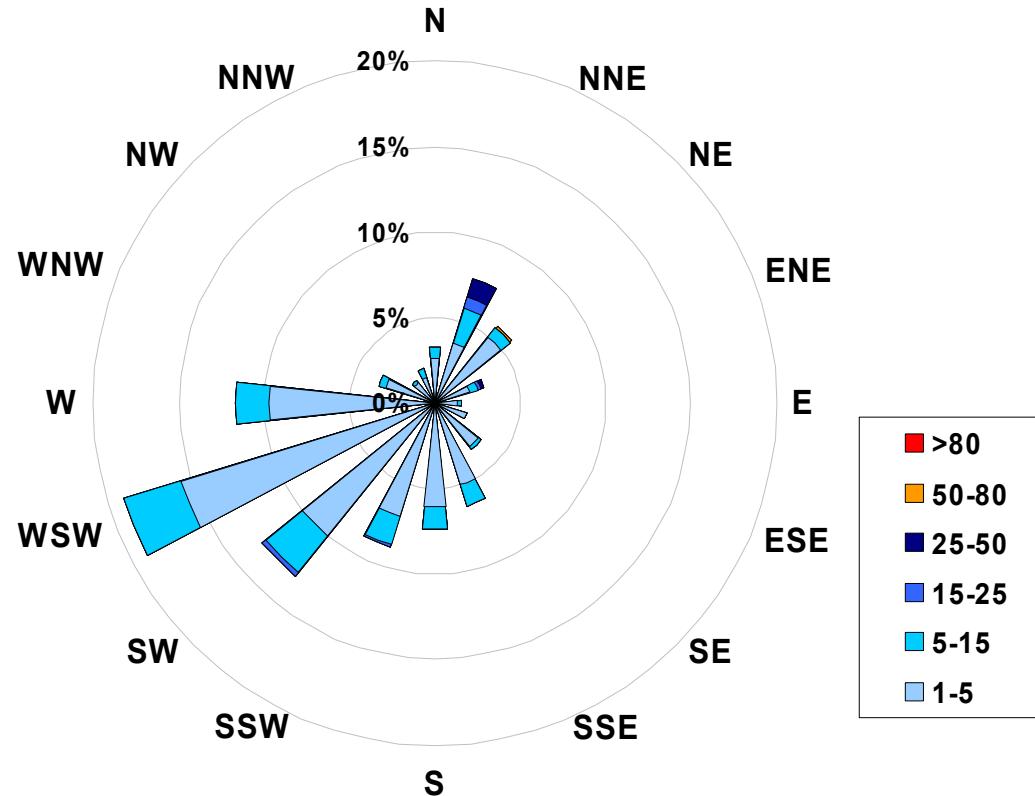


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

**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 October 2005**



**Calms:** 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range		Frequency (hrs)	
1.0	<	5	644
5	to	15	84
15	to	25	6
25	to	50	6
50	to	80	1
		> 80	0
Total Non-Zero Values		741	

## PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	21.5	°C	25-Oct	15:00 16:00
Maximum 24-hr Value:	10.9	°C	25-Oct	

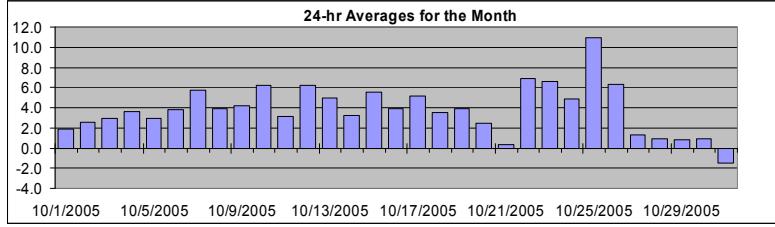
AIC Time:	0 hrs	Operational Time:	743 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	14.5	11.2	7.2	3.8	0.6	-3.7	-5.3	3.8 °C

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
1-Oct-05	-1	-2	-3	-2	-1	-2	-3	-3	-1	2	5	6	5	5	5	7	7	6	5	3	2	2	1	1	1.9	6.9		
2-Oct-05	1	1	1	1	1	0	0	0	1	2	4	6	7	7	7	7	7	6	4	2	-2	-2	-3	-3	2.5	7.5		
3-Oct-05	-3	-3	-2	-2	-2	-3	-3	-3	-1	0	3	6	7	9	9	10	10	8	7	6	6	4	4	4	2.9	9.8		
4-Oct-05	4	4	4	3	1	-1	-2	-2	0	3	4	6	7	7	8	9	9	8	5	3	3	2	1	1	3.7	9.2		
5-Oct-05	1	-1	-2	-2	-1	-2	-4	-3	0	1	2	5	6	8	9	9	8	7	5	5	4	4	4	2	2.9	9.2		
6-Oct-05	0	1	0	-1	-1	-1	-1	-1	0	2	3	4	5	7	9	10	11	11	8	5	1	1	2	1	3.8	11.4		
7-Oct-05	2	3	3	3	3	4	5	5	5	6	7	8	10	11	12	12	11	9	7	4	3	3	2	1	5.7	11.6		
8-Oct-05	0	-1	-2	-1	1	2	2	1	3	4	7	8	10	10	11	11	10	9	6	3	1	0	-2	-1	3.9	11.2		
9-Oct-05	-3	-2	-3	-3	-4	-5	-6	-5	-2	0	3	6	10	12	12	12	11	10	10	10	10	9	9	9	4.2	12.1		
10-Oct-05	9	8	6	4	2	3	5	4	5	8	8	8	9	10	10	10	10	8	5	5	4	3	3	3	6.2	10.1		
11-Oct-05	2	1	1	-1	-2	-2	-3	-3	0	3	6	7	9	10	10	10	10	8	4	1	-1	0	2	2	3.1	10.4		
12-Oct-05	3	3	4	4	3	2	2	1	5	6	7	8	10	12	12	12	12	9	8	7	6	5	4	4	6.2	12.3		
13-Oct-05	3	3	3	2	3	2	1	1	3	5	7	9	10	M	12	12	12	11	10	7	5	2	2	1	2	5.0	11.9	
14-Oct-05	0	-1	-2	-2	-3	-3	-3	-4	-2	1	4	6	6	8	9	9	8	7	7	7	7	6	5	5	3.2	8.9		
15-Oct-05	6	6	6	5	5	5	5	4	4	4	4	5	6	7	7	8	8	7	6	5	5	5	5	5.6	7.9			
16-Oct-05	4	2	1	1	2	1	0	-1	1	3	5	6	8	7	7	8	7	6	5	5	5	4	4	3	3.9	7.7		
17-Oct-05	3	3	3	3	5	5	4	4	5	5	6	8	8	10	9	8	9	7	5	4	3	2	1	1	5.1	10.4		
18-Oct-05	1	0	0	1	1	0	0	0	0	1	2	4	8	9	11	12	13	10	5	4	2	2	0	-1	3.5	12.6		
19-Oct-05	-2	-1	-1	1	1	2	3	2	2	3	4	6	8	9	10	10	9	7	5	3	4	4	3	3.9	10.0			
20-Oct-05	3	2	2	2	1	2	2	-1	0	3	4	6	7	8	8	8	8	5	1	-1	-2	-2	-4	2.5	8.0			
21-Oct-05	-5	-5	-5	-5	-5	-5	-6	-6	-4	-1	0	2	4	5	6	6	5	5	4	3	3	2	4	0.3	6.2			
22-Oct-05	4	4	4	4	3	2	2	2	3	4	7	8	10	12	13	12	11	11	10	9	8	7	6	6.9	13.3			
23-Oct-05	5	5	6	6	7	7	7	7	6	7	7	8	8	9	11	11	10	8	6	5	5	4	3	2	6.6	10.8		
24-Oct-05	2	1	1	1	2	1	1	1	0	0	1	2	6	9	12	12	11	10	10	10	7	5	6	6	4.9	12.5		
25-Oct-05	5	6	4	4	3	3	2	2	6	9	12	14	17	19	21	22	20	17	16	15	14	13	11	9	10.9	21.5		
26-Oct-05	7	6	8	7	8	11	9	7	7	8	9	9	9	9	8	6	5	4	1	0	0	-1	-1	6.3	10.7			
27-Oct-05	-2	-4	-3	-4	-4	-5	-4	-5	-3	0	3	6	8	9	9	10	8	5	2	2	2	1	1	0	1.3	10.3		
28-Oct-05	-1	-1	-3	-5	-3	-4	-5	-4	-4	-1	3	4	6	7	8	8	6	4	3	2	1	1	0	0.9	8.4			
29-Oct-05	-3	-4	-4	-5	-5	-4	-5	-4	-3	-2	1	4	8	9	10	9	8	6	4	2	1	-1	-1	0	0.8	9.5		
30-Oct-05	0	0	-1	-1	-1	-1	-3	-5	-4	0	3	6	8	9	9	8	7	3	1	-1	-2	-4	-3	0.9	8.9			
31-Oct-05	-3	-4	-4	-3	-3	-2	-4	-2	-2	-1	0	2	2	1	1	1	1	-1	-2	-1	-1	-3	-4	-4	-1.5	1.7		
Hourly Avg	1.3	1.0	0.8	0.4	0.5	0.4	0.0	-0.3	1.0	2.8	4.6	6.3	7.8	8.9	9.6	9.8	9.2	7.6	5.6	4.4	3.3	2.6	2.1	1.8				
Hourly Max	8.7	7.7	8.4	7.3	7.6	10.7	8.6	7.4	6.7	9.3	11.7	14.4	16.9	19.3	20.7	21.5	19.9	17.2	15.6	14.6	13.6	12.5	11.3	9.1				

### 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

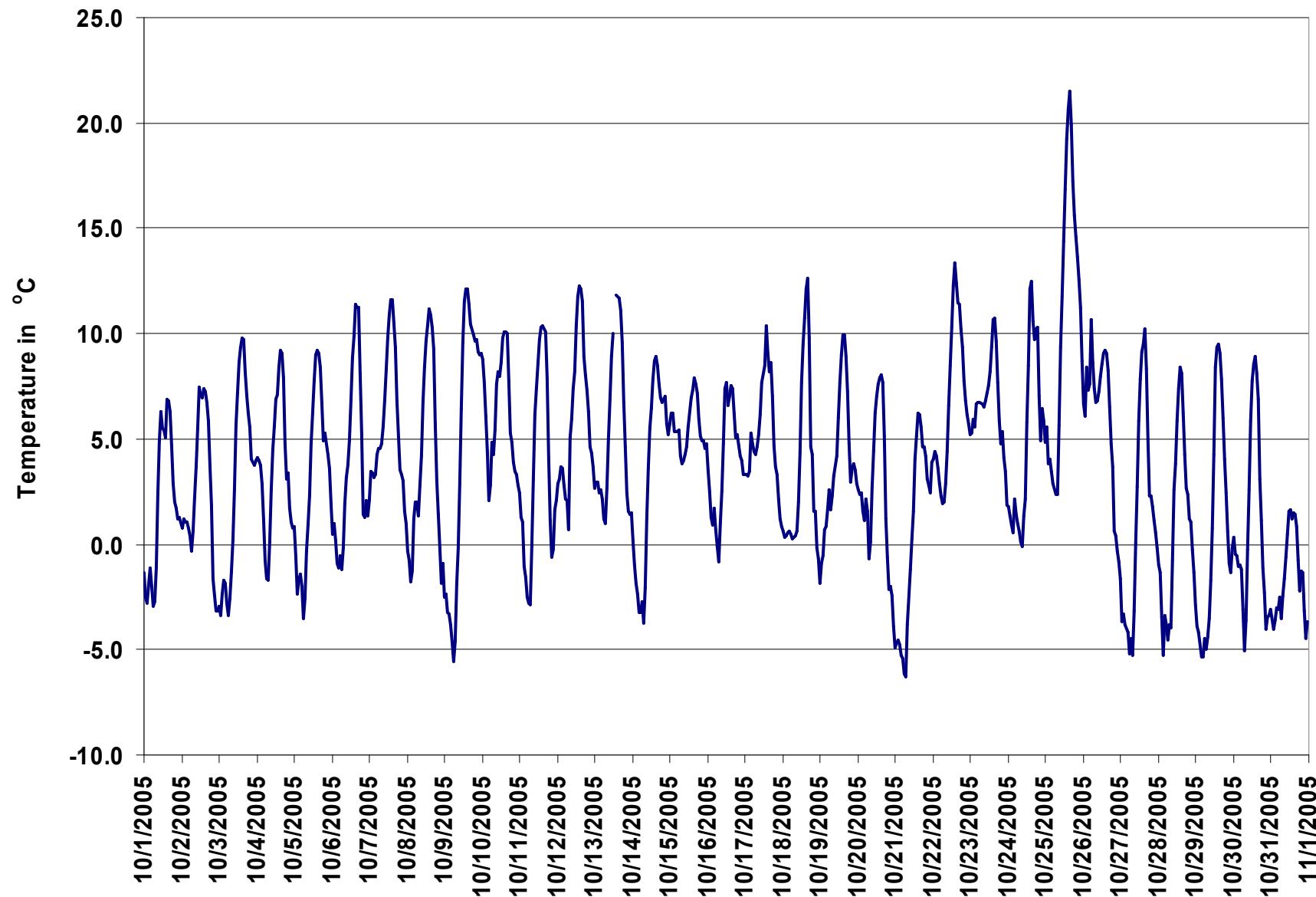


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

## PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

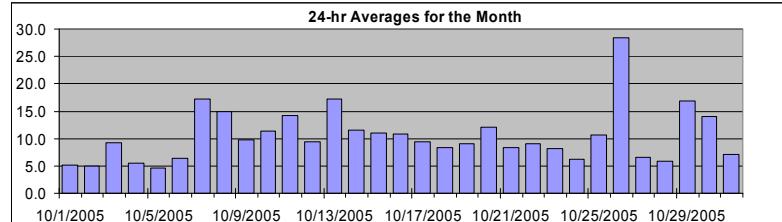
### Summary

Maximum 1-hr Average:	49.0	km/hr	26-Oct	7:00 8:00
Maximum 24-hr Value:	28.4	km/hr	26-Oct	

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%
Percentile				AverageS
99	95	75	50	25 5 1
41.3	24.0	12.5	8.4	6.0 3.3 2.2
				10.4 km/hr

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max
	Hour Start 1:00	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-Oct-05	6	5	7	6	4	3	1	3	3	2	4	7	8	6	6	7	7	4	4	5	9	6	6	4	5.1	9.2
2-Oct-05	5	7	8	6	9	5	2	3	4	2	3	5	6	7	6	7	7	7	4	4	2	2	3	4	4.9	8.8
3-Oct-05	4	5	5	6	7	9	9	12	12	13	11	10	12	14	13	12	13	9	7	8	10	9	6	6	9.2	13.5
4-Oct-05	7	7	5	4	4	5	6	5	5	3	5	8	8	7	5	5	9	5	4	6	7	4	5	6	5.6	9.0
5-Oct-05	7	4	4	3	2	2	2	3	4	7	9	10	8	5	5	5	3	2	4	2	3	6	4	6	4.7	9.6
6-Oct-05	8	7	4	4	6	6	5	6	5	7	8	7	8	9	8	10	10	6	5	5	5	4	5	3	6.3	10.1
7-Oct-05	6	9	5	6	8	17	18	14	8	9	18	25	31	29	33	35	27	23	17	11	16	18	16	15	17.2	35.0
8-Oct-05	12	10	5	10	14	11	12	12	16	17	22	24	22	25	22	21	23	22	12	13	13	9	6	6	15.0	24.7
9-Oct-05	8	7	7	9	7	7	7	8	7	7	8	8	11	14	13	12	10	8	8	8	11	12	17	21	9.7	20.8
10-Oct-05	20	16	13	8	7	7	5	3	8	11	15	11	8	7	6	4	5	21	16	20	15	14	15	20	11.4	20.7
11-Oct-05	20	16	14	13	8	12	10	4	4	15	24	27	33	32	29	29	21	11	4	3	3	3	3	2	14.1	33.0
12-Oct-05	4	4	13	13	9	7	5	5	6	7	8	9	15	16	17	16	15	8	5	8	8	8	8	10	9.4	17.0
13-Oct-05	11	11	11	8	11	12	12	10	8	15	24	35	36	M	33	32	30	21	15	13	13	14	12	12	17.3	35.5
14-Oct-05	13	14	15	14	12	13	13	10	8	8	8	7	9	7	8	11	14	14	14	13	13	15	11	13	11.5	15.2
15-Oct-05	16	17	12	13	10	7	6	5	7	5	6	9	10	10	15	14	7	12	18	13	14	14	10	10	10.9	17.8
16-Oct-05	7	3	5	5	8	10	13	13	14	15	14	17	22	16	11	15	11	8	10	10	9	12	10	7	10.9	21.6
17-Oct-05	5	6	5	6	12	9	9	8	6	7	9	12	10	7	12	20	12	10	13	11	9	11	10	7	9.4	19.9
18-Oct-05	8	6	4	7	8	9	11	11	11	11	10	8	8	11	10	11	9	9	5	7	6	9	5	5	8.3	11.4
19-Oct-05	3	2	4	5	8	8	7	7	8	7	8	10	12	17	20	10	10	11	9	12	12	9	9	9	9.0	20.2
20-Oct-05	10	10	12	12	12	14	13	11	13	14	18	23	19	17	17	14	7	5	8	10	7	5	4	12.1	23.3	
21-Oct-05	7	9	10	10	6	7	8	6	8	6	5	3	6	7	12	13	12	11	10	10	9	6	13	8.4	13.0	
22-Oct-05	14	16	13	10	9	6	7	9	10	12	11	9	8	7	10	7	7	9	11	5	7	4	5	9.0	15.9	
23-Oct-05	5	7	10	8	13	12	11	13	12	10	10	10	10	12	10	8	4	3	3	4	4	3	6	8.2	13.3	
24-Oct-05	5	6	7	5	7	5	5	8	7	8	7	7	5	3	4	5	6	7	12	4	4	8	7	6.3	11.7	
25-Oct-05	12	10	10	13	5	6	4	7	7	6	9	10	13	13	11	14	12	14	14	15	17	16	16	5	10.7	16.7
26-Oct-05	4	8	10	8	15	36	43	49	49	35	42	49	47	47	45	37	31	24	21	19	14	19	17	14	28.4	49.0
27-Oct-05	15	10	7	7	6	6	7	5	6	6	5	3	3	4	5	4	3	7	8	8	8	9	8	6.6	14.7	
28-Oct-05	6	8	5	3	3	2	3	7	7	7	6	7	7	5	9	8	5	6	6	3	7	6	5	5.8	9.1	
29-Oct-05	6	9	11	9	12	10	8	9	7	9	9	12	29	33	40	38	30	24	18	16	15	14	13	20	16.8	40.4
30-Oct-05	19	17	20	18	21	13	9	9	11	11	14	19	30	24	24	16	12	10	9	6	6	8	6	14.1	29.8	
31-Oct-05	6	7	7	7	7	6	7	10	11	8	5	4	10	13	9	6	6	4	6	7	8	7	7	7.1	13.0	

1-hr Average 9.0 8.7 8.7 8.3 8.7 9.0 9.2 9.3 9.6 11.3 13.0 15.0 14.1 14.7 15.0 12.6 10.7 9.3 9.3 9.0 9.5 8.5 8.6

Hourly Max 19.8 17.0 19.9 18.1 21.4 35.8 42.7 49.0 48.7 34.7 41.9 48.7 47.2 46.6 45.5 37.8 30.7 24.0 20.9 20.2 16.7 18.6 17.1 20.8

## PASZA - Smoky Heights Vector Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	48.9	km/hr	26-Oct	7:00 8:00
Maximum 24-hr Value:	27.9	km/hr	26-Oct	

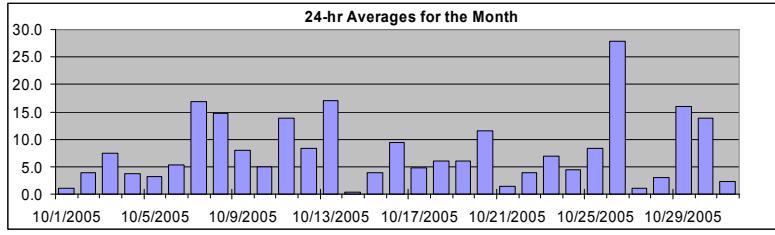
Calm Time:	2 hrs	0% calms	Operational Time:	741 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%
Percentile				AverageV
99	95	75	50	25 5 1
41.1	23.8	12.2	8.1	5.4 2.4 1.3
				28.7 km/hr

### 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-hr Vector 0:00	Daily Max
1-Oct-05	5	4	6	2	3	3	1	3	2	2	4	6	8	6	6	6	6	6	3	3	4	9	5	6	4	1.1	9.1
2-Oct-05	5	7	8	6	9	4	2	2	4	calm	2	3	5	6	6	6	7	7	4	4	2	2	3	4	3.9	8.8	
3-Oct-05	4	5	5	6	7	9	9	12	12	13	11	10	12	13	13	10	12	9	7	7	10	9	5	6	7.4	13.2	
4-Oct-05	7	7	4	4	4	5	6	5	5	3	4	7	7	6	4	5	9	5	3	5	7	3	5	5	3.7	8.5	
5-Oct-05	7	3	3	3	2	2	1	3	4	7	9	9	8	4	4	5	3	2	4	1	3	6	4	6	3.1	9.1	
6-Oct-05	8	6	4	4	6	6	5	6	5	7	8	7	8	9	8	10	10	6	5	5	4	3	4	3	5.3	9.8	
7-Oct-05	5	9	2	6	7	17	18	14	7	9	18	25	31	29	33	35	27	23	16	11	15	18	16	15	16.8	34.8	
8-Oct-05	12	9	5	9	14	11	12	12	16	17	22	24	22	24	22	20	23	22	12	13	13	9	6	6	14.8	24.5	
9-Oct-05	7	7	7	8	7	6	7	8	7	7	8	11	14	13	12	10	8	8	8	11	12	17	21		8.0	20.8	
10-Oct-05	20	16	13	6	7	6	4	2	7	11	14	11	8	7	6	4	3	21	15	20	15	14	15	20	5.0	20.5	
11-Oct-05	20	16	14	13	7	12	10	3	3	15	23	27	33	31	29	29	21	11	3	2	3	3	2	1	13.8	32.8	
12-Oct-05	3	3	13	13	8	6	3	5	5	7	8	9	15	16	17	16	15	6	5	8	8	8	8	10	8.4	16.9	
13-Oct-05	11	11	11	8	10	11	12	10	8	14	24	35	35	M	33	32	30	21	15	12	13	14	12	11	17.1	35.2	
14-Oct-05	12	14	15	14	12	13	11	8	8	8	7	6	9	6	7	11	14	14	14	13	13	15	10	12	0.4	15.0	
15-Oct-05	16	16	12	13	10	7	5	4	7	5	6	9	8	10	15	13	4	11	18	13	14	13	10	9	4.0	17.7	
16-Oct-05	7	2	5	5	7	10	12	13	14	15	14	16	20	16	11	14	10	8	9	10	9	12	9	5	9.3	20.4	
17-Oct-05	4	5	4	4	11	8	8	8	5	7	9	12	10	7	11	20	11	9	13	11	9	11	10	7	4.7	19.5	
18-Oct-05	7	5	4	6	8	9	11	11	11	9	8	7	10	10	11	9	8	1	5	5	9	4	5	6.0	11.0		
19-Oct-05	1	2	4	1	7	5	1	6	7	4	7	7	10	12	16	20	9	10	11	9	12	12	8	9	6.1	20.0	
20-Oct-05	10	10	12	12	12	12	14	13	11	12	14	18	23	19	17	17	14	7	5	8	10	7	4	4	11.6	23.1	
21-Oct-05	7	9	9	10	5	7	8	5	8	5	6	4	calm	6	7	12	13	12	11	10	10	9	4	13	1.3	12.9	
22-Oct-05	14	16	13	10	9	6	7	9	10	12	11	9	8	8	7	10	7	7	6	10	4	6	2	5	3.9	15.7	
23-Oct-05	4	7	9	7	13	12	11	13	12	10	10	10	10	10	11	10	8	3	3	2	3	2	2	5	7.0	13.2	
24-Oct-05	4	5	7	5	7	5	5	7	7	8	6	7	7	5	3	3	5	3	7	12	1	3	7	6	4.4	11.5	
25-Oct-05	12	9	9	11	1	5	2	6	7	6	9	10	12	13	10	14	12	13	14	15	17	16	16	1	8.4	16.6	
26-Oct-05	4	7	9	7	14	36	43	49	49	35	42	49	47	46	45	37	31	24	21	19	14	19	17	14	27.9	48.9	
27-Oct-05	13	10	6	6	5	6	7	5	5	5	4	2	2	4	5	3	3	7	8	8	8	9	8	7	1.1	13.3	
28-Oct-05	6	8	5	3	1	1	3	7	6	7	5	7	6	7	4	9	7	4	6	6	1	7	6	4	3.1	8.8	
29-Oct-05	6	9	11	9	12	10	7	9	7	9	9	12	28	32	40	38	30	24	18	16	15	14	13	20	16.0	40.2	
30-Oct-05	19	17	20	18	21	12	9	9	11	11	14	19	30	24	24	16	12	10	8	5	6	8	6	5	13.8	29.7	
31-Oct-05	5	7	7	7	6	6	10	11	7	5	3	10	13	9	4	5	4	3	6	3	7	8	7	2.4	12.9		
1-hr Vector	4.0	4.1	5.0	5.0	6.0	6.4	6.0	5.9	5.7	5.9	7.4	8.2	10.5	9.1	9.4	8.4	5.9	3.7	3.0	3.7	3.4	3.4	3.6	4.1			
Hourly Max	19.8	16.9	19.9	18.1	21.3	35.7	42.6	48.9	48.5	34.5	41.7	48.5	47.0	46.4	45.3	37.6	30.6	24.0	20.9	20.1	16.6	18.6	17.1	20.8			

### HOURLY AVERAGE TABLE

### Wind Speed (WSv)



### Status Flag Characters

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

## PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary											

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs							
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%							
Percentile	99	95	75	50	25	5	1	Average			
	343.7	296.3	255.6	227.7	149.3	25.0	10.2	245 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 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-Oct-05	312	280	298	273	204	249	33	11	356	36	111	130	169	149	171	226	257	31	88	249	295	356	6	2	276	W	
2-Oct-05	6	22	25	32	36	23	33	347	35	331	171	102	48	81	74	79	88	97	76	52	342	14	10	16	48	NE	
3-Oct-05	21	26	19	9	17	26	25	22	33	31	35	40	35	37	46	68	98	99	78	129	133	119	120	80	54	NE	
4-Oct-05	96	107	78	35	39	19	14	4	16	35	95	119	138	157	128	118	159	140	65	139	166	107	59	89	100	E	
5-Oct-05	117	50	21	124	134	89	117	161	190	181	175	163	156	168	189	171	170	278	303	324	150	174	208	204	166	SSE	
6-Oct-05	225	229	268	224	230	216	246	271	274	233	213	212	231	208	162	160	176	220	225	277	247	196	230	261	221	SW	
7-Oct-05	249	273	242	192	233	257	259	254	249	227	251	258	271	262	269	265	264	259	257	262	254	264	264	249	259	WSW	
8-Oct-05	254	254	264	246	246	245	251	242	250	249	257	262	263	261	265	270	250	260	266	262	260	261	233	218	256	WSW	
9-Oct-05	258	257	254	235	239	240	232	218	234	234	208	179	165	163	161	160	146	141	156	178	171	187	204	200	195	SSW	
10-Oct-05	194	184	183	210	241	238	328	35	24	6	16	20	16	23	15	28	177	278	241	251	258	253	253	264	261	W	
11-Oct-05	259	263	245	222	220	233	241	220	198	233	238	243	245	249	246	251	256	248	238	266	264	228	214	317	245	WSW	
12-Oct-05	200	204	177	191	220	251	229	217	201	201	199	188	200	208	206	203	226	216	158	174	202	274	265	276	210	SSW	
13-Oct-05	264	268	260	277	260	246	264	264	232	245	250	264	268	M	261	257	257	261	267	266	265	257	256	282	261	W	
14-Oct-05	270	252	265	274	278	275	276	251	225	201	177	163	156	147	82	58	63	70	55	51	79	116	68	43	93	E	
15-Oct-05	52	59	54	44	43	48	67	14	261	322	156	177	219	238	243	247	344	328	304	299	299	294	290	315	322	NW	
16-Oct-05	10	244	289	268	250	251	274	262	258	259	266	284	272	243	238	250	236	212	210	197	206	187	214	263	249	WSW	
17-Oct-05	253	277	254	230	242	262	267	266	281	251	241	250	256	236	295	290	314	28	11	32	39	45	37	51	295	WNW	
18-Oct-05	61	84	172	218	240	227	235	242	254	256	237	219	230	251	247	246	236	282	203	249	274	298	359	358	247	WSW	
19-Oct-05	350	123	239	342	225	281	325	170	275	168	200	215	242	216	241	275	344	336	288	283	296	319	311	278	272	W	
20-Oct-05	265	272	263	271	279	301	280	275	276	271	252	244	248	251	255	250	253	234	236	281	280	292	237	242	262	W	
21-Oct-05	243	236	223	200	220	231	251	245	203	200	177	178	213	49	33	41	41	40	57	73	56	46	60	131	115	ESE	
22-Oct-05	142	138	161	157	150	167	175	171	187	183	184	170	145	132	45	44	29	17	358	318	25	67	323	270	144	SE	
23-Oct-05	257	242	261	243	250	253	235	248	240	231	222	213	222	198	200	204	195	266	297	326	29	309	257	294	237	WSW	
24-Oct-05	267	275	273	232	248	236	220	203	173	204	198	184	201	217	202	131	32	72	167	184	279	211	190	196	207	SSW	
25-Oct-05	196	204	222	251	232	53	64	221	274	221	193	195	200	180	157	160	139	135	165	177	165	166	174	241	183	S	
26-Oct-05	236	230	219	230	218	254	254	256	252	246	246	249	254	253	252	248	241	239	241	249	283	269	267	250	250	WSW	
27-Oct-05	228	232	212	202	290	262	273	243	256	235	246	210	153	133	150	155	94	35	33	29	29	28	22	26	22	262	W
28-Oct-05	18	29	8	27	179	285	49	25	23	31	86	60	38	55	99	139	165	57	27	22	32	179	163	188	61	ENE	
29-Oct-05	188	211	224	237	256	244	235	243	208	193	199	196	235	245	251	245	242	253	242	235	245	268	268	251	240	WSW	
30-Oct-05	252	251	253	250	251	260	261	264	233	222	230	251	260	255	258	257	252	232	255	275	265	246	252	253	252	WSW	
31-Oct-05	254	248	230	236	296	342	47	25	30	31	36	113	213	248	240	146	170	178	191	197	208	246	240	238	241	WSW	

Hourly Avg 242 240 241 239 248 258 262 256 252 238 229 231 241 234 243 242 238 259 257 250 255 251 250 258

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

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Summary							

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%
Percentile	99	95	75	50
	52.0	33.8	14.8	8.5
	25	21	15	5.4
	1		3.1	2.2

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

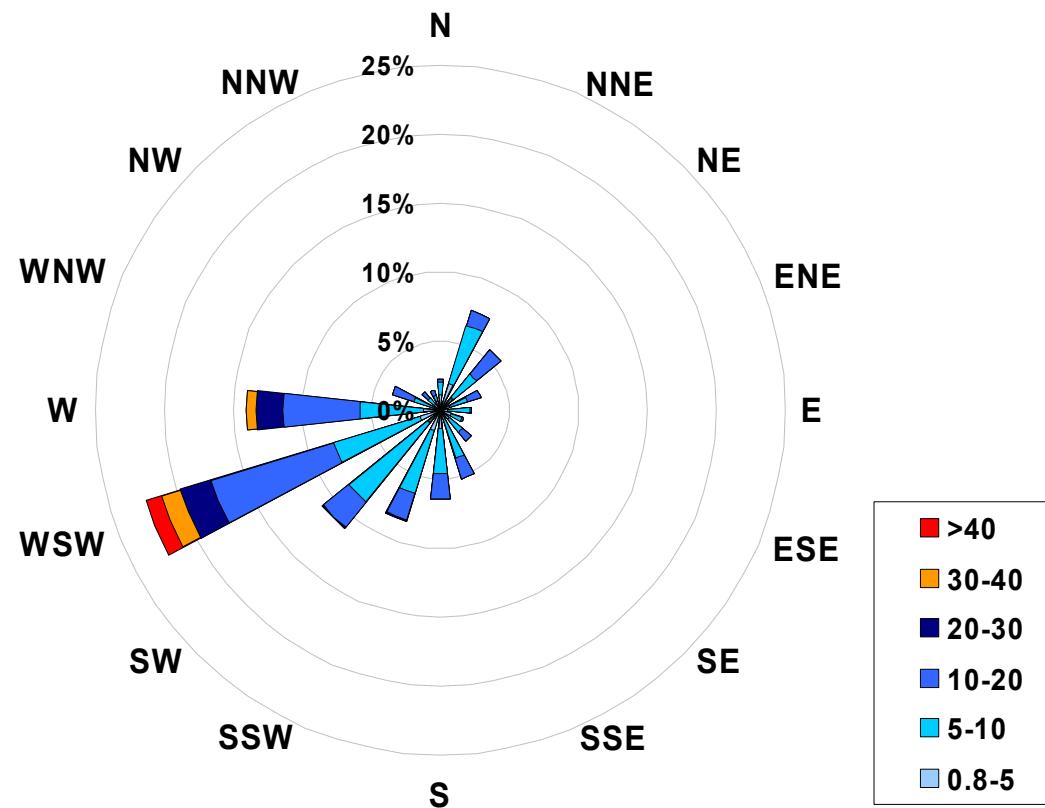
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Oct-05	18	20	12	33	20	17	32	18	58	28	18	16	10	16	10	23	9	11	10	15	5	22	8	8	58.3		
2-Oct-05	4	4	3	4	4	8	21	44	10	40	38	44	42	21	21	17	13	6	7	11	25	12	6	6	44.3		
3-Oct-05	5	5	5	3	5	3	3	3	4	6	9	9	9	12	11	15	17	10	6	9	5	7	8	8	16.9		
4-Oct-05	7	6	15	14	12	4	6	6	25	14	17	24	34	26	43	40	18	16	12	14	10	18	6	19	43.0		
5-Oct-05	9	16	15	33	15	11	22	27	12	10	9	14	12	30	28	15	11	8	5	21	15	22	14	7	32.6		
6-Oct-05	8	18	9	10	8	6	6	6	8	7	6	9	8	12	8	10	5	7	14	16	20	26	28	12	28.4		
7-Oct-05	7	2	54	14	8	4	2	4	7	7	5	5	6	6	5	5	5	3	3	3	2	3	3	3	54.2		
8-Oct-05	4	5	21	9	4	4	6	5	4	5	7	7	10	7	12	7	7	3	3	3	5	12	18	12	21.2		
9-Oct-05	9	8	5	14	7	6	6	5	7	6	8	14	13	10	9	6	3	6	7	11	9	5	4	2	14.1		
10-Oct-05	2	3	3	15	16	17	32	57	32	16	8	8	10	16	12	20	21	8	5	5	5	4	4	3	56.9		
11-Oct-05	3	4	4	3	16	5	5	14	18	7	5	7	6	7	7	5	3	34	60	10	18	37	66	65.9			
12-Oct-05	30	24	2	3	10	12	29	11	17	6	7	6	6	6	6	5	7	21	12	4	12	5	6	3	30.4		
13-Oct-05	4	3	7	5	5	5	5	8	8	6	5	5	7	5	3	3	3	3	5	3	5	3	11	10.7			
14-Oct-05	9	5	4	3	8	5	14	20	9	6	12	13	12	19	17	9	6	5	5	6	7	8	10	8	20.1		
15-Oct-05	8	6	6	5	6	8	47	24	9	13	18	14	12	11	8	8	43	20	6	5	5	6	9	14	46.6		
16-Oct-05	9	31	18	16	11	5	6	5	3	4	9	14	10	8	10	8	11	7	5	4	9	6	9	16	31.5		
17-Oct-05	25	13	26	35	8	5	10	7	9	12	6	10	8	24	15	7	18	12	7	6	8	5	6	7	34.9		
18-Oct-05	10	14	14	11	13	13	7	9	8	8	13	14	24	14	17	11	9	10	25	18	17	4	20	22	25.1		
19-Oct-05	27	43	17	41	24	39	48	19	28	35	25	13	8	11	10	7	15	8	4	6	7	4	9	9	48.2		
20-Oct-05	5	7	4	4	4	9	6	4	4	5	6	6	7	11	12	9	5	6	7	4	3	28	30	16	30.1		
21-Oct-05	8	6	7	4	8	3	4	11	5	12	17	19	51	12	11	5	3	3	8	6	4	6	22	5	51.4		
22-Oct-05	6	6	9	7	5	13	9	11	7	6	12	15	17	14	15	7	7	9	21	25	30	15	41	24	41.5		
23-Oct-05	28	11	6	14	4	4	7	4	6	5	7	8	6	10	9	11	14	13	53	31	21	52	52	11	53.1		
24-Oct-05	18	13	9	14	14	7	16	17	11	13	11	12	12	19	33	21	7	41	17	6	28	30	9	24	40.8		
25-Oct-05	4	18	14	25	57	20	31	12	12	21	7	8	7	8	10	5	6	5	6	4	4	4	3	42	57.1		
26-Oct-05	27	11	10	16	8	5	4	3	3	5	5	5	5	4	6	3	2	2	3	6	2	3	3	27.2			
27-Oct-05	12	21	36	21	26	14	6	12	12	12	19	51	48	29	20	35	15	6	6	5	4	4	4	5	51.3		
28-Oct-05	4	3	15	21	35	41	25	8	6	8	15	17	13	12	28	10	19	11	12	7	52	14	14	17	51.5		
29-Oct-05	6	6	4	5	5	6	12	9	11	8	8	8	11	6	6	4	4	4	3	3	2	3	4	3	11.9		
30-Oct-05	4	3	2	2	2	11	5	3	5	6	8	8	6	6	8	4	5	6	12	18	13	9	18	10	18.5		
31-Oct-05	9	8	9	6	8	6	15	12	4	13	10	30	9	7	6	48	22	15	21	11	23	6	7	7	48.1		

Hourly Max	30	43	54	41	57	41	48	57	58	40	38	51	51	30	43	48	43	41	53	60	52	52	52	66
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**1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for October 2005**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	120
5	to	10	332
10	to	20	232
20	to	30	33
30	to	40	17
	>	40	9
Total Non-Zero Values			743

# 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: October 1, 2005 to November 1, 2005

#### 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:	737
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

#### Status Flag Characters

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

#### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	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-Oct-05	9	11	9	9	2	5	5	5	4	6	5	7	10	10	12	14	13	14	13	13	13	13	13	12	10
2-Oct-05	8	8	7	6	6	2	2	2	5	7	11	11	11	14	13	13	12	11	11	10	9	8	7	8	10
3-Oct-05	11	12	13	13	12	12	12	12	11	11	10	10	12	13	14	15	15	15	14	13	11	10	11	10	10
4-Oct-05	9	7	7	8	8	7	7	7	7	8	8	9	11	13	13	13	12	11	9	10	10	9	8	7	
5-Oct-05	6	5	5	5	4	4	4	6	7	7	7	8	6	7	6	6	8	8	8	7	7	7	7	6	
6-Oct-05	7	5	3	3	3	3	2	3	4	7	6	5	6	8	11	12	13	14	10	11	11	11	11	12	
7-Oct-05	10	10	10	8	6	4	3	5	10	A	A	A	A	A	A	16	16	15	14	14	13	13	13	13	
8-Oct-05	13	12	13	12	10	11	9	9	8	11	12	14	15	15	15	15	15	15	13	14	14	13	12	12	
9-Oct-05	10	11	10	10	9	8	9	9	8	9	11	13	14	14	16	15	13	18	15	13	14	15	16	16	
10-Oct-05	16	15	15	13	13	13	14	14	13	15	16	16	15	15	15	15	13	14	12	13	15	14	14	14	
11-Oct-05	13	12	13	14	12	9	9	10	13	13	14	16	16	16	16	15	14	13	13	12	12	9	9	9	
12-Oct-05	12	12	12	13	11	8	8	8	7	10	10	13	16	17	17	15	15	16	12	11	14	14	13	7	
13-Oct-05	10	10	13	8	8	10	6	10	12	14	17	18	18	18	17	18	17	15	14	14	13	12	13	13	
14-Oct-05	12	13	12	12	10	9	9	9	10	7	9	10	12	11	13	15	15	15	14	14	13	13	13	13	
15-Oct-05	13	13	13	12	8	5	5	4	4	5	7	8	8	9	9	9	9	9	7	8	9	9	8	8	
16-Oct-05	8	9	8	8	7	7	10	10	13	11	14	15	18	18	18	18	15	13	12	12	11	9	9	10	
17-Oct-05	11	10	12	12	10	10	11	9	8	11	13	15	16	17	17	16	16	14	14	11	10	7	4	6	
18-Oct-05	6	4	4	4	5	3	2	2	3	5	6	14	17	17	18	17	16	14	8	13	13	13	13	12	
19-Oct-05	11	11	11	10	8	4	6	3	6	3	4	4	7	10	16	18	18	17	16	16	15	15	14	14	
20-Oct-05	13	14	14	13	11	12	8	5	7	6	10	13	16	17	17	17	16	13	11	13	14	11	10	11	
21-Oct-05	11	11	11	12	11	10	7	4	5	6	7	5	7	8	7	9	9	7	10	10	11	11	10	9	
22-Oct-05	7	6	6	6	4	4	5	5	5	7	5	6	8	8	7	6	9	10	6	7	5	5	4	5	
23-Oct-05	5	5	5	4	9	12	15	12	10	7	9	9	11	11	13	14	10	8	6	5	7	8	7	4	
24-Oct-05	2	2	2	3	2	3	3	2	2	4	4	5	6	9	7	7	9	6	4	7	10	10	9	10	
25-Oct-05	11	13	13	11	10	11	10	9	10	9	10	9	10	14	16	16	14	12	13	12	14	12	16	16	
26-Oct-05	14	14	13	14	16	19	20	20	18	18	18	18	18	19	19	18	18	17	14	11	13	11	12	10	
27-Oct-05	12	12	13	13	11	12	11	12	12	5	5	8	10	13	15	13	15	16	14	12	14	16	14	12	
28-Oct-05	12	10	10	9	5	5	5	4	4	4	4	6	12	13	17	18	18	17	16	16	15	14	14	15	
29-Oct-05	4	4	6	5	5	4	4	4	4	4	6	12	13	17	18	18	17	17	16	16	16	15	14	14	
30-Oct-05	14	15	15	17	18	18	17	17	15	15	17	18	18	18	17	16	13	13	12	12	12	13	11	13	
31-Oct-05	15	15	15	16	16	12	10	11	5	9	8	9	12	12	13	13	11	8	7	10	10	12	11	10	

## PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

**Summary**

Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	4.8 ppb	16-Oct	10:00 11:00
Maximum 24-hr Average:	1.4 ppb	28-Oct	

AIC Time:	1 hrs	Operational Time:	740 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 2.7	95 1.3	75 0.5	50 0.2	25 0.1	5 0.0	1 0.0	Average 0.4 ppb

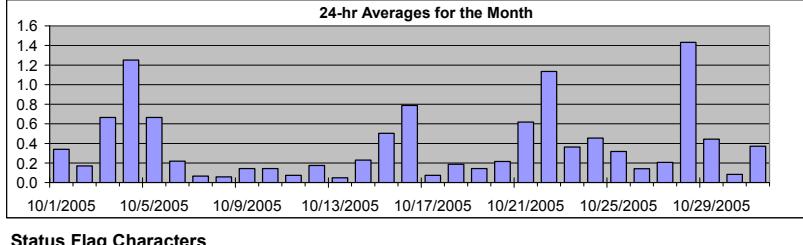
**Day Mountain Standard Time**

	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-Oct-05	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0.3	0.9
2-Oct-05	0	0	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
3-Oct-05	0	0	0	1	1	0	0	0	0	0	1	1	2	3	2	0	0	0	0	0	1	1	1	1	1	0.7	2.6
4-Oct-05	1	1	1	1	1	1	2	2	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.1
5-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.7	1.2
6-Oct-05	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
7-Oct-05	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	0.1	0.2
8-Oct-05	0	0	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
9-Oct-05	0	0	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
10-Oct-05	0	0	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
11-Oct-05	0	0	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
12-Oct-05	0	0	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	0.9
13-Oct-05	0	0	0	0	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
14-Oct-05	0	0	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	0.7
15-Oct-05	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	0	0	1	1	1	0	0	0.5	1.4
16-Oct-05	0	1	0	0	1	0	1	0	0	0	5	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0.8	4.8
17-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
18-Oct-05	0	0	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	0.7
19-Oct-05	0	0	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
20-Oct-05	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
21-Oct-05	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	0	0	1	1	2	2	2	0.6	1.8
22-Oct-05	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1.1	2.4
23-Oct-05	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	0.4	1.0
24-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0.5	1.3
25-Oct-05	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
26-Oct-05	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.2
27-Oct-05	0	0	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
28-Oct-05	1	1	1	1	1	0	1	1	1	1	1	1	1	2	1	1	1	1	1	2	3	3	3	2	1.4	3.4	
29-Oct-05	2	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8
30-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
31-Oct-05	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0.4	1.0

Hourly Avg	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4
Hourly Max	1.8	1.2	1.5	1.2	1.1	1.3	1.7	1.7	3.1	2.8	4.8	4.2	3.7	1.7	1.8	1.5	1.7	1.9	2.4	1.8	3.4	3.3	3.0	2.4		

### 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

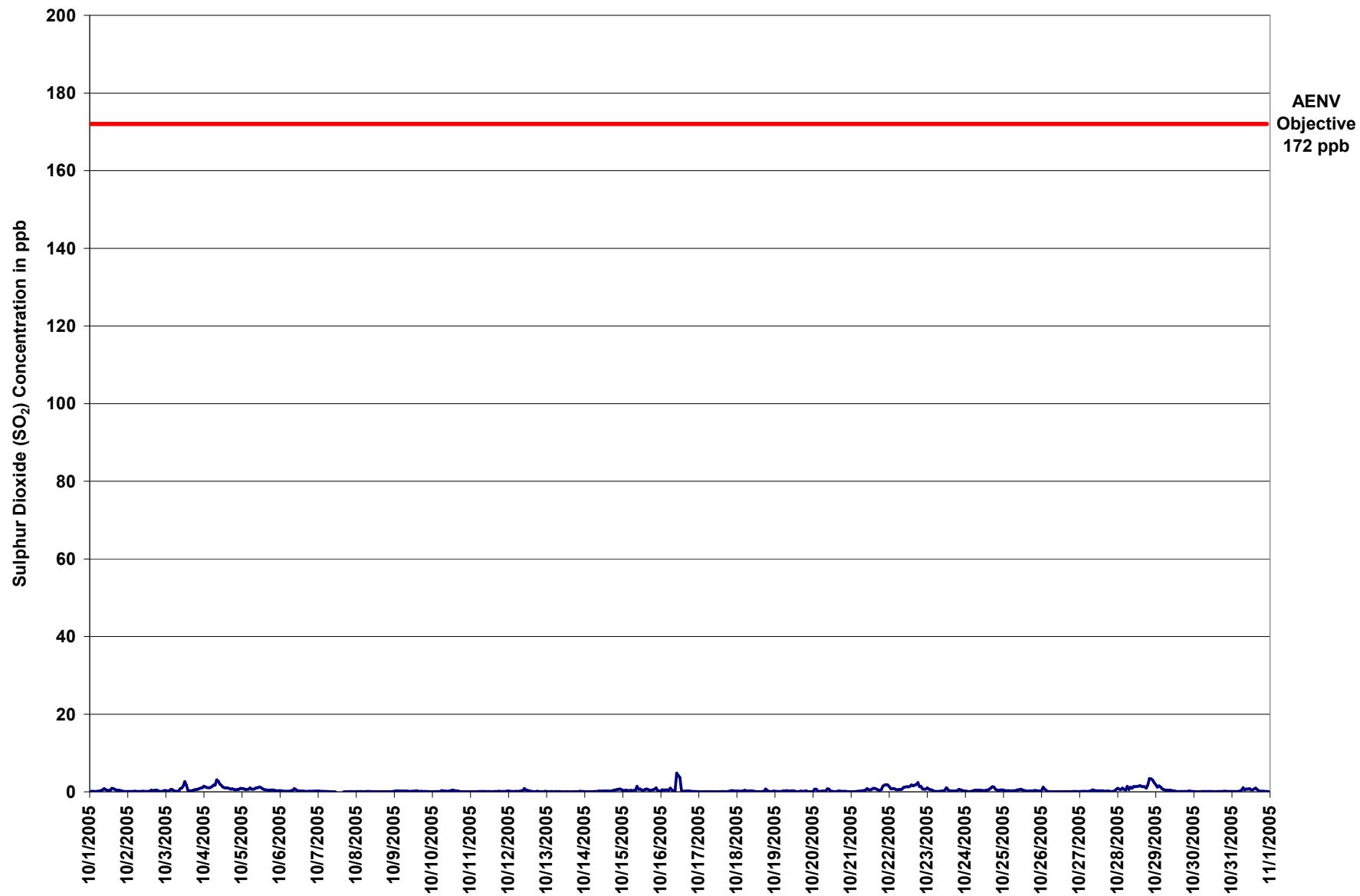


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

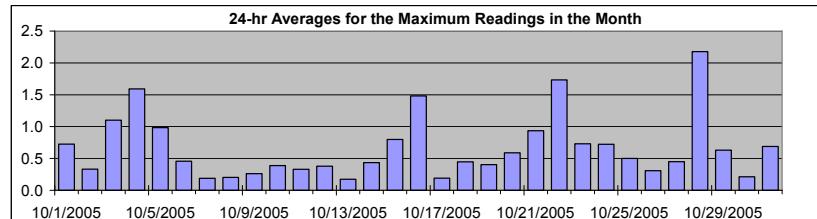
### HOURLY MAXIMUM TABLE

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

#### Summary

Maximum 1-hr Value: 11.4 ppb 16-Oct 10:00 11:00  
Maximum 24-hr Value: 2.2 ppb 28-Oct

AIC Time: 1 hrs Operational Time: 740 hrs  
Calibration Time: 3 hrs AMD Operational Uptime: 100.0%  
Percentile 99 95 75 50 25 5 1 Average 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	0:00		
1-Oct-05	0	0	1	0	0	0	0	0	1	1	1	1	1	1	1	5	1	1	1	1	0	0	0	0	0	0	0.7	4.5
2-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0.3	0.7
3-Oct-05	1	0	1	1	1	0	0	0	0	1	1	3	4	3	1	0	0	1	1	1	1	1	1	1	2	2	1.1	4.0
4-Oct-05	2	1	1	1	1	2	2	2	5	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	5.5
5-Oct-05	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	2	1	1	0	1	1	1	0	0	0	0	1.0	2.2
6-Oct-05	0	0	0	0	0	0	0	0	1	1	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.0
7-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0.2	0.4
8-Oct-05	0	0	0	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	0.7
9-Oct-05	0	0	0	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
10-Oct-05	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	1	0	0	0	0	0	0	0	0.4	2.2
11-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8
12-Oct-05	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2
13-Oct-05	0	0	0	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-Oct-05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.4	1.4
15-Oct-05	1	0	1	0	0	1	0	1	1	3	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0	0.8	2.6
16-Oct-05	0	1	1	1	1	1	1	1	0	1	11	7	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1.5	11.4
17-Oct-05	0	0	0	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	0.7
18-Oct-05	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0.4	1.6
19-Oct-05	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0.4	1.3
20-Oct-05	0	1	1	0	0	0	0	0	1	2	1	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0.6	2.2
21-Oct-05	0	0	0	0	0	0	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	0	0.9	2.4
22-Oct-05	2	1	1	1	1	1	1	1	1	2	1	4	1	2	2	2	2	3	5	2	3	1	1	1	1	1	1.7	5.1
23-Oct-05	2	1	1	1	0	0	0	2	1	0	1	2	1	0	0	0	0	0	1	1	1	1	1	1	0	0	0.7	2.2
24-Oct-05	0	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	2	2	1	1	1	1	1	1	0.7	1.9
25-Oct-05	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	1	0	0	0	0	1	0	0	0	0.5	1.2
26-Oct-05	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	0	0.3	1.5
27-Oct-05	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6
28-Oct-05	1	1	1	1	1	1	4	1	3	2	2	2	2	2	2	2	2	2	2	4	5	4	4	3	0	0	2.2	5.0
29-Oct-05	2	1	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.4
30-Oct-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
31-Oct-05	0	0	0	0	0	0	1	2	2	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0.7	1.9
Hourly Avg	0.6	0.5	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.9	1.1	1.0	1.0	0.7	0.7	0.6	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6		
Hourly Max	2.4	1.5	1.8	1.5	1.3	1.8	3.5	2.1	5.5	3.4	11.4	6.7	6.7	2.8	4.5	1.8	2.2	2.6	5.1	3.9	5.0	4.3	4.2	3.1				

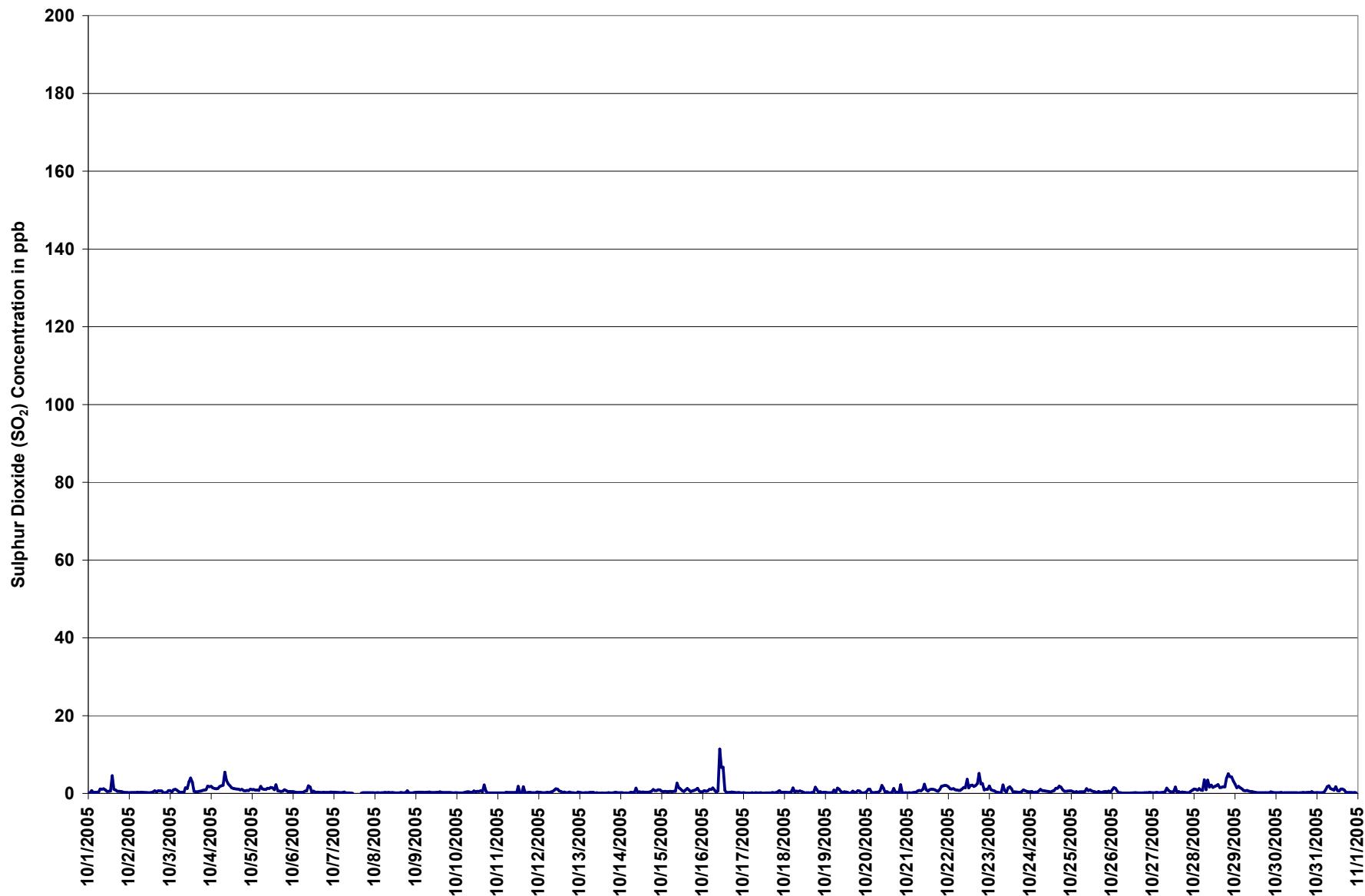
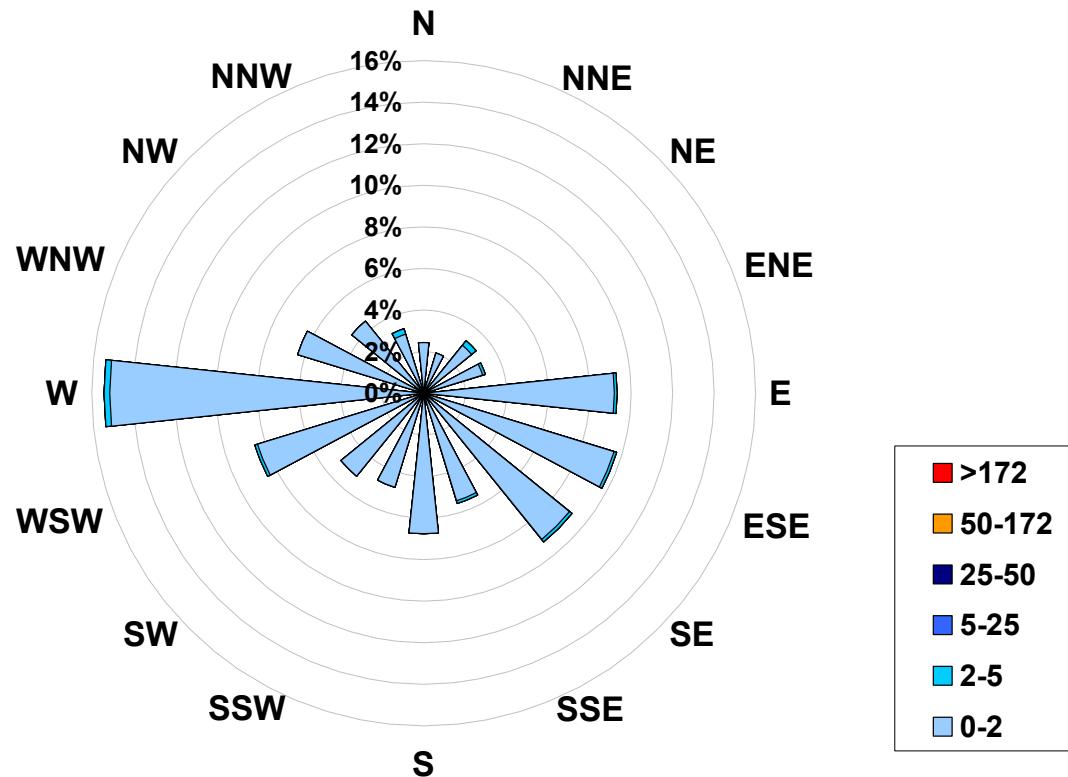


Figure 35. PASZA - Beaverlodge Sulphur Dioxide 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Beaverlodge Site for October 2005**



Calms:	1%
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Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	728
2	to	5	12
5	to	25	0
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			740

## PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

Objective Limit:	Alberta Environment:	1-hr 212 ppb	24-hr 106 ppb
<b>Summary</b>			
Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	21.0 ppb	28-Oct	17:00 18:00
Maximum 24-hr Average:	13.1 ppb	28-Oct	

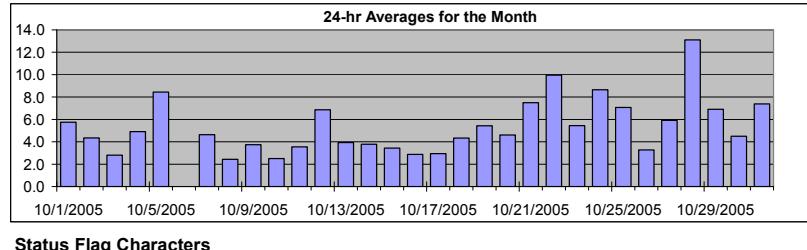
AIC Time:	1 hrs	Operational Time:	723 hrs
Calibration Time:	12 hrs	AMD Operational Uptime:	98.9%
Percentile	99 95 75 50 25 5 1	Average	5.4 ppb
	16.8 12.5 7.6 4.5 2.5 1.0 0.9		

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-Oct-05	4	5	7	5	7	8	8	8	10	10	9	7	5	4	4	3	4	5	6	5	5	5	3	3	4	5.7	10.3
2-Oct-05	5	5	5	7	5	9	8	8	6	4	2	2	2	2	2	2	2	3	5	5	5	4	4	3	4.3	9.2	
3-Oct-05	3	3	2	2	2	2	2	2	2	3	4	3	3	2	2	2	2	3	3	5	6	3	4	5	2.8	5.5	
4-Oct-05	5	6	6	5	5	6	7	7	7	5	5	5	3	3	3	3	3	4	6	4	4	5	5	6	4.9	6.7	
5-Oct-05	6	7	8	6	8	8	11	9	8	8	7	6	6	6	6	7	7	8	11	13	11	12	11	13	8.4	13.3	
6-Oct-05	14	13	10	9	10	11	10	10	8	C	C	C	C	C	C	C	0	5	10	7	5	5	7	5	N	14.0	
7-Oct-05	7	5	5	7	8	10	11	11	6	C	C	C	C	C	A	1	1	1	1	1	1	2	4	2	1	4.6	10.9
8-Oct-05	2	2	2	2	3	3	8	6	4	2	2	1	1	1	1	1	1	3	2	2	3	3	3	3	2.4	7.6	
9-Oct-05	3	3	3	4	4	5	5	5	5	4	2	3	3	3	4	3	4	7	3	4	5	4	3	2	3.7	7.0	
10-Oct-05	2	2	2	5	4	3	3	3	3	2	2	2	2	2	3	2	3	4	3	2	1	2	1	1	2.5	4.9	
11-Oct-05	1	1	1	2	3	7	8	6	3	2	3	1	0	1	1	2	2	4	5	4	4	5	10	9	3.6	9.7	
12-Oct-05	6	6	6	6	6	12	11	12	15	8	7	6	3	2	2	4	4	3	10	9	6	3	5	12	6.9	14.5	
13-Oct-05	7	5	3	8	4	6	10	7	5	2	1	1	1	1	1	1	2	3	4	4	6	5	4	3.9	10.3		
14-Oct-05	4	2	3	3	4	5	6	6	5	6	5	5	4	5	4	4	2	2	2	3	3	3	3	3	3.8	6.1	
15-Oct-05	2	2	2	2	4	6	6	7	8	5	3	3	2	2	2	2	3	2	3	5	4	2	2	3	3.4	7.5	
16-Oct-05	2	2	2	3	4	4	3	3	1	2	2	2	1	1	1	1	3	6	5	5	5	5	5	3	2.9	6.0	
17-Oct-05	2	3	2	2	3	4	3	5	8	4	2	1	1	1	1	1	2	3	2	5	4	4	5	3	2.9	8.1	
18-Oct-05	3	4	4	4	4	7	9	7	6	5	4	2	1	1	1	1	2	6	15	4	2	4	4	5	4.3	14.7	
19-Oct-05	4	4	4	4	5	11	8	12	9	10	8	9	11	5	1	1	2	4	3	2	D	2	2	2	5.4	12.0	
20-Oct-05	3	2	2	3	5	3	8	14	9	8	4	2	1	1	1	1	2	8	9	5	5	7	6	4	4.6	14.2	
21-Oct-05	3	4	3	3	5	5	9	15	13	11	M	M	M	M	16	9	9	10	6	6	4	5	6	8	7.5	15.9	
22-Oct-05	9	9	10	9	11	10	9	8	7	7	11	10	7	8	11	13	14	16	11	8	12	11	9	9	10.0	16.1	
23-Oct-05	11	12	10	10	5	3	3	4	5	6	4	3	3	2	2	3	6	5	5	7	5	4	6	5.4	11.8		
24-Oct-05	10	9	8	8	9	9	8	6	6	5	4	5	6	9	12	8	17	17	10	8	9	10	9	8.7	17.2		
25-Oct-05	7	5	4	6	7	6	8	8	9	10	11	12	9	3	2	2	6	10	8	8	8	7	9	3	7.1	11.7	
26-Oct-05	6	6	5	3	1	1	1	1	1	1	1	1	1	1	1	2	2	5	10	6	7	7	8	3.3	9.7		
27-Oct-05	6	4	4	4	5	4	5	6	20	13	10	8	6	4	5	4	3	5	7	4	2	2	4	7	5.9	20.0	
28-Oct-05	6	7	6	8	15	10	18	17	M	M	M	9	11	11	13	14	17	21	20	16	16	15	13	12	13.1	21.0	
29-Oct-05	12	12	18	18	16	14	13	15	12	9	4	3	1	1	1	1	2	2	2	2	3	3	2	6.9	18.2		
30-Oct-05	2	2	2	1	1	1	2	3	4	4	2	2	1	1	2	4	9	8	11	12	10	9	9	4.5	11.7		
31-Oct-05	4	4	3	3	3	8	9	7	12	9	8	8	5	7	6	7	8	11	13	10	9	7	6	8	7.4	13.4	

### 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

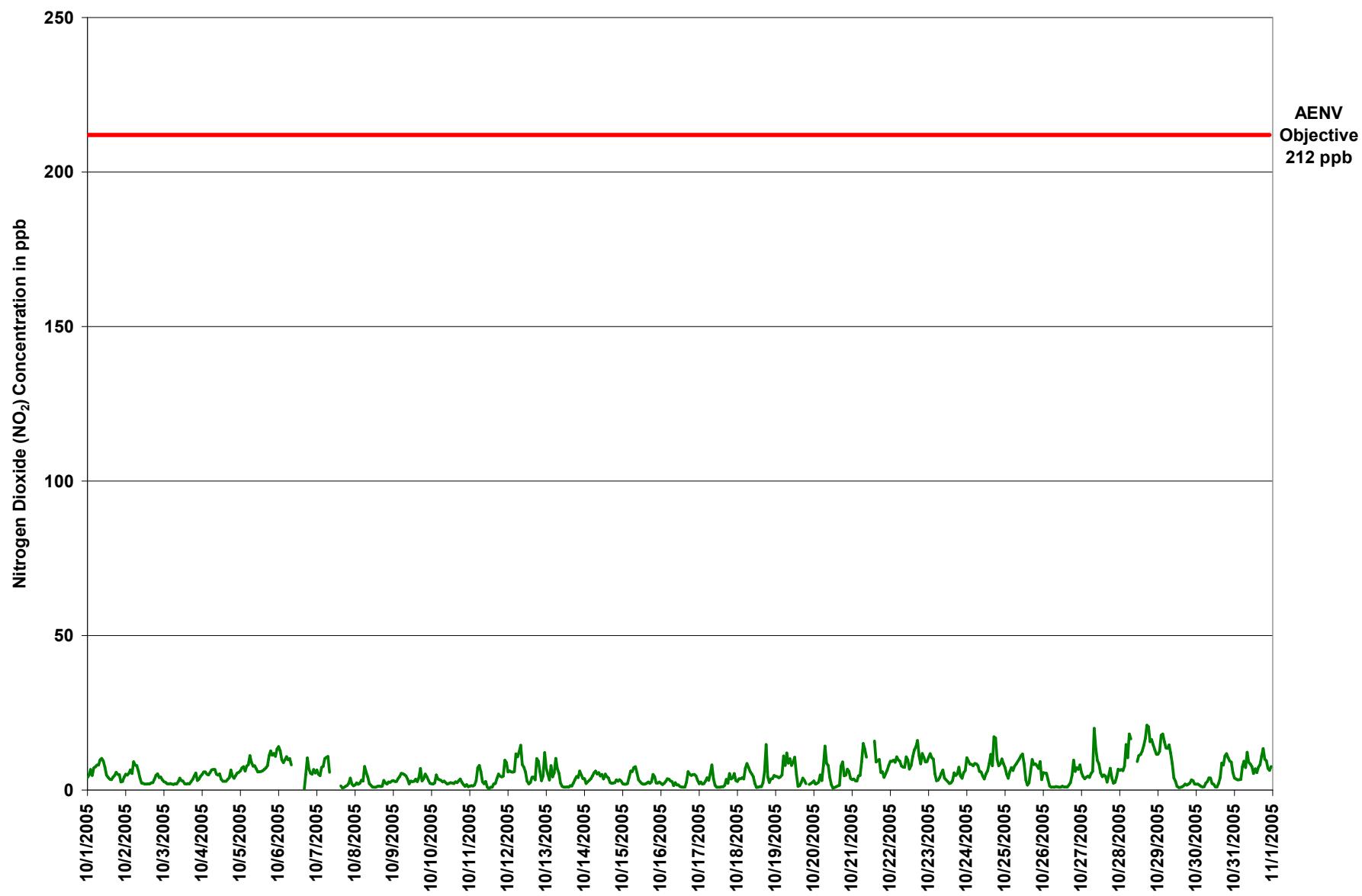


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Value:	40.1	ppb	20-Oct	20:00 21:00
Maximum 24-hr Value:	16.7	ppb	28-Oct	

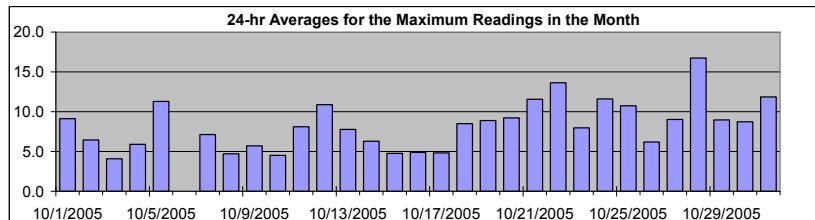
AIC Time:	1 hrs	Operational Time:	723 hrs						
Calibration Time:	12 hrs	AMD Operational Uptime:	98.9%						
Percentile	99	95	75	50	25	5	1	Average	
	25.8	19.5	11.5	6.8	3.9	1.9	1.6		8.3 ppb

### 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-hour Average	Daily Maximum	
	Hour End 1:00																										
1-Oct-05	6	5	20	6	9	16	13	26	16	13	11	9	6	5	4	5	6	8	8	8	8	4	4	4	5	9.1	25.6
2-Oct-05	9	6	7	9	7	12	10	11	8	6	3	3	2	2	2	3	5	4	14	10	8	5	7	4	6.4	14.1	
3-Oct-05	4	4	3	3	3	2	2	3	3	3	5	4	4	3	2	6	3	4	6	8	9	5	5	5	5	4.1	9.3
4-Oct-05	6	7	7	6	6	7	8	8	8	6	7	6	4	3	3	3	4	6	10	6	5	6	7	7	5.9	9.7	
5-Oct-05	7	10	10	9	11	20	16	11	10	10	8	7	7	7	16	8	9	9	14	16	14	16	15	16	11.3	20.1	
6-Oct-05	15	14	11	11	13	14	11	13	11	C	C	C	C	C	C	C	0	10	20	10	7	9	10	6	N	19.5	
7-Oct-05	9	7	9	10	12	14	15	13	8	C	C	C	C	C	A	2	2	2	3	4	5	10	3	2	7.1	14.7	
8-Oct-05	3	4	4	5	5	6	16	10	7	4	3	2	2	3	3	4	3	3	6	7	3	5	5	5	4.7	15.6	
9-Oct-05	5	3	3	5	7	7	6	7	6	3	4	4	4	4	4	8	13	14	7	7	5	5	5	3	5.7	13.6	
10-Oct-05	3	3	4	7	6	6	5	9	4	3	3	3	3	3	4	4	4	10	6	7	3	3	6	2	4.5	10.3	
11-Oct-05	2	2	2	2	8	17	14	9	4	3	6	2	5	2	2	35	7	7	13	12	8	10	12	14	8.1	35.2	
12-Oct-05	9	11	8	9	11	22	16	17	21	10	9	10	5	3	5	10	8	8	20	13	10	4	7	19	10.9	21.7	
13-Oct-05	18	9	5	15	7	11	19	13	17	5	2	2	2	2	2	6	3	4	6	8	10	12	6	6	7.8	18.5	
14-Oct-05	13	3	4	5	6	7	14	9	12	9	7	9	6	7	6	6	4	3	3	5	4	3	4	4	6.3	13.6	
15-Oct-05	3	3	2	3	6	8	7	10	12	8	5	3	3	2	3	3	3	3	5	8	7	4	3	4	4.8	11.6	
16-Oct-05	3	3	5	3	9	7	5	6	3	4	2	3	2	2	2	5	10	8	6	11	8	7	5	4	4.9	10.8	
17-Oct-05	4	4	2	3	3	9	6	11	13	6	3	1	1	2	2	2	3	7	5	10	5	5	8	4	4.8	12.7	
18-Oct-05	3	5	6	5	4	15	11	10	11	8	7	22	1	2	5	2	6	12	26	6	4	18	11	7	8.5	26.1	
19-Oct-05	10	6	6	6	7	18	13	18	15	14	11	13	12	10	3	2	4	8	7	13	D	5	4	4	8.9	17.6	
20-Oct-05	4	3	3	4	12	4	15	23	14	11	7	3	1	2	2	2	3	16	17	8	40	17	11	5	9.2	40.1	
21-Oct-05	4	5	4	3	6	7	19	22	22	24	M	M	M	M	21	14	12	15	7	15	5	7	11	9	11.6	24.2	
22-Oct-05	17	11	16	17	15	12	13	11	14	10	13	13	8	10	13	15	18	22	13	11	19	15	11	12	13.6	22.3	
23-Oct-05	15	14	13	11	9	5	7	6	11	19	7	5	3	3	3	5	9	6	7	9	6	4	11	9	8.0	18.7	
24-Oct-05	13	11	10	11	10	12	10	11	9	7	5	5	8	9	13	15	12	21	19	16	11	21	13	10	11.6	21.3	
25-Oct-05	9	6	5	9	10	9	13	13	13	20	14	15	11	7	2	4	13	17	16	12	10	11	16	9	10.7	19.7	
26-Oct-05	15	7	9	7	3	2	2	2	2	2	1	1	3	3	2	2	3	5	11	17	18	15	12	10	6.2	17.6	
27-Oct-05	7	5	5	6	7	7	14	17	30	18	14	10	9	9	6	4	8	10	5	3	4	8	9	9.0	30.3		
28-Oct-05	8	8	8	9	20	13	33	23	M	M	11	14	13	16	15	20	25	25	21	21	16	17	16	16.7	33.3		
29-Oct-05	16	18	20	19	16	15	15	16	15	11	6	4	3	2	2	3	4	4	4	5	7	6	3	9.0	20.2		
30-Oct-05	2	2	2	2	2	2	5	5	7	9	3	4	2	3	5	7	14	12	20	29	19	26	21	9	8.7	28.7	
31-Oct-05	5	5	5	4	4	26	20	16	19	19	14	12	8	9	7	10	13	16	17	15	13	10	9	11	11.9	26.4	

### HOURLY MAXIMUM 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

120

250

200

150

100

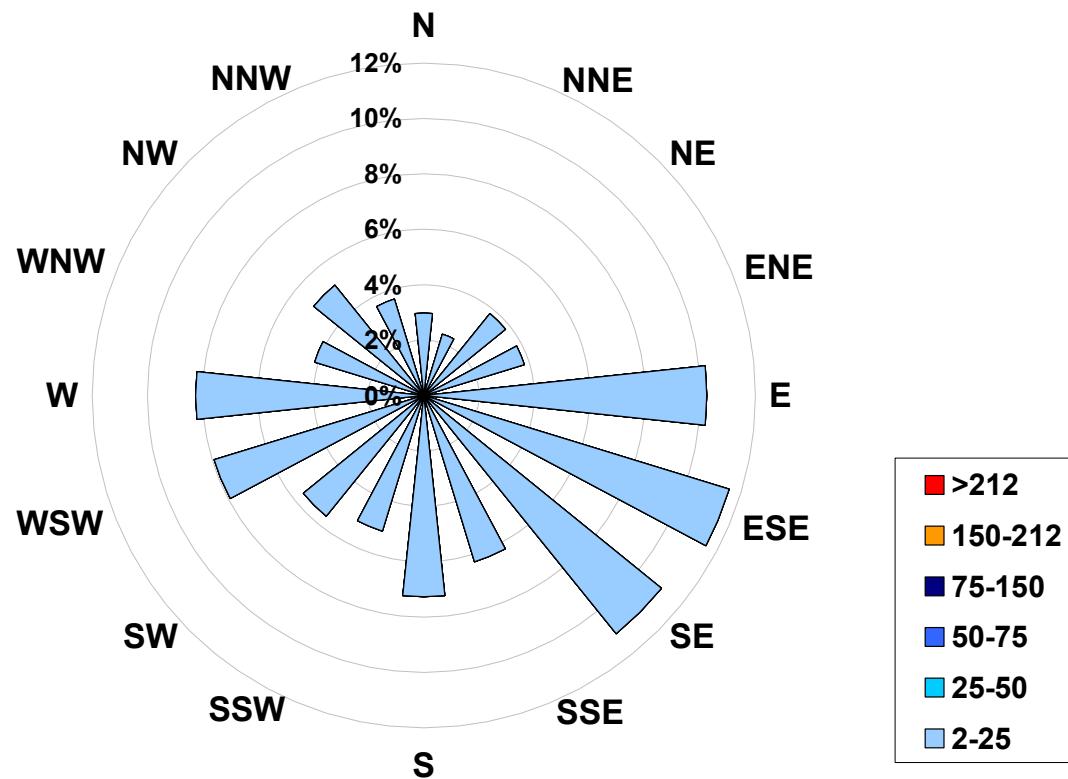
50

0

Nitrogen Dioxide ( $\text{NO}_2$ ) Concentration in ppb

Figure 37. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Beaverlodge Site for October 2005**



Calms:	1%
--------	----

Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range			
2.0	<	25	722
25	to	50	1
50	to	75	0
75	to	150	0
150	to	212	0
> 212			0
Total Non-Zero Values			723

## PASZA - Beaverlodge Nitric Oxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

Guideline Limit:  
Summary

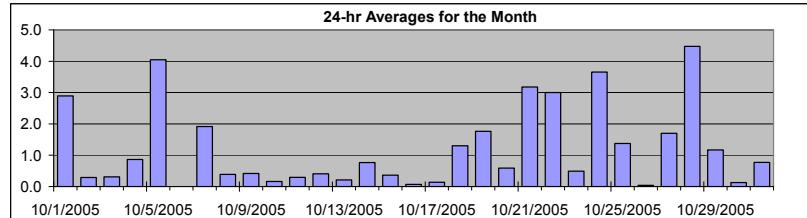
1-hr na ppb 24-hr na ppb

Maximum 1-hr Average: 31.0 ppb 28-Oct 6:00 7:00  
Maximum 24-hr Average: 4.5 ppb 28-Oct

AIC Time: 1 hrs Operational Time: 723 hrs  
Calibration Time: 12 hrs AMD Operational Uptime: 98.9%  
Percentile 99 95 75 50 25 5 1 Average 1.2 ppb  
10.6 6.2 1.1 0.1 0.0 0.0 0.0

### 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

	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-Oct-05	0	0	1	0	1	1	1	5	11	24	14	5	2	1	1	1	1	0	0	0	0	0	0	0	0	2.9	24.1	
2-Oct-05	0	0	0	0	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.4	
3-Oct-05	0	0	0	0	0	0	0	0	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8
4-Oct-05	0	0	0	0	0	0	0	0	2	3	4	5	2	1	1	1	1	0	0	0	0	0	0	0	0	0.9	4.6	
5-Oct-05	0	0	0	0	0	5	6	7	13	9	13	10	5	4	4	2	2	2	3	5	3	2	1	2	4.0	13.4		
6-Oct-05	2	0	0	0	0	1	1	3	5	C	C	C	C	C	C	C	5	1	0	0	0	0	0	0	0	N	5.5	
7-Oct-05	0	0	0	0	0	1	1	1	1	C	C	C	C	A	0	5	5	5	4	4	3	3	2	1.9	5.5			
8-Oct-05	2	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7	
9-Oct-05	0	0	0	0	0	0	0	0	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	2.1	
10-Oct-05	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.0	
11-Oct-05	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.2	
12-Oct-05	0	0	0	0	0	1	0	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.1	
13-Oct-05	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2	
14-Oct-05	0	0	0	0	0	0	0	0	1	6	2	3	1	2	1	1	0	0	0	0	0	0	0	0	0	0.8	6.2	
15-Oct-05	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	1.3	
16-Oct-05	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	
17-Oct-05	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0	
18-Oct-05	0	0	0	0	5	2	7	5	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	6.5	
19-Oct-05	0	0	0	0	0	7	1	8	4	5	4	5	5	2	0	0	0	0	0	0	D	0	0	0	0	1.8	8.3	
20-Oct-05	0	0	0	0	0	0	0	1	3	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	5.8	
21-Oct-05	0	0	0	0	0	0	1	2	5	10	M	M	M	M	9	8	6	5	4	4	3	3	2	2	3.2	9.9		
22-Oct-05	2	1	1	1	0	0	0	0	3	4	10	12	6	5	8	5	5	4	1	0	3	0	0	0	0	3.0	12.3	
23-Oct-05	1	0	0	0	0	0	0	0	1	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.8	
24-Oct-05	4	4	1	2	0	4	9	9	10	10	6	4	3	3	6	5	1	5	1	0	0	0	0	0	0	3.7	10.1	
25-Oct-05	0	0	0	0	0	0	0	0	1	7	7	9	6	2	0	0	1	0	0	0	0	0	0	0	0	1.4	9.4	
26-Oct-05	0	0	0	0	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	
27-Oct-05	0	0	0	0	0	0	0	0	9	11	7	6	3	2	2	1	0	0	0	0	0	0	0	0	0	1.7	10.8	
28-Oct-05	0	0	0	0	0	0	0	31	3	M	M	M	9	9	8	8	6	6	8	4	1	1	0	0	0	4.5	31.0	
29-Oct-05	0	1	4	1	0	0	0	2	6	4	5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1.2	6.1	
30-Oct-05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.6	
31-Oct-05	0	0	0	0	0	2	1	1	3	2	1	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0.8	2.9	

Hourly Avg 0.4 0.3 0.3 0.1 0.1 1.0 2.0 1.8 3.0 4.3 3.2 2.8 1.9 1.3 1.5 1.2 1.2 1.2 1.1 0.6 0.5 0.5 0.5 0.3 0.2 0.2  
Hourly Max 4.0 3.7 4.2 1.8 0.9 6.6 31.0 8.7 13.4 24.1 13.8 12.3 9.0 8.1 9.4 7.8 6.3 8.0 4.5 5.4 3.5 3.1 2.6 2.2

## PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

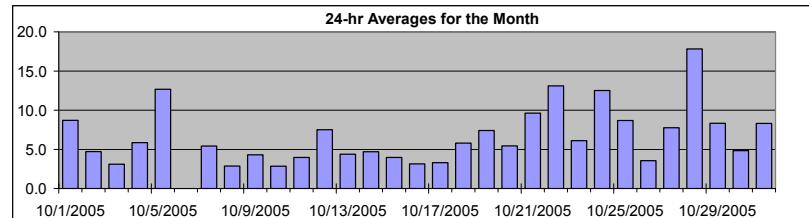
Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

Maximum 1-hr Average: 49.7 ppb 28-Oct 6:00 7:00  
Maximum 24-hr Average: 17.8 ppb 28-Oct

## 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

AIC Time:	1 hrs						Operational Time:						723 hrs						
	Calibration Time: 12 hrs						AMD Operational Uptime: 98.9%												
Percentile	99	95	75	50	25	5	1	Average											
	23.3	17.8	9.0	5.0	2.9	1.4	1.0	6.7 ppb											

## 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-Oct-05	4	5	8	5	8	8	9	14	21	35	23	13	7	5	4	4	5	5	5	5	5	3	3	3	4	8.7	34.6
2-Oct-05	5	5	5	7	5	12	10	9	7	4	3	3	2	2	2	2	2	3	4	5	5	4	4	3	4.7	11.7	
3-Oct-05	3	3	2	2	2	2	2	2	2	3	6	5	4	3	2	2	2	3	3	5	6	3	4	5	3.1	5.8	
4-Oct-05	5	6	6	5	5	6	7	7	9	9	9	10	6	4	4	4	4	4	7	5	4	5	6	6	5.9	9.8	
5-Oct-05	6	7	8	6	8	13	18	16	21	17	20	16	11	10	9	10	10	14	18	15	14	12	15	12.7	21.3		
6-Oct-05	16	14	10	9	10	12	12	13	14	C	C	C	C	C	C	C	C	7	6	11	7	6	5	7	6	N	15.9
7-Oct-05	7	5	5	8	8	11	12	12	7	C	C	C	C	C	A	1	2	2	2	3	3	5	3	2	5.4	12.1	
8-Oct-05	2	3	2	3	4	3	8	6	6	3	2	1	1	1	2	2	2	2	3	3	2	3	3	3	2.9	8.1	
9-Oct-05	3	3	3	4	5	6	6	6	6	3	4	4	4	4	3	4	7	3	4	5	4	3	2	4.3	7.3		
10-Oct-05	2	2	2	5	4	4	3	3	3	3	3	3	3	3	3	3	3	3	4	3	2	1	2	1	2.8	5.1	
11-Oct-05	1	2	2	2	3	8	9	6	3	3	4	1	1	1	3	3	4	5	5	4	5	10	9	4.0	10.0		
12-Oct-05	6	6	6	6	6	13	11	13	17	10	9	7	4	3	3	5	5	4	11	10	6	3	5	13	7.5	17.0	
13-Oct-05	8	5	3	8	5	6	11	7	7	3	2	1	1	1	2	2	3	4	5	4	6	5	4	4	4.4	11.4	
14-Oct-05	4	2	3	3	4	5	6	7	6	11	7	8	5	7	6	5	3	2	2	3	4	3	4	3	4.7	11.1	
15-Oct-05	2	2	2	2	4	7	6	8	9	7	4	4	3	3	3	3	3	2	3	5	5	2	2	3	4.0	8.7	
16-Oct-05	2	2	2	3	4	4	3	3	2	3	2	2	1	1	1	3	6	5	5	5	5	5	5	3	3.2	6.4	
17-Oct-05	2	3	2	2	3	4	3	6	9	5	2	1	1	1	1	2	4	2	6	4	4	6	3	3.3	9.1		
18-Oct-05	3	4	4	4	4	12	11	14	11	11	9	3	1	1	1	1	6	15	4	3	4	4	4	5.8	15.4		
19-Oct-05	5	4	4	4	5	18	9	21	13	15	12	14	16	7	2	2	3	4	3	2	D	2	2	3	7.4	20.7	
20-Oct-05	3	2	2	3	5	3	8	15	12	14	7	3	1	1	2	2	8	9	5	5	7	6	4	5.4	15.2		
21-Oct-05	4	4	3	3	5	5	10	18	18	21	M	M	M	M	25	13	12	12	7	7	5	6	7	9	9.6	24.9	
22-Oct-05	10	10	11	10	11	10	10	8	10	12	21	22	13	13	19	18	19	21	12	9	16	11	10	10	13.1	22.3	
23-Oct-05	12	13	11	10	6	3	3	4	6	8	5	4	4	3	3	4	7	5	6	8	5	4	6	7	6.1	12.6	
24-Oct-05	15	13	9	10	8	13	18	17	16	15	11	8	9	10	14	17	9	23	18	10	8	9	10	9	12.5	22.7	
25-Oct-05	7	5	4	6	8	7	8	9	10	17	18	21	14	5	2	3	7	10	9	9	8	7	10	4	8.7	21.4	
26-Oct-05	6	6	6	4	2	1	1	1	2	1	1	2	1	1	2	3	5	10	6	7	7	8	7	3.6	10.1		
27-Oct-05	6	4	4	4	5	4	6	7	29	24	17	14	8	7	7	6	3	5	7	4	2	3	4	7	7.8	29.0	
28-Oct-05	7	7	6	8	15	11	50	20	M	M	M	18	20	20	21	21	22	29	25	17	18	15	13	12	17.8	49.7	
29-Oct-05	12	14	22	20	16	14	16	21	16	14	6	5	2	1	1	2	2	2	2	2	3	3	2	8.3	22.2		
30-Oct-05	2	2	2	1	1	1	2	3	4	5	3	2	2	1	3	5	10	8	11	12	11	10	9	6	4.8	12.2	
31-Oct-05	4	4	4	4	4	4	10	10	8	15	11	10	9	7	9	7	9	12	14	10	10	7	7	7	8.3	15.3	

Hourly Avg 5.6 5.4 5.3 5.5 5.9 7.6 9.7 9.8 10.4 10.3 8.0 7.3 5.4 4.6 5.3 5.1 5.5 7.1 7.6 6.6 6.1 5.6 5.9 5.7  
Hourly Max 15.9 14.2 22.2 19.5 16.3 17.8 49.7 21.0 29.0 34.6 23.4 22.3 20.3 19.7 24.9 20.7 22.4 29.4 24.7 18.3 17.5 15.0 13.4 15.0

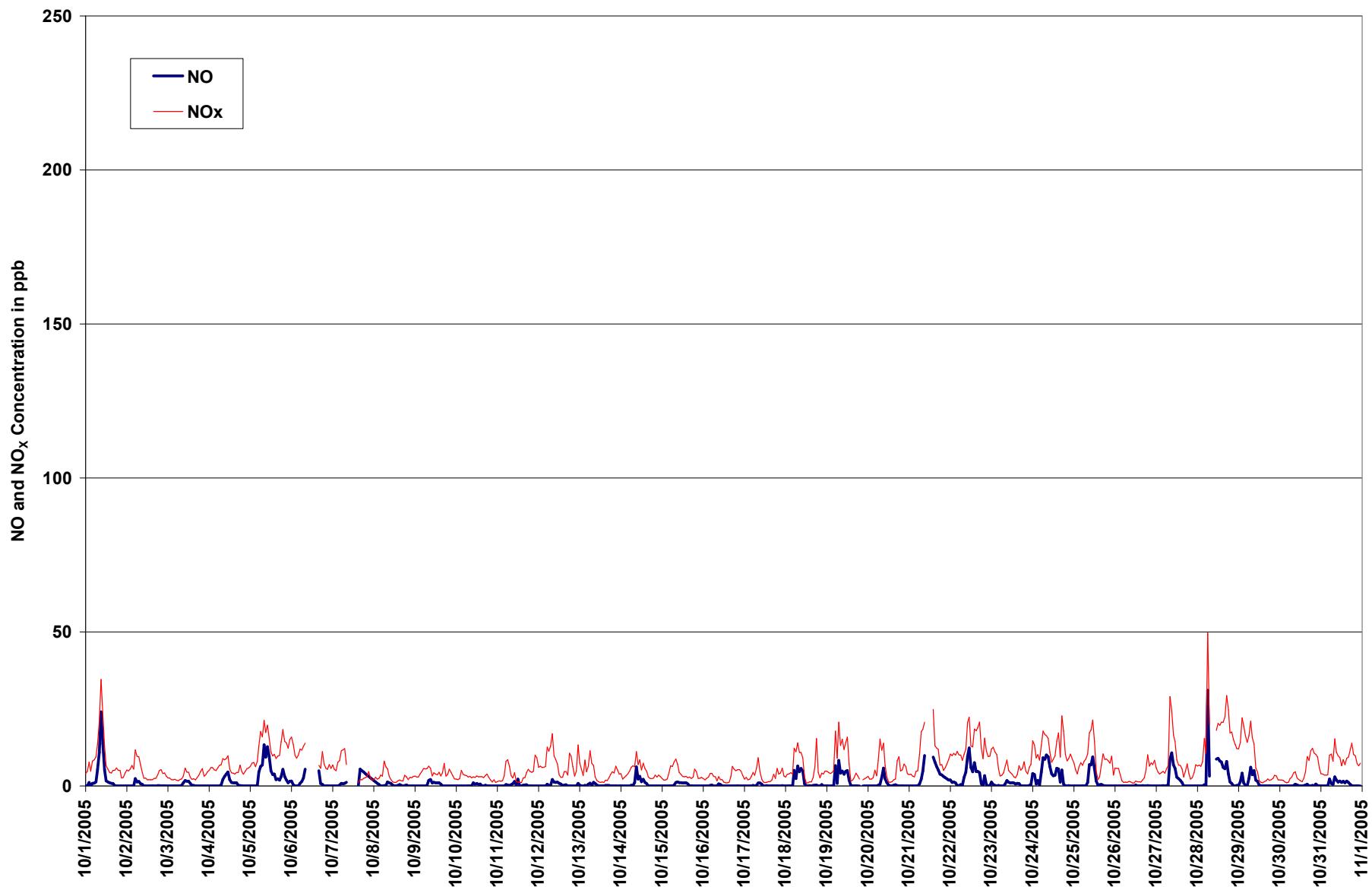


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Value:	103.3 ppb	28-Oct	6:00 7:00
Maximum 24-hr Value:	13.1 ppb	28-Oct	

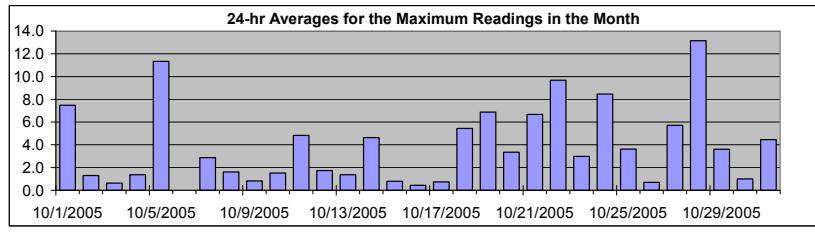
AIC Time:	1 hrs	Operational Time:	723 hrs
Calibration Time:	12 hrs	AMD Operational Uptime:	98.9%
Percentile	Average		
99	95	75	50
50	25	5	1
38.2	17.8	3.0	1.0
0.0	0.0	0.0	0.0

### 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																										
1-Oct-05	0	0	18	0	4	10	7	29	32	34	24	11	3	2	1	1	2	1	0	0	0	0	0	0	0	7.5	33.9
2-Oct-05	0	0	0	0	0	7	5	6	1	1	0	0	0	0	1	0	0	3	4	0	1	1	1	0	1.3	6.9	
3-Oct-05	0	0	0	0	0	0	0	1	1	1	3	2	2	1	1	2	0	0	0	0	0	0	0	0	0.6	3.0	
4-Oct-05	0	0	0	0	0	0	1	1	3	4	5	6	3	2	2	1	1	1	1	1	0	0	0	0	1.4	6.0	
5-Oct-05	0	0	0	0	0	38	24	20	21	12	17	14	6	4	47	3	3	3	9	20	13	10	4	4	11.3	46.8	
6-Oct-05	2	1	0	0	1	4	6	12	21	C	C	C	C	C	C	C	5	1	2	0	0	1	1	0	N	20.8	
7-Oct-05	0	0	0	0	1	4	6	2	2	C	C	C	C	C	A	1	6	6	5	5	4	4	3	2	2.9	6.3	
8-Oct-05	2	1	1	0	0	1	1	3	2	2	1	1	1	2	2	2	0	1	13	0	0	0	0	0	1.6	12.9	
9-Oct-05	0	0	0	0	0	0	0	1	5	4	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0.8	5.0	
10-Oct-05	0	0	0	0	0	0	0	2	0	1	15	1	1	1	7	1	0	3	1	1	0	1	1	0	1.5	14.9	
11-Oct-05	0	0	0	0	0	4	1	1	1	1	4	2	86	1	1	7	2	2	0	2	0	0	0	0	4.8	86.5	
12-Oct-05	0	0	0	0	0	3	1	2	4	2	2	3	1	8	1	1	1	0	2	0	0	0	0	0	1.7	10.5	
13-Oct-05	4	0	0	1	1	3	4	5	3	2	2	1	0	1	0	1	1	1	1	1	0	1	0	0	1.4	5.0	
14-Oct-05	1	0	0	0	0	0	6	1	4	78	4	7	3	3	2	2	0	0	0	0	0	0	0	0	4.6	77.5	
15-Oct-05	0	0	0	0	0	1	0	1	3	2	2	2	1	2	2	1	0	1	0	1	0	0	0	0	0.8	3.0	
16-Oct-05	0	0	0	0	2	2	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0	
17-Oct-05	0	0	0	0	0	2	0	1	2	2	1	1	0	3	0	1	1	1	0	1	0	0	0	1	0.7	3.0	
18-Oct-05	0	0	1	0	0	48	9	15	10	13	12	4	2	1	1	0	1	1	2	0	0	0	10	1	5.4	47.8	
19-Oct-05	3	0	0	0	1	29	5	38	34	14	7	12	7	4	1	1	0	1	0	0	D	0	0	0	6.9	38.4	
20-Oct-05	0	0	0	0	0	0	1	2	15	9	5	8	11	0	1	5	17	1	1	0	3	1	1	0	3.4	16.9	
21-Oct-05	0	0	0	0	0	2	16	12	12	34	M	M	M	M	15	10	9	6	4	4	3	3	2	2	6.7	34.2	
22-Oct-05	6	1	5	9	1	1	2	2	20	7	16	54	9	7	10	7	8	18	27	1	17	3	1	2	9.7	53.6	
23-Oct-05	6	2	1	0	1	0	0	0	31	10	4	1	2	1	1	1	2	1	0	1	0	0	3	4	3.0	30.8	
24-Oct-05	14	14	1	6	1	15	31	24	21	14	8	5	5	6	9	9	2	15	2	1	0	2	0	0	8.5	30.7	
25-Oct-05	0	0	0	0	0	1	1	1	3	36	12	14	9	4	1	1	1	1	1	0	0	1	0	0	3.6	35.9	
26-Oct-05	0	0	0	0	0	1	0	0	1	1	1	0	2	1	1	1	1	1	1	1	2	1	0	0	0.7	2.0	
27-Oct-05	0	0	0	0	2	0	2	5	33	21	13	12	5	39	2	2	1	0	1	0	0	0	0	0	5.7	38.7	
28-Oct-05	0	0	0	0	5	1	103	15	M	M	11	20	10	33	8	10	19	16	16	5	1	1	3	13.1	103.3		
29-Oct-05	2	8	16	2	2	1	11	13	10	10	3	2	1	1	1	1	1	1	1	0	0	0	0	0	3.6	16.0	
30-Oct-05	0	0	0	1	0	0	1	0	1	1	1	0	0	1	1	0	1	2	0	9	1	1	1	1.0	9.3		
31-Oct-05	0	0	0	0	0	22	11	5	30	16	3	3	2	2	3	2	4	1	0	0	1	0	0	4.5	29.8		

### HOURLY MAXIMUM 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

Hourly Avg 1.3 0.9 1.4 0.7 0.7 6.4 8.2 7.0 10.8 11.8 6.2 6.5 6.6 3.8 5.0 2.6 2.6 2.9 2.7 2.4 1.6 1.6 0.7 1.0

Hourly Max 13.9 14.2 18.3 8.7 4.5 47.8 103.3 38.4 33.5 77.5 23.9 53.6 86.5 38.7 46.8 9.9 16.9 18.8 26.8 19.9 17.5 10.0 4.0 10.5

Station: Beaverlodge  
 Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Value:	136.6	ppb	28-Oct	6:00 7:00
Maximum 24-hr Value:	29.1	ppb	28-Oct	

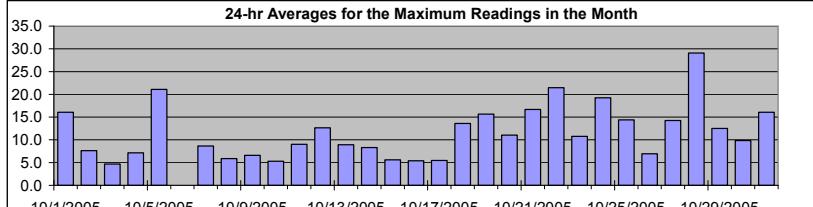
AIC Time:	1 hrs	Operational Time:	723 hrs					
Calibration Time:	12 hrs	AMD Operational Uptime:	98.9%					
Percentile	99 51.1	95 34.1	75 14.9	50 7.9	25 4.9	5 2.4	1 1.9	Average 11.6 ppb

### 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-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-Oct-05	6	5	39	7	11	23	20	52	44	45	35	20	9	7	5	6	8	8	8	8	4	4	4	5	16.1	51.9	
2-Oct-05	9	6	7	9	7	18	13	16	8	7	3	4	2	3	3	3	5	4	17	14	8	5	7	4	7.6	18.0	
3-Oct-05	4	4	3	3	3	3	3	4	3	4	7	6	6	4	3	7	3	4	6	8	10	5	5	5	4.7	10.0	
4-Oct-05	6	7	7	6	6	7	8	8	11	9	11	12	7	5	5	4	5	7	11	7	5	6	7	7	7.2	11.9	
5-Oct-05	7	11	10	9	11	56	33	31	29	20	25	22	12	11	51	11	12	13	20	33	26	20	18	18	21.1	56.4	
6-Oct-05	17	16	11	11	14	18	16	19	27	C	C	C	C	C	C	C	9	11	22	10	7	10	10	6	N	26.8	
7-Oct-05	10	7	9	10	12	18	21	15	10	C	C	C	C	C	A	2	4	4	5	6	6	11	5	3	8.7	20.7	
8-Oct-05	4	4	5	5	6	7	18	11	10	6	4	2	2	4	5	6	6	3	7	10	4	5	5	5	5.9	17.8	
9-Oct-05	5	3	4	5	7	8	7	7	11	10	4	6	5	5	6	5	8	14	14	7	7	5	5	3	6.6	14.1	
10-Oct-05	3	3	4	7	6	6	5	10	4	4	5	4	4	4	7	4	5	13	7	8	4	4	6	2	5.3	12.8	
11-Oct-05	2	2	2	2	8	22	14	10	5	5	10	3	5	2	2	36	9	8	13	14	8	10	12	15	9.0	35.8	
12-Oct-05	9	11	9	9	11	25	18	20	25	13	11	12	6	8	6	11	9	8	23	13	10	4	7	30	12.6	29.8	
13-Oct-05	22	9	5	16	8	14	23	15	19	6	4	2	2	2	6	4	5	6	9	10	13	7	6	8.9	22.7		
14-Oct-05	15	3	4	5	7	7	20	10	16	19	11	16	9	9	9	8	4	4	3	5	5	3	5	4	8.3	20.2	
15-Oct-05	3	3	2	3	6	8	11	15	10	7	5	4	4	4	4	4	3	5	8	8	4	3	5	5.6	14.6		
16-Oct-05	4	3	5	3	11	9	6	6	3	5	3	3	3	2	2	5	11	8	6	11	9	7	5	5.4	11.3		
17-Oct-05	4	4	2	3	4	10	6	12	14	7	4	2	2	3	2	2	4	8	5	11	5	5	9	5.5	13.9		
18-Oct-05	3	5	7	5	4	61	19	22	21	21	19	23	2	2	5	3	7	12	29	6	4	28	12	7	13.6	61.3	
19-Oct-05	13	6	6	6	7	45	18	56	48	27	17	26	19	14	3	3	5	9	7	14	D	5	5	4	15.7	56.0	
20-Oct-05	4	3	3	4	12	4	16	25	26	20	12	7	3	2	3	3	4	16	18	9	41	17	11	5	11.0	40.8	
21-Oct-05	4	5	4	3	6	9	33	35	34	53	M	M	M	M	35	19	17	18	8	17	6	8	12	10	16.7	52.6	
22-Oct-05	23	12	20	25	16	14	14	13	34	17	27	42	17	17	23	22	25	40	30	11	37	17	11	13	21.5	42.2	
23-Oct-05	17	16	13	11	10	6	8	6	39	29	9	6	5	4	4	6	11	7	7	10	7	5	13	10.8	38.7		
24-Oct-05	23	24	10	14	11	26	40	30	27	20	13	10	13	15	21	22	14	36	22	18	12	23	13	10	19.2	39.7	
25-Oct-05	9	6	5	10	10	11	13	15	16	51	27	30	20	11	3	5	14	18	16	12	10	11	17	9	14.4	51.2	
26-Oct-05	16	7	9	7	3	3	3	2	3	2	2	2	5	3	3	2	4	6	12	18	20	16	12	10	7.0	19.5	
27-Oct-05	7	5	5	6	9	7	15	22	60	39	26	21	14	40	9	8	4	8	10	6	3	4	8	9	14.2	60.0	
28-Oct-05	8	8	8	9	24	14	137	34	M	M	21	34	21	41	24	31	44	42	35	25	18	18	20	29.1	136.6		
29-Oct-05	19	26	36	22	18	17	26	29	26	19	9	7	4	3	2	3	3	5	5	5	5	7	6	9.9	35.4		
30-Oct-05	3	3	2	2	2	2	5	5	9	11	4	5	2	3	6	8	15	13	21	30	20	35	22	10	12.5	36.5	
31-Oct-05	5	5	5	4	4	47	32	19	48	36	17	14	9	12	8	13	15	19	18	15	13	10	9	11	16.1	48.2	

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

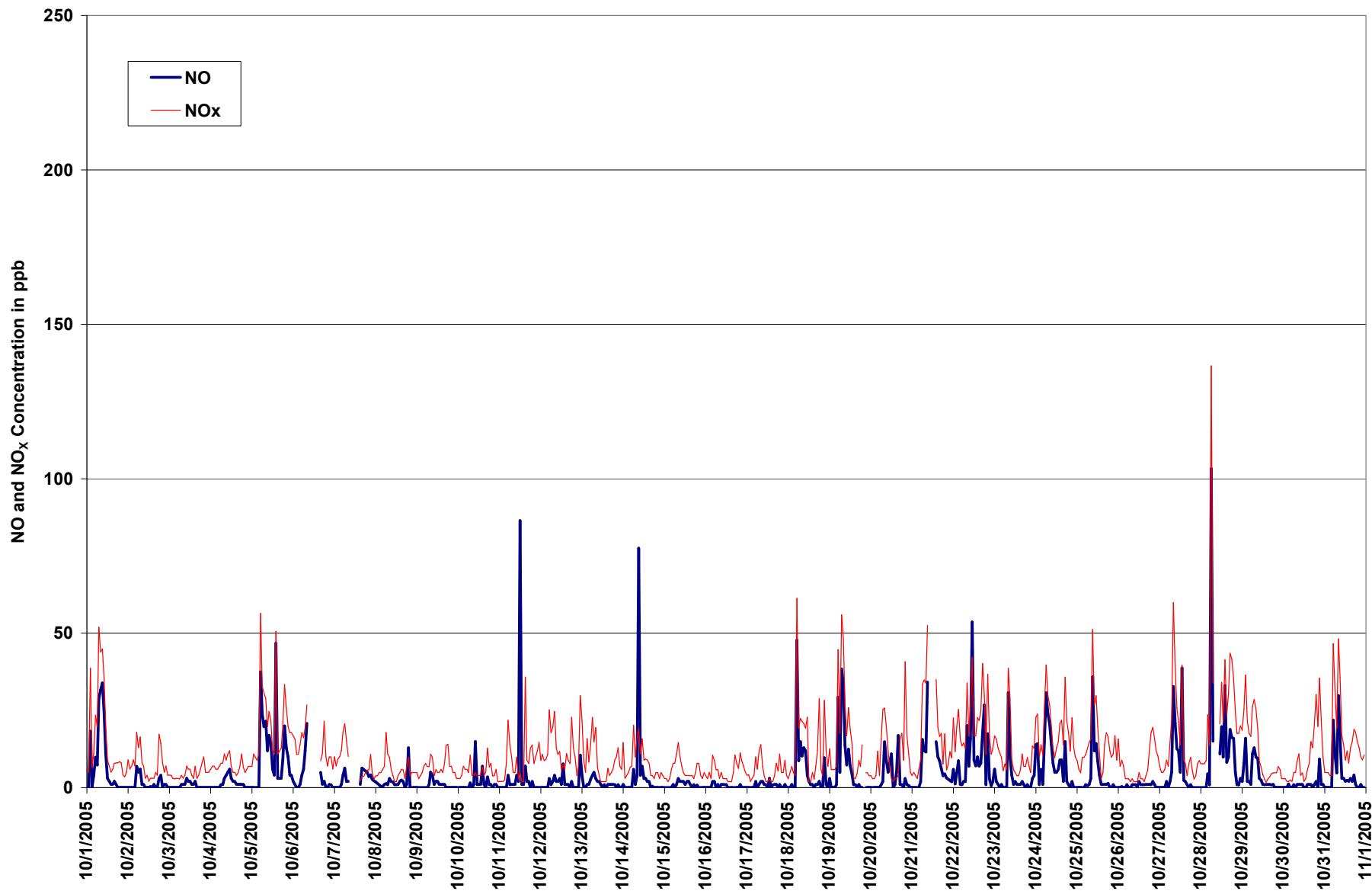


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Maximum Value Monthly Trend

## PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

### HOURLY AVERAGE TABLE

Monitoring Dates: October 1, 2005 to November 1, 2005

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

**Summary**

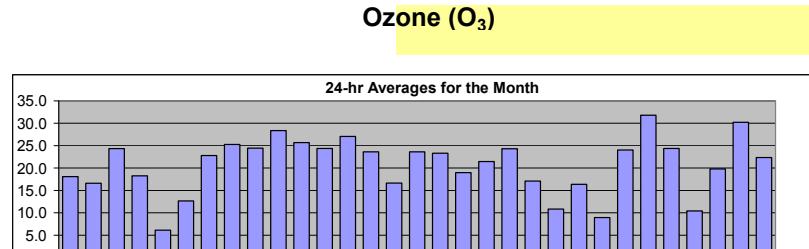
Number of 1-hr Exceedances: 0

Maximum 1-hr Average:	40.9 ppb	26-Oct	6:00 7:00
Maximum 24-hr Average:	31.8 ppb	26-Oct	

AIC Time:	1 hrs	Operational Time:	740 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	20.7 ppb
	36.8 34.5 27.3 21.8 14.3 3.9 1.0		

**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-Oct-05	17 21	18 21	17 21	4 11	11 10	10 10	7 4	8 14	14 21	21 20	25 28	28 26	25 25	25 26	25 26	25 25	25 23	23 19	19 18.1	18.1	28.0						
2-Oct-05	16 16	13 11	13 11	3 3	3 4	4 11	14 22	22 23	23 27	27 27	26 26	23 23	22 21	19 19	18 18	15 15	14 14	16 16	19 19	16.6	27.1						
3-Oct-05	22 23	26 26	25 25	24 24	24 23	23 23	22 22	21 21	24 24	26 26	28 30	30 31	31 31	27 27	25 25	23 23	19 19	21 21	20 20	19 20	24.4	31.0					
4-Oct-05	18 15	15 15	15 15	14 13	14 14	14 14	16 17	17 18	22 22	26 26	26 25	26 25	22 22	18 18	20 20	20 20	20 18	16 16	15 15	18.3	26.4						
5-Oct-05	12 10	8 9	9 7	7 8	1 1	2 2	2 2	6 6	6 6	8 8	10 10	10 10	9 9	8 8	7 7	3 3	1 1	2 2	2 3	1 1	6.1	12.3					
6-Oct-05	0 1	4 7	6 6	1 1	2 2	4 4	3 4	3 5	5 10	10 10	15 15	23 24	27 27	27 27	21 21	21 21	22 22	22 22	22 22	24 24	12.7	27.0					
7-Oct-05	20 20	20 20	16 16	12 8	7 7	9 9	20 20	C C	C C	A A	32 32	35 34	32 32	31 31	29 29	28 28	27 27	25 25	26 26	26 26	22.8	34.7					
8-Oct-05	26 25	25 25	24 24	20 22	19 19	18 18	17 17	22 25	25 29	30 30	30 30	30 30	30 30	29 29	26 26	27 27	29 29	27 27	25 25	24 24	25.3	30.2					
9-Oct-05	21 21	20 19	19 18	18 17	17 17	17 17	16 16	18 22	22 25	27 27	29 29	28 28	31 31	30 30	26 26	35 35	31 31	27 27	28 28	29 29	24.4	35.1					
10-Oct-05	32 31	30 30	26 26	26 27	27 27	28 28	26 26	30 33	31 31	30 30	30 30	30 30	30 30	27 27	29 29	23 23	21 21	26 26	30 30	28 27	28.3	32.8					
11-Oct-05	26 24	26 26	27 27	23 18	17 17	19 19	25 25	26 27	32 32	33 33	33 33	32 32	31 31	28 28	27 27	26 26	25 25	23 23	18 19	25.7	32.9						
12-Oct-05	23 23	23 23	25 25	22 17	17 17	14 14	20 20	21 21	26 26	33 33	33 33	31 31	30 30	32 32	25 25	22 22	28 28	28 28	26 26	14 14	24.4	33.5					
13-Oct-05	21 20	26 15	15 16	19 19	13 19	19 19	23 23	28 35	35 36	37 37	36 36	34 34	36 36	34 34	31 31	28 28	28 28	26 26	23 23	26 26	27.0	36.9					
14-Oct-05	24 26	25 24	20 19	19 18	17 17	19 19	13 13	18 18	20 20	23 23	21 21	26 26	29 29	30 30	31 31	30 30	28 28	27 27	26 26	27 27	23.6	30.6					
15-Oct-05	27 26	26 24	15 11	10 8	8 8	11 11	13 13	16 16	17 18	18 18	19 19	19 19	17 17	17 17	14 14	15 15	18 18	18 18	16 16	16.7	26.5						
16-Oct-05	16 18	16 16	16 14	14 15	20 20	20 20	27 27	21 21	28 28	30 30	35 35	36 36	35 35	31 31	25 25	24 24	23 23	22 22	19 19	20 20	23.6	35.7					
17-Oct-05	21 21	24 24	23 21	21 20	21 21	18 18	16 16	22 22	26 26	31 33	33 33	33 33	31 31	28 28	28 28	22 22	19 19	14 14	9 9	11 11	23.3	33.5					
18-Oct-05	12 9	9 9	8 8	10 6	3 3	1 1	5 5	9 9	12 12	28 34	35 35	36 36	35 35	32 32	27 27	16 16	25 25	27 27	26 26	24 24	19.0	35.6					
19-Oct-05	23 23	22 20	17 9	13 6	6 11	6 7	9 9	13 13	20 20	31 36	37 37	34 34	32 32	34 34	32 32	33 33	30 30	29 29	29 29	27 27	21.5	36.6					
20-Oct-05	27 28	27 26	26 22	22 24	16 11	14 14	13 21	25 25	32 33	33 33	34 34	32 32	25 25	23 23	26 26	27 27	22 22	20 20	22 22	20 20	24.3	33.7					
21-Oct-05	21 21	22 22	23 22	19 19	14 9	9 9	12 10	10 10	13 13	17 17	14 14	18 18	17 17	15 15	20 20	19 19	22 22	22 22	21 21	18 18	17.1	23.3					
22-Oct-05	15 12	12 12	12 9	9 9	10 10	10 10	11 11	14 14	10 10	11 11	16 16	17 17	14 14	12 12	10 10	6 6	10 10	14 14	8 8	7 7	7 7	10.8	16.7				
23-Oct-05	6 4	4 4	5 5	18 25	29 24	24 19	14 14	18 18	18 18	22 23	23 27	27 27	20 20	16 16	12 12	9 9	13 13	17 17	15 15	8 8	8 8	16.4	29.4				
24-Oct-05	2 1	2 2	2 2	2 2	0 0	0 0	1 1	4 4	8 8	11 11	12 12	18 18	14 14	18 18	5 5	14 14	20 20	20 20	18 18	20 20	8.9	20.0					
25-Oct-05	23 25	26 26	23 21	21 21	20 18	18 20	18 19	19 17	17 17	21 21	28 28	32 32	28 28	24 24	25 25	25 25	25 25	28 28	24 24	32 32	24.0	32.3					
26-Oct-05	29 27	26 26	29 33	33 38	41 39	36 35	35 35	36 36	37 37	37 37	37 37	35 35	34 34	28 28	22 22	26 26	22 22	23 23	21 21	31.8	40.9						
27-Oct-05	24 24	26 26	25 22	24 24	23 23	23 23	8 8	10 10	17 17	20 20	27 27	29 29	26 26	29 29	31 31	29 29	25 25	29 29	32 31	27 27	24 24	32.1	42.1				
28-Oct-05	24 20	19 18	18 10	10 7	6 6	8 8	9 9	10 10	14 14	12 12	13 13	12 12	10 10	7 7	2 2	6 6	6 6	8 8	9 9	10 10	10.4	24.1					
29-Oct-05	8 4	2 2	1 2	3 3	3 1	6 6	12 12	23 23	26 26	33 33	35 35	35 35	34 34	32 32	33 33	31 31	29 29	28 28	29 29	30 30	19.8	35.4					
30-Oct-05	29 29	30 30	33 33	36 35	34 34	30 31	33 33	35 35	37 37	37 37	34 34	31 31	26 26	24 24	24 24	26 26	22 22	27 27	27 27	21.1	30.2	36.9					
31-Oct-05	30 29	30 30	32 32	32 24	21 21	23 23	10 10	17 17	16 16	19 19	24 24	23 26	25 25	22 22	17 17	14 14	19 19	19 19	23 23	19 19	22.4	32.3					



**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

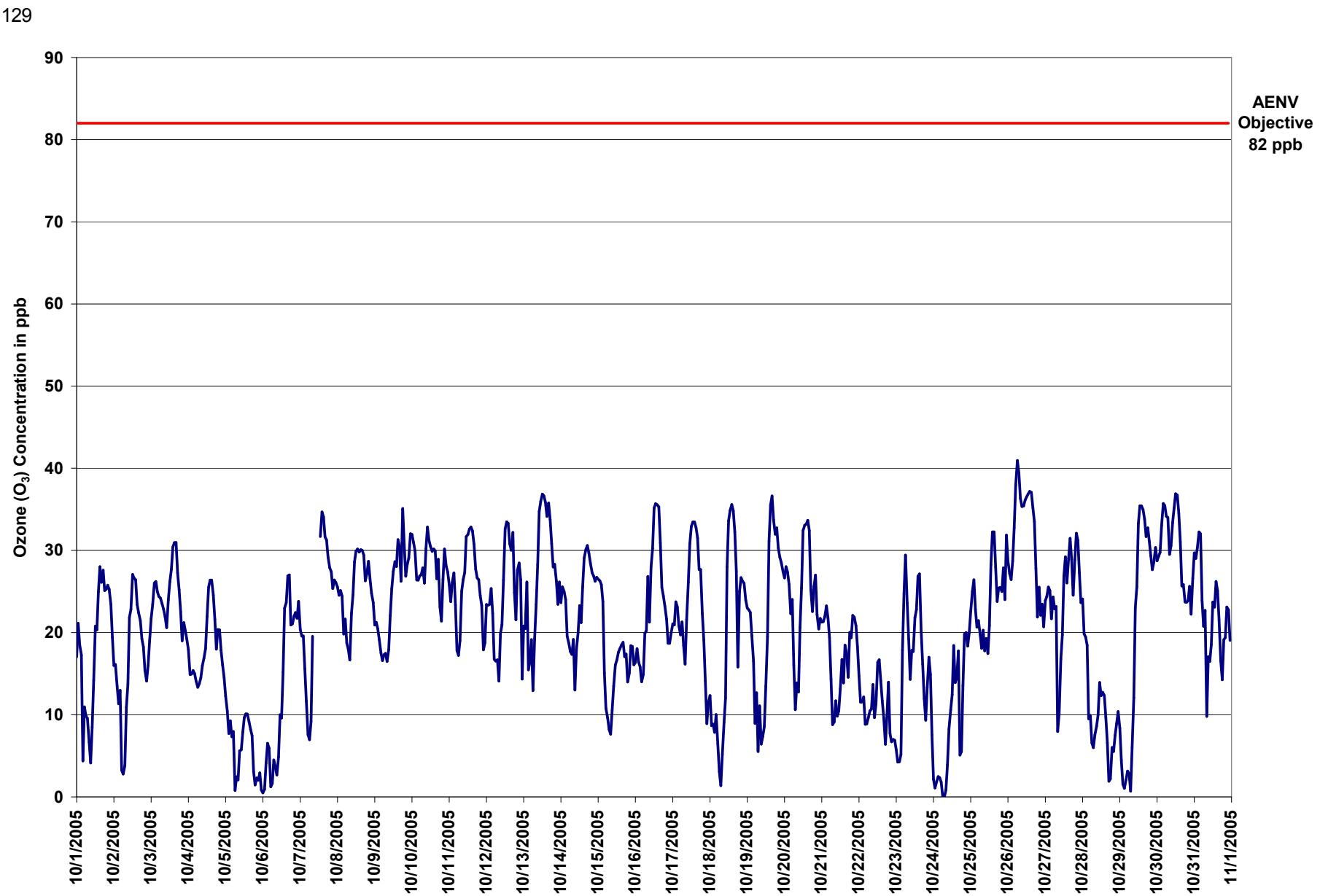


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

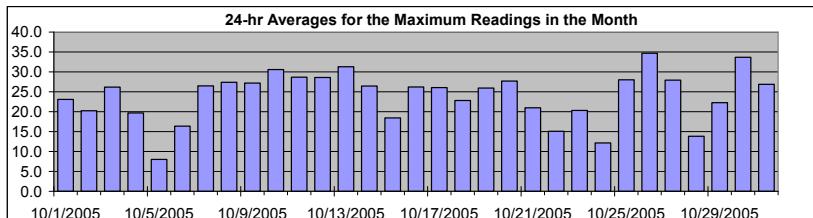
### Summary

Maximum 1-hr Value:	42.2	ppb	26-Oct	6:00 7:00
Maximum 24-hr Value:	34.7	ppb	26-Oct	

AIC Time:	1 hrs	Operational Time:	740 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 38.0	95 36.1	75 30.8	50 25.3	25 18.8	5 7.4	1 2.7	Average 24.0 ppb

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start 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-Oct-05	22	23	23	21	19	18	19	19	13	8	11	18	23	25	29	33	32	32	29	28	31	29	27	23	23.1	32.7	
2-Oct-05	24	19	16	15	15	14	7	8	16	18	26	30	30	27	28	27	24	23	22	21	19	17	19	21	20.2	30.0	
3-Oct-05	24	25	28	28	27	26	25	25	24	23	22	28	30	30	32	32	33	29	27	25	21	23	23	20	26.2	32.5	
4-Oct-05	20	16	16	16	15	15	14	15	15	17	18	21	24	28	27	28	26	24	20	21	21	20	17	16	19.7	28.5	
5-Oct-05	13	13	10	10	9	11	3	6	4	7	8	10	11	11	10	10	9	7	5	5	5	5	5	3	8.0	13.0	
6-Oct-05	2	5	5	9	10	2	3	11	7	6	13	13	13	22	27	27	29	31	29	28	25	28	26	26	16.4	31.0	
7-Oct-05	24	23	25	19	21	19	13	14	27	C	C	A	34	36	35	33	33	31	30	29	29	30	27	26.5	35.6		
8-Oct-05	28	26	28	27	23	23	25	22	21	24	26	30	31	31	31	31	31	31	29	29	30	29	27	26	27.4	31.4	
9-Oct-05	23	23	22	21	20	20	19	19	20	23	25	27	30	30	30	36	35	31	41	37	29	30	31	33	27.2	41.4	
10-Oct-05	34	33	32	28	28	29	28	30	29	33	35	32	31	31	31	30	32	28	23	31	32	33	30	30.6	34.8		
11-Oct-05	30	26	29	30	27	23	23	24	28	29	32	33	33	34	34	34	33	31	31	32	26	26	20	21	28.7	33.9	
12-Oct-05	27	28	27	27	25	23	21	19	24	23	32	36	36	36	35	36	35	32	27	31	31	29	28	28.6	36.5		
13-Oct-05	29	29	28	21	21	29	26	29	28	32	36	37	38	38	37	36	37	35	33	31	31	27	29	31.3	38.0		
14-Oct-05	29	27	26	25	22	20	21	20	21	22	20	29	25	22	32	32	32	31	30	30	28	27	28	26.5	32.5		
15-Oct-05	28	27	27	26	22	13	11	10	9	13	15	18	18	18	19	19	19	19	15	18	20	19	18	18.4	28.0		
16-Oct-05	18	19	19	17	17	18	24	24	29	25	36	34	37	37	36	35	35	29	27	26	25	21	21	26.2	36.9		
17-Oct-05	23	25	26	25	23	24	27	24	21	24	29	33	34	35	35	34	33	30	29	26	21	19	12	26.0	34.7		
18-Oct-05	13	13	17	9	11	11	6	5	8	12	16	34	34	36	37	36	36	30	28	31	34	32	29	22.8	37.0		
19-Oct-05	29	28	25	23	20	19	21	17	24	10	10	13	15	28	34	40	40	37	35	34	33	31	30	25.9	40.0		
20-Oct-05	29	29	29	27	25	26	24	16	22	22	23	31	33	34	35	35	35	30	29	28	29	29	24	27.7	35.1		
21-Oct-05	23	23	24	24	23	23	19	16	19	21	21	19	15	22	20	20	19	21	21	22	23	23	24	21.0	24.2		
22-Oct-05	19	15	18	16	13	13	14	14	16	18	14	15	18	19	19	16	14	10	12	18	17	12	13	15.1	19.3		
23-Oct-05	15	8	6	7	26	31	33	27	22	21	22	23	27	31	31	24	20	14	11	15	19	19	15	20.3	33.0		
24-Oct-05	8	4	4	6	4	6	1	1	3	7	11	13	15	22	19	21	22	13	7	17	22	25	20	22	12.2	25.3	
25-Oct-05	25	28	28	26	24	24	20	27	26	24	23	24	32	34	34	33	30	30	29	27	32	32	34	28.0	34.4		
26-Oct-05	33	30	30	35	35	41	42	42	38	36	36	37	37	38	38	38	37	35	32	31	31	28	27	23.9	34.7		
27-Oct-05	26	26	28	26	27	25	26	25	22	19	22	23	31	31	29	33	33	32	28	31	33	34	31	27	27.9	33.5	
28-Oct-05	26	22	21	21	15	13	15	12	15	15	14	16	14	14	14	11	10	4	8	10	9	10	12	12.8	26.0		
29-Oct-05	11	7	5	2	3	5	6	1	11	21	28	30	36	36	36	35	34	34	33	32	29	32	32	22.3	36.1		
30-Oct-05	30	32	32	36	37	36	35	36	33	34	35	37	38	38	36	35	32	33	30	33	31	32	29	33.7	38.1		
31-Oct-05	31	33	33	34	34	34	33	29	28	25	20	24	25	25	28	28	25	20	17	23	23	25	26	21	26.9	34.0	
Hourly Avg	23.0	22.0	22.1	21.1	20.6	20.4	19.5	18.8	19.9	20.5	22.4	25.3	26.8	28.7	29.7	30.0	29.2	26.9	25.5	25.3	25.3	25.0	23.9	22.9			
Hourly Max	33.5	32.5	33.0	35.6	36.8	41.5	42.2	41.8	38.0	36.5	36.5	37.5	38.1	37.9	38.3	40.0	39.8	36.8	41.4	36.5	33.9	33.5	32.7	34.4			

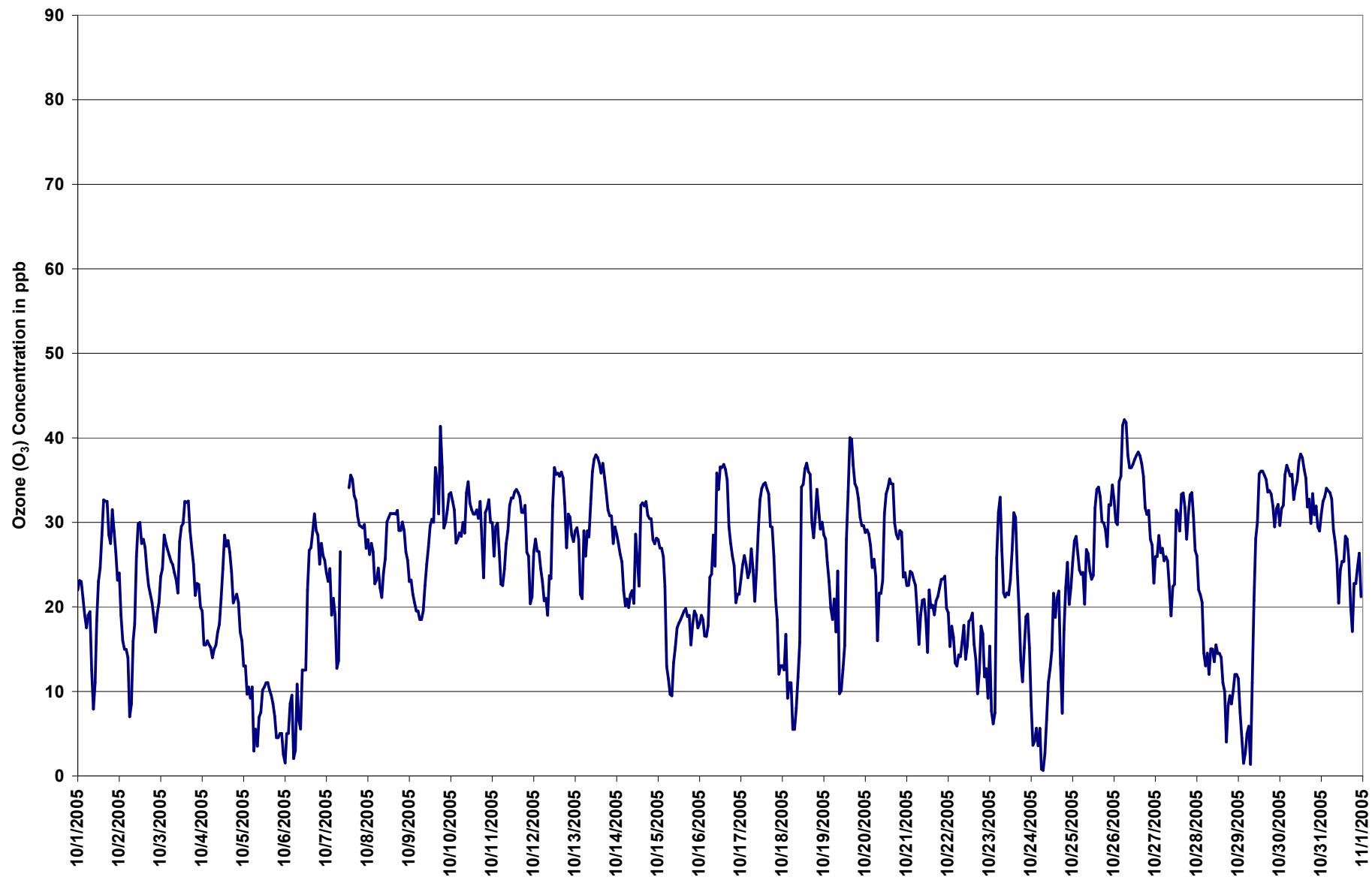
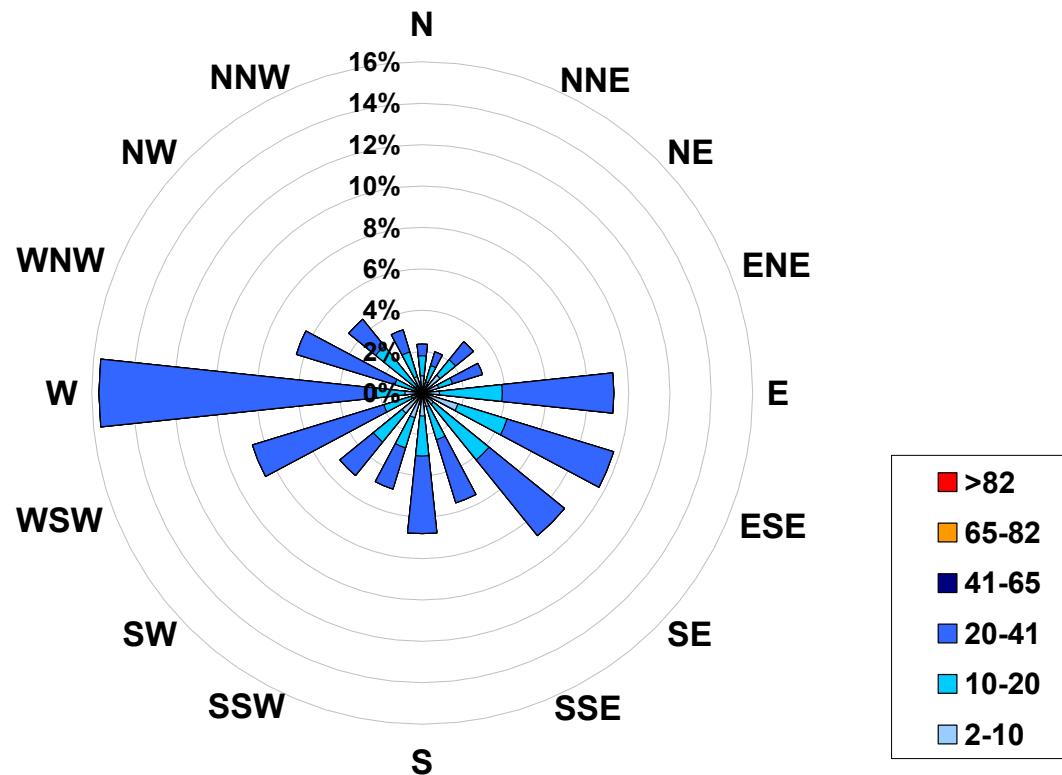


Figure 41. PASZA - Beaverlodge Ozone 1-hr Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the  
Beaverlodge Site for October 2005



Calms:	1%
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Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	120
10	to	20	199
20	to	41	421
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			740

**PASZA - Beaverlodge Ozone Monthly Summary**

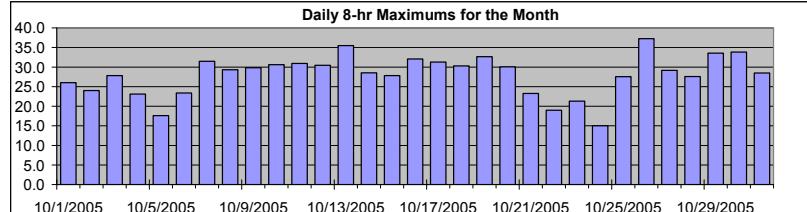
Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 37.3 ppb 26-Oct 12:00 13:00

**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

**Day Mountain Standard Time**

	Hour Start 0:00 1:00	1:00 2:00 3:00	2:00 3:00 4:00	3:00 4:00 5:00	4:00 5:00 6:00	5:00 6:00 7:00	6:00 7:00 8:00	7:00 8:00 9:00	8:00 9:00 10:00	9:00 10:00 11:00	10:00 11:00 12:00	11:00 12:00 13:00	12:00 13:00 14:00	13:00 14:00 15:00	14:00 15:00 16:00	15:00 16:00 17:00	16:00 17:00 18:00	17:00 18:00 19:00	18:00 19:00 20:00	19:00 20:00 21:00	20:00 21:00 22:00	21:00 22:00 23:00	22:00 23:00 0:00	Daily Maximum	
	Hour End 1:00 2:00																								
1-Oct-05	11	12	13	13	12	13	14	14	12	10	9	9	11	12	14	16	18	21	23	25	25	26	26	25	26.0
2-Oct-05	23	22	21	19	17	15	12	10	9	9	10	12	13	16	19	22	23	24	24	23	22	20	19	18	24.0
3-Oct-05	18	18	19	20	21	23	24	24	24	24	23	23	24	25	26	27	27	28	28	27	27	26	25	23	27.8
4-Oct-05	22	20	19	18	17	16	16	15	14	15	15	15	16	17	19	21	22	23	23	23	23	22	21	19	23.1
5-Oct-05	18	16	15	14	12	11	9	7	6	5	5	5	5	6	7	8	8	9	8	7	6	5	5	4	17.6
6-Oct-05	3	2	2	3	3	3	3	3	4	4	4	4	5	7	9	12	14	18	20	21	22	23	23	23	23.4
7-Oct-05	22	21	21	19	17	16	14	14	13	N	N	N	N	N	N	N	N	N	N	31	31	30	29	28	
8-Oct-05	27	27	26	26	25	24	23	22	21	21	21	21	23	24	25	27	28	29	29	29	29	29	28	27	29.3
9-Oct-05	26	25	24	23	22	21	20	19	18	18	18	19	20	22	23	25	26	27	29	30	30	30	30	30	29.8
10-Oct-05	30	31	30	29	29	29	29	28	28	28	28	29	29	30	30	30	30	30	29	28	27	27	27	27	30.6
11-Oct-05	26	26	26	27	26	25	24	23	22	23	23	23	25	26	28	30	31	31	31	30	29	28	26	25	30.9
12-Oct-05	24	23	23	22	22	21	21	21	20	19	19	19	20	23	25	26	28	30	30	30	29	29	28	26	30.5
13-Oct-05	25	23	23	22	21	20	18	19	19	20	21	24	26	29	31	33	35	35	35	34	33	32	30	29	35.5
14-Oct-05	28	27	26	25	24	23	23	21	21	19	18	18	18	19	20	21	23	25	26	27	28	28	29	28	28.5
15-Oct-05	28	27	27	26	25	23	21	18	16	14	12	11	12	12	14	15	16	17	18	17	17	17	17	17	27.8
16-Oct-05	17	17	17	17	17	16	16	17	18	19	19	19	20	22	25	27	29	31	32	32	31	29	29	28	32.0
17-Oct-05	22	21	21	21	21	21	21	21	21	21	21	22	23	25	27	28	30	31	31	30	28	26	23	20	31.3
18-Oct-05	18	16	13	11	10	9	9	7	6	6	7	9	12	16	20	24	28	30	30	30	29	28	27	25	30.3
19-Oct-05	24	24	25	24	23	20	19	16	15	13	11	10	9	11	13	17	20	23	26	29	31	33	32	31	32.7
20-Oct-05	30	29	29	28	27	26	25	23	21	19	18	18	19	21	23	26	28	30	30	30	29	28	26	25	30.1
21-Oct-05	23	23	23	22	22	21	21	19	17	16	15	13	12	12	13	14	14	16	17	18	18	19	19	19	23.3
22-Oct-05	19	19	18	17	15	13	12	11	10	11	10	10	11	12	13	13	12	12	12	12	11	10	9	9	19.0
23-Oct-05	8	8	7	6	7	9	12	14	16	17	19	21	21	21	21	21	21	21	21	20	18	18	16	14	21.3
24-Oct-05	12	10	8	8	6	4	2	1	1	2	2	3	5	7	9	10	12	13	12	13	14	14	14	15	15.0
25-Oct-05	16	18	21	22	22	22	22	22	22	21	20	19	19	20	22	24	25	25	26	27	28	28	26	26	27.6
26-Oct-05	27	27	27	27	28	30	32	33	34	35	36	37	37	37	37	36	36	36	35	33	32	30	28	26	37.3
27-Oct-05	25	24	23	24	23	24	24	24	22	20	19	18	19	20	20	21	24	26	27	28	29	29	29	28	29.2
28-Oct-05	28	26	26	25	22	19	16	14	12	11	10	9	9	10	10	11	11	10	9	8	7	6	6	6	27.6
29-Oct-05	6	7	7	6	6	5	4	3	3	4	6	9	13	17	21	26	29	32	33	34	33	32	31	31	33.5
30-Oct-05	30	30	29	30	30	31	32	33	33	33	33	33	34	34	34	33	32	31	30	28	27	25	25	33.8	
31-Oct-05	25	26	26	27	28	28	28	28	25	24	22	20	19	20	20	21	21	21	21	21	20	19	19	28.5	

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

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

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: 11.9  $\mu\text{g}/\text{m}^3$  22-Oct 17:00 18:00  
Maximum 24-hr Value: 7.4  $\mu\text{g}/\text{m}^3$  5-Oct

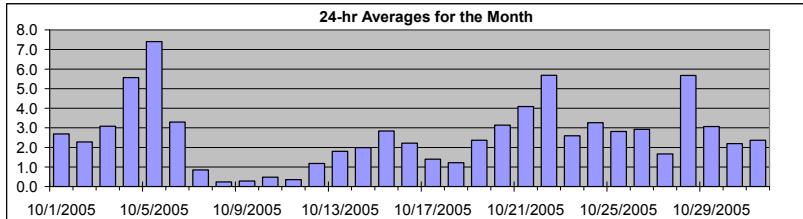
AIC Time: 0 hrs Operational Time: 739 hrs  
Calibration Time: 3 hrs AMD Operational Uptime: 99.7%  
Percentile 99 95 75 50 25 5 1 Average 2.6  $\mu\text{g}/\text{m}^3$  Geomean 2.0  $\mu\text{g}/\text{m}^3$

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-Oct-05	1:00	1	1	1	1	1	1	2	3	5	8	6	3	2	3	3	2	3	3	4	5	4	2	2	1	2.7	7.7	
2-Oct-05	2:00	2	2	2	2	2	3	3	3	2	2	1	2	2	2	3	2	2	2	3	3	3	2	2	2	2.3	3.2	
3-Oct-05	3:00	4	2	2	2	2	2	3	3	3	3	3	2	3	2	1	2	2	3	5	5	5	5	5	4	3.1	5.4	
4-Oct-05	4:00	5	5	5	5	5	4	5	6	6	5	5	5	5	5	5	6	6	6	9	8	6	7	7	6	5.6	9.3	
5-Oct-05	5:00	6	6	5	5	5	5	5	7	8	8	9	9	7	8	7	7	10	9	10	9	8	8	8	7	7.4	10.0	
6-Oct-05	6:00	7	3	2	2	3	3	3	5	9	8	4	8	3	0	0	0	0	0	1	3	3	3	1	0	3.3	8.8	
7-Oct-05	7:00	1	1	1	4	3	3	1	1	1	D	1	0	1	C	C	C	0	0	0	0	0	0	0	0.9	3.7		
8-Oct-05	8:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0.2	1.2	
9-Oct-05	9:00	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	D	0	0	0	0	0.3	0.9	
10-Oct-05	10:00	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	5	0	1	0	0	0	0	1	0.5	5.0	
11-Oct-05	11:00	1	0	0	0	0	0	1	1	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7	
12-Oct-05	12:00	0	0	0	0	1	1	1	2	3	3	3	3	1	0	0	1	0	0	2	2	2	2	0	1	1.2	3.2	
13-Oct-05	13:00	3	1	1	1	1	1	2	2	3	2	1	1	1	1	1	1	2	2	2	3	3	3	3	3	1.8	3.2	
14-Oct-05	14:00	2	3	3	2	1	3	2	3	2	3	3	2	2	2	0	1	0	0	2	3	3	3	3	2	2.0	3.1	
15-Oct-05	15:00	1	1	0	2	3	1	3	4	4	4	4	3	2	1	3	2	4	2	1	2	3	6	6	6	2.8	6.2	
16-Oct-05	16:00	5	9	9	9	7	3	1	1	1	2	1	1	0	0	0	0	0	1	2	0	0	0	1	0	2.2	9.2	
17-Oct-05	17:00	0	0	0	0	1	1	1	0	1	1	0	0	0	0	0	1	2	3	3	5	4	4	3	2	1.4	5.3	
18-Oct-05	18:00	3	2	2	1	2	0	1	1	3	4	2	0	0	0	0	0	0	1	4	1	1	0	1	1	1.2	3.7	
19-Oct-05	19:00	1	1	1	1	1	3	3	3	4	3	3	2	2	2	0	0	3	4	5	3	3	3	2	3	2.4	4.5	
20-Oct-05	20:00	3	3	3	3	3	3	3	4	4	5	4	2	0	0	1	1	2	4	4	5	4	4	4	4	3.1	4.9	
21-Oct-05	21:00	4	4	4	2	3	3	3	2	4	4	3	9	5	7	4	8	7	6	4	3	3	2	3	4	4.1	8.7	
22-Oct-05	22:00	4	5	4	3	5	5	4	5	4	5	5	5	7	5	6	6	6	6	10	12	8	6	6	5	6	5.7	11.9
23-Oct-05	23:00	5	6	5	5	3	1	0	1	2	2	1	2	1	1	0	0	2	2	4	4	4	5	4	1	2.6	6.5	
24-Oct-05	0:00	3	2	2	3	2	4	3	3	3	4	4	2	2	3	4	5	5	7	5	3	1	2	3	3	3.3	6.9	
25-Oct-05	1:00	3	2	2	0	2	1	2	2	2	3	2	4	3	0	0	2	4	5	7	6	5	4	5	4	2.8	6.5	
26-Oct-05	2:00	6	7	9	10	7	0	3	1	1	1	1	1	0	0	0	1	1	2	3	3	3	5	3	2	2.9	10.1	
27-Oct-05	3:00	2	1	1	1	1	2	1	1	4	4	3	3	0	1	2	0	0	4	3	1	1	2	1	2	1.7	4.2	
28-Oct-05	4:00	2	2	2	3	3	2	6	4	5	5	9	5	6	6	6	8	8	8	9	11	8	6	6	5	5.7	10.5	
29-Oct-05	5:00	5	7	6	6	5	4	5	4	5	3	2	0	0	0	1	1	1	1	2	2	2	3	1	3.1	6.9		
30-Oct-05	6:00	1	1	1	1	1	1	2	3	2	1	0	0	1	1	2	3	9	5	4	3	3	3	3	2.2	8.6		
31-Oct-05	7:00	2	0	0	0	0	0	0	1	4	2	3	5	2	4	4	4	5	4	4	4	2	4	2	2	2.4	5.4	

**HOURLY AVERAGE TABLE**

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



**Status Flag Characters**

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

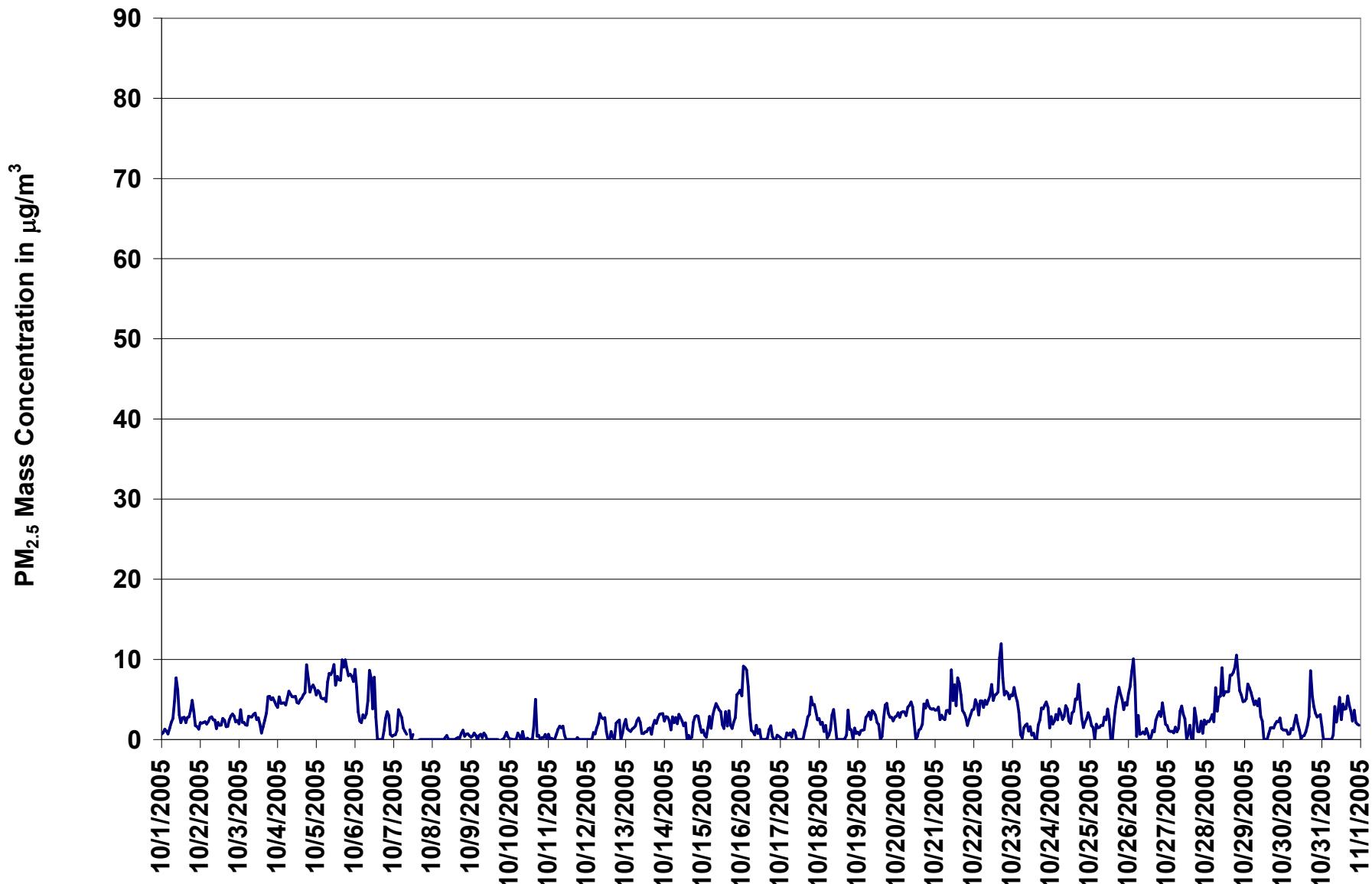


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

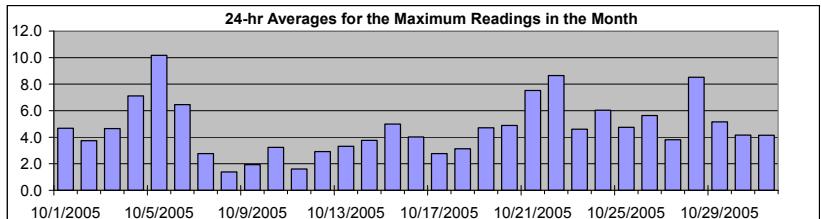
Maximum 1-hr Average:	22.1	µg/m³	21-Oct	12:00 13:00
Maximum 24-hr Value:	10.2	µg/m³	5-Oct	

AIC Time:	0 hrs	Operational Time:	739 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%						
Percentile	99 15.3	95 10.4	75 6.2	50 4.1	25 2.6	5 1.0	1 0.3	Average 4.7 µg/m³	Geomean 4.2 µg/m³

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-Oct-05	3	3	3	3	2	3	5	6	8	10	9	6	4	5	4	4	6	4	7	7	5	2	3	2	4.7	9.9	
2-Oct-05	4	3	4	4	4	3	4	4	4	4	3	3	3	4	4	4	3	3	4	5	5	4	4	3	3.7	5.0	
3-Oct-05	4	6	4	4	4	3	4	4	4	5	5	4	4	4	3	3	4	5	7	7	6	7	6	6	4.7	7.4	
4-Oct-05	5	6	6	6	6	6	7	7	6	6	7	6	6	6	6	7	7	15	9	8	9	9	8	7.1	14.7		
5-Oct-05	7	8	8	7	8	7	8	10	10	10	11	11	8	10	9	9	15	12	19	11	12	12	12	10	10.2	19.0	
6-Oct-05	11	8	6	4	5	5	6	6	6	16	15	5	21	5	4	4	1	2	3	8	5	5	3	1	6.5	20.7	
7-Oct-05	2	2	3	6	5	5	3	3	2	D	10	2	3	C	C	C	3	1	1	2	1	1	1	1	2.8	9.6	
8-Oct-05	1	1	1	1	1	1	1	2	2	1	0	1	1	1	3	2	2	3	2	2	2	2	2	2	1.4	2.6	
9-Oct-05	2	3	2	3	1	3	2	2	3	3	2	1	0	1	1	0	1	1	D	4	3	2	2	2	1.9	3.5	
10-Oct-05	2	2	1	2	0	3	5	3	4	4	3	2	3	2	2	4	13	8	3	2	3	4	2	1	3.2	13.0	
11-Oct-05	2	1	1	1	1	2	3	4	3	4	3	1	1	0	1	1	0	1	2	3	0	1	2	1	1.6	3.6	
12-Oct-05	1	1	1	2	2	2	4	4	5	4	4	4	3	1	2	3	2	2	5	4	5	2	2	6	2.9	6.0	
13-Oct-05	4	3	3	3	3	3	3	3	4	4	4	2	3	2	3	3	3	2	3	4	4	4	5	5	3.3	4.9	
14-Oct-05	4	4	4	4	5	5	4	5	4	6	4	4	3	3	3	2	1	1	5	5	4	5	3	2	3.8	5.7	
15-Oct-05	4	2	3	4	6	4	7	6	7	6	6	5	3	5	5	3	6	3	3	4	5	7	9	9	5.0	9.2	
16-Oct-05	8	11	10	10	9	6	2	2	2	4	3	4	1	1	1	0	2	4	6	2	2	3	3	1	4.0	10.6	
17-Oct-05	1	2	1	2	2	2	2	1	3	2	2	1	1	1	2	2	4	4	5	8	6	5	5	4	2.8	7.8	
18-Oct-05	4	4	4	4	3	3	2	3	5	6	4	3	1	0	2	1	2	2	5	4	3	3	5	3	3.1	5.6	
19-Oct-05	3	3	4	5	5	6	6	7	8	6	6	4	5	3	2	3	4	6	6	5	4	5	4	4	4.7	7.8	
20-Oct-05	5	5	4	5	5	4	4	5	6	7	7	4	1	2	3	3	3	7	7	7	6	7	5	5	4.9	7.4	
21-Oct-05	5	5	5	4	5	5	4	5	6	6	17	9	22	13	11	9	8	8	5	6	5	5	6	6	7.5	22.1	
22-Oct-05	6	9	7	5	8	7	7	8	7	7	10	6	7	9	9	13	17	13	9	12	8	9	7	8.6	16.5		
23-Oct-05	7	8	7	7	7	4	2	3	4	4	3	4	3	2	1	3	3	4	6	5	5	6	7	5	4.6	8.4	
24-Oct-05	7	5	7	5	4	7	8	5	7	8	9	7	4	8	6	7	7	9	6	4	3	4	4	6	6.0	8.9	
25-Oct-05	4	3	4	2	3	3	3	4	3	6	5	6	4	2	1	4	6	7	8	7	7	5	6	7	4.7	8.3	
26-Oct-05	8	14	11	17	10	5	7	3	3	3	3	3	2	1	2	3	3	5	6	5	5	7	5	4	5.6	16.6	
27-Oct-05	3	3	4	3	4	4	3	3	6	7	5	4	2	4	4	2	1	10	4	2	3	4	2	4	3.8	10.1	
28-Oct-05	3	5	3	4	4	5	14	6	11	10	13	9	8	8	11	10	12	11	11	15	11	8	8	6	8.5	14.6	
29-Oct-05	8	7	10	8	8	7	6	8	6	7	6	4	3	3	1	2	3	3	3	4	4	4	5	4	5.2	9.8	
30-Oct-05	2	3	2	2	3	3	3	4	5	3	3	1	1	3	3	3	4	16	10	6	5	5	5	5	4.2	15.8	
31-Oct-05	4	3	0	1	0	1	2	2	7	5	6	8	4	6	5	5	8	8	5	4	6	4	4	3	4.2	7.9	

### HOURLY MAXIMUM 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

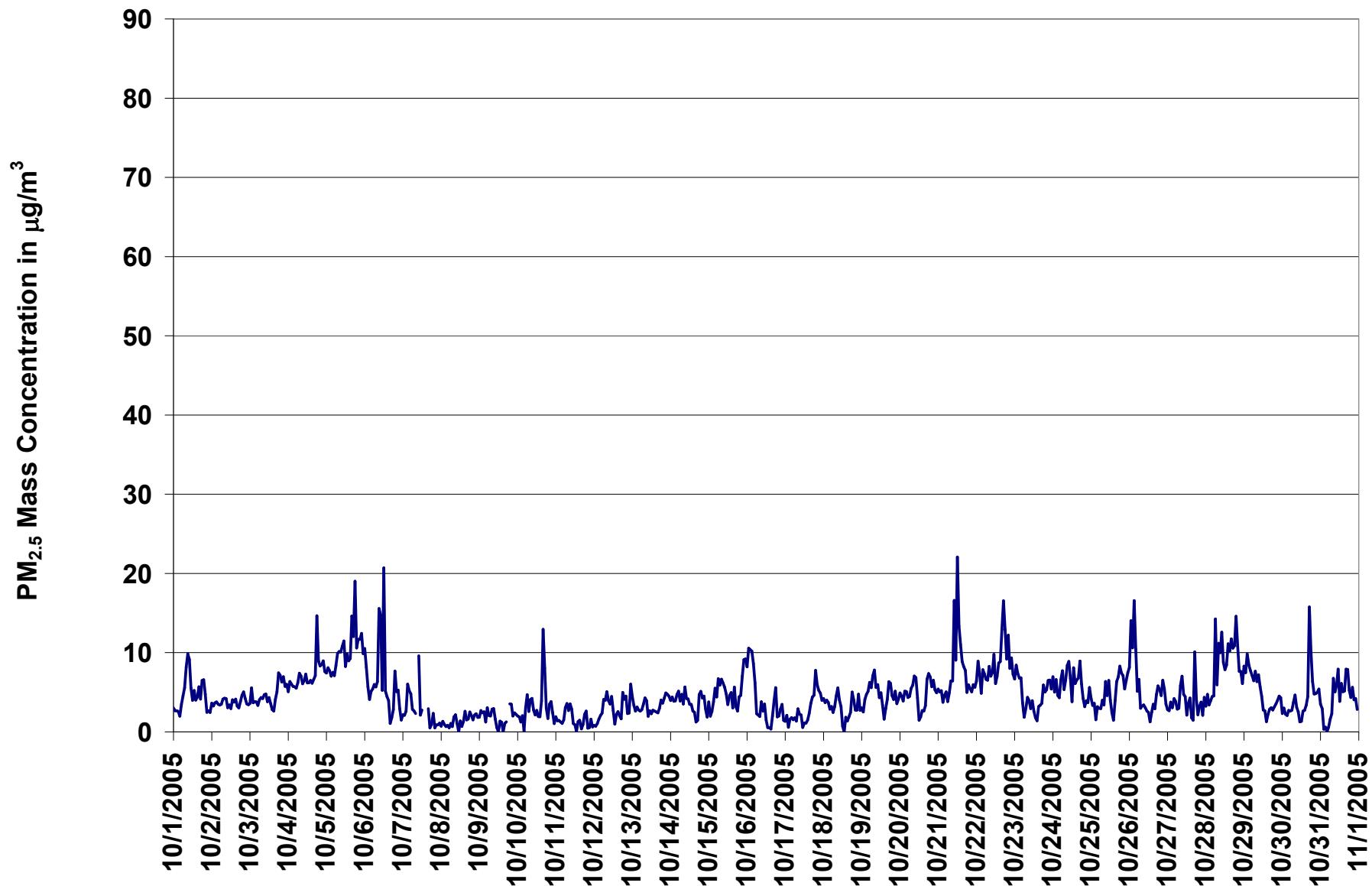
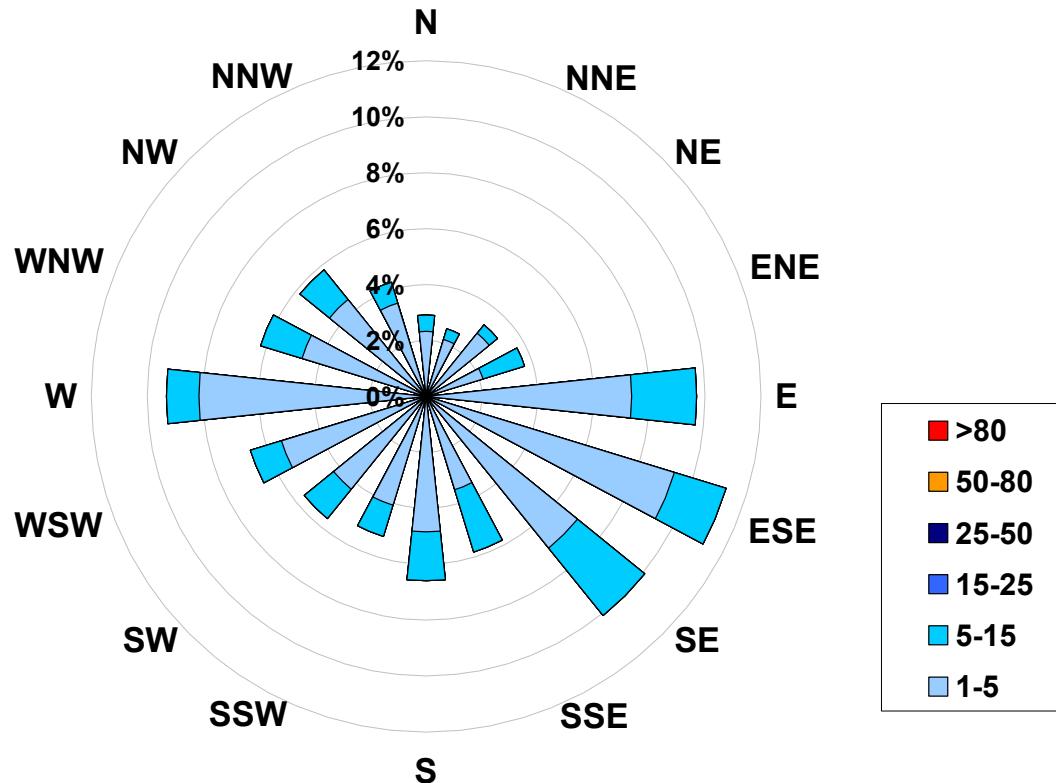


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Beaverlodge Site for October 2005**



Calms:	1%
--------	----

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>		
Range		Frequency (hrs)
1.0	< 5	621
5	to 15	118
15	to 25	0
25	to 50	0
50	to 80	0
	> 80	0
Total Non-Zero Values		739

## PASZA - Beaverlodge Relative Humidity Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	98.0	%	24-Oct	3:00 4:00
Maximum 24-hr Value:	86.7	%	2-Oct	

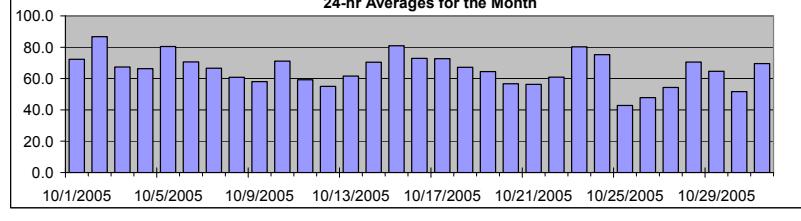
AIC Time:	0 hrs	Operational Time:	744 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	
	97.0 92.0 80.0 67.0 52.0 34.2 28.4		65.7 %

### 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	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-Oct-05	81	76	76	79	85	83	82	83	81	79	62	58	55	57	52	53	59	62	68	69	75	85	87	89	72.3	89.0	
2-Oct-05	91	92	94	95	95	95	96	95	92	89	89	87	84	84	76	72	77	73	72	77	84	92	91	89	84	86.7	96.0
3-Oct-05	80	79	77	77	79	81	81	79	76	74	72	64	57	53	47	45	46	51	58	65	69	68	69	71	67.4	81.0	
4-Oct-05	73	78	79	81	80	81	82	81	75	70	60	49	52	32	44	44	52	55	65	68	68	71	75	77	66.3	82.0	
5-Oct-05	82	83	88	89	91	92	95	95	93	86	79	68	67	65	65	67	71	73	77	82	84	86	87	80.4	95.0		
6-Oct-05	85	88	88	87	89	95	95	89	89	85	80	72	69	57	44	26	15	43	57	64	68	70	70	71	70.7	95.0	
7-Oct-05	75	78	77	85	92	94	94	94	85	76	63	46	39	36	36	45	46	55	62	66	70	72	76	66.6	94.0		
8-Oct-05	77	79	79	78	82	81	80	84	80	62	58	41	36	35	37	32	35	42	54	56	57	60	66	69	60.8	84.0	
9-Oct-05	75	77	80	71	73	84	84	83	68	66	60	52	45	41	40	36	39	43	38	42	45	46	51	54	58.0	84.0	
10-Oct-05	60	61	64	64	67	67	65	63	70	74	66	62	57	60	58	61	85	92	92	92	86	80	79	81	71.1	92.0	
11-Oct-05	83	86	82	79	82	83	81	80	72	64	61	49	41	36	33	33	36	43	44	47	51	51	52	52	59.2	86.0	
12-Oct-05	49	49	49	47	52	53	56	54	58	60	59	54	48	46	46	49	50	50	56	63	63	67	67	76	55.0	76.0	
13-Oct-05	74	76	73	80	84	79	83	79	70	62	46	42	40	39	42	43	39	46	51	62	62	63	72	72	61.6	84.0	
14-Oct-05	79	81	80	86	89	89	89	84	81	70	56	57	57	51	46	44	43	48	46	70	86	89	88	70.4	89.0		
15-Oct-05	86	81	75	77	87	91	93	95	95	94	90	85	80	67	67	71	75	74	77	80	78	74	73	77	80.9	95.0	
16-Oct-05	77	76	80	81	84	87	83	81	67	70	57	61	52	50	53	54	63	68	73	80	85	90	90	88	72.9	90.0	
17-Oct-05	85	86	84	85	85	85	83	84	84	81	71	59	47	44	45	47	51	55	62	68	83	88	91	91	72.7	91.0	
18-Oct-05	92	95	96	97	97	97	97	97	95	84	74	47	35	30	28	29	34	43	53	56	54	58	63	61	67.2	97.0	
19-Oct-05	64	64	65	67	70	70	72	84	79	81	82	78	62	65	50	42	42	49	54	53	58	62	66	68	64.5	84.0	
20-Oct-05	73	74	74	76	78	74	78	80	74	63	57	51	37	34	32	27	29	35	41	46	49	54	61	64	56.7	80.0	
21-Oct-05	65	58	65	65	63	71	72	76	66	65	70	63	55	42	41	41	44	41	45	47	47	48	50	52	56.3	76.0	
22-Oct-05	58	65	67	66	71	74	73	72	67	52	42	48	38	42	42	46	49	53	58	66	74	80	79	80	60.9	80.0	
23-Oct-05	79	81	83	87	82	78	75	81	83	85	81	81	70	68	62	59	68	82	88	90	90	89	91	94	80.3	94.0	
24-Oct-05	96	97	97	98	98	98	97	98	96	77	70	69	56	55	50	51	62	63	60	53	54	56	58	75.3	98.0		
25-Oct-05	56	58	57	60	62	63	65	68	55	51	39	34	29	24	20	21	27	31	34	34	37	32	37	34	42.8	68.0	
26-Oct-05	37	41	44	55	62	52	53	50	50	44	37	32	30	29	29	30	36	44	56	60	63	69	71	74	47.8	74.0	
27-Oct-05	74	75	74	74	73	74	72	69	52	45	36	33	35	31	33	39	45	43	41	42	46	51	54.3	75.0			
28-Oct-05	52	62	70	70	78	80	84	86	81	75	65	60	64	58	53	62	63	69	72	76	79	78	77	78	70.5	86.0	
29-Oct-05	82	88	86	87	85	83	82	84	77	70	66	59	40	32	32	33	40	49	48	54	62	67	69	76	64.6	88.0	
30-Oct-05	81	73	68	58	51	52	55	55	58	52	45	39	33	33	36	40	42	46	46	52	54	61	64	51.7	81.0		
31-Oct-05	64	69	67	64	61	67	69	67	81	73	74	71	62	58	57	53	54	71	76	82	83	82	81	84	69.6	84.0	

### 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

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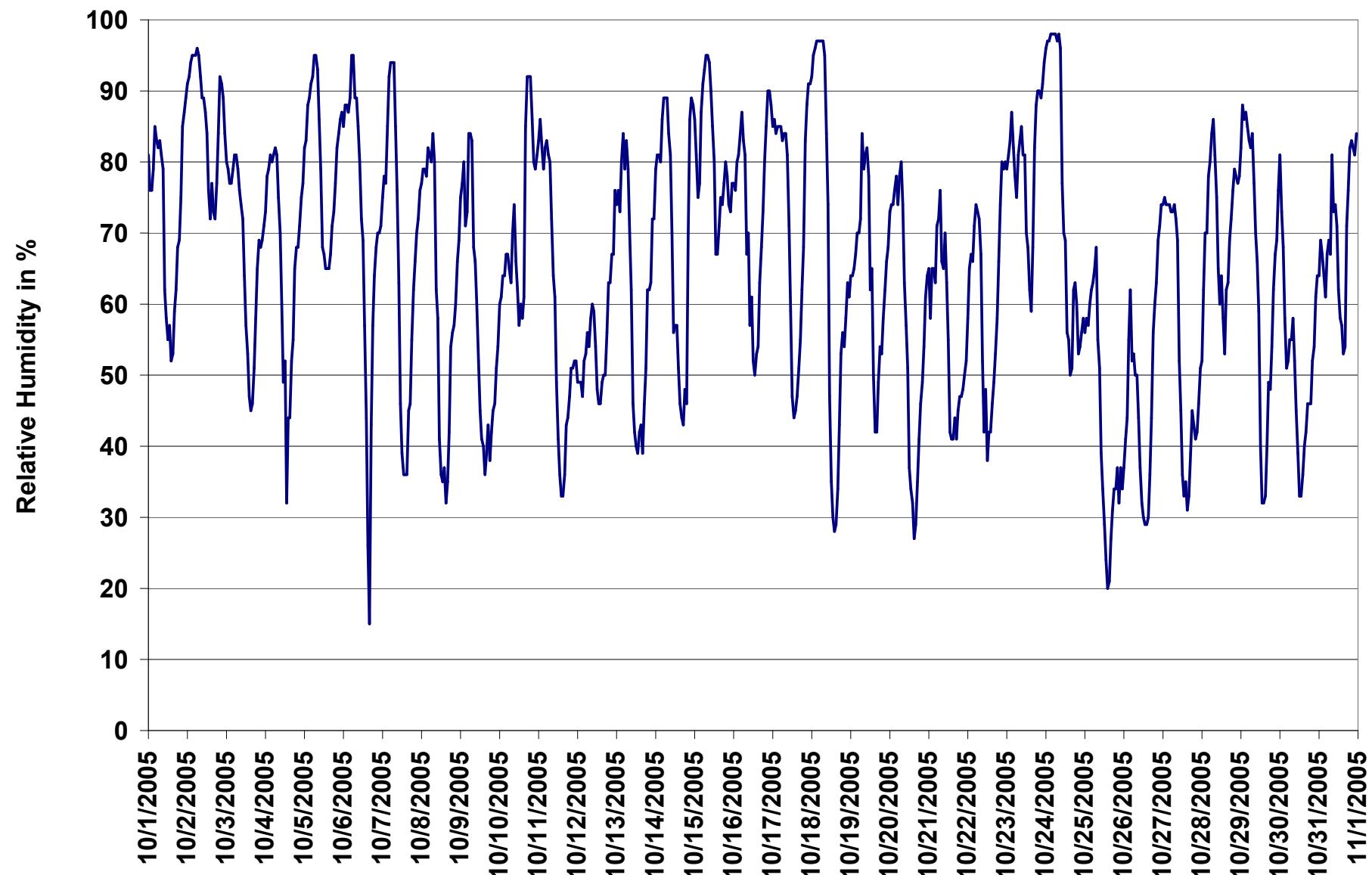


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

## PASZA - Beaverlodge Temperature Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	21.8	°C	25-Oct	14:00 15:00
Maximum 24-hr Value:	12.3	°C	25-Oct	

AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	14.3	12.2	7.8	4.8	2.3	-1.8	-4.1	5.1

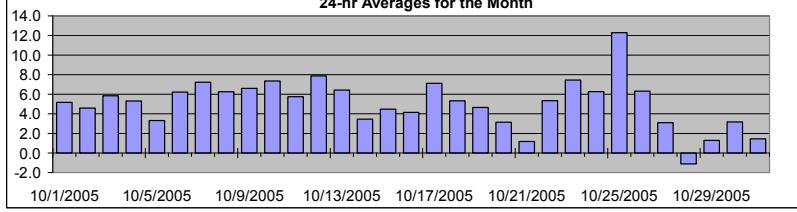
### Day Mountain Standard Time

	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-Oct-05	2 1:00	3	3	3	2	2	3	2	3	3	7	8	9	9	9	9	8	8	7	7	6	5	4	4	5.2	9.5	
2-Oct-05	4 2:00	4	4	4	3	3	3	3	4	4	5	5	5	5	6	7	6	6	6	5	4	4	4	4	4.6	6.9	
3-Oct-05	4 3:00	4	4	4	3	3	3	3	3	4	5	6	8	9	9	10	10	9	8	7	6	6	6	6	5.8	9.6	
4-Oct-05	5 4:00	3	3	3	3	3	3	2	2	4	5	7	8	8	9	10	10	9	8	6	5	5	4	4	5.3	9.9	
5-Oct-05	2 5:00	2	2	1	1	0	0	-2	-2	-2	1	3	6	7	7	8	8	7	6	5	4	3	3	2	3.3	7.8	
6-Oct-05	3 6:00	2	3	3	2	1	1	2	3	4	4	6	8	11	13	14	14	12	10	8	7	6	7	6	6.2	14.2	
7-Oct-05	6 7:00	5	6	5	5	5	5	5	5	7	9	11	12	13	12	13	10	10	8	6	5	4	4	3	7.2	12.7	
8-Oct-05	3 8:00	3	3	4	3	3	2	2	3	6	8	11	12	12	11	12	12	10	7	6	5	4	4	3	6.2	12.2	
9-Oct-05	2 9:00	1	0	0	0	0	0	0	3	5	7	9	11	13	13	13	12	11	12	11	10	9	8	8	6.6	13.4	
10-Oct-05	8 10:00	7	7	7	7	7	7	9	7	7	9	10	12	12	12	12	7	5	4	4	4	4	3	2	7.4	12.2	
11-Oct-05	2 11:00	1	1	2	1	1	1	2	4	6	8	9	11	11	12	12	11	8	7	6	5	6	6	5	5.7	11.9	
12-Oct-05	6 12:00	6	6	6	6	6	5	6	6	7	7	9	11	12	12	12	12	11	9	8	8	7	7	5	7.9	12.5	
13-Oct-05	5 13:00	5	6	4	3	4	3	3	5	7	10	11	11	11	11	11	9	7	5	5	5	2	2	6.4	11.2		
14-Oct-05	1 14:00	1	1	1	1	-1	-1	-1	-1	0	1	4	7	6	7	7	7	7	7	6	5	4	4	4	3.4	7.4	
15-Oct-05	4 15:00	4	5	4	3	3	3	2	2	3	4	5	5	6	9	8	7	6	5	4	4	4	4	4	4.5	8.8	
16-Oct-05	3 16:00	3	2	2	1	0	0	1	3	3	7	6	7	8	7	7	6	6	5	5	4	4	4	4	4.1	7.8	
17-Oct-05	4 17:00	4	5	5	5	5	5	5	5	6	8	10	12	13	12	11	10	10	8	7	6	6	4	4	7.1	12.6	
18-Oct-05	3 18:00	2	2	1	1	1	-1	-2	-1	3	5	11	12	14	14	14	13	10	7	5	5	4	3	3	5.3	14.4	
19-Oct-05	2 19:00	3	3	3	3	3	3	3	3	4	4	5	7	8	10	11	10	7	5	5	3	3	2	2	4.6	10.8	
20-Oct-05	1 20:00	1	0	0	0	0	0	0	-1	0	3	5	6	8	9	9	10	9	6	4	3	3	1	-1	3.1	9.8	
21-Oct-05	-3 21:00	-3	-3	-3	-3	-4	-4	-4	-4	-3	0	0	1	3	6	5	6	6	5	5	5	4	4	3	1.2	5.8	
22-Oct-05	2 22:00	2	1	1	0	0	-1	-1	-1	1	5	6	8	12	11	12	11	10	9	8	8	7	6	6	5.3	11.8	
23-Oct-05	6 23:00	6	6	6	7	7	7	6	6	7	8	10	10	11	12	11	9	8	7	7	8	6	3	3	7.5	11.7	
24-Oct-05	1 0:00	0	0	1	1	1	1	1	0	2	6	8	9	12	13	13	13	11	10	10	10	9	9	8	6.3	13.4	
25-Oct-05	8 1:00	8	8	8	7	6	6	5	5	7	9	13	16	19	21	22	22	18	16	14	13	12	14	12	12.3	21.8	
26-Oct-05	13 2:00	11	12	11	11	8	6	6	5	5	6	7	8	9	9	8	7	5	2	2	1	0	0	-1	6.3	12.8	
27-Oct-05	-1 3:00	-1	-1	-1	-2	-2	-2	-2	-2	0	5	8	10	10	10	11	8	6	5	4	4	4	3	2	3.1	10.6	
28-Oct-05	1 4:00	1	-1	-3	-3	-4	-5	-6	-6	-5	-3	1	2	2	3	4	2	2	1	0	-2	-2	-2	-2	-1.1	4.0	
29-Oct-05	-3 5:00	-3	-5	-4	-4	-3	-3	-4	-4	-3	0	4	6	9	9	9	8	7	4	4	3	1	0	0	1.3	9.1	
30-Oct-05	-2 6:00	-2	-1	-1	1	2	2	2	2	1	1	3	5	7	8	8	7	6	4	4	4	3	3	1	3.2	8.3	
31-Oct-05	1 7:00	1	0	0	1	2	0	0	0	-2	-1	-1	0	2	4	4	6	6	3	2	1	1	1	0	1.4	6.0	

Hourly Avg	3.0	2.5	2.5	2.5	2.1	1.8	1.5	1.4	2.1	3.7	5.8	7.5	8.9	9.8	10.2	10.2	9.2	7.6	6.4	5.6	5.0	4.6	4.0	3.4
Hourly Max	12.8	11.4	11.6	11.2	10.8	8.0	7.4	8.8	7.4	9.4	13.5	16.0	19.1	21.1	21.8	21.6	18.3	15.7	13.8	13.2	11.9	13.7	12.0	13.1

### 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

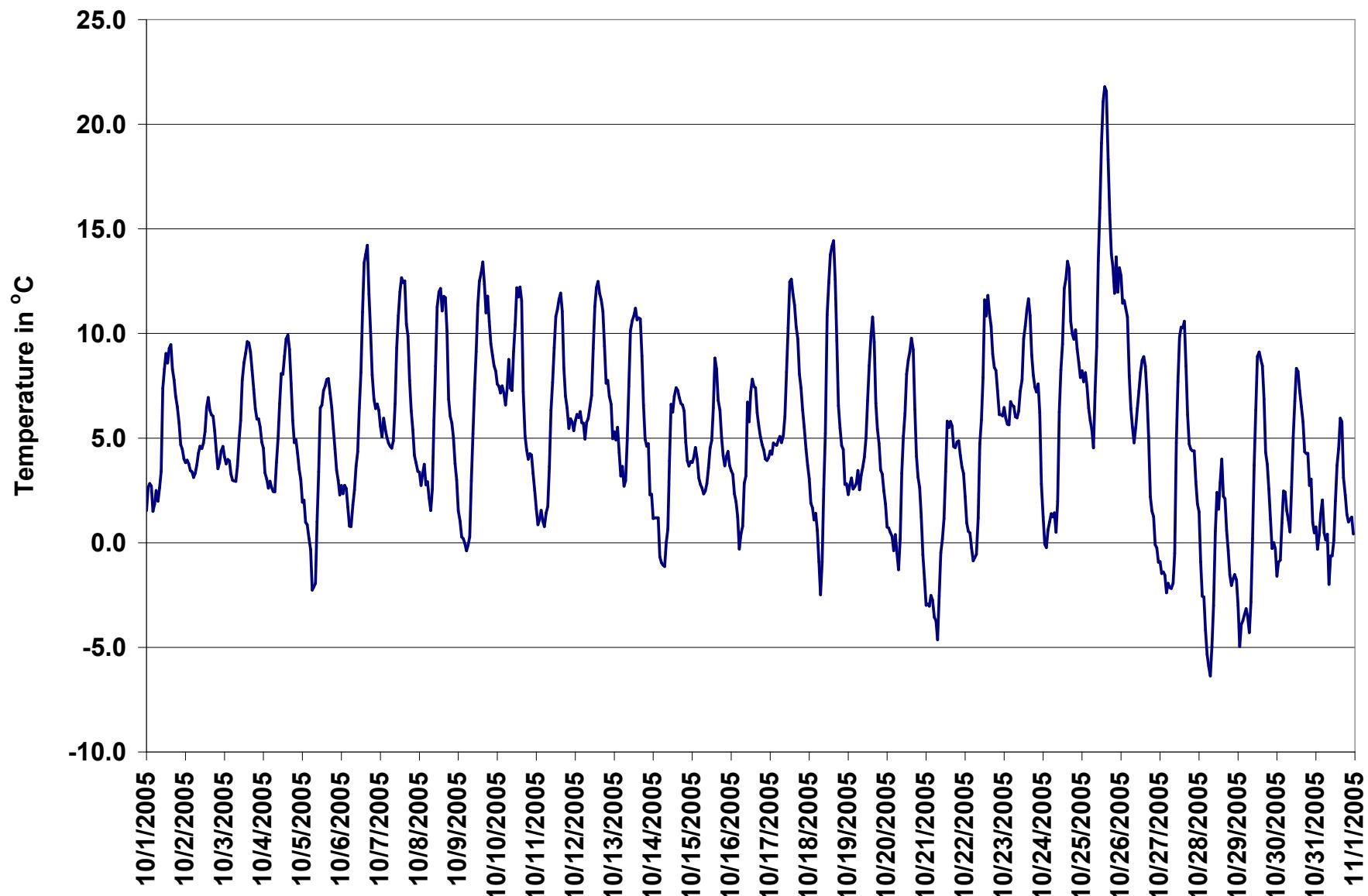


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

## PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

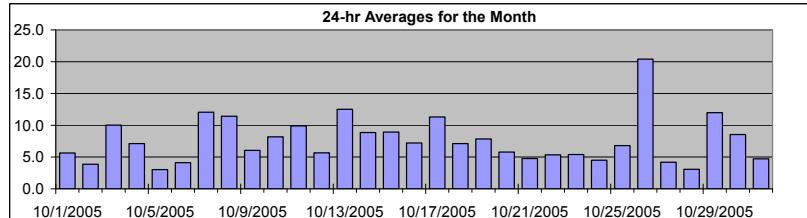
### Summary

Maximum 1-hr Average:	39.2	km/hr	26-Oct	10:00 11:00
Maximum 24-hr Value:	20.4	km/hr	26-Oct	

Calm Time:	6 hrs	1% calms	Operational Time:	738 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile	99	95	75	AverageS
	30.4	23.6	8.8	5.9
	3.4	2.0	1.2	7.6 km/hr

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

### Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Scalar Average	Daily Max
1-Oct-05	5	2	3	4	2	calm	4	4	2	4	2	3	6	10	12	14	12	5	4	7	6	8	7	5	5.6	14.3
2-Oct-05	3	4	2	5	3	1	1	calm	3	4	6	5	4	3	7	8	4	2	2	3	3	6	5	5	3.9	7.9
3-Oct-05	7	7	6	5	6	9	12	11	11	13	9	12	15	16	17	16	15	8	10	8	6	7	7	9	10.0	16.8
4-Oct-05	8	7	7	8	8	7	7	6	8	6	5	6	10	9	8	8	9	6	5	7	7	7	6	7.1	9.6	
5-Oct-05	7	4	2	3	3	2	4	3	2	2	3	2	2	2	2	2	3	5	3	3	3	2	2	4	3.0	6.6
6-Oct-05	3	5	2	3	3	3	2	2	1	2	2	3	5	6	9	11	11	9	6	3	3	3	2	3	4.1	10.9
7-Oct-05	3	4	5	7	3	1	1	3	6	5	11	26	30	29	30	30	18	18	16	14	11	8	7	7	12.0	30.1
8-Oct-05	7	7	9	9	7	9	6	6	3	7	10	21	23	20	22	22	20	15	13	13	5	6	9	6	11.4	22.9
9-Oct-05	3	3	3	4	4	4	3	4	4	4	6	8	10	9	9	10	8	6	14	7	7	6	7	5	6.1	13.6
10-Oct-05	5	4	5	4	9	12	10	11	13	8	9	5	4	3	3	4	16	8	8	9	12	16	11	8	8.2	16.0
11-Oct-05	4	4	5	6	5	6	5	4	6	8	14	26	25	27	25	17	11	11	6	2	5	6	6	5	9.9	27.1
12-Oct-05	5	9	6	4	4	5	3	3	6	6	4	7	7	6	5	10	8	9	8	3	5	5	6	3	5.7	9.7
13-Oct-05	4	1	4	6	6	11	6	5	7	11	25	25	28	27	27	21	27	21	13	7	3	6	4	6	12.5	27.7
14-Oct-05	8	7	7	7	3	3	3	2	3	3	2	2	5	7	11	14	14	15	18	18	18	17	15	15	8.9	18.3
15-Oct-05	13	13	7	5	6	8	9	8	6	8	8	11	10	8	7	8	10	15	9	7	6	11	13	8	8.9	15.4
16-Oct-05	6	8	7	6	8	9	7	7	11	6	8	8	11	10	11	7	7	6	6	4	4	5	6	6	7.2	11.4
17-Oct-05	4	3	6	4	3	7	7	7	8	10	13	23	27	26	26	24	18	9	12	11	6	7	6	5	11.3	27.3
18-Oct-05	2	1	3	3	4	2	1	2	2	calm	calm	16	24	24	21	15	10	6	4	6	4	3	2	2	7.1	23.8
19-Oct-05	3	4	3	1	5	8	7	6	8	3	4	3	3	10	19	15	15	14	14	14	7	8	7	7	7.8	18.7
20-Oct-05	2	4	8	7	4	6	3	2	3	3	5	7	9	10	12	13	10	6	5	5	6	5	4	3	5.8	12.7
21-Oct-05	2	3	4	3	2	4	3	2	2	4	5	5	4	6	8	9	6	6	7	7	10	5	5	3	4.8	9.8
22-Oct-05	5	4	3	3	4	4	3	calm	calm	2	3	3	4	5	6	7	6	13	12	8	8	7	4	4	5.4	13.4
23-Oct-05	2	4	3	3	9	6	9	5	4	4	5	4	5	7	7	6	7	7	6	7	5	3	5	5.4	9.0	
24-Oct-05	2	2	3	4	6	6	2	2	1	2	2	3	6	7	10	8	9	5	5	4	6	6	4	4.5	9.8	
25-Oct-05	4	4	8	8	4	3	4	3	1	3	3	3	3	12	19	17	11	6	7	5	7	12	8	6	6.8	19.4
26-Oct-05	7	6	8	11	24	35	30	31	29	30	39	36	32	28	29	29	23	19	11	12	8	4	5	4	20.4	39.2
27-Oct-05	4	4	3	3	3	2	1	2	4	2	2	3	3	4	6	7	7	8	8	9	7	4	3	3	4.2	8.9
28-Oct-05	3	3	1	2	4	4	3	3	3	5	3	4	3	2	4	3	4	4	4	4	2	3	2	3	3.1	4.8
29-Oct-05	2	2	2	2	2	4	3	4	3	4	9	11	26	32	33	28	24	17	20	16	13	9	12	10	12.0	32.5
30-Oct-05	3	4	4	13	19	19	14	7	5	6	10	16	18	18	11	7	5	2	3	5	3	7	5	4	8.5	18.9
31-Oct-05	4	4	5	5	6	7	6	7	4	8	8	9	7	3	4	3	2	2	2	2	3	2	3	2	4.7	8.7

1-hr Average 4.4 4.6 4.6 5.1 5.7 6.9 5.8 5.5 5.6 5.9 7.7 10.1 11.9 12.6 13.4 12.6 11.3 9.1 8.4 7.5 6.4 6.7 6.0 5.3

Hourly Max 13.1 13.3 8.6 13.4 23.6 34.8 30.4 30.8 28.8 30.4 39.2 36.2 31.8 31.5 32.5 29.5 27.4 20.5 20.1 18.3 17.1 15.7 14.5 14.7

## PASZA - Beaverlodge Vector Wind Speed Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

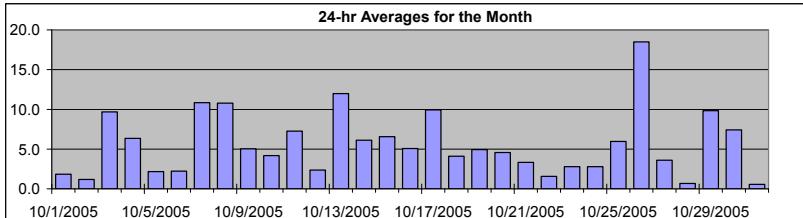
Monitoring Dates: October 1, 2005 to November 1, 2005

### Summary

Maximum 1-hr Average:	39.2	km/hr	26-Oct	10:00 11:00
Maximum 24-hr Value:	18.5	km/hr	26-Oct	

### HOURLY AVERAGE TABLE

### Wind Speed (WSv)



Calm Time:	6 hrs	1% calms	Operational Time:	738 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile	99	95	75	AverageV

99	95	75	50	25	5	1	30.4	23.6	8.8	5.9	3.4	2.0	1.2	6.8 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	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-Oct-05	5	2	3	4	2	calm	4	4	2	4	2	3	6	10	12	14	12	5	4	7	6	8	7	5	1.8	14.3							
2-Oct-05	3	4	2	5	3	1	1	calm	3	4	6	5	4	3	7	8	4	2	2	3	3	6	5	5	1.2	7.9							
3-Oct-05	7	7	6	5	6	9	12	11	11	13	9	12	15	16	17	16	15	8	10	8	6	7	7	9	9.7	16.8							
4-Oct-05	8	7	7	8	8	7	7	6	8	6	5	6	10	9	8	8	9	6	5	7	7	7	7	6	6.3	9.6							
5-Oct-05	7	4	2	3	3	2	4	3	2	2	3	2	2	2	2	2	3	5	3	3	3	2	2	4	2.2	6.6							
6-Oct-05	3	5	2	3	3	3	2	2	1	2	2	3	5	6	9	11	11	9	6	3	3	3	2	3	2.2	10.9							
7-Oct-05	3	4	5	7	3	1	1	3	6	5	11	26	30	29	30	18	18	16	14	11	8	7	7	10.8	30.1								
8-Oct-05	7	7	9	9	7	9	6	6	3	7	10	21	23	20	22	22	20	15	13	13	5	6	9	6	10.8	22.9							
9-Oct-05	3	3	3	4	4	4	3	4	4	4	6	8	10	9	9	10	8	6	14	7	7	6	7	5	5.0	13.6							
10-Oct-05	5	4	5	4	9	12	10	11	13	8	9	5	4	3	3	4	16	8	8	9	12	16	11	8	4.2	16.0							
11-Oct-05	4	4	5	6	5	6	5	4	6	8	14	26	25	27	25	17	11	11	6	2	5	6	6	5	7.3	27.1							
12-Oct-05	5	9	6	4	4	5	3	3	6	6	4	7	7	6	5	10	8	9	8	3	5	5	6	3	2.4	9.7							
13-Oct-05	4	1	4	6	6	11	6	5	7	11	25	25	28	27	27	21	27	21	13	7	3	6	4	6	12.0	27.7							
14-Oct-05	8	7	7	7	3	3	3	2	3	3	2	2	5	7	11	14	14	15	18	18	18	17	15	15	6.1	18.3							
15-Oct-05	13	13	7	5	6	8	9	8	6	8	8	11	10	8	7	8	10	15	9	7	6	11	13	8	6.6	15.4							
16-Oct-05	6	8	7	6	8	9	7	7	11	6	8	8	11	10	11	7	7	6	6	4	4	5	6	6	5.1	11.4							
17-Oct-05	4	3	6	4	3	7	7	7	8	10	13	23	27	26	26	24	18	9	12	11	6	7	6	5	9.9	27.3							
18-Oct-05	2	1	3	3	4	2	1	2	2	calm	calm	16	24	24	21	15	10	6	4	6	4	3	2	2	4.1	23.8							
19-Oct-05	3	4	3	1	5	8	7	6	8	3	4	3	3	10	19	15	15	14	14	14	7	8	7	7	4.9	18.7							
20-Oct-05	2	4	8	7	4	6	3	2	3	3	5	7	9	10	12	13	10	6	5	5	6	5	4	3	4.6	12.7							
21-Oct-05	2	3	4	3	2	4	3	2	2	4	5	5	4	6	8	9	6	6	7	7	10	5	5	3	3.3	9.8							
22-Oct-05	5	4	3	3	4	4	3	calm	calm	2	3	3	4	5	6	7	6	13	12	8	8	7	4	4	1.6	13.4							
23-Oct-05	2	4	3	3	9	6	9	5	4	4	5	4	5	7	7	6	7	7	6	7	5	3	5	2.8	9.0								
24-Oct-05	2	2	3	4	6	6	2	2	1	2	2	3	6	7	10	8	9	5	4	6	6	4	2	2.8	9.8								
25-Oct-05	4	4	8	8	4	3	4	3	1	3	3	3	3	12	19	17	11	6	7	5	7	12	8	6	6.0	19.4							
26-Oct-05	7	6	8	11	24	35	30	31	29	30	39	36	32	28	29	29	23	19	11	12	8	4	5	4	18.5	39.2							
27-Oct-05	4	4	3	3	3	2	1	2	4	2	2	3	3	4	6	7	7	8	8	9	7	4	3	3	3.6	8.9							
28-Oct-05	3	3	1	2	4	4	3	3	3	5	3	4	3	2	4	3	4	4	4	2	3	2	3	0.7	4.8								
29-Oct-05	2	2	2	2	2	4	3	4	3	4	9	11	26	32	33	28	24	17	20	16	13	9	12	10	9.8	32.5							
30-Oct-05	3	4	4	13	19	19	14	7	5	6	10	16	18	18	11	7	5	2	3	5	3	7	5	4	7.4	18.9							
31-Oct-05	4	4	5	5	6	7	6	7	6	5	4	8	8	9	7	3	4	3	2	2	2	2	3	2	0.6	8.7							

1-hr Vector	1.5	1.6	0.6	0.6	1.2	1.8	1.2	0.8	1.7	2.6	5.3	7.0	8.2	8.0	7.2	6.5	4.9	4.2	2.2	1.1	0.1	0.4	0.6	0.7		
Hourly Max	13.1	13.3	8.6	13.4	23.6	34.8	30.4	30.8	28.8	30.4	39.2	36.2	31.8	31.5	32.5	29.5	27.4	20.5	20.1	18.3	17.1	15.7	14.5	14.7		

## PASZA - Beaverlodge Wind Direction Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Statistics									

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average	
	348.1	321.7	265.0	189.0	115.0	43.2	10.4	252 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 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-Oct-05	115	107	315	33	136	56	34	49	14	329	155	197	208	148	149	159	145	211	123	131	344	338	10	17	124	SE	
2-Oct-05	300	316	215	315	346	205	54	248	312	290	288	277	242	186	186	235	234	246	11	34	28	44	50	89	296	WNW	
3-Oct-05	100	95	83	84	75	89	103	110	111	119	124	115	128	109	101	103	105	114	147	138	116	115	108	115	110	ESE	
4-Oct-05	111	102	99	99	100	107	100	75	99	118	147	156	147	155	158	140	131	126	73	63	74	97	98	119	113	ESE	
5-Oct-05	91	138	116	115	135	100	142	251	92	120	177	178	183	224	228	214	212	202	158	178	197	204	167	139	160	SSE	
6-Oct-05	156	80	140	121	215	232	281	51	275	264	172	161	187	195	234	251	242	265	238	177	108	69	319	110	219	SW	
7-Oct-05	163	75	7	319	319	197	118	190	241	249	266	287	283	284	278	277	274	277	276	275	283	268	254	272	278	W	
8-Oct-05	263	260	265	263	228	265	288	230	115	243	237	284	283	280	268	273	277	275	276	281	280	246	261	257	269	W	
9-Oct-05	165	103	124	82	144	152	140	100	132	157	197	181	180	168	138	174	237	242	170	184	201	186	187	169	171	S	
10-Oct-05	135	135	76	46	35	34	34	21	16	11	338	331	312	352	301	311	260	251	259	281	279	260	266	326	NW		
11-Oct-05	38	90	271	235	230	198	199	208	261	273	237	259	265	265	265	270	270	253	255	241	214	90	110	129	120	252	WSW
12-Oct-05	120	157	99	154	117	155	152	125	187	199	189	184	189	199	212	248	256	268	288	14	327	4	22	268	202	SSW	
13-Oct-05	298	326	278	245	246	274	234	281	255	251	278	284	283	283	284	282	282	278	273	248	279	269	181	257	275	W	
14-Oct-05	242	259	260	258	144	80	96	86	80	207	102	134	180	147	101	85	92	93	95	95	123	111	103	84	108	ESE	
15-Oct-05	82	86	91	36	328	335	330	331	324	308	300	306	320	332	320	351	355	330	347	319	313	318	312	296	336	NNW	
16-Oct-05	311	294	292	314	264	263	272	265	284	247	265	254	272	257	262	208	177	161	156	135	126	186	204	239	252	WSW	
17-Oct-05	244	206	261	219	187	231	254	241	258	256	257	267	273	275	279	279	286	285	270	289	326	352	358	24	274	W	
18-Oct-05	8	118	87	108	102	170	112	63	91	117	228	268	277	272	276	285	289	322	324	30	82	83	123	228	285	WNW	
19-Oct-05	119	145	99	232	36	5	29	60	333	230	207	164	184	244	283	287	315	305	299	292	298	286	296	308	299	WNW	
20-Oct-05	317	302	294	296	328	331	280	274	262	331	213	226	268	256	248	288	292	294	255	275	317	254	81	133	278	W	
21-Oct-05	132	98	78	82	94	78	107	178	110	68	316	298	88	159	150	156	124	131	109	107	121	140	164	177	124	SE	
22-Oct-05	172	237	45	115	260	349	34	72	123	134	271	350	142	235	133	178	273	323	339	15	334	301	59	59	327	NNW	
23-Oct-05	237	224	211	214	214	244	245	238	231	176	174	169	179	169	163	149	105	90	99	116	100	87	338	41	168	SSE	
24-Oct-05	68	357	43	6	30	335	261	128	118	107	128	190	144	162	144	135	136	165	119	95	111	136	103	145	121	ESE	
25-Oct-05	116	111	112	138	197	149	183	209	134	177	140	198	194	173	164	154	133	141	84	125	104	157	127	104	145	SE	
26-Oct-05	124	138	191	283	269	269	263	269	263	259	262	266	264	260	273	265	257	264	251	249	267	142	184	115	261	W	
27-Oct-05	119	96	127	99	113	102	143	94	213	129	169	137	117	95	65	133	115	92	65	67	75	81	142	222	102	ESE	
28-Oct-05	248	47	95	137	230	21	225	92	255	18	282	124	281	243	115	245	226	285	5	6	57	48	347	37	315	NW	
29-Oct-05	271	39	100	111	83	78	145	142	105	168	215	208	261	270	264	273	260	263	259	250	249	262	275	263	257	WSW	
30-Oct-05	213	184	170	262	277	274	266	261	203	236	236	238	259	264	265	255	234	162	213	277	227	255	185	107	252	WSW	
31-Oct-05	85	89	80	84	75	92	53	52	228	217	232	255	298	317	346	297	178	139	186	208	141	101	143	139	83	E	

Hourly Avg 129 118 112 269 254 283 258 266 257 240 248 256 259 254 253 252 257 268 258 257 3 228 172 139

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

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: October 1, 2005 to November 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms							Operational Time: 744 hrs																				
Calibration Time: 0 hrs							AMD Operational Uptime: 100.0%																				
Percentile	99	95	75	50	25	5	1	25.0	20.0	12.0	9.0	7.0	5.0	3.0													

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

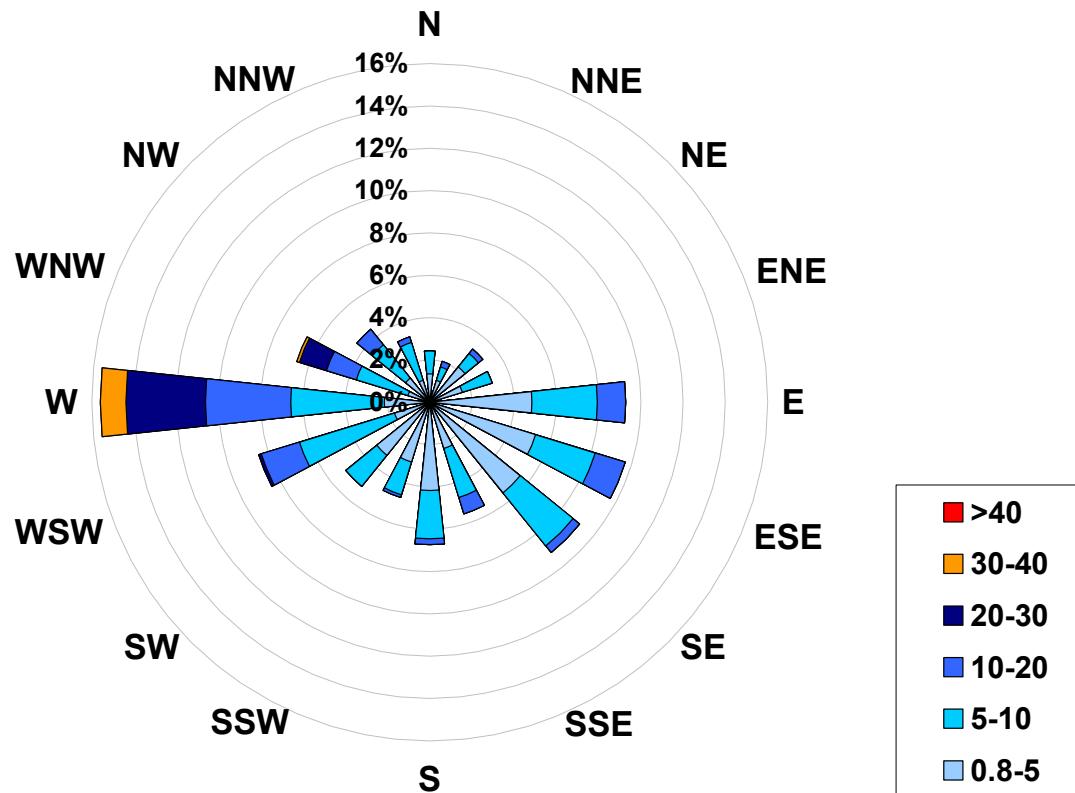
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-05	15	8	6	3	9	13	5	11	22	16	19	16	11	8	9	8	8	6	3	7	9	9	9	11	6	22.0
2-Oct-05	5	5	11	3	11	5	7	7	10	9	7	9	11	19	13	9	8	8	3	3	3	5	5	7	19.0	
3-Oct-05	9	8	8	17	10	11	11	10	10	9	11	10	10	10	9	9	8	8	7	7	8	9	10	17.0		
4-Oct-05	10	10	9	11	9	11	10	8	9	11	18	18	11	12	14	15	9	7	4	4	5	7	5	6	18.0	
5-Oct-05	6	7	13	8	5	9	7	15	9	15	18	29	23	18	17	11	9	5	3	2	2	7	7	2	29.0	
6-Oct-05	5	8	6	4	4	7	11	7	12	9	13	13	10	10	10	10	8	5	3	19	15	12	14	6	19.0	
7-Oct-05	6	9	9	5	9	9	8	8	12	26	9	8	8	8	8	8	8	7	7	6	3	8	7	26.0		
8-Oct-05	9	7	5	7	5	4	7	9	21	13	10	9	8	8	8	8	7	5	4	13	12	7	10	21.0		
9-Oct-05	25	14	13	8	10	7	12	10	9	11	11	10	10	10	9	5	7	11	8	6	6	5	9	25.0		
10-Oct-05	10	14	6	8	5	6	6	12	17	17	16	18	24	20	16	15	9	7	5	6	8	7	15	10	24.0	
11-Oct-05	12	14	14	6	7	8	20	12	21	11	11	8	8	8	8	9	8	5	7	8	10	11	10	10	21.0	
12-Oct-05	13	7	11	8	9	4	15	9	7	9	9	9	8	9	8	7	7	5	3	20	8	10	7	4	20.0	
13-Oct-05	9	17	4	5	8	6	8	12	8	8	8	8	8	8	8	8	8	6	4	11	3	13	7	17.0		
14-Oct-05	4	6	6	6	10	9	11	9	2	10	17	20	11	10	8	6	8	8	9	10	10	10	8	20.0		
15-Oct-05	7	8	15	15	8	5	6	8	8	7	7	8	11	14	15	18	20	12	19	12	9	10	9	7	20.0	
16-Oct-05	8	8	5	5	5	4	7	8	8	9	13	12	9	10	9	9	6	4	7	9	8	14	8	11	14.0	
17-Oct-05	15	13	6	9	16	8	8	6	7	8	8	8	8	8	8	7	7	7	7	10	16	17	7	17.0		
18-Oct-05	7	8	24	11	9	8	16	10	10	15	16	9	9	8	9	8	7	7	8	7	11	11	12	8	24.0	
19-Oct-05	7	10	14	13	5	13	13	14	5	9	11	9	16	9	8	9	9	8	8	7	8	8	9	7	16.0	
20-Oct-05	19	13	6	7	21	11	8	11	10	17	16	13	11	11	10	8	7	3	7	5	5	7	8	7	21.0	
21-Oct-05	14	8	7	12	10	5	5	5	14	5	7	11	18	19	9	8	8	6	9	21	10	14	12	10	21.0	
22-Oct-05	17	9	22	7	16	11	11	9	13	22	17	22	22	13	13	7	6	8	17	17	14	6	7	4	22.0	
23-Oct-05	8	8	10	15	12	11	8	8	7	7	9	12	9	8	7	8	6	10	12	9	8	14	12	15.0		
24-Oct-05	25	16	11	15	10	12	23	8	7	16	18	18	10	10	8	9	8	13	9	11	9	6	8	9	25.0	
25-Oct-05	10	7	4	7	25	15	6	12	8	13	20	24	24	15	8	7	9	12	10	22	14	8	10	13	25.0	
26-Oct-05	15	11	10	8	7	8	8	8	8	9	8	8	8	8	8	7	5	5	10	16	8	9	16.0			
27-Oct-05	9	10	10	6	9	7	9	5	10	9	22	25	28	20	21	12	8	6	7	5	8	8	17	21	28.0	
28-Oct-05	18	16	6	12	7	7	12	17	6	14	9	29	18	17	20	6	12	13	11	9	13	9	7	6	29.0	
29-Oct-05	12	15	13	6	6	6	26	12	11	21	13	10	9	7	8	8	6	8	7	6	7	8	6	6	26.0	
30-Oct-05	32	27	21	13	8	8	11	11	9	7	8	7	8	8	7	4	3	6	15	15	4	5	6	16	32.0	
31-Oct-05	6	8	6	7	7	8	16	23	9	12	14	8	8	10	17	12	5	6	14	6	14	12	11	9	23.0	

Hourly Max 32 27 24 17 25 15 26 23 22 26 22 29 28 20 21 18 20 13 19 22 15 16 17 21

**1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for October 2005**



<b>Calms:</b>	<b>1%</b>	<b>Frequency Distribution of Wind in km/hr</b>		
		<b>Range</b>	<b>Frequency (hrs)</b>	
		0.8 < 5	309	
		5 to 10	276	
		10 to 20	101	
		20 to 30	39	
		30 to 40	10	
		> 40	0	
		Total Non-Zero Values	738	

**PEACE AIRSHED ZONE ASSOCIATION**  
**PASZA Monthly Passive Data Summary**

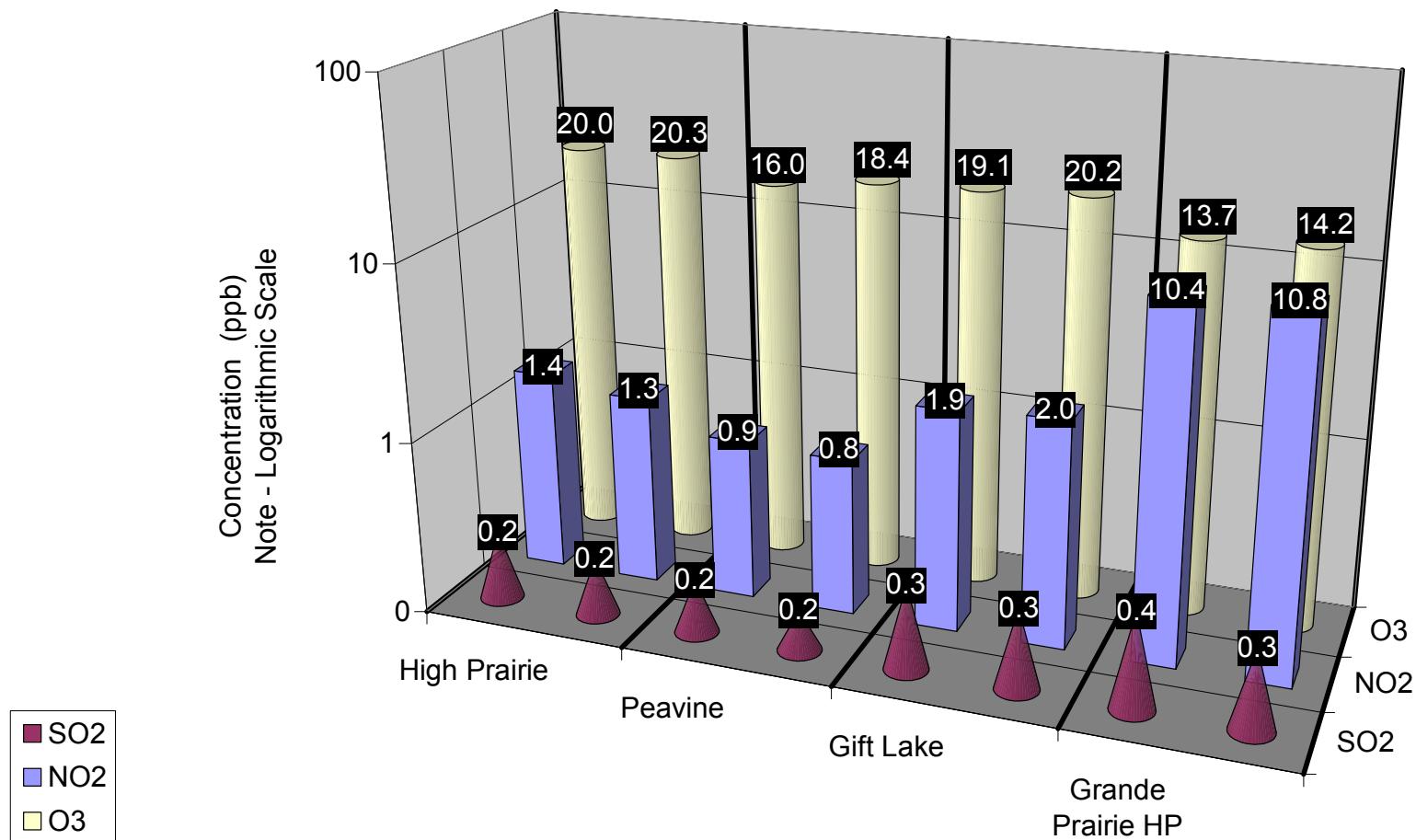
**Table 1. PASZA Passive Stations for October 2005**

PASZA					Site Legal
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	
<b>Duplicates</b>					
36a	High Prairie	0.2	20.0	1.4	
36b	High Prairie	0.2	20.3	1.3	
34a	Peavine	0.2	16.0	0.9	
34b	Peavine	0.2	18.4	0.8	
37a	Gift Lake	0.3	19.1	1.9	
37b	Gift Lake	0.3	20.2	2.0	
49a	Grande Prairie HP	0.4	13.7	10.4	
49b	Grande Prairie HP	0.3	14.2	10.8	

1	Silver Valley	0.3	14.4	1.7	08-27-081-11 W6M
2	Bay Tree	0.2	19.4	0.8	13-16-078-13 W6M
3	Forth Creek	0.3	23.0	1.4	04-13-082-07 W6M
4	Gordondale	0.4	23.4	1.7	04-34-078-10 W6M
5	Boone Creek	0.3	18.5	1.8	01-23-076-11 W6M
7	Steeprock Creek	0.2	22.8	1.2	09-35-072-13 W6M
9	Spirit River	0.3	20.6	1.9	08-12-079-07 W6M
10	Woking	0.3	20.4	1.4	01-13-076-07 W6M
11	Webber Creek	0.3	18.4	2.0	09-36-074-09 W6M
12	Hythe	0.3	16.5	2.2	14-36-072-11 W6M
14	Sylvester	0.1	13.3	1.0	08-06-069-12 W6M
16	Beaverlodge	0.2	20.2	4.2	15-36-071-10 W6M
17	Poplar	0.2	17.9	2.1	13-06-073-08 W6M
18	Saddle Hills	0.3	19.3	1.5	04-25-074-07 W6M

**Table 1. PASZA Passive Stations for October 2005 (Continued)**

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
19	Wanham	0.3	24.4	1.8	16-22-077-03 W6M
20	Shaftesbury	0.2	18.1	1.3	04-03-082-23 W5M
21	Eaglesham	0.2	15.9	1.2	16-21-079-25 W5M
23	Bear Lake	0.4	17.9	2.9	15-31-072-06 W6M
24	Wembley	0.2	13.6	2.4	12-31-070-08 W6M
25	Pinto Creek	0.1	16.5	1.5	04-24-069-11 W6M
26	Flyingshot	0.3	18.4	2.7	15-36-070-07 W6M
27	Grande Prairie I	0.3	13.1	8.3	08-15-071-06 W6M
28	Clairmont Lake	0.3	21.9	2.2	09-06-073-04 W6M
29	Smoky Heights	0.5	21.7	1.9	04-06-075-02 W6M
30	Fitzsimmons	0.2	17.3	1.9	15-36-072-03 W6M
32	Gold Creek	0.3	14.6	-	06-33-067-05 W6M
33	Wapiti	0.3	19.0	1.8	02-25-071-03 W6M
34	Puskwaskau	0.2	17.2	0.8	15-35-074-25 W5M
35	Jean Cote	0.3	20.2	1.5	12-35-079-21 W5M
36	Guy	0.2	20.1	1.4	03-04-076-22 W5M
37	Crooked Creek	0.3	19.7	1.9	16-01-071-26 W5M
38	Karr Creek	0.1	12.9	0.6	10-16-065-02 W6M
39	Clouston Creek	0.3	18.7	1.6	12-01-073-22 W5M
40	McLennan	0.2	19.9	1.5	03-29-077-19 W5M
41	Valleyview	0.5	23.7	1.9	09-30-069-22 W5M
42	Sunset House	0.5	28.2	1.2	05-32-070-19 W5M
43	High Prairie	0.2	20.0	1.7	16-13-074-17 W5M
44	Peavine	0.2	17.4	1.0	03-05-079-15 W5M
45	Gift Lake	0.2	16.1	1.7	10-07-079-12 W5M
46	Little Smoky	0.4	15.6	3.8	12-01-065-21 W5M
47	Kinuso	0.2	16.9	1.3	12-10-073-10 W5M
48	Deer Mountain	0.3	18.2	1.7	15-22-068-09 W5M
49	Grande Prairie HP	0.3	13.9	10.6	17-26-071-06 W6M



**Figure 46. Duplicate Summary Chart**

**Table 2. Passive Summary Results for October 2005**

Stats	Sulphur Dioxide SO <sub>2</sub>	Ozone O <sub>3</sub>	Nitrogen Dioxide NO <sub>2</sub>
	ppb	ppb	ppb
Passive Summary for Oct 2005 (PASZA Zone)			
Mean	0.3	18.6	2.1
Standard Deviation	0.1	3.3	1.8
Minimum	0.1	12.9	0.6
	Sylvester (#14)	Karr Creek (#38)	Karr Creek (#38)
Maximum	0.5	28.2	10.6
	Sunset House (#42)	Sunset House (#42)	Grande Prairie HP (#49)

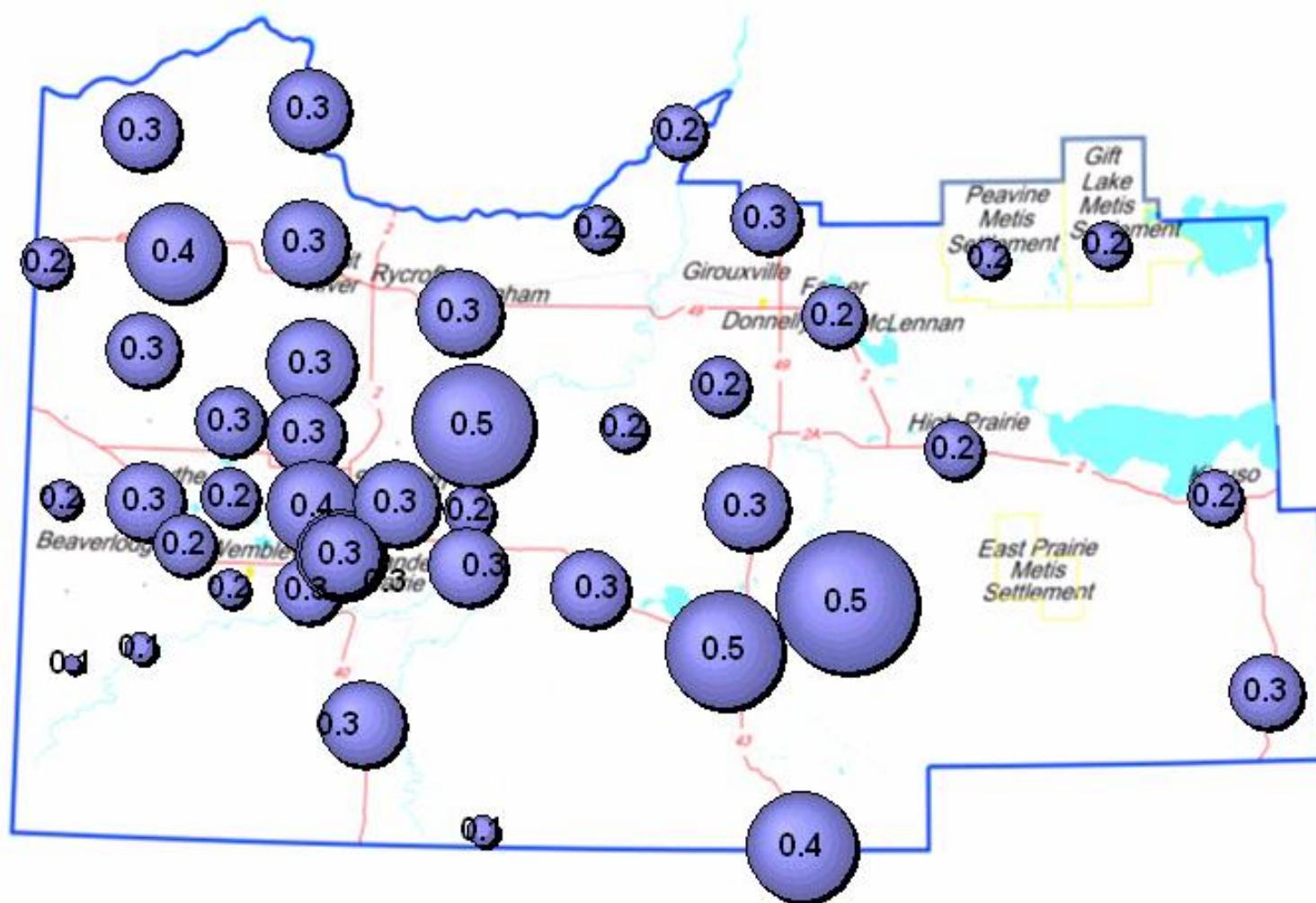
**Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)**

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
AENV Beaverlodge station	0.4	20.7	5.4
PASZA Beaverlodge passive	0.2	20.2	4.2

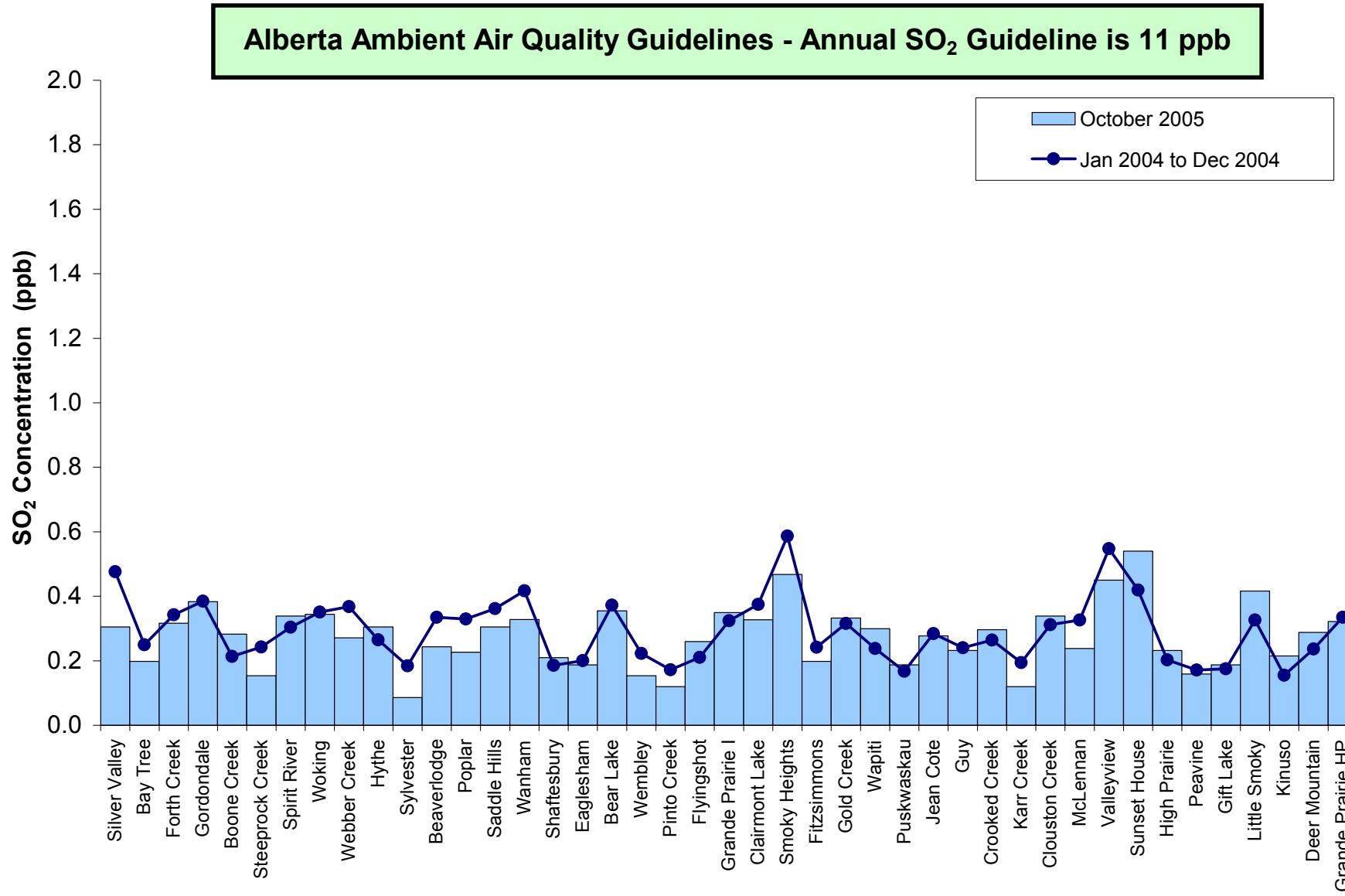
**Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)**

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Henry Pirker station	0.6	14.3	13.1
PASZA Grande Prairie passive	0.3	13.9	10.6

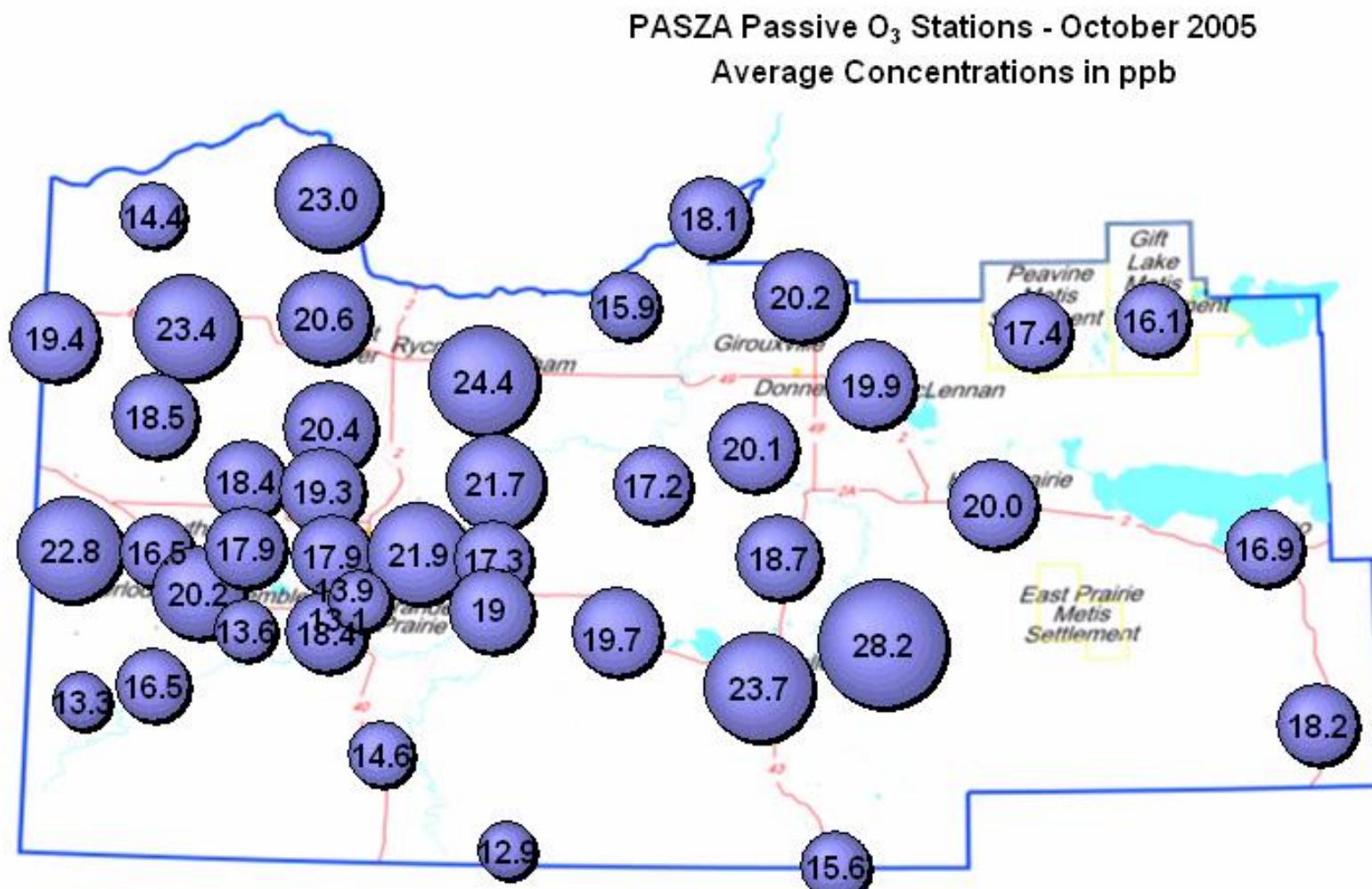
**PASZA Passive SO<sub>2</sub> Stations - October 2005**  
**Average Concentrations in ppb**



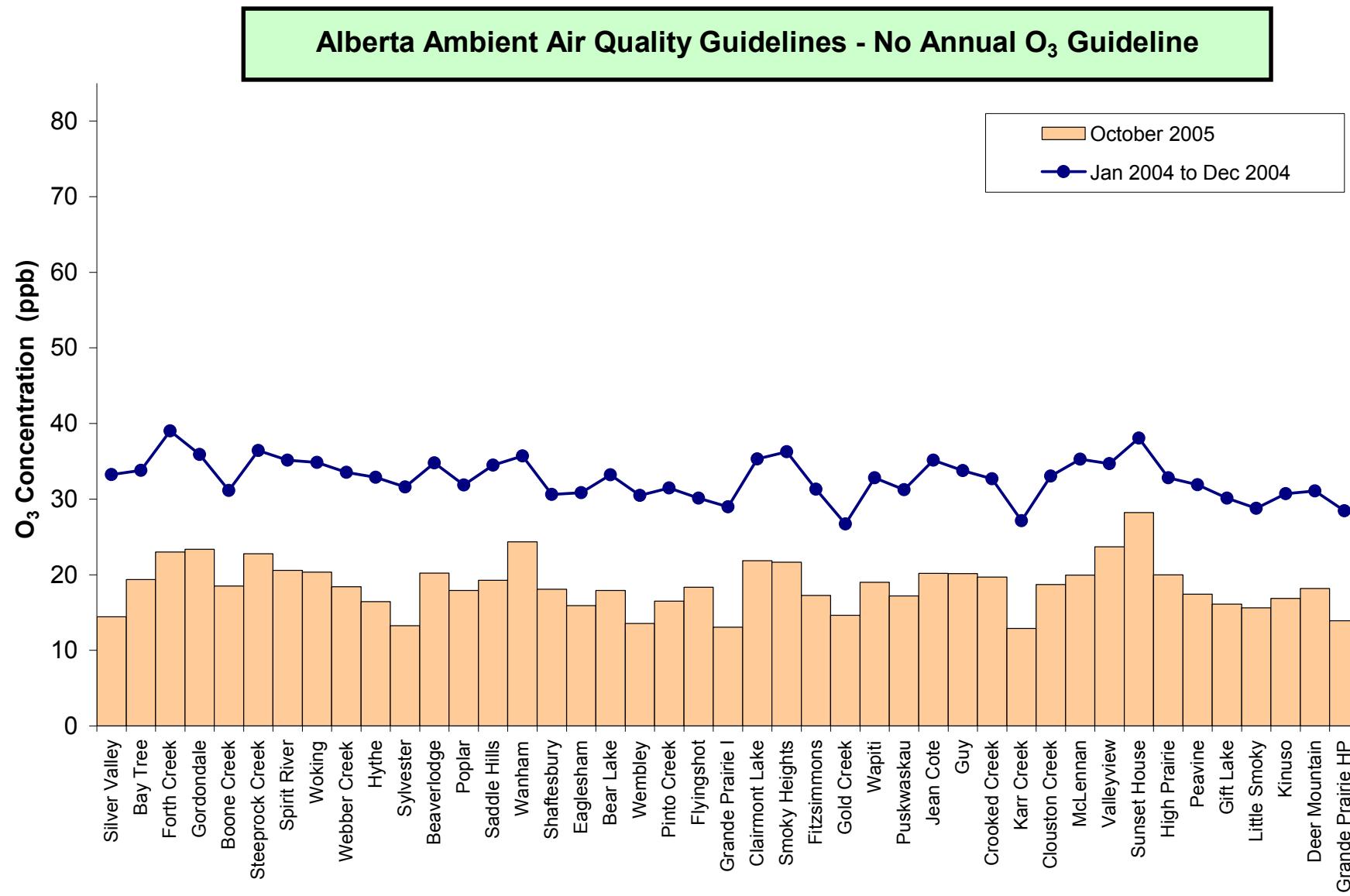
**Figure 47. SO<sub>2</sub> Bubble Chart**



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



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



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

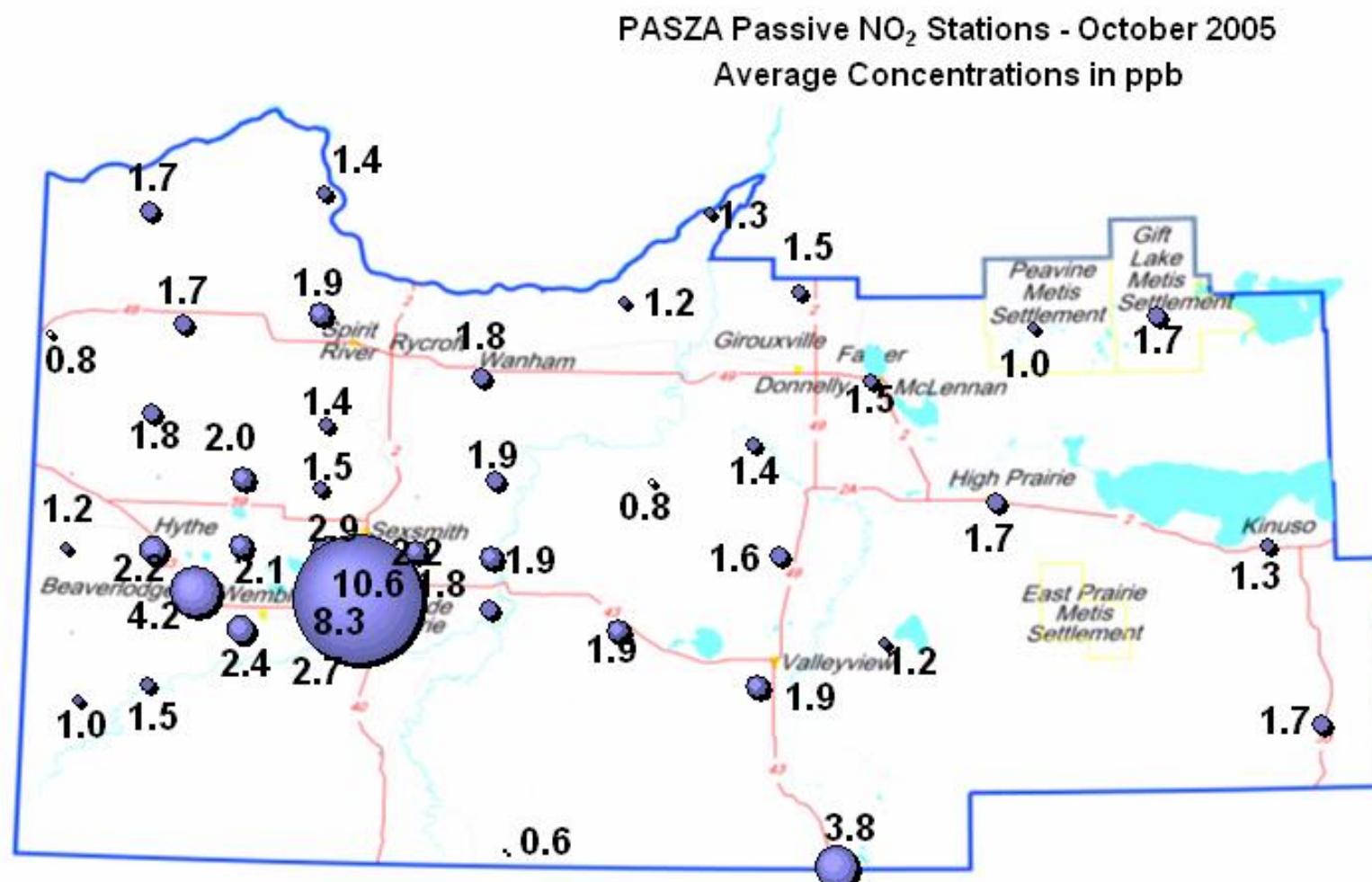
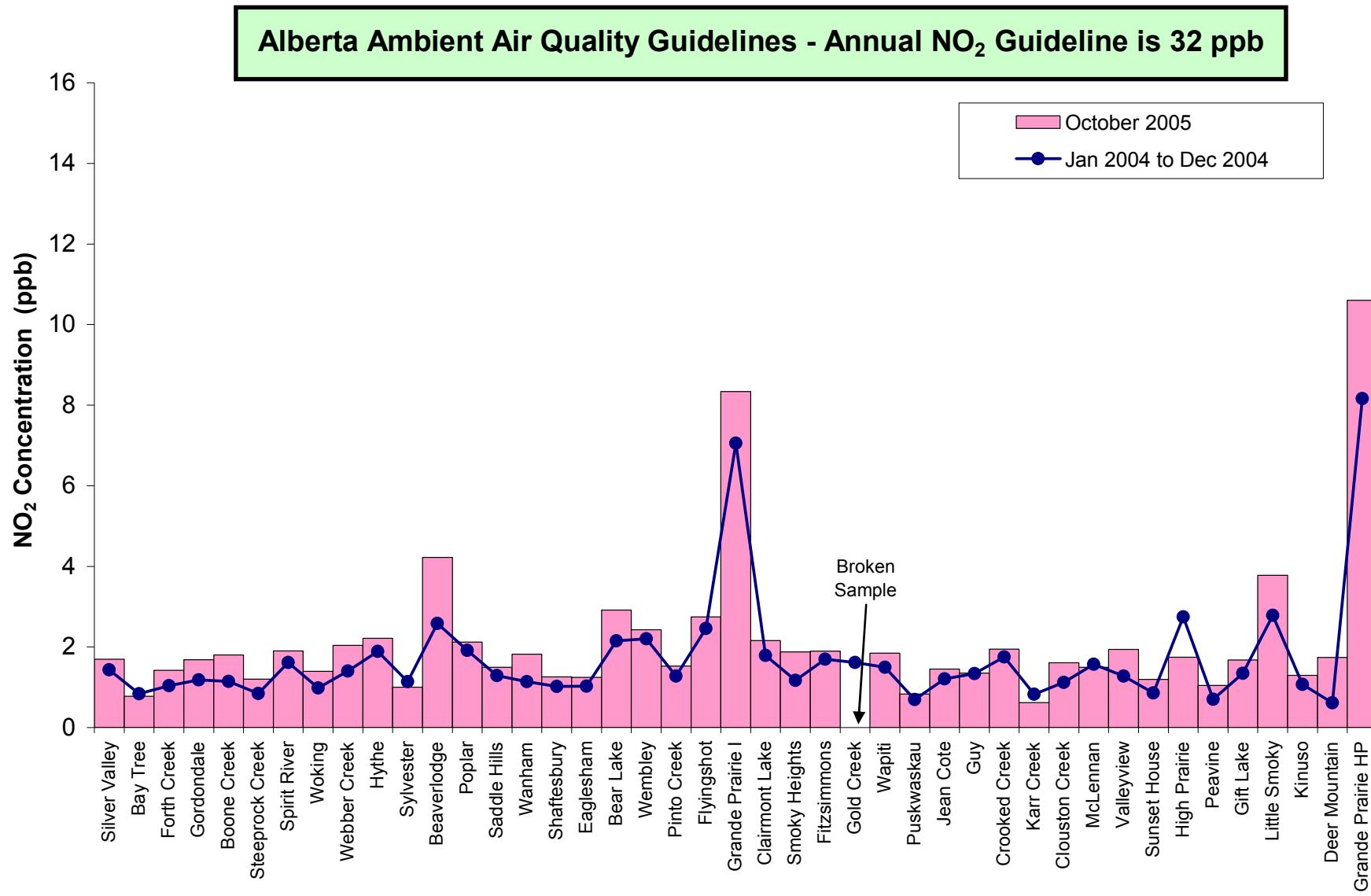
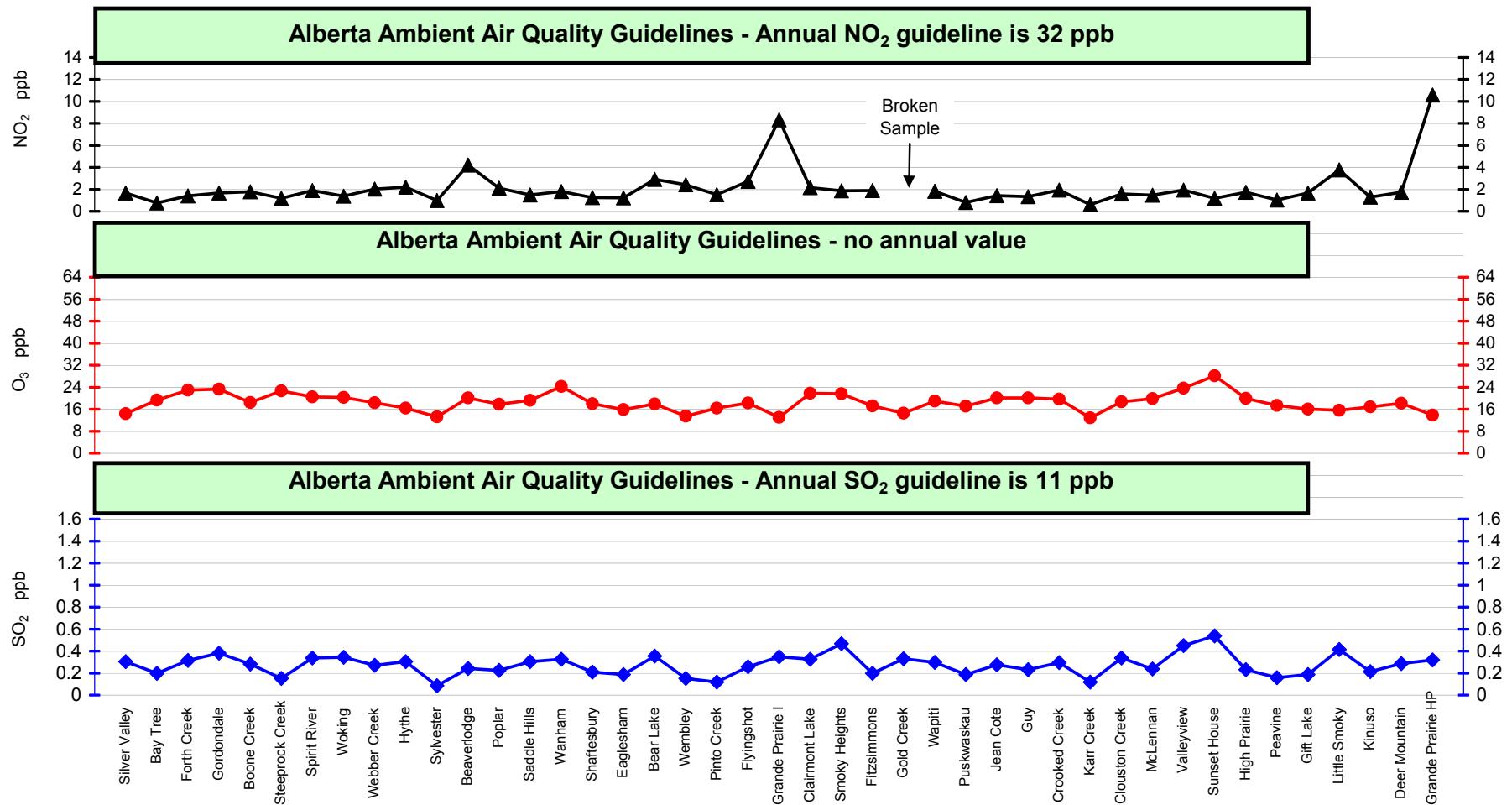


Figure 51. NO<sub>2</sub> Bubble Chart



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

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**Figure 53. Overview Summary**

## **October 2005 Calibration Reports**

**PASZA - Henry Pirker Station with the following calibrations:**

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

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

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

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

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

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

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

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

Calibration Date	October 18, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	9:13	End Time (MST)	11:47
Barometric Pressure	27.6 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,097 ng/min	Perm-tube Expiry Date	
Correction factor	0.936502	Perm-tube Cert #	19-9955
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	0.997175	Calculated slope	1.003861
Calculated intercept	0.966989	Calculated intercept	-0.800964
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195
Concentration range	before	after	
	0 - 500	ppb	0 - 500
	170		170
	152		168
	934	v	936
	18.4	" Hg	17.8
Sample Flow	420	ccm	420
			ccm

**Calibration Data**

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	1957.3	0.0	-0.1	N/A
2090	1957.3	408.9	407.4	1.0037
4940	4626.3	173.0	175.0	0.9888
9050	8475.3	94.4	94.7	0.9977
zero	1957.3	0.0	-0.1	As Found Zero
2090	1957.3	408.9	402.4	As Found Span
Average Correction Factor				0.9967

Calculated value of As Found Response: 402.342 ppm Percent Change of As Found: 1.6%

Auto zero	before calibration		after calibration	
	0.8	ppm	-1.0	ppm
	320.5	ppm	333.5	ppm

Notes: Adjusted span.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

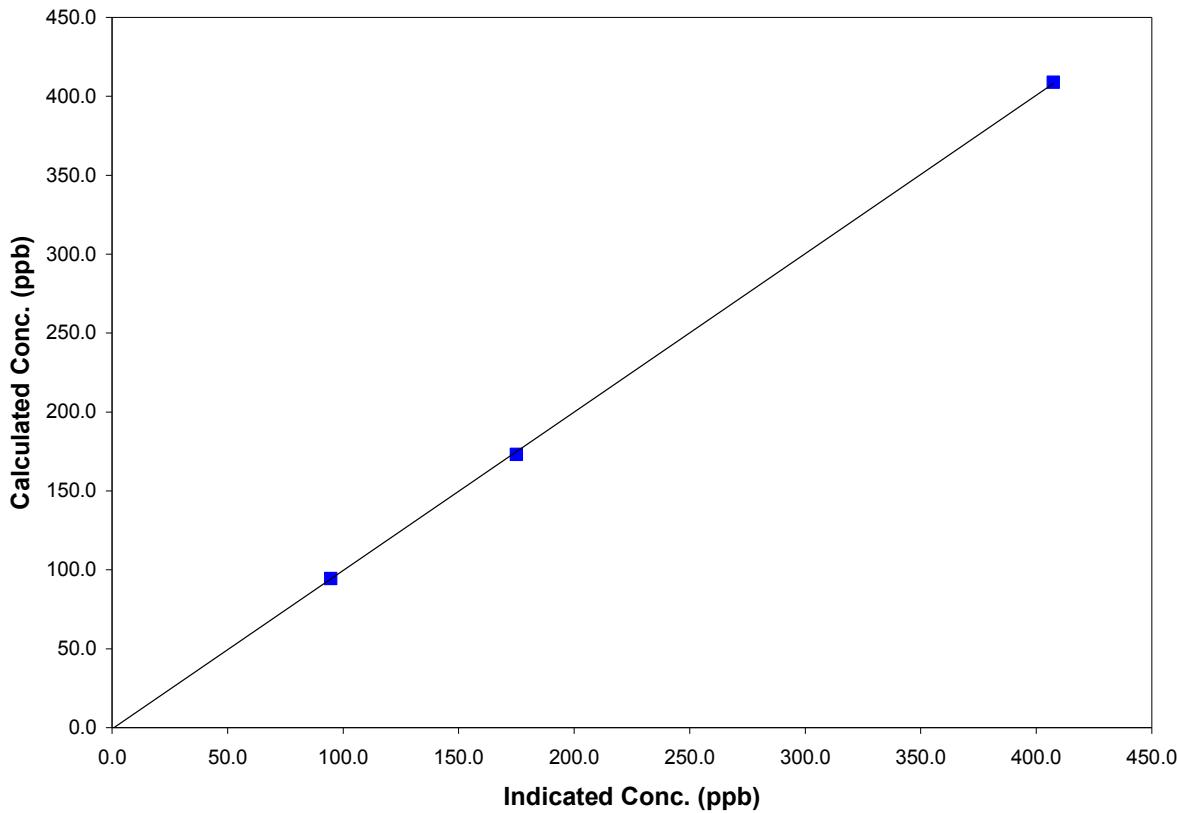
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

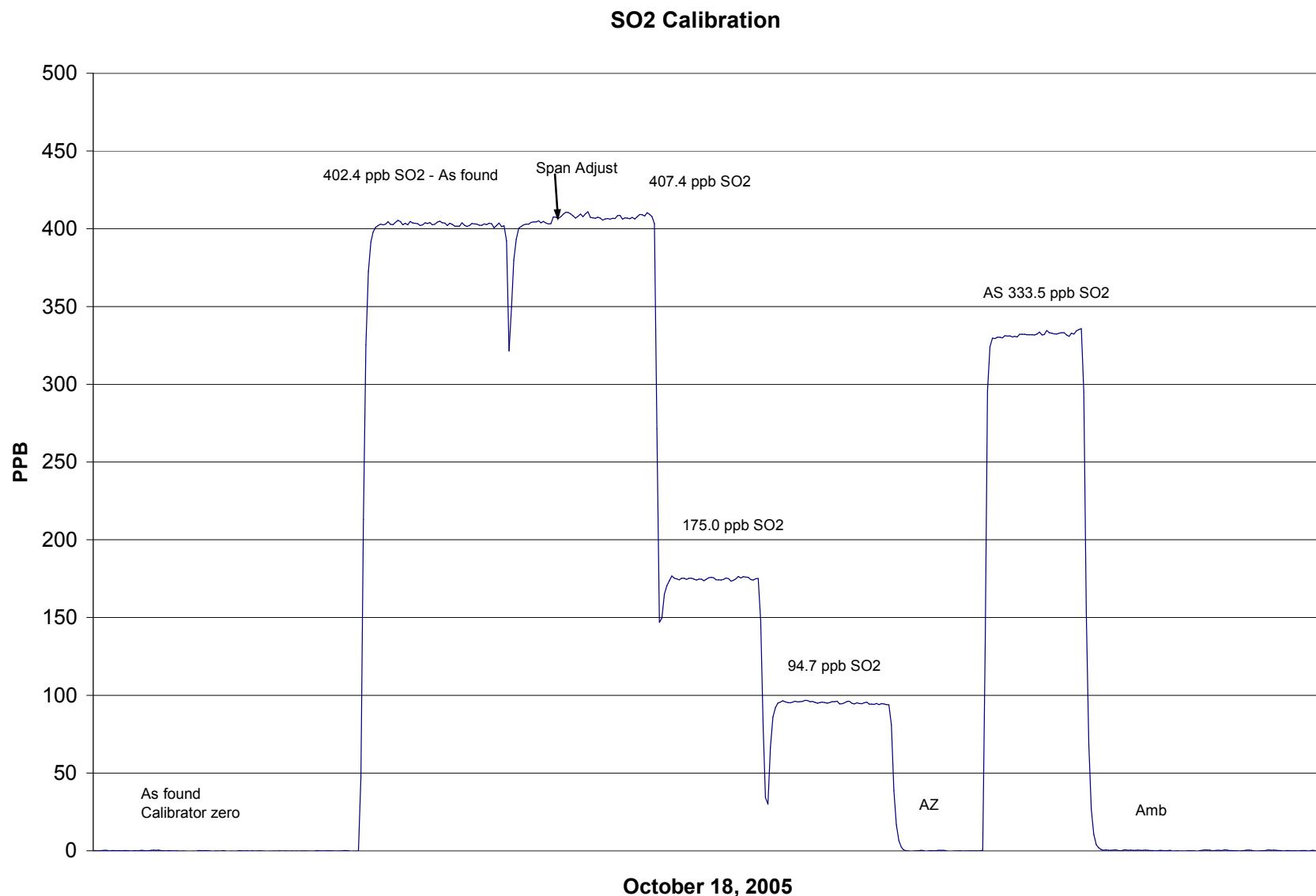
**Station Information**

Calibration Date	October 18, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:13	End Time (MST)	11:47
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-21120-195

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
408.9	407.4	1.0037	Correlation Coefficient	0.999948
173.0	175.0	0.9888	Slope	1.003861
94.4	94.7	0.9977	Intercept	-0.800964

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



# Calibration Report

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



## Station Information

Calibration Date	October 11, 2005			Previous Calibration	September 7, 2005	
Station Number	1			Station Location	Muskoosepi Park	
Reason:	Routine	Installation	Removal	Other:		
Start Time (MST)	9:15			End Time (MST)	15:10	
Barometric Pressure	0.925	Atm		Station Temperature	20.0	Deg C
Calibrator	Environics 6100			Serial Number	3016	
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	1.002413	0.991733	0.991880		
	Data Offset	-1.753210	-1.534499	-1.731013		
After	Data Slope	0.992775	0.991938	0.976628		
	Data Offset	1.903114	1.040200	1.357679		
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	6.3	ppb	8.6	mV
NOx background	6.6	ppb	8.4	mV
NO coefficient	0.904		0.924	
NOx coefficient	0.994		0.911	
Chamber Temp	49.7	Deg C	49.6	Deg C
Cooler Temp	-2.4	Deg C	-2.5	Deg C
Converter Temp	319.0	Deg C	318.0	Deg C
Vacuum	190.7	mm Hg	191.0	mm Hg

Notes:

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## Calibration Report

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



### Station Information

Calibration Date: October 11, 2005 Station Location: Muskoseepi Park

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	
zero	4993	0.00	0.0	0.0	0.0	-0.2	-0.1	0.0	N/A	N/A	
	4993	39.97	401.1	399.5	1.6	404.3	408.8	-4.5	0.9920	0.9771	
	4993	19.98	201.3	200.5	0.8	199.6	201.5	-1.8	1.0084	0.9948	
	4993	9.99	100.8	100.4	0.4	101.0	101.4	-0.3	0.9980	0.9908	
AFZ	4993	0.00	0.0	0.0	0.0	0.5	0.8	0.0	0.0000	0.0000	
	4993	39.97	401.1	399.5	1.6	424.5	408.7	15.8	0.9448	0.9773	
								Average Correction Factor	0.9995	0.9876	

As Found Concentrations: NO<sub>x</sub>= 422.5 NO= 406.2 As Found Percent Change NO<sub>x</sub>= 5.3% NO= 1.7%

### GPT Calibration Data

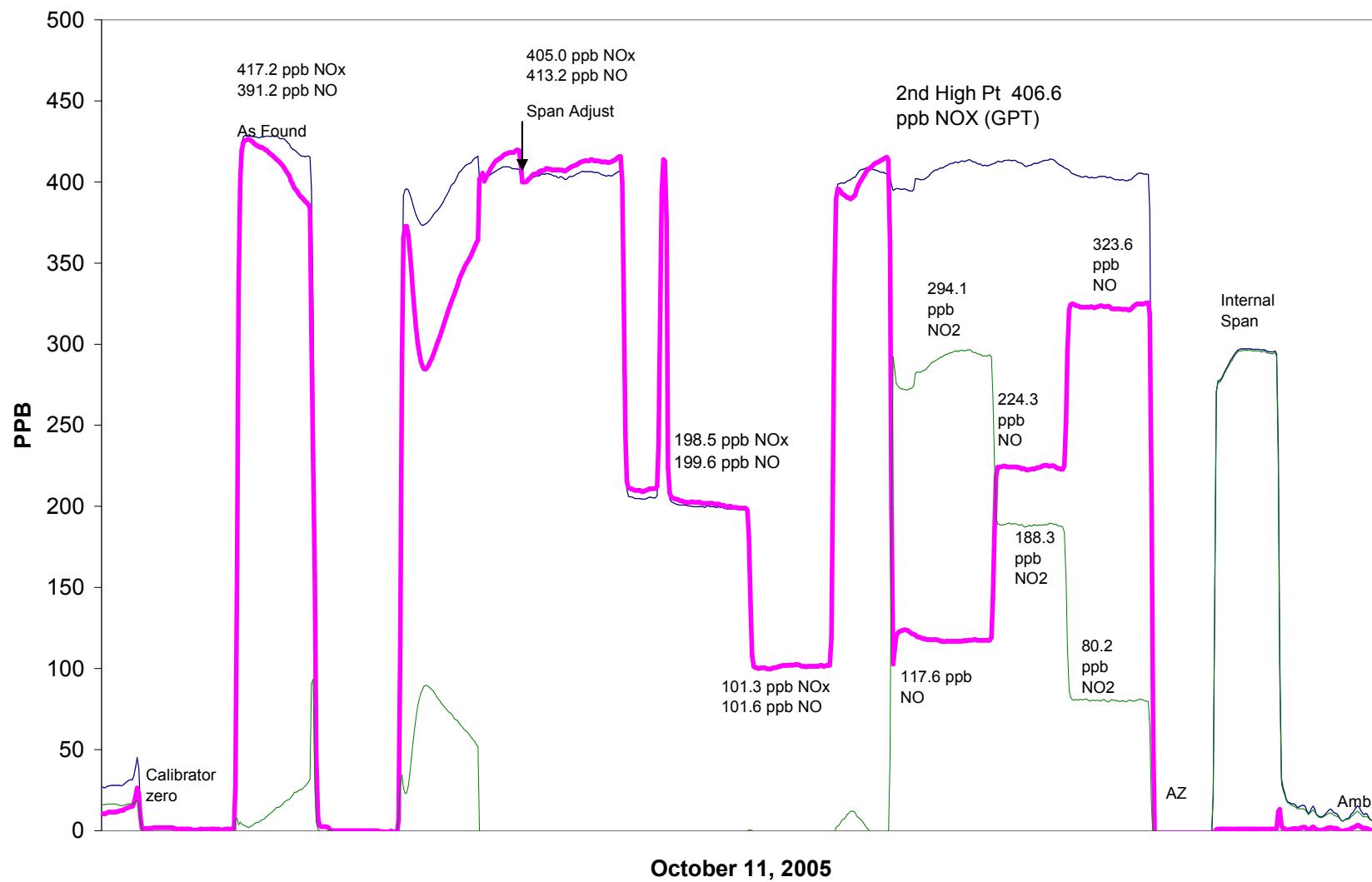
Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	406.2	401.9	4.3	407.1	410.1	-3.1	0.9978	0.9799	N/A	N/A
300	408.1	115.9	292.2	410.3	117.3	293.4	0.9945	0.9882	0.9957	100.4%
200	409.8	220.0	189.8	412.1	223.9	188.6	0.9945	0.9827	1.0063	99.4%
100	400.7	316.7	84.0	402.9	322.9	80.4	0.9945	0.9808	1.0446	95.7%
						Average Correction Factor	0.9945	0.9839	1.0155	98.5%

### AIC Data

	Previous calibration				Current calibration				
Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb	
Auto zero	0.9	0.9	0.9	ppb	3.3	1.0	3.6	ppb	
Auto span	294.8	294.8	1.3	ppb	294.7	294.8	2.4	ppb	

Calibration Performed By: Dawn Ewan

**NOx Calibration**

**Calibration Summary**

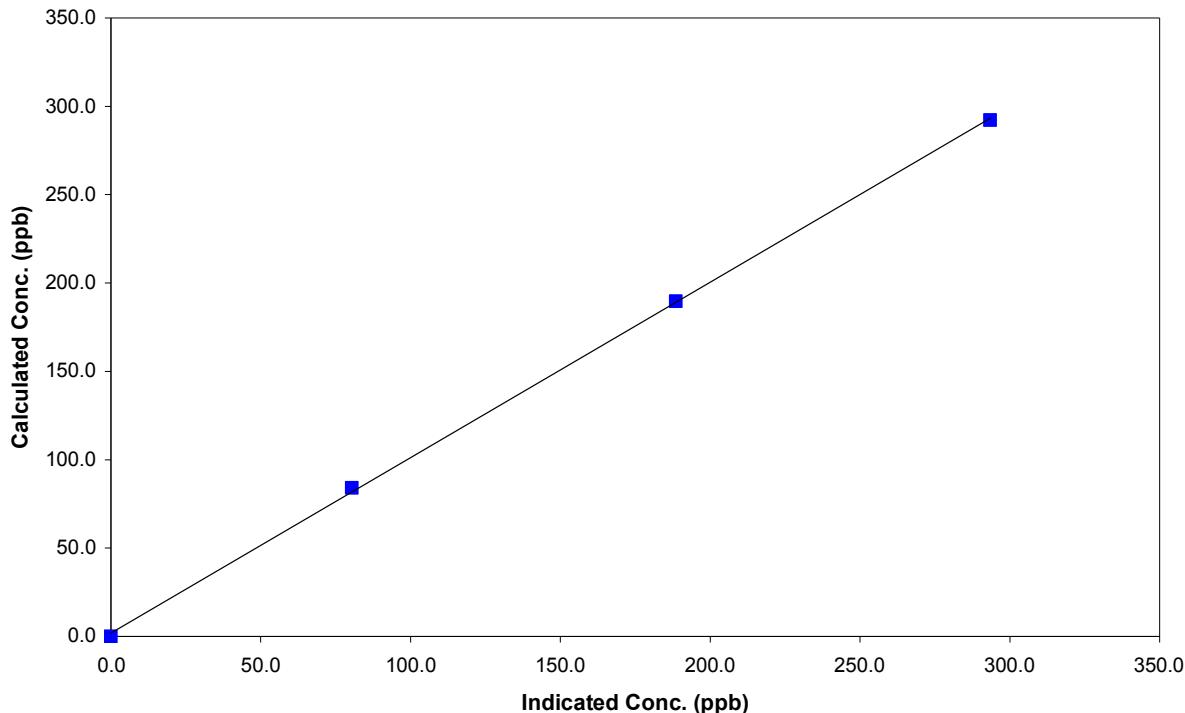
Parameter **NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	October 11, 2005	Previous Calibration	September 7, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:15	End Time (MST)	15:10
Analyzer make	Teco 42C	Analyzer serial #	508011073

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	0.0000	Correlation Coefficient	0.999791
292.2	293.4	0.9957		
189.8	188.6	1.0063		
84.0	80.4	1.0446		
			Slope	0.992775
			Intercept	1.903114

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

**Calibration Summary**

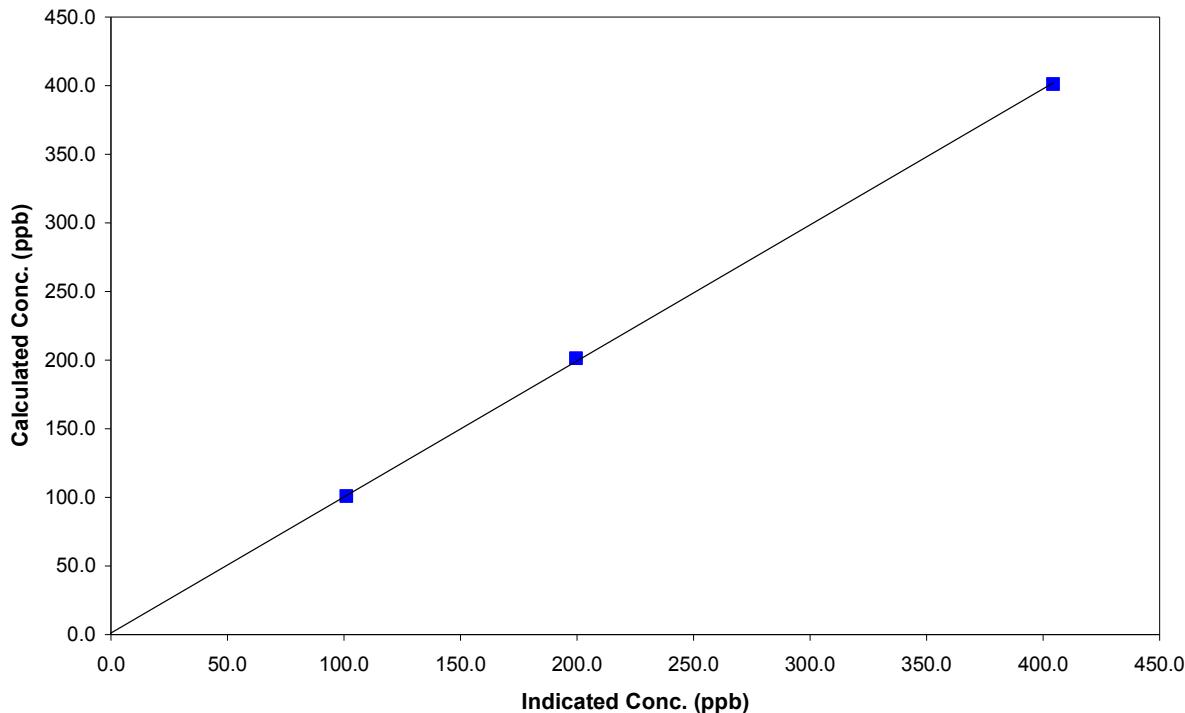
Parameter **NO<sub>x</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	October 11, 2005	Previous Calibration	September 7, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:15	End Time (MST)	15:10
Analyzer make	Teco 42C	Analyzer serial #	508011073

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	0.0000	Correlation Coefficient	0.999922
401.1	404.3	0.9920		
201.3	199.6	1.0084		
100.8	101.0	0.9980		
			Slope	0.991938
			Intercept	1.040200

**NOx Calibration Curve**

**Calibration Summary**

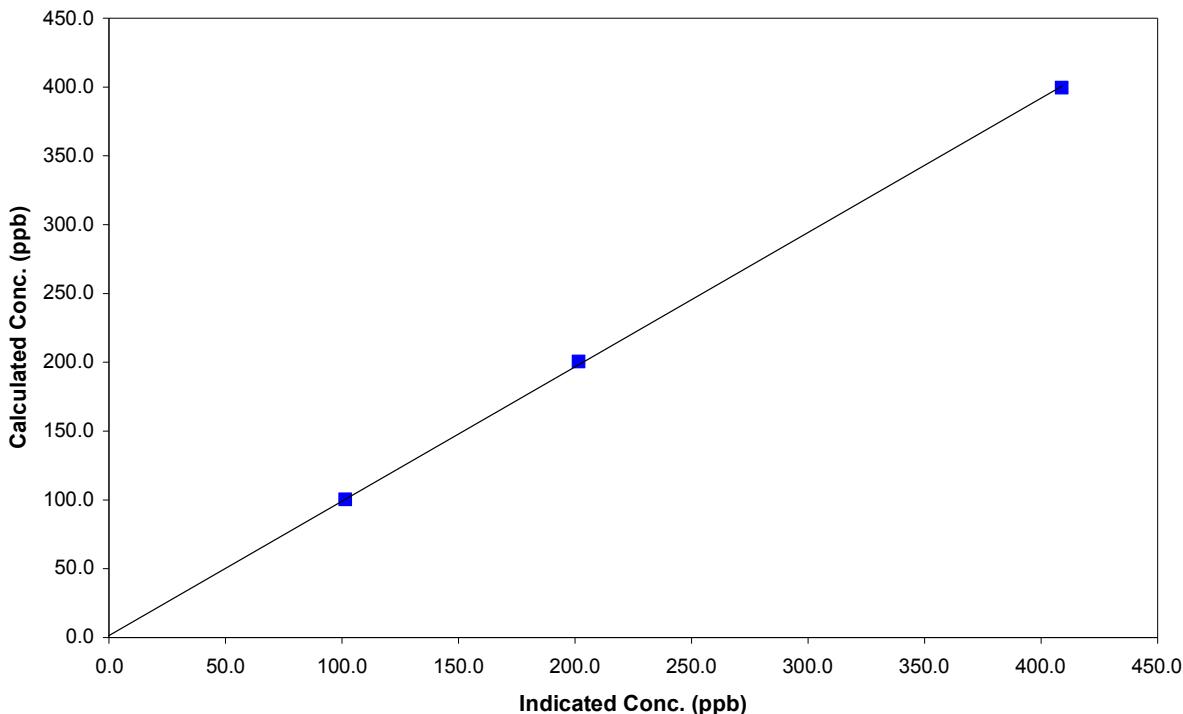
Parameter **NO**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	October 11, 2005	Previous Calibration	September 7, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:15	End Time (MST)	15:10
Analyzer make	Teco 42C	Analyzer serial #	508011073

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999907
399.5	408.8	0.9771		
200.5	201.5	0.9948		
100.4	101.4	0.9908		
			Slope	0.976628
			Intercept	1.357679

**NO Calibration Curve**

**Calibration Report**

Parameter

O3

Air Monitoring Network

PASZA**Station Information**

Calibration Date	October 5, 2005	Previous Calibration	September 9, 2005	
Station Number	1	Station Location	Muskoseepi Park	
Reason:	Routine	Install	Removal	
Start Time (MST)	11:20	End Time (MST)	13:55	
Barometric Pressure	0.929 atm	Station Temperature	20.0 Deg C	
Calibrator	Environics 6100	Serial Number	3016	
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	0.994292	Calculated slope	1.054574	
Calculated intercept	-0.259167	Calculated intercept	1.169845	
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
	-1.3	ppb	-1.2	ppb
	1.061		1.121	
	2423	mV	2520	mV
	2423	mV	2523	mV
	26.9	inches Hg	27.6	inches Hg
	663	ccm	672	ccm
	48	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)
4993	0.00	0.0	0.1	N/A
4993	0.00	298.0	283.4	1.0515
4993	0.00	202.6	188.3	1.0759
4993	0.00	100.0	93.3	1.0718
4993	0.00	0.0	0.1	As found zero
4993	0.00	298.0	300.3	As found span
Average Correction Factor				1.0664

Calculated value of As Found Response: 298.3 ppm Percent Change of As Found: 0.1%

Auto zero Auto span	before calibration		after calibration	
	0.8	ppb	2.3	ppb
	261.8	ppb	279.1	ppb

Notes: Calculated Concentrations taken from AUG17 NOX cal (pressure was the same).

Calibration Performed By: Dawn Ewan

**Calibration Summary**

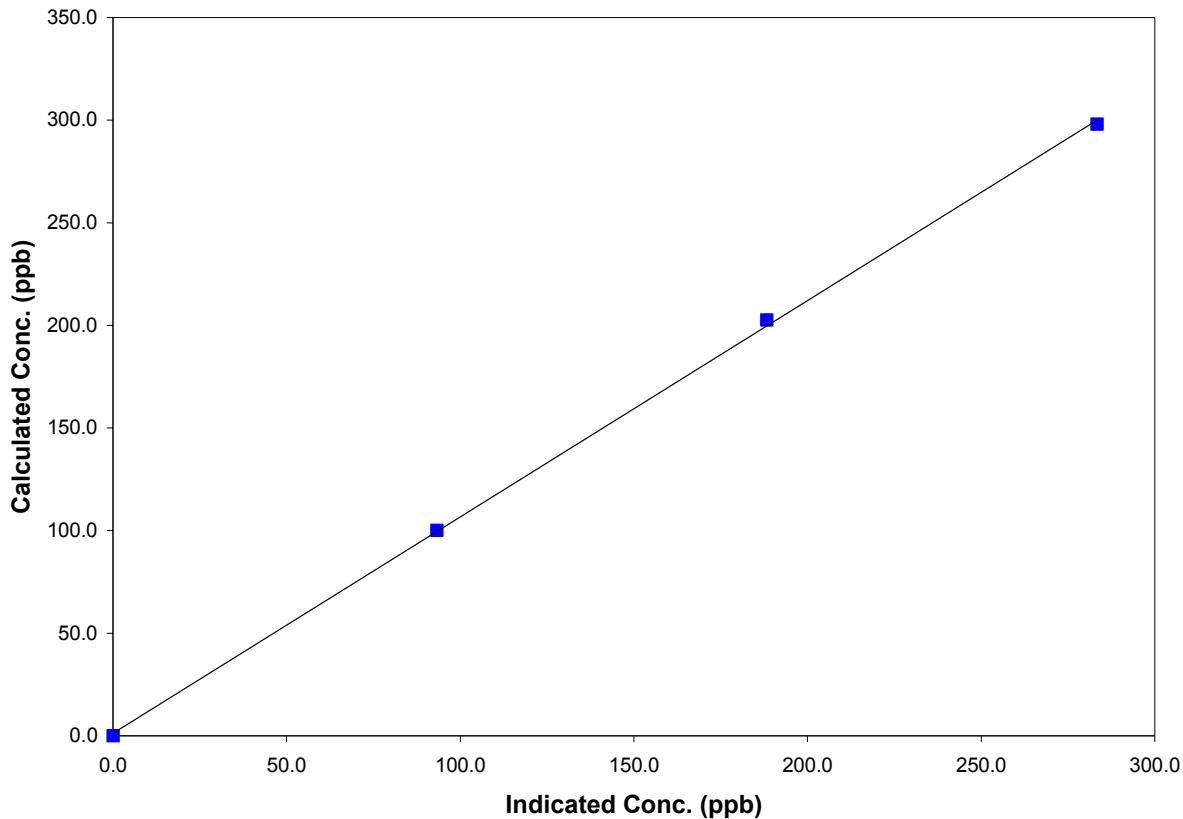
Parameter O3  
 Air Monitoring Network PASZA

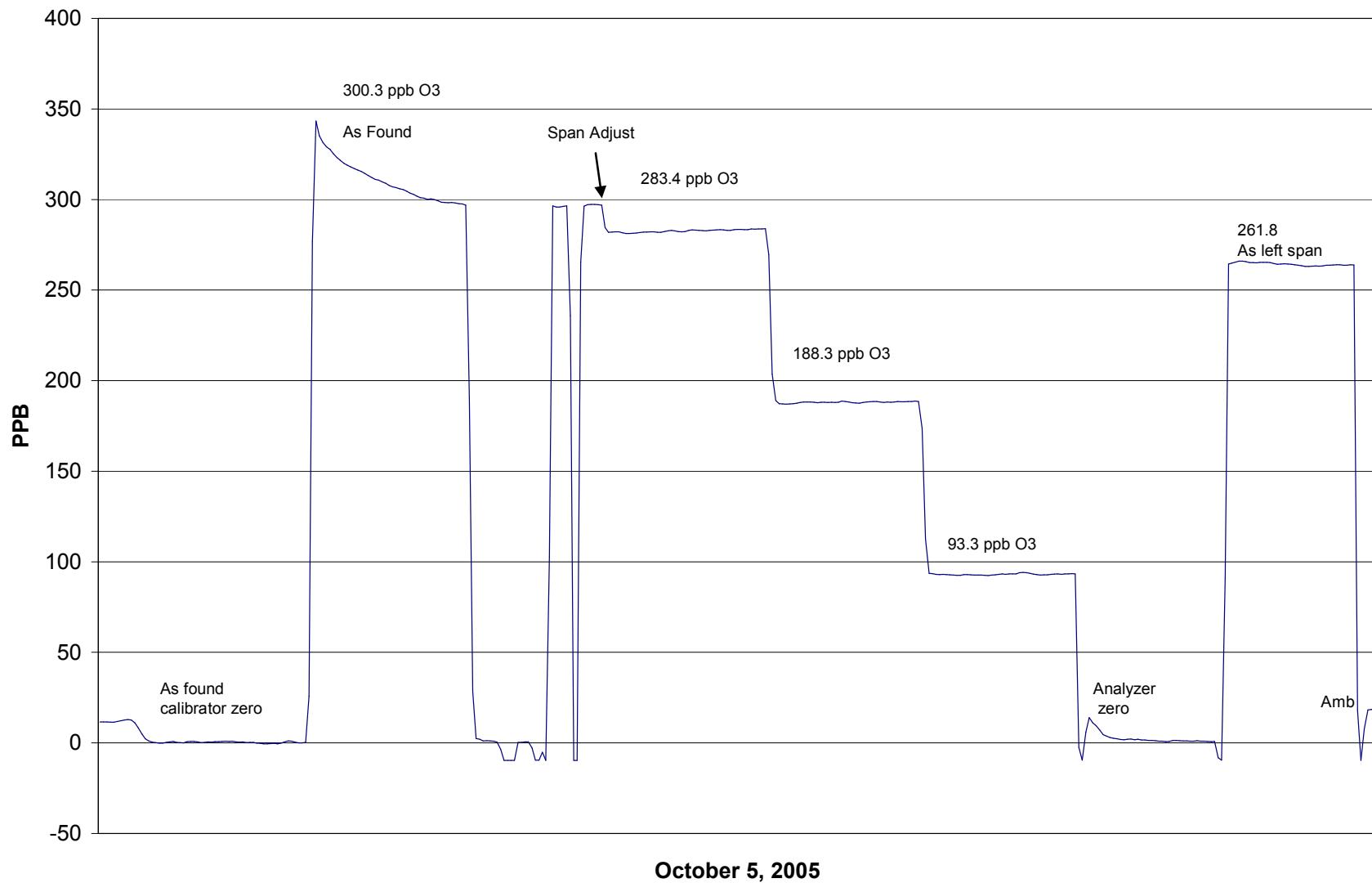
**Station Information**

Calibration Date	October 5, 2005	Previous Calibration	September 9, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	11:20	End Time (MST)	13:55
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	0.1	NA		
298.0	283.4	1.0515	Correlation Coefficient	0.999720
202.6	188.3	1.0759	Slope	1.054574
100.0	93.3	1.0718	Intercept	1.169845

**O3 Calibration Curve**

**O3 Calibration**

**Calibration Report**

Parameter CO  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	October 3, 2005		Previous Calibration	September 9, 2005
Station Number	1		Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	13:30	End Time (MST)	17:06	
Barometric Pressure	0.930	ATM	20.0	Deg C
Calibrator	Environics 6100	Serial Number	3016	
Cal Gas Conc	3000	ppm	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	1.005818	Calculated slope	0.995875	
Calculated intercept	-0.008459	Calculated intercept	0.018910	
Analyzer make	TEI Model 48C	Analyzer serial #	508011062	
before				
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	1.018		1.018	
CO zero setting	2.029		2.394	
Sample pressure	689.6	mm Hg	684.9	mm Hg
Sample Flow	1.094	LPM	1.076	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)
4993	0.00	0.00	0.01	N/A
4993	39.97	23.82	23.93	0.9956
4993	19.96	11.95	11.93	1.0014
4993	9.97	5.98	5.98	1.0005
4993	0.00	0.00	0.01	As Found Zero
4993	39.97	23.82	24.60	As Found Span
Average Correction Factor				0.9992

Calculated value of As Found Response: 24.718 ppm Percent Change of As Found: -3.8%

Auto zero	before calibration		after calibration	
	0.22	ppm	0.11	ppm
	19.26	ppm	19.01	ppm

Notes:

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Calibration Performed By: Dawn Ewan

**Calibration Summary**

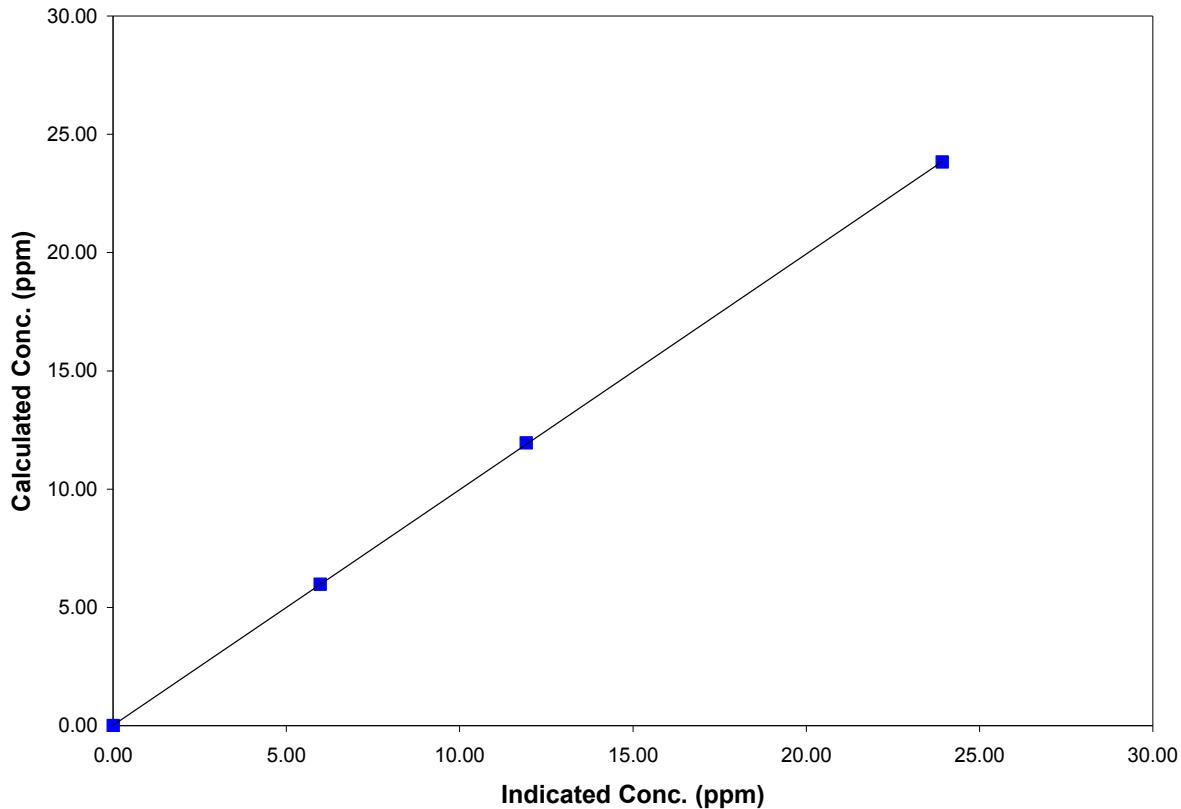
Parameter CO  
 Air Monitoring Network PASZA

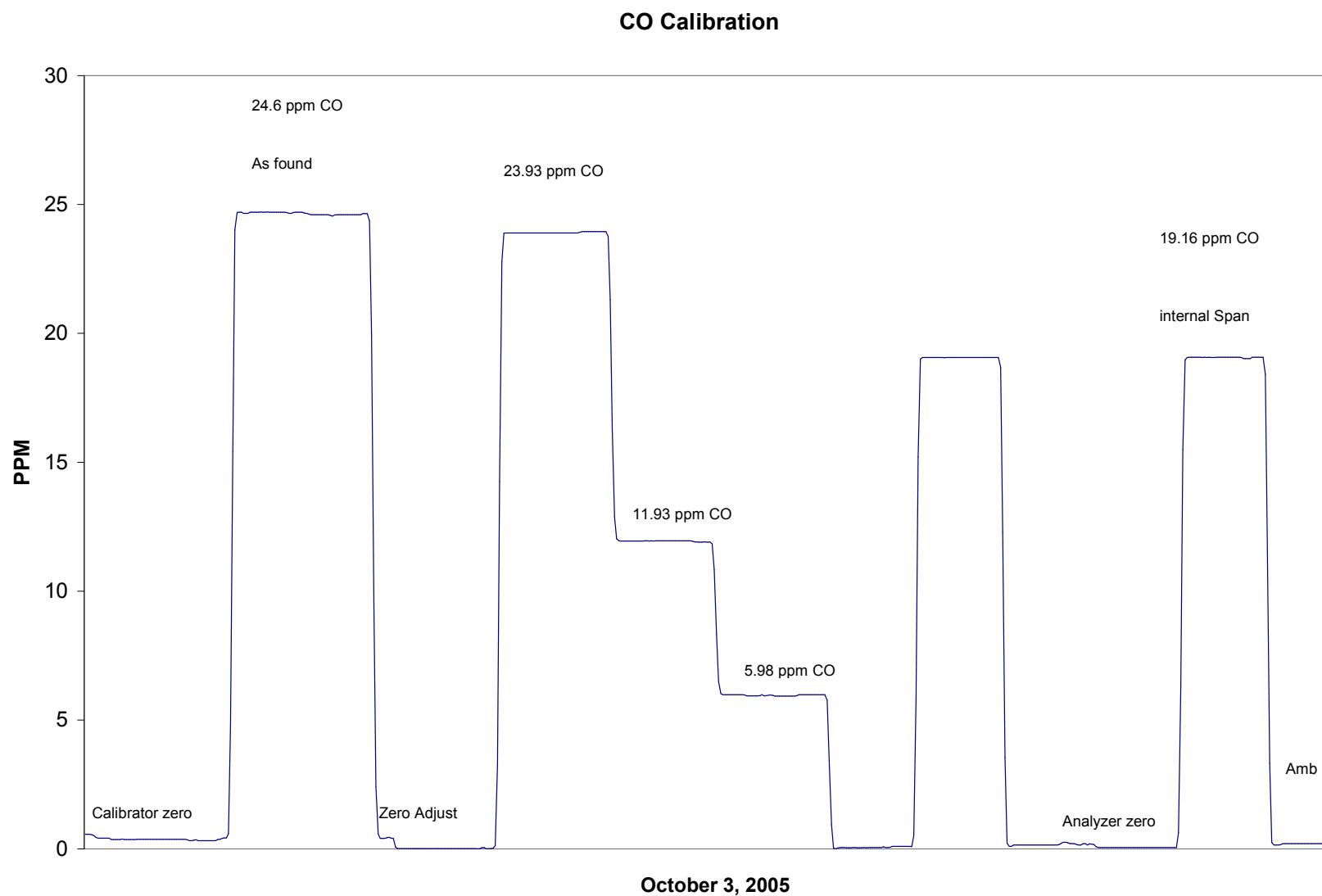
**Station Information**

Calibration Date	October 3, 2005	Previous Calibration	September 9, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	13:30	End Time (MST)	17:06
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	0.011	N/A		
23.825	23.930	0.9956	Correlation Coefficient	0.999988
11.945	11.929	1.0014	Slope	0.995875
5.978	5.975	1.0005	Intercept	0.018910

**CO Calibration Curve**



**Calibration Report**

Parameter THC  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	October 4, 2005		Previous Calibration	September 12, 2005
Station Number	1		Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	10:20		End Time (MST)	13:04
Barometric Pressure	0.933	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100		Serial Number	3016
Cal Gas Concentration	700 ppm CH4/ 299 ppm C3H8		Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1522.25	ppm	Cal Gas Cylinder #	ALM 030358
DACS make	Focus AP1000		DACS serial No.	1
DACS voltage range	0 - 1 volt		DACS channel #	9
	<u>Before</u>			<u>After</u>
Calculated slope	1.000066		Calculated slope	1.002571
Calculated intercept	0.056970		Calculated intercept	0.001836
Analyzer make	TEI Model 51C-LT		Analyzer serial #	51CLT-79009-390
Concentration range	before		after	
THC sample pressure	0 - 25	ppm	0 - 25	ppm
THC span counts	6.09	psi	6.1	psi
THC zero counts	6962	capture	7022	capture
	1371	capture	1334	capture

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	0.01	N/A
4993	64.97	19.55	19.53	1.0012
4993	34.96	10.58	10.50	1.0081
4993	9.97	3.03	3.04	0.9982
4993	0.00	0.00	0.01	As Found Zero
4993	64.97	19.55	19.73	As Found Span
Average Correction Factor				1.0025

Calculated value of As Found Response: 19.774 ppm Percent Change of As Found: -1.1%

Auto zero	before calibration		after calibration	
	-0.07	ppm	-0.08	ppm
	-0.01	ppm	21.19	ppm

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

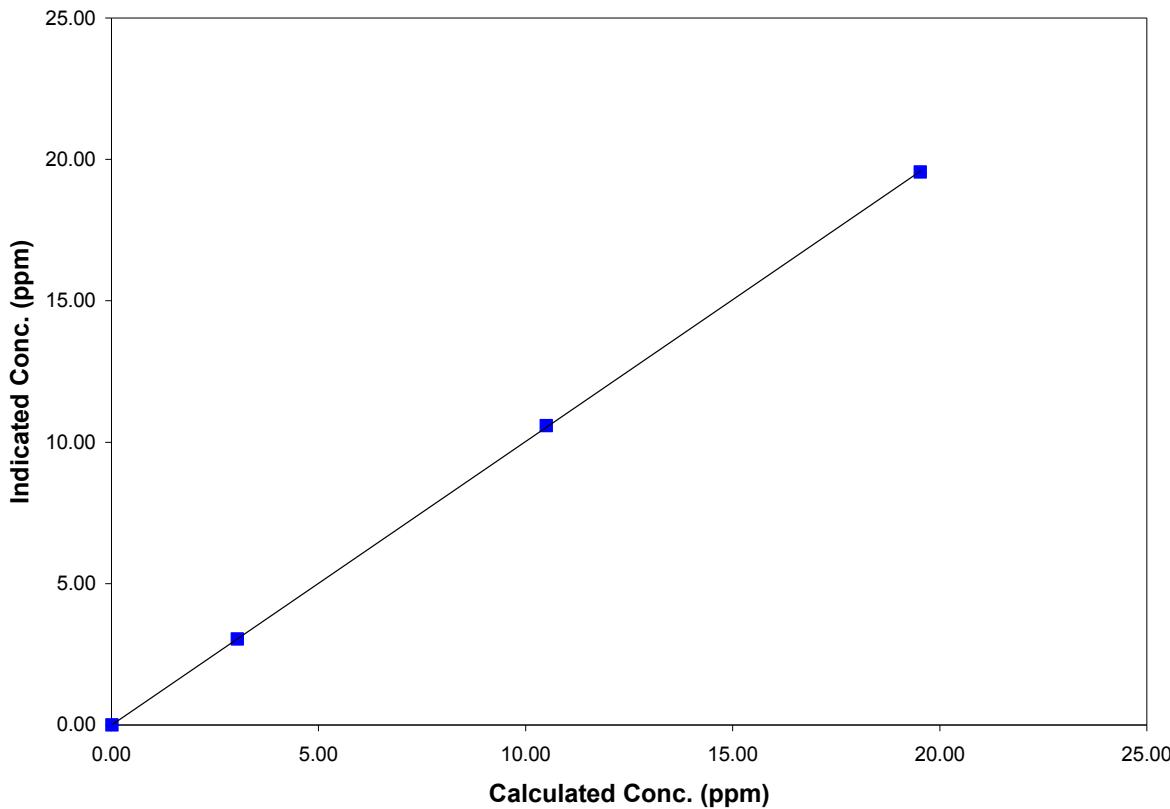
Calibration Performed By: Dawn Ewan

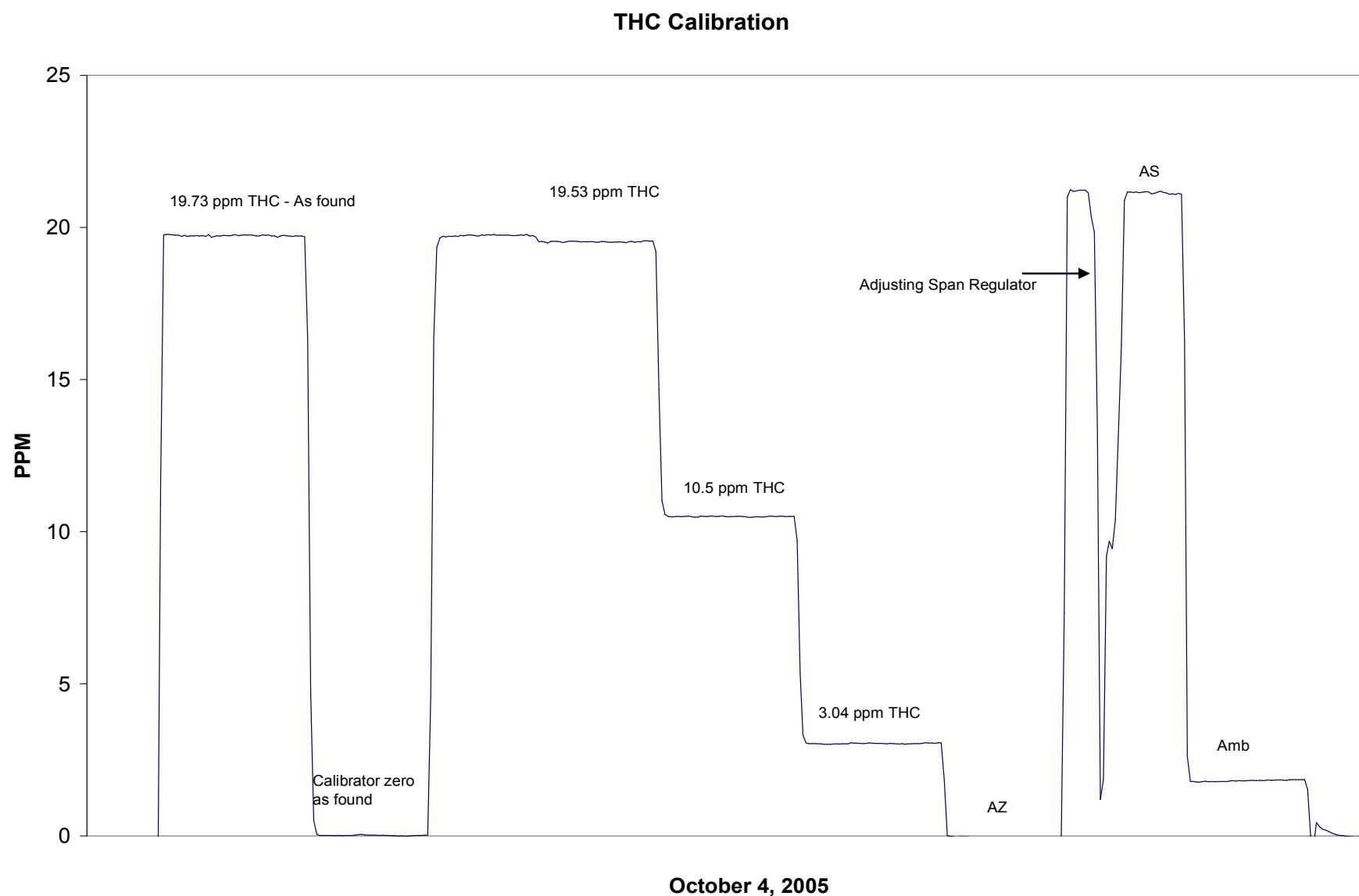
**Calibration Summary**Parameter THCAir Monitoring Network PASZA**Station Information**

Calibration Date	October 4, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:20	End Time (MST)	13:04
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

**Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.012	N/A		
19.553	19.529	1.0012	Correlation Coefficient	0.999981
10.584	10.499	1.0081	Slope	1.002571
3.034	3.039	0.9982	Intercept	0.001836

**THC Calibration Curve**



**Calibration Report**

Parameter

TRS

Air Monitoring Network

PASZA***Station Information***

Calibration Date	October 18, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal Other:
Start Time (MST)	9:13	End Time (MST)	11:47
Barometric Pressure	27.6 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	12/10/2005
Correction factor	0.936502	Perm-tube Cert #	04-19367
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	9 <u>Before</u> <u>After</u>
Calculated slope	0.982280	Calculated slope	0.983188
Calculated intercept	0.555779	Calculated intercept	0.351285
Analyzer make	TEI Model 43C	Analyzer serial #	31990000000491
before		after	
Concentration range	0 - 100 ppb	0 - 100 ppb	
Background coefficient	19.9 ppb	21.3 ppb	
Lamp Voltage	1.183	1.258	
Chamber Temp	875 volts	882 volts	
Perm Gas Temp	44.6 Deg C	44.7 Deg C	
Pressure	44.99 Deg C	45 Deg C	
Sample Flow	638.9 mm Hg	629.8 mm Hg	
Lamp Intesity	692 ccm	689 ccm	
	39,500 mv	39,400 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	1957.3	0.0	0.1	N/A
2090	1957.3	66.5	67.3	0.9879
4940	4626.3	28.1	28.6	0.9838
9050	8475.3	15.4	14.4	1.0640
zero	1957.3	0.0	0.1	As Found Zero
2090	1957.3	66.5	62.1	As Found Span
Average Correction Factor				1.0119

Calculated value of As Found Response:

61.42 ppm

Percent Change of As Found: 7.6%

Auto zero	before calibration		after calibration	
	0.5 ppm	ppm	0.6 ppm	ppm
	65.8 ppm	ppm	70.5 ppm	ppm

Notes: Adjusted span

Calibration Performed By: Dawn Ewan

**Calibration Summary**

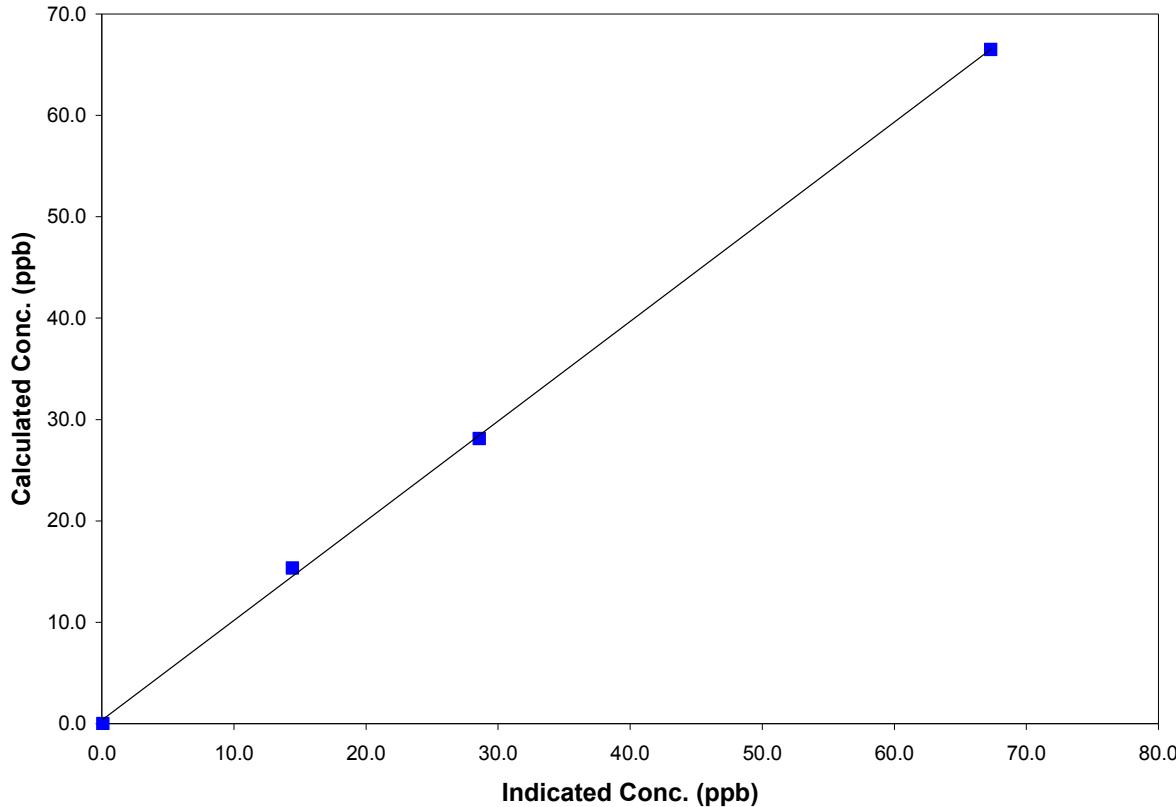
Parameter TRS  
 Air Monitoring Network PASZA

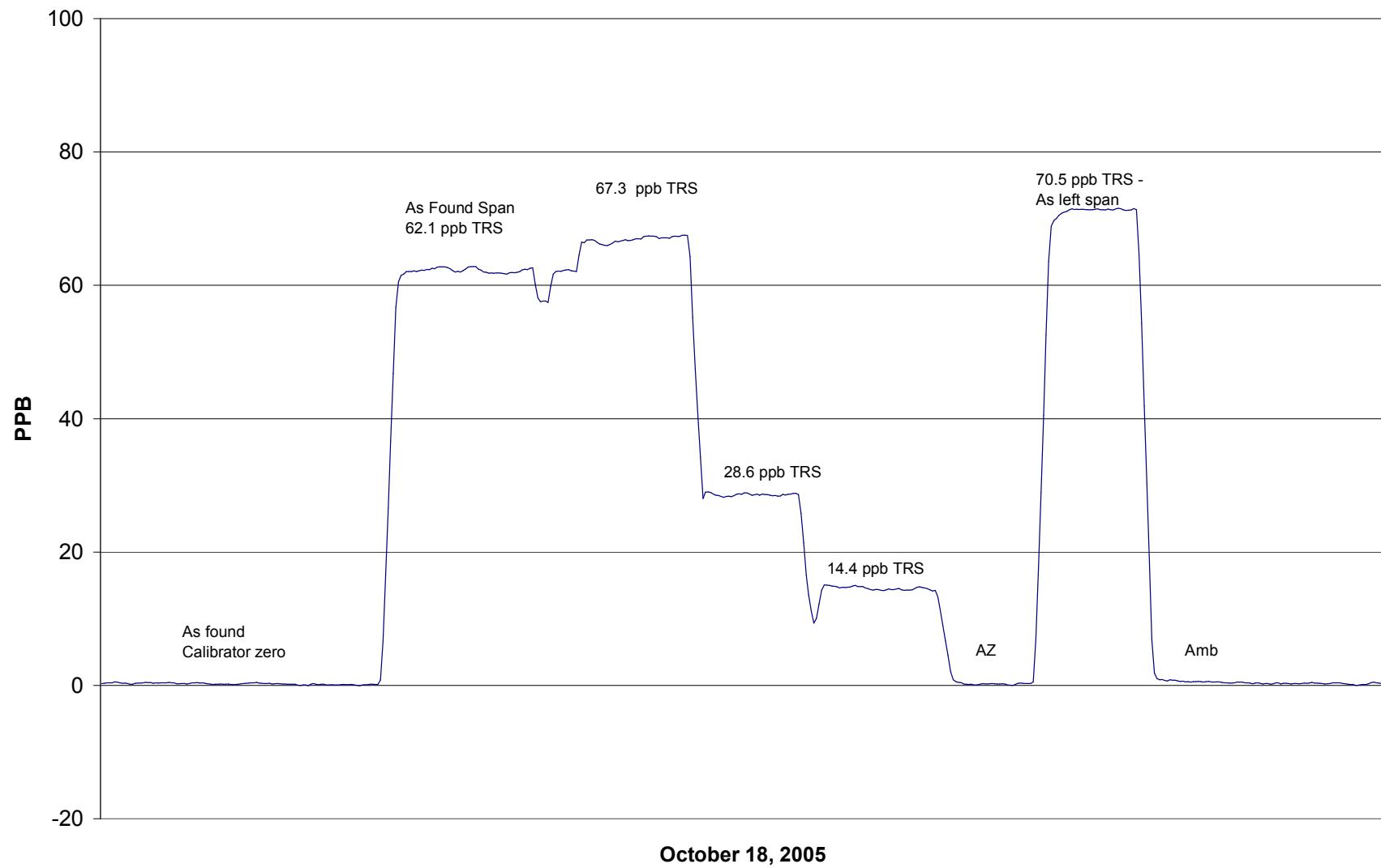
**Station Information**

Calibration Date	October 18, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:13	End Time (MST)	11:47
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		
66.5	67.3	0.9879	Correlation Coefficient	0.999597
28.1	28.6	0.9838	Slope	0.983188
15.4	14.4	1.0640	Intercept	0.351285

**TRS Calibration Curve**

**TRS Calibration**

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

Calibration Date	October 18, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	9:13	End Time (MST)	11:47
Barometric Pressure	27.6 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,097 ng/min	Perm-tube Expiry Date	
Correction factor	0.936502	Perm-tube Cert #	19-9955
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	0.997175	Calculated slope	1.003861
Calculated intercept	0.966989	Calculated intercept	-0.800964
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195
Concentration range	before	after	
	0 - 500	ppb	0 - 500
	170		170
	152		168
	934	v	936
	18.4	" Hg	17.8
Sample Flow	420	ccm	420
			ccm

**Calibration Data**

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	1957.3	0.0	-0.1	N/A
2090	1957.3	408.9	407.4	1.0037
4940	4626.3	173.0	175.0	0.9888
9050	8475.3	94.4	94.7	0.9977
zero	1957.3	0.0	-0.1	As Found Zero
2090	1957.3	408.9	402.4	As Found Span
Average Correction Factor				0.9967

Calculated value of As Found Response: 402.342 ppm Percent Change of As Found: 1.6%

Auto zero	before calibration		after calibration	
	0.8	ppm	-1.0	ppm
	320.5	ppm	333.5	ppm

Notes: Adjusted span.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

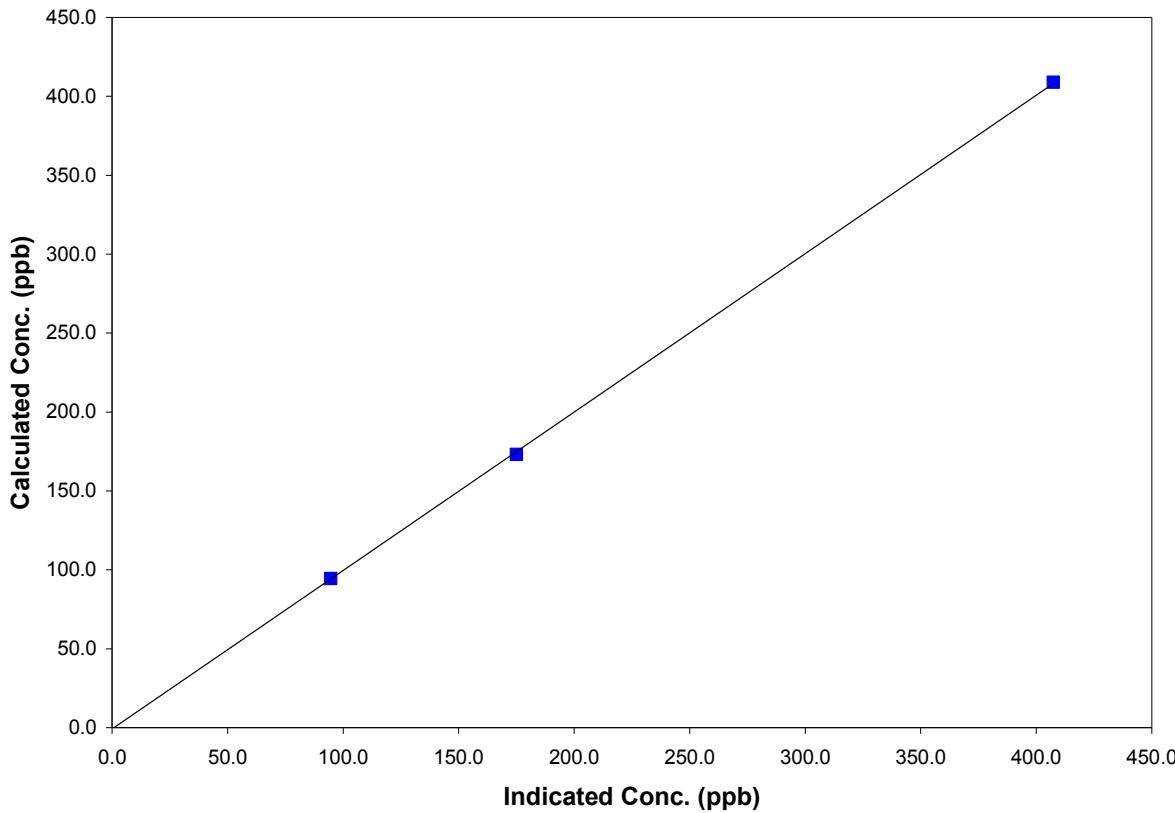
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

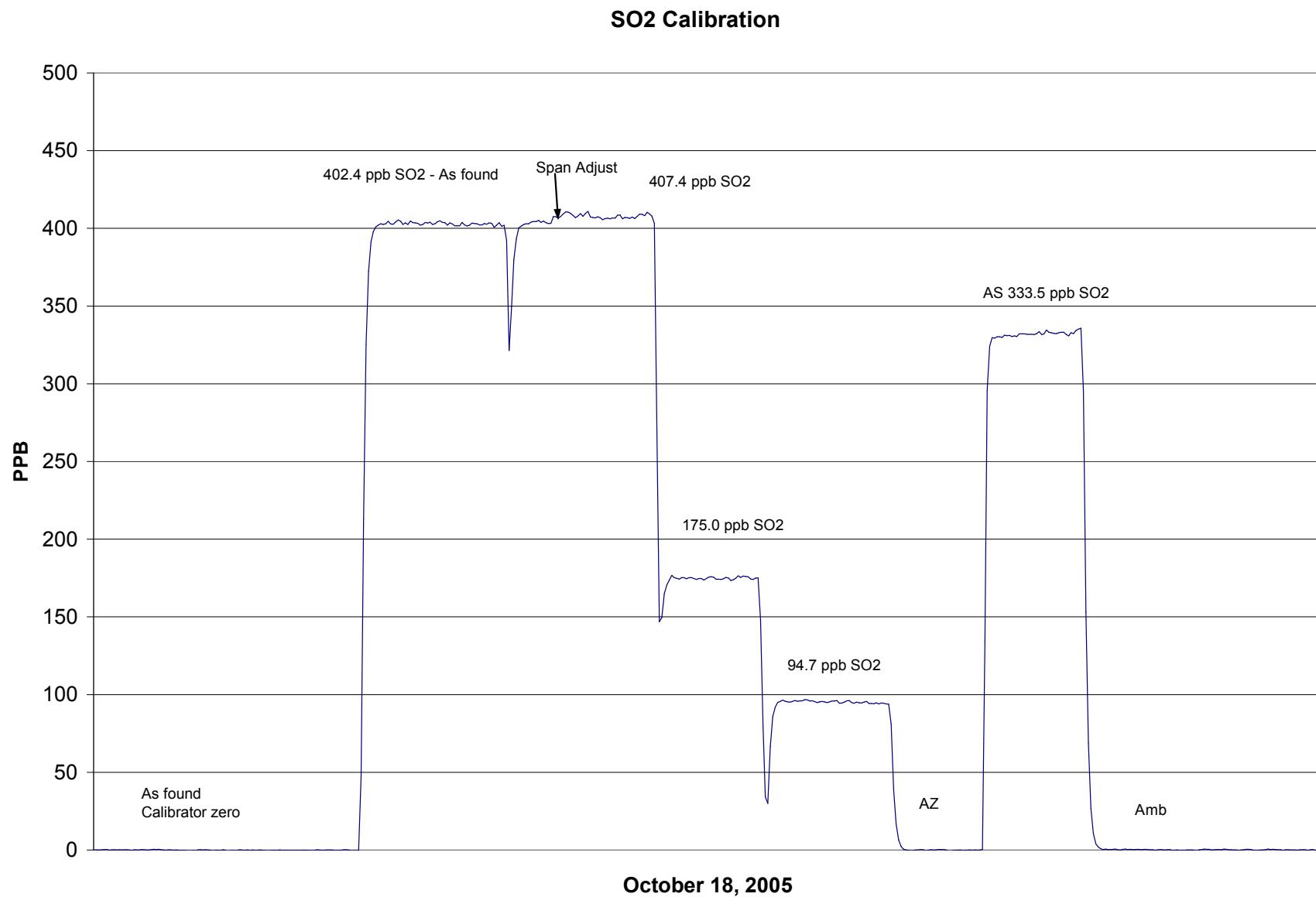
**Station Information**

Calibration Date	October 18, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:13	End Time (MST)	11:47
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-21120-195

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
408.9	407.4	1.0037	Correlation Coefficient	0.999948
173.0	175.0	0.9888	Slope	1.003861
94.4	94.7	0.9977	Intercept	-0.800964

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



**Calibration Report**

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



<b>Station Information</b>			
Calibration Date	October 18, 2005	Previous Calibration	September 12, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	11:00	End Time (MST)	13:15
Barometric Pressure	0.921 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	
Aux Flow Set Point	2.990	SLPM	2.990
Filter Load	13.67	SLPM	13.68
Ko Factor	54	%	22
Temperature	12122		12122
Pressure	5.9	Deg C	7.8
	0.926	ATM	0.926
			ATM

<b>Calibration Data</b>				
Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.02
zero flow - auxillary	0.0	0.00		0.01
flow recovery - main	45 - 60 Seconds	na	45 - 60 Seconds	35
flow recovery - aux	46 - 60 Seconds	na	46 - 60 Seconds	45
Temperature	measured	8.0	+/- 1.0 Deg C	7.8
Pressure	measured	0.921	+/- 1.5% ΔATM	0.926
Total Flow	16.67 SLPm	16.8/16.1		16.67
Main Flow	13.67 SLPm	13.15513.52	+/- 1.0 SLPm	13.67
Auxillary Flow	3.0 SLPm	3.1552.97	+/- 0.2 SLPm	3.000
Leak Check - main	0.0	0.00	<0.15 SLPm	.02/.01
Leak Check - aux	0.0	0.00	<0.15 SLPm	.07/.01
Ko Factor (w/o filter)	measured	324.877	filter weight (g)	0.111112
Ko Factor (w/ filter)	measured	231.621	% Ko difference	-0.02%

Notes: Install new blue filter. Redid leak check. Remeasured flows. Did audit filter when everything complete.  
Adjusted flows on mass flow controller.  
Cleaned head.

Calibration Performed By: Dawn Ewan

**Calibration Report**

Parameter TRS  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	October 17, 2005		Previous Calibration	September 19, 2005
Station Number	2		Station Location	Evergreen Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	10:20	End Time (MST)	13:54	
Barometric Pressure	27.37	inches Hg	20.0	Deg C
Calibrator	VICI Metronics	Serial Number	111-1695	
Perm-tube Conc	181	ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.930383		Perm-tube Cert #	04-19367
DACS make	Focus AP1000	DACS serial No.	1	
DACS voltage range	0 - 10 volt	DACS channel #	9	
	Before		After	
Calculated slope	1.001248	Calculated slope	0.953855	
Calculated intercept	0.129001	Calculated intercept	0.342342	

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
before			after
Concentration range	100	ppb	100
Background	13.6	ppb	15.1
coefficient	1.249		1.378
Lamp Voltage	753	volts	756
Chamber Temp	44.1	Deg C	44.1
Perm Gas Temp	45	Deg C	45
Pressure	634.2	mm Hg	629
Sample Flow	463	ccm	460
Lamp Intesity	32,500	mv	32,300

**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	1953.8	0.0	0.0	N/A
2100	1953.8	66.6	69.7	0.9563
4000	3721.5	35.0	36.1	0.9688
9150	8513.0	15.3	15.3	0.9974
zero	1860.8	0.0	0.0	As Found Zero
2000	1860.8	69.9	63.3	As Found Span
Average Correction Factor				0.9741

Calculated value of As Found Response: 63.55 ppm Percent Change of As Found: 9.1%

	before calibration		after calibration	
Auto zero	0.0	ppm	1.8	ppm
Auto span	67.7	ppm	67.6	ppm

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

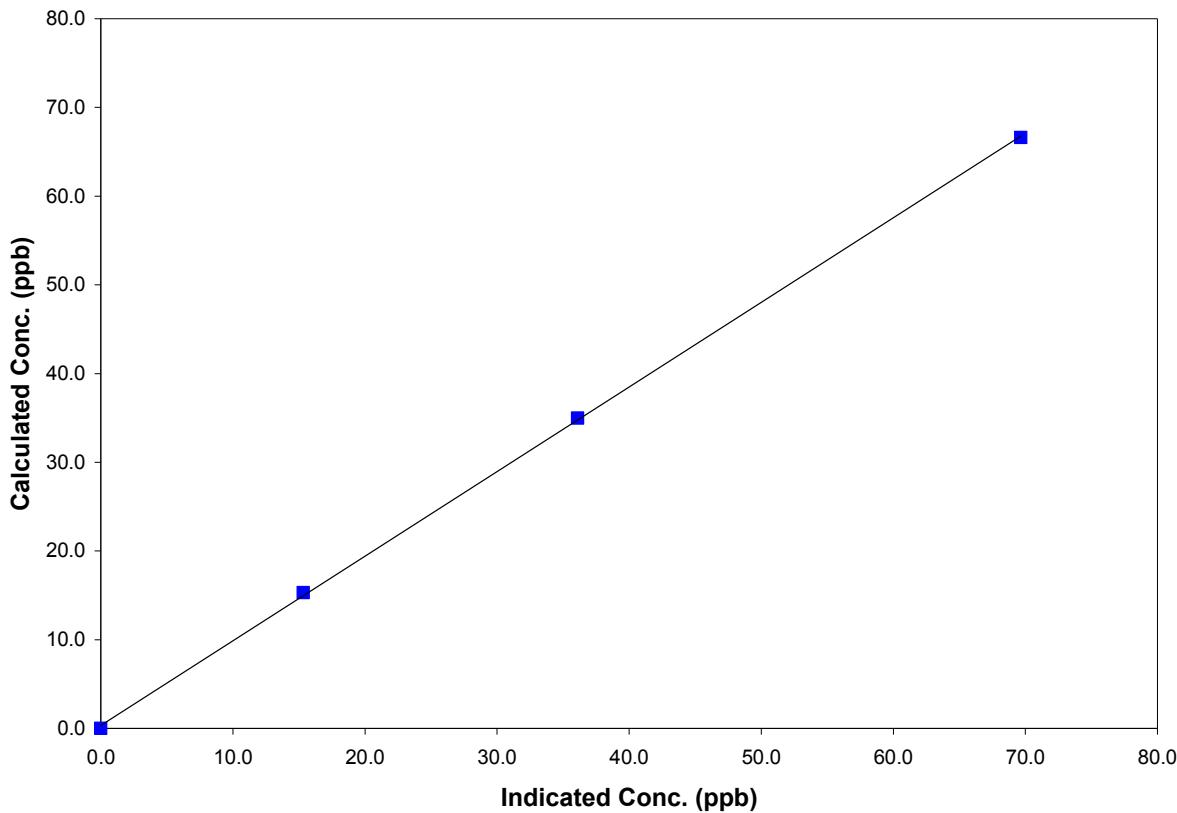
Parameter TRS  
 Air Monitoring Network PASZA

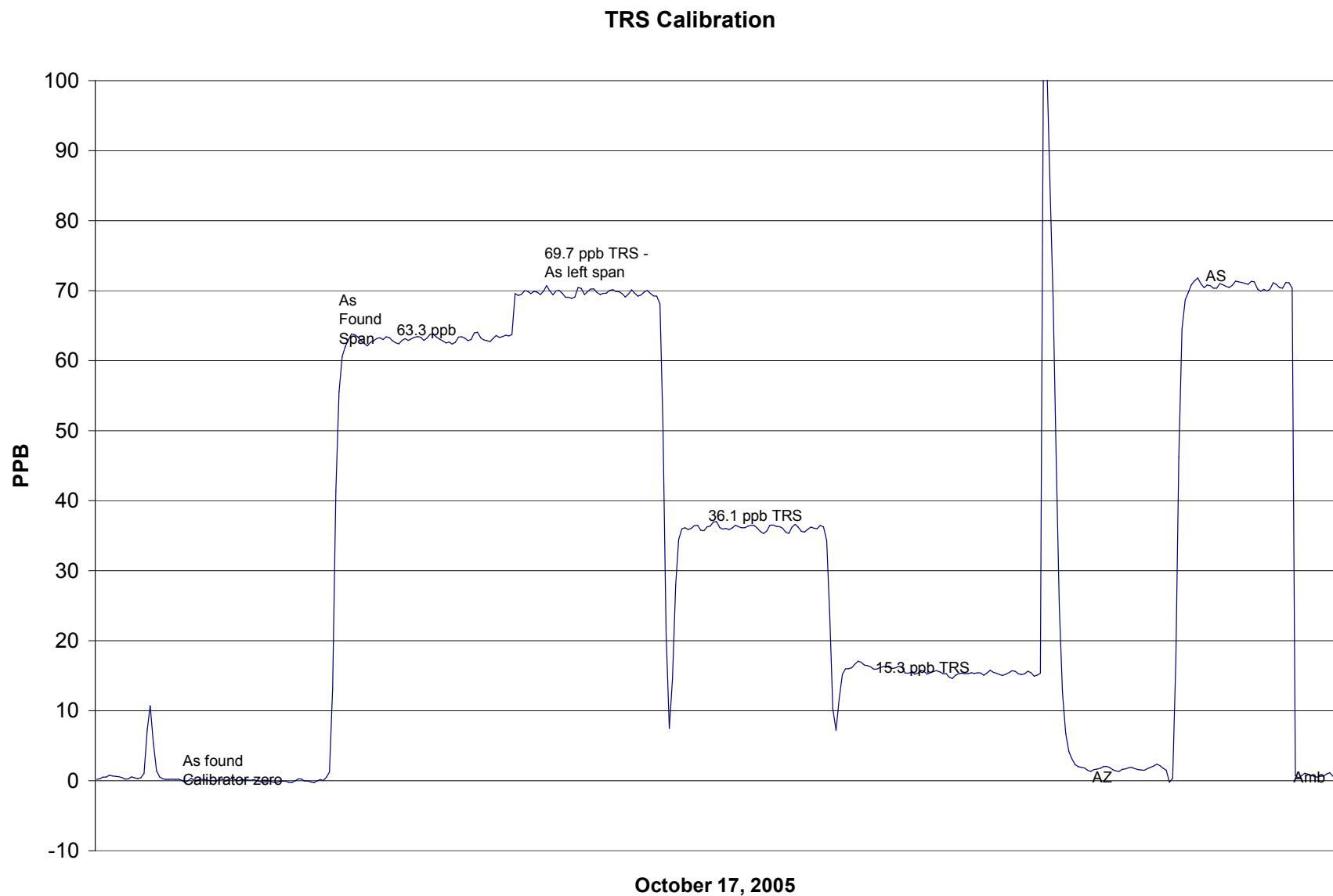
**Station Information**

Calibration Date	October 17, 2005	Previous Calibration	September 19, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:20	End Time (MST)	13:54
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	0.0	N/A		
66.6	69.7	0.9563	Correlation Coefficient	0.999881
35.0	36.1	0.9688		
15.3	15.3	0.9974	Slope	0.953855
			Intercept	0.342342

**TRS Calibration Curve**



**Calibration Report**

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

**Station Information**

Calibration Date	October 17, 2005	Previous Calibration	September 19, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	10:20	End Time (MST)	13:54
Barometric Pressure	27.4 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,097 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.930383	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	0.994372	Calculated slope	0.950279
Calculated intercept	-3.483057	Calculated intercept	-4.935948
Analyzer make	API 100	Analyzer serial #	32
	before		after
Concentration range	500 ppb	500 ppb	
Sample Flow	493 ccm	369 ccm	
UV Lamp Voltage	3290 mv	3318 mv	
Lamp Ratio	94 %	94 %	
Rx Cell Temp	49 Deg C	49 Deg C	
PMT Temp	10 Deg C	10 Deg C	
IZS Temp	40 Deg C	40 Deg C	
Slope	10.22	9.26	
Intercept	180.7	160.1	

**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	1953.8	0.0	1.3	N/A
2100	1953.8	409.7	434.3	0.9434
4000	3721.5	215.1	233.5	0.9210
9150	8513.0	94.0	108.1	0.8702
zero	1860.8		1.3	As Found Zero
2000	1860.8	430.2	403.3	As Found Span
		Average Correction Factor		0.9115

Calculated value of As Found Response: 396.281 ppm      Percent Change of As Found: 7.9%

Auto zero	before calibration		after calibration	
	-5.3	ppm	-5.1	ppm
	269.3	ppm	311.3	ppm

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

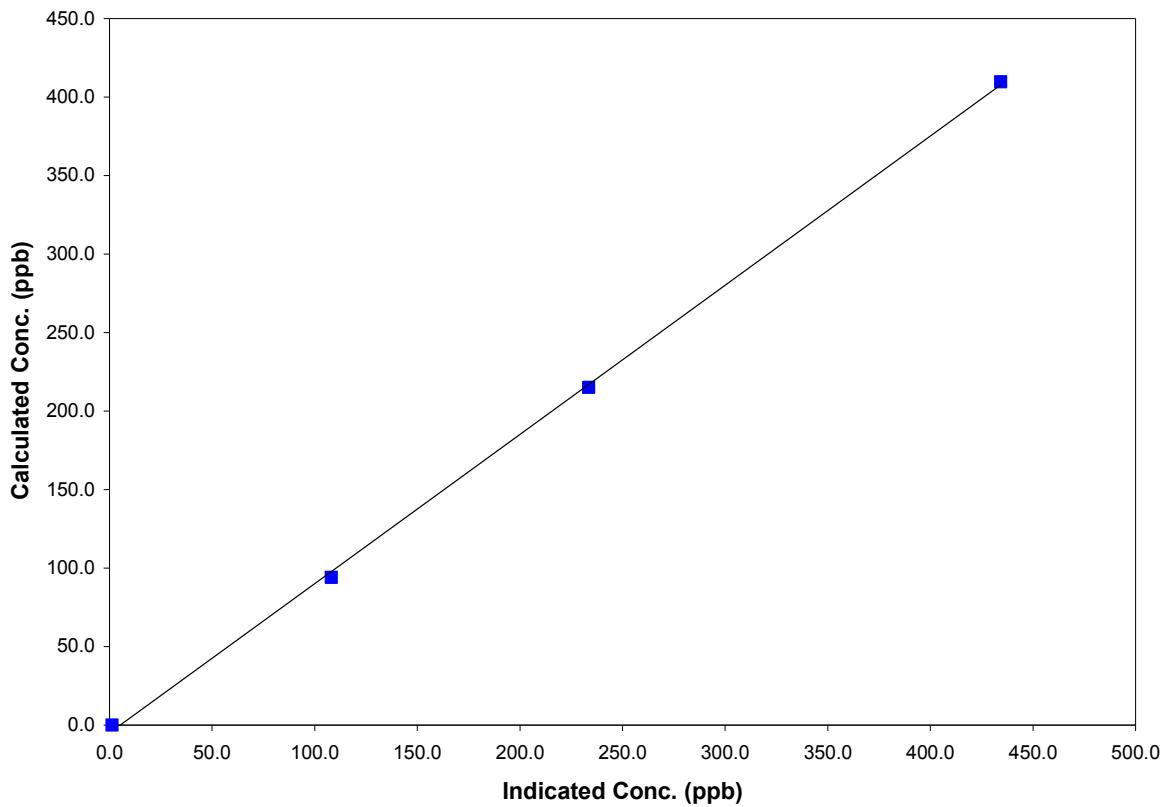
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

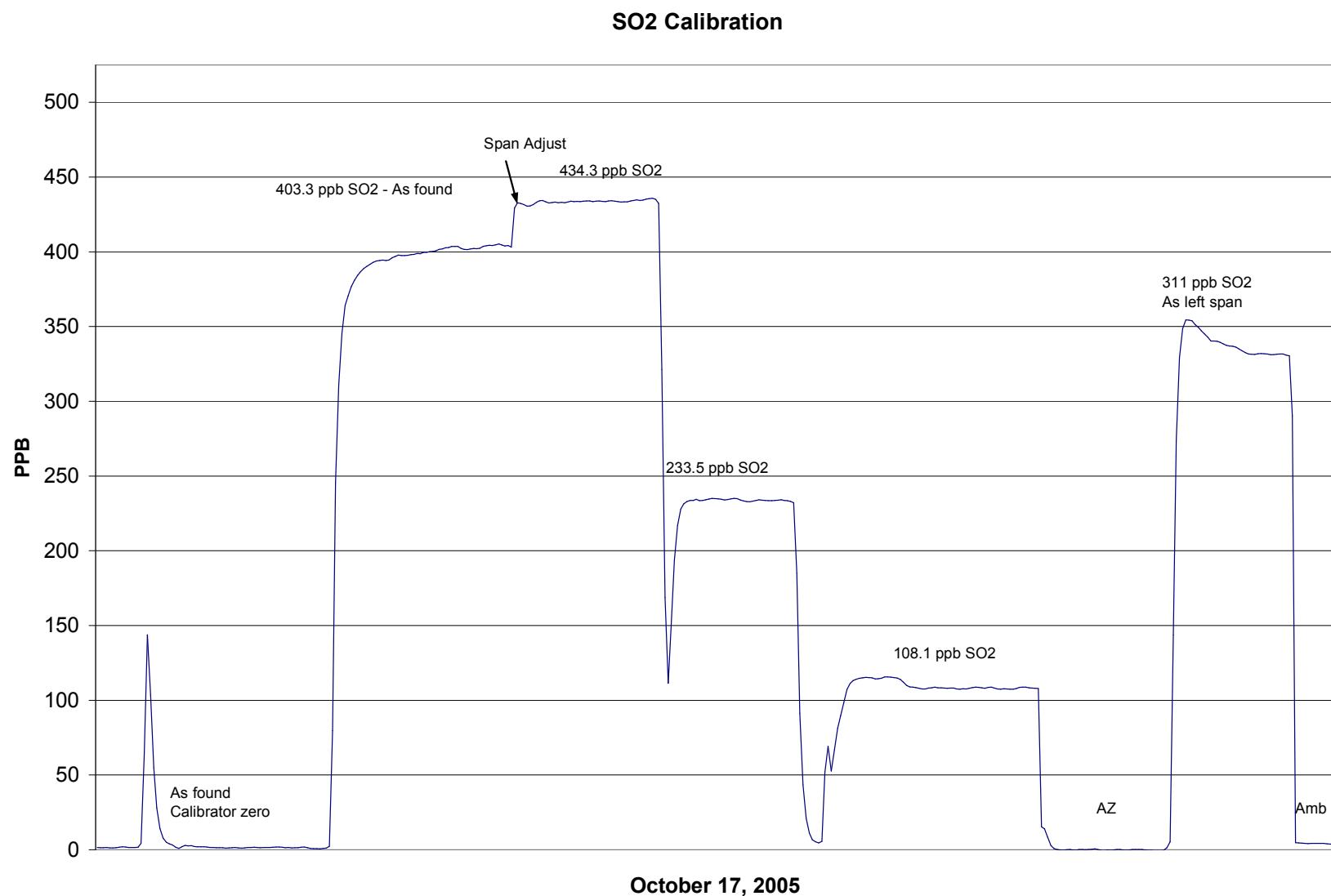
**Station Information**

Calibration Date	October 17, 2005	Previous Calibration	September 19, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:20	End Time (MST)	13:54
Analyzer make/model	API 100	Analyzer serial #	32

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.3	N/A		
409.7	434.3	0.9434	Correlation Coefficient	0.999629
215.1	233.5	0.9210	Slope	0.950279
94.0	108.1	0.8702	Intercept	-4.935948

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



## Calibration Report

Parameter PM2.5  
 Air Monitoring Network PASZA



<b>Station Information</b>				
Calibration Date	October 17, 2005	Previous Calibration	September 19, 2005	
Station Number	2	Station Location	Evergreen Park	
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	13:30	End Time (MST)	13:30	
Barometric Pressure	0.915	ATM	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	
<b>Analyzer Information</b>				
Analyzer make	R&P	Control Unit serial #	140AB246340305	
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB246340305	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.66	SLPM	13.67	SLPM
Filter Load	51	%	16	%
Ko Factor	12122		12122	
Temperature	8.4	Deg C	10.7	Deg C
Pressure	0.919	ATM	0.919	ATM

### Calibration Data

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.01
zero flow - auxillary	0.0	0.00		-0.01
flow recovery - main	45 - 60 Seconds	28.0	45 - 60 Seconds	35
flow recovery - aux	46 - 60 Seconds	55.0	46 - 60 Seconds	55
Temperature	measured	10.5	+/- 1.0 Deg C	10.7
Pressure	measured	0.920	+/- 1.5% ΔATM	0.924
Total Flow	16.67 SLPM	16.86/16.15		
Main Flow	13.67 SLPM	14.11/13.64	+/- 1.0 SLPM	13.67
Auxillary Flow	3.0 SLPM	3.095/2.95	+/- 0.2 SLPM	3.000
Leak Check - main	0.0	0.00	<0.15 SLPM	0.01/0.00
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.004/0.05
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	

Notes: Cleaned teom head.  
Checked flows... adjusted flows on mass flow controller pots.  
Did second lead check.

Calibration Performed By: Dawn Ewan

**Calibration Report**

Parameter

SO<sub>2</sub>

Air Monitoring Network

PASZA**Station Information**

Calibration Date	October 13, 2005	Previous Calibration	September 21, 2005
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:46	End Time (MST)	13:12
Barometric Pressure	27.52 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,097 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.935482	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	0.995966	Calculated slope	0.971960
Calculated intercept	4.546757	Calculated intercept	3.931598
Analyzer make	API 102A	Analyzer serial #	212
Concentration range	before	after	
Sample Flow	500 ppb	500 ppb	
UV Lamp Voltage	562 ccm	558 ccm	
Lamp Ratio	3047 mv	3060 mv	
Rx Cell Temp	84.1 %	83.7 %	
PMT Temp	51.1 Deg C	50 Deg C	
IZS Temp	6.8 Deg C	6.9 Deg C	
Slope	45 Deg C	45 Deg C	
Intercept	0.797	0.876	
	21.8	22.6	

**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	1955.2	0.0	0.7	N/A
2090	1955.2	409.4	418.3	0.9787
4860	4546.4	176.1	177.3	0.9929
9200	8606.4	93.0	85.5	1.0873
zero	1955.2	0.0	0.5	As Found Zero
2090	1955.2	409.4	386.4	As Found Span
Average Correction Factor				1.0196

Calculated value of As Found Response: 388.853 ppm Percent Change of As Found: 5.0%

	before calibration		after calibration	
	Auto zero	6.1 ppm	Auto span	4.1 ppm
	228.0	ppm	246.0	ppm

Notes: Adjusted span and zero

Calibration Performed By: Dawn Ewan

**Calibration Summary**

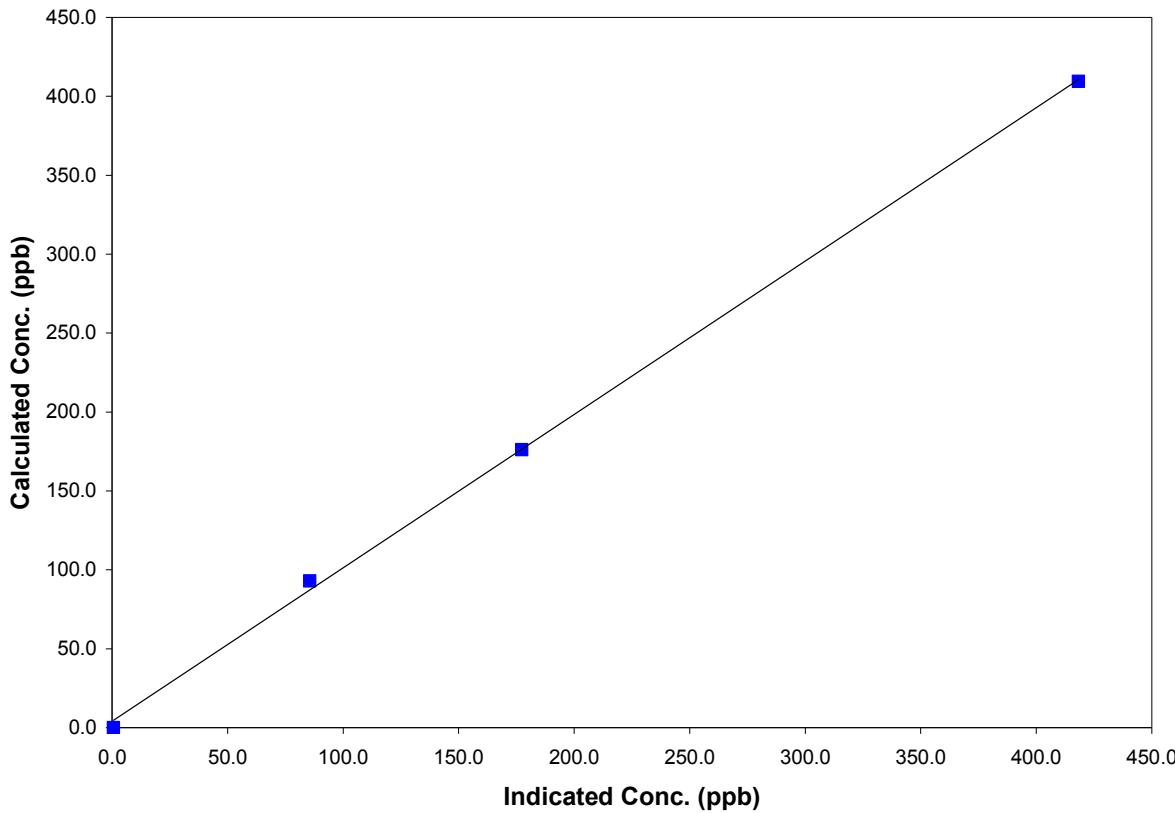
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

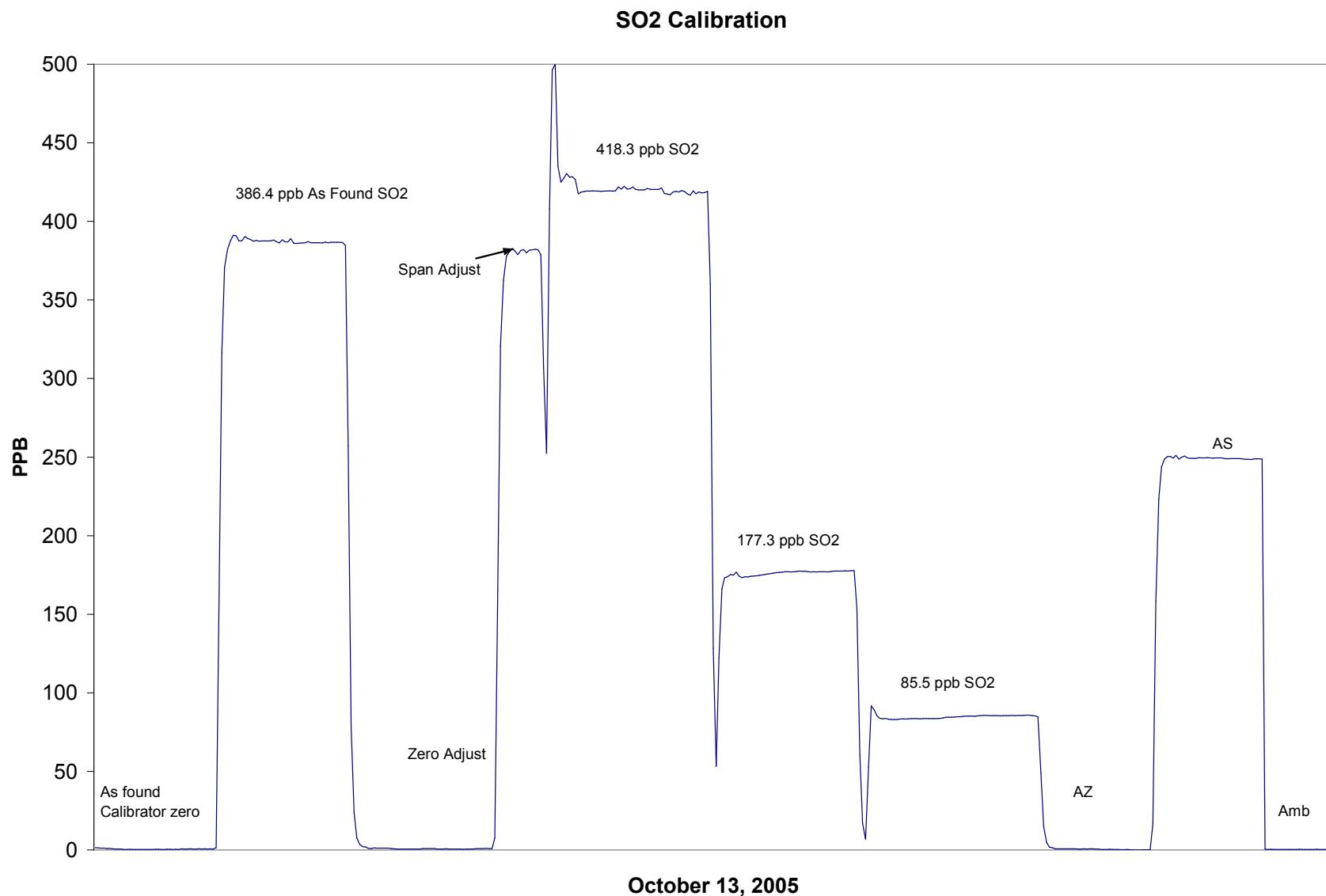
**Station Information**

Calibration Date	October 13, 2005	Previous Calibration	September 21, 2005
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:46	End Time (MST)	13:12
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	0.7	N/A		
409.4	418.3	0.9787	Correlation Coefficient	0.999374
176.1	177.3	0.9929	Slope	0.971960
93.0	85.5	1.0873	Intercept	3.931598

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



**Calibration Report**

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

**Station Information**

Calibration Date	October 13, 2005	Previous Calibration	September 21, 2005
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:46	End Time (MST)	13:12
Barometric Pressure	27.52 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.935482	Perm-tube Cert #	03-13509
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.996329	Calculated slope	1.008768
Calculated intercept	-0.009420	Calculated intercept	0.511057
Analyzer make	TEI Model 43C	Analyzer serial #	436610004
Concentration range Background coefficient Lamp Voltage Chamber Temp Perm Gas Temp Pressure Sample Flow Lamp Intesity	before		after
	100	ppb	100
	9.5	ppb	10.7
	1.114		1.2
	778	volts	777
	44.2	Deg C	44.3
	44.99	Deg C	44.99
	647.8	mm Hg	638.8
	473	ccm	468
	32,100	mv	32,100

**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	1955.2	0.0	-0.2	N/A
2090	1955.2	66.6	65.6	1.0147
4860	4546.4	28.6	27.7	1.0323
9200	8606.4	15.1	14.2	1.0642
zero	1955.2	0.0	0.0	As Found Zero
2090	1955.2	66.6	61.2	As Found Span
				Average Correction Factor
				1.0371

Calculated value of As Found Response: 60.94 ppm Percent Change of As Found: 8.4%

Auto zero Auto span	before calibration		after calibration	
	-0.1	ppm	0.2	ppm
	66.9	ppm	74.1	ppm

Notes: Adjusted zero and span.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

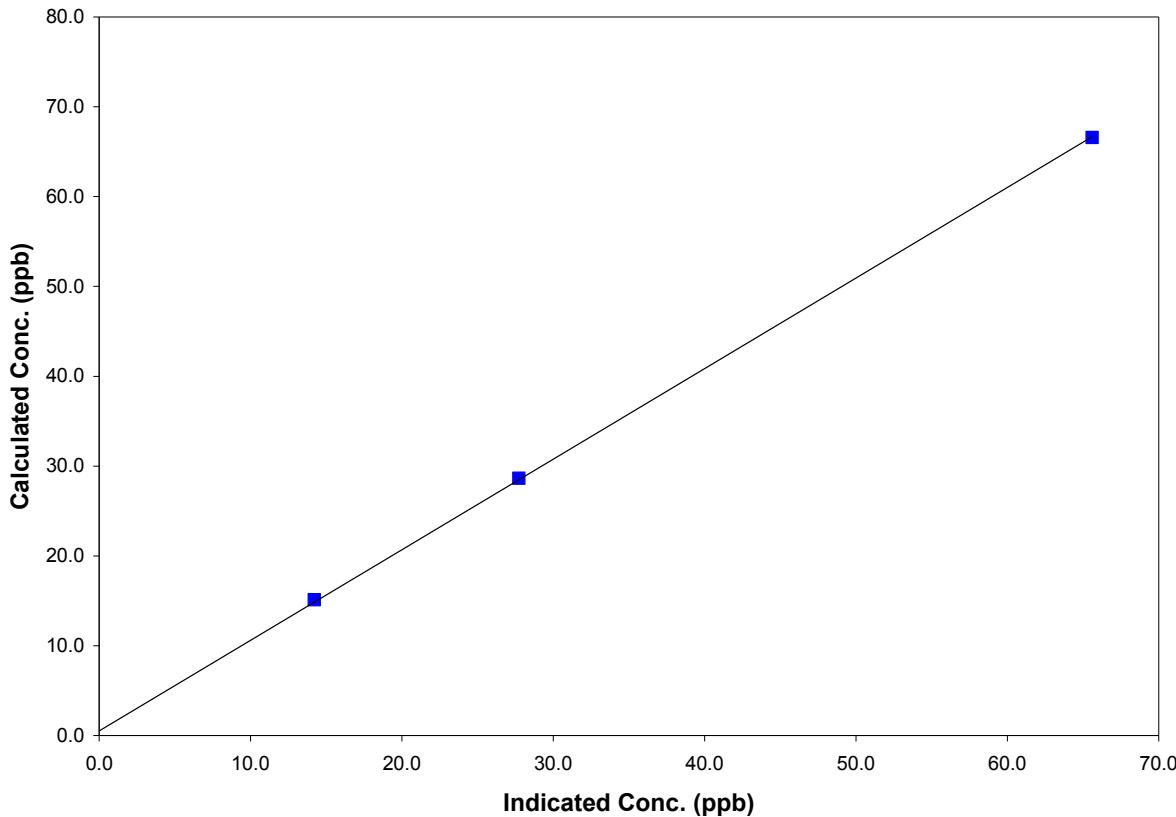
Parameter TRS  
 Air Monitoring Network PASZA

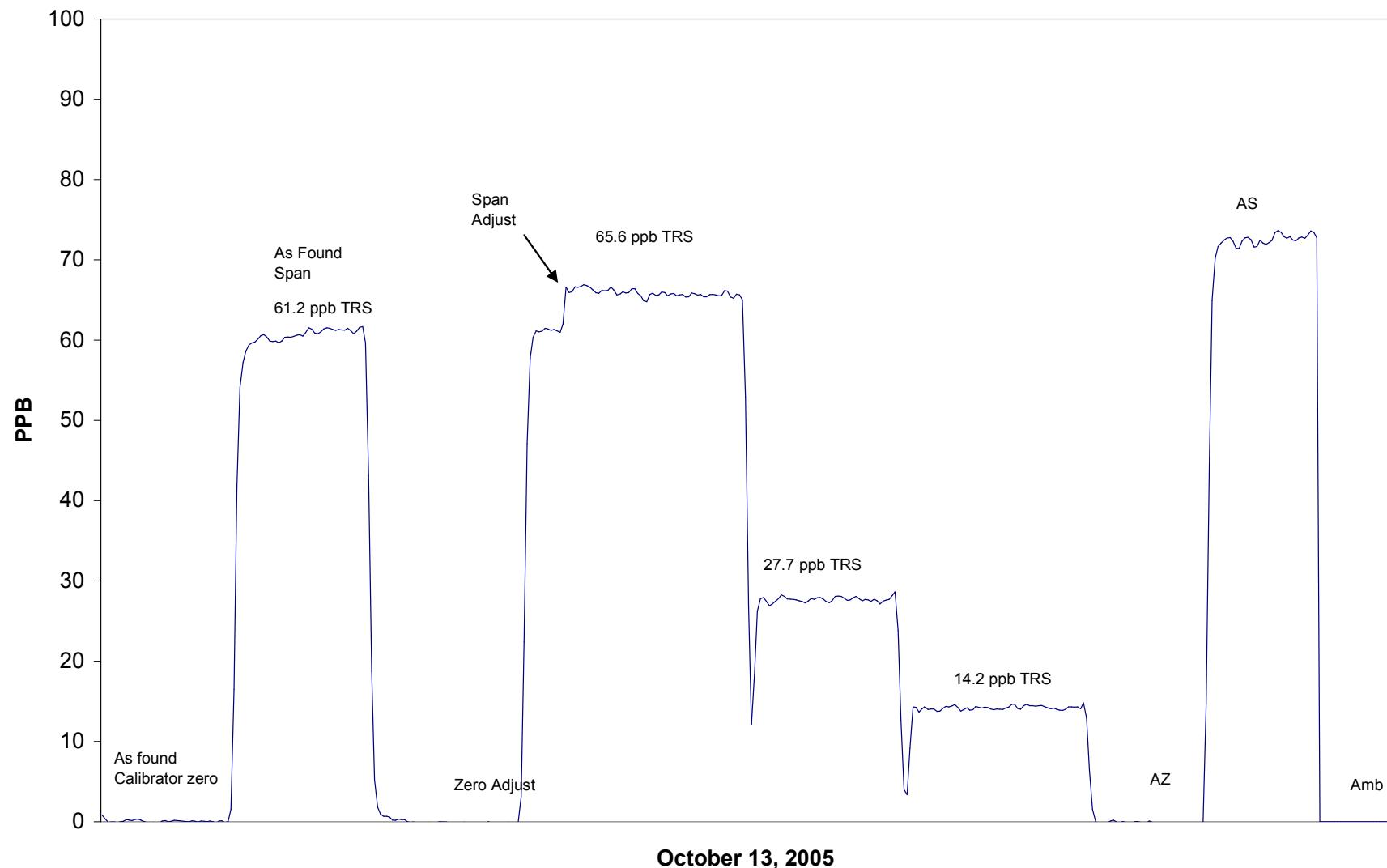
**Station Information**

Calibration Date	October 13, 2005	Previous Calibration	September 21, 2005
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:46	End Time (MST)	13:12
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	-0.2	N/A		
66.6	65.6	1.0147	Correlation Coefficient	0.999919
28.6	27.7	1.0323	Slope	1.008768
15.1	14.2	1.0642	Intercept	0.511057

**TRS Calibration Curve**

**TRS Calibration**

## Calibration Report

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



<b>Station Information</b>			
Calibration Date	October 13, 2005	Previous Calibration	September 21, 2005
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:46	End Time (MST)	12:30
Barometric Pressure	0.933 inches Hg	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
before		after	
Main Flow Set Point	2.990	SLPM	2.990
Aux Flow Set Point	13.66	SLPM	13.66
Filter Load	53	%	19
Ko Factor	10997		10997
Temperature	9.5	Deg C	12.7
Pressure	0.924	ATM	0.936
Main Fadj			
Aux Fadj			

### Calibration Data

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	New Reading
zero flow - main	0.0	0.00		0.01
zero flow - auxillary	0.0	0.00		0.02
flow recovery - main	45 - 60 Seconds	27	45 - 60 Seconds	27
flow recovery - aux	46 - 60 Seconds	48	46 - 60 Seconds	48
Temperature	measured	10.2	+/- 1.0 Deg C	10.6
Pressure	measured	0.920	+/- 1.5% ΔATM	0.924
Total Flow	16.67 SLPm	16.70		
Main Flow	13.67 SLPm	13.98	+/- 1.0 SLPm	13.66
Auxillary Flow	3.0 SLPm	3.076	+/- 0.2 SLPm	2.990
Leak Check - main	0.0	0.10	<0.15 SLPm	0.09
Leak Check - aux	0.0	0.19	<0.15 SLPm	0.10
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	

Notes: No adjustments necessary.  
Installed new filter.  
   
 

Calibration Performed By: Dawn Ewan

**Calibration Report**

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

**Station Information**

Calibration Date	October 7, 2005	Previous Calibration	September 8, 2005
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	12:20	End Time (MST)	15:50
Barometric Pressure	0.902 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
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.	45271
DACS voltage range	0 - 10 volt	DACS channel #	3
	<u>Before</u>		<u>After</u>
Calculated slope	0.975195	Calculated slope	0.991187
Calculated intercept	0.233157	Calculated intercept	0.073785
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376
Concentration range	before	after	
Background	0 - 100 ppb	0 - 100 ppb	
Coefficient	2.66 ppb	2.66 ppb	
Lamp Voltage	0.823	0.823	
Chamber Temp	897.0 Volts	897.0 Volts	
Sample Flow	43.7 Deg C	43.7 Deg C	
	618 ccm	618 ccm	

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	0.03	N/A
4993	39.97	81.79	82.48	0.9917
4993	19.96	41.00	41.29	0.9931
4993	9.99	20.57	20.54	1.0012
4993	0.00	0.00	-0.39	As Found Zero
4993	39.97	81.79	84.59	As Found Span
Average Correction Factor				0.9953

Calculated value of As Found Response: 83.107 ppm      Percent Change of As Found: -1.6%

Auto zero	before calibration		after calibration	
			0.03	ppm
	28.99	ppm	27.81	ppm

Notes:

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Calibration Performed By: Dawn Ewan

**Calibration Summary**

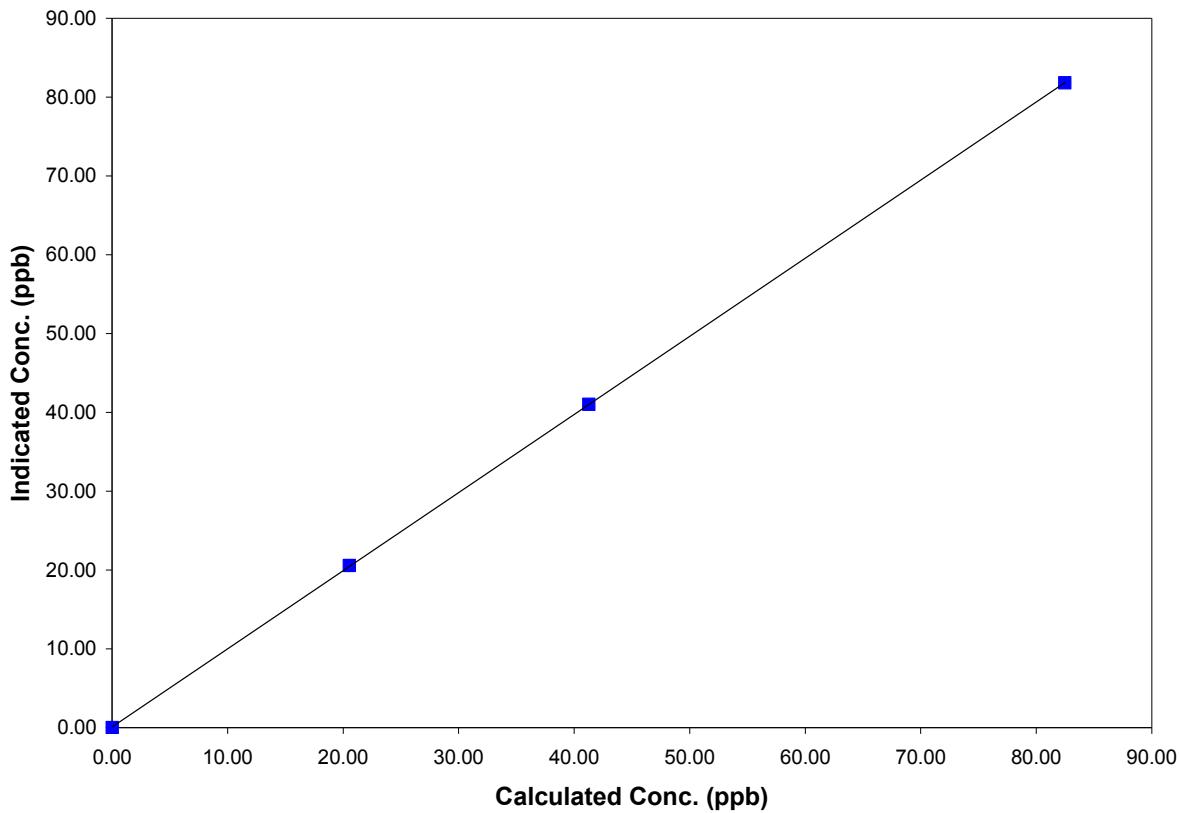
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

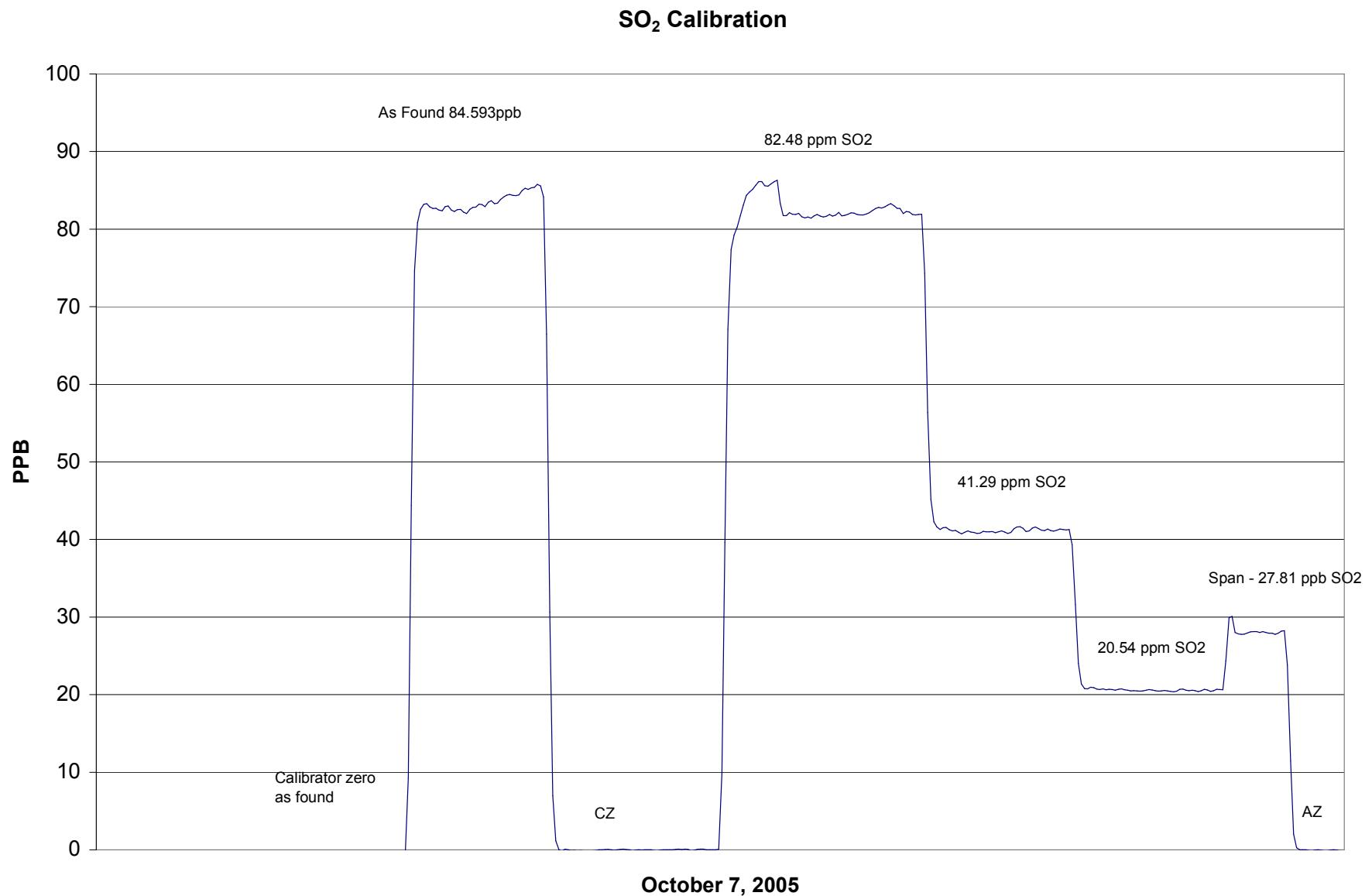
**Station Information**

Calibration Date	October 7, 2005	Previous Calibration	September 8, 2005
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:20	End Time (MST)	15:50
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	0.027	N/A		
81.795	82.482	0.9917	Correlation Coefficient	0.999992
41.003	41.289	0.9931	Slope	0.991187
20.567	20.543	1.0012	Intercept	0.073785

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



# Calibration Report

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



## Station Information

Calibration Date	October 6, 2005			Previous Calibration	September 6, 2005
Station Number	4			Station Location	AG Canada Research Station
Reason:	Routine	Installation	Removal	Other:	
Start Time (MST)	10:00			End Time (MST)	13:49
Barometric Pressure	0.908	Atm		Station Temperature	20.0 Deg C
Calibrator	Environics 6100			Serial Number	3016
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	0.978114	0.996406
	Data Offset	3.028088	1.785636
After	Data Slope	0.979465	0.995312
	Data Offset	0.740007	2.844399
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	1.1	ppb	1.9	mV
NOx background	1.2	ppb	3.8	mV
NO coefficient	0.922		0.972	
NOx coefficient	1.005		0.962	
Chamber Temp	1.0	Deg C	49.4	Deg C
Cooler Temp	-2.0	Deg C	-2.0	Deg C
Converter Temp	323.0	Deg C	323.0	Deg C
Sample Flow	835.0	LPM	804.0	LPM
Pressure	162.3	inches HG	157.0	inches HG
Box Temp	33.3	ccm	33.5	ccm

Notes: Zero Adjustment Made.

Span Adjustment Made.

## Calibration Report

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



### Station Information

Calibration Date: October 6, 2005 Station Location: AG Canada Research Station

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	-1.7	-0.8	-0.7	N/A	N/A
	4993	79.98	796.2	793.0	3.2	796.9	795.0	1.1	0.9991	0.9976
	4993	39.97	401.1	399.5	1.6	401.8	391.6	9.6	0.9981	1.0202
	4993	19.98	201.3	200.5	0.8	196.6	188.0	8.2	1.0235	1.0664
AFZ	4993	0.00	0.0	0.0	0.0	0.5	-0.4	0.5	0.0000	0.0000
	4993	79.98	796.2	793.0	3.2	800.2	779.0	20.4	0.9950	1.0180
								Average Correction Factor	1.0069	1.0280

As Found Concentrations: NO<sub>x</sub>= 801.5 NO= 782.0 As Found Percent Change NO<sub>x</sub>= 0.7% NO= -1.4%

### GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	797.3	802.7	-5.4	798.4	801.4	-3.8	0.9986	1.0016	N/A	N/A
350	797.3	481.7	315.5	799.6	478.0	321.2	0.9971	1.0079	0.9824	101.8%
200	797.3	627.5	169.8	798.4	624.9	173.1	0.9986	1.0042	0.9807	102.0%
100	797.3	713.3	83.9	796.5	711.4	84.6	1.0010	1.0027	0.9923	100.8%
						Average Correction Factor	0.9989	1.0049	0.9851	101.5%

### AIC Data

	Previous calibration				Current calibration				
	Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb
Auto zero	1.5	2.6	2.2			-0.1	-1.6	6.2	
Auto span	236.6	3.1	236.3	ppb		811.7	16.6	796.9	ppb

Calibration Performed By: Dawn Ewan

**Calibration Summary**

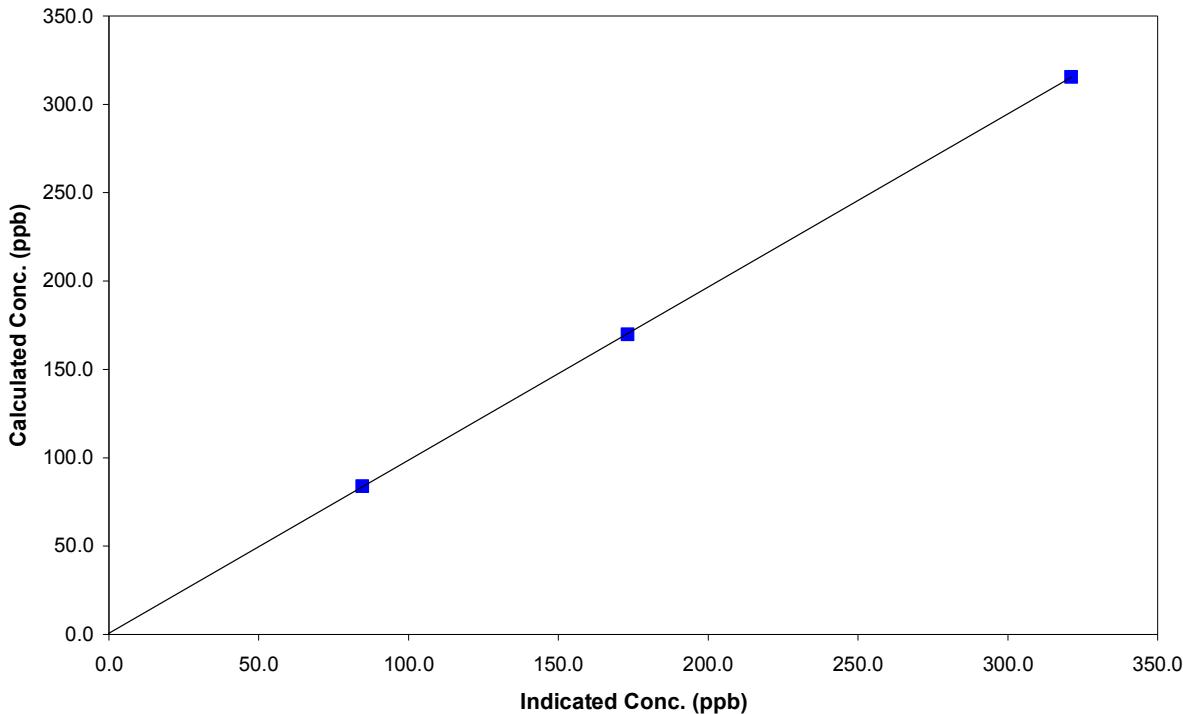
Parameter **NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	October 6, 2005	Previous Calibration	September 6, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	10:00	End Time (MST)	13:49
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	-0.7	0.0000	Correlation Coefficient	0.999992
315.5	321.2	0.9824		
169.8	173.1	0.9807		
83.9	84.6	0.9923		
			Slope	0.979465
			Intercept	0.740007

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

**Calibration Summary**

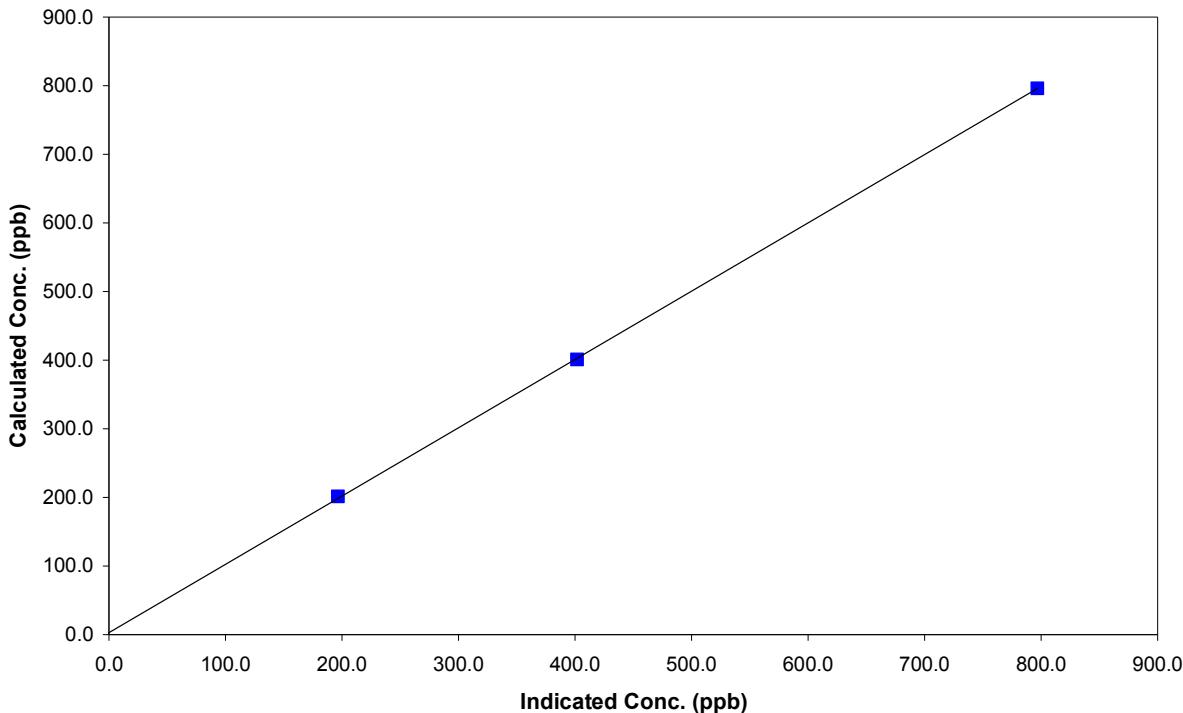
Parameter **NO<sub>x</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	October 6, 2005	Previous Calibration	September 6, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	10:00	End Time (MST)	13:49
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	-1.7	0.0000	Correlation Coefficient	0.999966
796.2	796.9	0.9991		
401.1	401.8	0.9981		
201.3	196.6	1.0235		
			Slope	0.995312
			Intercept	2.844399

**NOx Calibration Curve**

**Calibration Summary**

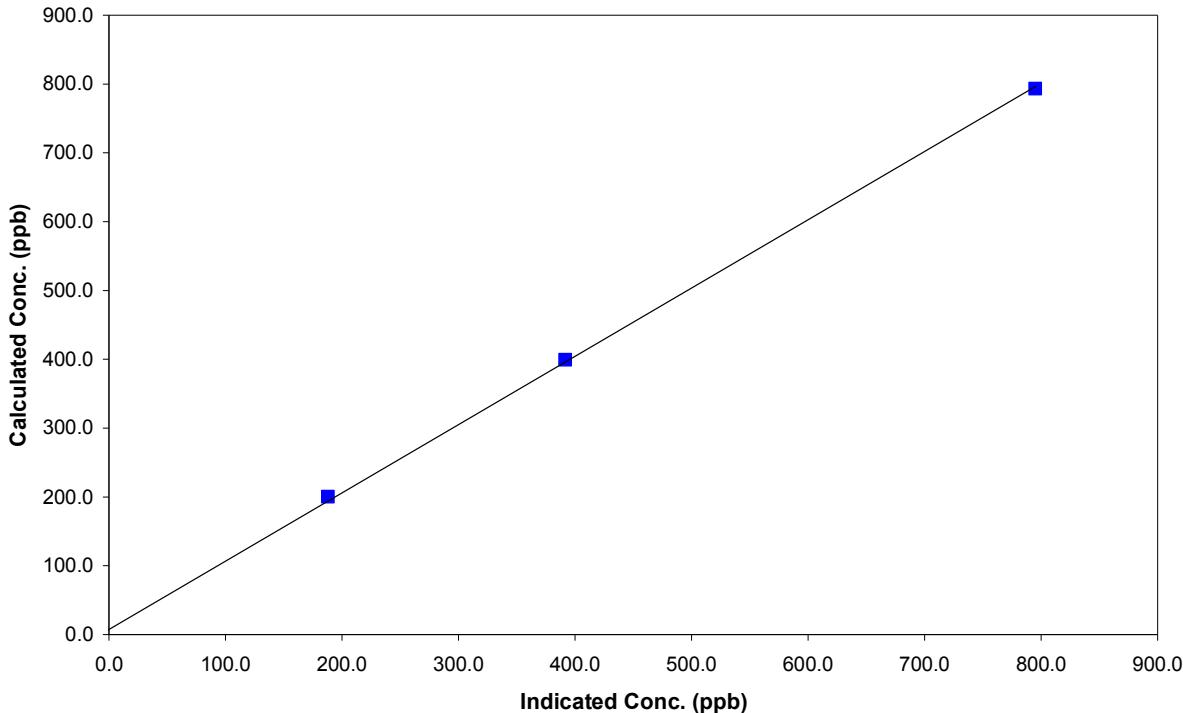
Parameter **NO**  
 Air Monitoring Network **PASZA**

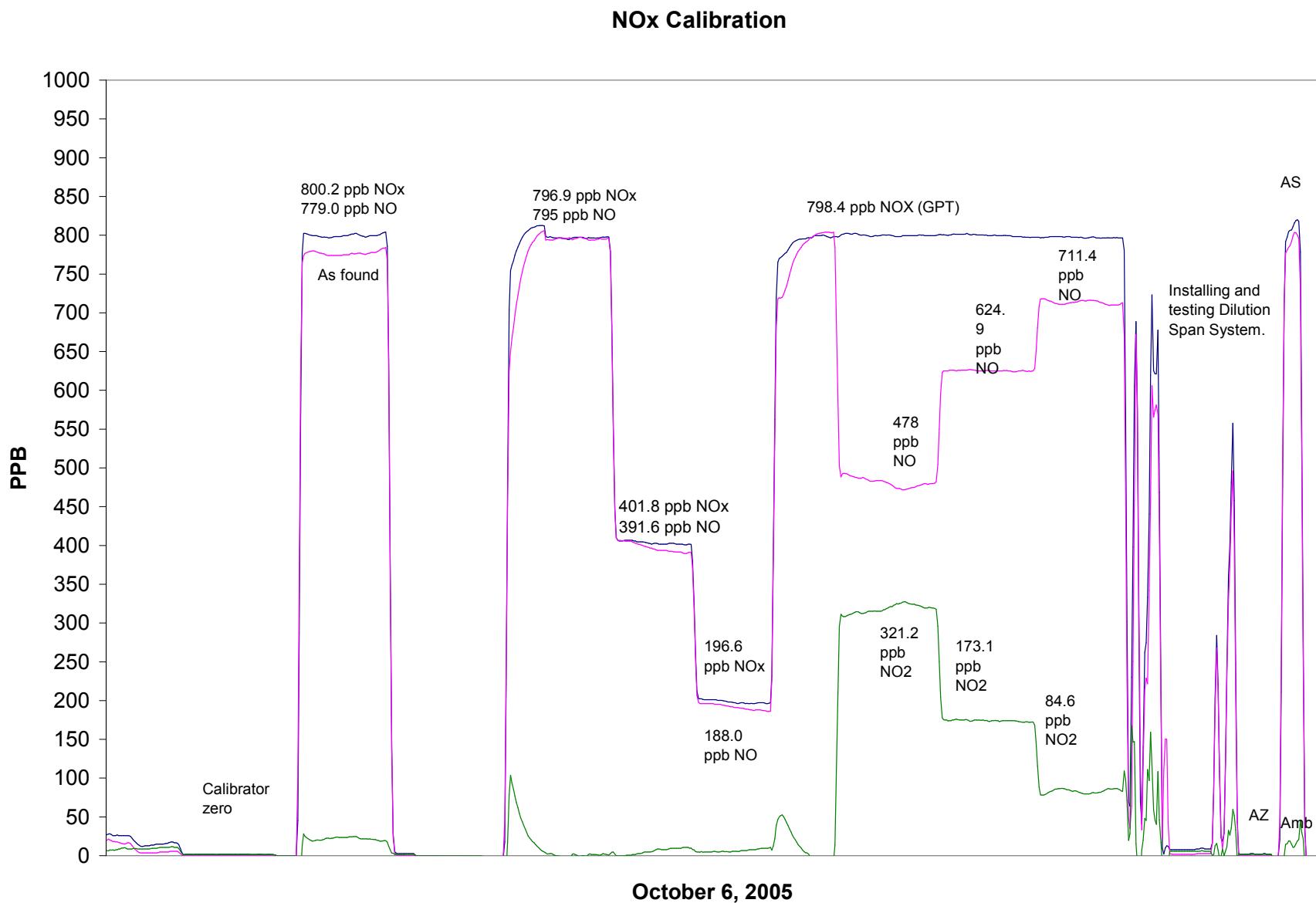
**Station Information**

Calibration Date	October 6, 2005	Previous Calibration	September 6, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	10:00	End Time (MST)	13:49
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	-0.8	N/A	Correlation Coefficient	0.999684
793.0	795.0	0.9976		
399.5	391.6	1.0202		
200.5	188.0	1.0664		
			Slope	0.992216
			Intercept	7.491668

**NO Calibration Curve**



**Calibration Report**

Parameter

O3

Air Monitoring Network

PASZA**Station Information**

Calibration Date	October 7, 2005	Previous Calibration	September 8, 2005
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	9:15	End Time (MST)	12:20
Barometric Pressure	0.909 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
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
	0.997968		0.998800
Calculated intercept	2.546714	Calculated intercept	-0.906630
Analyzer make	API Model 400	Analyzer serial #	383
before			
Concentration range	0 - 500	ppb	0 - 500
offset	-0.1	ppb	-0.5
slope	1.075		1.032
Lamp temp	71	mV	71
Lamp Intensity A/B	91500/89500	mV	92800/90400
Pressure	648.7	inches Hg	677.5
Flow A	0.717	ccm	715
Flow B	0.678	Deg C	673

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.0	0.1	N/A
4993	0.00	315.5	315.3	1.0007
4993	0.00	169.8	174.0	0.9758
4993	0.00	83.9	84.2	0.9968
4993	0.00	0.0	-0.2	As found zero
4993	0.00	315.5	327.5	As found span
Average Correction Factor				0.9911

Calculated value of As Found Response: 329.6 ppm Percent Change of As Found: 4.5%

Auto zero	before calibration		after calibration	
	2.3	ppb	-0.9	ppb
	121.6	ppb	113.2	ppb

Notes:

Calibration Performed By: Dawn Ewan

## Calibration Summary

## Parameter O3 Air Monitoring Network

PASZA

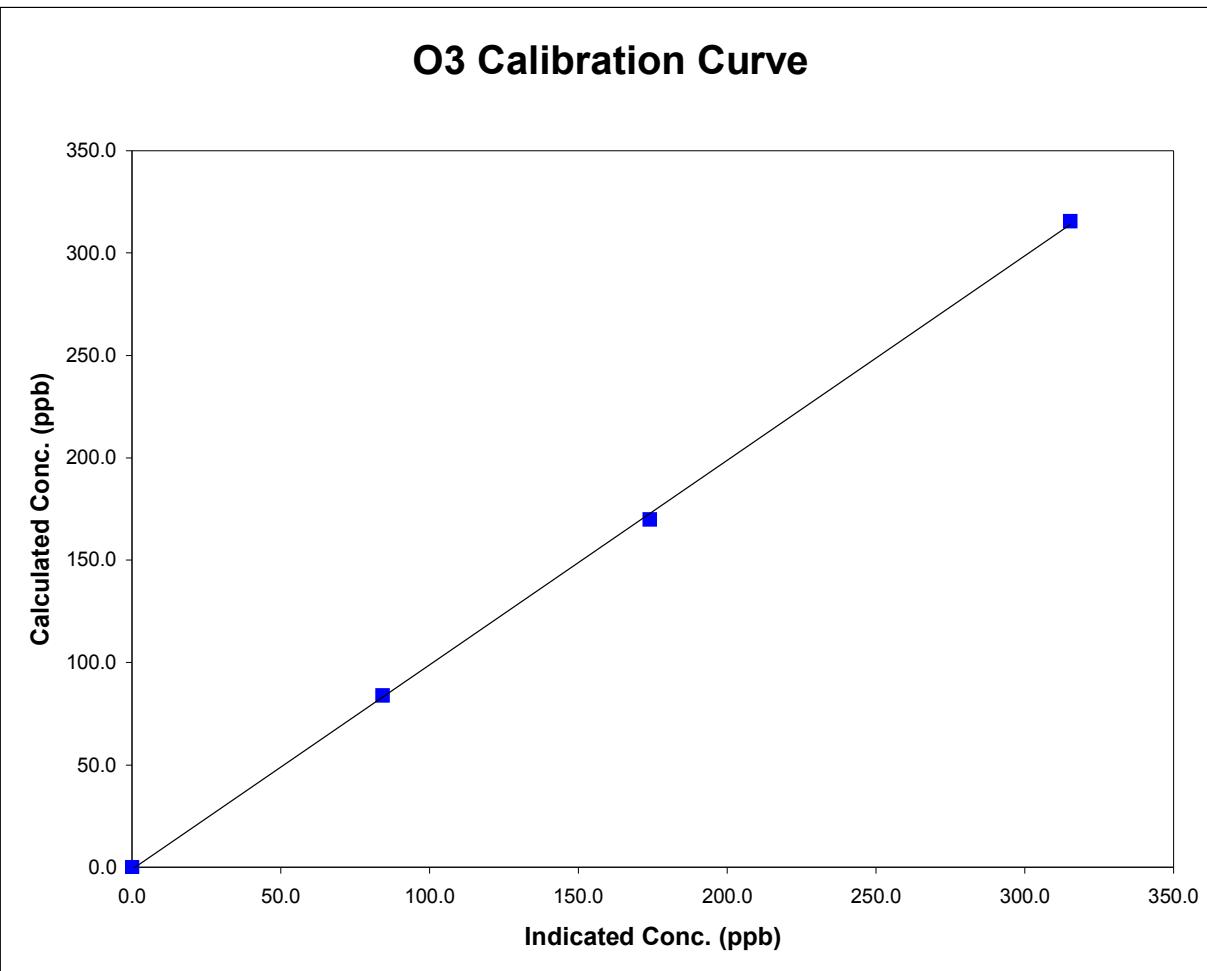


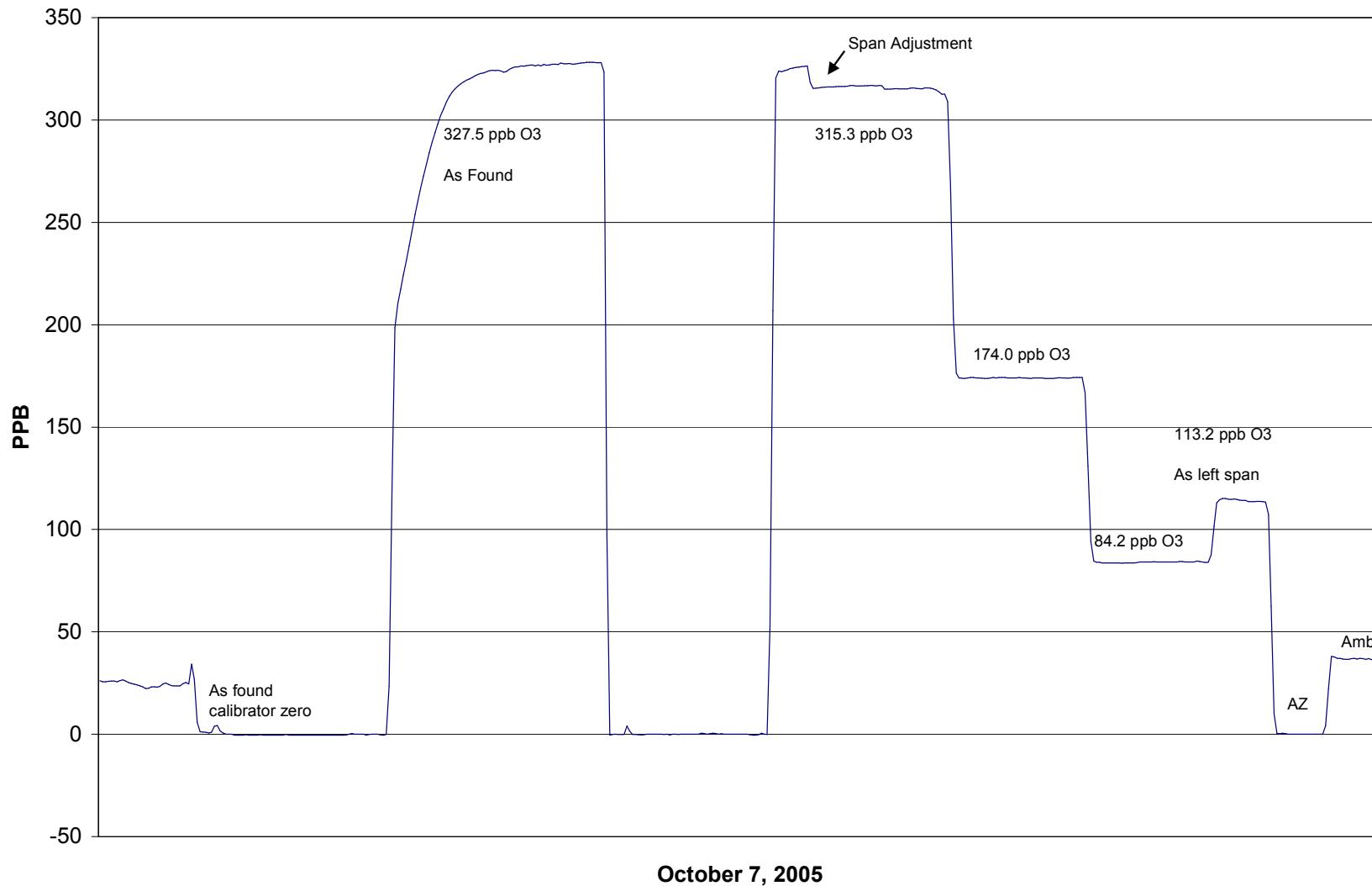
## ***Station Information***

Calibration Date	October 7, 2005	Previous Calibration	September 8, 2005
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:15	End Time (MST)	12:20
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	0.1	NA		
315.5	315.3	1.0007	Correlation Coefficient	0.999759
169.8	174.0	0.9758	Slope	0.998800
83.9	84.2	0.9968	Intercept	-0.906630



**O3 Calibration**

**Calibration Report**

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



<b>Station Information</b>			
Calibration Date	October 7, 2005	Previous Calibration	September 8, 2005
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Start Time (MST)	13:30	End Time (MST)	14:35
Barometric Pressure	0.902 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	12.67
Filter Load	25	%	17
Ko Factor	14287		14287
Temperature	12.1	Deg C	12.1
Pressure	0.904	ATM	0.904

<b>Calibration Data</b>				
Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.01
zero flow - auxillary	0.0	0.00		0.03
flow recovery - main	45 - 60 Seconds	na	45 - 60 Seconds	30
flow recovery - aux	46 - 60 Seconds	na	46 - 60 Seconds	45
Temperature	measured	11.6	+/- 1.0 Deg C	11.6
Pressure	measured	0.902	+/- 1.5% ΔATM	0.904
Total Flow	16.67 SLPM	16.76		
Main Flow	13.67 SLPM	14.14	+/- 1.0 SLPM	13.67
Auxillary Flow	3.0 SLPM	3.148	+/- 0.2 SLPM	3.000
Leak Check - main	0.0	0.00	<0.15 SLPM	-0.04
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.07
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: Replaced blue fileter. Did second leak check... Main = -.04 Aux = 0.07

Cleaned Head.

New filter, old one would not settle.

Calibration Performed By: **Dawn Ewan**