



## Air Quality Monitoring Network for August 2005

Prepared by  
**FOCUS**  
ambient air monitoring

<b>Airshed Zone Association – August PASZA Ambient Air Report.....</b>	<b>2</b>
<b>PASZA Monthly Continuous Data Summary .....</b>	<b>4</b>
PASZA - Henry Pirker AQI Monthly Summary.....	8
PASZA - Henry Pirker Sulphur Dioxide Monthly Summary.....	9
PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary.....	14
PASZA - Henry Pirker Nitric Oxide Monthly Summary.....	19
PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary .....	21
PASZA - Henry Pirker Ozone Monthly Summary.....	25
PASZA - Henry Pirker Ozone Monthly Summary.....	30
PASZA - Henry Pirker Carbon Monoxide Monthly Summary.....	31
PASZA - Henry Pirker Carbon Monoxide Monthly Summary.....	36
PASZA - Henry Pirker Total Hydrocarbons Monthly Summary .....	37
PASZA - Henry Pirker Reduced Sulphur Monthly Summary .....	42
PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Monthly Summary.....	47
PASZA - Henry Pirker Relative Humidity Monthly Summary .....	52
PASZA - Henry Pirker Temperature Monthly Summary .....	54
PASZA - Henry Pirker Solar Radiation Monthly Summary.....	56
PASZA - Henry Pirker Scalar Wind Speed Monthly Summary .....	58
PASZA - Henry Pirker Vector Wind Speed Monthly Summary .....	59
PASZA - Henry Pirker Wind Direction Monthly Summary.....	60
PASZA - Henry Pirker Standard Deviation of Wind Direction Monthly Summary.....	61
PASZA - Evergreen Park Sulphur Dioxide Monthly Summary.....	64
PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary .....	69
PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Monthly Summary.....	74
PASZA - Evergreen Park Temperature Monthly Summary .....	79
PASZA - Evergreen Park Scalar Wind Speed Monthly Summary .....	81
PASZA - Evergreen Park Vector Wind Speed Monthly Summary .....	82
PASZA - Evergreen Park Wind Direction Monthly Summary.....	83
PASZA - Evergreen Park Standard Deviation of Wind Direction Monthly Summary.....	84
PASZA - Smoky Heights Sulphur Dioxide Monthly Summary .....	87
PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary .....	92
PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Monthly Summary .....	97
PASZA - Smoky Heights Temperature Monthly Summary .....	102
PASZA - Smoky Heights Scalar Wind Speed Monthly Summary .....	104
PASZA - Smoky Heights Vector Wind Speed Monthly Summary .....	105
PASZA - Smoky Heights Wind Direction Monthly Summary .....	106
PASZA - Smoky Heights Standard Deviation of Wind Direction Monthly Summary.....	107
PASZA - Beaverlodge AQI Monthly Summary .....	110
PASZA - Beaverlodge Sulphur Dioxide Monthly Summary .....	111
PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary .....	116
PASZA - Beaverlodge Nitric Oxide Monthly Summary .....	121
PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary .....	123
PASZA - Beaverlodge Ozone Monthly Summary.....	127
PASZA - Beaverlodge Ozone Monthly Summary.....	132
PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Monthly Summary .....	133
PASZA - Beaverlodge Relative Humidity Monthly Summary .....	138
PASZA - Beaverlodge Temperature Monthly Summary .....	140
PASZA - Beaverlodge Scalar Wind Speed Monthly Summary .....	142
PASZA - Beaverlodge Vector Wind Speed Monthly Summary .....	143
PASZA - Beaverlodge Wind Direction Monthly Summary .....	144
PASZA - Beaverlodge Standard Deviation of Wind Direction Monthly Summary.....	145
<b>PASZA Monthly Passive Data Summary.....</b>	<b>147</b>
<b>August 2005 Calibration Reports.....</b>	<b>158</b>



Peace AirShed Zone Association

Alberta Environment  
Enforcement and Monitoring Division  
11<sup>th</sup> Floor, Oxbridge Place  
9820 - 106<sup>th</sup> Street  
Edmonton, Alberta, T5K 2J6

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

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

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

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the "Monthly Summary" and "Continuous Monitoring" pages of the report. The measured ambient air quality was within the Provincial and Federal guidelines with no exceedences recorded.

Three of the four continuous monitoring stations operated without any problems. The THC analyzer at the Henery Pirker station had a flame out situation that resulted in 145 hours removed. A 90% downtime was called into AENV (reference #164835). Please refer to attached letter addressed to Alberta Environment for details.

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

The samples collected at site #38 (Karr Creek) were left in the field over two months (July and August) due to a logging road being closed from an accident and the site being inaccessible. In addition site #23 (Bear Lake) was vandalized and the passives including the shelter head were stolen. Site #39 (Clouston Creek) also had the NO<sub>2</sub> passive damaged and sample was not analyzed. A summary of the remaining passive data collected are reported as follows.

- Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.1 ppb to 0.5 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 0.4 ppb to 5.5 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 12.6 ppb to 25.6 ppb.

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

On Behalf of the,  
Peace Airshed Zone Association

A handwritten signature in black ink, appearing to read "K. Warren".

Kevin Warren  
PASZA Technical Program Manager

A handwritten signature in black ink, appearing to read "K. McCullum".

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

October 12, 2005

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

**ATTENTION: Director**

**RE: PASZA Air Monitoring Directive Non-compliance Report Ref # 164835**

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A non-compliance of the Alberta Air Monitoring Directive was recently reported by Focus to Alberta Environment (AENV) on behalf of the Peace Airshed Zone Association (PASZA). The non-compliance was less than ninety (90%) percent uptime for the month of August for the Total Hydrocarbons (THC) parameter at the Henry Pirker Air Monitoring Station located in Grande Prairie, Alberta. The station is owned by PASZA and operated on their behalf by Focus. The non-compliance has been assigned AENV reference number 164835.

The cause of the non-compliance was due to a failed auxiliary system, the zero air supply, quit operating following a brief power failure. As a result of this issue the following actions have and will be taken:

1. Inclusive alarms have been incorporated that alert management and service staff to failed or low THC values.

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

Sincerely,

**THE FOCUS CORPORATION**



Kelly Baragar  
AQM Technical Supervisor

# PASZA Monthly Continuous Data Summary

Aug-2005 Peace Airshed Zone Association					Maximum Recorded Values							
					1-hr		Station	Monthly Average	Exceedence			
Pollutant (units)	Objectives	1-hr	24-hr	1-hr					24-hr			
SO <sub>2</sub> (ppb)	172	57	Henry Pirker	0.3	0	0	23.6	Aug-25 09:00	8.8	SW	2.1	Aug-25 100.0%
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	0.9	0	0	35.3	Aug-24 07:00	6.3	WSW	4.4	Aug-24 99.7%
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.4	0	0	5.1	Aug-06 07:00	9.5	SW	1.1	Aug-03 99.3%
SO <sub>2</sub> (ppb)	172	57	Beaverlodge	0.2	0	0	6.6	Aug-24 18:00	8.5	SE	0.8	Aug-15 90.6%
NO (ppb)			Henry Pirker	3.4	-	-	72.2	Aug-26 06:00	4.2	WSW	9.6	Aug-18 100.0%
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	6.2	0	0	30.1	Aug-25 20:00	4.2	SE	9.9	Aug-04 100.0%
NO <sub>x</sub> (ppb)			Henry Pirker	9.4	-	-	79.3	Aug-26 06:00	4.2	WSW	18.4	Aug-25 100.0%
NO (ppb)			Beaverlodge	0.3	-	-	11.8	Aug-27 08:00	4.2	NE	1.5	Aug-27 98.9%
NO <sub>2</sub> (ppb)	212	106	Beaverlodge	2.7	0	0	10.9	Aug-03 20:00	3.8	W	5.8	Aug-20 98.9%
NO <sub>x</sub> (ppb)			Beaverlodge	3.2	-	-	23.0	Aug-27 08:00	4.2	NE	7.0	Aug-20 98.9%
O <sub>3</sub> (ppb)	82		Henry Pirker	17.4	0	-	47.4	Aug-27 15:00	7.5	ESE	28.8	Aug-28 100.0%
O <sub>3</sub> (ppb) - 8-hr	65		Henry Pirker		0						41.0	Aug-28
O <sub>3</sub> (ppb)	82		Beaverlodge	22.0	0	-	47.0	Aug-27 17:00	5.6	NNE	31.8	Aug-28 98.0%
O <sub>3</sub> (ppb) - 8-hr	65		Beaverlodge		0						44.2	Aug-28
CO (ppm)	13		Henry Pirker	0.19	0	-	0.9	Aug-25 21:00	4.8	S	0.3	Aug-25 99.7%
CO (ppm) - 8-hr	5		Henry Pirker		0						0.5	Aug-20
THC (ppm)			Henry Pirker	2.01	-	-	3.0	Aug-25 07:00	5.2	SSE	2.2	Aug-25 80.5%
TRS (ppb)			Henry Pirker	0.2	-	-	2.0	Aug-01 00:00	3.1	ESE	0.4	Aug-01 100.0%
TRS (ppb)			Evergreen Park	0.5	-	-	1.5	Aug-11 22:00	4.4	NNW	0.6	Aug-25 100.0%
TRS (ppb)			Smoky Heights	0.5	-	-	1.5	Aug-04 18:00	16.8	WSW	0.9	Aug-31 98.9%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Henry Pirker	3.8	0	0	23.5	Aug-25 21:00	4.8	S	12.6	Aug-13 99.2%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Evergreen Park	4.7	0	0	27.1	Aug-13 16:00	7.1	ENE	15.4	Aug-13 99.1%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Smoky Heights	3.3	0	0	51.7	Aug-19 19:00	6.9	E	12.0	Aug-13 95.4%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Beaverlodge	3.8	0	0	41.7	Aug-13 21:00	4.1	NE	19.5	Aug-13 94.4%
RH (%)			Henry Pirker	68.5	-	-	-		-	-	-	100.0%
RH (%)			Beaverlodge	67.4	-	-	-		-	-	-	100.0%
SR (W/m <sup>2</sup> )			Henry Pirker	185.0	-	-	-		-	-	-	100.0%
Temp (°C)			Henry Pirker	14.1	-	-	-		-	-	-	100.0%
Temp (°C)			Evergreen Park	13.3	-	-	-		-	-	-	100.0%
Temp (°C)			Smoky Heights	12.0	-	-	-		-	-	-	99.7%
Temp (°C)			Beaverlodge	13.6	-	-	-		-	-	-	100.0%
WSPD v (km/hr)			Henry Pirker	9.2	-	-	-	Aug-31 15:00	29.9	WSW	18.1	31-Aug 100.0%
WSPD v (km/hr)			Evergreen Park	6.6	-	-	-	Aug-31 10:00	24.0	WSW	14.9	31-Aug 100.0%
WSPD v (km/hr)			Smoky Heights	10.0	-	-	-	Aug-02 08:00	34.8	W	22.7	2-Aug 99.7%
WSPD v (km/hr)			Beaverlodge	8.0	-	-	-	38595.5	28.1	WSW	14.4	38569.0 100.0%
WSPD s (km/hr)			Henry Pirker	9.9	-	-	-	Aug-31 15:00	30.3	WSW	18.2	31-Aug 100.0%
WSPD s (km/hr)			Evergreen Park	7.2	-	-	-	Aug-31 13:00	24.3	W	15.3	31-Aug 100.0%
WSPD s (km/hr)			Smoky Heights	10.3	-	-	-	Aug-02 08:00	34.9	W	23.8	2-Aug 99.7%
WSPD s (km/hr)			Beaverlodge	8.0	-	-	-	Aug-31 13:00	28.1	WSW	16.0	1-Aug 100.0%
WDIR (Deg)			Henry Pirker	N	-	-	-	-	-	-	-	100.0%
WDIR (Deg)			Evergreen Park	N	-	-	-	-	-	-	-	100.0%
WDIR (Deg)			Smoky Heights	N	-	-	-	-	-	-	-	99.7%
WDIR (Deg)			Beaverlodge	N	-	-	-	-	-	-	-	100.0%

Note: <sup>a</sup> the draft 1-hr Alberta Ambient Air Quality Objective

\* Wind Direction is the predominate direction for the Month

# Continuous Network Equipment Summary

## PASZA – Henry Pirker Station

### General Station Issues

There were no general operational issues noted during the month.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43	No operational problems observed.
NOx/NO/NO <sub>2</sub>	TECO	42C	No operational problems observed
O <sub>3</sub>	API	400	No operational problems observed
CO	TECO	48C	2 hours of data removed due to excessive baseline drift.
THC	TEI	51-CLT	145 hours of data removed due to a flame out situation with the analyzer.
TRS	TEI	42C	No operational problems observed
PM <sub>2.5</sub>	R&P	1400AB	6 hours were removed due to excessive baseline drift.
RH	Met One	083D	No operational problems observed
AT	Met One	083D	No operational problems observed
SR	Met One	096-1	No operational problems observed
WS	Met One	010C	No operational problems observed
WD	Met One	020C	No operational problems observed

## PASZA – Evergreen Park Station

### General Station Issues

No general station issues were identified.

Parameter	Make	Model	Notes
SO <sub>2</sub>	API	100	2 hours of data removed due to excessive baseline drift.
TRS	TEI	42C	No operational problems observed
PM <sub>2.5</sub>	R&P	1400AB	7 hours were removed due to excessive baseline drift.
AT	Met One	083D	No operational problems observed
WS	Met One	010C	No operational problems observed
WD	Met One	020C	No operational problems observed

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## PASZA – Smoky Heights School Station

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**General Station Issues**

Problems with the station air conditioner resulted in baseline adjustment for the SO<sub>2</sub>, TRS and PM<sub>2.5</sub> parameters. Two hours of data were removed from all parameters due to a power failure.

Parameter	Make	Model	Notes
SO <sub>2</sub>	API	100A	3 hours of data were removed due to excessive baseline drift.
TRS	TEI	42C	6 hours of data were removed due to excessive baseline drift.
PM <sub>2.5</sub>	R&P	1400AB	32 hours of data were removed due to excessive baseline drift.
AT	Met One	083D	No operational problems observed
WS	Met One	010C	No operational problems observed
WD	Met One	020C	No operational problems observed

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## PASZA – Beaverlodge Station

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**General Station Issues**

Problems with the station air conditioner resulted in various drift issues with most analyzers.

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43CTL	70 hours of data were removed due to signal loss from equipment
NOx/NO/NO <sub>2</sub>	TECO	42C	8 hours of data were removed due to signal loss from equipment
O <sub>3</sub>	API	400	15 hours of data were removed due to signal loss from equipment
PM <sub>2.5</sub>	R&P	1400AB	15 hours of data were removed due to signal loss from equipment; 27 hours were removed due to excessive baseline drift
RH			
AT			No operational problems observed
SR			
WS	Blue Sky		No operational problems observed
WD	Blue Sky		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: August 1, 2005 to September 1, 2005

#### Alberta's Air Quality Index

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

#### Summary

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

# PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

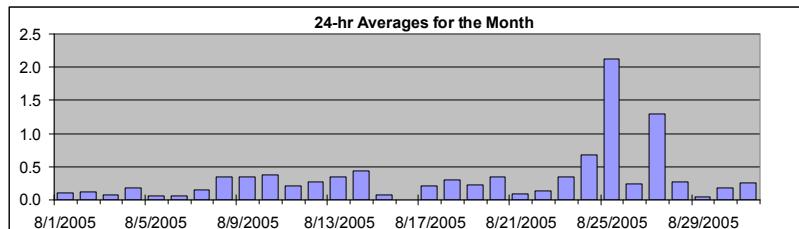
## HOURLY AVERAGE TABLE

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

Monitoring Dates: August 1, 2005 to September 1, 2005

Objective Limit:	Alberta Environment:		1-hr	172	ppb	24-hr	57	ppb
<b>Summary</b>								
Number of 1-hr Exceedances:	0							
Number of 24-hr Exceedances:	0							
Maximum 1-hr Average:	23.6	ppb	25-Aug	9:00	10:00			
Maximum 24-hr Average:	2.1	ppb	25-Aug					

AIC Time:	34 hrs	Operational Time:	708 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	0.3 ppb
	2.9 0.9 0.3 0.2 0.1 0.0 0.0		



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	2	A	0	0	0	0	0	0	0	0	0	0	0	0.1	1.6
2-Aug-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	0.1	0.4
3-Aug-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	0.1	0.3
4-Aug-05	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
5-Aug-05	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
6-Aug-05	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	0.3
7-Aug-05	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
8-Aug-05	0	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
9-Aug-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	0.3	2.9
10-Aug-05	0	0	0	A	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0.4	1.0
11-Aug-05	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
12-Aug-05	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
13-Aug-05	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.0
14-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0.4	3.6
15-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	A	0	0	0	0	0	0	0	0	0.1	0.3
16-Aug-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	0.0	0.0
17-Aug-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
18-Aug-05	0	0	0	0	A	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.7
19-Aug-05	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
20-Aug-05	0	0	0	A	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.3
21-Aug-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
22-Aug-05	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	0.3
23-Aug-05	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
24-Aug-05	0	0	0	0	A	1	0	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	2.2
25-Aug-05	0	0	0	0	A	0	1	2	7	24	9	0	0	0	0	0	0	0	0	0	1	1	1	1	0	2.1	23.6
26-Aug-05	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
27-Aug-05	0	0	A	0	0	0	0	1	3	1	4	4	4	3	1	0	1	0	2	1	1	1	1	1	1	1.3	3.9
28-Aug-05	1	A	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
29-Aug-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
30-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
31-Aug-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	0.3	0.4
Hourly Avg	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.6	1.2	0.8	0.5	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2			
Hourly Max	0.7	0.4	0.5	0.4	0.5	0.7	2.7	7.4	23.6	9.3	3.5	2.7	1.2	2.9	3.6	0.8	2.0	1.0	1.1	0.7	2.9	1.0	0.8				

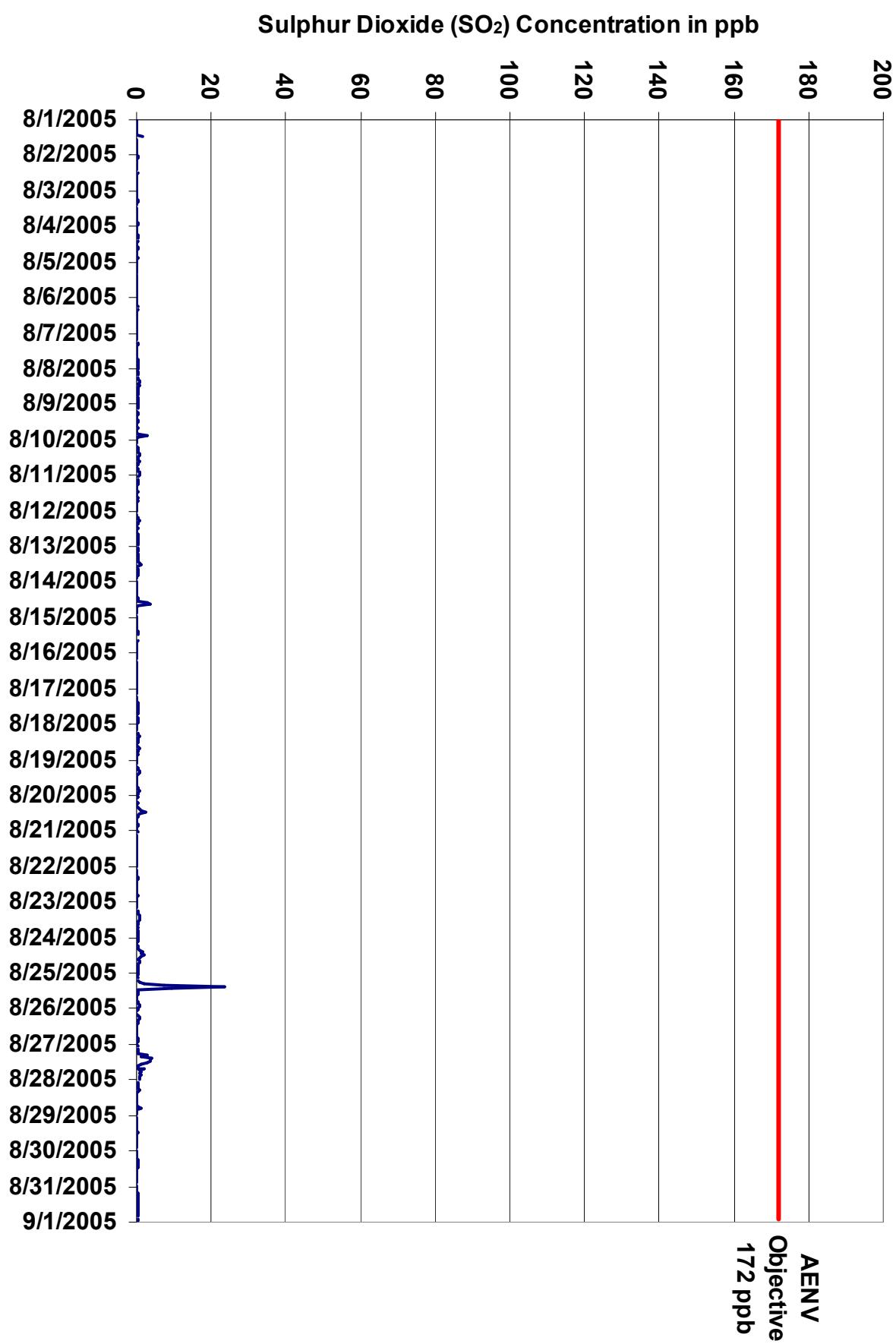


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### HOURLY MAXIMUM TABLE

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

#### Summary

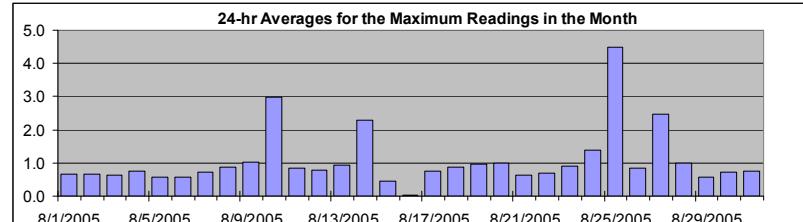
Maximum 1-hr Value:	45.2 ppb	10-Aug 15:00	16:00
Maximum 24-hr Value:	4.5 ppb	25-Aug	

AIC Time:	34 hrs	Operational Time:	708 hrs					
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 5.7	95 1.7	75 0.9	50 0.7	25 0.6	5 0.3	1 0.0	Average 1.1 ppb

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-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-Aug-05	0	0	0	0	0	0	0	1	1	1	1	4	A	1	0	0	0	1	0	1	1	0	1	1	0.7	4.1	
2-Aug-05	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	0.7	0.9	
3-Aug-05	1	1	1	1	0	1	1	1	1	0	A	1	0	1	0	0	1	0	0	1	1	1	1	1	0.6	0.9	
4-Aug-05	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
5-Aug-05	1	1	1	0	1	1	1	1	1	A	1	0	1	0	0	1	1	1	1	1	1	1	1	1	0.6	0.7	
6-Aug-05	0	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	0	0.6	0.7	
7-Aug-05	0	0	0	1	0	1	A	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	2	1	1	0.7	1.6
8-Aug-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	0.9	1.3	
9-Aug-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	1	1.0	5.1
10-Aug-05	1	1	1	A	1	1	1	1	1	1	2	2	1	1	3	1	45	1	1	1	1	1	1	1	1	3.0	45.2
11-Aug-05	1	1	A	1	1	1	2	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.8	1.8	
12-Aug-05	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
13-Aug-05	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0.9	1.6	
14-Aug-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19	18	1	1	1	1	1	1	1	1	A	1.1	18.7
15-Aug-05	0	0	0	0	1	1	1	1	1	1	1	1	C	C	A	A	1	0	0	0	0	0	0	0	0.4	0.9	
16-Aug-05	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	
17-Aug-05	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1	
18-Aug-05	1	1	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6	
19-Aug-05	1	0	0	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1.0	4.7
20-Aug-05	1	1	1	A	1	1	1	1	1	1	3	3	1	1	1	1	1	0	1	1	1	1	1	1	1.0	3.5	
21-Aug-05	1	1	A	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.2	
22-Aug-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	0.7	0.9	
23-Aug-05	1	1	0	1	1	A	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6	
24-Aug-05	1	1	1	1	1	A	1	1	2	2	2	2	3	2	1	1	1	1	1	2	1	1	1	2	1.4	3.4	
25-Aug-05	1	1	1	1	A	1	1	4	16	38	28	1	1	1	1	1	1	1	1	1	2	1	1	1	4.5	37.6	
26-Aug-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	2	1	0.8	1.7	
27-Aug-05	1	1	A	1	1	1	2	7	2	6	5	4	4	2	1	1	1	4	4	3	2	2	2	1	2.5	6.9	
28-Aug-05	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1	0	1.0	3.9	
29-Aug-05	A	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0.6	0.9	
30-Aug-05	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.7	1.1	
31-Aug-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	

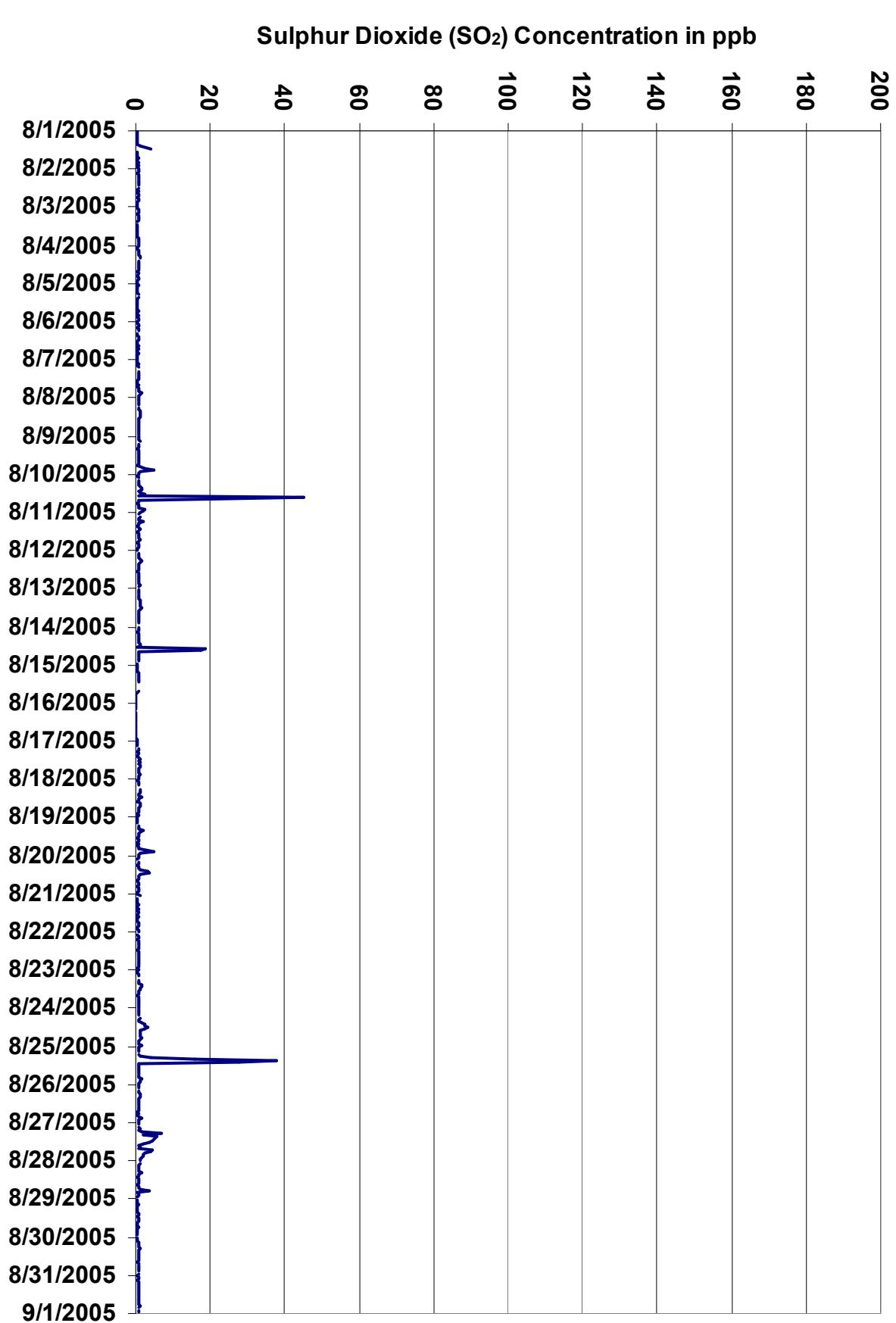
Hourly Avg	0.6	0.6	0.6	0.7	0.6	0.7	0.9	1.2	1.4	2.2	2.0	1.2	1.0	0.8	1.3	2.8	0.7	0.8	0.8	0.8	0.8	1.1	0.8	0.7
Hourly Max	1.4	1.2	1.0	1.1	1.0	1.0	1.8	6.9	16.0	37.6	27.8	4.4	3.8	2.5	18.7	45.2	1.3	4.3	4.2	3.9	2.4	5.1	2.3	1.9



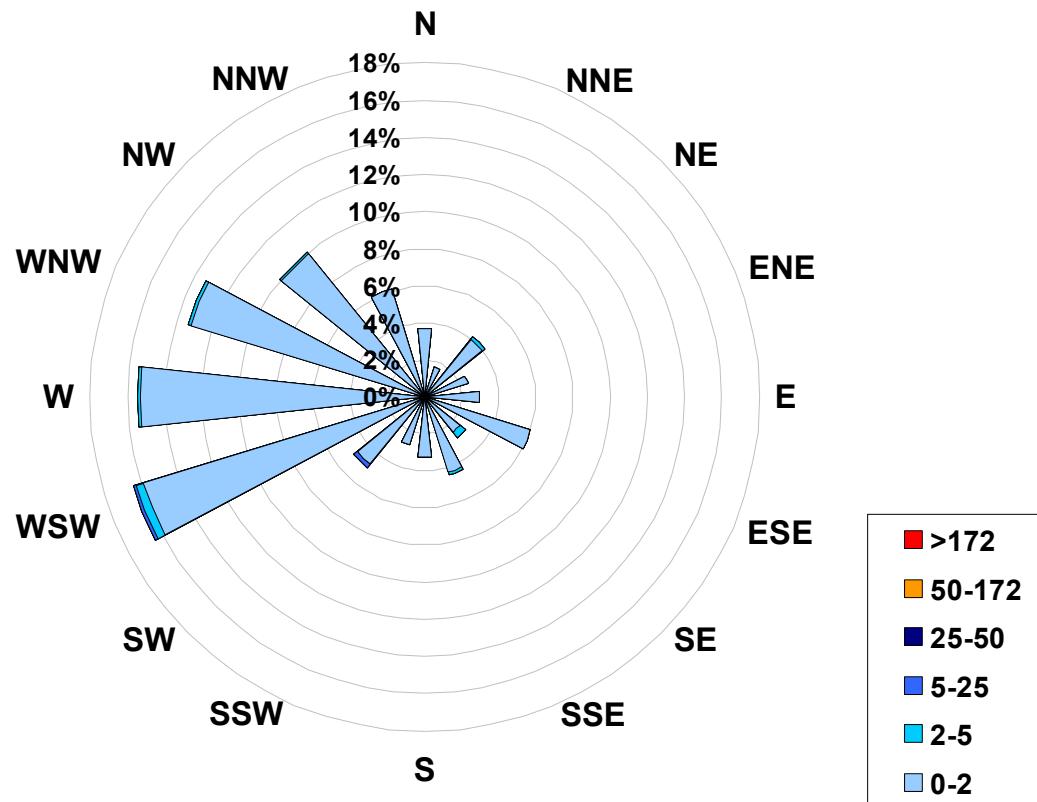
#### Status Flag Characters

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

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



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



Calms:	0%
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Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	694
2	to	5	11
5	to	25	3
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			708

### PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

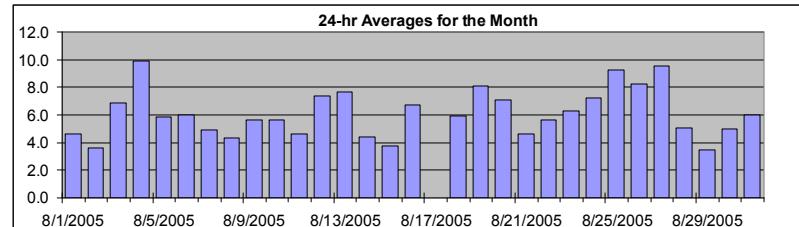
Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

Objective Limit:	Alberta Environment:	1-hr 212 ppb	24-hr 106 ppb
<b>Summary</b>			
Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	30.1 ppb	25-Aug	20:00 21:00
Maximum 24-hr Average:	9.9 ppb	4-Aug	

#### HOURLY AVERAGE TABLE

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



#### Status Flag Characters

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

Percentile	99	95	75	50	25	5	1	Average	
	20.6	14.7	8.4	4.5	3.0	1.7	1.2	6.2	ppb

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	13	10	9	5	3	5	7	3	4	4	2	3	A	5	3	2	2	3	3	3	5	5	5	5	2	4.6	12.9
2-Aug-05	3	4	2	3	3	3	4	4	6	3	3	A	4	2	3	3	3	4	5	5	5	4	4	4	4	3.6	5.6
3-Aug-05	5	5	4	4	10	11	11	9	5	3	A	4	3	2	3	2	2	3	8	11	16	20	14		6.9	20.3	
4-Aug-05	14	17	15	11	12	15	15	14	11	A	7	6	5	4	4	4	4	4	7	8	15	18	11	10	9.9	18.3	
5-Aug-05	9	7	6	3	2	11	7	4	A	4	3	3	3	3	2	3	4	6	7	9	8	11	9	11	5.8	11.3	
6-Aug-05	10	8	6	10	10	13	13	A	10	5	3	2	2	2	5	4	4	3	3	5	5	4	3	7	6.0	13.4	
7-Aug-05	4	8	8	7	10	16	A	7	2	2	1	1	1	1	1	2	2	2	5	8	11	7	6		4.9	16.4	
8-Aug-05	2	2	3	4	5	A	11	5	3	2	2	2	2	2	1	1	2	2	5	11	14	10	8		4.3	14.1	
9-Aug-05	6	5	4	4	A	8	11	6	4	4	5	3	3	2	3	7	7	4	7	7	8	9	8		5.6	11.0	
10-Aug-05	5	4	5	A	10	13	12	6	5	8	4	3	3	1	2	2	3	2	5	11	9	9	6		5.6	12.5	
11-Aug-05	7	5	A	5	5	10	6	5	4	2	2	2	2	3	2	2	2	3	3	7	10	10	5		4.6	10.3	
12-Aug-05	5	A	5	4	4	17	18	7	4	3	3	5	4	2	1	1	1	2	5	11	19	24	24		7.4	24.4	
13-Aug-05	A	19	16	15	10	13	13	9	7	5	6	6	4	3	3	4	5	3	5	5	6	6	6	A	7.6	19.0	
14-Aug-05	6	6	5	4	3	5	6	6	6	5	3	4	7	3	2	3	3	4	5	4	5	2	A	3	4.4	6.8	
15-Aug-05	3	2	2	3	3	8	7	8	5	3	2	2	2	2	1	4	3	3	3	4	6	6	4	4		3.7	8.0
16-Aug-05	4	4	5	3	3	A	12	12	9	5	4	5	4	4	5	7	8	7	8	6	14	14	9	5		6.7	14.3
17-Aug-05	3	4	4	3	A	9	9	5	3	C	C	C	C	C	C	C	C	C	A	8	22	21	18	13		N	21.7
18-Aug-05	7	7	8	11	10	A	11	9	7	5	4	3	3	3	4	3	3	3	3	6	10	9	5	3		5.9	11.3
19-Aug-05	3	3	4	6	A	11	13	10	9	9	9	4	3	2	2	2	2	3	4	11	14	22	23	17		8.1	22.7
20-Aug-05	16	13	10	A	8	12	8	9	7	4	4	4	2	2	2	3	2	3	2	7	19	14	7	5		7.1	19.3
21-Aug-05	2	1	A	3	5	11	8	8	11	5	3	5	3	3	4	4	4	3	4	5	5	3	3	2		4.6	10.9
22-Aug-05	2	A	3	4	4	10	12	11	8	5	3	2	2	2	3	4	3	3	3	10	12	11	10	4		5.7	11.7
23-Aug-05	4	4	7	7	13	A	11	7	5	2	1	2	2	4	4	3	4	10	5	6	15	12	8	9		6.3	15.1
24-Aug-05	7	8	10	9	8	A	8	6	4	4	6	4	2	2	1	1	2	2	3	11	21	18	17	13		7.2	20.6
25-Aug-05	11	12	14	10	A	11	9	8	10	5	3	3	3	3	2	1	1	2	2	12	30	28	20	12		9.3	30.1
26-Aug-05	12	13	10	A	11	9	6	10	8	7	7	4	3	3	4	3	4	5	6	18	14	16	13			8.2	18.0
27-Aug-05	14	16	A	18	13	15	16	11	7	7	6	8	12	10	4	3	4	6	7	11	12	9	7	4		9.6	18.4
28-Aug-05	6	A	11	11	13	13	11	6	2	2	2	3	2	3	2	1	1	2	4	6	3	4	4	3		5.0	13.2
29-Aug-05	A	4	2	2	3	3	4	5	3	4	4	3	3	3	3	2	2	4	3	3	5	7	8	A		3.5	7.7
30-Aug-05	8	7	6	5	5	4	3	3	6	6	4	2	3	3	3	4	2	3	6	9	12	A	8		5.0	11.8	
31-Aug-05	3	3	2	2	4	10	13	13	10	3	3	2	2	3	2	2	3	4	6	16	10	A	10	8		6.0	16.5
Hourly Avg	6.6	7.2	6.5	6.2	7.0	10.3	9.9	7.5	6.1	4.4	3.9	3.5	3.2	2.9	2.6	2.8	3.1	3.5	3.9	6.8	10.9	11.4	10.2	8.0			
Hourly Max	15.6	19.0	16.3	18.4	13.4	16.7	18.3	13.7	10.8	9.4	9.1	7.6	12.1	9.7	4.5	6.9	7.6	9.6	7.5	16.5	30.1	27.7	24.4	23.7			

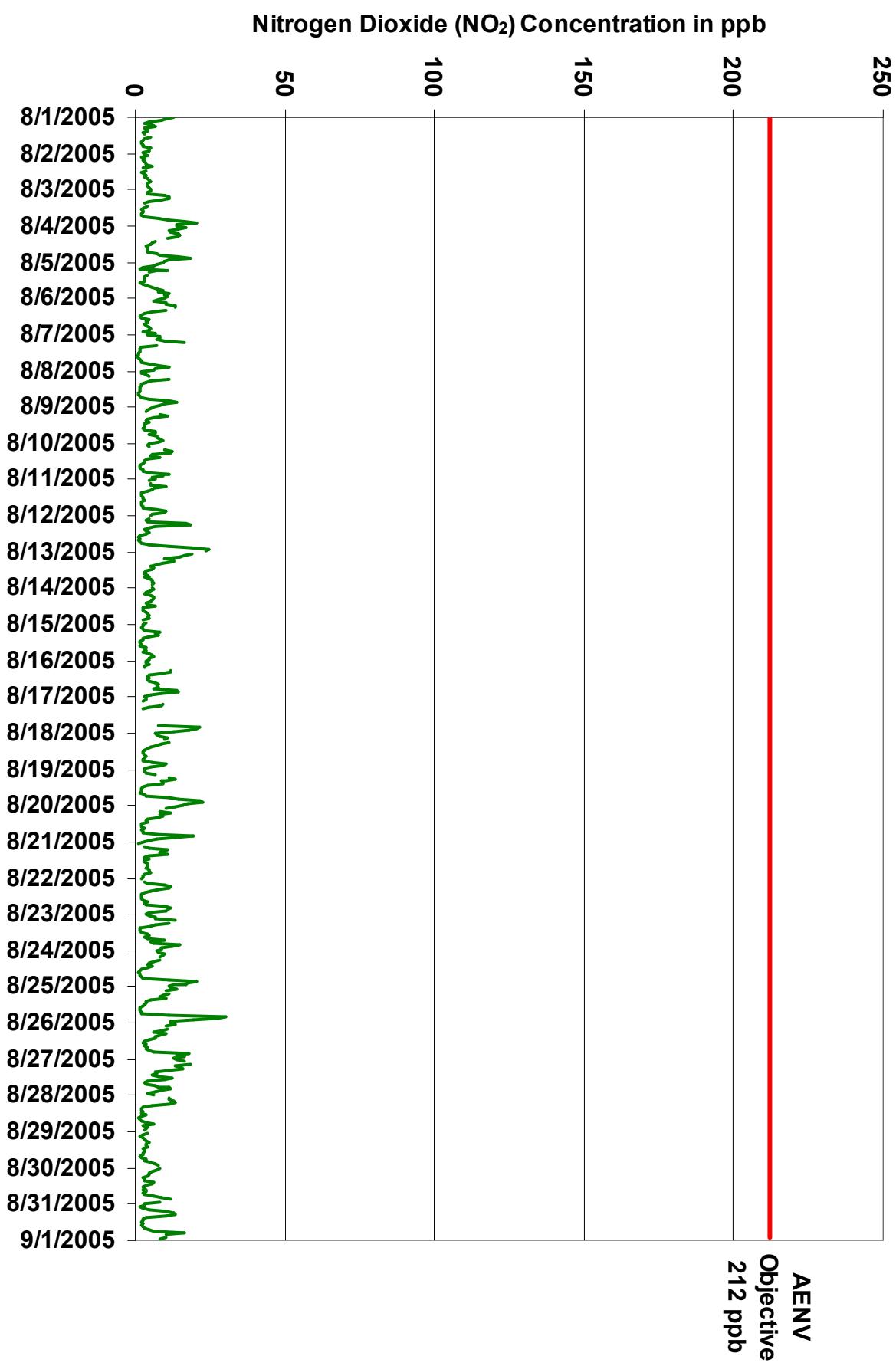


Figure 3. PASZA - Henry Pirkler Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	36.1 ppb	12-Aug 22:00 23:00
Maximum 24-hr Value:	13.8 ppb	4-Aug

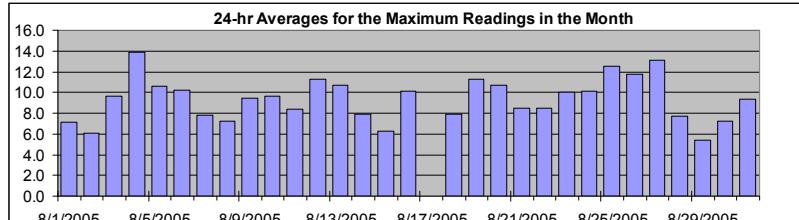
AIC Time:	33 hrs	Operational Time:	702 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	9.4 ppb
	27.8 20.2 12.4 7.7 5.1 3.4 2.5		

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
	Hour End 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
1-Aug-05	14	15	11	6	4	11	9	5	6	7	4	5	A	8	5	4	4	5	5	5	5	9	7	8	7	7.1	14.9
2-Aug-05	5	6	4	4	5	6	5	5	8	5	5	A	5	4	7	6	6	9	11	8	5	6	7	8	6.1	10.7	
3-Aug-05	10	8	5	6	12	13	14	13	7	5	5	A	7	5	6	5	4	4	4	6	11	13	23	24	9.6	23.6	
4-Aug-05	22	20	17	14	13	18	17	17	14	A	10	9	8	6	8	7	8	9	13	12	21	22	17	14	13.8	22.0	
5-Aug-05	18	11	8	8	6	21	16	7	A	9	6	5	6	8	3	6	6	10	10	15	16	17	16	15	10.6	20.6	
6-Aug-05	15	19	8	14	12	19	17	A	14	8	6	5	3	4	11	5	8	7	9	7	11	9	4	19	10.2	19.5	
7-Aug-05	7	16	11	9	17	20	A	15	3	2	3	2	3	2	2	3	3	3	4	3	8	12	16	10	9	7.8	19.9
8-Aug-05	7	4	5	6	10	A	18	8	5	3	4	3	4	4	3	2	2	4	5	9	17	17	14	11	7.2	18.4	
9-Aug-05	9	8	5	5	A	10	14	12	8	8	10	7	8	8	7	6	19	12	7	11	10	10	13	11	9.4	18.8	
10-Aug-05	9	5	7	A	13	14	14	11	12	12	7	6	5	24	3	7	5	6	4	7	18	12	13	8	9.7	23.9	
11-Aug-05	10	6	A	8	9	15	25	9	9	4	4	4	5	4	6	7	4	4	5	5	13	15	14	8	8.4	25.4	
12-Aug-05	7	A	8	9	8	18	21	15	7	5	5	6	6	6	3	4	3	3	5	8	18	30	36	30	11.3	36.1	
13-Aug-05	A	23	19	17	12	16	16	14	10	7	9	9	7	6	9	9	8	7	8	10	8	9	8	A	10.7	22.5	
14-Aug-05	12	15	7	6	5	10	10	10	11	9	7	8	11	5	5	4	8	6	6	7	9	4	A	6	7.9	14.8	
15-Aug-05	4	4	3	5	6	11	10	13	9	5	6	3	3	4	3	6	5	6	4	10	9	9	6	7	6.2	12.7	
16-Aug-05	6	5	7	4	5	A	15	16	12	9	7	8	7	6	8	13	13	12	11	9	19	18	12	11	10.1	19.5	
17-Aug-05	5	5	5	4	A	11	10	8	5	C	C	C	C	C	C	C	C	C	A	12	25	24	21	18	N	25.2	
18-Aug-05	8	10	12	13	11	A	15	10	9	7	5	4	3	4	5	6	5	4	4	9	13	13	8	5	7.9	14.8	
19-Aug-05	4	4	6	13	A	14	15	13	11	14	11	6	5	4	6	4	5	6	7	20	18	27	26	21	11.3	26.6	
20-Aug-05	20	18	13	A	12	14	12	12	10	5	5	5	3	5	4	5	4	4	5	19	26	18	18	6	10.7	25.7	
21-Aug-05	5	1	A	4	9	21	15	12	14	14	6	7	6	8	10	7	7	7	11	10	9	5	4	5	8.5	20.6	
22-Aug-05	3	A	5	6	6	15	13	13	9	8	5	4	4	4	6	9	7	6	14	16	13	15	8	8.5	16.2		
23-Aug-05	6	8	11	13	16	A	13	10	8	3	6	3	7	9	10	6	10	14	10	11	18	15	10	11	10.0	18.3	
24-Aug-05	9	11	11	12	10	A	11	8	6	5	7	6	4	4	2	3	4	5	6	19	28	24	24	17	10.1	27.9	
25-Aug-05	13	15	16	13	A	14	11	13	13	6	5	5	4	4	3	2	2	4	4	28	34	32	24	18	12.5	34.0	
26-Aug-05	14	15	15	A	12	11	10	11	10	9	9	8	7	5	7	6	8	6	7	10	28	21	23	17	11.7	28.1	
27-Aug-05	17	20	A	23	16	19	20	15	10	9	7	10	16	19	6	6	7	9	10	18	19	11	11	6	13.2	22.8	
28-Aug-05	8	A	12	12	15	17	14	9	4	3	5	5	3	7	5	4	3	4	6	11	6	9	6	7	7.7	16.8	
29-Aug-05	A	8	3	3	4	5	5	7	4	6	6	4	4	6	4	6	4	5	4	4	7	8	8	A	5.4	8.5	
30-Aug-05	11	8	6	5	5	5	4	4	6	8	7	6	5	5	6	6	4	6	9	14	17	A	14	7.3	16.8		
31-Aug-05	4	5	3	5	7	14	17	17	15	7	4	4	3	5	5	4	6	8	11	23	15	A	15	9.3	23.1		

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

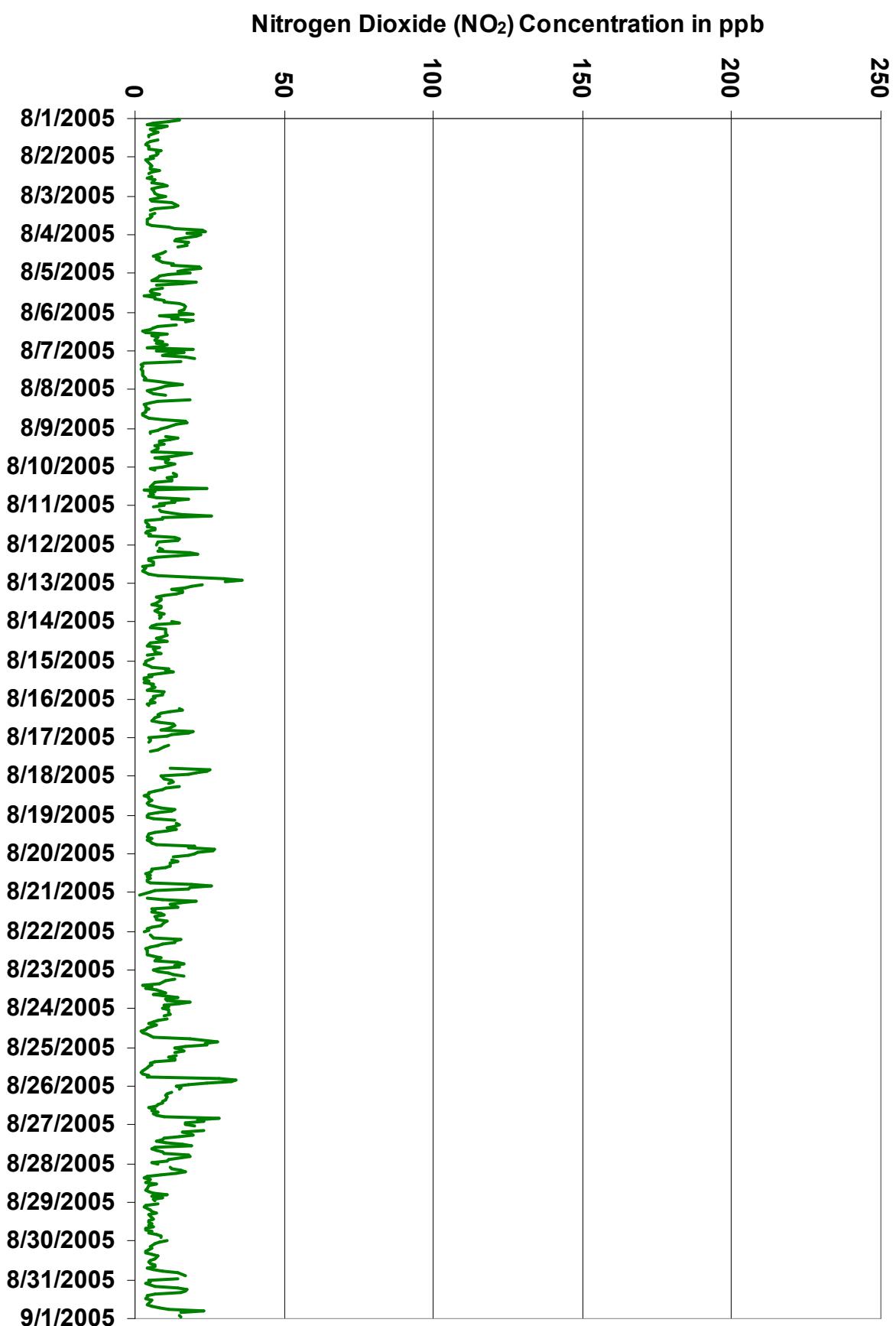
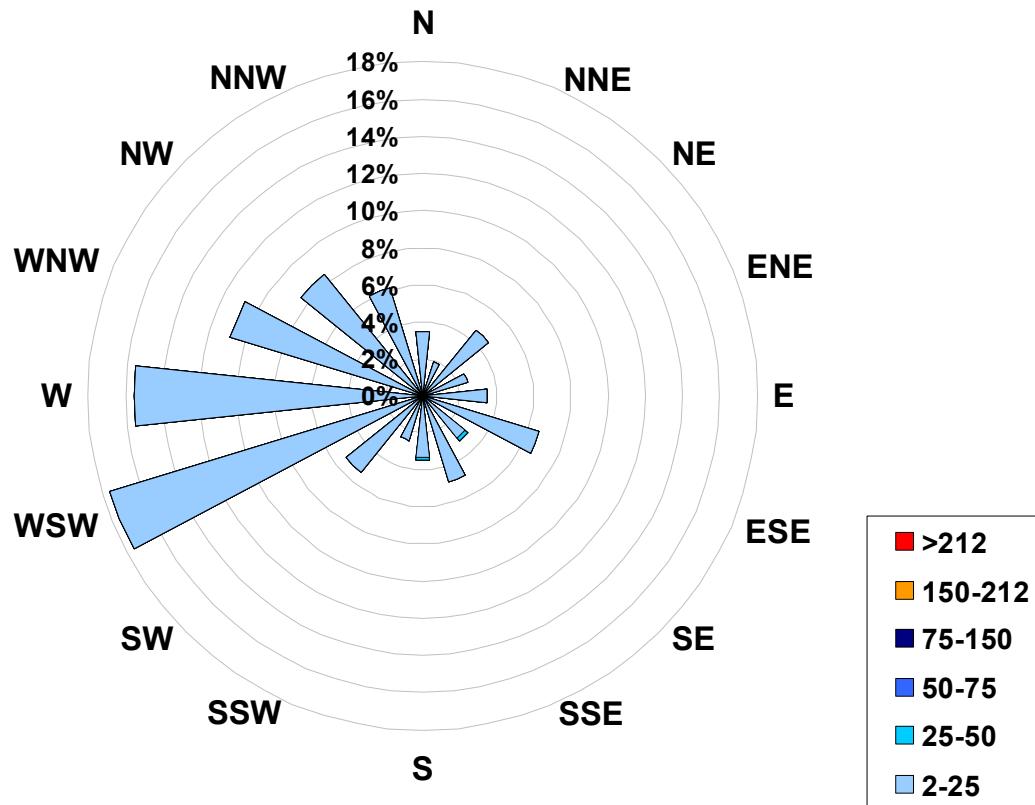


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

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



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

Frequency Distribution of NO <sub>2</sub> in ppb		Frequency (hrs)
Range	Frequency (hrs)	
2.0 < 25	687	
25 to 50	13	
50 to 75	2	
75 to 150	0	
150 to 212	0	
> 212	0	
Total Non-Zero Values	702	

### PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

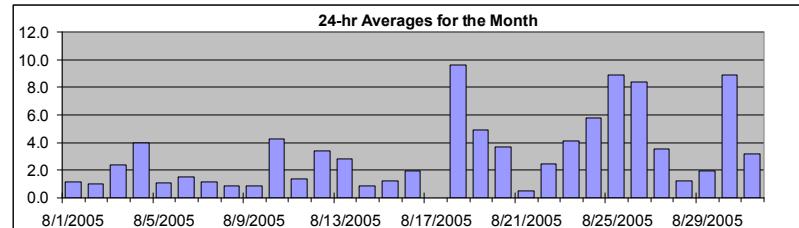
Monitoring Dates: August 1, 2005 to September 1, 2005

Guideline Limit:  
Summary

#### HOURLY AVERAGE TABLE

#### Nitric Oxide (NO)

	1-hr	na	ppb	24-hr	na	ppb
Maximum 1-hr Average:	72.2	ppb	26-Aug	6:00	7:00	
Maximum 24-hr Average:	9.6	ppb	18-Aug			



AIC Time:	33 hrs			Operational Time:	702 hrs		
Calibration Time:	9 hrs			AMD Operational Uptime:	100.0%		
Percentile	99	95	75	50	25	5	1
	36.5	16.7	2.9	1.1	0.5	0.1	0.0
				Average 3.4 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

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Aug-05	1	2	3	0	0	3	5	2	2	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	1.2	5.4	
2-Aug-05	0	0	0	0	0	1	1	2	3	2	2	A	1	1	1	2	1	1	2	2	1	1	0	0	1.0	2.7	
3-Aug-05	0	1	0	0	3	11	14	10	4	3	A	2	1	1	1	1	0	0	1	0	0	0	0	2.4	13.9		
4-Aug-05	1	1	1	1	2	9	22	21	15	A	3	2	2	1	1	1	1	1	1	1	2	1	0	4.0	22.1		
5-Aug-05	1	0	0	0	0	3	2	2	A	1	1	1	2	1	1	1	1	1	1	1	2	1	0	1.1	3.4		
6-Aug-05	1	0	0	1	0	5	7	A	5	3	1	1	1	1	2	1	1	1	1	1	1	1	0	1.5	7.4		
7-Aug-05	0	0	0	0	0	11	A	5	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1.2	11.1		
8-Aug-05	0	0	0	0	0	A	4	2	2	1	1	1	1	1	1	1	0	1	1	0	0	1	2	1	0.8	3.9	
9-Aug-05	0	0	0	0	A	1	3	2	1	1	1	1	1	1	1	1	1	2	1	1	1	0	0	1	0.9	3.2	
10-Aug-05	1	0	0	A	4	17	34	9	6	10	2	1	1	7	0	1	0	1	1	1	1	0	0	4.3	33.9		
11-Aug-05	0	0	A	0	1	3	11	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	11.0		
12-Aug-05	1	A	0	1	0	23	28	4	3	2	2	3	2	1	0	0	0	0	0	0	0	0	2	4	3.4	28.1	
13-Aug-05	A	5	3	5	3	7	14	6	6	3	3	2	1	1	1	1	1	1	1	0	0	0	0	A	2.9	13.8	
14-Aug-05	0	1	0	0	0	0	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.1	
15-Aug-05	0	0	0	0	0	1	2	5	3	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1.2	4.6		
16-Aug-05	0	1	0	0	1	A	2	3	4	2	2	3	3	2	2	3	3	2	1	1	3	4	2	1	2.0	4.4	
17-Aug-05	1	1	1	1	A	5	8	4	2	C	C	C	C	C	C	C	C	C	A	9	17	37	26	20	N	37.5	
18-Aug-05	10	9	10	12	21	A	33	39	26	10	7	6	5	4	4	4	4	3	3	3	3	3	2	1	9.6	39.1	
19-Aug-05	1	1	1	1	A	1	13	18	22	16	10	2	1	1	0	0	0	0	1	0	3	17	3	4.9	22.1		
20-Aug-05	7	15	4	A	1	8	3	7	11	2	1	1	0	0	0	0	0	1	0	0	1	12	5	2	0	3.7	15.4
21-Aug-05	0	0	A	0	0	0	1	2	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.7	
22-Aug-05	0	A	0	0	0	2	8	11	6	5	3	2	2	1	2	2	2	1	1	2	3	1	3	0	2.4	10.9	
23-Aug-05	0	0	0	0	5	A	20	19	14	2	2	1	1	4	2	1	4	2	1	5	4	3	3	4.1	20.5		
24-Aug-05	3	6	4	6	6	A	42	23	15	8	7	3	1	1	0	1	1	1	0	1	2	1	1	1	5.8	41.9	
25-Aug-05	0	0	3	4	A	14	29	63	22	6	2	2	1	1	0	0	0	1	0	1	13	23	17	1	8.9	62.6	
26-Aug-05	1	3	2	A	5	24	72	37	19	9	5	2	1	1	1	1	1	1	1	1	1	1	1	2	0	8.4	72.2
27-Aug-05	1	1	A	5	1	8	17	13	5	7	5	5	5	2	1	0	1	1	1	2	2	1	0	0	3.6	17.3	
28-Aug-05	0	A	0	0	0	4	14	3	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	1.3	14.3	
29-Aug-05	A	0	0	0	1	1	2	3	3	4	4	3	3	3	2	2	1	1	1	1	1	2	6	A	2.0	6.3	
30-Aug-05	4	7	5	4	8	20	28	42	38	18	8	5	2	2	2	2	2	1	1	1	1	1	1	1	8.9	41.8	
31-Aug-05	0	0	1	1	1	2	4	9	8	4	3	3	3	4	3	3	3	3	5	3	A	3	3	3.2	8.8		
Hourly Avg	1.2	2.0	1.4	1.6	2.3	7.1	14.9	12.2	8.4	4.3	2.8	2.0	1.6	1.5	1.2	1.2	1.2	1.2	1.0	1.4	2.6	3.2	3.2	1.5			
Hourly Max	9.7	15.4	9.6	12.3	21.2	24.1	72.2	62.6	38.4	18.4	9.8	5.6	4.7	6.5	4.1	4.1	3.5	4.3	3.4	9.1	17.3	37.5	25.6	20.4			

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

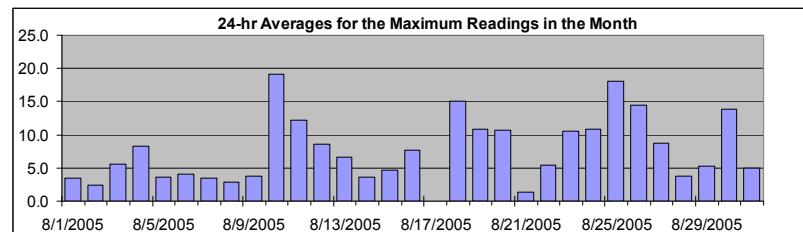
### Summary

Maximum 1-hr Value:	220.3 ppb	10-Aug 13:00 14:00
Maximum 24-hr Value:	19.1 ppb	10-Aug

AIC Time:	33 hrs	Operational Time:	702 hrs					
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 60.4	95 32.2	75 7.8	50 3.4	25 1.5	5 0.5	1 0.3	Average 8.0 ppb

### HOURLY MAXIMUM TABLE

### Nitric Oxide (NO)



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
Hour End 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-05	3	11	7	1	1	16	11	4	4	2	2	1	A	2	3	2	2	2	1	2	1	1	1	0	3.5	15.8	
2-Aug-05	0	0	0	1	1	2	3	3	5	4	4	A	2	3	3	3	5	5	4	2	2	1	1	3	2.5	5.5	
3-Aug-05	3	1	1	1	9	21	21	19	7	5	A	13	3	8	3	2	2	1	1	1	1	1	1	0	5.5	20.9	
4-Aug-05	6	10	6	3	4	18	38	39	22	A	5	4	4	3	3	3	4	3	3	3	6	2	1	2	8.3	38.6	
5-Aug-05	4	2	1	1	1	17	7	3	A	3	3	3	3	3	4	2	3	3	3	4	4	1	7	1	3.6	16.5	
6-Aug-05	8	3	1	3	2	13	11	A	8	5	3	3	2	2	5	2	2	2	13	2	2	1	1	2	4.0	12.9	
7-Aug-05	1	2	1	1	2	29	A	12	2	2	2	2	2	1	1	2	1	3	1	2	5	3	2	1	3.4	29.2	
8-Aug-05	1	1	1	0	1	A	12	3	3	2	3	2	2	2	1	1	12	1	1	7	6	2	1	2	2.9	12.3	
9-Aug-05	1	2	1	1	1	A	2	9	6	12	6	6	3	5	4	2	2	9	8	2	2	1	1	1	3.8	12.3	
10-Aug-05	2	1	1	A	15	26	60	33	22	21	9	5	3	220	2	6	2	2	1	1	3	1	1	1	19.1	220.3	
11-Aug-05	1	1	A	1	2	11	219	5	4	2	2	2	2	2	3	3	2	2	5	2	2	2	3	2	12.2	218.6	
12-Aug-05	2	A	3	9	4	45	44	11	5	5	3	4	19	5	3	1	1	1	1	1	2	15	17	8.7	44.6		
13-Aug-05	A	13	5	8	6	15	31	17	9	4	4	4	3	3	6	3	4	2	3	2	1	1	3	A	6.6	30.8	
14-Aug-05	1	7	1	0	1	1	1	4	5	4	4	7	7	5	1	2	6	8	2	4	3	4	A	5	3.6	8.4	
15-Aug-05	1	1	3	4	1	6	13	25	13	3	5	2	2	3	2	5	2	3	2	2	3	8	3	3	4.7	25.4	
16-Aug-05	1	6	3	1	4	A	7	6	15	5	8	16	6	5	9	8	13	9	7	4	10	13	7	12	7.7	15.6	
17-Aug-05	3	4	2	1	A	11	11	9	6	C	C	C	C	C	C	C	C	C	A	10	37	56	37	34	N	55.7	
18-Aug-05	15	12	15	20	32	A	60	59	47	16	9	8	5	6	5	6	6	4	3	4	3	4	3	2	15.0	60.4	
19-Aug-05	2	2	1	9	A	6	21	28	31	26	27	5	2	2	5	1	3	2	1	2	2	14	51	6	10.9	51.2	
20-Aug-05	19	21	11	A	5	21	13	19	22	4	2	2	1	1	1	1	1	1	2	7	43	32	14	1	10.7	43.4	
21-Aug-05	1	0	A	0	0	2	1	1	3	4	1	1	1	2	3	2	1	1	1	1	1	1	0	0	1.3	4.0	
22-Aug-05	0	A	0	1	1	4	15	16	8	7	11	3	4	4	3	4	4	3	2	5	8	3	15	1	5.4	16.3	
23-Aug-05	1	0	3	3	12	A	31	51	35	3	10	4	3	8	8	3	4	12	3	2	17	7	6	10	10.5	51.5	
24-Aug-05	5	11	10	11	17	A	60	31	43	11	11	4	2	2	1	1	2	2	1	2	9	4	3	2	10.8	60.1	
25-Aug-05	1	3	9	16	A	23	41	80	44	9	4	3	2	2	1	1	1	3	1	10	50	47	61	3	18.0	80.2	
26-Aug-05	6	8	6	A	18	42	96	49	33	14	11	6	3	3	3	3	3	1	1	1	5	2	16	1	14.5	95.7	
27-Aug-05	4	3	A	10	5	22	26	24	12	9	7	5	7	14	1	1	1	3	2	13	20	4	4	0	8.7	25.9	
28-Aug-05	1	A	1	0	2	25	29	6	1	1	1	2	2	2	1	1	1	1	2	1	0	3	1	0	3.7	29.0	
29-Aug-05	A	1	3	0	4	10	8	9	6	9	10	8	5	8	4	5	3	2	2	1	3	11	A	5.3	11.4		
30-Aug-05	7	10	7	7	12	36	39	62	47	32	15	10	4	3	3	4	4	4	2	2	2	1	A	1	13.8	62.4	
31-Aug-05	1	1	1	1	2	4	8	16	13	6	5	5	4	6	6	5	5	4	4	8	5	A	3	3	5.0	15.7	
	Hourly Avg	3.5	4.9	3.7	4.0	6.0	16.4	31.5	21.8	16.2	7.8	6.5	4.9	3.9	11.1	3.2	2.9	3.3	3.7	2.7	3.5	8.2	7.6	9.5	4.1		
	Hourly Max	18.6	20.9	15.4	19.9	31.6	44.6	218.6	80.2	46.9	32.2	27.0	15.6	19.0	220.3	9.3	8.3	12.5	12.3	12.9	13.3	49.6	55.7	61.0	33.5		

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

Station: Henry Pirker  
Station Owner: PASZA

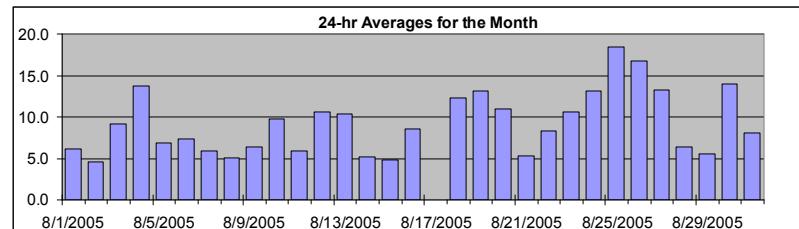
Monitoring Dates: August 1, 2005 to September 1, 2005

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

Maximum 1-hr Average: 79.3 ppb 26-Aug 6:00 7:00  
Maximum 24-hr Average: 18.4 ppb 25-Aug

#### HOURLY AVERAGE TABLE

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



#### Status Flag Characters

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

AIC Time:	33 hrs							Operational Time:							702 hrs											
	Calibration Time: 9 hrs							AMD Operational Uptime: 100.0%																		
Percentile	99	95	75	50	25	5	1	Average 9.4 ppb																		
	45.7	27.1	11.7	5.8	4.0	2.1	1.6	99	95	75	50	25	5	1	99	95	75	50	25	5	1					
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	24-hour Average	Daily Maximum

#### Day Mountain Standard Time

Day	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Aug-05	15	14	13	6	4	9	13	6	6	6	4	4	A	6	4	3	3	3	3	3	3	6	5	5	2
2-Aug-05	3	4	2	3	3	4	5	6	8	5	4	A	4	3	3	4	5	4	5	6	7	5	5	4	5
3-Aug-05	5	5	4	4	13	22	25	19	9	6	A	6	4	3	3	3	2	3	4	8	11	16	20	14	
4-Aug-05	15	18	16	12	13	24	37	35	25	A	9	7	7	5	6	6	5	5	8	9	16	19	11	10	
5-Aug-05	10	7	6	3	2	14	9	6	A	6	4	4	5	4	2	4	5	7	8	11	9	11	10	11	
6-Aug-05	10	8	6	11	10	18	20	A	15	8	5	3	2	2	6	5	5	4	5	6	6	4	3	7	
7-Aug-05	4	8	8	7	10	27	A	11	3	2	2	2	2	1	1	1	2	2	2	5	8	12	7	6	
8-Aug-05	2	2	3	4	5	A	15	7	5	3	3	2	2	2	2	2	2	2	2	5	12	16	10	8	
9-Aug-05	6	5	4	4	A	9	14	8	5	5	6	4	4	3	4	8	8	5	8	8	8	10	8	8	
10-Aug-05	5	4	5	A	14	29	46	15	11	19	6	4	5	8	2	2	2	3	3	5	12	9	9	6	
11-Aug-05	7	5	A	5	6	13	17	7	5	3	3	3	3	3	4	3	3	3	4	3	7	11	11	6	
12-Aug-05	6	A	5	5	4	39	46	10	7	5	5	7	6	2	2	2	1	2	2	5	11	19	26	27	
13-Aug-05	A	24	19	19	12	19	27	15	13	8	8	8	5	4	4	5	6	4	5	6	6	6	6	A	
14-Aug-05	6	7	5	4	3	5	7	7	7	6	5	5	9	4	3	3	5	5	5	6	3	A	4	8.7	
15-Aug-05	3	3	2	3	4	9	9	12	7	4	4	3	2	3	2	6	4	5	3	5	7	7	5	5	
16-Aug-05	4	4	5	3	4	A	14	15	12	7	6	7	7	6	6	10	10	9	9	7	17	18	10	6	
17-Aug-05	3	4	4	3	A	15	17	9	5	C	C	C	C	C	C	C	C	A	9	32	52	38	27		
18-Aug-05	10	10	13	18	26	A	40	44	30	11	7	5	4	4	4	5	4	3	4	7	12	11	6	3	
19-Aug-05	3	3	4	8	A	13	27	28	31	25	19	6	4	3	3	2	2	3	4	12	15	25	40	20	
20-Aug-05	23	29	14	A	9	20	11	16	19	7	5	5	3	2	2	3	3	3	3	8	32	19	10	5	
21-Aug-05	3	1	A	3	5	12	9	9	13	6	4	6	4	4	5	6	5	4	5	5	5	4	3	3	
22-Aug-05	2	A	3	4	5	12	20	22	14	10	6	4	4	3	4	4	6	5	4	13	15	12	13	5	
23-Aug-05	4	5	7	7	19	A	32	25	19	4	3	3	3	5	8	5	6	14	7	7	20	16	11	12	
24-Aug-05	10	14	14	16	14	A	50	29	19	12	13	7	3	2	2	2	2	3	12	23	19	18	14		
25-Aug-05	12	13	17	15	A	26	39	71	32	11	6	5	4	4	2	2	2	3	2	13	44	52	37	13	
26-Aug-05	13	17	12	A	15	34	79	47	28	16	12	7	4	4	5	4	5	4	5	7	20	15	19	14	
27-Aug-05	14	17	A	24	14	23	33	24	11	14	11	12	17	12	5	3	4	8	8	13	14	9	7	4	
28-Aug-05	6	A	11	12	14	17	26	9	3	3	3	3	3	4	3	2	2	2	4	6	3	5	4	3	
29-Aug-05	A	4	3	2	3	5	6	7	6	7	8	5	6	6	4	4	3	4	5	4	6	8	14	A	
30-Aug-05	13	14	10	9	13	24	31	45	42	25	14	9	4	5	5	6	6	4	4	7	10	13	A	9	
31-Aug-05	3	3	2	3	5	12	17	22	18	6	5	4	4	5	4	5	6	8	20	12	A	11	9		
Hourly Avg	7.6	9.0	7.8	7.7	9.2	17.4	24.6	19.6	14.3	8.6	6.5	5.3	4.6	4.2	3.7	3.8	4.1	4.5	4.7	7.8	13.2	14.3	13.1	9.1	
Hourly Max	23.3	29.0	18.5	23.7	26.4	39.2	79.3	71.2	41.8	25.3	19.3	12.3	16.8	12.2	8.2	9.8	10.2	14.0	8.6	19.7	43.8	51.9	40.0	27.4	

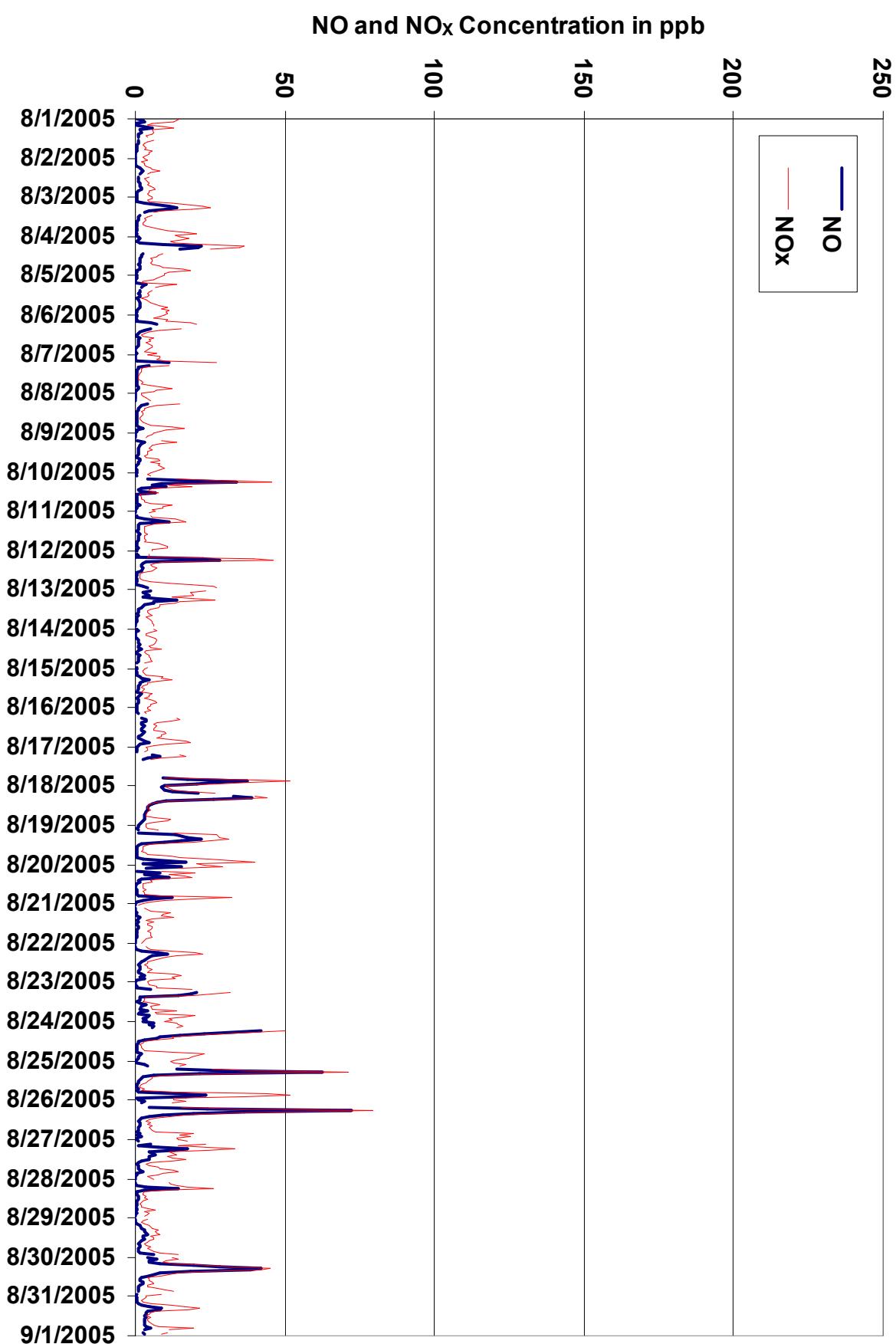


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	207.4 ppb	11-Aug 6:00	7:00
Maximum 24-hr Value:	29.4 ppb	25-Aug	

AIC Time:	33 hrs	Operational Time:	702 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	
	72.8 43.6 19.8 11.2 7.4 4.5 3.4	16.5 ppb	

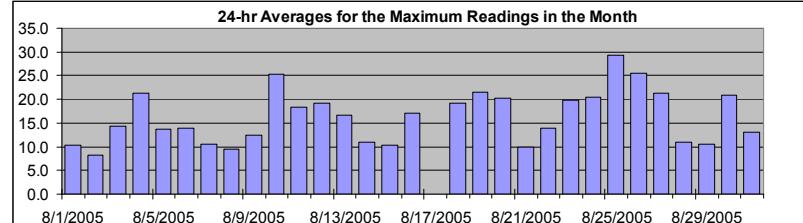
### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	18	21	19	8	6	27	20	10	10	10	6	6	A	9	7	6	5	6	7	5	10	7	8	7	10.3	27.2	
2-Aug-05	5	7	4	5	6	7	7	8	13	9	8	A	7	6	9	9	8	14	16	12	7	7	7	10	8.2	15.9	
3-Aug-05	13	9	6	6	21	33	34	32	14	11	A	12	8	14	7	5	5	5	6	12	13	24	25	17	14.4	34.1	
4-Aug-05	26	28	23	16	15	36	55	56	36	A	15	12	11	9	11	9	12	13	15	14	27	22	17	21.4	55.7		
5-Aug-05	22	13	8	8	6	37	23	10	A	12	9	7	9	12	5	9	9	12	12	19	20	18	21	16	13.8	36.9	
6-Aug-05	22	21	8	16	13	31	27	A	22	13	9	8	4	5	16	7	10	8	22	8	13	10	4	20	13.8	31.1	
7-Aug-05	8	16	11	9	18	45	A	27	4	3	5	3	4	4	3	4	4	6	3	9	14	17	12	10	10.5	45.0	
8-Aug-05	7	4	5	6	10	A	30	10	7	5	6	5	6	6	5	3	4	14	6	10	24	21	14	12	9.6	29.9	
9-Aug-05	10	9	6	5	A	12	22	17	19	13	15	8	13	12	8	7	28	17	8	13	11	10	14	12	12.5	27.8	
10-Aug-05	10	5	7	A	28	38	73	44	34	33	14	11	7	182	4	5	6	9	6	8	21	13	15	8	25.3	181.9	
11-Aug-05	10	6	A	8	11	26	207	13	13	5	5	6	6	5	10	10	6	6	10	7	14	15	15	9	18.3	207.4	
12-Aug-05	9	A	11	18	10	61	64	25	12	9	7	9	23	11	4	5	4	3	5	8	18	30	47	47	19.1	64.1	
13-Aug-05	A	33	23	24	18	29	46	30	18	11	13	12	9	8	13	11	11	8	10	10	8	9	10	A	16.6	45.9	
14-Aug-05	13	22	8	6	6	11	11	14	15	12	9	15	16	9	5	6	14	13	8	10	11	8	A	11	10.9	21.9	
15-Aug-05	4	4	7	7	6	16	23	37	18	7	10	5	5	7	5	10	8	9	5	12	12	16	9	8	10.3	37.1	
16-Aug-05	6	11	8	5	7	A	21	22	27	13	15	24	12	10	17	21	24	20	18	12	28	31	19	22	17.1	30.9	
17-Aug-05	6	9	6	5	A	22	21	16	10	C	C	C	C	C	C	C	C	A	14	56	68	51	43	N	68.2		
18-Aug-05	16	15	23	24	36	A	69	65	52	19	10	9	5	8	7	9	8	6	6	10	15	15	9	5	19.2	68.9	
19-Aug-05	5	5	7	22	A	20	36	38	42	40	31	11	7	6	11	6	8	7	9	22	20	39	74	28	21.5	73.8	
20-Aug-05	32	36	24	A	18	32	22	30	32	10	8	8	4	6	5	6	6	5	7	26	62	48	32	8	20.2	61.5	
21-Aug-05	5	2	A	4	10	23	16	13	17	19	7	8	7	11	13	9	8	8	12	11	9	6	5	5	9.9	22.7	
22-Aug-05	3	A	5	7	8	19	29	30	17	14	16	7	9	7	7	9	14	10	8	19	23	16	30	10	13.8	30.2	
23-Aug-05	6	9	12	16	28	A	43	61	43	5	16	6	10	17	18	9	14	27	14	12	32	21	16	21	19.9	61.1	
24-Aug-05	14	21	19	20	25	A	69	38	50	15	19	10	6	5	3	3	6	7	7	20	37	28	28	19	20.4	68.9	
25-Aug-05	14	18	25	30	A	33	50	89	57	16	9	9	7	6	3	3	3	7	5	38	81	73	78	21	29.4	89.2	
26-Aug-05	20	22	20	A	30	51	100	60	43	22	21	14	11	8	9	9	10	7	9	10	34	23	34	18	25.5	100.4	
27-Aug-05	20	22	A	30	20	38	45	39	22	18	13	16	22	33	8	7	9	11	11	11	30	39	15	14	6	21.4	44.6
28-Aug-05	8	A	12	13	17	41	41	15	5	5	6	7	5	9	6	5	4	5	7	11	6	10	7	7	11.0	40.9	
29-Aug-05	A	8	7	3	7	15	14	16	11	15	16	10	9	14	9	11	6	5	8	6	8	11	19	A	10.5	19.0	
30-Aug-05	18	18	12	12	18	40	42	66	50	40	22	16	8	8	9	11	11	8	8	11	16	19	A	15	20.9	65.6	
31-Aug-05	5	5	4	6	8	17	25	32	27	12	7	8	7	10	10	7	8	11	14	29	17	A	16	17	13.1	32.0	

Hourly Avg	12.3	14.3	11.7	12.1	15.1	29.3	42.7	32.1	24.7	14.4	12.0	9.8	9.0	15.2	8.3	7.8	9.1	9.6	9.4	14.2	22.8	21.7	22.4	15.5
Hourly Max	32.2	36.1	24.8	30.5	36.3	61.2	207.4	89.2	56.9	40.5	31.0	23.7	23.1	181.9	18.3	20.8	27.8	26.5	21.5	38.3	80.5	72.8	77.8	46.6

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

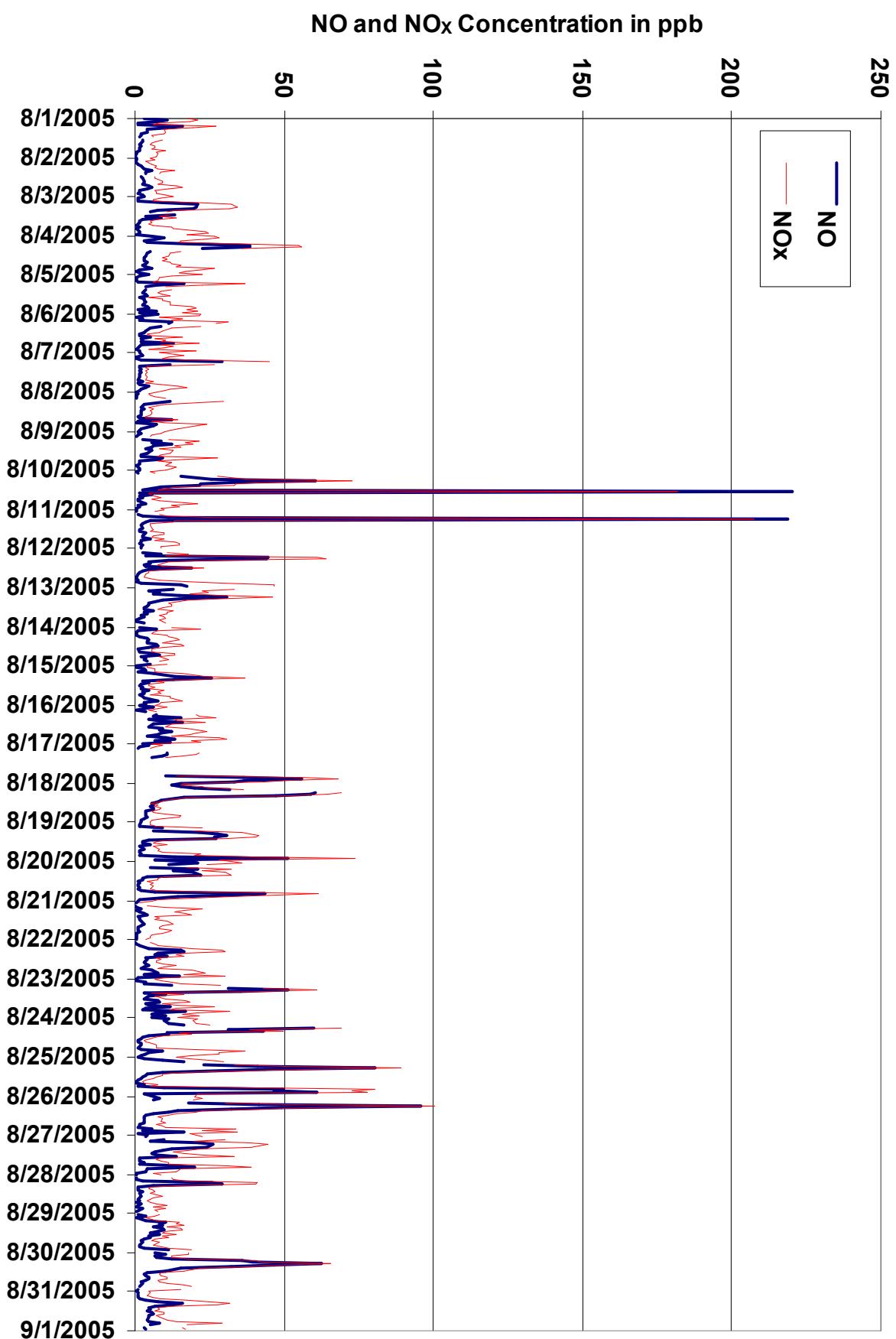


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Maximum Value Monthly Trend

### PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

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

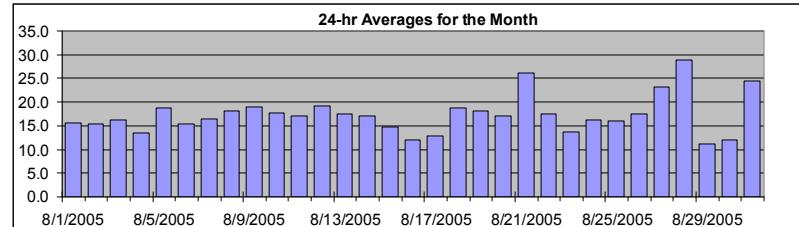
Number of 1-hr Exceedances: 0

Maximum 1-hr Average: 47.4 ppb 27-Aug 15:00 16:00  
Maximum 24-hr Average: 28.8 ppb 28-Aug

AIC Time:	33 hrs			Operational Time:	708 hrs				
Calibration Time:	3 hrs			AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average	17.4 ppb
	40.9	35.2	25.0	16.7	9.6	1.0	0.0		

#### HOURLY AVERAGE TABLE

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



#### Status Flag Characters

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

#### 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	24-hour Average	Daily Maximum	
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-Aug-05	1	1	0	2	4	3	2	6	12	16	23	24	A	25	26	27	28	27	25	24	20	19	21	25	15.6	27.6		
2-Aug-05	22	20	19	18	17	16	14	13	11	13	15	A	16	20	18	16	13	18	16	13	14	13	11	9	15.3	22.4		
3-Aug-05	8	8	10	8	4	1	4	8	12	15	A	22	23	25	29	30	30	30	30	25	20	12	7	11	16.2	30.5		
4-Aug-05	9	5	4	5	1	1	2	2	7	A	20	21	23	25	25	23	26	26	25	23	20	16	18	13	14	11	13.6	26.1
5-Aug-05	10	11	12	18	19	11	14	17	A	25	27	26	25	25	26	26	25	23	20	16	18	13	14	11	18.8	26.8		
6-Aug-05	10	11	10	5	8	5	4	A	12	16	22	24	22	21	18	20	18	17	14	18	18	26	20	16	15.4	26.5		
7-Aug-05	17	17	15	12	8	2	A	11	16	16	17	20	22	24	25	25	24	23	23	19	12	9	9	12	16.5	25.5		
8-Aug-05	19	25	21	17	14	A	7	9	12	17	19	24	24	24	27	28	27	25	25	22	13	4	6	8	18.2	28.0		
9-Aug-05	10	8	11	14	A	12	11	17	22	25	26	29	30	29	30	28	25	21	22	18	17	14	11	6	18.9	29.9		
10-Aug-05	5	5	7	A	2	0	1	6	11	12	22	27	28	31	33	34	33	30	25	15	16	16	17	17.8	34.4			
11-Aug-05	13	13	A	11	9	6	13	14	15	18	22	26	22	19	19	20	22	24	26	28	21	13	8	12	17.0	28.1		
12-Aug-05	9	A	17	16	16	1	2	12	14	18	20	22	27	30	31	31	33	34	33	30	22	14	6	4	19.2	33.6		
13-Aug-05	A	1	1	0	2	1	2	5	8	15	19	24	30	29	30	26	27	30	30	32	27	24	21	A	17.5	32.0		
14-Aug-05	14	14	16	21	21	15	12	16	19	21	22	21	17	19	20	20	18	14	12	15	14	14	A	17	17.1	21.8		
15-Aug-05	18	17	17	17	15	10	9	7	9	14	14	16	17	16	19	16	17	17	18	15	13	12	14	15	14.8	19.2		
16-Aug-05	16	14	13	15	16	A	10	8	10	12	12	12	13	15	16	15	14	15	14	15	6	3	6	8	12.0	16.0		
17-Aug-05	10	9	10	8	A	2	2	6	12	19	18	22	24	24	26	25	C	C	C	A	1	0	0	0	12.9	25.6		
18-Aug-05	2	2	1	1	0	A	1	3	6	15	22	27	32	36	40	40	41	37	32	25	16	15	18	19	18.8	40.9		
19-Aug-05	17	16	13	9	A	6	3	4	6	11	17	28	32	29	32	35	34	37	34	26	18	6	1	5	18.2	36.7		
20-Aug-05	2	0	4	A	5	1	4	2	10	20	24	30	36	38	41	38	30	27	28	22	4	4	11	12	17.2	41.1		
21-Aug-05	17	25	A	26	22	15	18	18	14	28	35	33	32	34	35	34	31	25	28	24	23	28	27	26.2	34.9			
22-Aug-05	28	A	26	21	19	11	6	8	11	15	21	23	24	25	26	24	23	22	22	10	7	8	6	15	17.5	27.6		
23-Aug-05	17	15	11	10	2	A	1	4	8	16	21	23	24	22	23	26	24	24	18	20	16	4	3	4	13.6	25.5		
24-Aug-05	3	2	1	0	0	A	0	3	5	9	16	24	29	31	34	35	36	37	36	27	13	13	11	12	16.3	36.6		
25-Aug-05	11	7	1	1	A	0	1	2	8	15	23	28	32	34	35	34	33	32	33	23	3	1	4	8	16.1	35.4		
26-Aug-05	6	2	3	A	1	0	1	2	5	11	19	29	33	35	35	36	34	32	31	30	16	16	11	12	17.5	36.1		
27-Aug-05	10	7	A	1	7	2	2	7	14	14	20	27	39	46	46	47	42	37	32	24	20	25	30	34	23.1	47.4		
28-Aug-05	24	A	14	11	6	4	2	10	25	36	45	42	40	38	41	41	40	38	31	37	36	34	26	28.8	45.1			
29-Aug-05	A	21	17	14	12	10	10	9	8	9	8	14	12	10	12	14	14	12	11	7	3	0	A	11.1	21.5			
30-Aug-05	1	0	0	0	0	0	0	2	5	9	19	25	25	24	24	24	26	25	21	18	10	A	17	12.0	26.2			
31-Aug-05	25	26	27	27	25	17	14	12	15	24	27	30	30	31	33	36	35	31	28	15	19	A	19	18	24.5	35.5		

Hourly Avg 12.2 10.8 10.8 11.0 9.4 5.8 5.7 8.0 11.3 16.7 20.8 24.6 26.1 27.0 28.2 28.1 27.2 26.4 25.4 21.4 15.6 12.8 12.5 13.5

Hourly Max 27.6 25.5 27.0 26.6 24.7 17.4 18.3 17.9 25.0 36.3 45.1 42.2 40.1 45.6 46.4 47.4 41.7 40.2 38.3 32.0 36.7 36.0 34.3 33.9

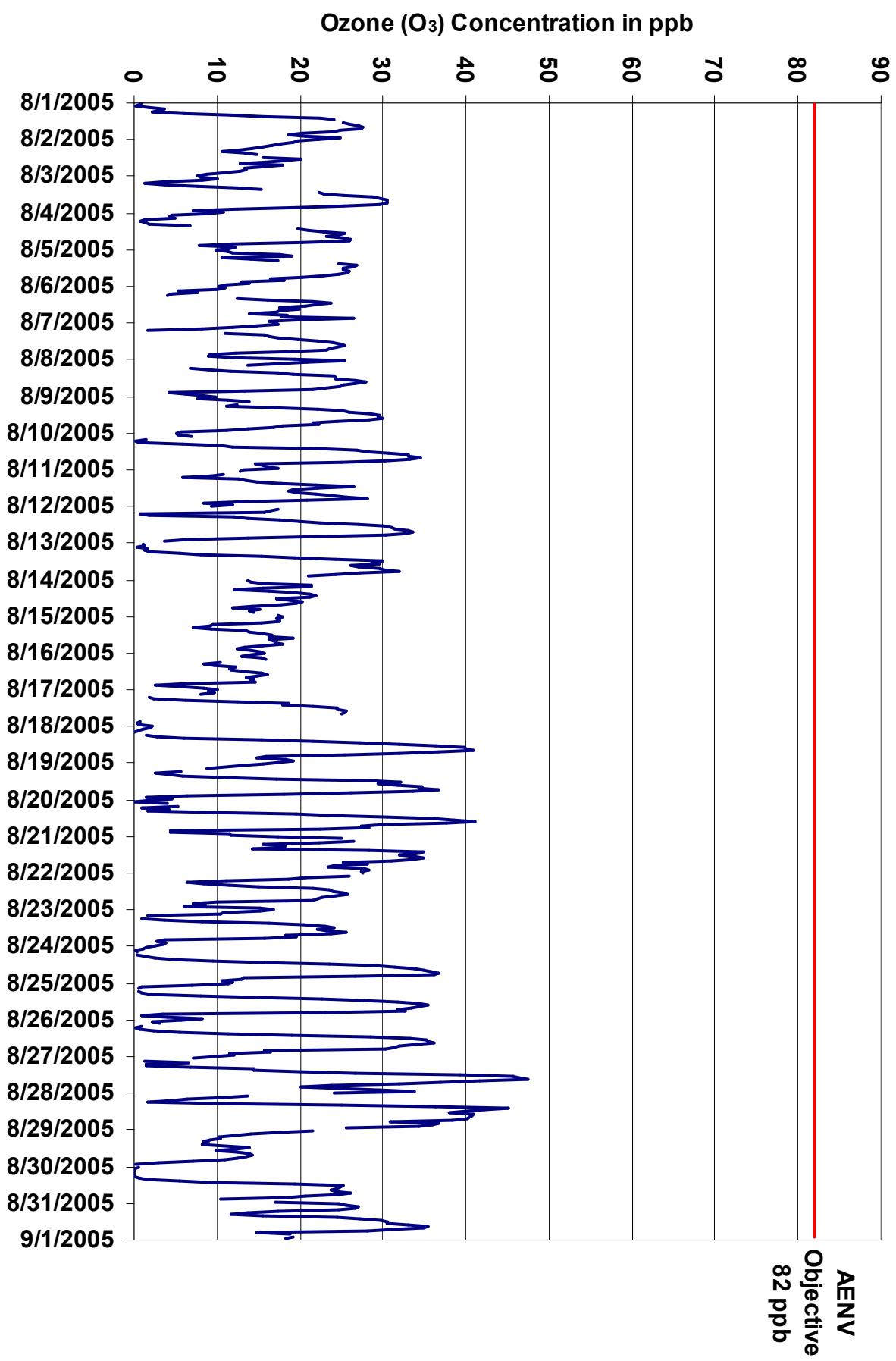


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	51.0 ppb	27-Aug 15:00	16:00
Maximum 24-hr Value:	33.3 ppb	28-Aug	

AIC Time:	33 hrs	Operational Time:	708 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	20.6 ppb
	44.8 38.0 27.9 20.0 13.0 2.7 1.0		

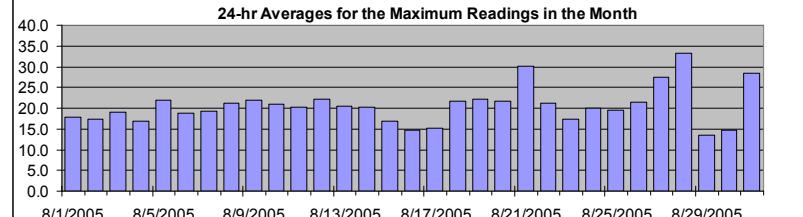
### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Aug-05	2	3	2	3	5	5	4	8	19	20	26	26	A	26	28	28	29	29	28	26	24	21	24	26	17.9	29.4	
2-Aug-05	24	21	20	20	18	18	16	14	13	15	17	A	19	22	20	18	15	20	19	17	15	15	13	11	17.4	24.5	
3-Aug-05	9	11	12	11	8	5	5	11	15	18	A	24	26	29	31	32	32	33	32	28	24	20	11	16	19.1	33.2	
4-Aug-05	15	8	8	9	2	2	3	5	10	A	23	23	26	27	27	25	28	29	30	24	17	13	17	15	16.8	30.1	
5-Aug-05	13	14	14	20	21	18	20	20	A	28	29	28	26	27	27	27	26	23	21	21	19	17	16	21.9	28.7		
6-Aug-05	14	15	14	9	10	11	9	A	14	19	25	26	23	22	21	21	21	20	15	22	22	29	25	23	18.7	29.2	
7-Aug-05	19	21	18	14	15	3	A	16	16	18	19	22	23	25	26	27	27	26	25	23	23	16	14	16	19.4	27.1	
8-Aug-05	26	27	24	20	17	A	11	10	15	21	22	26	26	26	29	29	29	27	27	26	19	8	11	10	21.1	29.2	
9-Aug-05	12	9	15	15	A	14	14	20	25	27	30	31	31	32	32	30	29	26	26	21	19	16	17	7	21.8	32.4	
10-Aug-05	7	8	9	A	4	1	1	10	13	21	27	29	32	33	35	37	36	35	33	29	23	18	21	20	20.8	36.6	
11-Aug-05	16	16	A	13	11	11	17	17	17	21	25	29	25	21	21	22	24	25	30	31	26	17	13	14	20.2	30.5	
12-Aug-05	12	A	19	18	18	9	7	14	17	19	22	24	30	32	33	34	34	35	34	34	28	20	12	7	22.2	35.1	
13-Aug-05	A	4	3	2	5	4	4	8	13	20	21	30	32	32	34	28	30	32	36	36	31	27	24	A	20.5	36.0	
14-Aug-05	17	16	19	25	23	21	15	21	23	24	24	24	21	21	23	22	19	15	19	16	16	A	21	21	20.3	24.7	
15-Aug-05	21	19	19	19	17	14	12	9	14	15	15	17	18	18	21	19	18	20	20	18	15	15	16	17	17.0	21.3	
16-Aug-05	17	16	15	17	17	A	13	11	12	14	14	14	15	17	19	18	17	17	16	14	7	8	10	14.7	18.9		
17-Aug-05	12	11	14	9	A	4	4	9	17	22	20	24	26	27	28	29	27	C	C	C	A	3	2	2	15.3	28.8	
18-Aug-05	5	5	2	2	1	A	4	6	9	21	25	30	35	40	41	42	43	42	35	29	21	18	21	21	21.6	42.9	
19-Aug-05	19	17	16	13	A	8	4	8	9	16	22	33	35	34	34	37	37	38	37	34	25	13	6	12	22.1	38.5	
20-Aug-05	10	1	12	A	10	5	7	4	20	24	28	34	38	41	43	41	34	30	30	31	14	11	16	14	21.6	43.2	
21-Aug-05	22	29	A	29	26	23	22	22	18	37	37	38	35	36	38	35	35	28	34	28	26	31	31	29	30.0	38.5	
22-Aug-05	30	A	28	25	21	19	9	13	14	22	25	25	26	27	28	28	27	26	26	16	12	11	11	20	21.1	29.7	
23-Aug-05	20	18	14	14	4	A	2	6	15	19	23	25	26	26	27	28	29	25	23	19	9	7	8	9	17.2	29.4	
24-Aug-05	5	6	4	2	3	A	2	5	9	12	24	27	32	34	36	36	38	38	38	35	19	17	19	17	20.0	38.5	
25-Aug-05	15	10	3	2	A	3	2	6	12	19	26	31	35	38	37	36	36	35	35	33	12	2	9	10	19.4	37.6	
26-Aug-05	9	6	8	A	3	1	2	5	8	14	25	33	36	39	39	39	37	34	34	33	26	24	18	18	21.4	38.9	
27-Aug-05	16	11	A	6	11	8	3	11	17	18	23	32	48	48	49	51	45	42	37	30	25	28	36	36	27.5	51.0	
28-Aug-05	34	A	15	13	9	10	8	18	37	47	50	45	42	40	44	43	42	42	41	36	41	38	39	31	33.3	49.6	
29-Aug-05	A	24	21	16	15	13	12	11	12	11	16	17	13	14	16	16	15	15	13	12	5	1	A	13.6	23.5		
30-Aug-05	2	1	1	1	1	1	1	2	4	9	12	26	28	27	27	27	28	28	28	23	26	13	A	14.6	28.1		
31-Aug-05	27	28	29	29	28	24	19	18	20	28	30	32	33	34	36	38	38	38	36	32	24	24	A	23	25		

Hourly Avg	15.6	13.4	13.6	13.3	11.9	9.8	8.4	11.2	15.2	20.6	24.0	27.6	28.9	29.5	30.6	30.5	30.0	29.3	28.6	25.9	20.7	16.6	16.7	17.1
Hourly Max	33.9	29.2	29.2	29.5	28.0	23.7	22.4	21.5	36.7	47.4	49.6	45.3	48.1	47.6	48.6	51.0	44.9	42.5	41.3	36.4	41.1	38.4	38.7	35.9

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

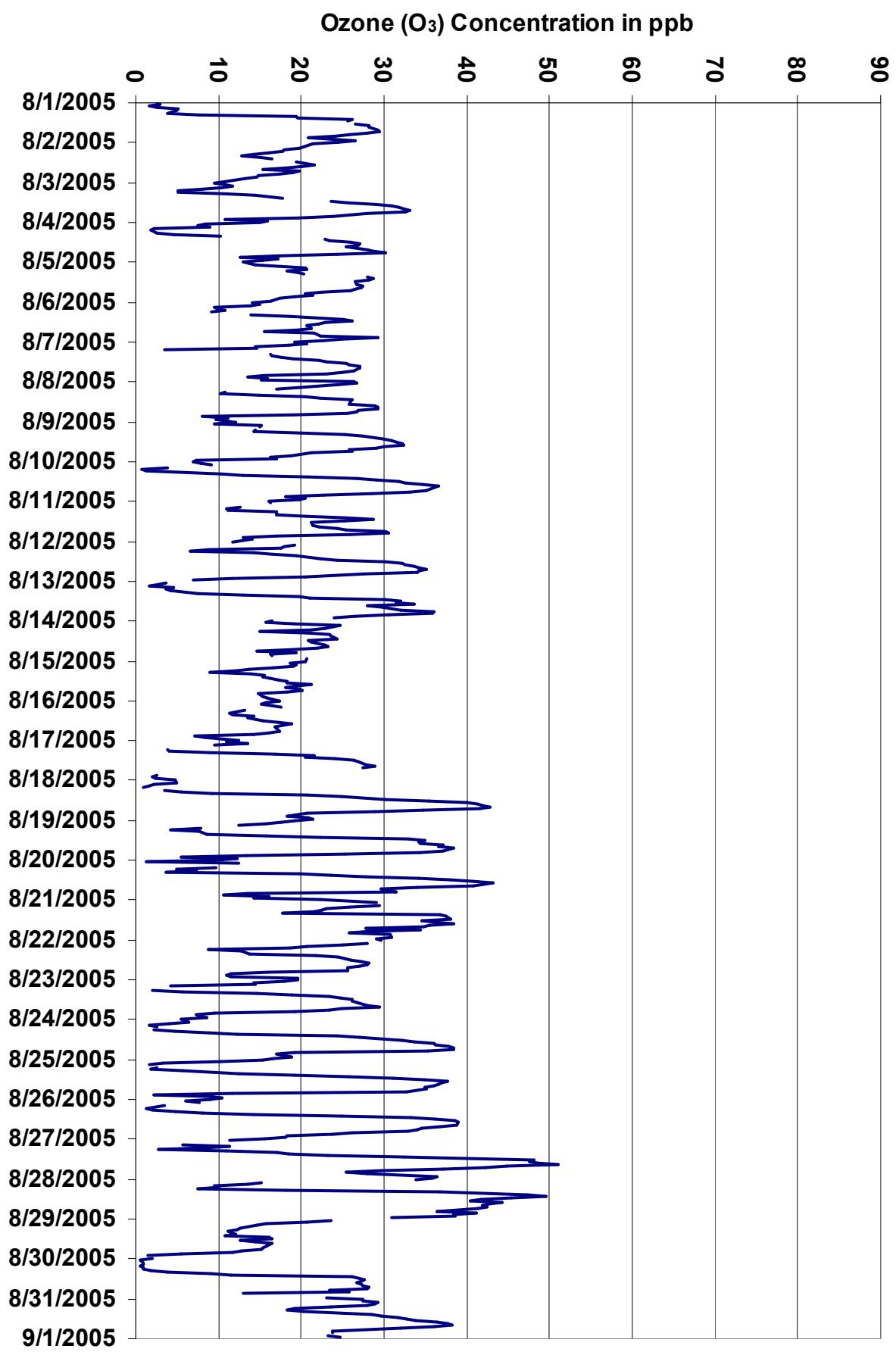
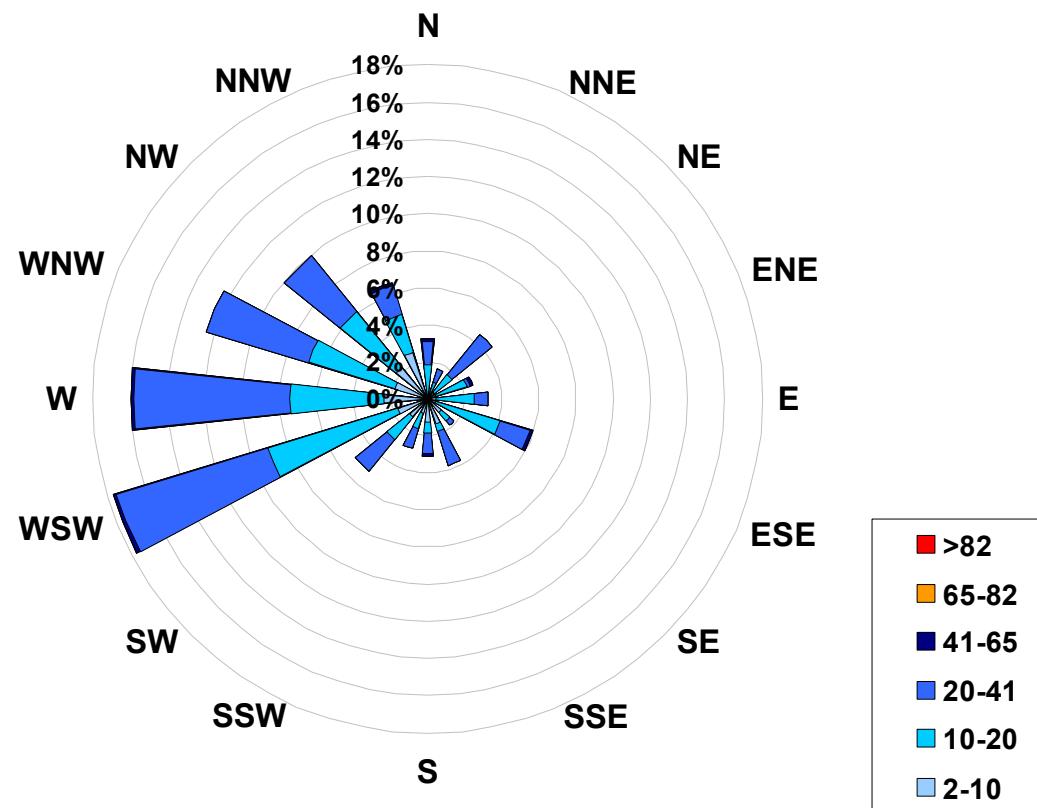


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

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



Calms:	0%
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Frequency Distribution of O <sub>3</sub> in ppb		Frequency (hrs)
Range		
2.0	< 10	182
10	to 20	248
20	to 41	271
41	to 65	7
65	to 82	0
	> 82	0
Total Non-Zero Values		708

### PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

#### EIGHT HOUR RUNNING AVERAGE TABLE

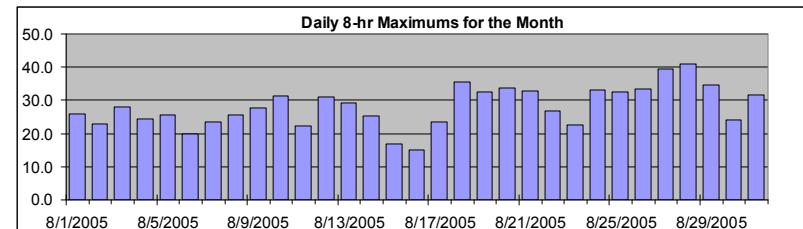
#### Ozone (O<sub>3</sub>)

Monitoring Dates: August 1, 2005 to September 1, 2005

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

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 41.0 ppb 28-Aug 17:00 18:00



#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Aug-05	9	8	6	4	3	3	3	2	4	6	8	11	12	15	19	22	24	26	26	26	25	24	24	24	24	24	26.0
2-Aug-05	23	22	21	20	20	20	19	17	16	15	14	14	14	14	15	15	15	16	16	17	16	16	15	14	13	22.9	
3-Aug-05	13	11	11	10	9	7	6	6	7	8	7	9	12	16	19	22	25	27	27	28	27	26	23	21	21	27.9	
4-Aug-05	18	15	12	9	7	5	5	4	3	3	5	8	11	14	17	20	23	23	24	24	23	21	19	18	18	24.3	
5-Aug-05	16	14	12	12	13	13	13	14	15	16	19	20	21	23	25	26	26	25	25	23	22	21	19	18	18	25.7	
6-Aug-05	16	14	13	12	10	9	8	8	8	9	10	13	15	17	19	19	20	20	19	18	18	19	19	18	18	20.0	
7-Aug-05	18	18	19	18	16	13	12	12	11	11	12	13	15	18	19	21	22	23	23	23	22	20	18	17	17	23.4	
8-Aug-05	16	16	16	16	17	16	16	15	14	14	15	16	17	20	22	24	25	25	25	25	24	21	19	16	16	25.5	
9-Aug-05	14	12	10	9	9	10	11	12	14	16	18	20	21	24	26	27	28	27	27	25	24	22	20	17	17	27.7	
10-Aug-05	14	12	10	9	7	5	4	4	4	5	8	10	13	17	21	25	28	30	31	31	29	27	25	23	31.2		
11-Aug-05	21	18	16	14	14	12	12	11	11	12	13	15	17	19	19	20	21	22	22	22	21	20	19	19	22.4		
12-Aug-05	18	17	16	14	13	11	10	10	11	12	12	13	14	18	22	24	27	29	30	31	31	28	25	22	31.2		
13-Aug-05	20	16	11	7	4	2	2	2	3	4	7	10	13	17	20	23	25	27	28	29	29	28	27	27	29.1		
14-Aug-05	25	23	21	20	19	17	16	16	17	18	19	19	18	19	20	20	19	18	17	16	16	15	15	15	25.4		
15-Aug-05	15	15	16	17	17	16	15	14	13	12	12	12	12	13	14	15	16	16	17	17	17	16	15	15	17.0		
16-Aug-05	15	15	14	14	14	15	14	13	12	12	12	11	11	12	12	13	14	14	14	15	14	12	11	10	15.1		
17-Aug-05	10	9	8	7	8	8	7	7	8	10	12	13	16	19	21	23	23	N	N	N	N	N	N	N	23.5		
18-Aug-05	N	N	N	1	1	1	1	1	2	4	7	11	15	18	23	27	32	34	36	35	33	31	28	25	35.6		
19-Aug-05	22	20	17	15	15	14	12	10	8	7	8	11	13	16	20	24	27	31	33	32	31	28	24	20	32.6		
20-Aug-05	16	12	8	5	3	3	3	3	4	6	9	12	16	20	25	30	32	33	34	33	29	24	21	17	33.7		
21-Aug-05	16	16	14	14	17	19	20	20	20	20	22	23	24	27	29	31	33	32	31	30	29	28	28	27	32.7		
22-Aug-05	26	27	26	26	25	23	20	17	15	15	14	15	15	17	19	21	23	24	24	22	20	18	15	14	26.7		
23-Aug-05	13	13	11	11	11	11	10	8	7	7	9	11	14	15	18	20	22	23	22	22	19	17	14	11	22.6		
24-Aug-05	9	7	4	2	2	2	1	1	2	3	5	8	12	15	19	23	27	30	33	33	31	29	26	23	33.0		
25-Aug-05	20	16	12	9	8	6	5	3	3	4	7	11	14	18	22	26	29	31	33	32	29	24	20	17	32.7		
26-Aug-05	14	10	6	4	4	3	3	2	2	3	6	9	13	17	21	26	29	32	33	33	31	29	26	23	33.4		
27-Aug-05	20	17	15	11	9	7	6	5	6	7	8	12	16	21	27	32	35	38	39	39	37	34	32	30	39.5		
28-Aug-05	28	27	24	22	20	18	14	10	10	14	17	21	26	30	35	39	40	41	40	39	38	38	37	35	41.0		
29-Aug-05	35	32	29	27	23	19	16	14	13	11	10	10	10	10	11	12	13	12	12	11	9	9	9	9	34.6		
30-Aug-05	7	5	3	2	1	0	0	0	0	1	2	4	8	11	14	17	20	22	24	24	23	22	21	20	24.2		
31-Aug-05	20	20	20	21	22	23	22	21	20	20	20	21	21	23	25	28	31	32	30	28	28	26	24	31.7			

Hourly Max 34.6 31.9 28.9 26.5 25.2 23.3 22.1 21.4 20.3 20.4 22.2 23.1 25.6 29.8 34.7 38.5 40.5 41.0 40.1 39.1 38.3 38.0 37.2 35.3

### PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

#### HOURLY AVERAGE TABLE

#### Carbon Monoxide (CO)

Monitoring Dates: August 1, 2005 to September 1, 2005

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

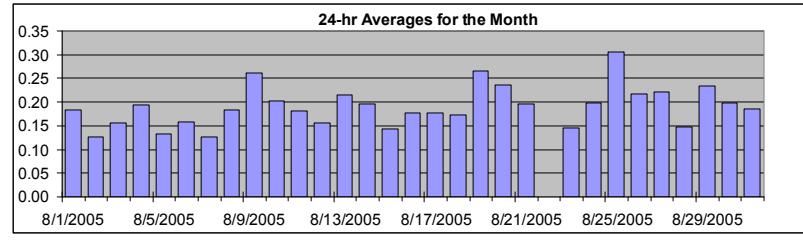
Number of 1-hr Exceedances: 0

Maximum 1-hr Average: 0.9 ppm 25-Aug 21:00 22:00  
Maximum 24-hr Value: 0.3 ppm 25-Aug

AIC Time:	33 hrs						Operational Time:	706 hrs					
Calibration Time:	3 hrs						AMD Operational Uptime:	99.7%					
Percentile	99	95	75	50	25	5	1	Average					
	0.5	0.3	0.2	0.2	0.1	0.1	0.0	0.2 ppm					

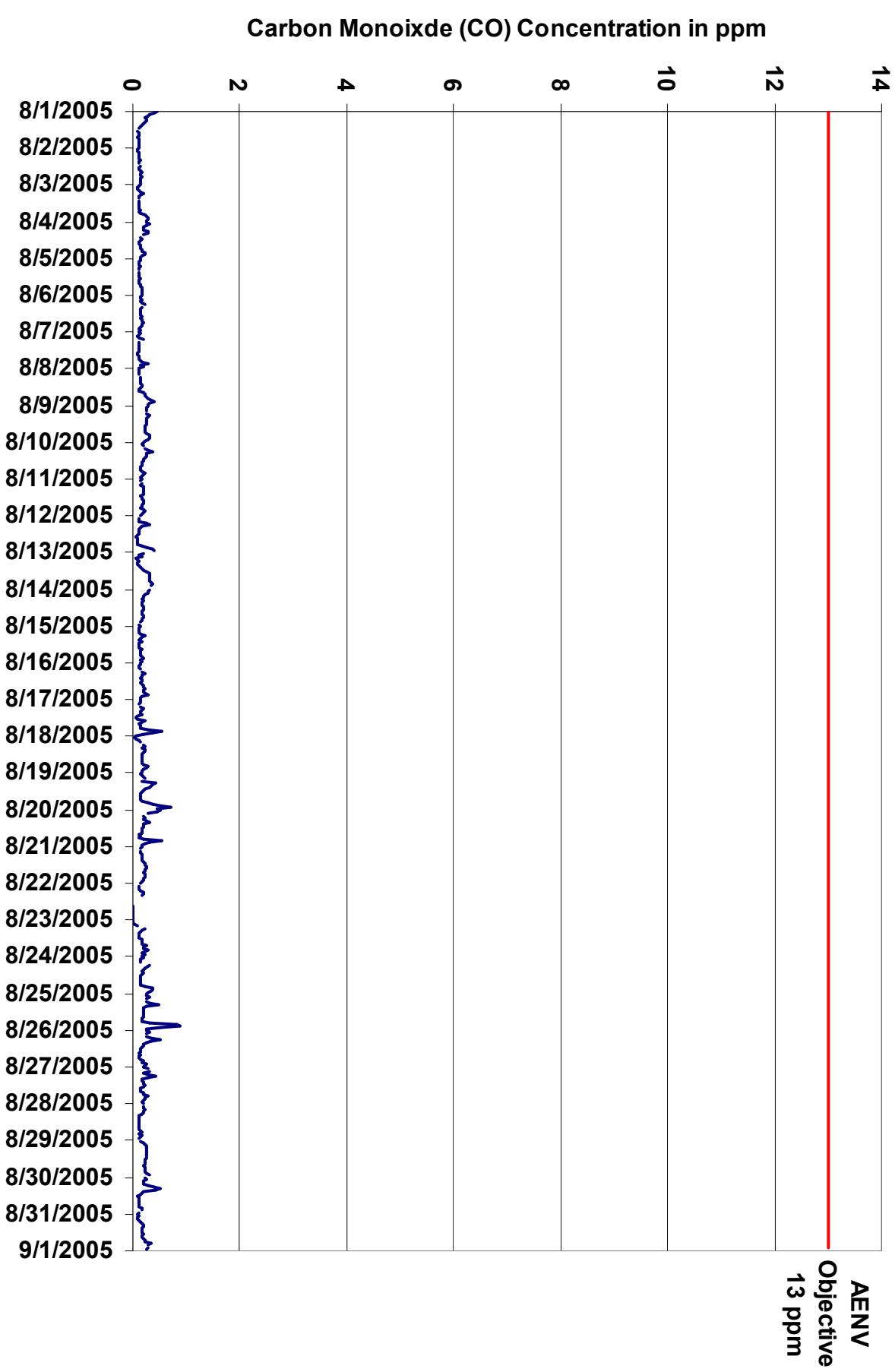
#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18	0.47
2-Aug-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.13	0.17
3-Aug-05	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.16	0.29	
4-Aug-05	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	A	0.1	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	0.19	0.32	
5-Aug-05	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.13	0.18	
6-Aug-05	0.2	0.1	0.1	0.2	0.1	0.2	0.2	A	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.16	0.22	
7-Aug-05	0.1	0.1	0.1	0.1	0.1	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.13	0.27	
8-Aug-05	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.18	0.40	
9-Aug-05	0.3	0.3	0.3	0.3	A	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	0.3	0.3	0.3	0.2	0.26	0.32	
10-Aug-05	0.2	0.2	0.2	A	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.37
11-Aug-05	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.21
12-Aug-05	0.2	A	0.1	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.16	0.39	
13-Aug-05	A	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	A	0.21	0.36	
14-Aug-05	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.20	0.30	
15-Aug-05	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.14	0.22	
16-Aug-05	0.1	0.1	0.1	0.1	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.18	0.27
17-Aug-05	0.2	0.1	0.1	0.1	A	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.4	0.18	0.54	
18-Aug-05	0.1	0.0	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.17	0.27	
19-Aug-05	0.2	0.2	0.2	A	0.2	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.7	0.5	0.27	0.72	
20-Aug-05	0.5	0.5	0.3	A	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.5	0.3	0.2	0.2	0.24	0.53	
21-Aug-05	0.2	0.2	A	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.26	
22-Aug-05	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	C	C	C	A	D	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N	0.20		
23-Aug-05	0.0	0.0	0.0	0.0	0.1	A	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	0.3	0.2	0.2	0.2	0.2	0.14	0.27	
24-Aug-05	0.2	0.2	0.1	0.1	A	0.3	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	0.2	0.4	0.4	0.3	0.3	0.20	0.38	
25-Aug-05	0.2	0.2	0.3	0.2	A	0.3	0.3	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8	0.9	0.5	0.31	0.87	
26-Aug-05	0.2	0.3	0.3	A	0.2	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.22	0.50	
27-Aug-05	0.2	0.3	A	0.3	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.22	0.43	
28-Aug-05	0.2	A	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	0.2	0.2	0.3	0.2	0.2	0.1	0.15	0.22	
29-Aug-05	A	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.23	0.31	
30-Aug-05	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.4	0.4	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	0.3	0.3	0.20	0.52	
31-Aug-05	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	0.4	0.3	A	0.3	0.3	0.19	0.35	



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

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



Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	1.4	ppm	19-Aug	6:00	7:00
Maximum 24-hr Value:	0.4	ppm	25-Aug		

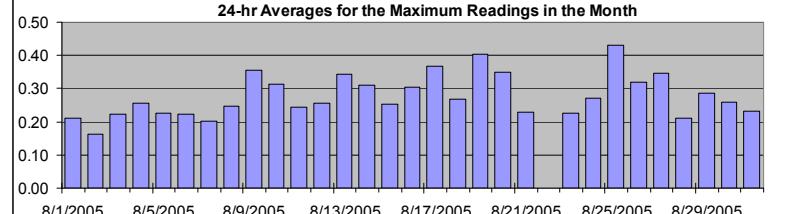
AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%						
Percentile	99 1.0	95 0.6	75 0.3	50 0.2	25 0.2	5 0.1	1 0.0	Average 0.3 ppm	

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum	
1-Aug-05	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.21	0.50
2-Aug-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.29	
3-Aug-05	0.3	0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.4	0.22	0.41		
4-Aug-05	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.26	0.50			
5-Aug-05	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	A	0.1	0.3	0.2	0.2	0.2	0.2	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3			
6-Aug-05	0.3	0.2	0.2	0.2	0.4	0.3	0.3	A	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.22	0.42		
7-Aug-05	0.2	0.2	0.2	0.1	0.2	0.6	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.5	0.2	0.4	0.20	0.56	
8-Aug-05	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.6	0.4	0.3	0.25	0.55
9-Aug-05	0.4	0.3	0.3	0.3	A	0.3	0.4	0.6	0.3	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.35	0.59	
10-Aug-05	0.2	0.2	0.3	A	0.3	0.4	0.9	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	1.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.31	1.10	
11-Aug-05	0.2	0.2	A	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.24	0.42	
12-Aug-05	0.2	A	0.2	0.2	0.2	0.5	0.9	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.25	0.89	
13-Aug-05	A	0.4	0.3	1.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	A	0.34	1.19	
14-Aug-05	0.4	0.3	0.3	0.7	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.5	0.3	0.2	0.2	0.3	0.7	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.31	0.70	
15-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	0.3	0.2	0.2	0.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.25	0.86	
16-Aug-05	0.2	0.3	0.2	0.2	0.2	A	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.6	0.2	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.2	0.2	0.30	0.58	
17-Aug-05	0.4	0.6	0.2	0.1	A	0.2	0.6	0.4	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.4	0.3	0.4	0.5	0.2	0.6	1.3	0.6	0.4	0.37	1.30			
18-Aug-05	0.1	0.0	0.2	0.5	0.4	A	0.3	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	0.2	0.3	0.5	0.3	0.2	0.27	0.55		
19-Aug-05	0.2	0.2	0.3	0.4	A	0.3	1.4	0.5	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.7	1.0	0.6	0.40	1.39		
20-Aug-05	0.6	0.5	0.4	A	0.2	0.3	0.3	0.4	0.5	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	0.5	1.1	0.8	0.6	0.35	1.06	
21-Aug-05	0.2	0.2	A	0.2	0.2	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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.23	0.30		
22-Aug-05	0.2	A	0.1	0.1	0.2	0.2	0.3	0.3	0.2	C	C	C	A	D	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N	0.35			
23-Aug-05	0.0	0.0	0.0	0.1	0.1	A	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.5	0.3	0.3	0.4	0.3	0.4	0.5	0.23	0.55		
24-Aug-05	0.3	0.3	0.2	0.2	0.2	A	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.4	0.27	0.52	
25-Aug-05	0.3	0.3	0.4	0.3	A	0.3	0.4	0.6	0.4	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	0.43	1.37		
26-Aug-05	0.3	0.4	0.3	A	0.3	0.6	0.7	0.4	0.3	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32	0.70		
27-Aug-05	0.3	0.5	A	0.4	0.2	0.4	0.8	0.5	0.3	0.2	0.5	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.6	0.6	0.6	0.3	0.35	0.76		
28-Aug-05	0.3	A	0.3	0.2	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.6	0.2	0.2	0.4	0.21	0.57			
29-Aug-05	A	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.4	0.29	0.49		
30-Aug-05	0.3	0.3	0.3	0.2	0.3	0.5	0.5	0.8	0.5	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	A	0.26	0.77			
31-Aug-05	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	0.2	0.2	0.2	0.2	0.3	0.5	0.4	A	0.4	0.3	0.23	0.50			

### HOURLY MAXIMUM TABLE

### Carbon Monoxide (CO)



### Status Flag Characters

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

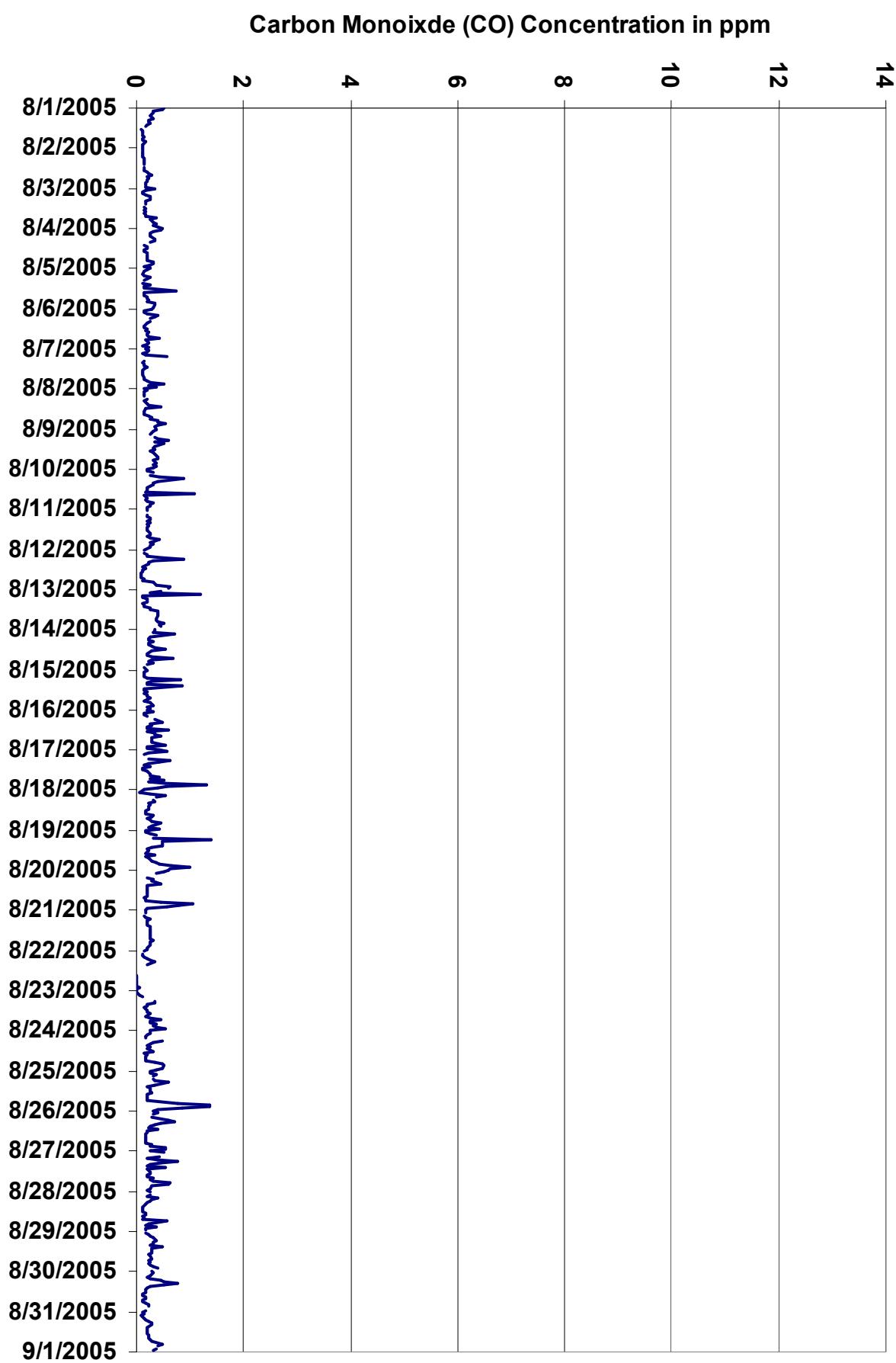
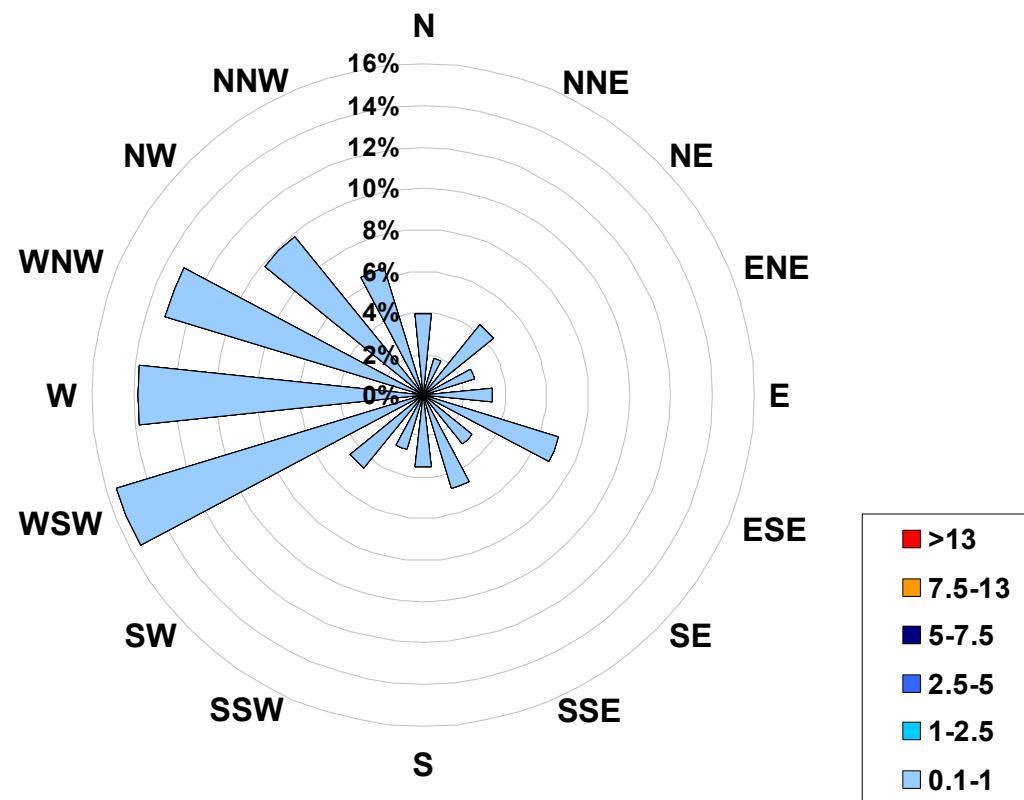


Figure 10. PASZA - Henry Pirker Carbon Monoxide 1-hr Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of CO in ppm			
Range		Frequency (hrs)	
0.1	<	1	706
1	to	2.5	0
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
>	13		0
Total Non-Zero Values		706	

### PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

#### EIGHT HOUR RUNNING AVERAGE TABLE

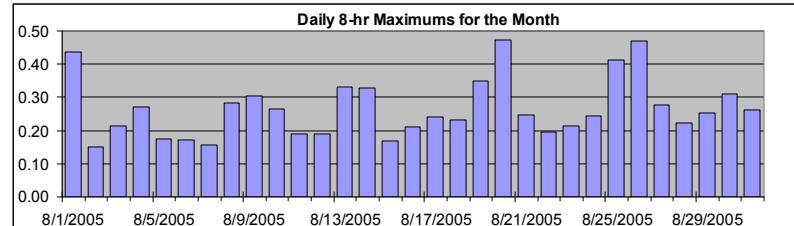
#### Carbon Monoxide (CO)

Monitoring Dates: August 1, 2005 to September 1, 2005

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

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 0.5 ppm 20-Aug 3:00 4:00



Percentile	99	95	75	50	25	5	1
	0.4	0.3	0.2	0.2	0.1	0.1	0.0

#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start 1:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Aug-05	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.44
2-Aug-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15
3-Aug-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.22
4-Aug-05	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.27
5-Aug-05	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.18
6-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.17
7-Aug-05	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16
8-Aug-05	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.28
9-Aug-05	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	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.30
10-Aug-05	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
11-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
12-Aug-05	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.19
13-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.33
14-Aug-05	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
15-Aug-05	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.17
16-Aug-05	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
17-Aug-05	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.24
18-Aug-05	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
19-Aug-05	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.35
20-Aug-05	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.47
21-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
22-Aug-05	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	0.0	0.20
23-Aug-05	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.21
24-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
25-Aug-05	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	0.2	0.2	0.2	0.3	0.4	0.4	0.41
26-Aug-05	0.4	0.4	0.5	0.5	0.4	0.3	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	0.2	0.47
27-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
28-Aug-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.22
29-Aug-05	0.1	0.1	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
30-Aug-05	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.31
31-Aug-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.26

Hourly Max 0.44 0.44 0.45 0.47 0.45 0.41 0.34 0.32 0.32 0.30 0.30 0.29 0.28 0.27 0.25 0.24 0.24 0.25 0.27 0.29 0.31 0.36 0.40 0.41

# PASZA - Henry Pirker Total Hydrocarbons Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

## HOURLY AVERAGE TABLE

## Total Hydrocarbons (THC)

Monitoring Dates: August 1, 2005 to September 1, 2005

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

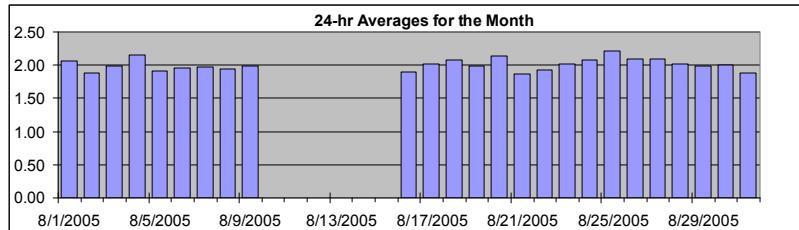
Maximum 1-hr Average: 3.0 ppm 25-Aug 7:00 8:00  
Maximum 24-hr Value: 2.2 ppm 25-Aug

AIC Time:	30 hrs		Operational Time:	567 hrs	
Calibration Time:	2 hrs		AMD Operational Uptime:	80.5%	
Percentile	99	95	75	50	25 5 1
	2.8	2.4	2.1	1.9	1.9 1.8

Average

2.0

ppm



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 1:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Aug-05	2.8	2.7	2.6	2.4	2.3	2.2	2.2	2.0	1.9	1.9	1.9	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.07	2.79
2-Aug-05	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.93
3-Aug-05	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.1	2.1	2.2	2.3	1.99	2.27	
4-Aug-05	2.3	2.5	2.5	2.3	3.0	2.8	2.5	2.3	2.1	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	2.1	2.1	2.2	2.3	2.15	3.02	
5-Aug-05	2.1	2.0	2.0	1.9	1.8	1.9	1.9	1.8	A	1.8	1.9	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.2	1.91	2.16	
6-Aug-05	2.2	2.1	2.2	2.1	2.1	2.1	A	2.0	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.96	2.24	
7-Aug-05	2.0	2.0	2.1	2.2	2.3	2.3	A	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.0	1.97	2.35	
8-Aug-05	1.9	1.9	1.9	2.0	2.1	A	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	2.0	2.1	2.1	1.94	2.14		
9-Aug-05	2.2	2.2	2.1	2.1	A	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	1.99	2.24		
10-Aug-05	2.2	2.2	2.2	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.21		
11-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00		
12-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00		
13-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00		
14-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00		
15-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00		
16-Aug-05	N	N	N	N	N	A	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.90	1.96	
17-Aug-05	2.0	2.0	2.0	2.1	A	2.2	2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.2	2.3	2.3	2.01	2.30	
18-Aug-05	2.2	2.4	2.4	2.4	2.3	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.37	
19-Aug-05	2.0	2.0	2.0	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	2.0	2.1	2.4	1.98	2.36	
20-Aug-05	2.9	2.9	2.5	A	2.1	2.2	2.2	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	2.9	2.1	2.0	2.0	2.14	2.94	
21-Aug-05	1.9	1.8	A	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.87	1.96	
22-Aug-05	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	C	C	A	A	1.8	1.9	1.9	1.9	2.0	2.0	2.0	1.93	2.01		
23-Aug-05	2.0	2.0	2.0	2.1	A	2.2	2.3	2.2	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.02	2.26	
24-Aug-05	2.2	2.2	2.3	2.5	2.4	A	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.08	2.51	
25-Aug-05	2.1	2.2	2.4	2.3	A	2.4	2.8	3.0	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.1	2.3	3.0	2.8	2.21	3.03	
26-Aug-05	2.3	2.4	2.3	A	2.7	2.5	2.6	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.0	2.0	2.0	2.2	2.09	2.65	
27-Aug-05	2.3	2.3	A	2.4	2.5	2.4	2.4	2.1	2.0	2.0	2.0	2.0	2.1	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.09	2.51
28-Aug-05	2.1	A	2.3	2.3	2.4	2.3	2.5	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.01	2.50	
29-Aug-05	A	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	1.99	2.09	
30-Aug-05	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.2	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.9	2.00	2.28	
31-Aug-05	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.88	2.10	
Hourly Avg	2.14	N	N	N	N	N	2.15	2.10	2.03	1.97	1.94	N	N	1.89	1.88	1.87	1.86	1.87	1.89	1.93	2.02	2.06	2.06	2.03			
Hourly Max	2.89	2.94	2.59	2.51	3.02	2.78	2.82	3.03	2.28	2.17	2.08	2.08	2.04	2.02	2.01	1.99	1.97	2.00	2.09	2.91	2.95	2.78	2.29				

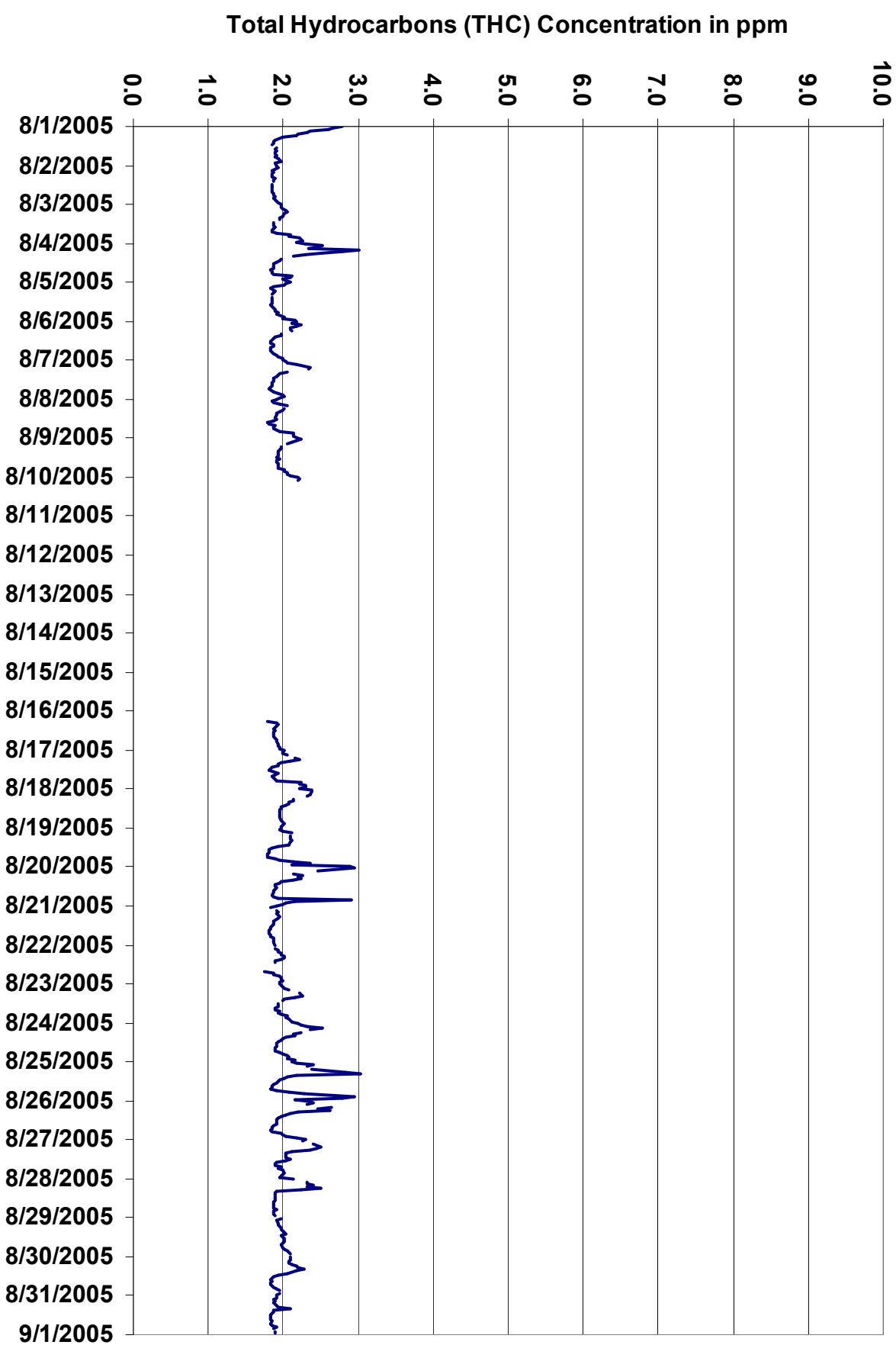


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	5.8	ppm	25-Aug	21:00 22:00
Maximum 24-hr Value:	2.7	ppm	4-Aug	

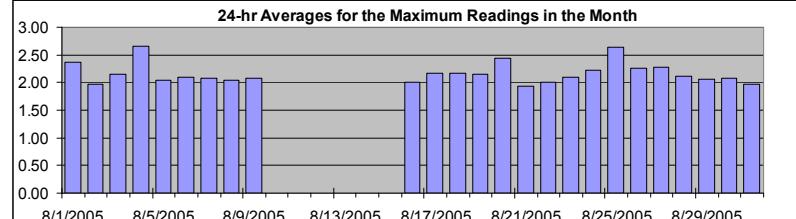
AIC Time:	30 hrs	Operational Time:	567 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	80.5%
Percentile	99 95 75 50 25 5 1	Average	
	3.9 2.8 2.2 2.0 1.9 1.9 1.9	2.2 ppm	

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Aug-05	4.6	4.1	2.8	2.5	3.5	2.6	2.5	2.2	2.0	1.9	2.1	1.9	A	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.1	2.0	2.37	4.63
2-Aug-05	2.3	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	1.97	2.34
3-Aug-05	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.7	2.4	2.6	2.4	2.8	2.15	2.83	
4-Aug-05	4.6	3.8	3.4	3.4	3.9	3.2	2.8	2.5	2.3	A	2.1	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.66	4.61	
5-Aug-05	2.7	2.1	2.2	2.0	1.9	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.03	2.68	
6-Aug-05	2.6	2.6	2.6	2.4	2.4	2.2	2.2	A	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.10	2.62	
7-Aug-05	2.1	2.2	2.2	2.3	2.8	2.6	A	2.2	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.8	2.1	2.0	2.1	2.1	2.08	2.75	
8-Aug-05	2.1	1.9	1.9	2.1	2.1	A	2.1	2.0	2.0	2.0	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.6	2.5	2.04	2.63	
9-Aug-05	2.5	2.3	2.2	2.1	A	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.2	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.08	2.52	
10-Aug-05	2.3	2.2	2.3	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.32	
11-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00	
12-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00	
13-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00	
14-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00	
15-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00	
16-Aug-05	N	N	N	N	N	A	1.8	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.4	2.3	2.2	2.0	2.1	2.1	2.0	2.01	2.41
17-Aug-05	2.1	2.1	2.1	2.1	A	2.2	2.3	2.2	2.1	2.1	2.0	1.9	2.1	2.1	2.0	1.9	2.0	1.9	1.9	2.2	2.7	2.6	2.5	2.6	2.16	2.75	
18-Aug-05	2.3	2.5	2.6	2.4	2.4	A	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.0	2.1	2.2	2.0	2.17	2.57
19-Aug-05	2.0	2.0	2.0	2.6	A	2.4	2.5	2.2	2.2	2.2	2.2	2.0	1.9	1.9	1.9	2.4	1.8	1.8	1.9	1.9	2.0	2.3	3.0	2.2	2.14	3.00	
20-Aug-05	3.8	3.7	3.1	A	2.2	2.4	2.3	2.4	2.3	2.0	2.1	1.9	2.0	2.2	2.0	2.0	1.9	1.9	2.2	2.2	4.0	2.8	2.5	2.0	2.43	4.02	
21-Aug-05	2.1	1.9	A	2.0	2.0	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.09	
22-Aug-05	1.9	A	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.0	1.9	1.9	C	C	A	A	1.8	1.9	2.0	2.0	2.1	2.0	2.1	2.0	2.01	2.23	
23-Aug-05	2.1	2.0	2.0	2.1	2.1	A	2.3	2.4	2.3	2.1	2.0	A	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.10	2.36	
24-Aug-05	2.4	2.4	2.5	2.7	2.5	A	2.4	2.2	2.3	2.6	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.1	2.1	2.23	2.75	
25-Aug-05	2.4	2.3	3.1	2.6	A	2.5	3.3	3.5	2.4	2.2	2.2	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.4	2.7	2.7	5.8	4.8	2.63	5.80	
26-Aug-05	2.7	2.7	2.5	A	3.3	2.8	2.9	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.2	2.2	2.4	2.26	3.27
27-Aug-05	2.9	2.3	A	2.6	2.8	2.8	2.6	2.3	2.1	2.1	2.1	2.1	2.2	2.7	2.1	1.9	1.9	1.9	2.2	2.1	2.1	2.1	2.0	2.1	2.0	2.27	2.92
28-Aug-05	2.3	A	2.5	2.5	2.6	2.6	2.8	2.4	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.12	2.77	
29-Aug-05	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.2	2.06	2.19	
30-Aug-05	2.2	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.5	2.4	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.07	2.48	
31-Aug-05	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.8	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	2.1	2.0	1.98	2.80

### HOURLY MAXIMUM TABLE

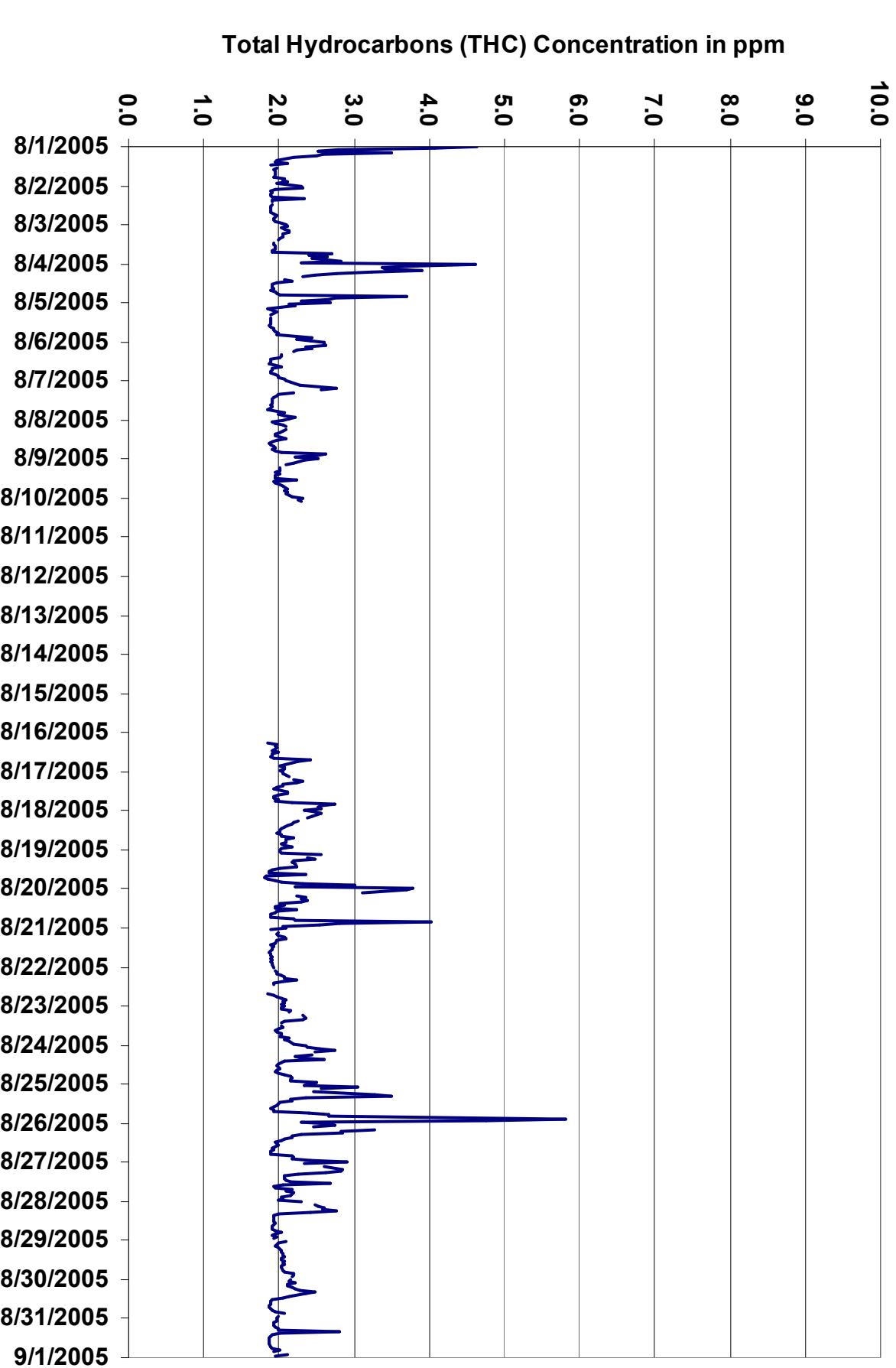
### Total Hydrocarbons (THC)



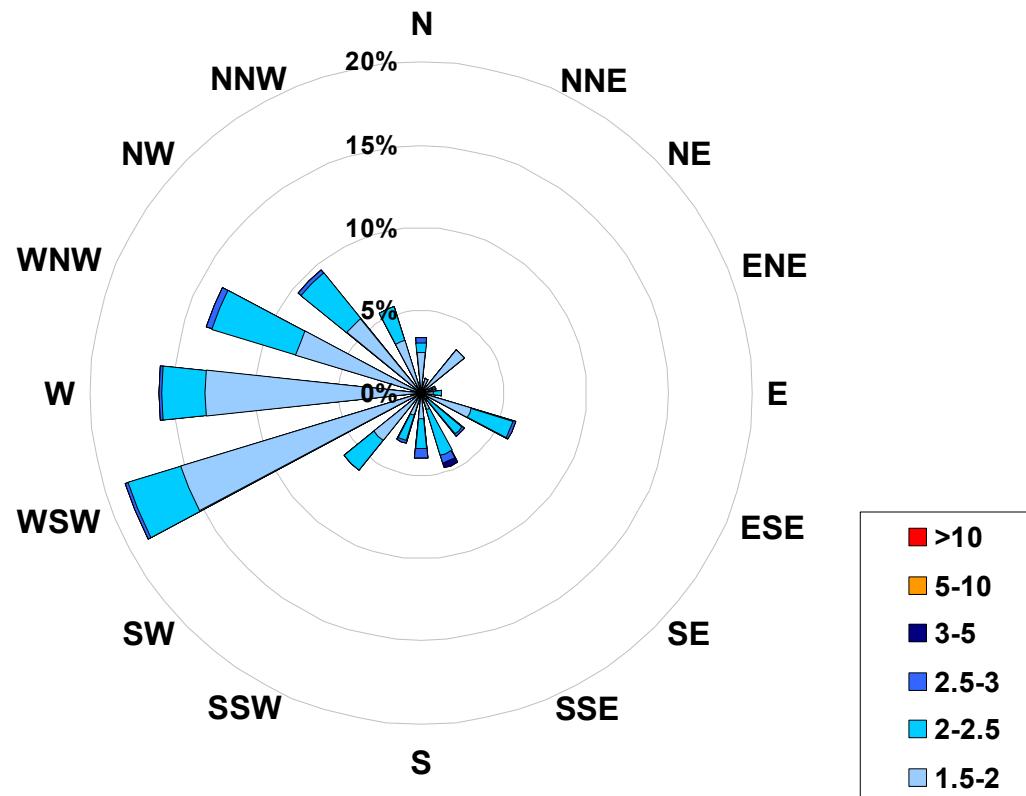
### Status Flag Characters

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

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



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



Calms:	0%
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Frequency Distribution of THC in ppm		
Range	Frequency (hrs)	
1.5 < 2	367	
2 to 2.5	181	
2.5 to 3	17	
3 to 5	2	
5 to 10	0	
> 10	0	
Total Non-Zero Values	567	

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

Station: Henry Pirker  
Station Owner: PASZA

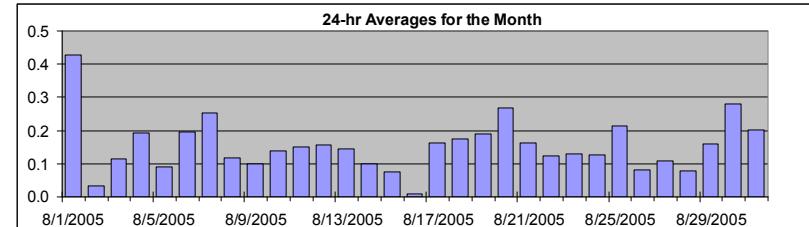
Monitoring Dates: August 1, 2005 to September 1, 2005

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

Maximum 1-hr Average: 2.0 ppb 1-Aug 0:00 1:00  
Maximum 24-hr Value: 0.4 ppb 1-Aug

#### HOURLY AVERAGE TABLE

#### Total Reduced Sulphur (TRS)



#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum		
Hour End 1:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00					
1-Aug-05	2	2	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0		
2-Aug-05	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	0.1		
3-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2		
4-Aug-05	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6		
5-Aug-05	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3		
6-Aug-05	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	0.2	0.4		
7-Aug-05	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
8-Aug-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	0.1	0.3	
9-Aug-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	0.1	0.2	
10-Aug-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
11-Aug-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
12-Aug-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
13-Aug-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
14-Aug-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	0.1	0.2	
15-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	A	0	0	0	0	0	0	0	0	0	0.1	0.2		
16-Aug-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	0.0	0.1	
17-Aug-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	0.2	0.5	
18-Aug-05	0	0	0	1	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	
19-Aug-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	0.2	0.4	
20-Aug-05	0	0	0	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
21-Aug-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
22-Aug-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
23-Aug-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	0.1	0.3	
24-Aug-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	0.1	0.3	
25-Aug-05	0	0	1	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6	
26-Aug-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
27-Aug-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
28-Aug-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
29-Aug-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
30-Aug-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	A	0	0.3	0.5
31-Aug-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	A	0	0	0.2	0.3
Hourly Avg	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2				
Hourly Max	2.0	1.6	1.0	0.7	1.0	0.9	0.8	0.6	0.5	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	0.4	0.3			

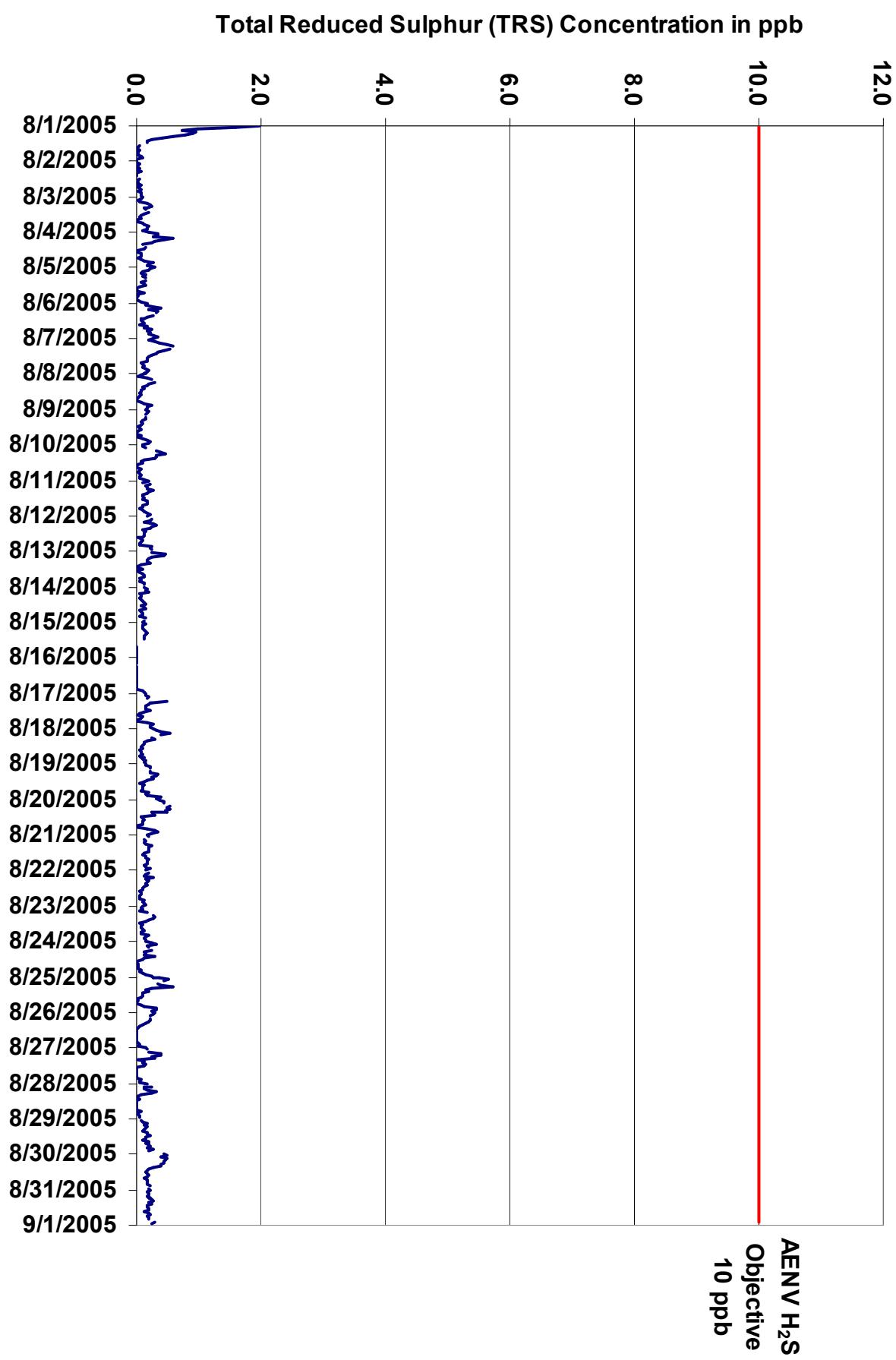


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	3.7	ppb	1-Aug	1:00 2:00
Maximum 24-hr Value:	0.9	ppb	1-Aug	

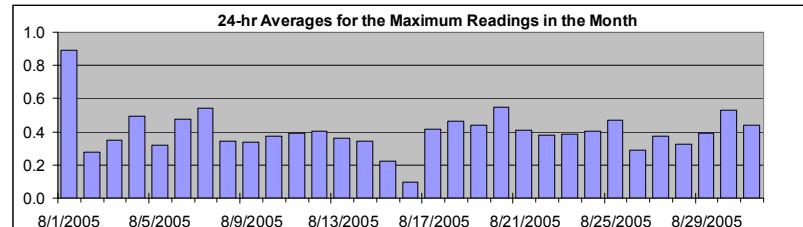
AIC Time:	34 hrs	Operational Time:	708 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	
	1.2 0.7 0.5 0.4 0.3 0.2 0.0	0.4 ppb	

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-Aug-05	4	4	1	1	2	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.9	3.7	
2-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
3-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
4-Aug-05	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.5	1.1	
5-Aug-05	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
6-Aug-05	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.9	
7-Aug-05	0	0	0	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.2	
8-Aug-05	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
9-Aug-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	0.3	0.5	
10-Aug-05	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
11-Aug-05	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
12-Aug-05	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.7	
13-Aug-05	A	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
14-Aug-05	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
15-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	A	0	0	0	0	0	0	0	0	0	0.2	0.5	
16-Aug-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	0.1	0.4	
17-Aug-05	0	0	0	0	A	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0	
18-Aug-05	0	1	1	1	1	A	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9	
19-Aug-05	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
20-Aug-05	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.9	
21-Aug-05	0	1	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.7	
22-Aug-05	0	A	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
23-Aug-05	0	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
24-Aug-05	0	1	1	0	0	A	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
25-Aug-05	0	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.9	
26-Aug-05	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
27-Aug-05	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9	
28-Aug-05	0	A	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
29-Aug-05	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0.4	0.5	
30-Aug-05	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8	
31-Aug-05	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0.4	0.7

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)



### Status Flag Characters

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

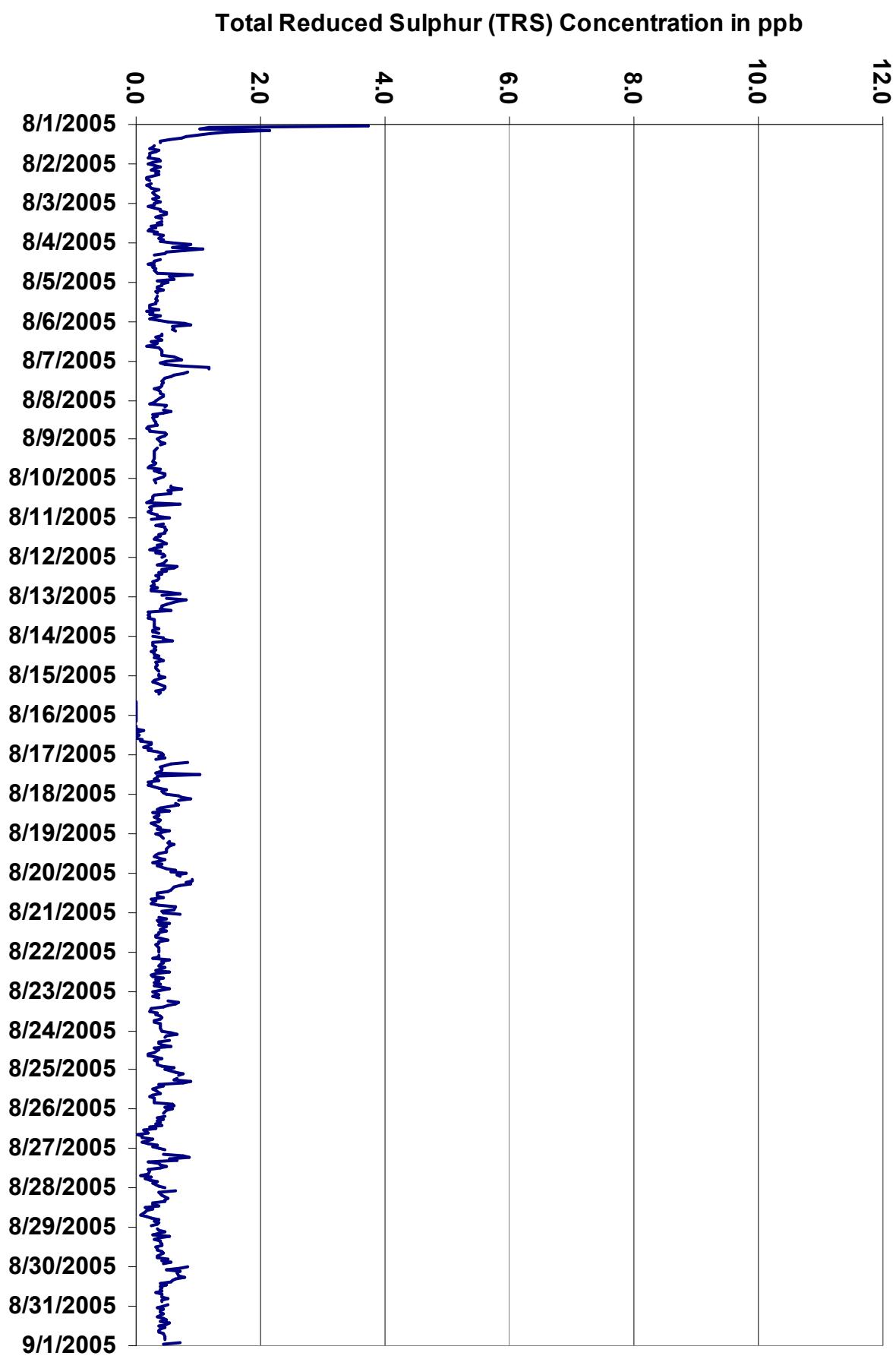
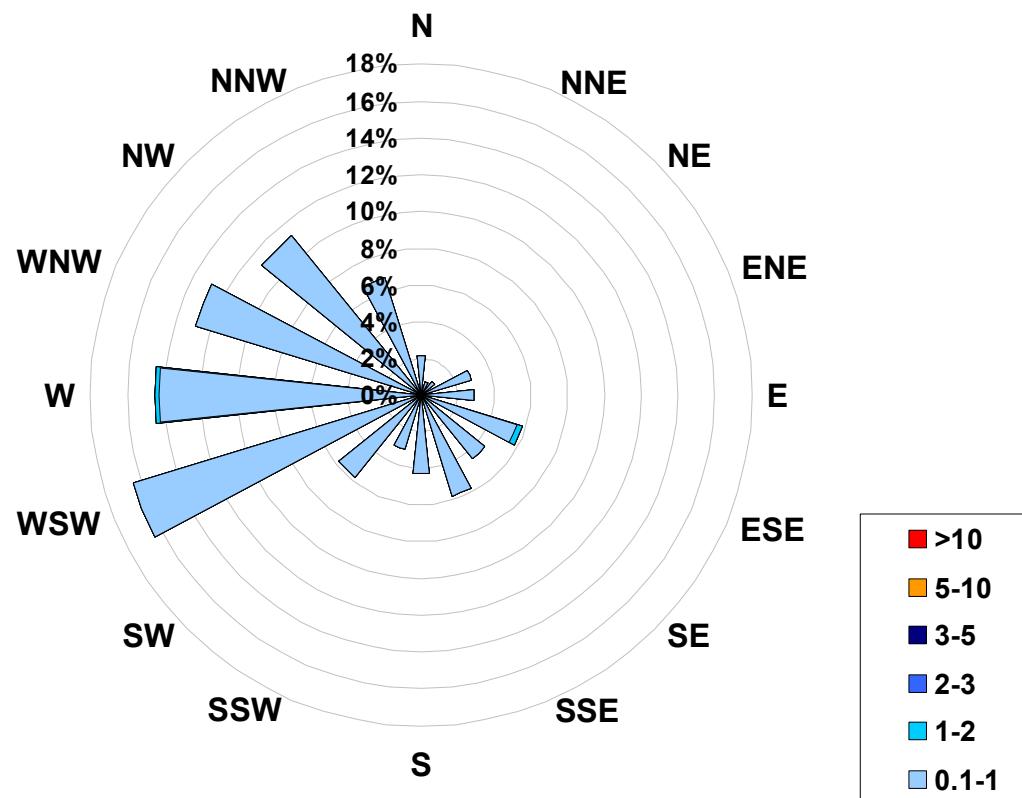


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of TRS in ppb		
Range		Frequency (hrs)
0.1	< 1	706
1	to 2	2
2	to 3	0
3	to 5	0
5	to 10	0
>	10	0
Total Non-Zero Values		708

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

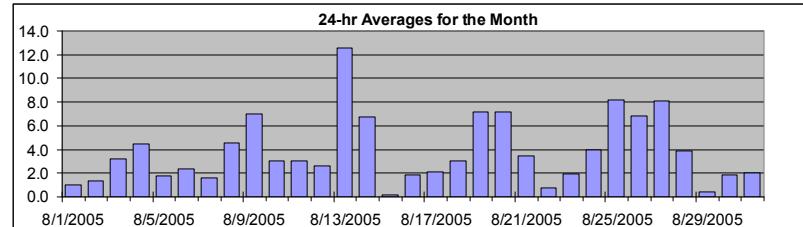
Draft Objective Limit: Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr 30  $\mu\text{g}/\text{m}^3$   
Summary

Number of 24-hr Exceedances (draft): 0  
Maximum 1-hr Average: 23.5  $\mu\text{g}/\text{m}^3$  25-Aug 21:00 22:00  
Maximum 24-hr Value: 12.6  $\mu\text{g}/\text{m}^3$  13-Aug

AIC Time:	0 hrs						Operational Time:	737 hrs													
Calibration Time:	1 hrs						AMD Operational Uptime:	99.2%													
Percentile	99	95	75	50	25	5	1	Average	3.8 $\mu\text{g}/\text{m}^3$						Geomean	2.8 $\mu\text{g}/\text{m}^3$					
	19.7	12.5	5.6	2.4	0.6	0.0	0.0														

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-05	1	0	0	0	0	3	4	7	1	0	0	0	D	0	0	1	0	0	2	1	2	1	0	0	0	1.0	7.0
2-Aug-05	0	0	1	2	0	0	2	1	1	0	2	4	1	0	2	4	2	0	2	2	0	0	1	1	1.3	4.2	
3-Aug-05	1	1	2	1	2	2	4	4	4	3	3	1	1	0	0	1	2	2	3	6	8	9	7	6	3.2	9.1	
4-Aug-05	5	6	5	3	4	4	6	8	7	7	5	5	4	2	2	4	4	3	3	1	5	6	3	3	4.5	7.8	
5-Aug-05	2	2	3	1	0	1	0	2	1	0	0	1	1	1	0	0	2	3	3	4	3	6	3	3	1.8	5.9	
6-Aug-05	4	2	3	2	2	4	4	4	3	5	0	1	2	3	4	1	6	5	1	0	0	0	0	0	2.3	6.0	
7-Aug-05	0	0	0	0	0	1	5	3	2	2	2	0	0	0	0	0	2	2	0	4	4	6	3	2	1.6	5.7	
8-Aug-05	0	0	0	1	0	2	1	3	2	2	4	4	5	4	4	5	7	5	5	9	13	15	10	10	4.5	14.9	
9-Aug-05	10	9	9	9	9	9	9	9	8	7	7	5	5	4	4	6	4	8	8	7	8	5	2	7.0	10.1		
10-Aug-05	2	2	2	0	1	2	6	9	6	6	4	2	2	2	1	1	2	1	2	6	4	4	2	3	3.0	9.1	
11-Aug-05	5	3	3	3	2	5	6	5	4	4	0	0	7	3	8	2	0	0	0	1	4	4	2	2	3.1	7.8	
12-Aug-05	1	0	0	0	0	3	3	1	1	0	0	1	2	0	0	2	2	2	3	5	8	15	12	2.6	14.6		
13-Aug-05	9	1	0	2	1	3	4	5	7	9	14	19	17	21	21	22	22	21	18	15	20	18	18	17	12.6	21.7	
14-Aug-05	15	13	13	10	8	12	11	10	8	10	8	8	8	6	4	4	2	5	3	1	2	0	0	0	6.8	15.2	
15-Aug-05	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0.2	1.5	
16-Aug-05	0	0	0	1	2	0	1	2	0	1	2	2	3	4	3	4	2	2	3	3	5	3	2	0	1.8	5.3	
17-Aug-05	0	0	0	0	0	0	3	4	1	0	2	0	0	2	0	0	0	2	1	3	6	9	12	6	2.1	11.6	
18-Aug-05	2	1	1	0	1	4	6	6	7	5	3	0	0	3	3	4	4	3	3	5	6	4	2	2	3.0	7.4	
19-Aug-05	2	1	1	1	1	3	5	10	14	14	6	8	6	6	6	5	6	7	10	11	16	18	13	7.2	17.9		
20-Aug-05	13	12	5	5	7	9	8	8	3	9	5	7	3	4	6	3	D	2	0	5	23	14	9	5	7.2	22.8	
21-Aug-05	2	0	0	1	1	3	4	4	6	4	9	8	8	5	5	4	4	4	D	0	0	D	0	D	3.5	9.1	
22-Aug-05	0	0	0	0	0	1	2	3	2	1	0	0	0	C	D	0	0	0	0	2	2	2	2	0	0.8	3.4	
23-Aug-05	0	0	0	0	1	2	4	6	4	1	1	1	3	2	1	4	2	2	2	4	2	1	2	2.0	6.1		
24-Aug-05	2	1	1	1	2	4	6	6	4	3	5	3	2	1	1	2	3	2	2	5	13	12	9	5	3.9	12.6	
25-Aug-05	6	8	8	6	5	6	7	20	13	10	8	6	6	5	5	4	3	3	3	6	15	23	15	8	8.2	23.5	
26-Aug-05	7	7	9	6	6	9	16	14	12	11	8	4	3	2	2	2	3	3	4	3	5	8	11	8	6.8	15.8	
27-Aug-05	7	6	5	7	5	6	8	9	6	7	8	8	13	11	6	5	4	12	10	11	11	11	11	8	8.1	13.3	
28-Aug-05	10	13	9	9	9	8	12	11	2	0	0	0	0	1	0	0	0	0	1	8	0	0	0	0	3.9	12.5	
29-Aug-05	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	2	1	0.4	2.2	
30-Aug-05	2	2	0	0	1	1	4	5	8	5	4	2	1	0	0	0	1	1	1	2	2	1	1	1	1.9	8.0	
31-Aug-05	0	0	0	0	0	1	3	3	4	2	1	1	1	1	4	5	2	7	4	3	3	2	0	2.0	6.6		

Hourly Avg	3.5	2.9	2.6	2.4	2.3	3.4	4.9	5.8	4.5	4.2	3.8	3.3	3.4	3.2	3.1	2.8	3.2	3.3	3.1	4.3	6.0	6.5	5.3	4.1
Hourly Max	15.2	13.1	12.9	9.8	9.2	12.1	15.8	19.6	12.8	14.3	14.4	18.9	17.1	20.7	20.6	21.6	21.7	20.7	17.8	14.9	22.8	23.5	17.9	17.3

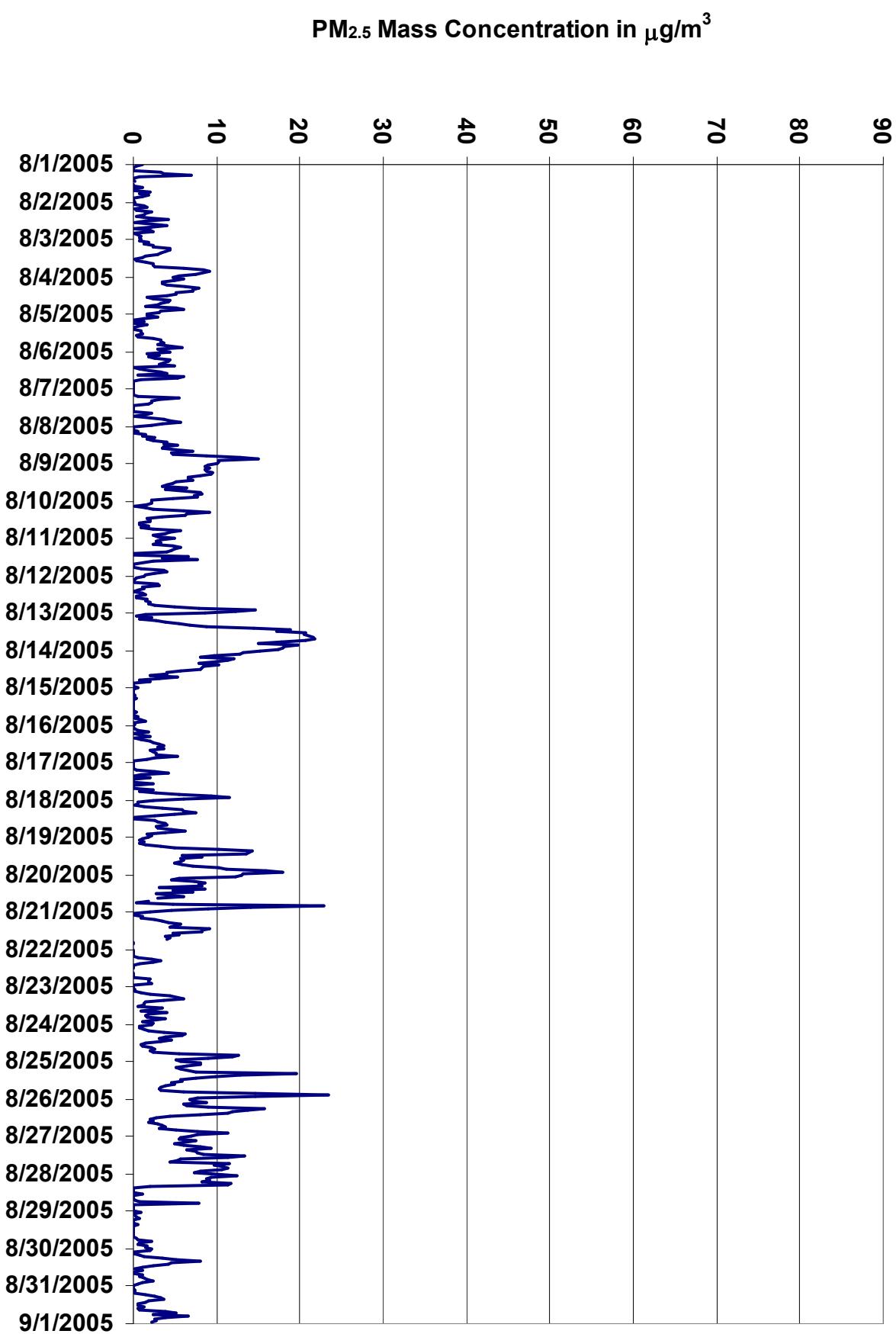


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

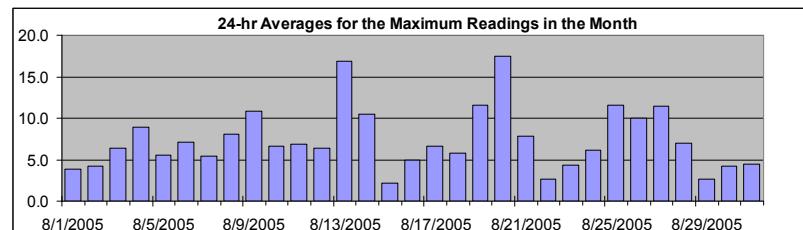
Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Average:	56.9	$\mu\text{g}/\text{m}^3$	20-Aug	20:00 21:00
Maximum 24-hr Value:	17.5	$\mu\text{g}/\text{m}^3$	20-Aug	

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
1-Aug-05	3	5	0	1	2	8	8	12	7	3	3	4	D	3	3	3	2	3	5	3	5	3	1	0	3.8	12.2
2-Aug-05	2	1	3	4	2	2	4	3	4	3	4	10	4	3	8	8	7	5	8	6	1	2	2	3	4.2	9.9
3-Aug-05	2	3	3	3	4	5	6	6	5	5	7	4	6	3	3	5	6	5	16	16	10	11	9	9	6.4	16.0
4-Aug-05	12	11	8	8	5	6	10	12	10	12	10	11	11	4	7	8	8	7	8	9	10	10	9	7	8.9	12.2
5-Aug-05	9	3	6	4	2	3	3	4	2	4	5	5	5	5	6	6	7	7	7	7	13	8	9	5.6	12.5	
6-Aug-05	10	7	7	5	5	7	8	6	6	8	8	4	6	7	11	5	20	17	5	3	4	3	4	1	7.1	20.1
7-Aug-05	1	2	1	1	1	2	18	6	4	5	6	3	4	3	3	5	6	11	5	9	11	8	7	11	5.5	18.0
8-Aug-05	5	1	1	6	2	4	2	6	5	8	8	8	10	7	8	8	10	10	11	12	18	18	15	12	8.1	18.3
9-Aug-05	15	11	11	11	10	10	11	12	9	9	10	9	9	8	6	7	18	13	30	13	9	9	6	5	10.9	29.5
10-Aug-05	4	3	3	2	4	5	10	21	9	11	8	7	7	8	4	5	6	4	7	9	7	5	5	7	6.7	20.7
11-Aug-05	8	7	7	5	4	7	8	7	8	7	8	6	13	8	14	11	7	3	3	4	6	7	6	3	6.9	13.6
12-Aug-05	3	2	2	1	2	5	5	3	3	4	3	5	4	9	12	7	5	5	4	6	9	11	24	19	6.4	23.6
13-Aug-05	14	6	3	6	4	5	7	10	11	15	19	24	23	26	24	24	30	25	23	18	26	21	23	21	16.9	29.6
14-Aug-05	19	17	16	14	11	15	13	14	13	12	12	13	12	11	11	9	7	12	7	4	7	0	2	1	10.5	18.6
15-Aug-05	2	0	0	1	2	3	2	3	3	2	2	1	5	2	1	5	2	3	3	2	3	3	0	2	2.1	4.7
16-Aug-05	2	2	2	4	5	2	3	4	3	4	4	5	7	5	6	5	6	5	9	11	12	7	5	1	4.9	11.6
17-Aug-05	2	0	0	1	1	2	5	8	11	4	8	4	3	7	13	3	3	5	3	15	15	16	19	11	6.6	18.7
18-Aug-05	5	2	2	3	4	7	9	12	10	8	5	3	2	6	6	9	7	5	5	8	8	6	3	4	5.8	11.6
19-Aug-05	4	3	3	3	3	3	5	10	13	22	17	15	14	10	13	11	8	9	16	16	13	30	21	17	11.6	29.7
20-Aug-05	30	22	12	8	12	13	15	13	10	17	17	19	20	13	13	15	D	8	17	16	57	24	21	10	17.5	56.9
21-Aug-05	9	5	2	4	3	6	6	8	8	8	14	13	13	10	11	9	9	10	D	13	4	D	1	D	7.8	13.5
22-Aug-05	0	2	1	2	2	4	6	5	4	4	2	3	2	C	D	0	1	1	2	4	4	4	3	2	2.6	5.6
23-Aug-05	0	1	2	2	3	6	6	9	7	3	4	4	3	8	5	5	7	5	4	4	8	4	2	4.4	9.2	
24-Aug-05	4	3	2	3	4	6	9	9	6	5	7	6	4	3	3	4	5	4	5	9	17	14	12	7	6.2	17.1
25-Aug-05	8	10	10	8	7	8	11	30	15	12	11	7	8	7	8	6	6	5	5	6	10	22	28	23	11.6	30.2
26-Aug-05	9	9	12	9	8	12	20	18	18	14	13	10	6	6	6	4	5	5	6	5	9	12	15	10	10.0	19.6
27-Aug-05	10	8	8	10	8	8	11	12	9	10	10	11	17	14	10	7	7	19	21	13	15	15	11	10	11.5	21.1
28-Aug-05	12	15	12	11	12	12	17	16	8	2	1	2	4	5	2	2	1	2	6	11	6	3	4	7.0	16.7	
29-Aug-05	4	3	1	5	3	3	3	2	3	1	3	0	0	2	2	3	3	3	4	3	2	3	4	2.7	4.6	
30-Aug-05	4	4	3	2	3	3	7	8	12	7	6	6	5	3	2	2	2	3	2	3	4	4	3	2	4.2	11.6
31-Aug-05	1	2	1	2	2	3	4	5	6	4	4	3	3	3	3	3	13	9	4	11	8	7	5	4	4.5	12.7

Hourly Avg 6.9 5.5 4.6 4.8 4.5 5.9 8.1 9.4 7.8 7.5 7.5 7.2 7.6 7.0 7.4 6.5 7.4 7.4 8.3 8.8 10.9 10.0 8.8 7.2  
Hourly Max 29.7 22.2 15.9 14.4 12.2 14.6 19.6 30.2 18.4 22.1 18.8 23.9 22.9 25.9 23.6 24.2 29.6 24.9 29.5 18.1 56.9 29.7 23.6 20.6

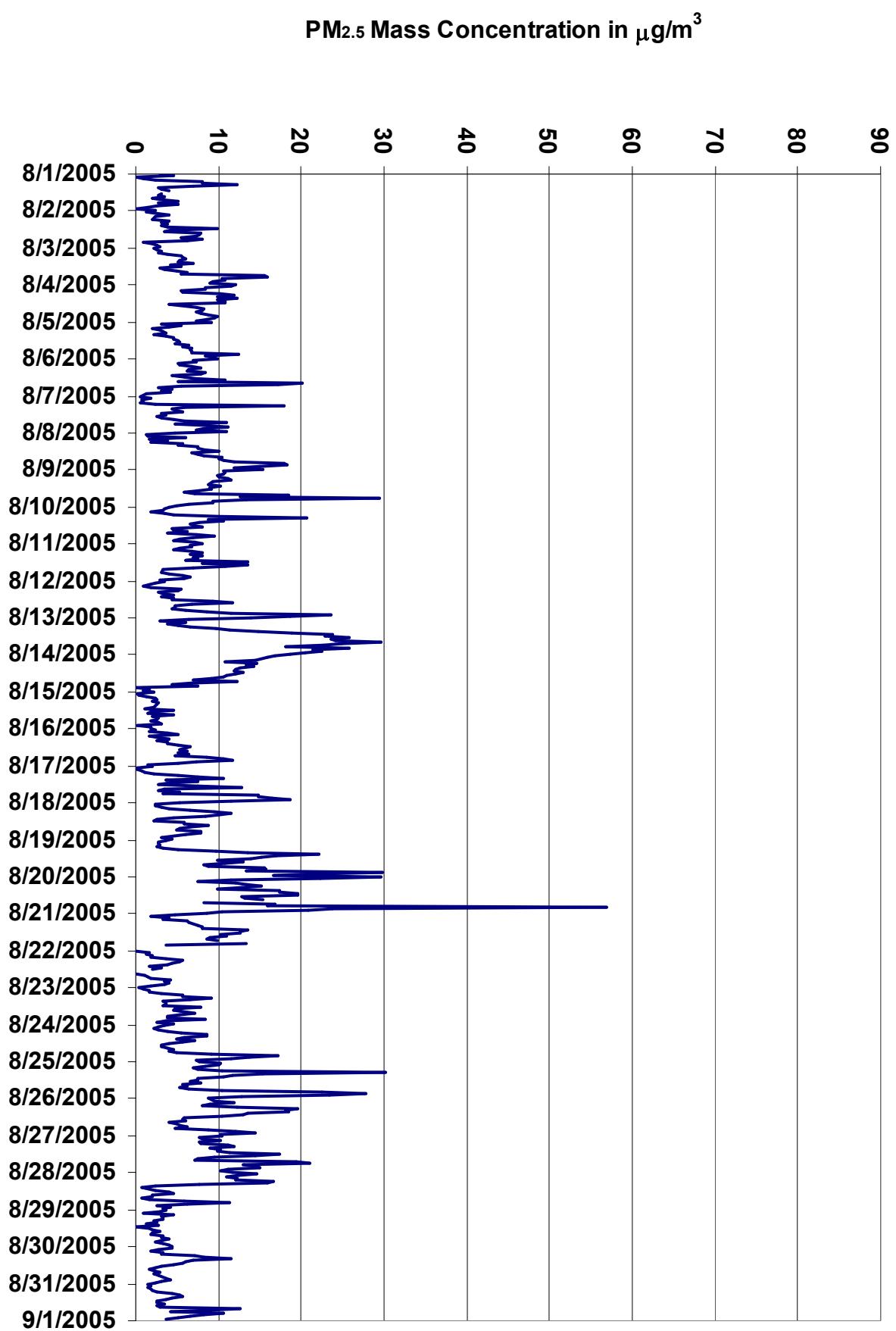
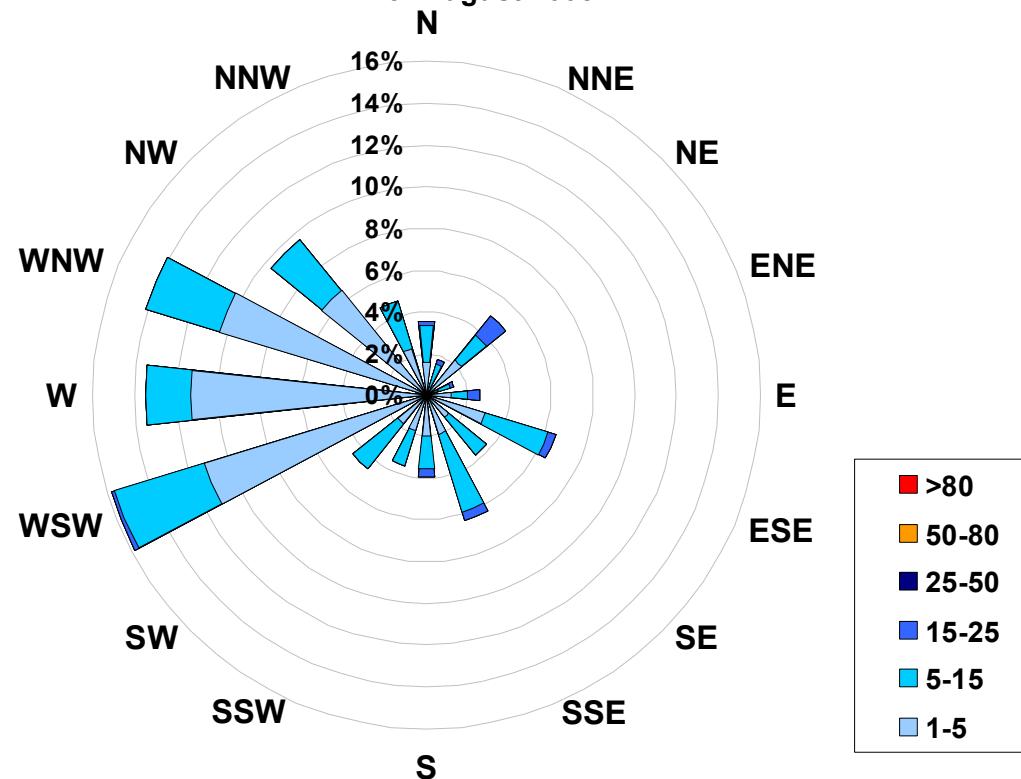


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

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



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

Frequency Distribution of PM<sub>2.5</sub> in µg/m<sup>3</sup>			
Range		Frequency (hrs)	
1.0	<	5	528
5	to	15	190
15	to	25	19
25	to	50	0
50	to	80	0
>	80		0
Total Non-Zero Values		737	

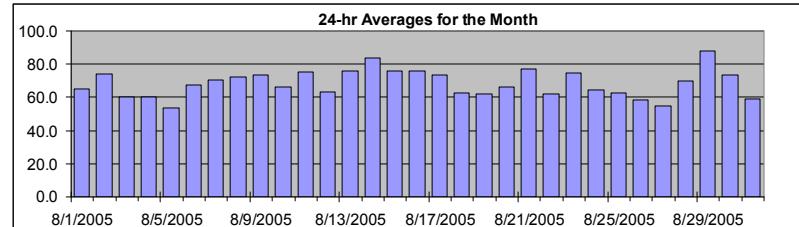
# PASZA - Henry Pirker Relative Humidity Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

## HOURLY AVERAGE TABLE

## Relative Humidity (RH)



### Summary

Maximum 1-hr Average:	96.1	%	24-Aug	5:00 6:00
Maximum 24-hr Value:	87.9	%	29-Aug	

AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	95.6	93.5	83.3	72.0	54.8	36.9	31.3	

### Status Flag Characters

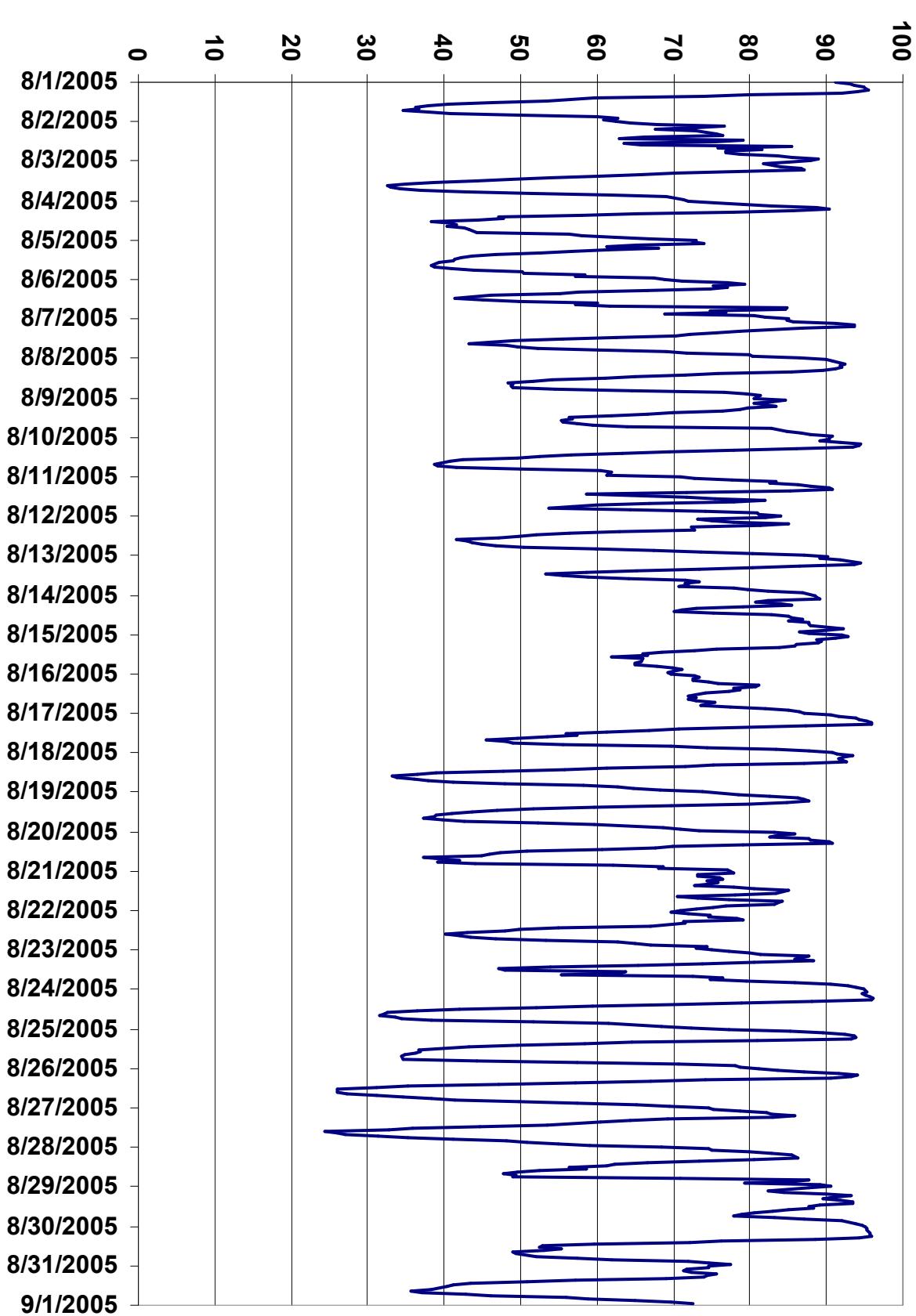
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

### Day Mountain Standard Time

	Hour Start 1:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-05	91	93	94	95	95	95	94	92	80	74	60	54	46	41	38	36	37	35	38	41	50	60	63	61	65.0	95.4	
2-Aug-05	63	64	68	77	73	68	73	76	76	66	63	79	75	63	66	85	76	82	77	77	79	84	86	89	74.3	88.9	
3-Aug-05	88	85	82	84	87	87	79	70	66	60	54	49	44	39	35	33	33	34	37	43	51	62	69	71	60.0	88.0	
4-Aug-05	72	75	79	83	89	90	86	78	65	58	47	48	45	38	41	42	40	43	43	44	56	58	62	67	60.4	90.4	
5-Aug-05	73	73	74	65	61	68	61	57	53	47	44	42	41	41	39	38	39	41	44	50	50	58	57	67	53.5	73.9	
6-Aug-05	69	71	77	79	75	77	75	67	57	55	46	41	45	50	60	57	62	85	85	75	77	69	81	82	67.3	84.8	
7-Aug-05	85	85	86	91	94	94	87	79	76	72	70	62	56	49	46	43	48	50	52	60	69	72	80	80	70.2	93.7	
8-Aug-05	86	90	91	92	92	91	90	85	76	71	65	61	54	52	48	49	49	49	54	65	77	80	81		72.5	92.5	
9-Aug-05	80	85	83	81	82	83	80	79	76	70	67	62	56	57	55	56	57	59	64	83	85	87	88	91	73.5	90.7	
10-Aug-05	90	90	89	92	94	94	94	86	78	70	63	57	52	50	42	41	39	39	42	50	60	62	61	61	66.5	94.4	
11-Aug-05	71	73	78	83	83	86	88	90	91	85	72	59	72	75	82	78	67	60	57	54	64	74	81	81	75.1	90.8	
12-Aug-05	84	82	73	75	78	85	81	72	73	63	56	52	50	47	47	42	43	44	45	47	50	60	68	74	80	63.4	85.0
13-Aug-05	87	90	89	92	94	94	87	80	73	65	59	53	55	59	64	71	73	71	72	71	78	80	82	87	76.2	94.5	
14-Aug-05	89	89	89	82	81	84	86	79	73	71	70	75	83	85	87	85	88	88	88	92	90	86	88		83.9	92.2	
15-Aug-05	92	93	91	89	89	89	86	86	84	76	73	69	66	67	62	66	66	65	65	68	70	71	70	69	75.8	92.7	
16-Aug-05	70	73	73	73	75	76	81	81	78	79	77	74	72	73	75	74	74	74	77	82	85	87		76.1	86.5		
17-Aug-05	87	91	92	94	94	95	96	96	87	71	67	61	56	57	54	50	46	48	49	56	70	74	83	88	73.4	95.9	
18-Aug-05	91	91	94	92	92	93	87	75	72	61	56	48	39	36	33	34	36	38	41	48	58	63	65	68	62.9	93.5	
19-Aug-05	74	78	83	86	87	88	85	80	70	60	52	47	44	41	39	39	37	40	43	52	60	69	71	73	62.3	87.6	
20-Aug-05	83	86	84	83	88	88	90	91	79	70	68	61	51	47	46	45	37	42	39	44	62	69	68	77	66.5	90.7	
21-Aug-05	77	78	73	73	76	76	74	76	75	73	78	81	85	83	78	71	73	77	84	84	83	77	75	73	77.2	85.1	
22-Aug-05	71	70	72	75	75	78	79	71	72	67	55	50	48	43	40	42	43	47	53	63	65	67	74	73	62.2	79.2	
23-Aug-05	75	77	80	81	88	86	88	81	74	65	54	47	48	64	63	55	73	76	75	79	86	91	93	94	74.7	93.8	
24-Aug-05	95	95	95	95	96	96	96	88	79	70	59	52	42	36	33	32	31	34	34	38	52	62	68	72	64.6	96.1	
25-Aug-05	77	85	90	92	94	94	93	81	65	58	50	43	40	37	37	36	35	34	35	44	57	71	78	79	62.7	93.9	
26-Aug-05	81	84	87	92	94	93	91	74	67	57	47	35	31	26	26	27	31	35	38	41	50	57	65	69	58.3	94.2	
27-Aug-05	75	75	79	82	83	86	83	69	64	60	53	45	36	33	24	26	27	31	35	41	48	51	55	59	55.0	85.8	
28-Aug-05	68	75	75	80	83	85	86	80	73	67	62	61	56	59	52	50	48	49	49	71	88	86	79	89	69.7	89.2	
29-Aug-05	90	88	82	84	90	93	91	90	92	94	93	89	88	88	85	83	81	79	78	83	87	92	94	95	87.9	94.7	
30-Aug-05	95	95	95	95	96	96	96	94	88	76	72	60	53	52	55	53	49	49	52	57	62	72	75	78	73.6	95.8	
31-Aug-05	75	75	72	71	72	76	74	74	69	57	51	43	41	40	38	36	37	43	46	56	59	65	70	72	58.9	75.7	

Hourly Avg	80.8	82.4	82.8	84.1	85.3	86.6	84.9	80.0	74.6	67.5	61.6	57.0	54.2	52.6	51.2	50.8	50.7	53.0	54.3	59.3	66.8	71.5	74.8	77.5
Hourly Max	95.0	95.3	95.4	95.5	95.7	96.1	96.0	95.9	91.8	93.5	93.4	89.1	87.7	88.4	85.4	87.0	84.9	87.8	87.6	87.9	92.2	92.0	93.9	94.7

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



## PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

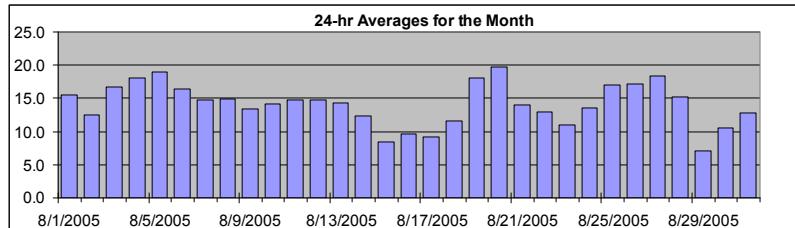
### HOURLY AVERAGE TABLE

### Ambient Temperature (T)

#### Summary

Maximum 1-hr Average:	28.4	°C	27-Aug	14:00 15:00
Maximum 24-hr Value:	19.8	°C	20-Aug	

AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	
	27.1	23.8	17.9	13.6	10.2	5.6	2.9		14.1 °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

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	Daily Maximum
Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00					
1-Aug-05	14	14	12	11	10	11	12	13	16	16	18	19	19	18	20	20	20	20	19	18	16	13	12	11	15.5	20.1		
2-Aug-05	11	10	10	10	11	11	11	11	12	14	15	13	13	15	15	13	15	12	14	15	13	12	11	10	12.4	15.8		
3-Aug-05	11	10	10	9	8	8	10	12	14	17	19	21	22	22	23	24	24	24	23	22	20	18	16	14	16.7	24.4		
4-Aug-05	13	12	11	10	9	9	10	12	15	18	22	21	23	24	23	25	25	25	24	24	20	20	19	17	18.0	25.0		
5-Aug-05	15	15	14	17	17	16	17	18	19	20	21	22	22	23	23	23	22	21	21	20	19	17	17	15	19.0	23.1		
6-Aug-05	14	13	12	12	12	13	16	19	21	22	23	22	21	20	21	20	16	16	17	16	15	12	11	16.4	22.8			
7-Aug-05	10	10	9	8	7	7	9	12	14	15	16	18	19	20	21	22	20	20	19	18	17	16	14	14	14.8	21.6		
8-Aug-05	12	11	11	11	10	10	11	12	13	14	15	17	18	19	19	20	20	20	20	19	16	14	13	13	15.0	20.4		
9-Aug-05	13	13	13	13	12	11	12	12	13	14	14	15	16	16	16	15	15	15	15	13	13	12	11	9	13.5	16.4		
10-Aug-05	9	9	9	7	7	6	7	10	13	15	16	17	18	18	20	20	20	20	19	18	16	15	15	15	14.2	20.2		
11-Aug-05	14	14	13	13	12	12	13	13	14	15	16	17	16	16	17	19	18	18	18	17	15	13	12	11	14.8	18.8		
12-Aug-05	11	11	11	11	9	8	9	11	12	14	16	18	18	19	19	20	21	21	20	18	16	15	13	12	14.7	20.7		
13-Aug-05	10	9	8	8	8	8	9	11	13	16	18	22	22	21	19	17	17	17	17	16	15	15	15	14	14.4	22.1		
14-Aug-05	14	14	14	13	13	12	12	13	14	14	14	14	13	13	13	13	13	13	13	11	10	10	9	8	12.4	14.3		
15-Aug-05	7	7	7	7	7	7	7	7	8	9	9	10	10	10	11	10	10	10	10	9	9	9	9	9	8.4	10.6		
16-Aug-05	9	8	8	8	8	8	8	8	8	9	9	10	11	12	11	11	11	11	11	10	10	10	9	9	9.6	11.7		
17-Aug-05	8	7	6	4	3	3	3	5	8	10	12	12	13	13	14	14	14	14	14	12	10	8	7	5	9.1	14.2		
18-Aug-05	3	3	3	2	2	2	3	7	9	12	14	16	18	18	19	20	20	19	19	17	14	13	12	11	11.5	20.4		
19-Aug-05	10	9	9	8	8	7	8	10	14	17	21	23	25	26	27	28	28	27	26	24	22	20	19	18	18.1	28.2		
20-Aug-05	17	16	16	16	15	15	15	15	18	20	21	23	24	25	25	25	25	24	25	23	19	18	18	17	19.8	25.4		
21-Aug-05	16	15	15	14	13	13	13	13	14	14	14	14	14	14	15	17	17	16	13	13	12	12	11	11	14.0	17.4		
22-Aug-05	10	10	10	9	9	8	8	10	11	13	15	16	17	18	19	18	18	17	15	14	13	12	11	10	13.0	19.4		
23-Aug-05	9	8	8	7	5	5	4	8	11	13	16	18	18	15	16	17	14	13	14	12	11	9	7	7	11.0	18.4		
24-Aug-05	6	5	5	4	4	4	5	8	11	14	17	19	21	21	22	22	22	21	20	19	16	14	13	12	13.6	22.2		
25-Aug-05	10	9	7	6	6	6	6	10	13	16	19	22	24	26	27	27	27	27	24	20	18	16	15	15	17.0	27.4		
26-Aug-05	13	12	11	10	9	9	10	13	15	19	21	23	24	24	24	24	24	23	22	21	18	16	13	12	17.2	24.4		
27-Aug-05	11	11	10	9	9	8	9	13	15	16	19	22	25	26	28	28	27	26	25	23	21	20	19	18	18.3	28.4		
28-Aug-05	16	15	15	14	13	13	12	15	15	15	16	16	18	17	19	19	19	18	18	15	12	11	11	11	15.1	19.1		
29-Aug-05	10	10	11	10	9	8	7	6	6	5	5	6	6	7	7	8	8	8	7	6	5	5	5	5	7.0	10.6		
30-Aug-05	4	3	3	3	3	3	3	5	7	11	13	16	17	18	17	16	15	13	11	10	9	9	9	9	10.5	17.7		
31-Aug-05	10	9	10	10	9	9	9	9	11	14	15	17	17	18	18	18	17	16	15	13	13	11	10	9	12.8	17.9		

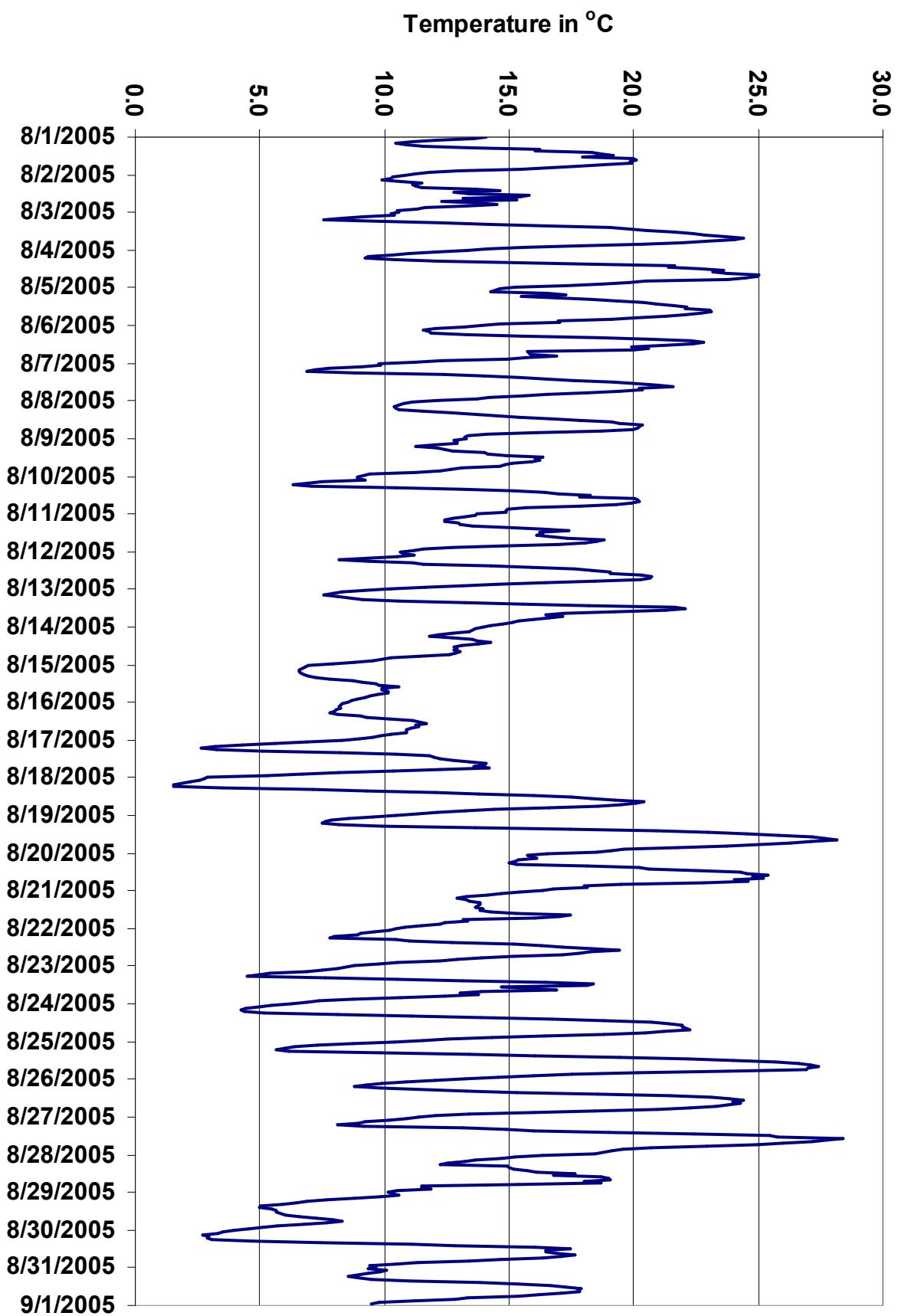


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

## PASZA - Henry Pirker Solar Radiation Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

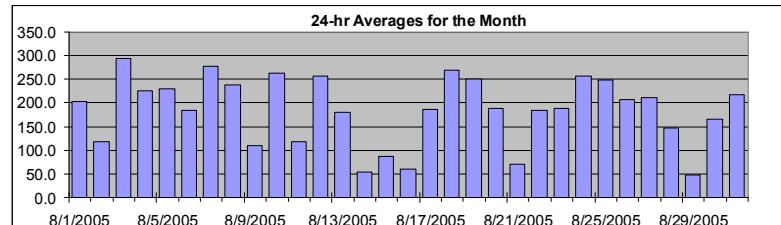
Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Average:	820.6	W/m <sup>2</sup>	7-Aug	12:00 13:00
Maximum 24-hr Value:	294.0	W/m <sup>2</sup>	3-Aug	

### HOURLY AVERAGE TABLE

### Solar Radiation (SR)



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-05	0	0	0	0	0	7	47	106	255	119	501	269	361	309	771	710	580	433	226	142	24	0	0	0	202.5	770.9
2-Aug-05	0	0	0	0	0	7	61	92	110	241	195	168	213	639	210	220	216	109	165	139	29	0	0	0	117.3	638.5
3-Aug-05	0	0	0	0	0	10	124	235	422	564	679	756	802	805	762	688	560	364	139	117	31	0	0	0	294.0	804.7
4-Aug-05	0	0	0	0	0	12	89	113	407	378	611	421	627	642	442	434	531	356	210	121	5	0	0	0	225.0	641.6
5-Aug-05	0	0	0	0	0	9	116	225	365	555	653	672	610	547	615	470	325	176	106	46	14	0	0	0	229.4	671.8
6-Aug-05	0	0	0	0	0	8	71	172	295	516	690	690	605	300	241	330	178	72	89	127	23	0	0	0	183.6	689.8
7-Aug-05	0	0	0	0	0	6	125	223	408	544	662	739	821	799	768	662	297	366	197	56	4	0	0	0	278.3	820.6
8-Aug-05	0	0	0	0	0	5	35	119	186	397	402	570	648	789	677	653	498	407	242	101	10	0	0	0	239.1	788.7
9-Aug-05	0	0	0	0	1	20	113	138	180	213	226	274	459	271	273	187	56	83	84	54	14	0	0	0	110.4	459.5
10-Aug-05	0	0	0	1	0	8	62	212	392	531	672	502	794	384	777	683	548	407	251	86	10	0	0	0	263.3	794.0
11-Aug-05	0	0	1	0	0	3	12	31	76	236	306	365	161	148	239	349	390	218	186	82	7	0	0	0	117.1	389.8
12-Aug-05	0	1	0	0	0	14	86	155	255	460	602	660	692	683	631	641	544	400	244	80	9	0	0	0	256.6	692.0
13-Aug-05	1	0	0	0	0	4	44	141	299	433	460	650	587	708	408	134	188	165	54	41	3	0	0	1	180.0	707.6
14-Aug-05	0	0	0	0	0	3	16	88	115	129	160	113	118	107	120	117	114	41	19	9	1	0	1	0	52.8	159.9
15-Aug-05	0	0	0	0	0	2	13	35	79	177	262	244	226	233	273	125	135	138	98	30	2	0	0	0	86.4	273.3
16-Aug-05	0	0	0	0	0	2	10	33	74	128	122	189	224	243	124	108	51	47	28	37	2	0	0	0	59.2	242.9
17-Aug-05	0	0	0	0	1	4	38	158	381	468	477	394	445	437	482	430	264	199	255	44	4	0	0	0	186.8	481.8
18-Aug-05	0	0	0	0	0	2	82	200	375	505	646	709	757	745	701	612	507	361	220	45	3	0	0	0	269.6	756.8
19-Aug-05	0	0	0	0	1	7	28	156	346	481	601	680	724	720	685	592	476	331	172	33	1	0	0	0	251.4	724.4
20-Aug-05	0	0	0	1	0	0	7	35	292	365	391	675	698	516	512	281	330	156	196	46	1	0	0	0	187.6	698.3
21-Aug-05	0	0	1	0	0	2	10	26	41	68	152	185	191	216	273	300	149	53	24	20	0	0	0	71.3	299.6	
22-Aug-05	0	1	0	0	0	2	70	159	175	314	495	585	589	574	673	317	226	166	74	19	1	0	0	0	185.0	673.4
23-Aug-05	0	0	0	0	0	3	60	182	347	486	602	687	421	175	660	513	131	133	105	42	1	0	0	0	189.4	686.8
24-Aug-05	0	0	0	0	0	3	53	181	344	484	600	682	725	729	695	602	481	337	189	43	1	0	0	0	256.2	728.8
25-Aug-05	0	0	0	0	1	2	55	181	336	474	587	667	707	709	672	579	463	323	179	41	0	0	0	0	249.0	709.5
26-Aug-05	0	0	0	1	0	3	51	146	269	453	412	503	590	705	557	537	349	205	131	44	0	0	0	0	206.5	705.3
27-Aug-05	0	0	1	0	0	1	50	172	275	383	573	643	661	492	714	470	347	185	83	17	0	0	0	0	211.1	714.0
28-Aug-05	0	1	0	0	0	1	51	133	78	218	286	454	574	266	574	325	298	134	117	4	0	0	0	0	146.4	574.2
29-Aug-05	1	0	0	0	0	0	6	17	27	38	61	166	97	79	90	104	143	145	123	39	0	0	0	0	47.4	166.1
30-Aug-05	0	0	0	0	0	0	55	122	256	312	279	580	553	301	357	360	338	300	136	14	0	0	1	0	165.2	580.0
31-Aug-05	0	0	0	0	0	1	39	63	177	440	580	700	695	690	653	556	344	177	87	11	0	1	0	0	217.2	699.5

Hourly Avg	0.0	0.1	0.1	0.1	4.9	54.1	130.6	246.3	358.5	449.8	502.9	528.3	482.6	504.1	422.3	324.4	225.4	143.0	55.9	6.5	0.0	0.0	0.0	
Hourly Max	0.7	0.7	0.7	0.6	0.7	20.5	125.3	235.0	422.0	564.2	689.8	755.7	820.6	804.7	776.5	710.0	579.9	432.8	255.2	142.3	30.9	0.6	0.7	0.7

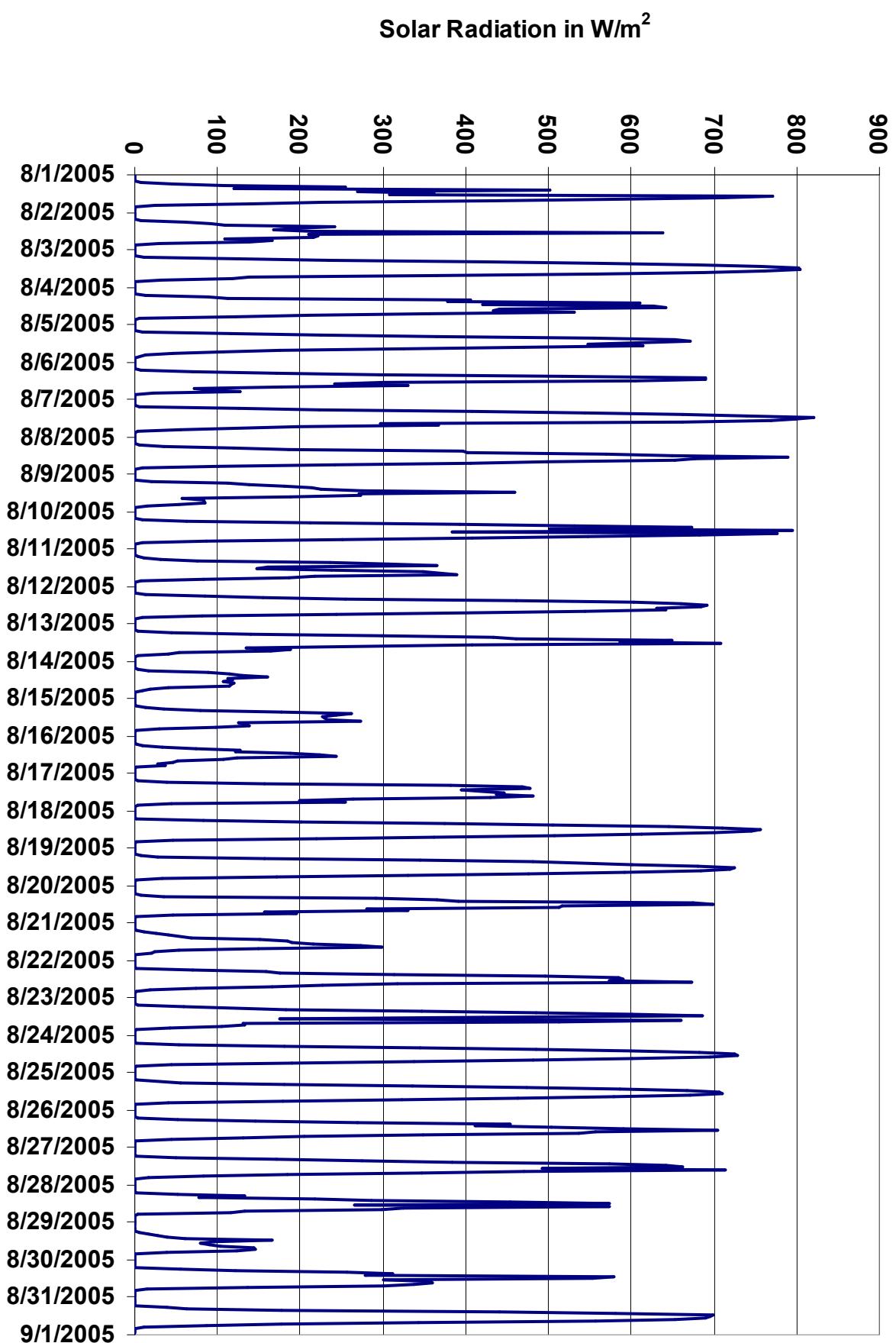


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

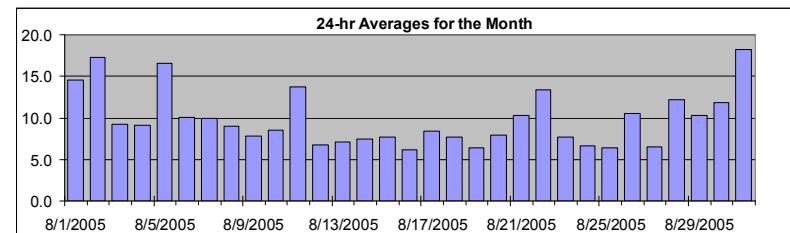
## PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Summary

Maximum 1-hr Average:	30.3	km/hr	31-Aug	15:00 16:00
Maximum 24-hr Value:	18.2	km/hr	31-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				
99	95	75	50	AverageS
27.5	22.0	12.1	8.2	6.1 4.2 3.4 9.9 km/hr

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	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	24-hr Average	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	3	6	5	4	5	10	7	15	10	14	24	19	23	25	23	24	22	20	22	21	15	11	11	11	14.6	24.9	
2-Aug-05	11	10	13	14	21	26	27	26	14	21	25	19	19	24	18	15	14	19	13	16	18	14	11	7		17.3	27.3
3-Aug-05	8	8	10	8	7	7	9	11	13	15	12	12	13	13	13	12	10	8	4	6	6	6	5	5		9.2	15.2
4-Aug-05	5	4	3	5	6	6	5	8	9	10	12	14	16	20	15	11	13	10	10	11	7	6	8	6		9.1	19.7
5-Aug-05	7	8	7	14	17	10	18	18	23	30	29	25	23	22	21	23	24	20	16	12	11	7	9	4		16.6	29.8
6-Aug-05	6	5	4	5	4	5	5	4	4	7	17	22	20	16	11	8	14	18	8	10	13	16	11	9		10.1	22.3
7-Aug-05	7	7	7	5	4	4	6	10	14	16	16	18	17	15	13	12	11	14	9	7	8	5	8	7		9.9	17.7
8-Aug-05	17	12	7	9	8	8	9	6	9	7	7	10	10	13	12	12	12	12	9	8	7	5	5	4		9.0	16.8
9-Aug-05	6	7	9	10	9	6	8	10	8	6	7	8	8	9	6	7	7	7	7	10	10	8	6	6		7.8	10.5
10-Aug-05	6	4	6	5	6	5	6	6	6	7	9	8	11	8	9	12	14	13	14	10	10	11	10	8		8.5	13.9
11-Aug-05	8	11	12	13	12	11	14	13	13	18	21	20	16	16	15	17	19	18	17	16	9	7	5	7		13.7	20.6
12-Aug-05	6	5	8	6	3	5	4	6	6	6	6	6	6	8	10	10	9	9	9	10	6	5	5	5		6.7	10.4
13-Aug-05	4	5	4	5	4	6	6	7	6	9	7	7	12	14	14	9	8	6	6	6	7	7	5	5		7.1	13.9
14-Aug-05	5	6	5	6	5	6	5	7	8	7	6	7	7	7	7	8	9	7	7	10	9	11	11	10		7.4	11.3
15-Aug-05	10	6	6	5	5	5	6	7	7	9	8	9	7	8	8	10	10	9	9	9	7	7	8	8		7.6	10.4
16-Aug-05	8	5	7	7	7	6	6	6	7	6	6	5	6	7	8	7	7	5	4	4	4	5	6	7		6.2	8.5
17-Aug-05	9	9	10	8	7	7	6	8	10	9	9	9	10	11	12	12	14	11	10	6	4	4	4	5		8.4	14.3
18-Aug-05	6	6	6	5	5	7	7	5	7	6	8	7	7	8	8	6	9	10	13	11	9	10	10	11		7.7	12.9
19-Aug-05	10	7	6	4	4	3	4	5	4	5	5	8	10	10	7	8	5	8	8	9	7	4	6	5		6.4	10.4
20-Aug-05	4	3	4	9	9	7	9	7	6	8	10	12	11	11	9	12	14	8	5	4	4	5	11	8		7.9	14.1
21-Aug-05	13	15	10	8	8	7	6	8	10	9	9	9	8	8	5	6	15	15	12	12	14	15	14		10.3	15.3	
22-Aug-05	16	14	13	14	15	10	8	11	12	15	22	24	19	15	16	18	15	16	10	7	9	8	7	10		13.4	23.6
23-Aug-05	8	7	6	6	6	7	4	6	8	9	6	6	7	9	13	13	15	6	10	7	6	6	6	5		7.7	14.7
24-Aug-05	5	5	6	5	4	4	5	8	7	8	6	7	7	8	7	8	7	9	9	7	8	7	6	6		6.6	9.2
25-Aug-05	5	5	4	5	5	6	6	5	7	9	9	8	8	8	9	9	8	4	4	4	5	6	5	5		6.4	9.4
26-Aug-05	3	3	5	3	3	4	4	6	8	9	12	18	20	22	21	18	14	14	20	16	10	8	7	4		10.5	22.0
27-Aug-05	4	4	5	5	4	4	3	4	6	7	7	5	5	4	7	8	10	8	7	8	9	8	9	11		6.5	10.8
28-Aug-05	7	7	6	4	4	5	7	13	27	27	21	19	18	19	13	12	11	6	6	14	16	10	10	9		12.1	27.3
29-Aug-05	8	9	13	13	12	11	14	14	12	13	12	13	10	13	12	12	9	8	6	8	7	6	6	5		10.3	14.2
30-Aug-05	6	5	5	6	6	5	4	5	5	8	9	10	17	25	19	21	23	27	22	18	13	6	8	10		11.8	27.0
31-Aug-05	13	10	18	18	15	13	14	13	14	26	28	29	29	27	30	30	28	22	17	9	11	9	8	7		18.2	30.3

1-hr Average 7.6 7.0 7.4 7.6 7.4 7.3 7.8 9.0 9.8 11.6 12.4 12.6 12.9 13.6 12.8 12.5 12.6 12.0 10.6 9.9 9.0 7.7 7.8 7.4

Hourly Max 16.8 15.0 17.5 17.9 20.8 26.1 27.3 26.4 27.0 29.8 28.9 28.7 27.4 29.8 30.3 27.5 27.0 22.5 20.9 18.2 16.3 15.3 14.1

### 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

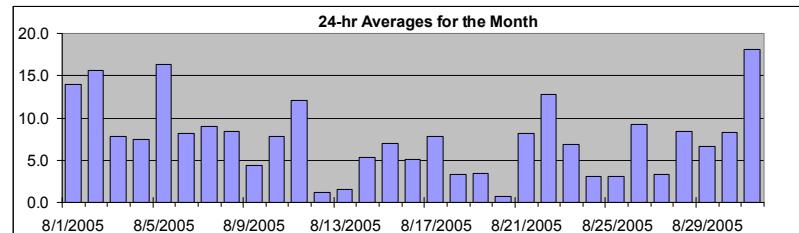
# PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

## HOURLY AVERAGE TABLE

## Wind Speed (WSv)



### Summary

Maximum 1-hr Average:	29.9	km/hr	31-Aug	15:00 16:00
Maximum 24-hr Value:	18.1	km/hr	31-Aug	

Calm Time:	1 hrs	0% calms	Operational Time:	743 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageV	
	27.2	21.6	11.6	7.6	5.4	3.0	1.6		28.3 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

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Max
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00	
1-Aug-05	1	6	5	4	3	10	6	15	10	14	24	18	22	25	23	23	22	20	21	21	14	10	11	11	14.0	24.7
2-Aug-05	11	10	13	14	21	26	27	26	14	21	24	18	19	24	18	14	14	18	12	15	18	14	10	7	15.6	27.2
3-Aug-05	8	8	10	7	6	7	9	11	13	15	12	12	12	12	12	12	9	8	2	6	6	6	5	4	7.8	14.8
4-Aug-05	4	3	3	5	6	6	4	7	9	9	11	13	15	19	15	10	12	8	10	10	7	6	8	6	7.5	19.4
5-Aug-05	7	8	6	14	17	10	17	18	23	29	28	24	23	22	21	23	23	20	16	12	11	7	8	3	16.3	29.5
6-Aug-05	5	4	3	5	2	4	2	1	1	6	15	22	19	15	9	7	12	18	7	9	13	15	11	8	8.2	22.1
7-Aug-05	7	6	6	5	3	3	5	9	14	15	16	17	16	14	13	11	11	9	7	7	4	4	4	4	9.0	17.0
8-Aug-05	17	12	6	7	8	8	9	6	8	7	6	9	9	12	11	11	11	9	7	7	5	4	4	4	8.4	16.6
9-Aug-05	5	7	9	10	9	6	7	10	7	5	7	7	7	8	5	6	6	7	1	10	10	8	5	6	4.4	10.3
10-Aug-05	6	3	6	5	6	5	6	6	6	7	8	6	10	6	9	11	13	13	14	10	10	11	9	8	7.8	13.6
11-Aug-05	7	11	11	13	11	11	14	13	13	17	20	20	16	15	15	16	19	18	17	16	9	6	5	7	12.1	20.2
12-Aug-05	6	4	8	6	3	5	4	6	5	4	3	3	3	7	9	9	8	8	6	9	6	5	5	5	1.1	9.4
13-Aug-05	4	4	4	3	4	6	6	7	6	9	7	5	11	13	13	9	7	6	5	5	6	6	4	1.5	13.5	
14-Aug-05	5	5	5	6	5	6	5	7	8	7	6	6	7	7	8	8	7	6	10	9	11	11	10	5.3	11.1	
15-Aug-05	9	6	5	4	5	5	6	7	7	9	8	8	6	8	7	10	10	9	9	9	7	7	8	7.0	10.2	
16-Aug-05	8	5	6	7	7	6	5	5	7	6	5	4	5	6	7	6	7	5	4	4	3	5	6	5.1	8.4	
17-Aug-05	9	9	9	8	6	7	6	8	9	8	8	8	9	9	11	10	14	11	9	5	3	4	4	7.8	13.9	
18-Aug-05	5	5	5	4	4	6	7	4	7	5	4	5	4	4	4	9	10	13	11	9	10	10	11	3.3	12.7	
19-Aug-05	10	7	6	3	4	3	4	4	4	4	7	9	8	4	6	1	7	8	9	7	4	5	5	3.4	9.7	
20-Aug-05	1	1	2	9	7	3	6	6	6	7	9	11	10	10	9	10	14	8	4	3	3	3	3	0.7	13.9	
21-Aug-05	13	15	10	7	8	6	6	7	10	9	9	8	8	8	7	4	4	4	14	13	12	12	14	15	8.2	15.2
22-Aug-05	16	14	13	14	15	9	7	10	12	15	22	23	18	14	15	17	15	15	10	7	8	8	7	9	12.8	23.2
23-Aug-05	7	6	6	6	5	7	4	6	8	8	5	3	4	8	12	13	12	5	10	7	5	6	5	5	6.8	12.8
24-Aug-05	4	4	6	4	3	4	4	7	7	7	5	6	7	7	4	5	5	8	9	7	7	7	6	6	3.0	9.0
25-Aug-05	5	5	3	4	5	6	6	5	6	8	8	7	6	7	8	8	8	8	4	4	4	5	2	3.0	8.4	
26-Aug-05	2	3	5	2	2	3	4	6	7	9	12	18	19	22	20	18	13	13	19	16	10	6	6	2	9.3	21.6
27-Aug-05	calm	3	1	4	4	3	3	4	6	6	6	4	5	2	3	5	8	8	7	8	9	8	9	11	3.3	10.5
28-Aug-05	6	6	5	2	2	4	6	12	27	27	21	18	17	19	13	12	10	5	4	11	15	8	4	8	8.4	27.1
29-Aug-05	8	9	13	12	11	10	13	14	12	13	12	10	13	12	12	9	8	5	8	7	6	5	5	6.6	14.0	
30-Aug-05	6	5	5	6	5	5	4	5	5	8	8	8	16	24	19	20	23	27	22	18	13	6	8	10	8.3	26.8
31-Aug-05	13	10	17	18	15	13	14	13	14	26	27	28	28	27	29	30	27	22	16	9	11	8	7	7	18.1	29.9
1-hr Vector	2.7	2.4	2.8	2.9	3.7	4.3	4.3	4.9	5.5	7.3	8.4	8.4	8.9	9.8	8.7	8.3	8.3	7.2	5.0	4.5	3.9	2.2	2.2	2.1		
Hourly Max	16.6	14.7	17.4	17.8	20.6	26.0	27.2	26.3	26.7	29.5	28.3	28.1	28.4	26.8	29.4	29.9	27.2	26.8	22.3	20.7	18.2	15.4	15.2	14.0		

**PASZA - Henry Pirker Wind Direction Monthly Summary**

Station: Henry Pirker  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

**HOURLY AVERAGE TABLE****Wind Direction (WD)****Summary**

Wind Data Summary											

Percentile	0	95	99	75	50	25	5	1	Average	
	351.3	332.2	292.0	255.2	162.8	43.6	6.8	273 deg		
Calm Time:	0 hrs		0% calms		Operational Time:		744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:		100.0%					

**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	WD Sector
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Aug-05	120	265	304	307	303	252	249	267	273	250	252	244	255	255	256	255	261	259	248	242	261	255	242	225	255	WSW
2-Aug-05	216	218	237	228	248	254	254	254	264	262	276	319	302	288	309	309	304	279	289	256	258	265	257	273	269	W
3-Aug-05	260	276	259	277	268	277	271	252	252	267	274	267	263	250	237	263	297	287	293	169	165	164	192	177	257	WSW
4-Aug-05	168	174	163	157	167	153	162	179	219	243	253	257	249	252	261	249	264	257	241	260	274	216	236	271	238	WSW
5-Aug-05	230	276	261	274	279	255	270	256	261	265	262	270	267	281	296	280	270	265	274	281	289	284	288	272	271	W
6-Aug-05	302	299	301	194	211	225	188	301	89	193	273	282	297	293	270	195	232	291	299	246	273	267	296	256	270	W
7-Aug-05	322	301	304	315	264	297	297	292	300	298	316	314	305	298	290	298	306	297	325	315	347	39	195	298	304	NW
8-Aug-05	304	353	319	252	256	263	284	292	306	300	299	307	271	288	298	291	303	308	296	295	306	316	314	317	297	WNW
9-Aug-05	321	313	324	332	342	342	347	17	32	18	15	36	45	53	48	45	34	51	118	245	254	254	269	329	356	N
10-Aug-05	317	329	341	313	289	308	324	300	278	240	237	279	238	268	256	286	292	282	294	290	285	288	272	267	283	WNW
11-Aug-05	273	255	263	252	267	268	296	305	295	305	316	328	308	297	330	317	317	349	346	344	329	325	328	337	309	NW
12-Aug-05	328	13	70	75	61	350	20	67	90	118	185	297	264	318	308	288	275	288	246	206	167	161	166	163	284	WNW
13-Aug-05	233	276	291	305	273	229	247	261	259	243	244	21	56	49	51	51	52	43	72	83	109	99	84	148	40	NE
14-Aug-05	90	77	23	3	344	315	327	345	359	7	26	36	1	319	298	311	341	318	308	7	39	68	79	70	8	N
15-Aug-05	92	93	66	63	28	32	66	72	81	100	120	119	117	121	116	83	103	127	119	115	105	93	80	85	96	E
16-Aug-05	97	86	32	36	55	45	45	44	48	76	82	65	39	11	10	14	5	40	47	34	347	328	345	337	35	NE
17-Aug-05	349	346	335	342	319	332	331	315	319	334	279	293	332	304	318	331	345	1	7	349	299	314	281	286	328	NNW
18-Aug-05	296	320	272	291	300	282	260	241	239	204	148	159	172	173	169	122	105	113	108	105	109	108	105	106	145	SE
19-Aug-05	109	112	107	93	97	119	110	134	140	204	199	203	211	207	280	295	354	117	111	128	118	180	105	112	144	SE
20-Aug-05	357	66	77	114	332	290	322	168	93	132	165	140	162	185	184	205	290	314	341	1	353	326	327	325	235	SW
21-Aug-05	323	309	290	269	243	242	187	238	257	308	307	264	229	186	175	240	233	283	270	231	231	231	235	223	254	WSW
22-Aug-05	230	236	235	248	253	267	288	252	255	253	260	271	267	273	266	265	294	305	282	240	249	262	262	261	276	W
23-Aug-05	275	259	248	244	223	289	302	299	286	293	269	269	253	276	242	232	317	278	302	279	268	305	306	320	227	SW
24-Aug-05	297	287	298	295	313	291	231	252	287	257	215	250	261	244	211	191	197	151	173	123	106	108	110	113	220	SW
25-Aug-05	143	147	122	127	153	157	159	168	219	228	243	244	245	265	305	305	292	323	299	160	137	174	194	301	250	WSW
26-Aug-05	257	183	162	151	188	192	237	225	231	224	234	255	273	268	258	256	248	230	257	257	242	267	301	355	268	W
27-Aug-05	263	141	88	143	142	103	89	127	110	132	152	237	255	336	6	116	63	40	51	10	2	51	82	108	82	E
28-Aug-05	164	159	210	244	180	235	287	288	277	269	269	254	259	262	279	289	325	318	97	223	311	46	147	294	321	NW
29-Aug-05	328	339	10	358	355	343	348	345	331	327	321	328	325	290	288	289	293	279	235	189	177	168	142	143	240	WSW
30-Aug-05	137	124	108	117	127	122	126	146	145	190	177	226	255	262	260	251	269	263	256	255	250	222	237	246	253	WSW
31-Aug-05	250	236	252	248	236	245	247	246	248	253	252	262	261	255	261	256	255	254	250	245	253	261	249	252	253	WSW
Hourly Avg	276	282	289	272	270	270	279	270	275	263	262	275	271	272	277	274	289	287	279	257	268	258	246	267		

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

#### HOURLY AVERAGE TABLE

#### Wind Direction (WD)

##### Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	54.7	43.0	21.4	13.4	8.9	5.9	4.6

##### Status Flag Characters

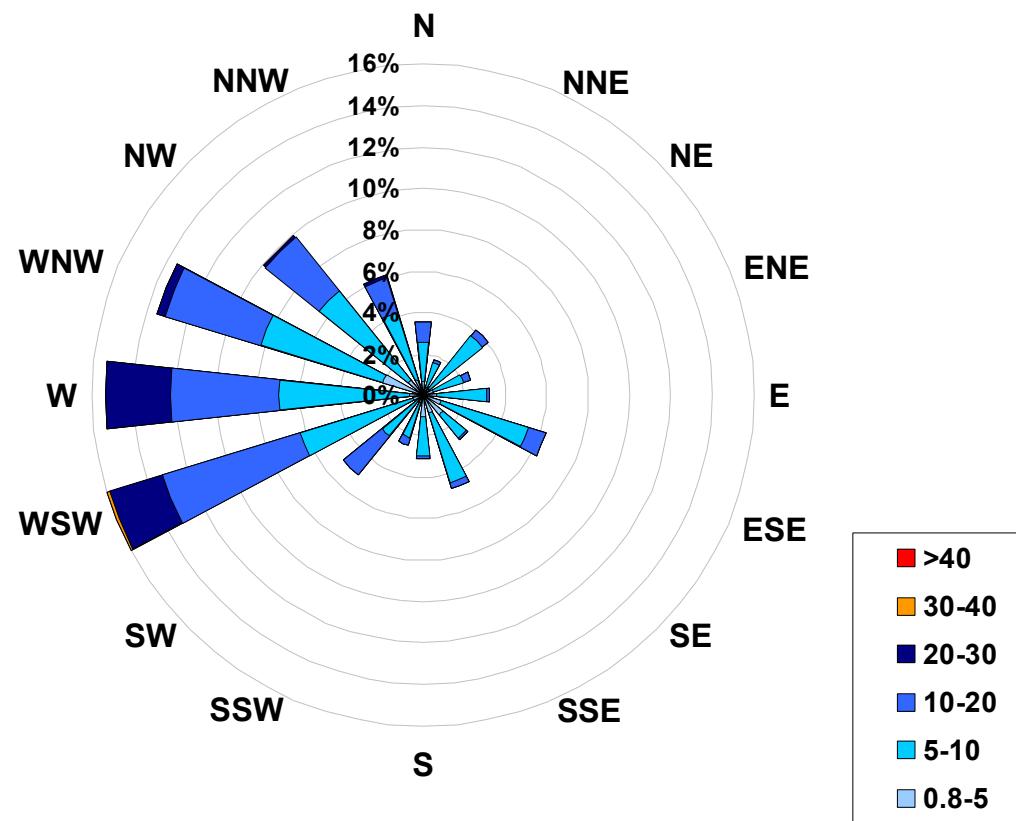
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

##### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Aug-05	42	22	27	22	38	16	32	7	13	9	7	9	10	6	9	11	9	9	8	8	8	8	11	7	8	42.1	
2-Aug-05	7	8	7	6	5	4	4	4	16	8	8	10	7	8	8	10	8	7	10	8	5	9	13	20	20.3		
3-Aug-05	8	12	7	18	19	9	9	6	8	8	14	17	18	21	25	23	16	16	28	5	7	9	14	20	27.6		
4-Aug-05	22	44	15	7	10	8	42	33	23	15	13	11	10	9	12	14	17	18	13	9	15	10	9	13	44.2		
5-Aug-05	16	8	14	16	5	11	7	6	7	8	9	9	11	7	7	7	9	9	7	5	6	14	21	31	31.2		
6-Aug-05	22	50	45	14	45	51	34	55	53	34	24	8	10	8	14	17	13	6	17	39	8	8	4	18	54.8		
7-Aug-05	12	12	18	21	24	31	33	11	9	10	11	14	14	13	15	20	12	10	9	7	13	23	33	34	34.0		
8-Aug-05	9	11	18	49	9	9	8	13	14	23	27	25	19	19	17	16	18	16	12	7	5	14	14	9	48.8		
9-Aug-05	17	9	6	7	7	13	12	12	23	34	25	25	28	28	48	26	19	16	33	8	9	9	13	9	48.1		
10-Aug-05	9	20	8	18	20	7	7	13	17	21	24	46	21	28	23	20	13	14	8	5	4	4	11	8	46.3		
11-Aug-05	9	10	12	7	9	9	5	5	6	7	9	10	8	8	10	11	8	8	7	7	6	6	18	6	18.2		
12-Aug-05	8	11	9	14	29	17	18	18	26	50	55	41	48	43	24	26	31	21	18	9	6	6	8	8	54.6		
13-Aug-05	16	10	24	20	16	10	11	15	17	12	25	39	17	13	16	19	22	28	25	24	11	9	19	19	39.1		
14-Aug-05	23	12	15	13	11	8	16	15	8	16	21	18	12	12	9	10	10	12	9	9	12	11	10	13	23.5		
15-Aug-05	8	13	15	17	16	15	16	11	16	13	18	22	36	24	36	15	13	15	15	10	9	12	10	9	35.9		
16-Aug-05	7	13	15	15	12	18	22	19	17	19	35	47	35	32	18	17	18	26	30	24	21	6	8	12	47.0		
17-Aug-05	5	6	5	8	9	13	11	10	10	23	32	22	24	39	21	25	11	13	16	17	15	17	12	15	38.9		
18-Aug-05	17	12	13	23	24	12	12	24	15	28	24	55	47	54	41	51	21	20	10	7	6	5	6	6	54.7		
19-Aug-05	6	8	12	20	23	28	10	29	70	19	54	26	26	29	68	45	67	31	12	9	8	33	16	8	69.7		
20-Aug-05	33	60	50	11	25	41	39	18	22	23	12	18	20	23	25	24	8	11	24	18	12	28	9	8	59.8		
21-Aug-05	7	5	7	15	11	16	19	17	9	8	12	17	13	16	26	39	20	10	16	10	9	25	6	5	38.6		
22-Aug-05	7	9	7	6	5	8	12	11	8	9	8	9	12	17	18	14	10	9	7	8	15	8	15	10	17.9		
23-Aug-05	12	15	15	22	13	12	22	10	10	17	32	51	53	23	23	15	15	50	10	13	19	11	13	25	53.2		
24-Aug-05	33	18	10	12	16	20	39	12	14	18	25	35	28	20	55	49	50	22	12	14	5	5	10	6	54.6		
25-Aug-05	12	10	14	10	4	6	11	17	18	17	18	27	30	39	32	28	23	18	27	14	9	19	10	24	39.4		
26-Aug-05	24	46	11	50	19	25	23	11	13	15	10	14	14	11	11	11	14	10	8	7	10	19	10	46	50.1		
27-Aug-05	41	40	23	34	23	22	37	27	25	24	33	43	36	56	66	55	22	16	18	9	7	9	7	13	65.7		
28-Aug-05	10	14	23	43	43	26	29	21	5	7	10	9	12	10	19	15	16	25	38	14	9	11	23	16	42.8		
29-Aug-05	11	12	10	11	9	11	7	7	8	7	9	10	11	9	8	9	12	16	25	14	13	9	12	10	24.7		
30-Aug-05	13	17	17	14	17	14	14	17	22	17	16	22	14	10	9	8	9	7	6	5	6	14	8	6	22.5		
31-Aug-05	7	9	6	6	6	6	8	8	6	8	10	10	11	8	9	8	7	8	8	7	16	18	17	18.4			

Hourly Max 42 60 50 50 45 51 42 55 70 50 55 55 53 56 68 55 67 50 38 39 21 33 33 46

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



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

Frequency Distribution of Wind in km/hr			
Range		Frequency (hrs)	
0.8	< 5		93
5	to 10		391
10	to 20		211
20	to 30		48
30	to 40		1
>	40		0
Total Non-Zero Values		744	

# PASZA – Evergreen Park Station

## Monthly Summary Tables, Graphs, and Roses

## PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

Objective Limit:	Alberta Environment:		1-hr	172	ppb	24-hr	57	ppb
<b>Summary</b>								
Number of 1-hr Exceedances:	0							
Number of 24-hr Exceedances:	0							
Maximum 1-hr Average:	35.3	ppb	24-Aug	7:00	8:00			
Maximum 24-hr Average:	4.4	ppb	24-Aug					

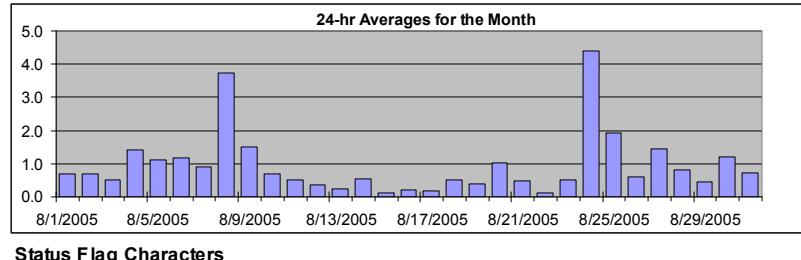
AIC Time:	33 hrs			Operational Time:	706 hrs					
Calibration Time:	3 hrs			AMD Operational Uptime:	99.7%					
Percentile	99	95	75	50	25	5	1	Average	0.9	ppb
	10.2	3.7	0.9	0.3	0.0	0.0	0.0			

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
Hour End 1:00																											
1-Aug-05	0	0	A	1	1	0	0	0	0	0	0	0	1	0	1	1	2	2	3	3	0	0	0	0	0	0.7	3.4
2-Aug-05	0	A	0	0	0	0	0	0	0	0	0	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0.7	8.4
3-Aug-05	A	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0.5	4.2
4-Aug-05	0	0	0	0	0	1	1	1	1	8	5	0	5	6	0	0	0	2	0	1	1	0	A	1	1	1.4	8.1
5-Aug-05	1	1	0	0	0	0	1	2	2	3	6	0	0	0	3	3	0	0	0	0	0	0	A	1	1	1.1	5.6
6-Aug-05	2	1	1	1	1	1	0	1	1	3	2	7	0	0	0	0	0	0	0	0	0	A	0	1	1	1.2	7.3
7-Aug-05	1	1	1	1	1	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0	A	1	2	2	1	0.9	2.0
8-Aug-05	1	1	1	2	2	3	3	3	3	C	C	A	10	6	6	5	5	4	4	4	4	4	3		3.7	10.2	
9-Aug-05	3	2	2	2	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	15	6	2		1.5	14.7
10-Aug-05	1	0	0	0	0	A	1	2	2	3	1	2	1	1	0	0	1	0	0	0	0	0	0	0	0	0.7	2.5
11-Aug-05	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	0.5	1.2
12-Aug-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0.4	1.2
13-Aug-05	0	0	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
14-Aug-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	6	2	1	0	0	0	0	0	0	0	0	0.5	5.9
15-Aug-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.3	
16-Aug-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	0.2	0.5
17-Aug-05	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.7
18-Aug-05	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	1	2	1	0	0	A	0	0	0	0.5	2.3	
19-Aug-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	A	1	1	1	0.4	1.1		
20-Aug-05	1	1	0	1	1	1	1	1	1	4	5	1	1	1	1	1	0	0	A	0	0	0	1	1	1.0	4.8	
21-Aug-05	1	1	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	A	1	0	0	0	0	0	0.5	1.3	
22-Aug-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	0.5	
23-Aug-05	0	0	0	0	0	D	0	0	1	3	2	1	1	0	A	0	0	0	0	0	0	0	0	1	1	0.5	2.9
24-Aug-05	0	0	0	0	0	0	35	34	3	7	15	3	1	A	1	0	0	0	0	0	0	0	0	0	0	4.4	35.3
25-Aug-05	0	0	0	0	0	D	0	0	0	12	16	10	A	1	0	1	0	0	0	0	0	0	0	0	1	1.9	16.0
26-Aug-05	0	0	0	0	0	0	1	1	1	0	1	A	0	0	0	1	1	1	1	1	1	1	1	1	0.6	1.4	
27-Aug-05	1	1	1	1	1	0	1	0	2	8	12	A	1	1	1	1	0	0	0	0	1	1	1	1	1.4	11.8	
28-Aug-05	1	0	0	0	0	0	0	1	1	6	A	3	1	3	0	0	1	0	0	1	0	0	0	0	0.8	6.2	
29-Aug-05	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0.5	1.4	
30-Aug-05	0	0	0	0	0	0	0	0	0	A	2	2	1	1	1	2	5	1	1	7	1	1	1	1	1.2	6.7	
31-Aug-05	0	0	0	1	0	0	1	A	0	0	2	3	0	0	4	2	3	0	0	0	0	0	0	0	0.7	4.1	
Hourly Avg	0.5	0.4	0.3	0.3	0.3	0.5	1.7	1.8	1.7	2.6	2.2	1.2	0.7	0.9	1.1	0.8	0.6	0.7	0.5	0.5	1.0	0.8	0.6				
Hourly Max	2.9	2.4	1.9	1.8	2.3	2.5	2.8	35.3	34.5	8.1	11.8	16.0	9.8	5.6	10.2	6.4	5.8	5.2	6.7	4.4	4.4	14.7	6.4	3.4			

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

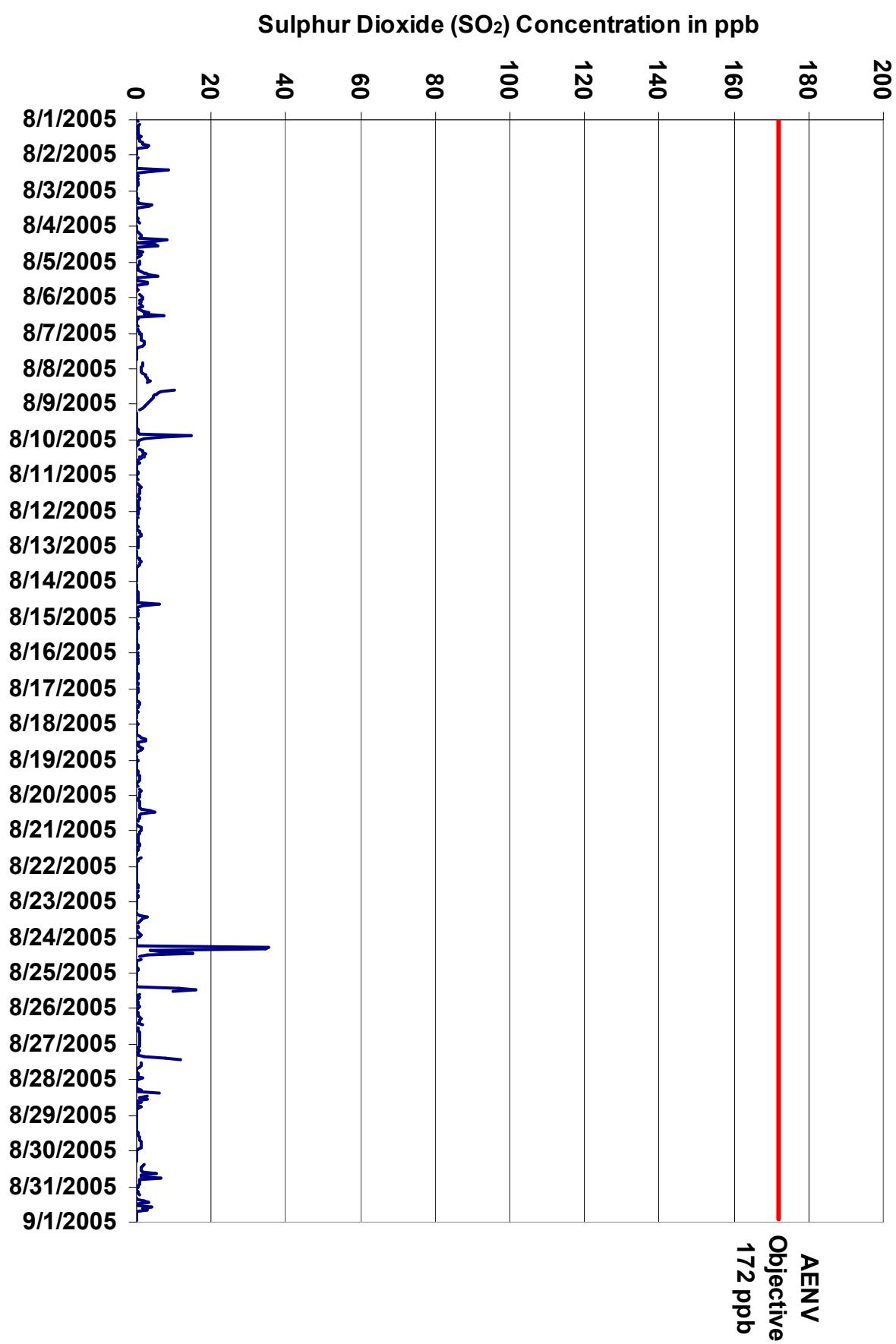


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

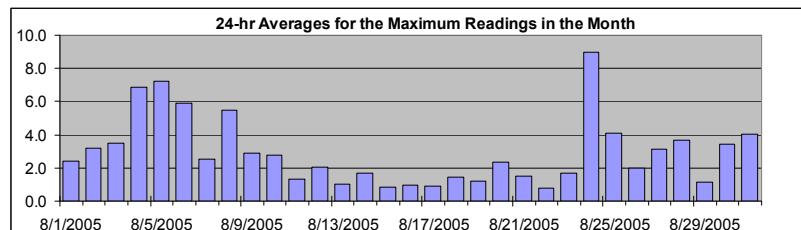
Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	74.3 ppb	24-Aug 8:00 9:00
Maximum 24-hr Value:	9.0 ppb	24-Aug

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00		
1-Aug-05	1	1	A	2	2	2	2	4	2	2	2	3	2	3	3	4	4	6	5	2	1	1	1	1	1	2.4	6.2
2-Aug-05	1	A	1	1	1	1	0	1	1	1	26	23	1	2	1	1	1	1	1	2	1	2	1	1	1	3.2	25.9
3-Aug-05	A	1	1	1	1	1	2	1	1	1	16	27	2	1	2	2	0	3	2	5	2	1	2	2	A	3.5	26.6
4-Aug-05	2	1	1	1	1	3	2	3	3	20	17	2	32	26	1	1	11	10	8	3	7	1	A	2	31.9	6.9	
5-Aug-05	2	3	2	1	2	2	3	3	20	27	24	5	11	13	21	13	6	1	1	1	1	A	2	3	7.2	26.9	
6-Aug-05	3	3	2	3	2	3	3	2	2	8	24	18	34	2	2	1	8	9	2	1	A	2	2	2	5.9	33.5	
7-Aug-05	2	3	2	2	2	3	3	3	3	3	2	1	1	1	0	4	1	1	7	A	3	3	3	3	2.5	7.1	
8-Aug-05	3	2	2	4	3	4	4	4	5	4	C	C	C	A	22	9	6	6	5	7	7	5	4	4	4	5.5	22.2
9-Aug-05	4	3	3	2	1	A	1	1	1	1	1	1	1	1	1	0	0	1	1	2	3	6	20	11	3	2.9	19.7
10-Aug-05	1	1	1	1	1	A	2	3	4	8	3	7	1	5	1	1	15	1	0	0	0	0	1	6	1	2.8	14.6
11-Aug-05	1	0	1	1	A	1	1	1	2	1	2	1	3	1	1	1	1	2	1	1	2	1	1	1	1.3	3.4	
12-Aug-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	3	8	1	5	11	1	3	1	1	2	1	2.1	10.6
13-Aug-05	1	1	A	1	0	0	0	1	4	2	7	2	2	2	1	0	1	0	0	0	0	0	0	0	0	1.0	7.3
14-Aug-05	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	5	2	1	1	1	1	1	1	1.7	12.8
15-Aug-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.8	1.2
16-Aug-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.0	1.5
17-Aug-05	1	1	1	1	0	0	0	0	1	1	1	1	1	1	2	1	1	1	2	1	0	1	1	A	1	0.9	1.7
18-Aug-05	1	1	1	0	0	0	0	0	0	1	2	7	6	1	1	1	2	3	2	1	1	A	1	1	1	1.4	6.5
19-Aug-05	1	2	0	1	1	0	0	0	1	1	1	1	2	2	3	2	1	1	1	1	A	2	2	2	1.2	2.7	
20-Aug-05	2	1	1	1	2	2	2	2	2	2	10	12	3	2	2	2	1	1	1	A	1	1	1	2	2.3	11.5	
21-Aug-05	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	5	2	2	1	1	1	1	1.5	5.2
22-Aug-05	1	1	0	0	0	0	0	0	0	0	1	1	1	1	3	A	1	1	1	1	1	1	1	1	0.8	2.8	
23-Aug-05	1	0	0	0	0	0	0	D	0	1	4	10	4	2	1	1	A	3	1	1	1	1	2	2	1.7	9.7	
24-Aug-05	1	0	0	0	0	0	3	62	74	6	13	18	9	2	A	11	1	2	1	1	1	1	1	9.0	74.3		
25-Aug-05	1	0	0	0	0	0	D	0	0	2	18	25	13	A	5	1	9	6	1	2	1	1	2	1	4.1	25.4	
26-Aug-05	1	1	1	1	1	1	2	2	1	3	1	8	A	1	1	1	1	2	9	1	2	1	2	2	2.0	9.4	
27-Aug-05	2	1	1	1	1	1	1	1	1	5	18	21	A	2	2	2	1	0	1	1	2	1	1	4	3.1	21.4	
28-Aug-05	4	1	1	1	0	1	1	3	2	13	A	14	7	15	2	10	1	1	6	1	1	1	1	1	3.7	14.7	
29-Aug-05	1	1	1	0	1	0	1	1	1	A	1	1	1	1	1	2	2	2	2	2	2	2	2	1.1	2.1		
30-Aug-05	1	0	0	0	0	0	0	0	A	3	2	2	5	2	8	21	2	2	23	2	2	1	1	3.4	22.8		
31-Aug-05	1	1	1	1	1	1	1	3	A	1	1	11	19	0	0	18	11	14	1	4	1	2	0	1	4.0	18.5	
Hourly Avg	1.5	1.2	1.0	1.1	1.0	1.1	1.4	3.5	4.7	5.2	8.1	6.3	4.8	3.3	3.8	3.9	3.7	2.5	3.3	1.5	1.8	2.0	1.9	1.6			
Hourly Max	3.7	3.0	2.6	3.7	3.2	3.8	3.9	62.1	74.3	26.9	26.6	25.4	33.5	25.7	22.2	20.8	14.6	10.6	22.8	6.6	6.7	19.7	10.5	4.4			

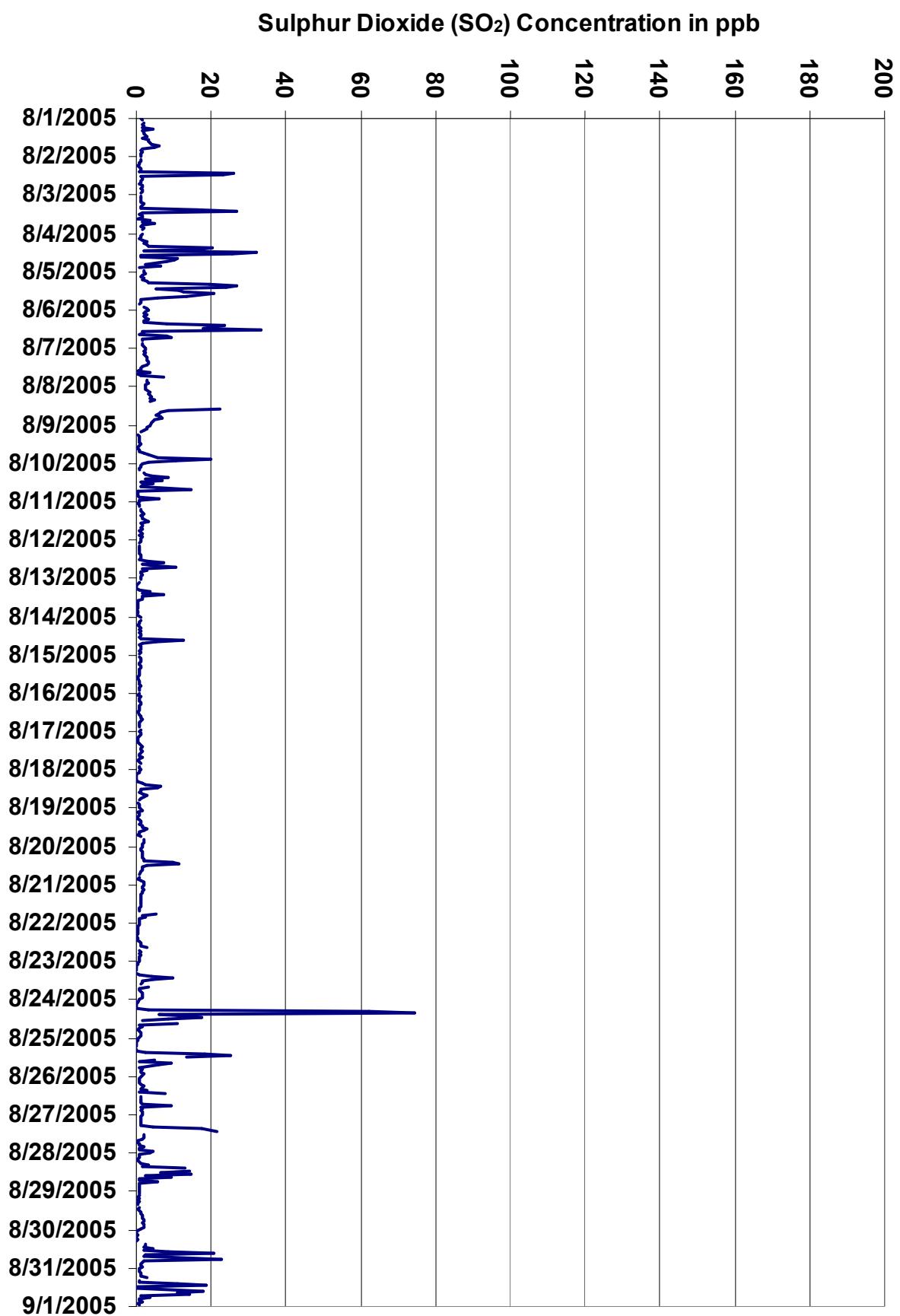
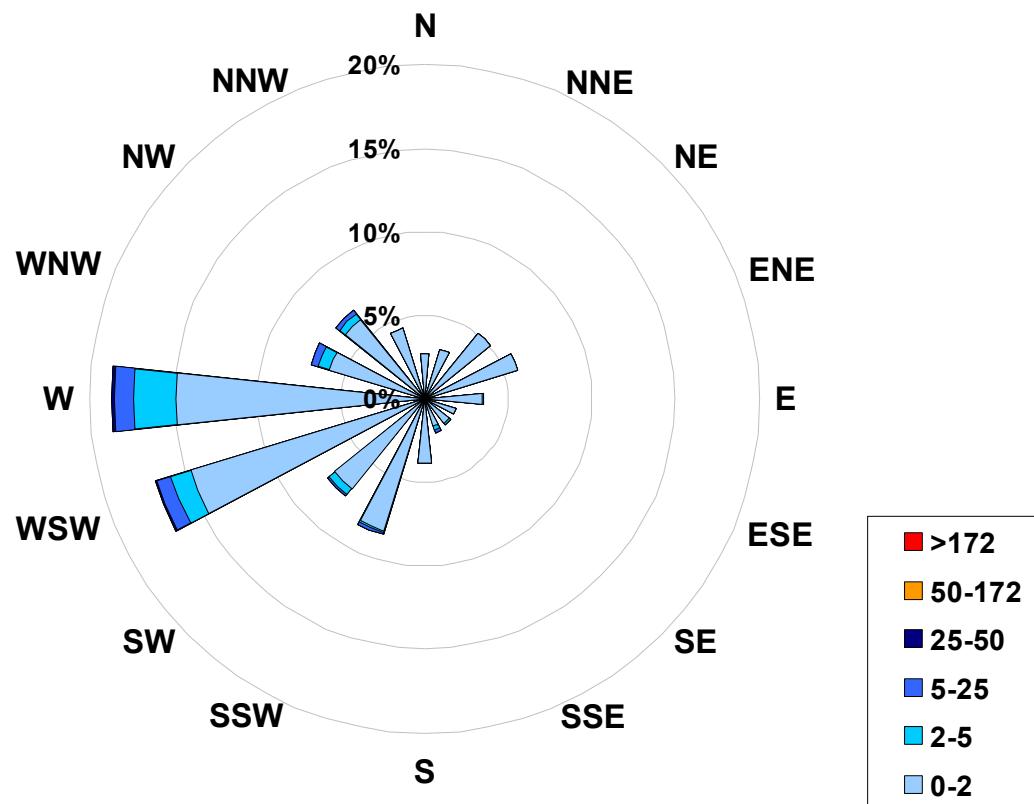


Figure 21. PASZA - Evergreen Park Sulphur Dioxide 1-hr Maximum Value Monthly Trend

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



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

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	639
2	to	5	43
5	to	25	22
25	to	50	2
50	to	172	0
	>	172	0
Total Non-Zero Values			706

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

Station: Evergreen Park  
Station Owner: PASZA

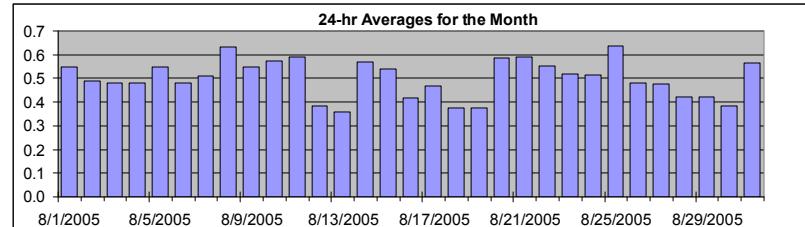
Monitoring Dates: August 1, 2005 to September 1, 2005

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

Maximum 1-hr Average: 1.5 ppb 11-Aug 22:00 23:00  
Maximum 24-hr Value: 0.6 ppb 25-Aug

#### HOURLY AVERAGE TABLE

#### Total Reduced Sulphur (TRS)



#### Status Flag Characters

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

#### Day Mountain Standard Time

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

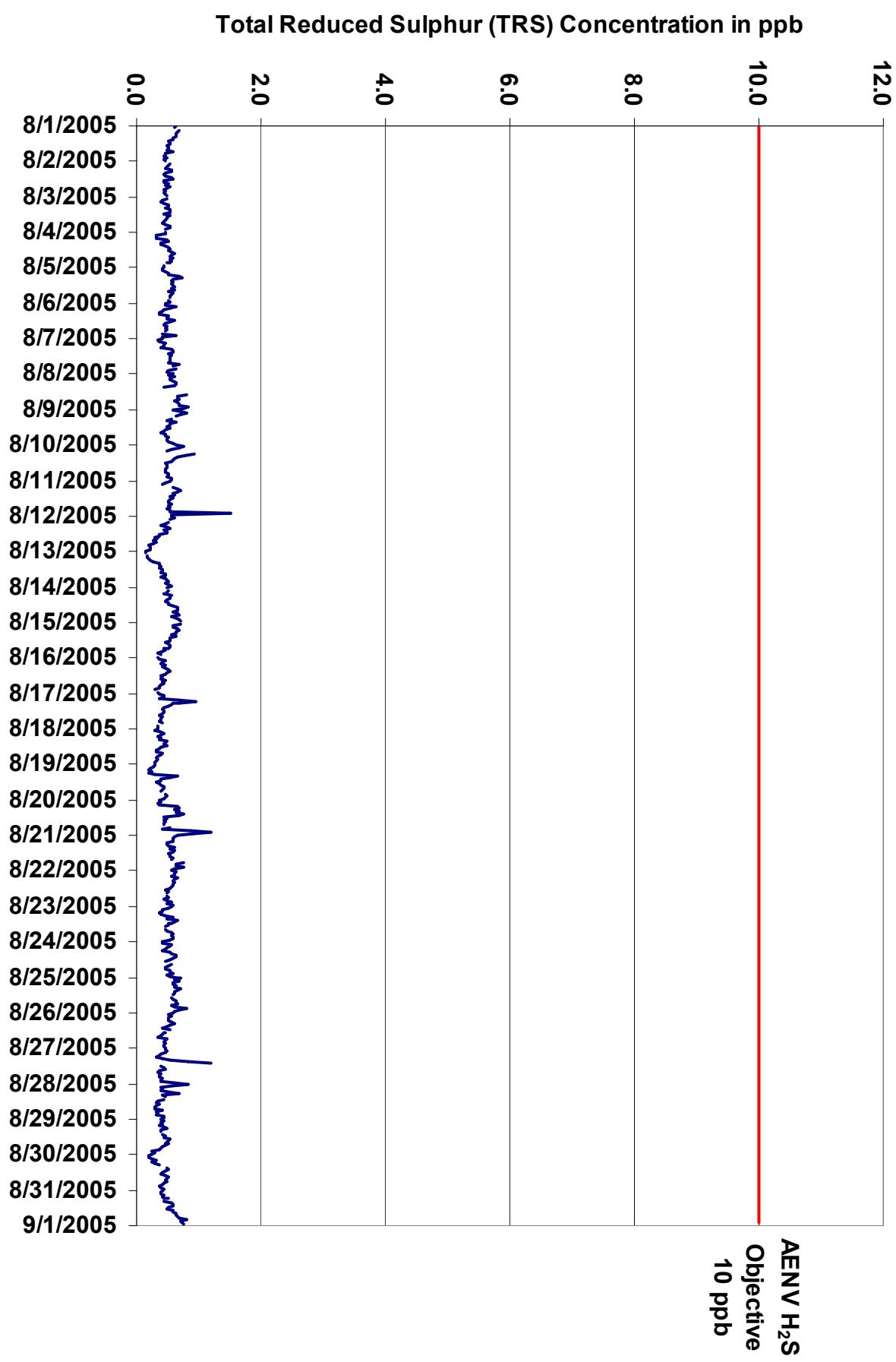


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

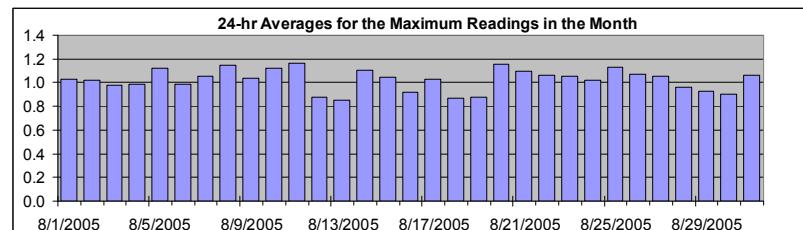
### Summary

Maximum 1-hr Value:	3.1	ppb	11-Aug	22:00 23:00
Maximum 24-hr Value:	1.2	ppb	11-Aug	

AIC Time:	33 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 1.9	95 1.3	75 1.1	50 1.0	25 0.9	5 0.8	1 0.7	Average 1.0 ppb

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	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	24:00			
1-Aug-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	1.0	1.4	
2-Aug-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	
3-Aug-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
4-Aug-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	1.3	
5-Aug-05	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1.1	2.2	
6-Aug-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	1.3	
7-Aug-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	1.8	
8-Aug-05	1	1	1	1	1	1	1	1	1	C	C	C	C	A	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5
9-Aug-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	1.4
10-Aug-05	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.4
11-Aug-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	1.2	3.1
12-Aug-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	0.9	1.2
13-Aug-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	0.8	1.2
14-Aug-05	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1.1	1.9
15-Aug-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
16-Aug-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	0.9	1.1
17-Aug-05	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	1.7	
18-Aug-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	0.9	1.0	
19-Aug-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	0.9	1.2	
20-Aug-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	1.2	2.3	
21-Aug-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	
22-Aug-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	1.1	1.2
23-Aug-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	1.1	1.3
24-Aug-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	1.0	1.3
25-Aug-05	1	2	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	1.5
26-Aug-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	3	1	1	1.1	2.6
27-Aug-05	1	1	1	1	1	1	1	1	1	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.1
28-Aug-05	2	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	1.6
29-Aug-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	0.9	1.2
30-Aug-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	0.9	1.3
31-Aug-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	1.1	1.4
Hourly Avg	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.1	1.2	1.1			
Hourly Max	1.6	1.5	1.4	1.4	1.5	1.6	1.7	1.6	1.3	1.8	2.1	1.7	2.2	1.2	1.2	1.9	1.2	1.3	2.6	1.5	1.4	2.3	3.1	1.8			

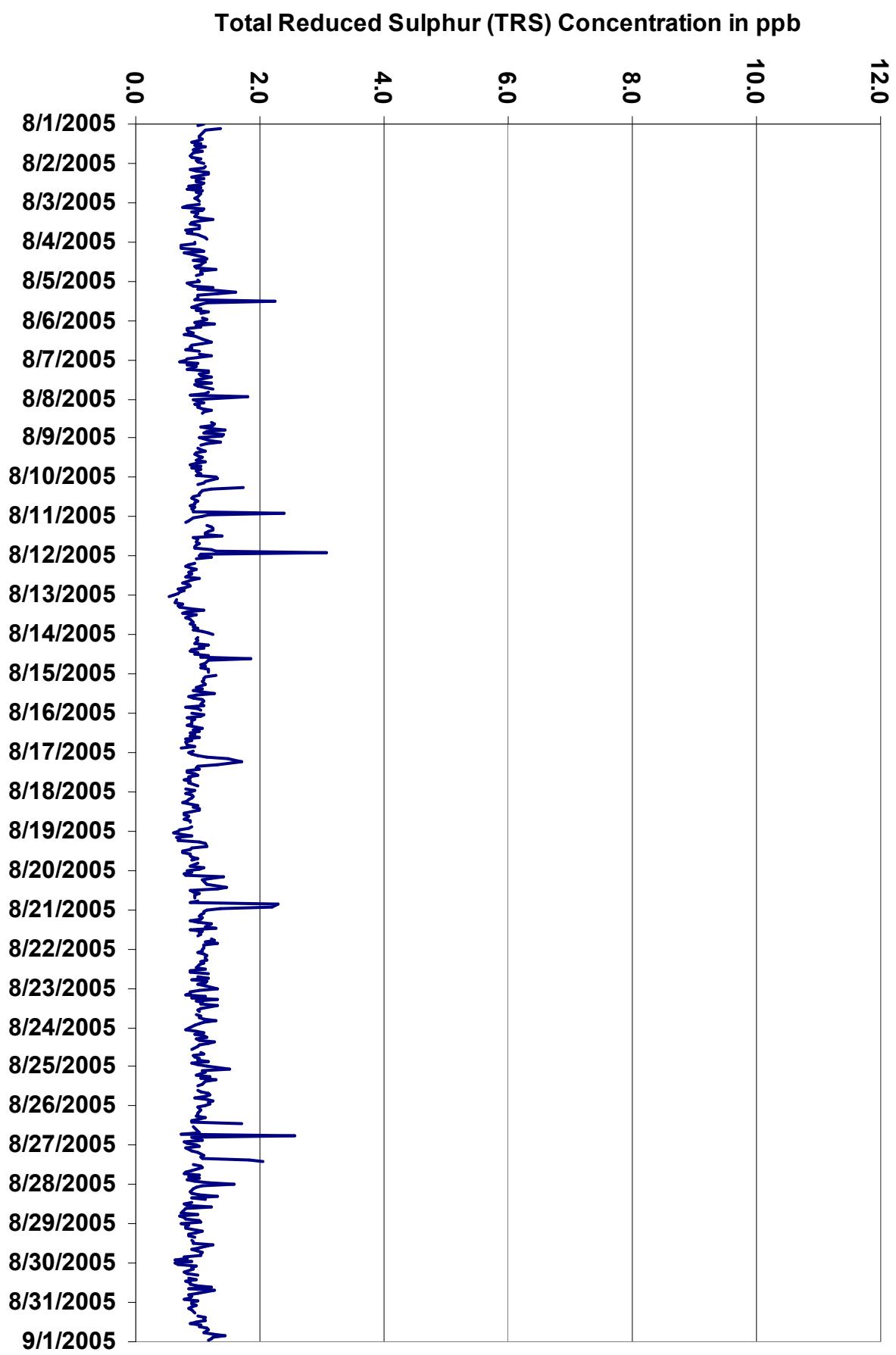
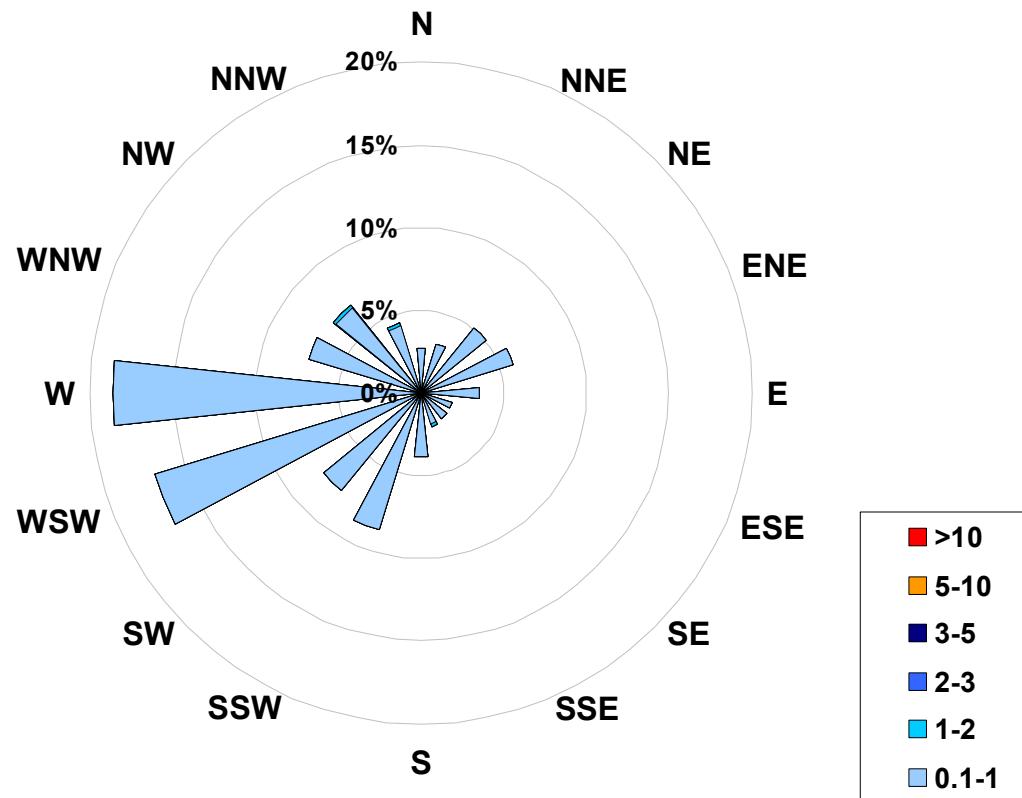


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of TRS in ppb		
Range		Frequency (hrs)
0.1	< 1	705
1	to 2	3
2	to 3	0
3	to 5	0
5	to 10	0
>	10	0
Total Non-Zero Values		708

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

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 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: 27.1  $\mu\text{g}/\text{m}^3$  13-Aug 16:00 17:00

Maximum 24-hr Value: 15.4  $\mu\text{g}/\text{m}^3$  13-Aug

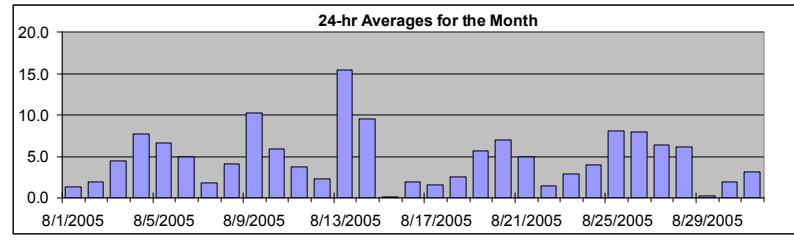
AIC Time:	0 hrs		Operational Time:	735 hrs		
Calibration Time:	2 hrs		AMD Operational Uptime:	99.1%		
Percentile	99	95	75	50	25 5 1	Average 4.7 $\mu\text{g}/\text{m}^3$ Geomean 3.3 $\mu\text{g}/\text{m}^3$
	23.2	13.7	7.1	3.4	0.8	0.0

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
	Hour End 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-05	0	0	0	0	0	6	5	8	1	0	D	0	D	0	0	0	1	1	0	2	2	2	1	0	0	0	1.3	7.8
2-Aug-05	0	0	1	3	0	0	3	1	1	1	9	8	2	0	2	4	1	3	3	3	0	0	0	0	1	1.9	9.4	
3-Aug-05	0	0	1	1	1	4	11	3	5	8	6	1	0	1	2	3	4	5	16	3	9	12	7	4	4.5	15.8		
4-Aug-05	6	5	5	3	4	7	14	6	6	9	14	5	16	12	6	6	9	10	5	7	9	8	6	5	7.7	16.0		
5-Aug-05	5	3	2	4	3	2	11	8	7	16	13	10	8	6	7	5	10	9	7	6	5	6	5	4	6.7	16.2		
6-Aug-05	5	5	2	3	7	9	8	5	4	8	8	5	14	3	8	2	10	7	1	0	0	D	0	0	5.0	14.4		
7-Aug-05	0	0	0	0	0	1	12	0	4	1	1	0	0	0	0	0	0	0	3	1	7	5	3	1	3	1.8	11.6	
8-Aug-05	0	0	0	1	0	1	2	3	5	2	5	C	C	0	3	1	6	3	4	6	13	11	11	11	4.1	12.9		
9-Aug-05	11	11	13	14	13	12	12	11	9	10	10	10	6	6	6	6	6	10	13	9	12	15	12	10.2	14.7			
10-Aug-05	7	6	5	4	4	5	11	10	7	10	5	5	6	2	5	4	6	3	2	3	13	6	6	7	5.9	13.0		
11-Aug-05	4	2	2	3	4	4	6	9	7	5	4	0	6	4	6	5	2	0	0	0	4	4	4	3	3.7	8.6		
12-Aug-05	2	3	0	0	1	0	3	0	0	0	0	2	1	0	2	0	3	4	2	3	4	7	13	6	2.3	12.7		
13-Aug-05	2	1	1	1	1	1	3	8	11	14	20	21	20	23	24	26	27	26	27	24	23	22	22	21	15.4	27.1		
14-Aug-05	20	19	18	17	15	16	15	17	10	11	11	9	9	9	8	8	7	4	6	2	0	0	1	0	9.6	20.0		
15-Aug-05	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.2	1.4		
16-Aug-05	0	0	0	0	0	1	1	2	1	1	1	2	2	2	2	3	3	4	2	4	4	3	4	3	2.0	4.4		
17-Aug-05	1	0	0	1	3	2	4	6	4	1	1	1	0	0	0	0	0	1	0	3	5	0	2	2	1.5	6.2		
18-Aug-05	5	5	3	1	2	3	5	3	6	2	0	0	2	2	2	3	3	3	2	3	3	1	1	1	2.6	5.9		
19-Aug-05	1	0	0	1	1	2	2	5	5	9	10	9	10	7	6	6	6	6	9	11	13	7	5	5.6	12.8			
20-Aug-05	4	7	6	7	9	11	11	10	7	8	8	7	3	6	8	7	D	3	4	9	8	10	4	4	7.0	11.4		
21-Aug-05	4	0	0	6	5	5	5	7	9	7	8	11	8	6	4	8	8	10	3	D	0	0	0	0	4.9	10.9		
22-Aug-05	0	0	0	0	0	1	2	1	1	1	0	2	0	0	1	4	5	4	3	2	2	2	3	0	1.4	4.6		
23-Aug-05	0	0	0	0	0	4	9	10	5	3	3	3	1	5	5	3	5	3	2	0	2	1	1	3	2.8	9.6		
24-Aug-05	3	1	2	3	1	1	4	18	9	1	8	4	0	0	2	1	2	2	2	6	7	8	6	4	3.9	17.9		
25-Aug-05	5	7	6	6	4	5	9	17	0	4	7	14	8	7	8	5	6	5	9	10	25	13	9	6	8.1	25.5		
26-Aug-05	6	8	7	6	5	5	13	22	7	10	10	8	7	13	14	6	8	8	9	4	5	2	4	4	7.9	22.2		
27-Aug-05	3	0	1	3	3	2	4	9	4	8	12	12	8	11	3	6	4	5	11	10	5	12	7	8	6.3	12.0		
28-Aug-05	12	10	9	8	7	7	14	15	6	21	0	8	0	8	0	2	0	5	0	7	D	0	0	1	6.1	21.2		
29-Aug-05	0	0	D	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0.2	1.4		
30-Aug-05	0	2	0	0	0	0	0	7	0	2	3	2	1	4	0	8	0	2	15	0	0	0	0	0	2.0	14.9		
31-Aug-05	0	0	0	0	0	1	3	3	2	1	5	8	2	4	14	6	11	3	2	5	3	2	1	1	3.1	13.6		

#### HOURLY AVERAGE TABLE

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



#### Status Flag Characters

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

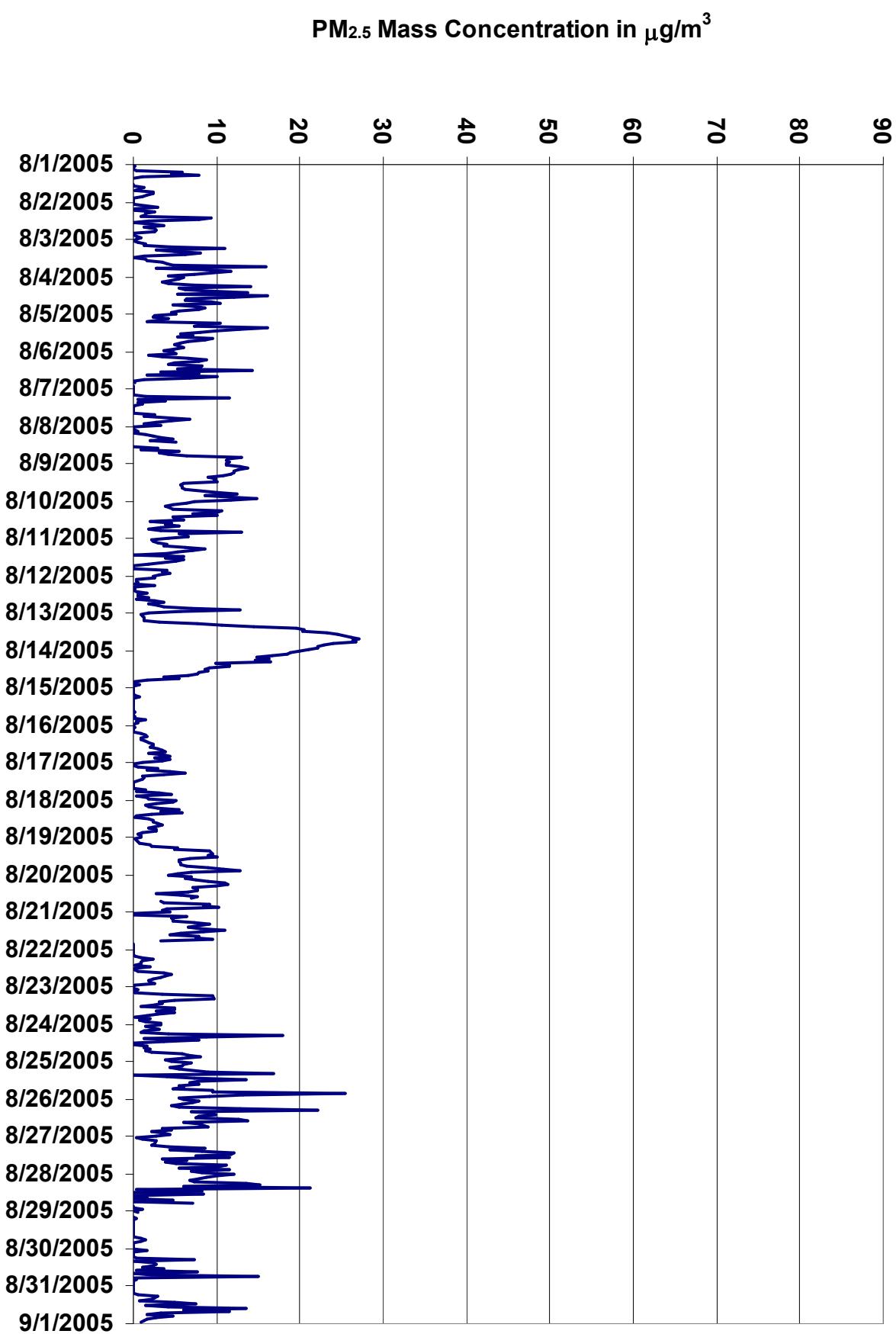


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

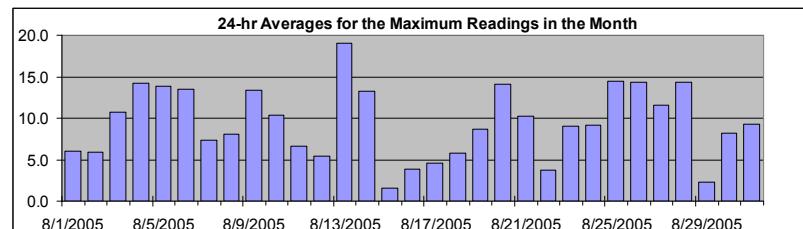
Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Average:	57.9	$\mu\text{g}/\text{m}^3$	30-Aug	18:00 19:00
Maximum 24-hr Value:	19.0	$\mu\text{g}/\text{m}^3$	13-Aug	

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	
1-Aug-05	2	4	3	4	5	10	9	12	18	4	D	7	D	2	3	6	10	4	6	8	8	8	2	1	6.1	17.6
2-Aug-05	2	1	6	7	2	2	5	3	3	3	18	15	5	5	6	15	13	10	8	7	1	1	2	2	5.9	18.1
3-Aug-05	2	2	4	5	8	8	19	9	8	16	18	7	7	6	7	10	9	9	37	13	15	23	10	6	10.7	37.3
4-Aug-05	8	8	7	6	6	12	22	22	11	20	24	11	23	21	16	14	16	18	10	12	16	19	11	9	14.3	24.4
5-Aug-05	9	8	5	7	7	7	19	18	20	30	26	14	14	17	23	17	15	12	14	13	11	10	12	5	13.9	30.1
6-Aug-05	8	11	4	5	9	11	11	16	9	23	17	19	29	11	14	14	37	40	8	7	4	D	1	1	13.4	40.2
7-Aug-05	3	2	2	2	4	6	24	6	6	5	5	7	3	1	3	7	5	8	8	25	13	7	12	13	7.4	25.1
8-Aug-05	9	3	3	3	1	4	5	6	8	6	11	C	C	5	19	8	7	7	5	12	15	13	13	13	8.1	19.3
9-Aug-05	12	13	14	15	14	13	14	14	13	12	12	11	15	8	8	9	7	10	11	25	11	15	26	20	13.4	26.1
10-Aug-05	8	8	7	5	7	8	15	16	11	22	8	12	8	6	7	9	13	7	3	6	23	12	16	14	10.4	23.5
11-Aug-05	7	5	5	5	7	7	8	12	9	7	6	3	10	7	9	12	4	1	2	1	14	6	6	5	6.6	14.0
12-Aug-05	4	5	2	2	4	2	4	5	2	2	3	4	3	2	6	3	8	10	4	6	6	11	23	9	5.4	22.9
13-Aug-05	4	2	2	3	3	3	5	13	18	20	30	24	24	31	31	30	30	28	28	28	26	24	25	23	19.0	31.4
14-Aug-05	23	20	20	19	18	18	18	21	16	15	15	14	12	12	12	27	9	7	8	6	2	1	3	1	13.2	26.8
15-Aug-05	1	0	1	1	1	2	2	1	0	2	1	1	1	2	2	1	2	2	2	2	4	3	2	2	1.5	4.0
16-Aug-05	2	2	1	3	1	2	3	3	2	3	3	4	5	5	5	5	4	6	7	4	6	7	4	6	3.9	6.7
17-Aug-05	4	0	0	4	6	3	9	9	7	3	4	4	3	5	4	6	5	4	4	7	8	1	3	4.5	9.0	
18-Aug-05	11	10	4	2	3	6	11	10	13	4	4	5	5	6	6	5	6	6	4	5	4	3	3	5.8	12.7	
19-Aug-05	2	1	2	2	2	4	3	10	9	12	12	14	17	11	8	7	12	10	11	11	16	14	11	7	8.7	16.7
20-Aug-05	7	9	8	10	15	15	20	19	16	22	15	16	9	14	14	13	D	14	18	21	17	15	10	6	14.1	22.4
21-Aug-05	12	1	2	12	13	8	9	12	14	10	10	16	15	12	9	13	11	28	25	D	3	0	1	0	10.3	28.2
22-Aug-05	0	2	0	1	1	4	4	2	3	2	4	6	3	3	4	8	9	7	5	5	4	3	5	2	3.7	9.4
23-Aug-05	1	1	2	1	2	7	23	20	9	11	13	6	7	20	15	18	14	10	8	4	7	6	4	7	9.0	22.7
24-Aug-05	5	4	10	6	4	6	13	23	14	5	24	7	9	5	5	13	9	6	6	9	9	12	8	7	9.1	23.8
25-Aug-05	7	9	7	7	6	8	15	29	4	7	11	20	14	13	14	10	9	11	32	26	48	21	12	7	14.5	47.7
26-Aug-05	9	11	12	8	7	8	23	34	18	15	13	19	19	22	32	10	17	14	16	7	7	4	9	9	14.4	34.2
27-Aug-05	5	3	3	5	5	4	9	16	8	12	16	16	14	18	17	14	13	10	20	17	8	20	11	13	11.5	20.1
28-Aug-05	17	12	12	11	10	12	20	21	14	32	20	32	13	23	11	10	7	24	7	17	D	1	4	4	14.4	31.7
29-Aug-05	3	3	D	2	2	3	3	1	2	1	2	2	3	2	5	3	1	4	4	5	3	0	0	1	2.3	4.6
30-Aug-05	2	4	2	2	2	1	3	14	8	5	7	6	8	14	12	30	3	7	58	2	3	1	2	0	8.2	57.9
31-Aug-05	1	1	0	1	1	2	6	5	4	3	18	37	5	7	26	25	27	15	11	11	7	6	3	4	9.3	36.6

Hourly Avg 6.1 5.3 5.1 5.3 5.7 6.5 11.4 13.0 9.6 10.8 12.3 12.0 10.4 10.2 11.4 11.9 11.1 11.3 11.3 12.5 10.8 10.7 8.8 8.3 6.7

Hourly Max 22.7 20.4 19.8 18.8 18.5 17.8 24.3 34.2 20.4 31.7 29.8 36.6 29.1 31.2 32.1 29.7 37.4 40.2 57.9 28.0 47.7 24.0 26.1 23.3

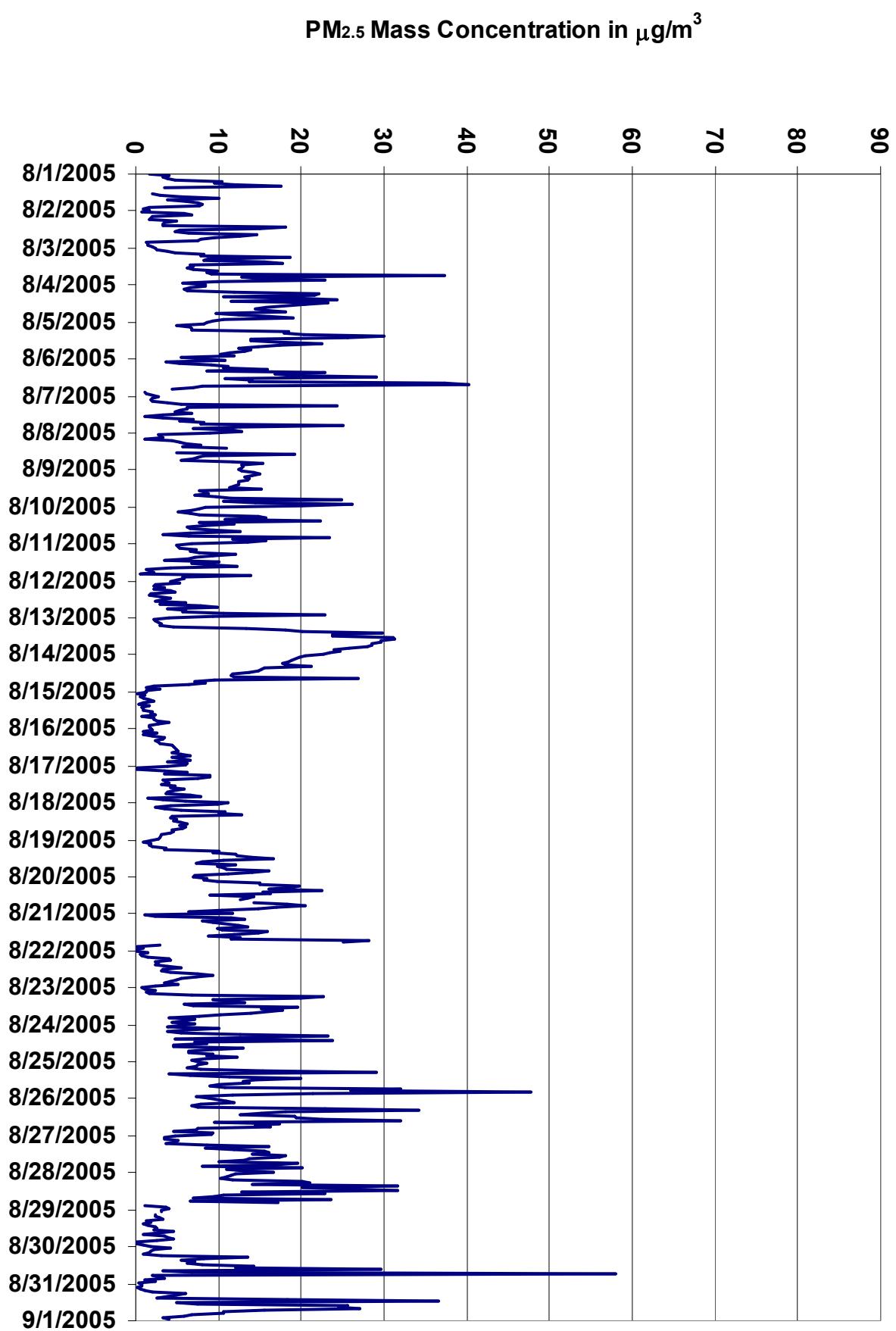
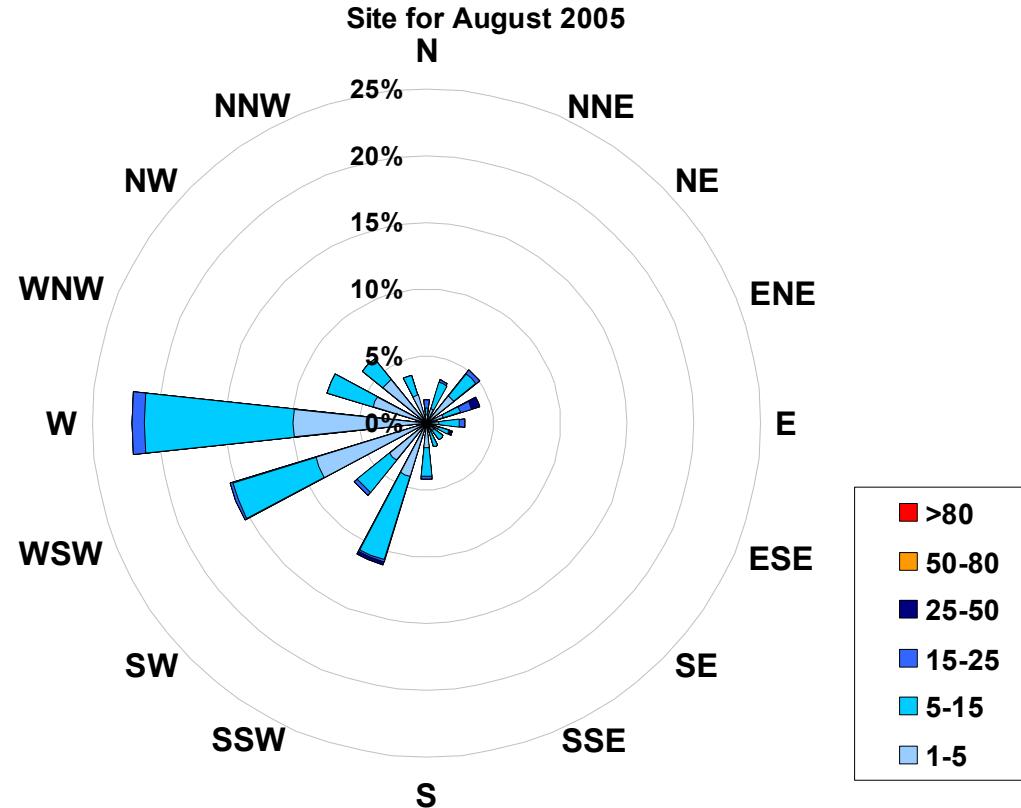


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range		Frequency (hrs)	
1.0	<	5	458
5	to	15	248
15	to	25	24
25	to	50	5
50	to	80	0
>	80		0
Total Non-Zero Values			735

## PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

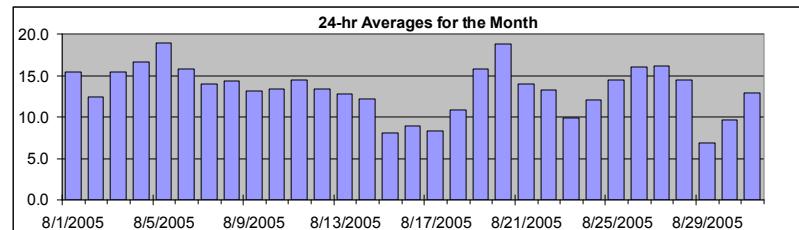
### Summary

Maximum 1-hr Average:	27.1	°C	19-Aug	16:00 17:00
Maximum 24-hr Value:	18.9	°C	5-Aug	

AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	26.3	23.3	17.0	13.0	9.4	4.4	1.8	13.3 °C

### HOURLY AVERAGE TABLE

### Ambient Temperature (T)



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Average	Max
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Aug-05	13	12	12	11	11	12	13	15	15	18	18	19	18	20	20	20	20	19	18	16	14	13	12	11	15.4	20.2	
2-Aug-05	11	11	10	10	10	11	11	12	13	15	13	13	15	16	14	15	12	13	14	13	12	11	11	11	12.4	15.9	
3-Aug-05	10	9	7	7	6	5	8	12	14	16	18	20	21	22	22	23	24	24	22	22	19	15	12	11	11	15.4	23.7
4-Aug-05	10	9	8	7	7	7	8	11	13	17	20	22	22	23	23	24	25	25	25	24	21	18	16	14	14	16.6	24.8
5-Aug-05	13	14	16	15	15	15	16	18	19	21	21	22	22	23	23	23	23	23	22	20	20	18	17	17	18.9	23.5	
6-Aug-05	15	13	11	10	9	9	12	14	16	18	21	22	23	21	21	20	15	16	17	16	14	13	11	11	15.7	22.5	
7-Aug-05	10	8	7	7	6	5	8	11	13	15	16	17	18	19	20	21	21	20	20	18	16	14	14	12	14.0	20.6	
8-Aug-05	13	12	11	10	10	10	11	11	12	13	15	16	17	17	19	19	19	20	20	19	15	12	12	12	14.3	19.8	
9-Aug-05	11	13	13	13	12	11	12	13	14	13	14	15	16	15	16	15	14	13	13	12	12	11	10	10	13.1	15.7	
10-Aug-05	9	9	9	7	6	6	6	9	11	13	14	16	17	17	19	19	19	19	19	18	16	15	15	14	13.4	19.0	
11-Aug-05	14	13	13	12	12	12	12	13	14	16	17	16	16	17	18	18	18	18	18	17	15	13	12	11	14.5	18.2	
12-Aug-05	11	11	10	10	8	6	7	10	11	13	15	16	17	18	18	19	19	19	20	20	19	14	11	9	8	13.4	19.8
13-Aug-05	7	6	6	5	5	5	5	8	11	14	17	19	21	20	19	17	16	17	16	16	15	14	14	14	12.7	21.1	
14-Aug-05	13	13	13	13	12	12	12	12	14	14	14	14	13	13	13	13	13	12	12	12	10	9	8	8	12.1	13.8	
15-Aug-05	7	7	7	7	6	6	7	7	8	8	9	10	10	10	10	10	9	10	10	9	9	8	8	8	8.1	10.3	
16-Aug-05	7	7	7	7	7	7	7	7	8	9	9	10	10	11	11	11	11	11	11	10	9	9	9	9	8.9	11.1	
17-Aug-05	8	7	5	4	4	3	4	4	6	8	9	11	11	12	13	14	14	13	14	12	8	6	4	3	8.3	14.0	
18-Aug-05	3	4	4	3	3	3	3	6	8	11	13	15	16	17	18	19	20	19	19	16	13	10	9	8	10.9	19.7	
19-Aug-05	7	6	5	5	4	4	5	7	12	16	19	21	23	25	26	26	27	27	26	23	19	17	15	14	15.8	27.1	
20-Aug-05	13	13	13	14	14	14	14	15	17	20	20	22	23	24	25	25	25	24	24	22	17	17	17	18	18.7	24.9	
21-Aug-05	16	16	15	15	13	12	12	13	14	14	14	14	14	14	15	16	17	16	14	13	13	12	12	11	13.9	16.5	
22-Aug-05	10	11	10	10	9	10	11	12	13	15	16	17	18	18	18	17	17	16	15	13	12	12	10	10	13.3	18.5	
23-Aug-05	9	5	5	4	3	2	3	7	9	12	14	16	17	16	14	16	15	12	14	13	10	9	8	7	9.8	17.1	
24-Aug-05	5	4	5	6	5	4	3	6	9	12	15	17	19	20	20	21	21	22	21	18	12	9	8	6	12.0	21.5	
25-Aug-05	5	4	4	3	2	2	2	7	11	15	18	20	22	24	25	26	27	27	27	23	16	14	13	11	14.5	27.0	
26-Aug-05	10	9	8	7	6	6	7	11	14	17	19	21	23	24	24	24	24	24	23	22	21	19	18	16	11	16.1	24.2
27-Aug-05	9	8	7	6	5	4	5	9	13	15	18	21	23	24	26	27	27	26	24	21	19	17	16	16	16.1	26.7	
28-Aug-05	16	14	13	12	11	11	11	14	15	15	15	16	18	17	17	19	19	17	18	15	12	11	11	11	14.5	18.9	
29-Aug-05	10	11	11	10	9	8	7	6	5	5	6	6	6	7	7	8	8	6	6	5	3	2	2	2	6.9	10.8	
30-Aug-05	1	1	2	1	2	1	1	4	7	11	13	15	17	16	17	17	17	17	14	11	8	10	10	10	9.6	17.5	
31-Aug-05	10	10	10	11	11	10	11	11	12	15	16	17	18	18	18	17	16	16	14	11	10	9	8	12.8	17.9		
Hourly Avg	9.9	9.3	8.9	8.4	8.0	7.6	8.1	10.0	11.8	13.6	15.3	16.6	17.4	17.8	18.2	18.6	18.7	18.2	17.8	16.6	14.1	12.4	11.4	10.6			
Hourly Max	16.4	16.1	16.0	15.3	15.1	15.0	15.9	17.6	19.0	20.5	21.1	22.4	23.5	24.6	25.7	26.7	27.1	27.1	27.0	23.6	21.2	18.2	17.1	17.6			

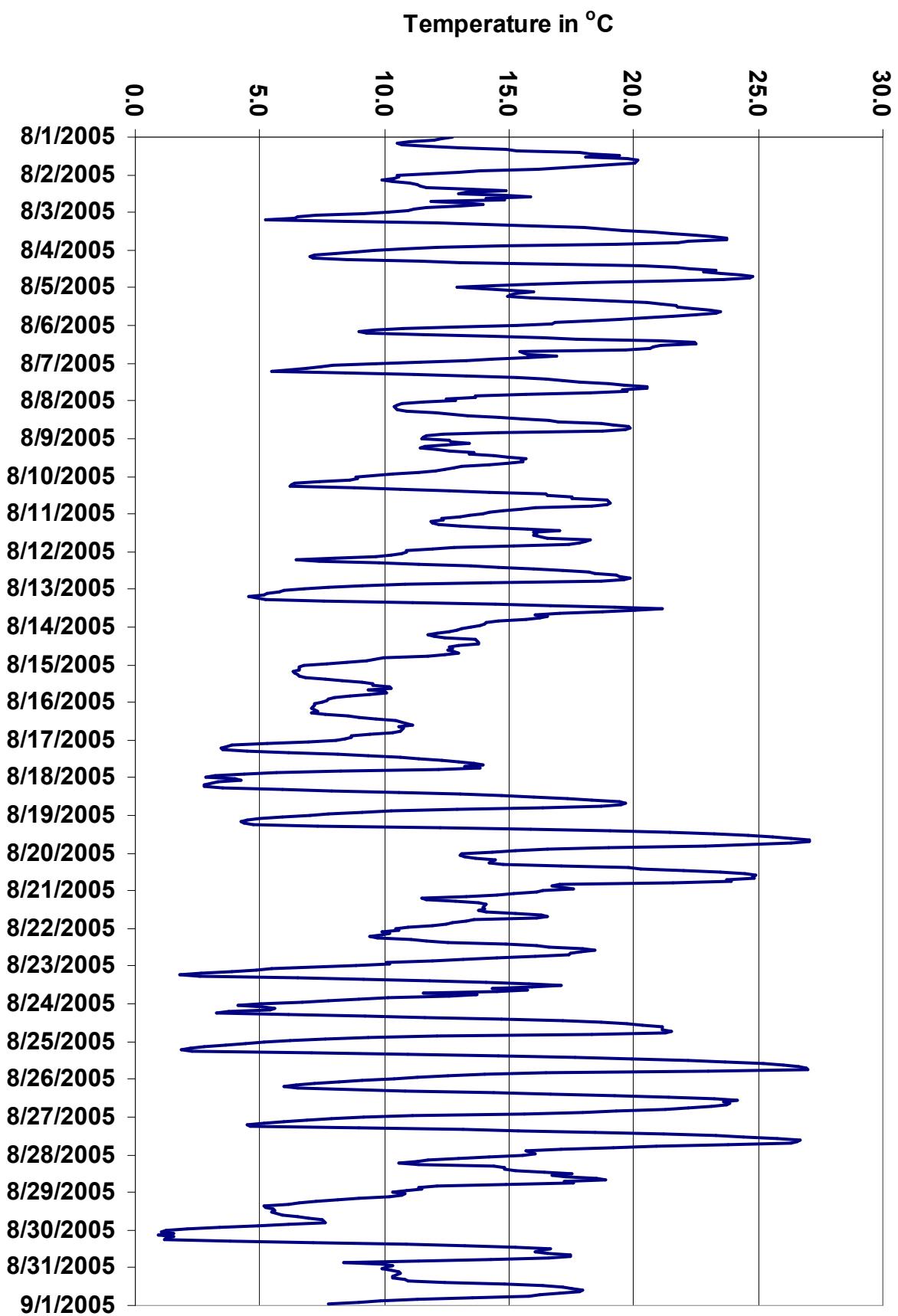


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

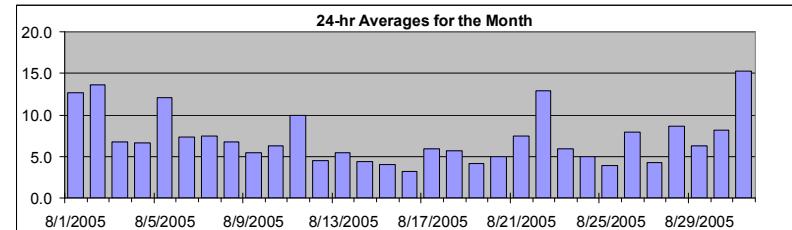
## PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



#### Summary

Maximum 1-hr Average:	24.3	km/hr	31-Aug	13:00 14:00
Maximum 24-hr Value:	15.3	km/hr	31-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile	99	95	75	50

Percentile 99 95 75 50 25 5 1 AverageS  
22.0 17.4 9.3 5.9 3.8 1.9 1.3 7.2 km/hr

#### Status Flag Characters

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

#### Day Mountain Standard Time

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

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

Station: Evergreen Park  
Station Owner: PASZA

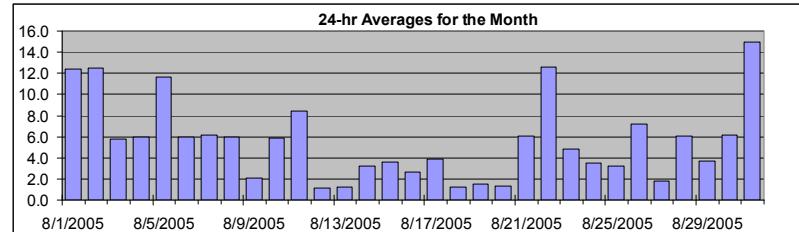
Monitoring Dates: August 1, 2005 to September 1, 2005

#### HOURLY AVERAGE TABLE

#### Wind Speed (WSv)

##### Summary

Maximum 1-hr Average:	24.0	km/hr	31-Aug	10:00 11:00
Maximum 24-hr Value:	14.9	km/hr	31-Aug	



Calm Time:	16 hrs	2% calms	Operational Time:	728 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageV	
	21.5	17.1	8.7	5.2	3.2	1.3	0.9		19.1 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

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

### PASZA - Evergreen Park Wind Direction Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

#### HOURLY AVERAGE TABLE

#### Wind Direction (WD)

##### Summary

Summary											

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs							
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%							
Percentile	99	95	75	50	25	5	1	Average			
	350.7	329.2	273.8	246.5	170.1	38.2	9.6	266 deg			

##### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
1-Aug-05	187	255	279	241	222	245	254	272	277	246	254	251	253	256	260	262	259	259	256	246	253	254	244	230	253	WSW
2-Aug-05	222	224	227	241	250	251	257	255	254	256	264	306	295	275	265	315	303	302	263	248	252	257	256	273	261	W
3-Aug-05	288	267	332	337	306	316	295	281	276	271	269	261	277	266	255	270	250	262	229	172	185	203	191	174	265	W
4-Aug-05	208	209	332	182	200	215	204	208	219	247	265	267	268	267	269	238	272	262	242	236	235	206	203	205	246	WSW
5-Aug-05	221	241	233	234	267	282	273	252	255	269	273	266	254	281	284	283	273	266	276	291	274	253	274	266	267	W
6-Aug-05	248	323	201	151	170	202	173	137	188	228	253	257	273	278	280	248	227	287	279	249	241	248	310	241	254	WSW
7-Aug-05	301	342	291	321	233	286	258	264	263	299	327	322	326	327	316	319	318	315	341	345	330	67	212	306	307	NW
8-Aug-05	289	2	268	238	274	273	273	278	293	318	311	270	274	280	272	298	297	326	317	300	245	279	256	225	289	WNW
9-Aug-05	230	293	312	343	12	17	22	27	55	33	28	51	88	49	50	69	62	79	232	257	272	282	280	290	359	N
10-Aug-05	309	305	222	240	265	290	269	243	211	275	265	266	267	266	292	281	274	301	308	295	275	270	260	270	274	W
11-Aug-05	264	267	271	266	280	268	274	268	291	299	314	329	318	307	337	329	327	3	359	358	340	322	333	347	309	NW
12-Aug-05	352	41	66	81	321	66	55	68	69	135	173	245	272	2	290	322	289	299	228	215	196	197	206	207	291	WNW
13-Aug-05	197	197	207	217	208	192	200	209	248	254	259	5	79	63	60	71	66	61	103	105	88	79	92	181	115	ESE
14-Aug-05	72	42	13	34	49	353	305	7	32	28	35	71	38	349	296	310	9	355	281	17	49	65	71	67	27	NNE
15-Aug-05	84	93	44	29	43	27	42	73	83	83	111	133	134	98	125	95	97	108	129	109	82	72	61	76	95	E
16-Aug-05	87	47	38	56	70	56	45	42	59	69	68	61	17	45	48	24	42	75	39	85	254	180	350	339	49	NE
17-Aug-05	345	354	332	336	310	312	269	281	262	252	254	274	308	339	332	349	347	13	40	40	203	177	193	212	311	NW
18-Aug-05	264	289	287	316	309	282	276	276	267	242	152	214	221	187	256	69	129	105	114	101	107	111	106	86	214	SSW
19-Aug-05	70	67	74	96	230	240	50	99	229	213	212	239	267	267	268	246	229	122	108	131	166	208	75	68	217	SW
20-Aug-05	38	155	32	90	343	347	230	202	96	148	150	141	183	194	174	179	281	315	60	80	284	282	324	314	188	S
21-Aug-05	331	314	302	245	268	168	185	244	250	285	275	267	231	200	225	172	319	286	265	242	247	249	241	227	254	WSW
22-Aug-05	229	243	240	247	250	253	250	250	250	249	256	263	270	262	258	263	258	260	288	280	232	252	261	279	254	WSW
23-Aug-05	239	133	212	169	224	212	218	263	288	316	273	263	296	311	291	253	319	231	304	277	270	272	274	276	273	W
24-Aug-05	210	225	234	246	251	226	197	237	277	277	255	232	202	227	199	291	292	187	161	123	143	172	88	55	231	SW
25-Aug-05	194	211	189	194	197	208	206	205	187	247	257	246	244	274	281	236	273	271	329	172	194	196	201	205	242	WSW
26-Aug-05	163	179	170	296	191	199	204	228	243	252	247	254	271	275	270	266	261	252	253	252	253	247	254	92	254	WSW
27-Aug-05	27	193	159	205	141	37	17	52	90	194	164	204	261	359	45	49	64	66	47	14	19	52	79	145	73	ENE
28-Aug-05	192	195	203	65	343	212	252	274	280	270	274	261	264	269	292	253	324	134	161	236	315	54	165	298	266	W
29-Aug-05	346	313	31	2	10	16	26	357	1	324	336	336	313	300	288	291	308	261	228	205	175	174	167	145	326	NNW
30-Aug-05	154	80	68	68	87	77	63	114	188	193	206	222	258	256	250	252	263	264	261	245	224	220	240	236	245	WSW
31-Aug-05	236	229	235	241	244	246	249	247	247	253	250	260	270	263	262	248	255	249	249	240	218	223	267	198	250	WSW
Hourly Avg	252	263	261	261	265	262	255	258	261	265	264	268	270	278	277	276	284	279	265	253	255	243	247	248		

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

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs						0% calms		Operational Time:						744 hrs												
Calibration Time:	0 hrs								AMD Operational Uptime:						100.0%												
Percentile	99	95	75	50	25	5	1																				
	64.4	52.6	29.6	18.4	12.5	6.8	5.0																				

#### Status Flag Characters

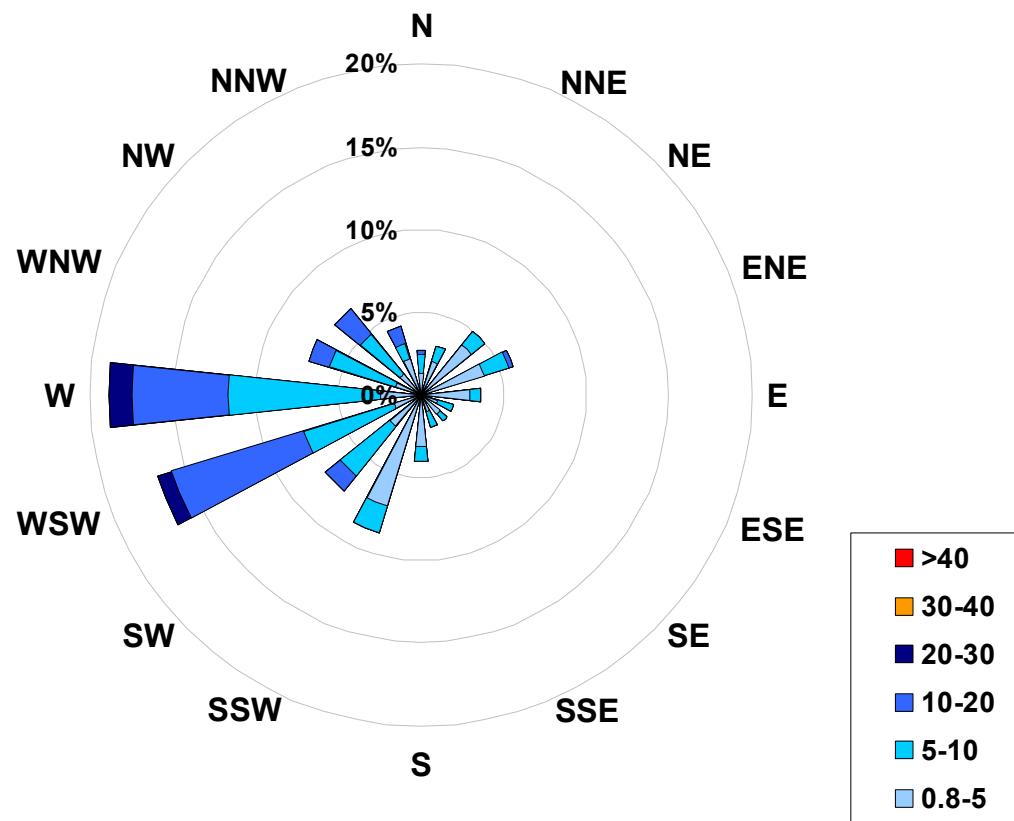
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Aug-05	43	41	40	15	12	14	49	12	17	10	10	11	10	11	13	13	11	12	8	8	8	8	5	6		49.2	
2-Aug-05	4	4	6	9	6	5	7	7	8	8	9	19	13	15	12	20	15	14	14	7	6	6	7	14		19.7	
3-Aug-05	20	23	19	35	32	22	13	15	13	10	18	16	20	27	27	29	27	27	21	18	15	9	40	34		39.6	
4-Aug-05	31	52	60	17	18	10	12	23	14	17	19	17	15	16	13	15	16	16	12	12	12	10	17	28		59.8	
5-Aug-05	20	11	10	9	11	14	12	7	8	10	11	10	10	17	20	14	11	9	11	12	12	10	11	16		20.4	
6-Aug-05	26	27	51	38	25	66	30	41	21	18	14	14	15	16	20	23	13	12	31	17	12	15	12	32		66.0	
7-Aug-05	46	48	56	43	34	27	10	11	13	18	18	24	18	18	34	33	15	15	20	23	18	27	18	34		55.9	
8-Aug-05	11	43	51	29	16	15	14	19	21	25	31	26	31	28	22	29	30	23	23	12	42	30	32	20		50.6	
9-Aug-05	13	21	15	13	16	20	36	44	25	30	28	29	28	28	25	24	53	11	10	14	15	19	10			53.3	
10-Aug-05	23	28	35	39	12	13	15	19	18	35	19	59	20	40	21	27	23	19	16	12	11	10	10	12		58.7	
11-Aug-05	11	11	14	13	18	12	12	14	14	13	15	11	14	16	19	22	13	18	18	14	9	16	15	14		22.4	
12-Aug-05	15	12	15	34	33	22	13	18	54	67	71	65	46	47	38	51	40	35	23	6	26	18	11	21		71.2	
13-Aug-05	7	7	8	29	9	6	8	24	39	13	23	39	27	18	17	19	19	48	55	24	17	18	38	14		55.2	
14-Aug-05	27	39	35	29	16	41	45	48	33	28	28	20	19	39	13	14	26	46	19	19	14	18	20	19		48.0	
15-Aug-05	24	34	38	35	48	41	42	20	29	31	28	30	42	29	44	41	15	23	25	15	6	9	12	13		48.2	
16-Aug-05	18	18	19	17	13	24	18	16	27	34	36	53	46	43	22	20	39	57	30	18	36	17	42	25		57.0	
17-Aug-05	13	15	24	24	11	11	14	16	19	13	16	22	46	31	24	28	24	21	21	40	8	21	20	13		45.8	
18-Aug-05	12	13	12	13	12	15	19	26	13	42	40	47	55	61	56	62	51	26	16	9	10	9	9	11		62.0	
19-Aug-05	21	11	10	14	19	15	25	28	17	24	58	64	23	45	32	30	54	49	26	13	22	66	40	29		66.2	
20-Aug-05	45	49	55	56	67	43	56	50	33	24	30	36	32	23	53	26	36	23	31	14	29	27	12	23		67.0	
21-Aug-05	21	13	17	11	28	60	28	21	10	19	21	19	17	20	28	27	40	17	19	9	9	14	6	5		59.5	
22-Aug-05	6	7	8	5	5	8	6	5	6	7	10	11	16	14	14	13	12	13	14	11	10	10	24	14		23.8	
23-Aug-05	11	47	28	41	46	12	18	15	24	29	39	43	54	20	27	11	25	17	21	18	17	15	12	16		53.9	
24-Aug-05	31	14	10	11	11	9	7	10	14	16	39	45	41	65	57	63	33	39	18	11	47	39	52	34		64.5	
25-Aug-05	14	32	26	23	6	9	11	11	15	18	14	28	29	38	49	51	41	42	55	12	15	12	18	29		54.6	
26-Aug-05	14	27	15	46	13	13	16	10	25	9	9	13	16	16	14	15	19	10	8	7	5	5	19	52		52.3	
27-Aug-05	59	23	70	56	46	51	44	14	33	45	32	58	49	44	48	24	23	20	14	10	30	9	17	33		70.0	
28-Aug-05	18	42	31	39	61	42	35	49	12	10	14	16	18	16	25	38	43	37	25	15	17	13	15	18		61.2	
29-Aug-05	23	30	14	24	16	21	14	22	25	12	12	13	17	15	22	20	18	19	16	18	16	14	20	27		29.8	
30-Aug-05	35	44	27	46	62	24	64	41	25	28	28	29	21	13	12	10	11	9	9	6	24	13	5	5		64.2	
31-Aug-05	6	9	7	6	5	5	4	5	5	6	8	11	12	11	11	9	10	8	8	12	16	7	36	32		35.8	

Hourly Max	59	52	70	56	67	66	64	50	54	67	71	65	55	65	57	63	54	57	55	40	47	66	52	52	
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**1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for  
August 2005**



**Calms:** 0%

Frequency Distribution of Wind in km/hr			
Range		Frequency (hrs)	
0.8	< 5		299
5	to 10		278
10	to 20		150
20	to 30		17
30	to 40		0
>	40		0
Total Non-Zero Values		744	

# PASZA – Smoky Heights Station

## Monthly Summary Tables, Graphs, and Roses

# PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

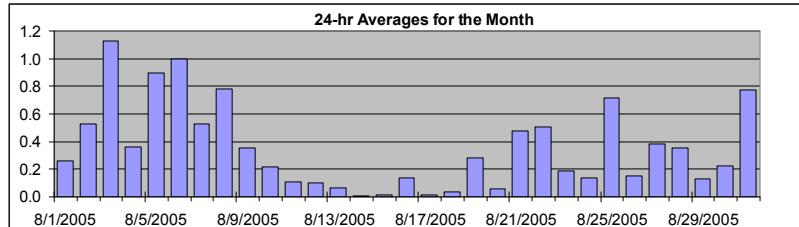
## HOURLY AVERAGE TABLE

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

Monitoring Dates: August 1, 2005 to September 1, 2005

Objective Limit:	Alberta Environment:		1-hr	172	ppb	24-hr	57	ppb
<b>Summary</b>								
Number of 1-hr Exceedances:	0							
Number of 24-hr Exceedances:	0							
Maximum 1-hr Average:	5.1	ppb	6-Aug	7:00	8:00			
Maximum 24-hr Average:	1.1	ppb	3-Aug					

AIC Time:	35 hrs	Operational Time:	697 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	99.3%						
Percentile	99	95	75	50	25	5	1	Average	
	3.0	1.5	0.4	0.1	0.0	0.0	0.0	0.4	ppb



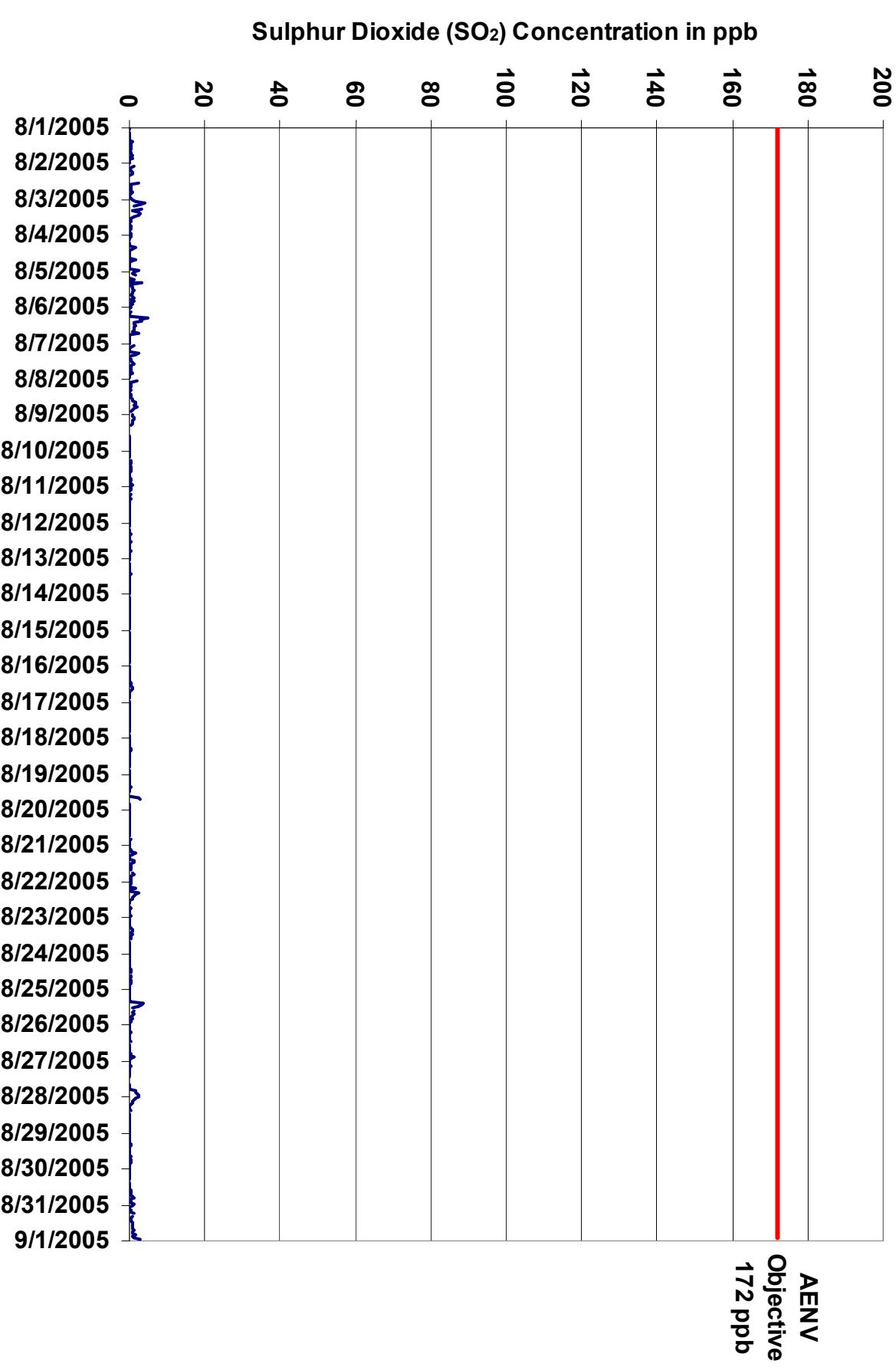
### Status Flag Characters

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

	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	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0.3	0.9
2-Aug-05	0	A	1	0	0	1	1	1	0	C	C	A	3	0	0	0	0	0	0	1	0	0	0	0	0	0.5	2.6
3-Aug-05	1	1	4	3	1	A	3	1	2	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.1	4.1
4-Aug-05	0	0	0	0	A	0	0	0	2	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0.4	2.6
5-Aug-05	1	1	2	A	0	1	0	0	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.9	3.2
6-Aug-05	0	0	A	0	0	0	5	3	3	1	1	1	1	1	1	1	1	2	0	0	0	0	0	0	0	1.0	5.1
7-Aug-05	0	A	1	1	0	0	0	2	2	0	0	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0.5	2.5
8-Aug-05	A	2	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	1	1	2	1	1	0	A	0.8	2.2	
9-Aug-05	1	1	1	1	1	1	0	C	C	C	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
10-Aug-05	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
11-Aug-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	0.1	0.5
12-Aug-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
13-Aug-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
14-Aug-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
15-Aug-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
16-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0.1	0.7	
17-Aug-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	0.1
18-Aug-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
19-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	D	D	0	2	3	A	A	0	0	0	0.3	3.0
20-Aug-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	0.5
21-Aug-05	0	0	0	0	0	2	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.5	1.6
22-Aug-05	0	0	0	0	2	0	1	2	2	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.5	2.3
23-Aug-05	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.9
24-Aug-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	0.5
25-Aug-05	0	0	0	0	0	0	0	0	0	4	3	2	1	A	1	1	1	1	1	1	0	0	0	0	0	0.7	3.7
26-Aug-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	1.1
27-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	P	P	0	0	0	0	0	0	0	0	0.4	2.6
28-Aug-05	3	2	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.6
29-Aug-05	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
30-Aug-05	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.2	1.4
31-Aug-05	1	0	0	0	0	0	1	A	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	3	0.8	2.6	
Hourly Avg	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.5	0.6	0.6	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.4		
Hourly Max	2.6	2.0	4.1	2.9	1.6	1.6	3.1	5.1	3.2	3.7	3.3	2.5	1.5	2.6	1.2	1.6	2.3	3.0	1.3	2.2	1.5	1.5	2.0	2.6			

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



Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	19.9 ppb	6-Aug 7:00 8:00
Maximum 24-hr Value:	2.4 ppb	6-Aug

AIC Time:	35 hrs	Operational Time:	697 hrs
Calibration Time:	7 hrs	AMD Operational Uptime:	99.3%
Percentile	99 95 75 50 25 5 1	Average	0.8 ppb
	5.7 3.3 1.0 0.4 0.2 0.0 0.0		

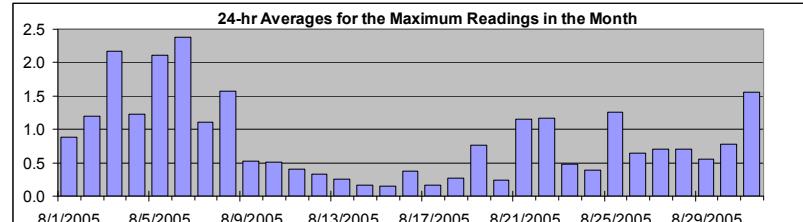
### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-Aug-05	0	0	A	0	0	0	0	0	1	1	1	1	1	1	2	0	1	1	2	1	2	4	1	0	0.9	4.1		
2-Aug-05	0	A	2	1	1	2	3	2	0	C	C	A	A	3	0	1	1	1	2	1	1	1	1	1	1	1.2	3.3	
3-Aug-05	1	2	8	7	2	A	6	2	4	4	4	2	1	1	1	1	1	1	1	0	1	0	1	0	0	2.2	7.9	
4-Aug-05	1	1	0	0	A	1	0	0	3	2	1	1	1	1	0	0	1	3	2	0	0	1	5	2	5	1.2	5.0	
5-Aug-05	2	2	5	A	0	4	1	3	6	2	1	1	1	1	2	2	1	1	2	2	2	1	4	1	1	2.1	6.3	
6-Aug-05	1	0	A	0	0	0	4	20	4	6	2	2	2	2	1	2	2	2	3	1	0	1	1	0	0	2.4	19.9	
7-Aug-05	0	A	2	2	0	0	1	3	3	1	0	1	1	1	2	1	2	2	1	1	2	0	0	0	0	1.1	3.3	
8-Aug-05	A	7	1	1	0	1	1	1	1	1	1	1	1	1	1	3	2	3	2	3	2	1	1	1	A	1.6	7.1	
9-Aug-05	1	1	2	1	1	1	1	1	C	C	C	C	C	D	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.7
10-Aug-05	0	0	0	0	A	0	1	1	0	1	1	1	1	1	1	0	0	0	0	0	1	0	0	1	2	0.5	2.1	
11-Aug-05	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2	
12-Aug-05	0	0	0	A	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
13-Aug-05	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
14-Aug-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
15-Aug-05	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.4	
16-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0.4	1.0	
17-Aug-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	A	0.2	0.4	
18-Aug-05	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
19-Aug-05	0	0	0	0	0	0	0	0	1	1	0	0	0	0	D	D	4	5	5	A	A	0	0	0	0	0.8	4.9	
20-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0.2	1.0	
21-Aug-05	0	0	0	1	1	4	2	0	0	1	3	2	1	1	1	1	1	2	4	1	1	1	0	0	0	1.2	4.1	
22-Aug-05	1	1	0	0	5	1	2	3	3	2	2	2	0	1	0	0	A	0	1	1	0	0	1	1	1.2	4.8		
23-Aug-05	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0.5	1.5		
24-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0.4	1.0	
25-Aug-05	0	0	0	0	0	0	0	0	1	6	5	3	2	A	2	1	2	1	1	1	1	1	0	0	0	1.3	6.0	
26-Aug-05	0	0	0	1	0	1	0	0	1	0	1	1	A	1	0	1	0	0	0	2	0	4	1	0	0	0.6	3.6	
27-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	A	1	P	P	0	0	0	0	0	2	3	3	0.7	3.4		
28-Aug-05	3	2	2	2	1	1	0	0	1	1	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0.7	2.9		
29-Aug-05	0	0	0	0	0	0	0	1	1	A	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0.6	1.4		
30-Aug-05	0	0	1	0	0	0	0	0	A	0	0	0	1	1	1	1	1	2	2	1	0	2	5	0.8	4.7			
31-Aug-05	4	0	0	0	1	0	3	A	1	1	1	1	1	1	1	1	1	1	2	1	3	6	1.6	5.6				

Hourly Avg	0.6	0.8	1.0	0.7	0.6	0.6	0.9	1.4	1.3	1.2	0.9	0.8	0.7	0.7	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.7	1.0
Hourly Max	4.4	7.1	7.9	7.1	4.8	3.9	5.9	19.9	6.3	6.0	4.7	3.1	2.1	3.3	1.8	3.7	4.6	4.9	2.2	4.1	2.4	5.0	3.8	5.6

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

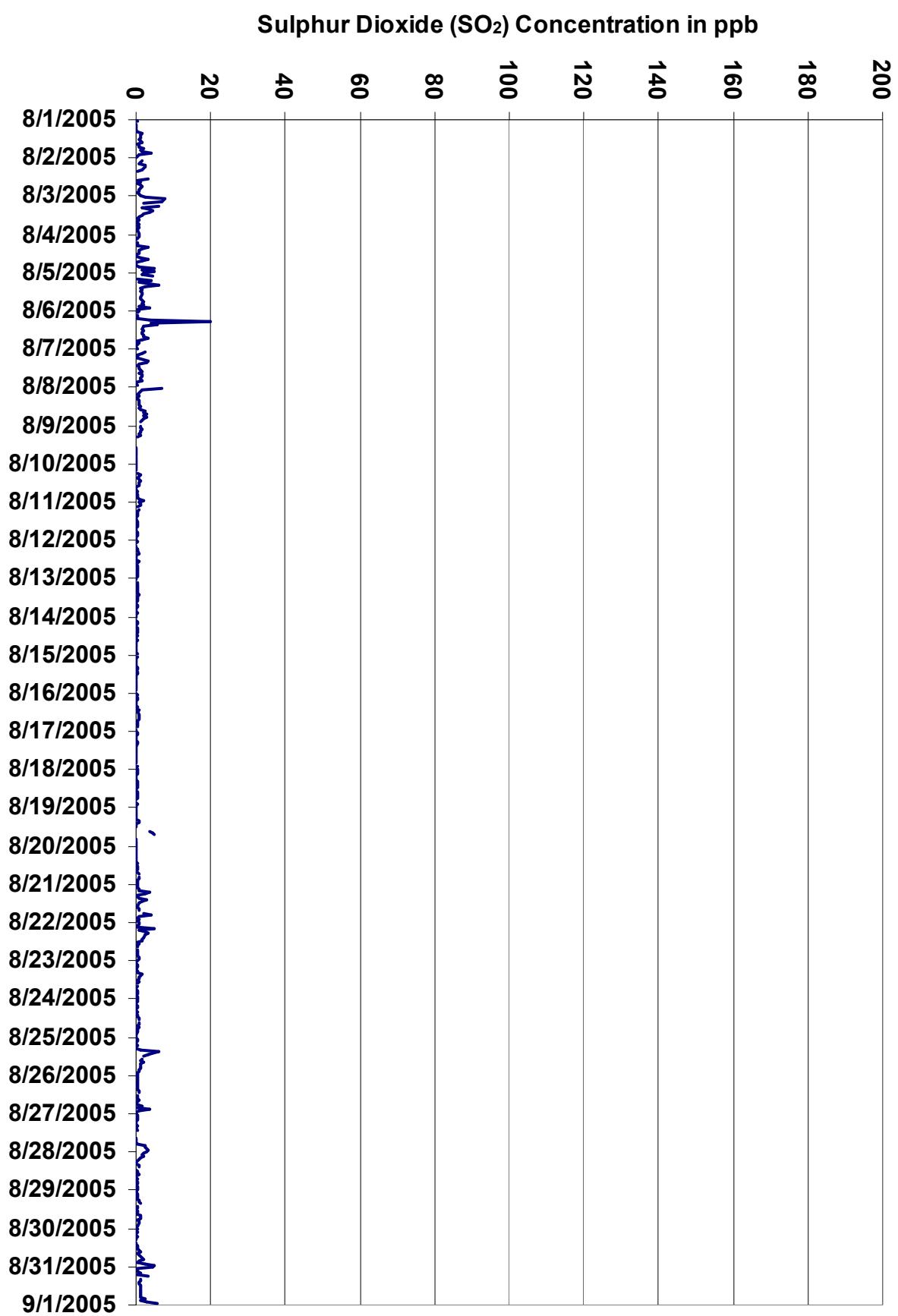
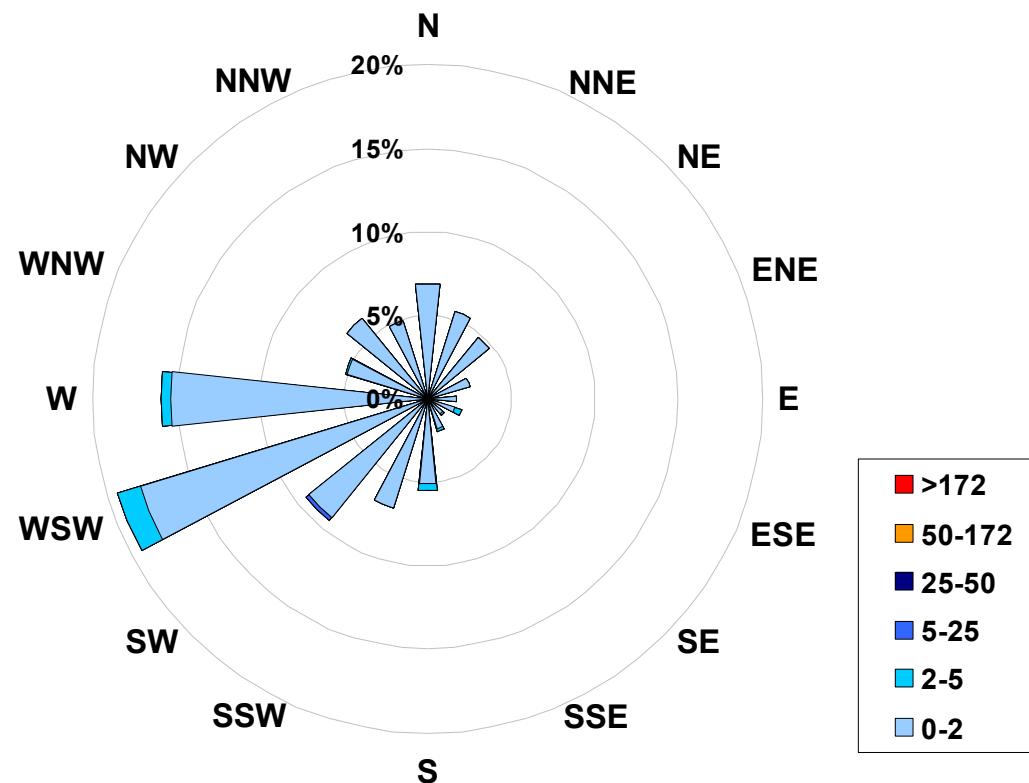


Figure 28. PASZA - Smoky Heights Sulphur Dioxide 1-hr Maximum Value Monthly Trend

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



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

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	673
2	to	5	23
5	to	25	1
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			697

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

Station: Smoky Heights  
Station Owner: PASZA

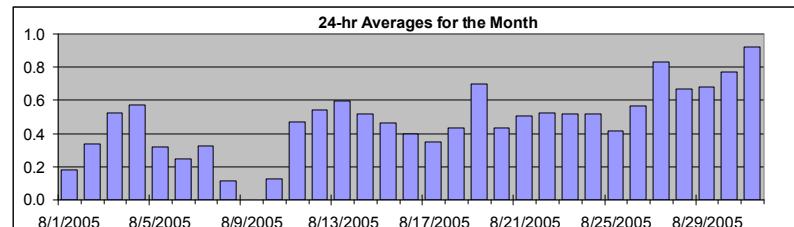
## HOURLY AVERAGE TABLE

## Total Reduced Sulphur (TRS)

**Monitoring Dates:** August 1, 2005 to September 1, 2005

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

Maximum 1-hr Average: 1.5 ppb 4-Aug 18:00 19:00  
Maximum 24-hr Value: 0.9 ppb 31-Aug



## Status Flag Characters

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

**Day Mountain Standard Time**

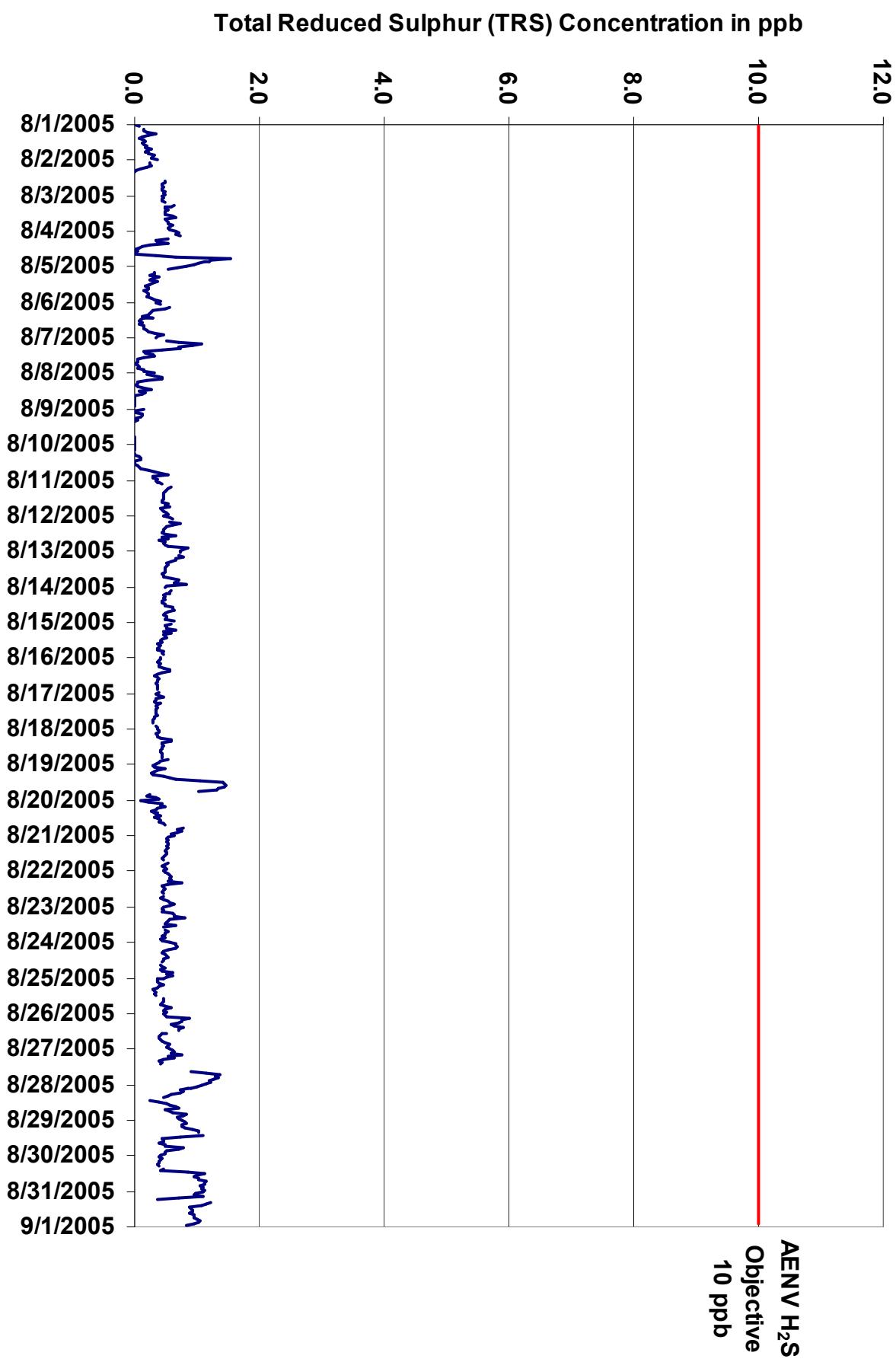


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	2.4 ppb	29-Aug	10:00 11:00
Maximum 24-hr Value:	1.4 ppb	31-Aug	

AIC Time:	34 hrs	Operational Time:	695 hrs
Calibration Time:	7 hrs	AMD Operational Uptime:	98.9%
Percentile	99 95 75 50 25 5 1	Average	
	1.9 1.5 1.0 0.8 0.7 0.3 0.0	0.8 ppb	

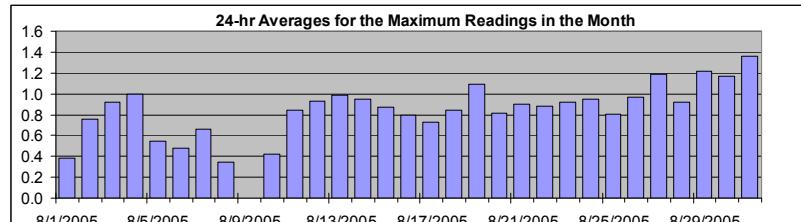
### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Aug-05	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4	0.6
2-Aug-05	1	A	1	1	1	1	1	1	1	C	C	C	A	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
3-Aug-05	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
4-Aug-05	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	1	0	0	1	1	2	2	2	1	1	1	1.0	2.3
5-Aug-05	1	1	1	A	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.2	
6-Aug-05	1	1	A	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	1.0	
7-Aug-05	1	A	1	1	2	2	1	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.7	1.9	
8-Aug-05	A	0	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8	
9-Aug-05	0	0	0	0	1	0	0	0	0	C	C	C	C	D	D	D	D	D	D	D	D	0	0	0	0	N	0.5	
10-Aug-05	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.4	0.9	
11-Aug-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	0.8	1.1	
12-Aug-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	0.9	1.3	
13-Aug-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	1.4	
14-Aug-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	0.9	1.2	
15-Aug-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
16-Aug-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	0.8	1.1	
17-Aug-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	0.7	1.1	
18-Aug-05	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
19-Aug-05	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	A	1	1	1	1	1.1	2.3	
20-Aug-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	0.8	1.2	
21-Aug-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	0.9	1.0	
22-Aug-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	0.9	1.1	
23-Aug-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	0.9	1.3	
24-Aug-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	0.9	1.2	
25-Aug-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	0.8	1.0	
26-Aug-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	1.0	1.4	
27-Aug-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	P	P	2	2	2	2	2	1	1	1	1.2	1.6
28-Aug-05	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
29-Aug-05	1	1	1	1	1	1	1	1	2	2	2	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1.2	2.4	
30-Aug-05	1	1	1	1	1	1	1	1	1	1	A	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1.2	1.9	
31-Aug-05	2	2	2	2	2	2	1	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	2.0	

Hourly Avg	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.9	0.9	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.9
Hourly Max	1.9	1.7	1.6	2.0	1.9	1.6	1.6	1.5	2.0	1.6	2.4	1.9	2.3	1.8	1.7	1.8	1.6	1.6	2.3	1.9	1.5	1.4	1.4	1.4	1.6

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)



### Status Flag Characters

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

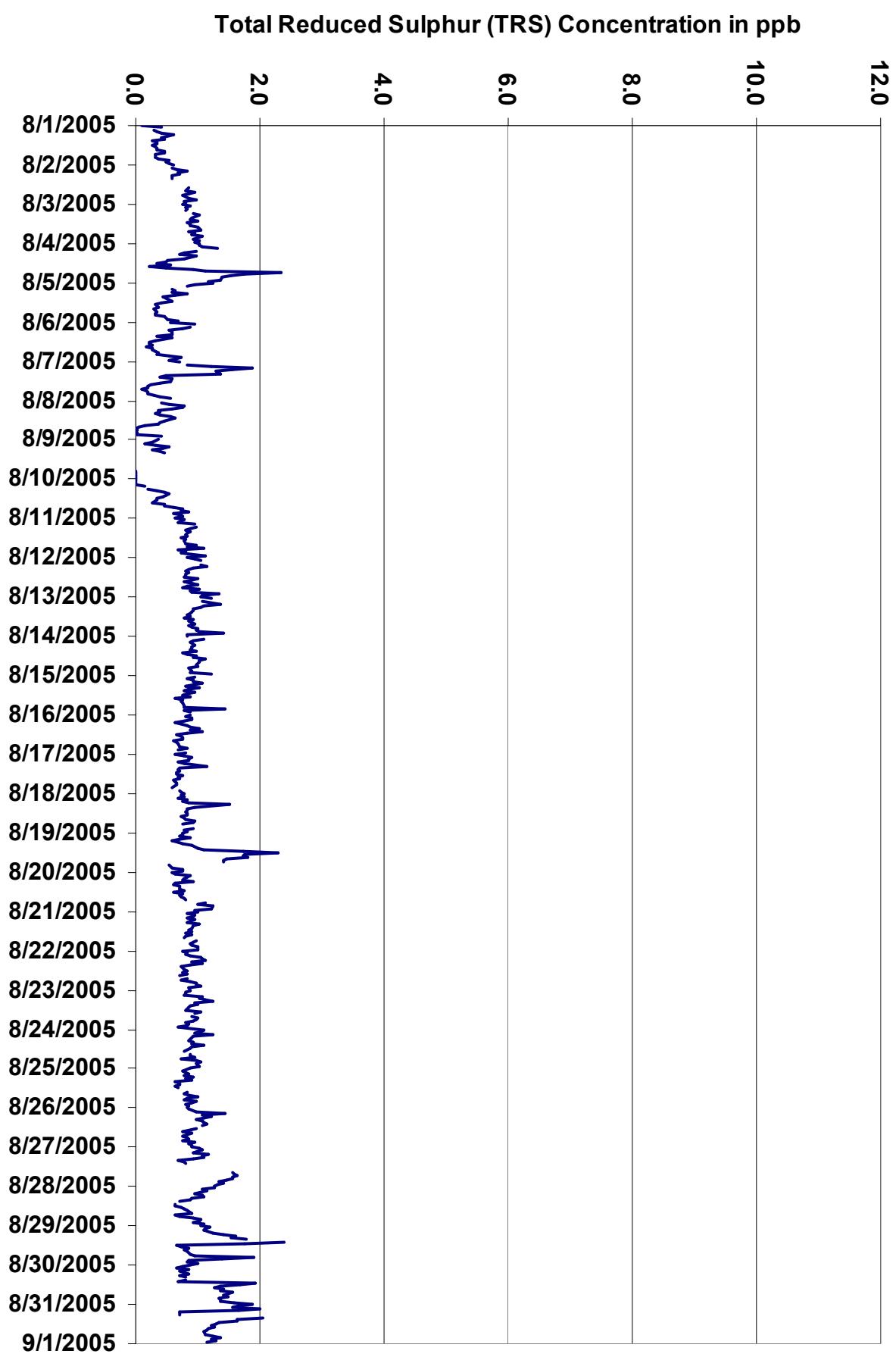
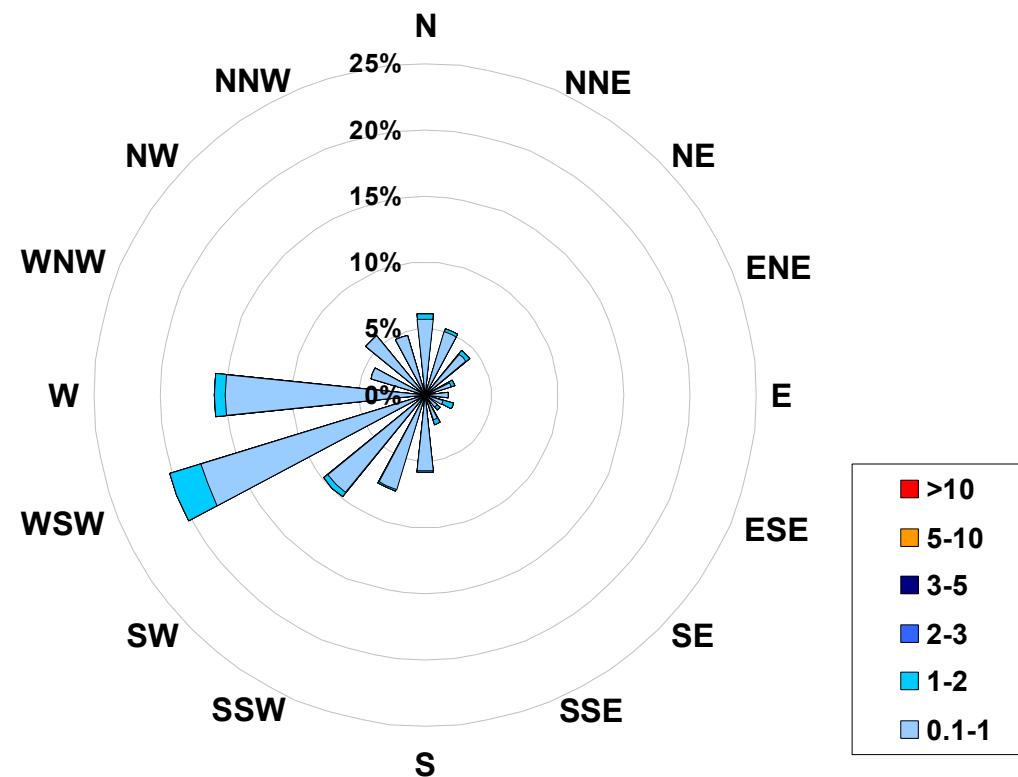


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of TRS in ppb			
Range		Frequency (hrs)	
0.1	<	1	651
1	to	2	44
2	to	3	0
3	to	5	0
5	to	10	0
>	10		0
Total Non-Zero Values		695	

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

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 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

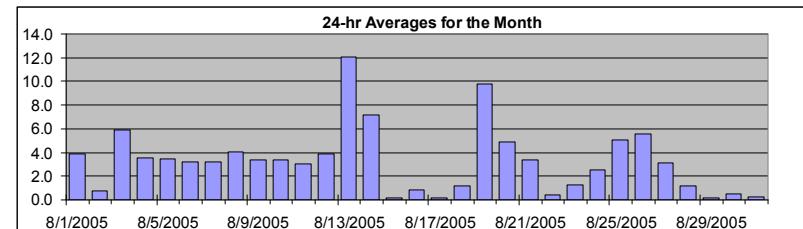
Number of 24-hr Exceedances (draft): 0

Maximum 1-hr Average: 51.7  $\mu\text{g}/\text{m}^3$  19-Aug 19:00 20:00

Maximum 24-hr Value: 12.0  $\mu\text{g}/\text{m}^3$  13-Aug

#### HOURLY AVERAGE TABLE

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



#### Status Flag Characters

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

Percentile	99	95	75	50	25	5	1	Average	Geomean
	23.5	13.8	4.1	1.3	0.0	0.0	0.0	3.3 $\mu\text{g}/\text{m}^3$	2.0 $\mu\text{g}/\text{m}^3$

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum	
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00				
1-Aug-05	17	17	9	7	4	3	4	4	2	0	0	0	0	0	0	0	0	0	0	D	D	D	2	5	2	2	3.9	17.3
2-Aug-05	3	3	5	0	0	0	1	1	0	2	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.8	4.6	
3-Aug-05	0	0	0	0	0	1	3	2	3	2	2	1	0	0	1	1	2	2	6	6	48	19	6	34	5.9	48.0		
4-Aug-05	10	5	5	5	4	4	6	8	7	7	2	3	3	2	1	1	3	2	1	1	0	0	0	0	0	3.6	10.3	
5-Aug-05	0	0	1	1	1	0	0	0	0	0	0	D	D	D	D	D	0	0	4	7	11	17	15	10	3.5	16.6		
6-Aug-05	4	1	1	1	2	2	1	1	0	0	0	D	D	D	D	5	5	0	0	12	8	12	5	3	3.2	12.2		
7-Aug-05	0	1	1	2	0	0	1	1	0	0	0	D	D	D	D	5	2	1	D	21	15	8	3.2	20.5				
8-Aug-05	3	1	0	1	1	0	1	2	2	2	1	1	0	D	D	D	D	0	0	22	18	17	8	4.0	22.2			
9-Aug-05	5	2	3	3	3	4	3	3	12	8	7	5	4	1	2	2	2	0	3	0	2	2	3	3.4	12.0			
10-Aug-05	3	2	1	0	1	4	14	8	5	0	0	4	1	4	3	3	1	6	2	5	5	3	3	2	3.3	14.1		
11-Aug-05	2	2	4	3	3	4	5	5	5	4	3	2	6	7	2	6	0	0	0	3	1	1	3	3.0	6.5			
12-Aug-05	1	0	0	0	0	42	8	4	0	0	2	2	0	1	1	1	4	2	5	3	9	4	3	3.8	41.5			
13-Aug-05	1	1	2	3	2	5	5	4	5	6	13	22	23	24	20	20	20	19	19	21	18	17	17	12.0	23.5			
14-Aug-05	16	17	16	16	13	11	13	14	11	10	8	5	4	3	3	2	3	0	1	0	0	D	0	0	7.1	16.5		
15-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0.2	1.9		
16-Aug-05	1	3	4	0	0	0	0	0	0	1	1	3	3	1	0	1	0	0	0	1	0	0	0	0	0.9	4.2		
17-Aug-05	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0		
18-Aug-05	0	0	0	0	3	7	2	2	2	0	0	0	0	0	0	0	1	1	1	1	1	3	3	0	1.2	7.2		
19-Aug-05	0	0	2	0	3	18	11	2	2	6	8	7	7	2	0	D	D	D	47	52	24	7	6	4	9.8	51.7		
20-Aug-05	6	8	8	8	10	8	3	11	7	5	3	4	2	2	5	7	6	5	2	5	0	4	0	2	4.9	10.9		
21-Aug-05	4	0	2	0	0	4	2	5	4	5	4	12	10	9	7	5	4	1	0	0	0	0	D	0	3.4	12.0		
22-Aug-05	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	3	2	0	0.4	2.5		
23-Aug-05	0	2	0	0	0	0	2	3	3	3	2	0	0	3	1	2	0	4	3	0	0	1	0	0	1.2	3.9		
24-Aug-05	0	0	0	0	0	0	2	3	6	4	5	1	0	0	1	0	3	5	5	2	9	6	7	0	2.6	8.8		
25-Aug-05	2	1	9	3	0	2	6	6	3	8	7	7	5	5	7	6	8	6	5	4	5	3	5.1	8.7				
26-Aug-05	5	4	5	4	1	5	13	9	10	9	0	2	0	4	1	0	5	10	6	4	29	3	3	2	5.6	29.4		
27-Aug-05	2	2	0	0	2	1	13	8	5	7	5	6	3	P	P	5	4	2	0	0	1	1	1	2	3.1	12.6		
28-Aug-05	2	2	1	3	2	2	3	2	2	0	0	0	0	0	0	0	0	0	0	2	4	2	0	0	1.2	4.0		
29-Aug-05	1	1	0	0	0	0	0	D	D	0	0	0	0	0	0	0	0	0	0	1	0	D	1	0.2	1.0			
30-Aug-05	0	0	0	0	0	0	0	1	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0.5	5.0			
31-Aug-05	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.3	1.7		

Hourly Avg 2.8 2.4 2.5 1.9 1.6 3.9 4.2 3.7 3.0 3.2 2.5 2.9 2.6 2.7 2.2 2.5 2.5 2.6 3.7 4.5 6.8 5.5 4.0 3.5

Hourly Max 16.5 17.3 16.5 15.7 12.9 41.5 14.1 14.1 10.7 12.0 8.1 13.1 21.5 22.7 23.5 20.3 20.0 20.3 46.9 51.7 48.0 20.5 16.8 34.2

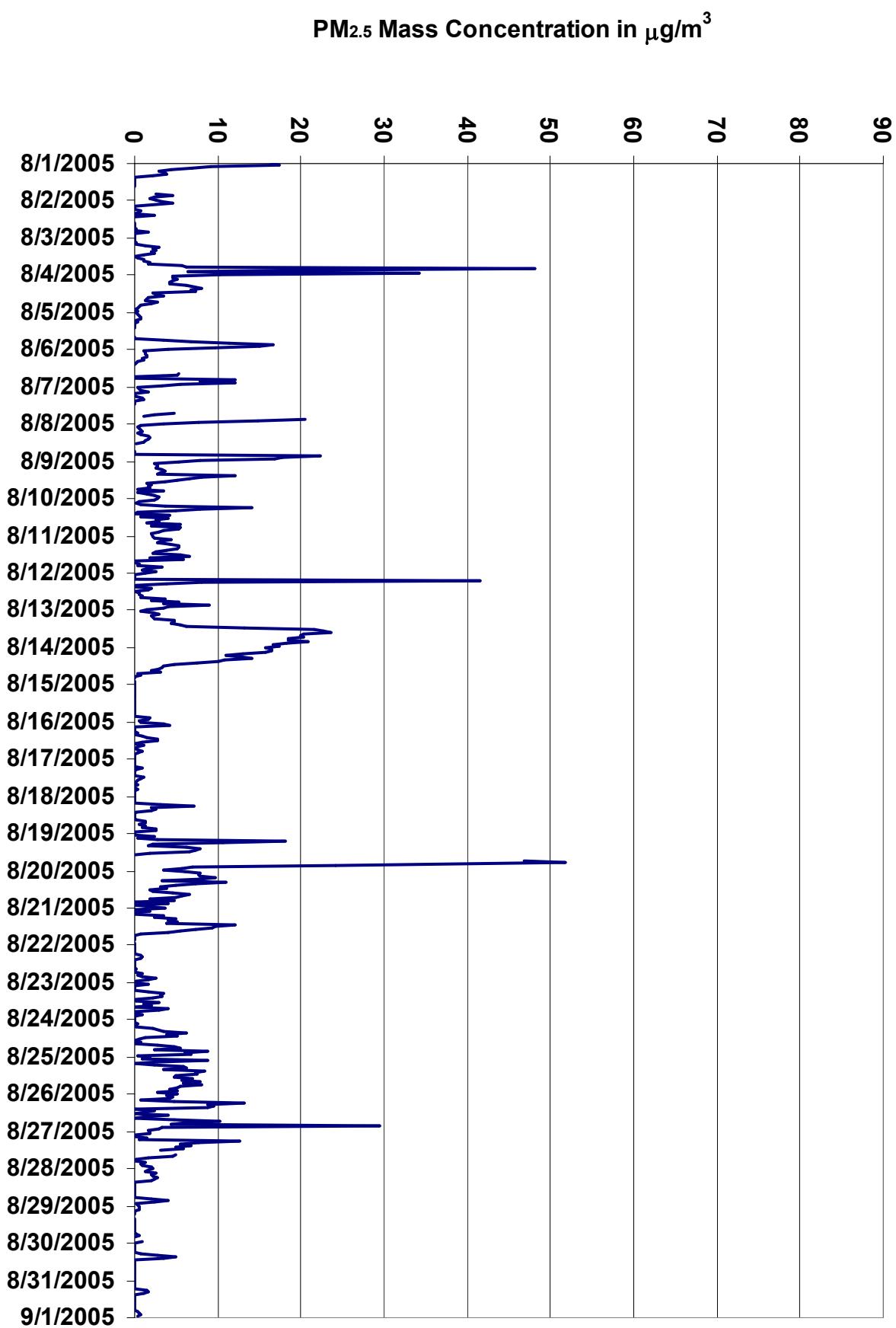


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

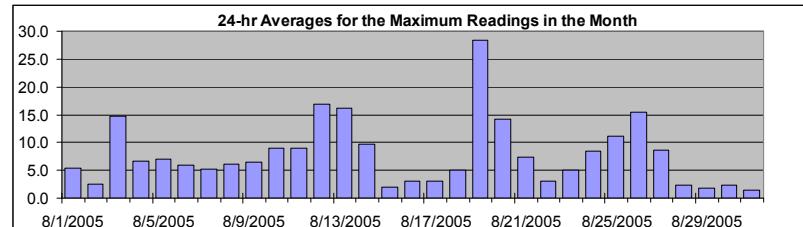
### Summary

Maximum 1-hr Average:	186.9	$\mu\text{g}/\text{m}^3$	12-Aug	5:00 6:00
Maximum 24-hr Value:	28.4	$\mu\text{g}/\text{m}^3$	19-Aug	

AIC Time:	0 hrs	Operational Time:	707 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	95.4%						
Percentile	99 53.1	95 21.5	75 9.8	50 4.7	25 1.8	5 0.0	1 0.0	Average 7.9 $\mu\text{g}/\text{m}^3$	Geomean 6.0 $\mu\text{g}/\text{m}^3$

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00		
1-Aug-05	24	20	9	9	5	3	5	7	3	1	0	0	0	0	0	0	0	D	D	D	D	6	7	6	2	5.4	24.4
2-Aug-05	4	4	7	6	1	1	3	2	2	4	2	C	C	C	0	3	1	2	2	3	4	1	0	0	2.4	6.9	
3-Aug-05	0	2	1	1	1	3	6	4	5	3	4	4	2	3	4	4	4	6	14	14	107	59	16	91	14.8	106.9	
4-Aug-05	15	7	7	7	7	6	5	9	11	9	15	6	5	7	9	10	4	8	6	2	2	1	0	1	6.6	14.9	
5-Aug-05	0	1	1	1	1	1	1	0	1	1	0	D	D	D	D	D	12	1	7	12	15	33	22	22	7.0	33.3	
6-Aug-05	7	2	2	2	2	2	2	3	2	1	1	D	D	D	D	D	8	8	2	17	16	11	14	13	4	5.9	16.9
7-Aug-05	1	1	1	3	3	0	2	4	4	1	0	0	D	D	D	D	D	7	4	4	D	25	17	16	5.2	25.2	
8-Aug-05	4	2	1	1	1	1	1	1	2	2	3	2	2	1	D	D	D	D	2	21	24	25	18	8	6.1	25.1	
9-Aug-05	8	4	3	3	3	4	4	4	12	17	13	11	8	8	5	5	6	7	4	10	6	4	4	5	6.5	16.9	
10-Aug-05	4	5	2	5	5	13	21	13	7	4	6	11	7	11	8	10	10	14	7	17	14	14	5	3	9.0	20.6	
11-Aug-05	3	4	7	5	4	6	7	7	9	6	6	9	18	18	16	28	12	5	5	14	14	5	5	5	9.0	27.5	
12-Aug-05	4	2	0	0	1	187	50	11	3	4	9	10	7	7	5	5	4	8	6	14	10	32	14	15	16.9	186.9	
13-Aug-05	3	6	5	6	4	6	7	8	9	8	14	25	29	26	29	25	27	23	21	21	24	22	19	19	16.1	29.4	
14-Aug-05	19	19	18	17	16	14	15	16	14	12	10	10	8	6	8	6	7	3	4	1	0	D	1	0	9.7	19.1	
15-Aug-05	1	0	0	0	0	0	0	0	1	3	1	2	3	1	2	4	2	2	2	2	2	6	8	4	1.9	7.5	
16-Aug-05	4	9	9	2	0	1	1	3	1	3	3	5	6	3	2	3	2	3	6	3	2	0	0	1	3.0	9.4	
17-Aug-05	2	1	2	0	0	0	5	3	3	3	4	3	6	5	8	4	8	6	4	3	1	0	0	1	3.0	8.4	
18-Aug-05	1	6	3	5	4	8	12	8	5	6	3	5	3	2	5	3	6	6	4	7	4	7	6	0	5.0	11.9	
19-Aug-05	1	1	15	9	12	53	18	7	5	9	13	12	15	2	2	D	D	D	183	159	38	20	15	7	28.4	182.7	
20-Aug-05	16	16	10	10	13	12	16	19	15	17	13	12	13	9	12	21	14	19	24	25	3	9	8	13	14.2	24.9	
21-Aug-05	12	3	6	1	4	6	6	9	8	8	14	17	15	13	12	10	10	5	6	4	3	0	D	0	7.4	16.6	
22-Aug-05	0	0	0	0	0	0	2	3	4	3	3	4	3	4	5	6	4	6	4	3	3	8	3	4	3.0	7.7	
23-Aug-05	1	4	1	0	2	2	7	5	6	6	5	6	8	12	14	8	5	8	9	1	3	5	3	0	5.0	13.7	
24-Aug-05	3	2	1	3	2	3	6	6	12	10	11	7	6	5	4	7	8	20	14	15	16	19	17	5	8.4	20.5	
25-Aug-05	5	8	26	7	4	6	11	11	8	11	10	12	13	10	13	9	13	10	17	22	10	8	11	10	11.1	26.0	
26-Aug-05	10	8	9	10	5	8	18	20	16	13	10	11	13	11	5	3	28	31	11	13	97	7	10	3	15.4	97.0	
27-Aug-05	4	7	3	4	8	6	32	15	12	13	11	13	9	P	P	17	22	5	2	1	2	2	2	2	8.7	32.4	
28-Aug-05	2	2	2	3	2	3	3	4	3	2	0	0	0	0	0	5	5	1	0	6	6	6	1	1	2.4	6.1	
29-Aug-05	1	1	1	1	1	0	D	D	1	1	0	0	2	6	1	3	2	5	5	3	0	D	D	3	1.9	6.5	
30-Aug-05	2	1	0	0	0	0	2	2	4	12	11	7	6	3	1	1	1	1	1	0	0	0	0	2	2.4	12.2	
31-Aug-05	0	0	1	0	2	0	4	5	3	2	3	2	1	1	1	1	0	0	0	1	1	1	1	1	1.4	5.0	

Hourly Avg 5.2 4.7 4.9 3.9 3.6 11.5 9.1 7.0 6.2 6.2 6.4 7.4 7.8 6.8 6.5 7.6 8.4 7.6 13.0 13.8 14.3 11.8 7.7 8.0

Hourly Max 24.4 19.8 26.0 17.1 15.7 186.9 49.8 20.4 15.5 16.9 14.6 25.1 28.7 26.3 29.4 27.5 27.8 30.5 182.7 158.9 106.9 58.5 22.2 91.1

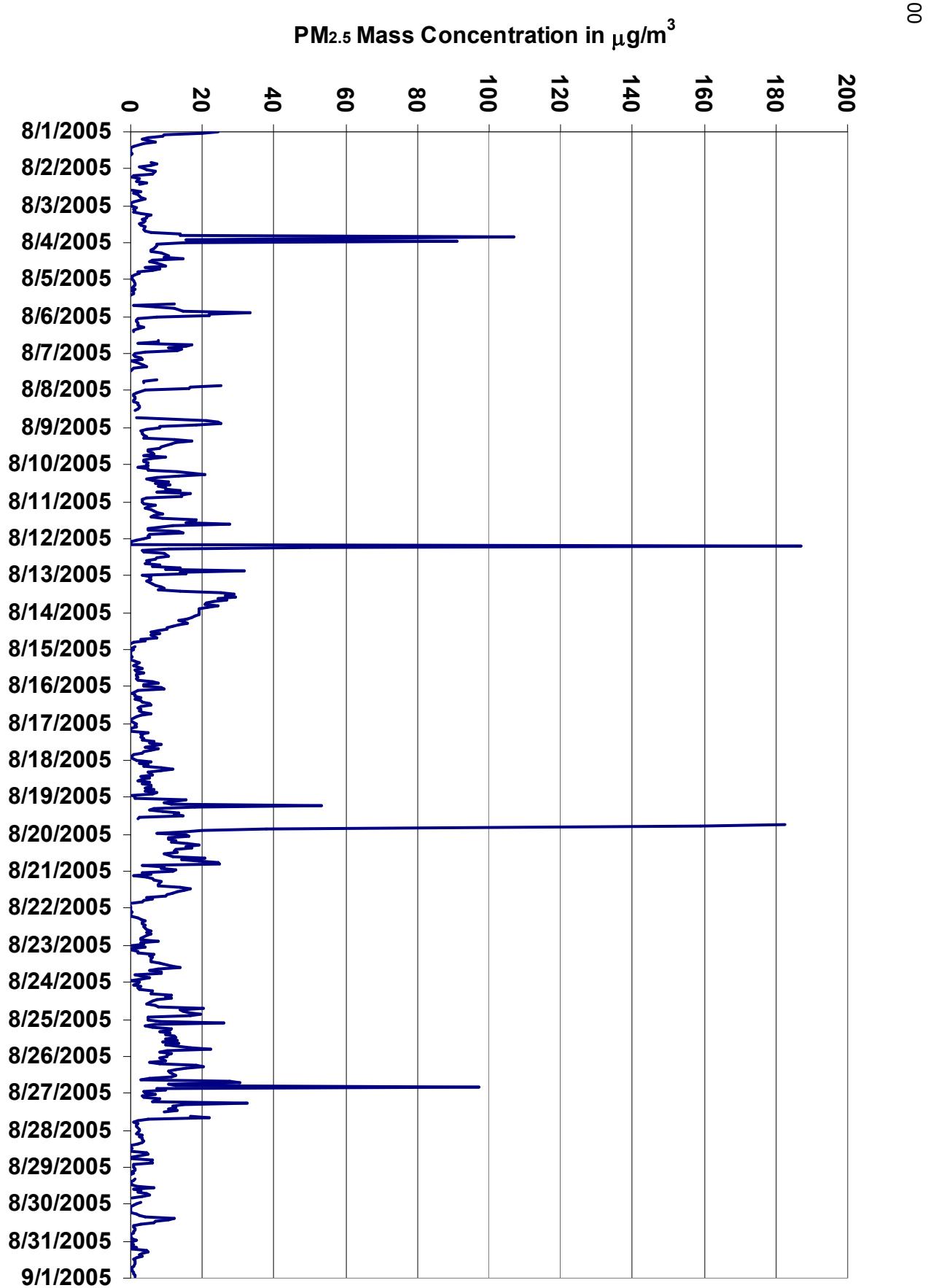
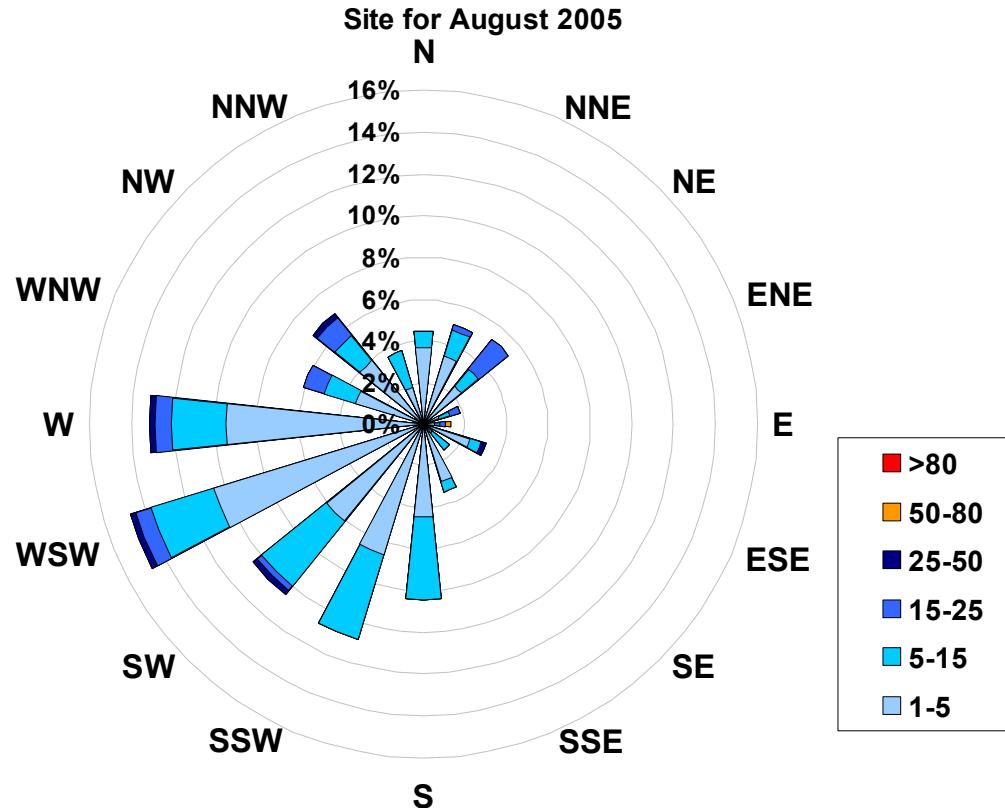


Figure 32 PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	565
5	to	15	110
15	to	25	26
25	to	50	5
50	to	80	1
>	80		0
Total Non-Zero Values			707

## PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

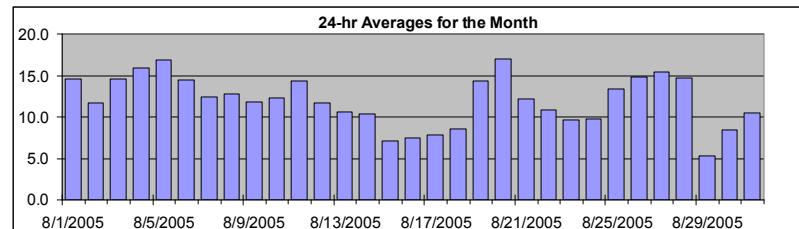
### Summary

Maximum 1-hr Average:	24.9	°C	25-Aug	17:00 18:00
Maximum 24-hr Value:	17.0	°C	20-Aug	

AIC Time:	0 hrs	Operational Time:	742 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%					
Percentile	99	95	75	50	25	5	1	Average
	23.9	21.6	15.7	11.8	7.9	3.7	1.0	12.0 °C

### HOURLY AVERAGE TABLE

### Ambient Temperature (T)



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	18.7
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	18.7	
1-Aug-05	14	15	14	12	11	10	10	12	14	17	17	18	17	17	17	19	18	18	18	16	14	12	10	10	10	14.6
2-Aug-05	8	8	8	10	10	10	10	10	11	11	12	13	13	14	15	15	15	15	16	16	14	13	11	10	8	11.7
3-Aug-05	8	8	8	8	7	7	9	11	14	16	18	19	20	21	21	21	22	22	21	18	15	13	11	10	10	14.5
4-Aug-05	8	8	7	8	7	8	9	11	13	16	20	21	21	23	22	23	23	23	23	22	18	16	15	15	15	15.9
5-Aug-05	13	12	13	14	15	14	15	16	18	19	19	20	20	20	21	22	21	21	20	18	16	13	12	11	11	16.8
6-Aug-05	10	10	10	10	10	9	11	14	15	19	20	20	20	19	20	21	16	14	14	13	11	11	9	9	14.4	
7-Aug-05	8	7	6	5	5	5	7	10	13	14	15	16	17	18	18	19	18	18	18	17	13	10	10	10	10	12.4
8-Aug-05	10	11	10	9	9	10	9	10	10	12	13	13	16	16	18	17	18	18	18	17	15	13	11	11	11	12.8
9-Aug-05	10	12	12	11	10	10	10	10	11	12	13	13	14	14	15	14	14	14	14	14	12	9	8	8	8	11.8
10-Aug-05	9	8	7	5	4	5	6	10	12	13	15	14	16	16	16	17	18	18	18	17	16	14	13	13	13	12.3
11-Aug-05	13	13	14	13	13	14	14	14	15	15	16	15	16	17	17	17	17	16	16	15	13	11	11	11	11	14.4
12-Aug-05	10	9	8	6	6	4	6	9	10	11	13	15	15	16	16	18	18	18	18	17	13	9	7	6	6	11.7
13-Aug-05	5	5	6	5	5	4	5	6	8	12	14	17	16	15	14	15	15	14	13	13	13	12	11	11	11	10.6
14-Aug-05	11	10	10	9	10	10	10	11	11	12	13	13	13	13	13	13	12	10	9	8	7	6	6	6	6	10.4
15-Aug-05	6	5	5	5	5	5	5	6	7	7	8	8	9	10	9	9	9	9	8	8	7	7	6	6	6	7.1
16-Aug-05	6	6	6	6	6	6	6	6	6	7	7	7	8	9	9	10	10	10	9	8	8	7	7	7	7	7.5
17-Aug-05	7	7	6	6	5	4	4	6	8	9	9	10	11	10	12	12	12	12	11	8	4	3	4	4	7.9	
18-Aug-05	2	0	0	0	-1	-2	0	3	6	9	11	13	15	16	17	17	16	16	14	11	9	9	9	9	8.6	
19-Aug-05	8	8	7	5	5	6	6	8	10	12	16	19	21	22	23	23	24	24	23	21	17	13	12	13	14.3	
20-Aug-05	13	13	13	13	14	13	14	13	14	16	18	20	22	22	22	23	22	22	20	15	13	15	15	15	17.0	
21-Aug-05	15	14	13	12	11	11	11	11	11	12	12	13	13	14	15	15	15	13	11	11	11	10	9	9	12.2	
22-Aug-05	9	8	7	6	6	5	6	9	10	11	12	14	15	16	17	17	16	16	15	12	9	8	8	9	10.8	
23-Aug-05	7	8	7	5	3	3	3	6	9	12	14	16	15	15	16	15	15	14	12	9	6	5	4	4	9.7	
24-Aug-05	3	3	2	2	1	0	1	3	5	7	11	16	18	18	19	19	20	20	18	16	12	9	7	5	9.7	
25-Aug-05	4	5	4	4	2	3	3	6	8	12	16	18	21	22	23	24	25	25	24	21	15	13	11	10	13.4	
26-Aug-05	9	8	8	8	6	6	7	10	13	16	20	21	22	23	23	23	22	22	19	14	12	11	10	10	14.8	
27-Aug-05	9	8	7	7	5	6	5	10	13	17	20	22	23	P	P	25	24	23	22	20	18	19	19	19	15.4	
28-Aug-05	18	17	15	13	14	12	12	13	15	15	15	18	17	17	18	17	17	16	14	12	11	11	11	11	14.7	
29-Aug-05	11	10	10	9	8	6	5	5	4	4	3	4	4	4	5	5	5	6	6	6	5	3	2	2	5.4	
30-Aug-05	3	3	3	2	2	2	2	3	4	5	9	13	15	15	15	15	16	15	13	11	8	7	7	8.4		
31-Aug-05	7	6	5	4	5	5	6	7	10	11	14	15	16	16	17	17	16	15	14	11	9	10	8	7	10.5	
Hourly Avg	8.8	8.6	8.1	7.6	7.0	6.7	7.3	9.0	10.5	12.3	13.8	15.2	16.0	16.3	16.5	17.2	17.3	17.0	16.3	14.7	12.3	10.4	9.6	9.2		
Hourly Max	18.1	17.0	14.9	14.1	14.8	13.8	15.1	16.4	17.8	18.9	20.0	21.5	23.2	22.9	23.4	24.6	24.8	24.9	24.3	21.6	18.3	18.5	18.6	18.8		

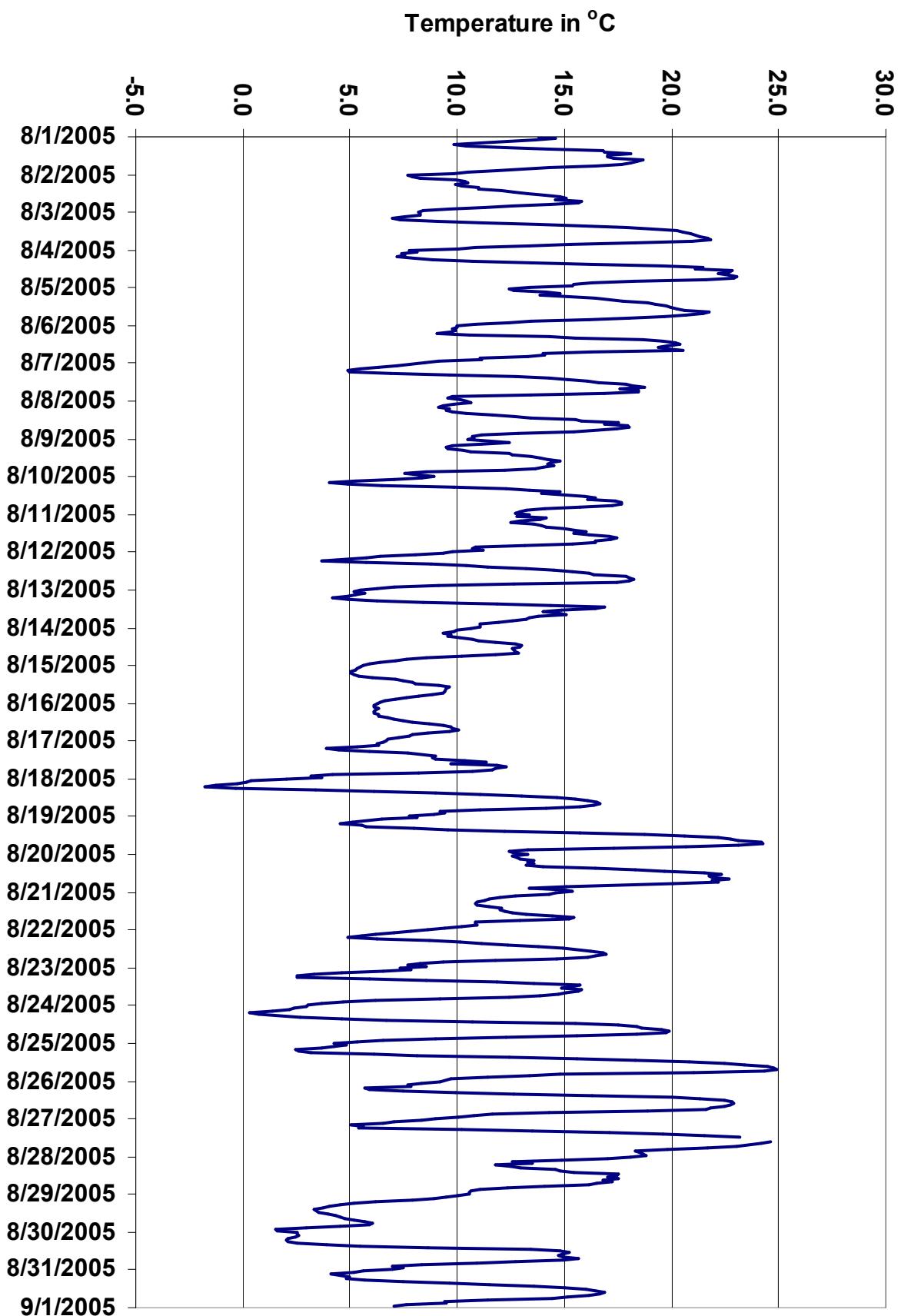


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

## PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

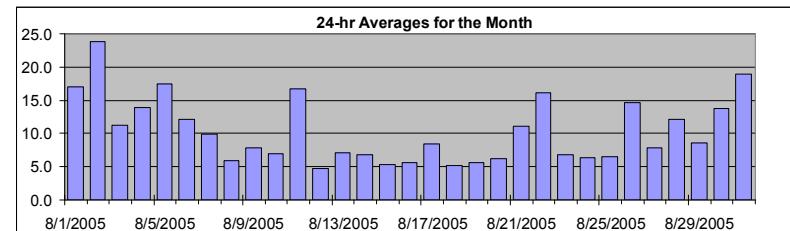
### Summary

Maximum 1-hr Average:	34.9	km/hr	2-Aug	8:00 9:00
Maximum 24-hr Value:	23.8	km/hr	2-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	742 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%
Percentile				AverageS
99	95	75	50	25 5 1
31.1	26.0	12.8	8.0	5.7 3.2 1.9 10.3 km/hr

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hr Scalar Average	Daily Max
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Aug-05	10	15	9	4	4	5	8	8	7	21	25	30	26	29	23	28	26	22	18	21	21	18	16	14	17.0	30.4							
2-Aug-05	10	14	15	27	27	25	28	31	35	31	32	30	29	28	34	31	28	29	23	17	11	11	13	12	23.8	34.9							
3-Aug-05	15	13	15	15	14	16	7	8	7	13	8	14	19	17	17	15	15	13	7	2	4	4	7	6	11.3	18.6							
4-Aug-05	5	5	7	9	8	8	8	9	10	11	14	26	24	25	30	24	20	20	17	12	10	11	12	12	14.0	30.0							
5-Aug-05	10	11	11	16	16	15	17	19	22	29	30	27	25	26	24	27	22	18	10	8	7	8	10	11	17.4	29.6							
6-Aug-05	11	11	11	10	9	8	7	10	11	15	20	19	22	18	15	8	8	21	11	7	8	8	12	11	12.1	21.7							
7-Aug-05	15	12	13	13	14	14	5	7	5	10	14	14	12	11	10	11	11	7	7	4	3	4	5	9.8	14.6								
8-Aug-05	3	16	7	4	5	9	10	7	5	5	3	4	5	7	7	4	5	5	5	3	4	6	7	8	5.9	15.8							
9-Aug-05	8	9	15	12	13	11	8	9	10	7	9	9	8	7	8	7	7	5	2	4	6	4	2	7.8	14.9								
10-Aug-05	1	2	3	3	2	4	4	1	2	5	7	4	8	7	8	9	13	14	12	10	9	11	12	13	6.9	13.8							
11-Aug-05	13	13	19	17	10	12	19	22	22	22	24	22	24	19	22	22	22	20	17	13	8	8	6	6	16.7	24.5							
12-Aug-05	5	7	5	7	7	3	3	4	4	4	3	5	5	4	3	6	5	6	5	2	3	4	6	5	4.7	7.4							
13-Aug-05	6	7	6	7	7	8	8	8	8	7	6	13	19	15	7	4	8	8	4	4	2	2	3	3	7.1	18.6							
14-Aug-05	5	6	6	7	5	3	4	7	7	8	6	6	8	7	6	7	8	8	8	7	9	9	10	8	6.9	10.1							
15-Aug-05	4	3	3	3	4	4	4	6	6	6	6	6	6	7	8	10	7	6	8	6	5	3	3	3	5.3	9.9							
16-Aug-05	3	5	6	6	6	5	7	8	9	7	6	6	5	6	6	4	7	6	6	5	3	5	6	5.7	8.6								
17-Aug-05	6	5	7	9	8	8	8	9	9	7	9	11	12	11	10	14	13	8	9	6	6	7	6	8.4	13.5								
18-Aug-05	1	4	4	3	5	3	3	3	4	5	6	5	5	6	6	6	8	9	10	7	6	5	5	5.2	9.9								
19-Aug-05	4	4	4	4	5	3	5	7	8	6	5	6	8	8	10	6	6	8	7	4	3	3	4	5.6	9.8								
20-Aug-05	5	4	5	6	6	5	6	5	4	9	8	9	12	13	10	6	8	6	3	2	1	5	4	6.2	13.0								
21-Aug-05	7	6	6	6	11	12	7	4	7	8	10	9	13	13	10	9	9	13	22	12	13	18	15	22.0	11.1	22.0							
22-Aug-05	19	18	17	18	13	14	15	21	22	21	20	24	20	17	18	18	17	17	14	10	10	7	6	12	16.1	23.6							
23-Aug-05	12	9	7	8	9	7	5	4	4	5	6	7	5	6	10	8	7	10	9	8	3	3	5	5	6.7	11.8							
24-Aug-05	6	4	6	7	5	3	4	6	7	8	7	8	9	11	10	8	6	9	7	2	2	4	5	6.3	11.1								
25-Aug-05	5	4	7	9	9	7	8	9	9	9	9	8	8	6	8	4	4	4	2	2	5	6	6.5	9.5									
26-Aug-05	5	6	8	7	8	8	7	8	9	10	18	23	25	33	30	27	26	21	22	16	6	8	8	11	14.6	32.5							
27-Aug-05	12	11	8	5	6	6	6	7	4	5	7	9	8	P	P	4	7	7	7	8	10	10	17	7.8	16.7								
28-Aug-05	17	15	8	7	6	5	6	5	9	31	31	15	25	21	22	14	10	6	7	7	6	8	6	4	12.1	31.2							
29-Aug-05	9	11	12	13	10	12	11	13	11	10	10	10	8	5	8	7	5	5	7	7	6	7	5	8.6	13.3								
30-Aug-05	5	3	4	4	8	7	9	10	9	7	8	15	24	25	29	28	20	21	20	16	15	12	13	17	13.8	29.3							
31-Aug-05	15	11	12	13	14	11	13	13	20	24	25	28	27	28	30	34	29	27	23	10	10	10	11	13	18.9	33.8							

1-hr Average 8.1 8.5 8.6 9.0 8.8 8.4 8.5 9.3 9.8 11.8 12.7 13.6 14.7 14.6 14.7 13.4 12.7 12.2 10.8 8.1 6.8 7.2 7.7 8.4

Hourly Max 19.0 18.1 19.2 26.7 26.5 24.8 28.4 31.2 34.9 31.2 31.7 30.4 29.5 32.5 34.1 33.8 29.5 28.7 23.4 20.6 20.6 18.5 16.2 22.0

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

Station: Smoky Heights  
Station Owner: PASZA

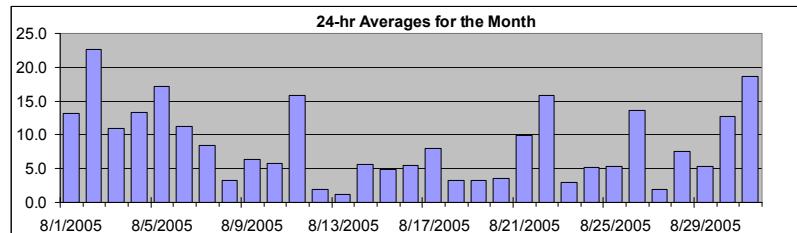
Monitoring Dates: August 1, 2005 to September 1, 2005

#### HOURLY AVERAGE TABLE

#### Wind Speed (WSv)

##### Summary

Maximum 1-hr Average:	34.8	km/hr	2-Aug	8:00 9:00
Maximum 24-hr Value:	22.7	km/hr	2-Aug	



Calm Time:	4 hrs	1% calms	Operational Time:	738 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%					
Percentile	99	95	75	50	25	5	1	AverageV	
	30.9	25.8	12.7	7.6	5.1	2.5	1.4		35.8 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

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Max
Hour 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	24-hr Vector Average	
1-Aug-05	9	15	9	4	4	3	4	6	6	21	25	30	26	29	23	27	26	21	18	20	20	18	16	14	13.2	30.2
2-Aug-05	10	14	15	27	26	25	28	31	35	31	32	30	29	28	34	31	28	28	22	17	10	11	13	12	22.7	34.8
3-Aug-05	15	13	15	14	14	16	6	8	6	13	6	13	18	16	16	14	15	12	7	2	4	4	7	6	10.9	17.9
4-Aug-05	4	5	7	9	7	8	8	8	9	10	13	26	24	25	30	23	20	20	17	12	10	10	12	12	13.3	29.8
5-Aug-05	10	11	10	16	16	15	16	19	22	28	29	26	24	26	24	27	22	18	10	8	7	8	10	10	17.2	29.2
6-Aug-05	11	11	11	10	9	8	7	9	11	15	20	18	21	17	15	8	8	8	6	8	6	11	11	11	11.3	21.5
7-Aug-05	15	12	13	13	14	14	5	7	4	9	14	13	14	12	10	9	11	11	6	7	4	2	4	4	8.5	14.6
8-Aug-05	2	16	7	3	4	8	9	7	5	4	2	2	3	6	4	2	3	3	4	2	4	6	6	8	3.3	15.5
9-Aug-05	8	8	15	12	13	11	8	8	9	7	9	8	8	6	8	7	6	5	2	4	6	4	1	6.3	14.6	
10-Aug-05	1	2	3	2	2	4	4	calm	2	4	6	3	6	5	7	7	12	13	12	10	9	11	12	13	5.8	13.2
11-Aug-05	13	13	19	17	9	10	19	22	21	22	24	21	23	18	21	22	21	19	16	12	7	8	5	6	15.9	24.0
12-Aug-05	5	7	5	7	6	2	3	3	4	3	calm	1	2	1	3	2	4	5	5	2	3	4	6	5	1.9	7.3
13-Aug-05	6	7	6	7	7	8	8	8	8	6	5	12	18	15	7	4	8	8	4	4	1	calm	3	3	1.2	18.3
14-Aug-05	5	6	6	7	5	2	4	7	7	8	5	5	8	7	6	6	7	7	7	9	9	10	7	5.6	9.9	
15-Aug-05	3	3	3	2	4	4	4	6	6	6	5	6	6	5	7	9	7	5	8	6	5	3	3	4.9	9.4	
16-Aug-05	3	5	6	6	6	5	7	8	9	7	6	6	5	6	6	4	6	6	5	5	3	5	6	5.5	8.5	
17-Aug-05	6	5	7	9	8	7	8	9	8	7	8	10	11	10	9	13	12	7	8	6	6	7	6	5	8.0	13.1
18-Aug-05	1	3	3	3	5	1	3	3	4	5	6	3	2	5	5	5	6	9	10	7	6	5	5	5	3.3	9.7
19-Aug-05	4	4	3	3	4	3	5	6	7	6	6	4	5	6	7	9	5	5	8	7	3	3	3	3.2	8.6	
20-Aug-05	4	4	5	6	4	4	4	4	2	9	8	9	11	12	9	6	8	5	1	2	1	5	4	3.6	12.1	
21-Aug-05	7	6	6	6	11	10	5	4	7	8	10	9	13	12	10	9	9	12	21	12	13	18	15	22	9.9	21.9
22-Aug-05	19	18	17	18	13	14	15	21	22	21	20	23	20	16	17	16	17	14	10	10	7	6	12	15.9	23.3	
23-Aug-05	11	8	6	7	8	7	5	4	3	4	5	5	3	4	9	2	7	10	8	8	3	2	4	4	2.9	11.2
24-Aug-05	6	4	6	6	5	3	4	6	7	8	6	7	8	10	9	9	7	5	8	6	2	2	4	5	5.2	10.3
25-Aug-05	4	4	7	9	9	7	8	9	9	9	9	7	7	6	4	3	1	3	3	1	2	5	5	5.3	9.2	
26-Aug-05	5	6	8	7	8	8	7	7	9	9	17	23	24	32	30	27	26	21	22	16	6	8	8	11	13.6	32.2
27-Aug-05	12	10	7	5	5	5	7	4	5	7	8	7	P	P	calm	7	7	7	7	8	9	9	16	2.0	16.5	
28-Aug-05	17	15	8	6	6	5	6	3	9	31	31	15	24	21	21	14	7	6	7	6	6	6	6	3	7.5	31.0
29-Aug-05	8	11	11	13	10	12	11	13	11	10	10	10	7	5	8	7	5	5	6	7	7	6	7	5	5.4	13.0
30-Aug-05	5	3	4	4	8	7	9	10	9	7	8	12	24	25	29	28	20	21	20	16	15	12	13	16	12.8	28.9
31-Aug-05	15	11	12	13	13	11	13	13	20	24	25	28	27	28	29	33	29	27	23	10	9	10	11	13	18.7	33.3
1-hr Vector	4.7	4.6	4.8	5.4	5.7	5.8	5.0	4.7	4.4	6.0	7.1	8.5	9.0	9.8	9.3	8.3	7.4	7.0	5.4	3.5	3.5	4.7	4.6	5.6		
Hourly Max	18.9	18.0	19.1	26.6	26.3	24.7	28.3	31.1	34.8	31.0	31.5	30.2	29.3	32.2	33.9	33.3	29.2	28.0	23.3	20.4	20.4	18.1	16.2	21.9		

**PASZA - Smoky Heights Wind Direction Monthly Summary**

Station: Smoky Heights  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

**HOURLY AVERAGE TABLE****Wind Direction (WD)****Summary**





Calm Time:	0 hrs	0% calms	Operational Time:	742 hrs							
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%							
Percentile	99	95	75	50	25	5	1	Average			
	356.7	342.6	272.1	245.2	177.7	23.7	3.8		266 deg		

**Status Flag Characters**

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Aug-05	48	60	59	28	351	343	249	210	201	257	254	251	252	249	259	252	263	255	252	248	248	254	242	237	254	WSW
2-Aug-05	225	213	221	240	248	256	261	263	267	263	267	284	286	291	275	272	269	278	282	274	278	260	262	249	266	W
3-Aug-05	256	270	268	270	268	268	255	233	238	252	247	227	254	257	245	236	240	257	230	208	231	243	270	251	252	WSW
4-Aug-05	225	261	232	204	202	209	208	205	205	224	222	259	251	248	256	254	245	252	245	258	249	226	225	241	240	WSW
5-Aug-05	262	252	250	261	265	264	260	259	261	270	271	275	283	276	278	276	283	281	273	252	260	278	277	273	270	W
6-Aug-05	280	267	267	265	253	258	226	236	246	256	269	277	287	278	293	289	278	275	302	200	226	241	302	265	269	W
7-Aug-05	273	270	270	269	273	273	253	250	254	311	314	322	324	319	299	320	305	319	356	24	351	301	332	338	299	WNW
8-Aug-05	223	270	258	307	240	283	346	358	22	11	297	256	280	303	7	83	30	50	72	105	286	289	281	270	308	NW
9-Aug-05	263	286	337	356	356	355	1	23	22	25	34	37	48	41	31	34	41	41	7	358	342	323	312	326	7	N
10-Aug-05	57	248	267	348	2	274	271	135	123	174	235	301	228	277	288	276	273	297	301	287	269	273	277	274	276	W
11-Aug-05	270	262	298	302	286	298	327	322	325	330	325	327	311	322	324	330	329	329	327	323	326	317	345	357	318	NW
12-Aug-05	36	41	25	12	15	313	2	60	86	179	184	231	255	291	55	313	315	310	317	218	255	283	279	240	326	NW
13-Aug-05	213	205	214	212	219	216	217	203	179	172	127	46	49	41	45	44	32	53	84	54	218	238	266	305	113	ESE
14-Aug-05	313	308	317	298	314	328	333	0	8	21	17	11	351	341	350	352	18	54	14	35	48	51	49	54	7	N
15-Aug-05	46	346	354	6	25	31	41	51	58	69	72	65	93	73	80	87	69	57	68	80	62	41	27	34	60	ENE
16-Aug-05	36	23	26	27	29	57	34	30	36	41	28	26	10	351	360	31	29	17	27	38	356	356	1	9	23	NNE
17-Aug-05	2	353	354	359	353	340	342	353	7	26	351	332	330	332	339	342	355	349	324	318	332	307	308	324	343	NNW
18-Aug-05	40	338	81	275	251	266	183	172	170	166	136	219	127	187	138	125	114	106	97	87	83	121	151	148	134	SE
19-Aug-05	149	152	244	246	245	239	245	199	187	180	175	193	172	146	144	116	109	114	116	93	59	15	338	249	161	SSE
20-Aug-05	244	209	200	231	319	163	282	217	109	110	132	154	164	195	191	186	196	177	155	262	342	311	327	275	194	SSW
21-Aug-05	302	316	192	202	241	250	183	190	180	205	255	246	228	215	206	221	211	251	257	241	220	244	241	242	234	SW
22-Aug-05	235	234	244	259	264	263	257	258	258	260	259	258	258	253	259	263	259	269	266	268	268	272	272	226	257	WSW
23-Aug-05	195	197	225	244	235	197	234	217	243	186	121	232	345	308	120	86	357	318	304	303	0	216	228	247	238	WSW
24-Aug-05	264	258	258	251	208	211	201	206	188	165	178	190	170	182	168	198	224	222	155	160	187	270	241	261	201	SSW
25-Aug-05	243	231	237	222	230	213	201	197	185	186	178	181	190	209	221	199	246	102	93	57	190	248	248	228	206	SSW
26-Aug-05	231	225	198	201	251	252	226	226	185	183	246	260	259	260	265	261	242	241	251	268	260	270	261	269	249	WSW
27-Aug-05	274	247	228	223	226	258	241	197	206	132	124	146	148	P	P	285	67	49	44	34	38	64	105	145	154	SSE
28-Aug-05	161	164	195	211	183	204	218	283	236	265	270	269	256	258	259	274	317	15	18	25	326	283	95	23	255	WSW
29-Aug-05	357	0	16	34	18	359	12	10	6	352	353	353	342	348	306	292	303	268	238	223	208	210	219	263	344	NNW
30-Aug-05	246	254	205	177	208	216	211	219	209	190	185	216	250	249	255	255	256	268	249	241	245	261	267	258	243	WSW
31-Aug-05	245	221	231	231	242	245	256	251	248	250	255	264	261	256	248	253	254	254	248	260	255	238	255	251	251	WSW
Hourly Avg	254	255	260	264	264	264	258	250	255	262	268	269	268	268	268	276	281	279	272	270	270	268	258	258		

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

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	742 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%
Percentile	99	95	75	50
	58.5	42.9	16.9	9.6
	4.2	6.4	3.6	2.5

#### Status Flag Characters

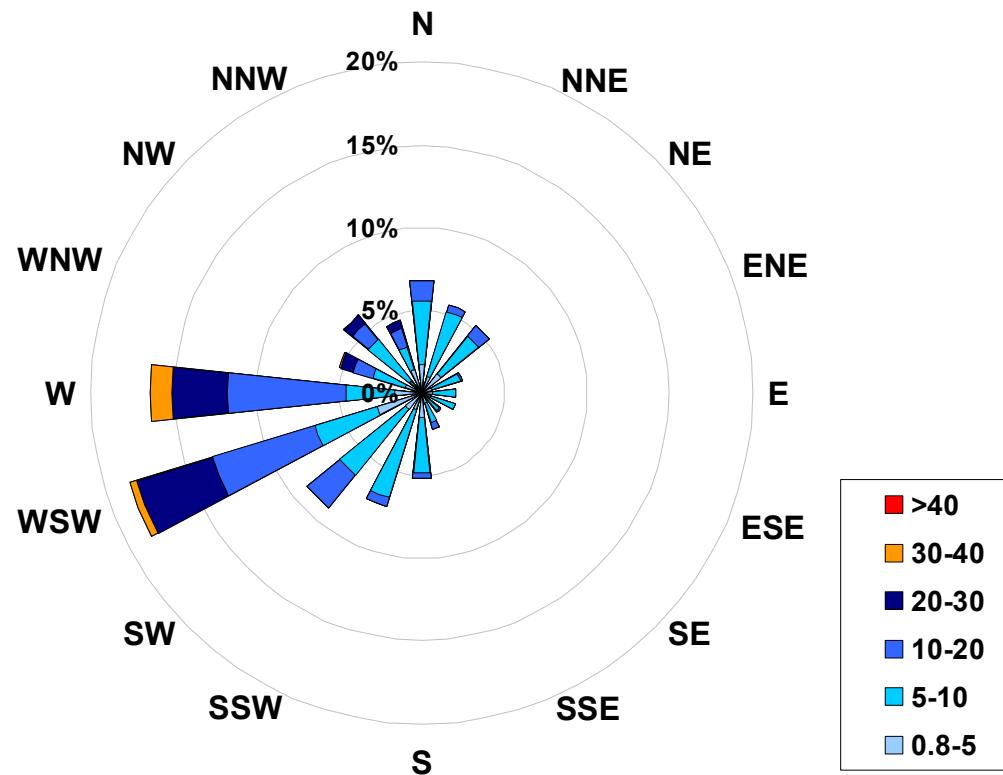
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

#### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-05	9	5	7	16	22	19	44	22	19	7	6	5	6	4	7	8	9	9	7	5	5	5	5	4	5	43.7
2-Aug-05	6	4	6	4	4	4	4	4	5	4	5	5	5	6	6	7	5	6	9	5	20	18	2	3		19.9
3-Aug-05	3	3	4	2	3	3	34	14	21	9	34	17	12	15	19	11	11	12	13	18	6	10	6	8		34.0
4-Aug-05	13	11	10	6	6	3	7	16	9	11	17	8	7	10	7	7	8	8	6	5	11	7	8	5		16.5
5-Aug-05	4	4	7	5	3	5	4	4	6	6	9	8	8	7	11	11	7	7	4	5	5	6	5	5		11.2
6-Aug-05	6	4	4	3	5	10	7	8	7	10	11	12	8	8	8	13	16	10	17	10	4	9	5	7		17.4
7-Aug-05	4	4	4	3	3	3	26	8	34	21	13	18	13	21	22	22	10	10	16	7	7	23	5	40		40.5
8-Aug-05	35	15	9	16	25	12	6	12	12	26	45	70	48	33	31	32	51	45	20	37	19	9	5	5		69.7
9-Aug-05	5	7	6	7	4	6	8	8	9	19	12	15	22	14	22	14	11	19	15	18	8	6	5	51		51.1
10-Aug-05	24	39	10	24	13	20	9	47	51	31	36	29	36	44	19	32	18	14	10	6	3	4	3	3		51.1
11-Aug-05	2	4	7	4	7	11	7	7	8	10	11	13	7	13	9	11	11	9	7	7	6	3	27	9		27.2
12-Aug-05	9	8	7	5	43	12	13	16	33	45	63	49	77	58	51	60	52	37	10	30	13	12	6	11		77.3
13-Aug-05	10	8	9	3	30	5	6	5	8	12	21	11	10	8	15	24	16	9	21	12	64	48	15	13		64.5
14-Aug-05	8	7	5	6	10	13	21	11	9	10	20	30	13	12	12	10	15	8	8	9	7	7	8	7		30.1
15-Aug-05	11	13	14	17	10	10	8	9	9	15	20	26	18	29	43	14	22	16	10	6	7	12	9	9		43.3
16-Aug-05	8	10	8	6	6	8	6	6	7	11	12	13	15	15	13	22	11	15	16	10	11	6	5	8		22.3
17-Aug-05	10	9	8	8	8	6	7	11	17	25	16	15	19	28	17	13	18	17	12	15	9	11	8	10		28.0
18-Aug-05	33	44	14	28	15	35	18	17	15	19	29	59	49	46	42	38	34	16	9	5	6	9	11	11		59.2
19-Aug-05	30	17	20	11	6	8	5	12	11	17	22	42	41	49	37	38	27	39	7	4	15	12	10	12		48.6
20-Aug-05	7	9	11	13	25	47	37	39	23	8	18	15	20	20	12	18	14	35	41	21	41	12	8	52		52.4
21-Aug-05	14	19	12	8	5	20	27	11	9	9	15	10	8	7	7	14	9	10	6	6	6	4	4	4		27.4
22-Aug-05	3	4	3	3	4	4	4	3	4	5	8	9	12	12	13	11	12	5	3	6	2	5	11	6		13.3
23-Aug-05	5	13	18	9	13	7	13	16	28	38	37	45	33	33	34	50	18	13	9	11	23	64	30	14		63.9
24-Aug-05	7	14	11	18	8	45	31	10	8	9	20	18	20	23	24	29	22	37	14	4	13	17	9	3		44.9
25-Aug-05	6	10	5	3	4	6	4	6	5	10	13	17	31	30	37	47	47	44	29	13	42	8	6	8		47.4
26-Aug-05	8	5	3	10	4	6	8	7	6	8	12	7	8	7	10	8	7	7	6	6	12	9	6	2		12.1
27-Aug-05	3	8	8	13	9	9	7	23	21	17	15	31	P	P	51	13	9	4	11	10	10	10	5		51.2	
28-Aug-05	5	4	10	19	8	18	10	62	20	6	5	15	9	10	9	9	19	14	9	11	22	30	22	27		61.7
29-Aug-05	10	9	7	8	8	7	7	6	8	9	9	9	13	22	11	10	13	21	11	6	5	10	10	7		21.7
30-Aug-05	13	14	15	11	7	5	4	7	7	9	12	19	9	8	8	6	5	7	6	3	3	3	6	2		19.5
31-Aug-05	2	8	7	4	8	4	5	4	5	6	7	10	10	8	11	8	6	6	5	5	7	4	5	5		10.5

Hourly Max	35	44	20	28	43	47	44	62	51	45	63	70	77	58	51	60	52	45	41	37	64	64	30	52	
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**1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for  
August 2005**



Calms: 0%

Frequency Distribution of Wind in km/hr			
Range		Frequency (hrs)	
0.8	< 5	140	
5	to 10	337	
10	to 20	175	
20	to 30	76	
30	to 40	14	
>	40	0	
Total Non-Zero Values			742

# PASZA – Beaverlodge Station

## Monthly Summary Tables, Graphs, and Roses

**PASZA - Beaverlodge AQI Monthly Summary**

Station: Beaverlodge  
 Station Owner: PASZA

**Air Quality Index (AQI)**

Monitoring Dates: August 1, 2005 to September 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:	716
Number of 1-hr Fair Readings:	8
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	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	7	5	6	6	4	3	6	8	10	13	14	16	14	14	15	15	15	15	14	14	14	12	11	11			
2-Aug-05	9	11	12	12	10	9	8	8	8	8	9	9	9	9	9	10	11	11	9	9	8	6	8	6			
3-Aug-05	5	5	5	5	4	4	4	5	7	9	12	13	14	15	16	16	16	16	12	14	9	9	12	10			
4-Aug-05	8	10	9	8	6	5	5	6	7	8	9	11	11	10	12	14	15	15	15	13	12	10	12	11			
5-Aug-05	11	12	12	11	11	11	11	12	12	14	14	14	15	14	15	14	15	14	14	12	12	11	11	10			
6-Aug-05	11	11	11	11	8	5	6	9	11	12	12	12	11	11	12	13	12	12	11	11	15	17	15	14	16		
7-Aug-05	15	15	12	11	9	8	7	7	9	9	11	12	13	14	14	14	12	12	12	12	9	9	9	14			
8-Aug-05	15	11	10	11	7	6	6	6	7	9	11	12	13	13	13	12	13	13	14	13	12	15	15	13			
9-Aug-05	14	13	13	12	10	11	11	12	12	12	13	16	17	15	16	16	13	11	11	12	9	7	8	7			
10-Aug-05	7	7	6	3	3	1	7	5	6	9	13	16	17	17	18	18	18	16	16	14	11	9	11	11			
11-Aug-05	10	7	5	5	5	5	7	9	10	11	11	12	12	12	12	12	12	12	11	13	14	13	12	10	10		
12-Aug-05	A	11	10	9	9	10	10	10	10	11	12	15	16	16	17	18	18	18	19	18	13	12	12	13			
13-Aug-05	12	6	5	3	2	3	4	9	6	8	15	19	23	21	28	30	28	29	28	28	27	31	19	20			
14-Aug-05	21	20	19	14	12	11	13	10	11	11	11	11	11	11	14	13	12	11	10	10	9	11	11	11			
15-Aug-05	10	11	10	10	9	8	6	7	8	8	7	9	9	10	10	10	10	9	9	7	6	6	7				
16-Aug-05	7	8	8	10	9	9	9	8	9	10	10	10	10	11	10	10	10	10	10	9	8	4	3	5			
17-Aug-05	6	5	3	4	6	5	5	5	5	6	9	13	13	14	14	14	15	14	14	13	12	9	5	5			
18-Aug-05	8	9	6	3	3	5	3	4	6	9	A	16	17	17	16	17	18	17	15	12	11	11	10				
19-Aug-05	9	9	6	6	4	4	5	6	9	9	11	13	14	A	A	A	13	13	11	9	10	10	9	10			
20-Aug-05	11	9	9	11	5	8	13	7	11	8	12	17	20	19	19	16	15	15	15	12	A	A	A				
21-Aug-05	A	A	A	A	A	A	A	A	A	A	A	18	18	18	18	17	15	16	15	15	13	14	15	14			
22-Aug-05	14	14	12	11	11	9	9	10	12	13	13	14	14	14	14	13	12	11	10	11	11	10	11				
23-Aug-05	8	9	9	9	8	8	7	7	7	9	11	13	14	13	13	15	16	16	11	11	11	12	9	9			
24-Aug-05	6	7	6	5	5	4	3	12	4	6	8	13	17	18	19	19	19	19	18	17	15	16	14	14	14		
25-Aug-05	12	10	11	7	7	6	5	6	8	10	12	15	17	16	16	16	16	16	16	14	9	12	11	11	9		
26-Aug-05	7	8	7	7	7	7	6	10	10	16	21	20	19	19	19	19	20	21	20	19	16	16	15	16			
27-Aug-05	15	15	14	13	12	12	9	8	9	7	12	16	19	22	23	23	22	24	23	22	19	18	17	13			
28-Aug-05	10	8	6	8	8	7	7	8	20	23	22	22	23	22	22	23	22	22	19	19	22	18	14	15	15		
29-Aug-05	14	9	7	7	6	6	7	7	7	7	7	7	8	9	9	9	10	10	8	4	4	5	5	5			
30-Aug-05	4	4	4	2	2	2	1	4	5	7	10	13	14	14	14	15	15	15	16	14	14	14	14	13			
31-Aug-05	14	15	15	13	12	10	10	11	12	15	16	17	17	18	19	19	19	18	19	19	17	17	16	15	14		

## PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

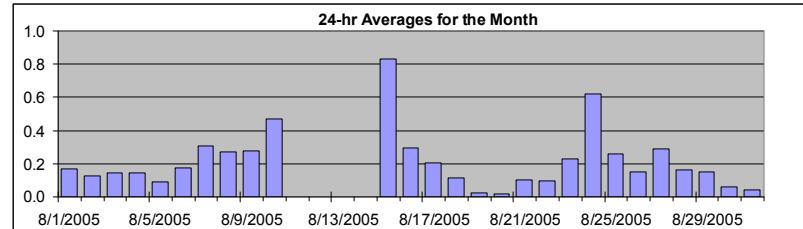
Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

**Summary**

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	6.6 ppb 24-Aug 18:00 19:00
Maximum 24-hr Average:	0.8 ppb 15-Aug

### HOURLY AVERAGE TABLE

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



AIC Time:	0 hrs		Operational Time:	668 hrs	
Calibration Time:	6 hrs		AMD Operational Uptime:	90.6%	
Percentile	99	95	75	50	25 5 1
	1.8	0.7	0.3	0.2	0.1 0.0
					Average 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**

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
2-Aug-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	0.1	0.4	
3-Aug-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	0.1	0.4
4-Aug-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	0.1	0.3
5-Aug-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	0.1	0.2
6-Aug-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	0.3
7-Aug-05	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
8-Aug-05	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
9-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
10-Aug-05	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	1	0	1	1	0	0	0	1	1	0	0.5	1.2	
11-Aug-05	0	0	0	0	1	2	1	0	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1.6		
12-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0		
13-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0		
14-Aug-05	N	N	N	N	N	N	N	N	N	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	1.9			
15-Aug-05	1	0	0	0	2	2	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	1.9	
16-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
17-Aug-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	0.2
18-Aug-05	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	0.1	0.3		
19-Aug-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	0.0	0.2
20-Aug-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	0.0	0.2
21-Aug-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	0.1	0.2
22-Aug-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	0.1	0.3
23-Aug-05	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
24-Aug-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	0.6	6.6
25-Aug-05	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
26-Aug-05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
27-Aug-05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
28-Aug-05	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
29-Aug-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	0.1	0.5
30-Aug-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	0.1	0.2
31-Aug-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	0.0	0.1
Hourly Avg	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Hourly Max	1.2	0.6	0.5	0.6	1.7	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.2	0.7	0.9	0.6	1.3	6.6	1.1	0.5	0.8	0.7	2.2						

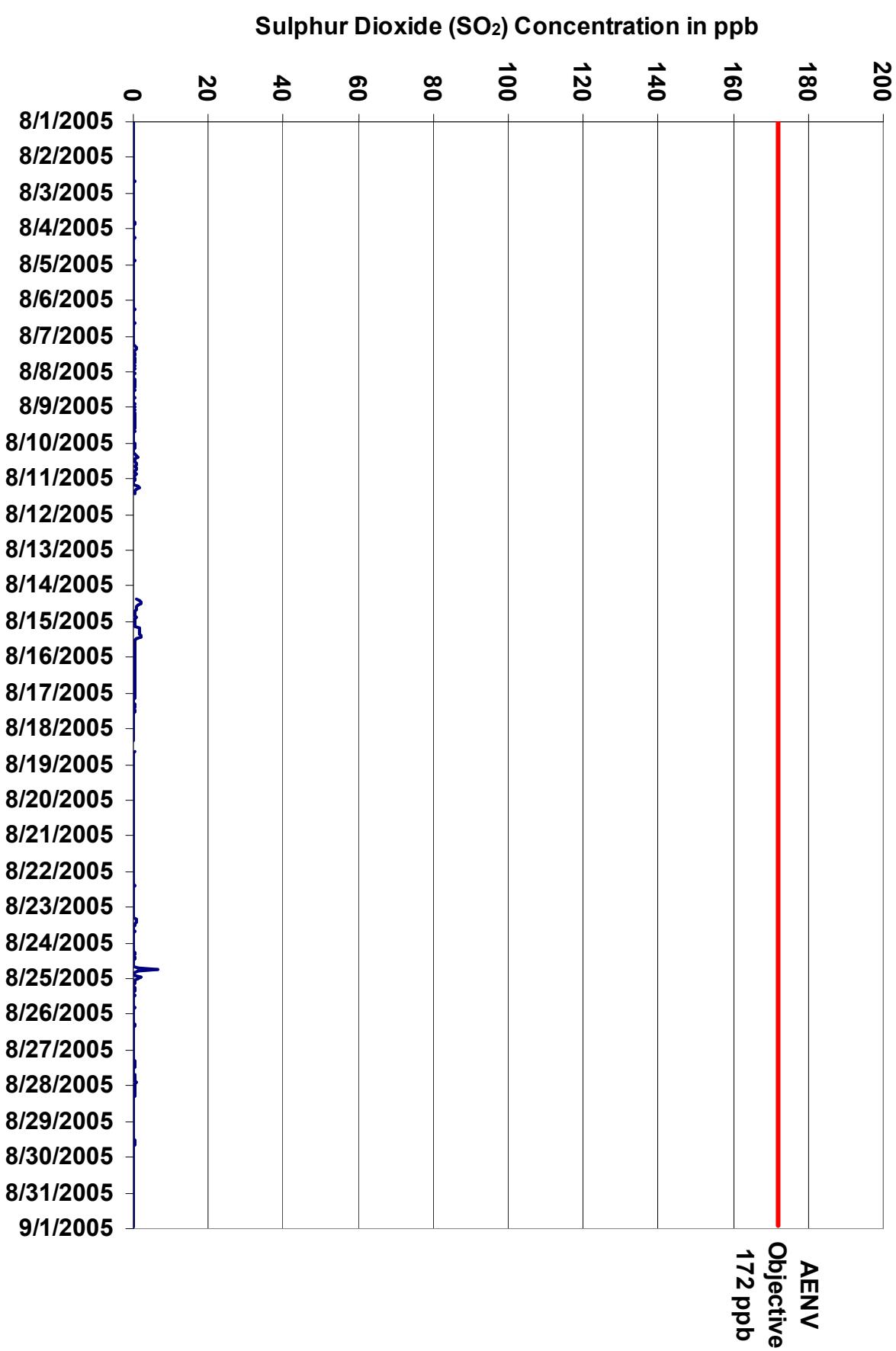


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

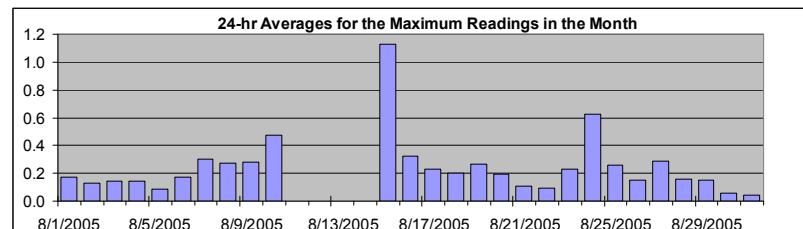
**Monitoring Dates:** August 1, 2005 to September 1, 2005

## HOURLY MAXIMUM TABLE

### Sulphur Dioxide ( $\text{SO}_2$ )

## Summary

Maximum 1-hr Value: 6.6 ppb 24-Aug 18:00  
Maximum 24-hr Value: 1.1 ppb 15-Aug



## Status Flag Characters

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

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

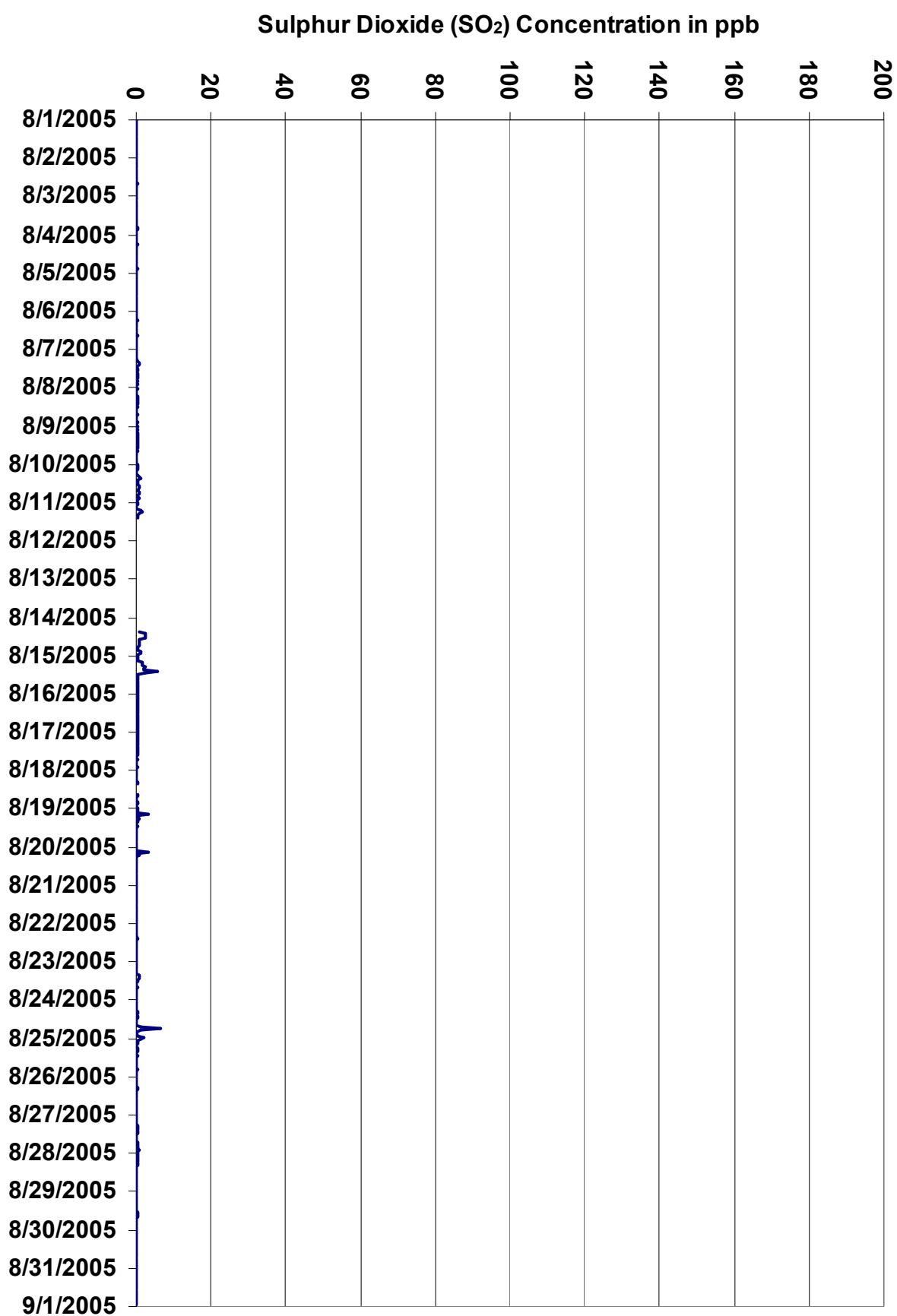
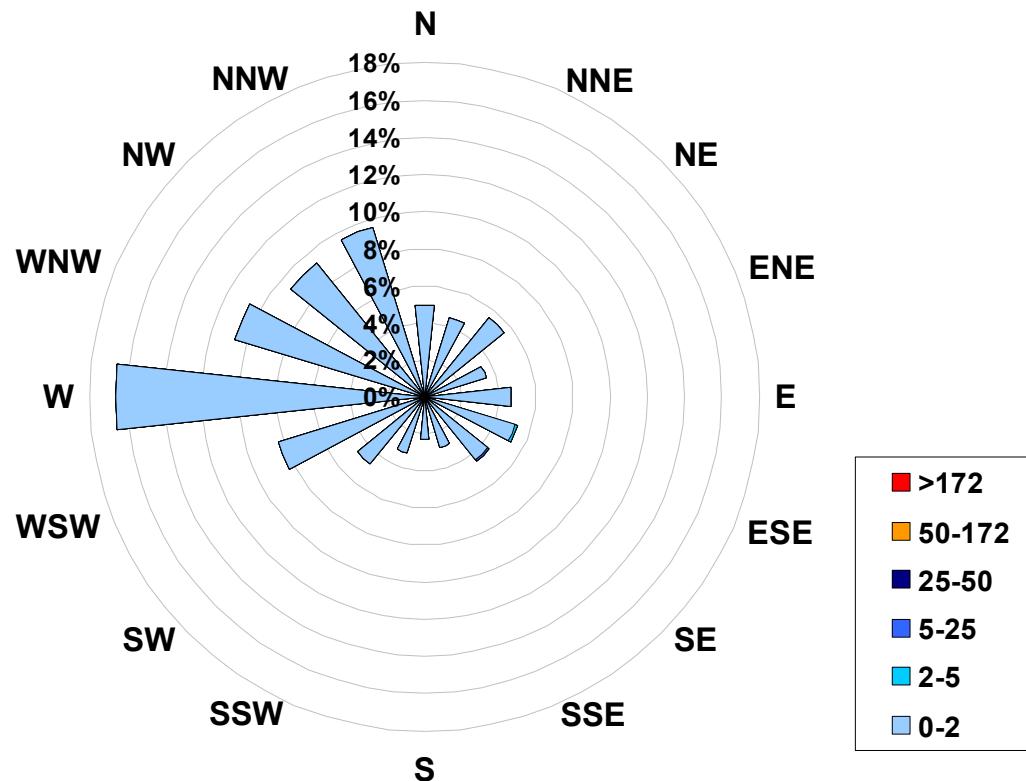


Figure 35. PASZA - Beaverlodge Sulphur Dioxide 1-hr Maximum Value Monthly Trend

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



Calms:	0%
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Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	666
2	to	5	1
5	to	25	1
25	to	50	0
50	to	172	0
> 172			0
Total Non-Zero Values			668

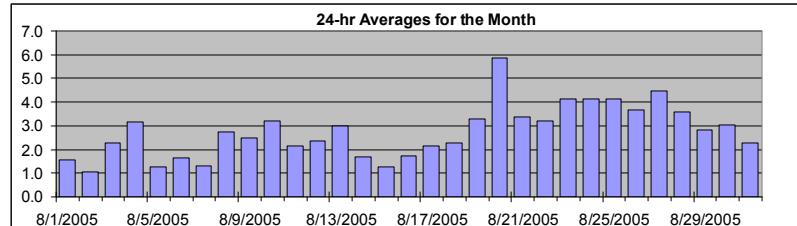
**PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary**

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

Objective Limit:	Alberta Environment:	1-hr 212 ppb	24-hr 106 ppb
<b>Summary</b>			
Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	10.9 ppb	3-Aug	13:00 14:00
Maximum 24-hr Average:	5.8 ppb	20-Aug	

AIC Time:	0 hrs	Operational Time:	732 hrs
Calibration Time:			AMD Operational Uptime: 98.9%
Percentile	99 95 75 50 25 5 1	Average	2.7 ppb
	8.9 6.8 3.9 2.0 1.0 0.6 0.0		

**HOURLY AVERAGE TABLE****Nitrogen Dioxide (NO<sub>2</sub>)****Status Flag Characters**

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

**Day Mountain Standard Time**

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	3	3	4	3	3	4	4	2	2	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	2	1.6	4.0
2-Aug-05	2	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	1	1	2	1	2	4	1	2	1.0	4.0	
3-Aug-05	2	1	2	2	3	4	2	1	1	1	1	0	0	1	0	1	1	4	3	11	8	2	2	2.3	10.9		
4-Aug-05	4	2	3	4	5	6	9	6	4	2	3	1	1	2	2	2	1	1	1	2	4	6	2	3	3.1	8.9	
5-Aug-05	2	1	0	0	1	1	2	1	1	0	1	1	1	1	1	1	1	1	1	2	3	3	3	2	1.3	3.0	
6-Aug-05	1	1	1	1	2	6	6	3	1	1	0	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1.7	6.0
7-Aug-05	2	1	1	2	2	2	2	2	1	1	1	1	1	0	0	1	1	2	1	1	1	2	3	1	1.3	3.0	
8-Aug-05	2	3	2	2	6	5	4	3	2	2	1	1	1	1	1	1	1	1	1	2	5	4	8	7	2.7	7.9	
9-Aug-05	9	3	3	6	2	2	2	1	1	1	1	1	1	1	1	1	2	3	2	2	4	4	3	4	2.5	8.9	
10-Aug-05	5	5	5	9	5	6	3	2	3	2	1	1	1	1	1	3	1	1	1	2	6	8	3	2	3.2	8.9	
11-Aug-05	2	5	4	3	3	3	7	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	2.2	7.0
12-Aug-05	2	2	2	2	2	1	1	2	2	1	1	1	2	11	1	1	1	1	1	2	7	4	4	3	2.4	10.9	
13-Aug-05	3	6	4	5	7	5	5	4	3	2	3	2	2	1	2	1	2	1	2	2	3	2	2	3	3.0	7.0	
14-Aug-05	3	4	3	2	2	3	4	4	3	2	2	2	1	1	0	1	1	1	1	1	1	1	1	0	1.7	4.0	
15-Aug-05	1	0	0	1	0	2	4	2	1	2	2	1	1	1	1	1	1	2	1	1	2	2	2	1	1.3	3.9	
16-Aug-05	2	2	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	9	8	3	1.7	8.5	
17-Aug-05	2	3	4	4	2	2	2	3	3	2	1	1	1	1	0	1	1	1	1	1	2	2	7	7	2.1	7.1	
18-Aug-05	3	2	5	6	5	5	3	3	2	2	2	1	0	1	1	1	1	1	1	4	3	2	1	1	2.3	6.4	
19-Aug-05	2	2	4	4	6	7	7	6	4	C	C	C	C	0	0	0	0	0	2	3	3	3	4	4	3.3	7.1	
20-Aug-05	4	5	7	7	8	6	10	6	4	4	4	4	4	5	5	5	6	6	7	7	9	N	N	N	5.8	9.6	
21-Aug-05	N	N	N	N	4	4	8	6	5	4	3	3	3	2	2	2	3	3	4	3	3	3	2	2	3.4	7.8	
22-Aug-05	2	1	2	1	3	4	5	4	3	2	2	3	3	3	3	3	5	4	4	5	6	5	4	3.2	5.9		
23-Aug-05	5	4	4	4	4	5	4	4	3	3	3	3	4	4	3	3	3	6	6	6	6	5	5	4.1	5.9		
24-Aug-05	7	5	5	4	4	6	5	4	3	3	4	3	2	2	2	2	2	3	4	7	5	7	6	6	4.1	6.8	
25-Aug-05	6	5	5	4	4	5	7	5	4	4	3	3	2	2	2	2	2	2	2	10	8	5	3	4	4.1	9.8	
26-Aug-05	6	5	6	5	5	5	5	5	5	4	2	2	2	2	2	2	2	2	2	3	5	4	4	3	3.7	5.9	
27-Aug-05	3	3	3	5	5	6	6	8	11	8	7	5	4	3	2	2	2	2	2	3	3	3	5	4	4.5	10.8	
28-Aug-05	7	8	7	6	6	6	7	5	2	2	2	1	2	2	2	2	2	2	2	3	2	3	3	3	3.6	7.8	
29-Aug-05	3	3	2	2	4	3	3	3	2	2	2	2	2	2	2	2	2	2	2	3	6	5	5	4	2.8	5.9	
30-Aug-05	5	5	5	6	9	7	5	3	3	2	2	1	1	1	1	1	2	2	2	2	3	2	3	3	3.1	8.8	
31-Aug-05	2	2	2	2	4	6	4	3	3	2	1	1	1	1	1	2	2	2	3	2	2	3	4	2.3	5.9		
Hourly Avg	3.3	3.1	3.2	3.4	3.6	3.9	4.5	3.5	2.9	2.2	1.9	1.6	1.5	1.7	1.4	1.4	1.6	1.7	2.1	2.8	3.6	3.8	3.4	3.2			
Hourly Max	8.9	7.8	6.8	8.9	8.8	6.8	9.6	7.8	10.8	7.8	6.8	4.9	4.8	10.9	5.1	5.9	6.3	6.5	6.8	9.8	10.9	8.5	7.9	7.0			

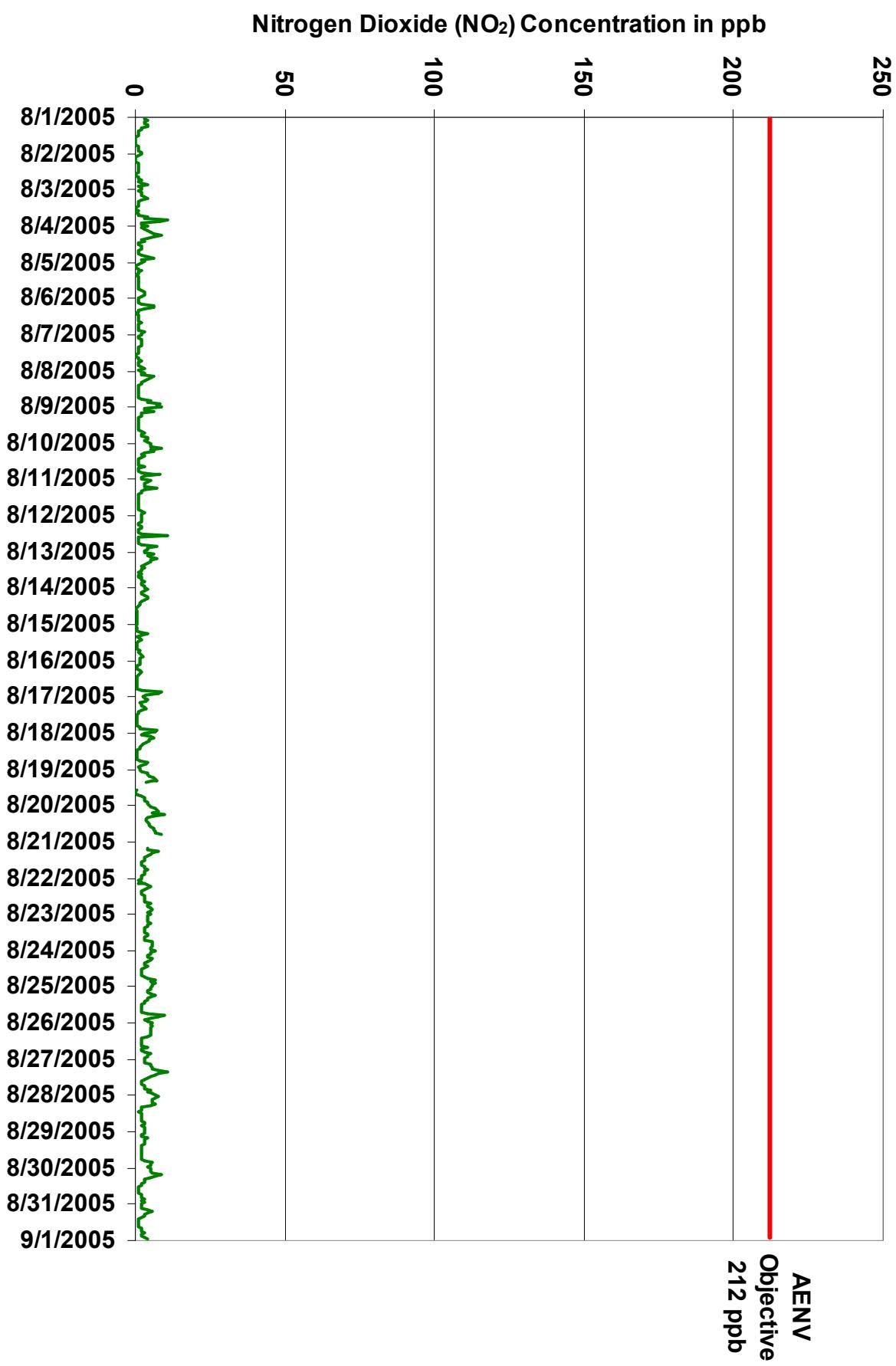


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	25.3 ppb	19-Aug 3:00 4:00
Maximum 24-hr Value:	7.5 ppb	20-Aug

AIC Time:	0 hrs	Operational Time:	732 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	98.9%					
Percentile	99 11.5	95 7.8	75 4.0	50 2.0	25 1.0	5 0.7	1 0.0	Average 3.1 ppb

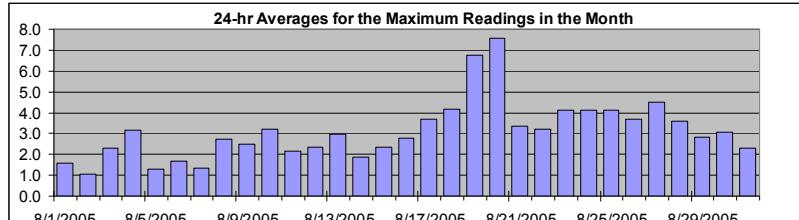
### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum	
Hour Start Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Aug-05	3	3	4	3	3	4	4	2	2	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	2	1.6	4.0
2-Aug-05	2	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	1	1	2	1	2	4	1	2	1.0	4.0	
3-Aug-05	2	1	2	2	2	3	4	2	1	1	1	1	1	0	0	1	0	1	1	4	3	11	8	2	2	2.3	10.9
4-Aug-05	4	2	3	4	5	6	9	6	4	2	3	1	1	2	2	2	1	1	1	2	4	6	2	3	3.1	8.9	
5-Aug-05	2	1	0	0	1	1	2	1	1	0	1	1	1	1	1	1	1	1	1	2	3	3	3	2	1.3	3.0	
6-Aug-05	1	1	1	1	2	6	6	3	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1.7	6.0
7-Aug-05	2	1	1	2	2	2	2	2	1	1	1	1	1	1	0	0	1	1	2	1	1	1	1	2	3	1.3	3.0
8-Aug-05	2	3	2	2	6	5	4	3	2	2	1	1	1	1	1	1	1	1	1	2	5	4	8	7	2.7	7.9	
9-Aug-05	9	3	3	6	2	2	2	1	1	1	1	1	1	1	1	1	1	2	3	2	2	4	4	3	4	2.5	8.9
10-Aug-05	5	5	9	5	6	3	2	3	2	1	1	1	1	1	1	1	3	1	1	1	2	6	8	3	2	3.2	8.9
11-Aug-05	2	5	4	3	3	3	7	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2.2	7.0
12-Aug-05	2	2	2	2	2	1	1	2	2	1	1	1	1	2	11	1	1	1	1	1	2	7	4	4	3	2.4	10.9
13-Aug-05	3	6	4	5	7	5	5	4	3	2	3	2	2	2	1	2	1	2	1	2	2	3	2	2	3	3.0	7.0
14-Aug-05	3	4	3	2	2	3	4	4	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.9	4.0
15-Aug-05	1	1	1	1	1	1	7	7	4	2	4	3	3	2	1	1	2	2	3	3	2	3	4	3	2	2.4	7.4
16-Aug-05	2	2	2	1	2	1	3	3	2	2	1	1	1	2	1	1	2	2	2	2	2	9	13	11	2.8	12.7	
17-Aug-05	3	5	7	5	3	4	3	5	5	4	2	2	2	2	1	1	1	1	5	2	1	3	3	14	11	3.7	13.5
18-Aug-05	5	4	10	9	6	8	6	4	3	3	11	4	2	2	2	1	1	2	4	7	8	3	2	4.2	10.9		
19-Aug-05	3	4	5	25	6	12	12	10	7	12	C	C	C	C	1	1	1	1	1	3	5	9	8	9	6.7	25.3	
20-Aug-05	8	8	10	10	9	9	12	9	7	5	4	5	6	6	6	7	7	7	8	13	N	N	N	7.5	12.5		
21-Aug-05	N	N	N	N	4	4	8	6	5	4	3	3	3	2	2	2	3	3	4	3	3	3	2	2	3.4	7.8	
22-Aug-05	2	1	2	1	3	4	5	4	3	2	2	2	3	3	3	3	3	5	4	4	5	6	5	4	3.2	5.9	
23-Aug-05	5	4	4	4	4	4	5	4	4	3	3	3	3	4	4	3	3	3	6	6	6	6	5	5	4.1	5.9	
24-Aug-05	7	5	5	4	4	6	5	4	3	3	4	3	2	2	2	2	2	3	4	7	5	7	6	6	4.1	6.8	
25-Aug-05	6	5	5	4	4	5	7	5	4	4	3	3	2	2	2	2	2	2	2	4	10	8	5	3	4.1	9.8	
26-Aug-05	6	5	6	5	5	5	5	5	5	4	2	2	2	2	2	2	2	2	2	4	2	2	3	5	3.7	5.9	
27-Aug-05	3	3	3	5	5	6	6	8	11	8	7	5	4	3	2	2	2	3	3	3	3	3	5	4	4.5	10.8	
28-Aug-05	7	8	7	6	6	6	7	5	2	2	2	1	2	2	2	2	2	2	3	3	3	2	3	3	3.6	7.8	
29-Aug-05	3	3	2	2	4	3	3	3	2	2	2	2	2	2	2	2	2	2	2	3	3	6	5	5	2.8	5.9	
30-Aug-05	5	5	5	6	9	7	5	3	3	2	2	2	1	1	1	1	1	1	2	2	3	2	3	3.1	8.8		
31-Aug-05	2	2	2	2	4	6	4	3	3	2	1	1	1	1	1	2	2	2	3	2	2	3	4	2.3	5.9		

Hourly Avg	3.6	3.3	3.6	4.3	3.8	4.5	5.0	3.8	3.1	2.7	2.3	1.8	1.7	1.9	1.5	1.5	1.7	2.0	2.4	3.1	4.2	4.2	3.9	3.4
Hourly Max	8.9	7.8	9.6	25.3	8.8	11.5	12.5	9.5	10.8	12.1	10.9	4.9	5.7	10.9	5.7	7.0	7.4	7.3	7.7	12.5	10.9	12.7	13.5	11.4

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

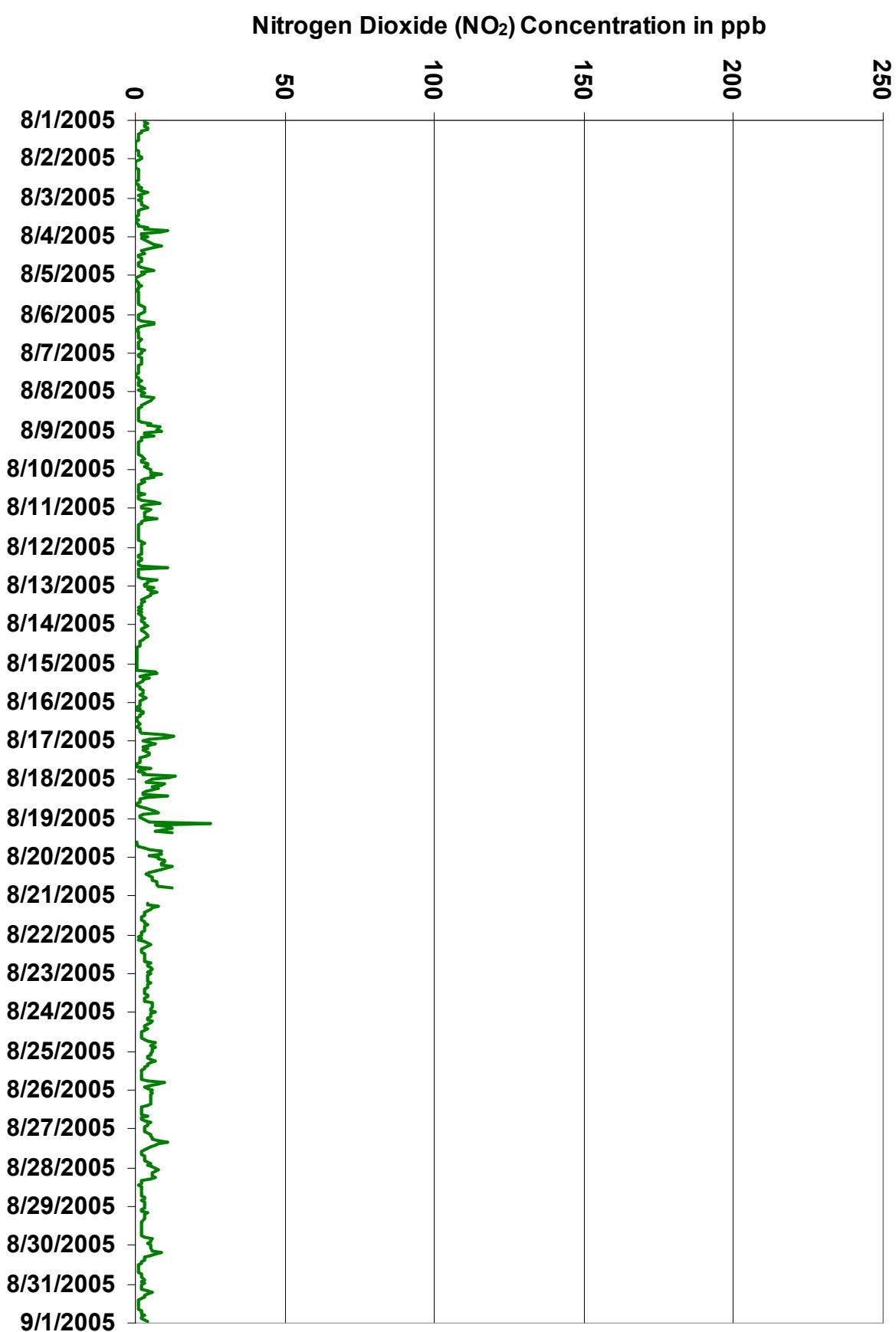
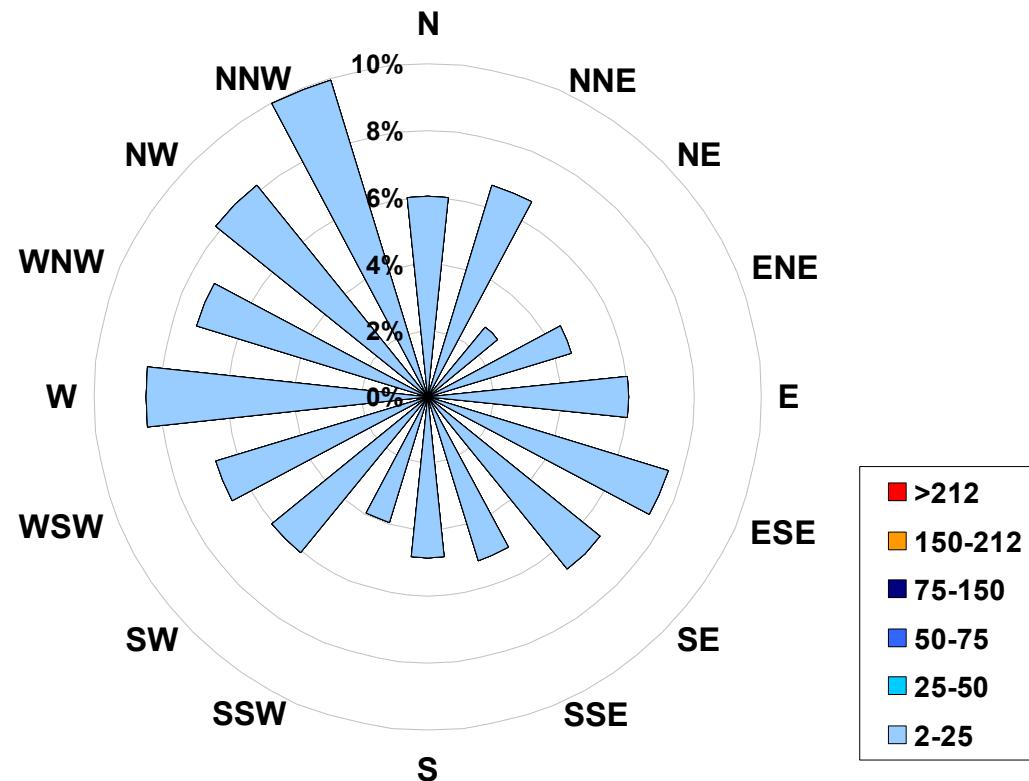


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

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



Calms:	0%
Frequency Distribution of NO <sub>2</sub> in ppb	
Range	Frequency (hrs)
2.0 < 25	732
25 to 50	0
50 to 75	0
75 to 150	0
150 to 212	0
> 212	0
Total Non-Zero Values	732

**PASZA - Beaverlodge Nitric Oxide Monthly Summary**

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

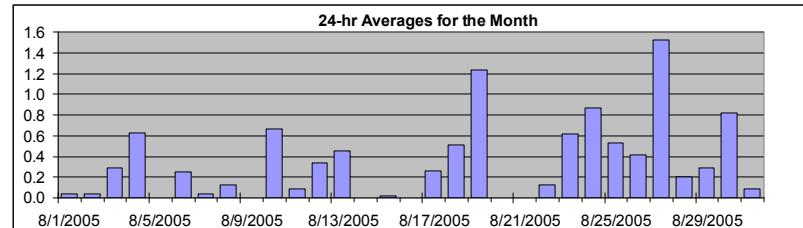
Guideline Limit:  
Summary

**HOURLY AVERAGE TABLE****Nitric Oxide (NO)**

Maximum 1-hr Average: 11.8 ppb 27-Aug 8:00 9:00  
Maximum 24-hr Average: 1.5 ppb 27-Aug

AIC Time:	0 hrs	Operational Time:	732 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	98.9%
Percentile	99 95 75 50 25 5 1	Average	0.3 ppb

1-hr na ppb 24-hr na ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Aug-05	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.0
2-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.0
3-Aug-05	0	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	2.0
4-Aug-05	0	0	0	0	0	1	5	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	5.0
5-Aug-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
6-Aug-05	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.2	3.0
7-Aug-05	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.0
8-Aug-05	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
9-Aug-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
10-Aug-05	0	0	0	1	1	3	3	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.0
11-Aug-05	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	2.0
12-Aug-05	0	0	0	0	0	0	0	1	2	1	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0.3	2.0
13-Aug-05	0	0	0	0	0	0	2	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.0
14-Aug-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
15-Aug-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	0.5
16-Aug-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
17-Aug-05	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.8
18-Aug-05	0	0	0	0	0	1	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.1
19-Aug-05	0	0	0	0	3	5	7	8	2	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	1.2	8.1
20-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	N	N	N	0.0	0.0	
21-Aug-05	N	N	N	N	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-Aug-05	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
23-Aug-05	0	0	0	0	0	0	1	2	4	2	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0.6	3.9
24-Aug-05	0	0	0	0	0	0	3	5	5	3	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0.9	4.9
25-Aug-05	0	0	0	0	0	0	2	3	3	2	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0.5	3.0
26-Aug-05	0	0	0	0	0	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.9
27-Aug-05	0	0	0	0	0	0	0	1	6	12	9	5	3	1	0	0	0	0	0	0	0	0	0	0	1.5	11.8
28-Aug-05	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	2.0
29-Aug-05	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0.3	1.0
30-Aug-05	0	0	0	0	3	4	4	3	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.8	3.9
31-Aug-05	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
Hourly Avg	0.0	0.0	0.0	0.0	0.1	0.4	1.3	1.6	1.9	1.0	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	
Hourly Max	0.0	0.0	0.0	1.0	3.0	3.9	5.0	6.7	11.8	8.9	4.9	3.0	1.0	2.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	

Station: Beaverlodge  
 Station Owner: PASZA

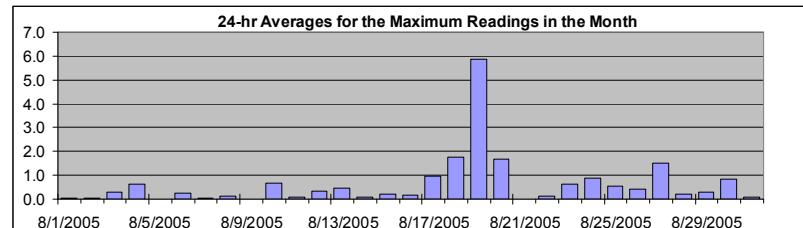
Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	31.5 ppb	20-Aug	3:00 4:00
Maximum 24-hr Value:	5.9 ppb	19-Aug	

### HOURLY MAXIMUM TABLE

### Nitric Oxide (NO)



### Status Flag Characters

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

AIC Time:	0 hrs				Operational Time:				732 hrs			
Calibration Time:	4 hrs				AMD Operational Uptime:				98.9%			
Percentile	99	95	75	50	25	5	1	Average				0.6 ppb
	9.2	3.0	0.0	0.0	0.0	0.0	0.0					

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 2:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Aug-05	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.0
2-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.0	1.0
3-Aug-05	0	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	2.0
4-Aug-05	0	0	0	0	0	0	1	5	4	2	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0.6	5.0
5-Aug-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	0.0
6-Aug-05	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.2	3.0
7-Aug-05	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.0
8-Aug-05	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
9-Aug-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	0.0
10-Aug-05	0	0	0	1	1	3	3	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.0
11-Aug-05	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	2.0
12-Aug-05	0	0	0	0	0	0	0	0	1	2	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0.3	2.0
13-Aug-05	0	0	0	0	0	0	0	2	3	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.0
14-Aug-05	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
15-Aug-05	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
16-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0.2	1.0
17-Aug-05	0	0	0	1	0	0	0	0	2	5	4	1	0	0	0	0	0	0	4	0	0	0	0	4	0	1.0	4.7
18-Aug-05	0	0	2	0	0	2	3	8	5	5	9	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1.8	9.4
19-Aug-05	0	0	0	30	0	23	25	17	14	7	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	5.9	29.8
20-Aug-05	0	0	0	31	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	N	N	N	N	N	1.7	31.5	
21-Aug-05	N	N	N	N	N	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-Aug-05	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
23-Aug-05	0	0	0	0	0	0	0	1	2	4	2	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0.6	3.9
24-Aug-05	0	0	0	0	0	0	3	5	5	3	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.9	4.9
25-Aug-05	0	0	0	0	0	0	2	3	3	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0.5	3.0
26-Aug-05	0	0	0	0	0	0	1	2	4	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	3.9
27-Aug-05	0	0	0	0	0	0	1	6	12	9	5	3	1	1	0	0	0	0	0	0	0	0	0	0	0	1.5	11.8
28-Aug-05	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.0
29-Aug-05	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	1	0	0	0	0.3	1.0
30-Aug-05	0	0	0	0	3	4	4	3	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	3.9
31-Aug-05	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
Hourly Avg	0.0	0.0	0.1	2.1	0.1	1.1	2.0	2.2	2.3	1.5	1.0	0.4	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.2	0.0			
Hourly Max	0.0	0.0	1.8	31.5	3.0	23.3	25.3	17.3	14.3	8.9	9.4	3.0	5.3	2.0	1.0	1.0	1.0	4.4	1.0	1.0	1.0	1.0	4.4	0.0			

### PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

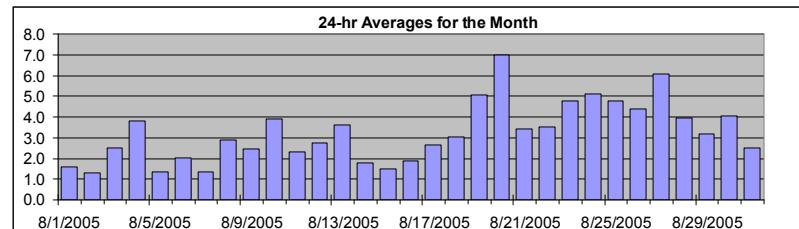
Monitoring Dates: August 1, 2005 to September 1, 2005

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

Maximum 1-hr Average: 23.0 ppb 27-Aug 8:00 9:00  
Maximum 24-hr Average: 7.0 ppb 20-Aug

#### HOURLY AVERAGE TABLE

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



#### Status Flag Characters

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

AIC Time:	0 hrs						Operational Time:						732 hrs														
	Calibration Time:						AMD Operational Uptime:						98.9%														
Percentile	99	95	75	50	25	5	1	Average																			
	12.1	8.0	4.0	2.3	1.0	0.7	0.0																				
Day	Mountain Standard Time																										
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			

1-Aug-05	3	3	4	3	3	4	5	2	2	1	1	1	1	1	0	0	0	0	0	0	0	1	1	2	1.6	5.0	
2-Aug-05	2	1	0	0	0	1	1	1	1	1	1	2	1	1	1	0	1	2	3	1	2	5	1	2	1.3	5.0	
3-Aug-05	2	1	2	2	2	3	6	3	2	2	1	1	0	0	1	0	1	1	4	3	11	8	2	2	2.5	10.9	
4-Aug-05	4	2	3	4	5	7	14	9	5	4	4	2	2	2	2	2	1	1	1	1	2	4	7	2	3	3.8	13.9
5-Aug-05	2	1	0	0	1	1	2	1	1	0	1	1	1	1	1	1	1	2	2	2	3	3	3	2	1.4	3.0	
6-Aug-05	1	1	1	1	3	6	9	4	1	1	0	1	1	2	2	2	2	2	2	1	1	1	1	3	2	2.0	8.9
7-Aug-05	1	1	1	2	2	2	2	3	1	1	1	1	1	0	0	0	2	2	2	1	1	1	2	3	1	1.4	3.0
8-Aug-05	2	3	2	2	6	5	4	4	3	3	2	1	1	1	1	1	1	1	1	1	2	5	4	8	7	2.9	7.9
9-Aug-05	9	3	3	5	2	2	2	1	1	1	1	1	1	1	1	1	2	3	2	2	4	4	3	4	2.4	8.9	
10-Aug-05	5	5	5	10	6	8	6	5	7	4	2	1	1	1	1	3	1	1	1	1	2	6	8	3	2	3.9	9.9
11-Aug-05	2	5	4	3	3	4	9	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	3	2	2.3	8.9
12-Aug-05	2	2	2	2	2	1	1	4	4	2	3	1	2	13	1	1	1	1	1	1	2	7	4	4	3	2.7	12.9
13-Aug-05	3	6	4	5	7	6	8	8	6	4	4	3	2	1	2	1	2	1	2	2	3	2	2	3	3.6	7.9	
14-Aug-05	3	4	3	2	2	3	4	4	3	3	2	2	1	1	0	1	1	1	1	1	1	1	1	0	1.8	4.0	
15-Aug-05	1	0	0	0	0	2	4	2	1	2	3	2	1	1	1	1	1	2	2	2	1	2	3	1	1.5	4.1	
16-Aug-05	2	2	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	9	8	3	1.9	8.8
17-Aug-05	2	3	4	4	2	2	2	5	7	5	2	1	1	1	1	1	1	1	1	1	1	2	2	8	7	2.7	7.6
18-Aug-05	3	2	6	7	5	5	8	6	4	4	1	1	1	1	1	1	1	2	4	4	2	1	1	3.0	7.5		
19-Aug-05	2	2	4	4	5	10	12	15	14	5	C	C	C	C	1	0	1	1	3	4	4	4	5	5	5.1	14.6	
20-Aug-05	5	6	7	8	9	6	12	8	6	5	5	5	6	6	6	7	7	8	8	8	10	N	N	N	7.0	11.7	
21-Aug-05	N	N	N	N	4	4	8	6	5	4	3	3	3	2	2	3	3	4	3	3	3	2	2	2	3.4	8.0	
22-Aug-05	2	1	2	1	3	4	6	5	3	2	3	2	3	3	3	3	4	5	4	5	5	6	5	4	3.5	6.0	
23-Aug-05	5	4	4	4	4	4	6	6	8	5	4	4	4	5	4	3	3	7	6	6	6	6	5	5	4.8	8.0	
24-Aug-05	7	5	5	4	4	6	7	9	9	7	6	3	3	4	2	2	2	3	4	7	5	7	6	6	5.1	9.0	
25-Aug-05	6	5	5	4	4	5	8	8	8	6	5	4	2	2	2	2	2	4	11	8	5	3	4	4.8	11.0		
26-Aug-05	6	5	6	5	5	5	8	10	7	3	2	2	2	2	3	5	2	3	3	5	4	4	3	4.4	10.0		
27-Aug-05	3	3	3	5	5	6	7	13	23	17	12	8	5	3	2	2	2	2	3	3	3	3	5	4	6.1	23.0	
28-Aug-05	8	8	7	7	6	7	9	6	2	2	2	2	2	2	2	2	2	3	3	2	3	3	3	3	4.0	9.0	
29-Aug-05	3	3	2	2	4	3	3	3	3	3	3	3	2	2	3	3	2	4	6	5	5	4	4	3.2	6.0		
30-Aug-05	5	5	5	6	12	11	9	6	5	4	4	3	1	1	1	2	2	2	2	2	2	3	2	4.0	12.0		
31-Aug-05	2	2	1	2	4	6	4	4	4	2	1	1	2	2	2	2	2	3	2	2	3	4	2.5	6.0			
Hourly Avg	3.4	3.1	3.2	3.5	3.9	4.5	5.9	5.3	5.0	3.5	2.8	2.1	1.8	2.1	1.5	1.6	1.9	2.0	2.4	3.0	3.6	4.0	3.5	3.2			
Hourly Max	8.9	8.0	7.5	9.9	12.0	11.0	13.9	14.6	23.0	17.0	12.0	8.0	5.8	12.9	5.9	6.8	7.3	7.6	8.0	11.0	10.9	8.8	8.3	7.0			

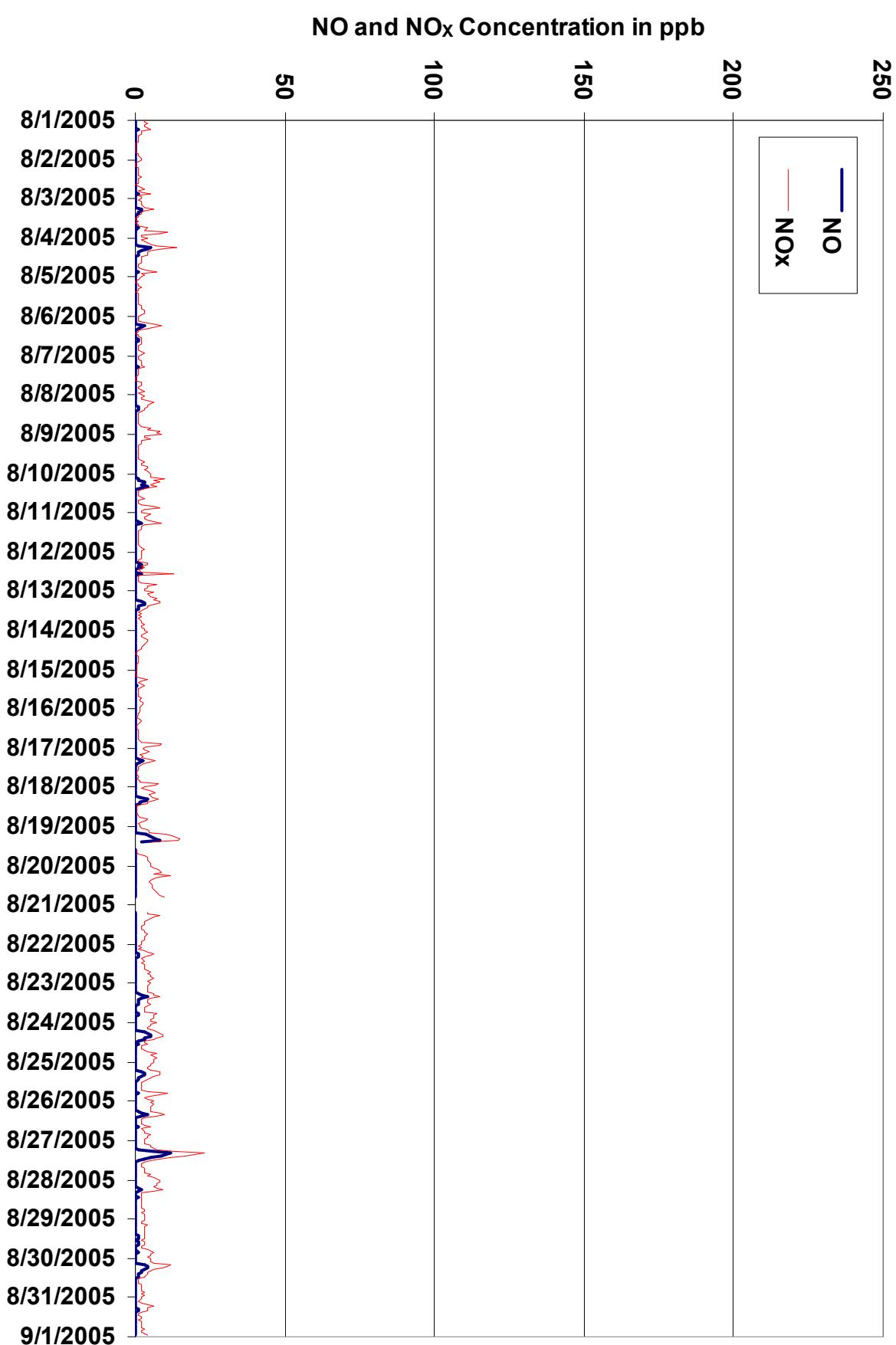


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	55.5 ppb	19-Aug 3:00	4:00
Maximum 24-hr Value:	12.9 ppb	19-Aug	

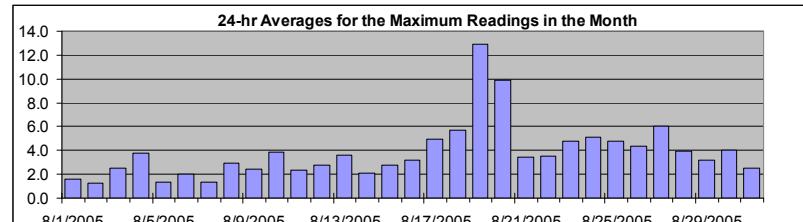
AIC Time:	0 hrs	Operational Time:	732 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	98.9%
Percentile	99 95 75 50 25 5 1	Average	
	18.4 9.5 5.0 3.0 1.8 0.8 0.0	3.8 ppb	

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
1-Aug-05	3	3	4	3	3	4	5	2	2	1	1	1	1	1	0	0	0	0	0	0	0	1	1	2	1.6	5.0
2-Aug-05	2	1	0	0	0	1	1	1	1	1	1	2	1	1	1	0	1	2	3	1	2	5	1	2	1.3	5.0
3-Aug-05	2	1	2	2	2	3	6	3	2	2	1	1	0	0	1	0	1	1	4	3	11	8	2	2	2.5	10.9
4-Aug-05	4	2	3	4	5	7	14	9	5	4	4	2	2	2	2	2	1	1	1	2	4	7	2	3	3.8	13.9
5-Aug-05	2	1	0	0	1	1	2	1	1	0	1	1	1	1	1	1	1	2	2	3	3	3	2	1.4	3.0	
6-Aug-05	1	1	1	1	3	6	9	4	1	1	0	1	1	1	2	2	2	2	2	1	1	1	1	3	2.0	8.9
7-Aug-05	1	1	1	2	2	2	2	3	1	1	1	1	1	1	0	0	2	2	2	1	1	1	2	3	1.4	3.0
8-Aug-05	2	3	2	2	6	5	4	4	3	3	2	1	1	1	1	1	1	1	1	2	5	4	8	7	2.9	7.9
9-Aug-05	9	3	3	5	2	2	2	1	1	1	1	1	1	1	1	1	1	2	3	2	2	4	4	3	2.4	8.9
10-Aug-05	5	5	5	10	6	8	6	5	7	4	2	1	1	1	1	3	1	1	1	2	6	8	3	2	3.9	9.9
11-Aug-05	2	5	4	3	3	4	9	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	3	2.3	8.9
12-Aug-05	2	2	2	2	2	1	1	4	4	2	3	1	2	13	1	1	1	1	1	2	7	4	4	3	2.7	12.9
13-Aug-05	3	6	4	5	7	6	8	8	6	4	4	3	2	1	2	1	2	1	2	2	3	2	2	3	3.6	7.9
14-Aug-05	3	4	3	2	2	3	4	4	3	4	3	3	2	2	1	1	2	1	2	1	1	1	1	1	2.1	4.0
15-Aug-05	1	1	1	1	1	1	7	8	4	2	6	4	4	3	1	2	2	2	4	3	3	3	4	3	2.8	7.7
16-Aug-05	2	2	2	1	2	1	3	3	2	2	1	1	1	2	2	3	2	2	2	2	10	15	12	5	3.2	14.5
17-Aug-05	3	5	7	5	3	5	4	8	10	9	4	3	2	3	1	1	2	9	2	2	3	3	19	12	5.0	18.6
18-Aug-05	5	4	11	9	6	10	10	13	8	7	18	2	3	2	3	1	1	2	4	8	8	3	3	5.7	18.0	
19-Aug-05	3	4	5	55	7	35	37	27	22	14	C	C	C	C	1	1	1	2	5	6	10	9	10	6	12.9	55.5
20-Aug-05	9	9	11	28	10	9	16	10	10	7	5	6	6	6	7	9	9	9	9	15	N	N	N	9.9	28.0	
21-Aug-05	N	N	N	N	4	4	8	6	5	4	3	3	3	2	2	2	3	3	4	3	3	3	2	3	3.4	8.0
22-Aug-05	2	1	2	1	3	4	6	5	3	2	3	2	3	3	3	3	4	5	4	5	5	6	5	4	3.5	6.0
23-Aug-05	5	4	4	4	4	4	6	6	8	5	4	4	4	5	4	3	3	3	7	6	6	6	5	5	4.8	8.0
24-Aug-05	7	5	5	4	4	6	7	9	9	7	6	3	3	4	2	2	2	3	4	7	5	7	6	6	5.1	9.0
25-Aug-05	6	5	5	4	4	5	8	8	8	6	5	4	2	2	2	2	2	2	4	11	8	5	3	4	4.8	11.0
26-Aug-05	6	5	6	5	5	5	5	8	10	7	3	2	2	2	2	3	5	2	3	3	5	4	4	4.4	10.0	
27-Aug-05	3	3	3	5	5	6	7	13	23	17	12	8	5	3	2	2	2	3	3	3	3	5	4	6	6.1	23.0
28-Aug-05	8	8	7	7	6	7	9	6	2	2	2	2	2	2	2	2	2	2	3	3	2	3	3	3	4.0	9.0
29-Aug-05	3	3	2	2	4	3	3	3	3	3	3	3	3	2	3	3	3	2	4	6	5	5	4	3.2	6.0	
30-Aug-05	5	5	6	12	11	9	6	5	4	4	3	1	1	1	2	2	2	2	2	3	2	3	2	4.0	12.0	
31-Aug-05	2	2	1	2	4	6	4	4	4	2	1	1	2	2	2	2	2	3	2	2	3	4	2.5	6.0		
Hourly Avg	3.6	3.4	3.7	6.0	4.1	5.8	7.1	6.1	5.5	4.3	3.4	2.3	2.1	2.2	1.8	1.7	2.0	2.4	2.7	3.5	4.3	4.5	4.2	3.5		
Hourly Max	8.9	9.4	11.4	55.5	12.0	34.5	37.2	26.6	23.0	17.0	18.0	8.0	5.9	12.9	6.9	8.9	8.9	9.5	8.9	14.8	10.9	14.5	18.6	11.5		

### HOURLY MAXIMUM TABLE

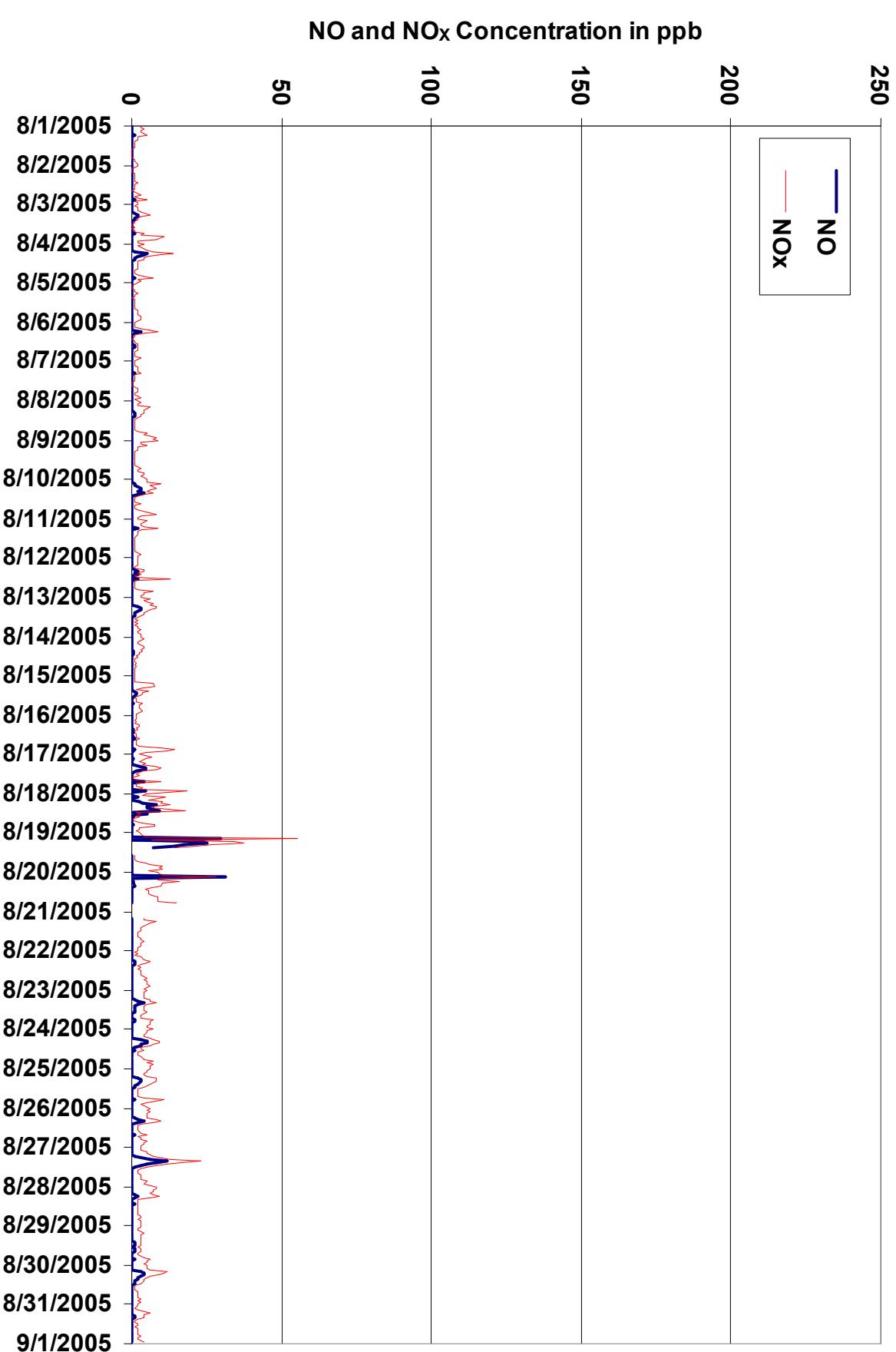
### Oxides of Nitrogen (NO<sub>x</sub>)



### Status Flag Characters

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

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



### PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

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

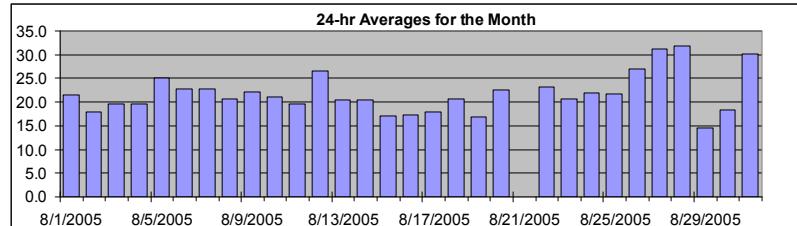
Number of 1-hr Exceedances: 0

Maximum 1-hr Average: 47.0 ppb 27-Aug 17:00 18:00  
Maximum 24-hr Average: 31.8 ppb 28-Aug

AIC Time:	0 hrs				Operational Time:	726 hrs			
Calibration Time:	3 hrs				AMD Operational Uptime:	98.0%			
Percentile	99	95	75	50	25	5	1	Average	
	44.0	37.0	28.0	21.4	15.8	7.1	4.2	22.0 ppb	

#### HOURLY AVERAGE TABLE

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



#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Aug-05	13	10	11	11	8	6	6	16	19	26	28	29	29	30	31	31	30	29	29	28	24	22	21	21	21	21	21	21	21.6	31.6			
2-Aug-05	18	22	24	23	20	18	16	15	15	16	17	17	18	18	18	19	21	21	17	17	15	11	15	12	18.0	24.5							
3-Aug-05	10	10	10	9	7	8	7	10	13	18	24	26	28	30	33	33	32	32	24	28	18	17	24	20	19.7	32.6							
4-Aug-05	16	19	17	16	12	8	4	9	12	15	18	22	22	20	24	28	30	31	30	26	23	20	24	21	19.7	30.6							
5-Aug-05	22	24	24	22	22	22	21	23	24	28	29	29	30	29	30	29	30	28	28	24	23	22	21	19	25.2	29.5							
6-Aug-05	22	22	22	21	16	10	7	17	22	23	23	23	22	22	23	25	23	21	21	30	34	31	29	32	22.8	33.6							
7-Aug-05	30	30	24	22	18	16	14	14	17	18	21	24	26	28	29	28	24	24	24	24	23	18	18	29	22.8	29.5							
8-Aug-05	30	22	20	21	13	12	12	11	14	17	21	24	25	25	25	24	25	26	28	26	23	20	12	13	20.7	29.5							
9-Aug-05	11	16	16	14	19	20	20	23	24	24	26	33	34	30	33	33	24	21	22	23	17	13	15	13	22.0	33.6							
10-Aug-05	14	14	11	5	5	2	6	9	11	17	26	32	34	35	37	37	36	33	32	29	22	18	21	21	21.1	36.7							
11-Aug-05	20	11	10	10	10	6	17	20	21	22	24	23	23	24	24	23	22	25	28	26	23	20	20	20	19.6	27.5							
12-Aug-05	22	22	19	18	18	20	19	19	19	21	24	30	33	33	35	36	36	37	39	36	26	23	24	26	26.6	38.7							
13-Aug-05	23	11	9	6	4	6	5	7	11	16	19	26	37	36	30	31	30	31	33	26	22	21	26	24	20.5	36.7							
14-Aug-05	25	22	20	17	15	16	11	16	19	21	22	21	20	22	28	27	24	21	20	20	18	21	21	22	20.5	27.5							
15-Aug-05	21	22	21	19	19	16	13	15	15	15	14	18	19	20	20	21	20	19	17	18	14	11	12	14	17.1	21.7							
16-Aug-05	15	16	16	20	18	19	17	16	17	19	21	21	20	21	21	21	20	20	20	18	15	7	5	11	17.2	21.1							
17-Aug-05	13	10	7	8	11	10	11	10	9	12	18	25	27	27	28	28	29	27	28	27	24	19	10	11	17.8	29.2							
18-Aug-05	17	19	12	5	7	6	5	6	8	12	19	28	32	33	33	33	35	35	34	31	24	23	22	21	20.7	35.4							
19-Aug-05	19	18	13	13	9	5	4	5	9	16	22	27	27	C	C	C	26	26	22	19	19	20	17	21	16.9	27.2							
20-Aug-05	21	18	15	10	7	16	5	12	16	17	24	34	39	39	37	31	29	29	30	23	N	N	N	N	22.6	39.3							
21-Aug-05	N	N	N	N	N	N	N	N	N	N	N	35	36	36	36	34	29	31	29	29	26	27	29	28	N	36.0							
22-Aug-05	27	27	23	22	21	21	17	18	20	24	25	26	28	28	28	25	23	22	19	22	22	20	21	23.2	28.0								
23-Aug-05	16	17	17	17	15	15	14	13	14	17	22	26	28	26	26	29	31	31	22	22	21	23	18	20.8	31.0								
24-Aug-05	11	13	12	9	9	7	5	5	7	11	15	26	33	35	37	38	37	36	33	30	32	28	28	28	21.9	38.0							
25-Aug-05	23	20	16	14	13	12	9	11	15	19	24	30	33	32	32	32	32	32	28	17	17	21	21	17	21.7	33.0							
26-Aug-05	13	15	14	13	13	14	14	12	13	16	32	41	39	38	38	38	39	42	40	38	32	32	30	32	27.0	42.0							
27-Aug-05	30	29	28	26	24	23	18	14	8	14	23	31	38	43	45	45	44	47	45	43	38	35	34	25	31.3	47.0							
28-Aug-05	19	15	12	16	15	11	8	16	39	46	43	44	45	43	44	44	45	43	47	45	43	44	43	35	28	29	31.8	46.0					
29-Aug-05	28	18	14	14	11	12	13	13	14	14	14	14	16	17	17	18	19	20	16	7	8	9	9	14.6	28.0								
30-Aug-05	8	7	7	4	0	1	2	7	10	13	20	25	28	28	27	29	29	29	31	28	28	28	27	26	18.4	31.0							
31-Aug-05	28	29	30	25	23	19	20	21	23	29	32	33	34	35	37	37	36	37	37	34	34	32	29	27	30.1	37.0							
Hourly Avg	19.6	18.4	16.6	15.1	13.5	12.8	11.0	13.4	16.0	19.3	23.0	27.3	29.1	29.3	30.1	30.3	29.5	29.2	28.0	26.5	24.0	21.9	21.2	21.1									
Hourly Max	30.0	29.5	30.0	26.0	24.0	23.0	21.4	23.4	39.0	46.0	43.0	44.0	45.0	43.0	45.0	45.0	45.0	47.0	45.0	44.0	43.0	35.0	34.0	32.0									

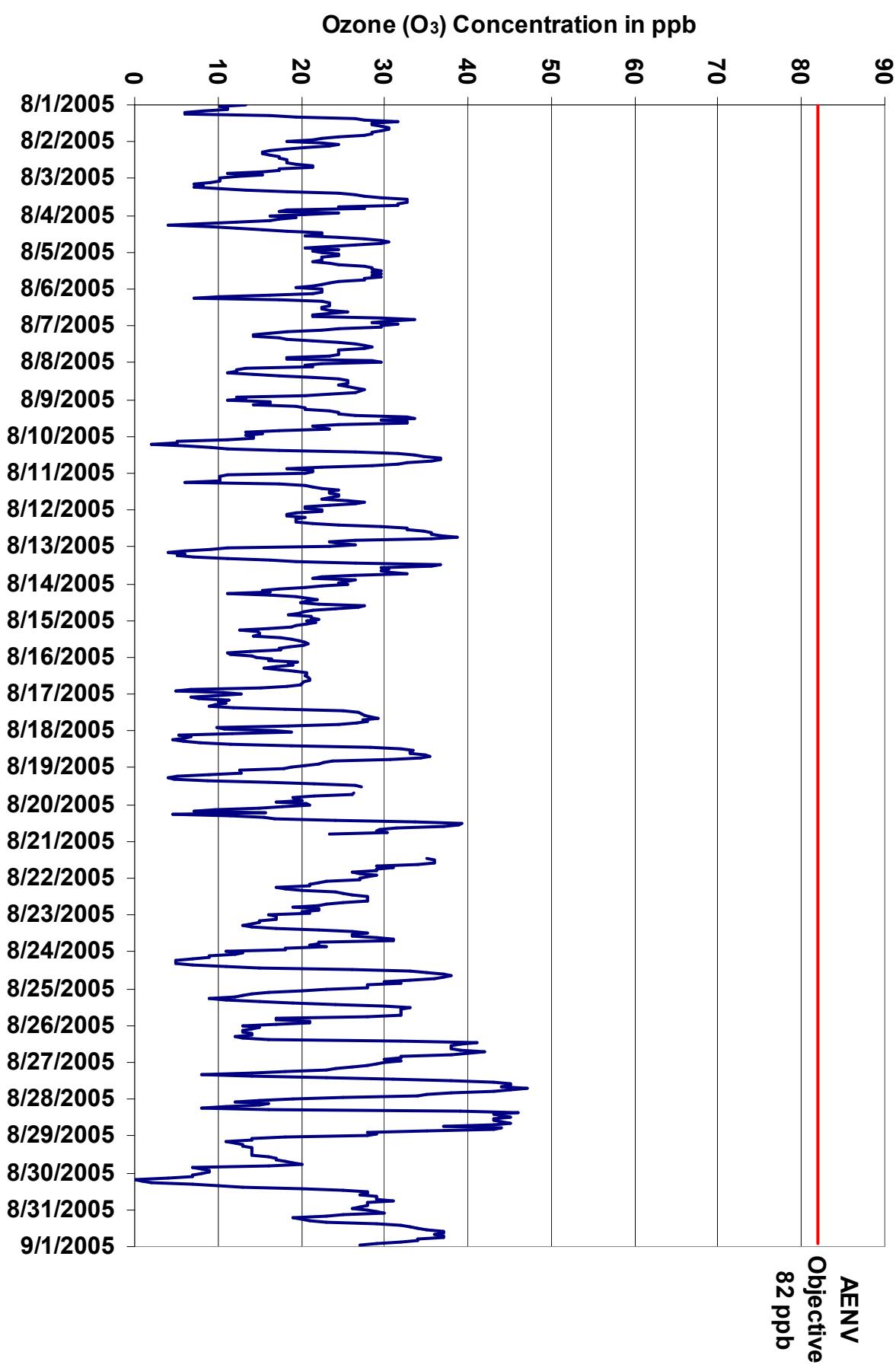


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Value:	53.1 ppb	20-Aug 3:00 4:00
Maximum 24-hr Value:	31.8 ppb	28-Aug

AIC Time:	0 hrs	Operational Time:	726 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	98.0%
Percentile	99 95 75 50 25 5 1	Average	
	45.0 38.0 28.5 22.4 16.3 8.2 5.0	22.7 ppb	

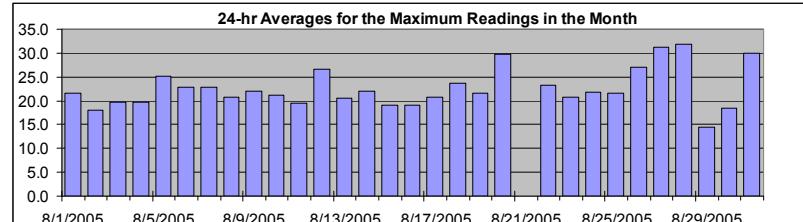
### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour Start Hour End	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00				
1-Aug-05	13	10	11	11	8	6	6	16	19	26	28	32	29	29	30	31	31	30	29	29	28	24	22	21	21.6	31.6	
2-Aug-05	18	22	24	23	20	18	16	15	15	16	17	17	18	18	18	19	21	21	17	17	15	11	15	12	18.0	24.5	
3-Aug-05	10	10	10	9	7	8	7	10	13	18	24	26	28	30	33	33	32	32	24	28	18	17	24	20	19.7	32.6	
4-Aug-05	16	19	17	16	12	8	4	9	12	15	18	22	22	20	24	28	30	31	30	26	23	20	24	21	19.7	30.6	
5-Aug-05	22	24	24	22	22	22	21	23	24	28	29	29	30	29	30	30	30	28	28	24	23	22	21	19	25.2	29.5	
6-Aug-05	22	22	22	21	16	10	7	17	22	23	23	23	22	22	23	25	23	21	21	30	34	31	29	32	22.8	33.6	
7-Aug-05	30	30	24	22	18	16	14	14	17	18	21	24	26	28	29	28	24	24	24	24	23	18	18	29	22.8	29.5	
8-Aug-05	30	22	20	21	13	12	12	11	14	17	21	24	25	25	25	24	25	26	28	26	23	20	12	13	20.7	29.5	
9-Aug-05	11	16	16	14	19	20	20	23	24	24	26	33	34	30	33	33	24	21	22	23	17	13	15	13	22.0	33.6	
10-Aug-05	14	14	11	5	5	2	6	9	11	17	26	32	34	35	37	37	36	33	32	29	22	18	21	21	21.1	36.7	
11-Aug-05	20	11	10	10	10	10	6	17	20	21	22	24	23	23	24	24	23	22	25	28	26	23	20	20	19.6	27.5	
12-Aug-05	22	22	19	18	18	20	19	19	19	21	24	30	33	33	35	36	36	37	39	36	26	23	24	26	26.6	38.7	
13-Aug-05	23	11	9	6	4	6	5	7	11	16	19	26	37	36	30	31	30	31	33	26	22	21	26	24	20.5	36.7	
14-Aug-05	25	22	20	17	15	16	11	16	19	24	24	23	22	27	32	30	27	23	22	22	20	23	23	25	22.1	31.7	
15-Aug-05	23	24	22	21	20	20	16	17	17	16	16	20	20	21	22	22	22	21	19	20	17	13	13	16	19.1	23.6	
16-Aug-05	17	17	19	21	20	20	20	17	19	21	22	22	21	22	23	22	22	22	22	21	20	17	11	7	15	19.0	22.6
17-Aug-05	15	13	10	10	12	11	12	12	10	16	22	28	28	30	29	30	31	30	29	29	27	24	21	19	20.8	31.2	
18-Aug-05	24	24	18	10	10	9	7	7	11	14	24	32	34	35	35	36	37	36	35	29	24	23	22	23	23.8	37.1	
19-Aug-05	20	19	15	47	13	11	8	10	12	18	25	29	29	C	C	C	27	28	26	23	24	25	23	21.6	47.3		
20-Aug-05	24	24	23	53	13	25	19	16	28	20	29	38	41	40	41	34	32	32	31	N	N	N	N	29.7	53.1		
21-Aug-05	N	N	N	N	N	N	N	N	N	N	N	35	36	36	36	34	29	31	29	29	26	27	29	28	N	36.0	
22-Aug-05	27	27	23	22	21	21	17	18	20	24	25	26	28	28	28	25	23	22	19	22	22	20	21	23.2	28.0		
23-Aug-05	16	17	17	17	15	15	14	13	14	17	22	26	28	26	26	29	31	31	22	22	21	23	18	20.8	31.0		
24-Aug-05	11	13	12	9	9	7	5	5	7	11	15	26	33	35	37	38	37	36	33	30	32	28	28	21.9	38.0		
25-Aug-05	23	20	16	14	13	12	9	11	15	19	24	30	33	32	32	32	32	32	32	30	32	21	17	21.7	33.0		
26-Aug-05	13	15	14	13	13	14	14	12	13	16	32	41	39	38	38	39	42	40	38	32	32	30	32	27.0	42.0		
27-Aug-05	30	29	28	26	24	23	18	14	8	14	23	31	38	43	45	45	44	47	45	43	38	35	34	31.3	47.0		
28-Aug-05	19	15	12	16	15	11	8	16	39	46	43	44	45	43	43	44	45	43	37	44	43	35	28	31.8	46.0		
29-Aug-05	28	18	14	14	11	12	13	13	14	14	14	16	17	17	18	19	20	16	7	8	9	9	14.6	28.0			
30-Aug-05	8	7	7	4	0	1	2	7	10	13	20	25	28	28	27	29	29	31	28	28	28	27	26	18.4	31.0		
31-Aug-05	28	29	30	25	23	19	20	21	23	29	32	33	34	35	37	37	36	37	34	34	32	29	27	30.1	37.0		

Hourly Avg	20.2	19.0	17.4	18.0	14.1	13.7	12.0	14.0	16.8	19.9	23.8	27.9	29.4	29.7	30.6	30.7	29.9	29.6	28.4	27.3	24.6	22.5	22.0	21.8
Hourly Max	30.0	29.5	30.0	53.1	24.0	25.2	21.4	23.4	39.0	46.0	43.0	44.0	45.0	45.0	45.0	45.0	47.0	45.0	44.0	43.0	35.0	34.0	32.0	

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

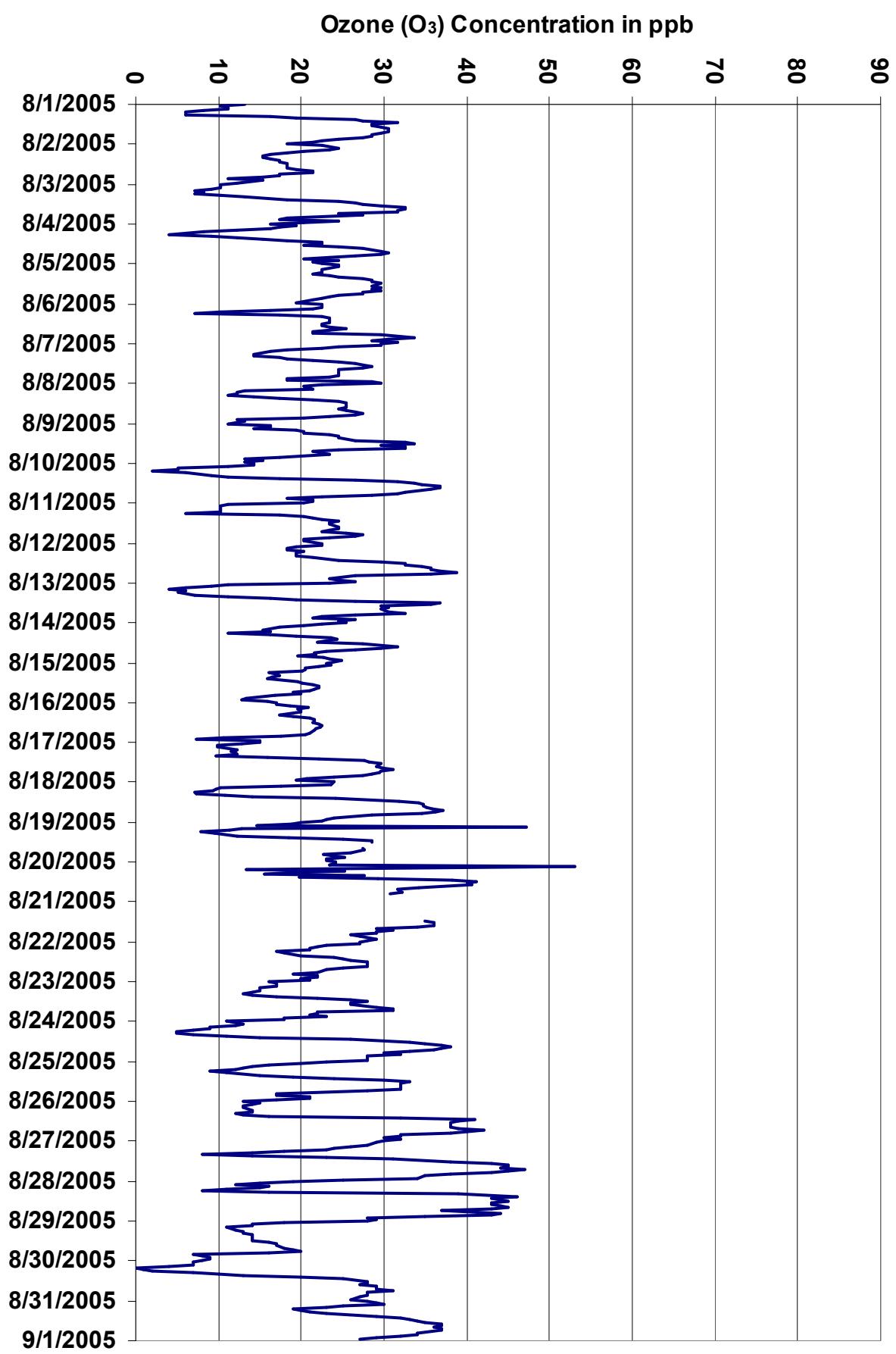
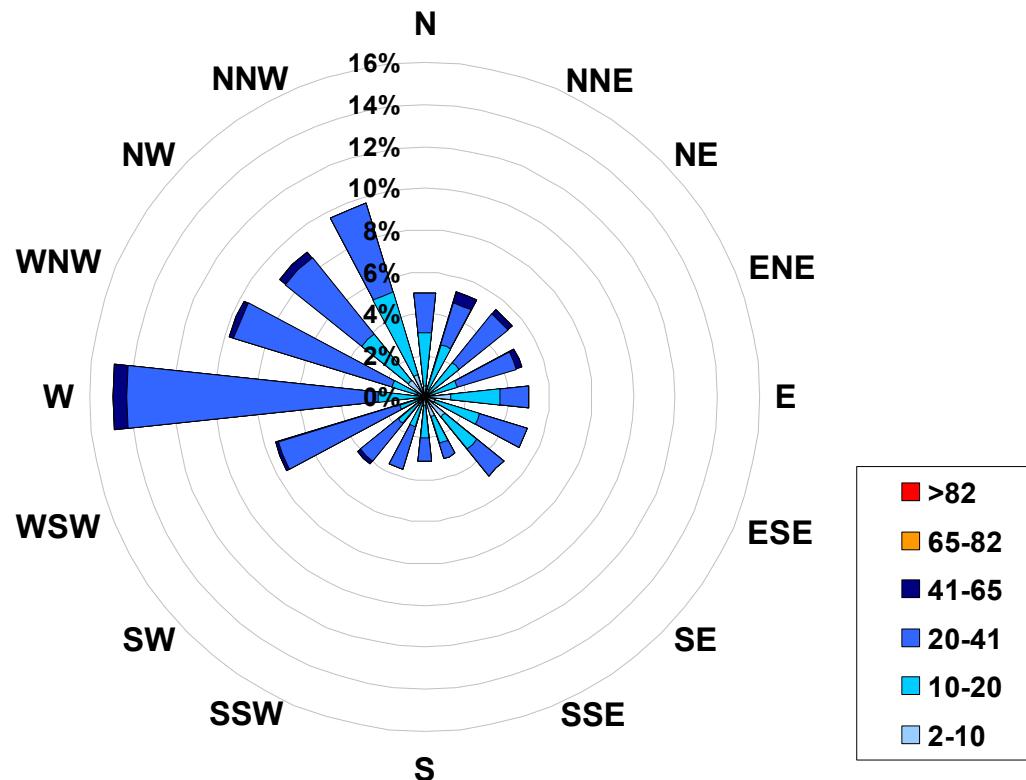


Figure 41. PASZA - Beaverlodge Ozone 1-hr Maximum Value Monthly Trend

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



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

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	66
10	to	20	230
20	to	41	410
41	to	65	20
65	to	82	0
	>	82	0
Total Non-Zero Values			726

**PASZA - Beaverlodge Ozone Monthly Summary**

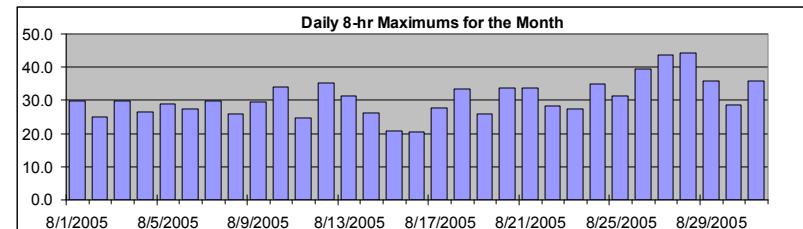
Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

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

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 44.2 ppb 28-Aug 16:00 17:00

**EIGHT HOUR RUNNING AVERAGE TABLE****Ozone (O<sub>3</sub>)****Status Flag Characters**

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

Percentile	99	95	75	50	25	5	1
	42.8	34.8	26.5	21.5	16.6	9.6	7.4

**Day Mountain Standard Time**

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum	
1-Aug-05	11	11	10	10	9	10	10	10	11	13	15	18	20	23	26	28	29	30	30	29	29	29	29	29	28	27	29.7	
2-Aug-05	25	24	24	23	22	21	21	20	19	19	18	17	17	17	17	18	18	18	19	19	19	19	19	18	17	16	25.1	
3-Aug-05	15	14	13	12	11	10	9	9	9	10	12	14	17	20	23	26	28	30	30	30	30	29	27	26	24	24.7		
4-Aug-05	23	21	20	19	18	17	14	13	12	12	12	13	14	16	18	20	23	24	26	26	26	26	26	26	26	26	26.5	
5-Aug-05	25	24	23	23	23	23	23	23	23	24	24	25	26	26	28	28	29	29	29	28	27	27	26	24	24	24	28.8	
6-Aug-05	24	23	22	22	21	19	18	17	17	18	18	18	19	20	22	23	23	23	23	23	24	25	26	27	26	28	27.5	
7-Aug-05	28	29	30	29	27	25	23	21	20	18	18	18	19	21	22	24	25	26	26	26	26	26	24	23	23	23	29.7	
8-Aug-05	24	24	23	23	22	21	20	18	16	15	15	16	17	19	21	22	24	25	26	26	26	26	25	23	22	22	25.9	
9-Aug-05	20	19	17	16	15	15	16	18	19	20	22	24	26	27	28	30	30	29	29	28	25	23	21	19	19	19	29.5	
10-Aug-05	18	17	15	13	11	10	9	8	8	8	10	14	17	21	25	29	32	33	34	34	32	30	28	26	26	26	34.1	
11-Aug-05	25	22	19	17	15	14	12	12	12	13	15	17	18	20	22	23	23	24	24	24	25	25	24	24	24	24	24.7	
12-Aug-05	24	24	23	22	21	20	20	20	20	19	20	22	23	25	27	29	31	33	35	35	35	33	32	31	31	31	35.3	
13-Aug-05	29	26	23	19	16	14	11	9	8	8	9	12	16	20	23	26	28	30	31	31	30	28	28	27	27	27	31.5	
14-Aug-05	26	25	24	23	22	21	19	18	17	17	18	18	19	21	22	23	23	23	23	23	23	22	22	21	21	21	26.2	
15-Aug-05	21	21	21	21	20	19	18	17	17	17	16	16	16	16	17	18	18	19	19	19	19	18	16	16	16	16	20.7	
16-Aug-05	15	15	14	15	15	16	17	17	17	18	18	18	19	19	19	20	20	21	20	20	20	20	18	16	14	14	20.6	
17-Aug-05	14	12	11	9	9	9	10	10	9	10	11	13	15	17	19	22	24	26	27	28	27	26	24	22	22	22	27.6	
18-Aug-05	20	19	17	15	12	11	10	9	8	7	8	11	14	18	21	25	28	31	33	33	32	31	30	28	28	28	33.3	
19-Aug-05	26	24	21	19	17	15	13	11	9	9	10	12	14	16	N	N	N	N	N	N	N	N	N	N	N	21	21	26.0
20-Aug-05	21	20	19	18	16	15	14	13	12	12	13	16	16	16	17	18	18	19	19	19	19	19	18	16	16	14	33.6	
21-Aug-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	34	33	33	31	30	29	29	29	33.9	
22-Aug-05	28	28	27	26	26	25	23	22	21	21	21	22	22	23	25	26	27	26	26	25	24	24	23	22	22	22	28.3	
23-Aug-05	21	20	19	19	18	17	17	16	15	15	16	17	19	20	22	24	26	27	27	27	26	26	25	23	23	23	27.4	
24-Aug-05	21	19	17	16	14	12	11	9	8	8	9	11	14	17	21	25	29	32	34	35	35	34	33	32	32	32	34.9	
25-Aug-05	30	28	26	24	21	19	17	15	14	14	15	17	19	22	25	27	29	31	31	31	30	28	26	25	23	23	31.4	
26-Aug-05	21	19	17	16	15	14	14	14	14	14	16	19	23	26	29	32	35	38	39	39	38	37	36	36	36	36	39.4	
27-Aug-05	35	33	31	30	29	28	26	24	21	19	19	21	24	27	31	35	40	42	44	44	43	43	42	40	39	39	43.8	
28-Aug-05	36	32	28	24	21	18	15	14	17	20	24	28	32	36	40	43	44	44	43	43	43	42	40	38	38	38	44.2	
29-Aug-05	36	33	30	26	22	19	17	15	14	13	13	13	14	14	15	15	16	16	17	17	16	15	14	13	13	13	35.9	
30-Aug-05	12	11	9	7	7	6	5	5	5	6	7	10	13	17	20	23	25	27	28	29	29	29	29	29	28	28	28	28.6
31-Aug-05	28	28	28	28	27	26	25	24	24	24	25	26	28	31	33	34	35	36	36	36	36	35	33	33	33	33	35.9	

Hourly Max 35.9 32.9 31.4 29.9 28.9 27.8 26.3 24.4 23.8 23.8 24.3 27.8 31.5 35.5 39.9 43.4 44.2 43.8 43.0 43.8 43.8 42.8 41.4 38.9

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

Station: Beaverlodge  
Station Owner: PASZA

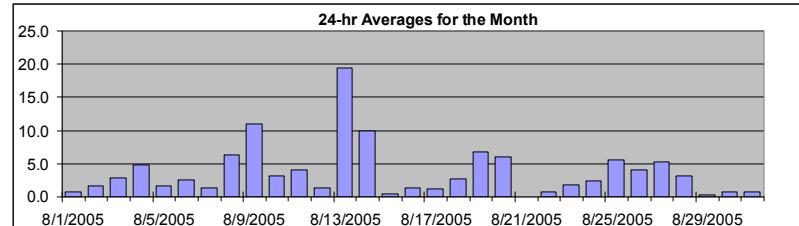
Monitoring Dates: August 1, 2005 to September 1, 2005

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  $\mu\text{g}/\text{m}^3$  13-Aug 21:00 22:00

Maximum 24-hr Value: 19.5  $\mu\text{g}/\text{m}^3$  13-Aug

**HOURLY AVERAGE TABLE**
**Particulate Matter (PM<sub>2.5</sub>)**


AIC Time:	0 hrs						Operational Time:	699 hrs					
Calibration Time:	3 hrs												AMD Operational Uptime:
Percentile	99	95	75	50	25	5	1	Average 3.8 $\mu\text{g}/\text{m}^3$		Geomean 2.4 $\mu\text{g}/\text{m}^3$			
	33.3	13.7	5.1	2.0	0.0	0.0	0.0						

**Status Flag Characters**

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

**Day Mountain Standard Time**

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	0	2	0	0	1	2	7	0	0	0	D	D	0	0	0	0	0	0	2	2	0	1	0	0	0	0.8	7.3
2-Aug-05	0	0	0	1	1	2	4	1	0	1	2	3	3	3	0	1	4	6	7	0	0	1	0	1	0	1.6	7.1
3-Aug-05	0	1	1	1	1	2	4	6	5	3	1	0	0	2	1	4	4	3	11	2	9	3	0	5	2.9	10.9	
4-Aug-05	5	3	4	5	5	6	7	7	9	7	8	5	7	8	4	5	D	0	4	3	4	2	0	3	4.8	8.5	
5-Aug-05	4	5	1	0	0	0	1	1	2	0	0	0	0	1	1	2	2	5	1	6	1	4	1	2	1.7	6.0	
6-Aug-05	3	1	3	2	4	4	7	0	0	2	1	5	1	4	2	0	14	3	0	D	0	1	0	0	2.5	13.6	
7-Aug-05	0	0	0	1	1	2	3	4	3	2	0	0	0	0	D	0	6	1	0	1	1	4	2	1	1.4	5.6	
8-Aug-05	0	1	1	0	0	3	3	6	6	6	7	7	3	5	5	6	3	6	8	13	14	18	19	15	6.3	18.6	
9-Aug-05	16	16	16	14	12	13	13	12	13	11	9	8	9	13	6	7	16	12	9	10	10	9	7	3	10.9	16.4	
10-Aug-05	1	5	5	4	0	0	9	7	7	7	1	0	2	2	1	1	2	1	1	4	4	6	3	4	3.1	8.9	
11-Aug-05	4	8	4	4	3	5	9	8	7	6	4	1	3	3	8	2	8	1	0	0	0	3	4	2	4.0	8.7	
12-Aug-05	D	1	2	1	0	0	1	1	1	2	2	0	0	2	0	2	0	0	3	2	6	6	1	1	1.4	6.0	
13-Aug-05	2	3	0	0	0	0	5	11	0	9	19	23	28	26	36	40	37	37	37	35	33	42	23	24	19.5	41.7	
14-Aug-05	25	24	23	17	15	13	15	13	14	13	12	14	13	5	0	1	5	3	3	2	0	D	0	0	10.0	24.7	
15-Aug-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	3	2	1	0	0.5	3.1	
16-Aug-05	0	0	2	0	0	0	1	0	0	0	0	1	3	2	2	3	2	1	1	3	3	5	4	0	1.4	5.3	
17-Aug-05	0	0	0	0	0	0	1	0	2	3	2	D	0	0	0	2	0	3	0	2	2	5	2	3	1.2	5.0	
18-Aug-05	0	1	2	1	1	0	6	1	3	5	2	D	0	3	5	3	1	4	7	4	4	3	2	3	2.7	7.4	
19-Aug-05	4	5	4	4	4	6	7	11	11	11	8	6	C	C	C	0	11	7	5	D	8	9	6.8	11.3			
20-Aug-05	4	6	10	14	7	3	16	8	14	6	7	0	0	D	0	5	5	0	0	8	N	N	N	6.0	15.9		
21-Aug-05	N	N	N	N	N	N	N	N	N	N	12	13	10	4	9	6	D	1	0	0	D	D	0	N	13.3		
22-Aug-05	0	0	0	0	0	2	2	0	0	0	D	D	1	0	1	3	3	1	3	D	0	1	0	0.7	2.7		
23-Aug-05	1	0	0	0	0	1	3	3	4	4	0	3	4	1	7	0	2	3	5	0	0	0	1	1	1.8	7.3	
24-Aug-05	0	1	1	0	2	0	3	15	0	0	4	0	D	1	0	0	0	4	5	6	2	5	5	4	2.4	14.6	
25-Aug-05	4	3	14	4	3	3	4	6	7	8	9	10	5	0	3	2	1	3	9	10	15	D	1	6	5.6	15.0	
26-Aug-05	4	3	5	3	4	3	7	7	12	12	D	D	3	4	3	5	5	1	0	2	4	2	2	1	4.0	12.3	
27-Aug-05	3	2	2	3	2	3	4	9	11	6	7	2	2	0	0	7	12	10	9	0	9	6	10	9	5.3	11.9	
28-Aug-05	9	9	6	8	6	8	2	D	0	0	D	0	0	0	0	0	1	4	6	D	0	0	0	0	3.2	9.0	
29-Aug-05	0	0	D	0	0	0	D	0	0	0	0	0	0	1	2	2	0	0	2	0	0	0	0	0	0.3	2.1	
30-Aug-05	0	0	1	0	0	0	1	5	1	2	0	2	D	3	0	0	2	0	0	1	0	0	0	0	0.8	5.4	
31-Aug-05	0	1	0	0	0	2	3	2	0	0	1	1	1	0	0	0	2	0	0	3	1	1	2	1	0.8	2.6	
Hourly Avg	3.0	3.2	3.6	2.9	2.3	2.7	5.3	4.7	4.5	4.2	3.8	4.3	3.8	3.5	3.0	3.7	4.9	3.7	4.5	4.5	4.6	4.9	3.3	3.2			
Hourly Max	24.7	24.2	23.3	16.9	15.0	13.1	15.9	14.6	13.8	13.4	18.5	22.8	27.7	25.8	35.7	39.5	36.7	37.4	36.5	35.1	33.3	41.7	22.7	24.0			

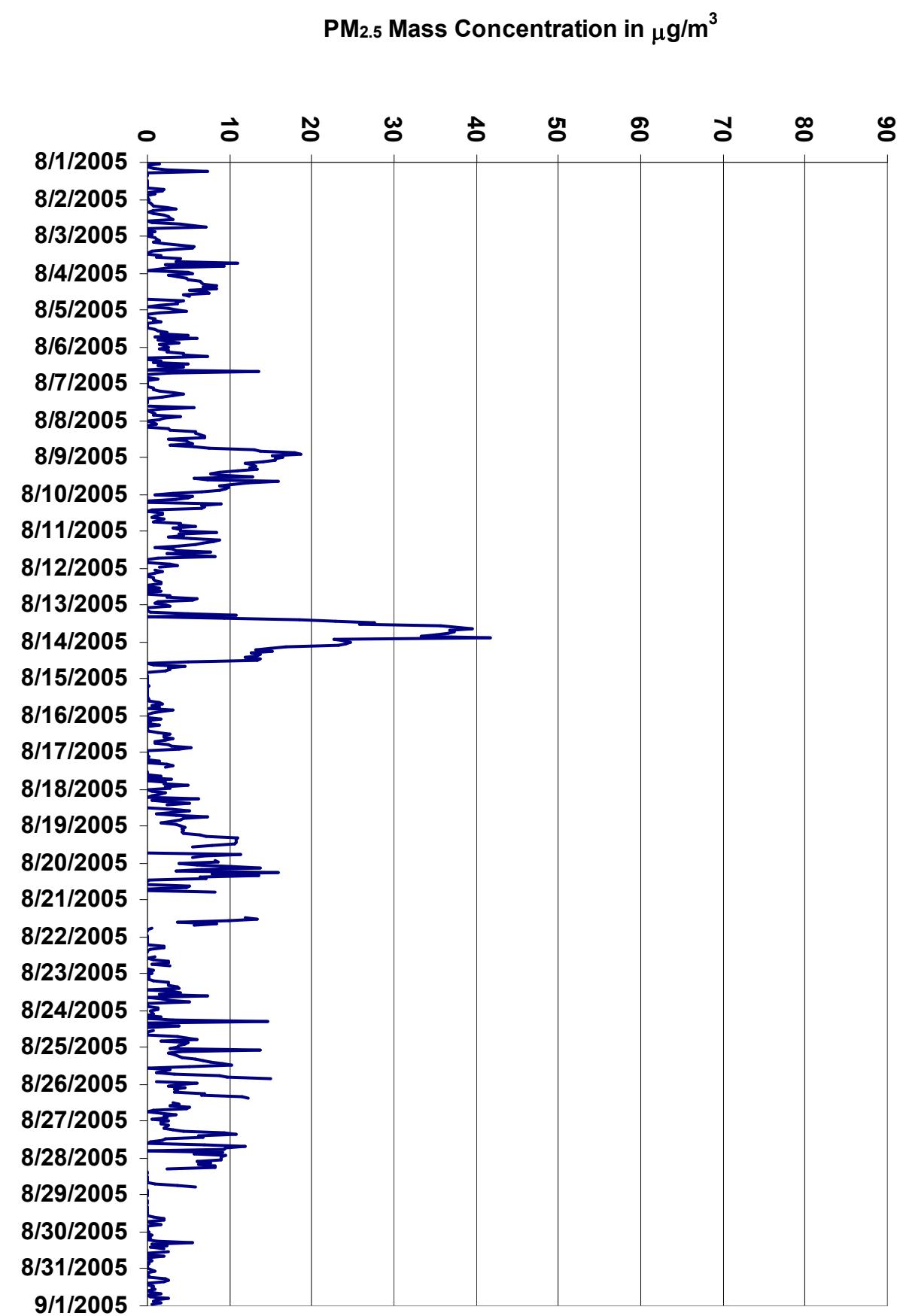


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge  
Station Owner: PASZA

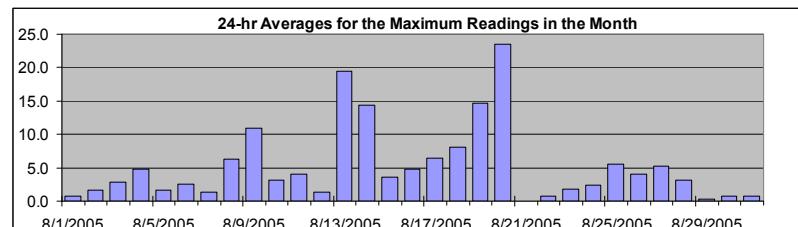
Monitoring Dates: August 1, 2005 to September 1, 2005

### Summary

Maximum 1-hr Average:	57.2	$\mu\text{g}/\text{m}^3$	20-Aug	8:00 9:00
Maximum 24-hr Value:	23.5	$\mu\text{g}/\text{m}^3$	20-Aug	

### HOURLY MAXIMUM TABLE

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



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
1-Aug-05	0	2	0	0	1	2	7	0	0	0	D	D	0	0	0	0	0	0	0	2	2	0	1	0	0	0.8	7.3	
2-Aug-05	0	0	0	1	1	2	4	1	0	1	2	3	3	3	0	1	4	6	7	0	0	1	0	1	1	1.6	7.1	
3-Aug-05	0	1	1	1	1	2	4	6	5	3	1	0	0	2	1	4	4	3	11	2	9	3	0	5	2.9	10.9		
4-Aug-05	5	3	4	5	5	6	7	7	9	7	8	5	7	8	4	5	D	0	4	3	4	2	0	3	4.8	8.5		
5-Aug-05	4	5	1	0	0	0	1	1	2	0	0	0	0	1	1	2	5	1	6	1	4	1	2	1.7	6.0			
6-Aug-05	3	1	3	2	4	4	7	0	0	2	1	5	1	4	2	0	14	3	0	D	0	1	0	0	2.5	13.6		
7-Aug-05	0	0	0	1	1	2	3	4	3	2	0	0	0	0	0	6	1	0	1	1	4	2	1	1.4	5.6			
8-Aug-05	0	1	1	0	0	3	3	6	6	6	7	7	3	5	5	6	3	6	8	13	14	18	19	15	6.3	18.6		
9-Aug-05	16	16	16	14	12	13	13	12	13	11	9	8	9	13	6	7	16	12	9	10	10	9	7	3	10.9	16.4		
10-Aug-05	1	5	5	4	0	0	9	7	7	1	0	2	2	1	1	2	1	1	4	4	6	3	4	3.1	8.9			
11-Aug-05	4	8	4	4	3	5	9	8	7	6	4	1	3	3	8	2	8	1	0	0	0	3	4	4.0	8.7			
12-Aug-05	D	1	2	1	0	0	1	1	1	2	2	0	0	2	0	2	0	0	3	2	6	6	1	1	1.4	6.0		
13-Aug-05	2	3	0	0	0	0	5	11	0	9	19	23	28	26	36	40	37	37	35	33	42	23	24	19.5	41.7			
14-Aug-05	25	24	23	17	15	13	15	13	14	23	22	30	23	13	12	10	12	7	7	8	4	D	1	2	14.4	29.7		
15-Aug-05	3	2	1	1	0	4	2	3	1	3	4	4	6	6	8	6	5	4	5	5	5	4	2	2	3.6	7.9		
16-Aug-05	2	1	4	2	3	3	5	3	2	4	5	5	6	7	7	8	4	6	8	5	8	7	4	4.8	8.0			
17-Aug-05	2	0	0	3	3	2	4	2	6	9	12	D	6	4	8	12	11	9	5	7	11	12	14	6.5	14.3			
18-Aug-05	3	5	6	3	5	3	11	17	9	9	10	D	5	11	12	15	9	8	15	9	8	5	3	8.1	16.6			
19-Aug-05	6	6	6	7	7	7	12	10	15	19	17	19	18	19	C	C	C	11	27	20	29	D	23	14	14.7	29.4		
20-Aug-05	19	28	31	26	14	20	41	19	57	19	19	15	10	D	19	16	25	20	28	21	N	N	N	23.5	57.2			
21-Aug-05	N	N	N	N	N	N	N	N	N	N	N	12	13	10	4	9	6	D	1	0	0	D	D	0	N	13.3		
22-Aug-05	0	0	0	0	0	0	2	2	0	0	0	D	D	1	0	1	3	3	1	3	D	0	1	0	0.7	2.7		
23-Aug-05	1	0	0	0	0	1	3	3	4	4	0	3	4	1	7	0	2	3	5	0	0	0	1	1	1.8	7.3		
24-Aug-05	0	1	1	0	2	0	3	15	0	0	4	0	D	1	0	0	0	4	5	6	2	5	5	4	2.4	14.6		
25-Aug-05	4	3	14	4	3	3	4	6	7	8	9	10	5	0	3	2	1	3	9	10	15	D	1	6	5.6	15.0		
26-Aug-05	4	3	5	3	4	3	7	7	12	12	D	D	3	4	3	5	5	1	0	2	4	2	2	1	4.0	12.3		
27-Aug-05	3	2	2	3	2	3	4	9	11	6	7	2	2	0	0	7	12	10	9	0	9	6	10	5.3	11.9			
28-Aug-05	9	9	6	8	6	8	8	2	D	0	0	0	0	0	0	0	0	1	4	6	D	0	0	0	3.2	9.0		
29-Aug-05	0	0	D	0	0	0	D	0	0	0	0	0	0	0	1	2	2	0	0	2	0	0	0	0.3	2.1			
30-Aug-05	0	0	1	0	0	0	1	5	1	2	0	2	D	3	0	0	0	2	0	0	1	0	0	0	0.8	5.4		
31-Aug-05	0	1	0	0	0	0	2	3	2	0	0	1	1	0	0	0	2	0	0	3	1	1	2	1	0.8	2.6		

Hourly Avg	4.0	4.3	4.7	3.7	3.1	3.7	6.8	6.0	6.6	5.7	5.7	6.2	5.6	5.0	5.1	5.4	6.8	5.4	6.7	6.2	6.2	5.4	4.5	3.9
Hourly Max	24.7	27.9	30.7	26.0	15.0	19.5	40.7	18.9	57.2	22.8	22.4	29.7	27.7	25.8	35.7	39.5	36.7	37.4	36.5	35.1	33.3	41.7	22.7	24.0

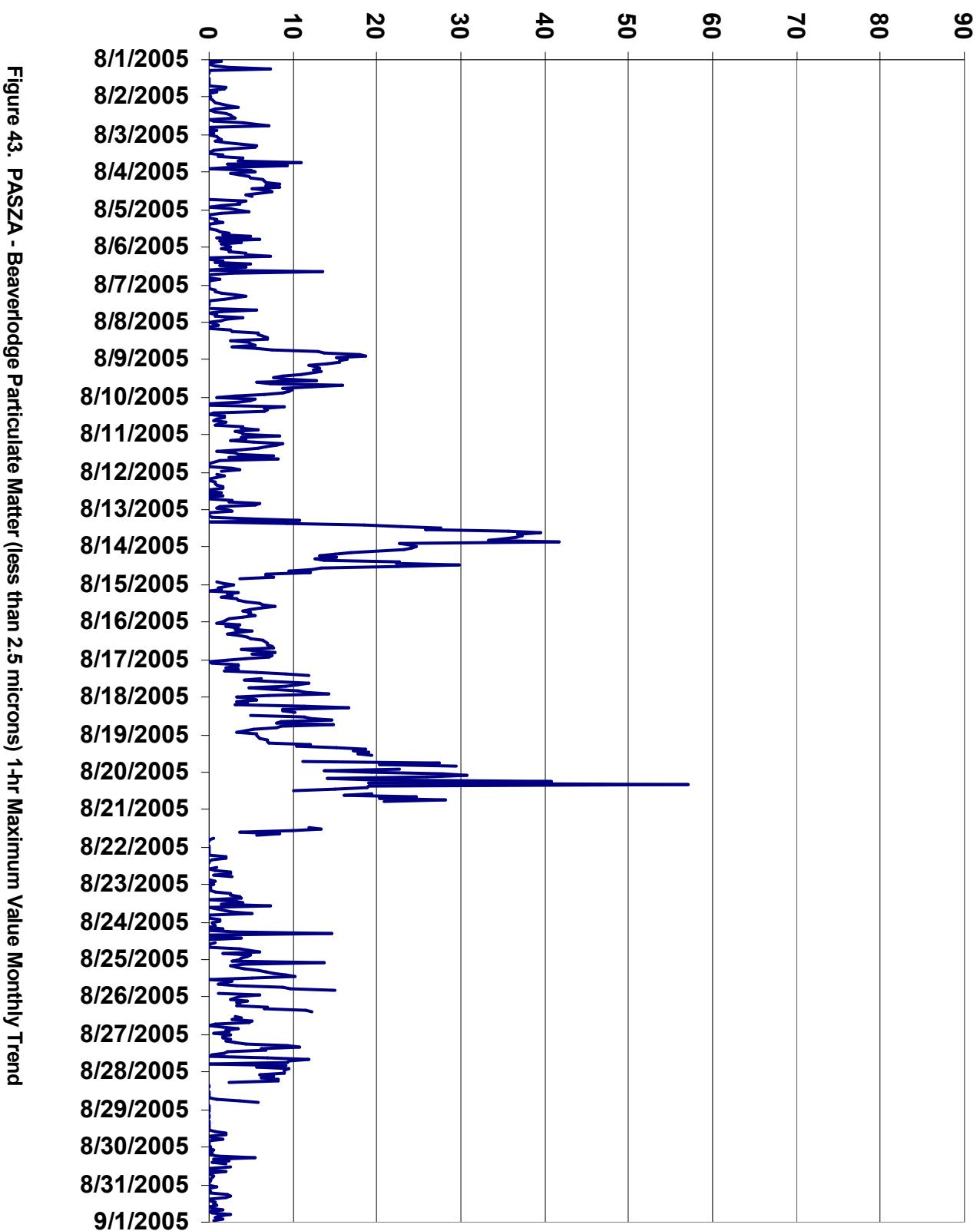
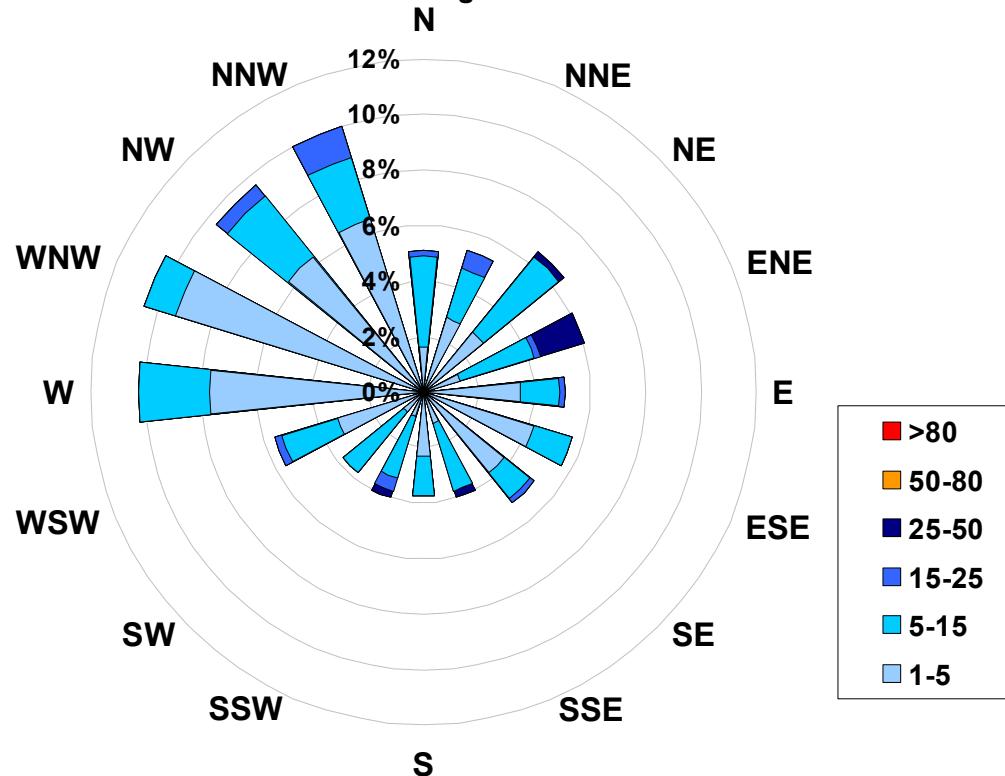


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

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



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

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range		Frequency (hrs)	
1.0	<	5	517
5	to	15	152
15	to	25	17
25	to	50	10
50	to	80	0
>	80		0
Total Non-Zero Values		699	

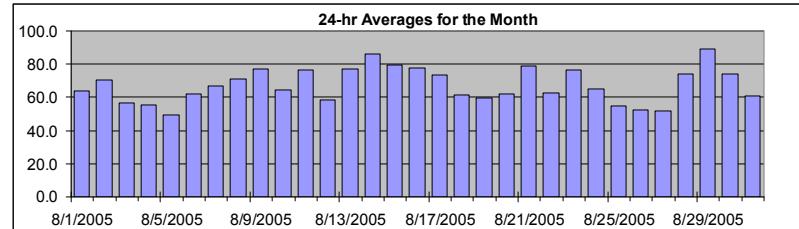
**PASZA - Beaverlodge Relative Humidity Monthly Summary**

Station: Beaverlodge  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

**HOURLY AVERAGE TABLE****Relative Humidity (RH)****Summary**

Maximum 1-hr Average:	97.0	%	17-Aug	4:00 5:00
Maximum 24-hr Value:	89.2	%	29-Aug	



AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	96.0	94.0	83.0	71.0	53.0	34.0	28.4	

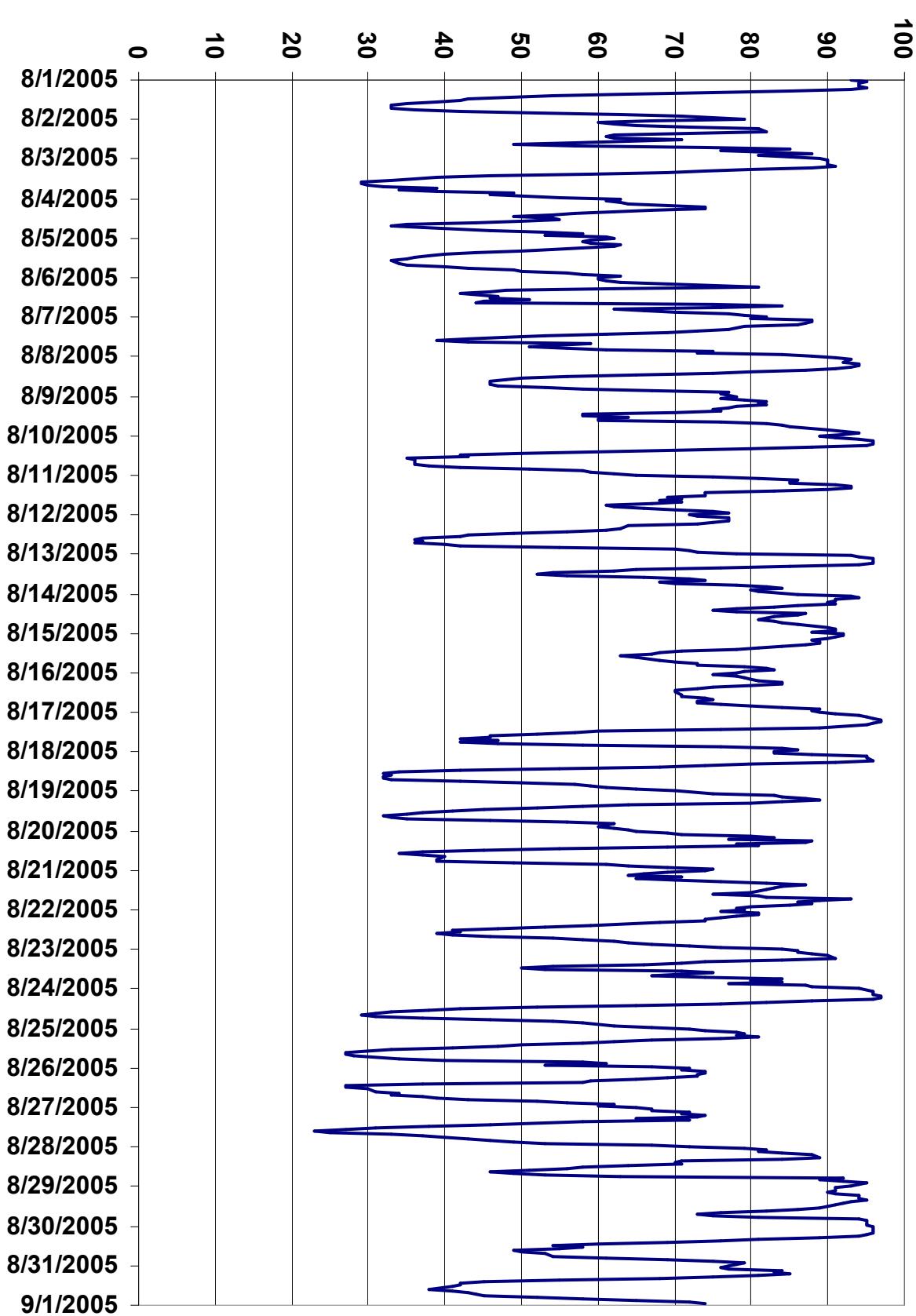
**Status Flag Characters**

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

**Day Mountain Standard Time**

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Aug-05	93	95	94	94	95	93	85	75	64	54	43	42	39	35	33	33	33	36	42	52	63	71	75	63.9	95.0	
2-Aug-05	79	67	60	62	65	72	81	82	72	62	61	62	71	64	57	49	57	74	85	76	82	88	81	85	70.6	88.0
3-Aug-05	89	90	90	90	91	88	80	74	69	59	46	39	36	33	29	29	30	32	39	34	39	49	46	55	56.5	91.0
4-Aug-05	63	61	63	64	69	74	74	67	62	57	54	49	54	55	50	44	35	33	37	46	53	58	53	61	55.7	74.0
5-Aug-05	62	59	58	59	63	62	58	54	50	44	40	38	36	35	33	34	35	40	43	49	50	56	58	63	49.1	63.0
6-Aug-05	60	60	61	63	69	75	81	62	48	46	42	47	46	51	45	44	75	84	76	62	66	70	77	79	62.0	84.0
7-Aug-05	82	80	88	88	87	86	79	77	73	69	61	53	48	43	39	43	59	55	51	56	61	75	73	84	67.1	88.0
8-Aug-05	88	91	93	92	94	94	93	91	87	80	75	65	56	50	48	46	46	46	47	53	58	67	77	76	71.4	94.0
9-Aug-05	78	76	79	82	81	82	78	77	75	76	70	58	58	64	60	60	76	82	84	85	90	92	94	92	77.0	94.0
10-Aug-05	89	91	94	96	96	96	95	88	80	70	60	50	42	43	35	36	36	36	38	42	51	58	59	62	64.3	96.0
11-Aug-05	65	75	81	86	85	85	91	93	93	90	83	74	74	69	71	68	71	67	61	62	66	70	75	77	76.3	93.0
12-Aug-05	72	73	77	77	75	73	64	63	61	56	49	43	42	37	36	37	36	40	42	55	70	72	73	58.3	77.0	
13-Aug-05	78	93	94	96	96	96	94	85	76	65	62	54	52	56	66	72	74	68	70	78	82	84	80	81	77.2	96.0
14-Aug-05	86	93	94	91	91	90	91	86	83	78	75	78	87	86	83	82	81	83	84	86	90	91	88	86.2	94.0	
15-Aug-05	92	92	91	90	88	89	89	87	84	81	78	71	68	67	63	65	68	70	73	73	79	82	83	79	79.3	92.0
16-Aug-05	78	75	78	79	80	81	84	84	80	75	73	70	70	71	74	75	73	73	76	80	84	89	88	77.5	89.0	
17-Aug-05	89	91	94	95	96	97	97	96	95	89	76	60	57	52	46	46	42	47	42	47	58	76	84	86	73.3	97.0
18-Aug-05	83	83	88	95	95	96	91	80	74	68	55	42	34	32	33	32	32	33	42	50	57	59	61	65	61.7	96.0
19-Aug-05	70	75	83	84	87	89	84	80	64	58	52	45	41	37	35	32	33	35	46	56	62	60	64	59.8	89.0	
20-Aug-05	65	69	71	80	83	77	88	87	78	81	69	55	45	37	34	37	40	39	39	49	61	64	69	75	62.2	88.0
21-Aug-05	74	69	66	64	71	65	70	76	82	87	84	83	82	80	75	81	82	93	89	86	88	85	80	78	78.8	93.0
22-Aug-05	79	76	81	81	78	76	74	74	68	59	53	47	41	42	39	41	46	54	58	62	64	67	72	76	62.8	81.0
23-Aug-05	84	86	86	88	90	91	84	74	71	66	54	50	53	71	75	71	67	74	84	80	84	77	88	76.5	91.0	
24-Aug-05	94	96	96	96	97	97	96	88	82	76	65	52	42	38	33	31	29	31	37	46	54	58	62	67	65.1	97.0
25-Aug-05	72	74	78	79	78	81	76	67	62	58	50	47	41	33	30	27	27	28	34	40	58	61	53	67	55.0	81.0
26-Aug-05	72	71	74	74	73	73	69	65	59	58	37	27	27	30	31	34	33	37	39	43	52	56	62	60	52.3	74.0
27-Aug-05	65	67	67	72	71	74	73	65	72	58	46	38	31	27	23	25	33	37	40	43	46	49	53	67	51.8	74.0
28-Aug-05	72	79	82	81	84	88	89	84	71	70	71	64	58	56	51	46	49	53	63	92	89	92	95	94	73.9	95.0
29-Aug-05	93	91	91	90	91	94	94	94	95	93	92	91	90	89	86	82	76	73	75	81	94	95	95	95	89.2	95.0
30-Aug-05	96	96	96	96	96	95	94	89	81	76	69	60	54	58	55	49	50	53	54	61	69	75	78	74.1	96.0	
31-Aug-05	77	76	77	84	83	85	81	75	68	55	45	42	42	41	38	41	43	44	45	52	58	65	72	74	61.0	85.0

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



**PASZA - Beaverlodge Temperature Monthly Summary**

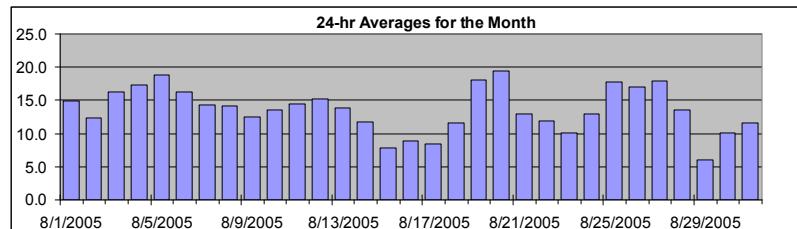
Station: Beaverlodge  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

**Summary**

Maximum 1-hr Average:	28.3	°C	25-Aug	16:00 17:00
Maximum 24-hr Value:	19.4	°C	20-Aug	

AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	
	26.9	23.3	17.3	13.2	9.7	5.1	3.4		13.6 °C

**HOURLY AVERAGE TABLE****Ambient Temperature (T)****Status Flag Characters**

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

**Day Mountain Standard Time**

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Aug-05	13	13	13	12	12	12	13	14	15	17	19	19	18	18	19	19	18	18	16	13	11	9	9	14.9	19.4		
2-Aug-05	8	10	12	11	11	10	10	10	12	14	14	14	13	15	16	17	16	14	13	14	12	11	11	10	12.4	17.2	
3-Aug-05	9	8	8	7	7	7	9	11	14	17	19	21	21	22	24	24	24	24	23	23	21	17	16	14	16.2	24.2	
4-Aug-05	12	12	11	11	10	10	11	13	15	18	19	21	20	20	21	24	25	25	24	22	20	18	18	16	17.3	25.0	
5-Aug-05	16	17	17	17	16	15	17	18	19	20	21	21	21	22	23	23	22	21	20	19	18	17	16	14	18.8	23.3	
6-Aug-05	15	14	14	13	13	12	13	16	19	20	21	20	21	20	22	22	16	15	16	17	15	14	12	11	16.2	21.9	
7-Aug-05	10	10	8	8	8	9	10	12	13	15	17	18	19	20	21	19	17	18	19	18	16	13	13	11	14.3	20.9	
8-Aug-05	10	10	10	10	9	9	9	11	12	13	14	16	17	18	19	19	20	20	19	18	16	14	13	13	14.1	20.1	
9-Aug-05	13	13	13	12	12	11	12	12	12	12	13	15	15	14	14	15	14	13	12	12	11	11	10	10	12.5	15.2	
10-Aug-05	9	9	9	8	7	5	7	9	11	14	16	17	19	18	20	19	19	19	18	18	16	15	14	14	13.6	19.8	
11-Aug-05	13	13	12	11	11	12	11	12	13	13	15	16	16	17	18	17	18	18	17	15	14	14	13	14	14.4	18.1	
12-Aug-05	12	11	11	11	10	10	10	12	13	14	15	17	19	19	21	22	21	21	20	20	17	14	14	13	15.2	21.5	
13-Aug-05	11	9	8	7	7	7	7	9	12	15	17	21	22	21	18	17	16	18	17	16	15	15	14	14	13.9	21.7	
14-Aug-05	14	13	13	13	12	12	12	12	13	13	13	13	12	12	12	13	12	12	11	10	9	8	8	8	11.8	13.5	
15-Aug-05	7	6	6	6	6	6	6	7	7	7	8	9	9	10	10	10	9	9	9	8	8	8	8	8	7.8	10.1	
16-Aug-05	8	8	7	7	7	7	7	8	8	9	10	11	11	11	10	10	10	10	10	9	9	9	9	8	8.8	10.6	
17-Aug-05	7	6	5	4	3	3	3	3	4	6	9	11	12	13	14	14	14	14	14	11	8	6	5	8.5	14.3		
18-Aug-05	5	4	3	2	2	1	2	5	7	10	13	15	17	19	20	21	21	19	17	14	13	12	12	11.6	21.4		
19-Aug-05	11	10	9	8	8	8	9	10	15	17	20	23	25	26	27	28	28	27	25	23	21	20	19	19	18.1	28.1	
20-Aug-05	18	17	17	16	15	16	14	15	18	17	19	22	24	25	25	24	24	24	21	19	18	17	16	16	19.4	24.7	
21-Aug-05	15	15	14	14	13	13	13	13	12	12	13	13	14	15	16	15	15	12	13	12	11	10	10	9	12.9	15.7	
22-Aug-05	8	9	7	7	7	7	8	9	11	13	15	16	18	17	18	18	16	15	14	14	12	10	9	8	12.0	18.3	
23-Aug-05	6	6	5	5	4	4	6	9	10	13	16	17	17	13	13	14	14	12	11	12	10	10	8	8	10.0	17.3	
24-Aug-05	6	6	6	5	5	4	4	7	9	11	15	18	19	20	21	21	22	21	20	17	15	14	13	12	12.9	21.9	
25-Aug-05	11	10	9	8	8	7	8	11	13	16	19	22	24	26	27	28	28	26	25	21	18	18	15	15	17.8	28.3	
26-Aug-05	13	13	12	12	11	11	12	14	16	18	22	23	22	22	22	23	22	21	19	16	15	14	14	14	17.0	23.1	
27-Aug-05	12	12	12	10	11	10	10	13	13	17	20	23	25	27	27	26	25	24	23	21	20	19	18	15	18.0	27.2	
28-Aug-05	14	13	12	13	13	12	12	13	14	13	13	15	15	16	18	19	18	17	15	11	11	10	10	10	13.6	19.0	
29-Aug-05	10	9	8	7	7	5	5	4	4	4	4	4	4	4	5	6	7	8	9	9	8	6	5	4	6.0	9.5	
30-Aug-05	4	4	4	4	4	5	5	6	9	11	13	15	15	16	16	17	16	15	13	11	10	9	8	8.0	10.1	16.5	
31-Aug-05	8	9	8	6	6	6	7	9	11	14	16	17	17	17	16	16	15	14	13	12	10	9	8	11.7	17.0		

Hourly Avg 10.6 10.3 9.7 9.3 8.8 8.5 9.0 10.5 12.0 13.7 15.4 16.8 17.4 17.8 18.5 18.7 18.3 17.8 17.2 16.1 14.2 12.9 12.0 11.1

Hourly Max 18.4 17.5 17.4 16.8 15.5 16.0 16.6 17.9 19.2 20.4 21.6 23.0 24.6 26.5 27.2 28.2 28.3 27.8 26.3 25.1 20.6 19.7 18.8 18.6

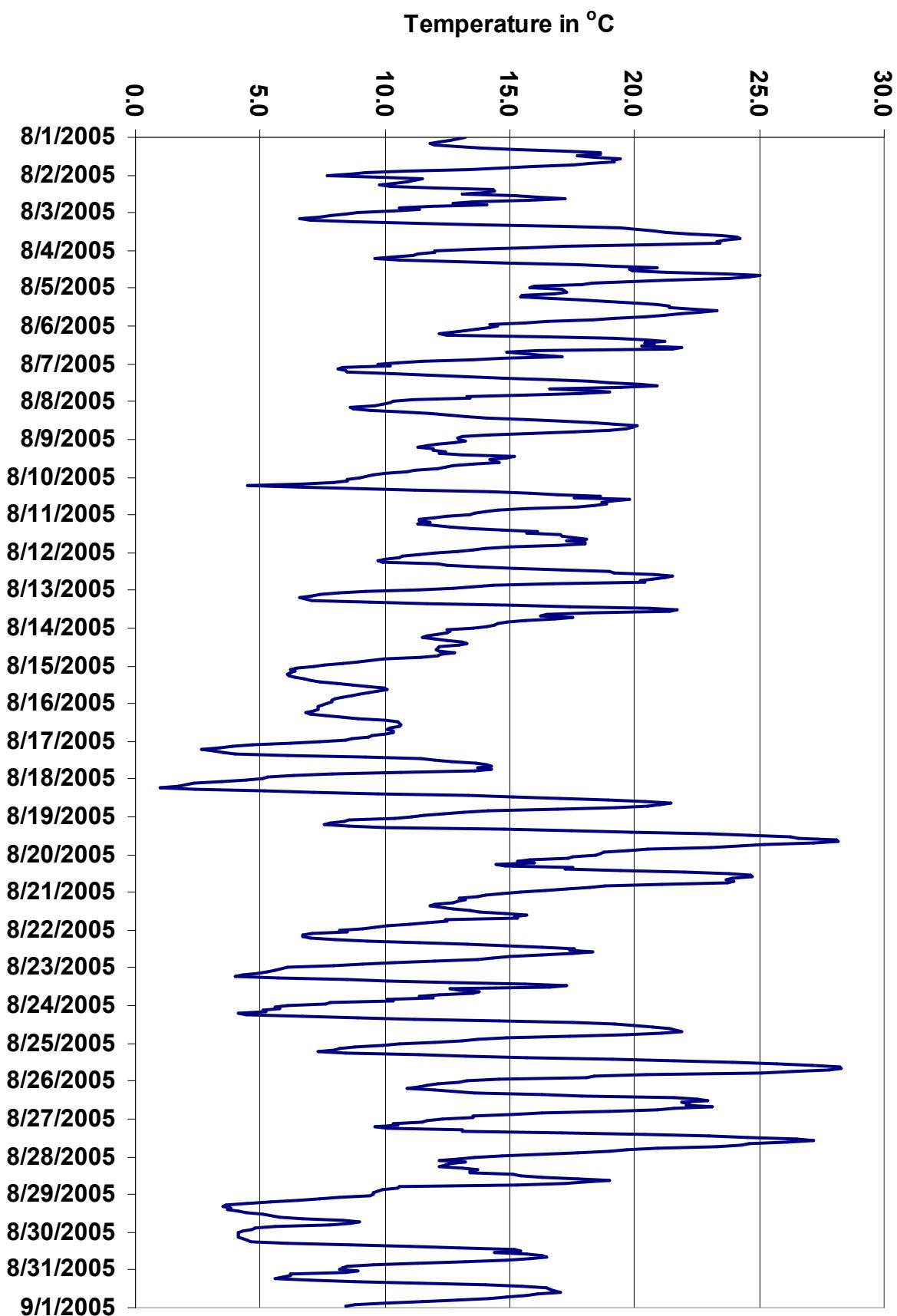


Figure 45. PASSA - Beaverlodge Temperature 1-hr Average Monthly Trend

## PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

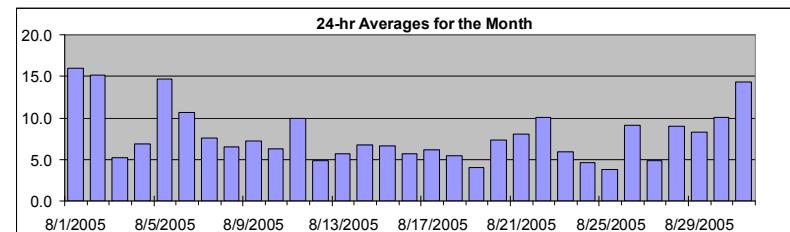
### Summary

Maximum 1-hr Average:	28.1	km/hr	31-Aug	13:00 14:00
Maximum 24-hr Value:	16.0	km/hr	1-Aug	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs		
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%		
Percentile	99	95	75 50 25 5 1			
	25.7	20.1	AverageS 9.7 6.5 4.2 2.5 1.7			
			8.0 km/hr			

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

### Day Mountain Standard Time

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

1-hr Average	5.5	6.1	6.5	6.3	5.5	5.5	5.6	6.4	7.8	9.0	9.7	10.2	11.0	10.8	11.2	10.9	10.5	9.3	8.8	8.2	7.5	6.7	6.1	5.9
Hourly Max	10.9	19.0	27.9	24.6	22.1	18.7	19.6	18.4	21.4	22.1	23.7	26.3	24.3	28.1	27.5	26.9	22.5	26.5	25.6	21.9	17.1	15.2	17.2	17.1

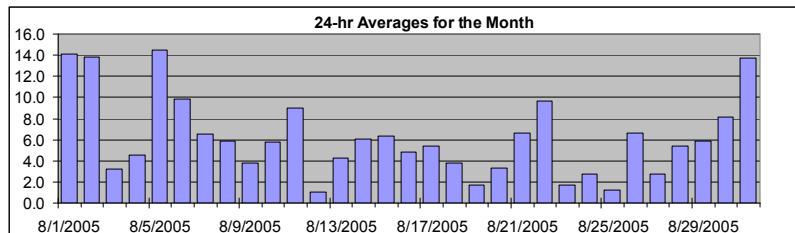
**PASZA - Beaverlodge Vector Wind Speed Monthly Summary**

Station: Beaverlodge  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

**HOURLY AVERAGE TABLE****Wind Speed (WSv)****Summary**

Maximum 1-hr Average:	28.1	km/hr	31-Aug	13:00 14:00
Maximum 24-hr Value:	14.4	km/hr	5-Aug	



Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageV	13.3 km/hr
	25.7	20.1	9.7	6.5	4.2	2.5	1.7		

**Status Flag Characters**

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

**Day Mountain Standard Time**

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

**PASZA - Beaverlodge Wind Direction Monthly Summary**

Station: Beaverlodge  
 Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

**HOURLY AVERAGE TABLE****Wind Direction (WD)****Summary**





Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average	
	357.6	343.0	296.0	251.5	114.5	26.3	9.0	294 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	23:00 2:00	
1-Aug-05	346	335	344	343	340	330	292	323	277	252	241	239	264	249	276	275	274	272	266	280	276	265	249	248	272	W
2-Aug-05	241	257	265	268	272	275	280	269	277	283	292	316	337	297	287	289	315	350	317	275	262	21	277	244	284	WNW
3-Aug-05	80	142	157	91	89	80	93	166	206	262	280	294	269	260	268	271	269	286	273	288	267	267	303	219	266	W
4-Aug-05	110	93	128	127	169	161	127	159	189	206	236	247	253	251	244	268	280	282	288	297	299	291	269	260	258	WSW
5-Aug-05	280	290	286	282	283	285	283	266	269	278	279	293	288	297	292	273	287	285	277	273	284	299	295	360	284	WNW
6-Aug-05	308	307	306	309	212	178	229	262	288	293	287	295	291	299	278	289	291	294	258	275	273	320	292	287	287	WNW
7-Aug-05	313	282	214	325	331	328	338	322	329	320	336	335	336	338	341	311	297	329	325	344	21	60	243	312	326	NW
8-Aug-05	8	30	301	316	307	322	337	318	329	321	314	329	318	303	312	310	340	351	3	349	358	18	313	28	332	NNW
9-Aug-05	337	342	341	349	355	9	25	45	44	65	57	65	71	37	82	96	246	263	247	269	263	37	26	352	10	N
10-Aug-05	360	11	348	340	9	299	10	331	322	302	313	328	292	344	288	309	331	318	334	334	331	306	296	304	328	NNW
11-Aug-05	294	244	25	250	286	342	319	321	332	329	327	320	314	319	326	339	329	330	360	13	22	342	341	345	331	NNW
12-Aug-05	23	26	29	71	113	80	88	103	161	174	185	279	278	254	318	296	301	332	310	269	159	75	62	71	11	NNE
13-Aug-05	79	137	130	99	185	127	112	141	172	178	211	359	61	69	67	75	73	69	77	201	160	55	76	125	82	E
14-Aug-05	96	202	340	18	44	358	348	20	22	45	42	43	43	53	41	38	25	15	14	30	47	54	70	74	41	NE
15-Aug-05	92	105	117	109	102	149	148	101	112	122	128	134	127	122	129	141	112	130	141	126	108	85	87	76	119	ESE
16-Aug-05	85	94	91	88	39	38	53	42	48	64	90	56	49	38	47	42	45	51	48	32	332	330	322	17	49	NE
17-Aug-05	19	6	28	18	16	3	357	322	306	302	311	312	323	335	349	339	346	354	3	14	49	74	287	4	350	N
18-Aug-05	33	360	26	254	346	106	153	222	158	185	172	170	198	167	212	126	140	144	144	135	116	107	118	104	142	SE
19-Aug-05	101	115	245	261	311	56	83	159	172	212	222	244	254	266	224	244	242	210	210	118	63	59	94	75	214	SW
20-Aug-05	65	65	234	23	329	356	319	46	153	197	168	181	235	257	266	271	281	299	286	78	277	337	306	333	287	WNW
21-Aug-05	335	320	297	279	185	319	275	259	300	269	238	229	223	208	211	230	233	269	224	251	248	255	255	252	260	W
22-Aug-05	252	255	246	268	267	261	212	248	270	277	272	281	288	272	282	283	283	297	281	281	311	305	257	254	274	W
23-Aug-05	117	129	188	342	297	333	304	350	324	341	334	331	329	196	185	207	107	107	276	316	318	319	36	29	317	NW
24-Aug-05	198	229	61	339	323	134	215	97	211	210	215	228	219	192	214	187	212	157	145	119	102	116	103	116	168	SSE
25-Aug-05	130	110	95	112	148	100	108	134	195	216	220	206	243	264	297	287	274	261	199	159	109	41	292	152	212	SSW
26-Aug-05	141	175	96	72	83	82	104	107	161	216	280	281	279	262	244	241	253	278	264	267	258	235	246	281	261	W
27-Aug-05	93	125	102	126	98	84	77	44	43	232	290	182	280	59	223	269	47	16	28	33	37	43	20	350	45	NE
28-Aug-05	11	319	58	129	59	336	350	306	279	285	270	252	262	289	313	321	17	52	32	304	72	264	112	350	309	NW
29-Aug-05	28	360	4	356	350	347	347	345	343	345	340	341	325	324	315	329	279	240	224	191	157	101	97	104	346	NNW
30-Aug-05	138	131	138	155	122	166	142	171	216	184	210	259	270	273	261	274	265	264	269	263	260	263	235	238	254	WSW
31-Aug-05	230	237	257	238	248	217	189	242	240	261	274	269	270	258	272	266	278	271	276	280	286	280	260	244	264	W
Hourly Avg	8	324	321	328	319	335	323	305	287	277	276	281	284	282	284	283	294	292	281	289	309	333	302	316		

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

Station: Beaverlodge  
Station Owner: PASZA

Monitoring Dates: August 1, 2005 to September 1, 2005

#### HOURLY AVERAGE TABLE

#### Wind Direction (WD)

##### Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs						0% calms		Operational Time:						744 hrs												
Calibration Time:	0 hrs								AMD Operational Uptime:						100.0%												
Percentile	99	95	75	50	25	5	1																				
	30.9	23.0	15.0	10.0	8.0	5.0	3.0																				

##### Status Flag Characters

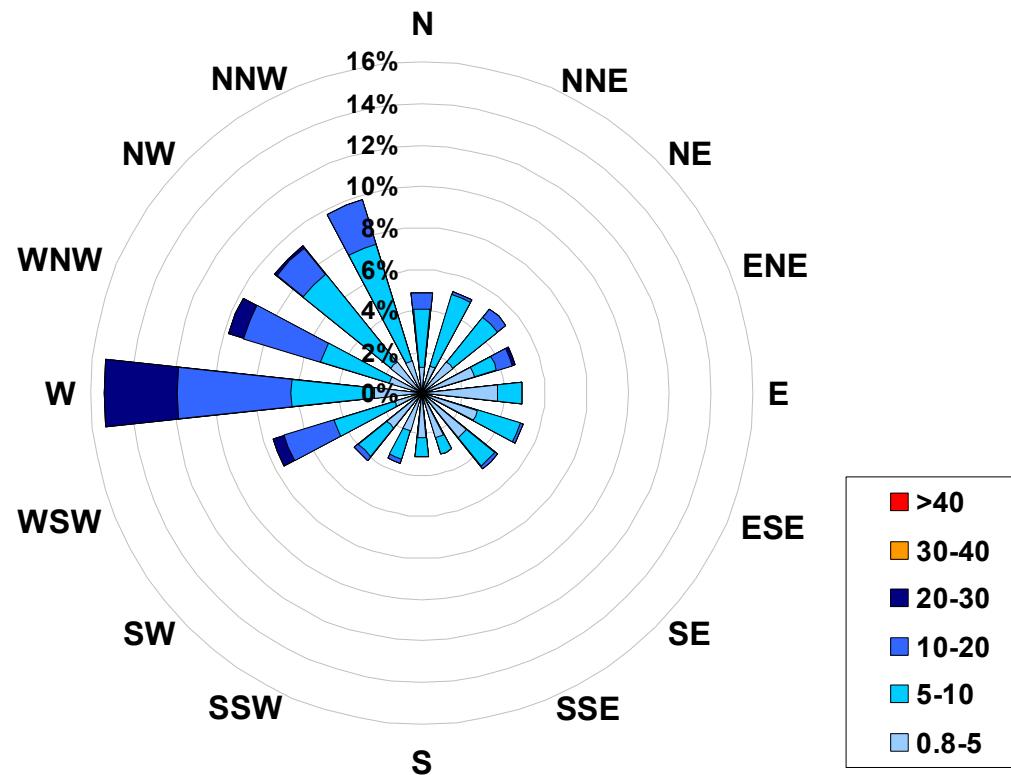
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

##### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Aug-05	7	9	14	17	14	10	9	20	10	9	8	9	10	9	10	10	10	9	9	9	9	9	7	7	6	20.0	
2-Aug-05	7	9	9	9	9	9	9	9	10	10	10	10	12	18	10	10	10	16	17	13	9	19	7	6	10	19.0	
3-Aug-05	34	23	13	16	17	11	9	10	12	13	10	13	12	15	14	17	11	11	8	5	6	10	8	23	34.0		
4-Aug-05	13	7	9	8	13	6	8	17	15	14	10	10	8	9	9	11	11	9	9	8	5	7	13	9	17.0		
5-Aug-05	7	9	9	8	7	7	8	9	9	9	9	10	9	10	10	9	9	9	9	7	6	10	5	17	17.0		
6-Aug-05	10	7	5	5	5	12	4	8	9	9	10	10	10	10	10	10	9	9	10	10	9	8	15	3	15.0		
7-Aug-05	8	5	10	15	8	7	14	10	13	11	17	20	20	20	19	15	7	9	10	13	12	8	7	13	20.0		
8-Aug-05	18	9	9	10	3	10	13	10	12	12	12	19	16	13	15	19	19	18	16	13	11	13	10	5	19.0		
9-Aug-05	10	14	16	19	20	20	15	11	11	8	10	14	12	13	12	9	10	7	7	6	1	4	3	8	20.0		
10-Aug-05	12	16	14	7	19	23	17	11	10	17	27	22	21	25	23	12	14	18	16	13	8	4	3	5	27.0		
11-Aug-05	3	7	7	4	9	15	10	11	14	14	13	13	11	11	14	19	15	15	22	20	15	12	8	13	22.0		
12-Aug-05	14	12	10	9	10	5	6	10	10	18	22	31	26	28	30	22	18	17	13	5	8	4	3	4	31.0		
13-Aug-05	9	8	9	10	15	6	6	14	14	24	22	21	10	9	8	7	8	17	12	6	4	5	7	11	24.0		
14-Aug-05	9	13	6	11	7	9	10	11	15	9	8	9	10	8	11	12	13	14	15	12	10	7	7	8	15.0		
15-Aug-05	9	9	9	8	8	6	6	6	9	9	9	10	10	12	9	8	9	9	8	8	8	4	5	6	12.0		
16-Aug-05	5	6	6	7	8	8	7	9	8	9	15	23	23	13	10	10	11	10	9	5	4	2	2	11	23.0		
17-Aug-05	9	13	13	12	15	17	19	10	13	16	22	19	19	19	19	17	21	18	17	13	10	7	11	11	22.0		
18-Aug-05	15	17	8	3	8	5	11	16	15	16	15	16	25	25	26	20	16	12	8	9	9	16	23	12	26.0		
19-Aug-05	9	10	5	7	3	6	6	11	16	18	19	18	11	22	21	59	30	21	7	33	32	13	10	15	58.8		
20-Aug-05	31	30	51	17	23	15	26	14	19	9	26	29	21	11	10	7	8	25	31	11	8	7	8	14	51.4		
21-Aug-05	16	11	8	7	18	16	6	5	10	7	9	10	8	14	16	11	13	8	8	7	7	7	7	8	18.0		
22-Aug-05	10	8	23	10	8	11	9	11	9	9	9	10	10	10	10	8	8	8	6	8	5	4	4	23.0			
23-Aug-05	8	10	15	15	8	10	4	19	15	19	22	20	24	14	8	8	10	9	10	3	5	5	8	8	24.0		
24-Aug-05	8	15	5	11	13	12	11	18	14	17	16	22	20	20	15	20	21	11	7	7	7	8	9	7	22.0		
25-Aug-05	17	16	8	10	10	14	11	15	16	15	28	23	24	18	16	16	19	15	4	4	6	12	6	9	28.0		
26-Aug-05	9	9	5	7	8	6	10	8	12	11	9	9	9	8	9	9	10	8	8	7	4	6	22	18	22.0		
27-Aug-05	7	13	8	6	11	5	4	11	14	23	29	33	25	24	22	14	8	9	9	8	8	8	8	10	33.0		
28-Aug-05	7	6	4	6	5	18	10	10	9	9	8	9	8	10	10	18	17	9	9	9	16	12	9	10	18.0		
29-Aug-05	10	21	23	23	21	21	20	18	18	19	17	16	12	12	11	14	17	15	15	4	5	10	9	8	23.0		
30-Aug-05	6	7	5	6	8	8	14	22	10	15	10	10	8	9	9	9	8	8	7	6	5	17	8	22.0			
31-Aug-05	10	12	8	12	7	7	28	12	9	8	9	9	8	9	9	8	9	9	8	8	7	5	10	4	28.0		

Hourly Max	34	30	51	23	23	28	22	19	24	29	33	26	28	30	59	30	25	31	33	32	16	23	23
------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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



Calms: 0%

Frequency Distribution of Wind in km/hr			
Range		Frequency (hrs)	
0.8	< 5	243	
5	to 10	316	
10	to 20	140	
20	to 30	38	
30	to 40	0	
>	40	0	
Total Non-Zero Values		744	

# PEACE AIRSHED ZONE ASSOCIATION

## PASZA Monthly Passive Data Summary

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

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
<b>Duplicates</b>					
45a	Gift Lake	0.1	18.7	0.7	
45b	Gift Lake	0.1	18.0	0.8	
46a	Little Smoky	0.2	16.7	1.4	
46b	Little Smoky	0.1	16.1	1.3	
47a	Kinuso	0.1	15.7	0.6	
47b	Kinuso	0.1	17.5	0.6	
48a	Deer Mountain	0.1	15.6	0.4	
48b	Deer Mountain	0.1	15.2	0.5	
49a	Grande Prairie HP	0.2	21.6	5.7	
49b	Grande Prairie HP	0.3	21.2	5.4	
1	Silver Valley	0.3	19.0	1.2	08-27-081-11 W6M
2	Bay Tree	0.1	17.3	0.6	13-16-078-13 W6M
3	Forth Creek	0.2	24.8	0.8	04-13-082-07 W6M
4	Gordondale	0.2	22.0	1.3	04-34-078-10 W6M
5	Boone Creek	0.1	15.5	0.7	01-23-076-11 W6M
7	Steeprock Creek	0.1	19.7	0.5	09-35-072-13 W6M
9	Spirit River	0.2	23.6	1.2	08-12-079-07 W6M
10	Woking	0.2	19.3	1.0	01-13-076-07 W6M
11	Webber Creek	0.2	19.2	1.2	09-36-074-09 W6M
12	Hythe	0.2	16.0	1.0	14-36-072-11 W6M
14	Sylvester	0.1	14.7	0.4	08-06-069-12 W6M
16	Beaverlodge	0.1	25.1	2.1	15-36-071-10 W6M
17	Poplar	0.2	18.4	0.8	13-06-073-08 W6M
18	Saddle Hills	0.3	19.4	0.8	04-25-074-07 W6M

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

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
19	Wanham	0.3	24.9	0.6	16-22-077-03 W6M
20	Shaftesbury	0.1	18.6	0.4	04-03-082-23 W5M
21	Eaglesham	0.2	17.7	0.5	16-21-079-25 W5M
23	Bear Lake	vandalized	vandalized	vandalized	15-31-072-06 W6M
24	Wembley	0.1	15.0	1.2	12-31-070-08 W6M
25	Pinto Creek	0.1	16.7	0.9	04-24-069-11 W6M
26	Flyingshot	0.2	15.7	1.2	15-36-070-07 W6M
27	Grande Prairie I	0.3	18.6	4.1	08-15-071-06 W6M
28	Clairmont Lake	0.3	21.7	1.4	09-06-073-04 W6M
29	Smoky Heights	0.3	25.6	1.0	04-06-075-02 W6M
30	Fitzsimmons	0.2	18.5	1.1	15-36-072-03 W6M
32	Gold Creek	0.3	12.6	0.9	06-33-067-05 W6M
33	Wapiti	0.2	17.4	1.0	02-25-071-03 W6M
34	Puskwaskau	0.1	15.0	0.4	15-35-074-25 W5M
35	Jean Cote	0.5	17.2	0.8	12-35-079-21 W5M
36	Guy	0.1	18.4	0.6	03-04-076-22 W5M
37	Crooked Creek	0.1	17.8	0.9	16-01-071-26 W5M
38	Karr Creek	0.1	16.1	0.4	10-16-065-02 W6M
39	Clouston Creek	0.1	18.4	Damaged	12-01-073-22 W5M
40	McLennan	0.2	23.9	0.8	03-29-077-19 W5M
41	Valleyview	0.1	21.5	0.8	09-30-069-22 W5M
42	Sunset House	0.2	23.7	0.6	05-32-070-19 W5M
43	High Prairie	0.1	18.4	0.8	16-13-074-17 W5M
44	Peavine	0.1	18.0	0.4	03-05-079-15 W5M
45	Gift Lake	0.1	18.3	0.7	10-07-079-12 W5M
46	Little Smoky	0.2	16.4	1.3	12-01-065-21 W5M
47	Kinuso	0.1	16.6	0.6	12-10-073-10 W5M
48	Deer Mountain	0.1	15.4	0.4	15-22-068-09 W5M
49	Grande Prairie HP	0.3	21.4	5.5	17-26-071-06 W6M

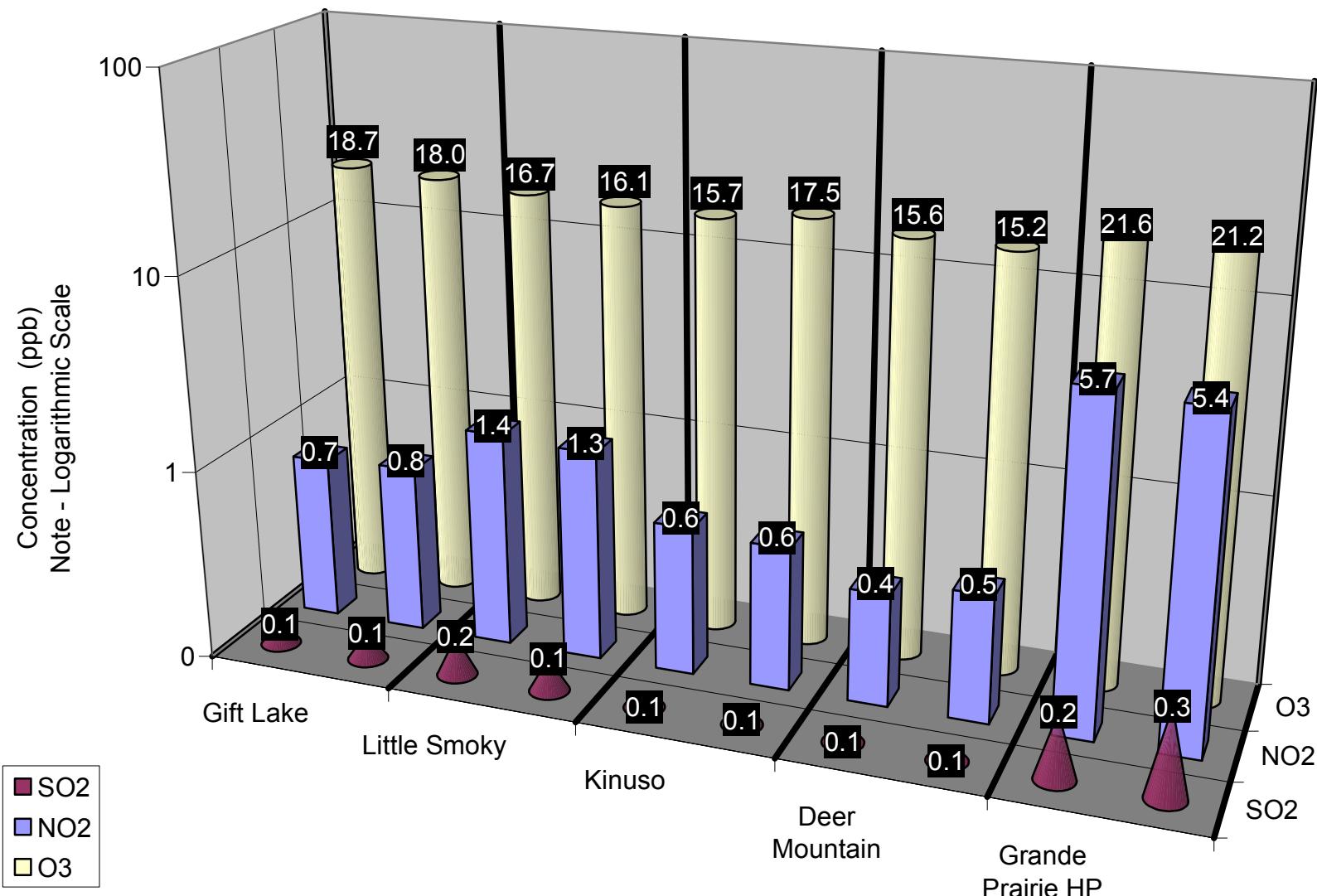


Figure 46. Duplicate Summary Chart

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

Stats	Sulphur Dioxide SO <sub>2</sub>	Ozone O <sub>3</sub>	Nitrogen Dioxide NO <sub>2</sub>
	ppb	ppb	ppb
Passive Summary for Aug 2005 (PASZA Zone)			
Mean	0.2	18.9	1.0
Standard Deviation	0.1	3.2	0.9
Minimum	0.1	12.6	0.4
	Sylvester (#14)	Gold Creek (#32)	Sylvester (#14)
Maximum	0.5	25.6	5.5
	Jean Cote (#35)	Smoky Heights (#29)	Grande Prairie HP (#49)

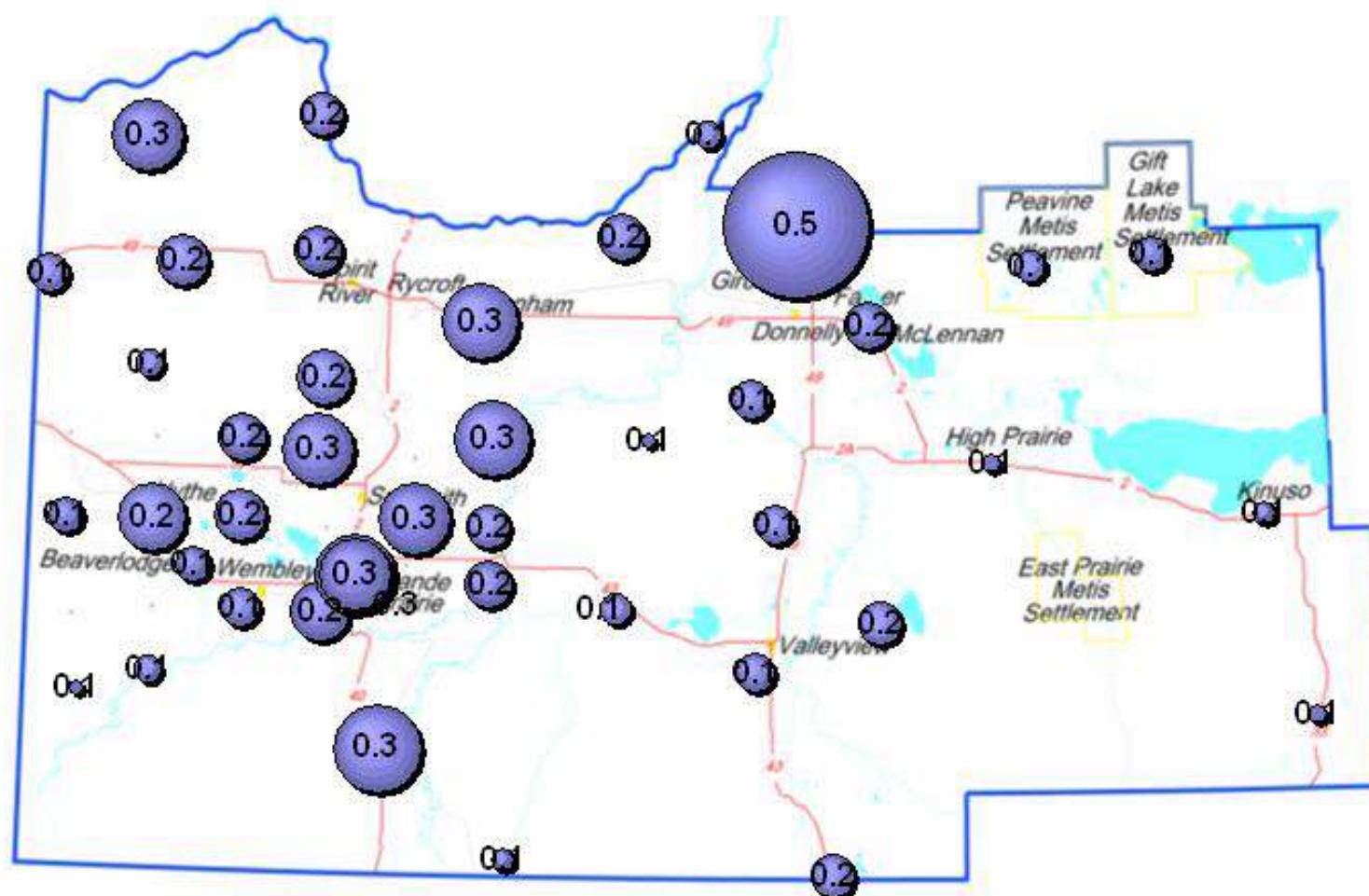
**Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)**

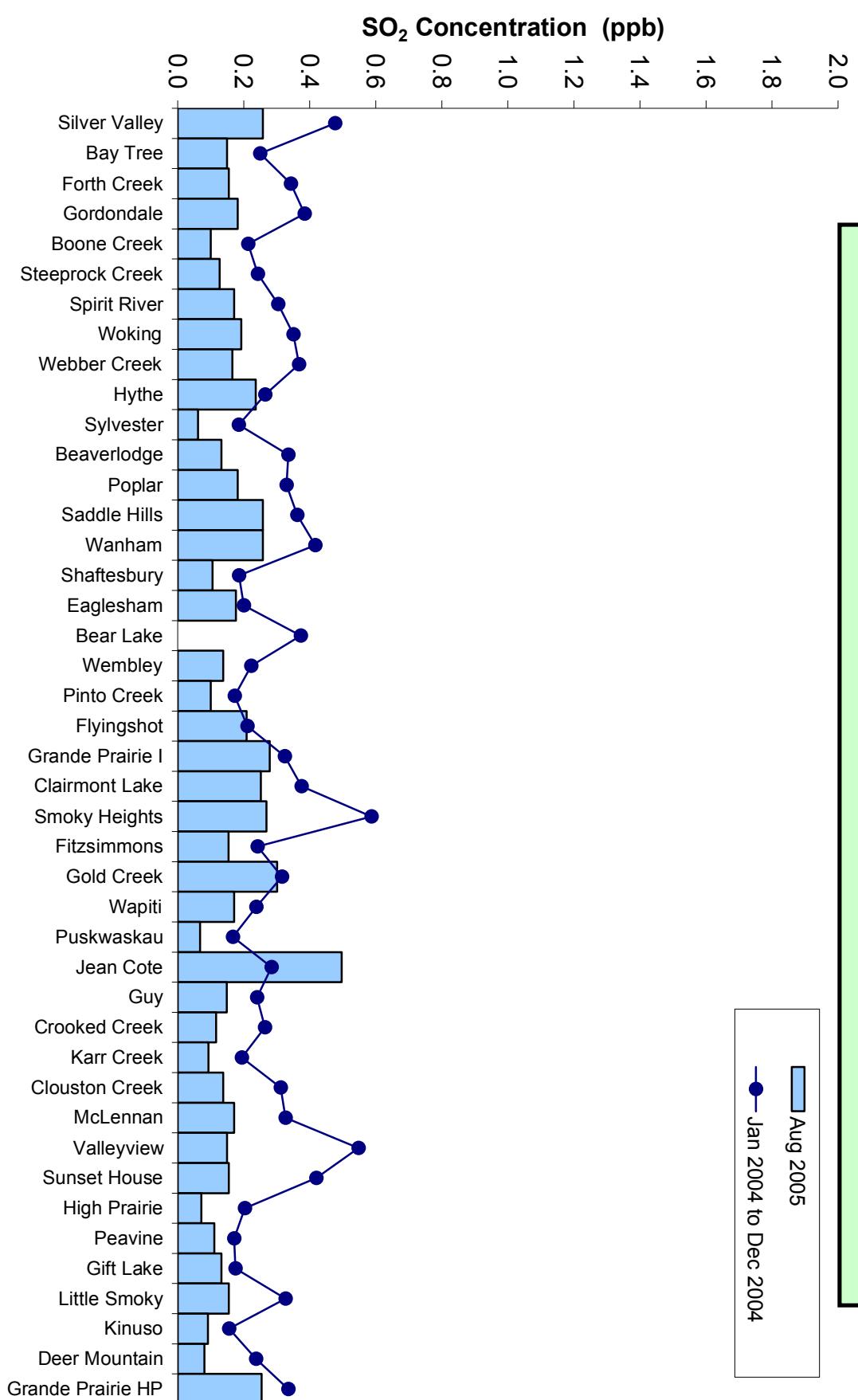
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
AENV Beaverlodge station	0.2	22.0	2.7
PASZA Beaverlodge passive	0.1	25.1	2.1

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

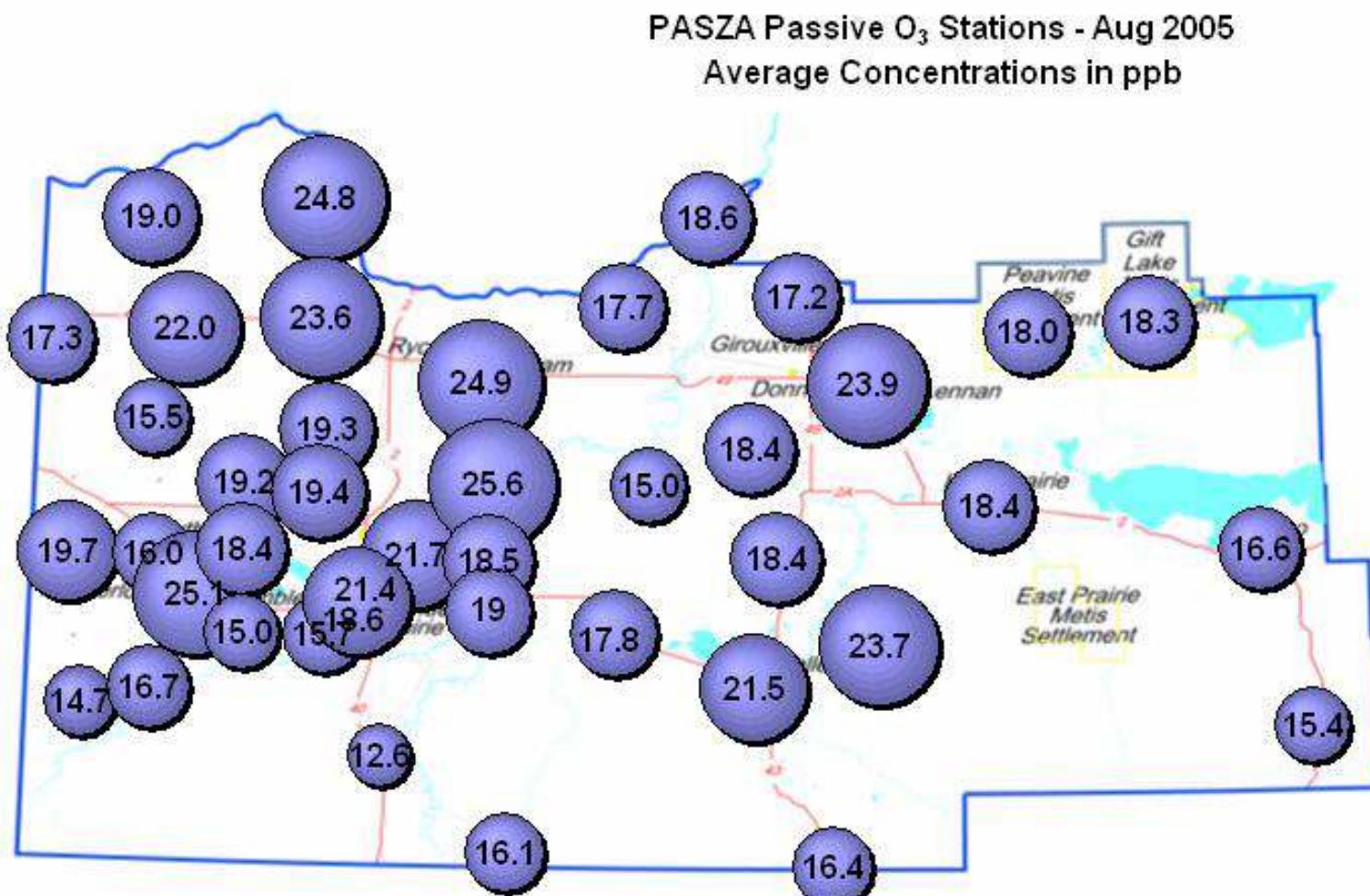
	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Henry Pirker station	0.3	17.4	6.2
PASZA Grande Prairie passive	0.3	21.4	5.5

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



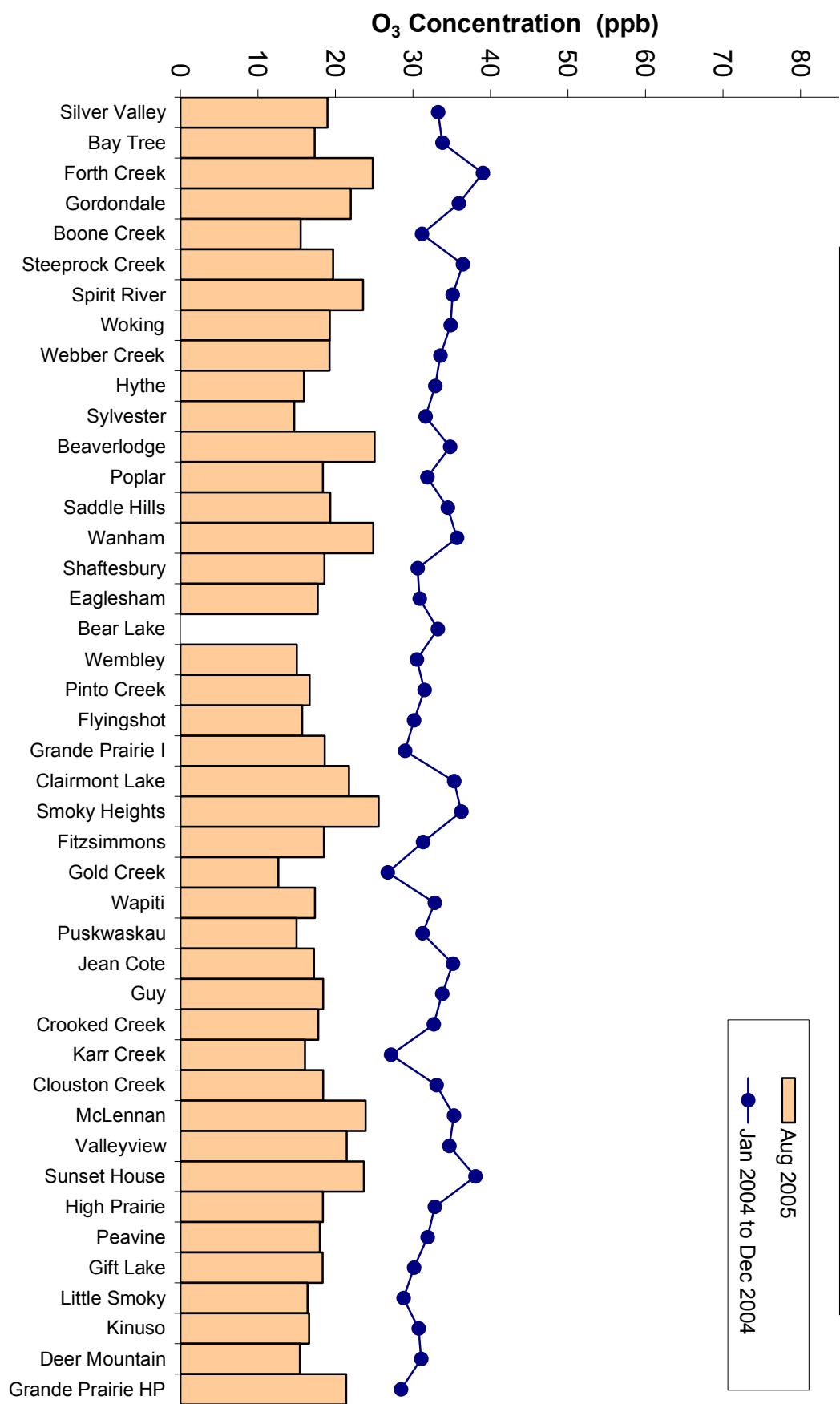


**Figure 48. SO<sub>2</sub> Summary Chart**

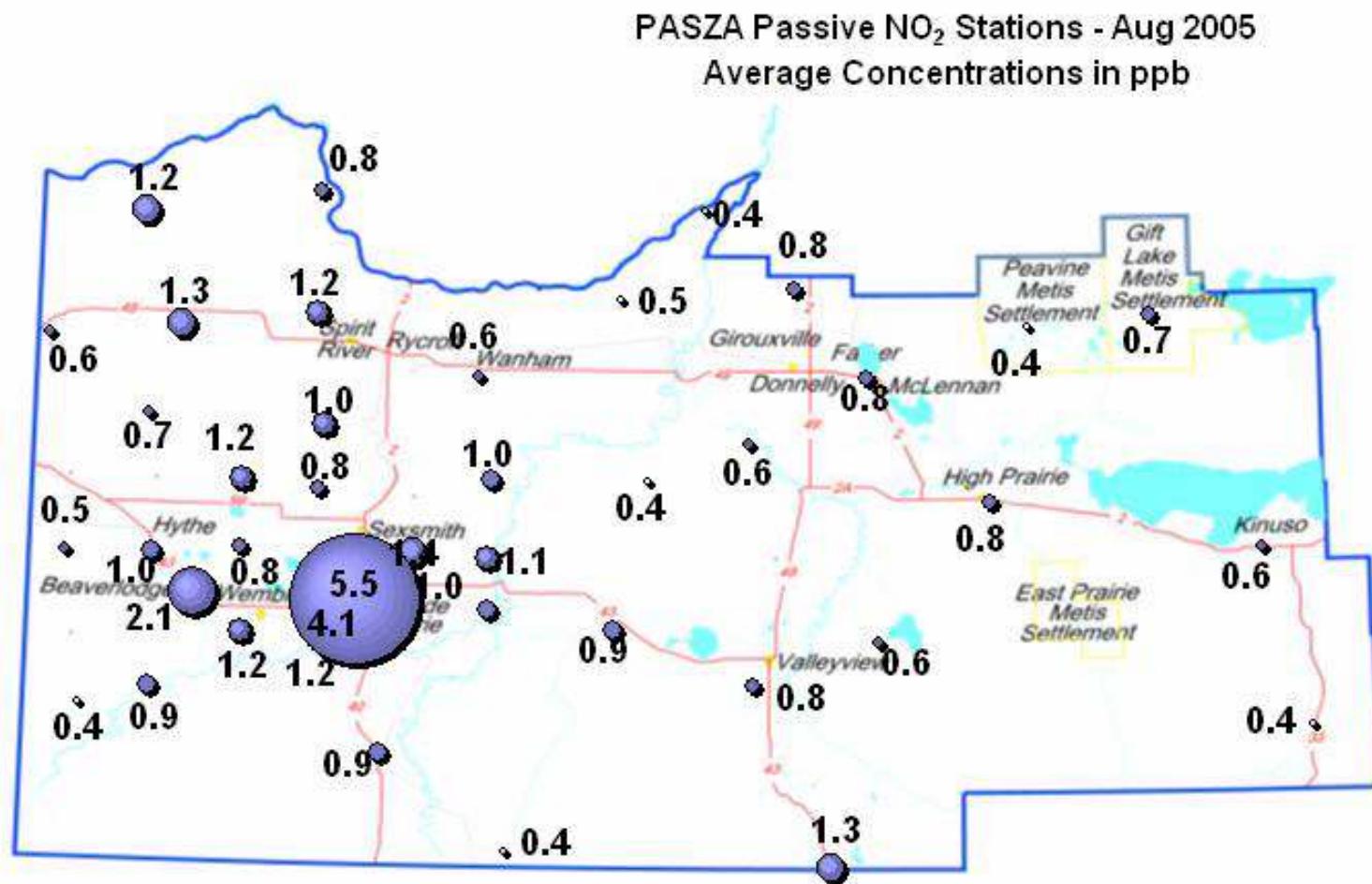


**Figure 49. O<sub>3</sub> Bubble Chart**

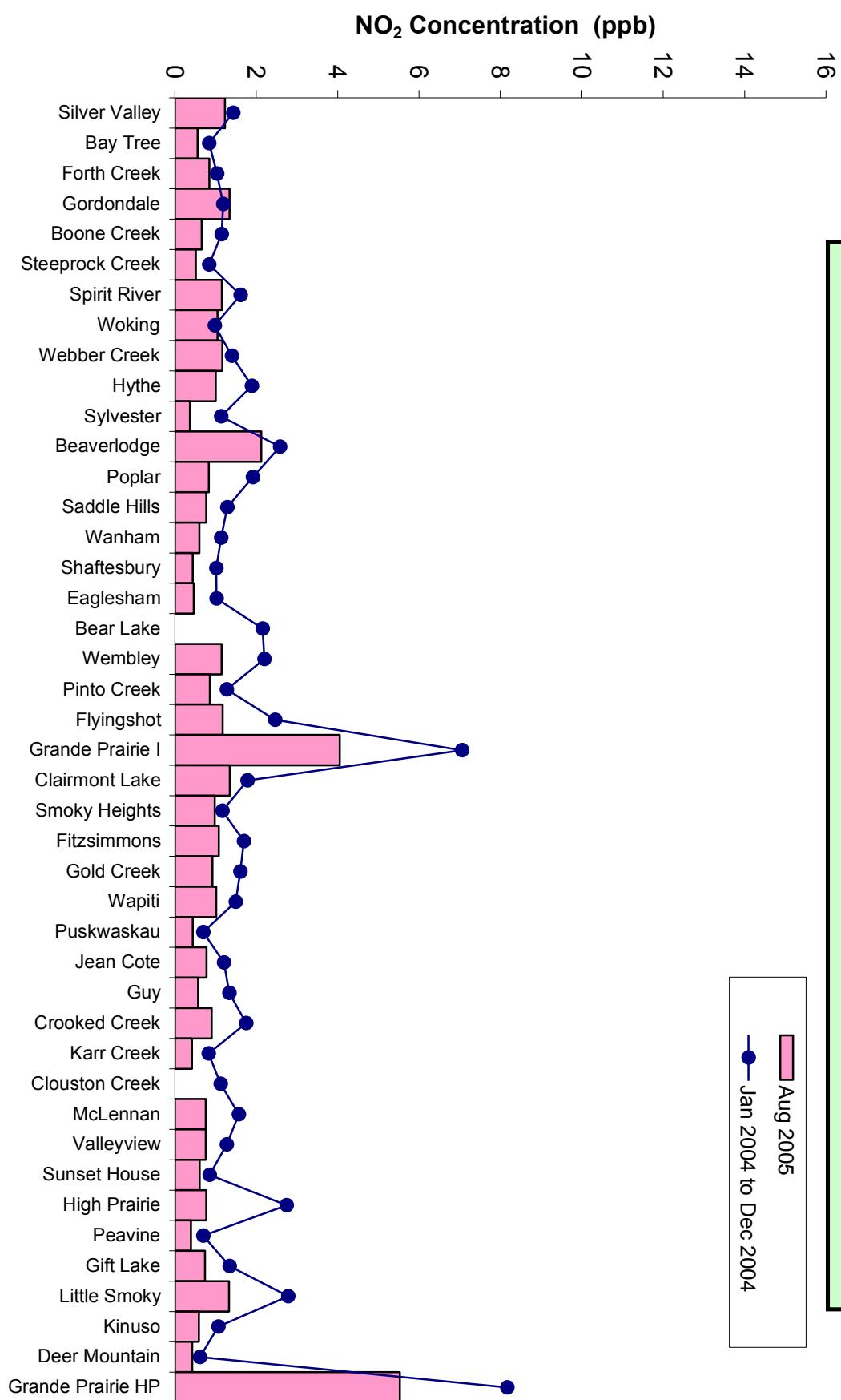
**Alberta Ambient Air Quality Guidelines - No Annual O<sub>3</sub> Guideline**



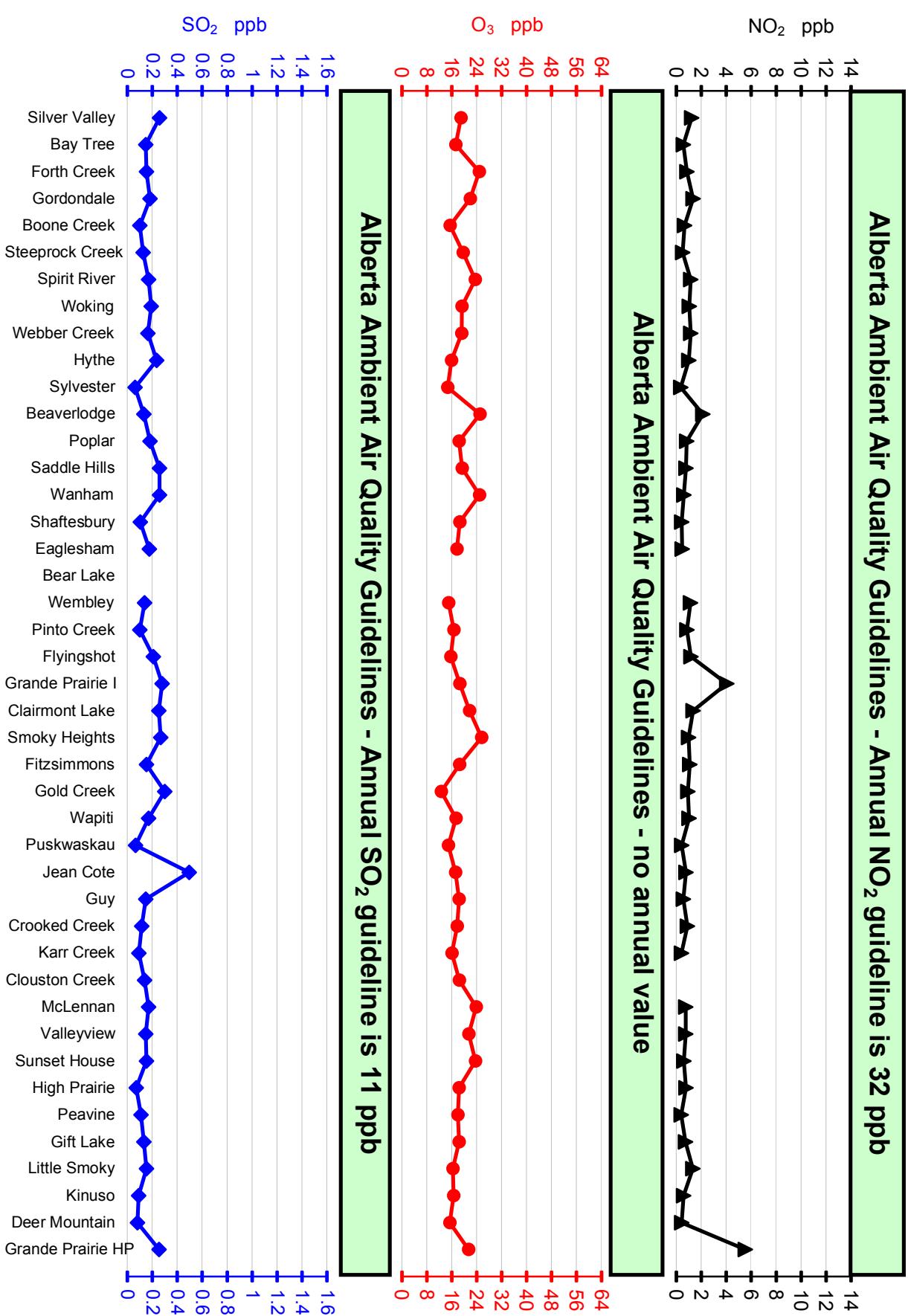
**Figure 50. O<sub>3</sub> Summary Chart**



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



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



**Figure 53. Overview Summary**

## **August 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	August 15, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
Start Time (MST)	9:12	End Time (MST)	20:00
Barometric Pressure	27.9 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	0.949759	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	0.998044	Calculated slope	0.991079
Calculated intercept	-0.237900	Calculated intercept	0.087672
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195
Concentration range	0 - 500 ppb	before	after
SO2 zero pot	187	0 - 500	ppb
SO2 span pot	163	187	
UV Lamp voltage	935 V	298	
Vacuum	19 " Hg	933	V
Sample Flow	420 ccm	18.5	" Hg
		425	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	2322.2	0.0	-1.9	N/A
2445	2322.2	344.7	347.3	0.9926
4970	4720.3	169.6	170.2	0.9963
9530	9051.2	88.4	92.2	0.9590
zero	2293.7	0.0	-1.9	As Found Zero
2415	2293.7	349.0	342.9	As Found Span
		Average Correction Factor	0.9826	

Calculated value of As Found Response: 343.905 ppm      Percent Change of As Found: 1.5%

Auto zero	before calibration		after calibration	
	-2.5	ppm	-2.0	ppm
	302.8	ppm	321.9	ppm

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

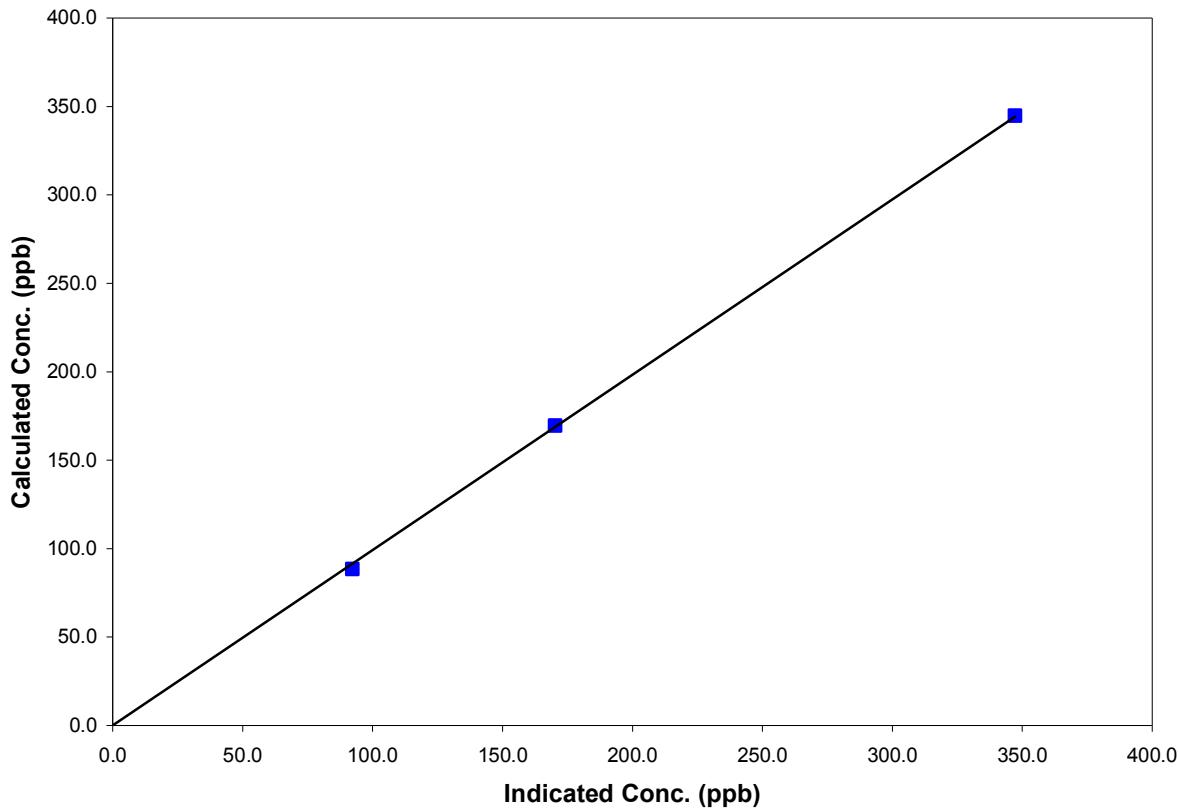
Calibration Performed By: Dawn Ewan

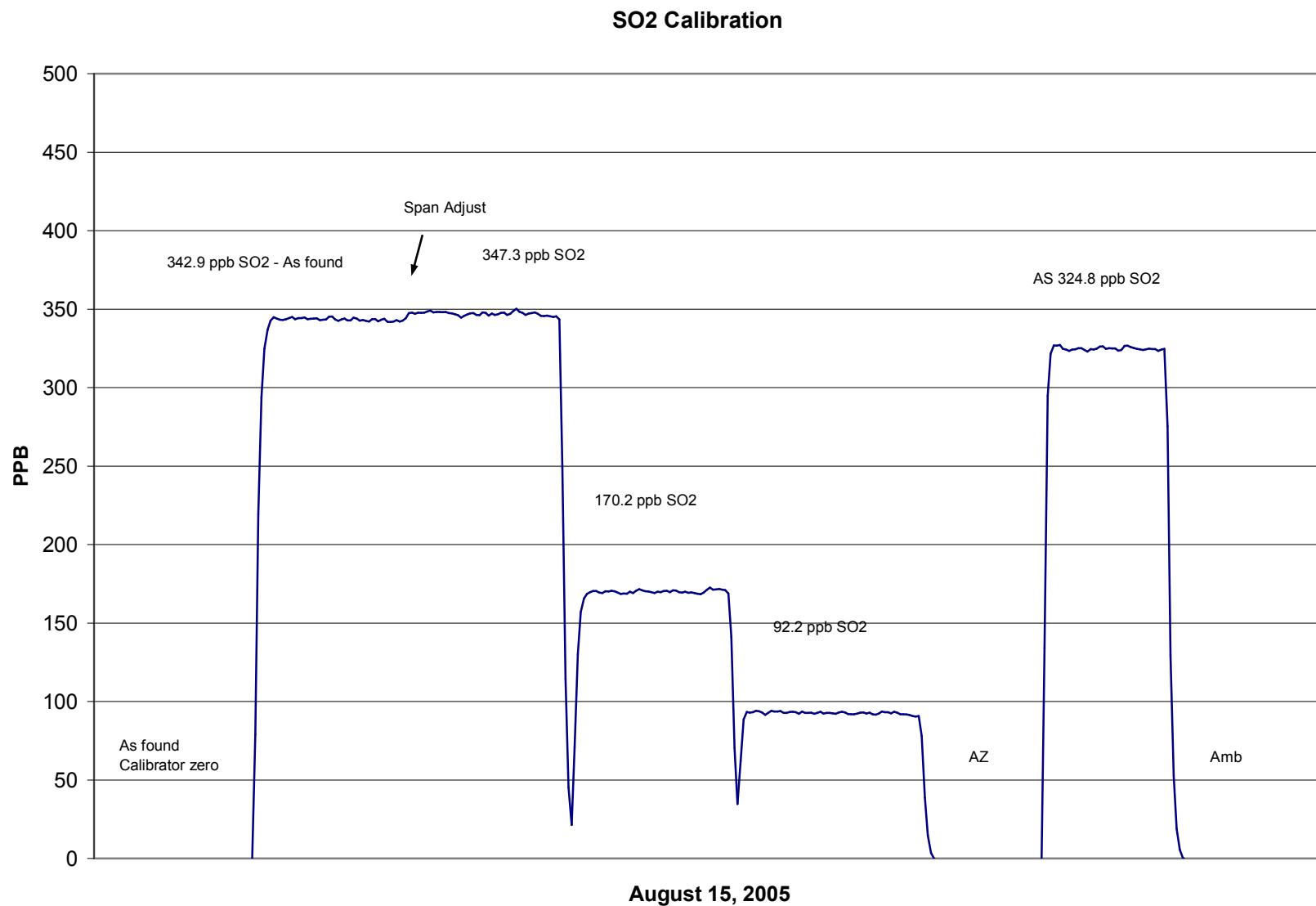
**Calibration Summary**Parameter **SO<sub>2</sub>**Air Monitoring Network **PASZA****Station Information**

Calibration Date	August 15, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:12	End Time (MST)	20:00
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	-1.9	N/A		
344.7	347.3	0.9926	Correlation Coefficient	0.999792
169.6	170.2	0.9963		
88.4	92.2	0.9590	Slope	0.991079
			Intercept	0.087672

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



# Calibration Report

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



## Station Information

Calibration Date	August 17, 2005			Previous Calibration	July 14, 2005
Station Number	1			Station Location	Muskoseepi Park
Reason:	Routine			Other:	<u>Install Span/zero Board and Ribbon Cable</u>
Start Time (MST)	9:16			End Time (MST)	18:34
Barometric Pressure	0.929	Atm		Station Temperature	20.0 Deg C
Calibrator	Environics 6100			Serial Number	3016
NO Cal Gas Conc	50.3	ppm		Cal Gas Expiry Date	22-Nov-06
NOx Cal Gas Conc	50.5	ppm		Cal Gas Serial #	BAL786

## DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269
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Parameter		NO2	NOx	NO
Before	Data Slope	1.024118	1.003082	0.999353
	Data Offset	-1.724540	-1.104197	-2.411468
After	Data Slope	0.986120	0.999628	0.990704
	Data Offset	-0.207216	0.077330	4.530133
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
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Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	7.8	ppb	7.0	mV
NOx background	8.2	ppb	6.7	mV
NO coefficient	0.939		1.005	
NOx coefficient	1.002		0.888	
Chamber Temp	49.6	Deg C	49.6	Deg C
Cooler Temp	-2.4	Deg C	-2.5	Deg C
Converter Temp	318.0	Deg C	318.0	Deg C
Vacuum	199.2	mm Hg	195.6	mm Hg

Notes:

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## Calibration Report

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



### Station Information

Calibration Date: August 17, 2005 Station Location: Muskoseepi Park

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	
zero	4993	0.00	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	
	4993	39.97	401.1	399.5	1.6	401.4	401.0	0.5	0.9992	0.9962	
	4993	19.98	201.3	200.5	0.8	200.6	194.9	5.9	1.0033	1.0287	
	4993	9.99	100.8	100.4	0.4	101.2	92.8	8.4	0.9967	1.0822	
AFZ	4993	0.00	0.0	0.0	0.0	-1.4	-1.5	0.0	0.0000	0.0000	
	4993	39.97	401.1	399.5	1.6	401.4	357.8	43.9	0.9991	1.1165	
							Average Correction Factor	0.9997	1.0357		

As Found Concentrations: NO<sub>x</sub>= 401.7 NO= 356.9 As Found Percent Change NO<sub>x</sub>= 0.2% NO= -10.7%

### GPT Calibration Data

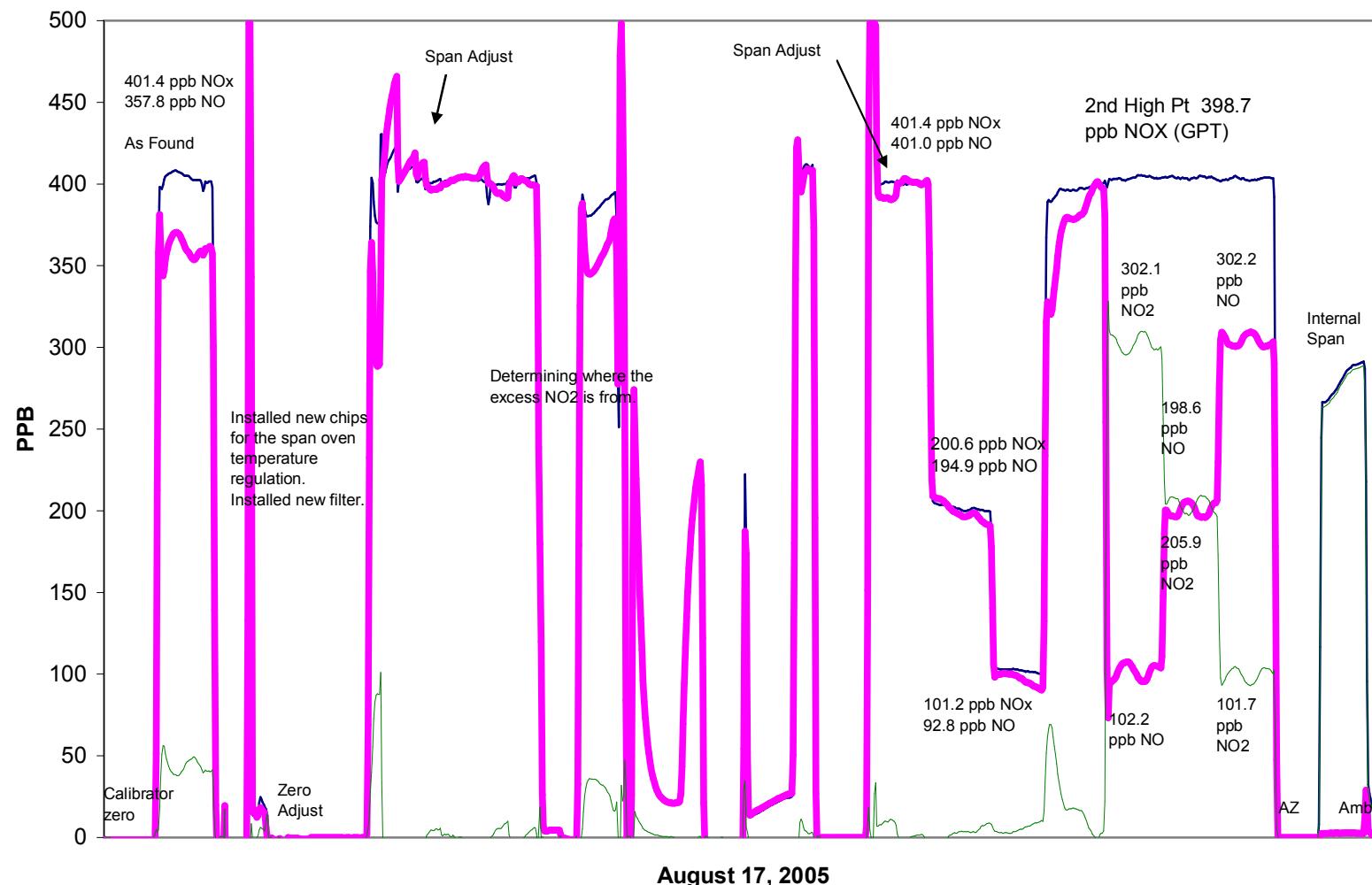
Dilution Flow	4993	ccm	Source Gas Flow	39.97	ccm						
O <sub>3</sub> Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency	
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	
NO point	403.8	394.4	9.5	398.6	393.5	5.1	1.0132	1.0022	N/A	N/A	
300	403.8	105.8	298.0	404.0	102.2	302.2	0.9995	1.0350	0.9864	101.4%	
200	403.8	201.3	202.6	404.2	198.6	206.0	0.9991	1.0135	0.9834	101.7%	
100	403.8	303.9	100.0	403.5	302.2	101.7	1.0008	1.0057	0.9828	101.7%	
							Average Correction Factor	0.9998	1.0181	0.9842	101.6%

### AIC Data

	Previous calibration				Current calibration				
Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb	
Auto zero	0.1	0.2	0.1	ppb	1.0	0.9	1.0	ppb	
Auto span	307.5	312.9	-1.9	ppb	289.1	282.4	7.2	ppb	

Calibration Performed By: Dawn Ewan

## NOx Calibration



## Calibration Summary

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

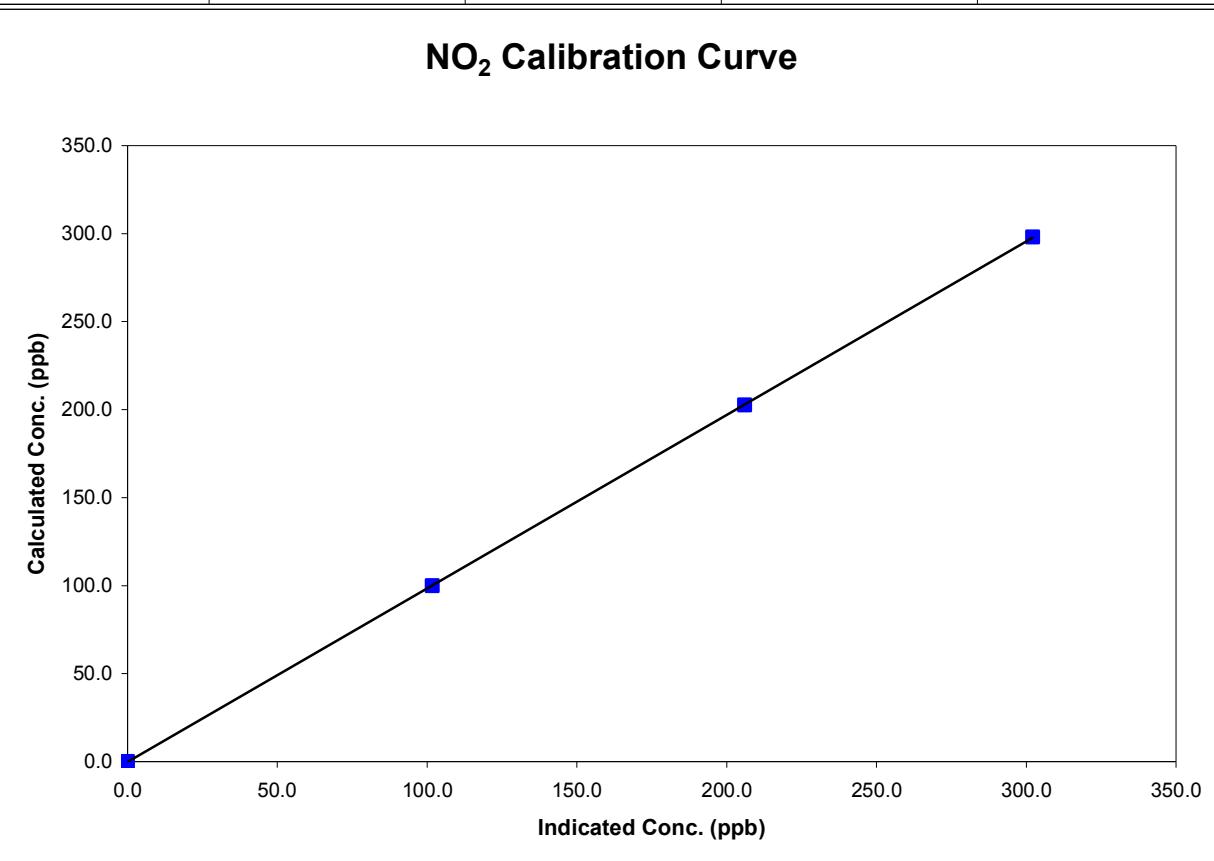


## **Station Information**

Calibration Date	August 17, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:16	End Time (MST)	18:34
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		
298.0	302.2	0.9864	Correlation Coefficient	0.999995
202.6	206.0	0.9834		
100.0	101.7	0.9828	Slope	0.986120
			Intercept	-0.207216



**Calibration Summary**

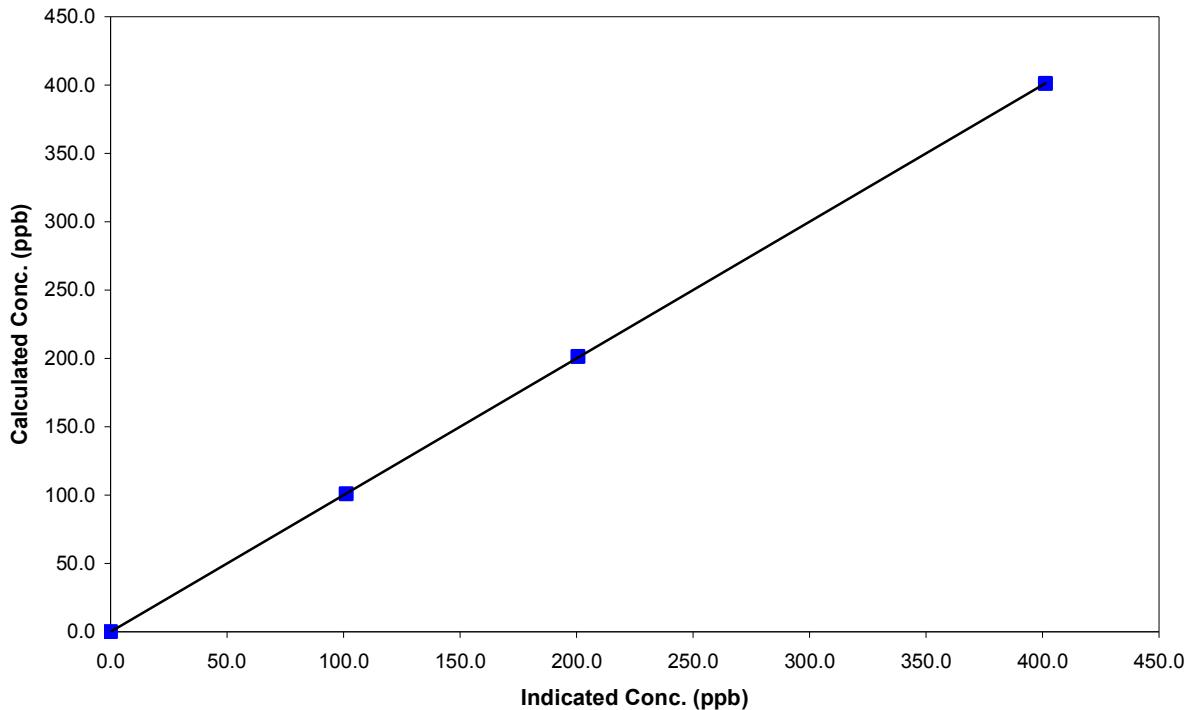
Parameter **NO<sub>x</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	August 17, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:16	End Time (MST)	18:34
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	0.999993
401.1	401.4	0.9992		
201.3	200.6	1.0033		
100.8	101.2	0.9967		
			Slope	0.999628
			Intercept	0.077330

**NOx Calibration Curve**

**Calibration Summary**

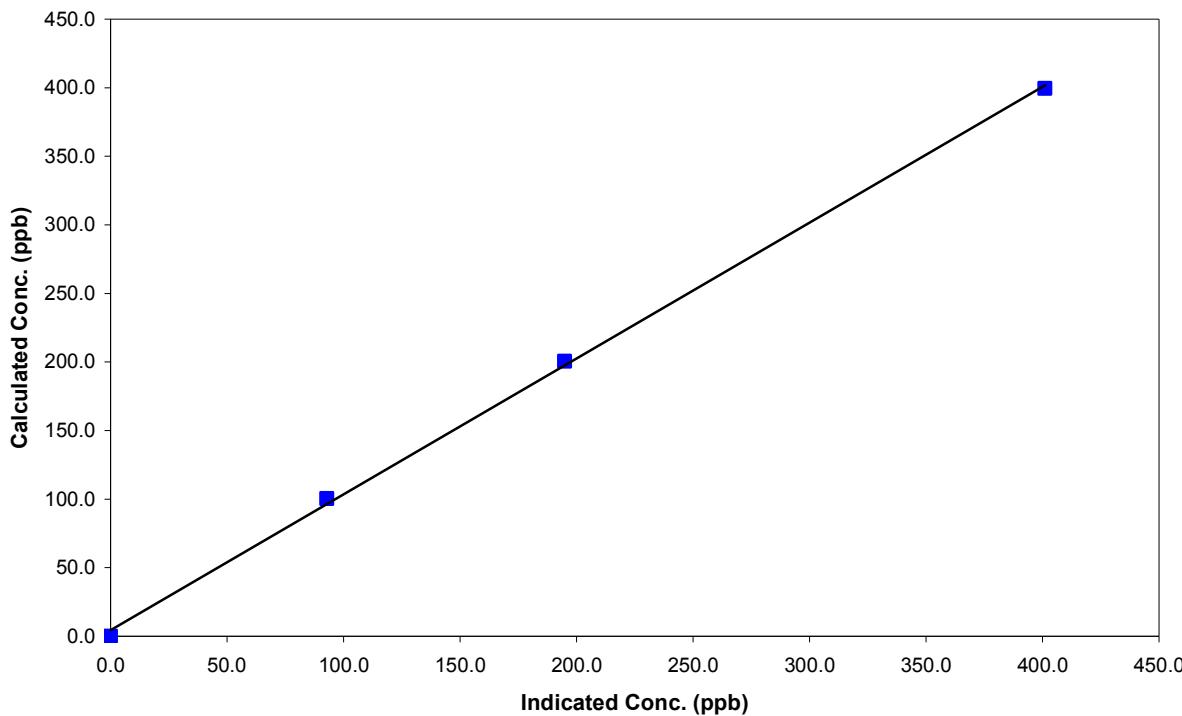
Parameter **NO**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	August 17, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Muskoosepi Park
Start Time (MST)	9:16	End Time (MST)	18:34
Analyzer make	Teco 42C	Analyzer serial #	508011073

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999428
399.5	401.0	0.9962		
200.5	194.9	1.0287		
100.4	92.8	1.0822		
			Slope	0.990704
			Intercept	4.530133

**NO Calibration Curve**

**Calibration Report**

Parameter O3  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 17, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	17:49	End Time (MST)	20:40
Barometric Pressure	0.929 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	1.006241	Calculated slope	0.992518
Calculated intercept	1.478082	Calculated intercept	0.947540
Analyzer make	API Model 400	Analyzer serial #	383
Concentration range offset slope Lamp measure Lamp Reference Pressure Sample Flow Lamp temp	before	after	
	0 - 500	ppb	0 - 500
	-1.2	ppb	-1.3
	1.037		1.12
	2500	mV	2451
	2500	mV	2455
	27.2	inches Hg	27.7
	667	ccm	677
	52	Deg C	52

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.0	0.2	N/A
4993	0.00	298.0	301.4	0.9888
4993	0.00	202.6	200.2	1.0121
4993	0.00	100.0	99.5	1.0048
4993	0.00	0.0	0.2	As found zero
4993	0.00	298.0	275.6	As found span
		Average Correction Factor	1.0019	

Calculated value of As Found Response: 278.6 ppm Percent Change of As Found: -6.5%

Auto zero Auto span	before calibration		after calibration	
	1.6	ppb	1.7	ppb
	272.5	ppb	275.0	ppb

Notes: A span adjustment was performed.

Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter O3  
Air Monitoring Network

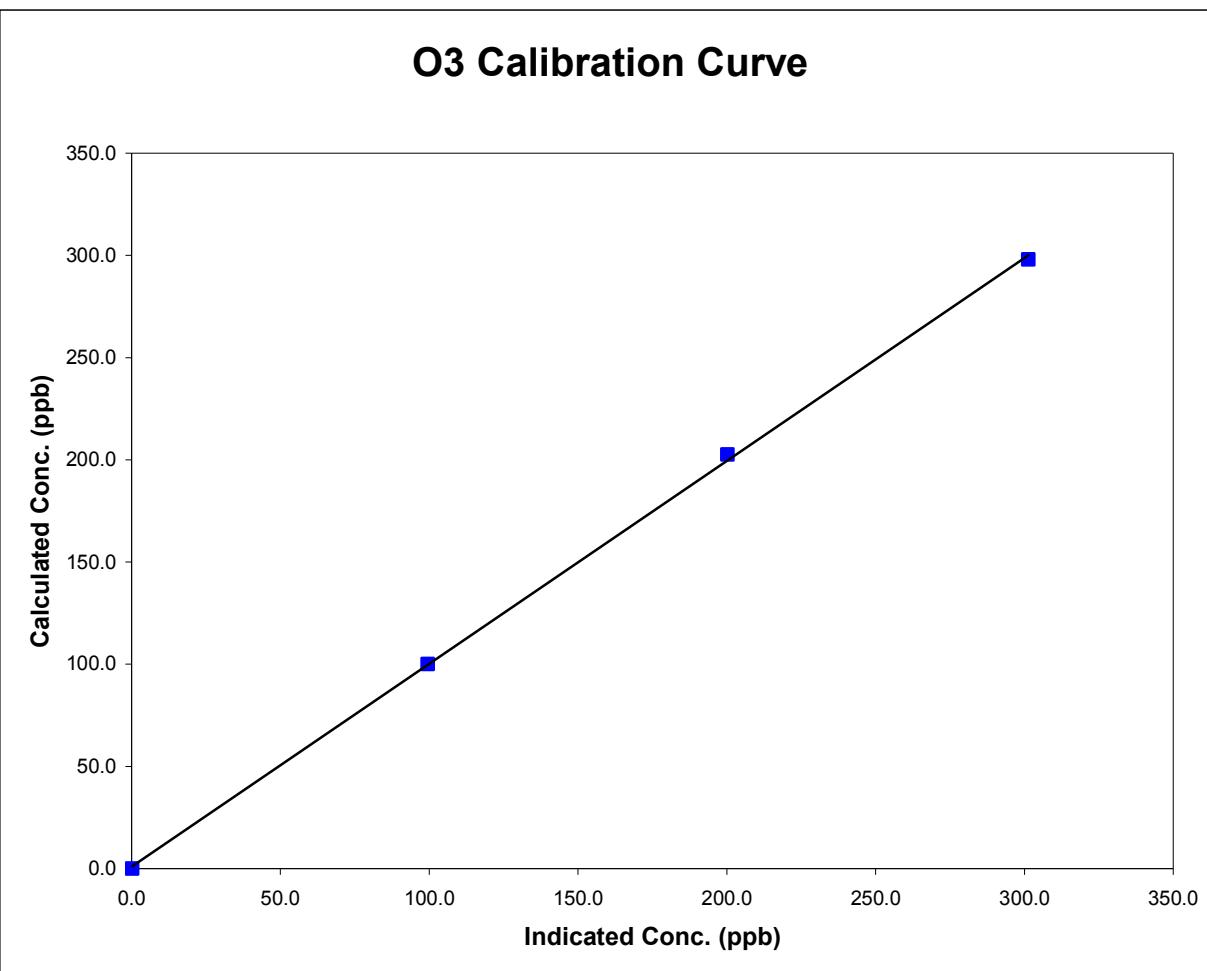


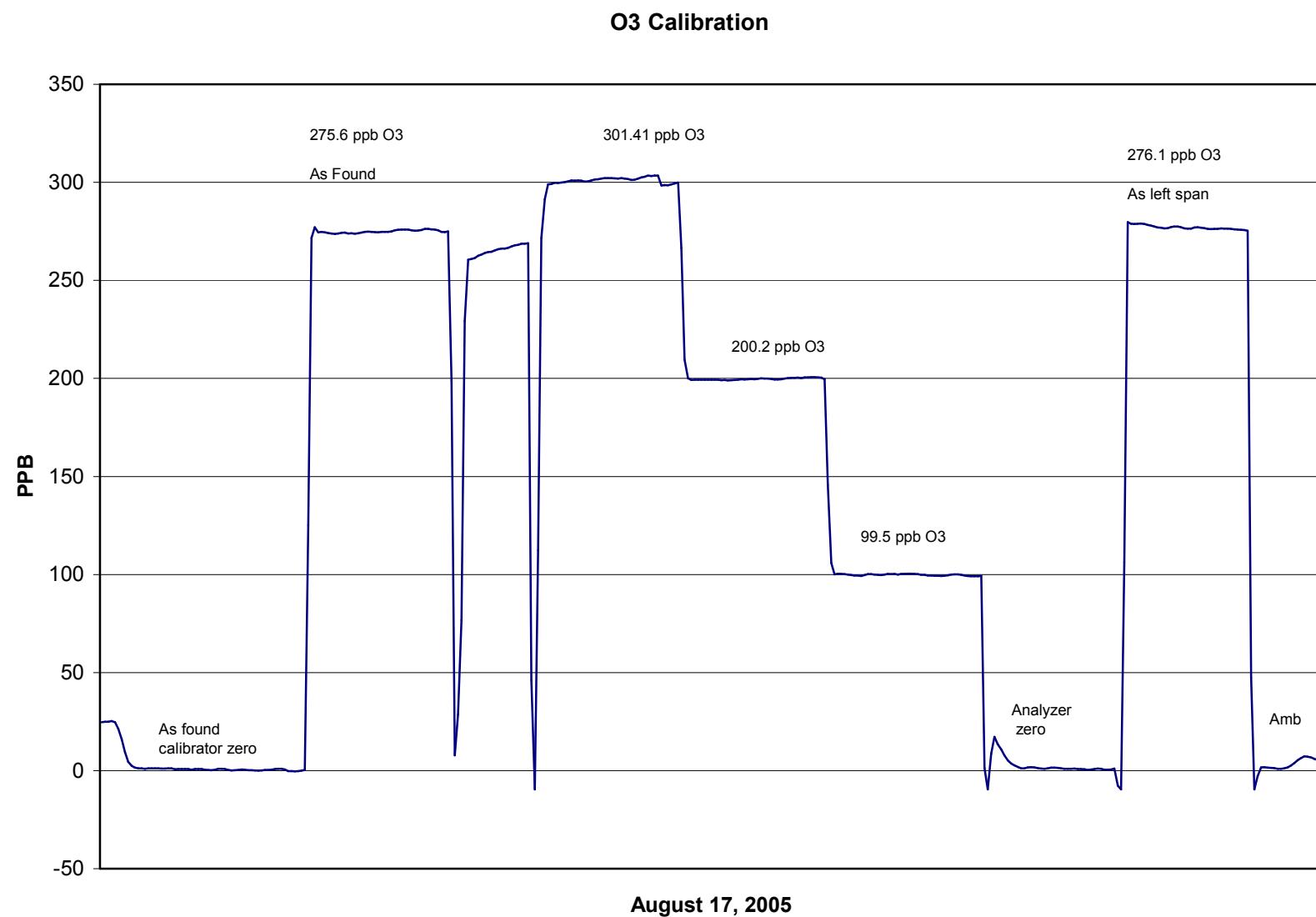
## ***Station Information***

Station Information			
Calibration Date	August 17, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	17:49	End Time (MST)	20:40
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	0.2	NA		
298.0	301.4	0.9888	Correlation Coefficient	0.999709
202.6	200.2	1.0121		
100.0	99.5	1.0048	Slope	0.992518
			Intercept	0.947540





**Calibration Report**

Parameter CO  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 22, 2005		Previous Calibration	July 15, 2005
Station Number	1		Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	9:26		End Time (MST)	12:39
Barometric Pressure	0.926	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
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	1.004134		Calculated slope	1.011138
Calculated intercept	0.393082		Calculated intercept	0.286376
Analyzer make	TEI Model 48C		Analyzer serial #	508011062
	<b>before</b>		<b>after</b>	
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	1.018		1.729	
CO zero setting	1.133		1.018	
Sample pressure	675.8	mm Hg	686.5	mm Hg
Sample Flow	1.068	LPM	1.078	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	-0.34	N/A
4993	39.97	23.82	23.27	1.0239
4993	19.96	11.95	11.50	1.0386
4993	9.97	5.98	5.73	1.0442
4993	0.00	0.00	0.25	As Found Zero
4993	39.97	23.82	24.57	As Found Span
Average Correction Factor				1.0356

Calculated value of As Found Response: 24.816 ppm Percent Change of As Found: -4.2%

Auto zero	before calibration		after calibration	
	0.05	ppm	-0.01	ppm
	19.82	ppm	19.88	ppm

Notes:

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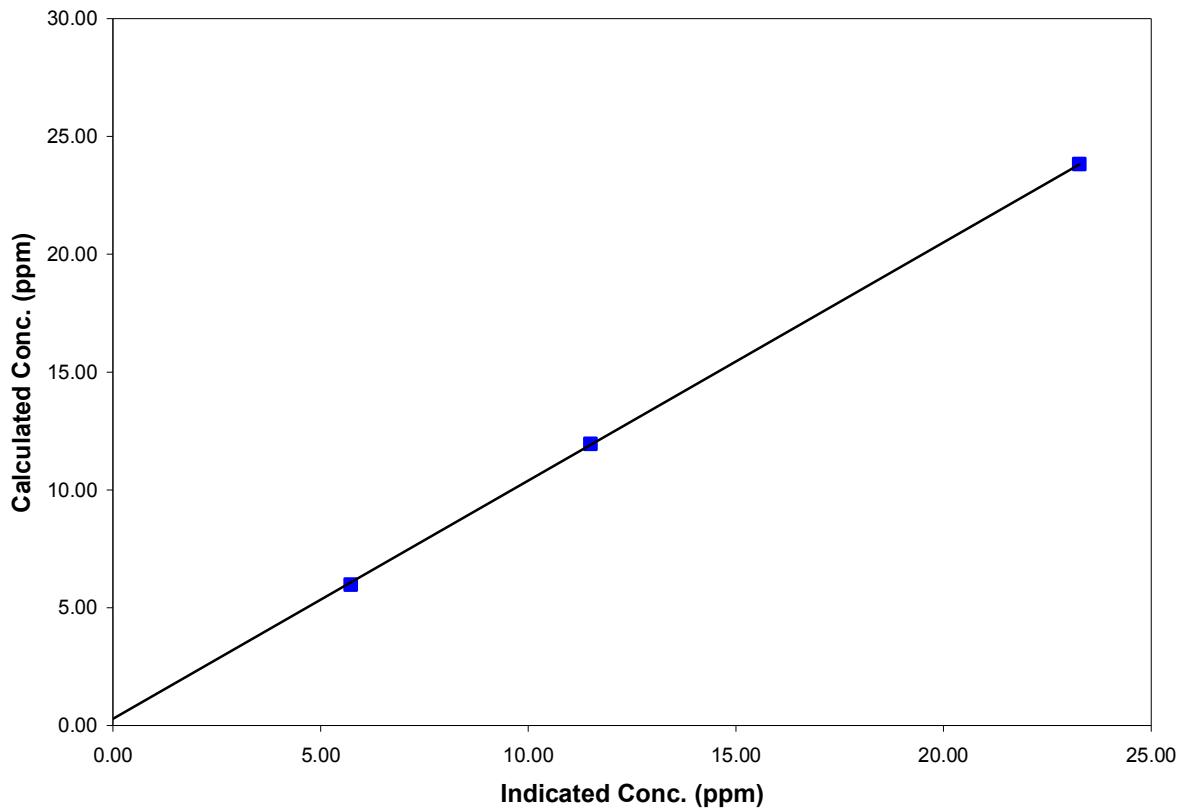
Calibration Performed By: Kelly Baragar

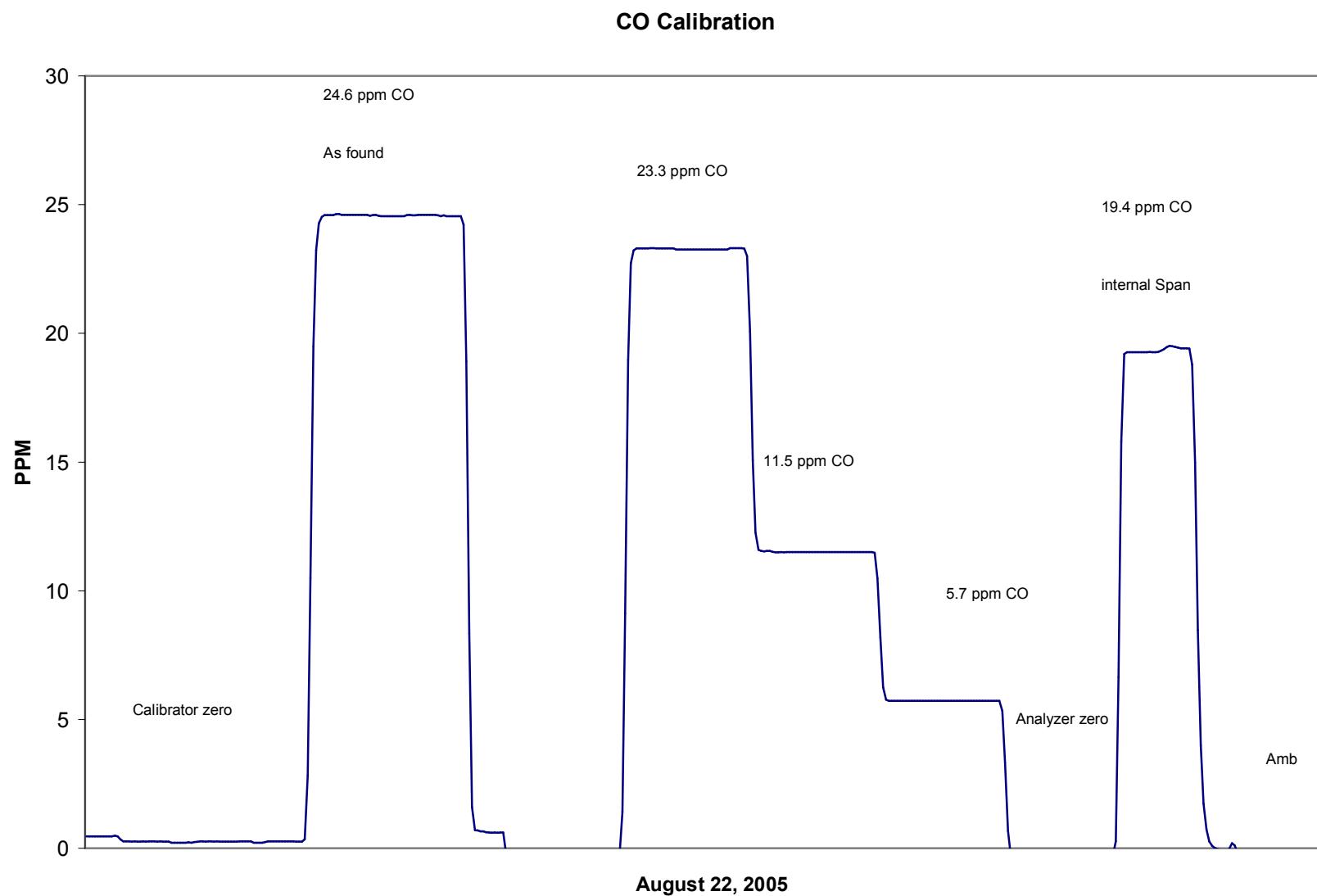
**Calibration Summary**Parameter coAir Monitoring Network PASZA**Station Information**

Calibration Date	August 22, 2005	Previous Calibration	July 15, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:26	End Time (MST)	12:39
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	-0.340	N/A		
23.825	23.269	1.0239	Correlation Coefficient	0.999956
11.945	11.501	1.0386		
5.978	5.725	1.0442	Slope	1.011138
			Intercept	0.286376

**CO Calibration Curve**



**Calibration Report**

Parameter THC  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 22, 2005		Previous Calibration	July 15, 2005
Station Number	1		Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	12:14	End Time (MST)	16:15	
Barometric Pressure	0.926	ATM	20.0	Deg C
Calibrator	Environics 6100	Serial Number	3016	
Cal Gas Concentration	700 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	12/10/2005	
Cal Gas CH4 equiv	1522.25 ppm	Cal Gas Cylinder #	ALM 030358	
DACS make	Focus AP1000	DACS serial No.	1	
DACS voltage range	0 - 1 volt	DACS channel #	9	
	Before		After	
Calculated slope	0.987086	Calculated slope	1.012849	
Calculated intercept	-0.048307	Calculated intercept	-0.180686	
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390	
Concentration range	before		after	
THC sample pressure	0 - 25	ppm	0 - 25	ppm
THC span counts	6.11	psi	6.1	psi
THC zero counts	6847	capture		capture
	1297	capture		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	0.15	N/A
4993	64.97	19.55	19.54	1.0009
4993	34.96	10.58	10.50	1.0079
4993	9.97	3.03	3.28	0.9259
4993	0.00	0.00	0.15	As Found Zero
4993	64.97	19.55	20.07	As Found Span
Average Correction Factor				0.9783

Calculated value of As Found Response: 19.611 ppm Percent Change of As Found: -0.3%

Auto zero	before calibration		after calibration	
	0.02	ppm	0.06	ppm
	22.15	ppm	22.16	ppm

Notes: span adjustment made  
No internal span... left and cylinder pressure was too low. Respanned next day.

Calibration Performed By: Dawn Ewan

**Calibration Summary**

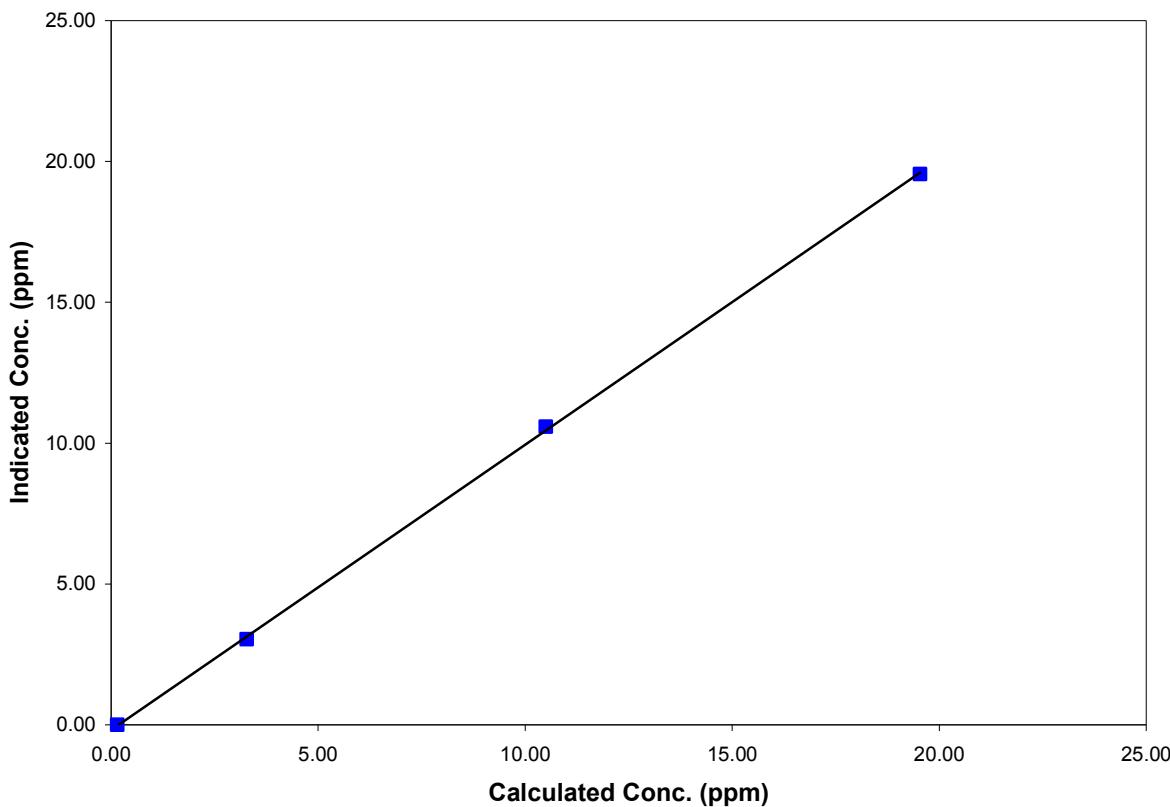
Parameter THC  
 Air Monitoring Network PASZA

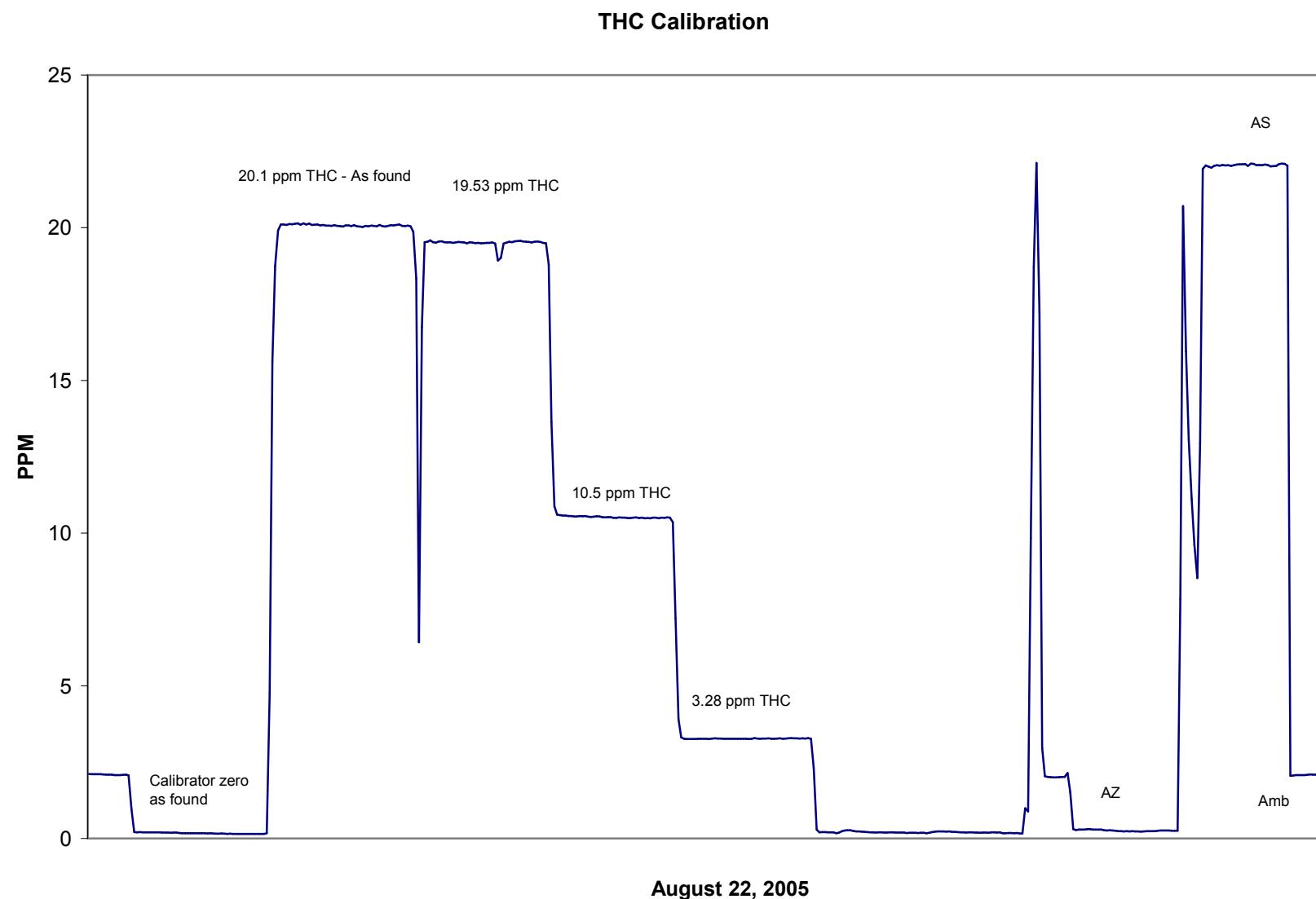
**Station Information**

Calibration Date	August 22, 2005	Previous Calibration	July 15, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:14	End Time (MST)	16:15
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	0.152	N/A		
19.553	19.535	1.0009	Correlation Coefficient	0.999864
10.584	10.501	1.0079		
3.034	3.276	0.9259	Slope	1.012849
			Intercept	-0.180686

**THC Calibration Curve**



**Calibration Report**

Parameter TRS  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 15, 2005	Previous Calibration	July 15, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	12:19	End Time (MST)	20:00
Barometric Pressure	27.9 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	12/10/2005
Correction factor	0.949861	Perm-tube Cert #	04-19367
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	0.970361	Calculated slope	0.972441
Calculated intercept	1.090784	Calculated intercept	0.208011
Analyzer make	TEI Model 43C	Analyzer serial #	31990000000491
Concentration range Background coefficient Lamp Voltage Chamber Temp Perm Gas Temp Pressure Sample Flow Lamp Intesity	before		after
	0 - 100	ppb	0 - 100
	19.9	ppb	19.8
	1.185		1.21
	872	volts	875
	44.4	Deg C	44.2
	45	Deg C	45
	638.3	mm Hg	665.1
	689	ccm	692
	39,500	mv	39,600

**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	2322.4	0.0	0.1	N/A
2445	2322.4	56.0	57.7	0.9711
4970	4720.8	27.6	27.4	1.0044
9530	9052.2	14.4	14.7	0.9786
zero	2293.9	0.0	0.1	As Found Zero
2415	2293.9	56.7	55.4	As Found Span
			Average Correction Factor	0.9847

Calculated value of As Found Response: 54.81 ppm Percent Change of As Found: 3.4%

Auto zero Auto span	before calibration		after calibration	
	1.3	ppm	0.1	ppm
	67.2	ppm	65.1	ppm

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

Calibration Performed By: Kelly Baragar

**Calibration Summary**

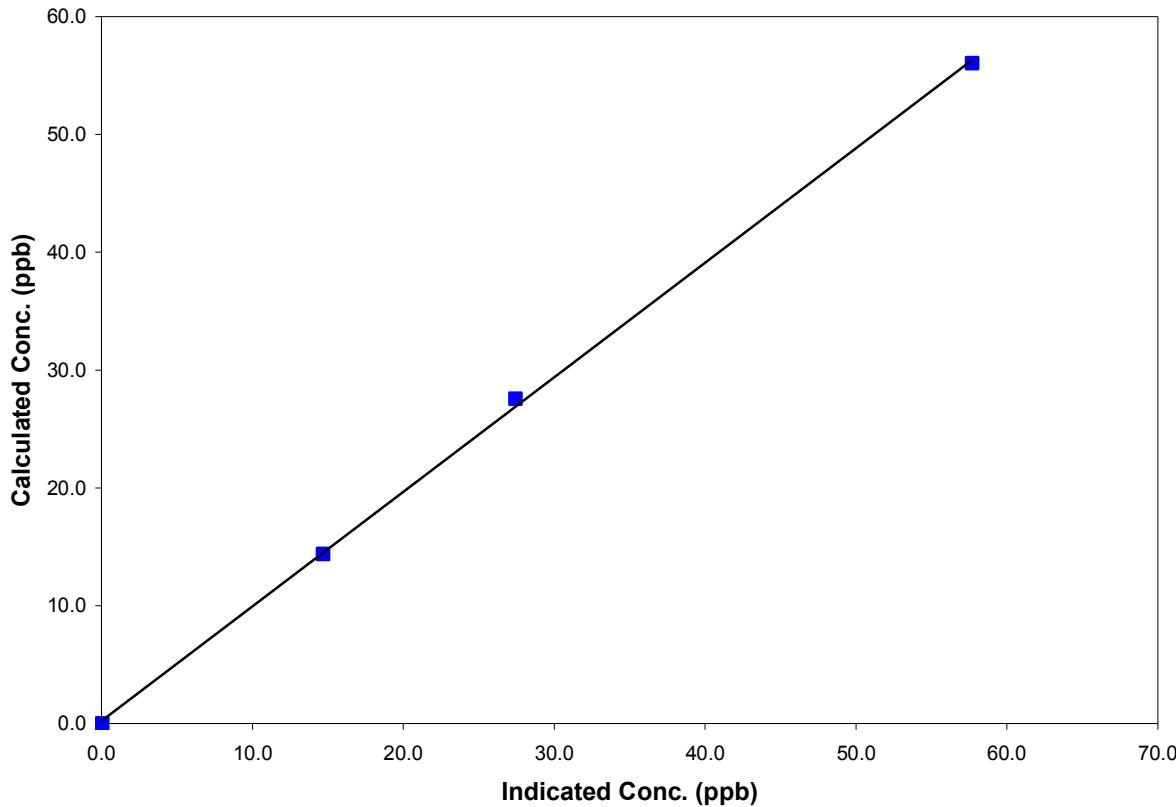
Parameter TRS  
 Air Monitoring Network PASZA

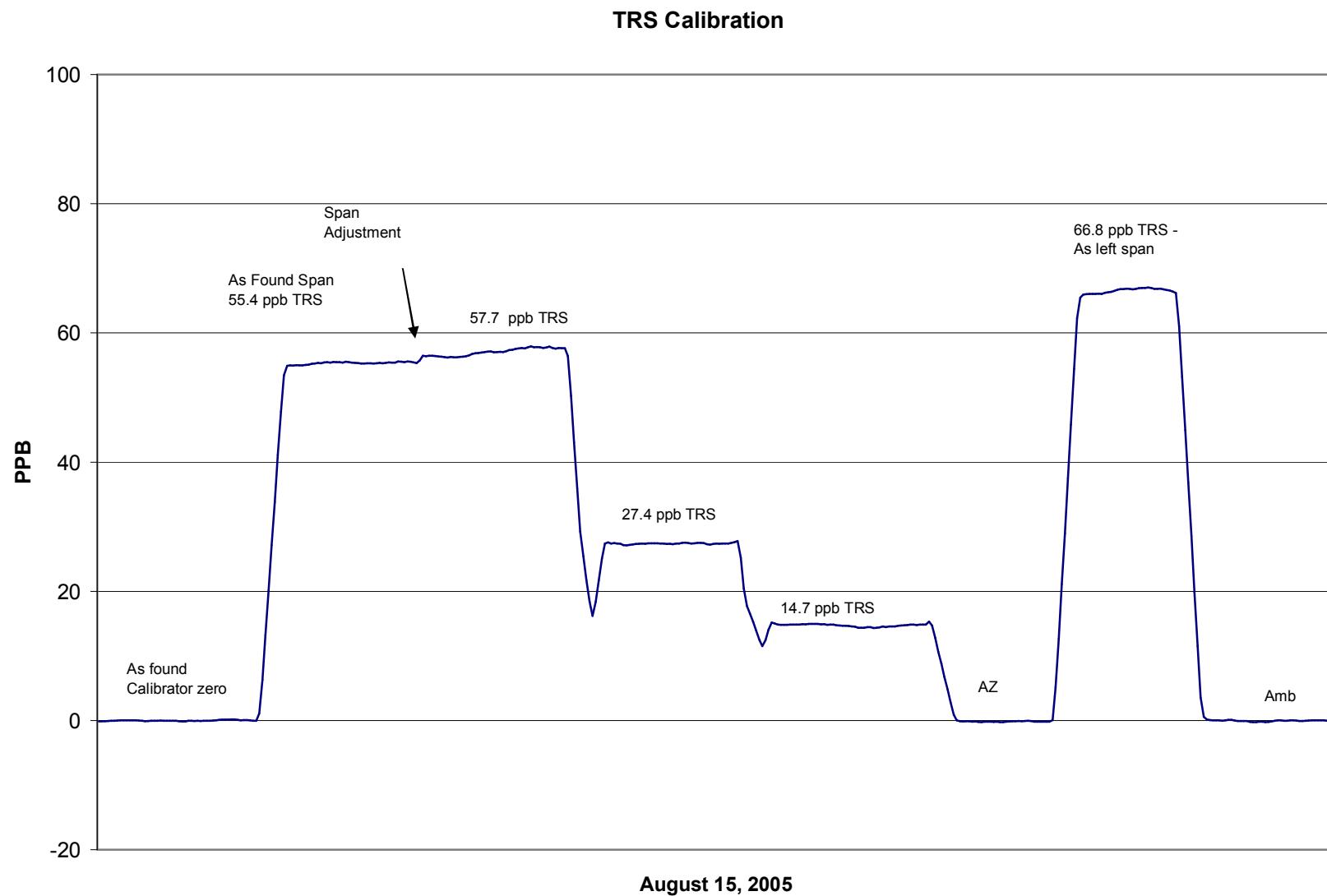
**Station Information**

Calibration Date	August 15, 2005	Previous Calibration	July 15, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:19	End Time (MST)	20:00
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		
56.0	57.7	0.9711	Correlation Coefficient	0.999640
27.6	27.4	1.0044		
14.4	14.7	0.9786	Slope	0.972441
			Intercept	0.208011

**TRS Calibration Curve**



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

Calibration Date	August 8, 2005	Previous Calibration	July 28, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:03	End Time (MST)	13:36
Barometric Pressure	27.9 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	0.948739	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	0.998494	Calculated slope	0.987883
Calculated intercept	-4.831759	Calculated intercept	-0.466266

Analyzer make	API 100	Analyzer serial #	32
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	before		after	
	500	ppb	500	ppb
Concentration range	488	ccm	493	ccm
Sample Flow	3263	mv	3290	mv
UV Lamp Voltage	93	%	94	%
Lamp Ratio	50	Deg C	49	Deg C
Rx Cell Temp	10	Deg C	10	Deg C
PMT Temp	40	Deg C	40	Deg C
IZS Temp	6.69		10.22	
Slope	180.7		180.7	
Intercept				

**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	1951.6	0.0	-0.1	N/A
2057	1951.6	410.1	413.2	0.9925
4058	3850.0	207.9	216.8	0.9592
9045	8581.3	93.3	92.0	1.0137
zero	1951.6		-0.1	As Found Zero
2057	1951.6	410.1	631.0	As Found Span
		Average Correction Factor	0.9885	

Calculated value of As Found Response: 625.281 ppm Percent Change of As Found: -52.5%

Auto zero	before calibration		after calibration	
	-4.2	ppm	-0.5	ppm
	355.6	ppm	242.3	ppm

Notes: no zero adjustments made  
adjusted both spans. Note SO<sub>2</sub> failed but see SR explanation.

internal span value closer to historical value... but note that slope is quite high. (Need manual to determine if inside operational range.)

Calibration Performed By: Dawn Ewan

## Calibration Summary

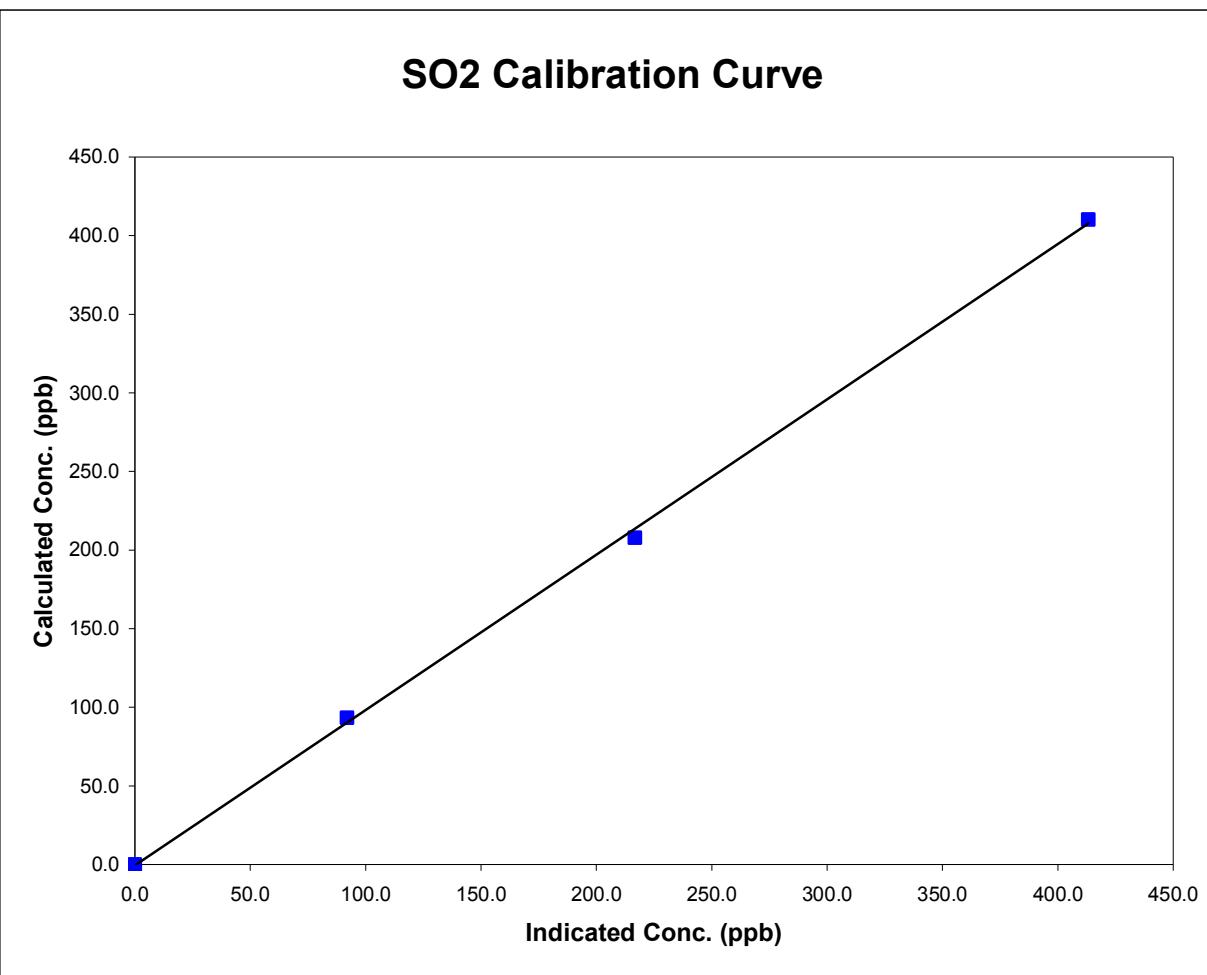
Parameter **SO<sub>2</sub>**  
Air Monitoring Network

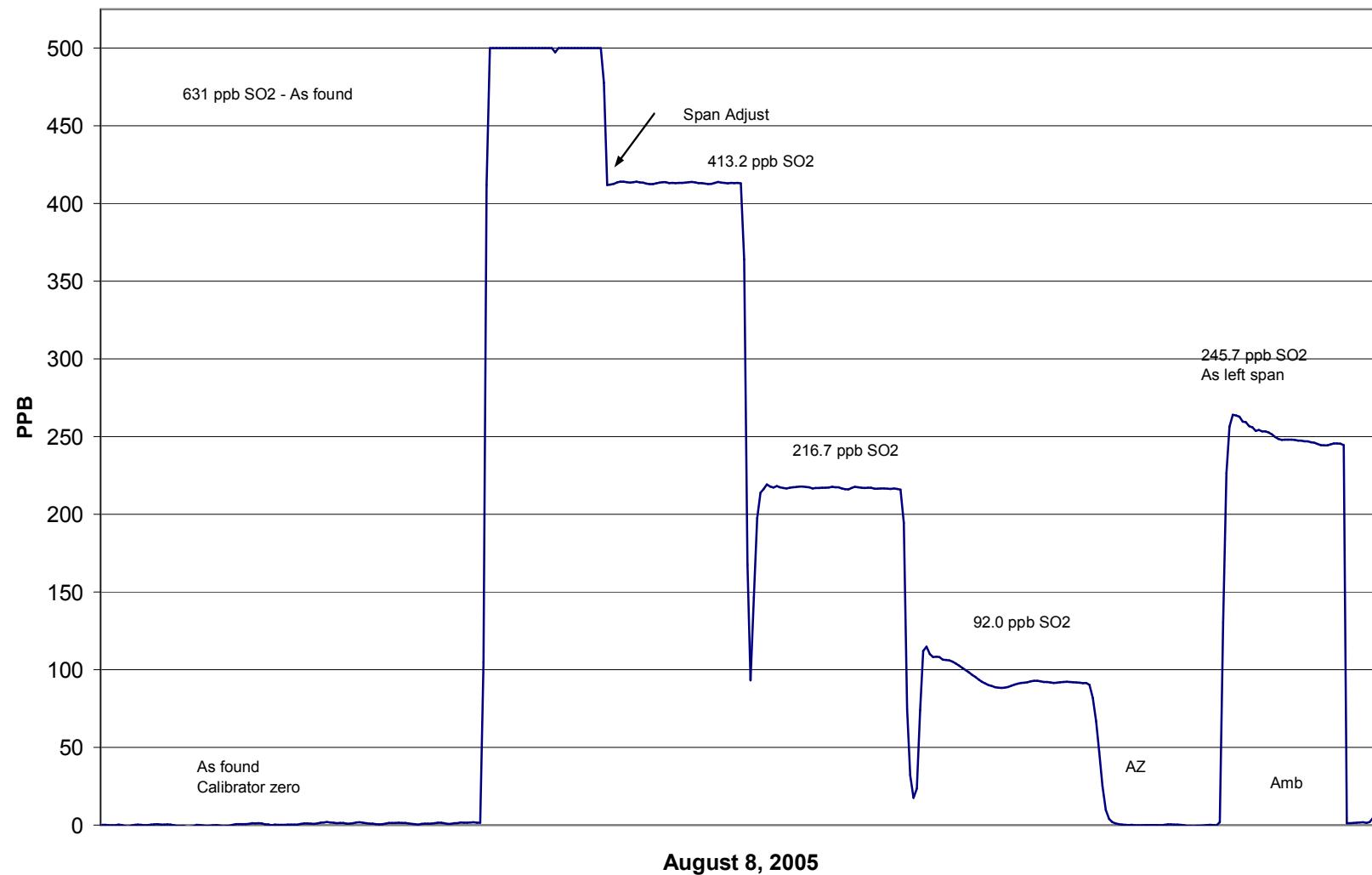


<b>Station Information</b>			
Calibration Date	August 8, 2005	Previous Calibration	July 28, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:03	End Time (MST)	13:36
Analyzer make/model	API 100	Analyzer serial #	32

## **Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
410.1	413.2	0.9925	Correlation Coefficient	0.999497
207.9	216.8	0.9592	Slope	0.987883
93.3	92.0	1.0137		
			Intercept	-0.466266



**SO2 Calibration**

**Calibration Report**

Parameter TRS  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 8, 2005	Previous Calibration	July 28, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:03	End Time (MST)	13:36
Barometric Pressure	27.9 inches Hg	Station Temperature	23.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.939124	Perm-tube Cert #	04-19367
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.993735	Calculated slope	1.000338
Calculated intercept	-0.064253	Calculated intercept	0.269844

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
before		after	
Concentration range	100	ppb	100
Background coefficient	13.5	ppb	13.6
Lamp Voltage	1.253		1.272
Chamber Temp	753	volts	753
Perm Gas Temp	44.3	Deg C	44.1
Pressure	45	Deg C	45
Sample Flow	640.7	mm Hg	648.1
Lamp Intesity	466	ccm	472
	32,200	mv	32,500

**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	1931.8	0.0	0.3	N/A
2057	1931.8	67.4	67.3	1.0004
4058	3811.0	34.1	33.5	1.0182
9045	8494.4	15.3	14.6	1.0511
zero	1931.8	0.0	0.3	As Found Zero
2057	1931.8	67.4	65.9	As Found Span
Average Correction Factor				1.0233

Calculated value of As Found Response: 65.18 ppm Percent Change of As Found: 3.2%

	before calibration		after calibration	
Auto zero	-0.5	ppm	0.1	ppm
Auto span	60.6	ppm	61.2	ppm

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

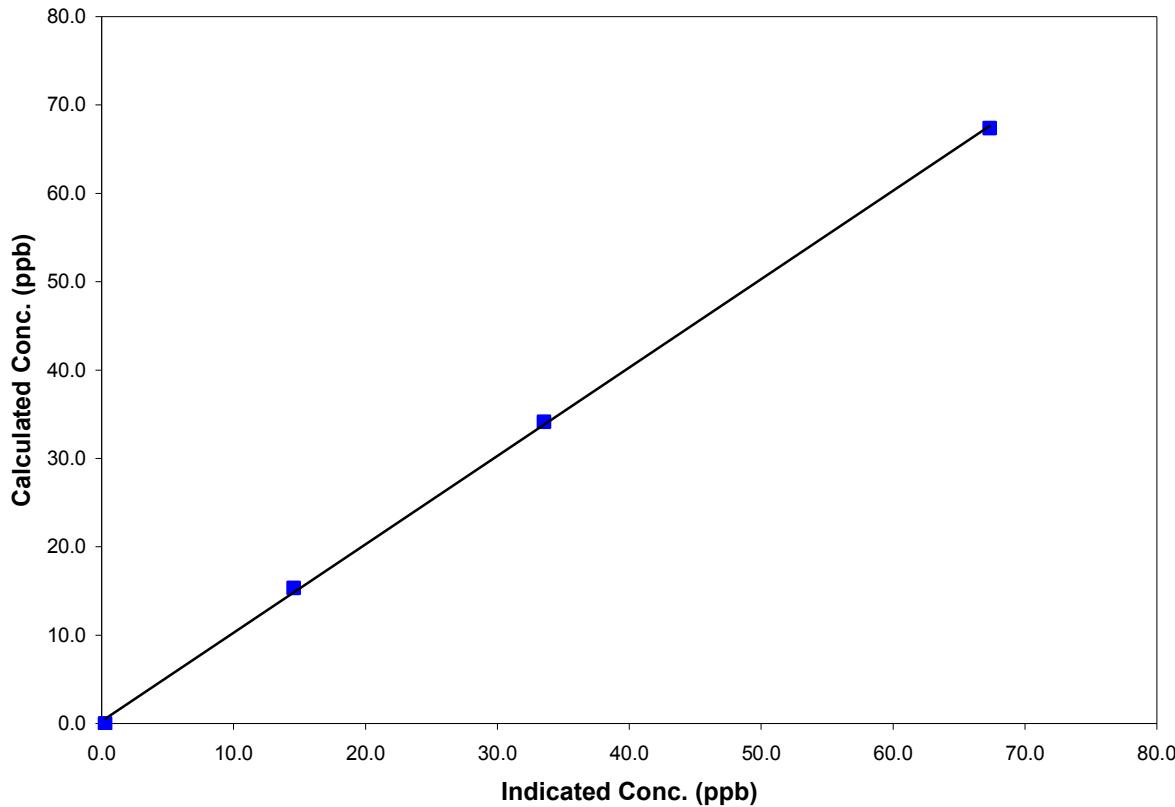
Parameter TRS  
 Air Monitoring Network PASZA

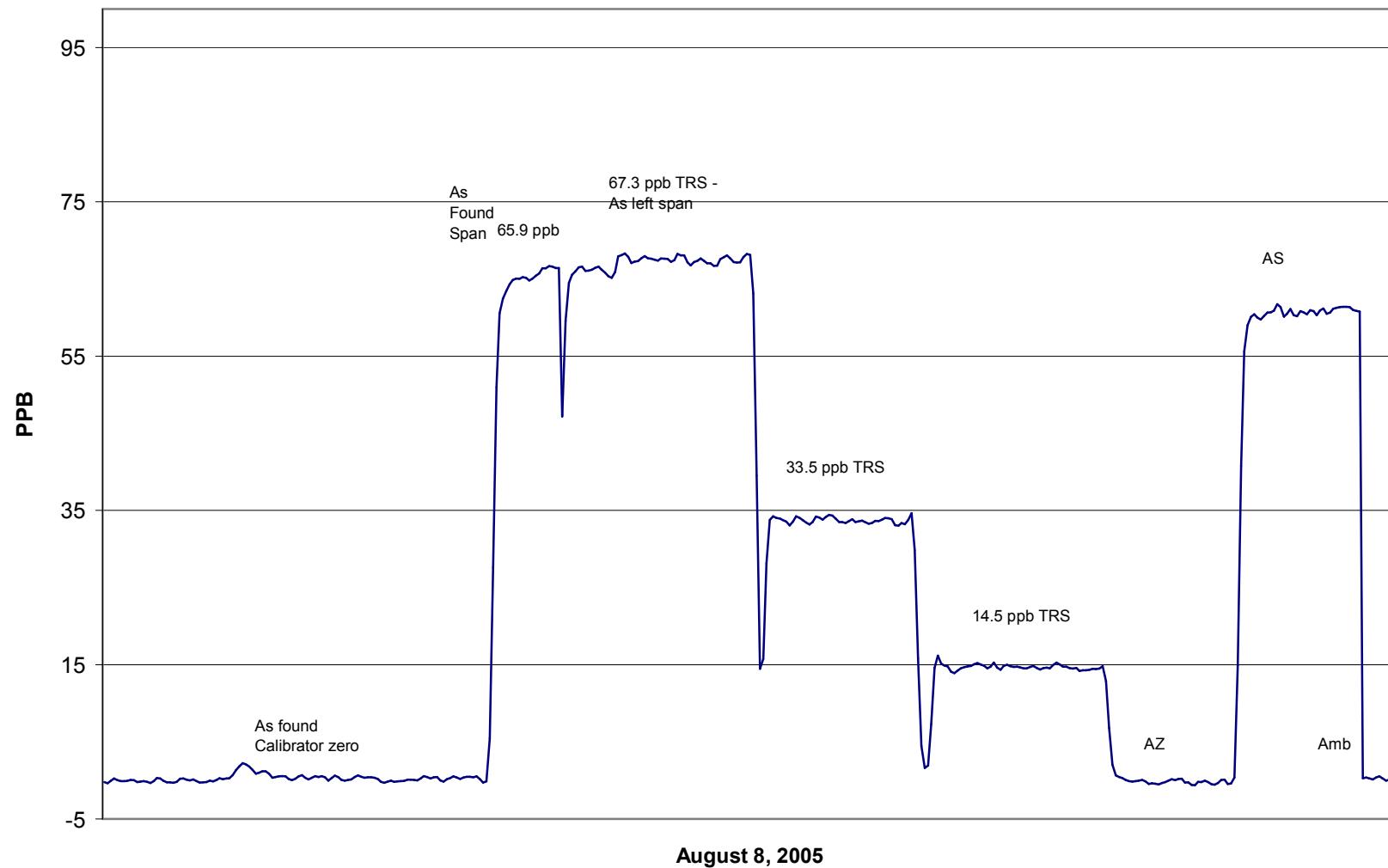
**Station Information**

Calibration Date	August 8, 2005	Previous Calibration	July 28, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:03	End Time (MST)	13:36
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
67.4	67.3	1.0004	Correlation Coefficient	0.999727
34.1	33.5	1.0182		
15.3	14.6	1.0511	Slope	1.000338
			Intercept	0.269844

**TRS Calibration Curve**

**TRS Calibration**

**Calibration Report**

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

**Station Information**

Calibration Date	August 8, 2005		Previous Calibration	June 22, 2005
Station Number	1		Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	11:58	End Time (MST)	12:45	
Barometric Pressure	0.932	ATM	20.0	Deg C
Flow Calibrator	BIOS Drycal DCL-MH		101780	
DACS make	AP 1000	DACS serial No.	45269	
DACS voltage range	0 - 1 V	DACS channel #	15	
	Before		After	
DACS slope	0.050000	DACS slope	0.050000	
DACS intercept	-50.000000	DACS intercept	-50.000000	

**Analyzer Information**

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

	before		after	
Main Flow Set Point	2.990	SLPM	3.000	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	27	%	18	%
Ko Factor	12122		12122	
Temperature	17.4	Deg C	17.4	Deg C
Pressure	0.936	ATM	0.936	ATM

**Calibration Data**

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.01
zero flow - auxillary	0.0	0.00		0.01
flow recovery - main	45 - 60 Seconds	28.0	45 - 60 Seconds	28
flow recovery - aux	46 - 60 Seconds	55.0	46 - 60 Seconds	55
Temperature	measured	16.3	+/- 1.0 Deg C	17.4
Pressure	measured	0.932	+/- 1.5% ΔATM	0.936
Total Flow	16.67 SLPM	16.72		16.70
Main Flow	13.67 SLPM	14.09	+/- 1.0 SLPM	13.67
Auxillary Flow	3.0 SLPM	3.091	+/- 0.2 SLPM	2.990
Leak Check - main	0.0		<0.15 SLPM	0.01
Leak Check - aux	0.0		<0.15 SLPM	0.11
Ko Factor (w/o filter)	measured	NA	filter weight (g)	0.11112
Ko Factor (w/ filter)	measured	NA	% Ko difference	N/A

Notes: Cleaned Head.

New filter... old one wouldn't return to stage 4.

Calibration Performed By: Dawn Ewan

**Calibration Report**

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

**Station Information**

Calibration Date	August 2, 2005	Previous Calibration	July 28, 2005
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:00	End Time (MST)	23:12
Barometric Pressure	27.67 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	3,141 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.940581	Perm-tube Cert #	19-14433
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	0.983871	Calculated slope	0.987346
Calculated intercept	1.929856	Calculated intercept	2.557110
Analyzer make	API 102A	Analyzer serial #	212
before			
Concentration range	500	ppb	500
Sample Flow	545	ccm	578
UV Lamp Voltage	3290	mv	3230
Lamp Ratio	90	%	90
Rx Cell Temp	51	Deg C	50.9
PMT Temp	6.8	Deg C	7
IZS Temp	45	Deg C	45
Slope	1.202		1.224
Intercept	18.3		15.3

**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	2685.4	0.0	1.2	N/A
2855	2685.4	446.5	452.2	0.9873
4950	4655.9	257.5	255.1	1.0093
10100	9499.9	126.2	121.9	1.0351
zero	2677.8	0.0	1.0	As Found Zero
2847	2677.8	447.7	437.9	As Found Span
Average Correction Factor				1.0105

Calculated value of As Found Response: 431.796 ppm      Percent Change of As Found: 3.6%

Auto zero Auto span	before calibration		after calibration	
	4.6	ppm	7.3	ppm
	342.0	ppm	351.0	ppm

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

Calibration Performed By: Dawn Ewan

## Calibration Summary

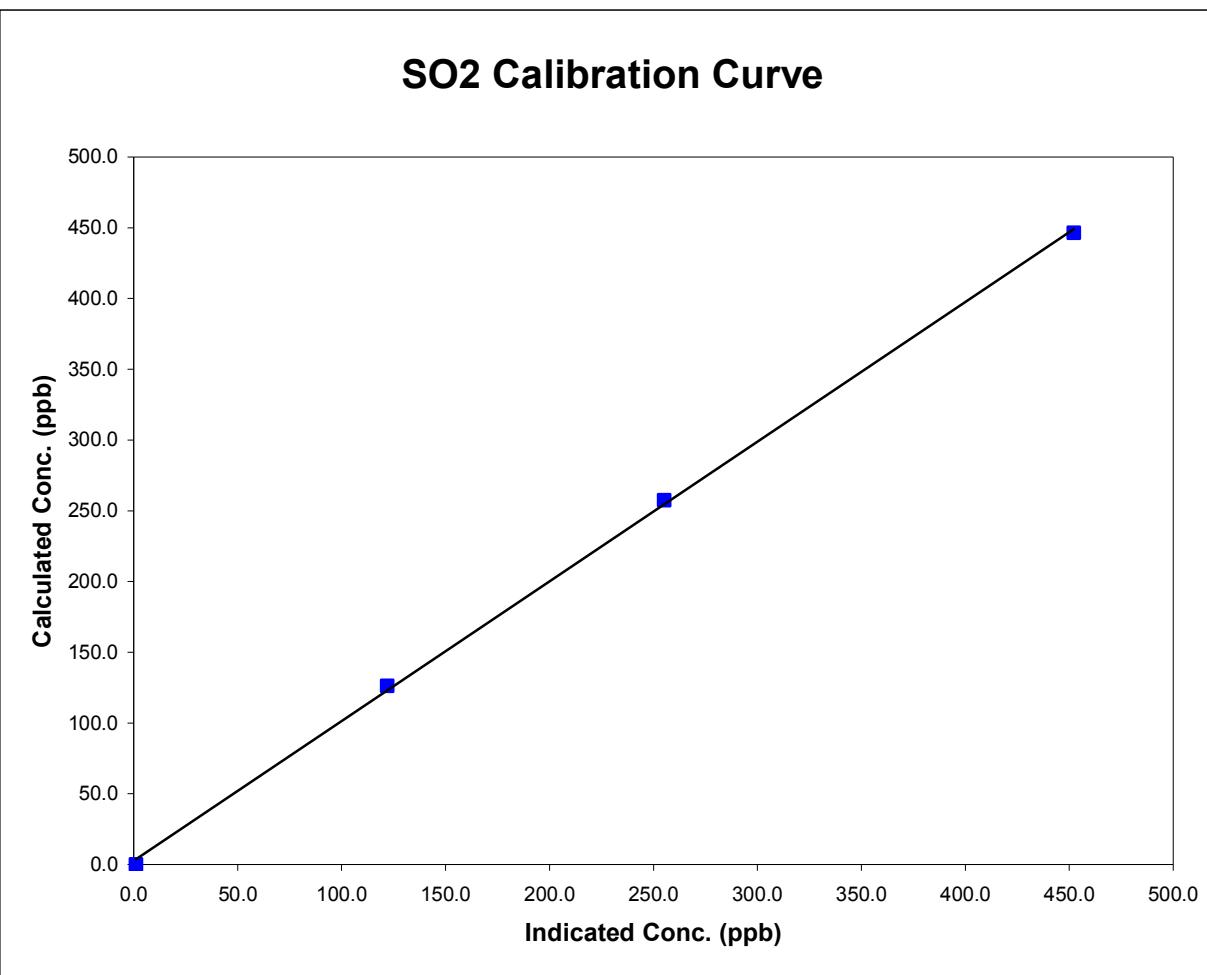
Parameter **SO<sub>2</sub>**  
Air Monitoring Network

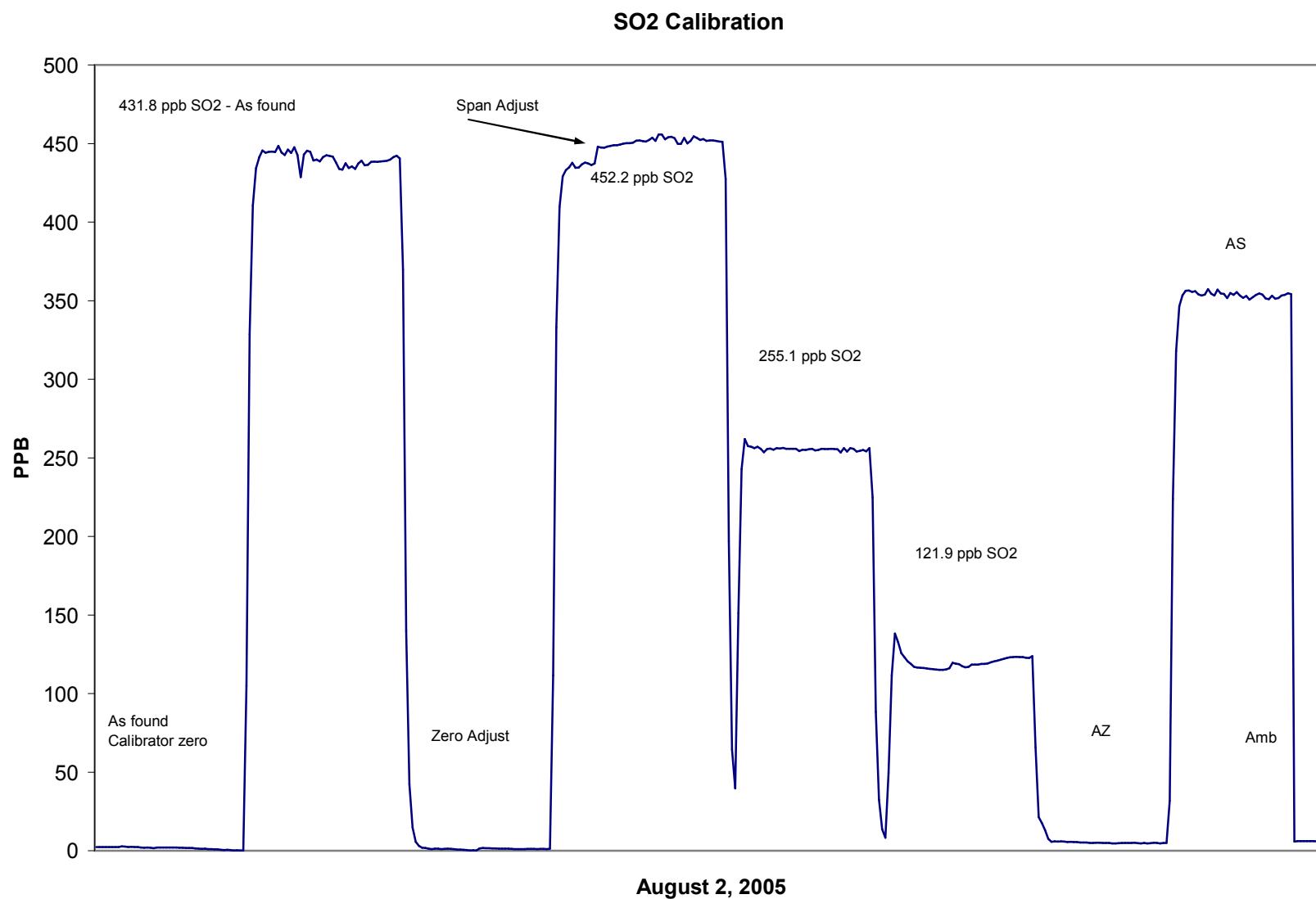


<b>Station Information</b>			
Calibration Date	August 2, 2005	Previous Calibration	July 28, 2005
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:00	End Time (MST)	23:12
Analyzer make/model	API 102A	Analyzer serial #	212

## ***Calibration Data***

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.2	N/A		
446.5	452.2	0.9873	Correlation Coefficient	0.999630
257.5	255.1	1.0093	Slope	0.987346
126.2	121.9	1.0351		
			Intercept	2.557110





**Calibration Report**

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

**Station Information**

Calibration Date	August 9, 2005	Previous Calibration	August 2, 2005	
Station Number	3	Station Location	Smoky Heights	
Reason:	Routine	Install	Removal	
			Other:	
Start Time (MST)	8:57	End Time (MST)		
Barometric Pressure	27.99 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	0.951459	Perm-tube Cert #	19-9955	
DACS make	Focus AP1000	DACS serial No.	45274	
DACS voltage range	0 - 10 volt	DACS channel #	4	
	Before		After	
Calculated slope	0.987346	Calculated slope	0.998067	
Calculated intercept	2.557110	Calculated intercept	0.957641	
Analyzer make	API 102A	Analyzer serial #	212	
Concentration range Sample Flow UV Lamp Voltage Lamp Ratio Rx Cell Temp PMT Temp IZS Temp Slope Intercept	before		after	
	500	ppb	500	ppb
	578	ccm	578	ccm
	3230	mv	3230	mv
	90	%	90	%
	50.9	Deg C	50.9	Deg C
	7	Deg C	7	Deg C
	45	Deg C	45	Deg C
	1.224		0.806	
	15.3		20.4	

**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	2026.6	0.0	0.2	N/A
2130	2026.6	395.0	395.2	0.9994
4900	4662.1	171.7	170.8	1.0051
9164	8719.2	91.8	89.6	1.0241
zero	2012.3	0.0	2.1	As Found Zero
2115	2012.3	397.8	615.0	As Found Span
Average Correction Factor				1.0095

Calculated value of As Found Response: 607.696 ppm Percent Change of As Found: -52.8%

Auto zero Auto span	before calibration		after calibration	
	7.3	ppm	1.5	ppm
	351.0	ppm	227.9	ppm

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

Calibration Performed By: Dawn Ewan

## Calibration Summary

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

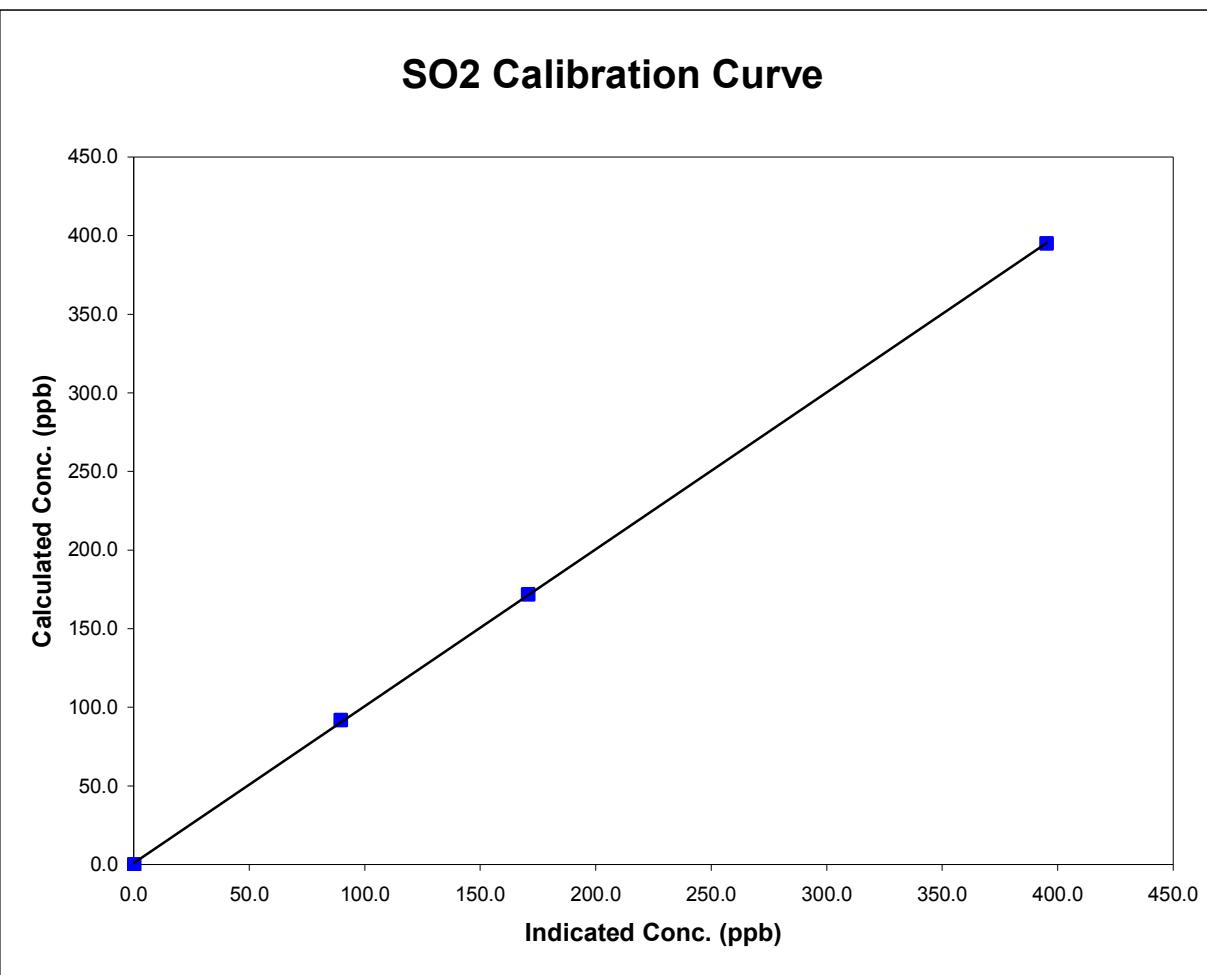


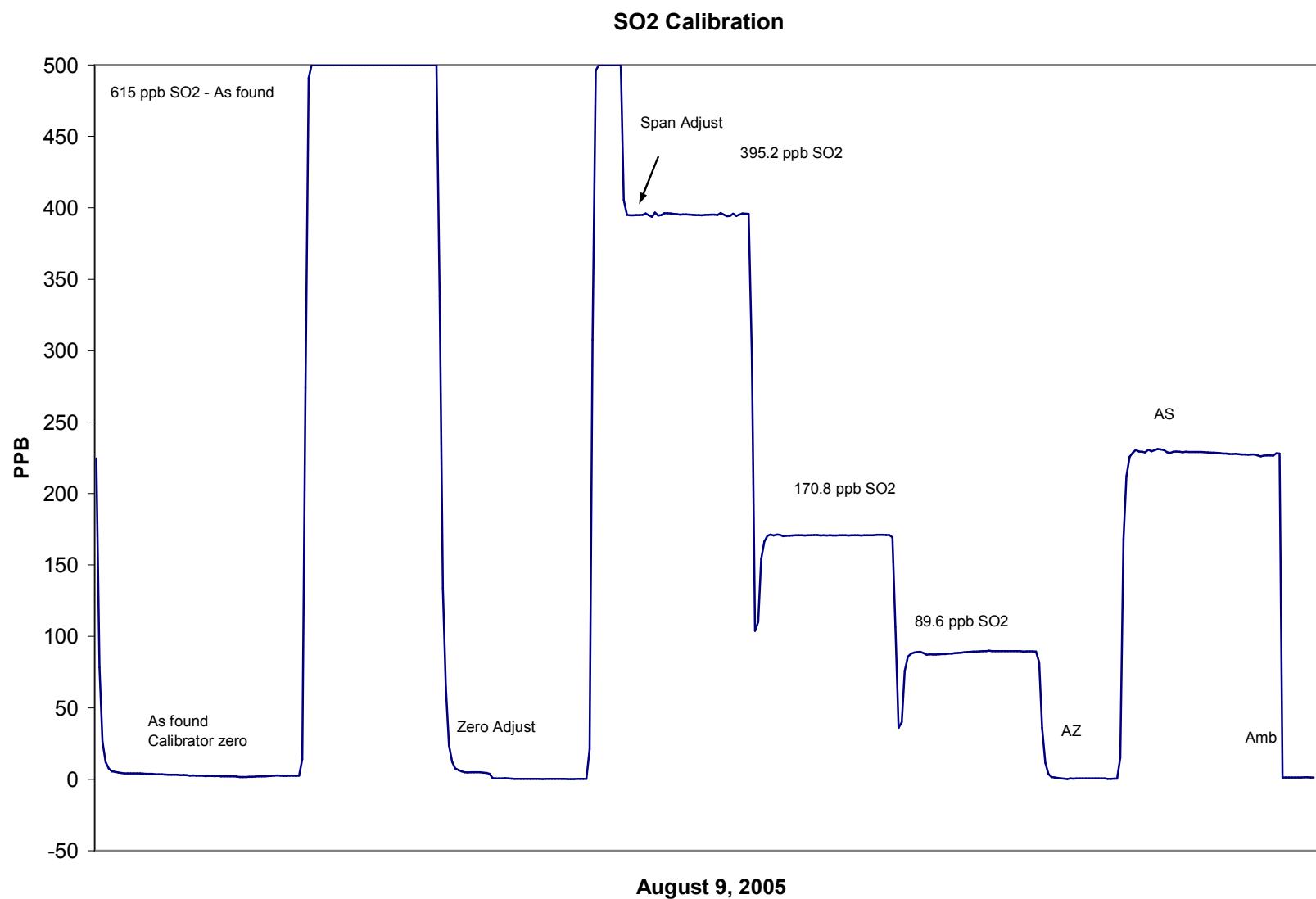
## ***Station Information***

Station Information			
Calibration Date	August 9, 2005	Previous Calibration	August 2, 2005
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	8:57	End Time (MST)	0:00
Analyzer make/model	API 102A	Analyzer serial #	212

## ***Calibration Data***

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
395.0	395.2	0.9994	Correlation Coefficient	0.999958
171.7	170.8	1.0051		
91.8	89.6	1.0241	Slope	0.998067
			Intercept	0.957641





**Calibration Report**

Parameter **TRS**  
Air Monitoring Network

**PASZA****Station Information**

Calibration Date	August 2, 2005	Previous Calibration	July 28, 2005
Station Number	3	Station Location	Smoky Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:00	End Time (MST)	22:31
Barometric Pressure	27.67 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	0.940581	Perm-tube Cert #	03-13509
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	0.977345	Calculated slope	1.002601
Calculated intercept	0.836924	Calculated intercept	0.045085
Analyzer make	TEI Model 43C	Analyzer serial #	436610004
Concentration range Background coefficient Lamp Voltage Chamber Temp Perm Gas Temp Pressure Sample Flow Lamp Intesity	before	after	
	100	ppb	100
	10.1	ppb	10.5
	1.057		1.164
	776	volts	776
	34	Deg C	43.8
	45	Deg C	45
	641.5	mm Hg	649.3
	459	ccm	470
	32,500	mv	32,000

**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	2685.4	0.0	-0.5	N/A
2855	2685.4	48.5	48.3	1.0038
4950	4655.9	28.0	27.4	1.0210
10100	9499.9	13.7	14.5	0.9443
zero	2677.8	0.0	-0.5	As Found Zero
2847	2677.8	48.6	43.0	As Found Span
		Average Correction Factor	0.9897	

Calculated value of As Found Response: 43.32 ppm Percent Change of As Found: 10.9%

Auto zero Auto span	before calibration		after calibration	
	-0.1	ppm	-0.8	ppm
	71.5	ppm	80.9	ppm

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

Calibration Performed By: Dawn Ewan

**Calibration Summary**

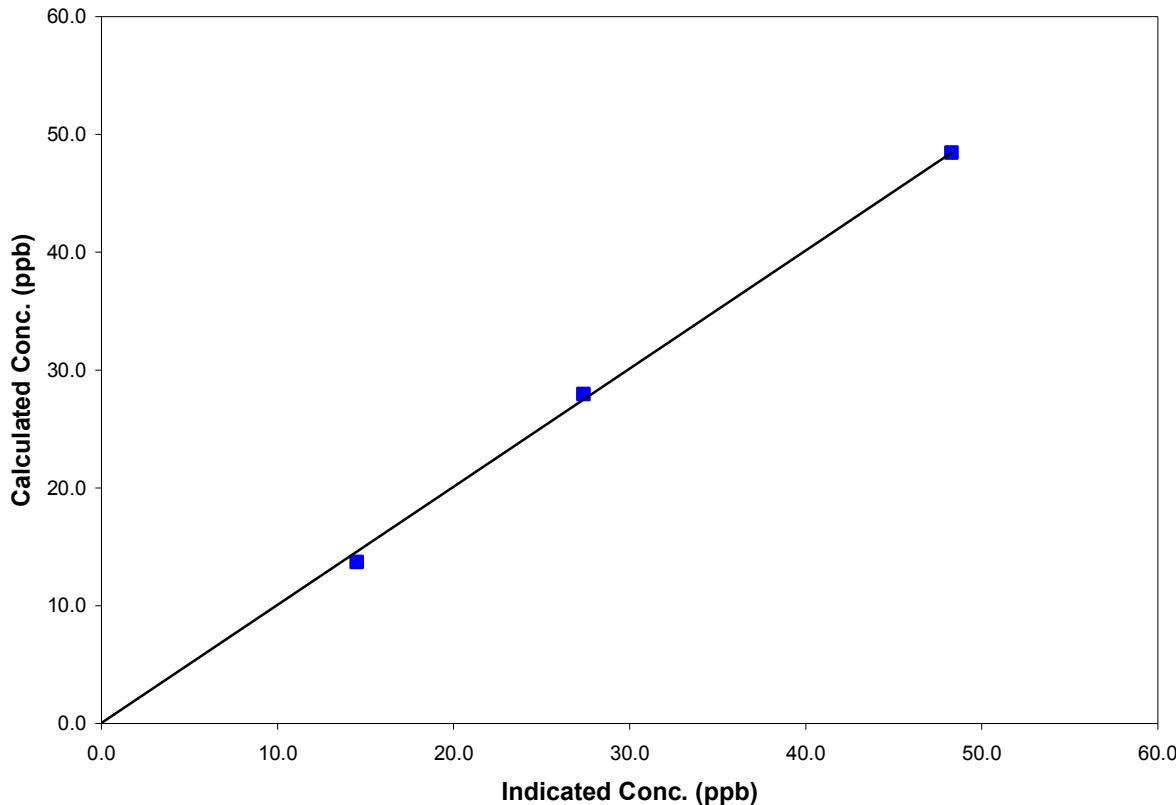
Parameter TRS  
 Air Monitoring Network PASZA

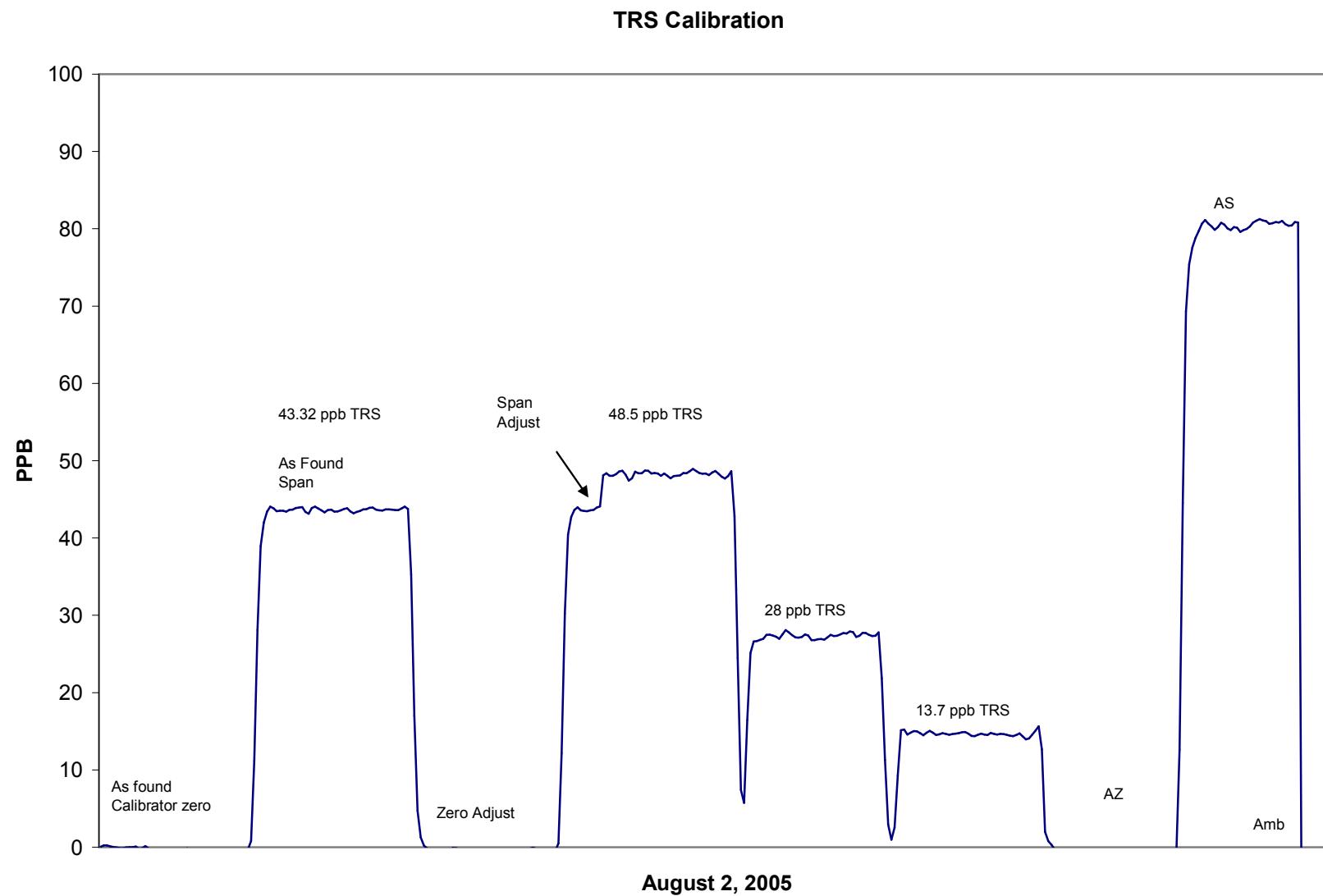
**Station Information**

Calibration Date	August 2, 2005	Previous Calibration	July 28, 2005
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:00	End Time (MST)	22:31
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610004

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.5	N/A		
48.5	48.3	1.0038	Correlation Coefficient	0.999083
28.0	27.4	1.0210		
13.7	14.5	0.9443	Slope	1.002601
			Intercept	0.045085

**TRS Calibration Curve**



**Calibration Report**

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

**Station Information**

Calibration Date	August 2, 2005		Previous Calibration	July 5, 2005
Station Number	1		Station Location	Smoky Heights
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	10:55		End Time (MST)	12:23
Barometric Pressure	0.925	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	29	%	27	%
Ko Factor	10997		10997	
Temperature	11.2	Deg C	11.2	Deg C
Pressure	0.93	ATM	0.93	ATM
Main Fadj				
Aux Fadj				

**Calibration Data**

Parameter	Set Point	Indicated Reading	Tolerance	New Reading
zero flow - main	0.0	0.01		
zero flow - auxillary	0.0	0.04		
flow recovery - main	45 - 60 Seconds	28.0	45 - 60 Seconds	28.0000
flow recovery - aux	46 - 60 Seconds	44.0	46 - 60 Seconds	44.0000
Temperature	measured	11.2	+/- 1.0 Deg C	11.2
Pressure	measured	0.930	+/- 1.5% ΔATM	0.930
Total Flow	16.67 SLPM	16.67		16.67
Main Flow	13.67 SLPM	14.04	+/- 1.0 SLPM	14.04
Auxillary Flow	3.0 SLPM	3.076	+/- 0.2 SLPM	3.076
Leak Check - main	0.0	0.04	<0.15 SLPM	0.04
Leak Check - aux	0.0	0.09	<0.15 SLPM	0.09
Ko Factor	measured	NA		NA

Notes: Head is clean.

No adjustments made.

Changed filter

Calibration Performed By: Dawn Ewan

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

Calibration Date	August 18, 2005	Previous Calibration	July 11, 2005
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
			Other: Mirror Replacement
Start Time (MST)	9:37	End Time (MST)	14:10
Barometric Pressure	0.915 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Make	Scott	Cal Gas Expiry Date	December 12, 2005
Cal Gas Conc.	10.3 ppm	Cal Gas Cylinder #	BLM002816
DACS make	Focus AP1000	DACS serial No.	45271
DACS voltage range	0 - 10 volt	DACS channel #	3
	Before		After
Calculated slope	1.001235	Calculated slope	0.962678
Calculated intercept	0.238810	Calculated intercept	0.185709
Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376
before		after	
Concentration range	0 - 100	ppb	0 - 100
Background	2.43	ppb	4.12
Coefficient	1.122		0.972
Lamp Voltage	1000.0	Volts	901.0
Chamber Temp	43.9	Deg C	43.6
Sample Flow	608	ccm	608

**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)
1997	0.00	0.00	-0.03	N/A
1997	14.90	76.28	78.90	0.9668
1997	9.90	50.81	53.03	0.9582
1997	4.90	25.21	25.53	0.9874
1997	0.00	0.00	-1.48	As Found Zero
1997	14.90	76.28	26.43	As Found Span
Average Correction Factor				0.9708

Calculated value of As Found Response: 28.188 ppm Percent Change of As Found: 63.0%

Auto zero	before calibration		after calibration	
	0.36	ppm	-0.14	ppm
	28.85	ppm	33.69	ppm

Notes:

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Calibration Performed By: Dawn Ewan

## Calibration Summary

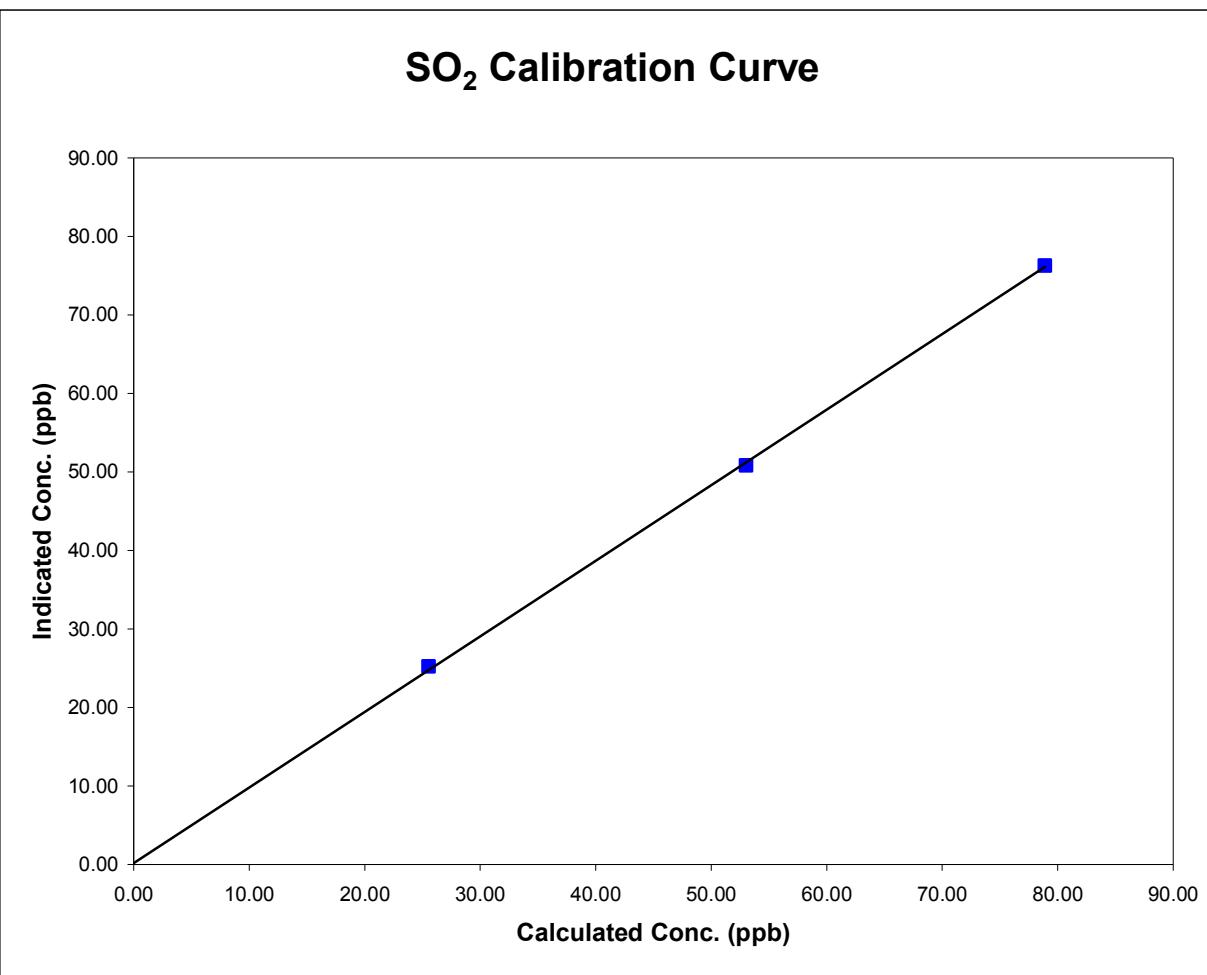
Parameter **SO<sub>2</sub>**  
Air Monitoring Network

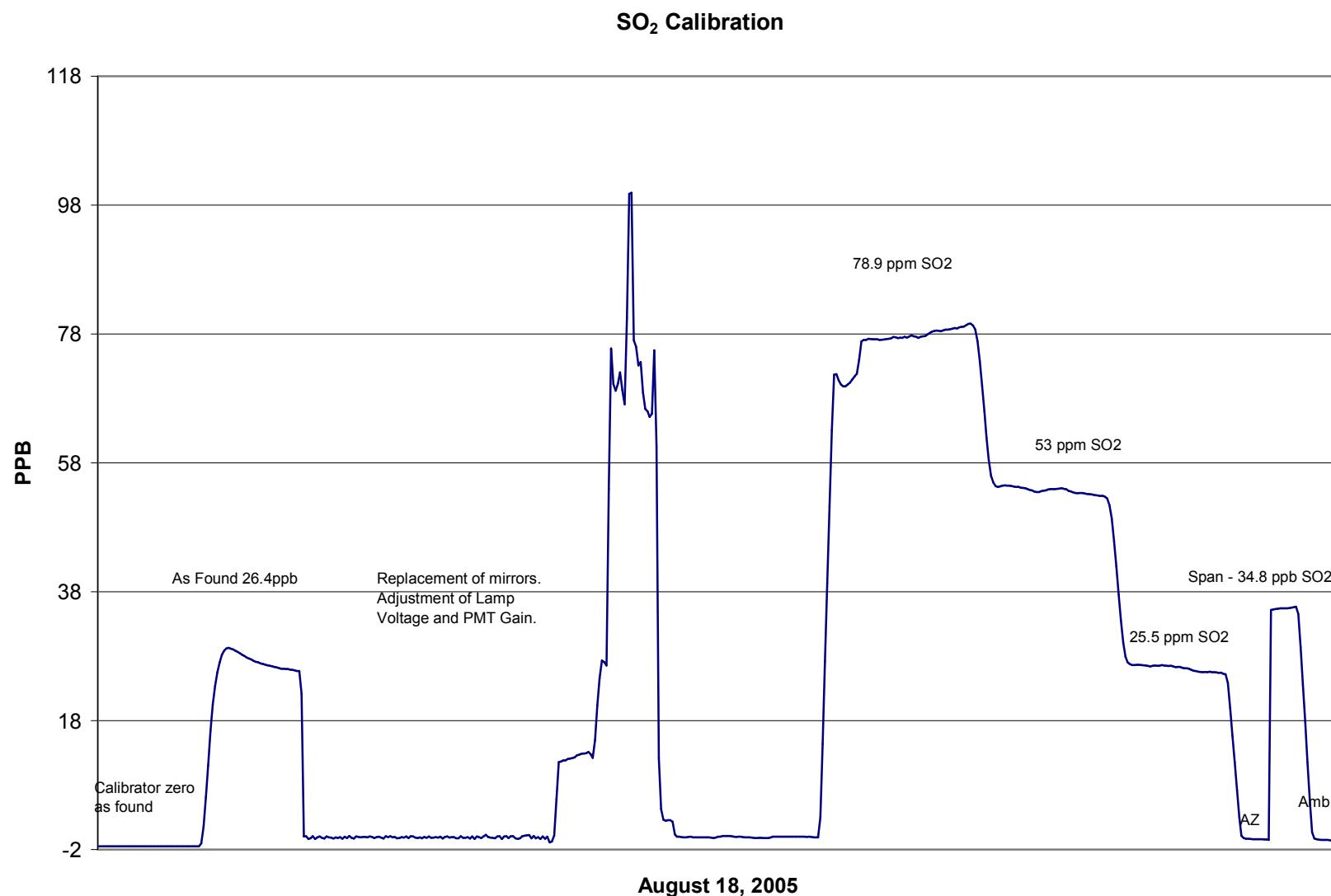


<b>Station Information</b>			
Calibration Date	August 18, 2005	Previous Calibration	July 11, 2005
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:37	End Time (MST)	14:10
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

## **Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.025	N/A		
76.281	78.898	0.9668	Correlation Coefficient	0.999869
50.810	53.029	0.9582		
25.211	25.533	0.9874	Slope	0.962678
			Intercept	0.185709





# Calibration Report

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



## Station Information

Calibration Date	August 19, 2005			Previous Calibration	July 17, 2005
Station Number	4			Station Location	AG Canada Research Station
Reason:	Routine			Other:	
Start Time (MST)	9:52			End Time (MST)	13:46
Barometric Pressure	0.911	Atm		Station Temperature	20.0 Deg C
Calibrator	Environics 6100			Serial Number	3016
NO Cal Gas Conc	50.3	ppm		Cal Gas Expiry Date	22-Nov-06
NOx Cal Gas Conc	50.5	ppm		Cal Gas Serial #	BAL786

## DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269
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Parameter		NO2	NOx	NO
Before	Data Slope	0.993332	0.993668	0.997664
	Data Offset	-0.048419	-0.315305	-0.243597
After	Data Slope	0.977371	0.998362	0.986487
	Data Offset	9.482548	-1.112757	-2.298205
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
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Test Point	before		after	
Concentration range	0-1000	ppb	0-1000	ppb
NO background	1.1	ppb	1.2	mV
NOx background	1.2	ppb	1.2	mV
NO coefficient	0.922		1.021	
NOx coefficient	1.005		0.934	
Chamber Temp	1.0	Deg C	49.4	Deg C
Cooler Temp	-2.0	Deg C	-2.0	Deg C
Converter Temp	323.0	Deg C	324.0	Deg C
Sample flow	835.0	LPM	813.0	LPM
Pressure	162.3	inches Hg	160.7	inches Hg
Box Temp	33.3	ccm	30.9	ccm

Notes: NO2 doesn't look pretty but may be caused by retained gas in calibrator.

No Zero Adjustment made (zero supplied by IZS)

Adjusted span NO and NOX

## Calibration Report

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



### Station Information

Calibration Date: August 19, 2005 Station Location: AG Canada Research Station

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	
zero	2496	0.00	0.0	0.0	0.0	-0.4	-0.4	-0.4	N/A	N/A	
	2496	39.97	795.9	792.8	3.2	797.7	804.0	-7.3	0.9977	0.9860	
	2496	19.98	401.0	399.4	1.6	403.1	410.1	-7.6	0.9949	0.9740	
	2496	9.99	201.3	200.5	0.8	204.6	207.4	-3.5	0.9840	0.9666	
AFZ	2496	0.00	0.0	0.0	0.0	-0.4	-0.4	-0.4	0.0000	0.0000	
	2496	39.97	795.9	792.8	3.2	775.3	715.2	59.2	1.0267	1.1084	
							Average Correction Factor	0.9922	0.9755		

As Found Concentrations: NO<sub>x</sub>= 775.3 NO= 715.4 As Found Percent Change NO<sub>x</sub>= -2.6% NO= -9.8%

### GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency	
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	
NO point	796.5	790.5	6.0	791.4	803.7	-13.3	1.0064	0.9836	N/A	N/A	
300	796.5	573.3	223.2	804.9	583.5	220.9	0.9895	0.9825	1.0106	98.9%	
200	796.5	657.0	139.5	802.9	668.3	134.0	0.9921	0.9830	1.0407	96.1%	
100	796.5	726.6	69.9	788.9	738.9	49.4	1.0096	0.9834	1.4163	70.6%	
							Average Correction Factor	0.9970	0.9830	1.1559	88.5%

### AIC Data

	Previous calibration				Current calibration				
Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb	
Auto zero	0.1	0.2	0.1	ppb	1.1	1.0	1.1	ppb	
Auto span	243.8	15.5	228.6	ppb	236.4	1.9	239.6	ppb	

Calibration Performed By: Dawn Ewan

## Calibration Summary

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

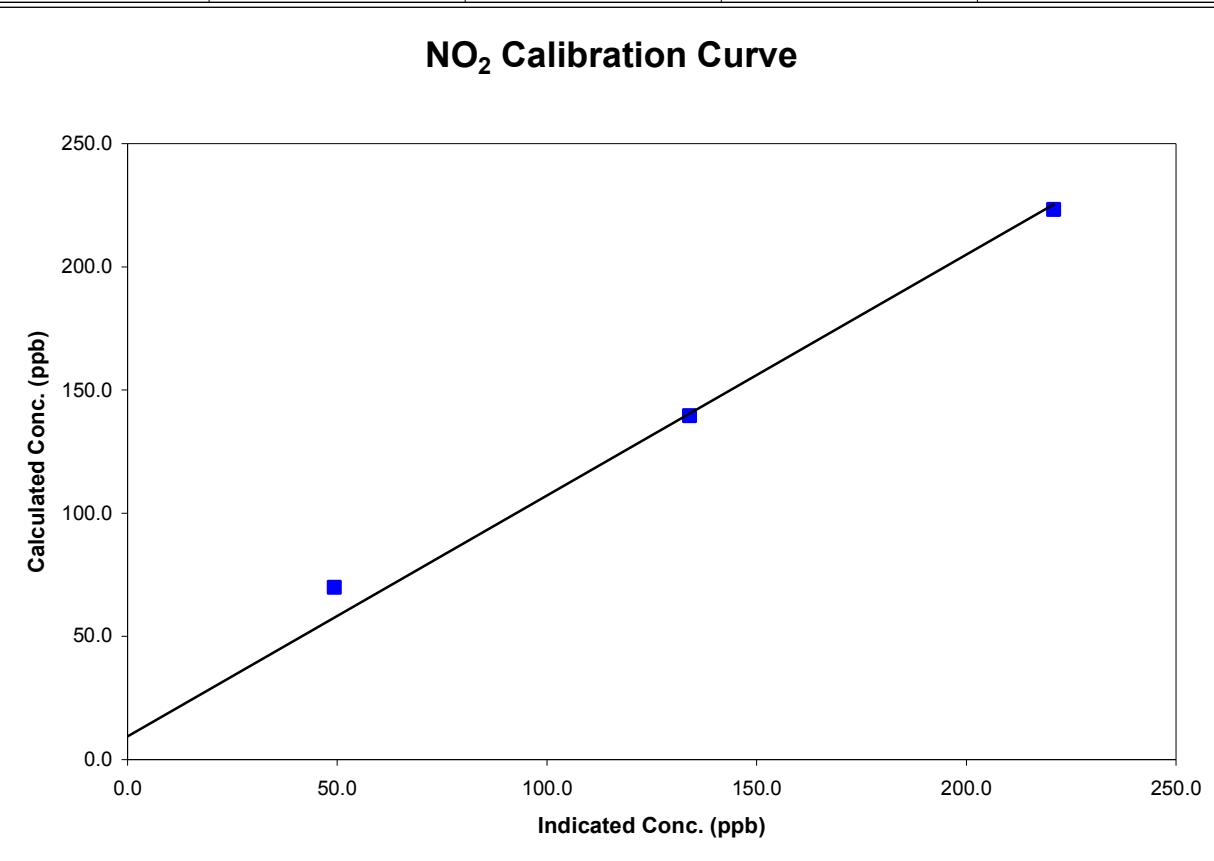


## ***Station Information***

Calibration Date	August 19, 2005	Previous Calibration	July 17, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:52	End Time (MST)	13:46
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	0.0000		
223.2	220.9	1.0106	Correlation Coefficient	0.991389
139.5	134.0	1.0407		
69.9	49.4	1.4163	Slope	0.977371
			Intercept	9.482548



**Calibration Summary**

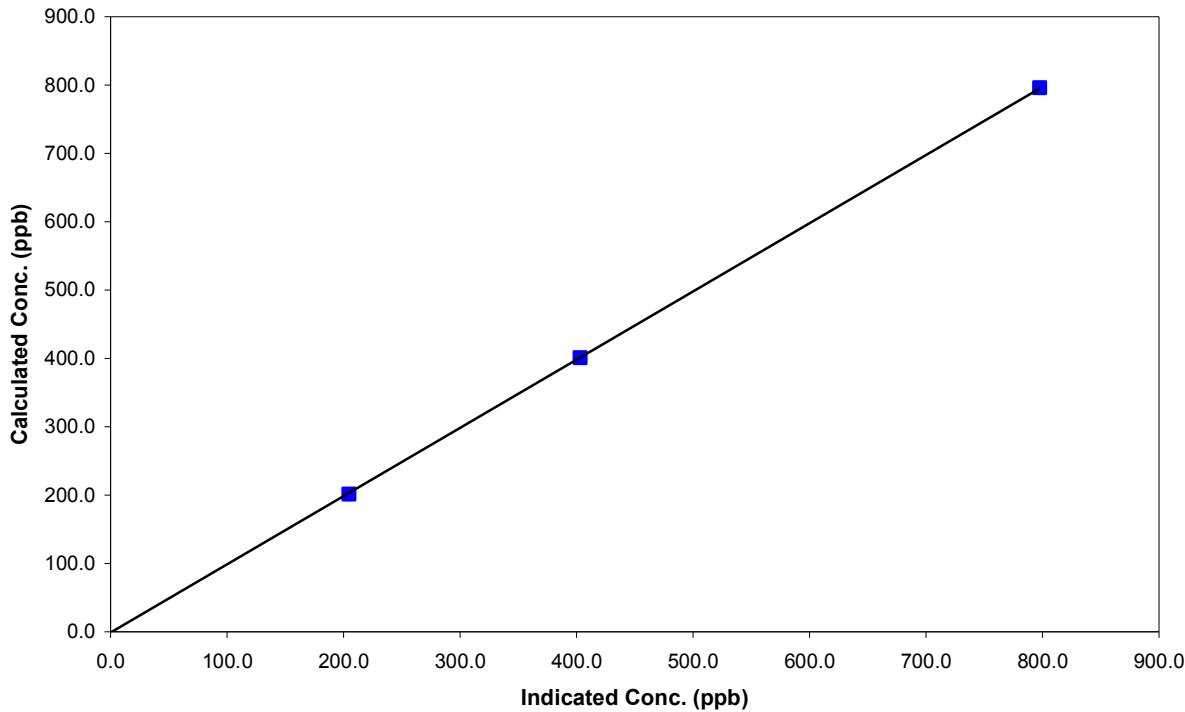
Parameter **NO<sub>x</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	August 19, 2005	Previous Calibration	July 17, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:52	End Time (MST)	13:46
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	0.0000	Correlation Coefficient	0.999983
795.9	797.7	0.9977		
401.0	403.1	0.9949		
201.3	204.6	0.9840		
			Slope	0.998362
			Intercept	-1.112757

**NOx Calibration Curve**

**Calibration Summary**

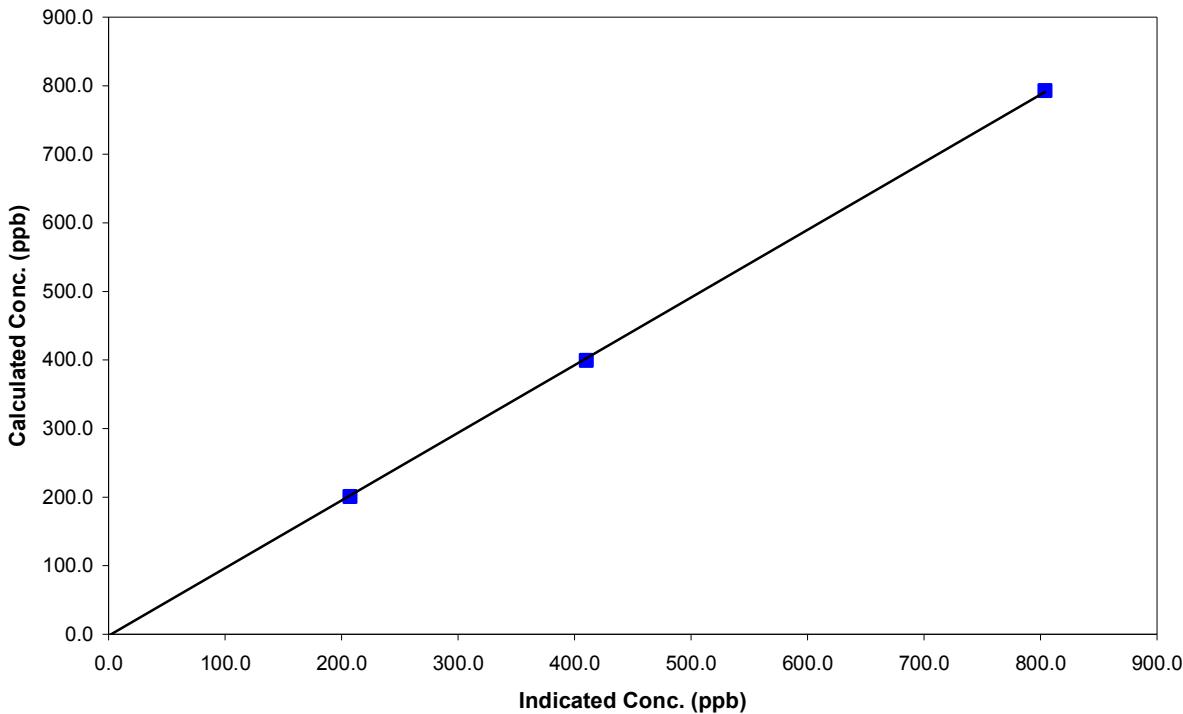
Parameter **NO**  
 Air Monitoring Network **PASZA**

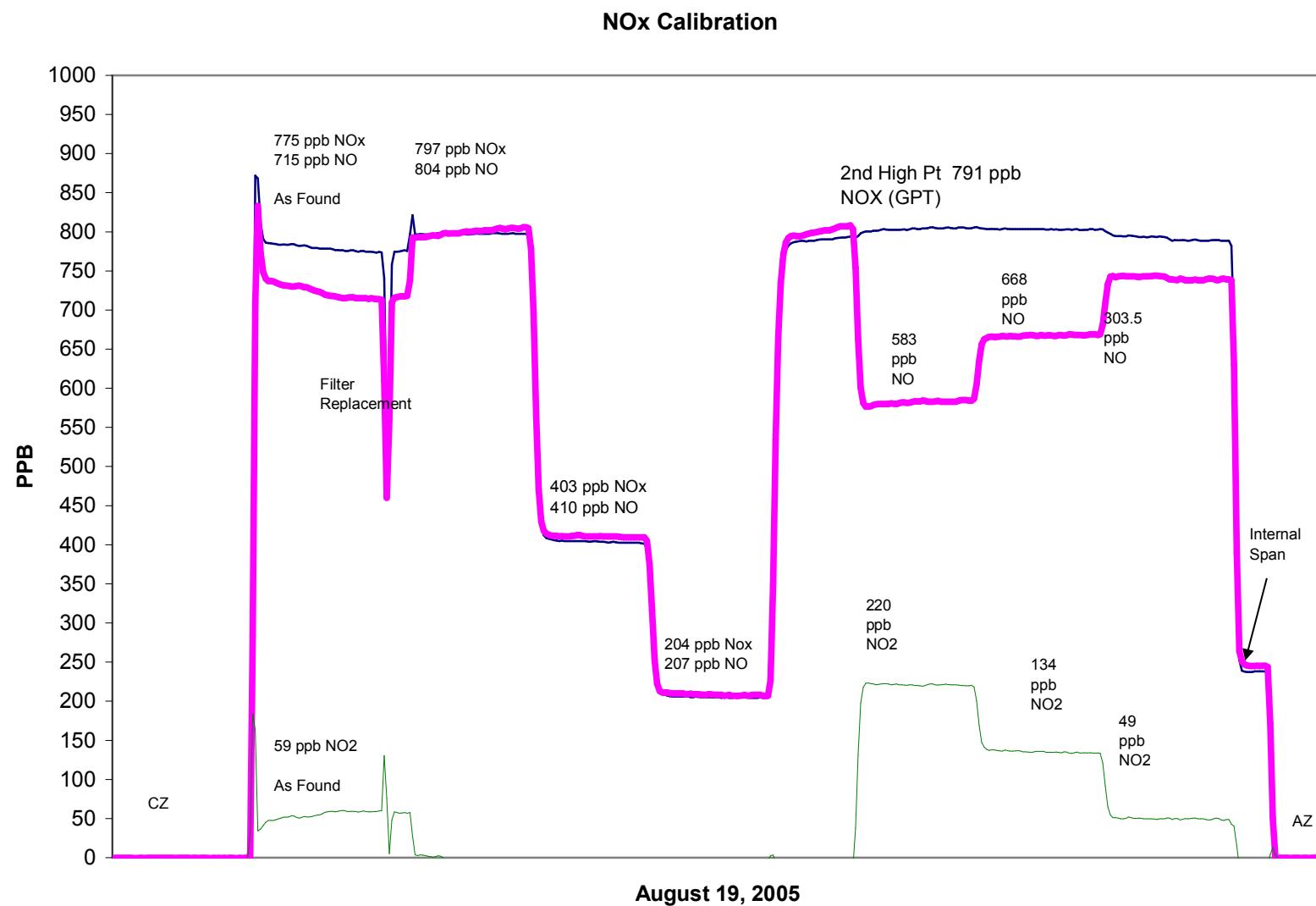
**Station Information**

Calibration Date	August 19, 2005	Previous Calibration	July 17, 2005
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:52	End Time (MST)	13:46
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	0.999935
792.8	804.0	0.9860		
399.4	410.1	0.9740		
200.5	207.4	0.9666		
			Slope	0.986487
			Intercept	-2.298205

**NO Calibration Curve**



**Calibration Report**

Parameter O3  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	August 19, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	13:21	End Time (MST)	15:38
Barometric Pressure	0.911 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	1.018895	Calculated slope	1.000689
Calculated intercept	2.206776	Calculated intercept	0.243984
Analyzer make	API Model 400	Analyzer serial #	383
	before	after	
Concentration range	0 - 500 ppb	0 - 500 ppb	
offset	-1.2 ppb	-0.1 ppb	
slope	1.037	1.19	
Lamp Temperature	mV	71 mV	
Lamp Intensity A/B	mV	92000/90000 mV	
Pressure	inches Hg	681.1 inches Hg	
Flow A	ccm	0.714 ccm	
Flow B	Deg C	0.674 Deg C	

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	-0.4	N/A
4995	0.00	223.2	220.6	1.0119
4995	0.00	139.5	143.4	0.9724
4995	0.00	69.9	67.7	1.0320
4995	0.00	0.0	-0.4	As found zero
4995	0.00	223.2	203.7	As found span
		Average Correction Factor	1.0054	

Calculated value of As Found Response: 210.2 ppm Percent Change of As Found: -5.8%

Auto zero	before calibration		after calibration	
	1.8 ppb	-0.2 ppb	133.6 ppb	143.8 ppb
Auto span				

Notes: zero good; adjusted span

Calibration Performed By: Dawn Ewan

## Calibration Summary

Parameter O3  
Air Monitoring Network

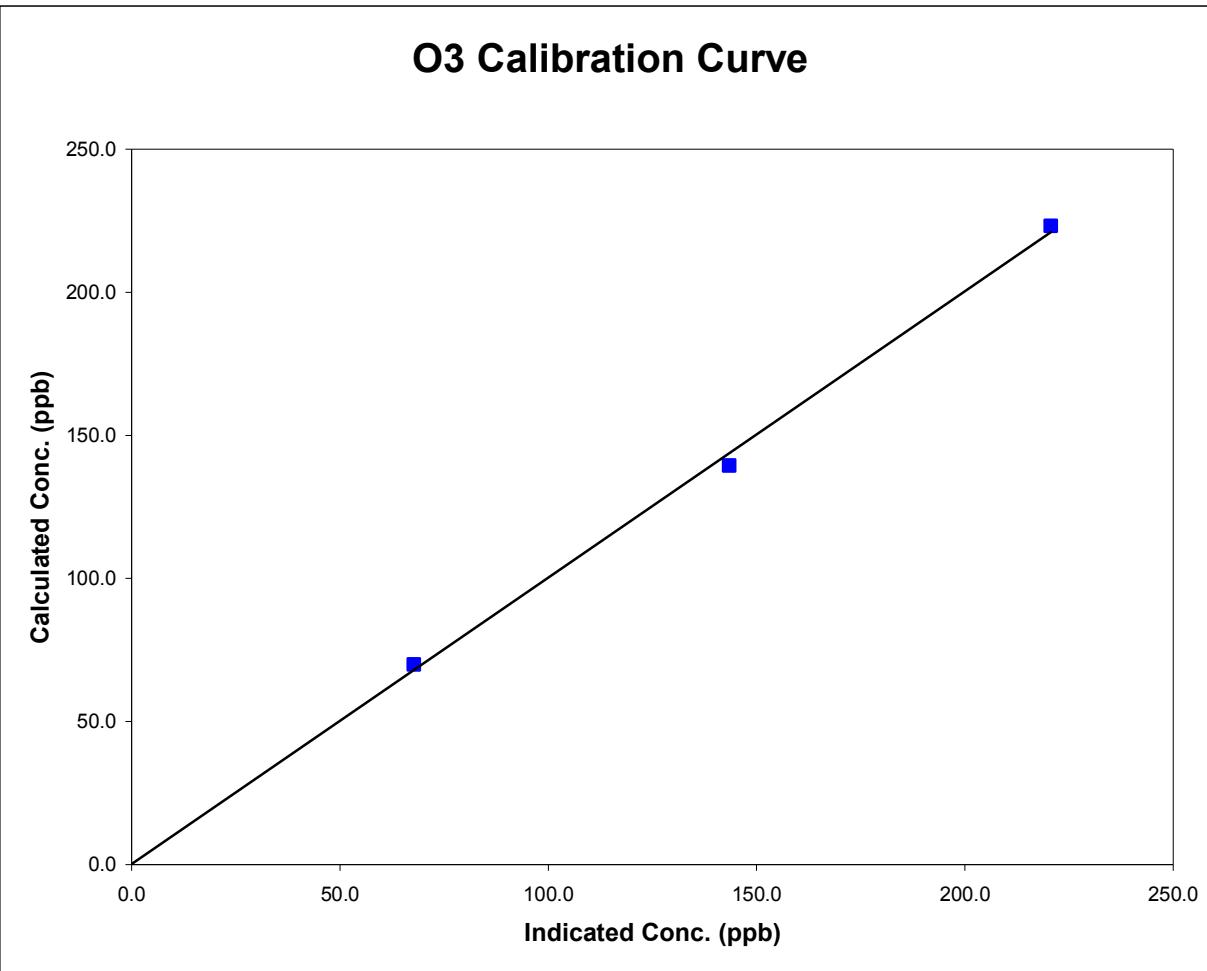


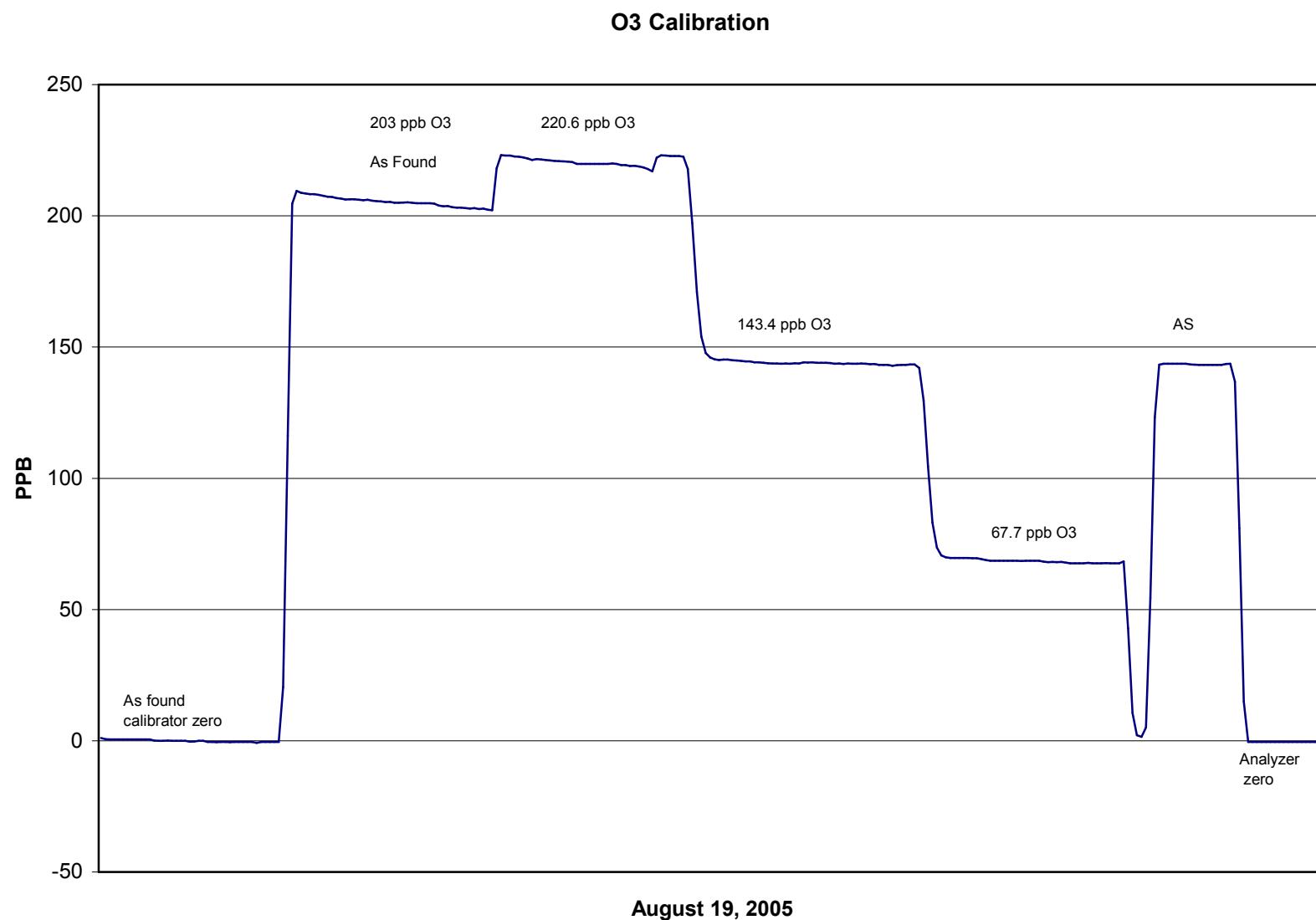
## ***Station Information***

Calibration Date	August 19, 2005	Previous Calibration	July 14, 2005
Station Number	1	Station Location	Beaverlodge
Start Time (MST)	13:21	End Time (MST)	15:38
Analyzer make/model	API Model 400	Analyzer serial #	383

## **Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	NA		
223.2	220.6	1.0119	Correlation Coefficient	0.999015
139.5	143.4	0.9724		
69.9	67.7	1.0320	Slope	1.000689
			Intercept	0.243984





**Calibration Report**

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

**Station Information**

Calibration Date	August 19, 2005	Previous Calibration	July 17, 2005
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	14:31	End Time (MST)	13:55
Barometric Pressure	0.911 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	2.990	SLPM	3.000
Aux Flow Set Point	16.67	SLPM	13.67
Filter Load	24	%	38
Ko Factor	14287		14287
Temperature	24.0	Deg C	26.4
Pressure	0.930	ATM	0.916

**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		0.02
flow recovery - main	45 - 60 Seconds	na	45 - 60 Seconds	30
flow recovery - aux	46 - 60 Seconds	na	46 - 60 Seconds	50
Temperature	measured	26.7	+/- 1.0 Deg C	26.4
Pressure	measured	0.911	+/- 1.5% ΔATM	0.916
Total Flow	16.67 SLPm	16.06		
Main Flow	13.67 SLPm	13.56	+/- 1.0 SLPm	13.67
Auxillary Flow	3.0 SLPm	2.998	+/- 0.2 SLPm	3.000
Leak Check - main	0.0	0.00	<0.15 SLPm	-0.05
Leak Check - aux	0.0	0.00	<0.15 SLPm	0.05
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: cleaned head

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Calibration Performed By: **Dawn Ewan**