



Peace AirShed Zone Association

## Air Quality Monitoring Network

# April 2005

Prepared by  
**FOCUS**  
AMBIENT AIR MONITORING

## TABLE OF CONTENTS

<b>Airshed Zone Association – April PASZA Ambient Air Report .....</b>	<b>2</b>
<b>PASZA Monthly Continuous Data Summary.....</b>	<b>4</b>
PASZA - Henry Pirker AQI Monthly Summary .....	9
PASZA - Henry Pirker Sulphur Dioxide Monthly Summary.....	10
PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary.....	15
PASZA - Henry Pirker Nitric Oxide Monthly Summary.....	20
PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary.....	22
PASZA - Henry Pirker Ozone Monthly Summary.....	26
PASZA - Henry Pirker Ozone Monthly Summary.....	31
PASZA - Henry Pirker Carbon Monoxide Monthly Summary.....	32
PASZA - Henry Pirker Carbon Monoxide Monthly Summary.....	37
PASZA - Henry Pirker Total Hydrocarbons Monthly Summary .....	38
PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary .....	43
PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Monthly Summary .....	48
PASZA - Henry Pirker Relative Humidity Monthly Summary .....	53
PASZA - Henry Pirker Temperature Monthly Summary.....	55
PASZA - Henry Pirker Solar Radiation Monthly Summary.....	57
PASZA - Henry Pirker Scalar Wind Speed Monthly Summary .....	59
PASZA - Henry Pirker Vector Wind Speed Monthly Summary .....	60
PASZA - Henry Pirker Wind Direction Monthly Summary.....	61
PASZA - Henry Pirker Standard Deviation of Wind Direction Monthly Summary.....	62
PASZA - Evergreen Park Sulphur Dioxide Monthly Summary.....	65
PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary .....	70
PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Monthly Summary .....	75
PASZA - Evergreen Park Temperature Monthly Summary.....	80
PASZA - Evergreen Park Scalar Wind Speed Monthly Summary .....	82
PASZA - Evergreen Park Vector Wind Speed Monthly Summary .....	83
PASZA - Evergreen Park Wind Direction Monthly Summary.....	84
PASZA - Evergreen Park Standard Deviation of Wind Direction Monthly Summary.....	85
PASZA - Smoky Heights Sulphur Dioxide Monthly Summary.....	88
PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary .....	93
PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Monthly Summary.....	98
PASZA - Smoky Heights Temperature Monthly Summary .....	103
PASZA - Smoky Heights Scalar Wind Speed Monthly Summary .....	105
PASZA - Smoky Heights Vector Wind Speed Monthly Summary.....	106
PASZA - Smoky Heights Wind Direction Monthly Summary.....	107
PASZA - Smoky Heights Standard Deviation of Wind Direction Monthly Summary .....	108
<b>PASZA Monthly Passive Data Summary .....</b>	<b>110</b>
<b>April 2005 Calibration Reports.....</b>	<b>121</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) – April Ambient Air Report**

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

#### **Continuous Monitoring: 3 Stations including Henry Pirker (Grande Prairie), Evergreen Park and Smoky Heights**

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.

During the month of April the operational time for the TRS parameter at the Henry Pirker station fell to 84% (AENV reference number 157963). The follow up letter sent to AENV is attached, which provides an explanation of the incident.

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

There were no missing passives during the month of April. A summary of the passive data collected are reported as follows.

- Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.1 ppb to 0.4 ppb.
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 0.4 ppb to 8.8 ppb.
- Monthly average concentrations for O<sub>3</sub> passives ranged from 27.3 ppb to 52.1 ppb.

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

On Behalf of the,  
Peace Airshed Zone Association

Kevin Warren  
PASZA Technical Program Manager

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

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

**ATTENTION:** Director

**RE:** Air Monitoring Directive Contravention Report Ref # 157963

---

A contravention 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 contravention was less than ninety (90%) percent data collection for the month of April 2005 for the TRS analyzer 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 contravention has been assigned AENV reference number 157963.

The cause of the contravention was due to a power failure that occurred at the station on April 8, 2005 at 16:00. The power failure resulted in the failure of the TRS converter thermocouple causing the converter temperature to remain at room temperature. The following action was taken:

- On April 9, 2005 an alarm was received that the TRS span was well below the limits for the analyzer.
- On April 11, 2005 a technician was dispatched to the site to investigate the problem. It was discovered that the thermocouple had failed.
- On April 12, 2005 the spare converter was attempted to be installed, but could not function as the quartz tube had been broken in transit. A new thermocouple was couriered to the Grande Prairie office immediately.
- On April 13, 2005 the new thermocouple was received, installed and the analyzer was calibrated and made operational.

Spare thermocouples have been ordered and will be kept at the station in the event of a similar failure in the future.

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

Sincerely,

**THE FOCUS CORPORATION**



Gary Cross,  
AQMP Technical Manager

# PASZA Monthly Continuous Data Summary

## Ambient Air Quality Data

Apr-2005 Peace Airshed Zone Association					Maximum Recorded Values								
					1-hr		24-hr / 8-hr		Conc	Day	WSPD (km/hr)	WDIR (Sector)	
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	Operational Time (%)
	1-hr	24-hr			1-hr	24-hr							
SO <sub>2</sub> (ppb)	172	57	Henry Pirker	0.3	0	0	2.9	Apr-06 11:00	5.3	E	1.1	Apr-11	99.7%
SO <sub>2</sub> (ppb)	172	57	Evergreen Park	0.6	0	0	11.4	Apr-21 09:00	9.2	SE	2.6	Apr-21	100.0%
SO <sub>2</sub> (ppb)	172	57	Smoky Heights	0.4	0	0	12.5	Apr-20 07:00	12.7	W	1.6	Apr-11	100.0%
NO (ppb)			Henry Pirker	3.4	-	-	107.8	Apr-06 07:00	4.0	NW	14.5	Apr-05	99.6%
NO <sub>2</sub> (ppb)	212	106	Henry Pirker	8.8	0	0	47.4	Apr-05 20:00	3.8	NNE	17.6	Apr-05	99.6%
NO <sub>x</sub> (ppb)			Henry Pirker	12.1	-	-	131.2	Apr-06 07:00	4.0	NW	32.2	Apr-05	99.6%
O <sub>3</sub> (ppb)	82		Henry Pirker	31.6	0	-	59.6	Apr-21 17:00	12.6	ESE	39.7	Apr-29	99.7%
O <sub>3</sub> (ppb) - 8-hr	65		Henry Pirker		0						54.5	Apr-21	
CO (ppm)	13		Henry Pirker	0.27	0	-	1.4	Apr-20 06:00	4.4	SSW	0.5	Apr-05	99.7%
CO (ppm) - 8-hr	5		Henry Pirker		0						0.7	Apr-06	
THC (ppm)			Henry Pirker	2.11	-	-	7.6	Apr-16 12:00	8.1	NE	2.8	Apr-16	99.6%
TRS (ppb)			Henry Pirker	0.3	-	-	1.8	Apr-18 08:00	9.0	SW	1.2	Apr-18	83.8%
TRS (ppb)			Evergreen Park	0.6	-	-	4.8	Apr-24 06:00	4.1	SSW	1.0	Apr-24	100.0%
TRS (ppb)			Smoky Heights	0.6	-	-	1.7	Apr-14 14:00	7.6	SSE	0.7	Apr-24	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Henry Pirker	4.2	0	0	31.8	Apr-25 00:00	5.8	NW	9.4	Apr-22	99.6%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Evergreen Park	3.0	0	0	41.0	Apr-20 07:00	7.5	SW	6.7	Apr-21	98.5%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Smoky Heights	1.7	0	0	55.2	Apr-28 03:00	3.8	NNE	5.2	Apr-25	99.3%
RH (%)			Henry Pirker	52.6	-	-	-	-	-	-	-	-	99.7%
SR (W/m <sup>2</sup> )			Henry Pirker	205.9	-	-	-	-	-	-	-	-	99.7%
Temp (°C)			Henry Pirker	6.6	-	-	-	-	-	-	-	-	99.7%
Temp (°C)			Evergreen Park	5.8	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Smoky Heights	4.9	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Henry Pirker	11.2	-	-	-	Apr-01 17:00	38.1	WSW	20.1	8-Apr	99.7%
WSPD v (km/hr)			Evergreen Park	17.6	-	-	-	Apr-01 17:00	67.6	WSW	35.2	2-Apr	100.0%
WSPD v (km/hr)			Smoky Heights	12.5	-	-	-	Apr-16 20:00	47.4	W	27.0	2-Apr	100.0%
WSPD s (km/hr)			Henry Pirker	10.6	-	-	-	Apr-01 17:00	37.9	WSW	19.7	8-Apr	99.7%
WSPD s (km/hr)			Evergreen Park	16.2	-	-	-	Apr-01 17:00	67.2	WSW	34.1	2-Apr	100.0%
WSPD s (km/hr)			Smoky Heights	12.2	-	-	-	Apr-16 20:00	47.1	W	26.9	2-Apr	100.0%
WDIR (Deg)			Henry Pirker	N	-	-	-	-	-	-	-	-	99.7%
WDIR (Deg)			Evergreen Park	N	-	-	-	-	-	-	-	-	100.0%
WDIR (Deg)			Smoky Heights	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 Monitoring

## Ambient Air Monitoring Network

---

### PASZA – Henry Pirker Station

---

#### General Station Issues

A power failure on April 8 (16:00 to 18:00) resulted in loss of data for all instruments. In addition the power failure caused the TRS analyzer to fail, resulting in less than 90% uptime on this instrument (Ref#157963).

Parameter	Make	Model	Notes
SO <sub>2</sub>	TECO	43	2-hrs of data loss due to power failure
NOx/NO/NO <sub>2</sub>	TECO	42	3-hrs of data loss due to power failure
O <sub>3</sub>	API	400	2-hrs of data loss due to power failure
CO	TECO	48	2-hrs of data loss due to power failure
THC	TEI	51-CLT	3-hrs of data loss due to power failure
TRS	TEI	42C	3-hrs of data loss due to power failure; 111-hours of instrument out of service due to power failure; 2-hrs of excessive drifting; and 1-hr of maintenance
PM <sub>2.5</sub>	R&P	1400AB	3-hrs of data loss due to power failure
RH	Met One	083D	2-hrs of data loss due to power failure
AT	Met One	083D	2-hrs of data loss due to power failure
SR	Met One	096-1	2-hrs of data loss due to power failure
WS	Met One	010C	2-hrs of data loss due to power failure
WD	Met One	020C	2-hrs of data loss due to power failure

---

## PASZA – Evergreen Park 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
TRS	TEI	42C	No operational problems observed
PM <sub>2.5</sub>	R&P	1400AB	10-hours of data was removed due to excessive drift; 1-hour of data was lost due to communications failure with TEOM
AT	Met One	062-1	No operational problems observed
WS	Met One	010C	No operational problems observed
WD	Met One	020C	No operational problems observed

---

## PASZA – Smoky Heights 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
TRS	TEI	42C	No operational problems observed
PM <sub>2.5</sub>	R&P	1400AB	5-hours of data was removed due to excessive drift
AT	Met One	062-1	No operational problems observed
WS	Met One	010C	No operational problems observed
WD	Met One	020C	No operational problems observed

# PASZA - Henry Pirker Monthly Summary Tables, Graphs, and Roses

## PASZA - Henry Pirker AQI Monthly Summary

Station: Henry Pirker  
 Station Owner: PASZA

### Air Quality Index (AQI)

Monitoring Dates: April 1, 2005 to May 1, 2005

#### Alberta's Air Quality Index

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

#### Summary

Number of 1-hr Good Readings:	655
Number of 1-hr Fair Readings:	27
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	
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-Apr-05	13	16	17	15	14	13	12	12	8	9	18	21	18	A	22	22	22	21	18	17	15	17	19			
2-Apr-05	20	20	20	20	20	20	18	20	21	22	23	23	A	23	23	24	23	23	18	10	10	10	11			
3-Apr-05	7	8	11	12	16	17	16	17	19	19	20	A	23	25	26	26	25	25	22	21	18	18	19			
4-Apr-05	16	16	19	19	16	8	9	9	14	20	A	22	23	23	23	23	23	22	22	19	15	12	13	17		
5-Apr-05	18	17	16	13	15	7	13	9	10	A	17	18	22	24	25	25	28	28	27	25	11	18	26	25	19	
6-Apr-05	11	10	7	10	9	11	16	17	A	17	19	22	24	25	24	25	24	23	20	20	19	14	12	7		
7-Apr-05	4	5	3	4	4	5	9	A	10	16	17	18	19	18	17	14	10	12	12	9	10	9	14	17		
8-Apr-05	16	15	16	17	18	18	A	16	18	19	20	20	21	21	22	23	A	A	A	20	17	15	19	18		
9-Apr-05	18	17	17	15	14	A	16	14	17	19	21	21	21	22	22	21	21	21	21	19	19	15	14	12		
10-Apr-05	12	12	12	11	A	6	6	7	13	19	22	23	24	25	27	27	26	25	23	20	20	19	20	20		
11-Apr-05	18	20	19	A	18	17	14	15	15	18	19	19	18	19	18	18	17	20	18	16	18	19	18	17		
12-Apr-05	18	16	14	12	9	A	7	6	A	A	A	21	23	24	25	25	23	A	2	7	22	17	17	14	11	
13-Apr-05	13	8	7	6	7	A	4	11	6	9	10	12	15	19	21	22	22	21	18	12	15	18	14			
14-Apr-05	7	6	13	12	8	A	8	6	10	17	22	24	24	23	23	22	22	19	21	19	12	15	13			
15-Apr-05	14	14	14	16	A	13	13	13	14	16	18	20	22	23	23	23	22	23	21	17	12	10	10			
16-Apr-05	12	10	10	A	8	11	11	14	14	14	15	19	20	20	21	20	21	20	22	25	22	20	19			
17-Apr-05	18	16	A	18	19	17	16	18	19	20	21	22	21	21	21	21	20	18	16	13	13	12				
18-Apr-05	10	A	8	9	6	4	7	6	9	15	19	20	20	21	21	21	21	21	17	15	16	14	15			
19-Apr-05	A	12	15	12	7	8	7	9	10	16	20	21	20	20	19	16	15	15	14	11	9	11	12	A		
20-Apr-05	12	12	12	11	9	6	19	18	9	18	19	21	23	24	24	25	25	24	19	14	16	16	A	18		
21-Apr-05	12	11	6	5	6	7	16	25	15	17	20	23	25	27	28	28	31	33	32	26	20	A	22	17		
22-Apr-05	18	16	14	16	22	19	24	26	12	15	8	16	17	18	17	17	18	18	14	13	A	9	7	7		
23-Apr-05	6	3	3	2	2	3	6	11	11	15	18	19	20	21	21	21	21	21	21	21	A	16	16	16	14	
24-Apr-05	10	5	7	7	6	4	5	8	14	17	19	21	22	22	23	24	25	24	A	20	15	16	17	19		
25-Apr-05	13	10	10	7	10	9	8	9	10	11	16	25	27	27	25	23	21	A	21	19	18	16	15	14		
26-Apr-05	26	8	13	13	7	14	14	12	14	14	15	18	19	21	21	21	A	21	22	22	20	20	19	17		
27-Apr-05	14	11	9	5	4	13	14	15	17	19	21	24	25	26	27	A	25	25	22	20	18	17	16	15	15	
28-Apr-05	13	13	6	6	5	3	6	8	16	17	21	23	25	25	A	25	25	26	25	24	21	18	20	18		
29-Apr-05	17	16	14	14	11	11	11	18	22	23	24	24	25	25	A	25	26	26	25	24	21	19	18	20		
30-Apr-05	17	10	8	8	9	8	9	19	20	21	22	23	A	23	23	23	24	24	24	22	18	17	17	18		

## PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

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

**Summary**

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	2.9 ppb 6-Apr 11:00 12:00
Maximum 24-hr Average:	1.1 ppb 11-Apr

AIC Time:	32 hrs	Operational Time:	684 hrs							
Calibration Time:	2 hrs	AMD Operational Uptime:	99.7%							
Percentile	99 1.8	95 1.1	75 0.3	50 0.2	25 0.1	5 0.0	1 0.0	Average 0.3 ppb		

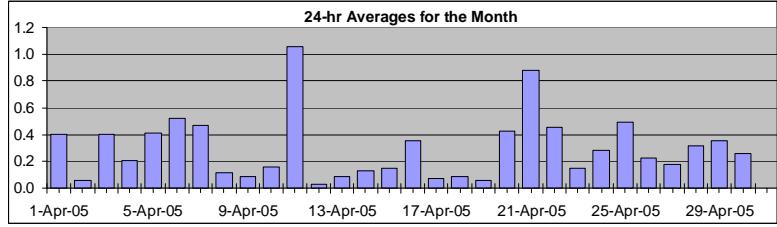
**Day Mountain Standard Time**

	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 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Apr-05	1	1	0	1	0	0	1	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
2-Apr-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	0.1	0.2
3-Apr-05	0	0	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0.4	1.2
4-Apr-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	0.2	0.4
5-Apr-05	0	0	0	0	0	0	0	1	1	0	A	1	2	0	0	0	0	0	0	0	0	0	1	1	0	0.4	1.7	
6-Apr-05	0	0	0	0	0	0	0	1	1	A	1	1	3	1	0	0	0	0	0	0	0	0	1	0	0	0.5	2.9	
7-Apr-05	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0.5	1.4
8-Apr-05	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	P	P	1	0	0	0	0	0	0	0.1	0.6	
9-Apr-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	0.2	
10-Apr-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	0.3	
11-Apr-05	0	0	1	A	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	0	0	0	0	1.1	2.4	
12-Apr-05	0	0	0	0	0	A	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
13-Apr-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	0.3	
14-Apr-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	0.3	
15-Apr-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	0.3	
16-Apr-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0.4	1.0	
17-Apr-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	0.4	
18-Apr-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	0.4	
19-Apr-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	
20-Apr-05	0	0	0	0	0	0	1	1	0	1	1	1	1	0	0	0	0	0	0	0	1	1	0	A	0	0.4	1.1	
21-Apr-05	0	0	0	0	0	0	1	1	1	3	1	1	2	1	2	2	1	1	1	1	1	A	1	1	0.9	2.7		
22-Apr-05	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	2	1	1	0	0	A	0	0	0	0.5	1.6		
23-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4		
24-Apr-05	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.7		
25-Apr-05	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0.5	1.2		
26-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.2	1.2		
27-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.6		
28-Apr-05	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.7		
29-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0.4	1.3		
30-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.3	0.8		

Hourly Avg	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Hourly Max	1.0	1.1	0.8	1.2	0.8	0.9	1.1	1.4	2.4	2.7	1.8	2.9	1.8	1.8	1.8	1.7	1.6	1.4	1.0	0.7	0.7	1.2	1.2	0.7	N	0.0

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

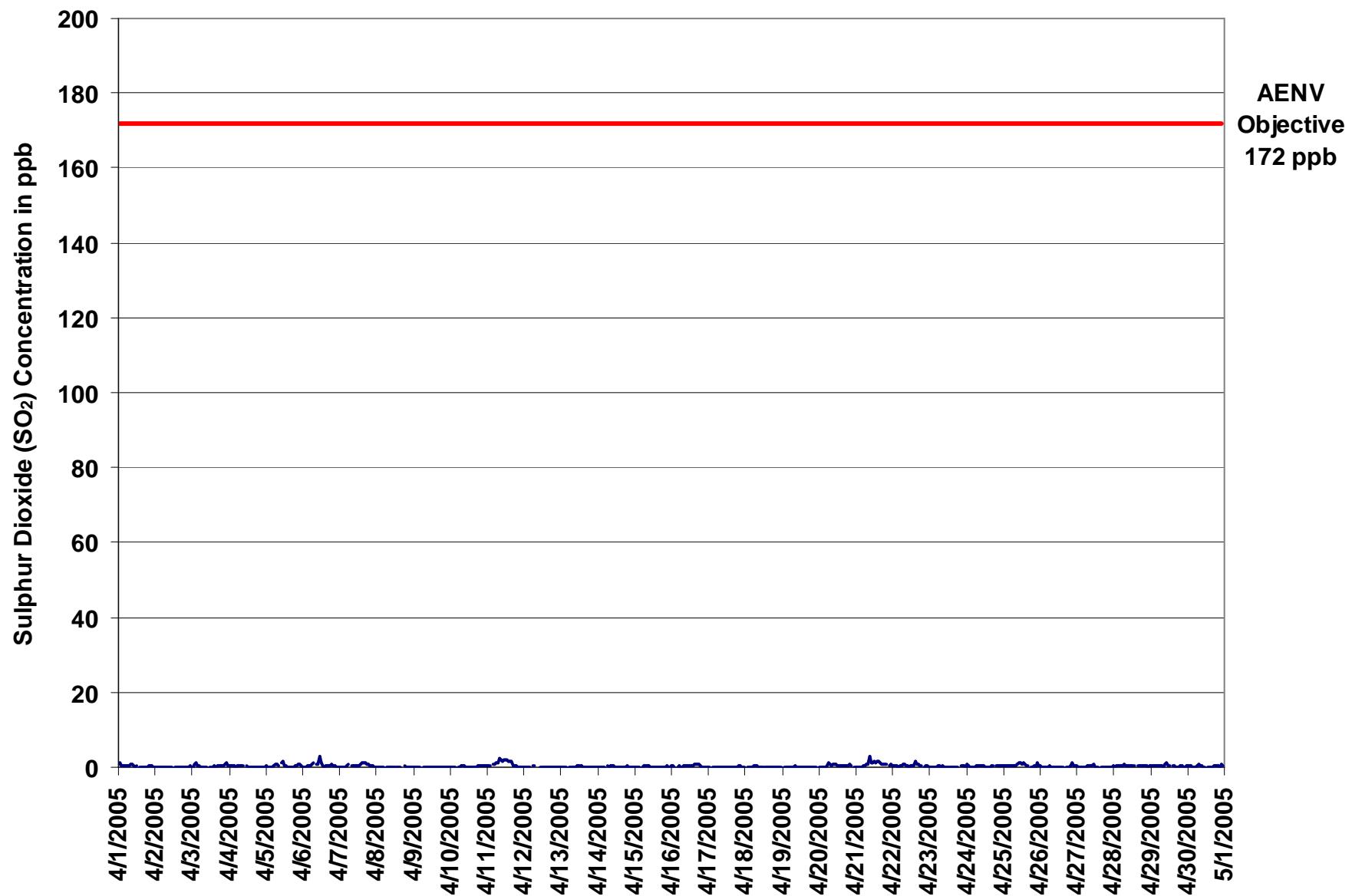


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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

#### Summary

Maximum 1-hr Value:	6.9	ppb	21-Apr	9:00 10:00
Maximum 24-hr Value:	1.7	ppb	11-Apr	

AIC Time:	32 hrs	Operational Time:	684 hrs				
Calibration Time:	2 hrs	AMD Operational Uptime:	99.7%				
Percentile	99 95 75 50 25 5 1						
	3.0	2.0	1.0	0.7	0.6	0.5	0.4
	Average 0.9 ppb						

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Apr-05	3 1:00	3 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	2 11:00	1 12:00	1 13:00	1 14:00	A 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.1	3.0	
2-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	0 8:00	0 9:00	0 10:00	0 11:00	0 12:00	0 13:00	0 14:00	A 15:00	0 16:00	0 17:00	1 18:00	0 19:00	1 20:00	1 21:00	1 22:00	1 23:00	0 0:00	0.6	0.8	
3-Apr-05	1 1:00	1 2:00	2 3:00	1 4:00	1 5:00	1 6:00	0 7:00	1 8:00	1 9:00	1 10:00	1 11:00	A 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	2 23:00	1 0:00	1.0	2.1	
4-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	A 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.8	1.1	
5-Apr-05	1 1:00	0 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	2 8:00	A 9:00	3 10:00	4 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	2 23:00	1 0:00	1.2	4.1	
6-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	2 8:00	A 9:00	1 10:00	6 11:00	3 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	0 0:00	1.4	5.9	
7-Apr-05	1 1:00	1 2:00	1 3:00	0 4:00	1 5:00	1 6:00	A 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	2 16:00	2 17:00	2 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.0	2.0	
8-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	A 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	P 18:00	2 19:00	2 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.7	2.3	
9-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	A 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.7	0.9	
10-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	A 5:00	0 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.7	1.0	
11-Apr-05	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	2 7:00	3 8:00	3 9:00	2 10:00	2 11:00	2 12:00	2 13:00	2 14:00	2 15:00	2 16:00	2 17:00	2 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.7	3.1	
12-Apr-05	0 1:00	1 2:00	1 3:00	1 4:00	A 5:00	1 6:00	C 7:00	C 8:00	C 9:00	A 10:00	0 11:00	0 12:00	0 13:00	0 14:00	0 15:00	0 16:00	0 17:00	0 18:00	0 19:00	0 20:00	0 21:00	0 22:00	0 23:00	0 0:00	0.5	1.0	
13-Apr-05	0 1:00	0 2:00	0 3:00	0 4:00	A 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.6	1.2	
14-Apr-05	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.7	1.6	
15-Apr-05	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.7	0.9	
16-Apr-05	1 1:00	1 2:00	1 3:00	A 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.0	2.2	
17-Apr-05	1 1:00	1 2:00	A 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.6	1.1	
18-Apr-05	1 1:00	A 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.7	1.1	
19-Apr-05	A 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.6	1.0	
20-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	2 8:00	2 9:00	2 10:00	2 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.1	2.2	
21-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	2 8:00	7 9:00	2 10:00	2 11:00	2 12:00	2 13:00	2 14:00	2 15:00	2 16:00	2 17:00	2 18:00	2 19:00	2 20:00	1 21:00	A 22:00	1 23:00	1 0:00	1.6	6.9	
22-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.2	6.0	
23-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.7	1.3	
24-Apr-05	2 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.9	1.5	
25-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	2 11:00	2 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	1.2	2.9	
26-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.9	2.9	
27-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.8	1.6	
28-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	1 11:00	1 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	0.9	1.3	
29-Apr-05	1 1:00	1 2:00	1 3:00	1 4:00	1 5:00	1 6:00	1 7:00	1 8:00	1 9:00	1 10:00	2 11:00	2 12:00	1 13:00	1 14:00	1 15:00	1 16:00	1 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:0			

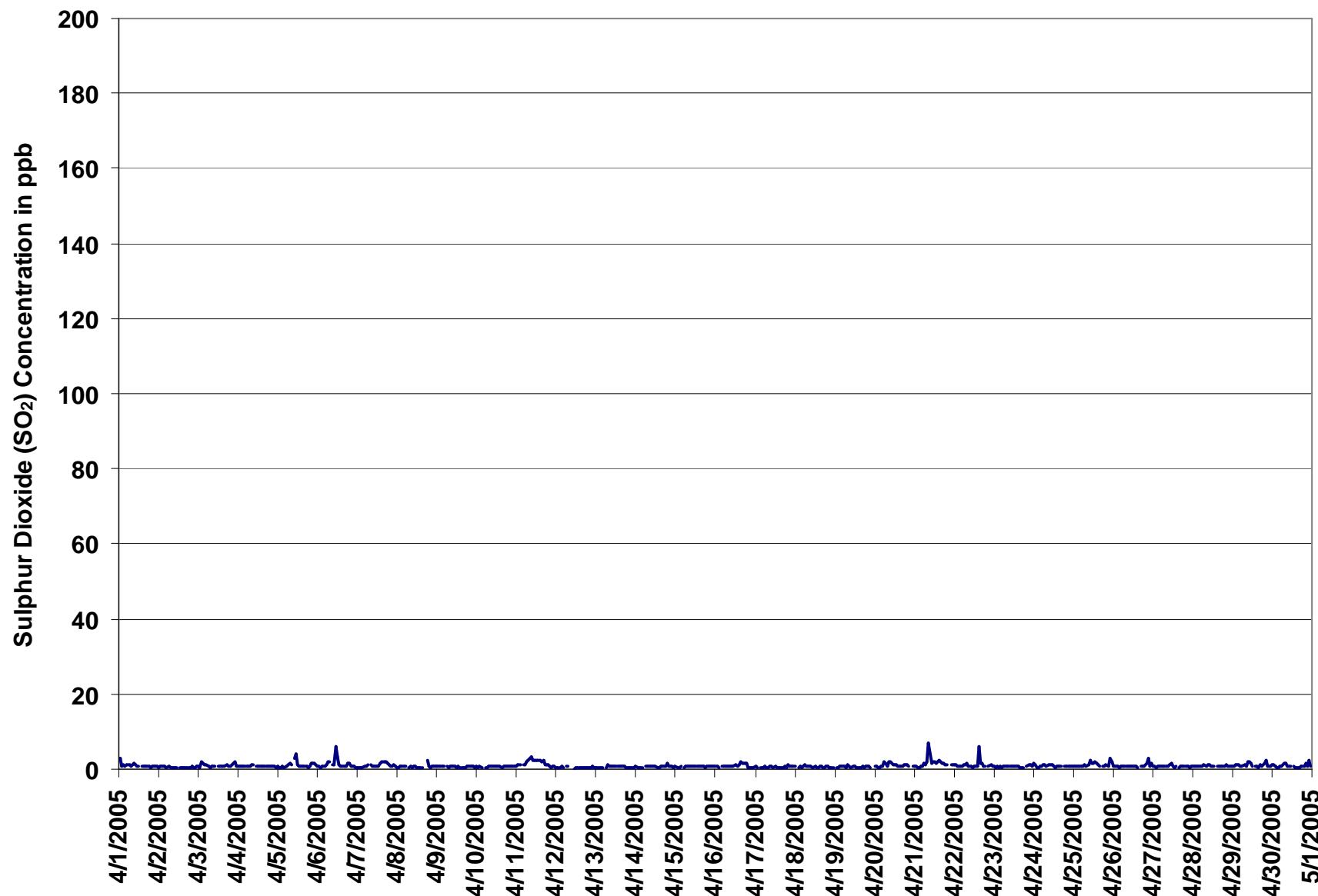
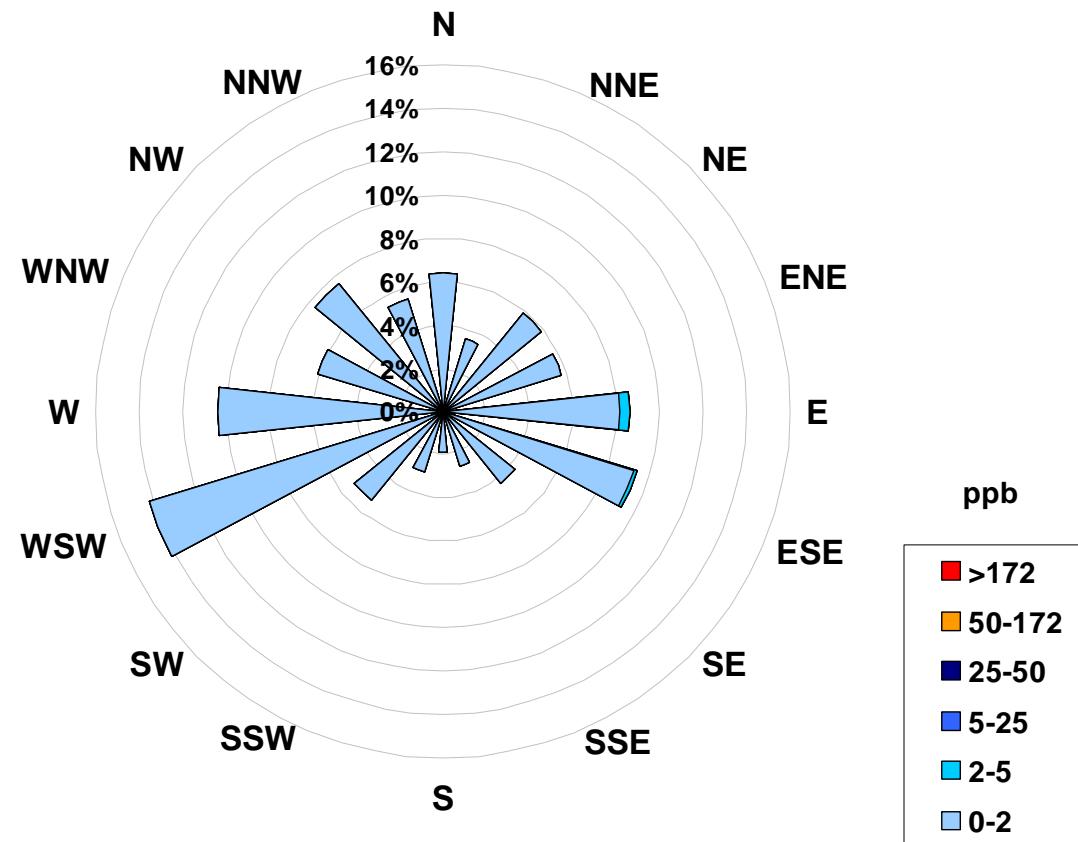


Figure 2. PASZA - Henry Pirker Sulphur Dioxide 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Sulphur Dioxide Average Concentration Occurrences at the Henry Pirker Site for April 2005**



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

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	680
2	to	5	4
5	to	25	0
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			684

## PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

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

**Summary**

Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	47.4 ppb	5-Apr	20:00 21:00
Maximum 24-hr Average:	17.6 ppb	5-Apr	

AIC Time:	32 hrs	Operational Time:	682 hrs							
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%							
Percentile	99 35.8	95 26.8	75 11.4	50 6.1	25 3.1	5 1.5	1 1.0	Average 8.8 ppb		

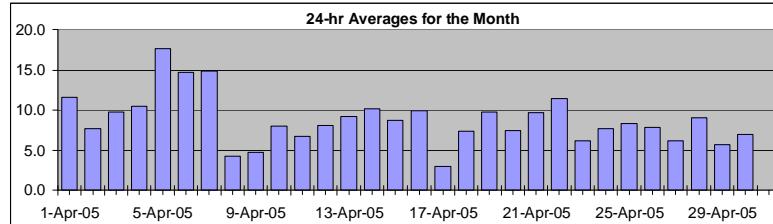
**Day Mountain Standard Time**

	Hour Start 0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Apr-05	19	10	9	10	11	13	16	18	33	25	10	3	5	A	7	6	4	4	6	12	12	15	12	6	11.6	32.8
2-Apr-05	4	3	2	2	2	3	6	5	3	3	3	3	A	4	3	2	3	3	6	10	25	22	23	37	7.7	36.6
3-Apr-05	31	34	21	17	9	8	8	7	4	4	2	A	4	3	3	3	3	3	4	9	10	15	15	6	9.7	33.7
4-Apr-05	8	7	3	3	9	33	39	28	17	6	A	4	3	3	4	3	3	3	4	7	14	16	14	8	10.5	39.0
5-Apr-05	7	6	7	12	8	30	39	35	23	A	13	8	4	3	2	2	2	2	4	30	47	46	44	28	17.6	47.4
6-Apr-05	27	27	27	32	34	27	25	23	A	13	11	6	3	2	4	4	5	6	8	9	17	11	12	14.7	33.7	
7-Apr-05	18	14	14	17	16	20	23	A	21	9	6	5	5	8	11	16	22	26	15	24	24	19	8	2	14.9	26.0
8-Apr-05	2	6	3	2	3	4	A	10	6	4	3	3	3	2	2	P	P	P	5	8	10	4	4	4.2	9.8	
9-Apr-05	4	5	6	7	8	A	7	11	6	2	2	2	2	1	2	2	2	2	3	4	7	10	12	4.7	11.9	
10-Apr-05	12	11	13	14	A	24	27	20	9	4	2	1	1	2	1	1	2	4	5	6	6	7	6	8.0	26.9	
11-Apr-05	7	4	6	A	7	8	12	10	8	6	6	6	6	5	7	7	9	6	9	11	4	4	3	6.8	12.2	
12-Apr-05	3	4	4	6	10	A	30	24	C	C	A	2	1	2	4	5	4	5	4	15	9	11	9	8.0	29.8	
13-Apr-05	5	11	8	10	8	A	13	23	13	10	9	9	8	5	5	4	3	3	5	8	17	12	8	14	9.2	23.2
14-Apr-05	28	22	13	12	16	A	36	24	14	6	3	1	1	3	2	2	3	3	7	3	5	16	8	6	10.1	35.6
15-Apr-05	5	5	6	4	A	9	8	10	10	5	5	3	1	1	1	2	4	2	5	13	20	22	20	38	8.7	37.7
16-Apr-05	28	27	25	A	29	15	15	9	8	8	9	5	4	4	5	5	5	5	6	4	2	4	4	3	9.9	28.7
17-Apr-05	3	3	A	4	3	6	9	6	3	2	2	2	2	1	1	1	1	3	4	5	3	4	3	4.0	8.5	
18-Apr-05	5	A	8	6	10	17	28	24	12	4	2	1	2	2	2	2	2	2	6	9	6	10	9	7.4	28.2	
19-Apr-05	A	10	6	13	28	35	30	22	20	8	3	3	2	2	2	3	2	2	3	5	8	4	3	A	9.7	35.5
20-Apr-05	4	3	3	3	6	21	31	27	10	2	1	1	1	1	1	2	4	12	21	12	A	7	7.5	31.2		
21-Apr-05	12	16	11	8	12	18	25	24	9	6	4	3	3	2	4	7	5	4	5	10	13	A	7	9.6	24.8	
22-Apr-05	10	19	23	23	24	31	24	28	7	7	16	3	2	2	3	3	2	3	4	5	A	9	8	11.4	30.9	
23-Apr-05	7	12	14	6	7	10	17	6	7	4	2	1	1	1	1	2	2	3	A	11	9	8	10	6.2	16.8	
24-Apr-05	14	13	10	8	9	14	16	20	6	3	2	1	1	1	1	1	2	2	A	9	15	11	10	9	7.7	19.6
25-Apr-05	11	9	13	9	9	12	16	14	15	12	9	4	3	3	4	3	4	A	4	4	5	6	7	8.3	16.3	
26-Apr-05	20	11	14	14	10	8	10	13	9	8	7	5	5	4	5	3	A	4	4	5	7	5	5	7.9	19.7	
27-Apr-05	6	9	13	19	14	11	10	7	3	3	1	1	2	2	3	A	4	3	3	5	5	6	6	6.2	19.1	
28-Apr-05	8	9	19	24	22	13	17	23	11	7	3	2	2	2	A	3	3	3	4	6	9	6	9	9.0	23.9	
29-Apr-05	9	7	6	7	7	12	16	8	2	1	2	2	2	A	3	2	3	3	4	4	10	9	9	5	5.7	16.3
30-Apr-05	9	15	17	14	10	10	18	5	3	2	2	2	A	2	2	3	2	3	3	4	9	9	8	7	6.9	17.8

Hourly Avg	11.2	11.5	11.1	10.9	12.2	15.8	19.6	16.7	10.4	6.2	4.9	3.2	2.8	2.7	3.2	3.3	3.8	3.9	4.9	8.0	11.9	11.7	10.0	10.3
Hourly Max	30.6	33.7	26.7	32.0	33.7	35.5	39.0	35.1	32.8	25.2	15.6	9.5	8.3	7.8	11.5	16.2	22.3	26.0	15.4	30.0	47.4	46.4	44.0	37.7

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

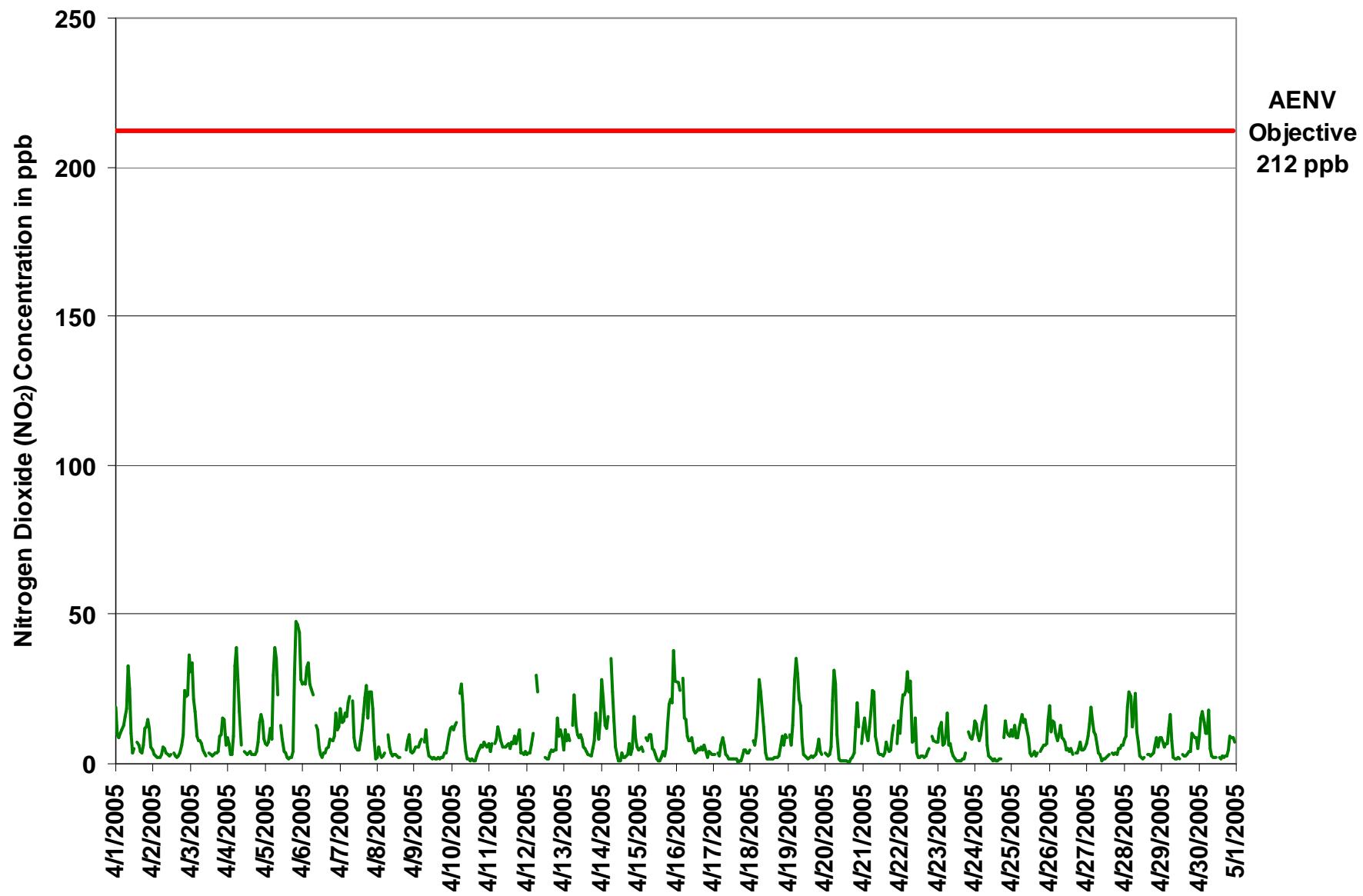


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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

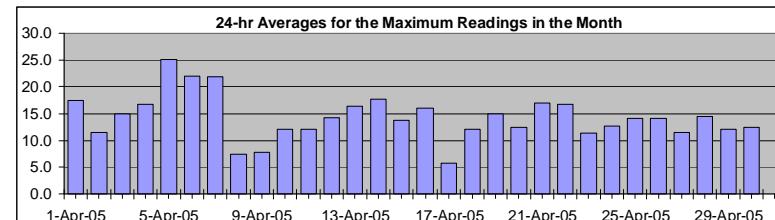
#### Summary

Maximum 1-hr Value:	53.6 ppb	5-Apr 20:00 21:00
Maximum 24-hr Value:	25.1 ppb	5-Apr

AIC Time:	32 hrs	Operational Time:	682 hrs	
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%	
Percentile	99 95 75 50 25 5 1	Average		
	45.9 36.7 18.9 11.1 6.5 3.6 2.8	14.3 ppb		

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	25	15	13	13	18	23	26	28	42	38	19	6	9	A	11	10	7	5	10	20	18	21	19	9	17.6	42.1
2-Apr-05	6	5	4	3	3	4	14	9	5	5	5	5	A	7	6	5	5	6	11	15	36	29	32	48	11.6	48.2
3-Apr-05	39	40	31	24	15	11	12	10	7	6	4	A	7	5	7	6	5	6	6	14	17	30	27	13	15.0	40.1
4-Apr-05	12	12	5	8	17	44	50	39	30	11	A	7	7	10	9	6	7	8	8	15	18	22	26	16	16.8	49.5
5-Apr-05	12	8	13	20	13	44	46	42	39	A	20	16	13	7	5	6	5	5	14	49	54	51	50	46	25.1	53.6
6-Apr-05	30	32	33	39	38	39	37	35	A	18	15	8	5	4	11	9	9	13	16	12	14	46	23	18	22.0	46.2
7-Apr-05	23	18	19	22	20	25	32	A	31	13	8	7	8	14	18	29	29	34	35	36	33	26	17	3	21.8	36.4
8-Apr-05	6	11	5	3	5	6	A	15	9	5	6	6	7	5	7	5	P	P	P	7	12	16	6	6	7.4	15.9
9-Apr-05	7	8	8	11	12	A	14	17	9	4	3	4	4	3	3	4	4	4	3	5	5	11	15	19	7.8	19.5
10-Apr-05	19	17	17	22	A	29	32	30	13	8	3	3	2	4	5	4	5	7	11	9	8	14	9	7	12.0	31.8
11-Apr-05	34	6	11	A	10	12	16	13	13	8	11	9	11	9	16	11	13	10	21	18	7	8	5	7	12.1	34.2
12-Apr-05	5	7	5	14	13	A	36	30	C	C	C	A	4	3	9	13	10	14	13	11	33	20	17	16	14.3	36.4
13-Apr-05	9	25	23	13	13	A	17	31	25	18	13	14	12	10	21	9	7	6	9	14	26	20	12	32	16.4	32.1
14-Apr-05	37	29	39	20	22	A	41	42	26	11	6	3	3	10	10	5	7	8	18	9	15	27	14	8	17.7	41.5
15-Apr-05	7	7	9	8	A	12	11	19	15	8	8	7	4	3	3	6	13	4	11	20	34	26	37	41	13.7	40.9
16-Apr-05	37	39	32	A	34	24	21	20	17	17	19	8	7	9	8	8	8	8	14	13	4	9	7	6	16.0	38.6
17-Apr-05	6	6	A	5	5	9	11	10	5	4	4	4	4	4	3	4	3	5	4	7	11	9	7	6	5.8	11.1
18-Apr-05	9	A	13	12	16	25	40	27	23	9	6	3	5	4	4	4	4	5	5	5	10	13	11	17	12.2	40.1
19-Apr-05	A	16	9	29	35	40	39	31	28	16	7	5	5	4	5	6	4	6	5	9	19	9	4	A	15.0	39.6
20-Apr-05	5	4	4	4	13	28	42	36	15	7	4	4	3	3	4	2	11	9	8	22	28	23	A	9	12.5	42.1
21-Apr-05	20	23	18	12	17	28	31	31	14	14	6	6	6	7	20	32	24	7	8	14	20	A	9	24	17.0	32.4
22-Apr-05	13	27	30	26	30	35	38	41	20	18	27	5	4	3	4	5	4	7	7	7	A	13	11	11	16.8	40.7
23-Apr-05	12	16	16	11	9	13	24	10	10	18	5	3	3	7	4	5	4	5	9	A	18	19	19	22	11.4	24.0
24-Apr-05	23	19	18	12	13	17	25	26	15	4	5	4	2	3	4	3	5	7	A	16	20	17	15	19	12.7	26.4
25-Apr-05	16	19	22	13	16	25	22	18	21	15	13	9	5	7	11	9	9	A	9	9	8	9	10	27	14.0	26.6
26-Apr-05	29	21	23	22	19	14	16	18	13	14	16	10	12	10	12	7	A	8	7	14	11	8	10	14.0	28.8	
27-Apr-05	15	17	21	26	21	20	17	15	7	5	4	3	4	5	8	A	7	6	7	7	12	13	11	16	11.6	26.1
28-Apr-05	15	15	29	28	27	18	31	34	13	11	14	5	8	5	A	9	7	5	6	9	11	13	8	13	14.5	34.3
29-Apr-05	14	11	8	9	30	27	24	16	6	3	5	5	5	A	11	8	6	9	8	13	19	11	14	14	12.0	30.3
30-Apr-05	17	23	23	26	21	19	23	12	5	7	5	6	A	4	6	8	8	7	7	14	12	15	12	12.5	25.5	
																								N	0.0	
Hourly Avg	17.3	17.0	17.3	16.3	18.0	22.7	27.1	24.3	17.0	11.3	9.3	6.3	6.0	6.0	8.4	8.2	8.3	8.0	10.3	14.2	18.5	18.8	15.9	17.1		
Hourly Max	39.1	40.1	38.7	38.8	37.9	44.2	49.5	42.5	42.1	37.6	27.0	16.5	12.8	13.7	20.6	32.4	28.6	34.1	34.6	49.2	53.6	51.4	49.7	48.2		



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

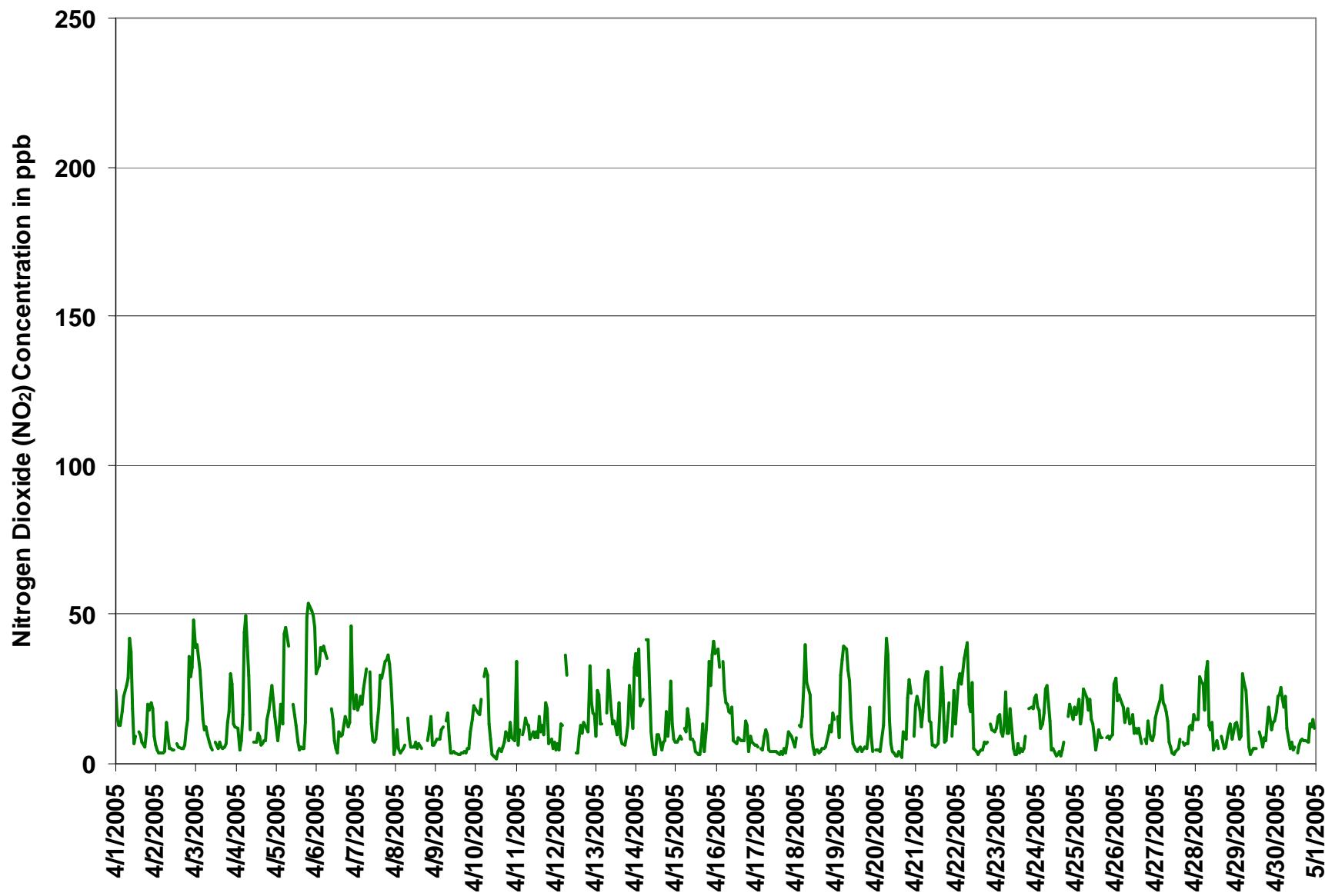
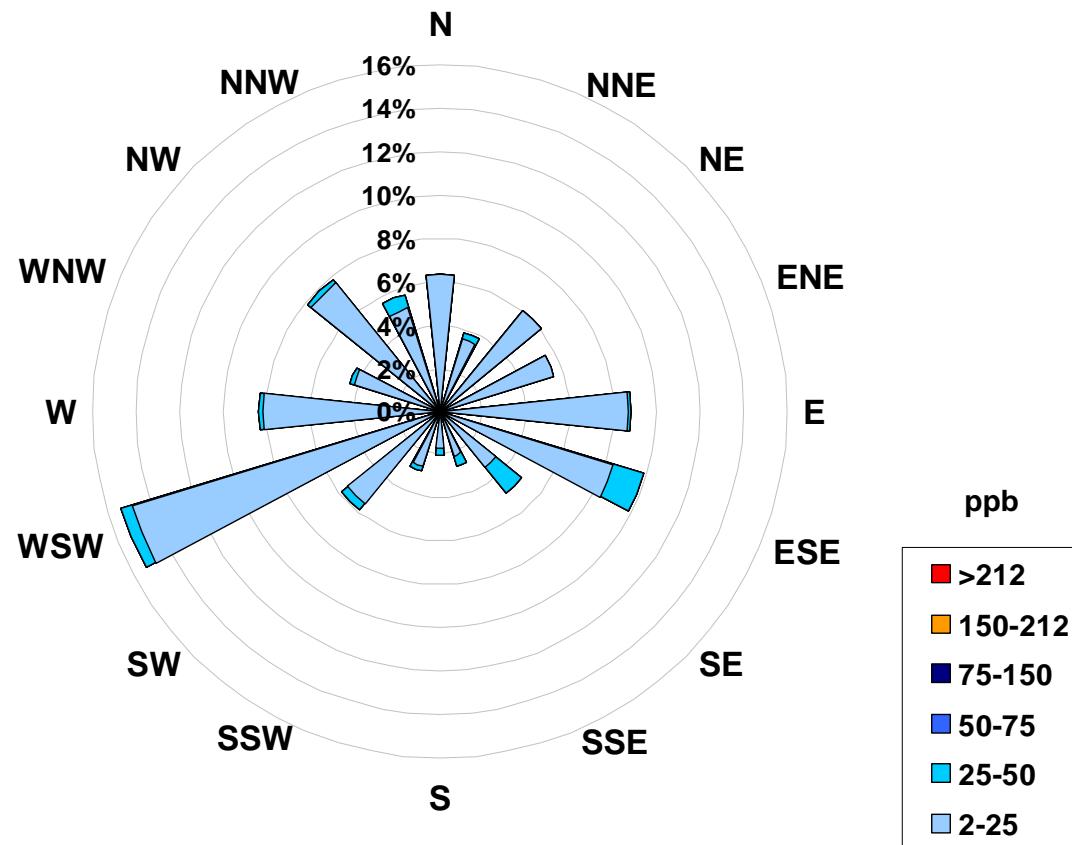


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Nitrogen Dioxide Average Concentration Occurrences at the Henry Pirker Site for April 2005**



Calms: 0%

Frequency Distribution of NO <sub>2</sub> in ppb		
Range	Frequency (hrs)	
2.0 < 25		659
25 to 50		14
50 to 75		5
75 to 150		4
150 to 212		0
> 212		0
Total Non-Zero Values	682	

## PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

Guideline Limit:  
Summary

Maximum 1-hr Average:	107.8	ppb	6-Apr	7:00 8:00
Maximum 24-hr Average:	14.5	ppb	5-Apr	

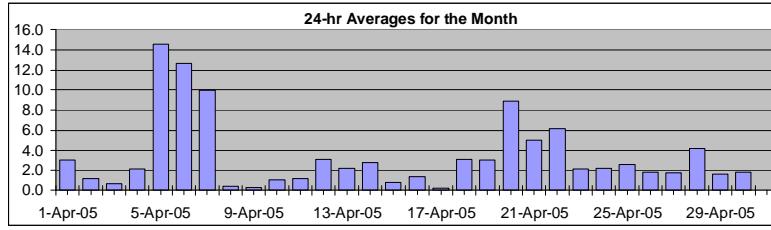
AIC Time:	32 hrs	Operational Time:	682 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%					
Percentile	99	95	75	50	25	5	1	Average
	55.1	16.0	1.7	0.9	0.3	0.0	0.0	3.4 ppb

Day Mountain Standard Time

	0:00 Hour Start 1:00 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	24-hour Average	Daily Maximum	
1-Apr-05	1	1	1	1	1	1	2	3	19	20	6	2	2	A	2	1	1	1	1	1	1	1	1	0	1	3.0	19.9
2-Apr-05	1	1	1	1	1	1	1	1	1	2	1	1	A	2	1	1	1	1	1	0	0	0	0	0	1.2	7.4	
3-Apr-05	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	0	0	0	0	0	0	0	0.7	1.6	
4-Apr-05	0	0	0	0	0	4	18	11	7	2	A	1	1	1	1	1	1	0	0	0	0	0	0	0	2.1	17.7	
5-Apr-05	0	0	0	0	1	0	13	65	55	20	A	4	2	0	0	0	0	0	0	0	4	36	44	56	14.5	65.0	
6-Apr-05	1	3	2	16	16	38	87	108	A	5	4	2	1	0	1	1	1	1	1	1	0	0	2	0	12.7	107.8	
7-Apr-05	1	0	1	3	7	37	85	A	47	3	1	1	1	1	1	3	4	7	3	8	9	4	0	0	10.0	85.3	
8-Apr-05	0	0	0	1	0	0	A	1	1	0	0	1	1	1	0	0	P	P	P	0	0	0	0	0	0.4	1.2	
9-Apr-05	0	0	0	0	0	A	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.2	
10-Apr-05	0	0	0	0	A	2	8	10	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	10.4	
11-Apr-05	1	0	0	A	0	0	2	3	2	2	2	1	1	1	2	2	2	1	2	1	1	0	0	0	1.2	2.5	
12-Apr-05	0	0	0	0	0	A	34	22	C	C	A	1	0	0	1	1	1	0	0	0	0	0	0	0	3.1	34.0	
13-Apr-05	0	0	1	0	0	A	2	22	9	6	3	2	1	0	0	1	1	1	0	0	0	0	0	0	2.2	21.7	
14-Apr-05	1	0	1	0	0	A	32	17	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.8	31.9	
15-Apr-05	0	0	0	0	A	0	1	3	3	1	1	0	0	0	0	0	1	0	0	1	2	1	0	0	0.7	3.3	
16-Apr-05	0	2	4	A	8	0	1	1	2	2	3	1	1	1	1	1	1	1	1	0	0	0	0	0	1.4	8.2	
17-Apr-05	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1		
18-Apr-05	0	A	1	1	1	4	26	20	10	2	1	1	1	1	1	1	1	1	0	0	0	0	0	3.1	25.6		
19-Apr-05	A	1	1	1	2	9	12	12	12	3	1	1	1	1	1	1	1	1	1	1	1	0	0	A	3.0	12.5	
20-Apr-05	0	0	0	0	1	23	98	64	7	1	1	1	0	1	1	0	1	1	1	1	1	1	1	A	8.8	97.7	
21-Apr-05	0	1	1	1	2	8	41	33	4	3	2	1	1	1	2	7	2	1	1	1	1	A	0	0	5.0	41.1	
22-Apr-05	0	0	1	2	7	32	32	54	3	1	4	1	0	0	1	0	0	1	1	0	A	0	0	6.2	54.4		
23-Apr-05	0	2	12	1	2	2	13	2	2	2	1	1	0	0	0	1	1	1	1	A	1	1	1	2.1	13.1		
24-Apr-05	1	1	1	0	0	2	11	20	3	1	1	1	1	1	1	1	1	1	1	1	1	1	0	2.2	20.2		
25-Apr-05	0	0	1	1	1	5	8	10	13	7	4	1	1	1	1	1	1	1	A	1	1	0	0	2.6	13.4		
26-Apr-05	6	1	2	2	1	1	1	3	1	2	3	2	3	2	3	1	A	2	1	1	1	1	1	2	1.8	6.0	
27-Apr-05	2	1	2	3	4	2	3	4	2	2	0	0	1	1	2	A	2	1	1	1	1	1	1	1.7	3.6		
28-Apr-05	1	1	1	4	3	6	21	40	3	4	1	1	1	1	A	1	1	1	1	1	1	1	0	4.1	39.8		
29-Apr-05	1	0	1	1	2	3	5	4	1	1	1	1	1	A	2	2	1	1	1	1	1	1	1	1.6	5.5		
30-Apr-05	1	1	2	2	2	2	7	3	2	2	1	1	A	1	1	2	2	1	1	1	1	1	1	1.8	6.7		
																							N	0.0			
Hourly Avg	0.7	0.7	1.2	1.5	2.3	7.7	21.4	18.3	6.9	2.7	1.7	1.0	0.8	0.7	0.9	1.1	1.1	1.0	0.8	0.9	2.1	2.1	2.3	1.8			
Hourly Max	6.0	3.2	11.6	16.0	15.7	38.4	97.7	107.8	46.7	19.9	6.1	2.2	2.8	1.9	2.5	6.5	3.7	7.4	3.4	8.2	35.7	43.9	56.1	33.8			

### HOURLY AVERAGE TABLE

### Nitric Oxide (NO)



### Status Flag Characters

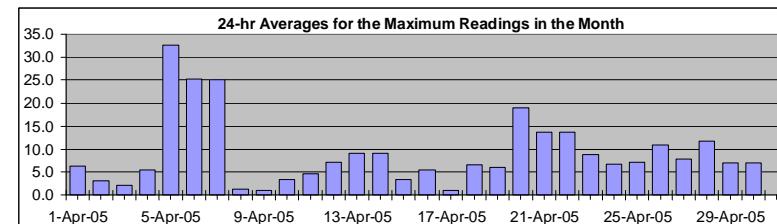
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

### Nitric Oxide (NO)



#### Summary

Maximum 1-hr Value:	172.0	ppb	20-Apr	6:00 7:00
Maximum 24-hr Value:	32.6	ppb	5-Apr	

AIC Time:	32 hrs	Operational Time:	682 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%
Percentile	99 95 75 50 25 5 1	Average	9.1 ppb
	103.8 38.6 7.5 2.8 1.3 0.1 0.0		

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Apr-05	2:00	2	2	2	2	10	11	6	36	39	12	3	3	A	3	3	3	1	1	1	1	1	1	1	1	6.3	38.7	
2-Apr-05	1:00	1	1	2	2	1	1	2	2	2	2	2	3	A	3	3	2	2	1	1	1	2	1	3	33	3.1	32.6	
3-Apr-05	6:00	6	6	4	4	1	2	3	3	2	3	2	A	3	1	2	2	1	1	1	1	1	1	0	0	2.2	6.3	
4-Apr-05	0:00	0	0	0	0	1	14	46	23	16	4	A	3	3	2	3	2	2	2	1	0	0	0	0	0	5.5	46.4	
5-Apr-05	0:00	0	1	1	7	1	47	111	99	55	A	9	10	4	2	1	1	1	1	1	29	95	99	86	89	32.6	111.3	
6-Apr-05	6:00	6	15	5	32	20	102	142	162	A	8	6	3	2	1	6	6	6	10	3	2	3	40	2	1	25.3	162.0	
7-Apr-05	7:00	7	1	4	33	19	79	141	A	75	6	3	4	3	11	7	14	8	25	24	68	31	11	2	1	25.1	141.3	
8-Apr-05	1:00	1	1	1	1	1	A	3	2	1	2	3	2	2	2	2	P	P	P	0	1	1	1	1	1.3	3.3		
9-Apr-05	0:00	0	1	1	1	1	A	2	9	3	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1.1	8.9	
10-Apr-05	0:00	0	0	0	2	A	9	20	31	5	3	0	0	0	0	1	0	0	0	1	0	0	0	4	0	0	3.4	30.5
11-Apr-05	18:00	18	0	1	A	1	1	3	5	5	7	5	4	3	2	12	3	11	5	12	5	1	1	0	0	4.5	17.7	
12-Apr-05	0:00	0	0	0	0	0	A	74	32	C	C	C	A	2	0	2	2	3	3	1	0	8	7	0	0	7.1	73.6	
13-Apr-05	1:00	1	9	10	1	1	A	9	64	28	20	6	4	3	3	10	5	3	2	4	2	2	0	0	22	9.1	64.1	
14-Apr-05	6:00	6	2	20	1	1	A	68	54	32	5	1	2	0	1	6	4	1	1	1	2	0	0	0	0	9.1	67.8	
15-Apr-05	1:00	1	0	0	1	A	1	2	7	7	3	3	2	1	0	1	2	7	1	3	4	13	9	2	8	3.3	12.9	
16-Apr-05	4:00	4	10	19	A	24	1	3	5	8	7	9	4	2	5	7	5	1	3	7	1	0	0	0	0	5.5	24.0	
17-Apr-05	0:00	0	0	A	1	1	1	2	2	1	2	1	2	2	1	1	0	2	1	0	2	0	1	0	1.0	1.8		
18-Apr-05	6:00	6	A	1	2	1	14	45	29	24	7	3	2	2	2	2	2	3	2	1	1	1	1	1	6.6	44.9		
19-Apr-05	1:00	A	1	1	3	4	19	20	24	21	7	3	3	2	2	2	3	2	4	2	2	4	2	1	6.1	24.1		
20-Apr-05	1:00	1	1	1	1	9	61	172	126	12	4	5	2	1	2	4	1	8	5	4	4	3	10	A	1	19.1	172.0	
21-Apr-05	1:00	1	4	3	4	8	26	64	72	7	7	3	2	2	2	17	53	28	2	1	2	5	A	1	1	13.7	72.4	
22-Apr-05	1:00	1	2	3	9	18	44	59	117	18	5	21	2	2	1	1	1	2	1	1	1	A	1	3	13.7	117.5		
23-Apr-05	2:00	2	13	31	4	4	5	34	5	9	19	5	2	2	9	4	5	2	3	12	A	16	7	14	8.9	33.9		
24-Apr-05	3:00	3	4	6	2	2	6	36	36	7	2	3	2	1	2	4	1	2	3	A	5	6	9	12	6.7	36.4		
25-Apr-05	1:00	1	2	3	2	2	30	16	16	27	11	8	4	4	4	7	4	5	A	6	4	1	2	1	7.2	30.4		
26-Apr-05	4:00	29	11	9	8	5	2	5	6	3	9	29	12	53	6	14	12	A	11	6	3	4	2	5	8	10.9	52.8	
27-Apr-05	1:00	13	6	5	13	11	8	7	16	6	3	2	2	4	10	6	A	4	4	5	8	9	9	7	7.7	16.9		
28-Apr-05	1:00	12	2	2	9	12	16	49	78	7	8	20	7	4	4	A	5	4	6	3	8	10	4	1	11.8	77.8		
29-Apr-05	1:00	9	1	1	2	26	9	10	12	4	2	3	17	4	A	10	10	6	4	3	4	3	2	7	6.9	25.7		
30-Apr-05	1:00	4	4	3	14	15	5	11	13	4	4	5	7	A	3	4	9	5	6	6	6	2	9	10	6.9	15.4		
																									N	0.0		

Hourly Avg	4.6	3.4	4.8	5.8	6.9	19.8	40.2	36.5	15.2	7.1	6.1	4.0	4.1	2.9	4.9	5.5	4.4	3.9	4.0	5.7	7.8	8.1	5.5	7.3
Hourly Max	29.1	14.9	30.7	33.0	25.7	102.0	172.0	162.0	74.8	38.7	28.7	16.8	52.8	10.8	16.9	53.4	28.1	24.5	23.9	68.0	95.3	99.0	86.3	89.2

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

Station: Henry Pirker  
Station Owner: PASZA

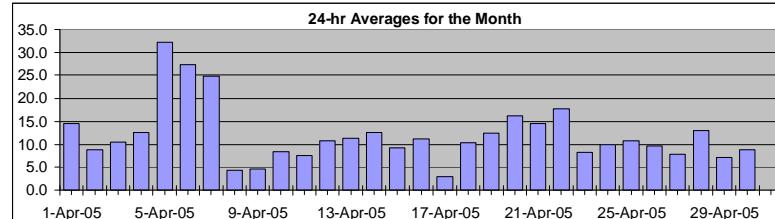
**Monitoring Dates:** April 1, 2005 to May 1, 2005

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

Maximum 1-hr Average: 131.2 ppb 6-Apr 7:00 8:00  
Maximum 24-hr Average: 32.2 ppb 5-Apr

AIC Time:	32 hrs	Operational Time:	682 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%					
Percentile	99 90.6	95 43.2	75 13.0	50 6.9	25 3.7	5 1.5	1 0.6	Average 12.1 ppb

## HOURLY AVERAGE TABLE



## Status Flag Characters

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

Day Mountain Standard Time

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
	Hour Start 1:00	1:00	2:00	3:00	4:00	4:00	5:00	6:00	7:00	8:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
1-Apr-05	20	11	9	11	12	14	18	22	52	45	16	5	7	A	9	8	6	4	7	12	13	16	12	6	14.6	52.2	
2-Apr-05	5	4	3	3	3	3	7	6	5	5	4	4	4	A	6	4	3	3	4	7	10	25	22	23	44	8.8	44.1
3-Apr-05	32	35	23	19	10	9	9	8	6	5	3	A	5	4	3	4	4	4	4	5	9	10	15	15	6	10.6	35.5
4-Apr-05	9	7	3	4	10	38	57	40	25	8	A	5	4	5	5	4	4	4	4	7	13	16	14	8	12.8	57.2	
5-Apr-05	6	6	8	13	8	43	104	90	43	A	17	10	5	3	2	2	2	2	4	34	83	91	100	62	32.2	104.0	
6-Apr-05	28	31	29	48	50	66	113	131	A	18	15	8	4	2	5	5	6	7	9	8	9	19	11	12	27.5	131.2	
7-Apr-05	19	14	15	20	24	58	108	A	68	12	7	6	6	9	13	19	26	34	19	32	34	22	8	2	24.9	108.2	
8-Apr-05	2	6	4	3	3	4	A	11	7	4	3	3	4	3	3	2	P	P	P	4	8	10	4	4	4.5	10.9	
9-Apr-05	4	6	6	7	9	A	8	14	8	3	2	1	2	1	1	2	2	1	1	2	2	2	5	8	11	4.6	13.6
10-Apr-05	11	11	12	14	A	26	34	30	13	5	1	1	0	1	0	0	2	3	5	5	5	5	6	5	8.4	34.4	
11-Apr-05	7	3	6	A	7	8	14	13	10	8	8	7	8	6	9	8	12	8	11	12	5	2	1	3	7.7	13.9	
12-Apr-05	2	3	3	6	10	A	64	46	C	C	C	A	4	2	2	5	6	5	4	3	15	9	10	8	10.8	63.9	
13-Apr-05	5	11	8	10	8	A	15	45	22	16	12	11	9	5	4	5	4	4	6	8	17	12	8	15	11.3	44.9	
14-Apr-05	29	22	13	12	16	A	68	41	25	7	3	1	0	3	2	1	2	3	7	2	4	15	7	5	12.6	67.7	
15-Apr-05	4	5	5	4	A	9	8	13	13	6	6	4	1	1	1	2	5	3	6	14	22	23	21	39	9.3	39.2	
16-Apr-05	28	29	29	A	37	15	16	11	10	10	12	6	5	5	6	6	6	5	7	4	1	4	3	2	11.1	37.0	
17-Apr-05	3	3	A	4	3	6	9	7	3	3	1	2	2	2	1	1	0	1	1	2	4	4	3	3	3.0	9.1	
18-Apr-05	5	A	8	6	10	21	54	44	22	6	2	2	2	2	3	3	3	3	6	9	6	10	9	10.3	53.8		
19-Apr-05	A	10	7	13	30	45	42	34	32	11	4	4	3	2	3	4	3	4	4	6	9	4	3	A	12.5	44.8	
20-Apr-05	4	3	3	3	6	44	129	91	17	2	1	1	1	2	1	1	2	3	4	13	21	13	A	7	16.2	129.1	
21-Apr-05	11	16	11	8	15	26	66	57	13	10	5	4	4	3	5	14	8	5	5	11	13	A	7	15	14.5	66.0	
22-Apr-05	10	19	24	25	32	63	56	82	10	9	20	4	3	3	3	3	2	3	5	5	A	10	8	7	17.6	82.4	
23-Apr-05	7	14	25	7	9	12	30	9	8	6	4	2	1	2	2	2	2	2	4	A	12	10	9	10	8.3	30.0	
24-Apr-05	15	14	11	8	10	16	27	40	9	4	3	2	1	2	2	2	2	2	A	10	16	12	10	9	9.8	39.9	
25-Apr-05	11	9	13	9	9	17	25	23	29	19	13	5	3	4	5	3	5	A	5	6	6	7	15	10.8	28.6		
26-Apr-05	26	11	16	16	11	8	11	16	10	11	10	7	8	6	8	5	A	6	5	6	8	6	6	7	9.7	25.6	
27-Apr-05	9	11	15	22	18	13	13	11	6	5	1	2	2	3	5	A	5	4	4	7	6	8	7	7.9	21.8		
28-Apr-05	9	10	20	28	26	19	39	63	15	11	4	3	2	3	A	4	4	3	4	4	7	10	6	9	13.2	63.5	
29-Apr-05	10	7	6	8	9	15	22	12	3	2	2	3	2	A	5	4	4	4	5	5	12	10	10	7	7.3	21.9	
30-Apr-05	10	16	19	16	13	13	25	8	5	4	3	3	A	3	3	5	4	5	4	6	10	10	10	8	8.8	24.7	
	Hourly Avg	11.7	12.0	12.2	12.4	14.5	23.5	41.1	35.1	17.5	9.0	6.6	4.2	3.5	3.2	3.9	4.3	4.8	4.8	5.5	8.7	13.8	13.5	11.9	11.9	N	0.0

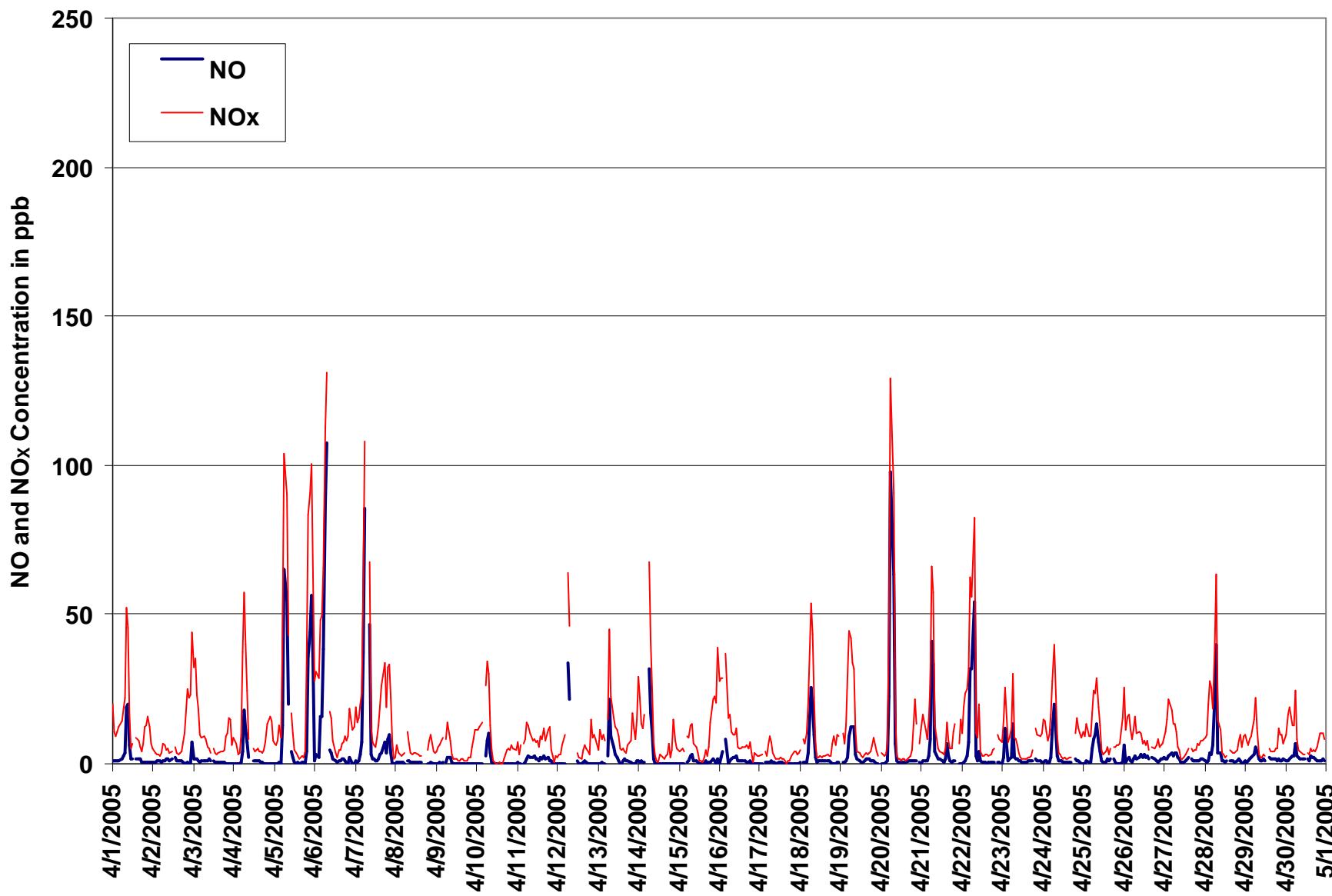


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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

#### Summary

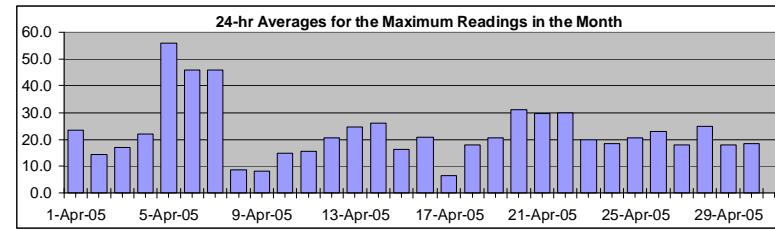
Maximum 1-hr Value:	214.2 ppb	20-Apr	6:00	7:00
Maximum 24-hr Value:	56.0 ppb	5-Apr		

AIC Time:	32 hrs	Operational Time:	682 hrs	
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%	
Percentile	99 95 75 50 25 5 1	Average		
	146.9 76.3 24.9 13.8 8.4 4.4 3.0	22.6 ppb		

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	26	16	15	15	19	30	35	35	78	76	31	10	12	A	13	12	10	7	11	21	19	21	19	10	23.5	78.0
2-Apr-05	7	5	5	5	4	5	15	11	8	7	7	7	A	10	8	7	8	8	12	15	38	29	33	79	14.5	78.6
3-Apr-05	44	45	35	28	16	13	14	13	10	9	6	A	10	7	9	8	6	7	7	15	19	30	27	14	16.9	45.1
4-Apr-05	12	12	5	8	18	58	97	61	46	16	A	10	10	13	12	9	9	10	9	15	17	22	26	16	22.2	96.8
5-Apr-05	12	8	13	24	13	89	156	135	94	A	29	25	17	8	6	7	6	6	14	69	145	145	135	132	56.0	155.7
6-Apr-05	36	41	37	70	58	134	170	192	A	27	21	11	7	5	17	15	16	21	19	14	17	85	23	19	45.7	191.6
7-Apr-05	29	19	23	50	40	98	168	A	103	18	11	11	10	25	25	43	36	59	59	104	63	37	19	4	45.8	168.4
8-Apr-05	7	11	5	4	5	6	A	18	11	7	8	9	9	7	9	6	P	P	P	8	13	17	7	7	8.7	18.4
9-Apr-05	7	8	9	12	13	A	16	21	12	5	5	4	4	4	4	4	5	5	2	3	4	10	14	19	8.3	20.9
10-Apr-05	18	17	16	22	A	35	51	59	18	11	3	2	1	4	6	4	5	7	10	10	7	18	8	7	14.7	59.3
11-Apr-05	51	6	12	A	11	13	19	18	18	12	16	11	14	11	22	14	18	12	32	23	8	8	3	5	15.5	51.3
12-Apr-05	3	6	4	13	13	A	109	59	C	C	C	A	7	4	11	16	13	16	13	10	36	23	16	16	20.4	109.2
13-Apr-05	11	32	33	14	14	A	25	82	53	38	18	18	16	13	30	12	10	8	12	16	27	19	11	54	24.6	82.4
14-Apr-05	41	31	59	19	22	A	107	96	57	16	8	3	3	10	10	9	7	8	19	10	14	27	12	8	26.0	106.8
15-Apr-05	7	7	9	9	A	12	12	25	22	11	11	9	5	3	3	9	21	5	12	23	47	34	37	45	16.3	46.7
16-Apr-05	38	46	50	A	56	25	24	25	25	24	29	11	9	14	13	12	9	11	21	13	3	8	6	6	20.8	56.3
17-Apr-05	6	5	A	5	5	9	12	11	6	5	5	5	5	5	4	5	3	7	4	6	10	9	8	5	6.3	12.5
18-Apr-05	13	A	13	14	17	39	78	54	47	16	9	5	7	6	5	6	7	7	6	10	13	10	17	15	17.9	78.1
19-Apr-05	A	16	10	33	38	58	59	55	49	22	9	9	6	6	8	8	6	10	7	12	23	11	4	A	20.7	58.8
20-Apr-05	5	4	5	5	22	86	214	161	27	11	9	5	4	4	7	3	19	13	10	26	30	32	A	10	30.9	214.2
21-Apr-05	19	25	21	14	24	54	93	100	22	21	9	9	8	8	36	73	52	9	9	15	26	A	10	25	29.7	100.4
22-Apr-05	14	27	34	34	47	77	96	158	38	23	48	8	5	4	5	5	6	9	8	8	A	14	14	11	30.0	158.4
23-Apr-05	12	27	43	14	13	18	57	14	17	37	10	5	5	16	8	9	6	7	21	A	35	26	32	19.8	57.0	
24-Apr-05	26	23	24	12	14	20	60	61	22	7	8	6	4	4	7	4	6	10	A	18	24	21	25	18.6	60.6	
25-Apr-05	16	20	25	14	17	55	38	34	48	24	21	13	7	12	18	13	13	A	14	12	8	9	10	33	20.6	54.7
26-Apr-05	57	32	32	27	24	16	22	23	16	19	34	22	54	16	20	17	A	19	11	16	14	10	13	17	23.1	57.4
27-Apr-05	28	19	23	36	32	24	25	30	13	8	6	4	8	11	14	A	10	9	12	12	20	22	17	17.9	35.6	
28-Apr-05	27	16	31	37	31	34	79	101	19	19	32	12	12	8	A	15	12	8	8	15	21	16	8	14	24.8	100.9
29-Apr-05	23	12	9	11	56	36	34	27	9	4	9	19	9	A	18	15	10	13	10	16	21	13	20	20	18.0	56.0
30-Apr-05	18	27	26	37	36	25	33	20	9	11	9	13	A	7	11	14	14	11	14	13	15	18	24	19	18.4	36.6

Hourly Avg	21.1	19.4	21.5	20.8	24.2	41.1	66.2	58.6	31.9	18.0	14.9	9.9	9.5	8.8	12.4	12.9	12.2	11.5	13.8	18.8	25.3	25.7	20.6	23.4
Hourly Max	57.4	46.5	59.3	69.5	58.0	134.1	214.2	191.6	102.8	76.4	47.7	25.2	54.5	24.8	36.4	73.5	52.0	58.7	58.6	104.4	144.5	144.8	135.4	132.3



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

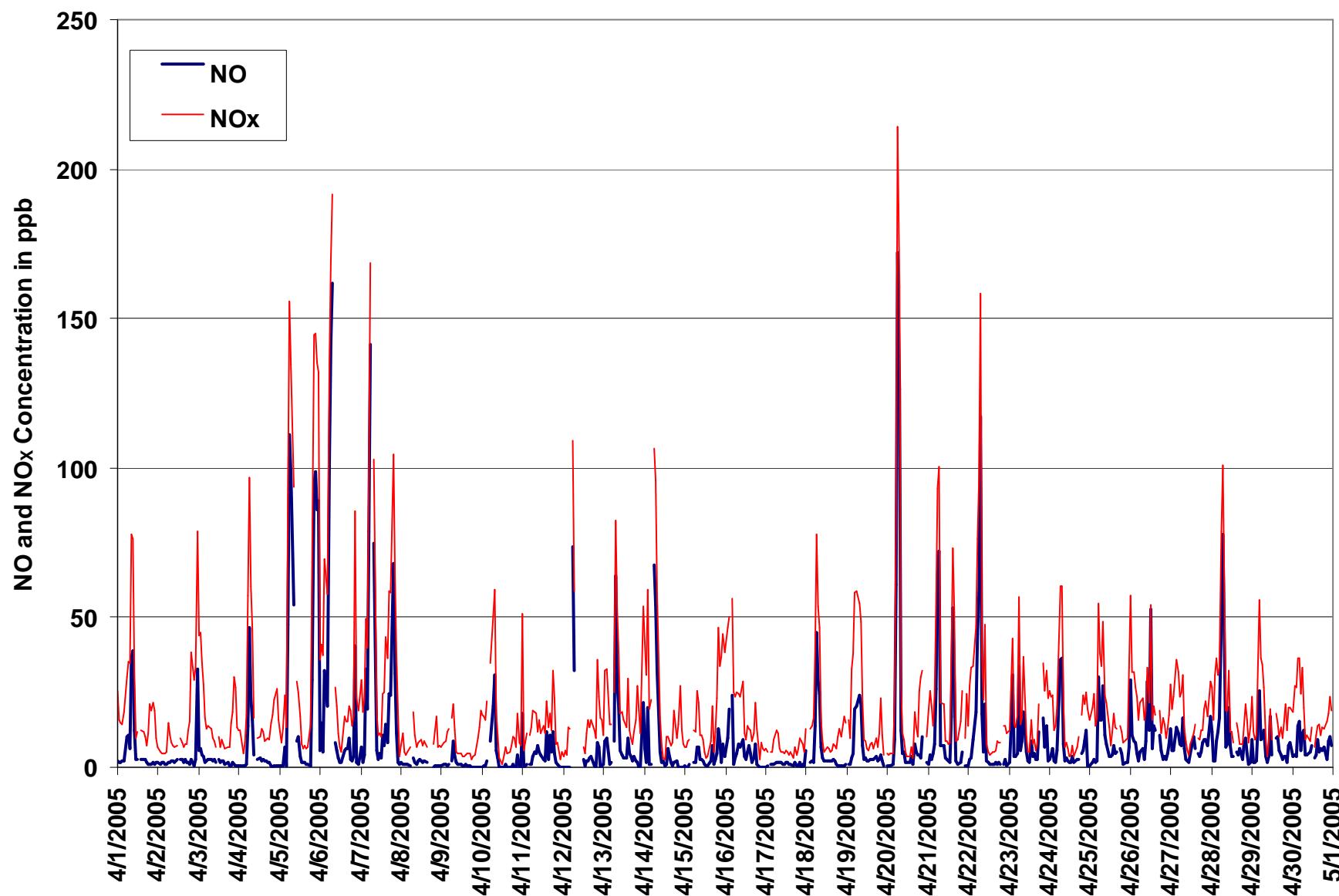


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Maximum Value Monthly Trend

## PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

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

Number of 1-hr Exceedances:	0
Maximum 1-hr Average:	59.6 ppb
Maximum 24-hr Average:	39.7 ppb

AIC Time:	33 hrs	Operational Time:	684 hrs						
Calibration Time:	1 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average	31.6 ppb
	52.9	49.8	42.2	34.8	23.4	3.9	0.9		

		HOURLY AVERAGE TABLE																								Ozone (O <sub>3</sub> )	
		24-hr Averages for the Month																									
		Status Flag Characters																									
Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
		1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	26	32	34	31	29	26	25	23	11	18	36	42	37	A	43	43	44	44	42	36	34	30	33	39	33.0	44.4	
2-Apr-05	40	41	41	40	40	40	37	39	42	44	45	46	A	46	47	48	46	46	42	37	20	21	21	10	38.1	47.5	
3-Apr-05	14	10	22	24	31	33	32	33	37	38	41	A	47	49	51	51	51	51	49	43	41	36	35	38	37.3	51.0	
4-Apr-05	33	31	38	38	32	10	3	18	29	41	A	44	46	46	46	45	45	43	38	30	25	27	34	34.2	46.5		
5-Apr-05	36	35	32	26	30	8	1	5	20	A	33	37	44	48	51	53	53	53	50	22	2	1	1	7	28.2	53.3	
6-Apr-05	5	3	2	1	0	1	1	2	A	34	38	44	48	50	48	49	48	46	41	40	39	28	23	14	26.3	49.7	
7-Apr-05	8	11	7	4	1	0	1	A	10	31	34	35	38	36	33	29	20	15	19	11	5	8	27	34	18.2	38.5	
8-Apr-05	32	30	32	35	37	37	A	32	35	38	40	41	41	43	44	45	P	P	43	40	34	29	37	36	37.2	45.4	
9-Apr-05	36	35	34	30	27	A	31	28	33	39	42	43	43	44	43	42	42	42	41	39	37	31	28	24	36.3	43.7	
10-Apr-05	25	23	24	21	A	6	7	14	26	38	44	46	49	50	53	53	52	49	45	41	40	38	41	40	35.8	52.8	
11-Apr-05	36	39	37	A	36	33	29	29	31	36	37	37	38	36	36	34	39	35	31	36	37	36	33	35.2	39.5		
12-Apr-05	35	32	28	24	18	A	3	7	18	27	37	43	46	49	49	47	C	A	A	45	34	34	28	22	31.3	49.2	
13-Apr-05	27	16	15	13	13	A	8	4	12	19	21	24	29	37	42	43	43	45	42	37	24	29	37	28	26.4	44.5	
14-Apr-05	8	12	25	24	16	A	3	11	19	35	43	48	48	45	46	45	45	44	38	43	38	25	31	27	31.3	48.4	
15-Apr-05	28	29	29	31	A	26	25	25	27	33	35	41	44	46	46	46	44	46	43	33	24	20	21	4	32.4	46.1	
16-Apr-05	10	9	8	A	4	22	22	22	28	28	30	37	40	40	41	41	41	43	40	44	49	43	41	38	31.6	49.5	
17-Apr-05	36	31	A	35	39	33	32	36	38	39	42	44	43	42	42	42	42	42	41	37	32	27	26	24	36.7	43.6	
18-Apr-05	21	A	16	18	11	5	3	8	19	31	38	39	40	42	43	42	41	43	41	35	30	32	27	30	28.5	42.8	
19-Apr-05	A	24	29	24	7	3	9	17	21	33	41	41	40	40	37	32	30	29	27	23	18	23	25	A	26.1	41.0	
20-Apr-05	24	24	24	22	19	3	2	6	19	36	38	42	45	47	49	51	50	50	48	37	26	33	A	35	31.8	50.6	
21-Apr-05	24	8	9	9	4	2	1	10	29	33	40	45	49	52	54	53	58	60	59	52	39	A	43	35	33.4	59.6	
22-Apr-05	31	18	10	6	2	1	2	2	24	30	17	32	35	36	33	33	36	36	29	26	A	18	14	13	21.0	36.3	
23-Apr-05	13	3	0	4	5	5	4	22	22	30	36	38	40	41	42	42	43	42	42	A	33	33	28	26.1	42.7		
24-Apr-05	19	10	13	14	12	4	5	10	28	34	38	42	44	45	47	49	49	49	A	40	30	33	34	39	29.9	49.0	
25-Apr-05	18	19	13	15	13	9	8	14	16	23	31	49	52	52	50	46	42	A	42	38	35	32	31	15	28.8	52.5	
26-Apr-05	7	12	8	8	13	27	28	24	28	28	30	35	38	41	42	42	A	42	45	43	39	41	37	33	30.1	44.6	
27-Apr-05	29	23	18	6	9	26	27	31	35	37	41	48	50	51	52	A	49	50	44	40	35	34	32	31	34.7	52.0	
28-Apr-05	26	25	13	4	4	4	3	11	31	35	42	46	49	A	50	50	51	50	49	41	37	36	40	37	32.3	50.6	
29-Apr-05	35	32	28	27	22	23	22	36	45	45	47	48	49	A	50	51	51	50	49	41	37	36	40	37	39.7	50.8	
30-Apr-05	34	20	17	16	16	17	16	38	41	43	45	46	A	47	47	46	47	48	48	44	36	33	34	36	35.3	48.2	
																								N	0.0		

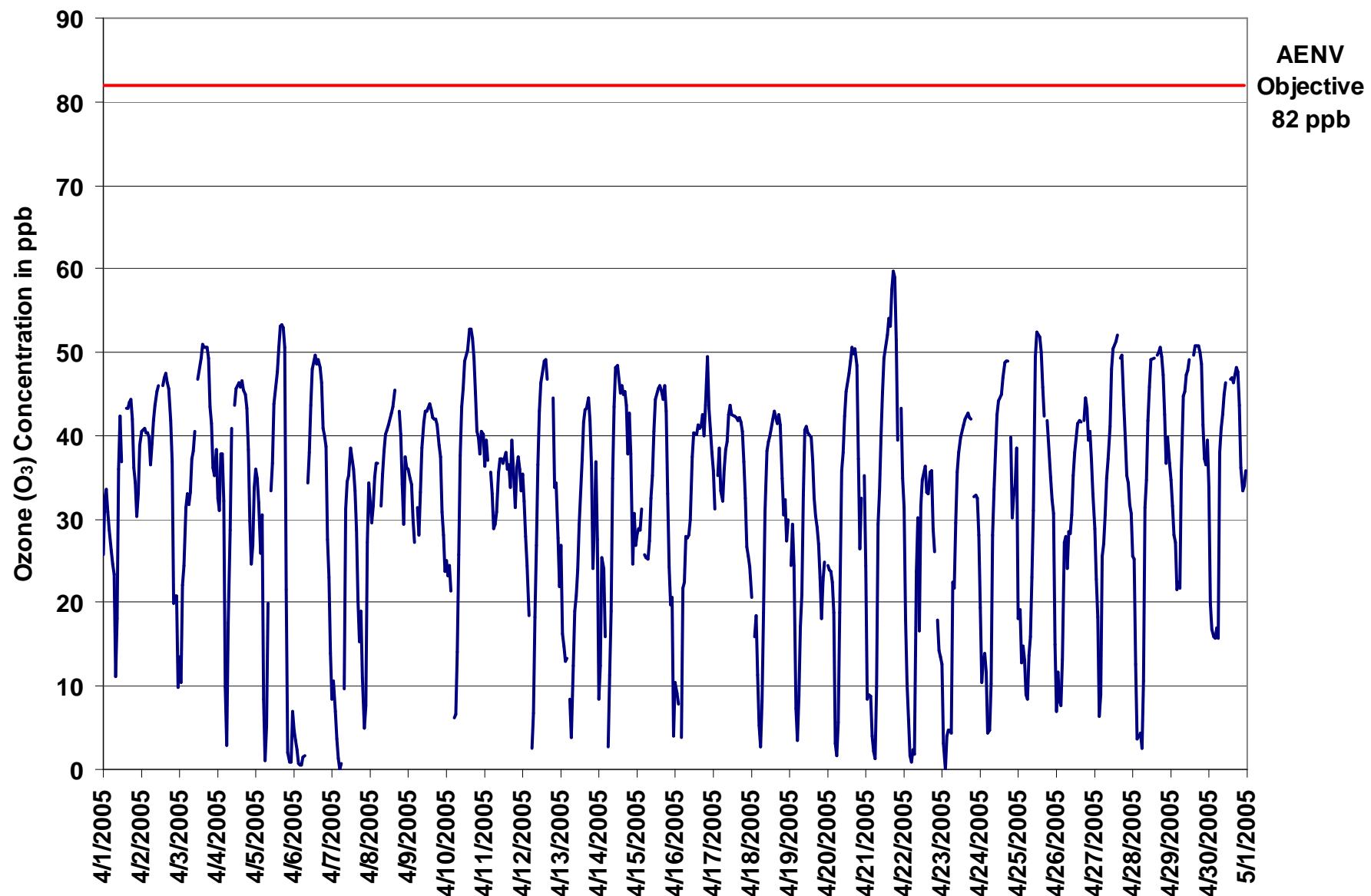


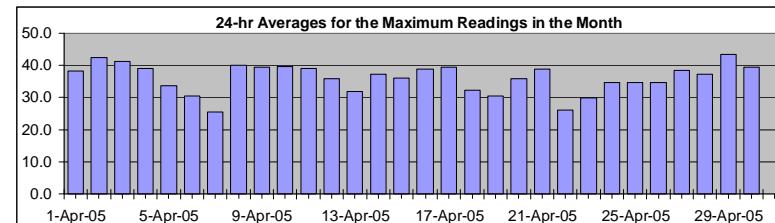
Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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



#### Summary

Maximum 1-hr Value:	65.9	ppb	16-Apr	12:00 13:00
Maximum 24-hr Value:	43.4	ppb	29-Apr	

AIC Time:	33 hrs	Operational Time:	684 hrs					
Calibration Time:	1 hrs	AMD Operational Uptime:	99.7%					
Percentile	99 57.0	95 52.8	75 45.1	50 38.6	25 29.5	5 9.7	1 2.4	Average 36.2 ppb

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	34	37	37	34	32	33	30	32	23	28	44	45	41	A	46	46	46	46	45	42	43	36	38	42	38.3	46.3
2-Apr-05	43	43	42	42	41	41	43	42	44	46	47	48	A	48	49	50	49	48	47	41	34	31	31	30	42.5	49.6
3-Apr-05	26	19	27	30	36	37	34	35	39	41	44	A	50	51	54	53	52	53	52	47	45	44	40	42	41.4	53.6
4-Apr-05	36	36	39	39	40	25	8	28	36	45	A	46	48	49	49	50	48	49	46	42	34	33	37	39	39.2	49.6
5-Apr-05	40	38	36	31	35	24	3	9	32	A	37	43	48	51	54	55	56	55	54	44	8	2	2	17	33.7	56.2
6-Apr-05	15	10	7	2	1	2	4	3	A	40	42	45	50	51	51	51	50	46	43	42	35	31	24	30.3	51.3	
7-Apr-05	19	18	14	15	7	1	3	A	32	37	36	38	41	42	40	34	26	24	28	23	15	25	37	36	25.7	41.6
8-Apr-05	35	34	34	40	40	40	A	35	38	40	43	43	45	46	48	P	P	45	44	38	35	41	40	40.2	47.7	
9-Apr-05	39	39	37	34	31	A	38	33	36	42	43	45	45	45	44	44	43	42	39	36	32	30	39.3	45.3		
10-Apr-05	30	28	30	29	A	11	14	26	31	42	46	47	51	53	54	55	55	52	50	43	41	40	43	39.7	54.9	
11-Apr-05	41	42	41	A	38	36	31	32	36	39	40	40	40	40	40	39	38	43	39	42	41	41	42	39.1	43.3	
12-Apr-05	38	37	31	28	24	A	11	10	24	31	42	45	49	51	51	51	C	A	A	50	42	38	36	28	35.8	51.3
13-Apr-05	31	23	21	20	16	A	15	8	18	22	23	28	37	41	46	47	46	46	51	49	33	38	40	37	32.1	51.1
14-Apr-05	24	24	30	30	21	A	10	22	30	39	49	50	50	49	48	47	48	47	43	49	46	34	34	32	37.2	50.2
15-Apr-05	33	32	31	33	A	29	31	30	32	36	38	45	46	47	47	47	47	49	47	41	32	23	30	8	36.2	49.1
16-Apr-05	20	16	20	A	17	27	27	31	31	33	39	45	66	61	45	44	43	44	45	54	52	47	45	41	38.9	65.9
17-Apr-05	39	37	A	38	40	36	35	39	40	41	45	46	45	44	45	43	44	43	42	41	39	32	28	27	39.6	45.6
18-Apr-05	25	A	22	21	16	11	7	13	23	37	42	41	42	44	45	44	43	44	44	39	34	36	31	33	32.1	45.4
19-Apr-05	A	27	32	32	16	7	18	24	30	40	43	43	42	42	40	37	33	31	29	27	24	25	27	A	30.6	43.3
20-Apr-05	26	25	26	24	21	18	6	14	25	39	41	44	48	50	51	53	51	52	51	49	31	37	A	39	52.9	
21-Apr-05	35	15	12	11	9	7	3	28	32	38	44	48	53	55	58	61	62	64	63	57	50	A	45	43	38.8	63.6
22-Apr-05	36	29	16	17	7	2	9	6	35	37	30	34	38	38	37	35	39	40	31	30	A	20	19	19	26.2	39.9
23-Apr-05	18	10	1	7	9	9	19	25	27	35	39	41	42	43	43	44	45	44	44	A	37	36	34	29.8	45.0	
24-Apr-05	28	21	18	19	17	11	7	21	34	35	41	45	46	47	49	51	52	51	A	47	36	37	40	43	34.6	52.0
25-Apr-05	28	27	19	19	20	15	11	18	21	33	49	55	55	55	55	49	46	A	44	43	38	35	35	28	34.6	55.0
26-Apr-05	16	17	19	14	18	33	31	28	32	36	37	43	45	45	44	A	47	47	50	43	43	40	36	34.7	49.5	
27-Apr-05	32	26	23	10	27	29	29	34	38	40	44	54	53	54	55	A	52	52	50	43	38	37	34	33	38.6	54.7
28-Apr-05	28	28	20	12	16	10	6	34	34	40	44	50	52	52	A	53	52	53	50	45	41	41	41	37.2	53.1	
29-Apr-05	38	37	31	31	25	28	33	45	47	48	49	50	51	A	53	54	53	53	52	46	42	40	42	43.4	53.5	
30-Apr-05	39	28	21	24	22	19	35	42	43	45	47	49	A	48	49	50	50	50	48	43	36	37	38	39.6	50.4	

Hourly Avg	30.7	27.7	25.5	24.4	23.0	20.8	18.9	25.7	32.5	38.0	41.6	44.4	47.0	48.0	48.0	47.6	47.1	47.3	45.8	43.8	37.6	34.3	34.8	33.7
Hourly Max	43.0	43.3	42.2	41.8	41.3	40.8	42.8	44.9	46.6	47.6	49.4	54.7	65.9	61.3	58.3	61.4	62.5	63.6	62.9	56.8	52.3	46.8	45.5	42.8

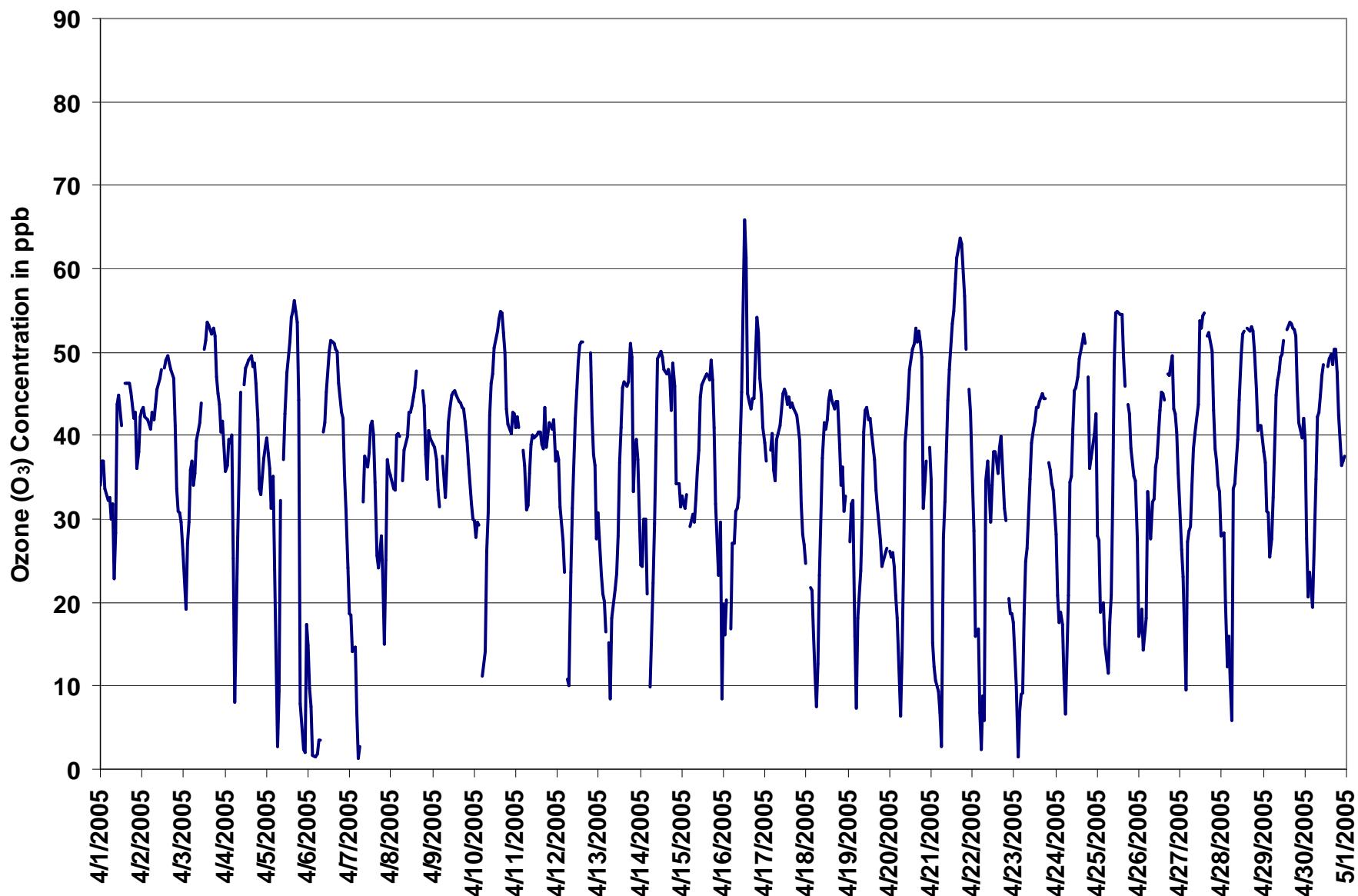
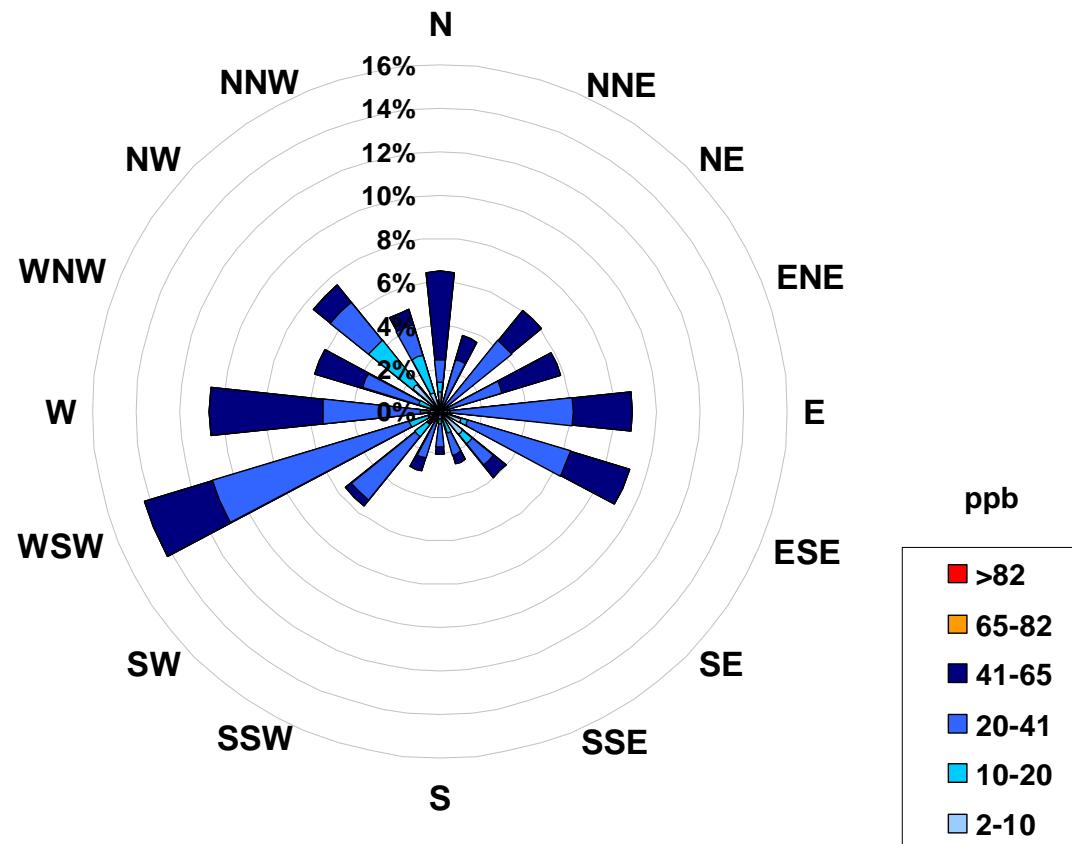


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Ozone Average Concentration  
Occurrences at the Henry Pirker Site for April 2005**



**Calms:** 0%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	79
10	to	20	67
20	to	41	336
41	to	65	202
65	to	82	0
>	82		0
Total Non-Zero Values			684

## PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

### EIGHT HOUR RUNNING AVERAGE TABLE

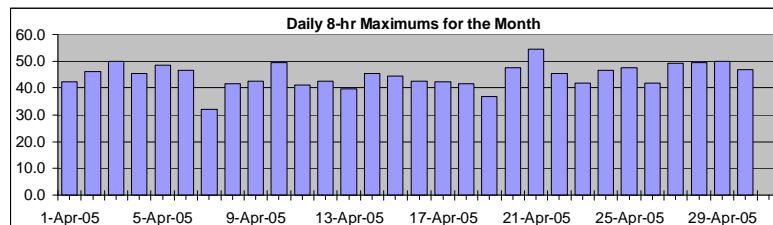
#### Ozone (O<sub>3</sub>)

Monitoring Dates: April 1, 2005 to May 1, 2005

Guideline Limit: Canada Wide Standard      8-hr 65 ppb

**Summary**

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	54.5 ppb      21-Apr 19:00 20:00



Percentile	99	95	75	50	25	5	1
	49.8	47.1	40.3	33.0	22.9	11.7	4.7

**Day Mountain Standard Time**

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
1-Apr-05	12	15	18	19	21	24	27	28	26	25	25	26	27	27	30	33	38	41	42	41	41	40	38	38	42.3
2-Apr-05	37	37	37	37	38	39	40	40	40	40	41	42	42	43	44	45	46	46	46	44	41	38	35	30	46.2
3-Apr-05	26	22	19	18	19	21	22	25	28	31	34	35	37	40	42	45	47	48	50	49	48	47	45	43	49.8
4-Apr-05	41	38	37	36	35	32	28	25	25	26	24	25	27	32	38	43	45	45	45	45	43	40	37	36	45.5
5-Apr-05	35	33	32	30	31	29	25	22	20	18	18	19	21	27	34	41	46	46	49	47	41	36	29	24	48.6
6-Apr-05	18	11	5	3	3	3	3	2	2	6	11	17	24	31	38	44	45	46	47	46	45	42	39	35	46.8
7-Apr-05	30	25	21	17	12	8	6	5	5	8	12	16	21	27	31	31	32	30	28	25	21	17	17	17	32.2
8-Apr-05	19	21	22	25	29	33	34	33	34	35	36	37	38	39	39	41	42	N	N	N	N	N	N	N	41.7
9-Apr-05	37	36	35	34	33	34	33	32	31	32	33	35	37	38	39	41	42	43	43	42	41	40	38	36	42.6
10-Apr-05	33	31	29	27	25	22	19	17	17	19	22	26	29	34	40	45	48	49	50	49	48	46	45	43	49.6
11-Apr-05	41	40	39	39	38	37	36	34	33	33	33	33	34	34	35	36	36	37	37	36	36	36	36	35	41.2
12-Apr-05	36	35	34	33	31	30	25	21	19	18	19	22	26	29	34	39	43	N	N	N	N	N	N	N	42.5
13-Apr-05	N	29	28	24	21	19	16	14	12	12	13	15	17	19	23	28	32	35	38	40	39	38	37	35	39.7
14-Apr-05	31	27	25	24	22	22	17	14	16	19	22	25	30	32	37	41	44	46	45	44	43	40	38	36	45.6
15-Apr-05	34	32	31	30	28	29	28	28	27	28	29	30	32	35	37	40	42	43	44	43	41	38	35	29	44.4
16-Apr-05	25	20	16	14	11	11	11	15	17	20	23	25	29	32	34	36	37	39	40	41	42	43	43	42	42.8
17-Apr-05	42	40	40	39	38	36	35	35	36	37	38	38	40	41	42	42	42	42	41	40	38	36	34	42.3	
18-Apr-05	31	30	26	23	20	17	14	12	12	14	17	19	23	27	33	37	40	41	41	41	40	38	37	35	41.5
19-Apr-05	34	32	30	28	25	21	18	16	17	18	19	22	26	30	34	36	37	36	35	32	30	27	26	25	36.8
20-Apr-05	24	23	23	23	23	20	17	15	15	16	18	21	24	29	35	41	45	47	48	47	45	43	42	40	47.9
21-Apr-05	36	30	25	21	17	13	12	8	9	12	16	21	26	33	39	44	48	51	54	55	53	53	52	49	54.5
22-Apr-05	46	40	33	26	21	18	13	9	8	10	10	14	18	22	26	30	31	32	34	33	33	30	27	25	45.6
23-Apr-05	21	17	12	9	9	7	6	7	8	11	16	20	25	29	34	36	39	40	41	42	41	40	38	36	41.7
24-Apr-05	33	28	24	23	20	17	13	11	12	15	18	22	26	31	36	41	44	45	46	44	42	41	39	46.5	
25-Apr-05	35	30	28	25	23	20	17	14	13	14	16	20	25	31	36	40	43	46	48	46	44	41	38	34	47.7
26-Apr-05	29	26	22	18	16	15	15	16	19	21	23	27	30	32	33	36	37	39	41	42	42	42	41	40	42.0
27-Apr-05	39	36	33	28	25	23	21	21	22	24	26	32	37	40	43	45	47	49	49	48	46	43	40	39	49.2
28-Apr-05	36	33	29	25	21	17	14	11	12	13	17	22	28	33	38	43	46	48	49	49	48	47	46	44	49.4
29-Apr-05	42	40	37	35	32	30	28	28	29	31	33	36	39	42	46	48	49	49	50	50	49	47	46	44	49.9
30-Apr-05	42	38	34	30	27	24	22	22	25	29	33	35	39	44	45	46	47	47	47	45	44	42	41	41	47.0

Hourly Max 45.6 40.3 40.3 39.1 38.1 39.3 39.7 39.8 39.9 40.3 40.8 41.5 41.7 42.6 45.7 47.8 48.7 51.3 53.7 54.5 53.3 53.4 51.9 49.3

## PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

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

**Summary**

Number of 1-hr Exceedances:

### HOURLY AVERAGE TABLE

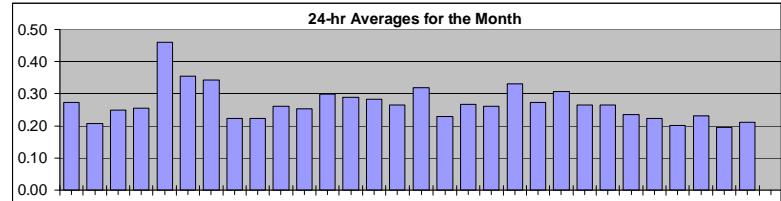
### Carbon Monoxide (CO)

Maximum 1-hr Average: 1.4 ppm 20-Apr 6:00 7:00  
Maximum 24-hr Value: 0.5 ppm 5-Apr

AIC Time:	33 hrs		Operational Time:	683 hrs					
Calibration Time:	2 hrs		AMD Operational Uptime:	99.7%					
Percentile	99	95	75	50	25	5	1	Average	0.3 ppm
	1.1	0.5	0.3	0.2	0.2	0.2	0.1		

**Day Mountain Standard Time**

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum		
1-Apr-05	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.4	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.27	0.67	
2-Apr-05	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.6	0.21	0.65	
3-Apr-05	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.25	0.54	
4-Apr-05	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.4	0.3	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	0.3	0.3	0.2	0.26	0.61		
5-Apr-05	0.2	0.2	0.2	0.2	0.2	0.5	1.3	1.2	0.7	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	1.0	1.1	0.46	1.33			
6-Apr-05	0.3	0.4	0.3	0.5	0.5	0.6	1.4	1.0	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	0.3	0.3	0.36	1.41			
7-Apr-05	0.3	0.2	0.2	0.2	0.3	0.5	1.2	A	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.3	0.4	0.4	0.3	0.2	0.2	0.34	1.19		
8-Apr-05	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	P	P	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.22	0.36		
9-Apr-05	0.3	0.3	0.2	0.3	0.2	A	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.29		
10-Apr-05	0.3	0.3	0.3	0.3	A	0.4	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.26	0.51		
11-Apr-05	0.2	0.2	0.2	A	0.2	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.25	0.39		
12-Apr-05	0.2	0.2	0.2	0.2	0.3	A	1.1	0.6	0.4	0.3	0.2	0.2	0.2	C	C	A	A	0.0	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.30	1.05
13-Apr-05	0.2	0.3	0.2	0.3	0.2	A	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.29	0.41		
14-Apr-05	0.4	0.4	0.3	0.3	0.3	A	0.7	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.28	0.70		
15-Apr-05	0.2	0.2	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	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.26	0.53	
16-Apr-05	0.4	0.5	0.5	A	0.5	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.32	0.51	
17-Apr-05	0.2	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.27		
18-Apr-05	0.2	A	0.2	0.2	0.3	0.4	0.8	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.27	0.83		
19-Apr-05	A	0.2	0.2	0.2	0.4	0.4	0.5	0.5	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	A	0.26	0.51		
20-Apr-05	0.2	0.2	0.2	0.2	0.2	0.7	1.4	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.3	A	0.2	0.33	1.44			
21-Apr-05	0.3	0.3	0.2	0.2	0.2	0.3	0.5	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.2	0.3	0.2	0.28	0.61			
22-Apr-05	0.3	0.3	0.3	0.3	0.5	0.6	0.8	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.3	0.3	0.3	0.31	0.76			
23-Apr-05	0.3	0.3	0.4	0.2	0.2	0.3	0.4	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	A	0.3	0.3	0.3	0.27	0.44			
24-Apr-05	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.26	0.41				
25-Apr-05	0.3	0.2	0.2	0.2	0.2	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	0.23	0.32			
26-Apr-05	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.27			
27-Apr-05	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.27			
28-Apr-05	0.2	0.2	0.2	0.2	0.3	0.2	0.5	0.6	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	0.23	0.65			
29-Apr-05	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.28		
30-Apr-05	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	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	0.2	0.2	0.21	0.27		



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

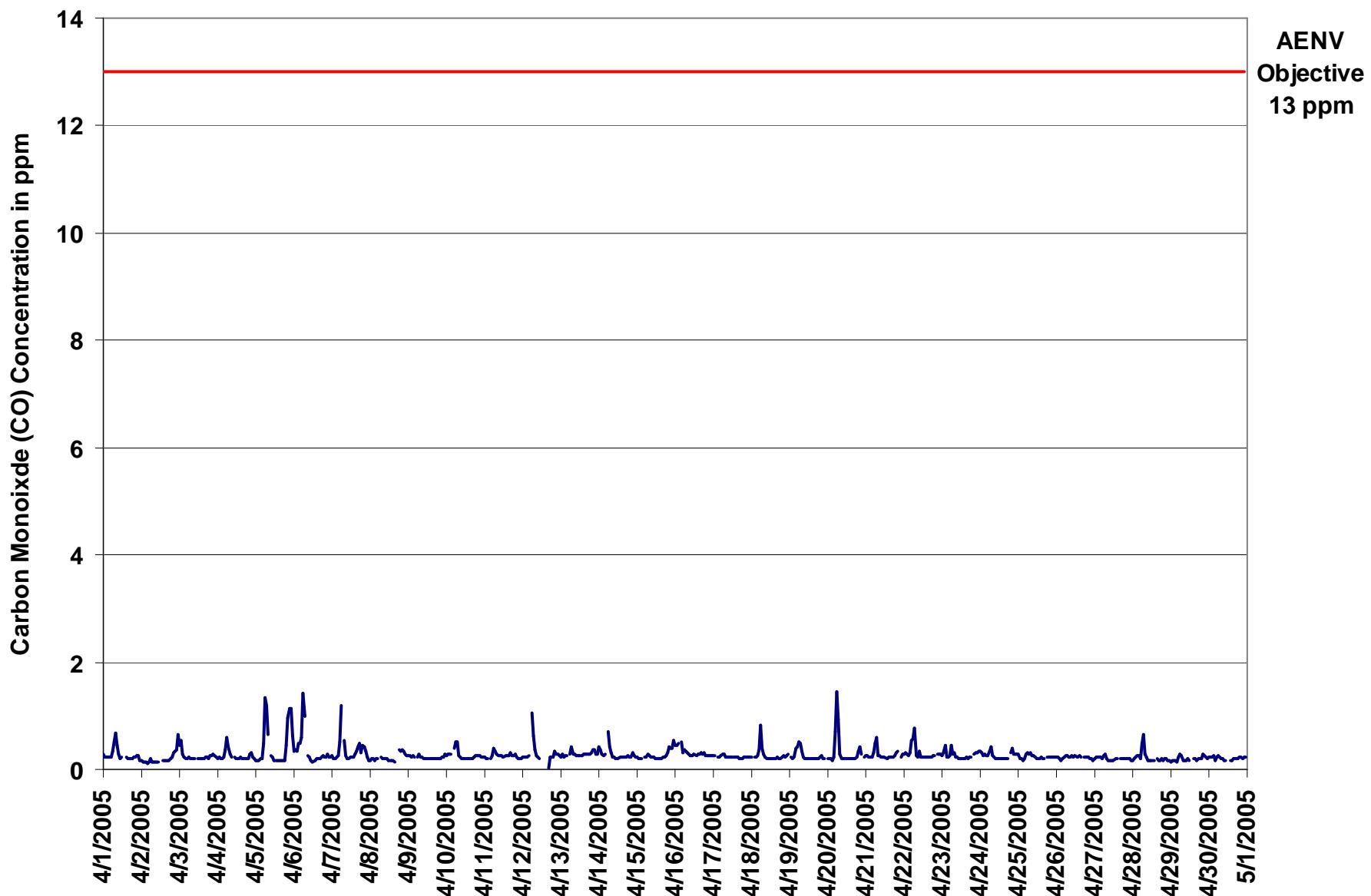


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

### Carbon Monoxide (CO)

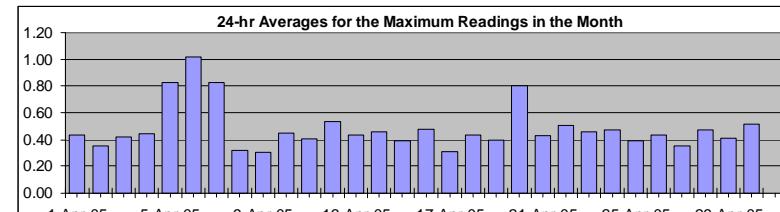
#### Summary

Maximum 1-hr Value:	10.9	ppm	6-Apr	6:00 7:00
Maximum 24-hr Value:	1.0	ppm	6-Apr	

AIC Time:	33 hrs	Operational Time:	683 hrs								
Calibration Time:	2 hrs	AMD Operational Uptime:	99.7%								
Percentile	99	95	75	50	25	5	1	Average			
	2.5	1.1	0.5	0.3	0.3	0.2	0.2	0.5	ppm		

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-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-Apr-05	0.6	0.3	0.3	0.3	0.5	0.3	0.5	1.1	0.9	0.6	0.5	0.3	0.4	A	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.43	1.10	
2-Apr-05	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	A	0.3	0.2	0.2	0.3	0.3	0.3	0.5	0.5	0.5	0.7	1.4	0.35	1.44	
3-Apr-05	0.7	1.1	0.5	0.4	0.3	0.4	0.5	0.3	0.6	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.42	1.09	
4-Apr-05	0.3	0.3	0.3	0.3	0.3	1.2	1.4	0.8	0.5	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.44	1.41	
5-Apr-05	0.2	0.3	0.3	0.3	0.3	1.1	2.9	1.7	1.2	A	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.8	1.6	2.3	1.9	1.3	0.83	2.92
6-Apr-05	0.4	0.7	0.4	0.6	0.6	1.3	10.9	1.5	A	0.4	1.7	0.2	0.3	0.3	0.4	0.3	0.3	0.4	0.6	0.4	0.4	0.5	0.4	0.3	1.02	10.90	
7-Apr-05	0.4	0.3	0.3	0.3	0.5	1.2	5.0	A	0.9	0.7	0.4	0.3	0.6	0.5	0.4	0.8	1.0	1.4	0.6	0.9	0.9	0.6	0.4	0.3	0.82	5.04	
8-Apr-05	0.3	0.4	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	P	P	0.5	0.4	0.4	0.5	0.3	0.3	0.32	0.54	
9-Apr-05	0.3	0.3	0.3	0.4	0.3	A	0.3	0.5	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.30	0.52	
10-Apr-05	0.4	0.4	0.4	0.4	A	0.6	2.1	1.1	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.45	2.15	
11-Apr-05	0.4	0.3	0.3	A	0.3	0.5	0.9	0.4	0.4	1.0	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.40	0.99	
12-Apr-05	0.3	0.3	0.3	0.3	0.4	A	3.3	1.0	0.5	0.3	0.3	0.3	C	C	A	A	0.1	0.3	0.3	0.3	0.7	0.4	0.4	0.3	0.53	3.26	
13-Apr-05	0.3	0.5	0.4	0.4	0.3	A	0.5	0.6	0.4	0.3	0.4	0.4	0.3	0.4	1.0	0.3	0.4	0.3	0.4	0.5	0.5	0.4	0.4	0.43	1.01		
14-Apr-05	0.6	0.5	0.4	0.3	0.4	A	2.4	0.9	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.46	2.37		
15-Apr-05	0.3	0.3	0.3	0.3	A	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	1.1	0.5	0.6	0.39	1.12	
16-Apr-05	0.6	0.6	0.7	A	0.8	0.4	0.7	0.5	0.4	0.4	0.3	0.3	0.8	0.4	0.3	0.8	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.48	0.81	
17-Apr-05	0.3	0.3	A	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.31	0.47	
18-Apr-05	0.3	A	0.3	0.4	0.4	0.9	2.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.43	2.43	
19-Apr-05	A	0.3	0.3	0.4	0.6	0.7	1.2	0.7	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	A	0.40	1.24	
20-Apr-05	0.3	0.3	0.2	0.2	0.6	1.5	7.0	2.7	0.4	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.6	0.5	0.4	A	0.3	0.80	7.05	
21-Apr-05	0.3	0.3	0.3	0.4	0.3	0.4	0.7	1.0	0.3	0.9	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.5	0.5	0.5	0.5	A	0.3	0.4	0.43	0.97	
22-Apr-05	0.4	0.5	0.4	0.6	0.6	0.9	1.2	1.6	0.4	0.4	0.8	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.50	1.63	
23-Apr-05	0.3	0.6	1.2	0.3	0.3	0.3	0.8	0.5	1.1	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.5	0.4	0.4	0.5	0.46	1.15	
24-Apr-05	0.5	0.5	0.5	0.3	0.3	0.3	0.6	0.7	0.3	0.3	0.6	0.4	0.3	0.3	0.6	0.3	0.4	0.4	0.3	A	0.7	0.8	0.4	0.4	1.0	0.47	1.01
25-Apr-05	0.5	0.3	0.5	0.2	0.3	0.6	0.6	0.4	0.6	0.3	0.3	0.6	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.39	0.71	
26-Apr-05	0.8	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.9	0.4	0.7	0.4	1.0	0.4	0.6	0.3	A	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.43	1.05	
27-Apr-05	0.2	0.3	0.4	0.4	0.3	1.0	0.6	0.4	0.2	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.36	0.98	
28-Apr-05	0.2	0.5	0.3	0.5	0.4	0.3	3.1	1.0	0.3	0.3	0.3	0.3	0.2	0.3	A	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.47	3.09	
29-Apr-05	0.2	0.2	0.2	0.3	0.2	0.5	1.8	0.3	0.2	0.3	0.6	0.3	0.3	A	0.4	0.4	0.3	0.4	0.4	0.3	0.5	0.4	0.3	0.3	0.41	1.83	
30-Apr-05	0.3	0.6	0.5	1.2	0.3	1.0	1.1	0.8	0.5	0.6	0.4	0.4	A	0.3	0.7	0.3	0.3	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.52	1.24	



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

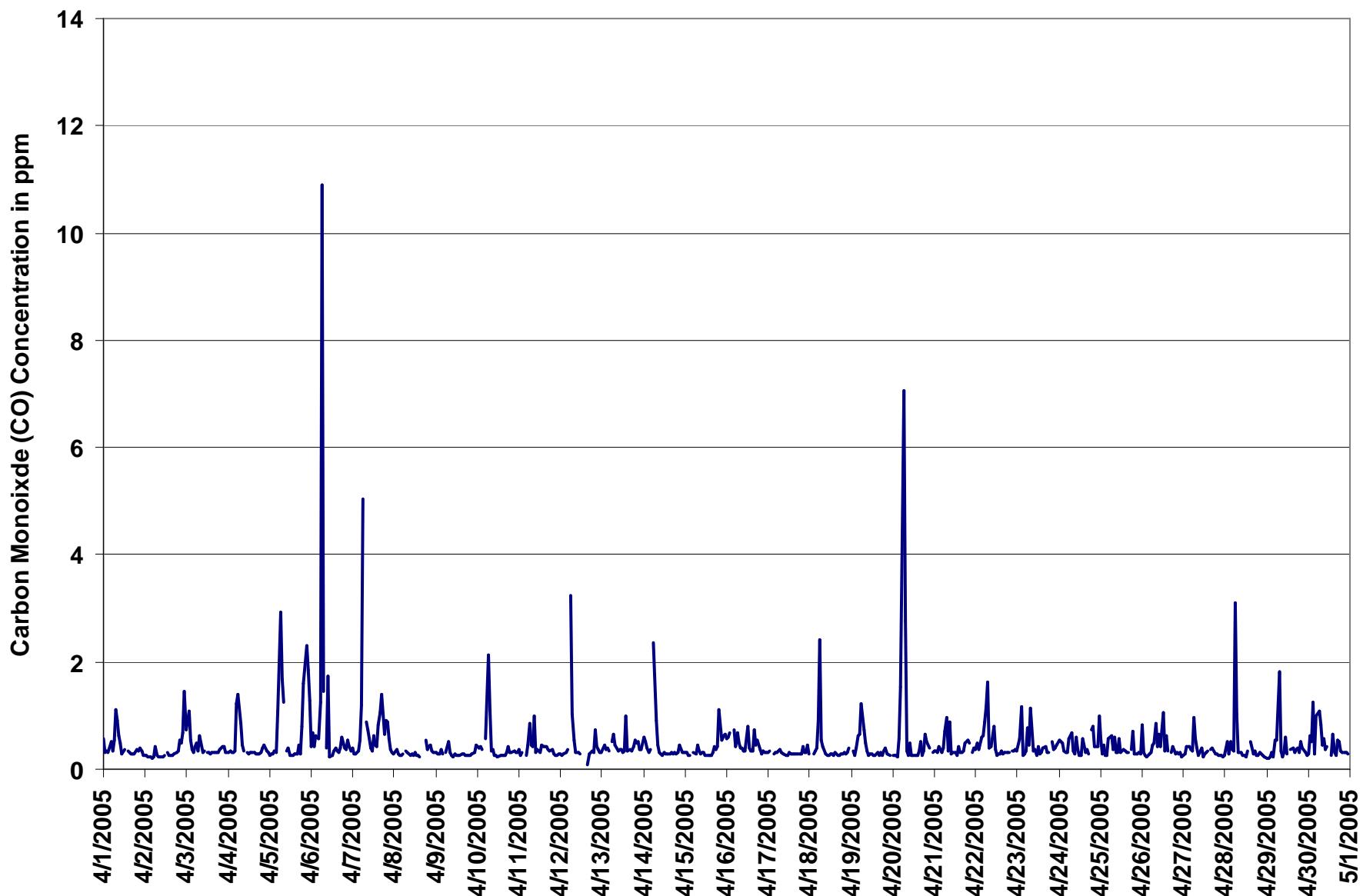
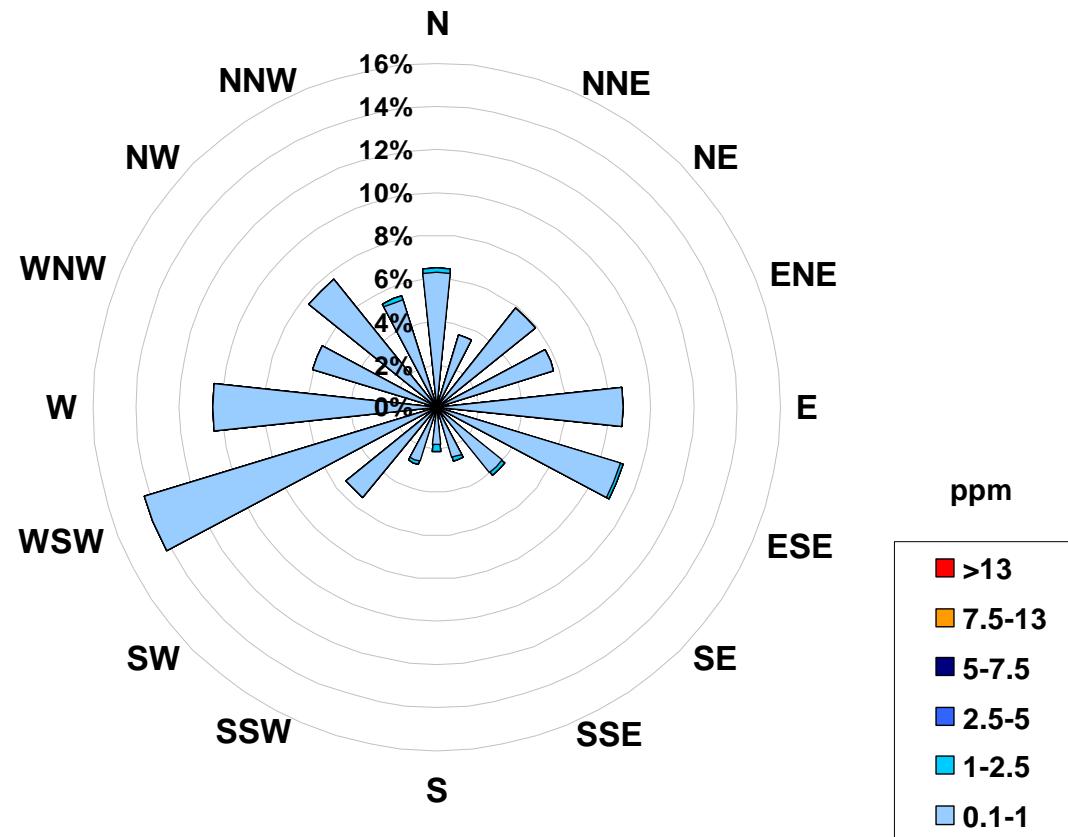


Figure 10. PASZA - Henry Pirker Carbon Monoxide 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Carbon Monoxide Average Concentration  
Occurrences at the Henry Pirker Site for April 2005**



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

Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	<	1	675
1	to	2.5	8
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
>	13		0
Total Non-Zero Values			683

## PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station:	<b>EIGHT HOUR RUNNING AVERAGE TABLE</b>												<b>Carbon Monoxide (CO)</b>																							
Station Owner:	Henry Pirker PASZA																																			
Monitoring Dates:	<u>April 1, 2005</u> to <u>May 1, 2005</u>																																			
Guideline Limit:	Alberta Environment:						8-hr	5	ppm																											
Summary																																				
Number of 8-hr Exceedances:	0																																			
Maximum 8-hr Average:	0.7 ppm 6-Apr 3:00 4:00																																			
Percentile	99	95	75	50	25	5	1	0.6	0.4	0.3	0.2	0.2	0.2	0.2																						
Day	<b>Mountain Standard Time</b>																																			
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 Maximum										
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	0:00											
1-Apr-05	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.41									
2-Apr-05	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31									
3-Apr-05	0.3	0.4	0.4	0.4	0.4	0.4	0.4	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	0.40									
4-Apr-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34									
5-Apr-05	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.62									
6-Apr-05	0.6	0.6	0.7	0.7	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.67									
7-Apr-05	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.45									
8-Apr-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	N	N	N	N	N	N	N	N	N	0.32									
9-Apr-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	0.2	0.31									
10-Apr-05	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.36									
11-Apr-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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.28									
12-Apr-05	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	N	N	N	N	N	N	N	N	N	N	N	N	0.43									
13-Apr-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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.31									
14-Apr-05	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.39									
15-Apr-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	0.3	0.3	0.3	0.3	0.3	0.35									
16-Apr-05	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.46									
17-Apr-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	0.2	0.2	0.2	0.27									
18-Apr-05	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.37									
19-Apr-05	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	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	0.35									
20-Apr-05	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.52									
21-Apr-05	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.33									
22-Apr-05	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.41									
23-Apr-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31									
24-Apr-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30									
25-Apr-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.29									
26-Apr-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	0.2	0.24									
27-Apr-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	0.2	0.23									
28-Apr-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	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									
29-Apr-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	0.2	0.21									
30-Apr-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	0.2	0.24									
	Hourly Max	0.62	0.65	0.67	0.67	0.61	0.54	0.58	0.62	0.67	0.65	0.63	0.62	0.62	0.57	0.41	0.32	0.28	0.30	0.31	0.34	0.37	0.43	0.54	0.60	0.00										

## PASZA - Henry Pirker Total Hydrocarbons Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

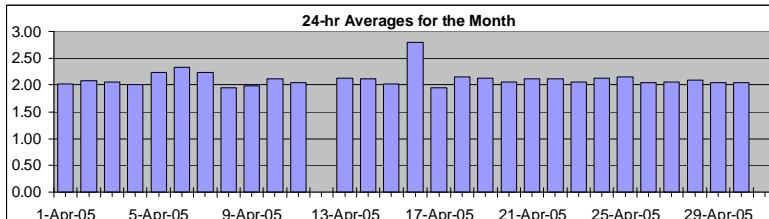
Guideline Limit: Alberta Environment: 1-hr na ppm 24-hr na ppm  
Summary

Maximum 1-hr Average:	7.6	ppm	16-Apr	12:00 13:00
Maximum 24-hr Value:	2.8	ppm	16-Apr	

AIC Time:	34 hrs	Operational Time:	680 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%						
Percentile	99	95	75	50	25	5	1	Average	2.1 ppm
	3.1	2.5	2.1	2.0	2.0	1.9	1.9		

### HOURLY AVERAGE TABLE

### Total Hydrocarbons (THC)



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum		
1-Apr-05	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.1	2.0	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.33
2-Apr-05	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	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.5	2.6	2.08	2.60	
3-Apr-05	2.5	2.6	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	A	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.60	
4-Apr-05	2.0	2.0	2.0	1.9	1.9	2.0	2.2	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.01	2.18		
5-Apr-05	2.1	2.1	2.1	2.1	2.2	2.4	2.9	2.7	2.3	A	2.1	2.1	2.0	2.0	1.9	2.0	1.9	2.0	1.9	2.1	2.6	2.7	3.0	2.6	2.24	2.99			
6-Apr-05	2.5	2.6	2.7	3.0	2.9	3.1	3.4	3.4	A	2.2	2.2	2.0	2.1	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.34	3.42			
7-Apr-05	2.6	2.3	2.5	2.7	2.6	2.9	3.1	A	2.4	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.0	1.8	2.24	3.10			
8-Apr-05	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	P	P	P	2.2	2.2	2.2	2.2	2.1	2.1	1.95	2.18			
9-Apr-05	2.1	2.1	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	1.99	2.09			
10-Apr-05	2.2	2.2	2.1	2.2	A	2.4	2.5	2.5	2.3	2.1	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	2.11	2.51			
11-Apr-05	2.0	2.0	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.13		
12-Apr-05	2.0	2.0	2.1	2.1	2.2	A	2.5	2.3	2.2	2.2	2.1	2.0	C	A	C	C	A	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	N	2.49		
13-Apr-05	2.1	2.2	2.2	2.4	2.4	A	2.3	2.4	2.3	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.13	2.44		
14-Apr-05	2.4	2.3	2.3	2.2	2.3	A	2.6	2.2	2.3	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.12	2.60			
15-Apr-05	2.0	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.03	2.32			
16-Apr-05	2.6	2.4	2.5	A	2.6	2.2	2.1	2.0	2.0	2.0	2.8	6.1	7.6	4.7	3.6	3.3	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.80	7.64		
17-Apr-05	1.9	2.0	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	2.0	2.0	2.0	1.96	2.11			
18-Apr-05	2.1	A	2.2	2.2	2.3	2.3	2.5	2.3	2.3	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.15	2.48			
19-Apr-05	A	2.3	2.2	2.3	2.5	2.5	2.4	2.4	2.4	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	2.14	2.47			
20-Apr-05	2.0	2.0	2.0	2.0	2.1	2.4	2.7	2.5	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	A	2.0	2.06	2.74		
21-Apr-05	2.1	2.3	2.3	2.2	2.2	2.3	2.3	2.4	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.12	2.39		
22-Apr-05	2.2	2.3	2.3	2.3	2.6	2.5	2.6	2.1	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.11	2.65		
23-Apr-05	2.0	2.2	2.3	2.2	2.3	2.3	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.06	2.34		
24-Apr-05	2.2	2.3	2.2	2.3	2.3	2.2	2.5	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.12	2.53			
25-Apr-05	2.2	2.1	2.2	2.3	2.4	2.5	2.4	2.5	2.4	2.4	2.2	2.0	2.0	2.0	2.0	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.1	2.16	2.51		
26-Apr-05	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.05	2.13		
27-Apr-05	2.1	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.31			
28-Apr-05	2.1	2.1	2.3	2.3	2.3	2.2	2.4	2.3	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.09	2.39			
29-Apr-05	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.12		
30-Apr-05	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.05	2.17		

Hourly Avg	2.15	2.17	2.18	2.20	2.23	2.27	2.36	2.24	2.14	2.06	2.05	2.14	2.19	2.08	2.02	2.01	1.97	1.96	1.98	2.00	2.05	2.08	2.10	2.11
Hourly Max	2.61	2.60	2.72	2.96	2.93	3.06	3.42	2.90	2.44	2.39	2.79	6.11	7.64	4.73	3.57	3.30	2.14	2.07	2.13	2.16	2.55	2.66	2.99	2.60

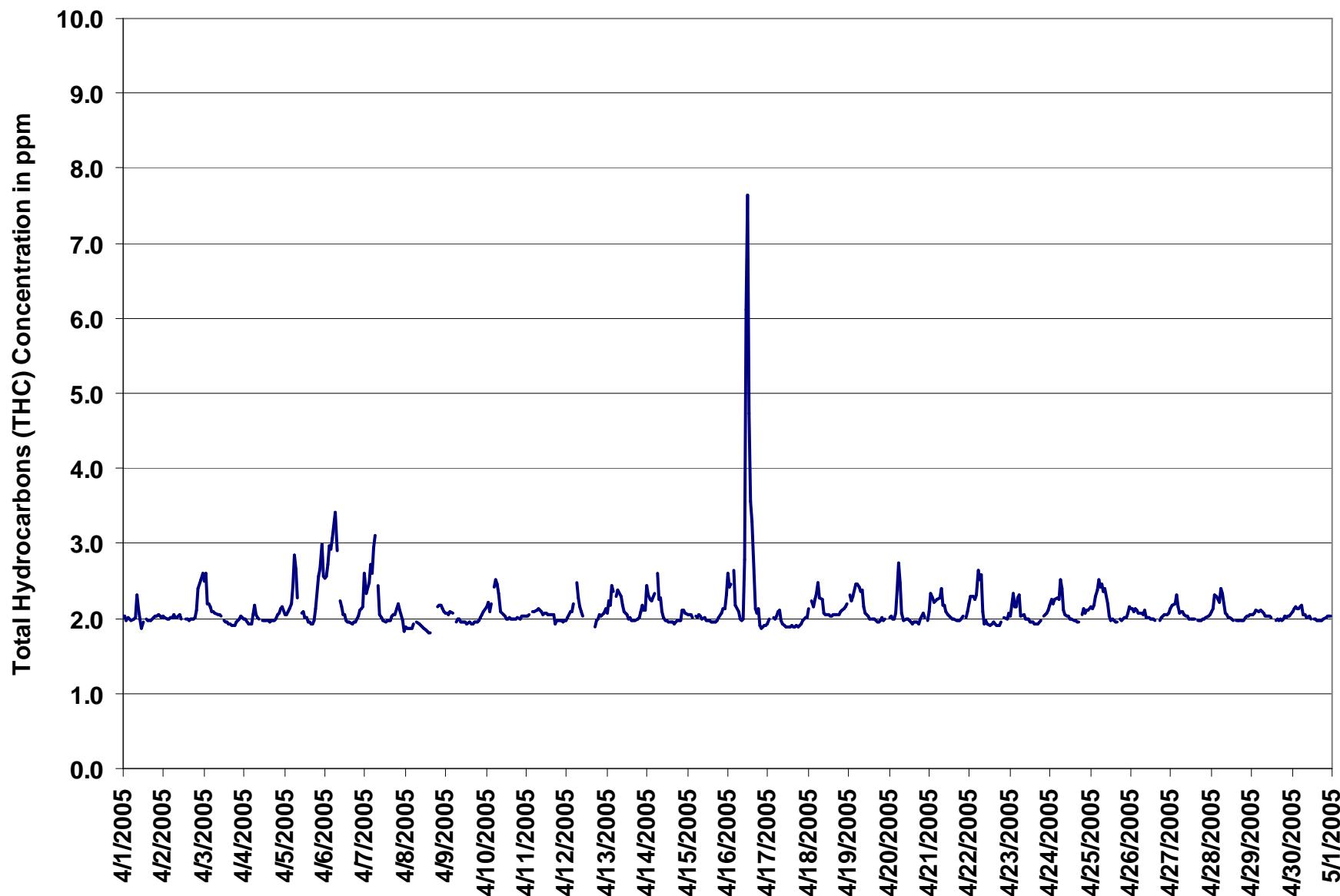


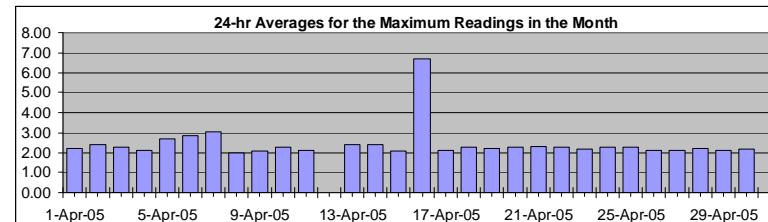
Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

### Total Hydrocarbons (THC)



#### Summary

Maximum 1-hr Value:	25.0	ppm	16-Apr	12:00 13:00
Maximum 24-hr Value:	6.7	ppm	16-Apr	

AIC Time:	34 hrs	Operational Time:	680 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%					
Percentile	99 5.5	95 3.4	75 2.4	50 2.1	25 2.0	5 2.0	1 1.9	Average 2.4 ppm

#### Status Flag Characters

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Apr-05	2.1	2.4	2.1	2.7	2.1	2.0	2.4	2.3	3.2	2.7	2.3	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.21	3.23
2-Apr-05	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.2	2.4	2.0	A	2.1	2.0	2.0	2.0	2.0	2.0	2.2	4.5	5.0	4.2	2.39	4.96		
3-Apr-05	3.7	3.2	2.4	2.4	2.7	2.1	2.1	2.1	2.1	2.1	A	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.5	2.4	2.27	3.72	
4-Apr-05	2.0	2.0	2.0	2.0	2.0	2.3	2.7	2.3	2.1	2.0	A	2.3	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.5	2.12	2.73		
5-Apr-05	2.1	2.1	2.5	2.3	2.9	3.1	4.5	3.4	2.6	A	2.2	2.2	2.2	2.4	2.0	2.0	2.0	2.4	2.4	3.9	3.5	4.1	3.6	2.71	4.46		
6-Apr-05	3.3	3.3	3.2	4.1	3.6	5.5	5.0	4.3	A	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.9	2.6	2.7	2.85	5.47		
7-Apr-05	5.8	4.3	4.5	4.3	4.5	4.1	4.3	A	2.6	2.1	2.3	2.1	2.0	2.1	2.1	2.1	2.2	2.3	2.4	4.1	3.4	2.6	2.1	1.9	3.05	5.77	
8-Apr-05	2.1	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	P	P	P	2.2	2.2	2.2	2.2	2.1	1.99	2.24	
9-Apr-05	2.1	2.1	2.3	2.3	2.1	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.05	2.33	
10-Apr-05	2.5	2.5	2.1	3.0	A	2.8	3.0	3.0	2.5	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.28	3.03	
11-Apr-05	2.1	2.1	2.1	A	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.11	2.30	
12-Apr-05	2.0	2.2	2.3	2.3	2.3	A	3.1	2.5	2.3	2.2	2.1	C	A	A	C	C	A	2.4	2.1	2.0	2.2	2.1	2.3	2.4	N	3.08	
13-Apr-05	2.5	3.0	2.7	4.5	3.1	A	2.5	2.4	2.4	2.2	2.1	2.2	2.1	2.0	2.2	2.0	2.0	2.0	2.1	2.2	2.3	2.2	2.4	2.4	2.40	4.49	
14-Apr-05	3.2	2.6	3.3	2.7	2.7	A	3.2	2.5	2.6	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.1	2.4	3.1	2.8	2.42	3.33	
15-Apr-05	2.2	2.1	2.1	2.0	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.5	2.09	2.46		
16-Apr-05	2.9	2.9	2.7	A	3.4	2.5	2.2	2.1	2.0	2.3	9.3	24.7	25.0	23.1	16.4	8.9	5.5	3.2	3.8	2.5	1.9	2.0	2.1	2.1	6.68	25.02	
17-Apr-05	2.0	2.3	A	2.2	2.1	2.1	2.6	2.6	2.3	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.2	2.1	2.4	2.11	2.65		
18-Apr-05	2.5	A	2.8	2.5	2.5	2.6	2.8	2.4	2.7	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.29	2.81		
19-Apr-05	A	2.5	2.4	2.5	2.6	2.6	2.6	2.5	2.7	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.23	2.70	
20-Apr-05	2.0	2.1	2.0	2.0	2.2	2.7	4.2	3.3	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.3	2.1	2.1	A	2.0	2.26	4.19	
21-Apr-05	2.6	2.7	2.5	3.0	2.6	2.6	2.4	2.6	2.3	2.3	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.30	2.98	
22-Apr-05	2.4	2.6	2.5	2.6	2.7	3.0	3.1	3.0	2.3	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	A	2.1	2.2	2.28	3.05	
23-Apr-05	2.1	2.4	2.5	2.2	2.2	2.5	2.5	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.2	A	2.2	2.1	2.1	2.1	2.2	2.16	2.54	
24-Apr-05	2.4	2.5	2.6	2.7	2.4	2.5	2.8	2.7	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.2	2.2	2.2	2.1	2.2	2.27	2.82	
25-Apr-05	2.3	2.3	2.3	2.4	2.4	2.6	2.6	2.5	2.5	3.1	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.3	2.1	2.0	2.1	2.28	3.14	
26-Apr-05	2.3	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.4	2.1	2.1	2.1	2.2	2.0	2.2	2.0	2.1	2.0	A	2.0	2.1	2.1	2.1	2.1	2.13	2.43	
27-Apr-05	2.2	2.2	2.4	2.5	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.2	2.2	A	2.0	2.0	2.0	2.0	2.0	2.1	2.14	2.52		
28-Apr-05	2.3	2.2	2.8	2.5	2.4	2.3	2.7	2.6	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.20	2.78		
29-Apr-05	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.6	2.1	2.1	2.1	2.2	2.2	A	2.0	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.11	2.59	
30-Apr-05	2.4	2.3	2.2	2.3	2.2	2.3	2.3	2.2	2.4	2.1	2.7	2.0	A	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.17	2.72	
	Hourly Avg	2.49	2.44	2.47	2.58	2.52	2.57	2.78	2.51	2.31	2.18	2.39	2.88	2.90	2.83	2.55	2.26	2.15	2.08	2.13	2.17	2.20	2.30	2.36	2.37		
	Hourly Max	5.77	4.31	4.53	4.49	4.47	5.47	4.97	4.26	3.23	3.14	9.32	24.71	25.02	23.08	16.45	8.90	5.46	3.23	3.83	4.07	3.92	4.45	4.96	4.16	N	0.00

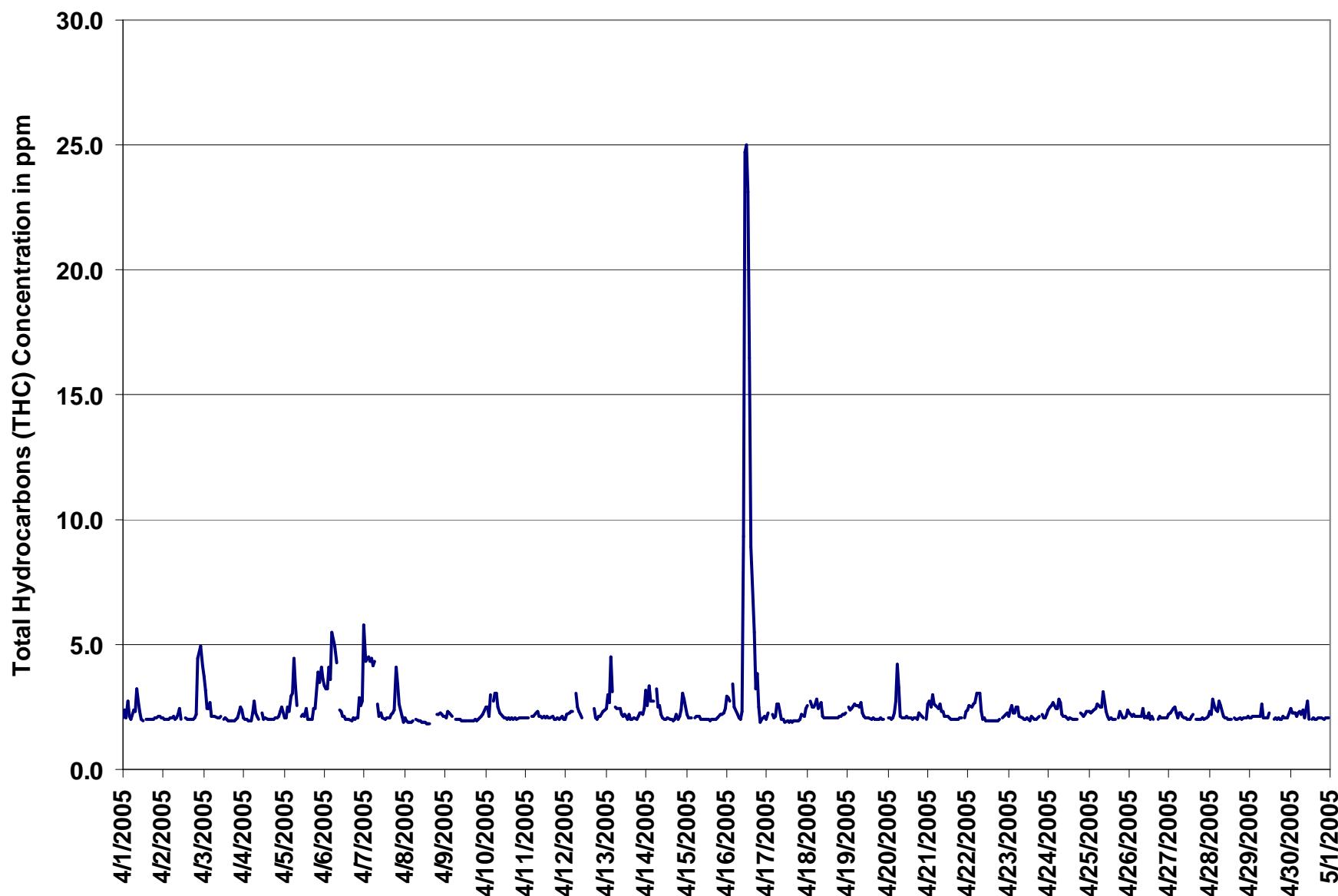
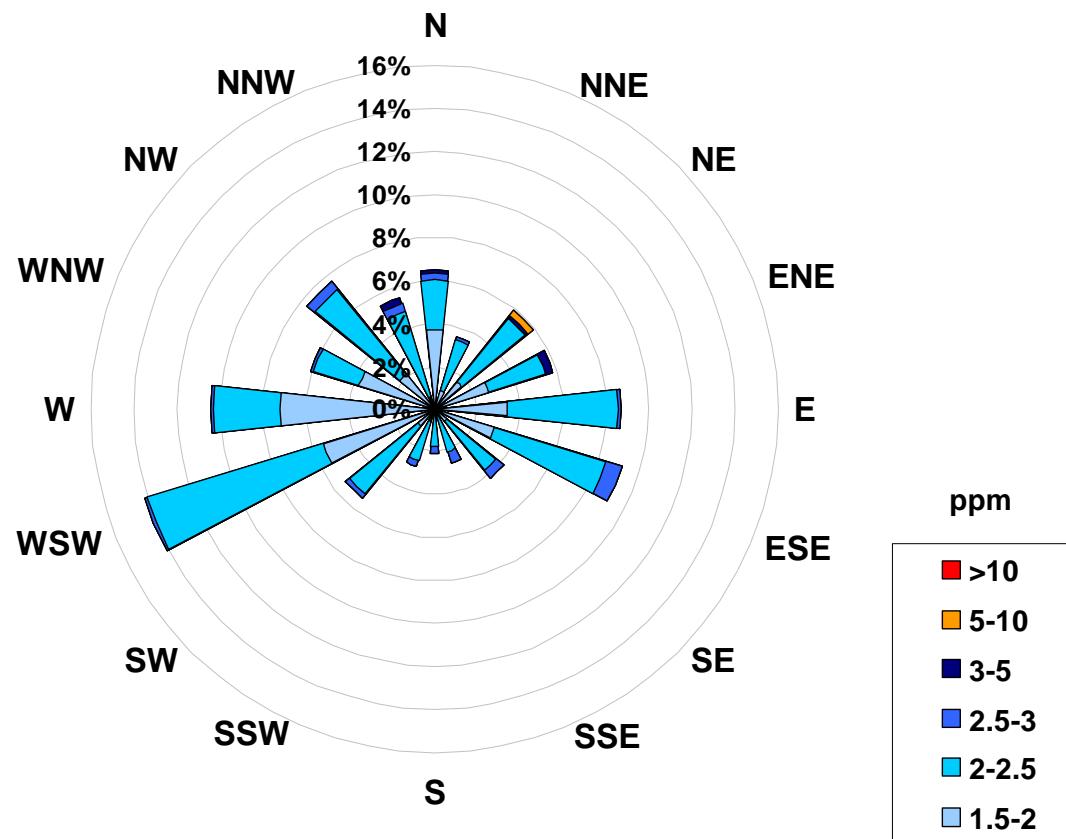


Figure 12. PASZA - Henry Pirker Total Hydrocarbons 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Total Hydrocarbons Average  
Concentration Occurrences at the Henry Pirker Site for April 2005**



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

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	251
2	to	2.5	391
2.5	to	3	30
3	to	5	6
5	to	10	2
>	10		0
Total Non-Zero Values			680

## PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

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

Maximum 1-hr Average:	1.8	ppb	18-Apr	8:00 9:00
Maximum 24-hr Value:	1.2	ppb	18-Apr	

AIC Time:	28 hrs	Operational Time:	573 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	83.8%						
Percentile	99	95	75	50	25	5	1	Average	0.3 ppb
	1.4	0.9	0.4	0.2	0.1	0.0	0.0		

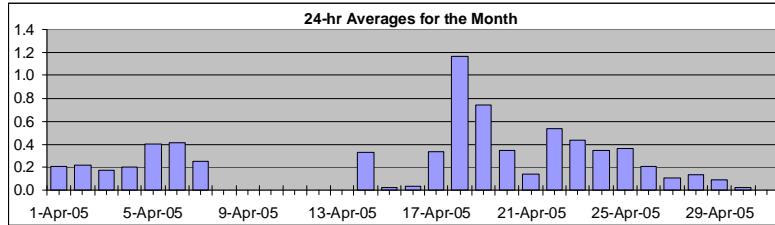
### Day Mountain Standard Time

	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Apr-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
2-Apr-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
3-Apr-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
4-Apr-05	0:00 1:00	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
5-Apr-05	0:00 1:00	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.4	0.8	
6-Apr-05	0:00 1:00	0	0	0	0	0	0	0	1	1	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9	
7-Apr-05	0:00 1:00	0	1	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
8-Apr-05	0:00 1:00	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	P	P	P	S	S	S	S	S	S	N	0.3	
9-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
10-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
11-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
12-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
13-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	M	C	C	A	A	0	0	0	0	0	0	N	0.4		
14-Apr-05	1	1	1	0	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
15-Apr-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	0.4	
16-Apr-05	1	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	0.6	
17-Apr-05	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0.3	0.8	
18-Apr-05	0	A	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.8	
19-Apr-05	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	1.2	
20-Apr-05	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.8	
21-Apr-05	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.4	
22-Apr-05	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.5	1.2	
23-Apr-05	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.9	
24-Apr-05	1	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.7	
25-Apr-05	0	0	0	0	0	0	1	1	0	1	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.6	
26-Apr-05	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.6	
27-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3		
28-Apr-05	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	D	0	0	0	0	0	0.1	0.6		
29-Apr-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	0.1	0.3		
30-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.2	

Hourly Avg	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.4	0.4	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	0.2
Hourly Max	0.9	1.2	1.2	1.1	0.9	1.0	1.1	1.6	1.8	1.7	1.4	1.4	1.4	1.3	1.4	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	0.9	0.6	

### HOURLY AVERAGE TABLE

### Total Reduced Sulphur (TRS)



### Status Flag Characters

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

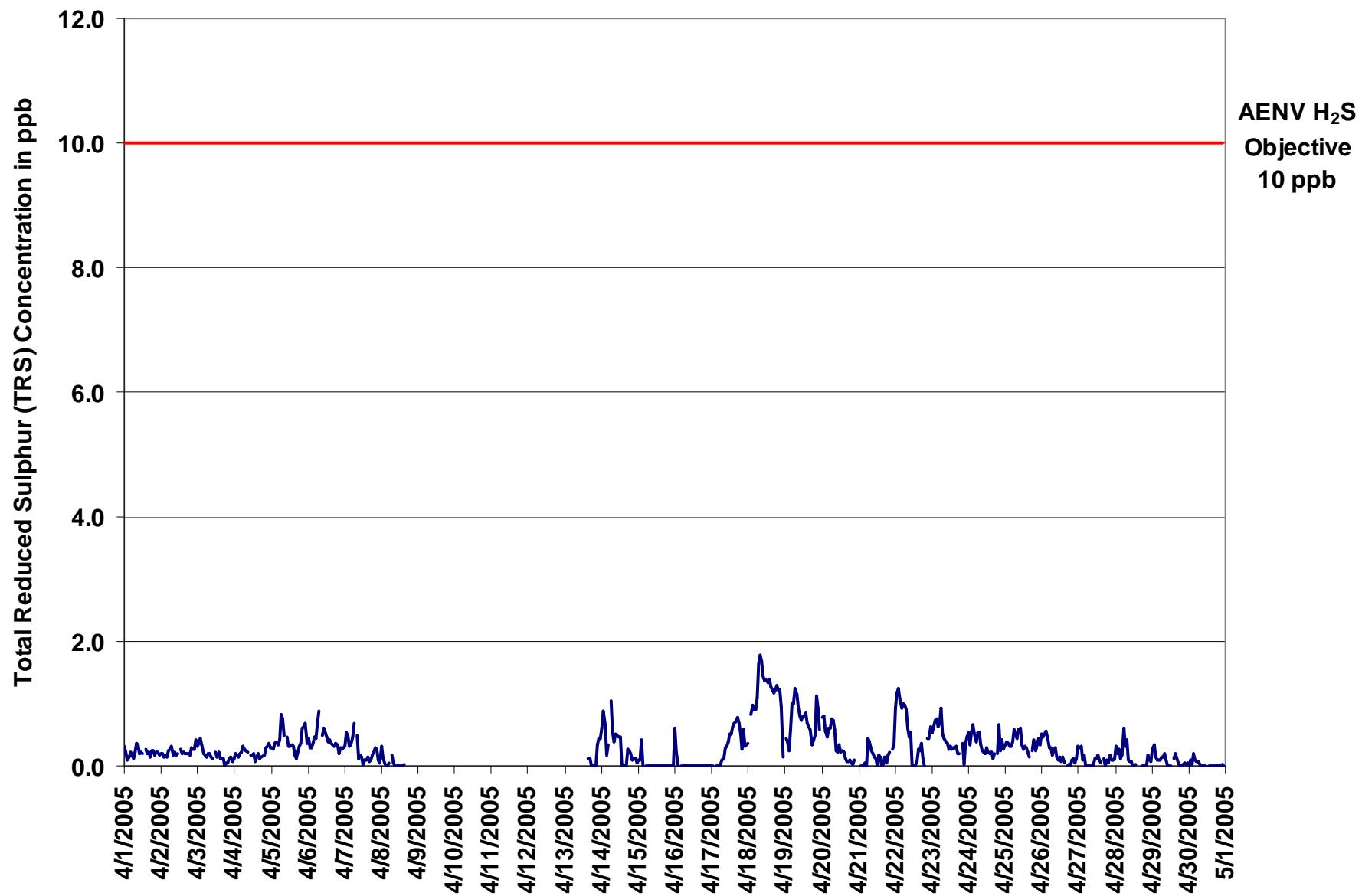


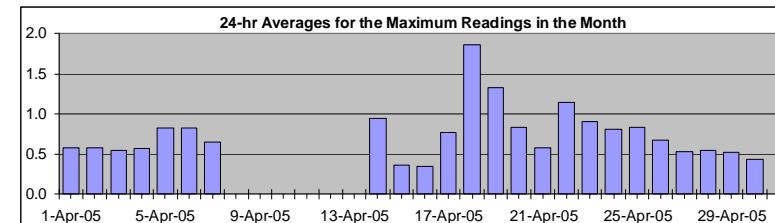
Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)



### Summary

Maximum 1-hr Value:	3.1	ppb	18-Apr	7:00 8:00
Maximum 24-hr Value:	1.9	ppb	18-Apr	

AIC Time:	28 hrs	Operational Time:	573 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	83.8%
Percentile	99 95 75 50 25 5 1	Average	
	2.1 1.6 0.9 0.6 0.5 0.3 0.0	0.7 ppb	

### Day Mountain Standard Time

	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	1	1	0	1	1	1	0	1	1	1	0	0	1	A	1	1	1	0	1	1	1	1	1	1	1	0.6	0.8
2-Apr-05	0	1	1	1	1	1	1	1	0	1	0	0	0	A	1	1	0	1	1	1	1	1	1	1	1	0.6	0.7
3-Apr-05	1	1	1	1	1	1	0	0	1	1	0	0	A	0	0	1	0	0	1	0	0	0	1	1	0.5	0.8	
4-Apr-05	0	1	1	0	1	1	1	1	1	1	1	A	0	1	1	0	0	1	1	0	1	1	1	1	0.6	0.8	
5-Apr-05	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0.8	1.2	
6-Apr-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	0.8	1.3	
7-Apr-05	1	1	1	1	1	1	1	1	A	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2	
8-Apr-05	1	1	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	P	P	S	S	S	S	S	N	0.8	
9-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
10-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
11-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
12-Apr-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0		
13-Apr-05	S	S	S	S	S	S	S	S	S	S	M	C	C	A	A	1	1	0	0	0	0	1	1	1	1.2		
14-Apr-05	1	2	1	1	2	A	2	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	0.9	1.9	
15-Apr-05	1	1	1	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3	
16-Apr-05	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4	
17-Apr-05	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4	
18-Apr-05	1	A	2	2	2	1	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.9	3.1	
19-Apr-05	A	1	1	1	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1.3	2.3	
20-Apr-05	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	A	0.8	1.6	
21-Apr-05	D	0	0	0	1	1	1	1	1	1	1	0	1	0	1	1	0	1	1	1	1	A	1	1	0.6	0.9	
22-Apr-05	1	2	2	1	1	2	2	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1.1	2.3	
23-Apr-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	1.5	
24-Apr-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	0.8	1.2	
25-Apr-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	0.8	1.2	
26-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	A	0	0	1	1	0.7	
27-Apr-05	1	1	1	1	1	1	0	1	0	1	0	1	1	1	1	1	1	1	A	1	0	0	0	0	0.5	0.9	
28-Apr-05	1	0	1	1	1	1	1	1	1	0	0	1	0	1	0	A	0	D	0	0	0	1	1	1	0.5	1.0	
29-Apr-05	1	1	1	0	0	1	0	1	1	1	0	0	1	A	1	1	1	0	0	0	0	0	0	0	0.5	0.8	
30-Apr-05	1	1	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	1	0	0	0.4	0.6	
	Hourly Avg	0.8	0.8	0.8	0.7	0.8	0.8	1.0	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.8	0.8	0.7	0.7
	Hourly Max	1.4	1.8	1.7	1.6	1.8	1.8	2.3	3.1	2.6	2.3	1.8	1.8	1.8	1.8	1.9	1.9	1.7	1.8	1.7	1.9	2.3	2.3	2.0	1.2		

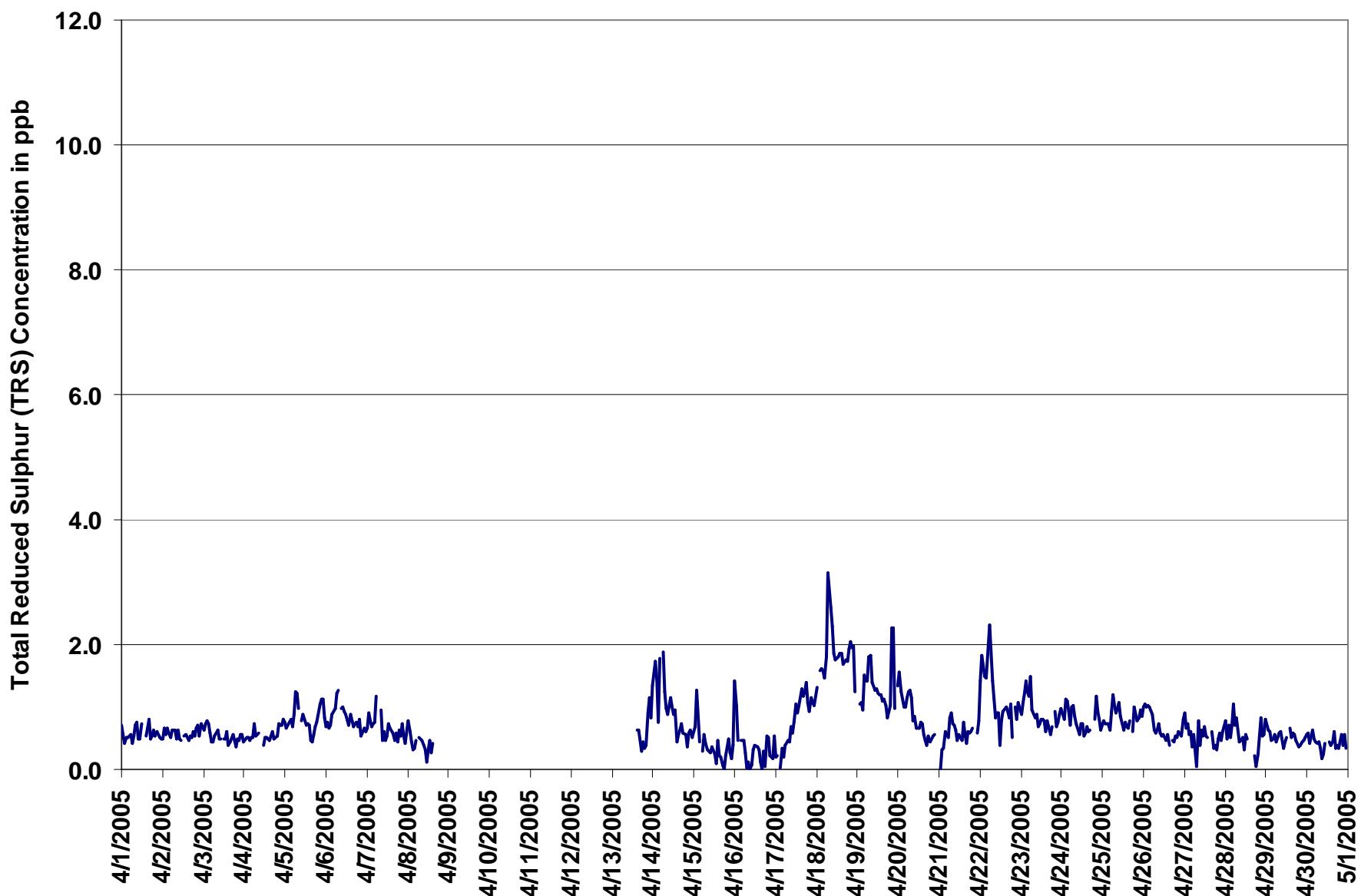
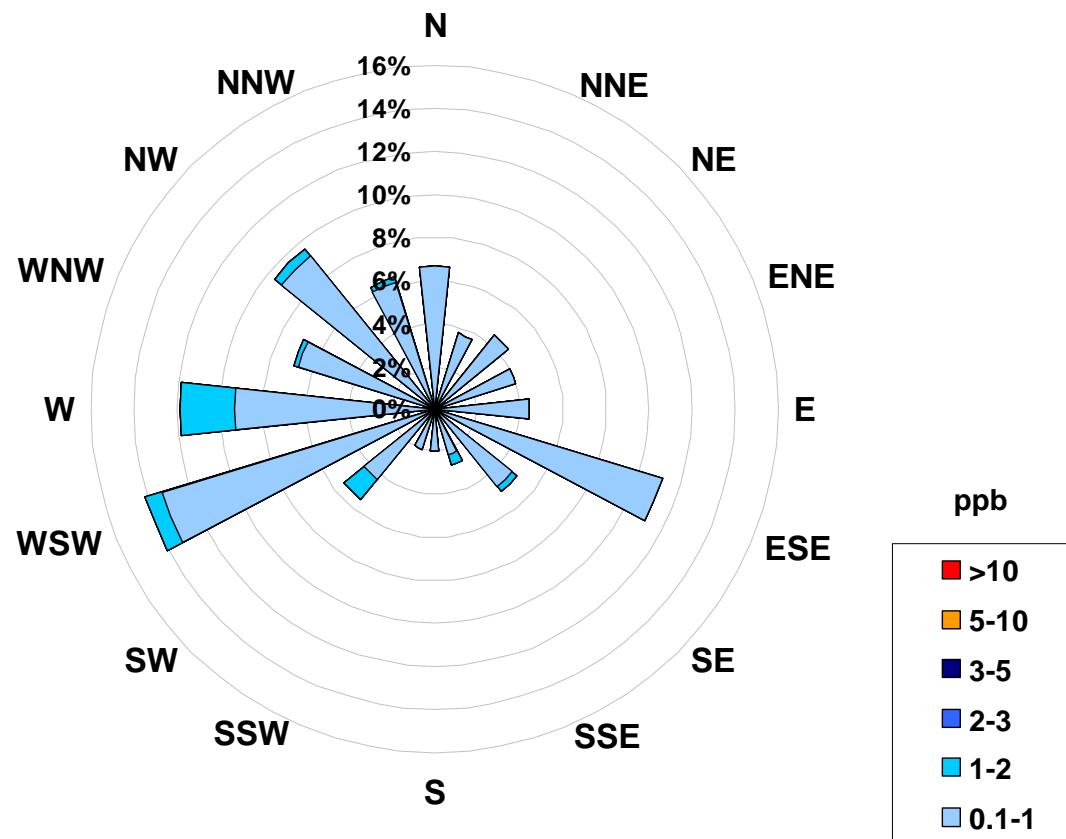


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Total Reduced Sulphur Average  
Concentration Occurrences at the Henry Pirker Site for April 2005**



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

Frequency Distribution of TRS in ppb			Frequency (hrs)
Range			
0.1	<	1	548
1	to	2	25
2	to	3	0
3	to	5	0
5	to	10	0
>	10		0
Total Non-Zero Values			573

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 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:	31.8 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	9.4 $\mu\text{g}/\text{m}^3$
	26-Apr 0:00 1:00
	22-Apr

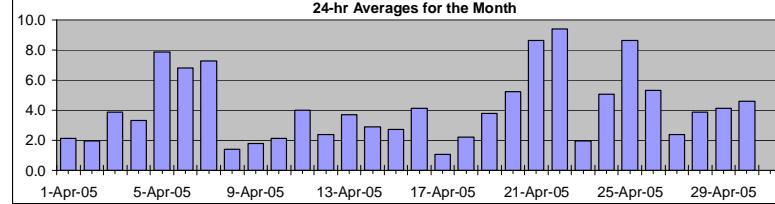
AIC Time:	0 hrs	Operational Time:	716 hrs						
Calibration Time:	1 hrs	AMD Operational Uptime:	99.6%						
Percentile	99 23.3	95 13.0	75 5.3	50 2.8	25 1.2	5 0.0	1 0.0	Average 4.2 $\mu\text{g}/\text{m}^3$	Geomean 3.6 $\mu\text{g}/\text{m}^3$

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 0:00		
1-Apr-05	2	0	0	0	0	0	0	1	7	8	5	2	8	0	0	0	3	6	0	0	1	2	2	2	2.1	8.2
2-Apr-05	1	0	0	0	1	1	0	1	0	0	1	1	0	2	0	0	0	1	2	3	6	7	6	13	1.9	13.1
3-Apr-05	9	7	5	2	1	0	1	1	1	1	1	0	1	2	3	3	4	6	5	7	7	7	9	10	3.9	10.0
4-Apr-05	5	6	5	3	3	5	6	5	4	2	2	2	1	1	2	1	2	2	4	4	5	5	3	3	3.3	6.0
5-Apr-05	1	1	2	2	2	6	16	11	8	2	6	3	0	0	2	1	2	2	3	13	21	31	30	23	7.9	31.4
6-Apr-05	13	12	9	12	11	13	19	21	12	4	6	1	0	1	0	2	3	3	5	4	2	3	3	4	6.8	20.8
7-Apr-05	4	3	2	1	2	5	11	19	12	3	3	2	3	6	6	9	10	14	15	11	12	11	7	2	7.3	18.8
8-Apr-05	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	P	P	P	9	6	5	3	3	1.4	8.7
9-Apr-05	1	1	1	2	3	4	4	0	1	0	1	1	1	2	1	2	2	2	2	3	3	3	1	3	1.8	4.2
10-Apr-05	3	4	1	2	3	5	5	6	2	0	0	0	0	0	0	0	0	0	2	5	3	3	3	2	2.1	5.9
11-Apr-05	2	0	1	2	2	3	4	6	6	4	5	4	4	5	5	6	7	7	6	7	7	2	0	1	4.0	7.4
12-Apr-05	0	1	0	2	1	1	6	8	2	2	0	0	0	0	0	1	C	3	8	4	5	5	4	1	2.4	8.0
13-Apr-05	2	2	2	1	1	3	3	13	5	3	3	4	5	4	2	2	3	2	2	6	5	6	4	3	3.7	13.4
14-Apr-05	7	7	4	3	4	4	9	4	4	2	0	0	0	4	0	1	0	0	3	3	2	4	2	1	2.9	8.9
15-Apr-05	0	0	1	0	0	1	1	2	3	2	1	0	0	0	0	1	2	1	2	6	12	10	7	12	2.7	12.3
16-Apr-05	14	11	12	11	9	0	0	1	1	1	4	3	2	1	1	2	2	2	4	13	1	2	1	0	4.1	14.0
17-Apr-05	0	0	0	0	1	0	2	2	0	0	0	0	1	0	1	2	1	0	1	3	4	2	1	2	1.0	4.1
18-Apr-05	2	1	1	1	2	3	8	3	5	0	0	0	0	0	1	1	2	3	5	6	4	3	3	2.2	7.8	
19-Apr-05	3	5	3	5	5	5	7	7	11	4	3	3	3	3	3	4	3	2	2	4	2	1	1	3.8	11.3	
20-Apr-05	1	1	1	2	3	7	23	22	6	1	0	0	0	1	2	2	3	4	4	10	17	9	4	3	5.2	23.1
21-Apr-05	7	13	7	6	7	8	20	30	6	9	7	5	4	4	5	5	3	5	7	9	15	7	7	10	8.6	29.6
22-Apr-05	21	19	16	20	26	23	29	32	7	6	10	2	0	0	1	1	0	1	2	1	3	2	2	1	9.4	31.5
23-Apr-05	1	0	3	0	0	4	8	0	2	0	0	0	0	0	0	1	0	0	3	5	7	5	8	2.0	7.7	
24-Apr-05	7	6	5	6	2	5	6	10	4	3	2	0	2	3	1	3	3	2	4	8	18	4	8	5.1	18.4	
25-Apr-05	15	9	12	9	12	11	10	11	12	10	8	5	6	7	6	6	4	4	7	8	6	5	7	17.0	8.6	
26-Apr-05	32	10	16	15	6	3	4	5	4	4	3	4	0	1	1	1	2	0	2	0	4	4	3	3	5.3	31.8
27-Apr-05	3	2	2	4	3	2	3	3	2	3	1	0	0	1	3	4	2	2	5	2	4	3	2	2.4	5.0	
28-Apr-05	3	2	4	6	6	3	7	9	5	4	1	1	1	2	3	1	3	2	5	4	3	5	4	3.9	9.3	
29-Apr-05	5	5	3	4	5	4	7	4	2	2	2	4	4	1	3	2	2	3	3	13	7	6	5	4.1	13.3	
30-Apr-05	5	7	5	7	5	3	7	4	4	4	2	2	3	3	3	4	3	5	4	5	8	5	6	4.6	7.5	

Hourly Avg	5.6	4.5	4.1	4.3	4.2	4.4	7.5	8.0	4.6	2.8	2.5	1.7	1.6	1.8	1.9	2.2	2.6	2.9	4.0	5.3	7.0	5.7	4.8	5.4
Hourly Max	31.8	19.1	16.4	19.8	25.9	23.3	29.2	31.5	12.0	9.9	9.5	5.5	8.2	6.6	6.5	8.9	10.4	14.4	14.7	13.0	21.2	31.4	30.5	22.9

**HOURLY AVERAGE TABLE**

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



**Status Flag Characters**

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

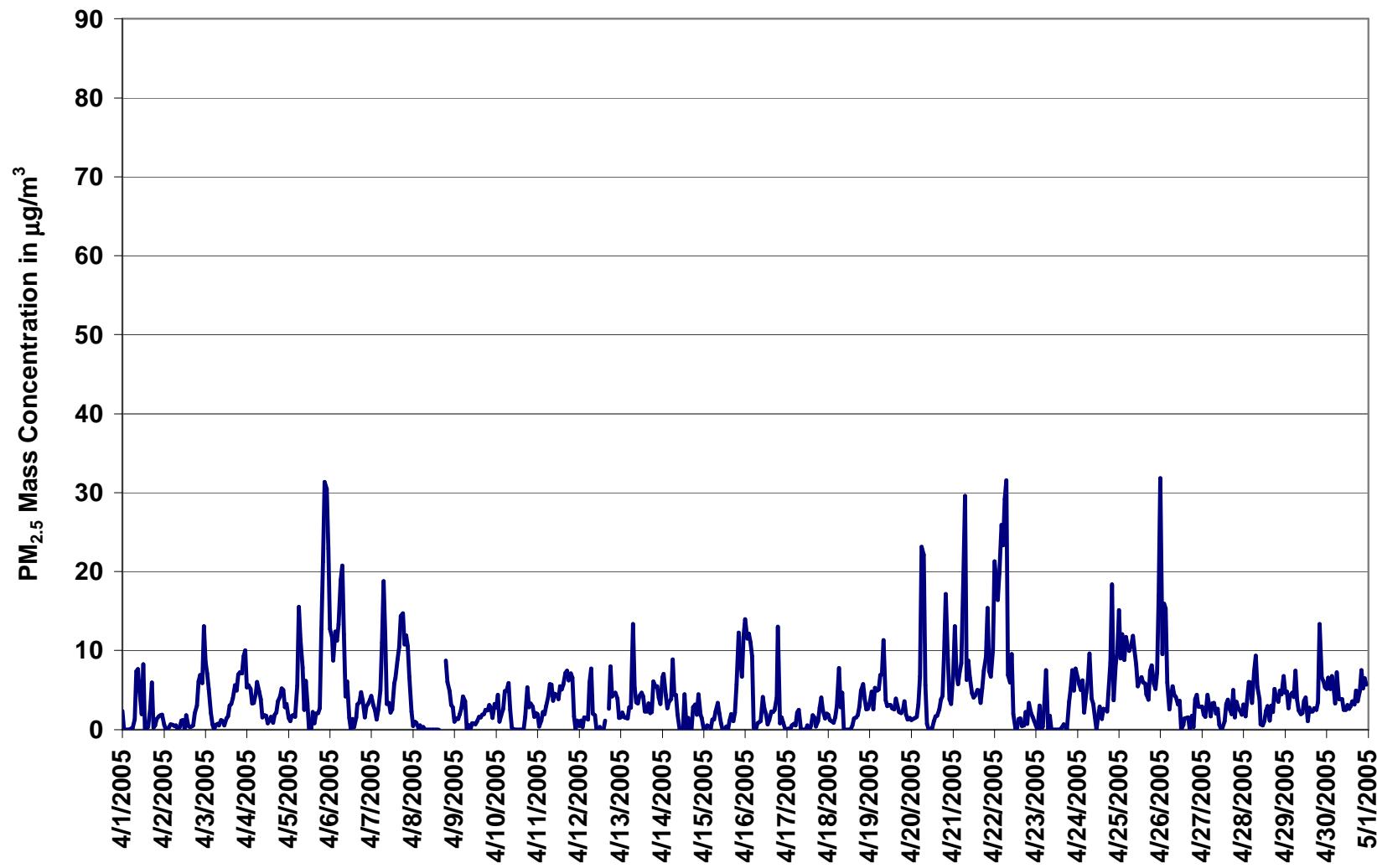


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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

#### Summary

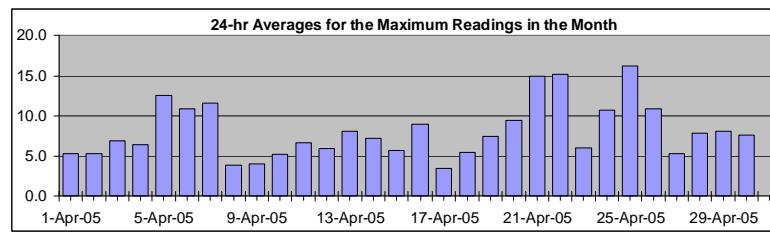
Maximum 1-hr Average:	58.3	µg/m <sup>3</sup>	21-Apr	7:00 8:00
Maximum 24-hr Value:	16.1	µg/m <sup>3</sup>	25-Apr	

AIC Time:	0 hrs	Operational Time:	716 hrs
Calibration Time:	1 hrs	AMD Operational Uptime:	99.6%
Percentile	99 95 75 50 25 5 1	Average	8.1 µg/m <sup>3</sup>

Percentile      99 95 75 50 25 5 1      Average 8.1 µg/m<sup>3</sup>      Geomean 7.5 µg/m<sup>3</sup>

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Apr-05	4	2	1	1	2	2	1	5	13	12	10	5	17	4	1	3	7	13	5	3	4	5	5	3	5.3	16.6	
2-Apr-05	3	2	1	2	2	2	3	3	2	2	3	4	3	6	6	4	4	4	5	6	10	11	17	23	5.2	22.6	
3-Apr-05	14	10	8	4	4	1	2	3	3	4	5	3	5	4	9	6	6	9	7	8	9	12	12	16	6.9	15.9	
4-Apr-05	8	9	7	6	6	7	9	8	5	4	4	4	4	7	3	9	6	6	7	7	6	8	7	6	6	6.4	9.0
5-Apr-05	3	2	3	3	6	13	19	20	14	6	9	9	2	4	6	3	5	5	5	17	29	43	37	36	12.5	42.7	
6-Apr-05	17	16	13	15	15	21	24	27	23	7	9	4	2	6	8	4	6	7	9	5	3	6	5	7	10.8	26.5	
7-Apr-05	6	6	5	4	4	10	17	23	18	7	6	6	5	9	10	12	15	25	28	15	15	15	14	13	11.5	27.8	
8-Apr-05	3	6	2	2	4	1	3	2	1	1	2	3	2	3	4	2	P	P	P	15	8	7	5	5	3.9	15.0	
9-Apr-05	3	3	2	4	4	6	8	2	2	3	4	3	4	4	4	3	5	4	4	4	5	5	4	5	3.9	8.5	
10-Apr-05	6	9	3	4	8	7	7	11	6	3	3	3	2	5	3	3	3	5	10	5	5	4	4	3	5.1	11.1	
11-Apr-05	4	3	3	4	4	5	5	7	8	6	6	7	7	9	8	8	14	15	8	10	12	3	2	2	6.7	14.7	
12-Apr-05	1	2	2	3	3	3	14	14	3	5	4	3	6	2	2	9	C	6	13	9	10	10	7	4	5.9	14.3	
13-Apr-05	4	5	4	3	4	7	5	39	9	6	5	6	6	7	6	10	10	5	12	11	8	8	8	7	8.1	39.5	
14-Apr-05	11	12	7	5	6	5	16	12	8	4	1	1	3	19	4	9	2	5	5	13	9	7	4	4	7.2	19.1	
15-Apr-05	1	1	2	2	2	3	3	4	5	4	3	1	3	4	3	5	4	4	4	9	27	13	11	16	5.6	27.0	
16-Apr-05	18	18	25	20	17	8	1	4	3	3	8	6	4	3	4	4	4	6	5	9	30	6	6	4	2	9.0	30.3
17-Apr-05	3	2	2	3	4	3	4	5	3	1	2	3	3	3	3	5	4	3	3	4	8	5	4	4	4	3.5	8.0
18-Apr-05	4	3	3	3	4	5	14	10	7	4	2	2	3	4	4	5	6	4	8	7	8	9	6	5	5.4	14.1	
19-Apr-05	5	6	7	23	11	9	10	11	19	8	6	5	5	5	4	9	6	5	5	7	7	4	3	3	7.5	23.0	
20-Apr-05	3	3	3	4	5	12	33	34	8	6	3	3	4	6	7	8	11	8	7	17	19	12	6	5	9.5	33.8	
21-Apr-05	13	16	13	9	12	13	42	58	10	11	10	10	9	8	10	10	8	11	12	13	23	10	9	18	14.9	58.3	
22-Apr-05	25	24	21	31	36	27	45	41	23	14	15	5	6	4	5	5	3	6	8	3	6	3	4	3	15.1	45.3	
23-Apr-05	3	3	6	1	5	5	18	18	6	4	3	4	3	4	5	5	6	3	3	7	7	10	7	10	6.1	17.6	
24-Apr-05	19	13	9	9	4	10	14	18	7	8	5	5	8	7	6	8	7	6	10	17	29	8	16	14	10.7	29.4	
25-Apr-05	33	18	19	17	25	17	15	13	18	13	16	14	11	12	12	10	10	7	12	13	9	8	12	51	16.1	51.2	
26-Apr-05	45	25	26	24	10	6	6	7	6	6	5	11	3	4	7	12	10	10	5	9	6	5	4	4	10.9	45.2	
27-Apr-05	5	4	4	8	6	4	5	5	4	6	4	5	4	5	8	8	5	4	14	4	5	4	4	3	5.3	14.1	
28-Apr-05	5	4	6	10	10	8	14	16	8	8	4	7	4	7	7	7	6	4	11	7	6	9	6	13	7.8	15.7	
29-Apr-05	6	6	5	9	11	11	8	4	5	5	7	9	5	8	8	8	6	6	14	17	9	8	8	8	8.0	17.4	
30-Apr-05	9	9	7	10	9	5	15	6	5	6	5	6	8	5	6	7	9	7	6	8	9	8	10	8	7.6	14.8	
																								N	0.0		
Hourly Avg	9.4	8.1	7.3	8.1	8.1	8.0	12.7	14.4	8.4	5.9	5.6	5.2	5.3	5.6	5.9	6.6	6.8	7.0	8.5	9.8	10.9	8.8	8.1	9.8			
Hourly Max	45.2	25.4	25.9	30.7	36.0	27.1	45.3	58.3	23.2	14.2	16.2	13.8	16.6	19.1	11.9	12.3	14.9	24.8	27.8	30.3	29.4	42.7	37.2	51.2			



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

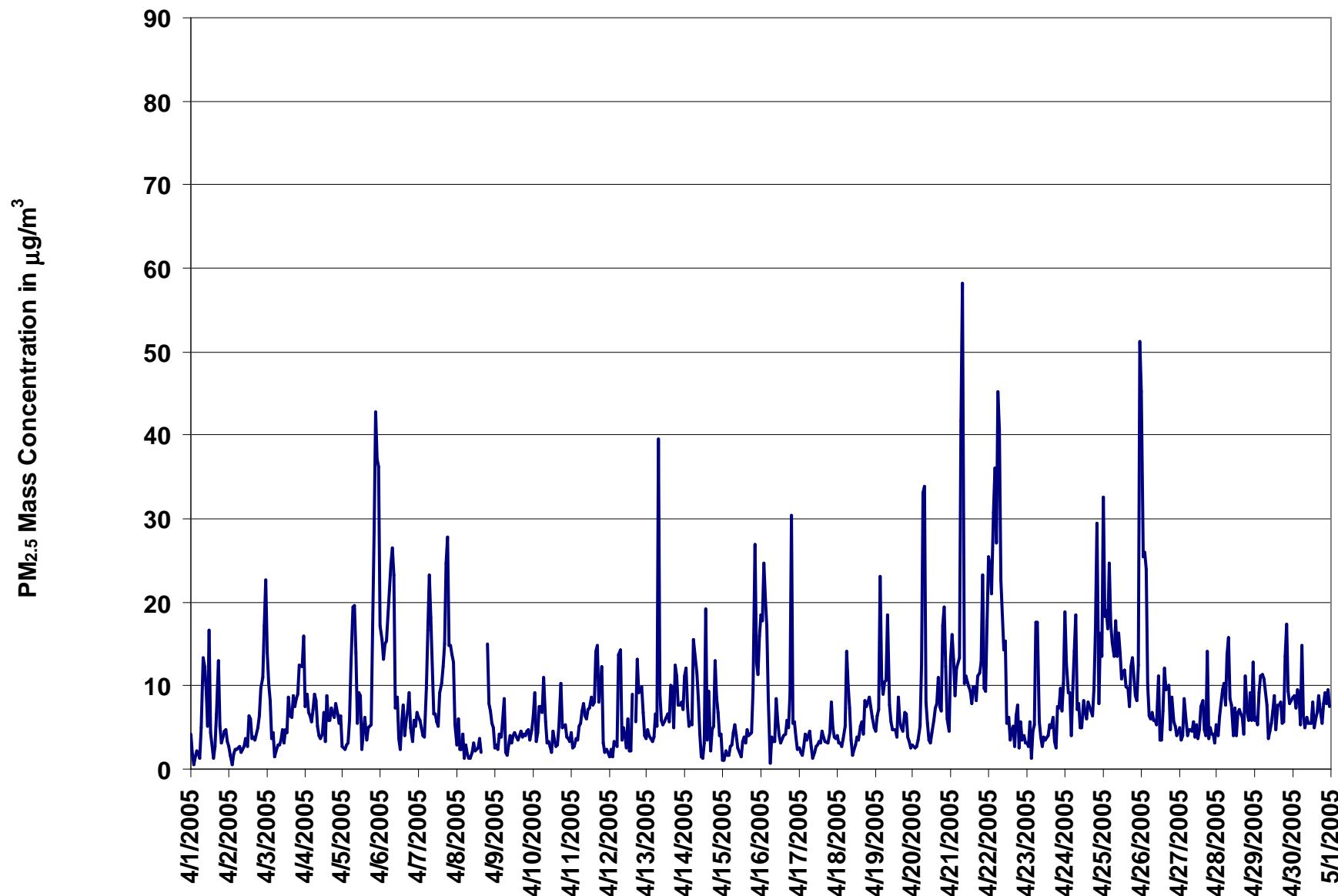
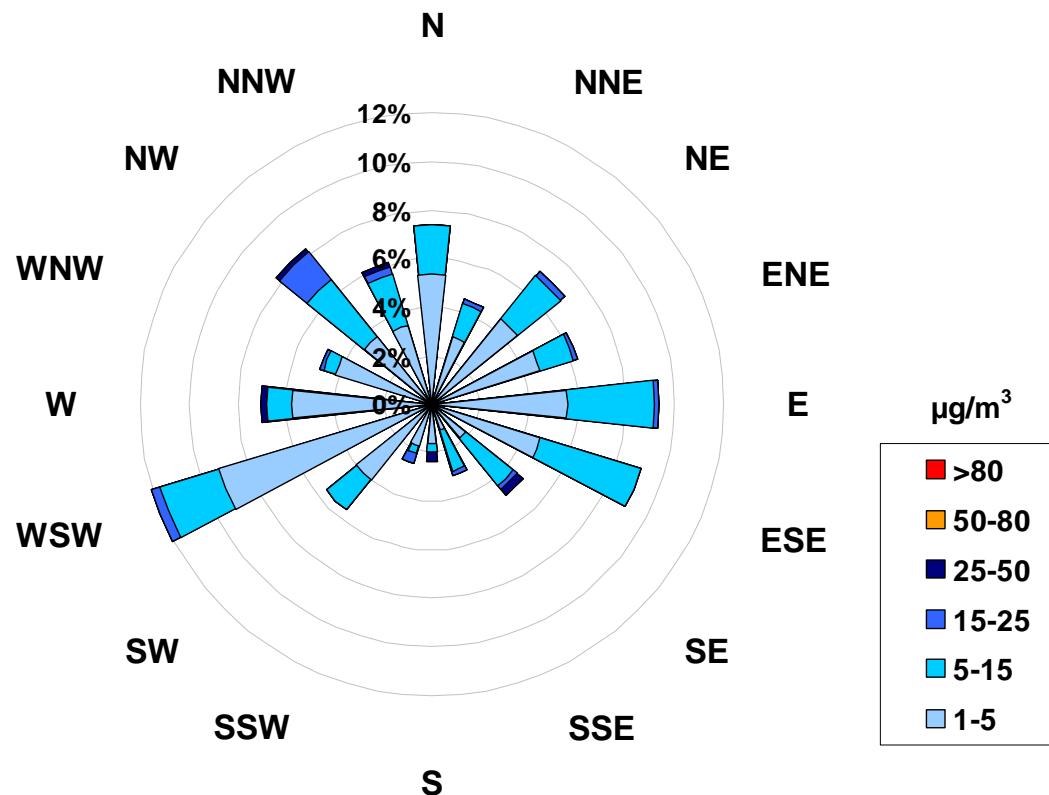


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Particulate Matter (less than 2.5 microns)  
Average Concentration Occurrences at the Henry Pirker Site for April 2005**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$			Frequency (hrs)
Range			
1.0	<	5	515
5	to	15	173
15	to	25	21
25	to	50	7
50	to	80	0
>	80		0
Total Non-Zero Values			716

## PASZA - Henry Pirker Relative Humidity Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

Maximum 1-hr Average:	96.2	%	23-Apr	4:00 5:00
Maximum 24-hr Value:	76.0	%	22-Apr	

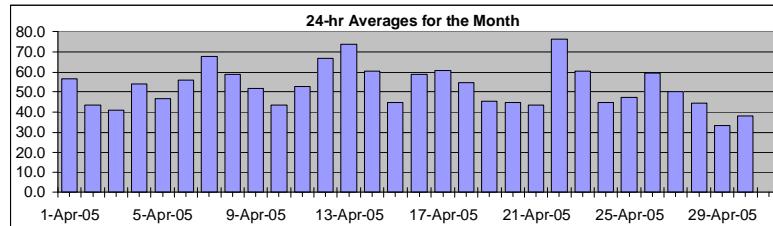
AIC Time:	0 hrs	Operational Time:	718 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%					
Percentile	99	95	75	50	25	5	1	Average
	93.3	86.3	67.9	51.3	36.2	24.0	17.1	52.6 %

### 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	24-hour Average	Daily Maximum
1-Apr-05	54	56	57	60	60	63	57	55	55	48	39	42	71	64	46	43	44	63	62	61	60	64	64	67		56.5	70.5		
2-Apr-05	69	64	56	53	52	52	53	48	43	38	35	33	31	30	30	29	30	30	33	39	48	48	47	49		43.3	68.9		
3-Apr-05	52	55	54	55	57	58	60	56	50	46	43	33	29	25	23	22	23	24	25	30	33	35	37	55		40.8	60.2		
4-Apr-05	68	75	74	77	80	83	84	72	66	59	50	47	39	34	31	28	28	29	33	40	47	52	52	49		54.1	83.9		
5-Apr-05	50	54	60	63	62	69	73	66	53	44	41	38	27	25	25	25	24	28	29	38	47	55	62	67		46.9	73.4		
6-Apr-05	69	71	72	72	78	83	74	54	49	43	40	38	36	34	32	32	32	35	42	50	53	59	71	80		55.8	82.9		
7-Apr-05	82	83	85	85	87	88	89	82	70	57	55	49	43	45	42	43	47	49	60	66	75	77	75	82		67.4	88.5		
8-Apr-05	85	85	84	82	83	75	71	69	63	59	51	46	42	38	36	31	P	P	39	43	49	54	54	58		58.9	85.4		
9-Apr-05	57	56	59	65	68	75	88	77	66	53	44	39	36	33	32	32	32	33	36	42	48	55	56	60		51.7	88.4		
10-Apr-05	60	64	63	66	76	77	74	64	57	44	36	31	26	23	19	18	16	17	25	33	36	38	35	38		43.1	77.5		
11-Apr-05	43	42	42	45	46	48	48	49	50	45	41	40	39	38	37	39	42	54	58	61	85	89	92	93		52.7	92.9		
12-Apr-05	93	92	93	93	93	95	95	90	79	70	54	43	35	29	28	27	34	39	48	65	69	74	79	85		66.7	94.6		
13-Apr-05	85	88	90	90	89	89	89	86	81	75	74	72	68	60	57	53	54	52	59	67	73	73	72	75		73.7	90.2		
14-Apr-05	82	84	81	81	83	85	89	79	72	62	49	40	36	39	37	41	36	36	40	44	52	62	62	72		60.2	88.7		
15-Apr-05	68	64	64	65	66	68	68	59	55	51	46	34	27	25	25	24	24	25	26	30	37	41	42	47		45.0	68.4		
16-Apr-05	52	55	61	70	66	60	58	53	54	53	51	49	49	49	49	46	42	43	46	73	86	83	84	82		58.8	85.8		
17-Apr-05	79	81	83	78	76	79	75	68	64	56	47	41	40	39	39	43	42	44	51	60	71	79	82		60.7	82.9			
18-Apr-05	85	86	85	85	89	91	88	72	63	53	42	37	35	31	29	29	29	31	37	43	45	50	49		54.6	91.3			
19-Apr-05	53	57	56	57	63	61	58	48	42	35	32	31	33	32	33	35	35	36	37	42	49	51	53	57		45.2	62.9		
20-Apr-05	59	62	64	66	71	76	75	62	54	47	42	34	32	27	26	22	22	22	24	30	35	38	40	42		44.6	75.9		
21-Apr-05	54	67	76	83	83	85	71	58	52	44	37	30	27	24	22	21	17	16	17	19	30	36	35	39		43.4	84.7		
22-Apr-05	46	55	61	67	75	74	72	73	64	64	82	88	84	79	82	86	80	75	84	84	86	87	89	90		76.0	90.1		
23-Apr-05	91	93	95	95	96	96	93	76	75	65	55	49	44	41	39	37	35	34	31	33	40	42	44	48		60.4	96.2		
24-Apr-05	56	67	72	77	77	82	76	59	52	46	39	31	28	27	25	24	23	22	25	33	33	37	36		44.7	82.4			
25-Apr-05	63	64	68	69	74	79	70	62	53	45	37	28	27	27	26	27	26	25	28	33	40	44	51	64		47.2	79.3		
26-Apr-05	70	74	82	81	78	67	65	66	67	68	68	65	57	48	45	48	45	48	42	38	41	46	52	57		59.2	82.2		
27-Apr-05	65	70	73	79	83	75	71	67	62	55	51	39	31	28	25	27	27	26	31	33	39	45	49	52		50.1	83.2		
28-Apr-05	58	59	64	70	75	79	78	60	48	43	41	34	31	30	29	25	22	21	24	28	30	37	38	41		44.4	79.5		
29-Apr-05	43	49	56	56	66	59	52	43	35	32	28	27	27	24	19	17	14	14	14	15	20	28	31	34		33.4	65.8		
30-Apr-05	38	49	53	60	66	63	54	42	38	35	31	28	27	26	25	24	23	24	25	27	33	38	43	42		38.1	65.8		
																									N	0.0			

### HOURLY AVERAGE TABLE

### Relative Humidity (RH)



### Status Flag Characters

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

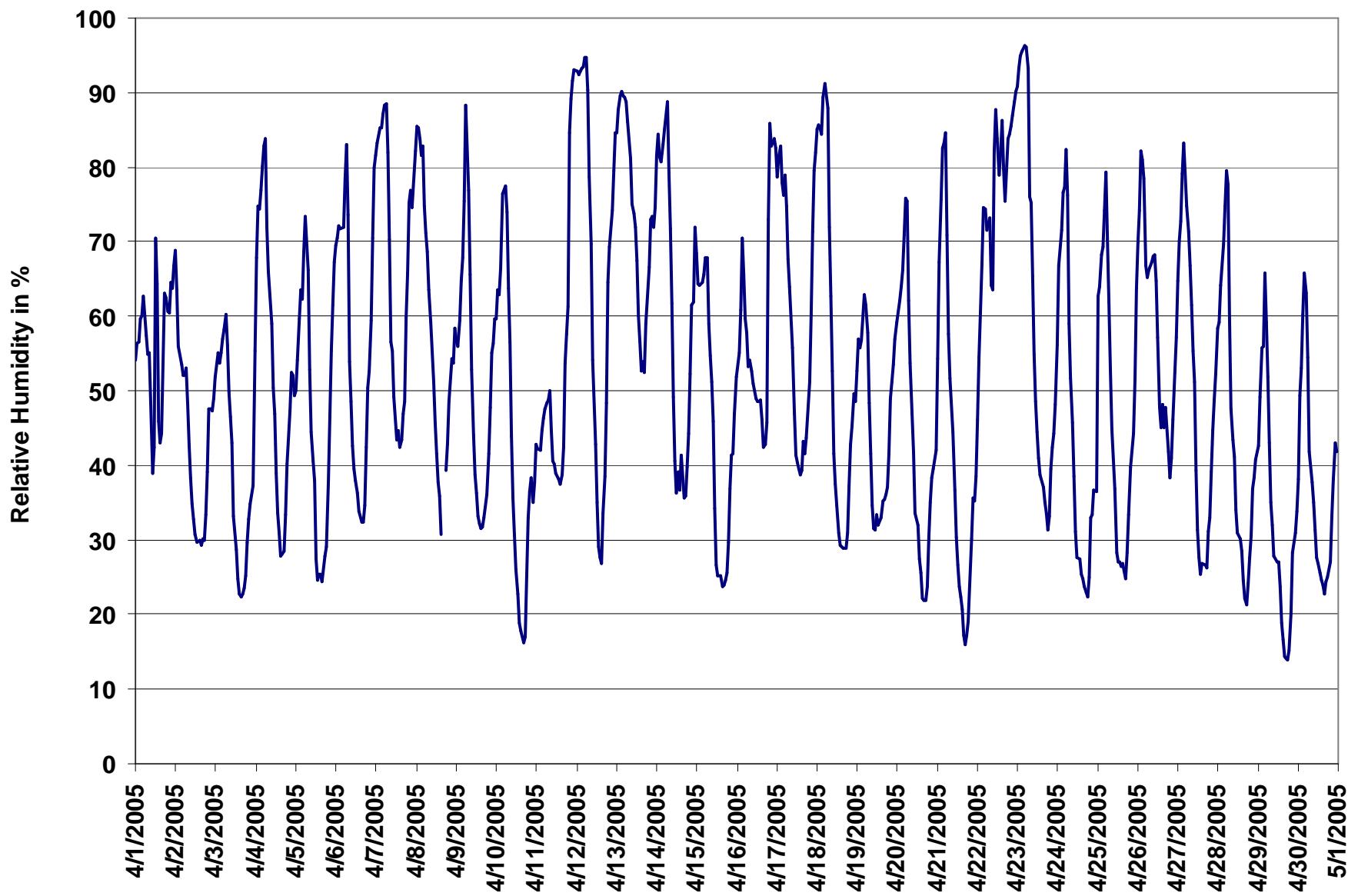


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

## PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

Maximum 1-hr Average:	24.8	°C	21-Apr	16:00 17:00
Maximum 24-hr Value:	14.4	°C	21-Apr	

AIC Time:	0 hrs	Operational Time:	718 hrs							
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%							
Percentile	99	95	75	50	25	5	1	Average	6.6	°C
	22.2	18.7	9.7	6.0	2.0	-1.5	-5.0			

### 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	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	100:00	101:00	102:00	103:00	104:00	105:00	106:00	107:00	108:00	109:00	110:00	111:00	112:00	113:00	114:00	115:00	116:00	117:00	118:00	119:00	120:00	121:00	122:00	123:00	124:00	125:00	126:00	127:00	128:00	129:00	130:00	131:00	132:00	133:00	134:00	135:00	136:00	137:00	138:00	139:00	140:00	141:00	142:00	143:00	144:00	145:00	146:00	147:00	148:00	149:00	150:00	151:00	152:00	153:00	154:00	155:00	156:00	157:00	158:00	159:00	160:00	161:00	162:00	163:00	164:00	165:00	166:00	167:00	168:00	169:00	170:00	171:00	172:00	173:00	174:00	175:00	176:00	177:00	178:00	179:00	180:00	181:00	182:00	183:00	184:00	185:00	186:00	187:00	188:00	189:00	190:00	191:00	192:00	193:00	194:00	195:00	196:00	197:00	198:00	199:00	200:00	201:00	202:00	203:00	204:00	205:00	206:00	207:00	208:00	209:00	210:00	211:00	212:00	213:00	214:00	215:00	216:00	217:00	218:00	219:00	220:00	221:00	222:00	223:00	224:00	225:00	226:00	227:00	228:00	229:00	230:00	231:00	232:00	233:00	234:00	235:00	236:00	237:00	238:00	239:00	240:00	241:00	242:00	243:00	244:00	245:00	246:00	247:00	248:00	249:00	250:00	251:00	252:00	253:00	254:00	255:00	256:00	257:00	258:00	259:00	260:00	261:00	262:00	263:00	264:00	265:00	266:00	267:00	268:00	269:00	270:00	271:00	272:00	273:00	274:00	275:00	276:00	277:00	278:00	279:00	280:00	281:00	282:00	283:00	284:00	285:00	286:00	287:00	288:00	289:00	290:00	291:00	292:00	293:00	294:00	295:00	296:00	297:00	298:00	299:00	300:00	301:00	302:00	303:00	304:00	305:00	306:00	307:00	308:00	309:00	310:00	311:00	312:00	313:00	314:00	315:00	316:00	317:00	318:00	319:00	320:00	321:00	322:00	323:00	324:00	325:00	326:00	327:00	328:00	329:00	330:00	331:00	332:00	333:00	334:00	335:00	336:00	337:00	338:00	339:00	340:00	341:00	342:00	343:00	344:00	345:00	346:00	347:00	348:00	349:00	350:00	351:00	352:00	353:00	354:00	355:00	356:00	357:00	358:00	359:00	360:00	361:00	362:00	363:00	364:00	365:00	366:00	367:00	368:00	369:00	370:00	371:00	372:00	373:00	374:00	375:00	376:00	377:00	378:00	379:00	380:00	381:00	382:00	383:00	384:00	385:00	386:00	387:00	388:00	389:00	390:00	391:00	392:00	393:00	394:00	395:00	396:00	397:00	398:00	399:00	400:00	401:00	402:00	403:00	404:00	405:00	406:00	407:00	408:00	409:00	410:00	411:00	412:00	413:00	414:00	415:00	416:00	417:00	418:00	419:00	420:00	421:00	422:00	423:00	424:00	425:00	426:00	427:00	428:00	429:00	430:00	431:00	432:00	433:00	434:00	435:00	436:00	437:00	438:00	439:00	440:00	441:00	442:00	443:00	444:00	445:00	446:00	447:00	448:00	449:00	450:00	451:00	452:00	453:00	454:00	455:00	456:00	457:00	458:00	459:00	460:00	461:00	462:00	463:00	464:00	465:00	466:00	467:00	468:00	469:00	470:00	471:00	472:00	473:00	474:00	475:00	476:00	477:00	478:00	479:00	480:00	481:00	482:00	483:00	484:00	485:00	486:00	487:00	488:00	489:00	490:00	491:00	492:00	493:00	494:00	495:00	496:00	497:00	498:00	499:00	500:00	501:00	502:00	503:00	504:00	505:00	506:00	507:00	508:00	509:00	510:00	511:00	512:00	513:00	514:00	515:00	516:00	517:00	518:00	519:00	520:00	521:00	522:00	523:00	524:00	525:00	526:00	527:00	528:00	529:00	530:00	531:00	532:00	533:00	534:00	535:00	536:00	537:00	538:00	539:00	540:00	541:00	542:00	543:00	544:00	545:00	546:00	547:00	548:00	549:00	550:00	551:00	552:00	553:00	554:00	555:00	556:00	557:00	558:00	559:00	560:00	561:00	562:00	563:00	564:00	565:00	566:00	567:00	568:00	569:00	570:00	571:00	572:00	573:00	574:00	575:00	576:00	577:00	578:00	579:00	580:00	581:00	582:00	583:00	584:00	585:00	586:00	587:00	588:00	589:00	590:00	591:00	592:00	593:00	594:00	595:00	596:00	597:00	598:00	599:00	600:00	601:00	602:00	603:00	604:00	605:00	606:00	607:00	608:00	609:00	610:00	611:00	612:00	613:00	614:00	615:00	616:00	617:00	618:00	619:00	620:00	621:00	622:00	623:00	624:00	625:00	626:00	627:00	628:00	629:00	630:00	631:00	632:00	633:00	634:00	635:00	636:00	637:00	638:00	639:00	640:00	641:00	642:00	643:00	644:00	645:00	646:00	647:00	648:00	649:00	650:00	651:00	652:00	653:00	654:00	655:00	656:00	657:00	658:00	659:00	660:00	661:00	662:00	663:00	664:00	665:00	666:00	667:00	668:00	669:00	670:00	671:00	672:00	673:00	674:00	675:00	676:00	677:00	678:00	679:00	680:00	681:00	682:00	683:00	684:00	685:00	686:00	687:00	688:00	689:00	690:00	691:00	692:00	693:00	694:00	695:00	696:00	697:00	698:00	699:00	700:00	701:00	702:00	703:00	704:00	705:00	706:00	707:00	708:00	709:00	710:00	711:00	712:00	713:00	714:00	715:00	716:00	717:00	718:00	719:00	720:00	721:00	722:00	723:00	724:00	725:00	726:00	727:00	728:00	729:00	730:00	731:00	732:00	733:00	734:00	735:00	736:00	737:00	738:00	739:00	740:00	741:00	742:00	743:00	744:00	745:00	746:00	747:00	748:00	749:00	750:00	751:00	752:00	753:00	754:00	755:00	756:00	757:00	758:00	759:00	760:00	761:00	762:00	763:00	764:00	765:00	766:00	767:00	768:00	769:00	770:00	771:00	772:00	773:00	774:00	775:00	776:00	777:00	778:00	779:00	780:00	781:00	782:00	783:00	784:00	785:00	786:00	787:00	788:00	789:00	790:00	791:00	792:00	793:00	794:00	795:00	796:00	797:00	798:00	799:00	800:00	801:00	802:00	803:00	804:00	805:00	806:00	807:00	808:00	809:00	810:00	811:00	812:00	813:00	814:00	815:00	816:00	817:00	818:00	819:00	820:00	821:00	822:00	823:00	824:00	825:00	826:00	827:00	828:00	829:00	830:00	831:00	832:00	833:00	834:00	835:00	836:00	837:00	838:00	839:00	840:00	841:00	842:00	843:00	844:00	845:00	846:00	847:00	848:00	849:00	850:00	851:00	852:00	853:00	854:00	855:00	856:00	857:00	858:00	859:00	860:00	861:00	862:00	863:00	864:00	865:00	866:00	867:00	868:00	869:00	870:00	871:00	872:00	873:00	874:00	875:00	876:00	877:00	878:00	879:00	880:00	881:00	882:00	883:00	884:00	885:00	886:00	887:00	888:00	889:00	890:00	891:00	892:00	893:00	894:00	895:00	896:00	897:00	898:00	899:00	900:00	901:00	902:00	903:00	904:00	905:00	906:00	907:00	908:00	909:00	910:00	911:00	912:00	913:00	914:00	915:00	916:00	917:00	918:00	919:00	920:00	921:00	922:00	923:00	924:00	925:00	926:00	927:00	928:00	929:00	930:00	931:00	932:00	933:00	934:00	935:00	936:00	937:00	938:00	939:00	940:00	941:00	942:00	943:00	944:00	945:00	946:00	947:00	948:00	949:00	950:00	951:00	952:00	953:00	954:00</th

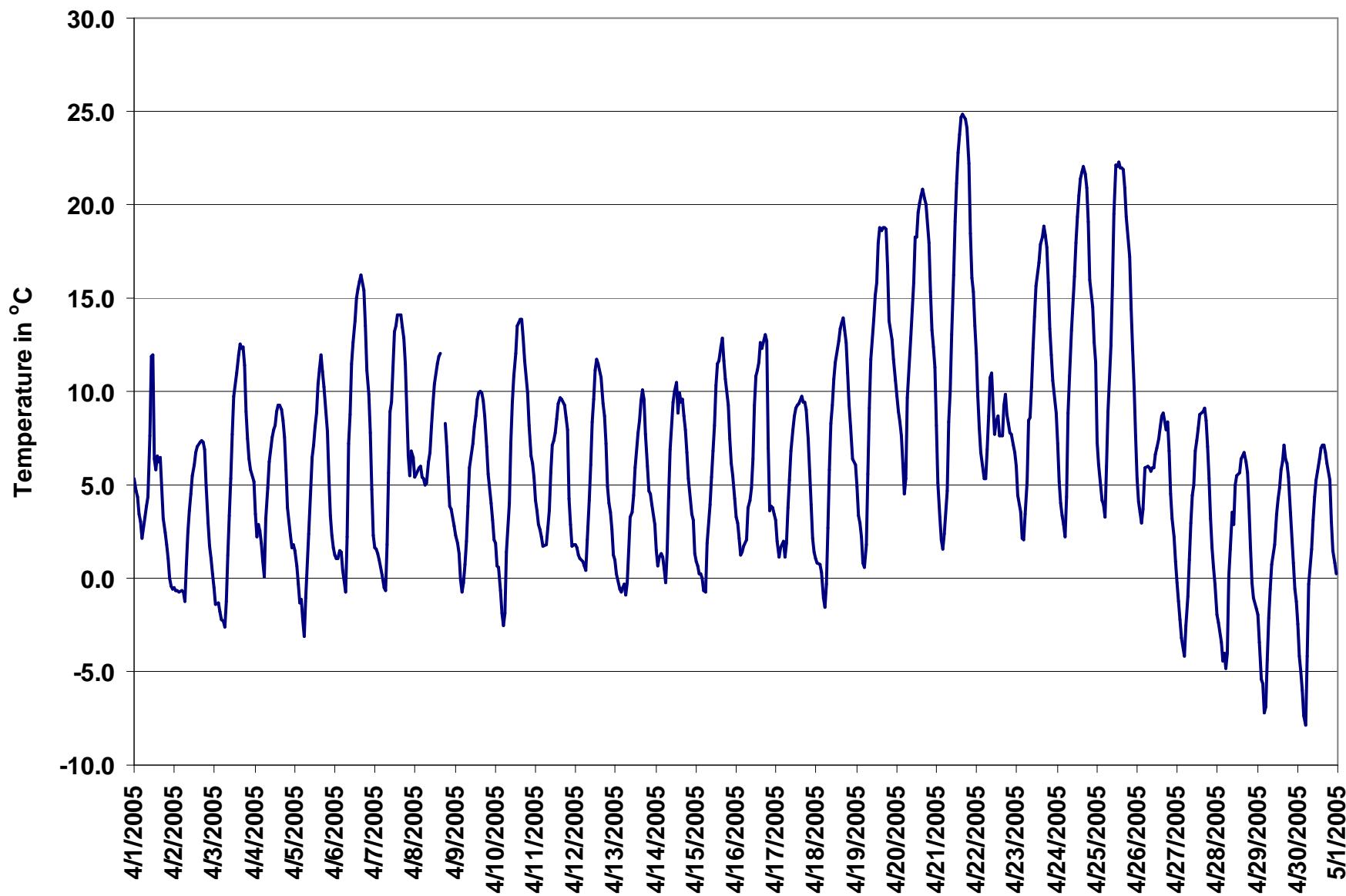


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

## PASZA - Henry Pirker Solar Radiation Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

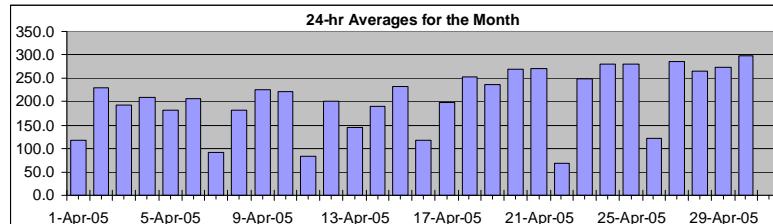
### Summary

Maximum 1-hr Average:	839.6	W/m <sup>2</sup>	28-Apr	12:00 13:00
Maximum 24-hr Value:	297.9	W/m <sup>2</sup>	30-Apr	

AIC Time:	0 hrs	Operational Time:	718 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%					
Percentile			Average					
99	95	75	50	25	5	1		205.9 W/m <sup>2</sup>
771.4	720.6	385.1	70.9	0.0	0.0	0.0		

### 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																								24-hour Average	Daily Maximum		
	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Apr-05	0	0	0	0	0	0	6	33	111	363	536	446	107	323	222	191	318	71	100	16	0	0	0	0	0	118.5	536.1	
2-Apr-05	0	0	0	0	0	0	14	134	284	432	557	642	688	688	639	552	434	288	132	13	0	0	0	0	0	229.1	688.4	
3-Apr-05	0	0	0	0	0	0	17	130	279	417	496	480	597	494	539	418	308	292	132	11	0	0	0	0	0	192.1	597.4	
4-Apr-05	0	0	0	0	0	0	13	133	289	436	557	538	588	568	457	548	439	303	150	21	2	0	0	0	0	0	210.0	587.7
5-Apr-05	0	0	0	0	0	0	2	23	130	294	371	424	359	331	445	592	555	433	283	128	15	2	0	0	0	0	182.9	592.4
6-Apr-05	0	0	0	0	0	0	2	22	145	288	386	459	415	617	707	646	554	417	202	78	14	2	0	0	0	0	206.4	707.5
7-Apr-05	0	0	0	0	0	0	2	21	98	254	310	283	331	251	129	136	124	88	91	71	12	2	0	0	0	0	91.7	330.7
8-Apr-05	0	0	0	0	0	0	2	11	58	199	221	384	478	547	717	678	586	P	P	98	24	0	0	0	0	0	182.0	716.6
9-Apr-05	0	0	0	0	0	0	0	17	106	306	444	548	529	553	723	669	585	455	304	148	16	0	0	0	0	0	225.1	723.2
10-Apr-05	0	0	0	0	0	0	6	39	154	304	443	559	650	700	691	626	554	334	149	74	29	0	0	0	0	0	221.3	700.0
11-Apr-05	0	0	0	0	0	0	18	75	175	245	302	224	174	198	183	150	111	77	35	0	0	0	0	0	0	81.9	301.5	
12-Apr-05	0	0	0	0	0	0	4	39	153	325	481	608	644	760	685	511	213	234	158	19	6	0	0	0	0	0	201.6	760.1
13-Apr-05	0	0	0	0	0	0	0	0	52	272	334	210	232	292	334	358	442	486	356	117	17	0	0	0	0	0	145.9	486.3
14-Apr-05	0	0	0	0	0	0	0	14	145	320	480	583	680	659	235	576	399	263	126	62	9	0	0	0	0	0	189.6	679.8
15-Apr-05	0	0	0	0	0	0	0	55	179	310	378	454	519	743	785	562	582	549	292	127	30	0	0	0	0	0	231.8	784.8
16-Apr-05	0	0	0	0	0	0	0	41	117	133	148	224	446	408	264	266	293	171	208	99	6	0	0	0	0	0	117.7	446.4
17-Apr-05	0	0	0	0	0	0	0	58	194	369	515	634	568	519	412	305	322	357	286	172	46	0	0	0	0	0	198.3	634.1
18-Apr-05	0	0	0	0	0	0	3	57	161	361	516	480	623	696	755	726	620	506	348	187	40	0	0	0	0	0	253.3	754.7
19-Apr-05	0	0	0	0	0	0	4	68	225	344	373	524	672	670	746	588	434	465	333	197	37	2	0	0	0	0	236.8	746.4
20-Apr-05	0	0	0	0	0	0	6	60	191	381	479	631	727	752	759	725	627	506	355	199	56	3	0	0	0	0	269.1	759.3
21-Apr-05	0	0	0	0	0	0	5	74	203	378	519	625	720	761	760	718	621	501	358	205	61	3	0	0	0	0	271.3	761.1
22-Apr-05	0	0	0	0	0	0	6	75	75	69	57	47	113	218	219	118	152	249	140	75	20	3	0	0	0	0	68.2	249.1
23-Apr-05	0	0	0	0	0	0	4	77	147	109	359	525	722	762	761	720	626	496	360	211	66	4	0	0	0	0	247.8	761.9
24-Apr-05	0	0	0	0	0	0	7	84	210	387	532	650	732	772	770	736	636	518	374	217	71	4	0	0	0	0	279.1	771.7
25-Apr-05	0	0	0	0	0	0	9	98	214	393	535	652	734	755	762	728	637	517	377	218	71	6	0	0	0	0	279.4	762.0
26-Apr-05	0	0	0	0	0	0	3	13	26	55	82	134	217	196	304	396	523	434	263	204	59	6	0	0	0	0	121.5	522.7
27-Apr-05	0	0	0	0	0	0	10	108	226	409	555	641	753	796	794	754	659	512	354	195	82	7	0	0	0	0	285.6	796.1
28-Apr-05	0	0	0	0	0	0	10	47	202	287	598	340	780	840	707	739	616	547	338	234	87	9	0	0	0	0	265.8	839.6
29-Apr-05	0	0	0	0	0	0	9	117	229	418	547	623	687	714	691	674	595	551	311	193	88	10	0	0	0	0	272.9	763.7
30-Apr-05	0	0	0	0	0	0	10	124	240	427	570	686	766	806	805	761	671	548	399	241	89	7	0	0	0	0	297.9	806.5
Hourly Avg	0.0	0.0	0.0	0.0	0.0	0.0	3.5	47.0	146.1	284.3	404.3	479.2	547.5	575.7	574.4	547.9	482.8	405.1	268.8	143.9	37.1	2.4	0.0	0.0	0.0	N	0.0	
Hourly Max	0.0	0.0	0.0	0.0	0.0	0.0	10.1	124.2	240.1	427.1	598.4	686.1	780.3	839.6	804.7	763.7	670.6	551.1	399.1	241.1	89.2	10.3	0.0	0.0	0.0	N	0.0	

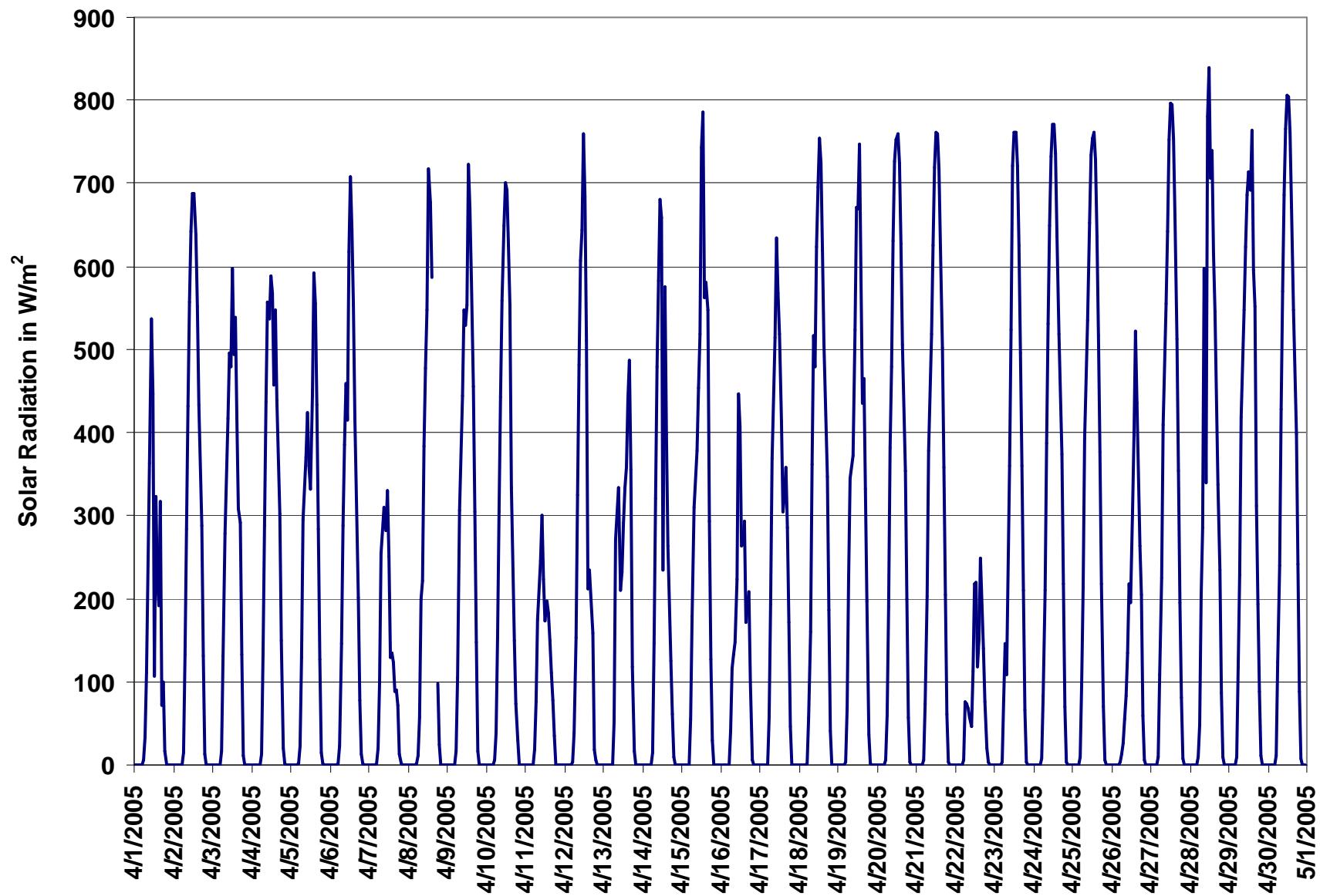


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

## PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

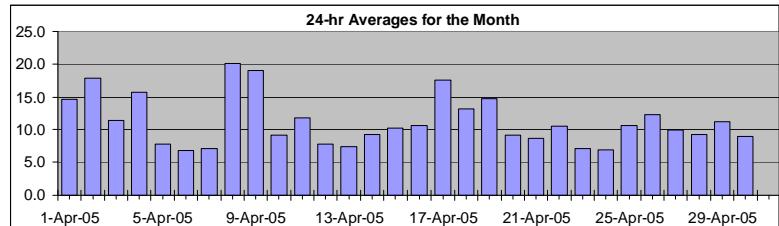
Maximum 1-hr Average:	38.1	km/hr	1-Apr	17:00	18:00
Maximum 24-hr Value:	20.1	km/hr	8-Apr		

Calm Time:	0 hrs	0% calms	Operational Time:	718 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%				
Percentile	99	95	75	50	25	5	1	AverageS
	30.2	25.1	13.8	9.6	6.7	4.1	3.3	11.2 km/hr

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Apr-05	8	8	8	8	9	7	9	8	6	6	7	11	28	23	28	26	33	38	21	14	12	11	10	13	14.7	38.1
2-Apr-05	15	17	20	20	20	13	6	12	18	25	32	30	31	28	25	25	23	18	14	12	8	6	6	6	17.9	31.6
3-Apr-05	6	5	8	7	8	10	10	10	12	12	12	12	14	16	15	15	15	16	16	12	12	9	8	9	11.3	16.1
4-Apr-05	7	11	14	12	11	7	6	9	11	14	20	23	26	22	23	27	28	27	23	16	16	10	8	9	15.6	27.8
5-Apr-05	11	10	8	5	5	5	5	5	6	6	6	9	14	15	16	12	11	10	7	5	4	4	4	5	7.9	15.9
6-Apr-05	4	4	3	4	3	4	4	4	4	6	5	5	8	10	13	13	14	12	10	11	9	6	6	4	6.8	13.6
7-Apr-05	3	4	4	4	4	4	5	4	5	7	11	12	14	11	6	6	5	5	9	6	6	8	13	14	7.1	14.2
8-Apr-05	11	12	15	17	21	19	14	18	26	27	25	25	26	25	28	P	P	27	21	17	13	16	12	20.1	28.0	
9-Apr-05	11	9	9	7	8	13	11	11	17	28	29	30	28	32	31	30	29	28	26	21	19	11	9	8	19.0	31.8
10-Apr-05	8	8	7	4	6	5	3	5	8	10	10	8	6	9	11	12	14	13	14	14	11	12	12	12	9.2	14.2
11-Apr-05	12	11	9	12	12	12	14	14	13	14	14	12	10	9	10	11	11	13	9	8	19	16	12	9	11.9	19.2
12-Apr-05	8	7	6	6	6	6	5	6	7	8	8	8	8	7	9	11	13	9	15	11	7	7	7	6	7.9	14.7
13-Apr-05	7	4	6	5	5	9	8	6	8	9	9	8	7	5	7	8	9	11	13	9	7	8	5	5	7.4	13.3
14-Apr-05	4	6	4	4	4	4	5	7	9	9	7	10	11	20	13	19	14	10	9	19	10	6	11	11	9.3	19.6
15-Apr-05	12	12	13	14	15	12	11	9	12	11	14	14	14	10	10	8	6	9	10	10	7	7	7	6	10.1	15.2
16-Apr-05	6	5	3	3	5	6	7	8	9	10	10	8	8	10	12	12	13	12	11	29	28	14	15	13	10.6	28.8
17-Apr-05	11	9	10	9	12	11	9	9	14	18	25	31	31	33	28	29	29	25	23	18	12	9	10	7	17.6	33.0
18-Apr-05	4	4	4	3	4	5	4	6	9	17	19	18	18	20	23	24	23	23	22	18	15	15	9	9	13.2	24.2
19-Apr-05	8	7	7	7	6	6	6	6	7	8	21	22	21	19	20	25	27	23	22	18	14	16	20	20	14.8	27.0
20-Apr-05	16	14	16	15	5	4	4	6	10	14	10	7	9	8	8	10	8	7	7	8	8	9	10	8	9.2	16.5
21-Apr-05	4	5	5	5	3	3	4	5	9	8	10	11	11	12	11	14	13	13	10	10	11	12	8	8.7	14.2	
22-Apr-05	7	5	5	3	5	5	5	9	19	15	10	20	19	21	19	17	12	11	9	8	7	7	6	10.5	20.7	
23-Apr-05	6	4	4	5	7	4	5	7	6	11	13	12	8	7	6	7	7	9	10	9	7	7	5	7.2	12.9	
24-Apr-05	4	4	6	6	5	3	3	4	7	9	9	12	10	10	9	8	9	8	9	7	6	8	7	7.0	12.2	
25-Apr-05	6	6	6	6	7	4	8	9	8	7	10	14	15	14	15	18	20	18	20	19	17	12	9	5	10.7	20.0
26-Apr-05	6	5	4	6	7	10	12	14	15	15	17	16	16	22	19	15	17	15	14	11	10	9	8	12.2	22.3	
27-Apr-05	6	5	4	4	6	9	8	7	6	7	11	10	13	13	14	13	12	15	16	15	13	11	9	8	9.9	16.3
28-Apr-05	6	5	4	5	4	6	5	5	4	5	7	11	10	12	12	14	14	15	15	15	15	10	10	9	9.3	15.3
29-Apr-05	9	8	9	8	8	9	8	11	14	14	14	13	15	18	15	14	13	14	11	11	10	9	7	11.3	17.5	
30-Apr-05	6	5	5	5	6	6	5	8	8	8	10	12	12	12	13	13	13	12	10	9	10	9	9	9.1	12.9	
1-hr Average	7.7	7.3	7.6	7.3	7.6	7.4	6.9	8.1	10.2	11.9	13.6	14.3	15.3	15.7	16.0	15.7	15.3	14.5	13.1	11.1	9.6	9.3	8.6	N	0.0	
Hourly Max	16.5	17.3	20.1	19.5	21.0	18.9	14.4	17.7	26.3	27.9	31.6	31.0	31.2	33.0	30.7	30.1	32.6	38.1	26.5	28.8	28.1	16.2	19.6	20.0		

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

## PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

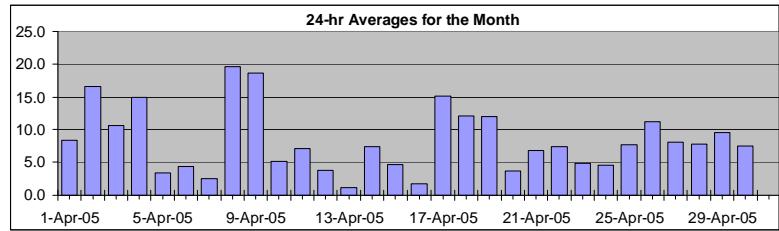
Maximum 1-hr Average:	37.9	km/hr	1-Apr	17:00	18:00
Maximum 24-hr Value:	19.7	km/hr	8-Apr		

Calm Time:	4 hrs	1% calms	Operational Time:	714 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	99.7%
Percentile				AverageV
99	95	75	50	25 5 1
29.6	24.8	13.0	8.8	5.6 2.6 1.1
				8.3 km/hr

Day	Mountain Standard Time																									24-hr Vector Average	Daily Max
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Apr-05	8	8	8	8	7	8	8	6	5	5	10	27	23	28	26	32	38	20	14	11	10	10	10	13	8.5	37.9	
2-Apr-05	15	17	20	19	20	13	5	12	18	24	31	30	30	28	25	24	23	18	14	12	8	6	5	5	16.6	31.4	
3-Apr-05	6	5	8	7	8	10	10	10	12	12	12	12	14	15	14	15	15	16	16	12	12	8	8	8	10.7	16.1	
4-Apr-05	7	10	14	11	11	7	5	8	11	13	20	22	25	22	27	28	27	23	16	16	10	8	9	11	15.0	27.6	
5-Apr-05	11	10	7	2	5	4	5	5	6	5	5	8	13	15	15	11	8	10	7	5	3	3	3	calm	3.4	14.9	
6-Apr-05	2	3	2	4	2	3	3	4	2	5	3	2	6	8	12	13	13	11	10	11	8	5	6	4	4.5	13.4	
7-Apr-05	3	4	3	3	2	3	4	3	1	6	11	12	13	11	5	6	5	4	9	6	5	7	13	14	2.5	14.1	
8-Apr-05	11	11	15	17	21	19	14	17	26	27	25	24	25	25	28	P	P	26	21	17	13	16	11	11	19.7	27.7	
9-Apr-05	11	9	9	7	8	13	10	11	17	28	29	30	28	31	30	30	29	28	26	21	19	11	9	8	18.6	31.2	
10-Apr-05	7	7	7	1	4	4	2	5	8	10	9	9	6	3	7	10	11	14	13	14	14	11	11	12	5.2	14.2	
11-Apr-05	12	11	9	12	12	12	14	14	13	14	14	11	10	9	9	10	11	13	9	7	17	16	11	8	7.1	16.7	
12-Apr-05	7	5	6	6	6	6	4	5	6	8	7	6	5	3	6	9	12	8	14	10	5	7	6	6	3.9	13.8	
13-Apr-05	6	calm	6	5	5	7	7	5	8	8	9	8	7	2	4	6	8	9	12	9	7	7	5	1	1.2	12.4	
14-Apr-05	3	6	3	4	3	1	5	6	8	8	5	9	10	19	12	18	13	9	9	18	10	5	11	11	7.4	18.8	
15-Apr-05	12	12	13	14	15	10	10	7	11	11	13	13	8	7	6	3	7	10	9	7	7	7	6	5	4.7	15.1	
16-Apr-05	5	5	calm	2	4	6	7	8	9	9	9	7	7	9	12	12	13	12	10	27	27	13	15	13	1.7	27.3	
17-Apr-05	10	8	9	9	12	11	8	9	14	18	25	31	31	33	28	28	29	24	23	18	12	9	9	6	15.1	32.8	
18-Apr-05	2	calm	3	3	4	5	3	6	9	16	19	18	17	20	22	24	22	22	22	18	15	15	9	9	12.2	23.7	
19-Apr-05	8	7	7	6	6	6	6	5	6	8	21	21	20	19	19	25	27	23	21	17	14	16	20	20	12.1	26.5	
20-Apr-05	16	14	16	14	3	4	4	6	10	13	9	4	8	5	6	8	6	4	6	8	8	9	8	3.7	16.4		
21-Apr-05	2	5	5	4	2	1	3	4	9	8	9	10	10	11	10	12	12	13	10	10	11	12	8	6.8	12.5		
22-Apr-05	7	4	4	3	3	4	2	1	18	14	8	20	19	21	19	17	11	10	11	9	8	6	5	7.5	20.6		
23-Apr-05	5	2	3	5	6	4	4	7	6	10	12	11	6	6	1	5	3	8	10	9	7	7	5	4.9	12.4		
24-Apr-05	3	4	6	6	5	1	2	3	6	8	8	12	9	8	7	5	7	7	9	7	6	8	7	4.6	11.7		
25-Apr-05	6	6	6	6	6	3	8	8	7	7	6	7	13	15	17	20	18	20	19	17	12	9	5	7.7	19.8		
26-Apr-05	6	4	4	6	7	9	11	14	15	15	17	15	16	22	19	14	15	14	13	11	10	9	9	8	11.3	22.1	
27-Apr-05	6	5	4	3	5	9	8	7	4	5	10	8	12	12	13	12	11	14	15	15	13	11	9	7	8.2	14.9	
28-Apr-05	6	5	4	5	2	6	5	3	2	5	9	9	10	10	13	13	15	14	14	15	10	10	10	9	7.8	15.0	
29-Apr-05	9	8	9	8	8	9	8	11	13	14	13	11	14	17	14	13	11	13	10	10	10	10	9	7	9.6	16.8	
30-Apr-05	5	5	5	5	6	6	5	8	8	6	8	11	10	11	10	12	12	12	9	9	10	8	9	7.5	12.0		
	1-hr Vector	2.9	3.1	3.6	2.7	2.3	1.0	0.9	1.1	3.2	3.8	5.3	5.2	5.6	5.3	4.9	5.9	4.4	4.2	2.8	2.7	2.1	0.4	1.4	2.1	N	0.0
	Hourly Max	16.4	17.2	20.0	19.4	20.8	18.8	14.2	17.4	26.3	27.8	31.4	30.5	30.6	32.8	30.2	29.6	32.4	37.9	26.5	27.3	26.9	16.1	19.5	20.0		

### HOURLY AVERAGE TABLE

### Wind Speed (WSv)



### Status Flag Characters

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

## PASZA - Henry Pirker Wind Direction Monthly Summary

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary													

Calm Time:	0 hrs							0% calms							Operational Time: 718 hrs													
	Calibration Time: 0 hrs							AMD Operational Uptime: 99.7%																				
Percentile	99	95	75	50	25	5	1	Average																				
	357.6	337.9	274.3	227.5	97.7	21.2	3.3	280 deg																				

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	121	111	109	106	109	81	90	108	131	129	215	289	275	262	252	267	270	256	245	246	242	242	245	253	247	WSW	
2-Apr-05	243	240	223	234	241	247	336	260	252	250	250	253	254	248	259	260	266	262	255	254	227	187	160	126	249	WSW	
3-Apr-05	135	122	114	109	106	103	104	109	109	98	106	120	116	129	123	114	102	105	107	99	94	128	129	214	113	ESE	
4-Apr-05	246	258	260	266	239	237	262	248	236	251	258	259	255	261	278	273	273	271	261	246	240	208	203	257	WSW		
5-Apr-05	224	240	234	16	281	112	146	155	165	159	109	104	144	145	155	184	211	307	316	19	31	183	188	313	177	S	
6-Apr-05	292	346	107	104	118	335	333	317	100	144	111	93	59	63	76	65	54	54	40	28	22	331	292	316	48	NE	
7-Apr-05	353	308	319	0	330	321	353	319	141	85	104	109	98	94	78	32	52	342	317	328	306	289	297	302	9	N	
8-Apr-05	310	257	253	261	263	267	260	258	255	258	267	269	261	258	267	284	P	P	257	256	251	250	255	249	262	W	
9-Apr-05	238	229	236	234	233	258	240	226	244	253	255	272	271	260	263	261	261	258	254	254	247	242	230	254	WSW		
10-Apr-05	216	210	237	177	213	185	120	161	173	196	213	241	245	204	162	152	122	101	86	88	92	92	97	91	147	SSE	
11-Apr-05	89	101	98	96	98	100	96	99	101	100	110	115	135	109	93	88	82	79	66	94	260	274	285	245	101	E	
12-Apr-05	240	185	164	152	154	148	110	123	172	179	229	229	176	192	109	105	132	107	245	221	28	70	283	328	169	S	
13-Apr-05	344	274	303	330	317	269	278	221	255	227	230	218	199	129	28	21	87	129	96	108	141	163	244	316	217	SW	
14-Apr-05	117	187	225	299	107	132	236	284	249	250	265	286	305	258	308	294	282	303	303	308	309	258	251	248	277	W	
15-Apr-05	260	249	243	250	249	258	283	266	249	247	243	258	264	278	281	142	68	100	88	81	74	84	115	145	247	WSW	
16-Apr-05	151	143	132	12	92	97	85	92	107	111	142	54	49	78	66	56	82	67	63	267	278	243	234	97	E		
17-Apr-05	246	281	246	212	205	193	199	206	228	253	261	260	273	281	277	284	293	285	288	285	327	324	322	327	270	W	
18-Apr-05	296	225	280	329	166	170	224	222	236	265	282	281	262	263	271	278	268	270	264	253	248	249	232	225	261	W	
19-Apr-05	221	183	169	148	128	120	140	164	216	249	257	257	271	262	262	271	276	276	276	260	269	275	263	257	255	WSW	
20-Apr-05	251	256	269	267	303	125	202	239	247	307	307	282	289	284	317	302	336	52	59	85	77	67	84	90	292	WNW	
21-Apr-05	152	317	336	325	358	95	238	136	122	108	106	113	111	97	99	85	109	123	102	105	80	85	108	158	104	ESE	
22-Apr-05	207	321	330	319	128	146	268	331	316	338	310	313	304	303	300	295	303	274	227	197	202	211	283	214	291	WNW	
23-Apr-05	252	232	285	321	355	338	30	73	97	80	98	106	98	116	101	23	70	59	71	60	52	54	54	40	67	ENE	
24-Apr-05	313	326	325	340	345	359	200	197	131	111	102	96	106	93	80	55	44	42	62	53	50	63	63	106	69	ENE	
25-Apr-05	321	344	314	337	316	244	254	254	230	231	222	352	355	360	350	356	3	1	8	5	31	34	35	313	346	NNW	
26-Apr-05	317	325	308	303	317	13	24	19	15	4	0	9	5	359	6	20	15	10	29	38	36	47	40	43	11	N	
27-Apr-05	58	43	360	336	346	38	40	47	28	318	303	352	350	360	9	24	16	6	56	61	61	68	64	62	25	NNE	
28-Apr-05	53	59	359	351	336	313	315	138	266	355	346	14	2	2	3	4	9	9	54	60	49	35	29	21	16	NNE	
29-Apr-05	4	340	329	325	310	319	321	339	338	319	330	350	352	356	358	1	5	3	6	348	60	83	74	52	354	N	
30-Apr-05	17	341	354	314	320	331	332	45	85	90	87	62	75	61	59	65	60	54	63	47	37	35	56	74	50	NE	
	Hourly Avg	253	253	259	279	258	239	278	222	228	251	257	279	281	279	298	309	322	324	320	324	297	261	253			

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

Station: Henry Pirker  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms							Operational Time: 718 hrs							
Calibration Time: 0 hrs							AMD Operational Uptime: 99.7%							
Percentile	99	95	75	50	25	5	1							
	59.9	44.1	22.0	12.2	8.3	5.0	3.8							

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

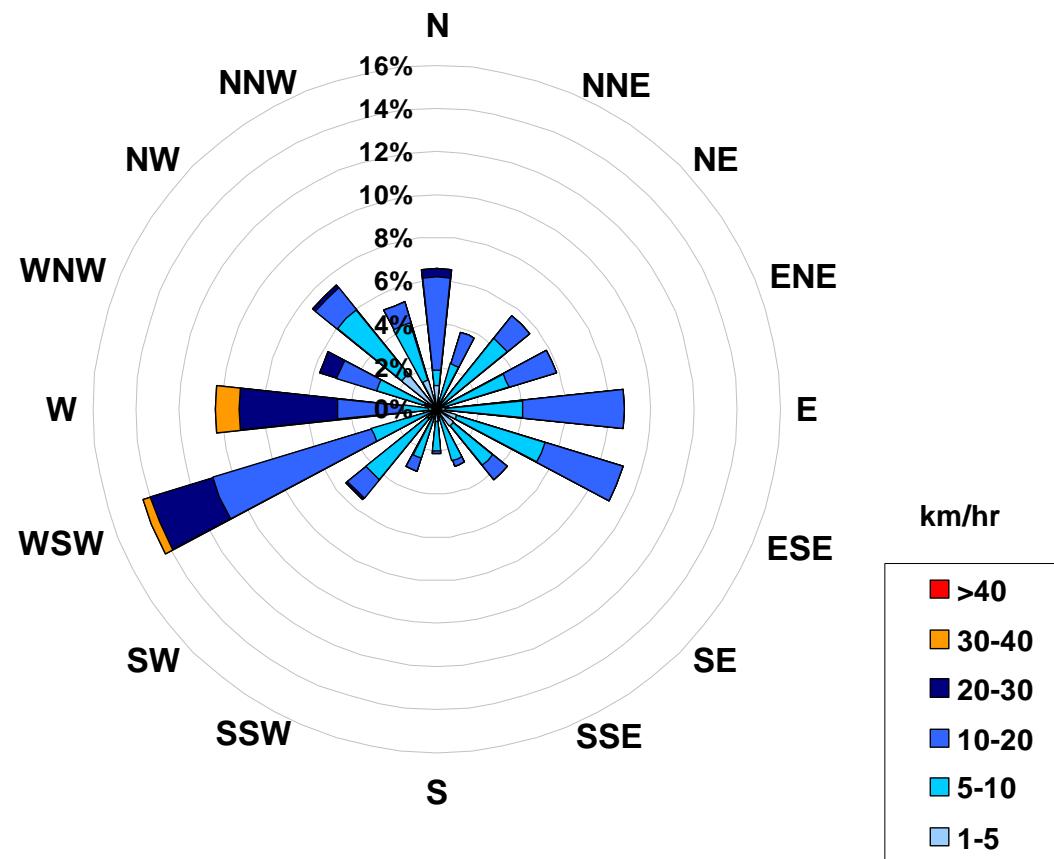
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Apr-05	6	20	6	9	11	9	7	9	16	18	31	18	9	7	5	6	6	5	7	6	7	6	9	7	31.2		
2-Apr-05	6	6	4	5	5	7	27	10	7	7	6	6	6	8	8	7	7	8	6	4	8	13	16	16	27.4		
3-Apr-05	16	14	7	13	14	6	5	6	8	10	12	18	12	13	15	9	8	8	6	4	4	30	10	12	29.7		
4-Apr-05	12	8	8	6	7	13	19	10	10	11	10	11	10	11	8	7	5	4	5	5	5	5	5	5	18.6		
5-Apr-05	6	4	24	59	34	47	14	11	14	20	27	18	14	12	20	24	31	15	11	14	16	19	37	43	58.5		
6-Apr-05	43	23	26	13	24	41	42	16	53	42	53	60	34	29	17	15	12	8	10	10	17	29	20	15	59.9		
7-Apr-05	40	26	44	47	33	24	40	17	34	22	9	10	9	14	31	20	30	27	6	10	10	14	19	9	5	46.8	
8-Apr-05	9	10	5	5	5	6	6	7	4	5	6	7	7	10	9	7	P	P	26	4	3	5	5	11	26.3		
9-Apr-05	7	6	11	10	7	6	11	7	7	5	7	11	11	10	9	10	8	8	5	4	4	7	7	6	10.8		
10-Apr-05	9	5	7	42	24	29	27	13	10	13	23	25	44	69	28	24	19	11	7	5	4	7	4	4	69.3		
11-Apr-05	3	4	6	5	5	6	5	6	7	9	9	12	18	13	12	11	9	7	10	22	26	8	9	9	26.5		
12-Apr-05	9	15	11	7	8	7	19	11	17	16	26	45	49	61	55	27	28	31	42	18	21	16	20	20	60.9		
13-Apr-05	27	32	18	14	14	25	24	15	12	13	15	13	28	65	38	33	28	29	14	13	10	14	26	43	65.2		
14-Apr-05	39	13	17	22	28	29	23	13	11	16	43	26	22	17	16	10	12	8	7	12	12	13	7	10	43.5		
15-Apr-05	11	6	6	4	5	16	10	24	10	13	10	11	32	38	58	47	43	25	14	9	6	7	11	8	58.4		
16-Apr-05	10	10	42	53	25	16	7	11	11	10	18	29	22	15	13	11	10	13	10	24	7	11	6	5	53.1		
17-Apr-05	10	13	8	7	6	5	10	9	9	8	9	10	10	7	9	7	6	9	7	6	9	6	5	16	16.1		
18-Apr-05	40	57	43	17	52	12	33	11	14	10	11	13	16	14	13	11	14	9	10	9	10	11	12	11	56.5		
19-Apr-05	11	12	12	14	12	11	12	18	21	18	13	13	12	17	14	12	11	10	9	9	12	9	9	9	21.1		
20-Apr-05	10	11	9	14	59	30	30	17	11	14	26	63	40	60	43	34	45	44	28	7	6	6	5	5	62.9		
21-Apr-05	28	10	9	16	51	34	39	25	14	19	16	18	23	27	26	29	20	20	11	6	9	5	5	11	50.8		
22-Apr-05	17	36	23	26	31	26	47	55	7	19	60	6	6	5	6	8	14	9	10	9	15	21	16	59.9			
23-Apr-05	14	38	23	9	5	10	14	12	17	12	13	19	36	44	54	40	65	27	17	12	10	10	12	12	64.8		
24-Apr-05	34	15	7	6	15	55	23	21	23	18	22	16	27	27	35	47	31	29	16	12	12	6	8	46	55.0		
25-Apr-05	5	8	15	22	17	43	10	11	13	16	31	39	15	15	13	9	11	7	6	4	10	10	14	9	42.8		
26-Apr-05	8	25	21	8	7	11	11	7	7	7	6	10	9	7	10	15	13	12	21	12	9	12	13	11	24.5		
27-Apr-05	12	11	16	22	13	10	13	18	37	38	35	36	19	19	21	23	19	16	18	9	8	8	8	11	38.3		
28-Apr-05	11	10	12	9	31	9	13	32	60	51	35	33	31	32	24	19	17	19	14	10	10	10	8	7	59.7		
29-Apr-05	4	8	7	4	9	4	5	11	12	17	20	20	18	16	21	25	34	17	25	11	10	6	7	14	33.8		
30-Apr-05	17	7	6	11	8	10	17	15	24	44	25	22	28	25	28	25	22	24	17	15	10	8	11	6	43.9		
																									0.0		

Hourly Max 43 57 44 59 59 55 47 55 60 51 60 63 49 69 58 47 65 44 42 24 26 30 37 46

**Wind Rose for the 1-hr Average Occurrences at the Henry Pirker Site for April 2005**



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
1.0	<	5	78
5	to	10	304
10	to	20	259
20	to	30	66
30	to	40	11
>	40		0
Total Non-Zero Values			718

# PASZA - Evergreen Park Monthly Summary Tables, Graphs, and Roses

## PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

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

**Summary**

Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	11.4 ppb	21-Apr	9:00 10:00
Maximum 24-hr Average:	2.6 ppb	21-Apr	

AIC Time:	33 hrs	Operational Time:	683 hrs							
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%							
Percentile	99 4.2	95 2.0	75 0.9	50 0.3	25 0.0	5 0.0	1 0.0	Average 0.6 ppb		

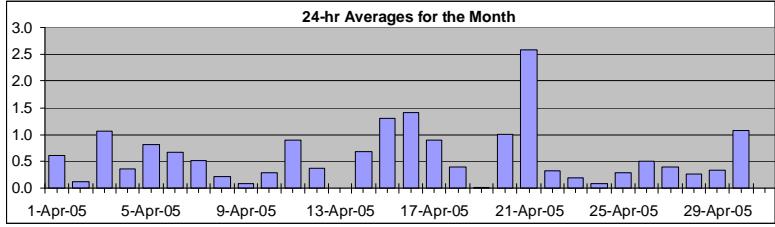
**Day Mountain Standard Time**

	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 0:00	23:00 1:00	24-hour Average	Daily Maximum
1-Apr-05	1	1	2	1	1	0	0	1	1	1	0	0	0	0	A	0	0	1	1	0	1	1	0	1	0.6	2.4	
2-Apr-05	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.6	
3-Apr-05	0	1	1	0	1	0	1	0	1	5	2	2	A	1	0	0	1	1	1	1	1	1	1	1	1.1	4.9	
4-Apr-05	0	1	1	0	1	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9	
5-Apr-05	0	1	0	0	0	1	1	1	1	2	A	4	0	0	0	1	1	1	0	0	0	0	0	0	0.8	4.4	
6-Apr-05	1	1	1	1	1	1	1	1	1	A	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.2	
7-Apr-05	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.5	1.7	
8-Apr-05	1	1	0	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8	
9-Apr-05	2	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	1.5	
10-Apr-05	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8	
11-Apr-05	0	0	0	0	0	A	0	0	0	1	3	2	2	2	2	2	2	0	0	0	0	0	0	0	0.9	2.9	
12-Apr-05	0	0	1	A	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	1	1	0	0.4	0.6	
13-Apr-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	A	A	7	0	N	6.5		
14-Apr-05	0	0	0	0	0	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	1.2	
15-Apr-05	0	0	0	0	0	A	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1.3	1.9	
16-Apr-05	0	0	0	0	A	0	0	0	0	1	2	2	2	3	3	2	3	3	3	2	2	1	1	1	1.4	3.1	
17-Apr-05	1	1	A	0	0	0	0	0	0	1	1	1	2	2	2	1	1	1	1	1	2	1	1	1	0.9	2.0	
18-Apr-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1	1	1	0.4	1.5	
19-Apr-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	0.4	
20-Apr-05	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	0	0	A	1.0	2.0	
21-Apr-05	0	1	1	1	0	1	1	1	4	11	5	5	3	4	4	3	3	3	2	2	1	A	1	1	2.6	11.4	
22-Apr-05	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	A	0	0	0.3	1.4	
23-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0.2	0.6		
24-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6		
25-Apr-05	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	A	0	0	0	0	0	0.3	1.0		
26-Apr-05	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0	0	0	A	0	0	1	2	2	1	0.5	1.7	
27-Apr-05	0	0	0	0	0	1	1	1	0	0	1	2	1	1	1	A	0	0	0	0	0	0	0	0.4	1.6		
28-Apr-05	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	1.0		
29-Apr-05	0	0	1	1	1	1	1	1	0	1	1	1	0	A	0	0	1	2	2	1	1	1	0	1.1	3.2		
30-Apr-05	0	0	1	1	2	1	2	3	2	1	1	0	A	0	0	1	2	2	1	1	1	0	1	N	0.0		

Hourly Avg	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.6	0.7	1.1	0.9	1.1	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.7	0.5	0.5
Hourly Max	1.5	1.4	2.4	1.4	1.6	1.2	2.1	3.2	4.5	11.4	5.5	5.4	3.4	3.6	3.7	3.4	2.9	3.1	2.8	2.2	1.9	1.9	6.5	1.4	

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

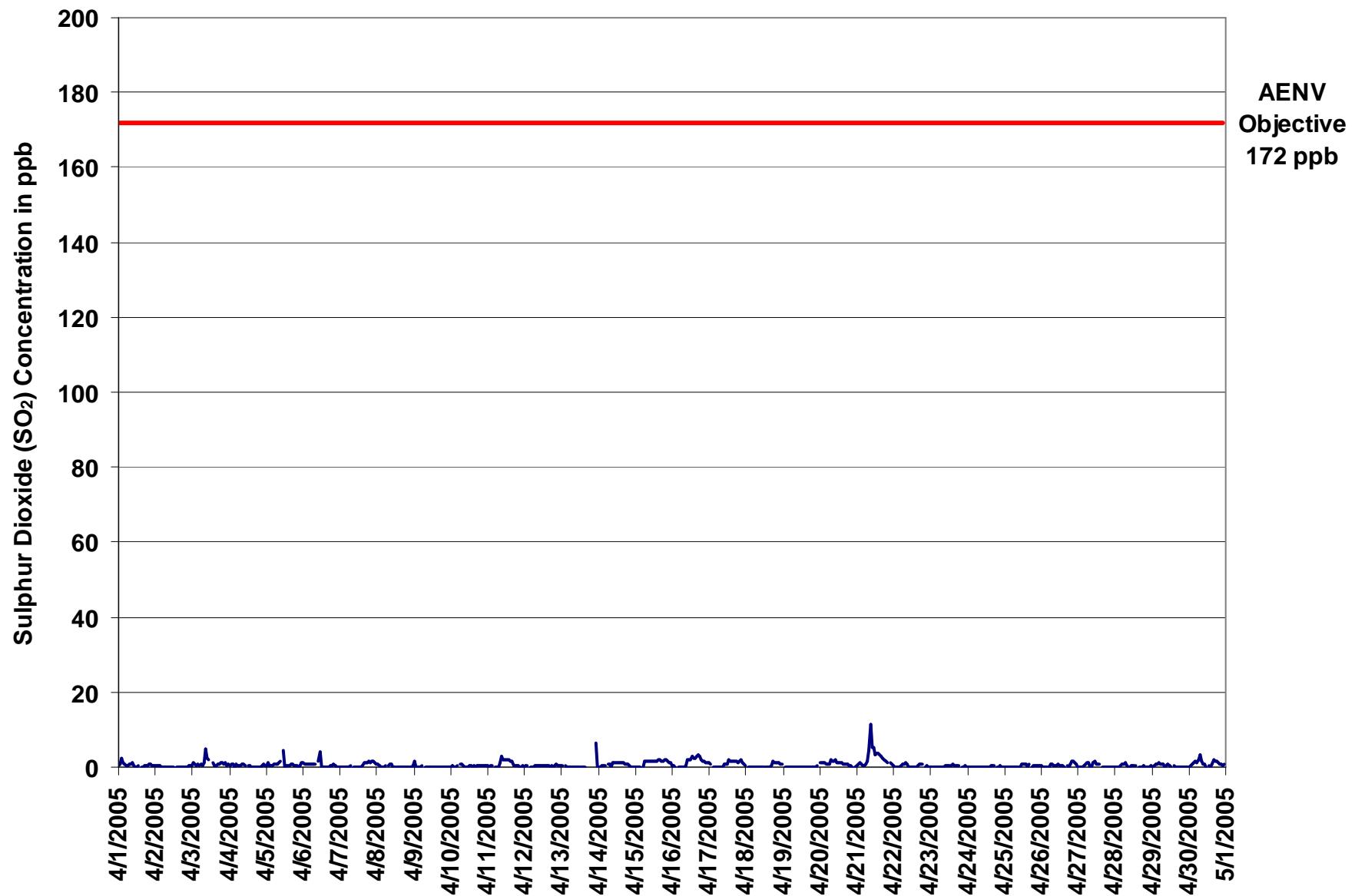


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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

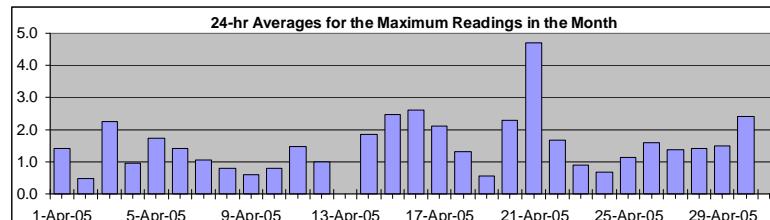
#### Summary

Maximum 1-hr Value:	18.2 ppb	21-Apr 9:00	10:00
Maximum 24-hr Value:	4.7 ppb	21-Apr	

AIC Time:	33 hrs	Operational Time:	683 hrs														
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%														
Percentile	<table border="1"> <tr> <td>99</td><td>95</td><td>75</td><td>50</td><td>25</td><td>5</td><td>1</td> </tr> <tr> <td>6.2</td><td>3.3</td><td>2.1</td><td>1.3</td><td>0.7</td><td>0.0</td><td>0.0</td> </tr> </table>			99	95	75	50	25	5	1	6.2	3.3	2.1	1.3	0.7	0.0	0.0
99	95	75	50	25	5	1											
6.2	3.3	2.1	1.3	0.7	0.0	0.0											
	Average 1.5 ppb																

#### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	3	3	4	2	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.4	3.9	
2-Apr-05	1	1	1	2	1	0	1	0	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	0.5	1.8	
3-Apr-05	1	2	1	1	2	1	2	1	4	9	6	4	A	3	1	1	2	2	2	2	2	2	1	2	2.3	9.0	
4-Apr-05	1	1	1	1	1	1	1	1	1	2	1	A	1	1	1	1	0	0	0	0	1	1	1	1	1.0	2.3	
5-Apr-05	1	2	1	1	1	1	1	2	2	3	A	10	1	1	1	1	1	1	1	1	1	1	1	1	1.7	10.1	
6-Apr-05	2	2	2	1	1	1	1	1	2	A	2	6	2	1	1	1	1	1	1	1	1	2	1	0	1.4	5.9	
7-Apr-05	0	0	0	0	1	0	1	2	A	1	1	0	0	1	1	1	3	2	2	2	2	2	2	2	1.1	2.6	
8-Apr-05	1	1	1	1	0	1	1	A	1	1	1	1	0	0	1	0	0	1	0	1	1	1	1	2	0.8	2.4	
9-Apr-05	3	1	0	1	0	1	A	1	1	1	1	0	1	0	0	0	0	0	0	1	0	1	1	1	0.6	2.9	
10-Apr-05	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
11-Apr-05	1	1	1	1	A	0	0	1	3	3	2	3	3	2	2	2	3	1	1	1	1	1	1	1	1.5	3.5	
12-Apr-05	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
13-Apr-05	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	A	A	8	1	N	7.6	
14-Apr-05	1	2	1	2	1	A	2	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	1	1	1.9	2.8	
15-Apr-05	0	1	1	1	A	2	2	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	2	2.5	3.7	
16-Apr-05	2	1	1	A	1	1	1	1	1	3	3	3	3	4	4	4	4	4	4	4	4	3	3	2	2.6	4.5	
17-Apr-05	3	2	A	1	1	1	1	1	1	2	2	2	4	3	3	3	2	3	3	3	2	3	2	2	2.1	3.7	
18-Apr-05	2	A	1	1	1	0	0	1	1	1	1	1	0	0	1	1	2	3	3	2	2	2	2	2	1.3	2.7	
19-Apr-05	A	1	1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	2	1	A	0.6	1.7	
20-Apr-05	2	3	2	3	2	2	2	4	3	3	4	2	2	3	2	2	2	2	2	2	2	1	1	A	2.3	3.8	
21-Apr-05	2	2	2	2	2	2	3	13	18	11	10	5	5	5	5	4	4	3	3	2	A	3	2	4.7	18.2		
22-Apr-05	2	1	2	1	1	2	2	2	3	2	1	1	1	1	1	2	2	2	2	5	A	1	1	1.7	4.5		
23-Apr-05	1	0	0	0	0	0	0	0	1	1	2	2	2	2	2	2	2	2	2	2	A	1	1	0.9	1.7		
24-Apr-05	1	0	0	0	0	0	0	1	0	0	0	0	0	2	1	2	2	2	2	1	A	1	1	0.7	1.8		
25-Apr-05	1	0	0	0	0	0	2	0	1	0	0	2	2	2	2	1	3	A	1	1	1	1	1	2	1.2	2.6	
26-Apr-05	1	1	1	1	0	2	2	2	2	2	2	2	2	2	2	1	2	A	2	1	3	3	2	2	1.6	2.9	
27-Apr-05	1	1	1	1	1	2	2	3	3	2	1	2	3	2	2	2	2	A	1	1	1	0	0	0	1.4	3.0	
28-Apr-05	1	1	1	2	1	2	2	2	2	1	1	1	2	1	A	2	1	2	2	1	1	0	1	2	1.4	2.3	
29-Apr-05	1	2	2	2	2	2	2	2	2	2	2	1	1	A	1	2	1	1	0	0	0	0	1	1	1.5	2.5	
30-Apr-05	2	2	2	2	3	2	3	5	3	2	2	2	2	A	2	2	3	3	3	2	2	2	2	2	2.4	4.7	
	Hourly Avg	1.3	1.2	1.2	1.1	0.9	1.1	1.3	1.5	1.9	2.3	2.0	2.2	1.5	1.7	1.5	1.6	1.6	1.6	1.4	1.6	1.4	1.6	1.4	1.4		
	Hourly Max	2.9	2.6	3.9	2.6	2.8	2.3	3.4	4.7	12.7	18.2	10.6	10.1	4.9	4.7	5.0	4.9	4.1	4.2	4.0	4.5	3.0	3.3	7.6	2.7	N	0.0



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

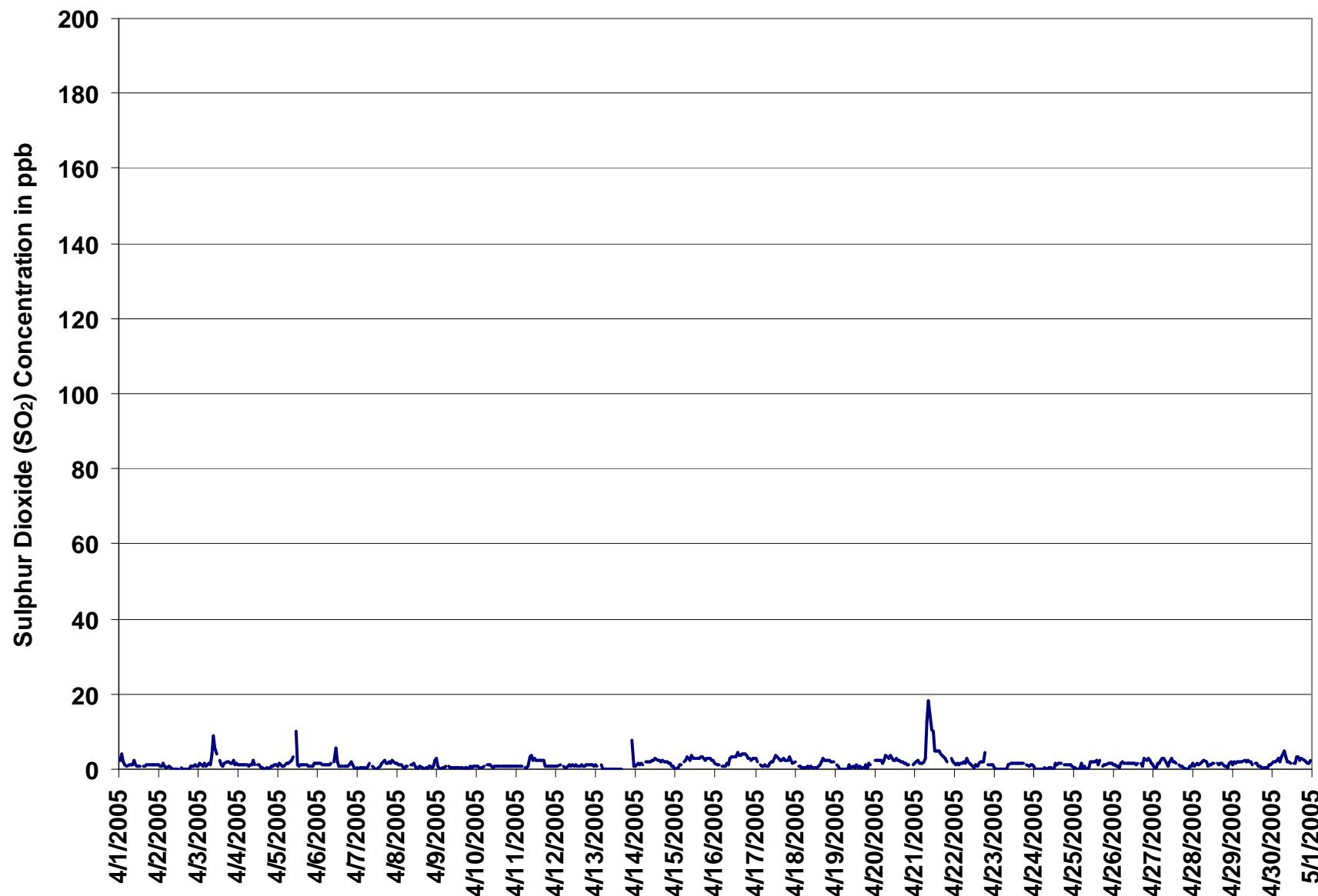
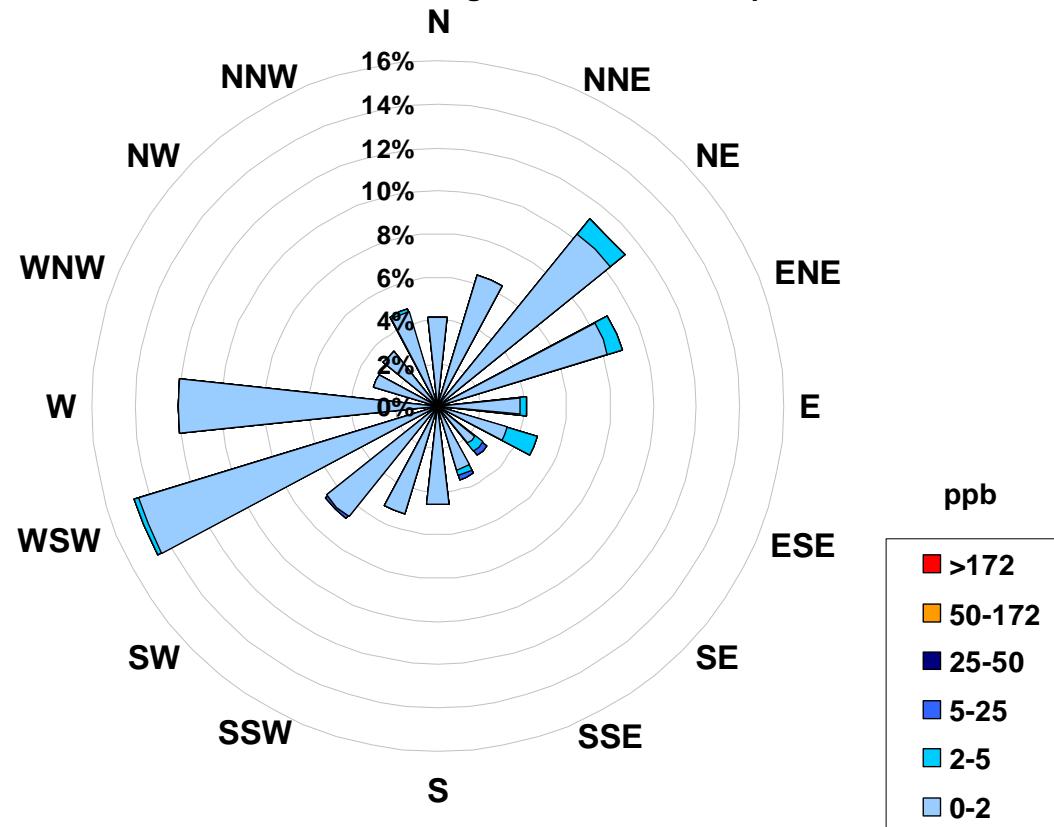


Figure 21. PASZA - Evergreen Park Sulphur Dioxide 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Sulphur Dioxide Average Concentration Occurrences at the Evergreen Park Site for April 2005**



Calms: 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	649
2	to	5	30
5	to	25	4
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			683

## PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

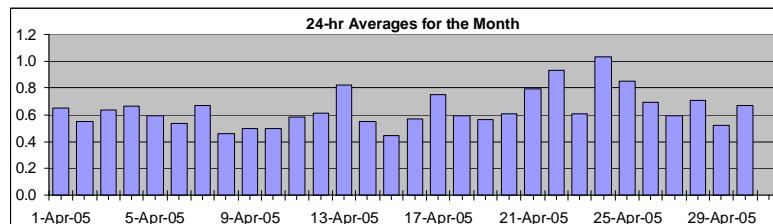
Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
 Summary

Maximum 1-hr Average:	4.8	ppb	24-Apr	6:00 7:00
Maximum 24-hr Value:	1.0	ppb	24-Apr	

AIC Time:	33 hrs	Operational Time:	685 hrs					
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	2.1	1.1	0.7	0.6	0.5	0.4	0.4	0.6 ppb

### HOURLY AVERAGE TABLE

### Total Reduced Sulphur (TRS)



### Status Flag Characters

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

### Day Mountain Standard Time

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9		
2-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7		
3-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8		
4-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.7		
5-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8		
6-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.6		
7-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9		
8-Apr-05	1	1	1	1	1	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.5	0.6		
9-Apr-05	1	1	1	1	0	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.6		
10-Apr-05	0	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	0	0	0.5	1.2		
11-Apr-05	0	0	0	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7		
12-Apr-05	0	0	0	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7		
13-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.3		
14-Apr-05	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	2.0		
15-Apr-05	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.7		
16-Apr-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	0.4	0.6		
17-Apr-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7		
18-Apr-05	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.5		
19-Apr-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8		
20-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0		
21-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4		
22-Apr-05	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.3		
23-Apr-05	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8		
24-Apr-05	1	1	1	1	1	1	4	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	4.8		
25-Apr-05	1	1	2	2	2	2	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	2.3		
26-Apr-05	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	2.2		
27-Apr-05	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7		
28-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4		
29-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.7		
30-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2		

Hourly Avg	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Hourly Max	1.8	1.4	1.8	2.3	2.3	3.9	4.8	1.9	1.2	1.3	0.8	1.0	0.7	0.8	1.1	1.4	0.9	0.7	0.8	1.4	2.5	1.7	1.4	1.3				

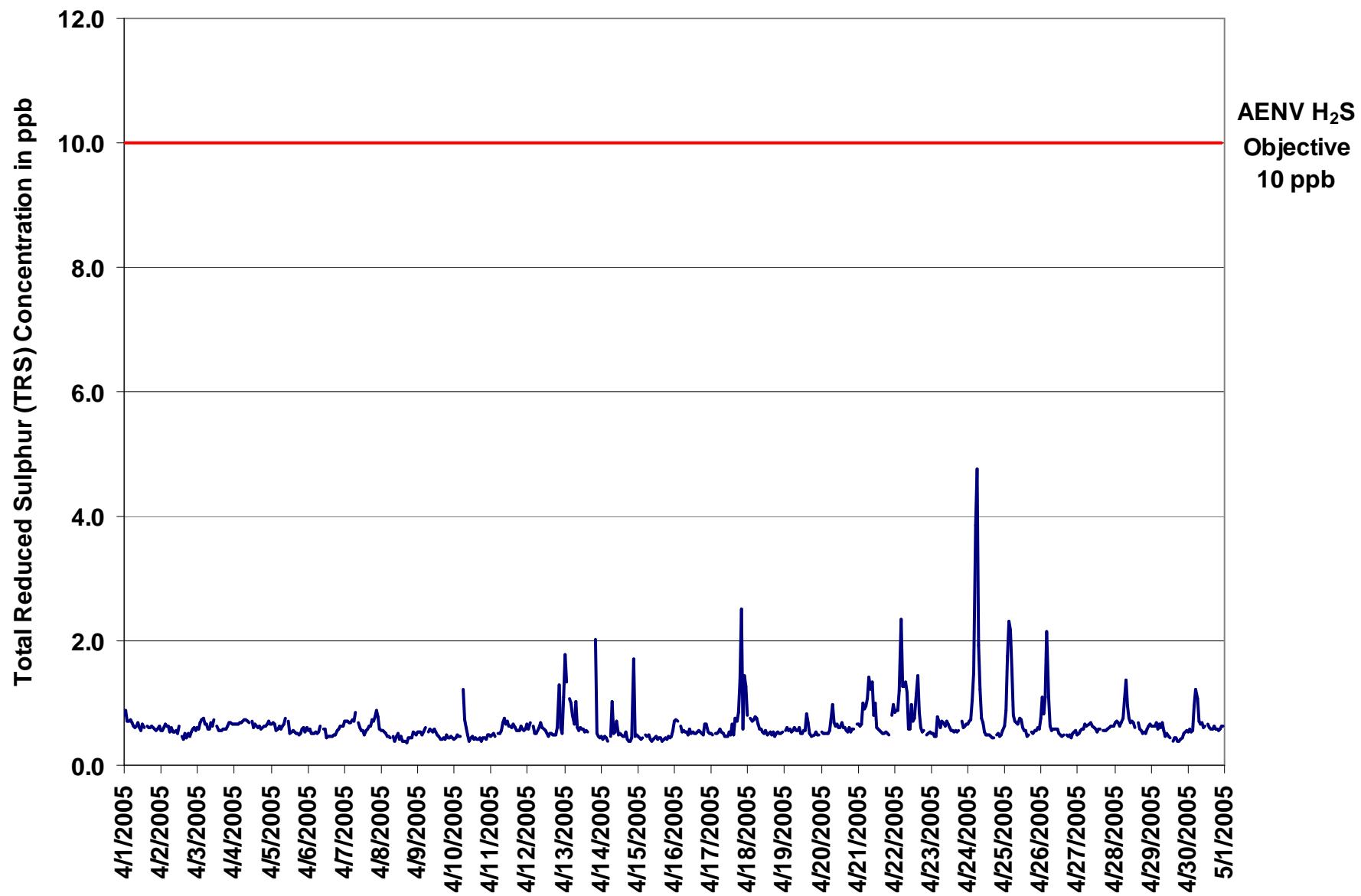


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

### Total Reduced Sulphur (TRS)

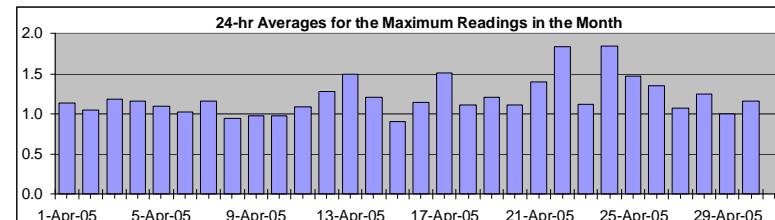
#### Summary

Maximum 1-hr Value:	7.6 ppb	24-Apr	6:00	7:00
Maximum 24-hr Value:	1.8 ppb	24-Apr		

AIC Time:	33 hrs	Operational Time:	685 hrs	
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%	
Percentile	99 95 75 50 25 5 1	Average		
	3.5 2.3 1.2 1.1 1.0 0.9 0.8	1.2 ppb		

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Apr-05	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.1	1.4	
2-Apr-05	1:00	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	1.6	
3-Apr-05	1:00	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	1.5	
4-Apr-05	1:00	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	1.5	
5-Apr-05	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.1	1.4	
6-Apr-05	1:00	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
7-Apr-05	1:00	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.7	
8-Apr-05	1:00	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	1.1	
9-Apr-05	1:00	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
10-Apr-05	1:00	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	1.0	1.8
11-Apr-05	1:00	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3
12-Apr-05	1:00	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.3
13-Apr-05	3:00	2	A	2	2	1	1	3	1	1	1	1	1	1	1	1	C	C	A	A	3	1	1	1	1	1.5	3.2	
14-Apr-05	1:00	1	1	1	1	1	A	1	3	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1.2	2.8
15-Apr-05	1:00	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
16-Apr-05	1:00	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1.1	2.6	
17-Apr-05	1:00	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	4	1	2	3	1.5	3.9	
18-Apr-05	1:00	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6	
19-Apr-05	1:00	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1.2	2.4	
20-Apr-05	1:00	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.6	
21-Apr-05	1:00	1	1	1	2	1	1	2	2	2	2	2	3	1	1	1	1	1	1	1	1	1	A	2	1	1.4	2.6	
22-Apr-05	1:00	1	1	1	3	4	3	2	3	2	1	1	2	1	1	2	3	2	1	1	2	A	1	1	1	1.8	3.9	
23-Apr-05	1:00	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.1	2.6	
24-Apr-05	1:00	1	1	1	2	3	6	8	4	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.8	7.6	
25-Apr-05	1:00	2	3	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.5	3.9	
26-Apr-05	1:00	2	1	2	4	3	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.3	4.3	
27-Apr-05	1:00	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	1.4	
28-Apr-05	1:00	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	2.5	
29-Apr-05	1:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	1.2	
30-Apr-05	1:00	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	1.7	
	Hourly Avg	1.1	1.2	1.2	1.4	1.5	1.5	1.5	1.5	1.2	1.2	1.1	1.2	1.0	1.1	1.1	1.2	1.1	1.1	1.1	1.0	1.2	1.2	1.1	1.2			
	Hourly Max	3.2	2.2	2.8	3.9	4.3	5.6	7.6	3.8	2.4	2.1	1.5	2.6	1.4	1.4	2.3	2.5	1.8	1.9	1.8	3.3	3.9	2.8	2.5	3.0	N	0.0	



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

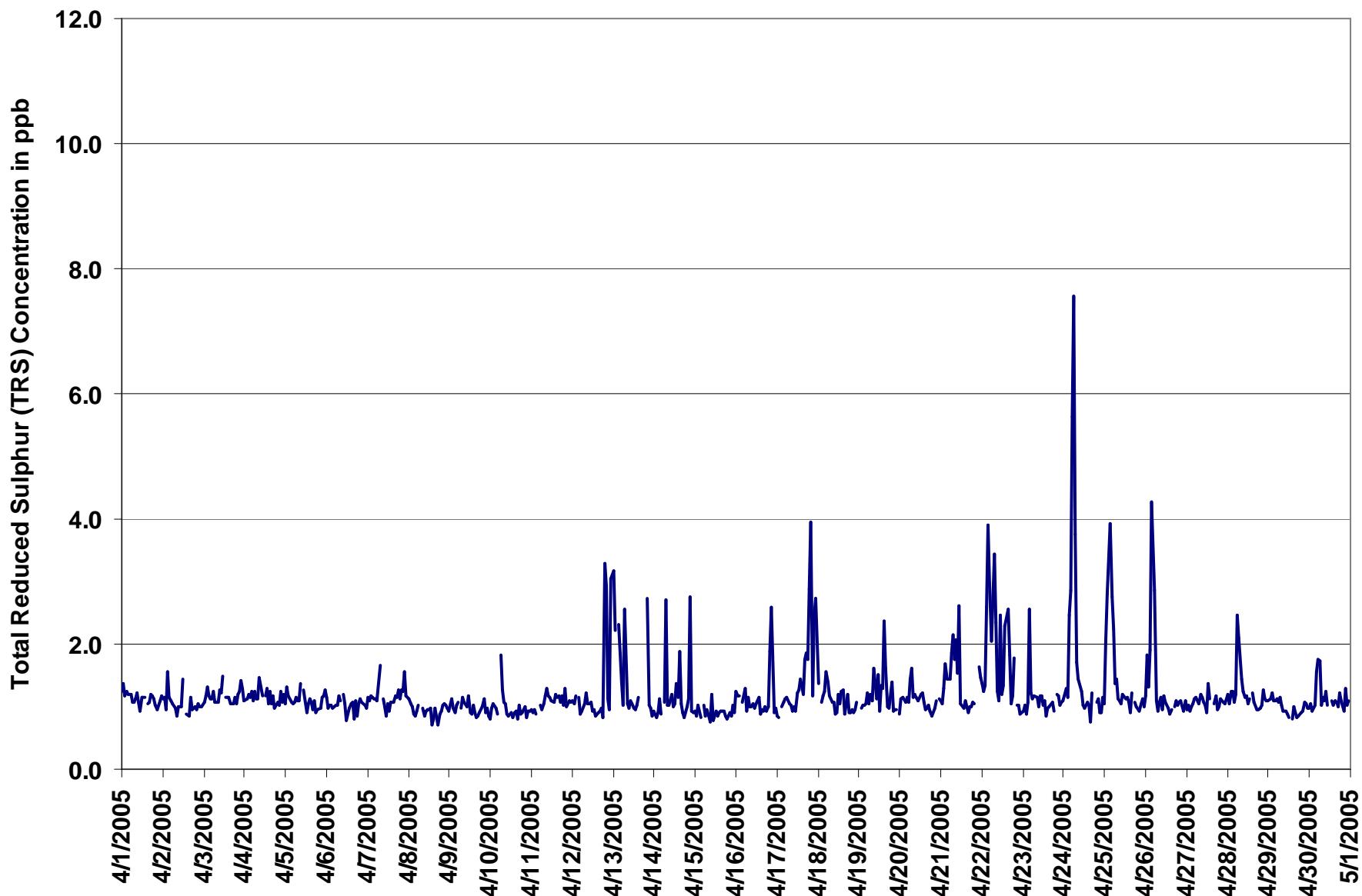
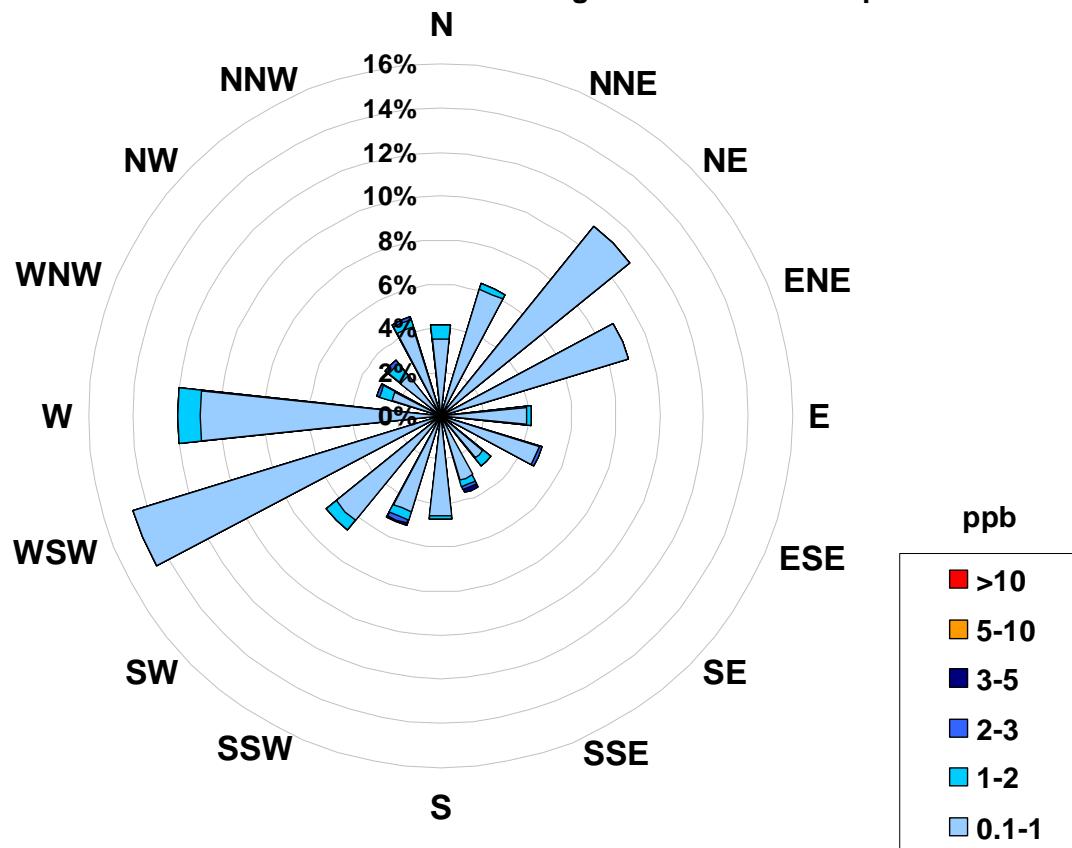


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Total Reduced Sulphur Average  
Concentration Occurrences at the Evergreen Park Site for April 2005**



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

Frequency Distribution of TRS in ppb		
Range	Frequency (hrs)	
0.1 < 1	639	
1 to 2	38	
2 to 3	6	
3 to 5	2	
5 to 10	0	
> 10	0	
Total Non-Zero Values	685	

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

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 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

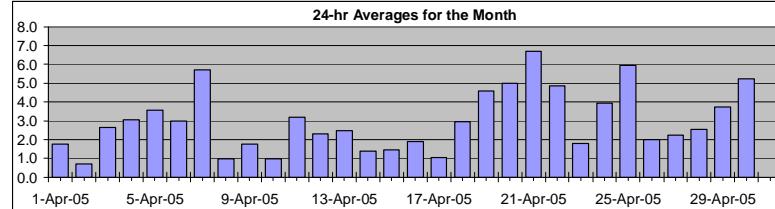
Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	41.0 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	6.7 $\mu\text{g}/\text{m}^3$
	20-Apr 7:00 8:00
	21-Apr

AIC Time:	0 hrs	Operational Time:	704 hrs								
Calibration Time:	5 hrs	AMD Operational Uptime:	98.5%								
Percentile	99	95	75	50	25	5	1	Average	3.0 $\mu\text{g}/\text{m}^3$	Geomean	2.5 $\mu\text{g}/\text{m}^3$
	14.1	8.9	4.0	2.2	0.8	0.0	0.0				

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Apr-05	1	1	0	0	1	0	0	0	2	0	2	2	2	15	D	D	0	4	7	0	0	0	0	0	0	0	3	1.7	15.0
2-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	2	4	3	2	0.7	4.0		
3-Apr-05	1	3	2	2	2	0	1	1	D	0	1	0	1	1	1	2	2	4	4	4	4	6	2	2	4	0	2.7	11.7	
4-Apr-05	7	6	5	4	4	2	3	10	0	2	2	2	2	1	0	1	5	2	4	6	2	2	4	0	3.1	9.7			
5-Apr-05	0	2	1	2	1	0	2	5	9	5	4	0	D	0	2	1	3	3	4	4	4	7	11	7	8	3.6	11.1		
6-Apr-05	6	5	5	3	4	4	5	3	4	8	3	0	0	0	0	0	0	0	0	5	3	2	3	3	4	3.0	8.3		
7-Apr-05	3	5	5	1	3	2	3	11	5	2	1	0	0	2	1	9	0	13	18	10	14	11	13	4	5.7	18.2			
8-Apr-05	2	1	0	0	1	0	0	0	1	1	0	0	0	0	0	1	1	3	1	3	2	1	2	3	1.0	3.4			
9-Apr-05	1	1	1	3	3	5	5	0	D	0	0	0	1	2	2	2	2	2	1	2	4	1	0	2	1.7	5.4			
10-Apr-05	2	0	1	1	0	2	7	2	1	0	0	0	0	0	0	0	0	1	0	2	0	1	2	1	1.0	6.6			
11-Apr-05	4	2	2	3	1	2	2	2	3	1	3	3	3	4	3	4	6	7	4	6	9	0	0	1	3.2	8.9			
12-Apr-05	0	1	0	1	1	0	1	12	0	0	D	D	0	0	D	2	6	1	9	6	3	2	2	2	2.3	12.0			
13-Apr-05	2	2	4	4	4	2	3	2	4	3	4	3	2	2	2	2	1	1	C	C	C	C	C	0	2.5	4.3			
14-Apr-05	1	0	0	0	1	1	3	4	3	2	0	D	2	5	0	1	D	0	1	2	1	2	2	0	1.4	5.4			
15-Apr-05	0	0	0	0	1	2	1	4	0	2	0	0	0	2	0	0	1	1	0	1	3	4	7	5	1.5	7.1			
16-Apr-05	3	4	4	3	3	3	2	1	1	0	1	2	1	0	1	2	0	2	1	7	1	2	1	1	1.9	6.7			
17-Apr-05	1	0	1	0	0	2	3	1	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	1.1	3.1			
18-Apr-05	1	0	1	1	0	2	5	4	5	4	3	1	7	3	4	4	6	2	4	3	4	1	1	2	3.0	7.3			
19-Apr-05	2	0	0	1	0	1	3	6	4	8	14	10	7	7	9	14	8	3	3	3	2	2	2	1	4.6	13.8			
20-Apr-05	1	1	1	1	0	2	8	41	11	2	2	3	2	2	4	3	3	4	4	4	4	5	6	5	5.0	41.0			
21-Apr-05	8	5	6	4	5	5	14	37	11	11	5	4	3	3	3	2	3	5	3	3	3	4	5	7	6.7	37.2			
22-Apr-05	6	7	8	8	8	6	20	21	9	4	N	0	0	1	0	3	0	1	1	4	1	1	1	1	4.8	21.0			
23-Apr-05	0	0	2	2	3	2	5	3	1	1	3	0	2	1	2	1	1	1	1	1	4	3	0	5	1.8	5.0			
24-Apr-05	4	4	5	4	4	5	8	7	9	5	3	0	2	2	1	3	3	3	2	1	3	3	5	7	4.0	9.0			
25-Apr-05	5	6	7	7	8	8	3	11	11	10	8	6	7	6	5	3	2	3	5	3	2	3	3	5.9	11.2				
26-Apr-05	3	3	2	4	6	4	3	3	3	2	2	2	0	0	1	0	0	1	0	0	2	2	2	1	2.0	5.6			
27-Apr-05	2	1	1	1	3	3	8	4	3	2	2	3	1	2	3	3	3	1	3	0	1	2	1	1	2.2	8.0			
28-Apr-05	2	1	1	1	2	2	5	8	3	6	1	1	2	2	3	1	3	2	4	2	1	4	3	2	2.5	7.8			
29-Apr-05	4	2	4	5	6	6	7	6	3	3	3	4	4	3	2	3	2	2	3	4	3	5	5	5	3.7	7.0			
30-Apr-05	6	3	3	2	5	5	10	4	3	2	3	11	2	10	7	17	7	3	3	3	4	4	4	4	5.2	16.5			
	Hourly Avg	2.6	2.3	2.4	2.3	2.7	4.7	7.1	3.9	2.9	2.5	2.1	2.2	2.2	2.1	2.9	2.6	3.0	3.2	3.1	3.3	3.2			0.0				
	Hourly Max	8.0	7.4	7.7	7.5	8.1	8.1	19.8	41.0	11.2	11.2	13.6	10.9	15.0	10.4	9.0	16.5	7.9	13.0	18.2	10.2	13.6	11.1	13.1	11.7				

**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

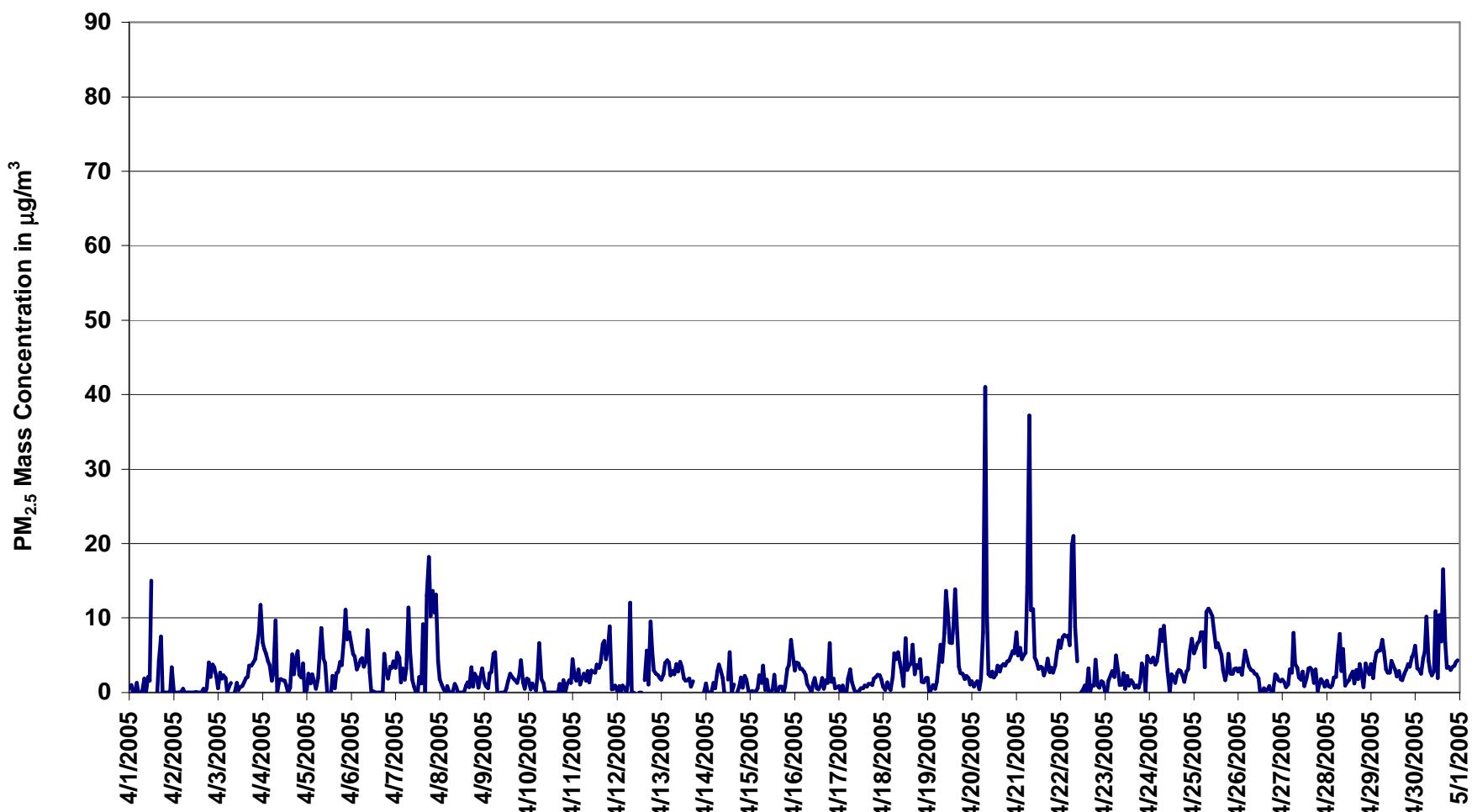


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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

#### Summary

Maximum 1-hr Average:	73.7	µg/m <sup>3</sup>	20-Apr	7:00 8:00
Maximum 24-hr Value:	12.2	µg/m <sup>3</sup>	7-Apr	

AIC Time:	0 hrs	Operational Time:	704 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	98.5%
Percentile	99 95 75 50 25 5 1	Average	7.5 µg/m <sup>3</sup>

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Apr-05	3 1:00	4 2:00	2 3:00	5 4:00	5 5:00	4 6:00	6 7:00	6 8:00	8 9:00	7 10:00	7 11:00	9 12:00	45 13:00	D 14:00	D 15:00	5 16:00	10 17:00	2 18:00	1 19:00	1 20:00	1 21:00	2 22:00	2 23:00	5 0:00	6.9	45.4	
2-Apr-05	5 1:00	0 2:00	0 3:00	4 4:00	2 5:00	2 6:00	1 7:00	0 8:00	2 9:00	1 10:00	2 11:00	4 12:00	4 13:00	4 14:00	5 15:00	7 16:00	7 17:00	4 18:00	5 19:00	8 20:00	8 21:00	13 22:00	13 23:00	9 0:00	4.6	13.2	
3-Apr-05	8 1:00	9 2:00	9 3:00	7 4:00	3 5:00	1 6:00	4 7:00	8 8:00	D 9:00	3 10:00	5 11:00	4 12:00	6 13:00	6 14:00	4 15:00	6 16:00	5 17:00	6 18:00	7 19:00	7 20:00	7 21:00	6 22:00	12 23:00	21 0:00	7.0	21.0	
4-Apr-05	9 1:00	7 2:00	7 3:00	6 4:00	7 5:00	6 6:00	18 7:00	13 8:00	15 9:00	6 10:00	8 11:00	8 12:00	6 13:00	6 14:00	16 15:00	9 16:00	10 17:00	8 18:00	9 19:00	9 20:00	8 21:00	6 22:00	10 23:00	3 0:00	8.8	18.5	
5-Apr-05	3 1:00	4 2:00	5 3:00	7 4:00	3 5:00	4 6:00	19 7:00	33 8:00	11 9:00	7 10:00	6 11:00	6 12:00	D 13:00	3 14:00	7 15:00	8 16:00	7 17:00	6 18:00	8 19:00	11 20:00	24 21:00	29 22:00	14 23:00	15 0:00	10.4	32.9	
6-Apr-05	9 1:00	10 2:00	10 3:00	6 4:00	7 5:00	7 6:00	9 7:00	9 8:00	7 9:00	15 10:00	11 11:00	3 12:00	6 13:00	5 14:00	2 15:00	7 16:00	5 17:00	11 18:00	8 19:00	3 20:00	11 21:00	8 22:00	10 23:00	10 0:00	7.6	14.8	
7-Apr-05	6 1:00	10 2:00	10 3:00	3 4:00	5 5:00	4 6:00	7 7:00	20 8:00	17 9:00	8 10:00	5 11:00	3 12:00	5 13:00	5 14:00	4 15:00	16 16:00	13 17:00	23 18:00	33 19:00	17 20:00	22 21:00	18 22:00	25 23:00	10 0:00	12.2	33.4	
8-Apr-05	4 1:00	3 2:00	8 3:00	8 4:00	2 5:00	0 6:00	3 7:00	4 8:00	3 9:00	6 10:00	6 11:00	5 12:00	D 13:00	1 14:00	4 15:00	6 16:00	8 17:00	8 18:00	4 19:00	4 20:00	4 21:00	3 22:00	4 23:00	10 0:00	4.5	10.2	
9-Apr-05	4 1:00	2 2:00	2 3:00	5 4:00	8 5:00	10 6:00	13 7:00	0 8:00	D 9:00	1 10:00	3 11:00	3 12:00	3 13:00	7 14:00	5 15:00	6 16:00	5 17:00	4 18:00	4 19:00	4 20:00	10 21:00	6 22:00	2 23:00	4 0:00	5.0	13.1	
10-Apr-05	8 1:00	6 2:00	3 3:00	2 4:00	2 5:00	6 6:00	10 7:00	7 8:00	5 9:00	4 10:00	0 11:00	3 12:00	4 13:00	7 14:00	7 15:00	4 16:00	4 17:00	6 18:00	3 19:00	6 20:00	3 21:00	6 22:00	3 23:00	3 0:00	4.6	9.8	
11-Apr-05	13 1:00	10 2:00	7 3:00	8 4:00	7 5:00	6 6:00	6 7:00	12 8:00	5 9:00	7 10:00	5 11:00	6 12:00	6 13:00	6 14:00	6 15:00	8 16:00	17 17:00	6 18:00	10 19:00	18 20:00	2 21:00	2 22:00	2 23:00	2 0:00	8.1	18.4	
12-Apr-05	1 1:00	2 2:00	1 3:00	4 4:00	3 5:00	2 6:00	9 7:00	22 8:00	9 9:00	5 10:00	D 11:00	D 12:00	8 13:00	6 14:00	D 15:00	7 16:00	11 17:00	5 18:00	19 19:00	17 20:00	8 21:00	4 22:00	6 23:00	6 0:00	7.5	21.6	
13-Apr-05	7 1:00	5 2:00	6 3:00	7 4:00	5 5:00	4 6:00	4 7:00	4 8:00	5 9:00	6 10:00	2 11:00	6 12:00	6 13:00	7 14:00	9 15:00	9 16:00	9 17:00	6 18:00	C 19:00	C 20:00	C 21:00	C 22:00	C 23:00	3 0:00	5.8	9.2	
14-Apr-05	13 1:00	2 2:00	2 3:00	16 4:00	15 5:00	4 6:00	8 7:00	5 8:00	3 9:00	3 10:00	2 11:00	D 12:00	10 13:00	23 14:00	5 15:00	4 16:00	D 17:00	4 18:00	6 19:00	6 20:00	3 21:00	5 22:00	4 23:00	2 0:00	6.7	22.5	
15-Apr-05	3 1:00	3 2:00	1 3:00	12 4:00	16 5:00	15 6:00	4 7:00	5 8:00	13 9:00	4 10:00	5 11:00	15 12:00	13 13:00	14 14:00	5 15:00	3 16:00	4 17:00	5 18:00	2 19:00	5 20:00	6 21:00	10 22:00	10 23:00	11 0:00	7.0	15.6	
16-Apr-05	6 1:00	7 2:00	7 3:00	5 4:00	4 5:00	4 6:00	2 7:00	2 8:00	1 9:00	4 10:00	4 11:00	4 12:00	D 13:00	2 14:00	3 15:00	5 16:00	4 17:00	3 18:00	18 19:00	5 20:00	5 21:00	2 22:00	3 23:00	3 0:00	4.5	17.7	
17-Apr-05	3 1:00	3 2:00	3 3:00	4 4:00	1 5:00	6 6:00	4 7:00	2 8:00	1 9:00	3 10:00	3 11:00	2 12:00	2 13:00	2 14:00	4 15:00	3 16:00	3 17:00	3 18:00	3 19:00	3 20:00	4 21:00	5 22:00	5 23:00	6 0:00	3.2	6.1	
18-Apr-05	3 1:00	2 2:00	3 3:00	3 4:00	2 5:00	5 6:00	10 7:00	6 8:00	7 9:00	7 10:00	7 11:00	27 12:00	8 13:00	8 14:00	10 15:00	5 16:00	7 17:00	5 18:00	7 19:00	12 20:00	4 21:00	3 22:00	4 23:00	4 0:00	6.9	26.5	
19-Apr-05	4 1:00	3 2:00	2 3:00	3 4:00	2 5:00	3 6:00	7 7:00	19 8:00	9 9:00	14 10:00	19 11:00	17 12:00	9 13:00	18 14:00	14 15:00	33 16:00	12 17:00	8 18:00	6 19:00	9 20:00	4 21:00	6 22:00	4 23:00	2 0:00	9.4	32.5	
20-Apr-05	3 1:00	2 2:00	2 3:00	3 4:00	29 5:00	74 6:00	20 7:00	7 8:00	6 9:00	7 10:00	5 11:00	4 12:00	4 13:00	8 14:00	6 15:00	6 16:00	7 17:00	6 18:00	7 19:00	7 20:00	6 21:00	6 22:00	8 23:00	7 0:00	9.9	73.7	
21-Apr-05	14 1:00	7 2:00	7 3:00	6 4:00	8 5:00	8 6:00	8 7:00	8 8:00	30 9:00	56 10:00	25 11:00	14 12:00	10 13:00	7 14:00	7 15:00	7 16:00	7 17:00	6 18:00	7 19:00	6 20:00	5 21:00	5 22:00	5 23:00	8 0:00	11.3	56.0	
22-Apr-05	8 1:00	14 2:00	10 3:00	10 4:00	9 5:00	9 6:00	38 7:00	43 8:00	14 9:00	8 10:00	N 11:00	2 12:00	2 13:00	5 14:00	2 15:00	2 16:00	11 17:00	7 18:00	3 19:00	6 20:00	24 21:00	4 22:00	3 23:00	4 0:00	10.5	43.2	
23-Apr-05	1 1:00	2 2:00	4 3:00	5 4:00	6 5:00	4 6:00	13 7:00	13 8:00	3 9:00	5 10:00	6 11:00	6 12:00	6 13:00	4 14:00	4 15:00	3 16:00	3 17:00	2 18:00	3 19:00	3 20:00	3 21:00	18 22:00	7 23:00	19 0:00	9.1	39.9	
24-Apr-05	8 1:00	8 2:00	7 3:00	10 4:00	10 5:00	18 6:00	18 7:00	15 8:00	15 9:00	12 10:00	18 11:00	12 12:00	10 13:00	6 14:00	6 15:00	6 16:00	6 17:00	6 18:00	5 19:00	5 20:00	5 21:00	5 22:00	8 23:00	8 0:00	8.3	17.8	
25-Apr-05	11 1:00	7 2:00	8 3:00	11 4:00	19 5:00	15 6:00	14 7:00	15 8:00	15 9:00	13 10:00	14 11:00	13 12:00	14 13:00	12 14:00	12 15:00	8 16:00	8 17:00	9 18:00	4 19:00	9 20:00	5 21:00	4 22:00	4 23:00	4 0:00	9.6	19.4	
26-Apr-05	4 1:00	5 2:00	4 3:00	7 4:00	7 5:00	5 6:00	4 7:00	4 8:00	4 9:00	4 10:00	4 11:00	4 12:00	4 13:00	4 14:00	3 15:00	3 16:00	7 17:00	4 18:00	4 19:00	4 20:00	5 21:00	4 22:00	3 23:00	3 0:00	4.4	7.0	
27-Apr-05	3 1:00	2 2:00	3 3:00	3 4:00	9 5:00	6 6:00	14 7:00	8 8:00	7 9:00	5 10:00	6 11:00	7 12:00	5 13:00	5 14:00	6 15:00	6 16:00	8 17:00	5 18:00	7 19:00	2 20:00	3 21:00	2 22:00	3 23:00	3 0:00	5.5	14.1	
28-Apr-05	3 1:00	3 2:00	3 3:00	3 4:00	5 5:00	8 6:00	13 7:00	8 8:00	11 9:00	6 10:00	6 11:00	4 12:00	4 13:00	6 14:00	6 15:00	6 16:00	6 17:00	5 18:00	10 19:00	6 20:00	6 21:00	4 22:00	8 23:00	6 0:00	6.1	13.1	
29-Apr-05	6 1:00	5 2:00	11 3:00	17 4:00	7 5:00	10 6:00	12 7:00	9 8:00	13 9:00	6 10:00	4 11:00	7 12:00	6 13:00	8 14:00	7 15:00	6 16:00	6 17:00	5 18:00	6 19:00	10 20:00	6 21:00	6 22:00	6 23:00	6 0:00	7.7	16.6	
30-Apr-05	19 1:00	8 2:00	7 3:00	5 4:00	7 5:00	10 6:00	14 7:00	10 8:00	5 9:00	6 10:00	6 11:00	6 12:00	6 13:00	23 14:00	12 15:00	19 16:00	15 17:00	6 18:00	8 19:00	5 20:00	5 21:00	5 22:00	6 23:00	7 0:00	10.2	23.9	
Hourly Avg	6.4	5.2	5.0	6.3	6.5	6.0	10.2	14.2	9.7	6.7	6.4	6.1	9.1	7.3	6.5	8.0	8.1	6.7	7.1	8.8	7.4	7.3	6.8	7.2			
Hourly Max	19.5	14.1	10.7	16.6	19.4	15.3	38.5																				

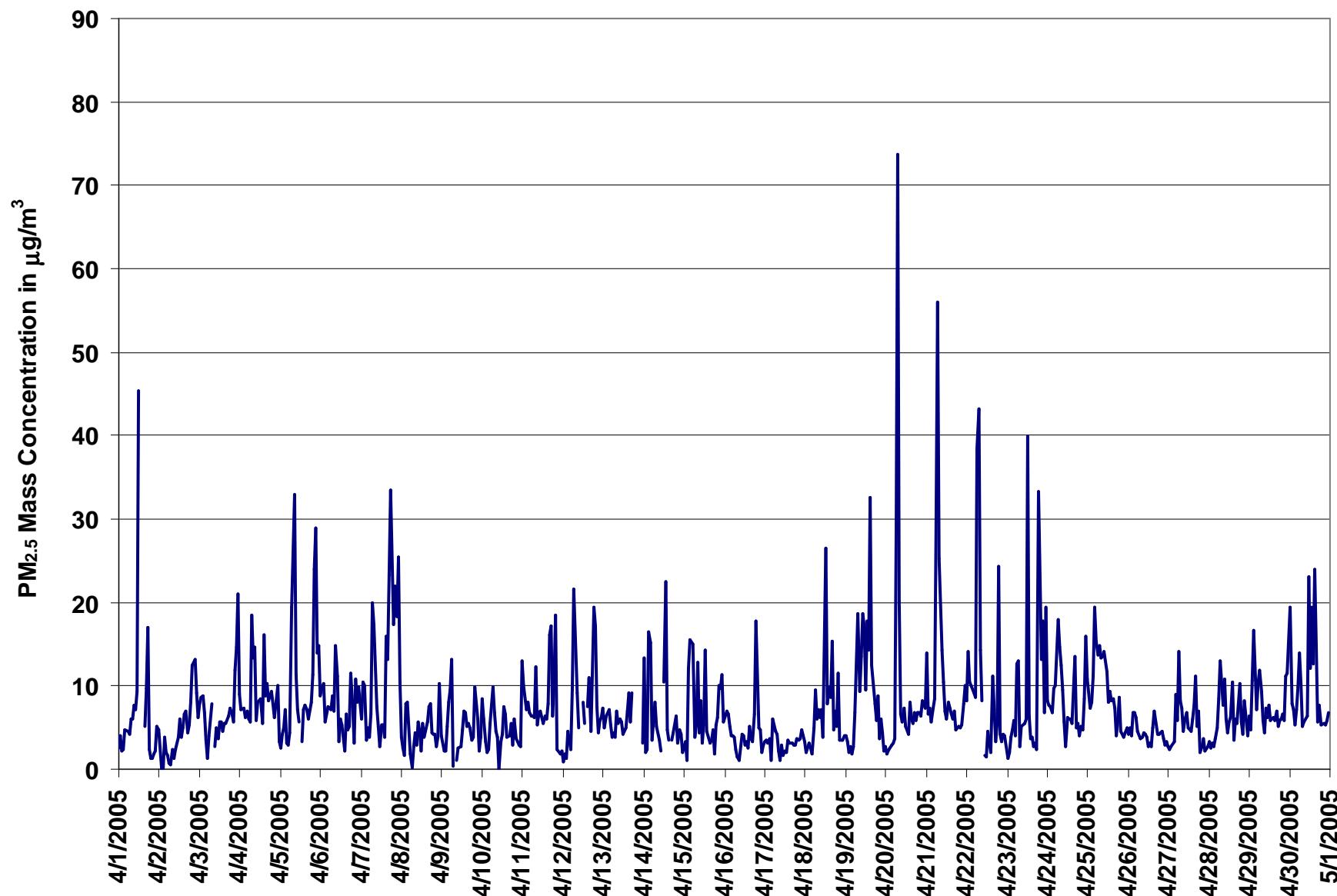
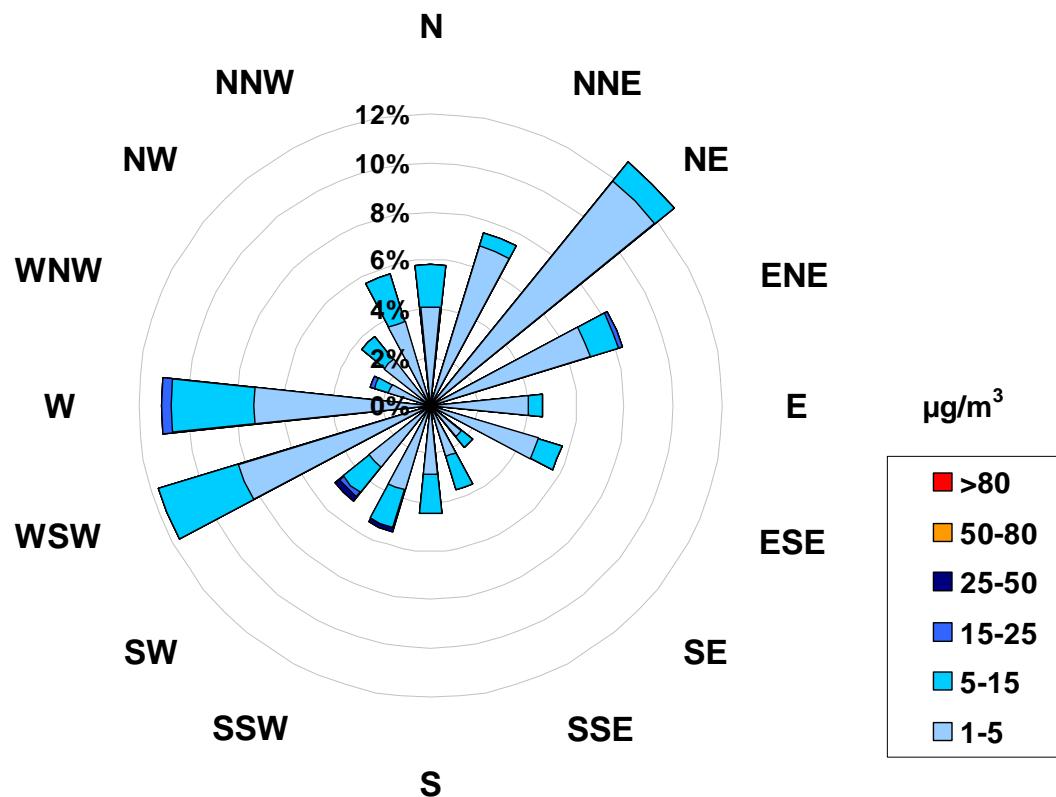


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Particulate Matter (less than 2.5 microns)  
Average Concentration Occurrences at the Evergreen Park Site for April  
2005**



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

Frequency Distribution of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$		
Range		Frequency (hrs)
1.0	< 5	580
5	to 15	117
15	to 25	5
25	to 50	2
50	to 80	0
>	80	0
Total Non-Zero Values		704

## PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

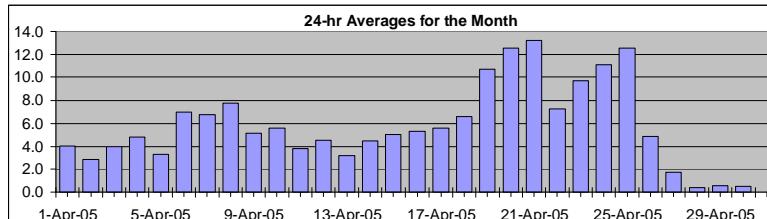
### Summary

Maximum 1-hr Average:	25.1	°C	21-Apr	17:00 18:00
Maximum 24-hr Value:	13.3	°C	21-Apr	

AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	5.8 °C
	22.2	18.3	9.4	5.6	1.0	-3.9	-6.3		

### 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	25:00	26:00	27:00	28:00	29:00	24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00		
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			
1-Apr-05	5	3	4	5	2	0	0	1	2	7	11	12	7	6	7	7	7	3	3	2	1	1	1	0	1				4.0	12.4		
2-Apr-05	0	0	0	0	0	0	0	1	2	4	5	6	6	7	7	8	8	8	7	5	2	-2	-2	-3				2.9	7.8			
3-Apr-05	-3	-4	-5	-6	-6	-6	-7	-4	1	4	6	8	10	11	12	12	13	13	12	9	8	6	7	6				4.0	12.9			
4-Apr-05	4	3	4	3	2	-1	-3	0	4	6	7	8	8	9	9	9	9	9	8	6	3	2	1	2				4.8	9.5			
5-Apr-05	2	1	-2	-3	-4	-5	-5	-3	2	4	6	7	8	9	10	11	11	11	10	10	6	3	1	0				3.3	11.5			
6-Apr-05	0	-1	0	0	0	-1	-2	1	6	8	10	11	13	14	15	15	16	16	15	12	9	6	4	2				7.0	16.1			
7-Apr-05	1	1	1	0	-1	-2	-2	0	4	6	9	12	14	14	14	14	14	13	12	10	7	6	8	7				6.8	14.2			
8-Apr-05	7	6	7	7	6	5	6	6	7	7	8	10	10	11	12	12	12	11	9	8	6	5	5	3			7.8	12.0				
9-Apr-05	2	2	1	-1	-1	1	1	2	4	6	7	9	8	9	10	10	10	10	9	8	6	4	4	3			5.2	10.0				
10-Apr-05	-1	-2	-3	-4	-4	-4	-4	-1	4	6	9	10	11	12	13	13	14	13	12	11	9	8	7	5				5.6	13.6			
11-Apr-05	0	-2	-2	-3	-3	-3	-3	0	3	6	7	7	8	9	9	10	10	10	9	8	4	3	2	2				3.8	9.9			
12-Apr-05	2	1	1	1	0	0	-1	1	3	5	7	9	9	10	11	10	9	9	7	5	3	3	1				4.6	11.0				
13-Apr-05	0	-1	-2	-1	0	0	-1	0	1	2	3	4	6	8	8	9	9	9	8	6	4	3	3	1			3.2	9.3				
14-Apr-05	0	-1	-1	-1	-1	-1	-2	1	3	5	7	9	10	8	10	9	9	9	7	6	4	2	2				4.4	9.7				
15-Apr-05	2	2	0	-1	-1	-1	0	2	4	5	7	8	9	10	11	11	12	12	11	9	5	2	2	1				5.1	11.8			
16-Apr-05	1	0	0	-1	-1	-2	-2	1	3	5	7	9	11	11	12	13	13	14	14	7	4	4	4				5.3	13.9				
17-Apr-05	3	3	1	0	0	0	0	3	5	7	8	9	9	10	10	10	10	10	9	9	7	5	4	2			5.6	10.4				
18-Apr-05	0	-1	-2	-2	-3	-3	-1	2	5	8	10	10	11	13	13	14	14	14	13	11	10	9	7	6			6.6	13.9				
19-Apr-05	5	3	0	-1	-3	-3	-1	5	9	12	14	15	16	18	19	19	19	19	19	18	15	14	13	13				10.7	19.2			
20-Apr-05	12	10	9	9	5	3	3	8	13	14	15	17	18	18	19	20	20	20	20	18	12	9	7	4				12.6	20.2			
21-Apr-05	3	2	1	0	-1	-2	0	5	10	13	16	19	21	23	24	25	25	25	25	23	19	16	14	13				13.3	25.1			
22-Apr-05	9	7	6	4	3	2	4	8	11	12	9	8	8	8	8	9	9	9	8	7	6	5	5				7.3	11.5				
23-Apr-05	4	2	1	2	2	3	3	6	7	9	12	14	15	16	17	18	18	18	18	16	12	9	7	5				9.7	18.0			
24-Apr-05	3	2	1	0	-1	-1	1	6	9	13	16	18	19	20	21	22	22	21	21	18	14	10	7	6				11.1	21.5			
25-Apr-05	4	3	2	2	2	2	5	8	11	14	17	21	22	22	22	22	22	21	19	17	14	12	9	6				12.6	22.3			
26-Apr-05	4	3	2	1	2	4	6	6	6	6	7	7	8	8	8	8	8	8	7	6	4	3	1	-1				4.9	8.3			
27-Apr-05	-3	-4	-4	-5	-6	-6	-4	0	1	3	4	6	7	8	8	8	9	8	7	5	3	1	0	-2				1.8	8.6			
28-Apr-05	-3	-4	-5	-6	-6	-5	-5	-2	1	2	2	3	5	5	6	6	6	6	6	4	1	-1	-2	-3				0.4	6.3			
29-Apr-05	-3	-3	-4	-4	-5	-6	-4	-2	-1	0	1	3	4	5	5	6	7	6	6	6	2	1	-2	-3				0.6	6.6			
30-Apr-05	-4	-5	-6	-7	-8	-8	-5	-1	0	2	3	4	5	6	6	7	7	6	6	5	2	0	-1	-3				0.5	6.6			

Hourly Avg	1.9	0.9	0.1	-0.4	-1.0	-1.5	-0.8	2.0	4.6	6.7	8.3	9.7	10.5	11.2	11.9	12.2	12.3	12.1	11.3	9.4	6.8	5.1	4.0	2.9		
Hourly Max	11.5	10.1	9.2	8.7	5.7	5.4	5.6	8.4	12.5	14.3	17.4	20.6	21.8	22.7	23.6	24.6	25.0	25.1	24.7	22.7	19.3	16.3	14.4	12.9		

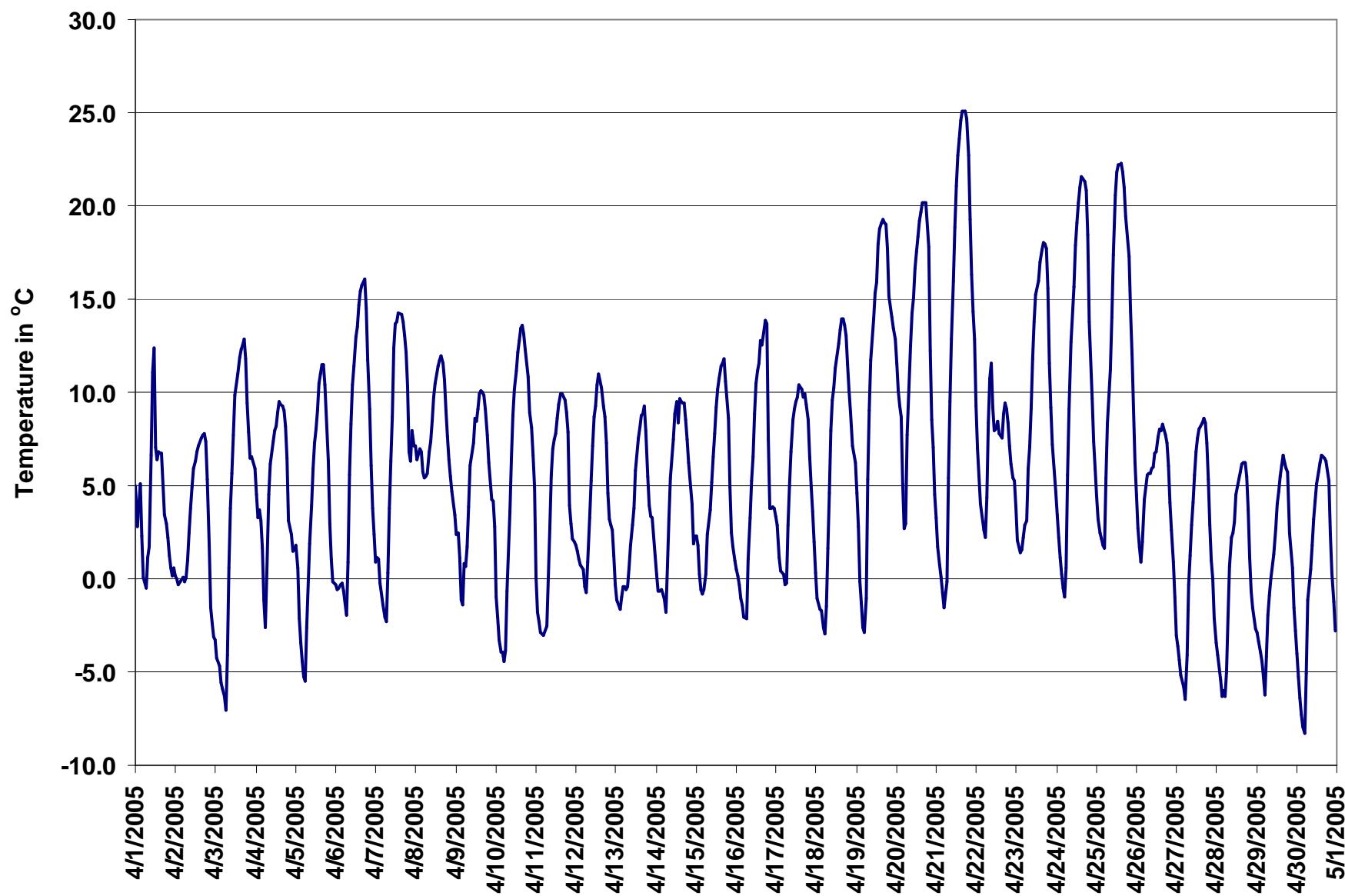


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

## PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

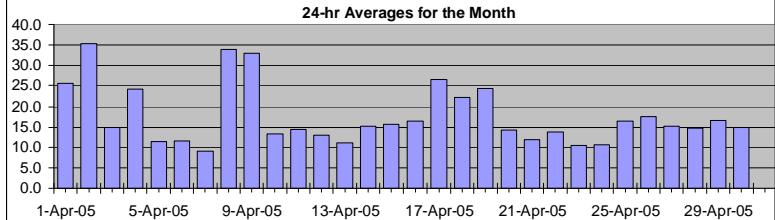
Maximum 1-hr Average:	67.6	km/hr	1-Apr	17:00 18:00
Maximum 24-hr Value:	35.2	km/hr	2-Apr	

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				AverageS
99	95	75	50	25 5 1
51.2	40.9	22.7	15.5	8.7 3.8 2.8
				17.6 km/hr

Day	Mountain Standard Time																									24-hr Scalar Average	Daily Max
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Apr-05	8	8	15	18	12	8	13	9	5	7	10	31	52	43	59	43	46	68	38	26	18	20	22	36	25.6	67.6	
2-Apr-05	34	37	36	44	46	35	31	33	41	51	51	54	58	55	45	46	36	34	27	15	13	8	9	8	35.2	57.8	
3-Apr-05	10	7	6	5	9	9	6	7	11	17	18	20	20	22	21	24	23	22	23	18	17	15	15	13	14.9	24.3	
4-Apr-05	13	16	22	22	11	6	5	5	17	29	41	39	41	36	38	34	38	38	32	22	12	19	21	21	24.1	41.2	
5-Apr-05	22	14	9	6	4	4	8	4	6	9	11	15	21	21	23	14	17	21	13	6	5	6	5	8	11.3	23.2	
6-Apr-05	3	4	6	3	4	4	3	4	6	12	11	11	20	20	26	30	25	25	16	15	12	6	8	7	11.7	29.9	
7-Apr-05	4	3	3	3	4	4	5	4	6	9	9	15	18	15	7	10	12	9	11	6	13	20	15		8.9	20.4	
8-Apr-05	18	20	30	36	31	26	25	23	39	38	45	35	40	42	44	44	47	51	49	32	26	25	26	22	33.9	50.8	
9-Apr-05	21	22	20	11	16	23	20	19	34	49	51	48	45	54	56	51	50	43	44	34	26	14	22	17	32.9	55.8	
10-Apr-05	8	8	4	5	8	10	8	7	13	16	17	14	15	18	18	17	21	17	16	14	17	15	14	13.3	21.0		
11-Apr-05	9	7	7	9	8	10	12	11	10	20	16	14	14	13	16	15	16	20	13	10	37	26	16	17	14.4	37.0	
12-Apr-05	11	9	6	8	7	6	6	7	12	13	14	17	16	21	17	17	23	13	27	16	9	16	11	7	12.9	27.0	
13-Apr-05	4	6	7	8	9	14	11	10	18	16	15	11	10	17	11	16	15	15	14	10	7	8	11	5	11.2	17.8	
14-Apr-05	6	9	4	6	8	6	8	11	17	16	15	18	20	32	18	19	13	31	21	9	11	19			15.2	31.6	
15-Apr-05	18	24	11	15	18	21	17	16	27	22	25	23	19	15	12	17	13	16	15	9	5	4	6	5	15.6	26.8	
16-Apr-05	8	7	4	5	5	6	7	8	7	10	11	17	17	15	21	21	18	19	18	54	40	24	27	27	16.4	53.8	
17-Apr-05	25	19	10	14	13	15	14	16	22	34	44	48	44	46	44	41	40	39	32	27	14	13	11	10	26.5	48.3	
18-Apr-05	7	5	8	4	5	9	8	10	19	31	34	33	34	34	37	34	39	37	33	28	26	19	20	19	22.3	38.6	
19-Apr-05	17	13	7	6	5	6	8	14	14	22	33	40	34	33	34	42	41	37	37	30	23	24	29	33	24.3	41.6	
20-Apr-05	26	23	25	16	9	8	6	8	18	21	17	14	17	18	16	17	14	11	10	10	9	10	12	6	14.2	26.5	
21-Apr-05	6	3	4	4	3	3	6	4	9	9	17	18	18	18	21	19	17	18	18	15	14	14	11	12	11.8	21.0	
22-Apr-05	8	5	3	4	2	5	8	17	27	20	11	24	26	27	23	19	16	18	18	14	11	8	7	9	13.8	27.2	
23-Apr-05	5	4	6	3	7	4	6	9	9	12	13	13	12	16	16	17	16	16	16	13	11	6	3		10.4	17.3	
24-Apr-05	4	3	4	3	3	4	4	9	8	13	15	20	18	16	16	16	20	18	17	13	9	7	10	4	10.6	20.0	
25-Apr-05	3	4	5	7	8	10	13	18	15	15	15	14	21	27	26	27	28	30	31	26	22	18	6	5	16.4	31.2	
26-Apr-05	6	3	4	4	8	12	13	19	18	22	23	25	24	28	25	21	24	18	19	19	12	7		17.5	31.9		
27-Apr-05	6	4	4	4	4	3	9	14	13	14	18	17	22	23	24	24	22	23	27	24	19	16	16	11	15.1	27.3	
28-Apr-05	9	3	3	3	3	4	4	4	7	15	18	18	22	21	25	24	28	23	28	27	19	19	15	11	14.7	28.1	
29-Apr-05	12	11	10	12	9	10	12	15	20	25	22	23	25	24	26	26	23	20	17	13	16	15	9	6	16.7	25.9	
30-Apr-05	6	6	5	5	5	5	6	9	13	15	18	25	24	23	23	25	26	21	18	17	14	12	12	12	14.8	26.2	
1-hr Average	11.3	10.2	9.6	9.8	9.5	9.6	10.0	11.4	16.1	20.1	21.9	23.9	25.6	26.6	26.4	26.2	25.8	25.5	23.3	20.0	16.7	14.6	14.1	13.0	N	0.0	
Hourly Max	33.6	36.9	35.8	44.5	45.8	35.2	30.9	32.9	40.9	51.1	51.5	53.7	57.8	54.5	58.8	50.6	50.4	67.6	48.7	53.8	40.4	26.5	29.3	35.7			

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



C	Calibration	A	AIC - 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 - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

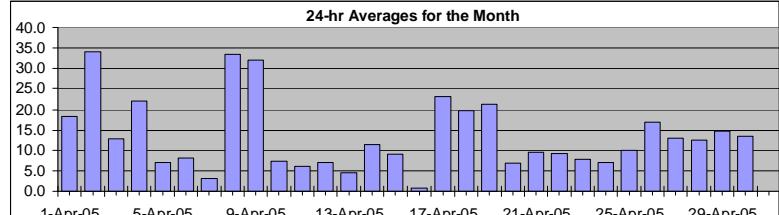
Maximum 1-hr Average:	67.2	km/hr	1-Apr	17:00 18:00
Maximum 24-hr Value:	34.1	km/hr	2-Apr	

Calm Time:	4 hrs	1% calms	Operational Time:	716 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				AverageV
99	95	75	50	25 5 1
50.3	40.0	21.1	13.3	7.0 2.1 1.2
				27.5 km/hr

Day	Mountain Standard Time																									24-hr Vector Average	Daily Max
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Apr-05	7	7	13	18	9	7	13	9	4	3	7	27	47	42	59	42	46	67	37	25	18	20	22	35	18.1	67.2	
2-Apr-05	33	37	36	44	46	35	31	33	40	51	50	52	57	53	43	44	35	33	27	14	13	8	9	6	34.1	57.0	
3-Apr-05	9	7	5	5	9	9	5	5	9	16	17	19	19	20	19	23	22	21	22	18	16	13	14	12	12.8	23.1	
4-Apr-05	12	15	22	22	11	5	2	3	17	28	40	38	40	36	35	33	37	38	32	22	11	19	20	21	22.1	40.4	
5-Apr-05	21	14	8	1	3	2	7	4	5	8	10	13	20	19	20	8	13	18	13	5	1	5	2	4	7.0	21.3	
6-Apr-05	1	2	4	2	4	1	2	3	3	11	7	6	19	19	25	29	25	24	16	15	12	3	5	5	8.0	29.2	
7-Apr-05	2	calm	2	2	2	3	4	1	5	8	8	14	17	14	6	9	11	8	10	8	4	12	20	15	3.1	20.1	
8-Apr-05	17	20	30	36	30	26	24	23	39	38	44	35	39	41	43	43	46	50	48	32	26	25	26	22	33.4	50.3	
9-Apr-05	20	22	20	8	14	22	19	19	34	48	50	47	45	53	55	49	49	42	43	34	26	14	22	17	31.9	54.6	
10-Apr-05	8	8	3	3	8	10	8	6	13	15	15	10	11	14	12	12	19	16	16	14	17	17	15	14	7.3	18.7	
11-Apr-05	8	7	7	8	7	9	12	11	10	19	14	13	12	15	13	15	19	12	6	36	26	15	16	6.1	36.4		
12-Apr-05	10	9	5	8	7	5	4	3	12	13	12	14	11	17	12	14	22	11	25	13	7	15	9	4	7.2	25.1	
13-Apr-05	2	4	3	8	9	13	9	9	17	15	14	11	9	12	7	10	11	12	13	8	7	7	11	3	4.4	17.0	
14-Apr-05	5	8	2	5	6	2	6	9	17	15	12	14	16	28	15	28	17	17	12	30	19	7	11	19	11.4	29.7	
15-Apr-05	18	24	11	15	18	21	17	15	27	22	25	21	16	11	5	3	5	15	15	8	5	calm	5	4	8.9	26.6	
16-Apr-05	8	7	3	4	5	5	6	7	7	8	9	15	15	14	21	21	17	17	16	48	38	23	26	27	0.8	48.3	
17-Apr-05	25	18	9	14	13	15	14	16	21	33	42	47	41	45	43	40	39	37	31	26	12	12	10	10	23.2	47.1	
18-Apr-05	4	2	3	3	5	9	8	9	18	30	32	32	33	32	36	31	37	37	32	28	25	19	19	19	19.6	37.4	
19-Apr-05	17	13	6	4	4	5	8	14	13	22	32	39	33	31	32	40	39	36	36	29	23	24	29	32	21.3	40.1	
20-Apr-05	26	23	25	16	5	6	5	7	18	18	15	8	12	12	10	13	11	8	8	10	9	10	12	5	6.9	26.3	
21-Apr-05	2	3	3	2	1	2	3	1	7	7	15	16	15	14	18	14	13	17	18	15	14	14	10	12	9.4	17.7	
22-Apr-05	7	2	2	calm	1	4	5	4	24	19	8	23	25	27	23	19	15	16	18	14	11	6	6	9	9.1	26.6	
23-Apr-05	4	4	5	1	6	calm	1	8	9	12	8	7	8	10	11	15	14	14	16	16	13	11	6	2	7.8	15.8	
24-Apr-05	3	1	2	2	2	2	2	8	3	11	11	17	13	11	12	14	19	17	17	13	9	7	10	1	7.2	18.5	
25-Apr-05	1	3	5	3	3	8	13	18	15	15	13	4	19	25	23	24	27	29	31	25	22	18	5	4	9.9	30.9	
26-Apr-05	6	1	3	3	8	12	13	19	17	22	22	25	24	31	28	27	24	20	23	18	19	19	12	7	16.9	31.0	
27-Apr-05	6	2	1	3	4	1	9	13	9	11	15	13	20	19	20	22	20	20	26	23	18	16	16	11	13.1	26.3	
28-Apr-05	9	3	3	3	2	3	3	2	3	9	13	15	18	18	22	21	26	26	26	19	18	15	11	11	12.7	26.2	
29-Apr-05	11	11	7	12	9	10	12	13	18	23	20	19	22	23	23	21	18	16	12	16	15	9	5	14.6	23.2		
30-Apr-05	5	4	5	5	4	4	6	7	11	11	15	23	20	20	21	23	25	20	18	17	14	12	12	12	13.6	25.1	
1-hr Vector	6.4	5.9	5.2	4.8	2.7	3.4	3.4	3.3	7.1	8.9	10.1	10.5	10.0	9.4	8.6	8.5	7.7	7.3	5.1	4.3	2.3	1.5	5.3	6.7	N	0.0	
Hourly Max	33.4	36.7	35.6	44.3	45.6	34.9	30.5	32.7	40.4	50.5	50.3	52.4	57.0	53.1	58.5	49.4	49.1	67.2	48.4	48.3	38.3	26.2	29.0	35.5			

### HOURLY AVERAGE TABLE

### Wind Speed (WSv)



### Status Flag Characters

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

## PASZA - Evergreen Park Wind Direction Monthly Summary

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary									

Calm Time:	0 hrs							Operational Time: 720 hrs											
	0% calms							AMD Operational Uptime: 100.0%											
Calibration Time:	0 hrs																		
Percentile	99	95	75	50	25	5	1	Average											
	352.5	329.8	258.5	199.9	68.3	19.4	4.1	269 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	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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-Apr-05	137	54	150	171	96	72	66	73	72	96	263	239	269	266	254	264	269	257	250	235	238	240	227	239	248	WSW	
2-Apr-05	237	238	230	234	235	242	246	243	245	244	245	246	251	238	252	258	263	247	249	243	206	191	176	154	242	WSW	
3-Apr-05	173	149	135	116	65	69	75	54	86	119	120	131	137	142	117	109	109	113	107	97	106	169	156	230	120	ESE	
4-Apr-05	250	242	263	264	238	211	105	208	246	255	260	275	266	262	252	285	278	275	271	257	213	205	205	218	257	WSW	
5-Apr-05	229	240	205	141	68	138	183	164	152	128	142	136	167	151	181	237	239	256	330	39	159	223	216	224	194	SSW	
6-Apr-05	97	178	63	98	40	20	39	21	40	225	154	60	37	47	44	44	51	57	40	28	28	293	249	233	46	NE	
7-Apr-05	41	346	152	38	61	42	12	301	2	44	62	118	87	89	43	345	65	335	301	314	247	267	268	311	10	N	
8-Apr-05	278	251	257	260	264	256	251	249	251	255	269	275	274	266	263	259	258	257	256	259	249	240	241	224	258	WSW	
9-Apr-05	230	229	216	218	219	254	239	222	240	253	262	266	269	259	256	260	260	263	255	254	252	236	237	223	251	WSW	
10-Apr-05	200	193	57	87	186	194	198	190	196	194	208	259	245	226	193	139	118	109	88	76	87	100	101	93	155	SSE	
11-Apr-05	79	69	43	77	74	68	64	64	71	97	105	123	110	105	90	84	87	89	60	64	260	261	270	222	91	E	
12-Apr-05	230	169	158	170	157	144	85	114	190	198	211	204	216	188	126	113	120	80	238	238	81	60	235	307	175	S	
13-Apr-05	131	214	211	263	270	243	268	273	254	259	246	255	223	212	168	91	33	81	93	128	164	181	223	78	217	SW	
14-Apr-05	165	192	240	186	65	231	228	267	251	256	288	276	273	264	301	315	307	319	328	328	319	259	249	236	282	WNW	
15-Apr-05	245	242	265	249	252	248	252	252	243	244	247	264	268	301	253	14	34	58	72	60	57	44	188	181	259	W	
16-Apr-05	181	179	178	46	74	70	64	54	43	118	125	45	51	60	59	54	77	60	46	254	269	222	231	232	81	E	
17-Apr-05	226	245	232	205	199	192	202	191	228	246	248	265	266	268	276	276	284	277	282	284	311	325	286	277	W		
18-Apr-05	219	170	155	68	192	195	193	205	253	264	266	272	265	275	273	278	270	277	268	256	248	237	217	214	257	WSW	
19-Apr-05	204	189	179	145	132	163	180	189	190	250	247	264	263	271	263	270	272	262	254	259	269	258	252	251	252	WSW	
20-Apr-05	259	266	264	251	107	47	243	225	251	308	335	251	282	300	301	308	4	2	35	62	75	69	71	77	298	WNW	
21-Apr-05	156	6	360	4	42	123	227	213	140	124	134	153	119	102	79	109	148	103	110	105	92	87	141	189	118	ESE	
22-Apr-05	182	195	203	349	123	184	228	270	312	355	338	304	303	307	299	288	300	275	243	198	205	223	176	187	281	W	
23-Apr-05	209	178	189	223	353	74	135	60	68	57	161	72	97	32	51	46	49	58	54	49	45	51	55	344	61	ENE	
24-Apr-05	223	254	335	330	17	164	201	202	153	116	111	81	86	90	42	55	45	42	51	45	50	56	66	287	70	ENE	
25-Apr-05	329	339	261	301	200	225	262	265	251	261	248	313	359	11	15	4	15	15	23	24	41	39	336	322	351	N	
26-Apr-05	349	352	6	307	341	21	27	31	28	25	21	24	18	18	22	34	37	28	46	40	41	46	50	31	28	NNE	
27-Apr-05	42	55	338	354	353	339	45	51	41	338	328	334	18	356	3	25	27	17	53	58	63	56	60	62	26	NNE	
28-Apr-05	60	16	329	29	34	337	317	10	206	337	11	333	6	1	3	10	3	28	51	54	48	40	31	25	18	NNE	
29-Apr-05	17	16	330	316	308	342	334	350	335	319	328	338	13	26	353	18	12	14	23	15	55	63	49	19	1	N	
30-Apr-05	352	21	6	315	330	313	332	50	56	15	42	61	40	54	57	72	49	50	51	52	41	46	56	64	45	NE	
Hourly Avg	227	232	236	241	233	233	241	245	249	261	258	272	283	283	292	319	322	315	319	307	303	236	225	232	-		

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

Station: Evergreen Park  
 Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms								Operational Time: 720 hrs							
Calibration Time: 0 hrs								AMD Operational Uptime: 100.0%							
Percentile								99	95	75	50	25	5	1	
								60.6	51.1	30.2	17.0	10.2	5.3	4.1	

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

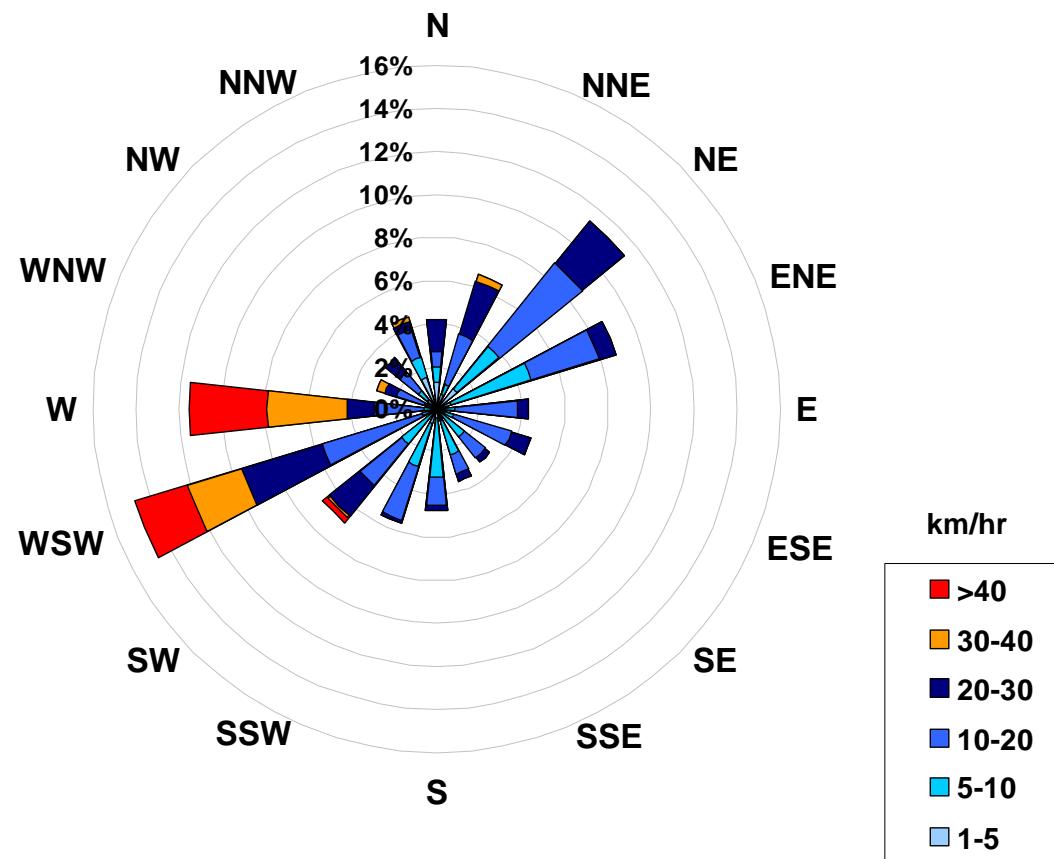
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	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-Apr-05	29	23	42	5	15	11	10	11	38	45	58	40	15	10	6	8	9	6	9	8	6	6	6	6	6	57.6	
2-Apr-05	6	5	5	5	5	7	7	7	8	8	9	10	8	10	12	12	12	13	9	6	17	10	14	31		31.2	
3-Apr-05	25	17	16	25	7	14	17	43	20	18	20	19	24	25	31	19	16	18	13	9	8	26	13	16		43.5	
4-Apr-05	9	6	6	9	20	29	34	15	11	10	12	11	12	10	17	15	11	10	9	6	8	4	4	4		33.6	
5-Apr-05	4	9	15	55	26	41	8	23	32	32	26	23	17	24	33	60	44	20	11	22	61	41	55	47		61.0	
6-Apr-05	40	50	21	32	9	42	27	21	56	20	34	47	17	22	13	12	14	13	12	12	8	37	48	25		56.0	
7-Apr-05	32	85	71	58	55	49	11	35	39	20	21	22	15	26	44	21	26	19	19	15	39	21	11	13		84.8	
8-Apr-05	12	7	7	7	8	5	9	10	5	6	10	11	12	12	10	9	7	6	7	4	4	5	6		12.3		
9-Apr-05	6	5	4	22	11	7	9	9	8	7	10	13	10	11	12	12	11	10	7	6	5	5	4	6		21.6	
10-Apr-05	13	10	51	25	18	14	22	37	9	14	26	56	45	39	46	45	24	19	10	11	8	9	8	5		55.7	
11-Apr-05	10	16	12	8	40	25	8	10	18	15	30	25	25	27	18	20	19	15	12	40	10	7	11	8		40.1	
12-Apr-05	27	17	24	19	12	19	35	40	12	20	39	41	39	32	50	34	17	22	27	16	25	12	51	27		51.3	
13-Apr-05	23	34	44	19	10	10	30	19	13	15	14	18	33	40	61	27	34	36	18	18	20	28	14	51		60.6	
14-Apr-05	43	13	53	23	22	41	28	29	10	23	42	47	44	21	41	18	23	19	23	15	34	20	9	5		52.8	
15-Apr-05	9	4	10	5	5	5	6	14	7	12	12	19	32	49	68	41	64	30	14	9	10	50	39	26		67.9	
16-Apr-05	12	14	30	42	21	33	20	18	14	23	30	19	24	24	14	15	15	18	34	25	14	9	6	5		42.4	
17-Apr-05	5	8	25	10	12	7	5	8	13	9	14	12	15	13	16	12	12	14	13	11	16	11	17	20		24.6	
18-Apr-05	51	55	40	45	30	7	11	16	13	11	18	14	18	20	16	20	13	13	9	5	5	5	6	7		54.9	
19-Apr-05	4	5	36	44	43	32	26	8	16	11	12	13	12	20	14	13	13	9	8	8	9	8	7	4		44.2	
20-Apr-05	5	6	7	16	48	59	42	12	11	23	32	60	53	51	51	39	40	42	49	11	5	6	5	16		59.5	
21-Apr-05	21	17	47	51	33	38	39	51	52	32	26	26	36	46	35	38	50	22	13	10	6	10	17	13		51.9	
22-Apr-05	28	35	40	32	35	53	47	74	13	18	34	15	12	12	13	16	18	13	12	7	8	13	43	10		73.6	
23-Apr-05	20	35	38	52	38	55	21	40	15	21	59	57	55	48	51	29	32	25	16	8	3	4	12	22		59.2	
24-Apr-05	23	38	58	24	29	25	58	41	39	28	36	28	46	49	48	31	23	16	15	8	7	14	8	57		57.9	
25-Apr-05	46	29	15	32	57	33	12	12	16	17	27	47	26	24	25	24	16	14	8	9	8	7	22	17		56.9	
26-Apr-05	17	52	18	50	15	9	12	13	19	14	15	13	14	13	14	16	15	16	14	10	8	7	9	9		51.5	
27-Apr-05	10	46	52	21	17	43	9	14	31	35	42	45	29	33	29	23	25	23	15	13	12	9	8	6		51.7	
28-Apr-05	4	12	25	7	16	20	34	46	62	44	47	37	35	34	29	30	21	17	15	11	8	6	7	8		62.2	
29-Apr-05	9	9	17	10	13	8	10	22	25	24	26	28	26	21	24	25	26	25	20	16	10	9	10	18		27.9	
30-Apr-05	14	12	23	18	22	23	13	31	34	38	37	25	29	31	30	21	27	14	18	14	6	5	6	4		37.6	
																										0.0	

Hourly Max 51 85 71 58 57 59 58 74 62 45 59 60 55 51 68 60 64 42 49 40 61 50 55 57

**Wind Rose for the 1-hr Average Occurrences at the Evergreen Park Site for April 2005**



**Calms:** 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
1.0	<	5	69
5	to	10	151
10	to	20	265
20	to	30	135
30	to	40	53
	>	40	47
Total Non-Zero Values			720

# PASZA - Smoky Heights Monthly Summary Tables, Graphs, and Roses

## PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

Guideline 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:	12.5 ppb	20-Apr	7:00 8:00
Maximum 24-hr Average:	1.6 ppb	11-Apr	

AIC Time:	32 hrs	Operational Time:	683 hrs							
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%							
Percentile	99 5.2	95 1.7	75 0.4	50 0.2	25 0.0	5 0.0	1 0.0	Average 0.4 ppb		

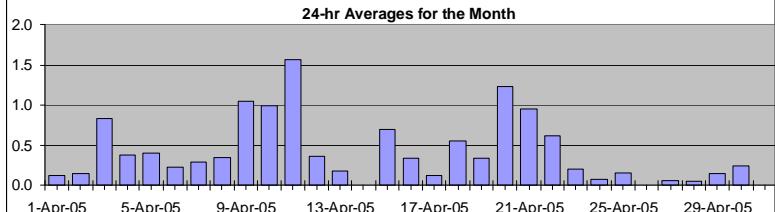
**Day Mountain Standard Time**

	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	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
1-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.1	0.6		
2-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0.1	0.5			
3-Apr-05	0	0	0	0	0	0	0	0	1	5	2	1	0	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	5.2			
4-Apr-05	1	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2				
5-Apr-05	0	0	0	1	0	0	0	1	1	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2				
6-Apr-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	0	0	0.2	0.6				
7-Apr-05	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0.3	1.6				
8-Apr-05	0	0	0	2	2	1	0	A	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	2.0				
9-Apr-05	1	1	3	0	1	0	A	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	9.8				
10-Apr-05	11	7	0	0	1	A	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	11.4				
11-Apr-05	0	1	1	2	A	2	2	2	1	2	3	3	3	4	3	2	1	1	1	0	0	0	0	0	1	3	1.6	3.6						
12-Apr-05	1	0	0	A	1	1	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	1.5					
13-Apr-05	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.1					
14-Apr-05	0	A	0	0	0	0	0	0	3	1	C	C	C	C	A	1	1	0	0	0	0	0	0	0	0	0	1	N	2.8					
15-Apr-05	0	0	2	1	1	A	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.5					
16-Apr-05	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.3	0.9					
17-Apr-05	0	0	0	A	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6					
18-Apr-05	0	0	A	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	7	0.6	7.1					
19-Apr-05	2	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	1	0.3	2.5					
20-Apr-05	A	1	0	0	2	0	0	13	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	12.5					
21-Apr-05	0	0	0	0	0	0	0	0	0	1	3	3	2	2	2	2	2	1	1	1	1	1	1	1	A	1	1.0	2.8						
22-Apr-05	1	1	1	1	1	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0.6	2.5					
23-Apr-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	1	A	0	0.2	1.0					
24-Apr-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	0.1	0.3					
25-Apr-05	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0					
26-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.0					
27-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.2						
28-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.2						
29-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.4						
30-Apr-05	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.6						

Hourly Avg	0.7	0.5	0.3	0.3	0.4	0.3	0.3	0.9	1.1	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.9	
Hourly Max	11.4	6.9	3.4	1.7	2.3	2.1	2.3	12.5	9.9	2.3	2.6	3.4	3.5	3.6	3.0	1.7	1.9	1.7	1.4	1.2	1.1	0.8	5.3	9.8	

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

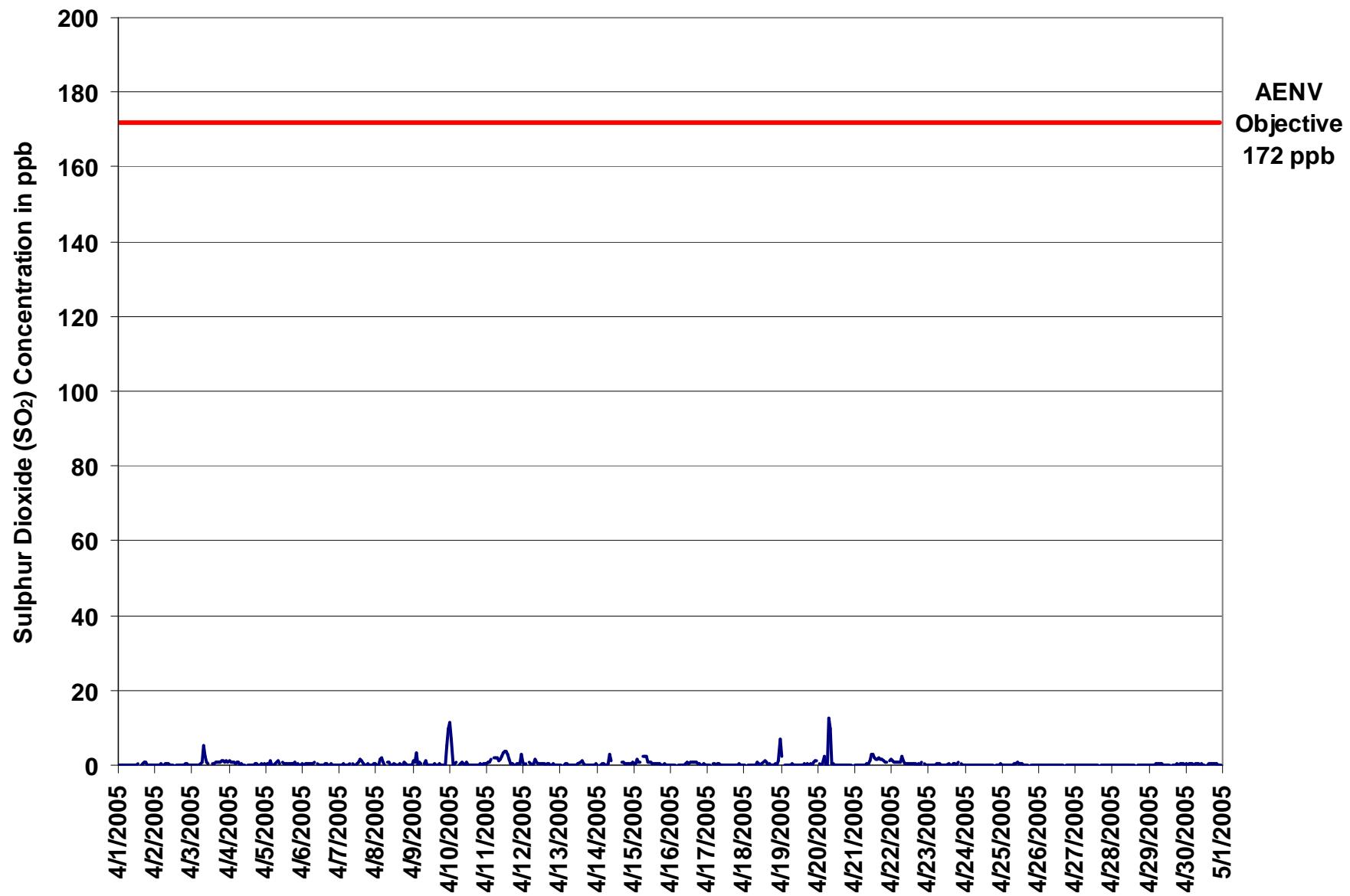


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

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

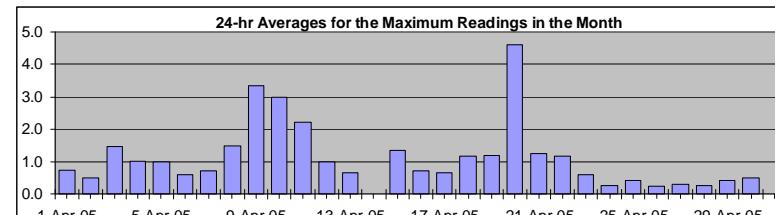
#### Summary

Maximum 1-hr Value:	42.4	ppb	20-Apr	7:00 8:00
Maximum 24-hr Value:	4.6	ppb	20-Apr	

AIC Time:	32 hrs	Operational Time:	683 hrs	
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%	
Percentile	99 95 75 50 25 5 1	Average		
	10.7 3.3 1.0 0.5 0.3 0.1 0.0	1.1 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-Apr-05	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	A	0	2	3	2	0	0	0	0	0	0	0.7	2.7
2-Apr-05	0	0	0	0	1	1	0	1	1	1	0	0	0	0	A	0	0	1	1	0	0	1	2	0	0	0.5	1.9	
3-Apr-05	0	0	0	0	0	1	1	3	7	5	1	1	A	1	1	1	1	2	1	1	2	2	1	1	1	1.5	7.0	
4-Apr-05	2	1	1	2	2	3	3	0	1	1	0	A	0	0	0	0	0	1	1	2	0	1	1	0	0	1.0	3.2	
5-Apr-05	0	2	0	3	0	0	1	1	2	1	A	1	1	1	1	1	1	1	1	1	4	1	1	1	0	1.0	4.2	
6-Apr-05	1	1	1	0	1	1	1	1	A	1	0	0	0	0	0	0	1	1	1	1	1	4	1	1	0	0.6	1.1	
7-Apr-05	0	0	0	1	0	0	0	0	1	A	1	1	0	0	1	2	2	1	0	1	1	1	1	0	0	0.7	1.9	
8-Apr-05	1	0	1	5	6	2	4	A	2	2	2	0	1	0	0	0	1	0	1	2	1	1	1	0	0	1.5	6.4	
9-Apr-05	5	7	10	2	3	1	A	2	3	0	1	0	1	0	0	1	1	1	1	0	1	0	0	0	17	19	3.4	19.1
10-Apr-05	33	19	0	3	2	A	0	1	1	1	0	2	1	0	0	0	0	0	0	0	1	1	1	1	1	3.0	33.5	
11-Apr-05	1	1	1	2	A	3	2	2	2	2	3	4	4	4	3	3	1	1	1	1	0	1	1	2	5	2.2	5.0	
12-Apr-05	2	1	1	A	1	1	1	1	2	2	1	1	1	1	1	1	1	2	2	0	1	1	0	0	0	1.0	2.4	
13-Apr-05	0	0	A	0	0	1	1	1	1	1	1	1	1	1	3	1	0	1	0	0	0	0	0	0	0	0.7	3.1	
14-Apr-05	0	A	0	1	1	0	0	3	5	2	C	C	C	C	C	A	2	2	1	1	1	1	1	1	N	4.5		
15-Apr-05	1	1	6	1	1	A	4	4	4	4	1	2	1	1	0	1	0	0	0	0	0	1	0	0	0	1.3	6.0	
16-Apr-05	0	0	0	0	A	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0.7	1.5	
17-Apr-05	0	1	0	A	2	1	0	2	2	2	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0.7	1.8	
18-Apr-05	0	0	A	0	0	0	0	0	1	1	1	0	1	2	2	1	1	0	1	0	1	0	1	0	4	1.2	10.5	
19-Apr-05	6	A	0	0	0	0	0	1	1	1	0	0	1	0	0	1	1	1	1	2	0	5	4	2	1.2	5.5		
20-Apr-05	A	1	1	9	12	0	0	42	29	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.6	42.4	
21-Apr-05	0	0	0	0	0	0	1	1	1	2	3	4	2	2	2	2	2	2	1	1	1	A	2	1.3	3.5			
22-Apr-05	2	2	1	1	1	1	2	4	3	1	1	0	0	0	1	0	0	0	0	1	0	2	A	3	0	1.2	4.3	
23-Apr-05	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	1	0	3	A	1	0	0	0.6	3.1		
24-Apr-05	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.5	
25-Apr-05	0	0	0	0	0	0	0	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.9	
26-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
27-Apr-05	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.6	
28-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0.3	0.5	
29-Apr-05	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0.4	0.7	
30-Apr-05	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	A	0	1	1	0	1	1	0	0	0	0.5	0.9	
	Hourly Avg	2.0	1.4	1.0	1.3	1.3	0.7	0.9	2.6	2.5	1.1	0.8	0.8	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.7				
	Hourly Max	33.5	19.0	10.5	8.8	11.5	3.0	4.1	42.4	29.5	4.8	2.9	4.0	4.1	3.5	2.6	2.0	2.7	2.1	4.2	2.0	4.6	17.2	19.1				



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

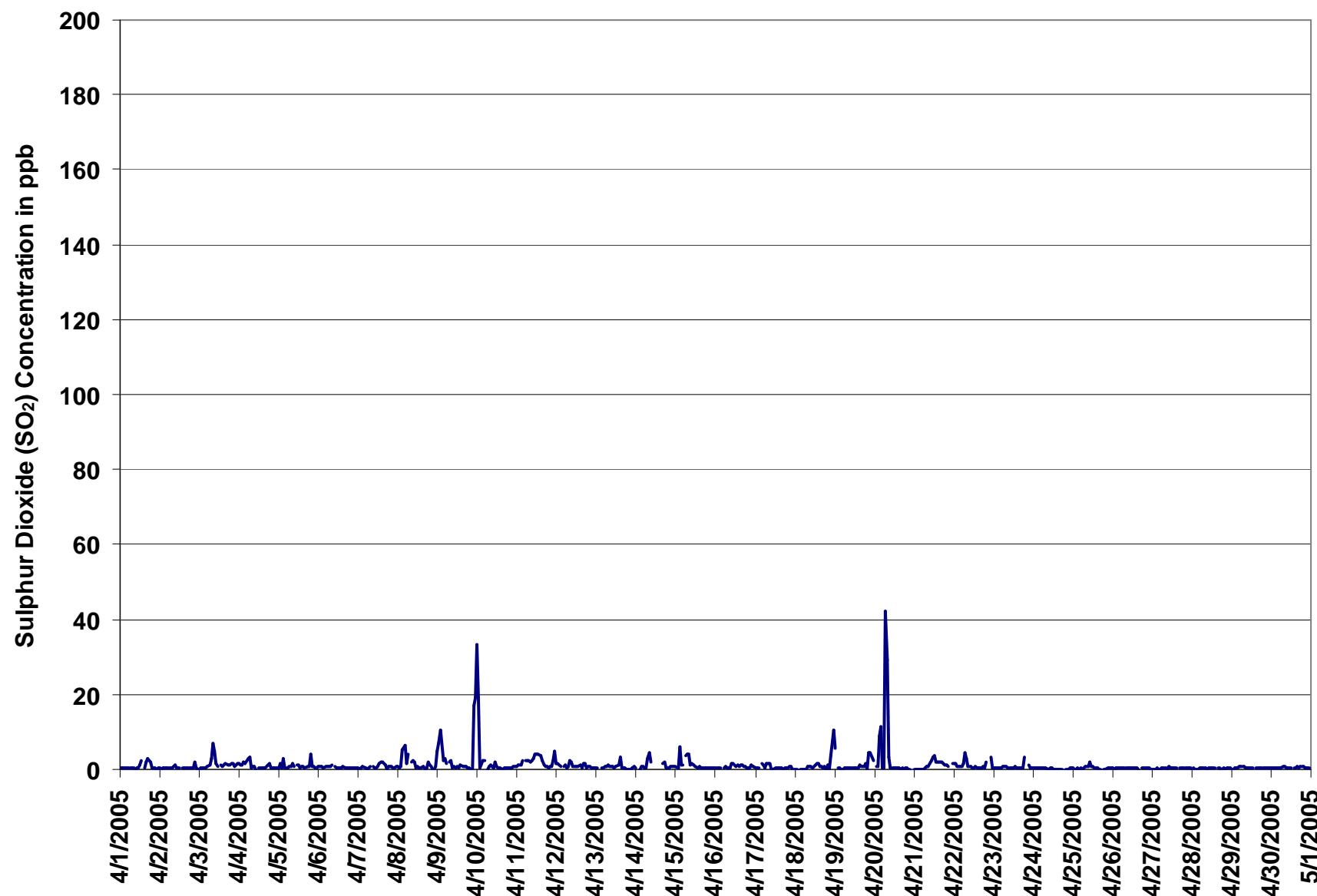
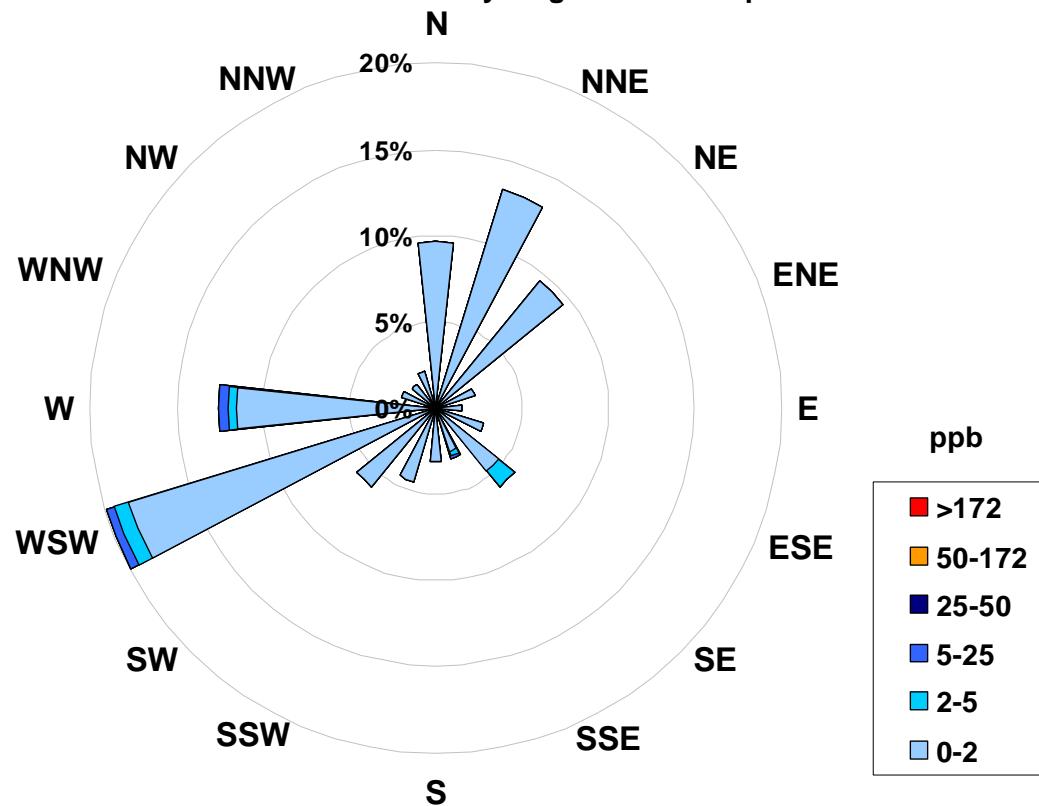


Figure 28. PASZA - Smoky Heights Sulphur Dioxide 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Sulphur Dioxide Average Concentration Occurrences at the Smoky Heights Site for April 2005**



Calms: 0%

Frequency Distribution of SO <sub>2</sub> in ppb			Frequency (hrs)
Range			
0.0	<	2	656
2	to	5	19
5	to	25	8
25	to	50	0
50	to	172	0
>	172		0
Total Non-Zero Values			683

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

Station: Smoky Heights  
Station Owner: PASZA

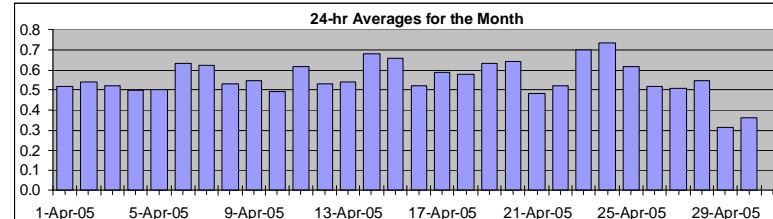
**Monitoring Dates:** April 1, 2005 to May 1, 2005

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

Maximum 1-hr Average: 1.7 ppb 14-Apr 14:00 15:00  
Maximum 24-hr Value: 0.7 ppb 24-Apr

AIC Time:	32 hrs			Operational Time:				685 hrs	
Calibration Time:	3 hrs			AMD Operational Uptime:				100.0%	
Percentile	99	95	75	50	25	5	1	Average	
	0.9	0.8	0.6	0.5	0.5	0.4	0.2	0.6	ppb

## HOURLY AVERAGE TABLE



## Status Flag Characters

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

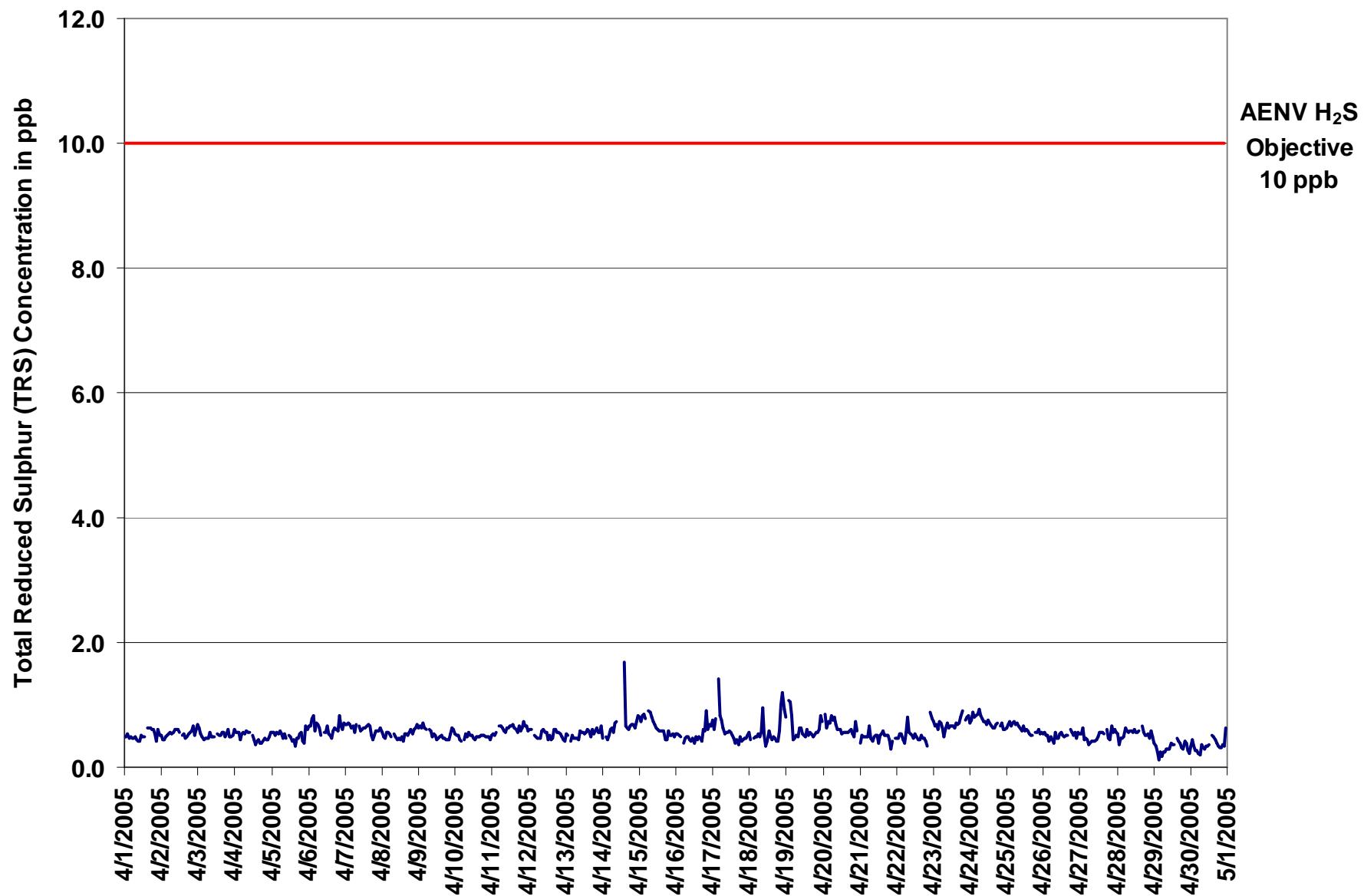


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

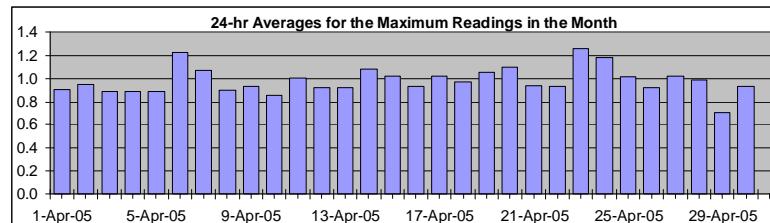
## HOURLY MAXIMUM TABLE

## Total Reduced Sulphur (TRS)

**Monitoring Dates:** April 1, 2005 to May 1, 2005

## Summary

Maximum 1-hr Value: 4.5 ppb 30-Apr 23:00 0:00  
Maximum 24-hr Value: 1.3 ppb 23-Apr



AIC Time:	32 hrs	Operational Time:	685 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 2.4	95 1.4	75 1.0	50 0.9	25 0.8	5 0.7	1 0.6	Average 1.0 ppb

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

Day	Mountain Standard Time																								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-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.1
2-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.1
3-Apr-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	1.0
4-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
5-Apr-05	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
6-Apr-05	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	1.2	3.5
7-Apr-05	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1.1	2.2
8-Apr-05	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
9-Apr-05	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
10-Apr-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
11-Apr-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.0	1.9
12-Apr-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0.9	1.6
13-Apr-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	0.9	1.1
14-Apr-05	1	A	1	1	1	1	1	1	1	1	C	C	C	A	2	1	1	1	1	1	1	1	1	1	1	1.1	2.0
15-Apr-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
16-Apr-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5
17-Apr-05	1	1	1	A	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.7
18-Apr-05	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1.0	1.7
19-Apr-05	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6
20-Apr-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.1	2.0
21-Apr-05	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	2.8
22-Apr-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.4
23-Apr-05	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	A	1	2	1	1.3	3.0	
24-Apr-05	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.2	2.3
25-Apr-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	1.0	1.3
26-Apr-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	1.2
27-Apr-05	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	2.5
28-Apr-05	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1.0	1.6
29-Apr-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	0.7	0.9
30-Apr-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	5	0.9	4.5
Hourly Avg	1.0	1.0	1.0	0.9	1.0	1.0	1.1	1.0	0.9	1.0	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	1.1	1.0	1.1			
Hourly Max	1.2	1.4	2.5	1.4	2.7	1.6	2.8	1.8	1.2	1.6	1.1	1.1	1.2	1.2	2.0	2.2	1.6	1.3	2.3	3.0	3.5	2.7	1.6	4.5			

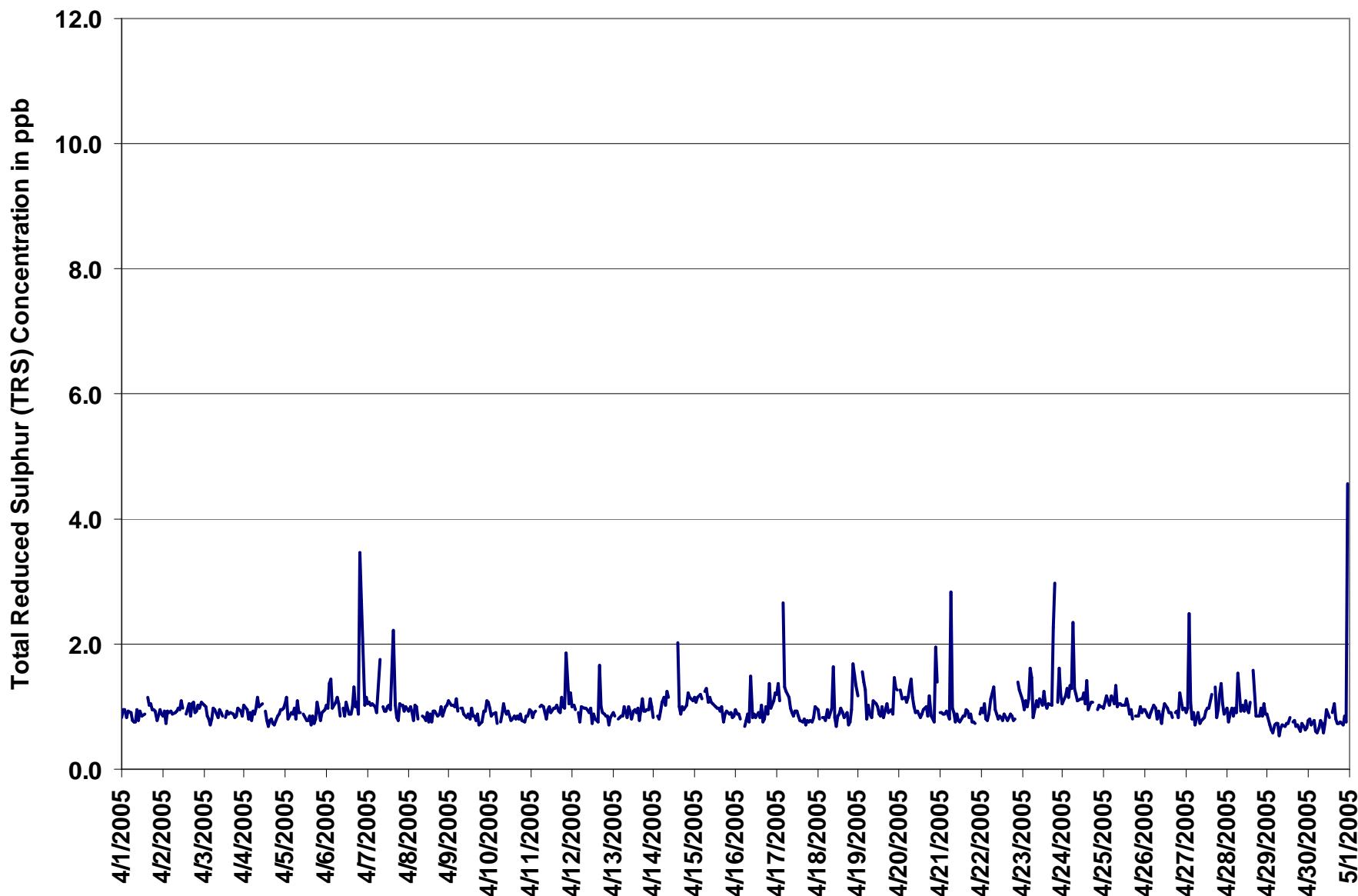
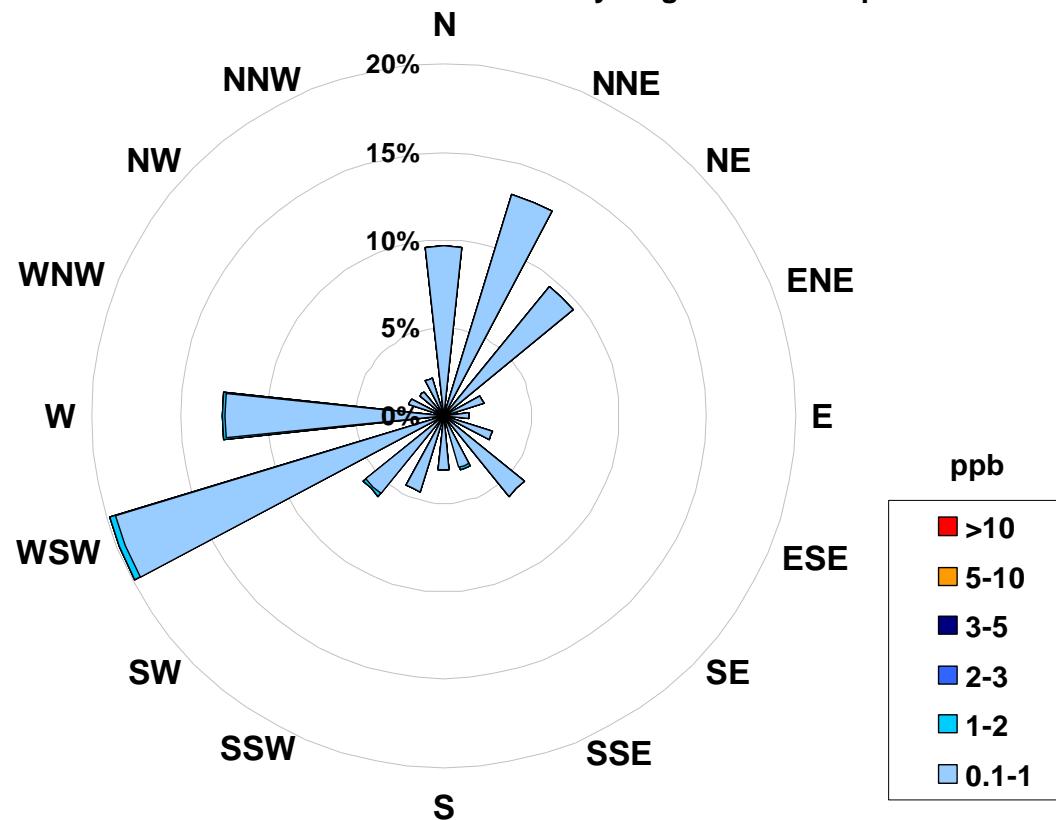


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Total Reduced Sulphur Average  
Concentration Occurrences at the Smoky Heights Site for April 2005**



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

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

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

Station: Smoky Heights  
Station Owner: PASZA

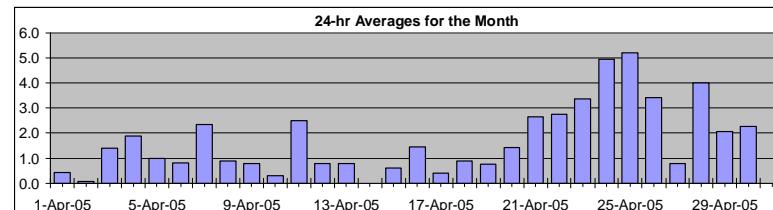
**Monitoring Dates:** April 1, 2005 to May 1, 2005

**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: 55.2  $\mu\text{g}/\text{m}^3$  28-Apr 3:00-4:00  
 Maximum 24-hr Value: 5.2  $\mu\text{g}/\text{m}^3$  25-Apr

AIC Time:	0 hrs	Operational Time:	710 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.3%						
Percentile	99 11.5	95 6.2	75 2.2	50 0.8	25 0.0	5 0.0	1 0.0	Average 1.7 Hg/m <sup>-3</sup>	Geomean 1.2 Hg/m <sup>-3</sup>

## 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	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-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	2	0	0	0	0	0	0	0.4	5.1	
2-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.1	0.9	
3-Apr-05	1	1	0	0	0	0	0	0	0	1	3	4	1	1	1	1	2	3	2	3	3	3	3	3	1.4	3.6	
4-Apr-05	3	4	5	6	4	3	3	3	1	1	0	0	0	0	0	0	0	0	2	2	3	2	2	1	1.9	6.1	
5-Apr-05	1	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	7	3	3	1	2	1.0	6.6	
6-Apr-05	1	1	2	1	3	2	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	4.6	
7-Apr-05	0	0	0	0	0	0	1	1	1	0	0	2	0	2	2	2	4	4	5	6	5	6	8	6	2.3	8.0	
8-Apr-05	4	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	1	2	1	0.9	4.3
9-Apr-05	0	0	1	1	1	1	3	2	0	0	0	0	0	0	0	0	0	0	2	2	3	1	1	1	0.8	3.2	
10-Apr-05	1	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3	
11-Apr-05	0	1	1	2	1	1	2	1	2	2	1	2	2	3	3	4	5	4	6	2	2	9	2	1	2.5	9.5	
12-Apr-05	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	4	3	2	2	0	0.8	3.8	
13-Apr-05	0	1	3	0	0	0	1	1	1	1	2	0	1	1	2	0	0	0	1	2	0	0	0	1	0.8	2.8	
14-Apr-05	0	0	0	2	1	1	1	2	1	0	0	0	C	C	C	C	D	D	D	0	0	0	0	N	2.2		
15-Apr-05	0	0	0	0	0	0	0	0	0	0	D	0	0	0	0	0	0	0	2	5	7	0	0	0.6	7.0		
16-Apr-05	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	10	8	7	1	0	1.5	10.1	
17-Apr-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	1	1	1	0.4	3.2	
18-Apr-05	2	1	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	1	1	2	3	2	3	0.9	3.5	
19-Apr-05	0	0	0	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.4	
20-Apr-05	0	1	1	2	3	1	3	3	2	0	0	0	0	0	0	0	1	1	1	3	3	3	2	2	1.4	3.2	
21-Apr-05	2	3	2	1	2	2	5	3	1	1	1	2	3	3	3	3	4	4	3	3	3	3	3	4	2.7	4.6	
22-Apr-05	4	3	3	3	4	3	8	9	6	5	3	5	2	1	0	0	0	0	0	0	2	2	0	0	2.8	9.0	
23-Apr-05	0	0	0	0	1	6	0	0	0	0	0	0	1	3	0	0	2	4	7	49	0	8	0	1	3.4	49.1	
24-Apr-05	0	8	16	11	0	9	16	2	4	2	1	0	0	0	0	0	1	0	1	3	14	12	8	8	4.9	16.3	
25-Apr-05	10	6	8	7	4	12	8	5	6	3	6	5	5	6	4	0	2	3	6	10	4	2	2	3	5.2	11.6	
26-Apr-05	2	1	2	1	1	2	3	3	3	3	0	0	1	0	0	0	0	2	7	10	35	2	2	3.4	35.2		
27-Apr-05	4	0	0	1	0	1	2	0	1	0	0	0	0	1	1	2	0	0	0	2	1	3	1	1	0.8	3.9	
28-Apr-05	1	2	8	55	D	5	0	0	0	0	0	0	1	1	2	2	1	1	3	3	3	1	2	4.0	55.2		
29-Apr-05	2	2	1	2	2	2	2	2	2	2	3	2	1	1	1	1	2	3	4	4	4	4	5	2.1	5.2		
30-Apr-05	3	2	2	2	2	3	2	3	2	1	0	1	2	1	1	3	2	2	2	3	3	5	3	3	2.3	4.7	
Hourly Avg	1.5	1.4	1.9	3.4	1.1	1.7	2.5	1.4	1.2	0.8	0.7	0.9	0.8	1.1	0.7	0.8	1.2	1.3	2.3	4.3	3.0	3.9	1.8	1.8	N	0.0	
Hourly Max	10.4	8.0	16.3	55.2	4.1	11.6	15.9	9.0	5.8	4.8	6.2	5.0	4.6	6.2	3.9	4.4	5.3	5.7	10.1	49.1	13.8	35.2	8.4	8.4			

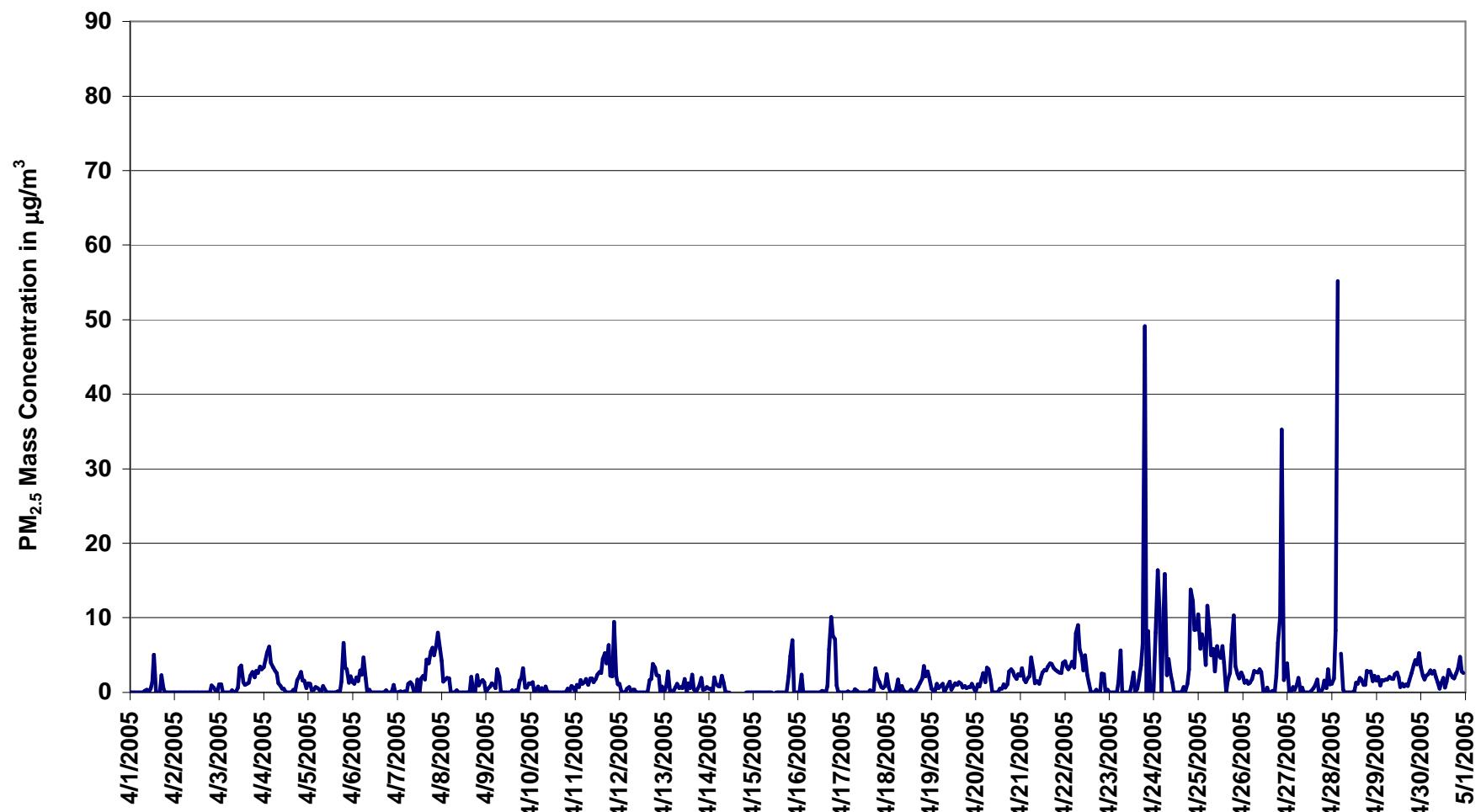


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY MAXIMUM TABLE

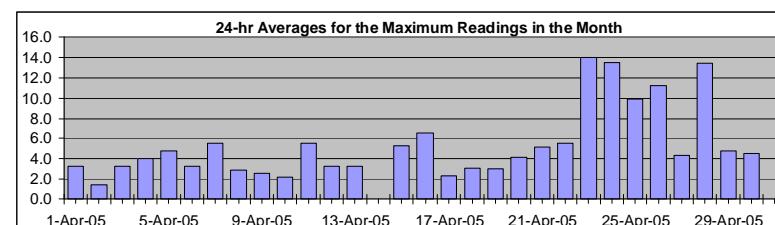
### Particulate Matter (PM<sub>2.5</sub>)

#### Summary

Maximum 1-hr Average:	167.1	µg/m <sup>3</sup>	28-Apr	3:00 4:00
Maximum 24-hr Value:	14.0	µg/m <sup>3</sup>	23-Apr	

AIC Time:	0 hrs	Operational Time:	710 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.3%
Percentile	99 95 75 50 25 5 1	Average	5.3 µg/m <sup>3</sup>

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-Apr-05	0	1	0	0	0	0	1	2	4	4	2	3	15	18	3	1	3	8	6	5	1	1	1	1	1	3.3	18.3
2-Apr-05	1	1	0	1	1	1	2	2	1	1	1	1	1	1	1	1	2	2	1	2	2	4	2	3	1.4	3.5	
3-Apr-05	4	4	2	1	0	1	1	2	2	3	3	3	5	6	5	3	3	4	4	3	4	4	4	5	5	3.3	5.9
4-Apr-05	5	6	10	10	6	5	4	5	3	2	2	2	2	2	1	2	2	4	2	4	3	9	5	3	2	4.1	10.1
5-Apr-05	3	3	2	3	2	2	2	2	3	2	2	2	2	1	2	3	3	6	3	5	24	21	8	5	9	4.8	23.8
6-Apr-05	5	5	3	4	4	5	13	6	2	2	1	1	0	0	0	3	0	4	2	3	2	2	2	3	4	3.3	13.5
7-Apr-05	1	1	2	2	3	2	5	4	3	3	4	2	4	4	7	6	8	7	7	9	9	9	11	23	8	5.5	22.7
8-Apr-05	8	4	5	4	4	4	2	1	2	0	1	1	0	0	0	4	3	5	5	2	4	2	2	4	4	2.9	7.6
9-Apr-05	1	2	3	3	3	2	5	4	2	1	2	1	0	3	2	3	3	2	4	4	4	7	2	2	3	2.6	6.9
10-Apr-05	3	3	1	2	3	2	2	3	3	2	1	1	7	2	2	2	1	2	2	0	2	2	2	2	2	2.2	7.2
11-Apr-05	1	3	2	4	3	2	4	3	3	4	3	4	3	4	5	8	10	12	11	5	4	29	5	3	5.6	28.7	
12-Apr-05	3	2	1	2	2	2	2	3	3	2	0	1	0	3	1	2	8	7	7	8	5	7	2	3	3.2	8.4	
13-Apr-05	3	10	10	2	3	1	2	3	2	2	4	4	3	4	2	4	2	2	3	3	4	1	3	3	3.3	10.2	
14-Apr-05	3	4	4	4	4	3	2	5	5	3	3	0	C	C	C	C	C	D	D	D	0	1	1	0	N	5.1	
15-Apr-05	0	0	0	0	0	0	2	0	0	1	0	D	1	1	2	5	3	1	3	21	26	41	13	1	5.3	40.8	
16-Apr-05	1	3	8	1	1	2	0	3	6	1	1	3	3	2	2	2	4	13	14	36	36	7	6	1	6.5	36.0	
17-Apr-05	2	2	1	2	1	1	1	2	2	1	0	0	1	2	4	4	2	3	11	3	3	2	3	2	2.3	10.7	
18-Apr-05	6	2	3	3	0	3	4	3	2	2	0	0	2	2	3	3	3	4	3	5	5	7	6	3.1	7.2		
19-Apr-05	3	1	2	3	3	3	4	1	3	2	4	4	3	4	3	3	5	3	4	2	3	4	3	2	3.0	4.8	
20-Apr-05	1	3	2	4	5	3	6	6	5	1	2	1	3	4	3	4	5	6	7	6	6	5	5	4	4.1	7.2	
21-Apr-05	5	6	4	2	4	5	9	10	4	3	4	5	5	6	7	6	6	6	5	5	5	4	4	5.1	10.3		
22-Apr-05	8	6	5	5	6	6	14	14	11	7	6	9	4	4	2	1	2	4	1	2	5	5	3	5.5	14.2		
23-Apr-05	1	4	3	1	1	4	9	12	1	2	4	17	16	16	3	5	7	9	13	107	34	43	13	12	14.0	106.7	
24-Apr-05	2	35	34	24	15	25	45	9	15	7	7	1	3	2	3	3	2	5	9	18	26	15	14	13.5	45.2		
25-Apr-05	14	13	25	14	7	19	14	9	9	8	9	8	8	10	8	3	5	5	13	16	8	5	3	4	9.9	25.5	
26-Apr-05	4	5	6	3	3	4	5	5	4	6	7	5	6	7	5	3	3	10	8	18	24	113	10	6	11.2	112.9	
27-Apr-05	20	2	4	4	2	3	3	2	3	0	1	2	2	4	3	4	4	3	1	2	3	3	21	6	4.3	20.8	
28-Apr-05	4	10	48	167	D	13	6	0	0	1	2	2	3	6	6	6	4	4	4	6	6	4	3	5	13.4	167.1	
29-Apr-05	3	4	2	3	3	4	4	4	4	3	7	4	5	4	5	4	4	4	5	5	5	7	6	12	4.7	12.4	
30-Apr-05	9	4	3	3	4	5	4	5	4	3	2	5	5	4	3	7	5	4	4	4	6	7	4	6	4.6	9.2	
	Hourly Avg	4.1	4.9	6.6	9.3	3.2	4.4	5.8	4.3	3.6	2.7	2.8	3.4	3.9	4.3	3.4	3.5	4.2	4.7	5.5	11.0	8.8	12.0	5.9	4.6		
	Hourly Max	20.3	34.6	47.6	167.1	15.3	25.1	45.2	13.8	15.3	8.4	9.3	16.7	16.3	18.3	7.8	7.8	10.0	12.6	14.2	106.7	36.0	112.9	22.7	14.1	N	0.0



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

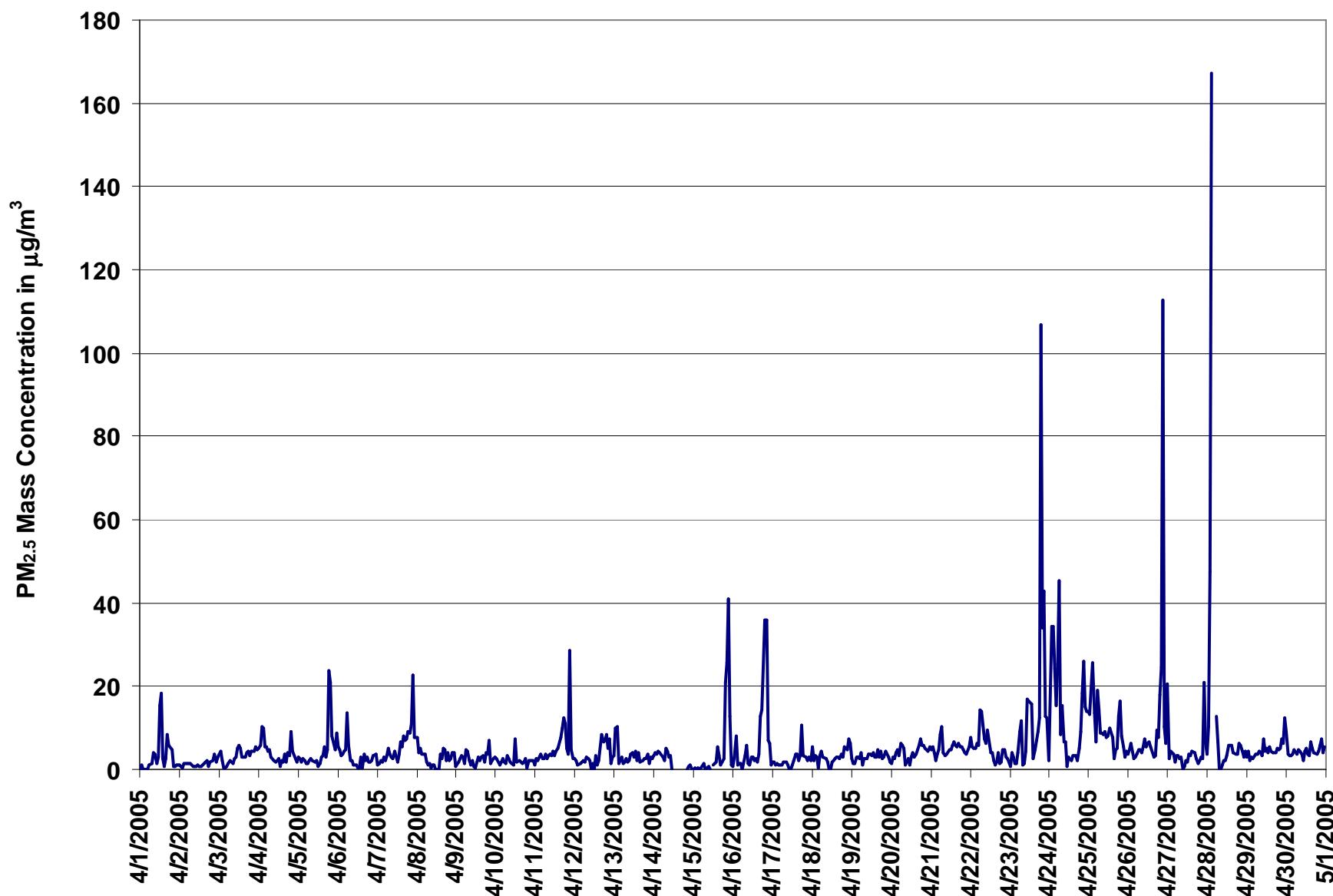
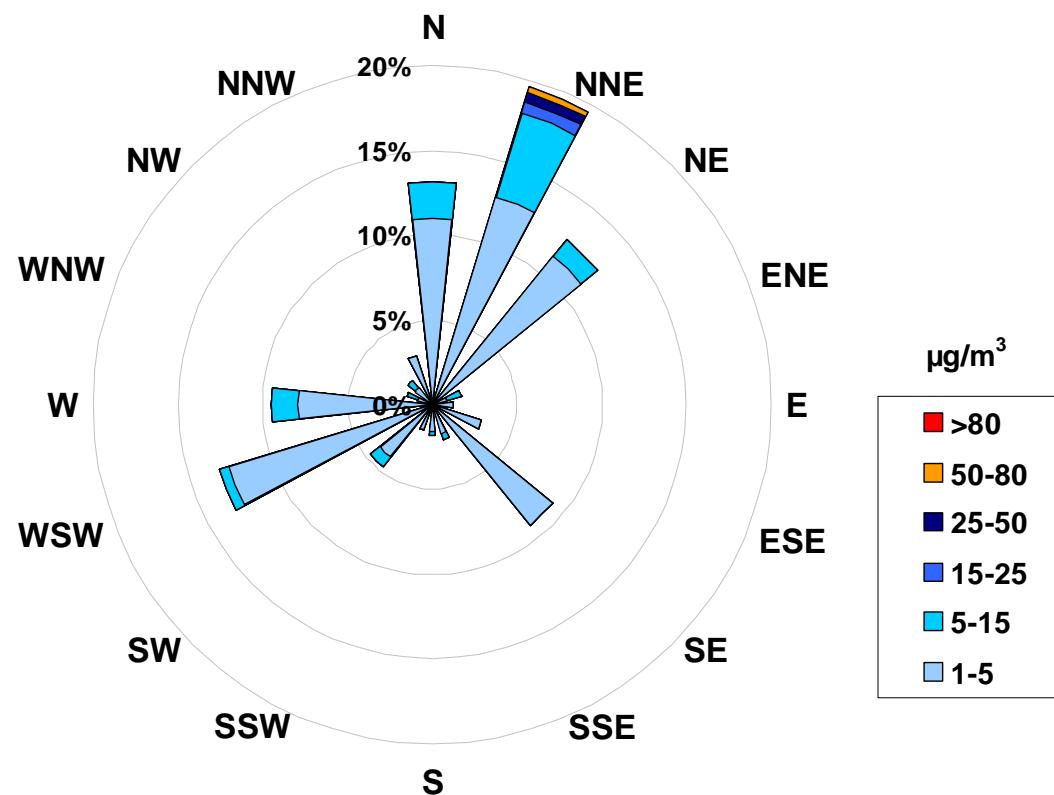


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend

**Concentration Rose for the 1-hr Particulate Matter (less than 2.5 microns)  
Average Concentration Occurrences at the Smoky Heights Site for April  
2005**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$			
Range		Frequency (hrs)	
1.0	<	5	659
5	to	15	46
15	to	25	2
25	to	50	2
50	to	80	1
>	80	0	
Total Non-Zero Values		710	

## PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

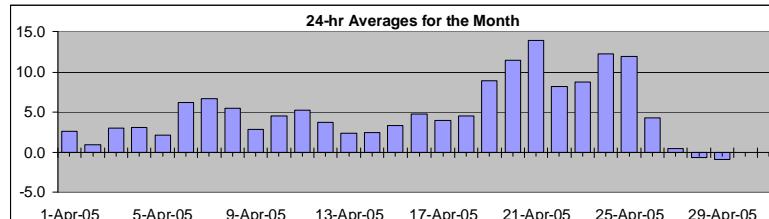
### Summary

Maximum 1-hr Average:	21.8	°C	21-Apr	16:00 17:00
Maximum 24-hr Value:	13.9	°C	21-Apr	

AIC Time:	0 hrs	Operational Time:	720 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99 20.1	95 16.8	75 8.4	50 4.4	25 0.1	5 -3.5	1 -4.9	Average 4.9 °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	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Apr-05	4	3	3	3	2	1	0	0	2	3	6	9	9	4	5	5	5	4	1	1	0	-1	-2	-2	2.6	9.3							
2-Apr-05	-2	-1	-1	-1	-1	-2	-2	-1	0	1	2	3	4	4	5	5	5	5	4	2	0	-1	-2	-3	0.9	5.1							
3-Apr-05	-3	-3	-4	-4	-4	-4	-4	-1	0	1	3	5	7	9	9	10	9	9	8	7	6	5	4	4	2.9	9.5							
4-Apr-05	3	2	1	0	0	-1	-1	0	2	4	5	6	7	7	8	8	8	7	6	4	1	-1	-1	-1	3.1	7.9							
5-Apr-05	-2	-2	-2	-3	-4	-4	-4	-2	0	2	3	5	6	7	8	9	9	9	9	6	3	0	-1	-2	2.1	9.4							
6-Apr-05	0	-1	0	0	-1	-1	-1	-1	2	4	6	8	10	11	13	14	14	14	13	11	10	9	9	5	1	6.2	13.9						
7-Apr-05	1	1	0	0	-2	-2	-1	2	4	8	11	13	15	14	14	13	13	13	12	11	10	9	6	4	4	6.7	14.6						
8-Apr-05	6	4	3	3	4	4	4	4	4	5	6	8	9	10	11	11	10	10	9	5	3	1	0	-2	5.5	11.1							
9-Apr-05	-1	0	-1	-2	-3	-3	-2	-1	1	3	5	6	7	8	8	8	9	8	7	5	3	0	-1	0	2.8	8.7							
10-Apr-05	0	0	-1	-3	-3	-3	-4	-1	1	4	6	8	8	9	11	11	11	11	9	9	8	6	5	5	4.5	11.5							
11-Apr-05	4	4	4	3	2	2	2	4	5	6	7	7	8	7	8	9	8	8	7	6	5	4	3	2	5.2	8.6							
12-Apr-05	1	0	0	0	0	0	0	0	2	4	5	6	7	9	9	10	9	7	5	4	3	2	2	2	3.6	9.7							
13-Apr-05	0	0	0	-1	0	0	0	0	1	2	4	4	5	5	6	6	7	7	5	4	1	1	-1	0	2.3	6.9							
14-Apr-05	-1	-2	-3	-2	-2	-3	-3	-1	1	3	5	7	8	6	7	6	9	8	6	5	4	2	0	-1	2.5	8.5							
15-Apr-05	2	-3	-3	-3	-2	-3	-3	-3	0	2	3	5	7	8	8	9	9	9	10	9	7	4	3	3	3.4	9.7							
16-Apr-05	3	1	0	1	1	0	0	0	2	3	4	6	7	9	10	10	11	11	11	9	2	2	2	1	4.8	11.1							
17-Apr-05	1	1	0	-1	-1	-1	-1	1	3	5	6	7	8	8	9	8	8	7	5	4	4	3	1	1	3.9	8.8							
18-Apr-05	0	0	-1	-3	-4	-5	-3	-1	1	5	7	8	9	10	11	12	12	12	11	9	6	4	3	2	4.5	12.3							
19-Apr-05	1	1	-2	-1	-3	-2	0	3	6	9	11	13	14	15	17	18	18	18	17	15	13	12	10	8	8.8	18.4							
20-Apr-05	7	6	7	4	3	1	3	7	11	13	14	16	16	17	18	19	19	19	18	15	12	11	10	9	11.4	18.9							
21-Apr-05	8	8	7	6	3	4	5	8	11	13	16	18	19	20	21	22	22	22	21	19	17	16	15	14	13.9	21.8							
22-Apr-05	13	10	7	6	6	6	7	10	11	10	10	7	7	8	9	9	10	10	11	10	6	5	4	3	8.2	12.9							
23-Apr-05	1	0	0	-1	-1	-1	3	7	8	9	11	13	15	16	16	16	16	16	14	11	9	7	7	8.7	16.4								
24-Apr-05	9	8	6	5	5	4	5	8	10	12	15	17	17	18	19	19	19	20	20	19	17	13	11	11	8	12.3	19.7						
25-Apr-05	5	5	5	3	1	2	4	8	11	16	18	19	20	20	20	20	19	18	17	15	12	9	8	7	11.8	20.4							
26-Apr-05	6	4	4	5	4	4	4	4	4	4	5	6	5	6	6	7	8	6	6	5	3	1	-1	-3	4.3	7.6							
27-Apr-05	-3	-4	-5	-3	-4	-4	-3	-2	-1	0	2	3	4	5	6	6	6	5	4	3	1	-1	-2	-3	0.4	6.5							
28-Apr-05	-4	-5	-6	-6	-4	-5	-2	-1	-1	0	1	2	3	3	4	5	5	4	3	1	-1	-3	-3	-4	-0.7	4.6							
29-Apr-05	-4	-4	-4	-5	-5	-6	-5	-4	-3	-2	-1	0	1	3	3	4	5	5	4	2	0	-1	-3	-4	-0.9	5.1							
30-Apr-05	-4	-4	-4	-4	-5	-6	-4	-3	-1	1	2	2	3	4	4	5	5	4	3	1	0	-1	-2	-2	0.0	4.8							

Hourly Avg	1.6	0.9	0.3	-0.1	-0.6	-0.9	-0.3	1.7	3.3	5.1	6.9	8.1	9.1	9.5	10.1	10.5	10.6	10.2	9.4	7.6	5.3	3.9	2.7	1.9		
Hourly Max	12.9	10.4	7.4	6.0	6.3	5.6	6.5	10.4	11.4	15.8	17.8	19.4	19.8	20.4	21.1	21.5	21.8	21.6	20.9	19.0	16.9	16.3	15.0	14.2		

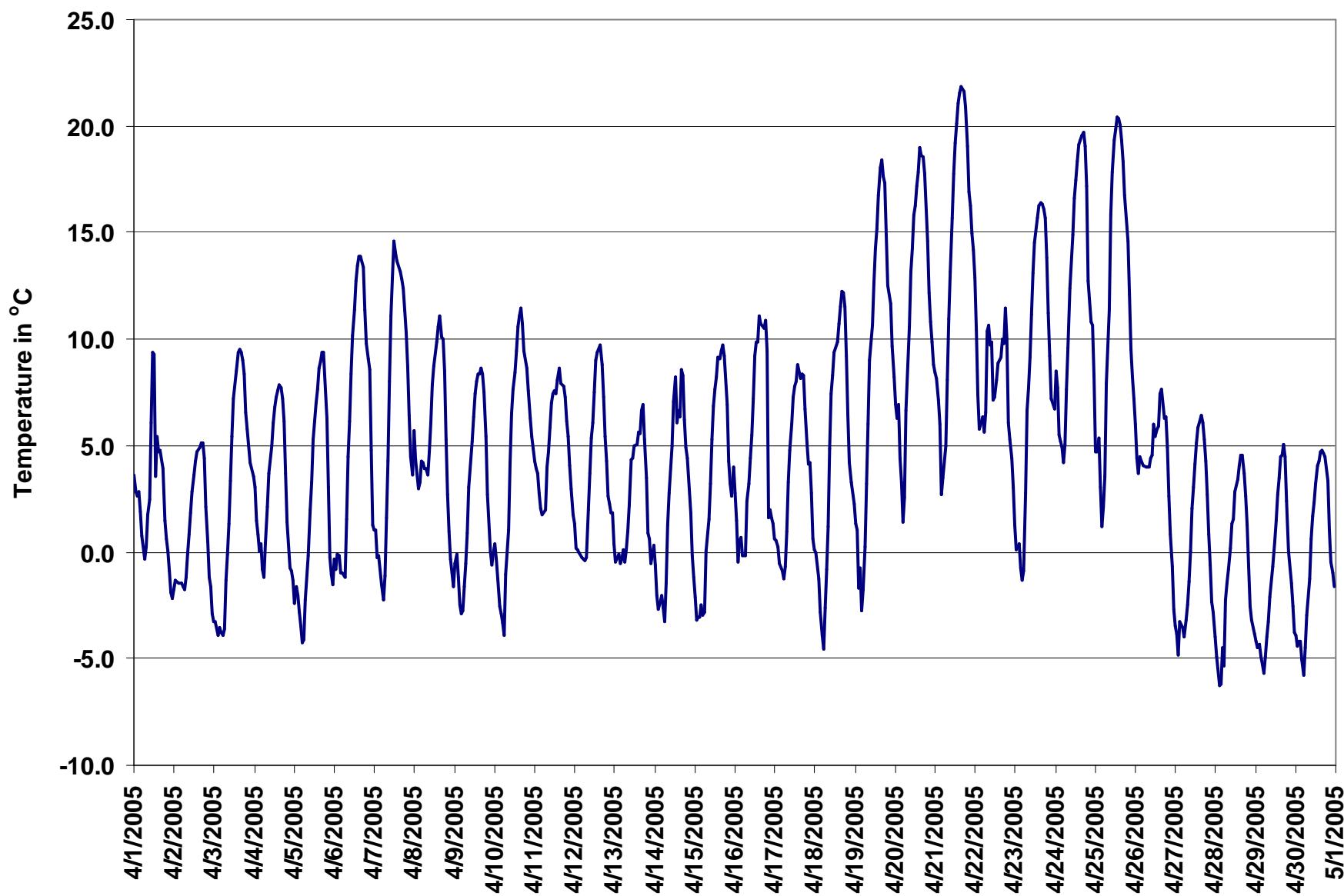


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

## PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

Maximum 1-hr Average:	47.4	km/hr	16-Apr	20:00 21:00
Maximum 24-hr Value:	27.0	km/hr	2-Apr	

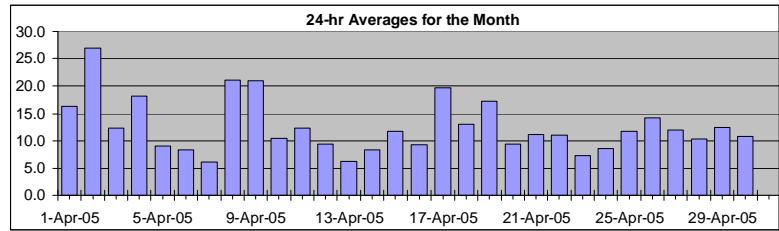
Calm Time:	1 hrs	0% calms	Operational Time:	719 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	35.7	27.9	15.8	10.9	6.9	3.3	2.0	12.5 km/hr

### 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 0:00	24-hr Scalar Average	Daily Max
Hour End 1:00																												
1-Apr-05	13	14	11	13	7	3	5	5	5	5	9	10	22	35	27	23	25	33	36	27	21	15	12	16	16.4	36.0		
2-Apr-05	25	34	32	33	35	36	31	28	31	37	36	36	38	37	34	31	28	22	15	11	7	12	8	8	27.0	38.5		
3-Apr-05	4	4	4	3	2	3	3	4	7	12	15	20	19	19	20	21	21	17	13	11	12	18	21	19	12.2	20.9		
4-Apr-05	15	7	9	17	15	13	13	15	17	17	23	28	27	28	29	27	25	23	18	15	14	12	13	12	18.0	28.7		
5-Apr-05	14	17	15	13	11	10	7	9	10	9	9	6	10	11	13	15	12	6	3	2	5	3	4	3	9.1	16.5		
6-Apr-05	10	7	8	6	6	4	3	5	3	6	6	7	5	6	7	11	15	16	19	18	16	10	5	4	8.4	19.1		
7-Apr-05	4	6	3	4	3	2	4	5	4	5	4	6	15	14	8	7	8	10	3	4	6	5	5	7	6.0	15.0		
8-Apr-05	15	13	8	12	21	24	28	26	21	19	26	31	32	30	26	23	21	27	29	21	17	13	10	12	21.1	32.3		
9-Apr-05	16	17	14	9	4	13	20	15	12	22	27	31	36	35	32	28	32	32	28	21	15	15	15	17	21.0	36.2		
10-Apr-05	18	15	12	13	9	7	7	6	6	8	12	16	15	12	8	8	8	11	11	12	13	9	8	9	10.5	18.0		
11-Apr-05	11	12	14	15	11	11	9	12	13	13	19	23	21	22	17	14	10	4	2	6	7	2	12	17	12.3	22.9		
12-Apr-05	12	13	10	9	6	7	8	8	9	10	8	6	10	8	9	8	13	10	10	17	11	9	10	7	9.5	16.8		
13-Apr-05	6	4	5	6	7	7	7	4	4	3	4	7	6	11	9	13	12	10	8	3	4	2	5	4	6.2	12.6		
14-Apr-05	2	1	1	4	5	4	2	8	6	4	5	5	6	13	8	13	14	19	10	14	19	11	12	13	8.3	18.7		
15-Apr-05	10	10	10	13	16	14	10	19	18	21	22	21	18	12	11	10	11	6	5	5	4	4	4	5	11.8	22.5		
16-Apr-05	4	1	2	3	2	5	2	2	4	3	6	9	5	11	12	11	12	7	13	47	20	11	16	9.2	47.4			
17-Apr-05	16	16	17	13	14	16	16	12	19	29	33	33	30	32	35	32	30	26	16	11	8	8	9	3	19.8	35.0		
18-Apr-05	7	6	4	2	2	2	2	5	10	16	23	20	25	18	16	17	21	22	20	16	15	13	14	13	12.9	25.0		
19-Apr-05	12	9	8	4	8	12	11	14	14	15	18	22	20	22	22	22	28	27	24	18	20	23	20	20	17.2	27.6		
20-Apr-05	20	14	17	11	9	9	11	13	10	12	8	5	7	6	5	5	7	6	9	10	9	9	7	8	9.4	20.0		
21-Apr-05	4	7	6	6	4	6	7	6	9	9	8	10	13	15	16	15	15	16	16	12	13	15	17	21	11.1	21.0		
22-Apr-05	19	11	8	9	11	9	9	8	22	18	17	17	12	8	15	10	5	10	5	3	10	13	11	4	11.0	22.0		
23-Apr-05	3	calm	2	3	2	5	9	11	10	8	10	9	7	6	6	9	11	12	10	8	7	8	5	7	7.2	11.6		
24-Apr-05	9	10	8	10	7	7	5	11	11	9	12	15	15	10	8	8	8	7	7	6	6	7	5	5	8.5	14.8		
25-Apr-05	5	8	6	4	5	6	2	5	5	6	14	14	15	15	19	19	21	23	24	20	13	10	11	13	11.8	24.2		
26-Apr-05	10	4	4	11	13	12	12	17	14	14	14	19	19	23	19	20	18	17	22	20	14	10	7	5	14.2	23.3		
27-Apr-05	4	5	4	8	9	9	9	12	11	10	12	15	14	16	15	17	18	23	20	18	12	9	7	8	11.9	22.7		
28-Apr-05	5	4	3	4	5	3	4	8	9	7	11	12	12	15	15	16	20	20	21	16	12	10	8	7	10.3	21.5		
29-Apr-05	7	8	12	11	12	10	14	16	13	13	15	16	17	15	14	14	16	15	17	11	8	7	5	12.5	17.3			
30-Apr-05	7	6	9	10	10	7	11	13	9	10	12	14	12	14	13	15	13	15	13	10	8	9	8	9	10.8	15.5		
1-hr Average	10.3	9.8	8.8	9.3	9.2	9.2	9.4	10.7	11.3	12.4	14.7	16.0	16.8	17.3	16.3	16.1	16.5	16.5	14.7	12.8	12.5	10.3	9.8	9.9	N	0.0		
Hourly Max	25.3	33.7	31.8	33.2	35.2	35.8	31.3	28.0	30.7	37.1	36.5	36.3	38.5	37.1	35.0	31.9	31.5	33.3	36.0	27.1	47.4	22.5	20.5	21.0				

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### Status Flag Characters

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

## PASZA - Smoky Heights Vector Wind Speed Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### Summary

Maximum 1-hr Average:	47.1	km/hr	16-Apr	20:00 21:00
Maximum 24-hr Value:	26.9	km/hr	2-Apr	

Calm Time:	7 hrs	1% calms	Operational Time:	713 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				AverageV
99	95	75	50	25 5 1
35.4	27.7	15.2	10.2	5.8 2.7 1.6
				15.3 km/hr

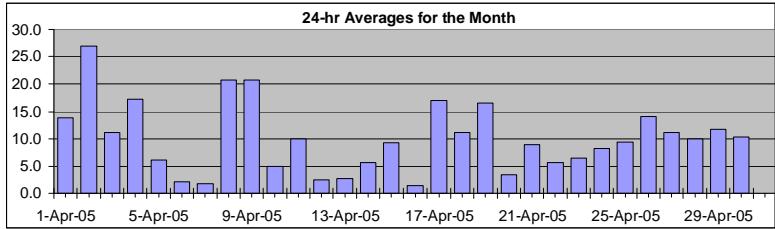
### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hr Vector Average	Daily Max
Hour End 1:00																												
1-Apr-05	13	14	11	13	7	3	4	4	4	5	9	9	21	35	26	23	25	33	36	27	21	15	12	16		13.9	35.6	
2-Apr-05	25	34	32	33	35	36	31	28	31	37	36	36	38	37	34	30	28	22	15	11	7	11	8	8		26.9	38.3	
3-Apr-05	4	4	4	3	1	3	2	4	7	12	14	20	19	18	20	20	21	17	13	11	12	18	20	19		11.2	20.7	
4-Apr-05	15	7	8	17	15	13	13	15	17	17	23	28	27	28	27	25	23	18	15	14	12	13	12		17.3	28.4		
5-Apr-05	14	17	15	12	11	10	7	9	10	9	9	5	9	11	12	14	11	5	calm	2	5	3	4	1		6.0	16.5	
6-Apr-05	10	6	7	5	6	3	3	5	3	5	5	7	5	3	6	10	14	16	19	18	16	9	4	3		2.1	19.0	
7-Apr-05	4	6	2	4	3	2	4	3	4	5	4	6	15	14	8	6	8	9	3	3	5	4	4	6		1.8	14.5	
8-Apr-05	14	13	7	12	21	23	28	26	21	19	26	30	32	29	26	23	20	26	29	21	17	13	10	12		20.8	32.0	
9-Apr-05	16	17	14	9	4	12	20	14	12	22	26	30	35	35	32	28	31	32	28	21	15	15	15	17		20.8	35.4	
10-Apr-05	18	15	12	13	8	7	7	6	6	7	12	15	15	11	6	5	6	10	10	10	12	13	9	8	9		5.0	18.0
11-Apr-05	11	12	14	15	11	11	9	12	13	13	19	23	21	21	16	13	8	3	1	6	7	2	12	17		9.9	22.6	
12-Apr-05	12	13	10	8	6	6	8	8	9	10	6	6	9	5	8	8	13	2	10	12	9	9	10	4		2.5	12.9	
13-Apr-05	5	3	5	6	6	6	7	4	4	3	3	7	6	10	8	12	11	8	7	2	3	1	5	calm		2.7	12.3	
14-Apr-05	calm	1	1	4	4	3	2	8	2	4	3	2	4	8	5	12	12	18	9	13	18	10	11	13		5.7	18.5	
15-Apr-05	10	10	10	13	16	14	10	19	17	21	22	20	18	11	9	9	10	2	4	4	4	4	5	6		9.3	22.1	
16-Apr-05	4	calm	2	2	2	5	2	2	4	2	6	8	4	10	12	10	11	12	7	3	47	16	10	16		1.5	47.1	
17-Apr-05	16	16	17	13	14	16	16	12	19	28	33	32	30	32	35	32	29	25	15	11	8	8	9	calm		17.0	34.7	
18-Apr-05	6	6	4	2	2	2	2	4	9	15	23	20	25	17	15	17	20	21	20	16	15	13	14	13		11.1	24.6	
19-Apr-05	11	8	7	3	8	12	11	14	14	15	18	22	19	21	21	22	27	27	24	17	20	22	20	20		16.6	27.3	
20-Apr-05	20	13	17	10	9	9	11	13	10	11	8	4	5	4	3	3	5	6	8	10	9	9	7	7		3.4	19.9	
21-Apr-05	4	6	6	6	4	6	7	5	9	9	8	10	12	14	15	14	14	15	16	12	13	14	17	21		8.9	20.9	
22-Apr-05	19	10	8	9	11	9	6	6	22	18	17	16	11	8	15	10	4	10	5	3	9	12	11	3		5.6	21.5	
23-Apr-05	3	calm	1	3	calm	5	8	11	10	8	9	7	5	5	5	8	10	11	9	8	7	5	7		6.3	11.3		
24-Apr-05	9	10	8	10	7	7	5	11	8	12	14	14	8	6	7	7	7	6	5	6	7	5	4		8.2	14.2		
25-Apr-05	5	8	4	2	5	5	2	4	5	3	14	13	14	14	17	18	21	23	24	20	13	10	11	13		9.5	24.0	
26-Apr-05	10	4	4	11	13	12	12	17	14	14	14	18	18	23	19	20	18	16	22	20	14	10	7	5		14.0	23.1	
27-Apr-05	4	5	4	8	9	9	9	12	10	9	11	14	14	15	14	16	17	22	20	18	12	9	7	7		11.2	22.3	
28-Apr-05	5	4	3	4	5	3	4	8	9	6	10	11	11	14	14	15	19	20	21	16	11	10	8	7		9.9	21.3	
29-Apr-05	7	8	12	11	12	10	13	15	12	14	15	16	16	14	13	15	14	17	11	8	7	5			11.6	17.2		
30-Apr-05	7	6	9	10	10	7	11	13	9	9	12	12	11	12	13	15	12	14	13	10	8	8	8		10.4	14.6		

1-hr Vector	5.0	5.5	4.7	4.6	4.8	4.8	5.0	3.8	3.4	4.3	4.9	5.5	5.8	6.0	5.1	3.8	3.3	3.2	3.5	2.9	3.9	2.9	2.7	3.4		
Hourly Max	25.2	33.7	31.7	33.1	35.2	35.7	31.2	27.9	30.7	37.0	36.4	36.1	38.3	36.9	34.7	31.7	31.2	33.2	35.6	27.0	47.1	22.4	20.5	20.9		

### HOURLY AVERAGE TABLE

### Wind Speed (WSv)



### Status Flag Characters

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

## PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary													

Calm Time:	1 hrs							0% calms							Operational Time: 719 hrs													
	Calibration Time: 0 hrs							AMD Operational Uptime: 100.0%																				
Percentile	99	95	75	50	25	5	1	Average																				
	356.9	344.8	257.8	212.6	44.5	10.8	1.6	270 deg																				
Day	Mountain Standard Time																											
Hour Start	0:00	1:00	2:00	3:00	4:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00						
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						
1-Apr-05	175	173	160	158	168	209	289	249	258	214	194	264	268	267	254	245	254	256	256	242	239	248	247	250				
2-Apr-05	248	245	242	241	246	250	250	247	247	248	247	250	245	246	248	247	247	246	245	241	259	233	248	251				
3-Apr-05	214	249	192	201	204	176	182	158	147	154	155	152	141	132	133	130	125	118	122	111	110	139	155	162				
4-Apr-05	175	195	228	268	259	241	232	243	240	241	242	247	245	245	248	246	251	260	257	242	254	256	244	249				
5-Apr-05	267	265	264	254	246	235	212	192	186	191	176	158	150	148	192	193	199	207	8	5	357	354	333	244				
6-Apr-05	276	244	257	230	193	196	228	213	186	164	148	152	116	137	130	104	62	43	35	34	42	23	325	265				
7-Apr-05	263	286	209	299	343	313	323	44	37	29	45	115	131	134	138	84	54	55	31	352	357	24	307	278				
8-Apr-05	281	270	232	268	258	264	258	250	240	255	266	266	263	270	270	280	278	258	256	262	263	274	272	260				
9-Apr-05	256	249	259	230	203	236	258	249	242	252	259	261	264	265	253	258	253	250	255	254	247	264	268	254				
10-Apr-05	247	245	243	229	227	248	220	195	190	204	229	242	257	258	234	184	119	115	92	85	88	94	100	118				
11-Apr-05	120	132	133	136	136	133	135	126	125	129	134	137	144	142	160	176	148	215	61	141	94	56	260	261				
12-Apr-05	258	246	243	223	206	182	207	198	186	176	191	209	199	116	113	89	58	97	335	274	296	2	354	33				
13-Apr-05	223	321	11	281	275	288	264	282	261	293	223	139	156	258	241	183	139	131	127	130	128	292	244	275				
14-Apr-05	49	20	226	239	254	158	239	258	262	78	29	301	40	296	164	202	240	280	278	270	299	271	260	265				
15-Apr-05	249	250	266	249	247	253	248	248	240	249	245	258	254	254	249	240	262	73	107	95	29	44	27	173				
16-Apr-05	130	3	123	215	218	231	236	12	37	43	135	176	68	31	40	57	54	46	61	319	265	266	192	234				
17-Apr-05	238	242	251	229	238	228	231	230	229	241	244	256	264	263	266	267	267	278	321	341	330	342	3	67				
18-Apr-05	27	24	54	41	349	311	286	207	221	242	253	264	262	277	266	261	265	255	246	241	252	262	267	261				
19-Apr-05	245	245	232	248	214	220	219	218	213	238	250	263	265	255	255	254	254	250	248	250	265	268	247	239				
20-Apr-05	232	232	265	259	238	258	275	262	266	5	21	39	320	263	226	56	23	40	43	30	26	53	48	45				
21-Apr-05	59	59	35	20	22	22	25	40	151	138	135	130	132	136	130	135	127	113	109	109	114	126	142	156				
22-Apr-05	170	185	226	219	201	224	247	251	354	351	345	351	322	311	337	355	330	294	322	294	276	268	276	222				
23-Apr-05	259	calm	260	240	122	43	19	31	45	37	64	58	15	21	44	35	18	31	41	32	19	21	15	17				
24-Apr-05	16	20	26	22	15	20	27	34	32	39	38	49	54	62	57	35	19	30	48	49	14	31	36	357				
25-Apr-05	299	269	298	14	262	23	219	217	185	340	1	17	357	17	9	1	7	21	28	31	36	31	23	24				
26-Apr-05	24	19	0	360	7	1	1	15	20	357	5	5	24	22	25	14	19	22	34	24	21	19	24	34				
27-Apr-05	15	353	348	359	5	7	15	8	2	354	8	356	359	11	10	34	38	43	41	52	50	44	44	34				
28-Apr-05	31	11	11	12	357	12	26	52	45	20	19	353	18	7	1	14	43	41	29	33	26	21	18	15				
29-Apr-05	8	352	353	347	350	346	348	4	356	355	345	350	354	1	9	352	5	28	40	55	51	30	26	6				
30-Apr-05	7	357	356	9	8	8	13	30	41	43	38	56	44	43	39	33	36	48	37	31	16	23	27	52				

Hourly Avg	245	252	256	256	254	256	265	258	246	258	259	266	267	272	264	266	293	313	337	336	312	314	284	251
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

#### Status Flag Characters

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

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

Station: Smoky Heights  
Station Owner: PASZA

Monitoring Dates: April 1, 2005 to May 1, 2005

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 1 hrs 0% calms							Operational Time: 719 hrs						
Calibration Time: 0 hrs							AMD Operational Uptime: 100.0%						
Percentile							99	95	75	50	25	5	1
							50.2	37.3	15.7	8.8	5.2	2.7	2.0

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

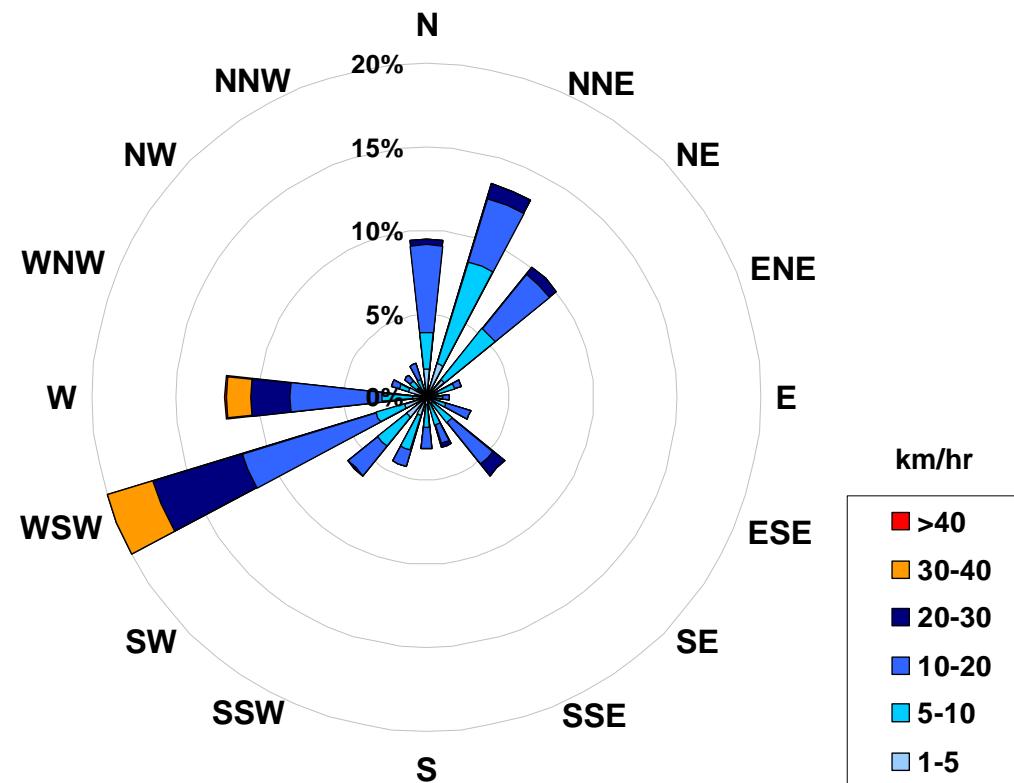
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start 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-Apr-05	4	2	5	4	27	30	26	17	23	21	11	18	11	4	6	4	5	4	5	3	2	4	4	3	29.8		
2-Apr-05	3	3	3	3	2	2	3	3	4	4	4	4	4	5	5	5	5	5	4	3	6	9	12	12	10	12.1	
3-Apr-05	25	13	12	14	44	12	25	16	11	9	10	10	9	10	12	10	6	5	6	6	7	7	4	4	43.8		
4-Apr-05	4	8	13	4	4	2	3	3	4	7	5	5	7	7	8	7	6	7	4	2	3	2	2	5	12.9		
5-Apr-05	1	1	1	5	4	6	5	5	5	10	10	17	13	13	15	16	20	37	28	20	6	9	23	36	37.3		
6-Apr-05	4	13	11	9	5	17	14	10	15	12	21	17	36	56	37	26	12	7	5	4	4	7	22	24	56.0		
7-Apr-05	11	8	29	11	40	18	11	32	16	10	26	17	14	9	10	9	8	10	18	26	8	12	15	30	39.5		
8-Apr-05	5	3	25	6	3	4	3	4	4	5	5	6	7	8	7	8	6	7	3	2	3	7	7	4	25.3		
9-Apr-05	2	2	3	6	23	5	2	5	5	7	8	8	9	8	7	8	8	5	4	3	3	2	1	2	23.3		
10-Apr-05	2	2	6	2	5	5	8	6	11	14	13	12	11	19	49	42	44	16	6	4	5	11	12	11	48.8		
11-Apr-05	14	14	6	3	4	34	21	24	12	27	8	7	7	8	7	12	33	25	31	30	7	12	21	3	34.0		
12-Apr-05	7	5	4	5	8	5	4	4	8	13	19	22	22	46	29	21	12	33	9	11	14	16	8	15	46.2		
13-Apr-05	15	25	12	11	29	12	5	12	13	19	35	25	33	28	17	11	17	25	10	47	40	48	17	52	52.5		
14-Apr-05	37	32	32	16	26	25	29	7	40	21	51	56	40	45	35	12	18	8	7	3	7	7	6	3	56.2		
15-Apr-05	5	4	8	5	2	3	8	3	5	5	8	8	12	22	39	22	25	45	24	13	8	10	25	22	44.8		
16-Apr-05	14	43	25	12	15	9	18	16	8	14	17	19	58	11	7	13	13	6	11	16	3	16	11	3	58.2		
17-Apr-05	5	4	3	6	3	2	2	4	6	6	6	9	8	8	8	6	7	8	10	7	6	7	5	46	45.6		
18-Apr-05	6	4	10	12	8	17	28	8	7	9	10	15	10	13	19	14	15	12	5	2	4	3	3	2	28.2		
19-Apr-05	7	8	11	17	7	3	7	4	6	8	9	9	12	15	11	10	8	6	6	3	3	3	3	3	17.2		
20-Apr-05	3	10	3	10	5	10	4	3	14	13	22	53	40	47	54	50	43	26	17	4	3	9	10	37	54.3		
21-Apr-05	28	10	7	4	6	3	4	24	10	12	17	16	22	17	13	23	19	11	7	6	5	6	4	5	27.8		
22-Apr-05	6	12	9	5	5	6	41	21	7	6	7	8	13	19	10	12	26	15	33	17	5	5	4	28	41.3		
23-Apr-05	15	calm	23	21	37	11	6	6	8	14	17	31	50	42	41	34	14	11	9	7	3	2	4	2	50.1		
24-Apr-05	3	4	7	2	3	9	19	4	7	11	12	16	15	37	37	31	35	17	11	8	3	6	8	7	37.1		
25-Apr-05	7	4	36	39	8	19	47	9	9	44	13	14	13	14	14	13	12	8	6	5	5	6	3	3	46.7		
26-Apr-05	3	25	10	5	4	5	6	5	5	7	9	9	10	8	9	12	13	14	7	4	3	3	7	6	25.2		
27-Apr-05	6	5	15	4	4	5	6	7	15	20	13	18	19	14	22	15	14	9	8	6	6	5	5	5	22.1		
28-Apr-05	10	7	7	8	4	5	10	9	18	32	20	25	21	18	22	22	13	11	7	6	5	3	5	5	31.8		
29-Apr-05	7	6	4	4	5	6	6	6	9	14	17	14	16	16	13	16	15	14	13	7	5	9	8	10	18.0		
30-Apr-05	5	4	3	4	4	6	5	7	10	13	13	27	21	26	18	22	16	21	14	7	4	7	5	9	26.7		
																									0.0		

Hourly Max 37 43 36 39 44 34 47 32 40 44 51 56 58 56 54 50 44 45 33 47 40 48 25 52

**Wind Rose for the 1-hr Average Occurrences at the Smoky Heights Site for April 2005**



**Calms:** 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
1.0	<	5	105
5	to	10	213
10	to	20	291
20	to	30	78
30	to	40	31
>	40		1
Total Non-Zero Values			719

## PEACE AIRSHED ZONE ASSOCIATION

# PASZA Monthly Passive Data Summary

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

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
<b>Duplicates</b>					
3a	Silver Valley	0.2	58.0	0.8	
3b	Silver Valley	0.3	46.2	0.8	
4a	Bay Tree	0.3	39.3	1.3	
4b	Bay Tree	0.3	40.2	1.2	
9a	Boone Creek	0.3	37.9	1.3	
9b	Boone Creek	0.2	36.9	1.1	
49a	Grande Prairie HP	0.3	38.7	8.6	
49b	Grande Prairie HP	0.2	39.6	8.9	
1	Silver Valley	0.3	37.3	1.3	08-27-081-11 W6M
2	Bay Tree	0.2	38.7	0.6	13-16-078-13 W6M
3	Forth Creek	0.2	52.1	0.8	04-13-082-07 W6M
4	Gordondale	0.3	39.7	1.2	04-34-078-10 W6M
5	Boone Creek	0.2	33.9	0.6	01-23-076-11 W6M
7	Steeprock Creek	0.1	41.2	0.7	09-35-072-13 W6M
9	Spirit River	0.2	37.4	1.2	08-12-079-07 W6M
10	Woking	0.3	38.5	1.0	01-13-076-07 W6M
11	Webber Creek	0.2	36.4	0.9	09-36-074-09 W6M
12	Hythe	0.2	35.0	1.2	14-36-072-11 W6M
14	Sylvester	0.1	32.1	0.8	08-06-069-12 W6M
16	Beaverlodge	0.3	43.0	1.6	15-36-071-10 W6M
17	Poplar	0.2	33.7	1.3	13-06-073-08 W6M

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

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
18	Saddle Hills	0.3	37.2	1.1	04-25-074-07 W6M
19	Wanham	0.4	42.8	1.4	16-22-077-03 W6M
20	Shaftesbury	0.2	32.3	0.8	04-03-082-23 W5M
21	Eaglesham	0.2	32.3	0.7	16-21-079-25 W5M
23	Bear Lake	0.2	40.1	1.6	15-31-072-06 W6M
24	Wembley	0.2	34.9	1.3	12-31-070-08 W6M
25	Pinto Creek	0.2	31.9	0.9	04-24-069-11 W6M
26	Flyingshot	0.2	34.2	1.8	15-36-070-07 W6M
27	Grande Prairie I	0.2	34.2	7.5	08-15-071-06 W6M
28	Clairmont Lake	0.2	37.8	1.2	09-06-073-04 W6M
29	Smoky Heights	0.4	46.0	1.1	04-06-075-02 W6M
30	Fitzsimmons	0.2	36.5	1.3	15-36-072-03 W6M
32	Gold Creek	0.3	31.8	1.4	06-33-067-05 W6M
33	Wapiti	0.2	38.6	1.0	02-25-071-03 W6M
34	Puskwaskau	0.2	32.7	0.4	15-35-074-25 W5M
35	Jean Cote	0.3	34.9	1.6	12-35-079-21 W5M
36	Guy	0.2	39.0	0.7	03-04-076-22 W5M
37	Crooked Creek	0.3	37.1	1.0	16-01-071-26 W5M
38	Karr Creek	0.2	27.3	0.7	10-16-065-02 W6M
39	Clouston Creek	0.2	41.1	0.8	12-01-073-22 W5M
40	McLennan	0.3	37.3	1.0	03-29-077-19 W5M
41	Valleyview	0.4	46.7	0.9	09-30-069-22 W5M
42	Sunset House	0.3	42.6	0.6	05-32-070-19 W5M
43	High Prairie	0.2	38.2	2.7	16-13-074-17 W5M
44	Peavine	0.2	40.6	0.5	03-05-079-15 W5M
45	Gift Lake	0.2	35.6	1.3	10-07-079-12 W5M
46	Little Smoky	0.4	38.7	2.6	12-01-065-21 W5M
47	Kinuso	0.2	34.2	0.8	12-10-073-10 W5M
48	Deer Mountain	0.2	34.9	0.7	15-22-068-09 W5M
49	Grande Prairie HP	0.3	39.1	8.8	17-26-071-06 W6M

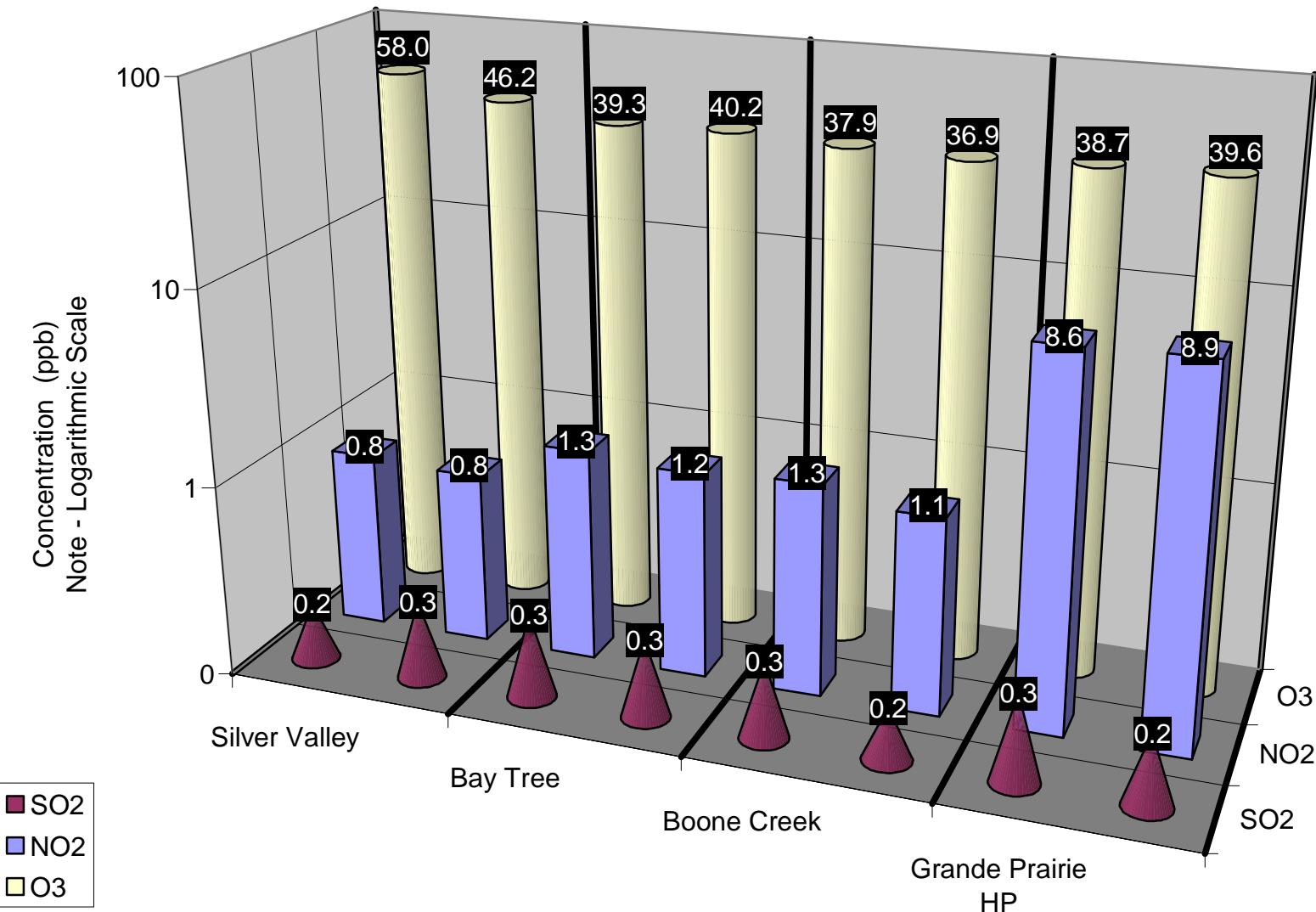


Figure 34. Duplicate Summary Chart

**Table 2. Passive Summary Results for April 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 April 2005 (PASZA Zone)			
Mean	0.2	37.4	1.4
Standard Deviation	0.1	4.6	1.6
Minimum	0.1	27.3	0.4
	Sylvester (#14)	Karr Creek (#38)	Puskwaskau (#34)
Maximum	0.4	52.1	8.8
	Smoky Heights (#29)	Forth Creek (#3)	Grande Prairie HP (#49)

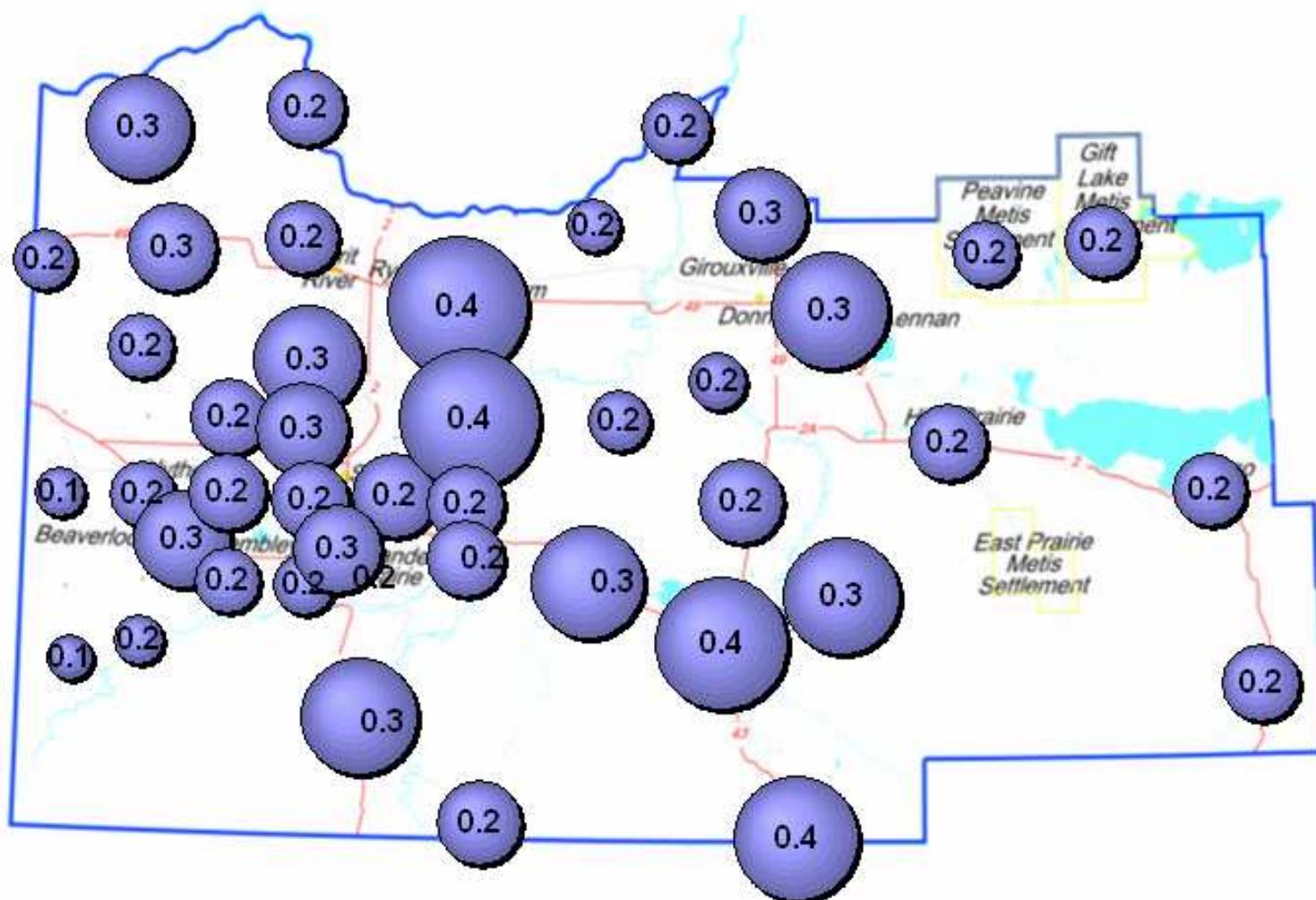
**Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)**

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
AENV Beaverlodge station	0.3	40.0	2.7
PASZA Beaverlodge passive	0.3	43.0	1.6

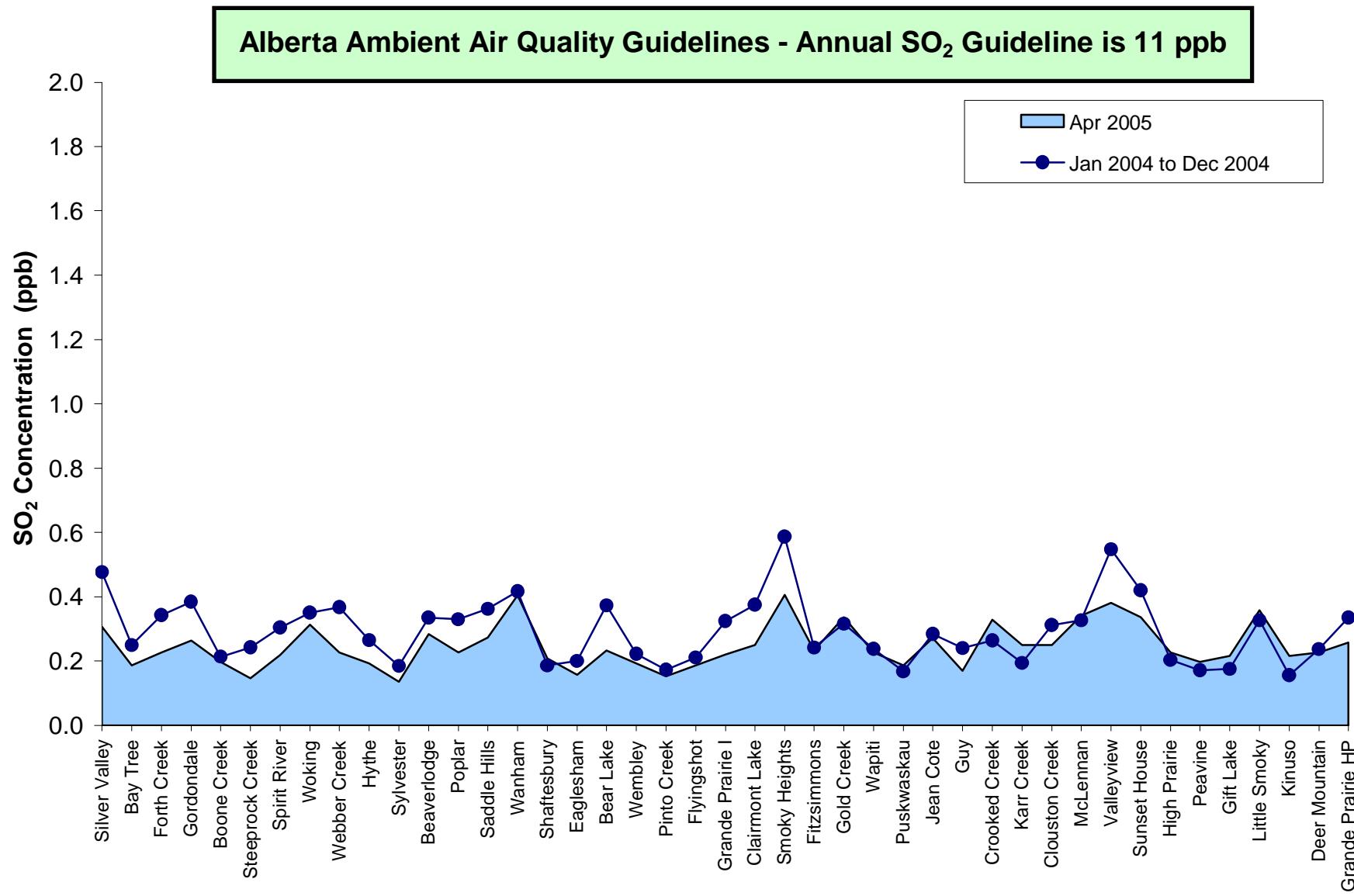
**Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)**

	SO <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>
PASZA Henry Pirker station	0.3	31.6	8.8
PASZA Grande Prairie passive	0.3	39.1	8.8

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



**Figure 34. SO<sub>2</sub> Bubble Chart**



**Figure 35. SO<sub>2</sub> Summary Chart**

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

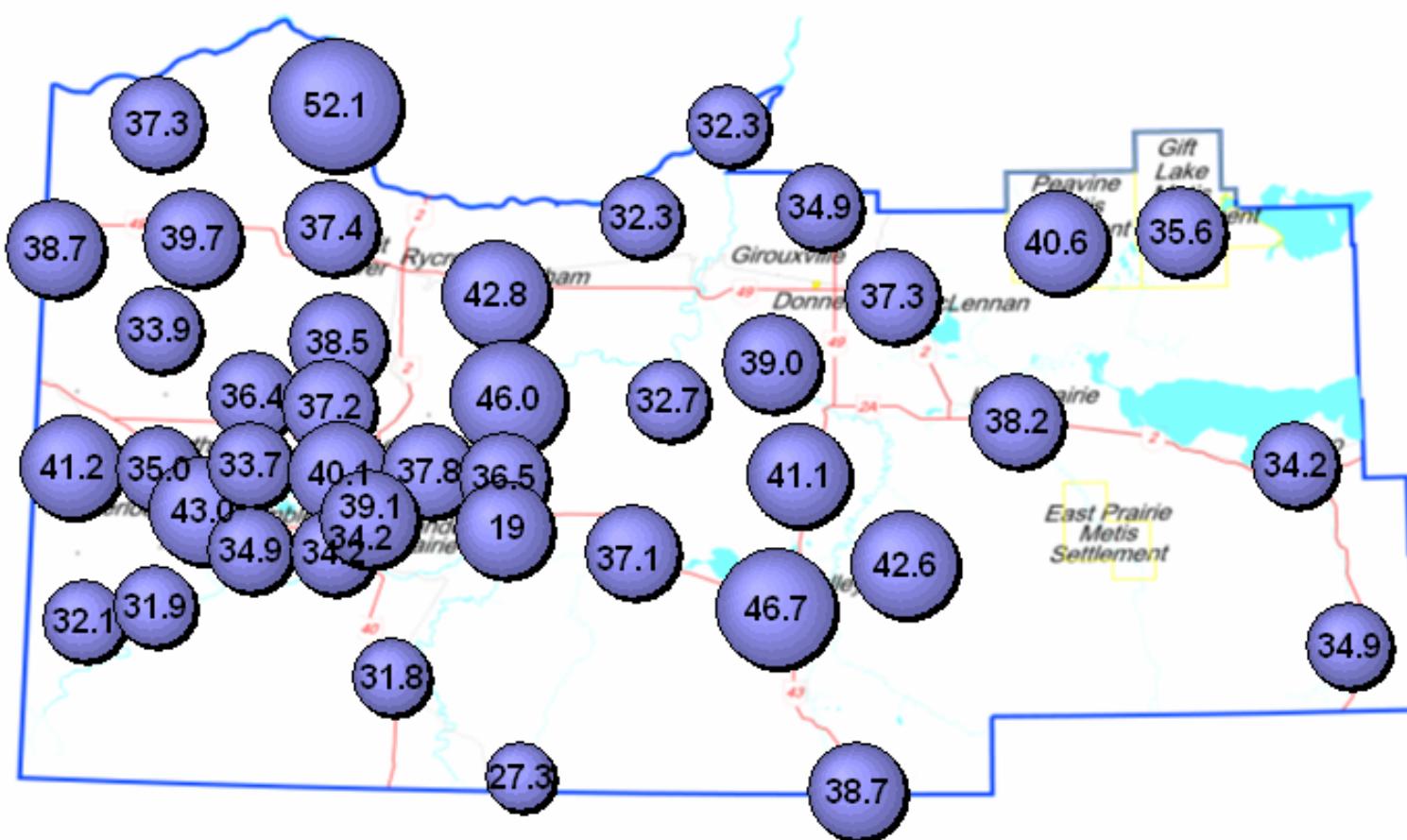
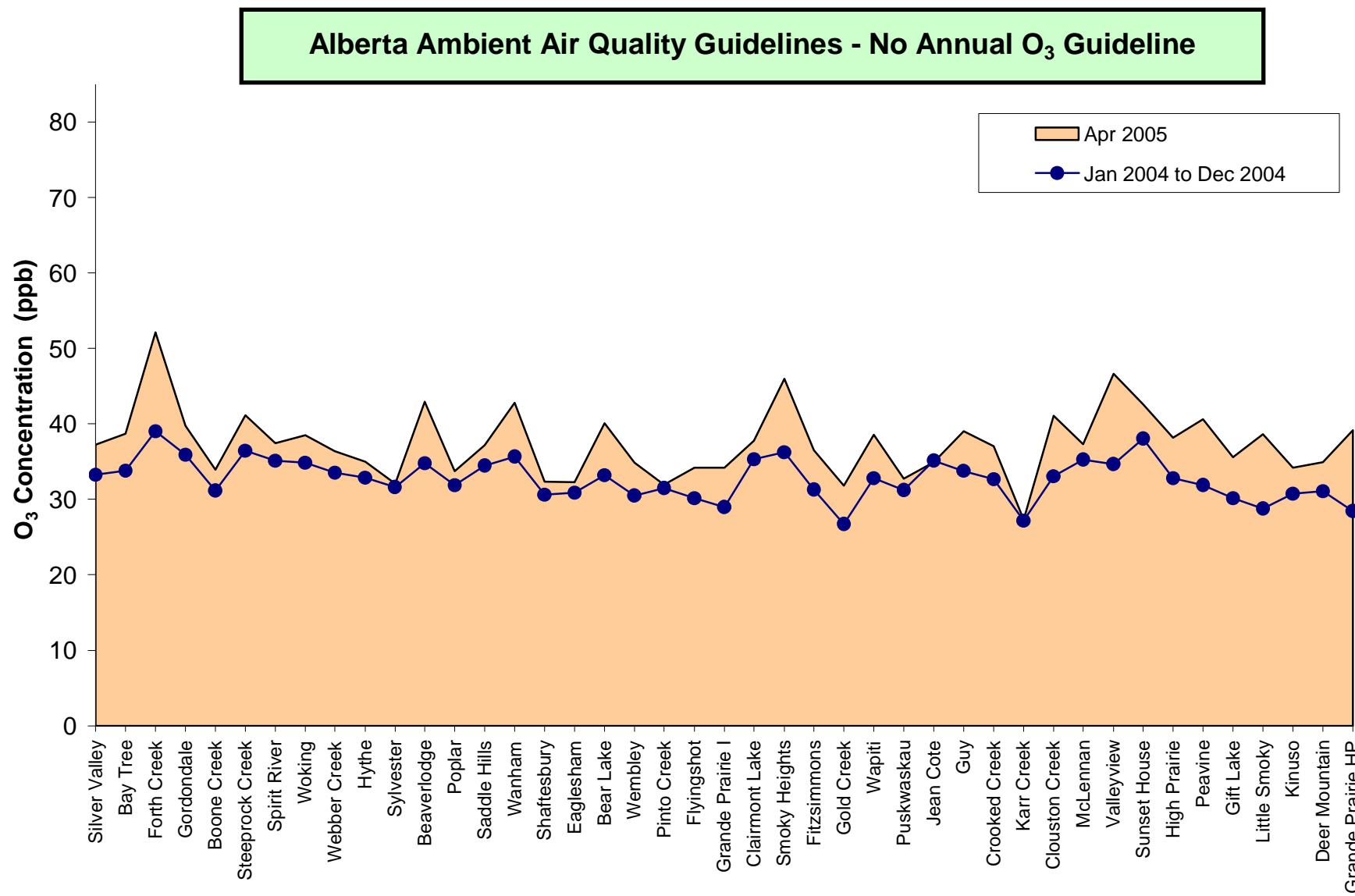
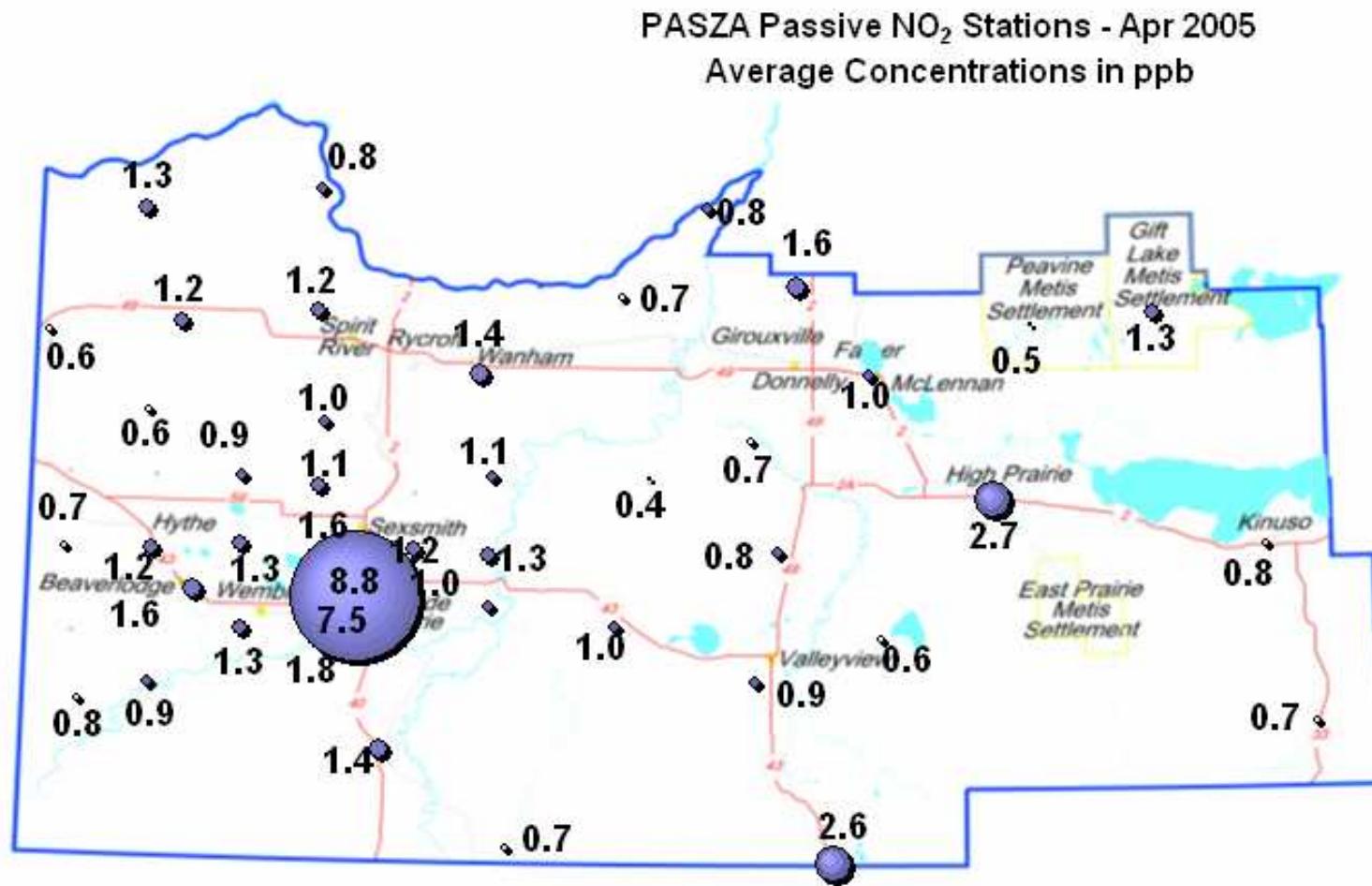


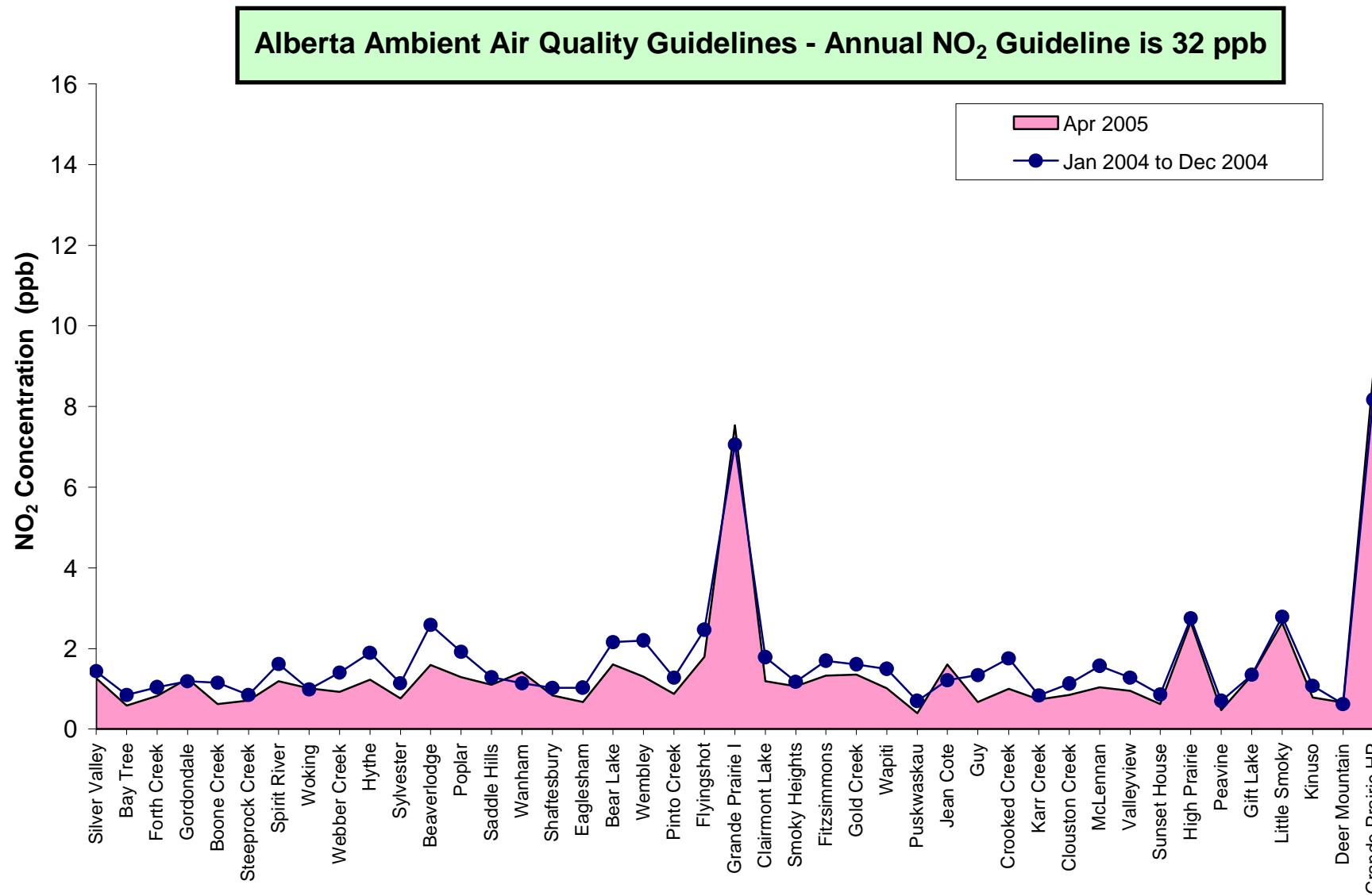
Figure 36. O<sub>3</sub> Bubble Chart



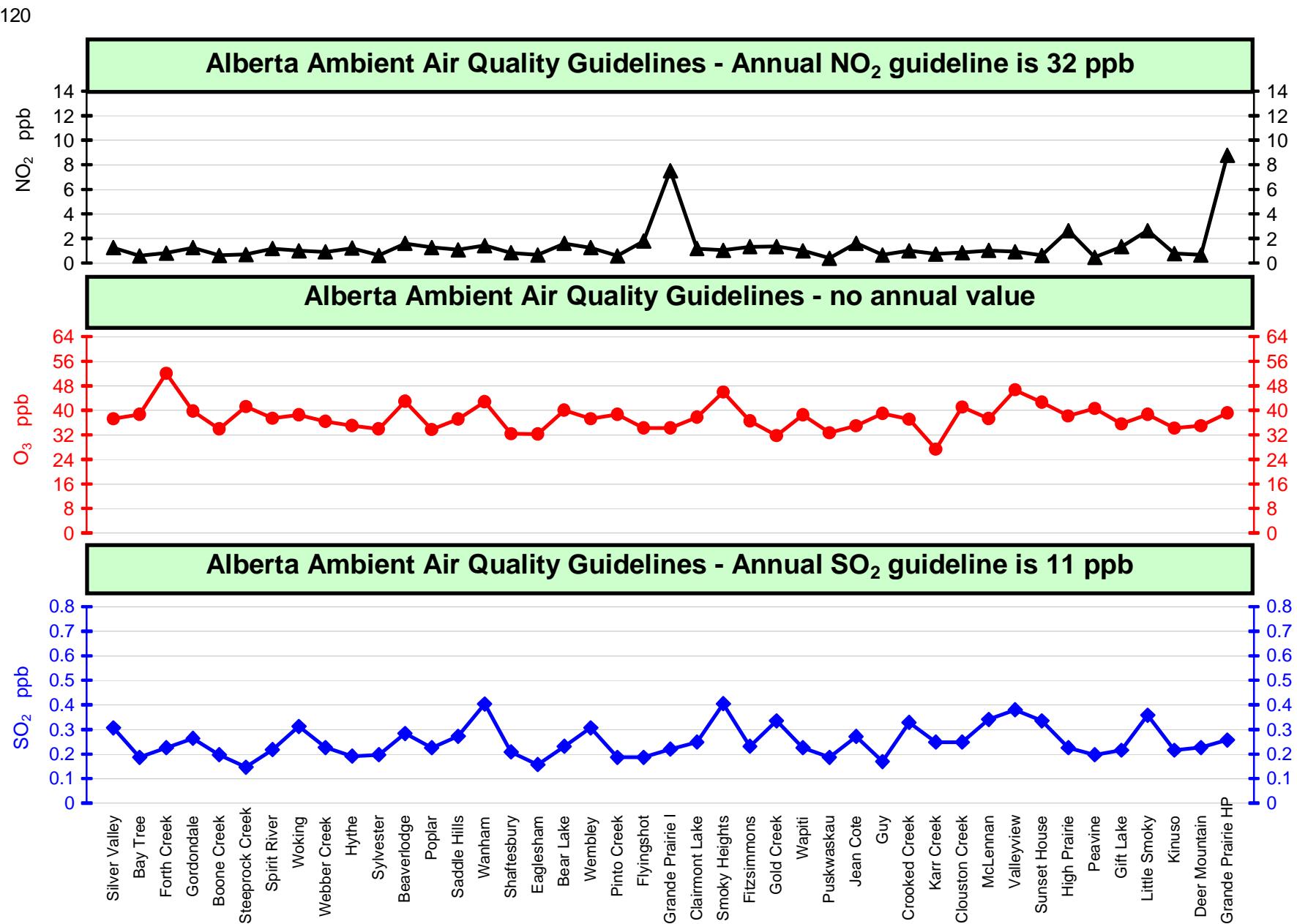
**Figure 37. O<sub>3</sub> Summary Chart**



**Figure 38. NO<sub>2</sub> Bubble Chart**



**Figure 39. NO<sub>2</sub> Summary Chart**



**Figure 40. Overview Summary**

## **April 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>**

**Calibration Report**

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

**Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	8:00	End Time (MST)	10:45
Barometric Pressure	27.70 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	50.8 ppm	Cal Gas Expiry Date	11/22/2006
Gas Cert Reference	BAL786	DACS serial No.	1
DACS make	Focus AP1000	DACS channel #	8
DACS voltage range	0 - 10 volt		
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.988588	Calculated slope	0.992627
Calculated intercept	0.037218	Calculated intercept	-0.866799
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195
before		after	
Concentration range	0 - 500	ppb	0 - 500
SO <sub>2</sub> zero pot	171		171
SO <sub>2</sub> span pot	210		210
UV Lamp voltage	937	V	937
Vacuum	20.0	" Hg	20.0
Sample Flow	430	ccm	430
			ccm

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.0	-0.1	N/A
4993	39.97	403.4	406.8	0.9918
4993	19.98	202.5	205.4	0.9857
4993	9.99	101.4	104.0	0.9752
4993	0.00	0.0	-0.1	As found zero
4993	39.97	403.4	406.8	As found span
		Average Correction Factor		0.9842

Calculated value of As Found Response: 402.3 ppm Percent Change of As Found: 0.3%

Auto zero Auto span	before calibration		after calibration	
	0.1	ppm	-0.9	ppm
	338.5	ppm	295.3	ppm

Notes: No adjustments or maintenance performed.

Calibration Performed By: Kelly Baragar

**Calibration Summary**

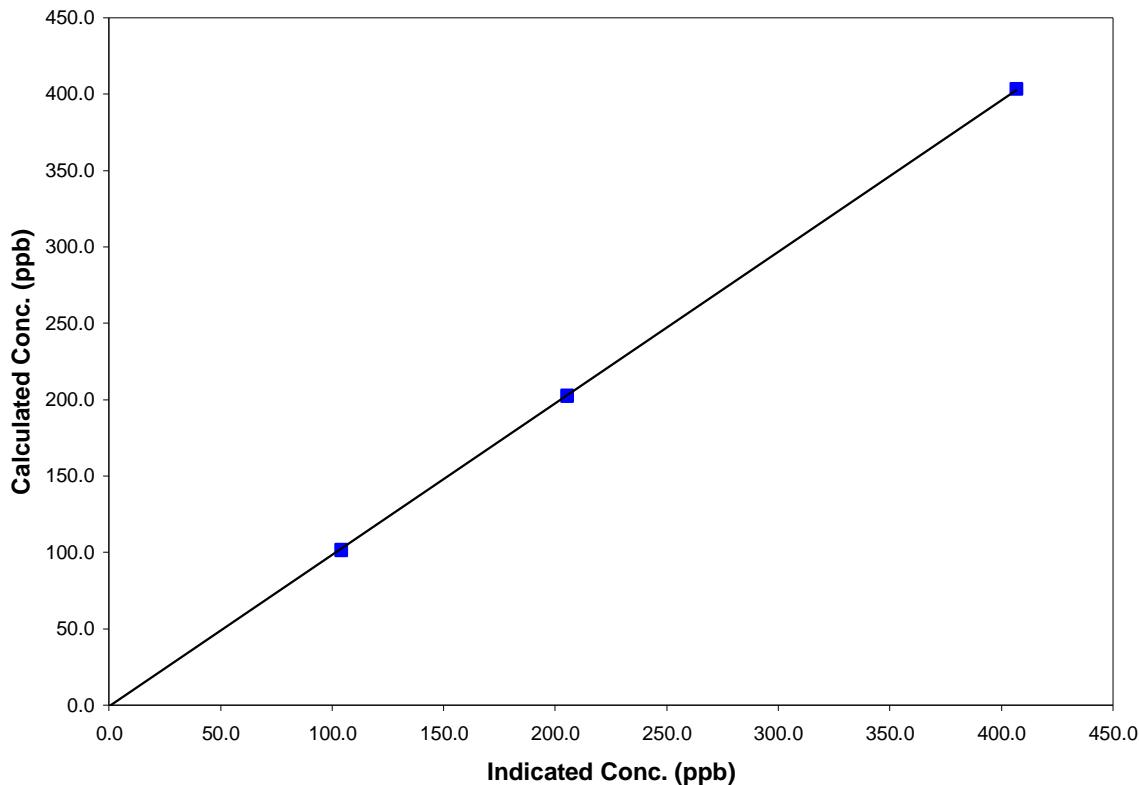
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

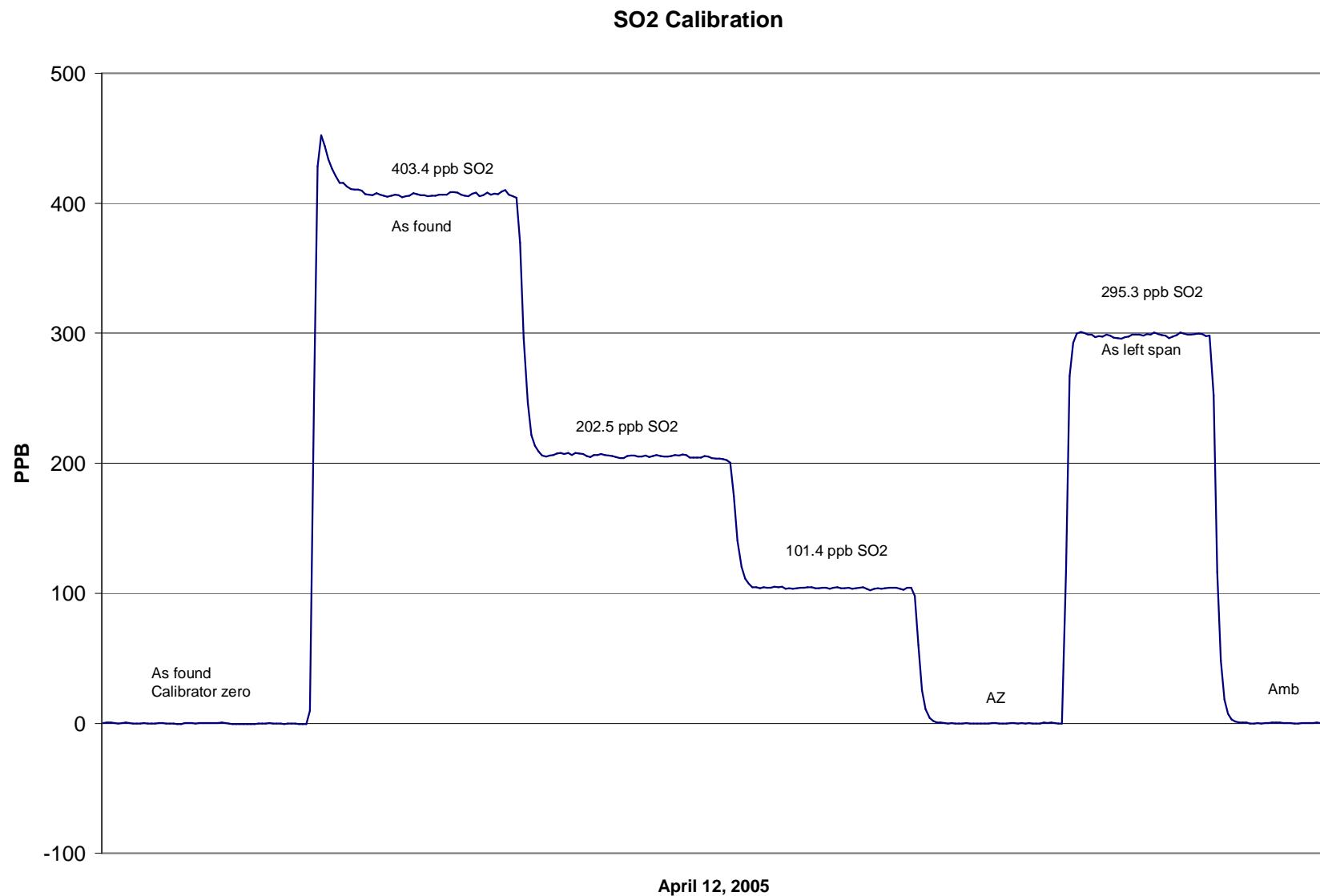
**Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	8:00	End Time (MST)	10:45
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-21120-195

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999973
403.4	406.8	0.9918		
202.5	205.4	0.9857		
101.4	104.0	0.9752		
			Slope	0.992627
			Intercept	-0.866799

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



## Calibration Report

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



### Station Information

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Installation	Removal
Start Time (MST)	9:00	End Time (MST)	12:00
Barometric Pressure	0.926	Atm	20.0
Calibrator	Environics 6100	Serial Number	3016
NO Cal Gas Conc	50.3	Cal Gas Expiry Date	19-Jan-06
NOx Cal Gas Conc	50.5	Cal Gas Serial #	ALM025793

### DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269
Parameter	NO2	NOx	NO
Before	DACS slope	0.050000	0.050000
	DACS offset	0.000000	0.000000
After	DACS slope	0.050000	0.050000
	DACS offset	0.000000	0.000000
Before	Data Slope	1.008657	1.006969
	Data Offset	0.251949	-1.017562
After	Data Slope	1.022540	1.015056
	Data Offset	-0.496661	-1.302460
Channel #	8	6	7
Voltage Range	0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

### Analyzer Information

Analyzer make/model **TEI Model 42** Analyzer serial # **42-28486-231**

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	10.5	ppb	10.5	mV
NOx background	11.1	ppb	11.1	mV
NO coefficient	1.449		1.449	
NOx coefficient	1.003		1.003	
Chamber Temp	49.9	Deg C	49.9	Deg C
Cooler Temp	2.0	Deg C	2.0	Deg C
Converter Temp	323.0	Deg C	323.0	Deg C
Vacuum	21.0	inches Hg	21.0	inches Hg
Box temp	29.2	ccm	29.2	ccm

Notes: No adjustments or maintenance performed.

## Calibration Report

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



### Station Information

Calibration Date: April 12, 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	0.6	0.4	0.1	N/A	N/A
	4993	39.97	401.1	399.5	1.6	396.0	395.9	-0.1	1.0127	1.0090
	4993	19.98	201.3	200.5	0.8	199.9	199.9	0.0	1.0069	1.0031
	4993	9.99	100.8	100.4	0.4	101.4	101.3	-0.1	0.9946	0.9912
AFZ	4993	0.00	0.0	0.0	0.0	0.6	0.4	0.1	0.0000	0.0000
	4993	39.97	401.1	399.5	1.6	396.0	395.9	-0.1	1.0127	1.0090
							Average Correction Factor	1.0047	1.0011	

As Found Concentrations: NO<sub>x</sub>= 394.5 NO= 394.5 As Found Percent Change NO<sub>x</sub>= -1.6% NO= -1.2%

### 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	400.4	399.4	1.0	395.8	396.2	-0.7	1.0116	1.0080	N/A	N/A	
350	400.4	69.4	331.0	393.9	69.8	323.7	1.0164	0.9940	1.0226	97.8%	
200	400.4	210.5	189.8	396.3	209.4	187.0	1.0101	1.0053	1.0151	98.5%	
100	400.4	305.4	94.9	396.9	303.3	93.3	1.0088	1.0071	1.0172	98.3%	
							Average Correction Factor	1.0118	1.0021	1.0183	98.2%

### AIC Data

	Previous calibration				Current calibration				
Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb	
Auto zero	-1.2	0.3	-1.0	ppb	-0.7	-0.5	-0.5	ppb	
Auto span	406.7	406.1	1.3	ppb	433.4	434.0	1.8	ppb	

Calibration Performed By: Kelly Baragar

**Calibration Summary**

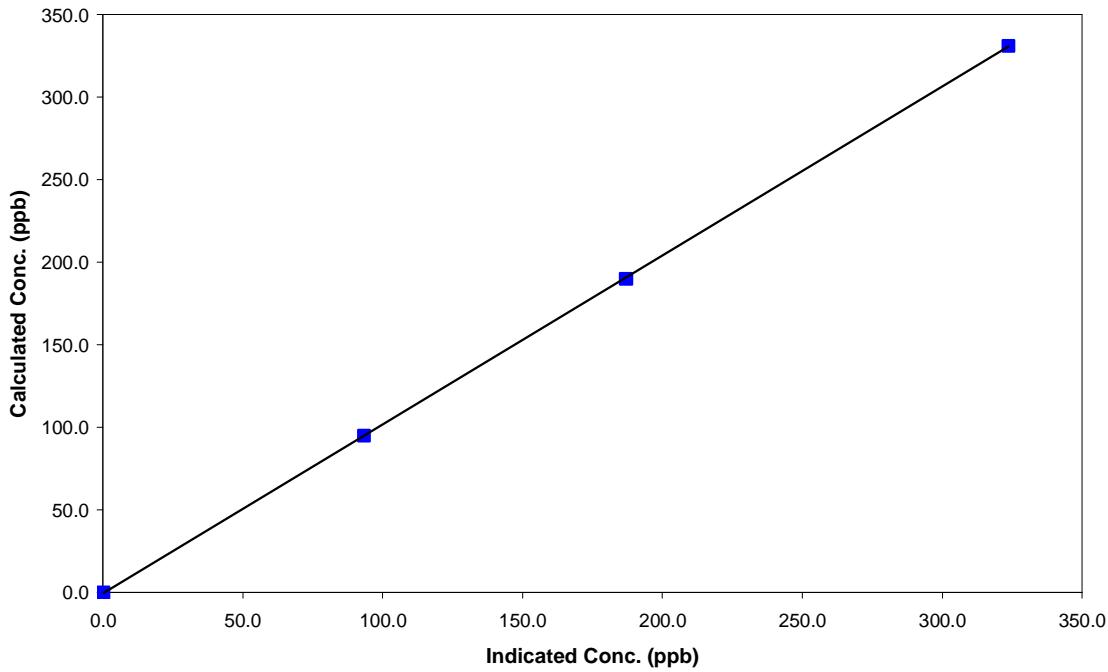
Parameter **NO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:00	End Time (MST)	12:00
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	0.0000		
331.0	323.7	1.0226	Correlation Coefficient	0.999980
189.8	187.0	1.0151	Slope	1.022540
94.9	93.3	1.0172	Intercept	-0.496661

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

**Calibration Summary**

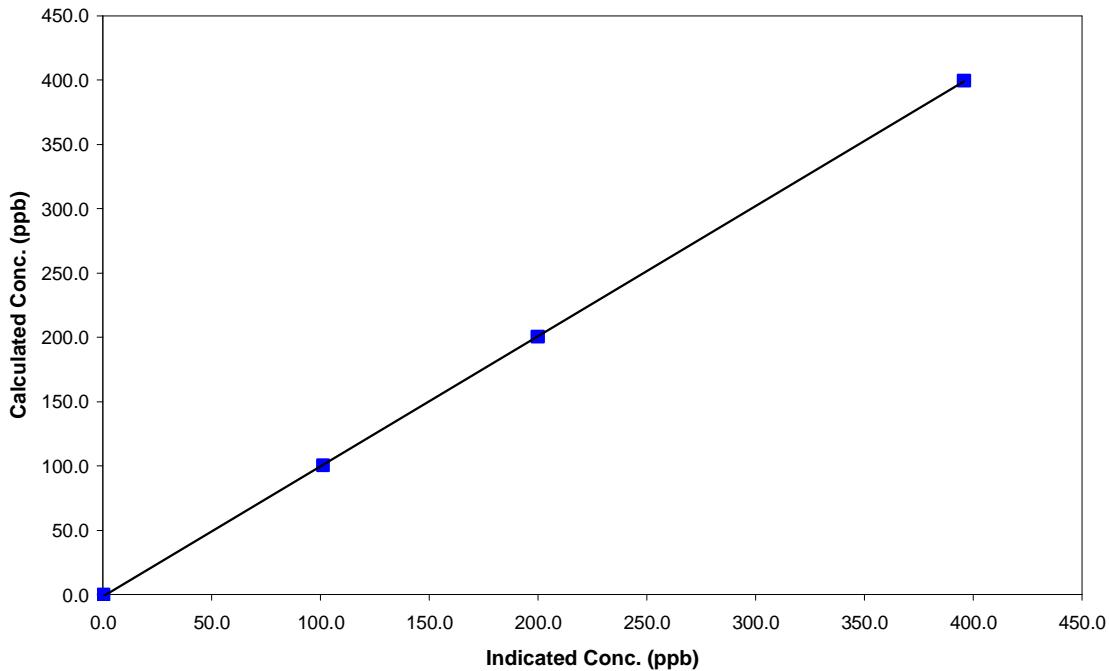
Parameter **NO**  
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:00	End Time (MST)	12:00
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A		
399.5	395.9	1.0090	Correlation Coefficient	0.999981
200.5	199.9	1.0031	Slope	1.011022
100.4	101.3	0.9912	Intercept	-1.188545

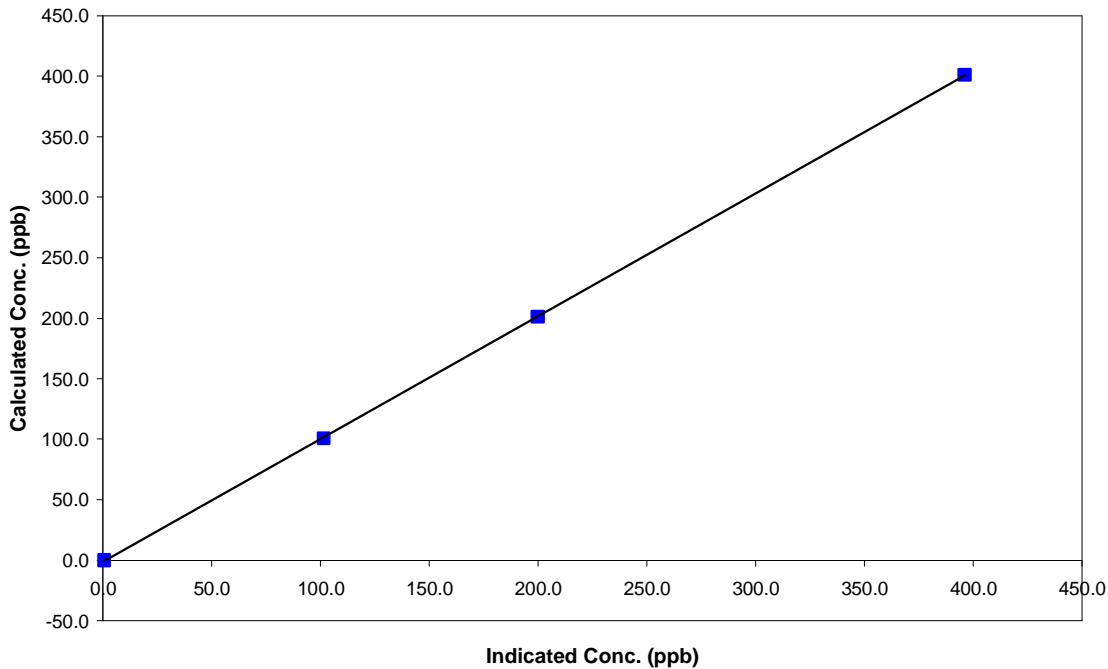
**NO Calibration Curve**

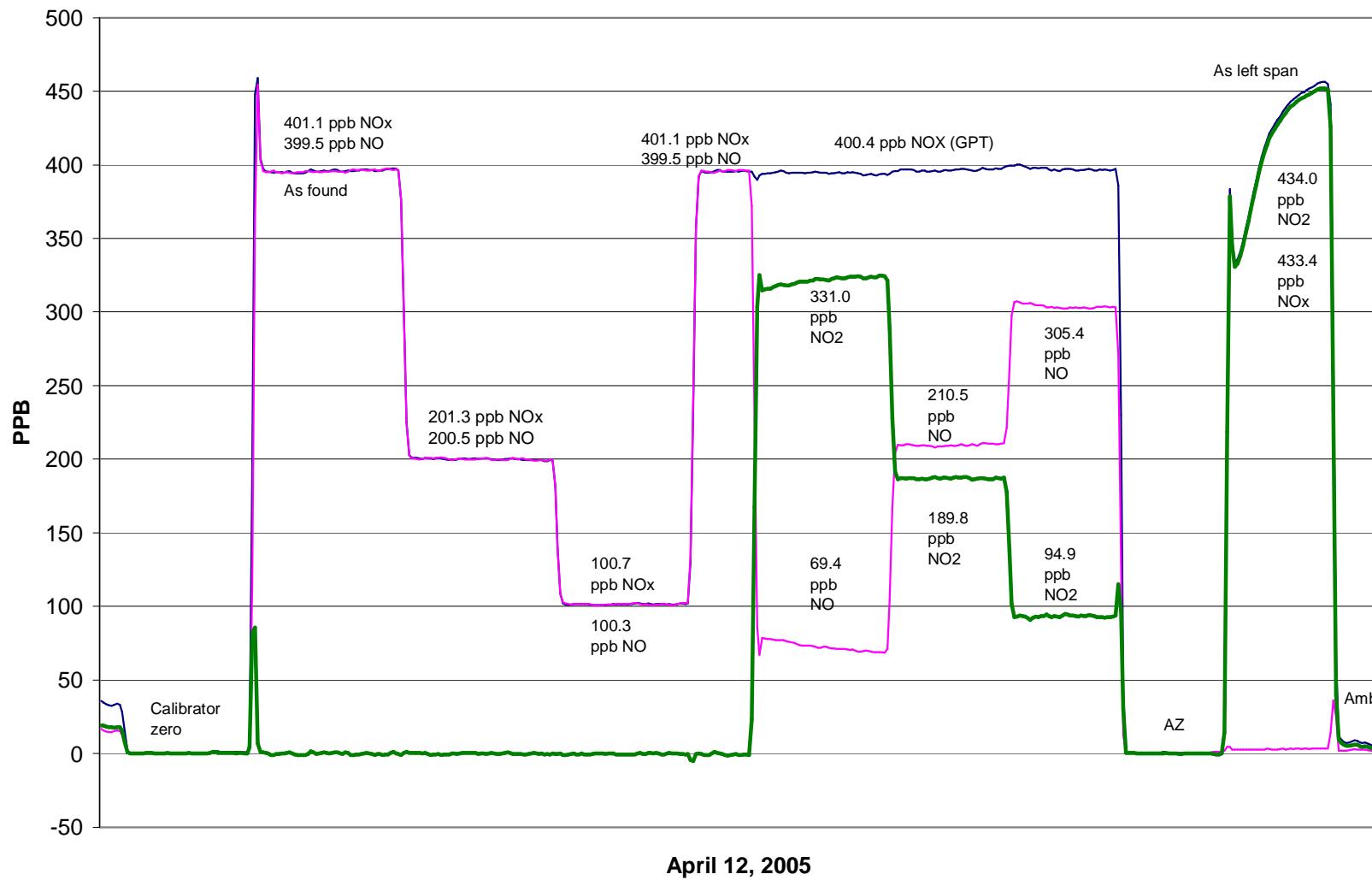
**Calibration Summary**Parameter **NO<sub>x</sub>**Air Monitoring Network **PASZA****Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:00	End Time (MST)	12:00
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

**Calibration Data**

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	0.0000		
401.1	396.0	1.0127	Correlation Coefficient	0.999984
201.3	199.9	1.0069	Slope	1.015056
100.8	101.4	0.9946	Intercept	-1.302460

**NOx Calibration Curve**

**NOx Calibration**

**Calibration Report**

Parameter O3  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	16:00	End Time (MST)	18:30
Barometric Pressure	0.926 atm	Station Temperature	21.5 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
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.005522	Calculated slope	0.994956
Calculated intercept	1.085864	Calculated intercept	0.261947
Analyzer make	API Model 400	Analyzer serial #	383
before			
Concentration range	0 - 500	ppb	0 - 500
offset	-1.2	ppb	-1.2
slope	1.048		1.048
Lamp measure	2662	mV	2632
Lamp Reference	2663	mV	2633
Pressure	26.9	inches Hg	26.9
Sample Flow	664	ccm	664
Lamp temp	52	Deg C	52
after			

**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	0.8	N/A
4995	0.00	331.0	334.1	0.9906
4995	0.00	189.8	187.1	1.0146
4995	0.00	94.9	95.8	0.9904
4995	0.00	0.0	0.8	As found zero
4995	0.00	331.0	334.1	As found span
Average Correction Factor				0.9985

Calculated value of As Found Response: 336.3 ppm      Percent Change of As Found: 1.6%

	before calibration	after calibration	
Auto zero	2.4	1.5	ppb
Auto span	277.3	272.9	ppb

Notes: No adjustments or maintenance required.

Calibration Performed By: Kelly Baragar

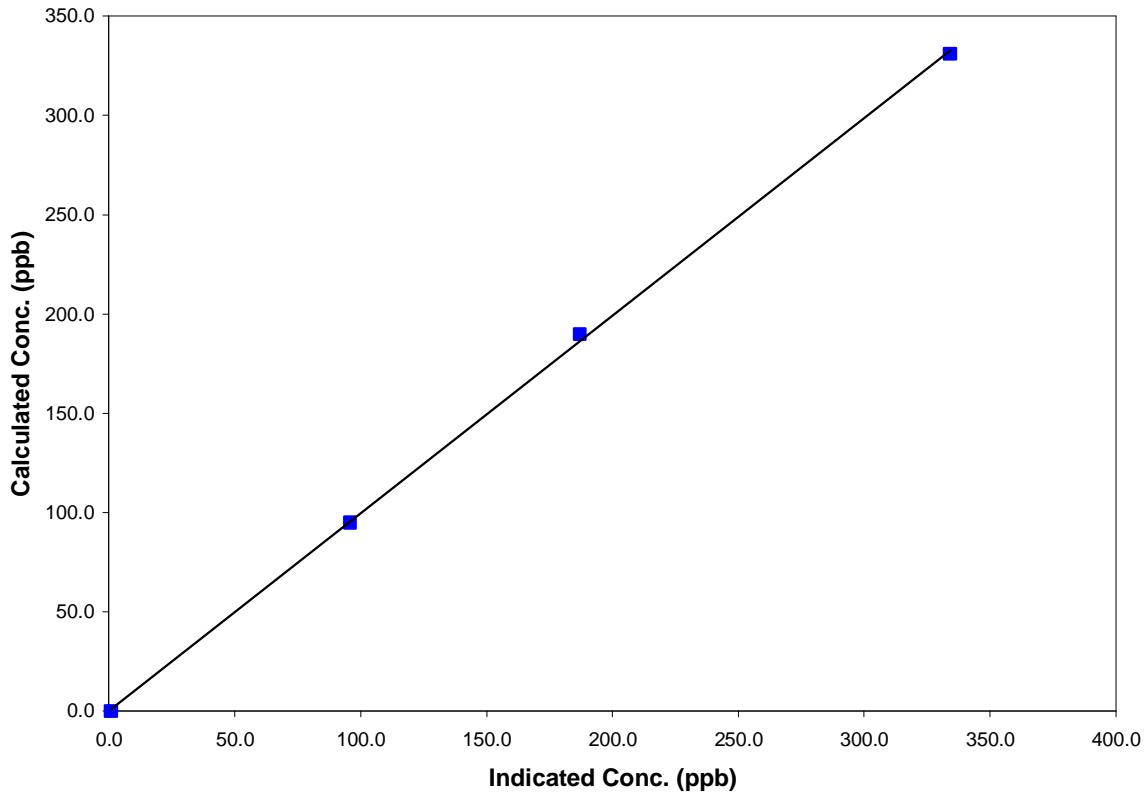
**Calibration Summary**

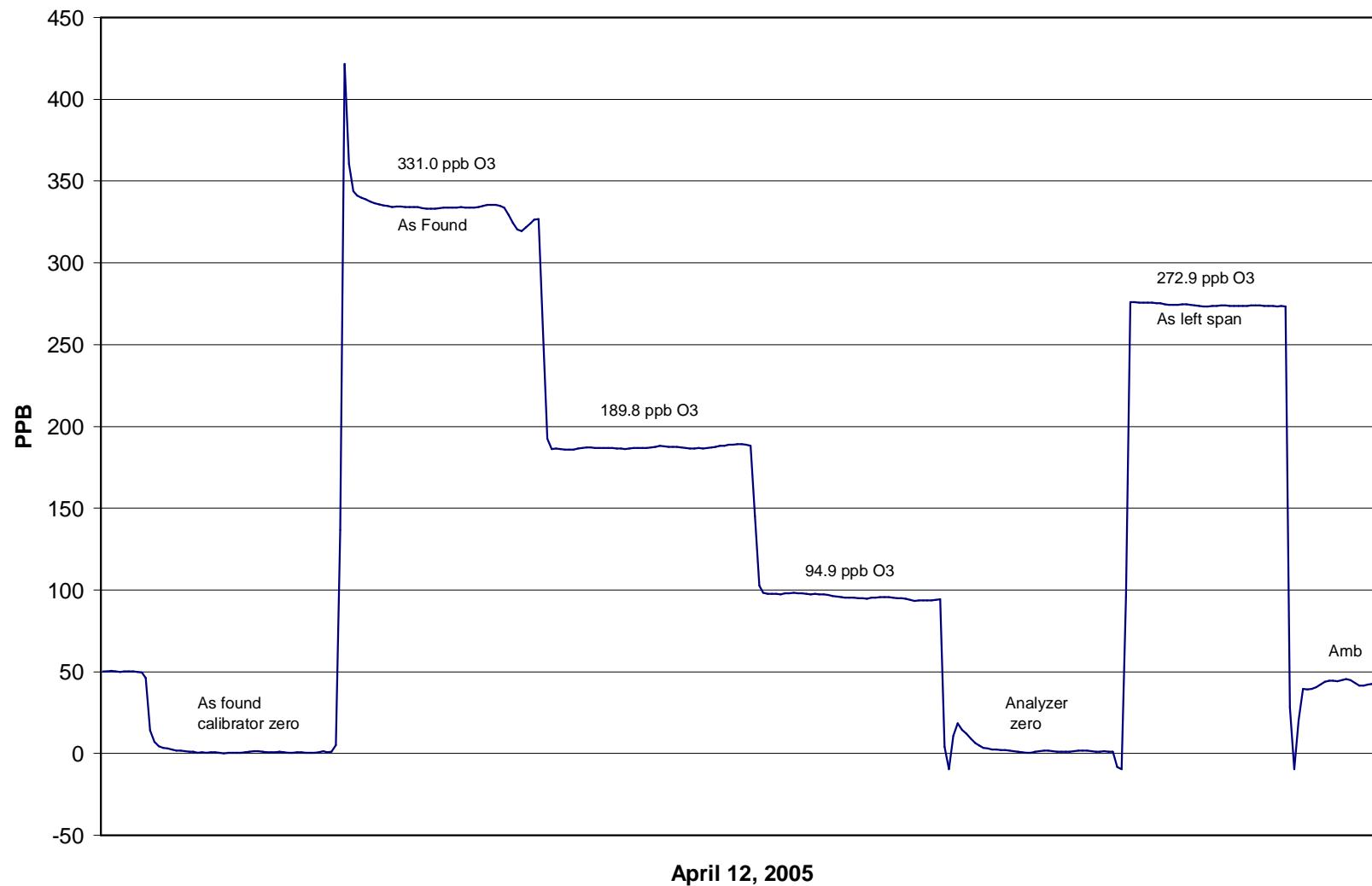
Parameter O3  
 Air Monitoring Network PASZA

<b>Station Information</b>			
Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	16:00	End Time (MST)	18:30
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	0.8	NA		
331.0	334.1	0.9906	Correlation Coefficient	0.999731
189.8	187.1	1.0146	Slope	0.994956
94.9	95.8	0.9904	Intercept	0.261947

**O3 Calibration Curve**

**O3 Calibration**

**Calibration Report**

Parameter CO  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	12:00	End Time (MST)	15:20
Barometric Pressure	0.926 ATM	Station Temperature	22.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	12/10/2005
DACS make	Focus AP1000	Cal Gas Cylinder #	ALM 005412
DACS voltage range	0 - 1 volt	DACS serial No.	1
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.001242	Calculated slope	1.002982
Calculated intercept	-0.211353	Calculated intercept	-0.043694
Analyzer make	TEI Model 48	Analyzer serial #	ACM-13989-143
before		after	
Concentration range	0 - 25 ppm	0 - 25 ppm	ppm
CO span setting	750	NA	
CO zero setting	523	NA	
Sample pressure	691 mm Hg	691 mm Hg	
Sample Flow	1.15 LPM	1.15 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	0.08	N/A
4993	39.97	23.82	23.84	0.9994
4993	19.96	11.95	11.87	1.0067
4993	9.97	5.98	6.01	0.9946
4993	0.00	0.00	0.45	As Found Zero
4993	39.97	23.82	23.89	As Found Span
Average Correction Factor				1.0002

Calculated value of As Found Response: 23.257 ppm Percent Change of As Found: 2.4%

	before calibration		after calibration	
	Auto zero	0.18 ppm	Auto span	0.02 ppm
	19.39	ppm		20.50 ppm

Notes: Zero and span adjustments performed. New span cylinder installed.

Calibration Performed By: Kelly Baragar

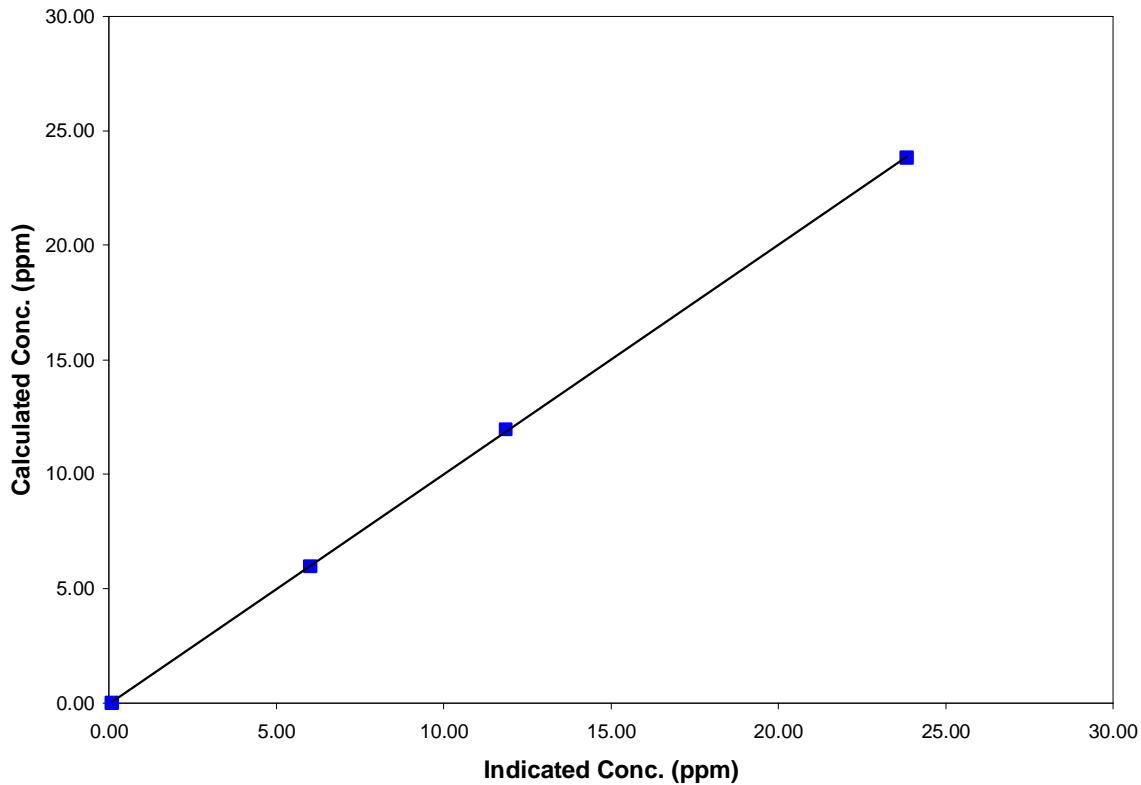
**Calibration Summary**

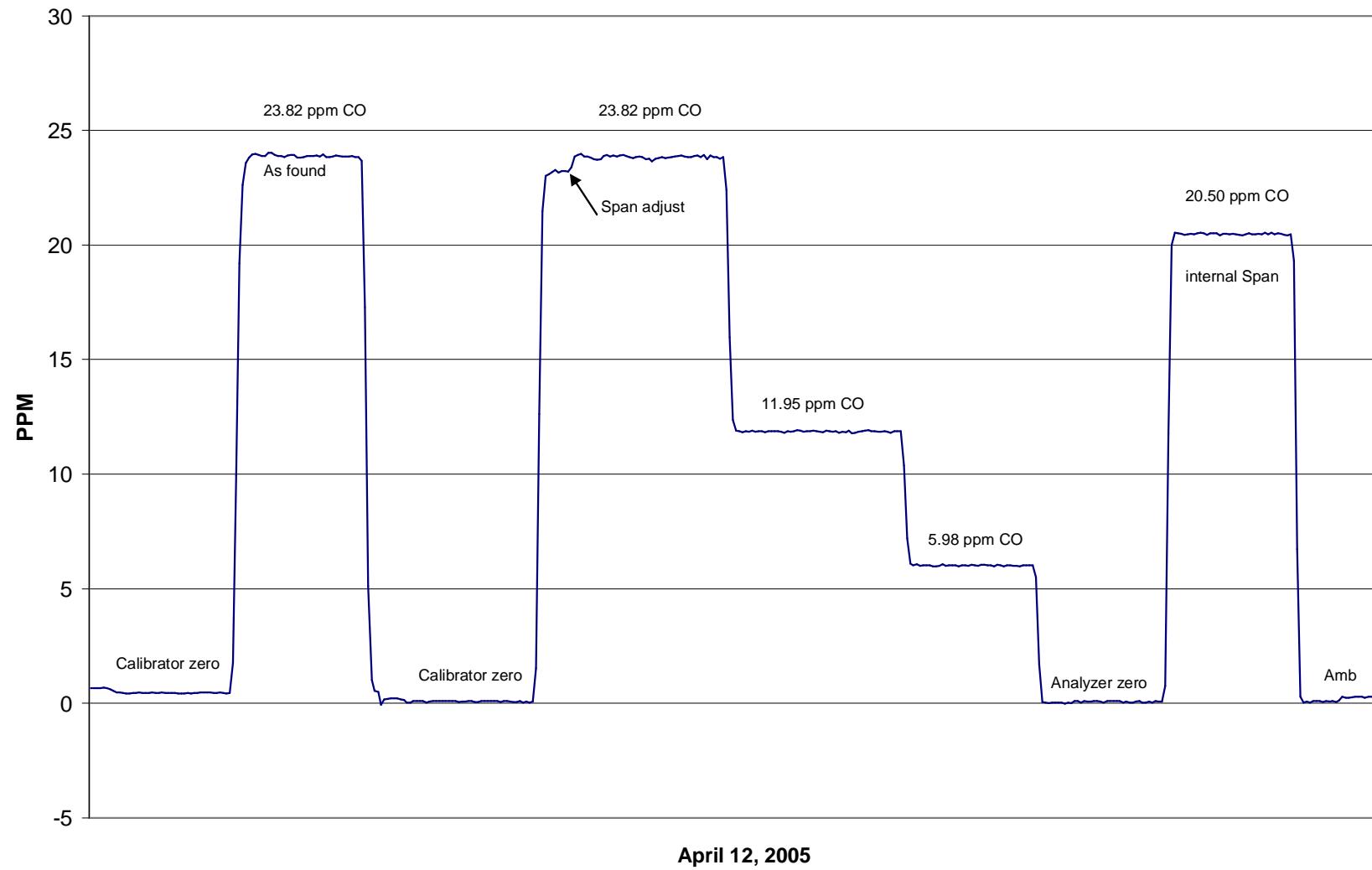
Parameter CO  
 Air Monitoring Network PASZA

<i>Station Information</i>			
Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:00	End Time (MST)	15:20
Analyzer make/model	TEI Model 48	Analyzer serial #	ACM-13989-143

**Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.083	N/A		
23.825	23.839	0.9994	Correlation Coefficient	0.999965
11.945	11.866	1.0067	Slope	1.002982
5.978	6.011	0.9946	Intercept	-0.043694

**CO Calibration Curve**

**CO Calibration**

**Calibration Report**

Parameter THC  
 Air Monitoring Network PASZA

<b>Station Information</b>			
Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	11:10	End Time (MST)	17:00
Barometric Pressure	0.926 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1522.25 ppm	Cal Gas Cylinder #	ALM 030358
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
DACS slope	Before 0.005000	DACS slope	After 0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.010942	Calculated slope	0.998473
Calculated intercept	0.092176	Calculated intercept	-0.022225
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390
before		after	
Concentration range	0 - 25	ppm	0 - 25
THC sample pressure	6.11	psi	6.11
THC span counts	6829	capture	NA
THC zero counts	1259	capture	NA
			capture

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	0.01	N/A
4993	64.97	19.55	19.63	0.9961
4993	34.96	10.58	10.56	1.0019
4993	9.97	3.03	3.11	0.9766
4993	0.00	0.00	0.14	As Found Zero
4993	64.97	19.55	19.37	As Found Span
Average Correction Factor				0.9915

Calculated value of As Found Response: 19.530 ppm Percent Change of As Found: 0.1%

Auto zero	before calibration		after calibration	
	0.01	ppm	0.00	ppm
	21.77	ppm	21.43	ppm

Notes: Performed as found point before rebuilding sample pump with new diaphragm and valves.  
 Zero and span adjustments performed.

Calibration Performed By: Kelly Baragar

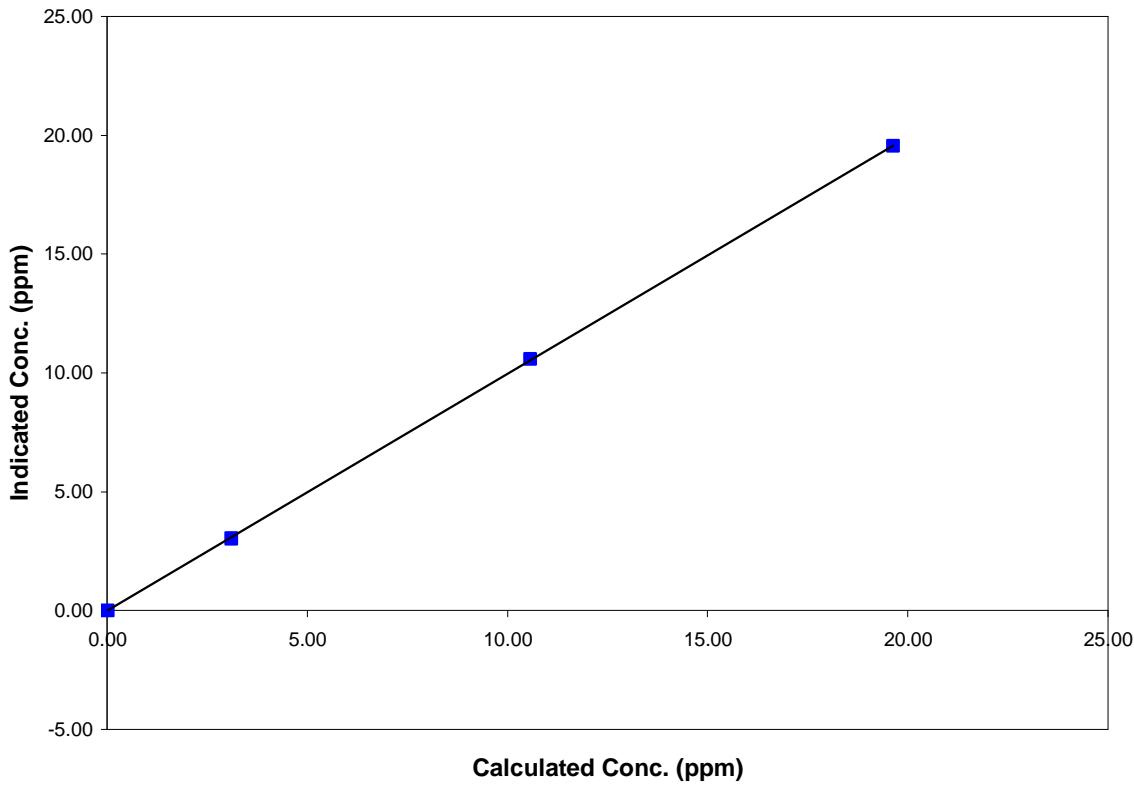
**Calibration Summary**

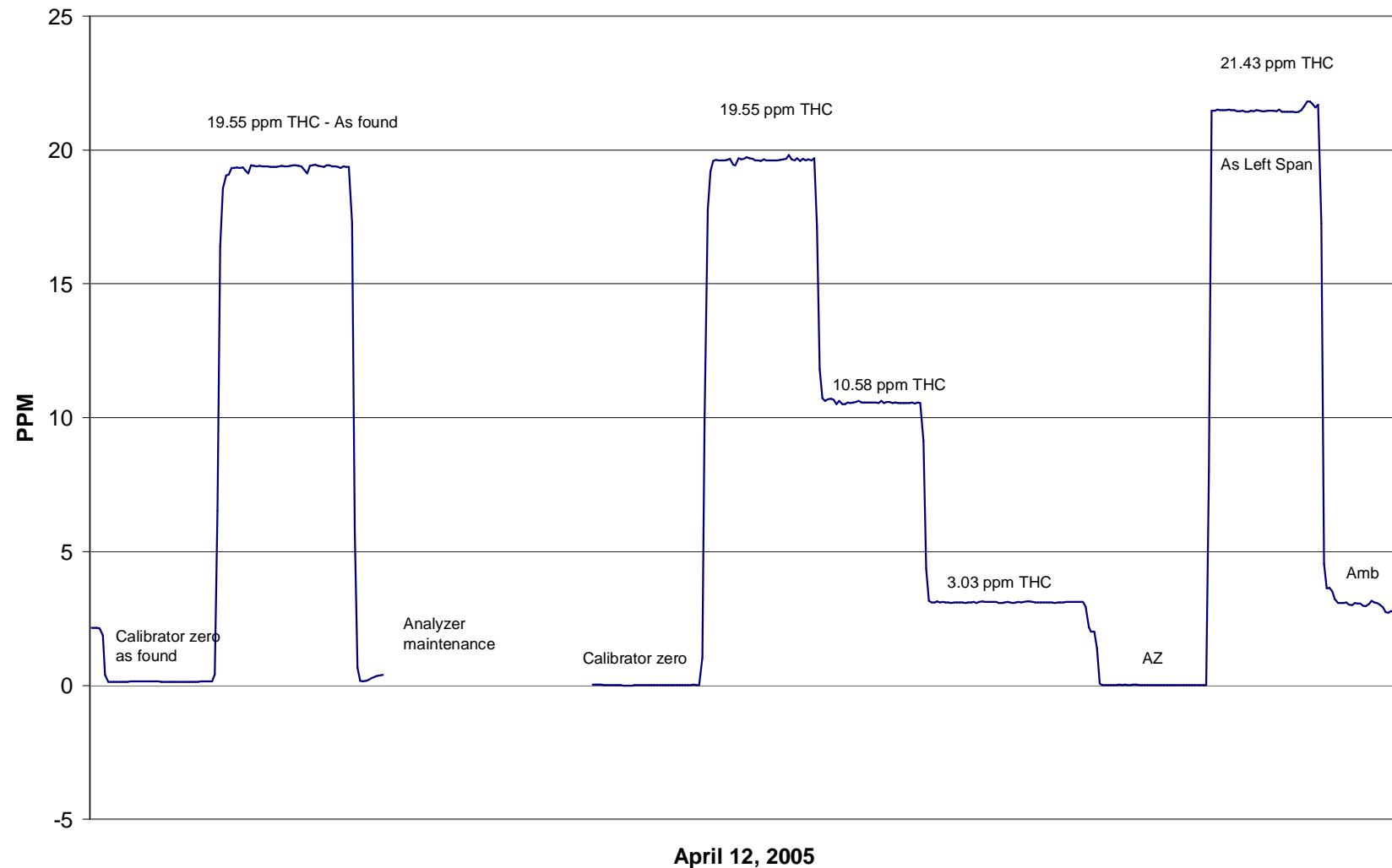
Parameter THC  
 Air Monitoring Network PASZA

<i>Station Information</i>			
Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	11:10	End Time (MST)	17:00
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

**Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.011	N/A		
19.553	19.630	0.9961	Correlation Coefficient	0.999973
10.584	10.565	1.0019	Slope	0.998473
3.034	3.106	0.9766	Intercept	-0.022225

**THC Calibration Curve**

**THC Calibration**

**Calibration Report**Parameter TRS

Air Monitoring Network

PASZA**Station Information**

Calibration Date	April 13, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	11:20	End Time (MST)	14:25
Barometric Pressure	27.8 inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	111-1695
Cal Gas Concentration	5.02 ppm	Cal Gas Expiry Date	11/22/2006
Gas Cert Reference	BLM003489	DACS serial No.	1
DACS make	Focus AP1000	DACS channel #	9
DACS voltage range	0 - 10 volt		
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.005441	Calculated slope	1.015526
Calculated intercept	0.381940	Calculated intercept	-0.127358
Analyzer make	TEI Model 43C	Analyzer serial #	31990000000491

Concentration range	before		after	
	0-100	ppb	0-100	ppb
TRS bkg	18.7		NA	
TRS slope	1.111		NA	
UV Lamp	873	V	821	V
Converter Temp	NA	Deg C	850	Deg C
Perm Temp	45	Deg C	45	Deg C

**Calibration Data**

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.0	0.0	0.3	N/A
4993	79.95	79.1	78.3	1.0098
4993	39.97	39.9	38.7	1.0306
4993	9.63	9.7	9.9	0.9784
			NA	As found zero
			NA	As found span
Average Correction Factor				1.0063

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

Auto zero	before calibration		after calibration	
	0.3	ppm	0.5	ppm
	68.9	ppm	70.0	ppm

Notes: TRS converter had failed upon arrival; as found response close but post repairs.  
A slight span adjustment was performed.Calibration Performed By: Kelly Baragar

**Calibration Summary**

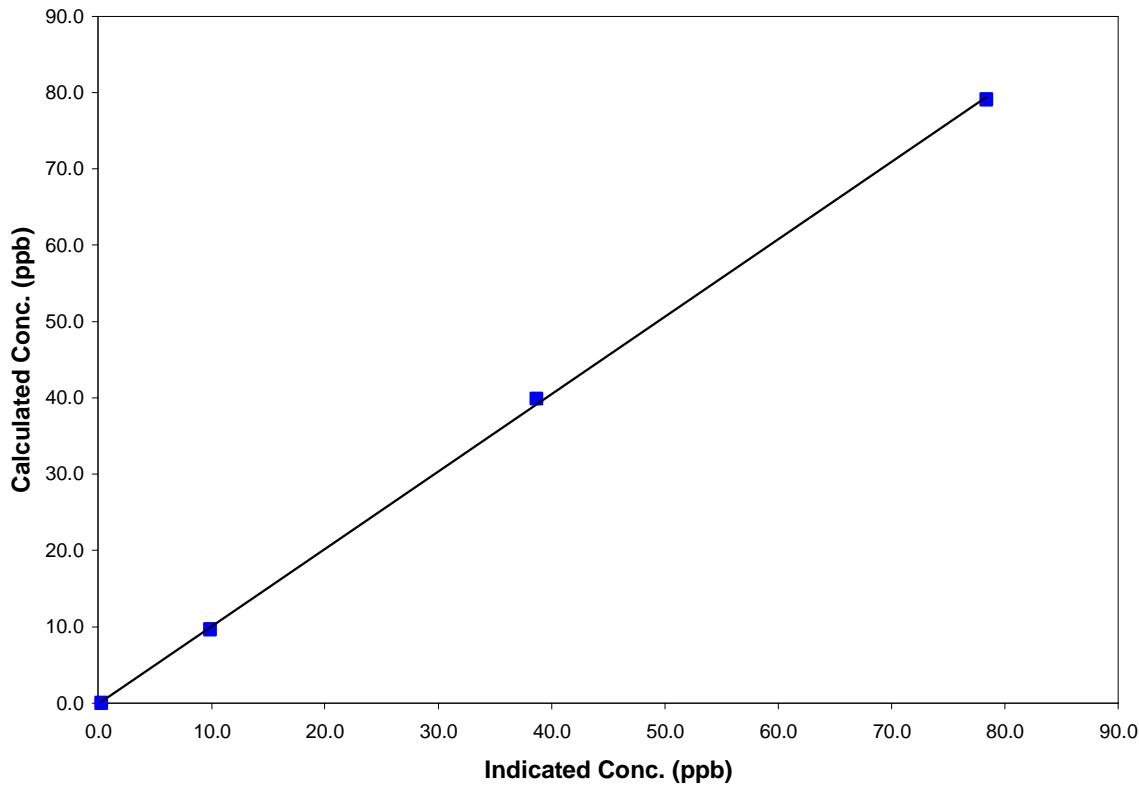
Parameter	<u>TRS</u>
Air Monitoring Network	<u>PASZA</u>

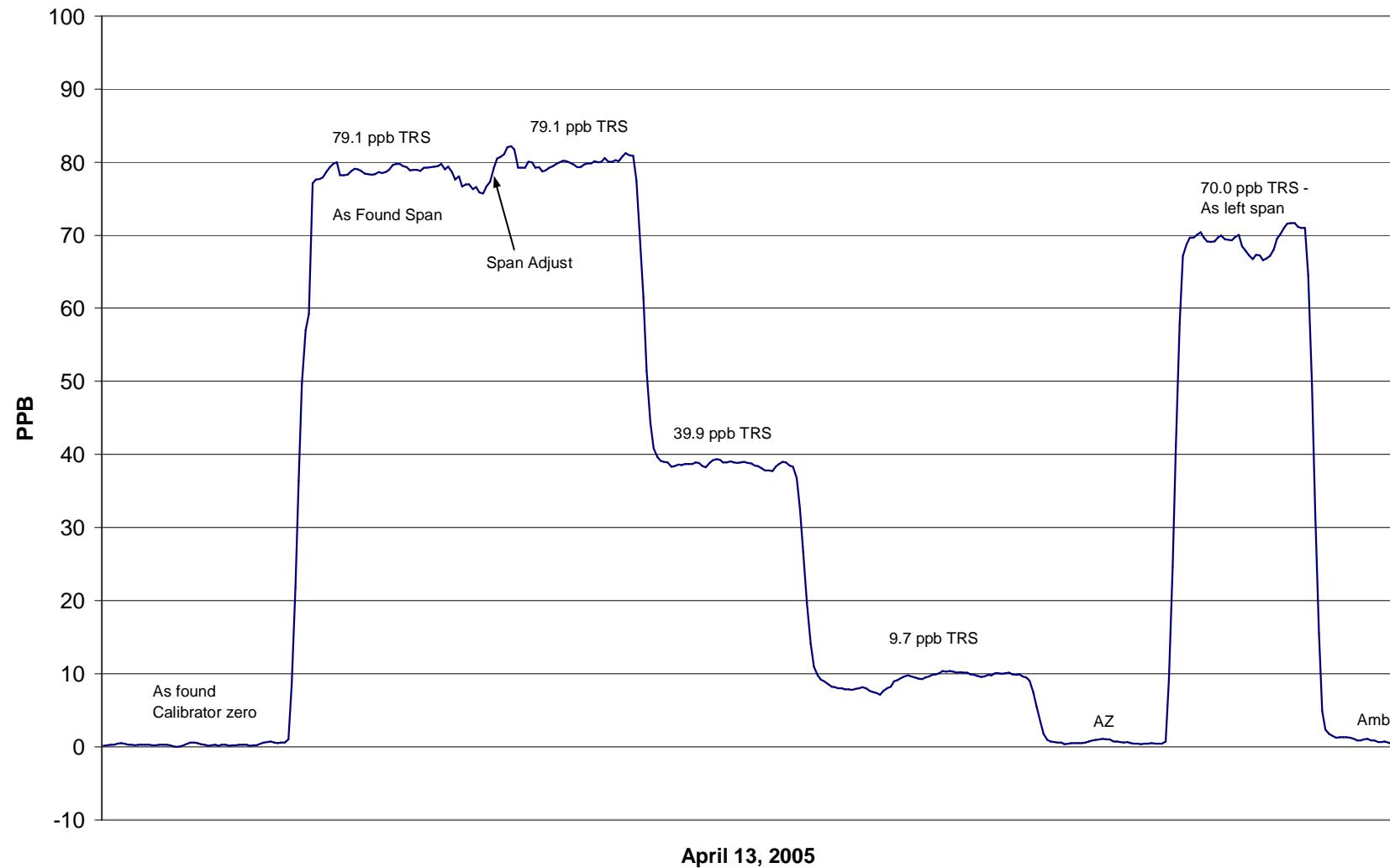
**Station Information**

Calibration Date	April 13, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	11:20	End Time (MST)	14:25
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	0.3	N/A	Correlation Coefficient	0.999819
79.1	78.3	1.0098		
39.9	38.7	1.0306		
9.7	9.9	0.9784		
			Slope	1.015526
			Intercept	-0.127358

**TRS Calibration Curve**

**TRS Calibration**

**Calibration Report**

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

**Station Information**

Calibration Date	April 12, 2005	Previous Calibration	March 16, 2005
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	16:30	End Time (MST)	17:15
Barometric Pressure	0.920	ATM	21.5 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
DACS slope	Before 0.050000	DACS slope	After 0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

**Analyzer Information**

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	37	%	37	%
Ko Factor	12122		12122	
Temperature	9.3	Deg C	9.3	Deg C
Pressure	0.920	ATM	0.920	ATM

**Calibration Data**

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		NA
zero flow - auxillary	0.0	0.00		NA
flow recovery - main	45 - 60 Seconds	NA	45 - 60 Seconds	NA
flow recovery - aux	46 - 60 Seconds	NA	46 - 60 Seconds	NA
Temperature	measured	9.5	+/- 1.0 Deg C	9.3
Pressure	measured	0.926	+/- 1.5% ΔATM	0.920
Total Flow	16.67 SLPM	16.45		16.45
Main Flow	13.67 SLPM	13.55	+/- 1.0 SLPM	13.55
Auxiliary Flow	3.0 SLPM	2.980	+/- 0.2 SLPM	2.980
Leak Check - main	0.0	0.00	<0.15 SLPM	0.09
Leak Check - aux	0.0	0.00	<0.15 SLPM	-0.09
Ko Factor (w/o filter)	measured	NA	filter weight (g)	0.11112
Ko Factor (w/ filter)	measured	NA	% Ko difference	N/A

Notes: Flow audit and leak check performed. All parameters appear to be within specifications.

Calibration Performed By: **Kelly Baragar**

**Calibration Report**

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

**Station Information**

Calibration Date	April 13, 2005	Previous Calibration	March 8, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	16:15	End Time (MST)	21:15
Barometric Pressure	27.70 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	50.8 ppm	Cal Gas Expiry Date	11/22/2006
Gas Cert Reference	BAL786		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.008690	Calculated slope	0.990483
Calculated intercept	-8.490468	Calculated intercept	-0.601908

Analyzer make	API 100	Analyzer serial #	32
---------------	---------	-------------------	----

	before		after	
	500	ppb	500	ppb
Concentration range	539	ccm	539	ccm
Sample Flow	3520	mv	3520	mv
UV Lamp Voltage	100	%	100	%
Lamp Ratio	50	Deg C	50	Deg C
Rx Cell Temp	23	Deg C	3	Deg C
PMT Temp	40	Deg C	40	Deg C
IZS Temp	NA		N/A	
Slope	NA		N/A	
Intercept	NA		N/A	

**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	-0.9	N/A
4993	39.97	403.4	405.5	0.9950
4993	19.98	202.5	210.4	0.9622
4993	9.99	101.4	101.6	0.9984
4993	0.00	0.0	-10.2	As found zero
4993	39.97	403.4	366.0	As found span
Average Correction Factor				0.9852

Calculated value of As Found Response: 370.9 ppm Percent Change of As Found: 8.1%

	before calibration		after calibration	
	-7.0	ppm	-0.1	ppm
	56.1	ppm	200.3	ppm

Notes: After as found removed cover for photo-multiplier chamber and re-soldered peltier cooler leads.  
 PMT cooling operational again; reset PMT temp to 3 degC and dropped filter from 200 to 100.  
 Zero and span adjustments performed. Installed new span tube.

Calibration Performed By: Kelly Baragar

**Calibration Summary**

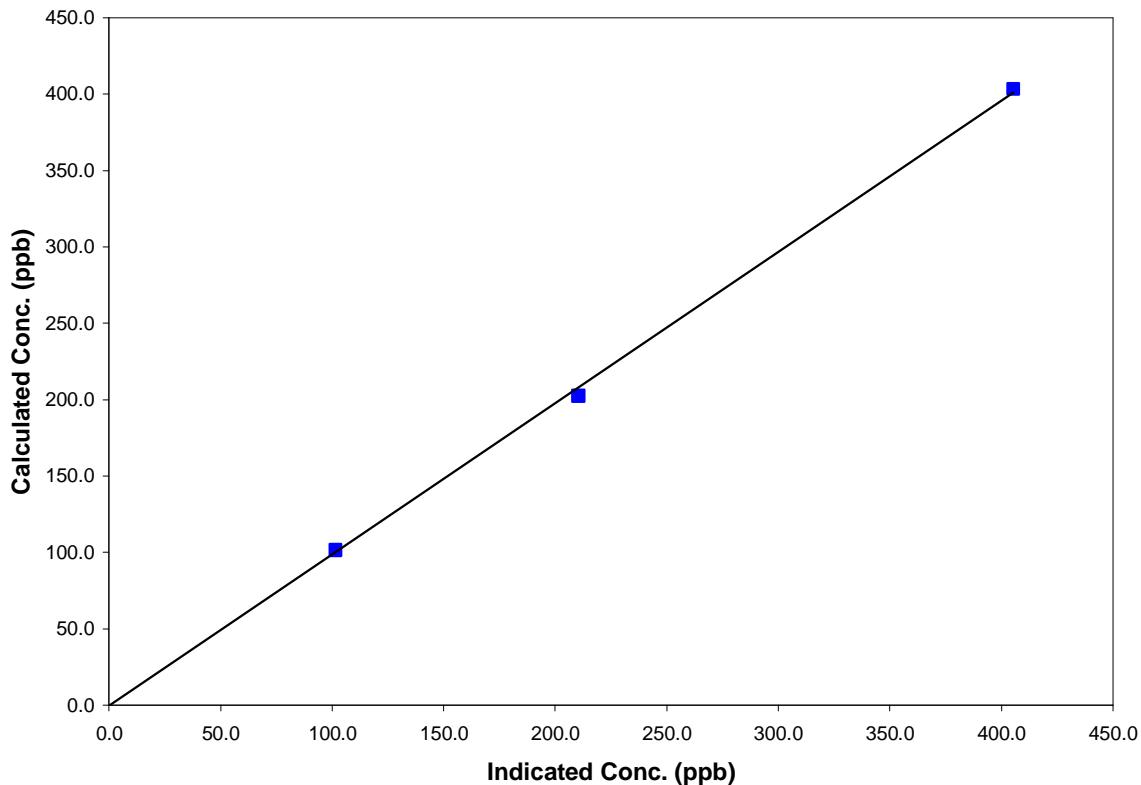
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

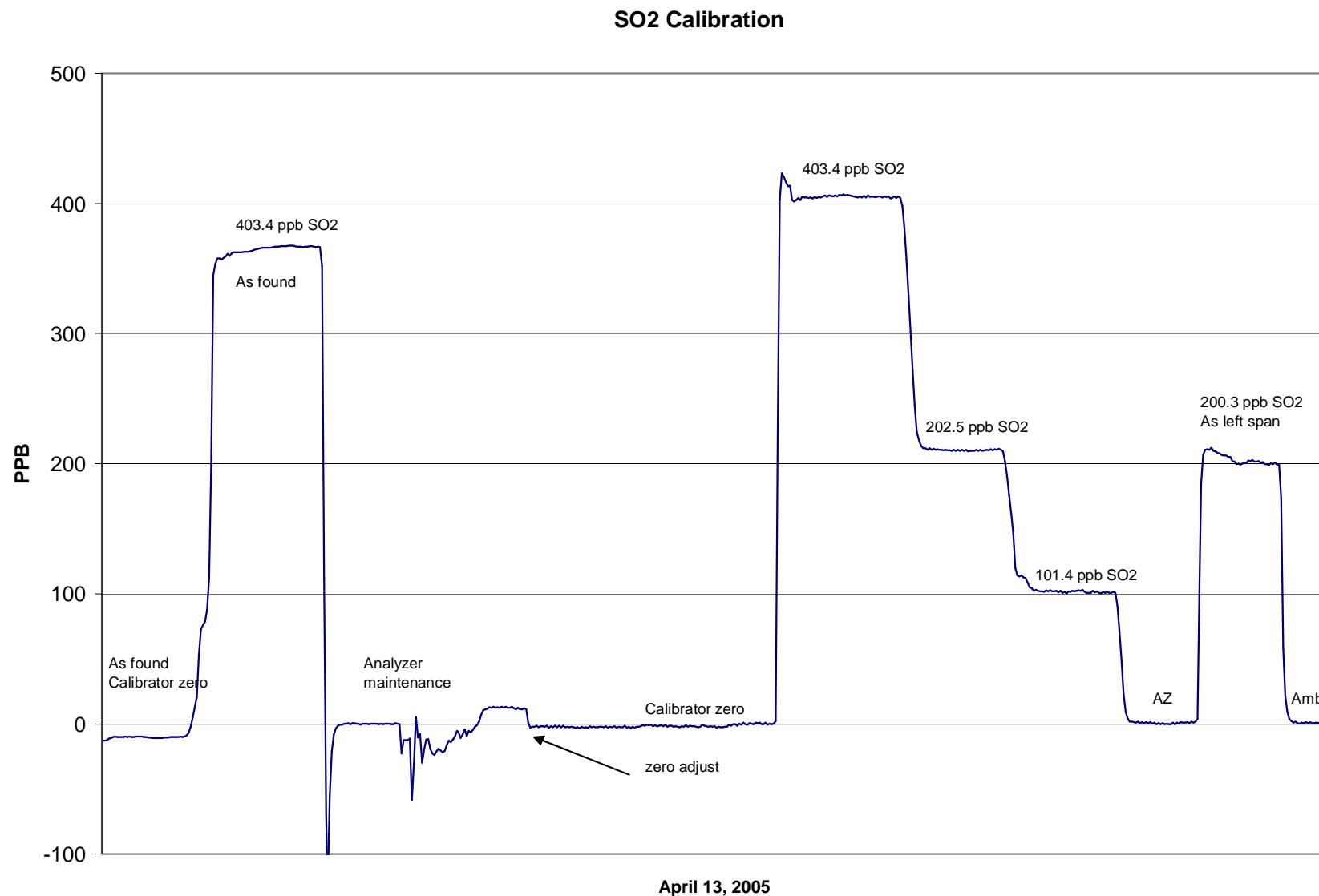
**Station Information**

Calibration Date	April 13, 2005	Previous Calibration	March 8, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	16:15	End Time (MST)	21:15
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	-0.9	N/A	Correlation Coefficient	0.999566
403.4	405.5	0.9950		
202.5	210.4	0.9622		
101.4	101.6	0.9984		
			Slope	0.990483
			Intercept	-0.601908

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



**Calibration Report**

Parameter TRS  
 Air Monitoring Network

PASZA**Station Information**

Calibration Date	April 13, 2005	Previous Calibration	March 8, 2005
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:15	End Time (MST)	19:30
Barometric Pressure	27.8 inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	111-1695
Cal Gas Concentration	5.02 ppm	Cal Gas Expiry Date	11/22/2006
Gas Cert Reference	BLM003489	DACS serial No.	45274
DACS make	Focus AP1000	DACS channel #	3
DACS voltage range	0 - 10 volt		
	<u>Before</u>		<u>After</u>
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.008956	Calculated slope	0.998930
Calculated intercept	-1.269223	Calculated intercept	0.229902
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
Concentration range Background coefficient Lamp Voltage Chamber Temp Perm Gas Temp Pressure Sample Flow Lamp Intesity	before		after
	100	ppb	100
	15.6	ppb	15.6
	1.304		1.304
	769	volts	769
	44.5	Deg C	44.5
	45	Deg C	45
	638.1	mm Hg	638.1
	466	ccm	466
	32,000	mv	32,000

**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	0.0	0.0	-0.1	N/A
4993	79.95	79.1	79.1	1.0004
4993	39.97	39.9	39.5	1.0105
4993	9.63	9.7	9.4	1.0271
4993	0.00	0.0	-0.1	As found zero
4993	79.95	79.1	79.1	As found span
Average Correction Factor				1.0126

Calculated value of As Found Response: 78.61 ppm Percent Change of As Found: 0.6%

Auto zero Auto span	before calibration		after calibration	
	0.3	ppm	-0.1	ppm
	68.9	ppm	63.8	ppm

Notes: No adjustments or maintenance performed at this time.

Calibration Performed By: Kelly Baragar

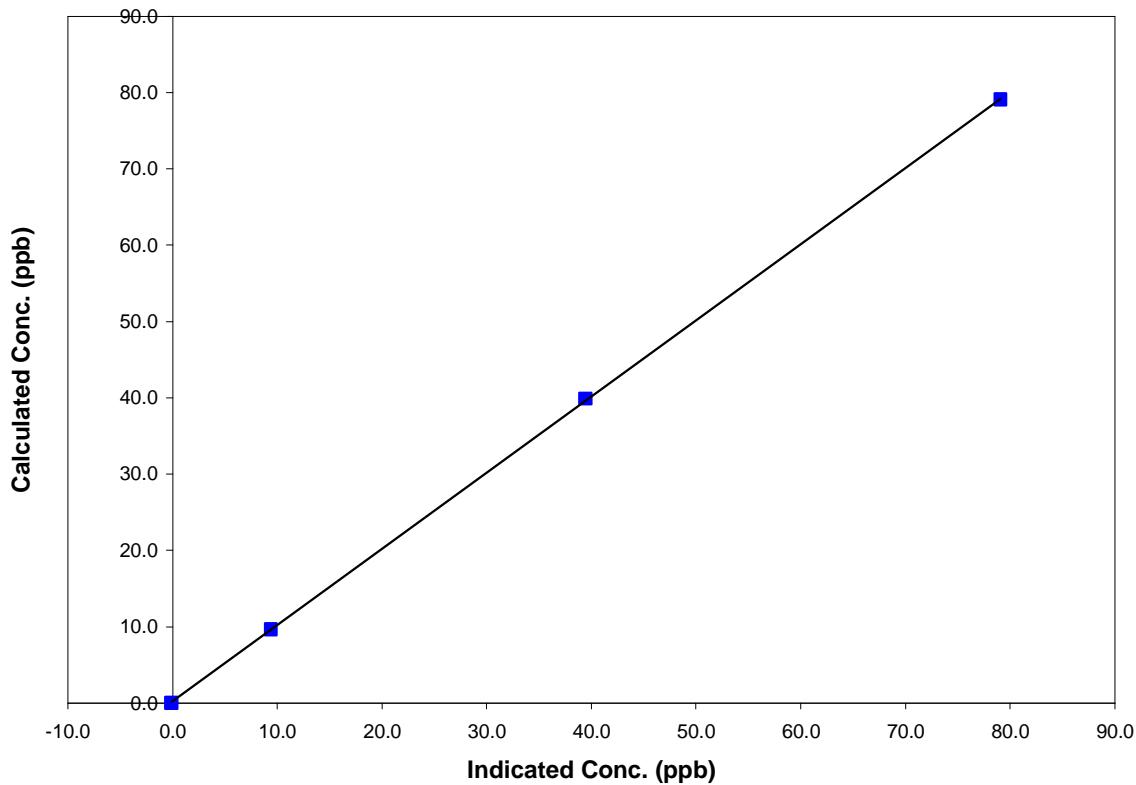
**Calibration Summary**

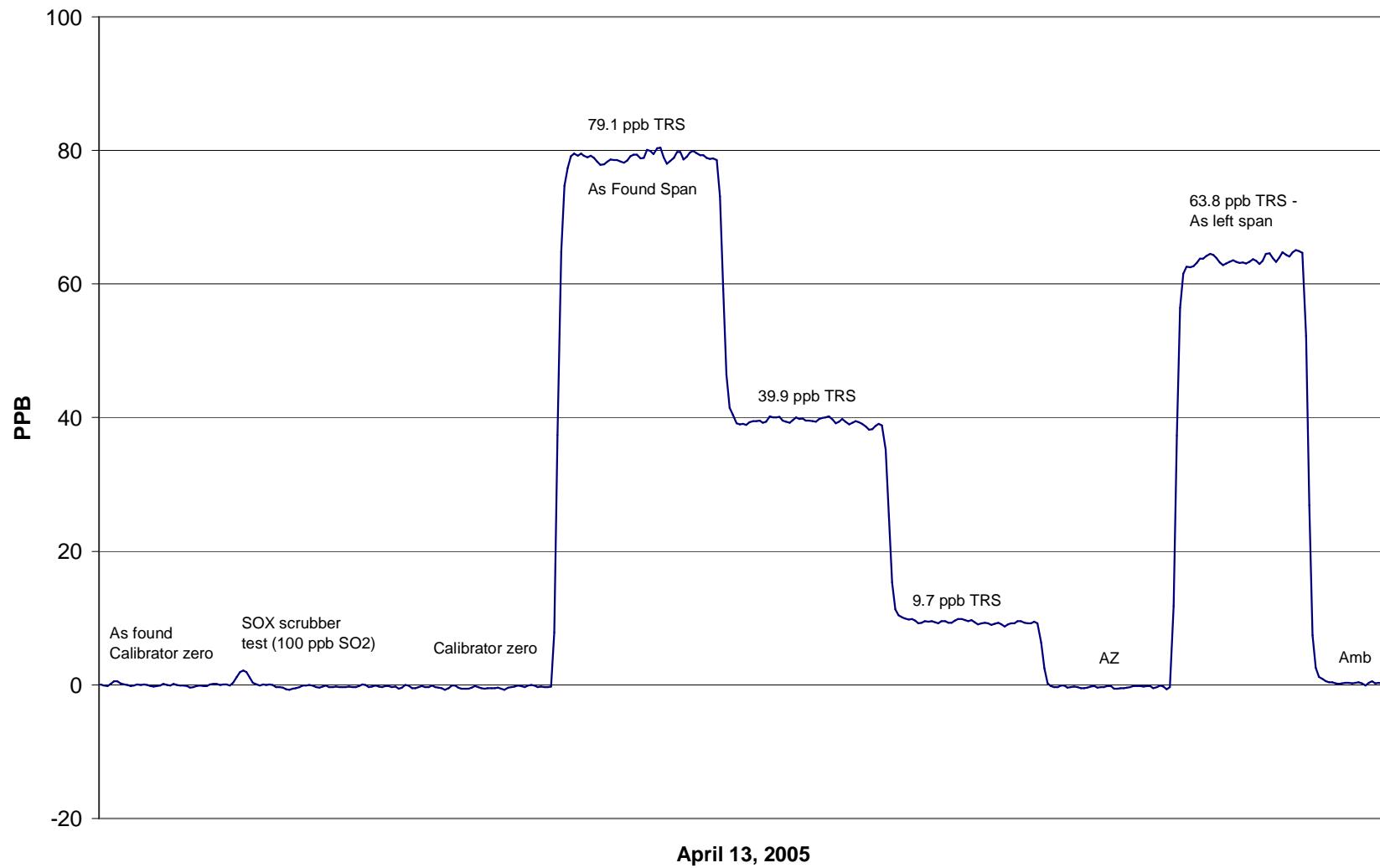
Parameter TRS  
 Air Monitoring Network PASZA

<i>Station Information</i>			
Calibration Date	April 13, 2005	Previous Calibration	March 8, 2005
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	16:15	End Time (MST)	19:30
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	-0.1	N/A		
79.1	79.1	1.0004	Correlation Coefficient	0.999977
39.9	39.5	1.0105	Slope	0.998930
9.7	9.4	1.0271	Intercept	0.229902

**TRS Calibration Curve**

**TRS Calibration**

**Calibration Report**

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

**Station Information**

Calibration Date	April 13, 2005	Previous Calibration	NA
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	18:00	End Time (MST)	23:00
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45274
DACS voltage range	0 - 1 V	DACS channel #	7
DACS slope	Before 0.050000	DACS slope	After 0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

**Analyzer Information**

Analyzer make	R&P	Control Unit serial #	140AB215519705
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB215519705

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	66	%	28	%
Ko Factor	10124		10124	
Temperature	10.0	Deg C	10.0	Deg C
Pressure	0.920	ATM	0.920	ATM

**Calibration Data**

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.02
zero flow - auxillary	0.0	0.00		0.02
flow recovery - main	45 - 60 Seconds	30.0	45 - 60 Seconds	30
flow recovery - aux	46 - 60 Seconds	40.0	46 - 60 Seconds	40
Temperature	measured	8.7	+/- 1.0 Deg C	10.0
Pressure	measured	0.931	+/- 1.5% ΔATM	0.920
Total Flow	16.67 SLPM	16.80		16.80
Main Flow	13.67 SLPM	13.80	+/- 1.0 SLPM	13.80
Auxiliary Flow	3.0 SLPM	3.020	+/- 0.2 SLPM	3.020
Leak Check - main	0.0	0.00	<0.15 SLPM	0.03
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.33
Ko Factor (w/o filter)	measured	307.483	filter weight (g)	0.11012
Ko Factor (w/ filter)	measured	215.987	% Ko difference	-0.2%

Notes: Flow audit and leak check performed. Replaced auxiliary line filter.

Adjusted down zero via hardware for auxiliary reading.

Replaced sample filter after audit.

Calibration Performed By: **Kelly Baragar**

**Calibration Report**

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

<b>Station Information</b>																																											
Calibration Date	April 14, 2005	Previous Calibration	March 9, 2005																																								
Station Number	3	Station Location	Smoky Heights School																																								
Reason:	Routine	Install	Removal																																								
Start Time (MST)	10:29	End Time (MST)	16:04																																								
Barometric Pressure	27.70 inches Hg	Station Temperature	21.0 Deg C																																								
Calibrator	Environics 6100	Serial Number	3016																																								
Cal Gas Concentration	50.8 ppm	Cal Gas Expiry Date	11/22/2006																																								
Gas Cert Reference	BAL786	DACS serial No.	45272																																								
DACS make	Focus AP1000	DACS channel #	4																																								
DACS voltage range	0 - 10 volt																																										
	Before		After																																								
DACS slope	0.005000	DACS slope	0.005000																																								
DACS intercept	0.000000	DACS intercept	0.000000																																								
Calculated slope	0.993982	Calculated slope	0.992017																																								
Calculated intercept	2.394142	Calculated intercept	3.281156																																								
Analyzer make	API 100A	Analyzer serial #	212																																								
<table border="1"> <thead> <tr> <th colspan="2">before</th><th colspan="2">after</th></tr> </thead> <tbody> <tr> <td>500</td><td>ppb</td><td>500</td><td>ppb</td></tr> <tr> <td>547</td><td>ccm</td><td>539</td><td>ccm</td></tr> <tr> <td>1400</td><td>mv</td><td>3520</td><td>mv</td></tr> <tr> <td>100</td><td>%</td><td>100</td><td>%</td></tr> <tr> <td>50.5</td><td>Deg C</td><td>50</td><td>Deg C</td></tr> <tr> <td>7.2</td><td>Deg C</td><td>3</td><td>Deg C</td></tr> <tr> <td>45</td><td>Deg C</td><td>40</td><td>Deg C</td></tr> <tr> <td>0.827</td><td></td><td>0.832</td><td></td></tr> <tr> <td>20</td><td></td><td>18.2</td><td></td></tr> </tbody> </table>				before		after		500	ppb	500	ppb	547	ccm	539	ccm	1400	mv	3520	mv	100	%	100	%	50.5	Deg C	50	Deg C	7.2	Deg C	3	Deg C	45	Deg C	40	Deg C	0.827		0.832		20		18.2	
before		after																																									
500	ppb	500	ppb																																								
547	ccm	539	ccm																																								
1400	mv	3520	mv																																								
100	%	100	%																																								
50.5	Deg C	50	Deg C																																								
7.2	Deg C	3	Deg C																																								
45	Deg C	40	Deg C																																								
0.827		0.832																																									
20		18.2																																									

**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	-4.1	N/A
4993	39.97	403.4	403.1	1.0009
4993	19.98	202.5	201.0	1.0075
4993	9.99	101.4	99.8	1.0159
4993	0.00	0.0	-2.4	As found zero
4993	39.97	403.4	460.3	As found span
Average Correction Factor				1.0081

Calculated value of As Found Response: 462.2 ppm      Percent Change of As Found: -14.6%

	before calibration		after calibration	
Auto zero	0.2	ppm	-1.6	ppm
Auto span	247.2	ppm	236.0	ppm

Notes: Replaced UV lamp post as found responses. UV lamp values increased to 3500 mV.  
 Zero and span adjustments performed.

Calibration Performed By: Kelly Baragar

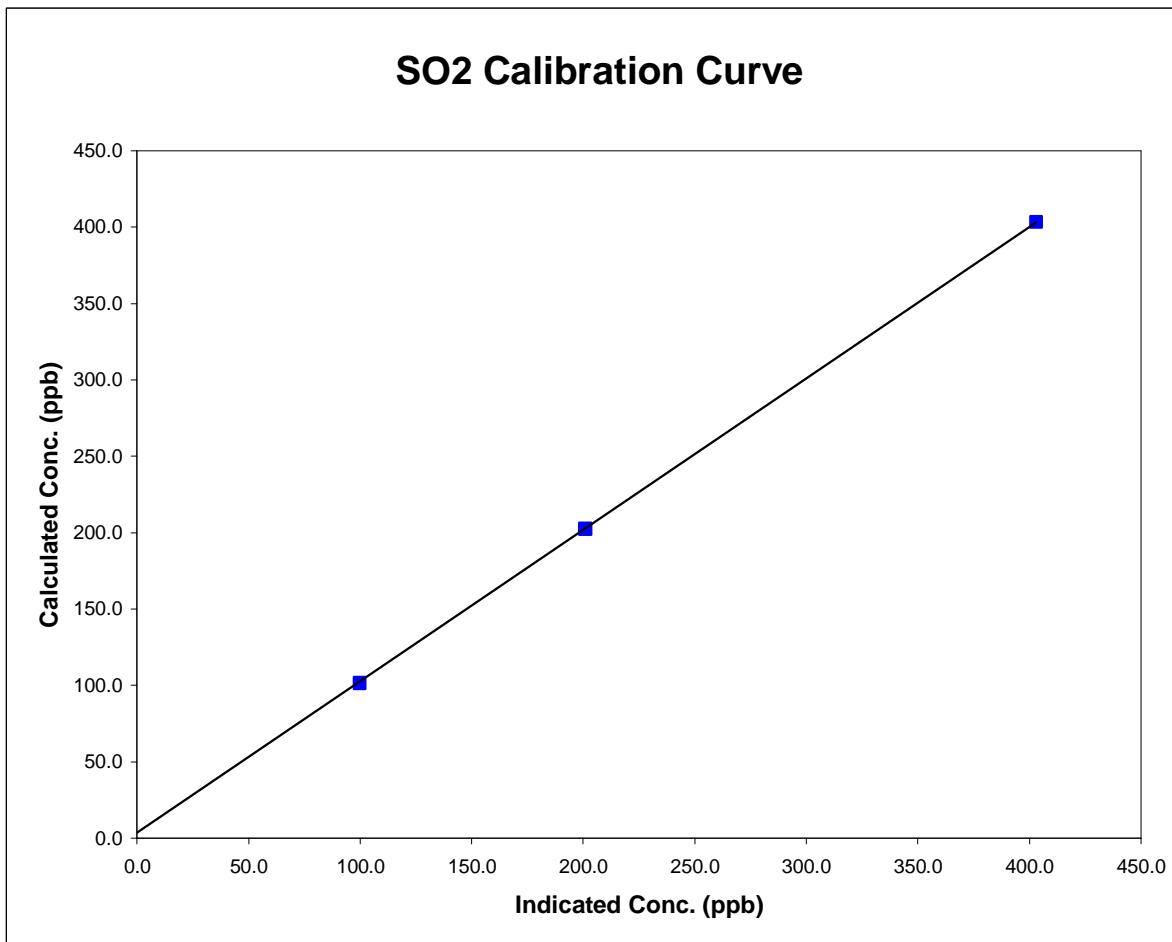
**Calibration Summary**

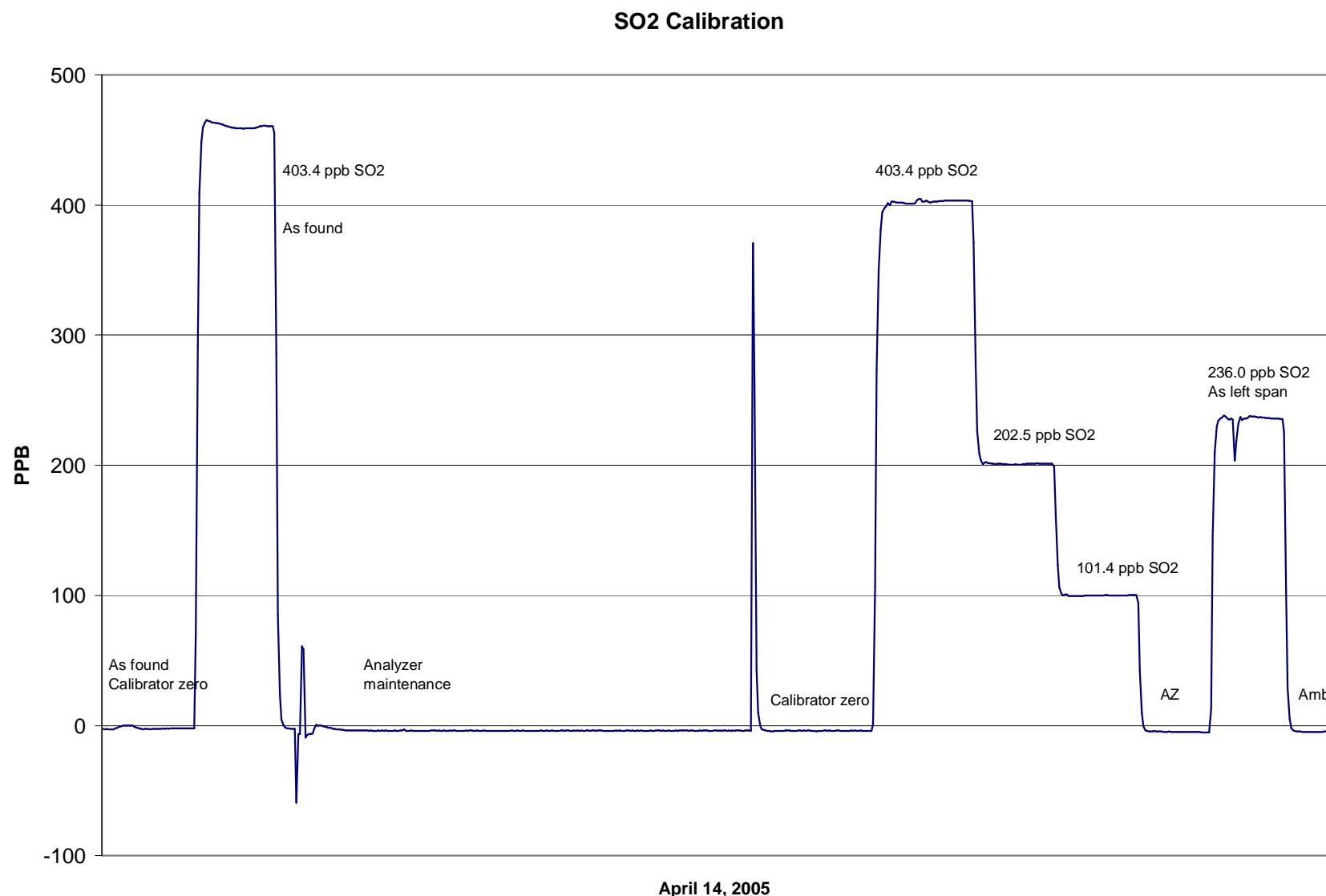
Parameter **SO<sub>2</sub>**  
 Air Monitoring Network **PASZA**

<b>Station Information</b>			
Calibration Date	April 14, 2005	Previous Calibration	March 9, 2005
Station Number	3	Station Location	Smoky Heights School
Start Time (MST)	10:29	End Time (MST)	16:04
Analyzer make/model	API 100A	Analyzer serial #	212

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-4.1	N/A		
403.4	403.1	1.0009	Correlation Coefficient	0.999983
202.5	201.0	1.0075	Slope	0.992017
101.4	99.8	1.0159	Intercept	3.281156





**Calibration Report**

Parameter TRS  
 Air Monitoring Network PASZA

**Station Information**

Calibration Date	April 14, 2005	Previous Calibration	March 9, 2005
Station Number	3	Station Location	Smoky Heights School
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:29	End Time (MST)	13:55
Barometric Pressure	27.7 inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	111-1695
Cal Gas Concentration	5.02 ppm	Cal Gas Expiry Date	11/22/2006
Gas Cert Reference	BLM003489	DACS serial No.	45272
DACS make	Focus AP1000	DACS channel #	3
DACS voltage range	0 - 10 volt		
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.005505	Calculated slope	0.990457
Calculated intercept	-0.356127	Calculated intercept	0.552088
Analyzer make	TEI Model 43C	Analyzer serial #	0436610004
	before		after
Concentration range	100 ppb	100 ppb	
Background coefficient	10.8 ppb	11.1 ppb	
Lamp Voltage	1.156	1.193	
Chamber Temp	814 volts	821 volts	
Perm Gas Temp	44 Deg C	45 Deg C	
Pressure	45 Deg C	45 Deg C	
Sample Flow	646.3 mm Hg	645 mm Hg	
Lamp Intesity	475 ccm	475 ccm	
	32,000 mv	32,000 mv	

**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	0.0	0.0	-0.8	N/A
4993	79.95	79.1	79.3	0.9978
4993	39.97	39.9	39.7	1.0051
4993	9.63	9.7	9.5	1.0142
4993	0.00	0.0	-0.8	As found zero
4993	79.95	79.1	76.3	As found span
Average Correction Factor				1.0057

Calculated value of As Found Response: 77.16 ppm Percent Change of As Found: 2.5%

	before calibration		after calibration	
Auto zero	1.6 ppm		-0.7 ppm	
Auto span	67.8 ppm		60.0 ppm	

Notes: Span adjustment made. No other maintenance required at this time.

Calibration Performed By: Kelly Baragar

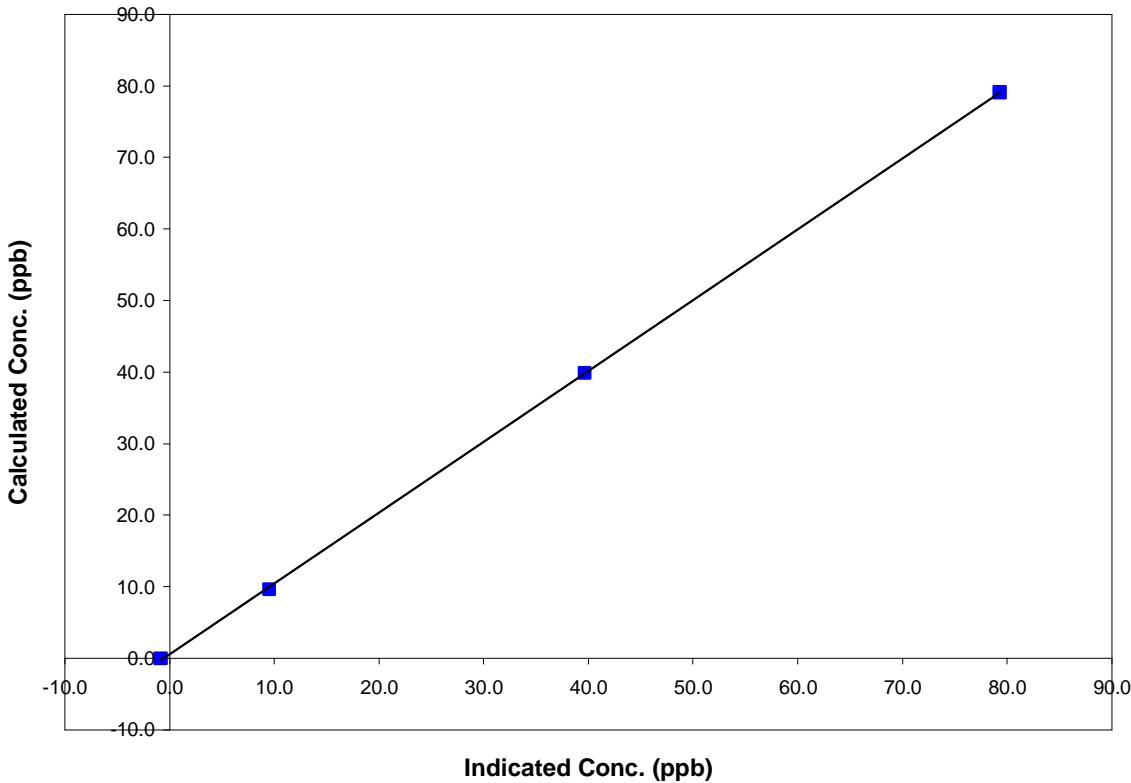
**Calibration Summary**

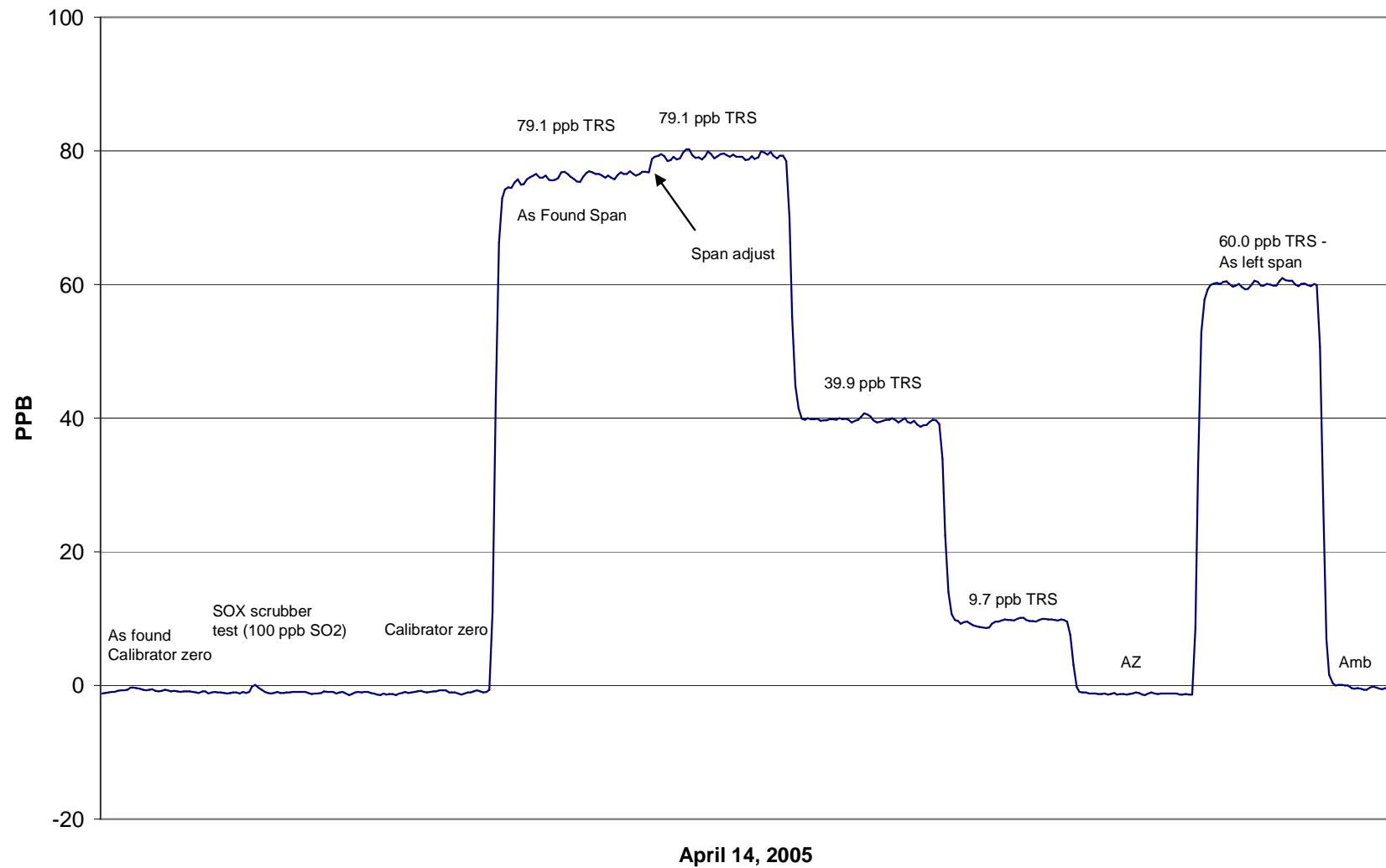
Parameter	<u>TRS</u>
Air Monitoring Network	<u>PASZA</u>

<b>Station Information</b>			
Calibration Date	April 14, 2005	Previous Calibration	March 9, 2005
Station Number	3	Station Location	Smoky Heights School
Start Time (MST)	10:29	End Time (MST)	13:55
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610004

**Calibration Data**

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.8	N/A		
79.1	79.3	0.9978	Correlation Coefficient	0.999952
39.9	39.7	1.0051	Slope	0.990457
9.7	9.5	1.0142	Intercept	0.552088

**TRS Calibration Curve**

**TRS Calibration**

**Calibration Report**

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

**Station Information**

Calibration Date	April 14, 2005	Previous Calibration	NA
Station Number	3	Station Location	Smoky Heights School
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	12:15	End Time (MST)	16:30
Barometric Pressure	0.923	ATM	20.0
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45272
DACS voltage range	0 - 1 V	DACS channel #	7
DACS slope	Before 0.050000	DACS slope After	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

**Analyzer Information**

Analyzer make	R&P	Control Unit serial #	140AB215549705
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB215549705

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	36	%	36	%
Ko Factor	10997		10997	
Temperature	12.0	Deg C	12.0	Deg C
Pressure	0.923	ATM	0.923	ATM

**Calibration Data**

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.07
zero flow - auxillary	0.0	0.00		0.19
flow recovery - main	45 - 60 Seconds	40.0	45 - 60 Seconds	40
flow recovery - aux	46 - 60 Seconds	40.0	46 - 60 Seconds	40
Temperature	measured	8.4	+/- 1.0 Deg C	12.0
Pressure	measured	0.932	+/- 1.5% ΔATM	0.923
Total Flow	16.67 SLPM	16.80		16.80
Main Flow	13.67 SLPM	13.80	+/- 1.0 SLPM	13.80
Auxiliary Flow	3.0 SLPM	3.020	+/- 0.2 SLPM	3.020
Leak Check - main	0.0	0.00	<0.15 SLPM	0.11
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.26
Ko Factor (w/o filter)	measured	315.553	filter weight (g)	0.11014
Ko Factor (w/ filter)	measured	222.830	% Ko difference	0.8%

Notes: Flow audit and leak check performed.

Calibration Performed By: **Kelly Baragar**