



PEACE AIRSHED ZONE ASSOCIATION

Air Quality Monitoring Network

January 2005

Prepared by



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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 – January PASZA Ambient Air Report

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

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.

Passive Monitoring – 43 Stations throughout the PASZA zone:

There were two missing and one damaged passives during the month of January. A summary of the passives are reported as follows.

- Monthly average concentrations for SO₂ passives ranged from 0.2 ppb to 1.1 ppb.
- Monthly average concentrations for NO₂ passives ranged from 1.1 ppb to 14.6 ppb.
- Monthly average concentrations for O₃ passives ranged from 18.4 ppb to 39.7 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, Ph.D., P.Eng.
AQM Environmental Engineer

PASZA Monthly Continuous Data Summary

January 2004 Monthly Overall Summary Report Ambient Air Quality Data

Jan-2005 Peace Airshed Zone Association						Maximum Recorded Values						Operational Time (%)	
Pollutant (units)	Guidelines		Station	Monthly Average	Exceedence		Conc	1-hr		24-hr			
	1-hr	24-hr			1-hr	24-hr		Day	WSPD (km/hr)	WDIR (Sector)	Conc		Day
SO ₂ (ppb)	172	57	Henry Pirker	0.8	0	0	3.3	Jan-23	4.5	SW	1.9	Jan-17	99.9%
NO (ppb)			Henry Pirker	25.5	0	0	237.1	Jan-23	4.5	SW	82.1	Jan-23	99.6%
NO ₂ (ppb)	212	106	Henry Pirker	22.1	0	0	60.7	Jan-23	4.5	SW	40.0	Jan-15	99.9%
NO _x (ppb)			Henry Pirker	47.3	0	0	297.0	Jan-23	4.5	SW	112.3	Jan-23	99.9%
O ₃ (ppb)	82		Henry Pirker	12.3	0	0	42.1	Jan-31	35.6	W	29.9	Jan-31	99.7%
CO (ppm)	13		Henry Pirker	0.39	0	0	2.77	Jan-23	2.5	NE	1.04	Jan-23	99.9%
THC (ppm)			Henry Pirker	2.55	0	0	4.15	Jan-05	2.7	NNE	3.44	Jan-15	99.9%
TRS (ppb)			Henry Pirker	0.6	0	0	3.2	Jan-13	4.8	WNW	1.2	Jan-03	99.9%
PM _{2.5} (µg/m ³)		30 ^a	Henry Pirker	7.4	0	0	52.0	Jan-15	3.8	S	25.6	Jan-15	99.3%
RH (%)			Henry Pirker	73.4									99.9%
SR (W/m ²)			Henry Pirker	30.8									99.9%
Temp (°C)			Henry Pirker	-16.1									99.9%
WSPD v (km/hr)			Henry Pirker	2.8									99.9%
WSPD s (km/hr)			Henry Pirker	5.8									99.9%
WDIR (Deg)			Henry Pirker	NW*									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

One hour of data was lost during a DACS firmware upgrade on January 22, 2005.

Parameter	Make	Model	Notes
SO ₂	TECO	43	No operational problems observed
NO _x /NO/NO ₂	TECO	42	No operational problems observed
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	No operational problems observed
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: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Good Readings:	693
Number of 1-hr Fair Readings:	16
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
	28.2	18.7	12.4	9.7	7.6	5.6	4.7

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-Jan-05	7	8	10	11	10	10	7	5	A	6	7	9	9	10	10	8	7	7	7	9	9	6	5	
2-Jan-05	4	5	5	5	5	6	6	A	6	7	8	6	7	9	8	6	6	8	8	9	10	8	8	7
3-Jan-05	6	6	6	6	7	7	A	7	8	7	7	7	8	8	11	9	7	8	8	8	6	6	6	6
4-Jan-05	6	6	7	10	10	A	13	19	19	11	13	14	10	14	12	8	10	21	22	15	12	11	16	20
5-Jan-05	18	15	15	11	A	11	11	13	15	26	22	17	17	7	5	7	8	9	11	13	10	17	18	17
6-Jan-05	14	16	17	A	15	17	14	13	12	14	15	16	15	14	14	11	11	7	9	7	8	7	8	13
7-Jan-05	15	15	A	13	12	11	9	9	7	6	8	9	10	12	9	7	9	10	10	8	8	8	8	7
8-Jan-05	6	A	6	6	5	7	6	5	7	6	9	13	14	14	15	15	13	11	12	13	12	10	9	8
9-Jan-05	A	9	9	8	8	7	8	8	8	7	14	9	9	13	11	7	8	8	6	7	6	6	8	A
10-Jan-05	6	12	17	17	17	16	18	16	9	9	8	8	9	8	9	9	13	12	10	10	9	8	A	6
11-Jan-05	10	8	10	6	10	12	11	12	12	13	14	13	13	13	13	13	14	14	14	15	17	A	17	17
12-Jan-05	18	16	14	15	12	8	7	12	11	16	16	10	8	11	7	8	9	10	10	9	A	8	7	7
13-Jan-05	8	6	9	9	6	8	7	9	11	11	9	8	10	14	11	9	8	12	16	A	16	12	8	9
14-Jan-05	8	8	9	8	7	7	9	15	7	7	12	23	12	8	9	7	9	10	A	12	10	9	10	8
15-Jan-05	8	7	6	6	7	11	10	14	23	19	28	36	29	29	35	31	27	A	26	27	26	23	18	20
16-Jan-05	14	15	12	12	11	12	18	7	7	12	11	13	9	8	9	8	A	8	11	9	8	9	10	9
17-Jan-05	8	8	7	8	9	9	8	10	8	8	10	16	13	34	6	A	5	9	10	26	18	11	17	12
18-Jan-05	12	13	14	13	16	13	14	13	13	13	14	14	14	A	10	11	10	11	11	12	12	12	12	12
19-Jan-05	12	12	11	12	10	11	11	10	5	5	10	11	11	A	10	9	9	8	9	9	10	10	9	7
20-Jan-05	10	10	9	9	10	11	10	8	9	7	8	9	A	10	10	8	7	7	10	10	10	9	11	11
21-Jan-05	11	10	8	11	11	11	10	7	5	7	9	A	10	10	9	6	5	7	6	6	6	6	10	13
22-Jan-05	9	8	6	7	8	5	5	6	5	6	A	8	12	7	8	10	N	12	13	8	7	10	11	8
23-Jan-05	10	10	10	A	8	7	11	10	11	9	11	14	19	26	28	27	23	7	8	9	6	7	5	5
24-Jan-05	6	10	11	11	A	12	15	8	8	8	6	12	14	N	1	1	16	15	16	13	14	12	13	
25-Jan-05	7	7	6	6	5	A	7	7	6	5	8	7	5	6	7	5	7	8	8	8	7	6	6	6
26-Jan-05	6	6	5	5	A	6	7	8	9	8	8	A	10	6	9	7	7	8	8	7	6	6	6	7
27-Jan-05	8	12	10	10	8	A	9	13	16	17	7	7	8	9	8	9	10	8	8	10	11	11	11	11
28-Jan-05	13	12	12	13	A	13	12	11	11	12	12	12	12	13	13	12	11	10	10	11	10	9	9	10
29-Jan-05	8	7	8	A	10	6	12	11	8	8	9	8	8	7	10	6	11	16	9	15	17	18	15	12
30-Jan-05	15	16	A	13	13	15	13	13	15	14	12	12	12	13	10	9	8	9	9	10	8	10	12	13
31-Jan-05	10	A	10	12	12	12	9	10	14	17	19	19	21	21	21	19	20	17	16	8	13	9	19	20

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	3.3 ppb 23-Jan 14:00 15:00
Maximum 24-hr Average:	1.9 ppb 17-Jan

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

AIC Time:	32 hrs	Operational Time:	707 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.9%
Percentile	99	95	75
	2.5	1.9	1.0
	0.7	0.4	0.2
	0.1	Average	
	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

Day	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	1	1	1	1	0	0	0	0	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2	
2-Jan-05	0	0	0	0	0	1	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1	
3-Jan-05	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
4-Jan-05	1	1	0	0	0	A	0	1	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1.0	1.6	
5-Jan-05	1	1	1	1	A	1	1	1	1	2	2	1	2	1	1	1	1	1	2	2	2	1	1	1	1.2	2.2	
6-Jan-05	1	1	2	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.6	1.7	
7-Jan-05	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	1.3	
8-Jan-05	0	A	0	0	0	1	1	1	1	1	0	1	1	1	0	0	1	1	0	1	1	1	0	0	0.6	1.2	
9-Jan-05	A	0	1	0	0	0	0	1	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1	A	0.5	0.9	
10-Jan-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	0	0.9	2.0	
11-Jan-05	1	1	1	1	1	2	1	1	1	0	1	1	0	0	0	1	1	2	2	2	2	A	1	1	1.0	2.4	
12-Jan-05	0	0	0	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	0	0	0.6	1.3	
13-Jan-05	0	0	1	0	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	A	1	1	1	1	0.5	1.1	
14-Jan-05	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	1.2	
15-Jan-05	1	0	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	0	1	0.8	1.5	
16-Jan-05	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	0.8	1.7	
17-Jan-05	1	2	2	2	2	2	2	2	2	2	3	3	3	2	2	A	2	2	2	1	2	1	1	1	1.9	3.2	
18-Jan-05	1	1	1	2	1	2	1	2	2	1	2	2	3	2	A	1	1	1	1	1	2	1	1	1	1.4	2.7	
19-Jan-05	1	1	1	1	1	1	0	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	2	1	1.0	2.0	
20-Jan-05	1	1	1	1	1	1	1	1	1	1	2	1	A	2	1	1	1	1	1	1	1	2	2	2	1.1	2.4	
21-Jan-05	2	2	2	1	0	0	0	1	0	0	A	1	1	1	1	1	1	1	1	1	1	2	2	1	0.9	1.9	
22-Jan-05	2	1	1	1	1	1	1	1	1	1	A	1	2	2	1	1	N	1	1	0	0	0	1	0	0.9	1.9	
23-Jan-05	0	0	0	A	1	1	2	2	2	1	1	2	2	3	3	3	2	1	1	1	1	1	1	1	1.5	3.3	
24-Jan-05	1	1	1	1	A	1	2	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.7	1.7	
25-Jan-05	0	0	0	0	0	A	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0.6	1.3	
26-Jan-05	0	0	0	0	A	0	1	1	C	C	C	C	1	0	0	1	1	1	1	1	1	0	0	1	0.5	1.1	
27-Jan-05	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0	0	0	1	0	0	0	0	0	0.6	1.0	
28-Jan-05	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
29-Jan-05	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0.5	1.2	
30-Jan-05	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0.5	0.9	
31-Jan-05	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.4	1.0	
Hourly Avg	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.6		
Hourly Max	1.7	1.7	1.9	2.0	2.2	2.0	2.2	2.5	2.3	2.4	2.7	3.2	2.8	3.0	3.3	2.5	2.1	2.0	2.4	2.1	2.4	2.4	2.0	1.9			

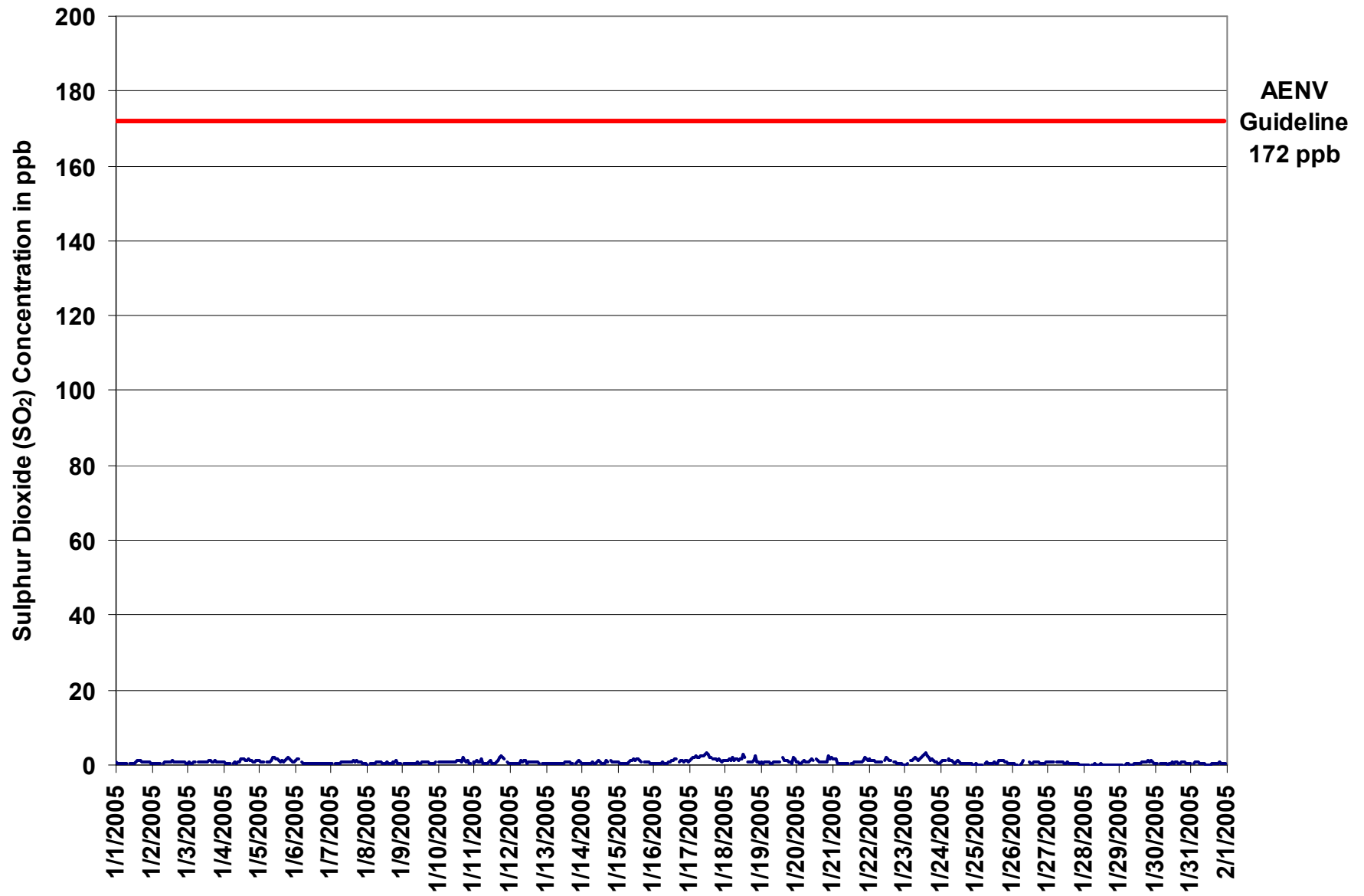


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Maximum 1-hr Value:	4.7	ppb	23-Jan	14:00 15:00
Maximum 24-hr Value:	2.7	ppb	17-Jan	

AIC Time:	32 hrs	Operational Time:	707 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	3.6	2.8	1.7	1.3	1.0	0.7	0.6	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-Jan-05	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	2	2	1	2	1	1	1	1	1.2	1.8
2-Jan-05	1	1	1	1	1	1	1	1	A	1	1	1	2	1	2	2	1	1	2	2	2	1	2	1	1.3	1.8
3-Jan-05	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	2	2	1	2	2	2	2	1	1	1.5	2.2
4-Jan-05	1	1	1	1	1	A	1	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1.7	2.2
5-Jan-05	2	1	1	1	1	A	1	1	2	2	3	3	2	2	2	2	1	2	2	3	3	2	2	2	2.0	3.3
6-Jan-05	3	2	3	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.6
7-Jan-05	1	1	A	1	1	1	1	1	2	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1.3	2.1
8-Jan-05	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	3	2	1	1	1.2	2.5
9-Jan-05	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1.2	1.6
10-Jan-05	2	2	1	2	2	1	1	1	2	2	2	2	2	2	2	2	4	2	2	2	1	1	A	1	1.7	3.8
11-Jan-05	1	1	2	1	2	3	1	1	1	1	2	2	1	1	1	1	2	3	3	3	2	A	1	1	1.7	3.2
12-Jan-05	1	1	1	1	1	1	1	1	2	2	4	2	1	2	1	2	1	1	1	1	A	1	1	1	1.3	3.8
13-Jan-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1.1	2.1
14-Jan-05	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	2	2	A	2	2	1	1	1	1.3	2.0
15-Jan-05	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	A	1	1	1	1	1	1	1.5	2.1
16-Jan-05	1	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	A	2	2	2	1	2	2	2	1.4	2.5
17-Jan-05	2	2	2	3	3	3	3	3	3	3	4	4	4	3	3	A	3	2	3	2	3	2	2	2	2.7	4.5
18-Jan-05	2	2	2	2	2	3	2	2	2	2	3	3	4	3	A	1	2	1	1	2	4	2	1	1	2.3	3.6
19-Jan-05	2	2	2	1	2	2	1	1	1	1	1	1	1	A	3	2	2	2	1	1	1	1	3	3	1.7	3.1
20-Jan-05	1	1	1	1	2	2	1	1	1	2	2	2	A	4	2	2	1	1	1	1	2	3	2	3	1.8	3.6
21-Jan-05	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	2	1	2	2	2	3	2	2	1.5	2.6
22-Jan-05	2	2	2	2	2	1	2	1	1	1	A	2	3	3	2	2	N	1	1	1	1	1	1	1	1.6	2.9
23-Jan-05	1	1	1	A	2	2	2	3	3	2	2	3	3	4	5	3	3	2	2	2	2	1	1	1	2.2	4.7
24-Jan-05	2	2	2	2	A	2	2	2	2	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.4	2.2
25-Jan-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1.2	2.4
26-Jan-05	1	1	1	1	1	A	1	1	2	C	C	C	C	2	1	1	2	2	2	1	1	1	1	1	1.2	1.8
27-Jan-05	2	2	2	1	1	A	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.0
28-Jan-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
29-Jan-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2	1	1	1.1	2.0
30-Jan-05	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1.1	1.7
31-Jan-05	1	A	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8
Hourly Avg	1.3	1.3	1.3	1.2	1.3	1.4	1.3	1.4	1.4	1.5	1.5	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.3	1.4	1.3		
Hourly Max	2.6	2.4	2.5	2.7	2.8	3.1	3.0	3.1	3.2	3.8	3.5	4.5	3.6	3.8	4.7	3.3	3.8	2.7	3.2	3.3	3.5	3.0	3.1	2.7		

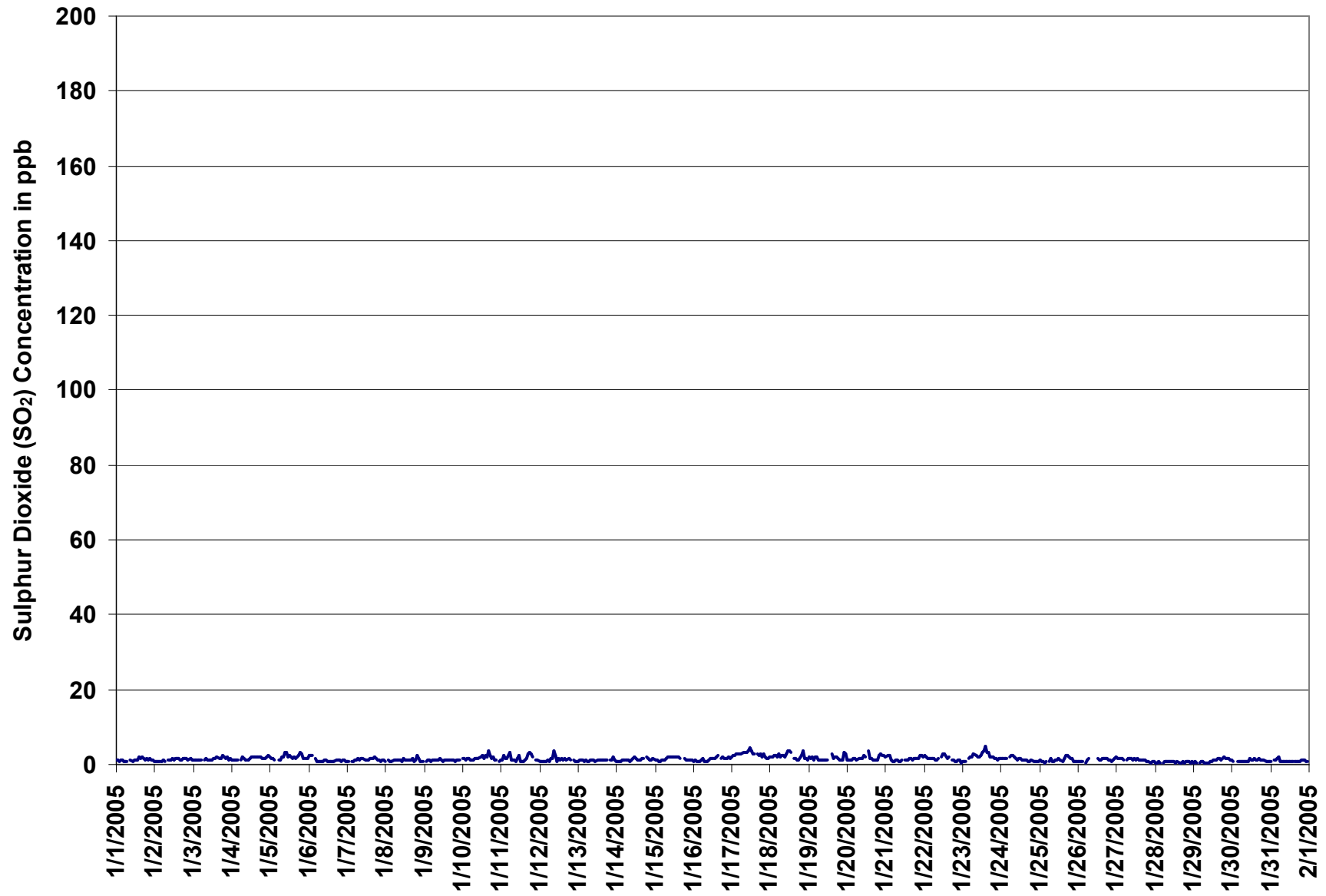
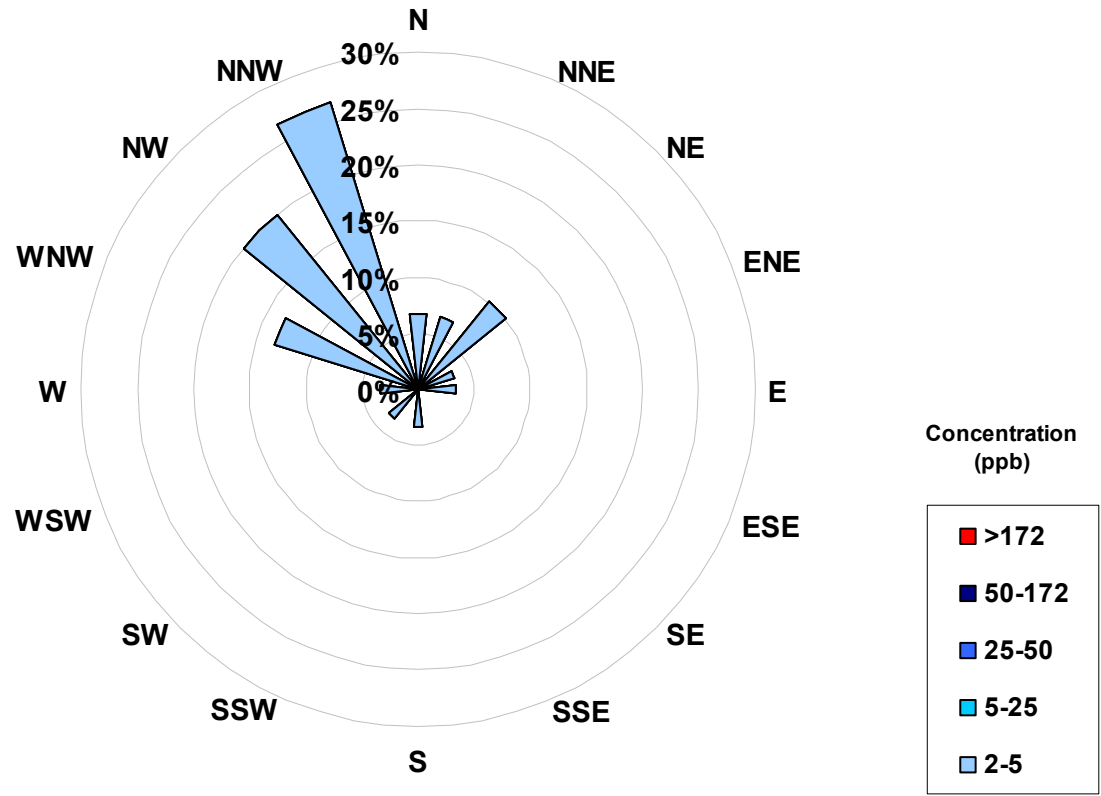


Figure 2. PASZA - Henry Pirker Sulphur Dioxide 1-hr Maximum Value Monthly Trend

Concentration Rose for the 1-hr SO₂ Average Concentration Occurrences at the Henry Pirker Site for January 2004



Frequency Distribution of SO ₂ in ppb			
Range		Frequency (hrs)	
0	< 2	677	
2	to 5	30	
5	to 25	0	
25	to 50	0	
50	to 172	0	
	> 172	0	
Total Non-Zero Values		707	

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

PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	60.7 ppb 23-Jan 14:00 15:00
Maximum 24-hr Average:	40.0 ppb 15-Jan

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

AIC Time:	32 hrs	Operational Time:	706 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%
Percentile	99	95	75
	51	41	31
	22	11	5
	4	1	1
Average	22.1 ppb		

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Jan-05	17	14	9	8	9	8	14	18	A	15	14	11	8	7	9	14	18	30	31	30	30	33	25	19	16.9	32.5	
2-Jan-05	14	17	17	12	14	20	26	A	23	25	24	20	20	14	17	21	27	33	34	36	35	32	32	28	23.4	35.8	
3-Jan-05	25	27	24	25	31	28	A	30	29	25	20	16	18	21	27	28	29	30	33	27	26	26	25	26	25.9	32.9	
4-Jan-05	24	24	24	24	24	A	27	34	36	27	18	20	21	24	19	20	29	41	38	34	29	26	30	36	27.4	40.7	
5-Jan-05	37	35	36	31	A	28	29	32	40	55	48	39	37	22	23	29	30	37	42	53	41	11	9	9	32.8	54.8	
6-Jan-05	10	7	3	A	5	3	6	9	13	9	8	8	8	10	10	18	15	25	37	31	33	31	17	10	14.3	37.0	
7-Jan-05	8	8	A	9	11	12	16	19	31	23	20	17	15	12	20	29	38	44	40	35	35	33	33	28	23.3	43.9	
8-Jan-05	24	A	20	20	20	16	24	23	31	27	24	12	10	9	8	9	14	20	16	11	14	17	19	20	17.7	31.2	
9-Jan-05	A	39	38	34	33	31	32	34	33	31	31	20	12	27	29	29	32	33	25	28	24	25	33	A	29.6	38.6	
10-Jan-05	23	12	6	6	8	9	5	8	37	38	34	26	36	35	39	36	55	49	41	41	36	33	A	22	27.6	54.5	
11-Jan-05	15	20	41	26	15	8	11	11	12	8	7	9	8	9	9	11	7	8	7	6	4	A	4	5	11.4	40.9	
12-Jan-05	5	8	12	9	15	36	29	48	48	52	41	17	28	17	26	33	37	41	41	37	A	34	30	28	29.3	52.5	
13-Jan-05	34	24	38	39	24	33	30	36	40	34	28	17	18	30	28	32	23	15	8	A	7	17	34	39	27.2	40.1	
14-Jan-05	33	20	19	20	28	21	37	46	31	31	37	50	29	22	18	23	39	41	A	44	38	36	37	36	31.9	50.4	
15-Jan-05	35	31	27	27	31	38	35	42	45	42	40	58	48	51	53	47	42	A	41	39	39	36	33	38	40.0	58.0	
16-Jan-05	31	37	30	24	30	37	49	28	27	36	33	35	30	22	18	32	A	35	38	36	34	37	40	37	32.9	49.3	
17-Jan-05	35	32	31	34	40	37	35	41	35	33	33	41	37	21	19	A	18	12	9	10	8	6	6	5	25.1	40.9	
18-Jan-05	5	4	4	4	4	5	4	5	5	5	5	4	4	6	A	13	12	13	11	11	9	8	8	6	6.8	13.2	
19-Jan-05	6	6	8	6	10	8	9	10	20	21	11	9	7	A	9	12	13	14	11	12	11	10	13	15	11.0	21.4	
20-Jan-05	9	9	11	11	9	9	9	14	11	14	11	10	A	8	8	12	13	17	15	13	14	8	7	6	10.8	16.7	
21-Jan-05	5	6	12	4	5	6	8	15	18	13	9	A	8	7	9	19	23	28	24	21	16	14	26	29	14.1	28.9	
22-Jan-05	29	25	17	19	24	19	23	24	21	23	A	18	25	16	17	21	N	28	28	24	24	26	28	23	22.8	28.8	
23-Jan-05	23	21	21	A	24	27	31	39	34	24	23	23	32	46	61	50	44	25	28	28	28	27	27	23	22	30.5	60.7
24-Jan-05	24	27	28	29	A	32	37	29	29	C	C	C	C	C	6	6	5	7	5	6	11	7	10	8	16.9	36.5	
25-Jan-05	30	31	26	25	19	A	28	29	26	20	21	18	19	14	18	21	31	34	33	34	28	25	25	25	25.2	33.7	
26-Jan-05	25	26	23	22	A	23	29	35	37	34	30	43	34	26	15	21	31	35	35	31	27	25	27	31	28.8	42.6	
27-Jan-05	33	34	31	30	30	A	31	32	32	30	16	9	9	7	6	6	5	9	9	8	7	6	5	6	17.0	33.8	
28-Jan-05	4	5	5	5	A	5	7	10	10	8	6	6	6	5	5	7	8	9	9	8	9	11	12	9	7.5	12.3	
29-Jan-05	13	17	13	A	9	20	29	22	18	17	18	19	17	17	15	21	29	30	35	38	35	36	34	12	22.3	37.7	
30-Jan-05	9	8	A	12	12	9	14	14	10	11	17	18	17	15	23	25	32	39	39	41	33	19	14	14	19.4	40.9	
31-Jan-05	19	A	19	15	15	14	22	22	16	10	8	7	5	6	7	9	8	13	17	33	23	36	9	7	14.7	35.9	
Hourly Avg	20.0	19.8	20.5	18.9	18.6	19.3	22.9	25.2	26.7	24.7	21.8	20.6	19.6	18.1	19.1	21.8	24.4	26.4	26.0	26.9	23.5	23.0	21.6	19.9			
Hourly Max	37.1	38.6	40.9	39.0	39.8	37.8	49.3	48.4	47.5	54.8	48.2	58.0	48.4	50.8	60.7	49.6	54.5	48.6	42.3	53.1	41.0	37.2	39.7	39.1			

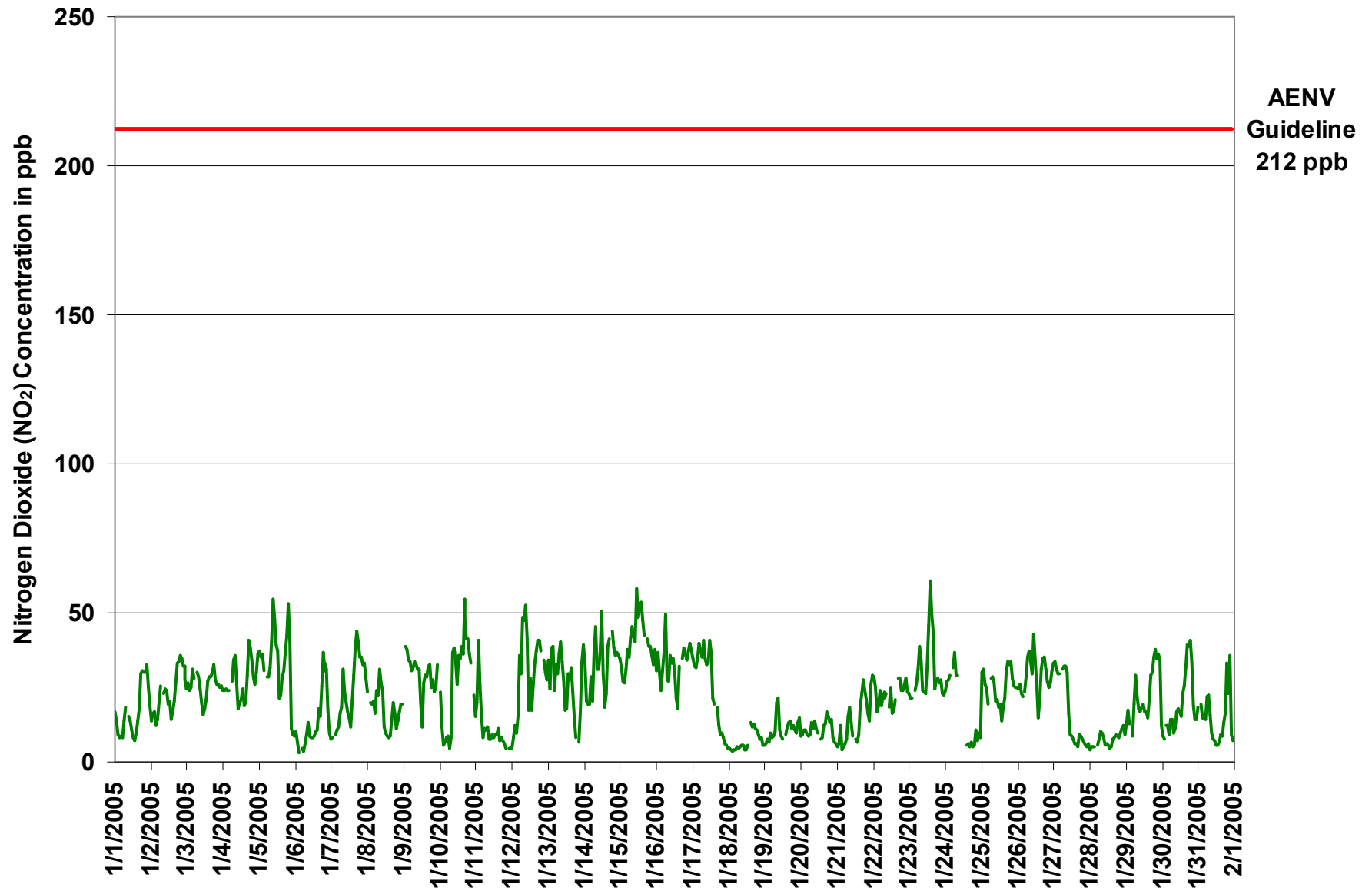


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005
 Summary

Maximum 1-hr Value:	116.1	ppb	12-Jan	9:00 10:00
Maximum 24-hr Value:	50.9	ppb	15-Jan	

AIC Time:	32 hrs	Operational Time:	706 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	75	55	39	29	18	9	6	29.4 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																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Average	Maximum	
1-Jan-05	23	23	13	11	12	11	19	24	A	26	17	15	10	11	12	18	29	33	35	38	34	36	30	22	21.9	37.7	
2-Jan-05	17	22	21	14	17	27	28	A	25	32	33	29	28	25	23	26	33	36	37	39	45	35	34	31	28.7	44.6	
3-Jan-05	29	28	28	30	35	32	A	31	33	28	23	21	23	30	37	36	32	36	47	34	31	31	28	28	31.0	47.1	
4-Jan-05	26	26	26	26	25	A	32	44	41	35	22	27	37	33	23	25	37	45	49	40	35	29	40	40	33.2	49.5	
5-Jan-05	41	39	41	33	A	31	32	44	57	78	61	45	49	32	30	34	34	56	55	74	63	20	17	15	42.8	78.4	
6-Jan-05	19	13	4	A	14	5	10	13	25	13	13	32	13	15	17	40	24	34	42	40	37	37	27	13	21.8	42.3	
7-Jan-05	13	13	A	13	17	22	23	61	42	30	28	26	23	19	27	46	48	54	46	41	38	36	37	34	32.1	61.2	
8-Jan-05	32	A	23	23	25	22	33	30	39	38	31	18	14	13	15	13	22	33	23	17	20	24	26	24	24.2	38.6	
9-Jan-05	A	43	42	41	41	33	35	37	37	39	42	34	17	40	36	33	40	36	33	37	26	31	37	A	35.9	43.3	
10-Jan-05	31	19	9	15	18	14	11	26	53	51	43	40	56	43	51	59	67	67	51	53	42	39	A	31	38.7	67.4	
11-Jan-05	23	36	50	40	30	14	20	18	18	14	14	15	13	14	14	29	11	18	10	10	7	A	8	9	18.8	49.5	
12-Jan-05	8	12	23	20	22	50	44	62	59	116	62	27	37	29	39	41	43	49	46	42	A	38	34	33	40.6	116.1	
13-Jan-05	44	33	50	43	32	38	41	49	50	48	36	25	34	36	33	38	41	18	13	A	9	34	44	48	36.4	50.1	
14-Jan-05	38	33	32	42	87	28	77	57	42	57	46	78	75	27	26	33	48	49	A	52	52	45	44	42	48.3	87.1	
15-Jan-05	40	47	39	33	41	58	42	54	60	47	76	75	60	59	68	53	47	A	45	48	41	41	55	44	50.9	75.6	
16-Jan-05	46	44	37	34	41	51	59	40	36	41	39	38	37	32	32	36	A	37	44	42	37	43	47	41	40.6	59.2	
17-Jan-05	37	35	34	40	45	43	41	46	44	39	42	51	42	30	25	A	23	18	13	13	13	8	8	6	30.2	51.5	
18-Jan-05	6	5	5	6	6	7	6	9	8	8	8	7	8	9	A	20	18	18	17	16	15	11	12	11	10.3	19.5	
19-Jan-05	11	10	13	11	17	10	14	15	28	29	16	15	11	A	13	16	21	19	16	19	19	16	23	24	16.7	28.9	
20-Jan-05	12	13	14	14	13	13	13	19	16	20	18	15	A	13	20	28	17	22	22	18	23	12	10	8	16.1	28.1	
21-Jan-05	6	9	19	6	8	9	12	24	22	18	14	A	15	11	13	28	29	32	31	28	20	18	30	31	18.9	32.3	
22-Jan-05	31	30	20	21	30	26	25	25	23	27	A	24	27	22	20	27	N	30	32	27	25	33	32	27	26.6	32.8	
23-Jan-05	25	22	24	A	27	35	37	57	72	30	27	27	42	53	78	57	62	32	34	36	34	33	25	27	39.0	78.5	
24-Jan-05	31	29	30	34	A	49	47	45	39	C	C	C	C	C	8	10	7	9	8	8	25	17	30	19	24.7	48.7	
25-Jan-05	42	33	35	29	28	A	39	36	31	25	26	33	28	25	22	30	43	46	49	43	35	28	28	31	33.2	49.2	
26-Jan-05	27	30	26	27	A	27	36	41	45	44	41	60	45	36	22	27	38	39	39	41	32	29	31	35	35.5	60.1	
27-Jan-05	43	40	37	35	33	A	37	40	38	40	27	14	16	12	9	9	7	13	13	19	12	9	10	10	22.8	42.5	
28-Jan-05	8	15	9	12	A	11	13	24	15	13	9	12	10	9	8	13	12	15	14	12	14	15	19	11	12.8	23.7	
29-Jan-05	17	20	19	A	12	38	37	30	21	24	27	24	20	22	27	31	32	36	41	44	41	41	40	37	29.5	44.1	
30-Jan-05	14	11	A	17	21	13	19	20	25	19	27	28	21	26	37	34	38	43	44	46	37	28	21	30	26.9	45.9	
31-Jan-05	35	A	27	25	22	20	35	31	28	14	14	10	7	8	9	14	13	19	36	41	36	47	24	8	22.7	47.3	
Hourly Avg	25.8	25.3	25.9	24.8	26.6	26.3	30.6	35.2	35.7	34.8	30.4	29.9	28.2	25.3	26.4	30.1	31.5	33.1	32.8	33.8	29.9	28.8	28.4	25.8			
Hourly Max	45.6	46.6	50.1	42.7	87.1	57.6	77.4	61.6	71.9	116.1	75.6	78.4	74.6	58.7	78.5	59.2	67.4	66.5	55.3	73.9	63.3	47.3	55.2	48.1			

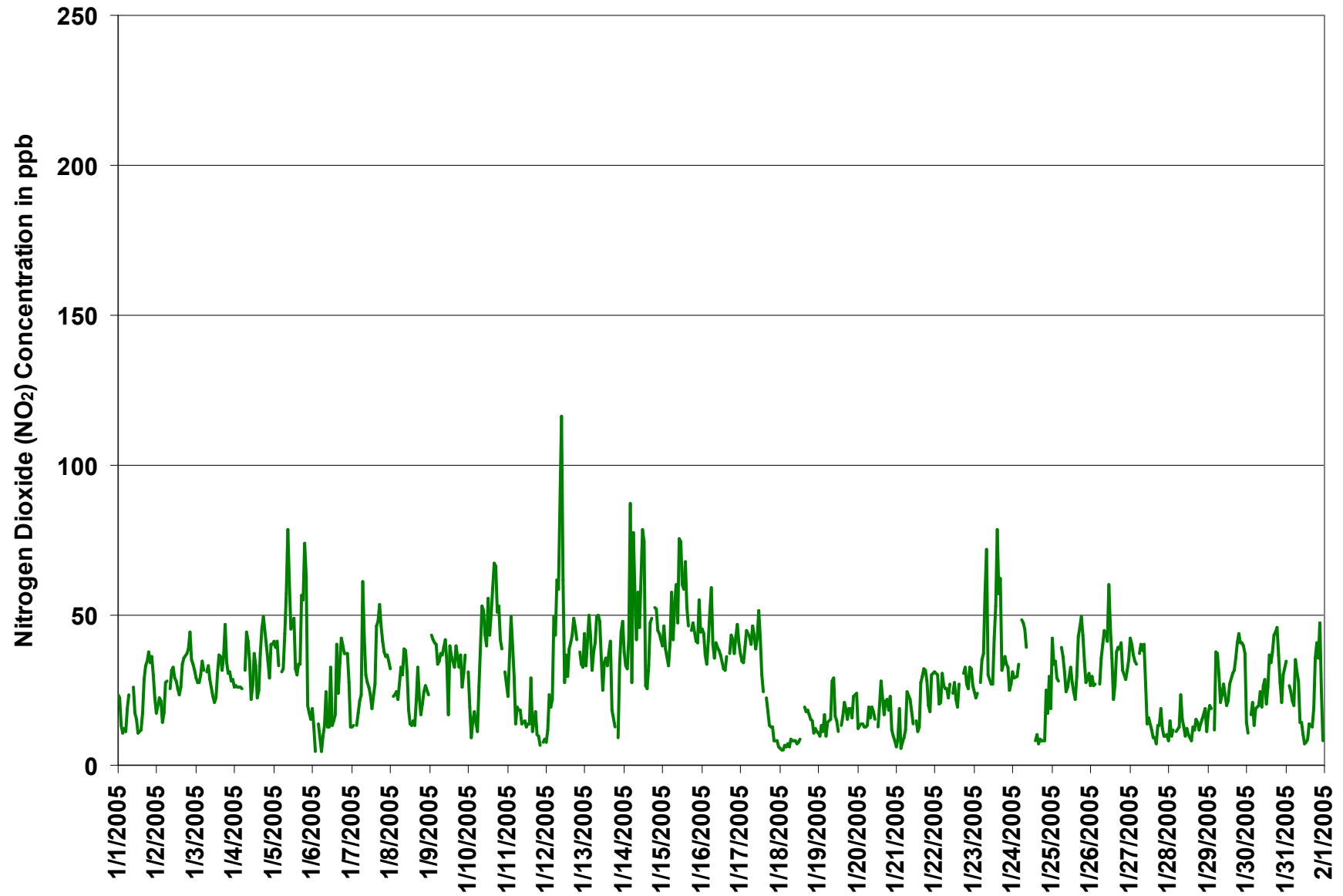
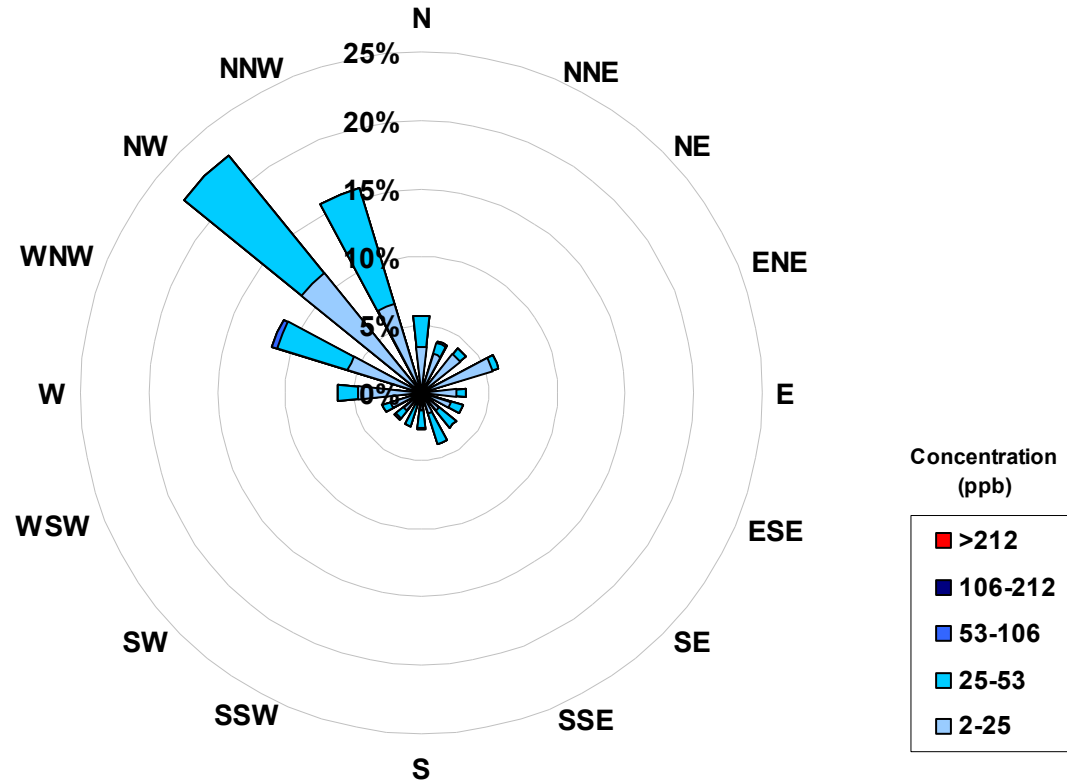


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

Concentration Rose for the 1-hr NO₂ Average Concentration Occurrences at the Henry Pirker Site for January 2004



Frequency Distribution of NO ₂ in ppb			
Range			Frequency (hrs)
0	<	2	0
2	to	25	412
25	to	53	288
53	to	106	6
106	to	212	0
	>	212	0
Total Non-Zero Values			706

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

Station: Henry Pirker

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	237	ppb	23-Jan	14:00 15:00
Maximum 24-hr Average:	82	ppb	23-Jan	

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

AIC Time:	32 hrs		Operational Time:	704 hrs	
Calibration Time:	5 hrs		AMD Operational Uptime:	99.6%	
Percentile	99	95	75	50	25
	150	104	37	10	2
					0
					0
	Average				
	25.5 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	2	1	1	0	0	0	1	2	A	5	9	10	9	7	8	7	5	22	20	31	38	45	23	6	11.0	44.7
2-Jan-05	2	2	3	1	2	6	16	A	11	13	26	21	25	11	11	10	11	19	44	66	41	21	22	8	17.0	65.7
3-Jan-05	3	5	3	4	11	5	A	36	43	24	22	22	32	40	58	51	39	47	110	68	42	45	31	32	33.6	109.9
4-Jan-05	14	10	8	6	4	A	17	66	74	33	19	36	42	50	24	24	38	108	95	78	39	15	35	82	39.9	108.5
5-Jan-05	83	72	72	51	A	40	51	70	113	226	191	110	90	37	31	44	41	80	108	132	55	1	1	1	73.9	226.4
6-Jan-05	1	1	0	A	1	1	1	2	4	2	2	4	4	5	4	11	4	8	28	12	13	13	1	0	5.3	28.3
7-Jan-05	1	0	A	0	0	1	2	7	12	5	8	9	9	8	15	25	57	109	83	49	45	24	33	19	22.7	108.6
8-Jan-05	5	A	2	1	1	0	3	4	11	15	10	5	5	5	5	4	4	5	5	2	2	2	1	0	4.2	15.4
9-Jan-05	A	13	13	10	10	3	11	35	31	42	73	38	16	50	53	46	40	40	12	16	4	4	20	A	26.4	73.2
10-Jan-05	3	0	0	0	1	1	1	1	18	19	24	23	55	45	55	39	177	115	58	50	18	14	A	2	31.3	177.4
11-Jan-05	1	1	25	4	2	2	2	4	5	3	3	4	5	6	5	9	3	4	2	2	1	A	1	1	4.2	25.5
12-Jan-05	1	1	1	1	1	13	6	70	68	117	90	18	49	24	39	48	35	48	65	43	A	20	13	7	33.8	116.6
13-Jan-05	13	4	25	25	3	13	19	28	63	43	41	23	26	49	39	37	14	3	2	A	1	2	7	21	21.8	63.2
14-Jan-05	7	1	2	1	6	2	17	62	23	25	63	128	56	34	23	26	67	71	A	113	64	51	56	46	41.0	128.0
15-Jan-05	45	27	17	8	9	26	33	83	105	104	93	148	103	115	111	96	57	A	43	29	23	14	13	27	57.7	147.6
16-Jan-05	8	17	4	0	6	20	66	5	4	34	36	49	39	19	12	30	A	10	36	26	19	39	50	44	25.0	66.0
17-Jan-05	29	9	10	26	51	37	37	72	57	52	59	104	76	18	14	A	6	1	0	1	0	0	0	0	28.7	103.6
18-Jan-05	0	0	0	0	0	0	0	0	0	0	0	0	1	2	A	7	6	7	7	5	3	0	0	0	1.7	7.4
19-Jan-05	0	D	D	0	0	0	0	0	1	3	4	4	4	A	5	6	4	2	2	2	4	2	2	1	2.2	5.6
20-Jan-05	1	0	0	0	1	1	2	3	2	3	5	5	A	5	6	7	4	4	4	3	2	1	0	0	2.6	7.3
21-Jan-05	0	0	0	0	1	1	1	6	7	5	5	A	6	5	7	16	13	12	9	3	1	0	7	10	5.1	15.5
22-Jan-05	12	5	0	0	4	3	7	11	6	27	A	27	49	21	20	28	N	56	61	24	18	34	57	23	22.4	61.2
23-Jan-05	30	22	26	A	26	30	51	126	97	44	60	45	105	196	237	154	150	59	108	97	75	86	24	40	82.1	237.1
24-Jan-05	63	94	111	121	A	142	193	116	123	C	C	C	C	C	3	3	1	1	0	0	1	1	0	0	54.1	193.3
25-Jan-05	18	13	5	5	5	A	32	66	44	26	37	33	37	22	22	30	79	97	109	90	59	37	30	23	40.0	109.3
26-Jan-05	11	17	6	5	A	6	46	112	113	94	58	118	60	28	11	16	30	58	52	35	24	14	22	43	42.6	117.7
27-Jan-05	70	76	49	51	43	A	49	61	52	45	11	4	4	3	2	3	2	2	2	3	2	1	2	3	23.5	76.1
28-Jan-05	2	2	2	2	A	3	3	4	3	3	2	3	3	3	3	4	3	3	1	0	2	1	1	0	2.3	4.2
29-Jan-05	0	0	0	A	0	11	17	5	2	8	20	29	30	25	21	29	53	36	72	106	76	100	55	6	30.4	105.9
30-Jan-05	1	0	A	1	1	1	1	1	1	2	6	9	9	9	12	12	11	14	10	20	4	0	0	0	5.4	19.6
31-Jan-05	0	A	1	1	1	1	1	2	1	2	3	2	1	1	1	2	2	2	1	2	2	5	1	1	1.6	5.1
Hourly Avg	14.2	14.1	13.8	11.6	7.0	13.1	22.8	35.4	36.4	34.2	33.8	35.6	32.7	29.1	28.6	27.5	33.0	34.9	38.4	37.0	22.5	19.8	17.0	14.9		
Hourly Max	82.7	94.2	110.8	120.8	51.0	142.5	193.3	125.6	122.9	226.4	191.0	147.6	105	196.2	237.1	154.4	177.4	114.9	109.9	132.2	75.7	99.6	57.2	82.2		

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Maximum 1-hr Value:	389.5	ppb	12-Jan	9:00 10:00
Maximum 24-hr Value:	129.2	ppb	23-Jan	

AIC Time:	32 hrs	Operational Time:	706 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	232	167	69	23	8	1	0	47.2 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	6	4	2	4	2	1	2	6	A	16	16	19	13	12	15	12	11	35	34	80	61	78	33	14	20.7	80.2
2-Jan-05	7	8	7	2	8	28	35	A	24	26	55	48	42	34	21	16	21	28	86	82	95	35	30	18	32.8	95.4
3-Jan-05	7	6	5	10	19	17	A	45	56	36	32	34	53	74	94	101	50	68	179	180	69	113	46	49	58.3	179.5
4-Jan-05	24	19	11	9	10	A	47	167	147	54	35	63	103	77	33	41	81	135	136	103	90	31	88	94	69.5	166.7
5-Jan-05	114	91	93	59	A	64	67	115	209	282	278	151	138	78	60	67	63	135	179	303	183	2	6	2	119.1	302.8
6-Jan-05	2	2	1	A	16	3	4	11	16	12	4	22	15	21	15	47	7	19	77	37	27	37	5	7	17.8	76.9
7-Jan-05	3	2	A	1	1	3	5	73	27	9	19	22	18	15	26	83	125	157	121	74	73	48	58	48	44.0	156.7
8-Jan-05	14	A	3	5	4	3	18	14	23	40	20	11	8	11	12	7	19	12	13	14	7	6	3	2	11.7	40.2
9-Jan-05	A	28	23	20	24	6	28	72	57	82	136	78	33	86	79	71	78	97	34	61	9	8	36	A	52.0	135.5
10-Jan-05	10	2	0	2	3	3	14	4	51	43	39	76	145	69	110	142	342	216	115	149	40	42	A	9	70.7	342.1
11-Jan-05	3	4	61	15	7	7	7	20	21	13	13	9	8	9	10	31	9	15	4	9	3	A	3	3	12.3	61.1
12-Jan-05	2	2	2	2	1	43	31	131	127	390	186	38	79	51	91	76	73	83	100	70	A	37	21	18	72.0	389.5
13-Jan-05	41	14	56	32	9	34	51	74	142	72	83	36	61	71	55	53	42	6	5	A	2	6	17	57	44.3	141.8
14-Jan-05	34	5	22	15	67	5	81	108	58	56	93	200	188	47	41	56	110	104	A	187	126	107	109	75	82.3	199.8
15-Jan-05	77	58	49	21	18	75	68	153	157	184	193	193	143	139	149	136	83	A	67	59	33	30	149	42	98.9	192.9
16-Jan-05	26	33	15	8	23	53	95	42	13	59	61	62	63	40	38	40	A	25	73	59	39	66	64	72	46.6	94.8
17-Jan-05	46	16	17	50	71	64	72	101	126	94	106	163	108	48	23	A	19	4	2	4	3	1	0	0	49.5	162.9
18-Jan-05	0	0	0	0	0	0	0	1	1	0	1	1	3	7	A	30	15	21	16	13	13	8	3	10	6.3	30.4
19-Jan-05	5	0	0	3	6	0	1	2	8	10	11	10	7	A	16	14	13	7	20	13	15	10	10	8	8.3	19.5
20-Jan-05	7	3	1	2	16	7	8	16	9	13	10	13	A	13	21	24	8	8	10	22	21	2	3	1	10.2	23.7
21-Jan-05	0	0	3	1	2	7	4	34	14	12	17	A	15	10	10	42	28	32	34	13	6	2	17	20	14.1	42.4
22-Jan-05	22	12	1	0	19	11	14	18	12	48	A	42	61	32	27	47	N	73	106	36	25	81	84	36	36.6	105.6
23-Jan-05	44	29	35	A	45	51	78	191	175	92	82	77	171	269	338	232	228	121	168	155	138	111	62	78	129.2	338.3
24-Jan-05	97	116	123	152	A	221	225	231	196	C	C	C	C	C	5	4	4	2	1	1	5	3	6	1	77.3	231.4
25-Jan-05	54	43	23	12	41	A	75	138	77	42	55	73	68	50	37	85	186	201	186	139	100	54	55	48	80.1	200.5
26-Jan-05	20	26	20	14	A	14	112	161	167	208	123	222	119	43	23	24	53	90	92	94	57	32	65	64	80.1	222.0
27-Jan-05	161	126	83	87	60	A	64	90	103	88	32	16	14	14	7	7	3	7	10	17	19	5	13	11	45.0	160.8
28-Jan-05	11	21	12	19	A	10	14	29	18	15	8	13	11	14	11	13	8	15	10	1	16	12	7	8	12.8	28.7
29-Jan-05	0	1	0	A	1	38	37	20	4	26	41	36	38	37	59	62	69	74	117	128	121	134	95	45	51.4	134.5
30-Jan-05	1	1	A	2	2	1	1	1	2	5	16	22	19	15	39	23	20	22	25	36	8	1	0	3	11.5	38.6
31-Jan-05	6	A	2	2	2	1	5	4	3	4	4	4	2	2	2	5	2	3	4	5	3	14	3	2	3.5	13.8
Hourly Avg	28.1	23.1	23.2	19.5	17.7	27.4	42.1	69.0	68.0	67.6	61.0	60.4	60.1	47.8	48.9	53.1	61.1	60.6	67.4	71.4	46.9	37.2	36.4	28.1		
Hourly Max	160.8	125.6	123.3	151.5	70.9	220.6	225.3	231.4	209.4	389.5	277.7	222.0	188	269.0	338.3	231.6	342.1	216.3	185.8	302.8	183.3	134.5	149.3	93.7		

Station: Henry Pirker

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	297	ppb	23-Jan	14:00 15:00
Maximum 24-hr Average:	112	ppb	23-Jan	

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

AIC Time:	32 hrs							Operational Time:	706 hrs						
Calibration Time:	5 hrs							AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average							
	203	142	67	34	14	6	3	47.3 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

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	18	14	9	8	9	8	15	20	A	21	23	21	17	15	17	21	23	51	50	61	67	77	48	25	27.7	76.9	
2-Jan-05	16	19	19	13	16	26	41	A	34	38	50	40	46	25	28	31	38	52	77	101	76	53	54	35	40.3	101.1	
3-Jan-05	27	31	26	29	42	33	A	67	72	49	41	38	50	61	85	79	68	78	143	95	68	71	56	57	59.4	142.7	
4-Jan-05	39	34	33	30	28	A	43	100	110	60	37	56	63	75	43	44	67	149	134	112	67	41	65	118	67.2	149.0	
5-Jan-05	120	106	108	81	A	68	80	101	152	281	239	149	127	59	54	72	72	116	150	185	96	12	10	10	106.4	280.5	
6-Jan-05	11	7	3	A	5	4	7	11	17	11	10	12	12	15	15	29	19	34	65	43	46	44	19	10	19.6	65.4	
7-Jan-05	9	9	A	10	11	13	18	25	43	29	28	27	25	20	35	54	95	152	123	85	80	57	66	47	46.0	152.3	
8-Jan-05	28	A	21	20	21	16	27	26	42	42	34	17	14	14	13	12	18	25	21	14	16	18	20	20	21.6	41.7	
9-Jan-05	A	52	51	44	43	34	42	68	64	73	104	58	28	77	83	74	72	73	37	44	28	29	52	A	55.8	103.9	
10-Jan-05	26	12	5	7	9	10	6	9	55	57	58	49	91	79	93	76	231	163	99	91	54	47	A	24	58.8	231.5	
11-Jan-05	17	21	66	29	17	10	14	15	17	11	11	13	14	15	14	20	10	12	9	8	6	A	5	6	15.7	66.2	
12-Jan-05	6	9	13	10	16	48	35	118	115	169	130	35	77	41	65	81	72	89	105	80	A	53	43	35	62.9	168.6	
13-Jan-05	47	28	63	64	26	46	48	64	103	76	68	40	43	78	66	68	38	18	10	A	8	19	40	60	48.7	102.8	
14-Jan-05	40	21	21	21	34	22	54	107	54	56	99	178	84	56	41	49	105	112	A	157	102	87	93	81	72.7	177.8	
15-Jan-05	79	59	44	34	40	64	68	125	150	145	133	205	151	165	164	143	100	A	84	67	62	50	46	64	97.4	204.9	
16-Jan-05	38	54	34	24	37	57	115	32	31	70	69	84	69	41	30	62	A	45	75	63	53	76	89	81	57.8	115.0	
17-Jan-05	64	41	41	61	91	74	72	113	92	85	92	144	112	40	34	A	24	13	9	11	8	6	5	4	53.7	144.2	
18-Jan-05	3	3	2	2	2	3	3	4	4	4	4	4	4	5	8	A	21	18	20	18	16	12	7	6	5	7.6	20.8
19-Jan-05	4	4	6	5	9	7	8	11	21	25	15	13	12	A	14	18	18	16	13	15	14	12	15	16	12.5	24.6	
20-Jan-05	9	9	11	11	10	9	11	17	14	17	16	15	A	13	14	20	17	21	20	16	16	9	7	6	13.4	21.3	
21-Jan-05	4	6	12	5	6	7	9	21	25	19	14	A	14	12	16	34	36	40	33	23	17	14	34	39	19.1	40.0	
22-Jan-05	40	30	17	19	28	22	30	35	27	50	A	45	74	37	49	N	83	89	48	41	59	84	46	45.0	88.7		
23-Jan-05	52	42	47	A	50	56	81	164	130	68	83	68	137	241	297	203	193	83	135	125	101	114	47	62	112.3	297.0	
24-Jan-05	87	121	138	149	A	174	229	145	152	C	C	C	C	C	9	9	7	7	6	6	11	8	10	8	70.9	229.3	
25-Jan-05	48	44	31	30	25	A	60	95	70	46	58	51	57	36	40	52	110	131	142	123	87	62	55	48	65.1	141.9	
26-Jan-05	35	43	29	26	A	30	75	147	150	127	87	160	94	54	26	37	61	93	87	66	51	39	49	74	71.4	160.1	
27-Jan-05	104	110	80	81	73	A	80	93	85	75	27	13	13	11	8	9	7	12	11	11	9	7	8	9	40.6	109.9	
28-Jan-05	6	7	8	7	A	8	10	14	13	11	8	10	9	8	8	11	11	12	10	9	11	13	13	9	9.9	14.3	
29-Jan-05	12	17	13	A	9	30	46	26	20	25	39	48	46	42	36	50	82	66	107	143	110	135	89	19	52.6	143.2	
30-Jan-05	9	8	A	13	13	9	15	15	10	13	23	27	26	24	35	37	43	53	49	60	37	19	14	14	24.6	60.4	
31-Jan-05	19	A	20	15	15	15	23	24	17	11	10	9	6	6	7	11	9	14	17	34	23	40	9	7	15.7	39.8	
Hourly Avg	33.9	33.1	33.5	30.3	25.3	32.2	45.4	60.4	62.9	58.7	55.5	56.1	52.2	47.2	47.6	49.2	57.4	61.1	64.3	63.7	45.9	42.6	38.4	34.6			
Hourly Max	119.7	120.8	138.4	149.4	90.8	173.7	229.3	164.0	152.4	280.5	238.6	204.9	151	241.3	297.0	203.5	231.5	163.3	150.2	184.8	109.9	135.4	92.8	118.2			

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Maximum 1-hr Value:	434.6	ppb	12-Jan	9:00 10:00
Maximum 24-hr Value:	165.3	ppb	23-Jan	

AIC Time:	32 hrs							Operational Time:	706 hrs						
Calibration Time:	5 hrs							AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average							
	288	211	104	54	25	10	6	74.7 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

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	41.3	114.3	
2-Jan-05		27	26	13	14	13	12	20	29	A	41	32	33	23	23	26	29	40	66	68	114	93	111	61	37	60.2	138.7	
3-Jan-05		23	30	27	15	23	55	63	A	48	53	87	75	68	59	44	41	54	63	121	115	139	69	62	49	87.6	225.6	
4-Jan-05		36	34	33	39	53	47	A	75	89	63	55	52	71	101	127	138	81	96	226	209	97	143	73	77	102.1	209.3	
5-Jan-05		48	45	37	34	36	A	79	209	186	89	57	88	140	110	56	67	118	178	185	142	123	60	128	133	157.6	356.4	
6-Jan-05		152	126	134	90	A	92	98	157	262	340	335	193	184	108	87	97	96	191	226	356	238	21	24	16	38.3	116.6	
7-Jan-05		21	14	5	A	31	6	12	22	37	21	17	49	29	34	30	88	29	54	117	77	62	74	33	18	74.1	202.2	
8-Jan-05		13	13	A	A	14	18	23	26	130	67	38	46	48	41	34	53	123	167	202	166	114	109	84	92	82	34.6	78.4
9-Jan-05		46	A	25	27	27	24	51	44	61	78	48	28	20	23	25	19	37	44	36	29	24	27	27	25	86.7	176.7	
10-Jan-05		A	69	64	61	65	39	62	107	92	118	177	112	49	124	113	103	113	133	66	97	35	37	71	A	107.1	400.1	
11-Jan-05		41	20	9	17	20	17	21	30	102	92	82	113	198	112	157	190	400	281	162	200	80	80	A	38	29.4	109.8	
12-Jan-05		26	40	110	55	32	16	26	32	35	24	27	24	21	22	22	55	17	32	13	17	9	A	10	12	107.6	434.6	
13-Jan-05		10	13	25	21	23	93	72	191	178	435	246	64	114	80	129	112	111	126	144	110	A	73	54	49	78.8	191.2	
14-Jan-05		84	46	104	74	40	71	89	113	191	117	118	58	90	105	88	90	82	23	16	A	11	35	59	104	127.5	275.5	
15-Jan-05		69	38	49	57	153	32	158	156	98	110	136	275	259	74	64	88	153	151	A	234	165	148	150	114	146.9	267.3	
16-Jan-05		117	100	88	48	59	130	104	203	213	228	267	266	202	195	216	187	128	A	110	106	74	70	186	83	85.9	152.8	
17-Jan-05		71	76	52	41	63	101	153	80	48	98	100	99	99	73	70	76	A	61	107	101	76	108	111	112	78.6	213.1	
18-Jan-05		80	50	50	88	116	107	103	147	169	132	148	213	150	79	47	A	40	21	14	17	15	9	7	6	15.3	45.5	
19-Jan-05		5	5	4	5	5	7	5	9	9	8	9	9	11	16	A	45	33	36	31	26	24	17	13	21	23.2	38.0	
20-Jan-05		15	7	12	14	20	10	15	18	35	38	25	24	19	A	26	30	32	25	33	27	25	26	27	29	25.4	51.5	
21-Jan-05		18	13	14	14	28	19	21	35	22	31	27	26	A	25	41	52	23	30	29	40	43	13	11	8	32.1	67.3	
22-Jan-05		6	8	21	7	9	15	17	57	35	27	29	A	29	22	23	67	57	63	65	40	24	19	47	50	62.5	137.4	
23-Jan-05		52	42	20	21	49	37	39	43	34	75	A	66	88	54	47	73	N	99	137	62	49	113	115	62	165.3	413.4	
24-Jan-05		67	49	56	A	73	82	115	245	241	118	108	102	211	318	413	288	284	148	197	191	171	137	87	101	100.8	274.4	
25-Jan-05		128	145	152	184	A	264	268	274	231	C	C	C	C	C	13	14	10	10	9	9	30	19	35	19	108.9	243.7	
26-Jan-05		95	75	58	40	64	A	104	169	108	66	79	89	70	72	56	111	228	244	222	183	133	80	83	79	113.7	280.6	
27-Jan-05		46	55	47	40	A	37	144	199	209	251	162	281	161	78	44	50	89	125	129	126	87	59	95	98	65.3	197.0	
28-Jan-05		197	164	117	121	92	A	96	129	140	115	59	25	27	22	15	14	10	20	18	32	31	14	21	19	23.8	49.3	
29-Jan-05		18	35	17	30	A	20	27	49	28	23	16	25	21	23	19	25	17	26	24	13	26	27	21	18	79.2	169.4	
30-Jan-05		17	19	19	A	13	75	73	50	25	49	68	60	57	58	83	92	100	101	157	169	158	169	128	80	37.4	78.5	
31-Jan-05		15	11	A	18	21	14	19	21	26	24	42	50	35	41	74	57	58	64	67	78	44	28	21	32	25.3	59.4	
		40	A	29	25	23	14	19	39	35	30	17	18	14	9	9	10	18	14	20	39	44	36	59	26	8		
Hourly Avg		52.7	47.2	47.9	43.4	43.2	52.3	70.7	101.9	101.7	97.3	90.4	88.3	86.1	72.2	74.0	81.3	90.4	91.2	97.8	102.6	74.4	64.4	62.6	52.7			
Hourly Max		197.0	164.3	152.1	184.3	153.0	263.6	268.4	274.4	262.3	434.6	334.6	280.6	259	318.3	413.4	288.0	400.1	281.2	226.3	356.4	238.1	169.4	185.9	133.0			

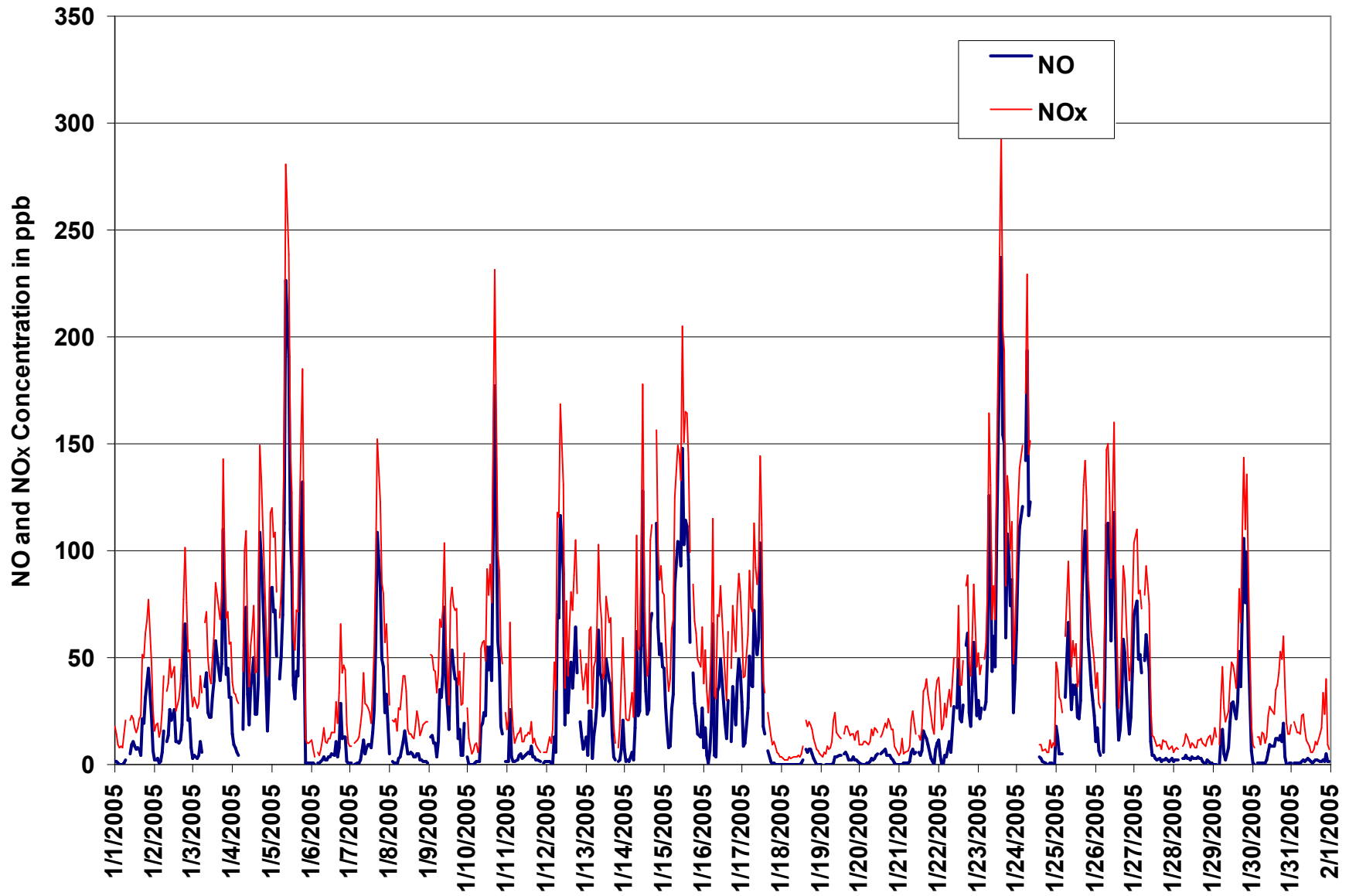


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trends

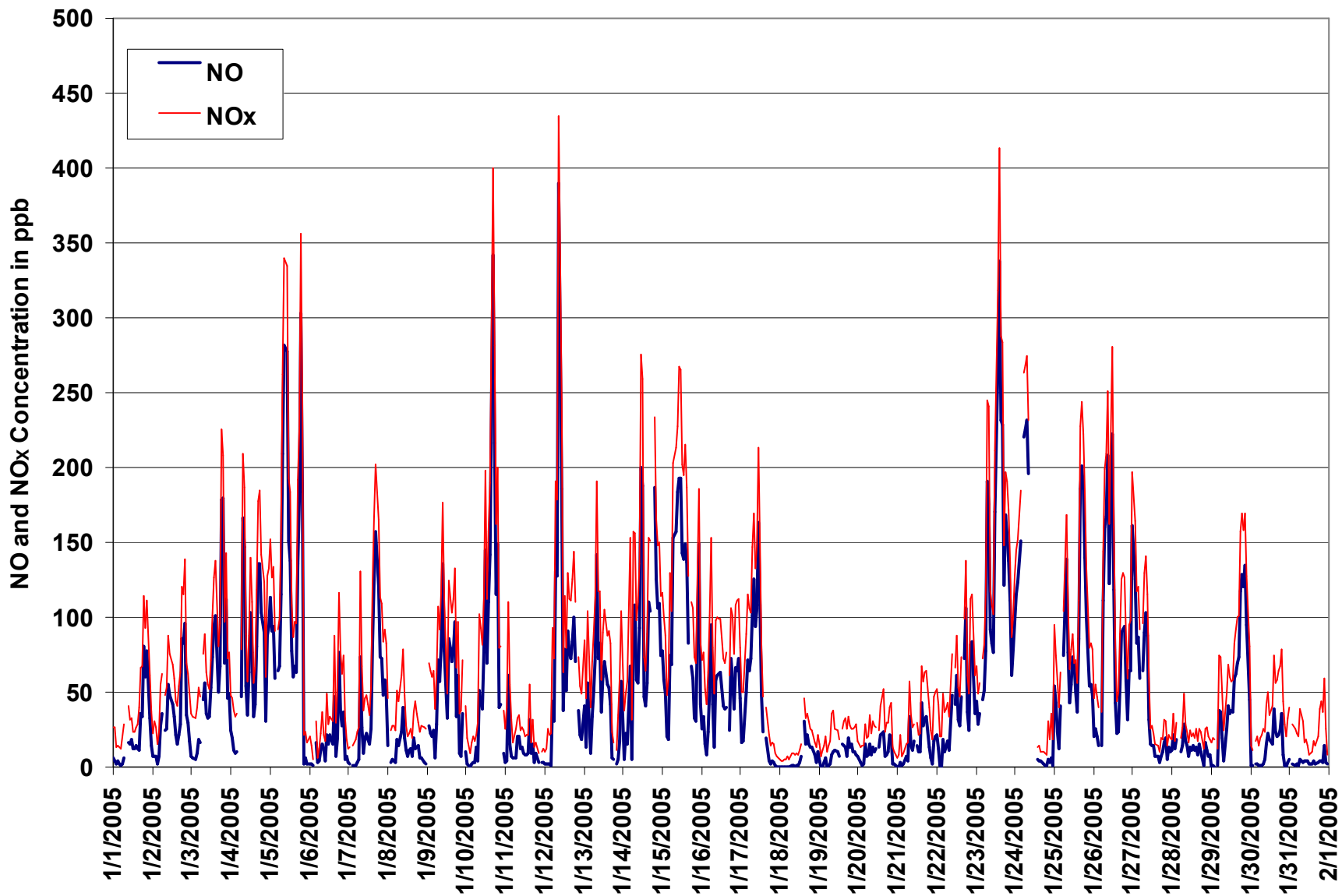


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Maximum Value Monthly Trends

PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Ozone (O₃)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	42.1 ppb 31-Jan 13:00 14:00
Maximum 24-hr Average:	29.9 ppb 31-Jan

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

AIC Time:	32 hrs	Operational Time:	707 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%
Percentile	99	95	75
	38	31	21
	50	25	5
	1	0	0
Average	12.3 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

Day	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	2	16	20	22	20	20	15	9	A	12	13	17	19	21	20	16	13	2	1	2	1	1	1	4	11.6	21.7	
2-Jan-05	8	7	8	11	9	6	2	A	3	4	7	10	11	17	16	13	7	2	1	2	2	1	1	1	6.4	17.2	
3-Jan-05	3	2	3	2	1	1	A	1	1	2	5	9	9	9	7	5	2	2	1	1	1	1	0	1	3.0	9.1	
4-Jan-05	0	2	1	1	1	A	1	2	2	3	8	9	11	9	12	8	3	3	2	2	2	2	2	4	4.0	12.1	
5-Jan-05	2	2	2	1	A	2	1	2	3	5	3	5	7	10	9	5	2	1	2	2	8	34	36	34	7.7	35.6	
6-Jan-05	29	31	35	A	31	33	29	27	24	28	31	31	30	28	28	22	23	13	3	6	3	4	17	27	23.1	34.8	
7-Jan-05	30	30	A	27	25	22	19	17	7	13	16	18	21	24	18	12	3	2	1	1	0	1	1	4	13.5	30.1	
8-Jan-05	8	A	11	11	10	15	7	10	4	12	17	26	27	28	30	30	25	21	24	26	23	21	19	16	18.4	30.5	
9-Jan-05	A	2	1	1	2	3	1	1	1	2	5	11	18	13	11	8	4	1	6	4	6	6	2	A	4.9	17.7	
10-Jan-05	8	24	34	35	33	33	36	33	9	8	12	17	13	14	10	10	3	1	1	1	1	3	A	13	15.3	36.3	
11-Jan-05	20	16	2	11	20	25	22	24	23	27	28	26	27	26	27	26	28	27	29	31	33	A	35	34	24.6	34.9	
12-Jan-05	35	32	27	30	24	9	12	3	3	4	8	20	15	21	15	10	7	2	2	2	A	4	6	8	13.0	35.3	
13-Jan-05	5	11	3	2	9	4	6	4	4	5	10	17	19	17	16	12	17	24	31	A	33	24	10	4	12.5	32.5	
14-Jan-05	6	17	18	17	11	14	5	4	6	7	8	8	16	17	18	13	4	1	A	3	2	3	3	2	8.9	18.5	
15-Jan-05	2	2	3	5	3	3	2	2	4	4	7	10	12	11	10	7	5	A	3	3	3	4	4	2	4.8	12.2	
16-Jan-05	4	3	5	10	3	3	3	6	7	3	6	8	11	16	17	7	A	2	2	1	1	1	1	0	5.3	17.1	
17-Jan-05	0	1	1	0	1	0	0	1	0	1	2	2	3	14	11	A	11	17	21	19	20	22	23	24	8.4	24.4	
18-Jan-05	25	26	27	27	27	26	27	27	27	27	28	28	28	27	A	21	21	21	21	21	21	23	23	23	25	25.0	27.9
19-Jan-05	25	24	22	24	21	22	22	20	11	10	20	21	23	A	21	19	17	17	19	18	19	20	18	15	19.4	24.9	
20-Jan-05	20	20	18	18	19	20	20	16	17	15	17	18	A	20	19	16	15	11	11	13	12	19	21	21	17.2	21.5	
21-Jan-05	22	21	15	22	22	22	20	14	11	14	19	A	20	21	18	11	7	2	5	7	10	11	2	1	13.8	22.5	
22-Jan-05	0	2	7	5	1	5	1	0	0	1	A	8	6	9	8	5	N	1	1	1	1	1	1	0	2.9	8.6	
23-Jan-05	1	1	1	A	0	0	0	0	0	0	1	3	2	1	2	1	0	0	0	0	0	0	0	D	0.5	3.0	
24-Jan-05	0	0	0	0	A	0	0	0	0	0	8	25	29	C	C	C	31	29	31	31	27	28	25	25	14.5	31.5	
25-Jan-05	6	1	4	2	5	A	0	0	0	1	4	8	8	11	11	8	2	0	0	0	0	0	0	0	3.1	11.2	
26-Jan-05	0	0	2	4	A	2	1	1	1	2	4	6	8	11	18	13	4	1	1	0	1	0	0	0	3.5	18.0	
27-Jan-05	0	0	0	0	0	A	0	0	1	1	6	15	16	18	17	18	20	17	17	19	21	22	23	23	11.0	22.9	
28-Jan-05	25	25	25	26	A	25	23	22	22	23	25	25	25	26	25	23	22	21	21	22	21	19	18	20	22.9	25.6	
29-Jan-05	16	12	16	A	19	11	3	7	9	11	10	10	13	11	12	8	2	1	1	1	1	1	0	23	8.6	23.3	
30-Jan-05	30	33	A	27	27	30	27	27	29	29	23	23	24	26	21	18	11	4	3	3	8	21	25	26	21.5	32.5	
31-Jan-05	20	A	19	24	24	24	18	21	27	34	38	39	42	42	41	39	40	34	32	16	25	12	38	40	29.9	42.1	
Hourly Avg	11.8	12.4	11.4	13.0	13.6	13.6	10.8	10.0	8.6	9.9	12.9	15.7	17.1	17.8	16.9	13.9	12.0	9.3	9.8	8.6	10.3	10.3	11.7	13.8			
Hourly Max	35.3	32.5	34.8	34.7	33.2	33.3	36.3	32.5	29.3	34.5	37.9	38.7	41.5	42.1	41.0	38.6	39.6	34.4	31.8	31.5	33.5	33.6	37.5	39.9			

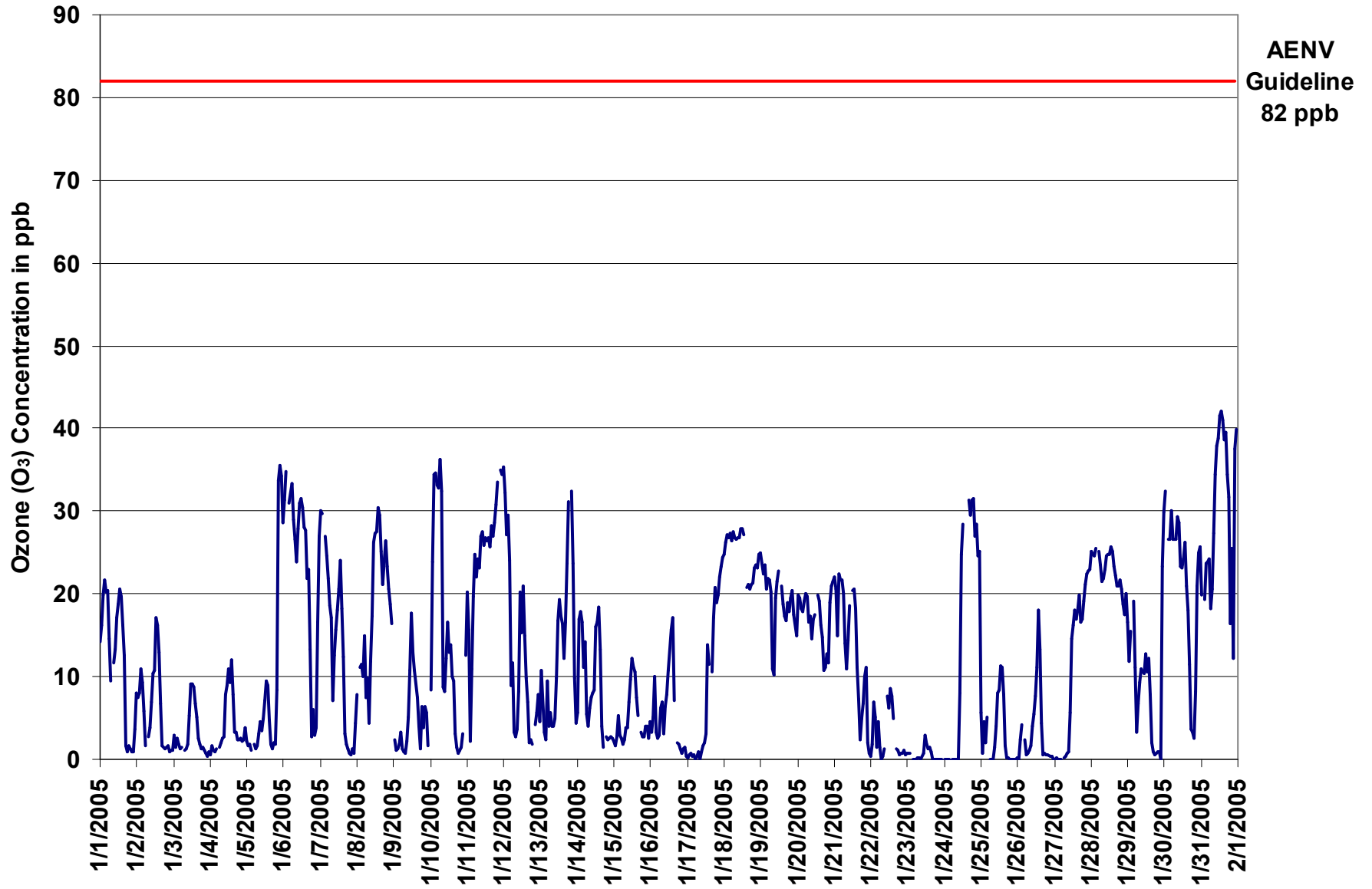


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Ozone (O₃)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Maximum 1-hr Value:	43.9	ppb	31-Jan	13:00 14:00
Maximum 24-hr Value:	35.2	ppb	31-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	41	35	25	15	5	1	1	15.7 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-Jan-05	18	21	22	23	22	22	20	15	A	17	16	20	21	23	22	20	19	3	2	6	4	2	2	6	15.1	23.4
2-Jan-05	12	10	11	13	12	9	3	A	6	6	12	13	15	22	21	17	13	2	2	3	3	2	3	2	9.2	22.2
3-Jan-05	5	3	4	3	3	3	A	2	2	4	8	10	11	13	9	6	5	3	3	5	2	2	2	2	4.7	12.9
4-Jan-05	1	4	2	2	2	A	2	3	4	6	10	11	14	13	14	10	6	7	7	4	4	3	5	9	6.3	14.3
5-Jan-05	3	3	3	2	A	3	2	3	5	7	4	7	9	12	14	9	4	3	8	5	27	37	39	38	10.7	39.4
6-Jan-05	36	36	36	A	35	35	33	28	29	31	35	35	33	31	32	27	28	19	10	18	8	10	26	31	27.9	36.2
7-Jan-05	32	32	A	31	32	28	22	22	15	20	22	24	26	29	22	19	8	3	6	2	2	5	2	11	18.1	32.3
8-Jan-05	14	A	15	15	14	19	11	16	10	22	24	29	30	32	33	32	29	25	28	30	29	26	26	21	23.0	33.3
9-Jan-05	A	4	4	3	5	7	2	2	1	4	8	14	20	18	14	9	7	2	13	10	8	8	3	A	7.6	20.2
10-Jan-05	17	35	36	37	38	37	39	38	21	17	23	23	19	18	16	14	5	3	3	2	5	11	A	20	20.8	39.2
11-Jan-05	25	22	13	22	28	27	25	27	26	30	29	29	29	29	30	30	30	30	32	33	36	A	37	36	28.5	36.7
12-Jan-05	37	34	34	35	29	20	18	6	4	5	14	26	21	26	22	13	11	3	5	3	A	7	9	11	17.1	37.1
13-Jan-05	10	15	6	4	15	7	14	11	11	8	18	20	22	22	19	18	26	31	34	A	34	33	21	9	17.8	34.3
14-Jan-05	14	26	23	22	23	21	13	11	13	14	11	11	24	19	24	20	7	3	A	4	4	5	8	5	14.1	25.5
15-Jan-05	4	3	6	13	5	4	3	4	6	6	12	12	15	13	12	10	8	A	4	4	5	7	8	8	7.5	14.7
16-Jan-05	12	10	12	16	7	6	5	11	11	7	8	9	17	21	21	9	A	5	7	3	2	3	3	1	9.0	21.3
17-Jan-05	1	2	5	2	1	1	2	3	1	3	3	3	5	36	14	A	20	21	22	21	21	24	25	25	11.4	36.1
18-Jan-05	27	28	28	28	29	28	29	29	29	28	29	30	29	29	A	23	25	24	25	24	25	26	26	27	27.2	29.9
19-Jan-05	27	25	25	25	24	24	24	23	19	15	23	24	25	A	24	21	21	20	21	21	24	23	22	21	22.7	26.6
20-Jan-05	22	22	21	20	22	22	23	20	20	19	20	21	A	22	22	19	17	14	17	17	17	21	22	23	20.1	23.1
21-Jan-05	24	23	22	24	24	25	23	19	13	17	22	A	23	22	21	17	11	5	16	11	14	15	9	2	17.4	24.6
22-Jan-05	2	7	9	8	5	10	5	1	3	4	A	9	8	10	9	8	N	2	3	2	2	2	2	1	5.1	10.4
23-Jan-05	2	2	1	A	1	2	3	1	4	1	2	5	4	2	3	2	1	1	1	1	4	1	1	0	2.0	5.2
24-Jan-05	1	1	0	0	A	2	1	4	1	1	18	29	31	C	C	C	33	32	34	34	31	34	29	29	17.3	33.9
25-Jan-05	22	5	14	6	11	A	4	7	1	4	6	11	10	14	15	16	4	2	3	2	1	1	3	1	7.1	22.2
26-Jan-05	2	2	11	12	A	6	3	1	2	4	5	7	13	16	22	20	10	2	2	2	2	2	2	1	6.5	21.7
27-Jan-05	1	2	1	1	1	A	2	1	2	2	11	18	18	20	21	21	22	20	20	22	24	25	25	26	13.2	25.9
28-Jan-05	27	27	27	27	A	27	26	25	25	25	27	26	26	27	27	26	25	24	24	24	24	22	21	22	25.2	27.2
29-Jan-05	19	13	20	A	22	21	11	11	12	14	16	14	15	14	16	14	3	5	2	2	2	2	2	31	12.1	31.0
30-Jan-05	33	35	A	32	32	33	30	29	35	36	30	31	27	31	25	23	16	9	8	10	15	25	34	34	26.6	36.2
31-Jan-05	28	A	26	30	28	29	26	31	33	38	41	41	43	44	43	41	43	39	38	25	36	27	40	42	35.2	43.9
Hourly Avg	15.9	15.6	15.1	16.3	17.4	17.0	14.2	13.5	12.2	13.4	16.9	18.7	20.1	21.7	20.2	17.8	15.8	12.1	13.3	11.6	13.8	13.7	15.2	16.5		
Hourly Max	37.1	35.5	36.2	37.0	38.2	37.0	39.2	38.0	34.7	37.9	40.9	40.6	43.3	43.9	42.8	41.2	42.6	38.7	37.6	33.7	36.1	37.4	40.1	41.6		

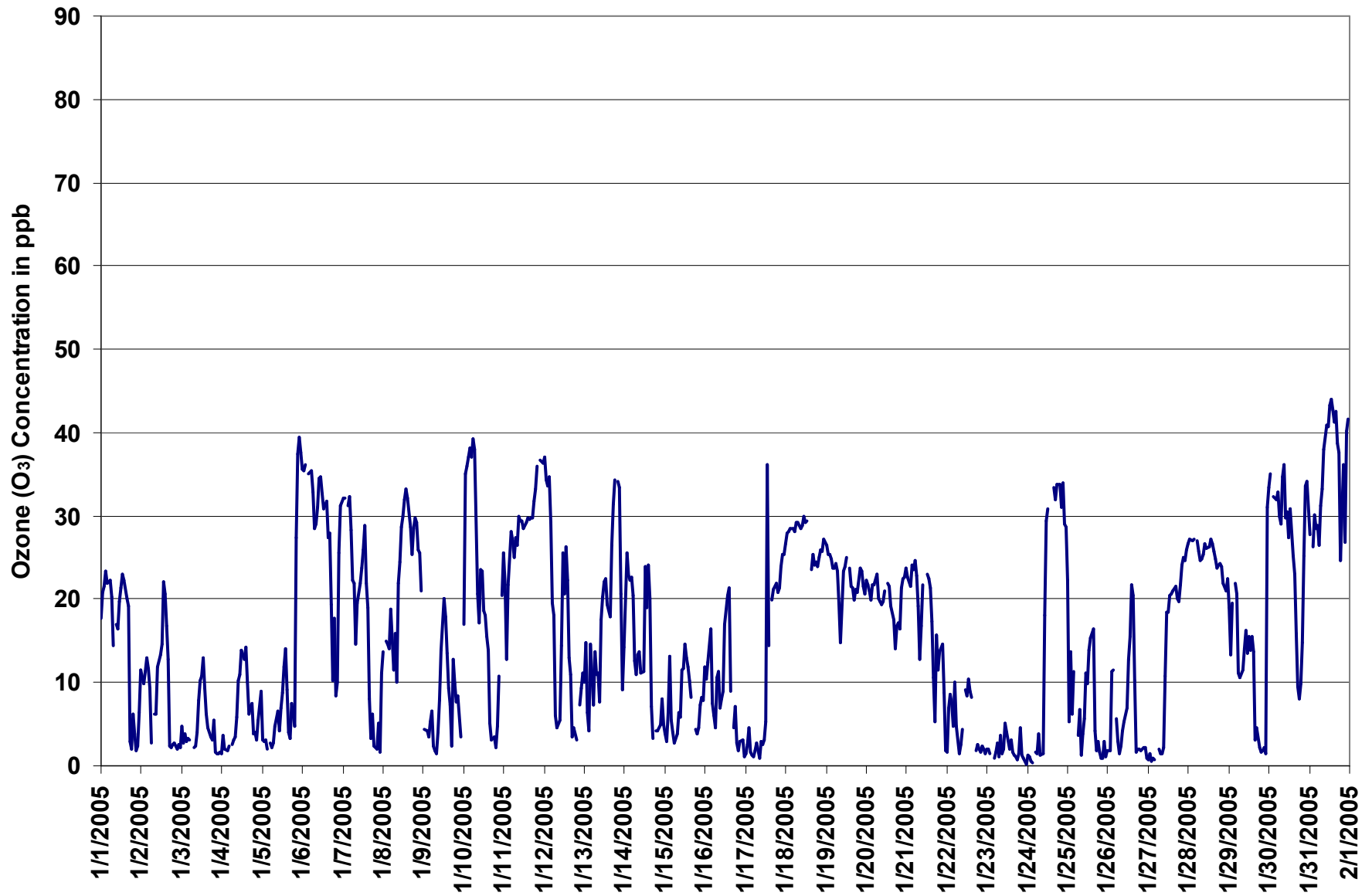


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	39.3	ppb	31-Jan	16:00	17:00		

Guideline Limit: Canada Wide Standard 8-hr 65 ppb

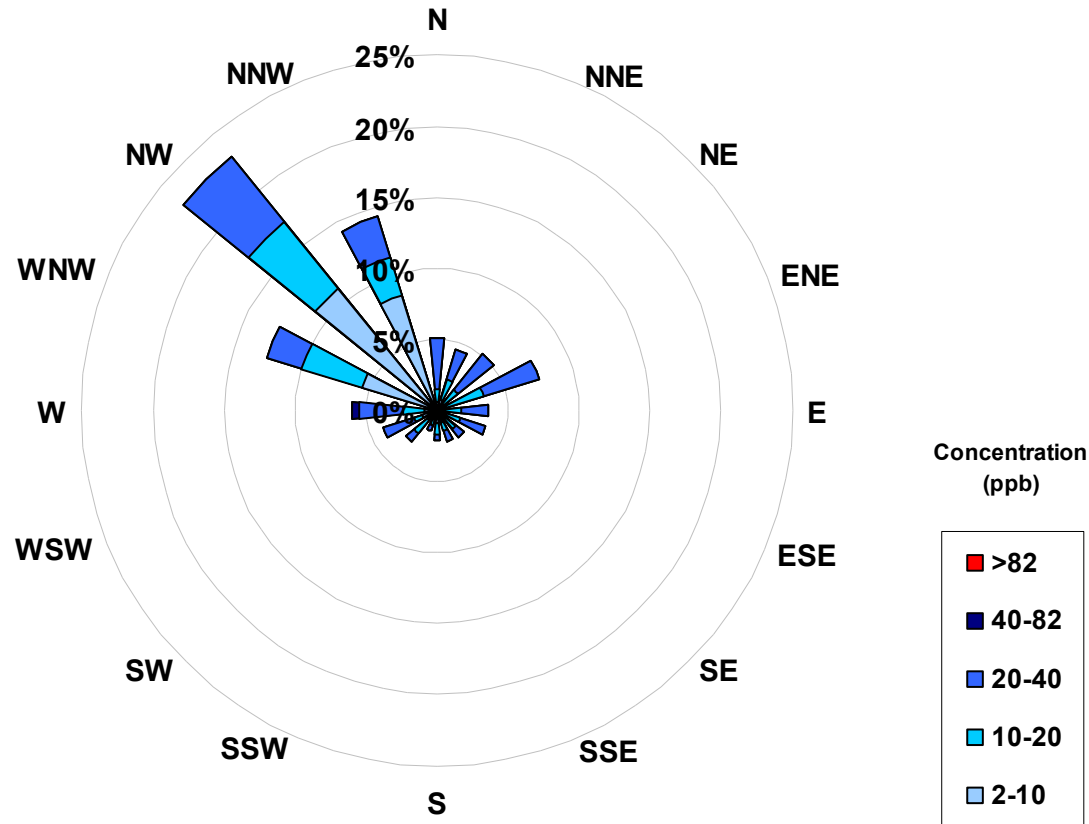
Percentile	99	95	75	50	25	5	1
	32.8	28.4	18.9	10.2	4.1	0.6	0.0

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
	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-Jan-05	14	15	16	16	16	17	18	17	18	17	16	15	15	15	16	17	16	15	13	11	9	7	5	3	14.1	17.5	
2-Jan-05	2	3	4	5	6	7	7	7	7	6	6	6	6	8	10	10	11	10	10	9	7	5	3	2	6.5	10.6	
3-Jan-05	1	1	2	2	2	2	2	2	2	2	2	3	4	5	5	6	6	6	6	5	4	3	2	1	3.1	6.0	
4-Jan-05	1	1	1	1	1	1	1	1	1	2	2	3	4	5	6	7	8	8	7	6	5	4	3	3	3.7	7.9	
5-Jan-05	3	2	2	2	2	2	2	2	2	2	2	3	3	4	5	6	6	5	5	5	5	8	11	15	4.4	14.8	
6-Jan-05	18	22	26	29	33	33	32	31	30	29	29	29	29	29	28	28	28	26	22	19	16	13	11	12	25.0	32.7	
7-Jan-05	13	15	17	20	23	25	26	24	21	18	18	17	16	17	17	16	16	14	12	10	8	5	3	2	15.5	25.6	
8-Jan-05	2	2	4	5	7	9	10	10	10	10	11	13	15	16	19	22	24	26	26	26	26	25	24	22	15.2	26.4	
9-Jan-05	21	19	16	12	9	6	4	2	2	2	2	3	5	6	8	8	9	9	9	8	7	6	5	4	7.5	21.5	
10-Jan-05	5	8	12	16	20	24	29	30	30	28	25	23	20	18	14	12	11	10	9	7	5	4	3	3	15.2	29.6	
11-Jan-05	6	8	8	9	12	15	16	17	18	19	22	24	25	25	26	26	27	27	27	28	28	29	30	31	21.0	31.1	
12-Jan-05	32	33	33	32	31	28	25	22	17	14	12	10	9	11	11	12	12	12	12	9	8	6	5	4	16.7	32.8	
13-Jan-05	4	5	5	5	6	6	6	6	5	5	6	7	9	10	12	13	14	17	19	20	21	22	21	20	11.0	22.3	
14-Jan-05	19	18	16	16	13	12	12	11	12	10	9	8	9	9	11	12	12	11	11	10	8	6	4	3	10.9	18.7	
15-Jan-05	2	2	2	3	3	3	3	3	3	3	4	4	5	6	8	8	8	9	8	7	6	5	4	3	4.8	9.0	
16-Jan-05	3	3	4	4	5	4	4	5	5	5	5	5	6	7	9	9	10	10	9	8	7	4	2	1	5.6	9.7	
17-Jan-05	1	1	1	1	1	1	0	0	0	0	1	1	1	3	4	5	6	9	11	14	16	17	19	20	5.5	19.7	
18-Jan-05	21	23	23	24	25	26	26	27	27	27	27	27	27	27	27	26	25	25	24	23	22	22	22	22	24.8	27.2	
19-Jan-05	23	23	23	24	23	23	23	22	21	19	18	18	19	18	18	18	19	20	20	19	19	19	18	18	20.2	23.6	
20-Jan-05	18	19	18	18	18	18	19	19	19	18	18	18	18	18	17	17	17	16	16	15	14	14	15	15	17.2	18.9	
21-Jan-05	16	17	18	19	20	21	21	20	18	18	18	17	17	17	17	16	16	14	12	11	10	9	7	6	15.6	20.8	
22-Jan-05	5	5	5	5	4	3	3	3	3	3	2	2	3	4	5	5	N	N	5	4	4	2	1	1	3.4	5.3	
23-Jan-05	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0.6	1.2	
24-Jan-05	0	0	0	0	N	N	N	0	0	0	1	5	8	9	N	N	N	N	N	N	N	29	29	N	29.1		
25-Jan-05	25	22	18	15	12	10	6	3	2	2	2	3	3	4	6	7	7	7	6	5	4	3	1	0	7.1	25.4	
26-Jan-05	0	0	0	1	1	1	1	1	2	2	2	2	3	4	6	8	8	8	8	7	6	5	3	1	3.4	8.2	
27-Jan-05	0	0	0	0	0	0	0	0	0	0	1	3	6	7	9	11	14	16	17	18	18	19	20	20	7.5	20.2	
28-Jan-05	21	22	23	24	24	24	25	24	24	24	24	24	24	24	24	24	24	24	24	23	23	23	22	21	20	23.2	24.5
29-Jan-05	20	18	18	17	17	16	14	12	11	11	10	10	9	9	10	11	10	8	7	6	4	3	2	4	10.8	19.6	
30-Jan-05	7	11	13	16	20	24	28	28	28	27	27	26	26	25	24	22	19	16	14	12	11	12	13	13	19.9	28.4	
31-Jan-05	14	15	17	20	23	23	22	21	22	24	26	28	30	33	35	38	39	39	38	36	34	30	30	30	27.8	39.3	
Hourly Avg	10.3	10.8	11.1	11.8	12.6	12.8	12.8	11.9	11.5	11.2	11.2	11.6	12.2	12.8	13.7	14.1	14.7	14.4	13.7	12.8	11.9	10.9	10.8	10.6			
Hourly Max	32.1	32.8	32.6	32.4	32.7	32.7	31.7	30.6	30.0	29.5	28.9	29.2	30.4	32.6	35.5	37.7	39.3	39.2	38.5	35.7	33.7	30.0	29.8	31.1			

Concentration Rose for the 1-hr O₃ Average Concentration Occurrences at the Henry Pirker Site for January 2004



Frequency Distribution of O ₃ in ppb			
Range			Frequency (hrs)
0	<	2	173
2	to	10	182
10	to	20	153
20	to	40	196
40	to	82	3
	>	82	0
Total Non-Zero Values			707

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

PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	2.77 ppm 23-Jan 13:00 14:00
Maximum 24-hr Average:	1.04 ppm 23-Jan

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

AIC Time:	34 hrs	Operational Time:	706 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%
Percentile	99	95	75
	1.5	1.0	0.5
	0.3	0.2	0.1
	0.0	Average	
	0.4 ppm		

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Jan-05	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	A	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.6	0.4	0.3	0.3	0.28	0.63	
2-Jan-05	0.3	0.3	0.3	0.2	0.2	0.3	0.3	A	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.5	0.4	0.4	0.3	0.3	0.35	0.64	
3-Jan-05	0.3	0.3	0.2	0.2	0.2	0.3	A	0.6	0.8	0.5	0.4	0.4	0.5	0.4	0.5	0.7	0.7	1.0	0.7	0.6	0.4	0.5	0.4	0.3	0.47	0.98	
4-Jan-05	0.3	0.3	0.3	0.3	0.3	A	0.3	0.6	0.8	0.4	0.3	0.4	0.5	0.5	0.4	0.4	0.5	1.1	0.9	0.6	0.4	0.4	0.5	0.8	0.49	1.08	
5-Jan-05	0.7	0.5	0.6	0.4	A	0.4	0.4	0.6	1.4	2.0	1.2	0.7	0.8	0.4	0.4	0.6	0.5	0.9	1.4	1.4	0.7	0.2	0.2	0.2	0.73	1.96	
6-Jan-05	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.5	0.3	0.3	0.3	0.2	0.1	0.24	0.46	
7-Jan-05	0.1	0.1	A	0.1	0.1	0.1	0.2	0.4	0.4	0.2	0.3	0.2	0.2	0.3	0.3	0.5	0.6	1.0	0.6	0.4	0.4	0.4	0.3	0.3	0.33	1.03	
8-Jan-05	0.3	A	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.28	0.41	
9-Jan-05	A	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.4	0.5	0.4	0.2	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.4	A	0.35	0.53	
10-Jan-05	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.7	0.6	A	1.0	1.6	0.8	0.5	0.5	0.3	0.3	0.2	A	0.42	1.62	
11-Jan-05	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.22	0.41	
12-Jan-05	0.1	0.1	0.1	0.1	0.1	0.4	0.4	1.3	0.6	0.7	0.5	0.3	0.5	0.3	0.4	0.5	0.5	0.4	0.5	0.4	0.3	A	0.3	0.3	0.40	1.31	
13-Jan-05	0.4	0.3	0.4	0.4	0.2	0.4	0.3	0.7	0.8	0.5	0.4	0.3	0.3	0.6	0.5	0.5	0.3	0.2	0.2	0.2	A	0.2	0.4	0.4	0.38	0.81	
14-Jan-05	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.8	0.4	0.4	0.6	0.8	0.5	0.3	0.4	0.3	0.6	0.6	0.5	A	0.5	0.5	0.7	0.6	0.44	0.78	
15-Jan-05	0.6	0.4	0.3	0.3	0.3	0.4	0.4	0.7	0.7	0.8	0.8	1.1	1.1	1.1	1.0	0.8	0.7	0.6	A	0.6	0.6	0.5	0.4	0.6	0.65	1.11	
16-Jan-05	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.5	0.5	0.3	0.3	0.4	0.4	A	0.8	0.6	0.5	0.5	0.6	0.5	0.43	0.77	
17-Jan-05	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.8	0.5	0.6	0.7	0.8	0.8	0.4	0.4	0.5	A	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.43	0.84	
18-Jan-05	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.17	0.30
19-Jan-05	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.33
20-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8	0.3	0.3	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.76
21-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	0.4	0.3	0.3	0.3	A	0.2	0.3	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.4	0.30	0.81	
22-Jan-05	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	A	0.5	0.3	0.3	0.3	C	C	C	0.3	0.3	0.3	0.4	0.5	0.3	0.31	0.49	
23-Jan-05	0.5	0.4	0.4	A	0.3	0.4	0.6	1.1	1.3	0.6	0.7	0.8	1.5	2.8	2.4	1.6	2.2	1.2	1.3	1.2	0.7	0.9	0.4	0.5	1.04	2.77	
24-Jan-05	0.7	1.0	1.1	1.0	A	1.2	1.6	1.0	1.0	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.55	1.63	
25-Jan-05	0.4	0.3	0.3	0.2	0.2	A	0.4	1.0	0.6	0.3	0.5	0.4	0.5	0.3	0.3	0.4	0.7	0.8	0.8	0.7	0.5	0.4	0.4	0.3	0.46	1.00	
26-Jan-05	0.3	0.3	0.2	0.2	A	0.3	0.4	0.6	0.9	0.6	0.5	A	N	0.3	0.2	0.3	0.5	0.8	0.7	0.5	0.4	0.3	0.4	0.4	0.44	0.89	
27-Jan-05	0.5	0.6	0.5	0.5	0.5	A	0.5	0.9	0.7	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.38	0.87	
28-Jan-05	0.2	0.2	0.2	0.2	A	0.3	0.2	0.5	0.3	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	0.2	0.24	0.51
29-Jan-05	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	1.2	1.4	1.1	1.4	0.9	0.3	0.52	1.41	
30-Jan-05	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.6	0.7	0.6	0.8	0.5	0.3	0.3	0.3	0.36	0.78	
31-Jan-05	0.4	A	0.3	0.2	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.36	
Hourly Avg	0.31	0.29	0.29	0.27	0.23	0.28	0.35	0.54	0.50	0.44	0.40	0.39	0.43	0.42	0.40	0.45	0.50	0.51	0.52	0.47	0.39	0.36	0.35	0.31			
Hourly Max	0.75	1.02	1.12	1.03	0.45	1.22	1.63	1.31	1.36	1.96	1.21	1.10	1.46	2.77	2.43	1.61	2.16	1.17	1.39	1.44	1.05	1.41	0.85	0.80			

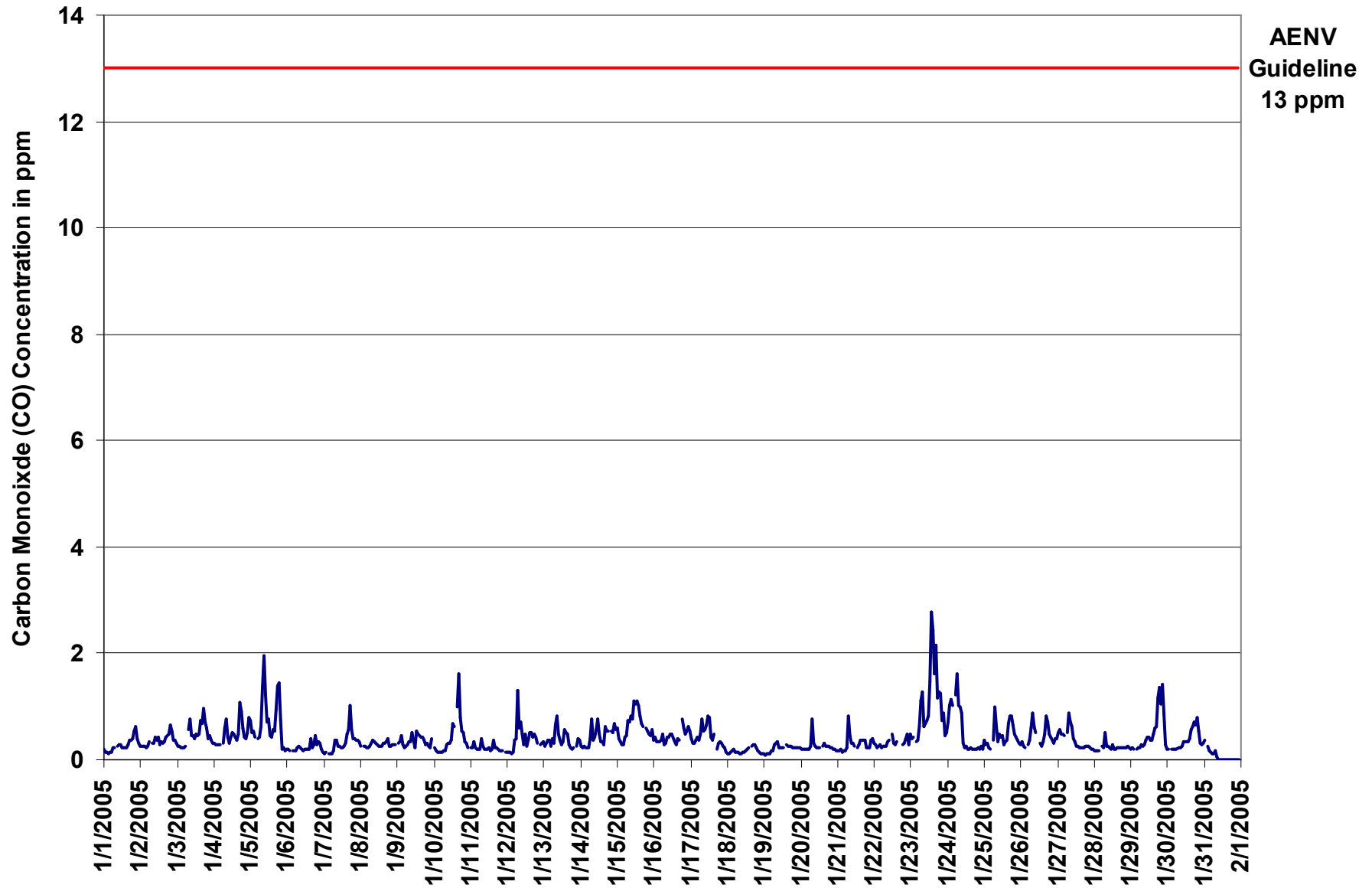


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Carbon Monoxide (CO)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005
 Summary

Maximum 1-hr Value:	15.4	ppm	25-Jan	7:00 8:00
Maximum 24-hr Value:	1.8	ppm	23-Jan	

AIC Time:	34 hrs	Operational Time:	706 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	4.0	2.1	0.9	0.5	0.4	0.2	0.0	0.8 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	0.5	0.6	0.2	0.2	0.3	0.3	0.8	0.5	A	0.5	0.4	0.6	0.3	0.3	0.3	0.4	0.5	0.8	0.5	0.8	1.3	2.3	0.6	0.4	0.59	2.29	
2-Jan-05	0.4	0.4	0.4	0.3	0.3	0.4	0.7	A	0.4	0.5	0.7	0.6	0.7	0.4	0.5	0.4	0.5	0.6	0.7	0.8	0.7	0.5	0.5	0.4	0.51	0.81	
3-Jan-05	0.4	0.3	0.3	0.3	0.3	0.3	A	1.0	1.3	0.6	0.9	0.7	0.7	0.7	0.8	1.2	1.0	1.9	1.3	2.7	0.6	1.2	0.5	0.4	0.84	2.72	
4-Jan-05	0.4	0.4	0.4	0.4	0.4	A	0.5	1.4	1.2	0.7	0.4	0.7	1.1	1.0	0.6	0.5	0.9	1.5	1.9	1.6	0.6	0.5	0.9	1.1	0.83	1.85	
5-Jan-05	1.0	0.6	0.8	0.5	A	0.6	0.6	1.4	2.2	2.6	1.7	0.9	1.1	0.8	0.6	1.0	0.9	2.3	3.5	6.3	2.0	0.3	0.5	0.3	1.41	6.29	
6-Jan-05	0.3	0.3	0.3	A	0.6	0.3	2.0	1.5	0.4	0.4	0.3	0.4	0.5	0.3	0.5	1.9	0.5	0.5	0.8	0.6	0.9	0.6	0.3	0.3	0.63	2.01	
7-Jan-05	0.2	0.2	A	0.2	0.2	0.3	0.3	2.2	0.7	0.4	0.4	0.4	0.3	0.4	0.4	3.0	0.8	1.7	1.5	0.7	0.6	0.5	0.6	0.6	0.72	3.00	
8-Jan-05	0.4	A	0.4	0.3	0.3	0.5	0.4	0.9	0.6	0.8	0.7	0.5	0.5	0.4	0.4	0.9	0.4	0.6	5.8	0.5	0.5	0.4	0.4	0.4	0.74	5.77	
9-Jan-05	A	0.6	0.5	1.9	0.4	0.3	0.4	0.4	0.6	0.6	0.9	0.7	0.3	0.8	0.7	0.6	0.7	0.6	0.4	0.4	0.3	0.4	1.7	A	0.64	1.93	
10-Jan-05	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.5	0.5	1.1	1.9	1.1	A	2.4	3.3	1.6	1.1	0.9	0.5	0.6	0.4	A	0.84	3.34	
11-Jan-05	0.7	0.3	0.6	0.3	0.3	0.7	0.6	1.7	0.6	0.5	0.3	0.6	1.1	0.3	0.5	2.8	0.5	0.5	0.3	0.3	0.3	0.3	A	0.2	0.61	2.79	
12-Jan-05	0.2	0.2	0.2	0.2	0.3	1.0	4.2	4.0	1.4	1.3	0.9	1.3	0.9	0.6	1.0	1.0	0.9	0.6	0.7	0.9	0.4	A	0.4	0.4	1.00	4.20	
13-Jan-05	0.5	0.4	0.8	0.5	0.5	0.7	0.5	1.9	1.6	1.0	0.7	0.4	0.6	1.0	0.8	0.7	0.5	0.3	0.3	0.5	A	0.4	0.9	0.8	0.71	1.92	
14-Jan-05	0.4	0.3	0.6	0.8	0.7	0.3	1.0	1.8	1.0	2.1	1.4	1.3	1.7	0.6	1.0	0.5	1.0	1.0	1.0	A	1.2	1.0	1.8	1.4	1.04	2.07	
15-Jan-05	1.2	0.6	0.5	0.4	0.4	1.2	0.8	2.1	1.2	1.8	1.5	1.8	1.4	1.7	1.4	1.0	1.4	2.1	A	0.8	0.9	0.6	0.8	1.3	1.16	2.10	
16-Jan-05	0.7	0.9	0.4	0.5	0.5	0.6	0.6	0.4	0.4	0.7	0.7	0.7	0.7	0.5	0.4	0.5	0.5	A	3.8	1.4	0.6	0.9	1.0	0.7	0.79	3.81	
17-Jan-05	0.5	0.5	0.4	0.6	0.5	0.5	0.8	1.2	1.0	0.9	1.0	1.3	1.1	0.7	0.5	2.2	A	0.3	0.6	0.6	0.5	0.4	0.4	0.2	0.73	2.18	
18-Jan-05	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.3	0.8	0.5	A	0.4	0.5	0.8	0.5	0.3	0.3	0.3	0.2	0.35	0.79	
19-Jan-05	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.9	0.6	0.5	0.3	0.4	0.5	0.3	A	0.5	0.3	0.3	0.4	0.5	0.5	0.3	0.4	0.3	0.40	0.92	
20-Jan-05	0.4	0.3	0.3	0.5	0.6	0.7	0.6	2.9	0.6	0.4	0.4	0.4	0.6	A	0.9	1.4	0.6	0.5	0.4	0.4	0.8	0.3	0.3	0.2	0.62	2.93	
21-Jan-05	0.3	0.2	0.3	0.2	0.2	0.2	0.5	3.5	2.1	0.8	0.9	0.5	A	0.5	0.4	0.8	0.6	0.7	1.7	0.4	0.4	0.3	0.6	0.5	0.72	3.46	
22-Jan-05	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.5	A	0.6	0.5	0.4	0.6	C	C	C	0.4	0.8	0.6	0.7	0.4	0.47	0.82	
23-Jan-05	1.0	0.6	0.7	A	0.5	0.7	1.0	2.4	3.0	1.1	1.1	4.0	2.2	3.7	3.2	3.2	3.1	1.9	2.1	2.5	1.4	1.5	0.6	0.8	1.84	4.01	
24-Jan-05	1.0	1.3	1.2	1.3	A	1.7	2.1	4.0	1.7	2.0	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.3	0.92	4.01	
25-Jan-05	0.6	0.4	0.5	0.4	0.3	A	0.6	15.4	4.5	0.6	0.8	0.7	0.8	0.6	0.6	0.9	1.8	2.1	2.6	1.3	0.7	0.8	0.7	0.5	1.66	15.42	
26-Jan-05	0.4	0.6	0.4	0.4	A	0.5	0.5	0.9	1.6	1.1	1.0	A	N	0.5	0.4	0.5	0.7	1.8	2.0	0.9	0.7	0.5	1.1	0.7	0.82	2.02	
27-Jan-05	0.7	1.1	0.6	0.6	0.6	A	0.8	1.6	1.1	1.5	1.2	1.0	0.7	0.6	0.4	0.4	0.3	0.5	0.4	0.4	0.8	0.3	0.3	0.2	0.70	1.65	
28-Jan-05	0.3	0.3	0.2	0.3	A	2.3	0.5	1.9	0.4	1.0	1.0	0.4	1.2	0.4	0.3	0.4	0.5	0.4	0.4	0.3	0.4	0.4	1.2	0.8	0.66	2.34	
29-Jan-05	0.3	0.3	0.3	A	0.3	0.4	0.4	0.7	0.4	0.5	0.7	0.5	0.5	0.6	0.5	0.7	0.9	1.4	2.0	2.2	1.7	2.1	1.4	0.8	0.84	2.17	
30-Jan-05	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.6	1.2	1.0	0.5	0.5	0.5	1.0	0.9	0.9	1.1	0.8	1.3	0.7	0.5	0.4	0.5	0.63	1.25
31-Jan-05	0.7	A	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.13	0.68	
Hourly Avg	0.49	0.45	0.44	0.46	0.37	0.57	0.77	1.95	1.09	0.87	0.74	0.80	0.80	0.70	0.66	1.05	0.85	0.98	1.32	1.04	0.71	0.64	0.67	0.53			
Hourly Max	1.20	1.30	1.24	1.93	0.68	2.34	4.20	15.42	4.48	2.56	1.71	4.01	2.20	3.74	3.20	3.20	3.34	2.25	5.77	6.29	2.00	2.29	1.77	1.38			

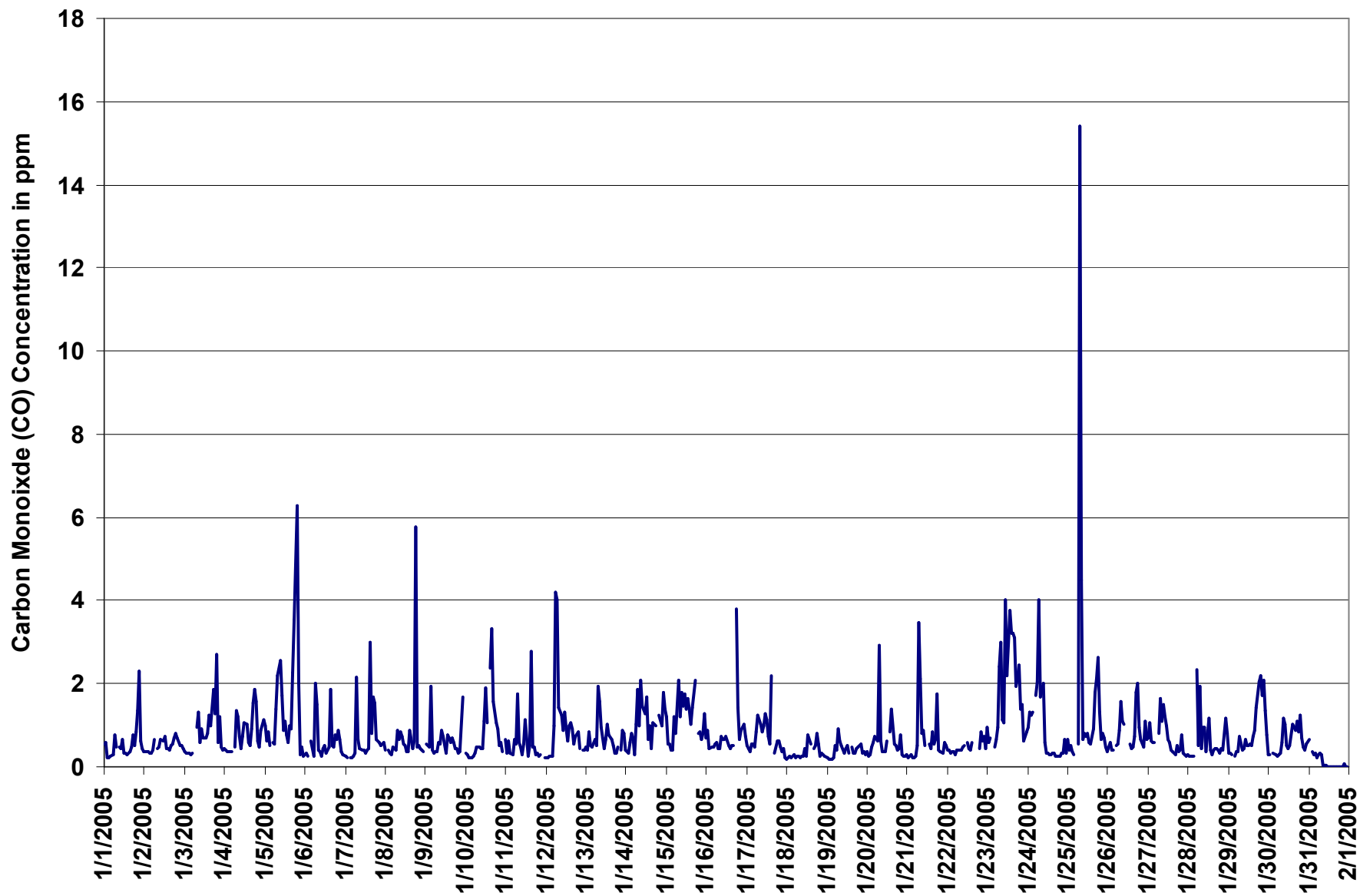


Figure 10. PASZA - Henry Pirker Carbon Monoxide 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	1.77	ppm	23-Jan	19:00	20:00		

Guideline Limit: Alberta Environment: 8-hr 5 ppm

Percentile	99	95	75	50	25	5	1
	1.35	0.84	0.48	0.33	0.24	0.16	0.00

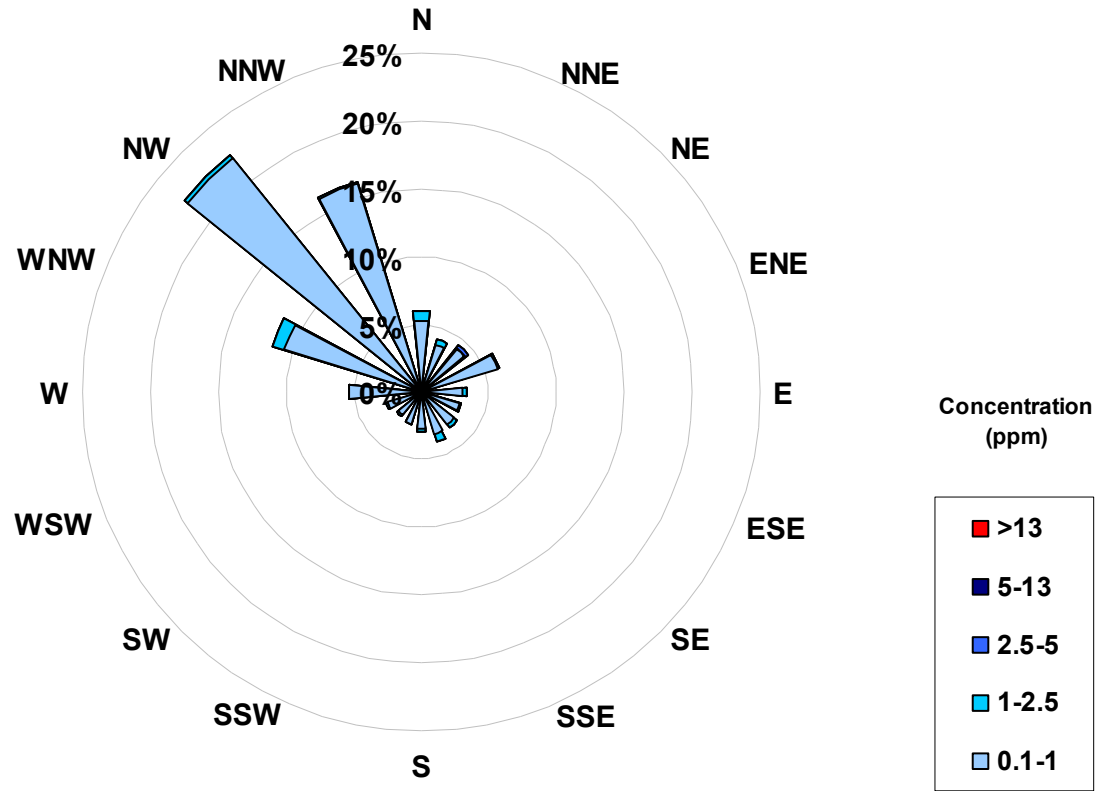
Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.24	0.41	
2-Jan-05	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.35	0.44	
3-Jan-05	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.46	0.64	
4-Jan-05	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.46	0.65	
5-Jan-05	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.8	0.9	1.0	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.74	0.95	
6-Jan-05	0.7	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.27	0.67	
7-Jan-05	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.30	0.53	
8-Jan-05	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30	0.46	
9-Jan-05	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.34	0.41	
10-Jan-05	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	0.4	0.4	0.4	0.5	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.42	0.82
11-Jan-05	0.4	0.3	0.3	0.3	0.3	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	0.2	0.25	0.42	
12-Jan-05	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.37	0.58	
13-Jan-05	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.38	0.50	
14-Jan-05	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.41	0.57	
15-Jan-05	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.6	0.6	0.65	0.92	
16-Jan-05	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.43	0.56	
17-Jan-05	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.48	0.64	
18-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.24	
19-Jan-05	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.26	
20-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.26	0.32	
21-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.28	0.38	
22-Jan-05	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	N	N	N	N	N	N	N	N	N	0.34	
23-Jan-05	N	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.7	0.9	1.2	1.4	1.5	1.6	1.6	1.7	1.8	1.7	1.4	1.2	1.1	0.99	1.77	
24-Jan-05	0.9	0.9	0.8	0.8	0.8	0.9	1.0	1.1	1.1	1.1	1.0	0.9	0.8	0.7	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.65	1.14	
25-Jan-05	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.42	0.58	
26-Jan-05	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	N	N	N	N	N	N	N	N	0.5	0.5	0.5	0.5	0.5	N	0.52	
27-Jan-05	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.42	0.59	
28-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24	0.28	
29-Jan-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	0.9	0.9	0.41	0.94	
30-Jan-05	0.9	0.8	0.8	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.44	0.87	
31-Jan-05	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.49	
Hourly Avg	0.41	0.38	0.35	0.32	0.31	0.29	0.29	0.32	0.35	0.37	0.39	0.40	0.41	0.43	0.44	0.42	0.43	0.44	0.45	0.46	0.46	0.45	0.44	0.43			
Hourly Max	0.88	0.86	0.84	0.81	0.82	0.87	1.04	1.11	1.14	1.12	1.01	0.95	0.93	1.18	1.40	1.47	1.58	1.65	1.72	1.77	1.68	1.44	1.19	1.06			

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



Frequency Distribution of CO in ppm			
Range		Frequency (hrs)	
0	< 0.1	17	
0.1	to 1	656	
1	to 2.5	32	
2.5	to 5	1	
5	to 13	0	
	> 13	0	
Total Non-Zero Values			706

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

PASZA - Henry Pirker Total Hydrocarbon Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Total HydroCarbons (THC)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	4.1	ppm	5-Jan	9:00 10:00
Maximum 24-hr Average:	3.4	ppm	15-Jan	

Guideline Limit: Alberta Environment:

1-hr	na	ppm
------	----	-----

24-hr	na	ppm
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AIC Time:	32 hrs		Operational Time:	708 hrs				
Calibration Time:	3 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	Average
	3.8	3.4	2.9	2.4	2.1	2.0	1.9	2.5 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																								24-hour Average	Daily Maximum	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00
1-Jan-05	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	2.82	3.25
2-Jan-05	2.4	2.4	2.5	2.5	2.5	2.7	2.7	2.8	A	2.9	3.0	3.0	3.0	2.8	2.8	2.8	2.9	3.0	2.9	3.3	3.2	3.0	3.0	2.4	2.4	2.76	3.35
3-Jan-05	2.9	3.0	3.1	3.2	3.3	3.4	3.3	A	3.3	3.2	3.1	2.8	2.8	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.4	2.5	2.4	2.4	2.61	2.90
4-Jan-05	2.4	2.4	2.4	2.4	2.4	2.4	A	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.7	2.7	2.8	2.8	2.8	2.9	2.9	3.13	3.53
5-Jan-05	3.0	3.0	3.2	3.3	3.4	A	3.4	3.5	3.4	3.3	3.2	3.2	2.9	3.0	2.8	2.9	3.0	3.0	2.9	2.9	2.9	3.0	3.1	3.5	3.13	3.53	
6-Jan-05	3.3	3.1	3.2	3.1	A	3.3	3.4	3.5	3.7	4.1	3.6	3.5	3.5	3.4	3.3	3.4	3.5	3.6	3.6	3.2	2.4	1.9	1.9	1.9	3.20	4.15	
7-Jan-05	2.1	2.2	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.13	2.27	
8-Jan-05	2.1	2.0	A	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.5	2.4	2.6	2.5	2.5	2.6	2.7	2.8	2.8	2.38	2.83	
9-Jan-05	2.9	A	3.0	2.9	2.9	2.8	2.7	2.6	2.6	2.3	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.34	2.96	
10-Jan-05	A	2.2	2.3	2.4	2.4	2.3	2.4	2.5	2.8	2.6	2.6	2.8	3.0	3.1	2.8	2.7	2.7	2.9	3.0	3.1	3.1	3.1	2.9	A	2.72	3.14	
11-Jan-05	2.6	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.4	2.4	2.7	2.4	2.3	2.4	2.3	2.5	A	2.25	2.73	
12-Jan-05	2.6	2.7	2.7	2.6	2.4	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.0	2.14	2.75
13-Jan-05	2.0	2.1	2.1	2.1	2.2	2.4	2.4	2.7	2.5	2.8	2.6	2.6	2.7	2.6	2.7	2.7	2.8	2.7	2.8	2.9	A	2.9	3.1	3.3	2.59	3.28	
14-Jan-05	3.3	3.1	3.2	3.1	3.0	3.0	2.9	3.0	3.0	2.9	2.8	2.7	2.6	2.6	2.5	2.4	2.2	2.1	2.1	A	2.1	2.2	2.3	2.4	2.68	3.30	
15-Jan-05	2.3	2.3	2.3	2.4	2.4	2.4	2.6	2.9	2.8	2.9	2.9	2.8	2.6	2.7	2.7	2.6	3.7	3.3	A	3.0	3.0	2.9	3.1	3.3	2.76	3.67	
16-Jan-05	3.4	3.3	3.2	3.3	3.4	3.6	3.7	3.8	3.8	3.7	3.7	3.8	3.4	3.3	3.5	3.3	3.3	A	3.4	3.3	3.3	3.1	3.2	3.3	3.44	3.82	
17-Jan-05	3.1	3.4	3.4	3.7	3.6	3.5	3.4	3.5	3.5	3.3	3.2	2.8	2.6	2.6	2.6	2.8	A	2.8	3.0	2.8	2.8	3.0	2.9	2.9	3.14	3.69	
18-Jan-05	2.8	2.8	2.8	2.9	2.9	2.9	2.9	3.0	2.8	2.8	2.9	3.2	2.9	2.6	2.6	A	2.5	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.63	3.15	
19-Jan-05	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.22	
20-Jan-05	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.12	2.20	
21-Jan-05	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	A	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.25	2.38
22-Jan-05	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	A	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.24	2.37	
23-Jan-05	2.3	2.3	2.4	2.5	2.6	2.2	2.3	2.3	2.3	2.4	A	2.6	2.7	2.4	2.5	2.5	N	2.6	2.6	2.6	2.8	2.8	3.1	2.9	2.54	3.13	
24-Jan-05	2.9	2.9	3.0	A	2.9	2.9	2.9	3.3	3.2	2.8	2.8	2.8	3.2	3.8	4.1	3.7	C	C	C	3.2	2.8	3.0	2.5	2.7	3.07	4.11	
25-Jan-05	2.8	3.2	3.3	3.5	A	3.8	4.1	3.3	3.4	3.3	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.52	4.06	
26-Jan-05	2.2	2.2	2.3	2.4	2.3	A	2.6	2.8	2.8	2.9	2.9	2.8	2.9	2.8	2.6	2.6	2.8	2.9	2.9	2.8	2.9	2.9	2.9	2.8	2.70	2.94	
27-Jan-05	2.7	2.8	2.7	2.7	A	2.7	2.8	2.8	3.0	2.7	2.8	3.0	2.6	2.5	2.3	2.3	2.4	2.7	2.6	2.5	2.4	2.4	2.6	2.7	2.64	2.98	
28-Jan-05	2.9	2.9	2.8	2.8	3.1	A	2.8	2.9	2.9	2.8	2.3	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.42	3.10
29-Jan-05	2.1	2.1	2.1	2.1	A	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.18	
30-Jan-05	2.1	2.2	2.1	A	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.5	2.5	2.8	2.8	2.7	2.9	2.8	2.1	2.33	2.85
31-Jan-05	1.9	1.9	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.3	2.4	2.4	2.4	2.4	2.5	2.3	2.1	2.1	2.2	2.17	2.49	
Hourly Avg	2.2	A	2.1	2.0	2.0	2.0	2.1	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.4	2.5	2.4	2.08	2.45	
Hourly Max	2.53	2.54	2.59	2.60	2.55	2.55	2.62	2.66	2.67	2.64	2.57	2.56	2.53	2.50	2.49	2.48	2.50	2.49	2.51	2.54	2.48	2.52	2.53	2.51			

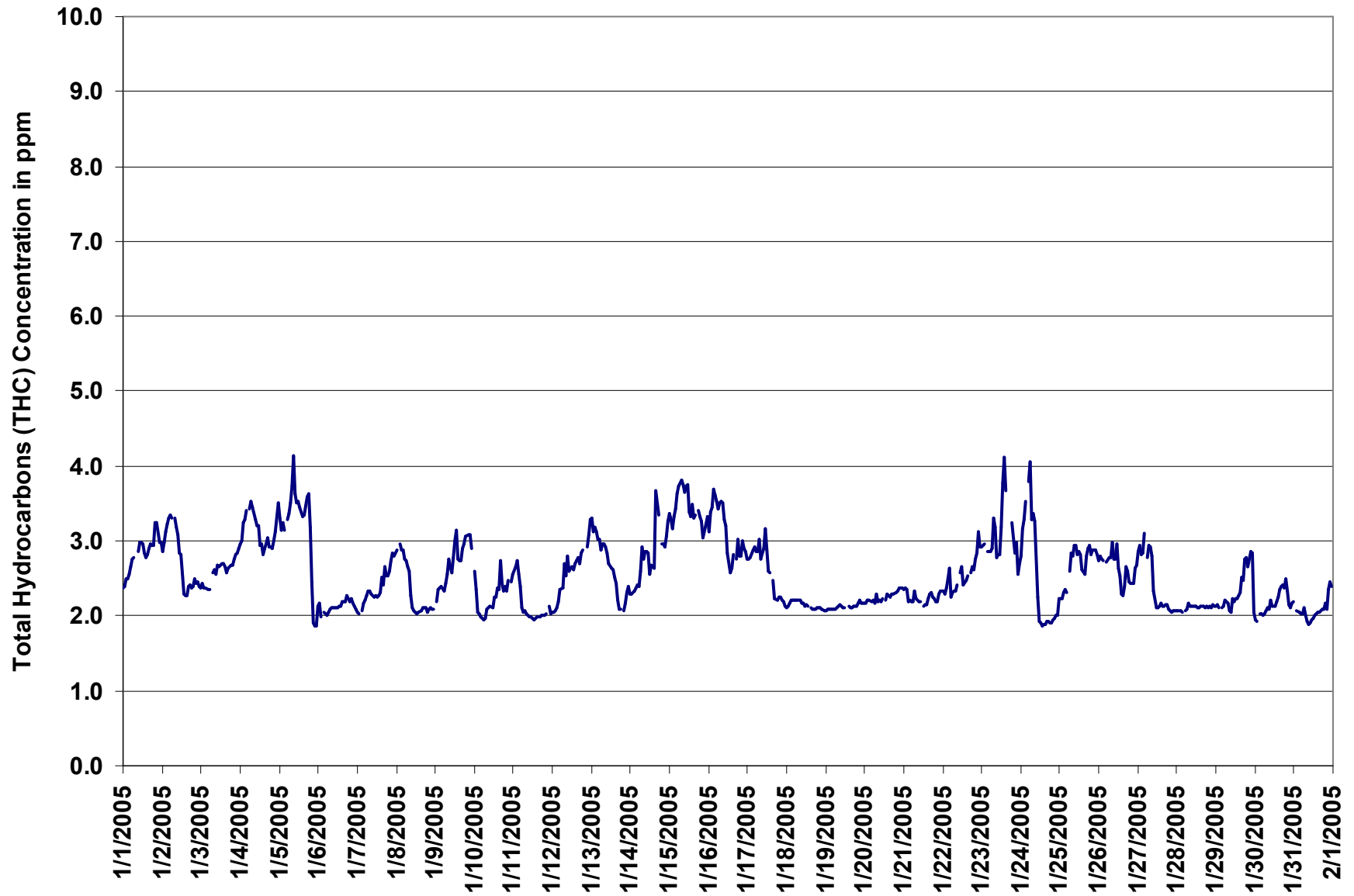


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Maximum 1-hr Value:	11.5	ppm	14-Jan	16:00 17:00
Maximum 24-hr Value:	3.8	ppm	15-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	5.1	3.8	3.1	2.7	2.2	2.1	2.0	2.8 ppm

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-Jan-05	2.5	2.5	2.5	2.5	2.6	2.7	2.8	2.9	A	2.9	3.1	3.1	3.0	2.9	2.8	2.9	3.0	3.0	3.0	3.1	3.5	3.6	3.2	3.1		2.92	3.55	
2-Jan-05	2.9	3.1	3.2	3.3	3.4	3.4	3.4	A	3.3	3.3	3.3	3.1	3.0	2.6	2.3	2.3	3.2	3.1	2.4	2.5	2.7	2.7	2.5	2.5		2.94	3.41	
3-Jan-05	2.4	2.5	2.4	2.4	2.4	2.5	A	2.6	2.8	2.7	2.8	2.7	2.8	2.8	2.9	2.9	2.7	2.9	2.8	3.3	2.8	3.0	2.9	3.0		2.74	3.26	
4-Jan-05	3.0	3.2	3.3	3.3	3.4	A	3.5	3.7	3.7	3.3	3.3	3.3	3.2	3.0	2.9	3.0	3.0	3.2	3.1	3.0	3.1	3.1	3.4	3.8		3.27	3.76	
5-Jan-05	3.5	3.4	3.4	3.2	A	3.4	3.4	3.8	4.5	5.3	3.8	3.6	3.6	3.6	3.5	3.5	3.6	4.0	5.5	4.4	3.3	2.0	1.9	1.9		3.56	5.47	
6-Jan-05	2.3	2.3	2.1	A	2.1	2.0	2.3	2.3	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.9	2.4	2.3	2.4	2.6	2.4	2.3	2.2	2.1		2.27	2.89	
7-Jan-05	2.1	2.0	A	2.1	2.3	2.3	2.3	2.7	2.4	2.3	2.3	2.3	2.3	2.3	2.7	3.4	2.5	2.9	2.8	2.6	2.7	2.8	2.9	2.9		2.52	3.42	
8-Jan-05	3.0	A	3.1	2.9	2.9	2.8	2.8	2.8	2.7	2.6	2.2	2.1	2.1	2.1	2.2	2.3	2.2	2.5	3.1	2.1	2.1	2.2	2.1	2.1		2.49	3.12	
9-Jan-05	A	2.3	2.5	2.7	2.5	2.4	2.5	2.6	3.1	2.8	2.8	2.9	3.1	3.3	3.1	2.8	2.9	3.0	3.0	3.2	3.1	3.1	3.1	A		2.86	3.33	
10-Jan-05	2.7	2.7	2.1	2.1	2.0	2.0	2.0	2.0	2.3	2.2	2.2	2.4	2.5	2.3	2.6	2.9	3.7	2.7	2.7	2.5	2.4	2.6	A	2.5		2.44	3.66	
11-Jan-05	2.6	2.8	3.0	2.7	2.6	2.2	2.1	2.4	2.2	2.0	2.0	2.1	2.3	2.0	2.1	2.4	2.1	2.1	2.1	2.0	2.1	A	2.7	2.1		2.28	2.97	
12-Jan-05	2.1	2.1	2.2	2.1	2.4	2.5	3.2	3.4	2.8	3.0	2.7	3.3	2.8	2.7	2.8	2.9	3.0	2.8	2.9	2.9	A	3.0	3.3	3.4		2.79	3.35	
13-Jan-05	3.4	3.2	3.4	3.4	3.1	3.3	3.0	3.3	3.2	3.1	3.1	2.8	2.7	2.7	2.6	2.5	2.4	2.1	2.2	A	2.1	2.3	2.4	2.6		2.84	3.45	
14-Jan-05	2.5	2.5	2.6	3.0	2.9	2.5	2.9	3.5	3.0	3.2	3.2	3.0	3.0	2.7	2.8	2.7	11.5	10.4	A	3.3	3.6	3.1	3.4	3.7		3.69	11.49	
15-Jan-05	4.0	3.5	3.4	3.7	3.5	4.0	4.1	4.3	4.1	4.5	4.5	4.1	3.7	3.6	3.7	3.4	3.5	A	3.5	3.4	3.7	3.1	3.5	3.6		3.77	4.54	
16-Jan-05	3.3	3.8	3.5	4.1	3.9	3.6	3.6	3.8	3.9	3.7	3.4	3.3	3.2	2.7	2.8	3.1	A	2.9	5.2	3.2	3.0	3.3	3.1	3.2		3.45	5.16	
17-Jan-05	2.9	2.9	3.0	3.0	3.1	3.0	3.0	3.2	3.0	3.2	3.1	4.5	3.1	2.7	2.7	A	2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.2		2.82	4.47	
18-Jan-05	2.1	2.2	2.2	2.3	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.4	A	2.2	2.1	2.2	2.2	2.2	2.1	2.2	2.1		2.20	2.37	
19-Jan-05	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2		2.18	2.32	
20-Jan-05	2.2	2.2	2.3	2.2	2.3	2.3	2.2	3.2	2.3	2.3	2.2	2.3	A	2.2	2.4	2.6	2.4	2.4	2.3	2.4	2.4	2.5	2.4	2.4		2.37	3.15	
21-Jan-05	2.4	2.4	2.4	2.3	2.3	2.2	2.3	2.9	2.5	2.3	2.5	A	2.3	2.2	2.2	2.4	2.4	2.6	2.4	2.3	2.2	2.2	2.4	2.4		2.36	2.91	
22-Jan-05	2.4	2.3	2.6	2.7	2.8	2.3	2.3	2.4	2.4	2.5	A	3.4	3.0	2.6	2.6	2.7	N	3.0	2.9	2.8	3.0	3.2	3.3	3.0		2.73	3.38	
23-Jan-05	3.0	3.1	3.1	A	3.2	3.3	3.2	3.8	3.8	3.2	2.9	3.2	3.5	4.4	4.9	4.7	C	C	C	4.2	3.9	3.8	2.9	3.9		3.60	4.92	
24-Jan-05	3.1	3.7	3.8	3.9	A	4.2	5.1	5.4	3.8	3.5	2.7	2.0	2.0	1.9	2.0	2.0	1.9	2.0	1.9	2.0	1.9	2.0	2.1	2.3	2.2		2.84	5.39
25-Jan-05	2.4	2.4	3.5	2.7	2.8	A	3.0	5.6	3.2	3.2	3.1	2.9	3.3	3.0	2.9	2.7	3.0	3.3	3.8	3.1	3.1	3.1	3.5	3.4		3.18	5.57	
26-Jan-05	3.0	3.5	3.4	3.5	A	3.2	3.0	2.9	3.6	3.0	3.1	3.3	2.9	2.6	2.5	2.3	2.5	3.1	3.1	2.9	2.6	2.6	3.1	2.9		2.99	3.55	
27-Jan-05	3.1	3.7	3.0	3.0	3.3	A	3.1	3.3	3.1	3.7	2.7	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.3	2.1	2.2	2.1	2.1	2.1		2.63	3.73	
28-Jan-05	2.1	2.1	2.1	2.1	A	2.4	2.2	2.5	2.2	2.2	2.3	2.2	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.5		2.23	2.56	
29-Jan-05	2.1	2.2	2.2	A	2.1	2.2	2.6	2.3	2.2	2.1	2.5	2.2	2.4	2.3	2.7	2.8	2.7	2.9	3.3	3.1	2.9	3.2	3.0	2.9		2.56	3.31	
30-Jan-05	2.0	2.0	A	2.2	2.3	2.1	2.1	2.1	2.5	2.4	2.9	2.2	2.2	2.3	2.5	3.5	3.1	2.5	2.5	2.6	2.5	2.2	2.2	2.4		2.40	3.45	
31-Jan-05	2.5	A	2.1	2.1	2.1	2.1	2.5	2.1	2.0	1.9	2.0	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.2	2.3	2.2	2.7	2.9	2.7		2.21	2.86	
Hourly Avg	2.66	2.72	2.78	2.78	2.69	2.69	2.83	3.07	2.91	2.87	2.78	2.77	2.70	2.63	2.67	2.75	2.97	2.92	2.84	2.76	2.69	2.69	2.73	2.73				
Hourly Max	4.01	3.84	3.78	4.06	3.91	4.22	5.11	5.57	4.53	5.30	4.47	4.47	3.71	4.40	4.92	4.74	11.49	10.41	5.47	4.40	3.88	3.80	3.54	3.88				

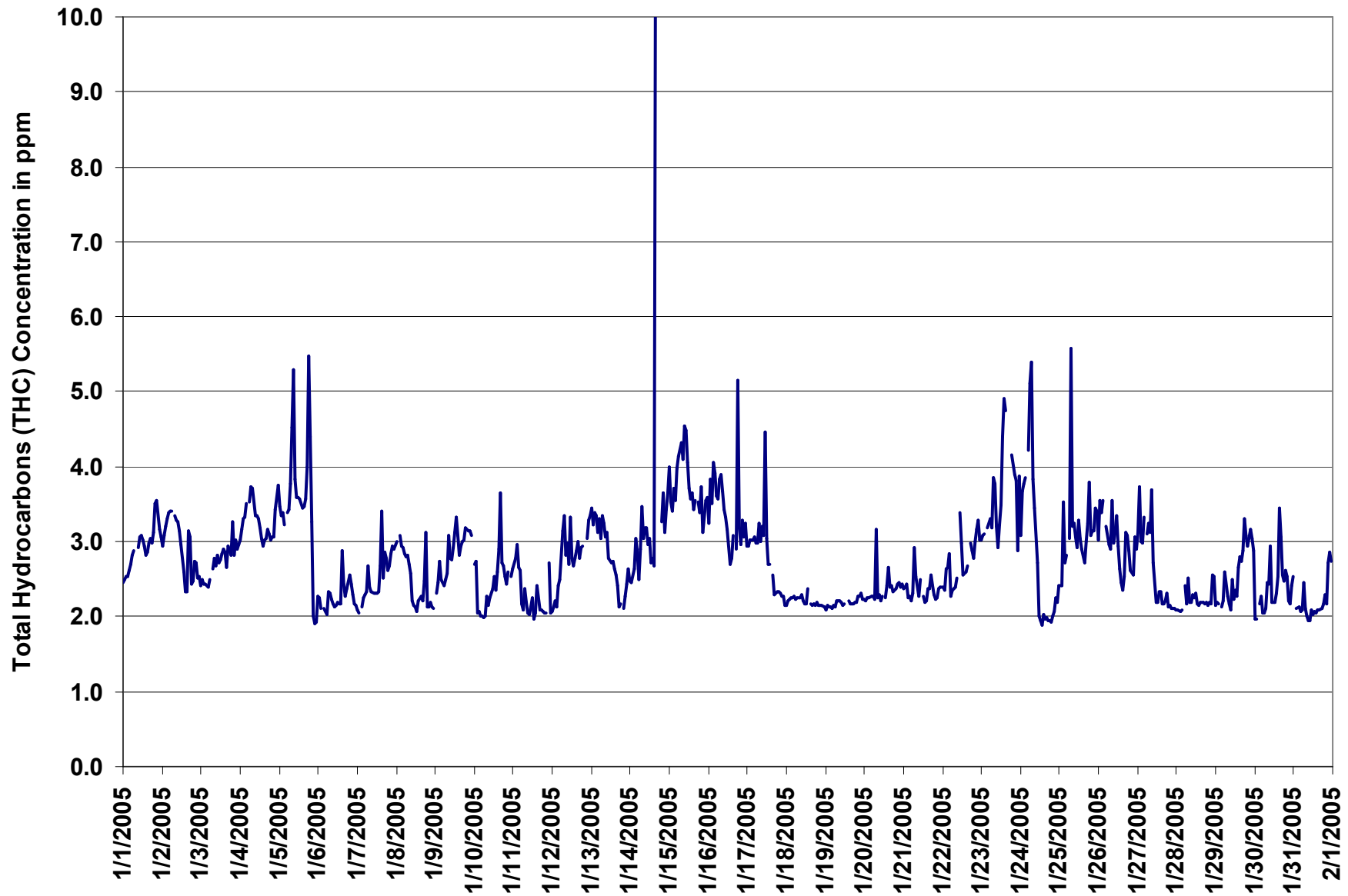


Figure 12. PASZA - Henry Pirker Total Hydrocarbons 1-hr Maximum Value Monthly Trend

PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	3.2 ppb 13-Jan 22:00 23:00
Maximum 24-hr Average:	1.2 ppb 3-Jan

H₂S Guideline Limit: Alberta Environment: 1-hr 10 ppb 24-hr 3 ppb

AIC Time:	32 hrs	Operational Time:	707 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.9%
Percentile	99	95	75
	1.7	1.2	0.7
	0.5	0.3	0.0
	0.0	0.0	0.6 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	0	0	1	0	0	0	0	0	A	A	0	0	0	0	0	0	1	1	1	0	1	1	1	0	0.5	0.7
2-Jan-05	0	0	0	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
3-Jan-05	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1.2	1.7
4-Jan-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1.0	1.5
5-Jan-05	1	1	1	1	A	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0.9	2.0
6-Jan-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Jan-05	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.4	1.0
8-Jan-05	0	A	1	1	0	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	1	1	0	0	0.5	0.6
9-Jan-05	A	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	A	0.6	0.8	
10-Jan-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	A	0	0.4	1.5
11-Jan-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.3
12-Jan-05	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	A	1	1	1	0.4	0.7
13-Jan-05	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	1	0	0	0	A	0	3	3	2	0.8	3.2
14-Jan-05	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	A	1	1	1	1	1	0.7	1.2
15-Jan-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.3
16-Jan-05	0	1	1	2	2	2	1	1	1	1	1	1	1	0	0	0	A	1	1	1	0	1	1	1	0.8	1.9
17-Jan-05	1	0	1	0	1	0	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	0	0	0.6	0.9
18-Jan-05	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.6
19-Jan-05	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4
20-Jan-05	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	1	1	1	1	1	1	1	1	1	0.4	0.7
21-Jan-05	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
22-Jan-05	0	0	0	0	0	0	0	0	0	1	A	1	1	1	0	0	N	1	1	1	1	1	1	1	0.7	1.3
23-Jan-05	1	1	1	A	0	0	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	0	0	1.0	2.1
24-Jan-05	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0.5	1.3
25-Jan-05	0	0	0	0	0	A	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.5	0.9
26-Jan-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	1	0	1	1	0	1	1	0.7	1.2
27-Jan-05	1	1	1	1	1	A	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0.5	0.9
28-Jan-05	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
29-Jan-05	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0.4	1.5
30-Jan-05	1	1	A	1	0	1	0	1	0	0	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0.5	1.0
31-Jan-05	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
Hourly Avg	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5		
Hourly Max	1.1	1.1	1.1	1.9	1.7	1.5	1.3	1.4	1.5	2.0	1.7	1.3	1.4	1.7	2.1	1.5	1.5	1.3	1.7	1.3	1.3	3.1	3.2	1.5		

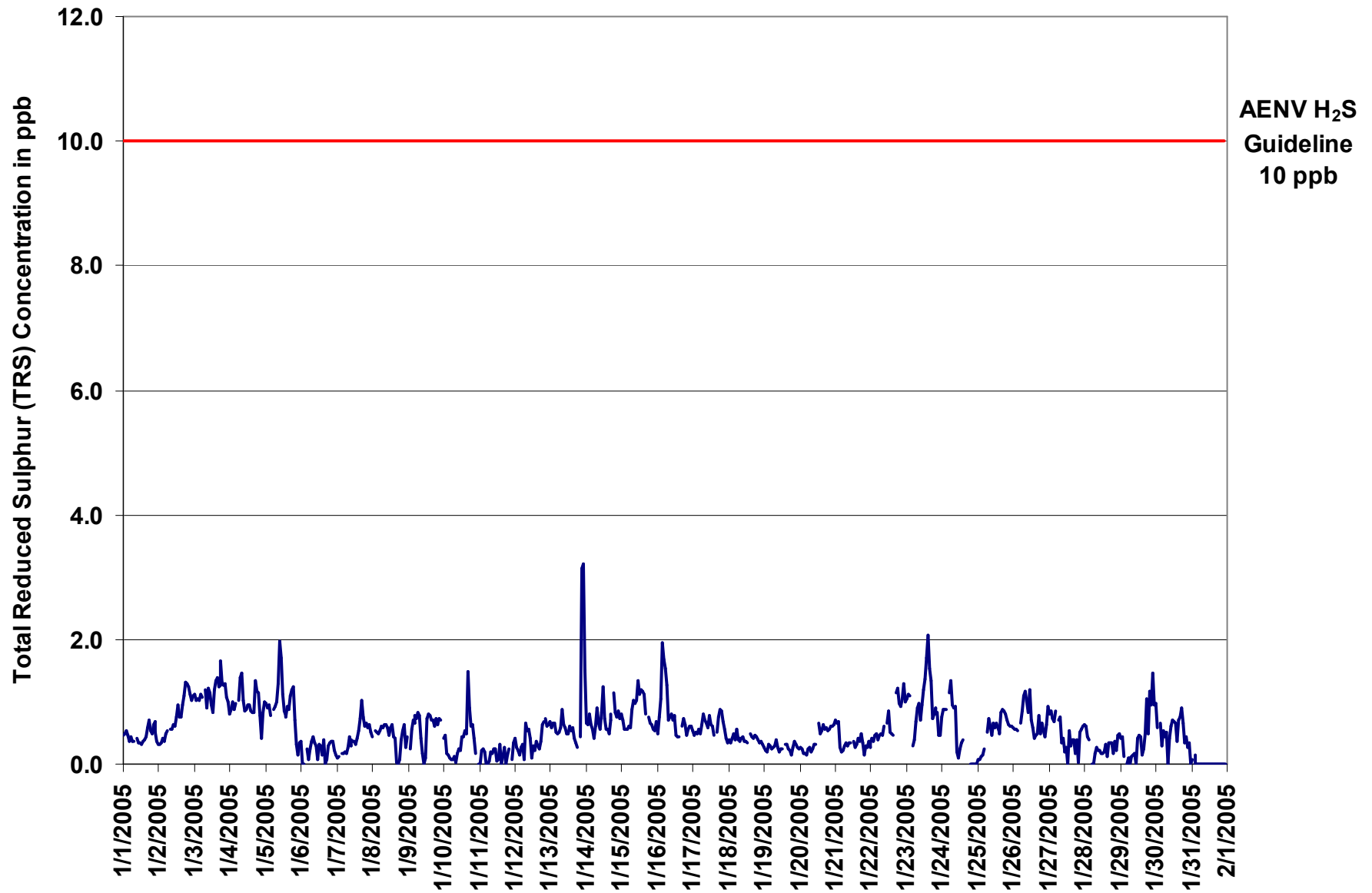


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Maximum 1-hr Value:	11.0	ppb	13-Jan	21:00 22:00
Maximum 24-hr Value:	1.8	ppb	13-Jan	

AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	2.4	1.9	1.3	1.0	0.8	0.5	0.0	1.1 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jan-05	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
2-Jan-05	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1.3	2.0
3-Jan-05	2	1	1	1	2	2	A	2	2	2	2	1	1	2	2	2	2	3	2	2	2	2	1	1.7	2.6	
4-Jan-05	1	1	2	1	1	A	2	2	2	1	1	1	2	1	1	1	1	2	2	2	1	1	1	1.5	2.2	
5-Jan-05	1	1	1	1	1	A	1	1	1	2	3	3	2	2	1	1	1	2	2	2	2	1	1	1.5	2.6	
6-Jan-05	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.8	1.1	
7-Jan-05	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0.9	1.5	
8-Jan-05	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
9-Jan-05	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.3	
10-Jan-05	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	3	2	1	2	1	1	A	1.0	2.7	
11-Jan-05	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.2	
12-Jan-05	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	1.6	
13-Jan-05	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	11	9	1.8	11.0	
14-Jan-05	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	1	A	2	1	1	1	1.3	2.3	
15-Jan-05	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	A	1	1	1	1	1	1.3	1.9	
16-Jan-05	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.4	2.4	
17-Jan-05	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	A	1	1	1	1	1	1	1	1.2	1.8	
18-Jan-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.1	
19-Jan-05	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	
20-Jan-05	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	1.2	
21-Jan-05	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
22-Jan-05	1	1	1	1	1	1	1	1	1	1	A	1	2	1	1	1	N	2	2	2	2	2	2	1.2	1.8	
23-Jan-05	2	2	2	A	1	1	1	2	2	1	1	2	2	2	3	2	2	1	1	2	1	1	1	1.6	2.8	
24-Jan-05	1	1	1	1	A	2	2	2	2	1	1	1	1	1	1	C	C	C	A	0	0	0	0	1.1	2.0	
25-Jan-05	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1.0	1.7	
26-Jan-05	1	1	1	1	A	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.3	1.9	
27-Jan-05	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6	
28-Jan-05	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
29-Jan-05	1	1	1	A	1	1	1	0	1	1	1	0	1	1	1	1	1	1	2	2	2	2	2	1.1	2.0	
30-Jan-05	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1.1	1.6	
31-Jan-05	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0	
Hourly Avg	1.0	1.0	1.1	1.0	0.9	1.0	1.0	1.1	1.2	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.4	1.3	1.0		
Hourly Max	1.6	1.6	2.2	2.4	2.3	2.0	2.1	2.2	2.1	2.5	2.6	2.3	2.1	2.3	2.8	2.1	2.7	2.0	2.6	2.2	2.0	11.0	8.5	2.2		

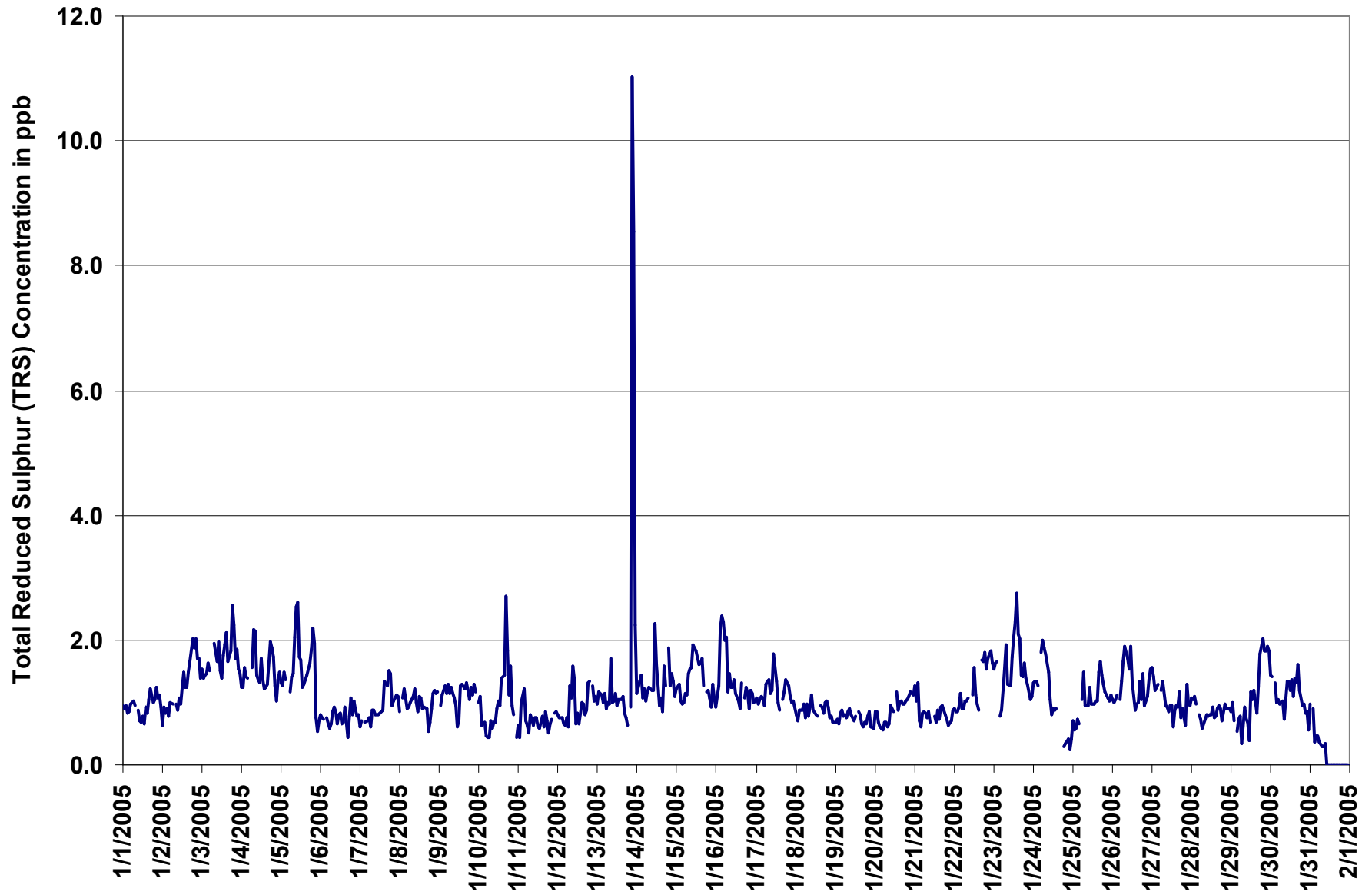


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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

Station: Henry Pirker

HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	52.0 $\mu\text{g}/\text{m}^3$ 15-Jan 11:00 12:00
Maximum 24-hr Average:	25.6 $\mu\text{g}/\text{m}^3$ 15-Jan

Guideline Limit	Canada Wide Standard	1-hr - $\mu\text{g}/\text{m}^3$	24-hr 30 $\mu\text{g}/\text{m}^3$
(considered as an absolute value)			

AIC Time:	0 hrs	Operational Time:	739 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.3%
Percentile	99	95	75
	35.9	20.0	9.7
	50	25	5
	5.8	2.2	0.0
	1	0.0	0.0
Average	7.4 $\mu\text{g}/\text{m}^3$		
Geomean	5.7 $\mu\text{g}/\text{m}^3$		

Status Flag Characters

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

Day Mountain Standard Time

Day	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	4	4	4	4	4	3	3	4	4	5	8	8	4	3	4	4	6	8	8	7	11	11	7	6	5.6	11.2	
2-Jan-05	4	6	6	5	4	7	7	7	7	9	10	8	8	3	3	3	4	5	6	10	12	6	8	7	6.5	12.4	
3-Jan-05	4	5	5	5	6	4	5	7	10	8	9	9	9	9	14	11	7	9	9	9	8	7	7	8	7.6	13.6	
4-Jan-05	7	7	9	12	12	13	15	23	22	13	16	17	12	17	14	9	12	25	27	18	14	13	19	25	15.5	26.8	
5-Jan-05	22	18	18	13	14	14	13	15	19	32	27	20	21	8	5	7	10	9	14	15	3	D	D	0	14.3	32.5	
6-Jan-05	1	2	3	2	1	0	1	1	2	3	3	2	1	1	0	1	0	1	2	1	3	1	0	0	1.4	3.4	
7-Jan-05	0	0	0	0	D	0	0	0	2	2	2	2	1	0	0	2	3	2	7	7	4	5	4	3	3	2.2	7.2
8-Jan-05	2	3	4	3	2	2	2	3	4	7	5	3	1	1	0	2	5	9	3	2	3	4	4	7	3.5	9.2	
9-Jan-05	5	4	4	4	4	3	3	5	5	4	17	11	9	16	13	8	8	6	6	6	7	7	10	10	7.2	16.8	
10-Jan-05	7	6	0	0	0	0	0	0	0	2	4	1	9	9	7	4	16	12	5	7	4	4	3	3	4.3	16.0	
11-Jan-05	5	6	11	5	3	0	1	0	0	1	0	1	1	2	3	4	6	6	5	6	5	3	3	3	3.4	10.7	
12-Jan-05	2	2	3	3	2	8	3	14	13	20	19	4	9	4	6	9	9	7	10	8	6	8	7	7	7.6	19.6	
13-Jan-05	9	5	9	10	4	8	6	10	13	13	10	8	8	17	13	11	7	2	2	1	0	1	5	7	7.4	16.7	
14-Jan-05	3	2	2	2	4	2	7	18	2	8	15	28	14	5	2	3	10	7	12	15	12	9	12	10	8.5	28.1	
15-Jan-05	9	6	4	6	6	13	12	17	27	22	37	52	38	37	50	42	34	30	32	34	32	27	22	24	25.6	52.0	
16-Jan-05	17	18	14	14	13	15	21	7	8	14	14	15	11	6	4	10	7	9	13	11	7	9	12	8	11.4	21.0	
17-Jan-05	8	6	7	7	10	9	9	12	10	9	12	19	15	48	5	3	0	0	12	31	22	12	20	2	12.1	47.6	
18-Jan-05	0	2	14	11	19	5	7	3	6	3	4	2	2	4	5	8	6	4	5	5	4	2	2	1	5.2	19.3	
19-Jan-05	1	2	2	2	2	2	2	3	5	5	3	4	2	3	4	4	4	4	4	7	6	5	8	7	3.8	8.0	
20-Jan-05	6	6	6	8	9	13	6	8	6	7	6	7	6	6	10	10	7	8	12	12	12	10	9	9	8.2	13.5	
21-Jan-05	9	10	9	8	6	3	2	2	2	2	5	4	2	4	3	5	6	6	4	7	8	7	12	15	5.8	15.1	
22-Jan-05	11	9	7	9	9	6	5	6	6	8	10	10	14	9	10	12	N	15	15	9	8	12	13	9	9.6	15.5	
23-Jan-05	12	12	11	13	10	9	13	12	13	11	13	17	23	32	37	35	27	9	9	11	6	7	4	5	14.6	36.6	
24-Jan-05	8	12	13	14	16	15	18	10	10	9	7	0	0	D	0	0	0	0	0	0	0	0	0	0	5.7	18.1	
25-Jan-05	1	0	1	0	0	0	4	8	7	6	9	8	6	1	9	2	6	8	5	7	5	3	5	3	4.4	9.4	
26-Jan-05	1	1	0	1	0	1	3	7	10	10	9	15	11	8	2	6	8	8	7	4	3	3	4	6	5.3	14.7	
27-Jan-05	10	14	12	11	10	9	11	16	19	21	8	0	0	1	0	1	2	2	4	2	2	2	2	2	6.6	20.6	
28-Jan-05	1	2	2	1	1	1	1	2	2	2	1	1	1	0	2	3	2	2	2	3	3	4	6	5	2.1	5.6	
29-Jan-05	7	8	7	4	4	7	14	13	9	10	11	10	10	9	12	7	13	19	11	18	20	22	18	2	11.0	22.2	
30-Jan-05	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	1	3	5	6	3	0	0	0	1.1	6.4	
31-Jan-05	0	0	1	0	0	0	2	4	2	1	0	2	1	0	2	2	0	1	0	0	1	0	0	0	0.8	3.6	
Hourly Avg	5.7	5.7	6.1	5.7	5.9	5.5	6.3	7.7	7.9	8.6	9.5	9.2	8.1	8.8	7.8	7.4	7.5	7.8	8.2	8.9	7.5	6.7	7.5	6.3			
Hourly Max	21.5	18.0	17.8	14.0	19.3	14.6	21.0	23.3	27.4	32.5	36.8	52.0	38.2	47.6	49.5	41.5	34.0	29.9	32.1	34.2	32.2	27.4	22.1	24.5			

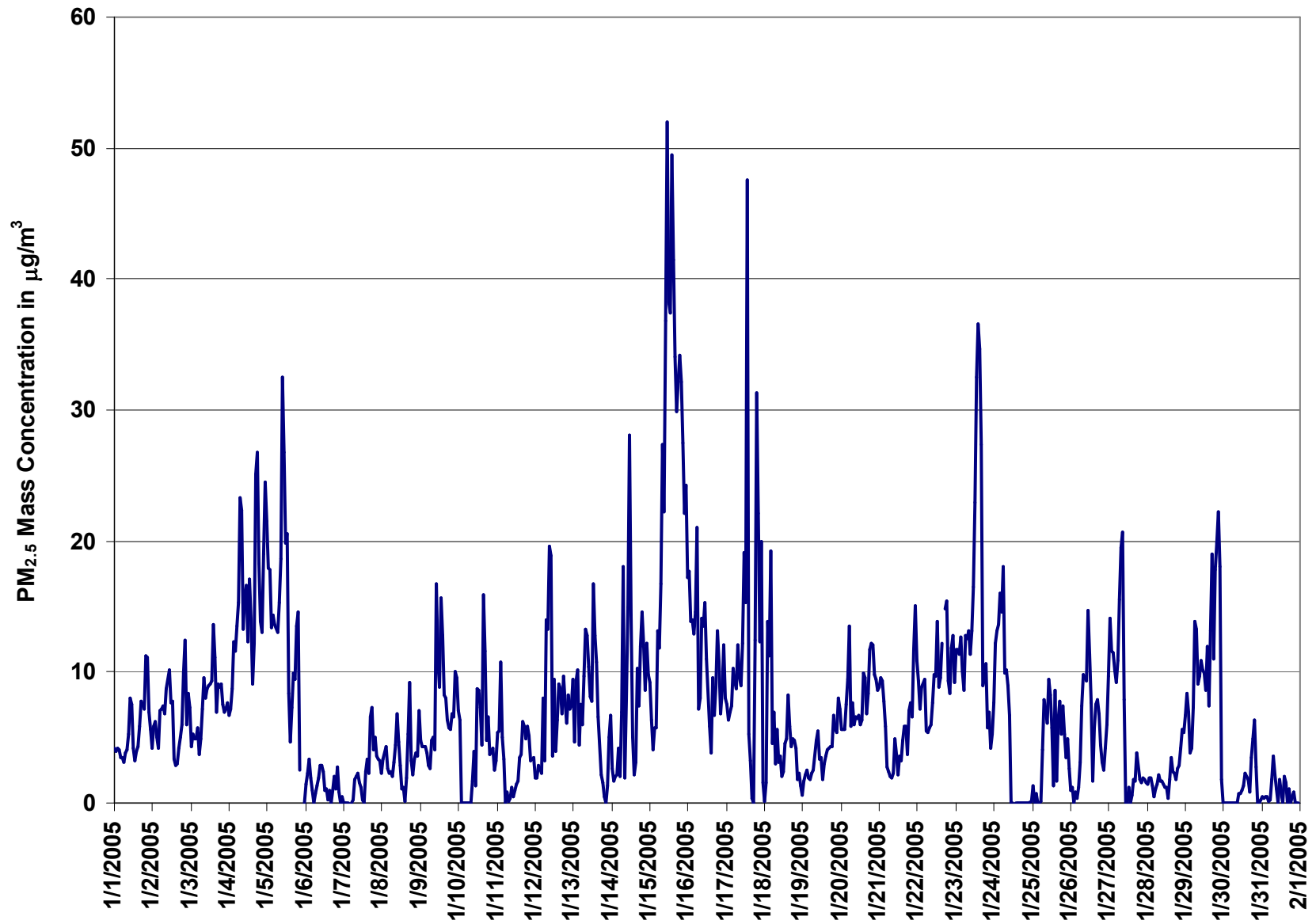


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005
 Summary

Maximum 1-hr Value:	140.1	µg/m ³	17-Jan	13:00 14:00
Maximum 24-hr Value:	34.3	µg/m ³	15-Jan	

AIC Time:	0 hrs	Operational Time:	742 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	55.2	30.7	15.4	9.5	5.4	1.8	0.0	11.9 µg/m ³	10.3 µg/m ³

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Jan-05	7	6	6	6	5	5	5	7	7	9	14	12	6	5	6	6	8	11	13	11	18	13	9	9	8.5	17.5	
2-Jan-05	9	11	10	9	7	10	10	12	10	14	15	15	12	10	5	5	7	7	9	14	18	8	10	10	10.3	18.0	
3-Jan-05	7	7	6	7	8	5	7	10	12	12	13	14	13	13	21	17	10	12	16	18	12	12	12	10	11.3	20.9	
4-Jan-05	9	11	12	14	18	17	18	32	32	20	22	25	24	21	18	16	15	47	59	28	21	17	28	31	23.0	58.6	
5-Jan-05	25	23	23	15	18	16	15	20	23	39	33	22	30	12	9	13	18	16	22	20	21	D	0	1	18.8	38.8	
6-Jan-05	5	4	9	5	5	0	4	3	3	5	5	4	3	3	2	2	2	3	6	10	10	3	1	2	4.1	10.1	
7-Jan-05	2	0	1	0	0	0	2	4	5	4	3	4	3	3	7	9	7	13	14	9	8	6	6	6	4.8	13.6	
8-Jan-05	5	5	6	5	5	4	4	6	8	9	7	5	4	3	2	4	16	19	6	3	5	6	6	9	6.4	19.2	
9-Jan-05	7	6	7	6	5	6	5	8	9	9	23	20	13	23	24	12	10	11	9	9	9	11	16	12	11.3	24.0	
10-Jan-05	11	14	1	2	1	1	1	0	4	6	10	8	13	13	11	8	24	19	14	14	8	7	6	6	8.4	23.7	
11-Jan-05	10	10	14	8	7	1	4	4	5	4	3	5	4	5	6	8	10	11	10	9	8	6	6	7	7.0	14.5	
12-Jan-05	6	4	5	4	4	14	6	22	18	31	36	9	16	8	9	14	13	9	15	13	9	13	11	12	12.5	35.8	
13-Jan-05	13	11	14	14	8	12	11	25	21	16	25	25	11	23	16	13	16	6	4	3	1	5	7	14	13.2	25.3	
14-Jan-05	7	5	6	7	13	7	17	47	8	16	20	53	52	8	5	7	18	12	18	19	17	17	22	13	17.3	53.3	
15-Jan-05	17	8	9	9	13	17	17	27	45	31	65	63	57	49	65	49	39	33	37	41	39	33	28	32	34.3	65.4	
16-Jan-05	21	21	16	17	15	20	28	16	11	18	17	17	17	13	10	15	15	13	17	17	10	15	14	12	16.0	28.1	
17-Jan-05	10	9	12	11	17	15	13	17	16	14	19	26	21	140	17	9	5	2	61	61	36	23	38	5	24.9	140.1	
18-Jan-05	4	8	20	16	28	9	11	8	9	9	7	6	8	8	11	12	9	7	9	7	7	6	5	4	9.5	28.4	
19-Jan-05	5	6	7	9	7	6	5	6	9	10	7	7	4	6	7	7	7	7	7	9	8	9	16	13	7.6	16.0	
20-Jan-05	7	8	8	12	13	18	13	13	9	11	10	10	9	10	13	13	9	11	15	14	14	12	11	12	11.5	17.5	
21-Jan-05	11	12	11	11	10	6	4	6	4	6	8	7	5	7	7	9	10	11	8	12	13	8	17	18	9.2	17.7	
22-Jan-05	14	13	12	11	12	9	9	8	10	10	13	16	17	16	13	17	N	18	21	13	12	16	18	13	13.5	20.8	
23-Jan-05	17	16	18	20	15	13	21	18	16	16	18	19	32	38	43	40	41	14	13	16	13	13	7	8	20.3	43.1	
24-Jan-05	13	17	16	16	19	19	21	18	15	19	20	5	9	0	1	3	3	2	1	2	3	3	2	3	9.5	20.5	
25-Jan-05	5	2	5	1	2	4	10	16	11	8	14	20	27	8	13	9	15	15	15	14	8	6	13	7	10.3	27.1	
26-Jan-05	3	3	2	5	5	4	7	11	14	16	22	25	20	18	4	10	10	11	10	9	6	6	8	9	9.8	25.5	
27-Jan-05	12	20	15	13	12	12	15	19	23	26	15	2	3	4	4	4	3	4	8	4	4	4	4	4	9.7	25.8	
28-Jan-05	4	4	4	4	2	2	5	4	4	3	3	5	4	2	4	5	5	4	3	4	5	7	8	8	4.3	7.8	
29-Jan-05	8	10	10	6	6	14	17	17	15	13	16	14	18	12	15	12	16	31	21	22	26	28	25	12	16.0	30.9	
30-Jan-05	0	1	0	0	0	1	1	0	2	2	3	3	3	4	7	8	3	6	7	10	5	2	1	3	2.9	10.0	
31-Jan-05	2	2	2	3	3	5	16	8	6	6	4	8	3	2	5	5	6	6	6	2	2	4	2	0	0	4.4	16.2
Hourly Avg	8.9	9.0	9.1	8.5	9.1	8.8	10.4	13.3	12.4	13.3	15.8	15.2	14.9	15.7	12.3	11.6	12.3	12.6	15.2	14.1	12.3	10.6	11.5	9.8			
Hourly Max	25.0	22.7	22.6	20.0	28.4	20.3	28.1	47.1	45.2	38.8	64.7	63.0	56.5	140.1	65.4	49.0	40.9	46.6	60.7	61.1	39.1	32.6	38.5	32.0			

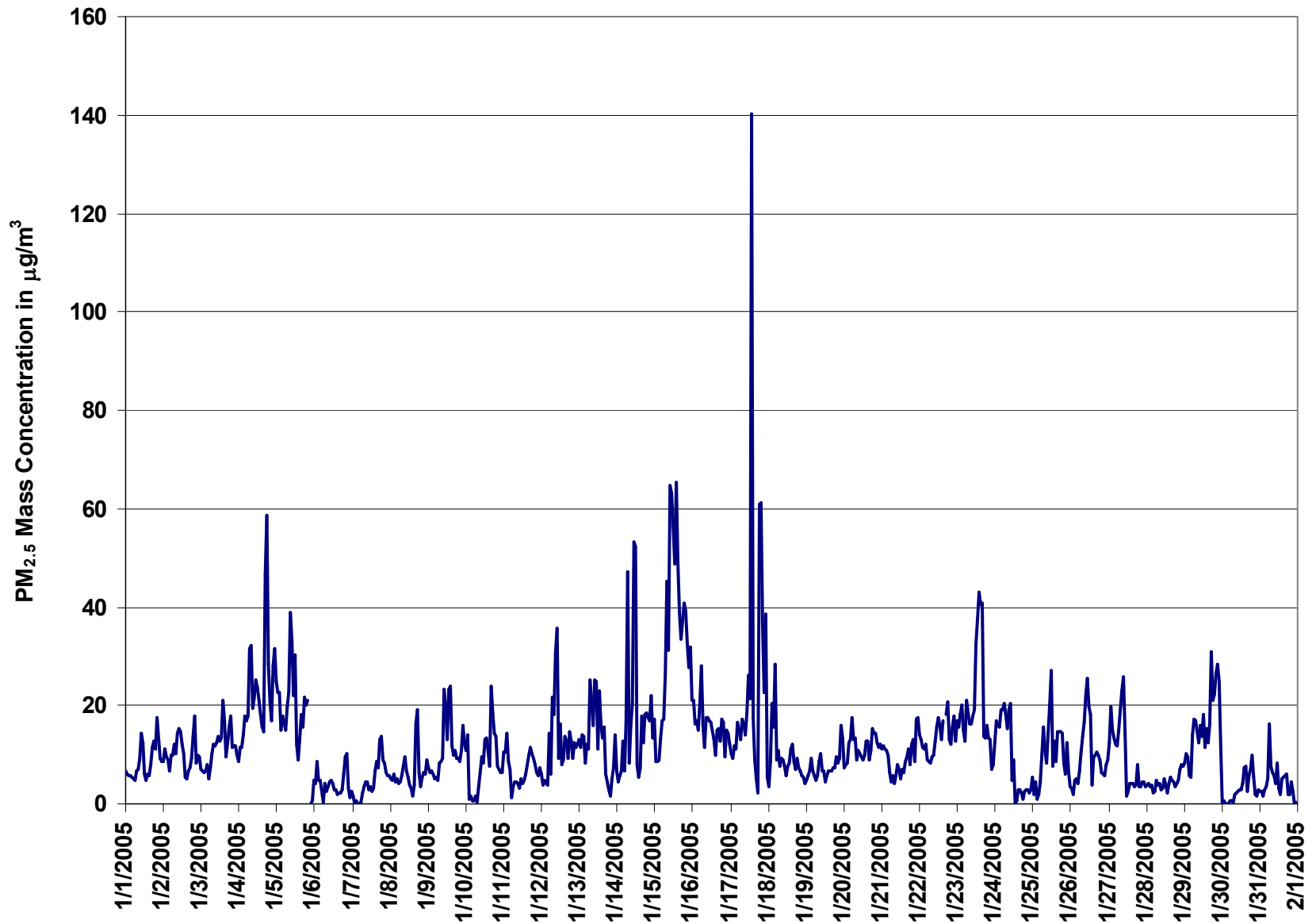
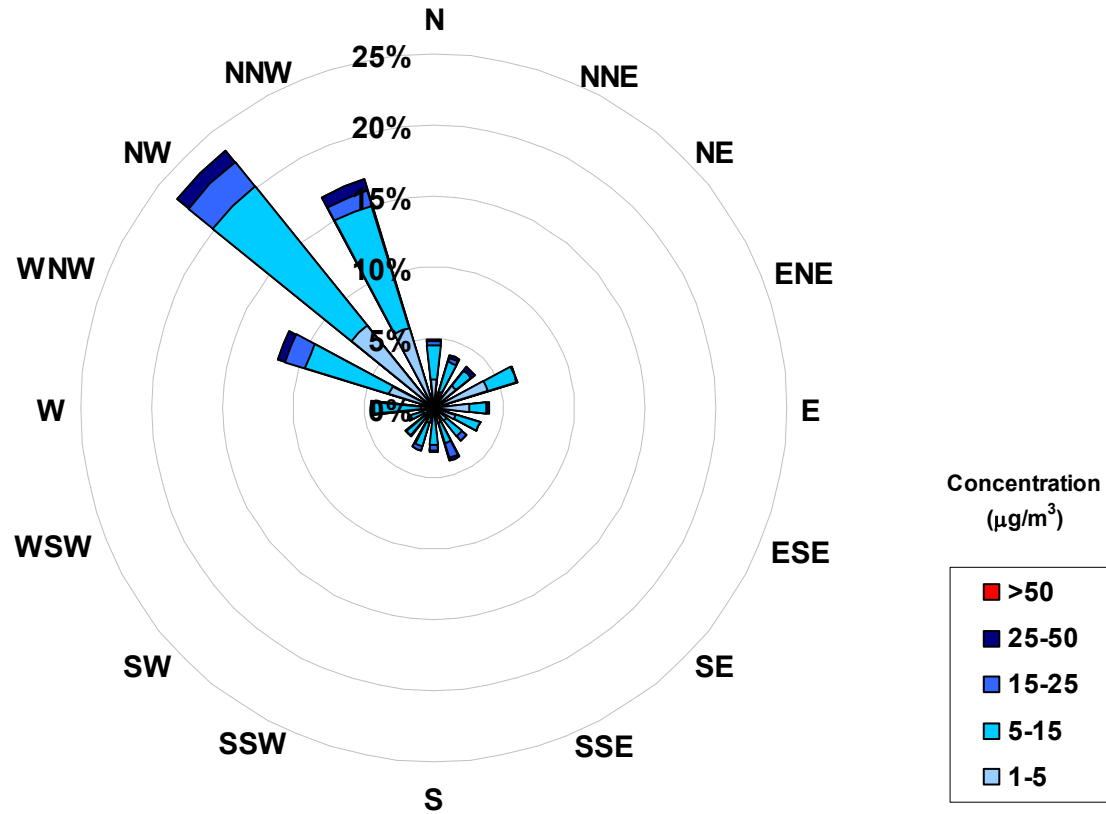


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly

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



Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
0	<	1	99
1	to	5	234
5	to	15	332
15	to	25	50
25	to	50	23
	>	50	1
Total Non-Zero Values			739

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

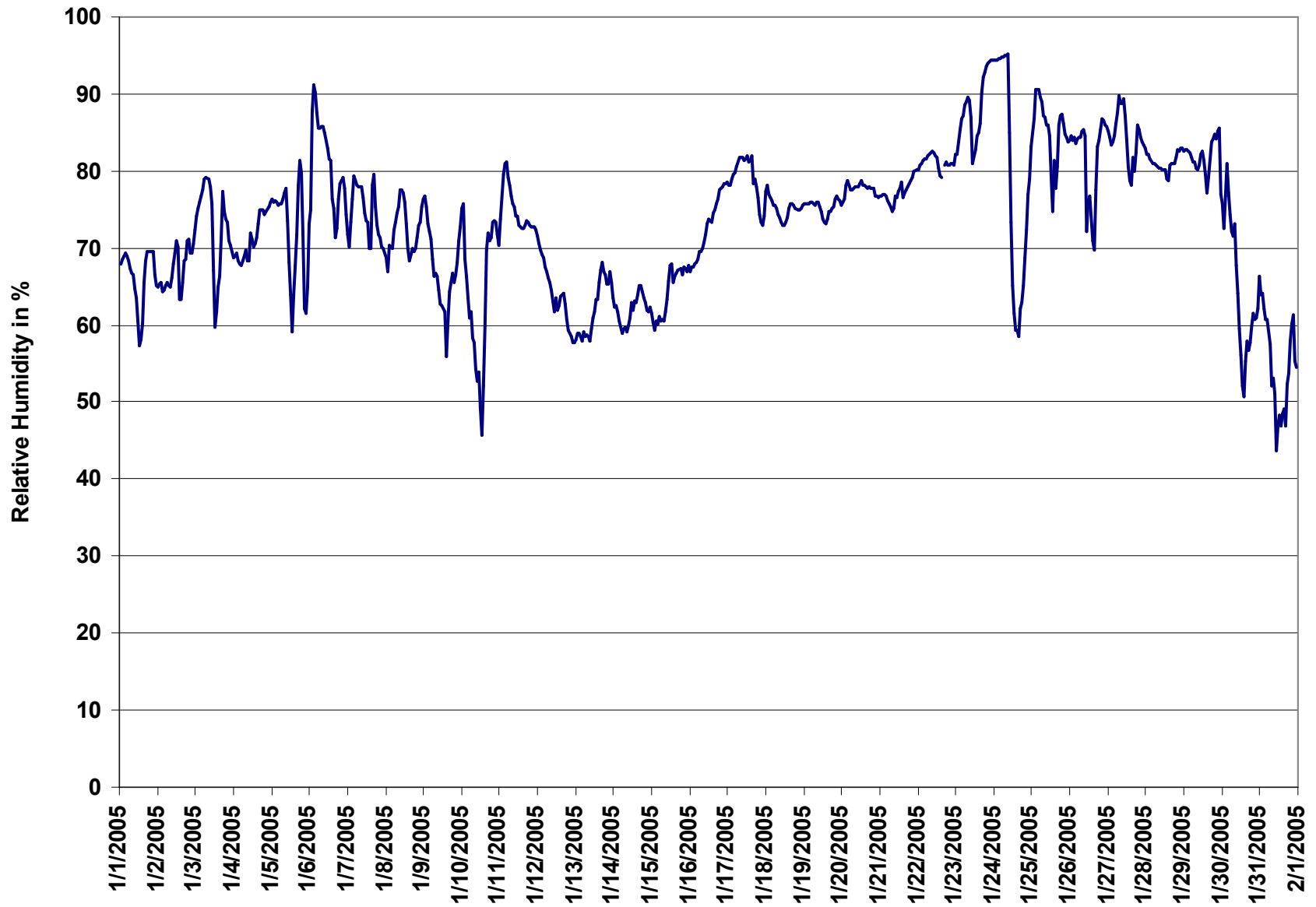


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY AVERAGE TABLE

Ambient Temperature (AT - °C)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	8.4 °C 31-Jan 10:00 11:00
Maximum 24-hr Average:	5.2 °C 31-Jan

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
	6.9	4.4	-8.5	-16.9	-23.2	-35.2	-38.9	-16.1 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	-29	-29	-28	-27	-27	-28	-29	-30	-31	-31	-30	-27	-26	-26	-26	-27	-28	-29	-29	-29	-30	-29	-31	-33	-28.5	-25.5
2-Jan-05	-33	-33	-32	-33	-33	-33	-33	-32	-32	-30	-27	-25	-23	-20	-17	-18	-19	-20	-19	-19	-19	-19	-18	-18	-25.1	-17.2
3-Jan-05	-17	-17	-17	-16	-16	-16	-16	-17	-17	-17	-16	-15	-12	-13	-13	-14	-16	-18	-23	-25	-26	-27	-28	-28	-18.3	-12.4
4-Jan-05	-29	-29	-29	-29	-29	-29	-28	-28	-27	-28	-26	-21	-20	-20	-19	-20	-21	-21	-21	-21	-22	-21	-21	-20	-24.1	-18.7
5-Jan-05	-20	-20	-20	-20	-21	-20	-20	-20	-19	-18	-16	-14	-13	-11	-11	-12	-13	-13	-12	-8	-6	-3	-3	-3	-14.1	-3.1
6-Jan-05	-5	-4	-3	-4	-5	-7	-9	-9	-9	-9	-8	-8	-8	-8	-9	-9	-10	-12	-13	-13	-13	-13	-12	-12	-8.7	-3.3
7-Jan-05	-11	-12	-13	-14	-18	-19	-19	-18	-17	-16	-15	-15	-14	-14	-12	-13	-16	-19	-22	-25	-26	-26	-27	-28	-17.9	-11.2
8-Jan-05	-29	-30	-28	-27	-27	-24	-23	-22	-21	-19	-17	-17	-17	-17	-17	-18	-19	-19	-19	-19	-20	-20	-20	-21	-21.2	-16.9
9-Jan-05	-22	-22	-24	-26	-27	-28	-30	-31	-32	-31	-29	-29	-29	-25	-22	-25	-27	-32	-32	-32	-30	-28	-25	-23	-27.6	-21.5
10-Jan-05	-21	-16	-12	-11	-10	-10	-10	-10	-12	-13	-12	-12	-9	-7	-8	-10	-15	-18	-17	-16	-15	-15	-14	-14	-12.7	-6.7
11-Jan-05	-14	-14	-13	-13	-13	-15	-16	-17	-17	-18	-19	-19	-19	-20	-20	-21	-22	-22	-22	-22	-22	-22	-23	-23	-18.7	-13.3
12-Jan-05	-23	-25	-27	-28	-28	-30	-31	-32	-32	-33	-32	-32	-28	-30	-29	-31	-32	-34	-37	-38	-39	-39	-40	-40	-32.0	-23.1
13-Jan-05	-40	-39	-39	-39	-40	-39	-39	-39	-39	-39	-36	-32	-30	-28	-28	-28	-27	-26	-25	-26	-28	-30	-30	-32	-33.2	-25.3
14-Jan-05	-34	-35	-35	-36	-37	-39	-38	-38	-38	-37	-33	-30	-28	-27	-27	-28	-28	-31	-33	-34	-35	-35	-36	-35	-33.6	-27.1
15-Jan-05	-35	-37	-38	-37	-37	-36	-37	-36	-36	-35	-31	-26	-23	-22	-23	-25	-27	-28	-30	-30	-30	-29	-30	-29	-31.2	-21.5
16-Jan-05	-30	-29	-29	-28	-28	-27	-27	-26	-26	-25	-23	-21	-20	-19	-18	-18	-18	-18	-17	-16	-15	-15	-16	-17	-21.9	-15.2
17-Jan-05	-17	-15	-15	-14	-13	-12	-11	-9	-9	-8	-7	-6	-4	-3	-3	-4	-7	-10	-13	-15	-16	-18	-19	-19	-11.0	-2.6
18-Jan-05	-19	-20	-20	-20	-20	-21	-21	-21	-22	-22	-23	-22	-22	-21	-21	-20	-20	-20	-20	-21	-21	-21	-21	-20	-20.8	-19.2
19-Jan-05	-20	-20	-20	-20	-20	-20	-20	-20	-19	-19	-19	-18	-18	-18	-18	-17	-18	-17	-17	-17	-17	-17	-17	-17	-18.5	-16.8
20-Jan-05	-17	-18	-18	-18	-18	-18	-19	-18	-18	-18	-18	-17	-16	-17	-17	-17	-18	-18	-18	-18	-18	-19	-19	-19	-17.9	-16.4
21-Jan-05	-19	-19	-19	-19	-19	-20	-20	-21	-22	-21	-19	-19	-18	-18	-16	-18	-18	-18	-18	-17	-17	-16	-15	-15	-18.5	-14.9
22-Jan-05	-15	-14	-14	-14	-14	-14	-13	-13	-12	-11	-10	-9	-8	-8	-7	N	-7	-7	-7	-8	-7	-7	-7	-7	-10.4	-6.8
23-Jan-05	-7	-6	-5	-3	-2	-1	-1	-1	-1	0	3	4	5	4	4	3	2	1	1	0	-1	0	0	0	-0.2	4.9
24-Jan-05	0	0	1	0	1	0	0	-1	-1	-2	3	7	8	8	8	7	7	6	5	5	4	3	1	0	3.0	8.0
25-Jan-05	-1	-3	-4	-5	-6	-8	-8	-9	-10	-10	-8	-6	-2	-3	-2	-2	-4	-6	-8	-10	-11	-12	-13	-13	-6.8	-0.9
26-Jan-05	-13	-12	-13	-13	-13	-13	-12	-12	-11	-10	-8	-4	-5	-5	-2	-2	-4	-5	-6	-7	-8	-8	-7	-6	-8.1	-1.5
27-Jan-05	-5	-4	-4	-3	-3	-2	-2	-2	-1	-1	-1	-2	-4	-5	-7	-8	-9	-10	-10	-10	-11	-12	-12	-13	-5.9	-0.7
28-Jan-05	-14	-14	-14	-15	-15	-15	-15	-15	-16	-16	-15	-14	-14	-13	-13	-13	-13	-13	-14	-14	-14	-14	-14	-14	-14.3	-13.1
29-Jan-05	-14	-13	-14	-14	-14	-14	-15	-16	-16	-16	-14	-13	-10	-9	-7	-5	-5	-4	-3	-4	-4	-3	-2	2	-9.4	2.2
30-Jan-05	2	3	1	-1	0	0	0	0	-1	1	2	3	5	6	7	6	5	5	4	4	5	5	5	5	3.0	6.9
31-Jan-05	4	5	5	5	5	4	5	6	7	8	8	8	7	6	6	6	6	5	4	3	3	3	4	4	5.2	8.4
Hourly Avg	-17.6	-17.5	-17.4	-17.4	-17.6	-17.8	-17.9	-18.0	-18.0	-17.6	-16.1	-14.6	-13.5	-12.9	-12.6	-13.1	-14.3	-15.1	-15.8	-16.2	-16.4	-16.5	-16.5	-16.3		
Hourly Max	4.5	5.0	4.8	4.9	5.1	4.5	4.8	6.5	6.9	8.1	8.4	7.6	8.0	7.8	7.7	7.1	6.9	5.8	5.5	4.8	4.6	5.2	5.3	5.5		

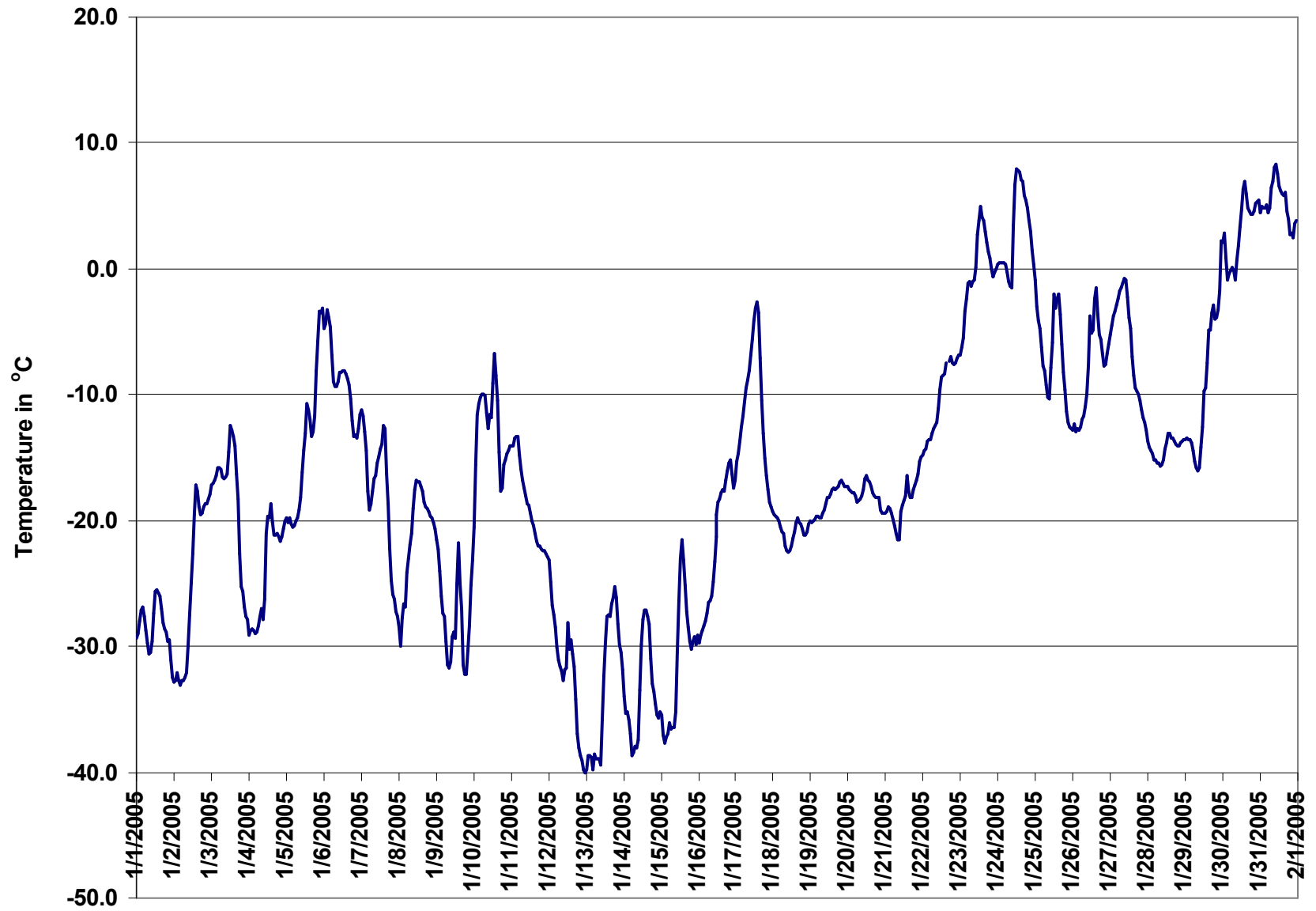


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

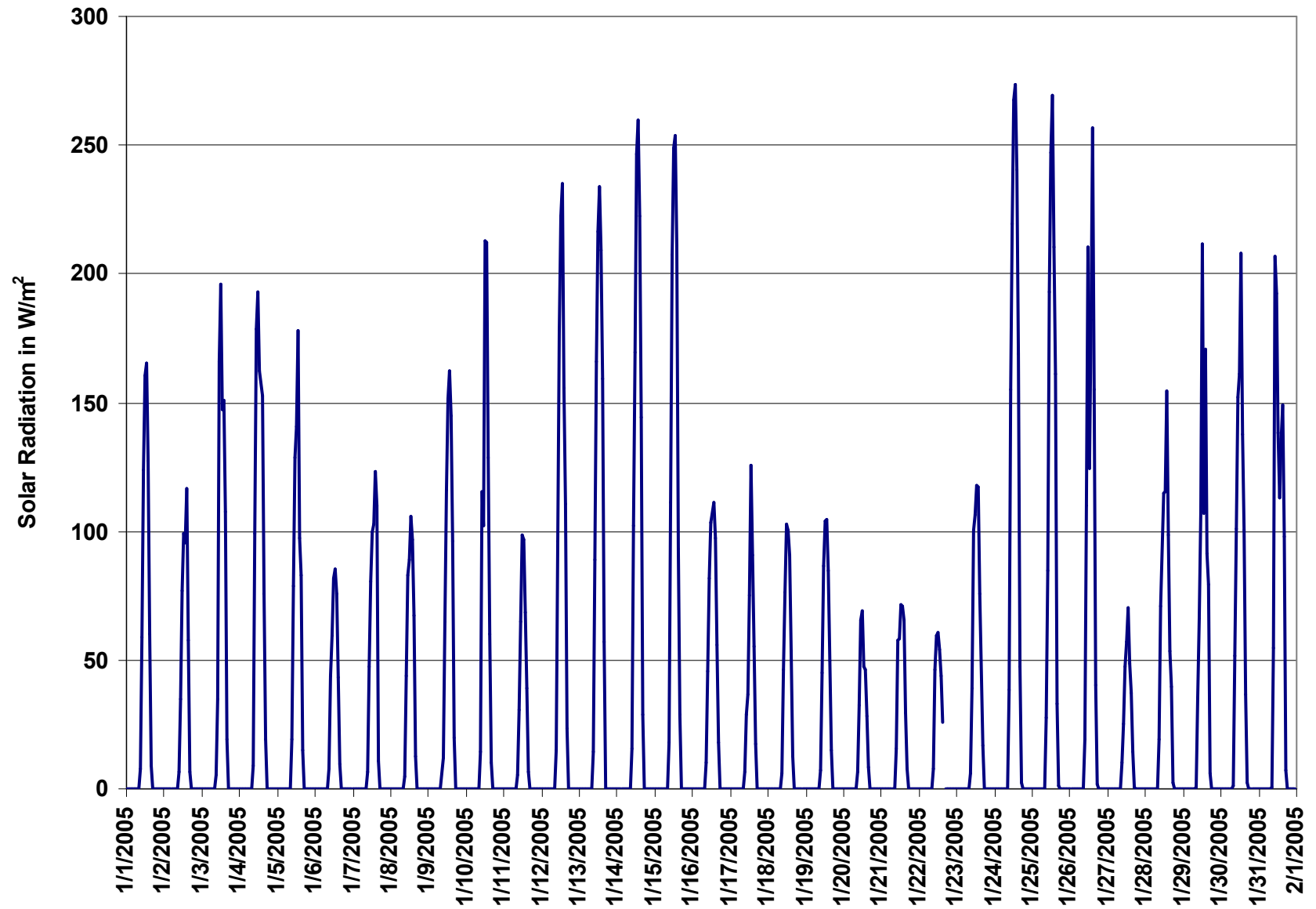


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY AVERAGE TABLE

Wind Speed (WSv - Km/hr)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Maximum 1-hr Average:	36.8	km/hr	24-Jan	16:00 17:00
Maximum 24-hr Average:	13.7	km/hr	31-Jan	

Calm Time:	9 hrs	1% calms	Operational Time:	734 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	29.3	16.1	6.5	4.3	2.8	1.4	1.0	5.8 km/hr	2.8 km/hr

Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Jan-05	6	6	6	6	5	5	4	3	1	5	5	5	4	5	6	5	4	4	1	2	1	4	3	4		3.9	6.0
2-Jan-05	4	3	4	2	1	1	1	1	1	1	2	calm	2	8	3	5	4	3	calm	2	5	3	3	3		1.8	8.5
3-Jan-05	3	3	3	2	3	1	2	3	4	4	5	6	2	4	3	3	4	4	3	4	5	5	4	4		0.2	5.7
4-Jan-05	4	4	3	2	1	1	1	calm	2	2	1	1	1	2	3	4	3	2	2	2	5	3	calm	calm		2.4	5.5
5-Jan-05	1	1	3	1	3	3	3	1	1	2	3	4	4	3	5	4	4	4	2	5	9	12	11	10		3.9	12.5
6-Jan-05	10	14	19	28	18	27	21	17	13	15	21	21	18	15	14	13	13	9	5	4	4	5	7	8		13.2	28.0
7-Jan-05	11	7	7	6	6	7	9	7	5	4	4	5	6	7	3	4	4	6	4	4	4	4	3	4		5.4	11.0
8-Jan-05	4	4	4	4	3	3	3	4	3	4	7	6	8	8	8	7	7	7	7	5	4	4	4	4		3.5	8.2
9-Jan-05	3	3	3	4	2	3	4	2	4	2	1	5	4	3	3	4	5	5	6	6	5	5	6	4		2.0	6.3
10-Jan-05	7	12	17	17	18	17	15	10	8	9	6	2	3	1	2	3	1	4	2	5	4	5	5	5		6.5	18.1
11-Jan-05	7	1	2	4	5	8	8	6	7	9	9	9	15	14	15	17	16	14	14	15	16	15	13	12		9.4	16.9
12-Jan-05	13	7	6	5	4	3	5	4	6	3	4	5	4	6	5	5	6	5	5	6	6	5	6	5		5.2	12.5
13-Jan-05	4	6	4	4	3	4	5	3	4	4	4	3	4	4	6	6	10	11	13	10	14	7	4	4		6.0	14.4
14-Jan-05	3	4	5	4	4	4	3	4	4	4	4	2	5	5	5	3	4	4	4	4	4	4	4	3		4.0	4.9
15-Jan-05	2	5	5	4	2	4	3	2	3	2	2	2	3	2	5	4	5	4	5	6	6	6	4	4		3.4	6.1
16-Jan-05	4	4	2	2	2	2	3	4	3	3	3	3	2	4	4	3	4	2	1	4	1	3	4	3		2.1	4.4
17-Jan-05	2	2	2	calm	2	3	2	1	4	2	2	4	2	5	5	7	8	11	15	17	13	15	13	12		6.3	16.9
18-Jan-05	11	12	10	9	10	11	12	11	11	10	9	7	6	5	4	4	4	6	6	6	7	7	6	5		5.9	12.1
19-Jan-05	3	5	2	5	4	3	5	6	2	3	5	5	7	6	5	5	5	5	5	5	6	5	5	4		3.8	6.6
20-Jan-05	4	5	4	3	5	6	5	3	2	2	3	2	3	3	2	3	3	3	3	2	2	4	4	3		2.4	6.2
21-Jan-05	2	2	2	3	4	4	4	3	3	3	4	2	3	3	1	2	2	2	2	2	2	2	calm	1		1.6	4.1
22-Jan-05	2	2	2	1	2	2	2	2	1	1	2	2	2	3	3	2	N	1	3	3	3	1	3	calm		2.0	3.2
23-Jan-05	4	2	3	1	6	3	3	1	4	6	5	2	3	2	4	calm	3	2	3	2	3	2	2	2		0.7	6.4
24-Jan-05	2	1	2	2	2	2	1	4	4	5	16	25	25	29	27	34	37	29	28	22	15	12	8	2		12.8	36.8
25-Jan-05	4	2	4	6	4	4	3	3	5	4	5	5	4	7	7	5	3	5	4	5	5	5	5	5		4.9	6.9
26-Jan-05	4	4	5	4	3	4	3	2	3	4	1	4	6	5	6	3	5	4	4	5	5	5	3	2		4.1	5.8
27-Jan-05	1	2	1	2	1	2	1	2	6	3	7	10	8	7	12	14	13	10	6	9	10	10	8	9		3.9	14.2
28-Jan-05	10	9	8	7	7	7	6	6	7	7	8	7	6	7	6	7	8	7	7	7	6	4	4	2		6.8	10.4
29-Jan-05	2	2	2	3	3	2	3	3	3	3	2	3	3	3	5	4	6	3	2	4	4	5	6	15		2.3	15.0
30-Jan-05	16	19	9	4	6	11	11	10	7	9	5	5	3	6	2	7	8	6	7	6	7	9	9	5		4.4	19.5
31-Jan-05	10	9	8	10	9	10	13	16	18	25	33	35	35	35	30	25	29	21	19	7	9	7	13	10		13.7	35.5
1-hr Vector	2.5	3.0	2.9	2.7	2.3	2.5	2.3	1.8	1.8	1.8	2.2	2.3	2.8	3.5	3.9	3.7	3.9	4.0	3.7	3.2	3.3	3.2	2.6	2.4			
Hourly Max	15.8	19.5	18.7	28.0	18.1	27.1	20.7	17.0	18.0	24.8	33.4	34.8	34.5	35.5	30.0	33.6	36.8	29.3	28.0	22.1	15.9	14.6	13.2	15.0			

Station: Henry Pirker

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

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
	355.3	343.1	319.2	290.1	141.2	25.2	2.8	316 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Jan-05	328	333	334	331	327	329	340	331	305	313	321	319	275	281	282	286	316	330	342	298	348	331	324	314	318
2-Jan-05	316	330	333	310	333	338	314	319	317	309	340	202	265	249	257	217	228	212	135	210	205	199	173	155	249
3-Jan-05	206	177	168	183	270	224	155	134	121	122	101	125	165	227	323	48	68	63	322	319	333	317	337	329	117
4-Jan-05	341	315	329	316	321	302	316	168	346	299	313	296	288	319	313	294	314	8	340	342	305	319	299	17	321
5-Jan-05	203	328	360	349	310	315	318	166	150	25	288	291	304	303	307	313	308	338	320	294	305	297	308	301	307
6-Jan-05	317	311	311	318	348	357	359	0	0	355	11	13	11	3	360	2	5	3	343	298	323	316	319	357	350
7-Jan-05	5	355	299	326	329	326	336	338	341	330	317	304	315	311	342	337	328	354	333	320	331	331	340	311	331
8-Jan-05	314	321	341	324	327	302	302	328	321	22	25	38	24	43	52	40	31	17	26	49	69	112	146	186	21
9-Jan-05	211	245	210	165	207	170	157	168	161	159	291	316	273	208	207	313	327	315	332	331	314	302	292	277	269
10-Jan-05	319	271	266	276	277	281	299	296	245	240	265	304	350	142	115	71	294	320	303	337	314	319	330	318	286
11-Jan-05	351	190	277	297	1	36	29	48	47	49	43	31	15	16	6	358	352	350	340	338	340	343	344	340	1
12-Jan-05	353	331	322	318	315	338	296	291	282	323	317	300	310	288	313	322	336	320	330	325	331	327	323	326	320
13-Jan-05	332	298	311	313	309	344	315	327	314	326	318	299	299	291	291	284	307	310	315	309	314	294	290	312	308
14-Jan-05	319	317	314	322	311	320	317	322	307	317	294	318	304	309	291	289	345	320	321	341	310	331	344	340	317
15-Jan-05	332	344	336	330	265	343	339	334	335	309	338	182	158	248	292	300	315	329	322	326	336	320	329	348	321
16-Jan-05	294	326	322	305	326	295	321	303	308	321	325	293	316	291	290	181	171	193	2	129	173	292	328	330	301
17-Jan-05	337	314	354	20	325	314	334	294	304	328	173	269	340	306	331	4	8	318	316	319	316	307	299	308	320
18-Jan-05	309	315	313	317	308	304	312	311	301	314	322	316	333	339	5	71	42	61	64	46	49	42	31	36	336
19-Jan-05	71	318	333	338	7	91	116	117	133	71	76	93	96	94	88	70	56	63	62	63	54	37	19	41	63
20-Jan-05	72	119	117	113	103	108	92	76	61	53	38	68	81	58	43	31	28	27	29	23	3	310	323	319	63
21-Jan-05	297	301	93	101	111	106	106	95	84	82	89	75	97	104	100	346	30	19	2	336	327	317	87	190	75
22-Jan-05	260	199	190	275	274	243	237	228	278	268	208	217	239	271	183	248	N	260	325	328	288	223	214	212	248
23-Jan-05	142	151	149	243	198	99	95	1	111	128	139	164	58	48	216	42	96	12	353	327	311	349	302	313	95
24-Jan-05	152	358	168	145	164	24	304	300	299	188	232	234	249	257	267	273	271	266	266	262	263	313	299	254	262
25-Jan-05	287	300	313	349	325	314	5	302	303	326	348	347	303	289	346	294	305	322	335	328	335	335	330	326	322
26-Jan-05	336	338	307	335	347	296	335	234	337	318	280	288	295	297	300	266	313	354	355	311	335	304	319	263	313
27-Jan-05	267	168	34	148	129	259	164	128	12	4	67	69	55	48	331	323	315	326	40	73	84	84	63	63	39
28-Jan-05	74	77	65	72	66	65	67	61	65	73	79	65	70	71	54	60	79	78	106	114	79	70	57	67	73
29-Jan-05	217	267	190	128	136	229	296	325	303	293	264	262	216	231	294	232	173	290	85	134	147	154	190	230	223
30-Jan-05	247	252	283	289	266	254	239	251	286	265	263	250	160	182	145	115	141	123	140	122	126	152	154	142	219
31-Jan-05	154	148	138	143	136	149	182	194	196	222	249	253	263	263	259	263	258	261	252	223	224	149	174	167	231
Hourly Avg	318	303	309	315	316	327	327	316	315	316	314	296	310	292	307	314	315	323	328	326	325	325	320	311	

Station: Henry Pirker

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

Station Owner: PASZA

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Determined by the Yamartino 15-min interval calculation

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
	62.9	49.5	23.3	14.6	9.1	4.5	3.5

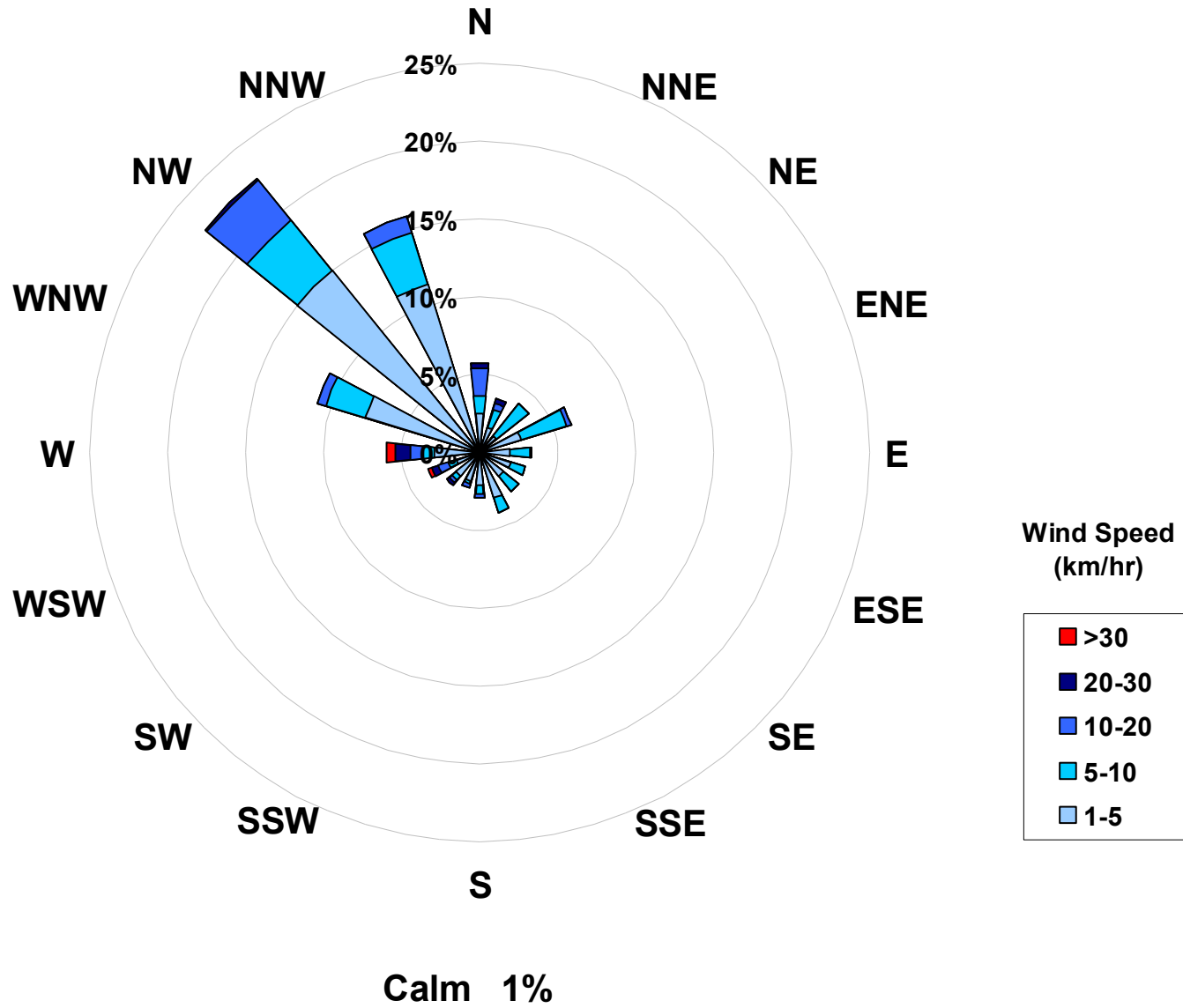
Status Flag Characters

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

Day Mountain Standard Time

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	5	6	6	6	10	7	7	12	30	7	5	9	5	3	2	4	7	5	16	19	62	6	12	7	61.7	
2-Jan-05	9	11	6	13	10	17	29	15	15	15	50	43	37	9	26	14	10	22	60	27	8	17	14	16	60.0	
3-Jan-05	17	15	15	13	13	29	33	16	14	11	11	12	35	22	18	19	32	12	28	19	8	12	12	12	34.7	
4-Jan-05	17	21	26	10	19	19	21	52	8	14	8	22	14	10	14	8	20	31	29	29	25	18	47	45	51.8	
5-Jan-05	31	25	21	40	27	14	29	34	48	36	21	9	22	19	14	15	19	32	55	17	5	5	6	6	54.9	
6-Jan-05	7	5	5	5	6	3	3	4	6	5	5	5	5	4	4	4	4	5	6	6	4	4	4	8	7.9	
7-Jan-05	6	14	8	5	10	5	8	11	11	14	17	15	16	16	21	10	11	5	9	12	13	7	11	14	21.3	
8-Jan-05	9	12	11	12	14	10	9	6	11	17	10	15	11	14	16	16	12	13	13	18	15	13	15	11	18.5	
9-Jan-05	23	17	16	9	56	13	9	22	35	23	53	9	18	33	27	13	5	9	7	7	9	11	10	15	56.2	
10-Jan-05	12	12	4	4	3	4	5	9	8	9	19	42	18	44	53	32	64	20	34	16	29	14	11	13	63.8	
11-Jan-05	11	36	22	30	14	13	13	20	14	12	13	13	7	9	6	3	5	6	7	6	5	5	4	4	36.2	
12-Jan-05	4	7	6	10	11	24	17	12	9	12	11	16	12	10	10	9	5	11	10	11	8	6	13	23.9		
13-Jan-05	11	9	25	11	18	7	10	19	11	10	7	18	18	13	9	9	5	4	4	5	4	24	21	27	27.1	
14-Jan-05	16	17	13	15	18	20	35	11	13	12	13	36	9	10	12	13	18	23	12	11	17	12	22	21	35.9	
15-Jan-05	42	6	11	17	23	15	15	16	17	41	24	27	31	33	14	14	18	20	13	7	8	9	14	10	42.1	
16-Jan-05	18	11	21	13	26	23	15	12	15	18	17	13	28	20	24	30	22	53	31	20	48	30	42	25	53.3	
17-Jan-05	33	44	58	46	57	36	47	48	24	68	58	54	50	16	41	14	21	8	6	5	6	6	7	8	67.8	
18-Jan-05	6	6	8	8	9	5	7	7	7	6	10	13	8	11	16	18	19	13	14	19	14	15	17	22	22.5	
19-Jan-05	36	28	55	35	28	36	16	17	48	28	14	19	15	17	16	16	20	19	18	22	16	15	16	24	55.1	
20-Jan-05	15	15	16	21	19	12	11	16	23	20	21	19	17	20	23	20	15	14	15	39	21	7	9	16	38.6	
21-Jan-05	11	13	27	9	9	8	7	9	9	8	9	18	14	16	40	21	20	16	7	15	14	17	40	24	40.1	
22-Jan-05	16	21	14	39	22	11	16	16	43	37	22	18	25	19	16	24	N	42	43	54	28	62	29	59	61.5	
23-Jan-05	32	65	51	38	11	44	32	42	25	11	16	48	30	40	20	57	31	36	56	56	40	65	55	55	65.4	
24-Jan-05	38	66	53	47	55	39	64	30	50	23	7	5	4	4	4	3	4	4	4	4	5	8	15	27	66.2	
25-Jan-05	13	40	18	6	33	31	42	35	30	15	11	9	26	9	18	16	36	20	13	7	8	9	11	11	42.4	
26-Jan-05	17	14	16	20	15	27	25	24	31	18	41	31	17	10	11	22	13	16	28	31	15	25	37	32	41.0	
27-Jan-05	80	61	43	52	47	47	73	43	19	44	18	11	20	17	13	6	5	8	29	12	10	10	12	11	79.7	
28-Jan-05	10	12	11	11	11	11	19	14	15	13	11	16	19	18	24	16	13	14	13	11	18	24	19	41	41.4	
29-Jan-05	20	35	13	21	18	34	15	16	13	12	26	31	27	20	25	45	13	49	20	38	29	13	11	8	49.4	
30-Jan-05	4	3	11	40	25	7	6	7	12	12	15	19	33	17	59	13	7	9	7	7	9	5	4	9	58.6	
31-Jan-05	7	10	8	10	8	5	11	6	9	8	5	5	4	4	4	6	4	6	7	14	19	14	4	9	18.6	
Hourly Max	80	66	58	52	57	47	73	52	50	68	58	54	50	44	59	57	64	53	60	56	62	65	55	59		

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



PEACE AIRSHED ZONE ASSOCIATION

PASZA Monthly Passive Data Summary

Table 1. PASZA Passive Stations for January 2005

PASZA					
Station Number	Station Name	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Site Legal
Duplicates					
24a	Flyingshot	0.5	26.2	4.8	
24b	Flyingshot	0.4	26.6	4.9	
25a	Gold Creek	0.4	28.2	3.3	
25b	Gold Creek	0.5	26.3	3.0	
14a	Karr Creek	0.3	28.0	2.1	
14b	Karr Creek	0.2	26.5	2.2	
49a	Grande Prairie HP	0.5	18.4	14.2	
49b	Grande Prairie HP	0.4	19.1	13.8	
1	Silver Valley	1.0	34.8	2.6	08-27-081-11 W6M
2	Bay Tree	0.6	38.3	1.5	13-16-078-13 W6M
3	Forth Creek	0.8	34.4	1.7	04-13-082-07 W6M
4	Gordondale	0.9	35.6	2.1	04-34-078-10 W6M
5	Boone Creek	0.5	29.2	1.7	01-23-076-11 W6M
7	Steeprock Creek	0.4	33.3	damaged	09-35-072-13 W6M
9	Spirit River	0.6	35.6	2.6	08-12-079-07 W6M
10	Woking	0.8	34.3	1.5	01-13-076-07 W6M
11	Webber Creek	0.8	30.9	2.3	09-36-074-09 W6M
12	Hythe	missing	27.8	3.8	14-36-072-11 W6M
14	Sylvester	0.2	27.2	2.2	08-06-069-12 W6M
16	Beaverlodge	0.7	31.8	5.6	15-36-071-10 W6M
17	Poplar	0.7	29.3	3.2	13-06-073-08 W6M

Table 1. PASZA Passive Stations for January 2005 (Continued)

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
18	Saddle Hills	0.6	36.4	2.1	04-25-074-07 W6M
19	Wanham	0.6	33.9	2.2	16-22-077-03 W6M
20	Shaftesbury	0.4	34.1	1.6	04-03-082-23 W5M
21	Eaglesham	0.4	32.8	1.6	16-21-079-25 W5M
23	Bear Lake	0.7	33.2	3.6	15-31-072-06 W6M
24	Wembley	0.5	26.4	4.9	12-31-070-08 W6M
25	Pinto Creek	0.4	27.2	3.1	04-24-069-11 W6M
26	Flyingshot	0.4	23.0	6.4	15-36-070-07 W6M
27	Grande Prairie I	0.5	18.4	14.6	08-15-071-06 W6M
28	Clairmont Lake	0.8	35.6	3.9	09-06-073-04 W6M
29	Smoky Heights	1.1	33.2	2.3	04-06-075-02 W6M
30	Fitzsimmons	0.4	27.9	3.9	15-36-072-03 W6M
32	Gold Creek	0.5	22.5	4.1	06-33-067-05 W6M
33	Wapiti	0.3	27.2	4.5	02-25-071-03 W6M
34	Puskwaskau	0.3	29.0	1.2	15-35-074-25 W5M
35	Jean Cote	0.7	34.4	1.8	12-35-079-21 W5M
36	Guy	missing	36.8	1.9	03-04-076-22 W5M
37	Crooked Creek	0.5	31.6	3.4	16-01-071-26 W5M
38	Karr Creek	0.2	26.3	1.2	10-16-065-02 W6M
39	Clouston Creek	0.8	30.2	2.4	12-01-073-22 W5M
40	McLennan	0.6	34.7	1.9	03-29-077-19 W5M
41	Valleyview	0.7	26.6	2.9	09-30-069-22 W5M
42	Sunset House	0.9	39.7	1.6	05-32-070-19 W5M
43	High Prairie	0.4	33.2	3.1	16-13-074-17 W5M
44	Peavine	0.3	30.8	1.1	03-05-079-15 W5M
45	Gift Lake	0.3	33.5	1.6	10-07-079-12 W5M
46	Little Smoky	0.5	22.0	5.6	12-01-065-21 W5M
47	Kinuso	0.3	26.4	2.6	12-10-073-10 W5M
48	Deer Mountain	0.4	31.9	1.1	15-22-068-09 W5M
49	Grande Prairie HP	0.5	18.8	14.0	17-26-071-06 W6M

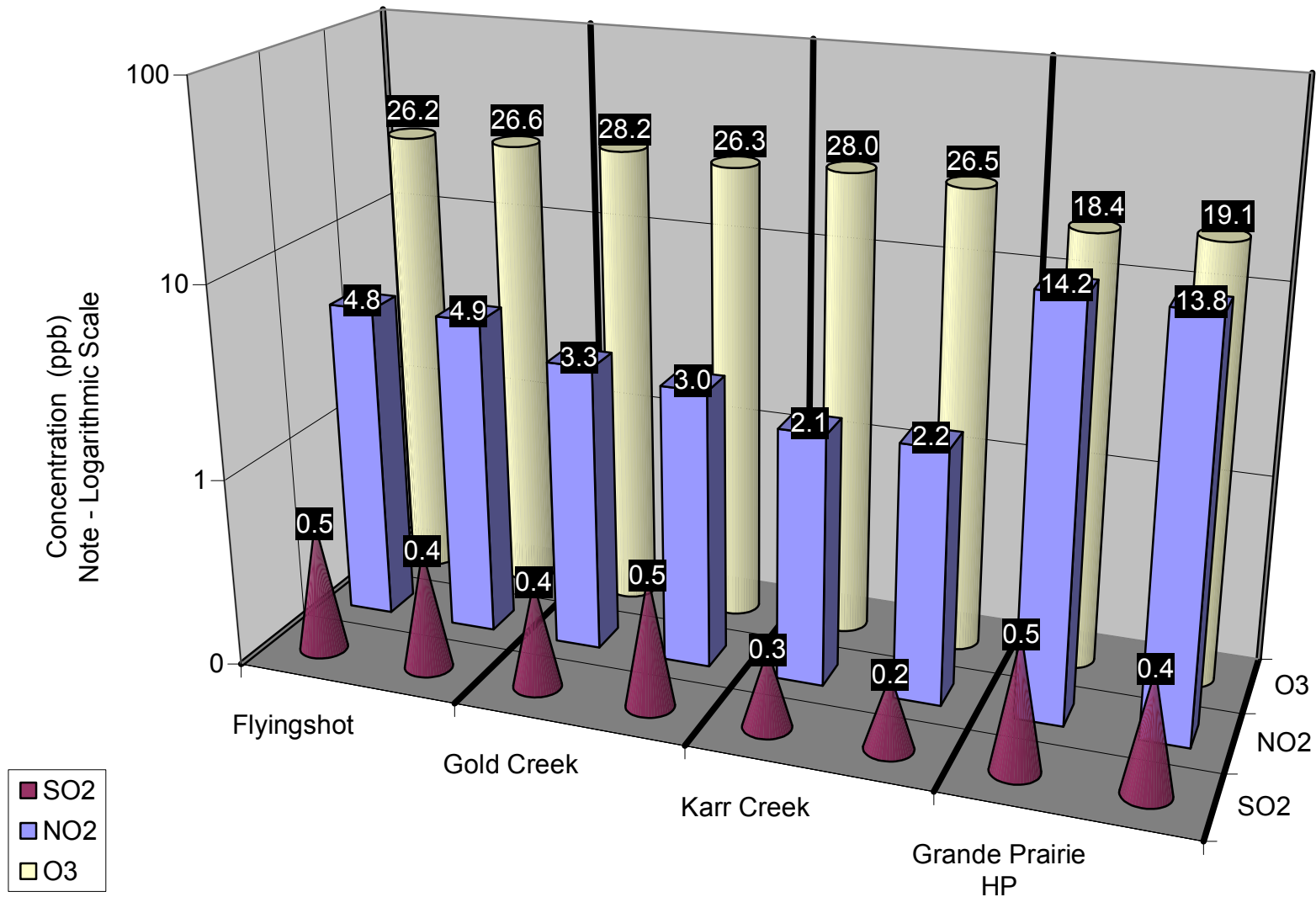


Figure 20. Duplicate Summary Chart

Table 2. Passive Summary Results for January 2005

Stats	Sulphur Dioxide SO ₂ ppb	Ozone O ₃ ppb	Nitrogen Dioxide NO ₂ ppb
Passive Summary for January 2005 (PASZA Zone)			
Mean	0.6	30.7	3.3
Standard Deviation	0.2	5.0	2.8
Minimum	0.2	18.4	1.1
	Karr Creek (#38)	Grande Prairie I (#27)	Deer Mountain (#48)
Maximum	1.1	39.7	14.6
	Smoky Heights (#29)	Sunset House (#42)	Grande Prairie I (#27)
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)			
	SO ₂	O ₃	NO ₂
AENV Beaverlodge station	0.9	22.7	8.9
PASZA Beaverlodge passive	0.7	31.8	5.6
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)			
	SO ₂	O ₃	NO ₂
PASZA Henry Pirker station	0.8	11.7	22.4
PASZA Grande Prairie passive	0.5	18.8	14.0

Alberta Ambient Air Quality Guidelines - Annual SO₂ Guideline is 11 ppb

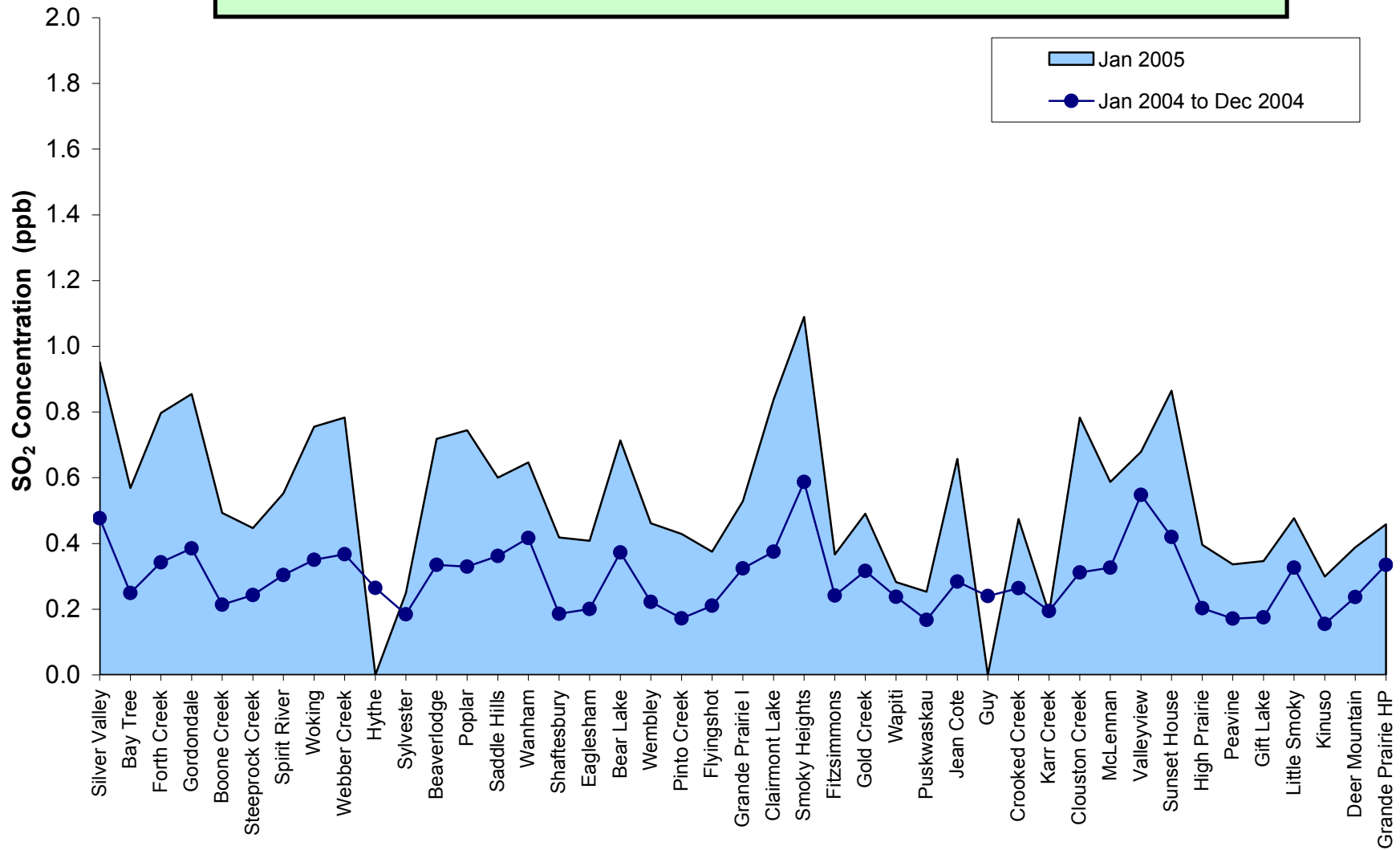


Figure 22. SO₂ Summary Chart

PASZA Passive O₃ Stations - Jan 2005
Average Concentrations in ppb

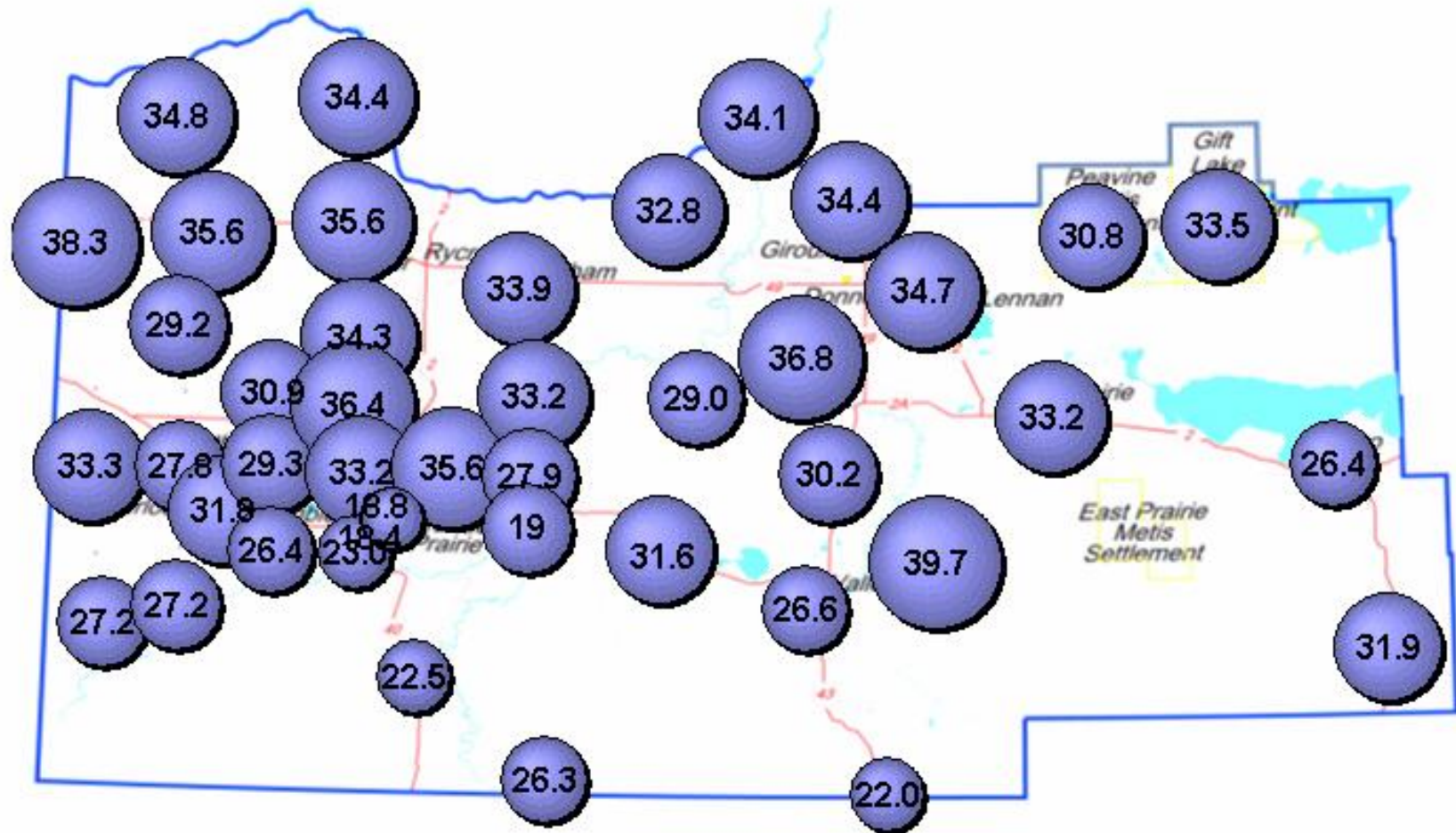


Figure 23. O₃ Bubble Chart

Alberta Ambient Air Quality Guidelines - No Annual O₃ Guideline

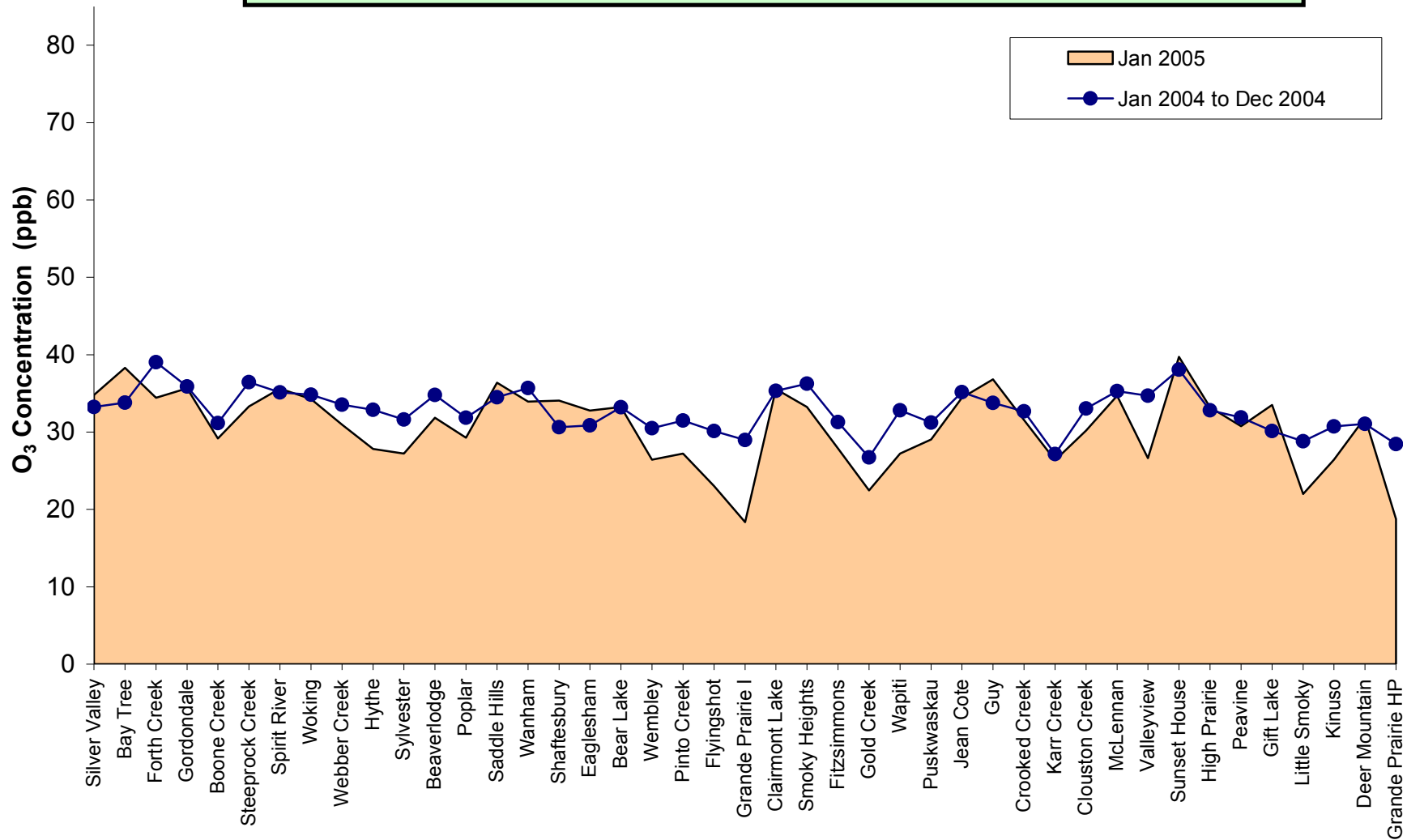


Figure 24. O₃ Summary Chart

PASZA Passive NO₂ Stations - Jan 2005
Average Concentrations in ppb

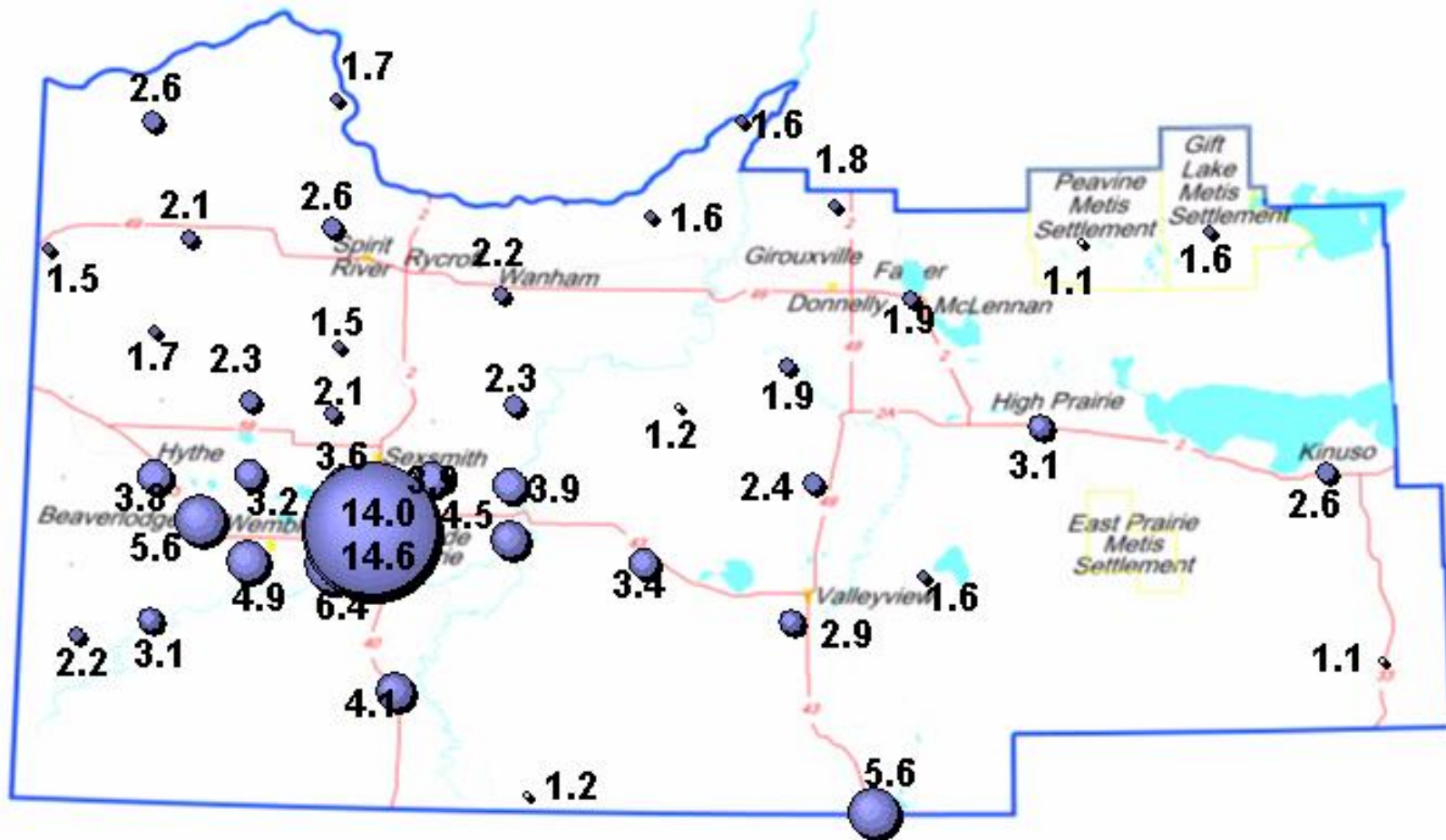


Figure 25. NO₂ Bubble Chart

Alberta Ambient Air Quality Guidelines - Annual NO₂ Guideline is 32 ppb

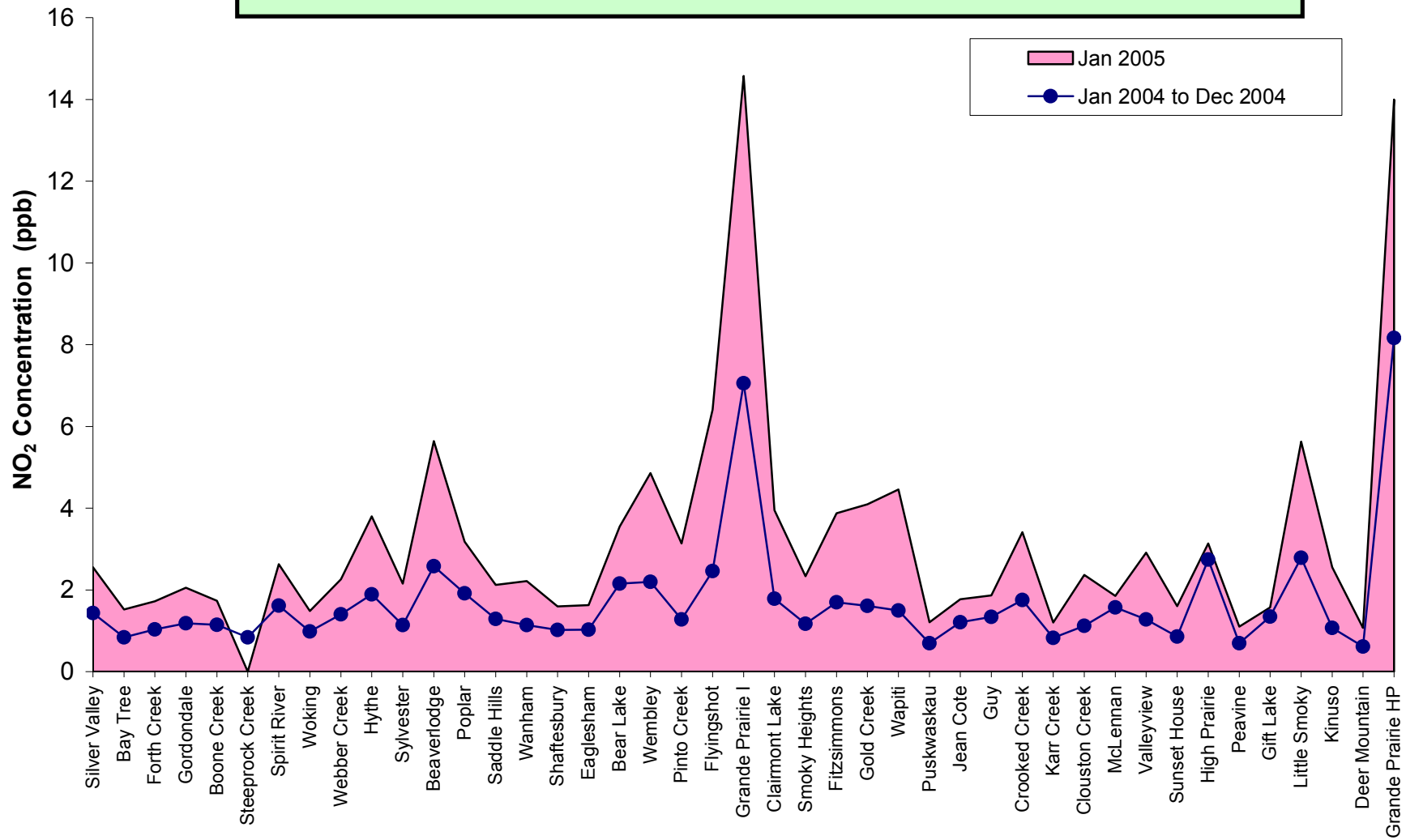


Figure 26. NO₂ Summary Chart

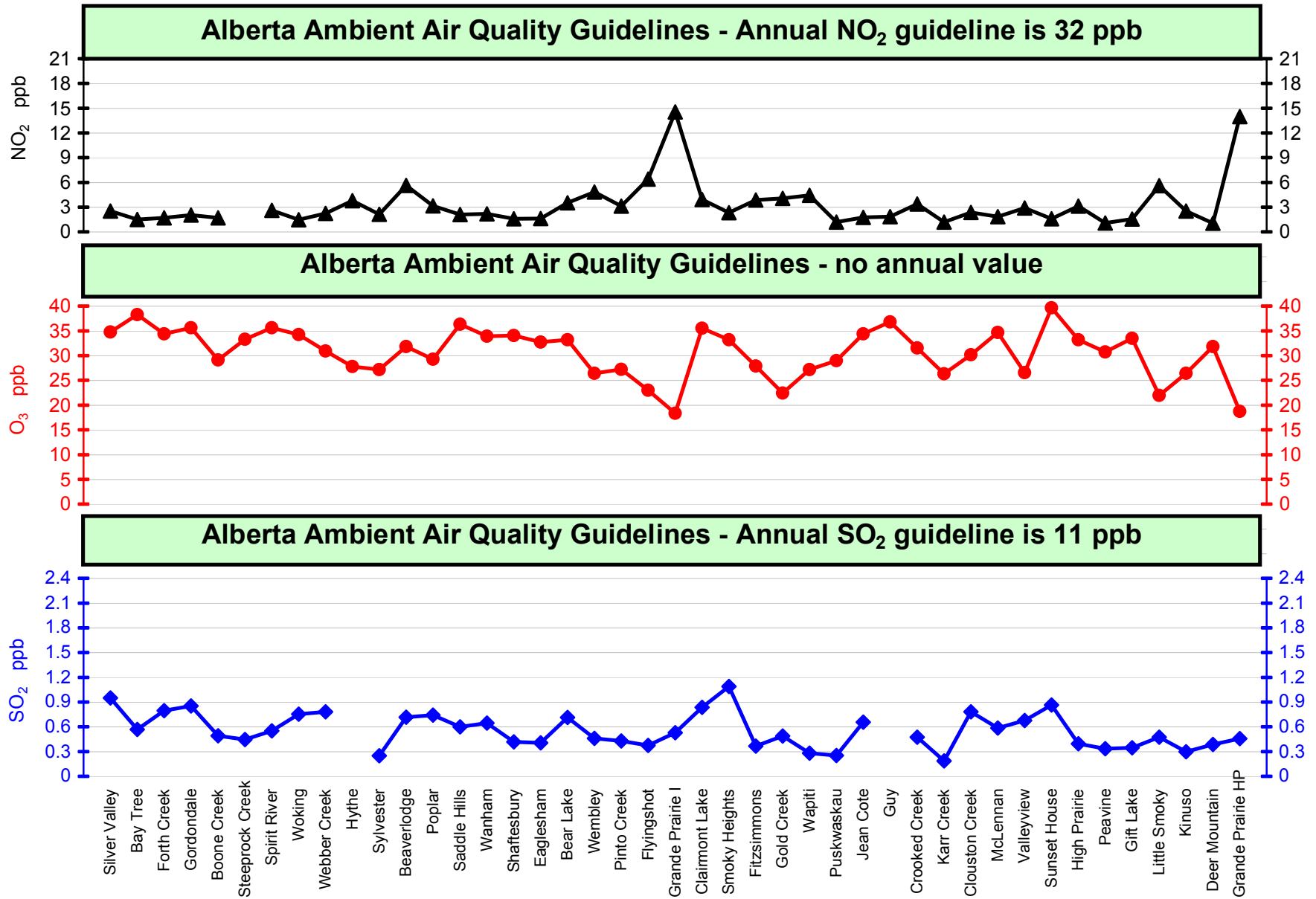


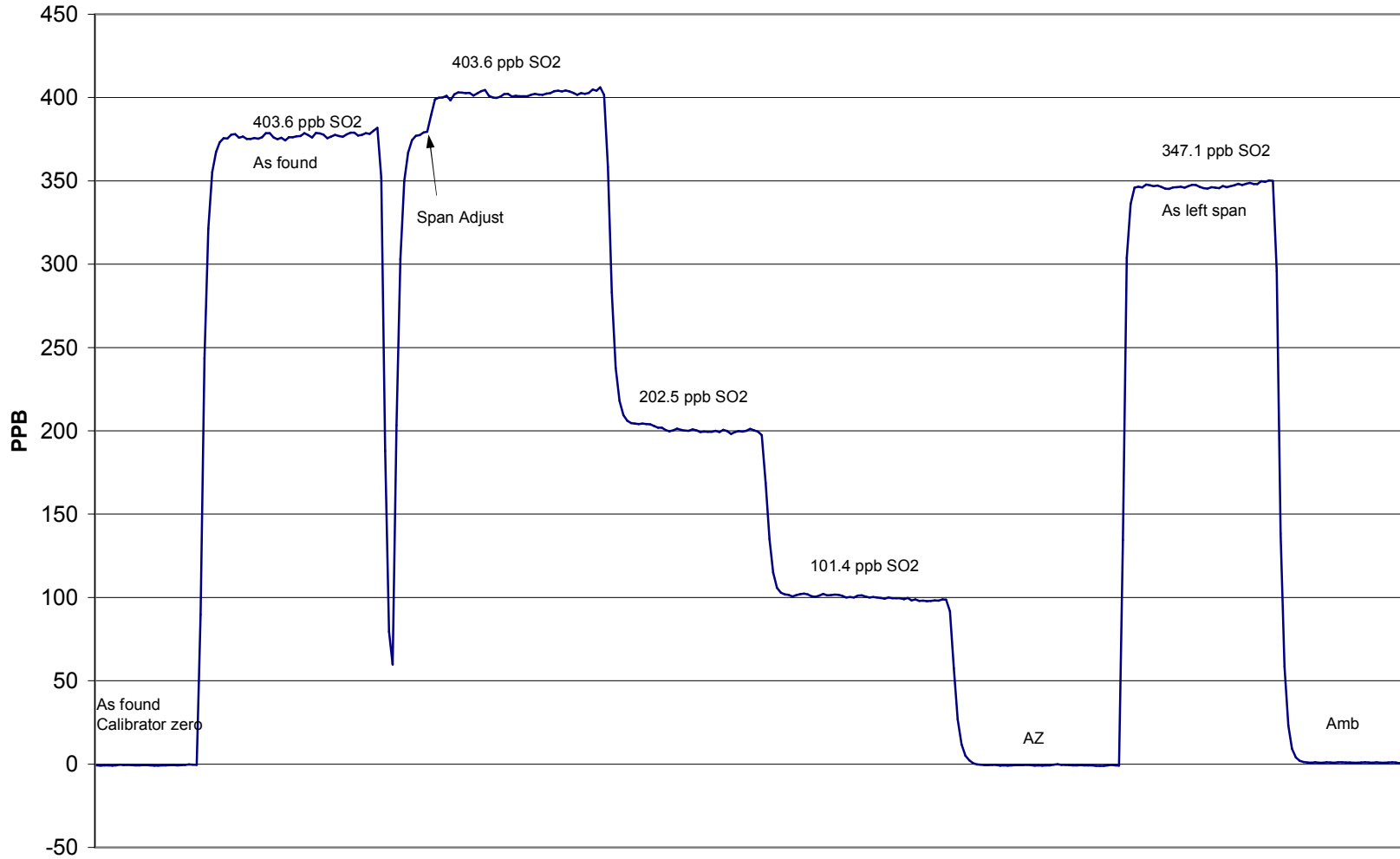
Figure 27. Overview Summary

January 2005 Calibration Reports

PASZA - Henry Pirker Station with the following calibrations:

SO₂, NO, NO₂, NO_x, O₃, CO, THC, TRS, PM_{2.5}

SO2 Calibration



January 26, 2005

Calibration Report

Parameter **NOx-NO-NO₂**
 Air Monitoring Network **PASZA**

**Station Information**

Calibration Date January 24, 2005 Previous Calibration December 13, 2004
 Station Number 1 Station Location Muskoseepi Park

Reason: Routine Installation Removal Other: _____

Start Time (MST) 9:00 End Time (MST) 13:55
 Barometric Pressure 0.911 Atm Station Temperature 20.9 Deg C
 Calibrator Envionics 6100 Serial Number 3016
 NO Cal Gas Conc 50.3 ppm Cal Gas Expiry Date 19-Jan-06
 NOx Cal Gas Conc 50.5 ppm Cal Gas Serial # ALM025793

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45269

Parameter		NO2	NOx	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	0.994088	0.978541	0.988761
	Data Offset	-1.160713	0.732464	-0.204782
After	Data Slope	1.010290	1.001234	1.002593
	Data Offset	1.072673	-0.320088	-0.889113
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	9.9	mV
NOx background	10.2	ppb	10.5	mV
NO coefficient	1.148		1.375	
NOx coefficient	1.003		1.003	
Chamber Temp	49.9	Deg C	49.9	Deg C
Cooler Temp	2.9	Deg C	0.1	Deg C
Converter Temp	324.0	Deg C	324.0	Deg C
Vacuum	22.4	inches Hg	21.0	inches Hg
Box temp	29.5	ccm	29.4	ccm

Notes: Analyzer was zero and span adjusted. Turned span oven temperature up slightly to see if this will help stabilize daily spans.

Calibration Report

Parameter **NO_x-NO-NO₂**
 Air Monitoring Network **PASZA**



Station Information

Calibration Date: January 24, 2005 Station Location: Muskoseepi Park

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	-0.5	-0.1	-0.3	N/A	N/A
1	4993	39.97	401.1	399.5	1.6	400.6	398.9	1.6	1.0012	1.0015
2	4993	19.98	201.3	200.5	0.8	201.4	201.2	0.1	0.9995	0.9963
3	4993	9.99	100.8	100.4	0.4	102.2	102.1	-0.1	0.9869	0.9835
AFZ	4993	0.00	0.0	0.0	0.0	-2.3	-1.5	-0.9	0.0000	0.0000
AFS	4993	39.97	401.1	399.5	1.6	387.4	387.1	0.2	1.0354	1.0320
Average Correction Factor									0.9959	0.9938

As Found Concentrations: NO_x= 390.4 NO= 388.4 As Found Percent Change NO_x= -2.7% NO= -2.8%

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O3 Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
0	399.7	400.3	-0.6	401.4	400.2	1.2	0.9957	1.0004	N/A	N/A
350	399.7	89.3	312.4	399.0	90.0	308.7	1.0017	0.9927	1.0118	98.8%
200	399.7	220.3	182.4	399.4	220.7	178.7	1.0009	0.9986	1.0205	98.0%
100	399.7	309.7	93.0	400.2	309.8	90.4	0.9987	0.9997	1.0290	97.2%
Average Correction Factor							1.0004	0.9970	1.0204	98.0%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	1.3	-2.2	1.3	ppb	-0.7	0.9	-1.1	ppb
Auto span	418.3	419.1	3.6	ppb	399.6	401.9	1.5	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter NO₂
 Air Monitoring Network PASZA

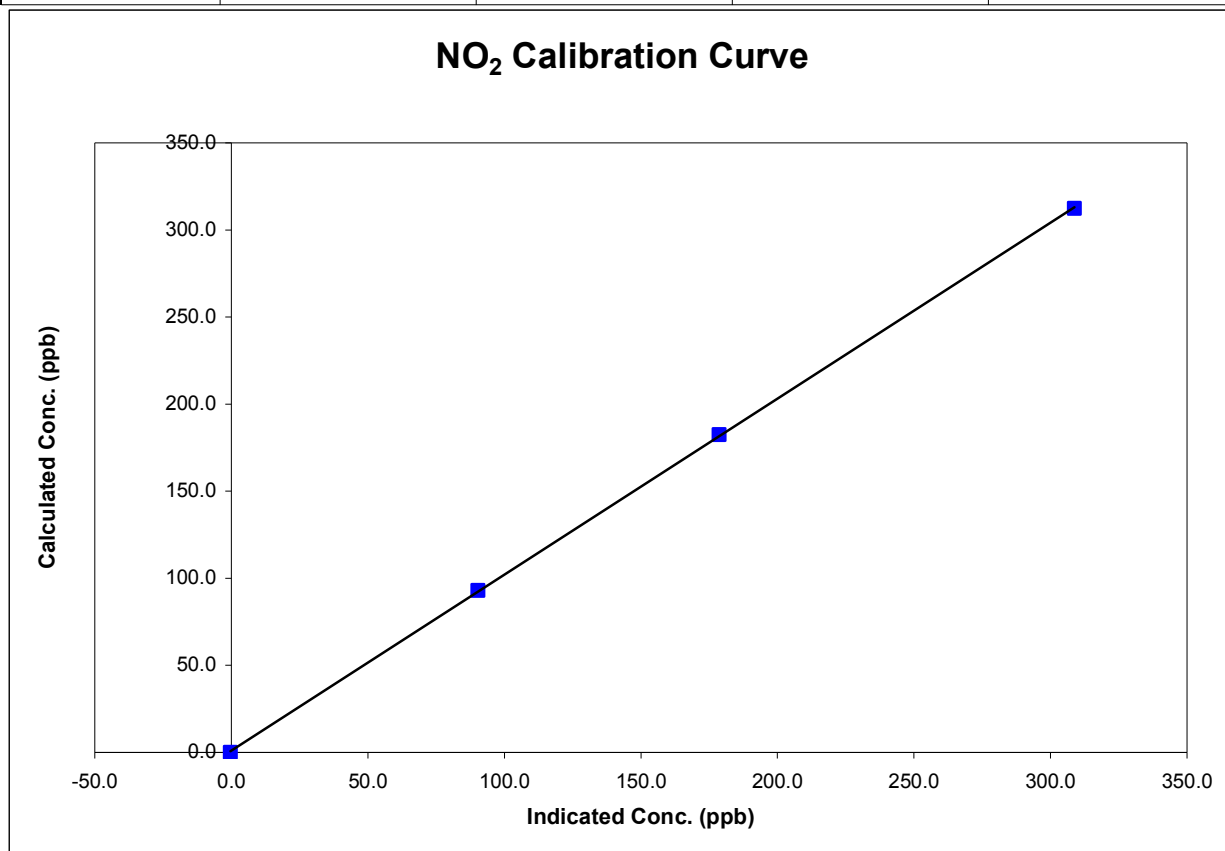


Station Information

Calibration Date	January 24, 2005	Previous Calibration	December 13, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:00	End Time (MST)	13:55
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000		
312.4	308.7	1.0118	Correlation Coefficient	0.999965
182.4	178.7	1.0205		
93.0	90.4	1.0290	Slope	1.010290
			Intercept	1.072673



Calibration Summary

Parameter NO
 Air Monitoring Network PASZA



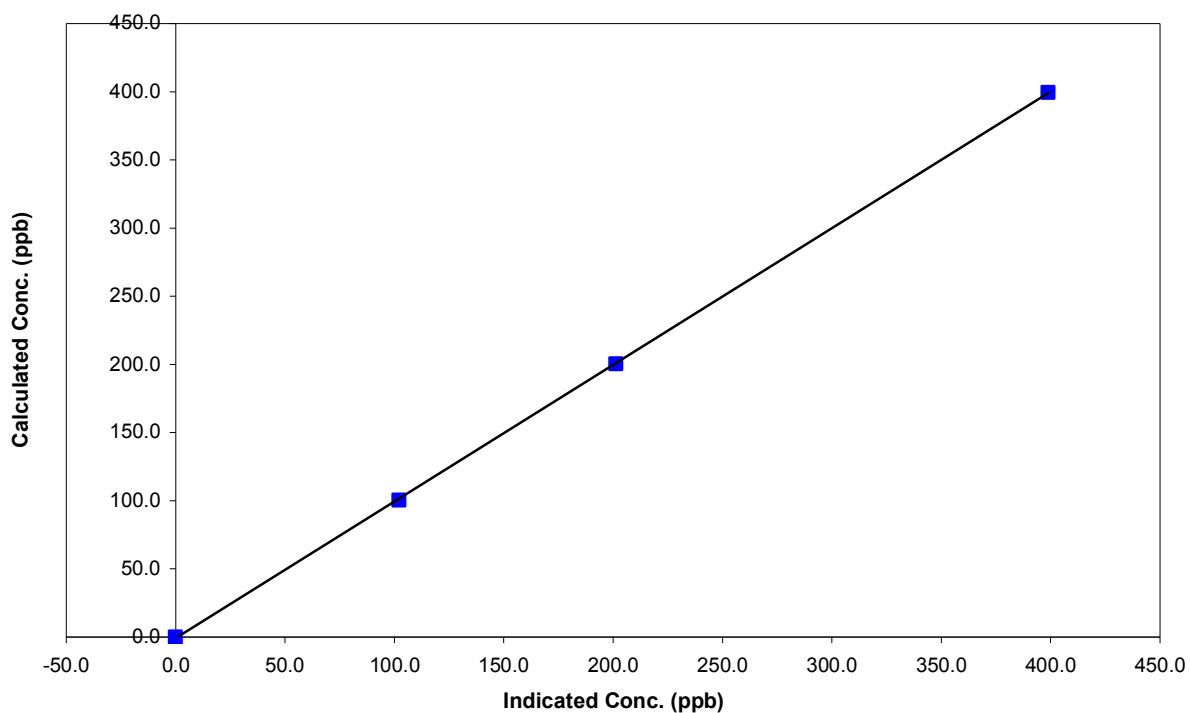
Station Information

Calibration Date	January 24, 2005	Previous Calibration	December 13, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:00	End Time (MST)	13:55
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
399.5	398.9	1.0015	Correlation Coefficient	0.999972
200.5	201.2	0.9963		
100.4	102.1	0.9835		
			Slope	1.002593
			Intercept	-0.889113

NO Calibration Curve



Calibration Summary

Parameter NO_x
 Air Monitoring Network PASZA



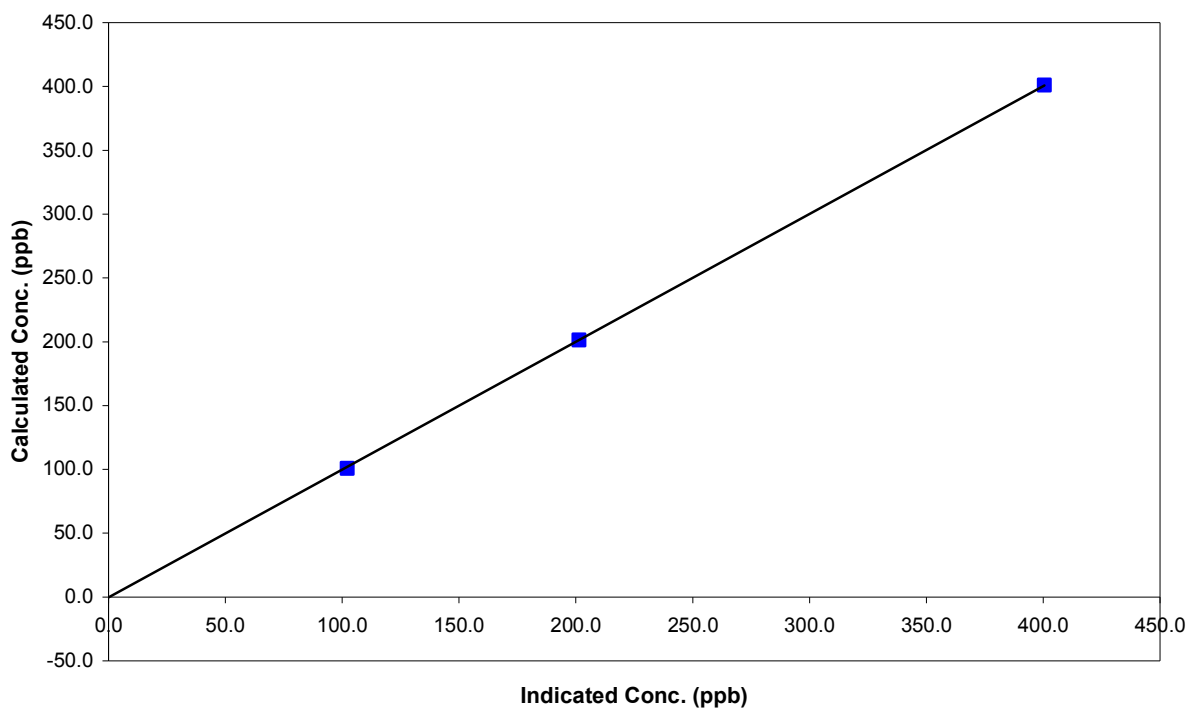
Station Information

Calibration Date	January 24, 2005	Previous Calibration	December 13, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	9:00	End Time (MST)	13:55
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

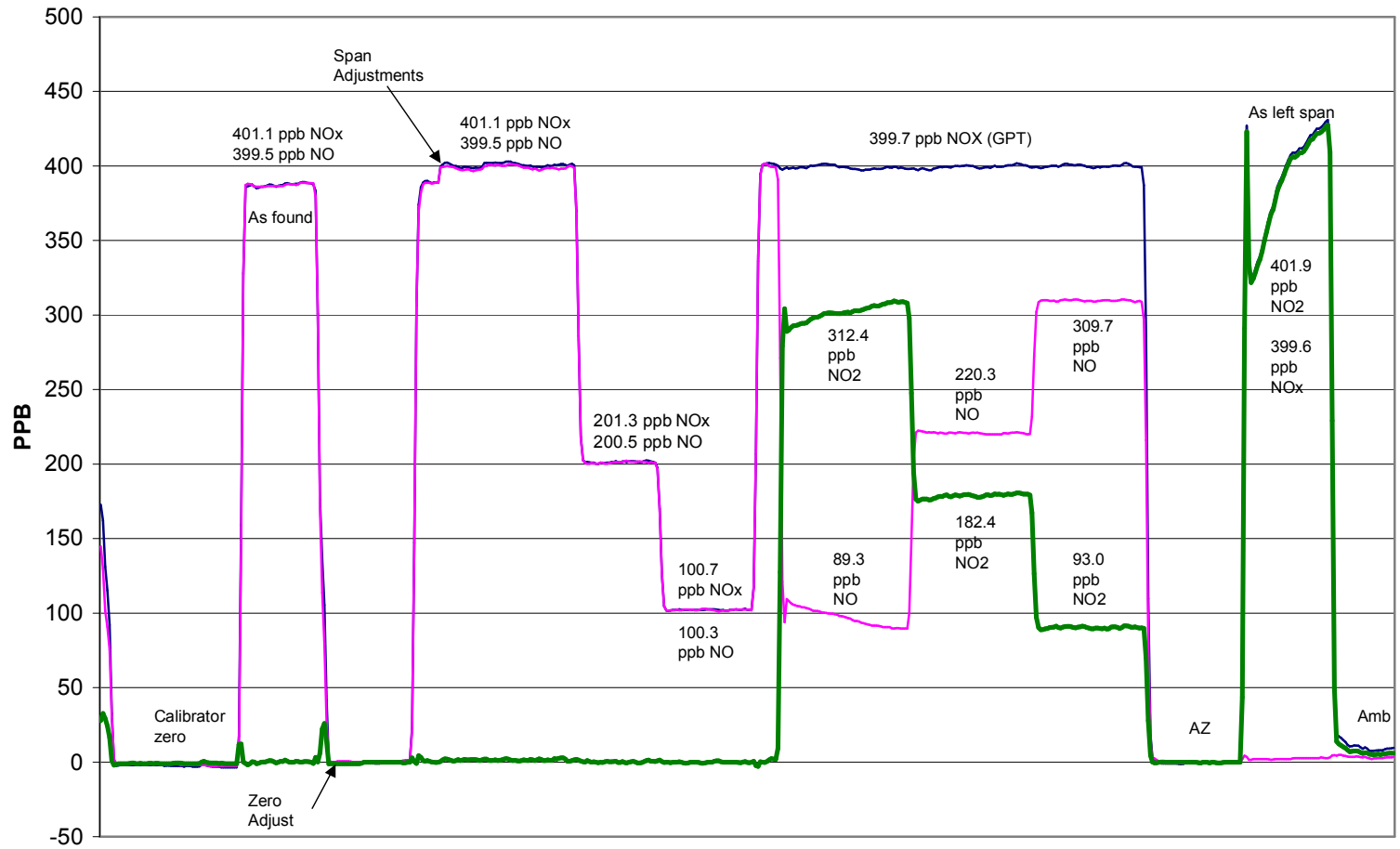
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.5	0.0000		
401.1	400.6	1.0012	Correlation Coefficient	0.999976
201.3	201.4	0.9995		
100.8	102.2	0.9869	Slope	1.001234
			Intercept	-0.320088

NO_x Calibration Curve



NOx Calibration



January 24, 2005

Calibration Report

Parameter 03Air Monitoring Network PASZA

Station Information

Calibration Date	January 24, 2005	Previous Calibration	December 13, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:00	End Time (MST)	15:55
Barometric Pressure	0.911 atm	Station Temperature	21.0 Deg C
Calibrator	Enviroics 6100	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.995906	Calculated slope	0.993905
Calculated intercept	0.774070	Calculated intercept	0.286910
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	1.021		1.05	
Lamp measure	2853	mV	2727	mV
Lamp Reference	2853	mV	2726	mV
Pressure	27.3	inches Hg	27.1	inches Hg
Sample Flow	675	ccm	668	ccm
Lamp temp	52	Deg C	52	Deg C

Calibration Data

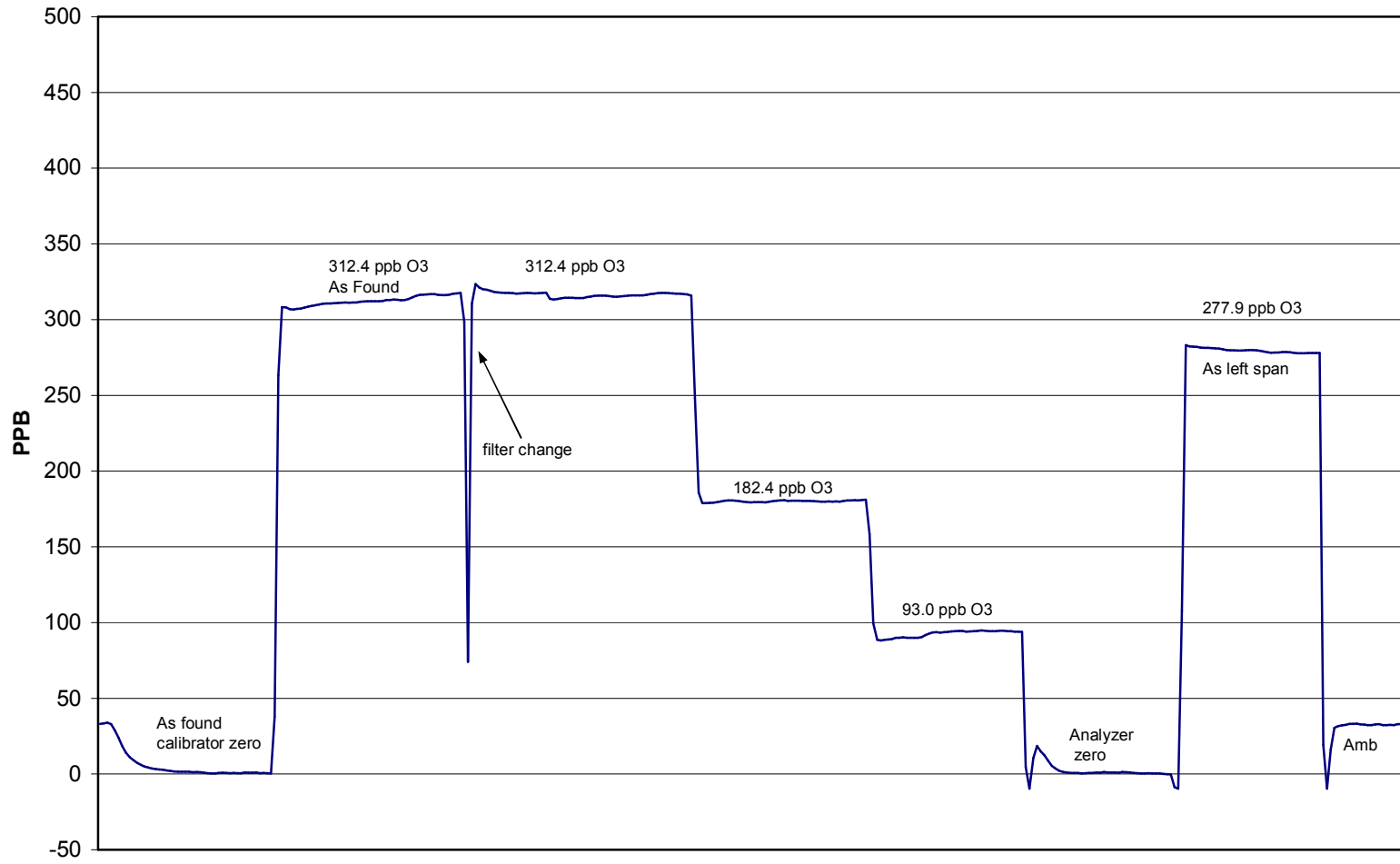
Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.8	N/A
4995	0.00	312.4	315.7	0.9896
4995	0.00	182.4	180.2	1.0123
4995	0.00	93.0	93.6	0.9940
4995	0.00	0.0	0.8	As found zero
4995	0.00	312.4	316.5	As found span
Average Correction Factor				0.9986

Calculated value of As Found Response: 315.1 ppm Percent Change of As Found: 0.9%

	before calibration		after calibration	
Auto zero	0.9	ppb	1.0	ppb
Auto span	284.7	ppb	277.9	ppb

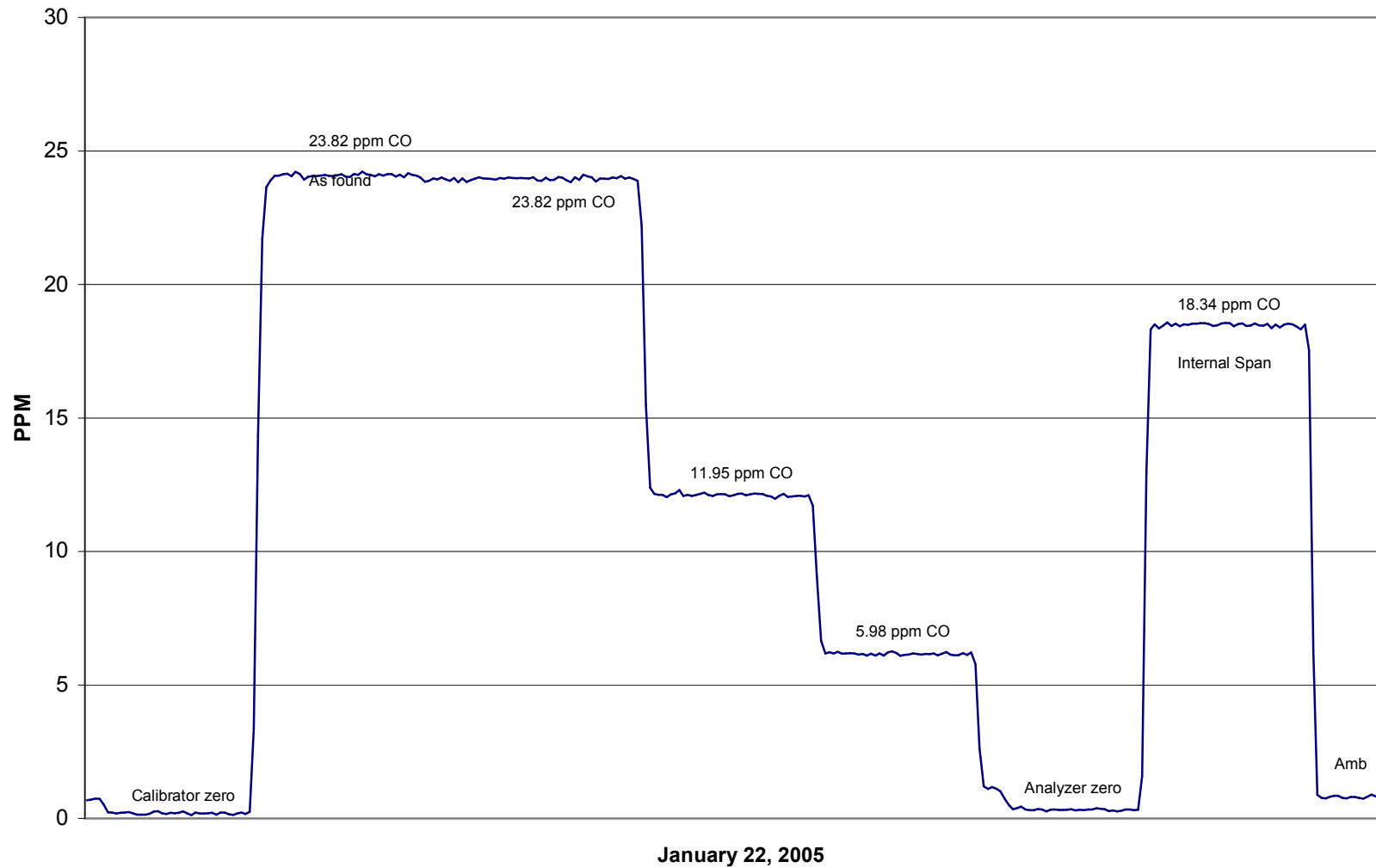
Notes: Analyzer was span adjusted.Calibration Performed By: Kelly Baragar

O3 Calibration



January 24, 2005

CO Calibration



Calibration ReportParameter THCAir Monitoring Network PASZA**Station Information**

Calibration Date	January 23, 2005	Previous Calibration	December 14, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:20	End Time (MST)	18:40
Barometric Pressure	0.913 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1522.25 ppm	Cal Gas Cylinder #	ALM 030358
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.999525	Calculated slope	1.001511
Calculated intercept	0.052283	Calculated intercept	0.032292
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.11	psi	6.11	psi
THC span counts	6876	capture	6876	capture
THC zero counts	1259	capture	1259	capture

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	-0.07	N/A
4993	64.97	19.55	19.50	1.0029
4993	34.96	10.58	10.51	1.0069
4993	9.97	3.03	3.05	0.9944
4993	0.00	0.00	-0.07	As Found Zero
4993	64.97	19.55	19.50	As Found Span
Average Correction Factor				1.0014

Calculated value of As Found Response: 19.606 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.03	ppm	-0.08	ppm
Auto span	22.33	ppm	22.30	ppm

Notes: No adjustments made; analyzer appears to respond and stabilize normally.Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter THC
 Air Monitoring Network PASZA

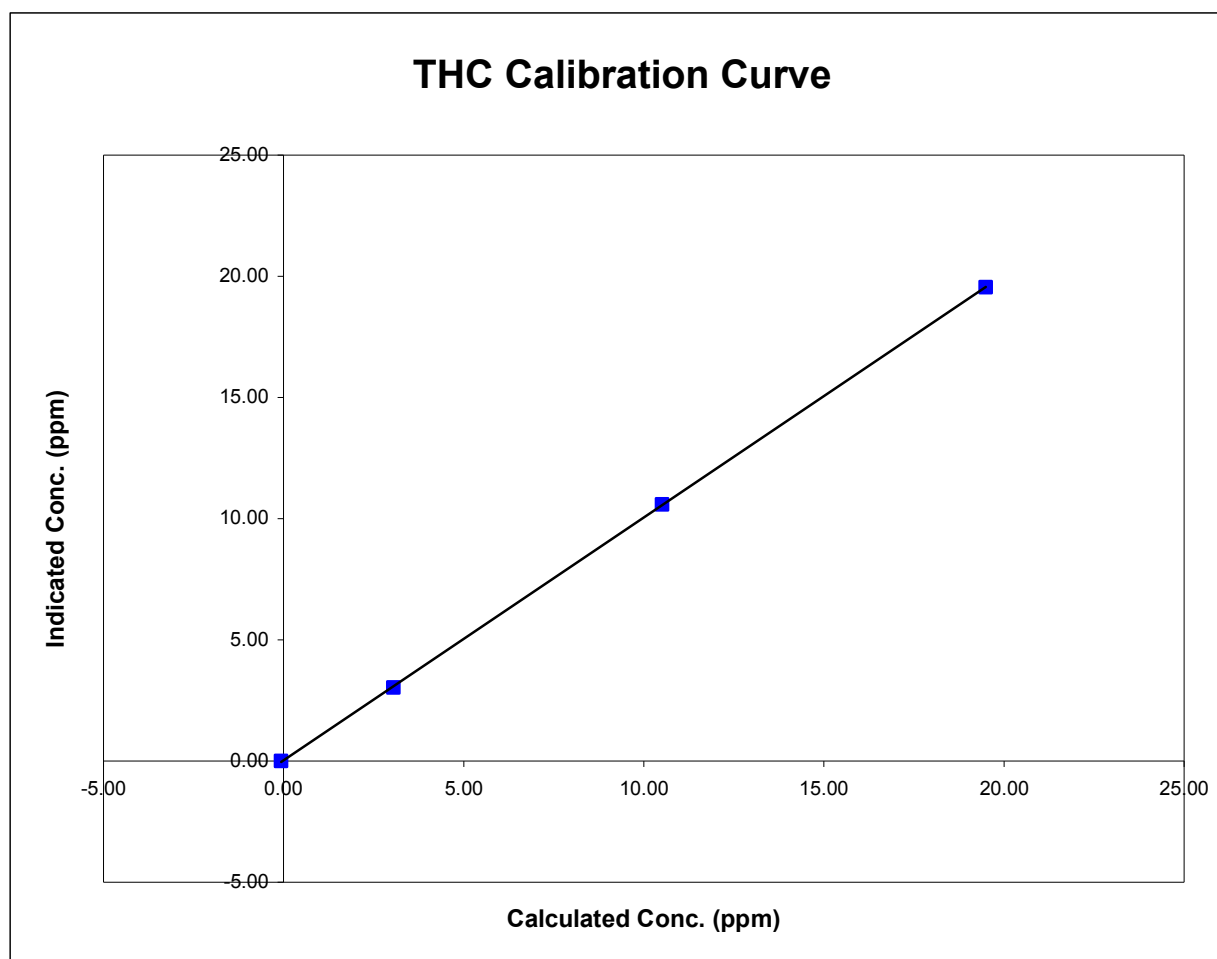


Station Information

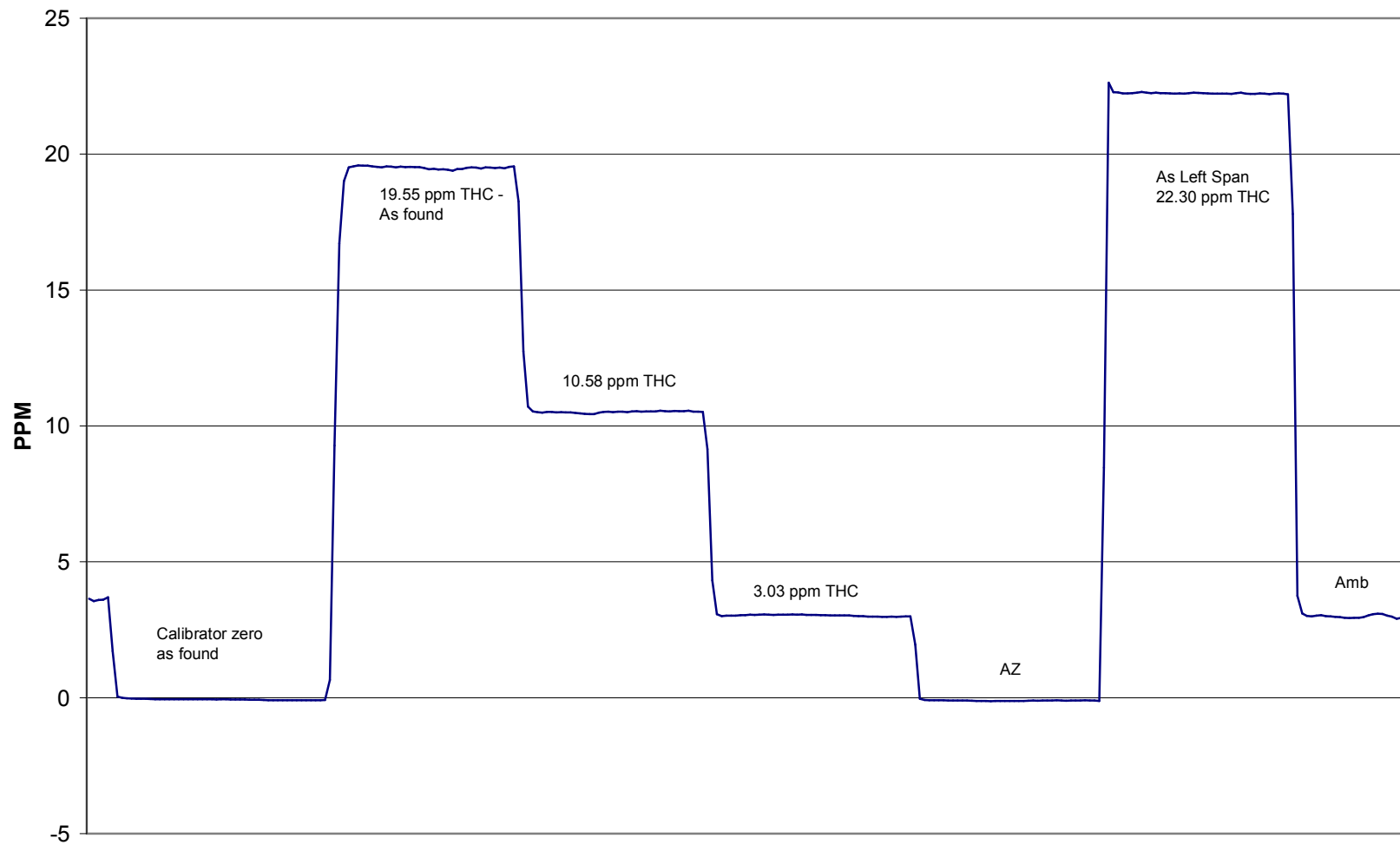
Calibration Date	January 23, 2005	Previous Calibration	December 14, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	16:20	End Time (MST)	18:40
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

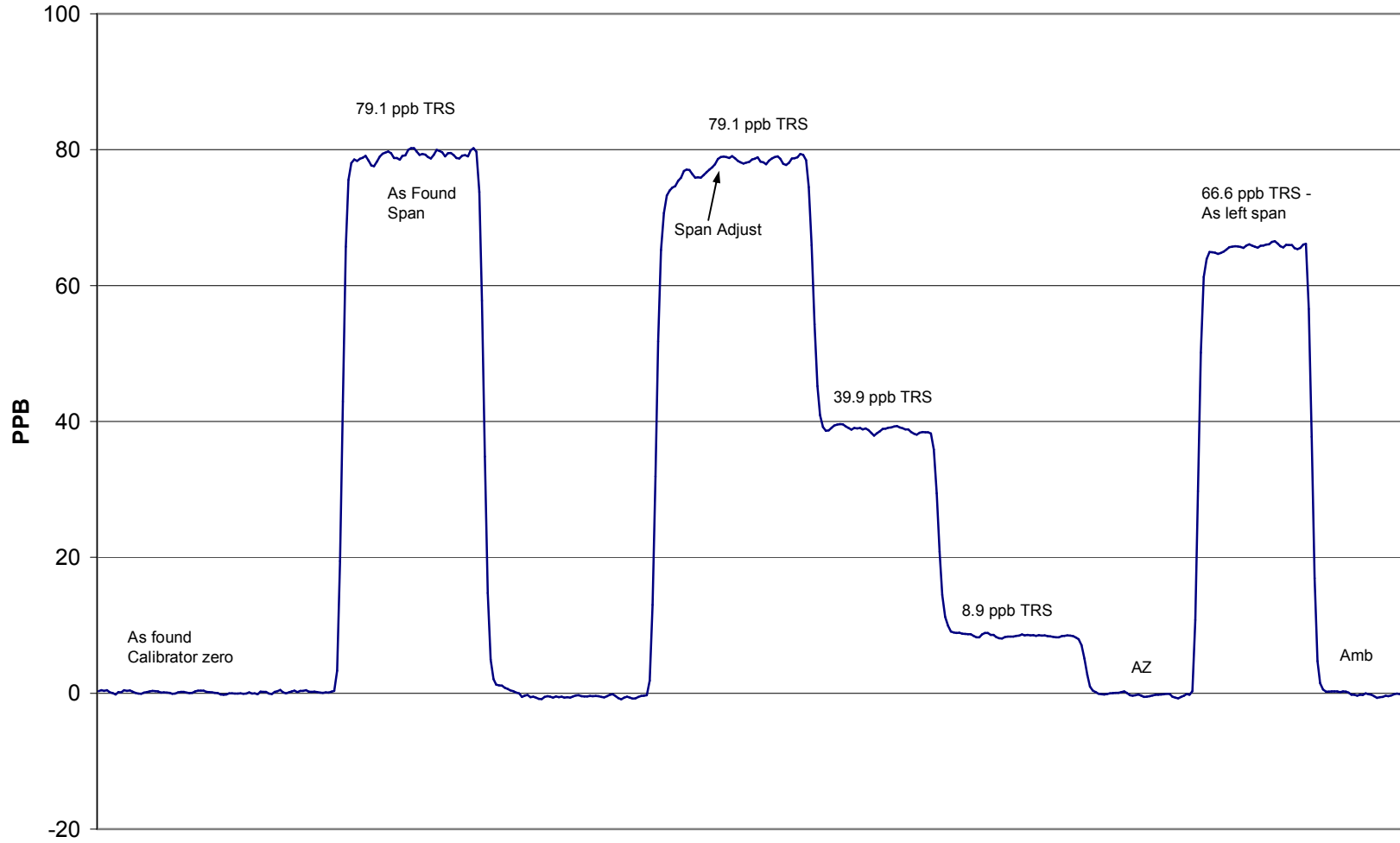
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.067	N/A		
19.553	19.496	1.0029	Correlation Coefficient	0.999979
10.584	10.512	1.0069		
3.034	3.051	0.9944	Slope	1.001511
			Intercept	0.032292



THC Calibration



TRS Calibration



January 24, 2005

Calibration ReportParameter PM2.5Air Monitoring Network PASZA**Station Information**

Calibration Date	January 24, 2005	Previous Calibration	December 13, 2004
Station Number	1	Station Location	Muskoseepi Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:10	End Time (MST)	12:45
Barometric Pressure	0.918 inches Hg	Station Temperature	21.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	69	%	69	%
Ko Factor	12122		12122	
Temperature	7.5	Deg C	7.5	Deg C
Pressure	0.911	ATM	0.911	ATM
Main Fadj	0.980		0.980	
Aux Fadj	0.980		0.980	

Calibration Data

Parameter	Set Point	Indicated Reading	Tolerance	New Reading
zero flow - main	0.0	NA		NA
zero flow - auxillary	0.0	NA		NA
flow recovery - main	45 - 60 Seconds	>45	45 - 60 Seconds	>45
flow recovery - aux	46 - 60 Seconds	>45	46 - 60 Seconds	>45
Temperature	measured	7.9	+/- 1.0 Deg C	7.5
Pressure	measured	0.911	+/- 1.5% Δ ATM	0.911
Total Flow	16.67 SLPM	17.20		17.20
Main Flow	13.67 SLPM	13.85	+/- 1.0 SLPM	13.85
Auxillary Flow	3.0 SLPM	3.080	+/- 0.2 SLPM	3.080
Leak Check - main	0.0	NA	<0.15 SLPM	NA
Leak Check - aux	0.0	NA	<0.15 SLPM	NA
Ko Factor	measured	NA		NA

Notes: Performed flow audit. All parameters operating normally; flows slightly high but well within specs.Calibration Performed By: Kelly Baragar