



# Air Quality Monitoring Network for November 2005

Prepared by  
**FOCUS**  
 AMBIENT AIR MONITORING

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Edmonton, Alberta T6B 2X3

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

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

In general, the PASZA Air Monitoring Network ran well for the month of November 2005; all equipment exceeded 98 percent uptime.

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

No problems were observed with any of the sampling sites for the month of November 2005.

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

- Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.0 ppb to 0.4 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 1.2 ppb to 12.6 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 18.0 ppb to 33.1 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

## PASZA Monthly Continuous Data Summary

Nov-2005 Peace Airshed Zone Association							Maximum Recorded Values						Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr			24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	
SO <sub>2</sub> (ppb)	172	57	Henry Pirker	0.5	0	0	2.3	Nov-25 13:00	3.9	S	1.2	Nov-25	99.6%
NO (ppb)			Henry Pirker	17.3	-	-	254.3	Nov-02 21:00	2.6	E	83.2	Nov-25	99.6%
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	13.2	0	0	36.2	Nov-11 18:00	2.4	SSE	23.0	Nov-24	99.6%
NO <sub>x</sub> (ppb)			Henry Pirker	30.3	-	-	276.6	Nov-02 21:00	2.6	E	106.0	Nov-25	99.6%
O <sub>3</sub> (ppb)	82		Henry Pirker	13.8	0	-	35.1	Nov-20 03:00	32.6	W	28.7	Nov-18	99.6%
O <sub>3</sub> (ppb) - 8-hr		65	Henry Pirker			0					34.1	Nov-18	
CO (ppm)	13		Henry Pirker	0.27	0	-	2.8	Nov-02 21:00	2.6	E	0.6	Nov-01	99.4%
CO (ppm) - 8-hr		5	Henry Pirker			0					1.0	Nov-01	
THC (ppm)			Henry Pirker	2.25	-	-	5.7	Nov-01 20:00	3.3	WNW	3.0	Nov-02	99.6%
TRS (ppb)			Henry Pirker	0.2	-	-	1.2	Nov-02 21:00	2.6	E	0.6	Nov-25	99.6%
PM <sub>2.5</sub> (g/m <sup>3</sup> )		30 <sup>a</sup>	Henry Pirker	5.6		0	40.4	Nov-25 17:00	4.1	NNE	16.3	Nov-25	99.6%
RH (%)			Henry Pirker	69.7	-	-	-	-	-	-	-	-	99.7%
SR (W/m <sup>2</sup> )			Henry Pirker	37.4	-	-	-	-	-	-	-	-	99.7%
Temp (°C)			Henry Pirker	-0.6	-	-	-	-	-	-	-	-	99.7%
WSPD v (km/hr)			Henry Pirker	8.5	-	-	-	Nov-17 23:00	40.0	WSW	21.3	18-Nov	99.7%
WSPD s (km/hr)			Henry Pirker	8.6	-	-	-	Nov-17 23:00	40.1	WSW	21.5	18-Nov	99.7%
WDIR (Deg)			Henry Pirker	N	-	-	-	-	-	-	-	-	99.7%
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	0.7	0	0	6.1	Nov-08 14:00	5.8	W	3.4	Nov-08	100.0%
TRS (ppb)			Evergreen Park	0.7	-	-	1.7	Nov-24 21:00	2.9	W	1.1	Nov-25	100.0%
PM <sub>2.5</sub> (g/m <sup>3</sup> )		30 <sup>a</sup>	Evergreen Park	4.8		0	21.4	Nov-08 09:00	3.3	WSW	14.1	Nov-04	100.0%
Temp (°C)			Evergreen Park	-1.0	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Evergreen Park	7.2	-	-	-	Nov-18 03:00	33.8	WSW	20.0	18-Nov	100.0%
WSPD s (km/hr)			Evergreen Park	7.1	-	-	-	Nov-18 03:00	34.0	WSW	20.3	18-Nov	100.0%
WDIR (Deg)			Evergreen Park	N	-	-	-	-	-	-	-	-	100.0%
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.4	0	0	11.3	Nov-17 08:00	26.3	W	1.3	Nov-17	99.6%
TRS (ppb)			Smoky Heights	0.6	-	-	1.4	Nov-22 16:00	34.7	W	0.9	Nov-07	99.9%
PM <sub>2.5</sub> (g/m <sup>3</sup> )		30 <sup>a</sup>	Smoky Heights	4.2		0	41.7	Nov-01 00:00	6.2	WSW	12.4	Nov-07	98.8%
Temp (°C)			Smoky Heights	-1.2	-	-	-	-	-	-	-	-	99.9%
WSPD v (km/hr)			Smoky Heights	12.6	-	-	-	Nov-17 00:00	42.4	WSW	33.3	22-Nov	99.9%
WSPD s (km/hr)			Smoky Heights	12.9	-	-	-	Nov-17 00:00	42.5	WSW	33.5	22-Nov	99.9%
WDIR (Deg)			Smoky Heights	N	-	-	-	-	-	-	-	-	99.9%
SO <sub>2</sub> (ppb)	172	57	Beaverlodge	0.3	0	0	5.7	Nov-06 16:00	4.1	ENE	0.9	Nov-29	100.0%
NO (ppb)			Beaverlodge	1.4	-	-	20.0	Nov-24 11:00	2.8	SSE	7.1	Nov-07	99.7%
NO <sub>2</sub> (ppb)	212	106	Beaverlodge	4.9	0	0	24.0	Nov-25 16:00	3.2	SE	13.6	Nov-24	100.0%
NO <sub>x</sub> (ppb)			Beaverlodge	6.5	-	-	37.0	Nov-24 19:00	6.2	SW	18.3	Nov-24	100.0%
O <sub>3</sub> (ppb)	82		Beaverlodge	23.1	0	-	41.0	Nov-21 13:00	22.5	WNW	38.8	Nov-21	100.0%
O <sub>3</sub> (ppb) - 8-hr		65	Beaverlodge			0					40.6	Nov-21	
PM <sub>2.5</sub> (g/m <sup>3</sup> )		30 <sup>a</sup>	Beaverlodge	3.1		0	25.6	Nov-21 14:00	28.0	WNW	13.3	Nov-04	99.9%
RH (%)			Beaverlodge	67.8	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Beaverlodge	0.0	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Beaverlodge	9.8	-	-	-	Nov-18 02:00	44.1	W	29.4	22-Nov	100.0%
WSPD s (km/hr)			Beaverlodge	9.8	-	-	-	Nov-18 02:00	44.1	W	29.6	22-Nov	100.0%
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

A power failure affected all instruments on November 14<sup>th</sup> from 14:00 – 16:00 MST. Some analyzers were flagged an additional hour to allow sufficient stabilization time.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43	No operational problems observed.
NO <sub>x</sub> /NO/NO <sub>2</sub>	TECO	42C	Internal permeation oven heat control was disabled to determine cause of converter / response stability issues. Daily spans were considerably lower past the Nov 4 <sup>th</sup> calibration to evaluate this relationship. No operational problems observed.
O <sub>3</sub>	API	400	No operational problems observed.
CO	TECO	48C	No operational problems observed.
THC	TEI	51-CLT	No operational problems observed.
TRS	TEI	42C	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	No operational problems observed.
RH	Met One	083D	No operational problems observed.
AT	Met One	083D	No operational problems observed.
SR	Met One	096-1	No operational problems observed.
WS	Met One	010C	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	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 – Smoky Heights School Station**


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**General Station Issues**

One (1) hour of data capture was missed Nov 1<sup>st</sup> at 4:00 MST. No other general station issues were identified.

Parameter	Make	Model	Notes
SO <sub>2</sub>	API	100A	Unstable spans evident Nov 12 <sup>th</sup> and 23 <sup>rd</sup> . DACS control appears to have intermittently released span port before 20 minutes were completed. Two (2) hours were flagged excessive drift post calibration on Nov 21 <sup>st</sup> . No other operational problems observed.
TRS	TEI	42C	Unstable spans evident Nov 12 <sup>th</sup> and 23 <sup>rd</sup> . DACS control appears to have intermittently released span port before 20 minutes were completed. No other operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	Eight (8) hours were flagged due to excessive instrument drift. No other 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.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43CTL	No operational problems observed.
NO <sub>x</sub> /NO/NO <sub>2</sub>	TECO	42C	No operational problems observed.
O <sub>3</sub>	API	400	No operational problems observed.
PM <sub>2.5</sub>	R&P	1400AB	One (1) hour was flagged 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	One (1) hour of data was flagged 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: November 1, 2005 to December 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:	676
Number of 1-hr Fair Readings:	5
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

**Status Flag Characters**

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

Day	Mountain Standard Time																								
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Nov-05	6	7	5	5	5	7	7	12	21	17	13	10	6	7	7	N	6	7	7	7	11	13	11	10	
2-Nov-05	6	6	7	9	7	7	6	13	13	8	8	6	7	11	N	14	7	8	7	8	6	13	28	19	7
3-Nov-05	5	8	5	5	4	4	5	8	14	18	11	8	9	9	N	12	11	8	6	8	6	6	17	6	8
4-Nov-05	11	12	12	13	12	11	10	10	11	10	9	10	12	14	13	10	9	10	12	14	14	14	17	17	22
5-Nov-05	16	6	4	4	4	N	5	9	9	9	10	7	5	6	6	5	11	15	8	6	5	6	7	8	
6-Nov-05	8	8	6	6	N	5	5	6	8	13	13	10	11	10	9	11	12	12	11	12	12	11	11	12	
7-Nov-05	11	12	12	N	22	22	16	17	11	7	N	N	N	N	N	N	4	9	8	8	7	9	9	10	
8-Nov-05	7	9	10	10	13	N	14	12	12	10	15	7	6	7	10	8	9	6	7	7	7	7	6	6	
9-Nov-05	7	6	11	13	N	11	6	7	7	8	12	9	11	13	12	11	7	6	11	10	7	8	7	7	
10-Nov-05	9	9	10	N	8	8	4	5	8	5	11	5	14	14	13	13	11	14	15	13	15	16	16	15	
11-Nov-05	13	14	N	15	9	14	9	7	7	7	8	13	15	15	11	11	7	15	17	13	7	5	6	4	
12-Nov-05	6	N	8	9	10	11	10	9	9	8	8	9	9	9	9	8	11	6	7	7	5	4	5	3	
13-Nov-05	N	6	6	5	4	6	5	6	8	6	8	6	7	10	8	4	4	4	6	5	6	6	6	N	
14-Nov-05	8	9	10	10	10	10	10	10	10	10	10	11	11	11	N	N	N	9	9	10	10	8	N	10	
15-Nov-05	10	9	10	9	8	8	7	6	6	7	8	8	8	8	7	5	3	4	5	6	5	N	5	5	
16-Nov-05	7	7	7	4	9	11	11	11	10	11	11	11	10	9	5	8	9	6	4	6	N	8	9	10	
17-Nov-05	8	7	9	10	12	14	14	13	10	7	7	8	6	7	13	12	12	13	17	N	16	16	17	17	
18-Nov-05	17	17	17	17	17	17	16	15	13	10	11	14	16	15	16	14	12	11	N	11	11	14	14	14	
19-Nov-05	12	14	13	14	15	12	10	11	13	12	12	11	13	16	17	17	16	N	15	15	14	15	13	16	
20-Nov-05	17	17	17	18	17	17	17	15	14	14	15	16	16	16	16	14	N	9	8	10	9	6	10	13	
21-Nov-05	14	15	12	9	14	15	13	11	11	15	14	12	13	14	9	N	15	7	8	7	13	15	16	16	
22-Nov-05	15	16	17	17	16	14	13	14	12	10	8	8	13	14	N	14	14	14	15	15	14	14	15	14	
23-Nov-05	14	15	14	15	13	8	10	9	9	8	10	14	13	N	13	13	9	14	8	14	9	6	7	8	
24-Nov-05	10	9	9	8	7	5	6	5	10	15	24	17	N	7	8	5	12	28	22	20	26	17	13	10	
25-Nov-05	9	9	9	9	10	9	10	11	19	23	18	N	6	10	9	14	25	30	28	21	12	8	5	5	
26-Nov-05	8	13	12	12	12	8	7	10	11	12	N	12	11	13	13	12	13	13	13	14	12	10	10	12	
27-Nov-05	13	13	10	7	4	4	6	4	4	N	6	5	8	10	9	5	6	6	5	7	5	7	6	7	
28-Nov-05	8	12	10	10	10	10	8	4	N	5	6	5	4	6	9	10	9	6	6	5	6	7	9	8	
29-Nov-05	5	8	8	5	4	6	6	N	5	6	9	10	11	11	11	7	5	5	9	10	9	9	9	9	
30-Nov-05	9	9	9	9	10	10	N	9	10	10	12	12	12	13	12	11	9	9	10	10	11	10	11	13	

## PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

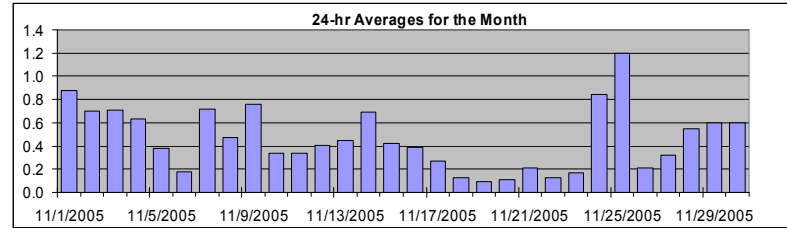
### HOURLY AVERAGE TABLE

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

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

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

Number of 1-hr Exceedances:		0	
Number of 24-hr Exceedances:		0	
Maximum 1-hr Average:	2.3 ppb	25-Nov	13:00 14:00
Maximum 24-hr Average:	1.2 ppb	25-Nov	



AIC Time:	31 hrs	Operational Time:	683 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%
Percentile	99	95	75
	1.9	1.3	0.6
	50	25	5
	0.4	0.2	0.1
	1	0.0	
	Average	Median	
	0.5 ppb	0.4 ppb	

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00
1-Nov-05	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	0.9	1.6
2-Nov-05	1	1	0	0	0	0	1	1	1	1	1	1	1	0	A	0	1	1	0	1	1	2	1	1	0	0.7	2.2
3-Nov-05	1	0	0	0	0	0	0	1	1	2	1	1	1	A	2	1	0	1	0	0	1	0	0	0	0	0.7	2.0
4-Nov-05	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.3
5-Nov-05	0	0	0	0	0	A	0	0	0	1	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0.4	0.6
6-Nov-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	0.5
7-Nov-05	0	0	0	A	0	0	1	1	1	1	1	1	C	C	C	A	1	1	1	1	1	1	1	1	0.7	1.3	
8-Nov-05	1	0	0	0	0	A	0	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.5	0.9
9-Nov-05	1	2	1	1	A	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0.8	1.8
10-Nov-05	0	0	0	A	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
11-Nov-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0.3	1.3
12-Nov-05	0	A	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
13-Nov-05	A	0	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0	1	1	1	0	0	0	A	0	0.4	0.8
14-Nov-05	1	1	1	0	0	1	1	1	1	1	1	1	1	1	P	P	P	0	0	0	0	0	A	1	0.7	1.3	
15-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	1	1	0.4	0.7
16-Nov-05	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.7
17-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	A	0	0	0	0	0	0.3	0.7
18-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3
19-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2
20-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3
21-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.5
22-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
24-Nov-05	1	0	0	0	0	0	0	1	1	2	2	1	A	1	1	0	1	2	2	1	1	1	0	0	0	0.8	2.0
25-Nov-05	0	0	1	0	1	1	1	1	2	2	2	A	2	2	2	2	2	2	2	1	1	1	0	0	0	1.2	2.3
26-Nov-05	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
27-Nov-05	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	0.3	0.7
28-Nov-05	0	0	0	0	0	0	0	0	1	A	0	0	1	1	2	1	0	0	0	0	0	0	0	1	2	0.6	1.8
29-Nov-05	1	0	0	0	0	0	0	1	A	1	1	1	2	0	0	1	1	1	1	0	0	1	1	0	0	0.6	1.6
30-Nov-05	1	1	1	1	1	0	A	0	0	0	0	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0.6	1.3
Hourly Avg	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4		
Hourly Max	0.8	1.8	1.2	1.5	0.8	1.3	1.3	1.5	2.1	2.0	1.8	1.3	1.6	2.3	1.9	1.9	2.2	2.2	1.8	1.4	1.3	2.2	1.4	1.5			



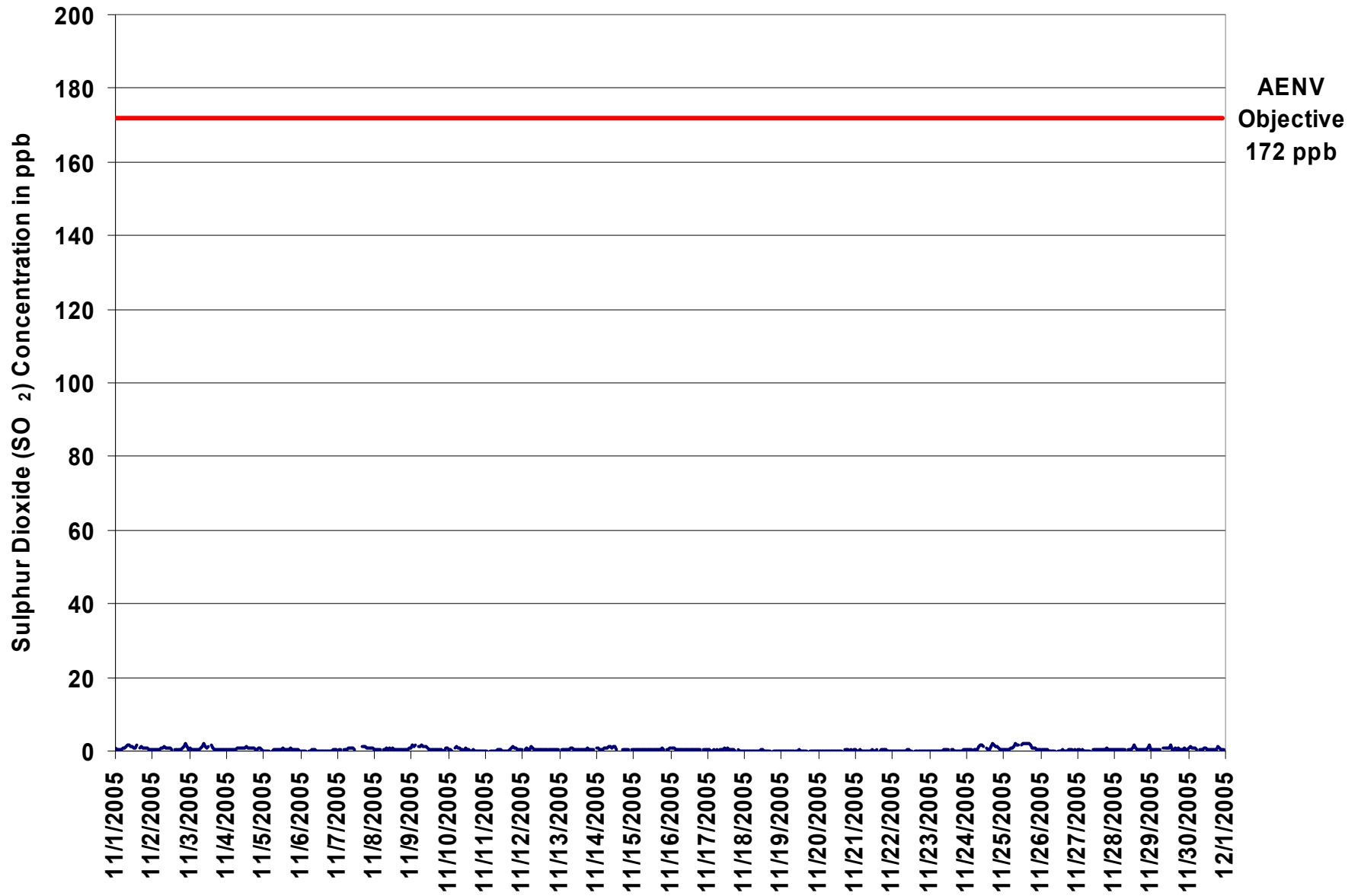


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

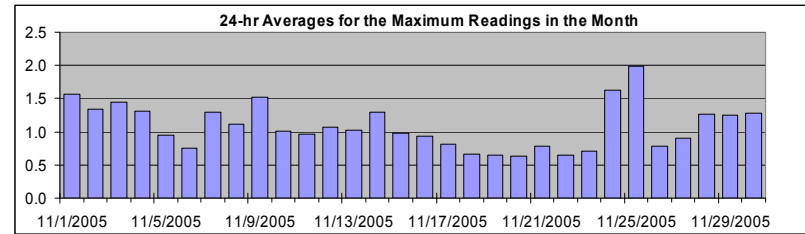
**Sulphur Dioxide (SO<sub>2</sub>)**

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

**Summary**

Maximum 1-hr Value:	3.3	ppb	25-Nov	13:00 14:00
Maximum 24-hr Value:	2.0	ppb	25-Nov	

AIC Time:	31 hrs	Operational Time:	683 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.1	2.3	1.2	0.9	0.7	0.6	0.5	1.1 ppb	0.9 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	1	1	1	1	1	1	1	2	2	2	2	2	2	1	2	A	2	2	1	3	2	1	1	1	1.6	2.6
2-Nov-05	1	1	1	1	1	1	1	2	2	1	1	1	2	1	A	1	1	1	1	1	2	3	3	1	1.3	3.0
3-Nov-05	2	1	1	1	1	1	1	1	3	3	2	2	2	A	2	3	1	1	1	1	1	1	1	1	1.4	3.3
4-Nov-05	1	1	1	1	1	1	1	1	1	1	1	2	2	3	3	1	1	1	1	1	1	1	2	1	1.3	2.9
5-Nov-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1.0	1.8
6-Nov-05	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0.8	1.3
7-Nov-05	1	1	1	A	1	1	1	1	1	1	1	1	C	C	C	A	2	2	2	2	1	1	1	1	1.3	2.0
8-Nov-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.1	1.7
9-Nov-05	2	3	2	3	A	2	2	2	3	2	1	2	1	1	1	1	1	1	1	1	1	1	2	2	1.5	2.9
10-Nov-05	1	1	1	A	2	2	1	1	2	1	1	3	1	1	1	1	1	1	1	1	0	1	1	1	1.0	2.6
11-Nov-05	0	1	A	1	1	1	1	0	1	1	1	1	1	1	1	1	1	2	2	2	1	2	1	1	1.0	2.4
12-Nov-05	1	A	2	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0
13-Nov-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.5
14-Nov-05	2	1	1	1	1	2	1	1	2	1	2	2	2	1	P	P	P	1	1	1	1	1	A	1	1.3	1.9
15-Nov-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	1.4
16-Nov-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	0.9	1.4
17-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	1	1	1	1	0.8	1.5
18-Nov-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	0.7	1.0
19-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	A	0	0	1	1	1	1	0.7	0.9
20-Nov-05	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8
21-Nov-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	0.8	1.1
22-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	1	1	1	1	0.7	0.9
23-Nov-05	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	0.9
24-Nov-05	1	1	1	1	1	1	1	2	2	2	3	2	A	1	1	1	2	3	3	2	2	1	1	1	1.6	3.0
25-Nov-05	1	1	1	1	2	2	1	2	3	3	A	3	3	3	3	3	3	3	3	2	1	1	1	1	2.0	3.3
26-Nov-05	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
27-Nov-05	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	0.9	1.6
28-Nov-05	1	1	1	1	1	1	1	1	A	1	1	1	2	3	1	1	1	1	1	1	1	1	2	3	1.3	3.0
29-Nov-05	1	1	1	1	1	1	1	A	2	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1.3	2.8
30-Nov-05	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1.3	3.3
Hourly Avg	0.9	1.0	0.9	0.9	0.9	1.0	1.0	1.1	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.0	1.1	1.2	1.2	1.2	1.1	1.0	1.0	1.0		
Hourly Max	1.7	2.9	2.2	2.6	1.7	2.0	2.0	2.2	3.2	3.3	2.8	2.6	3.1	3.3	2.9	2.7	3.1	3.2	3.1	3.3	2.1	3.0	2.6	2.9		

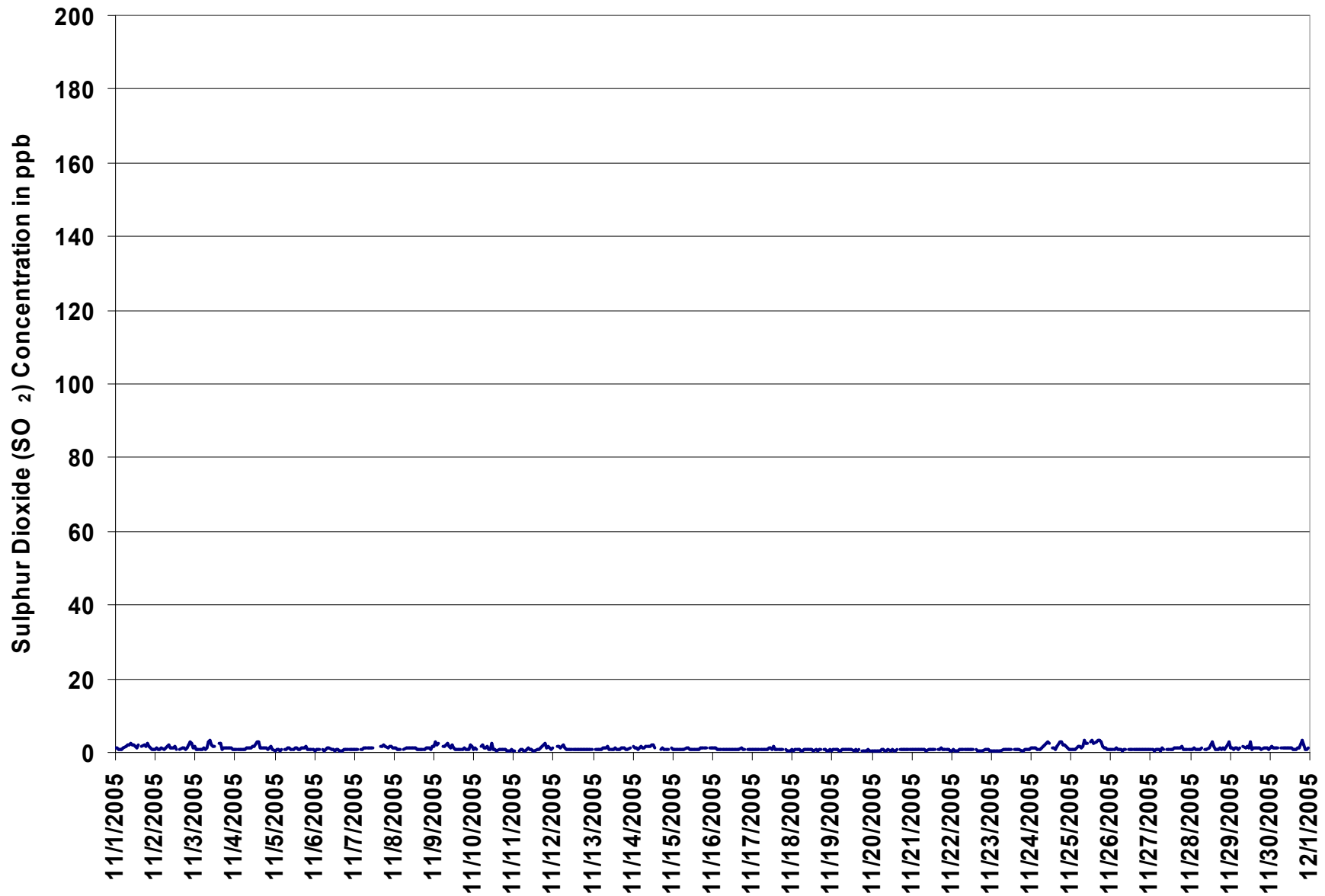
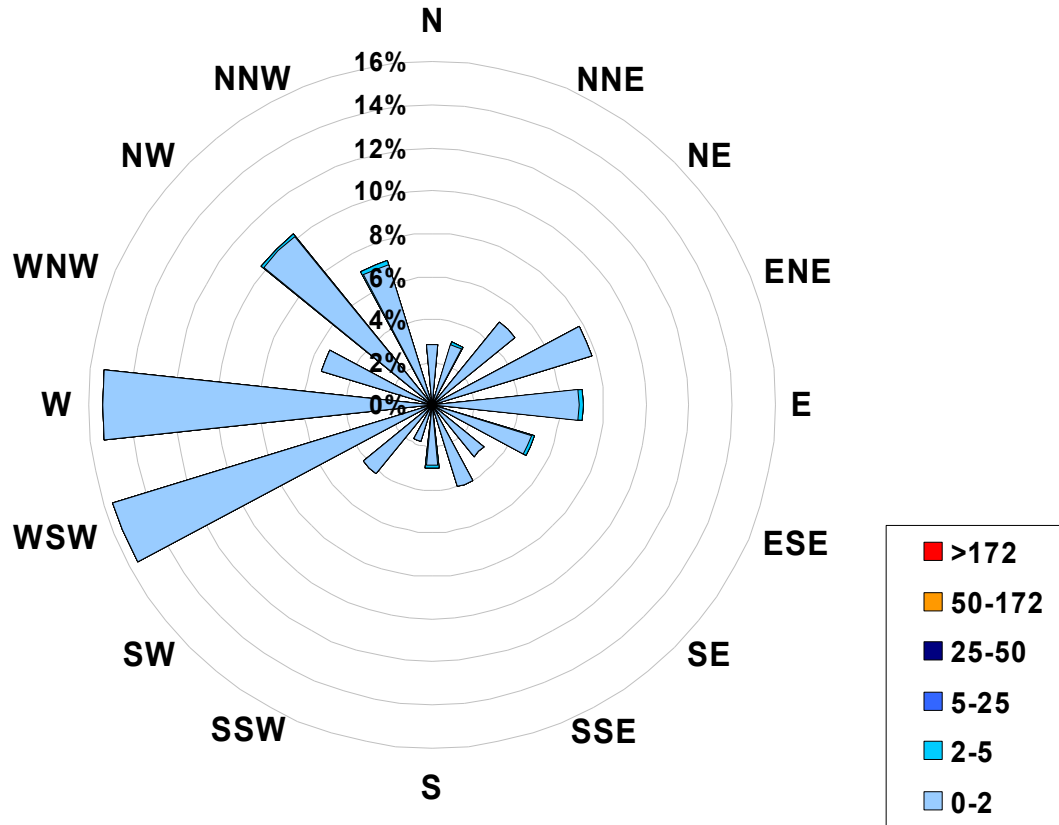


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
0.0	< 2	677	
2	to 5	6	
5	to 25	0	
25	to 50	0	
50	to 172	0	
	> 172	0	
Total Non-Zero Values			683

### PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

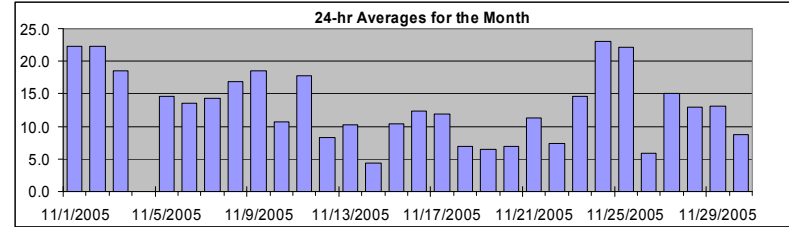
#### HOURLY AVERAGE TABLE

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

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

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

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	36.2 ppb 11-Nov 18:00 19:00
Maximum 24-hr Average:	23.0 ppb 24-Nov



AIC Time:	31 hrs	Operational Time:	678 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	32.4	28.7	17.8	12.3	7.0	2.9	1.5	13.2 ppb	12.3 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	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-Nov-05	20	18	21	22	20	21	21	18	20	21	24	28	25	24	22	A	24	30	28	29	23	19	16	18	22.3	30.0	
2-Nov-05	16	17	17	19	20	18	20	22	18	20	21	22	24	15	A	12	29	34	30	33	29	20	26	29	22.2	33.8	
3-Nov-05	22	16	19	19	16	19	22	18	20	23	25	19	14	A	13	12	17	27	24	21	20	15	14	12	18.5	26.6	
4-Nov-05	12	12	12	14	14	14	14	17	18	17	C	C	C	C	C	C	C	C	A	17	16	13	7	7	N	17.5	
5-Nov-05	9	11	12	11	11	A	13	12	13	11	9	9	11	13	15	18	19	23	23	20	19	19	17	17	14.6	23.3	
6-Nov-05	18	17	14	12	A	12	14	14	14	16	14	9	9	9	9	10	15	15	15	16	16	17	15	15	13.6	17.7	
7-Nov-05	14	13	14	A	11	12	17	16	16	17	18	13	14	10	13	10	15	19	19	13	13	14	15	13	14.3	18.7	
8-Nov-05	11	8	7	7	6	A	9	10	12	11	19	18	15	15	11	17	16	27	29	30	29	28	26	25	16.9	30.1	
9-Nov-05	23	24	14	8	A	12	24	31	30	30	20	11	17	15	10	13	15	23	27	12	12	19	17	18	18.6	31.3	
10-Nov-05	13	13	10	A	14	14	17	17	16	13	7	21	8	7	9	9	13	9	7	9	6	4	4	5	10.7	20.6	
11-Nov-05	6	5	A	5	13	5	16	19	29	28	18	8	5	5	13	12	31	35	36	31	27	20	24	18	17.8	36.2	
12-Nov-05	10	A	5	4	3	3	4	6	5	8	8	5	5	5	5	6	12	13	14	14	11	12	17	14	8.3	16.6	
13-Nov-05	A	15	16	11	9	11	13	12	15	10	7	6	7	13	9	9	10	14	11	10	7	6	4	A	10.2	16.2	
14-Nov-05	3	2	2	2	2	2	3	4	5	5	5	3	2	3	P	P	P	9	8	7	7	8	A	7	4.4	8.9	
15-Nov-05	5	6	5	5	6	6	8	11	12	9	6	6	6	5	7	12	14	17	19	19	19	A	20	19	10.5	19.7	
16-Nov-05	18	18	20	16	8	6	5	7	9	7	6	8	9	12	20	15	12	25	18	13	A	13	10	8	12.3	25.3	
17-Nov-05	10	12	8	7	5	4	6	8	14	20	23	32	25	29	12	15	16	11	4	A	4	3	2	2	11.9	32.3	
18-Nov-05	2	2	1	1	1	2	4	7	10	14	12	7	5	6	6	9	12	14	A	14	12	7	5	5	6.9	14.4	
19-Nov-05	7	4	5	4	2	8	15	11	7	10	11	13	9	4	4	3	4	A	5	4	5	4	7	3	6.5	14.5	
20-Nov-05	1	2	2	1	1	1	2	5	7	4	4	3	4	4	4	6	A	16	18	14	15	24	12	8	6.9	24.0	
21-Nov-05	7	6	10	14	6	5	8	11	11	6	7	10	9	9	17	A	8	30	34	28	9	6	4	5	11.4	34.3	
22-Nov-05	5	3	2	2	2	5	9	7	11	14	19	21	10	7	A	9	8	8	5	5	6	5	4	4	7.4	20.9	
23-Nov-05	4	2	4	3	7	15	14	15	17	18	15	9	12	A	13	11	17	24	21	9	18	25	30	30	14.6	30.3	
24-Nov-05	29	32	29	20	13	15	16	20	22	25	28	26	A	21	24	23	28	30	30	30	22	18	14	14	23.0	31.6	
25-Nov-05	14	15	16	15	17	19	21	23	27	22	23	A	21	28	31	35	36	31	24	18	18	19	18	17	22.1	36.2	
26-Nov-05	8	2	3	3	3	11	12	8	7	5	A	6	5	5	4	5	6	5	7	6	7	8	8	4	5.9	12.1	
27-Nov-05	4	4	8	14	16	14	10	15	16	A	20	12	8	9	11	21	26	24	19	28	21	16	18	12	15.0	27.6	
28-Nov-05	13	6	10	9	10	8	9	16	A	20	15	22	18	15	9	8	10	16	17	16	15	14	11	11	13.0	22.0	
29-Nov-05	15	11	12	21	18	26	27	A	16	12	10	8	7	6	7	15	23	22	12	7	7	5	5	5	13.1	27.1	
30-Nov-05	5	5	6	6	4	6	A	10	10	8	6	7	7	6	10	13	15	17	14	13	11	11	8	5	8.8	16.6	
Hourly Avg	11.1	10.4	10.4	9.8	9.3	10.5	12.8	13.5	14.7	14.5	14.4	13.0	11.1	11.1	11.8	12.7	16.8	20.2	18.5	16.8	14.6	13.6	13.0	12.1			
Hourly Max	29.4	31.6	28.8	21.5	20.4	26.3	27.1	31.3	29.7	29.8	28.2	32.3	25.4	29.0	30.7	35.1	36.2	35.4	36.2	32.8	29.0	28.1	30.3	30.2			

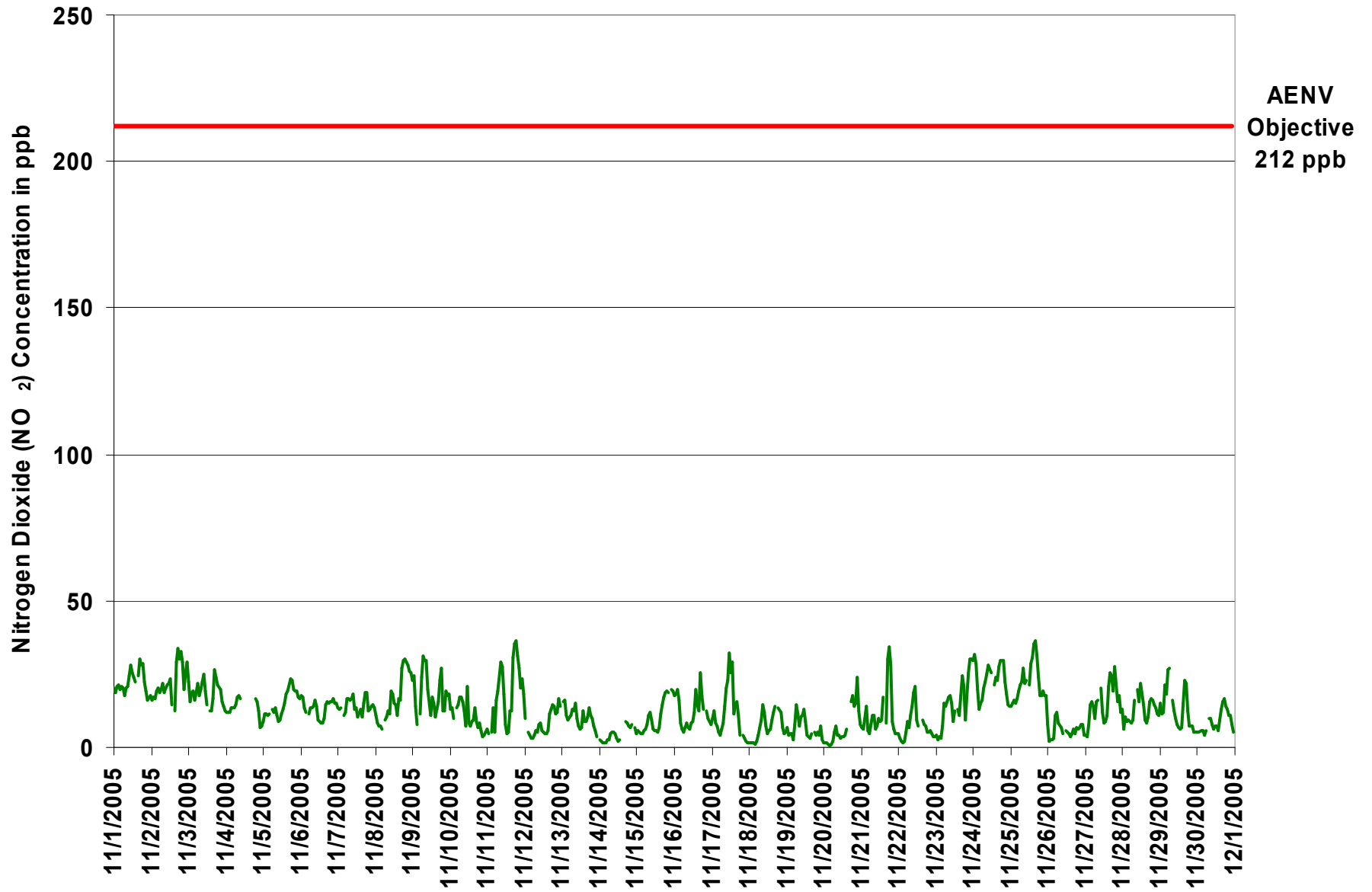


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

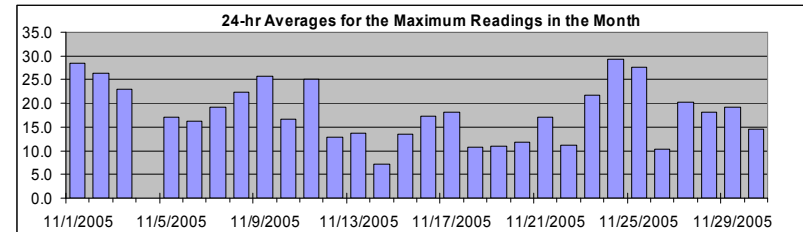
**Nitrogen Dioxide (NO<sub>2</sub>)**

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

**Summary**

Maximum 1-hr Value:	66.1	ppb	1-Nov	19:00 20:00
Maximum 24-hr Value:	29.4	ppb	24-Nov	

AIC Time:	31 hrs	Operational Time:	678 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	40.2	35.7	23.4	16.9	11.0	5.3	2.3	18.1 ppb	16.9 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	23	22	24	23	23	25	25	23	29	26	29	38	29	26	27	A	29	39	31	66	36	23	18	20	28.5	66.1
2-Nov-05	19	19	19	21	23	21	29	29	21	22	22	24	29	18	A	19	34	37	35	35	36	30	33	32	26.4	37.1
3-Nov-05	29	21	22	23	20	24	27	24	25	26	32	26	18	A	15	16	22	29	27	24	22	18	19	15	22.9	31.9
4-Nov-05	15	14	14	16	15	15	19	19	20	19	C	C	C	C	C	C	A	19	16	16	10	9			N	20.4
5-Nov-05	11	12	12	12	13	A	14	13	17	15	12	10	13	14	19	27	23	25	26	23	22	23	19	18	17.1	26.5
6-Nov-05	20	22	16	15	A	16	15	17	19	24	16	12	13	9	11	13	16	16	16	16	17	17	17	16	16.3	24.3
7-Nov-05	15	16	19	A	13	14	23	20	20	20	21	15	19	15	53	13	18	22	23	15	15	17	18	17	19.2	53.1
8-Nov-05	14	11	9	9	8	A	13	12	15	15	24	21	18	21	18	24	29	34	39	39	36	38	38	31	22.4	39.0
9-Nov-05	31	33	31	12	A	18	32	37	36	37	25	16	25	24	18	18	22	33	37	18	19	25	24	22	25.6	37.1
10-Nov-05	20	20	20	A	19	24	23	21	22	24	14	32	20	12	12	14	20	17	9	12	8	6	7	7	16.7	32.1
11-Nov-05	10	8	A	12	26	11	25	33	35	40	31	11	10	8	22	25	36	40	45	35	34	28	30	24	25.2	44.6
12-Nov-05	19	A	11	9	8	5	12	10	9	13	12	9	10	11	10	12	15	20	18	20	14	15	18	16	12.9	20.1
13-Nov-05	A	17	18	18	13	14	19	15	16	16	10	9	9	16	10	11	15	18	18	13	9	8	7	A	13.7	19.2
14-Nov-05	4	2	3	2	2	3	6	7	8	7	8	7	4	7	P	P	P	13	12	14	10	12	A	10	7.1	14.4
15-Nov-05	8	12	7	8	8	9	11	14	16	12	10	10	9	8	12	16	18	20	20	20	20	A	21	23	13.6	23.4
16-Nov-05	20	22	23	22	15	12	8	13	14	16	9	12	13	18	26	23	20	30	24	18	A	16	16	10	17.3	29.7
17-Nov-05	18	19	15	14	9	13	9	14	28	30	33	37	38	41	20	20	20	18	6	A	6	4	3	3	18.2	40.8
18-Nov-05	3	2	2	2	2	4	8	10	14	23	14	10	7	10	11	14	16	21	A	26	18	10	9	10	10.8	25.7
19-Nov-05	10	7	10	10	5	15	23	19	11	14	15	18	14	6	7	6	10	A	12	8	9	8	11	4	11.0	23.4
20-Nov-05	2	3	3	2	2	2	4	8	10	8	10	6	6	5	6	16	A	25	27	21	23	33	28	19	11.8	32.9
21-Nov-05	7	7	18	23	14	10	12	16	18	10	10	24	15	13	24	A	15	36	38	39	15	15	7	9	17.2	38.9
22-Nov-05	13	4	4	3	4	10	12	10	17	18	25	26	12	10	A	14	15	10	8	7	10	9	7	8	11.2	25.6
23-Nov-05	8	3	7	10	10	27	30	26	32	24	22	15	16	A	20	16	28	30	31	15	31	31	33	33	21.7	33.4
24-Nov-05	35	37	33	26	16	20	22	50	31	32	34	28	A	29	29	26	34	35	40	33	30	23	17	16	29.4	49.6
25-Nov-05	17	17	19	19	21	22	27	29	40	34	31	A	36	40	33	38	41	37	34	20	20	21	19	21	27.7	41.1
26-Nov-05	19	3	3	4	10	24	20	13	12	8	A	9	7	7	5	7	12	9	11	11	10	13	11	6	10.3	23.7
27-Nov-05	7	6	13	23	24	19	15	21	19	A	24	20	9	11	17	25	27	30	24	39	29	21	25	16	20.3	39.1
28-Nov-05	18	13	16	12	12	13	15	22	A	28	28	25	24	20	14	13	16	21	22	18	18	17	17	14	18.1	28.1
29-Nov-05	19	17	17	27	24	31	30	A	23	16	16	16	13	12	14	26	31	31	18	11	12	14	12	10	19.1	31.4
30-Nov-05	11	9	9	12	7	9	A	15	17	14	12	14	14	10	17	27	22	20	22	22	14	18	12	7	14.4	26.9
Hourly Avg	15.3	13.8	14.4	13.9	13.1	15.4	18.2	19.4	20.5	20.4	19.7	17.8	16.2	15.6	18.1	18.4	22.5	25.6	24.1	22.7	19.3	18.3	17.5	15.5		
Hourly Max	34.5	36.9	32.9	27.2	25.8	31.4	31.6	49.6	39.8	39.7	34.5	38.4	37.6	40.8	53.1	37.9	41.1	40.1	44.6	66.1	36.4	37.9	38.4	33.4		

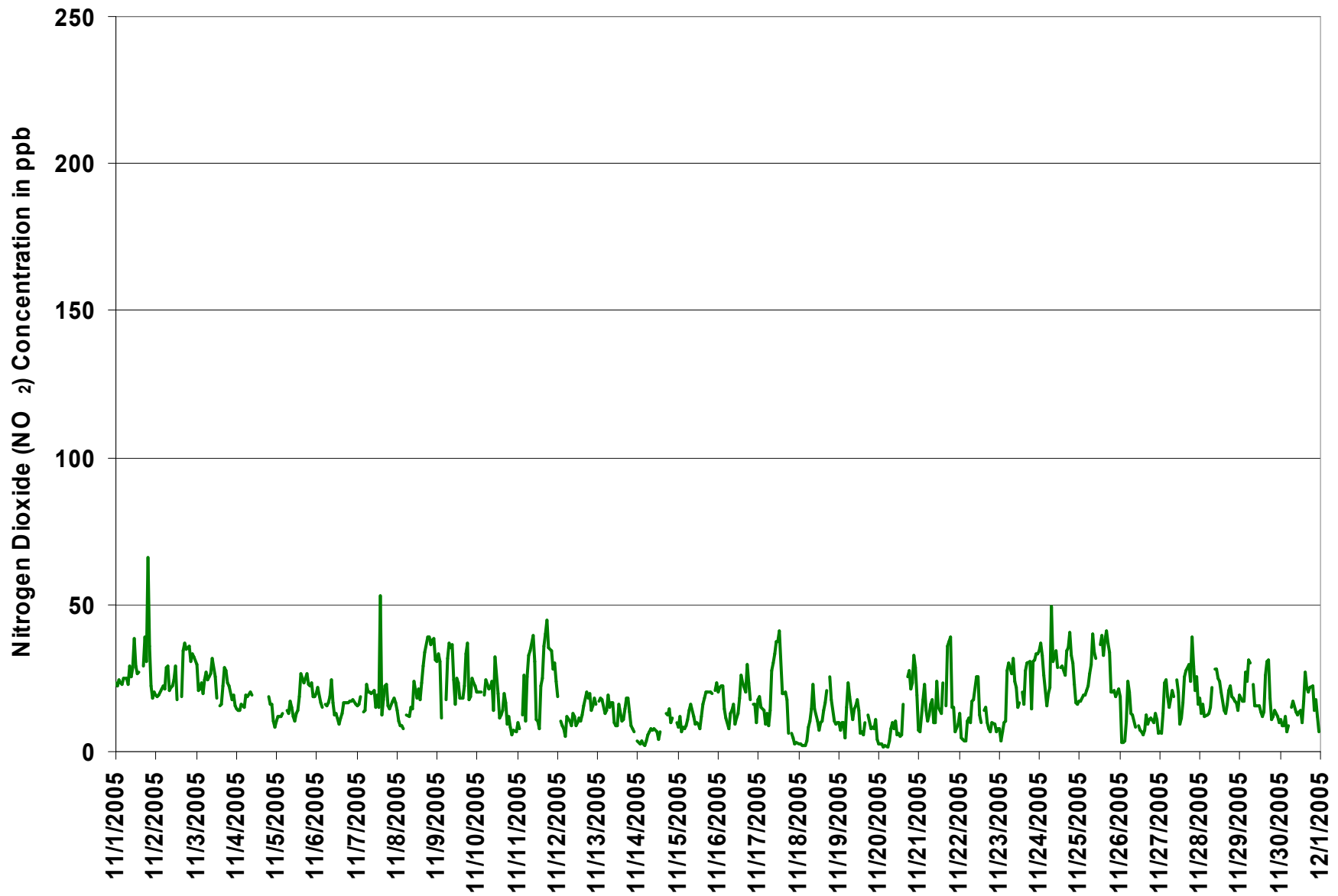
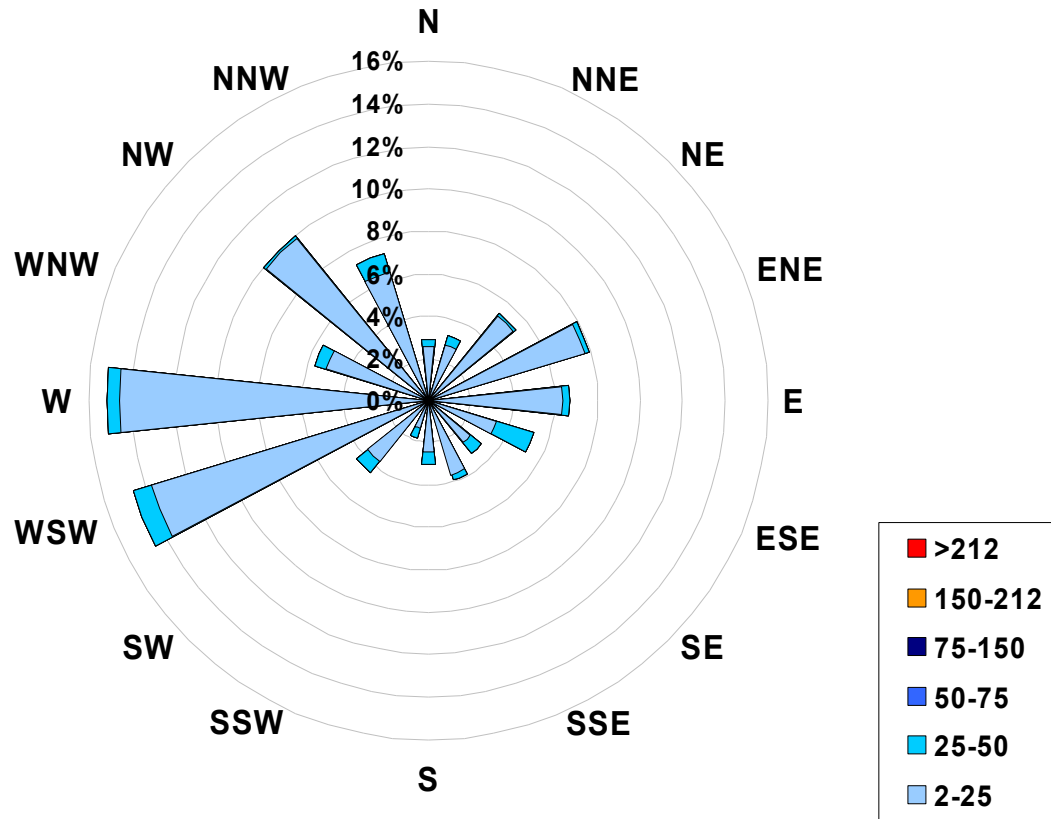


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range			
2.0	< 25		541
25	to 50		69
50	to 75		32
75	to 150		25
150	to 212		9
	> 212		2
Total Non-Zero Values			678

### PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

#### Nitric Oxide (NO)

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

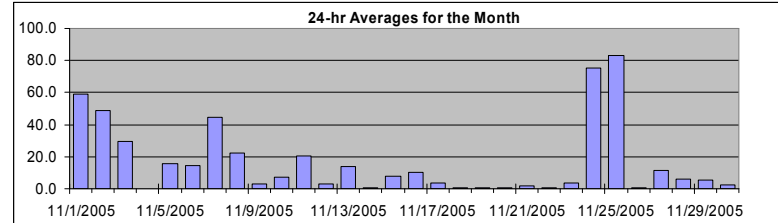
Guideline Limit: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	254.3	ppb	2-Nov	21:00 22:00
Maximum 24-hr Average:	83.2	ppb	25-Nov	

AIC Time:	31 hrs	Operational Time:	678 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	176.6	76.9	17.4	3.6	0.9	0.0	0.0	17.3 ppb	3.6 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Nov-05	56	48	17	17	39	62	92	140	185	147	111	62	31	22	17	A	9	35	23	45	66	56	44	34	59.1	185.1
2-Nov-05	13	16	31	21	14	18	51	86	100	48	33	43	39	10	A	4	22	21	13	29	104	254	141	9	48.7	254.3
3-Nov-05	3	2	2	9	13	20	33	79	148	187	65	34	12	A	6	5	5	16	12	11	9	6	5	4	29.8	187.2
4-Nov-05	4	3	4	7	4	4	6	12	17	13	C	C	C	C	C	C	C	C	A	27	25	59	68	29	N	67.9
5-Nov-05	15	13	5	2	9	A	11	22	40	32	29	21	20	16	13	18	12	21	22	10	11	14	4	4	15.8	39.8
6-Nov-05	5	13	12	8	A	3	4	43	54	49	26	7	6	5	3	3	6	4	5	11	14	19	17	18	14.5	54.0
7-Nov-05	16	29	56	A	39	42	74	87	62	61	65	30	35	17	19	9	28	57	75	32	30	36	66	68	44.8	87.4
8-Nov-05	37	17	22	15	17	A	48	49	62	39	78	32	21	12	4	6	2	4	8	13	9	7	4	2	22.1	77.8
9-Nov-05	1	1	1	0	A	1	2	6	7	13	4	2	4	5	2	2	2	4	7	0	0	2	1	1	2.9	12.8
10-Nov-05	0	0	0	A	1	1	30	65	49	6	1	6	2	1	2	2	2	1	1	1	1	0	0	0	7.4	65.1
11-Nov-05	0	0	A	0	1	0	1	2	7	17	11	3	2	2	4	3	17	64	120	77	55	35	38	10	20.4	119.9
12-Nov-05	4	A	1	1	1	1	2	1	1	2	3	3	3	3	3	3	3	4	5	6	3	3	11	4	3.0	11.2
13-Nov-05	A	5	8	4	2	16	37	50	63	34	13	7	8	20	7	6	4	5	4	3	2	2	1	A	13.7	63.4
14-Nov-05	0	0	0	0	0	0	1	1	2	2	2	2	1	1	P	P	P	1	1	1	0	1	A	1	0.9	2.4
15-Nov-05	1	1	1	1	1	1	2	4	4	4	4	4	5	4	5	9	7	10	11	28	21	A	21	34	8.0	34.0
16-Nov-05	54	52	48	7	1	1	0	1	1	2	2	3	3	5	11	7	4	17	5	2	A	1	1	0	10.0	54.5
17-Nov-05	0	1	0	0	0	0	0	1	2	7	10	17	8	22	2	2	2	1	0	A	0	0	0	0	3.4	22.0
18-Nov-05	0	0	0	0	0	0	0	0	1	3	3	2	1	1	1	1	1	1	A	0	0	0	0	0	0.8	3.3
19-Nov-05	0	0	0	0	0	0	0	1	1	1	2	5	3	1	1	1	1	A	0	1	1	0	0	0	0.8	4.8
20-Nov-05	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	1	1	1	1	3	1	0	0.6	3.0
21-Nov-05	0	0	0	0	0	0	0	1	2	1	1	3	3	2	4	A	1	4	12	9	0	0	0	0	1.9	11.9
22-Nov-05	0	0	0	0	0	0	1	1	1	1	4	5	2	1	A	1	1	1	1	0	1	1	0	0	0.9	4.9
23-Nov-05	0	0	0	0	0	1	1	2	3	4	5	3	4	A	4	2	2	5	3	1	3	5	19	13	3.4	18.7
24-Nov-05	54	36	40	31	11	21	38	45	114	149	164	85	A	26	30	28	81	200	152	132	140	69	46	40	75.3	199.7
25-Nov-05	34	36	43	51	54	79	78	109	230	192	135	A	36	46	30	76	158	195	174	74	49	24	6	4	83.2	230.1
26-Nov-05	0	0	0	0	0	2	2	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0.7	2.3
27-Nov-05	0	0	0	1	1	2	0	6	7	A	19	11	4	4	6	13	35	43	33	60	8	2	2	0	11.2	59.7
28-Nov-05	1	1	1	1	1	1	2	4	A	11	19	33	20	11	5	3	2	4	4	3	2	3	1	1	5.8	33.3
29-Nov-05	3	2	1	3	4	24	22	A	6	4	5	6	6	5	4	7	8	5	3	2	3	2	2	1	5.6	24.4
30-Nov-05	2	2	2	2	1	1	A	3	2	3	3	4	4	3	4	4	2	3	3	3	2	2	1	1	2.5	4.5
Hourly Avg	10.5	9.5	10.1	6.5	7.6	10.8	18.5	28.3	40.4	35.7	29.2	15.6	10.1	9.2	7.3	8.4	15.6	25.9	24.9	20.1	19.3	21.0	17.3	9.7		
Hourly Max	56.1	52.4	55.6	51.0	54.5	79.1	91.5	139.6	230.1	192.4	163.9	85.1	39.1	46.2	30.0	75.8	158.3	199.7	174.1	132.4	140.4	254.3	141.4	68.1		

Station: Henry Pirker  
 Station Owner: PASZA

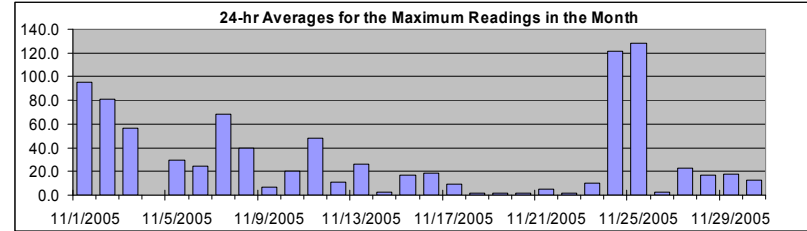
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitric Oxide (NO)**

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

**Summary**

Maximum 1-hr Value:	337.7	ppb	25-Nov	8:00 9:00
Maximum 24-hr Value:	127.8	ppb	25-Nov	



AIC Time:	31 hrs	Operational Time:	678 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	281.0	125.2	36.3	10.3	3.0	0.5	0.0	31.2 ppb	10.3 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Nov-05	63	62	38	32	52	79	122	256	220	194	140	123	50	27	23	A	18	112	38	214	115	83	71	57	95.1	255.5	
2-Nov-05	37	27	44	34	31	36	84	130	133	60	48	58	76	15	A	5	51	31	34	102	192	330	279	22	81.0	330.1	
3-Nov-05	6	3	7	18	25	44	58	117	274	287	148	103	22	A	10	10	10	33	32	25	20	17	18	18	56.7	286.8	
4-Nov-05	17	10	28	19	9	8	21	25	36	28	C	C	C	C	C	C	C	C	A	37	41	111	109	39	N	111.1	
5-Nov-05	22	17	10	4	20	A	32	31	60	57	42	26	26	23	21	41	18	36	70	27	26	51	9	11	29.6	69.6	
6-Nov-05	15	26	18	16	A	7	12	72	88	66	39	13	15	6	7	8	10	7	10	20	27	27	22	23	24.1	87.9	
7-Nov-05	32	43	78	A	52	55	103	125	95	82	82	46	52	34	69	14	68	85	105	54	44	73	92	90	68.3	125.2	
8-Nov-05	51	40	42	23	26	A	70	68	91	63	104	45	36	24	10	14	8	12	41	44	47	20	17	10	39.3	103.6	
9-Nov-05	3	3	2	1	A	1	7	13	13	27	7	3	9	10	4	4	4	10	18	1	1	5	5	3	6.8	26.6	
10-Nov-05	2	2	1	A	2	5	70	104	163	54	3	25	4	3	2	3	4	3	1	3	1	1	1	0	20.0	162.9	
11-Nov-05	1	1	A	0	3	9	5	11	23	51	31	5	5	3	10	13	49	125	218	216	94	153	56	24	48.1	217.7	
12-Nov-05	11	A	9	10	10	2	10	7	5	5	6	8	7	16	24	8	7	18	10	14	11	15	21	11	10.7	24.2	
13-Nov-05	A	11	22	23	6	24	62	74	75	87	23	14	15	40	9	16	8	13	21	17	3	15	2	A	26.5	86.7	
14-Nov-05	1	1	1	1	1	1	1	3	3	3	5	6	4	5	P	P	P	4	2	2	1	3	A	8	2.7	7.9	
15-Nov-05	10	7	6	18	2	5	4	10	8	7	8	9	10	8	16	18	17	21	23	47	41	A	32	55	16.5	54.9	
16-Nov-05	74	69	71	39	4	3	1	4	4	18	6	6	6	9	22	18	9	41	11	5	A	3	2	1	18.5	74.3	
17-Nov-05	2	3	2	1	1	1	2	2	13	20	21	29	39	66	4	4	3	2	1	A	1	1	0	0	9.4	65.5	
18-Nov-05	1	0	0	0	0	0	1	1	2	8	4	3	2	3	3	3	2	A	1	1	1	1	1	1	1.9	8.4	
19-Nov-05	1	0	0	0	0	1	1	2	1	2	5	8	5	2	2	2	1	A	2	1	1	1	1	0	1.8	7.9	
20-Nov-05	1	0	0	0	0	0	0	1	1	1	3	2	2	2	1	4	A	2	5	2	1	8	6	0	2.0	7.9	
21-Nov-05	0	0	6	1	1	1	1	2	5	3	3	12	6	5	8	A	3	9	31	23	5	1	1	1	5.4	31.0	
22-Nov-05	0	0	0	0	1	1	1	1	2	2	8	8	3	2	A	2	2	1	1	1	2	2	1	1	1.8	7.9	
23-Nov-05	1	1	1	6	1	4	4	4	15	9	11	5	7	A	8	4	8	15	6	3	13	22	52	42	10.5	51.9	
24-Nov-05	84	53	67	61	19	60	94	119	171	191	242	139	A	53	59	62	137	288	276	203	190	96	66	56	121.1	287.5	
25-Nov-05	46	56	57	62	77	99	100	178	338	293	216	A	83	88	38	103	242	316	297	108	77	36	14	14	127.8	337.7	
26-Nov-05	5	0	0	0	1	11	7	3	2	2	A	2	2	2	2	2	2	2	6	2	1	1	1	1	2.6	11.0	
27-Nov-05	1	1	0	6	5	8	1	24	31	A	41	31	6	6	21	21	59	66	51	104	27	5	7	2	22.8	104.0	
28-Nov-05	7	9	2	1	2	5	10	15	A	28	73	58	39	25	14	8	7	15	19	8	6	16	10	3	16.6	73.4	
29-Nov-05	20	8	5	8	12	47	36	A	22	9	17	28	27	22	19	19	18	12	8	8	13	15	15	19	17.7	47.3	
30-Nov-05	13	13	23	23	6	5	A	15	10	18	14	26	8	9	9	20	9	10	17	15	8	19	5	3	13.0	26.3	
Hourly Avg	18.2	16.0	18.6	14.6	13.2	18.7	31.8	48.8	65.6	57.8	48.2	30.0	20.3	18.8	16.0	16.5	28.7	46.2	48.4	45.1	34.8	39.0	31.6	17.8			
Hourly Max	84.0	68.7	77.6	62.0	77.3	98.6	121.8	255.5	337.7	292.7	242.4	138.5	82.6	88.4	68.6	103.3	242.2	316.2	297.2	216.0	192.2	330.1	279.3	90.0			

### PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

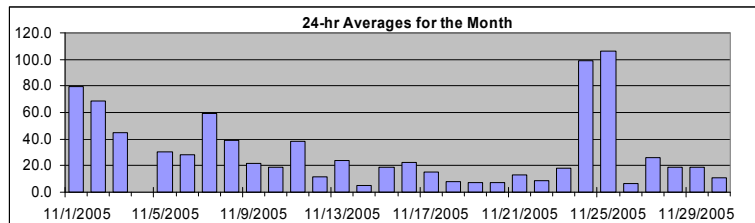
#### Oxides of Nitrogen (NO<sub>x</sub>)

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

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

Maximum 1-hr Average:	276.6	ppb	2-Nov	21:00 22:00
Maximum 24-hr Average:	106.0	ppb	25-Nov	

AIC Time:	31 hrs	Operational Time:	678 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	201.0	99.3	36.6	16.4	8.4	3.3	1.7	30.3 ppb	16.4 ppb



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	74	64	35	35	56	81	111	157	206	168	135	88	54	44	37	A	30	63	49	71	87	73	57	49	79.3	206.3	
2-Nov-05	26	30	44	37	31	33	68	107	117	66	51	62	60	21	A	12	48	52	40	59	132	277	167	35	68.4	276.6	
3-Nov-05	22	13	17	25	26	36	52	95	168	211	87	51	22	A	14	13	18	39	32	28	25	18	15	12	45.1	210.5	
4-Nov-05	12	10	12	16	14	14	17	25	31	26	C	C	C	C	C	C	C	C	A	45	41	72	75	37	N	75.2	
5-Nov-05	24	24	17	13	20	A	24	34	53	43	38	31	31	29	28	36	31	44	45	30	30	34	21	20	30.5	53.3	
6-Nov-05	23	30	25	20	A	14	18	57	69	65	40	17	15	13	12	13	21	20	20	26	29	36	32	34	28.3	68.5	
7-Nov-05	30	42	70	A	50	55	92	104	79	78	84	43	49	28	32	19	43	76	94	45	43	50	81	82	59.5	104.4	
8-Nov-05	48	26	29	22	24	A	58	60	75	50	98	51	37	27	15	23	18	31	37	43	38	35	31	28	39.3	97.6	
9-Nov-05	25	25	15	8	A	13	27	38	37	43	24	13	22	20	13	16	18	27	34	13	13	22	19	20	22.0	43.1	
10-Nov-05	14	14	10	A	15	16	47	83	65	19	9	27	10	9	11	12	16	10	8	10	6	4	4	5	18.5	83.0	
11-Nov-05	7	5	A	5	14	5	17	21	37	45	29	11	7	7	17	15	48	100	157	109	83	55	62	28	38.4	157.1	
12-Nov-05	14	A	6	5	4	4	6	6	10	11	8	8	8	8	8	9	15	17	19	20	15	15	28	18	11.3	27.9	
13-Nov-05	A	21	24	15	11	27	50	62	79	44	21	14	15	32	16	15	15	18	15	13	9	7	4	A	24.0	78.9	
14-Nov-05	3	2	2	2	2	3	3	6	7	7	7	5	3	4	P	P	P	10	9	8	7	9	A	8	5.4	10.1	
15-Nov-05	5	7	5	6	7	8	10	14	16	13	11	10	11	10	12	21	22	27	31	48	40	A	41	53	18.6	53.4	
16-Nov-05	72	71	67	24	9	7	6	8	10	9	8	12	12	17	31	22	16	43	23	15	A	14	11	8	22.4	72.5	
17-Nov-05	10	13	9	8	5	4	7	9	17	27	34	50	33	51	14	17	17	12	4	A	5	3	2	2	15.4	51.2	
18-Nov-05	2	2	1	1	1	2	4	7	10	17	15	9	6	7	8	11	13	15	A	14	13	7	5	5	7.7	17.5	
19-Nov-05	7	4	5	5	2	8	15	12	8	12	13	18	12	6	5	3	5	A	6	5	6	5	7	3	7.4	18.1	
20-Nov-05	2	2	2	1	1	1	2	5	8	5	5	4	5	5	5	8	A	17	19	15	16	27	13	8	7.6	27.1	
21-Nov-05	7	6	10	14	6	5	8	12	13	8	8	14	12	12	21	A	10	34	46	37	9	7	5	5	13.4	46.4	
22-Nov-05	5	3	2	2	2	6	9	7	12	15	22	26	11	9	A	11	9	8	6	6	6	6	4	4	8.3	25.9	
23-Nov-05	4	3	4	3	7	16	15	17	21	22	20	12	17	A	17	13	20	29	23	10	20	30	49	44	18.1	49.2	
24-Nov-05	84	68	69	51	24	36	54	66	137	175	193	111	A	47	54	51	110	231	183	163	164	87	60	54	98.9	231.0	
25-Nov-05	48	51	59	66	72	99	100	132	259	216	159	A	58	75	61	112	196	228	199	93	67	44	24	21	106.0	258.8	
26-Nov-05	8	2	2	2	3	13	14	9	7	5	A	7	7	6	5	6	7	5	8	7	7	8	8	5	6.6	13.9	
27-Nov-05	4	4	8	15	17	16	10	21	23	A	40	23	12	13	17	34	61	68	52	88	29	18	19	13	26.3	87.8	
28-Nov-05	14	7	11	9	10	9	11	20	A	31	34	55	38	26	14	11	12	20	21	19	17	16	13	12	18.7	55.5	
29-Nov-05	17	13	13	25	22	51	49	A	22	17	14	14	13	11	11	22	31	26	15	9	10	9	7	7	18.5	50.7	
30-Nov-05	7	7	7	7	5	7	A	13	12	11	9	11	11	8	14	18	18	20	17	16	13	13	9	4	11.2	19.5	
Hourly Avg	21.3	19.6	20.0	15.8	16.5	21.0	31.2	41.7	55.3	50.3	43.6	28.4	21.1	20.1	18.9	20.9	32.1	46.1	43.3	36.7	33.8	34.5	30.2	21.5			
Hourly Max	84.1	71.0	69.6	66.3	71.6	99.2	110.7	156.9	258.8	215.8	193.3	111.3	59.9	75.0	60.9	111.6	195.7	231.0	199.4	163.0	164.0	276.6	166.7	82.1			

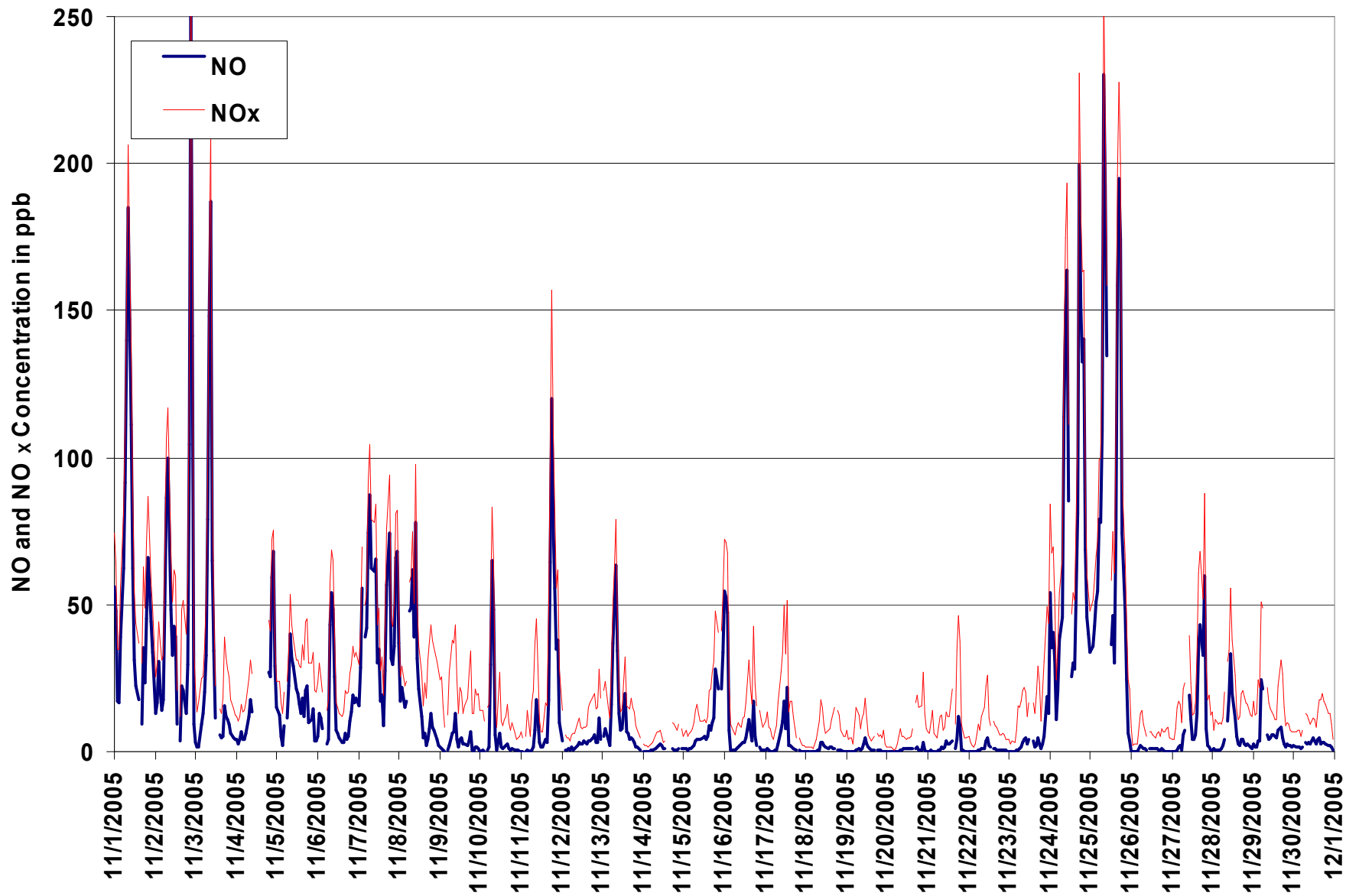


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

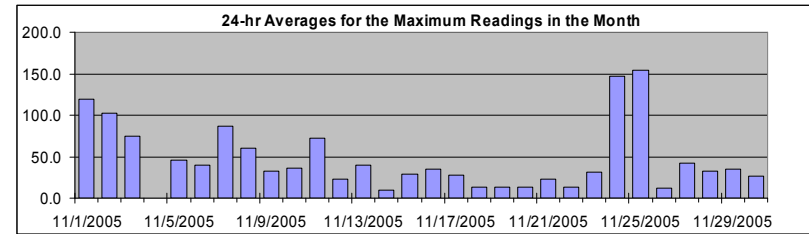
**Oxides of Nitrogen (NO<sub>x</sub>)**

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

**Summary**

Maximum 1-hr Value:	372.0	ppb	25-Nov	8:00 9:00
Maximum 24-hr Value:	154.2	ppb	25-Nov	

AIC Time:	31 hrs	Operational Time:	678 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	309.7	153.1	56.9	29.0	16.0	7.0	2.5	48.1 ppb	29.0 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	81	81	50	52	70	96	139	276	243	216	164	161	75	49	47	A	44	146	65	283	142	100	86	72	119.1	282.7
2-Nov-05	53	43	59	50	46	54	111	158	152	79	67	80	103	29	A	20	82	65	65	127	213	351	300	51	102.5	351.1
3-Nov-05	32	19	24	32	37	65	79	135	299	311	179	127	37	A	20	20	26	58	55	43	38	30	32	26	74.9	310.8
4-Nov-05	27	19	37	31	21	20	31	38	50	42	C	C	C	C	C	C	C	A	55	57	123	118	47	N	123.3	
5-Nov-05	30	29	22	15	33	A	46	44	77	72	54	36	39	37	39	61	41	61	92	49	43	70	27	29	45.5	92.0
6-Nov-05	34	44	34	29	A	23	26	85	103	88	55	25	27	15	17	20	26	23	25	36	45	45	38	39	39.3	102.8
7-Nov-05	44	55	97	A	65	69	125	146	114	102	103	61	71	49	122	26	86	104	128	70	57	90	107	104	86.7	145.6
8-Nov-05	62	49	50	32	32	A	81	80	103	77	127	63	54	45	25	38	36	46	79	80	84	58	52	41	60.7	127.0
9-Nov-05	34	36	33	12	A	19	39	50	49	64	32	20	35	33	23	26	44	55	19	19	30	28	25	25	32.6	63.9
10-Nov-05	22	22	22	A	22	30	93	120	185	79	16	57	25	15	15	18	24	20	11	15	9	6	9	7	36.7	185.2
11-Nov-05	10	8	A	13	28	20	28	43	57	91	62	16	16	11	32	38	85	162	258	251	120	177	84	44	71.9	258.5
12-Nov-05	28	A	19	18	18	7	22	14	14	18	17	17	16	22	34	21	22	39	27	33	24	30	39	27	22.9	38.8
13-Nov-05	A	27	40	41	19	38	81	86	92	103	33	22	23	56	20	27	21	31	32	31	12	22	9	A	39.5	102.9
14-Nov-05	4	3	4	3	3	4	7	9	11	10	13	12	7	12	P	P	P	16	14	17	10	14	A	18	9.5	17.5
15-Nov-05	17	15	12	27	10	13	15	23	22	19	17	19	15	25	34	33	41	43	67	61	A	52	79	29	29.3	78.5
16-Nov-05	94	90	93	61	17	14	9	16	17	34	15	17	19	27	47	41	28	71	33	22	A	20	17	11	35.4	93.9
17-Nov-05	20	21	17	15	10	14	11	15	41	50	55	66	77	106	24	24	24	20	7	A	7	5	3	3	27.5	105.8
18-Nov-05	3	3	2	2	2	4	9	12	16	31	19	14	10	13	14	17	20	23	A	28	19	11	10	10	12.7	31.4
19-Nov-05	10	8	10	10	5	15	25	21	12	17	21	26	19	9	9	8	12	A	14	9	10	9	12	5	12.7	26.0
20-Nov-05	3	3	3	2	2	2	4	8	11	9	13	7	9	7	7	20	A	27	33	24	25	41	32	20	13.6	41.1
21-Nov-05	8	7	24	23	14	11	13	17	23	12	13	36	21	18	32	A	19	43	68	61	20	16	7	10	22.5	68.1
22-Nov-05	13	5	4	4	4	11	13	11	20	20	34	33	14	12	A	16	16	11	9	8	12	11	8	8	12.9	33.6
23-Nov-05	8	4	7	16	11	32	34	31	47	33	33	21	24	A	27	19	35	43	37	18	44	51	85	69	31.6	85.1
24-Nov-05	113	84	96	81	31	79	113	143	201	225	270	167	A	81	89	88	172	320	309	233	220	116	79	68	146.9	319.7
25-Nov-05	59	73	73	81	99	120	123	206	372	327	247	A	120	126	68	141	281	351	331	126	95	57	32	36	154.2	372.0
26-Nov-05	24	3	3	4	11	35	28	16	14	10	A	11	9	9	7	10	14	12	13	12	10	13	12	7	12.5	34.9
27-Nov-05	7	7	13	26	29	25	17	43	51	A	65	51	16	17	38	46	85	91	74	141	56	24	32	18	42.3	140.7
28-Nov-05	19	20	17	12	14	15	22	35	A	56	100	83	63	45	28	21	21	35	41	26	22	29	21	15	33.1	100.4
29-Nov-05	38	24	19	35	34	76	65	A	37	24	32	43	40	33	32	45	48	43	24	18	23	30	23	24	35.2	76.4
30-Nov-05	24	20	30	35	13	13	A	30	25	31	26	39	22	19	23	44	27	29	39	37	20	37	16	9	26.4	43.7
Hourly Avg	31.8	28.3	31.6	27.2	25.0	33.0	48.6	66.0	84.7	77.6	67.2	47.6	36.1	33.7	33.2	34.0	50.2	70.5	70.9	66.8	52.3	55.7	47.2	31.7		
Hourly Max	113.1	90.0	97.0	81.5	98.7	120.4	139.4	275.8	372.0	327.2	269.8	166.8	119.9	125.8	122.2	141.4	281.0	351.4	331.3	282.7	220.3	351.1	299.8	103.7		

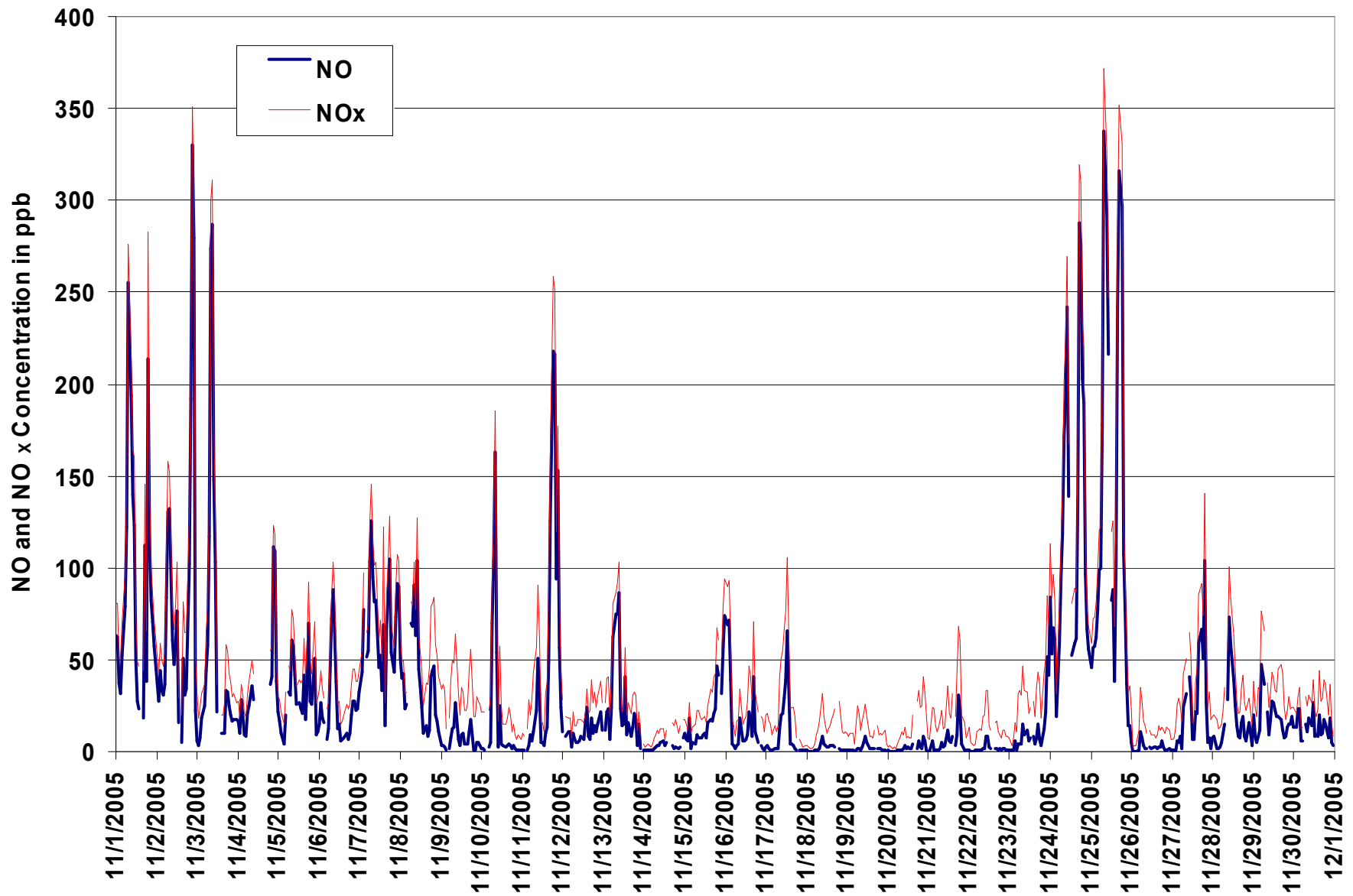


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

### PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

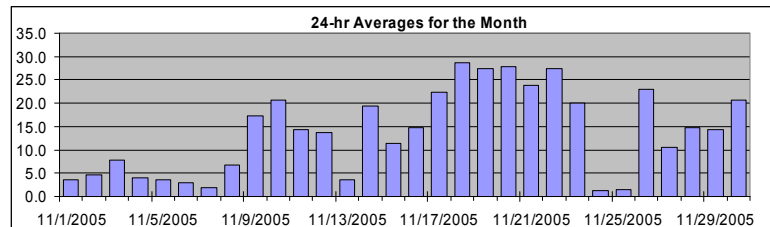
#### HOURLY AVERAGE TABLE

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

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

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

Number of 1-hr Exceedances:	0		
Maximum 1-hr Average:	35.1 ppb	20-Nov	3:00 4:00
Maximum 24-hr Average:	28.7 ppb	18-Nov	



AIC Time:	31 hrs	Operational Time:	683 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	33.9	31.4	22.4	14.4	2.5	0.1	0.0	13.8 ppb	14.4 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Nov-05	0	0	0	0	0	1	1	2	2	3	4	9	13	15	14	A	10	2	2	3	1	1	0	1	3.6	14.9	
2-Nov-05	0	1	0	1	1	0	1	1	1	1	4	4	12	22	A	28	8	5	6	2	1	4	2	3	4.7	27.6	
3-Nov-05	9	16	11	1	0	0	0	0	1	2	5	9	17	A	23	21	16	5	5	5	6	9	10	10	7.9	23.1	
4-Nov-05	8	7	7	4	4	4	4	1	1	4	9	8	7	7	6	7	5	1	0	0	1	1	0	1	4.1	8.8	
5-Nov-05	0	0	0	1	1	A	0	0	1	2	4	7	9	12	12	6	5	1	1	4	3	4	6	5	3.6	11.7	
6-Nov-05	3	1	0	0	A	5	4	0	0	2	4	7	7	8	9	8	2	1	1	1	1	1	1	1	2.9	9.4	
7-Nov-05	1	1	1	A	2	1	2	1	C	C	C	A	4	7	6	7	2	0	0	0	0	0	0	0	1.9	7.2	
8-Nov-05	0	0	0	0	0	A	0	0	1	1	2	7	10	14	21	16	17	11	9	7	9	9	10	11	6.8	20.7	
9-Nov-05	14	13	21	26	A	22	13	7	7	7	16	24	19	22	27	24	22	14	10	23	20	15	16	15	17.2	26.9	
10-Nov-05	19	19	20	A	17	16	4	0	2	9	22	10	27	28	26	26	22	28	30	27	30	31	32	30	20.7	31.7	
11-Nov-05	27	28	A	29	19	28	17	13	5	8	17	26	29	30	22	22	5	0	1	1	0	0	1	3	14.4	29.7	
12-Nov-05	12	A	17	19	20	21	20	18	18	16	16	18	19	19	17	16	12	9	7	6	8	6	0	2	13.8	21.0	
13-Nov-05	A	1	0	2	3	0	0	0	0	1	2	5	5	3	5	3	6	6	6	5	8	9	11	A	3.6	11.1	
14-Nov-05	17	18	20	20	20	19	20	19	19	19	20	21	23	22	P	P	P	17	18	19	19	16	A	20	19.3	23.0	
15-Nov-05	20	18	20	19	16	16	14	13	12	14	16	16	15	15	14	9	6	3	2	2	1	A	1	1	11.4	19.8	
16-Nov-05	1	1	1	6	18	22	23	22	21	22	23	21	20	17	9	16	17	3	8	12	A	16	18	20	14.8	22.8	
17-Nov-05	16	14	18	19	25	29	28	26	19	13	14	7	12	8	26	24	23	27	33	A	33	33	33	33	22.4	33.3	
18-Nov-05	34	34	34	35	35	34	32	30	26	20	22	29	31	31	31	28	25	21	A	21	22	28	28	27	28.7	34.9	
19-Nov-05	23	27	27	27	30	25	20	22	27	24	24	22	27	31	33	34	33	A	30	31	29	30	26	31	27.5	33.9	
20-Nov-05	34	34	34	35	35	34	33	30	27	28	30	32	32	32	32	28	A	19	17	20	18	10	21	26	27.8	35.1	
21-Nov-05	27	30	23	17	28	29	26	22	22	29	28	25	26	27	19	A	30	8	3	8	25	30	31	31	23.7	31.4	
22-Nov-05	29	33	33	33	33	29	26	29	24	20	16	15	26	28	A	27	28	28	30	29	27	28	30	28	27.3	33.4	
23-Nov-05	29	31	28	30	26	17	19	19	18	15	20	28	25	A	25	27	19	11	16	28	17	8	1	2	20.0	30.5	
24-Nov-05	1	1	0	0	0	0	0	0	1	1	1	1	2	A	7	5	3	1	2	1	1	1	0	0	1.3	7.3	
25-Nov-05	0	0	0	0	1	0	1	1	2	1	1	A	6	6	6	2	1	1	1	0	0	0	1	4	1.5	5.9	
26-Nov-05	16	26	25	24	24	15	15	20	22	24	A	24	23	26	26	24	25	26	26	27	24	21	20	25	22.9	27.3	
27-Nov-05	26	26	21	14	8	7	12	4	1	A	5	10	17	20	19	8	1	0	0	0	4	14	12	14	10.5	26.1	
28-Nov-05	16	24	20	21	19	19	17	9	A	8	12	6	8	12	18	20	19	12	11	11	13	13	17	17	14.7	23.9	
29-Nov-05	11	16	17	7	9	0	1	A	10	13	17	20	21	22	23	14	8	10	18	20	18	18	19	17	14.2	22.5	
30-Nov-05	18	18	18	18	19	19	A	18	19	21	24	24	24	26	24	21	19	18	20	20	21	20	23	25	20.7	26.1	
Hourly Avg	14.2	15.1	14.4	14.6	14.7	14.8	12.1	11.4	11.1	11.7	13.5	15.5	17.7	18.5	18.5	17.4	13.7	10.0	10.7	11.4	12.4	12.9	12.8	13.9			
Hourly Max	33.9	34.5	34.4	35.1	35.0	34.0	33.3	30.2	27.2	29.2	29.8	32.0	32.2	32.4	33.2	33.9	32.6	28.4	33.3	30.6	32.6	32.8	33.3	33.3			



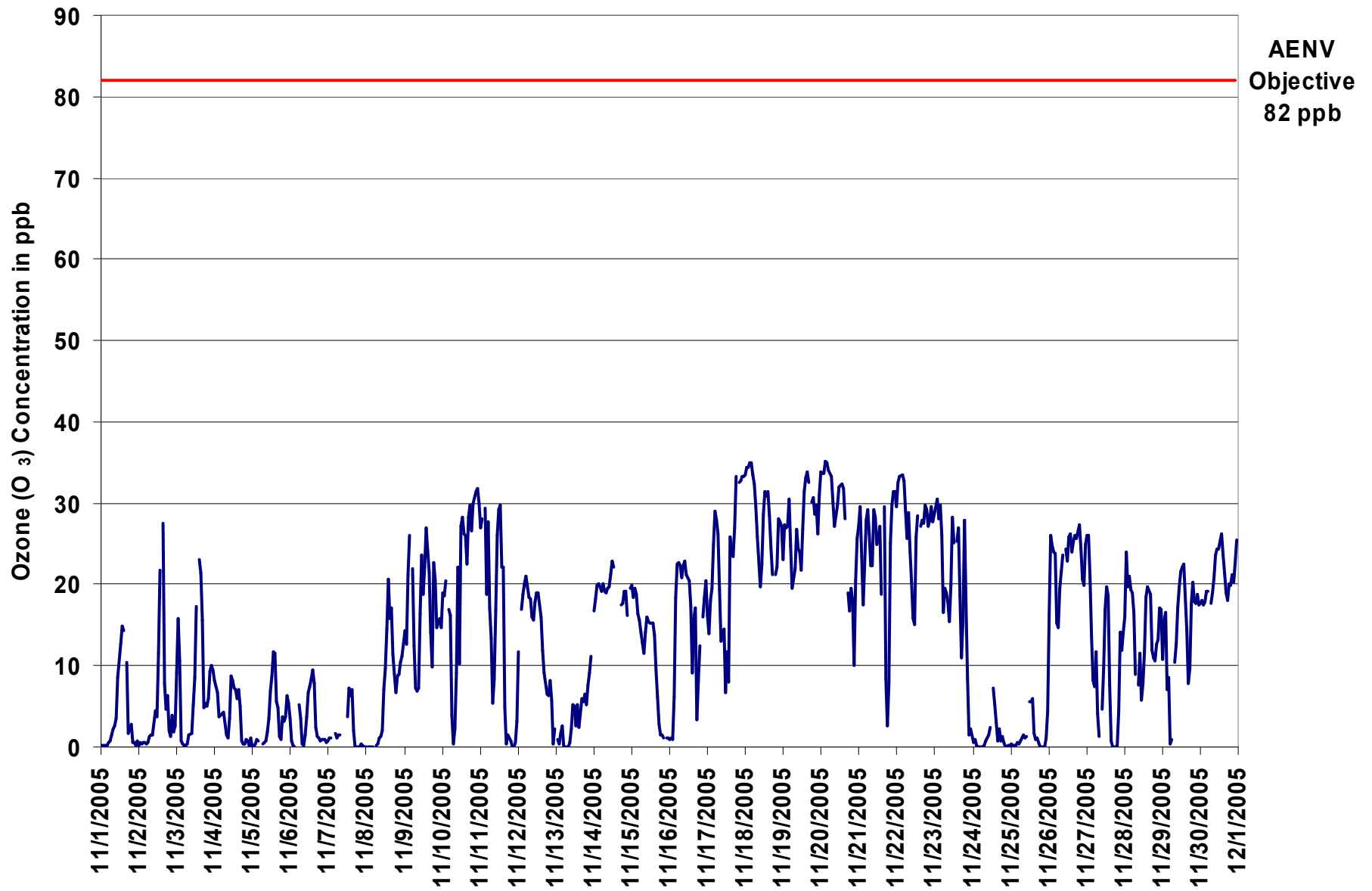


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

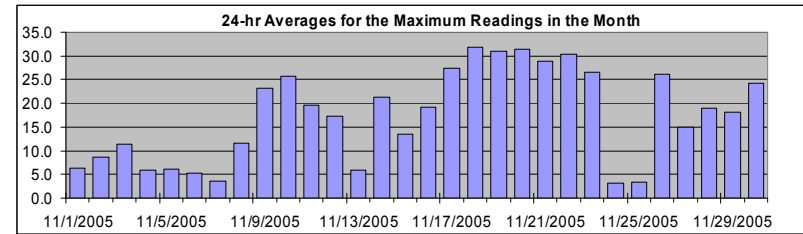
**Ozone (O<sub>3</sub>)**

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

**Summary**

Maximum 1-hr Value:	36.4	ppb	10-Nov	20:00 21:00
Maximum 24-hr Value:	31.7	ppb	18-Nov	

AIC Time:	31 hrs	Operational Time:	683 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	35.6	34.0	27.0	19.7	6.2	1.4	0.8	17.4 ppb	19.7 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	1	2	2	1	1	2	2	4	4	4	5	14	18	19	16	A	17	7	6	9	3	2	2	4	6.3	19.3
2-Nov-05	3	2	2	2	3	1	2	4	3	3	9	7	21	31	A	32	20	13	16	7	4	9	3	5	8.7	32.3
3-Nov-05	16	20	17	3	2	1	3	3	6	3	9	16	22	A	27	26	22	8	7	7	9	11	12	12	11.3	26.7
4-Nov-05	10	9	8	6	5	6	6	3	3	6	12	11	9	9	8	9	8	2	2	2	2	2	1	3	6.0	12.5
5-Nov-05	2	1	1	3	2	A	2	1	2	4	6	9	11	14	17	9	8	2	2	10	8	9	10	7	6.1	16.7
6-Nov-05	7	4	2	1	A	8	6	4	2	4	7	11	10	11	12	11	5	2	3	2	2	2	2	2	5.2	11.9
7-Nov-05	2	2	2	A	5	3	3	3	C	C	C	A	6	9	10	10	7	1	1	1	0	1	1	1	3.6	10.0
8-Nov-05	1	1	1	1	1	A	1	2	3	2	4	10	14	22	25	22	23	17	24	23	16	22	17	17	11.6	24.5
9-Nov-05	22	22	28	29	A	25	18	13	13	17	21	27	24	30	31	30	27	21	23	26	24	21	23	21	23.3	30.7
10-Nov-05	28	22	25	A	22	21	16	2	8	17	30	17	31	32	30	30	27	33	32	31	36	34	34	32	25.7	36.4
11-Nov-05	29	31	A	32	28	31	25	22	12	15	25	29	34	33	29	31	15	2	5	6	2	3	5	9	19.6	33.8
12-Nov-05	22	A	21	21	24	23	22	22	21	19	19	21	22	21	19	24	15	12	9	10	10	8	6	5	17.3	23.8
13-Nov-05	A	5	3	5	6	0	0	1	1	2	5	7	6	5	10	4	9	9	10	7	10	11	14	A	5.9	13.6
14-Nov-05	17	20	21	21	21	20	22	20	21	21	21	23	26	24	P	P	P	20	21	22	21	18	A	22	21.2	25.5
15-Nov-05	21	21	21	20	18	17	16	15	15	16	18	18	17	17	16	15	9	6	2	2	2	A	2	2	13.4	21.4
16-Nov-05	3	3	2	13	25	25	25	26	25	24	24	24	24	23	14	22	25	15	16	17	A	19	23	24	19.1	26.1
17-Nov-05	22	19	22	22	32	32	31	29	27	21	21	14	18	25	30	27	32	33	35	A	35	34	34	35	27.4	35.2
18-Nov-05	35	36	35	36	36	36	35	33	31	26	26	32	33	34	35	33	28	26	A	29	26	31	31	30	31.7	35.9
19-Nov-05	26	30	29	30	33	30	24	30	30	30	27	30	30	34	35	35	36	A	34	33	32	32	32	33	31.1	36.0
20-Nov-05	35	35	35	36	36	36	35	32	29	30	32	35	35	35	34	33	A	24	23	23	25	27	28	31	31.4	36.4
21-Nov-05	28	31	32	23	34	32	30	25	27	32	32	32	30	31	25	A	33	25	7	20	32	34	34	35	28.9	35.2
22-Nov-05	32	35	35	35	35	32	30	32	27	24	21	23	28	31	A	32	32	29	32	32	30	31	31	30	30.4	35.2
23-Nov-05	32	32	31	33	31	25	31	28	29	21	25	32	29	A	30	32	27	18	27	33	30	21	7	10	26.6	33.2
24-Nov-05	2	4	1	1	2	2	1	2	2	2	3	4	A	9	9	6	3	7	3	4	2	1	1	1	3.2	9.2
25-Nov-05	2	1	1	1	3	1	2	3	5	3	3	A	8	8	8	5	2	2	3	1	1	1	4	10	3.3	9.7
26-Nov-05	25	27	26	25	26	22	20	23	25	26	A	26	26	28	28	26	28	29	31	30	27	27	24	27	26.2	31.0
27-Nov-05	29	28	24	19	12	15	15	10	6	A	7	15	20	22	22	18	5	1	1	2	13	18	20	21	14.9	28.8
28-Nov-05	24	26	23	23	21	23	21	14	A	14	17	12	13	17	22	24	23	15	16	14	16	16	21	21	18.9	26.1
29-Nov-05	13	21	22	13	16	2	3	A	13	19	20	23	24	26	25	20	13	18	24	23	22	21	21	20	18.2	26.0
30-Nov-05	20	20	19	20	22	22	A	21	25	24	27	27	28	29	28	27	27	22	25	24	24	24	27	28	24.3	28.9
Hourly Avg	17.6	17.6	17.0	17.1	17.8	17.6	15.3	14.8	14.8	15.2	17.0	19.5	21.2	22.5	22.0	22.0	18.8	14.4	15.2	15.4	15.9	16.9	16.2	17.1		
Hourly Max	35.3	35.8	35.4	36.4	36.3	35.6	34.8	32.7	31.3	32.3	32.2	35.0	34.8	34.9	34.7	35.5	36.0	32.7	35.2	33.2	36.4	34.1	34.1	35.2		

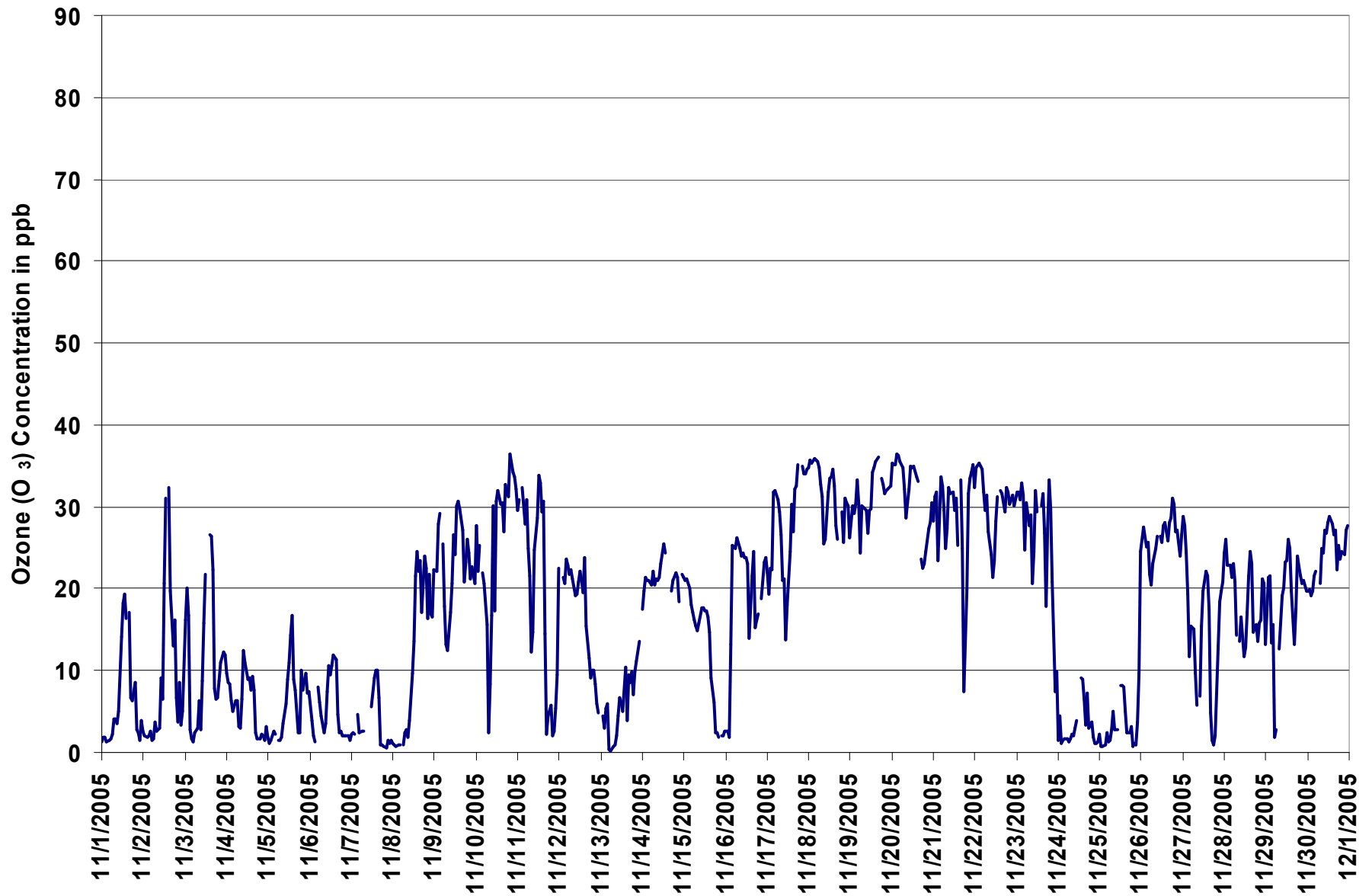
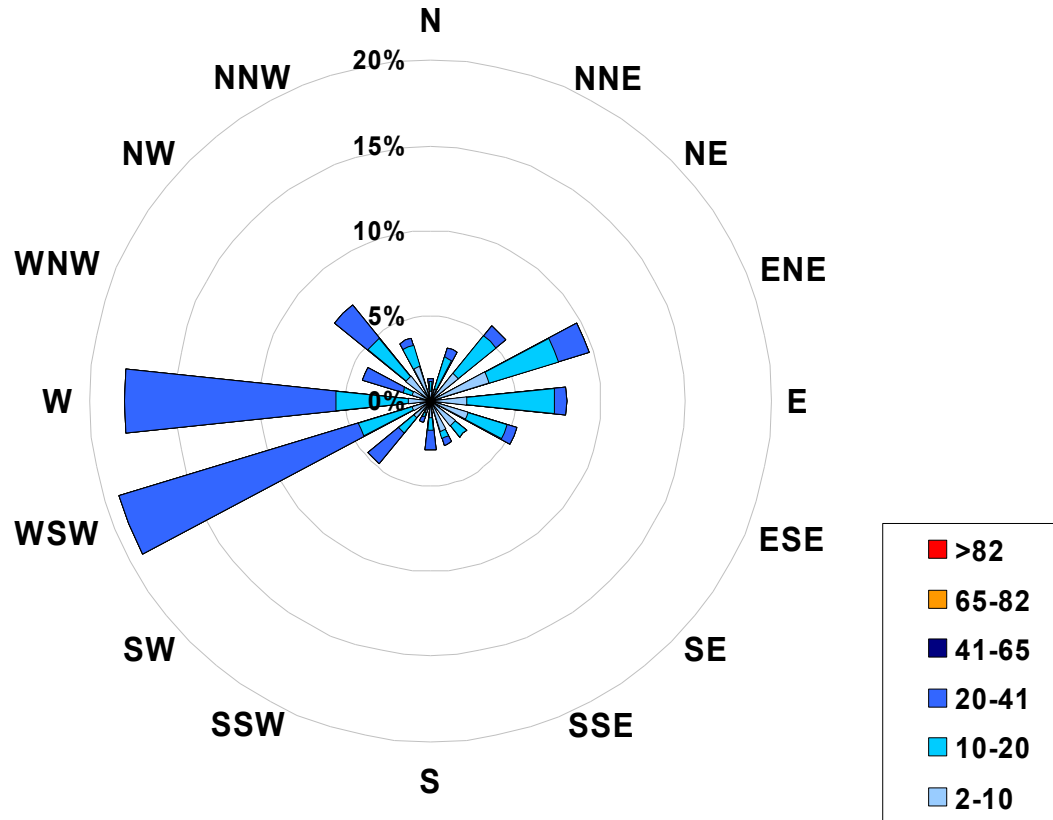


Figure 8. PASZA - Henry Pirker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	295
10	to	20	171
20	to	41	217
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			683

### PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

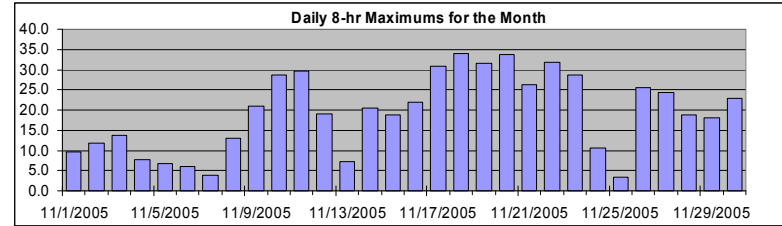
#### EIGHT HOUR RUNNING AVERAGE TABLE

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

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

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

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	34.1	ppb	18-Nov	5:00	6:00		



Percentile	99	95	75	50	25	5	1
	33.5	30.2	21.2	13.8	4.4	0.5	0.1

#### Status Flag Characters

C	Calibration	A	AIC - Zero / Span Check
S	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
1-Nov-05	9	8	6	4	3	2	2	0	1	1	1	3	4	6	8	8	10	9	9	8	7	5	3	2	9.5	
2-Nov-05	1	1	1	0	0	0	1	1	1	1	1	2	3	6	7	10	11	12	12	12	10	8	7	4	11.9	
3-Nov-05	4	5	6	6	6	5	5	5	4	2	1	2	4	5	8	11	13	14	14	13	12	11	10	8	13.8	
4-Nov-05	7	8	8	8	7	7	6	5	4	4	4	4	5	5	5	6	7	6	5	4	3	3	2	1	7.8	
5-Nov-05	1	0	0	1	1	0	1	0	1	1	1	2	3	4	6	6	7	7	6	6	5	4	4	4	6.8	
6-Nov-05	4	3	3	3	3	3	3	2	1	2	2	3	4	4	5	6	6	6	6	5	4	3	2	1	5.9	
7-Nov-05	1	1	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N	N	4	3	3	2	1	0	3.8	
8-Nov-05	0	0	0	0	0	0	0	0	0	0	1	2	3	5	7	9	11	12	13	13	13	12	11	10	13.1	
9-Nov-05	10	10	12	14	15	17	17	17	15	15	14	14	14	14	16	18	20	21	20	20	20	19	18	17	20.9	
10-Nov-05	16	17	18	18	17	17	16	14	11	10	10	10	11	13	16	19	21	24	25	27	27	28	28	29	28.8	
11-Nov-05	29	29	29	30	28	27	25	23	20	17	17	17	18	18	19	20	20	19	17	14	10	6	4	1	29.6	
12-Nov-05	2	3	5	7	10	13	16	18	19	19	19	18	18	18	18	17	17	16	15	13	12	10	8	6	19.0	
13-Nov-05	6	4	3	3	2	1	1	1	1	1	1	1	2	2	3	3	4	4	5	5	5	6	7	7	7.3	
14-Nov-05	9	11	13	15	16	18	19	19	19	20	20	20	20	20	21	N	N	N	N	N	N	N	N	N	20.5	
15-Nov-05	18	19	19	19	18	18	18	17	16	15	15	15	14	14	14	14	13	12	10	8	6	5	3	2	18.8	
16-Nov-05	1	1	1	2	4	7	9	12	14	17	20	22	22	21	20	19	18	16	14	13	12	12	13	14	21.9	
17-Nov-05	14	15	17	18	18	20	21	22	22	22	22	20	19	16	16	15	16	18	20	22	25	28	30	31	30.8	
18-Nov-05	32	33	33	34	34	34	34	33	33	31	29	28	28	28	28	27	27	27	28	27	26	25	25	25	34.1	
19-Nov-05	24	25	25	26	27	27	26	25	26	25	25	24	24	25	26	28	28	29	30	31	32	31	30	30	31.5	
20-Nov-05	30	31	31	32	32	33	34	34	33	32	32	31	31	31	30	30	31	29	27	26	24	20	19	18	33.7	
21-Nov-05	20	21	22	21	23	25	26	25	25	25	25	26	26	26	25	25	26	23	20	17	17	17	19	21	26.3	
22-Nov-05	21	24	28	31	32	32	31	31	30	28	26	24	23	23	23	22	23	24	26	28	28	28	28	28	31.7	
23-Nov-05	28	29	29	29	27	26	25	23	22	20	20	20	21	22	23	23	23	22	22	21	20	19	16	13	28.8	
24-Nov-05	11	9	7	4	2	1	0	0	0	0	0	1	1	2	3	3	3	3	3	3	3	2	1	1	10.5	
25-Nov-05	1	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	3	3	3	3	2	1	1	1	3.3	
26-Nov-05	3	6	9	12	15	17	19	21	21	21	20	20	20	22	23	24	25	25	25	25	26	25	24	24	25.6	
27-Nov-05	24	24	24	22	20	18	17	15	12	10	7	7	8	10	11	11	11	10	9	8	6	6	5	6	24.4	
28-Nov-05	8	11	13	16	18	18	19	18	18	16	15	13	11	10	10	12	13	13	13	14	14	15	14	14	18.7	
29-Nov-05	13	14	14	14	13	12	10	9	9	8	8	10	12	15	18	18	17	17	17	17	17	16	15	16	18.0	
30-Nov-05	17	18	18	18	18	18	18	18	18	19	20	21	21	22	22	23	23	23	23	22	22	21	20	21	22.9	

Hourly Max	32.3	33.3	33.5	33.7	34.0	34.1	33.9	33.6	32.8	32.1	31.6	31.2	30.9	30.7	30.5	30.2	30.7	29.3	30.0	31.2	31.5	31.3	30.3	30.8
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### PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

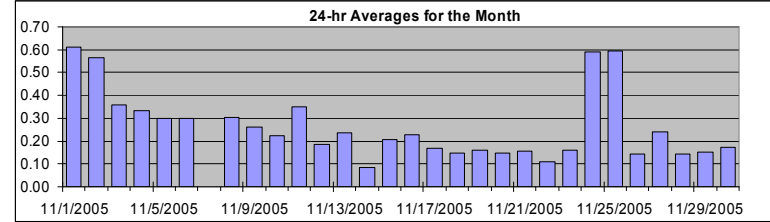
#### Carbon Monoxide (CO)

Monitoring Dates: November 1, 2005 to December 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:	2.8 ppm	2-Nov	21:00 22:00
Maximum 24-hr Value:	0.6 ppm	1-Nov	

AIC Time:	31 hrs	Operational Time:	681 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.4%
Percentile	99	75	25
	1.5	0.6	0.3
	0.2	0.1	0.1
	0.1	0.1	0.1
	0.3	0.2	0.2
	ppm	ppm	ppm



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	0:00
1-Nov-05	0:00	0.5	0.5	0.2	0.2	0.5	0.6	1.2	1.6	1.9	1.2	0.9	0.4	0.4	0.3	0.3	A	0.2	0.5	0.5	0.6	0.6	0.4	0.3	0.3	0.61	1.86	
2-Nov-05	1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.9	1.2	0.5	0.4	0.4	0.4	0.2	A	0.1	0.4	0.4	0.3	0.5	1.2	2.8	1.5	0.3	0.57	2.75	
3-Nov-05	2:00	0.2	0.2	0.2	0.2	0.1	0.2	0.4	0.6	1.3	1.0	0.5	0.3	0.2	A	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.36	1.32	
4-Nov-05	3:00	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.6	0.4	0.3	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.5	0.5	0.4	0.5	0.6	0.4	0.2	0.33	0.57	
5-Nov-05	4:00	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.30	0.55	
6-Nov-05	5:00	0.3	0.4	0.3	0.2	A	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.30	0.43	
7-Nov-05	6:00	0.3	0.4	0.5	A	0.2	0.2	0.4	0.6	0.7	0.2	C	C	C	C	A	D	0.2	0.5	0.9	0.4	0.4	0.4	0.5	0.6	N	0.85	
8-Nov-05	7:00	0.3	0.2	0.2	0.2	0.1	A	0.2	0.4	0.5	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.4	0.4	0.3	0.30	0.67	
9-Nov-05	8:00	0.2	0.2	0.2	0.1	A	0.2	0.3	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.26	0.52	
10-Nov-05	9:00	0.2	0.2	0.2	A	0.2	0.2	0.3	0.7	0.5	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.22	0.67	
11-Nov-05	10:00	0.2	0.1	A	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.2	0.2	0.4	0.7	1.5	1.0	0.6	0.4	0.4	0.3	0.35	1.47	
12-Nov-05	11:00	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.18	0.32	
13-Nov-05	12:00	A	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	A	0.23	0.51	
14-Nov-05	13:00	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	P	P	P	0.2	0.2	0.1	0.1	0.2	A	0.1	0.08	0.19	
15-Nov-05	14:00	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.3	A	0.3	0.4	0.21	0.39	
16-Nov-05	15:00	0.4	0.4	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.4	0.2	0.2	A	0.2	0.2	0.1	0.23	0.41	
17-Nov-05	16:00	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	A	0.1	0.1	0.1	0.1	0.17	0.32	
18-Nov-05	17:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.1	0.15	0.20	
19-Nov-05	18:00	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	A	0.2	0.1	0.2	0.1	0.2	0.1	0.16	0.22	
20-Nov-05	19:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.2	0.3	0.2	0.2	0.2	0.1	0.15	0.25	
21-Nov-05	20:00	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	A	0.1	0.3	0.4	0.3	0.1	0.1	0.1	0.1	0.16	0.35	
22-Nov-05	21:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.18	
23-Nov-05	22:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	A	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.4	0.3	0.16	0.40	
24-Nov-05	23:00	0.7	0.5	0.4	0.2	0.1	0.1	0.1	0.3	1.1	1.0	0.9	0.4	A	0.2	0.2	0.2	0.6	2.0	1.5	1.2	0.9	0.4	0.2	0.2	0.59	2.03	
25-Nov-05	0:00	0.2	0.1	0.2	0.2	0.2	0.5	0.5	1.4	1.7	1.1	0.9	A	0.4	0.4	0.4	0.6	1.2	1.4	1.1	0.5	0.3	0.2	0.2	0.2	0.60	1.67	
26-Nov-05	1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.14	0.16	
27-Nov-05	2:00	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	A	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.4	0.5	0.2	0.2	0.2	0.2	0.24	0.59	
28-Nov-05	3:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	A	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.39	
29-Nov-05	4:00	0.1	0.0	0.1	0.1	0.1	0.2	0.3	A	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.15	0.27	
30-Nov-05	5:00	0.1	0.1	0.1	0.1	0.1	A	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.17	0.34	
Hourly Avg		0.20	0.20	0.18	0.15	0.15	0.18	0.25	0.38	0.48	0.35	0.29	0.22	0.20	0.20	0.20	0.20	0.21	0.29	0.42	0.40	0.34	0.30	0.32	0.27	0.22		
Hourly Max		0.68	0.49	0.52	0.24	0.48	0.57	1.21	1.62	1.86	1.21	0.87	0.41	0.40	0.39	0.40	0.55	1.21	2.03	1.50	1.24	1.17	2.75	1.50	0.61			

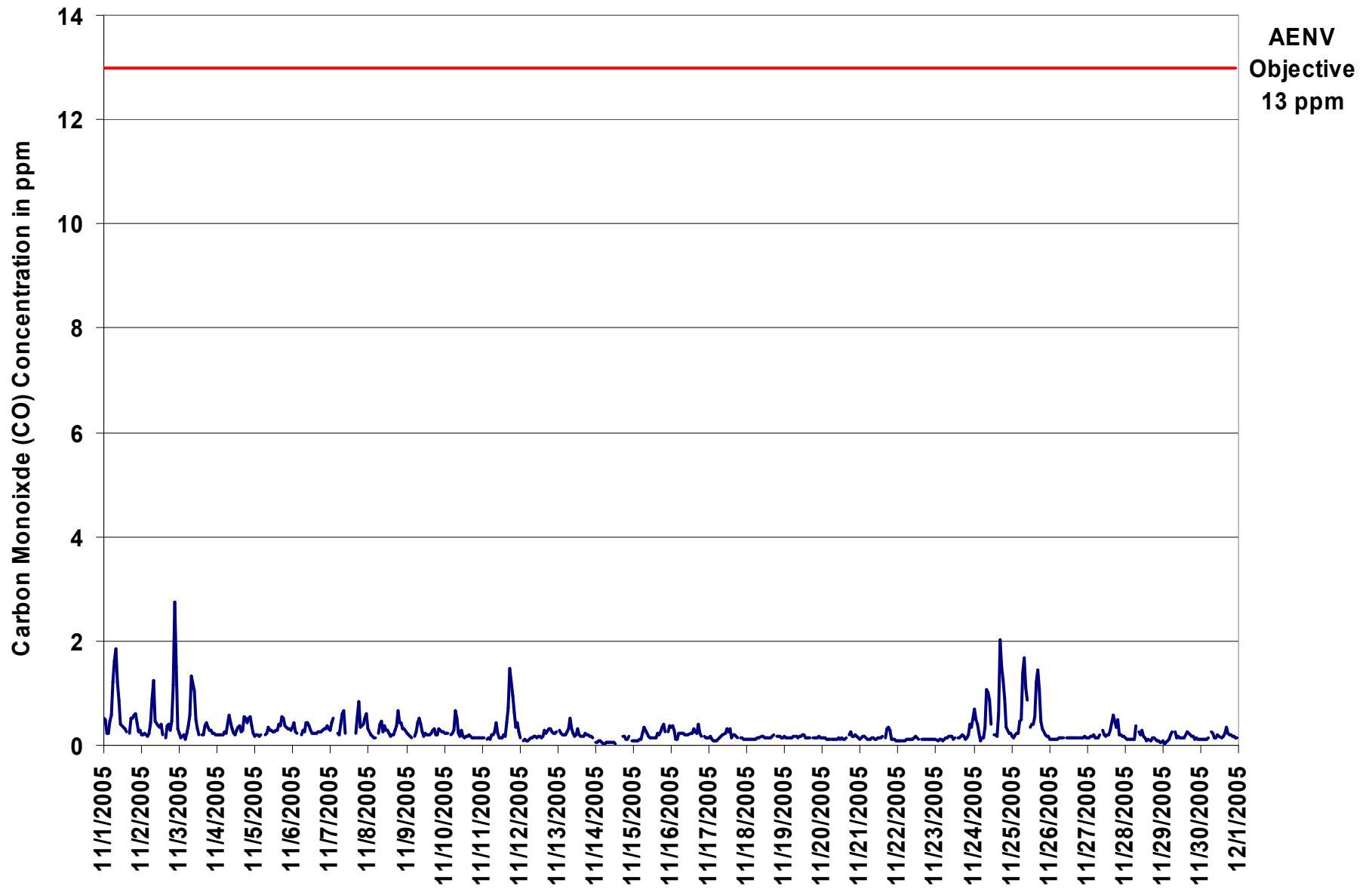


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

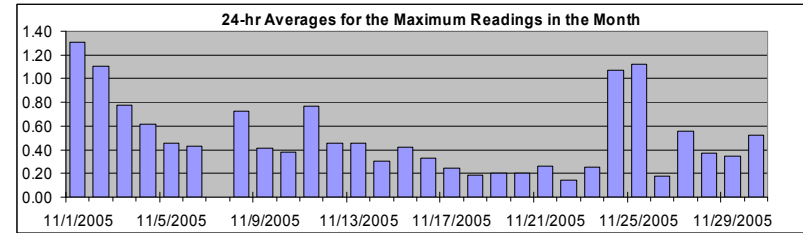
**Carbon Monoxide (CO)**

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

**Summary**

Maximum 1-hr Value:	8.2	ppm	1-Nov	7:00 8:00
Maximum 24-hr Value:	1.3	ppm	1-Nov	

AIC Time:	31 hrs	Operational Time:	681 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	99.4%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.4	1.6	0.6	0.3	0.2	0.1	0.1	0.5 ppm	0.3 ppm



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	0.6	0.6	0.4	0.4	0.7	2.1	3.8	8.2	2.9	1.8	1.1	0.6	0.4	0.4	A	0.3	0.8	0.8	1.2	1.0	0.6	0.6	0.5	1.31	8.23	
2-Nov-05	1.4	0.3	0.3	0.3	0.3	0.5	0.9	3.4	1.6	0.6	0.6	0.6	0.8	0.3	A	0.2	0.6	0.6	0.5	1.7	2.5	3.9	3.1	0.5	1.11	3.91
3-Nov-05	0.3	0.2	0.2	0.3	0.3	1.0	0.9	1.4	2.4	1.9	1.2	1.0	0.3	A	0.2	0.3	2.6	0.6	0.8	0.5	0.4	0.4	0.3	0.4	0.77	2.58
4-Nov-05	0.3	0.3	0.3	0.3	0.3	1.2	0.7	1.8	0.7	1.0	0.5	0.3	0.4	0.4	0.5	0.3	0.6	0.8	0.9	0.6	0.8	0.9	0.8	0.3	0.62	1.76
5-Nov-05	0.2	0.3	0.2	0.3	0.3	A	0.3	0.3	0.7	0.4	0.4	0.3	0.3	0.4	0.4	0.6	0.6	0.8	1.3	0.5	0.7	0.4	0.3	0.4	0.46	1.32
6-Nov-05	0.5	0.7	0.4	0.3	A	0.3	0.5	0.3	0.7	0.6	0.5	0.8	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.5	0.4	0.5	0.4	0.43	0.77
7-Nov-05	0.4	0.6	0.6	A	0.4	0.3	0.7	2.2	4.9	0.4	C	C	C	C	A	D	0.6	1.5	1.5	1.0	0.7	0.7	0.7	1.4	N	4.91
8-Nov-05	0.5	0.3	0.2	0.2	0.2	A	0.6	2.0	0.9	0.4	0.5	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.7	5.2	0.8	0.8	0.5	0.5	0.73	5.21
9-Nov-05	0.3	0.3	0.2	0.2	A	0.4	0.5	1.2	1.1	0.7	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.5	0.3	0.3	0.4	0.4	0.5	0.41	1.16	
10-Nov-05	0.3	0.3	0.3	A	0.3	0.4	0.6	1.2	1.5	0.7	0.2	0.7	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.38	1.48
11-Nov-05	0.2	0.2	A	0.2	0.2	0.2	0.7	0.3	1.1	1.0	0.5	0.2	0.2	0.2	0.3	0.3	0.8	1.4	3.2	3.0	1.1	1.3	0.7	0.6	0.77	3.21
12-Nov-05	0.3	A	0.2	0.2	0.2	0.1	0.5	0.4	0.4	0.3	0.6	0.3	1.8	0.7	0.3	0.4	0.6	0.4	0.4	0.5	0.5	0.5	0.3	0.9	0.46	1.79
13-Nov-05	A	0.4	0.3	0.3	0.2	0.4	0.3	0.6	1.2	1.2	0.5	0.3	0.3	0.4	0.3	0.2	0.2	0.6	0.8	0.7	0.2	0.2	0.2	A	0.45	1.24
14-Nov-05	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.2	0.2	0.2	0.2	0.1	0.1	P	P	P	0.2	0.7	0.2	0.2	0.2	A	0.2	0.31	2.74	
15-Nov-05	0.2	0.1	0.2	0.3	0.2	0.3	0.7	1.2	0.7	0.5	0.4	0.3	0.2	0.2	0.5	0.4	0.5	0.4	0.5	0.5	0.4	A	0.6	0.6	0.42	1.19
16-Nov-05	0.5	0.5	0.4	0.3	0.2	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.5	0.4	0.3	0.6	0.3	0.2	A	0.2	0.2	0.2	0.33	0.60
17-Nov-05	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.3	0.4	0.6	0.6	0.2	0.3	0.3	0.3	0.2	A	0.2	0.2	0.2	0.2	0.24	0.61
18-Nov-05	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.2	0.2	0.2	0.19	0.25
19-Nov-05	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.1	0.21	0.25	
20-Nov-05	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	A	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.20	0.42
21-Nov-05	0.2	0.2	0.6	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	A	0.2	0.6	0.6	0.6	0.2	0.2	0.1	0.26	0.64	
22-Nov-05	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.14	0.20
23-Nov-05	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.8	0.5	0.25	0.77
24-Nov-05	1.0	0.7	0.7	0.4	0.2	0.6	0.3	0.9	2.8	1.4	1.5	0.6	A	0.5	0.4	0.4	1.2	3.7	2.9	1.8	1.3	0.5	0.5	0.3	1.07	3.66
25-Nov-05	0.3	0.2	0.3	0.3	0.3	0.9	0.6	3.4	3.3	2.3	1.6	A	0.7	0.6	0.4	0.6	2.4	2.4	2.7	0.9	0.5	0.3	0.3	0.4	1.12	3.38
26-Nov-05	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	A	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.25
27-Nov-05	0.2	0.2	0.2	0.3	1.2	0.2	0.2	0.2	0.5	A	0.5	0.3	0.3	0.3	0.7	0.5	0.6	2.8	1.0	1.0	0.3	0.3	0.3	0.4	0.55	2.85
28-Nov-05	0.2	0.2	0.1	0.2	0.1	0.5	0.6	1.5	A	0.6	0.5	1.1	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.2	0.2	0.3	0.1	0.2	0.37	1.46
29-Nov-05	0.1	0.1	0.1	0.2	0.2	0.4	0.5	A	0.9	0.2	0.3	0.3	0.4	0.3	0.2	0.5	0.3	0.3	0.5	0.8	0.4	0.5	0.2	0.2	0.35	0.86
30-Nov-05	0.2	0.2	0.2	0.2	0.1	0.5	A	0.8	1.5	0.4	0.9	0.5	0.3	0.2	0.3	0.9	2.7	0.5	0.7	0.3	0.3	0.3	0.2	0.2	0.53	2.69
Hourly Avg	0.33	0.27	0.26	0.23	0.25	0.42	0.55	1.14	1.10	0.64	0.52	0.40	0.38	0.31	0.31	0.34	0.64	0.75	0.81	0.80	0.50	0.61	0.45	0.37		
Hourly Max	1.39	0.72	0.70	0.44	1.19	2.06	3.77	8.23	4.91	2.28	1.57	1.07	1.79	0.71	0.69	0.87	2.69	3.66	3.21	5.21	2.50	3.91	3.08	1.44		



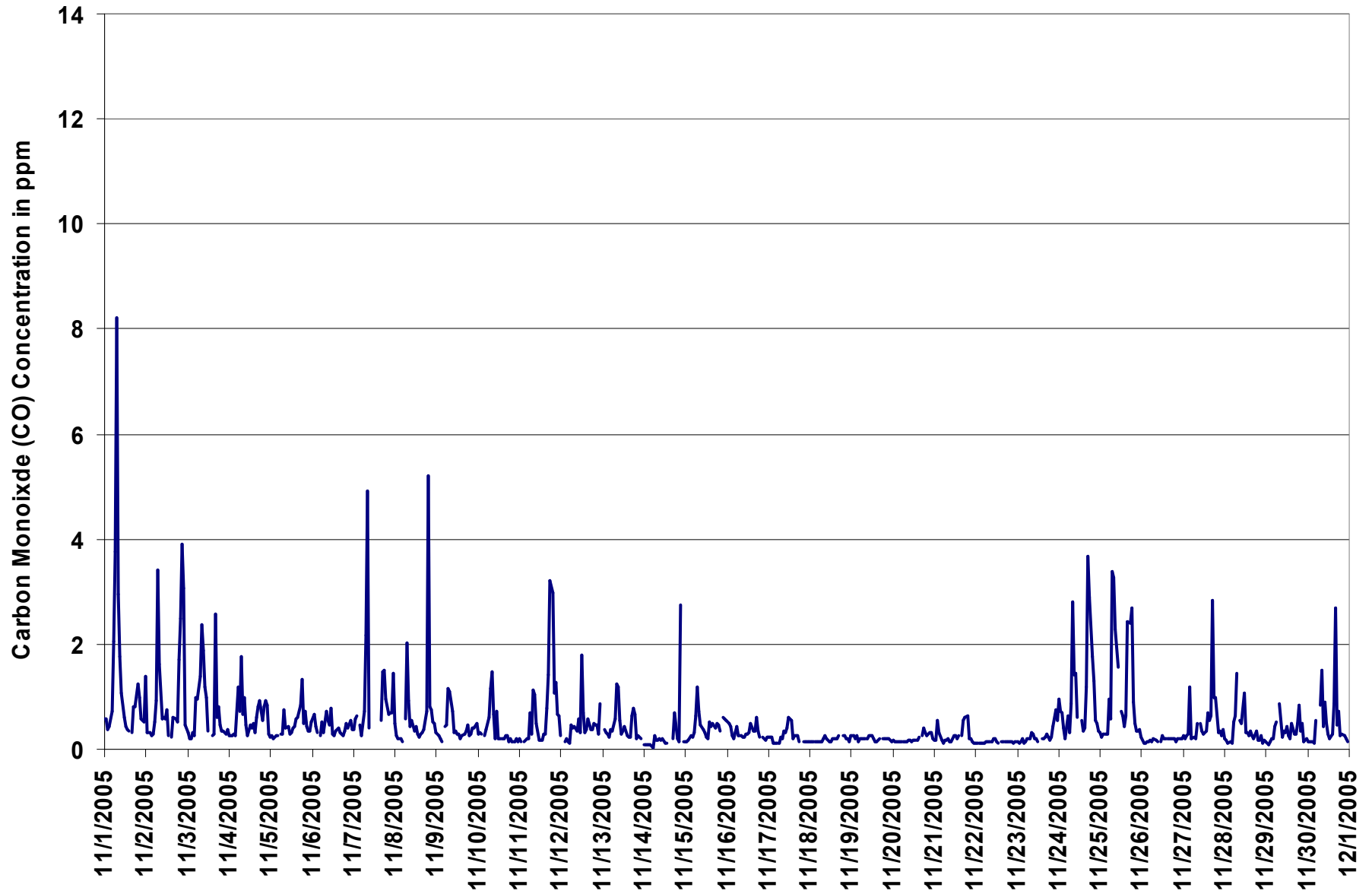
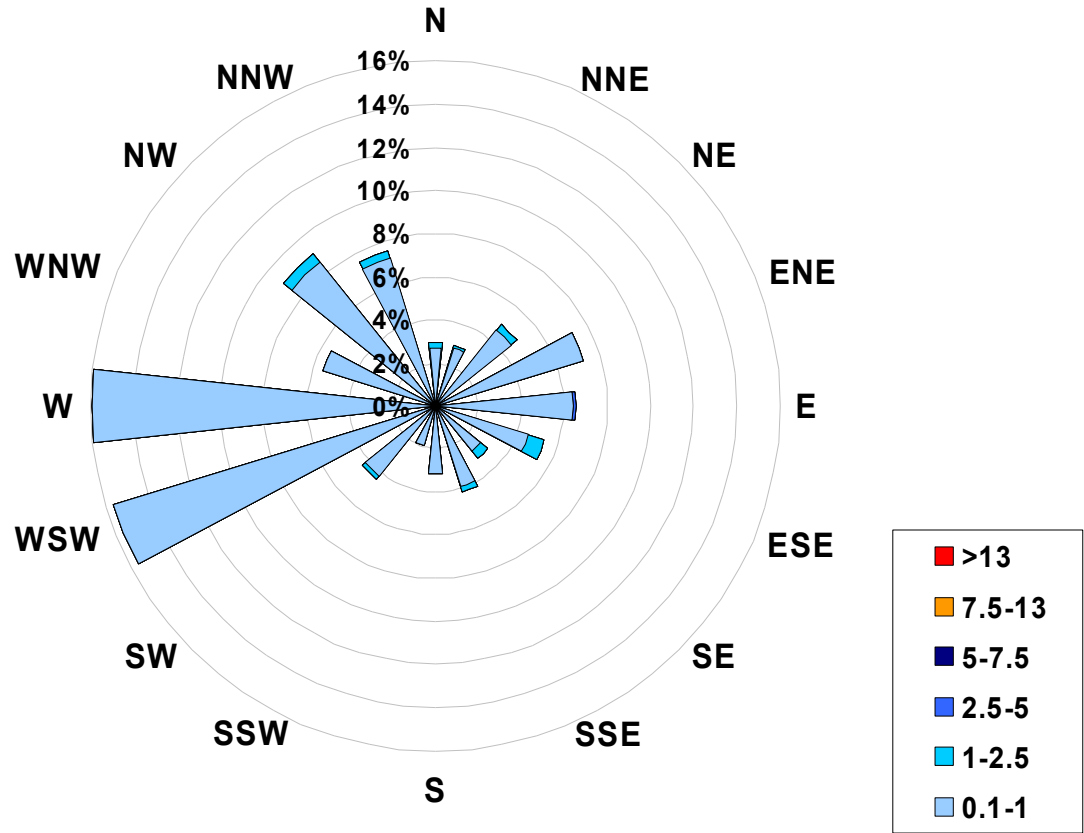


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0.1	<	1	659
1	to	2.5	21
2.5	to	5	1
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			681

### PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### EIGHT HOUR RUNNING AVERAGE TABLE

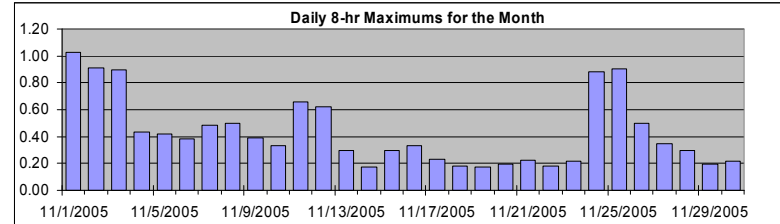
#### Carbon Monoxide (CO)

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

Objective Limit: Alberta Environment: 8-hr 5 ppm

**Summary**

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	1.0 ppm 1-Nov 11:00 12:00



Percentile							
99	95	75	50	25	5	1	
0.9	0.7	0.3	0.2	0.2	0.1	0.1	

**Status Flag Characters**

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

Day	Mountain Standard Time																								Daily Maximum			
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		23:00		
1-Nov-05	0:00	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.7	0.8	0.9	1.0	1.0	1.0	1.0	0.9	0.8	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	1.03
2-Nov-05	1:00	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.8	0.9	0.9	0.91
3-Nov-05	2:00	0.9	0.9	0.8	0.8	0.7	0.4	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.89
4-Nov-05	3:00	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.44
5-Nov-05	4:00	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.42
6-Nov-05	5:00	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.38
7-Nov-05	6:00	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.5	0.5	0.49
8-Nov-05	7:00	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.50
9-Nov-05	8:00	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.39
10-Nov-05	9:00	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34
11-Nov-05	10:00	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	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.66	
12-Nov-05	11:00	0.6	0.6	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.62
13-Nov-05	12:00	0.3	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30
14-Nov-05	13:00	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	N	N	N	N	N	N	N	N	N	N	0.17
15-Nov-05	14:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.30
16-Nov-05	15:00	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.33
17-Nov-05	16:00	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
18-Nov-05	17:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
19-Nov-05	18:00	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.17
20-Nov-05	19:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.19
21-Nov-05	20:00	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
22-Nov-05	21:00	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18
23-Nov-05	22:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
24-Nov-05	23:00	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.7	0.9	0.9	0.9	0.9	0.9	0.89
25-Nov-05	0:00	0.8	0.6	0.4	0.3	0.2	0.2	0.3	0.4	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.90
26-Nov-05	1:00	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.50
27-Nov-05	2:00	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.35
28-Nov-05	3:00	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.29
29-Nov-05	4:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
30-Nov-05	5:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22

Hourly Max    0.89   0.86   0.85   0.81   0.68   0.43   0.53   0.67   0.84   0.93   1.00   1.03   1.01   0.98   0.88   0.76   0.70   0.75   0.78   0.85   0.86   0.88   0.89   0.91

## PASZA - Henry Pirker Total Hydrocarbons Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

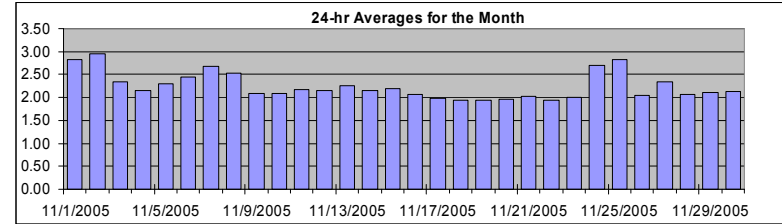
### Total Hydrocarbons (THC)

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

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

Maximum 1-hr Average:	5.7	ppm	1-Nov	20:00 21:00
Maximum 24-hr Value:	3.0	ppm	2-Nov	

AIC Time:	31 hrs	Operational Time:	684 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.6	2.9	2.3	2.1	2.0	1.9	1.9	2.2 ppm	2.1 ppm



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			0:00
1-Nov-05	0:00	2.5	2.5	2.3	2.4	2.8	2.7	2.9	3.1	3.2	2.8	2.6	2.3	2.3	2.1	2.2	A	2.0	2.3	2.1	2.2	5.7	3.5	3.9	4.5	2.83	5.67
2-Nov-05	1:00	5.0	3.6	4.9	2.9	2.9	2.7	3.4	3.2	3.6	2.8	2.7	2.9	2.4	2.3	A	2.3	2.2	2.3	2.2	2.3	2.8	3.4	3.2	2.2	2.96	4.96
3-Nov-05	2:00	2.1	2.1	2.3	3.3	2.8	3.0	3.0	2.5	3.1	2.7	2.3	2.2	2.1	A	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.34	3.33
4-Nov-05	3:00	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.2	2.2	2.3	2.8	2.6	2.4	2.15	2.81
5-Nov-05	4:00	2.4	2.3	2.2	2.2	2.3	A	2.3	2.4	2.5	2.5	2.5	2.4	2.3	2.3	2.2	2.3	2.3	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.31	2.49
6-Nov-05	5:00	2.2	2.6	2.6	2.8	A	2.2	2.2	2.7	2.9	2.6	2.3	2.3	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.6	2.6	2.6	2.45	2.86
7-Nov-05	6:00	2.8	3.0	3.3	A	2.6	2.6	2.7	2.7	2.6	2.5	2.4	2.3	2.4	2.3	C	C	A	2.6	2.9	2.6	2.7	2.7	2.9	2.9	2.67	3.27
8-Nov-05	7:00	2.7	2.9	2.8	2.8	2.8	A	2.9	2.9	3.0	2.9	3.0	2.6	2.6	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.54	3.00
9-Nov-05	8:00	2.2	2.2	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.09	2.18
10-Nov-05	9:00	2.1	2.1	2.1	A	2.0	2.0	2.5	2.5	2.4	2.1	2.0	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.08	2.54
11-Nov-05	10:00	2.0	2.0	A	2.0	2.0	2.0	2.1	2.2	2.1	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.2	2.5	2.8	2.5	2.5	2.2	2.3	2.2	2.18	2.81
12-Nov-05	11:00	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.14	2.22
13-Nov-05	12:00	A	2.2	2.2	2.2	2.3	2.4	2.4	2.4	2.5	2.3	2.3	2.3	2.3	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	A	2.26	2.48
14-Nov-05	13:00	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	P	P	P	2.3	2.2	2.2	2.1	2.1	A	2.0	2.14	2.27
15-Nov-05	14:00	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	A	2.3	2.18	2.50
16-Nov-05	15:00	2.5	2.5	2.5	2.1	2.0	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	2.0	2.0	2.0	2.07	2.50
17-Nov-05	16:00	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	1.9	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.8	1.99	1.99	2.13
18-Nov-05	17:00	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.94	2.02
19-Nov-05	18:00	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.93	2.04
20-Nov-05	19:00	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	1.9	2.0	A	2.0	2.1	2.0	2.0	2.1	2.1	2.2	1.97	2.23	
21-Nov-05	20:00	2.4	2.2	2.5	2.4	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	1.9	2.2	2.1	2.1	1.9	1.9	1.9	2.03	2.45	
22-Nov-05	21:00	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.04
23-Nov-05	22:00	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.1	2.2	2.3	2.01	2.29
24-Nov-05	23:00	2.9	2.7	2.8	2.6	2.4	2.5	2.5	2.6	3.1	3.2	3.0	2.7	A	2.4	2.3	2.2	2.5	3.2	2.8	2.9	2.8	2.6	2.7	2.8	2.70	3.16
25-Nov-05	0:00	3.0	2.7	2.8	2.9	2.9	3.1	3.0	3.4	3.7	3.3	3.0	A	2.4	2.4	2.5	2.5	2.9	3.0	2.9	2.6	2.6	2.5	2.6	2.4	2.83	3.73
26-Nov-05	1:00	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.05	2.24
27-Nov-05	2:00	2.1	2.1	2.1	2.3	2.3	2.3	2.2	2.3	2.3	A	2.4	2.5	2.5	2.3	2.3	2.5	2.7	2.6	2.5	2.5	2.3	2.2	2.2	2.2	2.33	2.65
28-Nov-05	3:00	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	A	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.08	2.22
29-Nov-05	4:00	2.1	2.1	2.1	2.2	2.2	2.3	2.3	A	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.29
30-Nov-05	5:00	2.1	2.1	2.1	2.1	2.1	A	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.19
Hourly Avg		2.33	2.27	2.33	2.26	2.22	2.22	2.29	2.33	2.40	2.30	2.26	2.20	2.14	2.13	2.10	2.11	2.15	2.24	2.23	2.21	2.32	2.26	2.29	2.27		
Hourly Max		4.96	3.59	4.94	3.33	2.94	3.12	3.35	3.40	3.73	3.29	3.00	2.86	2.56	2.41	2.52	2.51	2.87	3.16	2.93	2.92	5.67	3.50	3.92	4.46		

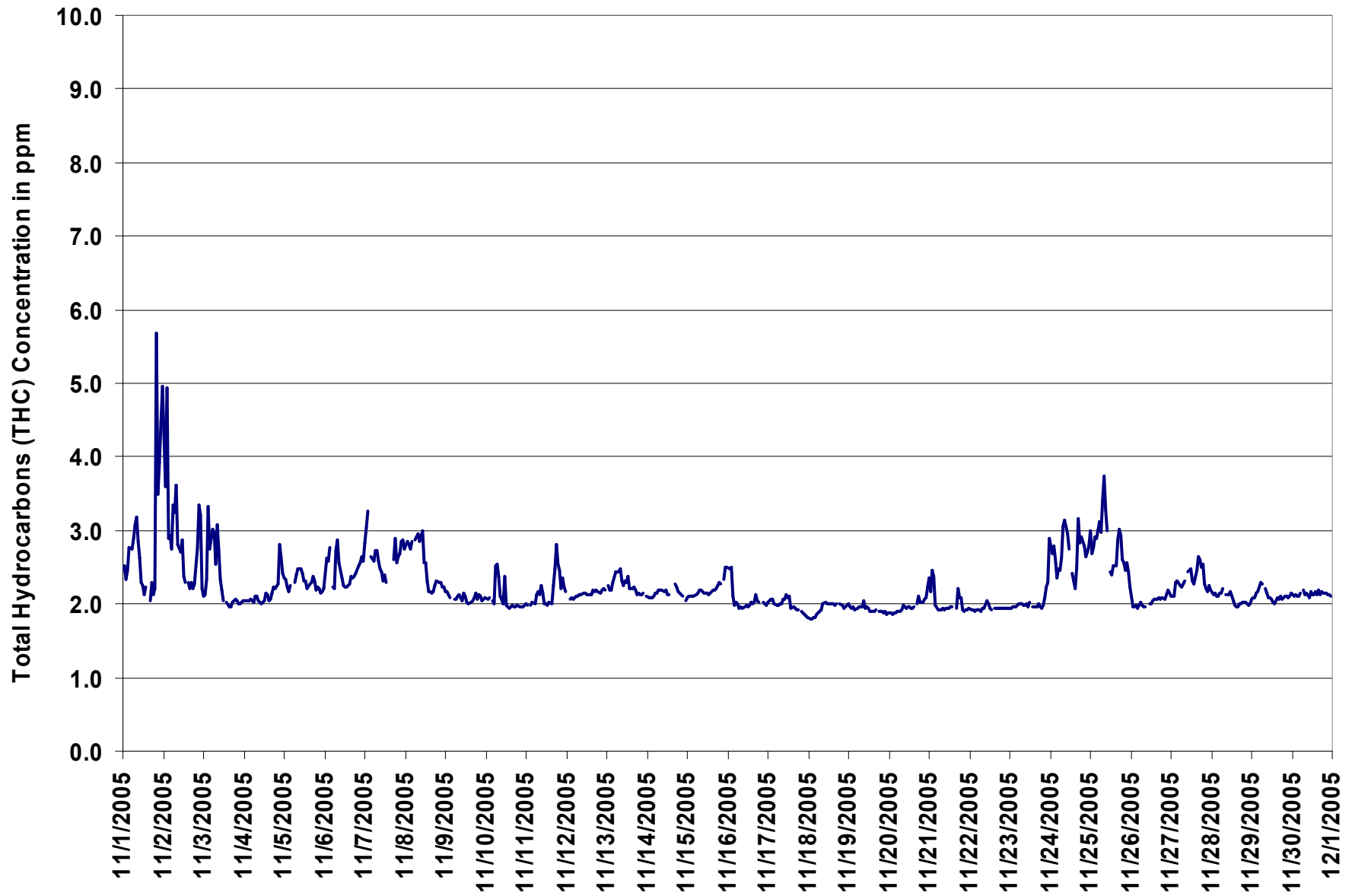


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

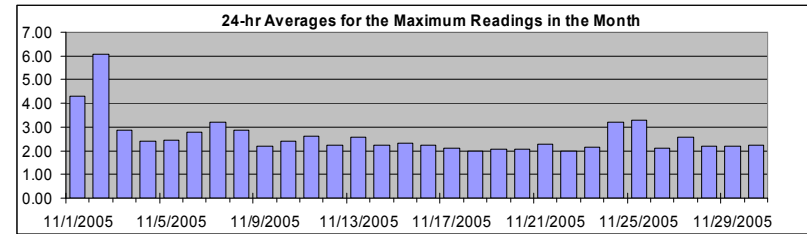
**Total Hydrocarbons (THC)**

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

**Summary**

Maximum 1-hr Value:	25.1	ppm	2-Nov	2:00 3:00
Maximum 24-hr Value:	6.1	ppm	2-Nov	

AIC Time:	31 hrs	Operational Time:	684 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	7.9	4.0	2.6	2.2	2.1	2.0	1.9	2.6 ppm	2.2 ppm



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	2.6	2.6	2.5	2.9	3.0	3.0	3.5	3.9	3.5	3.3	2.8	2.4	2.6	2.3	2.8	A	2.2	4.2	3.1	4.1	16.1	7.7	5.5	12.4	4.31	16.14
2-Nov-05	12.6	9.7	25.1	5.0	8.0	3.4	7.9	5.1	10.8	4.2	3.0	4.1	3.6	3.1	A	3.2	2.7	3.1	4.1	3.6	4.1	6.3	4.3	2.4	6.07	25.08
3-Nov-05	2.2	2.6	4.8	4.7	3.5	3.9	4.5	3.1	4.7	3.3	2.6	2.4	2.1	A	2.1	2.1	2.2	2.1	2.2	2.1	2.0	2.1	2.1	2.1	2.85	4.78
4-Nov-05	2.1	2.1	2.1	2.1	2.1	2.4	2.1	2.3	2.2	2.2	2.1	2.1	2.1	2.3	2.3	2.1	2.1	2.2	2.5	2.3	2.7	5.1	3.0	2.6	2.39	5.14
5-Nov-05	2.4	2.4	2.4	2.2	2.3	A	2.4	2.5	2.6	2.6	2.7	2.6	2.4	2.4	2.3	2.3	2.4	2.5	2.6	2.4	2.4	2.5	2.3	2.3	2.44	2.66
6-Nov-05	2.4	4.0	3.8	3.8	A	2.7	2.3	3.9	3.3	2.8	2.4	2.4	2.3	2.3	2.3	2.4	2.5	2.4	2.4	2.5	2.7	2.7	2.8	2.7	2.77	4.05
7-Nov-05	3.7	3.6	5.6	A	3.0	2.7	2.8	3.1	4.0	2.6	2.5	2.6	2.6	2.4	C	C	A	3.0	3.7	2.7	2.9	3.2	3.3	3.7	3.19	5.60
8-Nov-05	3.6	4.4	2.9	2.9	3.3	A	3.2	3.5	3.1	3.0	3.3	2.7	2.8	2.5	2.3	2.2	2.3	2.3	2.5	2.9	2.8	2.8	2.3	2.3	2.86	4.40
9-Nov-05	2.2	2.3	2.2	2.2	A	2.1	2.1	2.2	2.2	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.5	2.3	2.1	2.1	2.20	2.47
10-Nov-05	2.4	2.2	2.2	A	2.2	2.1	3.6	3.3	3.4	2.5	2.2	5.2	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.42	5.18
11-Nov-05	2.1	2.0	A	2.0	2.1	2.1	2.3	2.6	2.4	2.5	2.5	2.1	2.1	2.0	2.1	2.2	2.7	4.9	3.4	3.3	3.8	2.6	2.8	3.1	2.60	4.89
12-Nov-05	2.6	A	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.3	2.2	2.2	2.4	2.3	2.24	2.60
13-Nov-05	A	2.6	2.3	2.4	3.9	3.8	2.8	2.9	2.8	2.6	2.4	2.4	2.4	2.5	2.3	2.3	2.4	2.3	2.2	2.3	2.2	2.2	2.2	A	2.55	3.87
14-Nov-05	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	P	P	P	2.3	2.4	2.3	2.2	2.6	A	2.1	2.23	2.57
15-Nov-05	2.1	2.1	2.1	2.2	2.1	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	A	2.8	3.1	2.30	3.14
16-Nov-05	3.8	2.7	2.9	2.4	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.1	2.1	A	2.1	2.0	2.0	2.23	3.76
17-Nov-05	2.2	2.3	2.3	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.1	2.3	2.3	2.4	2.1	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	2.09	2.35
18-Nov-05	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.1	A	2.3	2.0	2.0	2.0	2.0	2.00	2.34
19-Nov-05	2.1	2.0	2.0	2.1	2.0	2.3	2.1	2.0	2.4	2.6	2.0	2.1	2.0	1.9	1.9	1.9	2.0	A	1.9	2.0	1.9	1.9	2.0	1.9	2.05	2.63
20-Nov-05	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.7	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.2	2.1	2.1	2.2	2.5	2.5	2.08	2.74
21-Nov-05	2.6	2.3	4.1	2.9	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	3.1	2.3	2.5	2.0	2.0	2.0	2.0	2.26	4.15
22-Nov-05	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.34
23-Nov-05	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.3	A	2.0	2.1	2.1	2.5	2.1	2.0	2.1	2.3	2.5	3.1	2.15	3.14
24-Nov-05	4.0	3.0	3.7	3.9	2.9	2.8	3.1	2.9	3.6	3.4	3.4	2.9	A	2.6	2.5	2.4	2.8	3.8	3.5	3.7	4.3	2.8	2.9	2.9	3.21	4.32
25-Nov-05	3.8	3.0	3.1	3.1	3.0	3.4	3.2	4.5	4.7	3.8	3.4	A	2.6	2.6	2.8	2.7	3.7	3.8	4.1	2.8	3.1	2.6	2.9	2.7	3.28	4.74
26-Nov-05	2.6	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	A	2.0	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.3	2.3	2.2	2.13	2.57
27-Nov-05	2.2	2.2	2.2	3.1	2.8	2.6	2.3	2.4	2.5	A	2.6	2.6	2.6	2.4	2.5	2.6	3.1	3.0	2.7	2.7	2.4	2.4	2.3	2.7	2.56	3.13
28-Nov-05	2.3	2.2	2.2	2.2	2.2	2.2	2.4	2.4	A	2.3	2.4	2.6	2.2	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.17	2.56
29-Nov-05	2.1	2.1	2.2	2.2	2.2	2.5	2.5	A	2.6	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.2	2.1	2.2	2.3	2.2	2.2	2.1	2.2	2.20	2.57
30-Nov-05	2.2	2.2	2.2	2.1	2.2	2.2	A	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.2	2.2	2.2	2.2	2.2	2.24	2.72
Hourly Avg	2.86	2.71	3.41	2.59	2.62	2.46	2.69	2.68	2.97	2.56	2.42	2.45	2.28	2.26	2.21	2.23	2.33	2.60	2.55	2.49	2.95	2.73	2.53	2.74		
Hourly Max	12.63	9.74	25.08	4.97	8.04	3.86	7.90	5.09	10.81	4.23	3.37	5.18	3.56	3.12	2.84	3.19	3.72	4.89	4.13	4.10	16.14	7.66	5.48	12.35		

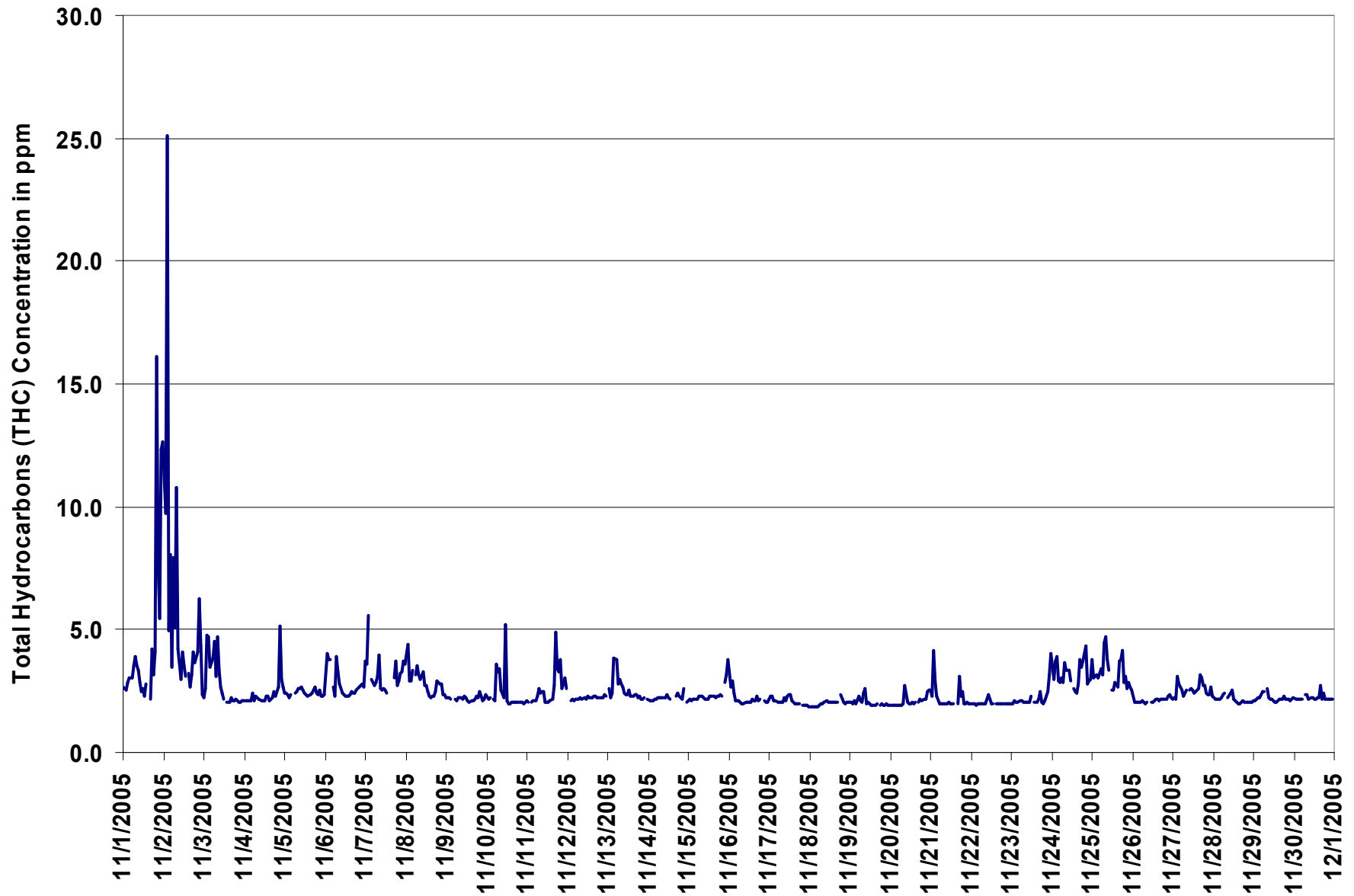
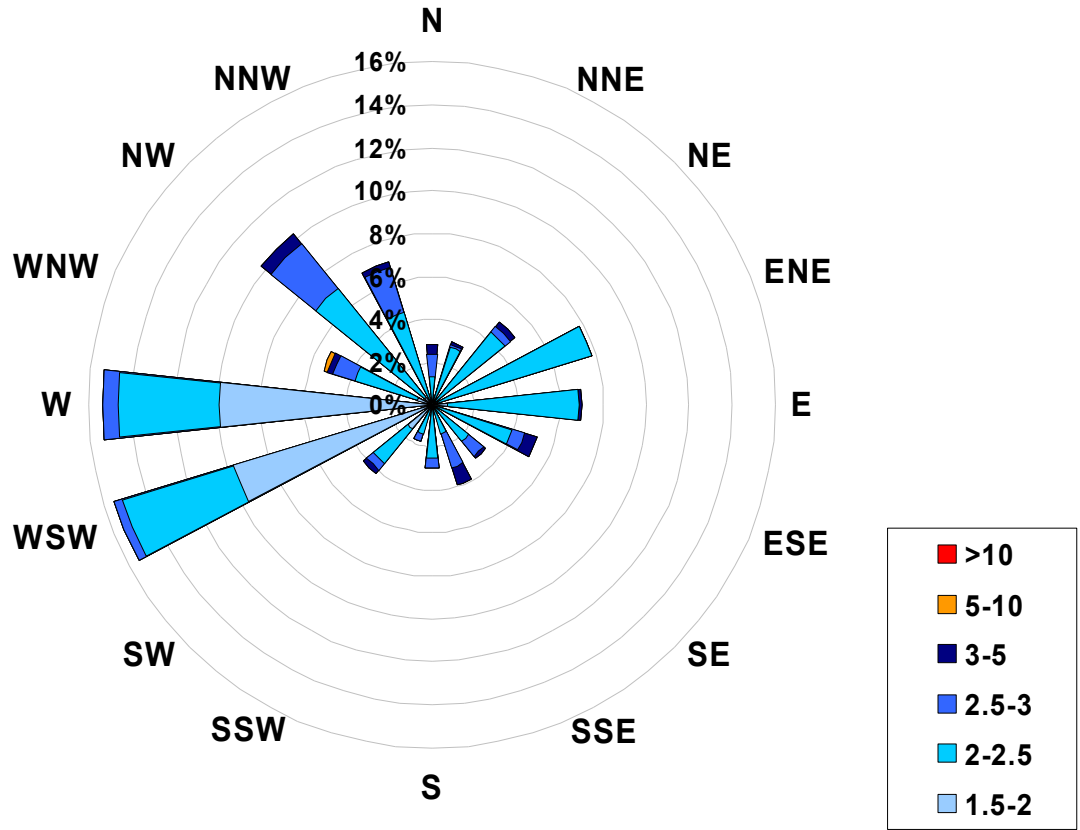


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of THC in ppm			
Range			Frequency (hrs)
1.5	<	2	161
2	to	2.5	408
2.5	to	3	87
3	to	5	27
5	to	10	1
	>	10	0
Total Non-Zero Values			684



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

Station: Henry Pirker  
 Station Owner: PASZA

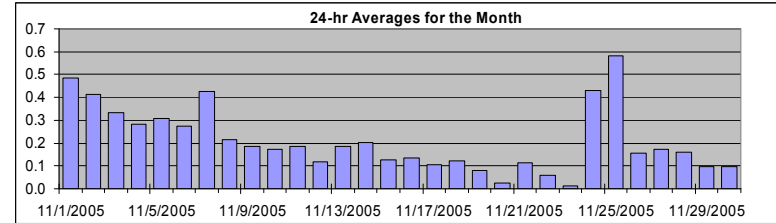
#### HOURLY AVERAGE TABLE

#### Total Reduced Sulphur (TRS)

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

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

Maximum 1-hr Average:	1.2	ppb	2-Nov	21:00 22:00
Maximum 24-hr Value:	0.6	ppb	25-Nov	



AIC Time:	31 hrs	Operational Time:	683 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.9	0.6	0.3	0.2	0.1	0.0	0.0	0.2 ppb	0.2 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum				
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	Hour End		
1-Nov-05	0:00	1	1	0	0	1	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0
2-Nov-05	1:00	0	0	0	0	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0.4	1.2	
3-Nov-05	2:00	1	0	0	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8	
4-Nov-05	3:00	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	0.3	0.4	
5-Nov-05	4:00	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	0.3	0.5	
6-Nov-05	5:00	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	0.3	0.4	
7-Nov-05	6:00	0	0	0	A	0	0	0	1	0	0	1	0	C	C	C	A	1	0	1	0	0	0	1	0	0	0.4	0.6		
8-Nov-05	7:00	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	0.4		
9-Nov-05	8:00	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	0.2	0.4		
10-Nov-05	9:00	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		
11-Nov-05	10:00	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		
12-Nov-05	11:00	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	0.1	0.2		
13-Nov-05	12:00	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4		
14-Nov-05	13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	P	P	0	0	0	0	0	0	A	0	0.2	0.3		
15-Nov-05	14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2		
16-Nov-05	15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3		
17-Nov-05	16:00	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	0.2		
18-Nov-05	17:00	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	0.2		
19-Nov-05	18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2		
20-Nov-05	19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.1		
21-Nov-05	20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2		
22-Nov-05	21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.2		
23-Nov-05	22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.1		
24-Nov-05	23:00	0	0	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	1	1	1	1	1	1	0	0	0.4	1.0		
25-Nov-05	0:00	0	0	0	1	0	0	1	1	1	1	1	A	0	0	1	1	1	1	1	1	1	1	0	0	0	0.6	1.0		
26-Nov-05	1:00	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3		
27-Nov-05	2:00	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4		
28-Nov-05	3:00	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	0.2	0.3		
29-Nov-05	4:00	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	0.1	0.2		
30-Nov-05	5:00	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2		
Hourly Avg		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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Hourly Max		1.0	0.9	0.4	0.5	0.6	0.6	0.6	0.8	1.0	0.8	0.9	0.4	0.5	0.5	0.5	0.7	0.8	1.0	0.9	0.6	0.7	1.2	0.7	0.6					

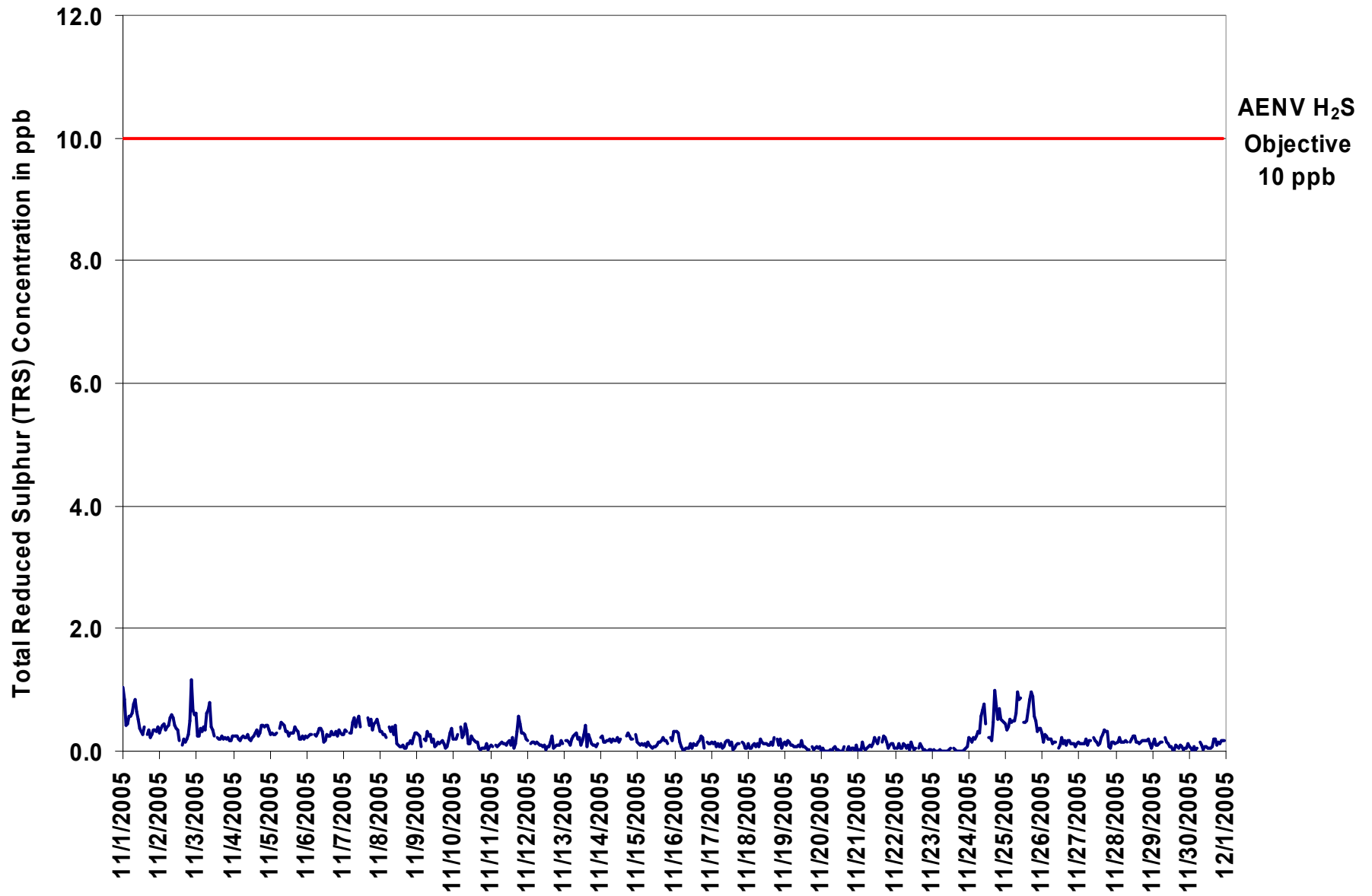


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

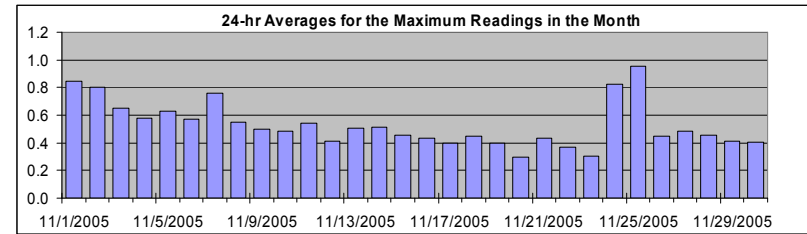
**Total Reduced Sulphur (TRS)**

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

**Summary**

Maximum 1-hr Value:	2.0	ppb	2-Nov	21:00 22:00
Maximum 24-hr Value:	1.0	ppb	25-Nov	

AIC Time:	31 hrs	Operational Time:	683 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.4	0.9	0.6	0.5	0.4	0.3	0.2	0.5 ppb	0.5 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.4
2-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	1	0	0	1	1	2	2	1	0.8	2.0
3-Nov-05	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	0	0	1	0.7	1.2	
4-Nov-05	1	1	1	0	0	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
5-Nov-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0	
6-Nov-05	1	1	1	1	A	1	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	0.6	0.7	
7-Nov-05	1	1	0	A	1	1	1	1	1	1	1	1	C	C	C	A	1	1	1	1	1	1	1	0.8	1.0	
8-Nov-05	1	1	1	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	0.6	0.8	
9-Nov-05	1	1	1	0	A	1	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0.5	0.7	
10-Nov-05	1	0	1	A	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.5	0.8	
11-Nov-05	0	0	A	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	0	0.5	1.2	
12-Nov-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.4	0.6	
13-Nov-05	A	0	1	0	0	0	0	1	1	1	1	0	0	1	1	0	1	0	0	0	0	0	1	A	0.5	0.8
14-Nov-05	0	1	1	0	0	1	1	1	1	0	0	1	1	0	P	P	P	1	1	1	0	1	A	0	0.5	0.7
15-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	A	1	1	0.5	0.6
16-Nov-05	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0.4	0.7
17-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.5
18-Nov-05	0	0	0	1	1	0	0	0	1	0	0	0	0	0	1	0	1	A	1	0	0	0	0	0	0.5	0.6
19-Nov-05	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5
20-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0.3	0.5
21-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	A	0	0	1	0	0	0	0	0	0.4	0.7
22-Nov-05	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.5
23-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
24-Nov-05	1	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1	0.8	1.6
25-Nov-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	1.0	1.5
26-Nov-05	1	0	1	1	1	1	1	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6
27-Nov-05	1	0	0	0	0	0	1	0	0	A	1	1	1	0	0	1	1	1	1	1	0	0	0	0	0.5	0.6
28-Nov-05	0	0	0	0	0	0	0	0	A	0	0	1	1	0	1	1	0	0	0	0	0	1	0	0	0.5	0.6
29-Nov-05	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.5
30-Nov-05	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0.4	0.6
Hourly Avg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5		
Hourly Max	1.4	1.4	0.8	0.9	0.9	0.8	0.9	1.2	1.5	1.2	1.3	0.9	1.1	0.9	0.8	1.0	1.2	1.6	1.5	1.1	1.1	2.0	1.5	1.2		

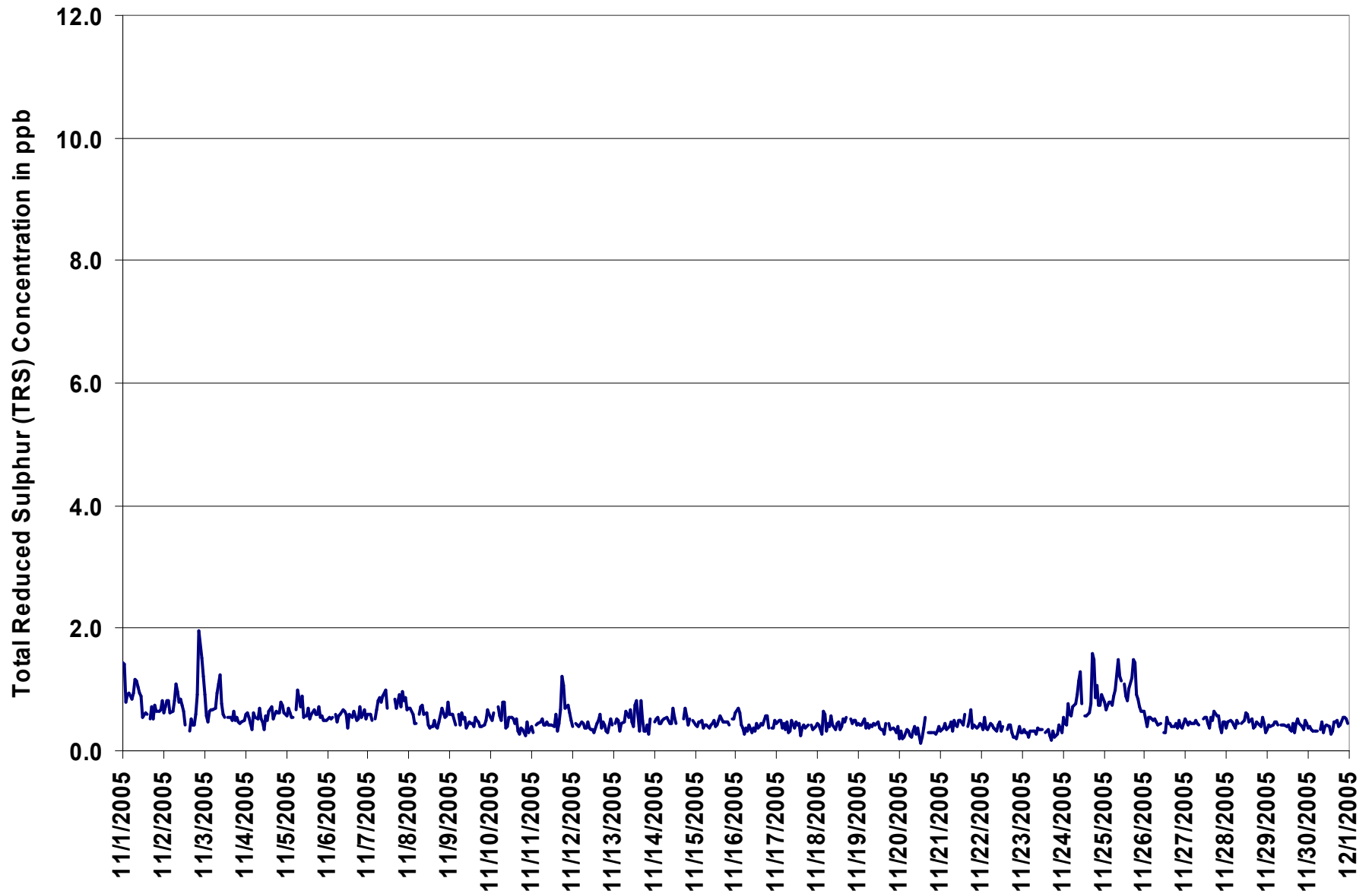
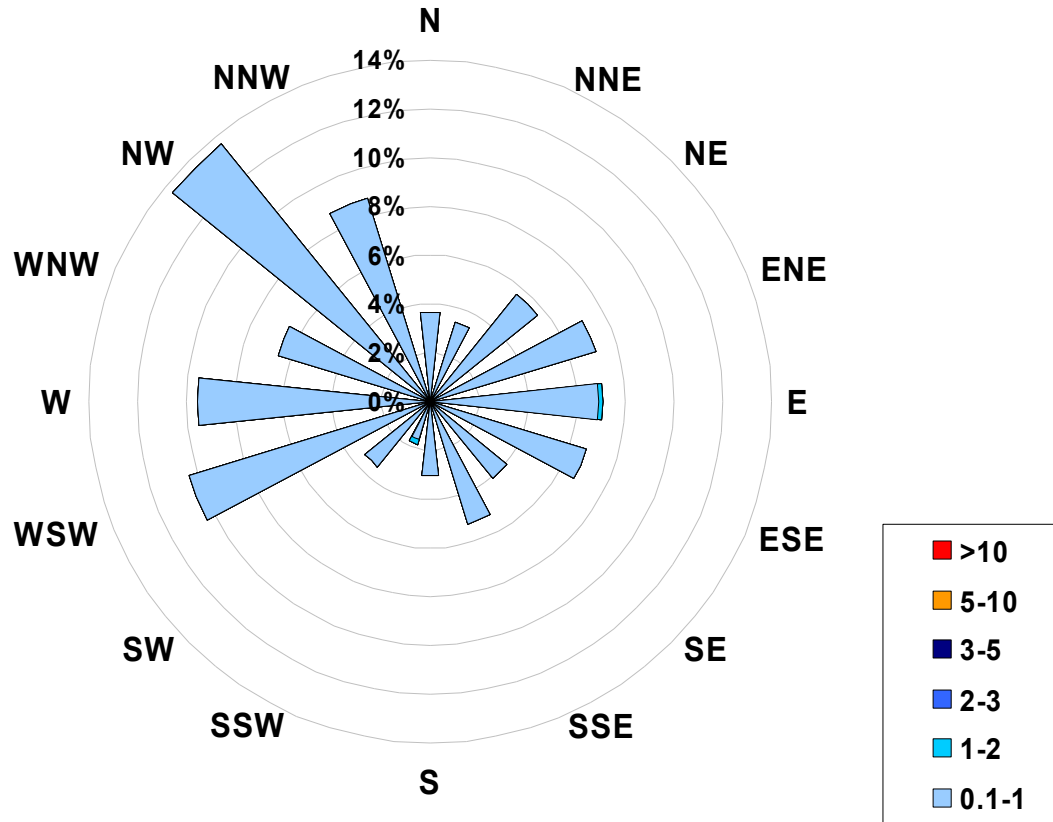


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	681
1	to	2	2
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			683

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

Station: Henry Pirker  
 Station Owner: PASZA

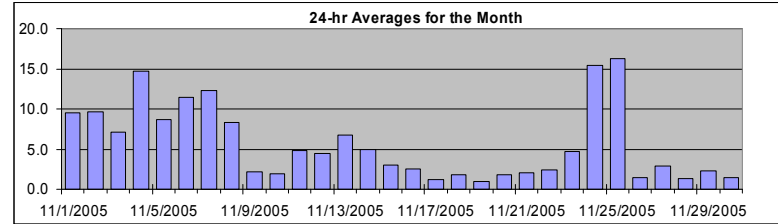
#### HOURLY AVERAGE TABLE

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

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

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

Number of 24-hr Exceedances (draft):		0	
Maximum 1-hr Average:	40.4	μg/m <sup>3</sup>	25-Nov 17:00 18:00
Maximum 24-hr Value:	16.3	μg/m <sup>3</sup>	25-Nov



AIC Time:	0 hrs	Operational Time:	716 hrs
Calibration Time:	1 hrs	AMD Operational Uptime:	99.6%
Percentile	99	95	75
	27.9	16.6	8.0
	50	25	5
	3.2	1.4	0.2
	1	0.0	5.6
	Average / Median		6 μg/m <sup>3</sup>
			Geomean
			4.0 μg/m <sup>3</sup>

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Nov-05	7	9	3	2	5	9	9	15	25	21	15	12	6	4	5	4	3	7	7	8	13	16	13	12	9.6	25.3
2-Nov-05	8	7	8	11	8	9	8	15	16	10	10	7	8	3	0	0	5	6	5	8	16	35	23	7	9.6	35.4
3-Nov-05	4	1	1	4	4	4	5	10	17	22	13	10	4	6	7	4	1	6	10	7	7	7	7	9	7.1	21.6
4-Nov-05	13	14	14	15	15	13	12	12	13	12	10	12	14	16	15	12	11	12	15	16	17	20	21	26	14.7	26.4
5-Nov-05	20	7	5	5	5	5	6	11	11	11	12	8	6	8	4	6	13	18	9	7	6	7	8	10	8.6	19.6
6-Nov-05	10	10	7	7	7	6	6	7	10	15	15	12	13	12	11	13	15	15	13	14	14	14	13	15	11.4	15.5
7-Nov-05	14	14	14	16	27	26	19	20	14	8	10	8	11	5	5	C	0	10	10	9	9	11	11	12	12.3	26.7
8-Nov-05	8	11	13	12	15	14	17	14	15	12	18	9	7	5	1	2	1	1	4	5	4	3	4	6	8.3	17.8
9-Nov-05	4	3	0	0	0	0	1	4	4	6	4	7	3	2	2	2	3	3	0	0	0	1	1	1	2.2	7.0
10-Nov-05	1	1	0	1	1	0	0	5	9	6	1	3	0	0	0	0	0	1	0	1	2	2	5	5	1.9	9.3
11-Nov-05	4	3	2	2	1	1	1	1	2	4	4	1	0	0	1	1	7	18	21	16	8	6	7	4	4.8	20.7
12-Nov-05	5	3	3	3	2	3	3	3	3	3	3	2	2	3	4	6	13	7	9	8	6	4	5	4	4.5	12.8
13-Nov-05	5	8	7	6	5	7	6	8	9	7	9	8	8	11	9	5	5	5	7	7	7	7	5	4	6.8	11.5
14-Nov-05	4	6	9	10	8	5	4	3	4	3	4	3	3	4	P	P	P	9	7	4	3	4	3	3	4.9	9.9
15-Nov-05	2	1	2	1	2	1	2	1	2	3	2	1	1	2	1	3	4	4	6	7	6	6	6	6	3.0	7.1
16-Nov-05	9	9	9	5	2	2	0	0	0	1	1	1	2	3	4	2	2	4	2	1	1	1	0	1	2.5	8.9
17-Nov-05	1	1	1	1	1	2	1	1	1	1	3	3	2	3	1	1	1	2	1	2	0	0	0	0	1.2	3.2
18-Nov-05	0	0	3	1	2	4	3	3	3	4	2	3	1	0	1	1	2	3	3	2	1	1	1	1	1.8	3.6
19-Nov-05	0	1	0	0	0	0	1	1	1	1	1	2	2	0	1	0	0	2	1	1	1	2	2	2	1.0	2.5
20-Nov-05	0	1	1	1	2	2	1	2	2	2	2	2	1	1	1	2	3	3	3	3	2	4	1	0	1.8	4.3
21-Nov-05	0	1	2	4	1	1	1	1	2	1	1	3	2	1	3	1	0	5	9	6	3	1	0	0	2.1	8.9
22-Nov-05	1	2	2	0	1	1	1	2	3	4	5	5	3	3	2	3	2	3	2	2	3	1	2	3	2.4	5.2
23-Nov-05	1	1	1	2	2	3	4	4	6	6	5	3	3	2	4	4	7	17	7	3	4	7	8	9	4.7	16.8
24-Nov-05	12	11	10	10	8	6	7	7	12	19	29	21	13	9	10	6	14	35	27	25	31	21	16	12	15.4	35.1
25-Nov-05	11	11	11	11	12	11	12	13	23	28	22	11	7	12	11	17	30	40	37	25	15	10	6	5	16.3	40.4
26-Nov-05	4	2	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	2	3	2	0	1	2	2	1.4	4.4
27-Nov-05	0	0	1	1	1	2	3	3	3	4	7	2	1	1	2	3	3	5	6	9	2	1	1	6	2.9	8.9
28-Nov-05	1	1	2	0	1	1	1	1	3	2	1	6	3	3	0	1	0	1	1	2	1	0	0	1	1.3	5.7
29-Nov-05	2	0	0	1	1	4	5	5	3	2	2	1	1	2	1	3	3	5	3	2	3	2	2	3	2.3	4.9
30-Nov-05	3	2	2	3	1	1	1	1	2	2	1	0	0	1	1	1	1	1	2	2	2	2	1	1	1.4	3.0
Hourly Avg	5.2	4.6	4.4	4.4	4.8	4.7	4.7	5.8	7.4	7.3	7.2	5.5	4.4	4.2	3.8	3.8	5.1	8.3	7.6	6.7	6.3	6.5	5.8	5.6		
Hourly Max	19.6	14.4	14.4	16.0	26.7	26.4	19.2	19.9	25.3	28.0	28.9	20.8	13.9	16.3	15.3	17.3	29.8	40.4	36.8	25.2	31.1	35.4	22.6	26.4		

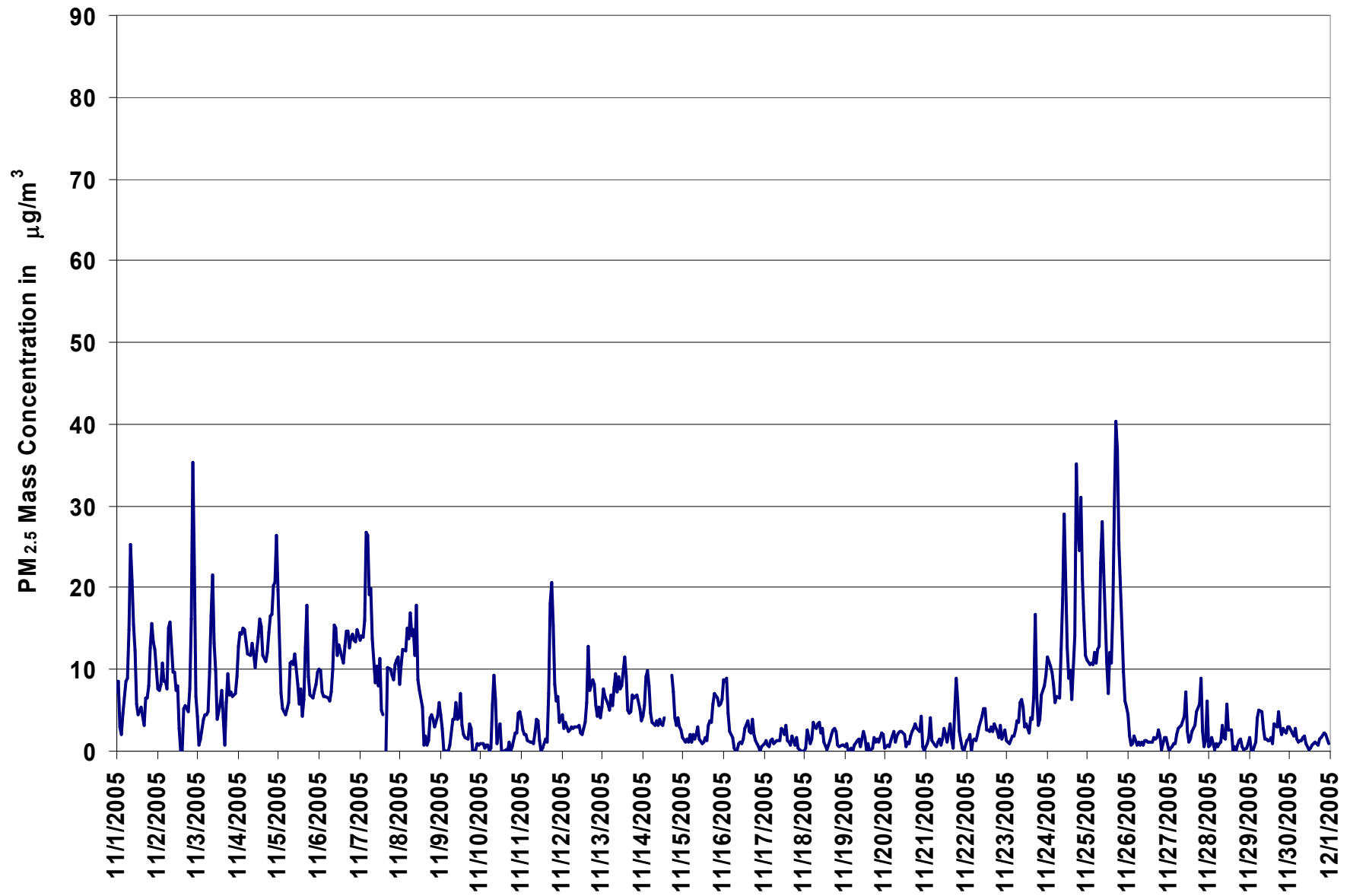


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

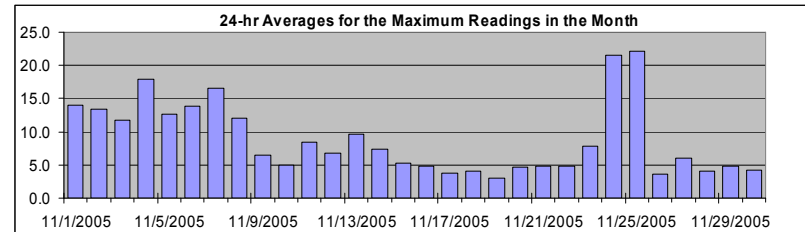
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

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

**Summary**

Maximum 1-hr Average:	55.4	µg/m <sup>3</sup>	25-Nov	17:00 18:00
Maximum 24-hr Value:	22.1	µg/m <sup>3</sup>	25-Nov	



AIC Time:	0 hrs	Operational Time:	716 hrs						
Calibration Time:	1 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	37.8	23.6	11.8	5.9	3.9	2.4	1.4	8.8	9 µg/m <sup>3</sup>
									7.5 µg/m <sup>3</sup>

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	11	11	7	6	7	12	12	23	32	28	22	21	10	7	9	6	5	11	9	15	18	24	16	18	14.1	32.0
2-Nov-05	10	10	11	15	11	10	11	18	19	12	12	12	12	5	2	1	12	9	7	13	23	42	32	9	13.4	42.4
3-Nov-05	6	4	5	8	8	8	8	14	30	27	21	21	6	14	13	14	3	11	13	9	10	8	10	11	11.7	29.8
4-Nov-05	16	16	18	17	17	16	14	13	16	15	12	16	17	20	17	14	13	15	17	18	25	24	30	31	17.9	31.2
5-Nov-05	26	12	7	8	7	7	10	14	13	14	15	12	10	18	6	9	18	24	12	13	10	12	12	12	12.6	26.1
6-Nov-05	13	14	10	8	9	9	8	10	13	19	19	14	15	15	12	15	16	16	14	16	17	16	16	17	13.9	19.3
7-Nov-05	15	17	16	20	39	35	22	23	23	12	12	11	14	10	9	C	9	12	11	13	11	14	14	15	16.5	39.1
8-Nov-05	14	13	17	16	17	17	20	17	17	15	25	15	10	12	4	5	4	4	8	7	7	5	9	9	12.0	25.4
9-Nov-05	7	5	4	1	3	1	3	6	5	9	9	30	30	6	4	4	3	5	5	3	3	3	4	2	6.5	29.9
10-Nov-05	4	4	3	3	3	2	4	8	16	10	4	7	2	3	3	4	3	3	4	4	6	4	8	7	4.9	15.8
11-Nov-05	5	4	4	3	4	4	4	4	5	6	7	3	2	2	5	5	15	25	25	30	13	13	10	7	8.4	29.6
12-Nov-05	7	5	6	5	4	5	5	5	5	5	5	4	4	5	5	9	17	11	12	11	7	6	7	7	6.8	16.9
13-Nov-05	9	11	10	8	7	10	8	11	13	14	12	11	11	14	12	7	7	7	9	8	9	8	8	5	9.6	14.5
14-Nov-05	8	8	12	12	11	7	5	5	8	6	6	6	5	6	P	P	P	12	12	6	5	8	5	4	7.4	12.1
15-Nov-05	4	3	3	3	4	4	4	4	5	6	3	3	3	5	4	6	5	6	8	9	9	7	7	11	5.2	10.5
16-Nov-05	12	12	12	9	6	4	2	1	1	2	3	3	4	4	6	4	4	6	5	4	3	3	3	3	4.8	12.5
17-Nov-05	3	3	2	2	4	4	3	3	3	3	6	6	7	6	4	3	5	4	4	5	2	3	2	1	3.7	6.6
18-Nov-05	1	4	9	4	3	5	6	5	6	6	4	5	3	3	3	4	4	4	5	5	3	3	3	3	4.1	8.5
19-Nov-05	2	3	1	2	4	1	3	4	3	2	4	4	2	3	1	4	3	3	4	3	3	5	5	3	3.1	5.2
20-Nov-05	3	5	5	3	5	6	4	5	4	4	5	5	3	3	3	5	6	5	6	6	6	7	7	3	4.7	6.8
21-Nov-05	3	4	5	7	5	2	2	3	3	4	4	6	4	4	6	5	2	8	14	9	5	5	2	3	4.8	14.1
22-Nov-05	4	4	4	1	3	4	4	6	6	7	8	7	4	4	5	5	5	5	5	4	6	4	4	5	4.8	7.8
23-Nov-05	3	3	2	4	3	4	7	7	9	10	8	8	6	4	6	6	13	29	10	6	6	10	13	13	7.9	28.7
24-Nov-05	15	14	13	13	11	10	10	10	19	21	42	25	19	16	15	11	24	54	38	33	37	29	20	18	21.6	54.0
25-Nov-05	13	13	14	15	16	14	16	18	34	35	32	15	11	17	14	23	43	55	46	31	19	17	10	9	22.1	55.4
26-Nov-05	7	3	3	3	5	3	3	3	3	2	3	4	3	3	3	4	3	4	6	4	3	2	4	5	3.6	6.6
27-Nov-05	3	2	2	3	3	5	4	5	6	7	11	5	3	3	4	4	6	9	10	14	7	3	6	18	6.0	17.9
28-Nov-05	4	3	5	3	3	3	4	3	8	5	6	9	5	6	4	3	2	3	4	5	3	2	3	4	4.1	9.5
29-Nov-05	5	2	2	3	3	7	8	7	6	3	4	3	4	4	3	5	6	9	5	5	5	5	5	6	4.8	9.2
30-Nov-05	5	6	5	6	4	5	4	3	5	5	4	2	3	4	4	4	3	3	4	3	5	5	5	4	4.2	6.2
Hourly Avg	7.9	7.2	7.3	7.1	7.7	7.4	7.2	8.6	11.3	10.5	10.9	9.8	7.8	7.5	6.6	6.7	8.9	12.5	11.0	10.3	9.4	9.9	9.3	8.8		
Hourly Max	26.1	17.3	17.6	20.2	39.1	35.3	22.3	22.8	34.1	34.5	42.4	29.5	29.9	20.1	17.2	22.8	42.9	55.4	46.0	33.1	37.0	42.4	32.1	31.2		



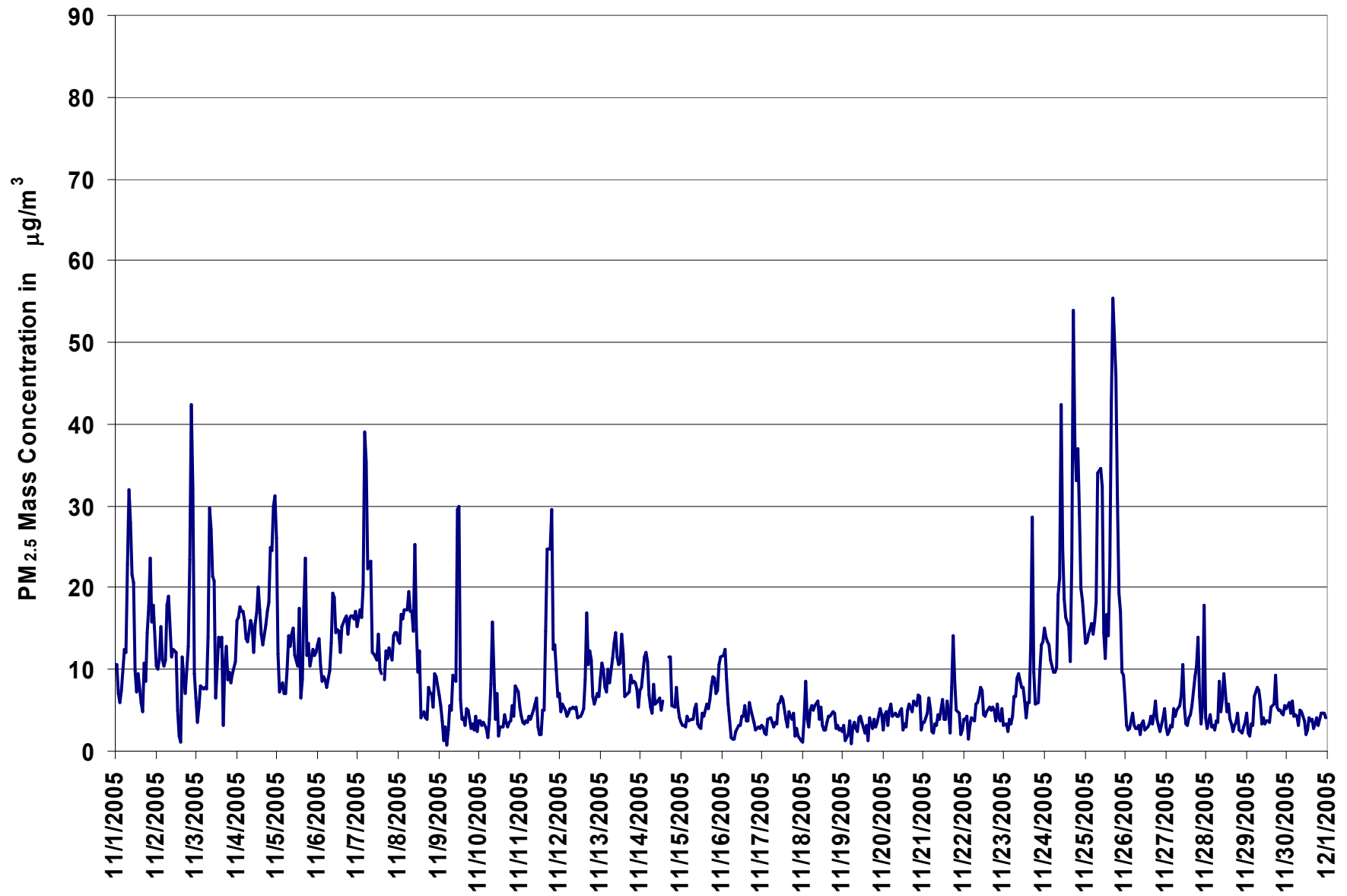
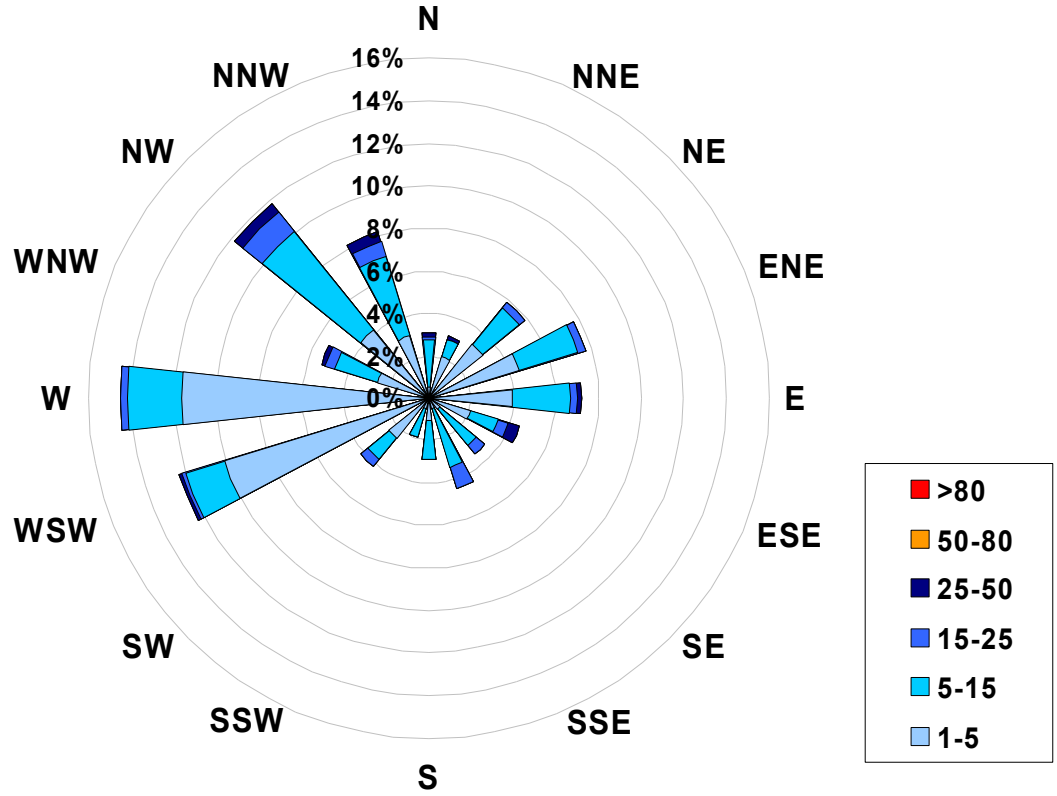


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range			Frequency (hrs)
1.0	<	5	439
5	to	15	225
15	to	25	38
25	to	50	14
50	to	80	0
	>	80	0
Total Non-Zero Values			716

### PASZA - Henry Pirker Relative Humidity Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

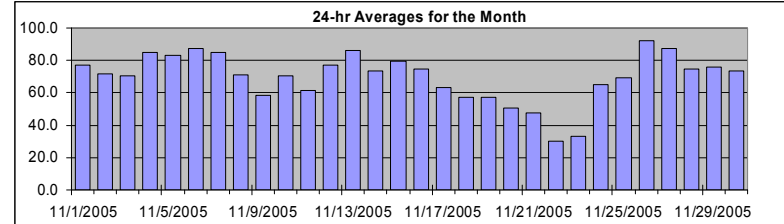
#### HOURLY AVERAGE TABLE

#### Relative Humidity (RH)

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

**Summary**

Maximum 1-hr Average:	94.8	%	26-Nov	16:00 17:00
Maximum 24-hr Value:	92.0	%	26-Nov	



AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	94.3	90.5	83.6	73.7	58.6	34.5	24.9	69.7 %	73.7 %

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	91	91	89	90	92	93	93	93	92	80	72	64	53	48	52	53	61	70	73	76	84	84	84	82	77.4	92.8
2-Nov-05	84	85	88	90	86	87	84	85	84	81	74	72	56	53	46	46	51	53	57	64	71	74	73	70	71.5	89.6
3-Nov-05	69	71	74	82	84	84	85	86	85	73	65	62	54	53	52	51	54	61	66	71	72	75	78	80	70.3	85.6
4-Nov-05	84	86	86	88	88	88	88	87	87	88	86	83	80	74	75	78	78	85	89	89	90	91	89	88	85.1	90.7
5-Nov-05	89	89	89	89	88	89	88	88	89	89	89	88	86	82	80	74	72	75	75	74	77	79	81	83	83.4	89.3
6-Nov-05	86	87	88	88	88	88	88	87	88	87	87	88	88	86	85	85	85	86	87	88	89	90	90	91	87.5	90.6
7-Nov-05	90	89	88	86	83	84	85	84	85	86	87	87	86	78	74	71	80	86	87	87	88	89	89	89	85.0	90.0
8-Nov-05	88	85	84	83	82	82	83	84	84	85	87	79	66	64	56	55	57	56	56	59	57	58	60	61	71.3	87.6
9-Nov-05	61	60	59	59	59	58	56	55	55	56	56	57	55	51	48	52	56	59	62	63	65	66	68	70	58.6	70.3
10-Nov-05	70	69	72	72	74	74	81	87	88	90	90	89	73	67	66	62	63	60	58	59	54	56	59	62	70.6	90.5
11-Nov-05	63	63	63	69	73	71	72	73	70	61	57	52	46	44	45	42	49	57	60	64	68	73	73	73	61.7	73.3
12-Nov-05	74	73	74	73	72	73	75	75	81	80	79	77	75	75	74	76	79	80	82	81	80	80	82	83	77.2	83.0
13-Nov-05	84	84	83	86	87	89	89	88	88	87	87	85	84	83	81	84	85	86	84	87	89	90	88	83	85.9	89.9
14-Nov-05	80	78	77	74	73	73	72	72	74	71	70	66	65	65	P	P	71	74	78	77	77	80	79	78	73.7	79.9
15-Nov-05	79	79	78	79	81	82	82	82	82	82	80	79	77	72	75	76	78	79	79	80	81	82	82	86	79.6	85.6
16-Nov-05	86	87	87	85	82	77	77	75	75	72	69	68	68	68	69	63	64	70	75	75	79	76	75	75	74.9	87.3
17-Nov-05	78	78	78	76	69	63	63	64	67	65	55	58	58	60	53	55	58	61	60	61	61	60	60	58	63.2	78.4
18-Nov-05	57	55	58	60	60	60	57	58	59	61	59	53	50	47	44	46	51	56	59	62	64	63	66	68	57.2	67.7
19-Nov-05	72	70	70	71	66	68	69	67	60	59	57	51	46	42	40	41	45	55	51	52	56	55	59	56	57.4	71.9
20-Nov-05	50	51	49	45	46	49	49	50	51	53	49	45	43	42	42	47	49	54	56	58	59	60	62	61	50.8	61.7
21-Nov-05	57	53	54	59	59	59	59	60	58	49	48	45	43	41	42	40	39	42	44	41	39	36	36	34	47.4	60.1
22-Nov-05	36	32	29	30	31	33	35	32	32	34	31	30	27	24	23	24	25	26	27	28	31	32	31	34	29.8	36.0
23-Nov-05	33	32	35	35	35	40	36	36	35	37	31	26	24	22	24	24	29	33	31	28	33	38	48	48	33.0	47.8
24-Nov-05	57	58	65	71	75	76	78	81	77	73	62	56	49	43	41	43	51	60	62	67	74	77	81	85	65.0	85.1
25-Nov-05	85	78	77	80	80	79	79	79	80	76	64	59	49	44	40	45	57	66	72	76	75	76	77	76	69.6	84.9
26-Nov-05	78	84	86	87	89	93	94	95	95	95	94	93	93	93	93	94	95	95	94	94	94	94	93	93	92.0	94.8
27-Nov-05	92	92	92	92	92	92	91	91	90	91	90	89	88	85	83	84	89	90	89	88	82	72	72	76	87.3	92.3
28-Nov-05	71	69	72	72	74	75	78	80	80	79	77	79	76	73	73	73	76	75	76	75	73	72	72	72	75.0	80.3
29-Nov-05	78	78	76	79	79	81	80	81	80	80	75	69	66	68	71	78	76	74	74	75	76	77	77	77	76.0	81.4
30-Nov-05	77	77	77	77	77	77	76	75	74	74	74	73	71	68	68	70	73	72	74	72	72	73	73	73	73.7	77.3
Hourly Avg	73.3	72.8	73.3	74.2	74.2	74.5	74.6	74.9	74.8	73.1	70.0	67.4	63.2	60.6	59.2	59.8	63.1	66.4	67.8	69.1	70.4	70.9	71.9	72.2		
Hourly Max	92.3	91.8	92.0	92.2	92.1	92.9	94.3	94.6	94.6	94.6	94.5	93.4	93.2	93.1	93.3	94.3	94.8	94.7	94.5	93.9	93.8	93.5	93.2	92.8		

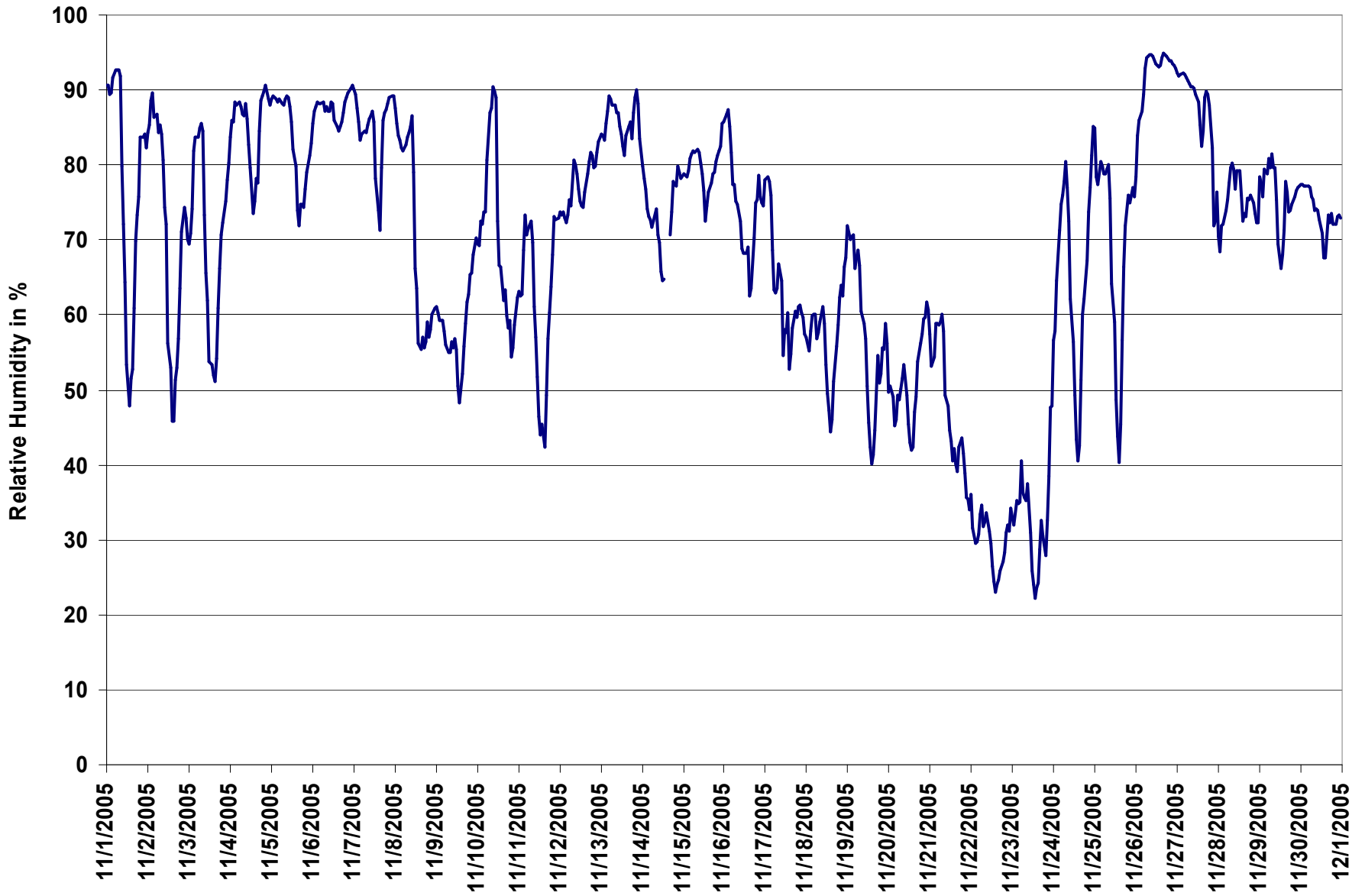


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

### PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

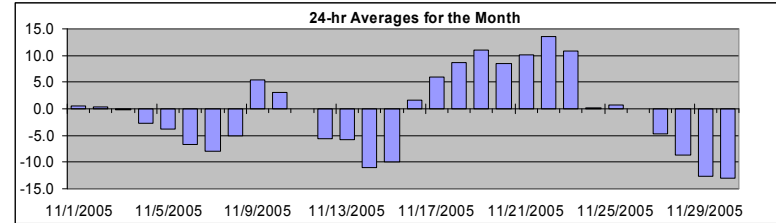
#### HOURLY AVERAGE TABLE

#### Ambient Temperature (T)

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

#### Summary

Maximum 1-hr Average:	16.8	°C	22-Nov	13:00 14:00
Maximum 24-hr Value:	13.5	°C	22-Nov	



AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	15.5	12.2	6.1	-1.3	-6.6	-12.9	-13.7	-0.6 °C	-1.3 °C

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	-1	-1	-2	-2	-3	-3	-3	-4	-4	0	2	5	7	8	8	7	5	3	2	1	-2	-3	-4	-4	0.5	8.5	
2-Nov-05	-4	-4	-5	-4	-3	-3	-2	-2	-2	-2	1	2	6	7	8	8	6	4	2	0	-2	-2	-2	-1	0.3	8.4	
3-Nov-05	-1	-1	-2	-3	-4	-4	-4	-5	-4	-1	3	5	5	6	6	4	2	0	-1	-1	-2	-2	-2	-2	-0.2	5.7	
4-Nov-05	-3	-4	-4	-4	-4	-4	-4	-4	-3	-3	1	2	1	0	2	1	1	-1	-2	-2	-3	-5	-9	-10	-2.8	1.7	
5-Nov-05	-9	-8	-8	-8	-8	-8	-8	-8	-7	-6	-5	-2	0	2	3	1	1	-1	-1	-1	-2	-3	-3	-4	-3.8	2.7	
6-Nov-05	-5	-6	-7	-8	-8	-8	-8	-9	-10	-9	-8	-7	-6	-5	-5	-5	-5	-5	-5	-5	-6	-6	-6	-7	-6.6	-4.8	
7-Nov-05	-7	-9	-10	-12	-14	-13	-12	-12	-11	-10	-8	-7	-5	-3	-2	-1	-4	-5	-6	-7	-8	-7	-8	-9	-8.0	-1.4	
8-Nov-05	-11	-12	-13	-14	-15	-15	-14	-13	-12	-11	-8	-3	-1	2	4	4	3	2	1	1	1	1	0	0	-5.1	4.0	
9-Nov-05	0	0	1	1	1	2	3	4	4	5	6	6	7	10	11	11	10	9	8	8	7	7	6	5	5.5	11.1	
10-Nov-05	5	6	5	6	5	5	1	-1	-1	3	4	4	5	5	5	5	3	3	2	2	1	1	1	1	3.1	5.8	
11-Nov-05	0	0	0	0	-2	-1	-2	-3	-2	0	2	3	5	5	4	4	2	0	-1	-1	-2	-4	-4	-4	-0.1	4.8	
12-Nov-05	-4	-5	-5	-5	-6	-6	-7	-7	-7	-7	-7	-6	-5	-5	-4	-5	-5	-5	-6	-6	-6	-6	-5	-6	-5.6	-4.1	
13-Nov-05	-6	-6	-5	-6	-7	-8	-8	-9	-8	-8	-7	-6	-5	-5	-4	-4	-4	-4	-4	-4	-4	-4	-5	-5	-8	-5.8	-3.6
14-Nov-05	-9	-9	-10	-10	-10	-11	-12	-12	-12	-12	-12	-11	-10	-10	P	P	-11	-11	-11	-11	-11	-11	-12	-12	-12	-10.9	-8.6
15-Nov-05	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-11	-10	-9	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-9	-9	-9.9	-7.5
16-Nov-05	-10	-11	-9	-4	0	3	3	4	4	5	5	5	5	6	6	7	5	4	3	2	1	2	1	1	1.6	6.6	
17-Nov-05	0	0	0	0	2	5	5	5	4	5	7	6	6	6	8	9	9	9	9	9	9	10	10	10	6.0	9.7	
18-Nov-05	10	10	10	9	9	8	9	8	8	7	8	9	10	10	11	10	9	8	7	7	8	9	8	8	8.6	10.6	
19-Nov-05	7	8	8	8	10	9	9	9	10	11	12	14	15	16	16	15	13	10	12	11	10	11	9	10	11.0	16.1	
20-Nov-05	11	11	11	11	10	9	9	8	8	7	8	10	10	10	10	9	8	7	7	6	6	6	6	6	8.5	11.2	
21-Nov-05	6	7	7	6	8	9	9	9	9	11	11	13	13	13	12	12	12	11	10	10	10	11	11	11	10.0	13.4	
22-Nov-05	11	12	13	13	12	12	12	13	12	12	13	14	15	17	17	16	16	15	15	14	13	13	13	12	13.5	16.8	
23-Nov-05	12	12	11	10	10	8	9	9	9	9	12	14	15	16	15	15	13	11	12	13	10	8	4	4	10.9	15.6	
24-Nov-05	2	1	0	-2	-4	-4	-4	-4	-4	-2	1	4	6	8	8	8	4	2	1	-1	-3	-4	-5	-5	0.1	8.4	
25-Nov-05	-5	-4	-3	-3	-3	-3	-3	-3	-4	-3	1	3	6	8	10	8	5	2	1	-1	0	1	1	2	0.7	10.0	
26-Nov-05	3	3	2	2	1	0	0	0	0	0	0	1	0	0	0	0	0	-1	-1	-2	-2	-2	-3	-3	0.0	3.2	
27-Nov-05	-3	-3	-3	-4	-4	-5	-5	-5	-6	-5	-4	-4	-3	-3	-2	-3	-5	-6	-8	-7	-6	-6	-5	-6	-4.7	-2.0	
28-Nov-05	-5	-5	-6	-6	-7	-8	-9	-10	-10	-10	-9	-10	-9	-9	-9	-9	-10	-10	-10	-10	-10	-10	-10	-10	-8.8	-5.3	
29-Nov-05	-11	-12	-13	-14	-14	-14	-13	-13	-12	-13	-12	-11	-10	-11	-12	-14	-14	-13	-13	-13	-13	-13	-13	-13	-12.7	-10.1	
30-Nov-05	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-12	-12	-12	-13	-13	-13	-13	-13	-13	-14	-14	-13.0	-11.9	
Hourly Avg	-1.8	-1.8	-2.1	-2.3	-2.3	-2.4	-2.4	-2.7	-2.5	-1.7	-0.3	0.8	2.0	2.9	3.6	3.2	1.7	0.6	0.1	-0.3	-0.8	-1.1	-1.6	-1.9			
Hourly Max	12.1	12.4	12.7	12.6	12.3	11.6	11.7	12.6	12.3	12.0	13.2	14.0	15.5	16.8	16.7	16.0	15.6	15.4	14.9	14.2	13.2	13.1	13.3	12.1			

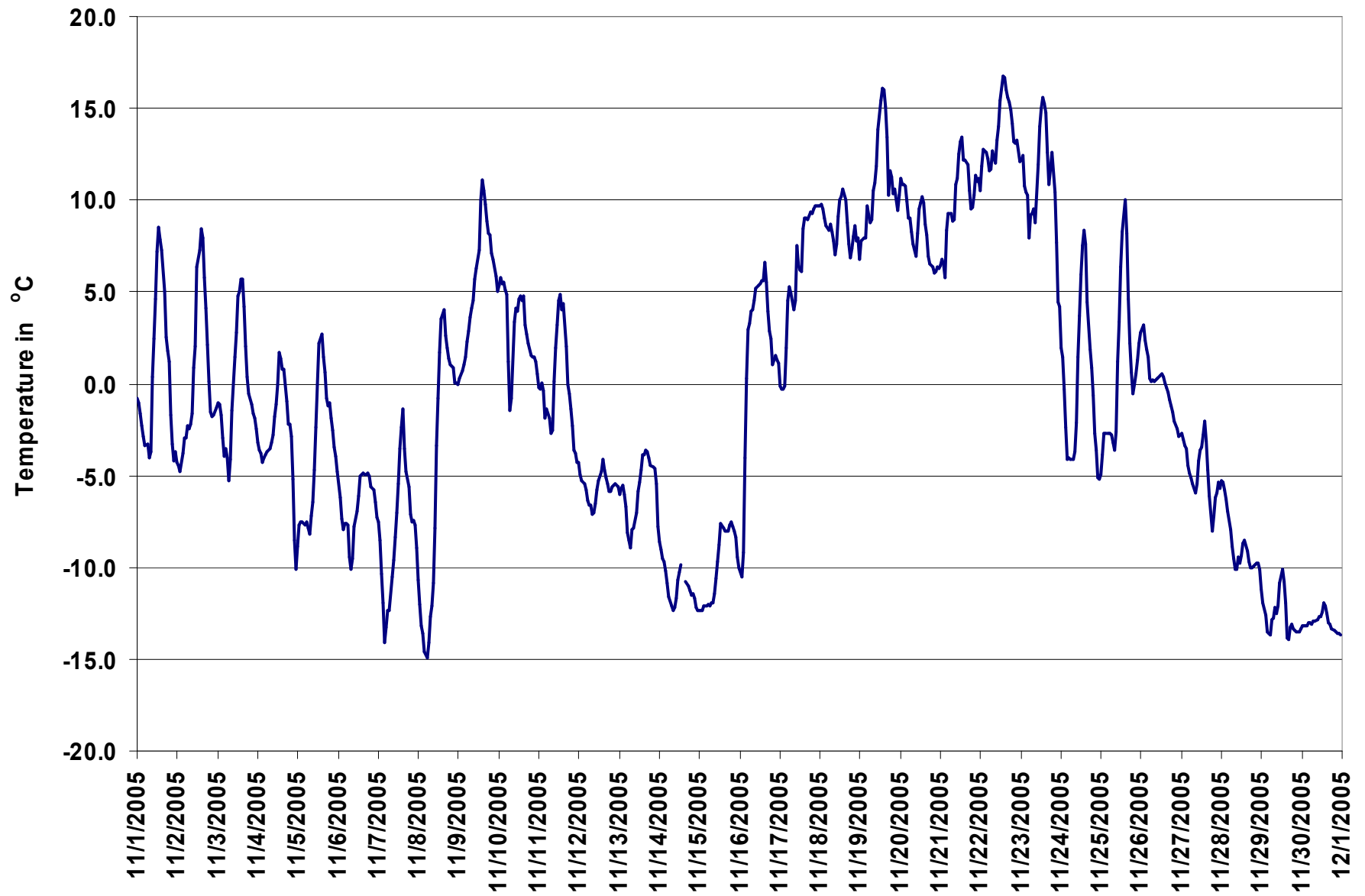


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

### PASZA - Henry Pirker Solar Radiation Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

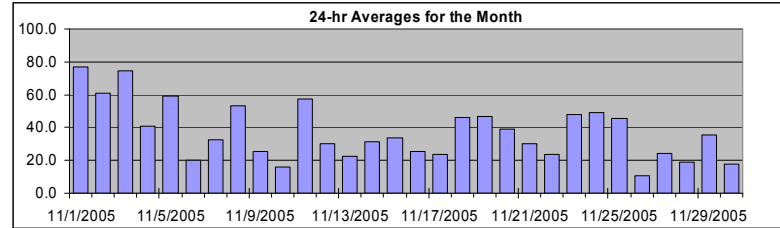
#### HOURLY AVERAGE TABLE

#### Solar Radiation (SR)

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

#### Summary

Maximum 1-hr Average:	340.4	W/m <sup>2</sup>	1-Nov	12:00 13:00
Maximum 24-hr Value:	76.7	W/m <sup>2</sup>	1-Nov	



AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	308.3	211.2	43.1	0.5	0.4	0.1	0.0	37.4 W/m <sup>2</sup>	0.5 W/m <sup>2</sup>

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Nov-05	0	0	0	0	0	0	0	0	1	37	163	232	315	340	324	259	136	29	2	0	0	0	0	0	0	76.7	340.4
2-Nov-05	0	0	0	0	0	0	0	0	1	32	59	151	132	334	315	269	151	22	2	0	0	0	0	0	0	61.2	334.2
3-Nov-05	0	0	0	0	0	0	0	0	1	27	139	236	300	326	313	257	151	40	2	0	0	0	0	0	0	74.8	326.4
4-Nov-05	0	0	0	0	0	0	0	0	0	6	25	68	87	200	259	147	126	62	2	0	0	0	0	0	0	41.0	259.0
5-Nov-05	0	0	0	0	0	1	0	0	0	11	58	175	275	309	303	182	68	35	1	0	0	0	0	0	0	59.2	309.4
6-Nov-05	0	0	0	0	1	0	0	0	0	15	44	114	69	81	69	51	32	12	1	0	0	0	0	0	0	20.3	114.1
7-Nov-05	0	0	0	1	0	0	0	0	0	3	44	53	86	112	170	153	144	17	1	0	0	0	0	0	0	32.7	169.6
8-Nov-05	0	0	0	0	0	1	0	0	0	9	38	100	226	301	240	190	153	21	1	0	0	0	0	0	0	53.5	300.7
9-Nov-05	0	0	0	0	1	0	0	0	0	3	40	87	85	89	129	91	64	16	1	0	0	0	0	0	0	25.5	129.5
10-Nov-05	0	0	0	1	0	0	0	0	1	6	15	27	36	64	57	53	100	15	1	0	0	0	0	0	0	15.8	99.5
11-Nov-05	0	0	1	0	0	0	0	0	1	12	110	195	264	293	269	120	97	13	1	0	0	0	0	0	0	57.5	293.0
12-Nov-05	0	1	0	0	0	0	0	0	0	5	24	67	134	137	144	133	69	8	1	0	0	0	0	0	0	30.3	144.1
13-Nov-05	1	0	0	0	0	0	0	0	0	6	42	82	99	85	90	92	34	9	1	0	0	0	0	0	1	22.8	98.5
14-Nov-05	0	0	0	0	0	0	0	0	0	5	41	100	172	176	184	P	P	10	0	0	0	0	0	0	1	31.5	184.3
15-Nov-05	0	0	0	0	0	0	0	0	0	5	43	113	139	153	175	117	43	17	0	0	0	0	0	0	0	33.6	174.6
16-Nov-05	0	0	0	0	0	0	0	0	0	6	45	128	103	82	74	66	93	13	1	0	0	1	0	0	0	25.6	127.7
17-Nov-05	0	0	0	0	0	0	0	0	0	7	79	191	74	50	59	70	25	5	0	0	1	0	0	0	0	23.6	190.8
18-Nov-05	0	0	0	0	0	0	0	0	0	8	61	155	210	232	159	177	87	16	1	1	0	0	0	0	0	46.4	231.8
19-Nov-05	0	0	0	0	0	0	0	0	0	3	32	99	213	250	237	193	83	12	1	0	0	0	0	0	0	47.0	250.0
20-Nov-05	0	0	0	0	0	0	0	0	0	4	49	103	175	173	198	147	60	16	1	0	0	0	0	0	0	38.8	198.3
21-Nov-05	0	0	0	0	0	0	0	0	0	2	23	75	161	173	166	76	39	8	1	0	0	0	0	0	0	30.4	173.2
22-Nov-05	0	0	0	0	0	0	0	0	0	2	26	94	85	100	133	74	40	6	1	0	0	0	0	0	0	23.6	133.0
23-Nov-05	0	0	0	0	0	0	0	0	0	4	64	163	217	234	226	156	62	10	1	0	0	0	0	0	0	47.6	234.2
24-Nov-05	0	0	0	0	0	0	0	0	0	3	55	150	214	242	230	180	87	10	0	0	0	0	0	0	0	49.0	242.2
25-Nov-05	0	0	0	0	0	0	0	0	0	2	53	146	206	222	213	167	76	6	0	0	0	0	0	0	0	45.7	221.6
26-Nov-05	0	0	0	0	0	0	0	0	0	1	9	29	46	52	48	42	20	4	0	0	0	0	0	0	0	10.7	51.9
27-Nov-05	0	0	0	0	0	0	0	0	0	1	14	53	76	105	125	141	52	7	0	0	0	0	0	0	0	24.2	141.3
28-Nov-05	0	0	0	0	0	0	0	0	0	3	21	55	87	92	85	73	36	6	0	0	0	0	0	0	0	19.2	92.0
29-Nov-05	0	0	0	0	0	0	0	0	1	1	19	75	180	236	211	101	24	4	0	0	0	0	0	0	0	35.6	236.1
30-Nov-05	0	0	0	0	0	0	1	0	1	1	17	53	56	84	94	80	33	4	0	0	0	0	0	0	0	17.8	93.5
Hourly Avg	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	7.7	48.3	112.3	150.7	177.6	176.6	133.0	75.3	15.1	0.8	0.4	0.4	0.4	0.3	0.4	0.3			
Hourly Max	1.3	1.3	1.3	1.3	1.3	1.2	1.0	1.1	36.7	163.2	236.3	314.8	340.4	324.4	268.7	153.1	62.4	2.5	1.3	1.3	1.3	0.5	1.0	1.3			

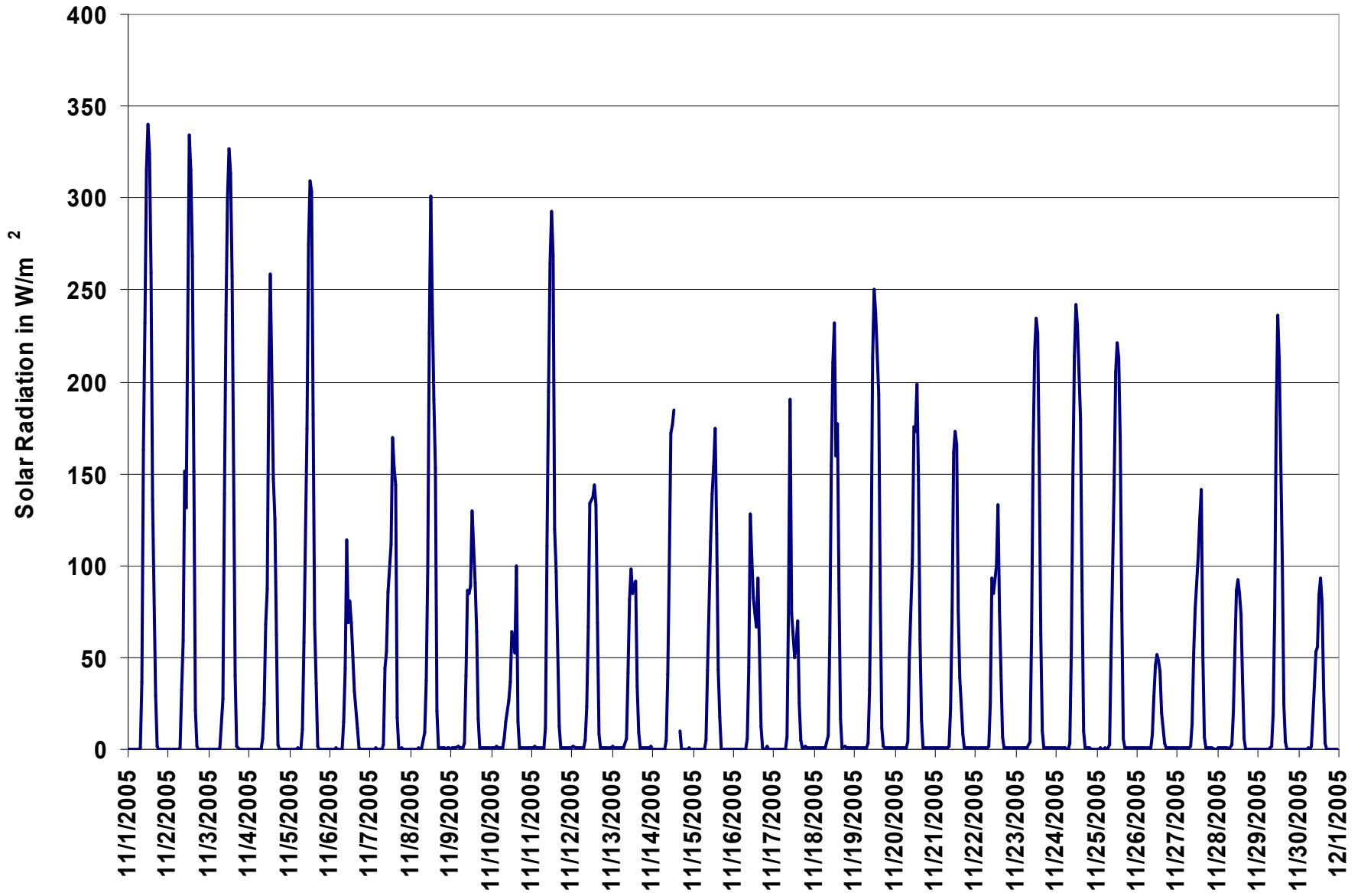


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend



### PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

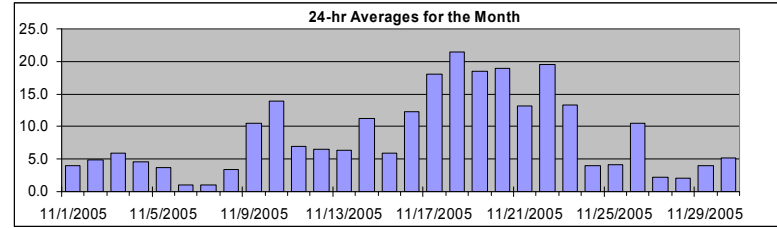
#### Wind Speed (WSs)

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

**Summary**

Maximum 1-hr Average:	40.1	km/hr	17-Nov	23:00 0:00
Maximum 24-hr Value:	21.5	km/hr	18-Nov	

Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%				
Percentile	99	95	75	50	25	5	1	AverageS
	33.4	23.6	11.7	5.9	3.6	1.1	1.0	8.6 km/hr



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	3	4	4	3	3	4	3	4	3	4	3	4	3	3	6	6	7	4	7	5	3	5	3	4	4.0	6.8
2-Nov-05	3	3	4	5	3	3	3	4	4	6	5	4	5	7	6	8	8	8	8	4	2	3	5	5	4.9	8.4
3-Nov-05	5	4	3	3	3	3	4	5	4	4	5	5	5	7	7	9	9	8	7	6	7	8	9	10	5.9	10.2
4-Nov-05	9	6	7	4	4	4	6	4	4	4	4	4	3	3	3	5	4	5	5	6	3	3	4	4	4.5	9.5
5-Nov-05	5	5	4	4	4	3	4	3	3	3	4	4	4	5	4	5	8	5	5	2	1	1	1	1	3.7	7.7
6-Nov-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
7-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1.1	1.7
8-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	4	10	7	6	5	8	5	4	4	6	6	6	3.5	10.1
9-Nov-05	6	5	8	8	8	8	8	8	8	8	7	13	13	17	23	20	18	12	9	10	9	9	9	8	10.4	22.6
10-Nov-05	8	6	6	6	7	7	5	4	8	8	8	5	20	20	22	20	20	25	25	24	22	23	22	14	14.0	25.1
11-Nov-05	12	15	18	13	5	5	5	4	5	4	7	10	10	11	9	4	5	4	2	4	4	3	4	5	7.0	17.8
12-Nov-05	6	7	4	6	8	10	7	6	6	7	7	8	9	8	8	8	7	5	6	6	4	4	3	3	6.5	9.5
13-Nov-05	3	3	3	4	2	3	2	3	3	4	4	5	4	6	7	8	12	9	10	6	7	8	12	21	6.3	20.8
14-Nov-05	24	22	18	15	15	14	15	12	14	13	11	9	8	8	P	P	6	7	5	6	4	7	8	8	11.2	23.6
15-Nov-05	8	7	7	8	8	8	9	8	8	8	9	7	6	6	6	5	5	4	2	3	4	4	3	3	6.0	9.0
16-Nov-05	3	4	3	9	9	13	12	21	19	22	21	20	17	16	10	15	16	7	10	10	8	12	11	9	12.3	22.3
17-Nov-05	7	9	10	11	12	16	24	17	13	10	9	6	4	9	18	21	19	20	29	26	34	34	36	40	18.1	40.1
18-Nov-05	40	34	34	32	28	26	27	25	20	17	21	23	24	21	20	18	15	13	10	9	10	16	13	19	21.5	39.9
19-Nov-05	12	14	11	10	19	10	8	17	22	18	19	12	14	31	31	34	27	17	24	24	20	19	12	18	18.4	33.8
20-Nov-05	26	25	30	33	27	22	23	19	17	17	21	22	25	25	22	19	16	12	10	10	9	8	7	10	18.9	32.6
21-Nov-05	5	5	3	3	11	19	17	15	18	25	21	14	13	16	11	19	21	7	5	6	11	19	13	17	13.2	25.5
22-Nov-05	14	19	18	22	21	14	17	24	20	12	7	10	21	24	26	20	25	27	24	23	18	24	22	15	19.5	26.7
23-Nov-05	16	18	12	14	13	7	12	14	16	14	12	19	16	18	16	20	14	10	13	17	12	7	3	4	13.2	20.2
24-Nov-05	4	3	3	4	4	4	3	4	5	3	3	4	4	4	4	3	3	3	6	4	7	6	5	3	3.9	6.8
25-Nov-05	4	4	3	3	4	4	4	3	4	3	5	5	4	4	3	3	4	4	4	5	5	6	5	6	4.1	6.0
26-Nov-05	11	14	13	11	10	9	10	11	11	11	12	13	13	15	15	14	10	11	8	6	5	6	5	6	10.5	15.5
27-Nov-05	5	4	2	1	1	1	1	1	1	1	1	3	7	7	5	2	1	1	1	1	1	1	1	1	2.2	7.3
28-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	4	3	3	3	4	4	5	2.1	5.4
29-Nov-05	5	5	4	1	1	1	1	1	1	1	1	3	6	7	6	5	5	7	7	6	6	6	6	5	4.0	6.9
30-Nov-05	5	6	5	5	4	5	5	4	4	6	7	5	4	4	4	4	4	4	4	6	5	6	7	8	5.2	7.9
1-hr Average	8.3	8.5	8.0	8.0	8.0	7.5	7.9	8.2	8.3	7.9	8.0	8.1	9.0	10.4	10.5	10.6	10.0	8.5	8.7	8.2	7.8	8.7	8.1	8.6		
Hourly Max	39.9	33.8	33.6	32.6	27.8	25.9	27.0	25.2	21.8	25.5	21.4	23.4	24.7	30.7	31.5	33.8	27.5	26.7	29.1	26.2	34.4	33.6	35.6	40.1		

### PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

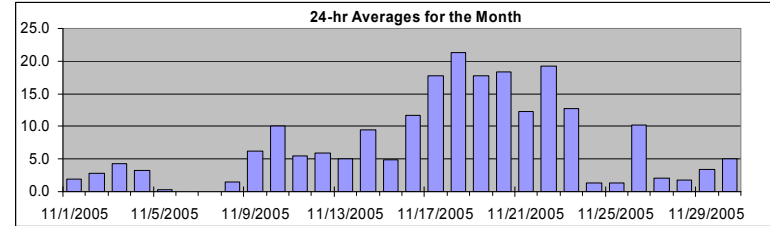
#### Wind Speed (WSv)

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

**Summary**

Maximum 1-hr Average:	40.0	km/hr	17-Nov	23:00 0:00
Maximum 24-hr Value:	21.3	km/hr	18-Nov	

Calm Time:	28 hrs	4% calms	Operational Time:	690 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%				
Percentile	99	95	75	50	25	5	1	AverageV
	33.5	23.5	11.8	6.1	3.0	0.9	0.9	21.3 km/hr



**Status Flag Characters**

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Nov-05	1	4	2	2	2	3	3	3	4	4	2	3	3	1	1	5	7	4	7	5	3	4	3	3		1.9	6.8
2-Nov-05	3	2	4	4	1	1	1	4	4	5	5	4	5	6	5	8	8	8	6	3	2	2	5	5		2.9	8.0
3-Nov-05	5	4	2	2	2	2	2	2	1	4	1	5	4	7	7	9	9	8	7	6	7	8	9	10		4.3	10.1
4-Nov-05	9	6	6	4	4	4	5	3	4	4	3	1	1	2	2	5	4	5	5	6	3	2	4	4		3.2	9.4
5-Nov-05	5	4	4	4	3	2	3	2	1	2	4	4	4	3	5	8	5	4	1	calm	calm	1	1	1		0.3	7.6
6-Nov-05	1	1	1	1	1	1	1	1	calm	calm	1	1	calm	calm	calm	1	calm	calm	1	1	1	1	1	1		N	1.0
7-Nov-05	1	1	1	1	1	1	1	calm	calm	1	1	calm	calm	calm	calm	1	calm	1	calm	1	1	calm	calm	1		N	1.0
8-Nov-05	1	1	1	1	1	1	calm	1	1	calm	1	1	3	10	7	6	2	7	3	3	4	5	6	5		1.4	9.8
9-Nov-05	6	5	7	7	7	8	8	8	8	7	7	13	13	16	22	20	18	12	9	10	9	8	9	8		6.2	22.5
10-Nov-05	8	6	6	6	7	7	2	3	8	8	8	3	19	20	22	20	20	25	25	23	21	23	22	14		10.1	25.0
11-Nov-05	11	14	18	12	4	3	2	4	3	3	7	10	10	10	9	4	4	2	1	4	3	3	4	4		5.4	17.7
12-Nov-05	5	7	4	6	8	9	6	6	6	6	7	8	9	8	8	8	7	5	6	6	4	3	3	2		5.8	9.4
13-Nov-05	1	1	1	3	calm	3	1	2	1	4	4	5	3	5	7	8	12	9	10	6	7	7	12	21		5.0	20.8
14-Nov-05	24	22	18	14	15	14	15	12	14	13	11	8	7	8	P	P	6	7	5	6	4	7	7	7		9.4	23.5
15-Nov-05	8	6	7	8	8	8	9	8	8	8	9	7	6	5	6	4	4	4	1	2	3	4	2	calm		4.9	8.8
16-Nov-05	2	4	2	7	7	11	12	21	19	22	20	20	17	16	10	15	16	7	10	10	8	12	11	9		11.6	22.2
17-Nov-05	7	9	10	11	11	15	24	17	13	9	9	5	2	8	16	21	19	20	29	26	34	34	35	40		17.8	40.0
18-Nov-05	40	34	34	32	28	26	27	25	20	17	21	23	24	20	20	18	15	13	10	9	10	16	13	19		21.3	39.8
19-Nov-05	12	14	10	8	19	10	8	16	22	18	19	12	14	31	31	34	27	17	24	24	20	19	11	18		17.7	33.5
20-Nov-05	26	25	30	32	27	22	23	19	17	17	21	22	24	25	22	18	16	12	10	10	9	7	5	9		18.3	32.5
21-Nov-05	5	5	2	2	10	19	17	15	18	25	21	14	13	16	11	19	21	6	5	6	11	19	13	17		12.3	25.4
22-Nov-05	13	18	18	22	21	14	17	23	20	12	7	9	21	23	26	20	24	27	23	23	18	24	22	15		19.3	26.7
23-Nov-05	15	18	11	13	13	7	12	14	16	14	12	19	16	18	16	20	14	10	12	17	12	6	2	4		12.8	19.9
24-Nov-05	3	2	2	3	4	3	2	3	3	calm	2	3	1	3	4	3	1	3	5	calm	6	5	5	2		1.4	6.1
25-Nov-05	3	3	1	calm	3	3	4	1	3	2	4	5	3	3	2	3	4	3	4	5	5	6	4	5		1.4	5.8
26-Nov-05	11	14	13	10	10	9	10	11	11	11	12	13	13	15	15	14	10	11	8	6	5	6	5	6		10.2	15.4
27-Nov-05	5	4	2	1	1	1	1	1	1	1	1	3	7	7	5	2	1	1	1	calm	1	1	1	1		2.1	7.2
28-Nov-05	1	1	1	1	1	1	1	1	1	1	calm	1	1	1	1	2	4	4	3	3	2	4	4	5		1.8	5.3
29-Nov-05	4	4	3	1	1	1	1	1	1	1	1	3	6	7	6	5	4	7	6	6	5	6	5	4		3.5	6.9
30-Nov-05	5	6	5	4	4	4	5	4	4	6	7	5	4	3	3	3	4	4	6	5	6	7	7	8		5.0	7.7
1-hr Vector	3.8	3.8	4.1	4.5	4.2	3.7	4.5	5.0	5.0	4.4	4.0	4.4	5.3	6.9	7.1	6.6	5.7	4.4	4.2	4.2	4.3	4.2	3.4	3.5			
Hourly Max	39.8	33.6	33.5	32.5	27.7	25.8	26.9	25.1	21.8	25.4	21.3	23.3	24.4	30.6	31.2	33.5	27.2	26.7	28.9	26.0	34.3	33.5	35.5	40.0			

### PASZA - Henry Pirker Wind Direction Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

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

**Summary**


Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%				
Percentile	99	95	75	50	25	5	1	Average
	350.8	334.6	279.0	247.4	104.3	38.5	13.9	264 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
	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Nov-05	203	168	224	131	127	119	130	143	123	127	159	175	4	28	171	127	101	101	105	93	296	328	315	323	127	SE
2-Nov-05	297	289	146	186	147	168	9	146	152	162	156	152	170	187	242	254	211	234	268	178	117	91	120	125	187	S
3-Nov-05	103	113	106	310	322	157	174	347	5	317	354	99	104	86	78	84	90	70	65	55	54	60	72	71	70	ENE
4-Nov-05	65	72	63	71	51	59	63	61	39	60	80	149	132	251	74	95	104	84	99	103	101	302	326	304	72	ENE
5-Nov-05	322	339	329	305	298	309	254	281	267	250	163	171	159	163	126	83	101	84	93	96	41	22	55	53	81	E
6-Nov-05	37	352	315	350	33	36	75	38	351	129	168	138	134	167	110	140	240	302	264	259	261	220	185	193	156	SSE
7-Nov-05	159	154	51	48	292	325	330	303	6	349	22	127	133	110	39	218	299	348	355	308	314	311	331	310	342	NNW
8-Nov-05	275	330	317	315	306	311	305	309	323	277	164	218	201	239	244	219	224	224	151	24	119	110	117	122	204	SSW
9-Nov-05	118	120	109	105	103	106	124	116	102	138	154	175	190	229	244	243	238	224	221	209	171	128	120	118	177	S
10-Nov-05	140	119	148	110	113	111	279	350	323	323	305	252	267	261	253	252	246	252	259	258	231	218	225	230	246	WSW
11-Nov-05	246	229	227	233	22	275	238	250	240	171	202	230	252	249	246	240	216	259	161	348	334	313	341	305	245	WSW
12-Nov-05	40	58	31	34	39	24	50	86	92	93	94	95	84	73	77	79	80	72	80	80	71	38	351	29	66	ENE
13-Nov-05	39	203	259	299	318	267	346	258	344	304	321	329	326	210	258	314	336	352	0	347	332	340	317	306	318	NW
14-Nov-05	313	317	315	311	309	315	309	311	314	317	324	309	294	300	P	P	310	312	313	329	338	92	91	82	318	NW
15-Nov-05	79	78	78	79	87	87	95	98	90	92	96	101	82	89	93	77	73	103	30	213	284	318	304	68	85	E
16-Nov-05	305	170	215	294	271	277	310	280	265	257	268	272	269	275	277	274	270	262	266	274	284	249	243	234	269	W
17-Nov-05	262	270	261	262	276	268	251	257	271	272	245	205	256	265	270	245	250	248	264	260	250	251	253	250	256	WSW
18-Nov-05	246	246	251	250	257	264	263	263	260	245	252	257	260	259	258	261	254	258	249	240	256	244	269	246	255	WSW
19-Nov-05	265	249	228	247	250	224	214	238	249	227	211	238	239	248	255	260	266	279	262	267	268	265	241	250	251	WSW
20-Nov-05	265	261	254	263	272	276	268	266	267	278	275	274	268	270	264	272	259	246	248	260	247	254	256	174	264	W
21-Nov-05	171	159	189	180	255	253	250	255	267	274	270	265	273	269	267	271	271	241	299	296	284	263	277	246	263	W
22-Nov-05	256	254	258	257	250	246	244	248	250	257	252	226	248	253	258	254	258	255	263	252	261	259	255	279	254	WSW
23-Nov-05	259	257	276	264	244	253	259	261	278	275	272	260	265	264	267	260	273	274	256	265	275	289	202	140	264	W
24-Nov-05	141	115	352	288	313	338	315	240	345	236	242	222	219	187	234	272	251	105	122	52	334	312	328	268	281	W
25-Nov-05	299	329	292	342	149	112	164	53	313	351	130	150	133	175	255	287	331	23	323	327	324	330	328	327	327	NNW
26-Nov-05	312	306	308	310	296	283	278	276	281	285	283	290	291	298	305	316	320	313	333	330	290	291	296	298	299	WNW
27-Nov-05	299	305	290	305	312	319	303	297	312	315	313	302	330	338	353	348	340	340	333	23	333	347	328	325	324	NW
28-Nov-05	16	45	20	10	16	31	44	79	77	68	344	337	327	23	54	81	79	71	55	31	56	67	77	81	57	ENE
29-Nov-05	78	76	80	96	53	341	329	339	67	28	48	49	54	67	59	62	23	348	5	43	53	73	67	35	48	NE
30-Nov-05	46	69	66	67	39	66	37	48	44	68	76	70	79	63	14	32	72	67	67	66	73	84	86	84	65	ENE
Hourly Avg	270	261	260	268	273	271	265	264	275	267	255	246	257	257	261	262	264	265	271	274	270	264	262	256		

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

Station: Henry Pirker  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

Wind Direction (WD)

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

**Summary**


Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%			
Percentile	99	95	75	50	25	5	1
	61.8	48.4	22.4	12.0	6.4	4.0	3.3

**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

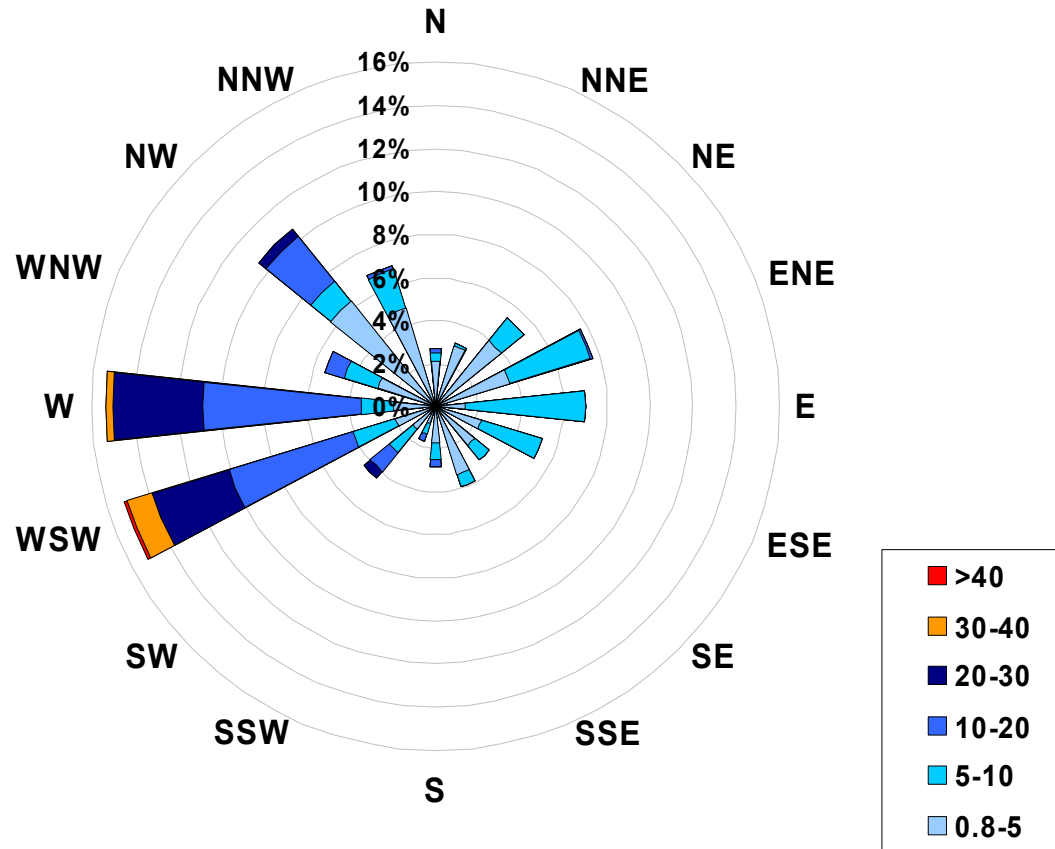
**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00
1-Nov-05	61	10	54	31	37	24	25	25	12	39	22	26	60	63	14	17	9	33	5	6	38	20	15	13
2-Nov-05	24	62	15	33	26	38	38	16	25	9	12	20	19	22	23	15	10	6	32	26	53	51	7	9
3-Nov-05	10	10	49	35	40	62	33	32	48	19	41	33	33	20	16	10	7	6	9	9	8	9	8	8
4-Nov-05	8	16	13	15	18	24	16	20	15	22	46	36	55	62	60	23	22	10	11	9	23	44	8	8
5-Nov-05	18	9	10	15	23	35	30	22	56	20	17	23	29	30	49	15	7	17	28	28	32	28	23	16
6-Nov-05	17	19	26	18	20	29	23	49	53	28	13	39	49	46	34	59	38	41	25	12	11	16	12	22
7-Nov-05	26	35	42	18	17	19	30	23	46	28	26	45	33	51	23	30	36	21	27	19	27	48	48	18
8-Nov-05	31	20	17	15	21	17	71	22	12	24	12	20	10	10	11	22	53	11	42	38	20	17	7	9
9-Nov-05	6	8	6	14	10	10	7	5	7	14	9	5	6	9	5	6	6	7	7	7	6	7	11	7
10-Nov-05	7	9	10	6	6	6	38	21	43	17	11	36	6	5	9	6	5	4	4	5	6	5	6	7
11-Nov-05	11	11	6	14	56	57	33	29	19	15	14	11	12	12	9	20	24	38	27	36	20	25	32	10
12-Nov-05	21	17	23	19	13	15	14	14	15	12	12	15	12	12	13	10	9	19	10	8	34	23	31	41
13-Nov-05	44	43	82	21	63	26	53	36	46	23	16	10	34	13	11	8	6	5	6	8	7	7	8	4
14-Nov-05	4	4	5	6	6	6	5	7	5	8	9	12	14	13	P	P	10	7	10	9	28	10	10	9
15-Nov-05	9	12	10	9	8	9	8	12	8	10	10	12	19	18	15	14	15	16	48	49	29	19	30	42
16-Nov-05	29	10	49	35	21	13	5	4	5	4	9	4	9	4	5	4	5	12	7	7	9	6	6	6
17-Nov-05	12	6	8	7	8	8	4	5	7	15	13	13	49	13	10	4	6	7	5	9	4	4	4	3
18-Nov-05	4	4	5	4	4	4	4	4	4	5	4	6	6	6	7	5	4	6	10	17	13	8	8	3
19-Nov-05	5	8	7	13	8	9	6	5	4	5	4	9	10	6	6	6	6	4	5	3	3	5	8	5
20-Nov-05	5	6	4	5	5	5	5	4	4	3	5	7	5	6	4	6	5	4	7	11	11	27	10	
21-Nov-05	20	7	27	38	18	5	4	5	3	3	4	9	5	5	7	6	6	16	17	7	6	9	5	
22-Nov-05	8	6	5	4	4	7	5	4	4	7	16	16	5	5	6	6	5	4	5	4	5	5	4	4
23-Nov-05	5	4	9	14	5	9	5	7	9	6	6	5	5	5	4	6	9	7	6	3	11	27	44	12
24-Nov-05	21	28	31	36	22	43	34	46	47	59	33	27	30	21	16	17	34	27	26	45	21	23	17	67
25-Nov-05	20	30	60	64	53	32	13	42	36	39	29	13	24	21	32	22	16	33	19	9	10	6	17	44
26-Nov-05	5	4	4	5	5	4	4	3	3	3	3	3	5	3	4	8	6	5	7	7	6	6	6	5
27-Nov-05	4	6	11	7	8	13	9	27	26	18	18	8	9	6	6	8	9	26	10	44	14	9	17	9
28-Nov-05	16	17	12	10	12	16	20	18	16	10	56	8	11	24	18	16	12	16	19	20	19	14	14	9
29-Nov-05	12	11	22	8	16	12	7	18	15	14	21	21	18	19	16	20	14	8	15	17	21	12	16	20
30-Nov-05	20	16	16	17	19	25	20	19	19	17	13	15	21	29	23	27	23	17	11	13	10	12	11	11

Daily Maximum
62.7
61.9
62.4
61.6
55.6
58.9
51.1
70.5
14.3
43.0
56.5
40.8
81.6
28.4
49.3
49.2
48.5
16.7
12.9
26.5
38.5
15.9
44.2
67.2
63.9
8.3
44.0
56.3
22.1
28.9

Hourly Max	61	62	82	64	63	62	71	49	56	59	56	45	60	63	60	59	53	41	48	49	53	51	48	67
------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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



**Calms: 0%**

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	312
5	to	10	194
10	to	20	137
20	to	30	63
30	to	40	11
	>	40	1
Total Non-Zero Values			718

# PASZA - Evergreen Park

## Monthly Summary Tables, Graphs, and Roses

### PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

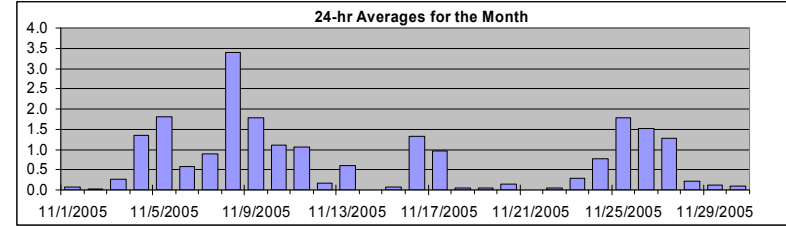
#### HOURLY AVERAGE TABLE

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

Monitoring Dates: November 1, 2005 to December 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:	6.1 ppb 8-Nov 14:00 15:00
Maximum 24-hr Average:	3.4 ppb 8-Nov



AIC Time:	32 hrs	Operational Time:	684 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	4.6	2.9	1.3	0.2	0.0	0.0	0.0	0.7 ppb	0.2 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum				
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	24:00		
1-Nov-05	0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0.1	0.6
2-Nov-05	1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
3-Nov-05	2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	1	1	1	0	0	0	0	0.3	1.0	
4-Nov-05	3:00	0	1	0	0	0	0	1	0	0	0	0	A	2	4	4	3	3	2	3	3	2	1	1	1	1	1.4	3.8		
5-Nov-05	4:00	1	2	1	1	1	0	1	1	1	1	A	1	2	4	4	3	3	3	3	2	1	1	1	2	1.8	3.8			
6-Nov-05	5:00	2	1	1	1	1	1	1	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.6		
7-Nov-05	6:00	0	0	0	0	0	0	0	0	A	1	0	1	0	1	2	2	3	3	2	1	1	1	2	1	0.9	3.2			
8-Nov-05	7:00	1	1	2	2	2	2	2	A	2	3	3	1	4	5	6	6	5	5	5	5	4	4	3	2	3.4	6.1			
9-Nov-05	8:00	1	1	0	0	0	0	A	1	2	2	3	3	3	3	3	2	2	3	2	2	2	2	1	1	1.8	3.4			
10-Nov-05	9:00	1	1	1	0	0	A	0	0	0	0	0	1	2	2	2	2	2	3	2	2	1	2	1	1	1.1	2.6			
11-Nov-05	10:00	1	1	0	0	A	0	0	1	0	1	0	1	3	3	3	3	3	3	2	1	0	0	0	0	1.1	3.1			
12-Nov-05	11:00	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0.2	1.0			
13-Nov-05	12:00	0	0	A	1	0	0	0	0	0	1	2	1	2	2	1	1	1	0	0	1	0	0	0	0	0.6	1.9			
14-Nov-05	13:00	0	A	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	A	0	0	0	0	0	0	0.0	0.0			
15-Nov-05	14:00	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.6			
16-Nov-05	15:00	1	1	1	1	A	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	0	0	1.3	2.3			
17-Nov-05	16:00	0	0	0	A	1	2	1	2	2	1	1	2	2	2	2	0	1	1	0	1	1	0	0	0	1.0	2.4			
18-Nov-05	17:00	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	0.3			
19-Nov-05	18:00	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	0.5			
20-Nov-05	19:00	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.8			
21-Nov-05	20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.1			
22-Nov-05	21:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.6			
23-Nov-05	22:00	0	0	0	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	A	1	1	0	0.3	1.3			
24-Nov-05	23:00	0	0	0	0	1	0	1	1	2	1	1	0	0	1	0	0	1	0	0	A	1	2	2	2	0.8	2.2			
25-Nov-05	0:00	2	2	2	2	1	1	1	1	2	1	1	1	1	3	3	3	3	2	A	2	2	2	3	2	1.8	3.0			
26-Nov-05	1:00	3	3	3	2	2	1	2	1	2	1	2	1	2	1	1	1	1	A	1	1	1	1	1	1	1.5	3.4			
27-Nov-05	2:00	1	0	0	0	0	1	2	2	2	2	2	2	2	1	1	1	A	1	1	1	1	2	2	1	1.3	2.0			
28-Nov-05	3:00	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0.2	1.2			
29-Nov-05	4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0.1	0.9			
30-Nov-05	5:00	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.6			
Hourly Avg		0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.7	0.6	0.6	1.0	1.3	1.3	1.1	1.1	1.0	0.9	0.9	0.8	0.7	0.7	0.5					
Hourly Max		2.6	3.4	2.7	2.4	1.8	2.0	2.3	1.9	2.4	3.0	3.2	3.4	3.9	5.5	6.1	5.9	5.5	5.4	5.3	5.2	4.5	3.9	3.1	2.4					

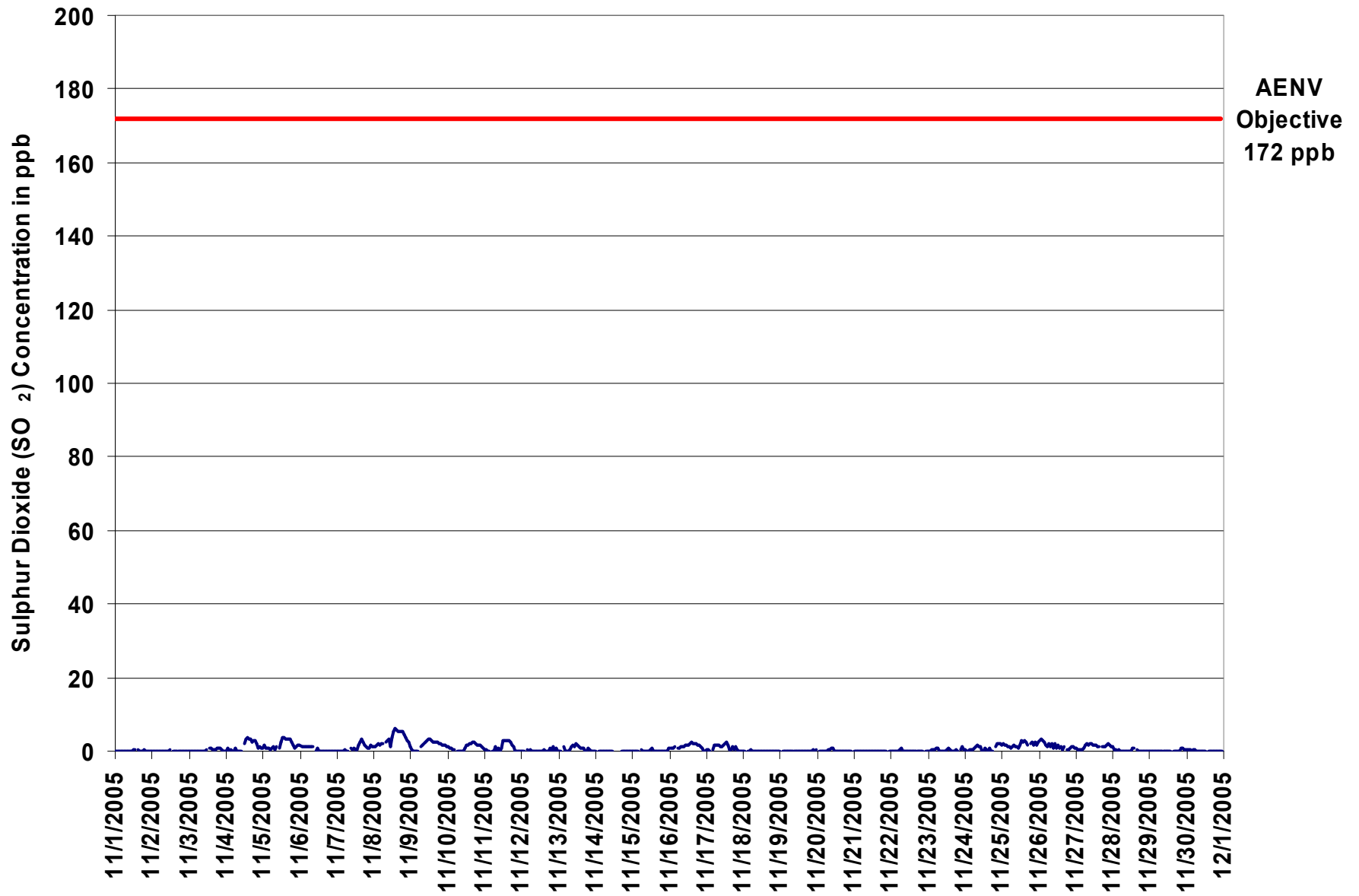


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend



Station: Evergreen Park  
 Station Owner: PASZA

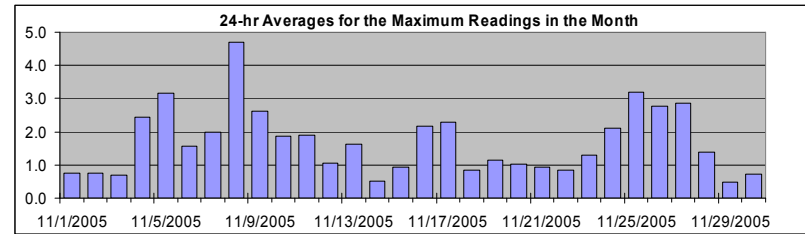
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

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

**Summary**

Maximum 1-hr Value:	9.0	ppb	17-Nov	19:00 20:00
Maximum 24-hr Value:	4.7	ppb	8-Nov	



AIC Time:	32 hrs	Operational Time:	684 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	6.3	4.1	2.6	1.4	0.8	0.0	0.0	1.7 ppb	1.4 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	1	1	1	0	1	0	1	1	1	1	0	1	1	2	A	2	1	0	1	1	1	0	0	1	0.8	1.8
2-Nov-05	1	1	1	0	0	1	1	0	0	0	0	0	1	A	4	2	1	1	1	1	1	0	0	0	0.8	3.7
3-Nov-05	0	0	0	0	0	0	0	0	0	0	1	A	2	2	1	1	1	1	2	2	1	1	0	0.7	2.1	
4-Nov-05	2	2	1	2	1	2	2	1	0	0	1	A	3	5	5	4	4	3	4	4	3	2	2	3	2.4	5.0
5-Nov-05	2	3	3	3	2	2	2	3	3	3	A	2	4	4	5	4	4	5	5	4	3	2	3	4	3.2	4.8
6-Nov-05	3	3	3	3	3	3	2	2	3	A	2	2	1	0	2	1	0	0	1	1	0	1	0	1	1.6	3.0
7-Nov-05	0	0	0	0	2	1	1	1	A	2	2	2	1	2	2	3	4	4	3	3	3	2	3	3	2.0	4.0
8-Nov-05	3	3	4	3	3	3	3	A	5	5	5	2	5	7	7	7	7	6	6	6	5	5	4	3	4.7	6.7
9-Nov-05	3	2	1	1	1	1	A	2	3	3	4	4	4	4	3	3	3	3	3	3	2	2	2	2	2.6	4.1
10-Nov-05	2	2	1	1	1	A	0	0	0	0	1	2	3	2	3	3	3	3	4	2	3	3	2	1	1.9	4.3
11-Nov-05	1	1	1	1	A	1	1	3	1	2	1	2	4	4	4	4	4	4	3	2	1	0	0	0	1.9	4.3
12-Nov-05	0	0	0	A	1	1	2	1	2	1	1	1	0	1	1	1	1	0	2	1	2	1	2	1	1.0	2.2
13-Nov-05	1	1	A	3	1	2	1	2	3	3	2	3	3	2	2	1	1	1	1	2	1	0	0	1	1.6	3.0
14-Nov-05	1	A	1	1	1	1	1	1	0	1	1	1	C	C	C	C	A	0	0	0	0	0	0	0	0.5	1.2
15-Nov-05	0	0	1	1	1	1	A	1	1	1	1	2	1	3	2	1	0	0	0	0	0	1	1	2	0.9	2.5
16-Nov-05	2	2	2	2	A	2	2	2	2	2	2	3	2	3	3	3	3	3	3	2	2	1	1	2	2.2	3.2
17-Nov-05	1	2	2	A	3	2	2	2	3	2	2	3	3	3	2	1	2	2	1	9	1	1	1	1	2.3	9.0
18-Nov-05	1	1	A	2	1	2	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0.9	2.0
19-Nov-05	1	A	0	0	1	1	1	1	1	1	2	0	0	0	0	0	6	1	1	1	1	2	2	2	1.1	6.5
20-Nov-05	A	1	1	1	1	1	2	2	1	2	2	2	0	0	0	0	1	0	1	1	1	1	2	A	1.0	2.1
21-Nov-05	0	0	1	1	1	1	1	0	1	1	1	0	0	1	0	1	1	1	3	1	2	0	A	2	0.9	3.3
22-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	0	1	A	1	1	0.8	1.5
23-Nov-05	1	1	2	4	1	1	2	1	0	0	0	1	2	2	1	1	1	1	1	1	A	2	2	1	1.3	4.4
24-Nov-05	1	1	1	2	2	2	2	3	3	3	3	0	1	2	2	2	2	1	3	A	2	3	4	3	2.1	3.8
25-Nov-05	3	3	3	3	3	2	3	3	4	3	3	2	3	4	4	4	5	3	A	4	4	3	4	3	3.2	4.6
26-Nov-05	4	4	3	3	3	2	3	2	3	2	3	2	3	2	3	2	3	A	2	2	2	3	3	3	2.8	4.4
27-Nov-05	3	2	3	2	2	2	3	3	3	3	4	3	3	3	3	3	A	3	3	3	3	3	3	3	2.9	4.0
28-Nov-05	3	2	2	2	2	1	2	1	1	0	1	1	1	2	2	A	2	1	1	1	1	1	1	1	1.4	3.0
29-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	1	2	2	2	0.5	2.0
30-Nov-05	1	1	2	1	1	2	1	1	1	1	0	1	0	A	0	0	0	0	0	0	1	0	0	0	0.7	2.2
Hourly Avg	1.5	1.4	1.4	1.5	1.4	1.5	1.6	1.4	1.6	1.5	1.5	1.5	1.8	2.3	2.3	2.1	2.3	1.7	2.0	2.1	1.7	1.5	1.6	1.5		
Hourly Max	4.1	4.4	3.6	4.4	3.4	3.5	3.5	3.3	4.9	4.7	4.9	4.0	5.3	6.6	6.7	6.7	6.7	6.2	6.5	9.0	5.5	4.7	3.9	3.6		

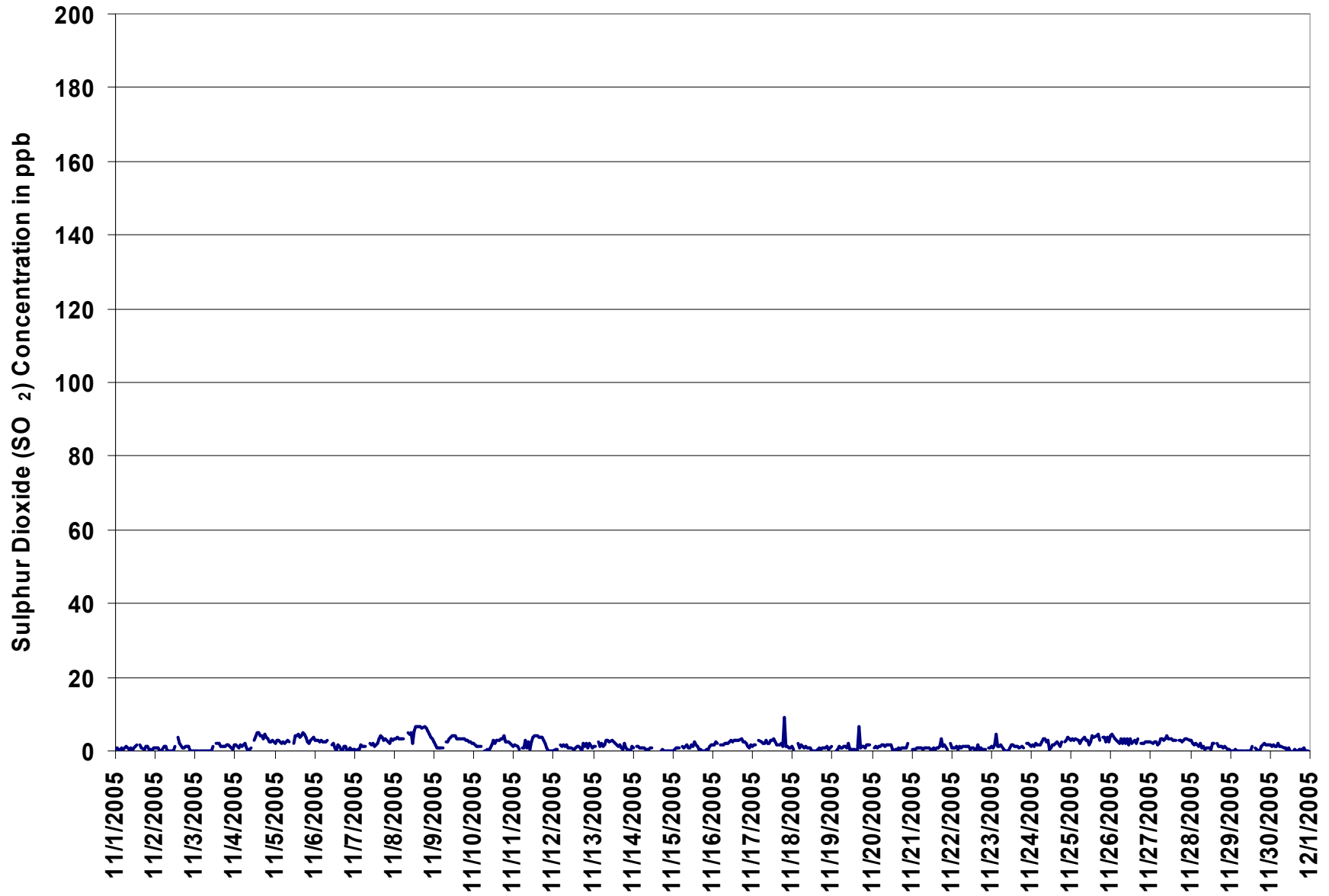
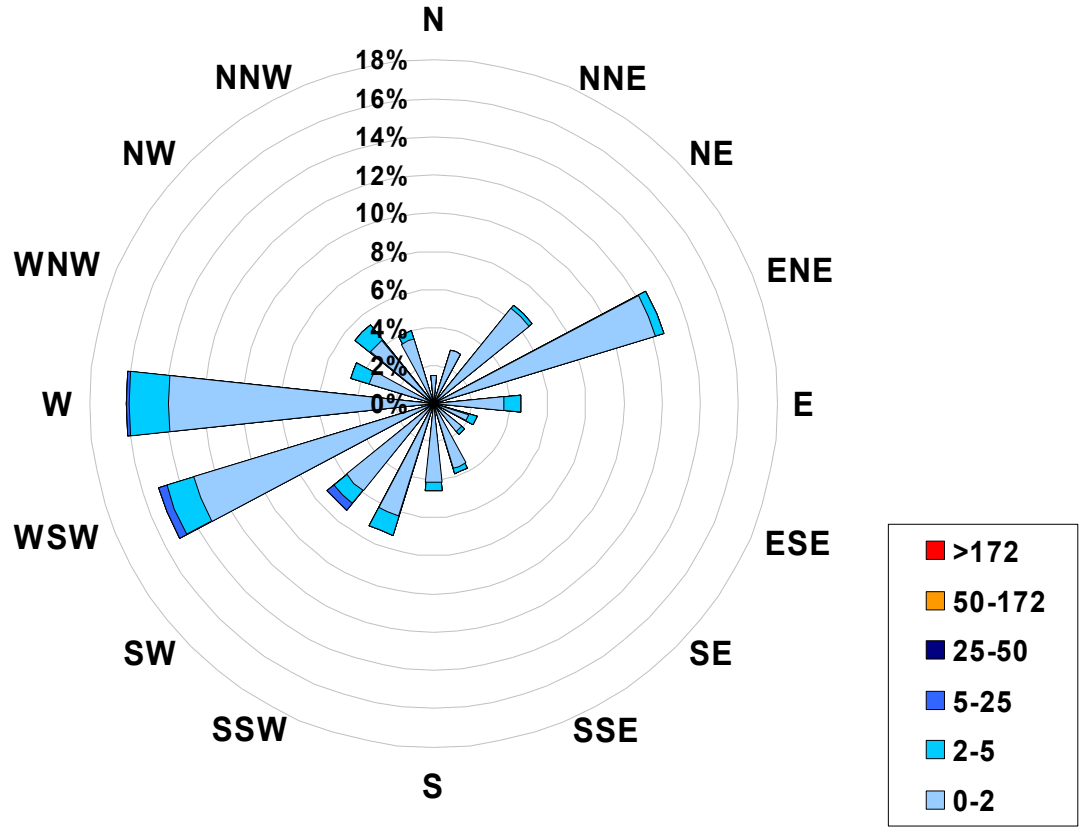


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
0.0	< 2	604	
2	to 5	73	
5	to 25	7	
25	to 50	0	
50	to 172	0	
	> 172	0	
Total Non-Zero Values			684

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

Station: Evergreen Park  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

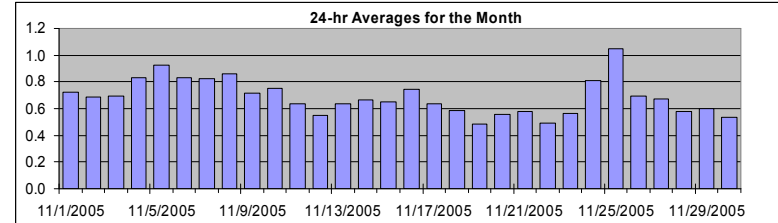
#### Total Reduced Sulphur (TRS)

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

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

Maximum 1-hr Average:	1.7	ppb	24-Nov	21:00 22:00
Maximum 24-hr Value:	1.1	ppb	25-Nov	

AIC Time:	32 hrs	Operational Time:	684 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.4	1.0	0.8	0.6	0.6	0.5	0.4	0.7 ppb	0.6 ppb



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	1	1	1	1	1	1	1	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.4
2-Nov-05	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
3-Nov-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	0.7	1.3
4-Nov-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	0.8	1.1
5-Nov-05	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	0.9	1.2
6-Nov-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	1	0.8	1.0
7-Nov-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	0.8	1.1
8-Nov-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	0.9	1.5
9-Nov-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	0.7	1.0
10-Nov-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	1.2
11-Nov-05	1	0	1	1	A	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
12-Nov-05	1	1	1	A	1	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	1	1	1	1	1	0.5	0.8
13-Nov-05	1	1	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
14-Nov-05	1	A	1	1	1	1	1	1	1	1	1	1	C	C	C	C	A	1	1	1	1	1	1	1	1	0.7	0.8
15-Nov-05	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
16-Nov-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
17-Nov-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
18-Nov-05	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0.6	0.7
19-Nov-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	0	0.5	0.6
20-Nov-05	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.6
21-Nov-05	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.7
22-Nov-05	0	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0.5	0.6
23-Nov-05	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	0.6	0.9
24-Nov-05	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	1	1	0.8	1.7
25-Nov-05	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1.1	1.5
26-Nov-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	0.7	1.0
27-Nov-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	0.7	0.9
28-Nov-05	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	0.7
29-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.7
30-Nov-05	1	1	1	1	1	1	1	1	1	1	0	1	1	A	0	1	0	0	1	1	1	1	1	1	1	0.5	0.6
Hourly Avg	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7		
Hourly Max	1.2	1.0	1.0	1.0	0.9	0.9	1.1	1.1	1.5	1.5	1.1	1.4	1.4	1.2	0.9	1.5	1.2	1.0	1.1	1.2	1.2	1.7	1.4	1.1			

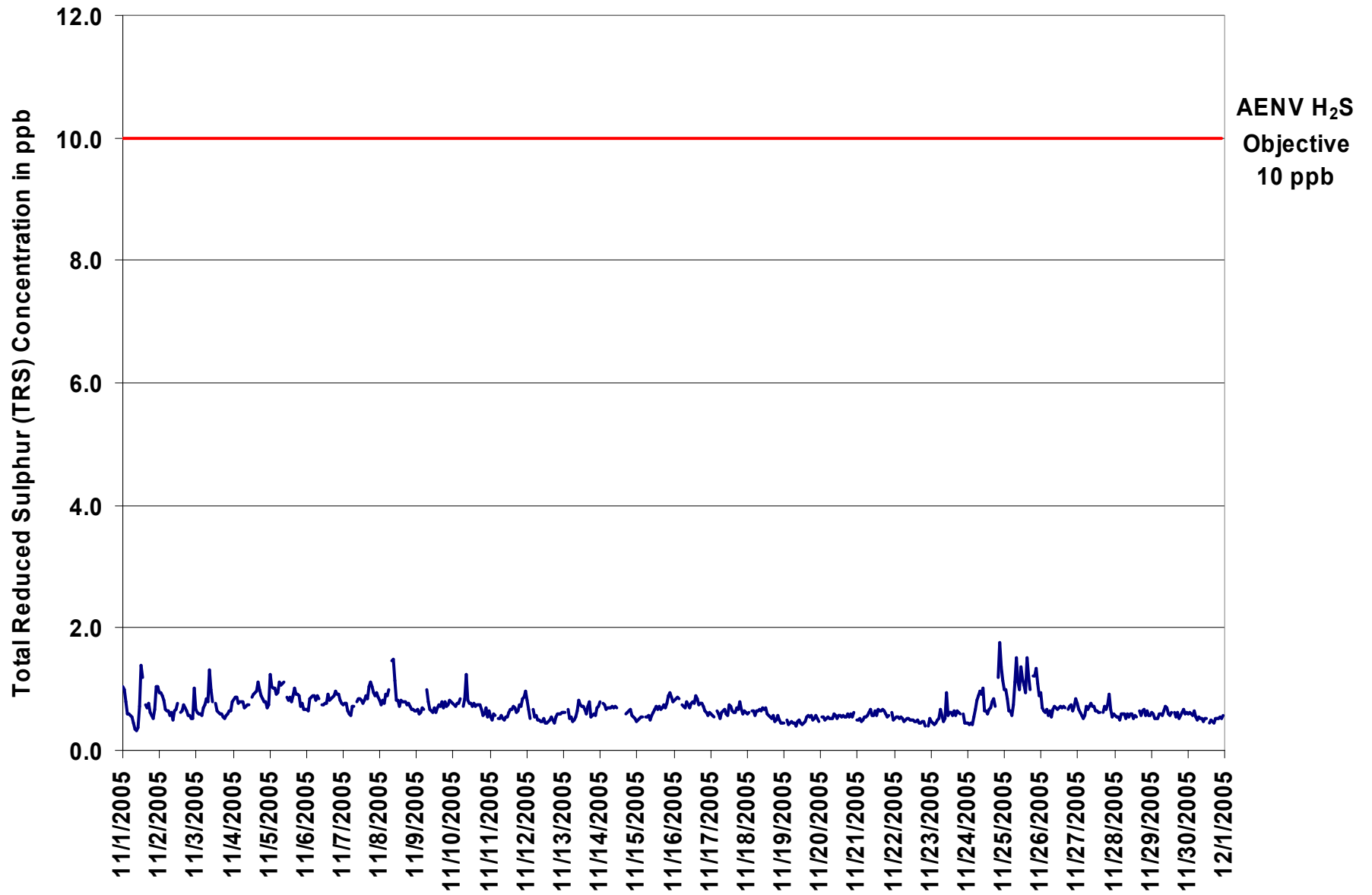


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

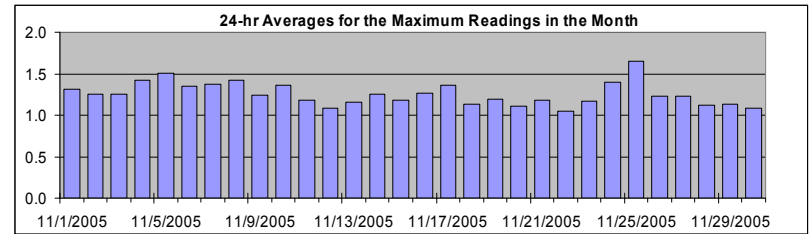
**Total Reduced Sulphur (TRS)**

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

**Summary**

Maximum 1-hr Value:	5.2	ppb	17-Nov	19:00 20:00
Maximum 24-hr Value:	1.7	ppb	25-Nov	

AIC Time:	32 hrs	Operational Time:	684 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.3	1.7	1.4	1.2	1.1	1.0	0.9	1.3 ppb	1.2 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Nov-05	2	2	1	1	1	1	1	1	1	1	1	1	2	2	A	1	1	1	1	1	1	1	2	2	1.3	2.2	
2-Nov-05	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1.3	2.0	
3-Nov-05	1	1	1	1	1	1	1	1	2	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1.2	2.2	
4-Nov-05	1	2	1	1	1	2	1	1	1	1	1	A	1	2	1	1	2	2	2	1	1	1	1	1	1.4	1.9	
5-Nov-05	2	2	2	2	2	2	2	2	2	2	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1.5	2.2	
6-Nov-05	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1.3	1.6	
7-Nov-05	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1.4	2.0	
8-Nov-05	1	1	1	1	1	2	2	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	2.3	
9-Nov-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	1.2	1.5	
10-Nov-05	1	1	2	1	1	A	1	2	2	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1.4	2.0	
11-Nov-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1.2	1.5	
12-Nov-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3	
13-Nov-05	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.5	
14-Nov-05	2	A	1	1	1	1	1	1	1	1	1	1	C	C	C	C	A	1	1	1	1	1	1	1	1.3	1.6	
15-Nov-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	1.2	1.4	
16-Nov-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	1.3	1.5	
17-Nov-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	1	1.4	5.2	
18-Nov-05	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4	
19-Nov-05	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1	1	1	1	1	1	1.2	4.3	
20-Nov-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.3	
21-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	A	2	1.2	2.3	
22-Nov-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	1.3	
23-Nov-05	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1.2	2.1	
24-Nov-05	1	1	1	1	1	1	2	1	2	2	2	1	1	1	1	1	2	1	A	2	2	2	2	2	1.4	2.4	
25-Nov-05	1	1	1	1	1	1	1	2	2	2	1	2	2	1	2	2	1	A	2	2	2	2	2	2	1.7	2.4	
26-Nov-05	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1.2	1.8	
27-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	1	1.2	1.6	
28-Nov-05	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.1	1.5	
29-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.1	1.3	
30-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1.1	1.6	
Hourly Avg	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.4	1.2	1.3	1.3	1.2	1.3	1.2	1.3	1.3		
Hourly Max	2.2	1.6	1.5	2.1	1.7	1.7	1.9	1.9	2.3	2.2	1.8	2.4	2.2	1.7	1.5	2.3	4.3	1.6	2.3	5.2	2.0	2.4	2.3	2.0			

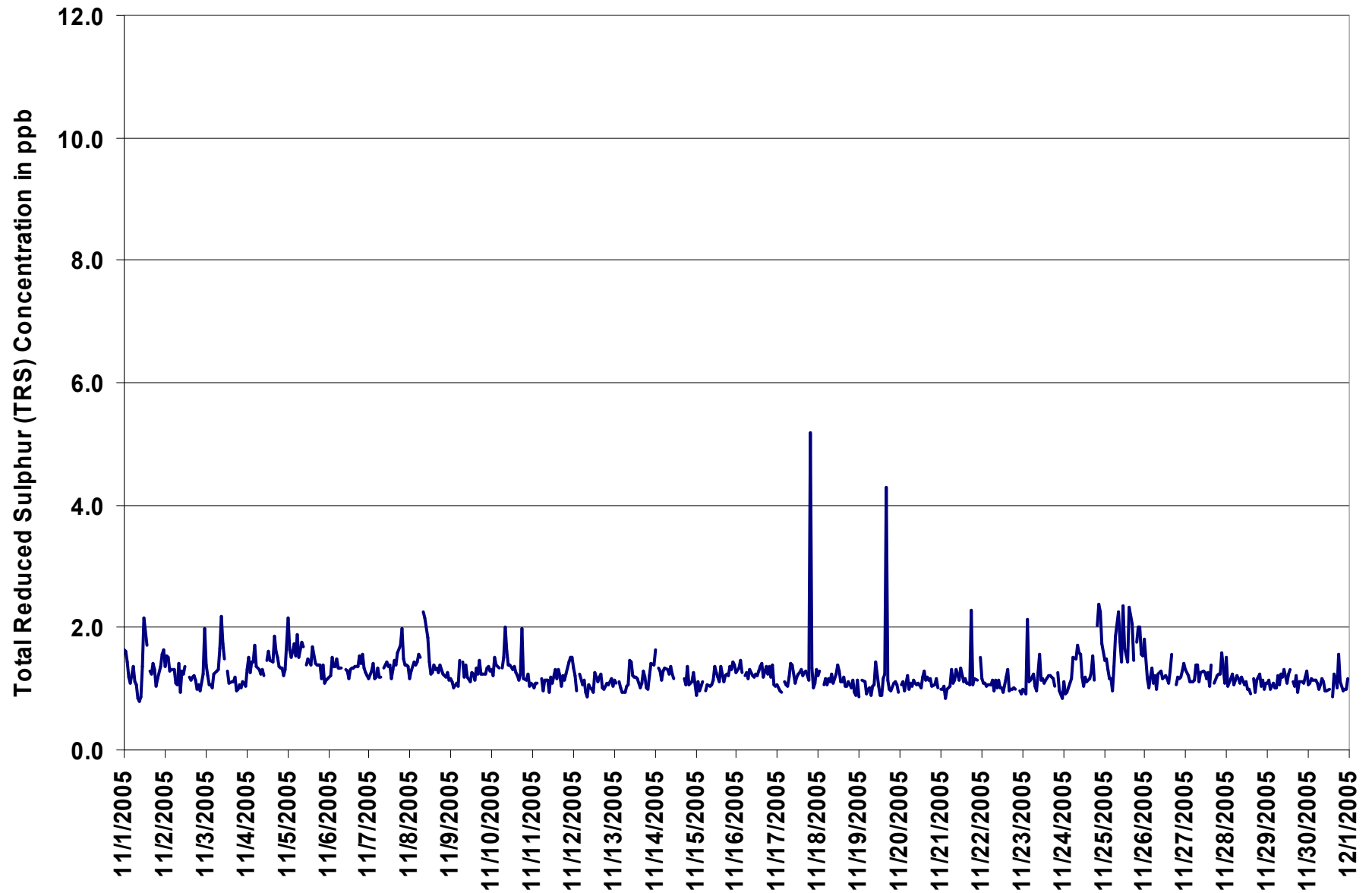
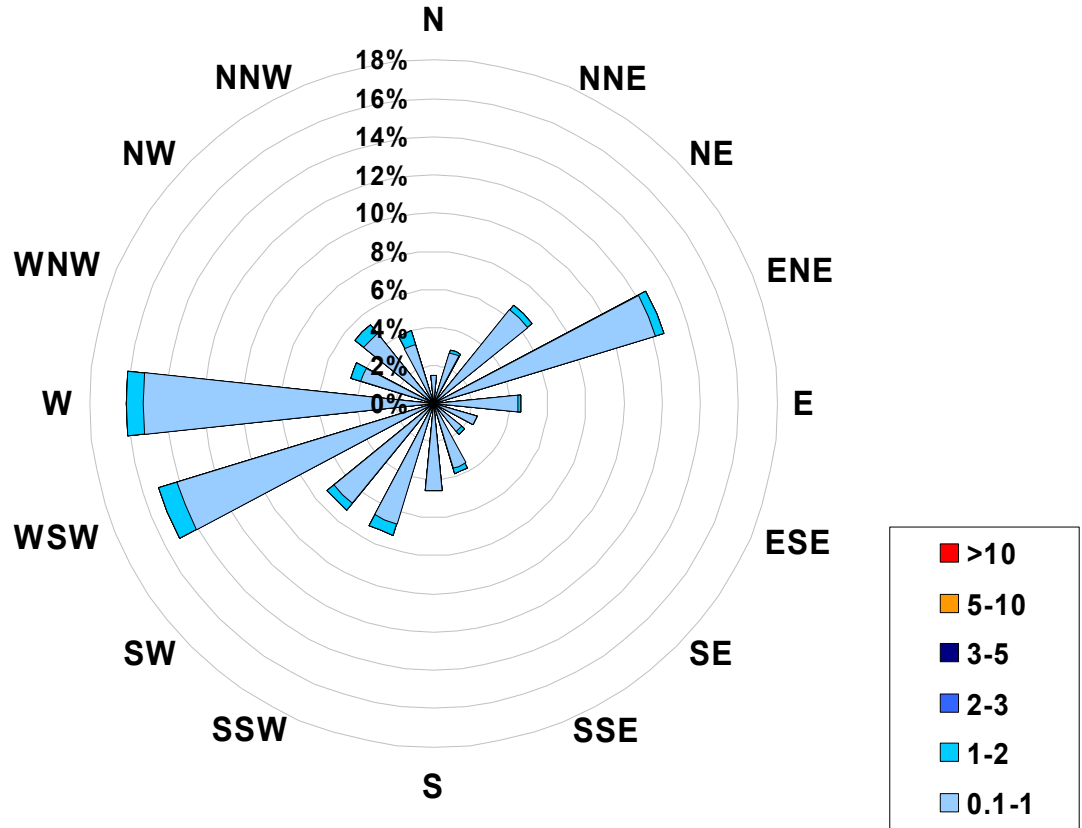


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of TRS in ppb			
Range		Frequency (hrs)	
0.1	< 1		641
1	to 2		43
2	to 3		0
3	to 5		0
5	to 10		0
	> 10		0
Total Non-Zero Values			684



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

Station: Evergreen Park  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

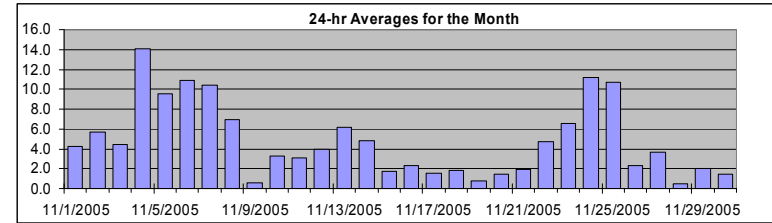
### Particulate Matter (PM<sub>2.5</sub>)

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

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

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	21.4 μg/m <sup>3</sup> 8-Nov 9:00 10:00
Maximum 24-hr Value:	14.1 μg/m <sup>3</sup> 4-Nov

AIC Time:	0 hrs	Operational Time:	718 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	19.7	14.8	7.7
	5.0	2.5	1.1
	0.0	0.0	0.0
Average / Median	4.8		5 μg/m <sup>3</sup>
Geomean	3.4 μg/m <sup>3</sup>		



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Nov-05	6	5	3	3	3	4	4	4	3	5	5	3	0	2	1	2	4	8	5	3	4	8	10	8	4.2	9.6
2-Nov-05	11	11	8	11	10	12	11	9	7	7	3	1	2	1	3	2	6	4	2	2	5	2	1	5	5.7	11.6
3-Nov-05	2	2	2	2	3	3	3	7	9	19	8	4	2	1	0	0	1	4	4	6	8	8	9	4.4	18.5	
4-Nov-05	12	14	14	15	16	17	15	13	13	13	13	13	15	19	15	11	13	12	13	15	12	13	12	19	14.1	19.4
5-Nov-05	21	16	14	9	6	7	9	9	11	11	11	8	4	4	4	6	12	13	13	12	10	6	6	8	9.6	21.2
6-Nov-05	7	7	10	9	9	10	11	12	11	9	11	11	10	10	13	12	13	13	13	13	13	12	11	12	10.9	13.5
7-Nov-05	11	9	9	8	9	19	19	18	13	11	11	8	7	5	4	6	8	13	12	15	9	10	9	8	10.4	19.0
8-Nov-05	8	10	10	9	9	10	13	15	18	21	16	7	11	4	2	0	0	0	2	0	0	0	0	0	6.9	21.4
9-Nov-05	0	1	0	0	0	0	0	0	0	0	0	0	2	1	4	3	0	2	0	0	0	0	0	0	0.5	3.9
10-Nov-05	0	1	0	0	0	0	0	1	11	12	1	0	7	0	0	0	14	20	0	4	3	0	2	3	3.2	19.7
11-Nov-05	3	3	1	1	0	0	0	0	0	0	0	4	0	0	0	1	4	3	6	8	10	11	10	8	3.1	10.6
12-Nov-05	7	1	3	2	2	3	2	2	2	2	1	1	1	2	3	6	12	11	5	6	4	4	5	5	3.9	12.4
13-Nov-05	5	6	5	4	3	3	3	4	6	8	10	9	12	11	9	6	6	5	6	6	7	7	4	3	6.1	12.2
14-Nov-05	4	5	8	9	9	6	3	3	5	2	3	3	11	3	C	C	3	5	6	9	5	3	2	2	4.9	11.1
15-Nov-05	2	1	2	2	2	1	0	0	0	0	0	0	0	2	1	2	0	0	2	4	4	6	6	4	1.8	5.8
16-Nov-05	5	5	6	5	8	1	0	0	0	1	1	1	1	3	3	3	3	3	1	2	0	1	1	0	2.3	7.9
17-Nov-05	0	0	1	0	2	1	1	1	3	3	1	0	2	2	3	1	2	2	0	11	0	0	0	0	1.5	10.7
18-Nov-05	0	0	3	1	1	3	3	3	3	3	2	2	0	0	0	1	3	4	3	2	0	1	1	1	1.8	4.2
19-Nov-05	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	2	2	2	1	1	2	2	0.8	2.3
20-Nov-05	0	1	0	1	2	2	2	2	2	3	2	1	0	1	2	2	3	1	1	1	1	3	1	0	1.4	3.2
21-Nov-05	0	0	1	2	2	1	1	0	1	2	1	2	2	3	6	3	5	7	2	4	0	1	1	0	2.0	7.4
22-Nov-05	0	0	2	0	1	1	1	2	4	4	5	8	7	8	10	7	8	14	4	11	7	4	2	2	4.7	14.2
23-Nov-05	1	1	1	4	2	4	6	5	4	4	3	7	11	7	6	13	11	20	10	8	14	6	4	6	6.6	19.6
24-Nov-05	6	5	4	3	5	5	8	11	12	11	20	8	4	3	6	10	20	19	16	15	21	21	20	15	11.2	21.2
25-Nov-05	16	15	11	8	7	6	6	7	9	8	8	8	8	6	8	18	15	9	11	17	18	17	9	8	10.7	18.5
26-Nov-05	7	5	2	2	3	1	1	2	3	2	3	3	4	2	1	2	2	3	2	1	1	2	3	1	2.3	7.2
27-Nov-05	0	0	2	1	2	4	3	4	4	5	7	4	2	2	3	3	3	4	3	4	7	10	4	6	3.7	10.5
28-Nov-05	2	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1	1	1	1	0	0.5	1.9
29-Nov-05	0	0	0	0	1	3	3	2	3	2	2	1	0	1	2	3	3	5	4	3	3	2	3	3	2.0	4.9
30-Nov-05	3	2	2	3	2	2	2	2	2	2	2	0	0	0	1	0	1	1	1	1	2	2	1	1	1.4	2.9
Hourly Avg	4.7	4.3	4.2	3.8	4.0	4.3	4.3	4.6	5.2	5.7	5.1	4.0	4.3	3.5	3.8	4.3	5.9	6.8	5.1	6.2	5.6	5.5	4.7	4.7		
Hourly Max	21.2	16.4	14.4	14.8	16.4	19.0	18.5	17.8	18.1	21.4	19.8	13.4	14.9	19.4	14.9	18.5	20.3	19.7	16.3	16.7	21.2	20.8	20.1	19.3		

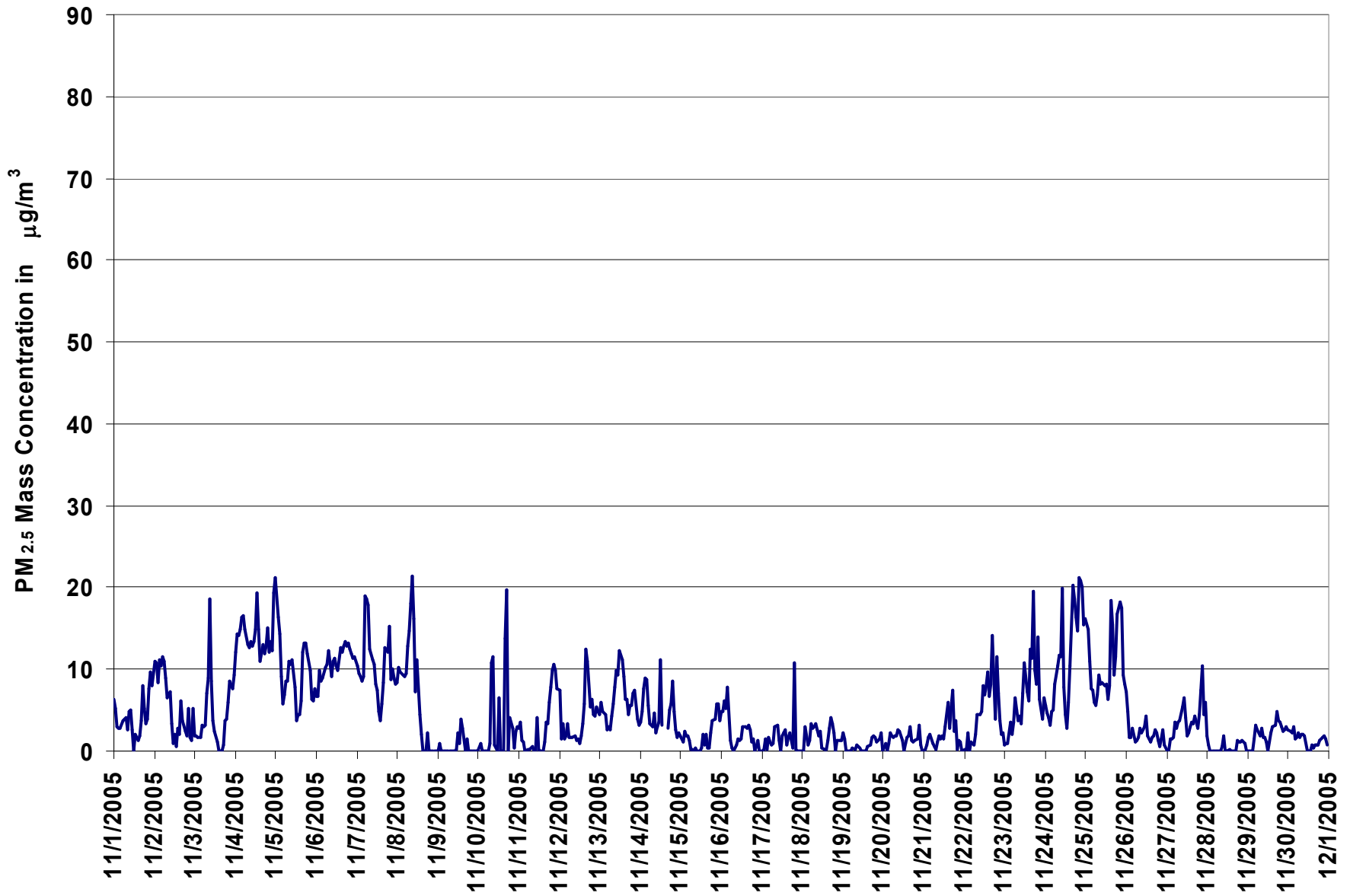


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

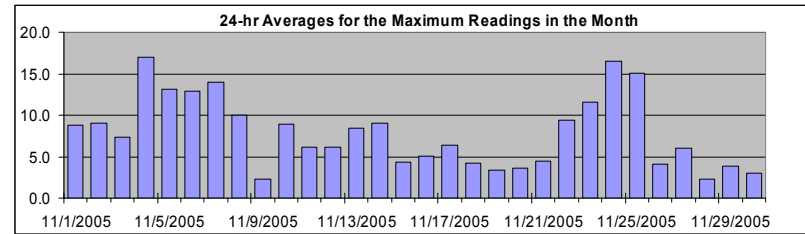
**Particulate Matter (PM<sub>2.5</sub>)**

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

**Summary**

Maximum 1-hr Average:	65.5	µg/m <sup>3</sup>	17-Nov	19:00 20:00
Maximum 24-hr Value:	17.0	µg/m <sup>3</sup>	4-Nov	

AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	28.5	21.3	11.0	5.4	3.1	1.2	0.0	7.9	8 µg/m <sup>3</sup>
									6.8 µg/m <sup>3</sup>



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	8	7	4	5	5	5	11	11	9	11	12	5	2	5	3	4	14	16	10	10	12	14	11	13	8.8	15.8
2-Nov-05	14	12	10	15	14	15	14	11	8	11	10	3	5	3	8	4	9	10	8	8	9	3	2	9	9.0	15.4
3-Nov-05	5	4	3	3	5	6	5	10	23	24	18	5	4	3	1	1	1	3	6	6	9	10	9	12	7.4	23.6
4-Nov-05	15	16	16	17	18	17	16	15	14	14	16	16	19	24	24	12	15	14	21	20	15	16	18	21	17.0	23.9
5-Nov-05	22	21	16	12	9	11	11	11	13	14	15	12	8	9	13	9	15	19	16	15	11	10	10	10	13.1	22.4
6-Nov-05	10	9	14	10	10	13	13	14	13	11	12	13	13	11	15	14	15	14	15	15	14	14	13	13	12.8	15.1
7-Nov-05	13	12	11	10	13	26	26	21	16	13	14	10	10	9	6	9	14	17	15	23	10	13	12	10	13.9	26.5
8-Nov-05	11	12	13	11	11	12	16	17	21	26	22	17	15	13	4	1	0	2	10	1	1	3	1	2	10.1	26.2
9-Nov-05	2	2	2	1	2	1	1	1	1	5	5	2	5	3	8	5	2	4	0	1	0	0	0	0	2.3	7.8
10-Nov-05	2	4	0	2	1	0	1	4	22	16	7	5	33	4	0	3	31	33	9	14	8	2	6	6	8.9	33.2
11-Nov-05	7	6	3	2	1	2	2	3	3	3	3	9	4	1	2	4	7	6	12	10	19	14	13	11	6.2	18.5
12-Nov-05	11	4	4	4	4	5	3	4	4	3	3	4	3	4	5	10	16	15	7	9	9	5	7	7	6.2	16.0
13-Nov-05	6	8	7	6	5	5	5	8	9	10	11	12	15	15	11	9	9	7	8	8	8	9	8	5	8.4	15.3
14-Nov-05	5	7	9	10	13	9	5	5	6	4	5	5	53	4	C	C	5	9	10	11	8	6	4	5	9.0	53.5
15-Nov-05	4	4	5	4	5	4	3	3	3	3	2	4	4	4	5	2	3	4	6	6	8	8	7	4	4.3	8.1
16-Nov-05	7	8	10	12	24	3	3	1	2	1	3	3	3	5	5	4	6	5	3	4	1	4	4	1	5.0	24.4
17-Nov-05	2	3	4	3	7	3	1	3	7	5	7	1	5	7	7	5	4	5	4	66	3	1	2	0	6.4	65.5
18-Nov-05	1	4	8	3	3	5	5	6	5	5	4	4	3	2	3	5	5	6	6	5	1	3	3	3	4.2	8.4
19-Nov-05	9	6	1	1	1	0	2	1	2	2	5	2	2	2	2	2	16	4	4	4	3	3	4	4	3.4	15.5
20-Nov-05	2	4	1	3	4	3	4	4	5	5	4	3	2	3	4	5	7	3	3	3	3	7	6	1	3.6	7.3
21-Nov-05	1	3	4	4	5	2	2	2	2	3	3	3	3	6	8	7	8	11	9	6	4	4	4	3	4.5	11.1
22-Nov-05	1	2	4	2	3	5	5	6	9	8	9	13	10	13	15	11	18	29	6	21	21	7	5	4	9.4	28.6
23-Nov-05	3	2	2	10	5	8	11	9	6	6	5	14	19	10	9	20	16	36	17	15	26	11	6	10	11.6	36.3
24-Nov-05	8	6	6	6	7	7	12	21	19	24	27	13	8	6	11	17	26	28	23	22	32	25	24	18	16.5	32.3
25-Nov-05	18	17	14	10	10	8	8	10	13	10	11	13	12	9	14	25	28	23	18	21	23	22	12	10	15.0	28.0
26-Nov-05	10	7	3	3	4	3	3	3	4	4	5	5	6	5	2	3	4	4	3	3	4	4	4	3	4.1	10.4
27-Nov-05	1	2	3	4	4	5	4	6	6	7	9	6	3	5	4	7	5	10	7	7	11	13	6	8	6.0	12.9
28-Nov-05	7	2	1	2	2	2	3	0	1	3	3	2	2	3	2	2	1	1	3	3	4	3	2	3	2.3	7.5
29-Nov-05	0	1	0	1	3	5	4	5	4	3	4	7	2	4	4	5	5	7	6	5	4	5	4	4	3.8	7.1
30-Nov-05	4	4	3	5	3	3	4	3	4	4	4	1	1	1	4	2	2	2	2	3	3	4	3	2	3.0	4.8
Hourly Avg	7.0	6.6	6.1	6.1	6.7	6.4	6.8	7.3	8.4	8.7	8.7	7.0	9.1	6.4	6.8	7.2	10.2	11.5	8.8	11.5	9.5	8.1	7.0	6.8		
Hourly Max	22.4	21.0	16.4	16.6	24.4	26.1	26.5	21.3	22.9	26.2	26.8	16.8	53.5	23.9	23.8	24.8	30.5	36.3	22.6	65.5	32.3	25.5	23.5	21.4		

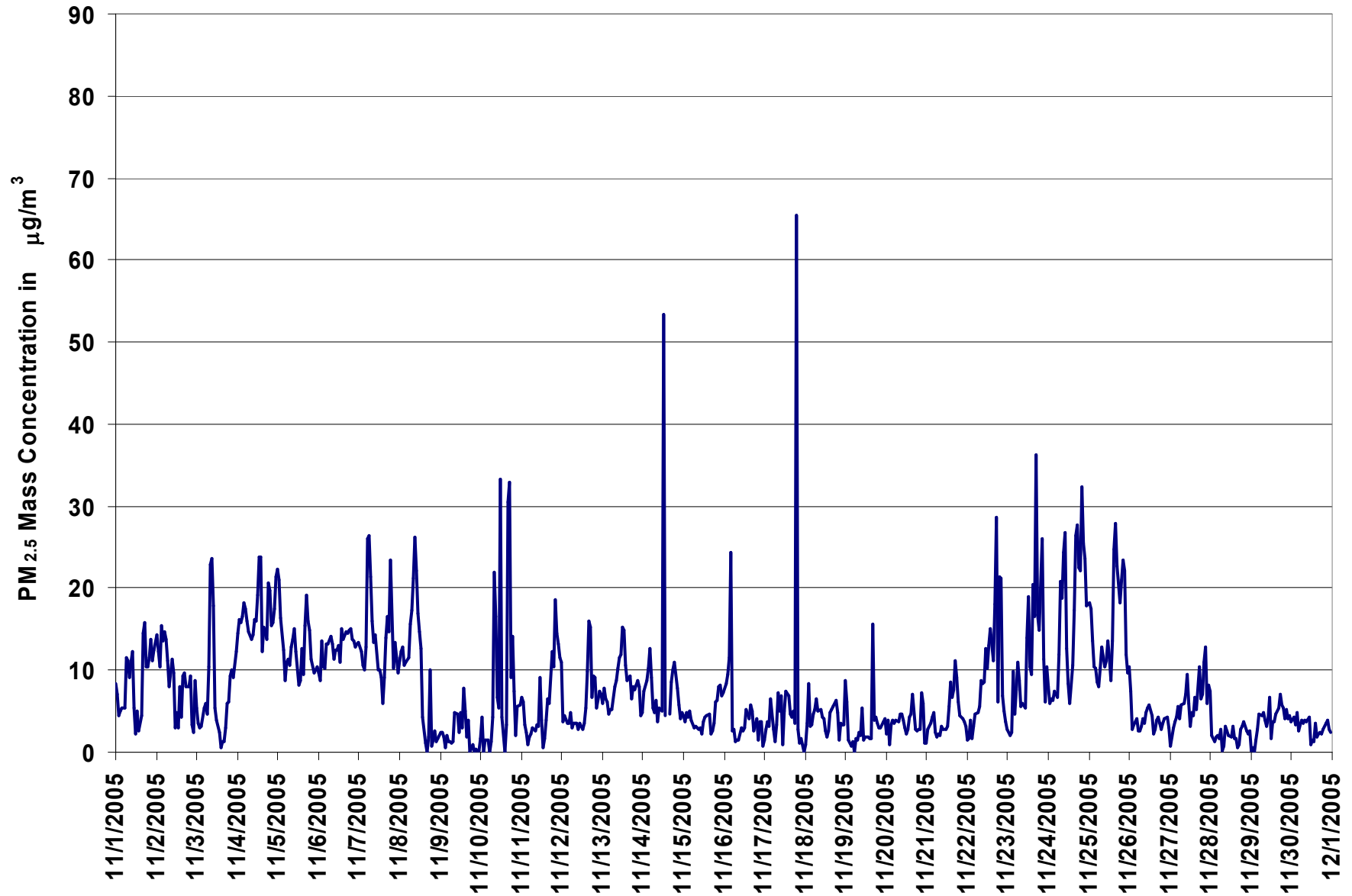
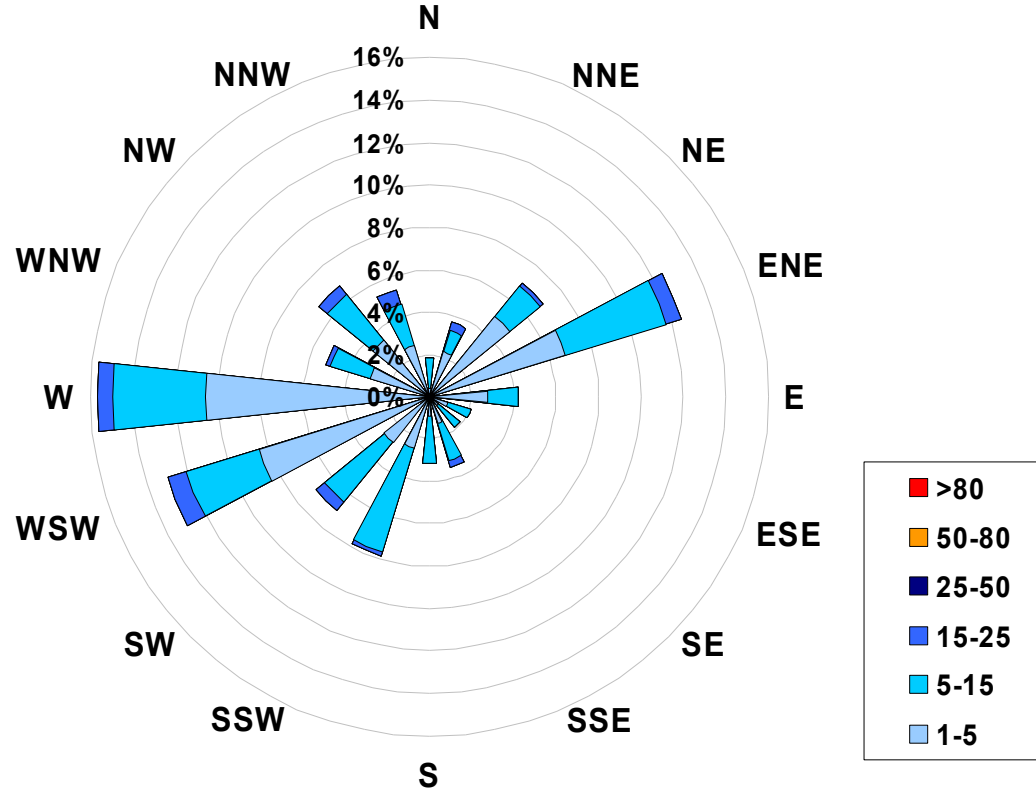


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	465
5	to	15	223
15	to	25	30
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			718

## PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

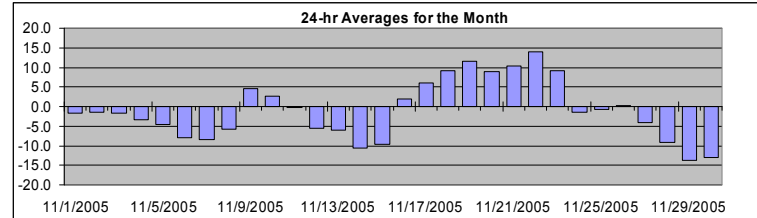
### HOURLY AVERAGE TABLE

### Ambient Temperature (T)

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

**Summary**

Maximum 1-hr Average:	17.0	°C	22-Nov	13:00 14:00
Maximum 24-hr Value:	13.9	°C	22-Nov	



AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	15.6	12.4	6.0	-2.7	-7.1	-13.2	-14.9	-1.0 °C	-2.7 °C

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Nov-05	0:00	-2	-2	-3	-4	-5	-5	-6	-7	-7	-5	0	3	5	6	7	8	4	-1	-3	-4	-4	-5	-5	-5	-1.7	7.5	
2-Nov-05	1:00	-5	-6	-7	-7	-6	-5	-4	-4	-4	-3	1	2	5	7	8	8	4	2	-1	-3	-4	-4	-4	-4	-1.4	8.2	
3-Nov-05	2:00	-4	-4	-4	-5	-5	-5	-6	-7	-7	-5	0	2	4	5	6	6	4	0	-2	-3	-3	-2	-3	-3	-1.7	6.4	
4-Nov-05	3:00	-3	-4	-4	-5	-5	-5	-4	-4	-4	-3	-2	-2	0	1	1	1	1	-2	-4	-4	-5	-7	-8	-8	-3.3	1.3	
5-Nov-05	4:00	-7	-8	-8	-8	-8	-8	-8	-8	-8	-7	-6	-3	-1	2	4	2	0	-2	-3	-4	-4	-4	-6	-7	-4.7	3.6	
6-Nov-05	5:00	-8	-10	-9	-10	-11	-12	-12	-12	-11	-9	-8	-7	-6	-6	-6	-5	-5	-5	-5	-6	-6	-6	-7	-9	-8.0	-5.3	
7-Nov-05	6:00	-8	-10	-12	-13	-14	-13	-13	-14	-12	-11	-9	-8	-8	-6	-3	-2	-2	-4	-5	-6	-6	-7	-8	-9	-11	-8.5	-1.7
8-Nov-05	7:00	-12	-13	-14	-15	-16	-16	-15	-13	-13	-10	-8	-4	-1	3	4	4	3	2	2	2	-1	-2	-4	-4	-5.9	4.4	
9-Nov-05	8:00	-4	-4	-4	-3	-2	-1	2	4	5	5	6	6	7	9	11	11	10	8	9	8	7	5	5	6	4.5	11.5	
10-Nov-05	9:00	6	6	4	2	1	-1	-2	-2	-1	4	5	5	4	5	5	5	4	4	3	3	2	2	2	2	2.7	6.4	
11-Nov-05	10:00	2	1	1	1	1	0	-2	-3	-4	-3	1	3	4	4	4	4	1	-3	-3	-3	-4	-4	-4	-4	-0.4	4.4	
12-Nov-05	11:00	-4	-5	-5	-5	-5	-6	-7	-7	-7	-7	-6	-5	-4	-4	-4	-4	-5	-6	-7	-7	-6	-6	-6	-6	-5.6	-3.5	
13-Nov-05	12:00	-7	-6	-6	-7	-7	-9	-10	-11	-10	-8	-7	-5	-4	-4	-4	-4	-4	-3	-4	-4	-5	-5	-4	-5	-7	-6.1	-3.5
14-Nov-05	13:00	-8	-9	-9	-9	-10	-10	-11	-12	-12	-12	-11	-11	-11	-10	-10	-10	-11	-11	-11	-11	-11	-11	-12	-12	-10.7	-8.3	
15-Nov-05	14:00	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-10	-9	-8	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-10	-9.8	-7.0	
16-Nov-05	15:00	-11	-12	-11	-9	2	3	5	5	5	5	5	6	6	6	7	7	6	5	4	4	3	3	2	1	2.0	7.2	
17-Nov-05	16:00	1	0	-2	-3	2	5	6	5	4	4	6	7	6	6	10	10	10	9	9	9	9	10	10	9	6.0	10.3	
18-Nov-05	17:00	10	10	10	10	9	9	9	9	8	8	8	9	10	10	11	10	9	7	7	7	7	9	9	10	9	9.1	10.7
19-Nov-05	18:00	9	9	10	10	10	10	9	10	11	11	12	14	15	16	16	15	14	13	11	11	11	11	11	10	11.7	16.3	
20-Nov-05	19:00	11	11	11	11	11	10	10	9	8	8	8	9	10	10	10	9	9	8	8	7	7	7	7	6	9.0	11.3	
21-Nov-05	20:00	7	7	6	5	7	9	10	10	10	10	11	12	13	13	12	12	11	11	12	11	13	12	11	11	10.3	13.3	
22-Nov-05	21:00	11	12	12	12	12	11	11	12	13	13	15	15	16	17	17	16	16	16	15	15	15	14	14	13	13.9	17.0	
23-Nov-05	22:00	13	14	12	12	11	9	4	1	0	1	8	12	14	15	16	15	14	12	11	11	9	6	1	0	9.2	15.5	
24-Nov-05	23:00	-2	-2	-3	-3	-4	-4	-5	-5	-5	-1	2	5	7	8	8	3	-2	-3	-4	-4	-4	-5	-5	-1.5	8.0		
25-Nov-05	0:00	-5	-5	-3	-3	-3	-4	-4	-5	-5	-6	-2	2	5	8	9	8	2	-1	-1	-1	-1	0	1	1	-0.6	9.3	
26-Nov-05	1:00	2	3	3	2	2	1	0	0	0	0	0	1	1	1	0	0	0	-1	-1	-1	-1	-2	-2	-2	0.2	2.9	
27-Nov-05	2:00	-2	-2	-3	-3	-4	-3	-3	-4	-4	-3	-3	-3	-3	-3	-2	-3	-4	-6	-7	-7	-7	-6	-6	-6	-4.0	-2.0	
28-Nov-05	3:00	-6	-6	-6	-7	-7	-8	-8	-9	-10	-11	-9	-9	-9	-8	-8	-9	-10	-11	-11	-11	-11	-10	-11	-11	-9.0	-5.7	
29-Nov-05	4:00	-13	-15	-16	-17	-16	-15	-14	-13	-13	-13	-12	-12	-12	-12	-11	-11	-14	-15	-16	-15	-14	-14	-14	-13	-13.8	-11.4	
30-Nov-05	5:00	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-12	-12	-12	-12	-12	-13	-13	-13	-13	-14	-14	-14	-14	-13.1	-12.1	
Hourly Avg		-2.3	-2.5	-2.9	-3.2	-2.9	-2.9	-3.2	-3.3	-3.3	-2.6	-0.7	0.7	1.7	2.7	3.3	3.0	1.6	0.1	-0.5	-0.9	-1.2	-1.4	-1.9	-2.4			
Hourly Max		13.2	13.8	12.3	12.5	12.4	11.2	10.6	12.3	13.0	12.6	14.9	15.3	15.8	17.0	16.9	16.5	15.7	15.6	15.2	15.0	14.5	14.5	14.0	13.1			

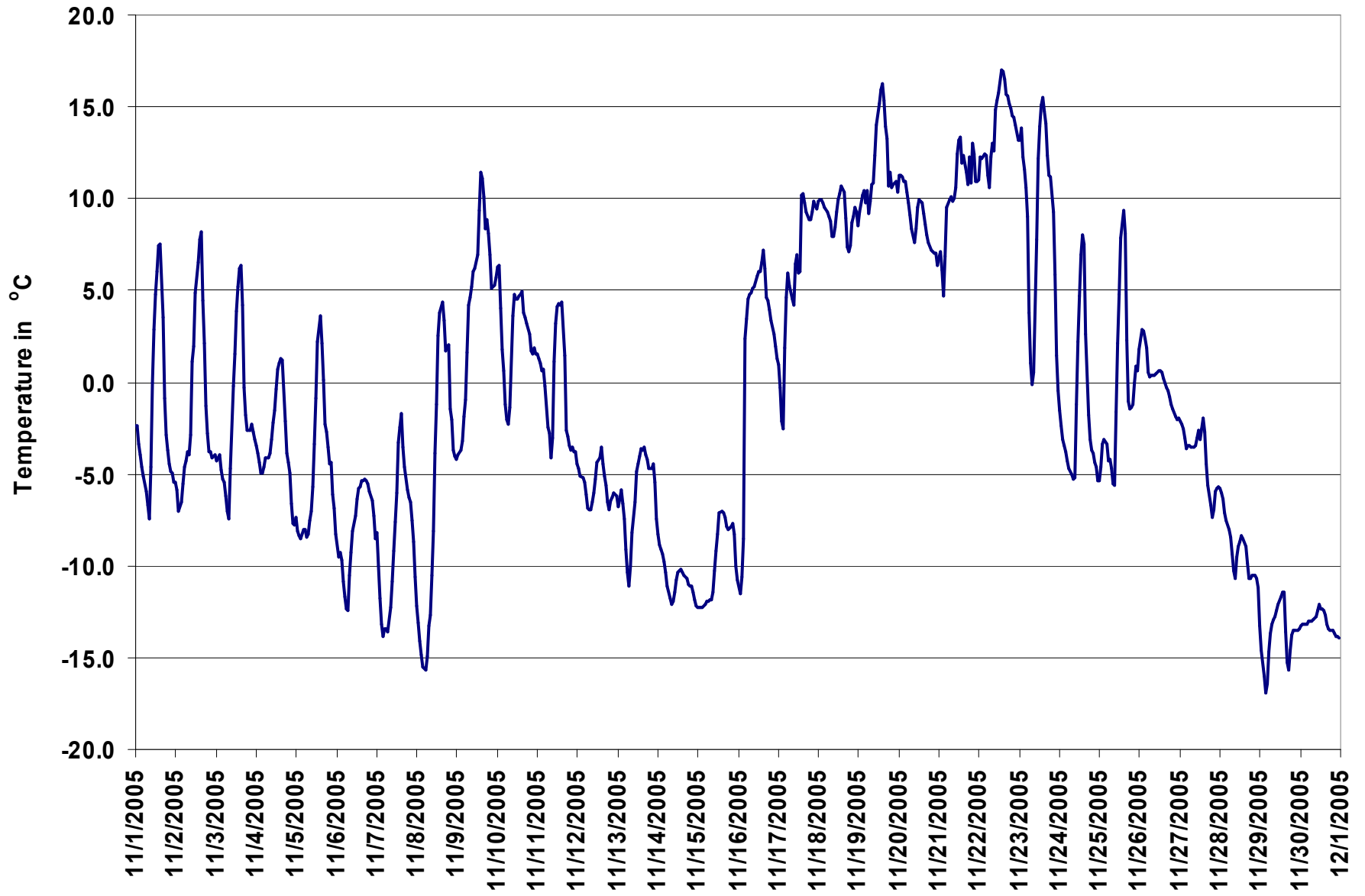


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

## PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

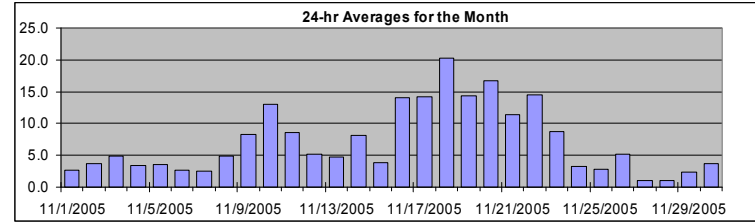
### HOURLY AVERAGE TABLE

### Wind Speed (WSs)

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

**Summary**

Maximum 1-hr Average:	34.0	km/hr	18-Nov	3:00 4:00
Maximum 24-hr Value:	20.3	km/hr	18-Nov	



Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	26.9	21.5	9.6	4.2	2.6	1.0	1.0	7.1 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	3	3	2	3	2	3	2	2	2	2	3	3	4	4	4	4	3	2	2	3	3	2	2	2	2.7	3.9
2-Nov-05	3	2	2	3	4	3	3	4	3	3	4	3	7	7	5	4	5	6	3	2	3	2	3	3	3.7	7.1
3-Nov-05	4	3	2	3	3	3	2	4	3	3	3	4	4	5	6	6	5	7	7	8	7	9	9	4.9	9.5	
4-Nov-05	9	8	7	4	5	4	2	1	2	1	3	3	3	3	4	4	4	2	2	2	2	2	2	2	3.4	9.1
5-Nov-05	3	3	3	4	4	4	4	2	3	4	4	3	4	4	4	4	4	3	4	6	3	4	3	3.6	5.9	
6-Nov-05	2	2	2	2	2	3	2	2	3	3	3	3	3	3	4	2	3	2	4	4	3	2	2	2	2.6	4.3
7-Nov-05	2	3	1	2	2	2	2	2	3	2	2	2	2	2	4	4	3	3	2	4	3	2	2	3	2.5	3.8
8-Nov-05	3	2	2	1	2	2	2	2	3	3	5	5	6	9	6	8	8	10	12	11	5	4	3	3	4.8	11.8
9-Nov-05	2	2	2	3	5	4	6	8	7	7	6	8	8	11	26	25	15	7	11	9	6	5	7	8	8.3	26.2
10-Nov-05	8	10	5	4	3	2	3	3	7	8	10	8	14	15	17	18	20	24	26	25	21	21	22	18	13.0	25.6
11-Nov-05	19	19	23	21	19	10	7	4	5	5	7	8	12	11	7	4	5	2	4	3	3	3	3	2	8.6	23.2
12-Nov-05	5	7	5	8	10	9	6	4	4	4	5	7	5	5	7	6	5	4	4	3	3	3	3	3	5.2	9.6
13-Nov-05	2	3	3	4	2	4	3	3	4	4	3	3	3	4	5	6	8	8	5	7	6	3	4	10	4.8	15.4
14-Nov-05	14	14	12	12	13	12	13	11	9	8	9	7	6	7	7	6	4	4	4	3	3	5	4	4	8.1	14.5
15-Nov-05	4	4	4	5	4	4	4	4	4	5	6	6	5	4	5	3	3	3	3	2	2	3	2	4	3.8	5.8
16-Nov-05	2	4	4	5	20	21	22	23	25	23	18	20	18	14	11	10	10	9	14	15	16	14	11	9	14.1	24.6
17-Nov-05	7	5	5	4	6	17	25	15	8	7	8	7	7	9	22	25	19	15	15	13	18	27	24	30	14.2	30.1
18-Nov-05	32	28	29	34	32	29	25	23	18	17	20	21	21	19	16	14	10	12	10	9	15	19	16	17	20.3	34.0
19-Nov-05	10	16	17	14	12	12	7	14	22	15	13	12	14	20	19	17	16	19	9	16	13	13	12	12	14.3	21.7
20-Nov-05	21	20	24	25	26	21	18	16	14	14	15	20	24	23	22	14	13	17	12	12	10	8	6	7	16.8	25.7
21-Nov-05	8	6	3	2	10	14	16	22	18	14	16	14	9	9	7	10	12	10	10	5	19	20	12	10	11.4	21.6
22-Nov-05	9	19	12	19	16	10	7	11	9	6	13	12	13	11	10	11	16	21	20	26	24	23	20	11	14.5	26.3
23-Nov-05	12	17	10	13	14	8	2	3	4	5	5	12	11	10	9	13	15	8	7	9	7	5	2	6	8.7	16.9
24-Nov-05	4	3	2	2	3	2	3	4	3	2	3	6	5	4	4	4	3	3	3	2	4	3	3	3	3.3	6.1
25-Nov-05	4	2	3	4	3	3	3	3	3	3	2	3	2	2	3	3	2	3	2	2	2	4	3	4	2.9	4.1
26-Nov-05	4	6	9	9	7	6	7	8	8	7	7	7	6	10	12	5	1	1	1	1	1	1	1	1	5.2	11.9
27-Nov-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	1.0	1.0
28-Nov-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	1.0	1.0
29-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	5	6	6	5	2	2	2	3	4	4	3	2	2.3	5.7
30-Nov-05	3	3	3	1	3	2	3	3	3	3	5	5	6	5	5	4	3	3	3	3	3	4	4	4	3.6	5.7
1-hr Average	6.7	7.2	6.7	7.2	7.7	7.2	6.8	6.8	6.6	6.0	6.7	7.2	7.6	8.0	8.5	8.1	7.3	7.0	6.8	6.9	7.2	7.2	6.5	6.7		
Hourly Max	32.3	27.7	29.0	34.0	31.5	28.9	25.1	23.3	24.6	23.3	19.9	21.1	24.3	23.3	26.2	25.5	20.1	24.5	25.6	26.3	24.5	27.0	24.3	30.1		



## PASZA - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

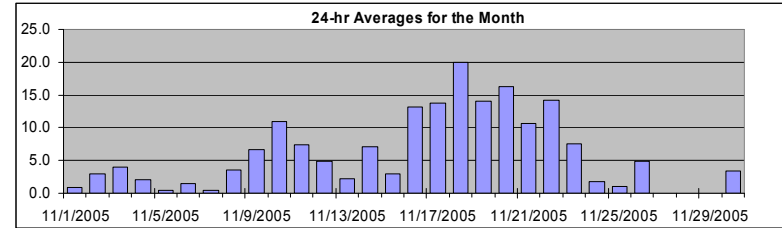
### HOURLY AVERAGE TABLE

### Wind Speed (WSv)

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

**Summary**

Maximum 1-hr Average:	33.8	km/hr	18-Nov	3:00 4:00
Maximum 24-hr Value:	20.0	km/hr	18-Nov	



Calm Time:	72 hrs	10% calms	Operational Time:	648 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	27.1	21.7	10.4	4.3	2.1	0.9	0.8	17.7 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max		
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	23:00
1-Nov-05	calm	2	2	2	1	3	calm	1	1	calm	3	2	3	4	3	3	2	calm	1	1	1	1	1	1	1	1	0.9	3.5
2-Nov-05	2	2	2	1	1	2	1	4	2	3	4	1	6	7	3	3	5	6	calm	calm	calm	2	1	2	3	2.9	6.7	
3-Nov-05	3	3	2	calm	calm	1	calm	calm	1	calm	1	4	3	5	5	6	5	6	7	7	8	7	9	9	4.0	9.3		
4-Nov-05	9	8	7	4	5	4	2	calm	1	calm	2	1	2	2	3	3	3	2	1	1	calm	calm	calm	1	2.1	9.0		
5-Nov-05	3	2	3	1	3	3	4	1	1	4	3	3	3	1	2	4	4	3	1	3	6	2	4	2	0.4	5.8		
6-Nov-05	1	1	calm	2	1	2	2	1	3	3	2	1	2	1	4	2	3	2	4	4	3	2	2	2	1.4	4.1		
7-Nov-05	1	2	1	1	calm	1	1	1	calm	1	1	calm	calm	1	3	2	2	2	1	3	3	1	1	3	0.4	2.9		
8-Nov-05	2	calm	calm	calm	calm	1	calm	1	2	3	5	5	5	8	6	8	7	9	12	11	5	3	2	2	3.5	11.6		
9-Nov-05	1	2	2	3	5	4	6	8	7	7	6	8	8	11	26	25	15	7	11	9	5	4	7	8	6.7	26.1		
10-Nov-05	8	10	5	4	2	1	2	2	6	7	9	8	13	14	17	18	20	24	25	25	21	21	22	17	10.9	25.4		
11-Nov-05	19	19	23	21	19	9	6	4	3	4	6	8	11	10	6	4	4	1	2	1	3	calm	calm	1	7.4	23.1		
12-Nov-05	2	7	4	8	9	9	6	4	4	4	5	6	4	4	6	6	5	4	4	2	3	2	1	1	4.9	9.4		
13-Nov-05	1	1	calm	3	1	2	1	calm	1	1	3	1	2	5	6	7	7	5	7	5	2	3	9	15	2.2	15.2		
14-Nov-05	14	14	12	12	13	12	13	11	9	8	9	7	6	6	6	5	4	4	4	3	3	5	4	4	7.1	14.2		
15-Nov-05	4	3	3	5	4	4	4	4	4	5	5	5	4	4	4	2	2	2	2	calm	calm	3	calm	1	3.0	5.5		
16-Nov-05	calm	3	2	1	20	21	22	23	25	23	18	20	18	13	11	10	9	8	14	15	16	14	11	9	13.2	24.5		
17-Nov-05	6	5	4	3	5	16	25	15	8	7	8	7	6	8	22	25	19	15	15	13	18	27	24	30	13.7	30.0		
18-Nov-05	32	27	29	34	31	29	25	23	17	17	20	21	21	19	16	14	10	12	10	9	14	19	16	17	20.0	33.8		
19-Nov-05	9	16	17	14	11	12	7	14	22	15	13	11	14	20	18	16	16	19	9	16	13	13	12	12	14.0	21.6		
20-Nov-05	21	20	23	25	25	21	17	16	14	14	15	19	24	23	22	14	13	17	12	12	10	7	4	7	16.3	25.4		
21-Nov-05	8	6	2	2	9	14	16	22	18	13	16	13	9	9	7	10	12	10	10	4	19	20	11	10	10.7	21.6		
22-Nov-05	8	19	12	19	16	10	7	10	9	5	12	12	13	11	10	11	15	21	20	26	24	23	20	10	14.3	26.2		
23-Nov-05	12	17	9	13	14	7	1	calm	calm	5	4	12	11	10	9	13	15	7	7	9	7	4	2	6	7.6	16.8		
24-Nov-05	3	1	calm	calm	3	calm	2	1	calm	calm	3	6	3	4	3	3	2	2	1	1	1	2	3	calm	1.8	5.9		
25-Nov-05	3	calm	3	1	calm	1	3	calm	1	calm	1	2	2	2	2	3	calm	calm	1	2	2	3	2	1	1.0	3.4		
26-Nov-05	3	4	9	9	6	6	6	8	8	7	7	7	6	10	12	4	1	1	1	1	1	1	1	1	4.9	11.8		
27-Nov-05	1	1	1	1	1	1	1	calm	calm	1	calm	1	1	1	1	1	1	calm	calm	calm	calm	calm	calm	calm	N	1.0	1.0	
28-Nov-05	1	1	1	calm	calm	1	1	calm	calm	1	calm	1	1	1	1	1	1	1	1	1	calm	1	calm	1	N	1.0	1.0	
29-Nov-05	calm	calm	calm	calm	1	calm	calm	calm	1	1	1	1	5	5	6	5	1	2	1	3	4	3	2	2	N	5.5	5.5	
30-Nov-05	3	3	3	1	3	2	3	3	3	3	4	5	5	5	5	5	4	2	3	3	3	4	4	4	3.4	5.5	5.5	
1-hr Vector	3.6	3.7	4.1	4.2	4.6	4.4	4.1	4.3	3.8	3.4	3.6	4.7	4.6	5.1	5.6	5.1	4.7	4.3	4.2	4.0	4.0	4.5	3.7	3.3				
Hourly Max	32.1	27.4	28.9	33.8	31.4	28.7	25.0	23.2	24.5	23.2	19.8	20.9	24.0	23.1	26.1	25.4	19.9	24.4	25.4	26.2	24.4	26.9	24.2	30.0				

### PASZA - Evergreen Park Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

#### Wind Direction (WD)

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

**Summary**


Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	349.3	328.5	265.0	224.5	88.4	39.4	16.9	258 deg

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 0:00		
1-Nov-05	74	224	182	196	37	209	185	155	109	325	48	342	58	69	53	65	82	151	69	61	17	228	245	193	90	E
2-Nov-05	214	197	174	206	143	207	83	185	166	177	200	147	204	202	284	250	200	221	212	117	179	156	168	167	193	SSW
3-Nov-05	78	73	59	21	307	174	190	50	324	339	130	47	49	58	60	69	69	68	69	63	64	69	68	70	63	ENE
4-Nov-05	68	70	71	57	63	58	55	161	31	111	59	240	216	305	62	101	147	88	108	109	144	153	134	331	80	E
5-Nov-05	312	16	338	299	334	223	257	261	312	203	196	205	200	196	314	82	86	76	322	70	60	46	66	75	1	N
6-Nov-05	245	325	261	229	69	209	197	153	101	87	223	296	65	134	196	166	231	200	204	212	212	210	197	207	198	SSW
7-Nov-05	182	177	225	75	23	23	77	68	358	77	78	306	356	94	34	328	296	301	243	272	241	235	187	190	331	NNW
8-Nov-05	183	221	264	230	93	46	307	268	266	243	218	212	203	250	264	252	243	214	223	214	183	90	91	122	224	SW
9-Nov-05	149	93	126	173	168	158	169	170	178	178	187	200	203	219	249	252	244	234	234	219	180	148	169	174	210	SSW
10-Nov-05	178	182	170	179	157	157	29	360	325	289	297	267	267	265	265	260	253	254	263	251	226	230	237	235	249	WSW
11-Nov-05	242	243	241	240	235	238	208	277	115	208	211	256	265	271	286	265	246	157	220	10	211	243	315	350	244	WSW
12-Nov-05	52	60	22	39	49	46	64	78	69	100	96	97	78	89	63	63	64	59	72	52	44	59	31	57	62	ENE
13-Nov-05	243	231	302	202	211	203	155	169	155	339	330	355	34	222	275	324	352	28	36	27	8	338	319	325	326	NW
14-Nov-05	320	322	321	319	322	322	320	322	316	325	336	345	332	330	327	328	311	296	308	318	44	82	72	76	328	NNW
15-Nov-05	74	70	72	75	84	77	89	87	88	87	104	113	129	126	122	111	61	61	31	345	64	299	214	131	91	E
16-Nov-05	340	197	213	83	246	249	261	264	262	264	267	266	262	271	284	271	279	265	259	260	253	242	239	235	259	W
17-Nov-05	230	266	272	314	308	267	256	260	269	235	219	213	214	244	253	254	249	258	239	248	249	253	246	248	251	WSW
18-Nov-05	246	247	256	257	259	266	268	272	260	256	263	266	262	265	264	262	234	225	227	255	250	248	251	255	257	WSW
19-Nov-05	252	252	247	248	256	233	250	248	250	240	233	244	263	259	263	268	247	261	261	275	265	264	263	254	254	WSW
20-Nov-05	254	262	253	260	270	278	279	281	279	276	273	276	277	272	273	280	273	262	262	258	249	248	250	193	267	W
21-Nov-05	194	186	202	87	246	242	253	243	256	261	253	269	283	269	270	275	258	257	266	258	256	255	260	256	254	WSW
22-Nov-05	259	249	257	252	251	246	221	249	269	275	261	257	255	261	265	279	279	266	267	261	257	259	255	286	260	W
23-Nov-05	274	265	253	246	251	252	190	339	230	164	143	247	258	267	280	262	266	265	268	270	251	228	168	189	254	WSW
24-Nov-05	181	75	331	233	224	74	211	220	193	220	244	260	256	236	254	327	217	167	148	16	348	260	258	256	238	WSW
25-Nov-05	234	115	197	204	166	118	223	207	337	46	139	216	286	278	280	211	42	37	297	335	320	300	260	266	245	WSW
26-Nov-05	330	323	326	324	285	285	281	282	282	285	282	290	287	311	323	324	340	332	351	357	307	266	281	300	303	WNW
27-Nov-05	302	288	266	258	273	271	302	287	222	258	303	274	334	343	346	12	32	345	337	36	8	298	27	137	313	NW
28-Nov-05	39	36	39	344	29	48	63	52	58	47	18	39	48	69	63	75	60	63	60	45	47	53	141	142	53	NE
29-Nov-05	85	58	78	161	52	107	89	115	74	74	78	61	54	49	50	46	13	195	54	72	61	63	49	27	59	ENE
30-Nov-05	40	53	35	67	32	44	36	54	68	94	82	60	38	48	53	49	61	75	73	60	80	81	93	86	61	ENE
Hourly Avg	249	253	259	257	261	257	258	260	265	256	250	260	264	264	276	273	260	253	256	262	249	249	247	243		

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

Station: Evergreen Park  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

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

**Summary**

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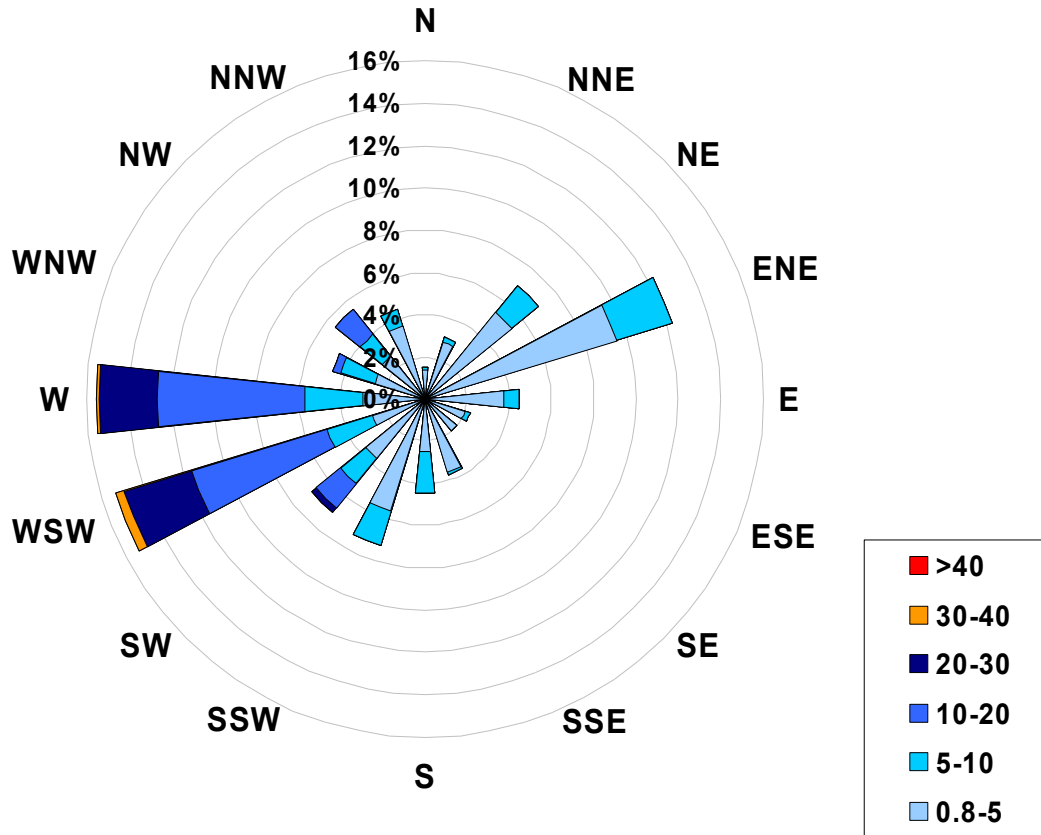
Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	66.7	57.2	35.9	18.7	9.3	4.9	3.9

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

Day	Mountain Standard Time																								Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	
1-Nov-05	47	28	24	36	58	22	43	47	44	45	21	42	25	23	36	19	27	55	63	44	43	35	32	35	63.0
2-Nov-05	51	14	32	42	37	37	59	16	15	25	34	34	42	13	38	41	17	16	51	37	16	33	20	15	58.7
3-Nov-05	27	43	48	33	53	56	61	49	56	30	36	19	51	27	17	14	8	6	5	5	8	10	7	9	60.9
4-Nov-05	11	11	11	16	12	11	54	20	19	63	49	40	44	57	42	34	24	34	55	44	48	40	58	50	63.1
5-Nov-05	37	42	28	54	39	37	14	64	42	12	14	19	37	48	44	27	11	49	71	19	6	52	19	26	70.9
6-Nov-05	44	56	62	49	34	39	7	28	18	34	47	47	44	57	18	56	21	16	10	5	6	12	15	13	62.4
7-Nov-05	51	38	16	45	33	18	49	44	38	55	54	55	64	57	41	43	45	32	61	34	36	53	43	15	64.1
8-Nov-05	28	66	47	49	54	56	87	51	44	18	12	15	16	14	13	12	20	7	7	5	23	28	45	23	87.2
9-Nov-05	57	17	33	22	9	13	10	8	7	10	14	7	6	10	6	7	6	9	6	7	15	17	10	8	56.7
10-Nov-05	7	5	9	15	29	53	43	46	26	22	17	20	10	8	7	6	7	6	6	5	5	5	6	6	52.7
11-Nov-05	6	5	5	5	6	26	20	27	40	38	14	14	15	13	19	15	15	46	34	57	23	45	63	55	63.2
12-Nov-05	34	12	26	9	11	11	16	28	24	29	30	39	42	35	22	14	12	23	16	27	31	27	67	36	66.8
13-Nov-05	47	65	68	18	49	43	39	52	48	67	30	75	49	13	19	14	14	8	10	16	29	21	14	10	74.6
14-Nov-05	13	11	12	12	11	11	12	12	14	15	14	22	27	18	20	22	17	15	16	18	21	19	20	25	27.2
15-Nov-05	21	32	32	16	22	18	25	18	19	19	21	26	39	30	27	36	33	27	30	67	60	18	65	28	66.5
16-Nov-05	62	38	58	47	5	4	5	5	4	4	6	5	5	8	13	11	19	14	4	4	4	5	4	5	61.6
17-Nov-05	37	17	25	44	16	10	4	7	9	23	24	8	34	20	5	5	4	10	7	8	8	6	6	4	44.3
18-Nov-05	5	7	6	6	5	6	6	5	4	4	5	7	7	7	7	6	5	5	10	8	6	5	5	4	9.5
19-Nov-05	6	6	4	9	11	5	16	5	3	4	5	8	10	9	12	7	8	5	10	7	6	7	6	8	15.6
20-Nov-05	6	8	5	5	7	8	10	9	9	7	9	9	8	8	9	10	8	5	5	4	5	8	36	23	35.9
21-Nov-05	7	11	44	28	17	6	5	4	4	5	5	8	13	10	10	8	5	8	9	39	5	4	7	8	44.0
22-Nov-05	12	4	6	5	6	9	37	14	14	21	8	6	7	8	8	12	9	6	6	5	5	5	10	36.8	
23-Nov-05	9	6	8	6	3	38	34	40	40	14	39	8	9	11	13	8	10	15	23	9	9	43	21	21	43.3
24-Nov-05	27	32	58	35	25	65	34	44	53	36	16	11	48	21	20	26	33	35	66	50	58	40	30	69	69.2
25-Nov-05	37	65	33	43	56	71	40	18	30	47	66	44	24	25	38	22	65	44	34	25	21	17	31	47	71.1
26-Nov-05	55	21	14	10	12	11	11	9	9	11	10	11	11	12	9	13	9	8	15	19	14	9	15	16	55.3
27-Nov-05	14	11	21	10	13	16	21	22	25	15	36	24	13	23	27	16	23	23	40	46	63	26	35	27	62.9
28-Nov-05	16	16	37	31	38	13	21	37	42	16	51	19	16	24	18	19	14	16	29	18	46	17	20	25	50.8
29-Nov-05	39	26	47	29	37	54	58	46	16	26	27	14	20	17	17	9	19	14	25	19	27	27	46	23	58.2
30-Nov-05	22	29	22	35	18	38	16	20	22	24	21	21	16	14	16	19	31	32	28	24	19	17	23	20	38.2
Hourly Max	62	66	68	54	58	71	87	64	56	67	66	75	64	57	44	56	65	55	71	67	63	53	67	69	

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



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	404
5	to	10	143
10	to	20	123
20	to	30	46
30	to	40	4
	>	40	0
Total Non-Zero Values			720

# PASZA - Smoky Heights

## Monthly Summary Tables, Graphs, and Roses

### PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

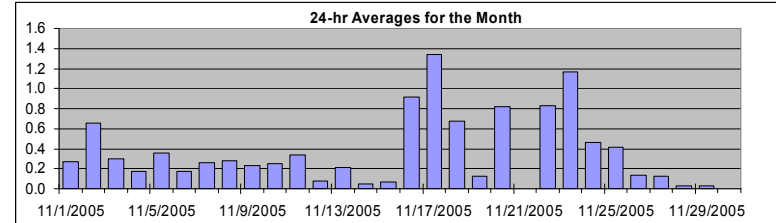
#### HOURLY AVERAGE TABLE

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

Monitoring Dates: November 1, 2005 to December 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:	11.3	ppb	17-Nov	8:00 9:00
Maximum 24-hr Average:	1.3	ppb	17-Nov	



AIC Time:	32 hrs	Operational Time:	680 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	4.0	1.5	0.4	0.1	0.0	0.0	0.0	0.4 ppb	0.1 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-Nov-05	0	0	0	0	N	0	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0.3	1.0	
2-Nov-05	0	0	0	0	1	0	1	0	1	A	1	1	1	1	1	1	1	1	2	1	1	1	0	0	0	0.7	1.9
3-Nov-05	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.1
4-Nov-05	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	0.6
5-Nov-05	0	0	0	0	0	0	A	0	1	3	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	2.5
6-Nov-05	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Nov-05	0	0	0	0	A	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0.3	0.6
8-Nov-05	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.8
9-Nov-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.2	1.5
10-Nov-05	0	A	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0.3	1.2
11-Nov-05	A	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.7
12-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.2
13-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0.2	1.2
14-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.3
15-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2
16-Nov-05	0	0	0	0	1	3	1	1	1	0	0	0	1	1	1	1	1	1	0	A	0	0	1	2	4	0.9	4.3
17-Nov-05	0	0	0	0	0	0	1	4	11	11	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	1.3	11.3
18-Nov-05	0	0	0	0	1	0	0	0	0	1	3	1	0	4	2	2	A	0	0	0	1	0	0	0	0	0.7	4.1
19-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	1	0	0	0.1	1.2	
20-Nov-05	0	0	1	0	0	3	1	0	0	0	0	1	2	0	A	0	1	0	0	0	0	5	3	1	0	0.8	4.8
21-Nov-05	0	0	0	1	0	1	0	0	1	3	6	3	2	C	C	C	C	C	A	0	D	D	0	0	N	6.4	
22-Nov-05	0	0	0	0	0	A	1	0	1	2	1	1	2	1	2	2	1	0	2	4	1	0	0	0	0	0.8	3.5
23-Nov-05	0	2	3	3	A	0	1	0	0	0	0	0	0	0	1	1	5	3	4	0	4	0	0	0	0	1.2	4.7
24-Nov-05	0	1	1	A	0	0	0	0	0	0	2	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0.5	1.8
25-Nov-05	0	0	A	0	0	1	1	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.2
26-Nov-05	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
27-Nov-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0.1	0.6
28-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.2
29-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.2
30-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.0
Hourly Avg	0.1	0.2	0.3	0.2	0.2	0.5	0.3	0.2	0.6	0.8	0.7	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.5	0.3	0.2	0.2			
Hourly Max	0.4	1.6	2.9	2.6	1.7	3.4	1.0	4.0	11.3	10.5	6.4	3.3	2.3	4.1	1.8	1.6	4.7	3.1	3.9	3.5	4.8	2.5	2.2	4.3			

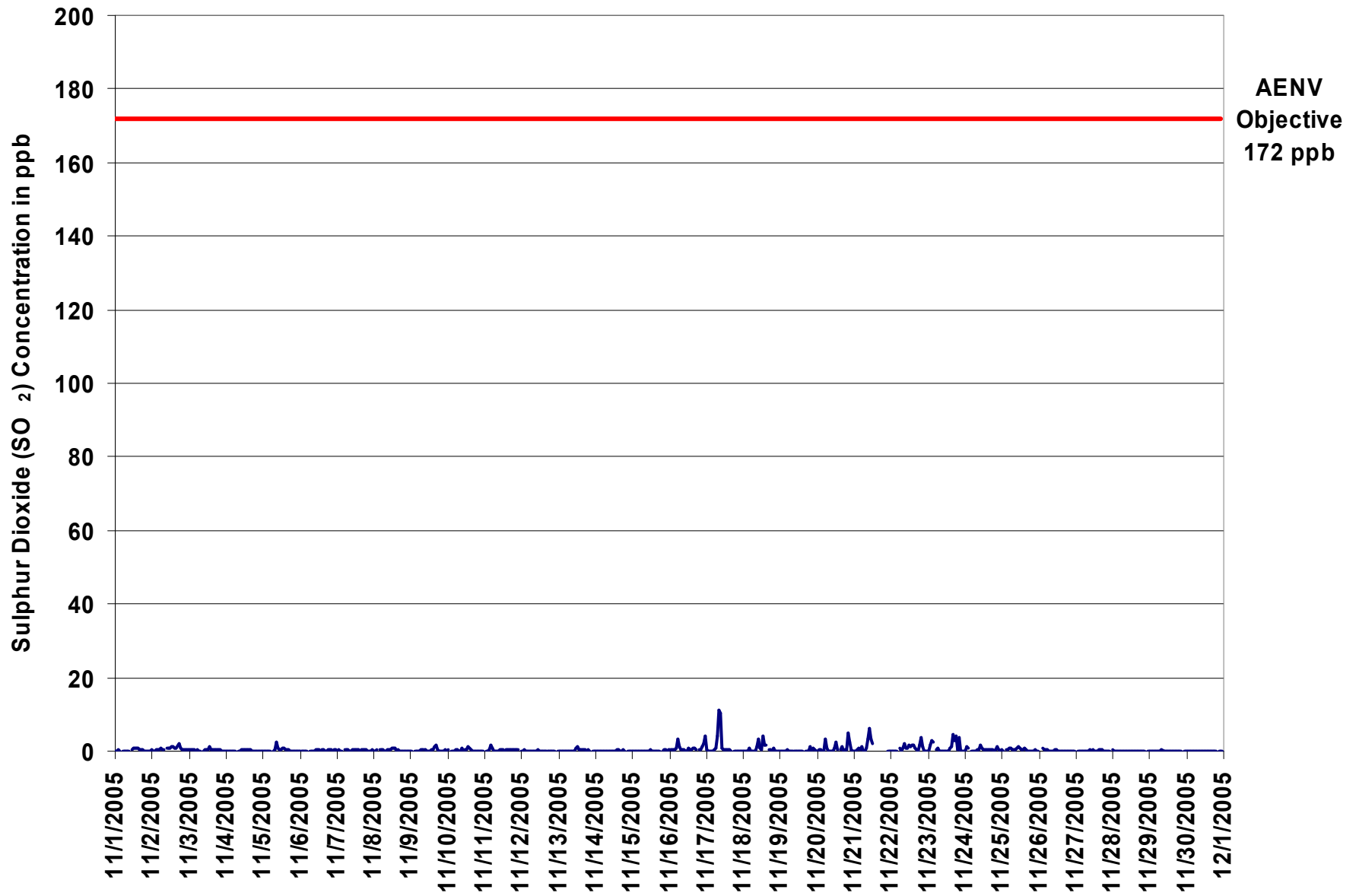


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights  
 Station Owner: PASZA

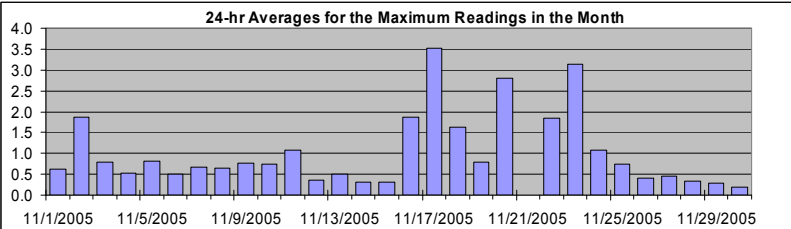
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

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

**Summary**

Maximum 1-hr Value:	32.6	ppb	17-Nov	8:00 9:00
Maximum 24-hr Value:	3.5	ppb	17-Nov	



AIC Time:	32 hrs	Operational Time:	680 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	Median
	8.4	3.8	0.9	0.5	0.3	0.1	0.0	1.1 ppb	0.5 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	0	0	1	1	N	1	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.6	1.4
2-Nov-05	1	0	0	1	1	1	1	1	1	1	A	1	1	1	2	2	1	1	22	1	1	1	0	1	0	1.9	21.7
3-Nov-05	1	0	1	0	0	1	0	0	A	1	1	1	1	2	2	1	1	1	1	1	1	1	0	0	0	0.8	2.2
4-Nov-05	0	0	0	0	1	0	1	A	0	0	2	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0.5	1.6
5-Nov-05	0	0	0	0	0	0	A	0	3	5	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.8	4.6
6-Nov-05	0	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	0	0	1	1	1	1	0	1	1	0.5	0.8
7-Nov-05	0	1	0	0	A	1	1	1	1	1	1	1	1	1	1	0	2	1	1	1	1	0	0	1	1	0.7	1.9
8-Nov-05	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0.6	1.3
9-Nov-05	0	0	A	1	0	0	0	1	1	1	0	0	1	1	1	3	5	1	1	0	0	1	1	1	1	0.8	4.7
10-Nov-05	1	A	0	0	0	1	1	0	1	4	0	2	1	2	2	1	0	1	1	1	1	0	0	0	0	0.7	4.0
11-Nov-05	A	0	0	2	8	2	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	8.3
12-Nov-05	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.6
13-Nov-05	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	1	1	0	1	0	0	A	0	0	0	0.5	1.6
14-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	A	0	0	0	0.3	0.6
15-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	A	0	0	1	1	0.3	0.8
16-Nov-05	1	1	1	1	2	5	2	1	1	1	1	1	2	1	1	1	1	1	A	1	1	3	7	7	1.9	7.1	
17-Nov-05	1	0	0	0	0	2	2	8	33	26	2	1	1	1	1	0	A	1	0	0	0	0	0	1	3.5	32.6	
18-Nov-05	0	0	0	1	2	0	0	0	0	4	7	2	2	6	3	2	A	1	1	0	4	0	0	0	1.6	7.4	
19-Nov-05	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	A	0	0	2	3	0	5	1	1	0.8	4.7	
20-Nov-05	1	2	2	0	1	5	2	0	0	0	0	2	6	1	A	1	3	1	1	2	26	8	1	1	2.8	25.7	
21-Nov-05	0	0	1	3	2	3	0	0	3	6	10	5	3	C	C	C	C	C	A	0	D	D	0	0	N	10.2	
22-Nov-05	3	0	0	0	0	A	1	0	3	4	2	3	2	2	3	3	2	0	3	5	5	0	1	0	1.8	5.5	
23-Nov-05	2	4	6	5	A	2	2	1	1	0	0	0	0	1	4	4	13	8	8	1	9	0	0	0	3.1	13.4	
24-Nov-05	0	5	2	A	0	0	0	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	1	0	1.1	4.5
25-Nov-05	1	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0.8	1.7
26-Nov-05	0	A	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2
27-Nov-05	A	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1	1	1	1	1	0	0	A	0.4	0.8	
28-Nov-05	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0.3	0.7
29-Nov-05	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.9
30-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.3
Hourly Avg	0.6	0.6	0.7	0.7	0.9	1.1	0.6	0.6	1.8	2.0	1.3	1.1	1.1	1.0	1.1	1.0	1.4	1.6	0.9	0.8	2.0	1.0	0.7	0.6			
Hourly Max	3.3	4.5	6.1	5.3	8.3	5.0	2.4	7.8	32.6	26.5	10.2	4.9	5.9	6.3	4.0	3.9	13.4	21.7	8.0	5.5	25.7	7.8	7.1	7.1			



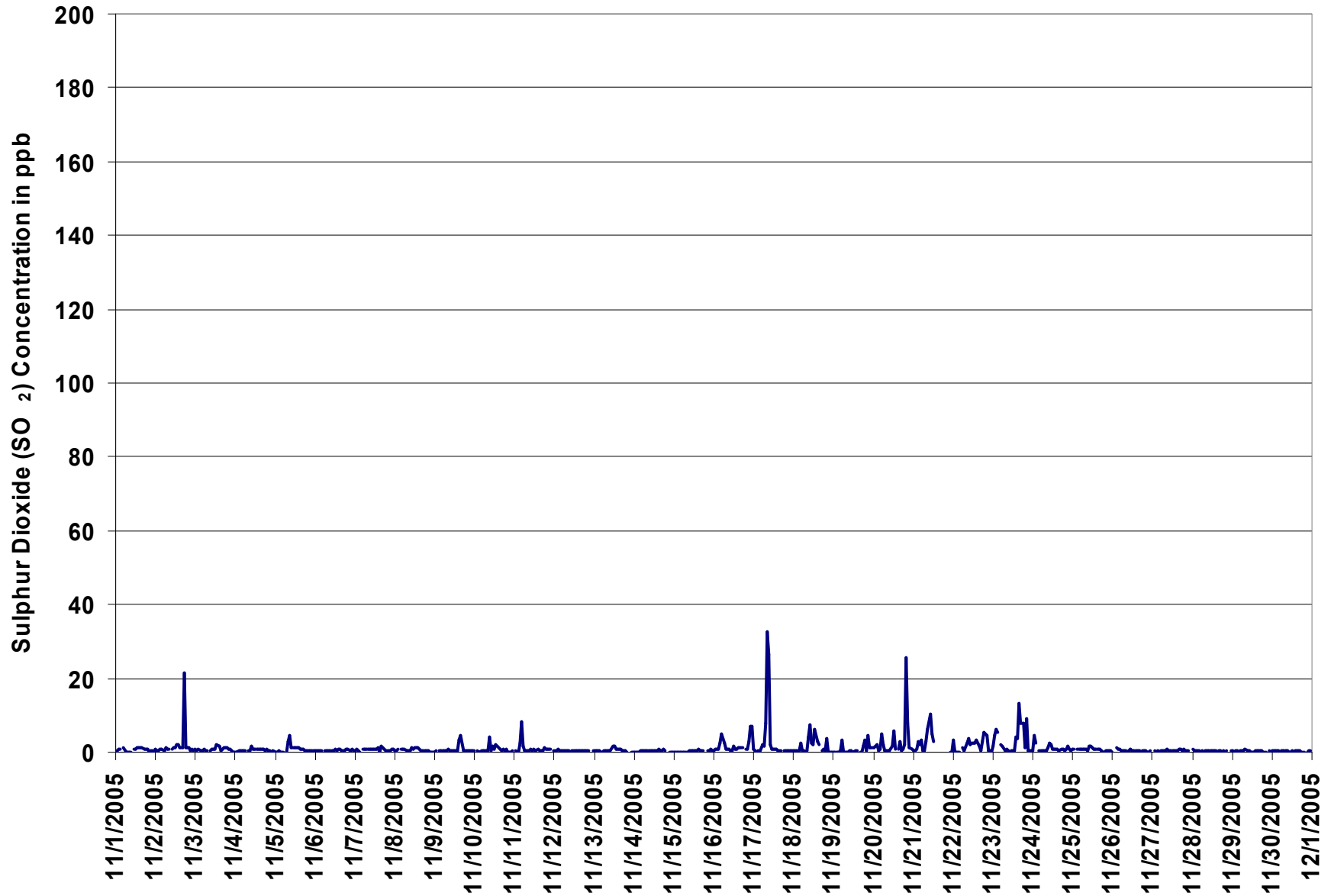
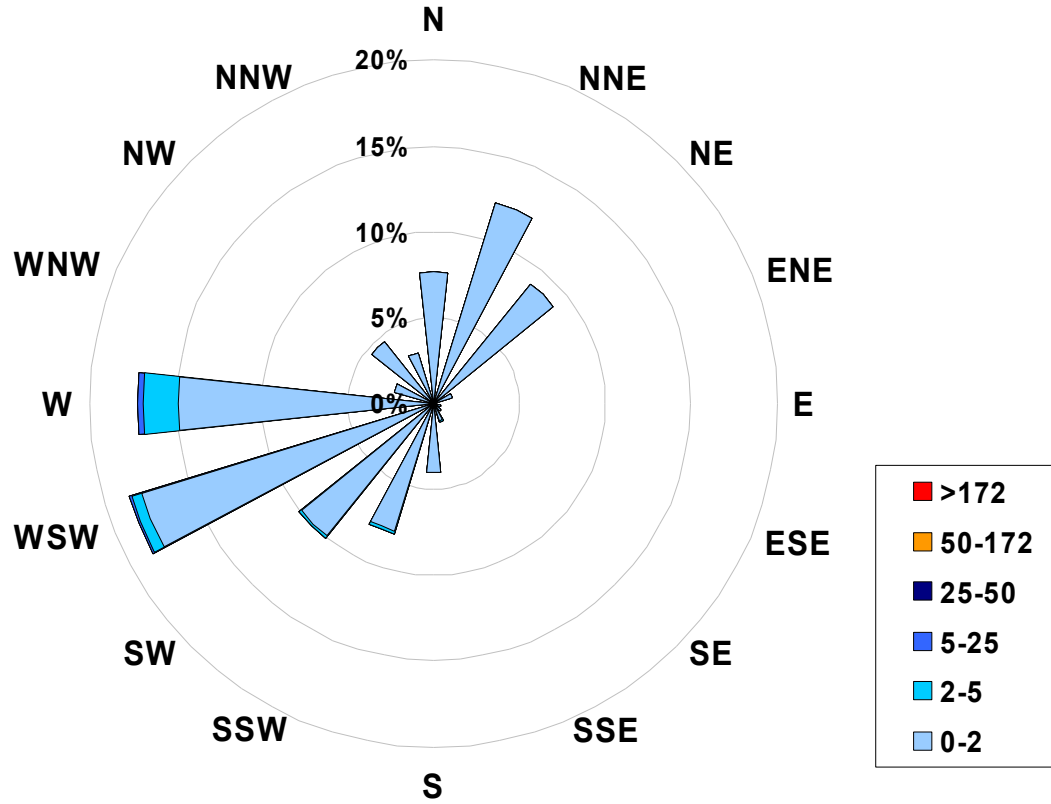


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
0.0	< 2		656
2	to 5		21
5	to 25		3
25	to 50		0
50	to 172		0
	> 172		0
Total Non-Zero Values			680

## PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

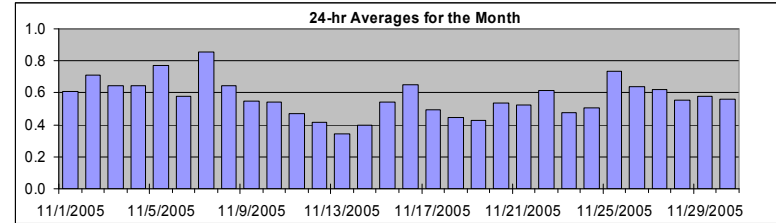
### Total Reduced Sulphur (TRS)

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

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

Maximum 1-hr Average:	1.4	ppb	22-Nov	16:00 17:00
Maximum 24-hr Value:	0.9	ppb	7-Nov	

AIC Time:	32 hrs	Operational Time:	682 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.0	0.8	0.7	0.6	0.5	0.3	0.2	0.6 ppb	0.6 ppb



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00			22:00	23:00	0:00
1-Nov-05			1	1	1	1	N	1	0	0	0	1	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
2-Nov-05			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	0.7	1.0
3-Nov-05			1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
4-Nov-05			1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
5-Nov-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	0.8	1.1
6-Nov-05			1	1	1	1	1	1	A	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
7-Nov-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	0.9	1.1
8-Nov-05			1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0.6	0.8	
9-Nov-05			1	1	A	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0.5	0.8
10-Nov-05			1	A	1	1	1	1	1	1	1	0	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0.5	0.9	
11-Nov-05			A	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0	A	0.5	0.7	
12-Nov-05			0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.4	0.6
13-Nov-05			0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.6
14-Nov-05			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	0	1	0.4	0.5	
15-Nov-05			0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	A	1	1	1	1	0.5	0.8	
16-Nov-05			1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	1.3
17-Nov-05			0	0	0	0	0	0	1	1	0	1	1	0	0	1	0	0	0	1	A	1	0	0	0	0	0	0.5	0.6
18-Nov-05			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.5
19-Nov-05			0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	0	1	1	1	0	1	0.4	0.5	
20-Nov-05			0	0	1	0	1	1	1	1	1	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	0.5	0.6	
21-Nov-05			1	1	1	1	1	1	1	1	1	1	0	1	0	C	C	C	C	C	A	1	0	0	0	0	0.5	0.7	
22-Nov-05			0	0	0	0	0	A	1	1	0	1	0	0	0	1	1	1	1	0	0	1	1	1	0	0	0.6	1.4	
23-Nov-05			0	0	1	1	A	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.5	0.7	
24-Nov-05			0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1.0	
25-Nov-05			1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0.7	1.1
26-Nov-05			1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
27-Nov-05			A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	0.6	0.8
28-Nov-05			1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.6
29-Nov-05			0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.6
30-Nov-05			1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	0.6	0.6
Hourly Avg			0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Hourly Max			1.0	0.8	0.9	1.0	1.0	1.1	1.0	1.1	1.0	1.1	1.0	0.9	0.9	1.0	0.8	1.1	1.4	1.4	0.9	0.9	0.9	0.8	1.3	0.8	1.0		

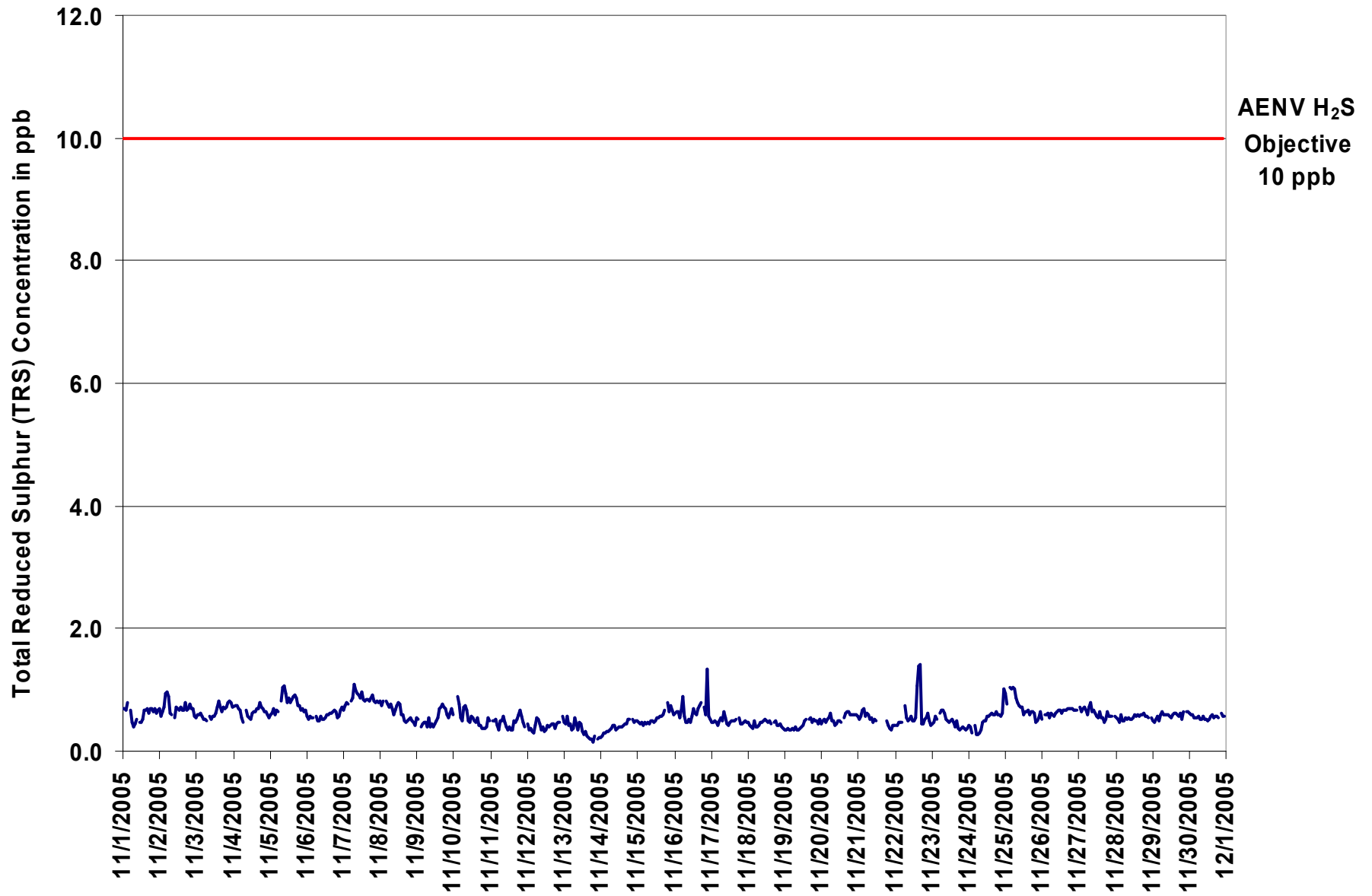


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

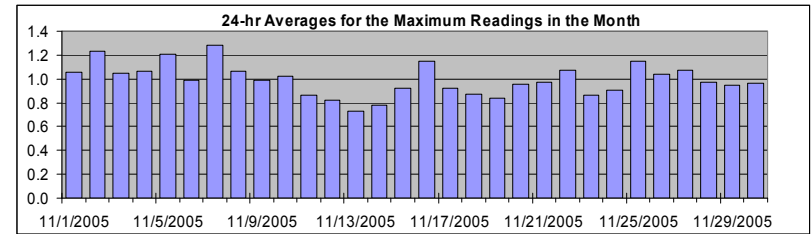
**Total Reduced Sulphur (TRS)**

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

**Summary**

Maximum 1-hr Value:	3.6	ppb	2-Nov	17:00 18:00
Maximum 24-hr Value:	1.3	ppb	7-Nov	

AIC Time:	32 hrs	Operational Time:	682 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.7	1.3	1.1	1.0	0.9	0.7	0.6	1.0 ppb	1.0 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Nov-05	1	1	1	1	N	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3
2-Nov-05	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	4	1	1	1	1	1	1	1	1.2	3.6
3-Nov-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	1.0	1.3
4-Nov-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	1.5
5-Nov-05	1	1	1	1	1	1	A	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.7
6-Nov-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	1.1
7-Nov-05	1	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1.3	1.6
8-Nov-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4
9-Nov-05	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
10-Nov-05	1	A	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8
11-Nov-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.1	
12-Nov-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	0.8	1.0	
13-Nov-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	0.7	1.0	
14-Nov-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	0.8	0.9	
15-Nov-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	0.9	1.2	
16-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	3	1	1	1.1	3.1	
17-Nov-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	1.2	
18-Nov-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	1.0	
19-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.1	
20-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	1.1	
21-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	A	1	1	1	1	1	1.0	1.1	
22-Nov-05	1	1	1	1	1	A	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1.1	2.4	
23-Nov-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	0.9	1.1	
24-Nov-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.9	1.5	
25-Nov-05	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.7	
26-Nov-05	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
27-Nov-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.3	
28-Nov-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	1.1	
29-Nov-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	1.1	
30-Nov-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	1.0	1.1	
Hourly Avg	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.0	1.0	1.0		
Hourly Max	1.4	1.2	1.8	1.6	1.5	1.5	1.7	1.6	1.7	1.6	1.4	1.3	1.4	1.4	2.4	2.0	2.2	3.6	1.3	1.6	1.2	3.1	1.4	1.5			

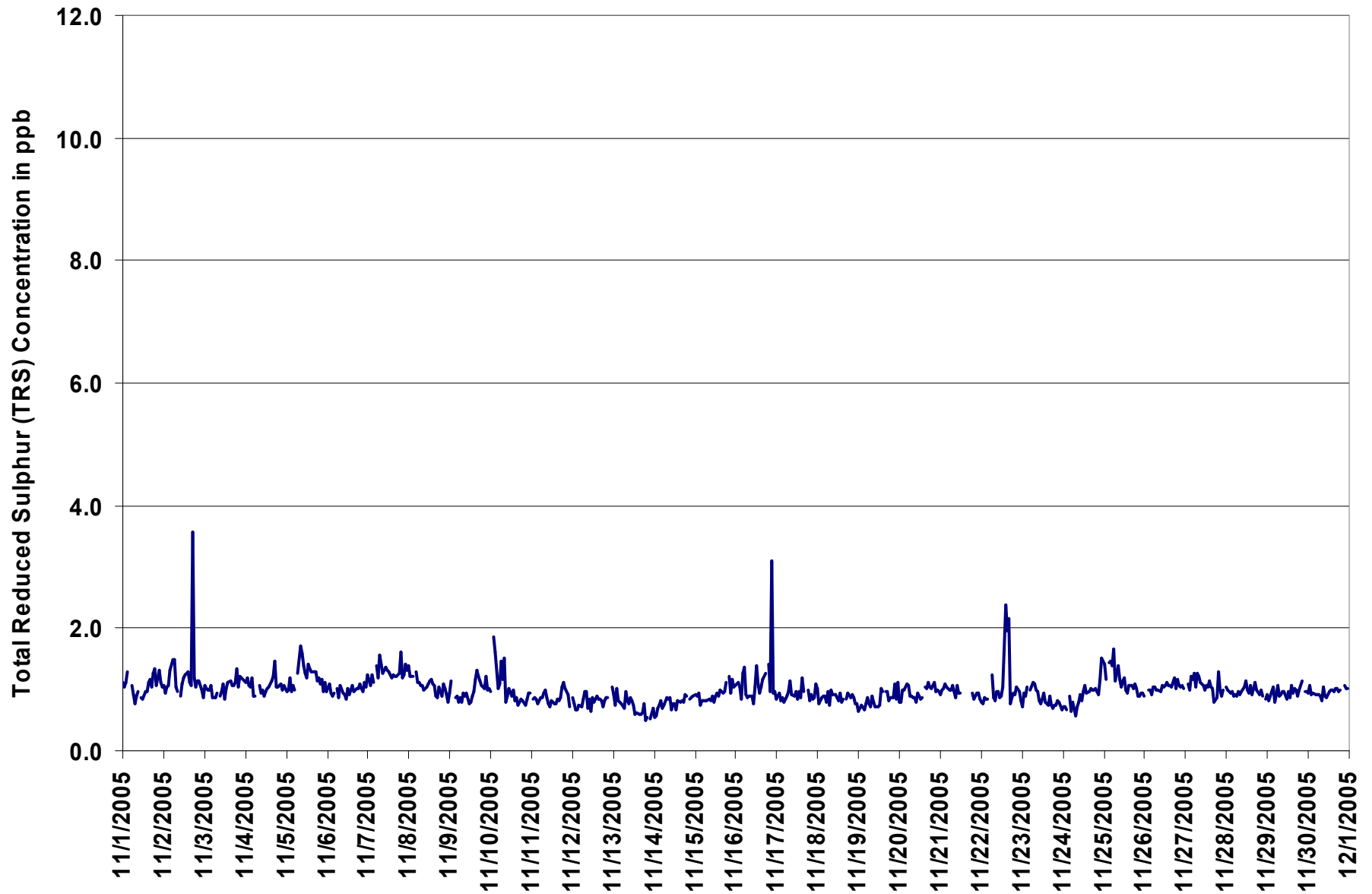
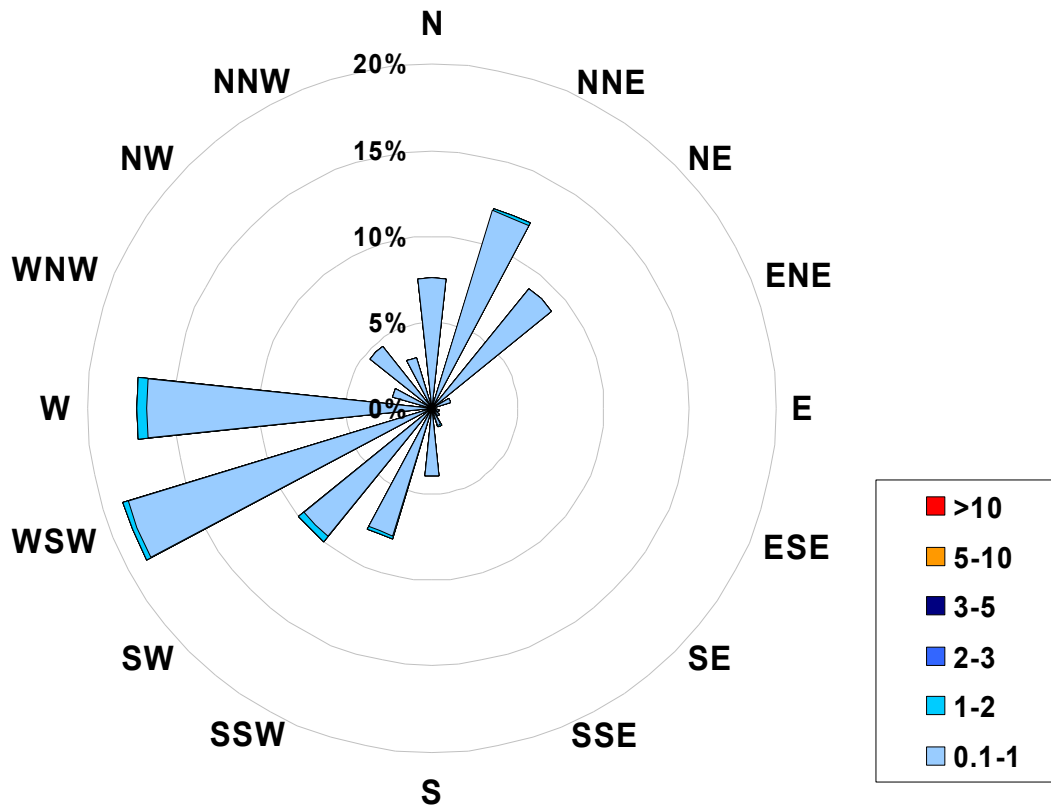


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

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



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

Frequency Distribution of TRS in ppb			
Range		Frequency (hrs)	
0.1	< 1	670	
1	to 2	12	
2	to 3	0	
3	to 5	0	
5	to 10	0	
	> 10	0	
Total Non-Zero Values		682	

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

Station: Smoky Heights  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

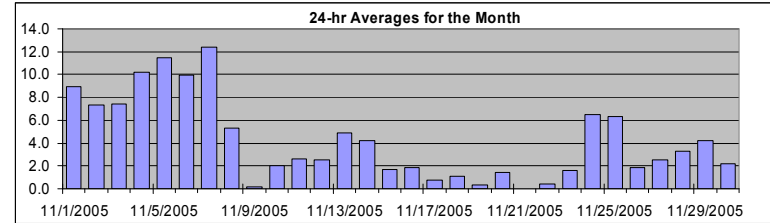
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: November 1, 2005 to December 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:	41.7 $\mu\text{g}/\text{m}^3$ 2-Nov 0:00 1:00
Maximum 24-hr Value:	12.4 $\mu\text{g}/\text{m}^3$ 7-Nov

AIC Time:	0 hrs	Operational Time:	709 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	98.8%
Percentile	99	95	75
	25.9	14.3	6.4
			2.1
			0.5
			0.0
			0.0
			4.2
			4 $\mu\text{g}/\text{m}^3$
			2.8 $\mu\text{g}/\text{m}^3$



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00			22:00	23:00
1-Nov-05	4	3	3	3	N	4	4	3	4	6	2	0	0	0	0	0	1	4	11	11	39	13	25	26	38	8.9	38.8	
2-Nov-05	42	24	24	22	10	6	5	2	8	6	0	2	1	0	1	0	1	0	1	5	3	2	4	3	3	3	7.3	41.7
3-Nov-05	5	5	7	5	6	5	3	4	6	6	4	5	6	11	9	7	3	15	13	10	5	10	15	17	17	7.5	16.6	
4-Nov-05	16	16	11	8	10	9	9	9	9	8	8	8	8	9	10	12	11	10	11	10	10	6	15	15	15	10.2	15.8	
5-Nov-05	23	14	9	15	11	8	8	7	9	8	11	9	10	10	9	11	9	11	14	27	12	7	13	12	12	11.5	27.1	
6-Nov-05	12	7	9	8	8	9	10	9	9	8	7	7	8	6	7	12	16	14	12	15	10	13	13	11	11	10.0	15.9	
7-Nov-05	9	10	10	14	13	7	8	9	15	9	9	10	21	14	5	9	20	28	26	9	3	11	15	13	13	12.4	28.2	
8-Nov-05	12	11	11	10	7	8	6	6	10	3	7	8	6	4	3	0	0	0	0	0	0	0	9	3	3	5.3	11.9	
9-Nov-05	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0.2	1.7	
10-Nov-05	0	1	10	5	0	0	5	6	5	5	0	0	0	0	0	0	0	D	D	0	0	0	1	0	3	3	2.0	10.0
11-Nov-05	5	3	2	2	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	2	11	16	8	5	0	2	2.6	15.6
12-Nov-05	2	7	5	4	0	7	1	1	2	5	1	2	0	0	1	1	1	2	1	9	9	0	0	1	1	2.5	9.2	
13-Nov-05	0	1	6	1	2	1	3	3	4	7	11	6	7	3	6	7	5	5	6	5	6	6	8	5	5	4.9	11.4	
14-Nov-05	2	3	4	6	8	5	3	3	3	2	2	1	2	2	2	2	3	9	15	22	3	0	0	1	1	4.2	22.1	
15-Nov-05	5	0	0	0	0	0	0	0	0	0	1	0	2	2	1	3	1	2	2	4	6	4	3	3	3	1.7	5.9	
16-Nov-05	4	3	5	8	5	4	2	1	0	1	0	0	1	2	2	3	2	1	0	2	0	0	0	0	0	1.9	7.6	
17-Nov-05	0	0	1	1	1	1	1	1	3	2	0	0	0	0	0	1	2	2	1	2	0	0	0	0	0	0.8	2.5	
18-Nov-05	0	0	1	1	2	1	3	2	2	4	2	1	0	0	0	0	0	0	2	1	1	1	1	1	1	1.1	3.6	
19-Nov-05	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0.3	2.1	
20-Nov-05	0	0	1	2	1	2	1	1	1	1	1	1	1	0	0	1	6	1	1	2	1	1	3	4	4	1.4	6.1	
21-Nov-05	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	C	C	D	D	D	D	0	N	1.4	
22-Nov-05	0	0	D	0	0	1	0	0	2	0	0	0	0	0	0	0	1	0	0	2	0	1	1	1	1	0.4	1.8	
23-Nov-05	2	2	2	2	0	1	1	3	3	3	1	1	0	1	0	1	1	1	3	1	2	3	3	2	2	1.6	3.3	
24-Nov-05	3	2	2	2	4	3	4	6	4	6	5	4	3	5	6	6	7	19	21	13	12	7	7	6	6	6.5	20.8	
25-Nov-05	8	7	8	9	8	9	8	9	5	7	6	3	1	2	2	3	4	3	5	6	7	4	1	26	26	6.3	25.9	
26-Nov-05	6	8	1	2	2	1	1	1	3	2	2	1	1	2	2	0	1	1	2	1	1	1	1	1	1	1.9	8.5	
27-Nov-05	0	1	1	3	3	5	2	1	1	5	2	0	0	2	0	5	1	4	4	8	7	5	0	1	1	2.5	7.6	
28-Nov-05	3	3	4	2	5	1	0	0	2	3	4	2	0	0	3	1	6	0	0	5	30	1	0	4	4	3.2	29.7	
29-Nov-05	0	0	1	19	6	1	3	0	1	2	7	5	2	1	1	1	2	3	2	2	2	11	20	7	7	4.2	20.1	
30-Nov-05	9	2	2	3	1	0	1	1	0	3	1	0	0	2	0	0	1	2	2	7	5	4	7	0	0	2.2	9.3	
Hourly Avg	5.8	4.5	4.8	5.2	3.8	3.4	3.1	3.0	3.7	3.7	3.2	2.6	2.7	2.6	2.4	3.0	3.9	5.2	5.8	7.5	5.4	4.8	5.6	6.1	6.1			
Hourly Max	41.7	23.6	24.4	22.1	12.6	9.0	10.3	9.4	15.0	9.2	11.4	9.6	21.3	14.3	10.1	12.0	19.8	28.2	25.9	38.8	29.7	25.1	26.2	38.4	38.4			



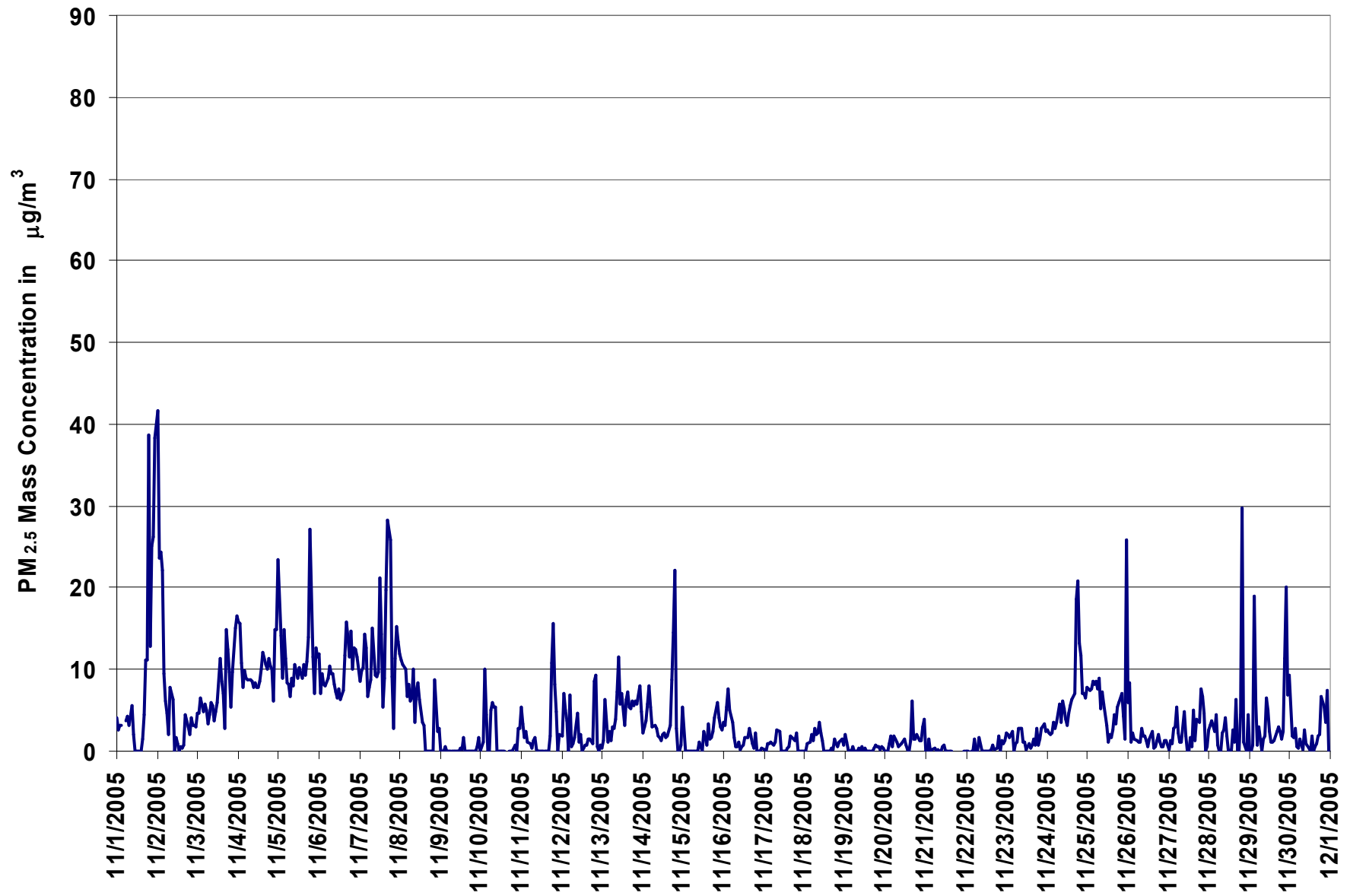


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights  
 Station Owner: PASZA

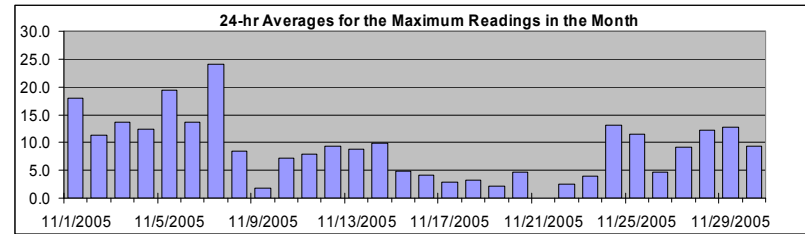
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

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

**Summary**

Maximum 1-hr Average:	131.1	μg/m <sup>3</sup>	1-Nov	19:00 20:00
Maximum 24-hr Value:	24.0	μg/m <sup>3</sup>	7-Nov	



AIC Time:	0 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	98.8%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	58.3	31.2	10.8	5.0	2.6	0.8	0.0	9.0	9 μg/m <sup>3</sup>
									7.5 μg/m <sup>3</sup>

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Nov-05	5	4	5	5	N	6	6	7	10	9	5	1	0	0	2	3	7	33	29	131	21	37	31	55	17.9	131.1	
2-Nov-05	55	34	26	28	15	8	7	4	13	11	3	4	4	2	2	1	5	8	6	8	8	6	8	5	11.3	55.4	
3-Nov-05	8	7	9	7	7	8	7	7	16	14	6	7	9	17	15	12	5	44	32	31	9	13	18	19	13.6	43.7	
4-Nov-05	18	17	15	9	11	10	10	10	10	9	11	9	10	10	12	14	12	11	13	12	13	12	19	19	12.4	19.1	
5-Nov-05	37	25	16	18	15	10	10	9	12	11	15	14	12	14	11	12	12	14	41	60	34	10	22	28	19.4	60.4	
6-Nov-05	23	9	13	10	10	11	12	11	11	11	9	10	14	9	10	14	18	18	17	23	19	16	16	17	13.7	23.4	
7-Nov-05	11	13	15	20	16	9	11	18	27	17	13	13	48	26	11	13	59	79	68	28	12	13	19	15	24.0	78.7	
8-Nov-05	15	13	14	12	10	10	10	10	13	6	10	15	15	7	6	2	4	1	0	0	2	16	6	6	8.4	16.3	
9-Nov-05	2	1	4	4	1	1	0	1	1	3	2	2	2	2	4	2	2	1	1	2	0	0	3	4	1.8	4.2	
10-Nov-05	4	12	28	23	0	0	12	13	23	11	3	2	1	2	0	4	D	D	2	3	6	3	2	5	4	7.2	28.5
11-Nov-05	8	5	3	4	3	3	1	9	7	2	0	0	0	0	2	2	2	5	47	33	24	18	2	6	7.8	47.5	
12-Nov-05	3	24	19	19	2	23	5	2	3	8	4	5	2	3	3	2	8	8	8	33	27	4	1	6	9.3	32.8	
13-Nov-05	2	3	15	3	4	3	6	4	7	10	16	12	12	7	16	11	7	8	8	7	8	15	17	9	8.7	17.1	
14-Nov-05	3	5	5	9	9	7	6	5	4	4	3	4	5	4	3	3	6	26	34	53	23	1	1	17	9.9	52.9	
15-Nov-05	19	8	0	0	1	0	0	1	2	1	7	4	10	6	4	11	4	5	4	6	8	6	5	4	4.9	19.2	
16-Nov-05	5	5	9	10	7	5	4	2	2	2	1	2	3	3	3	6	4	4	2	11	3	2	2	3	4.2	11.2	
17-Nov-05	4	2	3	3	2	2	2	3	6	4	2	1	3	2	2	4	5	4	5	5	2	0	2	1	2.9	6.2	
18-Nov-05	5	2	4	3	4	3	5	4	4	6	4	4	1	2	0	1	2	2	4	4	3	2	4	3	3.2	6.2	
19-Nov-05	3	3	2	2	0	3	1	1	3	2	2	1	3	2	3	0	1	2	3	2	2	3	3	3	2.1	3.5	
20-Nov-05	3	4	3	4	3	4	3	2	2	3	5	5	3	2	1	5	13	4	3	5	4	4	6	18	4.6	18.2	
21-Nov-05	4	0	4	3	2	1	2	2	2	2	3	2	1	1	0	C	C	D	D	D	D	D	0	N	4.2	4.2	
22-Nov-05	1	1	D	1	1	12	1	2	8	2	3	1	1	1	1	2	3	2	2	3	1	3	2	3	2.5	11.8	
23-Nov-05	4	4	4	5	2	3	3	7	6	6	5	3	4	2	2	3	3	2	5	3	3	6	6	4	3.9	7.1	
24-Nov-05	4	4	4	4	6	5	5	13	6	9	8	7	5	6	8	10	10	61	43	29	35	14	11	10	13.2	61.5	
25-Nov-05	11	9	10	10	10	11	9	17	9	10	8	5	3	4	4	4	10	6	19	19	13	9	4	61	11.6	60.8	
26-Nov-05	11	27	3	4	3	3	4	3	4	4	4	2	2	3	6	2	3	2	7	3	2	3	3	3	4.6	27.0	
27-Nov-05	2	4	3	5	6	10	6	3	4	10	3	3	2	6	5	13	13	21	12	34	22	32	1	2	9.2	34.3	
28-Nov-05	6	8	8	7	10	6	1	2	8	10	11	7	3	5	7	7	38	17	1	43	56	15	0	19	12.2	55.7	
29-Nov-05	4	7	13	36	31	3	9	1	4	5	22	26	6	5	3	2	4	5	4	3	5	37	53	18	12.8	53.0	
30-Nov-05	19	5	3	4	2	1	4	2	3	8	7	6	2	9	1	4	3	4	7	11	18	43	59	1	9.4	58.5	
Hourly Avg	10.0	8.9	9.0	9.0	6.7	6.1	5.4	5.8	7.7	6.9	6.4	6.0	6.2	5.5	4.9	5.8	9.3	13.8	14.7	21.0	13.1	11.8	11.3	12.1			
Hourly Max	55.4	34.2	28.5	35.9	30.8	22.8	12.5	18.5	27.3	17.2	22.1	26.0	48.4	25.9	15.8	13.7	59.2	78.7	68.4	131.1	55.7	43.4	58.5	60.8			

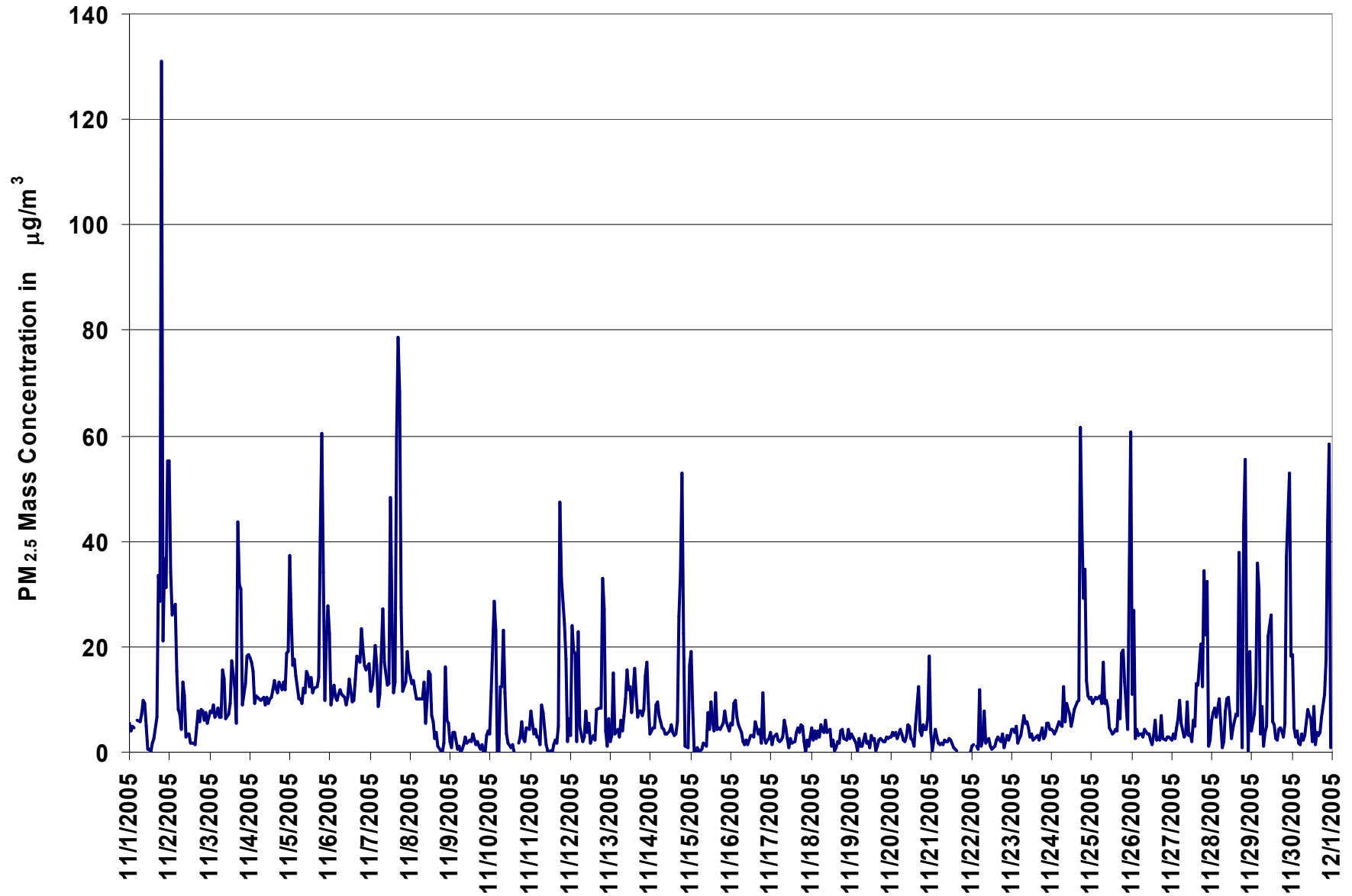
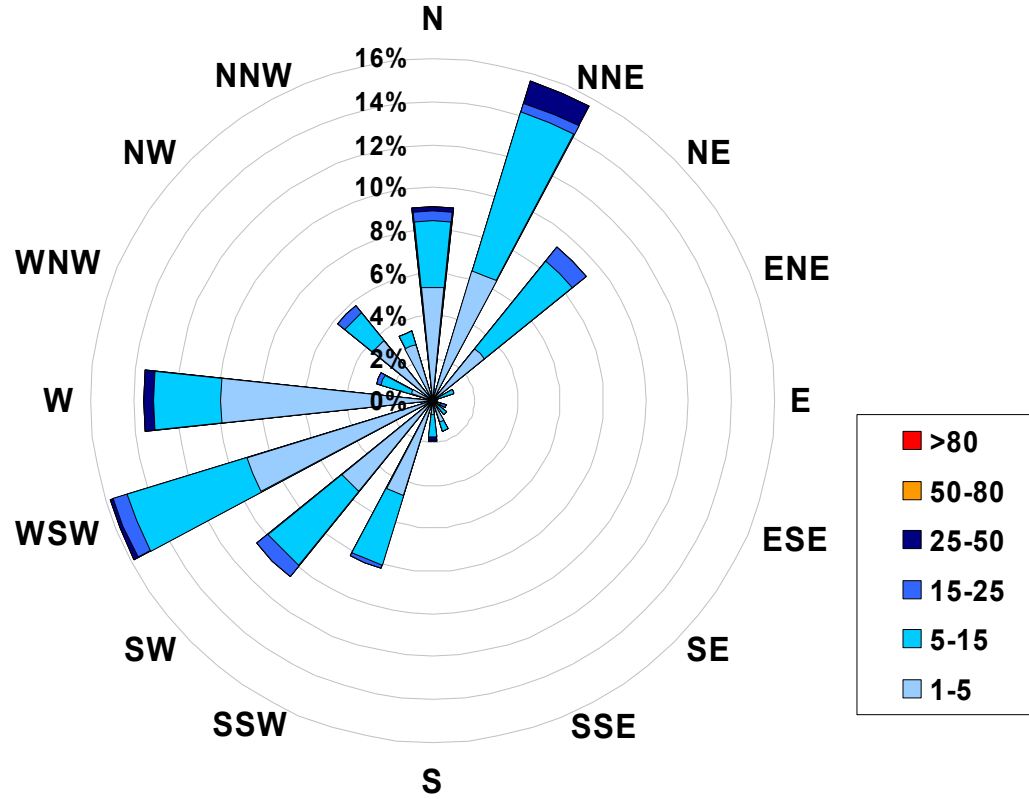


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range			Frequency (hrs)
1.0	<	5	487
5	to	15	193
15	to	25	19
25	to	50	10
50	to	80	0
	>	80	0
Total Non-Zero Values			709

## PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

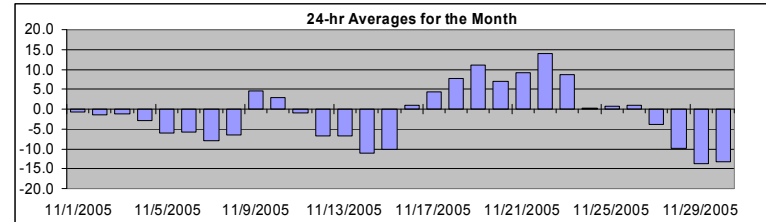
### HOURLY AVERAGE TABLE

### Ambient Temperature (T)

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

**Summary**

Maximum 1-hr Average:	16.8	°C	22-Nov	14:00 15:00
Maximum 24-hr Value:	14.0	°C	22-Nov	



AIC Time:	0 hrs	Operational Time:	719 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	15.3	12.2	4.4	-2.3	-7.1	-13.0	-14.5	-1.2 °C	-2.3 °C

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	-3	-2	-2	-3	N	-4	-4	-4	-4	-2	0	2	4	6	7	7	5	1	-2	-3	-4	-4	-5	-4	-0.8	6.8
2-Nov-05	-3	-4	-5	-5	-5	-4	-4	-3	-3	-2	-1	0	2	5	6	6	4	1	0	-3	-3	-5	-4	-4	-1.4	6.0
3-Nov-05	-4	-4	-3	-3	-4	-5	-5	-6	-6	-3	0	1	4	5	6	6	3	1	0	-1	-2	-3	-3	-3	-1.2	5.7
4-Nov-05	-3	-3	-3	-4	-4	-3	-3	-3	-3	-2	-2	-2	-1	-1	0	0	-1	-3	-4	-4	-4	-6	-7	-6	-3.0	-0.2
5-Nov-05	-8	-6	-6	-8	-8	-9	-9	-10	-10	-9	-8	-6	-4	-3	-2	-1	-2	-4	-5	-4	-4	-5	-6	-7	-6.0	-1.2
6-Nov-05	-7	-8	-8	-8	-8	-7	-7	-7	-7	-7	-6	-5	-5	-4	-4	-4	-4	-4	-4	-4	-4	-4	-5	-5	-5.8	-4.0
7-Nov-05	-8	-7	-10	-10	-9	-10	-10	-12	-13	-9	-7	-6	-4	-3	-3	-3	-5	-6	-7	-8	-10	-11	-10	-11	-7.9	-2.8
8-Nov-05	-12	-12	-13	-13	-12	-11	-11	-13	-11	-9	-8	-6	-3	-3	-1	0	0	-1	-2	-2	-2	-4	-4	-2	-6.4	0.4
9-Nov-05	-2	-1	-1	0	1	1	2	3	3	4	5	5	7	7	10	10	9	8	8	7	5	6	6	4	4.5	9.9
10-Nov-05	3	3	2	1	4	5	3	2	3	7	5	4	4	4	4	4	4	3	2	1	1	1	1	0	3.0	6.8
11-Nov-05	0	-2	-1	-2	-2	-3	-2	-4	-5	-2	1	2	3	3	4	4	2	-2	-3	-1	-4	-2	-2	-4	-0.9	3.7
12-Nov-05	-5	-6	-7	-7	-7	-7	-8	-8	-8	-8	-7	-7	-6	-6	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6.9	-5.0
13-Nov-05	-7	-8	-8	-8	-9	-8	-9	-11	-12	-9	-7	-5	-3	-4	-5	-5	-5	-5	-5	-5	-5	-6	-6	-6	-6.7	-3.4
14-Nov-05	-7	-8	-8	-9	-9	-10	-11	-11	-12	-12	-12	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-13	-13	-13	-11.0	-7.1
15-Nov-05	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-11	-10	-9	-8	-8	-8	-9	-9	-7	-7	-6	-6	-7	-8	-10.1	-6.2
16-Nov-05	-7	-7	-7	-5	-2	1	2	3	3	4	4	4	4	5	5	4	3	2	2	1	0	1	1	0	0.9	5.3
17-Nov-05	-2	-2	-3	-2	-2	-1	0	1	1	3	5	6	5	7	9	9	9	9	9	8	8	9	9	9	4.4	9.2
18-Nov-05	9	10	9	8	8	9	8	10	8	6	7	8	9	10	10	10	7	5	4	3	5	6	8	7	7.7	9.9
19-Nov-05	8	8	8	8	9	11	10	10	9	11	12	14	15	16	16	15	13	12	11	11	10	10	10	11	11.1	15.7
20-Nov-05	11	11	10	10	9	8	6	6	6	7	8	7	8	8	10	9	7	5	4	3	4	4	5	4	7.1	10.7
21-Nov-05	4	4	4	4	5	5	6	6	8	8	9	10	12	13	13	12	12	11	10	11	12	12	12	12	9.0	13.0
22-Nov-05	11	12	14	14	14	13	13	13	13	14	14	15	16	16	17	16	15	15	15	14	14	13	12	12	14.0	16.8
23-Nov-05	12	11	10	10	7	6	4	2	2	3	7	9	12	14	15	15	12	11	10	10	9	6	3	4	8.6	15.1
24-Nov-05	0	2	1	1	-2	-2	-2	-2	-2	-3	2	3	4	6	8	6	2	0	-3	-2	-2	-2	-4	-4	0.2	7.5
25-Nov-05	-4	-4	-3	-3	-3	-3	-3	-4	-4	-2	5	7	8	9	8	5	-1	-1	0	1	2	4	2	0.7	8.6	
26-Nov-05	1	3	4	3	3	3	2	2	2	1	1	1	1	1	1	0	0	0	-1	-1	-1	-1	-1	-2	0.9	4.0
27-Nov-05	-2	-3	-4	-4	-4	-4	-4	-4	-4	-3	-3	-2	-2	-2	-2	-3	-4	-5	-6	-7	-6	-5	-5	-5	-3.9	-1.8
28-Nov-05	-6	-7	-8	-8	-9	-11	-11	-13	-13	-13	-12	-9	-9	-9	-9	-10	-10	-11	-11	-10	-10	-10	-11	-11	-10.0	-5.8
29-Nov-05	-11	-12	-14	-15	-15	-14	-14	-15	-16	-16	-14	-14	-14	-13	-12	-13	-14	-14	-14	-13	-13	-14	-13	-13	-13.8	-11.3
30-Nov-05	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-12	-11	-12	-12	-13	-14	-14	-16	-15	-14	-14	-14	-13.2	-11.4
Hourly Avg	-2.2	-2.3	-2.5	-2.8	-2.7	-2.7	-2.9	-3.2	-3.3	-2.3	-1.0	0.1	1.1	1.9	2.4	2.2	1.0	-0.5	-1.1	-1.4	-1.5	-1.7	-1.8	-2.2		
Hourly Max	12.5	12.3	14.2	13.5	13.6	13.1	13.1	13.3	13.3	13.8	14.4	15.0	15.6	16.4	16.8	16.4	15.5	15.4	14.8	14.0	13.6	12.9	12.5	12.2		

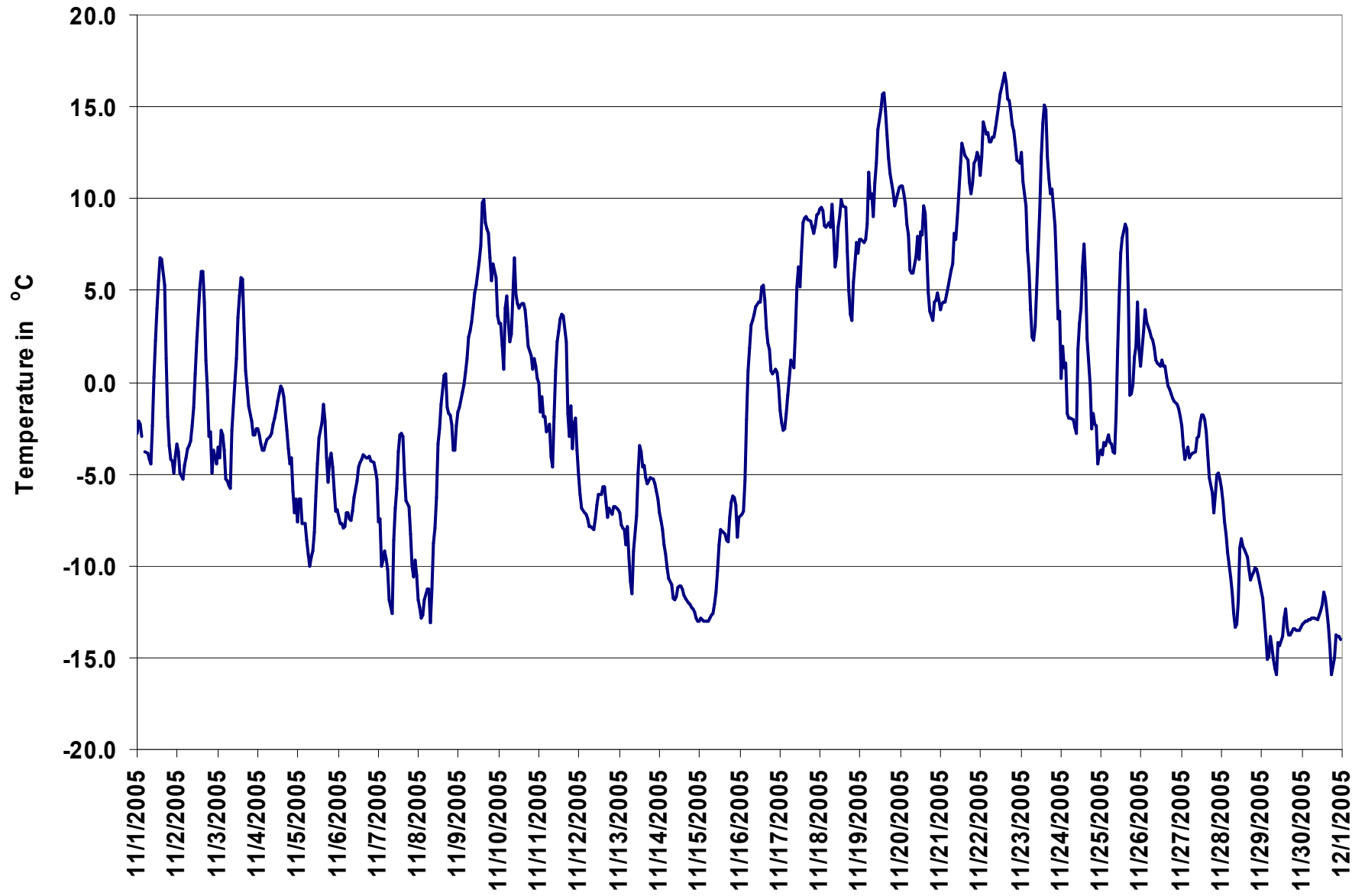


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

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

Station: Smoky Heights  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

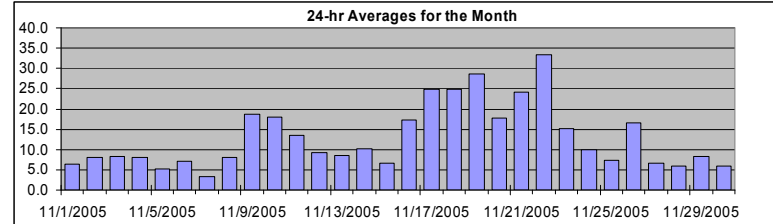
#### Wind Speed (WSs)

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

**Summary**

Maximum 1-hr Average:	42.5	km/hr	18-Nov	0:00 1:00
Maximum 24-hr Value:	33.5	km/hr	22-Nov	

Calm Time:	0 hrs	0% calms	Operational Time:	719 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	AverageS
	39.2	33.5	17.2	9.6	5.9	3.3	2.3	12.9 km/hr



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-Nov-05	7	9	7	6	N	6	7	9	8	6	8	8	8	7	7	10	11	8	4	6	4	5	3	4	8	6.4	8.8	
2-Nov-05	6	6	8	8	9	9	7	9	9	11	9	8	7	7	10	11	8	4	10	10	9	6	6	8	8	8.1	10.8	
3-Nov-05	6	3	7	5	4	7	3	6	6	5	7	5	6	6	6	9	13	12	12	13	14	16	16	15	8	8.4	15.8	
4-Nov-05	14	14	15	16	14	13	11	10	9	10	10	10	5	4	4	4	3	3	5	4	2	6	5	5	5	8.1	16.3	
5-Nov-05	3	3	3	2	3	3	3	3	7	4	4	5	5	5	7	6	4	3	6	8	8	10	12	8	8	5.2	11.8	
6-Nov-05	12	12	11	12	12	13	11	10	10	8	7	5	5	5	5	4	4	4	3	2	2	3	4	5	5	7.1	12.9	
7-Nov-05	5	3	5	4	3	3	2	2	2	3	2	2	1	2	3	3	4	4	3	3	3	3	4	5	5	3.2	5.2	
8-Nov-05	4	5	5	5	6	5	3	3	4	4	4	5	7	8	9	9	8	15	15	16	16	11	15	14	14	8.1	15.8	
9-Nov-05	15	15	13	15	16	15	18	16	17	21	22	23	28	26	28	30	20	23	24	15	12	13	12	10	10	18.6	29.7	
10-Nov-05	10	7	7	8	14	10	7	7	12	26	24	14	13	14	18	17	24	28	29	29	20	31	33	28	28	17.9	32.6	
11-Nov-05	26	18	27	19	21	20	16	4	7	10	13	17	22	20	16	7	7	6	5	7	5	5	8	17	17	13.4	26.6	
12-Nov-05	15	11	12	11	16	14	9	10	7	7	5	6	7	10	9	9	10	8	7	6	7	8	9	7	7	9.2	16.2	
13-Nov-05	5	6	4	4	4	5	7	8	8	5	3	4	6	7	7	6	13	14	17	15	16	17	15	12	12	8.6	17.2	
14-Nov-05	15	14	20	22	16	12	11	8	12	8	9	10	10	10	10	8	7	6	5	7	5	6	7	5	10	10	10.1	21.8
15-Nov-05	5	7	8	7	7	6	5	7	8	7	6	6	5	5	5	4	4	4	5	6	9	10	11	13	13	6.6	12.6	
16-Nov-05	10	11	17	20	20	18	20	22	25	25	25	26	22	20	13	6	8	12	14	14	16	16	18	15	15	17.3	26.1	
17-Nov-05	12	12	13	15	18	16	17	23	26	23	19	20	18	28	35	38	33	33	37	33	24	28	36	39	39	24.9	38.9	
18-Nov-05	43	42	42	35	37	38	30	31	20	15	18	20	22	23	21	18	16	14	8	10	21	21	30	25	25	24.9	42.5	
19-Nov-05	29	24	20	20	21	38	16	24	26	28	27	34	36	33	34	40	36	34	29	28	25	25	27	31	31	28.6	40.1	
20-Nov-05	29	29	27	28	23	22	20	20	20	19	20	20	19	19	14	11	10	8	9	10	11	14	18	5	5	17.7	29.1	
21-Nov-05	7	13	10	14	14	16	13	14	28	30	36	30	32	34	31	30	32	27	23	24	27	28	35	31	31	24.1	35.7	
22-Nov-05	19	26	36	33	37	33	34	38	34	32	38	39	38	37	39	42	35	41	34	27	32	28	24	29	29	33.5	42.0	
23-Nov-05	32	27	22	17	6	9	8	7	12	9	11	14	19	19	22	23	19	22	19	13	10	9	9	5	5	15.2	31.5	
24-Nov-05	10	14	15	12	14	8	8	10	8	9	11	11	11	11	11	10	6	8	8	12	11	5	8	11	11	10.0	15.5	
25-Nov-05	9	8	12	8	9	9	8	11	11	10	8	5	4	6	5	4	3	6	4	6	7	6	8	5	5	7.3	12.4	
26-Nov-05	4	10	16	12	14	21	26	28	23	18	15	16	15	13	13	20	22	22	19	15	16	17	12	10	10	16.5	27.6	
27-Nov-05	9	6	5	6	7	4	4	6	4	3	2	2	5	7	8	8	10	7	7	5	6	8	13	14	14	6.6	14.1	
28-Nov-05	11	11	12	10	7	5	6	6	5	3	2	3	6	6	6	4	5	6	7	5	4	3	4	3	3	5.8	11.9	
29-Nov-05	4	3	5	7	7	8	10	10	8	8	10	12	9	9	8	11	10	9	9	8	8	9	9	9	9	8.3	12.5	
30-Nov-05	8	7	6	7	6	5	5	5	5	6	7	5	5	4	11	8	4	5	4	4	6	7	5	5	5	5.9	11.1	
1-hr Average	12.7	12.6	13.6	13.0	13.2	13.0	11.6	12.1	12.7	12.4	12.8	12.8	13.1	13.6	13.8	13.6	12.8	13.1	12.7	12.0	12.0	12.3	13.9	13.2	13.2			
Hourly Max	42.5	41.5	41.6	35.5	37.2	38.1	34.3	37.7	33.5	32.0	37.7	39.3	37.8	37.1	39.2	42.0	36.1	41.2	37.5	33.5	31.8	31.3	36.1	38.9	38.9			

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

Station: Smoky Heights  
 Station Owner: PASZA

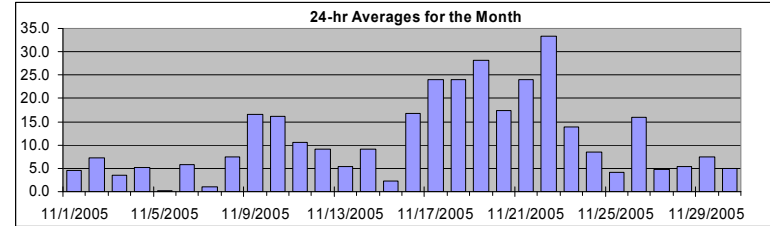
#### HOURLY AVERAGE TABLE

#### Wind Speed (WSv)

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

**Summary**

Maximum 1-hr Average:	42.4	km/hr	18-Nov	0:00 1:00
Maximum 24-hr Value:	33.3	km/hr	22-Nov	



Calm Time:	2 hrs	0% calms	Operational Time:	717 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	AverageV
	39.1	33.4	17.2	9.4	5.7	2.6	1.4	57.0 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	7	8	6	6	N	6	7	9	7	6	7	8	8	7	6	8	6	2	5	3	5	3	3	8	4.6	8.6
2-Nov-05	6	6	8	8	9	8	7	8	9	11	9	8	5	7	9	10	8	3	9	9	8	6	6	7	7.2	10.8
3-Nov-05	6	3	6	5	3	6	3	5	6	4	6	4	6	6	5	9	13	12	12	13	14	16	16	15	3.4	15.7
4-Nov-05	14	14	15	16	13	13	11	10	9	10	10	10	3	3	3	3	2	2	5	4	2	6	5	5.1	16.2	
5-Nov-05	3	2	2	2	2	2	2	3	7	1	4	5	5	5	7	5	3	1	6	8	7	9	12	7	0.1	11.8
6-Nov-05	12	12	11	11	12	13	11	9	10	8	6	5	5	5	5	4	4	3	2	1	3	4	5	5.8	12.8	
7-Nov-05	5	3	5	4	3	2	2	2	1	3	2	calm	1	2	3	3	4	4	3	3	3	3	4	5	1.1	4.9
8-Nov-05	4	4	5	5	6	4	3	3	4	4	4	5	7	8	9	9	8	14	15	15	16	10	15	14	7.5	15.7
9-Nov-05	15	15	13	15	16	15	17	16	17	21	22	23	28	26	28	30	20	23	24	15	11	13	12	10	16.7	29.6
10-Nov-05	9	7	7	7	14	10	7	6	11	26	24	14	13	14	18	17	24	28	29	28	20	31	32	28	16.1	32.5
11-Nov-05	26	18	26	19	21	20	15	3	7	10	13	16	22	20	15	7	6	5	3	7	3	4	8	17	10.5	26.4
12-Nov-05	15	11	12	11	16	13	9	10	7	7	5	5	7	9	9	8	10	8	7	6	7	7	9	7	9.0	16.1
13-Nov-05	4	5	3	2	2	4	7	8	8	4	3	3	5	7	7	6	13	14	16	15	16	17	15	11	5.5	17.1
14-Nov-05	15	14	19	21	16	12	11	7	11	8	9	9	10	10	10	8	6	6	5	7	5	6	7	5	9.1	21.5
15-Nov-05	5	7	8	7	7	6	5	6	7	7	6	6	4	4	4	4	4	4	4	6	8	10	11	13	2.3	12.6
16-Nov-05	10	11	17	20	20	18	20	22	25	25	25	26	22	20	12	6	7	12	14	13	16	16	18	15	16.8	26.1
17-Nov-05	11	12	13	15	18	15	16	23	26	22	19	20	18	28	35	38	33	33	37	33	24	28	36	39	24.1	38.8
18-Nov-05	42	41	42	35	37	38	30	31	20	14	18	20	22	23	21	17	16	14	7	10	21	21	30	24	24.0	42.4
19-Nov-05	29	24	19	20	21	38	16	24	26	28	27	34	35	33	34	40	36	34	29	27	25	25	27	31	28.1	40.0
20-Nov-05	29	29	27	28	23	22	20	20	20	19	20	19	19	19	13	11	10	7	9	10	11	14	18	3	17.3	28.9
21-Nov-05	6	13	9	13	14	16	13	14	28	30	36	29	31	34	31	30	32	27	23	23	27	28	35	31	24.0	35.7
22-Nov-05	18	26	36	33	37	33	34	38	33	32	38	39	38	37	39	42	35	41	34	27	32	28	24	29	33.3	41.9
23-Nov-05	31	26	21	16	6	8	8	7	10	9	11	14	19	19	22	23	19	22	18	12	10	9	8	4	14.0	31.3
24-Nov-05	10	14	15	11	14	7	7	9	7	9	10	11	11	10	10	10	6	8	8	12	11	3	7	10	8.5	15.4
25-Nov-05	9	8	12	8	9	9	8	11	11	10	8	5	4	6	5	3	1	5	4	6	7	6	8	5	4.2	12.3
26-Nov-05	calm	8	16	12	13	21	26	27	23	18	15	15	15	13	12	20	22	22	18	15	16	17	12	10	16.0	27.5
27-Nov-05	9	6	4	6	7	4	4	6	3	3	2	2	5	7	8	8	9	7	7	5	6	8	13	14	4.7	14.0
28-Nov-05	11	11	12	10	7	5	6	6	4	2	1	3	5	6	6	4	5	6	7	4	4	2	3	3	5.3	11.8
29-Nov-05	3	1	4	7	6	7	10	10	8	7	10	12	8	8	8	11	10	9	9	8	8	9	9	8	7.5	12.2
30-Nov-05	8	7	6	7	6	5	5	5	5	6	6	5	4	3	11	8	4	5	3	4	6	7	5	5	5.0	10.5
1-hr Vector	7.1	7.0	8.4	7.3	7.0	7.6	6.7	7.4	8.3	8.0	8.0	7.6	7.8	8.3	8.8	8.1	7.0	8.4	8.5	7.4	6.8	6.2	7.4	6.9		
Hourly Max	42.4	41.4	41.5	35.4	37.0	38.0	34.2	37.6	33.5	31.9	37.6	39.2	37.7	37.0	39.1	41.9	35.8	41.2	37.3	33.4	31.8	31.3	36.1	38.8		



### PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

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

**Summary**


Calm Time:	0 hrs	0% calms	Operational Time:	719 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	Average
	356.6	332.2	264.0	233.6	51.9	12.1	2.9	267 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		
1-Nov-05	265	216	225	242	D	230	227	217	231	247	201	195	187	178	191	162	163	208	311	355	316	24	277	260	222	SW
2-Nov-05	238	221	210	227	226	214	203	193	207	209	215	225	209	198	182	174	172	254	274	255	271	215	213	241	218	SW
3-Nov-05	277	189	264	276	294	269	244	283	265	222	185	152	150	143	67	42	39	30	32	31	30	32	38	45	27	NNE
4-Nov-05	51	47	40	36	48	49	55	40	38	42	45	53	111	225	210	138	115	140	257	279	306	292	266	257	44	NE
5-Nov-05	238	228	234	314	319	227	243	238	242	160	184	198	192	192	187	181	83	332	16	15	31	44	27	38	348	NNW
6-Nov-05	28	30	26	29	32	39	37	38	38	37	41	33	22	20	24	23	5	356	3	18	142	207	229	240	29	NNE
7-Nov-05	228	198	221	256	251	265	271	13	312	284	262	72	120	59	56	35	28	19	23	20	259	215	250	233	275	W
8-Nov-05	229	220	208	252	254	257	251	296	241	203	225	243	237	208	197	191	182	202	208	203	202	201	202	212	212	SSW
9-Nov-05	194	190	200	199	190	188	193	184	183	189	192	198	210	213	244	256	246	237	241	232	204	178	156	155	208	SSW
10-Nov-05	176	229	251	198	185	178	193	254	285	291	283	244	245	235	247	244	248	234	262	244	236	241	244	245	244	WSW
11-Nov-05	249	263	257	271	255	240	246	32	255	235	217	237	248	252	251	227	203	317	243	309	252	10	3	37	256	WSW
12-Nov-05	35	27	13	32	35	30	45	54	44	29	42	51	57	41	36	44	33	32	44	6	17	29	39	33	35	NE
13-Nov-05	29	10	281	152	220	265	228	249	218	260	50	45	35	37	32	1	356	3	8	10	13	15	30	11	4	N
14-Nov-05	353	344	325	334	322	326	324	340	336	328	339	357	13	15	21	14	23	13	21	21	35	41	49	47	352	N
15-Nov-05	32	34	41	38	43	44	49	46	43	47	40	64	66	39	39	31	8	279	254	232	230	250	254	252	15	NNE
16-Nov-05	248	240	229	244	250	265	272	276	277	280	279	275	274	276	266	270	263	264	280	271	261	266	264	256	266	W
17-Nov-05	226	220	220	224	222	219	227	264	268	255	231	217	205	238	247	244	242	244	254	253	242	245	252	250	242	WSW
18-Nov-05	257	255	260	257	267	275	278	296	303	262	265	260	266	270	273	264	237	223	242	214	252	251	262	257	263	W
19-Nov-05	248	250	225	229	233	257	244	243	240	247	251	240	241	251	254	257	253	257	252	266	270	258	257	256	250	WSW
20-Nov-05	260	260	270	269	269	269	273	272	269	268	279	254	265	271	284	280	281	258	251	253	244	233	252	216	265	W
21-Nov-05	254	236	249	272	273	266	271	270	262	270	265	263	263	262	265	265	257	262	264	262	258	258	263	266	263	W
22-Nov-05	259	252	257	251	252	253	255	258	260	259	263	263	263	266	266	267	267	264	264	268	266	265	273	275	262	W
23-Nov-05	266	266	268	242	212	250	254	232	228	204	195	193	246	249	252	265	262	251	265	253	211	258	197	207	247	WSW
24-Nov-05	278	294	280	256	205	215	213	255	243	254	240	200	193	220	209	191	188	228	253	272	288	209	246	225	239	WSW
25-Nov-05	228	231	204	205	216	224	238	266	265	258	275	249	228	212	236	181	318	335	357	45	26	358	351	179	249	WSW
26-Nov-05	268	2	342	7	356	337	329	323	325	320	312	317	330	332	319	329	323	316	315	313	317	322	328	344	327	NNW
27-Nov-05	353	231	229	266	289	306	220	281	313	31	260	306	15	11	16	26	5	1	4	0	17	8	358	356	346	NNW
28-Nov-05	3	8	23	39	38	6	352	13	327	357	318	310	31	35	33	2	5	344	336	324	15	21	53	39	10	N
29-Nov-05	55	350	260	299	341	13	17	12	19	26	30	45	45	16	11	7	11	16	20	21	19	10	10	10	14	NNE
30-Nov-05	15	14	12	16	15	355	355	352	4	3	6	357	353	17	286	295	347	5	358	359	12	32	64	59	2	N
Hourly Avg	268	265	265	266	261	267	267	279	273	267	261	250	252	258	263	265	270	269	277	276	272	271	271	267		

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

Station: Smoky Heights  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

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

**Summary**


Determined by the Yamartino 15-min interval calculation

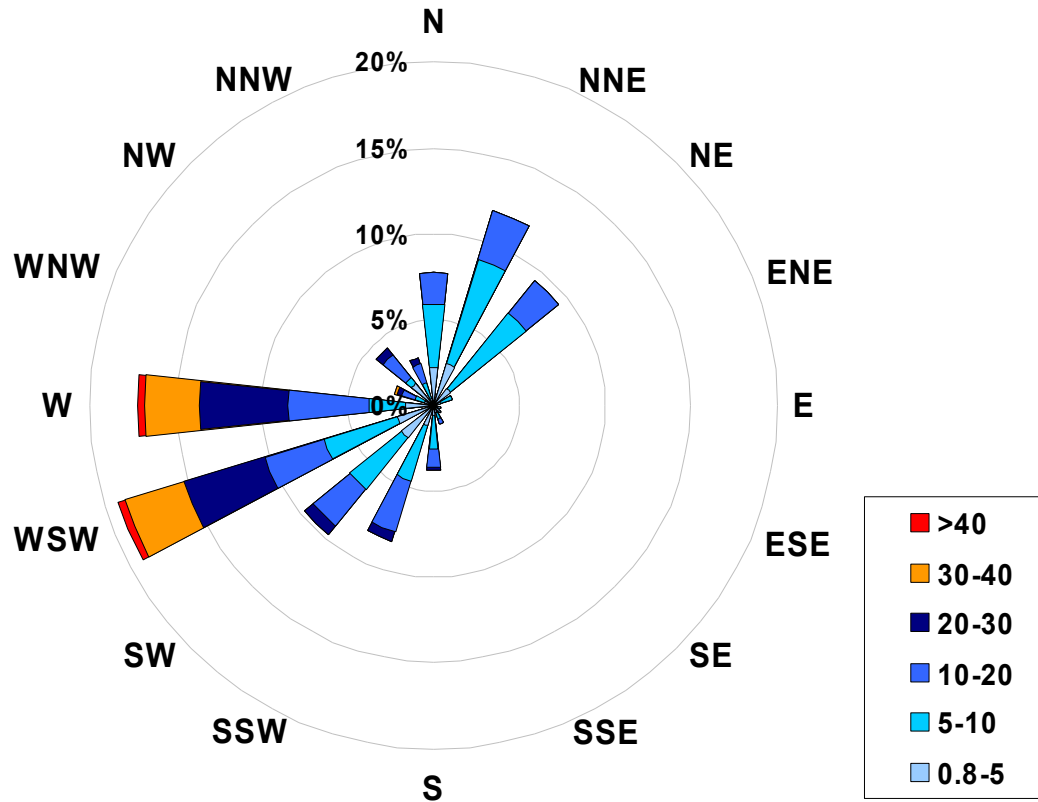
Calm Time:	0 hrs	0% calms	Operational Time:	719 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%			
Percentile	99	95	75	50	25	5	1
	47.6	29.6	11.0	6.8	4.1	2.6	2.1

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

Day	Mountain Standard Time																								Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		23:00 0:00
1-Nov-05	11	13	14	17	N	11	9	8	17	7	7	11	14	17	16	11	7	31	19	20	4	15	47	4	46.8	
2-Nov-05	9	7	8	8	10	17	11	6	5	4	8	10	13	15	9	9	4	17	15	9	13	16	5	5	16.7	
3-Nov-05	13	23	16	11	11	12	32	15	12	12	11	25	24	14	18	6	3	3	3	2	3	4	4	6	31.8	
4-Nov-05	5	4	3	3	5	4	7	5	4	5	7	7	30	23	43	29	16	21	22	7	20	26	7	10	42.5	
5-Nov-05	22	17	19	33	37	24	22	17	9	48	20	9	11	10	8	10	19	38	7	8	14	18	4	22	47.8	
6-Nov-05	2	3	3	3	4	3	6	6	5	7	9	15	12	11	11	27	11	7	7	14	23	6	3	4	26.7	
7-Nov-05	6	12	8	12	13	21	19	53	48	16	16	44	45	23	11	8	9	7	15	17	18	16	17	16	53.2	
8-Nov-05	9	7	6	10	7	8	11	10	6	8	6	6	7	3	4	9	11	5	5	6	3	11	4	4	11.5	
9-Nov-05	3	3	5	3	3	3	5	5	4	3	3	4	2	2	4	4	4	2	3	6	7	3	7	4	7.4	
10-Nov-05	6	11	10	9	2	5	6	11	10	5	5	8	8	6	4	5	5	5	4	6	8	4	3	3	11.0	
11-Nov-05	3	8	3	5	5	4	36	50	32	3	4	10	5	7	9	14	30	11	36	13	53	15	4	6	53.3	
12-Nov-05	4	4	4	5	4	7	6	7	8	8	11	17	11	10	10	8	4	3	8	13	6	8	5	7	17.0	
13-Nov-05	14	15	30	23	49	19	12	11	7	30	26	17	12	6	6	10	4	6	4	4	5	5	5	7	49.0	
14-Nov-05	6	7	6	7	8	11	14	18	9	10	8	10	8	9	9	8	8	9	10	8	7	5	5	11	18.3	
15-Nov-05	9	4	4	5	7	8	7	7	6	5	8	11	18	34	16	9	11	15	15	10	12	14	10	3	34.0	
16-Nov-05	9	6	3	3	2	4	5	4	3	2	2	2	2	3	8	8	5	2	3	10	3	3	3	3	9.8	
17-Nov-05	4	4	2	2	3	4	9	2	2	5	5	6	6	5	2	2	3	4	3	3	3	3	3	3	8.8	
18-Nov-05	4	3	3	3	3	3	3	5	5	12	4	5	4	5	4	5	4	4	17	7	4	4	3	3	17.2	
19-Nov-05	2	2	7	4	6	3	5	4	4	4	4	3	4	5	4	4	5	3	3	3	3	2	4	3	7.1	
20-Nov-05	4	5	3	3	4	4	3	2	3	4	9	4	4	4	3	6	7	10	10	4	4	2	2	4	40	39.9
21-Nov-05	24	3	13	5	4	4	4	3	2	2	2	3	3	18	29	3	3	2	3	3	2	3	3	3	29.5	
22-Nov-05	5	3	3	3	3	3	3	4	3	4	3	3	3	4	4	3	3	3	2	3	3	2	3	3	4.5	
23-Nov-05	3	2	3	8	28	7	7	13	10	9	5	6	5	3	4	4	4	2	5	11	8	10	11	27	28.0	
24-Nov-05	7	6	3	10	3	7	14	9	8	7	9	6	8	9	8	4	9	8	10	5	3	30	33	17	33.3	
25-Nov-05	13	17	7	10	6	9	7	6	5	13	6	11	16	7	10	15	31	6	9	16	6	8	15	22	30.5	
26-Nov-05	43	19	9	13	15	6	4	4	5	4	5	5	6	7	11	5	5	5	7	6	4	3	5	7	43.1	
27-Nov-05	9	25	10	9	7	20	11	9	17	32	19	45	23	9	7	4	5	8	6	19	9	8	5	5	45.4	
28-Nov-05	6	7	5	7	5	6	6	9	16	33	38	30	31	11	8	7	6	6	4	13	12	19	15	9	38.0	
29-Nov-05	10	52	11	7	10	4	5	4	4	6	5	7	8	14	16	8	8	7	6	7	8	7	7	8	52.5	
30-Nov-05	8	7	8	7	10	10	10	12	8	9	12	24	51	37	18	8	6	5	39	18	11	8	13	10	50.5	

Hourly Max	43	52	30	33	49	24	36	53	48	48	38	45	51	37	43	29	31	38	39	20	53	30	47	40
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**1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for November 2005**



**Calms: 0%**

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	133
5	to	10	249
10	to	20	190
20	to	30	91
30	to	40	50
	>	40	6
Total Non-Zero Values			719

# PASZA - Beaverlodge

## Monthly Summary Tables, Graphs, and Roses

### PASZA - Beaverlodge AQI Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

## Air Quality Index (AQI)

Monitoring Dates: November 1, 2005 to December 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:	708
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

**Status Flag Characters**

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

Day	Mountain Standard Time																							
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Nov-05	9	10	11	11	9	8	8	5	7	8	9	N	N	N	N	N	N	N	14	8	7	7	9	8
2-Nov-05	9	5	7	5	5	5	6	4	4	6	8	N	N	N	N	16	15	12	11	16	16	10	12	12
3-Nov-05	12	12	11	12	11	4	3	4	5	4	10	11	13	15	15	14	13	13	12	11	10	10	10	10
4-Nov-05	11	10	13	13	12	13	13	13	12	11	11	12	12	11	11	9	10	10	8	10	11	12	11	8
5-Nov-05	4	3	3	2	16	10	5	7	7	11	6	6	8	9	10	11	7	5	6	11	11	11	10	8
6-Nov-05	10	10	9	10	6	8	6	6	6	6	7	6	8	9	9	9	8	8	8	9	9	9	9	7
7-Nov-05	5	6	6	6	5	4	5	6	8	7	7	7	7	7	6	6	7	7	8	8	8	8	8	16
8-Nov-05	13	15	8	4	6	5	6	5	7	6	6	8	11	14	17	15	12	13	15	16	15	16	17	17
9-Nov-05	17	17	16	15	15	15	14	15	16	17	17	16	17	18	19	18	17	15	17	14	15	N	13	13
10-Nov-05	13	13	13	13	13	13	11	8	12	15	16	18	18	18	18	19	19	18	18	18	17	17	16	16
11-Nov-05	17	17	16	16	15	15	14	15	15	14	15	16	17	17	17	16	15	15	12	14	16	14	12	9
12-Nov-05	11	10	11	10	10	9	10	8	6	9	9	10	11	10	9	9	9	8	8	7	7	8	5	6
13-Nov-05	9	7	5	5	4	3	3	6	3	3	5	4	6	5	3	4	4	6	7	6	6	7	9	9
14-Nov-05	9	11	11	11	11	11	10	10	10	10	11	12	12	12	12	12	13	12	12	12	12	12	10	10
15-Nov-05	10	7	9	9	9	9	8	7	6	7	7	7	7	8	7	6	5	6	4	4	4	4	4	5
16-Nov-05	5	4	13	14	14	13	14	14	14	14	14	15	15	15	15	15	15	14	13	12	13	13	13	12
17-Nov-05	13	13	14	15	17	18	16	14	15	14	15	16	16	18	20	19	19	19	19	19	18	18	18	18
18-Nov-05	18	18	19	19	19	20	19	19	18	17	17	19	19	20	20	19	18	17	18	18	18	18	17	17
19-Nov-05	17	17	17	18	17	17	17	18	17	17	16	18	19	19	18	18	19	18	19	18	18	19	19	19
20-Nov-05	19	19	19	19	19	19	19	19	19	18	18	19	19	19	19	19	18	18	18	18	18	17	16	14
21-Nov-05	15	18	19	20	19	19	18	19	19	19	20	19	20	21	21	20	20	21	21	21	20	21	21	20
22-Nov-05	20	20	21	20	20	20	20	20	20	20	20	20	20	20	20	19	19	19	19	19	19	19	19	19
23-Nov-05	18	17	18	18	18	18	16	16	18	17	16	17	20	21	21	19	19	17	18	19	18	19	17	19
24-Nov-05	12	15	15	15	9	12	8	11	8	7	5	5	7	8	10	7	8	5	7	10	6	4	5	5
25-Nov-05	5	4	6	9	15	17	18	17	9	12	11	10	10	13	13	11	7	14	15	12	9	12	9	16
26-Nov-05	14	15	13	12	14	16	15	12	13	13	13	13	16	16	16	15	17	16	15	15	14	15	17	14
27-Nov-05	11	13	15	15	13	11	11	10	12	13	14	14	14	7	10	10	8	11	7	7	5	11	13	12
28-Nov-05	13	14	13	12	12	12	12	11	10	9	11	11	11	11	11	9	8	8	7	7	9	10	10	11
29-Nov-05	10	10	11	13	14	15	12	12	12	12	14	12	13	10	8	8	10	8	10	13	14	13	13	13
30-Nov-05	13	12	12	12	11	10	11	10	11	13	13	14	14	15	13	12	10	12	13	13	13	11	10	12

### PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

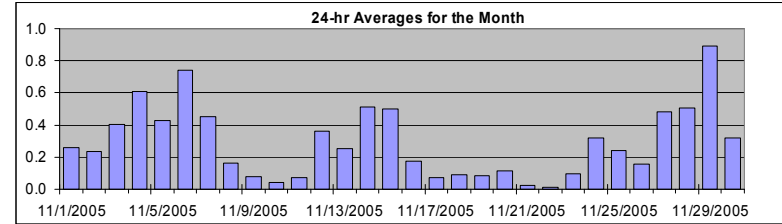
#### Sulphur Dioxide (SO<sub>2</sub>)

Monitoring Dates: November 1, 2005 to December 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:	5.7 ppb	6-Nov	16:00	17:00
Maximum 24-hr Average:	0.9 ppb	29-Nov		

AIC Time:	0 hrs	Operational Time:	717 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.7	0.7	0.4	0.2	0.1	0.0	0.0	0.3 ppb	0.2 ppb



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			0:00
1-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.3	1.0
2-Nov-05	1	0	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	1	0.2	0.6
3-Nov-05	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.4	0.9
4-Nov-05	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.6	0.9
5-Nov-05	0	0	1	1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.7
6-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	2	1	0	0	0	0	0	0.7	5.7
7-Nov-05	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.5	0.7
8-Nov-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	0.4
9-Nov-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
10-Nov-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
11-Nov-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-Nov-05	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.4	1.7	
13-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.7
14-Nov-05	1	1	1	0	0	1	1	1	1	1	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0.5	1.5
15-Nov-05	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	1	0.5	1.0	
16-Nov-05	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
17-Nov-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
18-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
19-Nov-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
20-Nov-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
21-Nov-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
22-Nov-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
23-Nov-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
24-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	0	0	0	0	0	0.3	0.7
25-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.2	0.5	
26-Nov-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	0.3
27-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	1	1	1	0.5	1.5	
28-Nov-05	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	1	0	0	0	0.5	0.8
29-Nov-05	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	2	3	3	6	2	1	0.9	5.7
30-Nov-05	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0.3	0.6	
Hourly Avg	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.5	0.3	0.3			
Hourly Max	0.8	0.6	0.6	0.6	0.5	1.0	1.7	0.7	0.7	0.7	0.7	0.9	0.9	1.5	1.3	3.0	5.7	2.0	2.0	2.6	2.6	5.7	1.6	1.0			

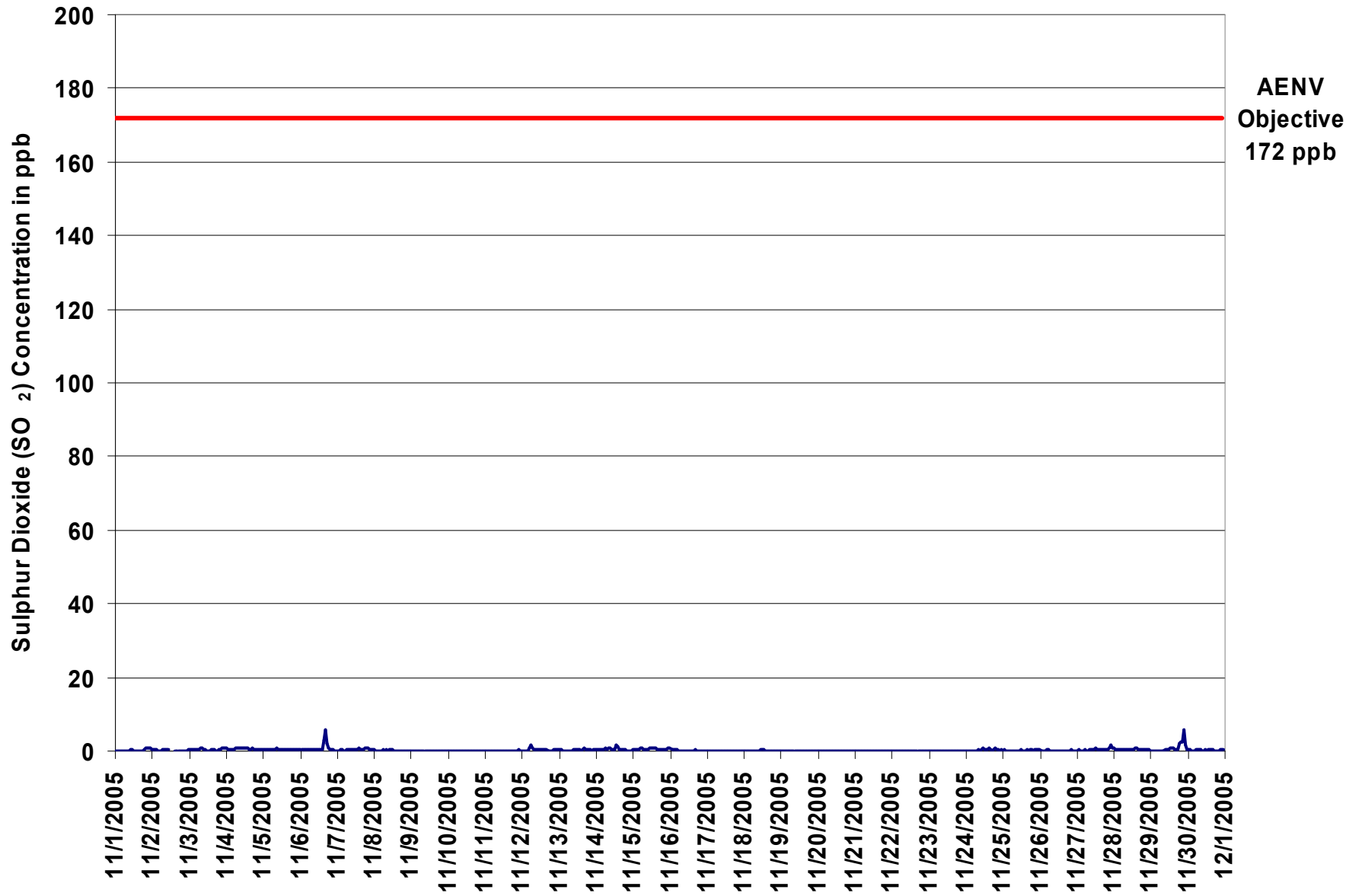


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

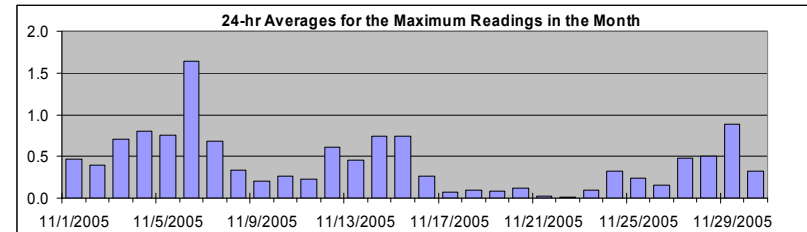
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

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

**Summary**

Maximum 1-hr Value:	13.2	ppb	6-Nov	16:00 17:00
Maximum 24-hr Value:	1.6	ppb	6-Nov	



AIC Time:	0 hrs	Operational Time:	717 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.3	1.0	0.5	0.3	0.1	0.0	0.0	0.4 ppb	0.3 ppb

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	1	1	0.5	1.9
2-Nov-05	1	1	1	0	0	0	0	0	0	1	0	0	C	C	C	0	0	0	0	0	0	0	0	1	0.4	1.0
3-Nov-05	1	0	0	1	1	1	0	2	1	1	0	0	0	1	0	0	0	0	0	1	1	1	1	1	0.7	2.3
4-Nov-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	0.8	1.1
5-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	0	0.8	1.3
6-Nov-05	0	0	0	1	0	0	0	0	0	1	0	0	1	1	0	13	13	2	2	0	0	0	0	0	1.6	13.2
7-Nov-05	0	0	0	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
8-Nov-05	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
9-Nov-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	0.2	0.4
10-Nov-05	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
11-Nov-05	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	0.8
12-Nov-05	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.6	2.3
13-Nov-05	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0.5	1.0
14-Nov-05	1	1	1	1	1	1	1	1	1	1	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0.7	2.0
15-Nov-05	0	0	0	0	0	3	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0.7	2.6
16-Nov-05	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
17-Nov-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	0.1	0.1
18-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
19-Nov-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	0.1	0.1
20-Nov-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	0.1	0.2
21-Nov-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
22-Nov-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
23-Nov-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	0.1	0.2
24-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	0	0	0	0	0.3	0.7
25-Nov-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.2	0.5
26-Nov-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	0.2	0.3
27-Nov-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	1	1	1	0.5	1.5
28-Nov-05	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0.5	0.8
29-Nov-05	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	2	3	3	6	2	1	0.9	5.7	
30-Nov-05	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0.3	0.6
Hourly Avg	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.3	0.4	0.4	0.4	0.5	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.6	0.4	0.4		
Hourly Max	1.0	0.9	1.3	1.1	1.0	2.6	2.3	2.3	1.3	0.9	0.9	1.1	1.3	2.0	1.7	13.1	13.2	2.4	2.0	2.6	2.6	5.7	1.6	1.2		



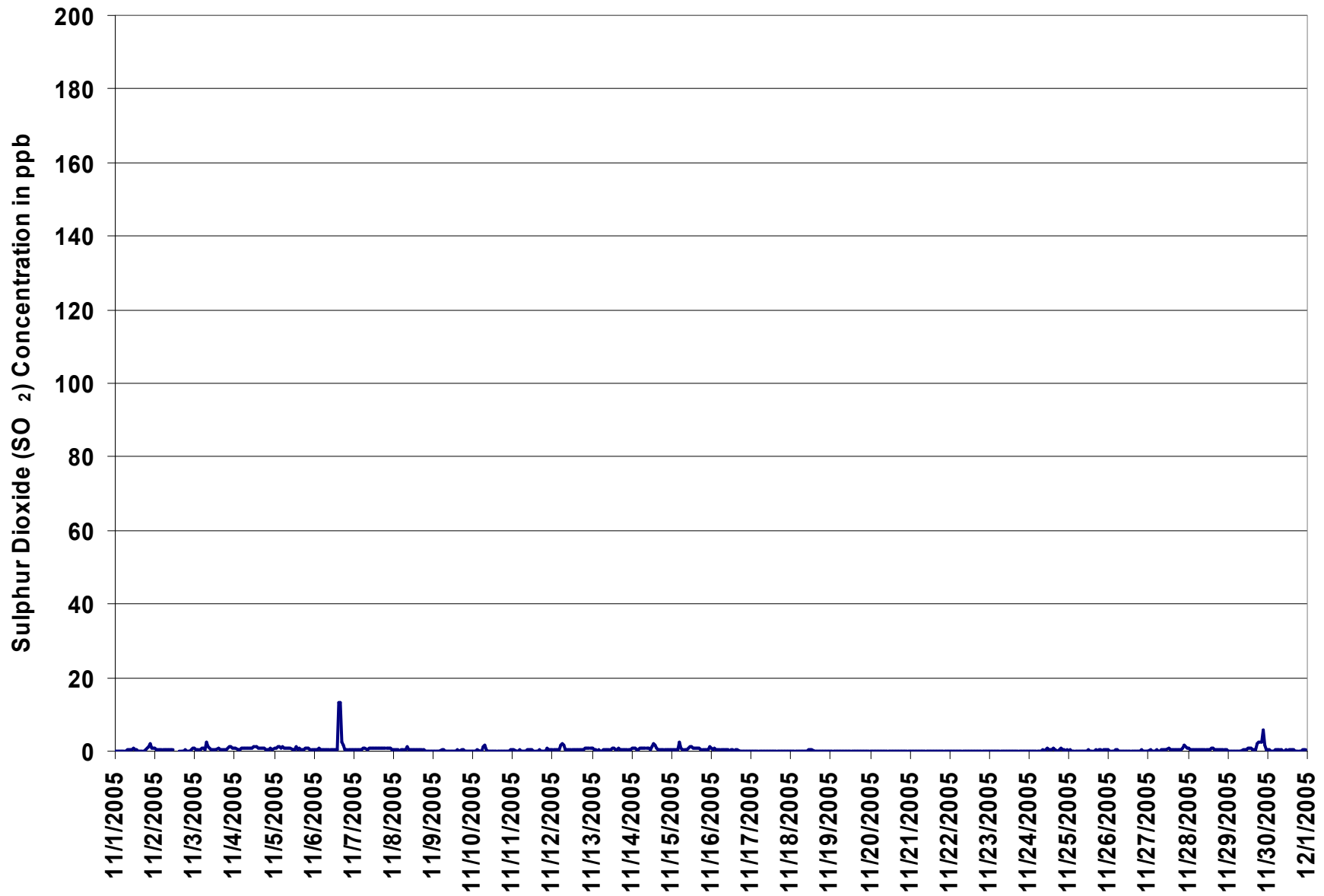
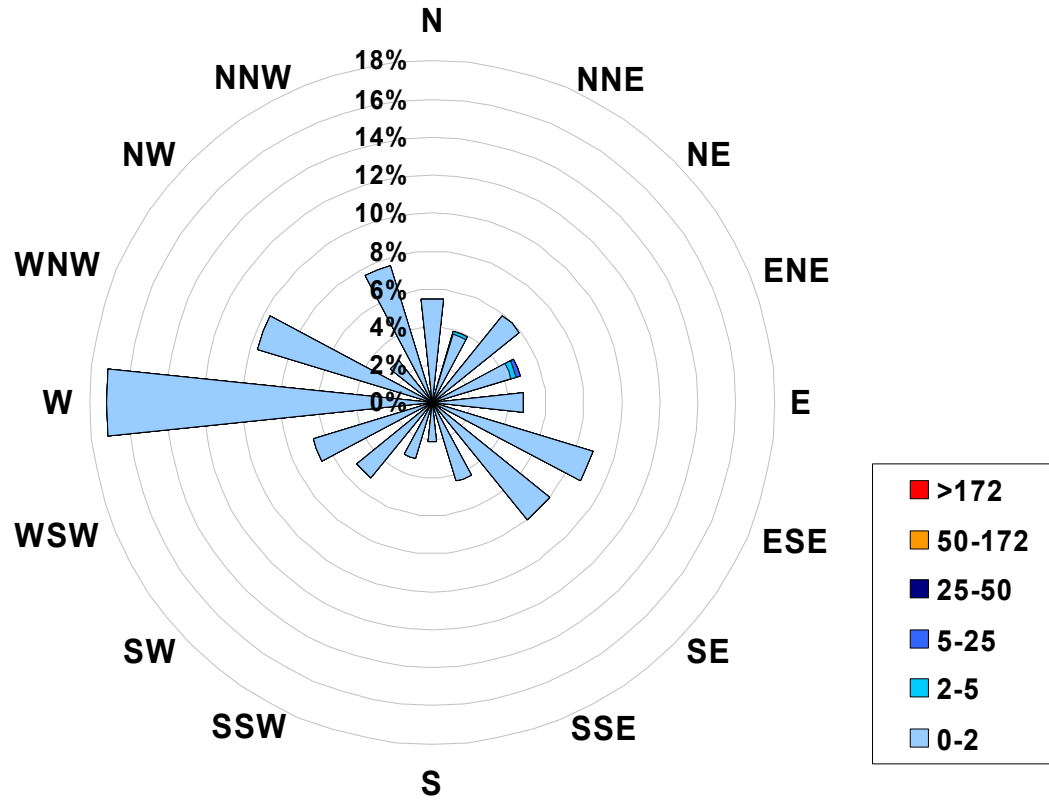


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of SO <sub>2</sub> in ppb			
Range			Frequency (hrs)
0.0	<	2	711
2	to	5	3
5	to	25	2
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			717

### PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

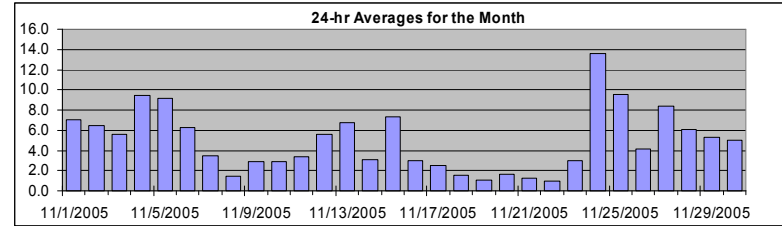
#### HOURLY AVERAGE TABLE

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

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

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

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	24.0 ppb	25-Nov	16:00	17:00
Maximum 24-hr Average:	13.6 ppb	24-Nov		



AIC Time:	0 hrs	Operational Time:	715 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	18.9	13.3	6.9	4.0	1.7	1.0	0.4	4.9 ppb	4.0 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		
1-Nov-05	9	6	4	4	5	6	7	12	9	7	5	C	C	C	C	C	8	1	4	11	10	11	7	8	7.0	11.7
2-Nov-05	16	12	17	11	8	7	7	12	13	9	6	3	1	0	0	0	2	7	9	0	0	6	4	5	6.4	16.7
3-Nov-05	4	6	3	3	4	17	13	11	15	9	4	3	2	1	2	3	4	4	5	4	5	4	4	5	5.6	16.6
4-Nov-05	7	8	6	6	8	9	7	7	8	7	5	5	5	5	6	7	11	15	14	16	17	16	16	14	9.5	17.0
5-Nov-05	15	13	11	9	11	11	10	11	10	7	7	5	5	5	6	6	10	12	13	8	6	6	9	10	9.1	14.7
6-Nov-05	7	6	6	5	6	5	9	9	10	6	4	7	4	4	4	4	5	6	6	7	7	8	7	7	6.3	9.6
7-Nov-05	5	5	5	6	6	7	7	10	10	2	1	1	1	1	1	1	2	2	1	1	2	2	2	3	3.5	10.1
8-Nov-05	3	2	2	2	2	2	2	2	2	2	2	1	1	0	0	1	2	2	1	1	0	1	0	0	1.4	2.9
9-Nov-05	0	0	1	1	3	4	6	5	4	2	2	3	2	1	1	2	2	5	2	5	3	4	6	4	2.9	6.5
10-Nov-05	5	5	4	3	3	3	8	10	5	2	3	2	1	1	1	1	1	1	1	1	1	2	2	2	2.9	10.4
11-Nov-05	1	1	1	1	1	2	2	3	3	6	3	2	1	1	2	3	5	4	11	7	3	4	5	8	3.4	10.9
12-Nov-05	6	5	2	2	2	2	1	5	9	5	5	4	3	4	6	5	5	4	5	6	10	15	11	13	5.6	15.2
13-Nov-05	13	9	9	8	8	8	8	7	10	8	7	6	9	7	7	7	9	5	3	4	3	2	2	2	6.8	13.1
14-Nov-05	2	2	2	2	2	3	4	4	4	4	3	2	3	3	4	3	2	3	3	3	2	3	5	6	3.1	5.8
15-Nov-05	4	8	5	5	4	5	6	6	8	7	6	7	6	4	5	6	9	15	10	9	10	10	12	14	7.4	15.0
16-Nov-05	12	11	2	1	1	1	2	2	2	1	1	1	1	2	2	2	3	3	4	4	3	3	2	3	2.9	12.3
17-Nov-05	2	3	2	2	1	1	3	7	6	8	4	3	4	2	1	2	2	2	1	1	1	1	1	1	2.5	8.0
18-Nov-05	1	1	1	1	1	1	1	1	2	3	2	1	1	1	1	2	3	4	3	2	1	1	1	2	1.6	4.0
19-Nov-05	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0
20-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	4	6	1.6	6.0
21-Nov-05	5	3	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	5.0
22-Nov-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	1.0	1.0
23-Nov-05	1	2	2	1	1	2	3	6	4	5	6	4	2	1	1	3	4	5	4	3	3	2	4	3	3.0	6.0
24-Nov-05	11	5	5	6	11	8	11	8	14	14	12	13	13	10	9	21	22	17	20	22	20	17	18	19	13.6	22.0
25-Nov-05	19	18	15	11	4	3	3	4	13	8	10	11	9	7	6	11	24	8	6	8	12	7	10	3	9.6	24.0
26-Nov-05	4	3	3	4	3	2	4	6	7	8	7	6	3	3	3	3	2	3	4	4	6	4	2	6	4.2	8.0
27-Nov-05	11	5	3	4	6	8	7	8	5	6	5	5	5	11	10	13	17	11	18	14	14	6	5	5	8.4	18.0
28-Nov-05	4	3	4	5	5	5	5	5	7	9	5	4	5	5	4	7	9	8	12	9	8	7	5	5	6.0	12.0
29-Nov-05	7	7	5	3	2	2	7	6	6	5	3	5	4	6	8	13	8	10	7	3	3	4	2	2	5.3	13.0
30-Nov-05	3	3	2	2	2	4	3	5	3	2	3	4	4	4	6	9	11	6	6	5	5	9	12	8	5.0	12.0
Hourly Avg	6.0	5.2	4.2	3.8	3.8	4.3	5.0	5.9	6.4	5.3	4.2	3.9	3.4	3.3	3.4	4.9	6.3	5.6	6.0	5.4	5.4	5.4	5.4	5.6		
Hourly Max	19.0	18.0	16.7	11.4	11.5	16.6	13.3	12.1	14.7	14.0	12.0	13.0	13.0	11.0	10.0	21.0	24.0	17.0	20.0	22.0	20.0	17.0	18.0	19.0		

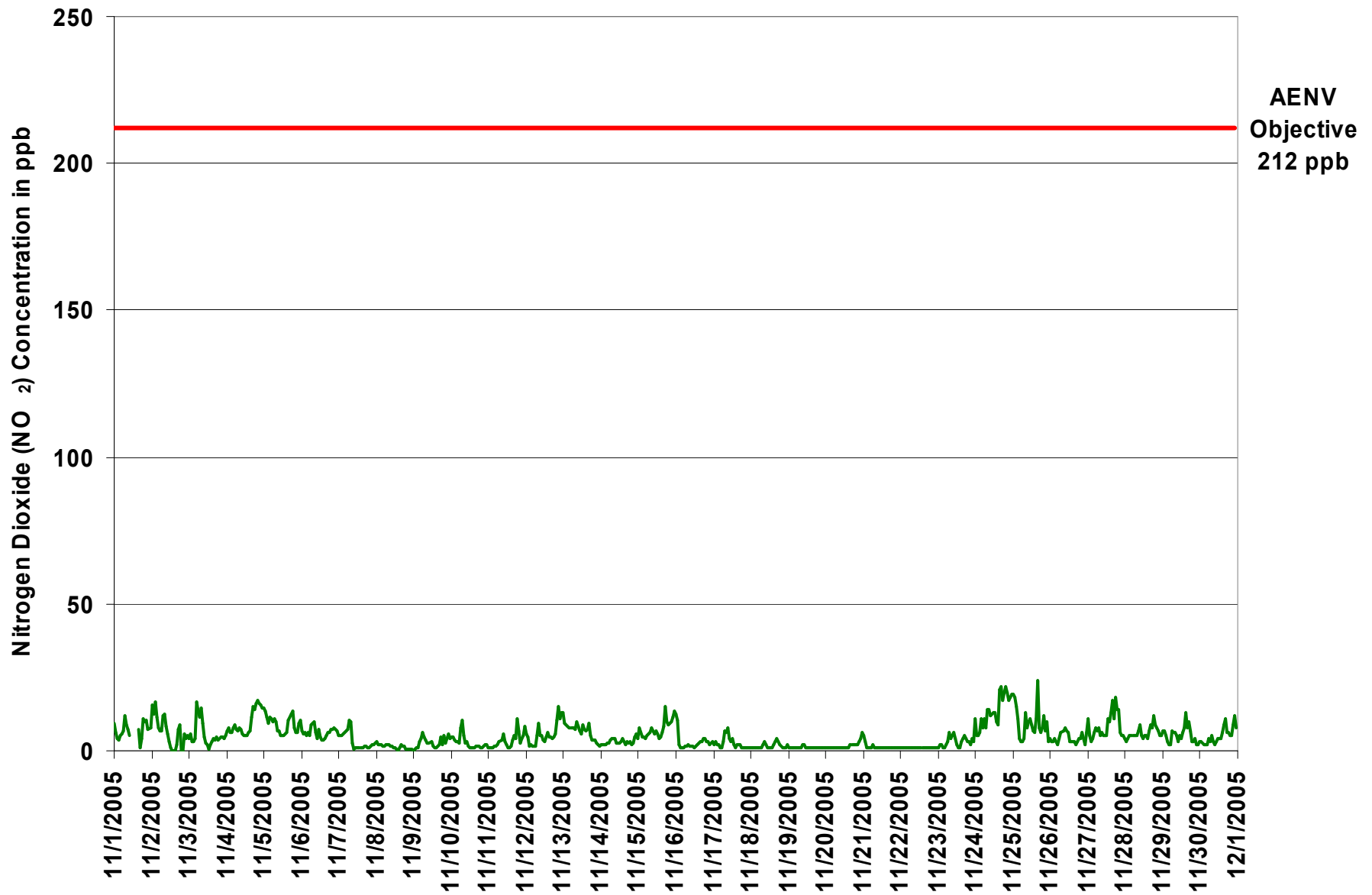


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

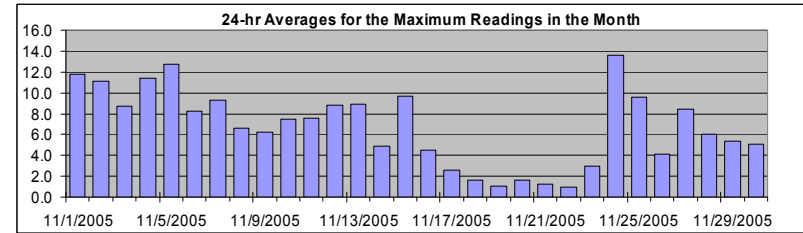
**Nitrogen Dioxide (NO<sub>2</sub>)**

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

**Summary**

Maximum 1-hr Value:	34.2	ppb	10-Nov	7:00 8:00
Maximum 24-hr Value:	13.6	ppb	24-Nov	

AIC Time:	0 hrs	Operational Time:	715 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	23.4	17.9	9.2	5.3	2.9	1.0	1.0	6.7 ppb	5.3 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	9	8	6	5	6	7	8	18	16	9	7	C	C	C	C	C	14	2	17	18	12	29	13	19	11.8	29.2
2-Nov-05	22	19	21	14	15	9	11	17	19	15	9	6	3	0	0	1	8	13	27	4	7	9	7	9	11.1	27.1
3-Nov-05	7	12	4	4	9	21	20	24	22	13	9	4	3	1	4	4	7	7	7	5	6	6	5	6	8.8	24.1
4-Nov-05	10	12	7	10	15	12	7	7	10	10	7	6	5	6	7	8	14	17	16	17	18	17	17	16	11.4	17.9
5-Nov-05	19	16	16	11	14	13	12	14	15	9	8	7	6	12	8	10	17	19	15	14	8	8	18	15	12.8	19.2
6-Nov-05	8	9	10	7	8	6	12	13	13	12	5	9	8	4	5	5	6	7	10	10	10	9	9	9	8.2	13.0
7-Nov-05	6	6	7	21	9	7	14	13	13	10	9	6	5	6	6	7	8	10	9	8	10	13	10	10	9.3	21.1
8-Nov-05	11	10	10	7	6	8	10	11	9	7	8	6	4	3	2	7	9	10	6	5	4	3	3	3	6.6	11.0
9-Nov-05	4	4	5	4	5	6	9	9	7	4	6	7	5	3	3	5	5	11	4	17	6	9	8	5	6.2	16.8
10-Nov-05	7	7	6	11	4	3	32	34	17	5	6	7	3	3	2	4	3	3	4	4	4	3	5	4	7.5	34.2
11-Nov-05	2	2	2	3	4	5	5	5	8	12	12	3	2	3	5	7	12	10	24	16	3	10	10	19	7.5	23.6
12-Nov-05	8	9	3	4	3	2	2	14	17	9	7	6	5	6	10	7	7	6	6	6	21	19	14	24	8.8	24.4
13-Nov-05	19	12	12	10	9	9	10	8	14	12	8	9	13	11	8	9	11	9	4	5	5	5	3	2	8.9	19.0
14-Nov-05	3	3	2	7	4	5	6	7	7	6	4	3	3	4	6	4	4	4	4	4	3	5	9	13	4.9	12.6
15-Nov-05	8	10	6	5	5	9	9	8	9	9	7	8	8	6	7	8	11	18	15	11	12	15	15	17	9.6	18.2
16-Nov-05	14	15	11	4	2	3	3	3	4	4	3	3	3	3	4	5	3	3	4	4	3	3	2	3	4.5	14.6
17-Nov-05	2	3	2	2	1	1	3	7	6	8	4	3	4	2	1	2	2	2	1	1	1	1	1	1	2.5	8.0
18-Nov-05	1	1	1	1	1	1	1	1	1	2	3	2	1	1	1	1	2	3	4	3	2	1	1	2	1.6	4.0
19-Nov-05	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0
20-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3	4	6	1.6	6.0
21-Nov-05	5	3	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	5.0
22-Nov-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	1.0	1.0
23-Nov-05	1	2	2	1	1	2	3	6	4	5	6	4	2	1	1	3	4	5	4	3	3	2	4	3	3.0	6.0
24-Nov-05	11	5	5	6	11	8	11	8	14	14	12	13	13	10	9	21	22	17	20	22	20	17	18	19	13.6	22.0
25-Nov-05	19	18	15	11	4	3	3	4	13	8	10	11	9	7	6	11	24	8	6	8	12	7	10	3	9.6	24.0
26-Nov-05	4	3	3	4	3	2	4	6	7	8	7	6	3	3	3	3	2	3	4	4	6	4	2	6	4.2	8.0
27-Nov-05	11	5	3	4	6	8	7	8	5	6	5	5	5	11	10	13	17	11	18	14	14	6	5	5	8.4	18.0
28-Nov-05	4	3	4	5	5	5	5	5	7	9	5	4	5	5	4	7	9	8	12	9	8	7	5	5	6.0	12.0
29-Nov-05	7	7	5	3	2	2	7	6	6	5	3	5	4	6	8	13	8	10	7	3	3	4	2	2	5.3	13.0
30-Nov-05	3	3	2	2	2	4	3	5	3	2	3	4	4	4	6	9	11	6	6	5	5	9	12	8	5.0	12.0
Hourly Avg	7.6	6.9	5.7	5.6	5.2	5.5	7.4	8.8	9.0	7.2	5.9	5.2	4.4	4.3	4.5	6.1	8.2	7.6	8.5	7.4	7.0	7.6	7.1	7.9		
Hourly Max	22.1	19.0	20.5	21.1	15.0	21.1	31.8	34.2	21.7	14.9	12.0	13.0	13.0	12.5	10.4	21.0	24.0	19.2	27.1	22.0	20.5	29.2	18.1	24.4		

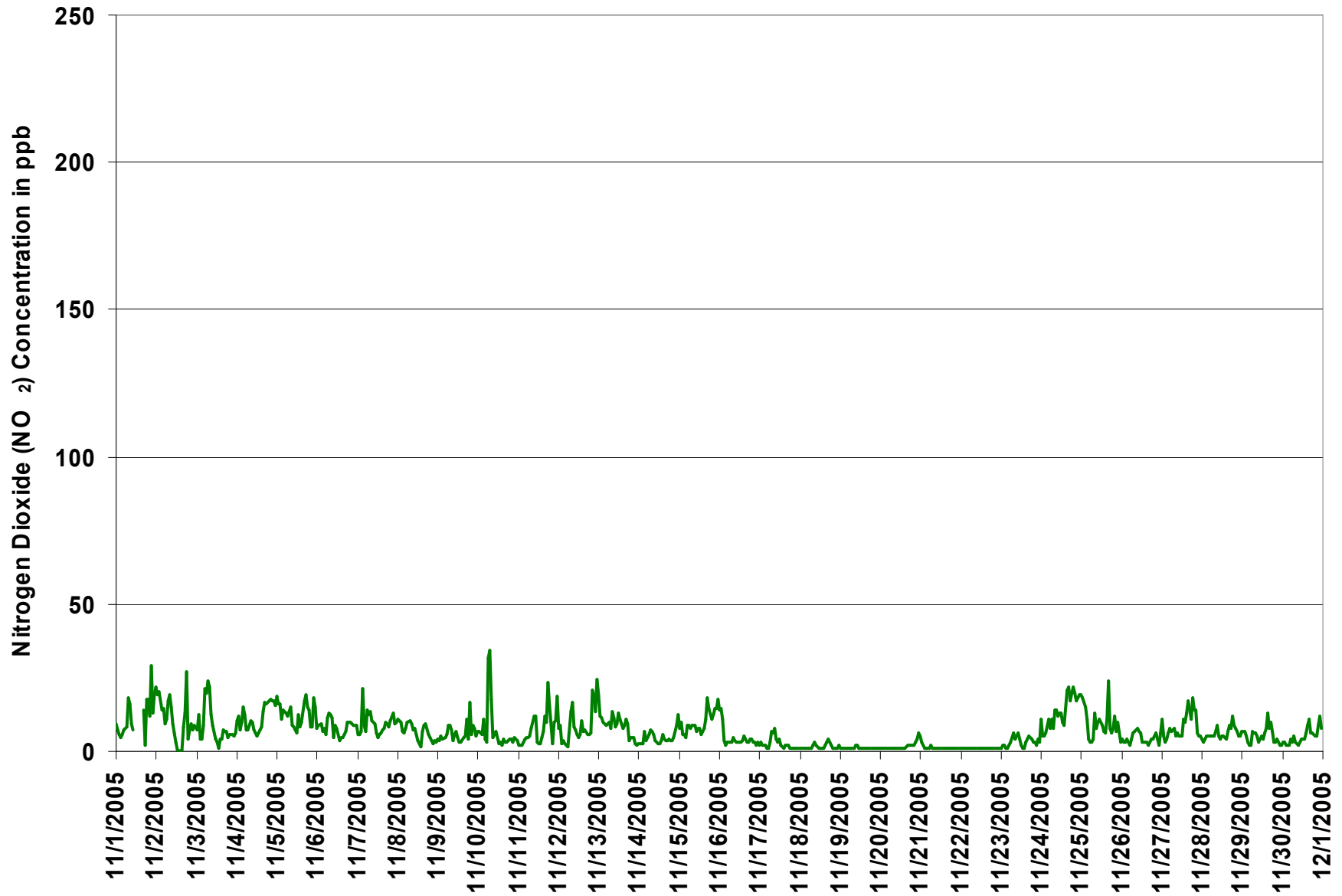
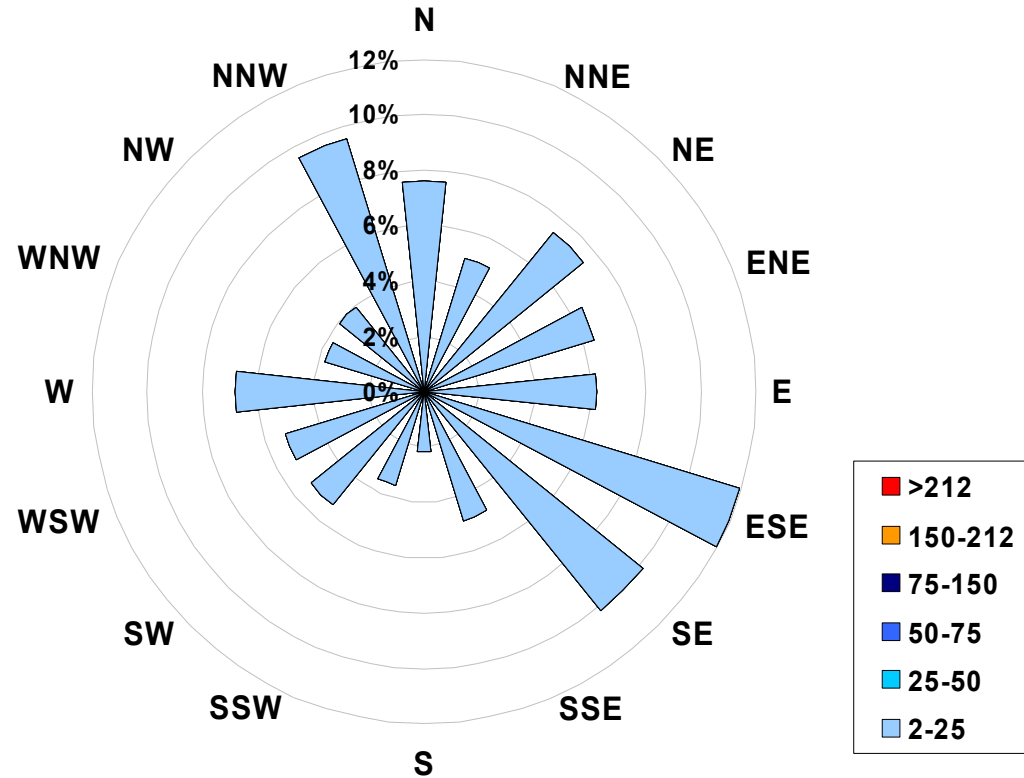


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of NO <sub>2</sub> in ppb			
Range			Frequency (hrs)
2.0	<	25	713
25	to	50	0
50	to	75	0
75	to	150	0
150	to	212	0
	>	212	0
Total Non-Zero Values			713

### PASZA - Beaverlodge Nitric Oxide Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

#### Nitric Oxide (NO)

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

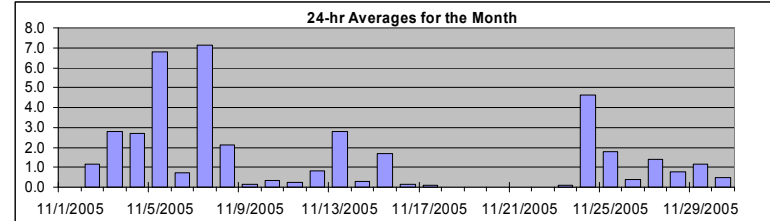
Guideline Limit: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	20.0	ppb	24-Nov	11:00 12:00
Maximum 24-hr Average:	7.1	ppb	7-Nov	

AIC Time:	0 hrs	Operational Time:	713 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	16.0	8.5	1.0	0.0	0.0	0.0	0.0	1.4 ppb	0.0 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	D	0	0	0	0	0	0	0	1	2	3	C	C	C	C	C	D	0	0	0	0	4	0	3	N	4.0	
2-Nov-05	6	2	4	0	1	0	0	1	3	3	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	1.2	6.2
3-Nov-05	0	0	0	0	0	9	1	17	16	10	4	3	2	1	1	1	0	0	0	0	0	0	0	0	0	2.8	16.7
4-Nov-05	0	0	0	0	1	1	0	0	2	3	4	4	7	7	6	3	6	11	2	3	1	1	2	1	2.7	10.8	
5-Nov-05	10	13	16	18	9	12	11	16	14	14	9	6	5	3	2	2	3	1	0	0	0	0	0	0	6.8	17.8	
6-Nov-05	0	0	0	0	0	0	0	2	3	2	1	3	1	1	1	1	0	0	0	0	0	0	0	1	0.7	3.5	
7-Nov-05	0	0	0	0	0	0	2	2	6	8	14	8	9	8	13	8	9	11	16	16	12	12	11	6	7.1	16.5	
8-Nov-05	2	1	0	0	0	1	8	3	11	5	8	7	3	1	0	1	1	0	0	0	0	0	0	0	2.1	10.7	
9-Nov-05	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6	
10-Nov-05	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.5	
11-Nov-05	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0.2	1.2	
12-Nov-05	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	1	0	0	0	0	4	3	1	1	0.8	3.9	
13-Nov-05	3	1	0	0	0	1	1	1	3	7	10	9	17	9	3	2	2	0	0	0	0	0	0	0	2.8	16.6	
14-Nov-05	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	1.2	
15-Nov-05	0	0	0	0	0	0	0	0	0	2	4	6	5	3	4	3	2	2	1	1	1	1	1	5	1.7	5.8	
16-Nov-05	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.2	0.8	
17-Nov-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	0.1	1.0	
18-Nov-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	
19-Nov-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	
20-Nov-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	
21-Nov-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	
22-Nov-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	
23-Nov-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	0.1	1.0	
24-Nov-05	0	0	0	0	0	0	0	0	3	2	8	20	16	7	4	13	6	1	5	15	1	3	1	6	4.6	20.0	
25-Nov-05	1	7	2	1	0	0	0	0	1	1	4	5	5	3	2	2	6	0	0	0	0	0	3	0	1.8	7.0	
26-Nov-05	0	0	0	0	0	0	0	0	0	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0.4	2.0	
27-Nov-05	0	0	0	0	0	0	0	0	0	1	1	2	4	12	5	3	3	0	2	0	0	0	0	0	1.4	12.0	
28-Nov-05	0	0	0	0	0	0	0	0	1	2	2	2	3	3	2	2	1	0	0	0	0	0	0	0	0.8	3.0	
29-Nov-05	0	0	0	0	0	0	1	0	0	1	1	3	3	7	6	5	1	0	0	0	0	0	0	0	1.2	7.0	
30-Nov-05	0	0	0	0	0	0	0	0	0	0	1	2	2	2	3	2	1	0	0	0	0	0	0	0	0.5	2.9	
Hourly Avg	0.8	0.8	0.8	0.6	0.4	0.8	0.8	1.5	2.2	2.3	2.7	3.1	3.1	2.5	2.0	1.8	1.5	0.9	0.9	1.2	0.7	0.8	0.6	0.7			
Hourly Max	10.0	12.8	16.5	17.8	9.5	11.9	10.6	16.7	16.4	14.3	13.8	20.0	16.6	12.0	12.8	13.0	8.8	10.8	16.0	16.5	12.3	12.1	11.2	6.0			



Station: Beaverlodge  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

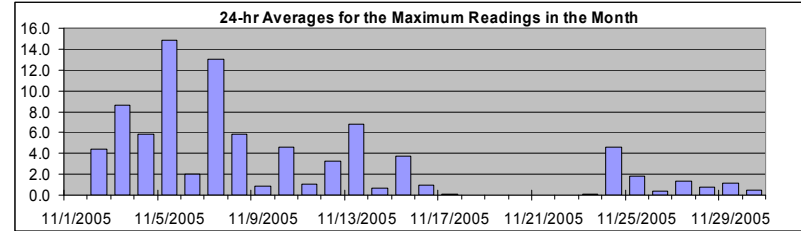
**Nitric Oxide (NO)**

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

**Summary**

Maximum 1-hr Value:	77.8	ppb	3-Nov	7:00 8:00
Maximum 24-hr Value:	14.9	ppb	5-Nov	

AIC Time:	0 hrs	Operational Time:	713 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	35.1	16.9	2.0	0.4	0.0	0.0	0.0	3.1 ppb	0.4 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	D	0	0	0	0	0	0	4	3	3	4	C	C	C	C	C	D	1	4	1	0	49	1	27	N	48.6
2-Nov-05	22	12	11	1	6	1	1	4	5	8	4	3	4	2	13	1	1	1	4	0	0	1	0	1	4.4	21.6
3-Nov-05	1	1	0	0	3	29	5	78	48	18	7	4	3	1	3	2	1	2	1	0	0	1	0	0	8.6	77.8
4-Nov-05	1	2	0	0	13	4	2	1	4	6	5	5	9	8	7	5	11	19	14	6	5	1	5	10	5.9	19.1
5-Nov-05	23	25	41	35	27	33	20	32	24	20	12	7	7	27	2	4	12	5	2	0	0	0	1	0	14.9	40.5
6-Nov-05	0	0	1	0	1	0	2	7	6	7	2	6	4	1	1	1	1	0	2	1	2	1	1	1	2.0	6.9
7-Nov-05	0	1	0	0	2	1	27	22	11	15	19	12	11	11	17	19	15	26	24	23	17	18	15	9	13.1	27.1
8-Nov-05	4	2	1	0	0	7	15	11	39	11	14	11	7	2	1	2	9	1	1	0	1	0	0	0	5.8	39.1
9-Nov-05	0	0	0	5	0	0	0	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0.9	4.8
10-Nov-05	0	0	0	0	0	0	39	53	4	0	1	1	1	1	1	2	1	1	1	1	1	1	1	0	4.6	52.7
11-Nov-05	1	1	0	0	1	0	1	0	1	5	5	1	1	1	2	2	1	0	0	1	0	0	0	2	1.1	4.9
12-Nov-05	0	1	0	4	0	0	1	2	2	2	2	2	2	3	5	1	1	0	0	0	20	13	3	14	3.3	19.9
13-Nov-05	9	5	1	0	0	4	5	5	8	11	13	21	33	32	7	4	3	1	0	0	1	0	0	0	6.8	32.7
14-Nov-05	0	0	0	0	0	0	1	0	1	2	1	1	2	2	2	1	1	0	0	1	0	0	0	0	0.6	2.0
15-Nov-05	0	0	0	4	0	0	1	1	1	3	5	7	8	5	5	5	4	12	3	1	3	4	3	16	3.8	15.9
16-Nov-05	2	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1.0	4.2
17-Nov-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	0.1	1.0
18-Nov-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
19-Nov-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
20-Nov-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
21-Nov-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
22-Nov-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
23-Nov-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	0.1	1.0
24-Nov-05	0	0	0	0	0	0	0	0	3	2	8	20	16	7	4	13	6	1	5	15	1	3	1	6	4.6	20.0
25-Nov-05	1	7	2	1	0	0	0	0	1	1	4	5	5	3	2	2	6	0	0	0	0	0	3	0	1.8	7.0
26-Nov-05	0	0	0	0	0	0	0	0	0	0	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0.4	2.0
27-Nov-05	0	0	0	0	0	0	0	0	0	1	1	2	4	12	5	3	3	0	2	0	0	0	0	0	1.4	12.0
28-Nov-05	0	0	0	0	0	0	0	0	1	2	2	2	3	3	2	2	1	0	0	0	0	0	0	0	0.8	3.0
29-Nov-05	0	0	0	0	0	0	1	0	0	1	1	3	3	7	6	5	1	0	0	0	0	0	0	0	1.2	7.0
30-Nov-05	0	0	0	0	0	0	0	0	0	0	1	2	2	2	3	2	1	0	0	0	0	0	0	0	0.5	2.9
Hourly Avg	2.2	2.0	2.0	1.7	1.8	2.7	4.1	7.4	5.4	4.0	3.9	4.1	4.4	4.6	3.1	2.7	2.7	2.4	2.1	1.7	1.7	3.1	1.1	2.9		
Hourly Max	23.4	24.6	40.5	35.4	26.6	32.5	39.1	77.8	47.5	19.6	18.6	20.7	32.7	31.8	16.9	19.2	14.6	26.4	23.5	22.9	19.9	48.6	14.9	27.2		

### PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

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

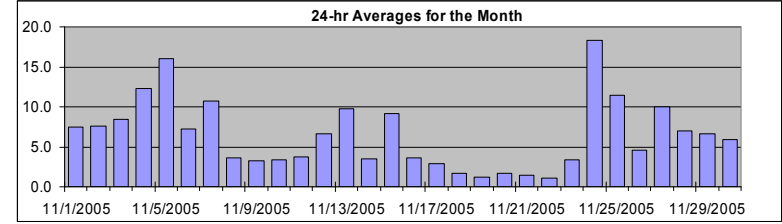
Monitoring Dates: November 1, 2005 to December 1, 2005

Guideline Limit: Alberta Environment: 

1-hr	na	ppb
24-hr	na	ppb

Maximum 1-hr Average:	37.0	ppb	24-Nov	19:00 20:00
Maximum 24-hr Average:	18.3	ppb	24-Nov	

AIC Time:	0 hrs	Operational Time:	715 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	28.0	18.7	8.8	4.7	2.0	1.0	0.5	6.5 ppb	4.7 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	8	6	5	4	6	6	7	12	10	9	8	C	C	C	C	C	0	1	4	11	10	15	8	11	7.5	14.7	
2-Nov-05	22	14	20	12	9	7	7	13	15	12	7	5	3	0	0	0	3	8	9	0	0	6	4	6	7.6	21.8	
3-Nov-05	4	6	3	3	4	26	14	28	31	19	8	5	4	2	3	4	5	4	5	4	5	4	4	5	8.4	31.3	
4-Nov-05	7	8	6	7	9	10	8	7	10	11	9	9	12	12	12	10	17	26	16	19	18	16	18	16	12.2	26.1	
5-Nov-05	25	26	28	27	21	23	21	27	24	21	16	11	11	9	8	8	13	13	14	8	7	7	9	11	16.1	28.1	
6-Nov-05	7	6	6	6	7	5	10	11	13	9	5	11	6	5	5	5	5	6	7	8	8	8	8	7	7.2	12.6	
7-Nov-05	5	5	5	6	7	7	10	13	16	10	14	9	10	9	14	9	11	12	17	18	14	14	13	8	10.7	17.5	
8-Nov-05	5	3	3	3	2	2	10	5	13	6	10	8	4	2	1	2	3	2	2	1	1	1	0	0	3.6	12.8	
9-Nov-05	0	1	1	1	3	4	7	5	4	3	3	4	2	2	2	2	3	5	2	5	3	5	6	5	3.2	6.7	
10-Nov-05	5	5	4	3	3	3	10	14	6	3	4	2	1	1	1	2	2	2	2	1	1	2	3	2	3.4	14.1	
11-Nov-05	1	1	1	1	2	2	2	3	4	7	4	3	2	1	2	4	6	5	11	7	3	4	6	9	3.8	11.1	
12-Nov-05	6	5	2	2	2	2	2	6	10	6	6	5	4	7	8	6	5	4	5	6	14	18	12	14	6.6	18.3	
13-Nov-05	16	10	10	9	8	9	9	8	13	15	16	14	26	17	10	10	11	6	4	4	4	3	2	2	9.7	25.6	
14-Nov-05	3	2	2	2	3	3	4	4	5	5	4	3	4	4	5	4	3	3	3	3	3	3	5	6	3.5	5.9	
15-Nov-05	4	8	5	5	4	5	6	6	8	9	10	13	11	7	9	9	10	18	11	9	11	11	12	19	9.2	18.7	
16-Nov-05	13	11	3	1	1	2	2	2	2	2	2	2	2	2	6	5	5	4	4	4	3	3	3	3	3.6	12.9	
17-Nov-05	2	4	3	2	1	1	3	7	6	9	5	4	4	3	2	2	3	2	2	1	1	1	1	1	2.9	9.0	
18-Nov-05	1	1	1	1	1	1	1	1	2	3	3	2	1	1	1	2	3	4	3	2	1	1	2	2	1.7	4.0	
19-Nov-05	1	1	1	1	1	2	1	1	2	2	3	1	1	1	1	1	1	1	1	2	1	1	1	1	1.3	3.0	
20-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	2	2	3	4	7	1.7	7.0	
21-Nov-05	6	3	1	1	1	1	3	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.5	6.0	
22-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.0	2.0	
23-Nov-05	1	2	2	1	1	2	4	7	4	5	7	6	2	2	2	4	4	5	4	3	4	3	4	3	3.4	7.0	
24-Nov-05	11	6	5	6	11	8	11	8	18	16	20	33	28	18	12	35	28	18	25	37	21	20	20	25	18.3	37.0	
25-Nov-05	20	25	18	12	4	3	3	4	15	9	14	15	13	10	8	13	30	8	6	9	12	7	14	4	11.5	30.0	
26-Nov-05	4	3	3	4	3	2	4	6	8	8	9	8	4	4	3	4	3	4	4	4	6	4	2	6	4.6	9.0	
27-Nov-05	11	6	3	4	6	9	7	8	6	7	6	8	9	23	15	16	20	11	20	15	15	6	5	5	10.0	23.0	
28-Nov-05	4	4	4	5	6	5	5	5	8	11	7	5	8	8	7	10	10	9	12	10	8	7	5	5	7.0	12.0	
29-Nov-05	7	7	5	3	2	2	9	6	6	5	5	8	7	13	15	18	9	10	7	3	3	4	2	2	6.6	18.0	
30-Nov-05	3	3	3	3	2	4	4	5	4	2	3	6	7	6	9	12	12	7	6	5	6	10	12	9	5.9	11.9	
Hourly Avg	6.8	6.2	5.2	4.6	4.4	5.3	6.1	7.5	8.9	7.5	7.1	7.0	6.5	5.9	5.6	6.8	7.6	6.7	7.0	6.8	6.2	6.3	6.2	6.5			
Hourly Max	24.8	26.3	28.1	27.3	21.1	26.0	20.5	28.0	31.3	21.3	20.0	33.0	28.0	23.0	15.0	35.0	30.0	26.1	25.0	37.0	21.0	20.0	20.0	25.0			

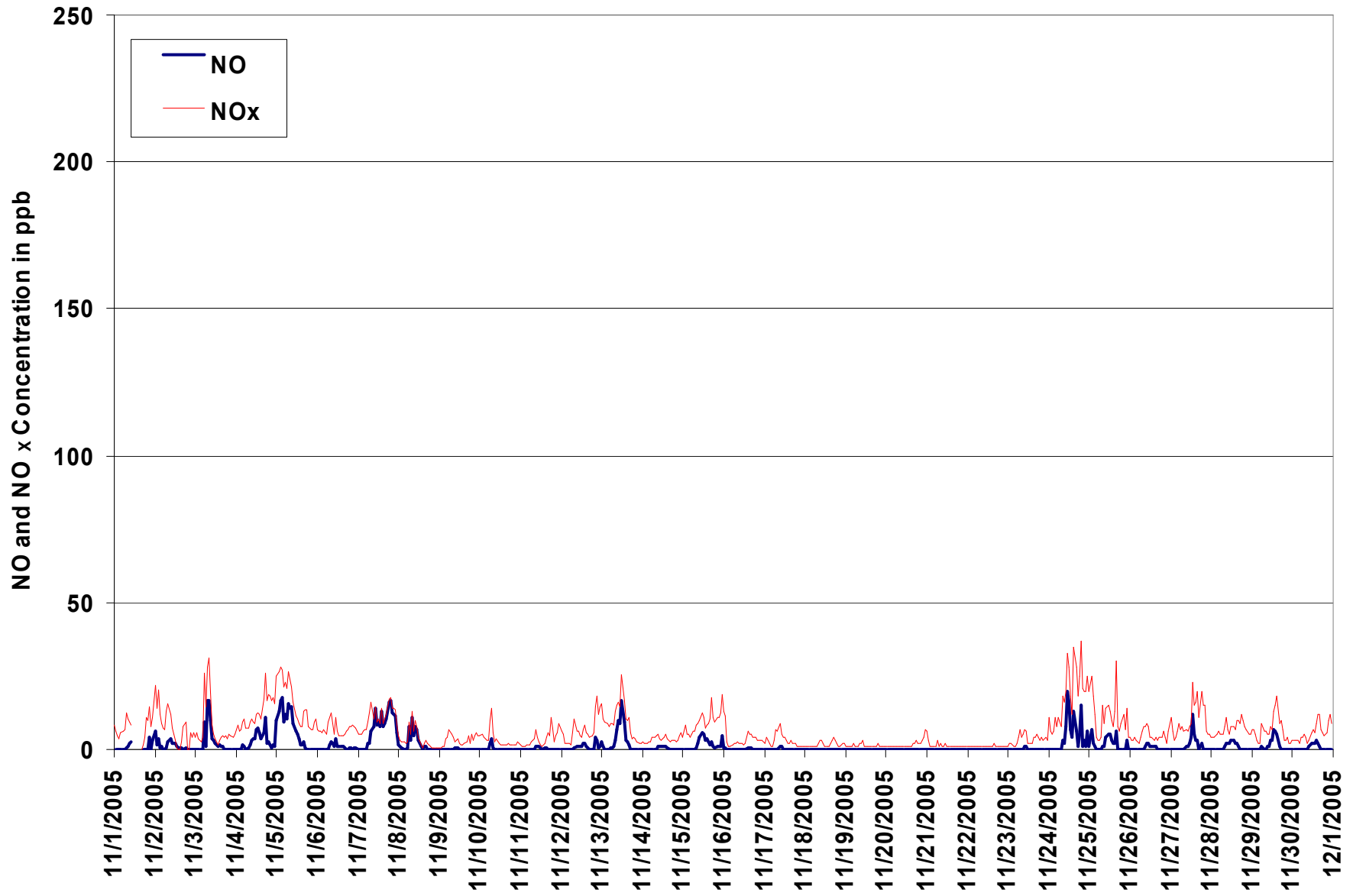


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

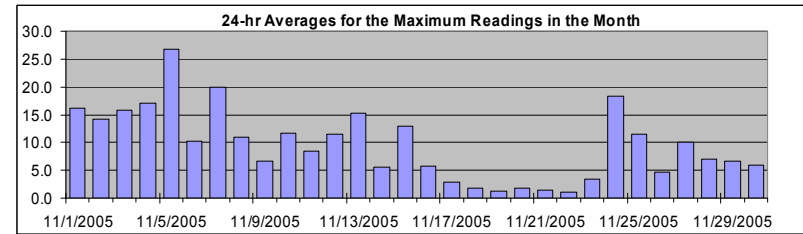
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

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

**Summary**

Maximum 1-hr Value:	93.2	ppb	3-Nov	7:00 8:00
Maximum 24-hr Value:	26.8	ppb	5-Nov	



**Status Flag Characters**

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

AIC Time:	0 hrs	Operational Time:	715 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	45.7	29.5	12.0	6.0	3.0	1.0	1.0	9.5 ppb	6.0 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	8	8	6	5	6	8	9	23	19	13	12	C	C	C	C	C	5	2	21	19	12	73	14	46	16.1	72.9
2-Nov-05	39	27	32	15	16	10	12	21	24	23	12	10	7	2	1	1	9	14	31	4	7	9	7	9	14.3	39.1
3-Nov-05	7	13	5	4	12	45	25	93	55	29	15	8	6	2	7	6	8	8	7	5	6	6	5	6	15.9	93.2
4-Nov-05	11	13	8	11	27	16	9	8	14	15	12	11	14	13	14	13	24	35	30	22	22	18	22	26	17.0	35.0
5-Nov-05	42	38	53	46	41	45	31	43	32	27	20	14	12	38	10	14	29	25	17	14	9	8	18	16	26.8	52.7
6-Nov-05	8	9	10	8	9	7	13	20	19	18	7	15	12	6	5	6	7	7	11	11	11	11	10	10	10.3	20.4
7-Nov-05	7	7	7	21	11	8	39	35	23	20	24	14	15	15	22	21	20	26	29	26	25	26	22	17	20.0	38.9
8-Nov-05	14	12	11	7	6	9	24	16	40	17	20	15	10	4	2	9	14	10	6	5	4	3	3	3	11.0	39.8
9-Nov-05	4	4	5	4	5	6	9	9	8	5	8	7	6	3	4	6	6	12	5	18	7	9	8	6	6.7	17.9
10-Nov-05	7	7	7	11	4	4	71	76	22	5	6	8	4	4	3	6	4	4	4	5	5	4	6	4	11.7	76.4
11-Nov-05	3	3	2	3	4	5	5	5	9	16	17	4	3	4	6	8	13	11	24	16	4	10	10	21	8.5	23.8
12-Nov-05	8	10	3	4	3	3	3	16	19	10	9	8	6	9	15	8	8	6	6	7	38	31	14	34	11.5	38.4
13-Nov-05	27	16	13	10	9	12	14	12	21	22	21	30	45	42	14	12	14	10	5	5	5	5	3	3	15.3	45.1
14-Nov-05	3	3	3	7	4	5	6	8	8	7	5	4	5	6	7	5	4	4	5	5	4	5	10	13	5.5	12.7
15-Nov-05	8	11	7	6	5	9	9	9	10	10	12	15	16	10	11	13	14	28	16	12	15	19	17	31	12.9	30.8
16-Nov-05	16	19	14	5	2	3	4	4	5	5	4	4	4	4	9	9	5	4	4	4	3	3	3	3	5.7	18.7
17-Nov-05	2	4	3	2	1	1	3	7	6	9	5	4	4	3	2	2	3	2	2	1	1	1	1	1	2.9	9.0
18-Nov-05	1	1	1	1	1	1	1	1	2	3	3	2	1	1	1	2	3	4	3	2	1	1	2	2	1.7	4.0
19-Nov-05	1	1	1	1	1	2	1	1	2	2	3	1	1	1	1	1	1	1	1	2	1	1	1	1	1.3	3.0
20-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	2	2	3	4	7	1.7	7.0
21-Nov-05	6	3	1	1	1	1	3	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.5	6.0
22-Nov-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.0	2.0
23-Nov-05	1	2	2	1	1	2	4	7	4	5	7	6	2	2	2	4	4	5	4	3	4	3	4	3	3.4	7.0
24-Nov-05	11	6	5	6	11	8	11	8	18	16	20	33	28	18	12	35	28	18	25	37	21	20	20	25	18.3	37.0
25-Nov-05	20	25	18	12	4	3	3	4	15	9	14	15	13	10	8	13	30	8	6	9	12	7	14	4	11.5	30.0
26-Nov-05	4	3	3	4	3	2	4	6	8	8	9	8	4	4	3	4	3	4	4	4	6	4	2	6	4.6	9.0
27-Nov-05	11	6	3	4	6	9	7	8	6	7	6	8	9	23	15	16	20	11	20	15	15	6	5	5	10.0	23.0
28-Nov-05	4	4	4	5	6	5	5	5	8	11	7	5	8	8	7	10	10	9	12	10	8	7	5	5	7.0	12.0
29-Nov-05	7	7	5	3	2	2	9	6	6	5	5	8	7	13	15	18	9	10	7	3	3	4	2	2	6.6	18.0
30-Nov-05	3	3	3	3	2	4	4	5	4	2	3	6	7	6	9	12	12	7	6	5	6	10	12	9	5.9	11.9
Hourly Avg	9.4	8.8	7.8	7.0	6.8	7.8	11.3	15.3	13.6	10.7	9.5	9.2	8.7	8.7	7.2	8.8	10.3	9.6	10.5	9.0	8.6	10.3	8.2	10.7		
Hourly Max	42.0	38.4	52.7	45.8	40.7	44.9	71.4	93.2	54.5	29.4	23.5	33.0	45.1	41.7	22.4	35.0	30.0	35.0	30.5	37.0	38.4	72.9	22.2	46.2		

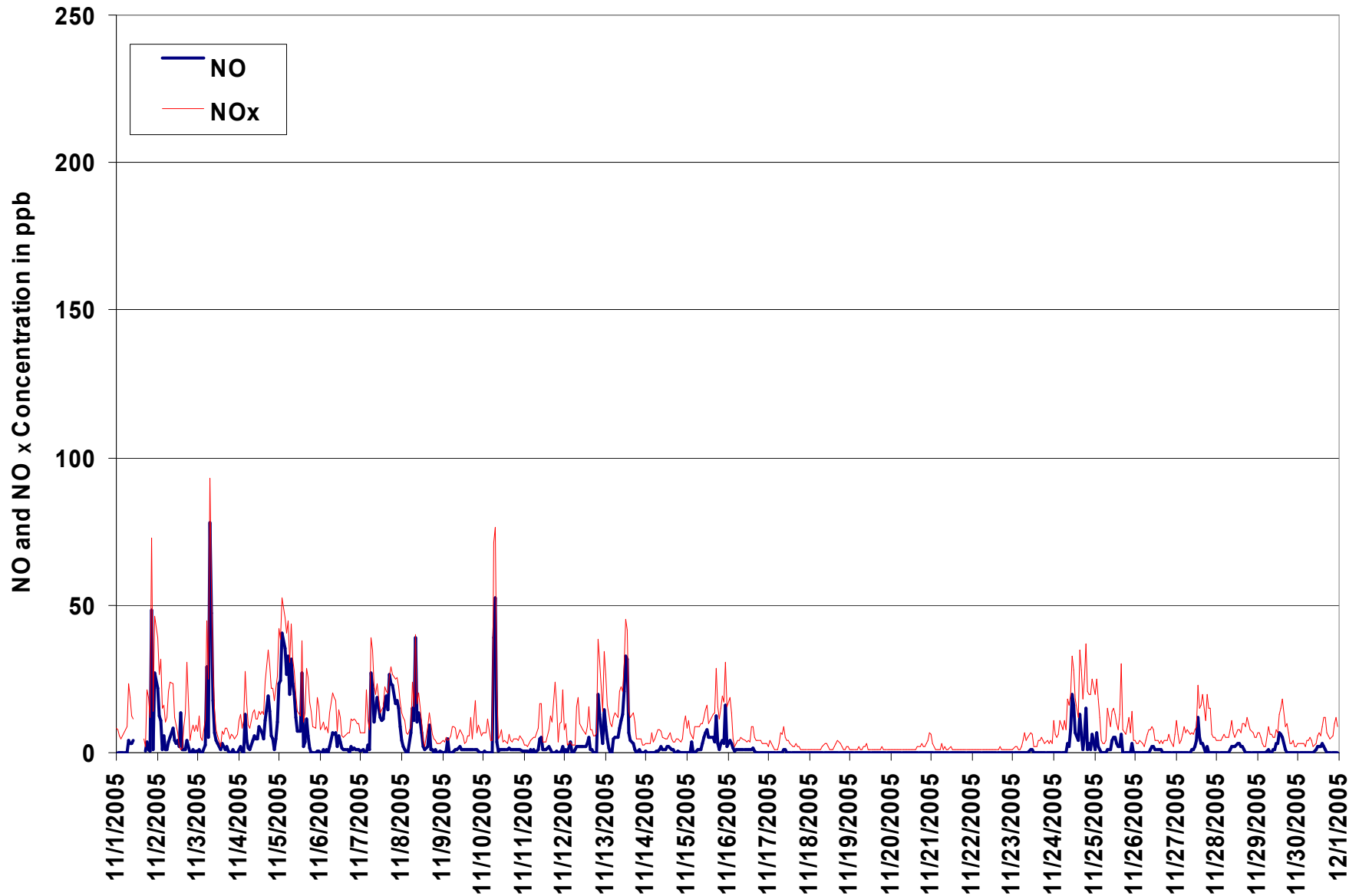


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

### PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

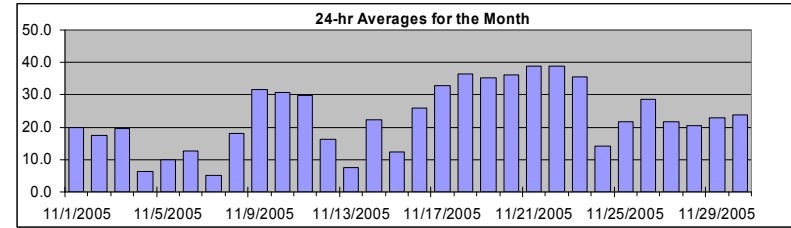
#### HOURLY AVERAGE TABLE

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

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

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

Number of 1-hr Exceedances:		0	
Maximum 1-hr Average:	41.0 ppb	21-Nov	2:00 3:00
Maximum 24-hr Average:	38.8 ppb	21-Nov	



AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	41.0	38.3	33.0	24.0	15.2	2.9	0.2	23.1 ppb	24.0 ppb

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		
1-Nov-05	17	20	22	22	18	17	17	10	14	15	19	16	24	26	25	27	28	32	28	16	14	14	18	17	19.7	31.8
2-Nov-05	3	5	1	4	11	10	13	9	8	12	15	C	C	26	30	32	31	23	23	32	31	20	24	23	17.5	32.4
3-Nov-05	25	24	23	24	23	1	7	5	2	8	19	23	26	31	29	28	26	25	24	22	20	20	21	16	19.6	30.9
4-Nov-05	13	9	9	8	6	5	7	7	5	6	9	10	10	11	11	12	6	1	2	1	1	2	1	2	6.5	12.6
5-Nov-05	0	0	0	0	1	0	0	0	1	3	9	11	15	19	20	22	13	10	12	21	22	23	20	16	10.0	22.9
6-Nov-05	20	20	18	19	13	15	8	5	5	10	15	9	15	18	18	18	16	14	12	8	7	6	6	6	12.6	20.4
7-Nov-05	10	12	12	12	10	8	7	4	1	3	3	5	6	10	7	9	3	1	0	0	0	0	0	2	5.2	12.5
8-Nov-05	2	2	3	9	12	10	1	4	2	9	11	15	22	29	34	29	23	26	31	32	31	33	34	33	18.2	34.1
9-Nov-05	33	33	31	30	31	30	28	30	31	34	33	33	35	37	37	36	34	30	34	28	30	27	25	27	31.6	37.4
10-Nov-05	25	26	26	26	26	26	22	15	24	29	31	36	36	36	36	38	38	36	36	36	34	34	32	32	30.8	38.1
11-Nov-05	34	33	33	32	29	30	27	29	30	27	31	33	34	35	34	33	30	29	25	28	32	28	23	19	29.9	34.7
12-Nov-05	21	19	22	20	20	18	20	15	12	17	18	20	22	21	18	19	17	16	15	14	9	4	3	6	16.2	22.3
13-Nov-05	5	6	5	5	7	6	4	2	2	4	4	5	3	4	6	8	8	11	14	12	12	15	17	18	7.7	18.2
14-Nov-05	19	21	22	21	21	22	21	21	21	20	23	23	23	23	24	25	25	24	24	23	24	25	20	19	22.3	25.5
15-Nov-05	20	15	18	18	18	18	16	15	13	13	14	14	14	15	14	13	10	4	8	8	7	5	4	2	12.3	19.9
16-Nov-05	4	8	26	29	28	27	27	28	29	29	29	29	29	30	30	30	31	28	26	24	25	25	25	24	25.8	30.8
17-Nov-05	25	25	28	30	34	35	32	28	29	27	30	32	32	36	39	38	37	37	37	37	36	36	35	35	32.9	39.0
18-Nov-05	35	36	38	38	38	39	38	37	36	34	34	37	38	39	39	38	35	33	35	36	36	36	34	33	36.3	39.0
19-Nov-05	34	34	34	36	34	33	33	36	33	33	32	36	37	37	36	36	37	36	37	36	36	37	37	37	35.3	37.0
20-Nov-05	38	38	38	38	38	38	38	37	37	36	36	38	38	38	38	37	35	35	35	35	36	33	32	27	36.2	38.0
21-Nov-05	30	35	38	39	38	38	36	38	38	38	39	38	40	41	41	40	40	41	41	41	40	41	41	40	38.8	41.0
22-Nov-05	39	40	41	40	40	40	40	39	40	40	39	39	39	39	39	38	37	38	38	38	38	37	37	37	38.8	41.0
23-Nov-05	35	34	35	35	35	35	32	31	35	34	32	33	39	41	41	37	37	34	35	37	36	37	34	37	35.5	41.0
24-Nov-05	23	29	29	30	17	23	16	22	16	14	10	10	9	16	20	8	8	10	5	4	4	7	4	3	14.0	30.0
25-Nov-05	3	3	11	17	30	33	35	34	18	24	21	19	20	26	26	21	8	27	30	24	17	24	17	31	21.6	35.0
26-Nov-05	27	29	26	24	27	32	29	24	26	25	26	26	31	31	31	30	33	32	30	30	27	30	33	28	28.6	33.0
27-Nov-05	21	26	29	29	25	21	21	19	24	25	27	27	28	14	20	20	15	21	14	13	9	21	25	23	21.5	29.0
28-Nov-05	26	27	26	24	23	23	23	22	20	17	21	22	21	21	21	18	16	16	13	14	17	20	20	22	20.5	27.0
29-Nov-05	20	20	22	25	28	29	23	23	23	23	23	27	24	25	20	16	16	20	16	20	26	27	26	26	23.0	29.0
30-Nov-05	25	24	24	23	22	20	21	20	22	25	25	27	27	29	26	23	20	24	25	26	26	22	20	23	23.7	29.0
Hourly Avg	21.1	21.8	23.0	23.6	23.4	22.7	21.4	20.3	19.9	21.2	22.7	23.8	25.5	26.6	26.9	26.0	23.9	23.7	23.6	23.4	22.8	22.9	22.3	22.1		
Hourly Max	39.0	40.0	41.0	40.0	40.0	40.0	40.0	39.0	40.0	40.0	39.0	39.0	40.0	41.0	41.0	40.0	40.0	41.0	41.0	41.0	40.0	41.0	41.0	40.0		

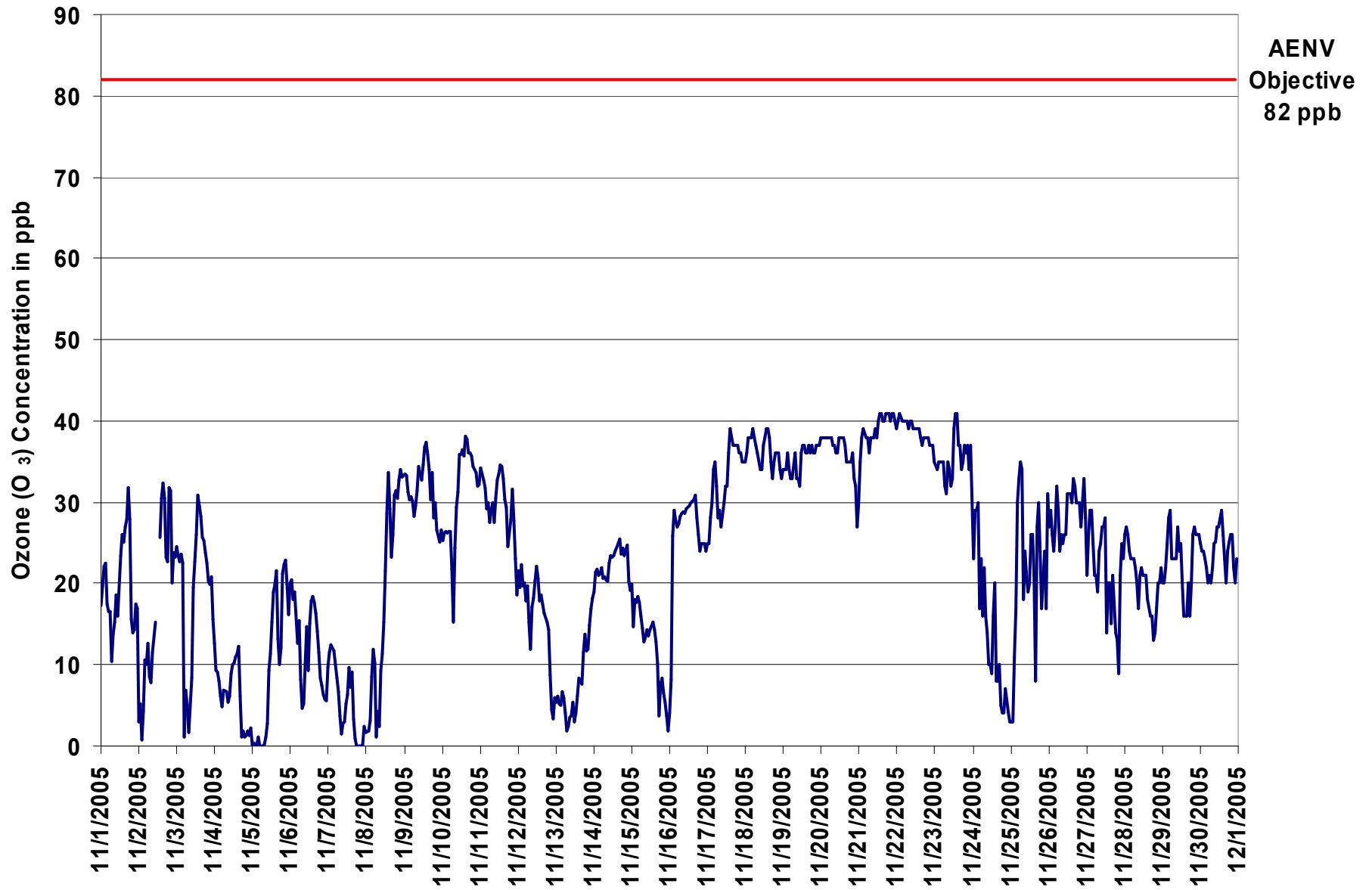


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

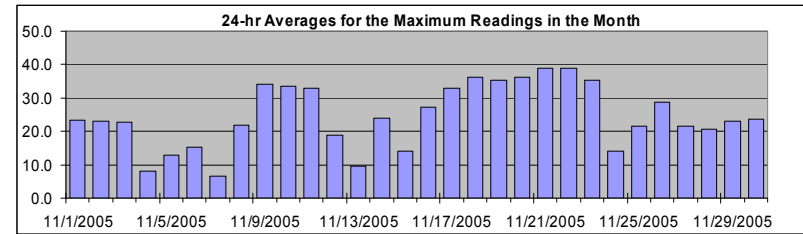
**Ozone (O<sub>3</sub>)**

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

**Summary**

Maximum 1-hr Value:	41.0	ppb	21-Nov	2:00 3:00
Maximum 24-hr Value:	38.8	ppb	21-Nov	

AIC Time:	0 hrs	Operational Time:	718 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	41.0	39.0	34.1	25.6	16.6	4.5	0.5	24.5 ppb	25.6 ppb



**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	17	22	25	24	19	18	18	15	16	17	22	24	26	28	29	35	34	33	32	28	16	19	21	23	23.2	34.6
2-Nov-05	8	10	6	9	20	14	17	15	13	16	21	C	C	29	32	36	36	30	34	36	36	33	27	27	23.0	36.3
3-Nov-05	27	27	26	26	25	9	13	13	5	15	22	25	31	32	33	31	30	27	26	25	21	21	23	18	22.9	32.5
4-Nov-05	14	10	10	10	8	8	8	7	7	7	11	11	11	12	12	13	13	3	3	2	2	3	2	3	8.0	14.3
5-Nov-05	1	1	1	0	3	0	0	0	5	6	12	16	17	21	21	26	18	18	17	25	25	27	28	22	12.9	27.5
6-Nov-05	21	22	21	21	16	17	16	10	11	14	16	16	17	19	20	19	18	16	14	10	9	8	7	8	15.2	22.4
7-Nov-05	11	13	13	14	12	10	11	6	3	4	5	6	7	11	10	11	5	3	0	0	0	0	1	3	6.6	13.5
8-Nov-05	2	4	7	11	13	14	2	11	9	13	16	22	27	34	35	36	30	31	34	36	33	35	37	37	21.9	36.7
9-Nov-05	36	37	33	32	32	34	31	34	37	36	35	35	36	38	38	38	36	34	35	33	33	30	27	28	34.1	38.1
10-Nov-05	27	28	28	29	29	27	27	26	33	31	34	39	38	39	38	40	40	37	38	37	36	35	34	34	33.5	40.4
11-Nov-05	36	35	34	34	32	33	31	32	32	31	34	34	35	36	36	35	34	34	29	33	33	31	28	27	32.9	36.2
12-Nov-05	25	25	24	22	22	19	21	20	17	22	22	22	24	22	20	20	19	18	16	15	15	8	6	8	18.8	25.2
13-Nov-05	8	8	7	6	7	8	6	3	6	5	4	9	4	6	7	11	12	15	15	12	13	16	18	19	9.5	18.8
14-Nov-05	20	22	23	22	23	24	23	22	21	22	24	24	24	25	25	27	27	25	25	25	25	26	27	24	23.9	26.7
15-Nov-05	23	17	19	18	20	20	18	16	14	14	15	15	15	16	15	14	13	8	10	10	9	7	6	4	14.1	23.2
16-Nov-05	5	17	30	30	29	28	29	31	31	30	30	31	31	32	32	32	31	28	26	24	25	25	25	24	27.2	32.1
17-Nov-05	25	25	28	30	34	35	32	28	29	27	30	32	32	36	39	38	37	37	37	37	36	36	35	35	32.9	39.0
18-Nov-05	35	36	38	38	38	39	38	37	36	34	34	37	38	39	39	38	35	33	35	36	36	36	34	33	36.3	39.0
19-Nov-05	34	34	34	36	34	33	33	36	33	33	32	36	37	37	36	36	37	36	37	36	36	37	37	37	35.3	37.0
20-Nov-05	38	38	38	38	38	38	38	37	37	36	36	38	38	38	38	37	35	35	35	35	36	33	32	27	36.2	38.0
21-Nov-05	30	35	38	39	38	38	36	38	38	38	39	38	40	41	41	40	40	41	41	41	40	41	41	40	38.8	41.0
22-Nov-05	39	40	41	40	40	40	40	39	40	40	39	39	39	39	39	38	37	38	38	38	38	37	37	37	38.8	41.0
23-Nov-05	35	34	35	35	35	35	32	31	35	34	32	33	39	41	41	37	37	34	35	37	36	37	34	37	35.5	41.0
24-Nov-05	23	29	29	30	17	23	16	22	16	14	10	10	9	16	20	8	8	10	5	4	4	7	4	3	14.0	30.0
25-Nov-05	3	3	11	17	30	33	35	34	18	24	21	19	20	26	26	21	8	27	30	24	17	24	17	31	21.6	35.0
26-Nov-05	27	29	26	24	27	32	29	24	26	25	26	26	31	31	31	30	33	32	30	30	27	30	33	28	28.6	33.0
27-Nov-05	21	26	29	29	25	21	21	19	24	25	27	27	28	14	20	20	15	21	14	13	9	21	25	23	21.5	29.0
28-Nov-05	26	27	26	24	23	23	23	22	20	17	21	22	21	21	21	18	16	16	13	14	17	20	20	22	20.5	27.0
29-Nov-05	20	20	22	25	28	29	23	23	23	23	27	24	25	20	16	16	20	16	20	26	27	26	26	26	23.0	29.0
30-Nov-05	25	24	24	23	22	20	21	20	22	25	25	27	27	29	26	23	20	24	25	26	26	22	20	23	23.7	29.0
Hourly Avg	22.1	23.3	24.2	24.6	24.7	24.0	22.9	22.3	21.8	22.6	24.1	25.4	26.5	27.6	27.8	27.4	25.8	25.3	25.0	24.9	23.9	24.4	23.7	23.7		
Hourly Max	39.0	40.0	41.0	40.0	40.0	40.0	40.0	39.0	40.0	40.0	39.0	39.0	40.0	41.0	41.0	40.4	40.0	41.0	41.0	41.0	40.0	41.0	41.0	40.0		



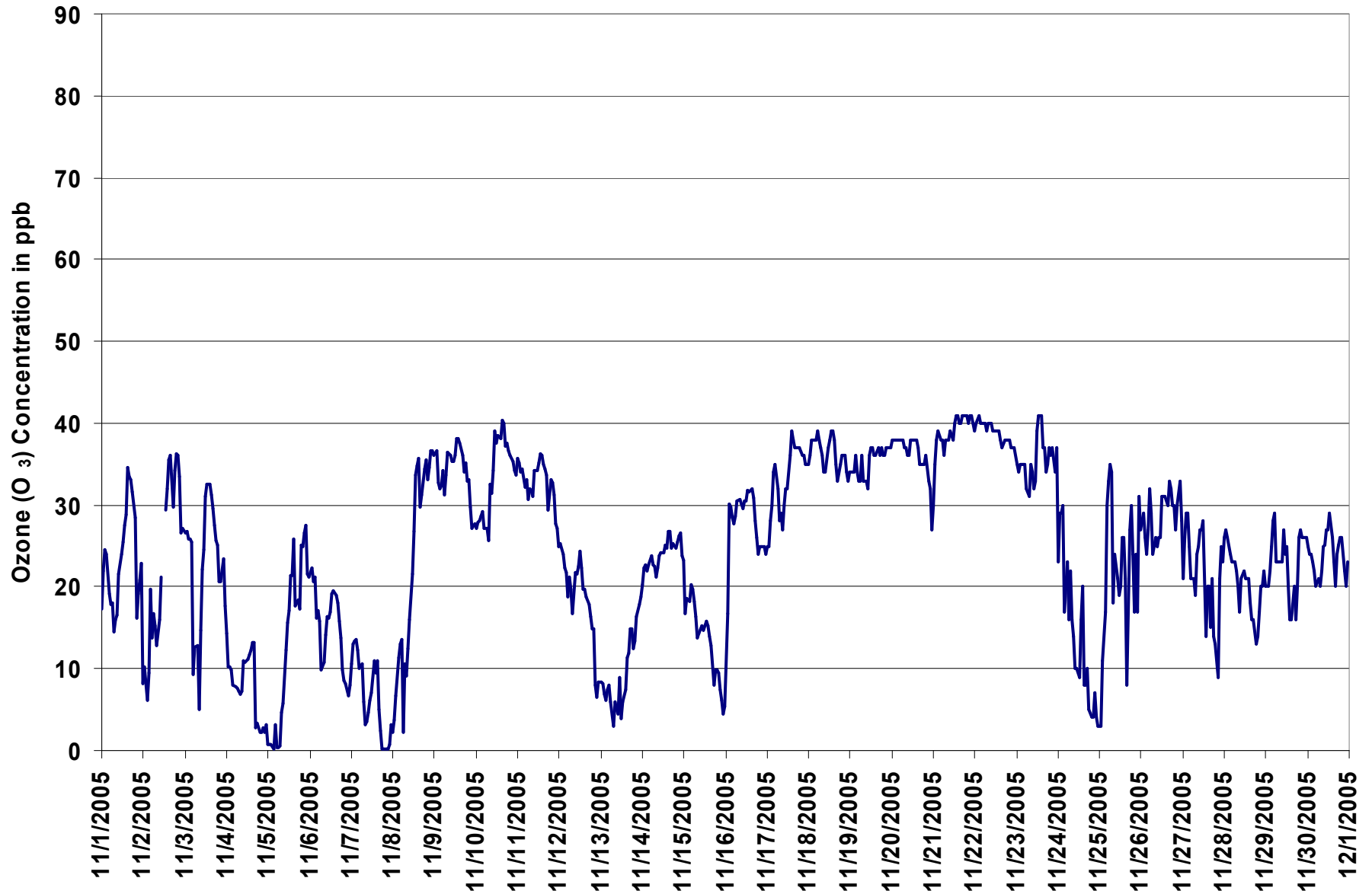
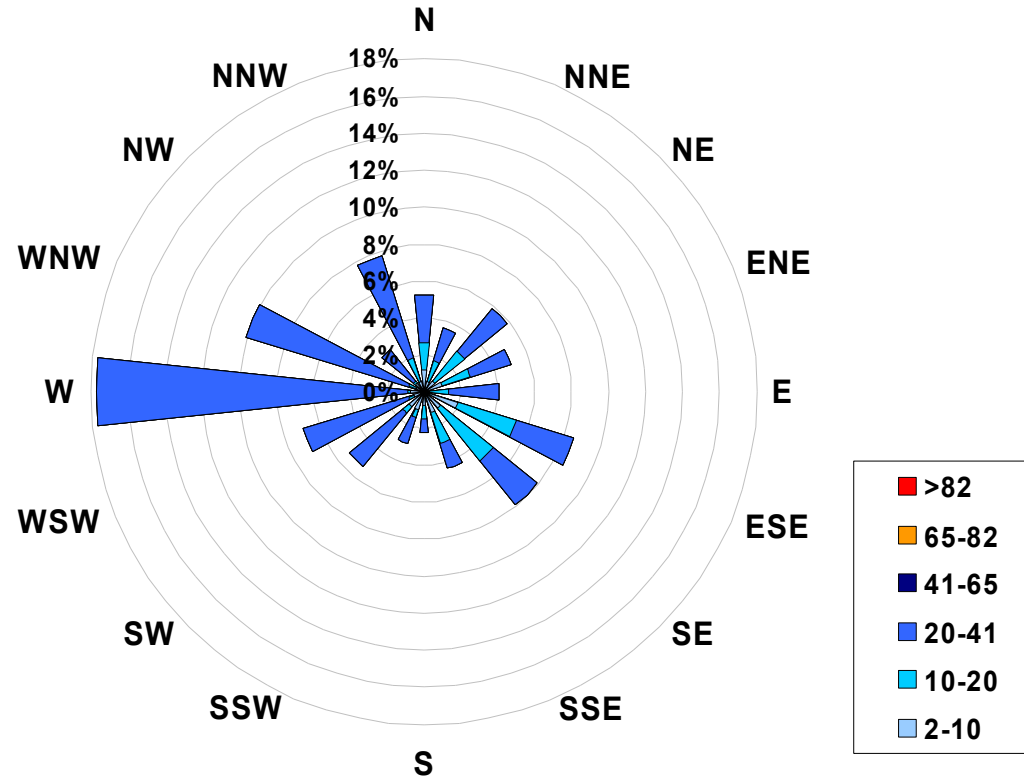


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			
Range			Frequency (hrs)
2.0	<	10	122
10	to	20	137
20	to	41	456
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			718

### PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

#### EIGHT HOUR RUNNING AVERAGE TABLE

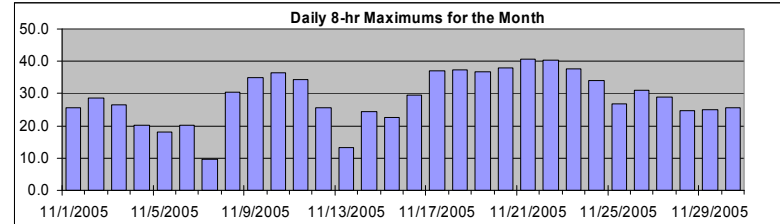
Ozone (O<sub>3</sub>)

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

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

**Summary**

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	40.6	ppb	21-Nov	19:00	20:00		



Percentile	99	95	75	50	25	5	1
	40.4	37.9	32.4	23.9	15.1	4.9	0.9

**Status Flag Characters**

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

Day	Mountain Standard Time																							Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00		22:00 23:00
1-Nov-05	11	12	13	14	15	16	18	18	17	17	16	16	16	18	19	21	22	25	26	26	24	23	22	21	25.7
2-Nov-05	18	14	11	9	9	9	8	7	7	8	10	11	N	N	N	N	N	N	N	28	29	28	27	26	28.5
3-Nov-05	25	25	25	24	23	21	19	16	13	12	11	11	11	15	18	21	24	26	27	26	26	24	23	22	26.5
4-Nov-05	20	18	16	14	13	11	9	8	7	7	7	7	7	8	9	9	9	8	8	7	6	5	3	2	20.1
5-Nov-05	1	1	1	1	1	1	1	0	0	1	2	3	5	7	10	13	14	15	15	17	17	18	18	17	17.9
6-Nov-05	18	19	20	20	19	18	16	15	13	12	11	10	10	11	12	14	15	15	15	15	14	13	11	9	20.1
7-Nov-05	9	8	8	9	9	9	10	9	8	7	6	5	5	5	5	6	6	6	5	5	4	3	2	1	9.5
8-Nov-05	1	1	1	2	4	5	5	5	5	6	7	8	9	12	16	19	22	24	26	28	29	30	30	30	30.3
9-Nov-05	32	32	32	32	32	32	31	31	31	31	31	31	32	33	34	35	35	34	34	34	33	32	30	29	34.9
10-Nov-05	28	28	27	27	26	26	26	24	24	25	25	26	28	29	31	33	35	36	36	36	36	36	35	35	36.5
11-Nov-05	34	34	34	33	32	32	31	31	30	30	29	30	30	31	32	32	32	32	32	31	31	30	28	27	34.3
12-Nov-05	26	24	24	23	22	20	20	19	18	18	17	18	18	18	18	18	19	19	19	18	16	14	12	11	25.5
13-Nov-05	9	8	7	6	5	5	6	5	5	4	4	4	4	4	4	5	5	6	7	8	9	11	12	13	13.3
14-Nov-05	15	16	17	18	19	20	21	21	21	21	21	21	22	22	22	23	23	24	24	24	24	24	24	23	24.3
15-Nov-05	22	21	21	20	19	18	18	17	16	16	16	15	15	14	14	14	14	12	11	11	10	9	7	6	22.5
16-Nov-05	5	6	8	11	13	16	19	22	25	28	28	28	28	29	29	29	30	30	29	29	28	27	27	26	29.7
17-Nov-05	25	25	25	26	27	28	29	30	30	30	31	31	31	31	32	33	34	35	36	37	37	37	37	36	37.1
18-Nov-05	36	36	36	36	36	37	37	37	38	37	37	37	37	37	37	37	37	37	37	37	36	36	35	35	37.5
19-Nov-05	35	35	35	35	34	34	34	34	34	34	34	34	34	35	35	35	36	36	37	37	36	36	37	37	36.6
20-Nov-05	37	37	37	37	38	38	38	38	38	38	37	37	37	37	37	37	37	37	37	36	36	36	35	34	37.9
21-Nov-05	33	33	33	34	34	35	35	37	38	38	38	38	38	39	39	39	40	40	40	41	41	41	41	41	40.6
22-Nov-05	41	40	40	40	40	40	40	40	40	40	40	40	40	39	39	39	39	39	38	38	38	38	38	38	40.5
23-Nov-05	37	37	36	36	36	35	35	34	34	34	34	33	34	35	36	37	37	37	37	38	37	37	36	36	37.6
24-Nov-05	34	34	33	32	30	28	26	24	23	21	19	16	15	14	15	13	12	11	11	10	9	8	6	6	34.1
25-Nov-05	5	4	5	7	10	13	17	21	23	25	27	27	26	25	24	22	21	21	22	23	22	22	21	22	26.8
26-Nov-05	25	25	24	24	26	27	28	27	27	27	27	27	27	27	27	28	28	29	30	31	31	30	31	30	31.0
27-Nov-05	29	28	28	28	28	27	25	24	24	24	24	24	24	24	23	23	22	22	20	18	16	17	17	18	28.9
28-Nov-05	19	20	21	23	24	25	24	24	24	22	22	21	21	21	21	20	20	20	19	18	17	17	17	17	24.6
29-Nov-05	18	18	19	21	22	23	24	24	24	25	25	25	25	24	23	22	21	21	20	20	20	21	22	23	25.1
30-Nov-05	24	25	26	25	25	24	23	22	22	22	22	23	23	25	25	26	25	25	25	25	25	24	23	23	25.5

Hourly Max	40.5	40.4	40.4	40.3	40.3	40.1	40.0	39.9	40.0	40.0	39.8	39.6	39.5	39.4	39.3	39.4	39.6	40.0	40.3	40.6	40.6	40.6	40.6	40.6
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## PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

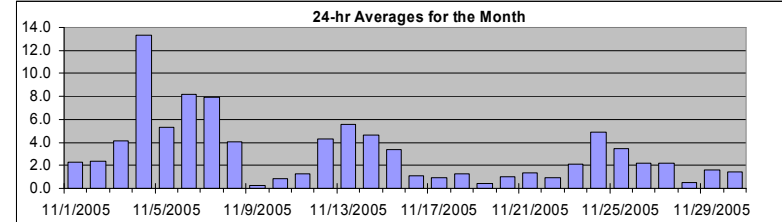
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: November 1, 2005 to December 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:	25.6 $\mu\text{g}/\text{m}^3$ 21-Nov 14:00 15:00
Maximum 24-hr Value:	13.3 $\mu\text{g}/\text{m}^3$ 4-Nov

AIC Time:	0 hrs	Operational Time:	714 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	15.4	10.6	4.4	1.8	0.5	0.0	0.0	3.1 3 $\mu\text{g}/\text{m}$	2.1 $\mu\text{g}/\text{m}$



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	2	2	1	1	1	1	1	1	1	1	1	0	0	C	C	C	C	C	0	5	8	7	6	5	2.2	8.5
2-Nov-05	11	6	8	5	2	2	1	1	2	3	2	2	1	0	0	0	0	2	3	0	1	2	1	1	2.4	10.6
3-Nov-05	0	1	1	1	1	3	3	5	6	4	1	1	0	1	0	1	6	3	7	10	11	11	10	12	4.1	11.9
4-Nov-05	13	12	15	16	15	16	15	15	15	13	13	14	14	14	13	10	12	12	10	12	13	14	14	9	13.3	15.8
5-Nov-05	4	1	1	2	19	12	6	9	8	13	7	2	2	1	1	2	4	6	4	4	3	6	7	7	5.3	18.8
6-Nov-05	8	7	7	6	7	6	7	7	8	7	8	7	7	7	8	9	8	9	10	11	11	11	11	9	8.2	11.1
7-Nov-05	5	3	4	5	5	5	6	7	10	8	9	8	9	8	7	7	8	9	9	9	10	9	19	7.9	18.8	
8-Nov-05	16	18	10	3	1	1	7	6	8	7	7	8	3	0	0	0	1	1	0	0	0	0	0	4.1	17.9	
9-Nov-05	0	0	0	0	0	0	0	1	1	0	0	0	1	0	1	1	0	1	0	0	0	D	0	0	0.2	1.3
10-Nov-05	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	1	1	0	0	2	2	4	4	0.9	4.3
11-Nov-05	3	3	3	2	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2	2	1	2	4	5	1.2	4.8
12-Nov-05	5	5	3	4	3	4	3	3	3	3	3	2	2	3	3	3	3	2	6	9	8	9	6	8	4.3	9.0
13-Nov-05	10	8	6	6	5	3	4	7	4	4	6	5	7	6	3	3	5	6	6	7	7	5	5	5	5.6	10.4
14-Nov-05	7	8	10	10	6	4	3	5	3	3	3	3	3	3	4	3	2	3	2	5	6	3	7	7	4.7	10.0
15-Nov-05	5	3	3	4	4	3	3	3	3	2	1	1	2	2	2	3	3	7	4	4	5	5	5	6	3.4	6.6
16-Nov-05	6	5	4	0	0	1	0	0	0	1	1	1	1	1	1	1	2	1	1	1	0	0	0	0	1.1	5.8
17-Nov-05	0	1	1	0	2	2	1	1	0	0	1	0	0	0	3	1	2	4	3	0	1	0	0	0	0.9	4.0
18-Nov-05	0	0	1	2	1	4	3	2	3	2	2	1	0	0	0	0	1	1	2	1	1	1	2	1	1.2	3.6
19-Nov-05	1	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	1	0	2	0	0.4	1.8
20-Nov-05	0	2	1	4	2	1	1	1	1	2	1	1	0	0	1	2	1	1	0	0	0	2	0	0	1.0	4.1
21-Nov-05	0	1	3	1	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	1	0	0	0	0	1.3	25.6
22-Nov-05	1	1	0	0	1	2	0	0	1	2	2	0	0	0	1	1	2	1	1	1	2	1	1	1	1.0	2.3
23-Nov-05	2	1	1	1	1	1	2	2	3	4	4	2	1	0	1	2	3	2	4	3	4	2	2	1	2.1	4.3
24-Nov-05	5	2	2	1	3	1	4	2	4	4	5	6	8	3	2	8	10	4	8	12	7	5	6	5	4.9	12.4
25-Nov-05	5	5	4	4	2	1	0	1	2	3	3	3	4	3	4	3	9	5	2	3	4	4	9	5	3.5	9.1
26-Nov-05	5	2	2	2	2	2	2	1	2	2	2	3	2	2	2	2	4	5	2	2	3	2	1	1	2.2	5.4
27-Nov-05	4	2	0	0	0	2	2	0	0	1	4	4	2	4	3	5	3	2	4	4	3	0	1	3	2.2	4.5
28-Nov-05	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	0	0	1	0	0.5	1.6
29-Nov-05	1	0	0	0	0	0	0	1	2	2	1	1	2	4	4	2	3	3	3	2	2	3	2	2	1.6	3.9
30-Nov-05	2	2	2	2	2	2	2	2	2	2	2	0	0	1	2	2	1	1	1	0	1	1	2	2	1.5	2.3
Hourly Avg	4.0	3.3	3.1	2.7	2.8	2.7	2.6	2.8	3.1	3.2	3.0	2.5	2.4	2.2	3.2	2.4	3.3	3.2	3.2	3.7	3.8	3.6	3.9	3.9		
Hourly Max	16.1	17.9	15.3	15.6	18.8	15.8	15.5	15.1	14.9	13.4	13.3	13.9	14.2	13.6	25.6	10.2	11.6	11.8	9.9	12.4	13.3	14.2	13.5	18.8		

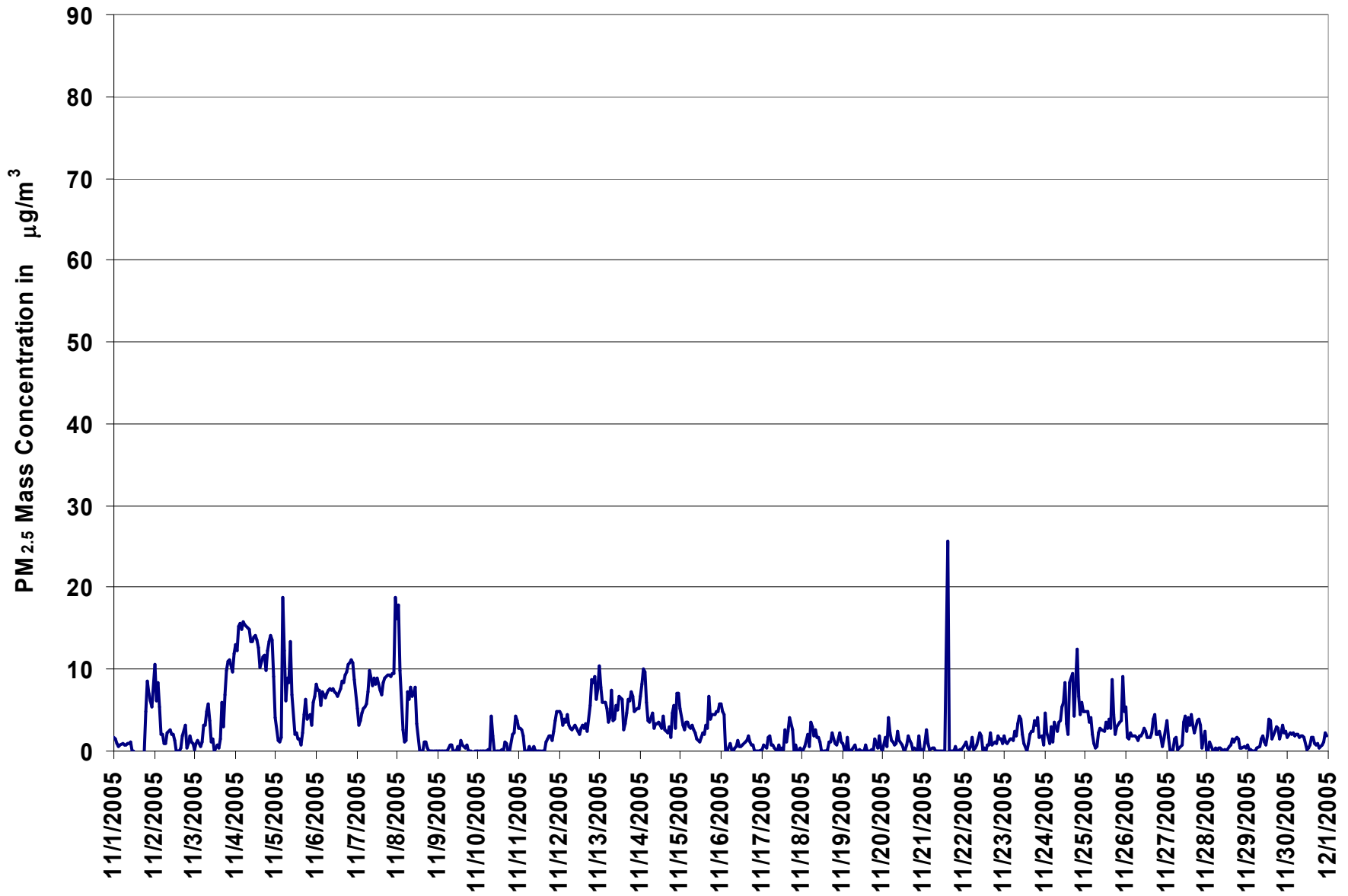


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge  
 Station Owner: PASZA

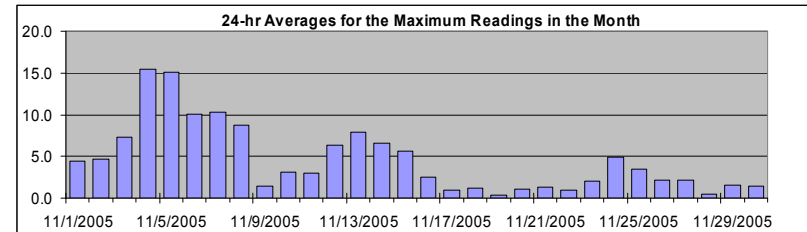
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

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

**Summary**

Maximum 1-hr Average:	113.0	µg/m <sup>3</sup>	5-Nov	4:00 5:00
Maximum 24-hr Value:	15.4	µg/m <sup>3</sup>	4-Nov	



AIC Time:	0 hrs	Operational Time:	714 hrs							
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	20.7	14.1	6.2	2.5	1.0	0.0	0.0	4.6	5 µg/m <sup>3</sup>	3.0 µg/m <sup>3</sup>

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	2	3	2	2	2	3	2	2	3	3	3	2	1	C	C	C	C	C	1	9	10	13	9	12	4.4	12.9
2-Nov-05	15	7	13	11	6	5	2	2	4	4	4	4	3	1	5	1	2	4	8	2	2	4	2	2	4.7	15.3
3-Nov-05	1	3	3	3	2	5	5	10	11	6	3	3	2	2	2	3	17	4	11	13	18	18	16	15	7.4	18.3
4-Nov-05	16	15	18	17	17	19	18	16	17	16	16	16	16	15	14	12	14	14	13	14	15	16	16	13	15.4	18.8
5-Nov-05	12	9	20	14	113	47	13	13	14	22	13	4	4	3	4	5	4	6	8	6	6	5	8	8	15.0	113.0
6-Nov-05	10	10	11	9	9	9	9	9	9	10	9	9	9	9	9	11	9	11	11	13	12	13	12	10	10.1	12.7
7-Nov-05	9	5	5	7	8	7	12	12	13	10	11	9	10	10	11	10	10	10	11	11	11	11	11	22	10.3	22.4
8-Nov-05	21	55	26	5	2	4	12	12	12	9	10	10	9	1	0	2	4	6	2	1	1	1	1	2	8.8	55.3
9-Nov-05	1	1	0	0	0	0	1	3	3	1	1	2	2	1	3	3	4	3	2	2	0	D	0	0	1.4	3.5
10-Nov-05	1	2	1	1	1	1	4	3	11	7	1	1	2	1	3	3	5	3	2	2	5	5	6	6	3.1	10.7
11-Nov-05	5	5	4	4	2	1	2	1	1	3	3	2	1	0	1	1	3	4	4	4	2	3	8	8	3.0	7.9
12-Nov-05	7	7	5	6	6	6	5	4	4	5	4	5	4	5	4	4	5	5	7	11	11	12	7	15	6.4	15.2
13-Nov-05	16	10	9	7	7	7	7	10	6	6	8	7	10	10	5	5	8	8	8	10	9	7	6	6	7.9	15.9
14-Nov-05	9	9	12	11	8	5	6	7	4	5	5	5	5	4	7	4	4	5	3	8	9	5	10	9	6.6	11.8
15-Nov-05	8	5	5	6	6	5	4	5	5	4	4	3	4	4	4	5	4	14	5	6	6	6	8	9	5.6	14.0
16-Nov-05	9	8	12	1	1	3	1	1	3	2	2	2	3	3	2	3	2	1	1	1	0	0	0	0	2.5	12.3
17-Nov-05	0	1	1	0	2	2	1	1	0	0	1	0	0	0	3	1	2	4	3	0	1	0	0	0	0.9	4.0
18-Nov-05	0	0	1	2	1	4	3	2	3	2	2	1	0	0	0	0	1	1	2	1	1	1	2	1	1.2	3.6
19-Nov-05	1	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	1	0	2	0	0.4	1.8
20-Nov-05	0	2	1	4	2	1	1	1	1	2	1	1	0	0	1	2	1	1	0	0	0	2	0	0	1.0	4.1
21-Nov-05	0	1	3	1	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	1	0	0	0	0	1.3	25.6
22-Nov-05	1	1	0	0	1	2	0	0	1	2	2	0	0	0	1	1	2	1	1	1	2	1	1	1	1.0	2.3
23-Nov-05	2	1	1	1	1	1	2	2	3	4	4	2	1	0	1	2	3	2	4	3	4	2	2	1	2.1	4.3
24-Nov-05	5	2	2	1	3	1	4	2	4	4	5	6	8	3	2	8	10	4	8	12	7	5	6	5	4.9	12.4
25-Nov-05	5	5	4	4	2	1	0	1	2	3	3	3	4	3	4	3	9	5	2	3	4	4	9	5	3.5	9.1
26-Nov-05	5	2	2	2	2	2	2	1	2	2	2	3	2	2	2	2	4	5	2	2	3	2	1	1	2.2	5.4
27-Nov-05	4	2	0	0	0	2	2	0	0	1	4	4	2	4	3	5	3	2	4	4	3	0	1	3	2.2	4.5
28-Nov-05	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	0	0	1	0	0.5	1.6
29-Nov-05	1	0	0	0	0	0	0	1	2	2	1	1	2	4	4	2	3	3	3	2	2	3	2	2	1.6	3.9
30-Nov-05	2	2	2	2	2	2	2	2	2	2	2	0	0	1	2	2	1	1	1	0	1	1	2	2	1.5	2.3
Hourly Avg	5.5	5.8	5.3	4.1	6.8	4.8	4.0	4.1	4.7	4.5	4.1	3.5	3.5	3.0	4.2	3.5	4.6	4.4	4.3	4.8	4.8	4.8	5.0	5.4		
Hourly Max	20.9	55.3	25.9	17.0	113.0	46.7	17.7	16.3	16.6	22.4	15.7	15.6	16.0	15.0	25.6	11.5	17.1	14.0	12.8	14.0	18.2	18.3	15.6	22.4		

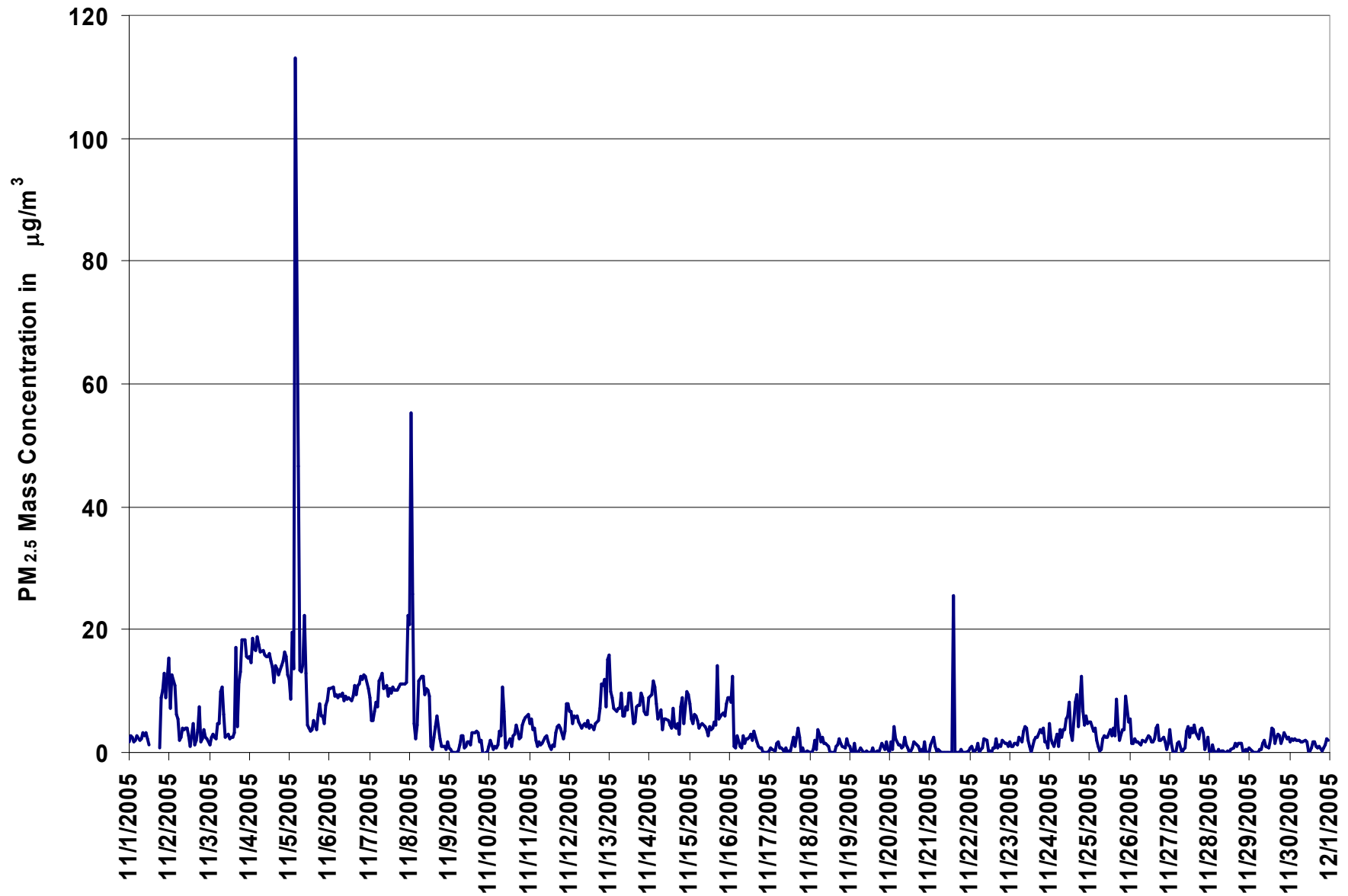
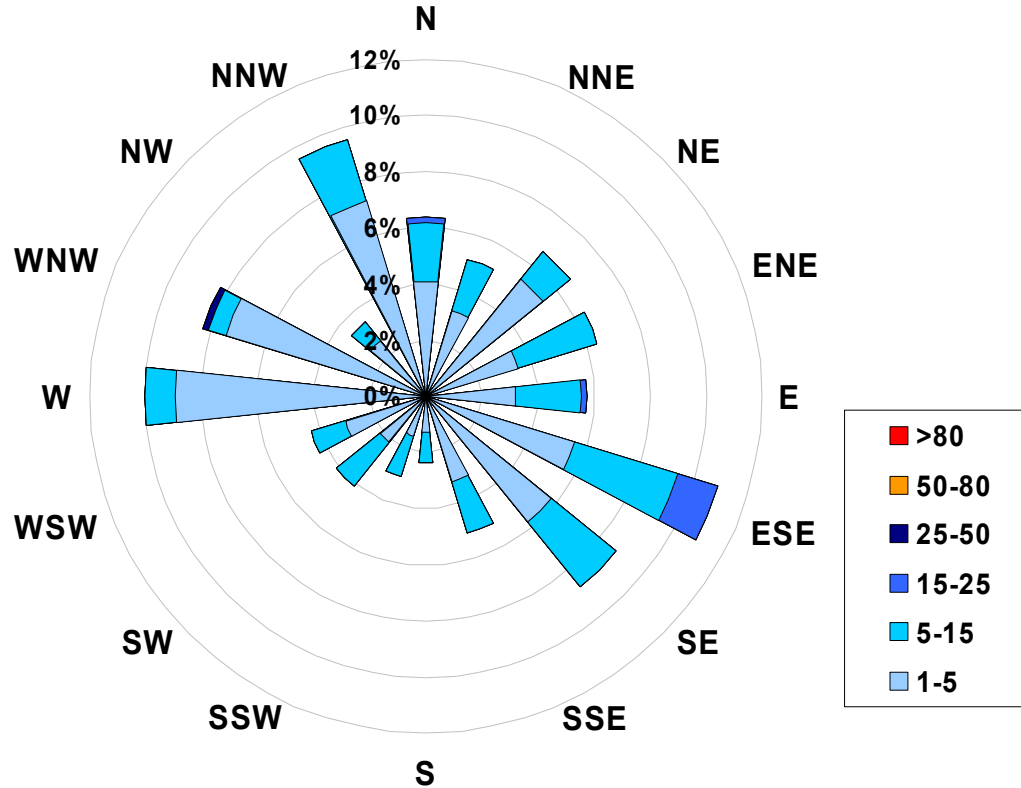


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

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



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	563
5	to	15	141
15	to	25	9
25	to	50	1
50	to	80	0
	>	80	0
Total Non-Zero Values			714



### PASZA - Beaverlodge Relative Humidity Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

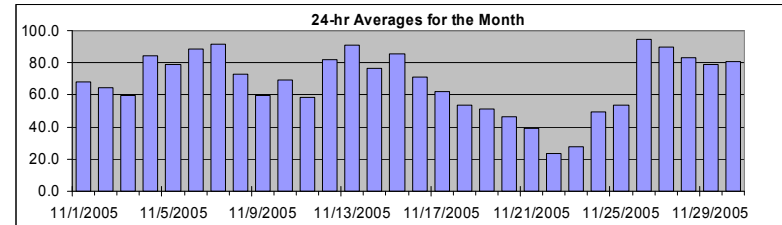
#### HOURLY AVERAGE TABLE

#### Relative Humidity (RH)

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

**Summary**

Maximum 1-hr Average:	97.0	%	26-Nov	3:00 4:00
Maximum 24-hr Value:	94.4	%	26-Nov	



AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	96.0	94.0	86.0	73.0	54.0	27.0	22.0	67.8 %	73.0 %

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	85	86	84	84	88	88	89	90	84	77	63	56	45	40	43	39	43	47	50	64	73	71	70	70		67.9	90.0
2-Nov-05	80	81	84	81	75	76	73	74	74	74	72	64	55	48	44	40	43	51	54	55	59	65	62	60		64.3	84.0
3-Nov-05	60	60	66	68	66	81	78	81	80	65	52	49	42	33	37	39	47	54	56	60	61	62	60	72		59.5	81.0
4-Nov-05	73	81	86	89	90	90	90	91	92	90	85	87	74	69	69	63	73	88	91	88	87	89	94	94		84.3	94.0
5-Nov-05	95	93	93	92	92	92	92	93	92	88	76	72	68	65	64	54	65	75	73	67	67	68	73	78		78.6	95.0
6-Nov-05	83	85	88	87	93	92	93	91	91	92	92	90	84	81	80	83	84	86	88	90	92	93	94	94		88.6	94.0
7-Nov-05	95	95	95	94	93	92	92	92	92	93	93	93	92	90	86	79	86	89	92	93	93	95	94	94		91.8	95.0
8-Nov-05	94	93	94	92	91	89	93	91	91	86	79	75	70	58	51	51	59	55	56	58	57	57	57	57		73.2	94.0
9-Nov-05	57	57	58	59	56	55	55	57	59	57	54	52	48	43	47	53	61	65	64	69	73	77	78	75		59.5	78.0
10-Nov-05	75	75	76	78	76	76	76	79	82	87	84	74	65	57	60	49	57	62	61	60	60	60	66	68		69.3	87.0
11-Nov-05	60	67	70	77	81	74	76	68	65	59	48	50	44	37	37	40	44	50	50	54	57	62	67	68		58.5	81.0
12-Nov-05	67	71	72	75	75	81	84	84	85	85	85	82	80	76	80	80	82	86	88	87	88	88	90	91		81.8	91.0
13-Nov-05	90	91	92	93	93	94	92	92	92	92	91	92	93	92	92	92	93	90	89	90	89	87	86	85		90.9	94.0
14-Nov-05	84	81	78	78	77	78	78	80	79	77	74	72	69	69	69	72	73	77	77	81	80	75	81	82		76.7	84.0
15-Nov-05	83	87	86	86	85	86	87	86	86	85	81	80	81	80	81	84	85	86	87	88	89	89	91	92		85.5	92.0
16-Nov-05	89	89	75	73	77	77	74	72	71	68	67	65	63	58	55	56	55	63	70	74	76	77	80	81		71.0	89.0
17-Nov-05	79	77	73	66	60	60	66	68	69	63	61	60	58	49	52	57	59	58	59	60	59	57	57	57		61.8	79.0
18-Nov-05	55	55	55	55	55	53	52	54	56	58	52	46	41	38	37	41	50	58	58	58	60	62	64	68		53.4	68.0
19-Nov-05	64	64	64	58	62	65	62	52	58	55	53	43	38	36	38	41	45	47	45	48	49	49	50	46		51.3	65.0
20-Nov-05	42	41	41	42	43	44	44	47	47	46	43	40	39	38	39	41	48	52	53	54	53	58	58	60		46.4	60.0
21-Nov-05	57	52	53	50	51	51	52	49	46	44	40	38	35	33	33	33	32	30	28	28	29	26	25	25		39.2	57.0
22-Nov-05	25	22	22	24	26	26	26	25	23	23	23	22	21	20	21	22	23	23	24	24	26	26	27	27		23.8	27.0
23-Nov-05	29	30	32	31	33	32	35	32	31	28	27	24	20	18	18	23	23	26	27	26	29	27	32	29		27.6	35.0
24-Nov-05	42	43	44	40	57	53	61	57	59	57	54	48	42	34	28	31	39	45	54	57	60	57	67	61		49.6	67.0
25-Nov-05	64	64	52	50	47	46	44	47	58	55	50	46	46	39	41	43	54	56	55	56	59	57	72	82		53.5	82.0
26-Nov-05	92	94	96	97	97	97	97	97	97	97	96	94	92	90	89	91	93	94	94	95	95	94	93	94		94.4	97.0
27-Nov-05	96	95	94	94	94	93	95	94	94	94	92	87	86	84	83	87	90	89	88	88	91	82	75	82		89.5	96.0
28-Nov-05	78	79	80	84	85	88	86	86	87	85	83	80	76	76	79	83	85	87	87	88	86	85	84	81		83.3	88.0
29-Nov-05	83	84	83	82	80	78	78	82	82	82	77	68	62	54	73	83	86	87	84	80	80	80	80	82		78.8	87.0
30-Nov-05	82	82	81	82	83	83	83	82	82	82	80	75	75	73	76	78	81	82	83	84	82	82	83	82		80.8	84.0
Hourly Avg	71.9	72.5	72.2	72.0	72.7	73.0	73.4	73.1	73.5	71.5	67.6	64.1	60.1	55.9	56.7	57.6	61.9	65.4	66.1	67.4	68.7	68.6	70.3	71.2			
Hourly Max	96.0	95.0	96.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	96.0	94.0	93.0	92.0	92.0	92.0	93.0	94.0	94.0	95.0	95.0	95.0	94.0	94.0			

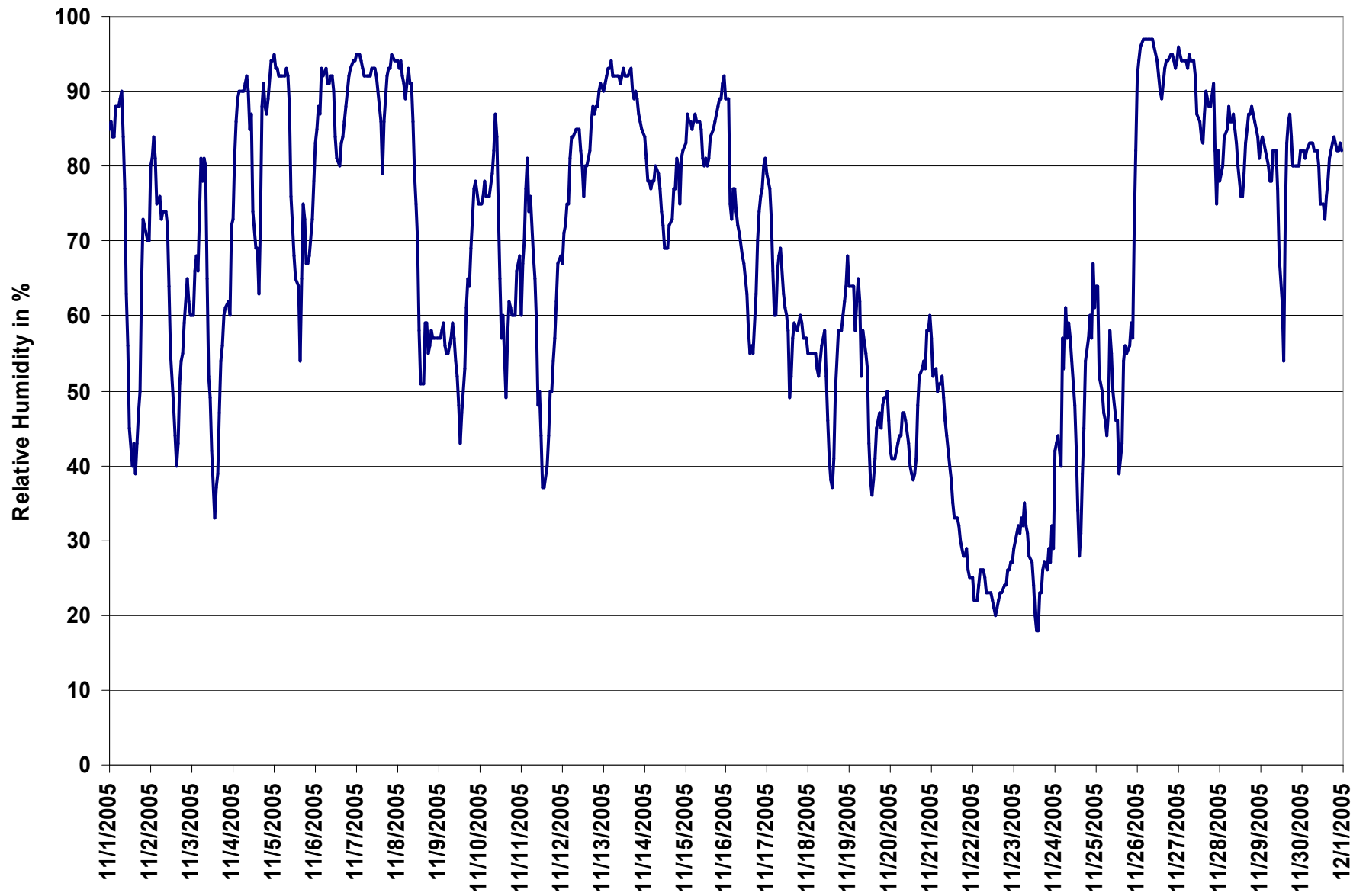


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

### PASZA - Beaverlodge Temperature Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

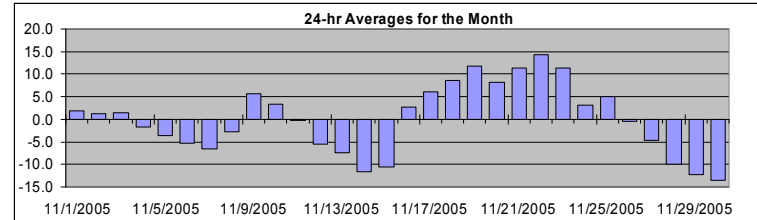
#### HOURLY AVERAGE TABLE

#### Ambient Temperature (T)

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

#### Summary

Maximum 1-hr Average:	16.6 °C	23-Nov	13:00 14:00
Maximum 24-hr Value:	14.4 °C	22-Nov	



AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	15.6	13.0	6.5	0.1	-6.6	-12.5	-13.9	0.0 °C	0.1 °C

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Nov-05	0	0	0	0	-1	-2	-2	-2	-2	0	3	5	7	8	7	8	6	4	2	1	1	1	1	1	1	1.9	8.3
2-Nov-05	-2	-2	-2	-2	-1	-1	0	-1	-1	0	1	3	5	7	7	7	5	2	2	2	1	-1	0	1	1.2	7.3	
3-Nov-05	0	0	-1	-1	-1	-4	-3	-3	-3	0	3	4	7	10	8	7	4	2	2	1	1	1	1	-1	1.5	10.1	
4-Nov-05	-1	-3	-3	-3	-4	-4	-3	-3	-3	-3	-2	-2	1	2	2	3	1	-2	-2	-2	-2	-3	-4	-4	-1.8	3.4	
5-Nov-05	-7	-9	-10	-11	-9	-9	-8	-7	-7	-6	-3	-1	1	2	2	4	2	-1	-1	-1	-1	-2	-3	-3	-3.6	4.1	
6-Nov-05	-4	-4	-5	-6	-8	-7	-8	-8	-7	-7	-6	-5	-4	-3	-3	-4	-4	-4	-4	-5	-5	-5	-5	-5	-5.3	-3.3	
7-Nov-05	-7	-7	-7	-8	-8	-9	-10	-10	-10	-8	-8	-7	-6	-4	-2	-1	-3	-4	-5	-6	-6	-7	-7	-7	-6.6	-1.0	
8-Nov-05	-7	-7	-8	-8	-8	-8	-9	-9	-10	-8	-4	-2	0	3	3	3	1	1	2	1	1	1	2	2	-2.8	3.2	
9-Nov-05	2	2	2	2	3	3	4	4	5	6	7	8	10	11	11	10	8	7	7	6	6	5	4	4	5.7	11.5	
10-Nov-05	4	4	4	5	5	5	6	5	6	5	4	4	5	5	5	5	3	2	1	1	0	0	-1	-1	3.4	5.9	
11-Nov-05	0	-1	-1	-2	-3	-3	-4	-3	-2	0	2	2	3	4	4	3	2	1	0	-1	-1	-1	-2	-2	-0.2	4.4	
12-Nov-05	-2	-3	-4	-4	-5	-5	-6	-6	-7	-7	-7	-6	-5	-4	-5	-5	-5	-6	-7	-7	-7	-7	-7	-7	-5.5	-2.5	
13-Nov-05	-7	-7	-7	-7	-8	-9	-10	-10	-10	-10	-9	-7	-7	-6	-5	-4	-4	-5	-6	-6	-7	-8	-9	-10	-7.4	-4.3	
14-Nov-05	-10	-10	-10	-11	-11	-12	-13	-13	-13	-13	-12	-12	-11	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-12	-11.5	-9.9	
15-Nov-05	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-10	-10	-10	-10	-9	-10	-9	-9	-9	-9	-9	-9	-9	-9	-10.5	-8.5	
16-Nov-05	-8	-7	2	3	3	3	4	4	4	5	5	6	7	7	7	6	4	3	2	1	1	0	0	0	2.8	7.2	
17-Nov-05	0	0	1	2	5	5	4	3	3	4	6	6	6	9	10	9	9	9	9	9	9	9	9	9	6.0	9.7	
18-Nov-05	9	9	9	9	9	9	9	8	7	6	8	9	10	11	11	10	8	6	7	8	9	9	8	8	8.7	11.0	
19-Nov-05	10	10	10	11	10	9	9	12	10	11	12	15	16	16	15	14	13	12	12	11	11	11	11	11	11.8	16.0	
20-Nov-05	11	11	11	11	10	9	9	8	7	7	9	9	9	9	9	9	7	7	6	7	6	6	5	5	8.2	11.3	
21-Nov-05	6	7	9	11	11	11	10	10	11	11	12	12	13	13	13	13	13	13	13	13	12	13	13	13	11.4	13.2	
22-Nov-05	13	14	14	13	13	13	13	14	14	14	15	15	16	16	16	16	15	15	15	14	14	14	13	13	14.4	16.4	
23-Nov-05	12	11	10	10	9	9	8	9	9	11	12	14	15	17	17	14	13	12	11	12	10	11	8	9	11.3	16.6	
24-Nov-05	4	4	4	5	0	1	-1	0	-1	0	3	6	7	9	11	10	7	4	2	1	0	1	-1	0	3.1	11.4	
25-Nov-05	0	1	3	4	5	6	6	6	2	3	6	7	7	10	10	9	5	4	5	5	4	5	3	4	5.0	9.8	
26-Nov-05	2	1	0	0	0	0	0	0	0	0	1	1	1	1	0	-1	-1	-2	-2	-2	-2	-3	-3	-3	-0.4	2.2	
27-Nov-05	-4	-4	-4	-5	-5	-6	-6	-8	-7	-6	-6	-4	-4	-4	-3	-3	-4	-5	-5	-4	-4	-4	-5	-5	-4.7	-2.7	
28-Nov-05	-6	-6	-7	-8	-9	-10	-11	-11	-12	-12	-12	-11	-10	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-11	-10.0	-5.8	
29-Nov-05	-11	-12	-12	-12	-13	-12	-12	-12	-12	-12	-10	-9	-6	-11	-14	-14	-14	-14	-14	-13	-14	-14	-14	-14	-12.2	-6.4	
30-Nov-05	-14	-14	-14	-14	-14	-14	-14	-14	-14	-13	-13	-12	-12	-12	-13	-13	-14	-14	-14	-14	-14	-14	-14	-14	-13.5	-12.0	
Hourly Avg	-0.9	-1.1	-1.0	-0.9	-1.2	-1.5	-1.8	-1.7	-1.8	-1.1	0.2	1.2	2.2	3.3	3.2	2.8	1.6	0.6	0.3	0.1	-0.2	-0.4	-0.8	-1.0			
Hourly Max	13.0	13.9	13.9	13.4	13.1	13.4	13.4	13.7	14.1	14.4	14.8	15.4	16.3	16.6	16.5	15.7	15.4	15.1	14.7	14.3	13.9	13.7	13.3	13.3			

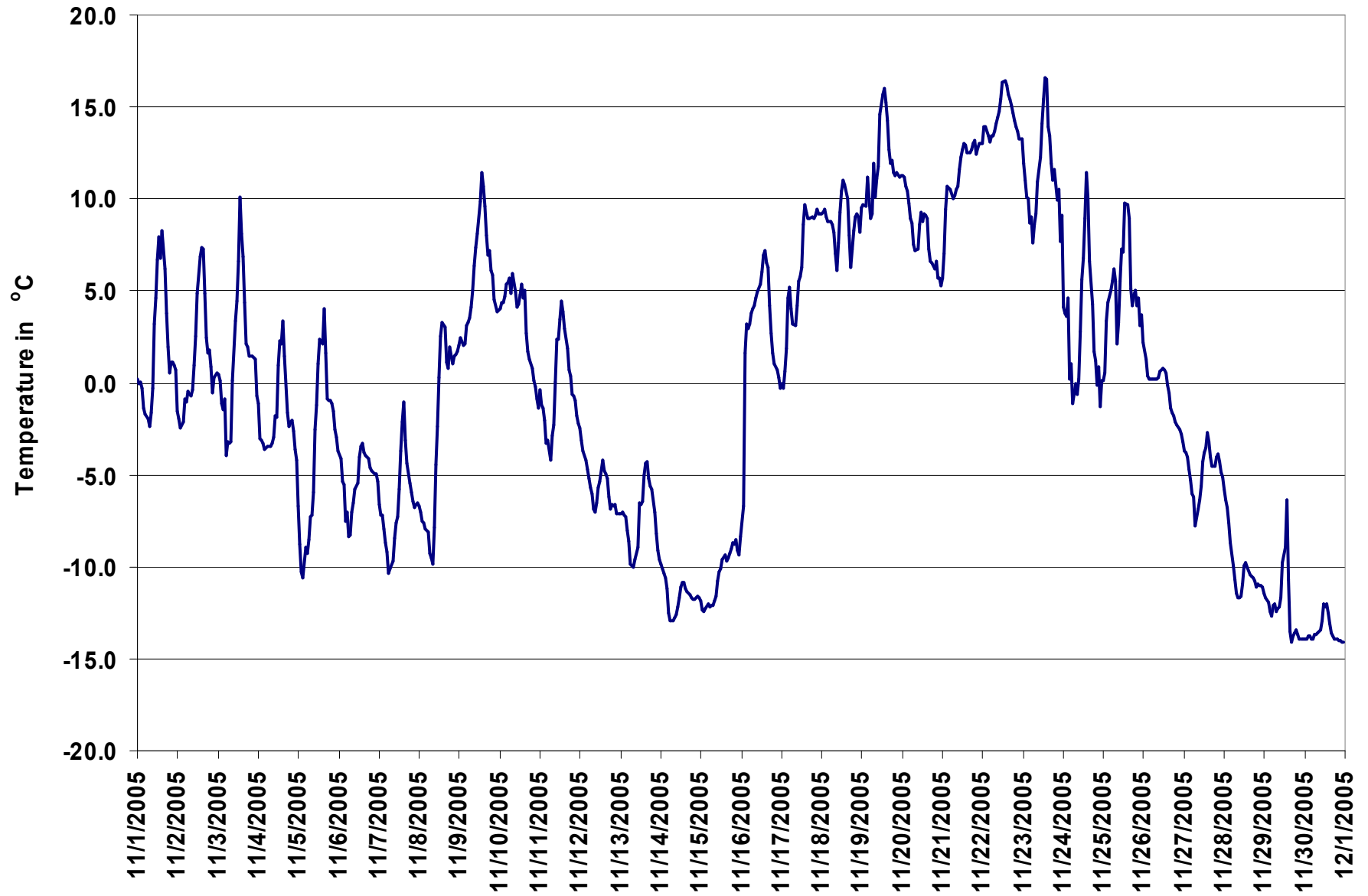


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

### PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

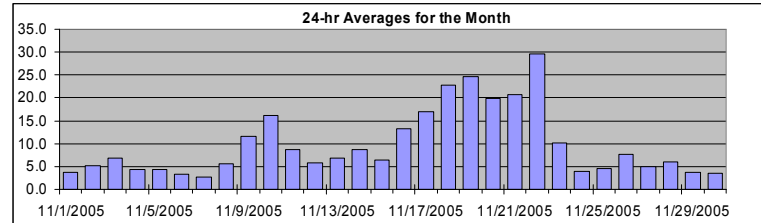
#### Wind Speed (WSs)

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

#### Summary

Maximum 1-hr Average:	44.1	km/hr	18-Nov	2:00 3:00
Maximum 24-hr Value:	29.6	km/hr	22-Nov	

Calm Time:	1 hrs	0% calms	Operational Time:	719 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	36.5	29.6	13.9	6.0	3.6	2.2	1.6	9.8 km/hr



#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	3	2	2	4	3	3	2	3	4	3	3	4	4	5	6	2	4	4	6	7	4	2	4	3	3.6	6.6	
2-Nov-05	6	3	3	5	4	4	3	3	3	4	4	4	5	6	11	14	12	7	4	4	4	5	5	4	5.2	13.8	
3-Nov-05	3	2	4	3	3	2	3	4	5	2	4	4	3	3	8	10	9	11	14	14	15	16	14	10	6.8	16.1	
4-Nov-05	8	5	6	9	3	5	7	6	3	2	3	6	4	5	6	3	4	3	4	4	3	3	3	3	4.4	8.7	
5-Nov-05	2	4	4	7	6	4	4	6	5	3	4	4	5	4	3	4	4	7	6	6	5	5	4	3	4.4	7.1	
6-Nov-05	3	2	2	5	4	3	3	2	4	7	5	4	2	3	3	5	4	2	2	3	4	3	3	3	3.4	6.5	
7-Nov-05	3	3	3	3	2	3	3	3	4	3	2	3	2	2	3	3	3	3	3	2	2	3	3	3	2.7	3.6	
8-Nov-05	3	3	3	3	3	4	4	3	4	2	2	5	10	13	14	8	7	7	6	6	6	8	7	6	5.7	13.9	
9-Nov-05	5	6	6	7	8	7	8	9	13	17	18	12	11	24	24	22	15	7	15	14	11	6	7	7	11.6	24.1	
10-Nov-05	6	5	5	4	4	5	4	6	18	16	13	21	23	24	23	24	22	24	26	27	23	24	21	19	16.1	26.8	
11-Nov-05	25	18	22	14	8	9	4	5	6	4	4	9	8	12	12	9	5	4	5	5	6	6	4	5	8.6	24.8	
12-Nov-05	6	6	11	4	8	8	4	3	3	6	7	9	9	9	9	9	7	6	5	4	3	2	2	1	5.8	10.6	
13-Nov-05	3	3	3	3	2	3	3	1	3	3	2	3	6	5	3	7	8	15	14	11	15	17	16	14	6.8	17.4	
14-Nov-05	16	18	17	14	13	11	14	9	9	10	9	7	6	6	8	6	4	4	5	6	6	5	3	4	8.7	18.0	
15-Nov-05	6	7	8	7	6	7	8	7	9	7	7	8	7	7	7	7	7	5	5	6	4	3	calm	2	6.3	8.5	
16-Nov-05	4	4	20	22	21	17	14	16	17	21	18	17	18	16	18	14	11	12	7	5	4	6	10	7	13.2	21.6	
17-Nov-05	5	4	5	7	17	18	10	8	5	6	10	10	10	20	27	24	24	32	28	24	21	26	30	37	17.0	37.1	
18-Nov-05	40	35	44	37	34	31	28	25	18	12	13	21	24	23	21	16	14	13	14	15	20	19	18	13	22.8	44.1	
19-Nov-05	17	23	16	32	19	12	16	27	17	17	19	25	30	33	32	25	32	26	33	27	28	31	27	30	24.7	33.3	
20-Nov-05	34	35	34	41	33	21	21	18	18	17	20	29	21	22	22	18	19	14	9	11	8	7	4	6	19.9	41.0	
21-Nov-05	6	8	15	29	26	18	10	17	21	17	18	18	23	23	28	22	22	23	25	31	24	25	26	27	20.8	30.9	
22-Nov-05	29	30	31	26	26	32	31	39	38	36	30	30	39	36	36	32	29	30	27	26	29	22	10	19	29.6	38.7	
23-Nov-05	14	10	15	12	4	8	7	7	16	9	7	6	14	22	23	15	13	13	4	4	3	7	5	5	10.1	22.8	
24-Nov-05	3	4	5	6	3	4	3	4	3	3	3	3	3	3	2	3	5	3	5	6	6	5	7	4	3.9	7.1	
25-Nov-05	2	3	7	7	2	3	3	4	4	3	4	3	4	4	5	2	3	2	5	9	12	7	5	7	4.6	11.8	
26-Nov-05	9	9	8	6	7	8	6	6	7	5	6	8	11	12	11	11	9	8	8	8	6	7	5	4	7.6	12.2	
27-Nov-05	7	6	6	5	4	5	4	3	4	5	4	6	7	3	1	4	3	2	4	7	6	9	9	5	5.0	9.4	
28-Nov-05	8	8	6	8	8	7	8	10	6	8	8	7	4	6	4	3	3	3	3	4	4	6	6	5	5.9	9.7	
29-Nov-05	4	6	7	5	5	4	3	2	3	4	7	2	4	2	2	3	3	2	3	5	7	6	3	1	3.8	6.9	
30-Nov-05	2	4	2	2	5	6	3	4	3	4	3	2	3	3	3	3	2	3	3	5	4	4	6	7	3.5	6.6	
1-hr Average	9.3	9.2	10.6	11.1	9.7	9.0	7.9	8.6	9.1	8.5	8.6	9.6	10.7	11.8	12.4	10.9	10.2	9.8	9.9	10.1	9.6	9.8	9.1	8.7			
Hourly Max	40.3	35.3	44.1	41.0	33.8	31.7	30.9	38.7	38.2	35.6	29.8	29.7	38.7	35.9	35.7	32.2	32.4	32.1	33.1	30.9	28.9	30.6	29.6	37.1			

### PASZA - Beaverlodge Vector Wind Speed Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

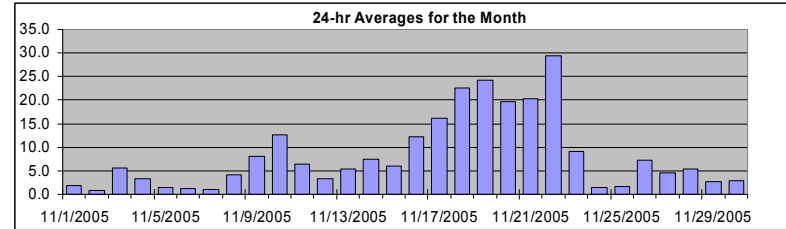
#### HOURLY AVERAGE TABLE

#### Wind Speed (WSv)

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

#### Summary

Maximum 1-hr Average:	44.1	km/hr	18-Nov	2:00 3:00
Maximum 24-hr Value:	29.4	km/hr	22-Nov	



Calm Time:	1 hrs	0% calms	Operational Time:	719 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	36.5	29.6	13.9	6.0	3.6	2.2	1.6	28.8 km/hr

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Nov-05	3	2	2	4	3	3	2	3	4	3	4	4	5	6	2	4	4	6	7	4	2	4	3	1.9	6.6	
2-Nov-05	6	3	3	5	4	4	3	3	3	4	4	4	5	6	11	14	12	7	4	4	5	5	4	0.7	13.8	
3-Nov-05	3	2	4	3	3	2	3	4	5	2	4	4	3	3	8	10	9	11	14	14	15	16	14	10	5.5	16.1
4-Nov-05	8	5	6	9	3	5	7	6	3	2	3	6	4	5	6	3	4	3	4	4	3	3	3	3	3.3	8.7
5-Nov-05	2	4	4	7	6	4	4	6	5	3	4	4	5	4	3	4	4	7	6	6	5	5	4	3	1.4	7.1
6-Nov-05	3	2	2	5	4	3	3	2	4	7	5	4	2	3	3	5	4	2	2	3	4	3	3	3	1.3	6.5
7-Nov-05	3	3	3	3	2	3	3	3	4	3	2	3	2	2	3	3	3	3	3	2	2	3	3	3	0.9	3.6
8-Nov-05	3	3	3	3	3	4	4	3	4	2	2	5	10	13	14	8	7	7	6	6	6	8	7	6	4.2	13.9
9-Nov-05	5	6	6	7	8	7	8	9	13	17	18	12	11	24	24	22	15	7	15	14	11	6	7	7	8.1	24.1
10-Nov-05	6	5	5	4	4	5	4	6	18	16	13	21	23	24	23	24	22	24	26	27	23	24	21	19	12.6	26.8
11-Nov-05	25	18	22	14	8	9	4	5	6	4	4	9	8	12	12	9	5	4	5	5	6	6	4	5	6.5	24.8
12-Nov-05	6	6	11	4	8	8	4	3	3	6	7	9	9	9	9	9	7	6	5	4	3	2	2	1	3.4	10.6
13-Nov-05	3	3	3	3	2	3	3	1	3	3	2	3	6	5	3	7	8	15	14	11	15	17	16	14	5.4	17.4
14-Nov-05	16	18	17	14	13	11	14	9	9	10	9	7	6	6	8	6	4	4	5	6	6	5	3	4	7.5	18.0
15-Nov-05	6	7	8	7	6	7	8	7	9	7	7	8	7	7	7	7	5	5	6	4	3	calm	2	6.0	8.5	
16-Nov-05	4	4	20	22	21	17	14	16	17	21	18	17	18	16	18	14	11	12	7	5	4	6	10	7	12.3	21.6
17-Nov-05	5	4	5	7	17	18	10	8	5	6	10	10	10	20	27	24	24	32	28	24	21	26	30	37	16.1	37.1
18-Nov-05	40	35	44	37	34	31	28	25	18	12	13	21	24	23	21	16	14	13	14	15	20	19	18	13	22.5	44.1
19-Nov-05	17	23	16	32	19	12	16	27	17	17	19	25	30	33	32	25	32	26	33	27	28	31	27	30	24.3	33.3
20-Nov-05	34	35	34	41	33	21	21	18	18	17	20	29	21	22	22	18	19	14	9	11	8	7	4	6	19.6	41.0
21-Nov-05	6	8	15	29	26	18	10	17	21	17	18	18	23	23	28	22	22	23	25	31	24	25	26	27	20.4	30.9
22-Nov-05	29	30	31	26	26	32	31	39	38	36	30	30	39	36	36	32	29	30	27	26	29	22	10	19	29.4	38.7
23-Nov-05	14	10	15	12	4	8	7	7	16	9	7	6	14	22	23	15	13	13	4	4	3	7	5	5	9.1	22.8
24-Nov-05	3	4	5	6	3	4	3	4	3	3	3	3	3	3	2	3	5	3	5	6	6	5	7	4	1.5	7.1
25-Nov-05	2	3	7	7	2	3	3	4	4	3	4	3	4	4	5	2	3	2	5	9	12	7	5	7	1.7	11.8
26-Nov-05	9	9	8	6	7	8	6	6	7	5	6	8	11	12	11	11	9	8	8	8	6	7	5	4	7.2	12.2
27-Nov-05	7	6	6	5	4	5	4	3	4	5	4	6	7	3	1	4	3	2	4	7	6	9	9	5	4.5	9.4
28-Nov-05	8	8	6	8	8	7	8	10	6	8	8	7	4	6	4	3	3	3	3	4	4	6	6	5	5.3	9.7
29-Nov-05	4	6	7	5	5	4	3	2	3	4	7	2	4	2	2	3	3	2	3	5	7	6	3	1	2.8	6.9
30-Nov-05	2	4	2	2	5	6	3	4	3	4	3	2	3	3	3	3	2	3	3	5	4	4	6	7	3.0	6.6
1-hr Vector	4.8	4.7	5.4	6.6	5.6	4.6	4.2	4.4	5.2	4.3	4.3	6.1	7.5	8.9	8.9	6.9	5.8	5.5	5.3	4.6	4.2	4.0	3.3	4.4		
Hourly Max	40.3	35.3	44.1	41.0	33.8	31.7	30.9	38.7	38.2	35.6	29.8	29.7	38.7	35.9	35.7	32.2	32.4	32.1	33.1	30.9	28.9	30.6	29.6	37.1		

### PASZA - Beaverlodge Wind Direction Monthly Summary

Station: Beaverlodge  
 Station Owner: PASZA

#### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

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

**Summary**


Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	355.0	340.1	280.0	220.5	109.8	25.9	8.0	280 deg

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	134	176	121	211	144	94	142	129	102	96	144	192	226	243	227	230	57	67	89	116	102	81	65	63	129	SE
2-Nov-05	11	110	59	74	347	102	98	123	134	120	131	213	215	220	226	255	273	262	322	15	50	114	99	118	196	SSW
3-Nov-05	125	247	35	63	15	199	101	44	123	173	280	219	139	119	130	117	88	94	107	104	97	99	105	105	104	ESE
4-Nov-05	106	234	114	105	275	117	113	106	198	239	137	183	162	157	140	106	149	119	88	98	96	106	132	163	131	SE
5-Nov-05	103	18	355	39	8	335	8	34	274	105	167	182	212	201	166	121	112	107	78	79	105	105	247	257	83	E
6-Nov-05	134	80	14	26	56	66	241	311	357	20	37	324	7	23	11	22	57	58	125	198	211	206	209	193	30	NNE
7-Nov-05	116	97	101	111	179	119	187	176	29	338	233	232	238	50	332	137	292	216	217	127	161	92	88	103	139	SE
8-Nov-05	91	123	126	134	152	183	225	236	52	129	131	189	238	240	250	239	206	217	221	183	194	200	201	188	207	SSW
9-Nov-05	165	159	151	162	179	143	144	179	205	218	233	249	262	274	282	276	264	242	249	223	219	149	138	137	229	SW
10-Nov-05	132	153	110	96	122	90	165	124	301	311	308	283	284	283	273	284	270	266	269	274	255	243	249	261	271	W
11-Nov-05	257	256	256	265	252	256	141	123	215	225	235	224	238	257	267	305	322	320	293	335	340	343	45	325	265	W
12-Nov-05	298	51	96	290	18	40	60	166	155	139	131	142	131	148	142	139	128	118	112	102	244	301	100	289	116	ESE
13-Nov-05	275	269	192	153	122	273	329	15	343	350	27	63	322	262	352	17	7	11	9	357	348	342	335	332	346	NNW
14-Nov-05	331	334	336	332	347	346	328	340	339	353	342	345	327	332	338	355	9	345	18	48	57	72	146	137	346	NNW
15-Nov-05	123	119	115	110	114	120	126	122	132	125	128	141	151	162	148	154	141	148	166	163	181	142	166	126	135	SE
16-Nov-05	66	232	256	258	265	271	278	281	277	280	284	285	287	294	299	298	295	282	277	227	228	237	251	258	276	W
17-Nov-05	251	217	334	321	286	283	274	255	239	212	237	218	247	265	277	266	260	271	276	274	275	274	269	268	268	W
18-Nov-05	264	270	278	284	285	294	295	292	285	269	271	283	280	278	282	282	269	264	281	284	275	273	268	256	279	W
19-Nov-05	268	269	268	280	256	251	271	285	269	248	244	267	277	273	274	276	275	282	287	282	282	280	282	282	274	W
20-Nov-05	280	280	278	279	280	284	284	287	288	276	283	290	291	286	284	290	282	280	275	265	279	263	234	206	281	W
21-Nov-05	214	234	255	275	270	287	301	284	276	280	290	289	281	287	283	283	280	274	278	278	274	282	286	274	278	W
22-Nov-05	264	274	273	273	270	279	278	273	280	281	278	275	277	277	281	275	281	285	288	288	282	279	269	274	278	W
23-Nov-05	272	240	258	269	276	279	278	234	285	240	226	203	270	277	279	279	286	267	259	256	350	329	355	332	272	W
24-Nov-05	179	78	78	347	59	90	225	45	106	301	60	168	214	232	218	326	56	58	352	236	63	15	30	10	39	NE
25-Nov-05	55	78	295	354	198	318	256	262	126	100	93	145	158	157	168	142	131	81	47	30	32	30	62	354	52	NE
26-Nov-05	357	342	339	319	330	330	298	297	312	309	308	311	319	333	338	336	357	345	332	336	328	351	4	340	332	NNW
27-Nov-05	312	333	349	357	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	353	356	16	18	2	15	NNE
28-Nov-05	11	6	349	332	332	332	335	352	8	7	27	16	347	343	43	51	26	21	333	329	330	7	43	56	0	N
29-Nov-05	51	56	82	91	70	42	58	236	271	12	15	270	55	155	143	120	72	109	77	65	73	64	74	101	66	ENE
30-Nov-05	9	73	114	32	44	55	58	62	94	114	135	135	132	118	142	124	116	107	113	112	131	128	105	100	98	E
Hourly Avg	275	277	281	288	286	294	286	283	281	277	273	266	273	273	276	281	281	279	286	285	286	291	284	276		

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

Station: Beaverlodge  
 Station Owner: PASZA

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

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

**Summary**

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Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	697 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	96.8%			
Percentile	99	95	75	50	25	5	1
	24.0	19.0	11.0	8.0	7.0	4.0	3.0

**Status Flag Characters**

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

**Day Mountain Standard Time**

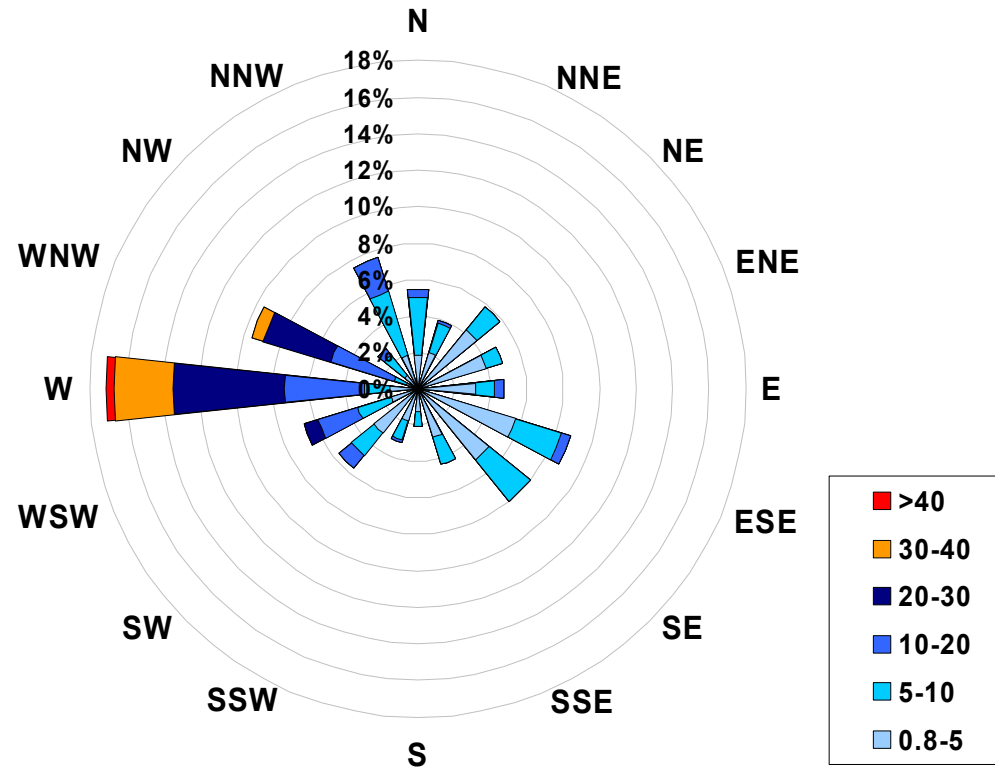
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00
1-Nov-05	13	11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

Daily Maximum
22.0
14.0
25.0
23.0
30.0
21.0
19.0
24.0
17.0
18.0
23.0
21.0
11.0
20.0
12.0
9.0
16.0
9.0
11.0
16.0
27.0
17.0
22.0
20.0
11.0
16.0
5.0
8.0

Hourly Max	20	20	22	13	23	22	27	25	16	24	24	22	22	25	24	19	20	23	27	22	21	20	30	25
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**1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for November 2005**



**Calms: 0%**

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	290
5	to	10	203
10	to	20	110
20	to	30	78
30	to	40	28
	>	40	3
Total Non-Zero Values			719

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

Table 1. PASZA Passive Stations for November 2005

PASZA					
Station Number	Station Name	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Site Legal
<b>Duplicates</b>					
29a	Smoky Heights	0.4	25.2	3.3	
29b	Smoky Heights	0.4	24.8	3.2	
30a	Fitzsimmons	0.1	23.2	3.2	
30b	Fitzsimmons	0.1	24.4	3.9	
33a	Wapiti	0.2	24.6	3.2	
33b	Wapiti	0.1	23.0	3.1	
49a	Grande Prairie HP	0.2	17.4	12.5	
49b	Grande Prairie HP	0.2	18.7	12.7	
1	Silver Valley	0.3	25.8	1.9	08-27-081-11 W6M
2	Bay Tree	0.1	27.8	1.2	13-16-078-13 W6M
3	Forth Creek	0.3	30.3	1.6	04-13-082-07 W6M
4	Gordondale	0.3	30.9	2.1	04-34-078-10 W6M
5	Boone Creek	0.3	26.6	2.2	01-23-076-11 W6M
7	Steeprock Creek	0.3	30.8	1.8	09-35-072-13 W6M
9	Spirit River	0.2	27.8	1.9	08-12-079-07 W6M
10	Woking	0.4	29.2	1.7	01-13-076-07 W6M
11	Webber Creek	0.3	24.5	2.4	09-36-074-09 W6M
12	Hythe	0.3	26.2	3.0	14-36-072-11 W6M
14	Sylvester	0.1	25.1	1.5	08-06-069-12 W6M
16	Beaverlodge	0.1	28.2	4.8	15-36-071-10 W6M
17	Poplar	0.2	24.0	2.5	13-06-073-08 W6M
18	Saddle Hills	0.2	27.2	2.2	04-25-074-07 W6M

Table 1. PASZA Passive Stations for November 2005 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
19	Wanham	0.3	31.4	2.3	16-22-077-03 W6M
20	Shaftesbury	0.1	23.3	1.9	04-03-082-23 W5M
21	Eaglesham	0.1	22.6	1.8	16-21-079-25 W5M
23	Bear Lake	0.1	24.1	3.9	15-31-072-06 W6M
24	Wembley	0.1	20.9	4.9	12-31-070-08 W6M
25	Pinto Creek	0.1	26.6	1.8	04-24-069-11 W6M
26	Flyingshot	0.1	23.5	4.3	15-36-070-07 W6M
27	Grande Prairie I	0.2	20.4	10.1	08-15-071-06 W6M
28	Clairmont Lake	0.2	24.1	3.5	09-06-073-04 W6M
29	Smoky Heights	0.4	25.0	3.3	04-06-075-02 W6M
30	Fitzsimmons	0.1	23.8	3.6	15-36-072-03 W6M
32	Gold Creek	0.2	19.1	3.4	06-33-067-05 W6M
33	Wapiti	0.2	23.8	3.2	02-25-071-03 W6M
34	Puskwaskau	0.1	23.0	1.5	15-35-074-25 W5M
35	Jean Cote	0.2	24.1	1.9	12-35-079-21 W5M
36	Guy	0.1	25.2	2.0	03-04-076-22 W5M
37	Crooked Creek	0.3	24.2	3.2	16-01-071-26 W5M
38	Karr Creek	0.1	21.8	1.2	10-16-065-02 W6M
39	Clouston Creek	0.3	25.4	2.2	12-01-073-22 W5M
40	McLennan	0.2	25.3	2.4	03-29-077-19 W5M
41	Valleyview	0.3	24.0	2.9	09-30-069-22 W5M
42	Sunset House	0.4	33.1	1.9	05-32-070-19 W5M
43	High Prairie	0.1	23.5	2.4	16-13-074-17 W5M
44	Peavine	0.1	26.6	1.3	03-05-079-15 W5M
45	Gift Lake	0.1	23.0	2.3	10-07-079-12 W5M
46	Little Smoky	0.3	18.4	6.1	12-01-065-21 W5M
47	Kinuso	0.0	21.7	1.4	12-10-073-10 W5M
48	Deer Mountain	0.1	27.3	1.5	15-22-068-09 W5M
49	Grande Prairie HP	0.2	18.0	12.6	17-26-071-06 W6M

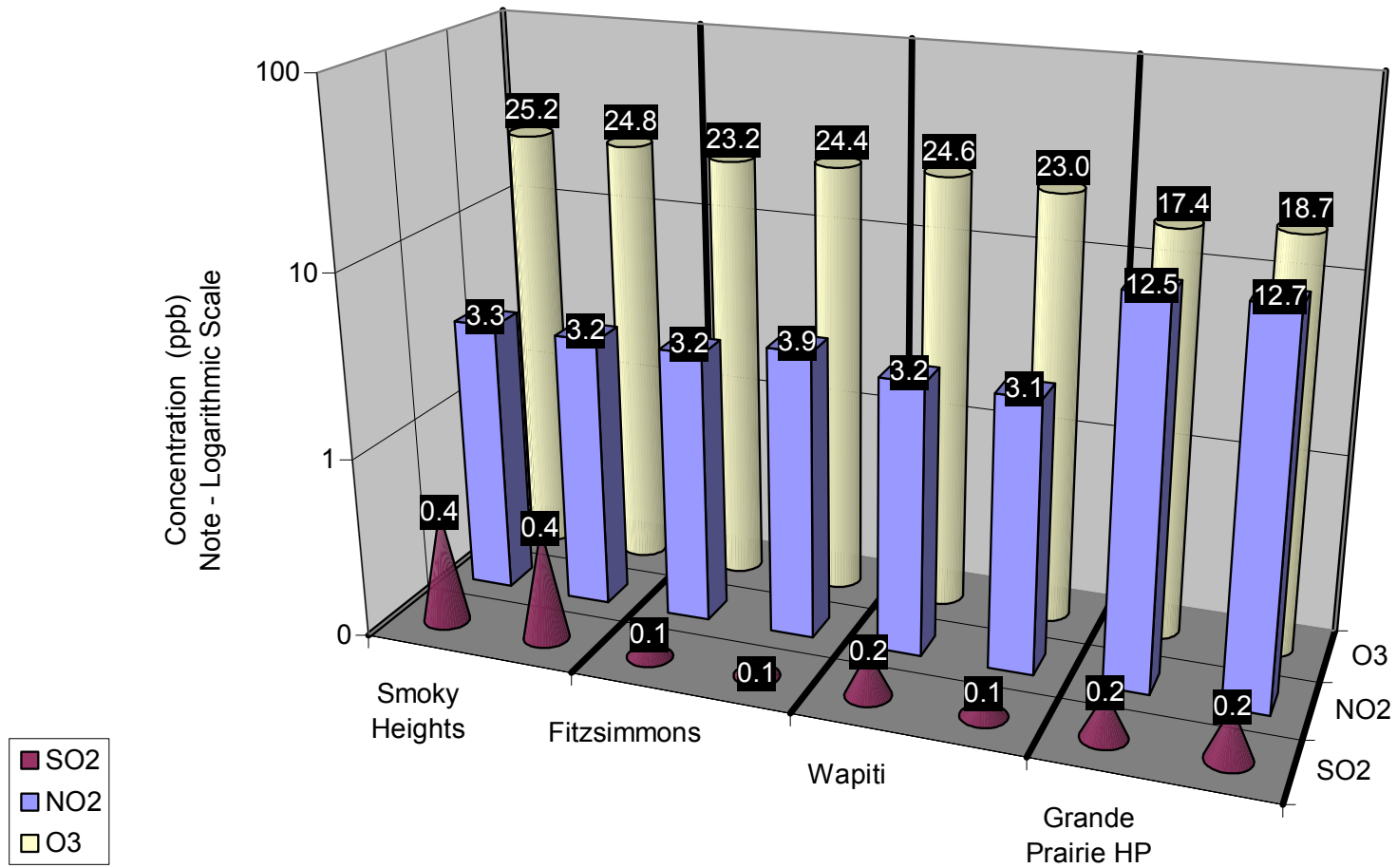


Figure 46. Duplicate Summary Chart

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

Stats	Sulphur Dioxide	Ozone	Nitrogen Dioxide
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
	ppb	ppb	ppb
<b>Passive Summary for Nov 2005 (PASZA Zone)</b>			
Mean	0.2	25.1	2.9
Standard Deviation	0.1	3.4	2.2
Minimum	0.0	18.0	1.2
Maximum	Kinuso (#47)	Grande Prairie HP	Bay Tree (#2)
	0.4	33.1	12.6
	Smoky Heights (#29)	Sunset House (#42)	Grande Prairie HP
<b>Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)</b>			
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
AENV Beaverlodge station	0.3	23.1	4.9
PASZA Beaverlodge passive	0.1	28.2	4.8
<b>Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)</b>			
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Henry Pirker station	0.5	14.0	12.8
PASZA Grande Prairie passive	0.2	18.0	12.6

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

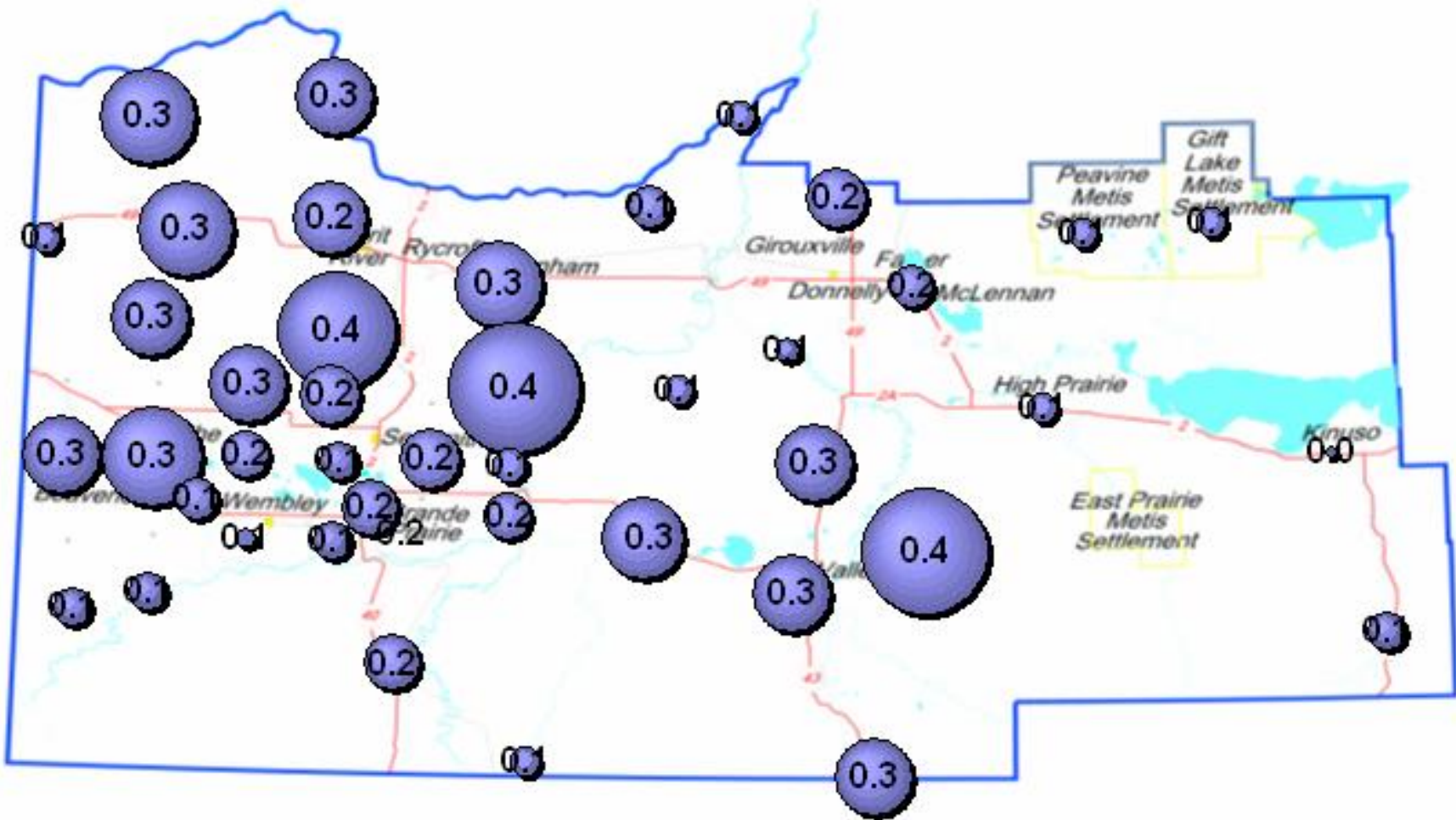
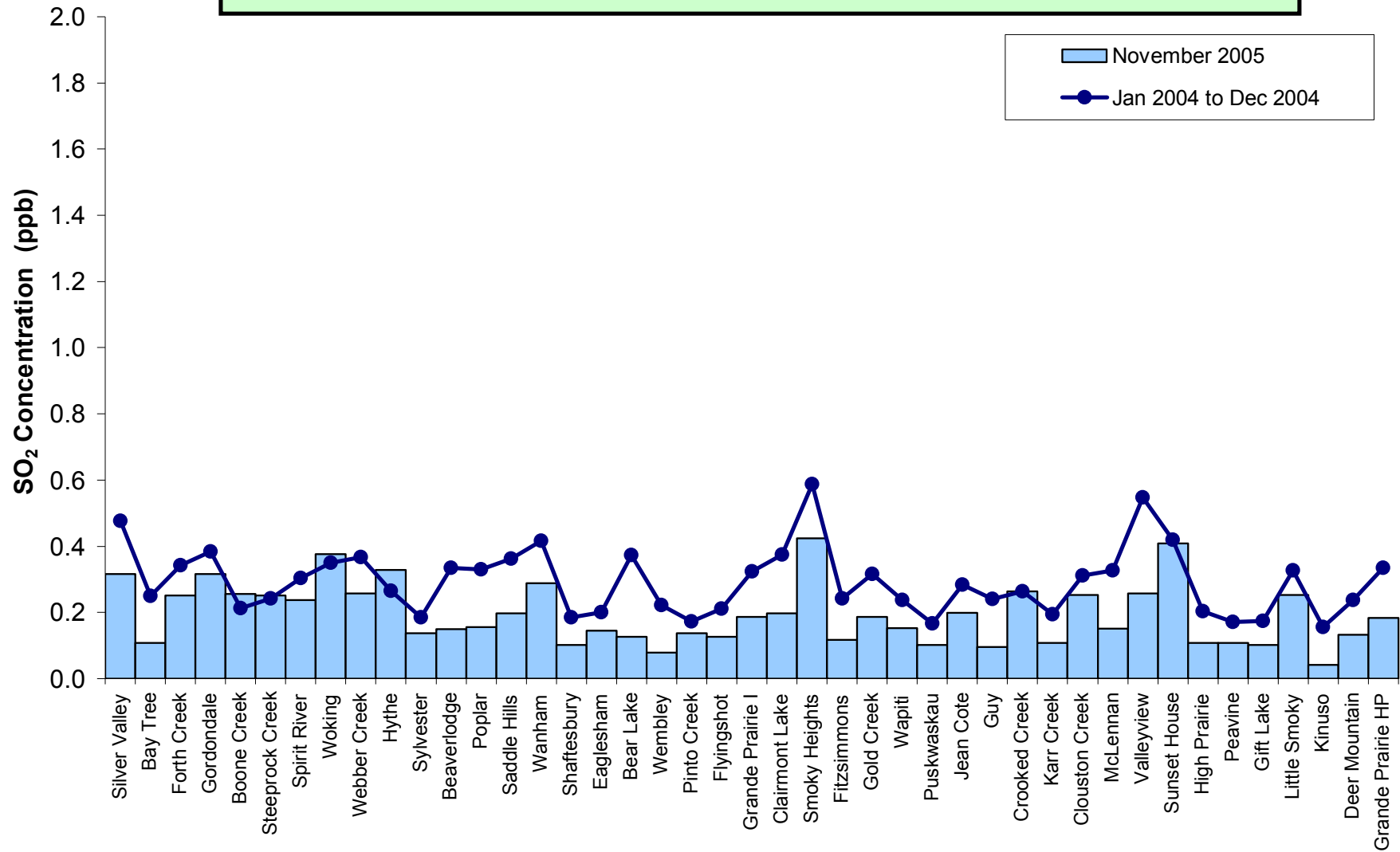


Figure 47. SO<sub>2</sub> Bubble Chart

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



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



PASZA Passive O<sub>3</sub> Stations - November 2005  
Average Concentrations in ppb

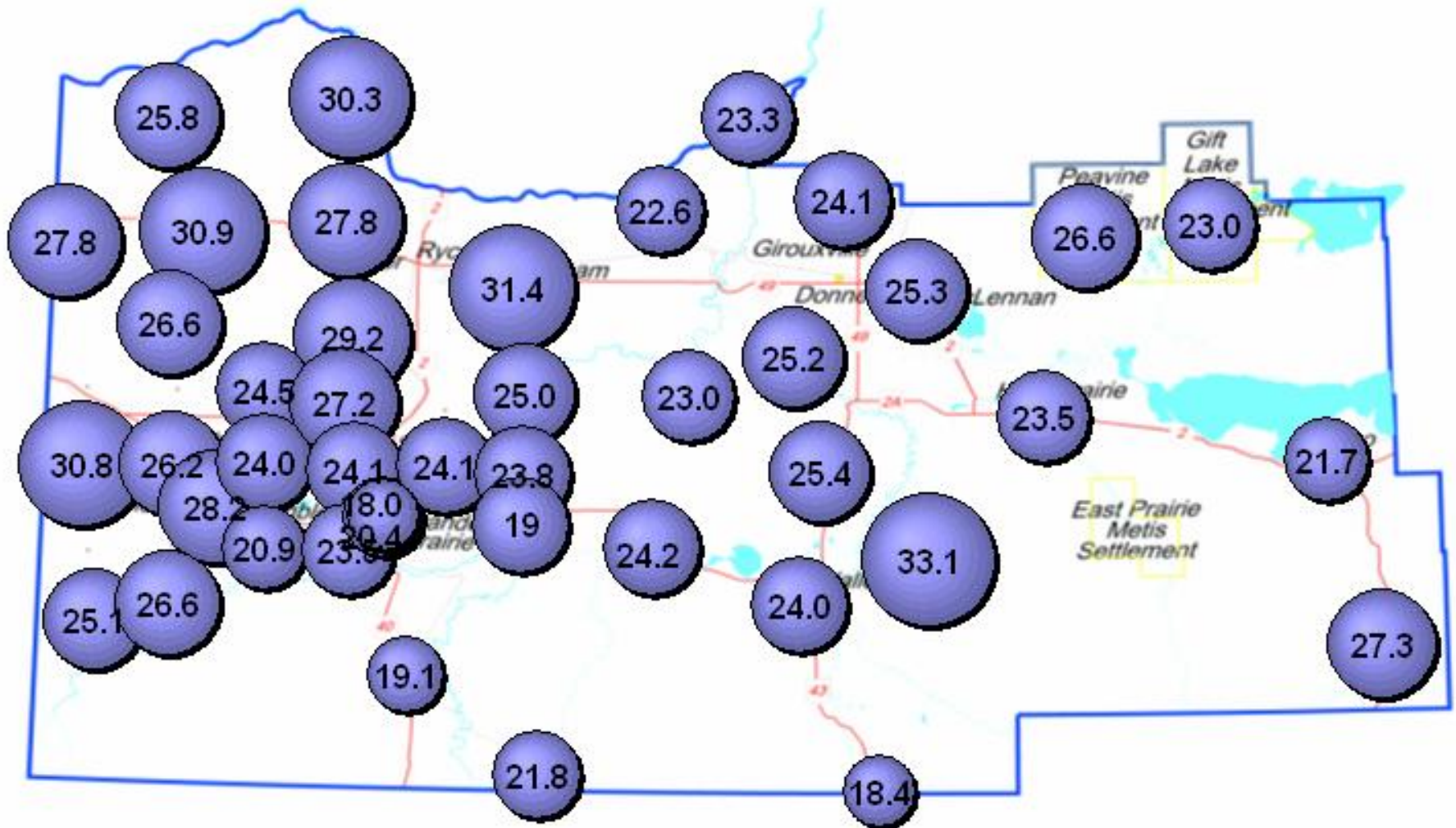


Figure 49. O<sub>3</sub> Bubble Chart

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

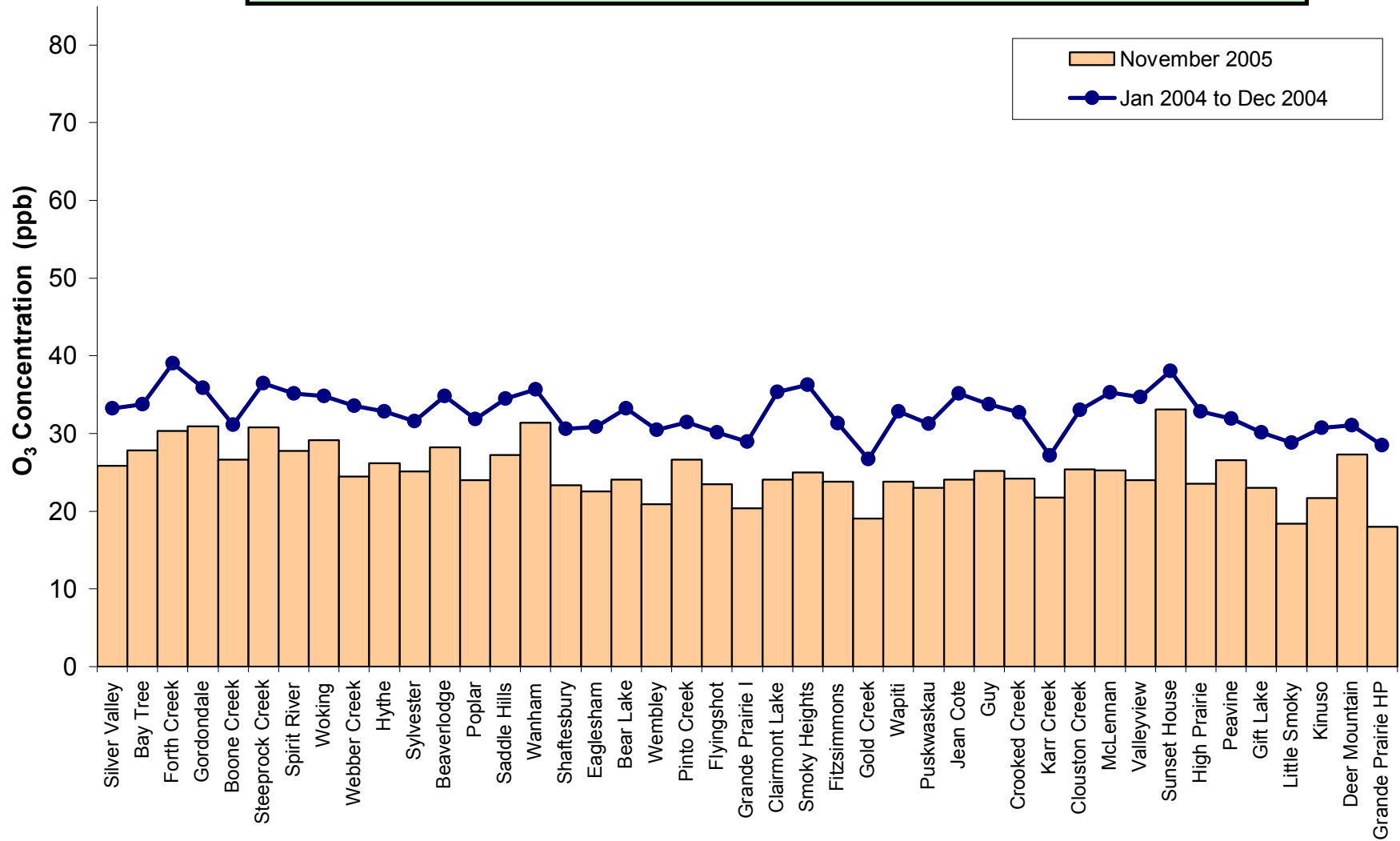


Figure 50. O<sub>3</sub> Summary Chart

PASZA Passive NO<sub>2</sub> Stations - November 2005  
Average Concentrations in ppb

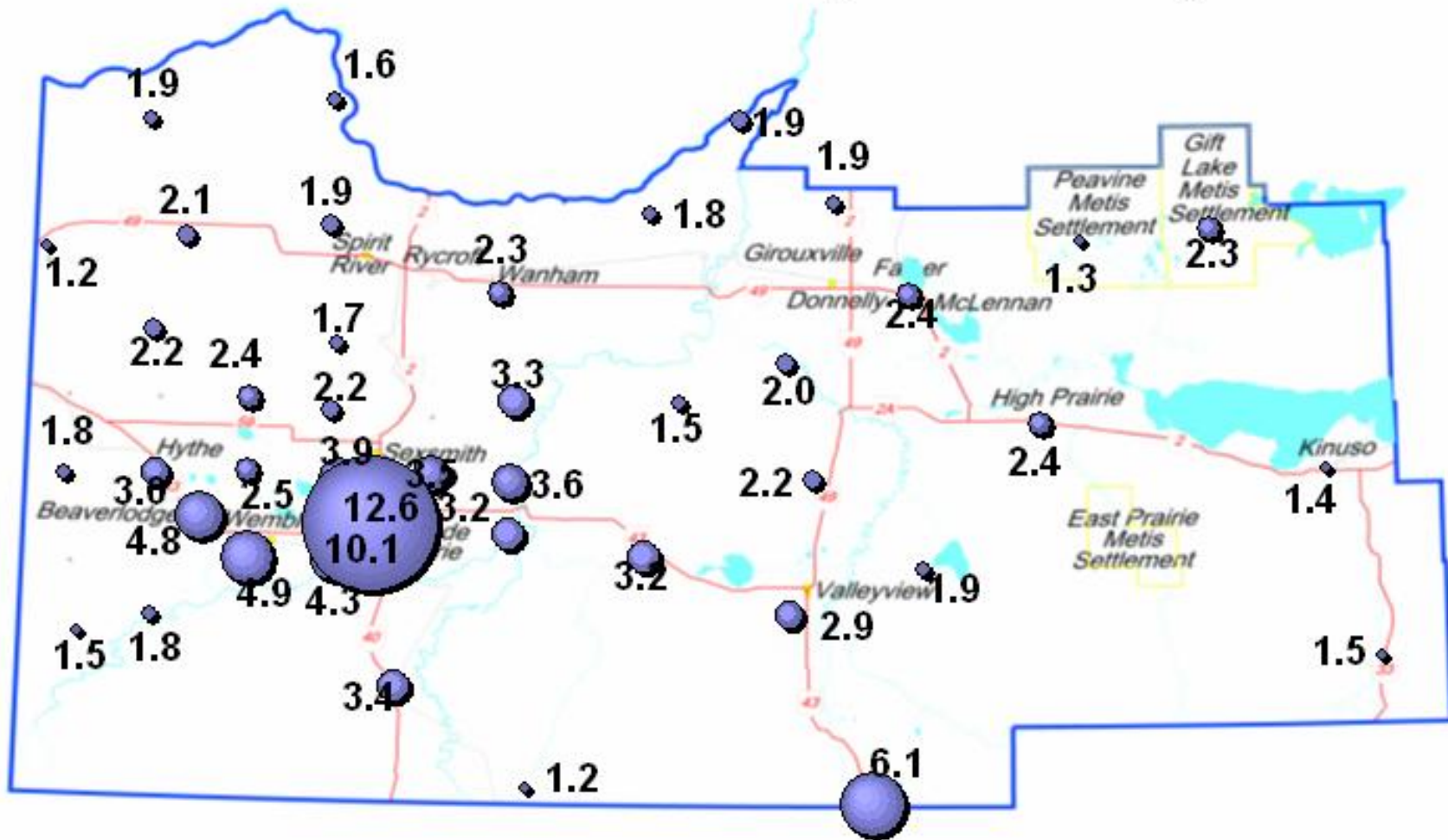
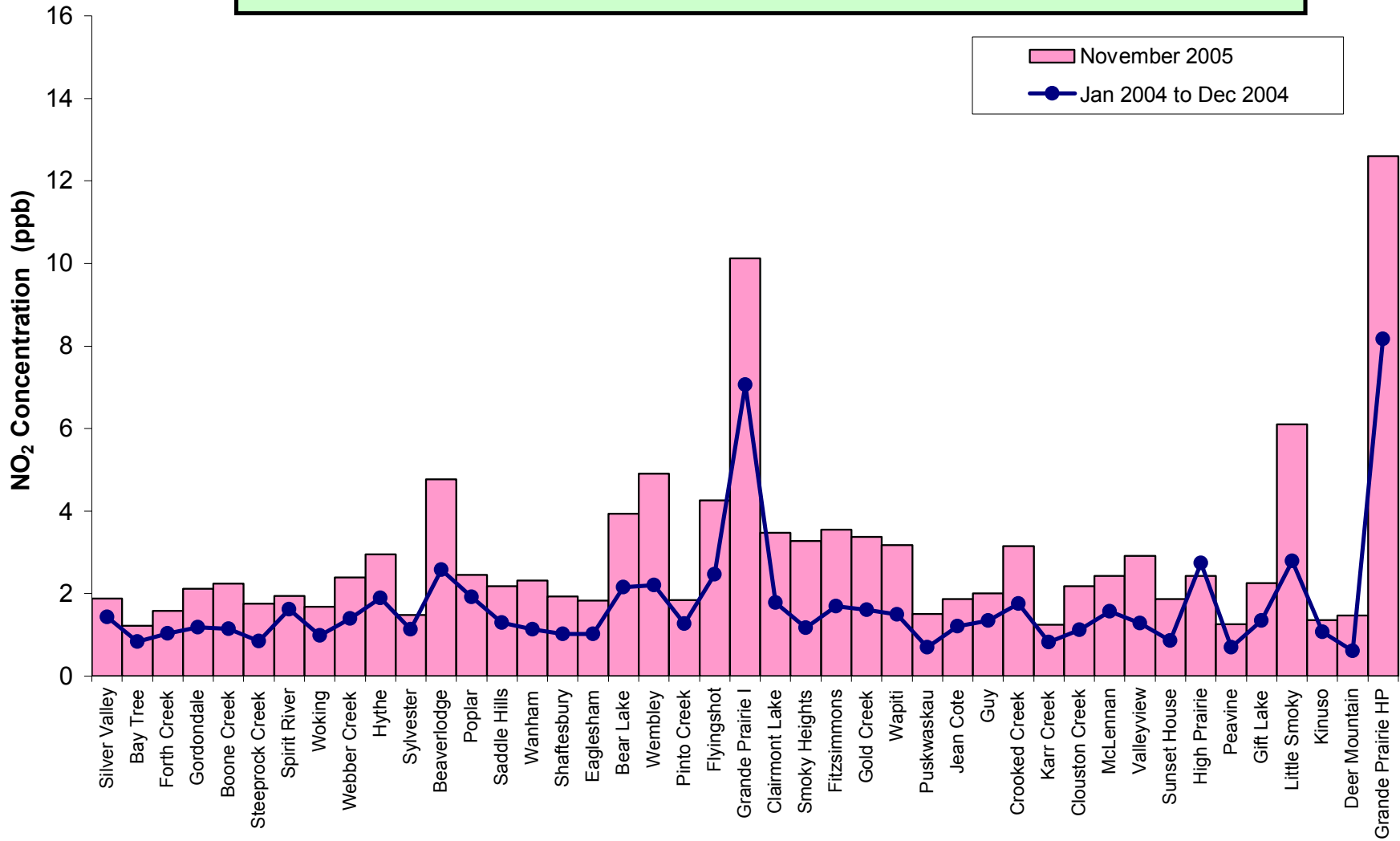


Figure 51. NO<sub>2</sub> Bubble Chart

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



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

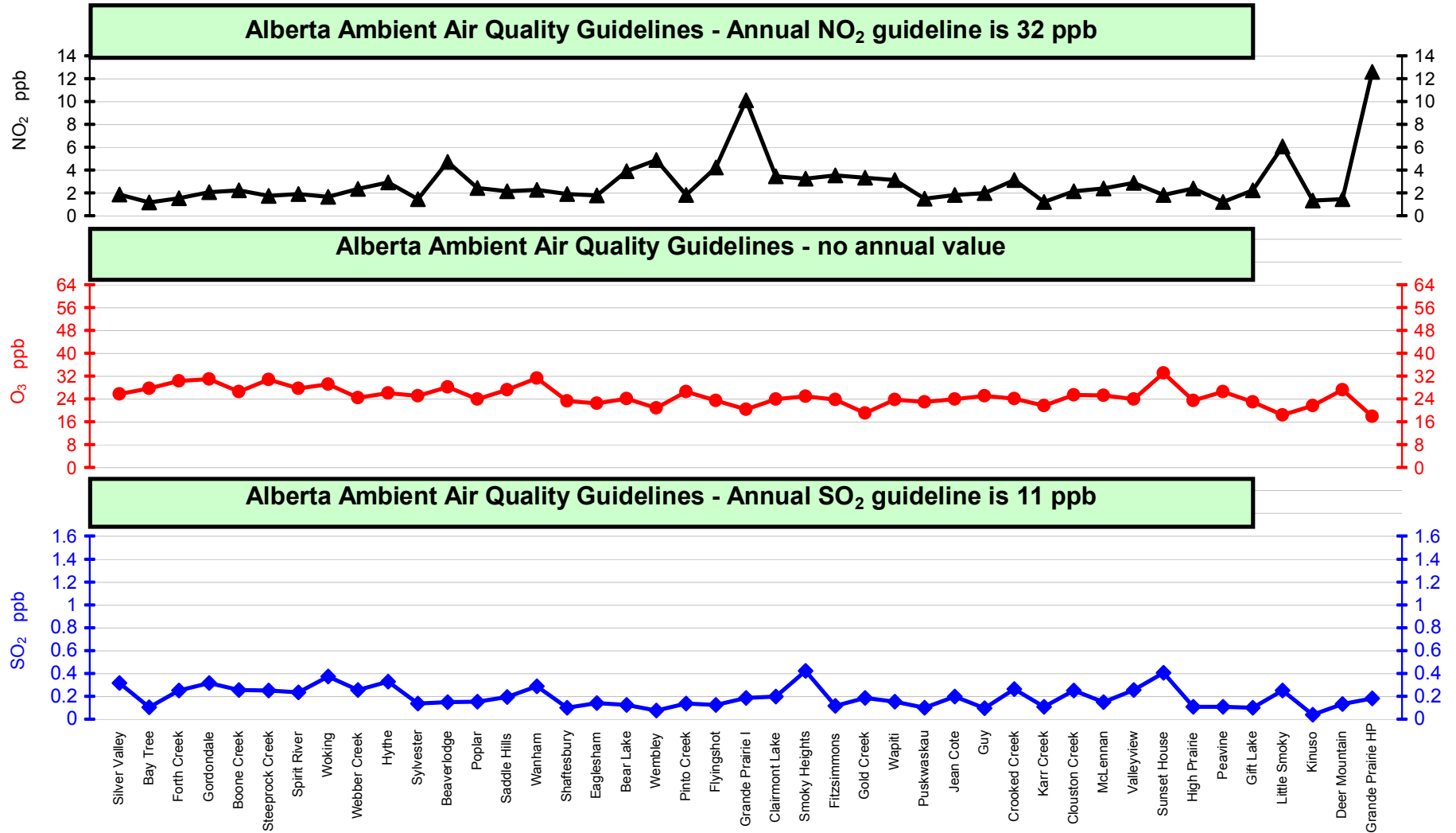


Figure 53. Overview Summary

## **November 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	November 7, 2005	Previous Calibration	October 18, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:00	End Time (MST)	16:00
Barometric Pressure	27.5 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	0.933443	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	1.003861	Calculated slope	0.995694
Calculated intercept	-0.800964	Calculated intercept	-0.043639
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
SO <sub>2</sub> zero pot	170		170	
SO <sub>2</sub> span pot	168		195	
UV Lamp voltage	936	V	942	V
Vacuum	17.8	" Hg	17.8	" Hg
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	1974.2	0.0	-0.1	N/A
2115	1974.2	405.4	406.8	0.9968
4075	3803.8	210.4	212.5	0.9903
10050	9381.1	85.3	85.3	1.0005
zero	1974.2	0.0	-0.3	As Found Zero
2115	1974.2	405.4	400.8	As Found Span
Average Correction Factor				0.9959

Calculated value of As Found Response: 401.889 ppm      Percent Change of As Found: 0.9%

	before calibration		after calibration	
Auto zero	-1.0	ppm	-0.3	ppm
Auto span	333.5	ppm	332.7	ppm

 Notes: Adjusted span.

 Calibration Performed By: Dawn Ewan

### Calibration Summary

Parameter SO2  
 Air Monitoring Network PASZA

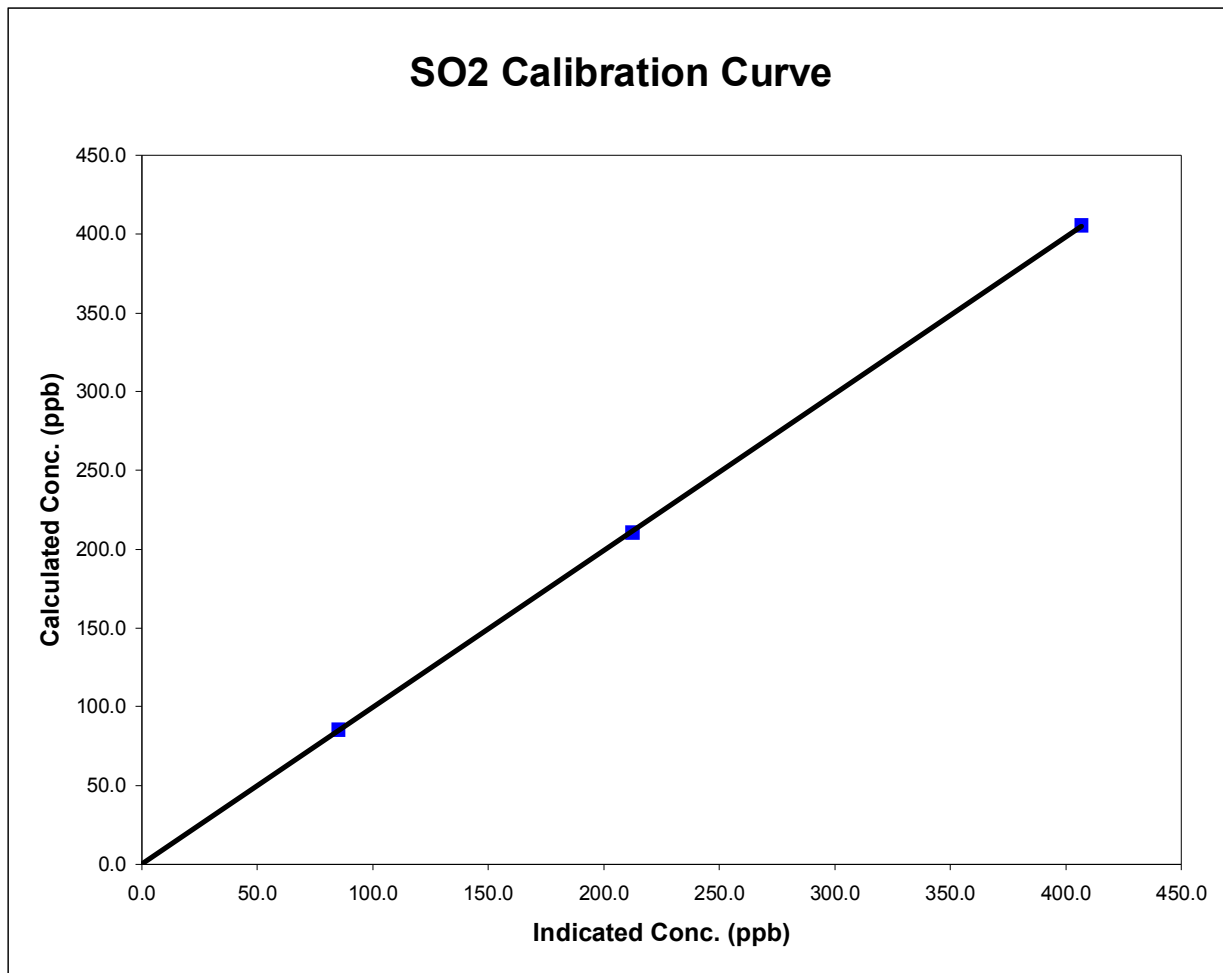


#### Station Information

Calibration Date	November 7, 2005	Previous Calibration	October 18, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:00	End Time (MST)	16:00
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-21120-195

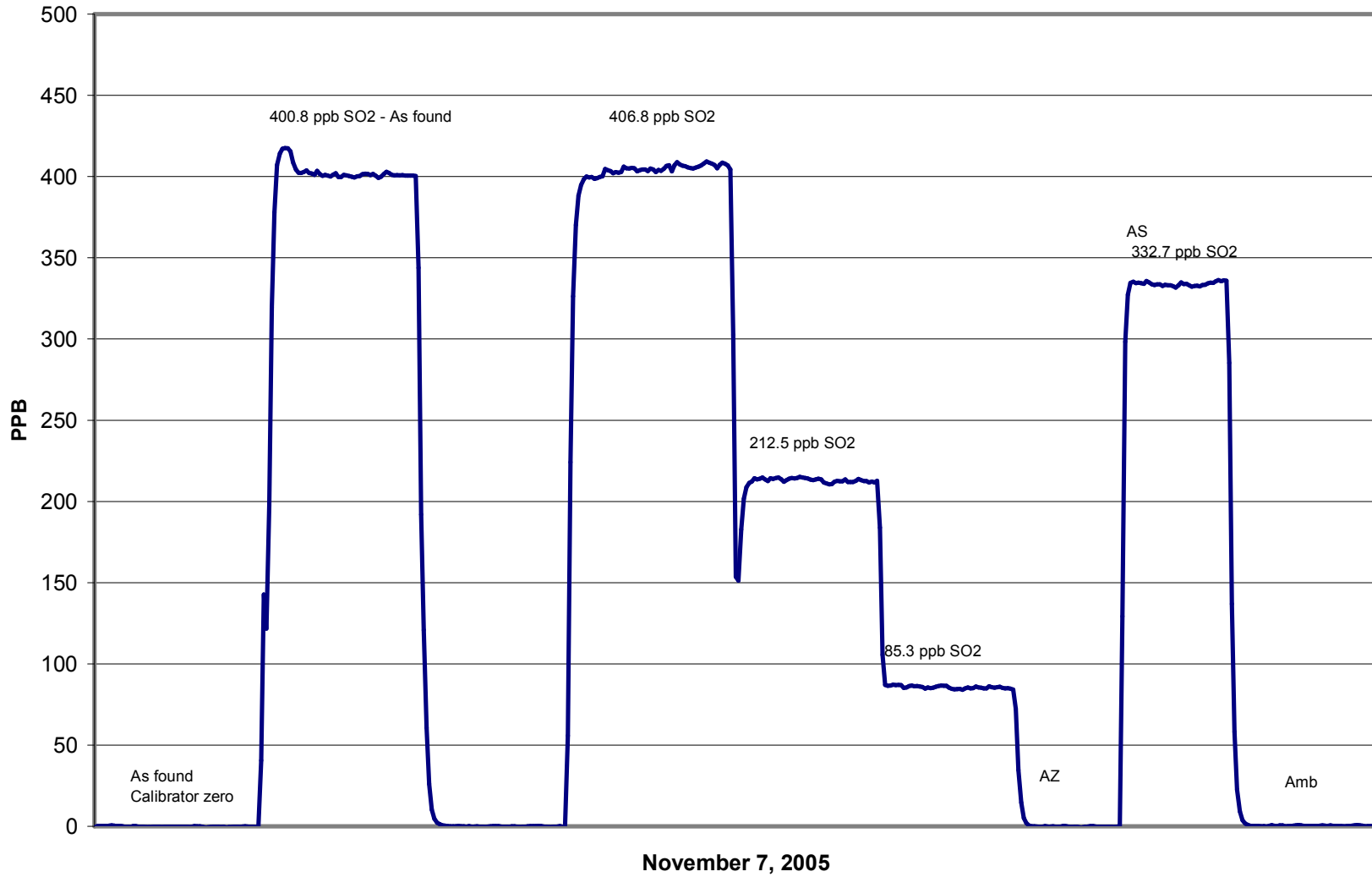
#### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
405.4	406.8	0.9968	Correlation Coefficient	0.999982
210.4	212.5	0.9903		
85.3	85.3	1.0005		
			Slope	0.995694
			Intercept	-0.043639





### SO2 Calibration



# Calibration Report

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



## Station Information

Calibration Date	<u>November 4, 2005</u>	Previous Calibration	<u>October 11, 2005</u>
Station Number	<u>1</u>	Station Location	<u>Muskoseepi Park</u>

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

Start Time (MST)	<u>10:30</u>	End Time (MST)	<u>18:40</u>
Barometric Pressure	<u>0.912</u> Atm	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>EnviroNics 6100</u>	Serial Number	<u>3016</u>
NO Cal Gas Conc	<u>50.3</u> ppm	Cal Gas Expiry Date	<u>22-Nov-06</u>
NOx Cal Gas Conc	<u>50.5</u> ppm	Cal Gas Serial #	<u>BAL786</u>

## DACS Information

DACS make FOCUS AP1000    DACS serial No. 45269

Parameter		NO2	NOx	NO
Before	Data Slope	0.992775	0.991938	0.976628
	Data Offset	1.903114	1.040200	1.357679
After	Data Slope	0.997408	1.000722	0.992884
	Data Offset	1.557614	-0.019864	0.027698
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

## Analyzer Information

Analyzer make/model Teco 42C    Analyzer serial # 508011073

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	8.6	ppb	9.0	mV
NOx background	8.4	ppb	9.2	mV
NO coefficient	0.924		0.842	
NOx coefficient	0.911		0.974	
Chamber Temp	49.6	Deg C	49.7	Deg C
Cooler Temp	-2.5	Deg C	-2.5	Deg C
Converter Temp	318.0	Deg C	318.0	Deg C
Vacuum	191.0	mm Hg	187.8	mm Hg

Notes: Adjusted zero and span.  
Tried to re-install old oven temp control chips; they were faulty.  
Re-installed new chips. Oven temp control disabled.

# Calibration Report

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



## Station Information

Calibration Date: November 4, 2005 Station Location: Muskoseepi Park

## Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	0.0	0.4	-0.3	N/A	N/A
1	4993	39.97	401.1	399.5	1.6	401.7	403.5	-1.8	0.9984	0.9900
2	4993	19.98	201.3	200.5	0.8	198.2	198.6	-0.3	1.0153	1.0094
3	4993	9.99	100.8	100.4	0.4	102.9	102.8	-0.1	0.9803	0.9770
AFZ	4993	0.00	0.0	0.0	0.0	-0.8	-1.1	0.5	0.0000	0.0000
AFS	4993	39.97	401.1	399.5	1.6	403.3	400.4	2.9	0.9943	0.9976
Average Correction Factor									0.9980	0.9921

As Found Concentrations: NO<sub>x</sub>= 405.2 NO= 402.9 As Found Percent Change NO<sub>x</sub>= 1.0% NO= 0.9%

## GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

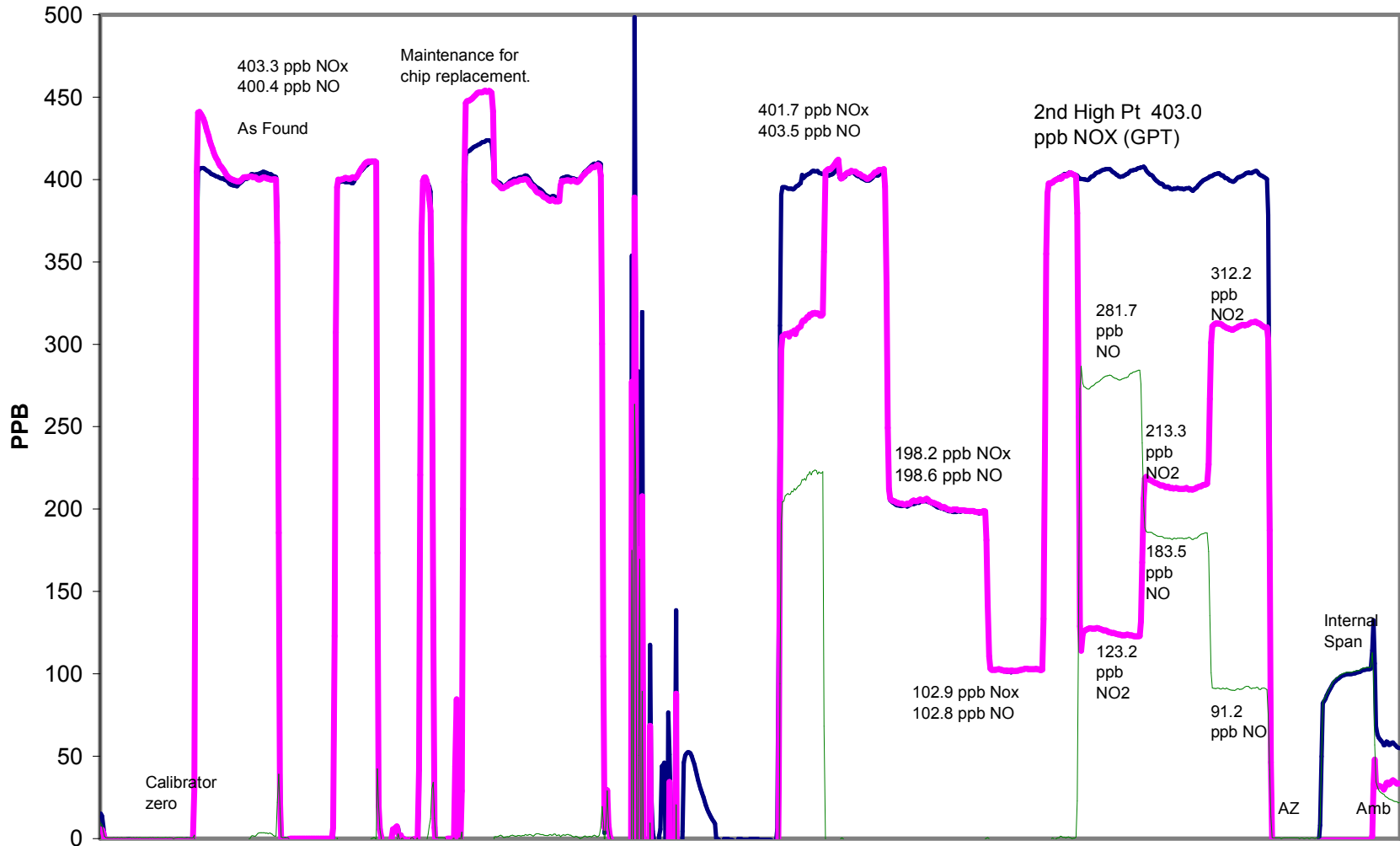
O <sub>3</sub> Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	401.7	399.5	2.2	403.0	402.3	0.7	0.9967	0.9930	N/A	N/A
300	401.7	122.4	279.3	404.6	123.2	281.7	0.9929	0.9931	0.9916	100.9%
200	401.7	211.8	189.9	396.6	213.3	183.5	1.0129	0.9930	1.0350	96.6%
100	401.7	310.0	91.7	403.2	312.2	91.2	0.9964	0.9930	1.0052	99.5%
Average Correction Factor							1.0007	0.9930	1.0106	99.0%

## AIC Data

	Previous calibration				Current calibration			
Parameter	NO <sub>x</sub>	NO <sub>2</sub>	NO		NO <sub>x</sub>	NO <sub>2</sub>	NO	
Auto zero	-1.3	1.1	-3.1	ppb	-0.6	1.6	-1.8	ppb
Auto span	294.6	292.3	3.6	ppb	102.0	104.4	-1.0	ppb

Calibration Performed By: Dawn Ewan

### NOx Calibration



November 4, 2005

## Calibration Summary

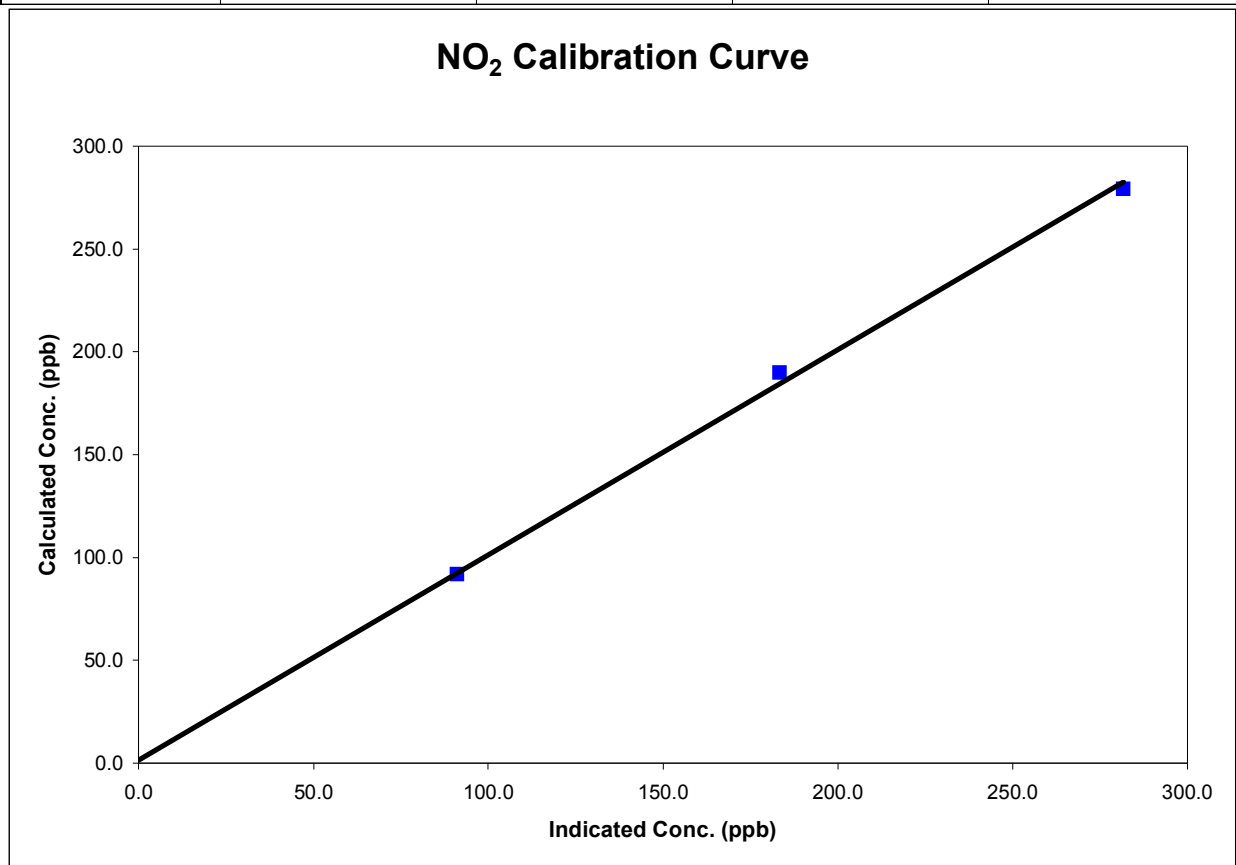
Parameter NO<sub>2</sub>Air Monitoring Network PASZA

### Station Information

Calibration Date	November 4, 2005	Previous Calibration	October 11, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:30	End Time (MST)	18:40
Analyzer make	Teco 42C	Analyzer serial #	508011073

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000	Correlation Coefficient	0.999061
279.3	281.7	0.9916		
189.9	183.5	1.0350		
91.7	91.2	1.0052		
			Slope	0.997408
			Intercept	1.557614



## Calibration Summary

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

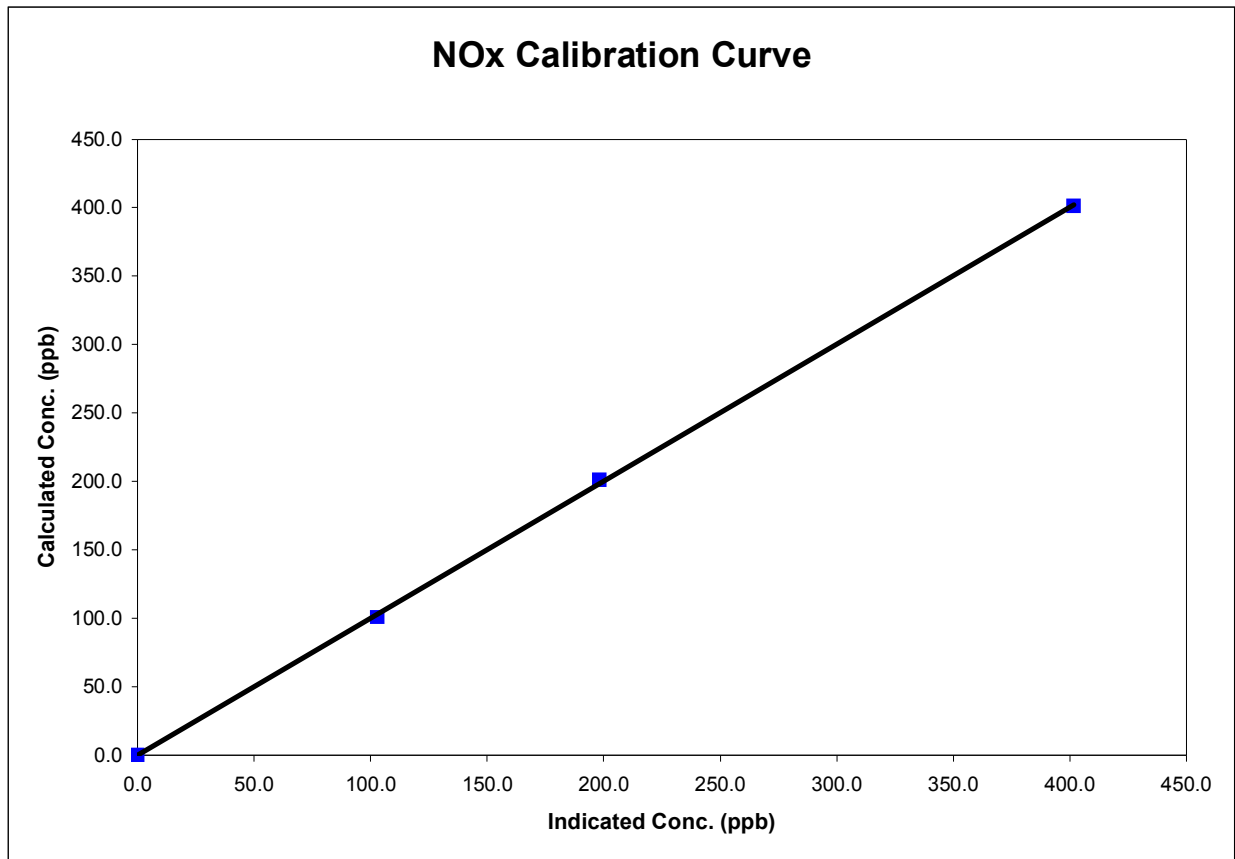


### Station Information

Calibration Date	November 4, 2005	Previous Calibration	October 11, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:30	End Time (MST)	18:40
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	0.999844
401.1	401.7	0.9984		
201.3	198.2	1.0153		
100.8	102.9	0.9803		
			Slope	1.000722
			Intercept	-0.019864



## Calibration Summary

Parameter NO  
 Air Monitoring Network PASZA

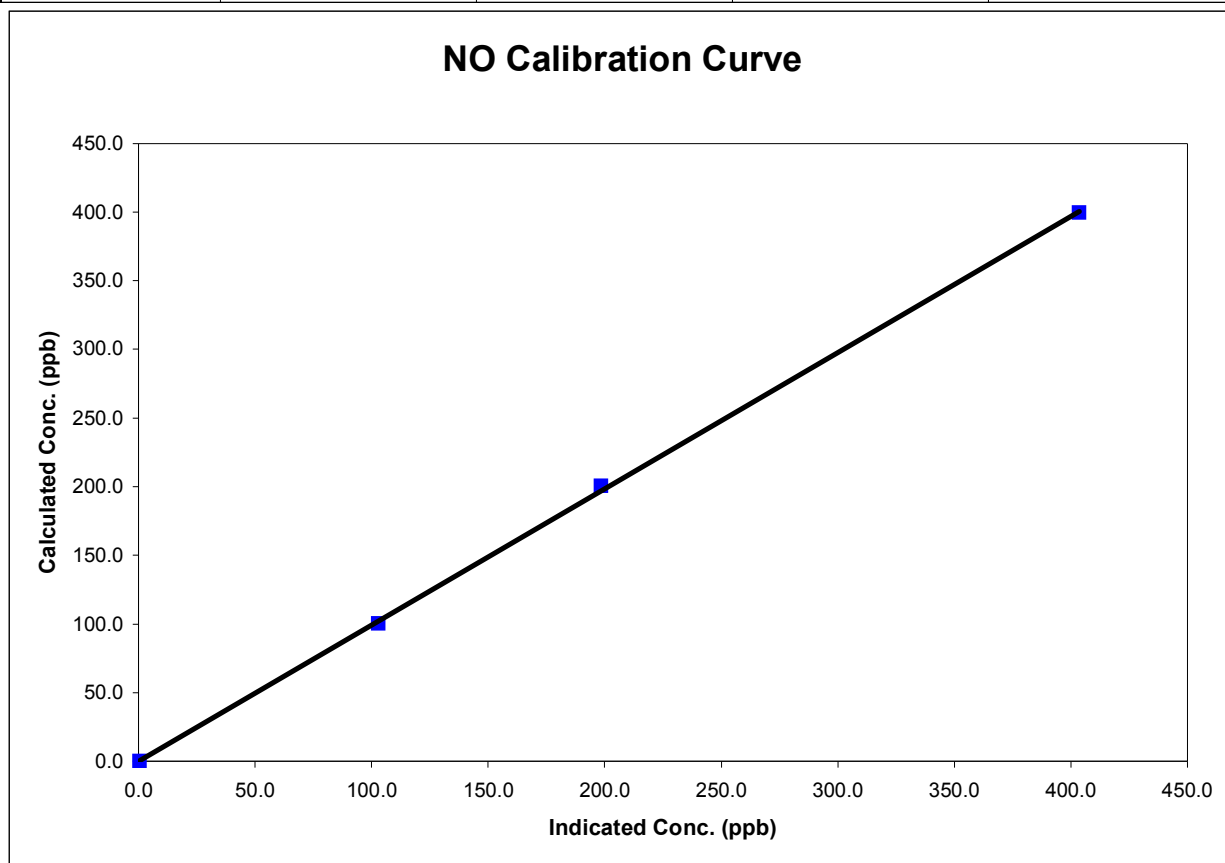


### Station Information

Calibration Date	November 4, 2005	Previous Calibration	October 11, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:30	End Time (MST)	18:40
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	0.4	N/A	Correlation Coefficient	0.999829
399.5	403.5	0.9900		
200.5	198.6	1.0094		
100.4	102.8	0.9770		
			Slope	0.992884
			Intercept	0.027698







## Calibration Summary

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

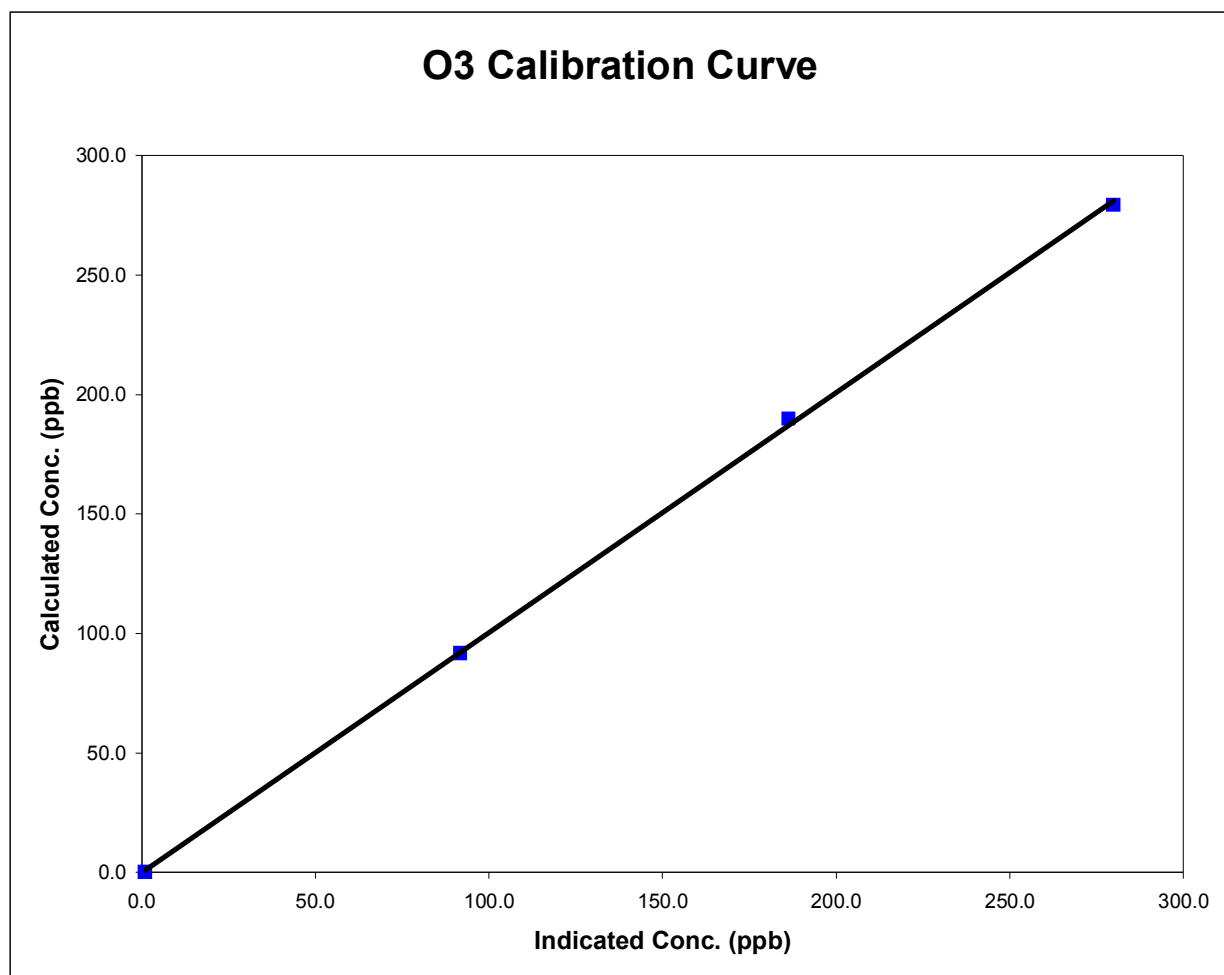


### Station Information

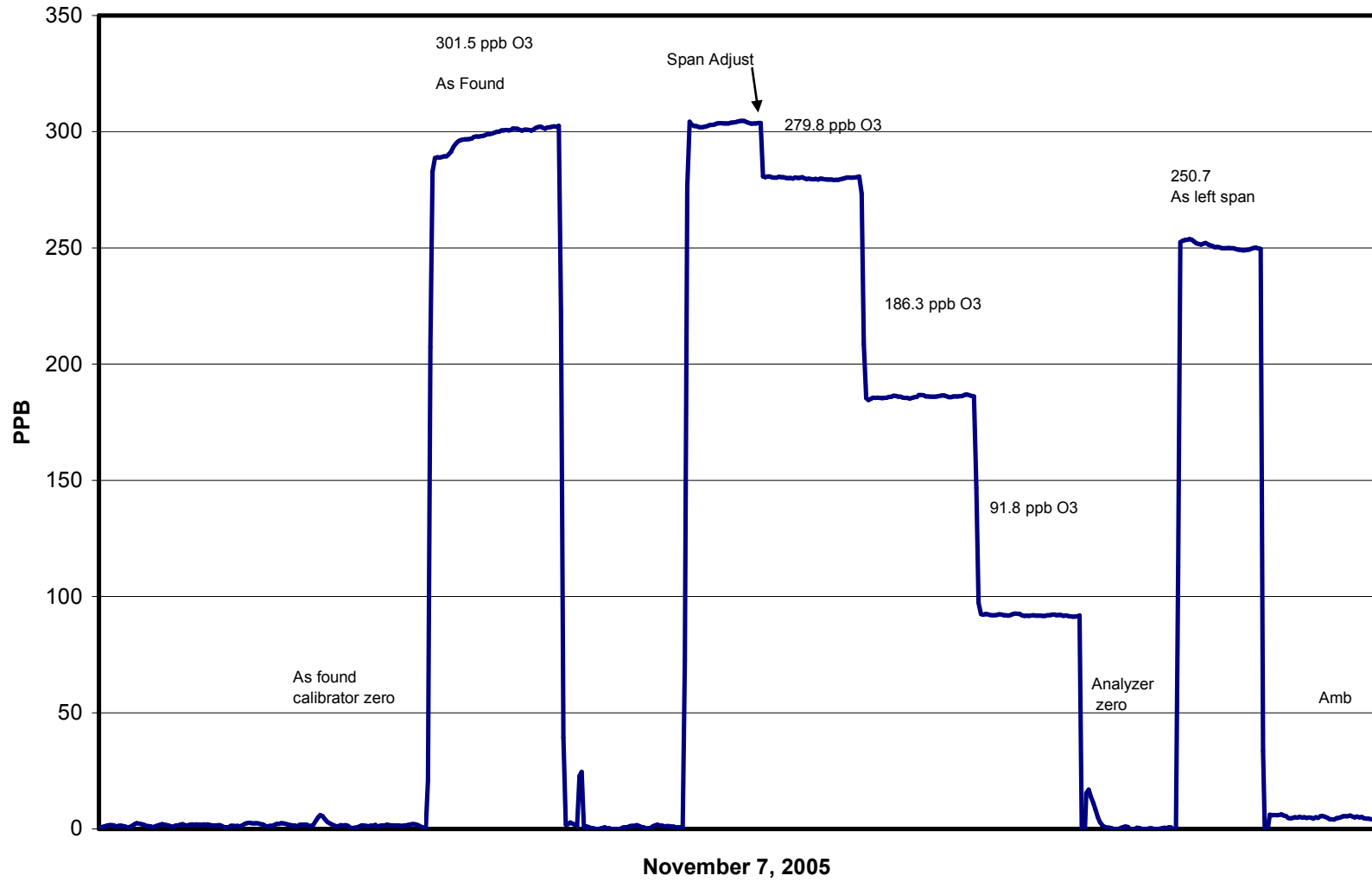
Calibration Date	November 7, 2005	Previous Calibration	October 5, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:46	End Time (MST)	10:40
Analyzer make/model	API Model 400	Analyzer serial #	383

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.0	NA		
279.3	279.8	0.9982	Correlation Coefficient	0.999725
189.9	186.3	1.0195		
91.7	91.8	0.9989		
			Slope	1.005681
			Intercept	-0.296406



### O3 Calibration



# Calibration Report



Parameter CO  
 Air Monitoring Network PASZA

### Station Information

Calibration Date	November 7, 2005	Previous Calibration	October 3, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:40	End Time (MST)	13:55
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	0.995875	Calculated slope	1.003079
Calculated intercept	0.018910	Calculated intercept	-0.047887
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	1.018		1.018	
CO zero setting	2.394		3.058	
Sample pressure	684.9	mm Hg	682	mm Hg
Sample Flow	1.076	LPM	1.074	LPM

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	0.09	N/A
4993	39.97	23.82	23.81	1.0004
4993	19.96	11.95	11.95	0.9993
4993	9.97	5.98	5.95	1.0045
4993	0.00	0.00	0.39	As Found Zero
4993	39.97	23.82	25.02	As Found Span
Average Correction Factor				1.0014

Calculated value of As Found Response: 24.550 ppm      Percent Change of As Found: -3.0%

	before calibration		after calibration	
Auto zero	0.11	ppm	-0.04	ppm
Auto span	19.01	ppm	19.97	ppm

Notes: Changed CO span bottle.  
Adjusted zero.

Calibration Performed By: Dawn Ewan

## Calibration Summary

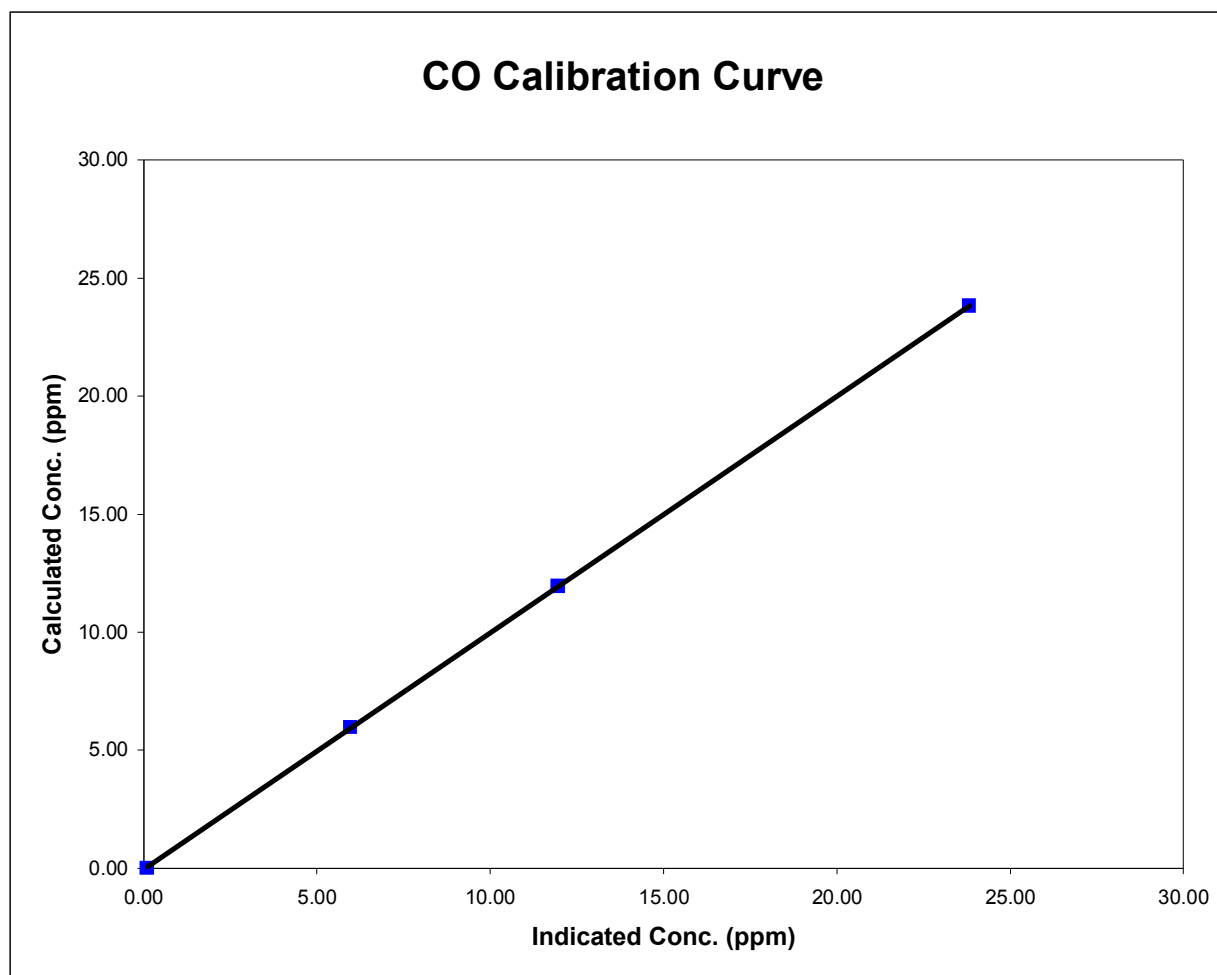
Parameter COAir Monitoring Network PASZA

### Station Information

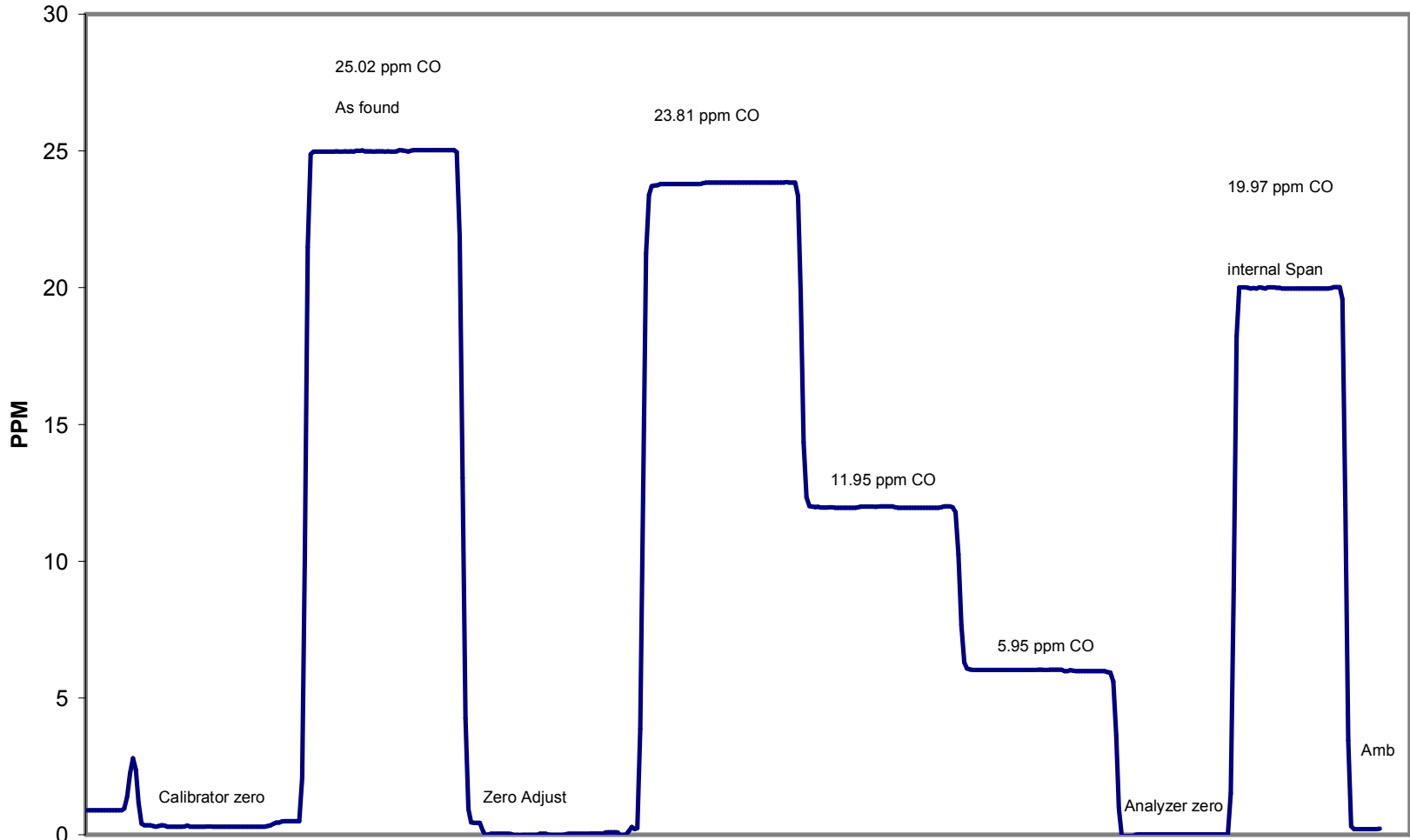
Calibration Date	November 7, 2005	Previous Calibration	October 3, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:40	End Time (MST)	13:55
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.091	N/A		
23.825	23.814	1.0004	Correlation Coefficient	0.999983
11.945	11.954	0.9993		
5.978	5.952	1.0045	Slope	1.003079
			Intercept	-0.047887



### CO Calibration



November 7, 2005

# Calibration Report



Parameter THC

Air Monitoring Network PASZA

### Station Information

Calibration Date	November 7, 2005	Previous Calibration	October 4, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	1:55	End Time (MST)	16:26
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 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	1.002571	Calculated slope	1.045428
Calculated intercept	0.001836	Calculated intercept	-0.281293
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.1	psi	6.1	psi
THC span counts	7022	capture	7022	capture
THC zero counts	1334	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	0.27	N/A
4993	64.97	19.55	18.91	1.0338
4993	34.96	10.58	10.52	1.0061
4993	9.97	3.03	3.10	0.9778
4993	0.00	0.00	-0.02	As Found Zero
4993	64.97	19.55	19.49	As Found Span
Average Correction Factor				1.0059

Calculated value of As Found Response: 19.568 ppm      Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	-0.08	ppm	-0.34	ppm
Auto span	21.19	ppm	21.91	ppm

Notes: No adjustments made.

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Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter THC  
 Air Monitoring Network PASZA

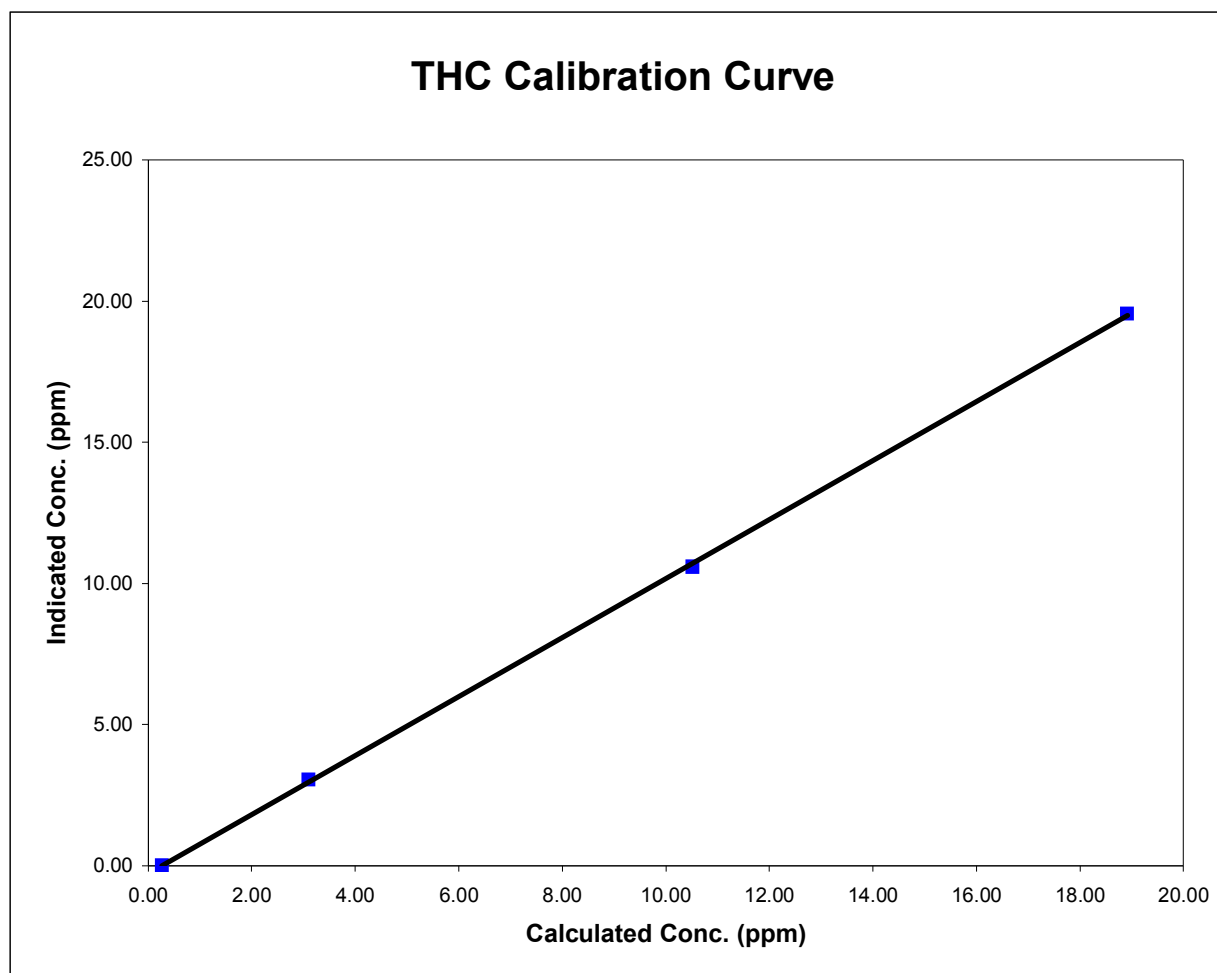


### Station Information

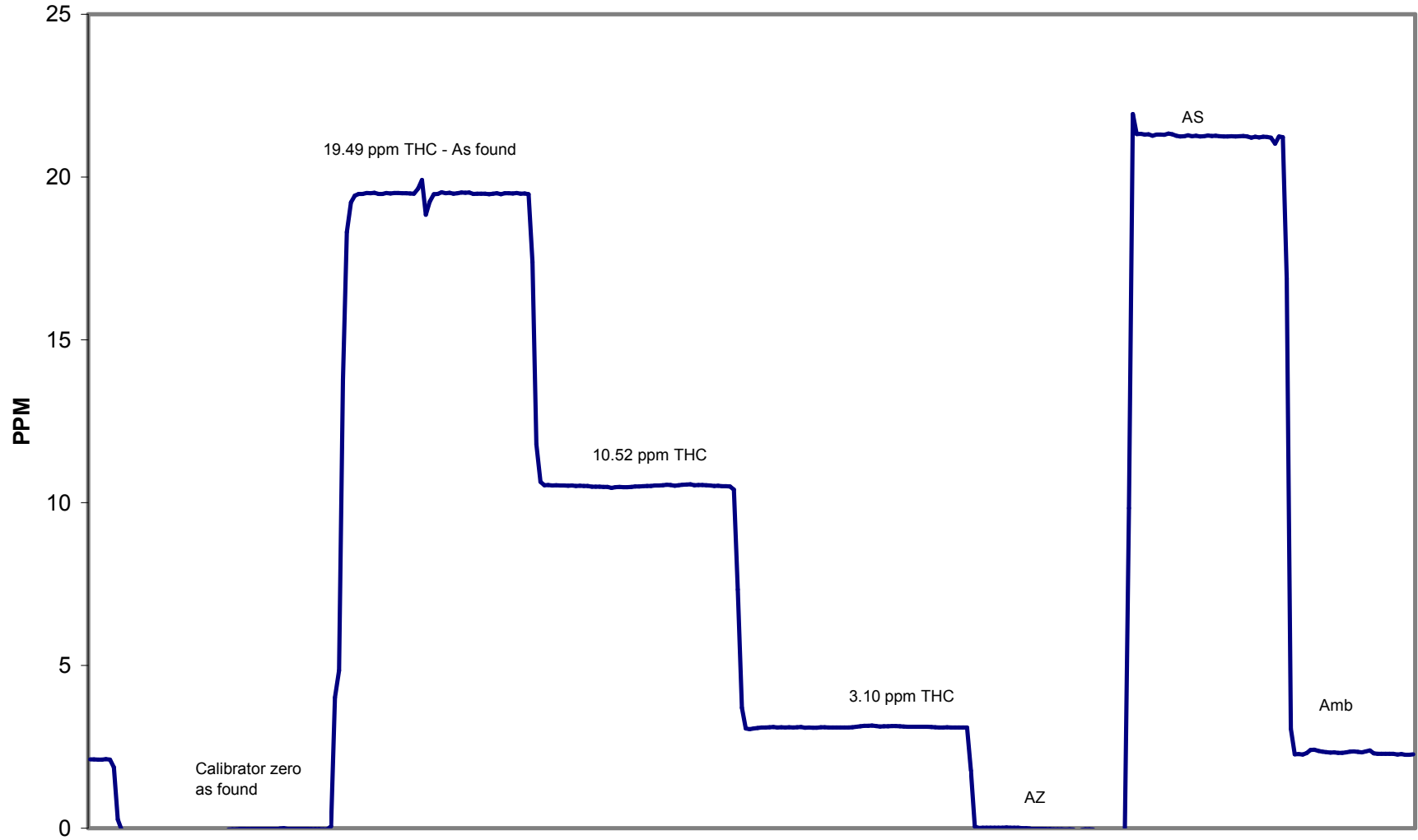
Calibration Date	November 7, 2005	Previous Calibration	October 4, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	1:55	End Time (MST)	16:26
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.270	N/A		
19.553	18.914	1.0338	Correlation Coefficient	0.999884
10.584	10.520	1.0061		
3.034	3.103	0.9778	Slope	1.045428
			Intercept	-0.281293



### THC Calibration



November 7, 2005



# Calibration Report

Parameter TRSAir Monitoring Network PASZA

## Station Information

Calibration Date	<u>November 7, 2005</u>	Previous Calibration	<u>October 18, 2005</u>
Station Number	<u>1</u>	Station Location	<u>Muskoseepi Park</u>
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:

Start Time (MST)	<u>12:02</u>	End Time (MST)	<u>16:00</u>
Barometric Pressure	<u>27.5</u> inches Hg	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>VICI Metronics</u>	Serial Number	<u>111-1695</u>
Perm-tube Conc	<u>181</u> ng/min	Perm-tube Expiry Date	<u>12/10/2005</u>
Correction factor	<u>0.933443</u>	Perm-tube Cert #	<u>04-19367</u>
DACS make	<u>Focus AP1000</u>	DACS serial No.	<u>45266</u>
DACS voltage range	<u>0 - 10 volt</u>	DACS channel #	<u>9</u>
	<u>Before</u>		<u>After</u>
Calculated slope	<u>0.983188</u>	Calculated slope	<u>0.967687</u>
Calculated intercept	<u>0.351285</u>	Calculated intercept	<u>0.281722</u>

Analyzer make TEI Model 43C Analyzer serial # 3199000000491

	before		after	
Concentration range	<u>0 - 100</u>	<u>ppb</u>	<u>0 - 100</u>	<u>ppb</u>
Background	<u>21.3</u>	<u>ppb</u>	<u>22</u>	<u>ppb</u>
coefficient	<u>1.258</u>		<u>1.303</u>	
Lamp Voltage	<u>883</u>	<u>volts</u>	<u>879</u>	<u>volts</u>
Chamber Temp	<u>44.7</u>	<u>Deg C</u>	<u>44.7</u>	<u>Deg C</u>
Perm Gas Temp	<u>45</u>	<u>Deg C</u>	<u>45</u>	<u>Deg C</u>
Pressure	<u>629.8</u>	<u>mm Hg</u>	<u>627.1</u>	<u>mm Hg</u>
Sample Flow	<u>689</u>	<u>ccm</u>	<u>689</u>	<u>ccm</u>
Lamp Intesity	<u>39,400</u>	<u>mv</u>	<u>39,500</u>	<u>mv</u>

## 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	1974.2	0.0	0.1	N/A
2115	1974.2	65.9	68.0	0.9692
4075	3803.8	34.2	34.8	0.9828
10050	9381.1	13.9	13.8	1.0087
zero	1974.2	0.0	0.1	As Found Zero
2115	1974.2	65.9	63.5	As Found Span
Average Correction Factor				0.9869

Calculated value of As Found Response: 62.64 ppm Percent Change of As Found: 5.0%

	before calibration		after calibration	
Auto zero	<u>0.6</u>	<u>ppm</u>	<u>1.0</u>	<u>ppm</u>
Auto span	<u>70.5</u>	<u>ppm</u>	<u>71.7</u>	<u>ppm</u>

Notes: Adjusted span and zero

Calibration Performed By: Dawn Ewan

## Calibration Summary

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



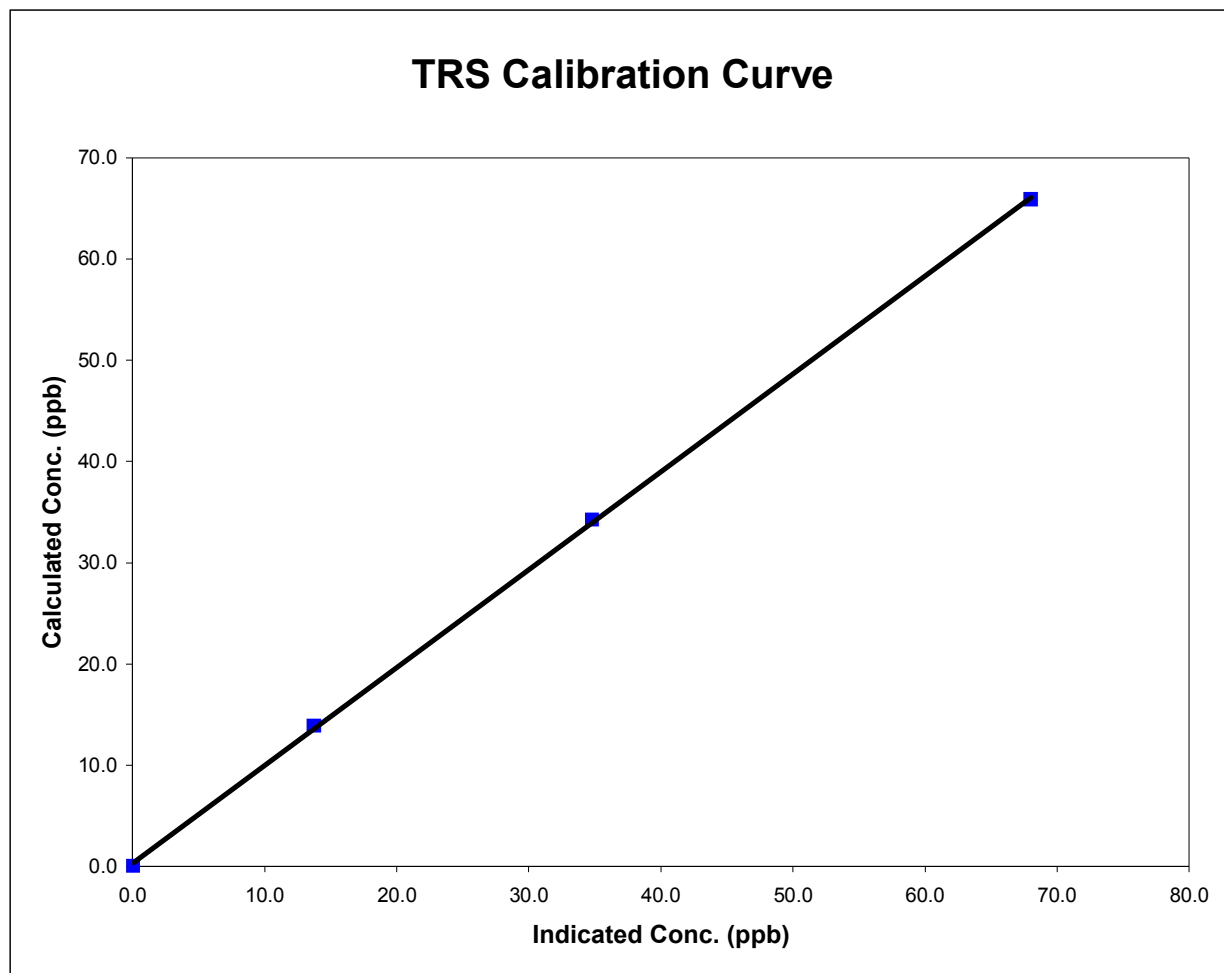
### Station Information

Calibration Date	November 7, 2005	Previous Calibration	October 18, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:02	End Time (MST)	16:00
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

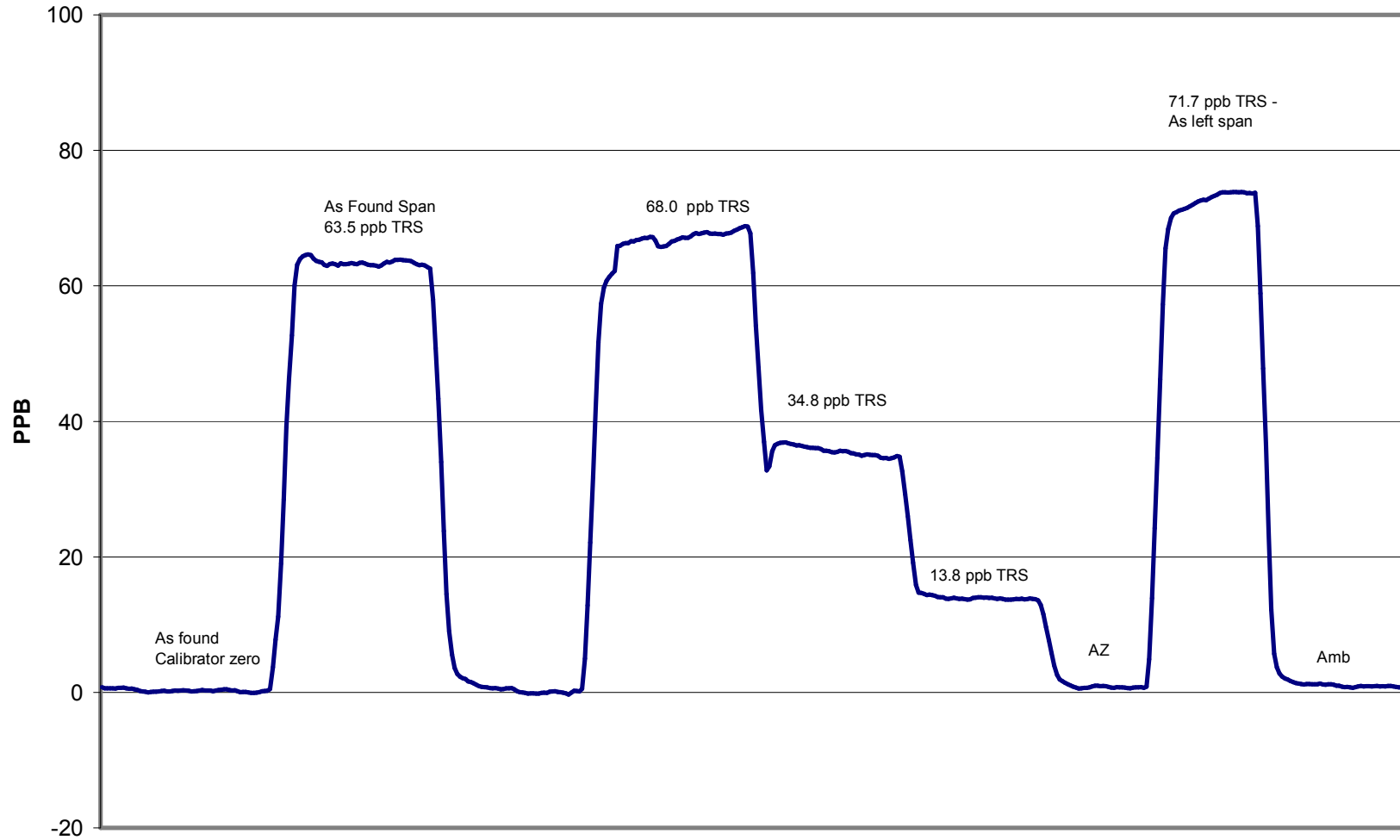
### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
65.9	68.0	0.9692	Correlation Coefficient	0.999882
34.2	34.8	0.9828		
13.9	13.8	1.0087	Slope	0.967687
			Intercept	0.281722

### TRS Calibration Curve



### TRS Calibration



November 7, 2005

# Calibration Report

Parameter PM2.5

Air Monitoring Network

PASZA

## Station Information

Calibration Date	November 7, 2005	Previous Calibration	October 18, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)		End Time (MST)	16:00
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15

## Analyzer Information

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

	before		after	
Main Flow Set Point	2.990	SLPM	2.990	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	46	%	25	%
Ko Factor	12122		12122	
Temperature	-2.9	Deg C	-2.9	Deg C
Pressure	0.922	ATM	0.922	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		0.00
flow recovery - main	45 - 60 Seconds	na	45 - 60 Seconds	30
flow recovery - aux	46 - 60 Seconds	na	46 - 60 Seconds	48
Temperature	measured	-2.2	+/- 1.0 Deg C	-1.5
Pressure	measured	0.918	+/- 1.5% $\Delta$ ATM	0.922
Total Flow	16.67 SLPM	16.17		
Main Flow	13.67 SLPM	14.21	+/- 1.0 SLPM	13.67
Auxillary Flow	3.0 SLPM	3.118	+/- 0.2 SLPM	2.990
Leak Check - main	0.0	0.00	<0.15 SLPM	0.01
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.00
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: New filter installed.Calibration Performed By: Dawn Ewan

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

Calibration Date	November 14, 2005	Previous Calibration	October 17, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:23	End Time (MST)	15:25
Barometric Pressure	28.2 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	0.958597	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	<b>Before</b>		<b>After</b>
Calculated slope	0.950279	Calculated slope	0.989636
Calculated intercept	-4.935948	Calculated intercept	-5.101314
Analyzer make	API 100	Analyzer serial #	32

	before		after	
Concentration range	500	ppb	500	ppb
Sample Flow	369	ccm	364	ccm
UV Lamp Voltage	3318	mv	3340	mv
Lamp Ratio	94	%	95	%
Rx Cell Temp	49	Deg C	50	Deg C
PMT Temp	10	Deg C	10	Deg C
IZS Temp	40	Deg C	40	Deg C
Slope	9.26		0.955	
Intercept	160.1		185.3	

**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	2061.0	0.0	-1.2	N/A
2150	2061.0	388.4	394.0	0.9858
5090	4879.3	164.0	176.3	0.9306
9170	8790.3	91.1	101.8	0.8946
zero	2061.0		0.9	As Found Zero
2150	2061.0	388.4	406.1	As Found Span
Average Correction Factor				0.9370

Calculated value of As Found Response: 380.132 ppm      Percent Change of As Found: 2.1%

	before calibration		after calibration	
Auto zero	-5.1	ppm	-7.4	ppm
Auto span	311.3	ppm	339.0	ppm

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

Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter SO2  
 Air Monitoring Network PASZA

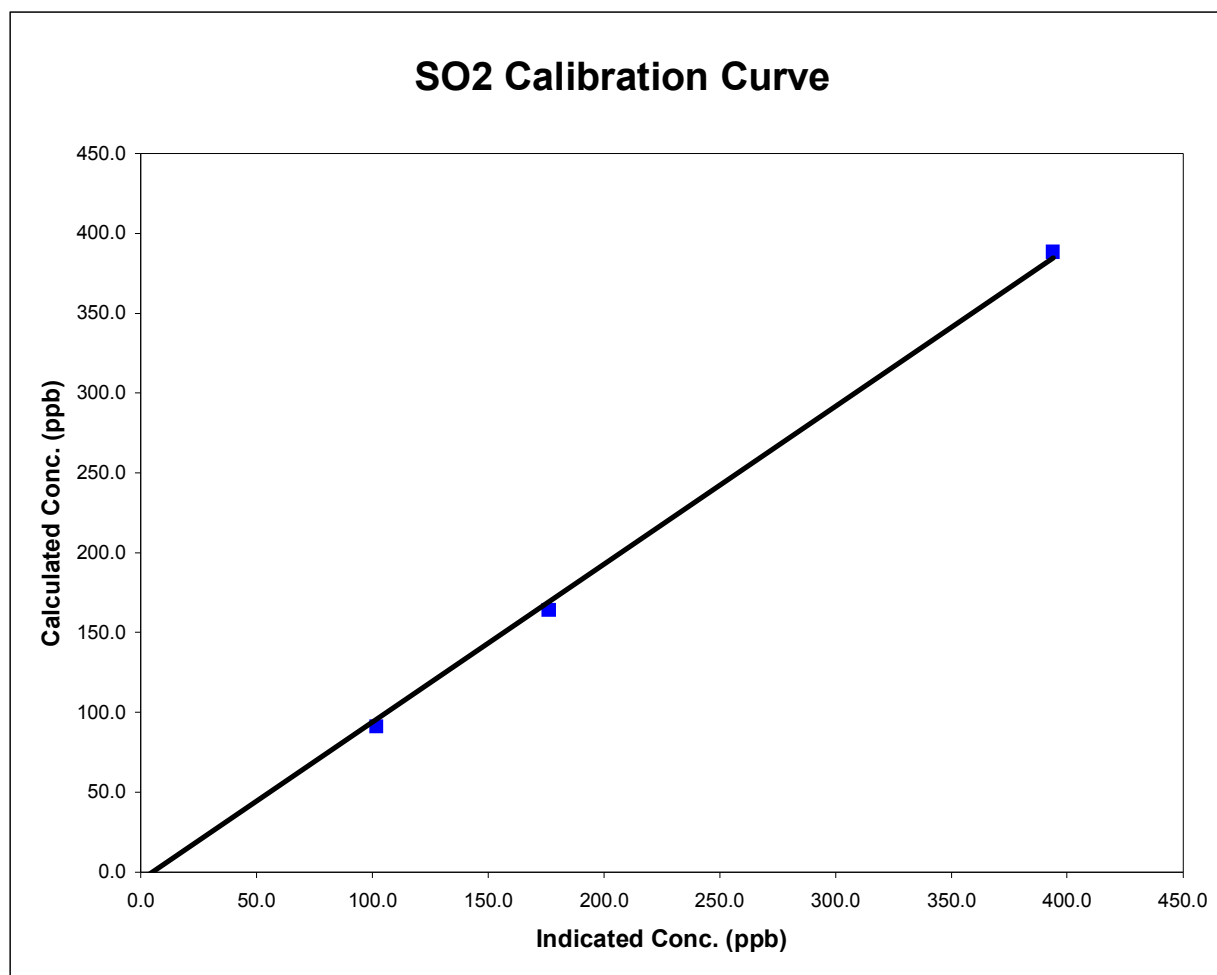


### Station Information

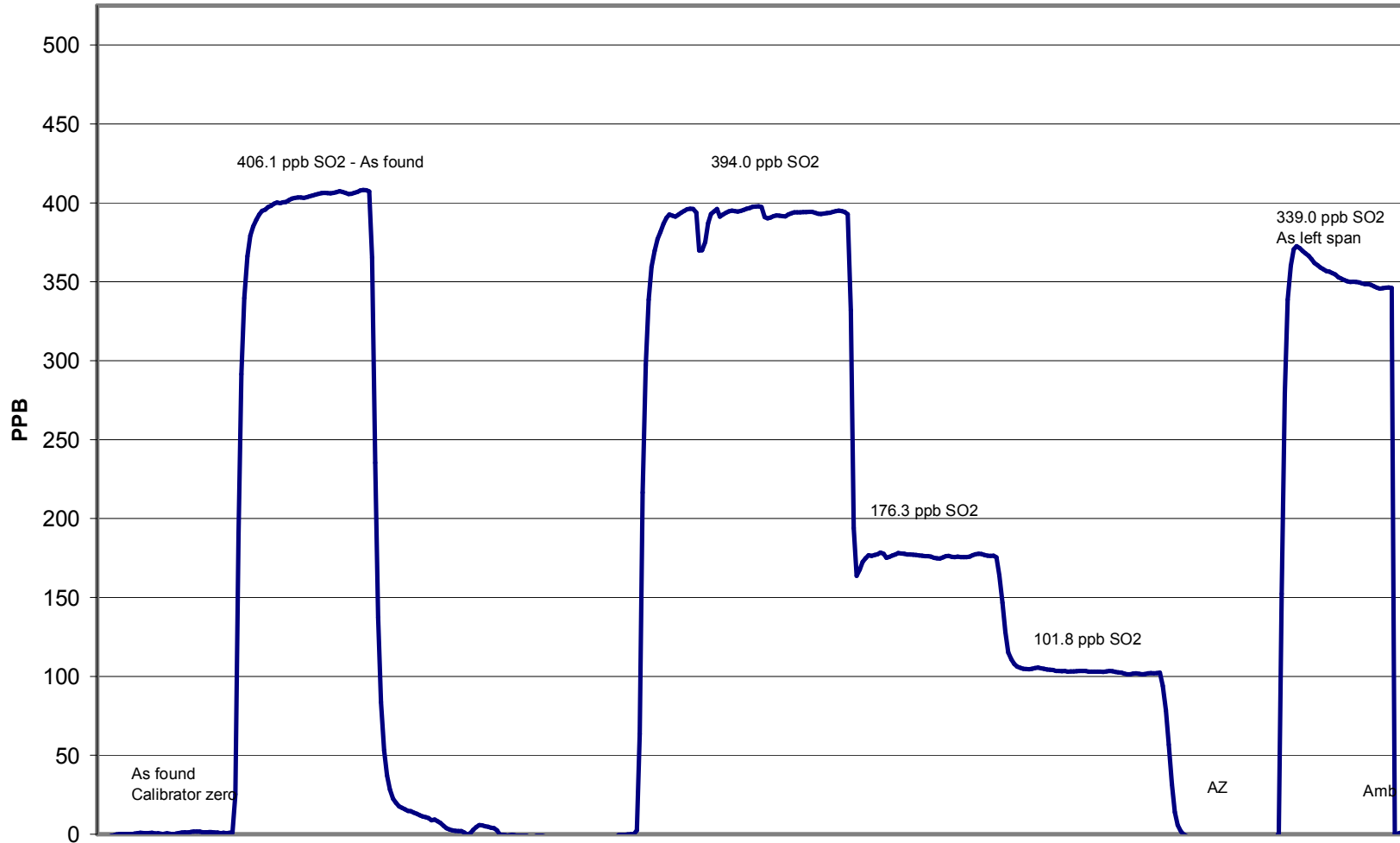
Calibration Date	November 14, 2005	Previous Calibration	October 17, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:23	End Time (MST)	15:25
Analyzer make/model	API 100	Analyzer serial #	32

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.2	N/A		
388.4	394.0	0.9858	Correlation Coefficient	0.998767
164.0	176.3	0.9306		
91.1	101.8	0.8946	Slope	0.989636
			Intercept	-5.101314



### SO2 Calibration



November 14, 2005

# Calibration Report

Parameter        TR5  
 Air Monitoring Network        PASZA



## Station Information

Calibration Date	November 14, 2005	Previous Calibration	October 17, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:23	End Time (MST)	15:25
Barometric Pressure	28.20 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	0.958597	Perm-tube Cert #	04-19367
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	0.953855	Calculated slope	1.000985
Calculated intercept	0.342342	Calculated intercept	-0.014098
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	15.1	ppb	14.1	ppb
coefficient	1.378		1.336	
Lamp Voltage	756	volts	760	volts
Chamber Temp	44.1	Deg C	44.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	629	mm Hg	653.9	mm Hg
Sample Flow	460	ccm	472	ccm
Lamp Intesity	32,300	mv	32,400	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	2061.0	0.0	0.0	N/A
2150	2061.0	63.1	63.1	1.0004
5090	4879.3	26.7	26.5	1.0063
9170	8790.3	14.8	15.0	0.9875
zero	2061.0	0.0	0.3	As Found Zero
2150	2061.0	63.1	65.9	As Found Span
Average Correction Factor				0.9981

Calculated value of As Found Response: 62.94 ppm      Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	1.8	ppm	0.2	ppm
Auto span	67.6	ppm	65.6	ppm

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

\_\_\_\_\_

Calibration Performed By: Dawn Ewan



## Calibration Summary

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

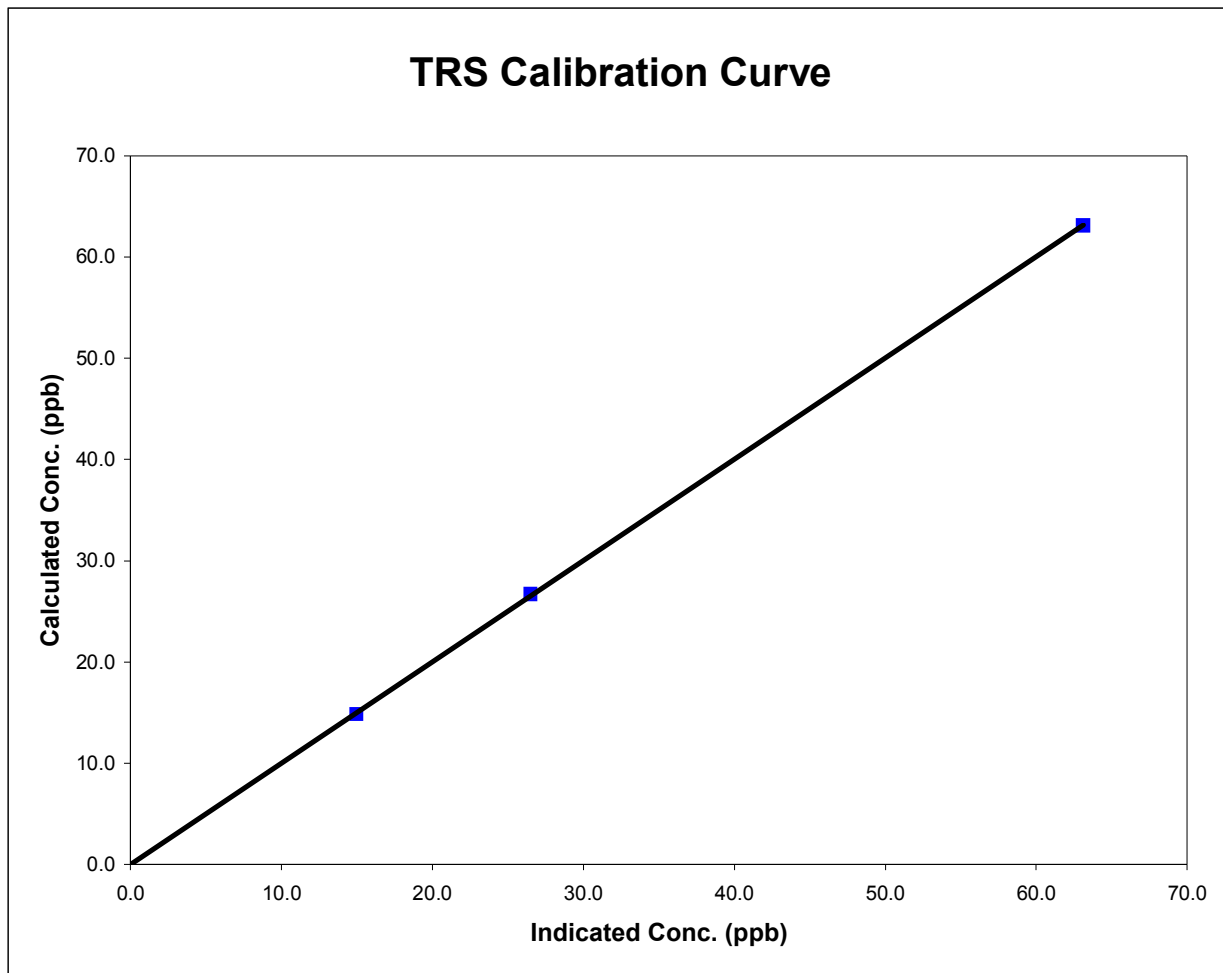


### Station Information

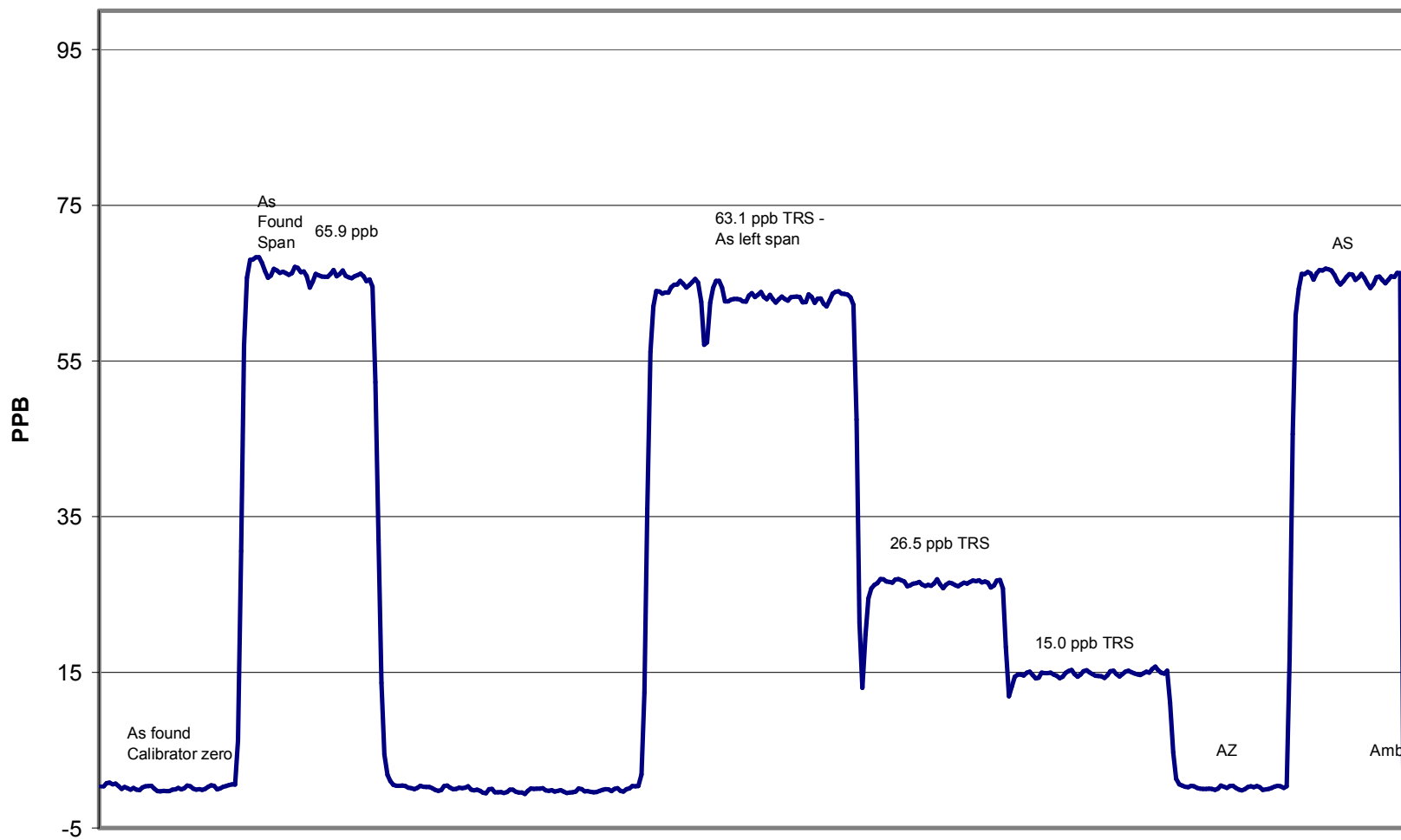
Calibration Date	November 14, 2005	Previous Calibration	October 17, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:23	End Time (MST)	15:25
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
63.1	63.1	1.0004	Correlation Coefficient	0.999971
26.7	26.5	1.0063		
14.8	15.0	0.9875		
			Slope	1.000985
			Intercept	-0.014098



### TRS Calibration



November 14, 2005

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

Calibration Date	November 14, 2005	Previous Calibration	October 17, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:52	End Time (MST)	14:25
Barometric Pressure	0.943 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

**Analyzer Information**

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.66	SLPM	13.67	SLPM
Filter Load	43	%	43	%
Ko Factor	12122		12122	
Temperature	-10.1	Deg C	-10.1	Deg C
Pressure	0.948	ATM	0.948	ATM

**Calibration Data**

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.00
zero flow - auxillary	0.0	0.00		0.00
flow recovery - main	45 - 60 Seconds	28.0	45 - 60 Seconds	45
flow recovery - aux	46 - 60 Seconds	55.0	46 - 60 Seconds	45
Temperature	measured	-10.0	+/- 1.0 Deg C	-10.1
Pressure	measured	0.942	+/- 1.5% ΔATM	0.948
Total Flow	16.67 SLPM	17.10		
Main Flow	13.67 SLPM	14.64	+/- 1.0 SLPM	13.67
Auxillary Flow	3.0 SLPM	3.180	+/- 0.2 SLPM	3.000
Leak Check - main	0.0	0.00	<0.15 SLPM	0.00
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.03
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	

Notes: Reinstalled old filter.Calibration Performed By: Dawn Ewan

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

Calibration Date	November 21, 2005	Previous Calibration	October 13, 2005
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:20	End Time (MST)	17:49
Barometric Pressure	27.76 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	0.943640	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	<u>Before</u>		<u>After</u>
Calculated slope	0.971960	Calculated slope	0.994748
Calculated intercept	3.931598	Calculated intercept	-0.530346
Analyzer make	API 102A	Analyzer serial #	212

	before		after	
Concentration range	500	ppb	500	ppb
Sample Flow	558	ccm	554	ccm
UV Lamp Voltage	3060	mv	2963	mv
Lamp Ratio	83.7	%	81.5	%
Rx Cell Temp	50	Deg C	51.3	Deg C
PMT Temp	6.9	Deg C	7	Deg C
IZS Temp	45	Deg C	45	Deg C
Slope	0.876		0.82	
Intercept	22.6		21.6	

**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	1972.2	0.0	1.0	N/A
2090	1972.2	405.9	408.6	0.9932
4525	4270.0	187.5	189.0	0.9919
9820	9266.5	86.4	86.8	0.9952
zero	1925.0	0.0	5.6	As Found Zero
2040	1925.0	415.8	443.3	As Found Span
Average Correction Factor				0.9934

Calculated value of As Found Response: 429.330 ppm      Percent Change of As Found: -3.3%

	before calibration		after calibration	
Auto zero	4.1	ppm	85.3	ppm
Auto span	246.0	ppm	0.4	ppm

 Notes: Adjusted span and zero

 Calibration Performed By: Dawn Ewan

### Calibration Summary



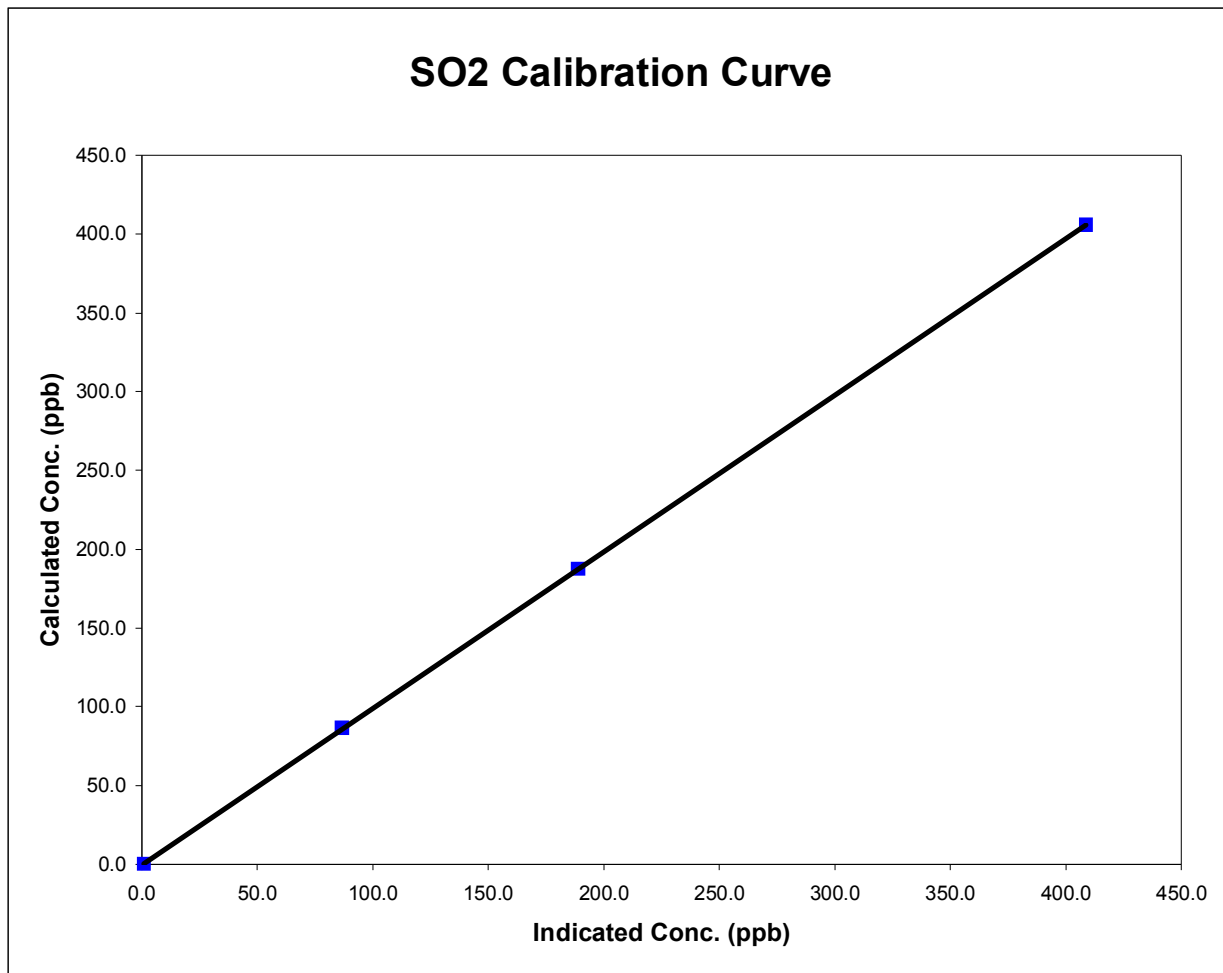
Parameter SO2  
Air Monitoring Network PASZA

#### Station Information

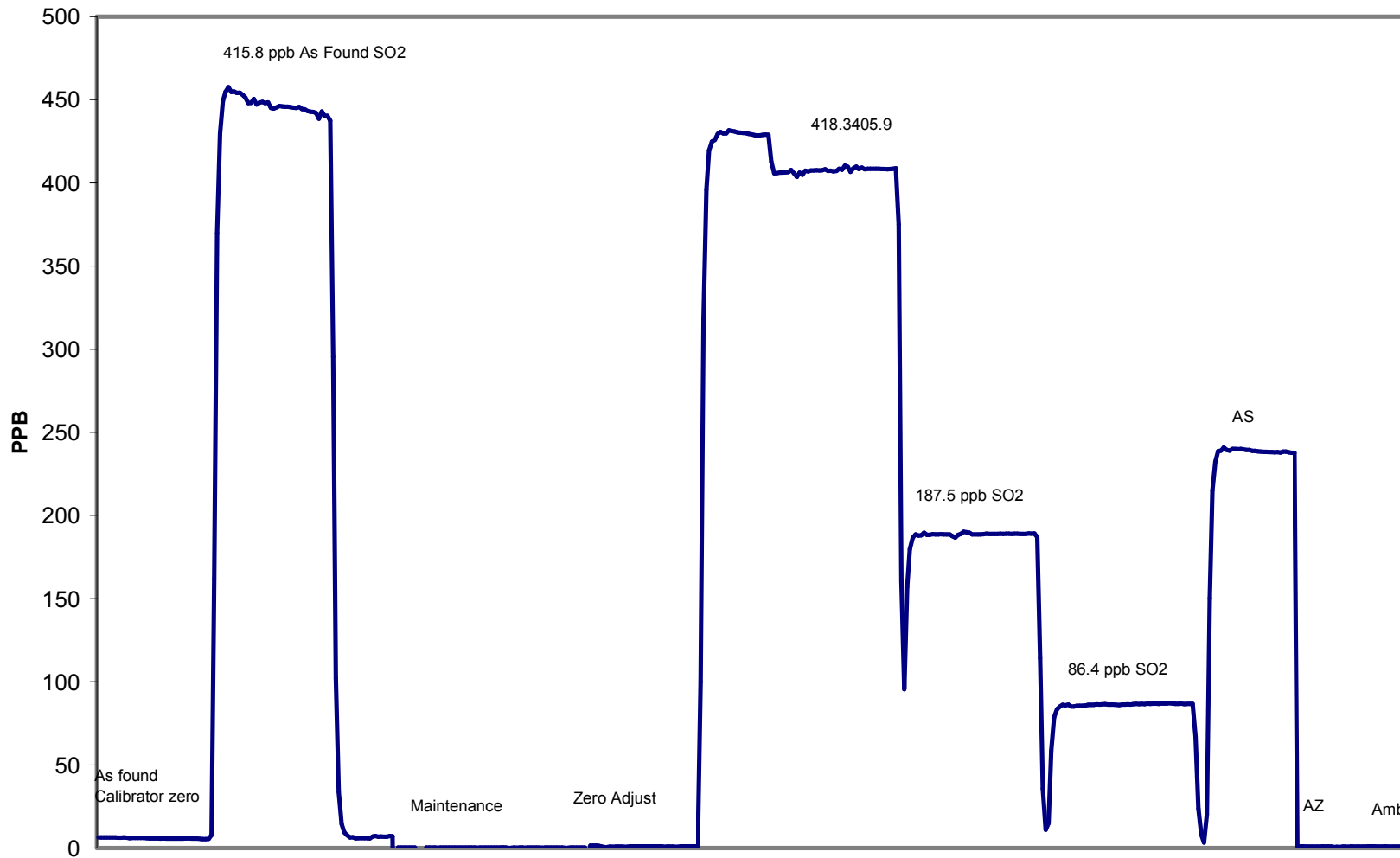
Calibration Date	November 21, 2005	Previous Calibration	October 13, 2005
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	13:20	End Time (MST)	17:49
Analyzer make/model	API 102A	Analyzer serial #	212

#### Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.0	N/A		
405.9	408.6	0.9932	Correlation Coefficient	0.999994
187.5	189.0	0.9919		
86.4	86.8	0.9952		
			Slope	0.994748
			Intercept	-0.530346



### SO2 Calibration



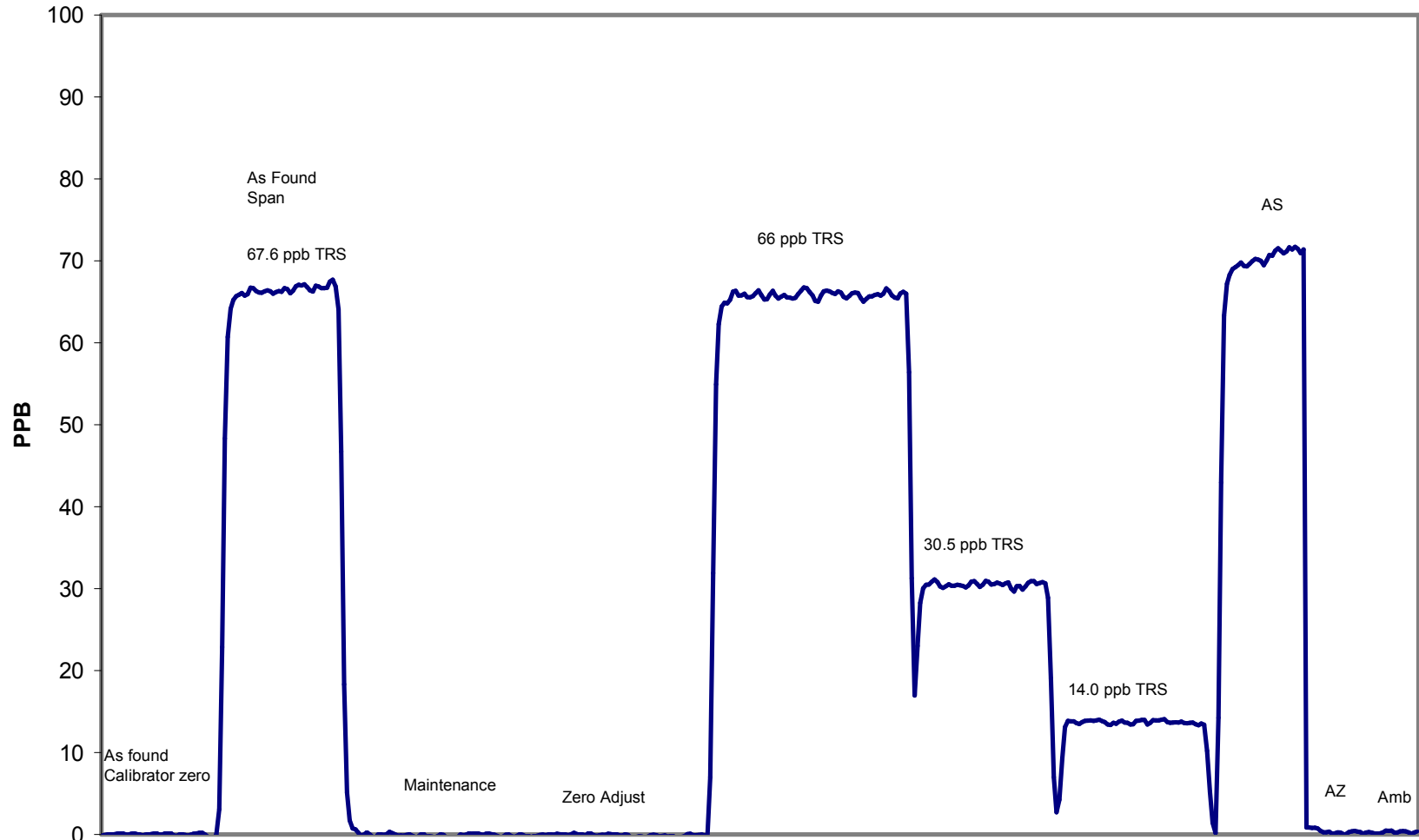
November 21, 2005







### TRS Calibration



November 21, 2005

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

Calibration Date	November 21, 2005	Previous Calibration	October 13, 2005
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:32	End Time (MST)	12:30
Barometric Pressure	0.928 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

**Analyzer Information**

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	SLPM
Aux Flow Set Point	13.65	SLPM	13.65	SLPM
Filter Load	50	%	50	%
Ko Factor	10997		10997	
Temperature	11.7	Deg C	11.7	Deg C
Pressure	0.93	ATM	0.93	ATM
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		0.04
flow recovery - main	45 - 60 Seconds		45 - 60 Seconds	24
flow recovery - aux	46 - 60 Seconds		46 - 60 Seconds	46
Temperature	measured	11.8	+/- 1.0 Deg C	11.7
Pressure	measured	0.928	+/- 1.5% ΔATM	0.930
Total Flow	16.67 SLPM	16.77		
Main Flow	13.67 SLPM	14.17	+/- 1.0 SLPM	13.65
Auxillary Flow	3.0 SLPM	3.089	+/- 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	0.11
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	

Notes: Reinstalled filter.  
No adjustments made.

Calibration Performed By: Dawn Ewan

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

Calibration Date	November 2, 2005	Previous Calibration	October 7, 2005
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:40	End Time (MST)	14:34
Barometric Pressure	0.905 atm	Station Temperature	20.0 Deg C
Calibrator	Enviroics 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	0.991187	Calculated slope	1.013643
Calculated intercept	0.073785	Calculated intercept	-0.198723
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.14	ppb	2.14	ppb
Coefficient	0.766		0.766	
Lamp Voltage	902.0	Volts	903.0	Volts
Chamber Temp	43.7	Deg C	43.7	Deg C
Sample Flow	604	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	0.01	N/A
4993	39.97	81.79	80.79	1.0125
4993	19.96	41.00	40.77	1.0058
4993	9.99	20.57	20.66	0.9957
4993	0.00	0.00	0.01	As Found Zero
4993	39.97	81.79	80.79	As Found Span
Average Correction Factor				1.0047

Calculated value of As Found Response: 80.138 ppm      Percent Change of As Found: 2.0%

	before calibration		after calibration	
Auto zero	0.03	ppm	-0.13	ppm
Auto span	27.81	ppm	27.80	ppm

 Notes: No adjustments made

 Calibration Performed By: Dawn Ewan

## Calibration Summary

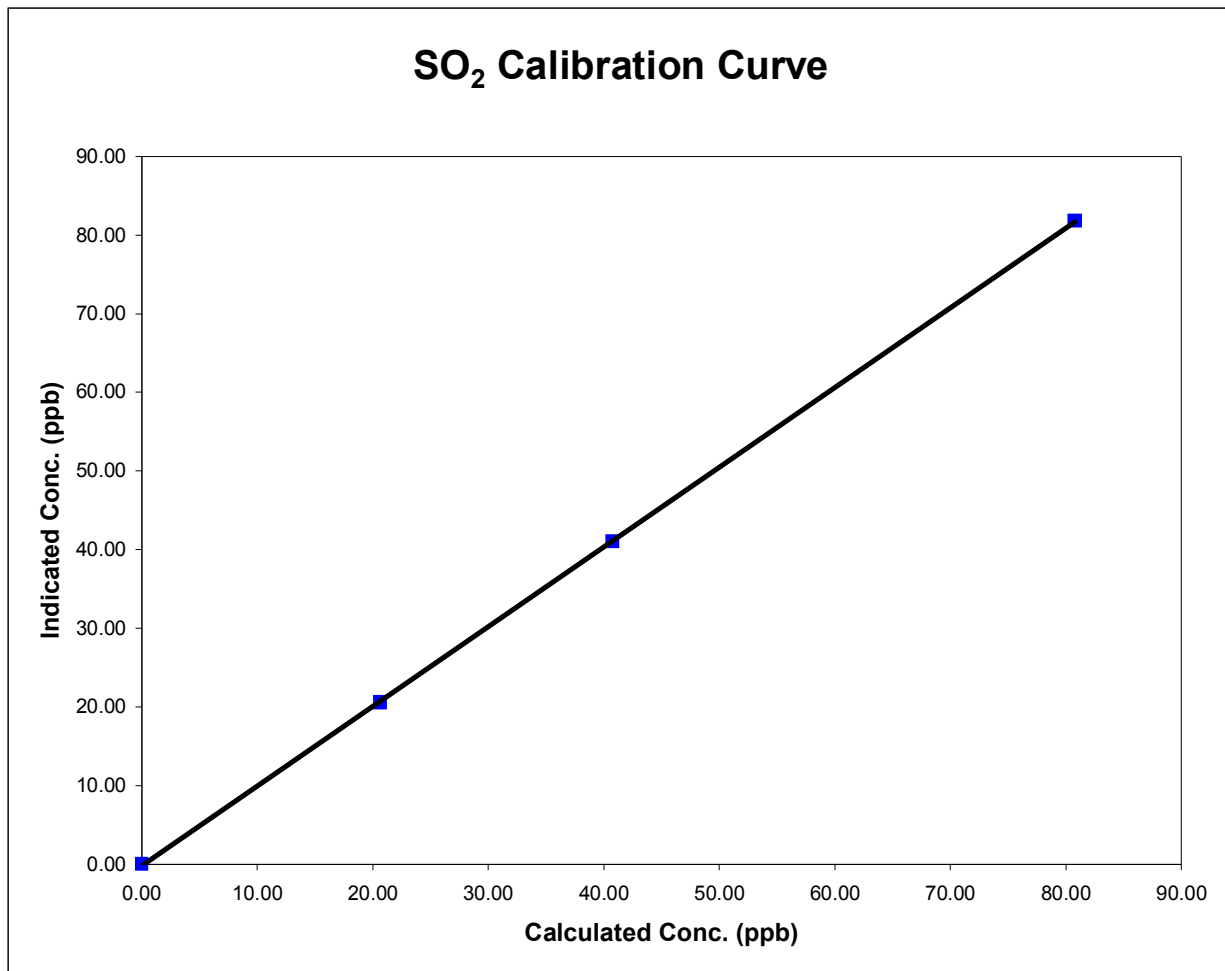
Parameter SO2Air Monitoring Network PASZA

### Station Information

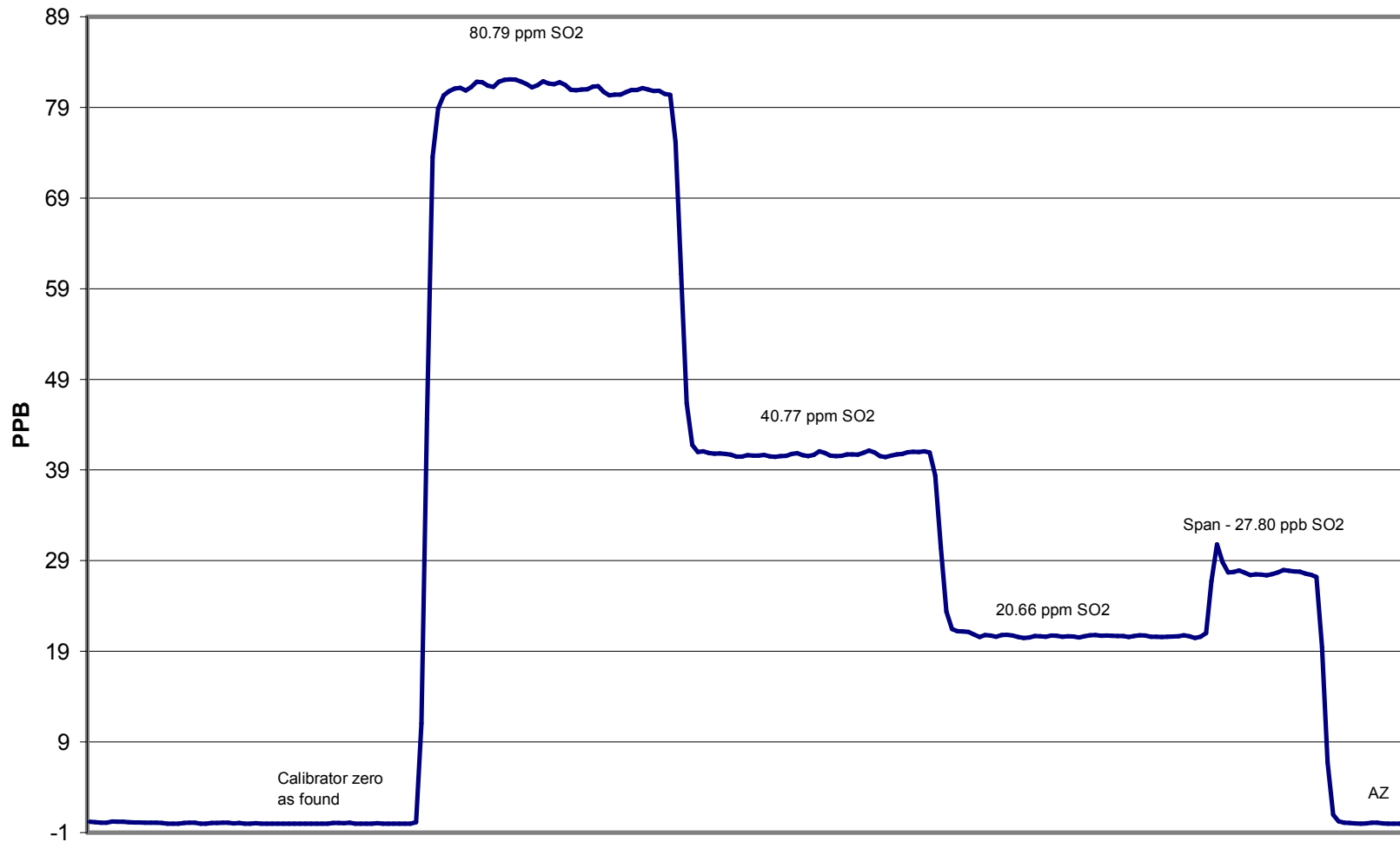
Calibration Date	November 2, 2005	Previous Calibration	October 7, 2005
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:40	End Time (MST)	14:34
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.010	N/A		
81.795	80.786	1.0125	Correlation Coefficient	0.999975
41.003	40.768	1.0058		
20.567	20.656	0.9957	Slope	1.013643
			Intercept	-0.198723



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



November 2, 2005

**Calibration Report**

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

**Station Information**

Calibration Date	<u>November 1, 2005</u>	Previous Calibration	<u>October 6, 2005</u>
Station Number	<u>4</u>	Station Location	<u>AG Canada Research Station</u>

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

Start Time (MST)	<u>10:45</u>	End Time (MST)	<u>15:17</u>
Barometric Pressure	<u>0.908</u> Atm	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>EnviroNics 6100</u>	Serial Number	<u>3016</u>
NO Cal Gas Conc	<u>50.3</u> ppm	Cal Gas Expiry Date	<u>Nov 22/06</u>
NOx Cal Gas Conc	<u>50.5</u> ppm	Cal Gas Serial #	<u>BAL786</u>

**DACS Information**

DACS make FOCUS AP1000      DACS serial No. 45269

Parameter		NO2	NOx	NO
Before	Data Slope	0.979465	0.995312	0.992216
	Data Offset	0.740007	2.844399	7.491668
After	Data Slope	0.990033	0.996526	0.992235
	Data Offset	0.930588	0.355742	3.636267
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	1.9	ppb	4.8	mV
NOx background	3.8	ppb	4.9	mV
NO coefficient	0.972		0.980	
NOx coefficient	0.962		0.951	
Chamber Temp	49.4	Deg C	49.2	Deg C
Cooler Temp	-2.0	Deg C	-2.0	Deg C
Converter Temp	323.0	Deg C	323.0	Deg C
Sample Flow	804.0	LPM	797.0	LPM
Pressure	157.0	inches HG	157.3	inches HG
Box Temp	33.5	ccm	33.7	ccm

Notes: Adjusted zero and span.

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# Calibration Report

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



## Station Information

Calibration Date: November 1, 2005 Station Location: AG Canada Research Station

## Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	-0.3	-0.4	-0.4	N/A	N/A
1	4993	79.98	796.2	793.0	3.2	798.3	797.4	0.0	0.9974	0.9945
2	4993	39.97	401.1	399.5	1.6	403.1	396.6	5.9	0.9950	1.0071
3	4993	19.98	201.3	200.5	0.8	200.9	195.6	4.7	1.0019	1.0248
AFZ	4993	0.00	0.0	0.0	0.0	-3.3	-1.4	-2.4	0.0000	0.0000
AFS	4993	79.98	796.2	793.0	3.2	795.0	773.1	21.1	1.0015	1.0258
Average Correction Factor									0.9981	1.0088

As Found Concentrations: NO<sub>x</sub>= 801.1 NO= 781.9 As Found Percent Change NO<sub>x</sub>= 0.6% NO= -1.4%

## GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	798.0	798.8	-0.8	801.6	801.3	-0.7	0.9955	0.9968	N/A	N/A
350	798.0	478.8	319.2	801.2	478.9	321.8	0.9960	0.9998	0.9918	100.8%
200	798.0	619.9	178.1	800.0	621.1	178.4	0.9974	0.9981	0.9979	100.2%
100	798.0	715.0	82.9	800.0	717.0	82.4	0.9975	0.9973	1.0066	99.3%
Average Correction Factor							0.9970	0.9984	0.9988	100.1%

## AIC Data

Parameter	Previous calibration				Current calibration			
	NO <sub>x</sub>	NO <sub>2</sub>	NO		NO <sub>x</sub>	NO <sub>2</sub>	NO	
Auto zero	-0.1	-1.6	6.2	ppb	-3.9	0.6	-0.7	ppb
Auto span	811.7	16.6	796.9	ppb	452.7	31.1	424.1	ppb

Calibration Performed By: Dawn Ewan

## Calibration Summary

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

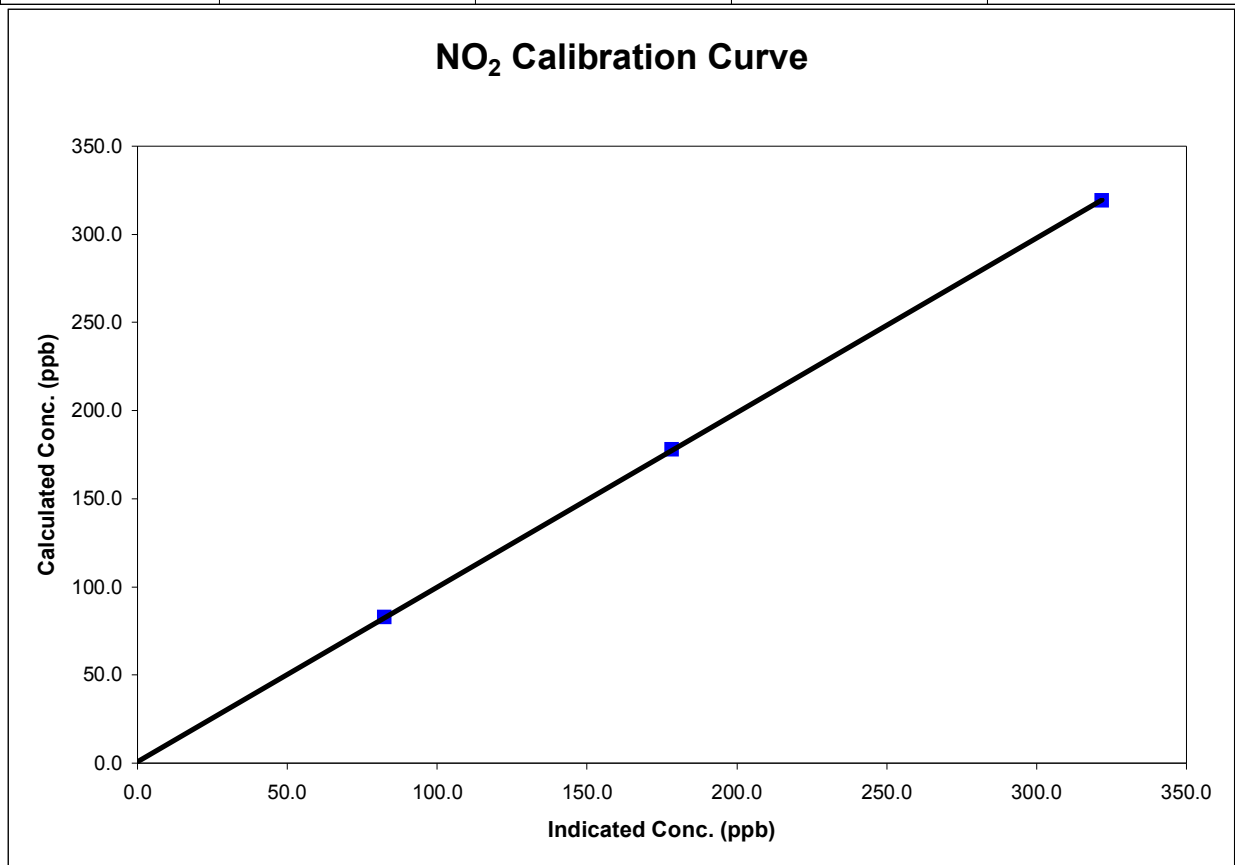


### Station Information

Calibration Date	November 1, 2005	Previous Calibration	October 6, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	10:45	End Time (MST)	15:17
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	0.0000	Correlation Coefficient	0.999985
319.2	321.8	0.9918		
178.1	178.4	0.9979		
82.9	82.4	1.0066		
			Slope	0.990033
			Intercept	0.930588





## Calibration Summary

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

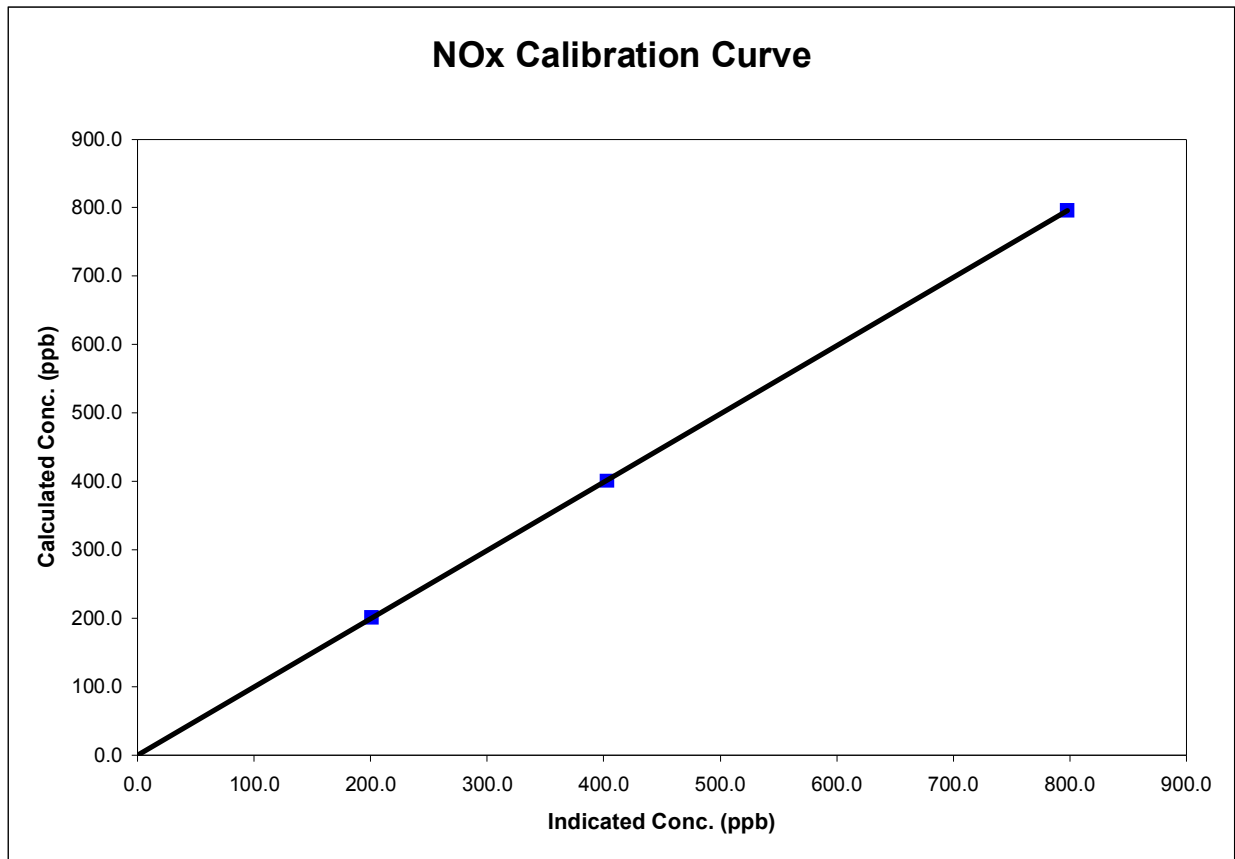


### Station Information

Calibration Date	November 1, 2005	Previous Calibration	October 6, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	10:45	End Time (MST)	15:17
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000	Correlation Coefficient	0.999995
796.2	798.3	0.9974		
401.1	403.1	0.9950	Slope	0.996526
201.3	200.9	1.0019		
			Intercept	0.355742



# Calibration Summary

Parameter NO

Air Monitoring Network PASZA

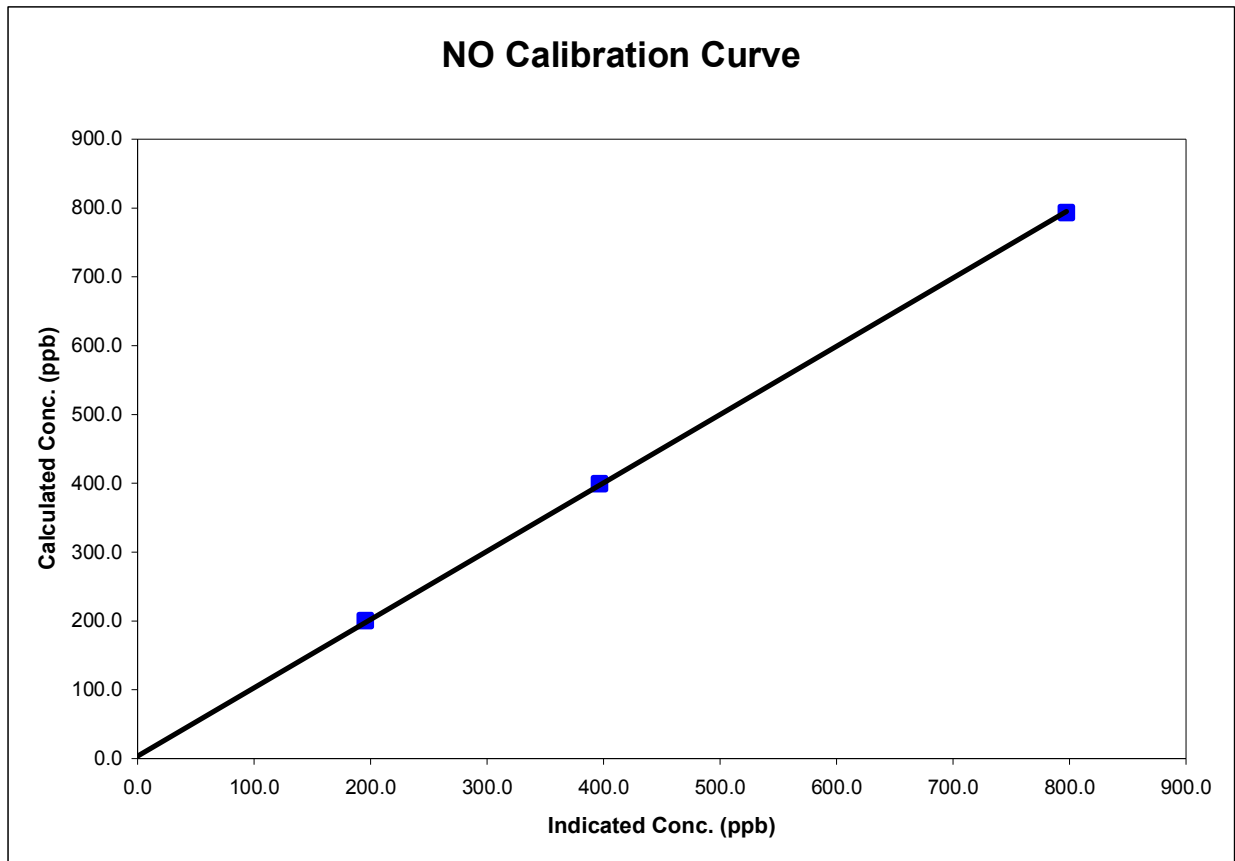


## Station Information

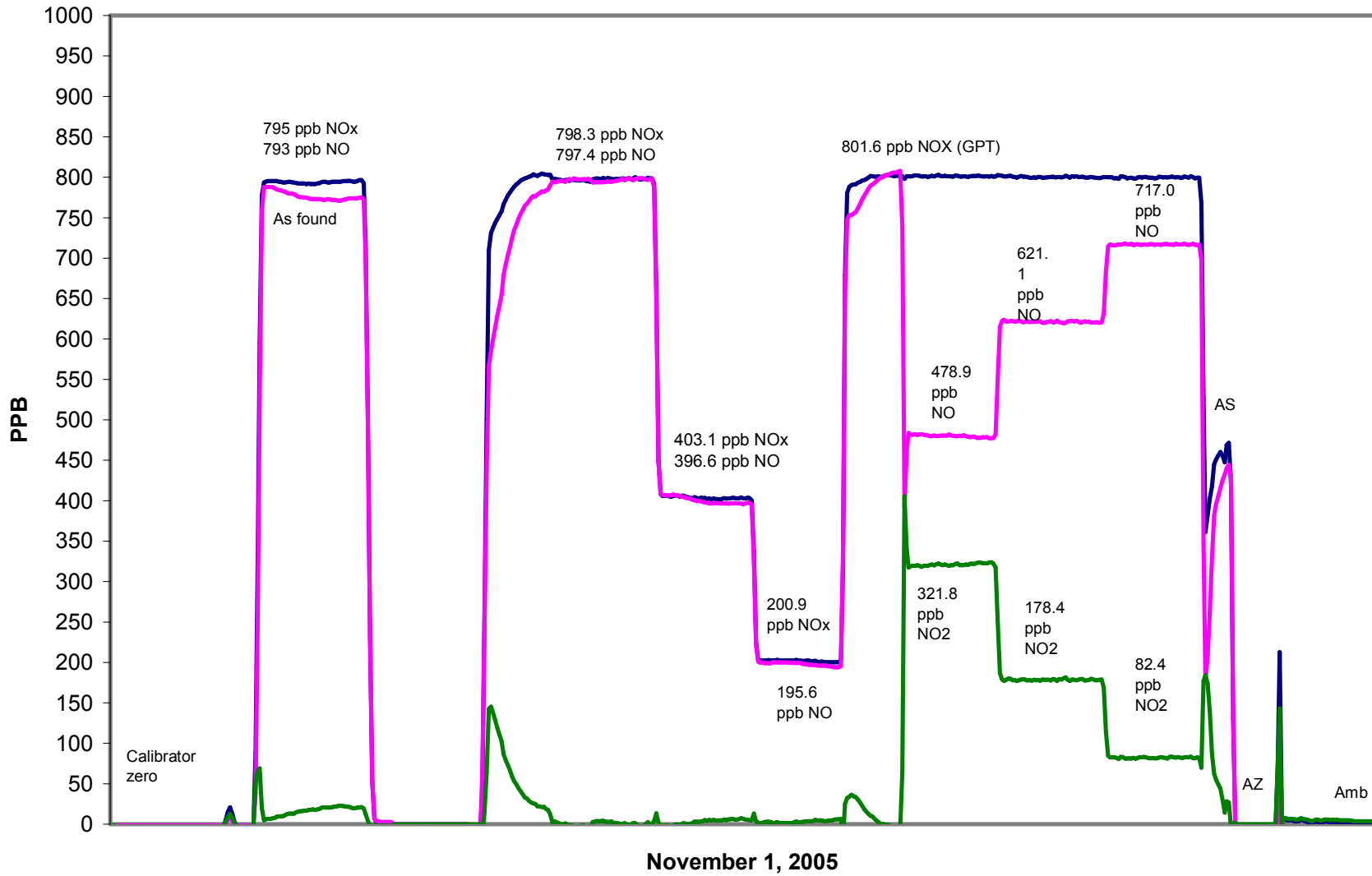
Calibration Date	November 1, 2005	Previous Calibration	October 6, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	10:45	End Time (MST)	15:17
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

## Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A	Correlation Coefficient	0.999924
793.0	797.4	0.9945		
399.5	396.6	1.0071		
200.5	195.6	1.0248		
			Slope	0.992235
			Intercept	3.636267



### NOx Calibration





### Calibration Summary

Parameter           O3            
 Air Monitoring Network                                 PASZA                                

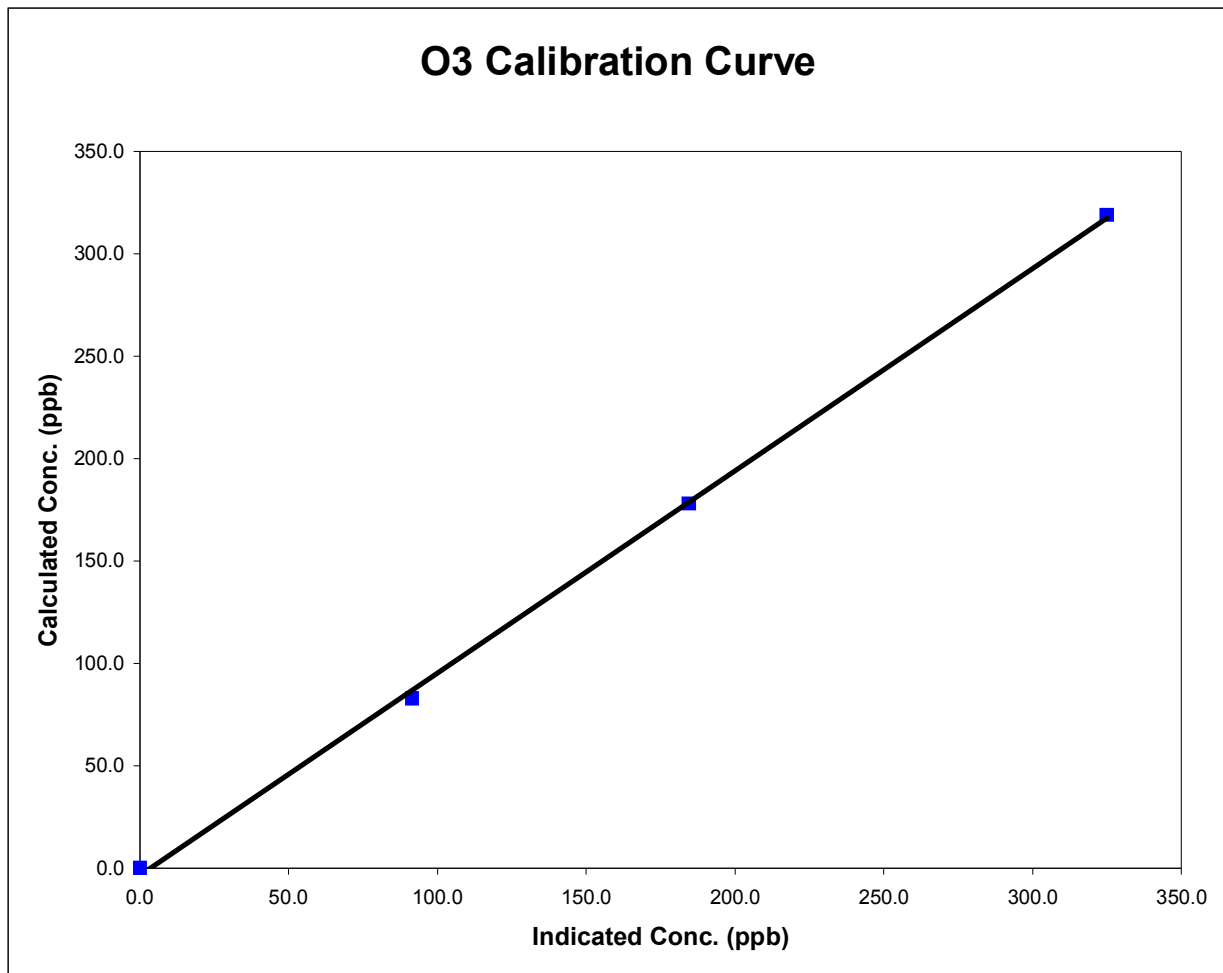


**Station Information**

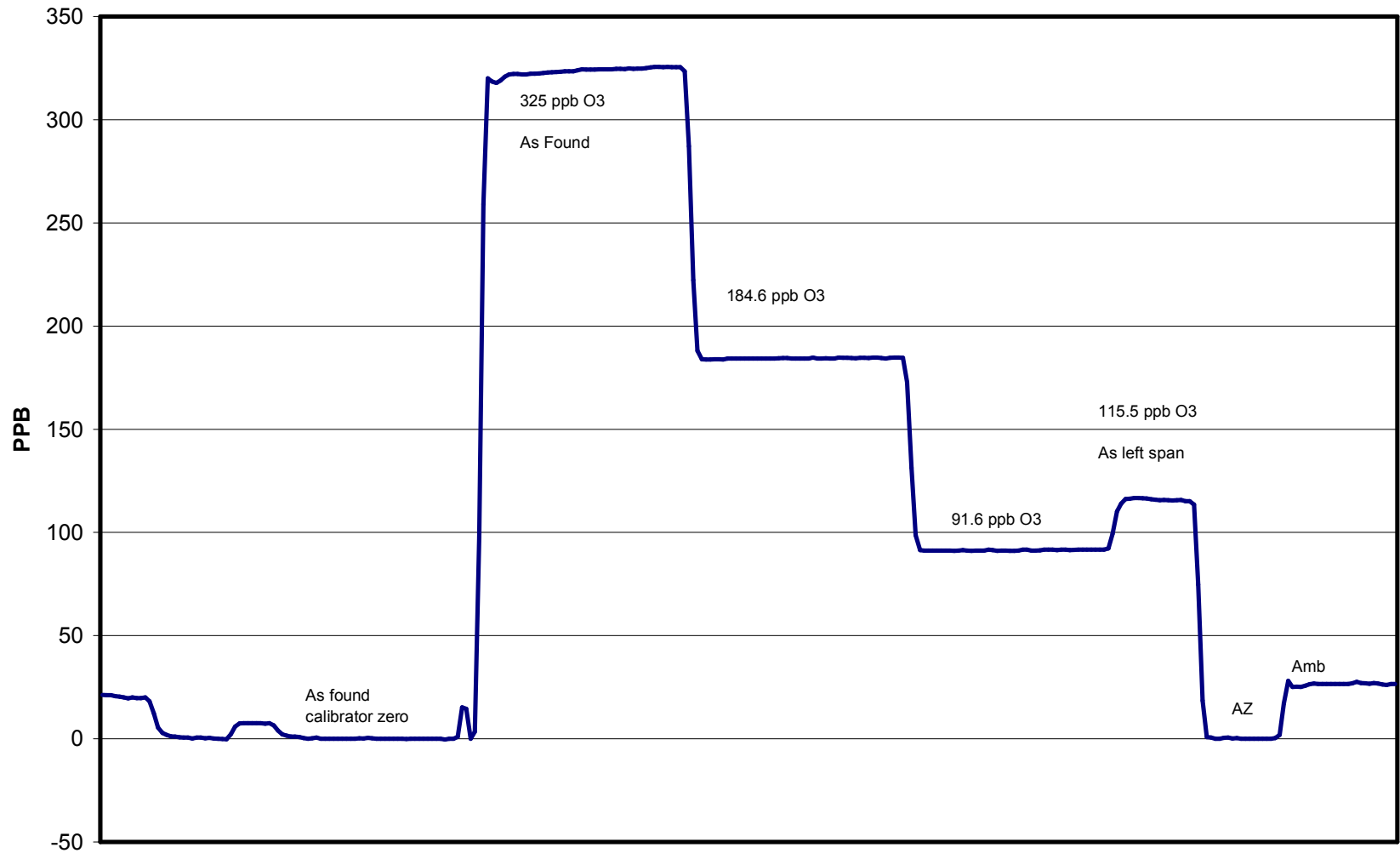
Calibration Date	November 2, 2005	Previous Calibration	October 7, 2005
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:44	End Time (MST)	12:58
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

**Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
319.2	325.0	0.9821	Correlation Coefficient	0.999441
178.1	184.6	0.9649		
82.9	91.6	0.9053	Slope	0.987549
			Intercept	-3.391987



### O3 Calibration



November 2, 2005

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

Calibration Date	November 1, 2005	Previous Calibration	October 7, 2005
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	12:20	End Time (MST)	13:27
Barometric Pressure	0.908 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	10

**Analyzer Information**

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	30	%	30	%
Ko Factor	14287		14287	
Temperature	6.5	Deg C	6.5	Deg C
Pressure	0.908	ATM	0.908	ATM

**Calibration Data**

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.01
zero flow - auxiliary	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	8.6	+/- 1.0 Deg C	8.5
Pressure	measured	0.908	+/- 1.5% $\Delta$ ATM	0.908
Total Flow	16.67 SLPM	16.80		
Main Flow	13.67 SLPM	14.20	+/- 1.0 SLPM	13.68
Auxiliary Flow	3.0 SLPM	3.142	+/- 0.2 SLPM	3.000
Leak Check - main	0.0	0.00	<0.15 SLPM	-0.03
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: All checks ok  
No adjustments necessary  
Reinstalled filter.

Calibration Performed By: Dawn Ewan