PEACE AIRSHED ZONE ASSOCIATION

Air Quality Monitoring Network

June 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 – June PASZA Ambient Air Report

Enclosed is PASZA Ambient Monitoring Report for the month of **June 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 May. All equipment except the carbon monoxide monitor operated above 90% uptime during the month of June. The CO analyzer failed as a result of the infrared source. The analyzer was repaired and returned to operation in early July. The response letter to Alberta Environment is attached.

Passive Monitoring – 43 Stations throughout the PASZA zone:

There were no damaged samples, however there were three missing samples for the month and no exceedances of the Provincial Air Quality guidelines. The three missing samples were from the Karr Creek station, in which the bridge was out and samples could not be collected. Samples will be collected in the following month (end of July) and averaged over the two month period. There was also one sample flagged from High Prairie, a level of 14.7 ppm for NO_2 was recorded, however this value was extremely excessive and flagged due to it being suspect of contamination.

- Monthly average concentrations for SO_2 passives ranged from 0.1 ppb to 0.6 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.3 ppb to 4.8 ppb.
- Monthly average concentrations for O_3 passives ranged from 24.7 ppb to 43.3 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

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

PASZA Monthly Continuous Data Summary

June 2004 Monthly Overall Summary Report

Ambient Air Quality Data

Jun-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	0.3	0	0	9.6	Jun-03	7.0	ENE	1.2	Jun-03	100.0%
NO (**ppb**)			Henry Pirker	2.4	0	0	33.4	Jun-21	3.8	SSE	7.0	Jun-22	100.0%
NO_2 (**ppb**)	212	106	Henry Pirker	5.3	0	0	41.7	Jun-18	3.6	WSW	12.6	Jun-21	100.0%
NO_X (**ppb**)			Henry Pirker	8.0	0	0	56.6	Jun-18	3.6	WSW	19.2	Jun-21	100.0%
O_3 (**ppb**)	82		Henry Pirker	27.7	0	0	63.0	Jun-30	15.9	W	46.6	Jun-27	100.0%
CO (**ppm**)	13		Henry Pirker	0.14	0	0	0.85	Jun-17	1.6	E	0.30	Jun-17	86.3%
THC (**ppm**)			Henry Pirker	1.89	0	0	2.69	Jun-04	4.3	SSW	2.09	Jun-21	100.0%
TRS (**ppb**)			Henry Pirker	0.3	0	0	1.3	Jun-30	12.1	SSE	0.7	Jun-10	100.0%
$PM_{2.5}$ (**µg/m^3**)		30 [a]	Henry Pirker	5.9	0	0	27.7	Jun-19	3.3	SE	14.2	Jun-21	98.9%
RH (**%**)			Henry Pirker	61.3									100.0%
SR (**W/m^2**)			Henry Pirker	250.9									100.0%
Temp (**^{o}C**)			Henry Pirker	16.3									99.9%
WSPD v (km/hr)			Henry Pirker	1.2									100.0%
WSPD s (km/hr)			Henry Pirker	8.8									100.0%
WDIR (Deg)			Henry Pirker	SE*									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

Generally the station was operating well with the exception of the CO analyzer which resulted due to a failed infrared source.

Parameter	Make	Model	Notes
SO_2	TECO	43	No Operational problems were observed
NOx/NO/NO_2	TECO	42	No operational problems observed
O_3	API	400	No operational problems observed
CO	TECO	48	A failed infrared source resulted in blanked hours of down-time during the month. The infrared source was replaced in early July.
THC	TEI	51-CLT	No operational problems observed
TRS	TEI	42C	No operational problems observed
$PM_{2.5}$	R&P	1400AB	Two hours were lost during the month due to drift below the AENV guideline.
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: June 1, 2004 to July 1, 2004

Summary

Number of 1-hr Good Readings:	625
Number of 1-hr Fair Readings:	37
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

Percentile	99	95	75	50	25	5	1
	31.2	26.1	19.3	14.0	9.6	5.1	4.0

Status Flag Characters

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

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-Jun-04	16	13	13	10	9	5	A	9	14	17	19	19	19	18	20	20	19	20	19	19	17	14	7	8
2-Jun-04	13	12	11	13	12	A	10	14	16	19	20	20	21	21	22	22	22	22	22	21	19	15	15	15
3-Jun-04	13	11	9	12	A	12	12	12	14	17	20	22	23	23	24	24	25	25	24	23	18	15	16	16
4-Jun-04	16	11	6	A	7	15	19	21	15	16	25	25	24	25	**26**	**28**	**28**	**28**	**28**	**27**	22	18	17	15
5-Jun-04	18	20	A	21	22	22	22	23	20	18	20	24	**26**	**28**	**26**	**30**	**29**	**30**	18	17	15	15	14	12
6-Jun-04	10	A	7	13	18	18	16	13	11	11	13	14	14	14	13	13	12	12	12	12	12	9	9	10
7-Jun-04	A	11	11	9	6	4	6	8	13	15	17	18	19	20	20	20	22	21	22	19	15	13	10	A
8-Jun-04	9	9	7	10	9	9	6	7	8	10	17	19	18	17	19	19	19	20	21	19	15	11	A	14
9-Jun-04	15	16	16	13	12	10	9	9	13	12	15	17	19	22	23	24	19	18	20	19	18	A	15	13
10-Jun-04	10	8	4	4	6	5	6	5	6	N	N	N	N	N	N	21	N	2	N	15	15	A	12	11
11-Jun-04	10	10	9	9	8	8	7	5	5	5	5	6	5	5	5	7	7	6	7	6	A	6	5	5
12-Jun-04	5	5	5	4	4	4	4	5	5	5	6	9	10	12	14	16	16	16	15	A	11	8	9	8
13-Jun-04	6	7	4	6	5	6	6	8	8	9	13	14	14	15	14	13	14	15	A	15	16	13	13	11
14-Jun-04	10	9	10	10	9	9	10	11	11	13	14	14	13	13	14	13	14	A	14	13	13	12	11	11
15-Jun-04	10	9	9	10	9	7	7	8	9	11	12	9	9	11	13	13	A	11	12	10	8	5	7	9
16-Jun-04	10	10	11	10	10	9	8	9	11	14	16	16	16	17	18	A	20	20	19	19	17	9	7	9
17-Jun-04	5	4	5	4	4	4	6	8	9	12	16	21	22	22	A	23	23	23	23	23	20	19	14	19
18-Jun-04	12	11	5	4	4	7	8	9	12	16	20	22	24	A	**26**	25	**26**	**27**	**27**	25	22	16	14	16
19-Jun-04	23	17	17	13	5	8	10	13	14	16	20	23	A	22	22	21	18	19	16	15	13	15	11	12
20-Jun-04	11	12	12	12	12	10	10	12	13	15	18	A	21	A	24	23	23	24	24	23	18	13	18	18
21-Jun-04	20	17	13	13	10	12	15	11	16	18	A	16	22	23	18	12	13	14	15	15	13	9	10	9
22-Jun-04	7	5	5	5	6	12	13	15	16	A	17	22	22	23	24	24	23	21	18	12	9	9	9	8
23-Jun-04	8	8	11	12	12	8	8	9	A	7	11	9	8	9	12	18	20	20	20	20	16	13	13	15
24-Jun-04	12	11	11	9	9	12	11	A	11	14	17	17	17	19	19	19	18	18	18	15	13	10	9	7
25-Jun-04	9	6	4	4	4	5	A	10	12	15	18	17	17	18	18	19	19	19	19	19	16	14	11	10
26-Jun-04	10	10	9	8	7	A	12	13	14	18	22	22	20	21	22	22	**28**	**29**	**28**	**29**	18	15	15	17
27-Jun-04	20	19	20	20	A	17	A	18	20	22	24	**26**	**27**	**29**	**30**	**31**	**32**	**32**	**31**	**30**	25	21	21	19
28-Jun-04	18	16	16	A	15	A	12	10	13	17	21	23	24	**27**	**29**	**30**	**31**	**32**	**28**	24	22	18	17	13
29-Jun-04	11	16	A	17	A	9	9	9	10	9	10	12	N	N	N	N	N	N	N	N	N	N	N	N
30-Jun-04	N	A	6	6	6	A	5	7	12	14	17	23	**31**	N	**33**	25	24	22	20	20	16	19	19	15

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	9.6	ppb	3-Jun	9:00 10:00
Maximum 24-hr Average:	1.2	ppb	3-Jun	

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

AIC Time:	31 hrs							Operational Time:	685 hrs																
Calibration Time:	4 hrs							AMD Operational Uptime:	100.0%																
Percentile	99	95	75	50	25	5	1	Average																	
	2.4	1.3	0.4	0.2	0.0	0.0	0.0	0.3 ppb																	

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jun-04	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.7
2-Jun-04	0	0	0	0	0	A	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
3-Jun-04	0	0	0	0	A	0	1	3	8	10	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1.2	9.6
4-Jun-04	1	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.4
5-Jun-04	0	0	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0.5	1.4
6-Jun-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	0.0	0.5
7-Jun-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.4
8-Jun-04	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.5
9-Jun-04	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.5
10-Jun-04	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1
11-Jun-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
12-Jun-04	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.6
13-Jun-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	0.1	0.3
14-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3
15-Jun-04	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	A	1	0	0	0	0	0	0	0.4	1.3
16-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0.3	0.6
17-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0.3	0.5
18-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
19-Jun-04	0	0	0	0	0	0	0	0	1	4	3	1	A	0	0	0	0	0	0	0	0	0	0	0	0.5	4.0
20-Jun-04	0	1	0	0	0	0	1	1	0	0	1	A	0	0	0	0	1	1	1	1	0	0	1	1	0.5	1.4
21-Jun-04	0	0	0	0	0	0	1	1	1	0	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0.4	1.0
22-Jun-04	0	0	0	0	0	1	5	2	1	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.6	5.2
23-Jun-04	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	1	0	0	0	0	1	1	0	0	0.4	0.9
24-Jun-04	0	0	0	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
25-Jun-04	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
26-Jun-04	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0.6	1.2
27-Jun-04	1	1	1	1	A	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	0	0	0	0	1.0	2.0
28-Jun-04	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0.6	1.4
29-Jun-04	0	0	A	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	0.4	1.1
30-Jun-04	0	A	0	0	0	0	0	0	1	2	2	3	2	2	1	1	1	1	0	0	0	0	0	0	0.8	3.2
																									N	0.0
Hourly Avg	0.2	0.2	0.1	0.1	0.1	0.3	0.6	0.5	0.8	1.0	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3		
Hourly Max	0.9	1.4	1.4	1.2	1.1	1.4	5.2	2.5	8.2	9.6	2.6	3.2	2.4	2.0	1.5	1.2	1.1	0.9	0.6	0.8	0.6	1.4	1.4	1.3		

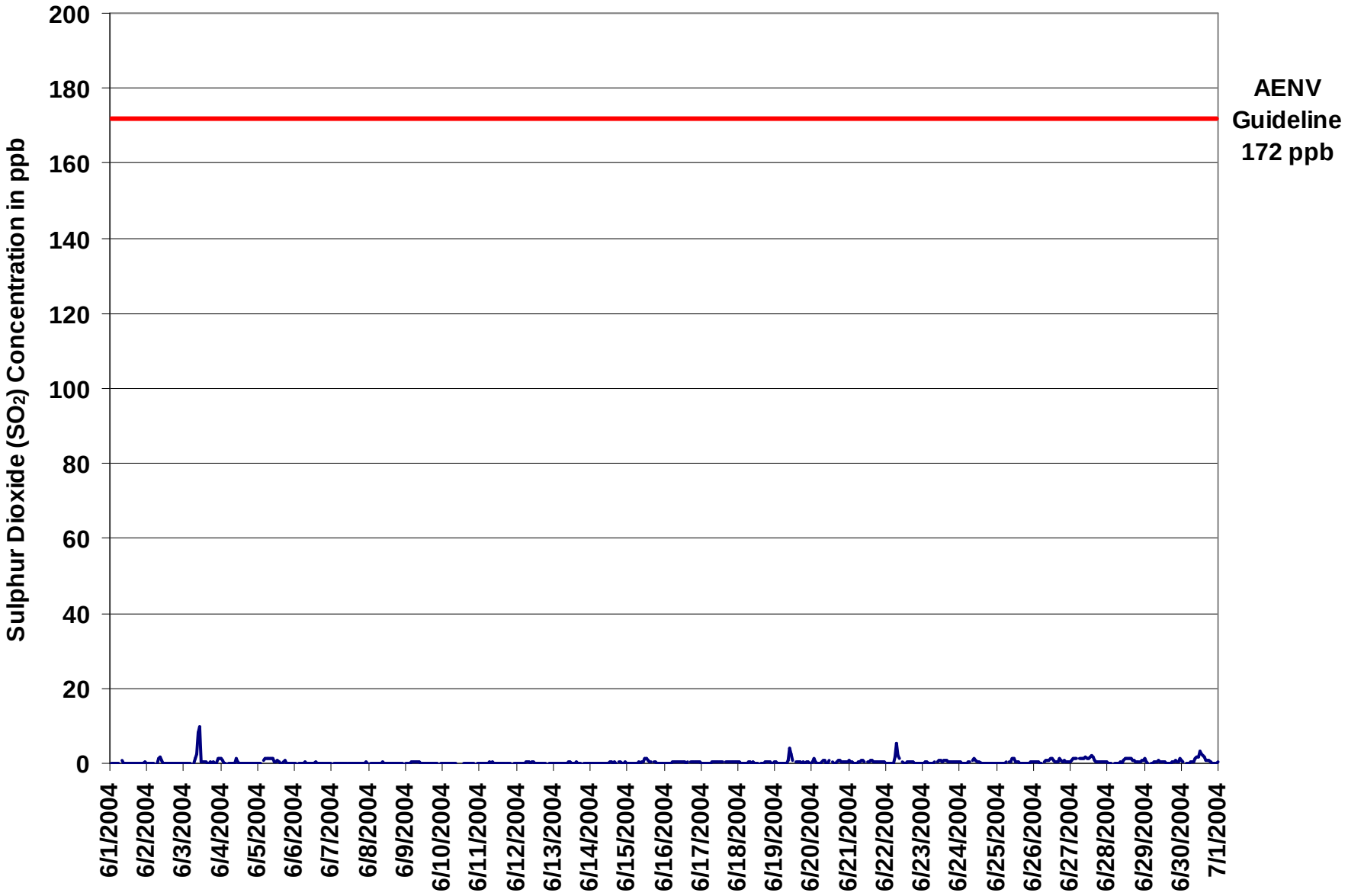


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Sulphur Dioxide (SO_2)

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

Summary

Maximum 1-hr Value:	15.0	ppb	3-Jun	9:00 10:00
Maximum 24-hr Value:	2.6	ppb	3-Jun	

AIC Time:	31 hrs	Operational Time:	685 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	5.6	2.4	1.1	0.8	0.6	0.0	0.0	1.0 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jun-04	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	1.4
2-Jun-04	0	0	0	0	0	A	0	8	6	4	1	1	0	0	1	1	1	1	0	0	0	0	1	0	1.2	7.5
3-Jun-04	0	0	0	0	A	1	2	4	14	15	1	1	2	1	2	1	1	1	1	0	0	6	5	3	2.6	15.0
4-Jun-04	2	1	0	A	0	1	1	1	1	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.7	3.4
5-Jun-04	0	0	A	2	2	2	2	2	3	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1.0	3.2
6-Jun-04	0	A	0	0	0	1	2	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.8
7-Jun-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	A	0.4	3.1
8-Jun-04	0	0	0	0	0	0	0	1	2	1	0	1	1	0	0	0	0	1	1	1	0	1	A	1	0.5	1.6
9-Jun-04	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	3	2	0	0	A	0	0	0.6	2.7
10-Jun-04	0	0	0	0	0	0	0	0	0	C	C	C	C	1	1	0	0	0	1	0	1	A	1	0	0.3	0.9
11-Jun-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0.7	0.9
12-Jun-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	1	0.7	1.1
13-Jun-04	1	0	1	0	1	1	1	0	1	1	1	1	1	1	2	1	0	1	A	1	1	1	1	0	0.7	1.6
14-Jun-04	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	1.5
15-Jun-04	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	A	1	1	1	1	1	1	1	1.0	2.4
16-Jun-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
17-Jun-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	0.9	1.2
18-Jun-04	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.2
19-Jun-04	1	1	1	1	1	1	1	1	3	6	5	2	A	1	1	1	1	1	1	1	1	1	1	1	1.3	6.2
20-Jun-04	1	3	1	1	1	1	2	2	1	1	2	A	1	1	1	2	1	1	1	1	1	1	1	1	1.2	2.6
21-Jun-04	1	1	1	1	1	1	1	3	3	1	A	1	1	2	2	1	1	1	1	1	1	1	1	1	1.1	2.7
22-Jun-04	1	1	1	1	1	6	7	3	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	7.4
23-Jun-04	1	1	1	1	1	1	1	2	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7
24-Jun-04	1	1	1	1	1	1	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
25-Jun-04	1	1	1	1	1	1	A	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.4
26-Jun-04	1	1	1	1	1	A	1	1	1	2	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1.2	2.0
27-Jun-04	1	2	2	2	A	2	2	2	2	2	2	2	2	3	2	2	1	1	1	1	1	1	1	1	1.7	2.7
28-Jun-04	1	1	0	A	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	2	2	4	1.3	3.5
29-Jun-04	1	1	A	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	2	1	1	4	3	1.2	3.5
30-Jun-04	1	A	1	1	1	1	1	1	2	2	3	4	3	3	2	1	1	1	1	1	1	1	1	1	1.5	4.2
																									N	0.0
Hourly Avg	0.7	0.7	0.6	0.6	0.6	1.0	1.2	1.4	1.9	2.0	1.3	1.1	1.1	0.9	1.0	0.8	0.8	0.9	0.8	0.7	0.7	1.0	1.0	0.9		
Hourly Max	2.2	2.6	2.3	1.7	1.6	6.3	7.4	7.5	14.3	15.0	5.0	4.2	3.4	2.7	2.4	1.8	2.0	2.7	2.3	1.5	2.3	5.7	5.0	3.5		

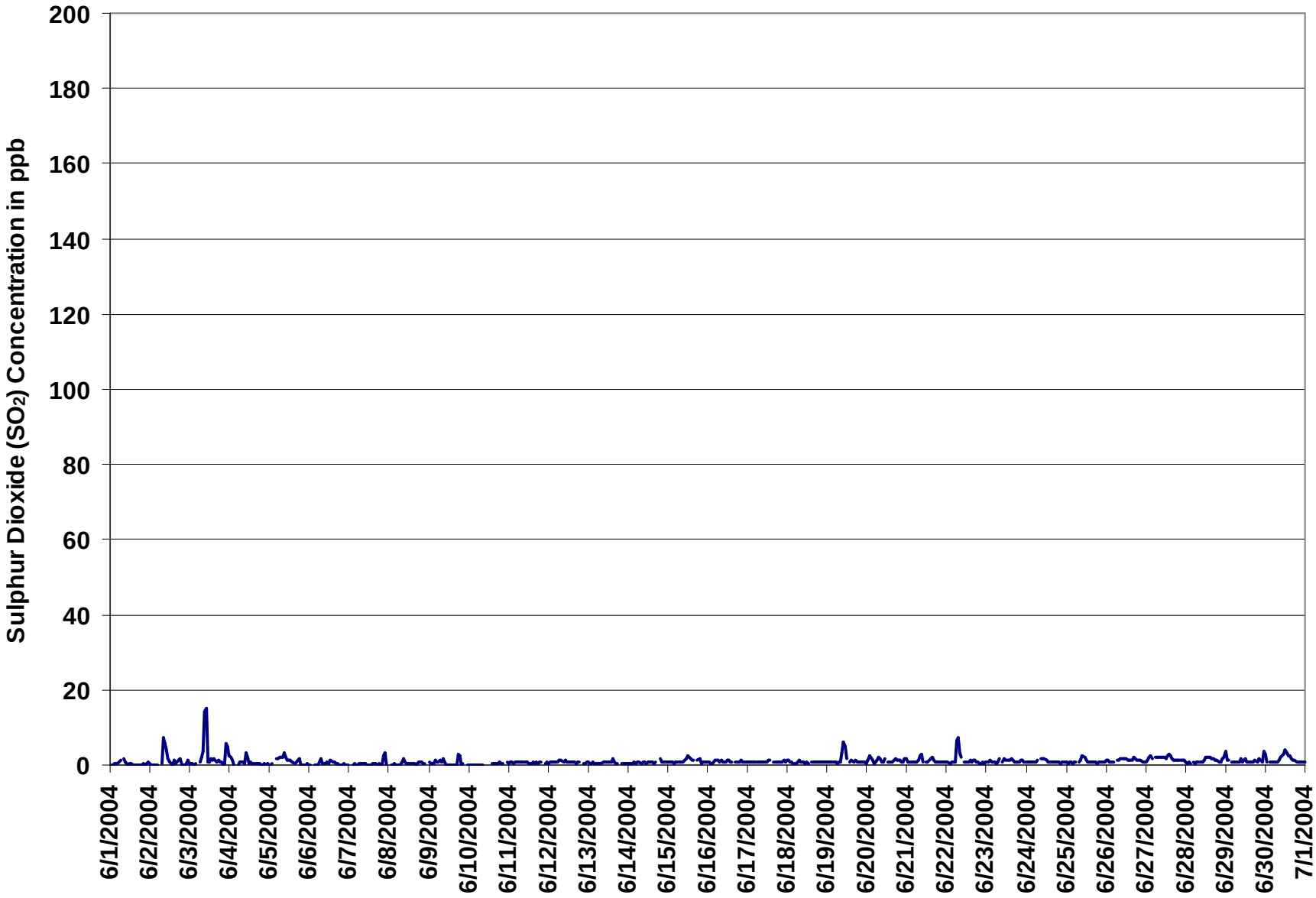
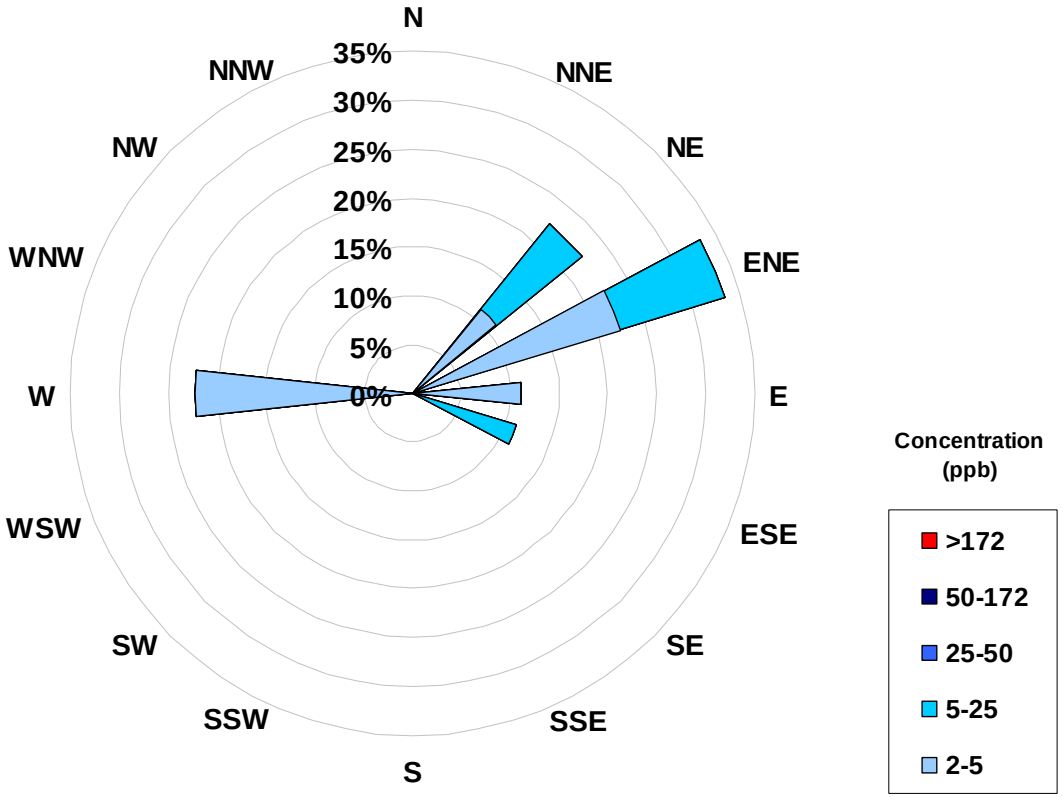


Figure 2. PASZA - Henry Pirker Sulphur Dioxide 1-hr Maximum Value Monthly Trend

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



Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0	<	2	676
2	to	5	6
5	to	25	3
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			685

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: June 1, 2004 to July 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	41.7	ppb	17-Jun	23:00 0:00
Maximum 24-hr Average:	12.6	ppb	21-Jun	

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

AIC Time:	31 hrs	Operational Time:	668 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	27	17	6	3	2	0	0	5.3 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jun-04	3	4	5	8	9	15	18	11	A	0	0	0	0	2	1	0	0	0	0	0	1	5	15	10	4.6	18.2
2-Jun-04	4	3	5	2	3	6	9	A	2	0	0	0	1	0	0	0	0	0	0	1	3	6	5	5	2.4	9.1
3-Jun-04	5	8	9	5	4	7	A	5	3	1	0	0	0	0	0	0	0	0	0	0	6	8	3	4	3.0	8.7
4-Jun-04	2	7	11	11	13	A	19	12	9	8	1	0	0	0	0	0	0	0	0	2	5	7	6	5	5.2	18.5
5-Jun-04	1	0	1	2	A	3	4	2	3	4	3	3	3	1	0	1	2	2	0	0	1	1	1	2	1.8	3.8
6-Jun-04	3	3	4	A	1	1	1	1	1	2	1	2	1	1	1	2	4	3	2	3	3	5	4	3	2.2	4.7
7-Jun-04	2	3	A	5	8	8	6	5	2	1	0	0	0	0	0	0	0	0	0	0	1	3	4	4	2.2	8.5
8-Jun-04	3	A	5	3	5	6	6	5	8	5	0	0	0	0	0	0	0	0	0	1	5	9	7	3	3.1	8.9
9-Jun-04	A	1	1	4	4	7	11	8	10	5	2	2	1	1	0	0	1	4	2	2	2	2	2	A	3.3	10.8
10-Jun-04	2	4	7	5	3	7	10	C	C	C	C	C	C	C	3	2	1	2	5	10	7	3	5	A	N	10.1
11-Jun-04	5	2	2	1	1	2	3	5	4	4	4	2	4	3	7	4	4	6	4	5	5	5	A	6	3.8	6.9
12-Jun-04	4	4	4	3	4	5	4	2	2	5	4	3	2	2	1	1	1	2	1	2	3	A	15	18	4.0	17.7
13-Jun-04	16	15	8	5	8	5	4	3	2	1	1	1	1	2	3	4	4	2	2	3	A	4	3	3	4.3	15.6
14-Jun-04	3	2	2	2	2	4	6	5	3	1	2	2	2	2	2	2	2	2	1	A	2	2	3	3	2.5	5.5
15-Jun-04	2	3	4	2	3	8	7	5	3	2	1	3	5	3	2	3	6	4	A	11	13	17	9	4	5.2	16.8
16-Jun-04	3	2	1	1	2	3	5	7	4	2	2	1	3	2	2	2	2	A	2	2	5	18	21	17	4.7	21.1
17-Jun-04	15	16	16	15	16	17	14	11	10	8	5	1	1	2	2	2	A	3	3	3	11	27	27	42	11.6	41.7
18-Jun-04	33	28	22	15	15	17	18	12	9	7	5	3	2	2	3	A	3	3	2	3	4	16	15	31	11.6	32.6
19-Jun-04	30	27	21	18	15	12	9	6	5	4	4	3	2	1	A	2	4	3	6	6	13	17	5	2	9.3	30.2
20-Jun-04	3	2	2	2	2	5	4	2	1	1	2	1	1	A	1	2	1	1	1	2	7	17	34	22	5.1	34.1
21-Jun-04	23	19	15	17	15	17	18	17	13	8	9	10	A	5	6	7	5	3	3	6	10	19	24	22	12.6	24.2
22-Jun-04	20	17	14	13	12	13	11	18	12	8	6	A	5	3	3	3	4	5	4	6	9	7	6	6	9.0	20.4
23-Jun-04	5	5	3	2	3	9	6	5	7	8	A	6	7	6	4	3	2	3	3	4	10	17	22	22	7.1	21.8
24-Jun-04	12	11	6	15	15	18	14	10	5	A	3	2	1	1	3	2	3	3	4	6	8	11	14	15	8.0	17.6
25-Jun-04	10	11	13	13	13	15	14	7	A	6	5	2	1	1	1	2	2	1	2	3	5	8	12	13	6.9	14.7
26-Jun-04	10	16	9	8	12	9	4	A	4	2	3	2	1	1	1	2	2	2	2	3	4	5	4	4	4.7	15.9
27-Jun-04	3	5	4	3	4	4	A	4	2	2	2	2	2	2	1	1	2	2	3	3	5	7	6	3	3.2	7.2
28-Jun-04	2	1	2	2	3	A	7	7	4	2	2	4	2	2	2	3	3	3	4	6	10	12	5	4	3.9	12.3
29-Jun-04	2	2	1	1	A	5	5	6	5	5	5	3	C	C	C	C	C	C	C	C	C	C	C	C	N	5.8
30-Jun-04	C	5	5	4	4	A	10	7	3	3	4	5	4	C	2	1	2	3	1	3	5	2	3	4	3.8	9.6
																									N	0.0
Hourly Avg	8.0	7.9	7.0	6.5	7.2	8.4	8.7	6.9	5.1	3.7	2.6	2.2	1.9	1.8	1.8	1.8	2.0	2.2	2.1	3.4	5.8	9.3	10.1	10.2		
Hourly Max	32.6	27.7	21.8	18.1	16.4	17.6	18.5	18.4	12.9	8.4	8.5	10.4	7.2	5.9	6.9	6.5	5.7	5.5	5.8	11.1	13.3	27.4	34.1	41.7		

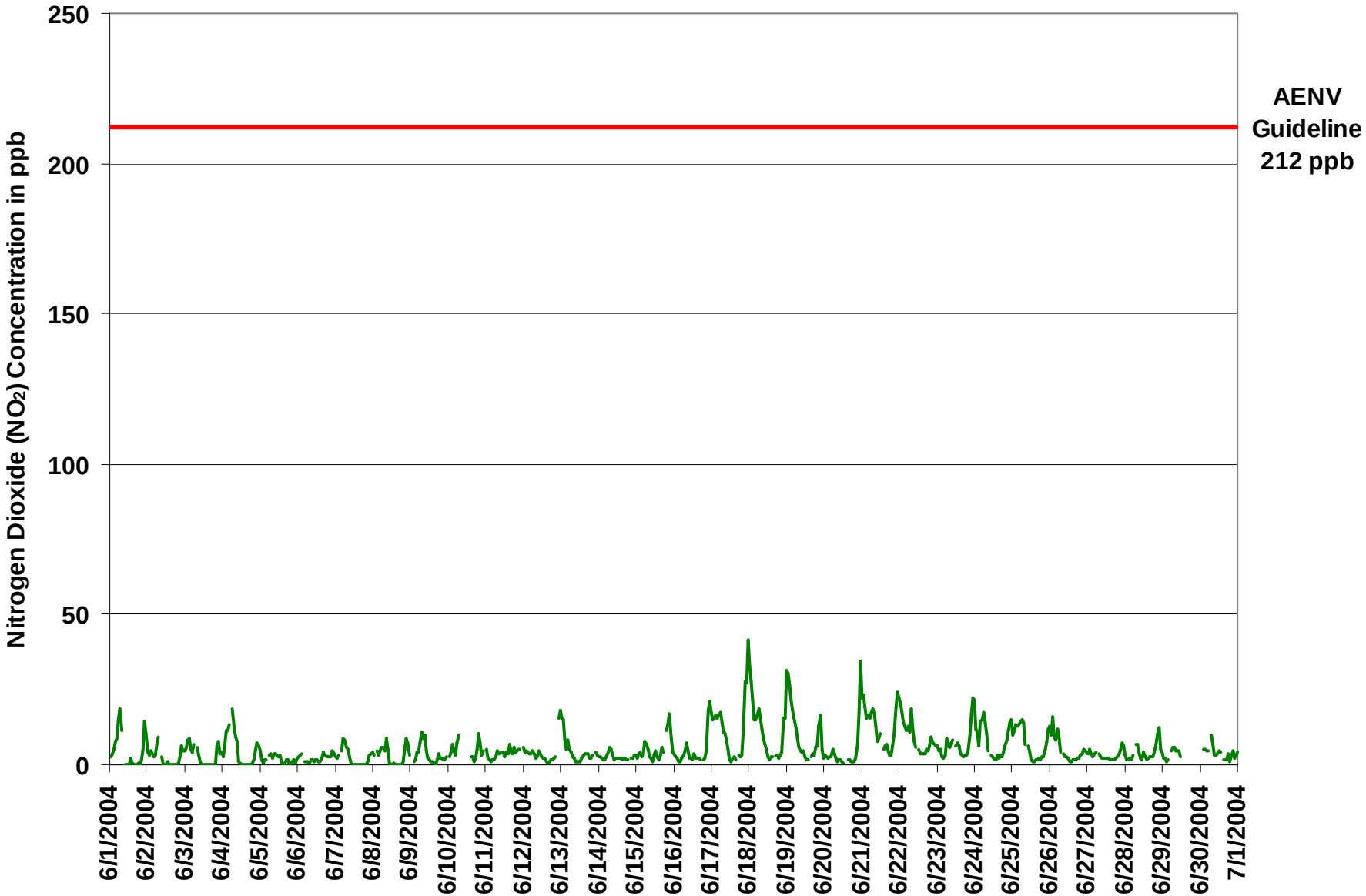


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

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

Summary

Maximum 1-hr Value:	56.2	ppb	17-Jun	23:00 0:00
Maximum 24-hr Value:	16.7	ppb	21-Jun	

AIC Time:	31 hrs	Operational Time:	668 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	34	24	11	6	3	1	0	8.6 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jun-04	4	7	8	10	14	22	23	20	A	2	0	0	1	5	4	1	3	0	2	1	3	10	21	19	7.9	23.0
2-Jun-04	7	8	9	4	7	12	14	A	6	2	5	2	7	3	2	2	2	2	2	3	6	12	14	10	6.1	14.3
3-Jun-04	7	16	14	9	9	9	A	10	6	5	1	2	1	0	0	1	0	0	1	5	14	17	7	7	6.1	17.0
4-Jun-04	7	14	15	19	18	A	24	16	13	10	4	1	2	2	0	0	1	3	2	4	8	9	10	15	8.7	23.9
5-Jun-04	3	2	2	3	A	5	16	4	8	5	5	6	6	4	1	2	3	4	1	1	3	3	2	6	4.2	16.3
6-Jun-04	7	5	7	A	5	3	2	2	3	3	2	4	3	3	3	3	7	7	4	4	6	7	6	5	4.5	7.5
7-Jun-04	3	6	A	6	13	13	8	10	6	2	1	1	2	0	1	1	0	2	2	2	2	6	6	6	4.5	13.4
8-Jun-04	4	A	6	5	7	10	12	8	12	9	2	1	2	2	1	1	1	1	1	5	10	13	10	5	5.5	13.1
9-Jun-04	A	2	2	19	7	11	18	14	17	7	4	3	2	2	1	2	3	9	5	5	4	4	4	A	6.4	18.5
10-Jun-04	3	8	10	7	6	13	12	C	C	C	C	C	C	C	5	6	3	5	10	18	21	5	12	A	N	20.9
11-Jun-04	15	3	2	2	2	3	5	7	5	7	6	4	7	6	17	6	6	9	8	9	8	8	A	8	6.7	17.4
12-Jun-04	5	6	6	5	6	7	6	4	6	7	7	6	5	4	4	2	3	3	3	3	4	A	20	20	6.2	20.4
13-Jun-04	18	18	14	8	12	9	6	6	3	5	3	3	2	3	7	8	6	4	5	5	A	8	6	5	7.1	18.0
14-Jun-04	4	3	2	2	5	7	9	33	7	3	4	4	4	4	3	4	6	3	3	A	3	3	12	6	5.9	32.7
15-Jun-04	3	6	11	5	6	12	10	8	5	5	2	28	20	8	6	8	16	8	A	21	21	23	19	9	11.3	28.3
16-Jun-04	4	7	2	2	3	5	8	17	8	6	6	5	9	5	6	5	4	A	4	3	10	27	27	24	8.5	27.0
17-Jun-04	20	19	19	19	20	21	18	18	13	10	8	5	3	4	12	3	A	6	7	6	17	34	38	56	16.3	56.2
18-Jun-04	42	30	23	21	17	24	24	19	12	8	8	6	3	4	4	A	6	6	5	5	10	20	20	39	15.5	42.3
19-Jun-04	36	29	26	21	20	18	15	7	6	6	7	5	3	3	A	5	7	5	9	9	21	22	14	4	12.9	35.7
20-Jun-04	6	6	4	3	4	9	6	3	2	3	2	2	1	A	3	3	1	2	2	7	12	31	40	29	7.8	40.4
21-Jun-04	25	24	18	19	19	20	21	22	19	12	11	15	A	8	10	13	8	10	5	9	16	26	28	26	16.7	27.5
22-Jun-04	24	19	17	14	13	17	12	25	24	10	8	A	11	4	5	5	6	8	7	9	14	11	8	8	12.2	25.2
23-Jun-04	6	9	6	4	7	13	10	10	12	12	A	10	8	8	6	5	4	5	7	12	16	26	35	30	11.4	34.9
24-Jun-04	24	19	9	26	21	21	20	20	7	A	5	6	3	3	7	6	5	4	7	11	16	14	19	24	12.9	26.4
25-Jun-04	12	15	15	15	15	17	16	9	A	8	8	4	3	3	3	4	4	3	4	5	10	12	18	17	9.6	18.0
26-Jun-04	13	19	17	11	16	11	7	A	5	4	4	4	2	2	3	3	3	3	3	5	5	8	6	6	6.9	19.1
27-Jun-04	5	7	6	4	5	7	A	8	3	3	3	3	3	3	3	3	3	3	4	6	9	9	12	6	5.1	11.7
28-Jun-04	2	2	3	2	5	A	8	12	7	4	3	31	30	3	4	6	4	5	8	10	15	19	8	6	8.7	31.3
29-Jun-04	3	4	2	2	A	6	9	9	8	9	8	5	C	C	C	C	C	C	C	C	C	C	C	C	N	9.3
30-Jun-04	C	7	6	7	6	A	12	10	5	4	5	7	11	C	2	2	3	6	5	8	11	11	6	8	6.8	12.3
																									N	0.0
Hourly Avg	11.2	11.0	9.7	9.6	10.3	12.1	12.6	12.4	8.4	6.1	4.7	6.2	5.7	3.7	4.4	4.0	4.3	4.5	4.5	6.8	10.5	14.2	15.2	15.0		
Hourly Max	42.3	30.1	26.2	26.4	20.9	23.9	24.1	32.7	23.9	12.3	10.5	31.3	30.1	8.0	17.4	13.4	16.2	10.0	10.1	21.0	21.0	33.9	40.4	56.2		

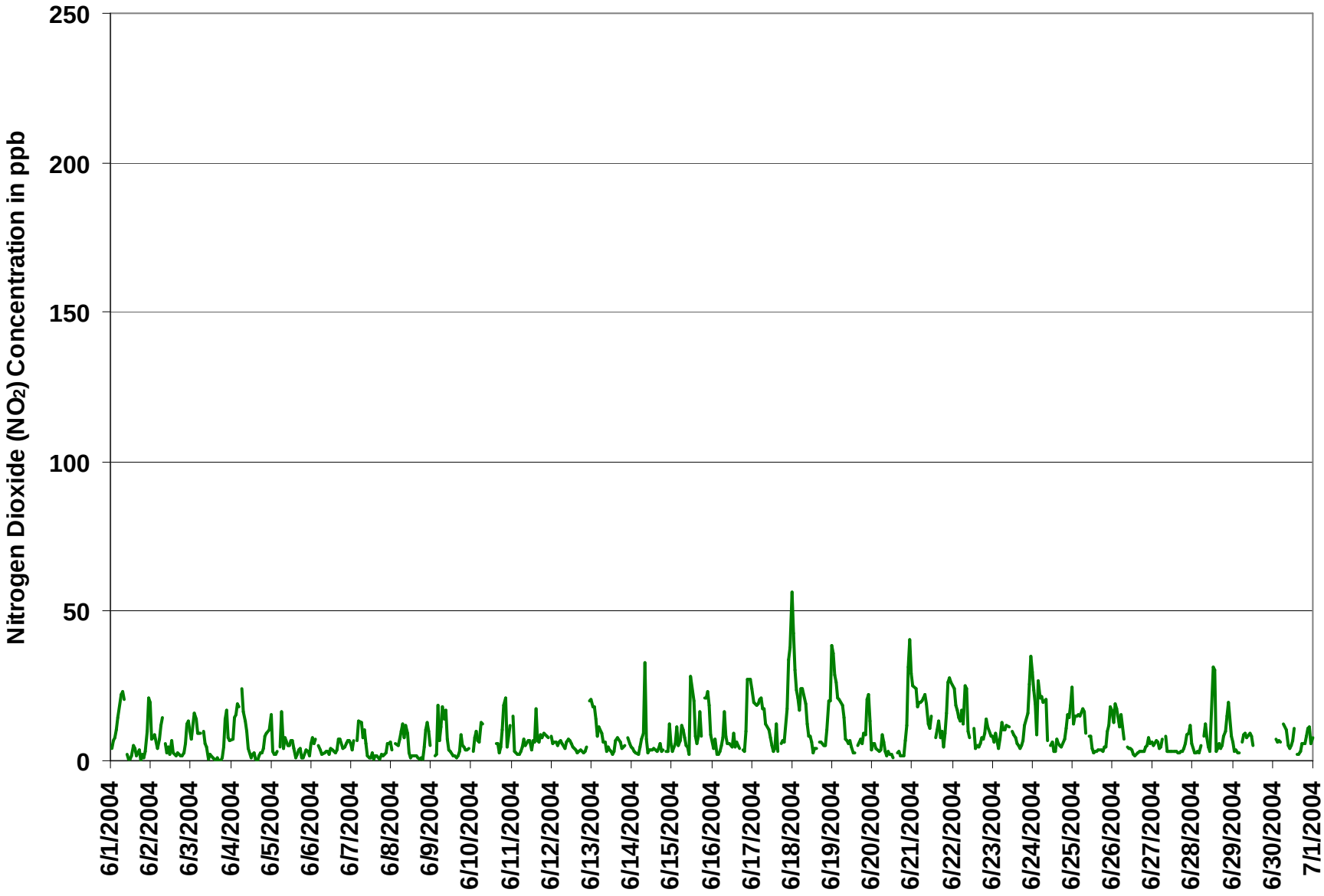
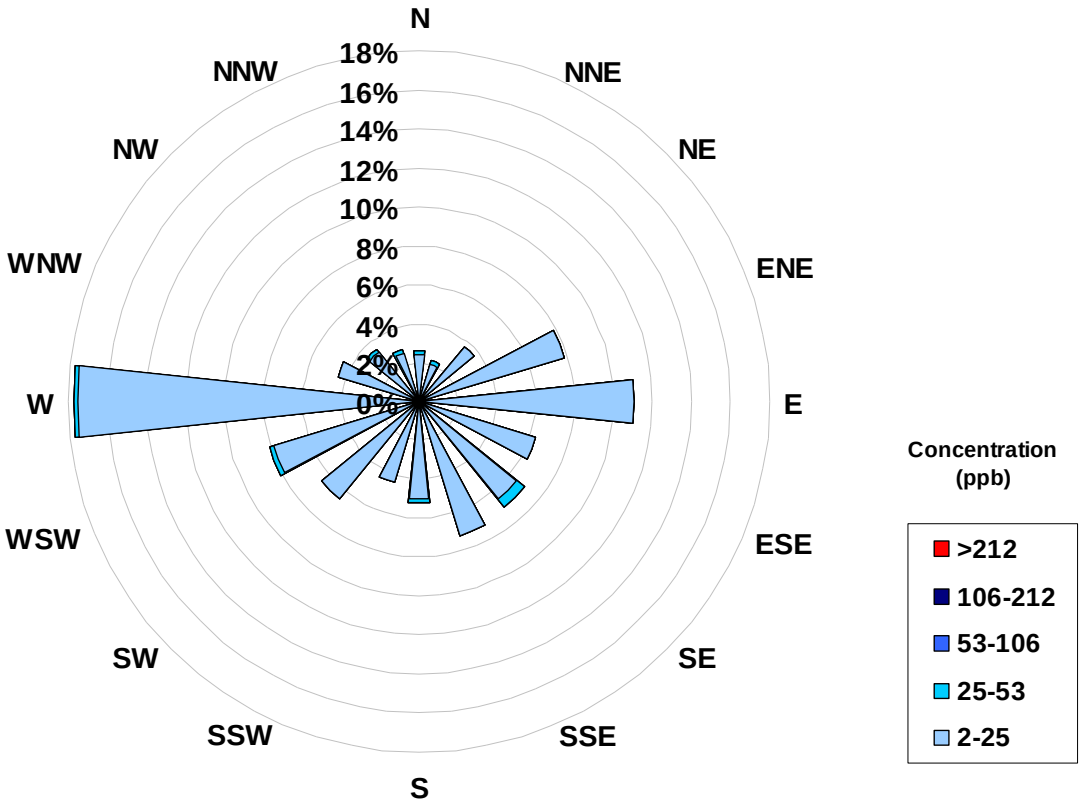


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

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



Frequency Distribution of NO_2 in ppb			
Range			Frequency (hrs)
0	<	2	205
2	to	25	454
25	to	53	9
53	to	106	0
106	to	212	0
	>	212	0
Total Non-Zero Values			668

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: June 1, 2004 to July 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	33	ppb	21-Jun	5:00 6:00
Maximum 24-hr Average:	7	ppb	22-Jun	

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

AIC Time:	31 hrs		Operational Time:		668 hrs		
Calibration Time:	21 hrs		AMD Operational Uptime:		100.0%		
Percentile	99	95	75	50	25	5	1	Average
	23	8	2	1	1	0	0	2.4 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-Jun-04	0	0	0	0	0	3	12	9	A	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1.3	12.4
2-Jun-04	0	0	0	0	0	1	4	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.7	4.4
3-Jun-04	0	0	0	0	0	1	A	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.6
4-Jun-04	0	0	0	0	8	A	25	10	6	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2.4	25.3
5-Jun-04	0	0	0	0	A	0	1	0	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0.4	1.0
6-Jun-04	0	0	1	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	1.4
7-Jun-04	0	1	A	0	1	4	4	6	2	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1.1	5.7
8-Jun-04	0	A	0	0	0	1	1	2	3	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0.7	2.8
9-Jun-04	A	0	0	1	0	1	6	7	10	4	2	2	1	1	1	0	1	1	1	1	0	0	0	A	1.8	9.7
10-Jun-04	0	0	0	0	0	3	7	C	C	C	C	C	C	C	2	2	1	1	1	1	1	1	1	A	N	7.1
11-Jun-04	1	1	1	1	1	2	2	5	4	4	5	3	5	4	11	5	4	5	4	4	3	2	A	2	3.5	10.8
12-Jun-04	2	2	2	2	2	3	3	3	3	4	4	3	2	2	2	2	2	2	1	1	1	A	3	5	2.4	5.0
13-Jun-04	4	7	3	1	2	2	3	3	2	2	2	2	2	2	2	2	2	2	1	1	A	1	1	1	2.1	7.4
14-Jun-04	1	1	1	1	1	2	4	4	3	2	3	3	3	3	2	3	2	2	2	A	1	1	1	1	2.1	4.1
15-Jun-04	1	1	1	1	1	2	3	4	3	3	2	12	4	4	2	2	3	2	A	3	2	1	1	1	2.6	12.1
16-Jun-04	1	1	1	1	1	2	3	7	3	3	3	2	3	2	3	2	2	A	1	1	1	1	1	2	2.0	6.9
17-Jun-04	2	3	3	4	7	14	16	10	9	6	4	2	1	2	2	2	A	2	2	2	2	2	2	15	4.9	15.6
18-Jun-04	11	9	6	4	7	23	20	8	6	4	3	2	1	2	2	A	1	2	1	1	1	1	1	5	5.2	22.6
19-Jun-04	6	4	8	7	2	3	4	3	3	3	2	1	1	1	A	1	2	1	2	2	2	2	2	1	2.7	7.7
20-Jun-04	1	1	1	1	1	2	2	2	2	2	1	1	1	A	1	1	1	1	1	1	1	1	3	1	1.5	3.0
21-Jun-04	1	2	3	2	7	33	32	14	13	6	5	5	A	2	3	3	3	2	2	3	2	2	4	4	6.8	33.4
22-Jun-04	10	12	10	9	9	27	13	27	11	6	4	A	2	2	2	2	2	2	2	2	2	2	1	1	7.0	27.5
23-Jun-04	1	1	1	1	1	2	3	4	3	5	A	3	3	3	3	2	1	2	1	1	1	2	2	2	2.1	5.1
24-Jun-04	1	1	1	2	5	22	5	7	3	A	2	2	2	1	2	2	2	2	2	2	2	2	1	1	3.1	22.3
25-Jun-04	1	1	1	3	8	23	31	3	A	3	3	2	1	2	2	2	2	2	2	1	1	2	1	1	4.3	31.5
26-Jun-04	1	2	2	1	2	3	2	A	2	2	2	2	1	1	2	2	1	1	1	1	1	1	1	1	1.6	2.6
27-Jun-04	1	1	1	1	1	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	1.7
28-Jun-04	1	1	1	1	1	A	2	3	3	2	1	5	2	1	1	1	1	1	1	1	2	1	1	1	1.6	5.3
29-Jun-04	1	1	1	1	A	2	3	3	2	2	4	3	C	C	C	C	C	C	C	C	C	C	C	C	N	3.6
30-Jun-04	C	0	0	0	0	A	5	4	0	0	0	0	0	C	1	0	0	0	0	0	0	0	0	0	0.6	5.2
																									N	0.0
Hourly Avg	1.8	1.9	1.7	1.6	2.6	6.8	7.8	5.7	3.9	2.8	2.0	2.1	1.6	1.6	1.7	1.4	1.4	1.4	1.2	1.2	1.2	1.1	1.1	1.8		
Hourly Max	11.4	11.7	10.5	9.0	9.3	33.4	31.6	27.1	12.6	6.5	4.9	12.1	4.8	4.5	10.8	4.7	4.2	5.0	3.7	3.7	3.2	2.5	3.9	14.8		

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

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

Summary

Maximum 1-hr Value:	132.1	ppb	21-Jun	8:00 9:00
Maximum 24-hr Value:	18.6	ppb	21-Jun	

AIC Time:	31 hrs	Operational Time:	668 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	53	19	5	3	2	0	0	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-Jun-04	0	0	0	1	1	7	21	19	A	6	1	1	1	6	2	1	2	1	0	0	0	0	2	0	3.1	21.3
2-Jun-04	0	0	0	0	0	4	7	A	3	10	17	2	2	2	2	1	2	1	1	1	0	1	0	0	2.6	16.7
3-Jun-04	0	1	1	1	1	3	A	6	5	3	1	2	1	1	1	1	1	0	1	1	2	1	3	3	1.7	6.1
4-Jun-04	5	0	2	5	20	A	45	17	12	6	7	0	18	2	0	0	0	2	1	0	0	2	3	3	6.6	45.1
5-Jun-04	1	1	1	1	A	1	4	1	3	2	3	2	2	2	2	2	1	1	1	1	1	1	0	1	1.3	3.7
6-Jun-04	6	1	3	A	5	4	1	3	3	2	1	2	2	2	2	2	2	3	1	3	5	1	1	2	2.4	5.7
7-Jun-04	1	5	A	1	4	8	8	14	5	2	2	1	4	1	2	2	1	1	1	1	1	4	1	1	3.0	14.3
8-Jun-04	0	A	1	1	1	1	4	4	4	2	2	1	1	1	1	1	1	1	1	1	1	2	2	1	1.5	4.2
9-Jun-04	A	1	0	7	1	4	19	15	20	6	3	2	2	1	1	1	1	4	4	2	0	0	1	A	4.3	20.1
10-Jun-04	0	1	3	0	1	6	13	C	C	C	C	C	C	C	3	2	2	2	2	2	5	2	2	A	N	12.6
11-Jun-04	3	2	2	2	2	3	5	10	6	7	7	5	8	7	27	12	10	10	11	9	9	4	A	4	7.1	26.7
12-Jun-04	2	2	4	4	3	6	5	6	11	14	12	14	5	4	6	2	3	8	2	2	2	A	8	10	5.9	14.0
13-Jun-04	8	22	7	4	6	3	12	9	3	6	3	4	2	3	2	3	3	3	3	2	A	1	1	1	4.8	22.1
14-Jun-04	1	1	1	2	2	4	7	10	6	4	4	5	4	5	3	5	5	3	3	A	2	2	2	2	3.6	9.9
15-Jun-04	1	1	2	2	2	5	5	5	5	5	4	121	32	24	3	5	8	4	A	6	5	3	2	1	10.9	121.0
16-Jun-04	2	2	1	1	2	3	12	25	9	7	5	3	6	4	8	4	5	A	5	2	2	2	4	4	5.1	24.7
17-Jun-04	4	8	9	6	15	23	23	25	13	9	8	5	3	8	10	3	A	5	7	2	2	4	11	49	10.9	48.7
18-Jun-04	29	20	10	7	12	53	27	16	9	5	5	3	2	2	2	A	3	2	4	1	1	1	1	15	10.1	52.8
19-Jun-04	17	13	13	10	5	6	5	4	4	4	4	2	2	2	A	2	3	2	2	2	3	6	8	2	5.3	16.9
20-Jun-04	1	2	3	1	2	3	5	3	2	3	2	2	1	A	1	2	1	1	1	2	2	2	7	3	2.5	7.2
21-Jun-04	5	5	8	5	19	43	44	21	132	53	6	8	A	4	9	6	7	6	4	5	5	5	13	11	18.6	132.1
22-Jun-04	23	19	17	19	19	54	17	49	41	9	5	A	5	3	3	2	3	3	3	4	5	4	2	3	13.5	54.3
23-Jun-04	3	5	8	5	2	3	5	7	6	9	A	5	6	4	4	4	2	3	2	2	2	3	5	4	4.3	9.2
24-Jun-04	1	2	5	7	19	41	9	24	5	A	2	4	3	2	4	4	3	2	3	4	5	3	2	3	6.9	41.4
25-Jun-04	2	4	2	7	20	53	57	4	A	5	5	3	2	4	5	3	3	3	3	3	3	10	4	2	9.0	56.5
26-Jun-04	2	8	5	2	8	4	3	A	4	3	2	3	2	2	3	2	2	2	1	3	2	2	1	1	2.9	8.4
27-Jun-04	1	2	1	1	1	2	A	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5	1	2.0	5.3
28-Jun-04	1	1	1	1	1	A	2	9	4	3	2	54	12	1	3	2	2	1	2	2	4	3	2	2	5.2	54.5
29-Jun-04	1	1	1	1	A	6	10	4	5	4	5	6	C	C	C	C	C	C	C	C	C	C	C	C	N	10.1
30-Jun-04	C	4	0	2	1	A	10	8	2	1	1	3	2	C	1	0	1	0	1	2	2	2	1	1	2.2	9.5
																									N	0.0
Hourly Avg	4.4	4.7	3.9	3.6	6.3	13.1	13.8	11.9	11.9	6.8	4.4	9.4	4.9	3.8	4.0	2.8	2.7	2.8	2.6	2.4	2.7	2.5	3.4	4.8		
Hourly Max	29.2	22.1	17.4	19.3	20.0	54.3	56.5	49.2	132.1	52.8	16.7	121.0	31.9	23.8	26.7	11.8	9.8	10.3	11.0	8.5	9.2	9.7	13.5	48.7		

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	57	ppb	17-Jun	23:00 0:00
Maximum 24-hr Average:	19	ppb	21-Jun	

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

AIC Time:	31 hrs			Operational Time:			668 hrs	
Calibration Time:	21 hrs			AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	Average
	41	24	9	5	3	2	1	8.0 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-Jun-04	4	5	7	9	10	20	32	22	A	2	1	1	1	5	3	1	2	1	2	2	3	7	16	12	7.3	32.3
2-Jun-04	5	5	6	4	5	9	15	A	5	2	2	2	3	3	2	2	2	2	2	3	5	8	6	6	4.6	15.0
3-Jun-04	7	10	10	7	6	9	A	11	8	4	1	1	1	1	1	1	0	0	1	1	8	9	5	5	4.7	10.6
4-Jun-04	4	8	13	13	23	A	46	24	17	14	3	1	1	0	0	0	1	2	2	4	6	9	8	7	9.0	45.6
5-Jun-04	3	2	3	4	A	5	6	4	6	6	6	5	6	3	2	3	4	4	2	2	3	3	3	4	3.9	6.4
6-Jun-04	5	5	6	A	3	3	3	3	4	4	3	4	4	3	4	5	7	6	5	5	5	7	6	5	4.6	7.1
7-Jun-04	4	6	A	7	12	14	11	12	6	4	2	2	2	1	2	2	2	2	1	2	3	5	6	6	5.0	13.7
8-Jun-04	5	A	7	5	7	8	9	9	13	8	3	2	2	2	2	2	2	2	2	3	7	11	10	5	5.4	13.0
9-Jun-04	A	3	3	7	6	10	19	17	21	11	6	5	4	3	3	2	4	7	5	4	4	4	4	A	6.9	21.3
10-Jun-04	4	6	9	7	5	12	18	C	C	C	C	C	C	C	4	4	2	3	6	11	8	4	6	A	N	18.4
11-Jun-04	6	3	2	2	2	3	5	10	7	9	9	5	9	8	18	8	8	10	8	8	8	7	A	7	7.1	17.7
12-Jun-04	6	6	5	5	5	7	7	5	5	9	8	6	4	4	3	2	3	3	2	3	4	A	18	23	6.2	22.5
13-Jun-04	19	22	11	6	10	7	7	5	4	3	3	3	2	3	4	5	5	3	3	4	A	5	4	3	6.3	22.1
14-Jun-04	4	3	2	2	4	7	9	9	5	3	5	5	5	5	4	4	4	3	3	A	3	3	4	4	4.3	9.5
15-Jun-04	3	4	5	3	4	10	10	8	6	4	2	14	9	6	3	5	9	6	A	14	15	18	10	5	7.6	18.2
16-Jun-04	3	3	2	2	3	5	8	14	8	5	4	3	6	4	5	4	3	A	3	3	6	19	22	19	6.6	22.3
17-Jun-04	17	18	19	19	23	32	29	20	19	14	9	3	2	4	4	3	A	5	4	4	12	29	29	57	16.4	56.6
18-Jun-04	44	36	28	18	22	40	39	20	14	11	8	4	3	4	4	A	4	4	3	4	5	16	16	36	16.6	43.9
19-Jun-04	36	31	29	25	17	15	12	9	7	6	6	4	2	2	A	3	5	4	7	7	15	19	7	3	11.8	35.9
20-Jun-04	4	3	3	3	3	7	5	3	2	3	3	2	1	A	2	3	2	2	2	3	8	18	37	23	6.2	36.9
21-Jun-04	24	20	19	18	22	51	50	31	25	14	13	16	A	6	9	10	8	5	5	8	12	21	28	26	19.2	50.6
22-Jun-04	30	29	25	22	21	40	23	46	23	14	9	A	7	5	5	5	5	7	6	8	11	9	7	8	15.8	45.5
23-Jun-04	6	6	4	3	4	11	9	9	10	13	A	9	10	9	6	5	3	4	4	5	11	18	23	23	8.9	23.5
24-Jun-04	12	12	7	16	19	40	18	18	8	A	5	4	3	3	4	4	4	4	6	8	11	13	15	16	10.9	39.9
25-Jun-04	11	12	14	16	21	38	45	10	A	9	7	3	2	3	3	3	3	3	4	4	7	9	13	14	10.9	45.3
26-Jun-04	10	18	10	9	14	11	6	A	6	4	4	4	2	2	3	3	3	3	3	4	5	6	5	5	6.0	17.8
27-Jun-04	4	6	4	3	4	5	A	5	4	4	3	3	3	3	2	2	3	3	4	5	6	8	7	4	4.2	8.2
28-Jun-04	2	2	3	2	4	A	8	9	7	3	3	9	4	3	3	4	4	4	5	7	12	14	6	5	5.3	13.5
29-Jun-04	3	3	2	2	A	6	8	8	7	7	8	5	C	C	C	C	C	C	C	C	C	C	C	C	N	8.4
30-Jun-04	C	5	5	4	5	A	15	11	4	4	4	6	4	C	3	2	2	4	3	3	5	2	3	5	4.7	15.4
																									N	0.0
Hourly Avg	10.2	10.1	9.1	8.4	10.2	15.7	16.9	13.1	9.3	6.9	5.0	4.6	3.8	3.6	3.8	3.4	3.7	3.8	3.6	5.0	7.4	10.8	11.6	12.4		
Hourly Max	43.9	36.3	29.1	24.8	23.2	50.6	49.9	45.5	25.3	14.3	13.2	15.7	10.4	8.7	17.7	9.5	8.9	10.4	7.8	13.6	15.3	29.3	36.9	56.6		

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

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

Summary

Maximum 1-hr Value:	130.0	ppb	15-Jun	11:00 12:00
Maximum 24-hr Value:	32.5	ppb	21-Jun	

AIC Time:	31 hrs	Operational Time:	668 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	71	40	17	10	6	3	2	14.0 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-Jun-04	5	8	9	13	16	31	46	41	A	5	3	2	4	13	8	4	7	2	4	2	5	12	24	21	12.3	45.8
2-Jun-04	9	10	11	6	9	16	23	A	11	10	23	5	10	6	5	5	5	4	4	5	8	15	15	12	9.9	23.1
3-Jun-04	9	18	15	11	12	12	A	17	12	10	4	6	4	2	2	3	3	2	4	7	16	20	10	11	9.1	19.8
4-Jun-04	14	16	19	26	38	A	69	35	26	18	7	2	20	6	2	2	3	6	5	6	10	12	15	19	16.4	69.0
5-Jun-04	6	5	5	5	A	7	22	6	11	8	10	10	10	7	4	5	6	6	3	3	6	5	3	8	7.0	21.8
6-Jun-04	15	8	12	A	11	10	5	6	7	6	5	7	7	6	6	7	11	12	7	8	12	9	8	8	8.3	14.8
7-Jun-04	6	12	A	9	18	19	17	25	12	5	4	4	8	3	6	4	3	5	4	4	5	9	8	9	8.6	24.8
8-Jun-04	6	A	8	7	10	12	17	14	18	13	5	4	4	4	4	4	3	3	3	7	13	16	12	7	8.6	17.6
9-Jun-04	A	4	4	27	8	17	39	31	39	15	8	7	5	5	4	4	6	14	11	9	6	6	7	A	12.4	38.9
10-Jun-04	5	10	14	9	8	21	27	C	C	C	C	C	C	C	8	8	6	6	12	20	26	6	13	A	N	27.1
11-Jun-04	16	4	3	3	4	6	10	17	11	13	13	9	14	13	43	18	14	18	19	17	16	11	A	12	13.2	43.4
12-Jun-04	8	8	10	8	9	13	11	10	17	18	18	18	8	6	9	4	5	12	4	4	6	A	28	30	11.5	29.7
13-Jun-04	25	39	19	9	18	11	17	15	6	10	6	7	4	5	8	10	9	7	6	7	A	9	7	6	11.3	39.4
14-Jun-04	5	4	3	3	6	11	14	43	13	6	8	8	8	9	6	8	10	6	5	A	5	4	14	7	8.9	42.8
15-Jun-04	4	7	13	7	8	16	15	13	10	10	5	130	52	32	8	11	23	12	A	27	26	26	21	10	21.0	130.0
16-Jun-04	5	9	4	3	4	7	20	39	17	11	11	8	15	8	13	9	8	A	9	4	11	29	30	28	13.0	38.7
17-Jun-04	23	26	27	25	35	41	38	42	25	19	13	10	5	10	22	5	A	8	13	8	19	37	49	103	26.2	103.3
18-Jun-04	67	49	33	28	29	71	51	35	21	13	12	9	4	5	6	A	8	8	8	6	11	21	21	51	24.6	70.9
19-Jun-04	50	41	36	29	25	25	19	11	10	9	11	7	6	4	A	7	10	7	11	10	24	26	19	5	17.4	50.0
20-Jun-04	7	7	7	4	5	11	11	6	4	5	4	4	2	A	4	4	2	2	2	8	13	33	47	31	9.6	46.5
21-Jun-04	30	29	26	21	35	62	63	39	115	63	17	23	A	10	19	17	14	16	8	13	21	30	40	36	32.5	114.7
22-Jun-04	44	36	32	32	32	70	28	74	65	17	12	A	16	7	8	7	8	10	10	12	18	13	10	10	24.8	74.1
23-Jun-04	8	11	14	8	10	15	14	17	18	21	A	15	14	11	10	8	6	8	8	13	17	29	39	33	15.0	39.3
24-Jun-04	25	20	13	31	35	60	27	45	11	A	7	10	5	4	11	9	8	6	10	15	20	16	20	26	18.9	59.8
25-Jun-04	14	17	16	22	31	70	71	13	A	12	13	6	4	6	8	6	5	6	7	7	11	21	19	19	17.6	70.9
26-Jun-04	13	26	21	12	24	14	10	A	8	6	6	6	3	3	5	5	4	5	4	7	7	9	7	7	9.3	26.1
27-Jun-04	6	8	7	5	6	9	A	11	5	5	5	4	4	5	4	5	5	5	5	7	10	11	17	7	6.7	16.8
28-Jun-04	3	3	4	3	6	A	10	16	11	7	4	81	42	4	7	7	6	7	10	11	17	22	10	7	13.0	80.7
29-Jun-04	4	4	3	3	A	10	18	14	11	12	13	11	C	C	C	C	C	C	C	C	C	C	C	C	N	18.4
30-Jun-04	C	12	6	8	8	A	21	18	7	6	6	9	13	C	4	3	4	6	7	11	11	11	6	8	8.8	20.7
																									N	0.0
Hourly Avg	15.4	15.5	13.6	13.0	16.4	24.7	26.1	24.1	19.2	12.6	9.0	15.0	10.8	7.5	8.7	6.8	7.1	7.4	7.3	9.2	13.1	16.6	18.5	19.6		
Hourly Max	66.9	49.0	35.7	31.7	37.7	70.9	70.9	74.1	114.7	62.9	23.1	130.0	52.0	31.8	43.4	17.8	23.1	18.1	18.7	26.6	25.8	37.4	49.0	103.3		

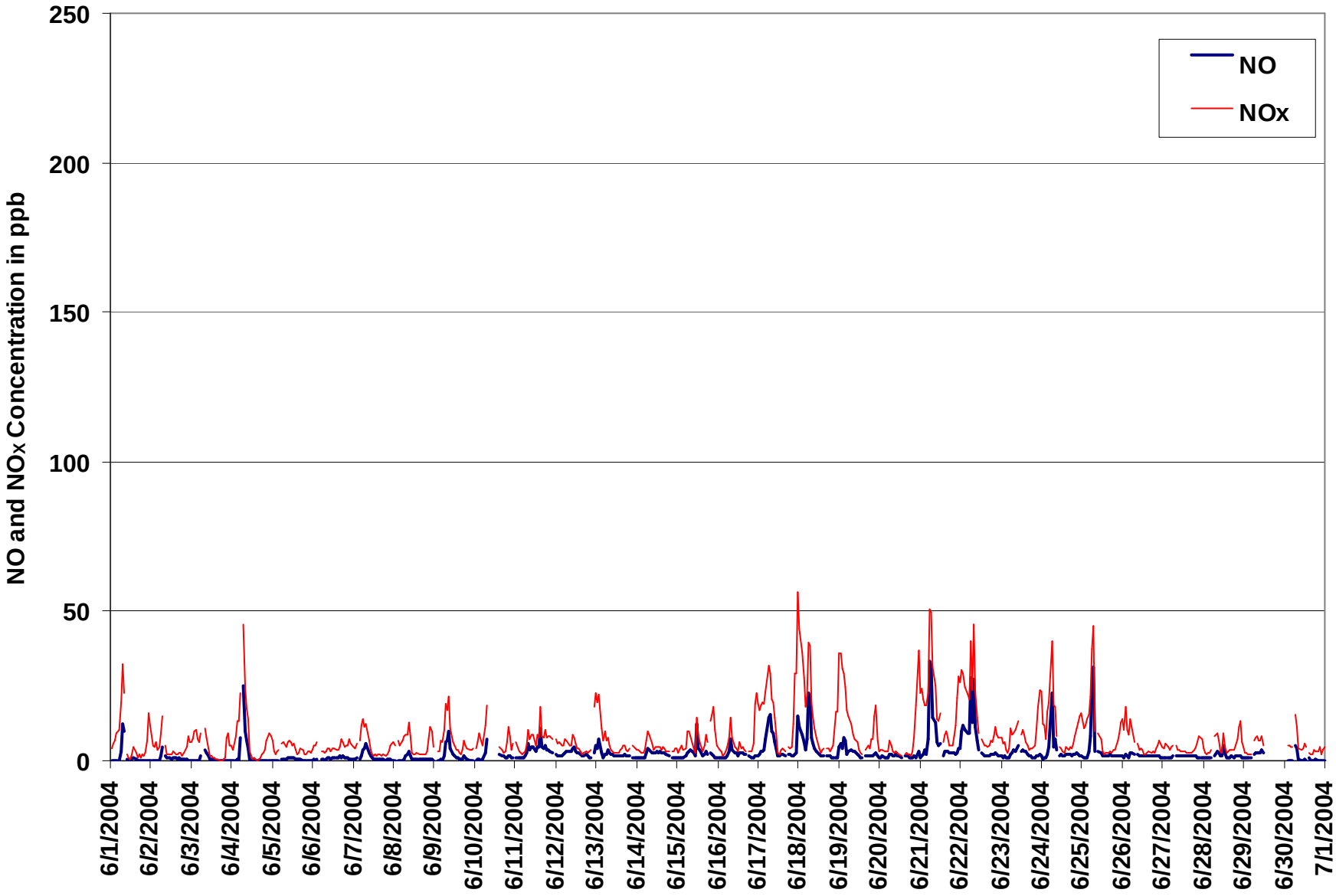


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trends

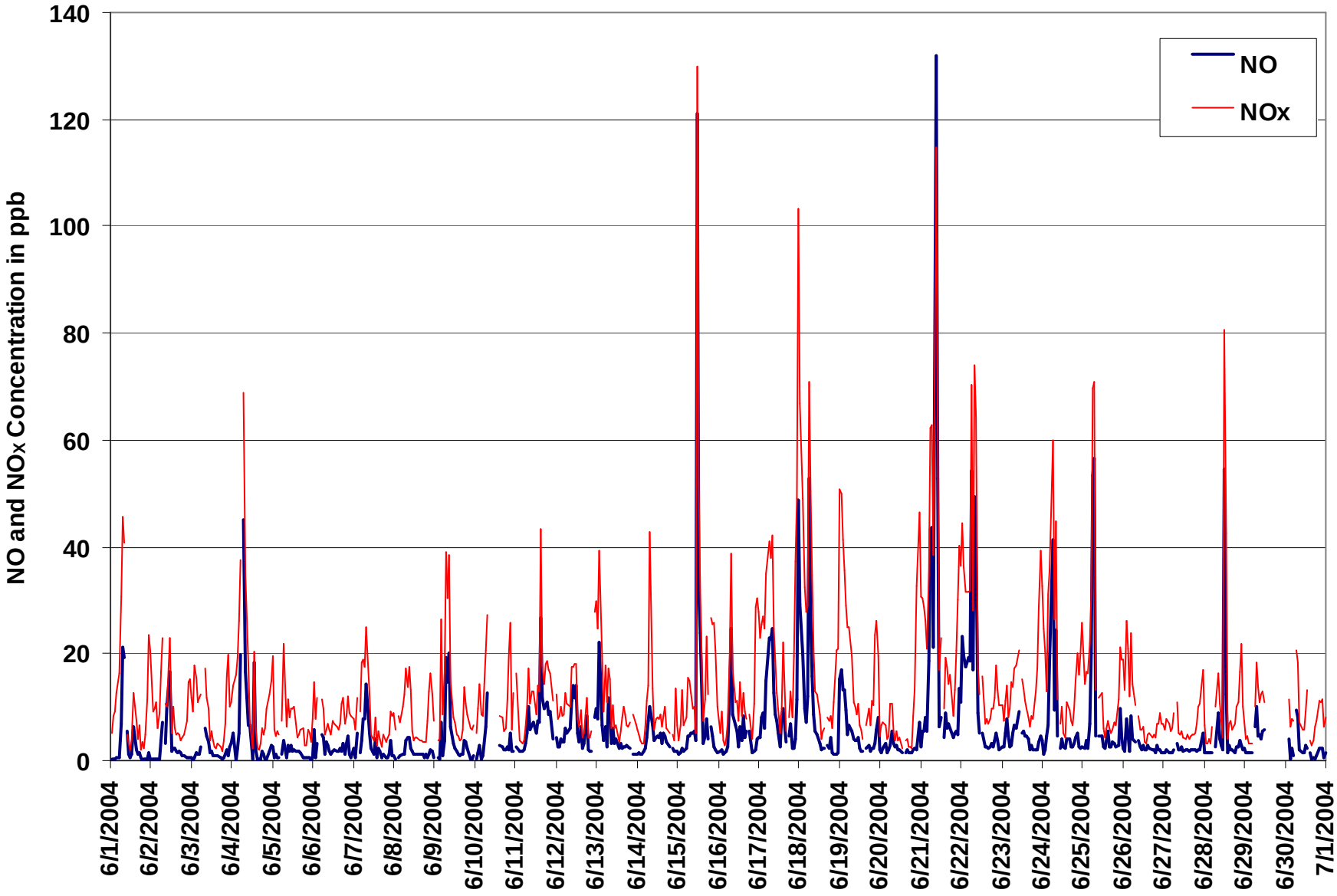


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Maximum Value Monthly Trends

PASZA - Henry Pirker Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O_3)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	63.0	ppb	30-Jun	13:00 14:00
Maximum 24-hr Average:	46.6	ppb	27-Jun	

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

AIC Time:	31 hrs			Operational Time:			686 hrs	
Calibration Time:	3 hrs			AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	Average
	58	51	38	27	18	4	1	27.7 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jun-04	2	26	25	20	18	11	A	17	29	34	37	38	38	37	39	39	38	40	39	37	33	28	15	16	28.6	39.9
2-Jun-04	25	23	22	25	24	A	20	29	32	38	41	40	41	42	44	44	43	43	44	43	38	30	30	29	34.3	44.4
3-Jun-04	27	23	18	24	A	25	25	24	28	33	41	45	45	46	48	49	49	49	48	47	35	29	32	31	35.8	49.5
4-Jun-04	32	22	8	A	6	3	6	16	23	32	50	50	48	50	52	53	54	54	53	52	45	37	33	30	35.1	53.7
5-Jun-04	35	40	A	42	43	44	43	46	40	36	40	47	51	54	51	56	55	56	35	34	30	30	29	24	41.8	56.3
6-Jun-04	20	A	14	26	36	36	31	25	22	21	27	27	27	29	27	25	24	24	24	23	23	17	19	21	24.7	36.0
7-Jun-04	A	22	22	19	11	9	12	16	26	31	34	36	38	40	41	40	44	42	44	38	30	26	20	A	29.1	43.8
8-Jun-04	18	17	14	19	18	18	12	14	17	21	34	38	36	34	37	37	38	40	41	38	31	22	A	29	27.1	41.4
9-Jun-04	31	32	31	26	24	21	17	18	18	23	29	33	39	43	46	48	38	36	39	39	36	A	31	26	31.4	47.6
10-Jun-04	19	15	8	7	11	7	1	1	7	21	31	37	36	31	36	42	C	C	C	29	30	A	23	21	20.7	41.5
11-Jun-04	19	20	19	17	17	16	13	10	10	10	10	11	10	10	11	14	14	12	13	12	A	11	10	10	13.1	19.5
12-Jun-04	11	10	10	9	8	8	8	10	10	10	12	17	21	23	28	31	31	31	29	A	23	15	9	4	16.0	31.4
13-Jun-04	3	2	8	13	9	12	12	15	16	18	25	28	29	30	27	26	28	30	A	30	33	26	26	21	20.3	32.8
14-Jun-04	19	18	20	20	19	19	20	21	22	27	27	27	27	27	27	26	27	A	27	26	27	24	21	22	23.6	27.3
15-Jun-04	21	18	17	19	19	14	15	16	19	21	25	18	18	22	26	26	A	21	25	21	16	9	14	18	19.0	26.1
16-Jun-04	20	21	23	20	19	17	17	19	22	28	32	32	32	35	36	A	40	39	39	37	34	18	12	13	26.3	39.5
17-Jun-04	8	5	3	3	2	4	8	15	18	23	32	41	43	44	A	46	46	45	46	46	40	24	16	4	24.6	46.4
18-Jun-04	2	1	1	2	1	2	7	18	24	31	40	45	48	A	51	50	51	52	52	49	43	31	27	7	27.7	52.4
19-Jun-04	5	2	1	0	10	17	21	26	28	32	39	46	A	45	43	42	37	38	33	29	18	9	22	23	24.6	46.2
20-Jun-04	23	25	24	25	24	20	21	23	27	30	35	A	42	47	49	46	46	47	48	45	37	26	7	15	31.8	48.8
21-Jun-04	8	6	4	3	2	1	3	8	16	22	A	33	44	46	33	25	27	29	30	30	26	12	4	6	18.2	46.4
22-Jun-04	1	1	1	1	2	2	5	7	16	A	33	43	45	45	47	47	46	42	36	24	18	18	18	15	22.3	47.5
23-Jun-04	16	17	21	24	24	16	16	17	A	15	21	19	17	17	25	36	41	41	41	39	32	23	17	14	23.9	41.0
24-Jun-04	19	19	22	14	9	4	16	A	22	28	33	34	35	38	39	38	36	37	35	31	25	21	17	15	25.5	38.9
25-Jun-04	17	13	8	7	2	2	A	21	25	30	36	35	34	36	36	37	38	38	38	38	32	28	22	19	25.7	38.2
26-Jun-04	21	9	17	15	10	A	23	26	28	36	44	43	40	42	43	45	53	55	54	54	36	29	29	34	34.3	55.4
27-Jun-04	39	39	41	40	A	35	35	36	40	43	49	52	53	55	56	58	58	59	57	55	49	43	43	39	46.6	58.6
28-Jun-04	35	33	32	A	31	28	24	21	27	35	43	46	48	52	55	56	58	58	53	49	43	37	34	27	40.1	57.9
29-Jun-04	23	31	A	34	25	18	18	18	19	19	20	25	28	32	36	34	31	28	30	29	26	20	17	16	25.1	36.2
30-Jun-04	17	A	12	12	11	9	8	14	24	28	34	46	58	63	59	50	49	43	40	40	32	39	37	30	32.8	63.0
																									N	0.0
Hourly Avg	18.5	18.2	15.9	17.4	15.6	14.9	16.3	18.9	22.5	26.7	32.9	35.6	36.8	38.5	39.6	40.2	40.7	40.4	39.1	36.7	31.7	24.5	21.9	20.0		
Hourly Max	39.4	39.8	40.6	42.1	43.5	43.8	43.1	45.8	39.8	43.0	49.8	51.6	57.8	63.0	59.3	57.6	58.4	58.6	57.3	55.4	49.2	42.6	42.6	38.6		

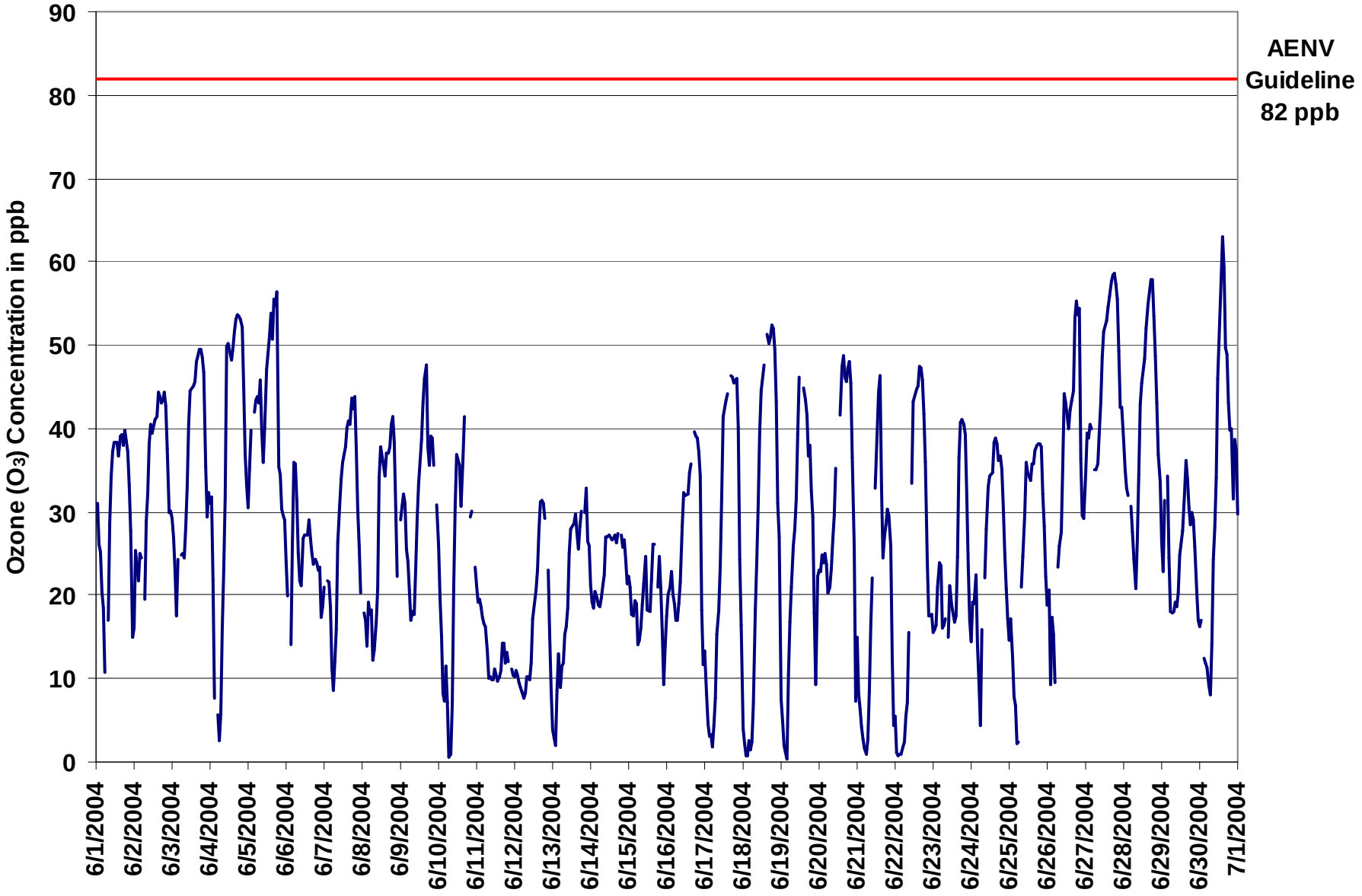


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Ozone (O_3)

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

Summary

Maximum 1-hr Value:	67.1	ppb	30-Jun	13:00 14:00
Maximum 24-hr Value:	49.3	ppb	27-Jun	

AIC Time:	31 hrs	Operational Time:	686 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	61	54	41	31	21	10	3	31.3 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-Jun-04	33	29	28	25	22	16	A	22	33	38	39	40	40	41	42	41	40	41	40	39	36	30	22	28	33.2	41.7
2-Jun-04	28	26	25	29	28	A	24	33	38	42	43	43	47	44	47	47	45	45	46	46	43	33	35	35	37.9	47.4
3-Jun-04	30	28	21	30	A	29	27	28	31	37	44	46	47	48	51	51	51	51	51	50	44	34	35	34	39.0	51.5
4-Jun-04	34	31	17	A	20	6	13	20	28	39	55	52	50	51	54	55	57	56	55	56	51	39	37	34	39.6	56.8
5-Jun-04	39	41	A	43	45	45	47	49	47	38	48	50	55	57	57	61	60	62	37	37	35	32	31	29	45.4	62.3
6-Jun-04	23	A	18	34	42	40	37	28	24	27	30	31	31	31	31	28	27	27	28	25	26	22	22	25	28.5	41.6
7-Jun-04	A	27	24	23	16	13	14	22	32	32	36	40	40	42	43	43	45	46	46	45	32	30	26	A	32.6	45.9
8-Jun-04	20	22	19	24	21	23	17	18	25	26	41	41	40	38	40	39	40	43	43	42	38	28	A	31	31.2	42.6
9-Jun-04	33	34	32	31	27	23	24	22	24	29	32	37	42	45	48	50	48	41	43	43	39	A	33	30	35.3	49.7
10-Jun-04	23	23	15	14	16	15	4	4	14	27	35	40	42	33	41	47	C	C	C	34	40	A	29	27	26.2	47.3
11-Jun-04	22	21	20	19	18	18	16	13	12	11	12	12	12	12	15	18	16	14	15	15	A	14	13	12	15.2	22.2
12-Jun-04	13	13	11	11	10	10	11	12	12	13	15	22	23	27	32	33	33	33	31	A	26	21	12	6	18.7	33.4
13-Jun-04	6	5	13	16	15	14	14	17	18	20	28	30	32	32	30	31	32	32	A	32	37	30	29	23	23.4	36.8
14-Jun-04	22	20	22	21	20	20	22	23	27	28	29	29	28	28	29	28	29	A	29	27	28	27	25	24	25.4	29.4
15-Jun-04	23	20	21	21	21	16	17	20	21	23	27	22	20	26	28	32	A	25	29	26	20	15	17	19	22.1	32.1
16-Jun-04	22	26	25	22	20	19	19	24	25	32	34	34	37	38	38	A	42	41	40	40	38	30	18	23	29.9	41.9
17-Jun-04	11	11	9	9	3	6	10	19	22	26	41	44	45	46	A	49	48	48	49	49	46	35	32	17	29.4	49.0
18-Jun-04	8	2	3	5	3	5	11	21	32	34	43	47	50	A	54	54	54	55	54	53	48	38	35	22	31.8	54.5
19-Jun-04	12	6	4	2	18	21	24	28	30	34	44	48	A	48	47	44	40	40	38	33	26	14	25	25	28.3	48.3
20-Jun-04	25	27	26	26	25	24	23	26	29	33	38	A	45	52	51	49	47	50	50	49	40	35	19	20	35.1	51.5
21-Jun-04	12	12	10	7	5	2	5	13	19	26	A	39	53	55	49	30	31	31	33	34	31	19	8	10	23.3	54.6
22-Jun-04	5	2	2	4	4	9	8	11	19	A	39	47	48	48	51	50	49	45	43	28	22	20	20	18	25.6	50.5
23-Jun-04	17	20	22	26	27	20	20	20	A	19	23	22	20	20	34	42	43	44	43	42	38	32	27	20	27.8	43.5
24-Jun-04	24	23	25	23	19	13	19	A	27	33	35	36	37	41	42	41	39	39	37	34	31	24	22	20	29.7	41.5
25-Jun-04	22	16	12	13	3	4	A	24	27	37	38	37	36	38	38	40	40	41	41	40	36	31	27	22	28.7	41.1
26-Jun-04	24	14	21	23	16	A	26	27	31	40	47	46	42	44	45	48	58	57	56	57	47	32	30	39	37.9	57.9
27-Jun-04	41	42	42	42	A	38	37	38	42	47	52	53	55	56	57	61	60	61	59	59	53	45	48	46	49.3	60.6
28-Jun-04	37	36	36	A	34	31	28	24	32	39	46	48	51	54	57	60	61	61	57	53	47	41	39	30	43.5	61.4
29-Jun-04	28	34	A	38	32	20	20	20	22	21	25	27	32	36	39	37	35	30	32	31	29	25	19	18	28.3	39.4
30-Jun-04	18	A	14	13	13	11	11	19	28	31	40	54	62	67	67	52	52	48	46	44	40	43	43	36	37.1	67.1
																									N	0.0
Hourly Avg	22.6	21.8	19.2	21.1	19.3	18.2	19.6	22.2	26.6	30.4	36.5	38.6	40.0	41.2	43.4	43.4	43.7	43.1	41.8	40.1	36.8	29.2	26.8	24.9		
Hourly Max	41.3	42.0	42.1	43.1	44.8	45.3	47.1	48.5	47.1	47.5	54.6	54.2	62.2	67.1	67.1	60.6	60.5	62.3	59.1	59.1	53.4	45.4	47.9	45.6		

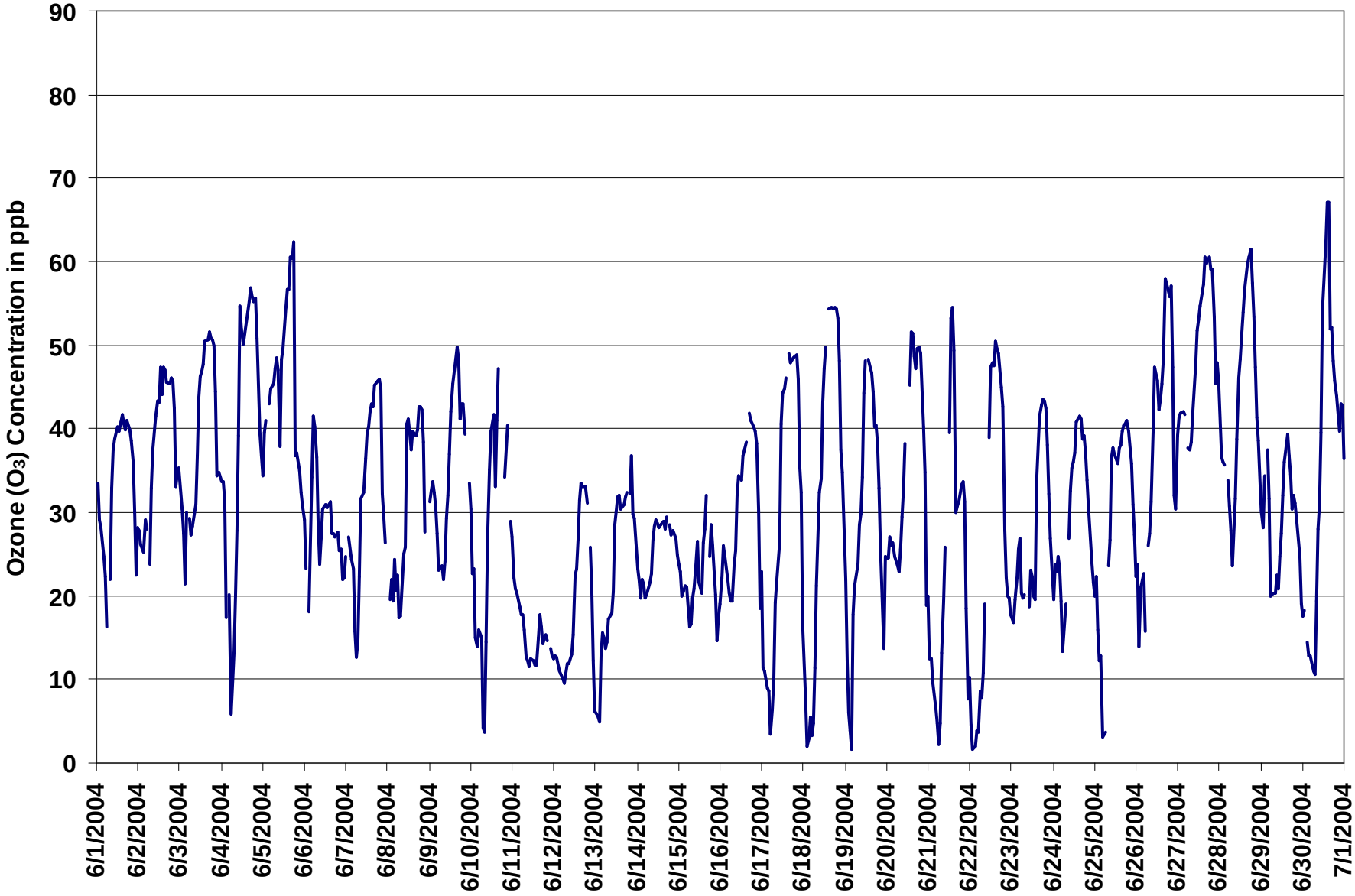


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	56.3	ppb	27-Jun	19:00 20:00

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

Percentile	99	95	75	50	25	5	1
	53.0	47.8	36.6	26.8	19.1	9.3	4.4

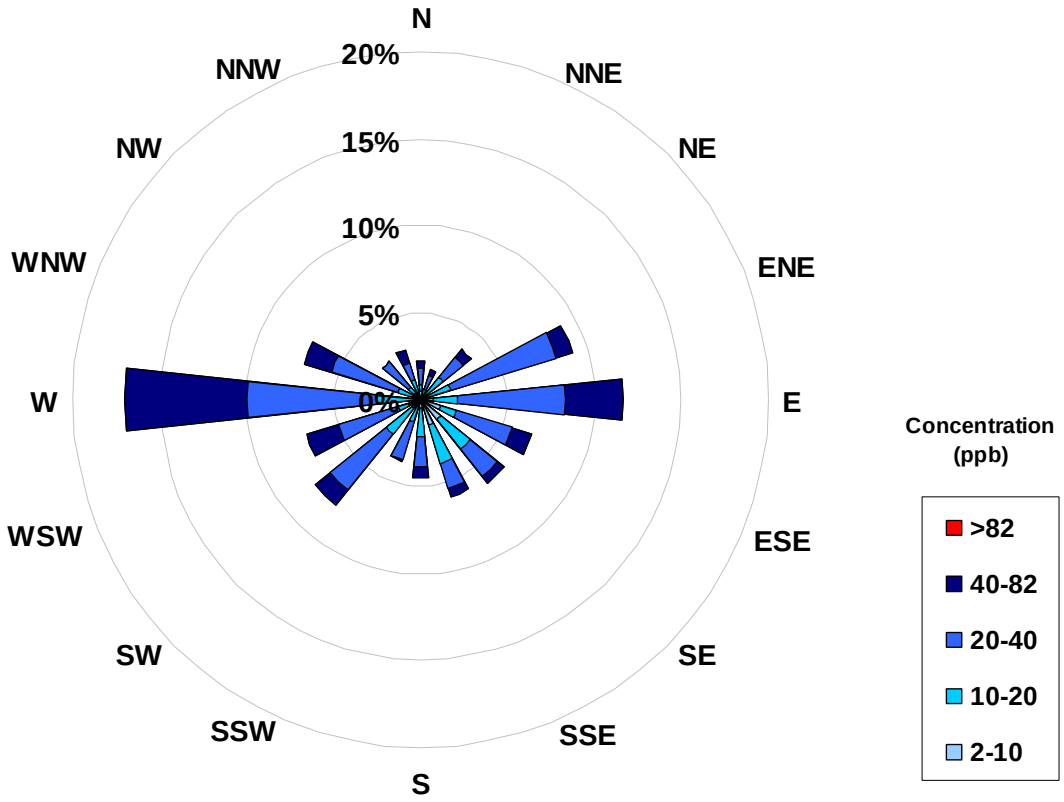
Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jun-04	31	40	35	33	30	27	25	21	21	22	24	26	29	33	34	36	38	38	39	38	38	37	34	31	31.7	39.6
2-Jun-04	29	27	25	23	22	22	22	24	25	27	30	32	34	35	38	40	42	42	43	43	43	41	39	38	32.8	43.0
3-Jun-04	36	33	30	27	26	25	24	24	24	25	29	32	33	36	39	42	44	46	47	48	47	44	43	40	35.1	47.7
4-Jun-04	38	35	30	27	23	19	15	13	12	13	19	23	28	34	40	45	49	51	52	52	51	50	48	45	33.8	51.9
5-Jun-04	42	41	39	37	37	38	40	42	43	42	42	42	43	45	46	47	49	51	51	49	46	43	41	37	43.0	51.2
6-Jun-04	32	29	26	25	26	26	27	27	27	26	28	28	27	26	26	26	26	26	26	25	25	23	22	22	26.2	32.4
7-Jun-04	22	21	21	20	19	17	16	16	17	18	20	22	25	29	33	36	38	39	41	41	40	38	36	35	27.5	40.9
8-Jun-04	31	28	23	21	19	18	17	16	16	17	19	21	24	26	29	32	34	37	38	38	37	36	35	34	26.8	37.8
9-Jun-04	33	32	31	29	28	28	26	25	23	22	22	23	25	28	31	35	37	39	40	41	40	40	38	35	31.3	40.8
10-Jun-04	32	29	25	20	17	16	12	9	7	8	11	14	17	20	25	30	33	N	N	N	N	N	N	N	N	33.2
11-Jun-04	N	N	23	21	19	19	18	16	15	14	13	12	11	11	10	11	11	12	12	12	12	13	12	12	14.1	23.0
12-Jun-04	11	11	11	10	10	10	9	9	9	9	9	10	12	14	16	19	22	24	26	28	28	27	24	20	15.9	28.1
13-Jun-04	16	12	9	10	8	7	8	9	11	13	15	17	19	22	24	25	26	28	28	29	29	29	28	28	18.7	29.1
14-Jun-04	26	25	24	23	21	20	20	20	20	21	22	23	24	25	26	26	27	27	27	27	27	26	26	25	24.0	27.0
15-Jun-04	24	23	22	21	20	19	18	17	17	18	19	18	18	19	21	22	22	22	22	23	22	20	19	18	20.2	24.1
16-Jun-04	18	18	18	18	18	19	19	19	20	21	22	23	25	27	29	31	34	35	36	37	37	35	31	29	25.7	37.1
17-Jun-04	25	21	16	12	8	6	6	6	7	10	13	18	23	28	31	36	40	43	45	45	45	42	39	34	24.9	45.4
18-Jun-04	28	22	17	11	7	4	3	4	7	11	16	21	27	30	37	41	45	48	50	51	50	48	45	39	27.5	50.6
19-Jun-04	33	27	21	15	11	9	8	10	13	17	22	27	30	34	37	39	41	41	40	38	36	31	28	26	26.4	41.4
20-Jun-04	24	23	22	21	22	23	23	23	24	24	26	26	28	32	36	39	42	45	46	46	46	43	38	34	31.5	46.4
21-Jun-04	29	24	19	13	9	6	5	4	5	7	8	12	18	25	29	31	33	34	33	33	31	26	23	20	20.0	33.8
22-Jun-04	17	14	10	6	3	2	2	3	4	5	10	16	22	28	34	40	44	44	44	42	38	35	31	27	21.6	43.9
23-Jun-04	23	20	18	18	19	19	19	19	19	19	19	18	17	18	19	21	24	27	30	32	34	35	34	31	23.0	34.8
24-Jun-04	28	26	23	20	17	15	15	15	15	17	18	21	25	29	33	33	35	36	37	36	35	33	30	27	25.8	36.5
25-Jun-04	25	22	18	15	12	10	9	10	11	14	18	22	26	31	31	34	35	36	36	37	37	36	34	32	24.6	36.9
26-Jun-04	30	26	23	20	18	16	16	17	18	22	26	30	34	35	38	40	43	46	47	48	48	46	45	43	32.4	48.3
27-Jun-04	42	40	38	36	36	37	38	38	38	38	40	41	43	45	48	50	53	55	56	56	56	54	53	50	45.0	56.3
28-Jun-04	47	44	41	39	36	34	32	29	28	28	30	32	34	37	41	45	49	52	53	54	53	51	48	45	40.9	53.7
29-Jun-04	40	37	35	33	30	27	25	24	23	22	21	20	21	22	25	27	28	29	31	31	31	29	27	25	27.6	40.4
30-Jun-04	23	22	20	17	15	14	12	12	13	15	18	22	28	34	41	45	48	50	51	50	47	44	41	39	30.0	51.0
																									N	0.0
Hourly Avg	28.9	26.6	23.7	21.5	19.6	18.4	17.6	17.4	17.8	18.8	20.8	23.1	25.7	28.6	31.5	34.1	36.4	38.1	38.8	38.9	38.2	36.4	34.2	31.7		
Hourly Max	47.4	44.2	41.1	39.0	37.3	38.3	39.7	41.9	42.5	42.0	41.8	42.4	43.4	45.2	47.8	50.5	52.8	54.8	55.9	56.3	55.9	54.4	52.7	50.4		

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



Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
0	<	2	17
2	to	10	62
10	to	20	138
20	to	40	330
40	to	82	139
	>	82	0
Total Non-Zero Values			686

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: **June 1, 2004** to **July 1, 2004**

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	0.85	ppm	16-Jun	23:00 0:00
Maximum 24-hr Average:	0.30	ppm	17-Jun	

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

AIC Time:	27 hrs	Operational Time:	590 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	86.3%

Percentile	99	95	75	50	25	5	1	Average
	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.1 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-Jun-04	0.0	0.0	0.0	0.0	0.0	0.1	A	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.02	0.13
2-Jun-04	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01
3-Jun-04	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.02	0.21
4-Jun-04	0.0	0.0	0.0	A	0.0	0.2	0.3	0.2	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.07	0.32
5-Jun-04	0.0	0.0	A	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.06
6-Jun-04	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.05	0.10
7-Jun-04	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.01	0.05
8-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	A	0.0	0.02	0.10
9-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.0	A	0.1	0.0	0.05	0.17
10-Jun-04	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.1	C	C	C	C	0.2	0.2	0.2	0.2	A	0.2	0.2	0.12	0.25
11-Jun-04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.21	0.34
12-Jun-04	0.2	0.2	0.4	0.4	0.3	0.3	0.4	0.5	0.4	0.6	0.4	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.3	0.4	0.25	0.58
13-Jun-04	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	A	0.1	0.1	0.1	0.1	0.2	0.16	0.36
14-Jun-04	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.16
15-Jun-04	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.18	0.29
16-Jun-04	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.0	0.0	0.1	0.2	0.7	0.9	0.17	0.85
17-Jun-04	0.5	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.5	0.5	0.30	0.56
18-Jun-04	0.5	0.5	0.5	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.6	0.25	0.58
19-Jun-04	0.6	0.4	0.4	0.5	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.2	0.2	0.22	0.57
20-Jun-04	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.3	A	0.3	0.1	0.4	0.2	0.1	0.1	0.1	0.5	0.2	0.2	0.5	0.3	0.22	0.49
21-Jun-04	0.4	0.4	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	A	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.4	0.3	0.20	0.39
22-Jun-04	0.2	0.1	0.1	0.2	0.1	0.3	0.3	0.4	0.3	A	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.5	0.3	0.3	0.2	0.2	0.3	0.28	0.49
23-Jun-04	0.2	0.4	0.2	0.4	0.5	0.4	0.5	0.4	A	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.4	0.4	0.5	0.4	0.3	0.28	0.50
24-Jun-04	0.1	0.0	0.0	0.0	0.0	0.1	0.1	A	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.04	0.35
25-Jun-04	0.0	0.1	0.0	0.0	0.0	0.0	A	0.1	0.1	0.2	D	0.2	0.2	0.0	0.2	0.2	0.2	0.0	D	D	0.5	0.3	0.3	0.2	0.14	0.48
26-Jun-04	0.3	0.5	0.0	0.0	0.1	A	0.3	0.0	0.1	0.1	0.2	0.3	0.5	0.4	0.5	0.3	0.1	0.2	0.4	0.2	0.2	0.5	0.5	0.7	0.29	0.67
27-Jun-04	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	N	0.00
28-Jun-04	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	S	S	S	S	S	N	0.00
29-Jun-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
30-Jun-04	S	S	S	S	S	S	S	S	S	S	S	S	M	M	S	S	S	S	S	S	S	S	S	S	N	0.00
																									N	0.00
Hourly Avg	0.16	0.17	0.13	0.12	0.12	0.14	0.18	0.15	0.14	0.14	0.13	0.11	0.12	0.09	0.13	0.12	0.10	0.10	0.12	0.14	0.15	0.20	0.22	0.23		
Hourly Max	0.57	0.56	0.56	0.48	0.46	0.44	0.47	0.53	0.41	0.58	0.39	0.34	0.51	0.36	0.48	0.40	0.34	0.41	0.49	0.49	0.48	0.55	0.71	0.85		

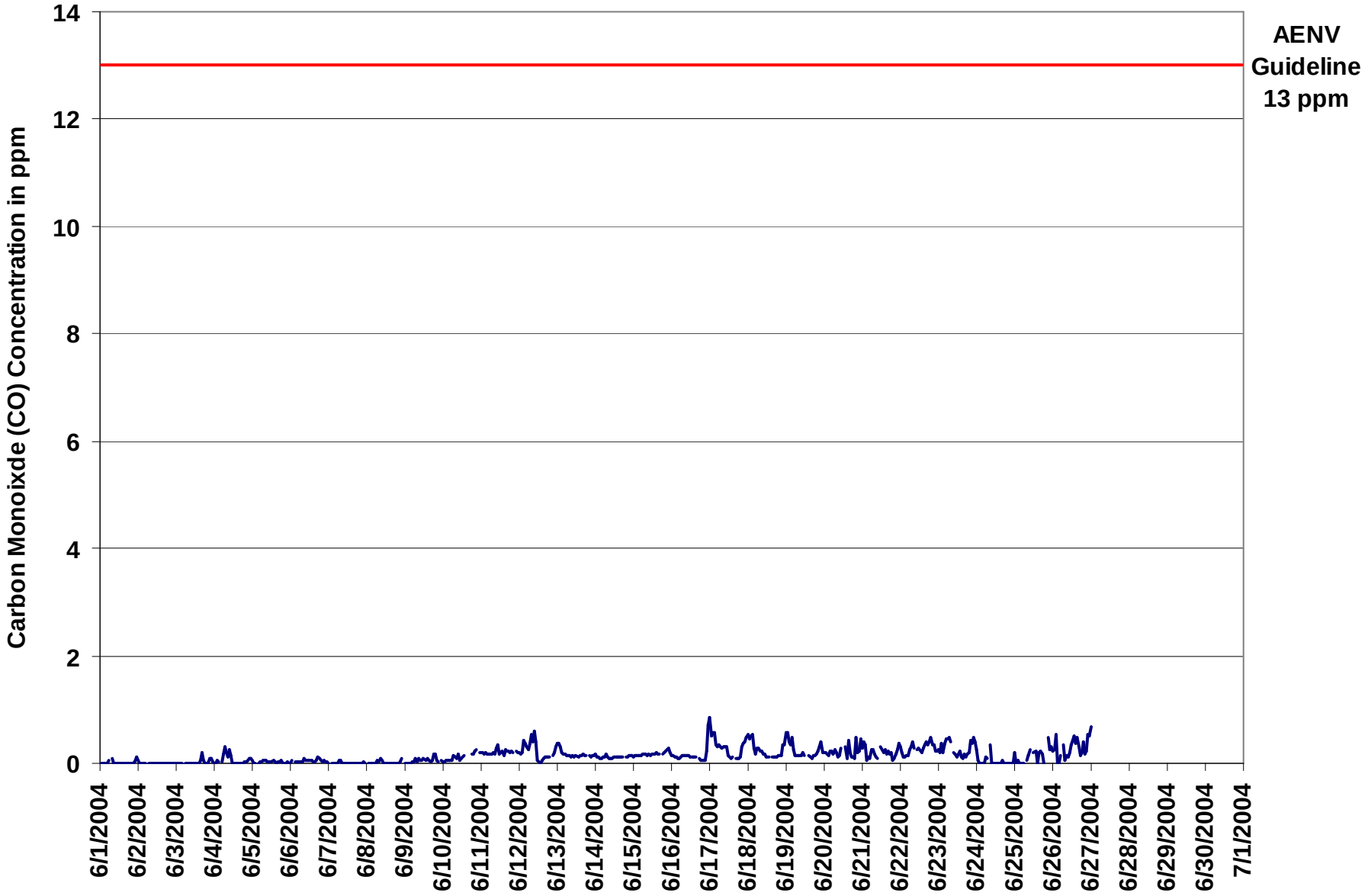


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Carbon Monoxide (CO)

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

Summary

Maximum 1-hr Value:	6.9	ppm	25-Jun	23:00 0:00
Maximum 24-hr Value:	1.7	ppm	25-Jun	

AIC Time:	27 hrs	Operational Time:	590 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	86.3%

Percentile	99	95	75	50	25	5	1	Average
	2.3	1.7	0.9	0.4	0.2	0.1	0.0	0.6 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-Jun-04	0.1	0.0	0.1	0.1	0.1	0.4	A	0.3	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.13	0.37
2-Jun-04	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.08	0.45
3-Jun-04	0.1	0.1	0.1	0.1	A	0.1	0.5	0.4	0.1	0.1	0.1	0.0	0.1	0.1	0.9	1.1	0.7	0.1	0.1	0.1	0.5	0.4	0.1	0.1	0.26	1.15
4-Jun-04	0.1	0.2	0.4	A	0.1	1.8	0.5	0.7	0.8	1.0	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.36	1.78
5-Jun-04	0.1	0.1	A	0.1	0.1	0.1	0.2	0.2	0.5	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	0.52
6-Jun-04	0.7	A	0.2	0.1	0.1	0.1	0.3	0.1	1.0	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.97
7-Jun-04	A	0.3	0.1	0.1	0.1	0.2	0.6	0.3	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.2	0.1	1.6	0.1	0.1	0.1	0.2	0.1	A	0.23	1.63
8-Jun-04	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.3	0.16	0.32
9-Jun-04	0.1	0.1	0.5	0.1	0.2	0.3	0.3	0.2	0.6	0.4	0.2	0.6	0.5	0.3	0.2	0.3	0.2	0.3	0.5	0.3	0.1	A	0.2	0.1	0.29	0.63
10-Jun-04	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.6	2.2	0.4	1.0	1.5	C	C	C	C	0.3	0.3	0.4	0.4	A	0.3	0.3	0.48	2.23
11-Jun-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.8	1.0	0.4	1.1	0.4	0.9	0.7	0.7	0.6	0.6	0.9	A	0.7	0.3	0.3	0.56	1.76
12-Jun-04	0.3	0.3	1.7	1.6	0.8	0.9	1.5	1.6	1.2	1.3	1.4	0.3	0.2	0.4	0.2	0.3	0.8	0.2	0.2	A	0.2	0.4	0.5	0.6	0.73	1.67
13-Jun-04	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.5	A	0.2	0.5	0.7	1.0	1.0	0.38	1.04
14-Jun-04	0.2	0.2	0.4	0.7	0.2	0.2	1.0	0.2	0.2	0.3	0.4	0.2	0.2	0.3	0.2	0.2	0.2	A	0.2	0.2	0.3	0.2	0.3	0.3	0.31	1.01
15-Jun-04	0.3	0.2	0.3	0.4	0.2	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.9	0.9	0.3	0.3	A	0.3	0.7	0.5	0.5	0.5	0.4	0.3	0.40	0.91
16-Jun-04	0.2	0.2	0.3	0.3	0.2	0.3	0.5	0.6	0.5	1.3	0.4	0.3	0.3	0.3	0.5	A	0.6	0.3	0.3	0.3	0.5	0.7	1.6	1.8	0.53	1.80
17-Jun-04	1.5	1.5	5.6	1.4	1.4	1.2	0.8	1.0	1.8	1.7	1.6	0.7	0.8	0.5	A	0.3	0.2	0.3	0.4	2.1	1.2	0.7	1.4	0.9	1.27	5.57
18-Jun-04	1.0	1.5	2.0	1.2	0.7	0.9	0.9	1.0	1.1	0.5	0.3	0.4	0.3	A	0.2	0.7	0.3	0.6	0.6	0.5	0.4	0.6	0.9	1.3	0.77	1.95
19-Jun-04	1.0	0.6	0.8	1.5	1.4	0.4	0.4	0.5	0.4	0.5	0.7	0.4	A	0.7	0.3	0.2	0.4	0.4	0.6	0.7	0.9	1.6	0.5	0.6	0.67	1.57
20-Jun-04	1.3	0.5	0.4	1.5	1.1	0.8	0.8	0.6	0.4	0.6	1.3	A	1.2	0.4	1.9	1.7	0.4	0.5	0.6	1.9	1.1	0.7	1.0	0.8	0.93	1.89
21-Jun-04	1.2	2.0	0.5	0.6	0.5	1.2	0.9	0.6	1.3	0.9	A	1.6	0.8	0.9	0.8	1.3	0.9	1.1	0.5	0.6	0.7	0.6	0.7	0.7	0.91	1.99
22-Jun-04	0.7	0.7	0.5	0.8	0.9	1.8	1.1	0.9	0.9	A	0.9	1.2	0.8	1.1	0.9	1.3	1.2	1.1	1.5	2.0	1.5	1.4	1.1	1.6	1.13	1.96
23-Jun-04	0.9	1.6	1.3	1.6	2.2	2.6	1.7	5.4	A	0.9	0.9	0.6	1.4	1.4	0.5	0.9	0.8	0.9	1.4	2.0	1.4	1.2	1.3	1.0	1.47	5.38
24-Jun-04	0.9	0.6	0.5	0.4	0.5	0.9	1.2	A	1.6	1.0	0.2	0.6	0.6	1.1	0.7	1.1	1.2	1.1	0.9	0.9	0.7	0.9	1.2	1.0	0.86	1.59
25-Jun-04	1.1	1.1	1.2	2.8	0.8	0.9	A	1.4	1.7	1.6	D	1.5	1.3	1.3	1.3	2.2	1.4	1.4	D	D	1.3	1.6	1.5	6.9	1.72	6.86
26-Jun-04	1.5	1.6	0.7	0.8	1.2	A	1.9	1.2	1.1	1.0	1.7	1.6	1.6	1.4	1.6	1.5	1.2	1.5	1.5	1.0	1.7	3.4	1.7	1.8	1.48	3.38
27-Jun-04	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	N	0.00
28-Jun-04	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	S	S	S	S	S	N	0.00
29-Jun-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
30-Jun-04	S	S	S	S	S	S	S	S	S	S	S	S	M	M	S	S	S	S	S	S	S	S	S	S	N	0.00
																									N	0.00
Hourly Avg	0.58	0.59	0.73	0.68	0.55	0.69	0.70	0.75	0.68	0.73	0.57	0.52	0.61	0.55	0.52	0.64	0.51	0.55	0.49	0.63	0.59	0.73	0.68	0.90		
Hourly Max	1.54	1.99	5.57	2.82	2.24	2.58	1.85	5.38	1.85	2.23	1.68	1.62	1.63	1.41	1.89	2.19	1.43	1.63	1.54	2.11	1.69	3.38	1.74	6.86		

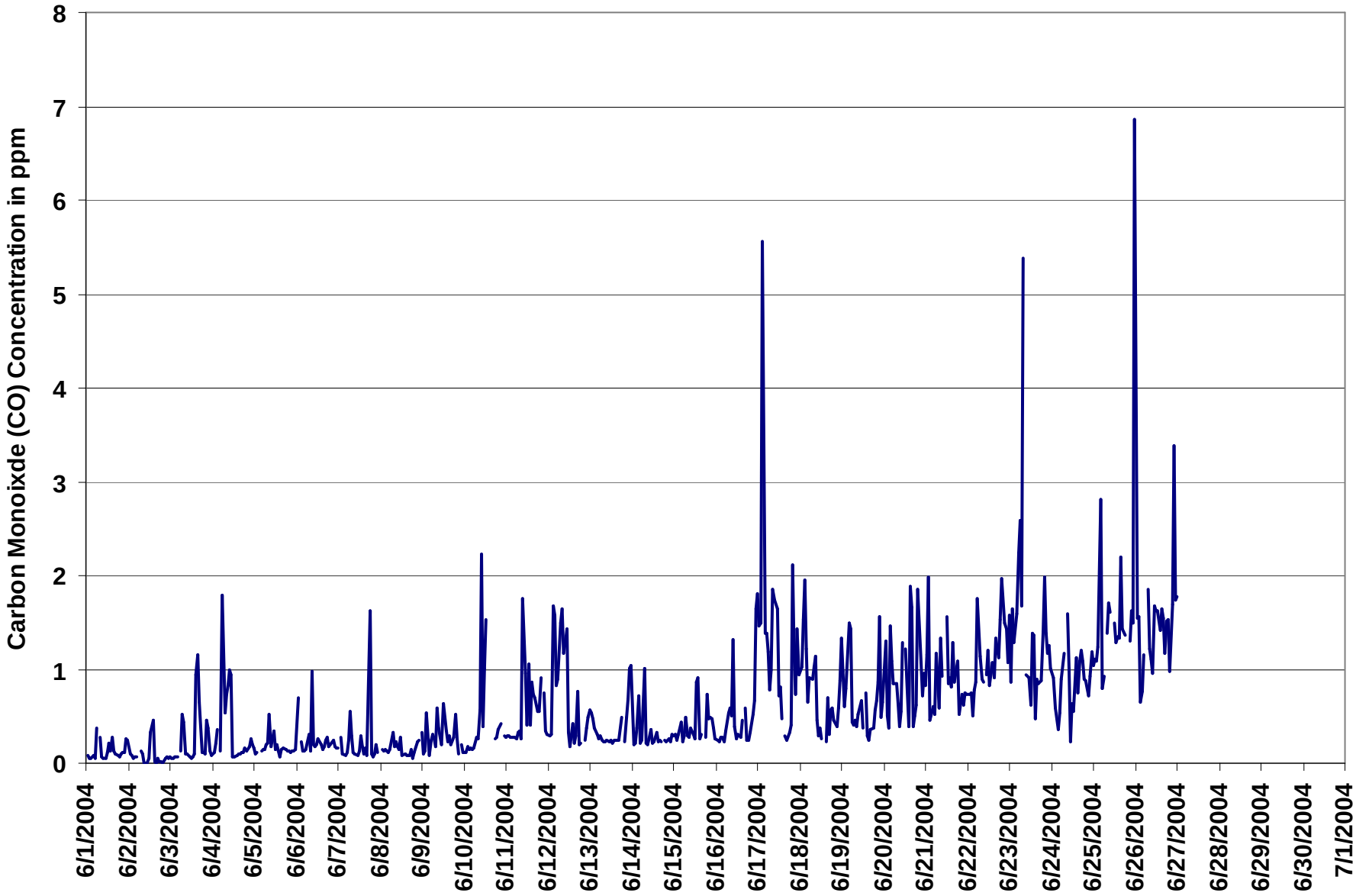


Figure 10. PASZA - Henry Pirker Carbon Monoxide 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	0.52	ppm	17-Jun	5:00 6:00

Guideline Limit: Alberta Environment: 8-hr 5 ppm

Percentile	99	95	75	50	25	5	1
	0.44	0.35	0.21	0.13	0.03	0.00	0.00

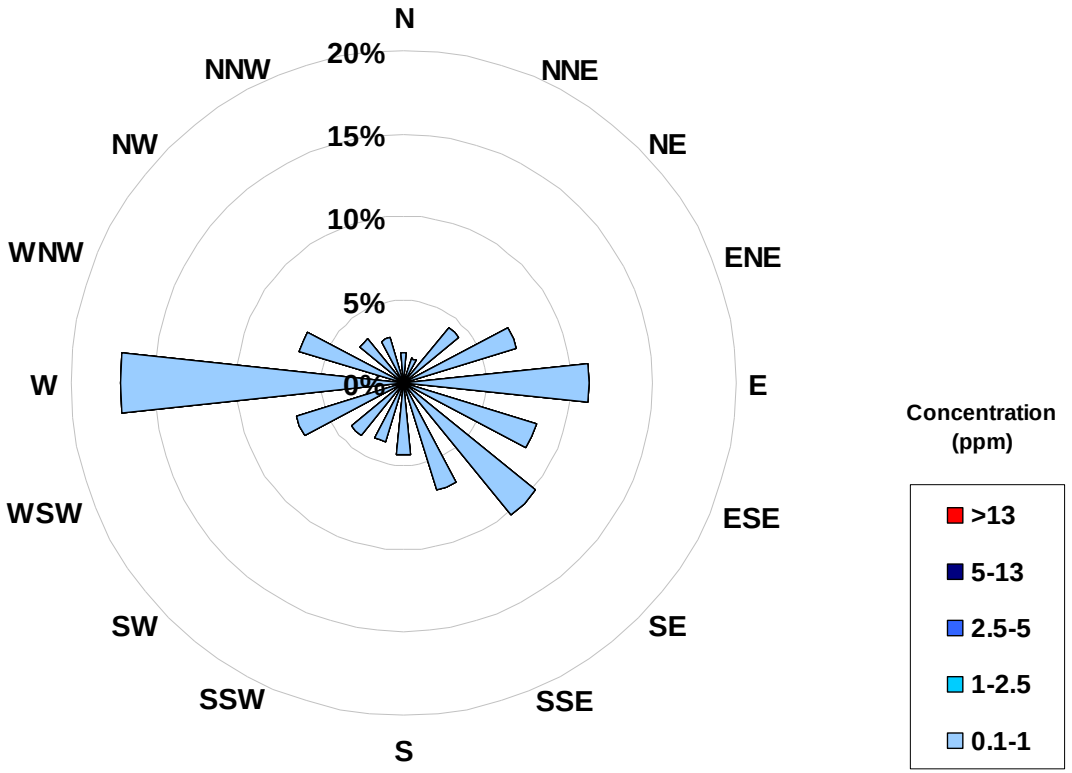
Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jun-04	0.0	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.18
2-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.03
3-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.02	0.06
4-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.18
5-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.05
6-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.06
7-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.04
8-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.03
9-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.09
10-Jun-04	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N	N	N	N	N	N	N	N	N	N	N	0.11
11-Jun-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	0.2	0.2	0.2	0.2	0.2	0.21	0.24
12-Jun-04	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.24	0.41
13-Jun-04	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18	0.27
14-Jun-04	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.14
15-Jun-04	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.22
16-Jun-04	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.14	0.26
17-Jun-04	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.30	0.52
18-Jun-04	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.26	0.45
19-Jun-04	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.23	0.41
20-Jun-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	0.2	0.2	0.2	0.2	0.2	0.21	0.24
21-Jun-04	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.31
22-Jun-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	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.27	0.37
23-Jun-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.27	0.39
24-Jun-04	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.30
25-Jun-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	N	N	N	N	0.2	0.2	0.2	0.1	0.1	N	N	N	N	N	N	0.18
26-Jun-04	N	N	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.26	0.36
27-Jun-04	0.4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.39
28-Jun-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
29-Jun-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
30-Jun-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
																									N	0.00
Hourly Avg	0.16	0.16	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.11	0.11	0.11	0.12	0.13	0.14	0.15		
Hourly Max	0.39	0.40	0.45	0.48	0.51	0.52	0.47	0.40	0.39	0.41	0.41	0.37	0.33	0.30	0.30	0.31	0.31	0.32	0.34	0.35	0.37	0.36	0.35	0.36		

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



Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0	<	0.1	267
0.1	to	1	323
1	to	2.5	0
2.5	to	5	0
5	to	13	0
	>	13	0
Total Non-Zero Values			590

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: June 1, 2004 to July 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	2.7	ppm	4-Jun	5:00 6:00
Maximum 24-hr Average:	2.1	ppm	21-Jun	

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

AIC Time:	31 hrs			Operational Time:			686 hrs	
Calibration Time:	3 hrs			AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	Average
	2.5	2.2	1.9	1.8	1.8	1.7	1.6	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-Jun-04	1.9	1.9	1.9	2.0	2.0	2.0	A	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.0	1.89	2.09
2-Jun-04	1.9	1.9	1.9	1.9	1.9	A	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	1.9	1.9	2.0	1.89	2.04
3-Jun-04	1.9	1.9	2.0	2.1	A	2.0	2.0	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	1.9	2.1	1.90	2.07
4-Jun-04	2.0	2.1	2.1	A	2.4	2.7	2.4	2.2	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.03	2.69
5-Jun-04	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.87	1.99
6-Jun-04	1.8	A	1.9	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.83	1.92
7-Jun-04	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.90	2.04
8-Jun-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	A	1.9	1.89	1.96
9-Jun-04	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.7	1.7	1.7	1.7	1.7	C	C	C	1.8	1.8	A	1.8	1.86	2.02
10-Jun-04	1.8	2.0	2.0	2.0	2.2	1.9	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	1.8	1.8	A	1.8	1.8	1.82	2.24
11-Jun-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	1.8	1.8	1.8	1.8	A	1.8	1.8	1.9	1.80	1.85
12-Jun-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	A	1.8	1.9	1.9	2.0	1.88	2.05
13-Jun-04	2.0	2.3	2.1	2.1	2.2	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	A	1.8	1.8	1.8	1.8	1.8	1.88	2.25
14-Jun-04	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.82	1.86
15-Jun-04	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.84	1.91
16-Jun-04	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	2.0	2.1	2.2	1.86	2.19
17-Jun-04	2.1	2.2	2.3	2.3	2.5	2.3	2.2	2.0	2.0	1.9	1.9	1.8	1.8	1.9	A	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.2	2.6	2.04	2.57
18-Jun-04	2.6	2.4	2.2	2.2	2.3	2.4	2.1	2.0	2.0	1.9	1.9	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.4	2.05	2.63
19-Jun-04	2.5	2.4	2.3	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.8	1.8	1.97	2.54
20-Jun-04	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	1.83	2.04
21-Jun-04	2.3	2.4	2.4	2.6	2.5	2.5	2.5	2.4	2.1	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.2	2.2	2.09	2.58
22-Jun-04	2.3	2.2	2.2	2.2	2.4	2.5	2.1	2.1	2.0	A	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.96	2.52
23-Jun-04	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.1	1.85	2.09
24-Jun-04	2.0	1.9	1.9	2.1	2.1	2.3	1.9	A	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	1.9	1.9	2.0	1.90	2.27
25-Jun-04	2.2	2.1	2.2	2.2	2.2	2.3	A	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	1.9	2.1	2.0	1.96	2.28
26-Jun-04	2.2	2.2	2.1	2.2	2.1	A	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	1.9	1.9	1.9	1.93	2.18
27-Jun-04	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.91	2.01
28-Jun-04	1.8	1.8	1.8	A	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.1	1.9	1.9	1.85	2.05
29-Jun-04	1.9	1.8	A	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.76	1.92
30-Jun-04	1.8	A	1.8	1.8	1.7	2.0	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.67	1.99
																									N	0.00
Hourly Avg	1.98	2.00	1.99	2.00	2.03	2.04	1.97	1.92	1.91	1.87	1.84	1.84	1.82	1.82	1.80	1.80	1.79	1.80	1.79	1.81	1.84	1.89	1.92	1.96		
Hourly Max	2.63	2.45	2.40	2.58	2.54	2.69	2.53	2.35	2.20	2.07	1.96	1.96	1.94	1.89	1.87	1.86	1.89	1.88	1.86	1.88	1.94	2.05	2.16	2.57		

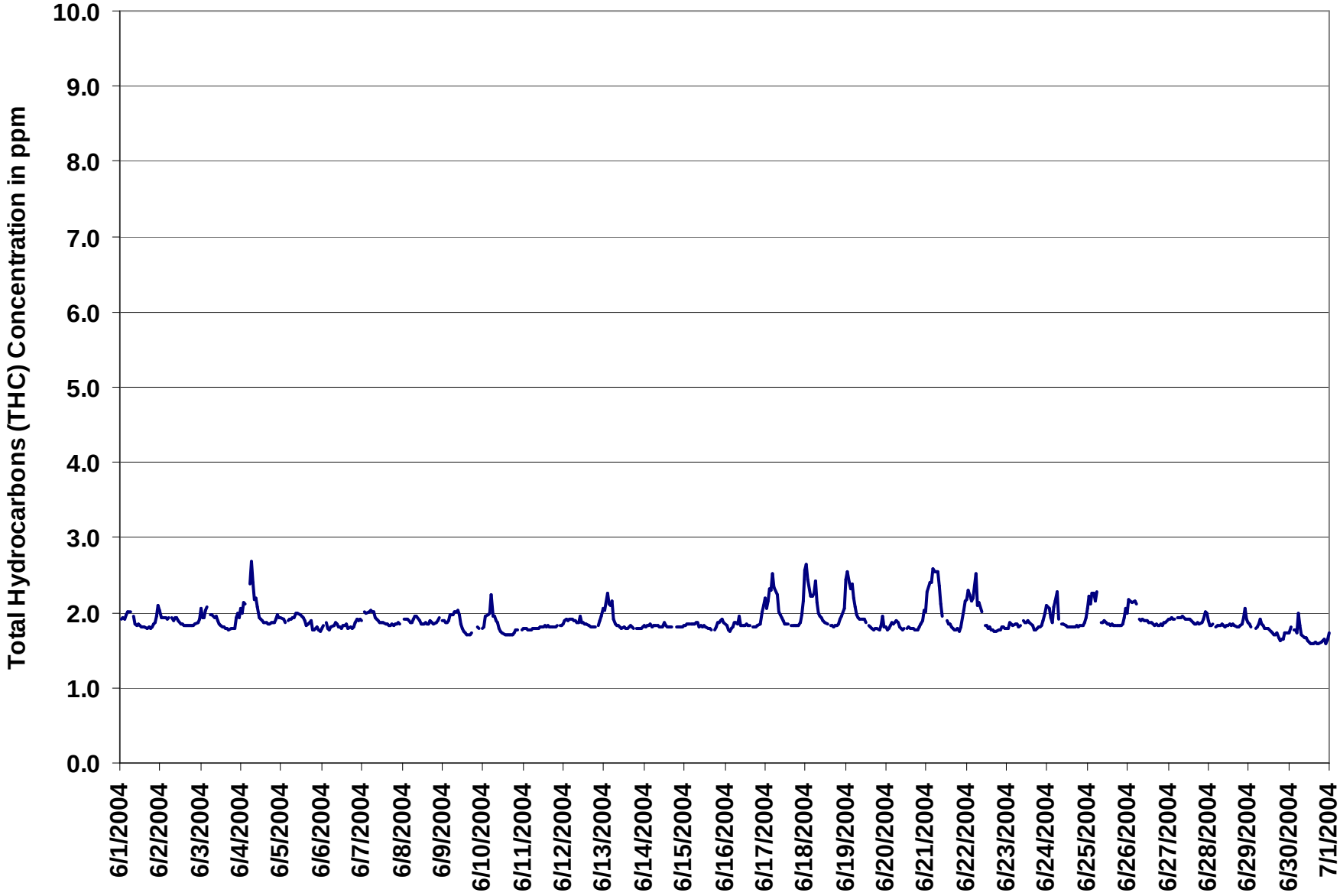


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

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

Summary

Maximum 1-hr Value:	3.9	ppm	18-Jun	0:00 1:00
Maximum 24-hr Value:	2.3	ppm	21-Jun	

AIC Time:	31 hrs	Operational Time:	686 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	3.1	2.6	2.0	1.9	1.9	1.8	1.7	2.0 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jun-04	1.9	2.0	2.3	2.2	2.3	2.2	A	2.1	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.9	1.8	1.9	1.9	2.0	2.1	2.4	2.5	2.02	2.55
2-Jun-04	2.0	2.0	2.0	1.9	2.0	A	2.0	1.9	2.6	2.6	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.2	2.2	2.00	2.63
3-Jun-04	2.0	2.0	2.1	2.5	A	2.0	2.1	2.0	2.2	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.3	2.4	2.1	2.2	2.01	2.51
4-Jun-04	2.1	2.3	2.2	A	3.0	3.6	2.9	2.4	2.5	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.9	2.2	2.0	2.0	2.21	3.61
5-Jun-04	2.0	1.9	A	1.9	2.0	1.9	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.8	1.8	1.9	1.9	1.8	1.9	1.94	2.12
6-Jun-04	2.0	A	2.0	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.92	2.03
7-Jun-04	A	2.2	2.2	2.3	2.3	2.4	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	1.9	1.9	1.9	2.0	1.9	A	2.01	2.40
8-Jun-04	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.6	1.9	2.1	1.9	2.0	A	1.9	2.00	2.60
9-Jun-04	2.0	1.9	1.9	1.9	2.1	2.1	2.1	2.1	2.1	2.2	1.9	1.8	1.8	1.8	1.7	1.7	2.0	C	C	C	1.9	1.8	A	1.8	1.94	2.23
10-Jun-04	1.9	2.6	2.1	2.1	2.4	2.0	2.1	2.0	1.9	1.9	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.8	1.9	A	1.9	1.9	1.93	2.63
11-Jun-04	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	2.1	1.8	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.86	2.08
12-Jun-04	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.2	1.9	1.9	1.9	1.9	1.9	1.8	2.0	1.8	1.9	A	1.9	1.9	2.0	2.4	1.96	2.37
13-Jun-04	2.9	3.1	2.6	2.4	2.3	2.4	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.9	1.9	1.8	1.8	A	1.8	1.9	1.8	1.8	1.8	2.06	3.08
14-Jun-04	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	2.1	2.0	1.9	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.9	1.9	1.87	2.13
15-Jun-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	A	1.8	1.9	2.0	2.0	2.0	2.1	2.1	1.91	2.11
16-Jun-04	2.1	1.8	1.8	1.8	1.8	2.0	1.9	2.4	2.3	1.9	1.9	1.8	1.9	1.9	2.0	A	1.9	1.9	1.8	1.9	1.9	2.2	2.4	2.5	1.99	2.52
17-Jun-04	2.1	2.5	2.8	2.4	3.0	2.5	2.3	2.2	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.7	3.1	2.21	3.09
18-Jun-04	3.9	2.8	2.5	2.5	2.4	2.6	2.2	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.8	2.2	1.9	1.9	2.1	2.0	2.5	3.1	2.25	3.90
19-Jun-04	3.1	2.6	2.8	2.6	2.5	2.1	2.1	2.0	1.9	2.0	2.0	1.9	A	1.9	1.9	1.8	1.8	2.2	1.8	1.8	1.9	2.3	2.0	1.9	2.12	3.13
20-Jun-04	1.8	1.8	1.9	1.9	1.9	2.0	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	2.1	2.1	2.2	1.90	2.23
21-Jun-04	2.5	2.6	2.5	3.0	3.1	2.8	2.7	2.5	2.3	2.2	A	1.9	2.0	1.9	1.9	1.9	1.8	1.8	1.9	1.8	2.0	2.5	2.7	2.4	2.30	3.15
22-Jun-04	3.0	2.3	2.3	3.1	2.7	2.8	2.1	2.2	2.2	A	1.9	2.0	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.8	1.8	2.13	3.14
23-Jun-04	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.9	A	2.1	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.1	2.1	1.9	1.9	2.0	2.2	2.7	1.98	2.69
24-Jun-04	2.4	2.0	1.9	2.5	2.5	2.5	2.1	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	2.1	1.9	2.0	2.4	2.04	2.54
25-Jun-04	2.6	2.3	2.4	2.9	2.4	2.6	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.3	2.0	2.09	2.90
26-Jun-04	2.6	2.3	2.3	2.5	2.2	A	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	1.9	2.0	2.02	2.60
27-Jun-04	2.0	2.0	1.9	1.9	A	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.2	2.1	1.97	2.18
28-Jun-04	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2.0	2.1	2.4	2.0	1.9	1.93	2.41
29-Jun-04	1.9	1.9	A	1.8	1.9	1.9	2.1	2.1	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.9	1.8	1.8	1.84	2.10
30-Jun-04	2.0	A	1.8	1.9	1.8	2.6	2.2	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.8	1.8	2.1	2.0	1.9	2.5	1.87	2.62
																									N	0.00
Hourly Avg	2.20	2.15	2.12	2.19	2.21	2.22	2.07	2.02	2.02	1.97	1.89	1.90	1.89	1.88	1.86	1.85	1.87	1.92	1.86	1.88	1.96	2.04	2.09	2.17		
Hourly Max	3.90	3.08	2.78	3.14	3.15	3.61	2.90	2.48	2.63	2.57	2.03	2.13	2.08	2.01	1.97	1.93	2.28	2.60	2.12	2.07	2.33	2.55	2.71	3.09		

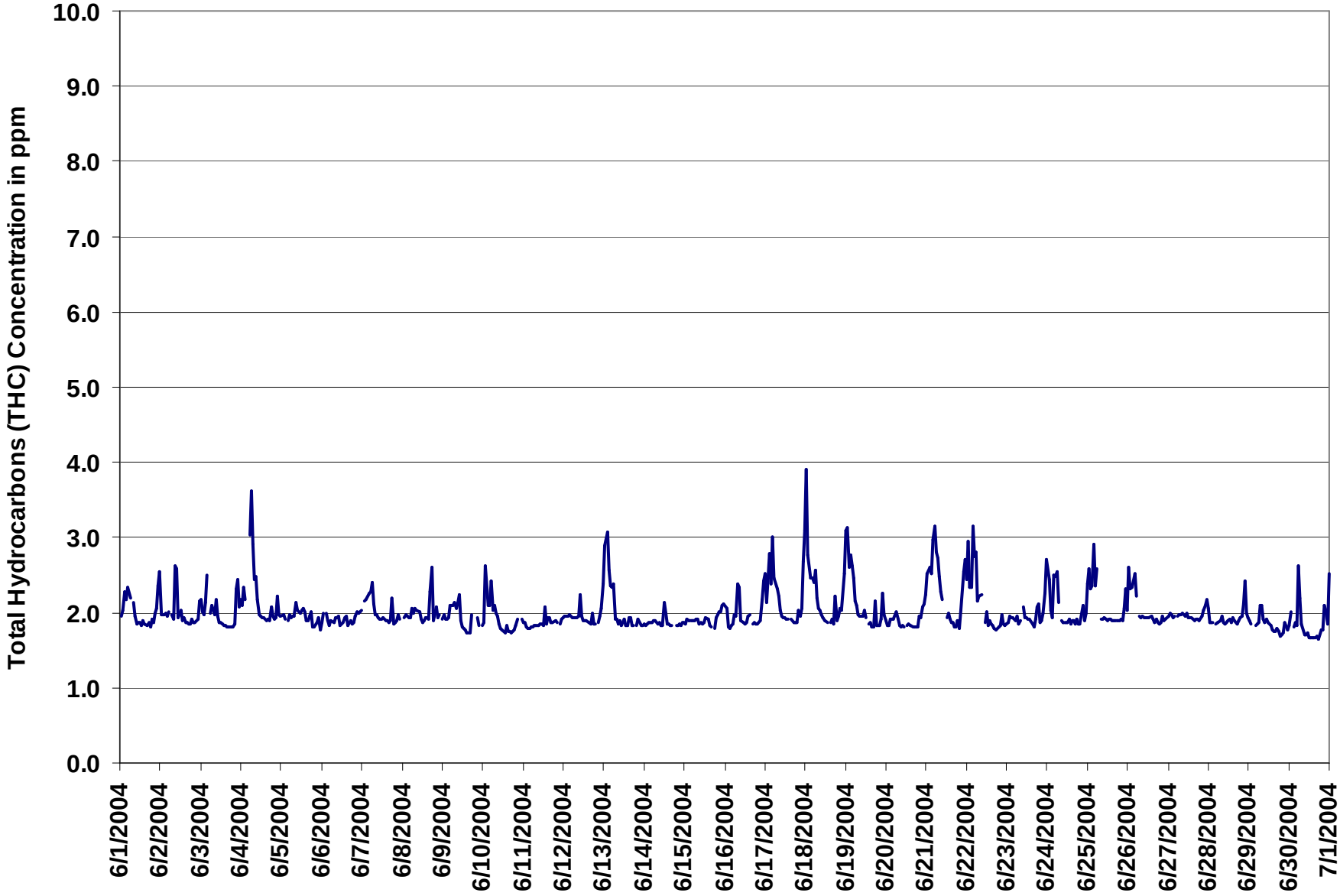


Figure 12. PASZA - Henry Pirker Total Hydrocarbons 1-hr Maximum Value Monthly Trend

PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	1.3	ppb	30-Jun	21:00 22:00
Maximum 24-hr Average:	0.7	ppb	10-Jun	

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

AIC Time:	31 hrs			Operational Time:			685 hrs	
Calibration Time:	4 hrs			AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	Average
	0.9	0.6	0.4	0.3	0.2	0.1	0.0	0.3 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jun-04	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
2-Jun-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	0.3	0.5
3-Jun-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	0.3	0.4
4-Jun-04	0	0	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
5-Jun-04	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
6-Jun-04	0	A	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
7-Jun-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5
8-Jun-04	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.6
9-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0.4	0.6
10-Jun-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	0	A	0	0	0.7	1.1
11-Jun-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
12-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4
13-Jun-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	0.2	0.2
14-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.3
15-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.3
16-Jun-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	0.2	0.3
17-Jun-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	0.3	0.5
18-Jun-04	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.5
19-Jun-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	0.2	0.4
20-Jun-04	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
21-Jun-04	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
22-Jun-04	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
23-Jun-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	0.1	0.5
24-Jun-04	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
25-Jun-04	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
26-Jun-04	1	1	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
27-Jun-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	0.1	0.2
28-Jun-04	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
29-Jun-04	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
30-Jun-04	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.5	1.3
																									N	0.0
Hourly Avg	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3		
Hourly Max	0.6	0.6	0.7	0.6	1.1	0.7	1.2	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.8	0.9	0.4	0.4	0.4	0.6	0.7	1.3	0.8	0.9		

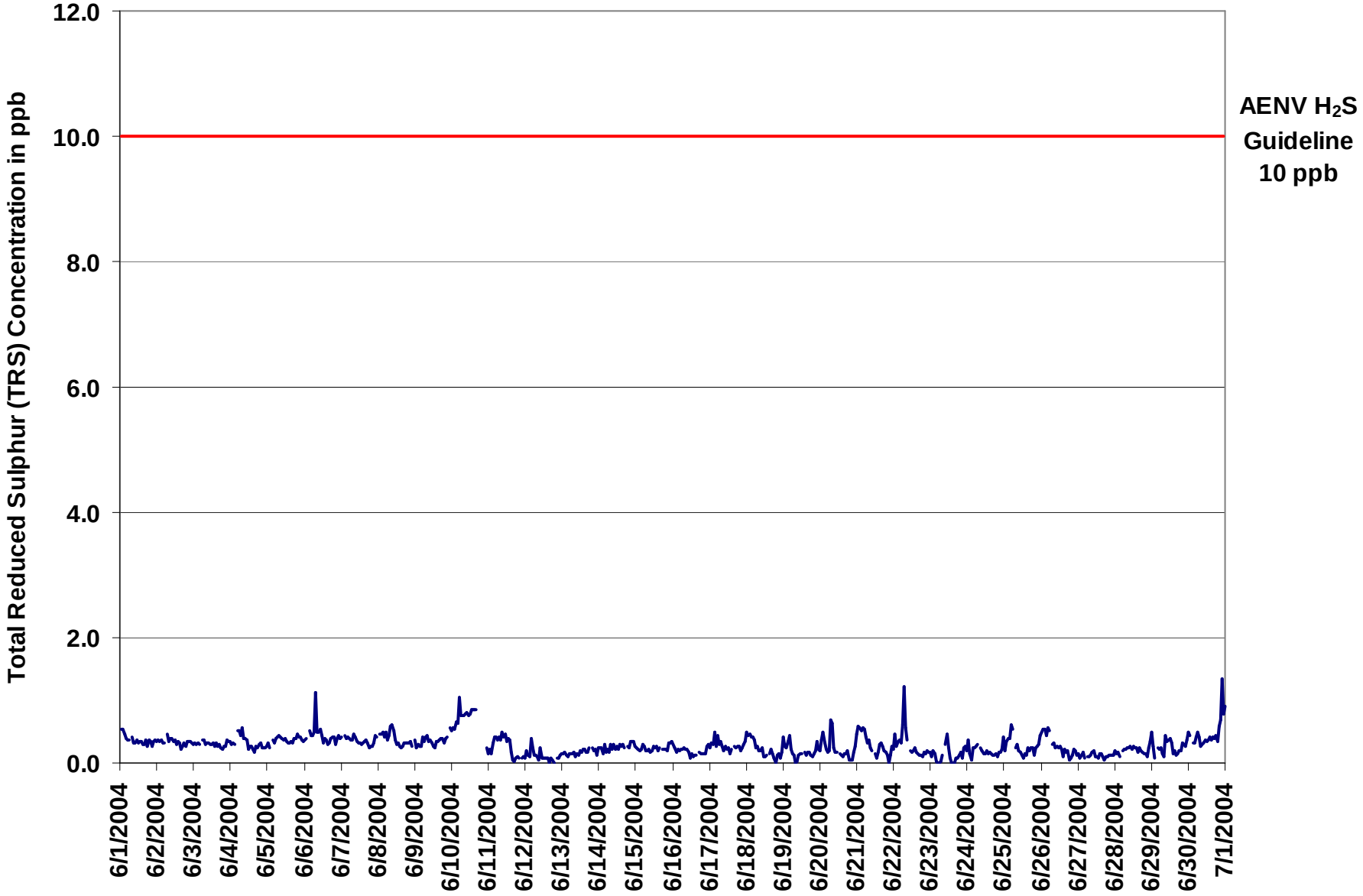


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Total Reduced Sulphur (TRS)

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

Summary

Maximum 1-hr Value:	2.7	ppb	30-Jun	21:00 22:00
Maximum 24-hr Value:	1.1	ppb	10-Jun	

AIC Time:	31 hrs	Operational Time:	685 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	1.7	1.1	0.8	0.7	0.6	0.5	0.4	0.7 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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-Jun-04	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
2-Jun-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	1.0
3-Jun-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	0.7	0.9
4-Jun-04	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
5-Jun-04	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
6-Jun-04	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.3
7-Jun-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	0.9
8-Jun-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	0.8	1.2
9-Jun-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	0.7	0.9
10-Jun-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	1	A	1	1	1.1	1.5
11-Jun-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	A	0	0	1	0.7	1.0
12-Jun-04	1	1	0	1	1	1	0	0	0	1	0	0	1	0	1	0	1	0	0	A	0	1	1	1	0.5	0.8
13-Jun-04	1	1	0	0	0	1	1	1	0	1	1	1	1	1	1	0	1	1	A	1	1	1	0	1	0.6	0.7
14-Jun-04	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.6	0.8
15-Jun-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.0
16-Jun-04	1	0	1	1	1	1	1	1	1	1	0	0	0	1	0	A	0	1	0	1	1	1	1	1	0.6	0.9
17-Jun-04	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	0.7	1.2
18-Jun-04	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	0	1	0	1	1	0	1	1	0.6	0.9
19-Jun-04	1	1	1	1	1	1	1	0	0	0	1	1	A	1	0	1	1	1	1	1	1	1	1	1	0.6	0.8
20-Jun-04	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	0	1	1	0	0	1	1	1	1	0.7	1.2
21-Jun-04	1	1	1	1	1	1	1	1	1	0	A	1	0	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5
22-Jun-04	2	1	1	1	1	2	2	1	1	A	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0.8	2.1
23-Jun-04	1	1	1	0	0	0	1	1	A	1	1	1	1	0	1	0	1	0	1	1	1	1	1	1	0.6	1.1
24-Jun-04	2	1	0	1	1	1	1	A	1	1	1	1	0	1	1	1	0	1	0	1	1	1	1	2	0.7	1.7
25-Jun-04	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	0.7	1.3
26-Jun-04	2	1	1	2	1	A	1	1	1	1	1	1	1	0	1	1	1	0	0	0	1	1	1	1	0.7	2.1
27-Jun-04	0	1	1	1	A	0	0	1	1	0	1	0	1	0	1	0	0	0	1	1	1	1	1	1	0.5	0.6
28-Jun-04	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.6	0.9
29-Jun-04	1	0	A	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	0.7	1.0
30-Jun-04	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	2	1.0	2.7
																									N	0.0
Hourly Avg	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8		
Hourly Max	2.1	1.2	1.2	1.5	1.5	1.7	2.3	1.2	1.2	1.3	1.2	1.1	1.2	1.1	1.2	1.2	1.1	0.8	0.9	1.0	1.3	2.7	1.4	2.3		

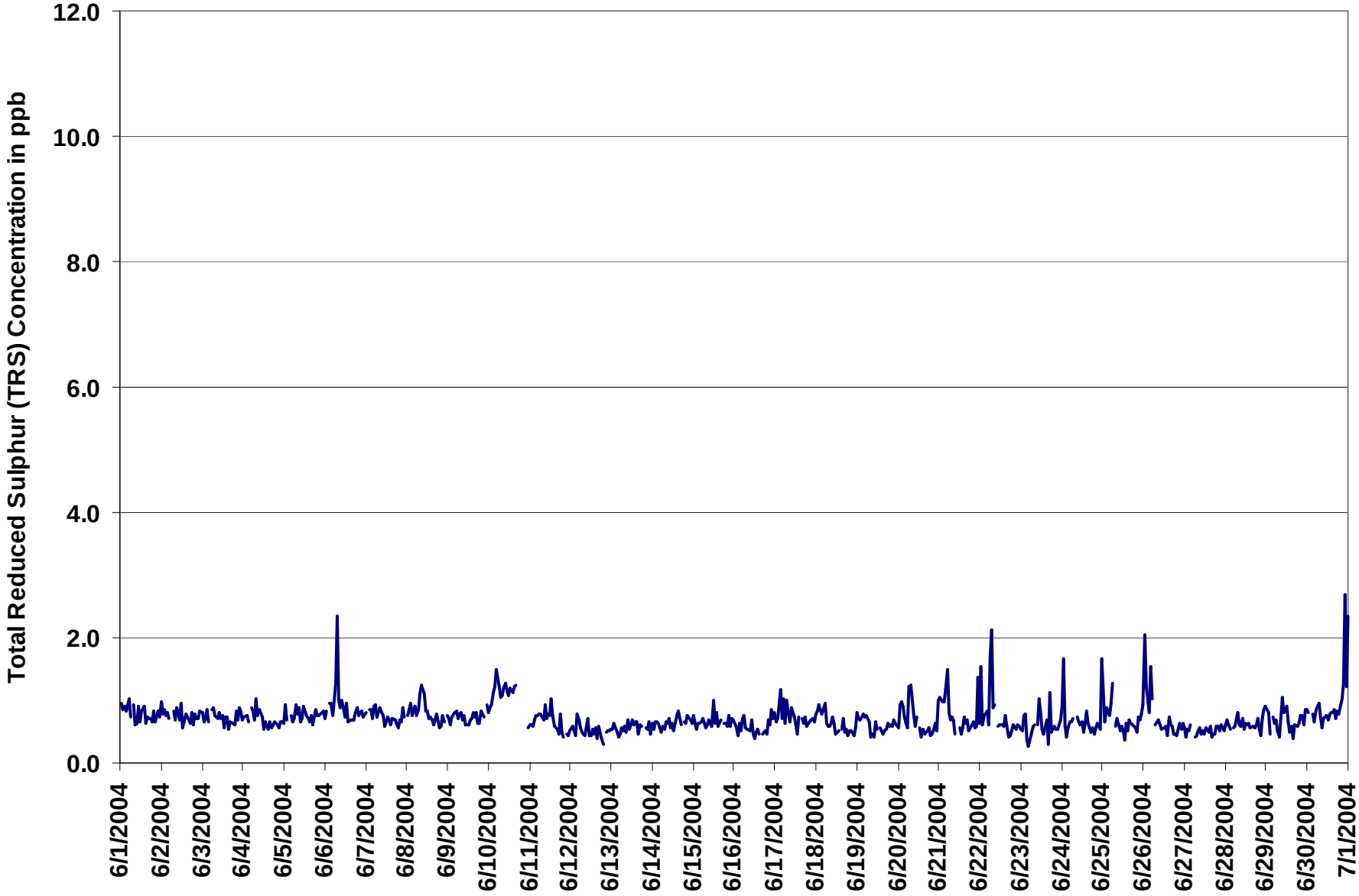


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	27.7	µg/m³	19-Jun	0:00 1:00
Maximum 24-hr Average:	14.2	µg/m³	21-Jun	

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:	707 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	98.9%

Percentile	99	95	75	50	25	5	1	Average	Geomean
	21.5	16.1	8.3	4.9	2.1	0.0	0.0	5.9 µg/m³	4.9 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-Jun-04	2	3	1	3	3	5	10	7	3	1	1	1	2	6	0	1	3	2	3	1	3	3	7	6	3.2	9.5
2-Jun-04	0	1	2	1	2	3	4	3	3	1	1	1	1	0	1	1	2	2	2	3	4	6	5	4	2.2	5.7
3-Jun-04	4	3	4	4	4	5	7	6	6	5	0	2	3	2	4	2	3	3	3	4	7	9	7	6	4.3	8.6
4-Jun-04	6	9	7	9	9	18	22	26	19	17	9	4	6	4	4	4	5	5	7	7	9	10	12	8	9.8	25.6
5-Jun-04	3	3	7	9	11	11	13	14	15	14	15	20	18	11	5	8	9	20	11	5	2	0	0	1	9.3	20.1
6-Jun-04	3	3	5	3	4	5	7	5	4	8	11	5	0	5	16	6	5	6	3	0	2	5	0	2	4.7	15.8
7-Jun-04	1	1	1	2	3	5	5	4	0	2	2	1	2	1	2	0	2	1	3	8	3	6	7	3	2.8	8.4
8-Jun-04	3	2	1	1	2	2	4	7	9	5	0	0	4	3	3	2	2	2	3	5	6	8	4	3	3.3	9.3
9-Jun-04	3	2	4	5	6	7	11	11	15	12	7	8	5	6	4	3	10	6	4	5	6	5	4	4	6.4	15.2
10-Jun-04	2	2	2	4	7	6	8	6	8	5	4	C	C	D	D	0	1	2	C	C	C	D	D	0	N	7.8
11-Jun-04	D	0	0	1	1	0	0	0	2	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.5	2.4
12-Jun-04	0	0	0	1	1	1	2	1	0	2	1	1	2	1	0	1	0	2	3	3	3	7	11	10	2.3	10.8
13-Jun-04	8	8	4	3	4	4	4	3	4	4	2	4	4	6	6	5	3	2	3	2	0	0	0	0	3.4	8.0
14-Jun-04	0	0	0	0	0	0	1	1	0	0	0	0	1	1	5	1	1	3	3	3	3	5	2	0	1.2	5.1
15-Jun-04	1	0	0	0	0	2	1	2	3	3	3	6	2	3	0	2	6	2	7	5	4	4	3	5	2.8	7.5
16-Jun-04	2	0	1	3	3	5	3	2	2	0	0	2	1	0	0	0	2	1	1	3	2	7	9	11	2.5	11.0
17-Jun-04	6	5	6	2	3	5	7	5	6	7	1	0	2	3	3	1	2	1	3	3	14	23	17	22	6.1	22.9
18-Jun-04	14	14	6	3	4	9	10	8	9	5	5	2	3	4	4	3	3	5	4	5	7	13	17	19	7.3	19.1
19-Jun-04	28	20	21	16	6	7	6	6	9	12	12	0	3	5	8	4	5	4	11	9	15	18	10	12	10.3	27.7
20-Jun-04	9	8	8	3	4	4	6	7	3	7	6	8	D	D	5	10	7	5	5	3	8	14	21	22	7.9	21.5
21-Jun-04	24	20	16	15	12	14	18	13	20	21	21	17	11	17	21	4	7	9	6	11	11	10	13	11	14.2	24.0
22-Jun-04	8	6	5	6	7	14	16	18	20	17	15	12	12	22	8	10	8	11	16	8	11	7	8	6	11.3	21.6
23-Jun-04	3	0	3	3	9	6	6	9	10	6	6	8	5	8	10	6	7	11	8	14	14	16	16	18	8.3	17.6
24-Jun-04	15	13	11	10	11	14	13	15	12	11	16	10	1	10	8	4	4	3	4	8	5	0	2	3	8.4	16.0
25-Jun-04	4	6	5	5	5	6	12	4	8	15	7	1	3	3	0	1	2	1	1	3	7	6	10	12	5.2	14.5
26-Jun-04	10	12	5	7	8	5	8	6	8	9	9	2	1	1	6	4	6	8	8	11	14	8	7	6	7.1	14.1
27-Jun-04	8	7	9	8	10	9	9	9	8	8	4	7	8	6	4	4	6	7	8	9	12	10	8	21	8.4	21.4
28-Jun-04	8	8	8	5	5	7	7	9	6	6	1	8	6	8	8	3	6	11	13	7	7	14	11	12	7.7	14.3
29-Jun-04	10	3	4	3	D	0	2	7	8	6	5	7	9	9	7	10	10	8	6	6	5	7	6	3	6.2	10.1
30-Jun-04	0	1	1	1	1	4	6	6	5	8	11	10	9	3	2	8	9	9	11	5	5	5	4	6	5.4	11.3
																									N	0.0
Hourly Avg	6.3	5.3	4.9	4.5	5.0	6.1	7.6	7.3	7.6	7.3	6.0	5.1	4.5	5.2	4.9	3.6	4.5	5.1	5.6	5.5	6.4	7.9	7.6	7.9		
Hourly Max	27.7	20.3	20.5	15.9	11.8	17.9	22.2	25.6	19.6	21.5	20.9	20.0	17.5	21.6	21.2	9.6	9.8	20.1	16.4	14.4	15.3	22.9	21.4	22.4		

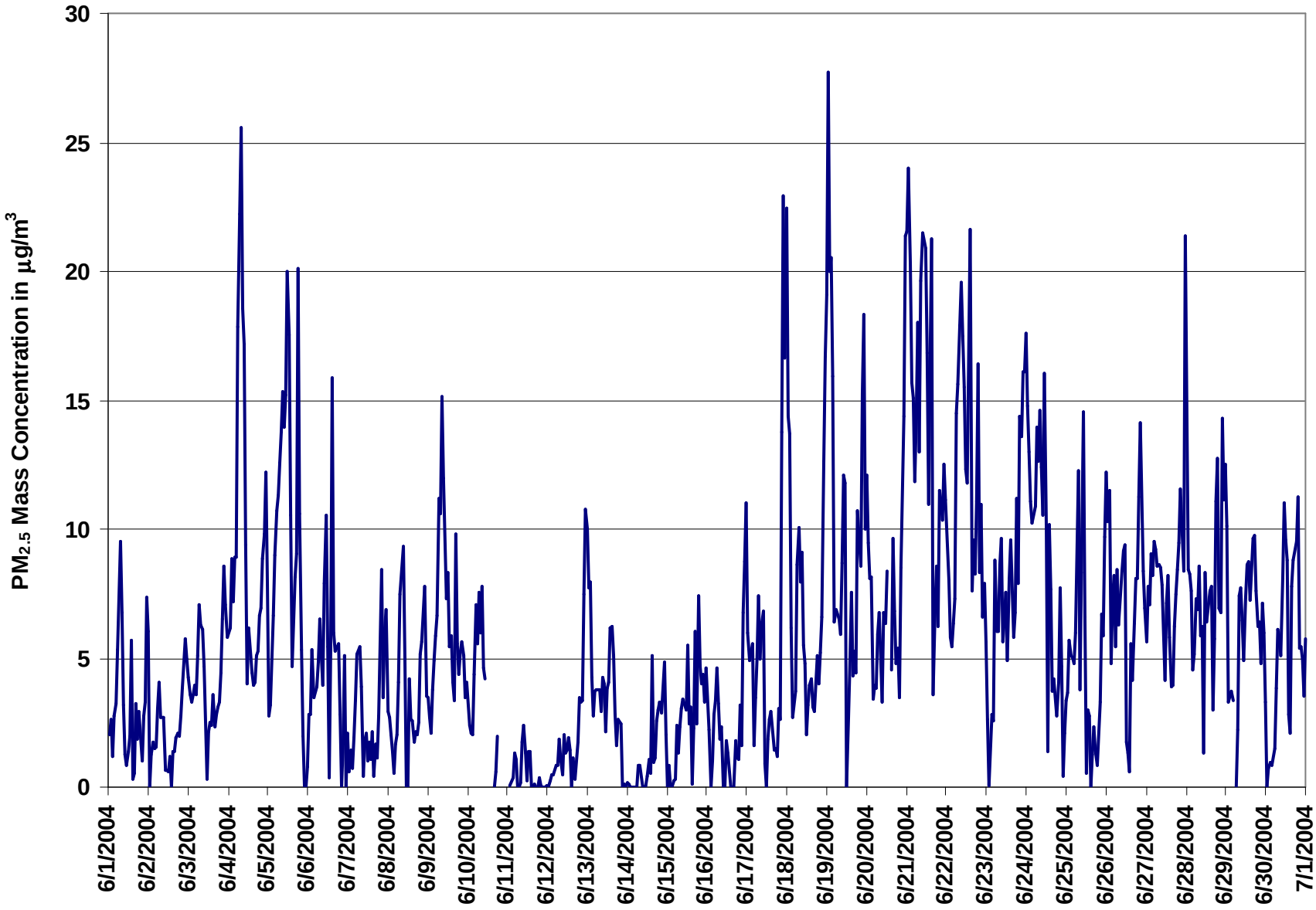


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

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

Summary

Maximum 1-hr Value:	68.7	µg/m³	5-Jun	17:00 18:00
Maximum 24-hr Value:	24.6	µg/m³	21-Jun	

AIC Time:	0 hrs	Operational Time:	713 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average	Geomean
	38.3	27.1	14.4	9.7	5.7	2.3	0.8	11.4 µg/m³	10.2 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-Jun-04	4	5	4	5	5	10	13	10	5	4	3	4	4	10	4	3	6	4	5	3	4	5	9	12	6.0	13.3
2-Jun-04	2	4	4	4	3	6	7	5	6	4	5	5	7	2	5	5	4	4	5	5	7	13	7	6	5.3	12.6
3-Jun-04	6	5	5	6	6	8	10	9	8	9	4	5	6	5	13	5	8	7	8	10	10	11	9	7	7.6	12.6
4-Jun-04	11	18	12	29	16	26	27	31	24	27	16	9	11	8	7	9	8	7	10	9	12	12	14	11	15.2	31.1
5-Jun-04	6	6	8	10	13	14	14	16	21	17	21	24	24	15	8	15	14	69	65	20	15	5	2	4	17.7	68.7
6-Jun-04	6	8	7	6	7	9	10	9	7	10	15	9	5	11	30	10	8	15	17	6	6	14	6	6	9.9	29.5
7-Jun-04	4	4	2	4	6	8	9	9	5	5	7	6	9	6	6	5	7	5	8	23	10	9	11	6	7.3	23.4
8-Jun-04	5	5	4	3	3	4	6	12	14	10	4	4	11	7	6	6	9	6	7	10	9	12	6	5	7.1	14.1
9-Jun-04	4	3	5	6	8	9	19	13	18	16	12	14	14	16	10	16	17	14	11	11	13	10	17	12	12.0	18.9
10-Jun-04	5	4	5	7	10	8	9	8	11	9	8	C	C	4	1	11	9	8	C	C	C	D	D	1	N	11.5
11-Jun-04	0	2	3	3	3	2	1	2	3	5	3	2	5	4	3	3	4	2	2	1	0	1	1	2	2.4	5.0
12-Jun-04	2	2	2	2	3	3	4	3	2	3	3	4	6	5	6	7	3	6	7	6	5	11	13	13	5.0	13.4
13-Jun-04	10	10	8	5	6	5	5	6	7	7	6	8	9	20	14	12	7	5	5	4	8	3	3	2	7.3	19.5
14-Jun-04	3	2	0	1	0	2	3	2	2	1	3	4	6	5	28	4	5	7	8	5	9	8	4	1	4.7	27.8
15-Jun-04	3	2	1	2	2	4	4	4	7	6	8	11	5	7	6	12	14	14	14	11	6	7	5	7	6.7	14.4
16-Jun-04	4	2	3	4	6	7	6	4	5	6	6	7	8	4	5	4	6	5	4	7	8	11	12	16	6.2	15.9
17-Jun-04	12	8	8	4	6	8	10	8	10	10	8	7	5	8	8	7	6	5	6	8	17	33	30	32	11.0	32.7
18-Jun-04	22	21	9	8	7	11	14	11	14	10	13	13	8	11	12	7	7	9	10	13	11	18	31	30	13.3	30.7
19-Jun-04	35	23	31	20	12	10	9	8	13	18	17	11	11	11	15	13	14	11	18	16	24	51	22	18	17.9	50.5
20-Jun-04	13	12	14	5	6	6	8	10	8	12	11	17	9	7	14	19	13	11	11	11	17	22	28	32	13.1	31.9
21-Jun-04	31	29	29	20	19	18	22	22	26	30	29	26	29	36	61	13	18	15	16	27	16	15	31	14	24.6	60.9
22-Jun-04	18	9	9	11	9	22	24	26	28	27	26	22	29	41	21	18	20	19	39	13	14	13	14	9	20.0	41.0
23-Jun-04	5	9	7	8	26	13	10	16	18	10	16	12	9	13	19	24	19	20	15	20	17	19	19	19	15.0	25.6
24-Jun-04	21	15	13	13	15	23	16	20	17	18	51	26	17	24	15	14	15	7	9	10	9	4	4	10	16.1	51.2
25-Jun-04	9	17	18	24	12	28	28	13	14	21	21	11	15	14	9	11	10	7	5	8	11	12	16	20	14.8	28.5
26-Jun-04	21	18	11	24	14	8	17	9	14	15	19	10	13	11	11	14	12	12	13	19	22	13	9	8	14.0	23.8
27-Jun-04	9	8	12	10	11	11	12	11	13	14	9	12	14	13	12	14	12	12	12	13	13	15	13	51	13.7	51.3
28-Jun-04	12	11	14	12	10	9	15	19	17	22	13	19	14	14	19	13	29	35	23	13	13	27	21	15	17.1	34.7
29-Jun-04	22	11	8	12	0	2	5	13	14	17	20	15	19	15	14	16	16	15	12	12	10	9	9	5	12.1	21.5
30-Jun-04	2	2	3	3	3	6	9	12	14	13	21	18	18	11	11	11	13	13	19	9	10	8	8	10	10.3	21.2
																									N	0.0
Hourly Avg	10.2	9.2	8.7	9.0	8.2	10.1	11.5	11.5	12.2	12.5	13.3	11.5	11.7	11.9	13.1	10.7	11.2	12.3	13.2	11.1	11.3	13.4	12.9	12.8		
Hourly Max	34.6	29.3	30.6	28.6	25.6	28.4	28.5	31.1	28.4	29.8	51.2	25.7	29.4	41.0	60.9	23.6	29.2	68.7	64.9	26.5	24.3	50.5	31.3	51.3		

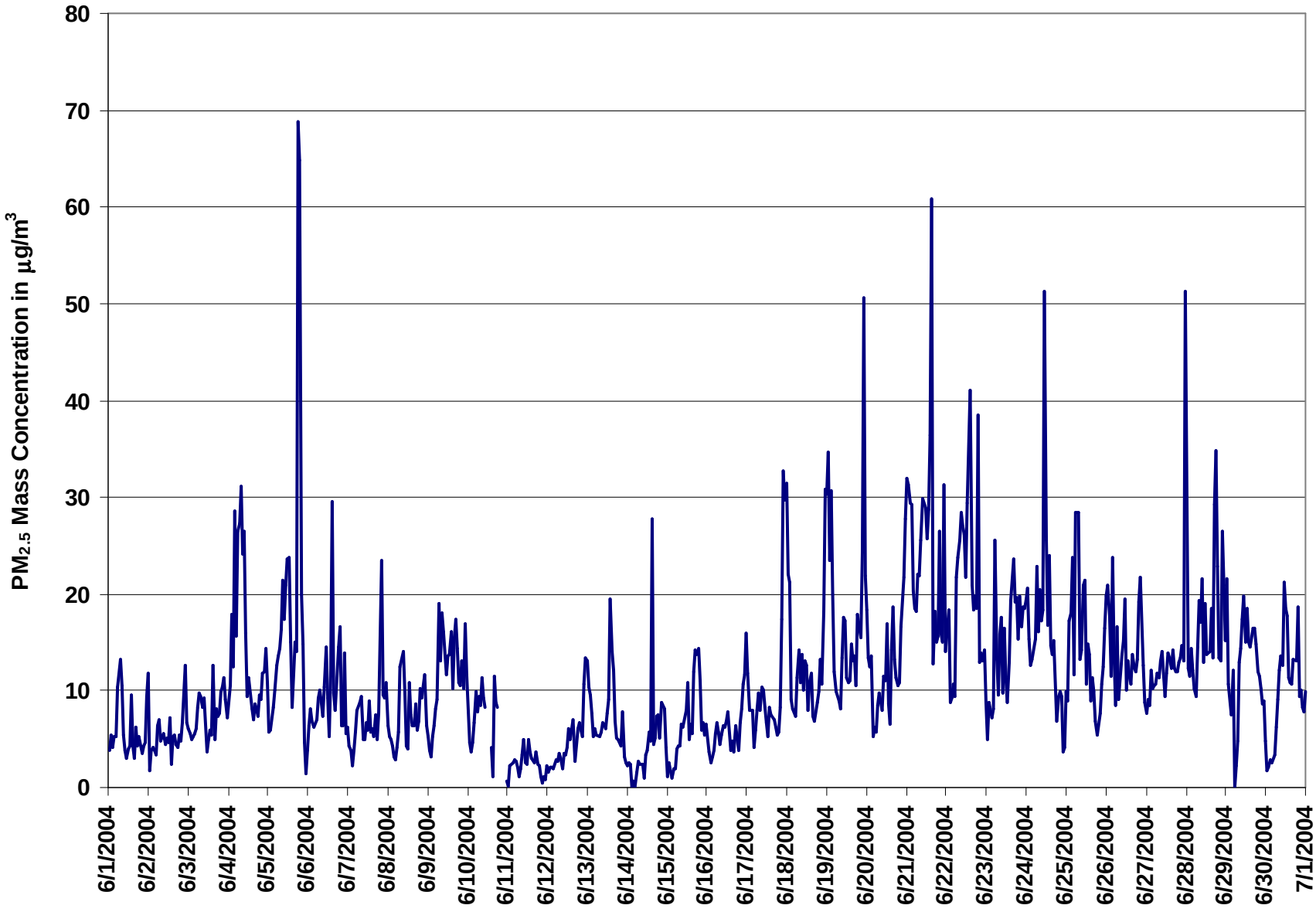
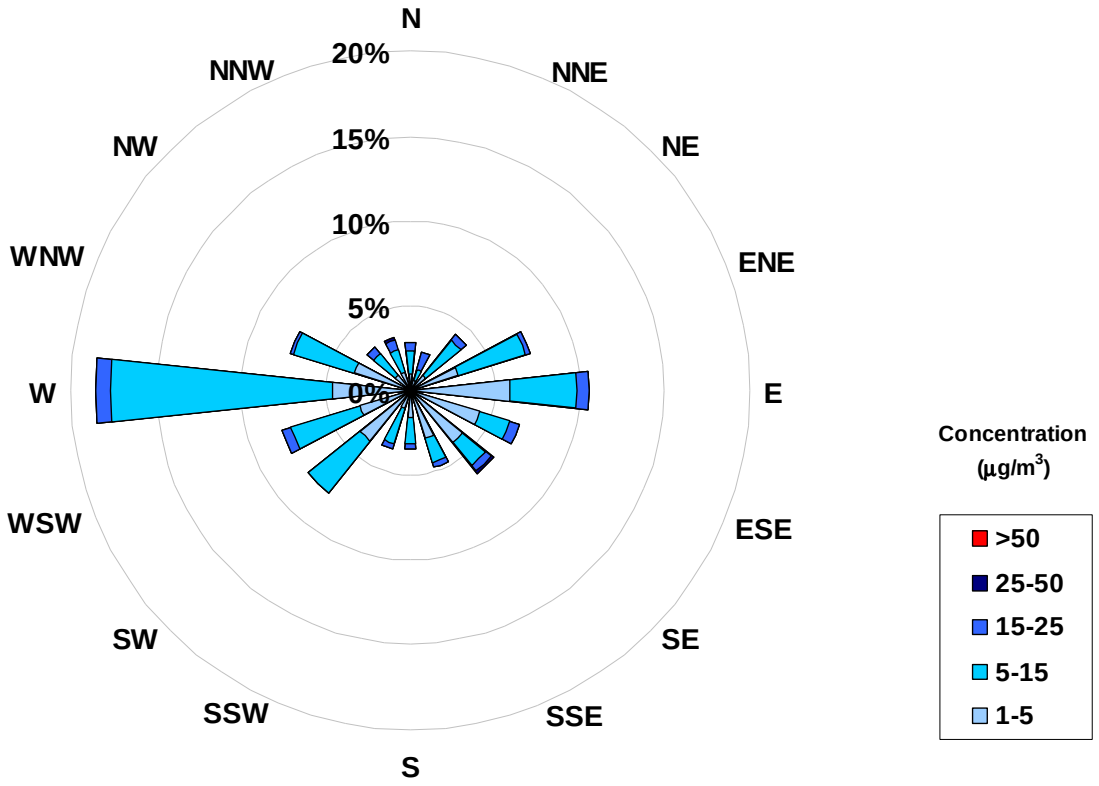


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly

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



Frequency Distribution of $PM_{2.5}$ in µg/m^3			
Range			Frequency (hrs)
0	<	1	96
1	to	5	261
5	to	15	302
15	to	25	46
25	to	50	2
	>	50	0
Total Non-Zero Values			707

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: **June 1, 2004** to **July 1, 2004**

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	97.5	%	10-Jun	4:00 5:00
Maximum 24-hr Average:	90.4	%	11-Jun	

AIC Time:	0 hrs	Operational Time:	720 hrs	
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%	

Percentile	99	95	75	50	25	5	1	Average
	95.6	92.9	79.5	61.7	44.3	26.6	18.5	61.3 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-Jun-04	56	61	62	67	68	69	65	53	44	38	33	33	34	46	44	36	40	47	47	48	53	58	67	70	52	70
2-Jun-04	61	64	67	69	69	69	64	56	52	42	34	36	37	27	23	23	24	23	23	25	29	35	39	43	43	69
3-Jun-04	46	50	58	59	59	57	53	47	41	33	26	24	23	21	19	18	17	17	18	19	24	30	38	41	35	59
4-Jun-04	44	53	67	65	67	63	57	54	46	37	29	24	22	19	19	17	17	17	19	19	23	28	33	37	36	67
5-Jun-04	36	33	39	46	52	54	54	55	55	50	46	39	38	34	29	27	31	39	76	84	88	92	92	93	53	93
6-Jun-04	95	95	96	92	87	80	78	80	78	79	82	82	68	59	70	79	83	81	74	54	51	58	57	56	76	96
7-Jun-04	55	57	60	64	69	72	67	59	48	44	44	44	40	39	35	36	34	35	35	47	60	67	81	89	53	89
8-Jun-04	89	91	94	92	93	91	93	90	81	82	70	57	57	57	52	51	47	44	41	45	49	53	60	61	68	94
9-Jun-04	63	63	66	70	75	74	68	60	59	57	50	46	44	41	37	36	45	56	59	59	62	77	82	89	60	89
10-Jun-04	92	94	96	98	98	97	95	94	87	77	67	60	62	69	61	53	51	52	56	68	79	91	93	93	78	98
11-Jun-04	84	84	86	87	87	87	87	91	94	94	93	91	93	92	90	90	90	90	91	92	93	94	95	95	90	95
12-Jun-04	95	94	95	94	95	94	93	89	87	91	89	81	77	71	65	61	59	59	64	68	71	77	82	86	81	95
13-Jun-04	90	92	89	88	89	88	85	80	81	78	69	67	67	68	76	88	87	88	83	82	87	86	85	90	83	92
14-Jun-04	89	88	84	86	84	79	73	70	66	53	49	46	46	42	40	40	40	44	49	56	61	75	81	76	63	89
15-Jun-04	79	81	78	74	73	74	72	70	65	59	59	73	73	63	55	61	72	67	81	91	92	95	96	96	75	96
16-Jun-04	94	92	92	93	92	91	89	81	78	67	60	60	64	52	46	33	34	34	34	36	41	55	64	70	65	94
17-Jun-04	82	87	89	87	91	86	79	65	59	52	45	37	33	33	33	31	30	29	30	31	36	41	54	58	54	91
18-Jun-04	72	83	84	87	87	86	74	63	57	47	38	32	29	28	26	26	26	25	27	30	36	42	51	62	51	87
19-Jun-04	67	77	84	90	79	69	61	56	53	50	47	34	27	25	27	27	29	29	35	39	48	59	53	65	51	90
20-Jun-04	69	68	72	71	72	72	70	70	63	57	51	48	37	25	25	34	35	35	35	34	34	42	50	55	51	72
21-Jun-04	64	72	83	89	88	82	77	67	57	56	51	42	36	46	80	76	69	64	61	61	69	74	83	86	68	89
22-Jun-04	92	93	95	96	96	95	84	77	75	65	57	47	45	52	47	44	42	43	50	61	66	71	74	77	68	96
23-Jun-04	77	76	71	72	76	90	87	78	78	82	75	79	80	80	74	63	56	58	58	60	66	72	77	82	74	90
24-Jun-04	88	88	89	91	93	92	85	80	76	69	63	57	49	47	46	42	40	37	39	43	51	52	53	58	64	93
25-Jun-04	59	66	78	79	85	82	75	60	58	56	50	38	34	34	30	28	28	27	27	28	35	39	45	51	50	85
26-Jun-04	56	67	64	72	78	70	59	58	55	51	47	38	28	26	27	27	27	28	29	30	40	45	49	50	47	78
27-Jun-04	52	55	56	59	64	64	60	55	50	45	38	35	34	31	29	26	27	29	31	33	40	46	48	58	44	64
28-Jun-04	67	71	75	75	76	79	80	85	75	66	60	54	50	45	44	41	40	38	43	45	47	53	58	64	60	85
29-Jun-04	67	72	73	78	77	69	66	68	79	86	80	75	72	70	71	68	72	70	68	68	70	77	82	84	73	86
30-Jun-04	83	82	85	86	86	85	83	73	67	63	61	57	51	47	48	49	50	53	72	93	92	92	90	93	73	93
																									N	0
Hourly Avg	72	75	77	79	80	79	74	69	66	61	55	51	48	46	46	44	45	45	48	52	57	63	67	71		
Hourly Max	95	95	96	98	98	97	95	94	94	94	93	91	93	92	90	90	90	90	91	93	93	95	96	96		

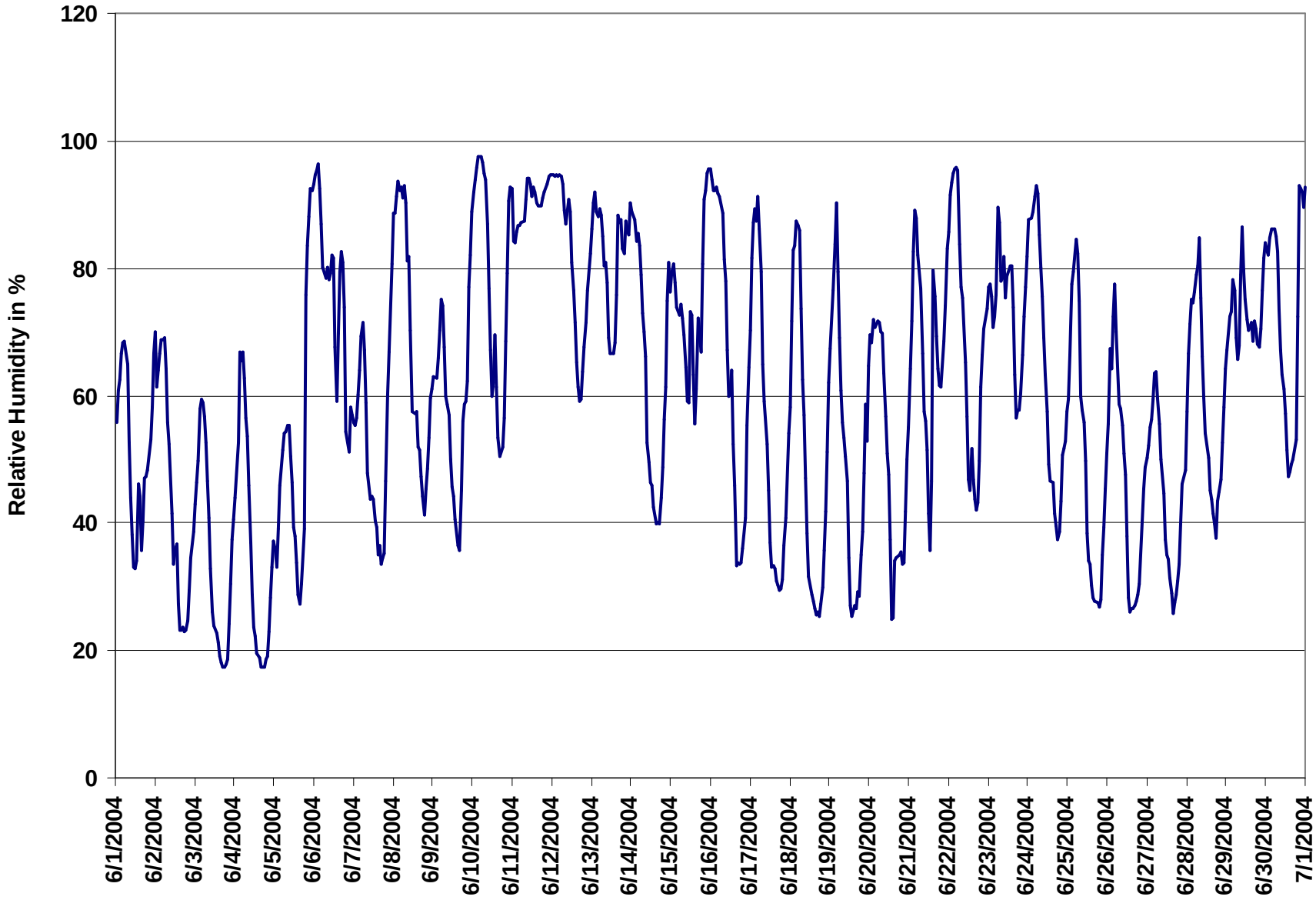


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (AT - ℃)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	29.0	°C	19-Jun	15:00 16:00
Maximum 24-hr Average:	20.8	°C	27-Jun	

AIC Time:	0 hrs	Operational Time:	719 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%

Percentile	99	95	75	50	25	5	1	Average
	27.8	26.0	20.0	15.6	12.0	8.3	6.2	16.3 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-Jun-04	8	7	6	5	5	6	7	11	14	16	17	18	17	15	16	17	16	15	15	14	13	12	11	10	12.2	17.5
2-Jun-04	10	8	7	6	6	6	8	11	12	15	16	17	15	18	18	18	18	18	18	17	15	14	12	11	13.1	18.2
3-Jun-04	10	8	6	6	6	7	9	12	14	18	18	20	21	22	23	23	24	24	24	23	21	18	16	14	16.1	24.0
4-Jun-04	13	11	8	8	8	8	12	14	17	21	23	25	26	27	28	28	28	28	27	26	24	21	19	18	19.4	28.1
5-Jun-04	17	18	17	16	15	15	16	16	16	17	19	22	23	25	27	28	26	24	16	14	14	13	13	12	18.3	27.9
6-Jun-04	13	12	13	13	14	14	14	13	13	14	14	14	16	17	17	16	15	16	16	18	18	16	15	14	14.8	18.0
7-Jun-04	13	12	11	10	8	8	10	13	16	17	18	17	19	19	21	19	20	19	17	16	14	13	12	11	14.7	21.2
8-Jun-04	11	10	10	10	10	10	10	11	12	12	14	16	16	16	18	17	18	19	19	18	17	15	14	13	13.9	19.2
9-Jun-04	13	12	11	10	9	9	11	15	16	18	21	23	24	24	25	25	23	20	19	18	17	15	14	13	16.8	25.4
10-Jun-04	13	12	11	10	10	11	11	11	14	16	18	19	19	18	19	20	21	20	18	16	15	12	12	12	14.9	21.2
11-Jun-04	13	12	12	11	11	11	10	10	10	10	10	10	10	10	11	10	10	10	10	9	9	9	8	8	10.2	12.7
12-Jun-04	8	8	8	8	8	8	9	10	10	9	10	11	12	13	14	15	15	15	14	14	13	12	11	10	11.2	15.3
13-Jun-04	9	9	10	10	10	10	12	13	13	14	15	16	16	15	14	12	12	12	13	13	9	10	10	9	12.0	16.3
14-Jun-04	9	9	8	7	7	7	9	10	11	13	14	15	15	16	16	16	17	16	15	14	12	11	10	10	12.0	16.6
15-Jun-04	10	9	9	9	10	10	10	11	13	16	16	14	14	17	19	16	15	16	13	11	11	11	11	11	12.7	18.8
16-Jun-04	11	11	11	11	11	11	11	12	12	14	15	15	14	17	17	18	19	19	19	19	17	14	12	11	14.2	19.2
17-Jun-04	9	8	7	6	6	7	10	13	15	18	20	20	21	21	22	22	22	22	22	21	19	17	14	13	15.5	22.3
18-Jun-04	11	9	8	7	6	8	12	14	17	19	22	23	24	25	25	25	24	25	24	23	21	19	17	15	17.6	25.3
19-Jun-04	14	12	10	9	10	12	13	15	18	21	24	26	27	29	29	29	28	28	27	26	24	22	22	19	20.5	29.0
20-Jun-04	18	17	16	14	13	13	15	16	17	20	22	22	23	24	25	25	25	25	25	25	22	20	18	17	19.9	25.4
21-Jun-04	14	13	12	11	10	11	14	18	19	22	24	27	28	24	D	17	19	20	21	21	19	18	16	15	17.9	27.7
22-Jun-04	13	12	11	10	10	12	15	17	18	21	23	25	26	26	26	27	27	26	24	22	21	19	18	17	19.4	26.7
23-Jun-04	16	15	16	14	14	13	14	16	16	15	17	16	15	16	19	21	22	23	22	21	20	18	17	16	17.3	22.7
24-Jun-04	15	15	14	13	12	12	15	16	18	20	21	23	24	25	25	25	25	25	24	23	21	18	17	15	19.2	25.4
25-Jun-04	14	13	11	11	10	11	12	15	17	20	22	24	25	25	26	26	26	26	25	24	22	20	18	16	19.1	26.0
26-Jun-04	15	12	12	11	10	11	15	16	18	20	22	23	24	25	25	26	26	25	25	24	22	20	18	17	19.3	25.7
27-Jun-04	16	15	14	13	12	13	14	16	18	21	22	24	25	26	27	27	27	27	27	26	24	22	21	19	20.8	27.5
28-Jun-04	17	16	15	15	15	15	15	15	17	20	22	23	25	26	26	25	26	26	25	24	22	20	19	18	20.4	26.5
29-Jun-04	18	16	16	15	15	15	15	15	14	13	15	17	18	19	19	20	19	19	20	20	18	17	16	15	16.7	19.7
30-Jun-04	14	14	13	12	12	13	14	17	19	20	22	24	26	27	26	26	26	25	19	16	16	15	15	15	18.5	26.8
																									N	0.0
Hourly Avg	12.8	11.9	11.1	10.5	10.1	10.5	12.1	13.8	15.2	17.0	18.6	19.6	20.2	20.9	21.5	21.4	21.3	21.1	20.1	19.2	17.7	16.0	14.8	13.8		
Hourly Max	17.9	17.7	16.7	15.7	15.3	15.2	15.9	17.8	19.5	21.7	23.9	26.6	27.7	28.7	28.9	29.0	28.1	27.9	27.0	26.1	24.3	22.3	21.8	19.4		

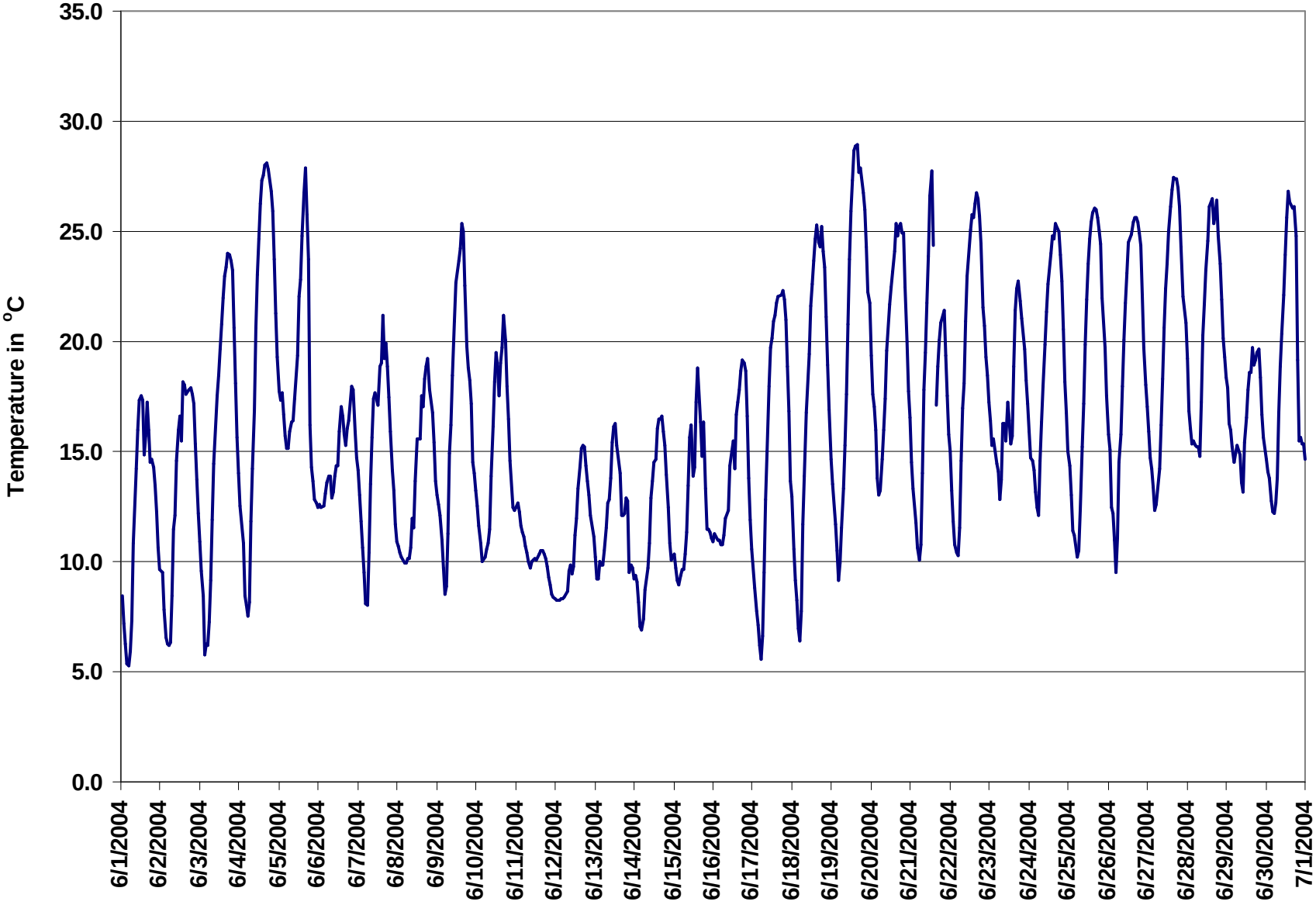


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Solar Radiation (SR - W/m^2)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	885.8	W/m^2	17-Jun	12:00 13:00
Maximum 24-hr Average:	354.8	W/m^2	17-Jun	

AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	878.0	826.5	484.5	123.4	0.0	0.0	0.0	250.9 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-Jun-04	0	0	0	0	8	50	135	316	513	661	748	637	582	317	588	524	232	243	154	81	36	3	0	0	243	748
2-Jun-04	0	0	0	0	8	46	182	364	332	563	773	691	561	873	788	592	560	442	343	184	22	3	0	0	305	873
3-Jun-04	0	0	0	0	6	42	226	325	516	662	772	847	881	878	833	750	631	487	336	182	34	4	0	0	350	881
4-Jun-04	0	0	0	0	8	44	219	322	511	655	763	834	875	872	816	747	626	484	330	186	37	4	0	0	347	875
5-Jun-04	0	0	0	0	8	54	135	176	236	256	351	424	400	657	826	671	256	91	122	17	9	0	0	0	195	826
6-Jun-04	0	0	0	0	0	19	34	51	83	186	218	170	216	248	239	275	107	211	113	60	44	5	0	0	95	275
7-Jun-04	0	0	0	0	7	49	191	303	496	645	794	547	667	558	878	393	411	157	66	37	31	0	0	0	260	878
8-Jun-04	0	0	0	0	2	18	45	120	123	93	479	636	381	284	506	225	493	410	328	105	45	4	0	0	179	636
9-Jun-04	0	0	0	0	8	51	205	311	491	632	734	814	849	856	789	511	178	188	158	102	29	0	0	0	288	856
10-Jun-04	0	0	0	0	5	18	36	74	351	492	594	452	376	269	442	396	528	168	61	28	5	0	0	0	179	594
11-Jun-04	0	0	0	0	1	13	25	31	33	59	58	62	66	118	114	99	88	53	40	18	7	0	0	0	37	118
12-Jun-04	0	0	0	0	2	10	53	130	99	62	150	177	242	302	598	655	431	292	172	65	26	6	0	0	145	655
13-Jun-04	0	0	0	0	9	34	159	222	238	273	411	556	696	233	130	121	179	157	160	78	2	0	0	0	152	696
14-Jun-04	0	0	0	0	8	67	178	239	290	583	477	619	476	820	713	587	474	280	225	92	20	1	0	0	256	820
15-Jun-04	0	0	0	0	2	26	88	150	326	609	457	142	176	510	508	293	133	121	35	20	8	0	0	0	150	609
16-Jun-04	0	0	0	0	4	37	104	165	203	549	585	526	531	817	570	622	656	547	419	226	49	6	0	0	276	817
17-Jun-04	0	0	0	0	8	52	218	324	511	658	767	826	886	883	839	760	651	512	364	208	44	5	0	0	355	886
18-Jun-04	0	0	0	0	8	49	212	303	505	651	761	837	863	873	818	456	511	500	275	214	47	6	0	0	329	873
19-Jun-04	0	0	0	0	8	44	205	316	497	639	749	829	864	856	712	646	414	403	200	158	42	12	0	0	316	864
20-Jun-04	0	0	0	0	8	62	187	271	455	597	746	806	869	815	816	722	616	492	318	200	46	8	0	0	335	869
21-Jun-04	0	0	0	0	14	60	164	265	389	502	610	768	783	490	225	192	366	331	317	173	46	6	0	0	238	783
22-Jun-04	0	0	0	0	12	59	156	274	447	665	678	769	841	825	783	686	483	397	218	49	43	0	0	0	308	841
23-Jun-04	0	0	0	0	0	16	124	320	108	162	405	174	134	199	643	696	587	437	286	145	40	3	0	0	187	696
24-Jun-04	0	0	0	0	4	39	127	245	426	509	662	737	802	797	573	624	568	448	311	165	35	2	0	0	295	802
25-Jun-04	0	0	0	0	8	33	143	243	392	598	717	806	852	854	819	737	644	468	363	217	45	8	0	0	331	854
26-Jun-04	0	0	0	0	8	43	203	320	495	643	707	828	881	880	835	756	645	504	359	213	45	7	0	0	349	881
27-Jun-04	0	0	0	0	5	38	197	323	501	662	774	847	879	878	843	754	649	501	345	195	46	7	0	0	352	879
28-Jun-04	0	0	0	0	8	46	74	102	320	642	728	802	841	847	595	308	426	385	243	63	21	5	0	0	269	847
29-Jun-04	0	0	0	0	8	34	66	69	53	201	347	360	535	355	341	509	314	226	245	182	49	7	0	0	162	535
30-Jun-04	0	0	0	0	6	40	89	301	450	599	710	789	828	874	493	354	298	34	0	0	1	1	0	0	244	874
																									N	0
Hourly Avg	0	0	0	0	6	40	139	232	346	490	591	610	628	635	622	522	438	332	230	122	32	4	0	0		
Hourly Max	0	0	0	0	14	67	226	364	516	665	794	847	886	883	878	760	656	547	419	226	49	12	0	0		

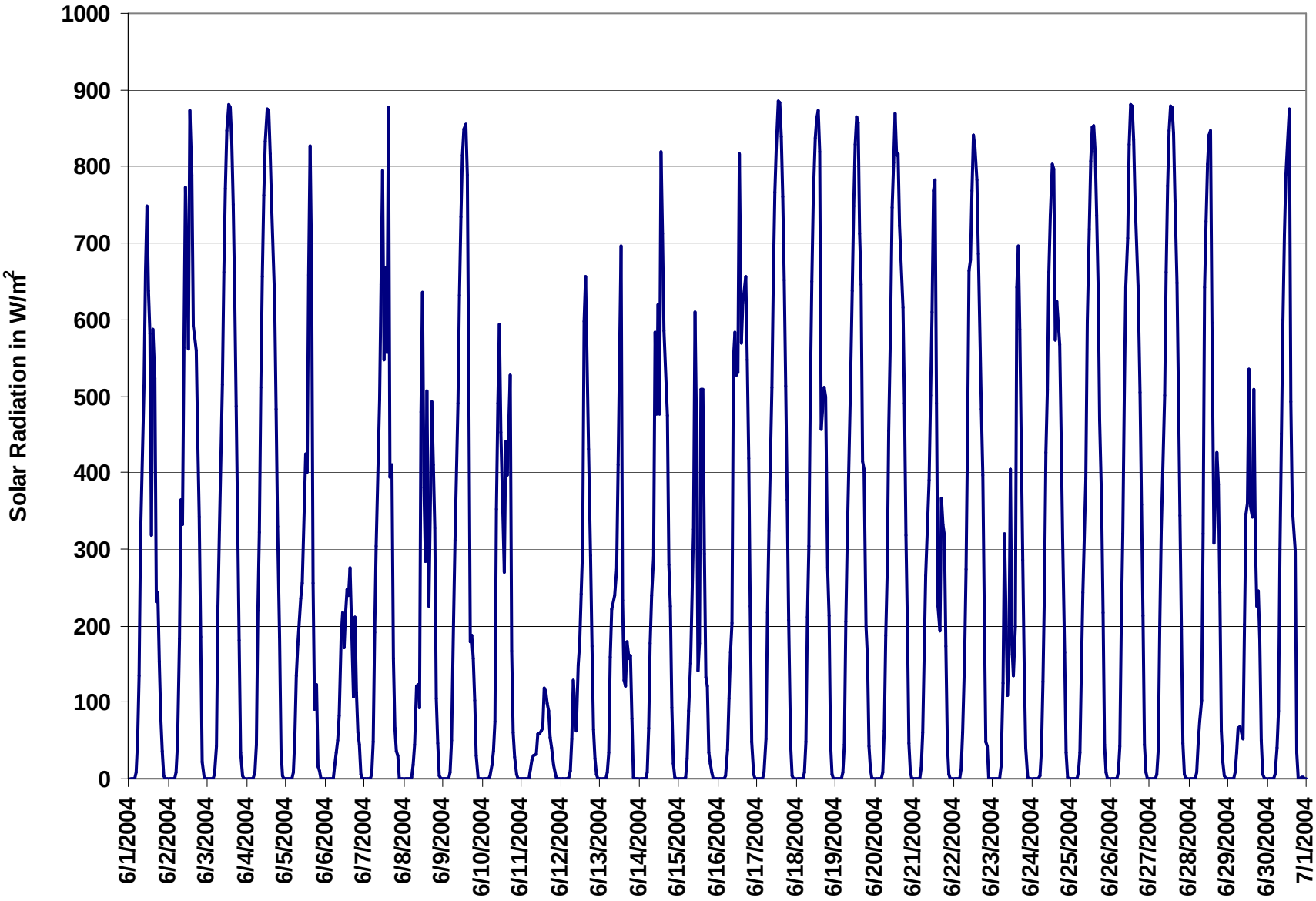


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WS - Km/hr)

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

Summary

Maximum 1-hr Average:	31.0	km/hr	5-Jun	18:00 19:00
Maximum 24-hr Average:	19.9	km/hr	14-Jun	

Calm Time:	0 hrs	**0%** calms			Operational Time:			720 hrs	
Calibration Time:	0 hrs				AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	26.1	17.5	11.2	8.1	5.2	3.2	2.1	8.8 km/hr	1.2 km/hr

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Scalar Average	24-hr Vector Average	Daily Max
1-Jun-04	9	7	5	3	3	4	6	6	9	12	9	10	12	22	13	11	14	16	10	9	7	4	4	6	8.8	6.6	21.7
2-Jun-04	11	10	8	9	7	8	11	16	17	20	23	21	16	21	25	26	24	23	23	19	14	12	12	10	16.1	15.3	26.1
3-Jun-04	8	7	4	8	8	10	9	8	7	7	13	13	10	11	11	12	8	8	8	5	4	7	8	6	8.3	4.9	13.1
4-Jun-04	4	2	3	4	4	4	5	5	4	5	9	11	8	7	9	9	8	9	12	12	9	9	9	10	7.1	5.0	12.4
5-Jun-04	12	14	14	10	8	11	10	8	10	5	4	4	7	11	12	9	10	12	31	22	17	15	13	8	11.5	0.4	31.0
6-Jun-04	4	5	6	7	11	12	12	11	9	10	8	5	7	6	11	15	12	11	9	9	9	4	5	6	8.6	2.4	14.7
7-Jun-04	7	7	7	6	6	7	5	5	4	5	7	9	7	7	7	6	5	6	13	13	13	6	6	5	7.0	4.2	13.0
8-Jun-04	3	4	5	4	5	3	7	5	2	5	8	10	9	8	7	7	7	7	7	4	5	6	6	9	5.9	2.9	10.4
9-Jun-04	9	9	9	6	3	4	4	3	5	5	5	5	5	7	5	5	9	12	17	13	12	10	10	11	7.7	0.5	17.0
10-Jun-04	6	4	2	5	3	4	4	5	7	10	10	9	15	15	11	11	9	8	14	11	10	15	11	8	8.7	6.9	15.3
11-Jun-04	13	15	18	18	18	21	19	16	14	13	12	15	13	13	10	10	9	8	7	7	6	6	5	5	12.0	11.6	20.9
12-Jun-04	5	5	5	5	6	5	6	5	6	6	5	5	4	4	8	9	7	9	9	6	7	5	5	4	5.8	3.0	9.3
13-Jun-04	4	4	4	2	2	6	5	7	8	7	6	10	12	12	11	12	12	9	4	4	9	8	10	8	7.4	1.7	12.5
14-Jun-04	9	11	13	12	12	15	17	20	21	31	28	28	28	26	27	26	25	22	22	21	24	16	11	10	19.9	18.4	31.0
15-Jun-04	10	7	7	10	11	9	11	13	17	17	22	12	7	6	8	19	12	9	10	7	4	3	10	10	10.5	7.9	21.7
16-Jun-04	13	14	14	11	11	11	13	12	11	10	11	12	10	12	13	14	12	10	12	9	6	4	4	2	10.4	8.4	14.4
17-Jun-04	3	3	4	4	2	5	6	6	5	4	5	8	7	8	6	6	6	6	6	8	8	5	2	4	5.3	1.0	8.1
18-Jun-04	2	4	3	5	3	3	5	7	7	7	6	7	7	7	6	5	6	5	5	5	6	5	4	2	5.0	1.7	7.3
19-Jun-04	3	2	3	2	5	7	12	14	12	9	8	9	9	8	8	10	12	12	10	11	8	5	13	13	8.6	5.9	14.4
20-Jun-04	7	10	9	6	4	6	5	7	7	5	5	6	8	7	5	9	6	7	6	5	6	4	5	4	6.3	0.9	10.2
21-Jun-04	2	3	2	3	4	4	2	2	6	6	4	5	7	11	18	14	11	7	5	4	4	4	4	3	5.7	1.4	17.8
22-Jun-04	4	3	5	4	6	5	3	4	7	5	5	5	7	9	8	9	9	12	13	11	8	9	9	9	7.0	3.1	13.2
23-Jun-04	9	10	10	11	9	8	9	5	5	9	9	10	9	9	9	8	7	8	9	9	9	6	5	4	8.1	6.5	11.3
24-Jun-04	4	6	6	3	3	4	5	6	8	7	9	9	9	9	8	8	11	10	12	11	10	8	5	3	7.2	6.4	11.5
25-Jun-04	4	3	2	4	4	3	3	6	5	5	7	10	9	8	10	10	9	9	10	10	9	7	5	5	6.5	4.5	9.9
26-Jun-04	5	3	3	4	2	3	8	9	7	8	11	14	11	11	13	13	12	15	16	14	13	11	11	11	9.5	8.7	15.8
27-Jun-04	10	9	11	11	10	12	12	13	14	14	16	16	14	14	13	13	14	13	13	12	8	6	8	9	11.9	10.8	16.2
28-Jun-04	14	11	14	10	11	12	15	13	12	12	12	10	10	7	7	6	6	8	11	6	4	5	7	9	9.7	4.4	15.1
29-Jun-04	9	15	17	15	13	12	8	8	8	5	5	5	5	5	8	9	11	9	9	8	8	5	6	6	8.7	5.3	16.6
30-Jun-04	7	6	4	5	5	4	4	8	13	13	13	14	16	16	14	12	12	8	20	10	6	12	6	5	9.7	6.0	19.6
																									N	N	0.0
1-hr Scalar	7.0	7.1	7.2	6.9	6.7	7.3	8.0	8.5	8.9	9.2	9.9	10.1	10.0	10.6	10.7	11.1	10.5	10.3	11.7	9.8	8.8	7.4	7.3	6.8			
1-hr Vector	0.8	1.7	3.0	2.1	2.9	2.2	1.4	1.5	2.1	2.4	1.9	1.4	0.4	1.1	0.7	1.1	0.9	1.4	1.9	1.9	2.1	1.4	1.4	0.6			
Hourly Max	13.8	15.3	18.0	17.9	17.6	20.9	18.8	20.0	21.1	31.0	28.2	28.1	27.6	26.4	27.0	26.1	25.0	22.9	31.0	21.5	24.2	16.5	13.2	13.3			

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

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

Summary

Calm Time:	0 hrs	**0%** calms		Operational Time:		720 hrs						
Calibration Time:	0 hrs			AMD Operational Uptime:		100.0%						
Percentile	99	95	75	50	25	5	1	Average				
	352.1	321.0	265.3	177.1	96.3	44.3	10.5	144 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-Jun-04	68	88	106	308	28	3	10	42	79	90	72	49	45	66	34	14	4	351	355	348	345	353	50	52	36
2-Jun-04	70	85	100	92	85	93	75	74	85	83	81	87	44	60	82	87	91	85	100	92	77	74	73	65	81
3-Jun-04	45	57	158	71	100	88	94	70	53	78	64	67	44	73	72	82	71	118	137	168	217	235	227	236	83
4-Jun-04	247	203	124	320	103	194	352	341	353	316	302	292	276	260	280	296	263	236	262	270	264	255	265	261	274
5-Jun-04	258	261	272	269	265	273	279	297	24	104	168	122	177	170	170	221	247	24	76	78	64	67	82	115	134
6-Jun-04	163	309	201	226	220	228	234	235	256	282	303	335	264	266	19	75	59	61	87	201	196	165	194	178	229
7-Jun-04	202	189	193	182	198	167	136	154	259	104	68	125	153	109	257	285	44	298	156	157	154	172	122	137	161
8-Jun-04	130	123	136	166	162	175	324	4	334	326	286	321	323	328	310	282	324	5	332	333	277	266	262	278	304
9-Jun-04	286	286	283	280	295	300	359	86	66	44	75	114	37	2	111	337	42	188	171	149	92	16	303	71	63
10-Jun-04	88	211	115	345	16	12	1	45	94	118	100	111	108	113	97	92	104	88	90	84	128	117	128	110	100
11-Jun-04	129	134	137	134	140	137	140	138	136	137	137	134	140	141	172	169	174	180	176	168	159	146	149	155	144
12-Jun-04	153	156	154	161	155	158	148	158	168	231	227	218	253	223	280	286	267	269	296	300	294	286	284	265	236
13-Jun-04	301	257	258	228	241	284	258	279	289	288	267	280	286	276	319	41	89	143	206	285	137	87	72	57	297
14-Jun-04	64	67	74	66	71	67	71	72	88	98	94	89	98	93	95	101	102	117	133	131	134	128	112	83	97
15-Jun-04	77	81	123	110	93	102	82	81	97	96	115	118	119	158	88	91	141	121	195	208	260	318	12	40	102
16-Jun-04	85	105	115	130	144	150	162	178	180	176	172	131	112	184	164	162	154	147	123	107	90	52	44	86	141
17-Jun-04	116	107	73	152	103	112	90	77	50	79	122	101	119	190	267	215	251	222	237	268	272	274	327	239	175
18-Jun-04	135	14	158	116	141	357	85	53	65	64	34	359	20	121	347	268	217	202	254	345	348	344	346	354	32
19-Jun-04	136	170	122	35	49	78	72	65	69	78	93	101	106	95	97	91	88	73	53	65	91	159	210	212	90
20-Jun-04	277	217	209	208	217	196	241	287	299	325	78	118	106	89	90	114	99	98	93	138	270	315	313	330	187
21-Jun-04	324	144	104	348	93	150	131	94	74	99	85	82	246	256	209	264	268	287	5	127	193	261	296	242	232
22-Jun-04	140	125	139	157	123	84	121	49	40	11	25	43	262	278	294	262	274	264	250	268	251	244	276	268	265
23-Jun-04	262	227	245	250	178	305	309	296	160	201	242	270	262	275	282	310	292	269	274	278	270	262	263	261	265
24-Jun-04	299	267	255	220	203	218	278	270	277	282	285	282	286	273	259	241	258	251	264	259	259	265	273	271	266
25-Jun-04	229	181	170	150	155	171	144	293	296	317	304	283	275	256	214	229	234	229	232	248	255	250	238	215	245
26-Jun-04	239	136	231	333	236	242	274	284	267	266	263	268	270	274	258	260	263	265	269	275	265	263	268	273	267
27-Jun-04	276	267	267	270	264	266	270	277	277	269	287	293	277	280	281	270	266	257	262	261	247	234	249	33	272
28-Jun-04	62	63	91	89	85	74	77	75	93	116	128	112	99	93	96	225	275	290	275	251	267	230	221	219	98
29-Jun-04	193	94	138	124	155	173	178	211	243	340	245	253	230	190	244	220	195	214	216	221	223	226	220	227	190
30-Jun-04	236	235	208	220	214	225	253	263	275	269	270	264	266	275	275	259	264	256	57	125	178	162	221	325	254
Hourly Avg	104	141	156	148	140	145	102	70	80	101	102	89	115	138	174	144	167	188	158	188	200	204	233	220	

Station: Henry Pirker

Station Owner: PASZA

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

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

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms	Operational Time: 720 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 100.0%

Percentile	99	95	75	50	25	5	1
	65.9	51.8	25.4	14.4	9.6	5.6	4.6

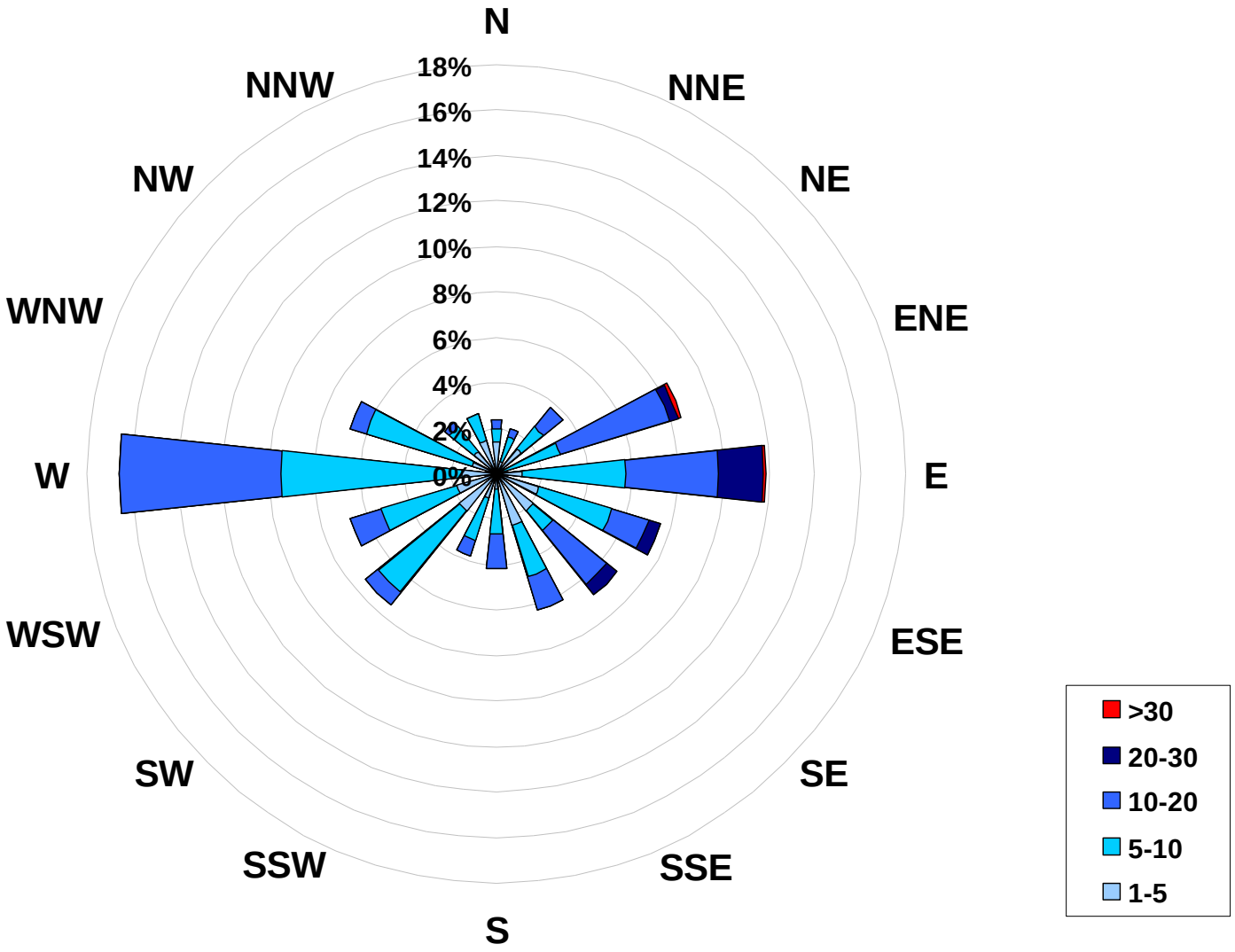
Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jun-04	4	9	51	34	9	39	13	17	23	45	33	22	24	32	30	51	50	33	14	52	17	43	22	34	51.8
2-Jun-04	19	13	13	17	24	12	5	5	6	6	7	8	9	9	11	16	6	7	6	7	11	13	14	10	23.8
3-Jun-04	10	14	17	14	17	15	14	17	15	17	16	16	24	39	52	32	34	38	39	24	11	11	19	16	51.6
4-Jun-04	28	47	39	12	61	22	18	17	15	10	9	9	10	8	9	6	6	6	12	14	7	20	12	9	60.9
5-Jun-04	8	7	8	11	12	6	10	20	22	54	54	74	48	56	58	26	48	36	33	11	11	6	8	8	74.2
6-Jun-04	7	6	6	6	10	10	9	12	17	30	41	73	38	30	18	13	12	12	13	10	9	9	13	15	72.7
7-Jun-04	16	14	14	10	6	15	65	30	68	33	34	40	51	42	50	32	42	31	12	11	10	9	10	11	67.7
8-Jun-04	6	8	6	5	5	4	5	5	6	5	7	11	6	5	7	6	5	5	7	7	6	5	7	6	11.0
9-Jun-04	9	12	11	18	10	11	19	17	23	30	27	56	58	36	73	53	46	44	11	9	7	13	10	10	72.8
10-Jun-04	8	10	9	6	8	9	10	17	23	44	40	44	33	29	40	34	39	22	17	12	8	11	11	12	44.4
11-Jun-04	22	8	11	12	23	33	40	40	37	33	38	52	46	52	52	61	49	21	40	13	9	7	51	11	60.7
12-Jun-04	9	10	8	10	6	6	10	16	24	18	26	34	45	59	39	18	47	12	22	34	21	9	28	14	59.1
13-Jun-04	29	34	35	17	21	15	18	21	36	42	48	28	38	23	17	29	21	20	19	8	7	34	49	18	48.9
14-Jun-04	15	14	32	14	17	8	13	26	47	32	52	31	65	63	43	73	24	38	18	11	9	18	49	22	73.0
15-Jun-04	17	21	23	20	15	34	12	18	22	35	32	58	41	53	43	62	30	18	14	13	7	6	13	12	62.3
16-Jun-04	15	17	33	22	11	8	9	12	15	12	13	18	15	18	21	16	16	21	25	23	9	18	28	22	33.3
17-Jun-04	8	15	11	6	8	8	6	5	10	14	17	28	24	27	24	21	13	10	10	7	5	5	4	5	27.7
18-Jun-04	15	16	10	10	14	7	7	7	11	41	38	66	54	38	45	29	19	14	11	6	11	9	12	13	66.1
19-Jun-04	7	12	12	8	37	9	40	22	37	72	33	30	15	16	22	14	6	10	14	9	10	14	18	13	72.3
20-Jun-04	13	13	16	12	9	10	13	14	13	21	34	25	28	22	21	19	18	27	12	13	9	13	14	18	33.8
21-Jun-04	11	12	15	15	12	16	16	17	13	14	17	16	20	20	17	18	14	12	12	13	12	11	14	9	20.0
22-Jun-04	10	9	9	11	10	11	10	11	13	16	17	22	22	17	20	22	21	26	21	15	11	9	10	10	26.1
23-Jun-04	28	14	21	20	26	31	27	19	25	27	33	46	59	51	53	54	61	57	30	8	9	4	13	15	61.4
24-Jun-04	42	20	42	58	45	15	13	18	27	29	66	35	49	57	35	49	33	43	15	12	8	5	5	8	66.4
25-Jun-04	7	6	10	11	7	13	8	21	22	15	7	8	12	8	8	8	8	16	35	25	4	4	21	7	35.4
26-Jun-04	22	11	8	6	5	5	5	6	9	9	10	12	10	11	12	10	9	8	7	6	5	5	7	6	22.0
27-Jun-04	6	14	21	9	14	12	8	6	6	11	12	21	29	19	35	23	28	17	11	9	8	15	19	13	34.8
28-Jun-04	14	9	12	15	15	14	20	15	20	24	19	34	17	19	20	15	36	13	22	28	11	10	12	14	35.7
29-Jun-04	30	7	12	8	23	9	8	8	6	7	7	8	7	8	13	12	14	17	13	9	11	8	6	15	29.7
30-Jun-04	11	8	11	12	11	10	8	8	10	14	12	15	27	22	21	11	14	15	24	23	9	26	22	24	26.7
Hourly Max	42	47	51	58	61	39	65	40	68	72	66	74	65	63	73	73	61	57	40	52	21	43	51	34	

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



Calm 0%

PEACE AIRSHED ZONE ASSOCIATION

PASZA Monthly Passive Data Summary

Table 1. PASZA Passive Stations for June 2004

Peace Airshed Zone Association - PASZA Passive Stations for June 2004

Station Number	Station Name	PASZA SO2 ppb	PASZA O3 ppb	PASZA NO2 ppb	Site Legal
Duplicates					
46a	Little Smoky	**0.3**	**29.5**	**1.6**	
46b	Little Smoky	**0.3**	**26.5**	**1.4**	
47a	Kinuso	**0.1**	**26.6**	**0.7**	
47b	Kinuso	**0.2**	**28.6**	**0.6**	
48a	Deer Mountain	**0.2**	**29.9**	**0.6**	
48b	Deer Mountain	**0.2**	**30.9**	**0.5**	
49a	Grande Prairie HP	**0.2**	**40.8**	**4.4**	
49b	Grande Prairie HP	**0.3**	**31.3**	**4.6**	
1	Silver Valley	**0.3**	**29.9**	**1.3**	08-27-081-11 W6M
2	Bay Tree	**0.2**	**29.3**	**0.6**	13-16-078-13 W6M
3	Forth Creek	**0.3**	**43.3**	**1.0**	04-13-082-07 W6M
4	Gordondale	**0.4**	**34.5**	**0.9**	04-34-078-10 W6M
5	Boone Creek	**0.2**	**33.0**	**0.6**	01-23-076-11 W6M
7	Steeprock Creek	**0.1**	**30.4**	**0.6**	09-35-072-13 W6M
9	Spirit River	**0.2**	**30.7**	**2.7**	08-12-079-07 W6M
10	Woking	**0.3**	**26.6**	**1.0**	01-13-076-07 W6M
11	Webber Creek	**0.3**	**33.0**	**2.2**	09-36-074-09 W6M
12	Hythe	**0.3**	**28.4**	**1.6**	14-36-072-11 W6M
14	Sylvester	**0.1**	**25.7**	**1.4**	08-06-069-12 W6M
16	Beaverlodge	**0.2**	**37.5**	**1.7**	15-36-071-10 W6M
17	Poplar	**0.2**	**31.0**	**2.4**	13-06-073-08 W6M
18	Saddle Hills	**0.2**	**30.4**	**1.1**	04-25-074-07 W6M

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

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
19	Wanham	**0.3**	**30.3**	**0.9**	16-22-077-03 W6M
20	Shaftesbury	**0.1**	**29.8**	**0.8**	04-03-082-23 W5M
21	Eaglesham	**0.1**	**29.3**	**1.9**	16-21-079-25 W5M
23	Bear Lake	**0.3**	**31.3**	**2.6**	15-31-072-06 W6M
24	Wembley	**0.2**	**25.7**	**2.5**	12-31-070-08 W6M
25	Pinto Creek	**0.3**	**27.9**	**1.2**	04-24-069-11 W6M
26	Flyingshot	**0.2**	**31.6**	**1.3**	15-36-070-07 W6M
27	Grande Prairie I	**0.3**	**37.0**	**4.8**	08-15-071-06 W6M
28	Clairmont Lake	**0.2**	**25.4**	**1.7**	09-06-073-04 W6M
29	Smoky Heights	**0.3**	**31.2**	**0.9**	04-06-075-02 W6M
30	Fitzsimmons	**0.2**	**28.1**	**1.0**	15-36-072-03 W6M
32	Gold Creek	**0.6**	**27.4**	**1.0**	06-33-067-05 W6M
33	Wapiti	**0.2**	**34.3**	**0.9**	02-25-071-03 W6M
34	Puskwaskau	**0.2**	**24.7**	**0.3**	15-35-074-25 W5M
35	Jean Cote	**0.2**	**34.0**	**1.8**	12-35-079-21 W5M
36	Guy	**0.2**	**29.6**	**2.2**	03-04-076-22 W5M
37	Crooked Creek	**0.2**	**32.4**	**1.3**	16-01-071-26 W5M
38	Karr Creek		**Samples Missing**		10-16-065-02 W6M
39	Clouston Creek	**0.2**	**27.3**	**0.9**	12-01-073-22 W5M
40	McLennan	**0.3**	**35.3**	**2.8**	03-29-077-19 W5M
41	Valleyview	**0.4**	**35.7**	**0.9**	09-30-069-22 W5M
42	Sunset House	**0.2**	**41.2**	**0.5**	05-32-070-19 W5M
43	High Prairie	**0.1**	**33.2**	**na**	16-13-074-17 W5M
44	Peavine	**0.2**	**35.7**	**0.4**	03-05-079-15 W5M
45	Gift Lake	**0.1**	**32.5**	**1.0**	10-07-079-12 W5M
46	Little Smoky	**0.3**	**28.0**	**1.5**	12-01-065-21 W5M
47	Kinuso	**0.2**	**27.6**	**0.6**	12-10-073-10 W5M
48	Deer Mountain	**0.2**	**30.4**	**0.5**	15-22-068-09 W5M
49	Grande Prairie HP	**0.3**	**36.0**	**4.5**	17-26-071-06 W6M

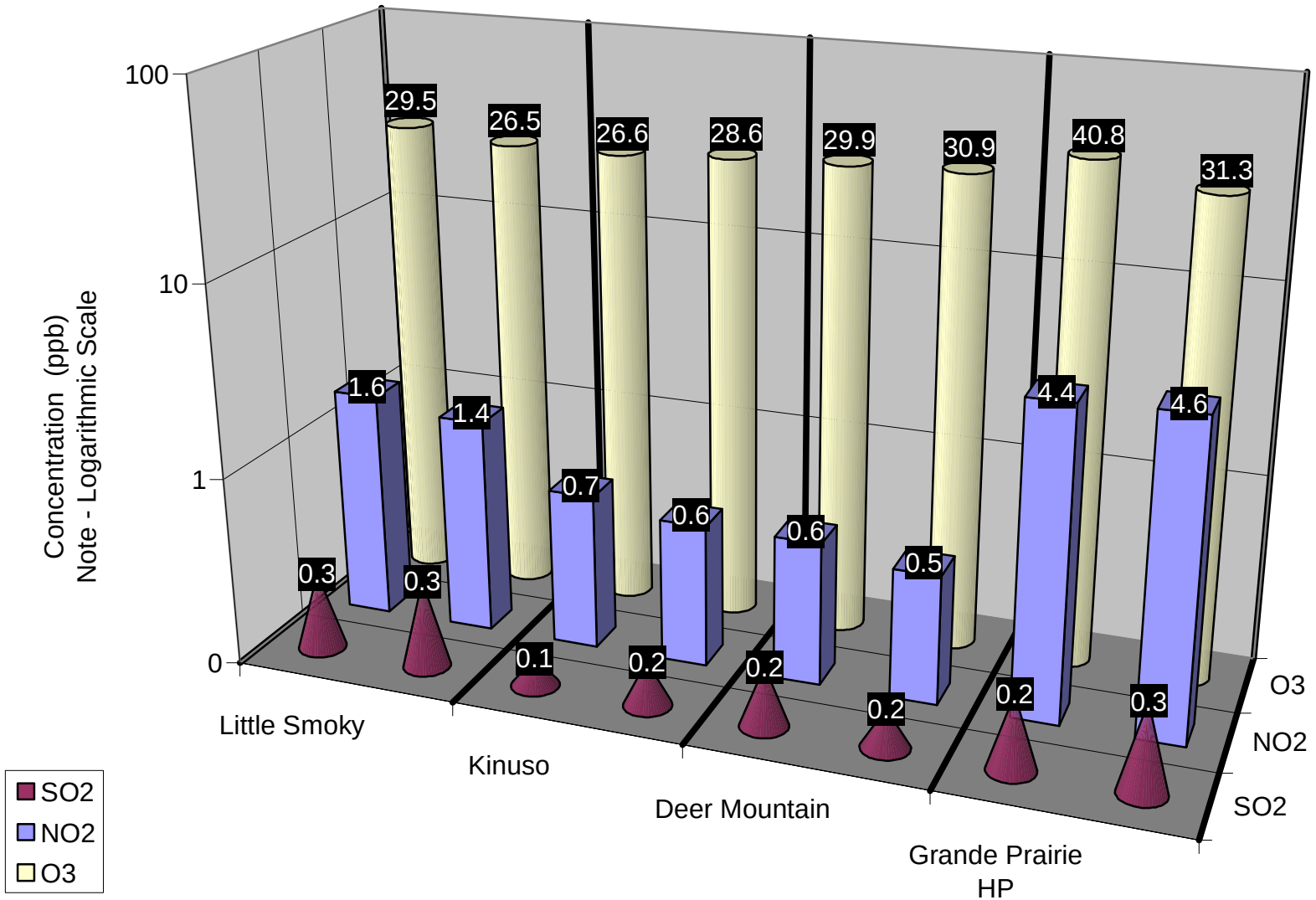


Figure 20. Duplicate Summary Chart

Table 2. Passive Summary Results for June 2004

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for June 2004 (PASZA Zone)		
Mean	**0.2**	**31.3**	**1.5**
Standard Deviation	**0.1**	**4.1**	**1.0**
Minimum	**0.1** Shaftesbury (#20)	**24.7** Puskwaskau (#34)	**0.3** Puskwaskau (#34)
Maximum	**0.6** Gold Creek (#32)	**43.3** Forth Creek (#3)	**4.8** Grande Prairie I (#27)

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

	SO_2	O_3	NO_2
AENV Beaverlodge station	**0.4**	**33.3**	**3.5**
PASZA Beaverlodge passive	**0.2**	**37.5**	**1.7**

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

	SO_2	O_3	NO_2
PASZA Henry Pirker station	**0.3**	**27.7**	**5.3**
PASZA Grande Prairie passive	**0.3**	**36.0**	**4.5**

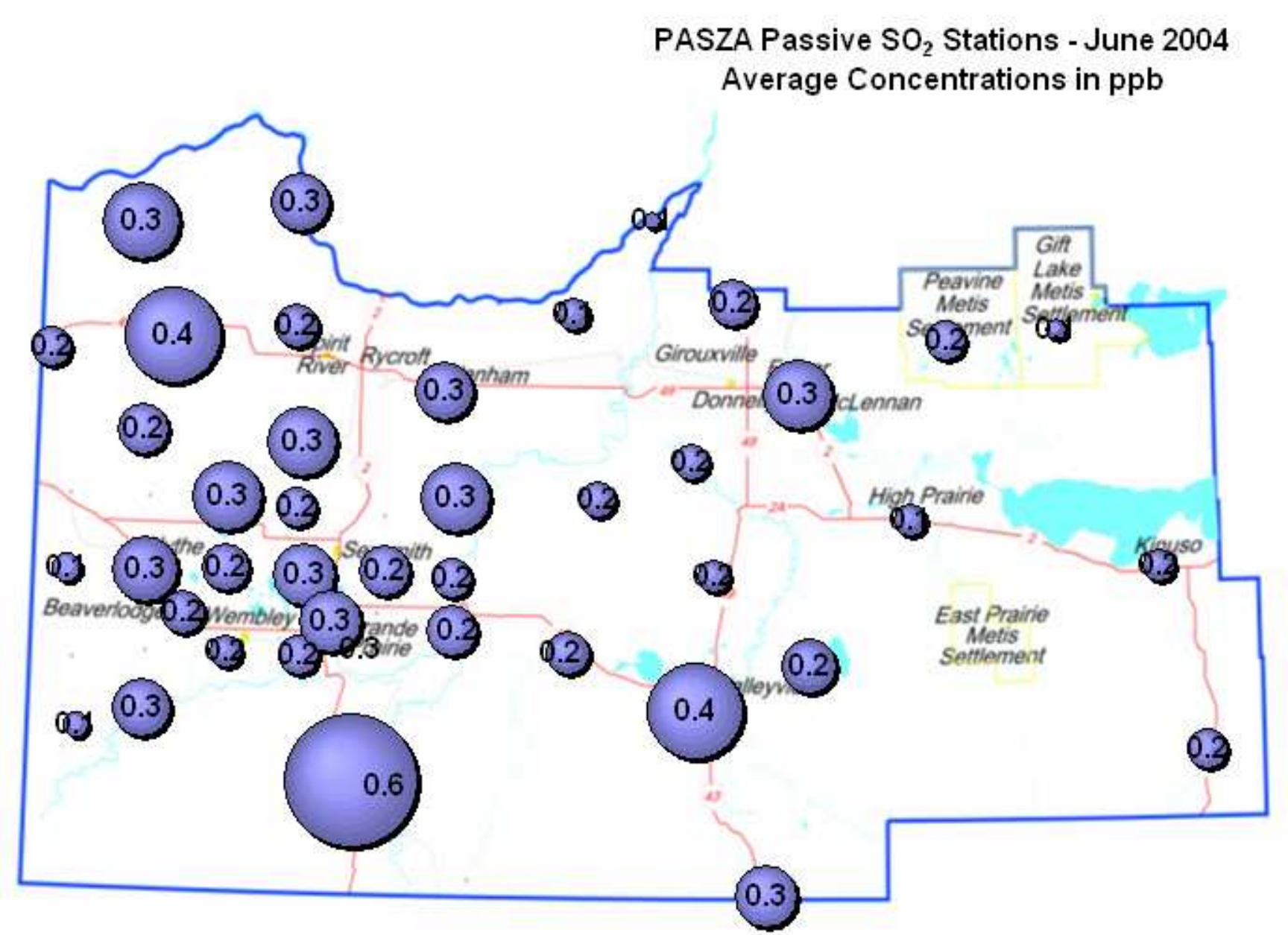


Figure 21. SO_2 Bubble Chart

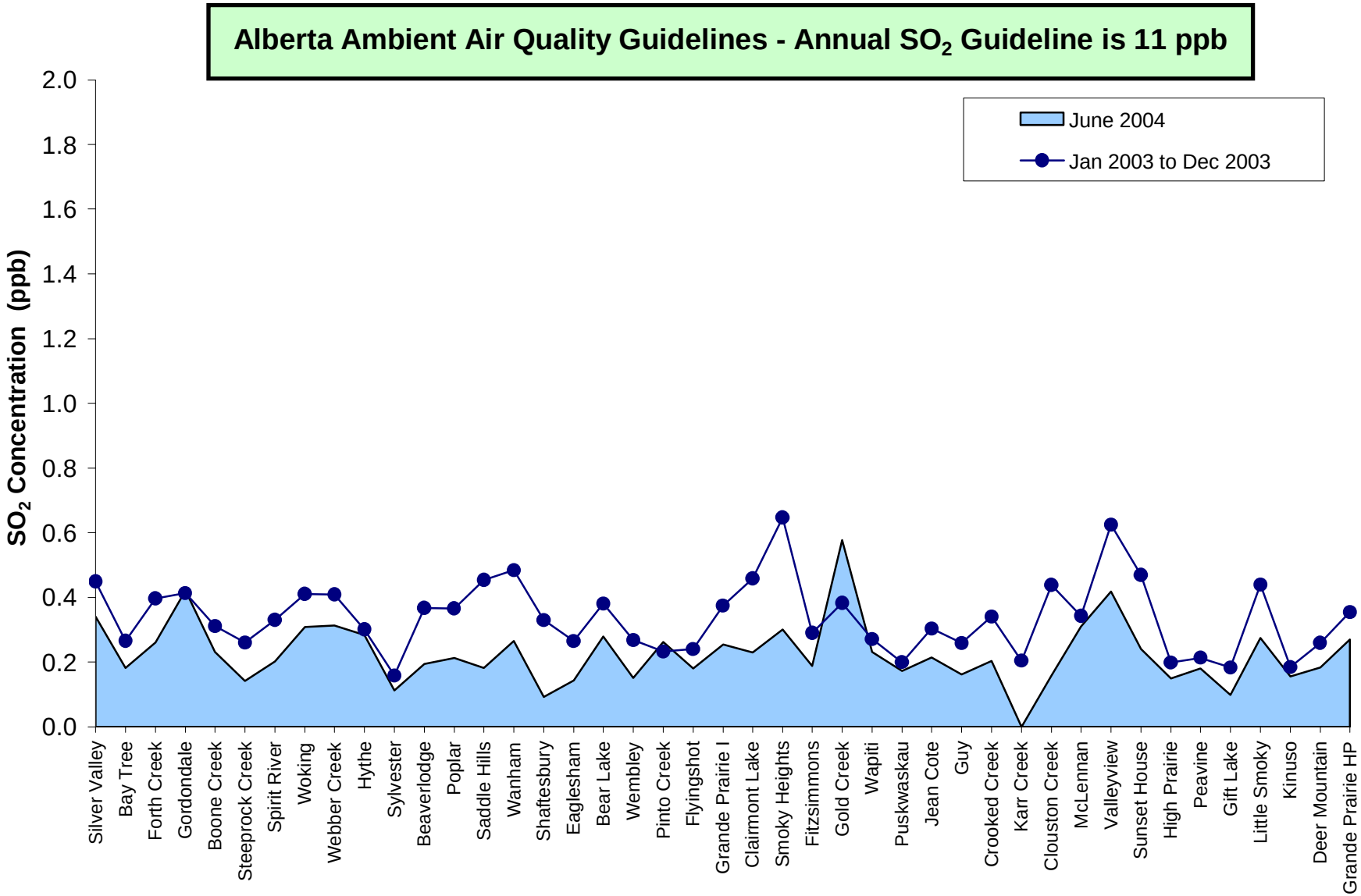


Figure 22. SO_2 Summary Chart

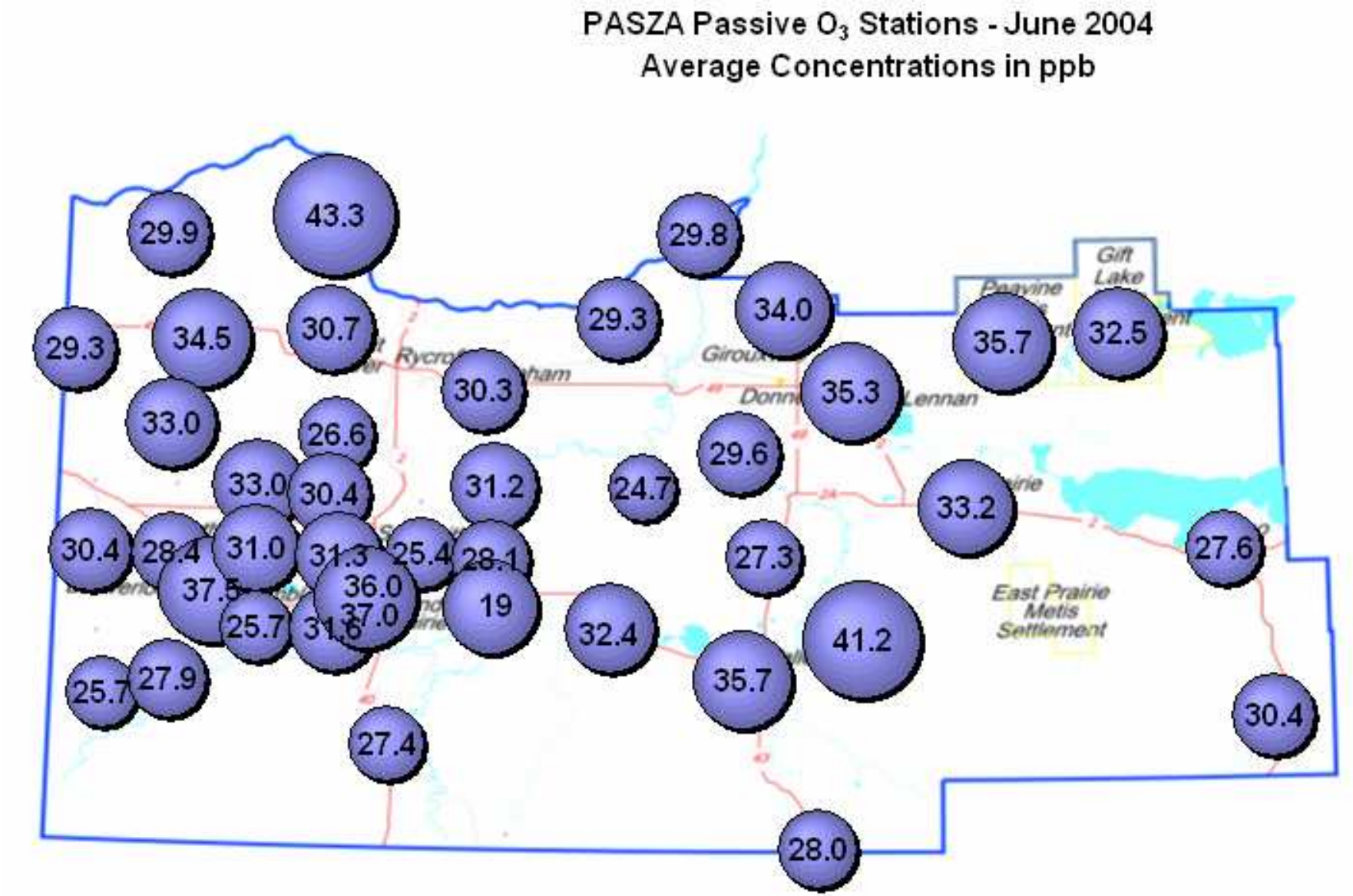


Figure 23. O_3 Bubble Chart

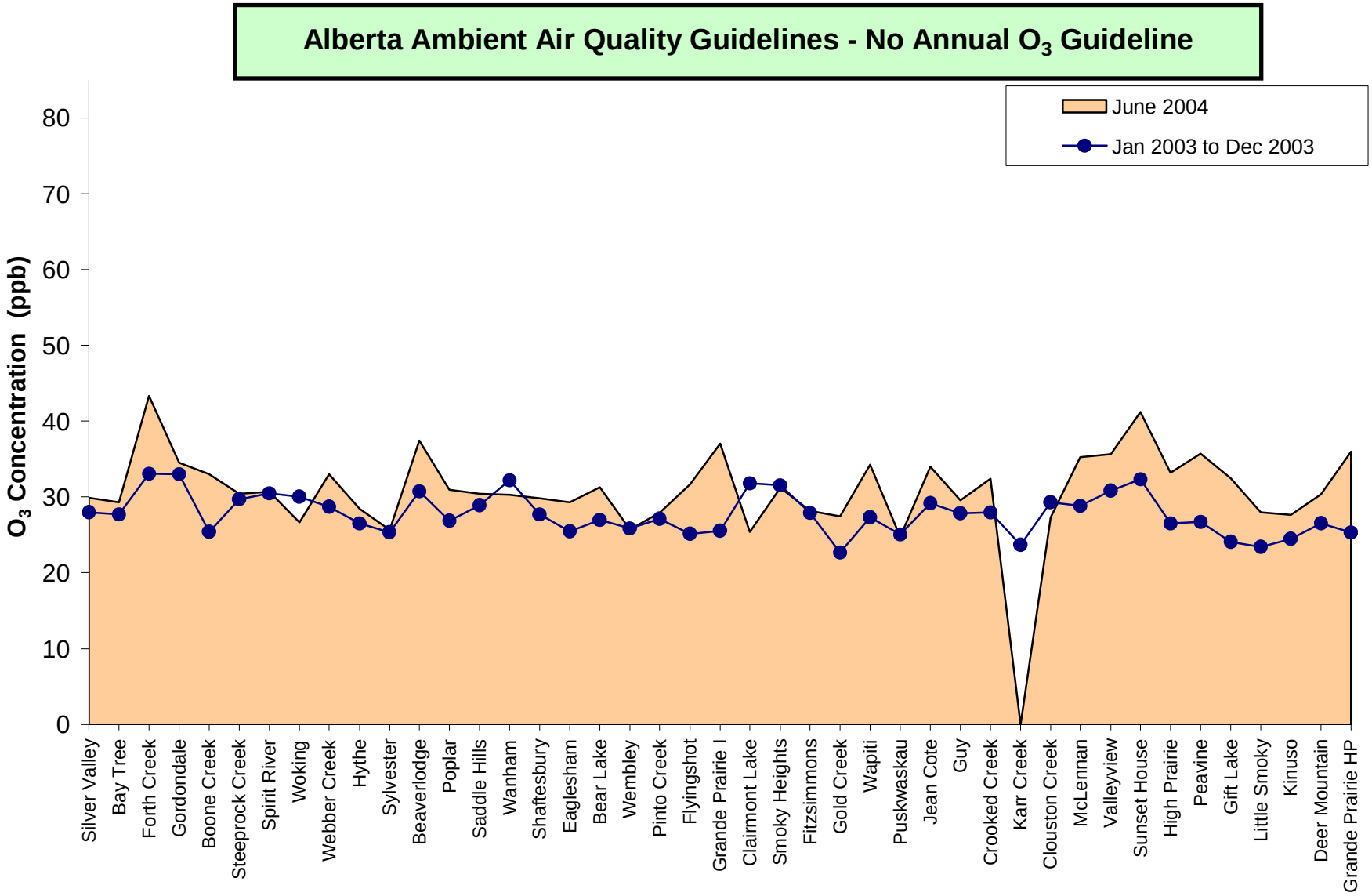


Figure 24. O_3 Summary Chart

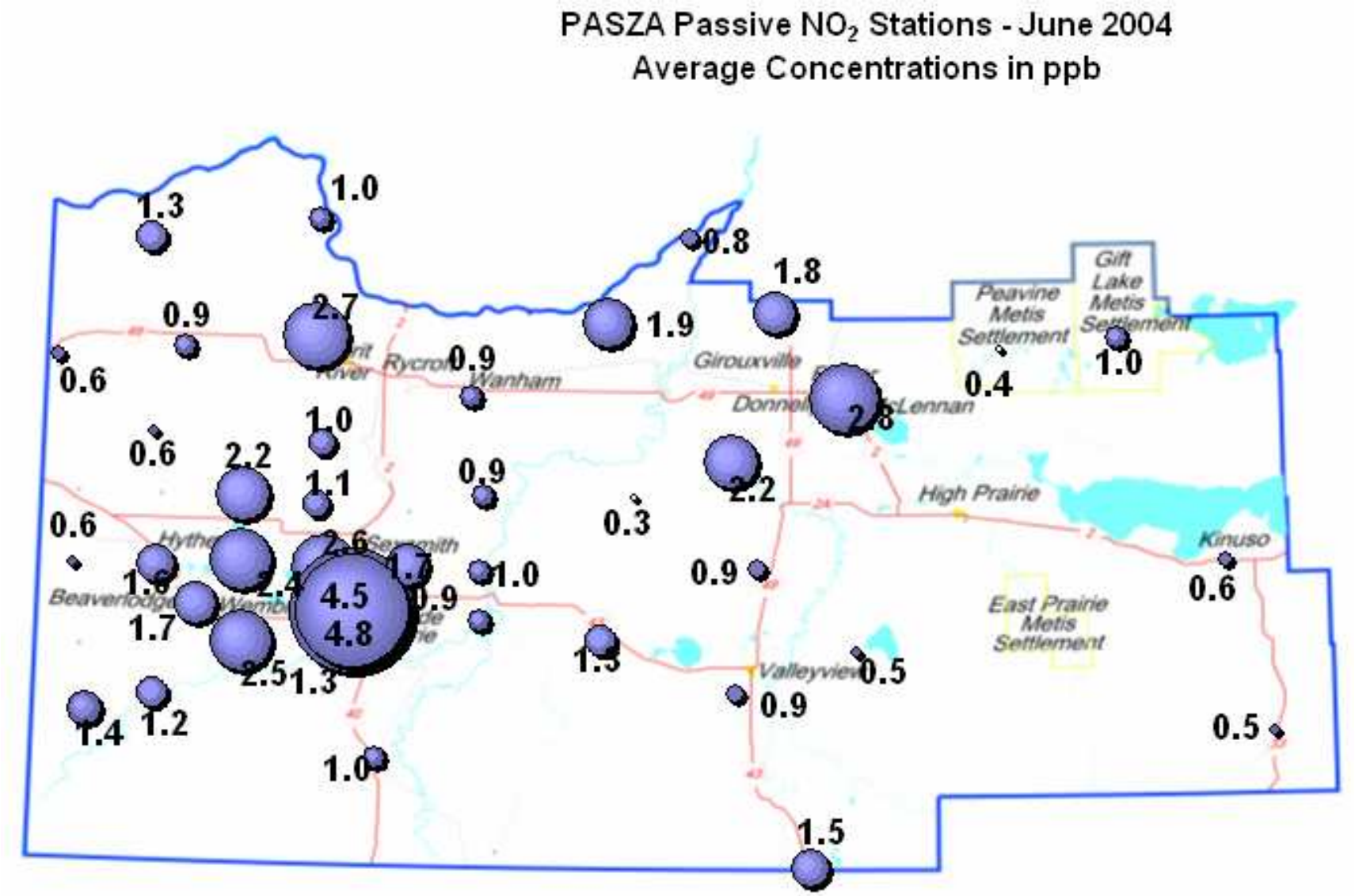


Figure 25. NO_2 Bubble Chart

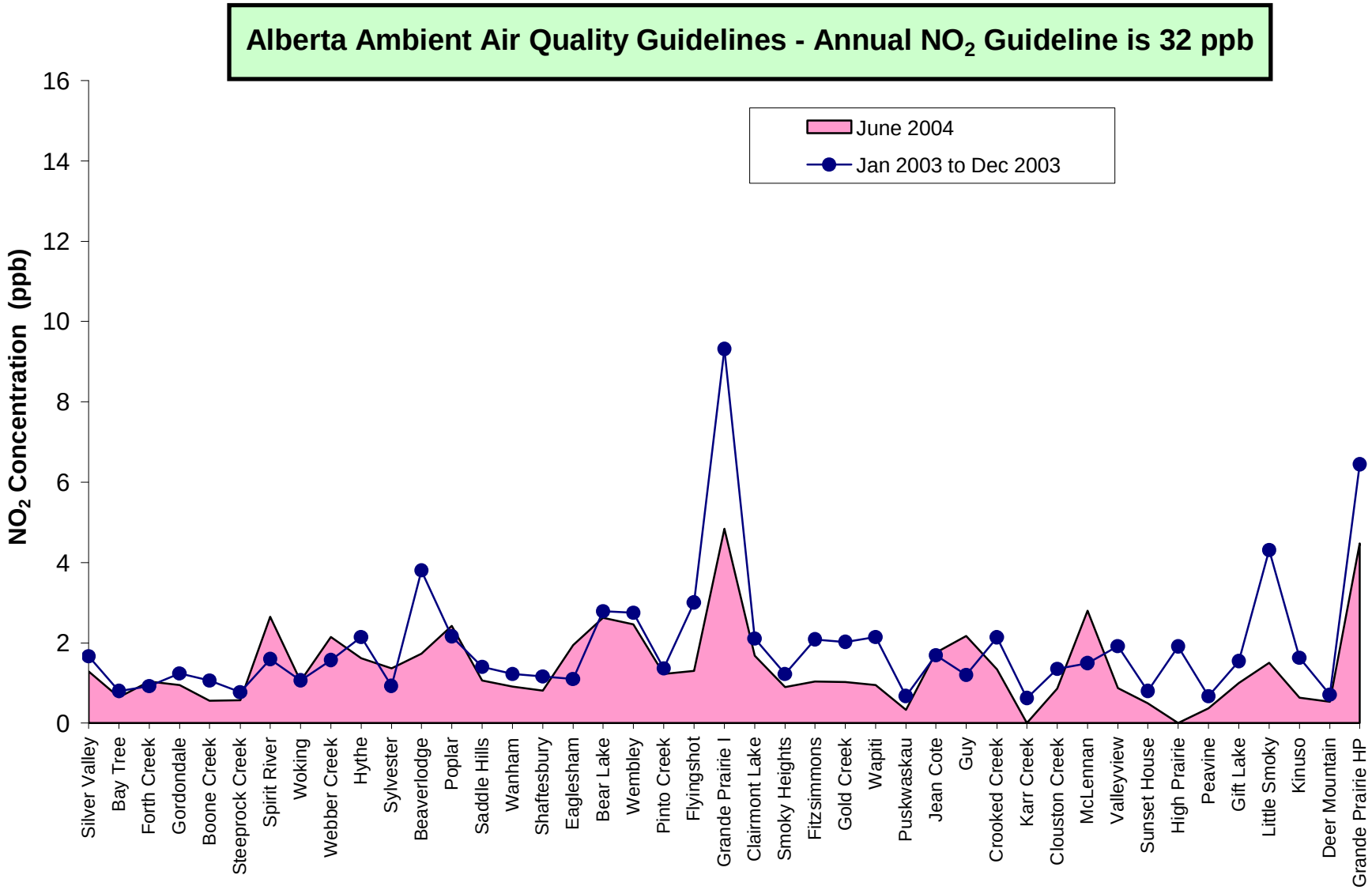


Figure 26. NO_2 Summary Chart

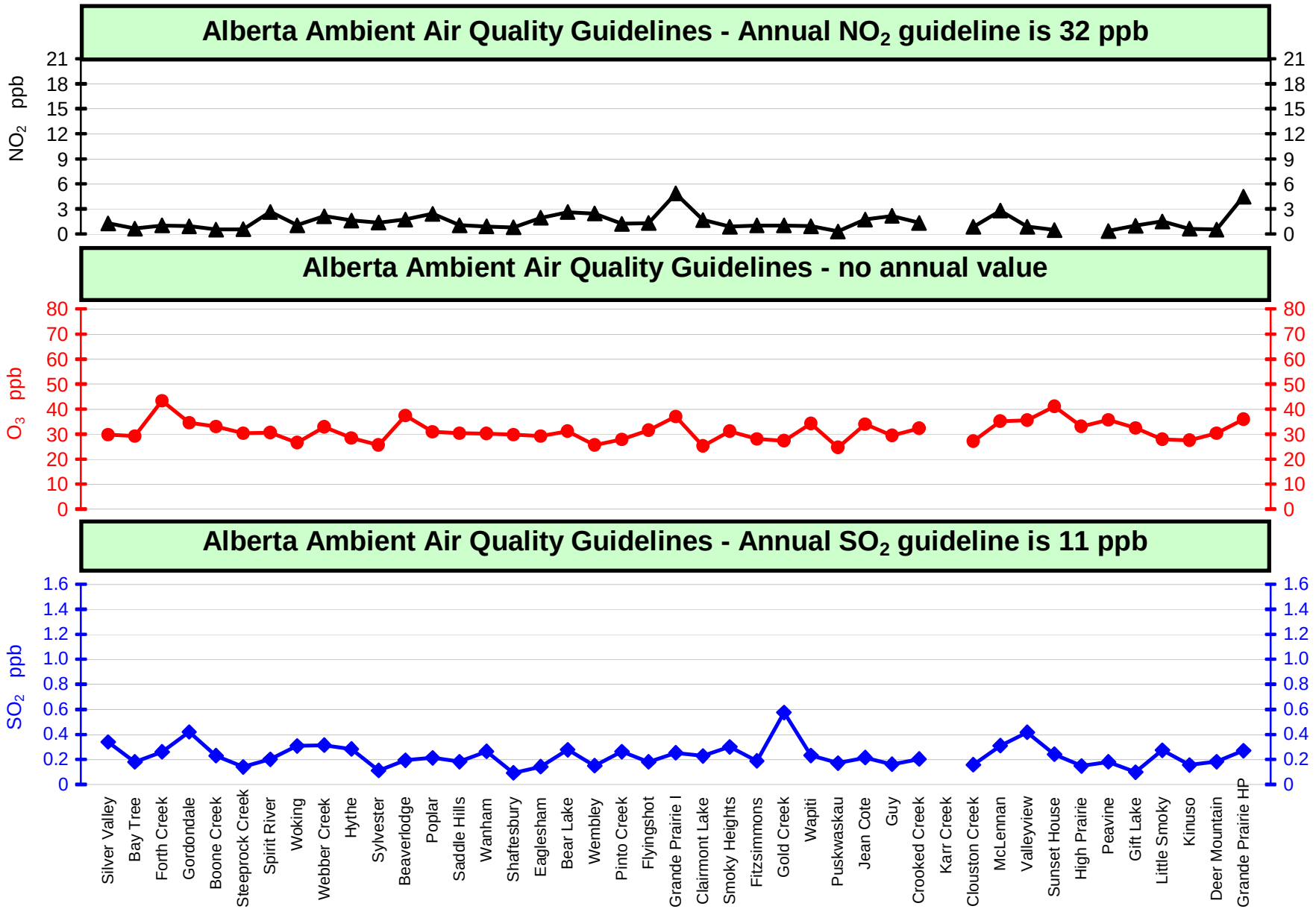


Figure 27. Overview Summary

June 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

FOCUS AIR QUALITY MONITORING

Parameter **SO2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine: Install	Removal	Other:
Start Time (MST)	9:30	End Time (MST)	12:15
Barometric Pressure	27.5 inches Hg	Station Temperature	19.5 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	0.935038	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	1.008522	Calculated slope	1.001058
Calculated intercept	-0.569198	Calculated intercept	0.020517
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	151		246	
Vacuum	22.7	in Hg	22.7	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	2875.2	0.0	-0.9	N/A
3075	2875.2	397.6	396.7	1.0023
6065	5671.0	201.6	201.8	0.9989
12680	11856.3	96.4	97.2	0.9920
zero	2828.5	0.0	-0.9	As Found Zero
3025	2828.5	404.2	385.6	As Found Span
			Average Correction Factor	0.9977

Calculated value of As Found Response: 389.219 ppm Percent Change of As Found: 3.7%

	before calibration		after calibration	
Auto zero	-0.8	ppm	0.2	ppm
Auto span	267.5	ppm	327.3	ppm

Notes: Span adjustment performed; all analyzer functions seem fine.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

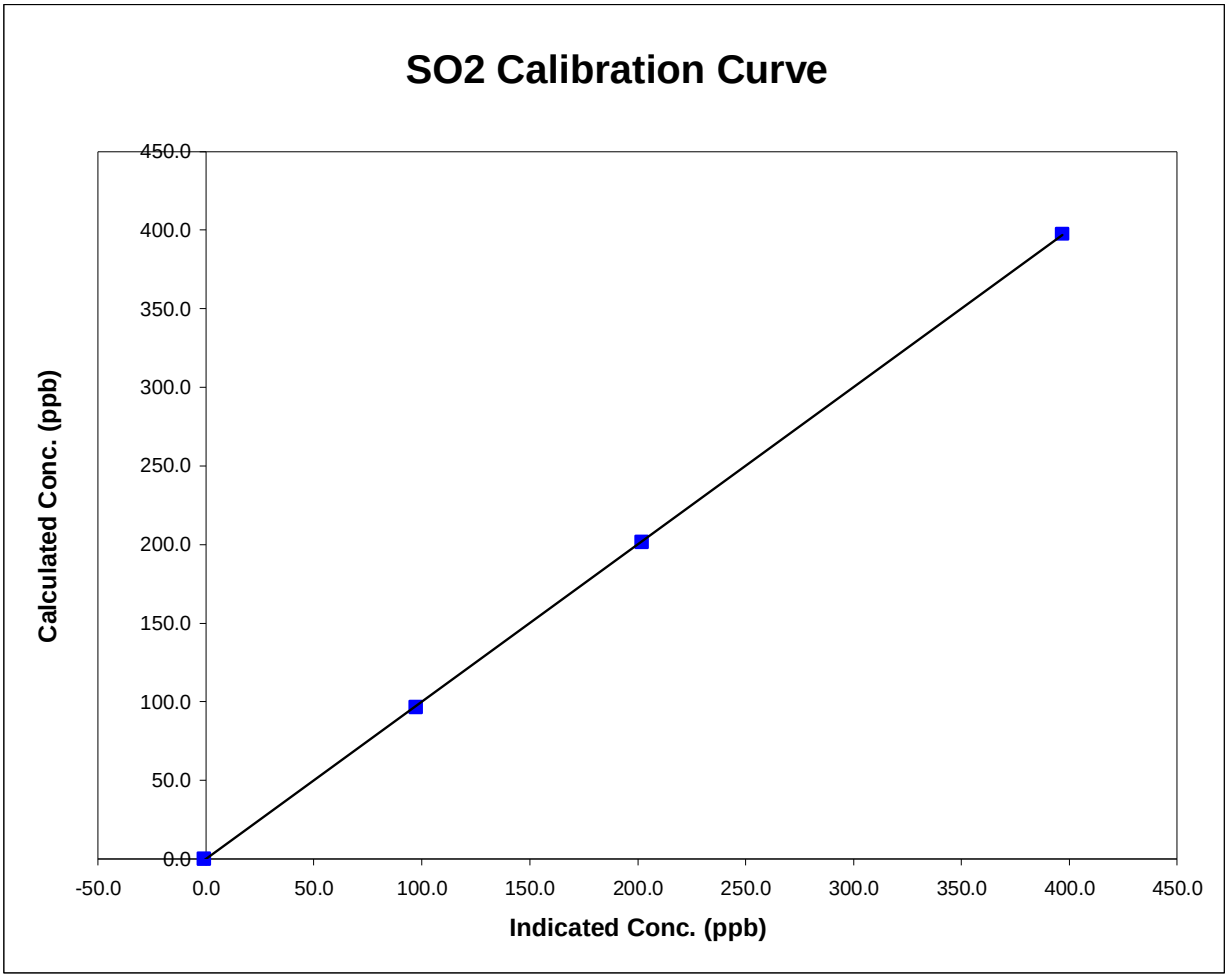
FOCUS AIR QUALITY MONITORING

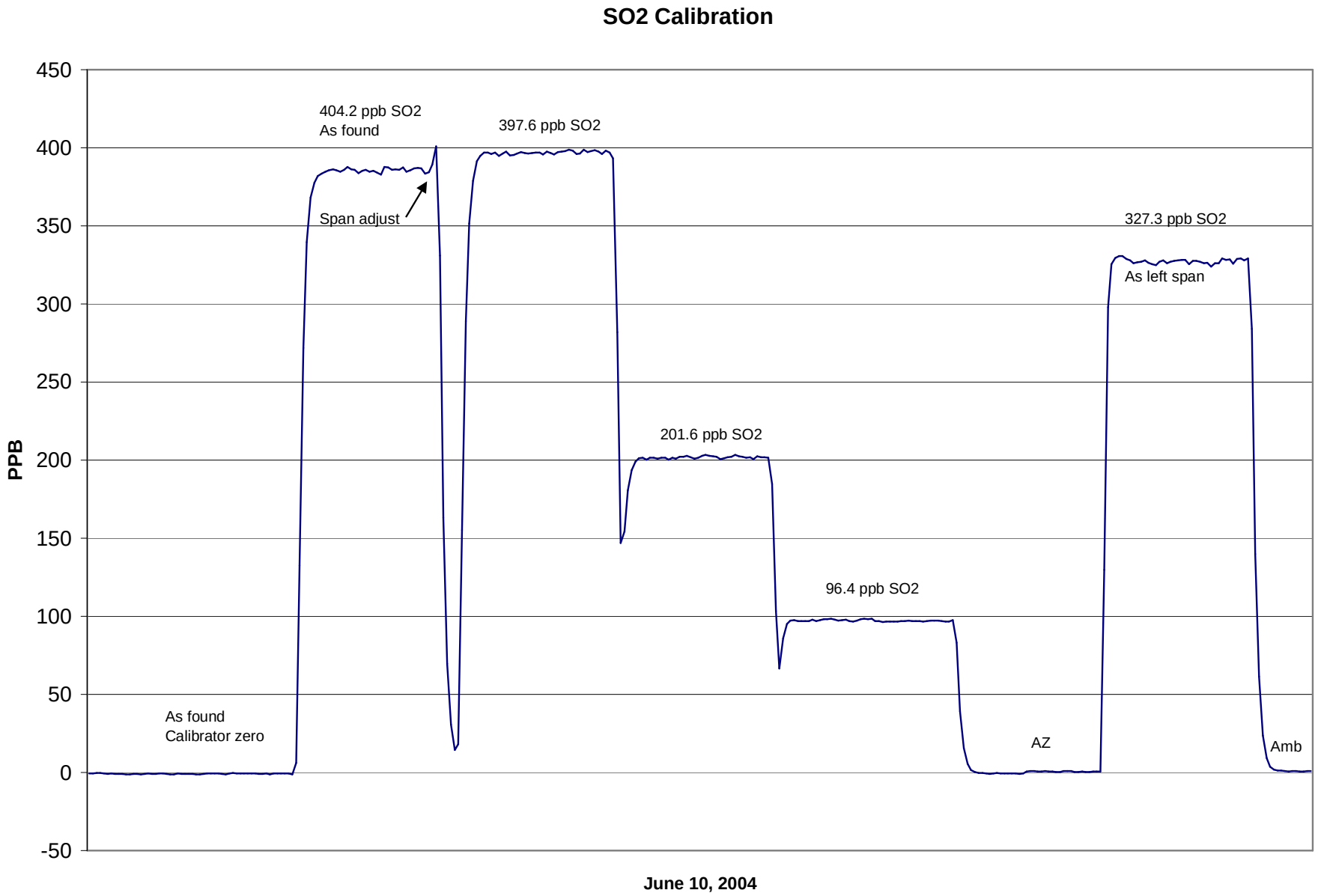
Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:30	End Time (MST)	12:15
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	-0.9	N/A		
397.6	396.7	1.0023	Correlation Coefficient	0.999977
201.6	201.8	0.9989		
96.4	97.2	0.9920	Slope	1.001058
			Intercept	0.020517




SO2 Calibration
450
400
350
300
250
200
150
100
50
0
-50
PPB
404.2 ppb SO2
As found
397.6 ppb SO2
Span adjust
327.3 ppb SO2
As left span
201.6 ppb SO2
96.4 ppb SO2
As found
Calibrator zero
AZ
Amb
June 10, 2004

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 18, 2004
Station Number	1	Station Location	Muskoseepi Park

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	7:30		End Time (MST)	13:55	
Barometric Pressure	0.918	Atm	Station Temperature	21.0	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	0.998943	1.001909	1.002693
	Data Offset	-1.195653	0.649576	0.146719
After	Data Slope	0.997645	1.000853	1.000273
	Data Offset	0.067325	0.792182	0.963496
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	16.7	ppb	12.0	mV
NOx background	17.2	ppb	12.1	mV
NO coefficient	2.315		2.833	
NOx coefficient	1.003		1.003	
Chamber Temp	49.5	Deg C	49.7	Deg C
Cooler Temp	-3.4	Deg C	-3.4	Deg C
Converter Temp	342.0	Deg C	342.0	Deg C
Perm Temp	NA	Deg C	NA	Deg C
Pressure	19.0	inches Hg	20.8	inches Hg
Sample Flow	NA	ccm	NA	ccm

Notes: NOX vacuum noted low; slight leak discovered with O3 scrubber. Resealed cannister and vac came up
Point instability is still constant problem; problem still appears electronic but limited parts available.

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 10, 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	0.0	0.0	0.0	N/A	N/A
1	4993	39.97	401.1	399.5	1.6	399.9	398.6	1.2	1.0028	1.0023
2	4993	19.98	201.3	200.5	0.8	201.0	199.9	1.0	1.0012	1.0029
3	4993	9.97	100.6	100.2	0.4	98.2	97.7	0.6	1.0243	1.0263
AFZ	4993	0.00	0.0	0.0	0.0	-8.4	-8.1	-0.3	0.0000	0.0000
AFS	4993	39.97	401.1	399.5	1.6	369.0	367.7	1.1	1.0869	1.0865
							Average Correction Factor		1.0095	1.0105

As Found Concentrations: NO_X= 378.0 NO= 375.9 As Found Percent Change NO_X= -5.7% NO= -5.9%

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	400.6	389.6	11.0	390.4	388.5	0.0	N/A	N/A	N/A	N/A
350	400.6	80.4	320.2	400.3	79.4	320.8	1.0008	1.0124	0.9983	100.2%
200	400.6	214.9	185.7	400.3	213.9	186.5	1.0007	1.0048	0.9958	100.4%
100	400.6	305.9	94.7	399.6	304.9	94.4	1.0024	1.0034	1.0022	99.8%
					Average Correction Factor		1.0013	1.0069	0.9988	100.1%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.3	-1.4	-0.7	ppb	1.1	0.4	0.9	ppb
Auto span	394.4	387.9	3.0	ppb	384.4	379.8	3.0	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

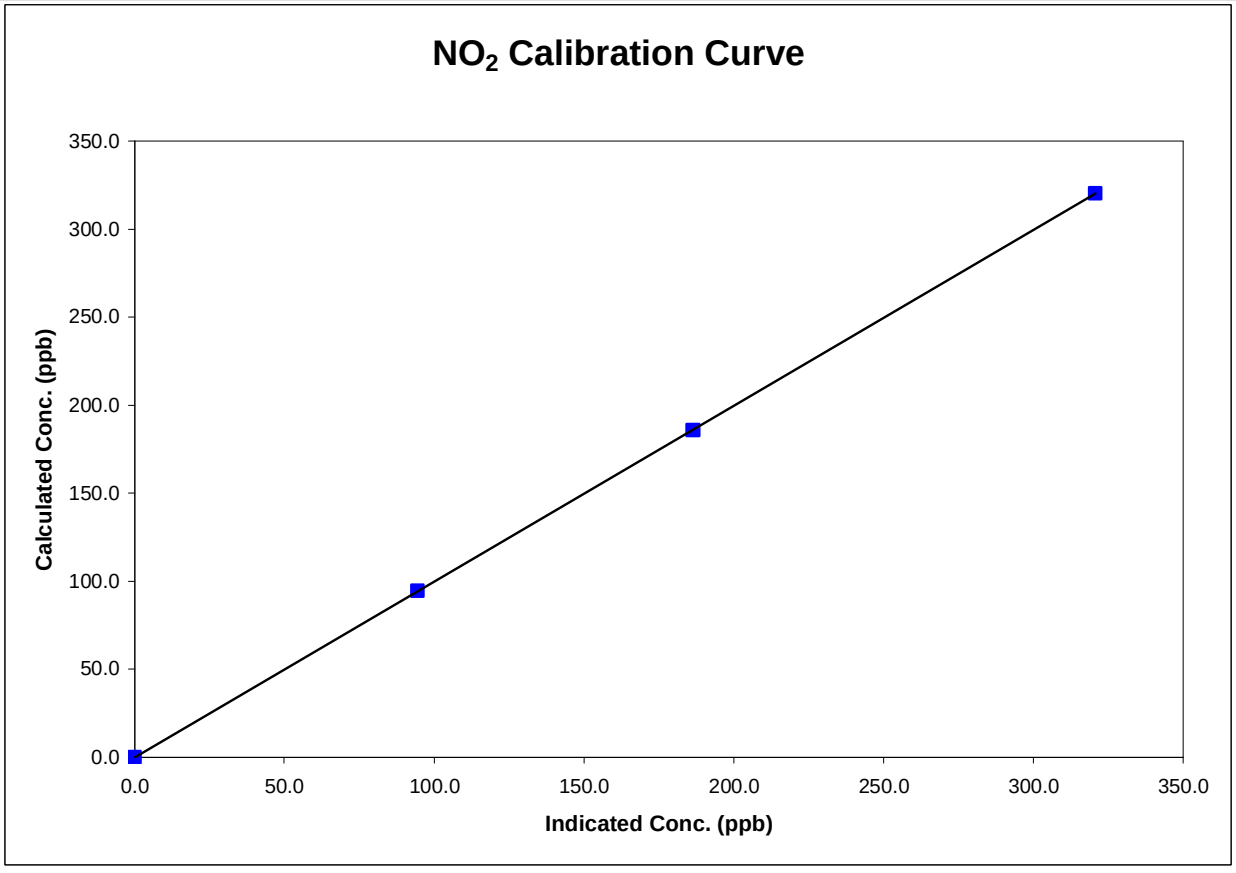
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 18, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:30	End Time (MST)	13:55
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	0.0000		
320.2	320.8	0.9983	Correlation Coefficient	0.999994
185.7	186.5	0.9958		
94.7	94.4	1.0022	Slope	0.997645
			Intercept	0.067325



Calibration Summary

Parameter NO_x

Air Monitoring Network **PASZA**

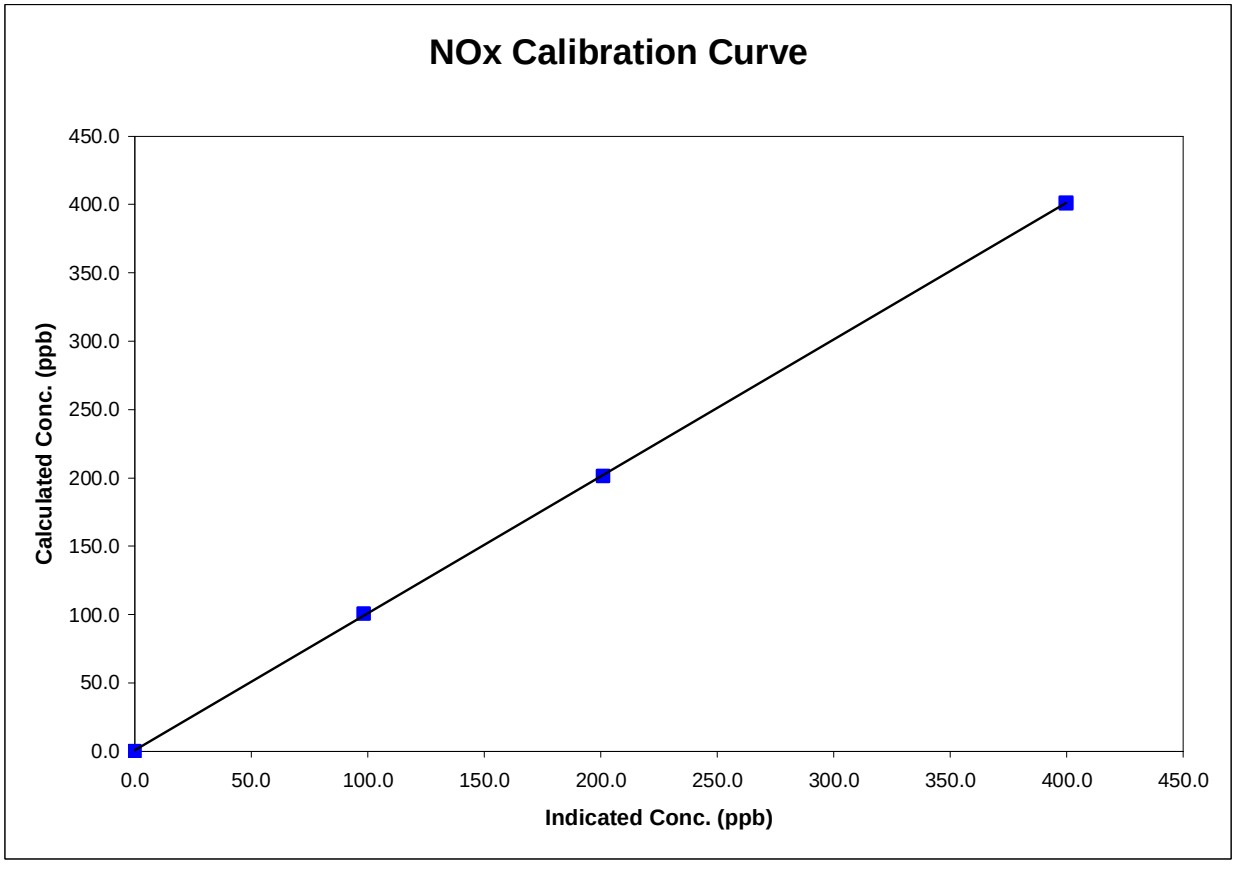
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 18, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:30	End Time (MST)	13:55
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	0.0000		
401.1	399.9	1.0028	Correlation Coefficient	0.999961
201.3	201.0	1.0012		
100.6	98.2	1.0243	Slope	1.000853
			Intercept	0.792182



Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **NO**

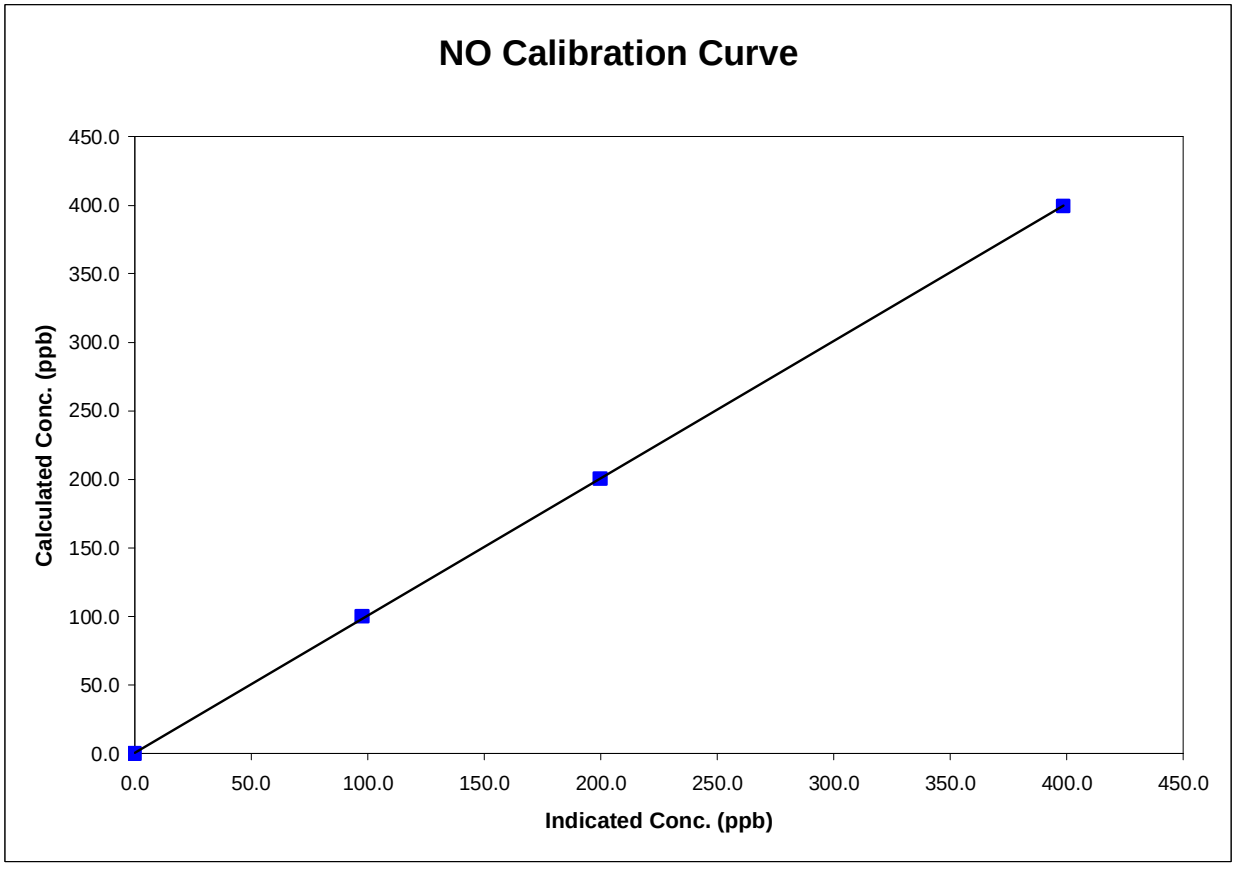
Air Monitoring Network **PASZA**

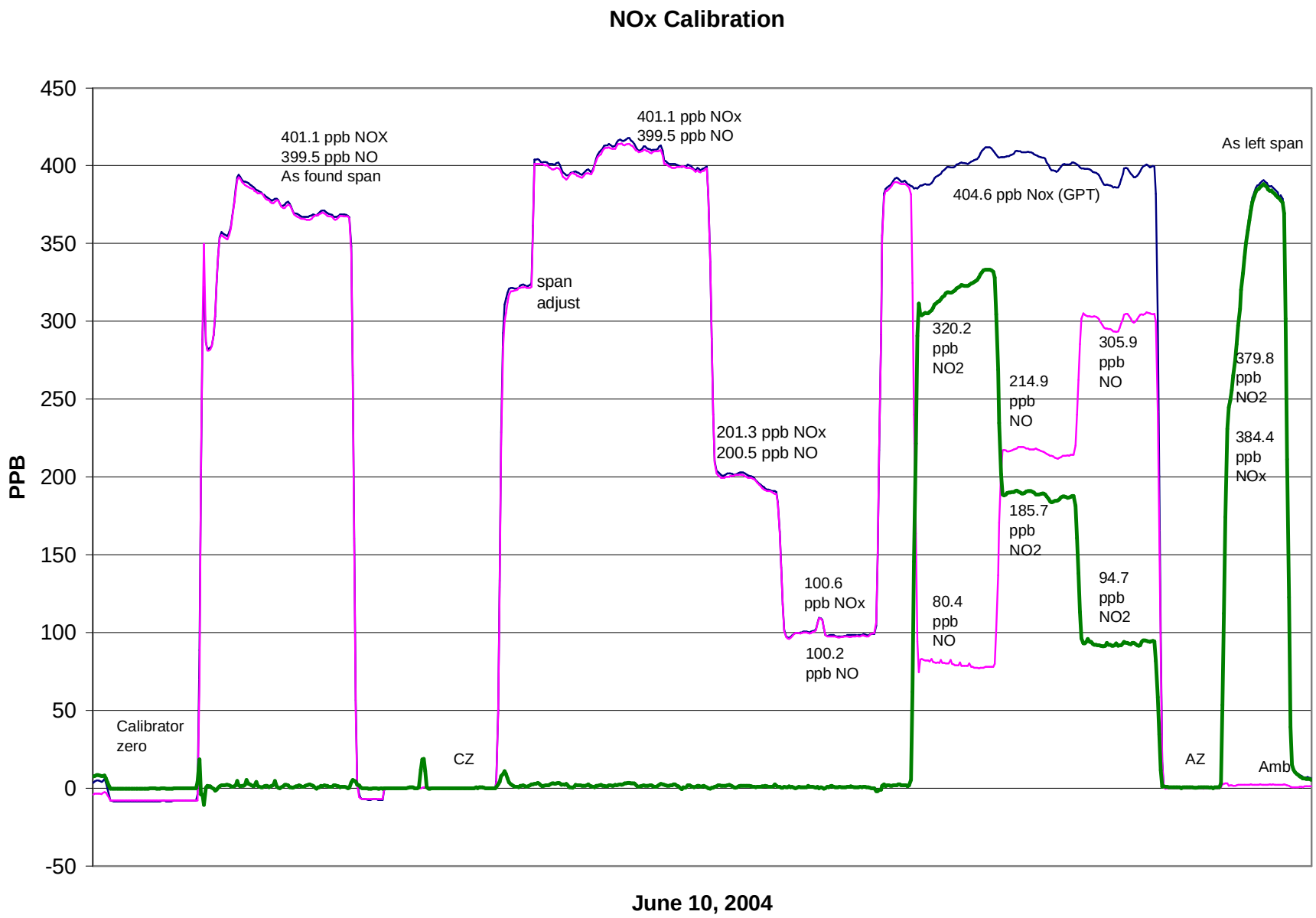
Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 18, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:30	End Time (MST)	13:55
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		
399.5	398.6	1.0023	Correlation Coefficient	0.999958
200.5	199.9	1.0029		
100.2	97.7	1.0263	Slope	1.000273
			Intercept	0.963496




NOx Calibration
PPB
450
400
350
300
250
200
150
100
50
0
-50
401.1 ppb NOX
399.5 ppb NO
As found span
401.1 ppb NOx
399.5 ppb NO
span
adjust
201.3 ppb NOx
200.5 ppb NO
100.6
ppb NOx
100.2
ppb NO
404.6 ppb Nox (GPT)
320.2
ppb
NO2
214.9
ppb
NO
305.9
ppb
NO
185.7
ppb
NO2
80.4
ppb
NO
94.7
ppb
NO2
As left span
379.8
ppb
NO2
384.4
ppb
NOx
Calibrator
zero
CZ
AZ
Amb
June 10, 2004

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 29th & 30th, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	12:00 - 23:59	June 29th	End Time (MST)	13:00 - 13:53	June 30th
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	0.997645	1.000853	1.000273
	Data Offset	0.067325	0.792182	0.963496
After	Data Slope	1.008902	1.003073	1.002583
	Data Offset	1.147658	-0.356225	-0.479091
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	12.0	ppb	7.8	mV
NOx background	12.1	ppb	7.3	mV
NO coefficient	2.833		1.281	
NOx coefficient	1.003		1.003	
Chamber Temp	49.7	Deg C	49.9	Deg C
Cooler Temp	-3.4	Deg C	-3.0	Deg C
Converter Temp	342.0	Deg C	342.0	Deg C
Perm Temp	NA	Deg C	NA	Deg C
Vacuum	20.5	inches Hg	20.8	inches Hg
Sample Flow	NA	ccm	NA	ccm

Notes: Maintenance performed between 12:53 to 20:37 MST on June 29th included replacement of the rxn cel main power board, temperature controller board, and O3 generator and purifier. Points very stable; cal continued. June 30th adjustment was span oven control to bring internal spans within range.

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 29th & 30th, 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	0.0	0.1	0.0	N/A	N/A
1	4993	39.98	401.2	399.6	1.6	400.1	398.8	1.6	1.0026	1.0020
2	4993	19.98	201.3	200.5	0.8	201.1	200.7	0.4	1.0007	0.9988
3	4993	9.98	100.7	100.3	0.4	101.1	100.9	0.1	0.9960	0.9943
AFZ	4993	0.00	0.0	0.0	0.0	0.3	-0.2	0.4	0.0000	0.0000
AFS	4993	29.98	301.4	300.2	1.2	276.5	275.4	1.1	1.0899	1.0901
							Average Correction Factor		0.9998	0.9984

As Found Concentrations: NO_X= 277.1 NO= 276.6 As Found Percent Change NO_X= -8.1% NO= -7.9%

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	400.3	397.5	2.9	398.8	396.9	0.0	N/A	N/A	N/A	N/A
350	400.3	138.3	262.1	397.9	138.4	259.3	1.0062	0.9991	1.0107	98.9%
200	400.3	220.6	179.8	397.3	220.5	176.9	1.0077	1.0004	1.0164	98.4%
100	400.3	308.2	92.1	396.6	307.9	88.5	1.0094	1.0010	1.0408	96.1%
					Average Correction Factor		1.0078	1.0002	1.0226	97.8%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	1.1	0.4	0.9	ppb	0.5	1.9	-0.5	ppb
Auto span	384.4	379.8	3.0	ppb	431.1	426.0	7.8	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

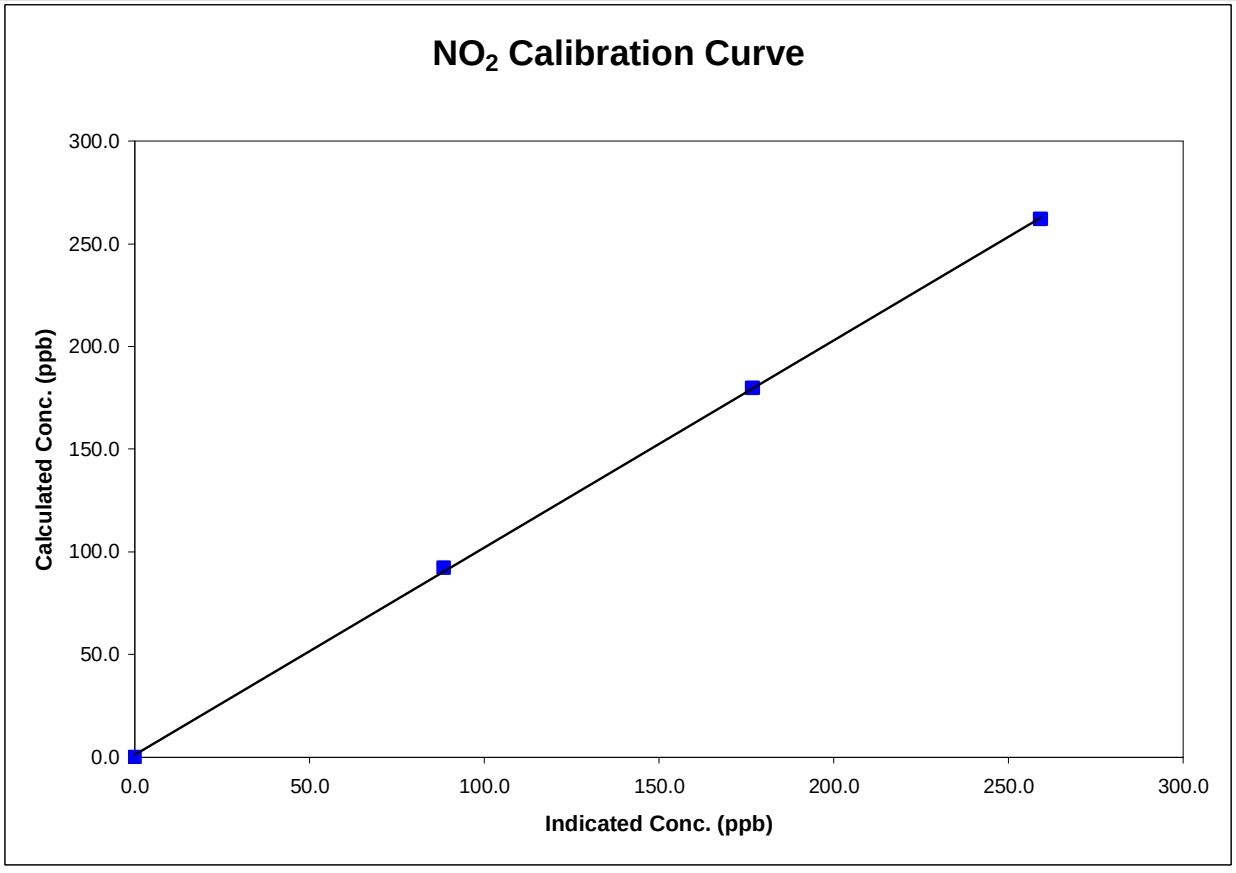
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 29th & 30th, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:00 - 23:59	End Time (MST)	13:00 - 13:53
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	0.0000		
262.1	259.3	1.0107	Correlation Coefficient	0.999878
179.8	176.9	1.0164		
92.1	88.5	1.0408	Slope	1.008902
			Intercept	1.147658



Calibration Summary

Parameter NO_x

Air Monitoring Network **PASZA**

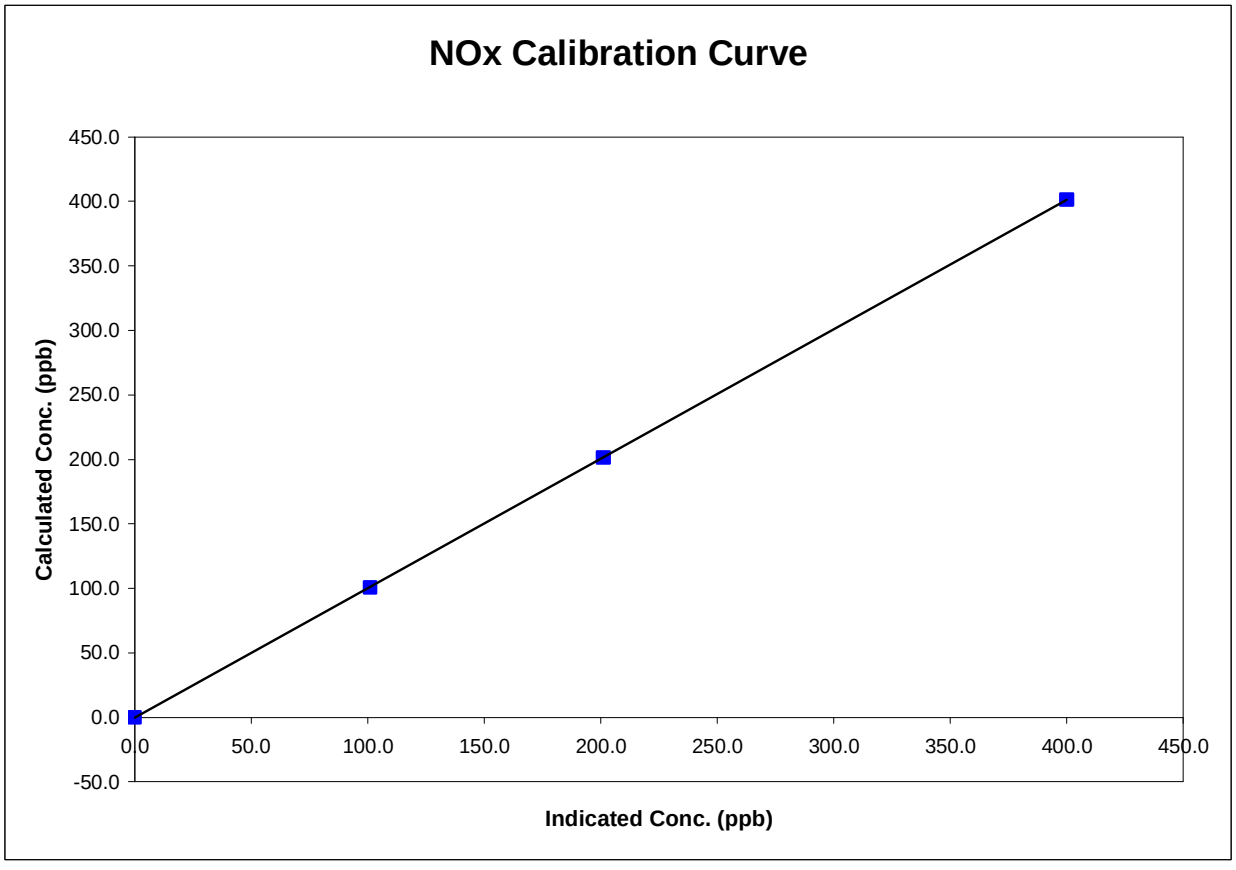
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 29th & 30th, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:00 - 23:59	End Time (MST)	13:00 - 13:53
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	0.0000		
401.2	400.1	1.0026	Correlation Coefficient	0.999997
201.3	201.1	1.0007		
100.7	101.1	0.9960	Slope	1.003073
			Intercept	-0.356225



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

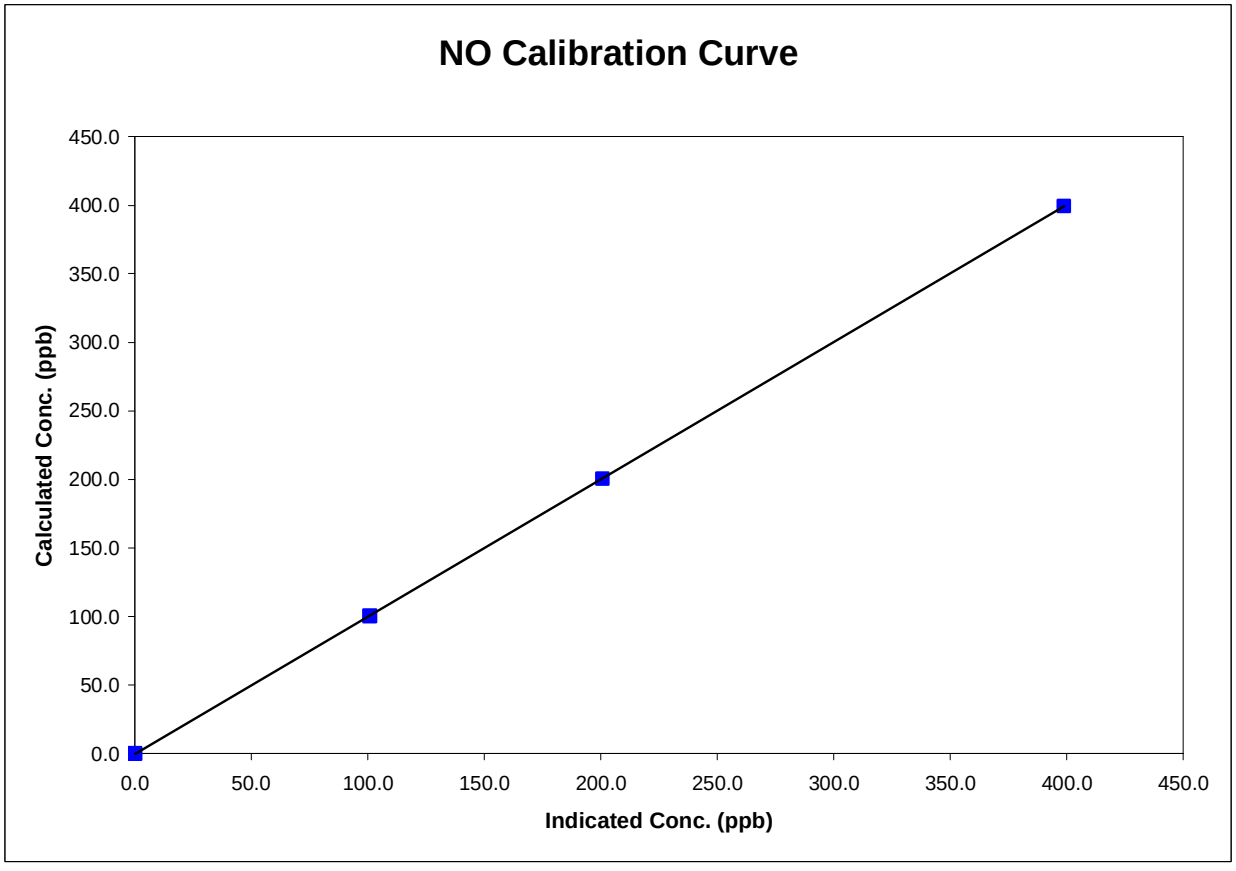
FOCUS AIR QUALITY MONITORING

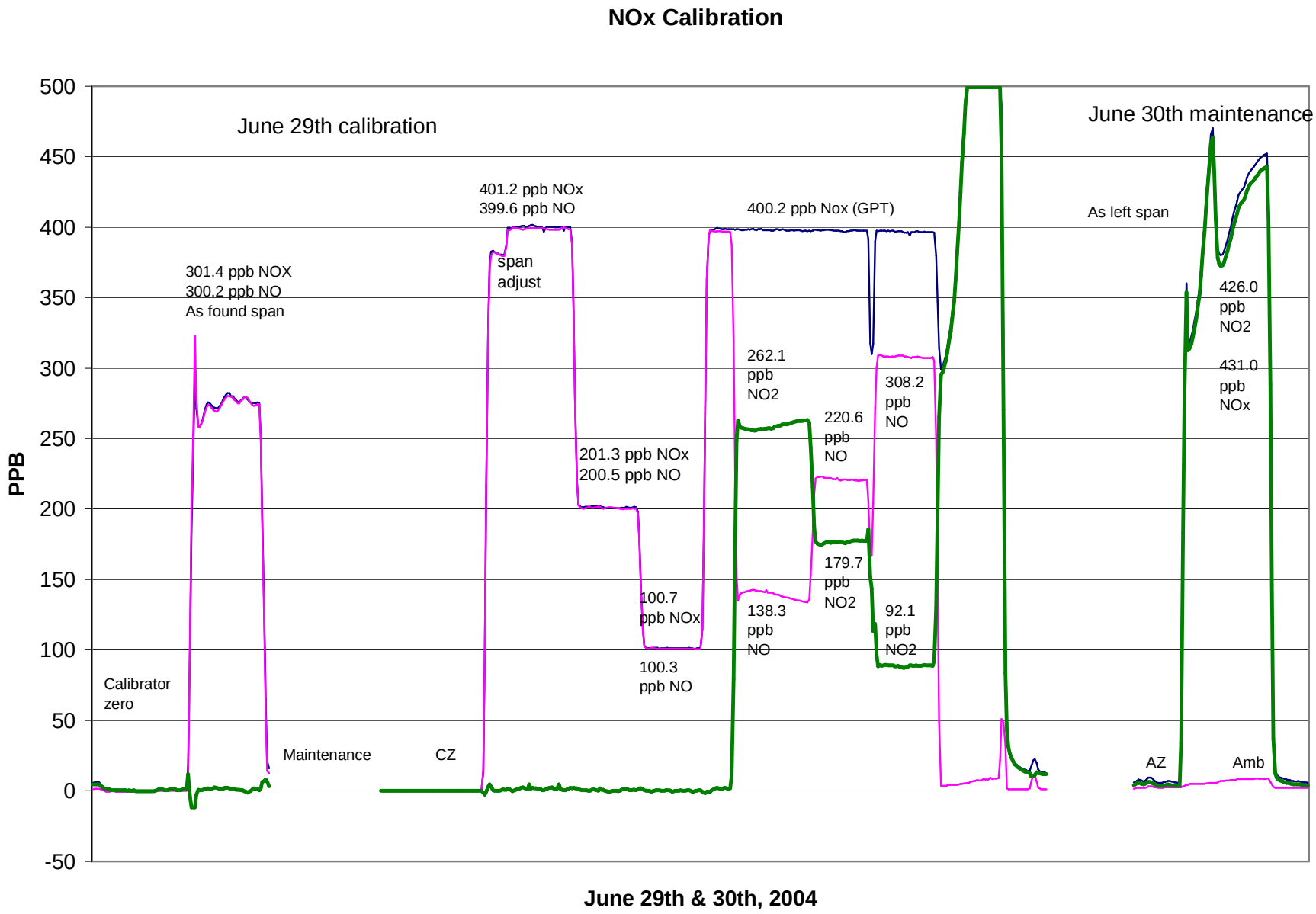
Station Information

Calibration Date	June 29th & 30th, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:00 - 23:59	End Time (MST)	13:00 - 13:53
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
399.6	398.8	1.0020	Correlation Coefficient	0.999995
200.5	200.7	0.9988		
100.3	100.9	0.9943	Slope	1.002583
			Intercept	-0.479091




NOx Calibration
June 29th calibration
June 30th maintenance
301.4 ppb NOX
300.2 ppb NO
As found span
401.2 ppb NOx
399.6 ppb NO
span
adjust
400.2 ppb Nox (GPT)
As left span
426.0
ppb
NO2
431.0
ppb
NOx
262.1
ppb
NO2
308.2
ppb
NO
220.6
ppb
NO
201.3 ppb NOx
200.5 ppb NO
179.7
ppb
NO2
100.7
ppb NOx
138.3
ppb
NO
92.1
ppb
NO2
100.3
ppb NO
Calibrator
zero
Maintenance
CZ
AZ
Amb
PPB
500
450
400
350
300
250
200
150
100
50
0
-50
June 29th & 30th, 2004

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☒	Install ☐	Removal ☐	Other: ☐
Start Time (MST)	16:05	End Time (MST)	18:55
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	0.996382	Calculated slope	0.998597
Calculated intercept	0.240106	Calculated intercept	2.012306
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	1.137		1.013	
Lamp measure	3365	mV	3158	mV
Lamp Reference	3366	mV	3167	mV
Pressure	27..4	inches Hg	27.1	inches Hg
Sample Flow	675	ccm	667	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	0.2	N/A
4995	0.00	320.2	320.3	0.9996
4995	0.00	185.7	181.9	1.0212
4995	0.00	94.7	91.1	1.0400
4995	0.00	0.0	0.2	As found zero
4995	0.00	320.2	357.4	As found span
			Average Correction Factor	1.0203

Calculated value of As Found Response: 356.2 ppm Percent Change of As Found: 11.2%

	before calibration		after calibration	
Auto zero	0.9	ppb	2.7	ppb
Auto span	300.7	ppb	268.1	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**

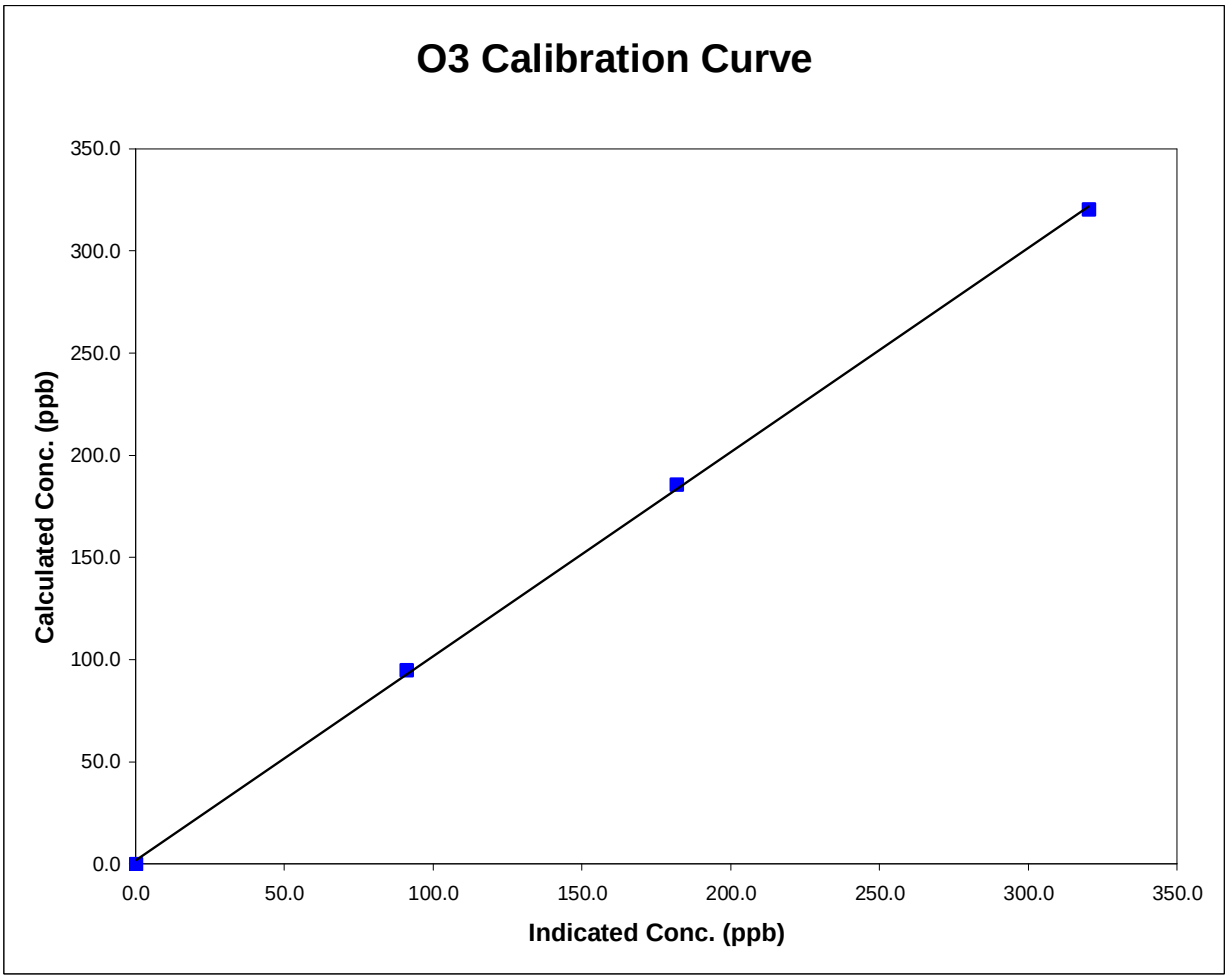
FOCUS AIR QUALITY MONITORING

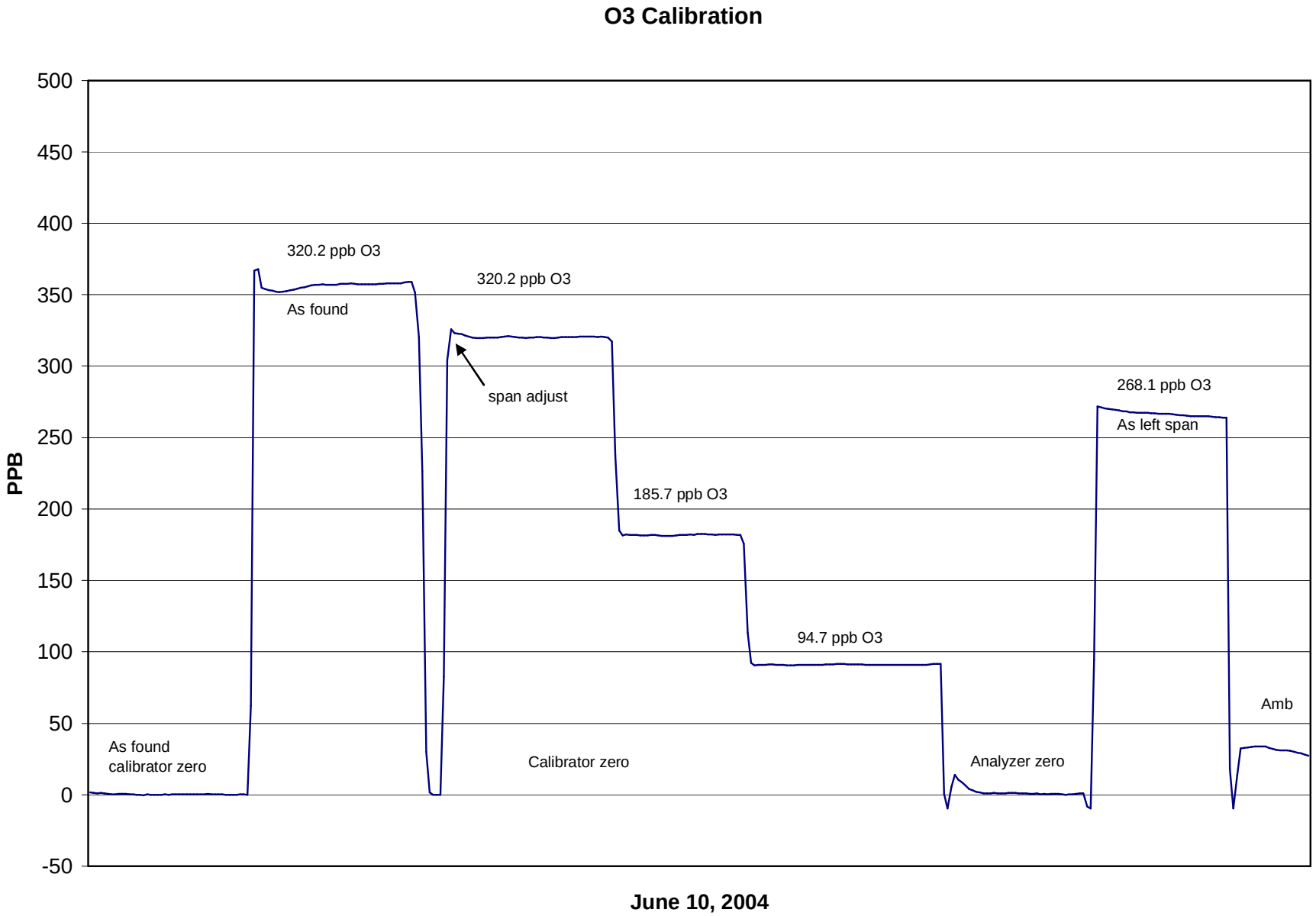
Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	16:05	End Time (MST)	18:55
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	0.2	NA		
320.2	320.3	0.9996	Correlation Coefficient	0.999731
185.7	181.9	1.0212		
94.7	91.1	1.0400	Slope	0.998597
			Intercept	2.012306




O3 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
320.2 ppb O3
As found
320.2 ppb O3
span adjust
268.1 ppb O3
As left span
185.7 ppb O3
94.7 ppb O3
Amb
As found
calibrator zero
Calibrator zero
Analyzer zero
June 10, 2004

Calibration Report

Parameter **CO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine [x] Install [ ]	Removal [ ]	Other: [ ]
Start Time (MST)	13:05	End Time (MST)	16:45
Barometric Pressure	0.918 mb	Station Temperature	12.5 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	1.006509	Calculated slope	1.004927
Calculated intercept	-0.227870	Calculated intercept	-0.092049
Analyzer make	TEI Model 48	Analyzer serial #	ACM-13989-143

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	613		618	
CO zero setting	595		587	
Sample pressure	712	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	0.11	N/A
4993	39.97	23.82	23.82	1.0003
4993	19.96	11.95	11.94	1.0005
4993	9.97	5.98	6.05	0.9883
4993	0.00	0.00	0.53	As Found Zero
4993	39.97	23.82	24.65	As Found Span
			Average Correction Factor	0.9964

Calculated value of As Found Response: 24.049 ppm Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	0.07	ppm	-0.01	ppm
Auto span	29.76	ppm	29.59	ppm

Notes: Analyzer was zero and span adjusted.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **CO**

Air Monitoring Network **PASZA**

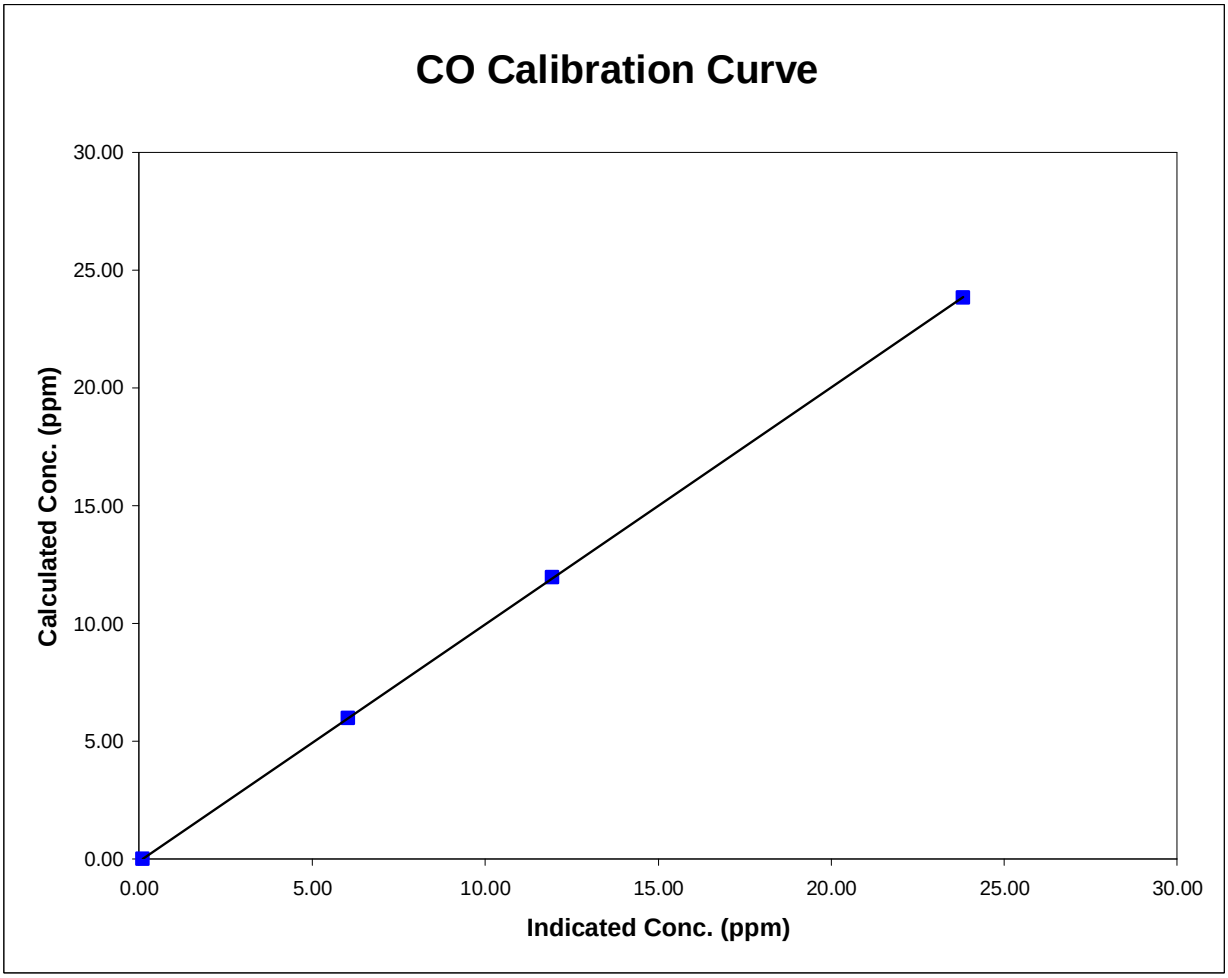
FOCUS AIR QUALITY MONITORING

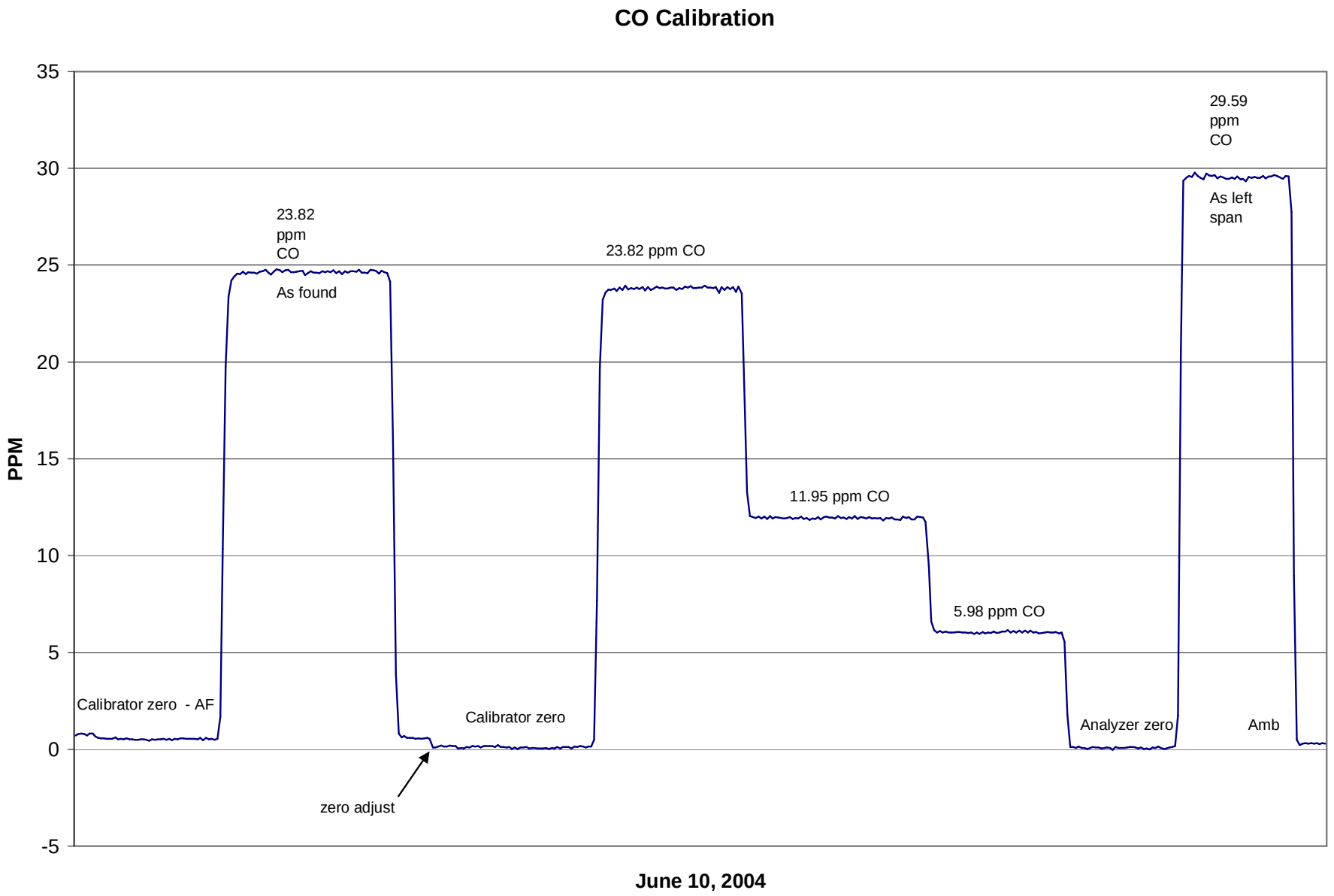
Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	13:05	End Time (MST)	16:45
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	0.105	N/A		
23.825	23.817	1.0003	Correlation Coefficient	0.999993
11.945	11.939	1.0005		
5.978	6.049	0.9883	Slope	1.004927
			Intercept	-0.092049




CO Calibration
35
30
25
20
15
10
5
0
-5
PPM
29.59
ppm
CO
As left
span
23.82
ppm
CO
As found
23.82 ppm CO
11.95 ppm CO
5.98 ppm CO
Calibrator zero - AF
Calibrator zero
Analyzer zero
Amb
zero adjust
June 10, 2004

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **THC**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 9, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☒	Install ☐	Removal ☐	Other: ☐
Start Time (MST)	17:00	End Time (MST)	20:05
Barometric Pressure	27.60 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	0.997697	Calculated slope	0.998335
Calculated intercept	0.034542	Calculated intercept	0.017428
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	NA	capture	6818	capture
THC zero counts	NA	capture	1271	capture

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	0.01	N/A
4993	64.97	19.55	19.60	0.9975
4993	34.98	10.59	10.53	1.0060
4993	9.97	3.03	3.03	1.0018
4993	0.00	0.00	-0.07	As Found Zero
4993	64.97	19.55	19.77	As Found Span
			Average Correction Factor	1.0018

Calculated value of As Found Response: 19.826 ppm Percent Change of As Found: -1.4%

	before calibration		after calibration	
Auto zero	0.04	ppm	0.07	ppm
Auto span	22.49	ppm	22.34	ppm

Notes: Zero and span adjusted analyzer. All pertinent analyzer test functions consistent month to month.

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **THC**

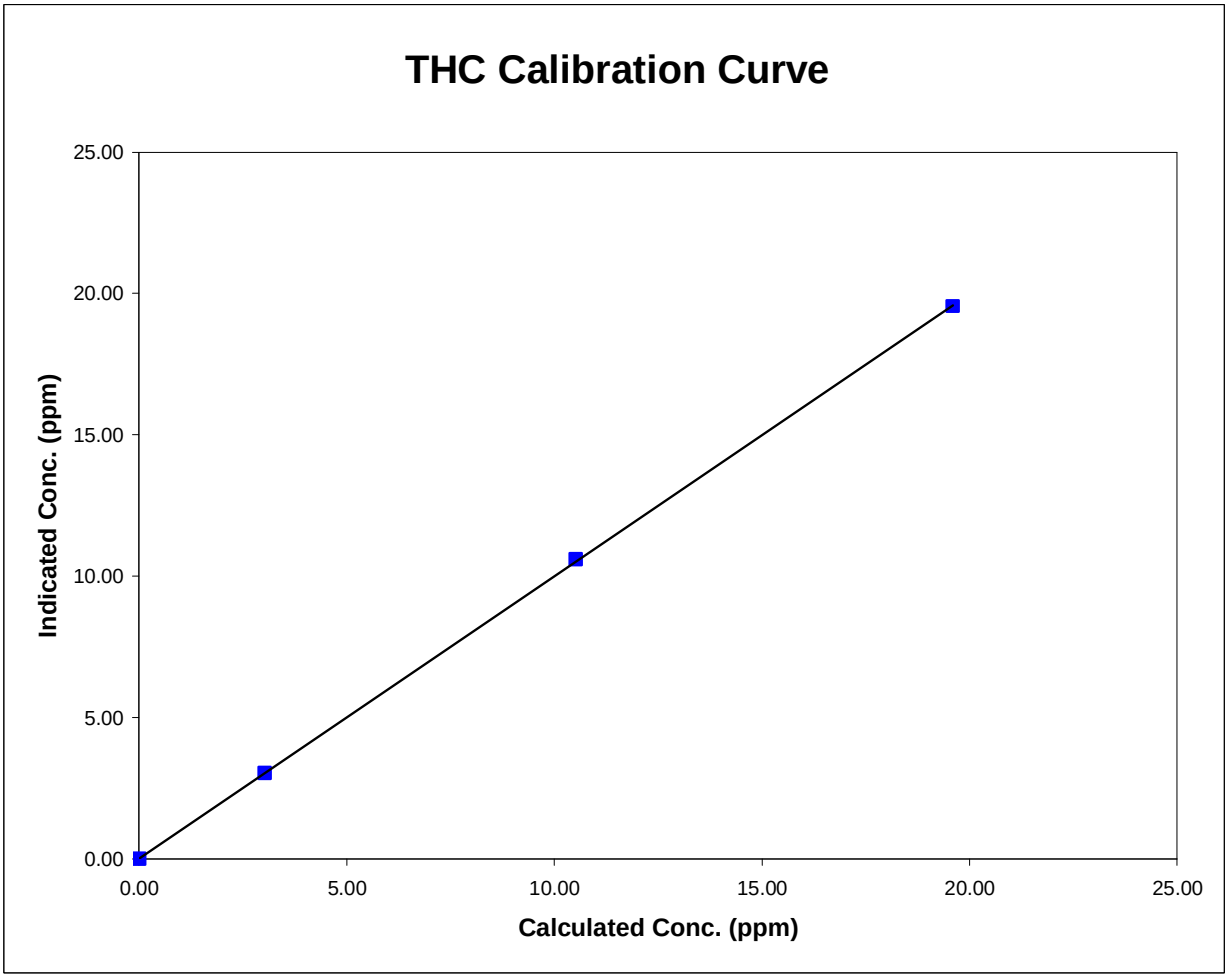
Air Monitoring Network **PASZA**

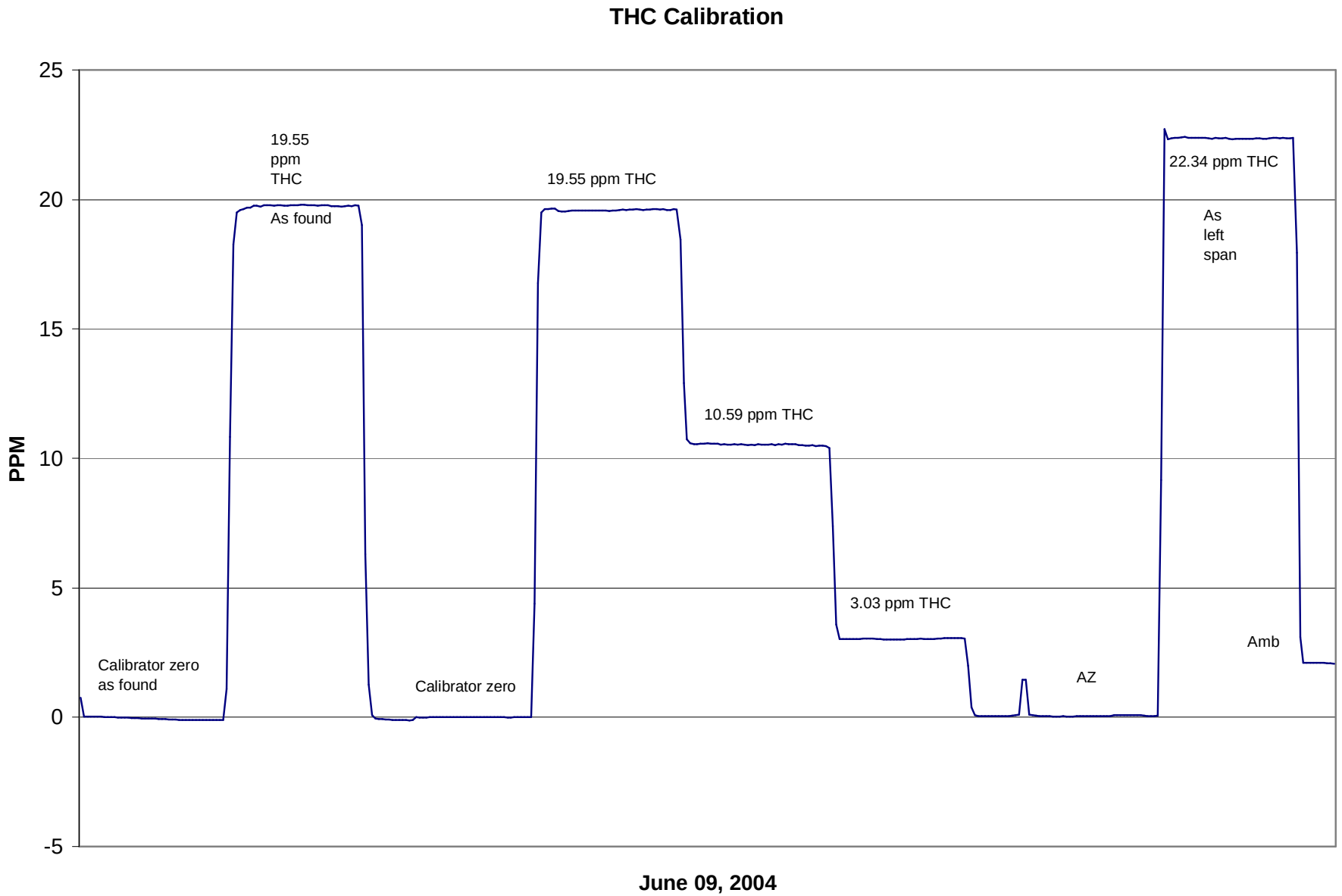
Station Information

Calibration Date	June 9, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	17:00	End Time (MST)	20:05
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	0.006	N/A		
19.553	19.602	0.9975	Correlation Coefficient	0.999975
10.590	10.527	1.0060		
3.034	3.028	1.0018	Slope	0.998335
			Intercept	0.017428




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
22.34 ppm THC
As
left
span
Calibrator zero
as found
Calibrator zero
AZ
Amb
June 09, 2004

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☐ Install ☐	Removal ☐	Other: ☐
Start Time (MST)	16:05	End Time (MST)	19:20
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	1.009913	Calculated slope	1.005493
Calculated intercept	0.420778	Calculated intercept	0.234874
Analyzer make	TEI Model 43C	Analyzer serial #	31990000000491

	before		after	
Concentration range	0 - 500	ppb	0-100	ppb
TRS bkg	18.8		19.6	
TRS slope	1.434		1.475	
UV Lamp	819	V	819	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	2007.5	0.0	-0.3	N/A
2158	2007.5	80.6	79.9	1.0081
4395	4088.5	39.6	39.0	1.0136
18100	16837.8	9.6	9.4	1.0189
zero	2009.4	0.0	-0.3	As Found Zero
2160	2009.4	80.5	75.7	As Found Span
			Average Correction Factor	1.0135

Calculated value of As Found Response: 77.187 ppm Percent Change of As Found: 4.1%

	before calibration		after calibration	
Auto zero	0.2	ppm	-0.2	ppm
Auto span	87.7	ppm	92.7	ppm

Notes: A span adjustment was performed.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

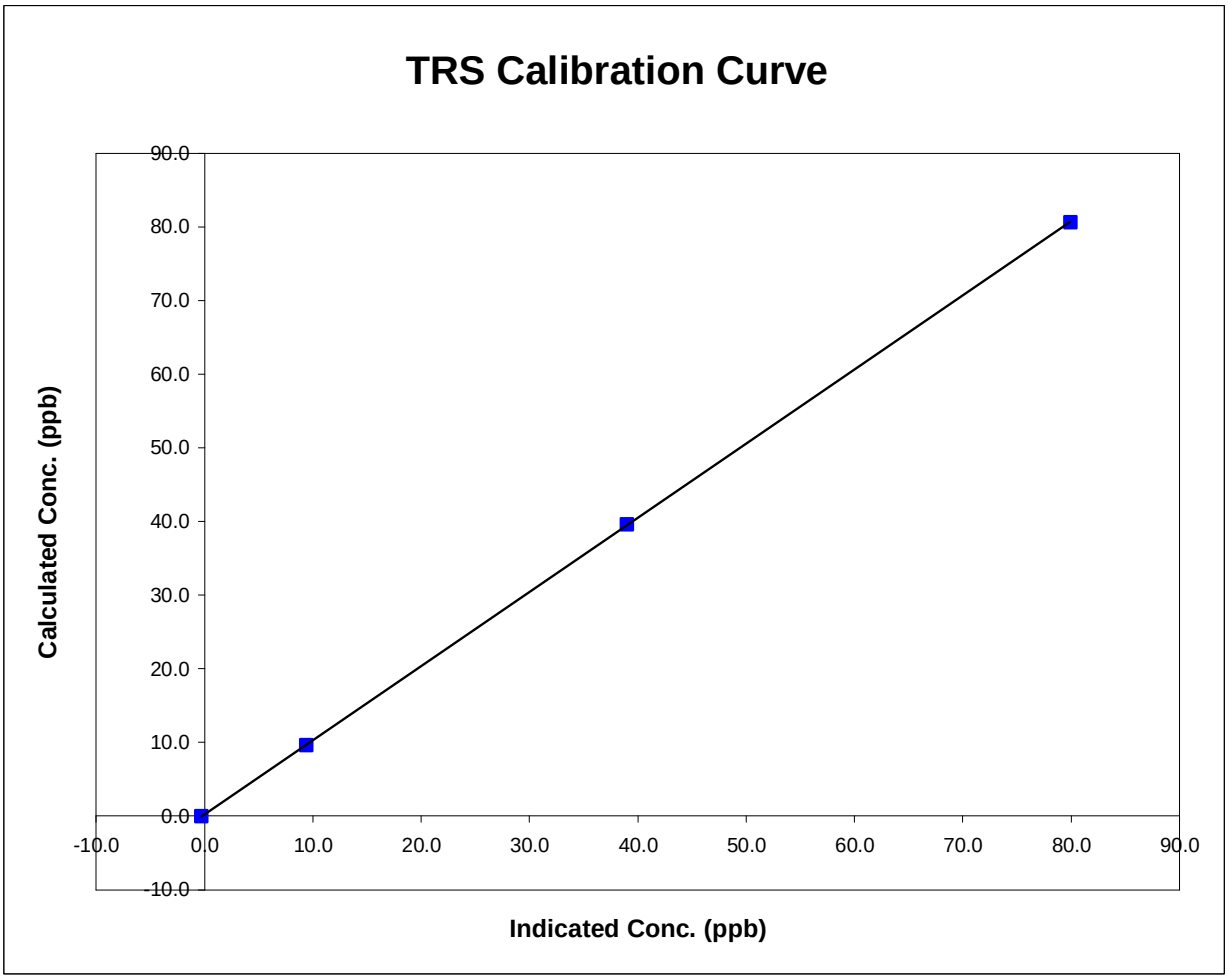
FOCUS AIR QUALITY MONITORING

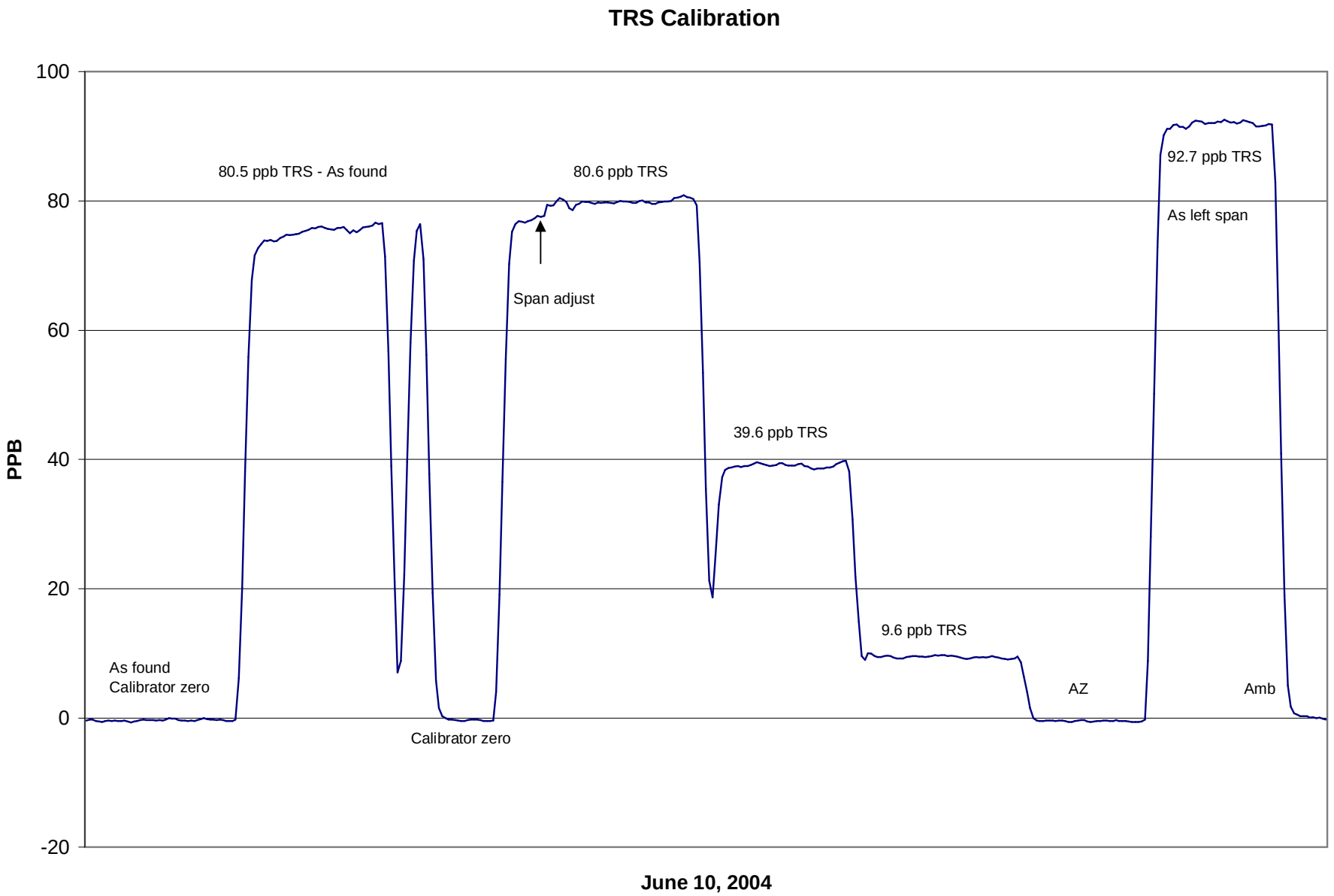
Station Information

Calibration Date	June 10, 2004	Previous Calibration	May 11, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	16:05	End Time (MST)	19:20
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
80.6	79.9	1.0081	Correlation Coefficient	0.999994
39.6	39.0	1.0136		
9.6	9.4	1.0189	Slope	1.005493
			Intercept	0.234874




TRS Calibration
100
80
60
40
20
0
-20
PPB
80.5 ppb TRS - As found
80.6 ppb TRS
92.7 ppb TRS
As left span
Span adjust
39.6 ppb TRS
9.6 ppb TRS
As found
Calibrator zero
Calibrator zero
AZ
Amb
June 10, 2004

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **PM2.5**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 10, 2004	Previous Calibration	NA
Station Number	1	Station Location	Muskoseepi Park

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	11:10	End Time (MST)	20:56
Barometric Pressure	0.9 inches Hg	Station Temperature	18.5 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	Before		After
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	27	%	27	%
Ko Factor	12122		12122	
Temperature	18.5	Deg C	18.5	Deg C
Pressure	0.918	ATM	0.918	ATM

Calibration Data

Parameter	Set Point	Indicated Reading	Tolerance	New Reading
zero flow - main	0.0	0.07		0.07
zero flow - auxillary	0.0	0.03		0.03
flow recovery - main	45 - 60 Seconds	>45	45 - 60 Seconds	>45
flow recovery - aux	46 - 60 Seconds	>45	46 - 60 Seconds	>45
Temperature	measured	18.7	+/- 1.0 Deg C	18.8000
Pressure	measured	0.9	+/- 1.5% Δ_{ATM}	0.9180
Total Flow	16.67 SLPM	15.95		16.60
Main Flow	13.67 SLPM	13.30	+/- 1.0 SLPM	13.60
Auxillary Flow	3.0 SLPM	2.955	+/- 0.2 SLPM	3.010
Leak Check - main	0.0	0.07	<0.15 SLPM	0.07
Leak Check - aux	0.0	0.06	<0.15 SLPM	0.06
Ko Factor	measured	NA		NA

Notes: Performed pump restart, leak checks, and flow audits. Unit was recalibrated on hardware to improve flow consistency. KO test was not performed due to the absence of a calibrated filter.

Calibration Performed By: Kelly Baragar