PEACE AIRSHED ZONE ASSOCIATION

Air Quality Monitoring Network

July 2004

Prepared by

FOCUS
AMBIENT AIR MONITORING

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

Re: Peace Airshed Zone Association – July PASZA Ambient Air Report

Enclosed is PASZA Ambient Monitoring Report for the month of **July 2004**.

Continuous Monitoring – Henry Pirker Station (Grande Prairie)

Included in this report is a summary of the, monthly continuous sampling, detailed hourly average reports and multipoint calibration reports of all instruments. The measured ambient air quality was within the Provincial and Federal guidelines with no exceedences recorded. There were no significant events leading to emergency response for the month of July. Due to vandalism at the station the air conditioner unit was disabled resulting in high temperatures in the station causing the NOx analyzer to fail. The analyzer was repaired and installed on July 8th. Additional secutiy measures have been installed at the station. The CO analyzer also failed initially due to the infrared source and further troubleshooting was performed at Alberta Environment. The CO analyzer was returned to service on July 6th. The response letters to Alberta Environment are attached.

Passive Monitoring – 43 Stations throughout the PASZA zone:

There were no damaged samples; however the three samples from Karr Creek were left expsosed for two months. There were no exceedances of the Provincial Air Quality guidelines.

- Monthly average concentrations for SO_2 passives ranged from 0.1 ppb to 0.3 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.2 ppb to 3.3 ppb.
- Monthly average concentrations for O_3 passives ranged from 18.1 ppb to 33.8 ppb.

If you have any questions, please contact the Focus office at 1-888-869-2252 or 1-888-466-6555.

On Behalf of the,
Peace Airshed Zone Association

Kevin Warren
PASZA Technical Program Manager

Kevin McCullum, M.Sc., P.Eng.
AQM Environmental Engineer

July 12, 2004

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

ATTENTION: Director

RE: Air Monitoring Directive Contravention Report Ref # 148941

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 June for the CO 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 148941.

The cause of the contravention was loss of data from the CO analyzer. The failure was believed to be associated with the IR source in the CO analyzer; a part was shipped and installed on June 29, 2004. This did not resolve the problem.

As this is an AENV analyzer, AENV agreed to assist with troubleshooting the analyzer. On July 5 2004, a Focus Technician returned to the Edmonton Alberta Environment shop with the analyzer and assisted in diagnosing the problem. A detailed check of the analyzer identified the optic measuring device was misaligned. This problem was corrected at the AENV shop allowing the analyzer to be taken back to Grande Prairie to be setup. As of July 6th, the analyzer was back on-line at the Henry Pirker station in Grande Prairie.

If there are any questions or concerns please feel free to call me.

Sincerely,

THE FOCUS CORPORATION

Gary Cross C.E.T.
AQM Technical Manager

July 15, 2004

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

ATTENTION: Director

RE: Air Monitoring Directive Contravention Report Ref # 149677

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 July for the NOx 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 149677.

The cause of the contravention was due to vandalism in which the condenser unit from the air conditioner was shut down from the outside of the trailer. The following action was taken:

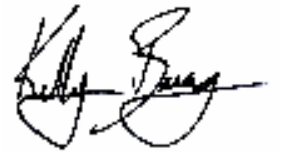
- On July 2nd the NOx data started to indicate some drift. It is suspected this was the initial point of the A/C failure. The problem was largely notable on July 5th; a site visit verified the vandalism and was remedied.
- On July 6th the NOx analyzer failure was confirmed. The analyzer was shut down and taken back to Edmonton by AENV for repair. The molybdenum converter op-amp became faulty due to the extreme temperature conditions.
- On July 7th the NOx analyzer was picked up at the AENV shop and taken back to the Henry Pirker station in Grande Prairie.
- On July 8th the NOx analyzer was recalibrated at the Henry Pirker station in Grande Prairie and put back on line.

Additional actions are being investigated to improve security at the station.

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

Sincerely,

THE FOCUS CORPORATION



Kelly Baragar,
AQM Senior Technician

PASZA Monthly Continuous Data Summary

July 2004 Monthly Overall Summary Report

Ambient Air Quality Data

Jul-2004	Peace Airshed Zone Association						Maximum Recorded Values						
							1-hr				24-hr		
Pollutant	**Guidelines**		**Station**	**Monthly**	**Exceedence**		Conc	Day	WSPD	WDIR	Conc	Day	**Operational**
(units)	1-hr	24-hr		**Average**	1-hr	24-hr			(km/hr)	(Sector)			**Time (%)**
SO_2 (**ppb**)	172	57	Henry Pirker	0.2	0	0	2.5	Jul-09	14.0	WNW	0.7	Jul-24	99.6%
NO (**ppb**)			Henry Pirker	1.4	0	0	48.1	Jul-23	2.7	W	7.7	Jul-23	81.2%
NO_2 (**ppb**)	212	106	Henry Pirker	4.1	0	0	22.1	Jul-23	2.7	W	7.5	Jul-23	81.2%
NO_X (**ppb**)			Henry Pirker	5.5	0	0	70.2	Jul-23	2.7	W	15.2	Jul-23	81.2%
O_3 (**ppb**)	82		Henry Pirker	22.5	0	0	78.7	Jul-24	4.4	SW	34.0	Jul-01	99.7%
CO (**ppm**)	13		Henry Pirker	0.29	0	0	0.79	Jul-23	2.7	W	0.46	Jul-23	81.9%
THC (**ppm**)			Henry Pirker	1.95	0	0	9.44	Jul-23	9.2	E	2.62	Jul-23	99.5%
TRS (**ppb**)			Henry Pirker	0.5	0	0	1.9	Jul-06	2.7	E	0.8	Jul-24	99.6%
$PM_{2.5}$ (**µg/m^3**)		30 [a]	Henry Pirker	5.6	0	0	33.4	Jul-23	2.7	W	16.7	Jul-23	97.2%
RH (**%**)			Henry Pirker	70.2									100.0%
SR (**W/m^2**)			Henry Pirker	233.2									99.9%
Temp (**^{o}C**)			Henry Pirker	18.0									100.0%
WSPD v (km/hr)			Henry Pirker	4.8									100.0%
WSPD s (km/hr)			Henry Pirker	8.9									100.0%
WDIR (Deg)			Henry Pirker	W*									100.0%

Note: [a] the 24-hr Canada Wide Standard level is considered as an absolute value

* Wind Direction is the predominate direction for the Month

Continuous Monitoring

Ambient Air Monitoring Network

Henry Pirker Station

General Station Issues

Prior to the calibration visit on July 5, the air conditioning system had been tampered with from the outside of the station resulting the no air conditioning in the station. The system was covered with a locking mechanism to prevent this from happening in the future. The high station temperature resulted in problems with the NO2 analyzer.

Parameter	Make	Model	Notes
SO_2	TECO	43	No Operational problems were observed
NOx/NO/NO_2	TECO	42	due to the high station temperature in the early part of the month, a component on the temperature controll board failed and was replaced at Alberta Environment's shop. The analyzer was reinstalled on July 8.
O_3	API	400	No operational problems observed
CO	TECO	48	The IR source and optic bench were replaced on this analyzer, and was reinstalled on July 5.
THC	TEI	51-CLT	No operational problems observed
TRS	TEI	42C	No operational problems observed
$PM_{2.5}$	R&P	1400AB	15 hours were removed from July 5 to 6 due to negative drift caused by excessive station temperature. 26 hours were removed from July 29 to 30 when a faulty main filter did not allow the sensor to stabilize. A new filter was installed on the 30.
RH	Met One	083D	No operational problems observed
AT	Met One	083D	No operational problems observed
SR	Met One	096-1	No operational problems observed
WS	Met One	010C	No operational problems observed
WD	Met One	020C	No operational problems observed

PASZA - Henry Pirker AQI Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

Air Quality Index (AQI)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Good Readings:	585
Number of 1-hr Fair Readings:	16
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

Percentile	99	95	75	50	25	5	1
	30.5	22.5	15.4	12.3	8.2	4.7	3.1

Status Flag Characters

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

Alberta's Air Quality Index

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00
1-Jul-04	A	8	13	14	A	14	15	15	13	13	15	19	24	27	29	30	26	22	18	16	13	13	9	A
2-Jul-04	8	6	9	A	7	6	6	6	7	7	10	10	N	N	N	N	N	N	N	N	N	N	A	N
3-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	N
4-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	N	N
5-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	N	N	N	N
6-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	A	A	10	11	11	7
7-Jul-04	8	9	9	10	10	8	6	8	8	8	8	9	9	10	12	12	13	A	A	12	13	13	12	11
8-Jul-04	11	11	10	9	10	9	10	9	8	8	N	N	N	A	7	2	N	A	12	13	15	12	12	12
9-Jul-04	12	12	13	13	15	15	13	11	11	11	12	12	13	10	14	15	A	14	13	13	11	6	5	6
10-Jul-04	5	4	4	3	4	7	8	6	10	25	17	19	19	21	22	A	20	16	13	11	9	6	8	7
11-Jul-04	6	6	5	5	5	5	6	7	9	12	14	14	15	14	A	16	16	15	16	14	12	10	7	8
12-Jul-04	8	7	6	6	6	5	6	8	7	9	13	14	15	A	13	12	13	12	11	10	9	8	6	5
13-Jul-04	5	3	4	3	2	3	7	5	7	8	9	12	A	16	16	16	14	14	14	15	14	12	9	10
14-Jul-04	7	6	7	5	4	4	7	5	6	9	11	A	14	15	16	17	18	16	19	18	13	10	8	7
15-Jul-04	6	5	5	3	5	3	12	10	12	12	A	21	18	15	15	18	19	18	17	16	12	10	9	10
16-Jul-04	13	14	14	10	8	11	10	10	10	A	20	21	22	23	22	24	31	28	23	19	18	18	16	14
17-Jul-04	11	8	8	8	6	5	6	8	A	14	16	17	17	17	18	18	17	16	15	13	12	12	10	9
18-Jul-04	9	7	6	8	6	6	6	A	9	11	13	15	16	16	17	15	14	15	12	11	8	7	11	8
19-Jul-04	8	4	7	9	8	7	A	8	7	11	10	14	14	19	21	22	18	13	11	15	12	9	10	15
20-Jul-04	15	14	12	11	9	A	8	10	12	A	15	15	15	15	15	14	14	15	14	13	12	12	12	12
21-Jul-04	11	10	10	9	A	6	6	8	9	8	11	14	18	17	18	19	19	20	21	23	24	23	24	21
22-Jul-04	10	6	5	A	4	4	5	9	6	8	8	11	12	12	12	14	15	15	14	14	13	17	15	12
23-Jul-04	11	13	A	17	16	15	14	24	27	20	12	18	22	24	27	31	25	24	18	15	10	21	17	20
24-Jul-04	26	A	14	8	9	11	18	20	20	21	23	37	49	47	36	34	30	19	15	12	9	9	17	18
25-Jul-04	A	14	14	11	9	6	5	7	8	12	13	15	15	14	15	18	18	16	20	18	16	14	12	A
26-Jul-04	10	16	16	12	11	9	8	7	9	10	11	12	12	12	14	12	13	16	15	13	12	13	A	11
27-Jul-04	11	12	13	12	12	11	13	13	14	14	16	17	17	19	20	20	20	20	20	20	18	A	13	12
28-Jul-04	12	12	11	10	7	5	5	4	7	10	14	16	16	17	19	20	21	19	19	18	A	12	10	10
29-Jul-04	4	4	3	4	4	2	5	5	7	9	10	13	16	18	19	18	18	18	18	A	A	13	14	A
30-Jul-04	13	13	12	10	9	6	6	7	13	15	15	16	16	15	15	15	15	13	A	11	14	13	14	12
31-Jul-04	9	8	8	6	6	6	6	7	8	8	8	11	12	13	13	12	13	A	11	8	8	8	4	4

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

Station: Henry Pirker

Station Owner: PASZA

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	2.5	ppb	9-Jul	9:00 10:00
Maximum 24-hr Average:	0.7	ppb	24-Jul	

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

AIC Time:	34 hrs			Operational Time:			704 hrs		
Calibration Time:	3 hrs			AMD Operational Uptime:			99.6%		
Percentile	99	95	75	50	25	5	1	Average	
	1.4	0.8	0.3	0.2	0.1	0.0	0.0	0.2	ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jul-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0.1	0.5
2-Jul-04	0	0	0	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0.3	2.1
3-Jul-04	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0.2	0.7
4-Jul-04	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0.3	0.7
5-Jul-04	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0.6	1.2
6-Jul-04	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0.4	1.0
7-Jul-04	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0.2	1.0
8-Jul-04	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	M	M	A	M	0	0	0	N	0.2
9-Jul-04	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	A	0	0	0	0	0	0.2	2.5
10-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0.2	0.9
11-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2
12-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3
13-Jul-04	0	0	0	0	0	0	0	0	1	1	1	1	1	A	1	0	1	1	1	0	1	0	0	0.5	1.2
14-Jul-04	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	0.3
15-Jul-04	0	0	0	0	0	0	0	0	0	0	1	A	0	0	1	0	0	0	0	0	0	0	0	0.2	0.5
16-Jul-04	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0.3	0.7
17-Jul-04	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
18-Jul-04	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
19-Jul-04	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
20-Jul-04	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
21-Jul-04	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
22-Jul-04	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
23-Jul-04	0	0	0	A	0	0	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0.3	1.0
24-Jul-04	0	0	A	0	0	0	0	1	1	1	2	1	2	2	1	1	1	0	0	0	0	0	0	0.7	1.9
25-Jul-04	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
26-Jul-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.2
27-Jul-04	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	0.4
28-Jul-04	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	0	1	1	0	0	A	0	0.4	1.5
29-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.4
30-Jul-04	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	A	0	0	0	0.2	0.8
31-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2
Hourly Avg	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	
Hourly Max	0.5	0.5	0.8	1.0	0.9	0.8	2.1	1.1	1.1	2.5	1.5	1.5	1.7	1.9	1.0	0.7	1.2	1.5	0.8	0.5	0.8	1.0	0.5	0.4	

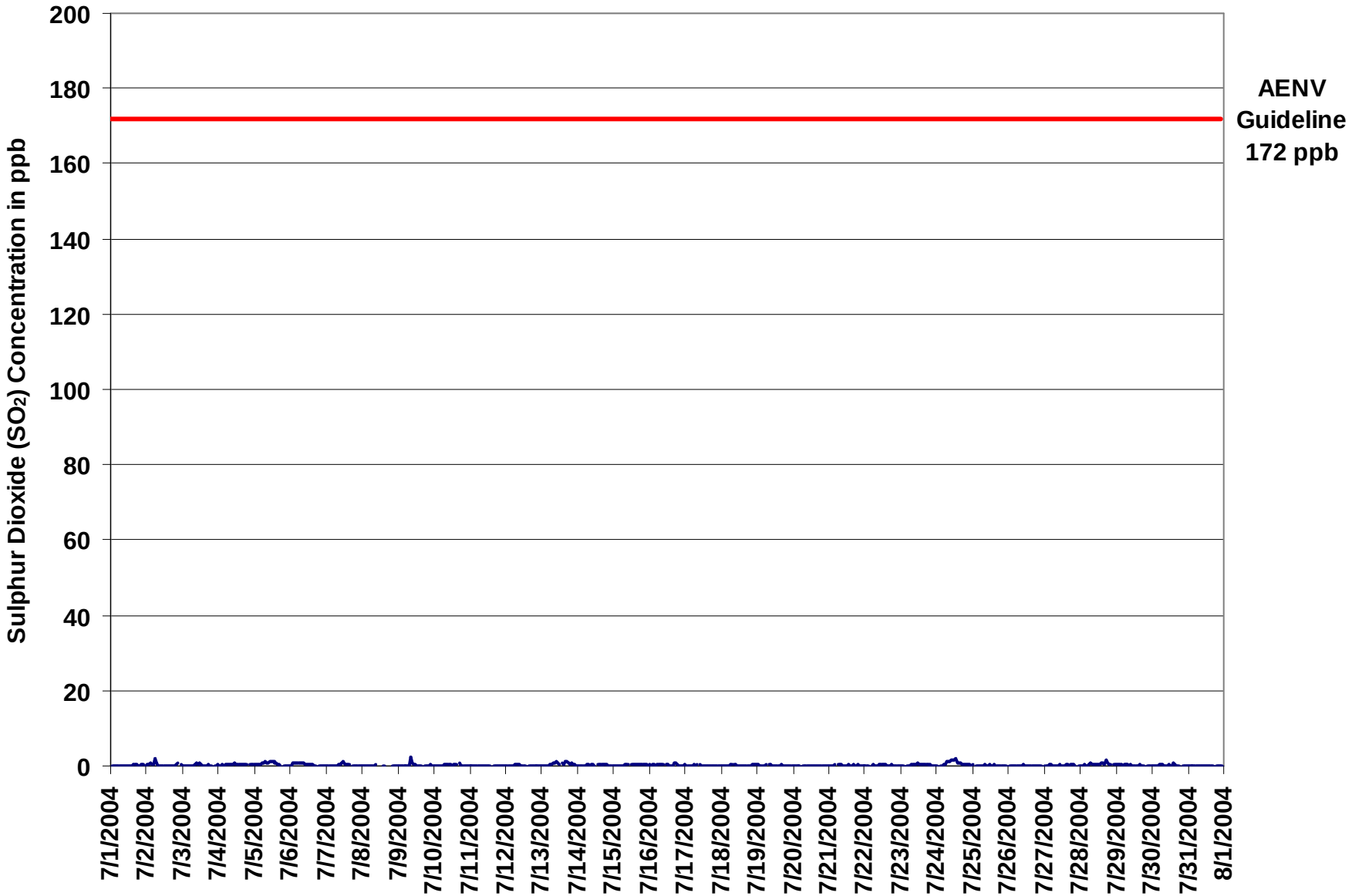


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	10.6	ppb	28-Jul	17:00 18:00
Maximum 24-hr Value:	1.7	ppb	24-Jul	

AIC Time:	34 hrs	Operational Time:	704 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%

Percentile	99	95	75	50	25	5	1	Average
	2.6	1.6	0.9	0.7	0.6	0.5	0.2	0.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	1.3
2-Jul-04	1	1	1	2	1	3	3	2	1	1	1	0	1	1	1	1	0	1	1	1	2	2	A	1	1.1	3.0
3-Jul-04	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	1.5
4-Jul-04	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1.0	1.5
5-Jul-04	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	A	0	0	0	0	1.1	1.8
6-Jul-04	0	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	1.8
7-Jul-04	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	A	1	1	1	1	1	1	0.9	1.7
8-Jul-04	1	1	1	1	1	1	1	1	1	1	C	C	C	A	1	0	M	M	A	M	0	0	0	0	N	0.8
9-Jul-04	0	0	0	0	0	0	0	0	0	6	3	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	5.6
10-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	3	1	1	1	1	1	1	0.8	2.6
11-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	0	1	0	1	0.6	0.9
12-Jul-04	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
13-Jul-04	1	1	1	1	1	1	1	1	1	1	2	2	2	A	1	1	2	3	2	2	2	1	2	1	1.3	3.1
14-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	0.7	1.0
15-Jul-04	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
16-Jul-04	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	2	1	1	1	1	1	0.9	1.8
17-Jul-04	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
18-Jul-04	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	1.1
19-Jul-04	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
20-Jul-04	0	0	0	1	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.8
21-Jul-04	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
22-Jul-04	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
23-Jul-04	1	1	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.0	2.4
24-Jul-04	1	1	A	0	1	1	1	3	2	2	2	2	2	2	2	1	8	1	1	1	1	1	1	1	1.7	7.7
25-Jul-04	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0.7	0.9
26-Jul-04	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	0	A	0.5	0.8
27-Jul-04	0	0	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.1
28-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	4	1	1	A	1	1	1.5	10.6
29-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.0
30-Jul-04	1	1	1	1	1	1	1	2	1	1	1	2	1	1	2	1	1	1	1	A	0	0	1	1	0.9	2.1
31-Jul-04	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	0	1	0	0.7	0.9
Hourly Avg	0.7	0.7	0.7	0.8	0.7	0.8	0.9	1.0	0.9	1.1	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.3	0.9	0.8	0.8	0.7	0.7	0.7		
Hourly Max	1.3	1.1	1.8	2.0	1.4	2.5	3.0	3.0	2.1	5.6	2.6	2.4	2.3	2.4	2.1	1.4	7.7	10.6	3.7	1.6	2.1	1.5	1.5	1.2		

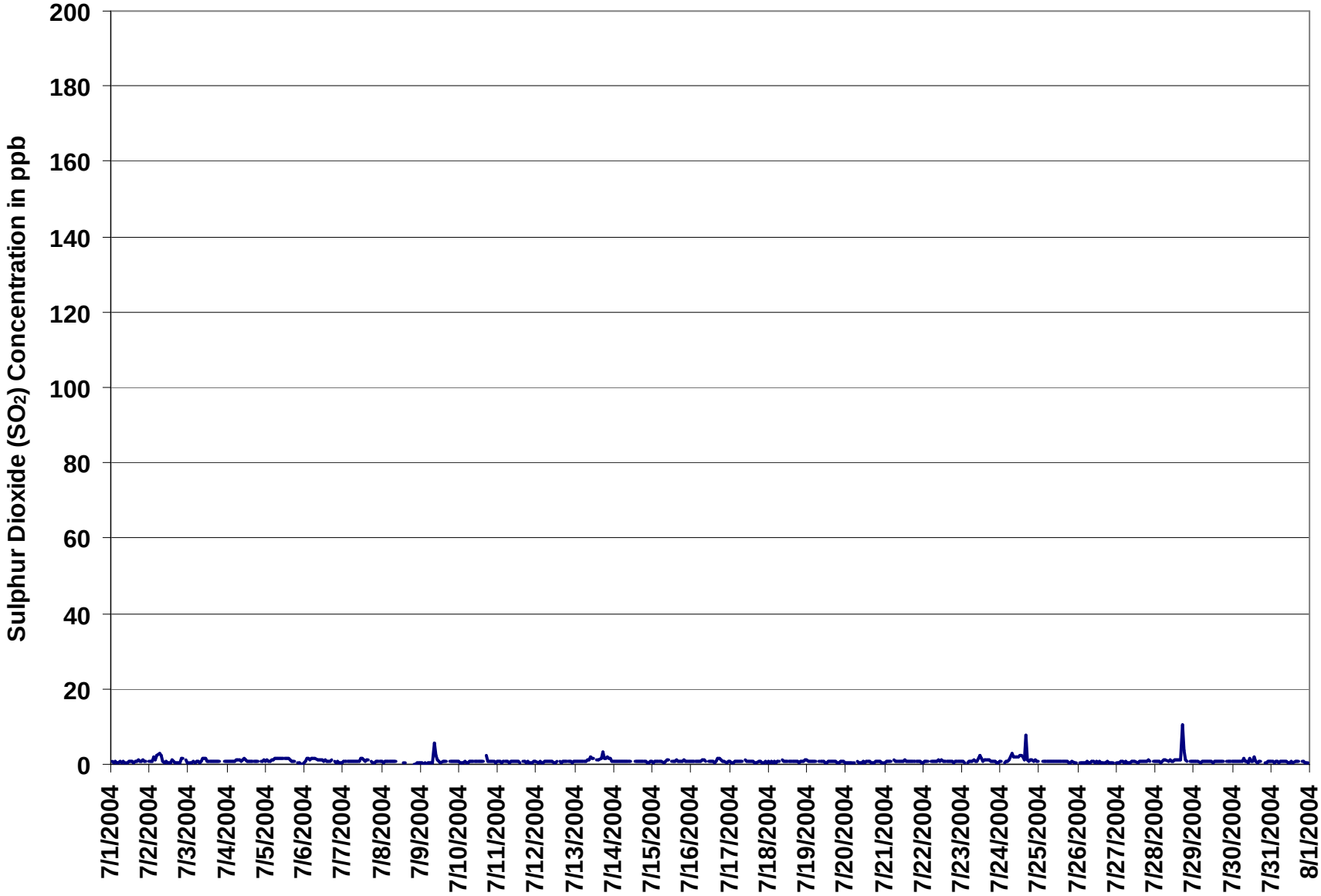
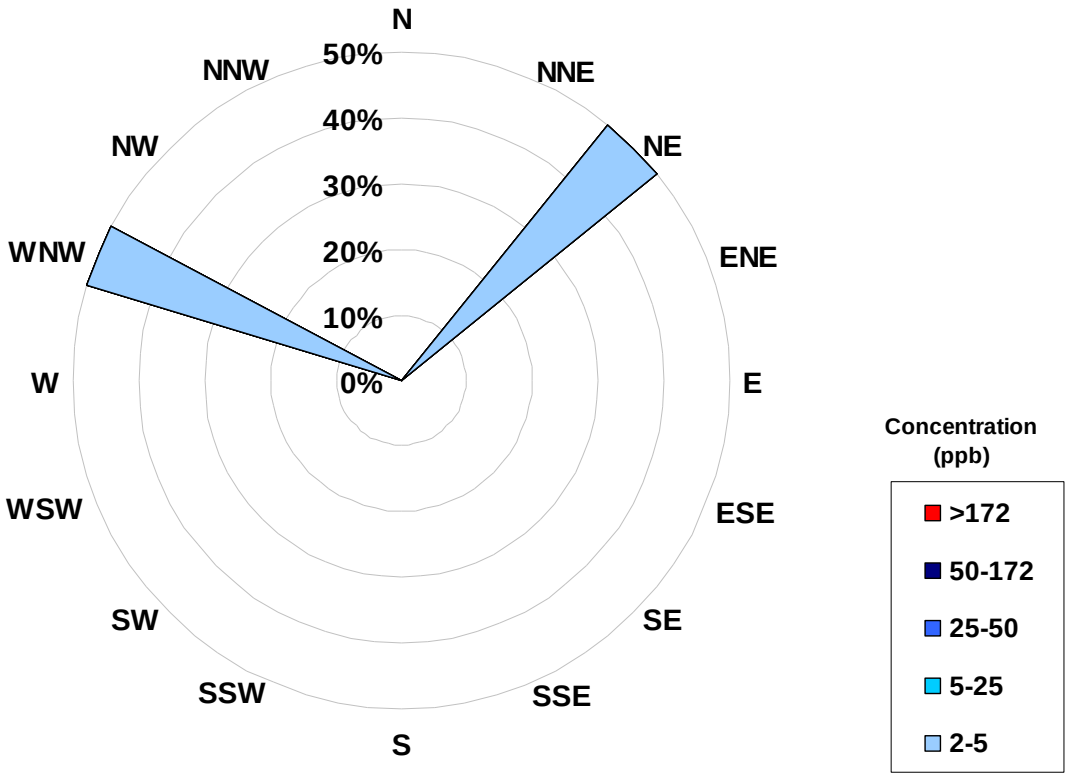


Figure 2. PASZA - Henry Pirker Sulphur Dioxide 1-hr Maximum Value Monthly Trend

Concentration Rose for the 1-hr SO_2 Average Concentration Occurrences at the Henry Pirker Site for July 2004



Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0	<	2	702
2	to	5	2
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			704

Calms	
Range	
ppb	
2-5	0.0%
5-25	0.0%
25-50	0.0%
50-172	0.0%
>172	0.0%

PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

Station: Henry Pirker

Station Owner: PASZA

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	22.1	ppb	23-Jul	8:00 9:00
Maximum 24-hr Average:	7.5	ppb	23-Jul	

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

AIC Time:	27 hrs			Operational Time:			571 hrs	
Calibration Time:	6 hrs			AMD Operational Uptime:			81.2%	
Percentile	99	95	75	50	25	5	1	Average
	14	11	6	3	2	1	0	4.1 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	5	4	2	2	A	3	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	3	2	1.9	4.8
2-Jul-04	3	3	2	A	1	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	N	2.8
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Jul-04	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
6-Jul-04	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
7-Jul-04	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
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	5	7	5	6	7	3	2	A	2	2	N	6.8
9-Jul-04	1	1	1	1	1	2	2	3	1	1	1	1	2	6	4	2	2	3	3	4	A	15	14	13	3.7	15.0
10-Jul-04	13	8	5	4	6	6	4	5	3	3	3	3	2	2	2	2	3	3	4	A	7	12	13	11	5.3	13.5
11-Jul-04	4	4	5	4	4	5	4	3	3	1	1	1	1	1	0	1	2	1	A	3	4	4	3	3	2.7	5.5
12-Jul-04	2	1	2	2	3	5	8	8	5	4	1	1	1	1	1	1	1	A	2	3	4	5	6	7	3.2	8.0
13-Jul-04	8	8	5	3	2	6	6	6	9	4	4	3	2	2	1	1	A	3	2	3	7	8	9	5	4.6	8.6
14-Jul-04	8	6	7	5	8	10	13	5	3	2	3	3	1	1	1	A	2	3	3	3	5	6	7	11	5.1	13.1
15-Jul-04	8	9	11	9	8	12	10	6	10	13	10	3	2	1	A	2	2	4	5	5	5	6	6	4	6.6	13.2
16-Jul-04	3	3	3	6	8	6	9	11	9	8	3	3	4	A	4	4	4	3	2	2	3	3	3	4	4.7	11.2
17-Jul-04	7	7	6	6	8	11	11	6	3	3	1	3	A	3	2	3	2	3	3	2	2	2	3	3	4.4	11.3
18-Jul-04	3	4	5	4	5	7	8	6	3	3	2	A	3	2	1	1	1	1	1	3	5	7	11	11	4.2	10.6
19-Jul-04	11	7	2	2	4	6	9	8	8	10	A	3	2	3	2	2	4	5	7	5	10	11	5	2	5.6	11.1
20-Jul-04	2	2	1	1	3	6	5	3	3	A	3	2	2	2	2	2	3	2	2	2	3	3	2	2	2.5	6.3
21-Jul-04	2	3	2	1	3	7	10	3	A	3	4	3	2	2	2	2	1	2	2	4	7	8	8	7	3.8	10.3
22-Jul-04	4	3	2	3	4	7	9	A	6	4	2	2	2	3	3	3	2	1	4	3	5	17	19	13	5.3	19.0
23-Jul-04	13	9	7	8	6	7	A	19	22	8	6	5	3	2	3	4	3	2	2	6	10	11	9	7	7.5	22.1
24-Jul-04	12	12	11	7	8	A	10	9	9	12	10	10	8	6	4	3	2	2	3	4	11	9	4	1	7.3	12.0
25-Jul-04	2	3	3	3	A	9	8	4	3	3	3	1	1	1	1	1	3	2	1	1	1	1	2	2	2.7	8.8
26-Jul-04	2	0	0	A	2	3	4	5	3	2	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1.8	4.6
27-Jul-04	1	0	A	2	2	3	2	2	2	1	1	0	1	0	1	1	1	1	1	1	3	6	4	5	1.7	5.9
28-Jul-04	5	A	5	4	7	10	8	10	8	8	4	2	1	2	2	3	3	3	3	5	6	8	7	6	5.2	10.0
29-Jul-04	A	12	9	5	5	9	6	5	3	2	2	1	1	2	2	3	2	2	2	3	4	5	4	A	4.1	12.1
30-Jul-04	4	3	2	3	5	10	7	8	3	3	2	1	1	1	1	1	2	5	4	4	2	2	A	4	3.3	10.4
31-Jul-04	2	4	2	4	3	5	4	2	2	2	2	1	1	1	1	1	1	3	2	4	5	A	10	13	3.2	13.4
Hourly Avg	5.2	4.9	4.3	N	N	6.5	6.6	5.9	5.2	4.3	2.9	2.3	N	N	1.9	2.2	2.2	2.6	2.8	3.2	4.8	N	6.4	5.7		
Hourly Max	13.5	12.1	11.2	9.1	8.4	12.1	13.1	19.0	22.1	13.2	10.1	10.0	8.5	6.1	5.0	6.6	5.0	5.5	7.3	5.6	10.8	17.3	19.0	13.4		

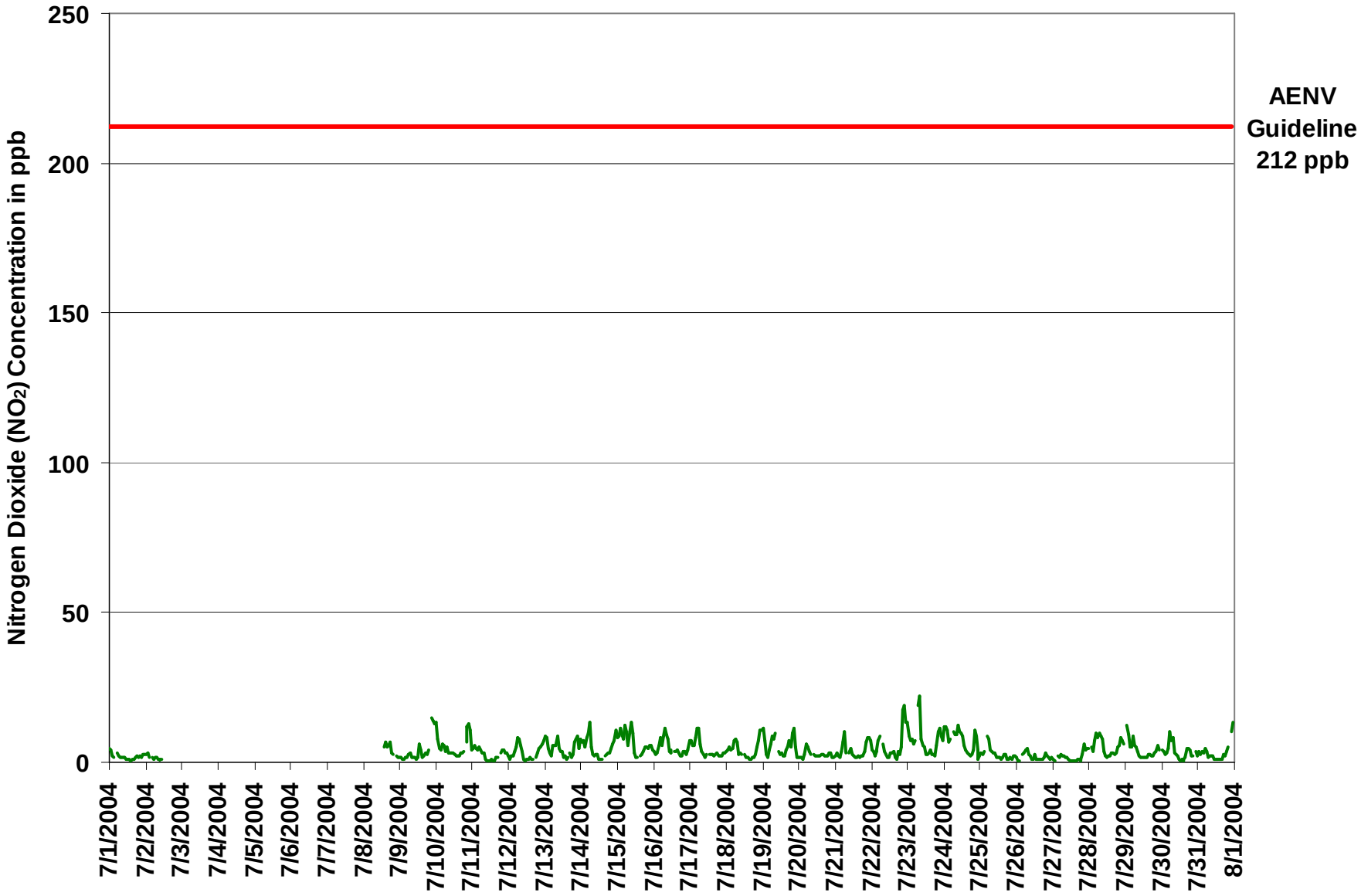


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	53.1	ppb	30-Jul	7:00 8:00
Maximum 24-hr Value:	12.6	ppb	23-Jul	

AIC Time:	27 hrs	Operational Time:	571 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%

Percentile	99	95	75	50	25	5	1	Average
	24	15	9	5	3	2	1	6.8 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	9	7	5	2	A	6	4	3	2	2	3	2	1	2	1	2	2	3	4	3	3	3	4	4	3.4	9.1
2-Jul-04	4	6	2	A	2	2	2	2	2	2	1	2	S	S	S	S	S	S	S	S	S	S	S	S	N	6.1
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Jul-04	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
6-Jul-04	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
7-Jul-04	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
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	13	11	7	13	13	6	4	A	3	3	N	13.2
9-Jul-04	2	3	2	3	3	4	7	8	2	2	3	1	3	9	7	3	4	4	7	6	A	18	22	19	6.3	22.2
10-Jul-04	16	9	6	5	8	8	5	9	4	4	4	4	4	3	3	3	4	4	5	A	10	16	19	14	7.5	19.1
11-Jul-04	7	7	8	6	6	9	5	4	4	2	1	1	1	2	1	3	3	3	A	6	8	7	5	4	4.5	8.5
12-Jul-04	4	2	3	3	8	11	13	15	7	8	3	2	3	3	3	4	2	A	3	11	8	9	8	10	6.2	15.5
13-Jul-04	11	11	6	5	5	7	8	8	14	13	5	5	3	23	2	3	A	18	3	8	9	12	12	7	8.6	23.5
14-Jul-04	9	7	11	7	11	12	17	10	3	3	4	4	2	2	1	A	3	4	4	7	8	12	14	16	7.6	16.7
15-Jul-04	13	11	14	11	10	17	15	9	14	15	16	5	4	4	A	4	5	6	9	7	7	7	9	8	9.5	16.6
16-Jul-04	4	4	5	8	13	10	13	13	12	10	8	5	5	A	5	5	6	4	3	3	6	5	4	7	7.0	13.5
17-Jul-04	10	9	7	7	13	13	15	9	5	3	2	4	A	4	4	5	3	4	7	6	5	3	4	5	6.5	14.6
18-Jul-04	5	7	8	6	9	10	9	9	4	4	4	A	5	3	2	1	1	2	2	7	9	10	14	13	6.4	13.5
19-Jul-04	13	12	4	3	6	8	14	11	9	11	A	6	5	4	4	3	9	11	13	12	15	15	11	2	8.8	15.1
20-Jul-04	3	2	3	2	5	12	9	5	4	A	4	3	3	4	3	5	5	4	3	3	4	5	4	3	4.4	12.0
21-Jul-04	3	3	3	2	7	15	14	9	A	5	8	5	3	3	3	3	3	6	3	6	9	9	11	11	6.4	15.1
22-Jul-04	5	5	3	5	5	9	11	A	11	5	5	3	3	8	6	6	3	3	9	6	6	24	24	20	8.1	24.1
23-Jul-04	18	14	10	9	9	9	A	22	27	21	9	29	4	3	5	28	5	4	5	8	14	15	10	13	12.6	28.6
24-Jul-04	15	14	15	8	10	A	13	14	12	14	12	12	11	7	5	4	9	3	4	9	15	15	11	2	10.3	15.5
25-Jul-04	4	5	4	5	A	12	11	7	5	4	5	3	3	2	2	3	6	5	2	2	3	2	5	3	4.4	11.5
26-Jul-04	3	2	2	A	4	5	7	9	5	6	2	3	6	3	2	3	2	2	3	7	3	2	2	3	3.6	8.7
27-Jul-04	2	1	A	3	3	4	3	5	6	3	2	1	2	2	3	2	3	2	2	3	6	9	6	7	3.6	8.5
28-Jul-04	9	A	9	6	12	13	13	12	12	13	6	4	5	5	3	5	5	32	11	9	8	13	11	9	9.8	32.5
29-Jul-04	A	14	11	8	8	12	11	7	5	3	3	2	3	3	4	4	5	3	4	5	7	11	7	A	6.5	14.4
30-Jul-04	5	5	4	5	11	16	11	53	7	5	5	2	3	2	2	3	7	8	7	6	5	7	A	5	8.0	53.1
31-Jul-04	5	11	4	6	5	9	6	3	3	4	3	2	3	2	2	3	3	4	4	6	14	A	13	16	5.6	16.1
Hourly Avg	7.5	7.2	6.3	N	N	9.7	9.8	10.7	7.6	6.8	5.0	4.7	N	N	3.6	4.9	4.4	6.3	5.4	6.4	7.9	N	9.7	8.5		
Hourly Max	17.9	14.4	15.4	11.4	13.5	16.6	16.7	53.1	26.8	20.5	16.0	28.6	11.2	23.5	13.2	27.9	9.0	32.5	13.1	11.7	15.5	24.1	23.5	19.5		

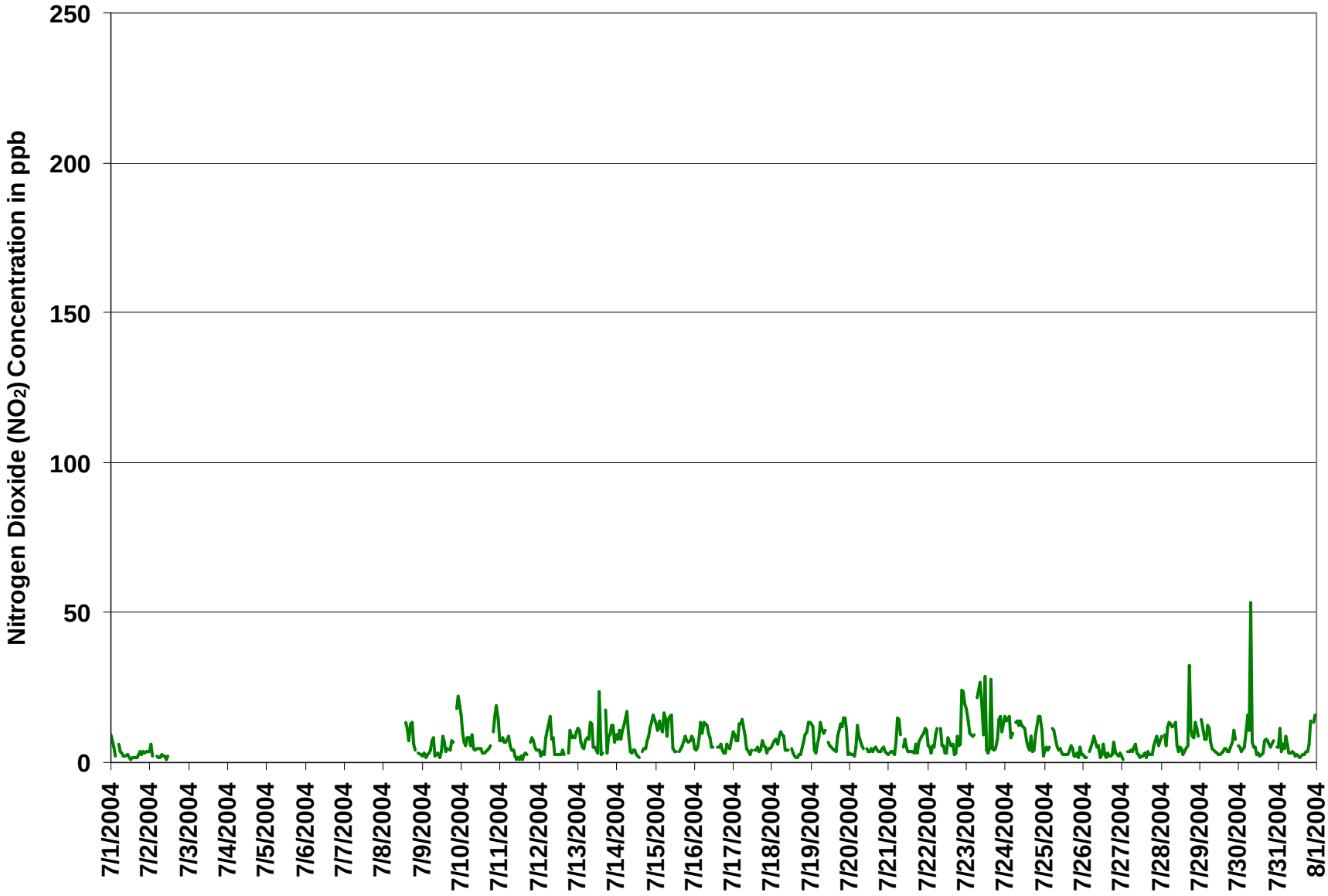
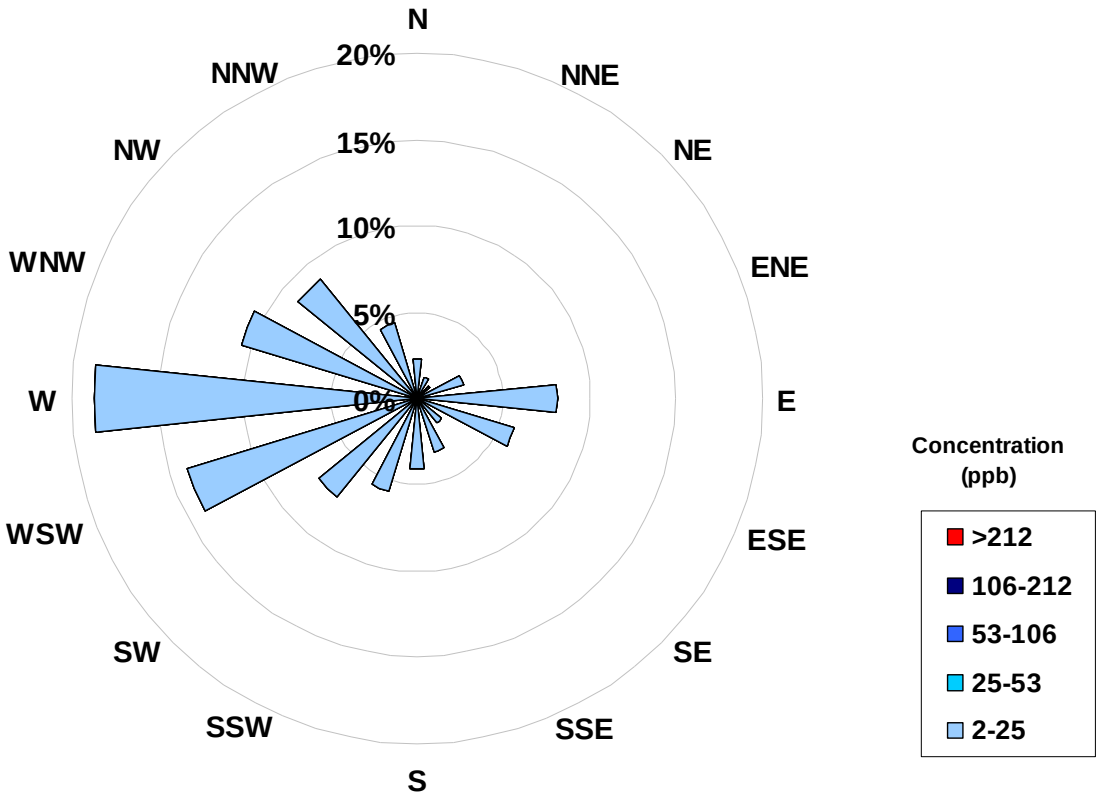


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

Concentration Rose for the 1-hr NO_2 Average Concentration Occurrences at the Henry Pirker Site for July 2004



Frequency Distribution of NO_2 in ppb			
Range			Frequency (hrs)
0	<	2	175
2	to	25	396
25	to	53	0
53	to	106	0
106	to	212	0
	>	212	0
Total Non-Zero Values			571

Calms	
Range	
ppb	
2-25	0.0%
25-53	0.0%
53-106	0.0%
106-212	0.0%
>212	0.0%

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	48	ppb	23-Jul	8:00 9:00
Maximum 24-hr Average:	8	ppb	23-Jul	

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

AIC Time:	27 hrs	Operational Time:	571 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%

Percentile	99	95	75	50	25	5	1	Average
	15	6	1	1	0	0	0	1.4 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
2-Jul-04	0	0	0	A	0	0	0	0	0	0	0	0	S	S	S	S	S	S	S	S	S	S	S	S	N	0.4
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Jul-04	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
6-Jul-04	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
7-Jul-04	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
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	3	3	1	1	0	0	0	A	1	1	N	2.8
9-Jul-04	1	0	0	0	0	0	0	1	0	0	1	1	0	2	3	1	1	1	0	1	A	1	1	1	0.7	2.5
10-Jul-04	1	0	0	0	1	4	3	5	3	1	1	1	0	0	0	0	0	0	1	A	1	1	1	0	1.1	4.5
11-Jul-04	0	0	1	0	0	1	2	2	3	1	1	1	0	1	1	1	1	1	A	1	1	0	0	0	0.8	2.5
12-Jul-04	0	0	0	0	1	2	7	9	5	3	1	1	1	1	1	1	1	A	1	3	1	1	1	1	1.8	8.8
13-Jul-04	1	1	0	1	1	4	6	5	5	3	2	2	1	1	0	0	A	1	1	0	0	0	0	0	1.5	5.6
14-Jul-04	0	0	0	0	1	10	27	10	3	2	2	1	1	1	1	A	1	1	1	0	0	0	0	1	2.7	27.0
15-Jul-04	0	0	1	0	0	6	13	5	10	9	4	1	0	0	A	0	0	1	1	1	1	0	0	0	2.3	12.6
16-Jul-04	0	0	0	0	0	0	4	6	5	3	1	1	1	A	1	1	1	0	0	0	0	0	0	0	1.0	5.8
17-Jul-04	0	0	0	0	0	2	6	5	2	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	1.2	5.8
18-Jul-04	0	0	0	0	0	1	3	3	1	1	1	A	0	0	0	0	0	0	1	1	1	0	1	1	0.7	3.4
19-Jul-04	1	1	0	0	0	1	2	3	2	6	A	1	1	1	1	1	1	1	1	0	0	0	0	0	1.0	6.1
20-Jul-04	0	0	0	0	0	1	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1.0	2.3
21-Jul-04	0	0	0	0	0	1	5	2	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.8	4.7
22-Jul-04	0	0	0	0	1	3	6	A	6	4	2	1	1	1	2	1	1	0	1	1	0	5	3	1	1.7	6.0
23-Jul-04	5	9	5	19	19	12	A	38	48	9	4	3	0	0	0	2	0	0	0	1	1	0	0	0	7.7	48.1
24-Jul-04	1	3	3	2	3	A	19	7	4	4	2	1	0	0	0	0	2	0	0	0	1	0	0	0	2.3	19.3
25-Jul-04	0	0	0	0	A	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8
26-Jul-04	0	0	0	A	0	1	1	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.8
27-Jul-04	0	0	A	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
28-Jul-04	0	A	0	0	0	2	4	10	7	6	2	1	1	1	0	1	1	6	1	0	0	0	0	0	1.8	10.5
29-Jul-04	A	1	0	0	1	5	3	3	3	2	2	2	1	1	1	1	2	1	1	1	1	0	0	A	1.5	5.5
30-Jul-04	0	0	0	0	0	2	3	8	2	1	1	0	0	1	0	0	0	1	1	1	1	0	A	0	1.0	7.9
31-Jul-04	0	0	0	1	1	1	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	A	2	6	1.2	6.0
Hourly Avg	0.4	0.8	0.5	N	N	2.5	5.0	5.4	4.9	2.6	1.3	0.9	N	N	0.7	0.8	0.7	0.8	0.6	0.6	0.5	N	0.4	0.5		
Hourly Max	4.6	9.0	4.6	19.3	19.3	12.4	27.0	38.1	48.1	9.4	3.7	2.9	1.4	2.1	2.6	2.8	1.5	6.2	1.3	2.9	1.1	4.5	2.9	6.0		

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	62.0	ppb	30-Jul	7:00 8:00
Maximum 24-hr Value:	18.3	ppb	23-Jul	

AIC Time:	27 hrs	Operational Time:	571 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%

Percentile	99	95	75	50	25	5	1	Average
	41	15	3	2	1	0	0	3.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	1	7	1	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0.8	7.1
2-Jul-04	0	2	0	A	0	1	1	2	1	2	1	2	S	S	S	S	S	S	S	S	S	S	S	S	N	2.1
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Jul-04	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
6-Jul-04	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
7-Jul-04	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
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	10	7	3	5	6	15	1	A	1	1	N	14.7
9-Jul-04	1	1	1	1	1	1	1	2	1	1	2	1	1	4	5	2	1	1	2	1	A	3	8	4	2.0	8.1
10-Jul-04	4	2	1	1	5	8	4	9	5	2	1	1	1	0	1	1	1	1	1	A	2	5	9	1	2.9	9.4
11-Jul-04	0	1	8	1	1	2	4	3	3	2	1	1	1	2	1	1	2	1	A	1	2	1	1	1	1.8	7.5
12-Jul-04	1	1	1	1	3	8	17	18	9	16	3	2	2	2	3	3	2	A	4	25	1	1	3	5	5.6	25.2
13-Jul-04	10	3	1	1	2	7	10	9	10	10	3	4	1	12	2	2	A	8	2	1	0	1	1	0	4.4	11.9
14-Jul-04	0	0	2	1	4	15	39	28	5	3	3	3	1	1	1	A	1	1	1	1	0	0	2	3	5.0	39.2
15-Jul-04	2	1	2	1	2	17	35	9	15	12	8	1	3	1	A	1	1	3	3	1	3	1	1	5	5.6	35.5
16-Jul-04	0	1	2	1	3	1	13	8	7	4	3	1	1	A	1	2	1	1	1	1	0	1	1	0	2.2	13.0
17-Jul-04	0	0	0	0	1	4	11	9	3	2	1	1	A	1	2	2	2	2	4	2	1	1	0	1	2.3	11.1
18-Jul-04	1	1	0	0	2	4	4	4	2	3	2	A	1	1	1	1	1	1	1	1	2	1	3	5	1.7	4.6
19-Jul-04	4	8	0	0	0	2	6	5	3	10	A	2	2	2	1	1	4	3	1	3	2	1	1	0	2.7	10.4
20-Jul-04	0	1	1	1	1	5	5	3	3	A	2	3	3	4	3	3	3	3	2	2	2	1	1	1	2.1	5.2
21-Jul-04	1	1	1	1	1	7	8	7	A	4	5	3	3	2	2	2	1	2	1	1	1	1	1	1	2.3	8.0
22-Jul-04	0	1	1	1	1	5	12	A	13	8	7	2	2	4	4	3	1	1	4	3	1	14	12	2	4.3	13.9
23-Jul-04	31	27	14	27	28	22	A	47	55	36	22	49	2	0	0	51	1	1	1	2	2	2	1	2	18.3	54.8
24-Jul-04	5	9	9	8	7	A	35	30	8	6	3	1	1	0	1	0	34	0	1	1	3	4	3	0	7.3	35.0
25-Jul-04	1	0	1	0	A	3	3	3	3	3	2	1	1	1	1	1	1	1	1	0	1	0	1	0	1.2	3.0
26-Jul-04	0	0	1	A	1	1	3	3	3	3	1	2	4	2	1	1	1	1	3	1	0	0	0	0	1.5	3.7
27-Jul-04	0	0	A	0	0	1	1	2	14	2	1	1	1	2	2	1	1	1	0	1	1	0	0	0	1.5	14.1
28-Jul-04	1	A	0	1	0	6	8	15	14	13	5	2	4	4	1	2	2	49	13	1	0	1	1	1	6.3	49.5
29-Jul-04	A	3	1	1	4	22	12	5	4	3	3	2	2	2	2	2	2	2	2	1	28	1	0	A	4.8	28.0
30-Jul-04	0	0	0	0	1	4	9	62	3	3	3	2	2	3	1	1	2	2	2	2	3	3	A	1	4.8	62.0
31-Jul-04	1	2	1	1	1	4	3	2	4	4	3	1	3	2	2	4	2	2	3	2	3	A	4	14	3.0	14.0
Hourly Avg	2.7	2.9	2.0	N	N	6.3	10.3	11.9	7.9	6.3	3.6	3.7	N	N	1.9	3.9	3.0	3.9	2.4	2.8	2.4	N	2.3	2.0		
Hourly Max	30.7	27.5	14.2	26.6	28.0	22.4	39.2	62.0	54.8	36.1	21.6	49.0	4.4	11.9	9.9	50.7	34.1	49.5	13.1	25.2	28.0	13.9	11.6	14.0		

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	70	ppb	23-Jul	8:00 9:00
Maximum 24-hr Average:	15	ppb	23-Jul	

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

AIC Time:	27 hrs	Operational Time:	571 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%

Percentile	99	95	75	50	25	5	1	Average
	24	15	7	4	2	1	1	5.5 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	5	5	2	2	A	4	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	1	3	2	2.0	5.1
2-Jul-04	3	3	2	A	2	2	2	2	2	1	1	2	S	S	S	S	S	S	S	S	S	S	S	S	N	3.1
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Jul-04	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
6-Jul-04	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
7-Jul-04	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
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	8	10	6	6	7	3	3	A	3	2	N	9.7
9-Jul-04	2	2	1	2	2	2	3	4	2	2	2	2	2	8	7	3	3	4	3	5	A	16	15	14	4.6	15.9
10-Jul-04	15	8	5	4	7	10	7	10	7	4	4	4	3	2	2	2	3	4	4	A	7	13	14	11	6.5	14.6
11-Jul-04	4	5	6	5	4	6	6	5	6	2	1	1	1	1	1	1	3	2	A	4	5	4	3	3	3.4	6.3
12-Jul-04	2	1	2	2	4	7	15	17	10	7	2	1	2	2	3	2	2	A	2	6	5	6	7	8	5.0	16.6
13-Jul-04	9	9	5	4	3	10	11	11	14	7	6	5	2	3	2	2	A	4	2	3	6	8	9	5	6.0	14.0
14-Jul-04	8	6	7	5	9	20	40	15	5	4	4	4	1	1	1	A	3	3	4	3	5	6	7	11	7.6	40.1
15-Jul-04	8	9	12	9	8	18	23	11	20	23	13	4	2	2	A	2	3	5	6	6	5	6	6	5	9.0	23.3
16-Jul-04	3	3	3	6	9	6	13	17	14	10	4	4	5	A	4	4	5	3	2	2	4	3	3	4	5.7	17.3
17-Jul-04	7	7	6	6	8	13	17	11	5	3	1	3	A	3	3	3	3	3	4	3	3	2	3	3	5.2	17.0
18-Jul-04	3	4	5	4	4	9	11	10	4	4	3	A	3	2	2	1	1	2	2	3	6	7	11	11	4.9	11.3
19-Jul-04	12	9	2	2	4	7	11	11	9	16	A	4	3	4	3	2	5	6	8	5	10	11	5	2	6.6	16.0
20-Jul-04	2	2	1	1	3	8	7	6	4	A	4	3	3	3	3	4	4	4	3	3	4	3	2	2	3.4	7.6
21-Jul-04	2	3	2	2	4	8	15	5	A	4	6	4	3	3	2	3	2	3	2	4	7	8	8	7	4.6	15.1
22-Jul-04	4	4	2	4	4	10	15	A	12	7	5	3	2	4	4	5	2	1	4	3	5	22	22	14	6.9	21.7
23-Jul-04	18	18	12	27	25	20	A	57	70	17	9	8	3	2	4	7	3	3	2	6	11	11	9	7	15.2	70.2
24-Jul-04	12	15	14	9	11	A	30	17	13	16	12	11	9	6	4	3	4	2	3	4	12	9	4	1	9.7	29.7
25-Jul-04	2	3	2	3	A	9	9	5	5	4	4	2	2	1	1	2	3	3	1	1	1	1	2	2	3.0	9.5
26-Jul-04	2	0	0	A	2	3	5	6	4	3	2	2	4	2	1	2	2	1	2	3	2	1	1	1	2.2	6.2
27-Jul-04	1	0	A	2	2	3	2	3	3	2	1	0	1	1	0	1	1	1	1	1	3	6	4	5	1.9	6.1
28-Jul-04	5	A	6	4	7	12	12	21	16	14	5	2	2	3	2	4	4	9	4	5	6	9	7	6	7.2	20.9
29-Jul-04	A	13	10	5	6	14	9	8	6	4	3	3	3	3	3	4	4	3	2	3	5	5	4	A	5.4	14.4
30-Jul-04	3	3	2	3	4	12	10	16	4	4	3	1	1	1	0	1	2	5	5	5	2	2	A	4	4.1	15.8
31-Jul-04	2	4	3	4	3	6	5	3	4	4	4	2	2	2	2	2	2	4	3	5	6	A	12	20	4.3	19.6
Hourly Avg	5.6	5.6	4.8	N	N	9.0	11.7	11.4	10.2	6.9	4.2	3.1	N	N	2.6	2.9	2.8	3.4	3.3	3.8	5.2	N	6.8	6.2		
Hourly Max	17.9	17.9	14.4	27.2	25.2	19.6	40.1	57.0	70.2	22.9	13.5	11.0	8.9	8.4	7.7	9.7	6.1	9.0	7.9	6.3	11.7	21.7	21.6	19.6		

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	113.7	ppb	30-Jul	7:00 8:00
Maximum 24-hr Value:	29.6	ppb	23-Jul	

AIC Time:	27 hrs	Operational Time:	571 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%

Percentile	99	95	75	50	25	5	1	Average
	60	29	12	7	4	2	2	10.3 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	10	14	5	3	A	7	4	4	2	3	4	2	1	2	1	2	2	3	4	3	3	3	4	5	4.0	14.4
2-Jul-04	4	8	2	A	3	3	2	4	3	3	1	3	S	S	S	S	S	S	S	S	S	S	S	S	N	8.2
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Jul-04	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
6-Jul-04	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
7-Jul-04	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
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	22	18	9	18	19	20	5	A	3	3	N	21.9
9-Jul-04	3	4	2	3	4	5	8	10	3	4	5	3	5	12	12	5	6	5	9	8	A	22	31	23	8.4	30.9
10-Jul-04	21	10	8	6	12	14	10	19	10	5	6	6	5	4	3	5	5	5	6	A	11	19	28	15	10.0	27.5
11-Jul-04	7	7	13	7	7	11	9	6	7	4	2	2	2	4	2	4	5	3	A	8	9	7	5	5	6.0	13.4
12-Jul-04	5	2	4	3	11	19	31	34	17	24	5	4	5	4	4	6	4	A	6	34	9	9	11	14	11.5	34.0
13-Jul-04	21	13	7	5	7	14	18	17	23	23	8	8	4	35	3	4	A	26	5	9	9	12	13	7	12.7	35.3
14-Jul-04	9	8	12	8	14	26	56	38	9	6	6	6	3	3	2	A	4	5	5	8	9	12	15	18	12.4	56.0
15-Jul-04	14	12	15	12	12	33	50	18	30	25	24	6	6	5	A	4	6	9	10	9	8	9	10	14	14.8	49.9
16-Jul-04	4	4	6	9	14	11	27	21	20	14	11	6	6	A	6	6	7	4	3	3	6	5	6	7	8.9	26.9
17-Jul-04	10	9	7	7	13	16	26	17	8	5	3	6	A	4	6	7	5	6	11	8	6	3	5	5	8.4	25.8
18-Jul-04	5	8	8	6	11	15	14	14	6	6	6	A	6	4	3	2	2	4	3	8	11	11	16	18	8.0	18.1
19-Jul-04	17	20	4	3	6	9	19	16	12	21	A	9	7	6	5	4	11	13	14	14	15	15	11	2	11.0	21.0
20-Jul-04	3	3	3	2	5	17	13	8	7	A	6	5	6	8	6	8	8	6	5	5	5	5	4	3	6.3	17.0
21-Jul-04	3	4	4	2	8	23	20	16	A	9	11	7	6	6	5	5	4	8	4	7	9	10	12	10	8.4	22.8
22-Jul-04	5	5	3	6	6	15	23	A	24	13	13	4	4	12	9	8	4	4	11	8	6	36	33	21	12.0	35.9
23-Jul-04	46	40	22	34	34	30	A	68	81	56	27	77	6	3	5	68	5	5	6	9	15	17	11	14	29.6	81.1
24-Jul-04	20	21	23	15	18	A	48	42	20	19	16	13	12	8	6	4	32	4	5	10	18	19	14	2	16.8	48.1
25-Jul-04	4	5	4	5	A	13	12	10	7	6	6	4	3	2	3	5	7	6	2	2	4	2	6	3	5.3	13.0
26-Jul-04	3	2	2	A	4	7	9	12	8	9	3	5	10	4	2	5	3	3	4	8	3	2	2	3	4.8	11.5
27-Jul-04	2	1	A	3	3	5	4	8	17	5	4	2	3	3	5	2	5	3	3	3	6	9	6	8	4.8	17.4
28-Jul-04	10	A	10	6	12	19	19	26	24	26	9	5	10	9	4	7	7	67	24	10	9	14	12	9	15.1	67.3
29-Jul-04	A	15	11	9	12	34	23	12	9	6	6	5	5	5	5	7	7	5	5	6	21	11	8	A	10.3	33.7
30-Jul-04	5	4	3	5	11	19	19	114	10	9	8	4	5	5	2	3	9	9	8	7	8	10	A	6	12.3	113.7
31-Jul-04	5	13	4	7	5	13	8	5	6	7	6	3	6	3	3	6	4	6	5	8	17	A	17	30	8.2	30.1
Hourly Avg	9.8	9.6	7.6	N	N	15.6	19.8	22.4	15.2	12.8	8.2	8.1	N	N	5.3	8.1	6.7	9.5	7.5	8.9	9.3	N	11.7	10.2		
Hourly Max	45.7	40.0	22.5	34.5	33.6	33.7	56.0	113.7	81.1	56.4	27.1	77.1	12.0	35.3	21.9	67.5	32.3	67.3	23.9	33.6	20.6	35.9	33.0	30.1		

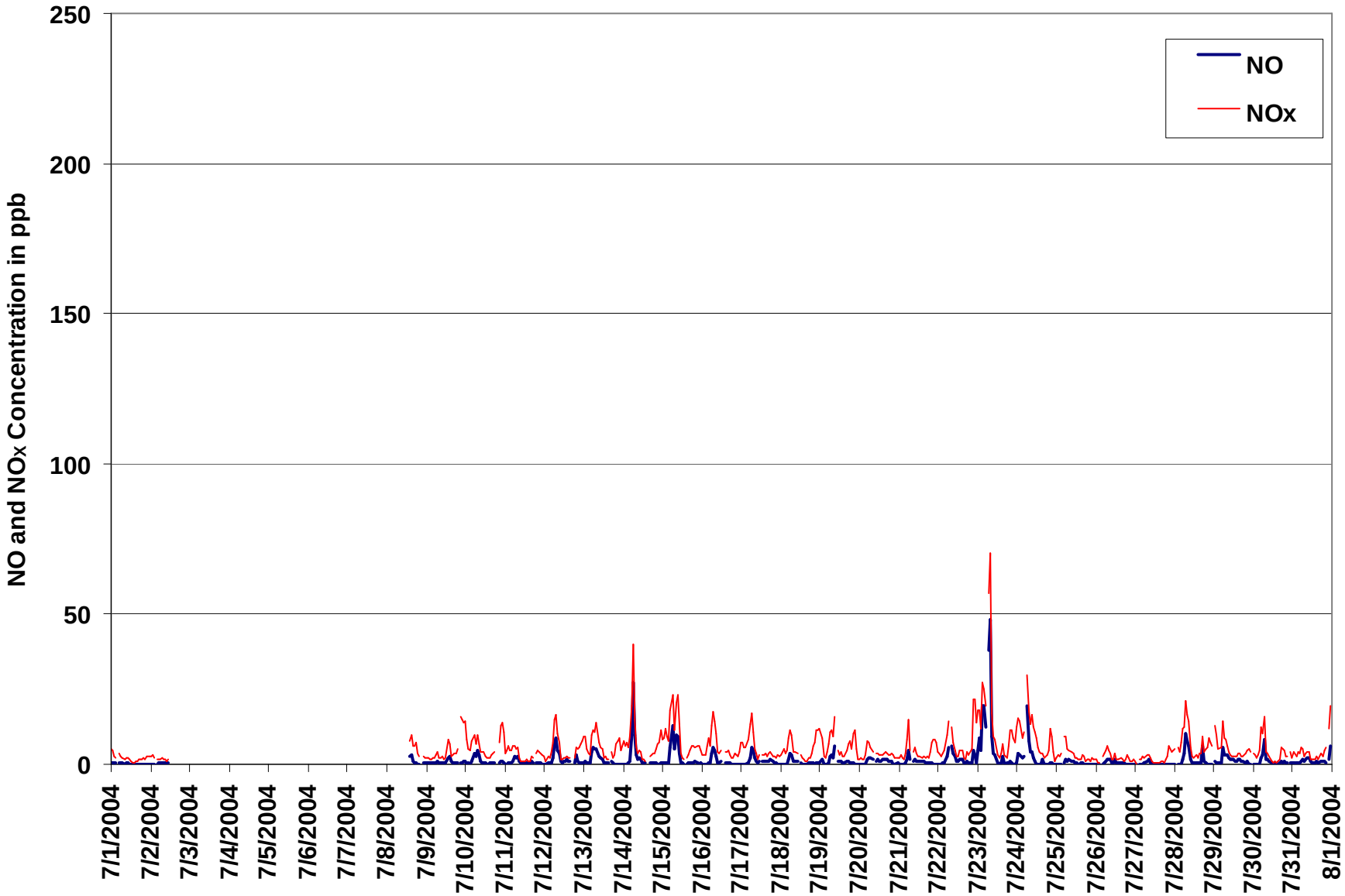


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trends

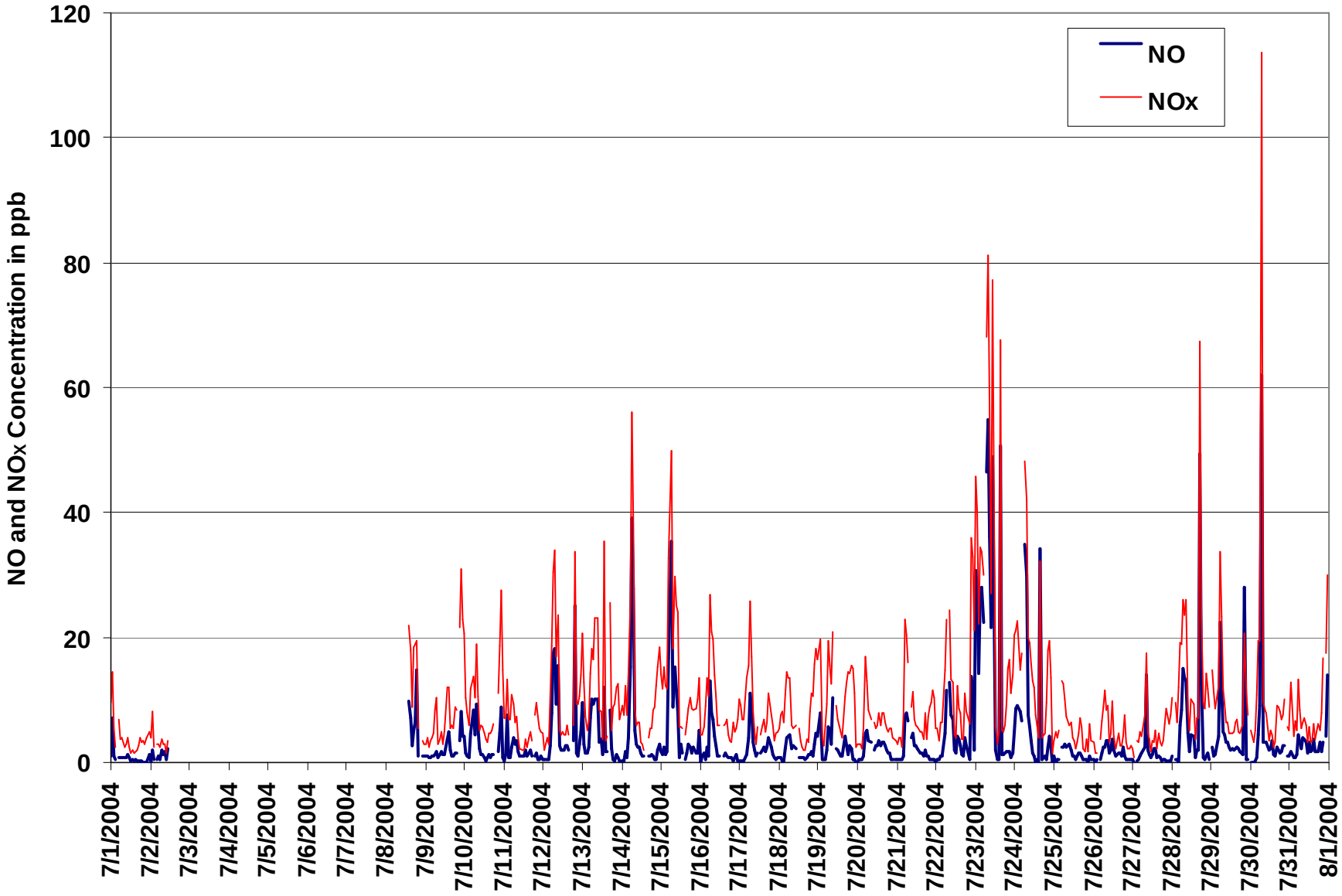


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Maximum Value Monthly Trends

PASZA - Henry Pirker Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O_3)

Station: Henry Pirker

Station Owner: PASZA

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	78.7	ppb	24-Jul	12:00 13:00
Maximum 24-hr Average:	34.0	ppb	1-Jul	

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

AIC Time:	33 hrs	Operational Time:	705 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average
	56	41	29	22	15	5	1	22.5 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	A	16	26	28	29	27	30	30	26	26	30	38	47	52	54	56	52	44	36	32	26	26	18	A	34.0	55.6
2-Jul-04	17	13	18	18	14	13	13	12	13	15	19	20	19	14	17	17	23	18	21	19	19	16	A	17	16.7	23.3
3-Jul-04	17	15	12	12	12	13	13	9	18	21	20	19	18	19	20	20	20	20	30	30	24	A	22	28	18.8	29.9
4-Jul-04	23	25	23	20	16	15	16	15	17	21	22	22	25	27	26	26	27	27	25	23	A	13	14	14	21.0	27.3
5-Jul-04	15	15	12	10	10	7	8	7	11	17	20	23	26	27	26	28	29	29	29	A	20	12	15	15	17.9	29.2
6-Jul-04	11	13	15	15	10	5	2	1	5	9	15	18	18	20	N	N	27	27	A	23	19	21	22	15	14.8	27.0
7-Jul-04	15	17	19	20	20	16	11	16	16	15	16	18	19	21	25	23	25	A	24	24	26	26	24	23	19.9	25.8
8-Jul-04	23	22	21	19	21	18	20	19	17	17	19	18	17	C	C	C	C	A	25	27	29	25	23	23	21.1	29.1
9-Jul-04	23	25	26	25	31	30	26	22	22	21	23	25	25	19	27	29	A	28	26	27	22	13	8	7	23.1	30.7
10-Jul-04	5	7	8	7	3	3	8	10	14	23	30	38	39	42	45	A	41	33	27	22	18	9	5	7	19.2	44.5
11-Jul-04	13	11	10	11	9	10	11	13	18	25	29	29	30	29	A	32	31	30	32	28	24	20	14	15	20.6	32.3
12-Jul-04	16	15	12	11	11	10	8	11	14	19	26	28	30	A	26	25	26	23	23	20	18	15	12	10	17.8	29.6
13-Jul-04	6	4	9	6	5	4	6	10	11	16	19	23	A	32	32	31	28	28	29	31	28	23	18	19	18.2	32.3
14-Jul-04	13	12	8	9	6	2	2	6	12	18	22	A	29	29	32	34	36	32	39	36	26	20	16	10	19.5	38.6
15-Jul-04	12	10	6	7	9	5	5	11	13	19	A	41	36	31	30	36	38	36	33	32	24	20	18	20	21.3	41.0
16-Jul-04	26	27	28	19	16	21	12	13	20	A	39	42	44	46	45	49	57	53	46	39	36	36	33	28	33.7	56.6
17-Jul-04	23	16	17	16	11	7	9	12	A	28	33	33	34	35	35	35	35	33	29	27	25	24	21	18	24.1	35.3
18-Jul-04	18	15	12	15	13	10	12	A	19	22	26	30	32	31	33	30	29	30	23	21	16	13	8	6	20.1	33.1
19-Jul-04	4	7	15	19	16	14	A	14	13	11	20	29	29	37	43	43	35	26	22	31	24	17	19	29	22.5	43.2
20-Jul-04	31	28	25	22	19	A	17	21	25	29	31	31	30	30	29	29	29	30	28	26	25	25	25	24	26.3	31.0
21-Jul-04	22	20	19	19	A	11	7	16	17	17	21	28	32	33	35	38	38	37	36	33	27	23	20	18	24.7	37.9
22-Jul-04	13	10	10	A	9	6	5	4	8	11	16	23	25	24	23	28	31	30	28	27	25	8	5	8	16.4	30.6
23-Jul-04	4	0	A	0	0	1	1	3	5	12	23	35	44	47	53	57	50	48	36	29	20	19	21	21	23.1	57.5
24-Jul-04	9	A	1	1	2	0	2	13	21	32	47	64	79	77	63	61	56	38	30	24	16	17	33	36	31.3	78.7
25-Jul-04	A	29	28	22	19	13	10	14	15	24	26	30	30	28	29	36	35	32	39	36	31	28	25	A	26.2	39.1
26-Jul-04	19	33	31	25	23	18	16	15	18	20	23	23	24	25	27	25	26	32	31	26	24	26	A	23	24.0	32.8
27-Jul-04	22	25	25	25	25	22	25	25	28	28	31	33	34	37	39	40	41	40	41	40	37	A	26	25	31.0	40.7
28-Jul-04	25	23	21	21	14	11	10	9	14	19	28	31	32	34	37	40	41	38	39	36	A	24	21	20	25.5	41.1
29-Jul-04	8	3	4	8	9	4	9	10	15	18	20	26	32	35	38	36	36	35	36	A	30	27	27	26	21.5	37.6
30-Jul-04	27	26	24	21	18	12	12	15	25	30	30	32	32	30	30	30	31	25	A	22	27	27	27	23	25.0	32.3
31-Jul-04	18	16	17	13	13	11	11	14	16	16	16	23	25	26	26	24	25	A	23	17	16	9	7	3	16.7	25.8
Hourly Avg	16.4	16.6	16.8	15.4	13.7	11.4	11.2	13.0	16.2	19.9	24.7	29.1	31.1	32.2	33.8	34.2	34.4	32.1	30.4	27.8	24.2	20.0	18.8	18.3		
Hourly Max	31.0	32.8	31.1	28.2	30.7	30.3	29.8	30.2	27.6	31.5	46.6	63.9	78.7	76.8	63.3	61.1	56.6	53.2	45.6	39.6	36.7	36.0	33.3	35.8		

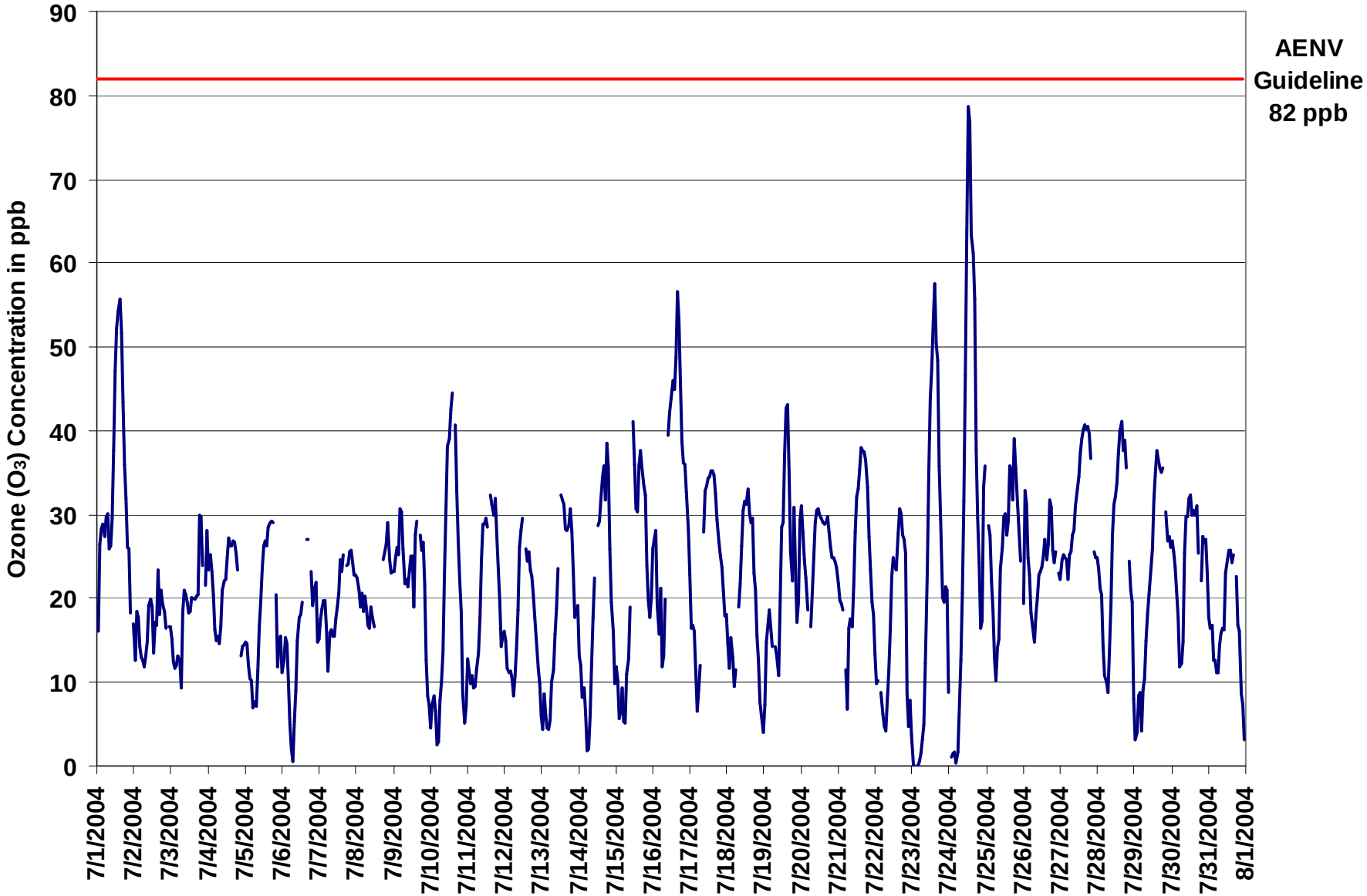


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	84.2	ppb	24-Jul	12:00 13:00
Maximum 24-hr Value:	38.5	ppb	1-Jul	

AIC Time:	33 hrs	Operational Time:	705 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average
	61	44	32	25	18	9	3	25.8 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	A	23	33	34	33	36	32	35	30	29	36	42	52	55	57	58	55	50	42	36	29	29	22	A	38.5	58.1
2-Jul-04	20	17	20	20	15	15	14	14	15	18	22	25	21	18	19	22	28	24	24	22	22	19	A	18	19.6	27.6
3-Jul-04	18	18	15	15	15	15	15	16	21	24	23	22	20	21	22	22	34	27	32	32	27	A	30	36	22.5	36.1
4-Jul-04	25	30	25	25	17	16	17	16	20	22	24	24	27	30	30	28	29	30	27	26	A	16	16	16	23.3	30.5
5-Jul-04	16	17	15	12	12	10	10	10	13	19	22	25	28	28	28	30	31	31	31	A	25	15	18	17	20.1	31.1
6-Jul-04	14	14	17	17	13	8	5	2	9	12	18	20	20	23	N	N	29	29	A	26	22	24	23	19	17.4	29.2
7-Jul-04	20	20	21	24	23	20	14	19	19	18	18	21	21	27	28	26	29	A	26	28	29	30	26	24	23.0	29.6
8-Jul-04	24	25	23	22	25	22	22	21	18	18	48	19	18	C	C	C	C	A	30	29	32	31	26	25	25.1	47.7
9-Jul-04	25	27	27	27	34	34	29	24	23	24	25	27	27	24	32	31	A	30	30	31	28	17	12	15	26.2	34.4
10-Jul-04	8	9	10	10	5	5	11	12	19	28	35	42	44	47	49	A	45	40	31	27	22	14	12	11	23.4	49.1
11-Jul-04	15	15	13	14	13	14	13	17	22	29	30	30	31	32	A	36	34	32	35	33	28	28	17	18	23.8	35.5
12-Jul-04	18	17	14	13	13	13	12	14	17	25	29	30	34	A	28	27	27	26	24	23	22	19	14	14	20.6	34.1
13-Jul-04	10	10	11	9	6	6	7	14	14	20	21	28	A	34	36	33	31	31	31	35	33	28	22	22	21.4	35.8
14-Jul-04	19	19	11	12	11	4	4	9	16	21	25	A	30	31	34	37	38	35	42	42	35	25	20	16	23.2	42.2
15-Jul-04	17	13	10	11	14	8	11	14	15	25	A	45	41	35	33	39	40	39	39	35	28	23	20	23	25.0	45.0
16-Jul-04	31	31	31	27	24	27	17	18	24	A	43	45	46	51	49	58	62	57	57	41	40	39	35	32	38.5	61.7
17-Jul-04	30	22	22	20	16	11	13	16	A	31	36	35	36	37	37	37	37	36	32	30	27	25	25	20	27.5	37.5
18-Jul-04	20	18	16	19	16	15	16	A	21	25	30	32	34	34	35	33	31	31	28	24	19	15	14	11	23.2	35.1
19-Jul-04	7	13	18	22	20	17	A	16	16	15	24	32	34	41	46	47	43	30	26	38	30	23	24	32	26.6	46.8
20-Jul-04	33	31	27	24	21	A	20	25	28	32	33	33	32	31	31	31	31	32	29	29	27	26	27	25	28.5	33.3
21-Jul-04	23	21	21	20	A	16	9	20	20	18	26	31	35	36	38	41	40	40	38	37	33	26	23	21	27.6	40.9
22-Jul-04	17	12	11	A	11	9	8	7	10	15	20	25	27	28	29	30	33	32	31	29	27	23	9	12	19.7	32.7
23-Jul-04	10	1	A	1	0	2	3	5	7	16	30	40	47	51	56	61	58	52	46	34	27	24	23	24	26.9	61.3
24-Jul-04	20	A	2	3	4	1	3	16	28	40	56	73	84	84	78	68	65	43	32	29	19	22	44	40	37.1	84.2
25-Jul-04	A	32	30	25	23	18	13	17	18	28	29	32	32	30	33	40	39	37	43	39	34	29	27	A	29.4	42.6
26-Jul-04	22	36	33	29	24	20	19	18	25	24	24	26	26	27	29	27	28	34	33	32	26	28	A	25	26.8	36.0
27-Jul-04	23	26	26	26	26	25	26	28	30	31	33	35	37	40	41	42	43	42	43	42	44	A	28	27	33.2	44.2
28-Jul-04	28	26	23	22	21	16	12	10	17	26	30	34	34	36	41	42	43	40	42	41	A	29	24	21	28.6	43.1
29-Jul-04	16	6	7	11	11	7	12	12	19	20	22	31	35	37	40	39	37	37	37	A	33	30	31	28	24.3	39.5
30-Jul-04	28	27	28	24	22	17	16	19	32	32	32	34	34	33	32	32	33	29	A	25	29	35	33	28	28.4	34.6
31-Jul-04	20	20	19	15	15	15	16	17	18	21	20	25	26	27	28	26	26	A	25	22	22	11	12	6	19.6	27.9
Hourly Avg	19.9	19.8	19.3	18.4	16.7	14.7	14.0	15.9	19.4	23.5	28.8	32.1	33.8	35.4	37.1	37.3	37.9	35.5	34.0	31.6	28.2	24.3	22.5	21.6		
Hourly Max	33.3	36.0	33.2	33.5	34.4	36.3	32.4	35.2	31.6	39.7	55.8	72.7	84.2	83.7	77.7	68.1	65.1	57.2	56.7	42.1	44.2	39.1	44.3	40.3		

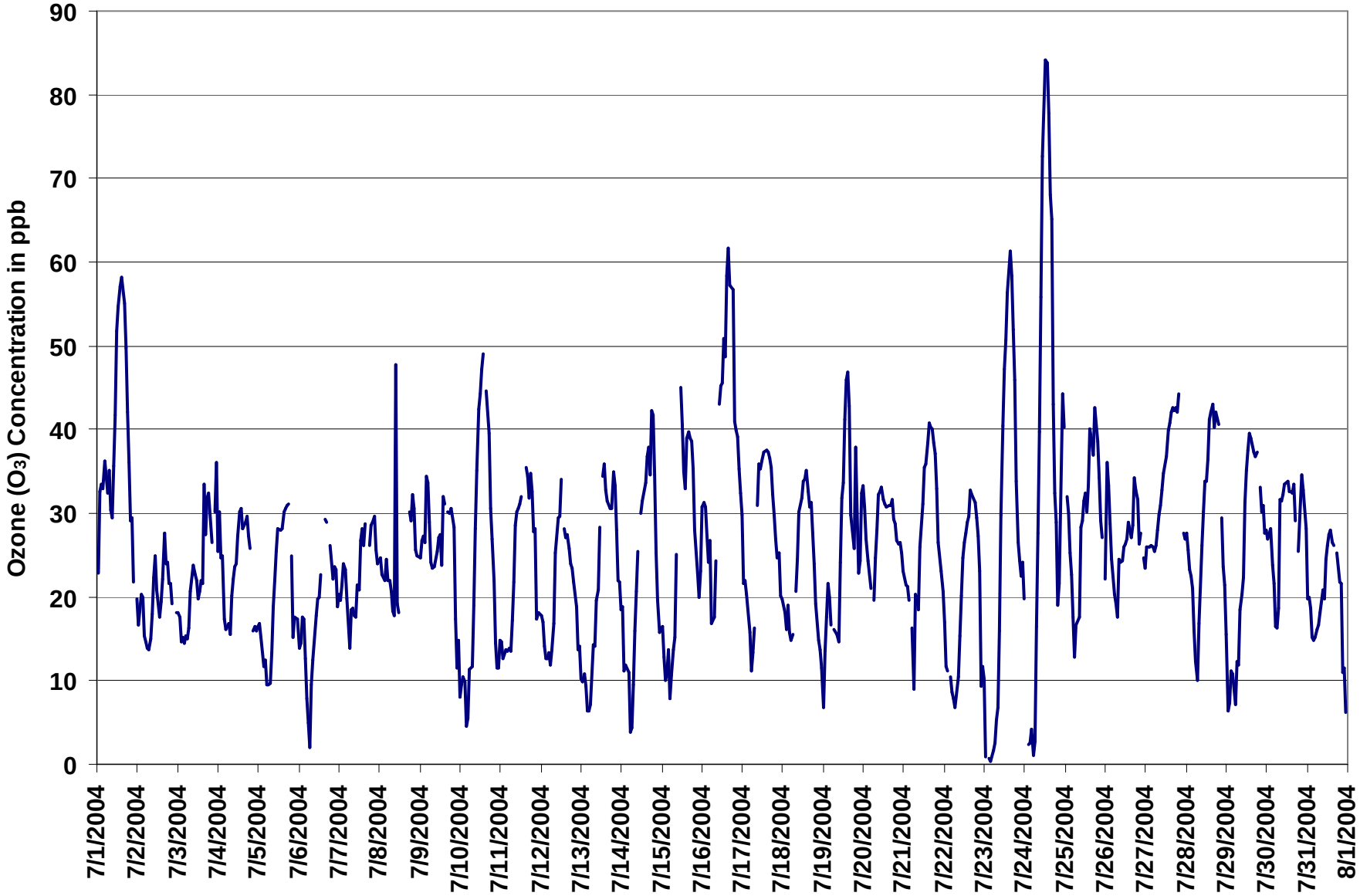


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	60.4	ppb	24-Jul	17:00 18:00

Guideline Limit: Canada Wide Standard — 8-hr 65 ppb

Percentile	99	95	75	50	25	5	1
	47.2	38.1	27.7	22.4	16.4	8.3	5.2

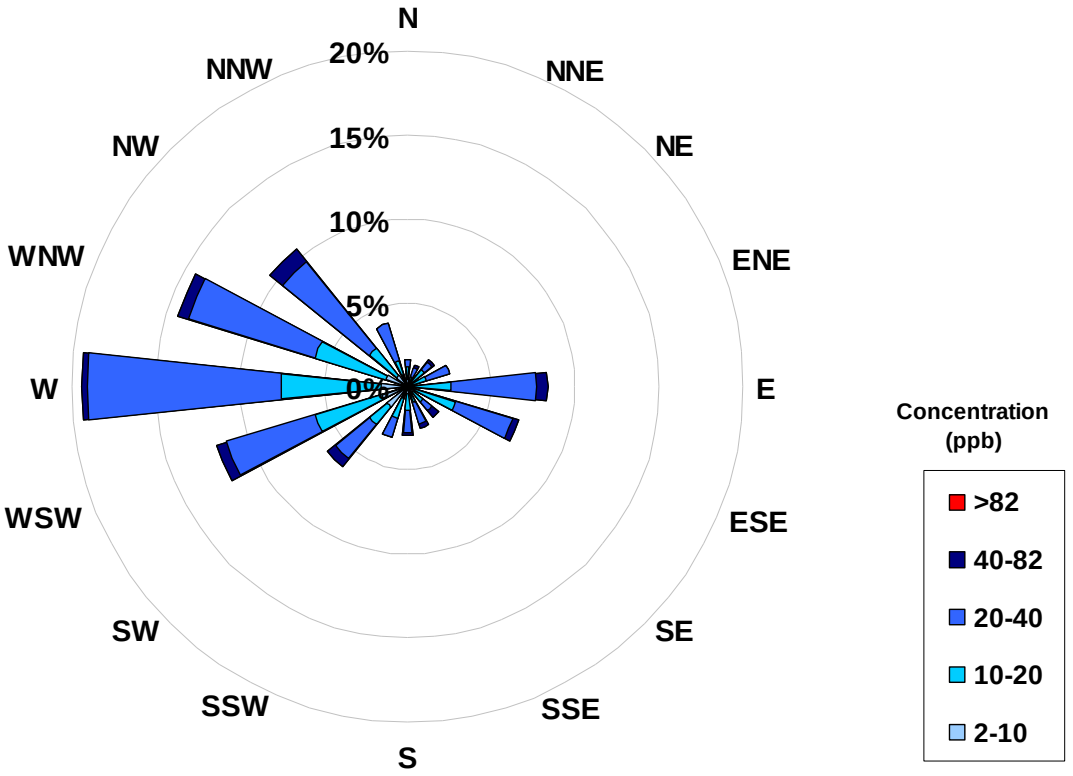
Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jul-04	A	41	38	34	32	30	28	27	27	28	28	29	32	35	38	41	44	46	47	47	44	41	36	33	35.9	47.3
2-Jul-04	28	24	21	19	18	16	15	15	14	14	15	15	15	16	16	17	18	18	19	19	18	19	19	19	17.8	28.3
3-Jul-04	18	18	16	15	14	14	14	13	13	14	15	16	17	17	18	20	20	20	21	22	23	23	24	25	17.9	24.9
4-Jul-04	25	26	25	24	23	22	21	19	18	18	18	18	19	21	22	23	25	25	26	26	26	24	22	21	22.3	26.0
5-Jul-04	19	17	15	13	13	12	11	11	10	10	11	13	15	17	20	22	25	26	27	28	27	25	23	21	18.0	27.9
6-Jul-04	19	16	14	15	13	12	11	9	8	8	8	8	9	11	12	N	N	N	N	N	N	N	N	22	N	22.0
7-Jul-04	20	19	19	19	19	18	17	17	17	17	16	16	16	16	18	19	20	21	22	23	24	25	25	25	19.4	24.6
8-Jul-04	24	24	24	23	22	21	21	20	20	19	19	19	18	18	N	N	N	N	N	N	N	N	N	N	N	24.2
9-Jul-04	25	25	25	25	25	26	26	26	26	25	25	25	24	23	23	24	24	25	26	26	25	24	22	19	24.6	26.2
10-Jul-04	17	14	12	10	7	6	6	6	7	9	12	16	21	26	30	33	37	38	38	35	32	28	22	20	20.1	38.3
11-Jul-04	17	14	12	10	9	9	10	11	12	13	16	18	21	23	25	27	29	30	30	30	29	28	26	24	19.8	30.4
12-Jul-04	22	20	18	16	14	13	12	12	12	12	14	16	18	19	22	24	26	26	26	25	23	22	20	18	18.8	26.2
13-Jul-04	16	13	12	10	8	7	6	6	7	8	10	12	13	17	21	24	26	28	29	30	30	29	27	25	17.2	30.1
14-Jul-04	24	22	19	16	14	11	9	7	7	8	10	10	13	17	21	25	29	31	33	33	33	32	30	27	19.9	33.2
15-Jul-04	24	21	17	13	11	9	8	8	8	9	10	15	19	22	26	29	33	35	35	34	32	31	30	28	21.1	35.3
16-Jul-04	26	25	24	23	22	22	21	20	20	18	20	23	27	31	36	41	46	47	48	47	46	45	43	41	31.8	47.6
17-Jul-04	37	32	28	26	23	19	16	14	13	14	17	19	22	26	30	33	34	34	34	33	32	30	28	26	25.8	36.7
18-Jul-04	24	22	20	18	17	15	14	13	14	15	17	19	21	25	28	28	29	30	30	29	27	24	21	18	21.5	30.2
19-Jul-04	15	12	11	11	11	11	12	13	14	15	15	17	19	22	24	28	31	33	33	33	33	30	27	25	20.6	33.2
20-Jul-04	25	25	25	24	24	25	24	23	22	22	23	24	26	26	28	29	30	30	29	29	28	28	27	26	26.0	29.7
21-Jul-04	25	24	23	22	22	20	17	16	16	15	16	17	19	21	25	28	30	33	35	35	35	34	32	29	24.5	35.4
22-Jul-04	26	23	19	17	15	12	10	8	7	8	8	10	12	14	17	20	23	25	26	27	27	25	23	20	17.6	27.0
23-Jul-04	17	13	11	7	4	2	2	1	1	3	6	10	16	21	28	35	40	45	46	46	43	39	35	31	20.9	46.4
24-Jul-04	26	22	17	13	11	8	5	4	6	9	15	22	32	42	49	55	60	60	58	53	46	38	34	31	29.9	60.4
25-Jul-04	28	26	26	26	26	26	22	19	19	18	18	19	20	22	24	27	30	31	32	33	33	33	33	32	26.0	33.2
26-Jul-04	30	30	29	27	26	25	24	23	22	21	20	20	20	21	22	23	24	26	27	27	27	27	27	27	24.7	30.0
27-Jul-04	26	25	24	24	24	24	24	24	25	25	26	27	28	30	32	34	35	37	38	39	39	40	38	35	30.3	39.6
28-Jul-04	33	31	28	25	22	21	19	17	15	15	16	17	19	22	25	29	33	35	36	37	38	36	34	31	26.5	37.7
29-Jul-04	26	22	17	13	12	10	8	7	8	10	12	14	17	21	24	28	30	32	34	35	35	34	32	31	21.3	35.3
30-Jul-04	30	28	27	26	24	23	21	19	19	20	20	22	23	26	28	30	31	30	30	29	28	28	27	26	25.6	30.6
31-Jul-04	24	23	22	21	19	17	15	14	14	14	14	15	17	18	20	22	23	24	24	24	22	20	17	14	19.1	24.5
Hourly Avg	23.9	22.5	20.7	18.9	17.5	16.3	15.1	14.3	14.2	14.7	15.7	17.4	19.6	22.1	25.1	28.2	30.4	31.7	32.4	32.2	31.2	29.7	27.7	25.7		
Hourly Max	36.7	41.1	37.6	34.5	31.9	29.6	27.9	26.7	26.6	27.9	28.3	29.5	32.0	41.5	49.3	55.3	59.7	60.4	58.3	53.4	46.2	45.0	43.4	40.9		

Concentration Rose for the 1-hr O_3 Average Concentration Occurrences at the Henry Pirker Site for July 2004



Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
0	<	2	13
2	to	10	74
10	to	20	217
20	to	40	363
40	to	82	38
	>	82	0
Total Non-Zero Values			705

Calms	
Range	
ppb	
2-10	0.0%
10-20	0.0%
20-40	0.0%
40-82	0.0%
>82	0.0%

PASZA - Henry Pirker Carbon Monoxide Monthly Summary

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

Station: Henry Pirker

Station Owner: PASZA

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	0.79	ppm	23-Jul	8:00 9:00
Maximum 24-hr Average:	0.46	ppm	23-Jul	

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

AIC Time:	28 hrs			Operational Time:			579 hrs	
Calibration Time:	2 hrs			AMD Operational Uptime:			81.9%	
Percentile	99	95	75	50	25	5	1	Average
	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.3 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	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	0.00
2-Jul-04	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	0.00
3-Jul-04	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	0.00
4-Jul-04	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	0.00
5-Jul-04	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	0.00
6-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	C	C	A	0.1	A	0.3	0.2	0.2	0.2	N	0.28
7-Jul-04	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.20	0.26
8-Jul-04	0.2	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	A	0.3	0.3	0.3	0.3	0.3	0.3	0.23	0.30
9-Jul-04	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	A	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.32	0.38
10-Jul-04	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.34	0.49
11-Jul-04	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	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29	0.33
12-Jul-04	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.26	0.35
13-Jul-04	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.26	0.32
14-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.27	0.44
15-Jul-04	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.4	A	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.28	0.38
16-Jul-04	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	A	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	0.28	0.34
17-Jul-04	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.28	0.36
18-Jul-04	0.2	0.3	0.3	0.2	0.2	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.27	0.41
19-Jul-04	0.3	0.3	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	0.3	0.4	0.4	0.3	0.3	0.31	0.42
20-Jul-04	0.3	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.25
21-Jul-04	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.34	0.49
22-Jul-04	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.5	0.38	0.67
23-Jul-04	0.5	0.4	A	0.5	0.4	0.5	0.7	0.7	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.46	0.79
24-Jul-04	0.5	A	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.5	0.3	0.3	0.42	0.52
25-Jul-04	A	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	0.3	0.2	0.2	0.2	0.2	0.2	A	0.26	0.30
26-Jul-04	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	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.24	0.29
27-Jul-04	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	0.3	A	0.3	0.3	0.26	0.30
28-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.4	0.4	0.3	0.31	0.40
29-Jul-04	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.2	0.26	0.37
30-Jul-04	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.3	0.3	0.3	0.25	0.30
31-Jul-04	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.4	0.4	0.4	0.27	0.43
Hourly Avg	0.30	0.28	0.26	0.26	0.26	0.29	0.31	0.31	0.31	0.30	0.29	0.28	0.28	0.28	0.27	0.27	0.27	N	0.28	0.29	0.31	0.33	0.33	0.31		
Hourly Max	0.54	0.45	0.43	0.47	0.42	0.46	0.66	0.74	0.79	0.49	0.50	0.51	0.50	0.44	0.38	0.38	0.36	0.37	0.40	0.42	0.52	0.65	0.67	0.53		

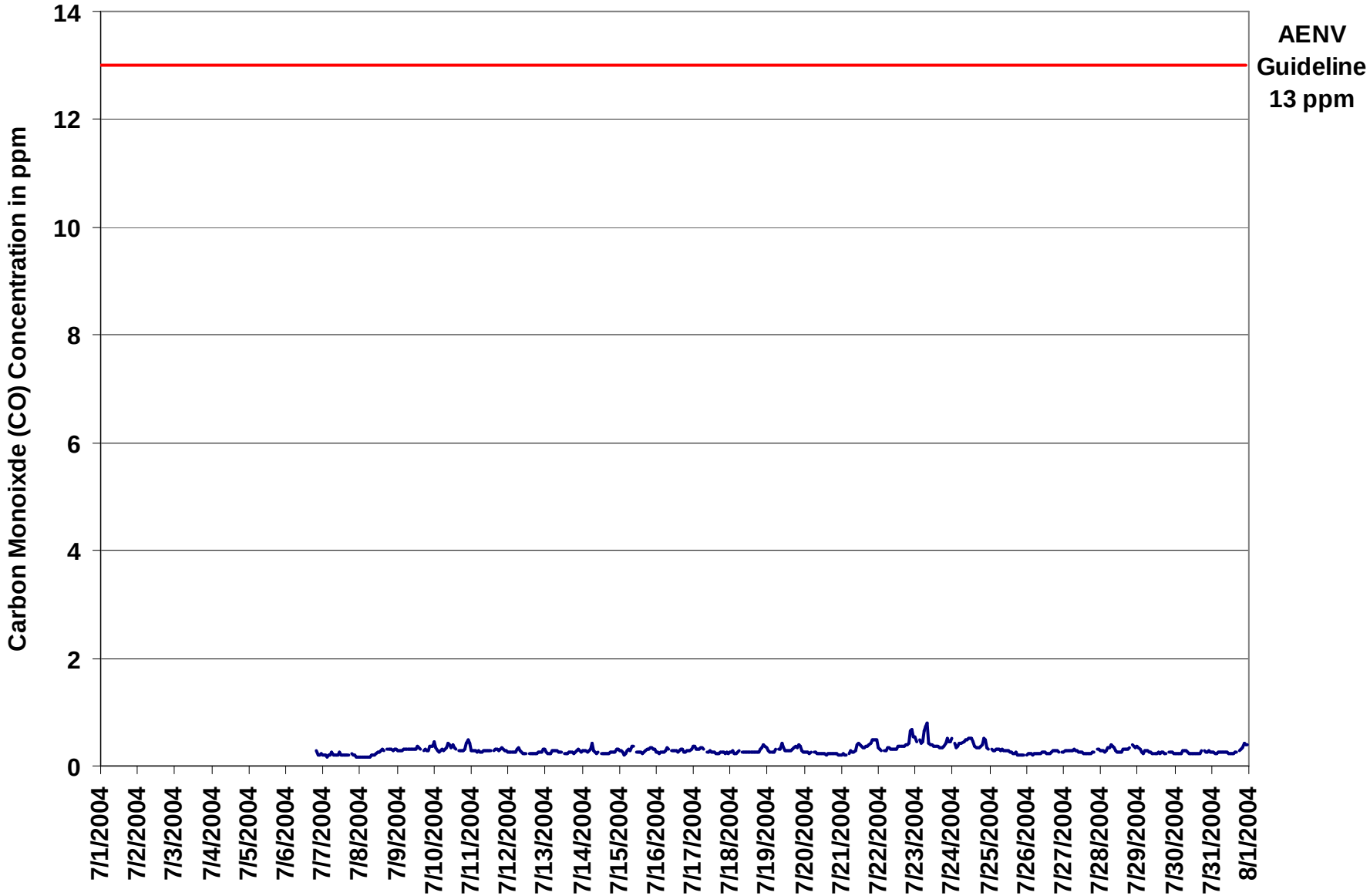


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Carbon Monoxide (CO)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	2.5	ppm	24-Jul	23:00 0:00
Maximum 24-hr Value:	0.6	ppm	24-Jul	

AIC Time:	28 hrs	Operational Time:	579 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	81.9%

Percentile	99	95	75	50	25	5	1	Average
	1.0	0.6	0.4	0.3	0.3	0.3	0.2	0.4 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**

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-Jul-04	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	0.00
2-Jul-04	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	0.00
3-Jul-04	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	0.00
4-Jul-04	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	0.00
5-Jul-04	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	0.00
6-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	C	C	A	0.2	A	0.4	0.3	0.3	0.3	N	0.37
7-Jul-04	0.3	0.2	0.2	0.2	0.3	0.3	0.6	0.4	0.3	0.2	0.3	1.3	0.2	0.2	0.3	0.3	0.3	0.3	A	0.3	0.3	0.2	0.2	0.2	0.32	1.26
8-Jul-04	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.6	0.4	A	0.4	0.4	0.3	0.3	0.4	0.3	0.31	0.60
9-Jul-04	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.4	A	0.3	0.4	0.4	0.4	0.7	0.7	0.5	0.41	0.74
10-Jul-04	1.0	0.4	0.3	0.3	0.4	0.5	0.4	0.4	0.5	0.8	0.6	0.5	0.7	0.5	0.4	A	0.4	0.3	0.4	0.3	0.4	0.6	0.6	0.6	0.49	1.03
11-Jul-04	0.3	0.3	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	A	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.35	0.46
12-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.5	1.4	0.4	0.3	0.5	0.3	0.4	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.38	1.42
13-Jul-04	0.4	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.4	0.3	0.3	0.4	A	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.35	0.51
14-Jul-04	0.3	0.4	0.3	0.3	0.3	0.4	0.5	0.4	0.3	0.3	0.3	A	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.5	0.35	0.63
15-Jul-04	0.4	0.4	0.4	0.3	0.7	0.7	0.6	0.3	0.5	0.4	A	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.42	0.72
16-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	A	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.35	0.43
17-Jul-04	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.4	A	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	0.3	0.34	0.52
18-Jul-04	0.4	0.3	0.4	0.3	0.3	0.3	0.3	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	0.5	0.5	0.5	0.5	0.34	0.51
19-Jul-04	0.4	0.4	0.3	0.3	0.3	1.0	A	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.6	0.5	0.4	0.3	0.41	0.95
20-Jul-04	0.3	0.3	0.3	0.3	0.3	A	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	0.28	0.34
21-Jul-04	0.2	0.3	0.2	0.2	A	0.3	0.4	0.3	0.3	0.3	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.41	0.61
22-Jul-04	0.4	0.4	0.3	A	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.5	1.2	1.0	0.7	0.48	1.25
23-Jul-04	0.9	0.8	A	0.5	0.5	0.6	0.8	0.8	0.9	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.6	0.6	0.5	0.5	0.57	0.90
24-Jul-04	0.6	A	0.7	0.4	0.4	0.8	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.6	0.6	0.5	2.5	0.63	2.51
25-Jul-04	A	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	A	0.31	0.41
26-Jul-04	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.29	0.34
27-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	A	0.4	0.4	0.33	0.46
28-Jul-04	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.5	A	0.5	0.5	0.4	0.39	0.53
29-Jul-04	0.5	0.4	0.3	0.3	0.3	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	A	0.3	0.4	0.3	0.3	0.34	0.66
30-Jul-04	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	A	0.3	0.4	0.4	0.3	0.3	0.34	0.50
31-Jul-04	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	0.3	0.4	A	0.4	0.4	0.5	0.8	0.5	0.5	0.36	0.76
Hourly Avg	0.40	0.35	0.33	0.31	0.34	0.43	0.43	0.44	0.38	0.38	0.36	0.40	0.37	0.36	0.34	0.35	0.34	N	0.35	0.37	0.40	0.45	0.44	0.49		
Hourly Max	1.03	0.77	0.71	0.55	0.72	0.95	0.83	1.42	0.87	0.76	0.58	1.26	0.72	0.60	0.51	0.60	0.51	0.46	0.49	0.57	0.62	1.25	0.97	2.51		

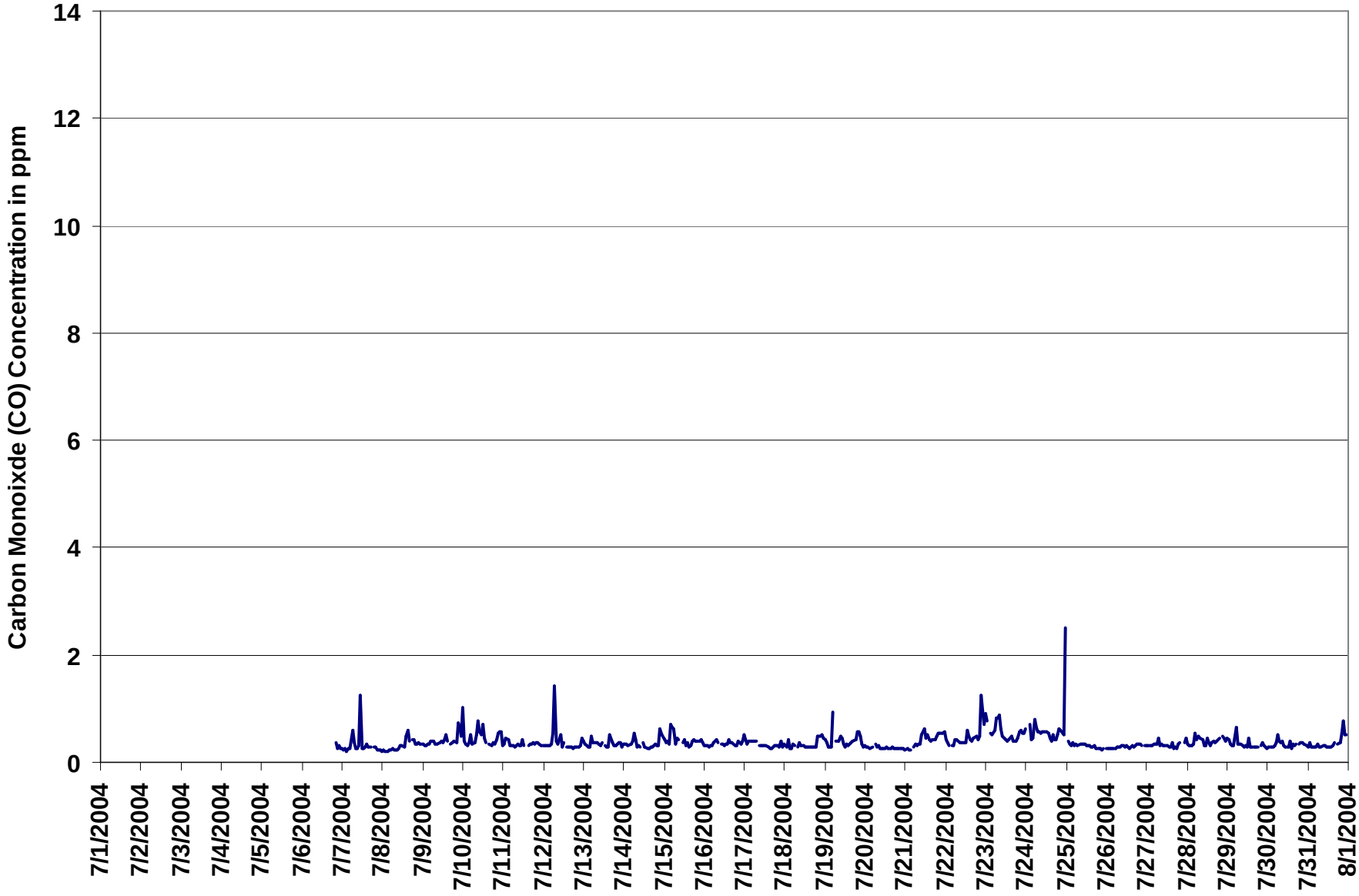


Figure 10. PASZA - Henry Pirker Carbon Monoxide 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	0.57	ppm	23-Jul	8:00 9:00

Guideline Limit: Alberta Environment: 8-hr 5 ppm

Percentile	99	95	75	50	25	5	1
	0.53	0.43	0.32	0.28	0.25	0.21	0.17

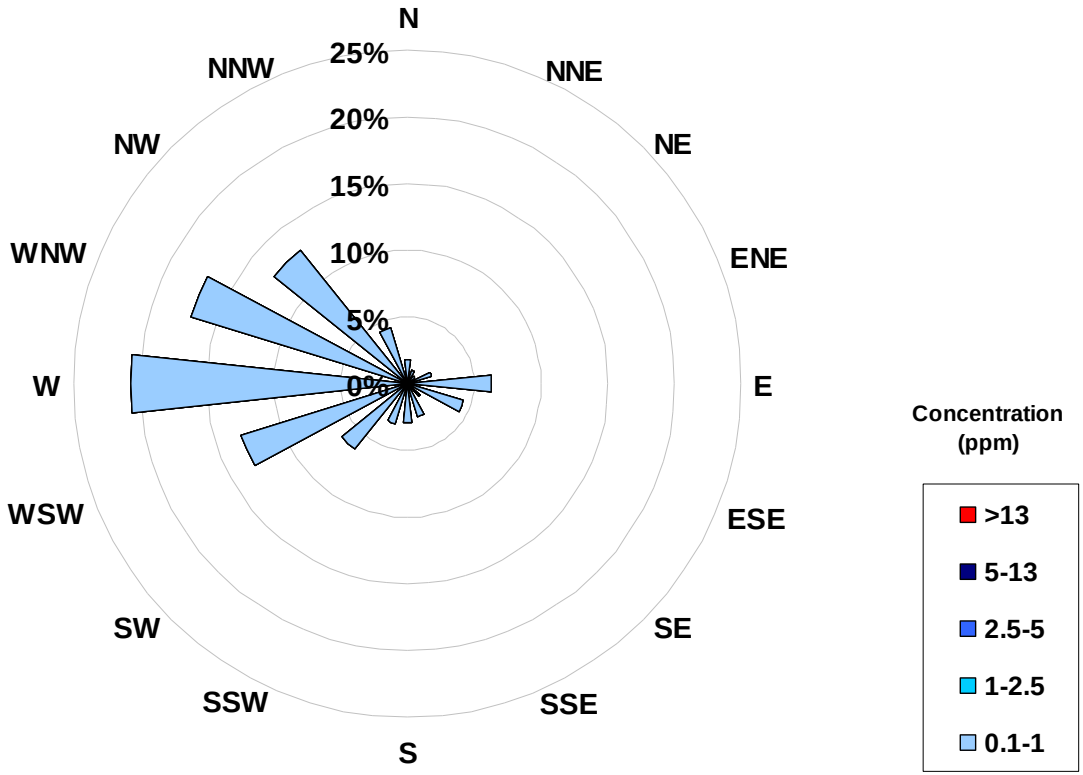
Status Flag Characters

C	Calibration	A	AIC - 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-Jul-04	S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
2-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
3-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
4-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
5-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
6-Jul-04	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
7-Jul-04	N	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.21
8-Jul-04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.22	0.30
9-Jul-04	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	0.33
10-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.34	0.37
11-Jul-04	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30	0.35
12-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.30
13-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.26	0.27
14-Jul-04	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	0.3	0.3	0.27	0.31
15-Jul-04	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	0.28	0.31
16-Jul-04	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	0.28	0.31
17-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.29	0.33
18-Jul-04	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.26	0.31
19-Jul-04	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	0.33
20-Jul-04	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	0.2	0.2	0.2	0.2	0.2	0.2	0.24	0.32
21-Jul-04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.30	0.43
22-Jul-04	0.4	0.4	0.4	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	0.4	0.4	0.4	0.4	0.5	0.5	0.36	0.47
23-Jul-04	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.47	0.57
24-Jul-04	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.43	0.48
25-Jul-04	0.4	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	0.2	0.2	0.2	0.2	0.2	0.2	0.29	0.40
26-Jul-04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.23	0.27
27-Jul-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.26	0.28
28-Jul-04	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	0.30	0.34
29-Jul-04	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28	0.35
30-Jul-04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.25	0.27
31-Jul-04	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	0.3	0.3	0.3	0.3	0.3	0.26	0.34
Hourly Avg	0.30	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.30	0.30		
Hourly Max	0.50	0.51	0.52	0.53	0.53	0.51	0.50	0.53	0.57	0.57	0.55	0.54	0.53	0.52	0.48	0.46	0.44	0.42	0.41	0.39	0.39	0.42	0.45	0.47		

Concentration Rose for the 1-hr CO Average Concentration Occurrences at the Henry Pirker Site for July 2004



Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0	<	0.1	0
0.1	to	1	579
1	to	2.5	0
2.5	to	5	0
5	to	13	0
	>	13	0
Total Non-Zero Values			579

Calms	
Range	
ppm	
0.1-1	0.0%
1-2.5	0.0%
2.5-5	0.0%
5-13	0.0%
>13	0.0%

PASZA - Henry Pirker Total Hydrocarbon Monthly Summary

HOURLY AVERAGE TABLE

Total HydroCarbons (THC)

Station: Henry Pirker

Station Owner: PASZA

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	9.4	ppm	23-Jul	19:00 20:00
Maximum 24-hr Average:	2.6	ppm	23-Jul	

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

AIC Time:	34 hrs			Operational Time:			703 hrs	
Calibration Time:	3 hrs			AMD Operational Uptime:			99.5%	
Percentile	99	95	75	50	25	5	1	Average
	2.6	2.3	2.0	1.9	1.8	1.7	1.7	1.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	A	2.2	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.06	2.22
2-Jul-04	2.0	2.1	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	A	1.9	1.93	2.05
3-Jul-04	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.92	2.01
4-Jul-04	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.1	1.9	1.9	1.91	2.08
5-Jul-04	1.9	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.6	1.5	D	D	D	D	1.5	1.6	1.7	1.8	1.8	A	2.2	2.3	2.4	2.4	1.87	2.43
6-Jul-04	2.6	2.2	1.7	1.8	1.9	2.2	2.2	2.3	1.9	1.9	1.8	1.7	C	C	C	A	1.8	1.8	1.8	1.8	A	1.9	1.9	2.0	1.96	2.64
7-Jul-04	2.1	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	A	1.9	1.8	1.8	1.9	1.87	2.07
8-Jul-04	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.80	1.86
9-Jul-04	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	A	1.8	1.8	1.9	2.1	2.1	2.4	1.86	2.36
10-Jul-04	2.4	2.4	2.0	2.0	2.5	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	A	1.9	1.8	1.8	1.9	2.1	2.7	2.5	2.05	2.66
11-Jul-04	1.9	2.1	2.0	2.1	2.2	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.9	1.9	1.9	1.9	2.0	1.9	1.92	2.17
12-Jul-04	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	1.96	2.09
13-Jul-04	2.3	2.1	2.1	2.1	2.3	2.2	2.4	2.2	2.2	2.1	2.0	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.02	2.38
14-Jul-04	2.1	2.2	2.4	2.0	2.3	2.4	2.3	2.0	1.9	1.9	1.9	1.9	A	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.1	2.2	2.04	2.45
15-Jul-04	2.2	2.3	2.4	2.3	2.3	2.4	2.2	2.1	2.2	2.2	2.1	A	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.05	2.42
16-Jul-04	1.9	1.9	1.9	2.0	2.2	2.0	2.0	2.1	2.0	2.0	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.9	1.91	2.16
17-Jul-04	2.0	2.1	2.1	2.1	2.0	2.2	2.0	2.0	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.89	2.17
18-Jul-04	1.9	2.1	2.1	2.0	2.0	2.1	2.0	2.0	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	2.0	2.3	2.2	1.92	2.31
19-Jul-04	2.2	2.1	1.9	1.8	1.8	1.9	2.0	A	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.81	2.18
20-Jul-04	1.7	1.7	1.7	1.7	1.7	1.8	A	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.76	1.83
21-Jul-04	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.6	2.4	2.00	2.63
22-Jul-04	2.1	2.1	2.0	2.0	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.4	2.3	2.2	2.05	2.35
23-Jul-04	2.3	2.6	2.5	A	2.8	2.6	2.5	2.9	2.7	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.3	2.5	9.4	3.3	2.0	2.0	2.0	2.62	9.44
24-Jul-04	2.4	2.3	A	2.4	2.4	2.5	2.4	2.1	2.1	2.3	2.1	2.1	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.9	2.0	2.0	1.9	1.8	2.08	2.53
25-Jul-04	1.8	A	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.83	1.92
26-Jul-04	A	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	A	1.85	1.90
27-Jul-04	1.9	1.9	1.9	1.9	1.9	2.0	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	1.9	1.9	2.0	A	2.0	1.93	2.02
28-Jul-04	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.9	1.93	2.16
29-Jul-04	2.1	2.3	2.2	2.1	1.9	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.8	1.8	1.8	1.83	2.28
30-Jul-04	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.83	1.98
31-Jul-04	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	2.0	2.0	2.1	2.2	1.89	2.16
Hourly Avg	2.02	2.04	1.98	1.97	2.03	2.04	2.03	2.00	1.96	1.92	1.90	1.87	1.86	1.85	1.83	1.83	1.83	1.85	1.87	2.13	1.95	1.96	2.00	2.01		
Hourly Max	2.64	2.62	2.52	2.39	2.80	2.55	2.53	2.87	2.74	2.26	2.13	2.10	2.04	2.01	2.00	2.00	1.98	2.27	2.51	9.44	3.32	2.42	2.66	2.46		

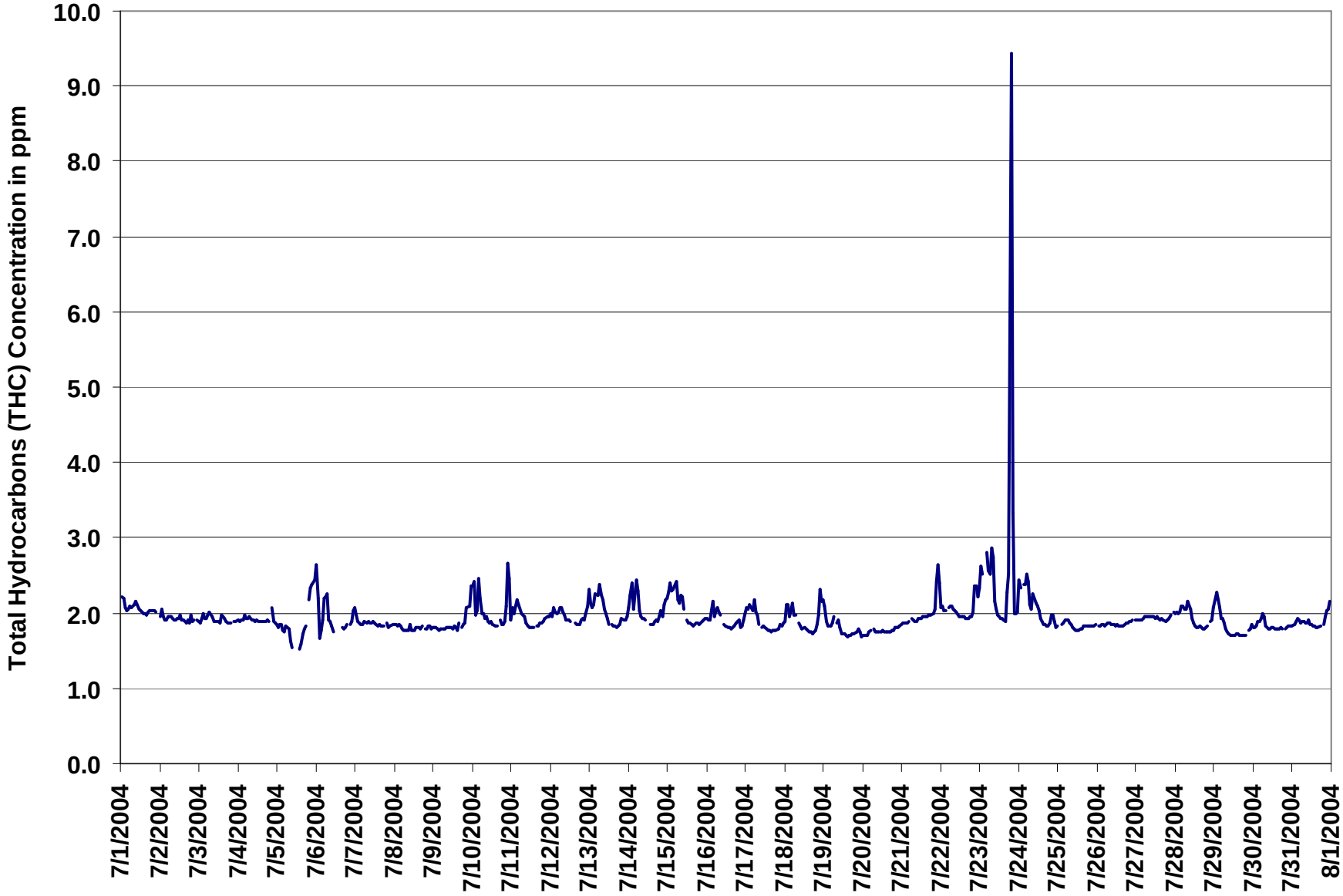


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	15.6	ppm	23-Jul	19:00 20:00
Maximum 24-hr Value:	4.0	ppm	23-Jul	

AIC Time:	34 hrs	Operational Time:	703 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.5%

Percentile	99	95	75	50	25	5	1	Average
	4.0	2.9	2.2	2.0	1.9	1.8	1.7	2.1 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	A	3.0	3.0	2.2	2.1	2.2	2.2	2.1	2.2	2.5	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.0	A	2.21	2.98
2-Jul-04	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.8	2.1	2.0	A	2.0	2.05	2.79
3-Jul-04	1.9	1.9	2.3	2.5	2.0	2.0	2.4	2.8	2.2	1.9	1.9	1.9	1.9	2.1	2.4	2.2	2.5	2.0	1.9	1.9	1.9	A	1.9	2.1	2.11	2.76
4-Jul-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	2.1	1.9	2.0	1.9	1.9	1.9	A	2.7	1.9	1.9	2.00	2.66
5-Jul-04	1.9	1.9	2.2	2.0	2.1	2.1	2.2	2.0	1.9	1.6	D	D	D	D	2.0	2.0	2.5	2.3	2.1	A	2.5	2.5	2.4	2.7	2.16	2.74
6-Jul-04	3.0	2.9	1.8	2.7	2.7	3.4	3.2	2.6	2.4	2.3	2.1	2.0	C	C	C	A	1.8	1.8	1.9	1.9	A	1.9	1.9	2.2	2.34	3.43
7-Jul-04	2.8	2.0	2.1	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.2	1.9	1.9	1.9	2.1	1.9	1.8	1.9	A	2.3	1.8	1.9	1.9	1.99	2.83
8-Jul-04	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	3.5	1.8	1.8	1.9	1.9	1.9	1.9	2.1	A	1.8	1.8	1.8	1.9	1.8	1.93	3.55
9-Jul-04	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.1	2.0	2.0	2.1	A	1.9	1.9	2.0	3.8	3.3	4.2	2.13	4.17
10-Jul-04	3.9	3.3	2.3	2.1	3.5	3.1	2.0	2.1	2.1	2.2	2.0	2.1	2.1	1.9	2.0	2.0	A	2.3	2.1	1.9	2.0	2.5	4.9	4.0	2.54	4.86
11-Jul-04	2.0	3.5	2.1	2.9	3.0	3.3	2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.8	1.8	A	1.8	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.16	3.47
12-Jul-04	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	1.9	2.0	1.9	A	1.9	1.9	1.9	1.9	2.3	2.7	2.0	2.8	2.7	2.12	2.83
13-Jul-04	3.8	2.3	2.9	2.4	2.4	2.3	2.4	2.4	2.2	2.2	2.0	2.0	2.0	A	1.9	1.9	2.0	1.9	1.9	1.9	2.3	2.0	2.0	2.5	2.23	3.80
14-Jul-04	2.4	3.7	3.3	2.2	3.8	4.0	2.4	2.2	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	2.1	2.3	2.0	2.5	2.4	2.0	2.9	3.7	2.50	4.05
15-Jul-04	2.5	2.9	3.6	2.5	3.4	2.6	2.3	2.2	2.4	2.3	2.2	A	1.9	2.0	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.28	3.65
16-Jul-04	2.0	1.9	2.0	2.3	2.9	2.1	2.1	2.2	2.0	2.1	A	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.1	2.2	2.1	1.9	1.9	2.0	2.04	2.93
17-Jul-04	2.2	2.6	2.4	2.4	2.2	2.5	2.1	2.0	1.9	A	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.9	2.01	2.65
18-Jul-04	2.0	2.7	2.8	2.2	2.2	2.5	2.2	2.1	A	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	2.7	3.0	2.4	2.12	2.96
19-Jul-04	2.5	2.4	2.0	1.9	1.9	2.0	2.2	A	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.9	2.2	2.0	1.9	1.8	1.7	1.94	2.52
20-Jul-04	1.8	1.8	1.7	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.80	1.87
21-Jul-04	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.8	2.9	2.8	2.10	2.90
22-Jul-04	2.1	2.2	2.1	2.1	A	2.1	2.2	2.6	2.4	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.9	2.8	3.1	2.21	3.08
23-Jul-04	2.6	2.8	2.7	A	3.1	2.7	2.7	3.0	2.8	2.4	2.2	2.1	2.0	2.0	1.9	2.0	1.9	8.0	7.5	15.6	14.7	2.0	2.0	2.1	3.95	15.60
24-Jul-04	2.8	2.5	A	2.5	2.5	2.6	2.6	2.4	2.1	2.4	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.4	1.9	2.21	2.80
25-Jul-04	1.9	A	1.9	1.9	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.88	2.06
26-Jul-04	A	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.89	1.94
27-Jul-04	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.0	A	2.1	1.97	2.08
28-Jul-04	2.0	2.2	2.1	2.1	2.4	2.2	2.2	2.1	2.4	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	A	1.9	2.2	2.03	2.38
29-Jul-04	2.2	2.5	2.3	2.3	2.0	2.0	1.9	1.9	1.8	1.8	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.7	A	1.8	1.9	2.0	1.91	2.46
30-Jul-04	1.8	1.8	1.9	1.9	1.9	2.0	2.1	2.0	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.9	1.9	1.9	1.88	2.06
31-Jul-04	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.2	1.9	1.9	1.9	1.8	1.8	1.9	1.9	A	1.9	2.2	2.2	2.2	2.2	1.96	2.21
Hourly Avg	2.26	2.34	2.23	2.14	2.31	2.30	2.17	2.13	2.06	2.01	2.03	1.93	1.92	1.91	1.93	1.93	1.94	2.14	2.11	2.49	2.52	2.16	2.28	2.33		
Hourly Max	3.87	3.70	3.65	2.90	3.77	4.05	3.21	2.98	2.80	2.48	3.55	2.22	2.11	2.12	2.36	2.24	2.50	7.98	7.47	15.60	14.68	3.76	4.86	4.17		

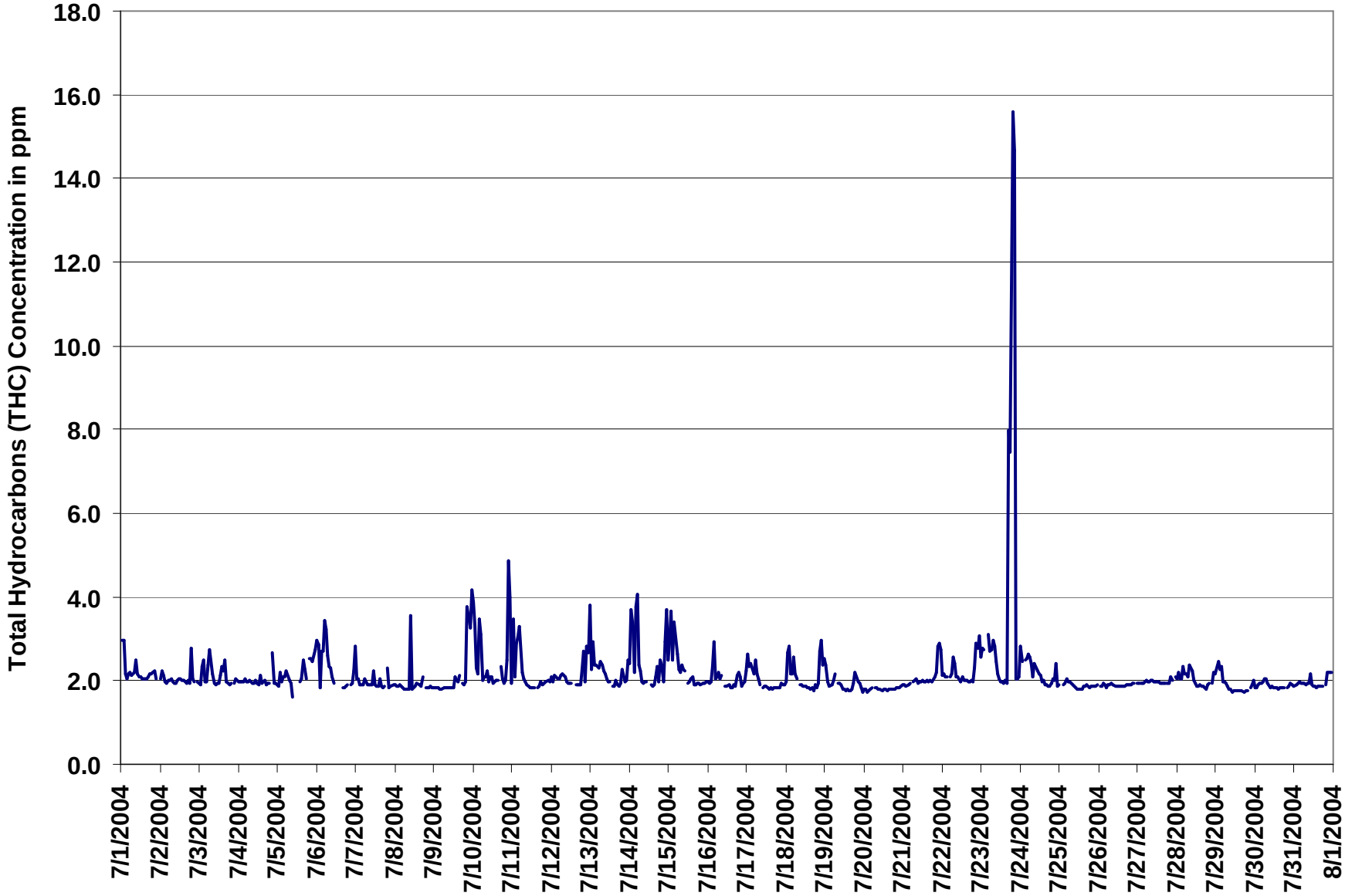


Figure 12. PASZA - Henry Pirker Total Hydrocarbons 1-hr Maximum Value Monthly Trend

PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Station: Henry Pirker

Station Owner: PASZA

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	1.9	ppb	6-Jul	0:00 1:00
Maximum 24-hr Average:	0.8	ppb	24-Jul	

H_2S Guideline Limit: Alberta Environment: 1-hr 10 ppb | 24-hr 3 ppb

AIC Time:	33 hrs		Operational Time:		703 hrs			
Calibration Time:	5 hrs		AMD Operational Uptime:		99.6%			
Percentile	99	95	75	50	25	5	1	Average
	1.2	0.8	0.6	0.5	0.4	0.1	0.0	0.5 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	A	0.5	0.9
2-Jul-04	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	0.6	1.4
3-Jul-04	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.6
4-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
5-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	2	0.2	1.6
6-Jul-04	2	1	0	0	D	D	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0.3	1.9
7-Jul-04	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	1	1	0.5	0.6
8-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	A	0	0	0	0	0	0.5	0.7
9-Jul-04	0	0	0	0	0	0	0	0	D	0	0	0	0	0	0	0	A	1	1	1	0	0	1	1	0.3	0.6
10-Jul-04	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	A	0	1	0	0	0	1	1	1	0.5	0.6
11-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.5
12-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	1	0.4	0.7
13-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	1	0.6	0.8
14-Jul-04	1	1	1	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7
15-Jul-04	1	1	1	1	1	1	1	1	0	1	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.7
16-Jul-04	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
17-Jul-04	1	1	1	1	1	1	1	1	A	1	1	1	0	0	0	1	0	0	0	1	0	1	1	1	0.6	0.8
18-Jul-04	1	1	1	1	1	0	1	A	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	1	0.5	0.8
19-Jul-04	1	1	1	1	0	1	A	1	1	1	1	1	1	1	0	0	1	0	0	1	0	1	1	0	0.6	1.1
20-Jul-04	1	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.5	0.6
21-Jul-04	0	1	0	1	A	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	0.6	0.7
22-Jul-04	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0.6	1.0
23-Jul-04	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.7	1.3
24-Jul-04	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	0.8	1.3
25-Jul-04	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	0	0	0	0	0	A	0.5	0.7
26-Jul-04	1	0	0	1	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	A	1	0.5	0.8
27-Jul-04	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.5
28-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.5
29-Jul-04	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	A	1	1	1	1	0.5	0.7
30-Jul-04	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	1	0	0	1	1	0.5	0.6
31-Jul-04	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	0.6	0.7
Hourly Avg	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6		
Hourly Max	1.9	1.4	1.3	1.3	1.3	1.2	1.4	1.0	0.9	0.9	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	1.1	1.2	1.6		

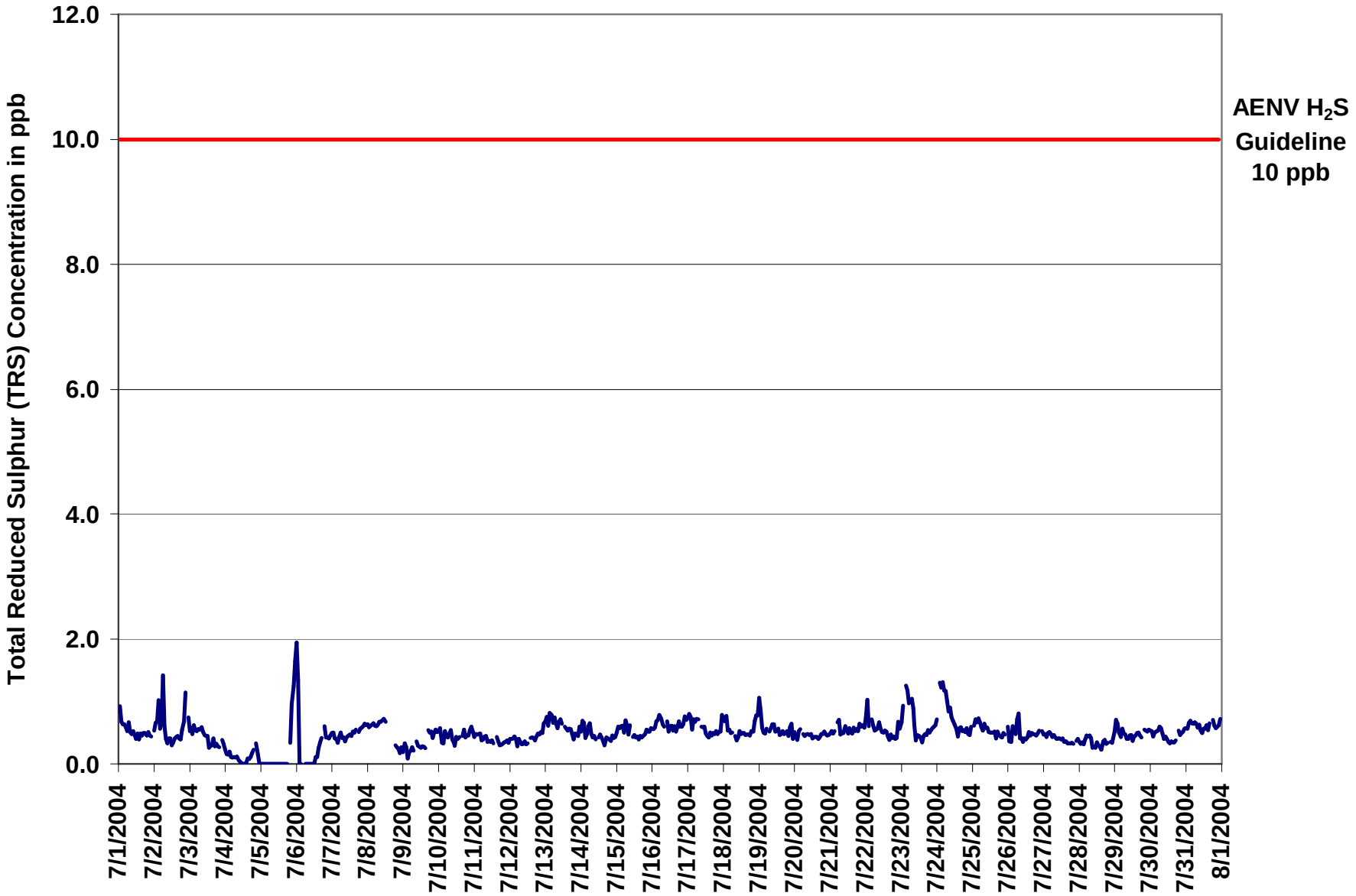


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	2.8	ppb	1-Jul	1:00 2:00
Maximum 24-hr Value:	1.2	ppb	24-Jul	

AIC Time:	33 hrs	Operational Time:	703 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%

Percentile	99	95	75	50	25	5	1	Average
	1.8	1.3	1.0	0.9	0.8	0.5	0.0	0.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	A	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	2.8
2-Jul-04	1	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	A	1	1.1	1.9
3-Jul-04	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	1.1
4-Jul-04	1	1	0	1	1	1	1	1	0	0	1	0	0	0	1	1	1	1	1	1	A	1	1	0	0.5	0.8
5-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	2	2	0.3	2.0
6-Jul-04	2	3	0	0	D	D	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	1	0.7	2.6
7-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.0
8-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	A	1	1	1	1	1	1.0	1.2
9-Jul-04	1	1	1	1	0	1	1	1	D	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.1
10-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.2
11-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.0
12-Jul-04	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
13-Jul-04	1	1	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5
14-Jul-04	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	1.3
15-Jul-04	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
16-Jul-04	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	1.5
17-Jul-04	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
18-Jul-04	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	1.4
19-Jul-04	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
20-Jul-04	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
21-Jul-04	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	1.2
22-Jul-04	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
23-Jul-04	1	1	A	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.2	1.7
24-Jul-04	1	A	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.8
25-Jul-04	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.2
26-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.5
27-Jul-04	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	1.0
28-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	0.9
29-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.2
30-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.1
31-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.0	1.2
Hourly Avg	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.9	0.9	1.0	1.0	1.0		
Hourly Max	2.4	2.8	1.8	1.7	1.8	1.8	1.9	1.6	1.5	1.3	1.1	1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1	1.5	1.4	1.5	1.6	2.0		

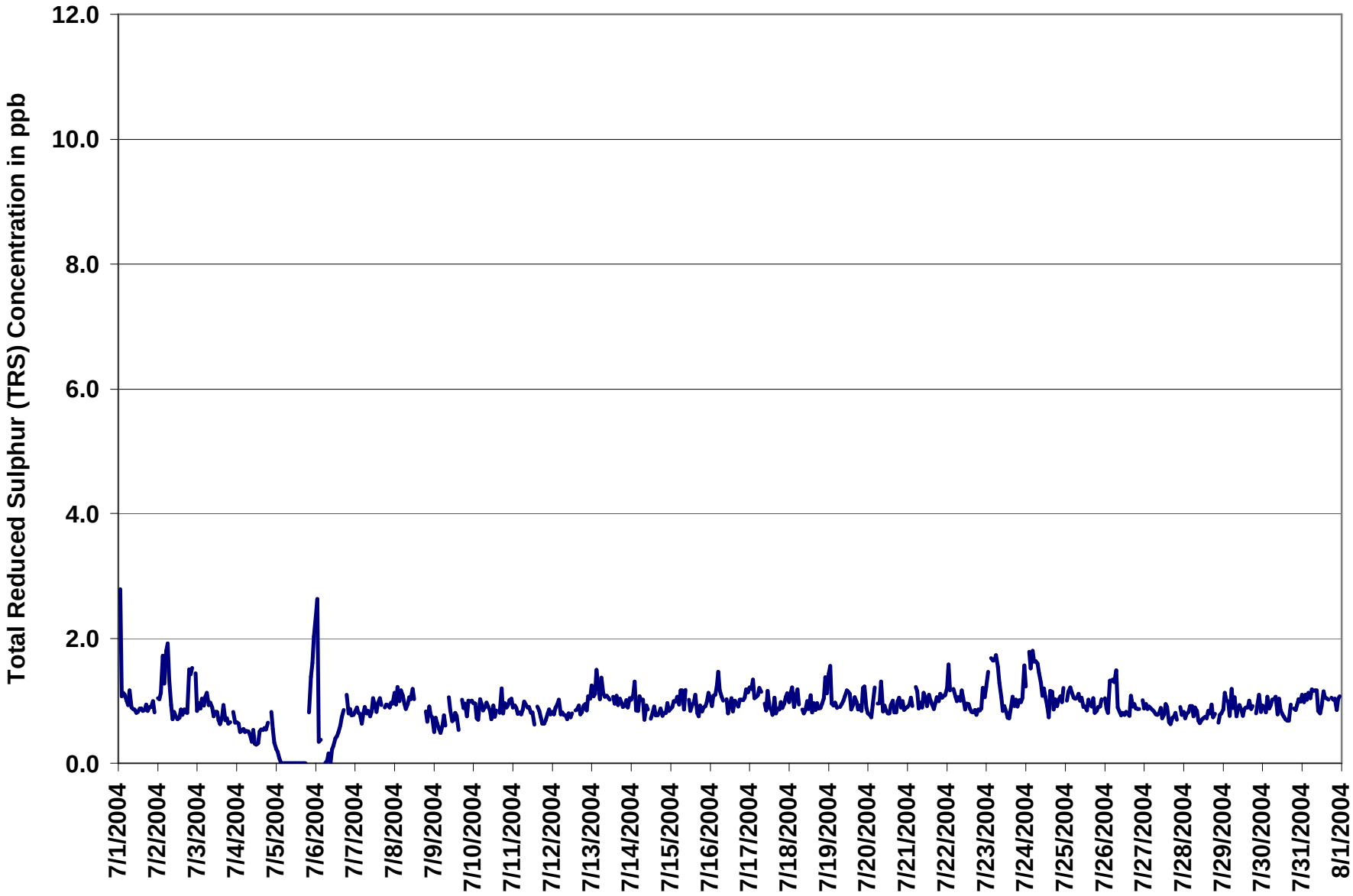


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	33.4	µg/m³	23-Jul	8:00 9:00
Maximum 24-hr Average:	16.7	µg/m³	23-Jul	

Guideline Limit: Canada Wide Standard (considered as an absolute value) — 1-hr - µg/m³ | 24-hr 30 µg/m³

AIC Time:	0 hrs	Operational Time:	697 hrs
Calibration Time:	26 hrs	AMD Operational Uptime:	97.2%

Percentile	99	95	75	50	25	5	1	Average	Geomean
	27.3	17.4	7.3	4.3	2.0	0.0	0.0	5.6 µg/m³	4.6 µg/m³

Status Flag Characters

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

Day — **Mountain Standard Time**

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-Jul-04	6	8	6	4	4	6	6	6	9	8	9	9	6	5	5	4	7	8	9	3	6	4	3	1	5.8	9.4
2-Jul-04	3	5	6	5	5	5	4	4	4	5	7	7	6	6	7	8	0	0	1	3	3	4	4	3	4.4	7.6
3-Jul-04	2	1	1	0	0	0	2	2	0	0	0	1	2	2	3	4	4	6	1	2	3	4	2	1	1.8	6.1
4-Jul-04	2	1	2	2	3	3	3	3	2	2	2	3	3	3	2	2	3	2	4	3	3	7	5	4	2.9	6.6
5-Jul-04	3	3	3	2	3	4	9	10	4	3	4	4	1	D	D	D	D	D	D	D	D	D	D	D	N	10.1
6-Jul-04	D	D	D	D	0	2	6	8	3	1	0	D	D	D	D	0	0	0	0	0	0	0	0	1	N	8.5
7-Jul-04	2	0	0	0	1	0	5	2	0	0	1	2	1	0	1	0	0	1	1	1	0	0	0	0	0.8	5.1
8-Jul-04	0	0	0	0	1	1	0	1	2	4	5	6	7	6	9	3	3	0	4	1	1	3	3	3	2.7	8.6
9-Jul-04	3	2	4	3	3	5	5	5	6	8	10	9	11	11	6	9	7	7	8	0	5	6	6	7	6.1	11.4
10-Jul-04	6	4	4	2	5	8	10	7	12	30	21	12	21	16	12	5	8	7	3	5	4	7	9	8	9.5	30.0
11-Jul-04	0	2	1	2	3	3	5	6	5	5	2	3	2	2	3	0	4	6	1	8	5	4	4	2	3.3	8.4
12-Jul-04	4	4	3	3	4	5	7	9	7	5	2	5	3	1	3	3	2	3	0	3	3	4	6	6	3.9	9.0
13-Jul-04	6	3	2	2	1	4	8	6	8	9	8	5	1	6	4	4	6	6	6	1	7	9	6	5	5.2	9.1
14-Jul-04	6	5	8	5	5	5	9	6	6	9	6	6	3	5	2	2	2	3	8	10	11	11	6	8	6.1	10.7
15-Jul-04	6	5	7	3	3	4	14	12	14	15	11	9	12	9	4	3	4	6	8	11	12	8	7	6	8.0	14.9
16-Jul-04	2	5	5	7	5	9	12	12	13	15	11	6	8	9	7	5	8	14	1	7	6	10	6	8	8.0	15.4
17-Jul-04	8	7	5	5	4	6	8	10	5	8	7	10	8	5	0	4	4	3	8	5	4	5	4	6	5.7	9.8
18-Jul-04	4	5	6	2	6	7	7	9	10	9	9	6	1	5	6	6	8	8	7	2	9	8	13	9	6.7	13.3
19-Jul-04	10	4	6	6	1	4	4	9	8	13	7	0	3	0	5	9	13	9	14	0	6	5	2	0	5.7	13.5
20-Jul-04	2	1	0	3	2	0	0	0	0	D	0	0	1	0	0	2	2	3	3	5	2	2	2	2	1.4	4.6
21-Jul-04	2	2	2	2	2	2	7	6	6	5	10	17	22	19	16	20	20	24	25	27	29	28	28	25	14.4	28.6
22-Jul-04	12	7	4	3	3	4	5	11	7	9	6	9	6	15	7	9	4	7	12	16	9	20	18	15	9.1	20.5
23-Jul-04	14	15	16	21	19	18	17	28	33	24	15	11	10	10	14	19	10	11	10	6	12	25	21	24	16.7	33.4
24-Jul-04	32	18	17	10	10	13	21	24	24	25	27	26	26	15	9	12	15	9	9	13	11	11	11	8	16.5	31.7
25-Jul-04	9	4	1	3	2	3	3	5	9	3	4	4	5	1	0	0	5	5	D	1	0	2	1	1	3.0	9.1
26-Jul-04	2	3	3	1	2	1	0	0	2	4	4	2	4	1	3	6	3	2	5	6	2	1	4	3	2.7	6.4
27-Jul-04	4	3	4	3	3	4	2	2	2	3	0	2	1	0	1	0	1	1	0	0	5	4	2	1	2.1	5.4
28-Jul-04	1	1	2	1	1	1	3	5	6	6	4	3	2	6	7	5	6	5	6	6	5	7	6	3	4.1	6.6
29-Jul-04	4	5	4	0	1	2	6	6	3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	N	6.1
30-Jul-04	C	C	C	C	C	C	C	C	C	C	C	0	0	1	1	2	3	7	2	3	2	4	1	3	N	7.1
31-Jul-04	0	0	0	0	1	1	1	1	1	1	2	0	0	0	0	1	1	2	3	6	6	9	5	5	1.9	9.2
Hourly Avg	5.4	4.2	4.2	3.4	3.4	4.3	6.3	7.2	7.1	8.2	6.7	6.1	6.0	5.7	5.0	5.0	5.2	5.7	5.7	5.4	5.9	7.3	6.5	5.8		
Hourly Max	31.7	17.9	17.0	20.6	18.7	18.2	21.2	28.3	33.4	30.0	26.8	26.4	25.7	18.8	15.9	20.2	20.0	23.9	25.1	27.3	28.6	28.1	28.3	25.4		

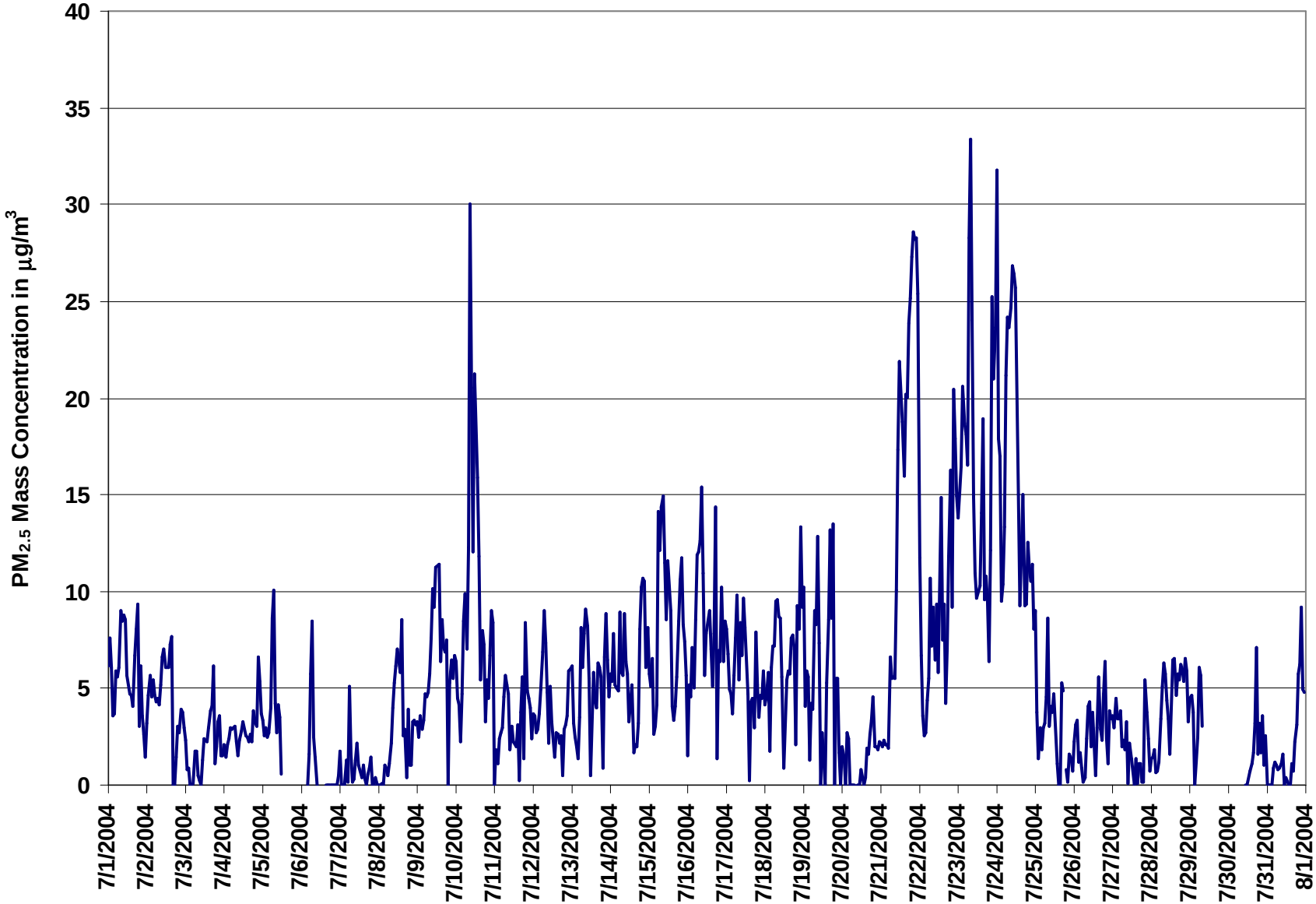


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Value:	60.2	µg/m³	18-Jul	22:00 23:00
Maximum 24-hr Value:	28.1	µg/m³	24-Jul	

AIC Time:	0 hrs	Operational Time:	697 hrs
Calibration Time:	26 hrs	AMD Operational Uptime:	97.2%

Percentile	99	95	75	50	25	5	1	Average	Geomean
	42.7	31.3	15.8	9.0	5.2	2.4	0.9	11.8 µg/m³	10.5 µg/m³

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jul-04	10	11	11	6	6	8	8	10	11	10	12	11	8	9	9	9	10	10	21	7	11	8	4	4	9.3	20.6
2-Jul-04	5	8	8	6	7	6	7	6	6	8	9	10	7	8	9	11	4	7	3	5	5	6	5	4	6.7	11.2
3-Jul-04	4	3	2	3	1	2	3	3	4	2	1	3	4	4	5	6	6	13	3	4	4	6	5	6	4.1	12.8
4-Jul-04	5	3	4	4	5	4	5	5	4	3	5	5	7	7	5	5	5	5	7	4	6	9	7	5	5.2	8.8
5-Jul-04	5	3	5	4	4	7	12	14	7	5	7	6	3	D	D	D	D	D	D	D	D	D	D	D	N	13.6
6-Jul-04	D	D	D	D	1	4	9	11	10	4	4	D	D	D	D	2	1	5	3	2	1	1	1	5	N	10.5
7-Jul-04	4	0	0	0	5	5	16	5	2	3	4	8	3	3	4	4	2	3	3	7	2	2	3	1	3.8	16.1
8-Jul-04	1	1	2	2	3	2	1	4	4	6	7	8	9	9	17	15	11	3	6	4	7	7	5	5	5.8	17.0
9-Jul-04	4	4	7	5	5	7	7	7	8	10	12	13	17	16	14	15	12	12	14	6	8	8	8	10	9.6	17.4
10-Jul-04	9	6	6	4	8	13	16	17	25	48	32	26	46	28	23	12	15	13	7	22	12	9	20	14	18.0	48.3
11-Jul-04	4	7	4	6	6	9	8	10	9	9	9	7	8	11	9	8	12	14	14	13	9	13	6	5	8.8	14.2
12-Jul-04	5	5	5	5	6	9	8	12	12	11	10	10	19	11	9	11	6	9	6	8	6	7	12	10	9.0	18.9
13-Jul-04	13	5	5	4	4	9	11	12	12	16	14	15	12	15	12	13	12	13	10	12	11	16	9	9	11.0	15.8
14-Jul-04	8	8	11	8	7	8	12	11	12	16	15	19	14	16	17	8	15	13	16	26	24	18	9	19	13.7	25.7
15-Jul-04	13	8	10	5	6	8	19	17	21	23	26	22	21	18	14	19	15	12	18	27	22	11	11	11	15.9	26.7
16-Jul-04	4	8	8	10	7	13	15	20	19	24	21	23	18	32	25	16	35	43	10	29	13	36	18	20	19.4	42.7
17-Jul-04	14	12	9	9	7	8	15	16	16	19	15	18	18	18	21	16	28	22	23	22	8	8	13	13	15.3	27.9
18-Jul-04	9	16	18	6	9	19	12	17	17	16	21	19	16	21	21	14	18	23	21	8	21	27	60	28	19.1	60.2
19-Jul-04	24	22	9	9	7	8	9	15	14	23	19	15	15	17	17	23	20	14	21	29	14	10	8	4	15.3	28.9
20-Jul-04	6	5	6	7	6	6	4	4	5	D	7	8	8	8	5	10	7	11	10	8	7	4	5	4	6.5	11.0
21-Jul-04	4	5	6	6	6	5	11	9	10	10	21	24	30	29	24	32	31	31	30	31	35	32	35	31	20.3	35.4
22-Jul-04	22	10	6	5	6	6	9	18	13	19	15	21	17	32	23	19	25	19	18	44	15	46	32	32	19.8	46.5
23-Jul-04	19	22	22	24	26	21	24	37	42	37	29	31	28	21	36	32	28	22	20	12	23	35	24	36	27.1	42.0
24-Jul-04	50	28	24	13	13	19	33	34	29	31	35	33	38	34	29	20	35	20	21	24	15	17	59	18	28.1	59.0
25-Jul-04	18	13	10	6	6	5	5	10	14	19	18	18	16	20	20	10	31	25	D	5	5	5	4	3	12.4	31.0
26-Jul-04	7	5	7	6	5	4	4	3	7	12	10	5	8	5	8	12	10	9	14	16	6	4	9	5	7.5	16.2
27-Jul-04	6	5	6	5	6	6	5	6	13	9	5	9	6	10	6	8	7	5	5	9	17	7	4	2	7.0	17.3
28-Jul-04	3	3	3	2	5	3	5	7	13	9	10	14	15	15	19	9	11	17	19	11	9	8	8	5	9.3	19.3
29-Jul-04	8	12	9	6	4	7	10	11	11	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	N	11.9
30-Jul-04	C	C	C	C	C	C	C	C	C	C	C	0	2	2	3	4	5	14	4	6	5	11	6	7	N	14.5
31-Jul-04	1	1	1	1	3	5	2	3	3	4	4	1	3	2	3	4	3	5	6	9	11	12	8	8	4.3	12.4
Hourly Avg	9.9	8.4	7.8	6.1	6.3	7.9	10.2	11.7	12.4	14.5	13.7	13.9	14.4	15.1	14.6	12.7	14.5	14.2	12.6	14.0	11.5	13.3	13.8	11.3		
Hourly Max	50.5	27.6	23.8	24.0	26.1	20.5	32.8	36.6	42.0	48.3	34.5	33.0	45.6	33.5	36.1	31.7	35.0	42.7	30.2	43.8	35.3	46.5	60.2	36.1		

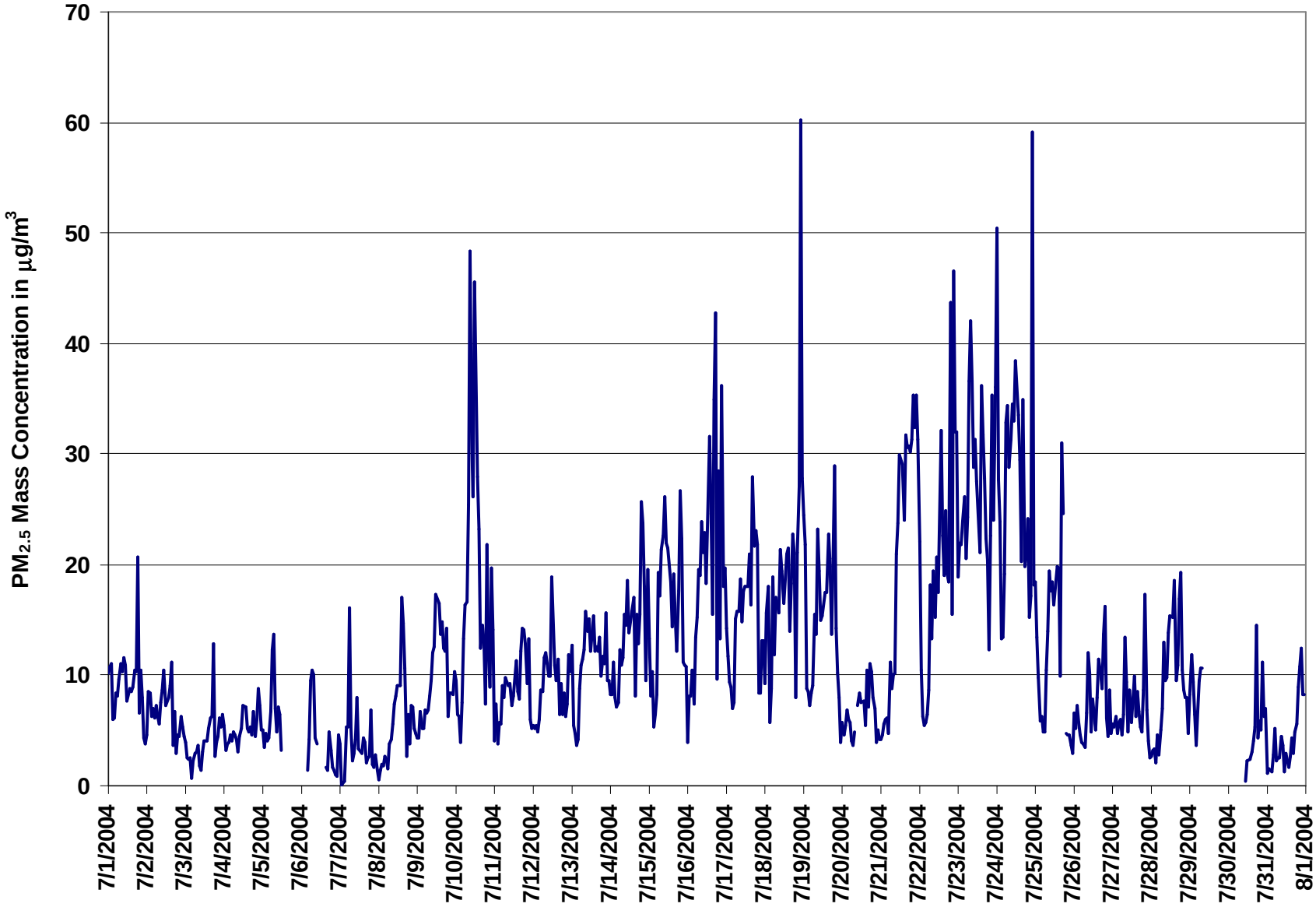
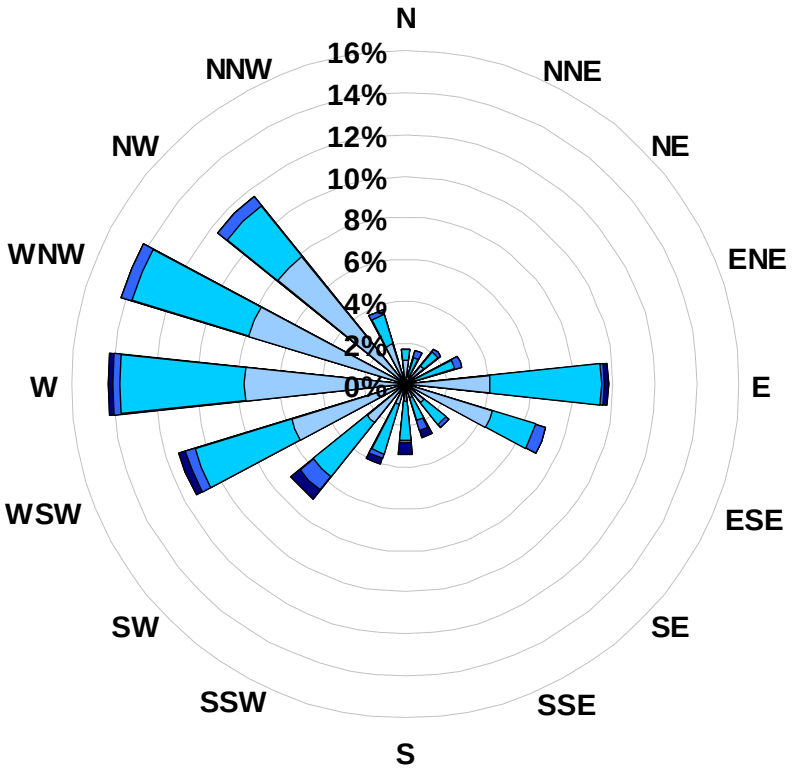


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly

Concentration Rose for the 1-hr $PM_{2.5}$ Average Concentration Occurrences at the Henry Pirker Site for July 2004



Frequency Distribution of $PM_{2.5}$ in µg/m^3			
Range			Frequency (hrs)
0	<	1	99
1	to	5	292
5	to	15	260
15	to	25	32
25	to	50	14
	>	50	0
Total Non-Zero Values			697

Calms	
Range µg/m^3	
1-5	0.0%
5-15	0.0%
15-25	0.0%
25-50	0.0%
>50	0.0%

PASZA - Henry Pirker Meteorological Parameters Monthly Summary

HOURLY AVERAGE TABLE

Relative Humidity (RH - %)

Station: Henry Pirker

Station Owner: PASZA

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	97.5	%	10-Jul	2:00 3:00
Maximum 24-hr Average:	92.3	%	3-Jul	

AIC Time:	0 hrs		Operational Time:				744 hrs	
Calibration Time:	0 hrs		AMD Operational Uptime:				100.0%	
Percentile	99	95	75	50	25	5	1	Average
	97.2	94.4	85.9	71.7	55.1	42.0	36.3	70.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jul-04	96	97	96	95	97	96	91	91	92	89	80	68	62	57	55	52	52	56	74	82	86	85	89	87	80	97
2-Jul-04	88	92	92	92	93	90	88	87	85	83	81	81	79	81	81	83	92	92	92	92	91	93	95	96	88	96
3-Jul-04	97	97	97	97	97	97	97	97	93	91	91	91	91	89	87	86	84	89	93	93	92	94	91	81	92	97
4-Jul-04	82	82	84	84	86	86	82	81	76	71	69	68	66	60	61	60	59	59	61	62	66	71	74	77	72	86
5-Jul-04	81	84	89	92	94	94	87	77	72	65	60	56	49	46	46	40	41	41	42	45	52	60	65	68	64	94
6-Jul-04	73	75	74	78	84	86	88	92	90	90	80	63	57	51	43	42	42	41	45	42	47	48	51	62	64	92
7-Jul-04	65	63	65	65	67	68	71	68	67	68	69	67	68	74	70	70	73	79	87	90	90	90	91	93	74	93
8-Jul-04	93	92	94	95	95	96	94	93	92	88	85	84	84	87	91	86	88	81	86	89	90	90	90	92	90	96
9-Jul-04	92	91	92	95	91	88	90	89	86	84	80	73	71	87	72	68	72	71	78	71	80	86	93	96	83	96
10-Jul-04	96	97	97	97	97	97	90	81	75	70	63	57	56	53	50	49	54	58	63	65	72	78	85	84	74	97
11-Jul-04	82	85	87	86	87	87	79	75	68	64	60	58	56	58	54	54	57	60	67	67	76	79	86	84	71	87
12-Jul-04	82	84	87	88	87	85	79	71	69	64	54	52	49	48	49	51	51	52	51	53	58	63	70	77	66	88
13-Jul-04	86	85	88	91	92	88	86	76	71	71	68	63	52	52	49	50	53	51	53	58	69	78	86	85	71	92
14-Jul-04	88	92	95	96	96	95	90	79	72	64	57	52	49	48	43	40	37	41	41	46	57	65	73	81	67	96
15-Jul-04	83	85	88	88	90	88	83	76	68	61	56	51	52	52	48	45	44	47	49	51	66	71	74	76	66	90
16-Jul-04	74	76	79	86	87	86	86	75	64	61	57	51	44	46	45	45	44	50	46	50	56	71	80	86	64	87
17-Jul-04	89	93	94	94	94	95	85	77	67	59	54	55	53	48	44	41	41	42	45	51	55	61	63	71	65	95
18-Jul-04	69	75	80	74	80	80	68	61	65	60	53	51	45	42	39	41	41	43	47	50	59	66	68	74	60	80
19-Jul-04	76	73	75	80	80	82	82	79	80	80	69	62	59	48	46	49	63	67	71	86	86	91	89	84	73	91
20-Jul-04	87	89	89	89	89	85	80	69	65	57	53	48	46	45	43	42	42	42	45	50	54	61	65	69	63	89
21-Jul-04	72	74	76	77	78	78	78	78	81	86	87	76	68	59	54	51	52	53	56	62	70	75	79	79	71	87
22-Jul-04	80	81	79	79	79	79	79	85	79	69	63	60	59	65	67	61	52	55	57	65	68	80	85	88	71	88
23-Jul-04	91	93	96	94	96	97	97	96	77	69	61	55	48	42	41	42	40	40	43	42	47	60	64	70	67	97
24-Jul-04	83	84	87	93	93	93	84	76	75	66	58	52	47	42	33	31	33	38	41	48	54	57	65	87	63	93
25-Jul-04	89	90	89	92	94	94	89	80	76	64	57	53	54	53	48	39	39	55	43	46	48	54	61	67	66	94
26-Jul-04	71	76	76	80	80	81	78	74	69	69	65	65	62	56	54	59	59	55	58	75	72	67	71	74	69	81
27-Jul-04	75	74	76	78	81	85	79	74	70	66	60	55	52	48	46	44	43	44	42	44	50	64	69	72	62	85
28-Jul-04	74	78	82	85	88	89	85	77	71	61	53	46	44	46	45	43	44	46	52	56	59	65	72	77	64	89
29-Jul-04	85	91	91	86	79	79	70	67	59	54	46	42	39	37	35	36	34	36	36	39	44	52	55	60	56	91
30-Jul-04	60	63	67	73	76	74	75	74	66	55	54	51	45	46	47	51	49	61	67	71	78	87	89	93	66	93
31-Jul-04	90	90	92	93	92	91	89	87	80	75	73	60	55	51	49	52	48	54	56	68	69	82	85	85	74	93
Hourly Avg	82	84	86	87	88	87	84	79	75	70	65	60	57	55	53	52	52	55	58	62	66	72	77	80		
Hourly Max	97	97	97	97	97	97	97	97	93	91	91	91	91	89	91	86	92	92	93	93	92	94	95	96		

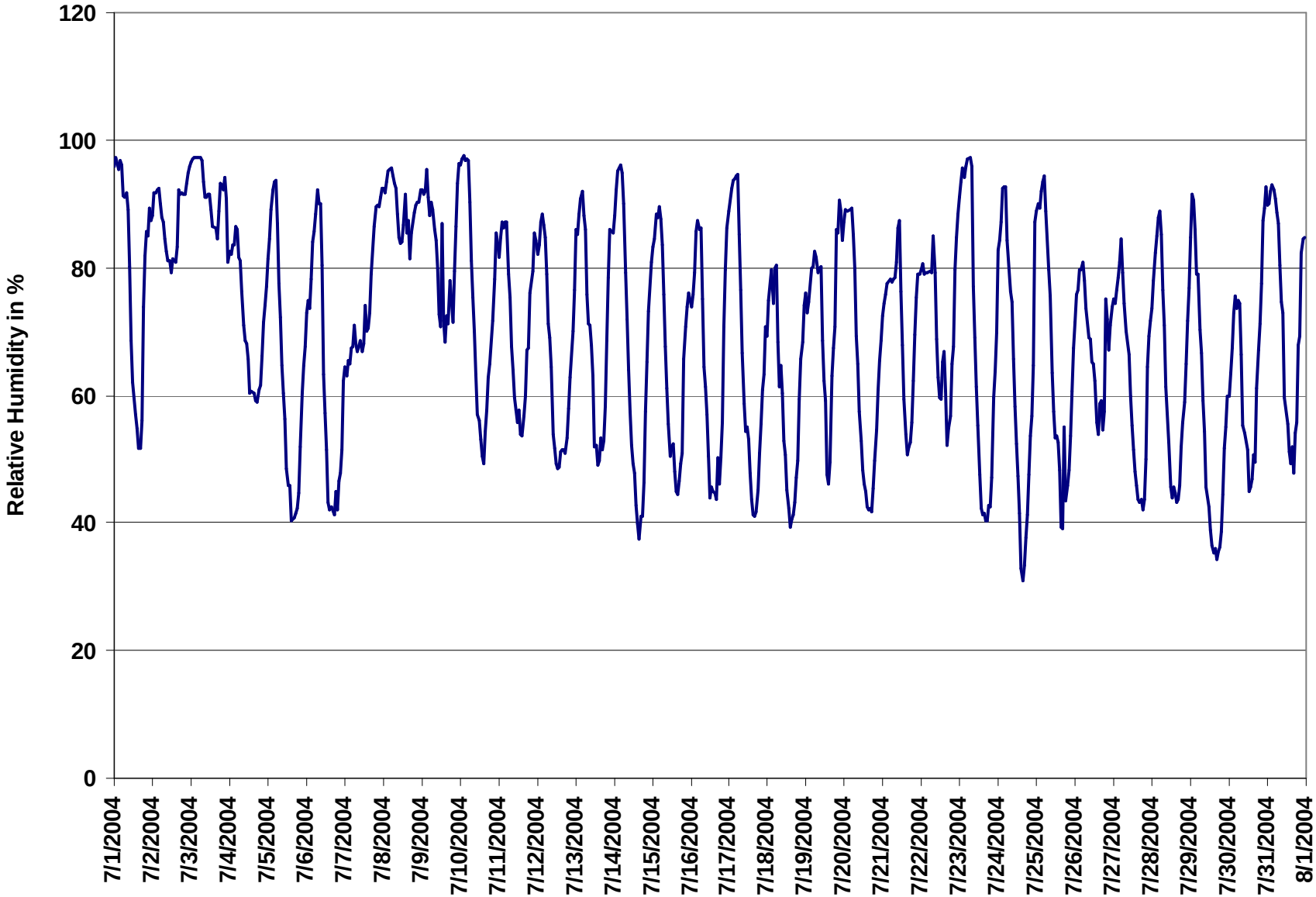


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (AT - ℃)

Monitoring Dates: **July 1, 2004** **to** **August 1, 2004**

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	32.5	°C	24-Jul	15:00 16:00
Maximum 24-hr Average:	23.2	°C	24-Jul	

AIC Time:	0 hrs	Operational Time:	744 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	29.0	27.1	21.9	17.0	14.0	10.6	9.4	18.0 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jul-04	14	13	13	14	13	13	15	15	15	15	18	22	23	24	25	25	25	24	20	17	17	16	15	15	17.7	25.3
2-Jul-04	15	14	14	14	13	13	14	14	15	16	16	17	17	17	17	17	14	13	13	14	14	13	13	13	14.5	17.1
3-Jul-04	13	13	13	13	12	12	12	12	11	10	10	10	11	12	12	12	12	12	10	10	11	11	11	11	11.4	13.1
4-Jul-04	11	11	10	10	10	10	11	11	12	13	14	15	16	17	17	17	17	17	17	17	16	15	14	14	13.9	17.2
5-Jul-04	13	12	10	9	9	9	11	15	16	18	20	21	23	24	25	25	25	24	24	23	21	20	19	18	18.1	25.3
6-Jul-04	17	17	17	16	15	15	15	15	15	15	17	20	21	21	22	22	20	21	19	18	16	15	15	13	17.3	22.0
7-Jul-04	12	11	10	10	10	10	10	11	11	11	11	11	12	11	12	12	12	11	10	10	10	10	9	9	10.6	12.5
8-Jul-04	9	9	9	9	10	10	10	11	11	13	14	15	16	16	15	15	15	15	15	14	14	13	13	13	12.8	16.0
9-Jul-04	13	13	13	12	13	13	13	13	14	15	17	19	20	17	20	21	19	19	18	18	16	14	13	12	15.6	20.7
10-Jul-04	12	11	11	11	10	10	12	15	17	19	21	22	22	23	25	24	22	22	20	20	19	17	16	16	17.4	24.7
11-Jul-04	15	13	12	12	11	11	13	15	18	20	20	21	22	21	22	22	21	21	18	19	18	16	15	15	17.2	22.2
12-Jul-04	15	15	13	12	12	11	13	16	17	18	21	21	22	23	23	22	23	23	23	22	20	19	18	16	18.3	22.9
13-Jul-04	15	15	14	13	12	12	13	16	18	19	20	22	24	24	26	25	25	25	24	20	18	17	16	16	18.7	25.5
14-Jul-04	16	15	14	14	13	13	14	17	19	21	24	25	25	26	27	27	27	25	27	25	23	22	20	18	20.7	27.4
15-Jul-04	17	15	14	14	13	14	16	19	21	24	25	26	27	27	29	29	29	27	27	27	24	22	21	20	21.9	28.6
16-Jul-04	19	18	17	16	15	16	16	19	22	24	26	27	28	29	28	29	29	28	28	26	24	21	18	18	22.5	28.9
17-Jul-04	17	16	16	15	15	15	17	20	22	23	25	25	26	27	27	27	27	27	27	25	23	20	19	18	21.6	27.1
18-Jul-04	17	16	15	15	14	14	17	20	20	21	24	25	26	27	29	29	29	29	28	26	24	22	22	20	22.1	29.1
19-Jul-04	19	20	19	18	18	17	17	18	19	20	23	24	24	27	27	27	24	24	23	17	17	17	16	16	20.5	27.4
20-Jul-04	16	15	15	15	15	14	15	17	18	19	20	21	22	22	23	23	23	23	22	21	19	17	15	15	18.5	23.1
21-Jul-04	14	14	13	13	14	14	14	15	15	15	15	17	19	21	21	22	22	22	21	20	18	17	17	16	17.1	22.4
22-Jul-04	16	15	15	15	14	14	14	14	16	20	22	24	24	22	22	23	25	24	23	23	21	19	17	16	19.2	25.3
23-Jul-04	16	14	13	13	12	13	13	15	20	22	25	26	26	28	29	29	28	28	27	26	24	22	21	19	21.2	28.9
24-Jul-04	17	15	15	13	13	13	15	20	21	24	26	28	30	31	32	32	32	31	30	29	27	25	21	17	23.2	32.5
25-Jul-04	16	16	16	15	15	14	15	17	19	21	23	24	25	23	23	24	23	21	20	19	18	17	16	14	19.0	24.9
26-Jul-04	14	14	14	14	14	13	14	14	16	16	17	17	17	19	19	19	19	20	19	16	16	16	15	15	16.1	19.6
27-Jul-04	15	15	14	14	13	13	14	15	15	17	18	19	20	21	22	22	22	22	22	22	20	17	16	15	17.6	22.3
28-Jul-04	14	13	12	12	11	10	12	14	16	19	22	25	25	25	26	27	27	27	25	24	23	21	20	18	19.6	27.3
29-Jul-04	16	15	14	15	15	15	17	19	22	24	25	25	26	26	26	26	27	26	25	25	23	21	19	18	21.2	26.6
30-Jul-04	17	16	15	14	13	14	14	16	18	19	19	20	22	22	21	20	21	19	17	17	15	13	12	13	17.0	21.8
31-Jul-04	12	12	11	10	11	11	12	12	14	15	16	19	20	21	21	20	21	19	19	18	17	15	14	13	15.5	21.4
Hourly Avg	14.9	14.3	13.7	13.2	12.8	12.8	13.9	15.5	16.8	18.3	19.8	21.1	21.9	22.4	22.9	23.1	22.8	22.2	21.3	20.2	18.8	17.4	16.4	15.5		
Hourly Max	19.4	19.8	19.1	18.1	17.7	16.9	17.5	19.9	22.2	24.0	26.1	28.1	29.7	30.9	32.0	32.5	31.9	31.0	30.5	28.8	26.6	25.2	21.9	20.3		

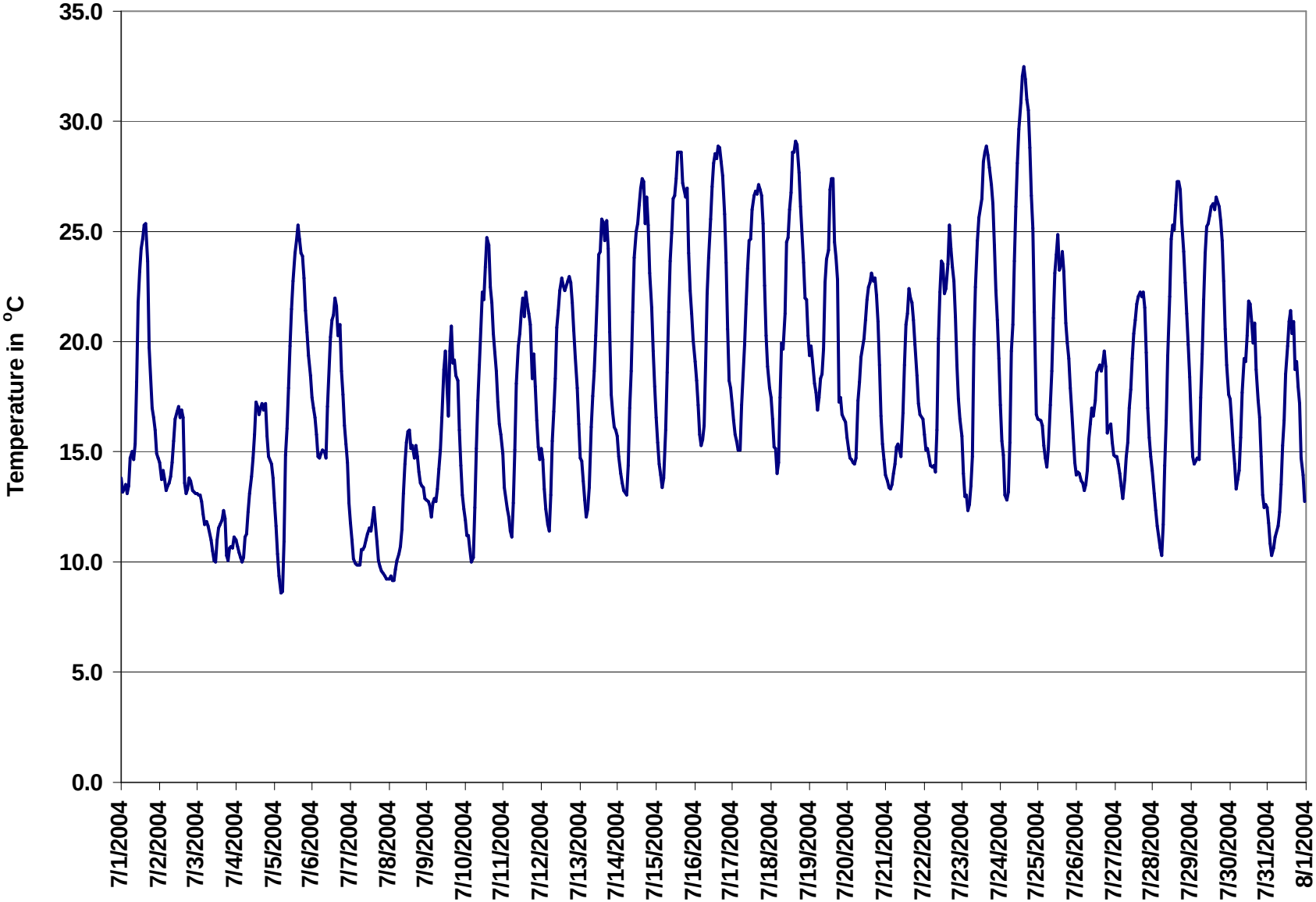


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Solar Radiation (SR - W/m^2)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	879.7	W/m^2	5-Jul	13:00 14:00
Maximum 24-hr Average:	319.8	W/m^2	5-Jul	

AIC Time:	0 hrs	Operational Time:	743 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%

Percentile	99	95	75	50	25	5	1	Average
	840.4	778.3	433.5	108.0	0.0	0.0	0.0	233.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jul-04	0	0	0	0	8	44	160	170	177	220	406	765	875	866	809	745	467	140	20	35	25	4	0	0	247	875
2-Jul-04	0	0	0	0	9	52	50	76	135	250	237	149	108	63	111	28	13	54	54	20	5	1	0	0	59	250
3-Jul-04	0	0	0	0	0	2	15	11	107	210	99	86	200	135	145	124	136	121	92	35	8	1	0	0	64	210
4-Jul-04	0	0	0	0	3	53	133	145	230	306	391	469	586	824	532	343	342	261	180	174	43	3	0	0	209	824
5-Jul-04	0	0	0	0	7	43	213	328	443	578	730	808	857	880	834	769	482	309	230	110	43	7	2	3	320	880
6-Jul-04	3	1	0	0	3	35	30	46	76	104	553	789	719	711	797	773	316	419	103	79	29	3	0	0	233	797
7-Jul-04	0	0	0	0	1	18	72	114	94	90	115	165	167	191	209	212	150	94	44	22	11	1	0	0	74	212
8-Jul-04	0	0	0	0	0	7	15	45	111	265	282	272	202	148	65	164	134	138	57	42	9	1	0	0	82	282
9-Jul-04	0	0	0	0	0	13	43	141	230	275	431	527	396	153	772	712	216	201	162	156	44	5	0	D	195	772
10-Jul-04	0	0	0	0	5	39	170	241	453	606	695	734	645	737	863	651	241	187	97	95	49	2	0	0	271	863
11-Jul-04	0	0	0	0	2	36	163	257	447	590	691	752	775	555	810	568	635	412	111	198	31	2	0	0	293	810
12-Jul-04	0	0	0	0	2	31	151	279	325	457	725	797	795	860	720	626	632	492	333	157	45	5	0	0	310	860
13-Jul-04	0	0	0	0	3	27	102	266	218	280	394	548	805	778	820	699	474	508	359	54	21	4	0	0	265	820
14-Jul-04	0	0	0	0	5	42	82	240	449	590	683	787	806	855	793	720	527	185	305	148	84	9	0	0	305	855
15-Jul-04	0	0	0	0	4	26	147	247	439	575	692	775	819	827	792	687	452	222	138	175	42	3	0	0	294	827
16-Jul-04	0	0	0	0	5	41	111	177	434	526	694	747	741	709	592	643	459	362	215	100	18	0	0	0	274	747
17-Jul-04	0	0	0	0	2	24	122	238	432	577	618	564	744	819	732	675	612	417	323	197	41	2	0	0	297	819
18-Jul-04	0	0	0	0	2	25	166	261	282	406	624	415	538	535	775	728	686	464	308	150	41	2	0	0	267	775
19-Jul-04	0	0	0	0	0	17	92	152	80	212	564	553	659	809	775	672	204	119	8	23	24	0	0	0	207	809
20-Jul-04	0	0	0	0	0	27	87	272	449	595	708	795	814	764	737	630	493	480	333	181	44	0	0	0	309	814
21-Jul-04	0	0	0	0	0	8	62	131	157	119	91	326	670	745	706	647	524	384	252	104	26	0	0	0	206	745
22-Jul-04	0	0	0	0	0	16	39	71	256	495	638	763	531	256	414	410	472	280	202	163	38	1	0	0	210	763
23-Jul-04	0	0	0	0	0	17	65	172	420	565	680	760	807	810	769	726	591	450	308	169	36	1	0	0	306	810
24-Jul-04	0	0	0	0	0	21	130	236	417	557	675	753	804	807	765	685	573	443	295	85	16	0	0	0	303	807
25-Jul-04	0	0	0	0	0	20	111	222	369	453	589	699	634	230	606	543	293	188	150	183	36	0	0	0	222	699
26-Jul-04	0	0	0	0	0	4	16	109	209	285	327	224	283	245	311	277	364	422	131	16	14	0	0	0	135	422
27-Jul-04	0	0	0	0	0	21	135	222	357	517	493	704	840	833	784	710	596	432	302	165	37	0	0	0	298	840
28-Jul-04	0	0	0	0	0	10	133	235	396	519	609	778	675	523	565	689	506	426	315	118	29	0	0	0	272	778
29-Jul-04	0	0	0	0	0	13	123	174	433	490	602	757	768	841	653	504	574	430	293	127	28	0	0	0	284	841
30-Jul-04	0	0	0	0	0	16	99	143	312	394	291	679	821	741	330	210	292	95	75	39	2	0	0	0	189	821
31-Jul-04	0	0	0	0	0	10	81	125	273	362	432	624	664	762	751	623	490	107	144	63	29	0	0	0	231	762
Hourly Avg	0	0	0	0	2	24	101	179	297	402	508	599	637	613	624	555	418	298	192	109	31	2	0	0		
Hourly Max	3	1	0	0	9	53	213	328	453	606	730	808	875	880	863	773	686	508	359	198	84	9	2	3		

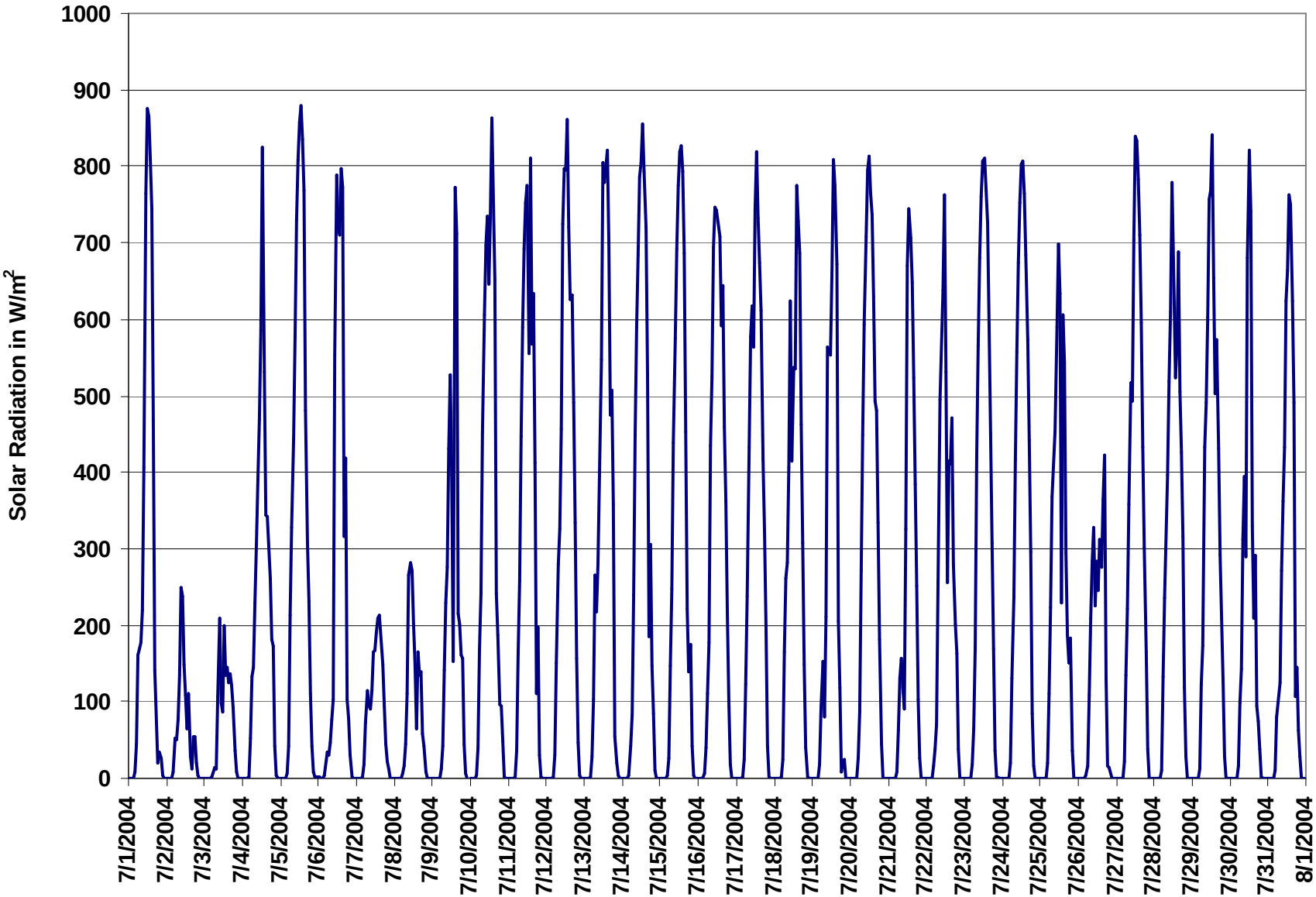


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv - Km/hr)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Maximum 1-hr Average:	32.4	km/hr	25-Jul	18:00 19:00
Maximum 24-hr Average:	19.4	km/hr	26-Jul	

Calm Time:	8 hrs	**1%** calms	Operational Time: 736 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 100.0%

Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	28.3	21.3	11.5	7.2	4.8	2.3	1.4	8.9 km/hr	4.8 km/hr

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Vector Average	Daily Max
1-Jul-04	3	3	5	5	5	6	9	9	10	8	5	4	4	4	5	calm	3	6	9	8	6	7	7	6	4.1	10.2
2-Jul-04	5	2	8	6	5	5	6	5	6	6	5	5	7	9	8	3	16	8	8	2	2	5	4	5	5.3	15.6
3-Jul-04	5	5	5	2	5	5	6	1	13	13	11	10	7	4	6	8	6	10	19	17	13	11	12	13	5.4	19.0
4-Jul-04	12	9	9	7	7	9	10	10	10	13	14	13	12	11	11	11	10	9	9	8	7	5	7	7	9.6	13.9
5-Jul-04	6	7	5	4	5	4	5	6	8	10	9	8	9	7	6	4	6	5	5	20	4	5	6	5	2.7	19.8
6-Jul-04	2	4	6	4	3	2	2	1	8	8	9	10	14	16	20	23	22	20	15	15	11	13	15	7	8.3	23.2
7-Jul-04	6	4	7	8	6	5	7	8	8	7	7	5	5	8	11	9	15	16	12	13	14	14	12	10	8.5	15.6
8-Jul-04	11	14	11	13	12	12	14	16	17	16	19	17	15	16	9	12	11	7	7	12	16	15	16	13	11.8	19.5
9-Jul-04	12	12	13	13	13	11	11	14	16	14	12	9	6	3	6	6	6	6	5	9	6	3	3	3	7.1	15.6
10-Jul-04	calm	4	5	3	2	4	4	4	4	4	4	2	4	3	4	4	7	5	7	6	4	1	3	5	3.5	7.3
11-Jul-04	6	3	4	5	calm	6	7	8	6	8	15	12	11	16	17	20	20	19	17	11	7	11	9	5	9.8	20.4
12-Jul-04	5	10	7	10	10	8	7	10	10	11	13	13	12	12	15	14	11	10	10	9	7	7	3	2	9.0	14.6
13-Jul-04	2	4	4	4	5	6	6	5	4	5	5	3	5	6	5	5	7	5	8	14	6	5	3	2	1.9	13.9
14-Jul-04	5	3	4	4	3	3	4	8	9	7	3	4	6	6	4	6	calm	2	3	2	6	7	2	2	4.2	9.4
15-Jul-04	3	1	calm	3	2	4	4	4	4	3	3	3	6	6	5	6	7	8	7	9	10	9	8	6	3.2	9.7
16-Jul-04	6	7	6	1	7	6	4	2	3	3	5	5	3	4	7	5	5	7	9	13	12	9	9	4	1.8	12.9
17-Jul-04	2	1	6	3	2	4	5	6	10	11	11	11	11	16	19	21	20	16	14	12	12	13	10	10	9.1	20.5
18-Jul-04	7	3	4	3	2	3	3	5	8	6	6	7	7	5	7	8	8	10	12	11	5	calm	calm	1	4.5	12.1
19-Jul-04	2	8	7	7	7	3	6	4	3	3	3	9	8	2	4	5	13	10	5	14	5	3	13	11	3.6	14.3
20-Jul-04	8	13	11	10	6	10	11	13	17	25	28	30	28	24	26	23	23	25	24	23	20	18	19	20	19.2	30.5
21-Jul-04	17	14	16	14	8	11	10	12	15	13	7	9	7	4	3	4	6	7	9	9	5	5	4	5	5.5	17.4
22-Jul-04	6	7	8	8	9	8	8	8	8	5	6	6	5	5	6	3	4	4	4	7	3	1	3	3	3.3	8.9
23-Jul-04	2	3	2	2	2	calm	2	2	2	4	3	5	5	4	5	7	5	6	9	9	7	7	6	3	1.1	9.1
24-Jul-04	1	3	3	3	2	3	3	3	4	3	3	4	3	2	3	4	5	10	10	10	7	7	29	21	1.1	29.4
25-Jul-04	5	5	8	6	5	5	4	9	9	14	14	14	14	18	18	18	11	10	32	28	28	23	21	13	13.1	32.4
26-Jul-04	13	18	16	12	21	19	21	20	21	21	26	25	23	26	25	25	27	26	19	12	11	16	16	15	19.4	26.8
27-Jul-04	16	16	14	12	10	12	17	16	17	13	11	10	12	12	11	11	11	10	6	5	4	8	9	8	9.2	16.9
28-Jul-04	7	6	5	6	4	5	6	4	5	7	7	7	7	7	4	7	5	8	11	9	8	7	7	4	3.6	11.5
29-Jul-04	1	3	5	7	6	6	7	5	13	19	28	31	30	28	25	24	28	30	29	23	17	14	12	13	16.8	31.1
30-Jul-04	15	10	7	8	6	8	7	7	8	7	10	8	7	10	6	6	8	11	7	10	14	11	5	12	8.2	15.2
31-Jul-04	9	11	9	8	10	11	10	10	12	8	7	10	8	9	9	15	11	8	8	6	3	2	5	5	8.0	15.3
1-hr Vector	3.4	3.4	3.0	4.3	3.8	3.9	4.9	5.5	6.2	6.6	7.3	6.6	6.5	6.6	6.7	5.6	5.0	4.5	4.6	3.8	3.1	3.4	4.2	3.1		
Hourly Max	17.4	18.3	16.0	13.6	21.2	19.0	21.1	19.7	21.0	24.8	27.8	31.1	30.3	28.1	26.2	25.0	28.0	29.7	32.4	27.6	27.9	23.0	29.4	20.7		

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

Monitoring Dates: July 1, 2004 to August 1, 2004

Summary

Calm Time:	0 hrs	**0%** calms			Operational Time:			744 hrs		
Calibration Time:		0 hrs			AMD Operational Uptime:			100.0%		
Percentile	99	95	75	50	25	5	1	Average		
	350.9	328.3	291.8	258.3	158.4	67.8	23.8	277 deg		

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average
1-Jul-04	268	332	66	322	327	280	257	259	260	258	267	279	267	322	285	85	43	31	259	205	211	264	331	343	280
2-Jul-04	354	344	88	90	76	59	41	55	84	91	105	70	55	14	38	61	320	17	41	83	59	26	54	79	47
3-Jul-04	91	135	162	243	298	297	261	289	54	40	39	42	40	112	176	172	148	86	94	94	86	99	97	96	87
4-Jul-04	100	104	86	85	82	93	104	108	113	114	114	122	129	135	118	117	139	122	109	112	134	132	112	111	113
5-Jul-04	105	105	129	81	119	135	169	228	230	245	237	228	241	261	260	238	188	215	238	350	158	118	110	111	213
6-Jul-04	96	76	94	124	107	144	228	289	233	203	202	245	276	268	273	275	278	288	272	269	257	261	256	270	262
7-Jul-04	247	266	285	297	302	322	321	305	289	293	301	358	297	296	303	335	314	317	305	276	265	264	263	266	293
8-Jul-04	265	266	269	273	285	284	294	295	294	297	304	305	313	303	334	20	45	46	305	315	316	323	328	320	307
9-Jul-04	318	325	326	308	305	303	294	289	292	302	302	310	273	99	146	159	203	246	285	274	294	325	300	242	295
10-Jul-04	203	187	226	277	6	198	288	245	216	210	232	252	196	228	229	127	113	221	236	266	284	29	192	217	223
11-Jul-04	239	264	257	241	155	235	255	268	295	310	303	302	313	305	290	288	268	266	279	289	257	264	270	308	280
12-Jul-04	278	266	280	261	254	270	269	246	249	277	292	296	271	276	256	268	279	276	254	220	211	228	274	86	265
13-Jul-04	279	352	347	320	324	334	324	319	277	271	298	22	95	105	80	64	29	74	97	154	145	114	352	355	36
14-Jul-04	169	172	217	235	237	287	230	258	250	265	258	211	252	283	291	291	300	262	81	178	201	228	237	281	247
15-Jul-04	276	124	279	349	313	328	328	307	266	262	167	79	101	96	94	122	87	71	68	60	69	78	101	83	76
16-Jul-04	82	77	90	290	34	133	246	225	255	216	270	284	233	248	285	314	127	129	162	175	188	308	330	270	223
17-Jul-04	91	193	171	237	301	204	248	300	286	287	290	260	268	276	275	268	275	270	281	302	308	303	326	335	281
18-Jul-04	317	359	179	297	195	223	197	206	207	225	238	217	228	251	240	242	221	284	292	290	302	92	39	276	252
19-Jul-04	316	225	200	215	216	158	185	151	151	118	276	274	275	257	165	112	98	92	96	184	119	219	252	233	195
20-Jul-04	219	231	273	277	270	263	274	260	262	262	264	263	260	266	260	260	260	262	263	257	260	254	254	254	260
21-Jul-04	252	250	255	253	286	265	270	294	293	300	11	65	42	29	152	271	266	227	226	206	189	162	166	185	261
22-Jul-04	256	263	254	255	254	246	248	243	252	273	270	255	228	73	84	276	287	321	20	114	148	245	75	105	254
23-Jul-04	338	292	16	305	257	258	171	190	275	284	188	172	190	238	293	288	92	96	100	84	91	94	92	105	125
24-Jul-04	233	347	313	332	323	288	310	162	159	230	248	249	224	109	325	272	132	99	101	110	101	102	288	326	300
25-Jul-04	218	204	252	216	251	227	196	246	254	257	277	303	317	298	300	288	250	214	267	258	255	256	253	250	261
26-Jul-04	273	275	268	274	265	264	266	266	279	284	297	293	282	292	307	306	291	300	307	317	311	298	294	299	288
27-Jul-04	299	317	325	331	318	305	316	319	319	315	311	298	296	299	309	317	321	313	316	334	100	107	111	111	317
28-Jul-04	116	108	106	116	118	118	119	141	170	198	243	278	309	333	352	82	84	94	98	97	99	109	106	118	108
29-Jul-04	324	278	297	289	299	298	298	308	258	267	269	268	272	268	270	268	261	269	265	260	256	252	251	250	268
30-Jul-04	257	261	310	287	297	313	320	337	339	355	332	348	333	348	316	314	309	292	308	322	332	307	258	262	309
31-Jul-04	296	261	259	279	272	282	283	286	280	259	246	293	270	284	303	347	338	308	334	309	338	295	280	292	
Hourly Avg	266	266	270	277	284	272	274	275	271	274	280	284	277	287	283	288	281	281	278	260	253	269	279	279	

Station: Henry Pirker

Station Owner: PASZA

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

Monitoring Dates: **July 1, 2004** **to** **August 1, 2004**

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms	Operational Time: 744 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 100.0%

Percentile	99	95	75	50	25	5	1
	56.7	47.2	24.2	14.4	8.5	5.2	4.3

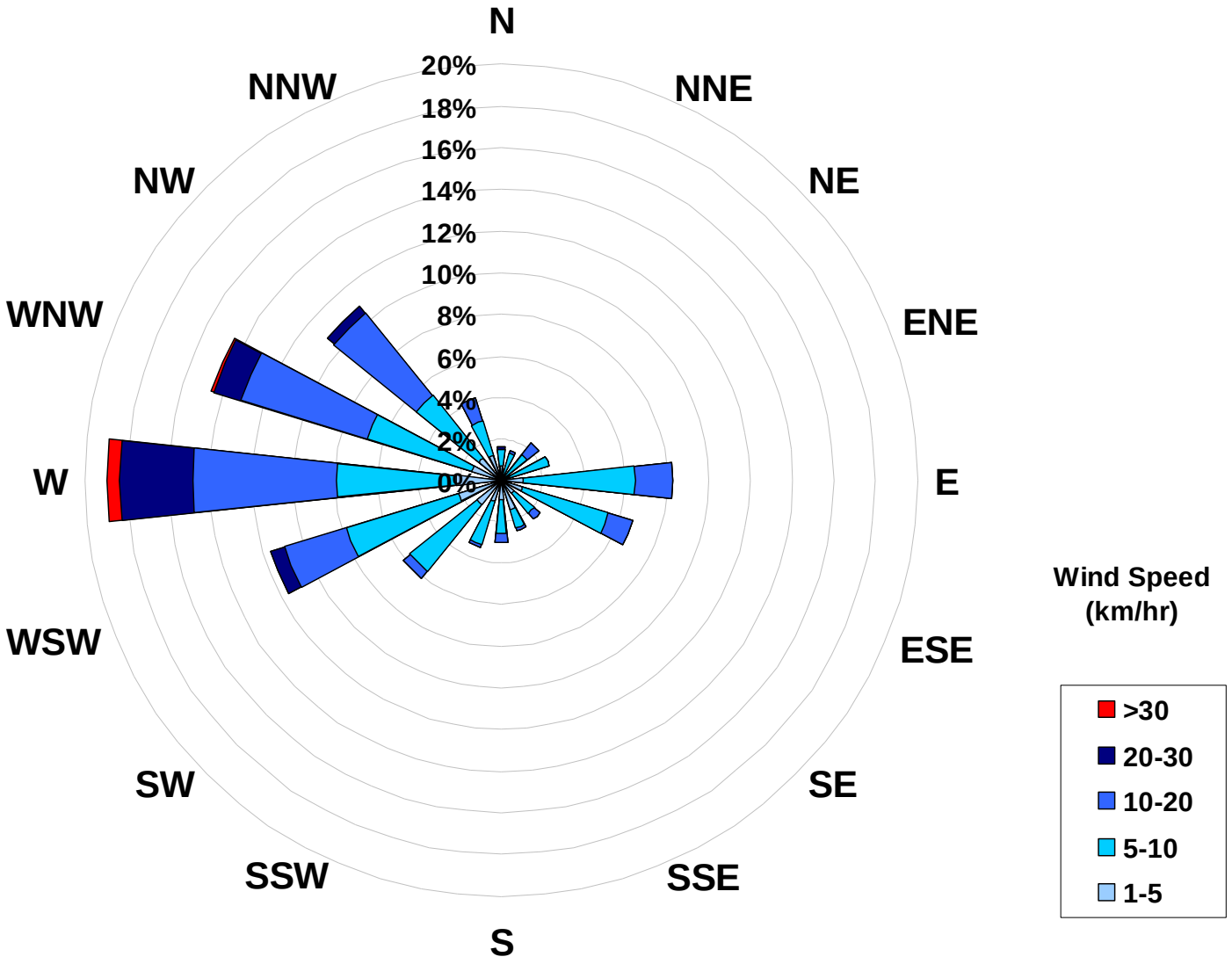
Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Jul-04	39	40	17	17	9	10	8	12	14	17	32	42	36	50	41	37	56	21	25	14	37	23	10	15	55.9
2-Jul-04	18	20	11	14	15	17	16	21	19	17	33	25	20	13	14	41	9	17	15	30	44	10	17	11	43.9
3-Jul-04	14	14	12	20	8	15	23	51	12	11	13	14	18	25	18	11	22	11	6	6	7	7	10	8	50.8
4-Jul-04	10	11	8	8	8	7	9	9	10	10	11	16	17	19	21	15	15	18	18	13	12	11	7	7	20.6
5-Jul-04	8	8	14	18	18	11	19	16	19	16	17	18	25	36	49	57	33	25	23	40	21	9	6	10	56.8
6-Jul-04	38	10	8	27	28	24	21	45	11	11	12	18	14	11	10	9	8	7	7	5	8	6	6	11	44.6
7-Jul-04	12	19	22	16	19	19	11	9	9	8	12	45	20	8	14	12	6	5	5	7	6	6	5	6	45.0
8-Jul-04	6	5	7	6	6	5	5	5	5	6	12	8	6	5	37	11	11	16	13	8	7	7	6	5	36.7
9-Jul-04	5	5	8	7	5	7	6	4	6	7	11	19	35	35	43	30	21	16	26	12	13	48	25	33	48.4
10-Jul-04	60	22	10	47	34	40	20	23	27	34	36	54	38	47	51	29	19	20	13	12	22	67	33	9	67.2
11-Jul-04	10	37	18	17	54	17	14	14	13	19	11	15	18	11	12	11	11	7	6	5	14	9	11	13	54.3
12-Jul-04	19	8	16	7	7	12	12	9	10	11	12	13	17	19	13	13	18	16	14	13	10	8	50	41	49.7
13-Jul-04	39	19	26	18	14	7	9	23	17	16	21	41	47	33	47	42	28	47	18	18	21	23	52	18	52.0
14-Jul-04	15	15	24	14	16	22	16	12	15	21	51	48	27	33	56	19	61	26	38	52	18	8	31	49	61.0
15-Jul-04	49	28	54	18	45	9	13	18	23	47	38	61	42	42	42	36	27	14	13	14	8	7	11	16	60.7
16-Jul-04	8	12	16	50	15	21	20	46	38	45	33	38	38	53	20	36	31	24	14	6	8	21	19	35	52.7
17-Jul-04	37	51	12	16	17	19	15	11	10	10	11	16	15	13	11	10	9	8	7	5	5	6	7	6	50.8
18-Jul-04	13	31	20	27	23	20	20	17	11	19	22	17	19	32	27	26	23	15	7	5	23	41	71	49	71.3
19-Jul-04	33	11	13	11	20	38	15	25	25	36	44	19	20	59	53	46	9	11	25	16	20	28	9	10	58.6
20-Jul-04	23	13	10	11	14	8	9	9	9	9	8	8	9	11	7	9	8	9	7	5	6	4	5	4	22.8
21-Jul-04	4	6	4	4	12	6	7	7	7	8	22	16	29	45	42	56	35	29	12	11	10	7	13	11	55.9
22-Jul-04	12	10	8	6	8	8	10	12	13	21	25	27	46	33	22	26	28	22	22	14	13	34	36	17	45.5
23-Jul-04	30	17	34	36	34	50	50	31	46	42	39	41	51	40	38	25	47	34	15	9	6	6	4	44	50.7
24-Jul-04	36	13	17	15	28	15	13	33	21	35	50	22	42	65	50	41	29	15	10	7	7	6	32	7	64.8
25-Jul-04	36	29	13	14	25	16	37	13	11	7	8	9	11	7	7	10	20	24	6	6	5	5	4	5	36.9
26-Jul-04	10	5	7	16	5	6	5	5	6	6	6	5	6	8	6	6	6	6	7	5	6	5	4	4	15.6
27-Jul-04	4	5	6	6	7	6	6	7	10	14	17	20	21	18	19	18	18	12	23	21	46	7	6	4	45.5
28-Jul-04	9	8	10	8	23	8	13	23	19	18	26	26	30	24	43	31	42	23	10	9	8	7	8	22	43.3
29-Jul-04	43	16	12	10	6	6	9	15	11	10	8	7	7	9	13	10	9	8	6	5	4	5	7	5	42.8
30-Jul-04	4	23	18	19	15	13	13	10	17	22	13	23	46	36	33	19	22	10	18	12	11	21	29	7	46.4
31-Jul-04	10	8	6	9	7	7	7	7	14	20	23	21	20	21	21	12	15	10	11	9	29	33	14	14	
Hourly Max	60	51	54	50	54	50	50	51	46	47	51	61	51	65	56	57	61	47	38	52	46	67	71	49	

Wind Rose for the 1-hr Average Meterological Data at the Henry Pirker Site for July 2004



Calm 0%

PEACE AIRSHED ZONE ASSOCIATION

PASZA Monthly Passive Data Summary

Table 1. PASZA Passive Stations for July 2004

Station Number	Station Name	PASZA SO2 ppb	PASZA O3 ppb	PASZA NO2 ppb	Site Legal
Duplicates					
7a	Steeprock Creek	**0.1**	**30.3**	**0.4**	
7b	Steeprock Creek	**0.1**	**28.3**	**0.4**	
39a	Clouston Creek	**0.2**	**27.1**	**0.6**	
39b	Clouston Creek	**0.2**	**27.3**	**0.4**	
41a	Valleyview	**0.3**	**28.1**	**0.7**	
41b	Valleyview	**0.3**	**25.5**	**0.6**	
42a	Sunset House	**0.2**	**29.1**	**0.4**	
42b	Sunset House	**0.3**	**31.1**	**0.3**	
49a	Grande Prairie HP	**0.2**	**28.1**	**3.1**	
49b	Grande Prairie HP	**0.2**	**32.3**	**3.2**	
1	Silver Valley	**0.3**	**25.6**	**1.3**	08-27-081-11 W6M
2	Bay Tree	**0.1**	**32.0**	**0.5**	13-16-078-13 W6M
3	Forth Creek	**0.2**	**33.2**	**0.5**	04-13-082-07 W6M
4	Gordondale	**0.2**	**29.9**	**0.7**	04-34-078-10 W6M
5	Boone Creek	**0.1**	**22.2**	**0.6**	01-23-076-11 W6M
7	Steeprock Creek	**0.1**	**29.3**	**0.4**	09-35-072-13 W6M
9	Spirit River	**0.3**	**29.6**	**1.0**	08-12-079-07 W6M
10	Woking	**0.3**	**29.8**	**0.6**	01-13-076-07 W6M
11	Webber Creek	**0.2**	**29.1**	**0.9**	09-36-074-09 W6M
12	Hythe	**0.2**	**31.3**	**1.2**	14-36-072-11 W6M
14	Sylvester	**0.1**	**20.2**	**0.6**	08-06-069-12 W6M
16	Beaverlodge	**0.2**	**29.5**	**1.4**	15-36-071-10 W6M
17	Poplar	**0.2**	**26.0**	**0.9**	13-06-073-08 W6M

Table 1. PASZA Passive Stations for July 2004 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
18	Saddle Hills	**0.3**	**23.4**	**0.5**	04-25-074-07 W6M
19	Wanham	**0.2**	**29.3**	**0.5**	16-22-077-03 W6M
20	Shaftesbury	**0.1**	**24.6**	**0.3**	04-03-082-23 W5M
21	Eaglesham	**0.1**	**23.6**	**0.6**	16-21-079-25 W5M
23	Bear Lake	**0.2**	**29.5**	**1.0**	15-31-072-06 W6M
24	Wembley	**0.1**	**22.9**	**0.9**	12-31-070-08 W6M
25	Pinto Creek	**0.1**	**23.7**	**0.7**	04-24-069-11 W6M
26	Flyingshot	**0.1**	**24.5**	**1.1**	15-36-070-07 W6M
27	Grande Prairie I	**0.2**	**27.6**	**3.3**	08-15-071-06 W6M
28	Clairmont Lake	**0.3**	**33.8**	**1.3**	09-06-073-04 W6M
29	Smoky Heights	**0.3**	**25.7**	**0.5**	04-06-075-02 W6M
30	Fitzsimmons	**0.2**	**28.0**	**0.9**	15-36-072-03 W6M
32	Gold Creek	**0.3**	**19.2**	**0.5**	06-33-067-05 W6M
33	Wapiti	**0.1**	**26.8**	**0.9**	02-25-071-03 W6M
34	Puskwaskau	**0.1**	**18.1**	**0.2**	15-35-074-25 W5M
35	Jean Cote	**0.3**	**28.7**	**0.9**	12-35-079-21 W5M
36	Guy	**0.2**	**26.1**	**0.8**	03-04-076-22 W5M
37	Crooked Creek	**0.2**	**21.7**	**0.7**	16-01-071-26 W5M
38	Karr Creek	**0.2**	**20.6**	**0.3**	10-16-065-02 W6M
39	Clouston Creek	**0.2**	**27.2**	**0.5**	12-01-073-22 W5M
40	McLennan	**0.3**	**26.9**	**1.1**	03-29-077-19 W5M
41	Valleyview	**0.3**	**26.8**	**0.6**	09-30-069-22 W5M
42	Sunset House	**0.3**	**30.1**	**0.4**	05-32-070-19 W5M
43	High Prairie	**0.1**	**20.4**	**0.7**	16-13-074-17 W5M
44	Peavine	**0.1**	**18.3**	**0.4**	03-05-079-15 W5M
45	Gift Lake	**0.1**	**19.9**	**0.6**	10-07-079-12 W5M
46	Little Smoky	**0.2**	**24.5**	**1.1**	12-01-065-21 W5M
47	Kinuso	**0.1**	**21.9**	**0.6**	12-10-073-10 W5M
48	Deer Mountain	**0.2**	**20.7**	**0.3**	15-22-068-09 W5M
49	Grande Prairie HP	**0.2**	**30.2**	**3.2**	17-26-071-06 W6M

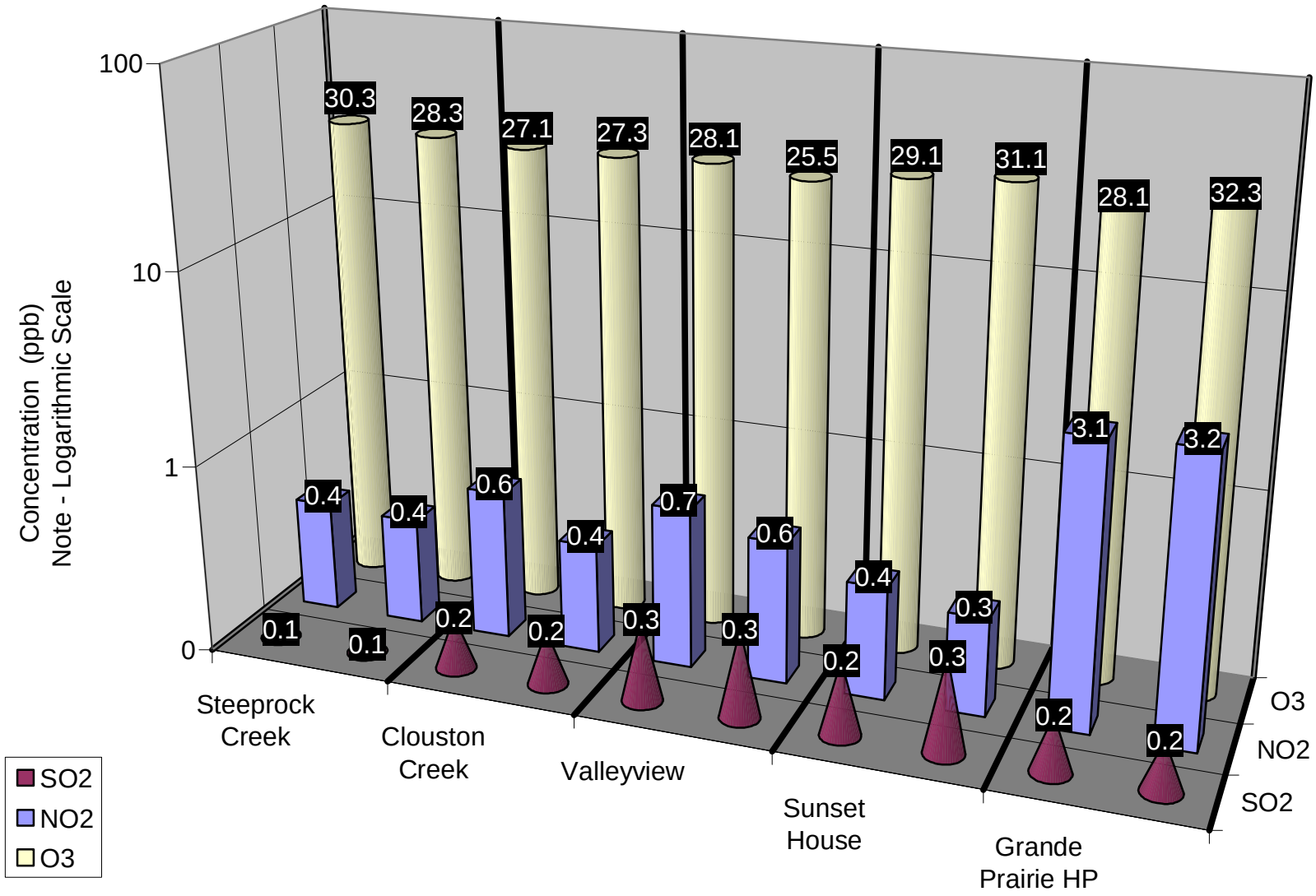


Figure 20. Duplicate Summary Chart

Table 2. Passive Summary Results for July 2004

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for July 2004 (PASZA Zone)		
Mean	**0.2**	**25.9**	**0.8**
Standard Deviation	**0.1**	**4.2**	**0.6**
Minimum	**0.1**	**18.1**	**0.2**
	Pinto Creek (#25)	**Puskwaskau (#34)**	**Puskwaskau (#34)**
Maximum	**0.3**	**33.8**	**3.3**
	Gold Creek (#32)	**Clairmont Lake (#28)**	**Grande Prairie I (#27)**

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

	SO_2	O_3	NO_2
AENV Beaverlodge station	**0.1**	**26.4**	**3.0**
PASZA Beaverlodge passive	**0.2**	**29.5**	**1.4**

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

	SO_2	O_3	NO_2
PASZA Henry Pirker station	**0.2**	**22.7**	**4.2**
PASZA Grande Prairie passive	**0.2**	**30.2**	**3.2**

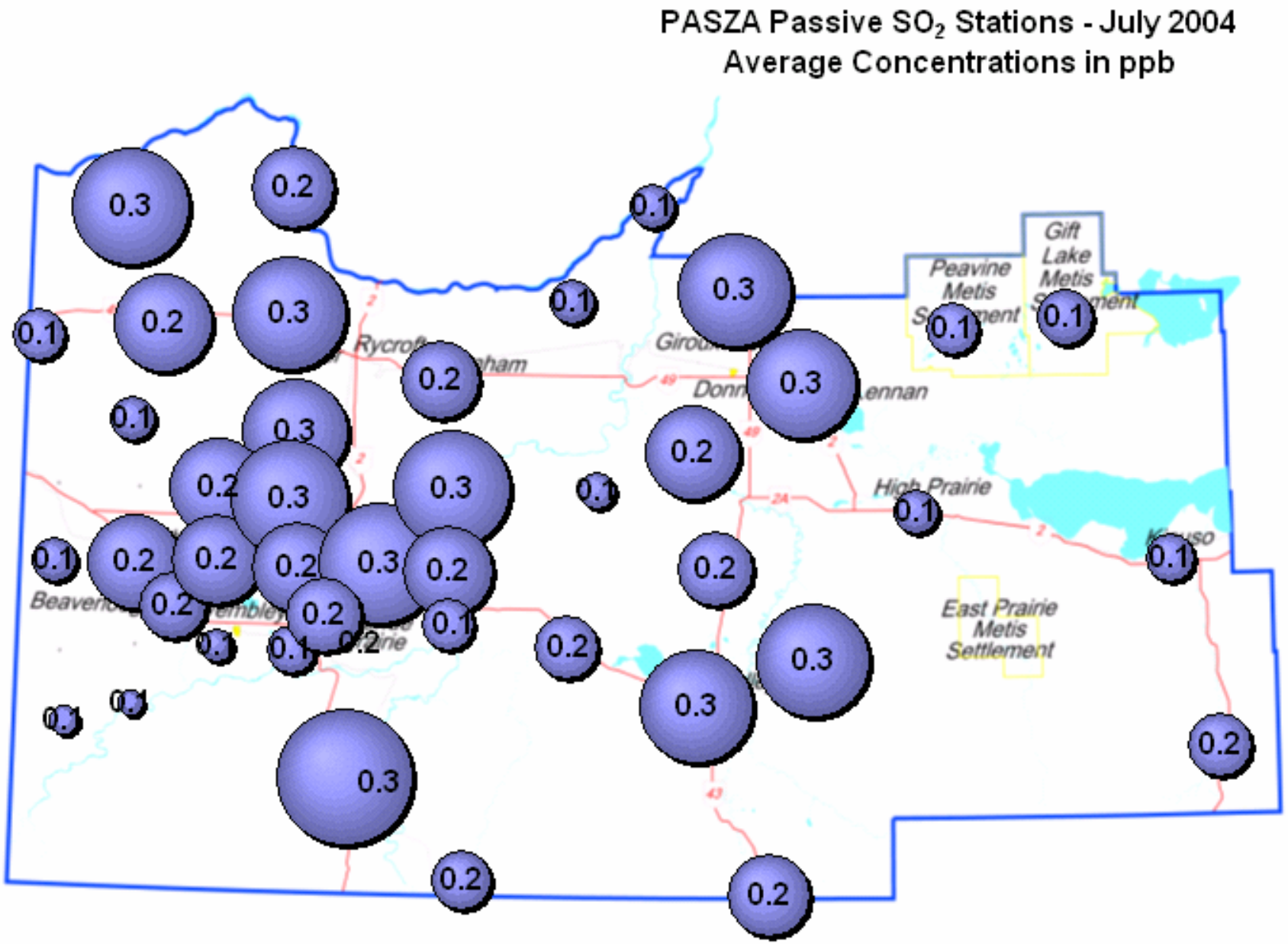


Figure 21. SO_2 Bubble Chart

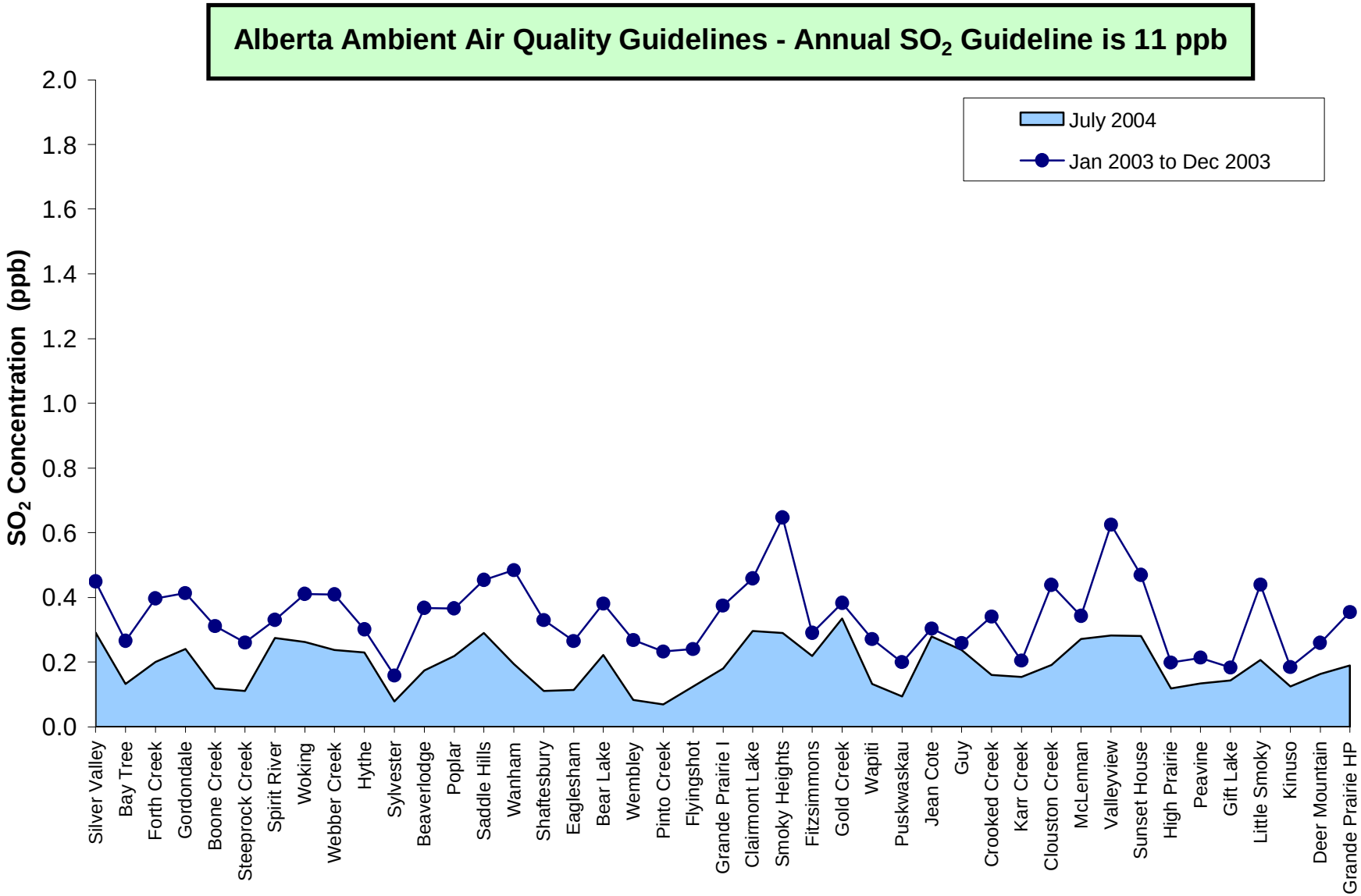


Figure 22. SO_2 Summary Chart

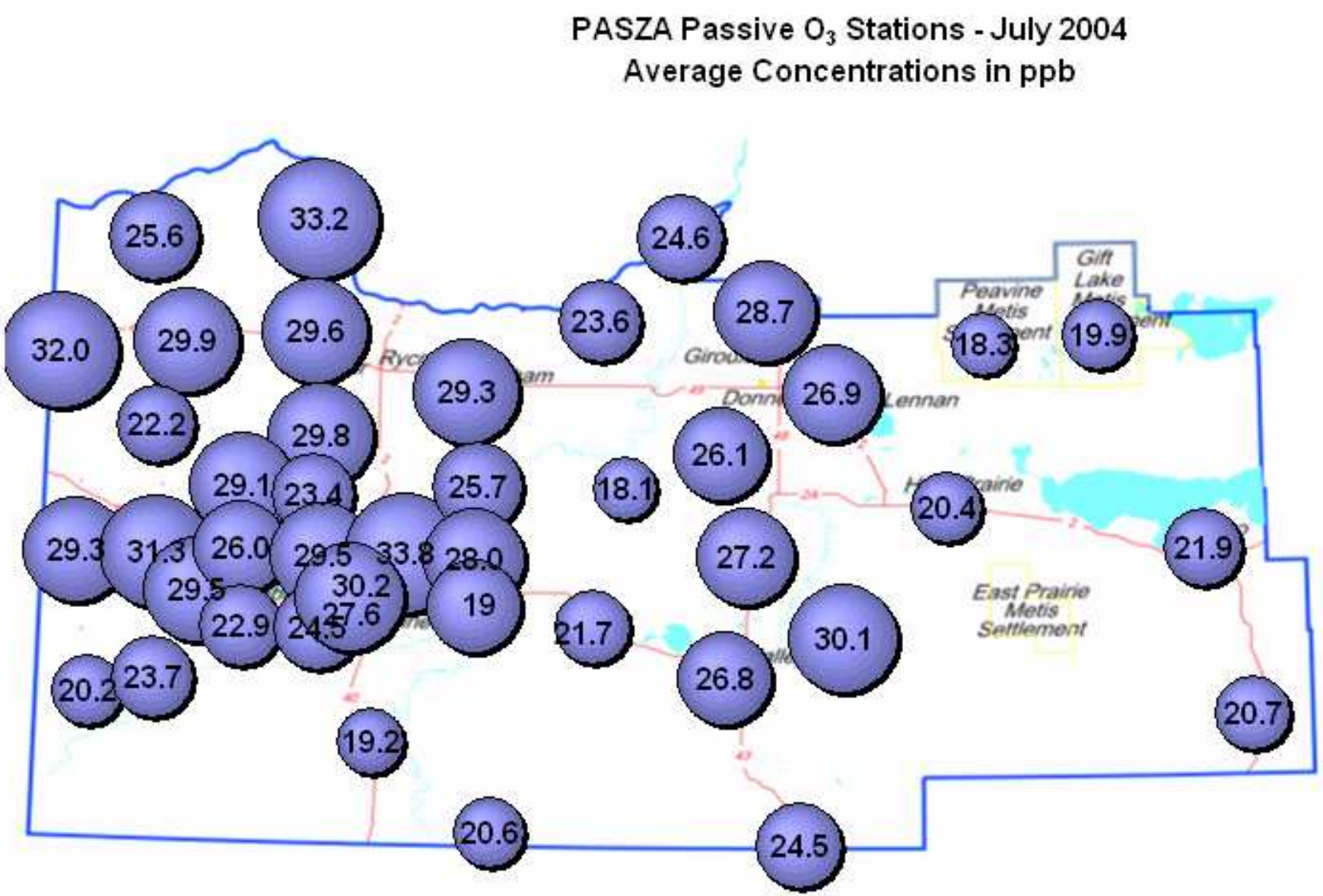


Figure 23. O_3 Bubble Chart

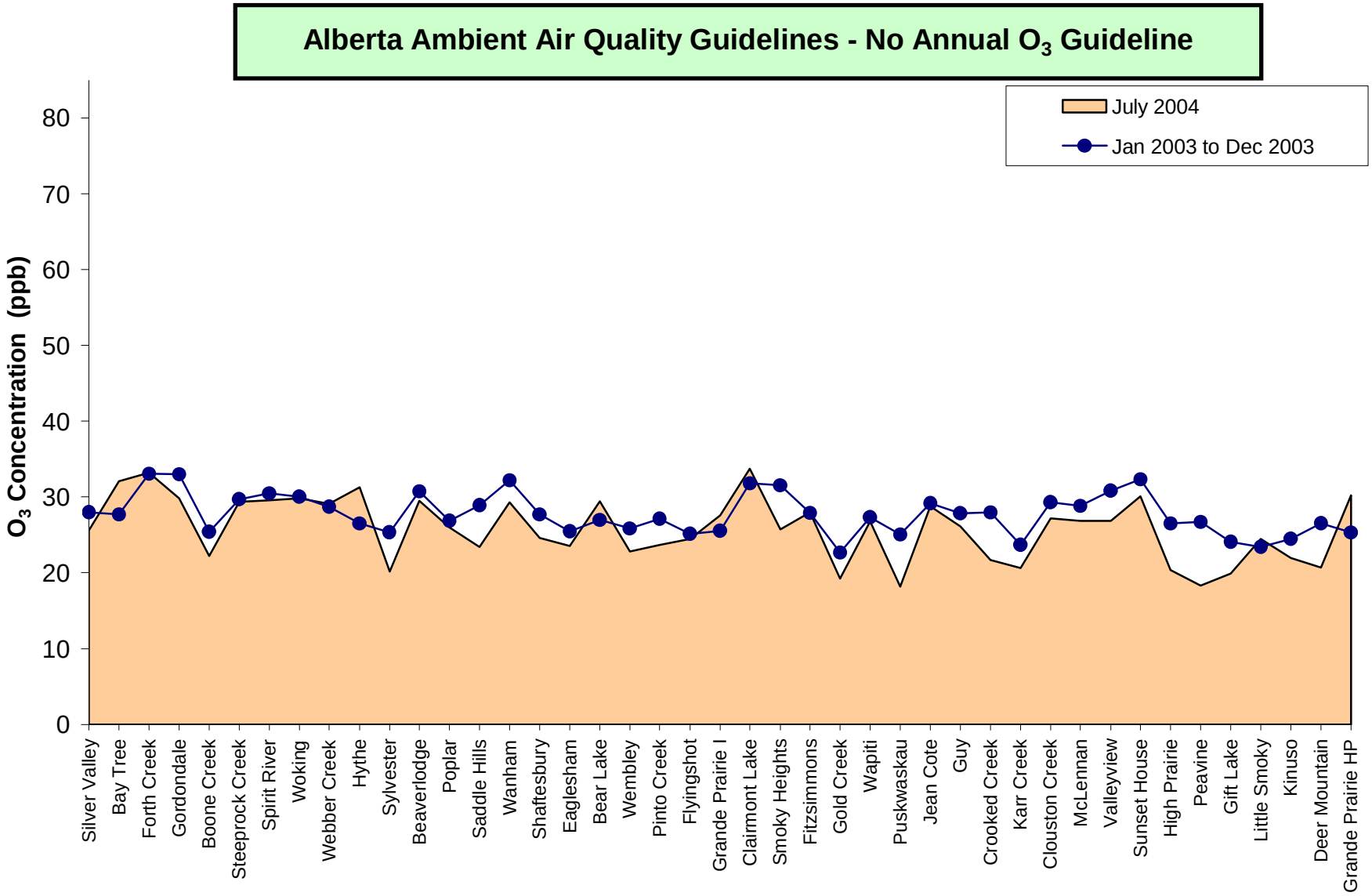


Figure 24. O_3 Summary Chart

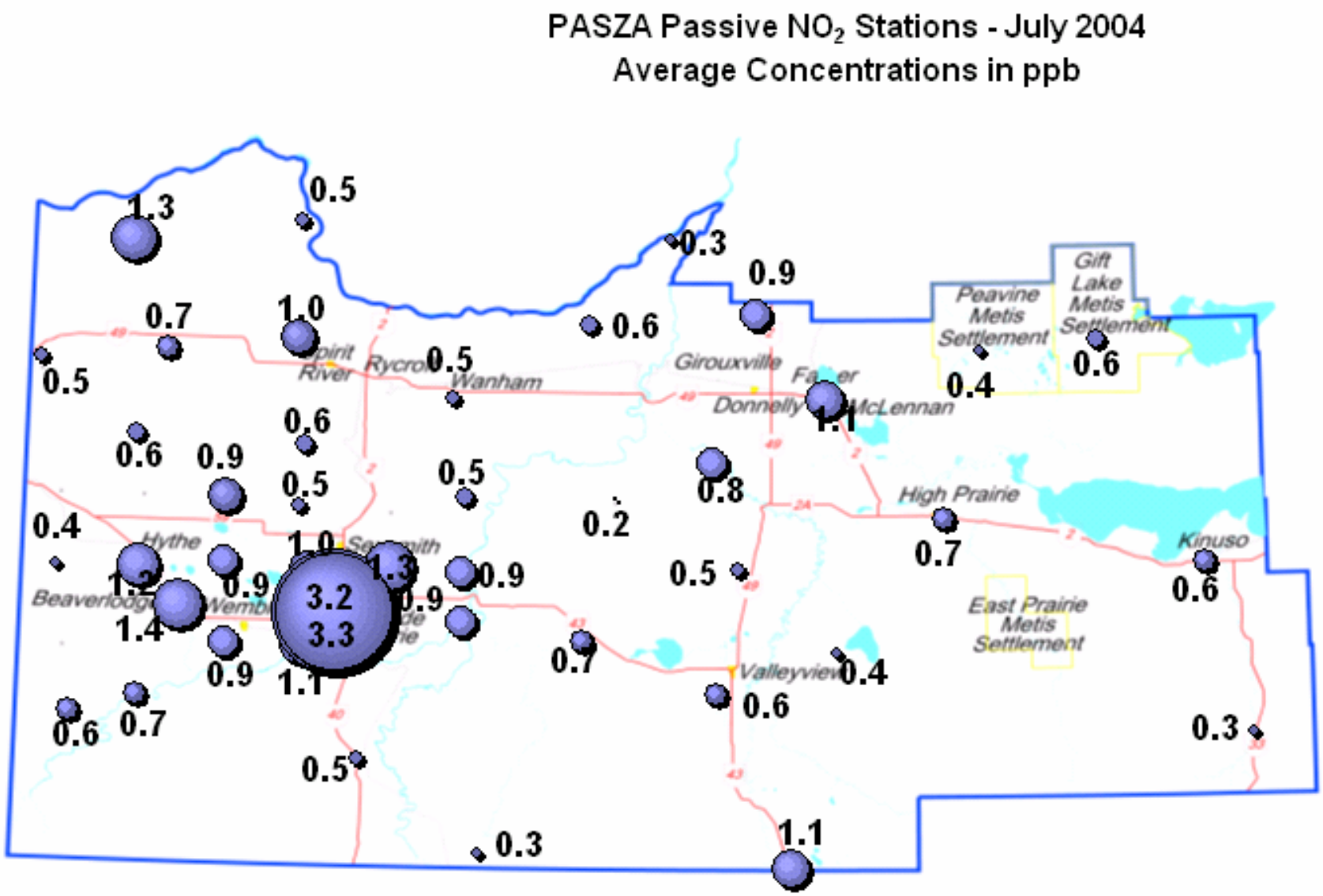


Figure 25. NO_2 Bubble Chart

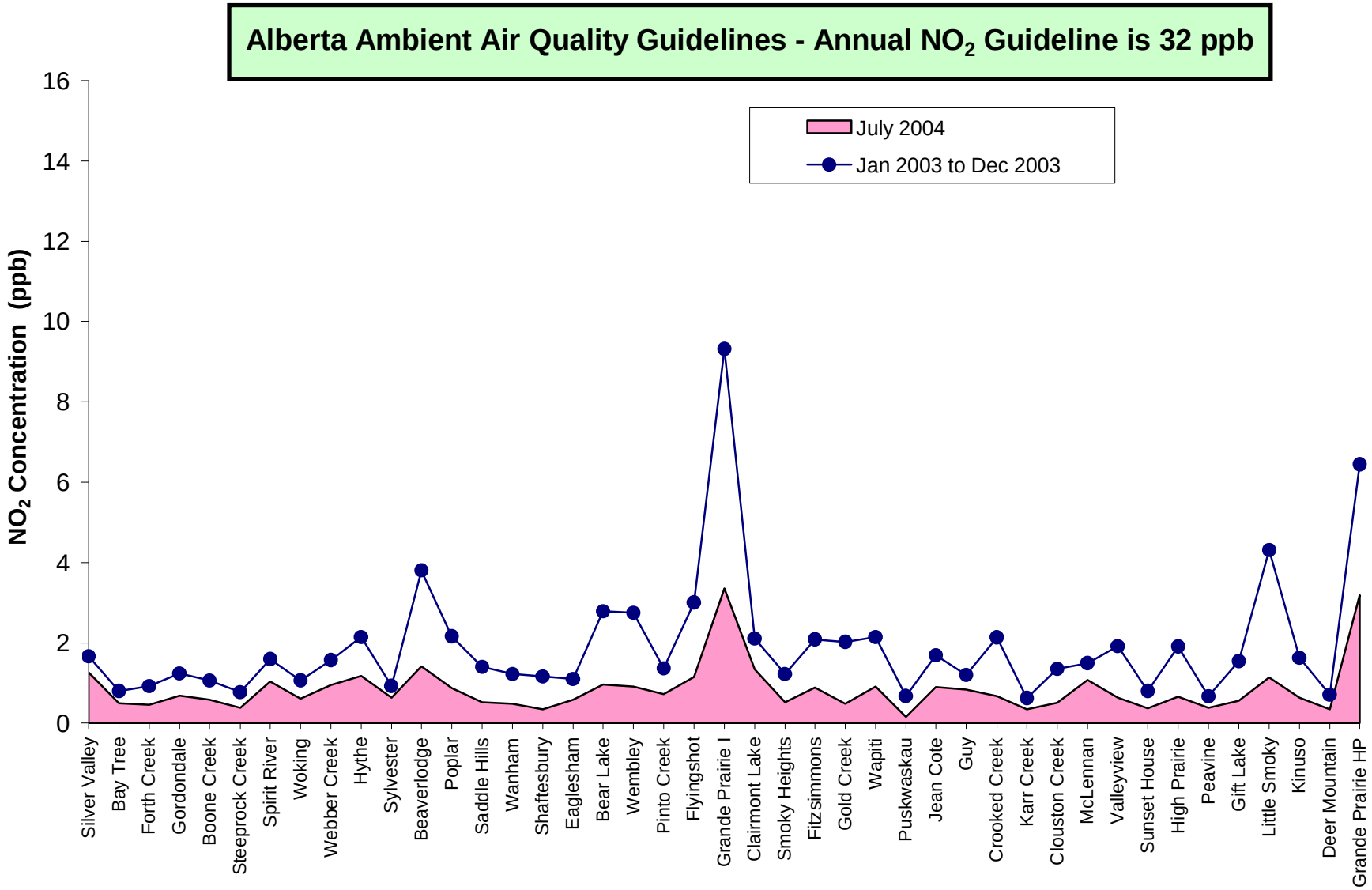


Figure 26. NO_2 Summary Chart

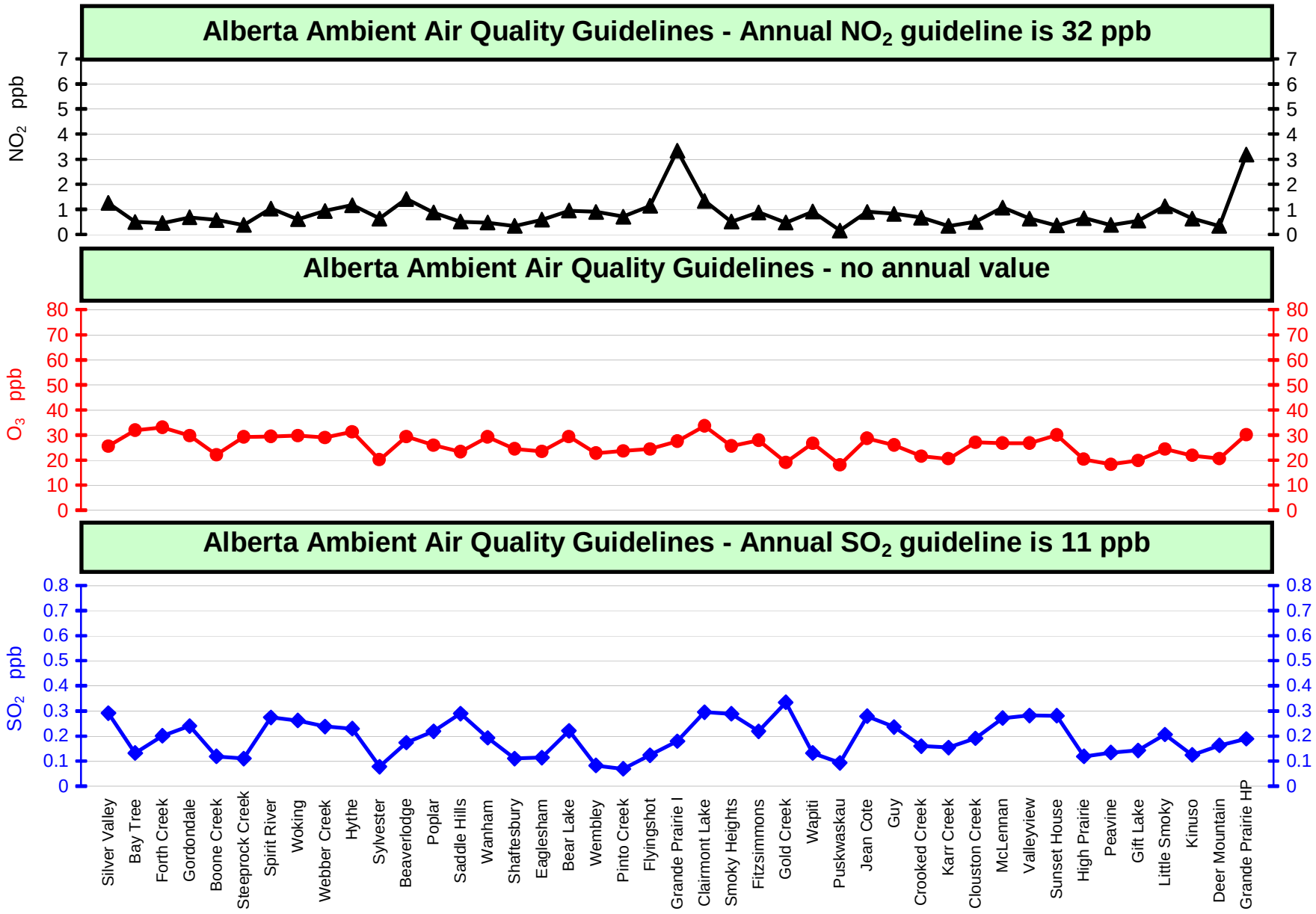


Figure 27. Overview Summary

July 2004 Calibration Reports

PASZA - Henry Pirker Station with the following calibrations:

SO_2, NO, NO_2, NO_x, O_3, CO, THC, TRS, $PM_{2.5}$

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☒ Install ☐	Removal ☐	Other: ☐
Start Time (MST)	10:40	End Time (MST)	19:05
Barometric Pressure	27.5 inches Hg	Station Temperature	20.5 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,995 ng/min	Perm-tube Expiry Date	12/10/2005
Correction factor	0.931852	Perm-tube Cert #	19-13334
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	8
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.001058	Calculated slope	1.000074
Calculated intercept	0.020517	Calculated intercept	-0.152523
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
SO2 zero pot	178		178	
SO2 span pot	246		199	
Vacuum	22.7	in Hg	22.2	in Hg

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	2843.1	0.0	0.0	N/A
3051	2843.1	402.1	402.0	1.0004
6115	5698.3	200.6	201.4	0.9964
12260	11424.5	100.1	100.1	0.9999
zero	2663.2	0.0	0.3	As Found Zero
2858	2663.2	429.2	437.2	As Found Span
			Average Correction Factor	0.9989

Calculated value of As Found Response: 437.313 ppm Percent Change of As Found: -1.9%

	before calibration		after calibration	
Auto zero	0.2	ppm	0.4	ppm
Auto span	327.3	ppm	359.3	ppm

Notes: Calibration performed from 10:40 - 14:00 MST produced incorrect span adjustment following as found capture. Calibration re-initiated at 16:25 MST to properly adjust analyzer.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

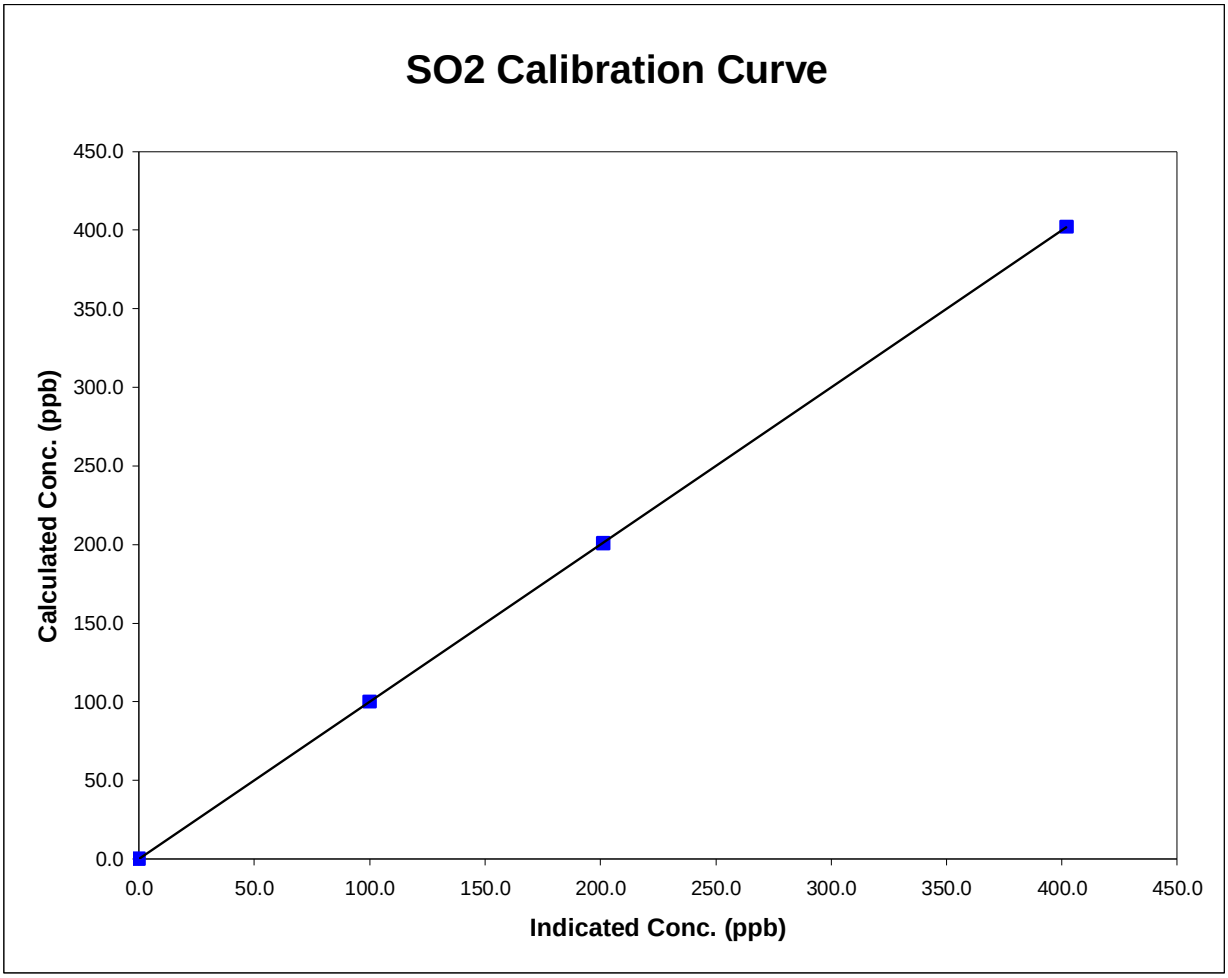
FOCUS AIR QUALITY MONITORING

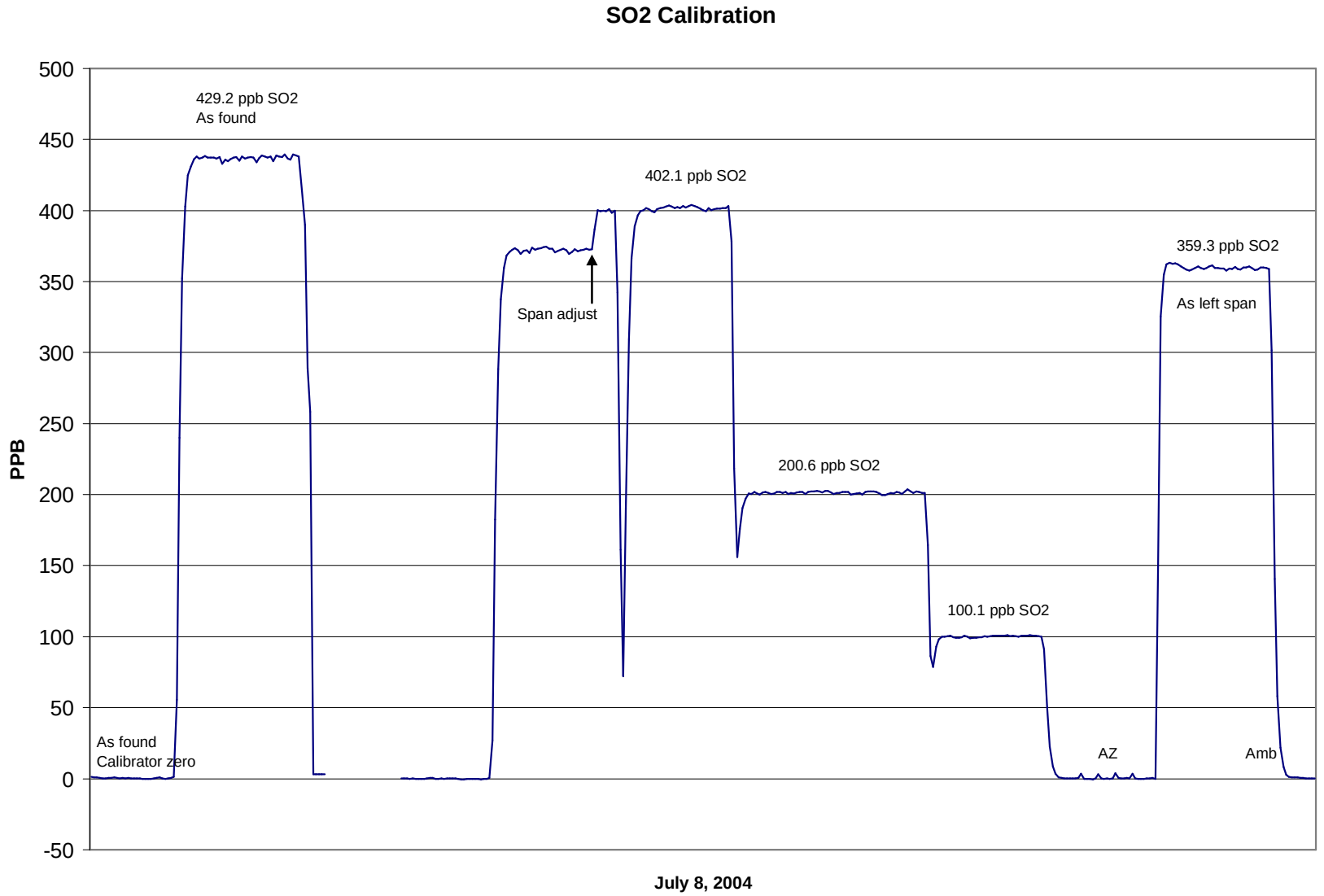
Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:40	End Time (MST)	19:05
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	0.0	N/A		
402.1	402.0	1.0004	Correlation Coefficient	0.999995
200.6	201.4	0.9964		
100.1	100.1	0.9999	Slope	1.000074
			Intercept	-0.152523




SO2 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
429.2 ppb SO2
As found
402.1 ppb SO2
Span adjust
359.3 ppb SO2
As left span
200.6 ppb SO2
100.1 ppb SO2
As found
Calibrator zero
AZ
Amb
July 8, 2004

Calibration Report

Parameter **$NOx-NO-NO_2$**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 29, 2004
Station Number	1	Station Location	Muskoseepi Park

Reason: Routine | **Installation** | Removal | Other:

Start Time (MST)	7:40		End Time (MST)	13:25	
Barometric Pressure	0.931	Atm	Station Temperature	20.5	Deg C
Calibrator	Environics 6100		Serial Number	3016	
NO Cal Gas Conc	50.3	ppm	Cal Gas Expiry Date	19-Jan-06	
NOx Cal Gas Conc	50.5	ppm	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	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.008902	1.003073	1.002583
	Data Offset	1.147658	-0.356225	-0.479091
After	Data Slope	1.011004	1.006049	1.003997
	Data Offset	-0.250492	-0.623168	-0.547564
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	NA	ppb	6.1	mV
NOx background	NA	ppb	6.3	mV
NO coefficient	NA		1.111	
NOx coefficient	NA		1.003	
Chamber Temp	NA	Deg C	49.9	Deg C
Cooler Temp	NA	Deg C	-2.0	Deg C
Converter Temp	NA	Deg C	324.0	Deg C
Perm Temp	NA	Deg C	NA	Deg C
Vacuum	NA	inches Hg	20.8	inches Hg
Sample Flow	NA	ccm	NA	ccm

Notes: No as found response captured; analyzer repair followed failed analyzer noted on July 6th.
Repair included op-amp in the moly converter temperature circuit; replaced by Alberta Environment.

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: July 8, 2004 Station Location: Muskoseepi Park

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	0.3	0.0	0.5	N/A	N/A
1	4993	39.98	401.2	399.6	1.6	399.2	398.3	1.0	1.0049	1.0032
2	4993	19.98	201.3	200.5	0.8	200.8	200.5	0.2	1.0023	1.0001
3	4993	9.98	100.7	100.3	0.4	101.1	101.0	0.0	0.9960	0.9933
AFZ										
AFS										
							Average Correction Factor		1.0011	0.9989

As Found Concentrations: NO_X= NA NO= NA As Found Percent Change NO_X= NA NO= NA

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	401.3	398.9	2.4	398.4	397.8	0.5	N/A	N/A	N/A	N/A
350	401.3	89.1	312.2	398.6	89.3	309.0	1.0067	0.9979	1.0101	99.0%
200	401.3	220.5	180.8	399.2	220.2	179.2	1.0052	1.0015	1.0090	99.1%
100	401.3	310.2	91.1	399.4	309.5	90.0	1.0047	1.0022	1.0122	98.8%
					Average Correction Factor		1.0055	1.0005	1.0104	99.0%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.5	1.9	-0.5	ppb	-0.2	0.3	-0.5	ppb
Auto span	431.1	426.0	7.8	ppb	349.2	345.8	4.3	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

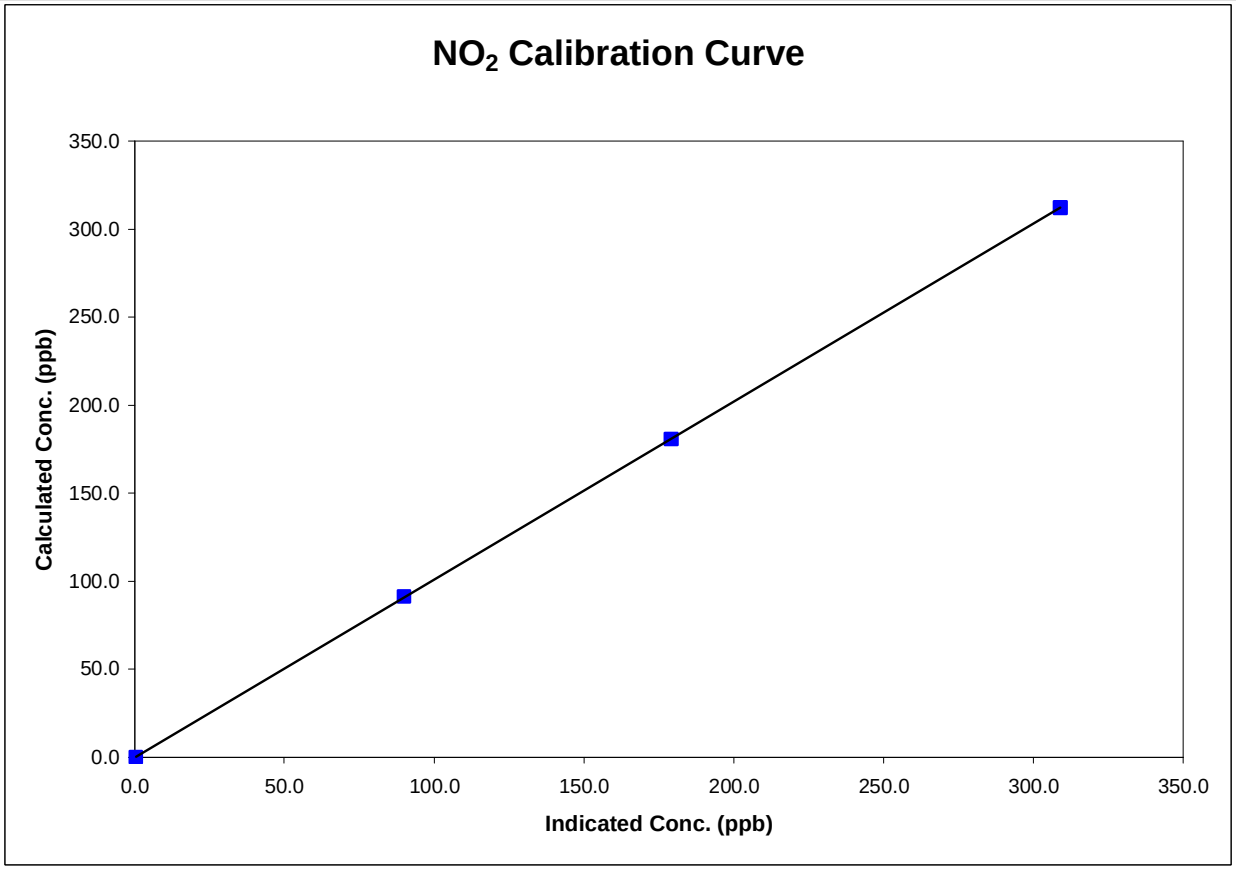
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 29, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:40	End Time (MST)	13:25
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	0.5	0.0000		
312.2	309.0	1.0101	Correlation Coefficient	0.999996
180.8	179.2	1.0090		
91.1	90.0	1.0122	Slope	1.011004
			Intercept	-0.250492



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

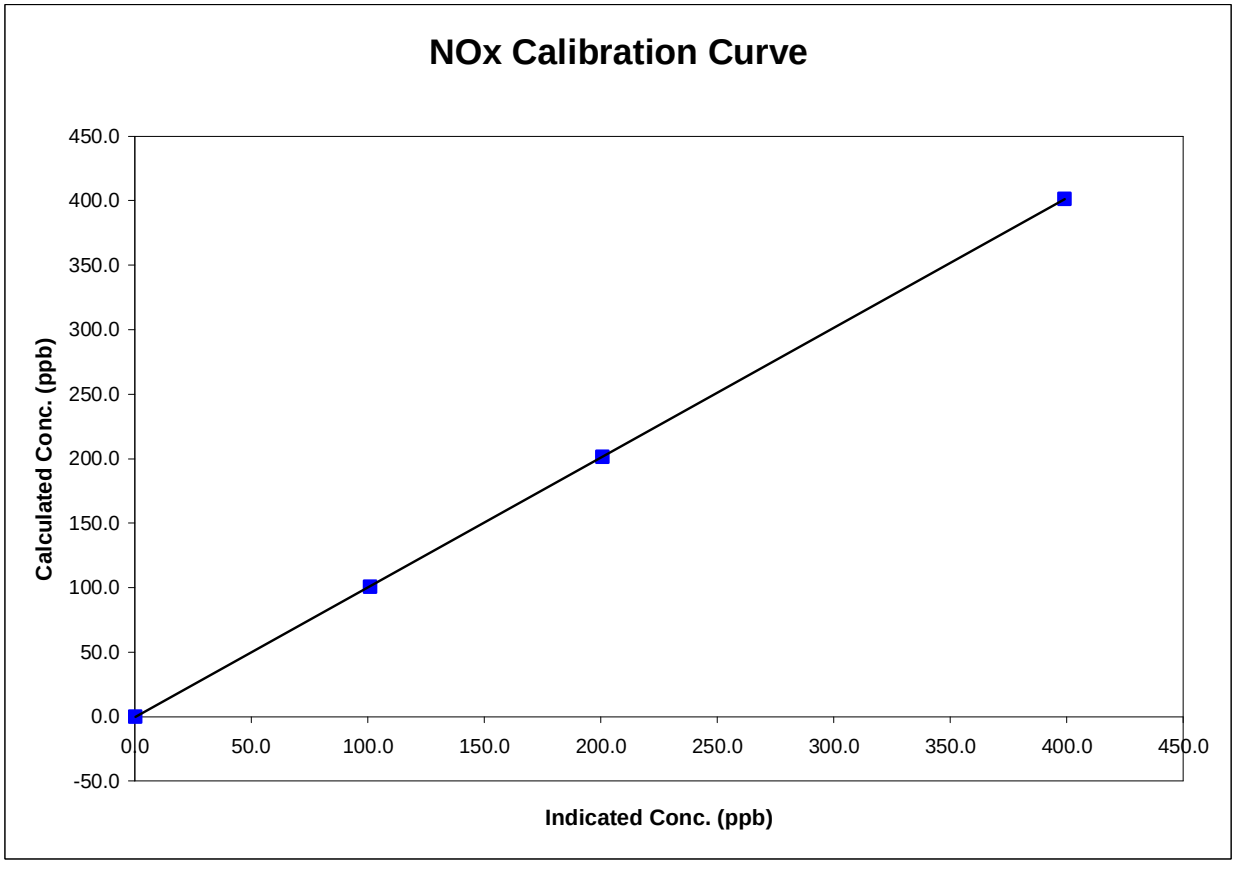
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 29, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:40	End Time (MST)	13:25
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	0.0000		
401.2	399.2	1.0049	Correlation Coefficient	0.999996
201.3	200.8	1.0023		
100.7	101.1	0.9960	Slope	1.006049
			Intercept	-0.623168



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

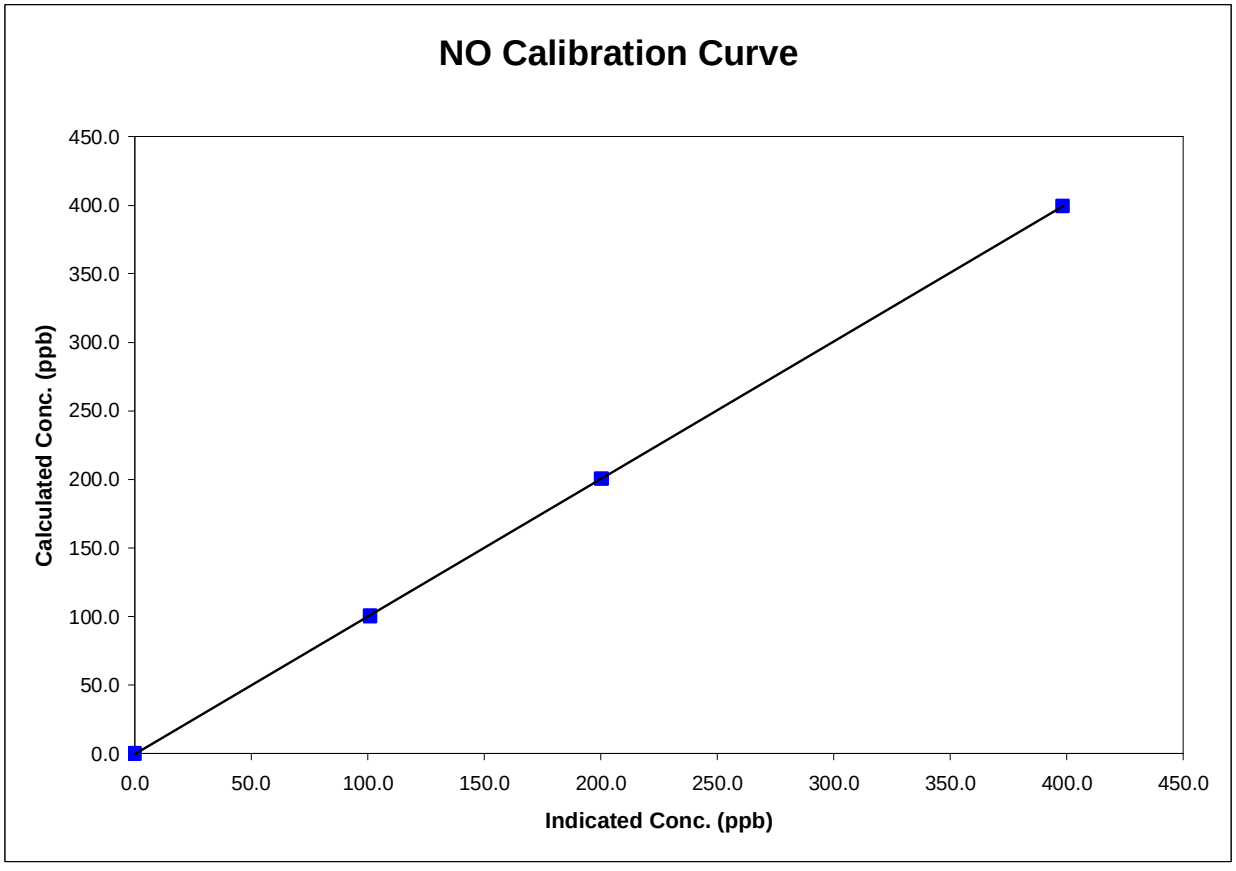
FOCUS AIR QUALITY MONITORING

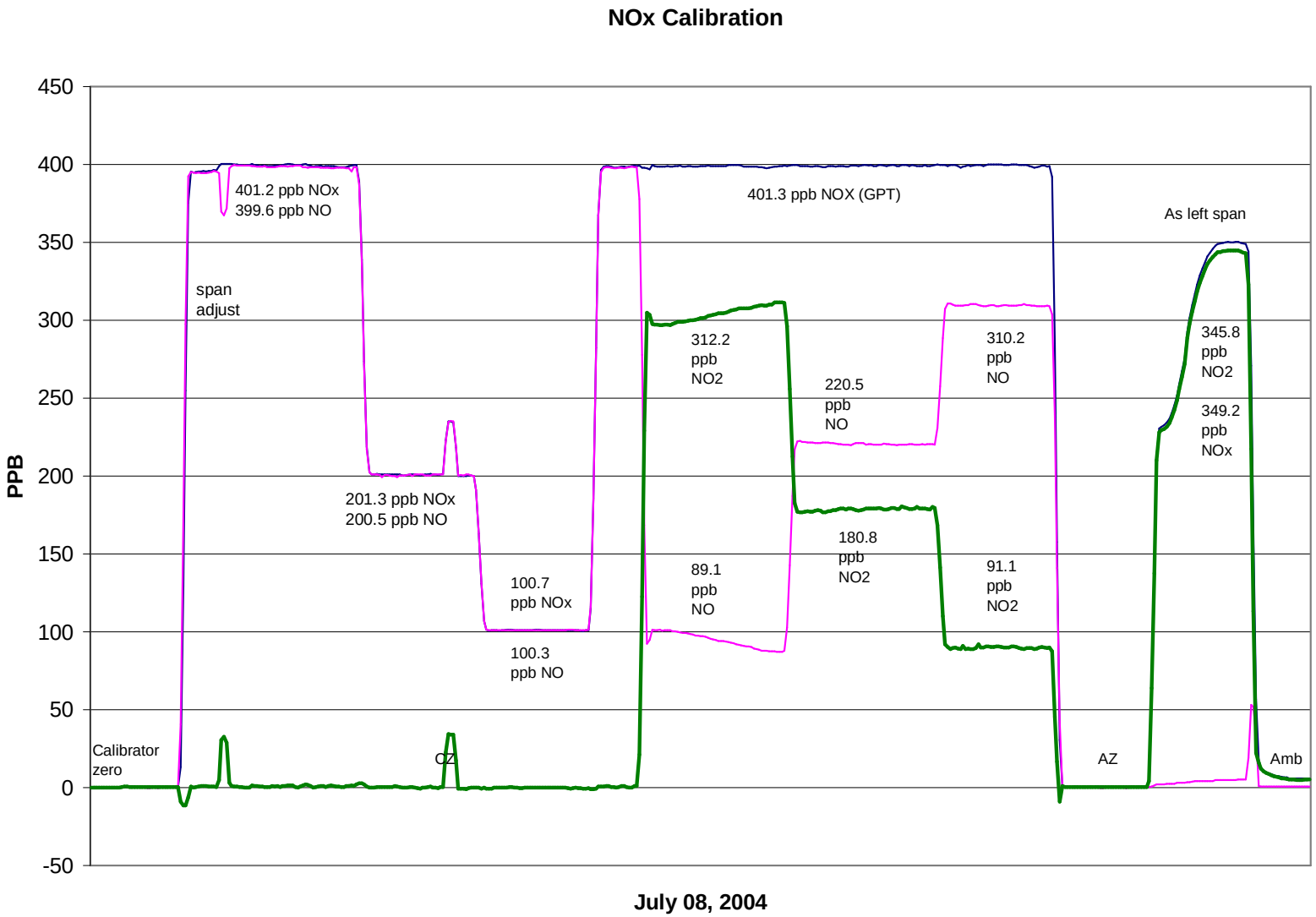
Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 29, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:40	End Time (MST)	13:25
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	0.0	N/A		
399.6	398.3	1.0032	Correlation Coefficient	0.999993
200.5	200.5	1.0001		
100.3	101.0	0.9933	Slope	1.003997
			Intercept	-0.547564




NOx Calibration
PPB
450
400
350
300
250
200
150
100
50
0
-50
401.2 ppb NOx
399.6 ppb NO
span
adjust
401.3 ppb NOX (GPT)
As left span
345.8
ppb
NO2
349.2
ppb
NOx
312.2
ppb
NO2
220.5
ppb
NO
310.2
ppb
NO
201.3 ppb NOx
200.5 ppb NO
180.8
ppb
NO2
89.1
ppb
NO
91.1
ppb
NO2
100.7
ppb NOx
100.3
ppb NO
Calibrator
zero
CZ
AZ
Amb
July 08, 2004

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☒	Install ☐	Removal ☐	Other: ☐
Start Time (MST)	13:30	End Time (MST)	17:55
Barometric Pressure	0.918 mb	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.998597	Calculated slope	0.995375
Calculated intercept	2.012306	Calculated intercept	1.516677
Analyzer make	API Model 400	Analyzer serial #	383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.6	ppb	-0.6	ppb
slope	1.013		NA	
Lamp measure	3158	mV	NA	mV
Lamp Reference	3167	mV	NA	mV
Pressure	27.1	inches Hg	26.7	inches Hg
Sample Flow	667	ccm	664	ccm
Lamp temp	52	Deg C	52	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.5	N/A
4995	0.00	312.2	313.8	0.9949
4995	0.00	180.8	177.9	1.0163
4995	0.00	91.1	88.6	1.0287
4995	0.00	0.0	-0.1	As found zero
4995	0.00	312.2	303.0	As found span
			Average Correction Factor	1.0133

Calculated value of As Found Response: 304.7 ppm Percent Change of As Found: -2.4%

	before calibration		after calibration	
Auto zero	2.7	ppb	1.7	ppb
Auto span	268.1	ppb	272.6	ppb

Notes: Analyzer was span adjusted. O3 concentrations based on GPT portion of the NOX calibration.
A span adjustment was performed.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

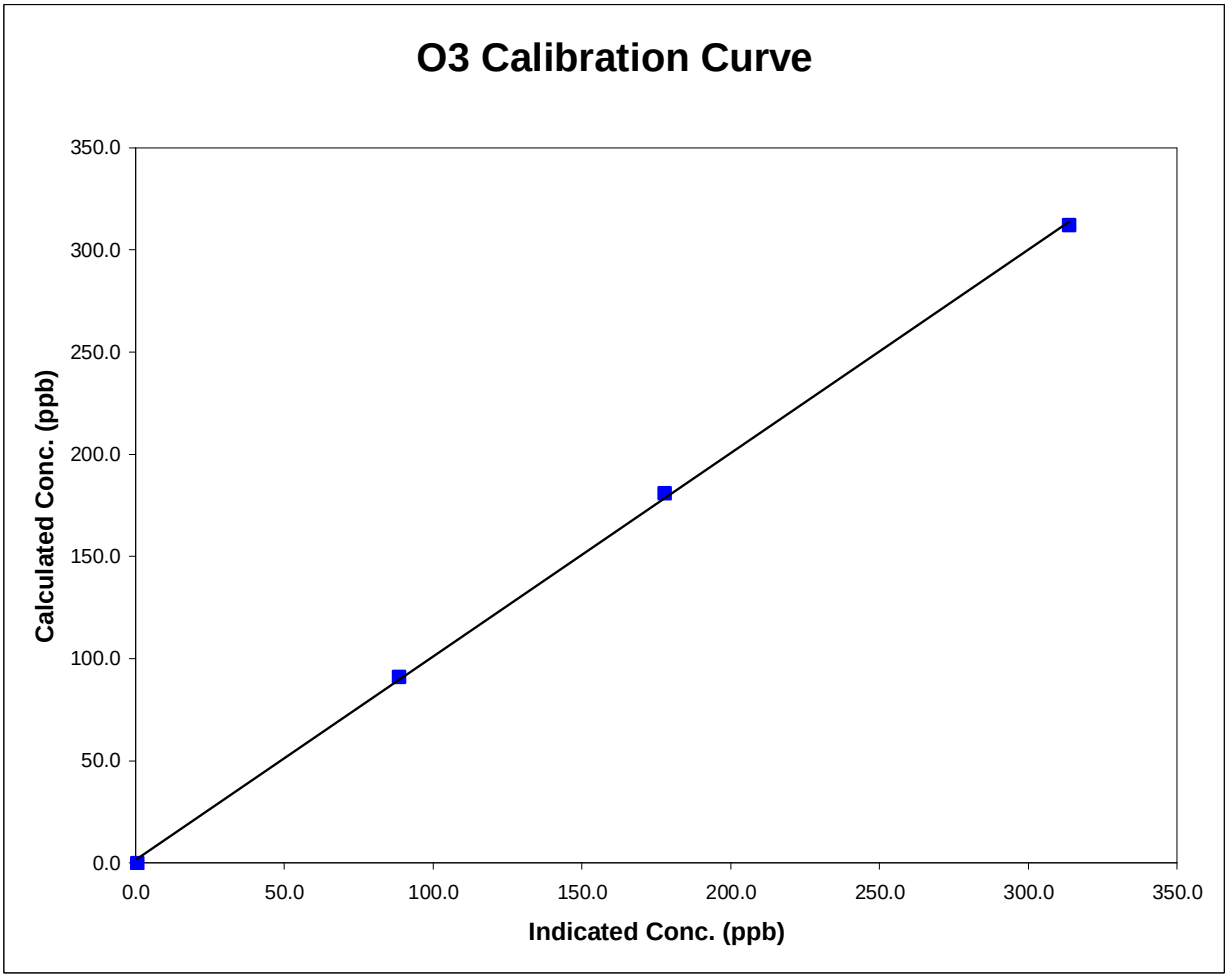
FOCUS AIR QUALITY MONITORING

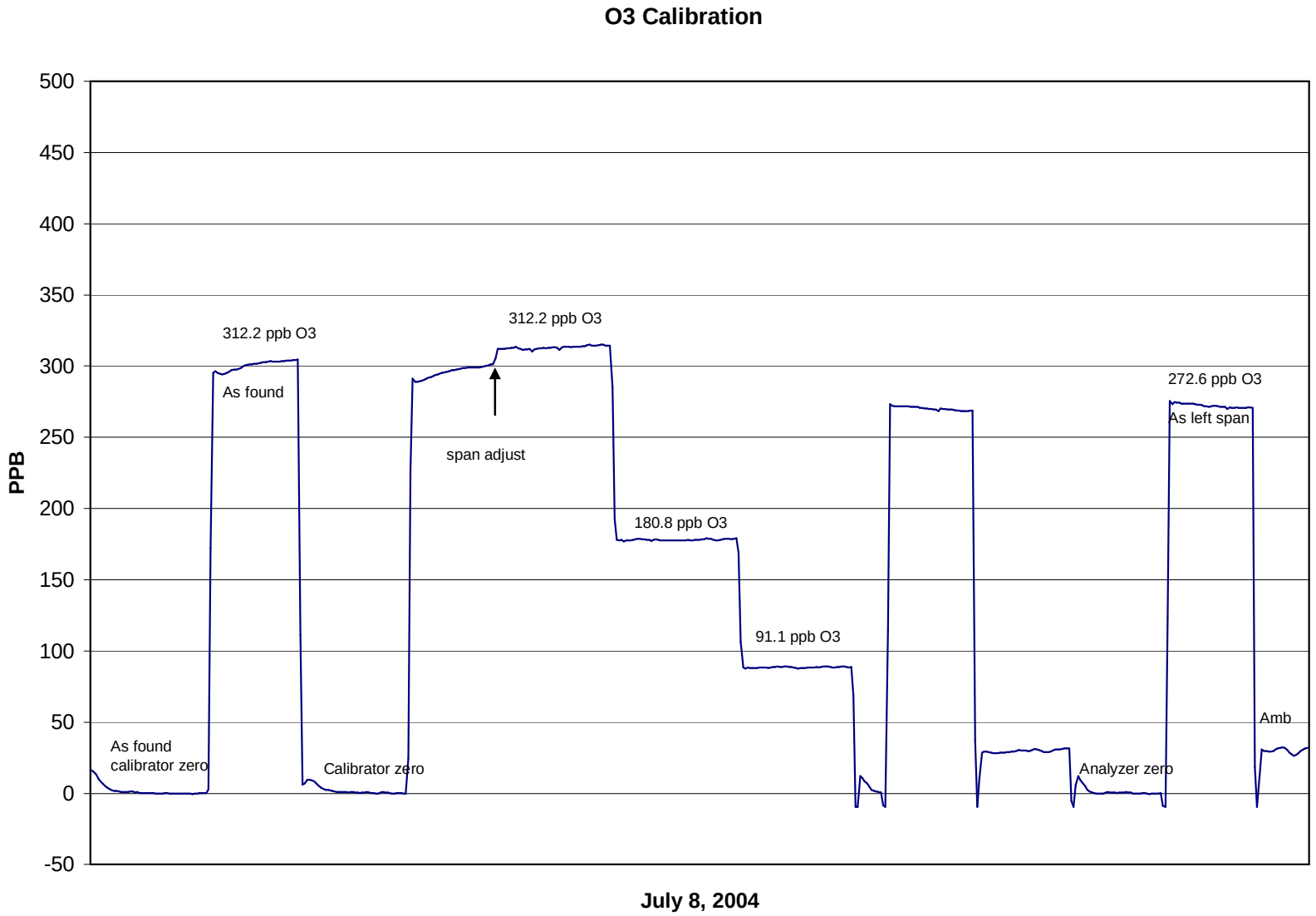
Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	13:30	End Time (MST)	17:55
Analyzer make/model	API Model 400	Analyzer serial #	383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	NA		
312.2	313.8	0.9949	Correlation Coefficient	0.999743
180.8	177.9	1.0163		
91.1	88.6	1.0287	Slope	0.995375
			Intercept	1.516677




O3 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
312.2 ppb O3
As found
312.2 ppb O3
span adjust
180.8 ppb O3
91.1 ppb O3
272.6 ppb O3
As left span
Amb
As found
calibrator zero
Calibrator zero
Analyzer zero
July 8, 2004

Calibration Report

Parameter **CO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 6, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason: Routine	Install	Removal	Other:
Start Time (MST)	15:20	End Time (MST)	17:45
Barometric Pressure	0.919 mb	Station Temperature	19.9 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	12/10/2005
		Cal Gas Cylinder #	ALM 005412
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	NA	Calculated slope	1.007972
Calculated intercept	NA	Calculated intercept	-0.064136
Analyzer make	TEI Model 48	Analyzer serial #	ACM-13989-143

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	NA		758	
CO zero setting	NA		536	
Sample pressure	NA	mm Hg	699	mm Hg

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	0.21	N/A
4993	39.97	23.82	23.77	1.0022
4993	19.96	11.95	11.83	1.0096
4993	9.97	5.98	5.86	1.0204
4993				As Found Zero
				As Found Span
			Average Correction Factor	1.0107

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

	before calibration		after calibration	
Auto zero	NA	ppm	0.10	ppm
Auto span	NA	ppm	30.04	ppm

Notes: Analyzer was re-installed after being pulled from service June 28th. New IR source resistor was installe and the sample bench was replaced via Alberta Environment. The suspect problem was the optic sens under the bench measuring wheel frequency.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **CO**

Air Monitoring Network **PASZA**

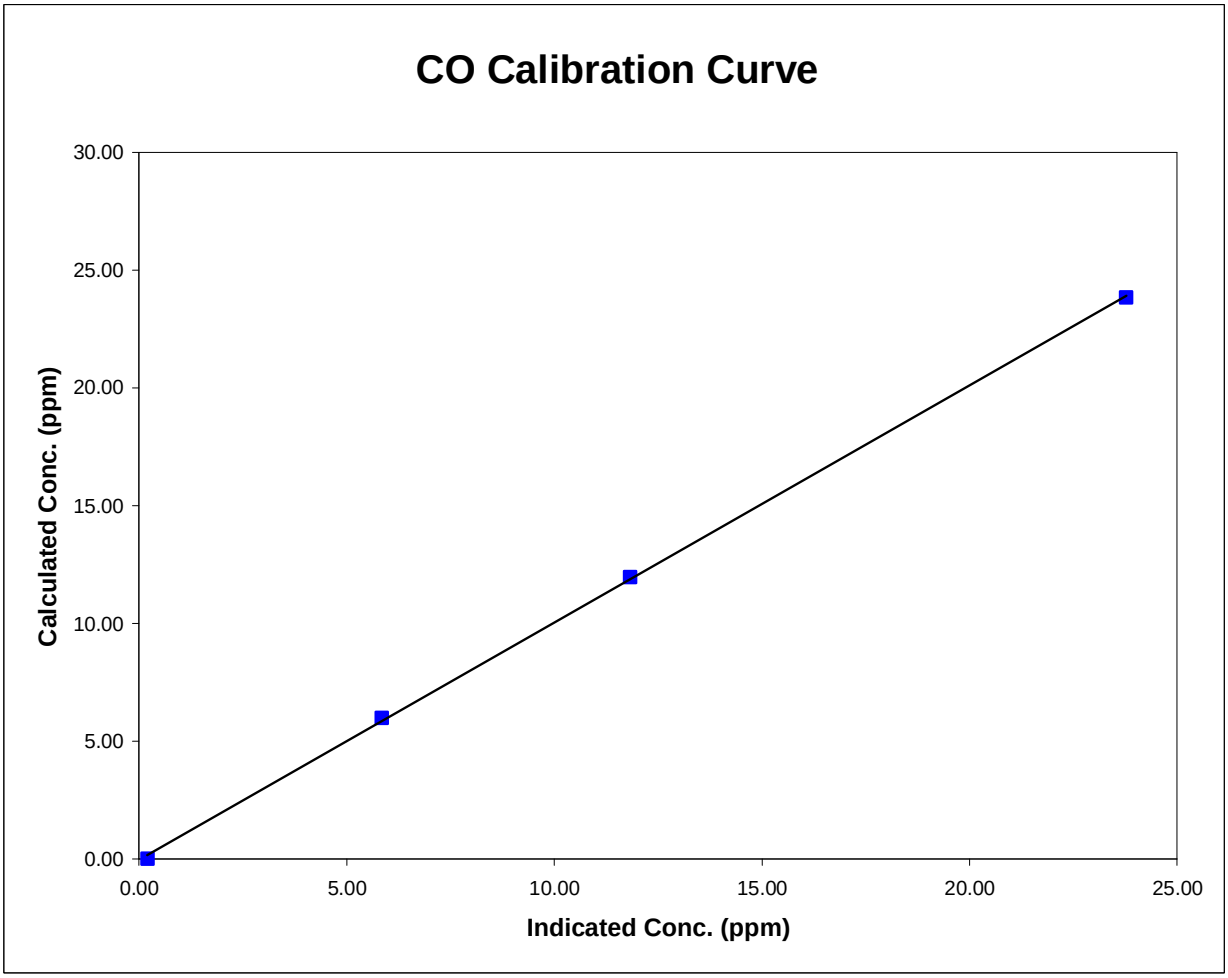
FOCUS AIR QUALITY MONITORING

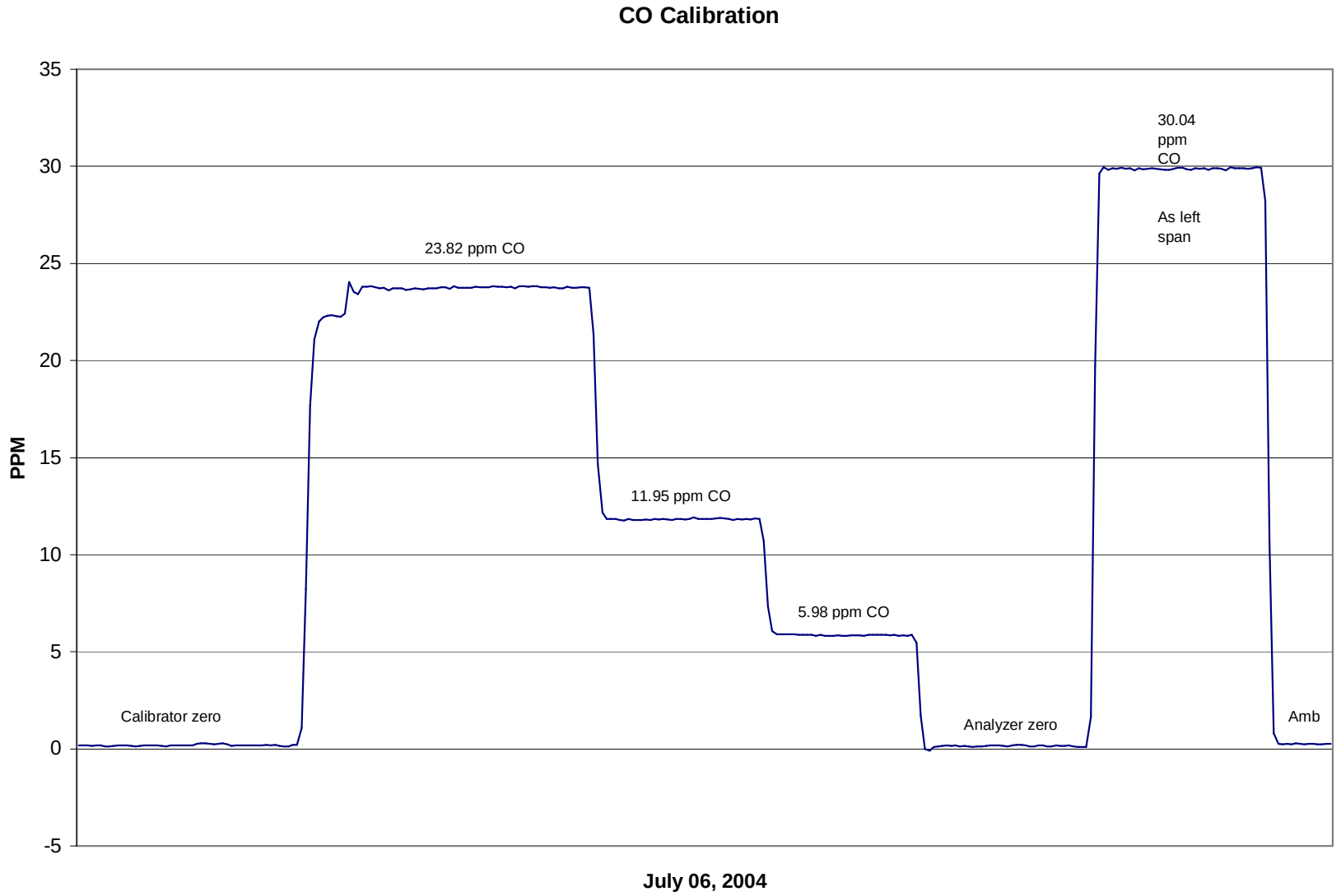
Station Information

Calibration Date	July 6, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	15:20	End Time (MST)	17:45
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	0.209	N/A		
23.825	23.774	1.0022	Correlation Coefficient	0.999830
11.945	11.831	1.0096		
5.978	5.859	1.0204	Slope	1.007972
			Intercept	-0.064136




CO Calibration
35
30
25
20
15
10
5
0
-5
PPM
30.04
ppm
CO
As left
span
23.82 ppm CO
11.95 ppm CO
5.98 ppm CO
Calibrator zero
Analyzer zero
Amb
July 06, 2004

Calibration Report

Parameter **THC**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 6, 2004	Previous Calibration	June 9, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	12:08	End Time (MST)	16:00
Barometric Pressure	27.50 inches Hg	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
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.998335	Calculated slope	1.002050
Calculated intercept	0.017428	Calculated intercept	0.022832
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.09	psi	6.09	psi
THC span counts	6818	capture	6891	capture
THC zero counts	1271	capture	1293	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	0.02	N/A
4993	64.97	19.55	19.54	1.0008
4993	34.98	10.59	10.46	1.0127
4993	9.97	3.03	3.01	1.0084
4993	0.00	0.00	0.09	As Found Zero
4993	64.97	19.55	19.77	As Found Span
			Average Correction Factor	1.0073

Calculated value of As Found Response: 19.665 ppm Percent Change of As Found: -0.6%

	before calibration		after calibration	
Auto zero	0.07	ppm	0.01	ppm
Auto span	22.34	ppm	22.17	ppm

Notes: Zero and span adjusted analyzer. All relative analyzer test values are within normal specs.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **THC**

Air Monitoring Network **PASZA**

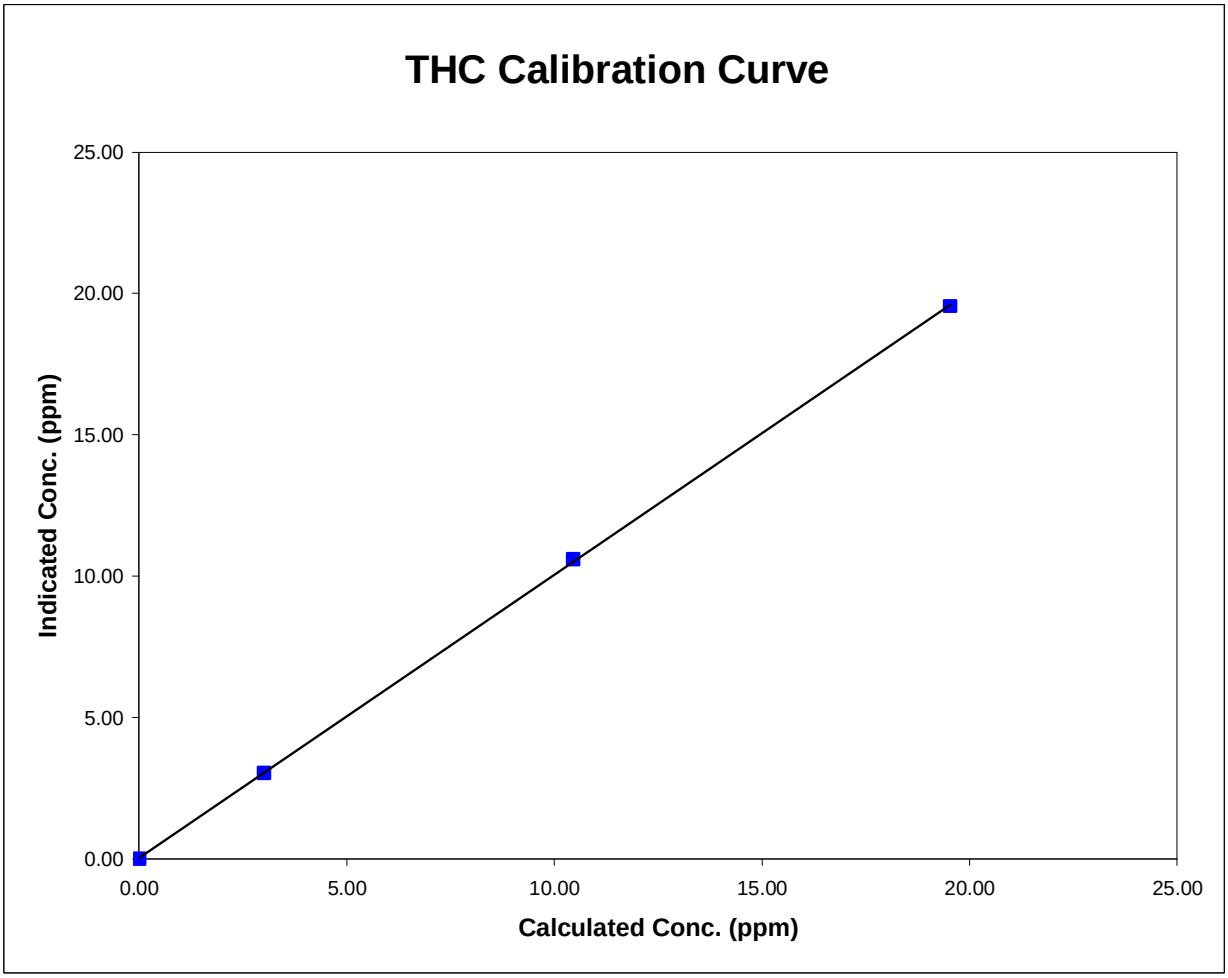
FOCUS AIR QUALITY MONITORING

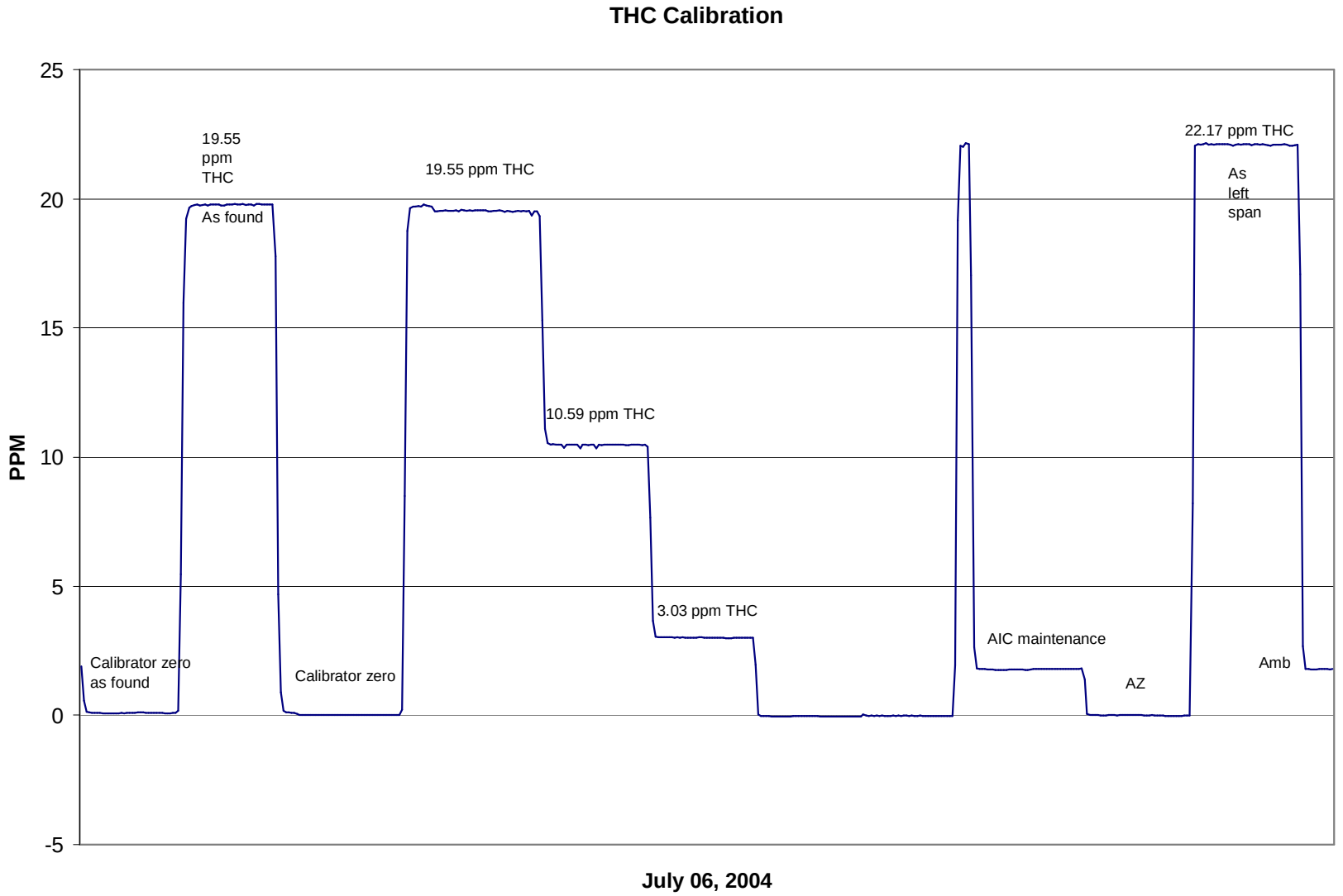
Station Information

Calibration Date	July 6, 2004	Previous Calibration	June 9, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:08	End Time (MST)	16:00
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	0.015	N/A		
19.553	19.537	1.0008	Correlation Coefficient	0.999950
10.590	10.458	1.0127		
3.034	3.008	1.0084	Slope	1.002050
			Intercept	0.022832




THC Calibration
25
20
15
10
5
0
-5
PPM
19.55 ppm THC As found
19.55 ppm THC
10.59 ppm THC
3.03 ppm THC
22.17 ppm THC As left span
Calibrator zero as found
Calibrator zero
AIC maintenance
AZ
Amb
July 06, 2004

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☒ Install ☐	Removal ☐	Other: ☐
Start Time (MST)	13:30	End Time (MST)	18:25
Barometric Pressure	27.5 inches Hg	Station Temperature	21.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	225 ng/min	Perm-tube Expiry Date	12/10/2005
Correction factor	0.930268	Perm-tube Cert #	03-13509
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.005493	Calculated slope	1.011118
Calculated intercept	0.234874	Calculated intercept	0.579136
Analyzer make	TEI Model 43C	Analyzer serial #	31990000000491

	before		after	
Concentration range	0 - 500	ppb	0-100	ppb
TRS bkg	19.6		21.9	
TRS slope	1.475		1.595	
UV Lamp	819	V	815	V

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	1880.1	0.0	-0.6	N/A
2021	1880.1	86.0	84.7	1.0159
4335	4032.7	40.1	38.6	1.0381
18200	16930.9	9.6	9.2	1.0390
zero	1880.1	0.0	0.1	As Found Zero
2021	1880.1	86.0	76.3	As Found Span
			Average Correction Factor	1.0310

Calculated value of As Found Response: 76.817 ppm Percent Change of As Found: 10.7%

	before calibration		after calibration	
Auto zero	-0.2	ppm	0.2	ppm
Auto span	92.7	ppm	57.4	ppm

Notes: Analyzer zero and span adjustments performed. Lamp holding steady at 34.5 kHz or 815 V. Flow at 45 cc/min. Noted span value had gone offscale during trailer A/C failure; only cure was replacement of permeation tube. Glass insert was cracked during installation and will be replaced next calibration.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

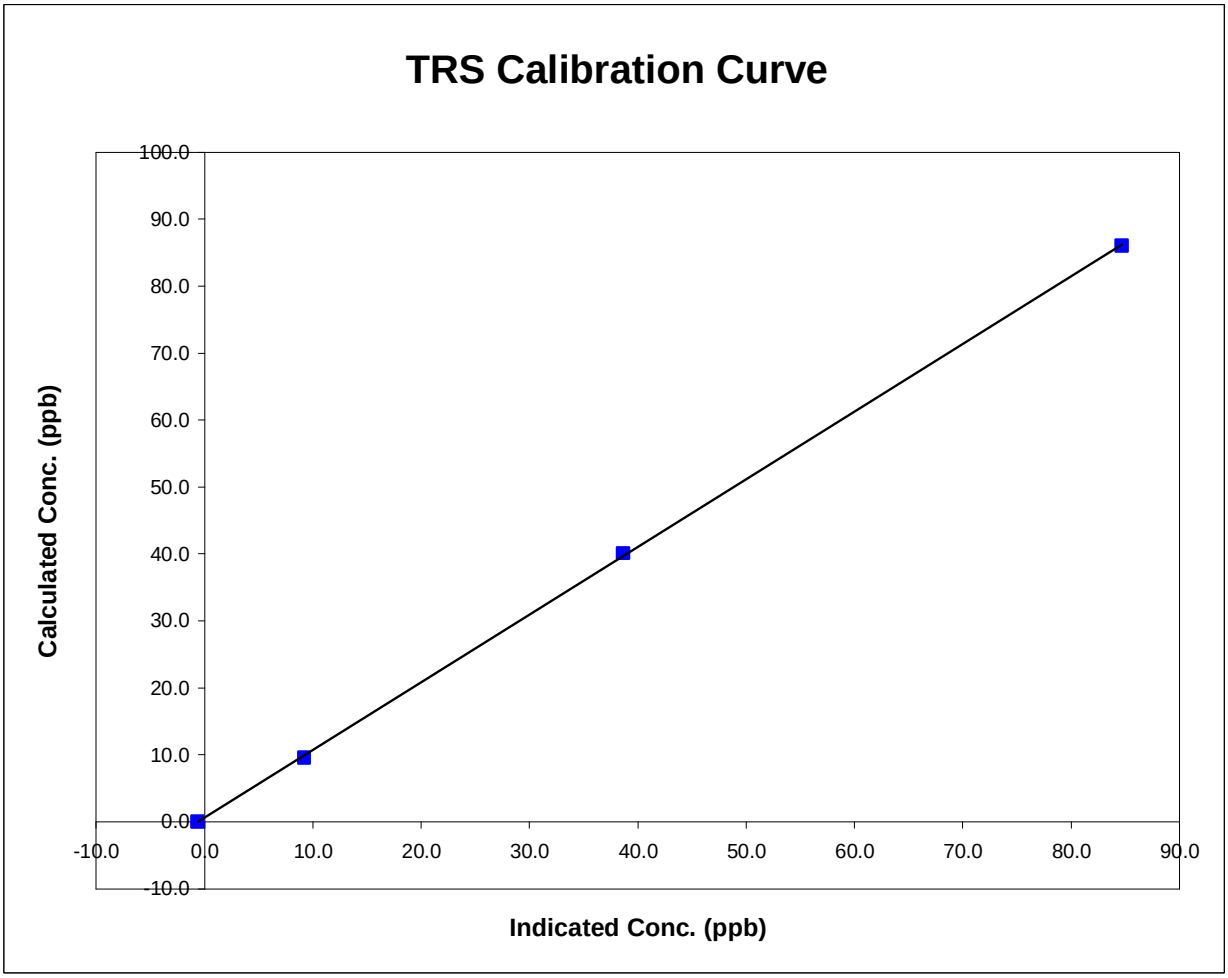
FOCUS AIR QUALITY MONITORING

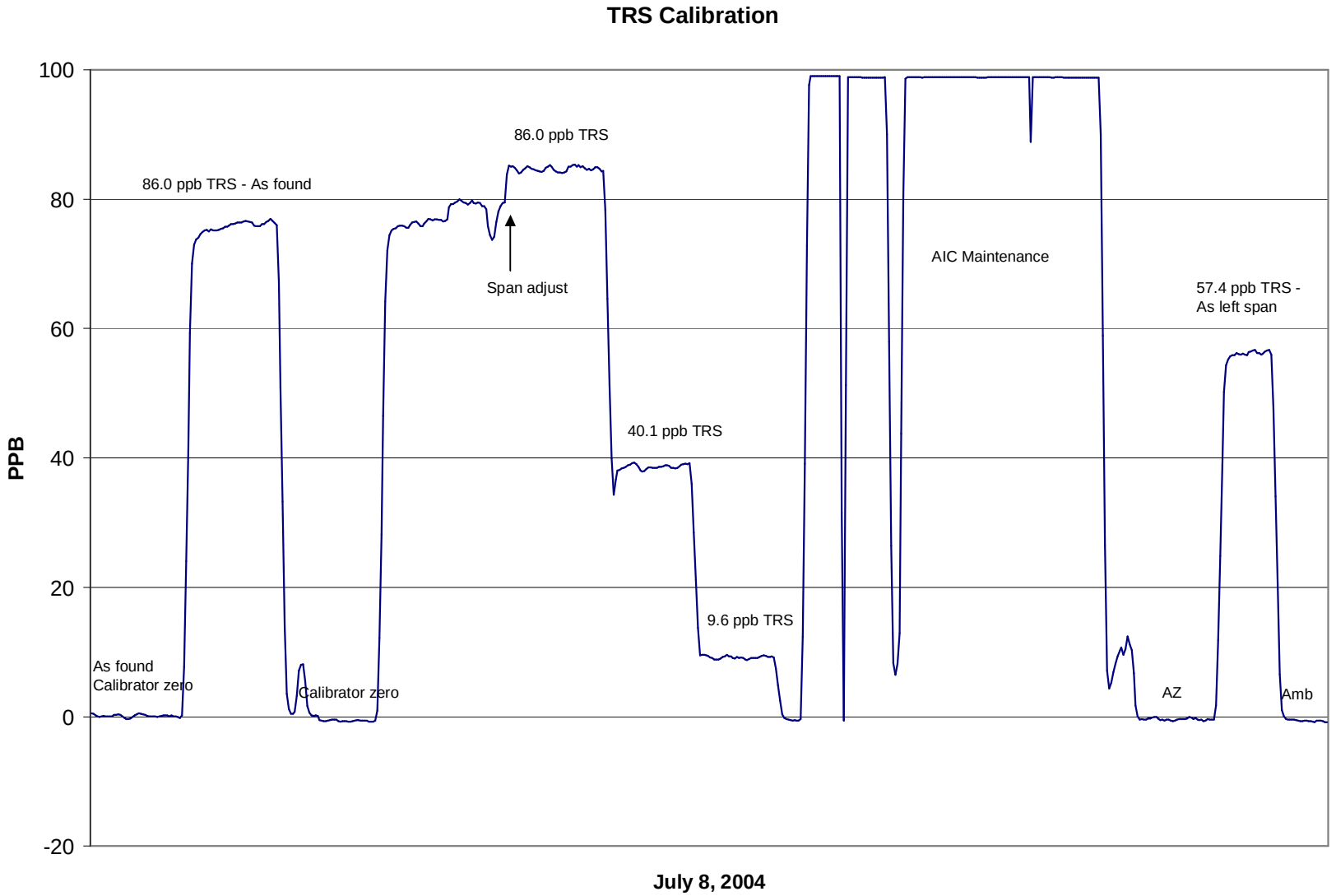
Station Information

Calibration Date	July 8, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	13:30	End Time (MST)	18:25
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	-0.6	N/A		
86.0	84.7	1.0159	Correlation Coefficient	0.999922
40.1	38.6	1.0381		
9.6	9.2	1.0390	Slope	1.011118
			Intercept	0.579136




TRS Calibration
100
80
60
40
20
0
-20
PPB
86.0 ppb TRS - As found
86.0 ppb TRS
Span adjust
40.1 ppb TRS
9.6 ppb TRS
AIC Maintenance
57.4 ppb TRS -
As left span
As found
Calibrator zero
Calibrator zero
AZ
Amb
July 8, 2004