PEACE AIRSHED ZONE ASSOCIATION

Air Quality Monitoring Network

May 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 – May PASZA Ambient Air Report

Enclosed is PASZA Ambient Monitoring Report for the month of **May 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 operated above 90% uptime during the month of May.

Passive Monitoring – 43 Stations throughout the PASZA zone:

There were no damaged or missing samples for the month and no exceedances of the Provincial Air Quality guidelines.

- Monthly average concentrations for SO_2 passives ranged from 0.0 ppb to 0.4 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.2 ppb to 4.9 ppb.
- Monthly average concentrations for O_3 passives ranged from 30.5 ppb to 48.3 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

May 2004 Monthly Overall Summary Report

Ambient Air Quality Data

May-2004	Peace Airshed Zone Association						Maximum Recorded Values						
							1-hr				24-hr		
Pollutant	**Guidelines**		**Station**	**Monthly**	**Exceedence**		Conc	Day	WSPD	WDIR	Conc	Day	**Operational**
(units)	1-hr	24-hr		**Average**	1-hr	24-hr			(km/hr)	(Sector)			**Time (%)**
SO_2 (**ppb**)	172	57	Henry Pirker	0.2	0	0	3.1	May-08	12.2	NE	0.5	May-08	99.6%
NO (**ppb**)			Henry Pirker	1.5	0	0	30.5	May-01	3.0	NNE	6.0	May-01	97.6%
NO_2 (**ppb**)	212	106	Henry Pirker	6.2	0	0	41.3	May-16	3.0	SE	11.8	May-01	97.6%
NO_X (**ppb**)			Henry Pirker	7.6	0	0	64.2	May-14	2.3	ESE	17.8	May-01	97.6%
O_3 (**ppb**)	82		Henry Pirker	34.5	0	0	59.6	May-16	15.4	SSE	44.4	May-07	99.7%
CO (**ppm**)	13		Henry Pirker	0.24	0	0	0.86	May-02	2.8	N	0.36	May-14	98.7%
THC (**ppm**)			Henry Pirker	1.95	0	0	2.92	May-02	2.8	N	2.17	May-01	99.5%
TRS (**ppb**)			Henry Pirker	0.4	0	0	1.1	May-20	6.2	SW	0.5	May-31	97.0%
$PM_{2.5}$ (**µg/m^3**)		30 [a]	Henry Pirker	4.0	0	0	53.4	May-27	15.6	N	11.7	May-01	99.6%
RH (**%**)			Henry Pirker	55.0									99.9%
SR (**W/m^2**)			Henry Pirker	222.7									99.9%
Temp (**^{o}C**)			Henry Pirker	9.4									99.9%
WSPD v (km/hr)			Henry Pirker	3.0									99.9%
WSPD s (km/hr)			Henry Pirker	10.4									99.9%
WDIR (Deg)			Henry Pirker	ESE*									99.9%

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

Alberta Environment performed an audit on May 6 for all pollutant parameters. Downtime was noted on that day as calibration time. A power failure occurred at 8:30 on May 14 resulting in one hour of downtime for most parameters, two hours where stability had not been reached. Maintenance was performed on the data system which resulted in one hour of downtime on May 10 at 18:00.

Parameter	Make	Model	Notes
SO_2	TECO	43	No Operational problems were observed
$NOx/NO/NO_2$	TECO	42	Maintenance was performed on the reaction cell to restore temperature control on May 11. The PMT was replaced on May 18 due to excessive drift. Multipoint calibrations were completed after each repair.
O_3	API	400	No operational problems observed
CO	TECO	48	No operational problems observed
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: May 1, 2004 to June 1, 2004

Summary

Number of 1-hr Good Readings:	627
Number of 1-hr Fair Readings:	70
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

Status Flag Characters

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

Percentile	99	95	75	50	25	5	1
	32.2	27.2	21.8	17.7	13.7	7.4	4.6

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-May-04	23	22	18	12	11	17	23	11	15	20	21	24	25	25	24	25	25	24	A	17	11	20	24	23
2-May-04	14	12	11	13	12	12	16	19	21	**26**	**30**	**30**	**28**	**27**	**28**	**27**	22	A	21	21	17	16	15	15
3-May-04	17	17	16	16	16	16	14	14	15	14	14	15	17	18	19	19	A	19	18	18	15	14	11	13
4-May-04	12	9	6	4	4	3	5	4	8	9	13	16	19	21	19	A	23	22	22	20	21	20	19	20
5-May-04	20	20	22	21	19	14	14	20	23	24	25	**26**	**27**	**27**	A	**29**	**29**	**28**	**27**	25	19	16	19	19
6-May-04	18	18	17	17	16	14	14	16	17	18	21	C	C	A	C	3	N	22	21	21	21	20	20	20
7-May-04	20	20	22	A	21	20	19	18	21	23	26	**27**	**27**	**27**	**27**	**26**	**26**	**26**	24	20	18	18	16	22
8-May-04	22	23	A	19	18	19	21	22	24	24	23	22	19	17	13	12	11	12	13	13	12	12	14	16
9-May-04	15	A	16	17	20	18	18	19	19	20	20	20	20	20	20	21	21	20	20	19	18	13	13	14
10-May-04	A	14	13	13	11	10	11	13	14	16	19	22	22	23	24	24	24	N	C	5	C	14	15	13
11-May-04	6	18	18	A	16	8	7	13	18	22	24	C	C	C	C	C	**26**	24	25	24	18	14	12	11
12-May-04	17	16	15	A	16	16	14	13	16	17	19	21	20	22	21	22	23	21	21	21	16	8	8	8
13-May-04	7	6	A	14	16	12	11	16	18	20	22	23	24	25	25	25	25	25	25	24	19	10	10	16
14-May-04	7	A	9	9	5	7	7	9	P	N	21	21	23	24	24	**26**	**26**	**27**	25	23	21	20	17	11
15-May-04	A	5	6	5	5	6	7	8	13	20	24	**27**	**28**	**29**	**30**	**33**	**32**	**30**	**29**	**26**	22	16	17	A
16-May-04	14	13	14	12	11	11	10	12	15	23	**27**	**30**	**33**	**33**	**33**	**33**	**32**	**32**	**30**	**30**	22	13	A	15
17-May-04	9	13	9	10	11	6	10	15	17	18	22	**27**	**28**	**27**	**27**	**27**	**27**	**26**	**26**	24	20	A	17	17
18-May-04	17	17	17	14	11	10	12	13	16	23	25	**27**	**27**	**26**	**26**	25	25	24	23	22	A	19	17	12
19-May-04	10	8	8	9	8	5	10	15	18	20	22	22	21	22	24	24	23	20	17	A	15	13	12	13
20-May-04	12	12	11	11	13	12	12	11	14	17	18	18	18	18	18	18	17	18	A	19	17	17	15	17
21-May-04	17	16	16	15	16	17	17	16	17	19	20	20	21	21	19	21	21	A	21	20	17	18	18	17
22-May-04	17	17	16	15	14	14	15	15	16	18	19	20	19	20	19	19	A	20	20	19	17	14	12	11
23-May-04	11	8	9	5	3	4	5	9	13	18	22	23	24	25	**26**	A	**27**	**27**	**26**	**26**	24	19	21	18
24-May-04	15	14	11	8	10	9	10	11	16	21	22	24	**26**	**26**	A	**27**	25	25	23	22	19	16	15	15
25-May-04	12	9	9	8	7	6	5	8	13	10	14	14	15	A	16	16	16	18	16	18	19	18	18	19
26-May-04	18	18	16	18	16	17	19	21	22	23	23	23	A	23	24	24	24	24	23	24	22	20	18	19
27-May-04	20	18	16	19	16	14	16	20	23	23	24	A	**28**	**28**	**28**	**26**	**25**	25	24	**37**	23	17	18	17
28-May-04	17	15	16	15	11	11	12	12	13	19	A	24	24	24	23	23	23	20	17	14	15	15	12	12
29-May-04	10	11	8	9	8	8	9	9	9	A	15	14	15	14	17	18	17	16	18	16	14	10	9	8
30-May-04	9	8	7	7	6	6	6	8	A	11	A	20	21	22	19	17	18	17	18	18	14	14	15	14
31-May-04	15	15	13	13	14	13	12	A	19	20	21	21	21	21	20	20	21	21	21	19	15	14	17	17

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	3.1	ppb	8-May	3:00 4:00
Maximum 24-hr Average:	0.5	ppb	8-May	

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

AIC Time:	32 hrs	Operational Time:	704 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%

Percentile	99	95	75	50	25	5	1	Average
	1.6	0.8	0.3	0.2	0.1	0.0	0.0	0.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-04	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	1	A	1	0	0	1	0	0.5	1.2
2-May-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	0.2
3-May-04	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.9
4-May-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	0.1	0.5
5-May-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	0.2	0.4
6-May-04	0	0	0	0	0	0	0	0	0	1	1	0	0	A	C	0	1	0	0	0	0	0	0	0	0.3	0.6
7-May-04	0	0	0	A	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
8-May-04	1	2	A	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.1
9-May-04	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	0.5
10-May-04	A	0	0	0	0	0	0	0	1	3	3	1	0	0	0	0	0	M	M	0	0	0	0	0	0.4	3.0
11-May-04	0	0	0	A	0	0	0	0	0	0	0	C	C	C	C	1	1	1	1	1	1	1	1	1	0.4	1.1
12-May-04	2	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	1.6
13-May-04	0	0	A	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.3	1.8
14-May-04	0	A	0	0	0	0	0	0	P	1	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0.5	1.1
15-May-04	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.7
16-May-04	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.6
17-May-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.4
18-May-04	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	0	A	0	0	0	0.3	1.1
19-May-04	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0.3	0.7
20-May-04	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0.3	2.1
21-May-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	0.2	0.3
22-May-04	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	1.0
23-May-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	0.4
24-May-04	0	0	0	0	0	0	0	0	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0.3	1.4
25-May-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	0.4
26-May-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	0.1	0.4
27-May-04	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
28-May-04	0	1	1	1	1	1	2	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.6
29-May-04	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
30-May-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	0.3
31-May-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	0.0	0.1
Hourly Avg	0.3	0.2	0.1	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
Hourly Max	2.1	1.7	1.0	3.1	2.4	0.9	1.6	1.2	1.8	3.0	2.8	1.2	0.8	0.4	0.4	1.1	1.1	1.1	0.9	0.8	0.7	0.7	0.5	0.9		

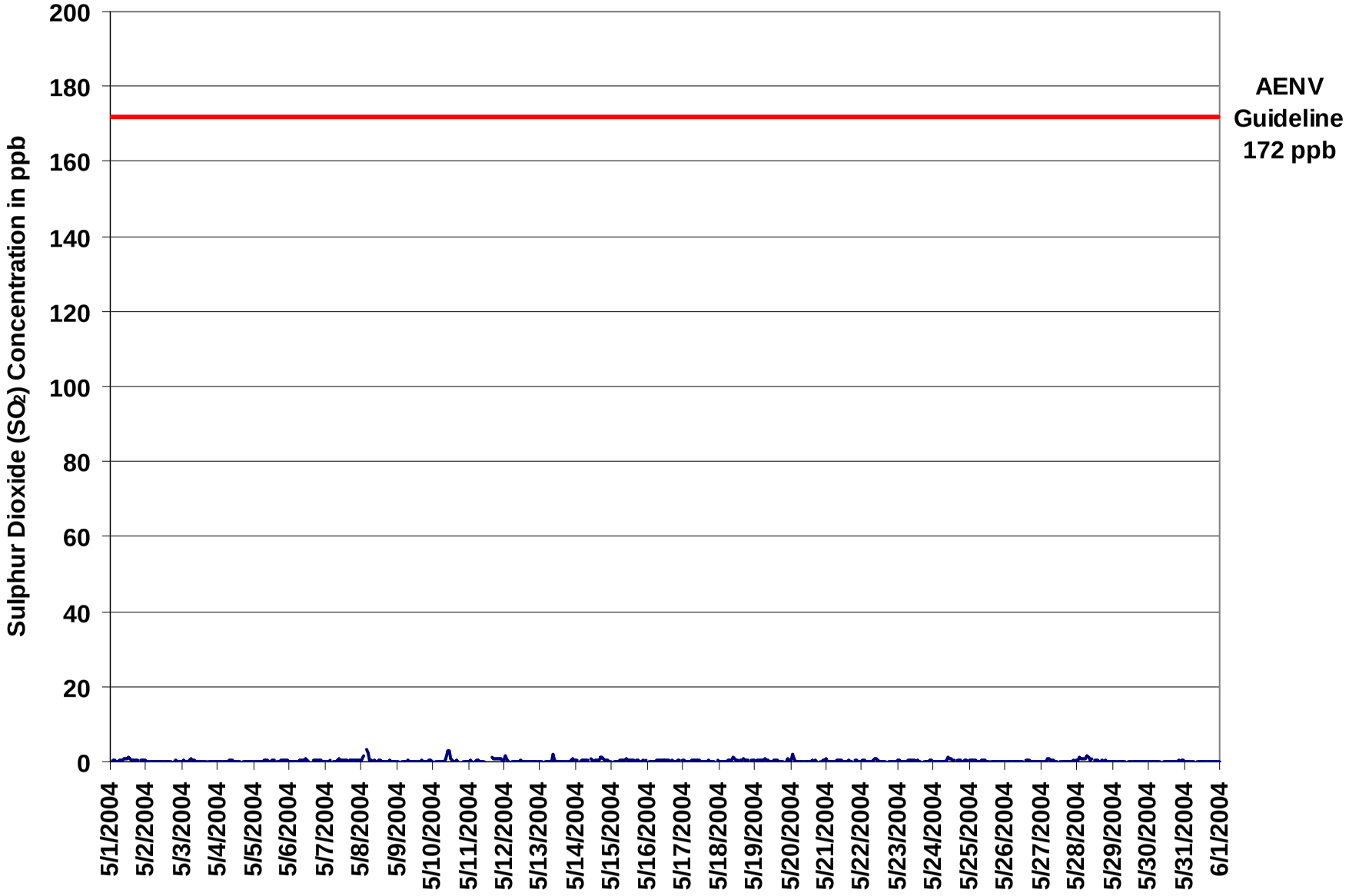


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Sulphur Dioxide (SO_2)

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

Summary

Maximum 1-hr Value:	4.2	ppb	8-May	1:00 2:00
Maximum 24-hr Value:	1.3	ppb	28-May	

AIC Time:	32 hrs	Operational Time:	704 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average
	3.6	1.6	0.9	0.7	0.6	0.5	0.4	0.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-04	1	1	1	1	0	1	1	1	1	2	1	4	2	1	1	1	1	1	A	1	1	2	1	1	1.2	3.5
2-May-04	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	1	1	A	1	1	0	0	1	1	0.6	1.0
3-May-04	1	0	1	0	2	2	2	2	1	1	1	1	0	0	1	0	A	1	1	1	1	1	1	1	0.9	2.2
4-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	0.7	1.0
5-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.0
6-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	1	1	1	1	1	1	1	1	1	0.8	1.3
7-May-04	1	1	1	A	0	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0.9	1.6
8-May-04	2	4	A	4	4	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1.3	4.2
9-May-04	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	1.2
10-May-04	A	0	1	1	0	1	0	1	3	4	4	1	1	1	1	1	1	A	M	0	1	0	0	1	1.0	3.8
11-May-04	1	1	1	A	1	1	1	1	0	0	0	C	C	C	C	4	2	2	1	1	1	1	1	2	1.1	3.6
12-May-04	4	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	3.7
13-May-04	1	1	A	1	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.7
14-May-04	1	A	1	1	1	1	1	1	P	2	3	1	1	1	1	1	2	2	2	1	1	1	1	1	1.2	2.9
15-May-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	0.8	1.3
16-May-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	0.9	1.3
17-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.1
18-May-04	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1.0	1.9
19-May-04	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	2	1	2	0.9	1.6
20-May-04	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1.0	4.0
21-May-04	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.2
22-May-04	1	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	A	1	1	1	0	0	0	1	0.9	2.0
23-May-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	0.8	1.1
24-May-04	1	1	1	1	1	1	1	1	1	3	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	2.7
25-May-04	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	0	1	1	0	0.7	1.1
26-May-04	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
27-May-04	1	1	1	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.9
28-May-04	1	2	2	2	1	1	3	4	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.5
29-May-04	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
30-May-04	1	1	0	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4
31-May-04	1	1	1	1	1	1	1	A	1	1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0.5	0.8
Hourly Avg	1.0	1.0	0.7	0.9	0.8	0.8	1.0	1.0	1.1	1.1	1.0	0.9	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.7	0.9	0.8	0.8		
Hourly Max	4.0	4.2	1.8	4.2	3.6	1.5	3.2	3.5	3.7	3.7	3.8	3.5	1.7	1.2	1.2	3.6	2.3	2.0	1.6	1.4	1.3	1.6	1.4	1.9		

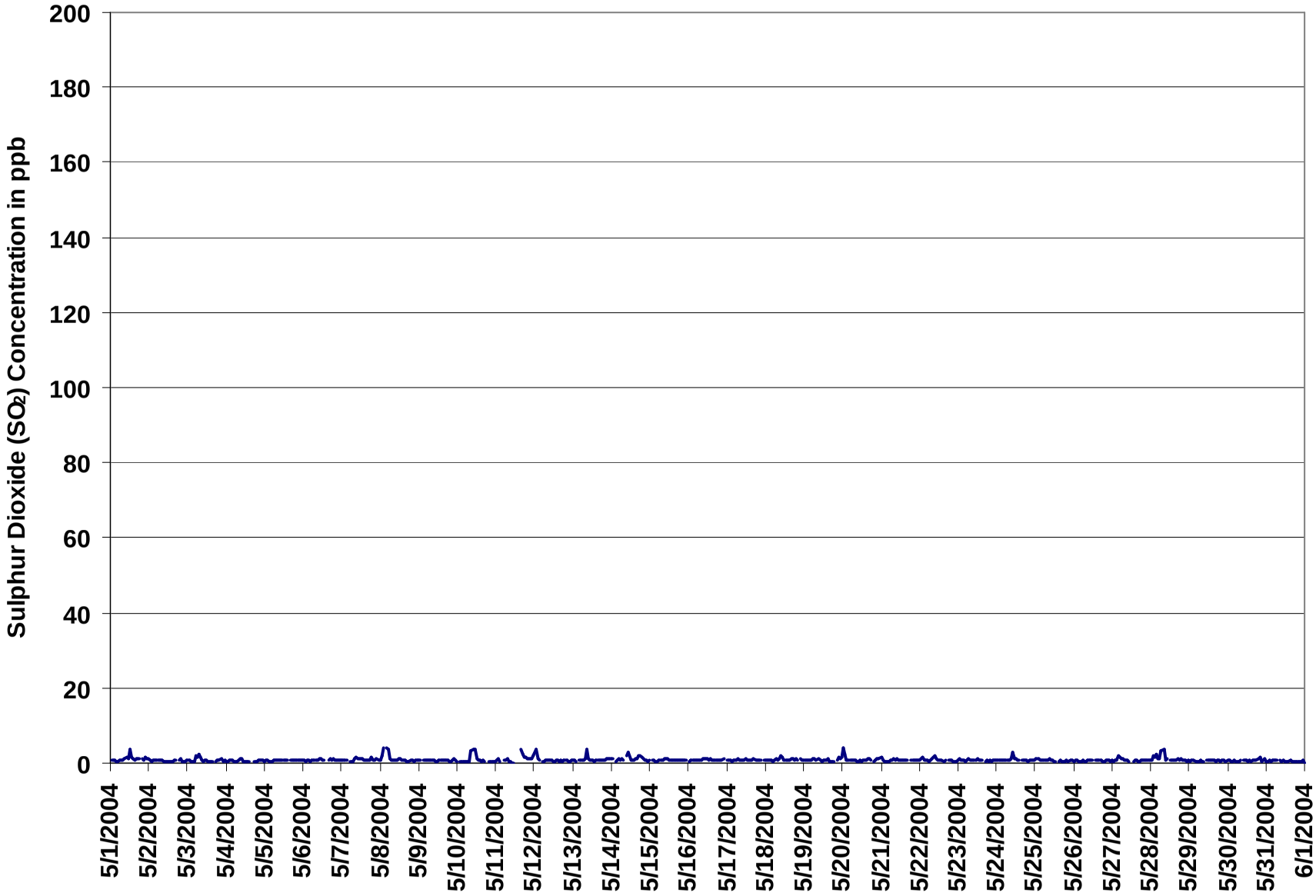
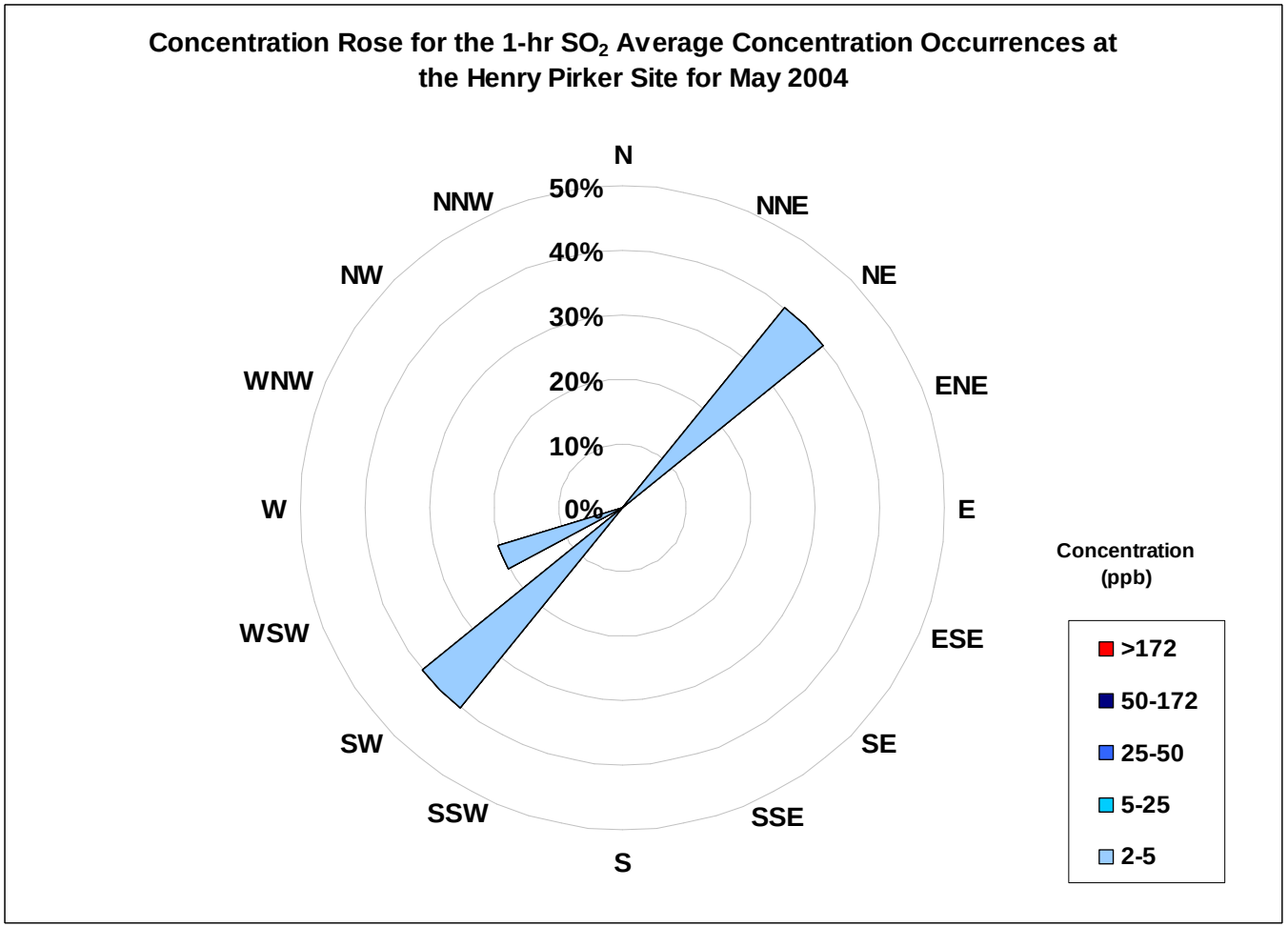


Figure 2. PASZA - Henry Pirker Sulphur Dioxide 1-hr Maximum Value Monthly Trend



Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0	<	2	699
2	to	5	5
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			704

PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	41.3	ppb	16-May	22:00 23:00
Maximum 24-hr Average:	11.8	ppb	1-May	

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

AIC Time:	30 hrs			Operational Time:			675 hrs	
Calibration Time:	21 hrs			AMD Operational Uptime:			97.6%	
Percentile	99	95	75	50	25	5	1	Average
	32	18	8	4	2	1	1	6.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-04	5	6	9	16	17	21	21	22	14	7	7	5	2	1	1	1	2	4	A	13	16	27	29	26	11.8	29.1
2-May-04	17	8	6	4	4	4	2	2	2	1	1	1	1	2	2	2	2	A	2	2	4	3	2	1	3.4	17.5
3-May-04	1	1	2	2	2	3	5	5	3	3	3	2	2	1	1	2	A	3	3	4	8	8	13	7	3.6	13.4
4-May-04	7	9	11	15	18	13	13	14	13	9	6	5	5	5	7	A	5	5	4	5	5	6	5	3	8.2	17.9
5-May-04	2	2	2	4	6	11	12	7	3	2	3	2	1	3	A	2	2	3	3	3	12	15	7	6	4.9	15.1
6-May-04	5	5	4	4	5	8	9	6	3	4	4	C	C	C	C	5	4	4	4	4	4	4	3	2	4.6	8.9
7-May-04	2	2	3	A	3	4	7	9	7	5	3	2	2	2	2	2	2	2	4	8	8	7	9	3	4.3	9.2
8-May-04	2	2	A	3	4	5	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.3	4.6
9-May-04	2	A	2	2	2	4	3	2	2	1	1	2	1	1	2	1	1	1	1	2	2	9	8	4	2.4	8.9
10-May-04	A	3	4	4	7	9	9	8	6	6	5	5	5	5	6	7	C	C	M	6	C	14	10	15	7.1	14.7
11-May-04	13	3	3	A	6	15	19	12	M	M	M	M	M	M	M	M	M	M	M	M	M	17	17	15	N	19.2
12-May-04	6	5	5	A	4	6	8	C	C	C	C	2	3	2	5	2	1	4	5	5	11	25	32	33	8.7	33.2
13-May-04	31	24	13	A	8	15	16	8	8	4	2	2	1	1	1	1	1	2	2	3	10	34	34	35	11.1	35.0
14-May-04	28	28	A	22	21	25	21	17	P	P	D	6	4	3	4	4	3	2	3	5	7	9	8	16	11.8	28.3
15-May-04	13	A	24	20	22	24	13	11	8	6	2	1	2	1	1	1	2	2	2	3	7	18	14	15	9.3	24.4
16-May-04	A	18	9	8	9	6	9	6	4	2	1	1	2	1	1	1	1	1	3	3	11	38	41	A	8.1	41.3
17-May-04	26	10	16	15	12	24	16	8	5	5	3	2	2	2	2	2	3	3	3	4	11	15	A	10	8.7	26.0
18-May-04	6	4	4	8	14	33	23	15	12	3	4	3	2	3	2	C	C	C	C	C	C	C	C	C	N	32.8
19-May-04	C	9	10	8	11	20	12	6	0	D	3	2	4	5	4	2	3	4	4	4	A	6	4	6.0	19.9
20-May-04	5	4	4	4	3	4	6	7	4	2	2	2	3	3	4	5	5	5	7	5	A	6	5	4	4.1	6.7
21-May-04	3	2	2	2	3	4	5	5	5	5	4	5	4	4	7	5	5	4	4	A	8	5	3	3	4.3	8.2
22-May-04	3	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	1	A	3	4	8	10	10	3.1	10.4
23-May-04	8	13	10	10	13	13	13	8	4	2	1	1	1	1	1	1	1	A	2	2	4	9	5	9	5.6	13.1
24-May-04	10	10	12	14	9	10	7	6	5	3	2	2	2	2	1	2	A	2	2	2	5	9	8	8	5.8	13.6
25-May-04	10	14	11	11	14	14	17	18	22	15	8	8	5	3	3	A	3	2	4	3	3	3	2	2	8.5	22.2
26-May-04	2	2	4	4	5	6	5	4	2	2	2	2	3	2	A	4	3	2	3	3	3	3	5	4	3.3	6.3
27-May-04	5	4	5	3	6	10	10	5	3	2	2	2	1	A	2	2	2	1	3	2	3	10	6	4	4.0	9.9
28-May-04	3	6	4	5	8	10	7	7	5	3	2	2	A	5	6	5	4	6	10	14	10	8	9	7	6.4	13.8
29-May-04	7	6	9	5	6	7	6	4	4	4	5	A	4	4	2	2	2	3	2	2	5	10	11	9	5.2	10.8
30-May-04	7	7	8	7	8	8	7	5	4	4	A	1	1	1	2	3	3	4	2	2	4	6	4	4	4.4	8.4
31-May-04	3	2	4	4	4	7	10	5	3	A	2	2	2	2	3	3	3	3	3	4	9	9	5	4	4.3	10.0
Hourly Avg	8.3	7.4	6.9	7.6	8.2	11.1	10.2	7.8	5.5	4.1	3.1	2.7	2.5	2.6	2.8	2.6	2.6	2.9	3.3	4.2	6.6	11.7	10.8	9.2		
Hourly Max	30.7	28.3	23.7	21.9	21.7	32.8	22.8	21.8	22.2	15.3	7.7	7.5	5.3	5.5	7.5	6.7	5.2	6.1	10.2	13.8	15.9	38.3	41.3	35.0		

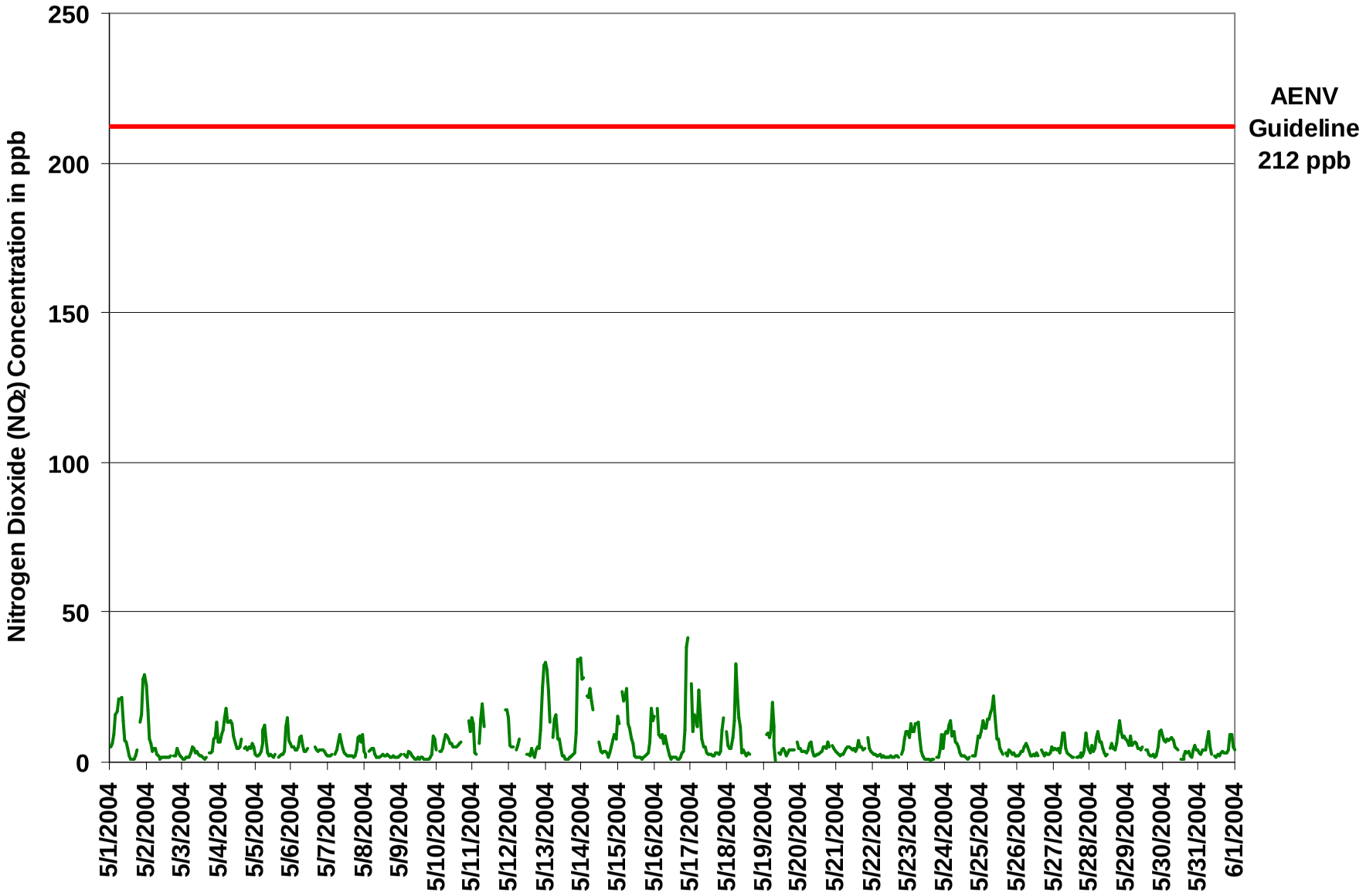


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

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

Summary

Maximum 1-hr Value:	49.2	ppb	16-May	21:00 22:00
Maximum 24-hr Value:	16.8	ppb	1-May	

AIC Time:	30 hrs	Operational Time:	675 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	97.6%

Percentile	99	95	75	50	25	5	1	Average
	39	26	12	7	5	3	2	9.8 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-04	8	10	16	19	22	25	29	30	22	11	12	8	4	3	3	2	6	8	A	25	28	35	32	30	16.8	35.2
2-May-04	27	11	8	6	6	7	5	3	3	2	3	3	3	3	4	3	3	A	4	4	7	7	5	3	5.7	26.9
3-May-04	3	3	8	5	3	8	10	9	5	5	5	4	4	5	3	4	A	7	9	7	13	16	21	12	7.3	20.9
4-May-04	10	11	17	19	19	19	15	18	21	12	11	7	8	8	18	A	7	12	7	8	10	11	10	5	12.3	20.9
5-May-04	4	7	4	7	13	19	18	16	5	4	4	4	2	6	A	3	4	5	6	10	17	24	11	10	8.9	24.0
6-May-04	7	8	6	5	8	14	13	10	5	5	6	C	C	C	C	7	7	7	6	6	9	7	5	5	7.3	14.2
7-May-04	5	5	4	A	4	7	11	14	10	6	5	4	4	3	4	4	3	4	6	13	13	8	12	7	6.8	14.3
8-May-04	5	3	A	5	6	7	7	5	3	3	3	3	4	3	3	4	3	3	3	5	3	4	3	4	3.9	7.2
9-May-04	5	A	4	5	3	7	6	4	6	3	2	6	2	2	2	2	2	2	2	3	4	13	10	6	4.4	12.9
10-May-04	A	5	4	7	12	13	13	11	9	13	7	7	11	7	11	10	C	C	M	7	C	21	13	20	10.5	20.7
11-May-04	19	9	7	A	16	20	28	19	M	M	M	M	M	M	M	M	M	M	M	M	M	20	29	23	N	28.6
12-May-04	8	7	20	A	6	9	15	C	C	C	C	6	5	4	16	6	6	7	9	9	17	34	39	36	13.6	38.9
13-May-04	34	29	20	A	14	23	23	14	9	8	5	5	3	4	2	3	4	5	6	9	19	44	39	41	15.9	43.9
14-May-04	35	33	A	25	26	28	24	24	P	P	D	16	7	5	5	6	8	4	6	8	9	13	12	22	15.8	34.9
15-May-04	17	A	26	23	26	28	21	14	14	10	4	2	3	3	3	2	2	7	5	6	13	27	20	23	13.0	27.9
16-May-04	A	29	13	16	13	8	14	8	6	3	3	3	4	3	5	3	3	4	13	12	28	49	46	A	13.0	49.2
17-May-04	42	18	21	20	17	28	26	21	9	7	5	5	8	6	6	5	6	6	5	6	16	30	A	13	14.3	42.5
18-May-04	7	7	6	13	23	39	40	19	20	5	5	6	5	10	9	C	C	C	C	C	C	C	C	C	N	40.5
19-May-04	C	15	16	10	19	25	19	9	10	D	4	4	10	7	8	4	6	7	8	6	6	A	9	7	10.1	25.0
20-May-04	6	6	6	5	4	7	10	10	7	4	5	5	6	7	9	15	10	10	10	8	A	13	6	7	7.8	15.4
21-May-04	4	3	3	4	4	8	9	12	7	33	8	8	7	8	15	9	8	7	9	A	12	9	6	4	8.7	32.9
22-May-04	4	4	4	5	3	4	3	4	3	3	4	5	5	5	3	5	5	3	A	5	7	11	15	19	5.6	18.6
23-May-04	12	19	18	15	16	16	18	11	5	4	2	2	2	2	1	2	1	A	3	3	8	11	6	17	8.3	19.3
24-May-04	18	13	17	18	12	13	11	7	7	5	4	3	3	3	2	3	A	3	3	4	9	10	12	10	8.4	18.2
25-May-04	15	20	17	13	19	17	21	23	26	23	10	13	7	6	4	A	5	4	8	9	4	5	4	4	12.1	25.9
26-May-04	3	4	8	8	7	8	7	5	3	3	5	5	6	4	A	10	5	5	5	4	5	6	7	6	5.8	9.7
27-May-04	7	8	7	4	8	18	17	9	5	5	3	5	3	A	6	4	6	4	5	4	5	13	14	10	7.6	17.9
28-May-04	7	7	6	10	13	13	10	12	6	7	4	5	A	8	10	8	8	10	17	25	17	14	11	10	10.3	24.9
29-May-04	9	11	15	10	8	12	10	6	7	6	7	A	8	8	6	4	4	6	3	3	15	18	19	18	9.2	19.0
30-May-04	10	8	9	9	9	10	10	8	7	6	A	2	5	2	3	5	10	8	4	6	9	16	6	7	7.4	15.9
31-May-04	4	4	5	6	6	11	15	8	4	A	9	3	5	5	7	9	7	7	7	9	13	12	9	6	7.5	14.9
Hourly Avg	12.0	11.0	11.0	10.9	11.8	15.3	15.4	12.1	8.8	7.6	5.4	5.4	5.1	5.1	6.2	5.3	5.4	6.0	6.5	8.0	11.8	17.3	14.9	13.2		
Hourly Max	42.5	33.4	26.2	25.4	26.0	39.4	40.5	29.8	25.9	32.9	11.6	16.3	10.9	10.4	17.8	15.4	10.4	12.4	17.0	24.9	28.5	49.2	46.2	40.5		

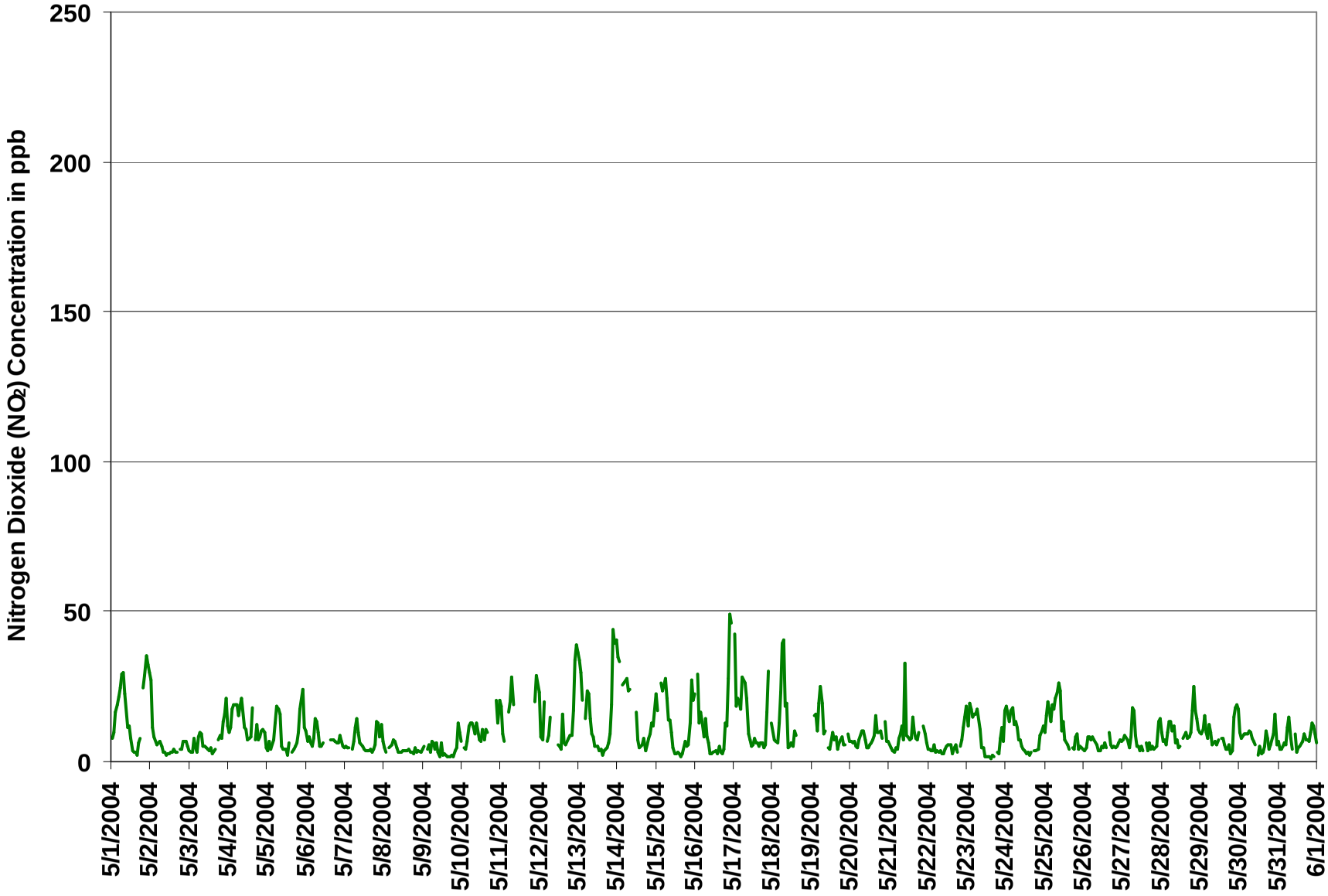
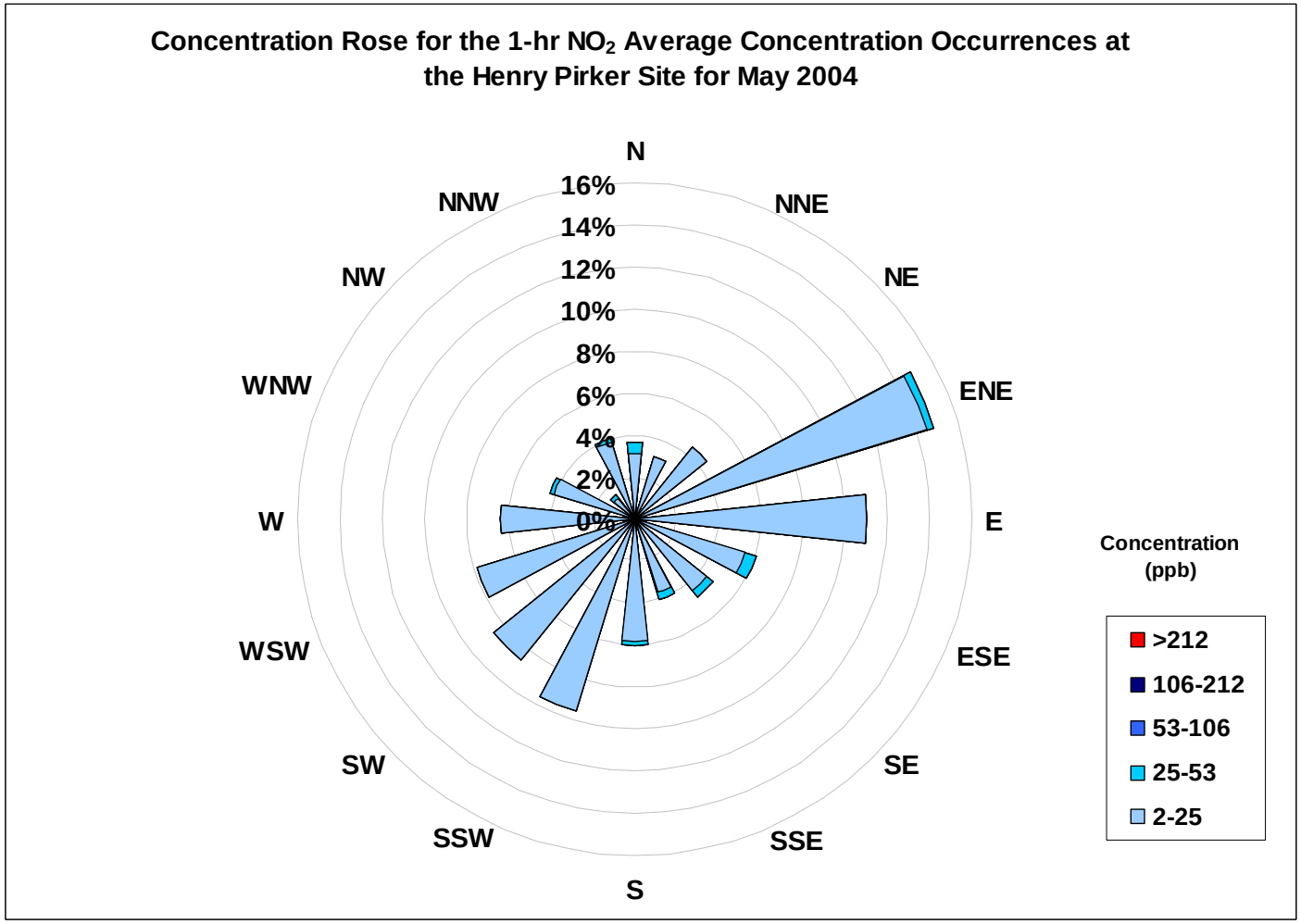


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Maximum Value Monthly Trend



Frequency Distribution of NO_2 in ppb			
Range			Frequency (hrs)
0	<	2	129
2	to	25	530
25	to	53	16
53	to	106	0
106	to	212	0
	>	212	0
Total Non-Zero Values			675

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	31	ppb	1-May	6:00 7:00
Maximum 24-hr Average:	6	ppb	1-May	

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

AIC Time:	30 hrs	Operational Time:	675 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	97.6%

Percentile	99	95	75	50	25	5	1	Average
	18	6	1	1	0	0	0	1.5 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-May-04	0	0	0	0	1	24	31	12	5	2	1	0	0	0	0	0	0	1	A	1	2	20	20	17	6.0	30.5
2-May-04	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	1.2
3-May-04	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	0	1	0	0.5	1.3
4-May-04	0	0	0	4	6	5	11	14	5	3	3	3	2	2	5	A	2	2	1	1	1	1	0	0	3.1	14.4
5-May-04	0	0	1	0	0	1	3	3	1	1	1	1	0	1	A	1	0	1	1	1	1	1	0	1	0.9	3.4
6-May-04	1	1	1	1	1	1	2	2	2	2	3	C	C	C	C	3	3	3	2	1	2	1	1	1	1.6	3.1
7-May-04	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0.4	1.0
8-May-04	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.3
9-May-04	0	A	0	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.3
10-May-04	A	0	0	0	1	2	2	2	1	2	1	1	0	0	0	0	C	C	M	1	C	0	0	0	0.7	2.1
11-May-04	0	1	1	A	3	7	19	6	M	M	M	M	M	M	M	M	M	M	M	M	M	0	0	1	N	19.4
12-May-04	0	0	1	A	0	1	1	C	C	C	C	1	1	1	3	1	0	2	1	0	0	1	3	5	1.2	5.3
13-May-04	5	2	0	A	0	1	5	3	3	2	1	1	1	0	0	0	0	1	0	0	1	7	3	29	2.9	29.0
14-May-04	10	7	A	5	4	8	5	5	P	P	D	2	1	1	1	1	1	0	1	1	0	0	0	0	2.7	9.7
15-May-04	0	A	6	2	4	21	6	7	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5	20.6
16-May-04	A	0	0	0	0	1	3	2	2	1	0	0	0	0	1	0	0	0	0	0	0	3	3	A	0.9	3.5
17-May-04	2	0	1	0	0	6	6	4	3	3	1	1	1	1	1	1	1	1	1	0	0	A	0	1.5	6.4
18-May-04	0	0	0	0	1	14	12	7	6	2	2	2	2	2	2	C	C	C	C	C	C	C	C	C	N	13.8
19-May-04	C	1	0	0	0	4	1	0	2	D	3	2	3	3	2	1	2	2	1	1	1	A	1	0	1.4	4.1
20-May-04	0	0	0	0	0	1	1	2	1	1	1	1	1	2	3	4	3	1	1	1	A	1	0	0	1.2	4.3
21-May-04	0	0	0	0	0	1	1	2	1	6	2	2	1	1	3	1	1	1	1	A	1	1	0	0	1.2	6.2
22-May-04	0	0	0	0	0	0	1	1	1	1	1	1	2	1	1	1	1	1	A	0	1	1	1	1	0.8	1.6
23-May-04	0	1	0	0	1	5	11	6	2	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1.3	10.7
24-May-04	0	0	0	0	0	1	2	3	2	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.6	2.9
25-May-04	0	1	0	0	1	3	7	11	16	9	2	2	2	2	2	A	1	1	1	1	0	0	0	0	2.8	16.2
26-May-04	0	0	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	0	0	0	0	0.5	1.4
27-May-04	0	0	0	0	0	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	1	0.5	1.5
28-May-04	0	0	0	0	0	2	3	3	2	1	1	1	A	1	1	1	0	0	0	0	1	0	0	0	0.9	3.2
29-May-04	0	0	0	0	0	1	2	2	3	2	2	A	1	2	1	1	1	1	1	0	1	1	0	1	1.0	2.8
30-May-04	0	0	1	0	1	2	3	3	3	3	A	1	1	0	1	1	1	1	0	0	0	1	0	0	1.1	3.4
31-May-04	0	0	0	0	0	1	4	2	1	A	1	0	1	1	1	1	1	1	0	0	1	1	0	0	0.8	4.0
Hourly Avg	0.8	0.5	0.4	0.6	0.9	3.7	4.8	3.6	2.7	1.9	1.1	1.0	0.9	0.9	1.2	0.9	0.9	0.9	0.7	0.5	0.5	1.4	1.3	2.0		
Hourly Max	9.7	6.8	5.6	5.1	6.4	24.0	30.5	14.4	16.2	8.8	2.8	2.6	2.6	2.9	4.8	4.3	3.1	2.7	2.0	1.5	1.8	20.1	20.5	29.0		

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

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

Summary

Maximum 1-hr Value:	85.9	ppb	1-May	21:00 22:00
Maximum 24-hr Value:	16.5	ppb	1-May	

AIC Time:	30 hrs	Operational Time:	675 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	97.6%

Percentile	99	95	75	50	25	5	1	Average
	44	15	5	2	1	0	0	4.5 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-May-04	0	0	2	2	8	56	58	30	17	5	4	2	0	0	0	0	4	3	A	3	6	86	49	45	16.5	85.9
2-May-04	9	0	0	0	0	1	0	0	0	0	0	1	1	1	1	1	1	A	1	2	2	3	7	2	1.5	8.8
3-May-04	2	5	5	7	2	7	12	3	4	5	4	2	2	4	2	6	A	5	6	1	2	1	8	2	4.2	11.6
4-May-04	1	2	2	9	9	10	25	28	17	5	6	6	4	4	15	A	7	9	4	2	3	5	4	1	7.8	28.0
5-May-04	0	4	2	2	2	5	10	11	4	3	3	4	1	3	A	1	1	3	3	5	3	5	1	2	3.3	11.2
6-May-04	2	2	2	2	2	10	6	4	3	3	4	C	C	C	C	6	7	6	4	3	7	5	5	4	4.3	10.1
7-May-04	6	3	1	A	1	1	1	2	2	1	2	1	1	1	1	2	1	1	1	1	1	0	1	0	1.4	5.7
8-May-04	0	1	A	1	1	1	1	1	1	1	1	2	3	2	6	3	2	2	2	1	2	2	2	2	1.7	6.1
9-May-04	1	A	2	4	2	2	4	2	4	2	1	10	2	1	1	1	1	1	1	1	1	1	1	1	2.0	9.7
10-May-04	A	1	1	1	8	10	7	11	16	11	4	5	7	2	4	3	C	C	M	1	C	3	3	1	5.2	16.4
11-May-04	3	10	6	A	8	11	49	15	M	M	M	M	M	M	M	M	M	M	M	M	M	1	4	2	N	48.5
12-May-04	1	1	7	A	2	3	2	C	C	C	C	4	2	2	16	3	3	4	2	1	1	3	10	12	4.1	15.7
13-May-04	14	4	2	A	1	4	19	6	4	4	3	4	4	2	1	1	2	3	2	2	4	40	15	44	8.1	43.8
14-May-04	29	31	A	12	11	14	7	9	P	P	D	11	4	2	2	2	2	1	1	1	1	1	1	1	7.1	31.2
15-May-04	1	A	13	4	12	34	11	10	21	4	2	1	1	1	1	1	1	1	1	1	0	0	0	0	5.3	33.7
16-May-04	A	1	0	2	1	1	5	4	4	1	1	1	1	1	3	3	1	1	4	4	1	13	15	A	3.1	15.1
17-May-04	9	3	7	0	1	13	13	16	4	4	3	2	3	3	2	2	2	2	1	1	1	1	A	1	4.1	16.1
18-May-04	0	1	0	1	5	34	39	8	11	2	2	3	4	13	5	C	C	C	C	C	C	C	C	C	N	38.8
19-May-04	C	6	3	0	3	17	6	0	4	D	4	3	6	5	8	3	7	6	4	2	3	A	5	4	4.7	16.5
20-May-04	4	3	4	3	6	9	7	5	3	3	5	4	6	5	9	29	9	5	5	5	A	2	2	2	5.9	29.3
21-May-04	2	1	1	2	1	5	10	10	9	84	8	8	4	4	9	3	4	3	4	A	2	4	4	3	8.0	84.4
22-May-04	1	1	1	4	2	2	4	3	8	5	5	5	4	4	4	6	7	2	A	4	4	4	11	11	4.3	11.0
23-May-04	1	6	5	1	4	13	18	8	3	3	2	0	0	1	0	2	0	A	2	0	0	0	0	1	3.1	17.7
24-May-04	0	1	0	1	1	2	3	5	4	4	2	1	1	2	1	1	A	0	1	1	0	0	0	0	1.3	4.7
25-May-04	1	3	2	0	2	5	16	22	23	22	3	3	4	3	3	A	3	1	16	2	1	1	1	1	6.1	23.2
26-May-04	1	0	1	0	0	1	12	2	1	1	3	5	3	1	A	2	1	1	1	1	1	0	0	0	1.7	11.8
27-May-04	0	1	0	0	0	3	3	3	2	3	2	2	2	A	2	1	1	1	1	1	0	0	5	5	1.6	5.3
28-May-04	4	1	8	5	2	7	9	10	5	5	3	3	A	2	4	3	2	1	1	1	1	1	1	1	3.4	10.2
29-May-04	0	1	1	0	1	3	5	4	4	3	2	A	3	4	3	3	2	5	1	1	2	4	1	6	2.6	5.8
30-May-04	1	1	2	1	1	3	7	5	5	5	A	2	1	1	2	2	2	3	2	2	1	5	1	0	2.3	6.8
31-May-04	0	0	1	0	0	3	8	5	3	A	6	1	2	3	3	4	3	2	1	2	7	1	0	0	2.4	7.6
Hourly Avg	3.3	3.2	2.7	2.4	3.2	9.3	12.1	8.0	6.7	7.3	3.1	3.4	2.7	2.7	4.0	3.5	2.9	2.8	2.8	1.8	2.0	6.6	5.4	5.3		
Hourly Max	28.6	31.2	13.0	11.8	11.9	55.8	57.8	30.3	23.2	84.4	8.0	11.4	7.0	13.0	15.7	29.3	8.5	9.0	16.3	5.1	7.4	85.9	48.6	45.5		

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	64	ppb	13-May	23:00 0:00
Maximum 24-hr Average:	18	ppb	1-May	

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

AIC Time:	30 hrs	Operational Time:	675 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	97.6%

Percentile	99	95	75	50	25	5	1	Average
	45	25	9	5	3	2	1	7.6 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-May-04	5	5	9	16	18	45	52	34	20	9	8	5	1	0	0	1	2	5	A	14	18	48	50	43	17.8	52.0
2-May-04	19	7	5	3	4	4	2	2	1	1	1	1	1	2	2	2	2	A	2	2	5	3	3	1	3.4	19.0
3-May-04	1	1	2	2	2	4	6	6	4	5	4	3	3	2	2	3	A	4	4	4	8	8	14	7	4.2	14.4
4-May-04	7	10	11	20	25	19	24	29	18	12	9	7	7	7	12	A	6	7	5	6	5	7	6	3	11.4	28.9
5-May-04	2	3	3	4	7	12	16	10	4	3	4	3	2	3	A	2	3	3	3	4	13	16	8	7	5.9	16.4
6-May-04	6	6	5	5	6	10	11	8	5	6	7	C	C	C	C	8	7	7	6	6	6	5	3	3	6.3	11.4
7-May-04	3	2	3	A	3	4	7	10	8	6	4	3	3	2	2	2	2	3	5	9	9	7	9	4	4.8	10.3
8-May-04	3	2	A	3	4	5	5	3	2	2	3	3	4	3	3	4	3	3	2	2	2	2	2	2	2.9	4.9
9-May-04	3	A	3	3	2	4	4	3	3	2	1	3	1	2	2	1	1	1	1	2	2	9	8	5	2.9	9.1
10-May-04	A	4	4	5	8	11	11	9	8	8	6	5	5	5	7	7	C	C	M	6	C	14	11	15	7.8	14.9
11-May-04	13	4	3	A	10	22	39	18	M	M	M	M	M	M	M	M	M	M	M	M	M	18	18	16	N	39.2
12-May-04	5	5	5	A	4	6	8	C	C	C	C	4	3	3	7	3	2	6	6	5	11	26	35	39	9.7	38.7
13-May-04	36	26	13	A	9	16	21	11	11	7	3	3	2	2	1	2	2	2	3	4	10	41	37	64	14.1	64.2
14-May-04	38	35	A	27	25	32	26	22	P	P	D	9	5	4	5	5	4	2	4	6	8	9	8	16	14.5	37.6
15-May-04	13	A	30	23	26	45	19	19	13	9	3	2	2	2	2	2	2	3	3	3	7	18	14	15	11.9	45.4
16-May-04	A	18	9	8	10	7	12	8	7	3	2	2	2	2	2	1	1	2	4	4	11	42	44	A	9.1	44.3
17-May-04	28	11	17	15	12	31	22	12	8	8	4	3	3	3	3	3	4	4	3	4	11	15	A	10	10.2	30.6
18-May-04	6	5	5	8	15	47	35	22	18	5	6	5	3	5	4	C	C	C	C	C	C	C	C	C	N	46.7
19-May-04	C	10	10	7	9	24	13	5	2	D	6	4	7	7	6	3	5	6	5	5	4	A	7	5	7.1	23.9
20-May-04	5	4	4	4	3	5	7	9	4	3	2	4	4	4	6	9	8	6	8	6	A	6	5	4	5.2	9.2
21-May-04	3	2	2	3	3	4	6	7	7	11	6	6	5	6	10	6	6	5	5	A	9	5	4	3	5.4	10.8
22-May-04	3	3	2	2	2	3	2	3	3	3	3	3	4	3	3	3	3	2	A	3	5	9	11	12	3.9	11.9
23-May-04	8	13	11	10	14	18	24	14	6	3	1	1	1	1	1	1	1	A	2	2	4	9	5	9	6.9	23.9
24-May-04	10	10	12	14	9	11	9	9	8	4	3	2	2	2	1	2	A	2	2	2	5	9	8	8	6.3	13.7
25-May-04	10	15	12	11	15	17	24	29	38	24	10	10	7	5	5	A	4	3	5	4	3	3	2	2	11.2	38.5
26-May-04	2	2	4	4	5	7	7	5	3	3	3	3	4	3	A	5	4	3	3	3	3	3	5	4	3.7	6.9
27-May-04	4	4	5	3	6	10	11	6	4	3	3	2	2	A	2	2	3	2	3	2	3	10	6	4	4.4	11.2
28-May-04	3	6	4	5	9	12	10	10	7	5	3	3	A	5	8	6	5	6	11	14	11	8	9	8	7.2	14.3
29-May-04	7	6	9	6	6	8	8	6	7	6	6	A	5	6	3	3	3	3	2	2	5	11	11	9	6.1	11.1
30-May-04	7	7	8	7	8	11	10	8	7	7	A	1	2	1	3	4	4	5	2	2	4	6	4	4	5.3	10.6
31-May-04	3	2	4	4	4	8	14	7	4	A	3	2	3	3	4	5	5	4	4	5	10	10	5	4	5.1	13.9
Hourly Avg	9.1	7.8	7.3	8.2	9.1	14.9	15.0	11.5	8.2	6.0	4.2	3.6	3.3	3.5	4.0	3.5	3.5	3.8	4.0	4.7	7.2	13.1	12.1	11.2		
Hourly Max	37.6	35.1	29.6	27.1	26.0	46.7	52.0	34.4	38.5	24.0	9.6	9.6	6.9	7.5	12.4	9.2	7.8	6.9	10.7	14.3	17.7	48.2	50.3	64.2		

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

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

Summary

Maximum 1-hr Value:	117.3	ppb	1-May	21:00 22:00
Maximum 24-hr Value:	32.3	ppb	1-May	

AIC Time:	30 hrs	Operational Time:	675 hrs
Calibration Time:	21 hrs	AMD Operational Uptime:	97.6%

Percentile	99	95	75	50	25	5	1	Average
	78	38	16	10	6	3	2	13.9 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-May-04	7	9	18	20	28	78	80	60	37	16	16	9	3	3	3	2	10	10	A	28	35	117	78	73	32.3	117.3
2-May-04	36	11	9	6	6	6	5	3	3	2	3	4	4	4	5	4	4	A	4	6	9	10	13	5	7.0	35.9
3-May-04	5	8	12	13	5	14	21	12	9	10	8	7	6	9	4	10	A	13	13	8	14	17	23	12	11.0	23.1
4-May-04	10	13	18	29	27	29	41	44	38	17	16	13	11	12	29	A	14	17	9	9	12	16	13	5	19.3	44.0
5-May-04	4	10	6	9	13	21	26	27	9	7	7	8	3	9	A	4	5	7	7	15	19	30	12	12	11.7	29.9
6-May-04	8	10	8	7	9	25	20	13	8	9	10	C	C	C	C	12	14	14	9	9	17	13	10	9	11.5	24.8
7-May-04	10	8	5	A	5	8	12	16	12	7	7	5	4	4	5	5	4	5	7	14	13	9	12	7	8.1	16.1
8-May-04	5	3	A	5	6	8	7	5	4	4	4	5	6	5	6	7	5	4	4	6	5	5	3	5	5.1	7.6
9-May-04	6	A	5	9	5	9	10	6	10	5	2	16	4	3	3	2	2	2	2	4	4	13	10	7	6.0	16.4
10-May-04	A	5	5	8	19	23	20	22	25	24	10	10	18	8	13	12	C	C	M	9	C	22	15	21	15.3	25.5
11-May-04	19	18	13	A	21	29	77	31	M	M	M	M	M	M	M	M	M	M	M	M	M	21	33	25	N	76.7
12-May-04	9	7	27	A	7	11	16	C	C	C	C	10	7	6	31	8	8	12	10	9	18	35	49	48	17.2	48.8
13-May-04	45	32	22	A	16	28	41	21	14	13	8	10	7	6	3	4	6	7	7	11	20	83	53	80	23.3	83.4
14-May-04	61	65	A	36	37	40	32	32	P	P	D	27	11	7	7	8	10	5	7	8	9	13	13	23	22.4	64.8
15-May-04	17	A	39	27	38	59	33	24	35	14	7	3	3	4	3	3	3	8	6	6	13	27	20	23	18.0	59.2
16-May-04	A	29	13	18	13	9	19	12	10	4	4	4	5	3	8	4	3	5	17	16	28	61	60	A	15.7	60.5
17-May-04	51	21	27	20	18	41	37	37	14	11	8	8	11	8	8	7	8	8	5	6	16	31	A	13	18.1	50.8
18-May-04	7	7	6	13	28	73	80	27	31	7	7	9	8	23	13	C	C	C	C	C	C	C	C	C	N	79.7
19-May-04	C	20	16	9	22	40	24	9	14	D	8	6	13	12	16	7	12	12	12	8	8	A	12	11	14.0	39.6
20-May-04	9	9	10	8	9	17	17	14	11	7	7	8	12	12	18	42	16	14	15	13	A	15	7	8	12.9	41.8
21-May-04	6	4	3	6	4	12	19	21	16	108	16	15	10	12	24	12	10	10	11	A	14	10	10	7	15.7	107.9
22-May-04	4	4	4	9	4	5	7	6	11	7	8	10	8	10	6	11	12	5	A	8	11	14	26	28	9.5	28.2
23-May-04	12	26	22	16	20	29	34	18	7	7	2	1	1	2	1	3	2	A	3	3	8	11	7	17	11.0	33.8
24-May-04	18	13	17	19	13	16	14	12	11	8	5	5	3	4	3	4	A	4	4	4	9	10	12	10	9.4	19.0
25-May-04	17	23	19	13	21	20	37	45	49	45	13	17	11	9	7	A	7	5	22	11	4	6	5	4	17.8	48.9
26-May-04	4	5	8	8	7	9	9	7	5	5	7	6	8	6	A	12	7	6	5	5	6	6	7	6	6.8	11.7
27-May-04	7	9	7	4	9	21	19	11	7	8	5	7	5	A	8	4	7	4	6	4	5	13	15	15	8.8	20.6
28-May-04	10	7	13	14	15	19	18	19	11	12	7	6	A	9	13	10	10	10	18	25	18	15	11	10	13.2	25.5
29-May-04	9	12	16	10	8	15	15	9	11	8	9	A	10	11	8	6	5	11	3	4	17	22	20	23	11.4	23.0
30-May-04	10	8	10	10	10	13	16	12	11	11	A	3	6	3	5	7	13	10	5	6	10	19	6	7	9.3	19.3
31-May-04	4	4	6	6	6	14	23	12	7	A	14	4	7	8	10	13	10	9	8	11	19	12	9	6	9.7	22.5
Hourly Avg	14.7	13.7	13.2	13.1	14.5	23.9	26.6	19.6	15.3	14.4	8.1	8.5	7.4	7.6	9.7	8.2	8.0	8.4	8.5	9.5	13.5	23.3	19.5	17.9		
Hourly Max	61.4	64.8	38.6	36.0	37.8	77.9	79.7	60.4	48.9	107.9	16.3	26.7	18.4	23.3	30.7	41.8	15.9	16.8	21.9	27.8	35.4	117.3	78.1	80.1		

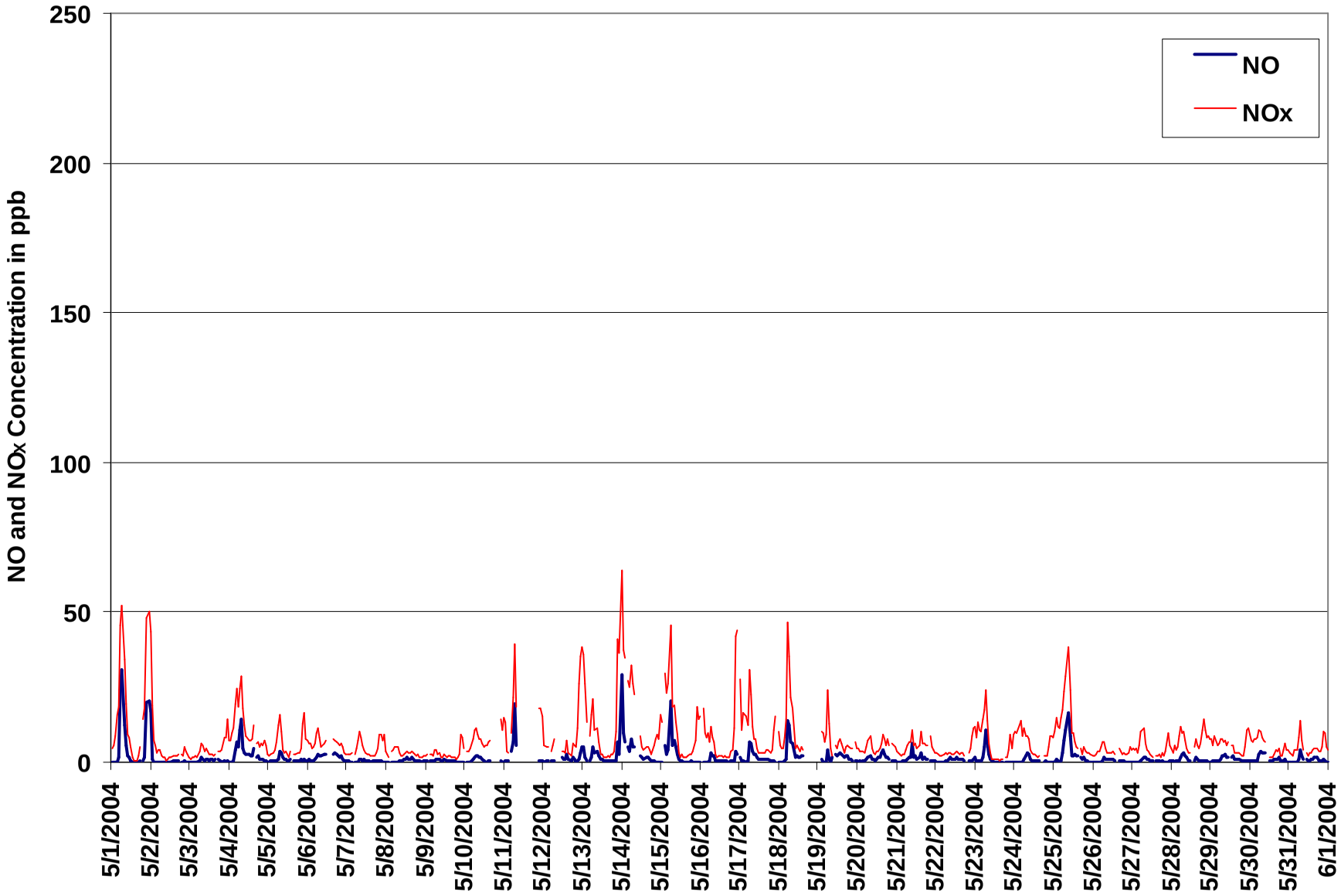


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trends

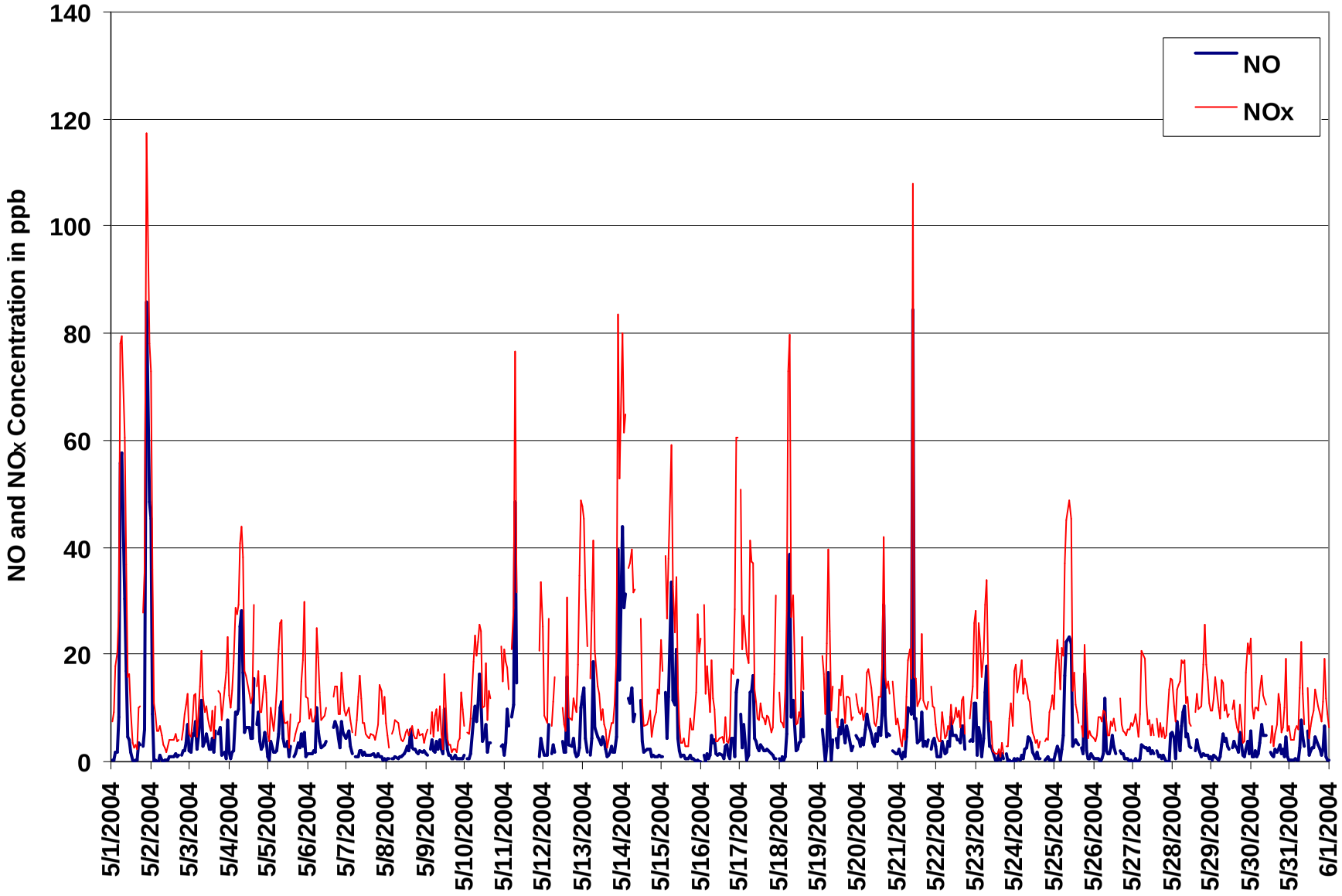


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Maximum Value Monthly Trends

PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Ozone (O_3)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	59.6	ppb	16-May	14:00 15:00
Maximum 24-hr Average:	44.4	ppb	7-May	

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

AIC Time:	31 hrs	Operational Time:	704 hrs
Calibration Time:	7 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average
	58	53	44	35	27	9	2	34.5 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-May-04	2	44	36	9	6	2	4	18	30	39	43	49	50	49	49	50	50	48	A	34	21	4	1	2	27.8	50.3
2-May-04	9	24	22	27	24	23	33	39	43	51	56	56	54	53	53	52	44	A	42	42	34	32	30	31	37.9	55.9
3-May-04	35	34	33	32	33	31	28	27	29	27	28	31	33	35	38	37	A	37	36	35	31	29	22	26	31.6	37.6
4-May-04	25	17	12	4	0	4	5	7	16	18	26	32	37	42	37	A	46	44	43	41	43	39	38	39	26.8	46.0
5-May-04	41	40	43	41	38	29	29	40	46	48	49	51	53	52	A	55	54	53	53	49	39	31	39	37	44.0	55.2
6-May-04	37	36	35	34	32	28	28	31	33	36	41	45	46	C	C	C	C	44	43	42	41	40	40	41	37.6	46.2
7-May-04	41	41	43	A	42	41	38	37	42	46	51	53	53	52	53	51	51	51	47	40	37	36	32	44	44.4	52.8
8-May-04	44	46	A	37	35	39	42	45	48	47	46	43	37	34	27	23	22	23	25	26	25	25	27	31	34.7	47.7
9-May-04	31	A	33	33	40	36	37	39	38	39	40	40	40	40	41	41	41	41	40	38	35	26	25	28	36.6	41.1
10-May-04	A	27	26	26	22	21	23	25	28	32	38	43	44	46	47	48	48	C	M	C	C	28	30	26	33.2	48.2
11-May-04	12	36	37	A	32	16	13	27	36	44	47	49	50	52	53	53	52	48	50	48	36	28	23	22	37.5	52.9
12-May-04	34	32	29	A	32	32	29	26	32	35	38	41	41	43	42	44	46	42	41	41	33	16	5	1	32.8	45.8
13-May-04	2	7	A	28	33	24	22	33	36	41	45	45	48	49	50	49	50	50	50	49	38	8	6	0	33.2	50.0
14-May-04	4	A	1	3	5	6	13	18	P	31	43	43	47	49	49	51	52	53	50	47	43	39	34	22	31.9	52.7
15-May-04	A	5	2	4	4	2	14	17	25	36	47	53	53	55	57	59	59	56	55	51	44	33	34	A	34.8	59.1
16-May-04	28	25	28	24	22	23	20	24	29	45	53	56	59	60	60	59	59	58	56	56	43	13	A	2	39.2	59.6
17-May-04	15	27	19	21	22	11	20	29	34	36	43	52	53	53	53	52	52	51	51	49	39	A	33	34	36.9	53.3
18-May-04	33	34	34	29	22	8	19	27	31	46	50	52	53	51	52	49	49	47	46	43	A	37	35	24	37.9	53.0
19-May-04	20	17	15	18	15	8	21	31	36	40	43	45	43	43	47	49	46	40	34	A	30	26	24	25	31.2	48.9
20-May-04	23	23	23	23	26	25	23	22	28	34	36	35	36	36	36	35	34	36	A	37	34	33	31	33	30.5	37.3
21-May-04	34	32	31	30	31	33	34	33	34	37	39	39	41	41	39	42	43	A	42	40	34	36	35	34	36.4	42.7
22-May-04	34	33	32	30	29	28	31	31	33	36	38	41	38	39	39	38	A	40	39	39	34	27	24	23	33.7	40.7
23-May-04	22	16	18	9	6	8	10	18	26	35	44	45	48	50	51	A	53	52	52	51	48	37	41	35	33.7	52.7
24-May-04	30	28	23	16	20	18	20	22	31	41	44	48	51	51	A	52	50	49	45	43	39	31	31	29	35.3	52.2
25-May-04	24	18	18	17	13	12	11	10	5	13	29	27	30	A	32	31	33	36	32	35	37	36	37	38	25.1	38.4
26-May-04	35	36	32	35	32	34	38	41	45	46	46	46	A	46	47	47	47	48	47	48	45	40	36	39	41.6	47.9
27-May-04	39	36	32	38	33	29	33	40	45	47	49	A	53	53	53	51	50	50	49	49	46	35	35	34	42.6	53.4
28-May-04	34	29	32	29	22	22	25	24	25	38	A	48	48	47	47	46	45	41	34	28	29	30	25	25	33.6	48.2
29-May-04	21	21	15	18	15	16	17	18	18	A	29	28	31	28	34	36	34	32	36	33	27	19	18	17	24.4	36.0
30-May-04	17	16	14	14	13	11	13	15	A	22	35	40	42	43	38	34	35	35	35	35	29	28	30	27	27.0	43.2
31-May-04	29	30	26	27	28	26	24	A	37	40	41	42	41	43	40	41	42	43	42	37	31	29	35	34	35.0	42.7
Hourly Avg	26.0	28.0	25.7	23.4	23.4	20.8	23.0	27.1	32.5	37.6	41.9	43.9	45.1	46.1	45.0	45.7	46.0	44.6	43.5	41.6	35.9	29.0	28.6	26.9		
Hourly Max	43.8	46.3	43.4	41.3	42.2	40.8	41.7	44.6	47.7	51.1	55.9	56.2	59.1	59.5	59.6	59.5	58.9	58.1	56.1	55.9	47.5	40.4	41.1	44.4		

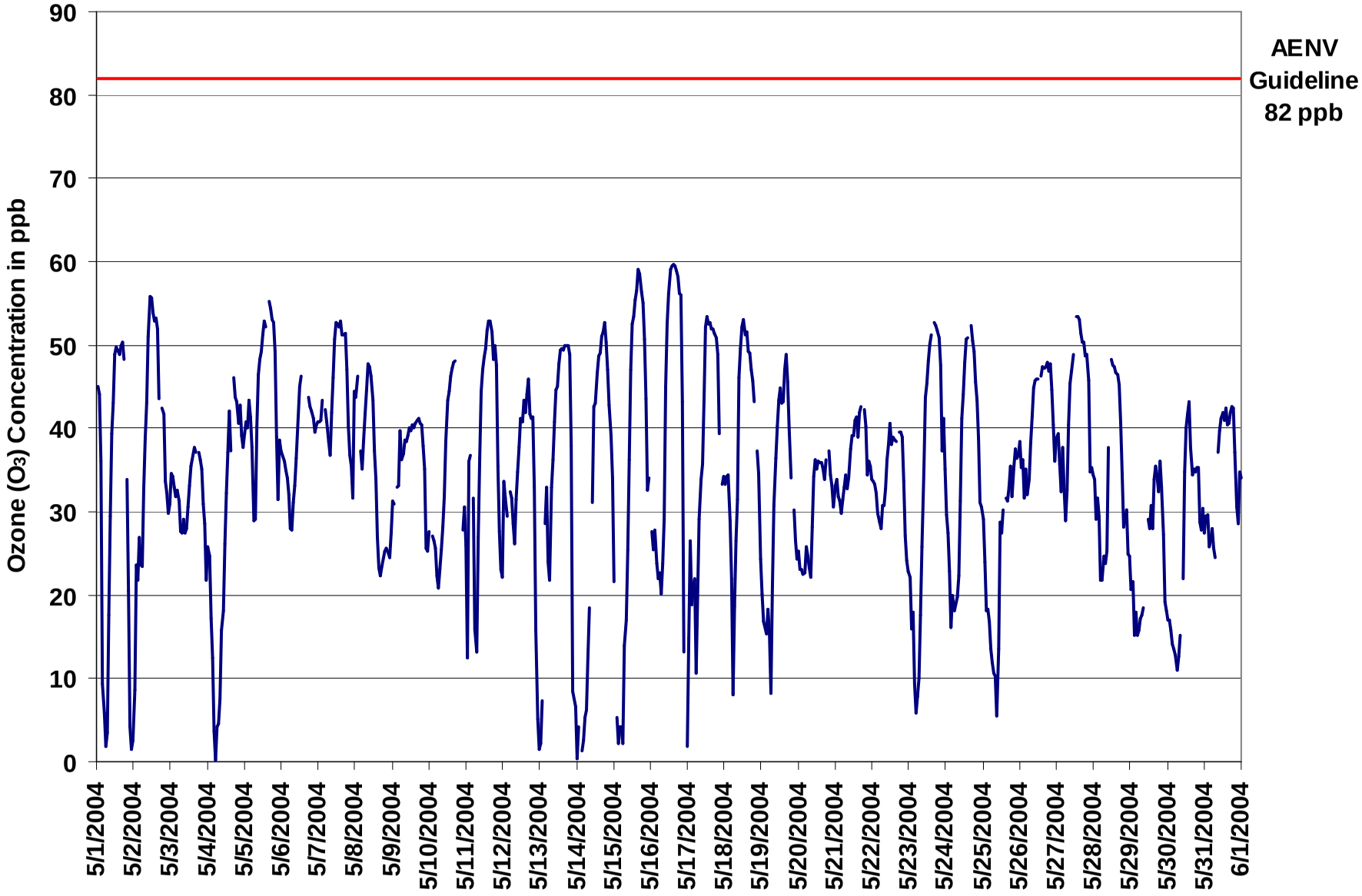


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Ozone (O_3)

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

Summary

Maximum 1-hr Value:	62.0	ppb	16-May	14:00 15:00
Maximum 24-hr Value:	47.7	ppb	7-May	

AIC Time:	32 hrs	Operational Time:	704 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average
	60	55	48	39	31	16	7	38.3 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-May-04	48	47	44	22	11	9	9	23	34	49	48	53	51	51	50	51	52	52	A	40	35	22	6	8	35.4	52.7
2-May-04	21	27	30	31	27	25	40	41	49	56	59	57	56	55	58	56	47	A	44	45	38	38	31	34	41.9	59.0
3-May-04	36	36	35	34	34	35	31	31	32	29	31	32	35	38	40	39	A	39	39	38	38	32	29	29	34.4	39.8
4-May-04	28	20	22	12	2	8	7	17	21	25	31	36	45	47	41	A	49	47	47	45	46	44	42	47	31.7	49.2
5-May-04	46	43	45	44	43	33	34	48	49	50	51	53	55	54	A	57	56	56	55	52	50	37	42	40	47.5	56.5
6-May-04	39	38	38	35	35	32	32	34	35	38	44	48	48	A	C	C	C	46	45	44	43	41	42	43	40.0	48.1
7-May-04	42	43	47	A	45	45	41	45	46	51	53	55	54	54	55	53	53	55	51	45	40	40	37	49	47.7	55.2
8-May-04	48	55	A	40	37	43	44	48	49	49	48	48	39	39	31	27	25	25	29	30	29	26	32	33	38.0	55.0
9-May-04	33	A	35	40	41	39	38	40	40	41	41	42	42	41	42	43	42	42	41	41	38	32	28	30	38.8	42.8
10-May-04	A	29	28	28	25	24	27	30	31	35	41	46	46	48	49	50	50	C	M	C	C	33	32	32	36.0	50.2
11-May-04	18	42	42	A	35	20	22	37	42	48	50	52	53	54	55	55	54	53	53	51	46	33	30	32	42.5	55.5
12-May-04	36	34	32	A	34	35	35	34	36	37	42	45	44	45	45	48	48	44	44	44	39	28	14	7	36.9	47.6
13-May-04	7	14	A	35	36	30	30	37	41	44	48	48	50	51	51	51	52	52	53	52	49	26	14	3	38.0	52.8
14-May-04	14	A	3	8	9	12	16	26	P	40	50	48	51	51	51	54	54	55	54	50	48	44	38	30	36.7	54.6
15-May-04	A	12	6	7	8	7	17	20	32	41	55	54	55	57	60	61	60	60	59	55	50	40	39	A	38.9	61.3
16-May-04	34	35	33	28	26	25	23	27	41	51	55	61	61	61	62	61	61	60	59	59	59	29	A	7	44.3	62.0
17-May-04	33	34	25	25	27	16	26	33	36	39	47	56	56	55	55	54	55	54	54	52	46	A	36	37	41.4	56.3
18-May-04	37	37	36	34	26	16	27	30	43	49	52	54	55	55	55	52	53	49	50	46	A	40	38	33	42.0	54.8
19-May-04	23	25	20	22	20	14	29	38	39	42	47	47	47	46	52	54	50	45	41	A	33	29	27	27	35.5	53.7
20-May-04	25	24	24	24	29	28	26	26	32	38	38	37	38	38	39	40	38	40	A	41	37	37	34	37	33.5	41.4
21-May-04	36	33	34	33	35	37	37	37	37	41	42	43	44	44	44	45	46	A	45	44	39	39	37	36	39.4	45.6
22-May-04	36	35	34	32	30	30	32	32	37	38	41	43	42	42	41	41	A	41	41	41	37	31	27	27	36.1	43.4
23-May-04	26	20	26	13	8	12	16	23	30	44	45	48	50	52	53	A	54	54	54	53	52	42	44	45	37.5	54.5
24-May-04	34	32	27	25	26	22	23	26	39	44	47	50	53	53	A	54	54	51	49	45	43	33	33	33	39.0	53.8
25-May-04	28	23	21	22	19	16	15	20	9	28	32	31	33	A	33	34	36	39	37	40	39	39	39	46	29.5	46.0
26-May-04	38	41	35	39	35	36	43	46	47	48	48	48	A	50	51	51	52	50	49	50	48	45	40	41	44.8	52.2
27-May-04	42	42	35	42	39	35	38	45	48	49	51	A	56	56	54	53	53	52	51	51	49	42	37	36	46.1	56.5
28-May-04	36	31	34	32	29	25	27	26	28	49	A	51	51	50	51	52	47	46	39	33	36	35	28	29	37.6	52.0
29-May-04	25	25	21	20	19	20	20	20	23	A	32	33	34	31	36	38	38	35	39	35	34	25	25	23	28.3	39.2
30-May-04	21	18	16	16	15	13	16	17	A	28	39	42	44	45	44	40	41	38	38	41	34	32	33	29	30.4	45.0
31-May-04	31	32	28	30	29	28	30	A	40	42	42	43	43	45	43	43	44	46	45	42	34	33	40	38	38.0	46.3
Hourly Avg	31.8	32.0	29.5	27.6	26.9	24.9	27.4	31.9	36.7	42.1	45.0	46.8	47.7	48.6	47.9	48.5	48.7	47.3	46.5	44.9	41.7	34.9	32.6	31.3		
Hourly Max	48.4	55.0	47.0	44.2	44.8	44.6	43.6	47.9	49.4	55.7	59.0	61.0	61.5	61.4	62.0	61.3	60.7	59.7	59.1	59.1	59.1	44.8	44.4	48.8		

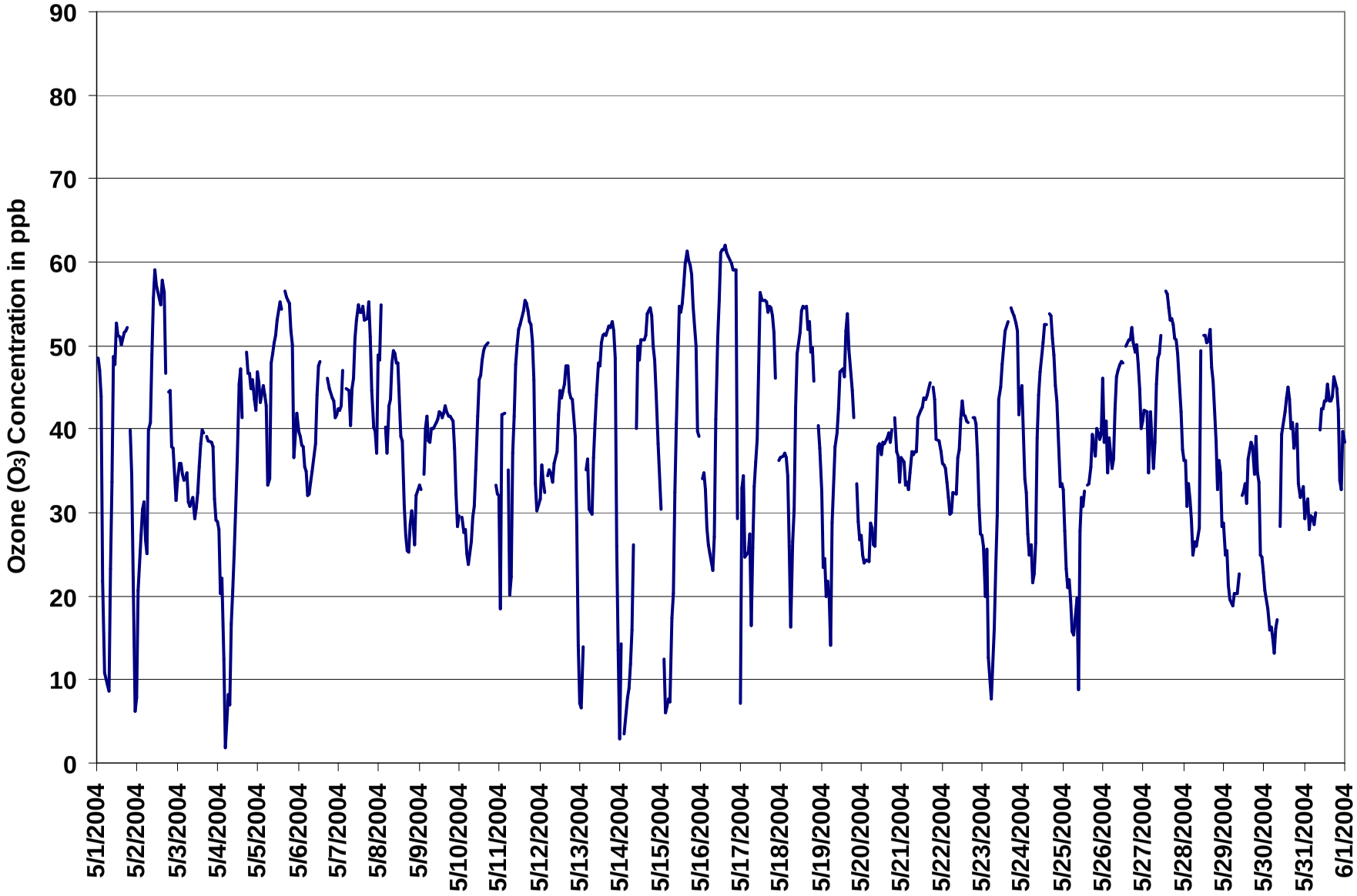


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	58.4	ppb	16-May	18:00 19:00

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

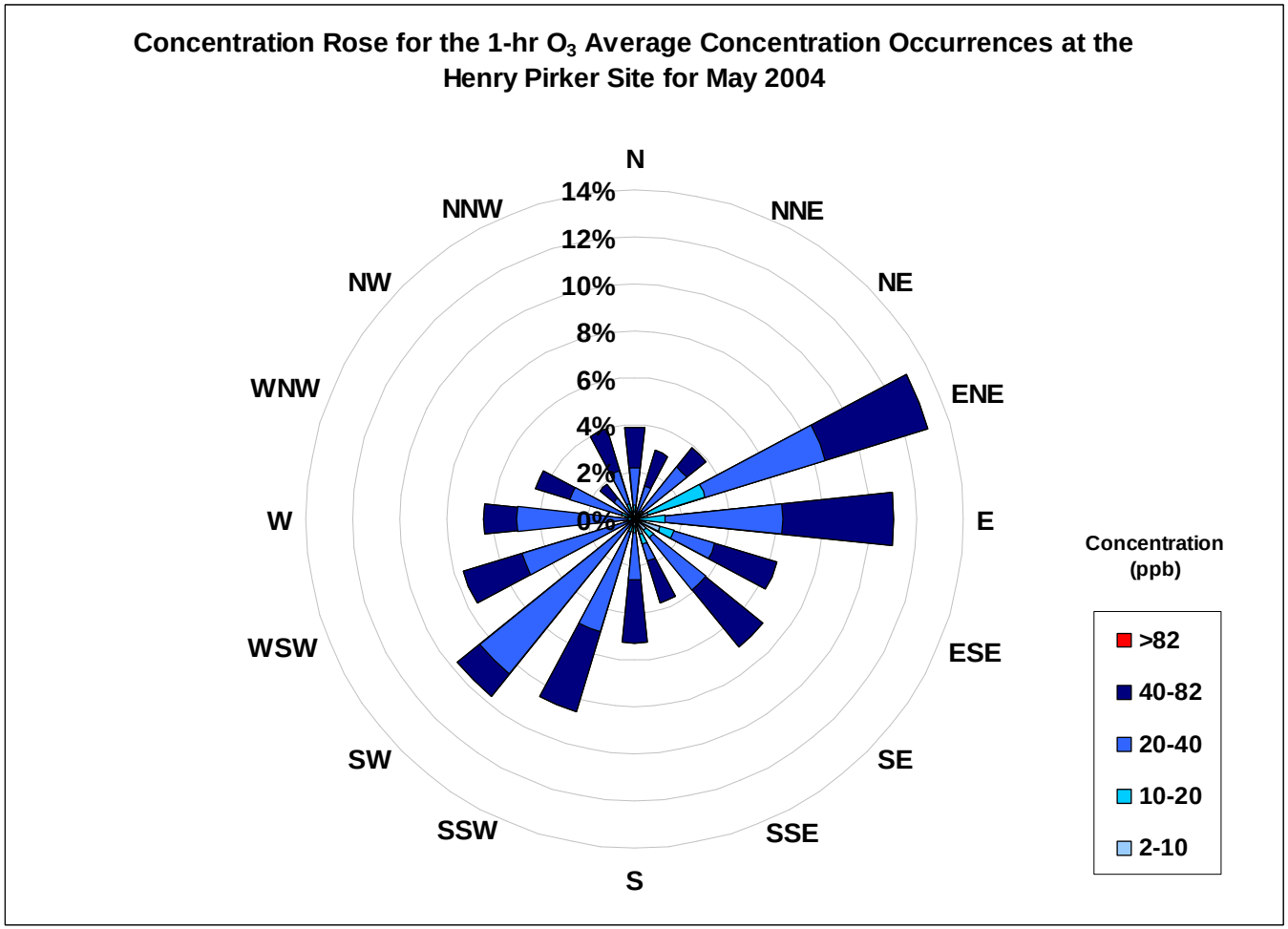
Percentile	99	95	75	50	25	5	1
	54.8	50.5	41.5	35.2	28.1	15.1	8.4

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-May-04	45	44	41	37	33	28	24	20	18	18	19	24	29	35	41	45	47	49	49	47	43	37	30	23	34.4	49.3
2-May-04	17	14	15	14	14	16	20	25	29	33	37	40	44	48	50	52	52	52	50	48	46	43	39	36	34.9	52.4
3-May-04	35	35	34	33	32	32	32	32	31	30	29	29	29	30	31	32	33	34	35	36	36	35	32	31	32.4	36.0
4-May-04	30	28	25	21	17	14	12	9	8	8	10	14	18	23	27	30	34	38	40	41	42	42	42	42	25.6	42.3
5-May-04	41	40	40	41	40	39	38	38	38	39	40	41	43	46	49	51	52	53	53	53	51	48	47	44	44.3	53.1
6-May-04	42	40	38	36	35	35	33	33	32	32	33	34	36	37	N	N	N	N	N	N	N	N	N	41	N	42.2
7-May-04	41	41	41	41	41	41	41	40	41	41	42	44	45	46	48	50	51	52	51	50	48	46	43	42	44.6	51.8
8-May-04	41	41	40	39	39	40	41	41	42	42	42	43	43	43	41	38	35	32	29	27	26	25	25	26	36.7	43.4
9-May-04	27	27	28	29	31	33	34	36	37	37	38	39	39	39	40	40	40	40	40	40	40	38	36	34	35.9	40.5
10-May-04	33	31	29	28	26	25	25	24	25	25	27	29	32	35	38	41	43	45	N	N	N	N	N	N	31.2	45.1
11-May-04	N	N	N	N	29	27	25	25	28	29	31	33	35	40	45	48	50	50	51	51	49	46	42	38	38.5	50.7
12-May-04	36	34	31	29	29	29	30	31	30	31	32	33	34	35	37	39	41	42	42	43	42	38	33	28	34.6	42.5
13-May-04	23	18	15	13	13	14	17	21	26	31	33	35	37	40	43	45	47	48	49	49	48	43	38	31	32.5	49.4
14-May-04	26	22	15	9	4	4	5	7	N	11	17	23	29	35	40	45	45	48	49	50	49	48	46	42	29.1	49.6
15-May-04	41	34	27	21	16	11	8	7	9	13	19	25	31	38	43	48	52	55	56	56	54	52	49	47	33.8	55.9
16-May-04	43	38	35	31	28	26	24	24	24	27	30	34	39	43	48	53	56	58	58	58	56	51	49	41	40.6	58.4
17-May-04	35	30	25	20	17	17	17	20	23	24	27	31	35	40	44	47	49	51	52	52	50	50	47	44	35.2	52.1
18-May-04	42	39	37	34	31	29	27	26	26	27	29	32	36	41	45	48	50	50	50	49	48	46	44	40	38.5	50.4
19-May-04	36	32	27	24	23	19	17	18	20	23	27	30	33	38	41	43	45	44	43	43	41	39	36	32	32.3	44.5
20-May-04	29	27	25	25	24	24	24	23	24	25	27	29	30	31	33	35	35	36	35	36	35	35	34	34	29.8	35.7
21-May-04	34	33	33	32	32	32	32	32	32	33	34	35	36	37	38	39	40	41	41	41	40	39	39	38	36.1	41.2
22-May-04	37	36	35	34	33	32	31	31	31	31	32	33	34	36	37	38	38	39	39	39	38	37	34	32	34.9	39.1
23-May-04	31	28	25	22	18	16	14	13	14	16	19	24	29	34	40	43	47	49	50	51	51	49	48	46	32.4	51.0
24-May-04	43	40	36	32	29	26	24	22	22	24	27	31	34	38	41	45	48	49	50	49	47	44	43	40	36.9	49.5
25-May-04	36	33	29	26	23	20	18	15	13	13	14	15	17	18	21	24	28	31	32	33	34	34	35	36	24.9	36.4
26-May-04	36	36	36	36	35	35	35	35	37	38	40	41	42	44	45	46	47	47	47	47	47	46	45	44	41.1	47.2
27-May-04	43	41	39	38	37	35	35	35	36	37	39	39	42	46	49	50	51	52	52	51	50	48	46	44	43.1	51.6
28-May-04	41	39	37	34	31	30	28	27	26	27	26	29	33	36	40	43	46	46	45	42	40	38	35	32	35.4	46.0
29-May-04	29	27	24	23	21	19	19	18	17	17	19	20	22	24	26	29	31	31	32	33	32	31	29	27	25.1	32.9
30-May-04	25	23	20	18	16	15	14	14	14	14	17	21	25	30	34	36	36	38	38	37	36	34	33	32	25.8	37.8
31-May-04	31	31	29	28	28	28	27	27	28	30	32	34	36	38	41	41	41	42	42	41	40	38	37	37	34.4	41.7
Hourly Avg	35.0	32.7	30.5	28.2	26.6	25.5	24.8	24.9	26.0	26.7	28.6	31.1	33.9	37.0	39.8	42.1	43.8	44.7	44.9	44.6	43.4	41.3	39.1	36.8		
Hourly Max	45.0	44.2	41.2	41.0	41.2	41.4	41.1	41.1	41.6	41.8	42.4	43.7	45.0	47.9	50.5	52.6	56.3	57.9	58.4	58.3	56.3	51.6	49.3	47.3		



Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
0	<	2	7
2	to	10	31
10	to	20	57
20	to	40	351
40	to	82	258
	>	82	0
Total Non-Zero Values			704

PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	0.86	ppm	1-May	23:00 0:00
Maximum 24-hr Average:	0.36	ppm	14-May	

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

AIC Time:	32 hrs	Operational Time:	696 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	98.7%

Percentile	99	95	75	50	25	5	1	Average
	0.6	0.4	0.3	0.2	0.2	0.0	0.0	0.2 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

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-May-04	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	A	0.4	0.3	0.7	0.9	0.9	0.32	0.86
2-May-04	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.34
3-May-04	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.24	0.31
4-May-04	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.4	0.3	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.40
5-May-04	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.23	0.36
6-May-04	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.1	A	0.2	0.3	C	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.24	0.36
7-May-04	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	D	0.8	0.6	0.4	0.6	0.5	0.6	0.4	0.3	0.31	0.78
8-May-04	0.2	0.4	A	0.7	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.67
9-May-04	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.24
10-May-04	A	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	M	0.0	0.0	0.1	0.1	0.2	0.07	0.21
11-May-04	0.2	0.2	0.2	A	0.2	0.3	0.5	0.2	0.0	0.0	0.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.47
12-May-04	0.0	0.1	0.1	A	0.0	0.3	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.5	0.15	0.59
13-May-04	0.3	0.3	A	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.6	0.26	0.58
14-May-04	0.4	A	0.2	0.2	0.2	0.3	0.3	0.3	P	D	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.5	0.4	0.3	0.4	0.5	0.36	0.54
15-May-04	A	0.2	0.3	0.3	0.2	0.4	0.4	D	D	D	0.2	0.2	0.2	0.3	0.5	0.5	0.4	D	0.3	0.4	0.3	0.3	0.3	A	0.30	0.48
16-May-04	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	D	0.3	0.5	A	0.6	0.29	0.65
17-May-04	0.4	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.22	0.42
18-May-04	0.1	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	0.1	0.1	0.1	0.2	0.2	A	0.3	0.3	0.2	0.11	0.28
19-May-04	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	A	0.3	0.3	0.2	0.2	0.21	0.32
20-May-04	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.6	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.2	0.25	0.57
21-May-04	0.3	0.6	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.2	0.3	0.30	0.62
22-May-04	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.5	0.4	0.2	A	0.2	0.3	0.3	0.4	0.4	0.5	0.4	0.31	0.52
23-May-04	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.23	0.31
24-May-04	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.25	0.36
25-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.4	0.3	0.3	0.3	A	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.30	0.55
26-May-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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.25
27-May-04	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.23	0.29
28-May-04	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.29	0.39
29-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.28	0.31
30-May-04	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.23	0.27
31-May-04	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.16	0.26
Hourly Avg	0.24	0.24	0.23	0.23	0.21	0.25	0.28	0.26	0.22	0.21	0.20	0.20	0.19	0.22	0.25	0.22	0.23	0.23	0.24	0.24	0.25	0.30	0.28	0.29		
Hourly Max	0.42	0.62	0.44	0.67	0.47	0.42	0.50	0.55	0.54	0.57	0.54	0.47	0.36	0.52	0.59	0.46	0.78	0.57	0.50	0.60	0.51	0.71	0.86	0.86		

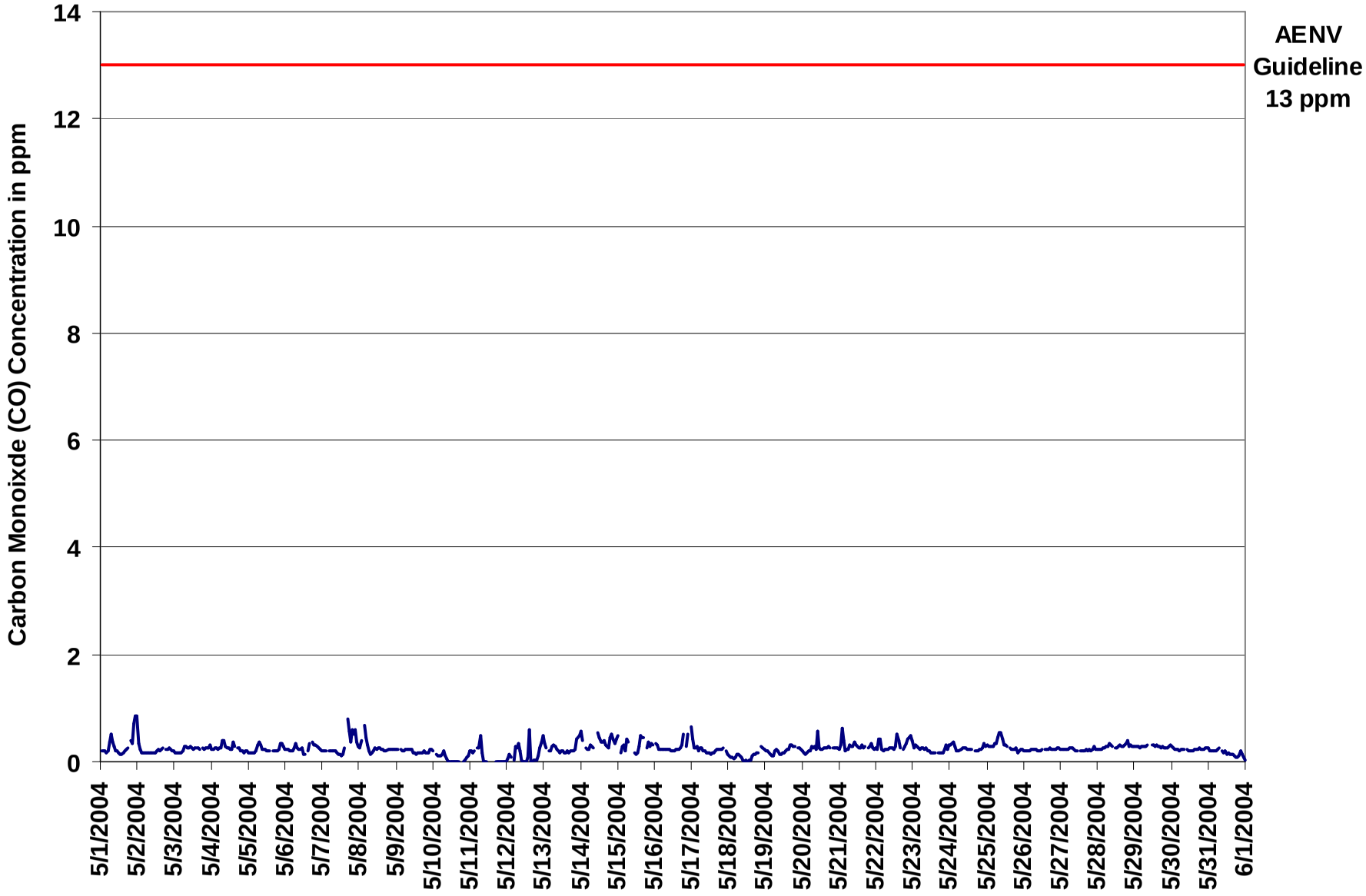


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Carbon Monoxide (CO)

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

Summary

Maximum 1-hr Value:	10.4	ppm	14-May	19:00 20:00
Maximum 24-hr Value:	2.1	ppm	14-May	

AIC Time:	33 hrs	Operational Time:	696 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	98.8%

Percentile	99	95	75	50	25	5	1	Average
	3.1	1.6	0.6	0.4	0.3	0.3	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-May-04	0.3	0.3	0.3	0.3	0.4	1.0	1.0	0.6	0.6	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.6	A	0.9	0.5	1.7	1.4	1.3	0.59	1.68
2-May-04	0.8	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.6	0.3	0.3	0.6	A	0.4	0.4	0.4	0.7	0.5	0.3	0.38	0.84
3-May-04	0.4	0.3	0.3	0.3	0.3	0.3	0.5	1.0	0.7	0.5	0.5	0.7	0.8	0.7	0.9	0.4	A	0.5	0.4	0.6	0.4	0.3	0.5	0.3	0.51	0.96
4-May-04	0.3	0.3	0.3	0.3	0.4	0.4	1.4	1.1	0.5	0.5	1.2	0.3	0.6	1.1	1.4	A	0.9	0.9	0.5	0.3	0.3	0.7	0.3	0.2	0.62	1.37
5-May-04	0.3	0.2	0.3	0.3	0.3	0.8	2.0	1.1	0.6	0.7	0.5	0.7	0.3	0.3	A	0.3	0.3	0.3	0.4	0.4	0.9	0.5	0.7	0.4	0.55	1.96
6-May-04	0.4	0.3	0.3	0.3	0.3	0.4	0.6	0.5	0.4	0.3	0.4	0.3	0.6	A	0.5	0.5	C	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.41	0.63
7-May-04	0.3	0.4	0.4	A	0.3	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.1	D	2.7	1.1	0.8	2.0	1.6	2.1	0.9	1.0	0.84	2.73
8-May-04	0.8	1.3	A	1.8	1.9	1.4	0.9	0.5	0.5	0.5	0.6	0.7	0.7	0.6	0.6	0.7	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.8	0.78	1.91
9-May-04	0.5	A	0.6	0.5	0.5	0.4	0.5	0.7	0.6	0.5	0.4	0.6	0.4	0.4	0.5	0.4	0.4	0.6	0.4	0.3	0.4	0.5	0.5	0.5	0.50	0.70
10-May-04	A	0.4	0.4	0.4	0.4	0.6	0.8	0.4	0.3	0.2	0.2	0.3	0.2	0.4	0.1	0.4	0.2	A	M	0.3	0.4	0.3	0.3	0.5	0.36	0.77
11-May-04	0.4	0.4	0.3	A	0.6	0.4	1.0	0.5	0.1	0.0	0.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.8	0.32	1.01
12-May-04	1.5	2.3	1.4	A	1.6	2.1	2.7	1.8	2.0	1.8	0.5	0.0	0.0	0.8	1.7	0.8	0.0	0.1	0.1	0.1	0.3	0.5	0.6	1.0	1.03	2.74
13-May-04	0.5	0.5	A	0.3	0.3	0.4	0.5	0.4	0.4	0.3	0.4	0.7	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.9	0.7	1.0	0.45	0.99
14-May-04	1.0	A	0.5	0.4	0.5	0.5	0.6	0.5	P	D	5.3	4.1	2.9	1.0	3.6	0.8	0.6	0.5	3.3	10.4	1.4	3.1	1.5	1.6	2.09	10.39
15-May-04	A	0.4	1.4	2.0	0.9	2.4	4.5	D	D	D	0.8	0.3	0.3	1.3	2.9	2.3	3.3	D	1.1	1.4	1.0	0.5	0.5	A	1.52	4.51
16-May-04	0.5	0.9	0.3	0.3	0.3	0.3	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.6	1.0	0.9	1.5	1.3	D	0.5	0.9	A	1.8	0.64	1.76
17-May-04	1.1	0.9	1.9	2.0	0.3	0.5	0.4	0.4	0.5	0.4	0.3	1.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.4	A	0.4	0.3	0.63	1.98
18-May-04	0.4	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.8	0.4	0.3	0.2	0.4	0.3	0.5	0.4	0.6	0.7	0.7	A	0.6	0.5	0.5	0.44	0.79
19-May-04	0.4	0.4	0.4	0.3	0.3	0.7	0.8	0.5	0.4	0.4	0.5	0.3	0.5	0.4	0.4	1.0	0.8	0.5	0.5	A	0.4	0.4	0.3	0.3	0.47	0.96
20-May-04	0.3	0.3	0.3	0.3	0.3	1.7	0.7	0.5	0.5	1.6	0.9	0.4	0.5	0.4	0.5	0.5	0.4	0.4	A	0.4	0.4	0.3	0.5	0.4	0.55	1.70
21-May-04	1.5	1.8	1.2	0.4	0.4	0.4	0.9	0.5	0.4	0.9	0.6	0.7	0.7	0.4	1.1	0.5	0.4	A	0.5	0.4	0.5	0.4	0.4	1.0	0.68	1.82
22-May-04	0.3	1.3	1.3	0.7	0.3	0.3	0.6	0.4	0.5	0.4	0.4	0.9	1.2	1.3	1.1	0.6	A	0.3	0.8	1.0	1.1	1.2	1.0	1.7	0.81	1.70
23-May-04	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.9	0.4	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.5	0.39	0.92
24-May-04	0.5	0.7	0.5	0.5	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	A	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.40	0.65
25-May-04	0.4	0.4	0.4	0.4	0.5	0.4	0.7	0.8	0.8	0.7	0.4	0.5	0.5	A	0.4	0.3	0.3	0.3	1.6	0.5	0.6	0.4	0.3	0.3	0.51	1.59
26-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.33	0.40
27-May-04	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.33	0.40
28-May-04	0.3	0.4	0.4	0.3	0.4	0.4	0.5	1.4	0.7	0.5	A	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.5	0.5	0.4	0.6	0.4	0.4	0.49	1.40
29-May-04	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	A	0.4	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.40	0.58
30-May-04	0.4	0.3	0.5	0.3	0.3	0.4	0.3	0.3	A	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.3	0.37	0.50
31-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.4	A	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.1	0.29	0.50
Hourly Avg	0.53	0.59	0.55	0.53	0.47	0.64	0.83	0.59	0.51	0.52	0.60	0.57	0.50	0.52	0.79	0.55	0.59	0.47	0.62	0.86	0.53	0.70	0.54	0.64		
Hourly Max	1.48	2.32	1.94	2.01	1.91	2.36	4.51	1.83	2.02	1.76	5.31	4.09	2.91	1.34	3.60	2.30	3.32	1.46	3.27	10.39	1.59	3.10	1.53	1.76		

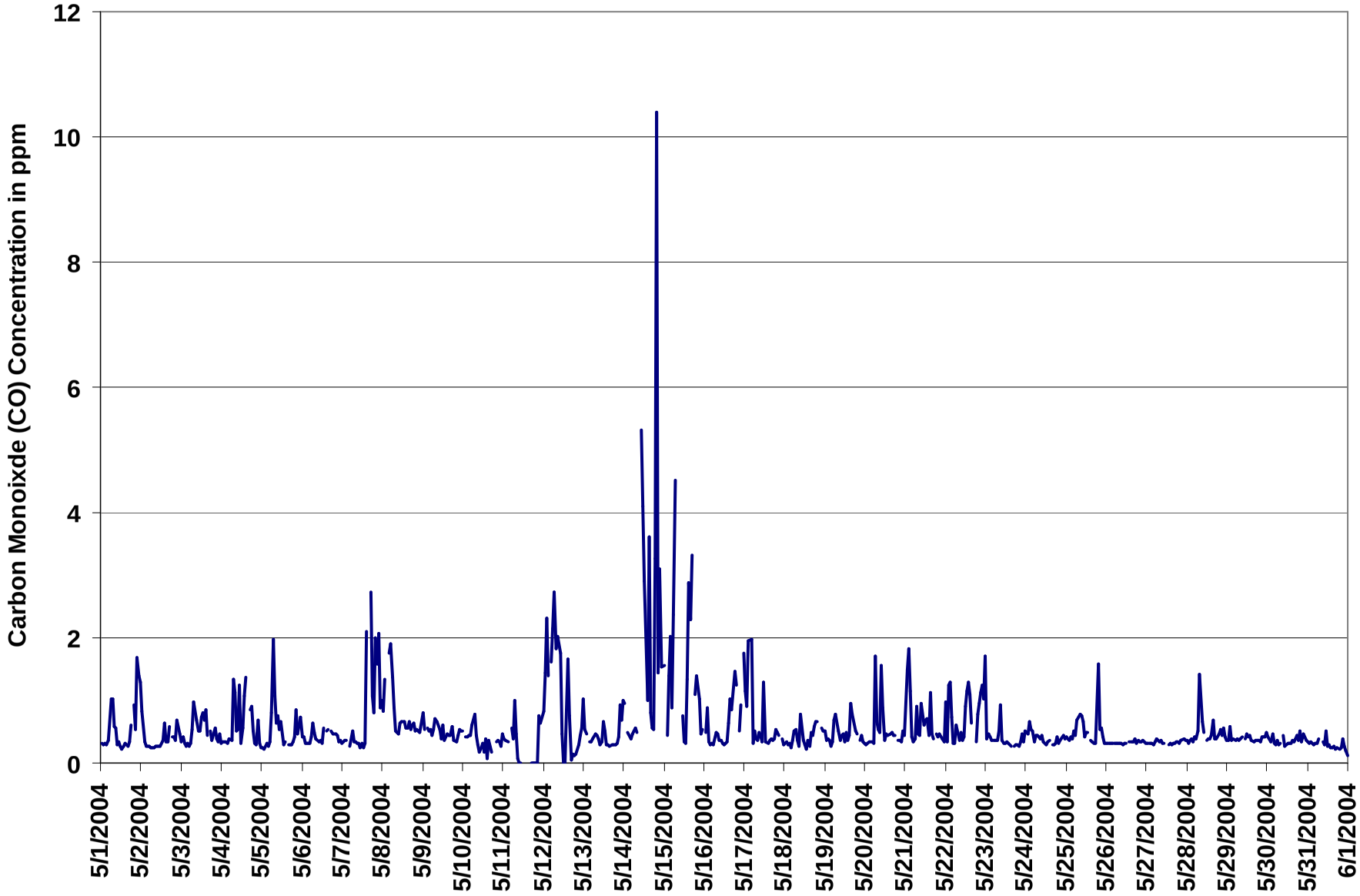


Figure 10. PASZA - Henry Pirker Carbon Monoxide 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	0.54	ppm	7-May	22:00 23:00

Guideline Limit: Alberta Environment: 8-hr 5 ppm

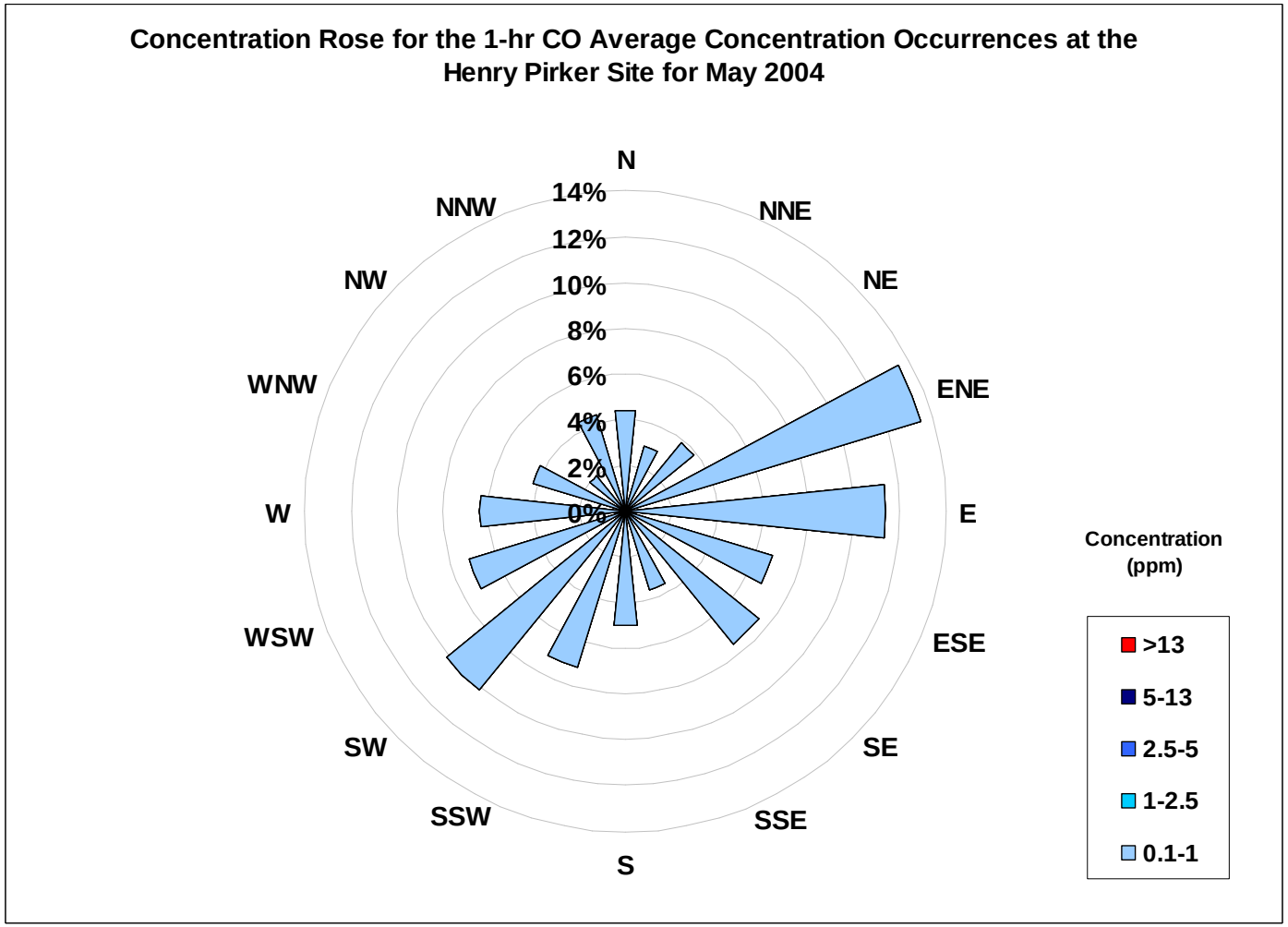
Percentile	99	95	75	50	25	5	1
	0.46	0.37	0.28	0.23	0.20	0.11	0.02

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-May-04	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.26	0.52
2-May-04	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27	0.54
3-May-04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.23	0.26
4-May-04	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.26	0.30
5-May-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.22	0.26
6-May-04	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	0.3	0.3	0.3	0.25	0.30
7-May-04	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.28	0.54
8-May-04	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30	0.44
9-May-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	0.20	0.23
10-May-04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	N	N	N	N	N	N	0.11	0.19
11-May-04	N	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	0.0	0.0	N	0.25
12-May-04	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.11	0.19
13-May-04	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.24	0.31
14-May-04	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	N	N	N	N	N	N	N	N	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	N	0.39
15-May-04	0.4	0.4	0.4	0.3	0.3	0.3	0.3	N	N	N	N	N	N	N	N	N	0.3	0.3	0.3	0.3	0.4	0.4	0.4	N	N	0.41
16-May-04	N	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	N	N	0.26	0.33
17-May-04	N	N	N	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.38
18-May-04	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	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.11	0.20
19-May-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	0.3	0.3	0.3	0.3	0.3	0.3	0.21	0.28
20-May-04	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	0.3	0.3	0.3	0.3	0.3	0.3	0.25	0.29
21-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29	0.33
22-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.29	0.37
23-May-04	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.37
24-May-04	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.25	0.30
25-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.31	0.41
26-May-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	0.22	0.24
27-May-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	0.23	0.24
28-May-04	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.28	0.31
29-May-04	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29	0.31
30-May-04	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.27
31-May-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18	0.24
Hourly Avg	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.24	0.24	0.23	0.23	0.23	0.23	0.22	0.22	0.21	0.22	0.22	0.23	0.24	0.25	0.26	0.25	0.26		
Hourly Max	0.54	0.53	0.49	0.46	0.44	0.39	0.37	0.35	0.39	0.40	0.41	0.41	0.40	0.41	0.38	0.34	0.39	0.37	0.36	0.41	0.46	0.53	0.54	0.52		



Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0	<	0.1	52
0.1	to	1	644
1	to	2.5	0
2.5	to	5	0
5	to	13	0
	>	13	0
Total Non-Zero Values			696

PASZA - Henry Pirker Total Hydrocarbon Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Total HydroCarbons (THC)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	2.9	ppm	1-May	23:00 0:00
Maximum 24-hr Average:	2.2	ppm	1-May	

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

AIC Time:	32 hrs	Operational Time:	704 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%

Percentile	99	95	75	50	25	5	1	Average
	2.3	2.2	2.0	1.9	1.9	1.8	1.8	2.0 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-May-04	2.0	2.0	2.1	2.2	2.2	2.5	2.5	2.3	2.3	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	A	2.1	2.0	2.2	2.8	2.9	2.17	2.92
2-May-04	2.1	2.0	2.0	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	A	1.9	1.9	2.0	2.0	2.0	2.0	1.90	2.13
3-May-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.05
4-May-04	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.8	1.8	1.8	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.93	2.03
5-May-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.98	2.05
6-May-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.8	C	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.02
7-May-04	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.9	1.95	2.07
8-May-04	1.9	1.9	A	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.88	1.95
9-May-04	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	2.0	2.1	2.0	2.0	1.98	2.07
10-May-04	A	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	1.8	1.8	M	M	1.7	1.8	1.8	1.9	1.9	1.87	1.99
11-May-04	1.9	1.8	1.9	A	2.0	2.0	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	C	C	C	1.8	1.9	1.9	2.0	2.1	2.0	1.90	2.13
12-May-04	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.3	1.99	2.26
13-May-04	2.2	2.2	A	2.1	2.1	2.0	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	1.9	2.0	2.1	2.2	2.3	2.03	2.32
14-May-04	2.2	A	2.2	2.2	2.3	2.3	2.1	2.0	P	P	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.06	2.34
15-May-04	A	2.2	2.2	2.2	2.2	2.4	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	2.0	A	1.99	2.37
16-May-04	2.1	2.1	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	1.9	1.9	1.9	1.9	1.9	1.9	2.2	A	2.4	1.95	2.38
17-May-04	2.3	2.1	2.1	2.1	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	1.9	1.9	A	1.9	2.0	1.95	2.29
18-May-04	2.0	1.9	1.9	1.9	2.0	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	A	1.9	1.9	2.0	1.92	2.08
19-May-04	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	A	1.9	1.9	2.0	2.0	1.93	2.08
20-May-04	2.0	2.0	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	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.93	1.99
21-May-04	1.9	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	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	1.94	2.05
22-May-04	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.2	2.2	2.2	2.00	2.24
23-May-04	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	A	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.06	2.33
24-May-04	2.1	2.2	2.3	2.3	2.1	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	1.9	A	1.9	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.06	2.27
25-May-04	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.4	2.2	2.0	1.9	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.00	2.38
26-May-04	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.85	1.90
27-May-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.9	2.0	1.88	2.01
28-May-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.88	1.95
29-May-04	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.86	1.97
30-May-04	1.9	1.9	1.9	2.0	2.0	2.0	1.9	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	1.9	1.8	1.9	1.87	2.00
31-May-04	1.9	1.9	1.9	1.9	1.9	2.2	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.91	2.23
Hourly Avg	2.00	1.99	2.00	2.01	2.01	2.04	2.01	1.98	1.97	1.94	1.92	1.91	1.90	1.89	1.88	1.88	1.87	1.89	1.89	1.90	1.92	1.98	2.01	2.03		
Hourly Max	2.29	2.21	2.27	2.26	2.34	2.45	2.54	2.33	2.38	2.20	2.09	2.05	2.01	1.99	1.99	2.05	1.95	1.96	1.96	2.07	2.03	2.24	2.85	2.92		

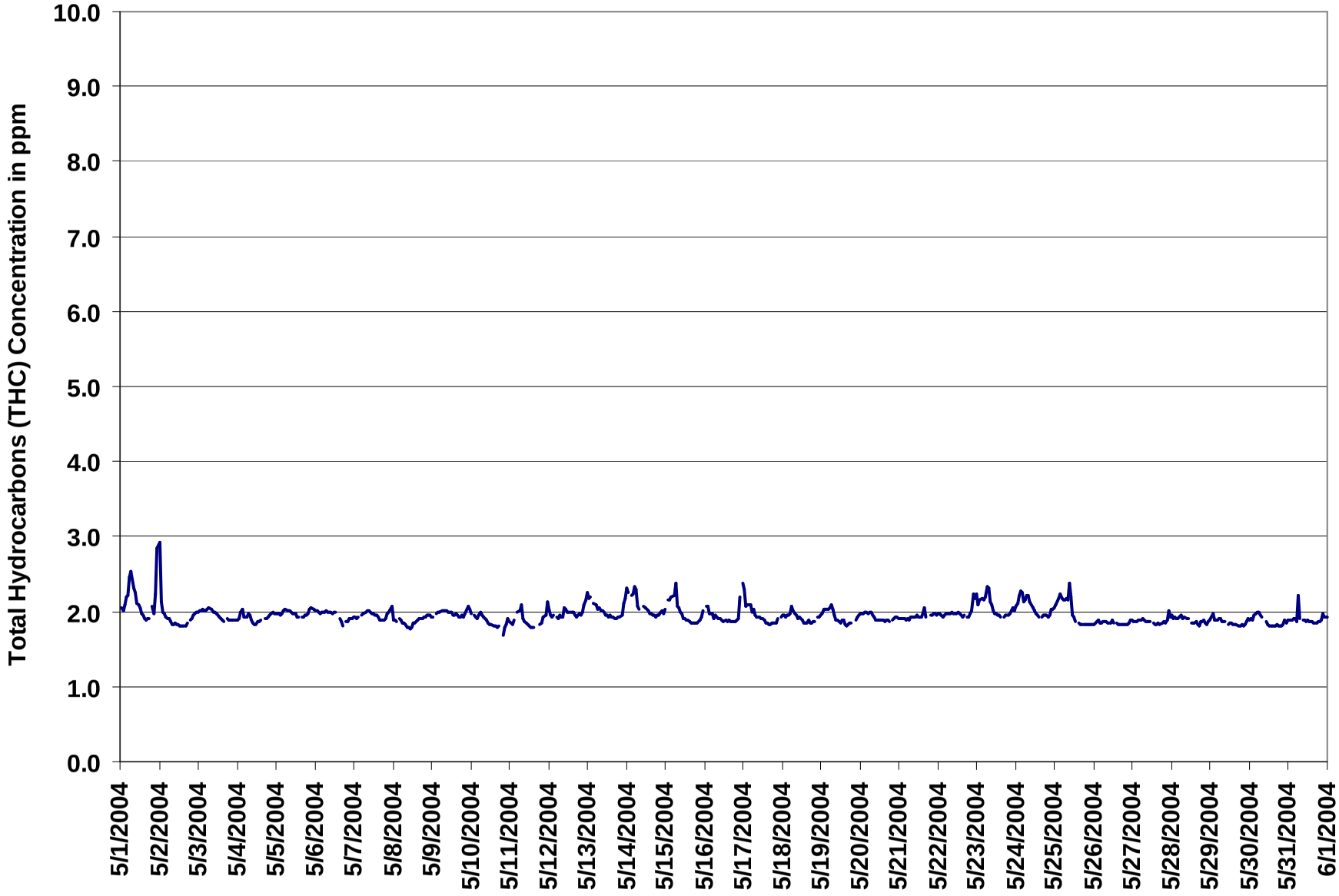


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

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

Summary

Maximum 1-hr Value:	4.2	ppm	1-May	23:00 0:00
Maximum 24-hr Value:	2.4	ppm	1-May	

AIC Time:	33 hrs	Operational Time:	704 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.6%

Percentile	99	95	75	50	25	5	1	Average
	2.7	2.4	2.1	2.0	1.9	1.9	1.8	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-May-04	2.1	2.0	2.2	2.3	2.3	2.7	2.7	2.5	2.4	2.2	2.1	2.1	2.0	2.0	2.0	1.9	2.0	2.0	A	2.6	2.1	2.7	4.2	4.2	2.40	4.23
2-May-04	2.6	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	A	1.9	2.0	2.0	2.0	2.0	2.1	1.96	2.62
3-May-04	2.1	2.1	2.1	2.0	2.1	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	1.9	2.0	1.9	1.9	1.9	2.1	2.02	2.17
4-May-04	2.1	2.5	2.2	2.0	2.0	2.0	2.0	2.2	2.2	1.9	2.0	1.9	1.9	1.9	2.1	A	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.0	2.05	2.50
5-May-04	2.0	2.0	2.0	2.0	2.1	2.1	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.4	2.1	2.05	2.41
6-May-04	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	A	2.0	2.0	1.9	C	1.9	1.9	2.0	1.9	2.0	2.0	2.01	2.09
7-May-04	2.0	2.0	1.9	A	2.0	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.1	2.1	2.1	2.3	2.0	2.01	2.32
8-May-04	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.91	1.97
9-May-04	2.0	A	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.02	2.12
10-May-04	A	2.0	2.0	1.9	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	A	M	1.8	1.9	2.0	2.1	2.0	1.95	2.11
11-May-04	1.9	1.9	2.0	A	2.1	2.1	2.2	2.0	2.2	1.9	1.9	1.9	1.9	1.8	1.8	C	C	C	1.9	1.9	2.0	2.0	2.5	2.1	2.01	2.51
12-May-04	2.0	2.0	2.0	A	2.0	2.1	2.1	2.0	2.1	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.5	2.6	2.08	2.56
13-May-04	2.3	2.7	A	2.3	2.5	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.3	2.4	2.6	2.15	2.66
14-May-04	2.7	A	2.3	2.3	2.4	2.4	2.2	2.1	P	P	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.15	2.70
15-May-04	A	2.3	2.2	2.3	2.3	2.7	2.3	2.1	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	A	2.07	2.65
16-May-04	2.2	2.3	2.2	2.0	2.1	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.1	2.0	2.5	A	2.6	2.04	2.56
17-May-04	2.8	2.2	2.6	2.1	2.0	2.1	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	1.9	2.0	A	2.0	2.0	2.03	2.83
18-May-04	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	A	2.2	2.0	2.1	2.00	2.20
19-May-04	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.8	2.0	1.9	1.9	A	1.9	2.0	2.1	2.1	2.00	2.16
20-May-04	2.0	2.0	2.1	2.1	2.0	2.2	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.00	2.25
21-May-04	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.1	2.3	2.0	2.0	2.0	2.4	3.5	2.0	A	2.0	2.1	2.0	2.0	2.0	2.3	2.11	3.53
22-May-04	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	3.1	2.0	2.0	2.0	2.1	A	2.0	2.0	2.0	2.1	2.7	2.5	2.6	2.14	3.14
23-May-04	2.3	2.3	2.4	2.3	2.2	2.5	2.5	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.1	2.1	2.2	2.1	2.3	2.16	2.46
24-May-04	2.3	2.4	2.4	2.4	2.3	2.2	2.2	2.3	2.4	2.2	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.2	2.0	2.0	2.1	2.1	2.1	2.17	2.44
25-May-04	2.2	2.3	2.6	2.8	2.2	2.3	2.3	2.3	2.6	2.4	2.1	2.0	1.9	A	2.1	1.9	1.9	1.8	2.0	1.9	1.9	1.9	1.9	1.9	2.13	2.78
26-May-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	1.9	A	1.9	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	2.0	1.90	2.22
27-May-04	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.4	2.0	1.95	2.36
28-May-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.98	2.22
29-May-04	2.2	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.9	1.9	2.0	1.9	1.91	2.23
30-May-04	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2.1	2.0	2.1	1.93	2.10
31-May-04	1.9	1.9	2.0	1.9	1.9	3.2	2.0	A	1.9	1.9	2.0	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	2.01	3.17
Hourly Avg	2.12	2.09	2.10	2.09	2.07	2.16	2.11	2.06	2.06	2.02	1.99	2.01	1.94	1.93	1.96	1.98	1.93	1.95	1.95	1.99	2.00	2.11	2.19	2.18		
Hourly Max	2.83	2.66	2.59	2.78	2.51	3.17	2.73	2.49	2.57	2.38	2.27	3.14	2.08	2.03	2.36	3.53	2.02	2.08	2.19	2.59	2.14	2.70	4.20	4.23		

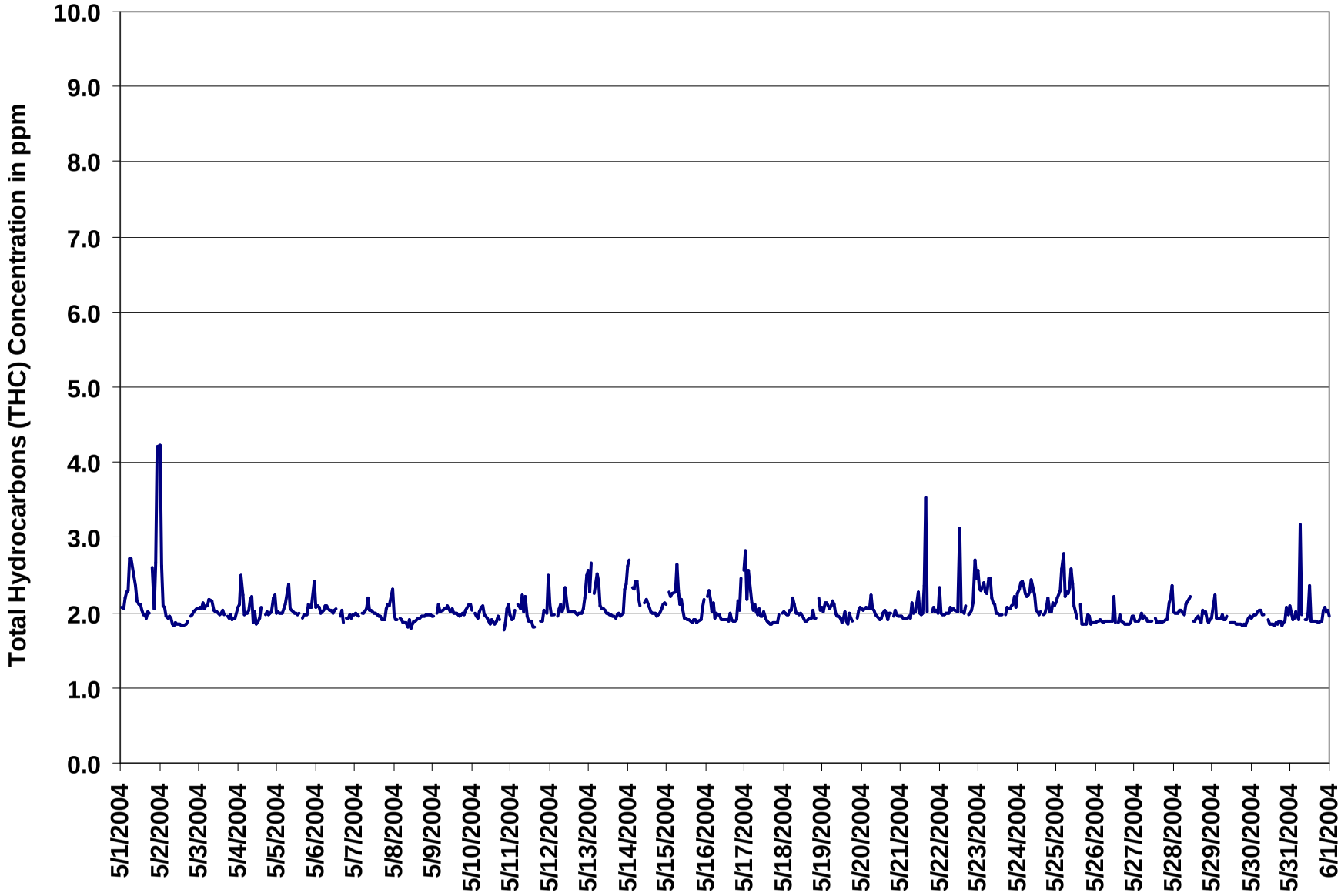


Figure 12. PASZA - Henry Pirker Total Hydrocarbons 1-hr Maximum Value Monthly Trend

PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	1.1	ppb	20-May	0:00 1:00
Maximum 24-hr Average:	0.5	ppb	31-May	

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

AIC Time:	31 hrs	Operational Time:	686 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	97.0%

Percentile	99	95	75	50	25	5	1	Average
	0.7	0.6	0.5	0.4	0.4	0.3	0.2	0.4 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-May-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	0.3	0.6
2-May-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.4
3-May-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4
4-May-04	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.5	0.7
5-May-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.5
6-May-04	0	0	0	0	0	0	0	0	0	0	0	0	0	A	C	1	1	1	1	1	1	0	0	0.5	0.6
7-May-04	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.5
8-May-04	0	0	A	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
9-May-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	0.3	0.4
10-May-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	M	M	M	M	M	M	M	N	0.4
11-May-04	M	M	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	C	0	0	0	0	0	0	N	0.5
12-May-04	1	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.6
13-May-04	1	1	A	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	0.6
14-May-04	1	A	1	1	1	0	0	0	P	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.6
15-May-04	A	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.6
16-May-04	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	A	1	0.5	0.8
17-May-04	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	A	1	0	0.5	0.7
18-May-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
19-May-04	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	0.4	0.8
20-May-04	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	1	1	0.5	1.1
21-May-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	0.4	0.4
22-May-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	1	0.4	0.5
23-May-04	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0.4	0.5
24-May-04	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	0.5
25-May-04	0	1	1	1	1	0	1	1	1	0	0	0	1	A	1	1	0	1	1	0	0	0	0	0	0.5	0.6
26-May-04	0	0	1	1	0	0	0	0	0	0	0	0	A	1	0	1	0	0	0	0	0	0	1	0	0.5	0.5
27-May-04	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
28-May-04	0	1	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	1	0	1	1	1	0	0.5	0.6
29-May-04	0	0	1	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.5
30-May-04	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.4	0.5
31-May-04	1	0	0	0	0	0	0	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.5	0.8
Hourly Avg	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5		
Hourly Max	1.1	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.7	0.8		

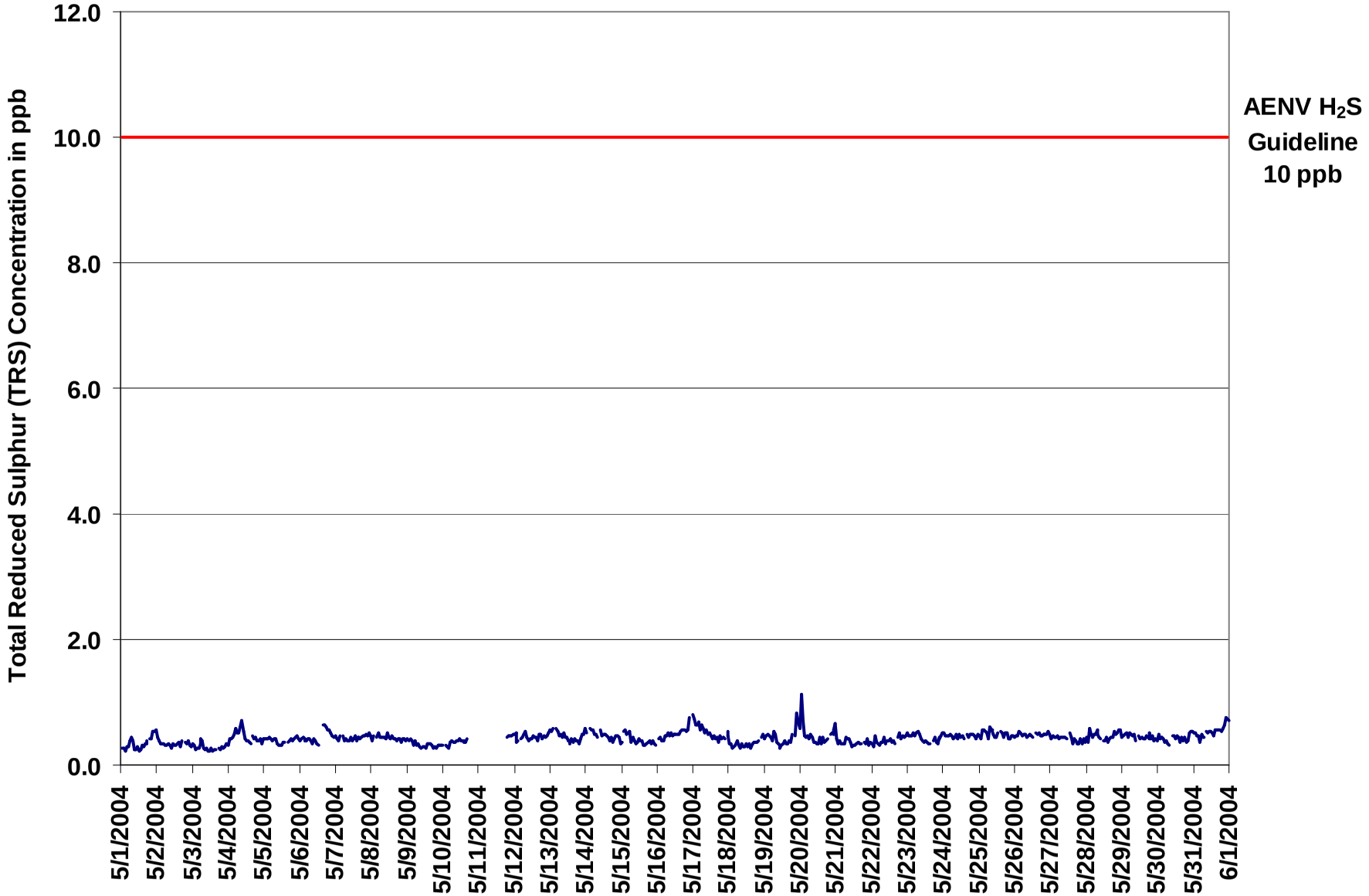


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Total Reduced Sulphur (TRS)

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

Summary

Maximum 1-hr Value:	1.9	ppb	20-May	0:00 1:00
Maximum 24-hr Value:	0.9	ppb	31-May	

AIC Time:	30 hrs	Operational Time:	686 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	97.0%

Percentile	99	95	75	50	25	5	1	Average
	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.8 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	0.9
2-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.8
3-May-04	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	A	1	1	1	1	1	1	1	0.6	0.9
4-May-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	0.8	1.2
5-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
6-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	1	1	1	1	1	1	1	1	1	0.8	1.2
7-May-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	0.8	1.0
8-May-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	0.7	0.9
9-May-04	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
10-May-04	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	M	M	M	M	M	M	M	N	0.7
11-May-04	M	M	M	M	M	M	M	M	M	M	M	M	M	M	C	C	C	C	1	1	1	1	1	1	N	0.9
12-May-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	0.9	1.1
13-May-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	1.0
14-May-04	1	A	1	1	1	1	1	1	P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
15-May-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	0.8	0.9
16-May-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	0.9	1.2
17-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.2
18-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	0.9
19-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	1	1	1	0.8	1.6
20-May-04	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.9
21-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	0.9
22-May-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	0.8	1.0
23-May-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	0.8	1.1
24-May-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	1.1
25-May-04	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.0
26-May-04	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
27-May-04	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
28-May-04	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
29-May-04	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
30-May-04	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
31-May-04	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
Hourly Avg	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9		
Hourly Max	1.9	1.6	1.0	1.2	1.0	1.1	1.0	1.2	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.1	1.0	1.1	1.1	1.6	1.1	1.1		

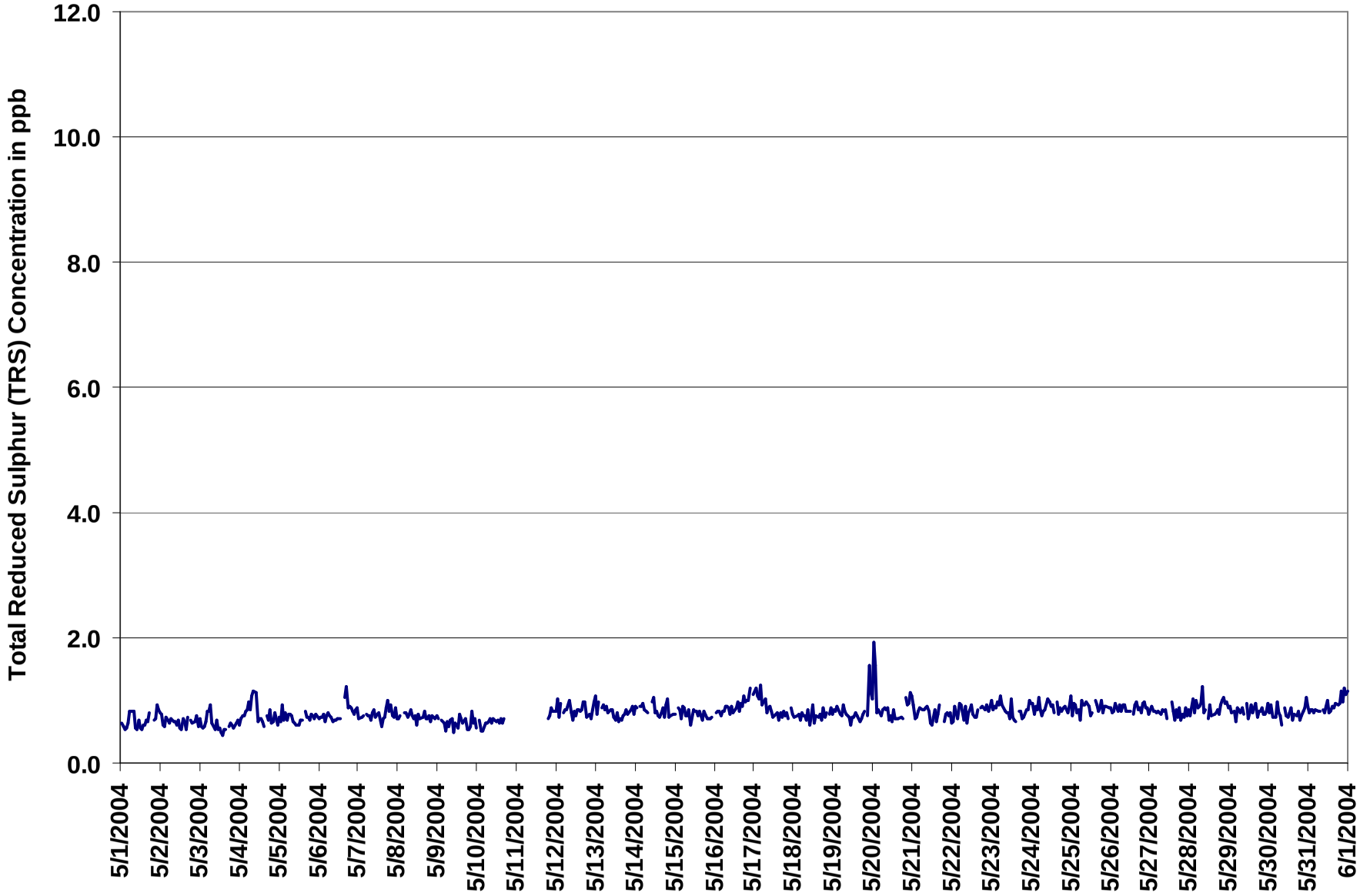


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	53.4	µg/m³	27-May	19:00 20:00
Maximum 24-hr Average:	11.7	µg/m³	1-May	

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:			738 hrs		
Calibration Time:	3 hrs			AMD Operational Uptime:			99.6%		
Percentile	99	95	75	50	25	5	1	Average	Geomean
	20.1	10.6	5.2	3.0	1.4	0.0	0.0	4.0 µg/m³	3.4 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-May-04	6	5	8	14	13	21	27	13	17	11	8	6	2	0	1	2	3	4	8	16	13	25	29	28	11.7	28.7
2-May-04	16	8	8	6	7	7	8	5	6	11	7	1	3	2	5	4	7	5	3	2	4	2	2	0	5.4	16.4
3-May-04	0	0	0	2	0	1	1	2	2	3	1	0	0	0	0	0	1	2	1	3	4	8	5	3	1.7	8.4
4-May-04	2	2	3	3	3	3	6	5	5	3	0	0	0	2	2	0	1	1	2	0	1	2	2	0	2.0	5.6
5-May-04	2	1	2	2	3	4	5	3	2	2	3	1	2	4	5	4	5	7	4	6	8	8	7	5	3.9	8.5
6-May-04	4	3	6	5	5	4	4	5	4	4	6	C	C	C	2	4	3	2	4	3	3	3	3	3	3.8	6.0
7-May-04	3	4	4	4	4	2	3	5	6	7	7	6	5	3	3	3	3	4	4	5	8	8	8	2	4.6	8.1
8-May-04	1	5	3	2	2	1	3	3	5	6	5	6	8	5	2	1	1	1	1	1	1	1	1	2	2.8	7.6
9-May-04	2	0	0	0	0	0	1	0	1	1	1	1	1	2	2	1	2	2	1	3	2	3	2	1	1.3	3.3
10-May-04	1	1	0	1	1	2	3	2	2	2	2	1	1	2	2	2	1	2	6	5	15	7	5	6	3.0	14.8
11-May-04	7	3	3	4	4	6	6	8	5	2	2	0	1	2	2	2	3	3	3	3	5	6	6	6	3.9	8.3
12-May-04	2	1	2	4	4	4	3	3	2	2	1	0	3	0	2	0	0	3	1	0	3	4	5	6	2.2	5.6
13-May-04	5	5	2	1	1	1	2	3	6	2	0	0	1	0	1	1	1	2	2	3	5	12	13	19	3.7	19.1
14-May-04	9	8	11	10	6	9	8	6	P	4	7	5	3	3	3	4	4	4	6	7	8	7	5	5	6.2	11.1
15-May-04	5	6	5	3	4	5	6	6	7	24	5	2	3	2	3	4	4	5	5	6	5	6	8	9	5.7	23.8
16-May-04	10	7	3	3	3	4	4	4	5	2	2	2	2	4	4	5	4	4	5	6	8	15	19	18	6.1	19.2
17-May-04	10	4	6	5	5	7	8	6	5	6	3	1	3	3	3	4	5	6	6	6	9	10	10	8	5.8	10.4
18-May-04	7	7	7	6	7	13	14	11	10	6	8	6	4	5	5	8	6	7	12	8	12	10	7	5	7.9	14.0
19-May-04	5	5	5	4	4	6	11	6	7	5	5	5	8	4	1	6	2	5	5	3	1	1	1	0	4.4	11.5
20-May-04	0	0	1	1	0	1	1	2	1	1	1	1	1	2	2	9	6	3	3	3	2	3	2	2	2.0	8.7
21-May-04	2	1	1	1	1	2	3	6	5	4	3	3	1	1	3	2	2	2	4	5	7	4	3	2	2.9	7.3
22-May-04	2	0	1	1	1	1	2	1	1	2	0	0	0	0	1	0	1	2	0	1	3	3	5	5	1.4	5.4
23-May-04	4	3	3	5	2	3	6	4	3	4	2	0	1	1	1	2	2	2	3	3	4	11	9	9	3.6	11.3
24-May-04	10	10	12	9	5	5	6	7	5	3	2	2	3	2	3	3	3	3	5	3	4	5	4	4	4.9	11.5
25-May-04	6	4	4	4	4	6	6	10	16	12	3	4	2	D	0	0	0	3	3	0	0	0	3	0	3.8	15.5
26-May-04	1	0	0	0	1	1	1	1	1	1	0	0	1	1	1	3	3	2	3	1	4	2	1	1	1.2	3.7
27-May-04	1	1	2	2	1	2	3	3	1	1	0	1	1	2	2	2	3	3	17	53	21	17	14	10	6.8	53.4
28-May-04	7	7	6	4	4	4	5	4	4	2	2	5	4	3	3	4	6	6	5	6	2	3	3	3	4.2	7.3
29-May-04	5	4	4	5	5	5	7	7	5	2	0	1	1	0	0	0	0	2	0	0	1	1	1	2	2.4	6.8
30-May-04	2	0	1	1	2	2	2	3	3	2	D	0	0	0	4	2	4	0	1	1	2	3	2	1	1.7	4.4
31-May-04	0	1	2	1	1	2	2	1	0	0	0	0	1	0	0	0	1	1	2	8	7	5	0	1	1.5	8.1
Hourly Avg	4.5	3.5	3.6	3.6	3.4	4.3	5.4	4.7	4.8	4.3	2.8	2.0	2.2	2.0	2.3	2.6	2.8	3.1	4.0	5.5	5.5	6.4	6.0	5.4		
Hourly Max	16.4	10.4	11.5	14.1	13.3	20.7	27.1	13.1	17.0	23.8	8.2	6.2	7.8	5.2	5.4	8.7	6.6	7.2	16.8	53.4	21.2	24.5	28.7	28.0		

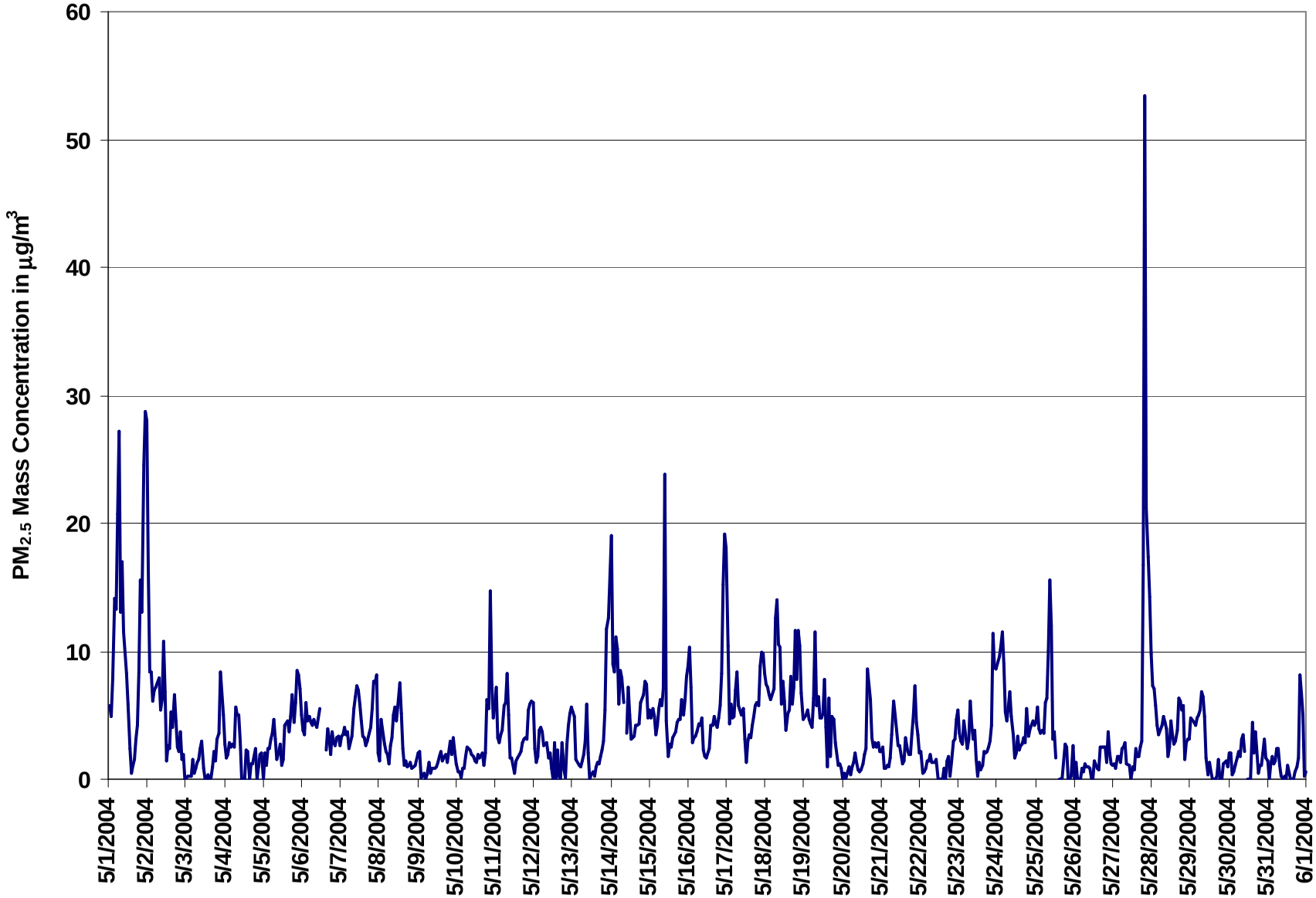


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

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

Summary

Maximum 1-hr Value:	103.4	µg/m³	27-May	19:00 20:00
Maximum 24-hr Value:	22.3	µg/m³	1-May	

AIC Time:	0 hrs	Operational Time:	741 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Geomean
	36.1	18.8	8.5	5.6	3.9	2.1	1.3	7.5 µg/m³	6.9 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-May-04	8	6	23	27	31	38	42	23	26	20	19	15	9	7	7	8	10	9	18	26	22	37	40	66	22.3	66.1
2-May-04	35	12	12	10	16	10	12	7	11	19	12	5	7	8	16	26	20	8	5	6	7	5	4	3	11.5	34.8
3-May-04	5	2	2	4	2	3	4	3	4	5	3	3	1	5	4	3	3	5	4	7	6	14	10	5	4.5	13.8
4-May-04	5	5	8	4	7	6	8	11	9	7	5	3	2	10	5	4	5	5	5	3	4	5	5	4	5.7	10.9
5-May-04	6	4	5	5	6	6	8	5	4	9	13	9	8	10	14	9	9	24	12	11	12	10	9	8	9.1	24.1
6-May-04	5	5	8	6	7	7	6	7	7	7	10	C	C	C	9	7	6	4	10	6	5	5	9	5	6.6	10.2
7-May-04	6	6	5	5	6	4	5	8	12	12	9	8	6	5	5	5	6	5	6	7	9	9	12	4	6.9	12.4
8-May-04	3	16	5	4	3	3	4	5	8	8	6	11	9	8	5	2	3	3	2	3	2	2	3	4	5.1	16.1
9-May-04	5	4	2	2	2	2	3	2	3	2	3	3	4	5	4	3	5	4	3	6	3	5	4	3	3.4	5.9
10-May-04	1	2	1	2	2	3	4	4	5	3	5	5	4	4	4	4	3	4	30	15	50	12	8	8	7.6	50.2
11-May-04	10	6	4	5	5	7	9	19	10	6	6	4	4	4	4	5	6	5	6	5	8	8	9	10	6.8	19.3
12-May-04	4	3	3	6	6	6	4	5	11	8	7	2	8	3	8	3	2	8	3	3	5	6	7	8	5.2	11.2
13-May-04	7	7	5	3	3	4	6	5	9	6	3	3	5	3	4	4	3	4	4	5	7	17	16	28	6.7	27.8
14-May-04	14	12	13	12	7	11	10	7	6	9	12	9	5	6	6	6	6	6	9	8	9	10	7	7	8.7	14.3
15-May-04	8	7	7	5	6	8	10	8	13	31	11	5	5	4	5	6	7	6	6	8	7	8	10	13	8.5	30.8
16-May-04	17	14	5	5	5	6	6	6	7	6	5	5	5	8	6	8	7	6	10	8	11	21	29	25	9.6	28.5
17-May-04	18	7	8	6	7	10	12	7	8	7	5	5	6	7	6	6	9	8	8	8	12	11	12	10	8.5	17.8
18-May-04	9	10	9	11	11	22	23	12	13	8	11	12	8	9	9	12	8	10	18	12	15	16	10	7	11.9	23.4
19-May-04	9	7	11	7	6	9	18	8	8	7	7	8	12	10	5	22	10	14	7	5	3	3	2	2	8.3	22.5
20-May-04	2	2	3	2	2	3	3	4	3	3	2	2	3	4	5	26	13	6	5	6	5	4	3	4	4.8	26.3
21-May-04	5	2	2	3	3	4	5	8	8	10	5	4	3	3	6	4	3	4	6	10	9	8	5	4	5.3	10.2
22-May-04	5	2	2	2	2	3	4	3	3	3	2	5	2	1	3	2	4	11	3	3	4	5	7	8	3.7	10.9
23-May-04	7	5	4	7	8	4	9	6	5	7	4	3	3	3	5	6	4	5	6	5	7	14	11	11	6.2	13.6
24-May-04	12	14	14	15	9	6	7	9	9	6	5	5	6	6	5	5	7	5	9	6	5	7	6	6	7.7	15.1
25-May-04	7	6	5	5	5	9	17	22	20	17	6	6	6	1	1	0	3	16	10	5	2	1	12	3	7.7	22.4
26-May-04	4	2	1	1	2	2	3	3	3	3	2	3	5	3	4	7	7	4	5	5	9	3	3	2	3.6	8.5
27-May-04	3	2	5	4	3	4	4	5	2	4	2	5	4	5	3	5	5	5	90	103	28	22	23	12	14.5	103.4
28-May-04	9	9	8	7	6	5	6	6	5	4	4	7	14	11	7	12	12	11	8	12	4	5	6	5	7.6	14.1
29-May-04	7	6	6	6	7	6	9	9	7	4	2	6	3	4	2	3	3	6	2	2	6	5	4	5	5.0	9.2
30-May-04	4	2	2	5	3	3	4	5	5	5	1	3	4	3	15	9	8	5	4	9	6	6	4	3	5.0	14.7
31-May-04	4	2	8	3	3	5	4	3	2	1	3	3	5	4	4	4	4	3	4	12	13	7	8	3	4.7	13.1
Hourly Avg	7.9	6.2	6.4	6.1	6.1	7.2	8.6	7.6	8.0	7.9	6.2	5.5	5.6	5.4	6.0	7.3	6.4	7.0	10.3	10.7	9.6	9.4	9.7	9.2		
Hourly Max	34.8	16.1	23.3	26.7	31.2	37.9	41.7	22.6	26.2	30.8	18.8	14.9	14.1	11.5	15.7	26.3	20.4	24.1	89.7	103.4	50.2	36.9	40.0	66.1		

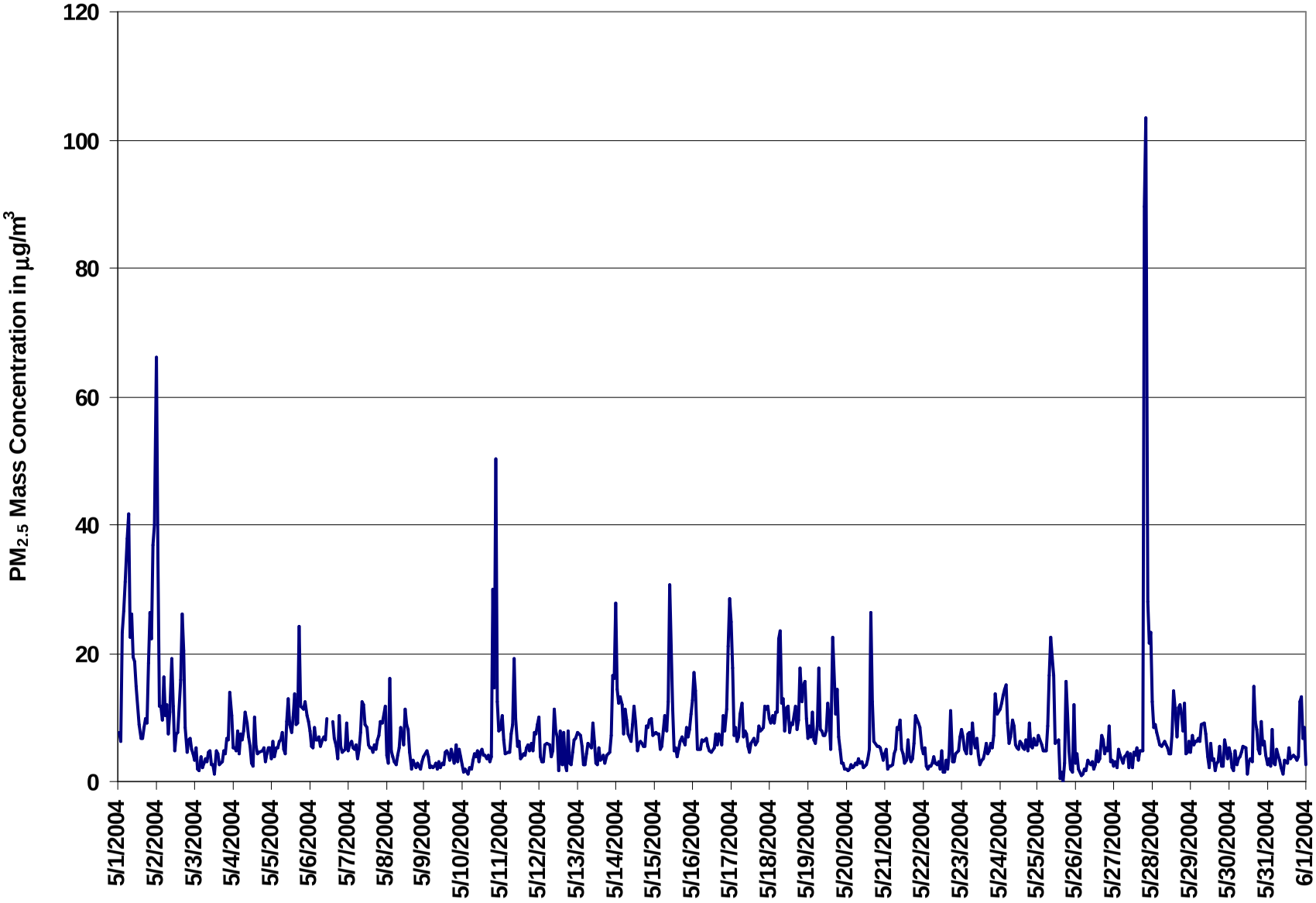
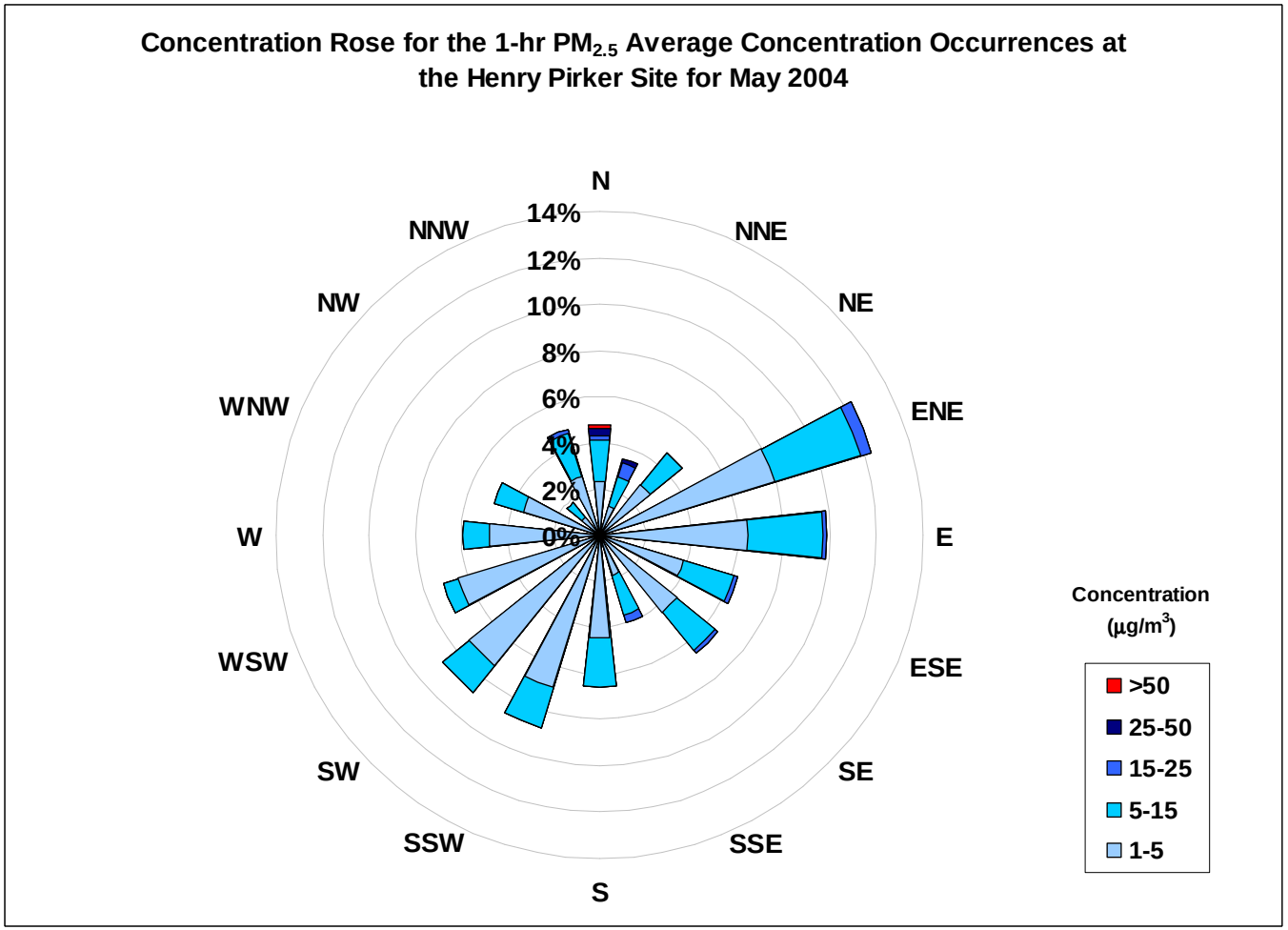


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly



Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
0	<	1	129
1	to	5	410
5	to	15	181
15	to	25	14
25	to	50	3
	>	50	1
Total Non-Zero Values			738

PASZA - Henry Pirker Meteorological Parameters Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Relative Humidity (RH - %)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	94.8	%	8-May	22:00 23:00
Maximum 24-hr Average:	85.7	%	4-May	

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

Percentile	99	95	75	50	25	5	1	Average
	93.3	88.5	71.6	55.2	39.0	21.5	17.7	55.0 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-May-04	35	35	43	62	65	66	60	46	41	32	28	24	21	17	16	15	14	15	17	22	28	35	42	50	35	66
2-May-04	50	44	48	44	47	49	47	47	49	43	41	38	38	36	39	43	58	58	62	64	69	73	78	80	52	80
3-May-04	77	78	76	77	79	77	79	78	78	80	77	69	62	58	52	52	52	51	52	55	57	64	76	77	68	80
4-May-04	80	85	86	89	89	91	92	86	80	89	87	87	82	82	88	89	91	93	92	90	78	78	77	75	86	93
5-May-04	75	76	75	74	73	76	68	61	53	46	43	36	33	31	29	29	32	39	38	42	46	53	59	64	52	76
6-May-04	67	68	72	73	75	75	73	70	67	58	46	40	38	41	46	58	61	62	63	66	74	81	85	81	64	85
7-May-04	85	86	85	83	82	81	78	75	69	65	59	54	49	46	42	39	37	36	38	39	43	46	45	36	58	86
8-May-04	36	34	41	44	46	42	40	39	39	39	40	43	56	76	87	92	93	93	91	91	91	92	95	93	64	95
9-May-04	91	85	79	76	63	59	51	47	44	46	45	44	46	46	48	46	46	50	55	61	66	71	75	76	59	91
10-May-04	75	75	75	75	74	71	69	68	64	55	42	34	31	28	25	24	23	25	25	29	34	39	41	43	48	75
11-May-04	61	47	48	51	52	57	49	41	35	29	26	24	22	20	19	19	19	21	21	25	29	32	39	44	35	61
12-May-04	41	45	48	54	67	84	94	90	83	79	68	57	71	53	62	56	48	70	61	60	63	68	78	81	66	94
13-May-04	79	80	74	77	78	76	66	55	50	41	33	33	28	27	26	26	27	26	27	28	33	41	52	64	48	80
14-May-04	61	69	69	67	62	65	62	57	P	51	59	74	69	65	59	52	51	48	50	53	57	62	66	73	61	74
15-May-04	76	82	86	84	88	90	82	71	65	54	43	38	36	34	32	30	30	34	33	39	45	53	59	66	56	90
16-May-04	71	76	79	82	84	80	76	70	63	49	38	29	25	24	22	21	22	23	22	20	29	41	49	66	48	84
17-May-04	65	59	66	68	69	70	60	53	46	38	29	22	20	19	19	18	19	20	21	21	27	34	38	42	39	70
18-May-04	48	48	50	55	61	62	52	45	37	26	24	20	18	18	18	21	20	20	26	30	33	45	52	60	37	62
19-May-04	66	67	70	69	73	71	61	55	52	45	43	44	58	54	44	50	59	57	76	75	75	78	81	83	63	83
20-May-04	86	89	91	91	89	88	86	84	80	70	65	64	60	61	59	57	63	64	66	69	72	76	80	83	75	91
21-May-04	84	85	85	84	84	85	85	84	83	72	69	65	60	54	56	51	49	45	41	41	45	42	44	47	64	85
22-May-04	51	52	52	58	64	67	67	62	56	49	41	29	26	23	24	23	22	21	20	23	29	35	40	44	41	67
23-May-04	51	56	59	74	72	74	60	52	45	43	34	27	23	20	19	19	19	20	21	23	26	36	45	52	40	74
24-May-04	58	56	62	62	58	55	54	47	38	33	33	31	28	26	25	25	28	28	33	36	41	49	52	56	42	62
25-May-04	62	67	71	77	77	75	70	63	62	69	76	77	66	53	47	43	44	49	61	53	50	54	58	57	62	77
26-May-04	59	59	62	62	64	58	53	49	44	40	38	35	36	32	30	30	31	33	36	38	48	55	58	60	46	64
27-May-04	61	66	71	67	68	67	61	54	45	39	32	29	26	24	24	25	26	26	28	29	33	40	44	54	43	71
28-May-04	61	68	70	74	79	79	74	71	67	56	52	49	51	59	51	56	65	84	88	91	90	91	92	91	71	92
29-May-04	93	93	94	94	93	90	85	86	85	84	79	83	82	80	67	56	57	65	52	52	55	63	63	68	76	94
30-May-04	71	72	73	76	79	80	77	72	67	59	43	34	33	31	40	48	52	47	47	52	56	66	72	76	59	80
31-May-04	64	64	71	73	72	71	64	56	49	43	39	38	40	32	31	28	27	27	29	43	56	60	50	49	49	73
Hourly Avg	66	67	69	71	72	72	68	62	58	52	47	44	43	41	40	40	42	44	45	47	51	57	61	64		
Hourly Max	93	93	94	94	93	91	94	90	85	89	87	87	82	82	88	92	93	93	92	91	91	92	95	93		

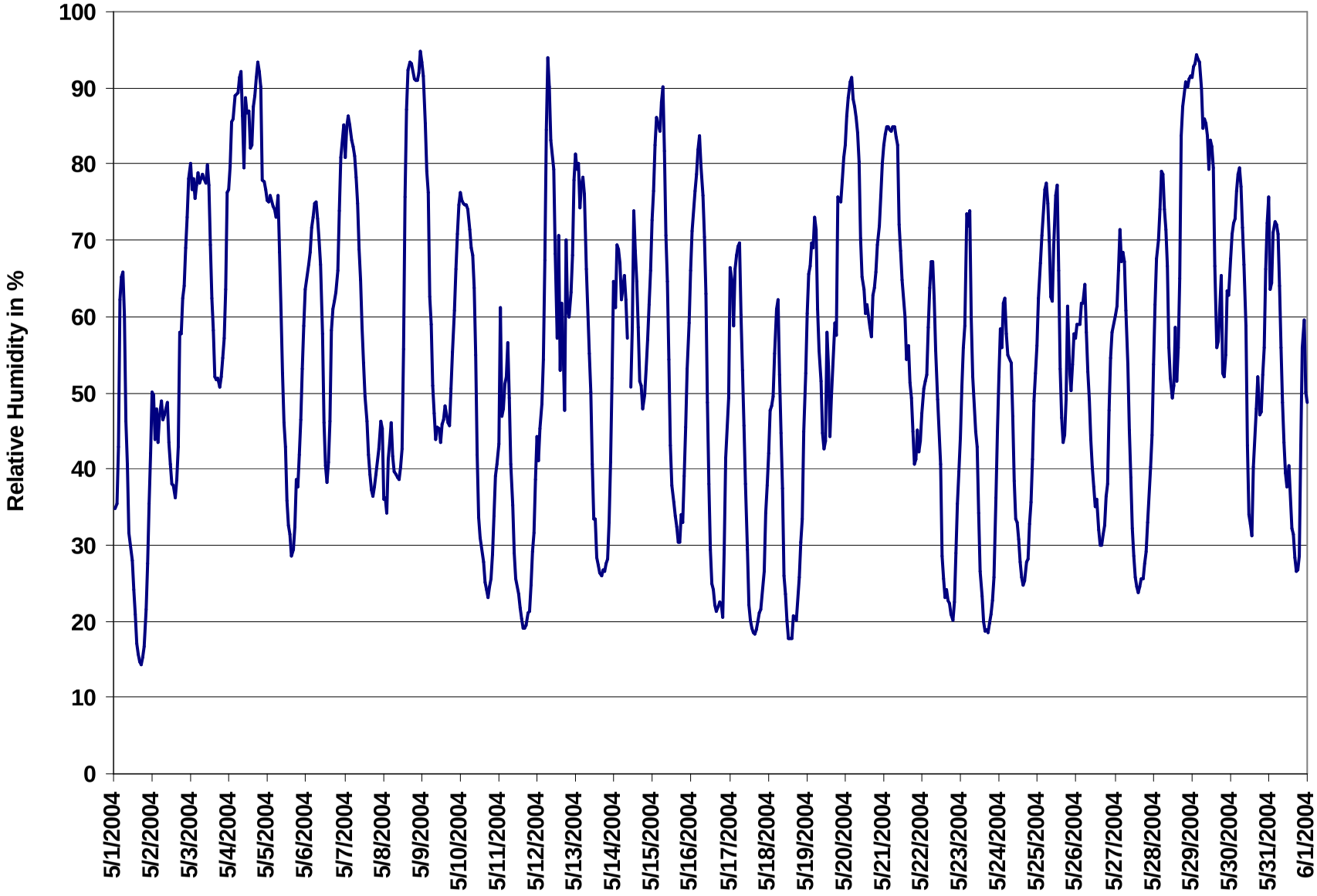


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (AT - ℃)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	26.8	°C	1-May	16:00 17:00
Maximum 24-hr Average:	17.4	°C	18-May	

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

Percentile	99	95	75	50	25	5	1	Average
	24.6	19.8	14.2	9.5	4.6	-1.0	-3.0	9.4 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-May-04	10	9	7	4	3	2	5	9	12	17	19	21	23	25	25	26	27	26	25	23	21	18	16	14	16.1	26.8
2-May-04	14	15	14	16	15	14	15	16	15	16	16	17	17	18	17	16	13	12	11	11	9	7	6	4	13.5	17.6
3-May-04	3	3	3	3	3	3	3	3	4	4	5	6	8	10	12	12	11	12	11	10	10	9	8	7	6.8	11.9
4-May-04	7	6	6	5	6	5	5	6	8	6	5	3	2	2	1	1	0	0	0	0	0	-1	-1	-1	2.9	7.6
5-May-04	-1	-1	-2	-2	-3	-4	-3	-1	0	2	3	4	4	4	6	5	4	3	3	3	1	1	0	-1	1.0	5.9
6-May-04	-2	-2	-3	-3	-3	-3	-2	-1	1	4	7	9	11	9	8	7	6	5	5	4	2	1	1	0	2.6	10.6
7-May-04	0	0	0	0	0	0	1	2	3	4	6	8	9	11	13	14	15	15	14	14	13	12	12	14	7.5	14.9
8-May-04	13	14	12	11	10	10	11	12	12	13	14	13	10	6	3	2	1	1	2	1	0	0	-1	-2	7.0	14.0
9-May-04	-2	-3	-3	-4	-5	-5	-4	-3	-2	-1	-1	0	1	2	3	3	3	3	1	1	0	-1	-1	-1	-0.7	3.3
10-May-04	-1	-1	-1	-2	-2	-2	-1	0	1	3	5	6	7	8	9	9	9	9	8	7	6	4	3	2	3.6	9.4
11-May-04	0	2	1	-1	-1	-2	1	4	6	8	9	9	10	11	12	12	12	11	11	10	8	7	5	4	6.2	11.9
12-May-04	4	2	1	2	2	1	0	1	2	3	5	6	4	8	6	7	9	5	6	5	4	4	2	2	3.8	9.0
13-May-04	2	1	2	2	2	2	3	5	7	9	8	9	11	11	11	11	11	11	11	11	9	7	5	3	6.8	11.3
14-May-04	2	1	0	0	0	2	4	6	P	8	7	6	8	9	11	12	11	12	11	11	9	8	7	5	6.5	11.9
15-May-04	4	2	1	0	0	0	4	7	9	12	14	14	15	16	16	17	17	15	17	15	14	11	10	8	9.9	16.9
16-May-04	7	6	5	5	5	6	7	9	12	15	17	18	18	19	20	21	20	20	19	20	17	13	12	10	13.3	20.6
17-May-04	9	9	7	7	7	7	10	13	15	19	22	23	23	24	24	25	24	24	23	22	20	17	16	14	16.7	24.6
18-May-04	12	12	12	10	8	7	11	14	18	21	23	25	25	24	24	23	23	22	22	20	19	16	14	12	17.4	24.6
19-May-04	11	10	9	9	9	9	12	14	16	18	19	18	15	18	18	17	15	15	12	12	10	9	8	7	13.0	18.8
20-May-04	6	5	4	4	5	5	5	6	7	10	11	11	12	12	13	12	12	11	10	9	7	6	6	5	8.1	12.6
21-May-04	5	5	5	5	4	4	4	5	5	7	7	8	9	10	10	10	10	11	11	10	9	9	9	7	7.4	10.8
22-May-04	6	6	5	4	3	3	4	6	8	9	11	12	13	13	13	13	13	14	13	12	10	8	7	5	8.8	13.9
23-May-04	4	2	2	-1	-1	-1	4	7	9	11	13	15	16	17	17	16	16	16	15	14	13	11	9	8	9.8	17.0
24-May-04	8	8	7	7	7	7	8	11	15	17	17	17	19	20	21	20	18	18	18	18	16	14	13	11	14.0	20.6
25-May-04	10	9	7	6	6	7	8	10	12	12	12	12	15	17	19	19	19	18	16	16	16	15	14	14	12.9	19.2
26-May-04	13	13	12	11	10	11	12	13	15	16	17	17	17	18	18	18	18	19	18	17	15	13	11	10	14.7	18.8
27-May-04	10	9	8	9	9	9	11	13	15	16	17	18	19	19	20	19	19	19	18	18	16	15	14	14	14.7	19.8
28-May-04	12	11	10	9	8	8	10	11	13	16	16	17	16	14	15	15	14	11	10	10	10	10	9	9	11.9	17.4
29-May-04	9	9	9	9	8	9	10	11	11	11	11	10	10	11	13	16	15	14	15	15	14	12	12	11	11.5	15.9
30-May-04	10	9	8	6	5	5	5	8	10	13	15	17	18	18	17	16	15	16	16	14	14	12	11	10	12.2	18.5
31-May-04	10	10	7	7	7	7	9	12	13	15	16	16	15	17	17	17	18	17	16	15	13	13	12	11	13.0	17.8
Hourly Avg	6.3	5.8	5.1	4.5	4.0	4.1	5.7	7.3	9.1	10.8	11.8	12.5	13.0	13.5	13.9	13.9	13.6	13.0	12.5	11.9	10.5	9.0	7.9	7.1		
Hourly Max	13.6	14.8	13.9	15.6	14.8	14.3	15.3	15.5	17.6	21.2	22.6	24.6	24.5	24.8	25.5	26.5	26.8	26.0	25.0	22.8	20.6	17.8	15.9	14.3		

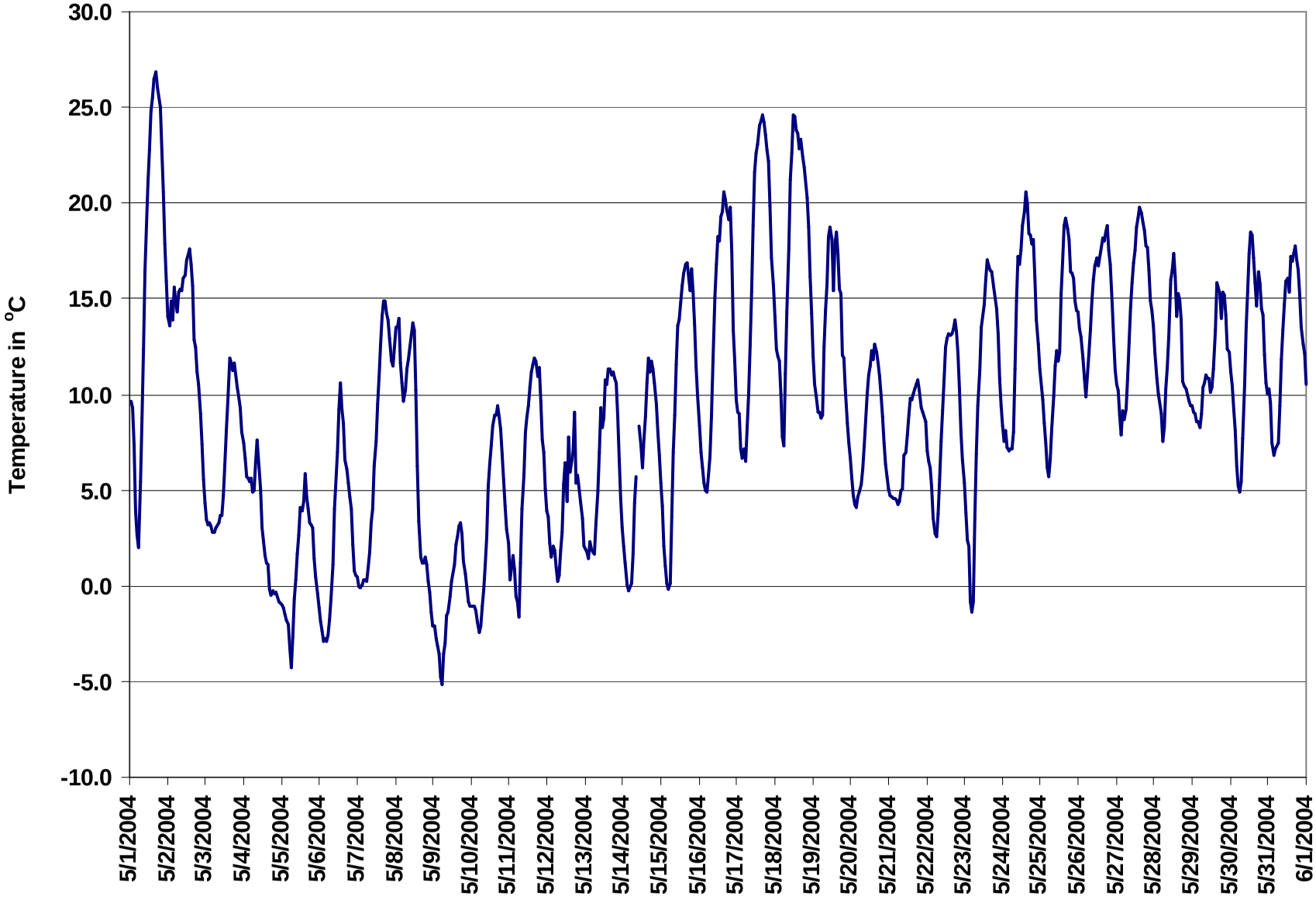


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

HOURLY AVERAGE TABLE

Solar Radiation (SR - W/m^2)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	933.9	W/m^2	5-May	14:00 15:00
Maximum 24-hr Average:	332.1	W/m^2	17-May	

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

Percentile	99	95	75	50	25	5	1	Average
	863.9	761.0	405.6	117.3	0.0	0.0	0.0	222.7 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-May-04	0	0	0	0	0	13	129	243	434	575	688	777	761	816	763	676	434	231	134	31	3	0	0	0	279	816
2-May-04	0	0	0	0	0	8	48	65	234	588	666	771	638	656	570	188	124	127	66	28	2	0	0	0	199	771
3-May-04	0	0	0	0	0	5	36	74	125	127	262	369	413	602	770	437	244	213	89	29	3	0	0	0	158	770
4-May-04	0	0	0	0	0	8	49	95	80	62	118	231	210	209	282	241	144	113	57	43	7	0	0	0	81	282
5-May-04	0	0	0	0	0	21	145	263	457	605	715	819	688	611	934	491	270	129	120	105	7	0	0	0	266	934
6-May-04	0	0	0	0	0	8	68	180	356	565	700	756	653	260	180	316	402	242	130	64	12	0	0	0	204	756
7-May-04	0	0	0	0	0	9	54	130	201	333	693	691	815	787	774	691	571	312	129	47	8	0	0	0	260	815
8-May-04	0	0	0	0	0	16	42	113	176	305	413	250	194	117	102	84	83	78	58	21	1	0	0	0	86	413
9-May-04	0	0	0	0	1	33	169	223	377	467	600	559	832	610	526	508	442	294	132	67	16	0	0	0	244	832
10-May-04	0	0	0	0	0	22	96	153	238	284	578	765	716	750	648	584	567	389	218	65	11	0	0	0	254	765
11-May-04	0	0	0	0	2	30	157	230	422	634	770	762	866	861	826	731	548	329	329	105	6	0	0	0	317	866
12-May-04	0	0	0	0	0	10	18	72	163	312	691	680	348	702	388	493	626	285	127	36	15	0	0	0	207	702
13-May-04	0	0	0	0	0	32	194	288	487	619	453	482	839	596	634	490	288	248	155	112	18	0	0	0	247	839
14-May-04	0	0	0	0	0	35	92	142	P	209	136	279	376	474	647	630	344	318	233	103	20	0	0	0	176	647
15-May-04	0	0	0	0	2	38	156	253	461	603	692	599	604	591	596	613	503	173	329	131	25	0	0	0	265	692
16-May-04	0	0	0	0	1	28	143	199	403	620	739	730	390	616	637	720	481	258	127	140	30	0	0	0	261	739
17-May-04	0	0	0	0	2	28	180	285	487	629	742	829	858	874	814	730	598	449	294	147	24	0	0	0	332	874
18-May-04	0	0	0	0	2	30	188	287	474	630	738	810	776	517	387	445	374	218	286	93	21	0	0	0	262	810
19-May-04	0	0	0	0	2	49	194	297	428	472	474	355	271	626	553	457	396	188	70	75	18	0	0	0	205	626
20-May-04	0	0	0	0	1	19	36	92	184	517	416	397	442	332	448	225	190	67	30	44	21	0	0	0	144	517
21-May-04	0	0	0	0	0	26	54	86	109	220	166	227	295	257	271	189	214	143	141	50	13	0	0	0	102	295
22-May-04	0	0	0	0	2	38	139	294	504	658	719	910	812	789	611	433	486	482	318	136	34	0	0	0	307	910
23-May-04	0	0	0	0	4	32	197	309	503	640	760	779	903	923	665	585	476	270	182	128	30	0	0	0	308	923
24-May-04	0	0	0	0	2	34	145	251	483	662	713	658	796	594	698	408	204	161	192	183	28	0	0	0	259	796
25-May-04	0	0	0	0	7	68	99	118	97	133	135	212	508	419	831	691	444	386	196	47	23	0	0	0	184	831
26-May-04	0	0	0	0	2	43	146	260	534	659	596	552	381	424	258	195	334	368	150	98	27	1	0	0	210	659
27-May-04	0	0	0	0	6	49	85	275	515	642	699	669	833	704	693	546	329	291	243	236	53	1	0	0	286	833
28-May-04	0	0	0	0	7	40	182	201	379	618	619	525	207	222	226	254	160	41	42	23	25	0	0	0	157	619
29-May-04	0	0	0	0	8	43	167	194	293	161	141	117	229	287	475	775	367	196	263	138	48	2	0	0	163	775
30-May-04	0	0	0	0	3	22	66	177	281	381	607	890	895	591	445	300	229	469	122	148	48	0	0	0	236	895
31-May-04	0	0	0	0	3	30	190	327	525	653	773	483	297	633	517	442	520	243	136	57	17	0	0	0	244	773
Hourly Avg	0	0	0	0	2	28	118	199	347	470	555	579	576	563	554	470	368	249	164	88	20	0	0	0		
Hourly Max	0	0	0	0	8	68	197	327	534	662	773	910	903	923	934	775	626	482	329	236	53	2	0	0		

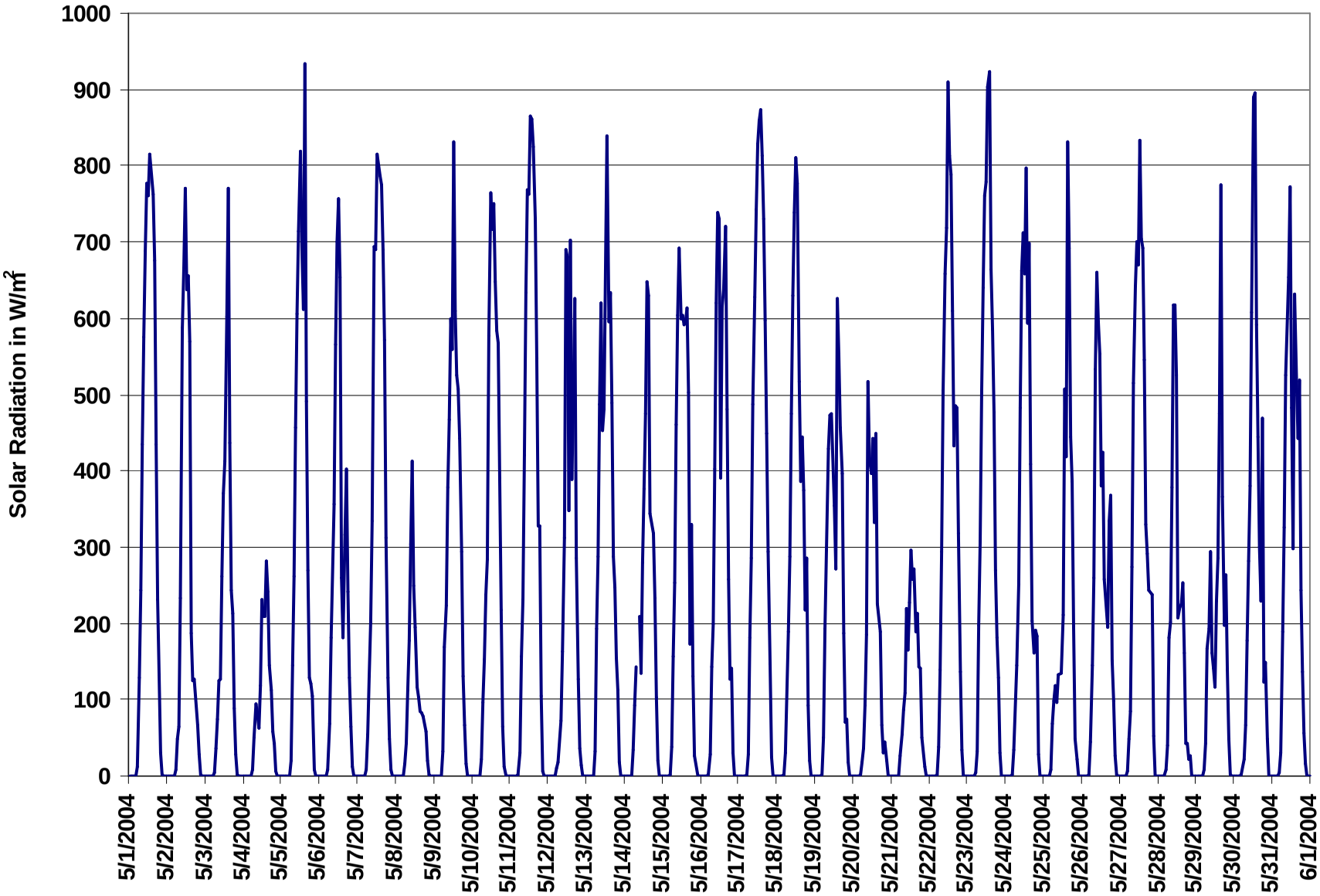


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

HOURLY AVERAGE TABLE

Wind Speed (WS - Km/hr)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

Maximum 1-hr Average:	42.2	km/hr	2-May	10:00 11:00
Maximum 24-hr Average:	22.2	km/hr	2-May	

Calm Time:	0 hrs	**0%** calms			Operational Time:			743 hrs		
Calibration Time:	0 hrs				AMD Operational Uptime:			99.9%		
Percentile	99	95	75	50	25	5	1	AverageS	AverageV	
	35.6	24.2	12.3	8.6	6.2	3.7	2.4	10.4 km/hr	3.0 km/hr	

Status Flag Characters

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

Day **Mountain Standard Time**

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-May-04	9	8	3	3	5	3	3	4	5	4	6	10	13	10	10	8	6	5	6	8	7	2	2	3	5.9	2.2	12.7
2-May-04	5	7	6	11	8	14	25	24	32	41	42	41	38	39	38	32	26	24	21	17	10	9	10	12	22.2	17.5	42.2
3-May-04	11	8	6	7	7	7	7	7	8	9	9	10	9	8	8	8	6	5	5	5	5	6	6	5	7.2	6.0	10.7
4-May-04	4	3	2	4	3	7	5	6	7	12	16	19	18	18	16	21	20	15	13	9	12	6	5	7	10.2	8.7	20.7
5-May-04	10	9	13	9	7	6	6	7	7	6	5	6	6	7	9	11	6	9	7	10	5	8	9	10	7.8	3.8	13.1
6-May-04	10	10	9	10	8	8	8	9	9	8	6	6	7	8	18	15	14	13	11	12	13	11	13	11	10.2	7.3	17.7
7-May-04	9	8	10	9	9	5	2	5	4	6	8	7	8	8	7	9	8	8	9	9	8	6	8	16	7.6	2.3	15.6
8-May-04	17	24	13	12	12	15	19	28	35	39	35	34	29	30	22	21	19	17	18	13	16	16	15	12	21.3	16.5	39.1
9-May-04	10	10	8	7	9	9	6	8	7	7	7	5	6	6	7	7	6	11	12	12	10	7	7	7	8.0	2.6	12.3
10-May-04	7	6	7	8	7	7	8	7	6	6	7	9	9	10	9	11	10	11	12	11	8	6	4	6	8.1	6.3	11.9
11-May-04	5	10	8	7	4	5	4	3	4	7	8	8	9	8	8	9	7	9	8	10	6	6	3	7	6.8	4.7	10.4
12-May-04	8	9	11	11	14	10	7	6	5	7	8	9	12	6	9	9	10	14	6	4	5	4	3	3	7.9	4.7	14.4
13-May-04	3	5	4	5	4	4	6	6	6	6	10	10	10	14	15	12	11	11	8	10	7	2	2	2	7.3	3.8	15.2
14-May-04	3	3	3	4	5	5	5	7	P	7	8	7	5	5	5	6	8	8	10	11	9	7	6	4	6.2	2.8	10.7
15-May-04	5	4	4	4	4	2	6	5	6	6	7	7	6	8	7	8	9	12	14	14	11	6	5	5	6.8	4.7	14.1
16-May-04	4	5	4	6	7	11	10	10	10	18	19	15	14	14	15	14	11	11	7	4	5	3	3	2	9.2	7.5	19.1
17-May-04	6	5	5	6	7	5	10	13	12	10	10	13	15	14	16	18	22	26	25	19	12	9	9	10	12.4	11.5	26.4
18-May-04	8	10	11	7	7	6	11	11	10	6	5	7	8	11	10	16	9	14	18	14	9	12	8	5	9.7	5.5	17.6
19-May-04	5	4	5	5	5	5	4	6	7	4	6	11	17	10	13	22	21	16	13	11	9	8	6	7	9.1	6.4	22.4
20-May-04	6	7	6	8	10	10	7	9	10	9	7	8	8	9	10	10	9	9	10	10	10	10	8	8	8.7	7.4	10.4
21-May-04	8	8	7	7	8	8	7	8	10	10	10	9	9	11	12	11	11	12	11	11	8	11	10	12	9.5	8.8	12.4
22-May-04	12	14	14	10	13	11	13	13	14	15	14	13	14	14	13	11	11	10	11	9	8	6	6	6	11.5	10.9	15.4
23-May-04	6	4	4	3	4	2	3	5	6	9	9	8	8	7	6	6	6	6	6	8	6	7	4	4	5.8	2.5	8.9
24-May-04	5	4	4	3	5	7	8	6	5	7	10	8	8	6	7	6	6	6	12	10	10	8	7	7	7.0	3.9	12.0
25-May-04	6	5	5	4	4	4	5	4	4	7	17	13	15	29	33	34	36	30	9	23	25	22	15	20	15.4	11.4	36.0
26-May-04	12	12	7	12	12	18	24	26	30	28	26	26	26	24	17	23	28	29	26	26	23	16	10	10	20.4	19.6	29.8
27-May-04	9	8	5	9	7	8	17	22	25	24	22	17	16	15	13	12	10	13	17	16	10	5	7	7	13.0	10.1	25.1
28-May-04	7	9	9	7	6	7	8	8	9	10	11	8	12	11	11	9	13	11	6	9	9	7	5	5	8.6	3.6	12.8
29-May-04	5	9	8	10	7	7	9	13	16	20	21	16	18	16	14	16	13	7	13	9	10	7	8	7	11.7	10.9	20.6
30-May-04	7	8	6	6	6	7	9	9	8	9	15	14	13	13	17	19	23	11	12	14	10	9	7	5	10.6	7.6	23.4
31-May-04	14	13	5	10	16	11	14	20	24	24	23	21	19	21	21	23	23	20	19	14	6	6	8	9	16.0	14.0	23.9
1-hr Scalar	7.7	8.0	6.8	7.2	7.3	7.5	8.9	10.2	11.3	12.3	13.1	12.9	13.1	13.3	13.5	14.1	13.6	13.1	12.1	11.7	9.7	7.9	6.9	7.6			
1-hr Vector	1.1	2.2	2.2	1.9	2.6	2.5	3.4	3.9	4.4	4.5	4.4	4.4	4.7	5.4	5.9	6.8	5.9	4.9	3.7	2.5	1.6	0.7	1.1	0.8			
Hourly Max	16.8	24.2	13.6	12.3	16.0	18.3	25.3	28.1	34.5	41.5	42.2	40.9	38.2	39.3	38.4	34.1	36.0	29.7	26.2	25.7	24.7	21.5	15.2	20.0			

Station: Henry Pirker

Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

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

Summary

Calm Time:	0 hrs	**0%** calms		Operational Time:		743 hrs		
Calibration Time:	0 hrs			AMD Operational Uptime:		99.9%		
Percentile	99	95	75	50	25	5	1	Average
	353.8	331.9	238.6	171.1	84.1	36.0	7.3	119 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-May-04	284	278	272	159	109	163	16	3	22	44	320	328	331	330	339	25	273	220	215	90	124	59	352	11	333
2-May-04	77	67	89	84	89	74	84	86	78	82	85	84	84	80	85	104	146	142	145	155	190	198	226	227	99
3-May-04	231	223	224	214	233	249	254	265	270	265	280	286	275	279	256	269	277	245	258	278	269	317	266	261	260
4-May-04	269	277	270	116	114	101	114	172	191	196	211	213	203	195	189	178	185	181	188	215	192	206	176	152	190
5-May-04	168	179	189	194	194	175	174	201	210	218	234	183	356	197	56	90	113	130	176	181	263	292	284	280	195
6-May-04	281	271	270	272	280	265	269	285	284	293	352	110	121	169	150	221	232	244	250	258	245	253	248	243	250
7-May-04	223	213	202	185	175	192	354	47	61	8	296	347	336	291	303	280	300	290	300	324	340	354	32	67	301
8-May-04	68	63	54	56	46	48	62	73	82	78	82	102	143	143	145	143	139	137	144	145	144	144	161	182	106
9-May-04	190	205	207	226	211	201	222	244	252	298	309	313	344	77	57	72	52	351	353	350	354	331	312	292	288
10-May-04	283	265	267	264	257	250	257	265	244	246	225	186	194	204	211	195	195	194	178	191	200	205	228	203	221
11-May-04	135	240	238	228	221	171	199	250	283	249	237	201	213	203	202	244	233	259	212	285	291	268	277	202	234
12-May-04	221	218	212	186	170	175	175	201	218	255	225	238	132	160	199	155	114	205	299	31	302	282	309	338	199
13-May-04	130	201	248	247	258	313	333	338	13	115	139	132	138	132	114	137	111	151	133	149	164	184	357	105	137
14-May-04	152	107	120	127	148	104	98	95	P	79	161	210	228	259	187	69	83	92	58	34	14	11	48	349	82
15-May-04	75	114	127	127	114	73	69	62	43	16	28	18	228	108	82	102	26	78	65	48	56	41	21	22	61
16-May-04	12	62	74	104	77	80	86	71	85	119	118	128	138	140	147	130	130	98	146	163	127	166	145	66	114
17-May-04	65	94	98	103	96	103	75	72	71	56	55	73	66	65	57	82	86	92	84	80	65	53	51	54	75
18-May-04	84	121	93	92	118	106	79	74	68	118	338	187	185	171	159	170	130	175	187	193	211	215	214	146	148
19-May-04	140	163	131	153	145	154	210	300	313	68	138	127	151	213	163	148	177	192	204	212	222	217	224	231	180
20-May-04	224	227	247	247	245	242	234	260	284	265	269	227	221	193	193	191	202	177	200	215	215	217	214	210	224
21-May-04	206	209	207	194	190	215	229	226	237	252	239	229	229	238	209	242	254	243	239	238	216	227	225	212	227
22-May-04	215	214	216	223	212	214	222	225	231	240	237	243	228	217	233	233	242	226	210	232	234	239	235	232	227
23-May-04	271	222	203	70	155	108	104	55	38	15	24	44	80	269	5	339	311	339	4	354	349	343	341	328	5
24-May-04	358	283	356	41	62	54	69	63	22	275	322	340	272	264	1	347	296	312	15	341	333	336	331	323	348
25-May-04	332	330	294	302	302	326	339	346	336	8	26	7	45	67	70	77	73	89	167	85	69	71	110	83	63
26-May-04	112	93	78	65	70	71	72	78	81	82	91	94	91	102	115	97	80	81	77	83	86	73	61	56	84
27-May-04	50	97	91	71	73	66	70	73	68	77	78	81	68	62	67	50	54	7	17	9	14	3	223	238	59
28-May-04	226	204	235	241	178	206	230	245	243	272	281	264	282	279	245	172	355	11	36	86	122	148	133	132	238
29-May-04	35	109	108	70	92	103	85	73	68	70	72	85	84	76	91	83	90	137	84	110	99	96	78	81	84
30-May-04	78	68	62	66	65	64	74	80	86	87	130	139	137	127	64	64	89	115	107	124	112	242	294	5	94
31-May-04	67	73	101	88	74	95	77	88	91	100	109	115	112	97	94	93	88	90	78	137	241	297	39	76	92
Hourly Avg	162	167	184	151	141	122	89	78	75	81	93	111	123	126	119	122	118	132	126	123	131	231	235	173	

Station: Henry Pirker

Station Owner: PASZA

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

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

Summary

Determined by the Yamartino 15-min interval calculation

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

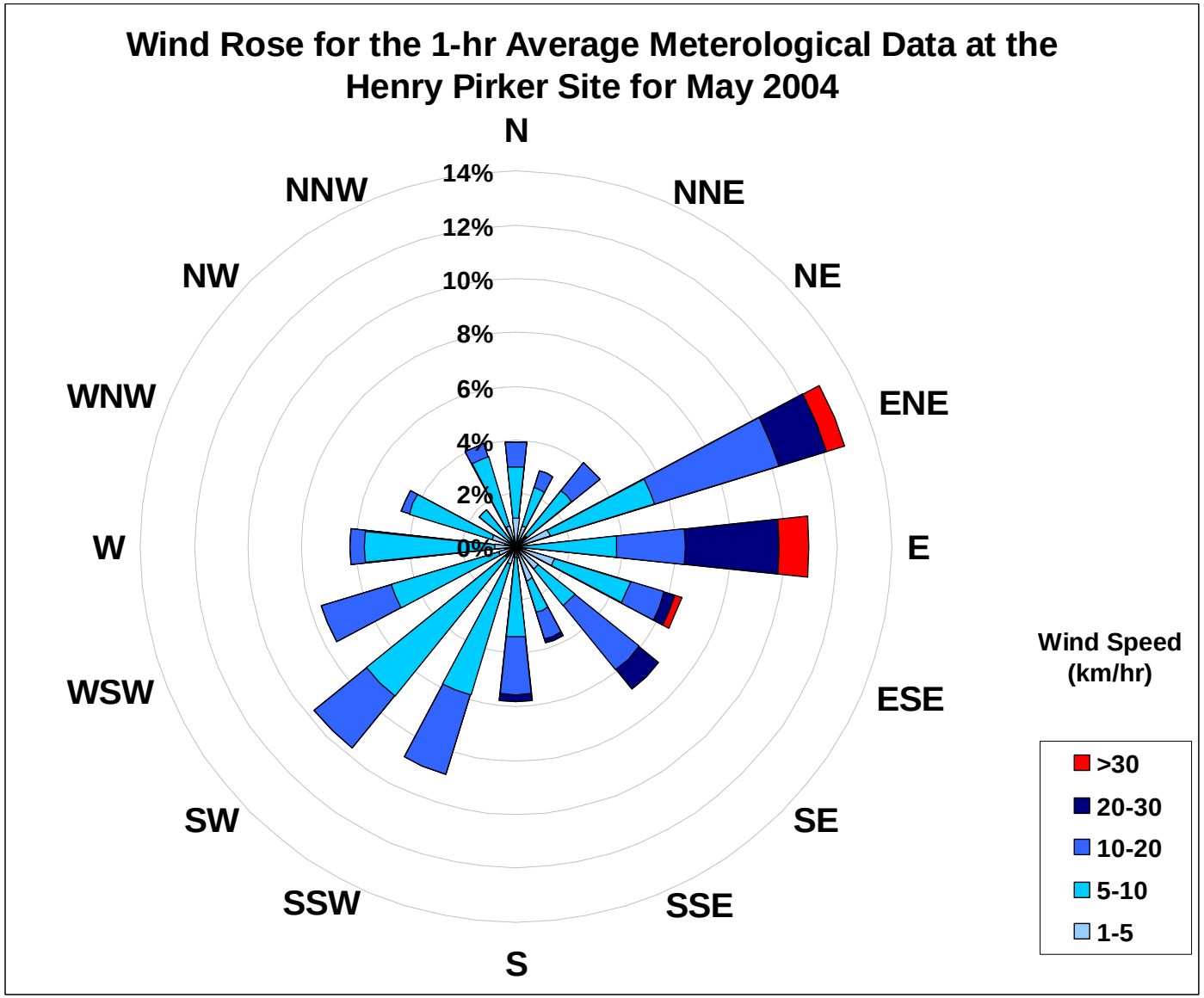
Percentile	99	95	75	50	25	5	1
	65.7	51.5	24.5	14.2	9.4	5.6	4.6

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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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-May-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
31-May-04	4	5	19	9	5	6	7	8	7	9	11	11	9	13	10	11	11	12	9	17	18	18	31	10	
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 May 2004
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
14%
12%
10%
8%
6%
4%
2%
0%
Wind Speed (km/hr)
>30
20-30
10-20
5-10
1-5

PEACE AIRSHED ZONE ASSOCIATION

PASZA Monthly Passive Data Summary

Table 1. PASZA Passive Stations for May 2004

Peace Airshed Zone Association - PASZA Passive Stations for May 2004

Station Number	Station Name	PASZA SO2 ppb	PASZA O3 ppb	PASZA NO2 ppb	Site Legal
Duplicates					
43a	High Prairie	**0.1**	**39.7**	**1.3**	
43b	High Prairie	**0.1**	**40.6**	**1.6**	
44a	Peavine	**0.1**	**32.6**	**0.2**	
44b	Peavine	**0.0**	**36.8**	**0.2**	
45a	McLennan	**0.1**	**31.0**	**0.8**	
45b	McLennan	**0.2**	**30.0**	**0.8**	
49a	Grande Prairie HP	**0.4**	**36.7**	**4.8**	
49b	Grande Prairie HP	**0.1**	**33.6**	**4.7**	
1	Silver Valley	**0.2**	**33.0**	**1.3**	08-27-081-11 W6M
2	Bay Tree	**0.1**	**33.5**	**0.6**	13-16-078-13 W6M
3	Forth Creek	**0.1**	**48.3**	**0.7**	04-13-082-07 W6M
4	Gordondale	**0.2**	**39.8**	**1.1**	04-34-078-10 W6M
5	Boone Creek	**0.1**	**32.4**	**0.6**	01-23-076-11 W6M
7	Steeprock Creek	**0.2**	**39.8**	**0.6**	09-35-072-13 W6M
9	Spirit River	**0.1**	**36.6**	**1.8**	08-12-079-07 W6M
10	Woking	**0.3**	**34.1**	**0.9**	01-13-076-07 W6M
11	Webber Creek	**0.1**	**30.7**	**1.5**	09-36-074-09 W6M
12	Hythe	**0.1**	**32.7**	**1.5**	14-36-072-11 W6M
14	Sylvester	**0.2**	**36.4**	**0.5**	08-06-069-12 W6M
16	Beaverlodge	**0.1**	**37.6**	**1.3**	15-36-071-10 W6M
17	Poplar	**0.1**	**33.6**	**1.9**	13-06-073-08 W6M
18	Saddle Hills	**0.1**	**39.4**	**0.8**	04-25-074-07 W6M

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

19	Wanham	**0.2**	**40.5**	**1.3**	16-22-077-03 W6M
20	Shaftesbury	**0.0**	**32.6**	**1.0**	04-03-082-23 W5M
21	Eaglesham	**0.0**	**31.4**	**1.2**	16-21-079-25 W5M
23	Bear Lake	**0.2**	**32.8**	**2.1**	15-31-072-06 W6M
24	Wembley	**0.1**	**32.0**	**2.0**	12-31-070-08 W6M
25	Pinto Creek	**0.2**	**42.0**	**0.6**	04-24-069-11 W6M
26	Flyingshot	**0.1**	**33.9**	**1.5**	15-36-070-07 W6M
27	Grande Prairie I	**0.1**	**31.8**	**4.9**	08-15-071-06 W6M
28	Clairmont Lake	**0.4**	**38.9**	**1.3**	09-06-073-04 W6M
29	Smoky Heights	**0.1**	**42.0**	**0.6**	04-06-075-02 W6M
30	Fitzsimmons	**0.2**	**39.6**	**0.9**	15-36-072-03 W6M
32	Gold Creek	**0.3**	**31.8**	**0.8**	06-33-067-05 W6M
33	Wapiti	**0.2**	**39.2**	**0.7**	02-25-071-03 W6M
34	Puskwaskau	**0.0**	**35.2**	**0.3**	15-35-074-25 W5M
35	Jean Cote	**0.2**	**33.4**	**1.0**	12-35-079-21 W5M
36	Guy	**0.2**	**41.9**	**1.1**	03-04-076-22 W5M
37	Crooked Creek	**0.1**	**45.0**	**1.2**	16-01-071-26 W5M
38	Karr Creek	**0.1**	**31.4**	**0.3**	10-16-065-02 W6M
39	Clouston Creek	**0.2**	**41.1**	**0.6**	12-01-073-22 W5M
40	McLennan	**0.2**	**35.9**	**2.5**	03-29-077-19 W5M
41	Valleyview	**0.4**	**35.2**	**0.5**	09-30-069-22 W5M
42	Sunset House	**0.3**	**38.6**	**0.2**	05-32-070-19 W5M
43	High Prairie	**0.1**	**40.2**	**1.4**	16-13-074-17 W5M
44	Peavine	**0.1**	**34.7**	**0.2**	03-05-079-15 W5M
45	Gift Lake	**0.1**	**30.5**	**0.8**	10-07-079-12 W5M
46	Little Smoky	**0.1**	**33.6**	**1.9**	12-01-065-21 W5M
47	Kinuso	**0.0**	**41.5**	**0.6**	12-10-073-10 W5M
48	Deer Mountain	**0.1**	**38.5**	**0.4**	15-22-068-09 W5M
49	Grande Prairie HP	**0.2**	**35.1**	**4.7**	17-26-071-06 W6M

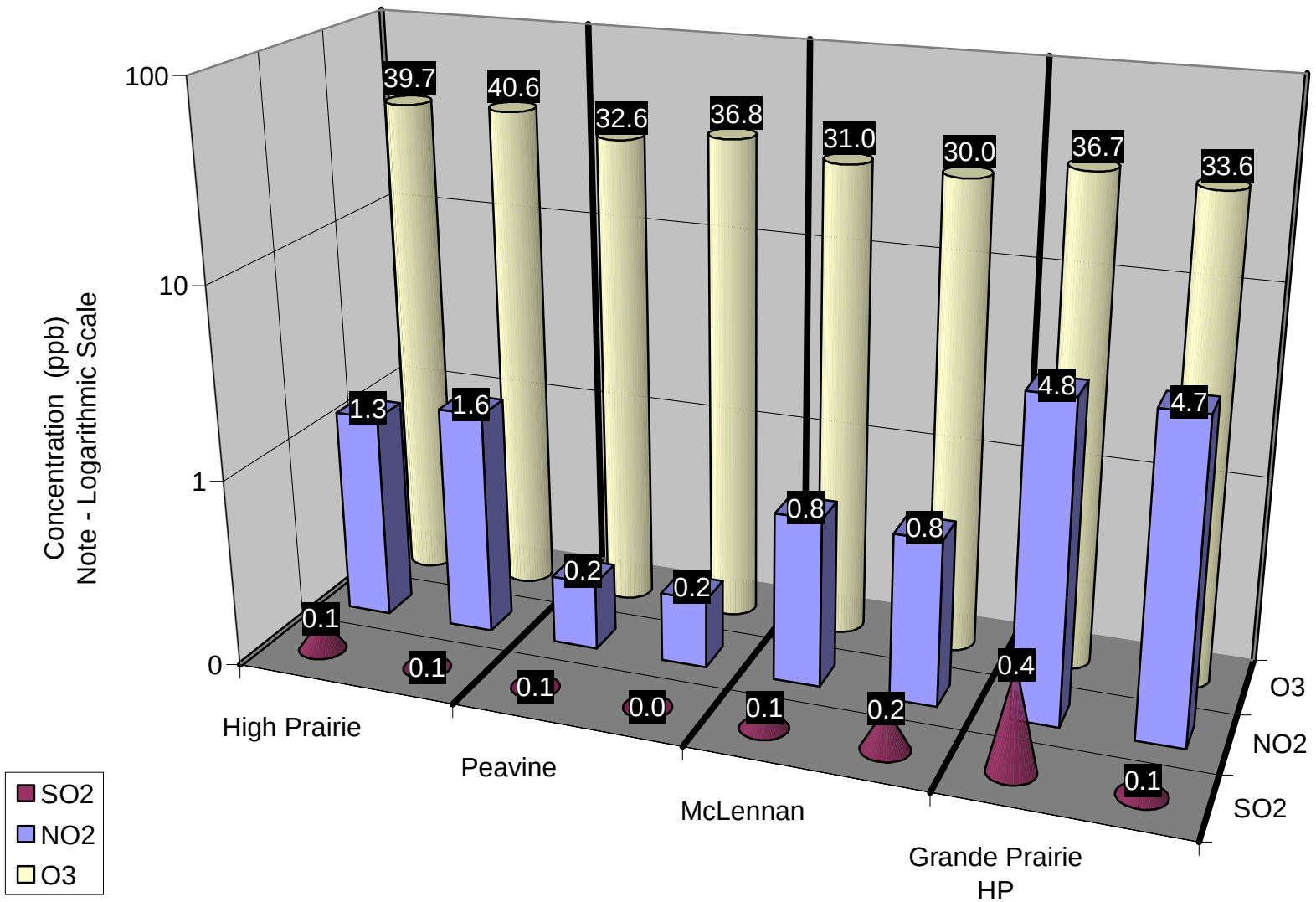


Figure 20. Duplicate Summary Chart

Table 2. Passive Summary Results for May 2004

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for May 2004 (PASZA Zone)		
Mean	**0.1**	**36.5**	**1.2**
Standard Deviation	**0.1**	**4.2**	**1.0**
Minimum	**0.0**	**30.5**	**0.2**
	Eaglesham (#21)	**Gift Lake (#45)**	**Peavine (#44)**
Maximum	**0.4**	**48.3**	**4.9**
	Clairmont Lake (#28)	**Forth Creek (#3)**	**Grande Prairie I (#27)**

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

	SO_2	O_3	NO_2
AENV Beaverlodge station	**0.3**	**36.6**	**2.6**
PASZA Beaverlodge passive	**0.1**	**37.6**	**1.3**

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**	**34.6**	**6.0**
PASZA Grande Prairie passive	**0.2**	**35.1**	**4.7**

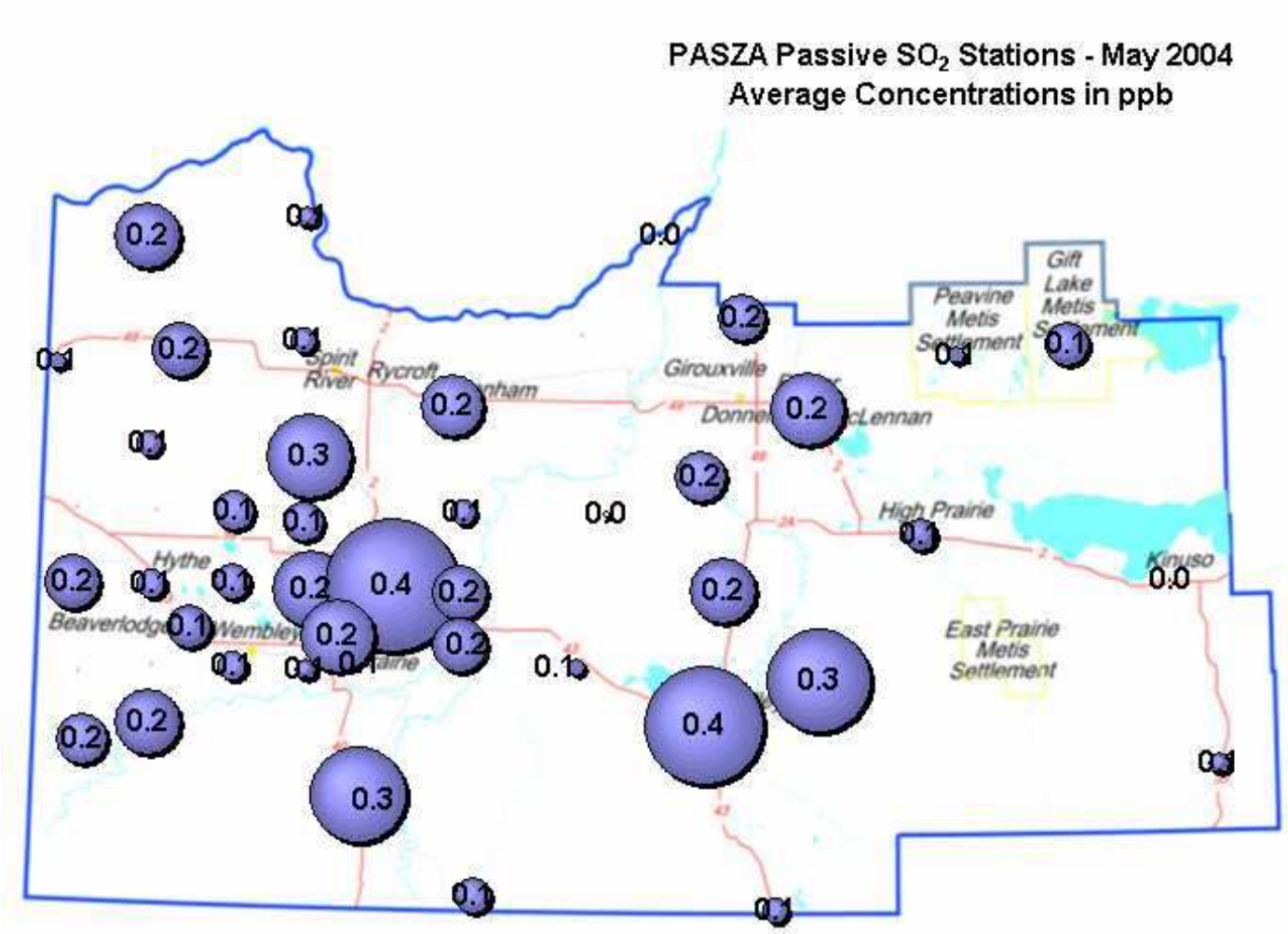


Figure 21. SO_2 Bubble Chart

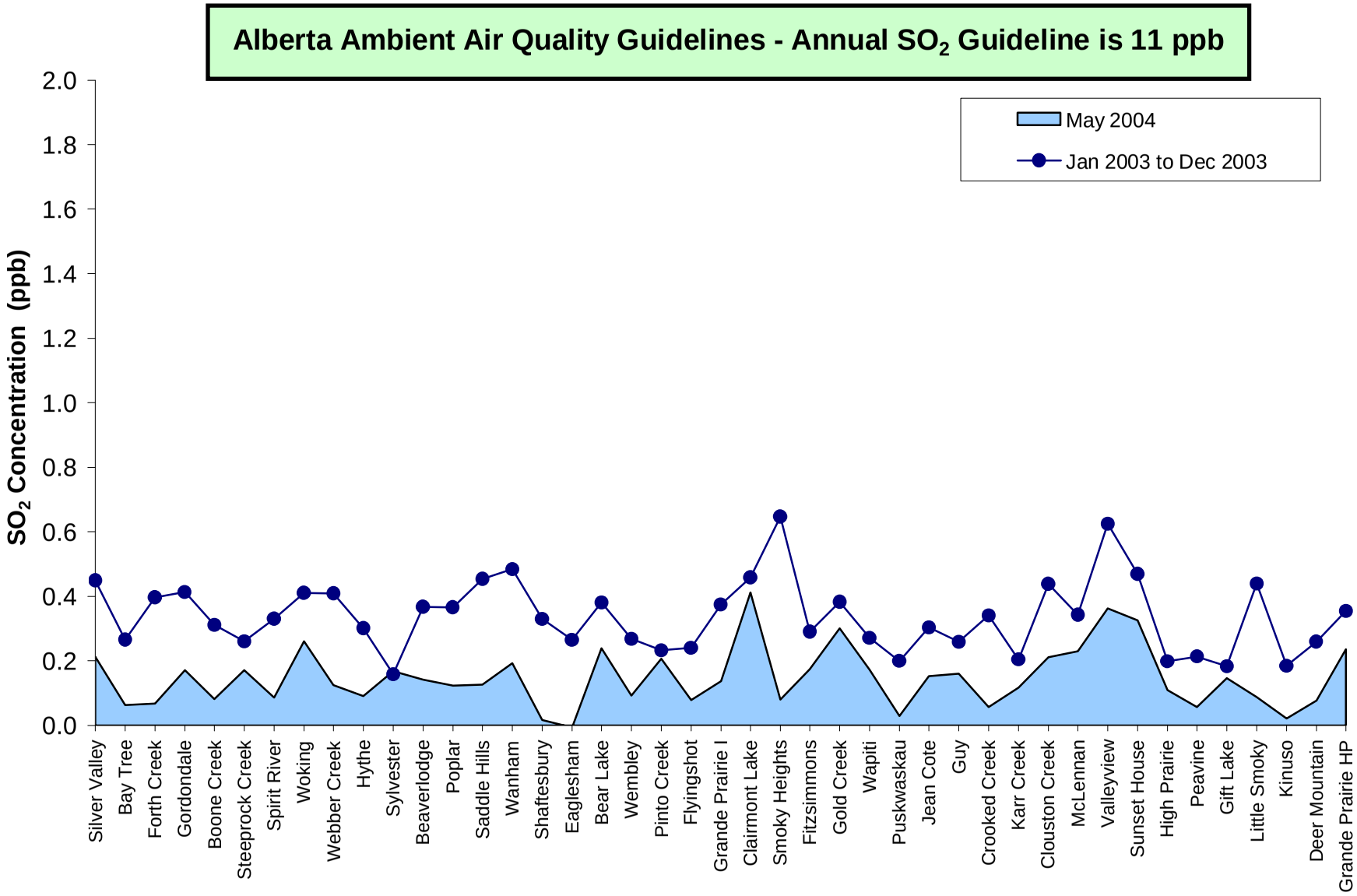


Figure 22. SO_2 Summary Chart

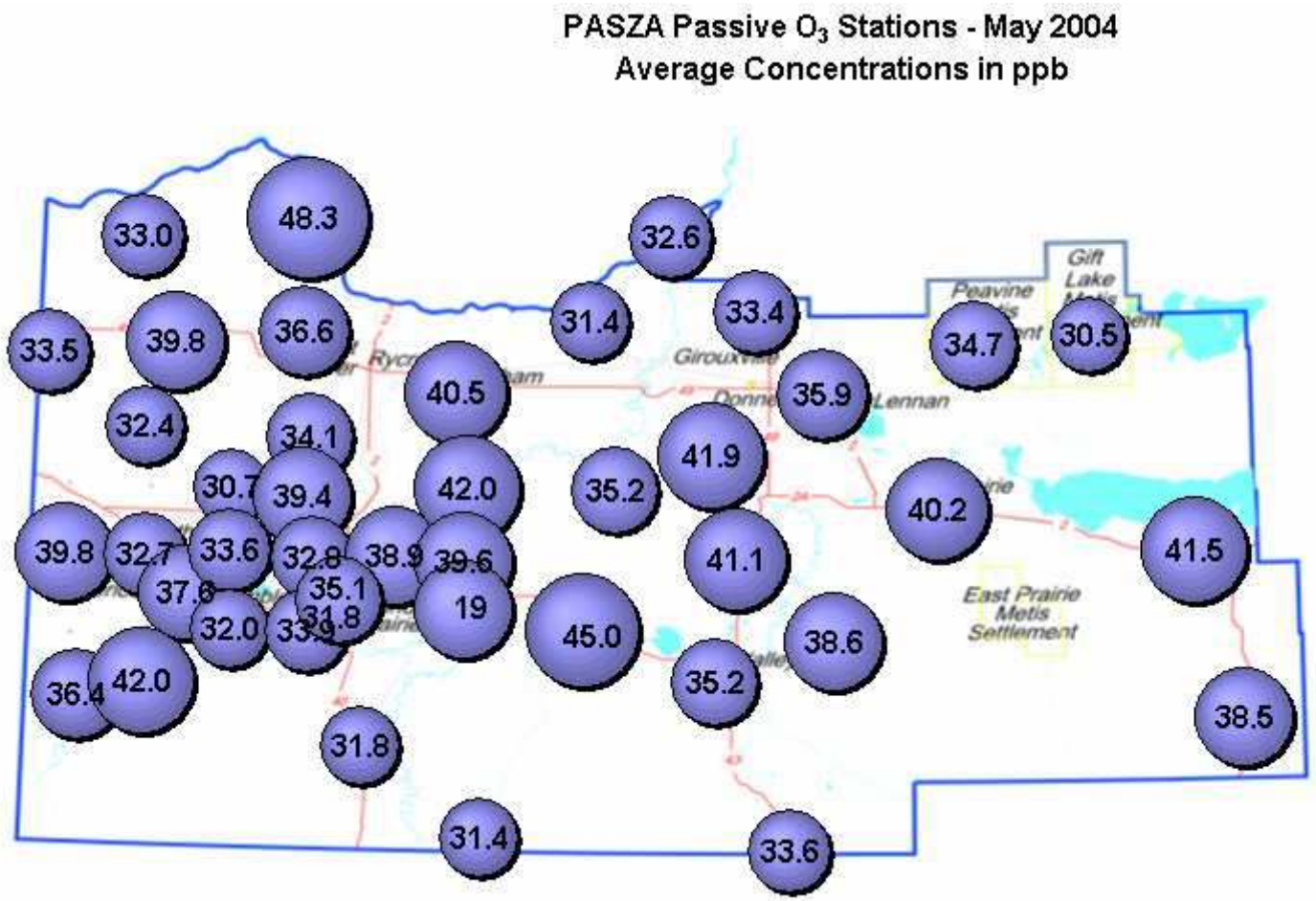


Figure 23. O_3 Bubble Chart

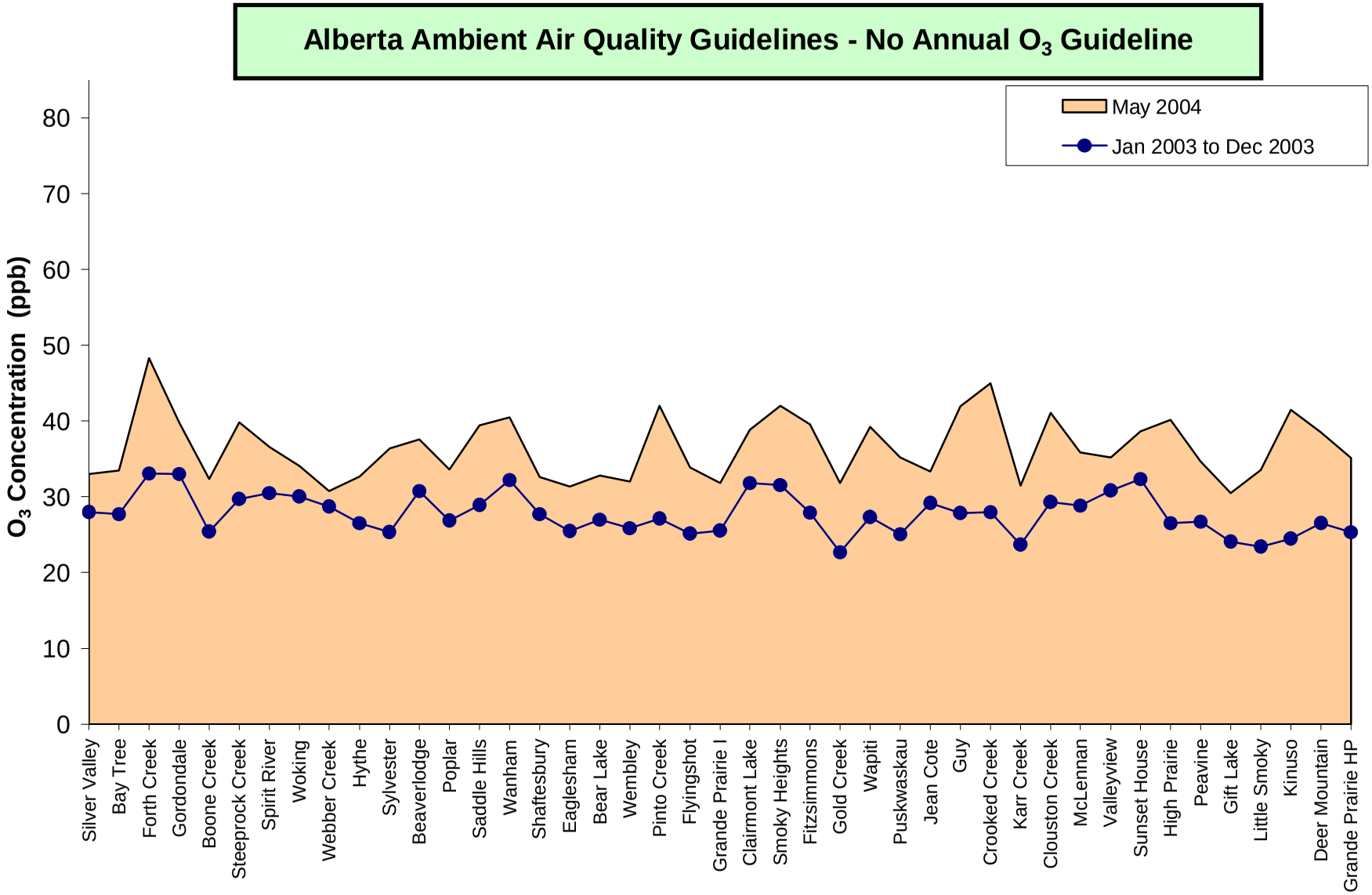


Figure 24. O_3 Summary Chart

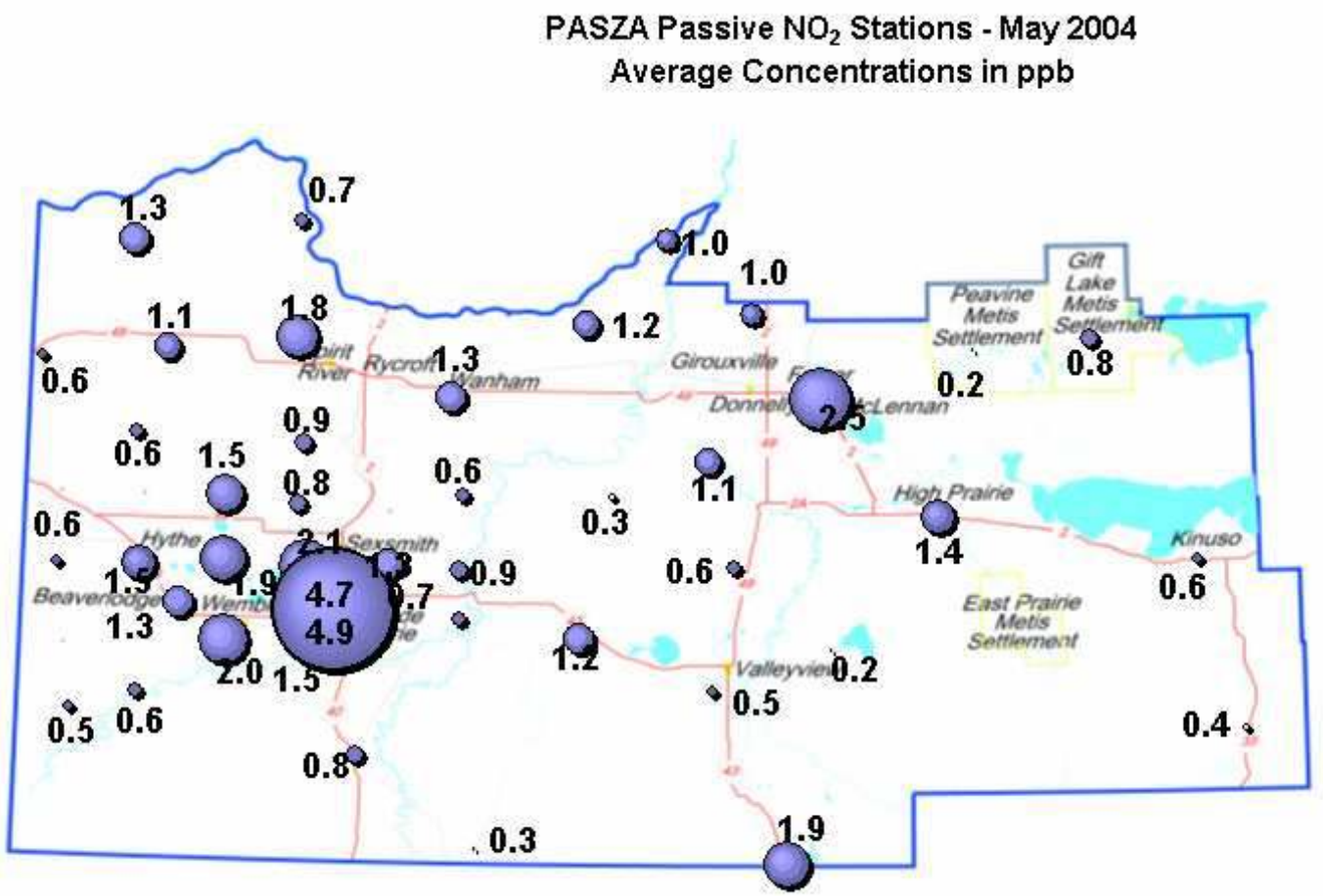


Figure 25. NO_2 Bubble Chart

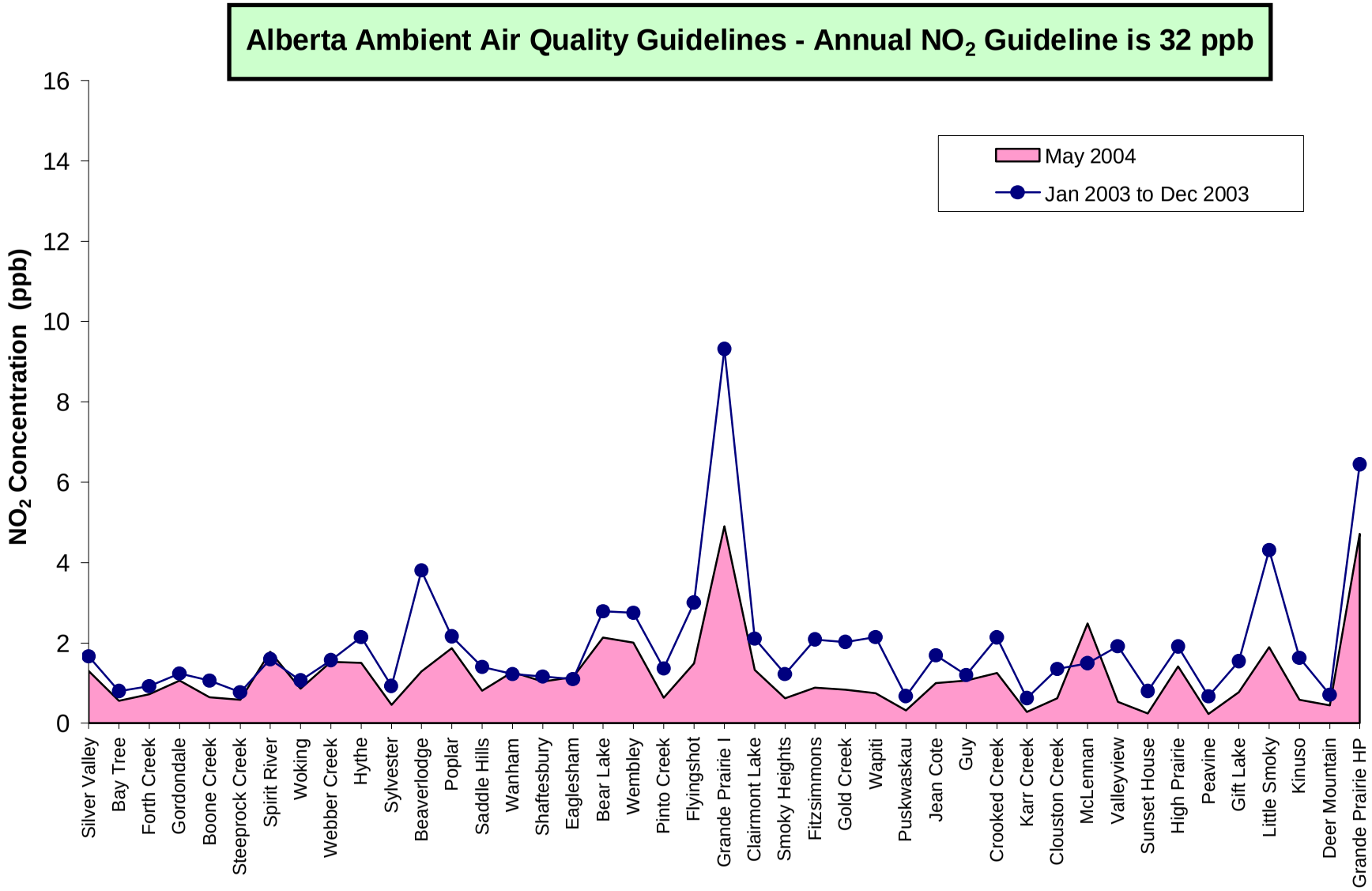


Figure 26. NO_2 Summary Chart

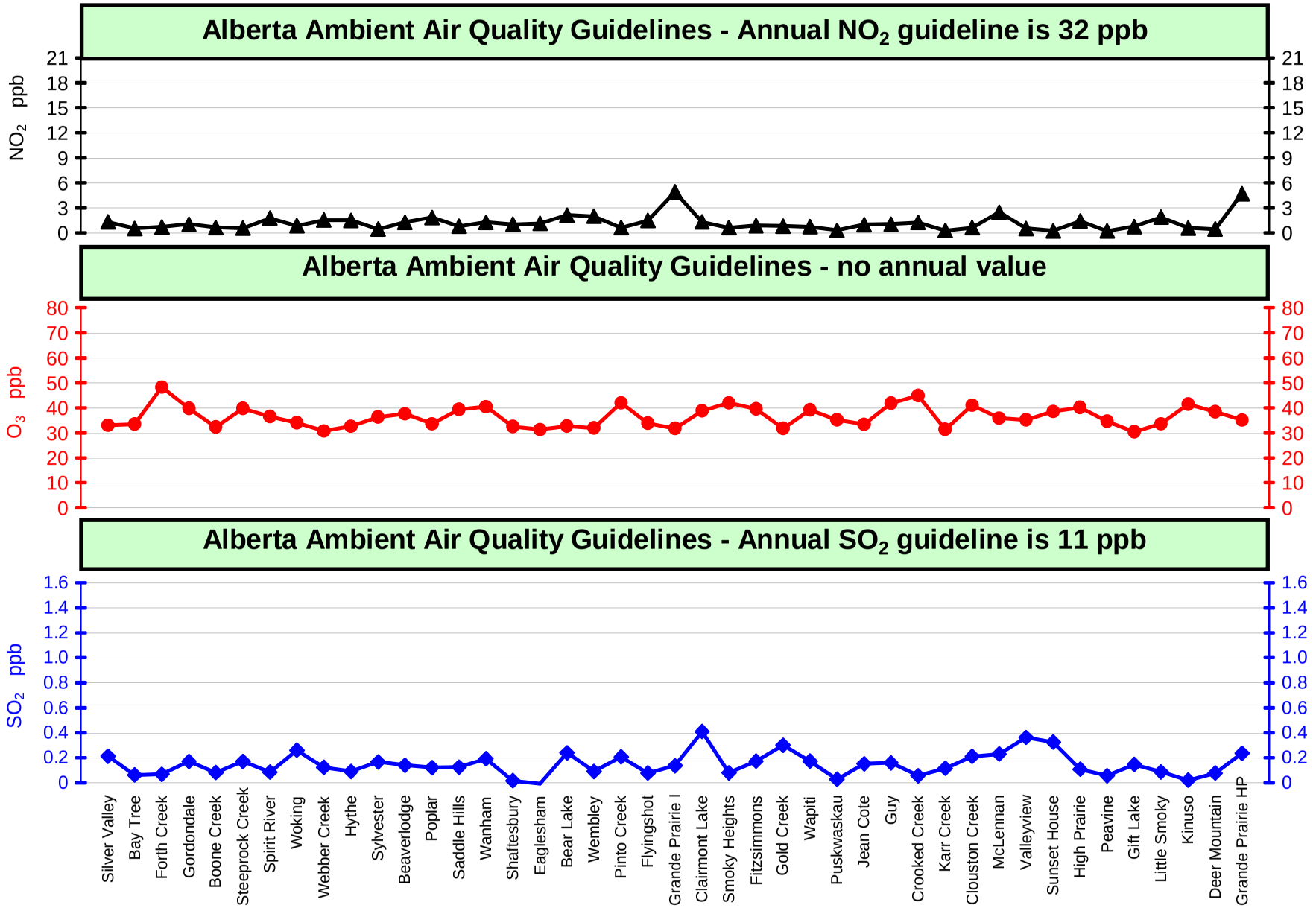


Figure 27. Overview Summary

May 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 INTEC
Air Quality Monitoring

Parameter **SO2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☐	Install ☐	Removal ☐	Other: ☐
Start Time (MST)	17:00 - 18:00 (May 10) As found	End Time (MST)	11:05 - 14:34 (May 11) calibration
Barometric Pressure	27.9 inches Hg	Station Temperature	21.0 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	0.945851	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	0.998651	Calculated slope	1.008522
Calculated intercept	-0.718662	Calculated intercept	-0.569198
Analyzer make	TEI Model 43A	Analyzer serial #	43A-21120-195

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
SO2 zero pot	206		186	
SO2 span pot	092		151	
Vacuum	22.1	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	2861.2	0.0	-0.1	N/A
3025	2861.2	399.5	396.2	1.0085
6045	5717.7	199.9	199.8	1.0007
12220	11558.3	98.9	98.9	1.0005
zero	3187.5	0.0	-2.4	As Found Zero
3370	3187.5	358.6	324.8	As Found Span
			Average Correction Factor	1.0032

Calculated value of As Found Response: 325.986 ppm Percent Change of As Found: 9.1%

	before calibration		after calibration	
Auto zero	0.3	ppm	-0.8	ppm
Auto span	358.6	ppm	267.5	ppm

Notes: Analyzer as found captured with AIC before DACS was removed on May 10th.
Calibration completed May 11th; zero and span adjustments performed.

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **SO2**

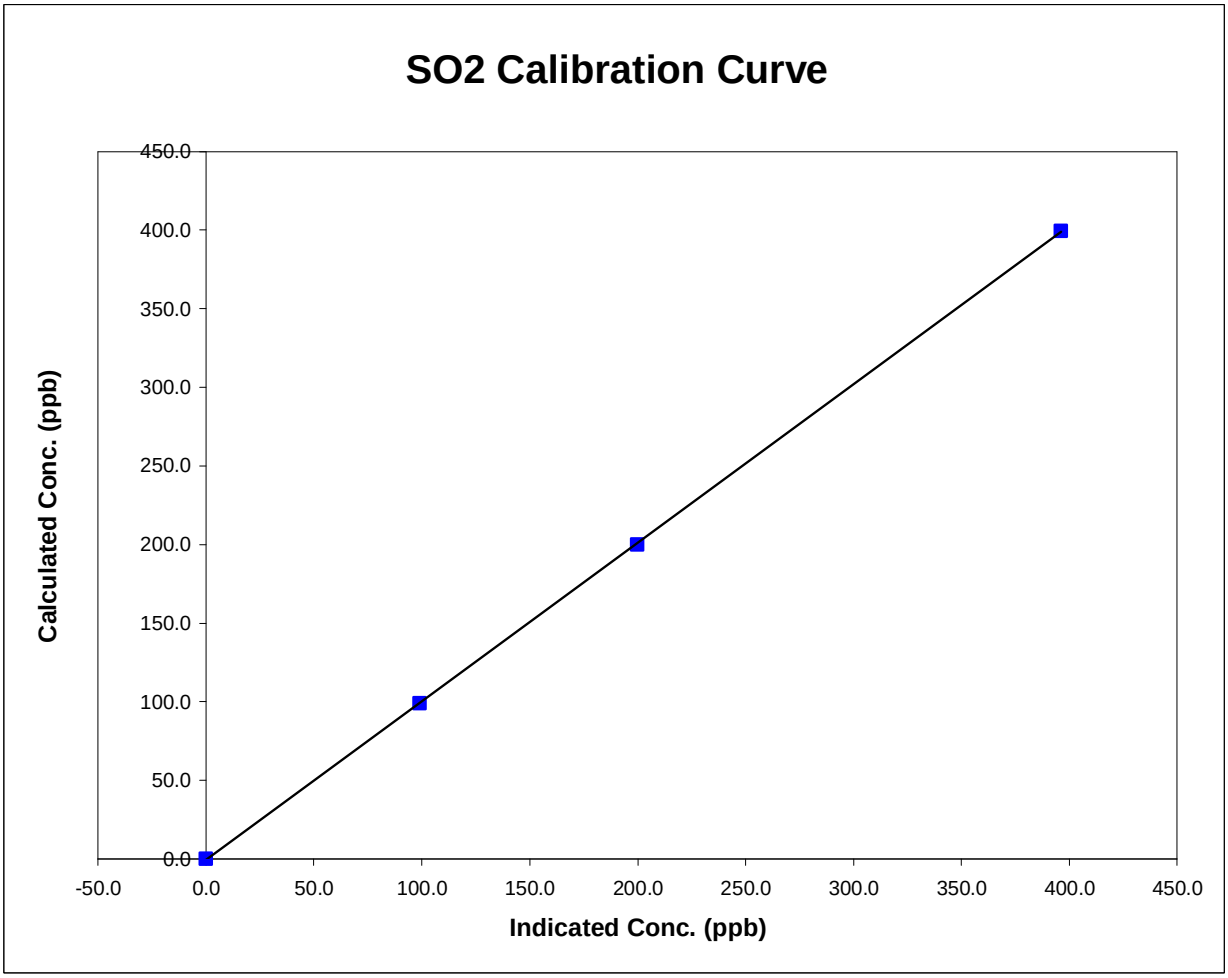
Air Monitoring Network **PASZA**

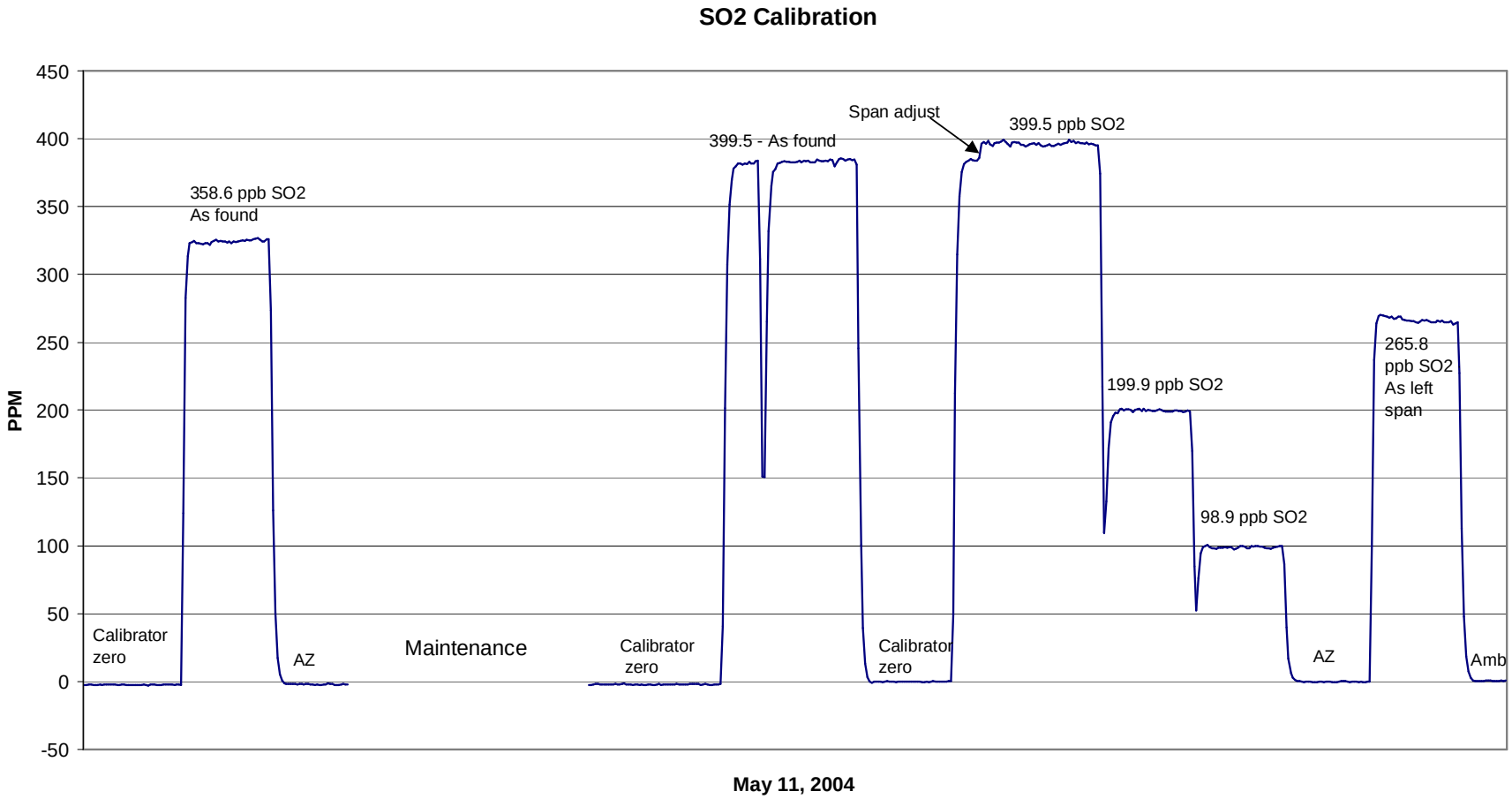
Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	17:00 - 18:00 (May 10)	End Time (MST)	11:05 - 14:34 (May 11)
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-21120-195

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
399.5	396.2	1.0085	Correlation Coefficient	0.999980
199.9	199.8	1.0007		
98.9	98.9	1.0005	Slope	1.008522
			Intercept	-0.569198




SO2 Calibration
PPM
450
400
350
300
250
200
150
100
50
0
-50
358.6 ppb SO2
As found
399.5 - As found
Span adjust
399.5 ppb SO2
199.9 ppb SO2
98.9 ppb SO2
265.8
ppb SO2
As left
span
Calibrator
zero
AZ
Maintenance
Calibrator
zero
Calibrator
zero
AZ
Amb
May 11, 2004

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 12, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	16:30 - 18:15 (May 10) As found	End Time (MST)	6:45 - 10:30 (May 12) Calibration
Barometric Pressure	0.933 ATM	Station Temperature	10.1 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.	N/A

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	0.983731	0.996216	0.993884
	Data Offset	-0.413114	-0.579985	-0.409378
After	Data Slope	1.002166	1.002219	1.003264
	Data Offset	0.053317	-0.020723	-0.415246
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	9.8	ppb	14.0	mV
NOx background	10.1	ppb	14.6	mV
NO coefficient	2.481		2.231	
NOx coefficient	0.998		1.002	
Chamber Temp	50.0	Deg C	49.6	Deg C
Cooler Temp	-3.4	Deg C	-3.4	Deg C
Converter Temp	341.0	Deg C	342.0	Deg C
Perm Temp	NA	Deg C	NA	Deg C
Pressure	22.9	inches Hg	22.2	inches Hg
Sample Flow	NA	ccm	NA	ccm

Notes: Analyzer as found captured before DACS replacement on May 10th.
Analyzer underwent maintenance on May 11th. Points are relatively unstable due to electronic intermitt failure. Lowered HVPS on May 12th and completed calibration.

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date: May 12, 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	-0.4	-0.1	-0.3	N/A	N/A
1	4993	39.98	401.2	399.6	1.6	399.8	398.3	1.6	1.0033	1.0033
2	4993	19.98	201.3	200.5	0.8	201.7	201.0	0.7	0.9978	0.9975
3	4993	9.98	100.7	100.3	0.4	100.5	100.6	-0.2	1.0020	0.9971
AFZ	4993	0.00	0.0	0.0	0.0	-1.4	-1.3	-0.2	0.0000	0.0000
AFS	4993	39.97	401.1	399.5	1.6	312.2	312.7	-0.4	1.2846	1.2775
							Average Correction Factor		1.0010	0.9993

As Found Concentrations: NO_X= 313.1 NO= 313.6 As Found Percent Change NO_X= -21.9% NO= -21.5%

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	409.2	408.0	1.2	408.3	407.1	-0.3	N/A	N/A	N/A	N/A
300	409.2	128.0	281.6	408.8	128.0	280.7	1.0011	1.0000	1.0032	99.7%
200	409.2	222.2	195.4	416.7	221.9	195.1	0.9821	1.0014	1.0013	99.9%
100	409.2	321.4	99.8	420.3	320.7	99.8	0.9737	1.0020	1.0003	100.0%
					Average Correction Factor		0.9857	1.0011	1.0016	99.8%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	2.0	0.3	1.6	ppb	-0.5	0.0	-0.8	ppb
Auto span	359.5	353.1	5.6	ppb	390.8	387.9	2.1	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **NO_2**

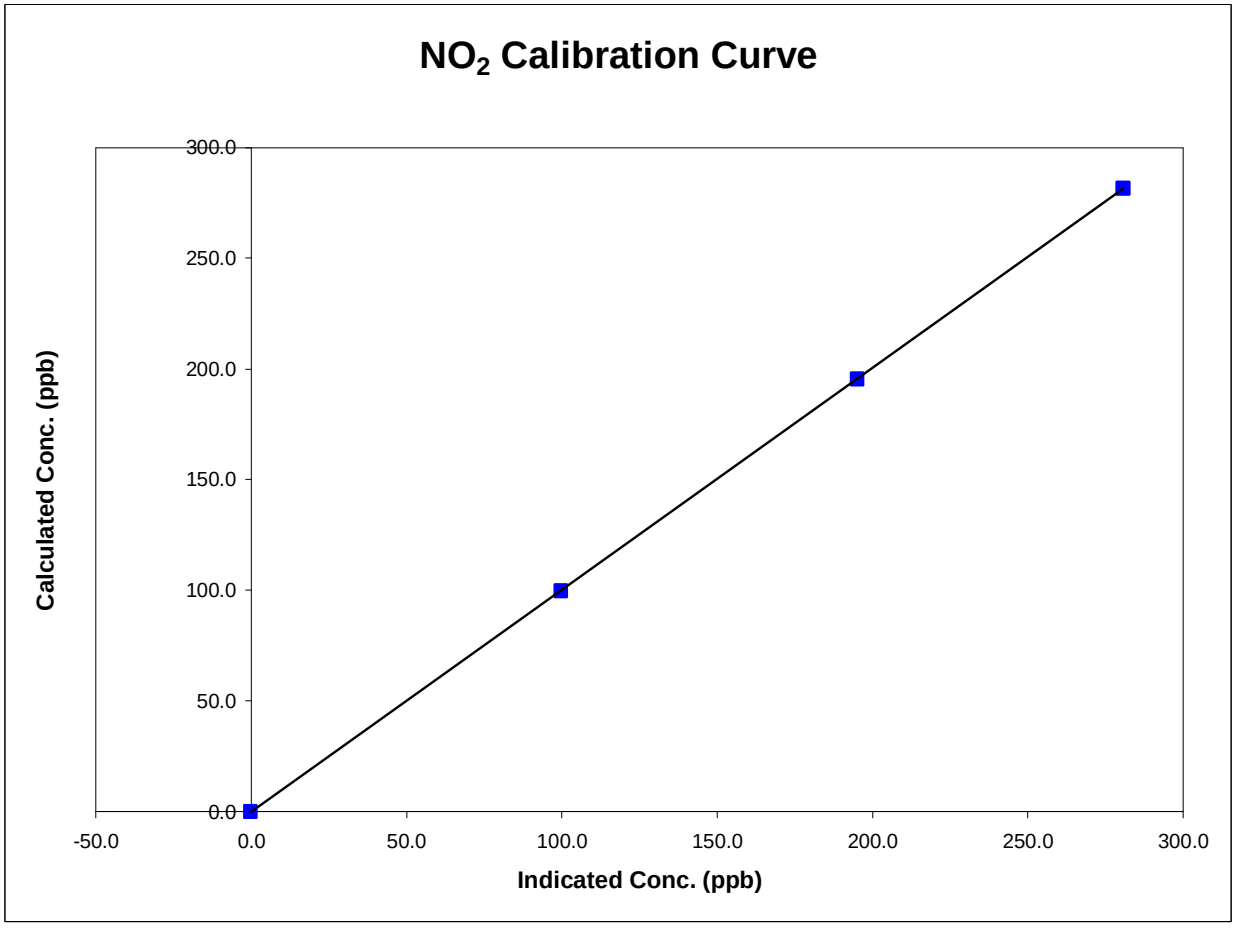
Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 12, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	16:30 - 18:15 (May 10)	End Time (MST)	6:45 - 10:30 (May 12)
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000		
281.6	280.7	1.0032	Correlation Coefficient	0.999995
195.4	195.1	1.0013		
99.8	99.8	1.0003	Slope	1.002166
			Intercept	0.053317



Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **NO_x**

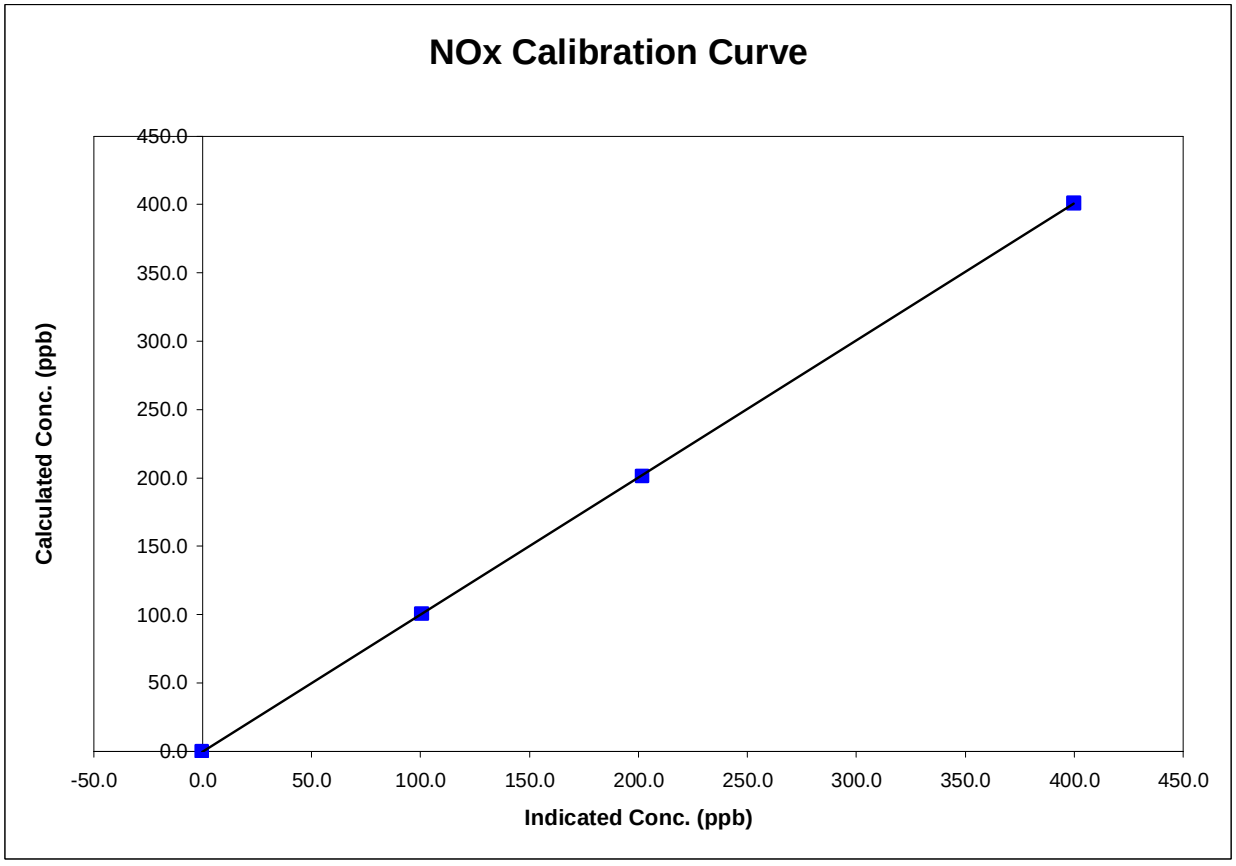
Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 12, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	16:30 - 18:15 (May 10)	End Time (MST)	6:45 - 10:30 (May 12)
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	0.0000		
401.2	399.8	1.0033	Correlation Coefficient	0.999987
201.3	201.7	0.9978		
100.7	100.5	1.0020	Slope	1.002219
			Intercept	-0.020723



Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **NO**

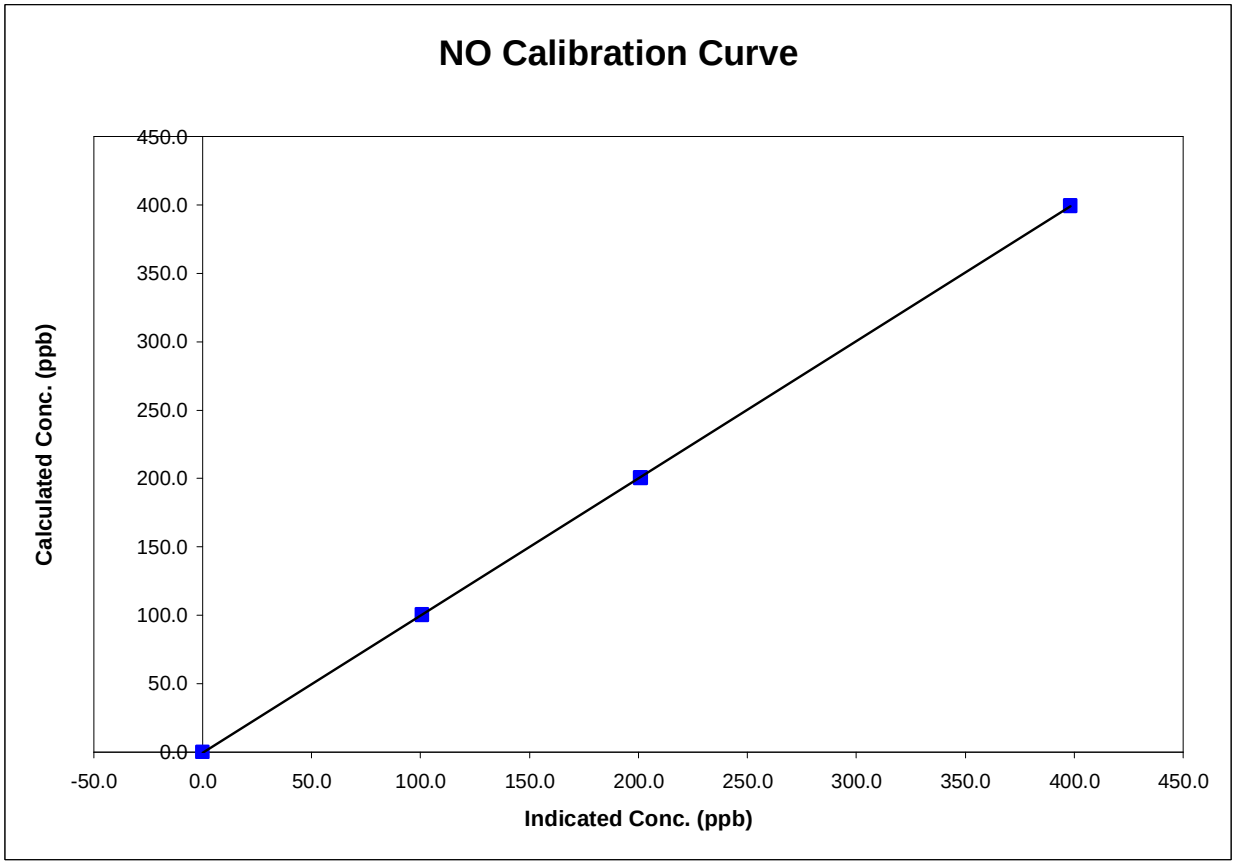
Air Monitoring Network **PASZA**

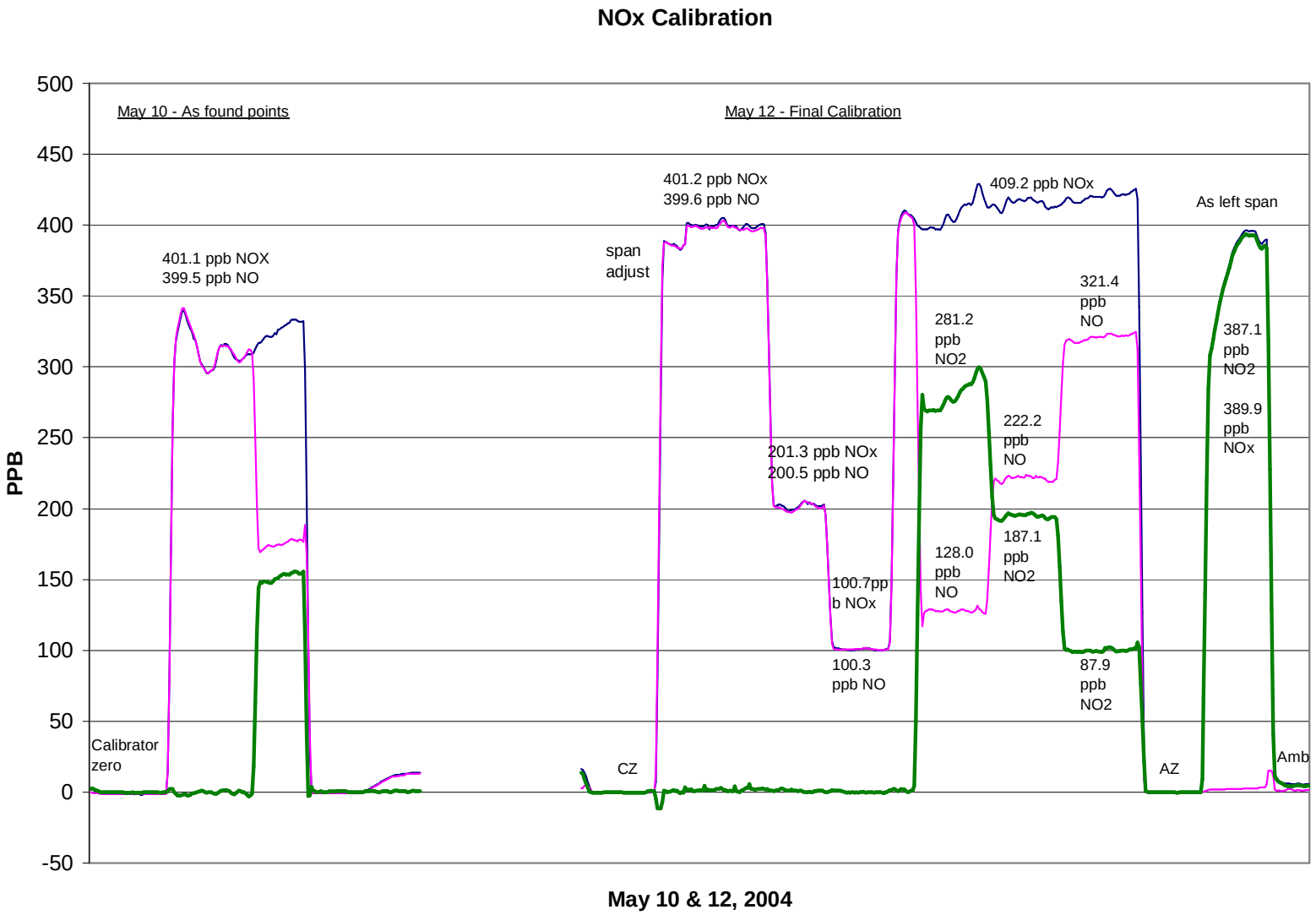
Station Information

Calibration Date	May 12, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	16:30 - 18:15 (May 10)	End Time (MST)	6:45 - 10:30 (May 12)
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	398.3	1.0033	Correlation Coefficient	0.999988
200.5	201.0	0.9975		
100.3	100.6	0.9971	Slope	1.003264
			Intercept	-0.415246




NOx Calibration
May 10 - As found points
May 12 - Final Calibration
401.1 ppb NOX
399.5 ppb NO
Calibrator zero
span adjust
401.2 ppb NOx
399.6 ppb NO
CZ
201.3 ppb NOx
200.5 ppb NO
100.7ppb NOx
100.3 ppb NO
281.2 ppb NO2
128.0 ppb NO
409.2 ppb NOx
222.2 ppb NO
187.1 ppb NO2
321.4 ppb NO
87.9 ppb NO2
AZ
As left span
387.1 ppb NO2
389.9 ppb NOx
Amb
PPB
500
450
400
350
300
250
200
150
100
50
0
-50
May 10 & 12, 2004

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 18, 2004	Previous Calibration	May 12, 2004
Station Number	1	Station Location	Muskoseepi Park

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	15:30		End Time (MST)	0:20	
Barometric Pressure	0.924	ATM	Station Temperature	23.5	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.: N/A

Parameter		NO2	NOx	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.003133	1.002238	1.003264
	Data Offset	-5.251087	-0.020723	-0.415246
After	Data Slope	1.003361	1.001909	1.002693
	Data Offset	0.266011	0.649576	0.146719
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	14.0	ppb	16.7	mV
NOx background	14.6	ppb	17.2	mV
NO coefficient	2.231		2.315	
NOx coefficient	1.002		1.003	
Chamber Temp	49.6	Deg C	49.5	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	21.5	inches Hg	20.5	inches Hg
Sample Flow	NA	ccm	NA	ccm

Notes: Discovered some moisture around PMT lines. Removed PMT and replaced; housing left to dry for a little while. Analyzer was zero and span adjusted following a HVPS adjustment.

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date: May 18, 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	-0.4	-0.3	-0.3	N/A	N/A
1	4993	39.98	401.2	399.6	1.6	399.9	398.2	1.3	1.0032	1.0034
2	4993	19.98	201.3	200.5	0.8	200.1	200.1	-0.3	1.0059	1.0019
3	4993	9.98	100.7	100.3	0.4	99.7	99.9	-0.3	1.0107	1.0044
AFZ	4993	0.00	0.0	0.0	0.0	0.5	0.0	0.4	0.0000	0.0000
AFS	4993	19.98	201.3	200.5	0.8	286.9	286.7	-0.1	0.7016	0.6993
							Average Correction Factor		1.0066	1.0033

As Found Concentrations: NO_X= 286.4 NO= 286.3 As Found Percent Change NO_X= 42.3% NO= 42.8%

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	404.1	401.2	2.8	402.6	400.0	-0.3	N/A	N/A	N/A	N/A
300	404.1	128.2	277.8	404.7	127.7	276.6	0.9985	1.0038	1.0046	99.5%
200	404.1	217.9	188.3	404.8	217.2	187.5	0.9983	1.0034	1.0042	99.6%
100	404.1	312.8	95.4	406.8	311.8	94.8	0.9932	1.0032	1.0063	99.4%
					Average Correction Factor		0.9967	1.0035	1.0050	99.5%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.5	-5.3	-0.8	ppb	-0.3	0.0	-0.7	ppb
Auto span	390.8	383.0	2.1	ppb	394.4	391.1	3.0	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **NO_2**

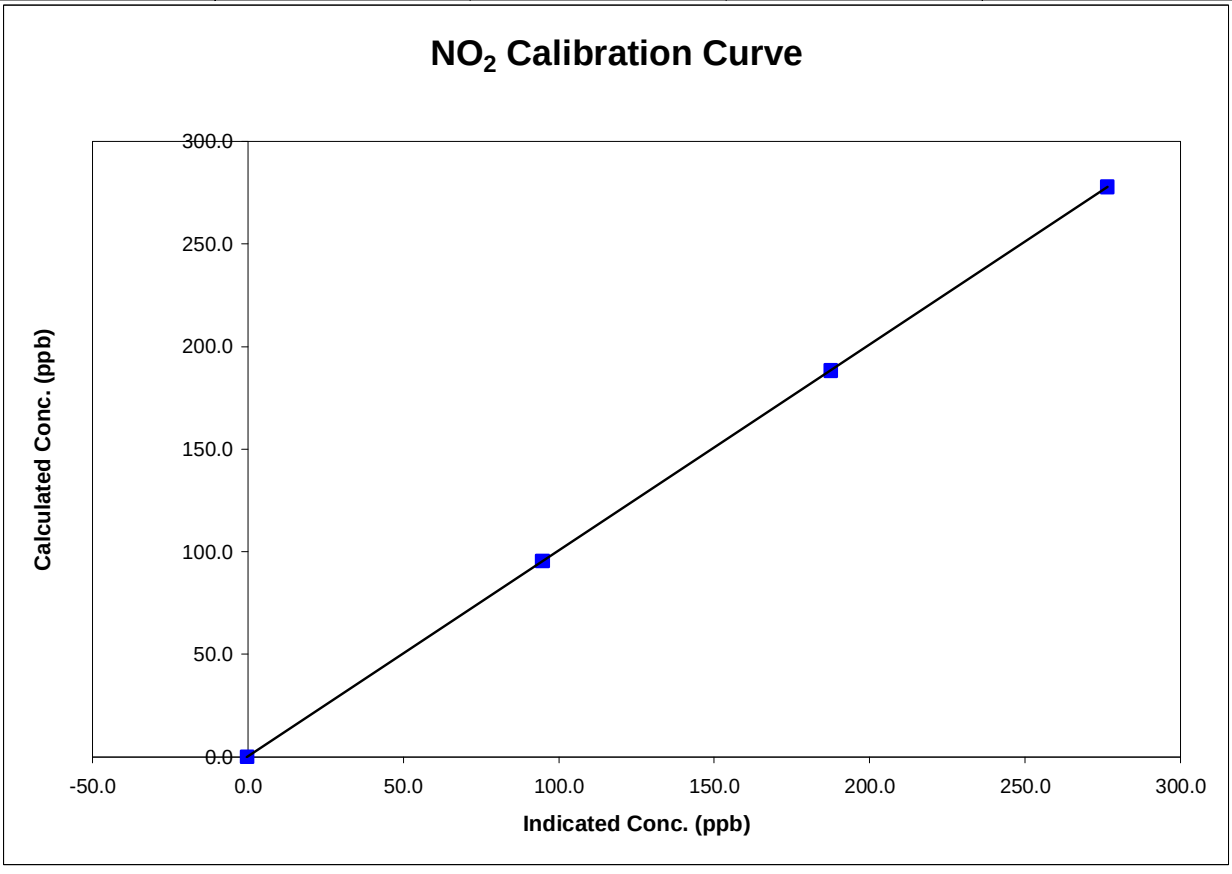
Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 18, 2004	Previous Calibration	May 12, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	15:30	End Time (MST)	0:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000		
277.8	276.6	1.0046	Correlation Coefficient	1.000000
188.3	187.5	1.0042		
95.4	94.8	1.0063	Slope	1.003361
			Intercept	0.266011



Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **NO_x**

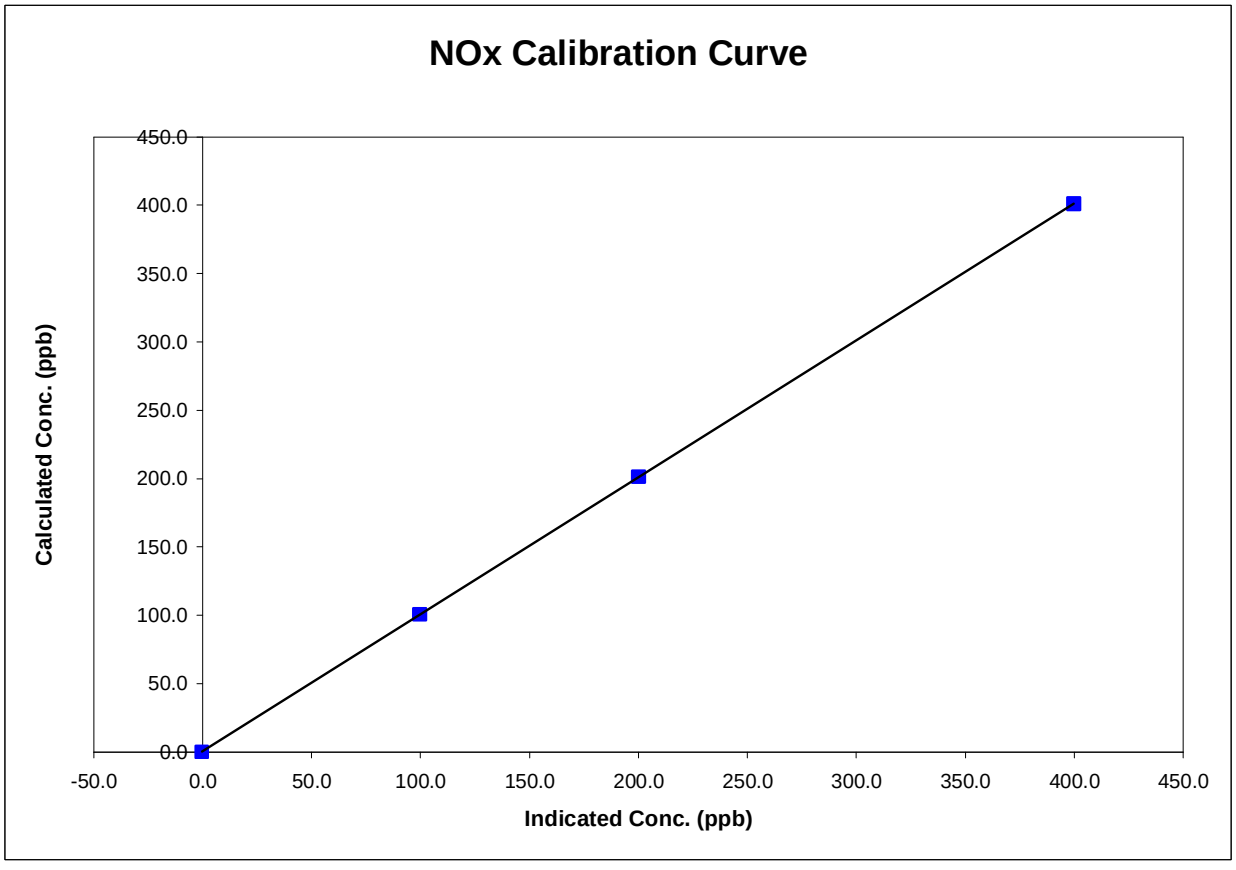
Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 18, 2004	Previous Calibration	May 12, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	15:30	End Time (MST)	0:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	0.0000		
401.2	399.9	1.0032	Correlation Coefficient	0.999998
201.3	200.1	1.0059		
100.7	99.7	1.0107	Slope	1.001909
			Intercept	0.649576



Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **NO**

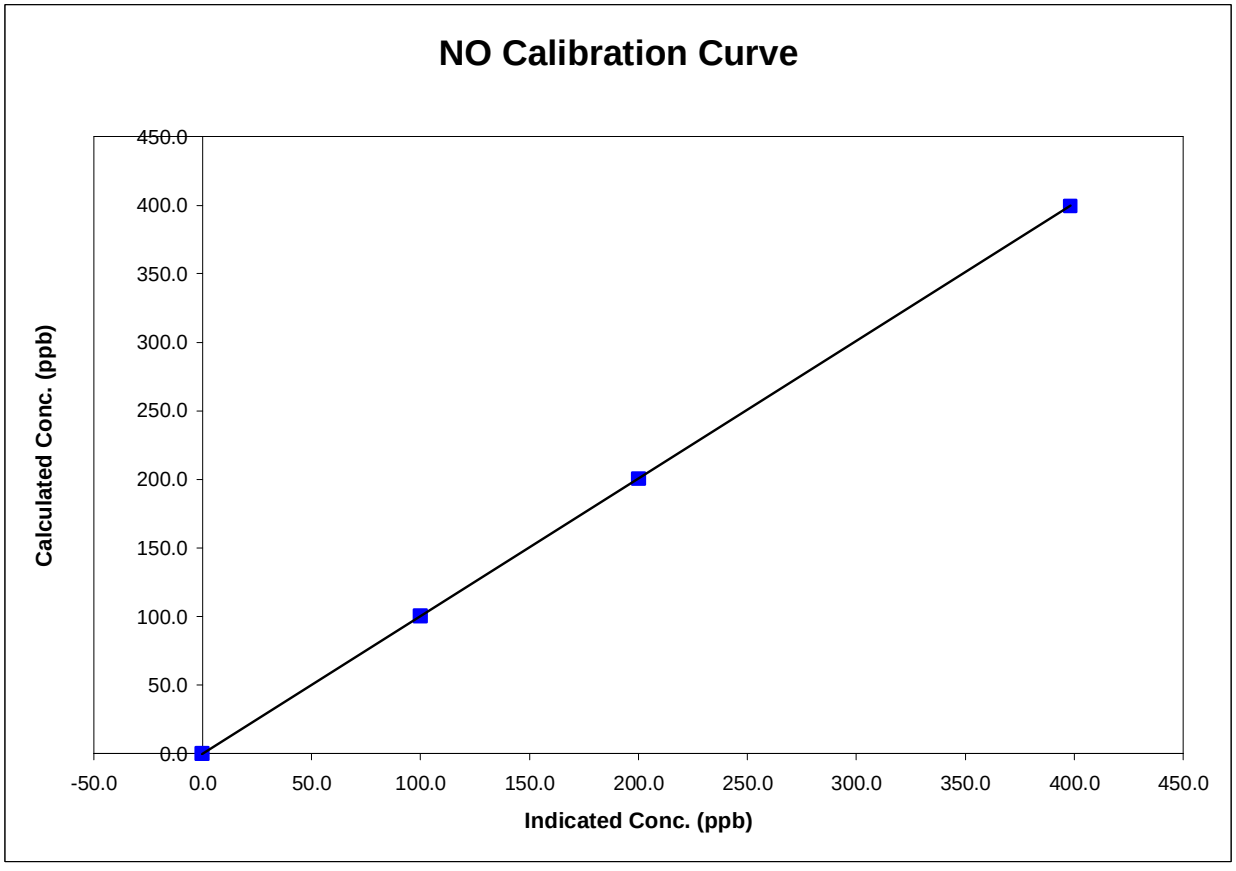
Air Monitoring Network **PASZA**

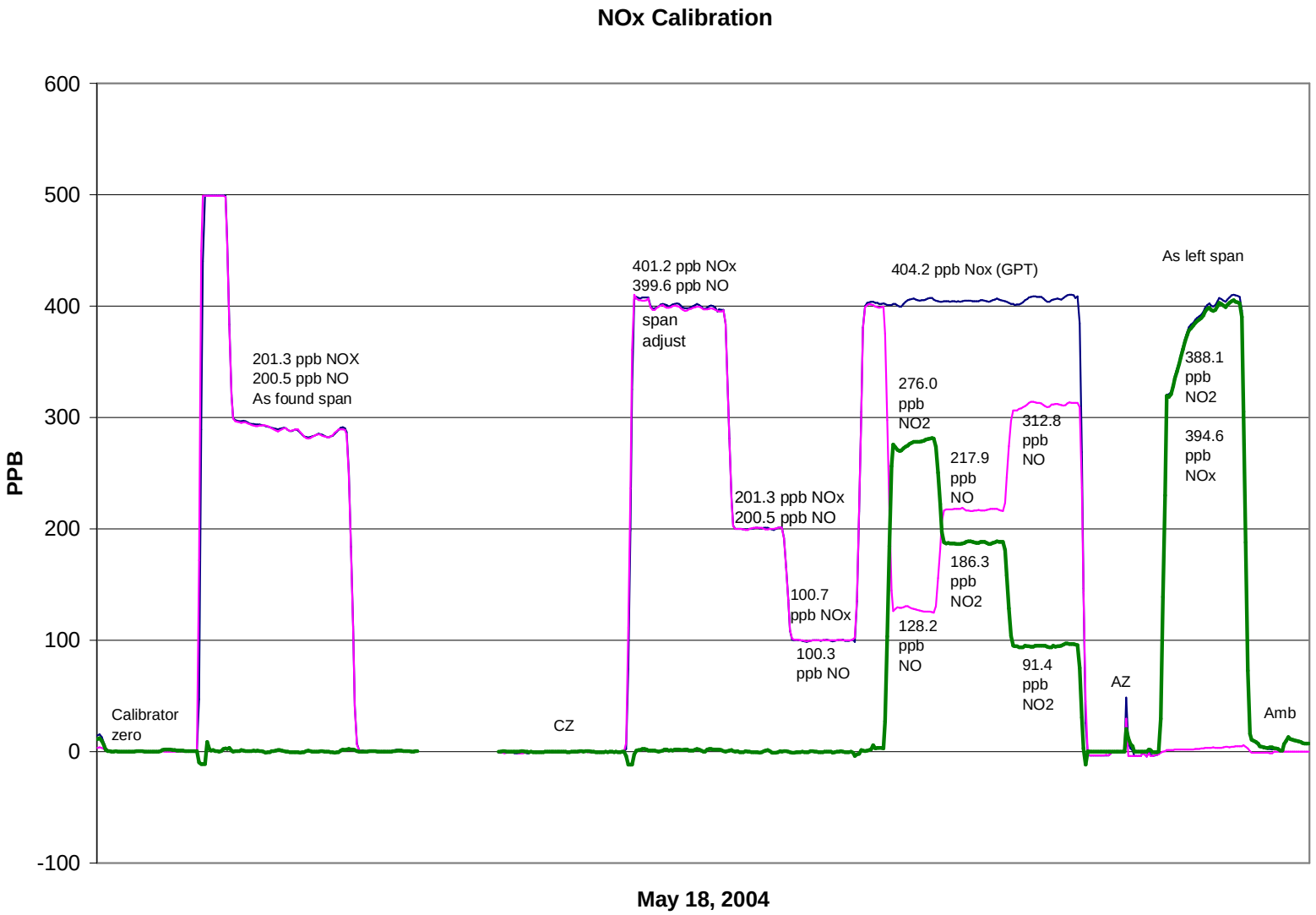
Station Information

Calibration Date	May 18, 2004	Previous Calibration	May 12, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	15:30	End Time (MST)	0:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
399.6	398.2	1.0034	Correlation Coefficient	0.999999
200.5	200.1	1.0019		
100.3	99.9	1.0044	Slope	1.002693
			Intercept	0.146719




NOx Calibration
600
500
400
300
200
100
0
-100
PPB
Calibrator zero
201.3 ppb NOX
200.5 ppb NO
As found span
CZ
401.2 ppb NOx
399.6 ppb NO
span adjust
201.3 ppb NOx
200.5 ppb NO
100.7 ppb NOx
100.3 ppb NO
404.2 ppb Nox (GPT)
276.0 ppb NO2
128.2 ppb NO
217.9 ppb NO
186.3 ppb NO2
312.8 ppb NO
91.4 ppb NO2
AZ
As left span
388.1 ppb NO2
394.6 ppb NOx
Amb
May 18, 2004

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 10, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☒	Install ☐	Removal ☐	Other: ☐
Start Time (MST)	17:39	End Time (MST)	21:00
Barometric Pressure	0.929 ATM	Station Temperature	16.5 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	NA
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	0.992411	Calculated slope	0.996382
Calculated intercept	-0.046181	Calculated intercept	0.240106
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		1.137	
Lamp measure	3394	mV	3365	mV
Lamp Reference	3395	mV	3366	mV
Pressure	27.4	inches Hg	27..4	inches Hg
Sample Flow	675	ccm	675	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	0.0	N/A
4995	0.00	400.0	401.4	0.9965
4995	0.00	200.0	200.1	0.9995
4995	0.00	100.0	100.1	0.9995
4995	0.00	0.0	0.0	As found zero
4995	0.00	400.0	401.8	As found span
			Average Correction Factor	0.9985

Calculated value of As Found Response: 398.7 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	1.0	ppb	0.9	ppb
Auto span	305.0	ppb	300.7	ppb

Notes: As found captured before DACS was replaced. No adjustments or maintenance preformed.

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **O3**

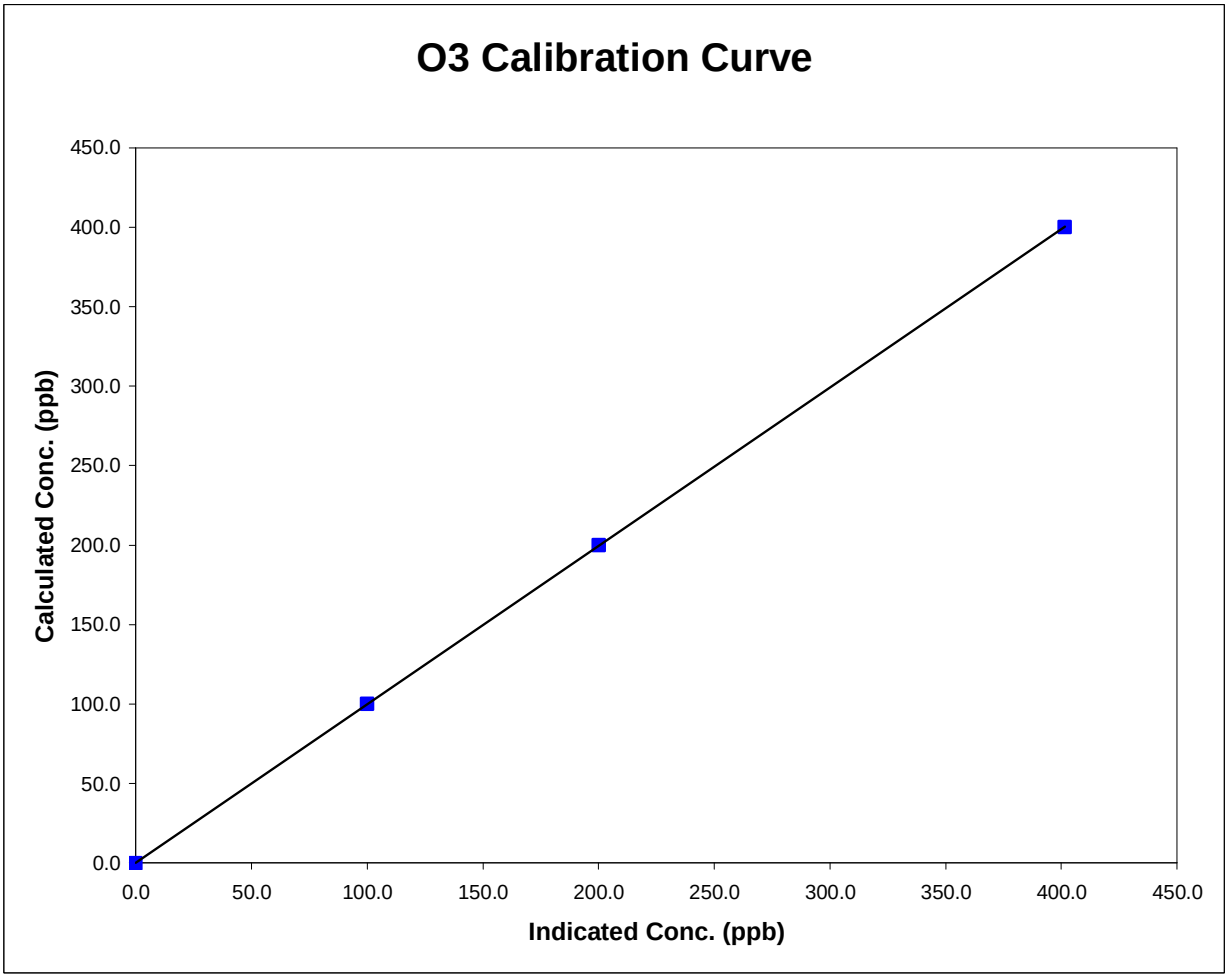
Air Monitoring Network **PASZA**

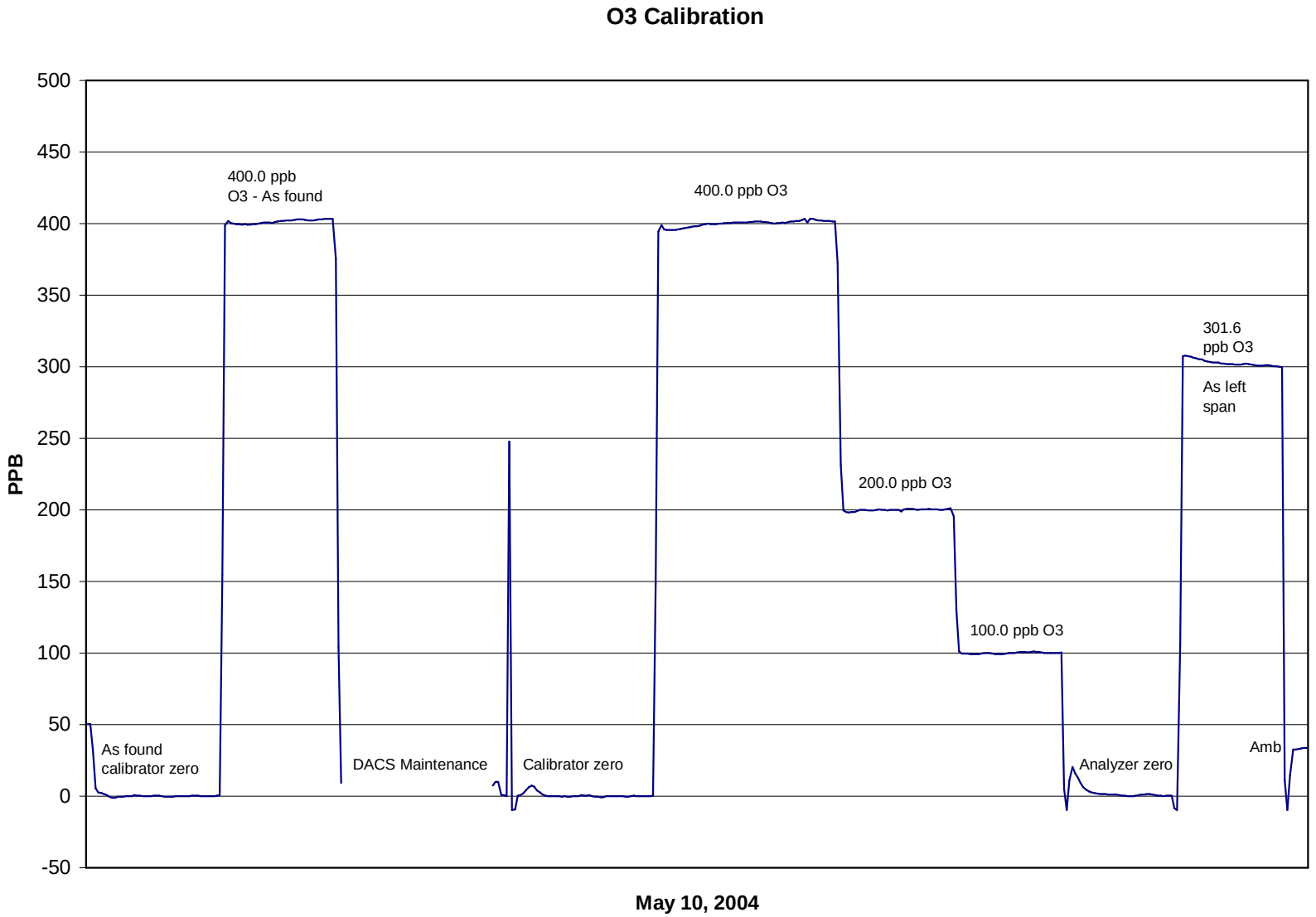
Station Information

Calibration Date	May 10, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	17:39	End Time (MST)	21:00
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	0.0	NA		
400.0	401.4	0.9965	Correlation Coefficient	0.999997
200.0	200.1	0.9995		
100.0	100.1	0.9995	Slope	0.996382
			Intercept	0.240106




O3 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
400.0 ppb
O3 - As found
400.0 ppb O3
301.6
ppb O3
As left
span
200.0 ppb O3
100.0 ppb O3
As found
calibrator zero
DACS Maintenance
Calibrator zero
Analyzer zero
Amb
May 10, 2004

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter: CO

Air Monitoring Network: PASZA

Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason: Routine	Install	Removal	Other:
Start Time (MST)	17:00 - 18:00 (May 10) As found	End Time (MST)	11:05 - 15:15 (May 11) Calibration
Barometric Pressure	0.930 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	1.004163	Calculated slope	1.006509
Calculated intercept	-0.107132	Calculated intercept	-0.227870
Analyzer make	TEI Model 48	Analyzer serial #	ACM-13989-143

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	623		613	
CO zero setting	595		595	
Sample pressure	702	mm Hg	712	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	0.23	N/A
4993	39.97	23.82	23.90	0.9967
4993	19.96	11.95	12.08	0.9891
4993	9.97	5.98	6.17	0.9687
4993	0.00	0.00	0.25	As Found Zero
		29.67	30.25	As Found Span
			Average Correction Factor	0.9848

Calculated value of As Found Response: 30.016 ppm   Percent Change of As Found: -1.2%

	before calibration		after calibration	
Auto zero	0.11	ppm	0.07	ppm
Auto span	29.67	ppm	29.76	ppm

Notes: As found captured with AIC performed May 10th prior to DACS replacement.
Calibrator as found done May 11th; analyzer was calibrated. A span adjustment was performed.
A second AIC was initiated after calibration as span cylinder was replaced.

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **CO**

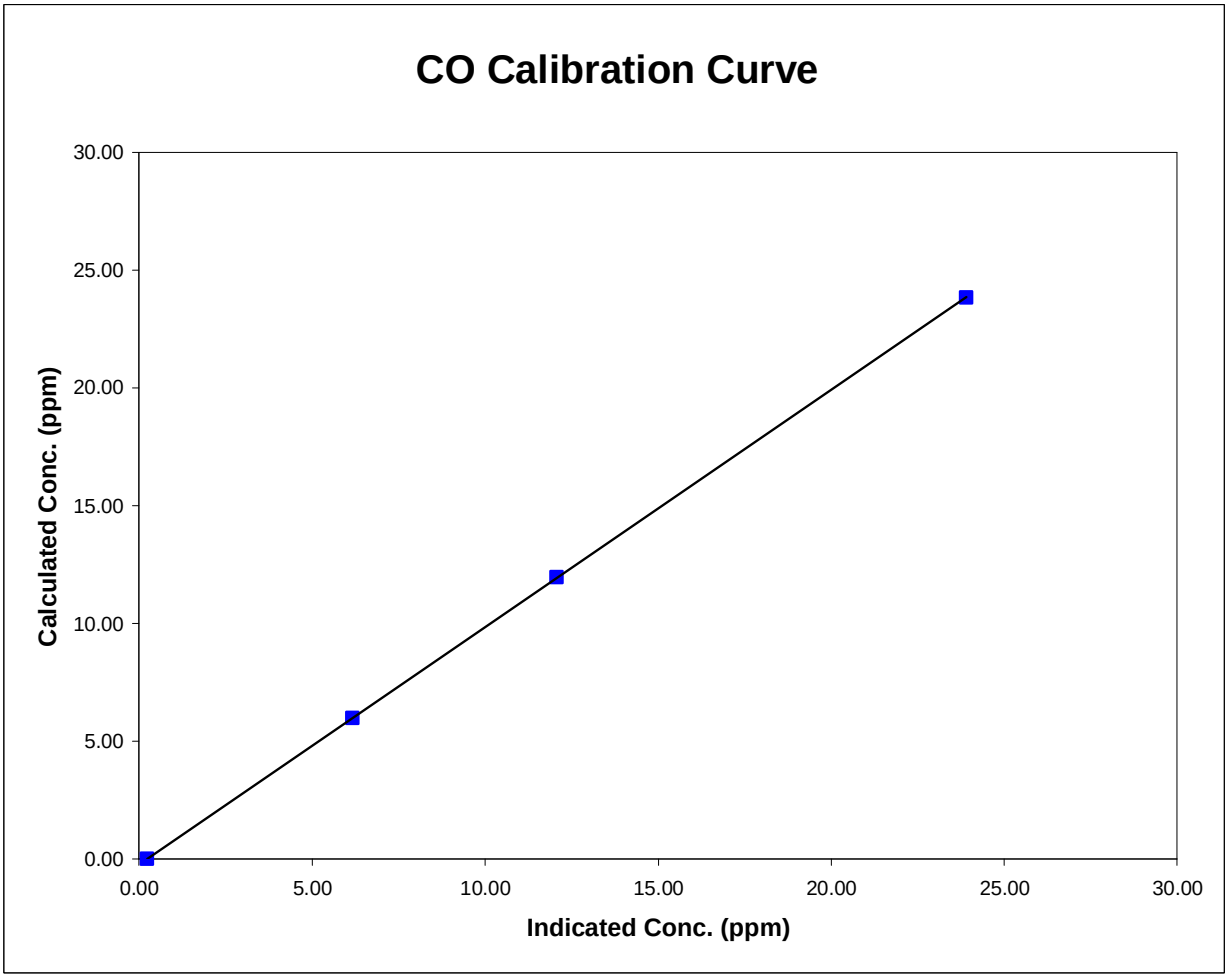
Air Monitoring Network **PASZA**

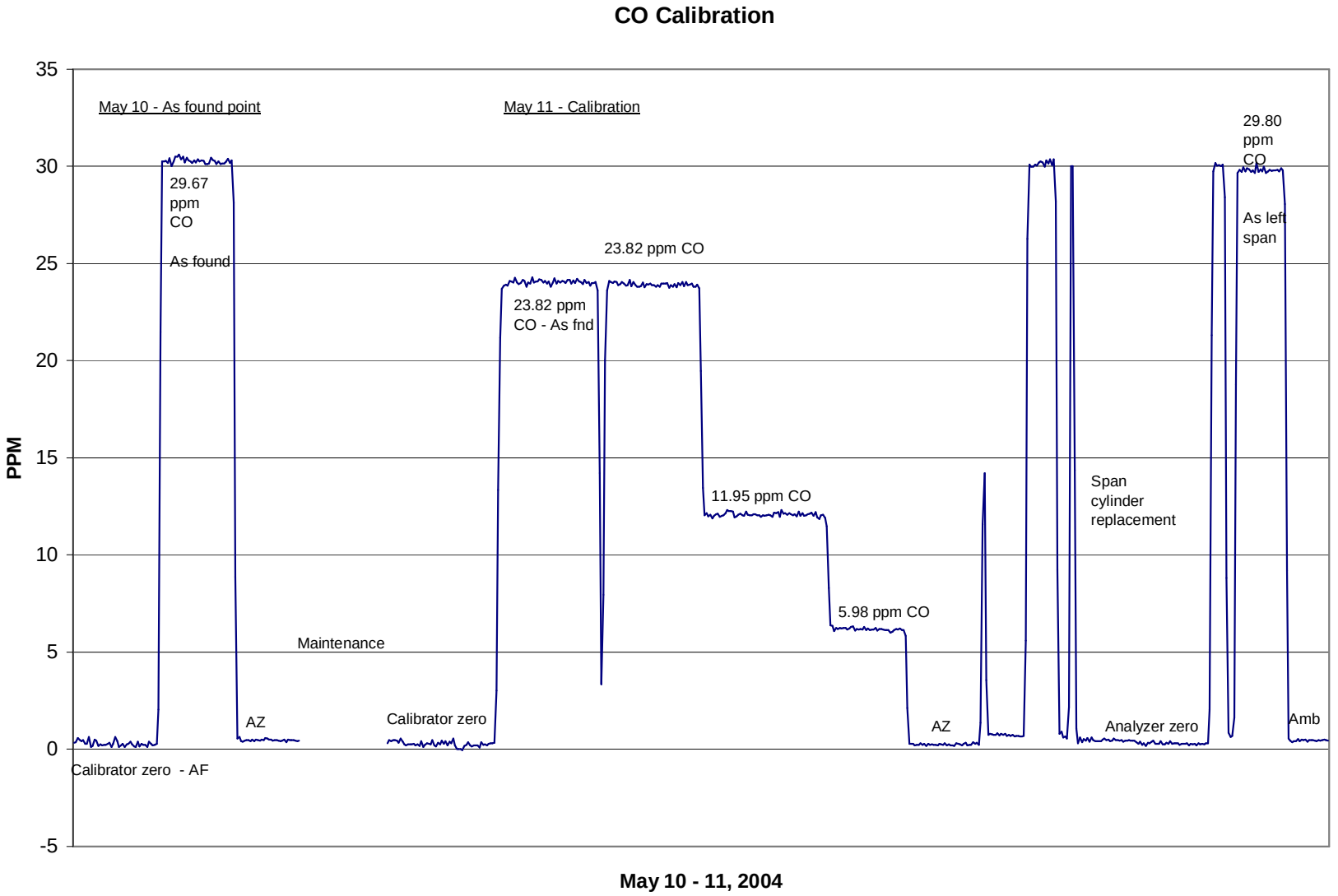
Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	17:00 - 18:00 (May 10)	End Time (MST)	11:05 - 15:15 (May 11)
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	0.231	N/A		
23.825	23.905	0.9967	Correlation Coefficient	0.999999
11.945	12.077	0.9891		
5.978	6.172	0.9687	Slope	1.006509
			Intercept	-0.227870




CO Calibration
PPM
35
30
25
20
15
10
5
0
-5
May 10 - As found point
May 11 - Calibration
29.67 ppm CO
As found
23.82 ppm CO - As fnd
23.82 ppm CO
11.95 ppm CO
5.98 ppm CO
29.80 ppm CO
As left span
Span cylinder replacement
Maintenance
Calibrator zero
AZ
AZ
Analyzer zero
Amb
Calibrator zero - AF
May 10 - 11, 2004

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **THC**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 22, 2004
Station Number	1	Station Location	Muskoseepi Park

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

Start Time (MST)	17:00 - 18:00 (May 10) As found	End Time (MST)	15:15 - 17:50 (May 11) Calibration
Barometric Pressure	27.90 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	0.993235	Calculated slope	0.997697
Calculated intercept	0.037910	Calculated intercept	0.034542

Analyzer make	TEI Model 51C-LT		Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC slope	NA		NA	
THC bkg	NA		NA	

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	64.84	19.51	19.57	0.9972
4993	35.00	10.60	10.51	1.0087
4993	9.97	3.03	3.00	1.0118
4993	0.00	0.00	-0.06	As Found Zero
		22.56	22.58	As Found Span
			Average Correction Factor	1.0059

Calculated value of As Found Response: 22.525 ppm Percent Change of As Found: 0.2%

	before calibration		after calibration	
Auto zero	0.15	ppm	0.04	ppm
Auto span	22.56	ppm	22.49	ppm

Notes: As found AIC intiated May 10 prior to DACS replacement. Final calibration completed May 11th.
Analyzer was span adjusted; no other maintenance performed.

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **THC**

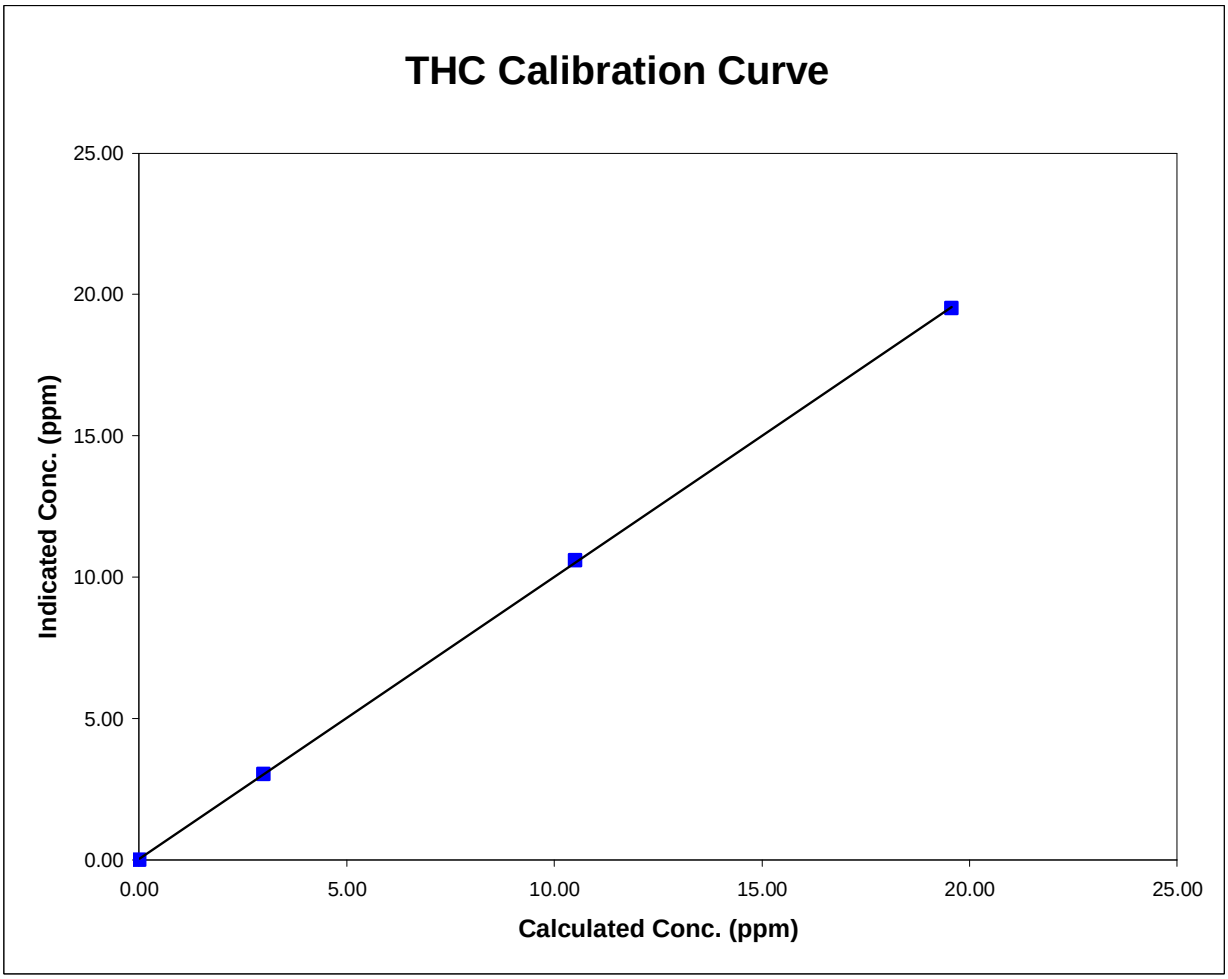
Air Monitoring Network **PASZA**

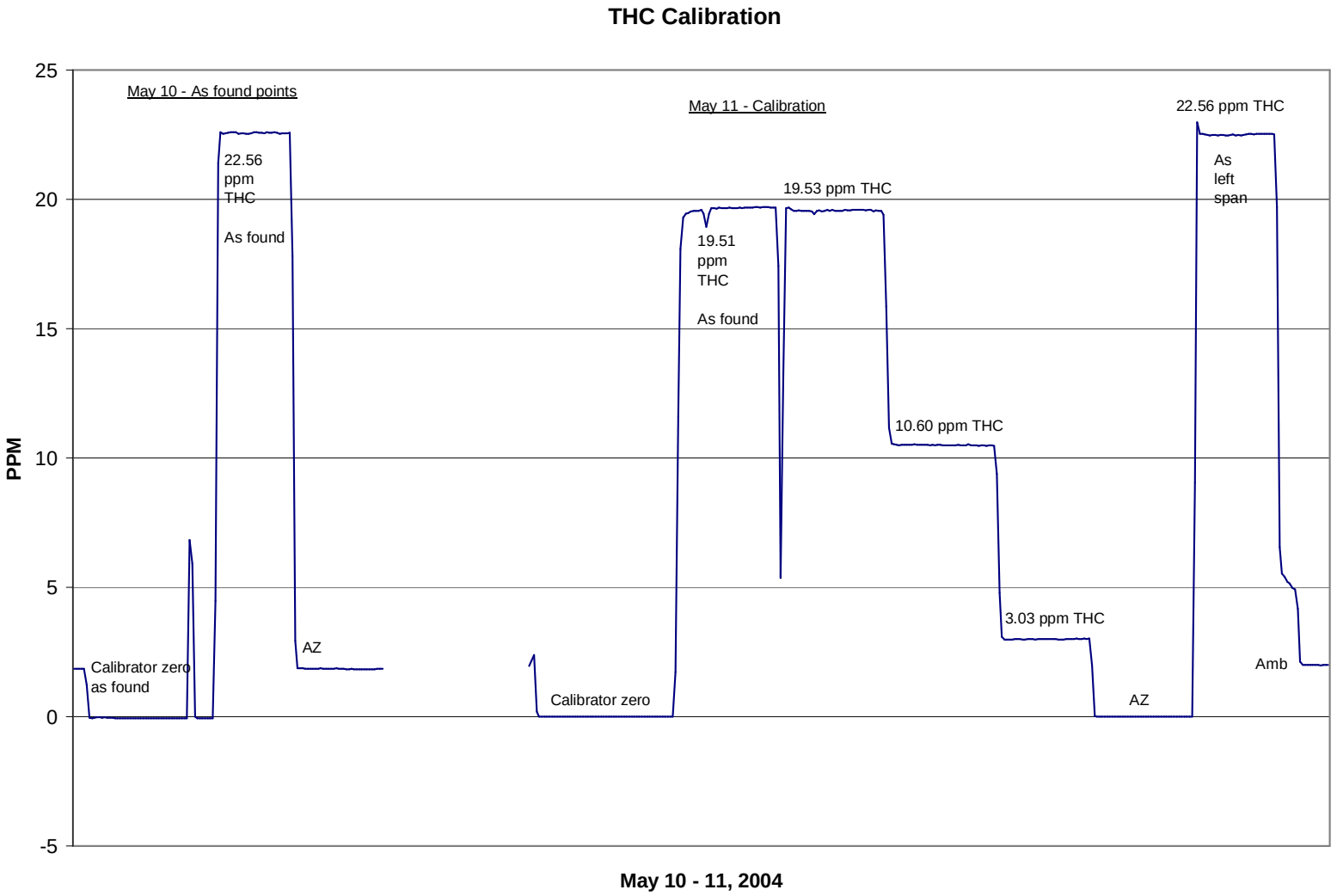
Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 22, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	17:00 - 18:00 (May 10)	End Time (MST)	15:15 - 17:50 (May 11)
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	0.010	N/A		
19.515	19.570	0.9972	Correlation Coefficient	0.999954
10.596	10.505	1.0087		
3.034	2.998	1.0118	Slope	0.997697
			Intercept	0.034542




THC Calibration
25
20
15
10
5
0
-5
PPM
May 10 - As found points
22.56 ppm THC
As found
AZ
Calibrator zero as found
May 11 - Calibration
19.51 ppm THC
As found
19.53 ppm THC
10.60 ppm THC
3.03 ppm THC
Calibrator zero
AZ
22.56 ppm THC
As left span
Amb
May 10 - 11, 2004

Calibration Report

FOCUS INTEC
Air Quality Monitoring

Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☐ Install ☐	Removal ☐	Other: ☐

Start Time (MST)	17:00 - 18:00 (May 10) As found	End Time (MST)	14:15 - 17:15 (May 11) Calibration
Barometric Pressure	27.9 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	0.945174	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	0.992667	Calculated slope	1.009913
Calculated intercept	-0.485757	Calculated intercept	0.420778

Analyzer make	TEI Model 43C	Analyzer serial #	31990000000491

	before		after	
Concentration range	0 - 500	ppb	0-100	ppb
TRS bkg	18.8		18.8	
TRS slope	1.390		1.434	
UV Lamp	816	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	2803.0	0.0	-0.4	N/A
2138	2020.8	80.1	78.9	1.0142
4284	4049.1	40.0	39.0	1.0253
14200	13421.5	12.1	11.6	1.0428
zero	1784.5	0.0	0.7	As Found Zero
1888	1784.5	88.8	83.0	As Found Span
			Average Correction Factor	1.0274

Calculated value of As Found Response: 81.254 ppm Percent Change of As Found: 8.5%

	before calibration		after calibration	
Auto zero	1.2	ppm	0.2	ppm
Auto span	88.8	ppm	87.7	ppm

Notes: Analyzer AIC initiated for as found capture before DACS was removed on May 10th.
Analyzer calibration completed May 11th and was span adjusted; no other maintenance performed.

Calibration Performed By: Kelly Baragar

Calibration Summary

FOCUS INTEC
Air Quality Monitoring

Parameter **TRS**

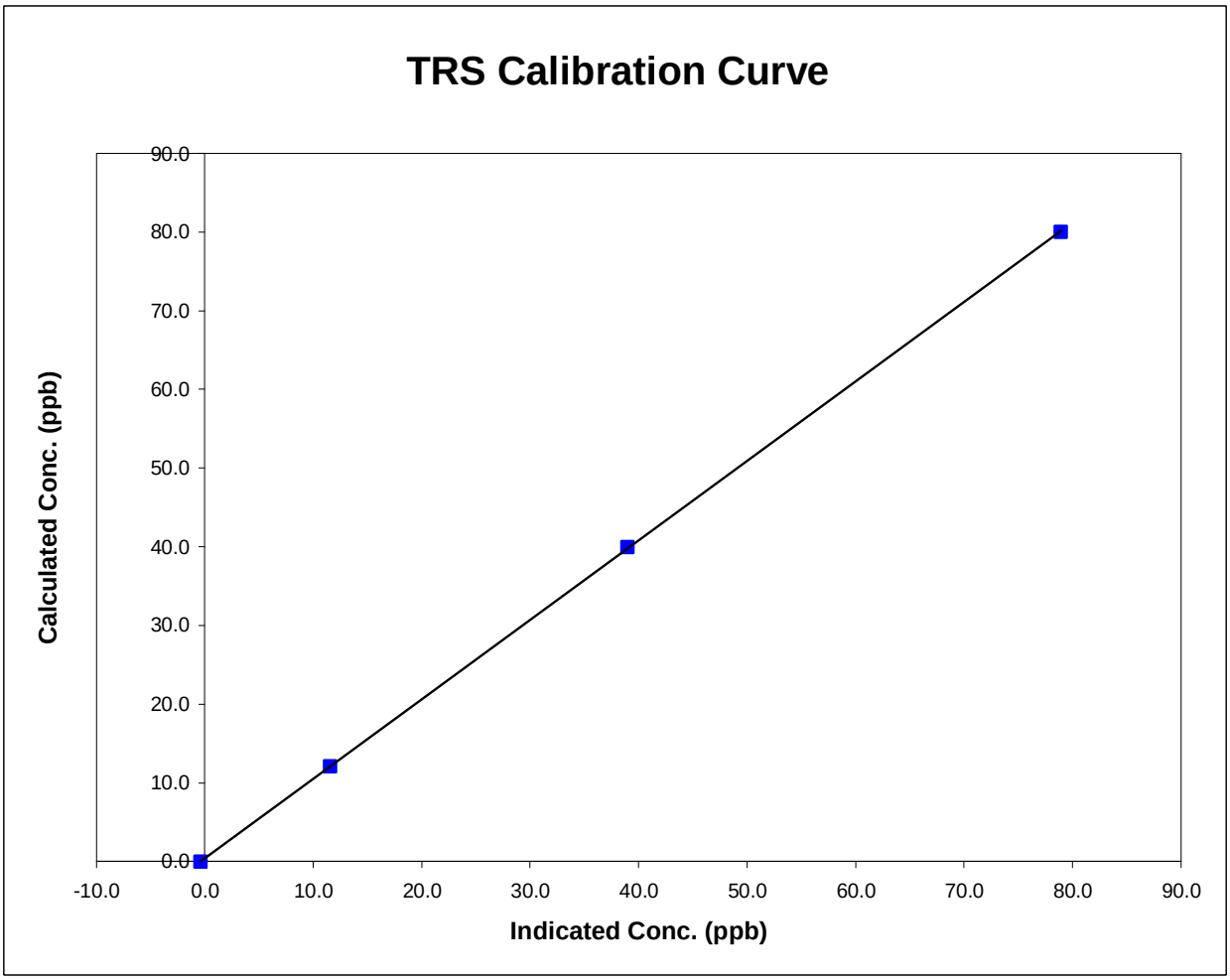
Air Monitoring Network **PASZA**

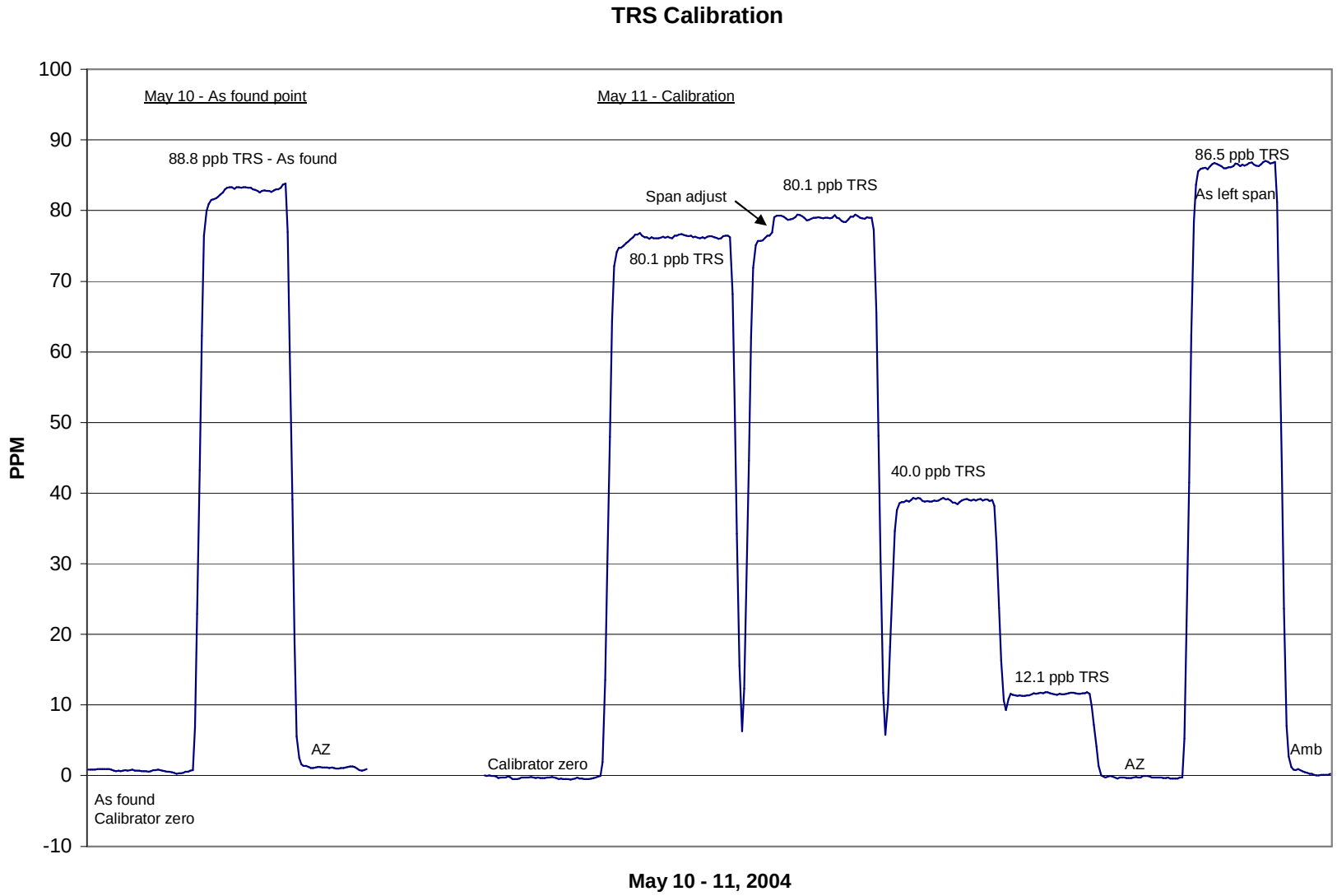
Station Information

Calibration Date	May 11, 2004	Previous Calibration	April 21, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	17:00 - 18:00 (May 10)	End Time (MST)	14:15 - 17:15 (May 11)
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	-0.4	N/A		
80.1	78.9	1.0142	Correlation Coefficient	0.999989
40.0	39.0	1.0253		
12.1	11.6	1.0428	Slope	1.009913
			Intercept	0.420778




TRS Calibration
May 10 - As found point
May 11 - Calibration
88.8 ppb TRS - As found
Span adjust
80.1 ppb TRS
80.1 ppb TRS
86.5 ppb TRS
As left span
40.0 ppb TRS
12.1 ppb TRS
AZ
Calibrator zero
AZ
Amb
As found
Calibrator zero
PPM
100
90
80
70
60
50
40
30
20
10
0
-10
May 10 - 11, 2004

Calibration Report

Parameter **PM2.5**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	May 10, 2004	Previous Calibration	April 22, 2004
Station Number	1	Station Location	Henry Pirker

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

Start Time (MST)	19:30	End Time (MST)	20:00
Barometric Pressure	0.929 ATM	Station Temperature	6.5 Deg C
Flow Calibrator	BIOS DCLite	Serial Number	7061
DACS make	Focus AP1000	DACS serial No.	N/A
DACS voltage range	0 - 10 Volts	DACS channel #	10
	Before		After
DACS slope	0.500000	DACS slope	0.500000
DACS intercept	0.000000	DACS intercept	0.000000

Analyzer Information

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

	before		after	
Main Flow Set Point	3.0	SLPM	3.0	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	34	%	35	%
Ko Factor	nc		nc	
Temperature	6.5	Deg C	6.7	Deg C
Pressure		ATM		ATM

Calibration Data

Parameter	Set Point	Indicated Reading	Tolerance	New Reading
zero flow - main	0.0	0.05		0.05
zero flow - auxillary	0.0	0.05		0.05
flow recovery - main	45 - 60 Seconds	nc	45 - 60 Seconds	nc
flow recovery - aux	46 - 60 Seconds	nc	46 - 60 Seconds	nc
Temperature	measured	nc	+/- 1.0 Deg C	nc
Pressure	measured	nc	+/- 1.5% Δ_{ATM}	nc
Total Flow	16.67 SLPM	17.45		16.75
Main Flow	13.67 SLPM	14.20	+/- 1.0 SLPM	13.70
Auxillary Flow	3.0 SLPM	3.25	+/- 0.2 SLPM	3.05
Leak Check - main	0.00	0.04	<0.15 SLPM	0.04
Leak Check - aux	0.00	0.03	<0.15 SLPM	0.03
Ko Factor	measured	nc		nc

Notes: flows were adjusted after as found point.

Calibration Performed By: Kelly Baragar