



PEACE AIRSHED ZONE ASSOCIATION

Air Quality Monitoring Network

July 2004

Prepared by



TABLE OF CONTENTS

Airshed Zone Association – July PASZA Ambient Air Report.....	2
PASZA Monthly Continuous Data Summary	5
PASZA - Henry Pirker AQI Monthly Summary	7
PASZA - Henry Pirker Sulphur Dioxide Monthly Summary.....	8
PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary	13
PASZA - Henry Pirker Ozone Monthly Summary.....	24
PASZA - Henry Pirker Carbon Monoxide Monthly Summary	30
PASZA - Henry Pirker Total Hydrocarbon Monthly Summary	36
PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary	40
PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Monthly Summary	44
PASZA - Henry Pirker Meteorological Parameters Monthly Summary.....	49
PASZA Monthly Passive Data Summary.....	59
July 2004 Calibration Reports	70



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

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

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

Continuous Monitoring – Henry Pirker Station (Grande Prairie)

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

Passive Monitoring – 43 Stations throughout the PASZA zone:

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

- Monthly average concentrations for SO₂ passives ranged from 0.1 ppb to 0.3 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.2 ppb to 3.3 ppb.
- Monthly average concentrations for O₃ passives ranged from 18.1 ppb to 33.8 ppb.

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

On Behalf of the,
Peace Airshed Zone Association

Kevin Warren
PASZA Technical Program Manager

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

July 12, 2004

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

ATTENTION: Director

RE: Air Monitoring Directive Contravention Report Ref # 148941

A contravention of the Alberta Air Monitoring Directive was recently reported by Focus to Alberta Environment (AENV) on behalf of the Peace Airshed Zone Association (PASZA). The contravention was less than ninety (90%) percent data collection for the month of June for the CO analyzer at the Henry Pirker Air Monitoring Station located in Grande Prairie, Alberta. The station is owned by PASZA and operated on their behalf by Focus. The contravention has been assigned AENV reference number 148941.

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

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

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

Sincerely,

THE FOCUS CORPORATION



Gary Cross C.E.T.
AQM Technical Manager

July 15, 2004

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

ATTENTION: Director

RE: Air Monitoring Directive Contravention Report Ref # 149677

A contravention of the Alberta Air Monitoring Directive was recently reported by Focus to Alberta Environment (AENV) on behalf of the Peace Airshed Zone Association (PASZA). The contravention was less than ninety (90%) percent data collection for the month of July for the NOx analyzer at the Henry Pirker Air Monitoring Station located in Grande Prairie, Alberta. The station is owned by PASZA and operated on their behalf by Focus. The contravention has been assigned AENV reference number 149677.

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

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

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

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

Sincerely,

THE FOCUS CORPORATION



Kelly Baragar,
AQM Senior Technician

PASZA Monthly Continuous Data Summary

July 2004 Monthly Overall Summary Report Ambient Air Quality Data

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

Note: ^a the 24-hr Canada Wide Standard level is considered as an absolute value
* Wind Direction is the predominate direction for the Month

Continuous Monitoring

Ambient Air Monitoring Network

Henry Pirker Station

General Station Issues

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

Parameter	Make	Model	Notes
SO ₂	TECO	43	No Operational problems were observed
NOx/NO/NO ₂	TECO	42	due to the high station temperature in the early part of the month, a component on the temperature controll board failed and was replaced at Alberta Environment's shop. The analyzer was reinstalled on July 8.
O ₃	API	400	No operational problems observed
CO	TECO	48	The IR source and optic bench were replaced on this analyzer, and was reinstalled on July 5.
THC	TEI	51-CLT	No operational problems observed
TRS	TEI	42C	No operational problems observed
PM _{2.5}	R&P	1400AB	15 hours were removed from July 5 to 6 due to negative drift caused by excessive station temperature. 26 hours were removed from July 29 to 30 when a faulty main filter did not allow the sensor to stabilize. A new filter was installed on the 30.
RH	Met One	083D	No operational problems observed
AT	Met One	083D	No operational problems observed
SR	Met One	096-1	No operational problems observed
WS	Met One	010C	No operational problems observed
WD	Met One	020C	No operational problems observed

PASZA - Henry Pirker AQI Monthly Summary

Station: Henry Pirker

Station Owner: PASZA

Air Quality Index (AQI)

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

Summary

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

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
	30.5	22.5	15.4	12.3	8.2	4.7	3.1

Alberta's Air Quality Index

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

Day Mountain Standard Time

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

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Station Owner: PASZA

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

Summary

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

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

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

Status Flag Characters

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

Day Mountain Standard Time

Day	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	24-hour Average	Daily Maximum
1-Jul-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0.1	0.5	
2-Jul-04	0	0	0	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0.3	2.1	
3-Jul-04	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.7	
4-Jul-04	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.7	
5-Jul-04	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0.6	1.2	
6-Jul-04	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	1.0	
7-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	1.0	
8-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	M	M	A	M	0	0	0	0	0	N	0.2	
9-Jul-04	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	2.5	
10-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0.2	0.9	
11-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.2	
12-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
13-Jul-04	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	1	0	1	1	1	0	1	0	0	0	0	0.5	1.2	
14-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
15-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
16-Jul-04	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.3	0.7	
17-Jul-04	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
18-Jul-04	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
19-Jul-04	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
20-Jul-04	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
21-Jul-04	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
22-Jul-04	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
23-Jul-04	0	0	0	A	0	0	0	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0.3	1.0	
24-Jul-04	0	0	A	0	0	0	0	0	1	1	1	2	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0.7	1.9	
25-Jul-04	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
26-Jul-04	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.2	
27-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4	
28-Jul-04	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	1	1	0	1	0	0	A	0	0	0	0.4	1.5	
29-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.4	
30-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0.2	0.8	
31-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.2	
Hourly Avg	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1				
Hourly Max	0.5	0.5	0.8	1.0	0.9	0.8	2.1	1.1	1.1	1.1	2.5	1.5	1.5	1.7	1.9	1.0	0.7	1.2	1.5	0.8	0.5	0.8	1.0	0.5	0.4					

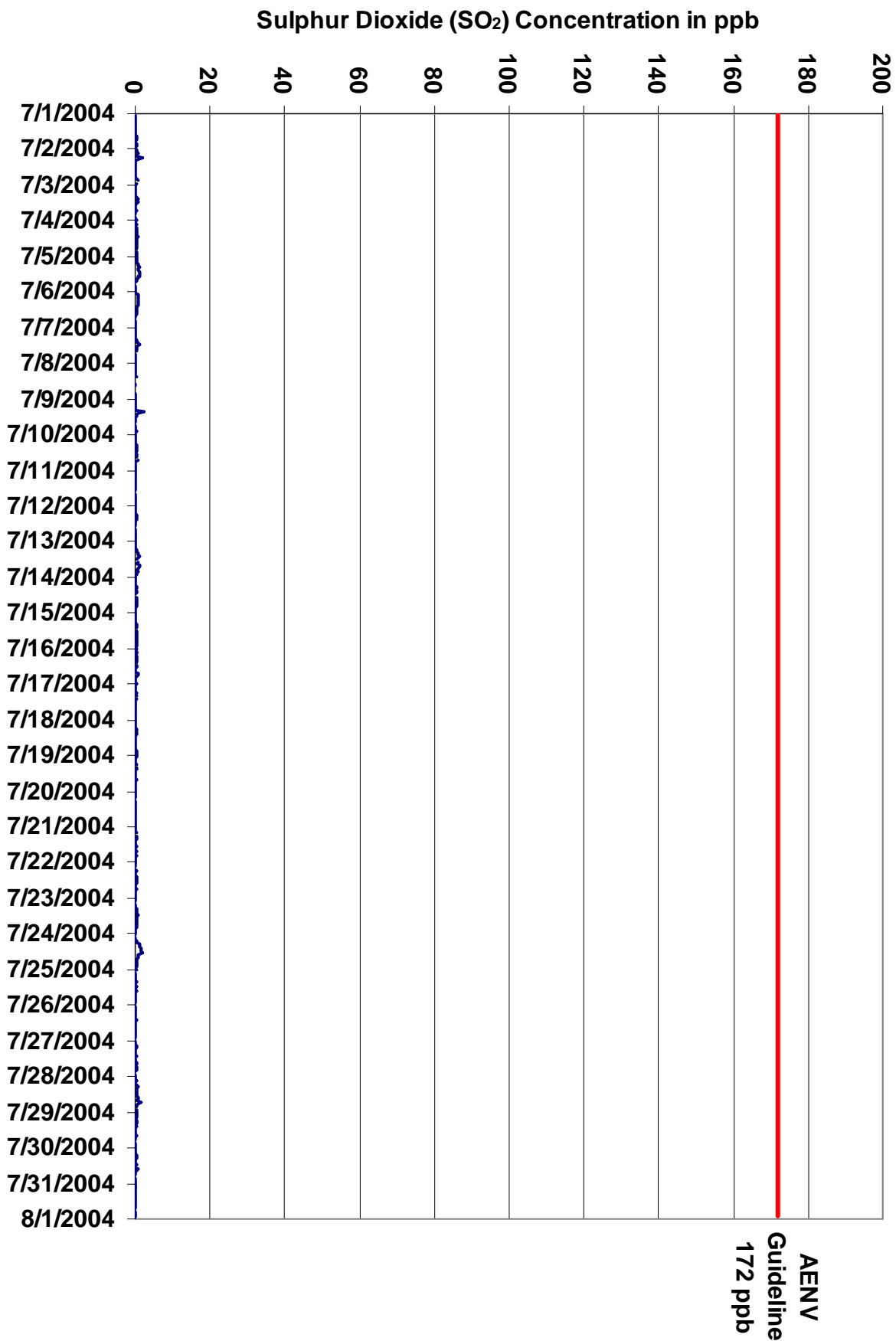


Figure 1. PASZA - Henry Pirkker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Station Owner: PASZA

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

Summary

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

AIC Time:	34 hrs	Operational Time:	704 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	99.6%					
Percentile	99	95	75	50	25	5	1	Average
	2.6	1.6	0.9	0.7	0.6	0.5	0.2	0.9 ppb

Status Flag Characters

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

Day Mountain Standard Time

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

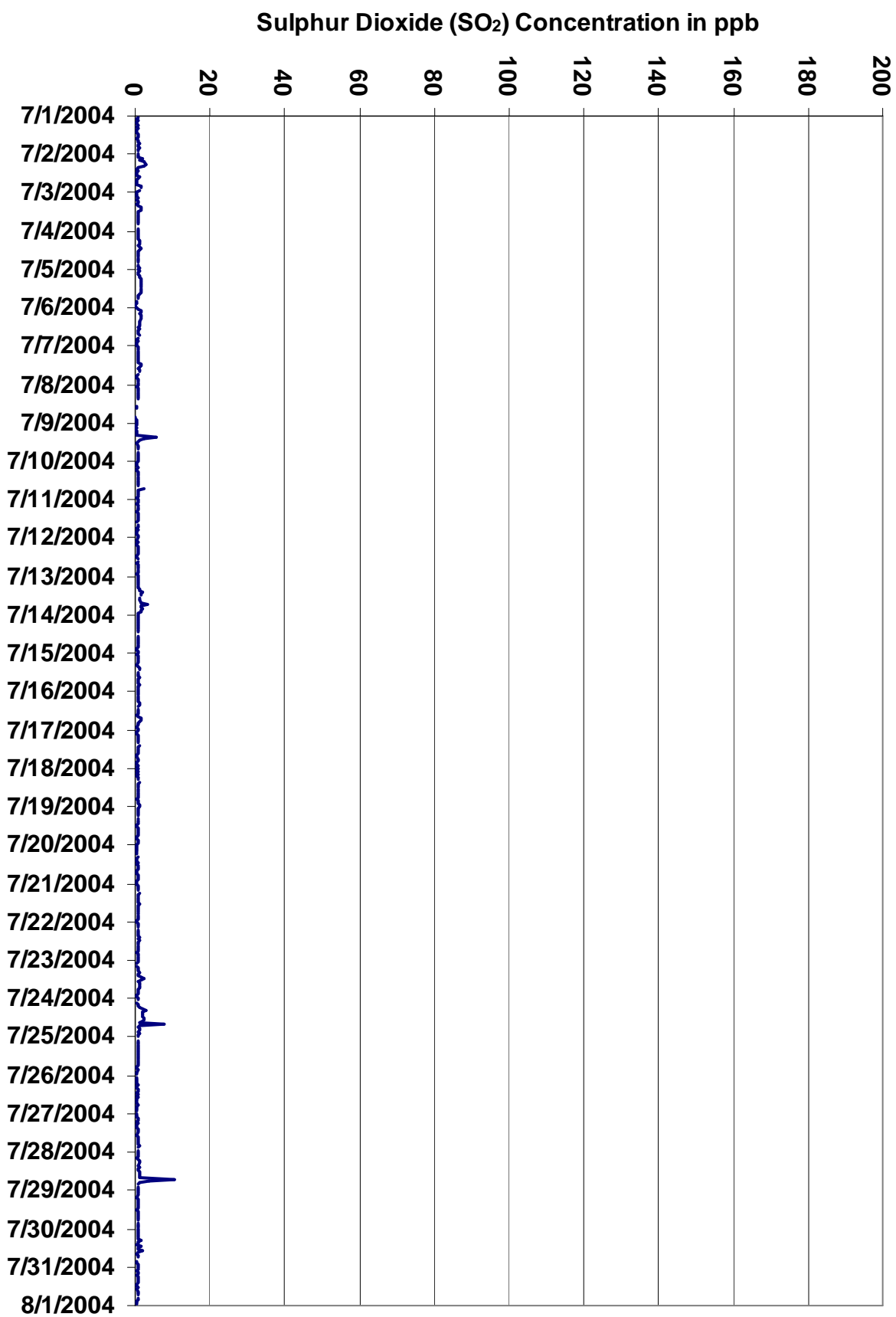
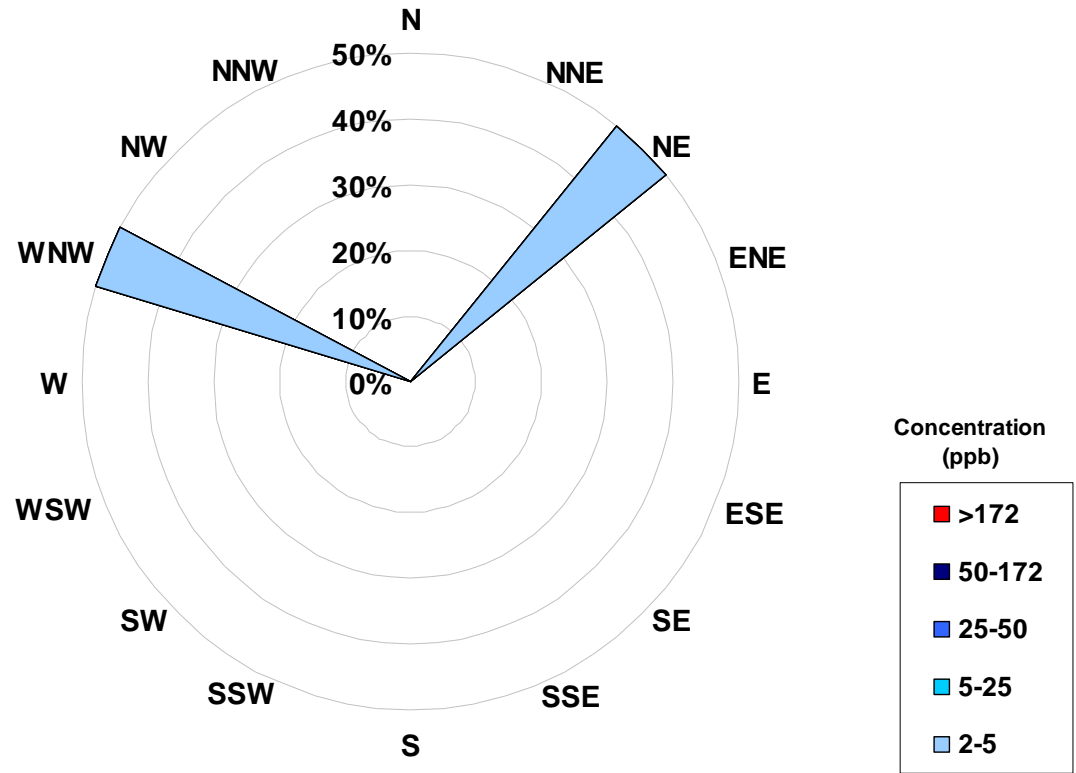


Figure 2. PASZA - Henry Pirkker Sulphur Dioxide 1-hr Maximum Value Monthly Trend

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



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

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

PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PASZA

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

Summary

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

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

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

Status Flag Characters

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

Day Mountain Standard Time

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

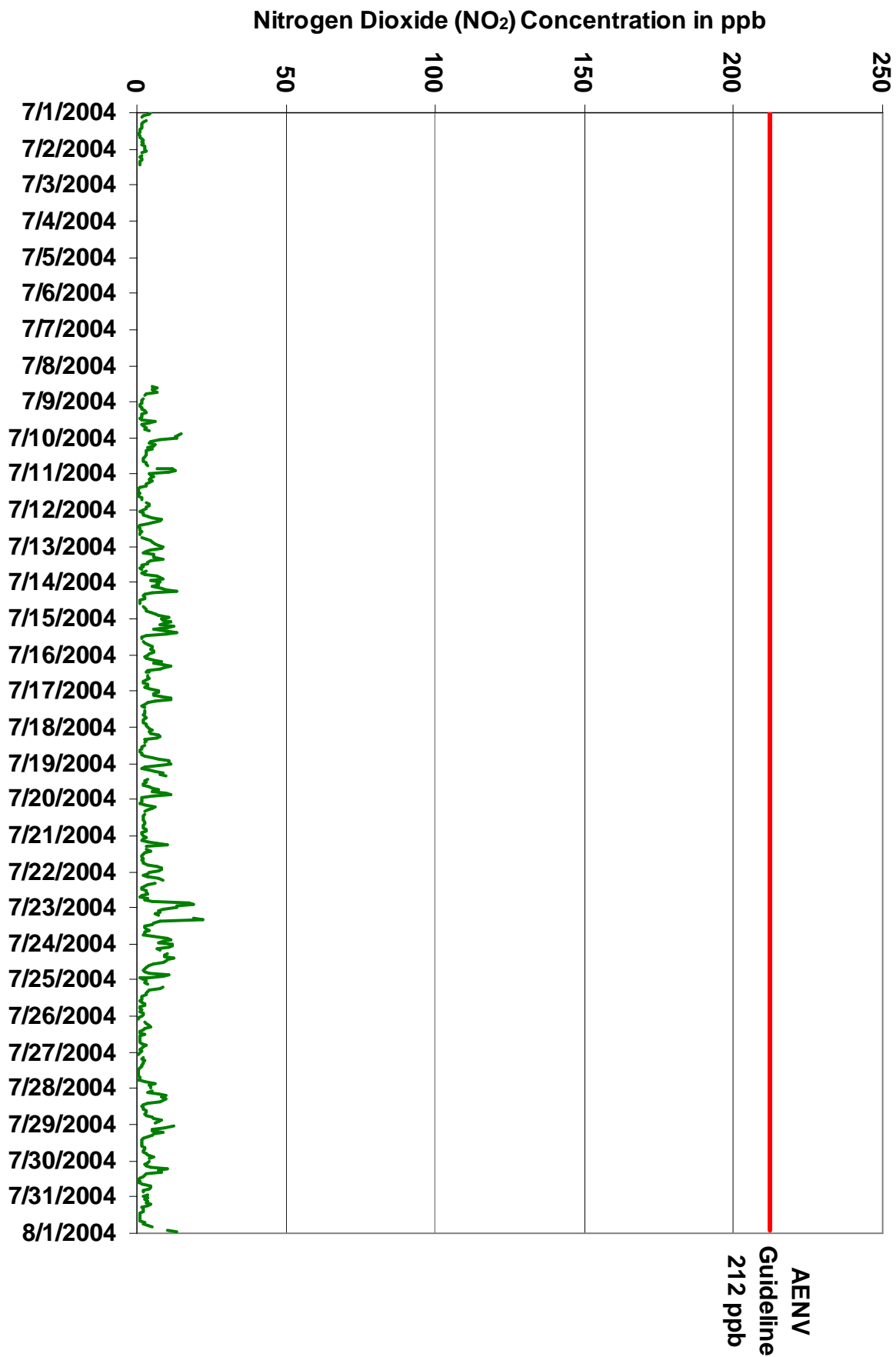


Figure 3. PASZA - Henry Pirkner Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PASZA

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

Summary

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

AIC Time:	27 hrs	Operational Time:	571 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%					
Percentile	99	95	75	50	25	5	1	Average
	24	15	9	5	3	2	1	6.8 ppb

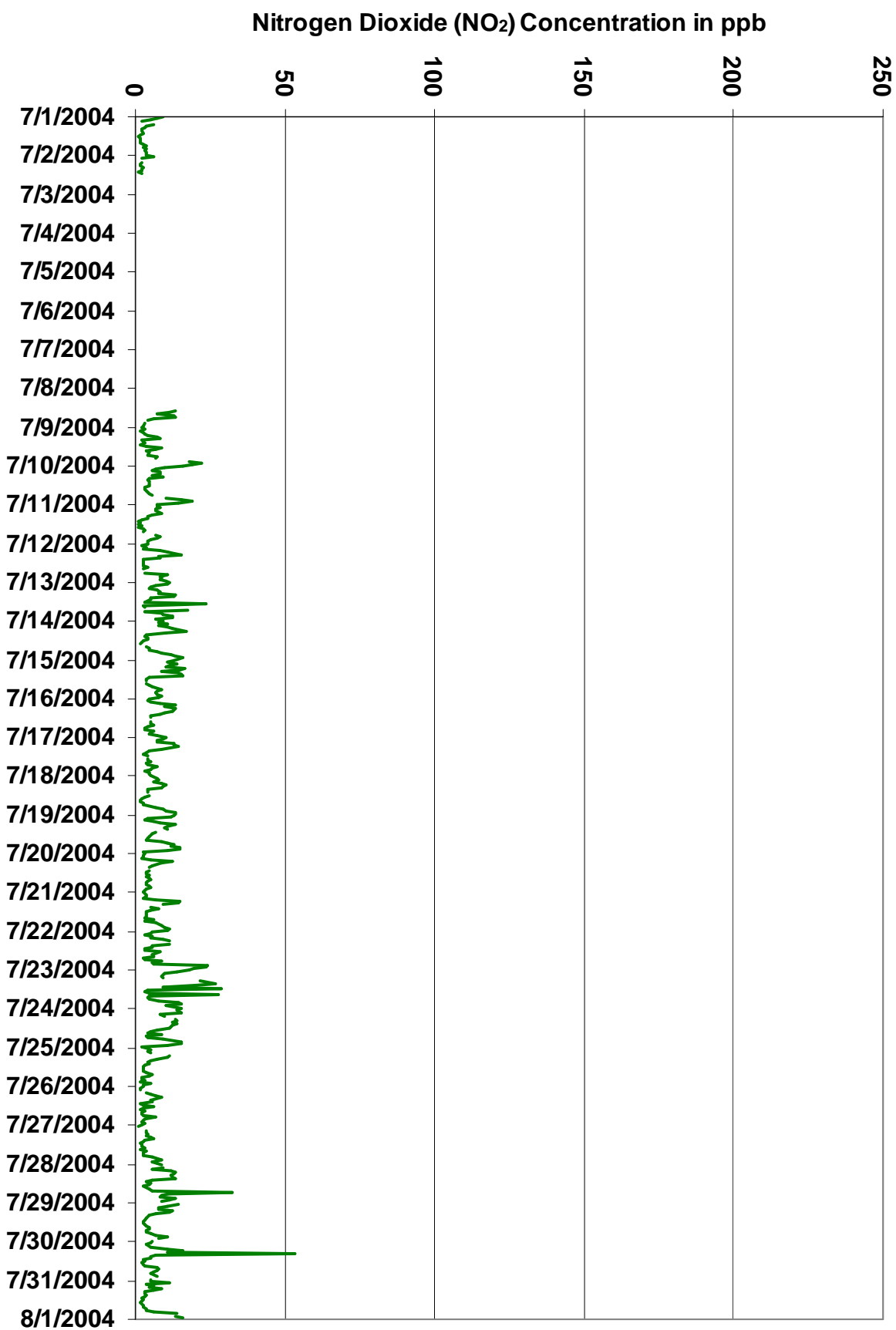
Status Flag Characters

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

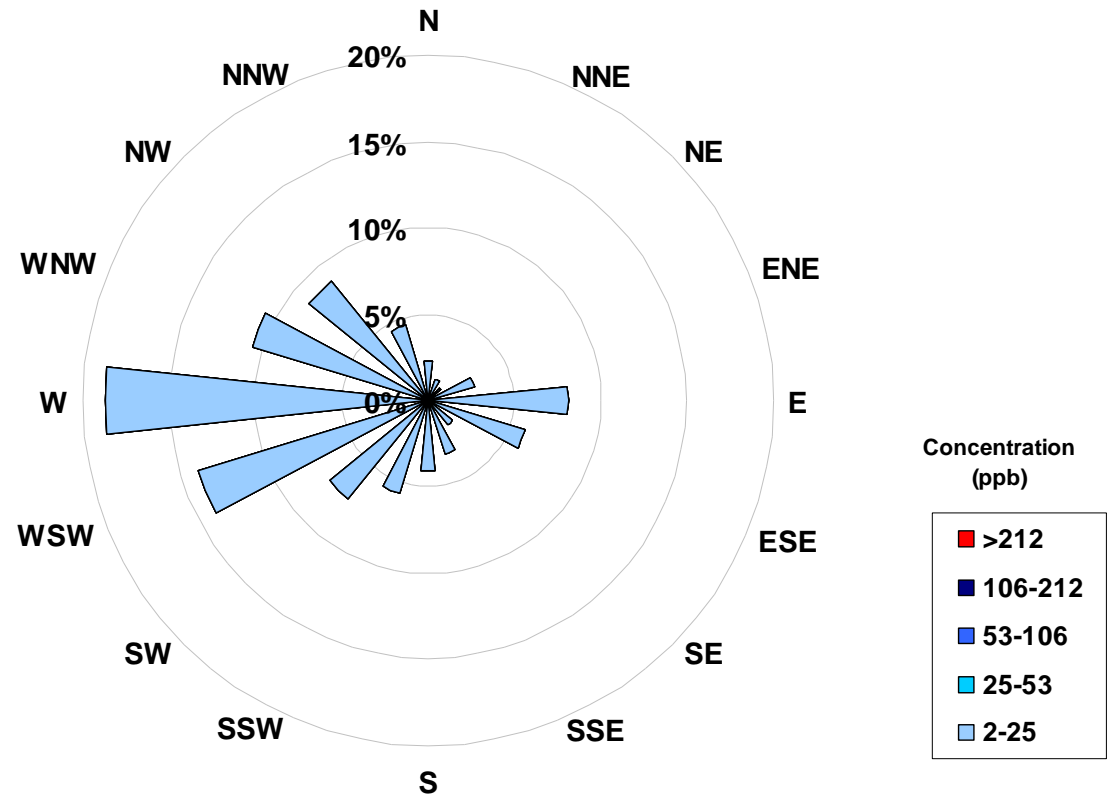
Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jul-04	9	7	5	2	A	6	4	3	2	2	3	2	1	2	1	2	3	4	3	3	3	4	4	3.4	9.1	
2-Jul-04	4	6	2	A	2	2	2	2	2	2	1	2	S	S	S	S	S	S	S	S	S	S	S	N	6.1	
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
5-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
6-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
7-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	13	11	7	13	13	6	4	A	3	3	N	13.2
9-Jul-04	2	3	2	3	3	4	7	8	2	2	3	1	3	9	7	3	4	4	7	6	A	18	22	19	6.3	22.2
10-Jul-04	16	9	6	5	8	8	5	9	4	4	4	4	4	3	3	3	4	4	5	A	10	16	19	14	7.5	19.1
11-Jul-04	7	7	8	6	6	9	5	4	4	2	1	1	1	2	1	3	3	3	A	6	8	7	5	4	4.5	8.5
12-Jul-04	4	2	3	3	8	11	13	15	7	8	3	2	3	3	3	4	2	A	3	11	8	9	8	10	6.2	15.5
13-Jul-04	11	11	6	5	5	7	8	8	14	13	5	5	3	23	2	3	A	18	3	8	9	12	12	7	8.6	23.5
14-Jul-04	9	7	11	7	11	12	17	10	3	3	4	4	2	2	1	A	3	4	4	7	8	12	14	16	7.6	16.7
15-Jul-04	13	11	14	11	10	17	15	9	14	15	16	5	4	4	A	4	5	6	9	7	7	7	9	8	9.5	16.6
16-Jul-04	4	4	5	8	13	10	13	13	12	10	8	5	5	A	5	5	6	4	3	3	6	5	4	7	7.0	13.5
17-Jul-04	10	9	7	7	13	13	15	9	5	3	2	4	A	4	4	5	3	4	7	6	5	3	4	5	6.5	14.6
18-Jul-04	5	7	8	6	9	10	9	9	4	4	4	A	5	3	2	1	1	2	2	7	9	10	14	13	6.4	13.5
19-Jul-04	13	12	4	3	6	8	14	11	9	11	A	6	5	4	4	3	9	11	13	12	15	15	11	2	8.8	15.1
20-Jul-04	3	2	3	2	5	12	9	5	4	A	4	3	3	4	3	5	5	4	3	3	4	5	4	3	4.4	12.0
21-Jul-04	3	3	3	2	7	15	14	9	A	5	8	5	3	3	3	3	3	6	3	6	9	9	11	11	6.4	15.1
22-Jul-04	5	5	3	5	5	9	11	A	11	5	5	3	3	8	6	3	3	9	6	6	24	24	20	8.1	24.1	
23-Jul-04	18	14	10	9	9	9	A	22	27	21	9	29	4	3	5	28	5	4	5	8	14	15	10	13	12.6	28.6
24-Jul-04	15	14	15	8	10	A	13	14	12	14	12	12	11	7	5	4	9	3	4	9	15	15	11	2	10.3	15.5
25-Jul-04	4	5	4	5	A	12	11	7	5	4	5	3	3	2	2	3	6	5	2	2	3	2	5	3	4.4	11.5
26-Jul-04	3	2	2	A	4	5	7	9	5	6	2	3	6	3	2	3	2	2	3	7	3	2	2	3	3.6	8.7
27-Jul-04	2	1	A	3	3	4	3	5	6	3	2	1	2	2	3	2	3	2	2	3	6	9	6	7	3.6	8.5
28-Jul-04	9	A	9	6	12	13	13	12	12	13	6	4	5	5	3	5	5	32	11	9	8	13	11	9	9.8	32.5
29-Jul-04	A	14	11	8	8	12	11	7	5	3	3	2	3	3	4	4	5	3	4	5	7	11	7	A	6.5	14.4
30-Jul-04	5	5	4	5	11	16	11	53	7	5	5	2	3	2	2	3	7	8	7	6	5	7	A	5	8.0	53.1
31-Jul-04	5	11	4	6	5	9	6	3	3	4	3	2	3	2	2	3	3	4	4	6	14	A	13	16	5.6	16.1
Hourly Avg	7.5	7.2	6.3	N	N	9.7	9.8	10.7	7.6	6.8	5.0	4.7	N	N	3.6	4.9	4.4	6.3	5.4	6.4	7.9	N	9.7	8.5		
Hourly Max	17.9	14.4	15.4	11.4	13.5	16.6	16.7	53.1	26.8	20.5	16.0	28.6	11.2	23.5	13.2	27.9	9.0	32.5	13.1	11.7	15.5	24.1	23.5	19.5		

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



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



Frequency Distribution of NO ₂ in ppb			
Range	Frequency (hrs)		
0 < 2	175		
2 to 25	396		
25 to 53	0		
53 to 106	0		
106 to 212	0		
> 212	0		
Total Non-Zero Values	571		

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

Station: Henry Pirker

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Station Owner: PASZA

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

Summary

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

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

AIC Time:	27 hrs		Operational Time:	571 hrs				
Calibration Time:	6 hrs		AMD Operational Uptime:	81.2%				
Percentile	99	95	75	50	25	5	1	Average
	15	6	1	1	0	0	0	1.4 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Jul-04	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
2-Jul-04	0	0	0	A	0	0	0	0	0	0	0	0	S	S	S	S	S	S	S	S	S	S	S	S	N	0.4	
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
5-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
6-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
7-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	3	3	1	1	0	0	0	A	1	1	N	2.8	
9-Jul-04	1	0	0	0	0	0	0	1	0	0	1	1	0	2	3	1	1	0	1	0	1	A	1	1	0.7	2.5	
10-Jul-04	1	0	0	0	1	4	3	5	3	1	1	1	0	0	0	0	0	0	1	A	1	1	1	0	1.1	4.5	
11-Jul-04	0	0	1	0	0	1	2	2	3	1	1	1	0	1	1	1	1	1	A	1	1	0	0	0	0.8	2.5	
12-Jul-04	0	0	0	0	1	2	7	9	5	3	1	1	1	1	1	1	1	A	1	3	1	1	1	1	1.8	8.8	
13-Jul-04	1	1	0	1	1	4	6	5	5	3	2	2	1	1	0	0	A	1	1	0	0	0	0	0	1.5	5.6	
14-Jul-04	0	0	0	0	1	10	27	10	3	2	2	1	1	1	1	A	1	1	1	0	0	0	0	1	2.7	27.0	
15-Jul-04	0	0	1	0	0	6	13	5	10	9	4	1	0	0	A	0	0	1	1	1	1	0	0	0	2.3	12.6	
16-Jul-04	0	0	0	0	0	0	4	6	5	3	1	1	1	A	1	1	1	0	0	0	0	0	0	0	1.0	5.8	
17-Jul-04	0	0	0	0	0	2	6	5	2	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	1.2	5.8	
18-Jul-04	0	0	0	0	0	1	3	3	1	1	1	A	0	0	0	0	0	0	1	1	1	0	1	1	0.7	3.4	
19-Jul-04	1	1	0	0	0	1	2	3	2	6	A	1	1	1	1	1	1	1	1	0	0	0	0	0	1.0	6.1	
20-Jul-04	0	0	0	0	0	1	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1.0	2.3	
21-Jul-04	0	0	0	0	0	1	5	2	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.8	4.7	
22-Jul-04	0	0	0	0	1	3	6	A	6	4	2	1	1	1	2	1	1	0	1	1	0	5	3	1	1.7	6.0	
23-Jul-04	5	9	5	19	19	12	A	38	48	9	4	3	0	0	0	2	0	0	0	1	1	0	0	0	7.7	48.1	
24-Jul-04	1	3	3	2	3	A	19	7	4	4	2	1	0	0	0	0	2	0	0	0	1	0	0	0	2.3	19.3	
25-Jul-04	0	0	0	0	A	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8	
26-Jul-04	0	0	0	A	0	1	1	1	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.8	
27-Jul-04	0	0	A	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6	
28-Jul-04	0	A	0	0	0	2	4	10	7	6	2	1	1	1	0	1	1	6	1	0	0	0	0	0	1.8	10.5	
29-Jul-04	A	1	0	0	1	5	3	3	3	2	2	2	1	1	1	1	2	1	1	1	1	0	0	A	1.5	5.5	
30-Jul-04	0	0	0	0	0	2	3	8	2	1	1	0	0	1	0	0	0	1	1	1	1	0	A	0	1.0	7.9	
31-Jul-04	0	0	0	1	1	1	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	A	2	6	1.2	6.0
Hourly Avg	0.4	0.8	0.5	N	N	2.5	5.0	5.4	4.9	2.6	1.3	0.9	N	N	0.7	0.8	0.7	0.8	0.6	0.6	0.5	N	0.4	0.5			
Hourly Max	4.6	9.0	4.6	19.3	19.3	12.4	27.0	38.1	48.1	9.4	3.7	2.9	1.4	2.1	2.6	2.8	1.5	6.2	1.3	2.9	1.1	4.5	2.9	6.0			

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

Station Owner: PASZA

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

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

AIC Time:	27 hrs	Operational Time:	571 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%					
Percentile	99	95	75	50	25	5	1	Average
	41	15	3	2	1	0	0	3.9 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Jul-04	1	7	1	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0.8	7.1	
2-Jul-04	0	2	0	A	0	1	1	2	1	2	1	2	S	S	S	S	S	S	S	S	S	S	S	S	N	2.1	
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
5-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
6-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
7-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0	
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	10	7	3	5	6	15	1	A	1	1	N	14.7	
9-Jul-04	1	1	1	1	1	1	1	2	1	1	2	1	1	1	4	5	2	1	1	2	1	A	3	8	4	2.0	8.1
10-Jul-04	4	2	1	1	5	8	4	9	5	2	1	1	1	1	0	1	1	1	1	A	2	5	9	1	2.9	9.4	
11-Jul-04	0	1	8	1	1	2	4	3	3	2	1	1	1	2	1	1	2	1	A	1	2	1	1	1	1.8	7.5	
12-Jul-04	1	1	1	1	3	8	17	18	9	16	3	2	2	2	3	3	2	A	4	25	1	1	3	5	5.6	25.2	
13-Jul-04	10	3	1	1	2	7	10	9	10	10	3	4	1	12	2	2	A	8	2	1	0	1	1	0	4.4	11.9	
14-Jul-04	0	0	2	1	4	15	39	28	5	3	3	3	1	1	1	A	1	1	1	1	0	0	2	3	5.0	39.2	
15-Jul-04	2	1	2	1	2	17	35	9	15	12	8	1	3	1	A	1	1	3	3	1	3	1	1	5	5.6	35.5	
16-Jul-04	0	1	2	1	3	1	13	8	7	4	3	1	1	A	1	2	1	1	1	1	0	1	1	0	2.2	13.0	
17-Jul-04	0	0	0	0	1	4	11	9	3	2	1	1	A	1	2	2	2	2	4	2	1	1	0	1	2.3	11.1	
18-Jul-04	1	1	0	0	2	4	4	4	2	3	2	A	1	1	1	1	1	1	1	1	2	1	3	5	1.7	4.6	
19-Jul-04	4	8	0	0	0	2	6	5	3	10	A	2	2	2	1	1	4	3	1	3	2	1	1	0	2.7	10.4	
20-Jul-04	0	1	1	1	1	5	5	3	3	A	2	3	3	4	3	3	3	3	2	2	2	1	1	1	2.1	5.2	
21-Jul-04	1	1	1	1	1	7	8	7	A	4	5	3	3	2	2	2	1	2	1	1	1	1	1	1	2.3	8.0	
22-Jul-04	0	1	1	1	1	5	12	A	13	8	7	2	2	4	4	3	1	1	4	3	1	14	12	2	4.3	13.9	
23-Jul-04	31	27	14	27	28	22	A	47	55	36	22	49	2	0	0	51	1	1	1	2	2	2	1	2	18.3	54.8	
24-Jul-04	5	9	9	8	7	A	35	30	8	6	3	1	1	0	1	0	34	0	1	1	3	4	3	0	7.3	35.0	
25-Jul-04	1	0	1	0	A	3	3	3	3	3	2	1	1	1	1	1	1	1	1	0	1	0	1	0	1.2	3.0	
26-Jul-04	0	0	1	A	1	1	3	3	3	3	1	2	4	2	1	1	1	1	3	1	0	0	0	0	1.5	3.7	
27-Jul-04	0	0	A	0	0	1	1	2	14	2	1	1	1	2	2	1	1	1	0	1	1	0	0	0	1.5	14.1	
28-Jul-04	1	A	0	1	0	6	8	15	14	13	5	2	4	4	1	2	2	49	13	1	0	1	1	1	6.3	49.5	
29-Jul-04	A	3	1	1	4	22	12	5	4	3	3	2	2	2	2	2	2	2	2	1	28	1	0	A	4.8	28.0	
30-Jul-04	0	0	0	0	1	4	9	62	3	3	3	2	2	3	1	2	2	2	2	2	3	3	A	1	4.8	62.0	
31-Jul-04	1	2	1	1	1	4	3	2	4	4	3	1	3	2	2	4	2	2	3	2	3	A	4	14	3.0	14.0	
Hourly Avg	2.7	2.9	2.0	N	N	6.3	10.3	11.9	7.9	6.3	3.6	3.7	N	N	1.9	3.9	3.0	3.9	2.4	2.8	2.4	N	2.3	2.0			
Hourly Max	30.7	27.5	14.2	26.6	28.0	22.4	39.2	62.0	54.8	36.1	21.6	49.0	4.4	11.9	9.9	50.7	34.1	49.5	13.1	25.2	28.0	13.9	11.6	14.0			

Station: Henry Pirker

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PASZA

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

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

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

AIC Time:	27 hrs		Operational Time:	571 hrs				
Calibration Time:	6 hrs		AMD Operational Uptime:	81.2%				
Percentile	99	95	75	50	25	5	1	Average
	24	15	7	4	2	1	1	5.5 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jul-04	5	5	2	2	A	4	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	1	3	2	2.0	5.1
2-Jul-04	3	3	2	A	2	2	2	2	2	1	1	2	S	S	S	S	S	S	S	S	S	S	S	S	N	3.1
3-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
4-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
5-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
6-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
7-Jul-04	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.0
8-Jul-04	S	S	S	S	S	S	S	S	C	C	C	C	C	C	8	10	6	6	7	3	3	A	3	2	N	9.7
9-Jul-04	2	2	1	2	2	2	3	4	2	2	2	2	2	8	7	3	3	4	3	5	A	16	15	14	4.6	15.9
10-Jul-04	15	8	5	4	7	10	7	10	7	4	4	4	3	2	2	3	3	4	4	A	7	13	14	11	6.5	14.6
11-Jul-04	4	5	6	5	4	6	6	5	6	2	1	1	1	1	1	1	3	2	A	4	5	4	3	3	3.4	6.3
12-Jul-04	2	1	2	2	4	7	15	17	10	7	2	1	2	2	3	2	2	A	2	6	5	6	7	8	5.0	16.6
13-Jul-04	9	9	5	4	3	10	11	11	14	7	6	5	2	3	2	2	A	4	2	3	6	8	9	5	6.0	14.0
14-Jul-04	8	6	7	5	9	20	40	15	5	4	4	4	1	1	1	A	3	3	4	3	5	6	7	11	7.6	40.1
15-Jul-04	8	9	12	9	8	18	23	11	20	23	13	4	2	2	A	2	3	5	6	6	5	6	6	5	9.0	23.3
16-Jul-04	3	3	3	6	9	6	13	17	14	10	4	4	5	A	4	4	5	3	2	2	4	3	3	4	5.7	17.3
17-Jul-04	7	7	6	6	8	13	17	11	5	3	1	3	A	3	3	3	3	3	4	3	3	2	3	3	5.2	17.0
18-Jul-04	3	4	5	4	4	9	11	10	4	4	3	A	3	2	2	1	1	2	2	3	6	7	11	11	4.9	11.3
19-Jul-04	12	9	2	2	4	7	11	11	9	16	A	4	3	4	3	2	5	6	8	5	10	11	5	2	6.6	16.0
20-Jul-04	2	2	1	1	3	8	7	6	4	A	4	3	3	3	3	4	4	4	3	3	4	3	2	2	3.4	7.6
21-Jul-04	2	3	2	2	4	8	15	5	A	4	6	4	3	3	2	3	2	3	2	4	7	8	8	7	4.6	15.1
22-Jul-04	4	4	2	4	4	10	15	A	12	7	5	3	2	4	4	5	2	1	4	3	5	22	22	14	6.9	21.7
23-Jul-04	18	18	12	27	25	20	A	57	70	17	9	8	3	2	4	7	3	3	2	6	11	11	9	7	15.2	70.2
24-Jul-04	12	15	14	9	11	A	30	17	13	16	12	11	9	6	4	3	4	2	3	4	12	9	4	1	9.7	29.7
25-Jul-04	2	3	2	3	A	9	9	5	5	4	4	2	2	1	1	2	3	3	1	1	1	1	2	2	3.0	9.5
26-Jul-04	2	0	0	A	2	3	5	6	4	3	2	2	4	2	1	2	2	1	2	3	2	1	1	1	2.2	6.2
27-Jul-04	1	0	A	2	2	3	2	3	3	2	1	0	1	1	0	1	1	1	1	1	3	6	4	5	1.9	6.1
28-Jul-04	5	A	6	4	7	12	12	21	16	14	5	2	2	3	2	4	4	9	4	5	6	9	7	6	7.2	20.9
29-Jul-04	A	13	10	5	6	14	9	8	6	4	3	3	3	3	3	4	4	3	2	3	5	5	4	A	5.4	14.4
30-Jul-04	3	3	2	3	4	12	10	16	4	4	3	1	1	1	0	1	2	5	5	5	2	2	A	4	4.1	15.8
31-Jul-04	2	4	3	4	3	6	5	3	4	4	4	2	2	2	2	2	2	4	3	5	6	A	12	20	4.3	19.6
Hourly Avg	5.6	5.6	4.8	N	N	9.0	11.7	11.4	10.2	6.9	4.2	3.1	N	N	2.6	2.9	2.8	3.4	3.3	3.8	5.2	N	6.8	6.2		
Hourly Max	17.9	17.9	14.4	27.2	25.2	19.6	40.1	57.0	70.2	22.9	13.5	11.0	8.9	8.4	7.7	9.7	6.1	9.0	7.9	6.3	11.7	21.7	21.6	19.6		

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PASZA

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

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

AIC Time:	27 hrs	Operational Time:	571 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	81.2%					
Percentile	99	95	75	50	25	5	1	Average
	60	29	12	7	4	2	2	10.3 ppb

Status Flag Characters

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

Day Mountain Standard Time

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

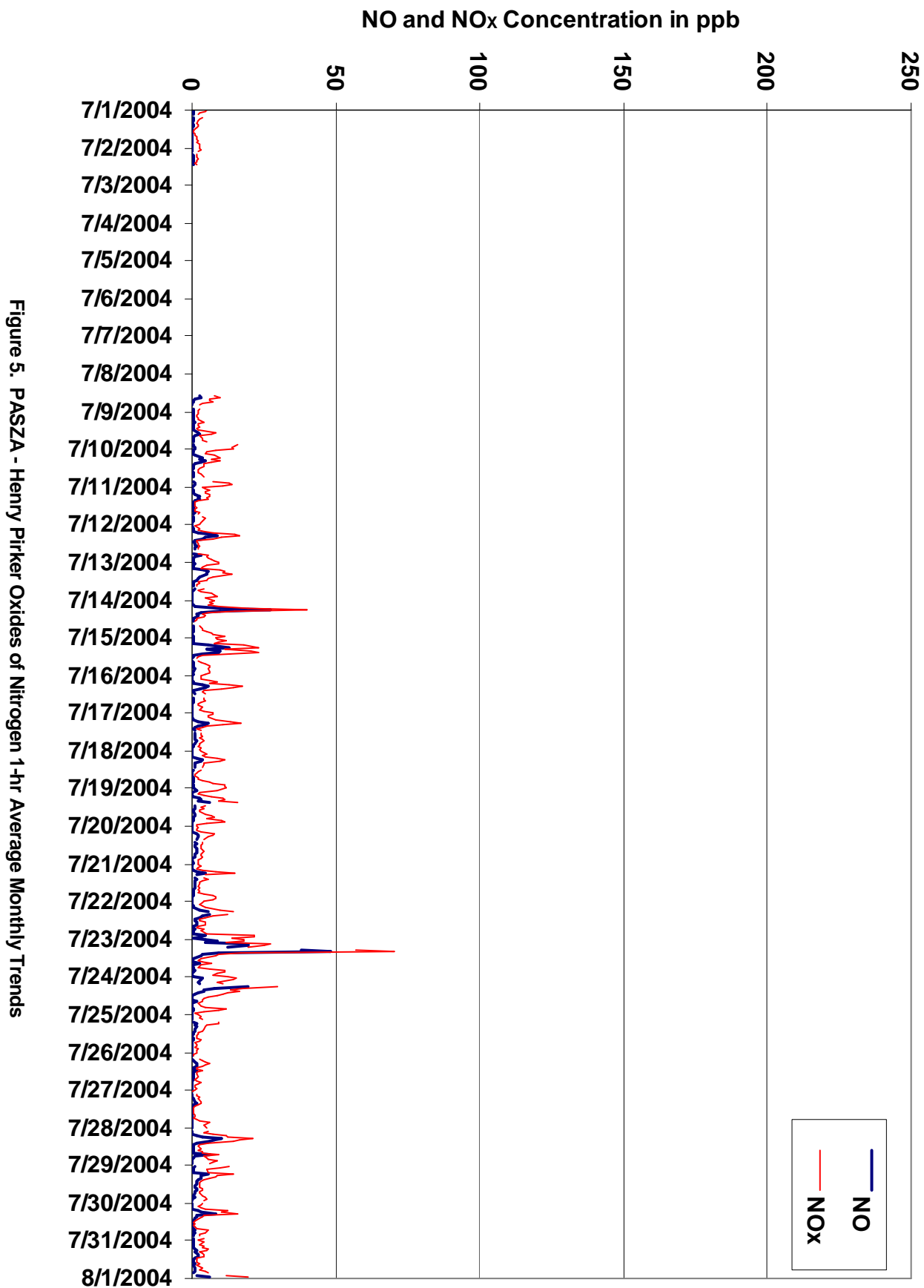


Figure 5. PASZA - Henry Pirkler Oxides of Nitrogen 1-hr Average Monthly Trends

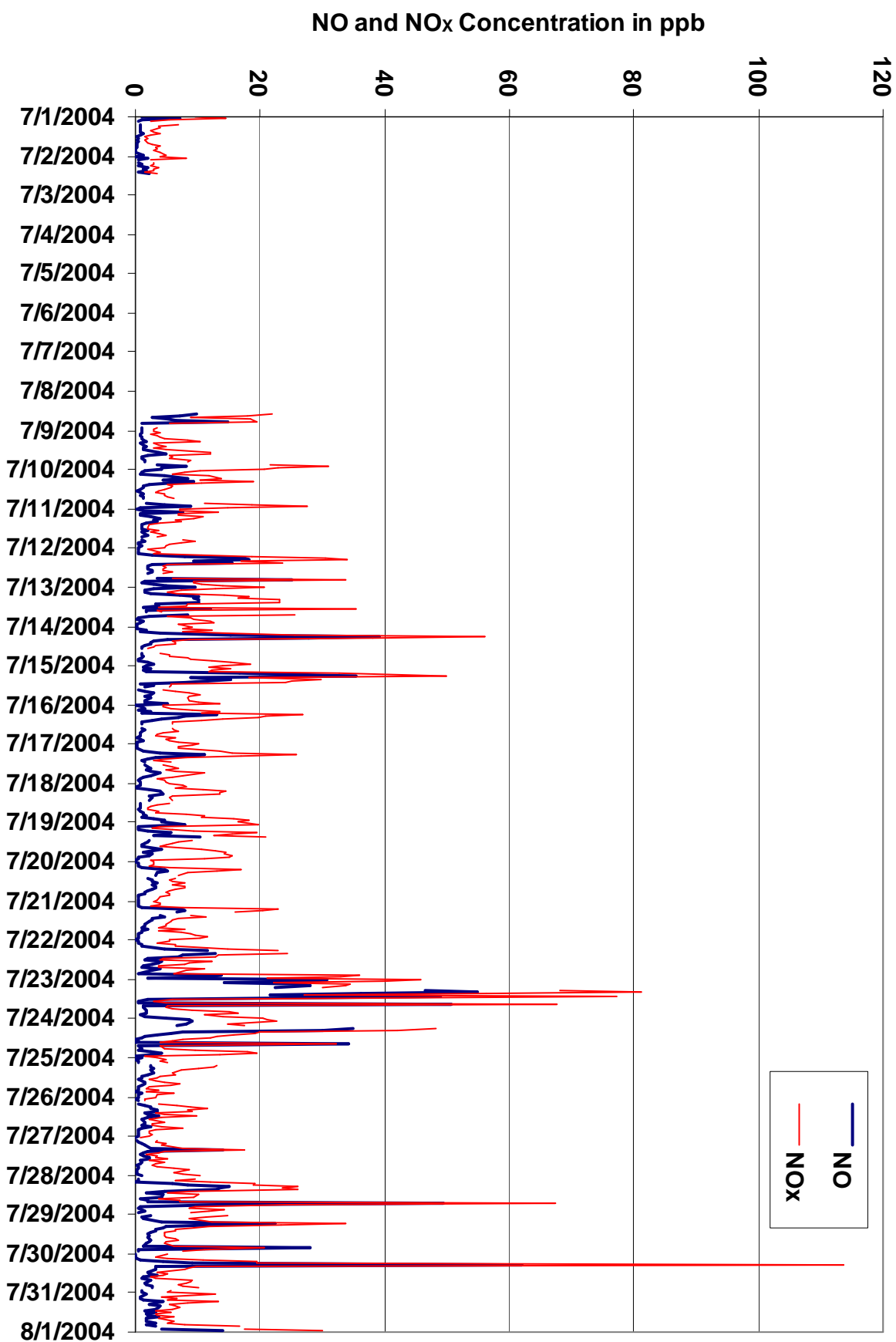


Figure 6. PASZA - Henry Pirkler Oxides of Nitrogen 1-hr Maximum Value Monthly Trends

PASZA - Henry Pirker Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O₃)

Station: Henry Pirker

Station Owner: PASZA

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

Summary

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

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

AIC Time:	33 hrs							Operational Time:	705 hrs	
Calibration Time:	4 hrs							AMD Operational Uptime:	99.7%	
Percentile	99	95	75	50	25	5	1	Average		
	56	41	29	22	15	5	1	22.5 ppb		

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jul-04	A	16	26	28	29	27	30	30	26	26	30	38	47	52	54	56	52	44	36	32	26	26	18	A	34.0	55.6
2-Jul-04	17	13	18	18	14	13	13	12	13	15	19	20	19	14	17	17	23	18	21	19	19	16	A	17	16.7	23.3
3-Jul-04	17	15	12	12	12	13	13	9	18	21	20	19	18	19	20	20	20	30	30	24	A	22	28	18.8	29.9	
4-Jul-04	23	25	23	20	16	15	16	15	17	21	22	22	25	27	26	26	27	27	25	23	A	13	14	14	21.0	27.3
5-Jul-04	15	15	12	10	10	7	8	7	11	17	20	23	26	27	26	28	29	29	A	20	12	15	15	17.9	29.2	
6-Jul-04	11	13	15	15	10	5	2	1	5	9	15	18	18	20	N	N	27	27	A	23	19	21	22	15	14.8	27.0
7-Jul-04	15	17	19	20	20	16	11	16	16	15	16	18	19	21	25	23	25	A	24	24	26	26	24	23	19.9	25.8
8-Jul-04	23	22	21	19	21	18	20	19	17	17	19	18	17	C	C	C	C	A	25	27	29	25	23	23	21.1	29.1
9-Jul-04	23	25	26	25	31	30	26	22	22	21	23	25	25	19	27	29	A	28	26	27	22	13	8	7	23.1	30.7
10-Jul-04	5	7	8	7	3	3	8	10	14	23	30	38	39	42	45	A	41	33	27	22	18	9	5	7	19.2	44.5
11-Jul-04	13	11	10	11	9	10	11	13	18	25	29	29	30	29	A	32	31	30	32	28	24	20	14	15	20.6	32.3
12-Jul-04	16	15	12	11	11	10	8	11	14	19	26	28	30	A	26	25	26	23	23	20	18	15	12	10	17.8	29.6
13-Jul-04	6	4	9	6	5	4	6	10	11	16	19	23	A	32	32	31	28	28	29	31	28	23	18	19	18.2	32.3
14-Jul-04	13	12	8	9	6	2	2	6	12	18	22	A	29	29	32	34	36	32	39	36	26	20	16	10	19.5	38.6
15-Jul-04	12	10	6	7	9	5	5	11	13	19	A	41	36	31	30	36	38	36	33	32	24	20	18	20	21.3	41.0
16-Jul-04	26	27	28	19	16	21	12	13	20	A	39	42	44	46	45	49	57	53	46	39	36	36	33	28	33.7	56.6
17-Jul-04	23	16	17	16	11	7	9	12	A	28	33	33	34	35	35	35	35	33	29	27	25	24	21	18	24.1	35.3
18-Jul-04	18	15	12	15	13	10	12	A	19	22	26	30	32	31	33	30	29	30	23	21	16	13	8	6	20.1	33.1
19-Jul-04	4	7	15	19	16	14	A	14	13	11	20	29	29	37	43	43	35	26	22	31	24	17	19	29	22.5	43.2
20-Jul-04	31	28	25	22	19	A	17	21	25	29	31	31	30	30	29	29	29	30	28	26	25	25	25	24	26.3	31.0
21-Jul-04	22	20	19	19	A	11	7	16	17	17	21	28	32	33	35	38	38	37	36	33	27	23	20	18	24.7	37.9
22-Jul-04	13	10	10	A	9	6	5	4	8	11	16	23	25	24	23	28	31	30	28	27	25	8	5	8	16.4	30.6
23-Jul-04	4	0	A	0	0	1	1	3	5	12	23	35	44	47	53	57	50	48	36	29	20	19	21	21	23.1	57.5
24-Jul-04	9	A	1	1	2	0	2	13	21	32	47	64	79	77	63	61	56	38	30	24	16	17	33	36	31.3	78.7
25-Jul-04	A	29	28	22	19	13	10	14	15	24	26	30	30	28	29	36	35	32	39	36	31	28	25	A	26.2	39.1
26-Jul-04	19	33	31	25	23	18	16	15	18	20	23	23	24	25	27	25	26	32	31	26	24	26	A	23	24.0	32.8
27-Jul-04	22	25	25	25	25	22	25	25	28	28	31	33	34	37	39	40	41	40	41	40	37	A	26	25	31.0	40.7
28-Jul-04	25	23	21	21	14	11	10	9	14	19	28	31	32	34	37	40	41	38	39	36	A	24	21	20	25.5	41.1
29-Jul-04	8	3	4	8	9	4	9	10	15	18	20	26	32	35	38	36	36	35	36	A	30	27	27	26	21.5	37.6
30-Jul-04	27	26	24	21	18	12	12	15	25	30	30	32	32	30	30	30	31	25	A	22	27	27	27	23	25.0	32.3
31-Jul-04	18	16	17	13	13	11	11	14	16	16	16	23	25	26	26	24	25	A	23	17	16	9	7	3	16.7	25.8
Hourly Avg	16.4	16.6	16.8	15.4	13.7	11.4	11.2	13.0	16.2	19.9	24.7	29.1	31.1	32.2	33.8	34.2	34.4	32.1	30.4	27.8	24.2	20.0	18.8	18.3		
Hourly Max	31.0	32.8	31.1	28.2	30.7	30.3	29.8	30.2	27.6	31.5	46.6	63.9	78.7	76.8	63.3	61.1	56.6	53.2	45.6	39.6	36.7	36.0	33.3	35.8		

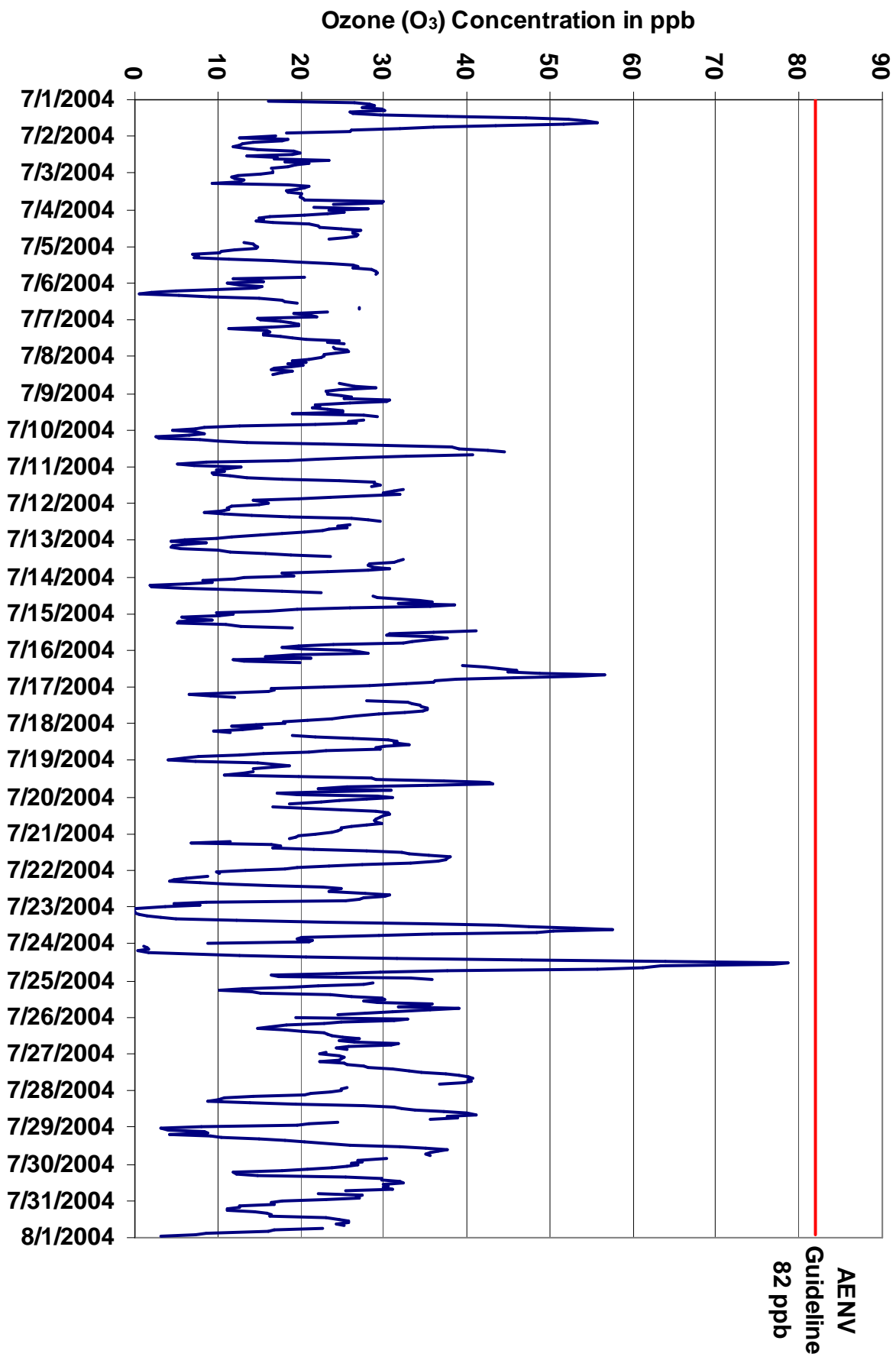


Figure 7. PASZA - Henry Pirkker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Ozone (O₃)

Station Owner: PASZA

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

Summary

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

AIC Time:	33 hrs							Operational Time:	705 hrs						
Calibration Time:	4 hrs							AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average							
	61	44	32	25	18	9	3	25.8 ppb							

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jul-04	A	23	33	34	33	36	32	35	30	29	36	42	52	55	57	58	55	50	42	36	29	29	22	A	38.5	58.1
2-Jul-04	20	17	20	20	15	15	14	14	15	18	22	25	21	18	19	22	28	24	24	22	22	19	A	18	19.6	27.6
3-Jul-04	18	18	15	15	15	15	15	16	21	24	23	22	20	21	22	22	34	27	32	32	27	A	30	36	22.5	36.1
4-Jul-04	25	30	25	25	17	16	17	16	20	22	24	24	27	30	30	28	29	30	27	26	A	16	16	16	23.3	30.5
5-Jul-04	16	17	15	12	12	10	10	10	13	19	22	25	28	28	28	30	31	31	31	A	25	15	18	17	20.1	31.1
6-Jul-04	14	14	17	17	13	8	5	2	9	12	18	20	20	23	N	N	29	29	A	26	22	24	23	19	17.4	29.2
7-Jul-04	20	20	21	24	23	20	14	19	19	18	18	21	21	27	28	26	29	A	26	28	29	30	26	24	23.0	29.6
8-Jul-04	24	25	23	22	25	22	22	21	18	18	48	19	18	C	C	C	C	A	30	29	32	31	26	25	25.1	47.7
9-Jul-04	25	27	27	27	34	34	29	24	23	24	25	27	27	24	32	31	A	30	30	31	28	17	12	15	26.2	34.4
10-Jul-04	8	9	10	10	5	5	11	12	19	28	35	42	44	47	49	A	45	40	31	27	22	14	12	11	23.4	49.1
11-Jul-04	15	15	13	14	13	14	13	17	22	29	30	30	31	32	A	36	34	32	35	33	28	28	17	18	23.8	35.5
12-Jul-04	18	17	14	13	13	13	12	14	17	25	29	30	34	A	28	27	27	26	24	23	22	19	14	14	20.6	34.1
13-Jul-04	10	10	11	9	6	6	7	14	14	20	21	28	A	34	36	33	31	31	31	35	33	28	22	22	21.4	35.8
14-Jul-04	19	19	11	12	11	4	4	9	16	21	25	A	30	31	34	37	38	35	42	42	35	25	20	16	23.2	42.2
15-Jul-04	17	13	10	11	14	8	11	14	15	25	A	45	41	35	33	39	40	39	39	35	28	23	20	23	25.0	45.0
16-Jul-04	31	31	31	27	24	27	17	18	24	A	43	45	46	51	49	58	62	57	57	41	40	39	35	32	38.5	61.7
17-Jul-04	30	22	22	20	16	11	13	16	A	31	36	35	36	37	37	37	37	36	32	30	27	25	25	20	27.5	37.5
18-Jul-04	20	18	16	19	16	15	16	A	21	25	30	32	34	34	35	33	31	31	28	24	19	15	14	11	23.2	35.1
19-Jul-04	7	13	18	22	20	17	A	16	16	15	24	32	34	41	46	47	43	30	26	38	30	23	24	32	26.6	46.8
20-Jul-04	33	31	27	24	21	A	20	25	28	32	33	33	32	31	31	31	31	32	29	29	27	26	27	25	28.5	33.3
21-Jul-04	23	21	21	20	A	16	9	20	20	18	26	31	35	36	38	41	40	40	38	37	33	26	23	21	27.6	40.9
22-Jul-04	17	12	11	A	11	9	8	7	10	15	20	25	27	28	29	30	33	32	31	29	27	23	9	12	19.7	32.7
23-Jul-04	10	1	A	1	0	2	3	5	7	16	30	40	47	51	56	61	58	52	46	34	27	24	23	24	26.9	61.3
24-Jul-04	20	A	2	3	4	1	3	16	28	40	56	73	84	84	78	68	65	43	32	29	19	22	44	40	37.1	84.2
25-Jul-04	A	32	30	25	23	18	13	17	18	28	29	32	32	30	33	40	39	37	43	39	34	29	27	A	29.4	42.6
26-Jul-04	22	36	33	29	24	20	19	18	25	24	24	26	26	27	29	27	28	34	33	32	26	28	A	25	26.8	36.0
27-Jul-04	23	26	26	26	26	25	26	28	30	31	33	35	37	40	41	42	43	42	43	42	44	A	28	27	33.2	44.2
28-Jul-04	28	26	23	22	21	16	12	10	17	26	30	34	34	36	41	42	43	40	42	41	A	29	24	21	28.6	43.1
29-Jul-04	16	6	7	11	11	7	12	12	19	20	22	31	35	37	40	39	37	37	37	A	33	30	31	28	24.3	39.5
30-Jul-04	28	27	28	24	22	17	16	19	32	32	32	34	34	33	32	32	33	29	A	25	29	35	33	28	28.4	34.6
31-Jul-04	20	20	19	15	15	15	16	17	18	21	20	25	26	27	28	26	26	A	25	22	22	11	12	6	19.6	27.9
Hourly Avg	19.9	19.8	19.3	18.4	16.7	14.7	14.0	15.9	19.4	23.5	28.8	32.1	33.8	35.4	37.1	37.3	37.9	35.5	34.0	31.6	28.2	24.3	22.5	21.6		
Hourly Max	33.3	36.0	33.2	33.5	34.4	36.3	32.4	35.2	31.6	39.7	55.8	72.7	84.2	83.7	77.7	68.1	65.1	57.2	56.7	42.1	44.2	39.1	44.3	40.3		

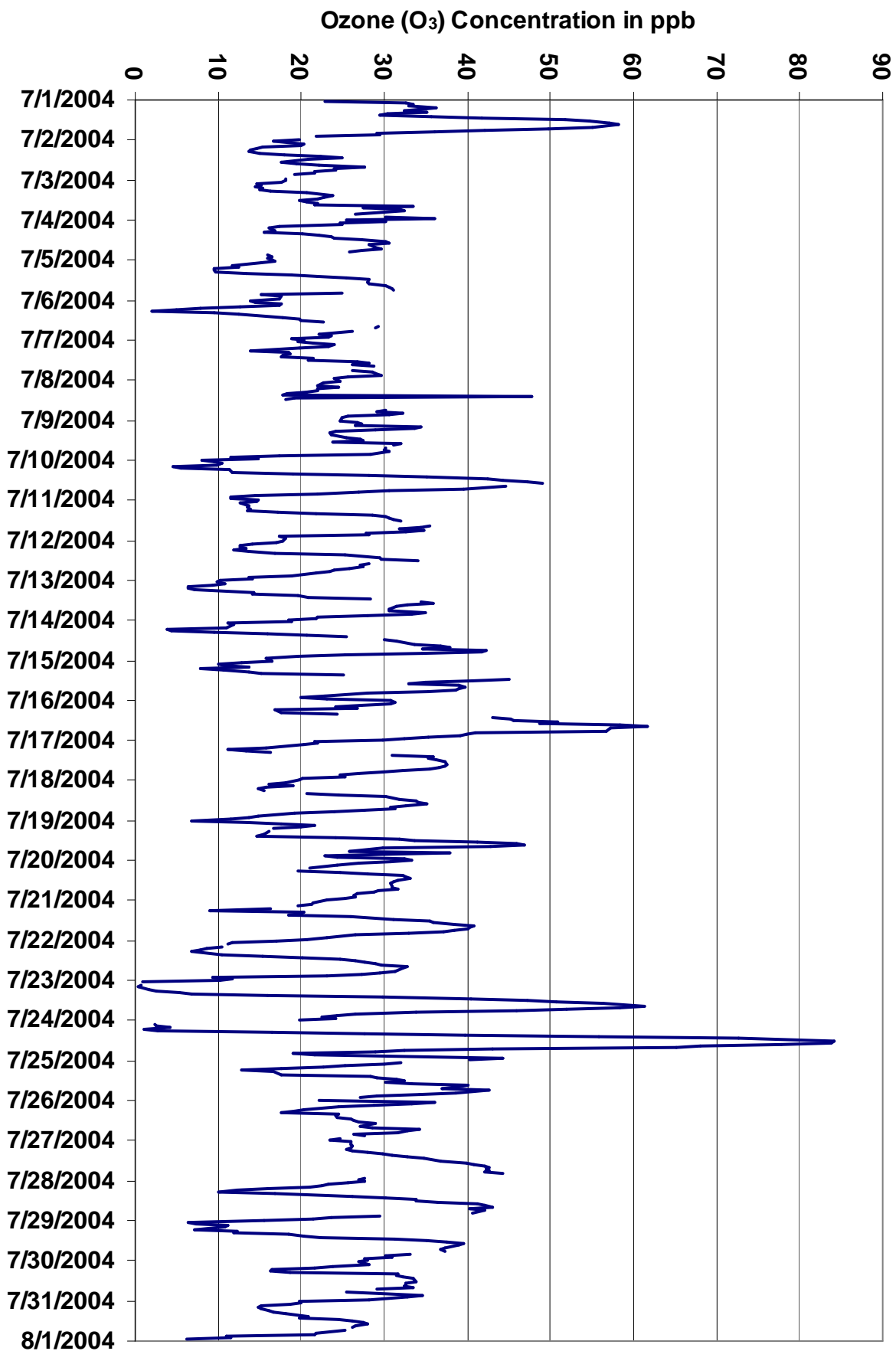


Figure 8. PASZA - Henry Pirker Ozone 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Station Owner: PASZA

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

Summary

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

Guideline Limit: Canada Wide Standard 8-hr 65 ppb

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

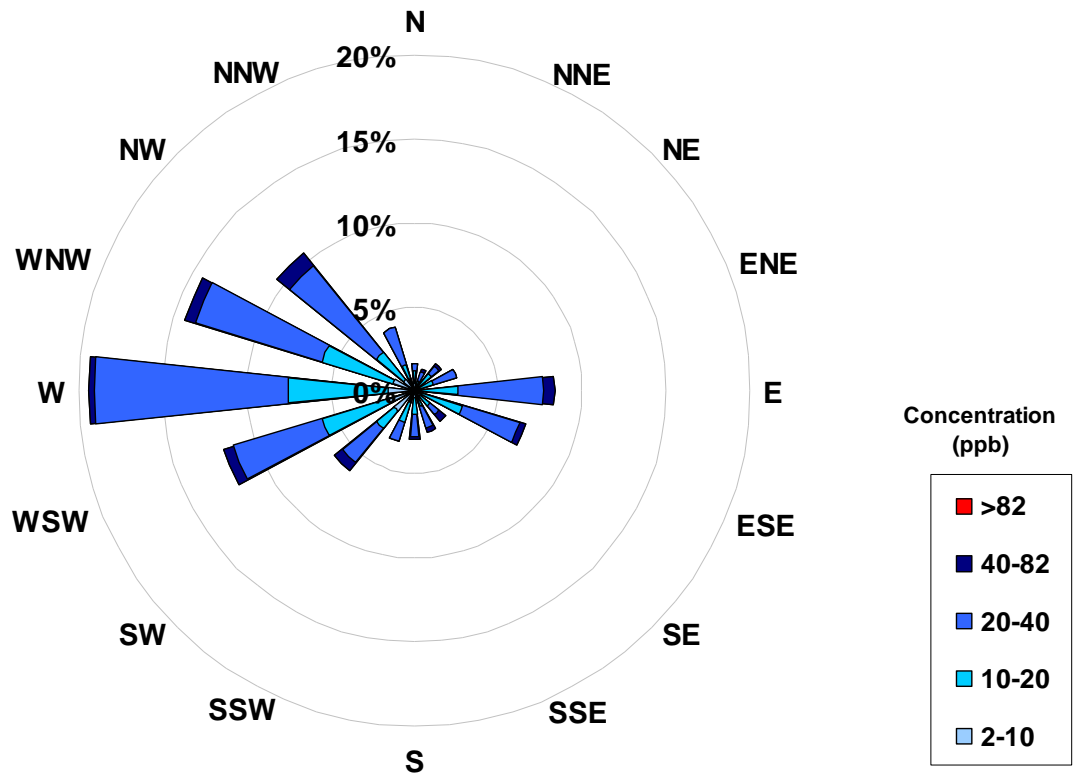
Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Jul-04	A	41	38	34	32	30	28	27	27	28	28	29	32	35	38	41	44	46	47	47	44	41	36	33	35.9	47.3	
2-Jul-04		28	24	21	19	18	16	15	15	14	14	15	15	16	16	17	18	18	19	19	19	19	19	19	19	17.8	28.3
3-Jul-04		18	18	16	15	14	14	14	13	13	14	15	16	17	17	18	20	20	20	21	22	23	23	24	25	17.9	24.9
4-Jul-04		25	26	25	24	23	22	21	19	18	18	18	19	21	22	23	25	25	26	26	26	24	22	21	22.3	26.0	
5-Jul-04		19	17	15	13	13	12	11	11	10	10	11	13	15	17	20	22	25	26	27	28	27	25	23	21	18.0	27.9
6-Jul-04		19	16	14	15	13	12	11	9	8	8	8	8	9	11	12	N	N	N	N	N	N	N	22	N	22.0	
7-Jul-04		20	19	19	19	19	18	17	17	17	17	16	16	16	18	19	20	21	22	23	24	25	25	25	19.4	24.6	
8-Jul-04		24	24	24	23	22	21	21	20	20	19	19	19	18	18	N	N	N	N	N	N	N	N	N	N	N	24.2
9-Jul-04		25	25	25	25	25	26	26	26	26	25	25	25	24	23	23	24	24	25	26	26	25	24	22	19	24.6	26.2
10-Jul-04		17	14	12	10	7	6	6	6	7	9	12	16	21	26	30	33	37	38	38	35	32	28	20	20.1	38.3	
11-Jul-04		17	14	12	10	9	9	10	11	12	13	16	18	21	23	25	27	29	30	30	30	29	28	24	19.8	30.4	
12-Jul-04		22	20	18	16	14	13	12	12	12	12	14	16	18	19	22	24	26	26	26	25	23	22	20	18	18.8	26.2
13-Jul-04		16	13	12	10	8	7	6	6	7	8	10	12	13	17	21	24	26	28	29	30	30	29	27	25	17.2	30.1
14-Jul-04		24	22	19	16	14	11	9	7	7	8	10	10	13	17	21	25	29	31	33	33	33	32	30	27	19.9	33.2
15-Jul-04		24	21	17	13	11	9	8	8	8	9	10	15	19	22	26	29	33	35	35	34	32	31	30	28	21.1	35.3
16-Jul-04		26	25	24	23	22	22	21	20	20	18	20	23	27	31	36	41	46	47	48	47	46	45	43	41	31.8	47.6
17-Jul-04		37	32	28	26	23	19	16	14	13	14	17	19	22	26	30	33	34	34	34	33	32	30	28	26	25.8	36.7
18-Jul-04		24	22	20	18	17	15	14	13	14	15	17	19	21	25	28	28	29	30	30	29	27	24	21	18	21.5	30.2
19-Jul-04		15	12	11	11	11	11	12	13	14	15	15	17	19	22	24	28	31	33	33	33	33	30	27	25	20.6	33.2
20-Jul-04		25	25	25	24	24	25	24	23	22	22	23	24	26	26	28	29	30	30	29	29	28	28	27	26	26.0	29.7
21-Jul-04		25	24	23	22	22	20	17	16	16	15	16	17	19	21	25	28	30	33	35	35	35	34	32	29	24.5	35.4
22-Jul-04		26	23	19	17	15	12	10	8	7	8	8	10	12	14	17	20	23	25	26	27	27	25	23	20	17.6	27.0
23-Jul-04		17	13	11	7	4	2	2	1	1	3	6	10	16	21	28	35	40	45	46	46	43	39	35	31	20.9	46.4
24-Jul-04		26	22	17	13	11	8	5	4	6	9	15	22	32	42	49	55	60	60	58	53	46	38	34	31	29.9	60.4
25-Jul-04		28	26	26	26	26	22	19	19	18	18	19	20	22	24	27	30	31	32	33	33	33	33	32	26.0	33.2	
26-Jul-04		30	30	29	27	26	25	24	23	22	21	20	20	21	22	23	24	26	27	27	27	27	27	27	27	24.7	30.0
27-Jul-04		26	25	24	24	24	24	24	24	25	25	26	27	28	30	32	34	35	37	38	39	39	40	38	35	30.3	39.6
28-Jul-04		33	31	28	25	22	21	19	17	15	15	16	17	19	22	25	29	33	35	36	37	38	36	34	31	26.5	37.7
29-Jul-04		26	22	17	13	12	10	8	7	8	10	12	14	17	21	24	28	30	32	34	35	35	34	32	31	21.3	35.3
30-Jul-04		30	28	27	26	24	23	21	19	19	20	20	22	23	26	28	30	31	30	30	29	28	28	27	26	25.6	30.6
31-Jul-04		24	23	22	21	19	17	15	14	14	14	14	15	17	18	20	22	23	24	24	24	22	20	17	14	19.1	24.5
Hourly Avg		23.9	22.5	20.7	18.9	17.5	16.3	15.1	14.3	14.2	14.7	15.7	17.4	19.6	22.1	25.1	28.2	30.4	31.7	32.4	32.2	31.2	29.7	27.7	25.7		
Hourly Max		36.7	41.1	37.6	34.5	31.9	29.6	27.9	26.7	26.6	27.9	28.3	29.5	32.0	41.5	49.3	55.3	59.7	60.4	58.3	53.4	46.2	45.0	43.4	40.9		

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



Frequency Distribution of O ₃ in ppb			
Range	Frequency (hrs)		
0 < 2	13		
2 to 10	74		
10 to 20	217		
20 to 40	363		
40 to 82	38		
> 82	0		
Total Non-Zero Values	705		

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

PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

Station Owner: PASZA

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

Summary

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

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

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

Status Flag Characters

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

Day Mountain Standard Time

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

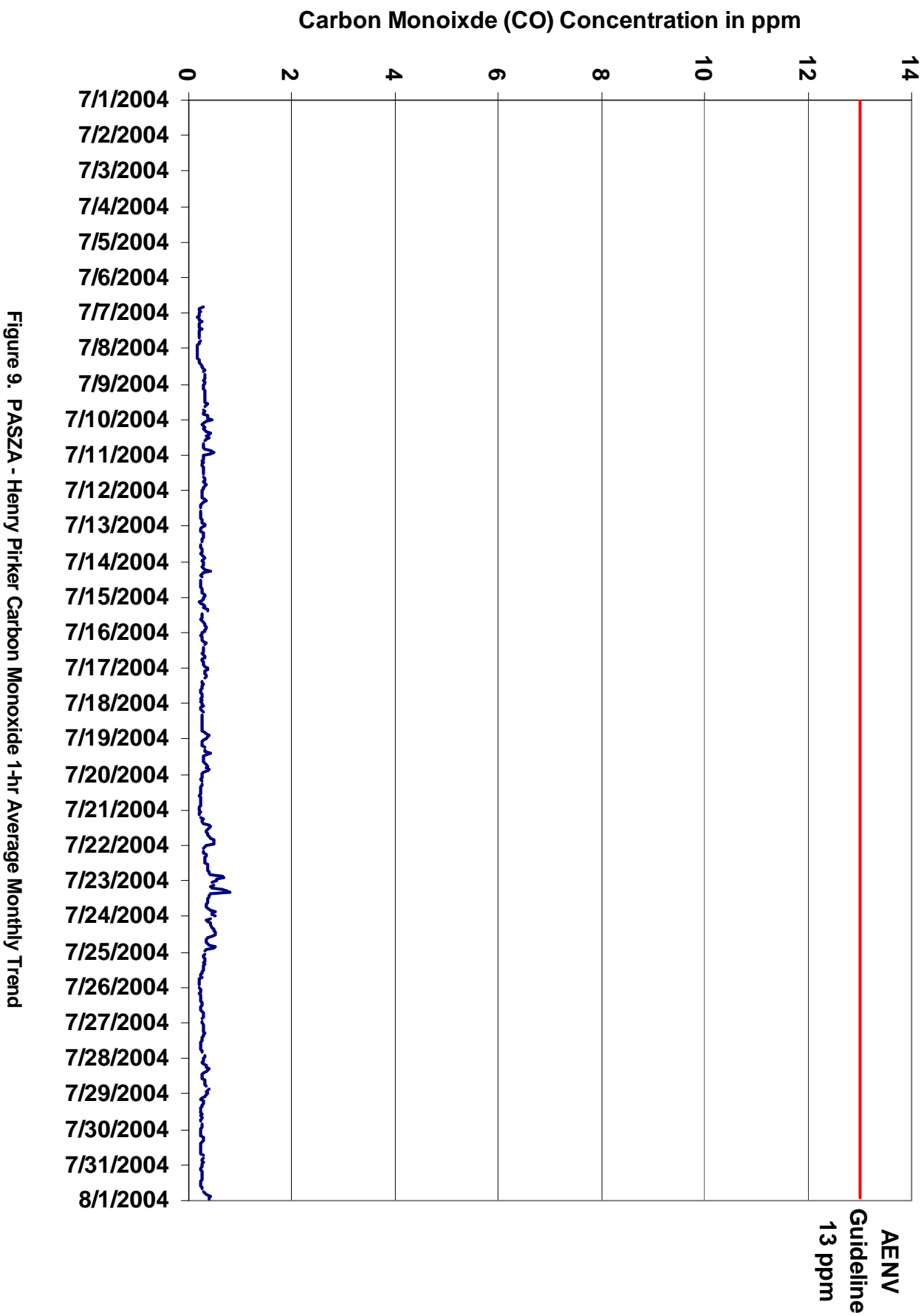


Figure 9. PASZA - Henry Pirkker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Carbon Monoxide (CO)

Station Owner: PASZA

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

Summary

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

AIC Time:	28 hrs							Operational Time:	579 hrs						
Calibration Time:	2 hrs							AMD Operational Uptime:	81.9%						
Percentile	99	95	75	50	25	5	1	Average							
	1.0	0.6	0.4	0.3	0.3	0.3	0.2	0.4 ppm							

Status Flag Characters

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

Day Mountain Standard Time

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

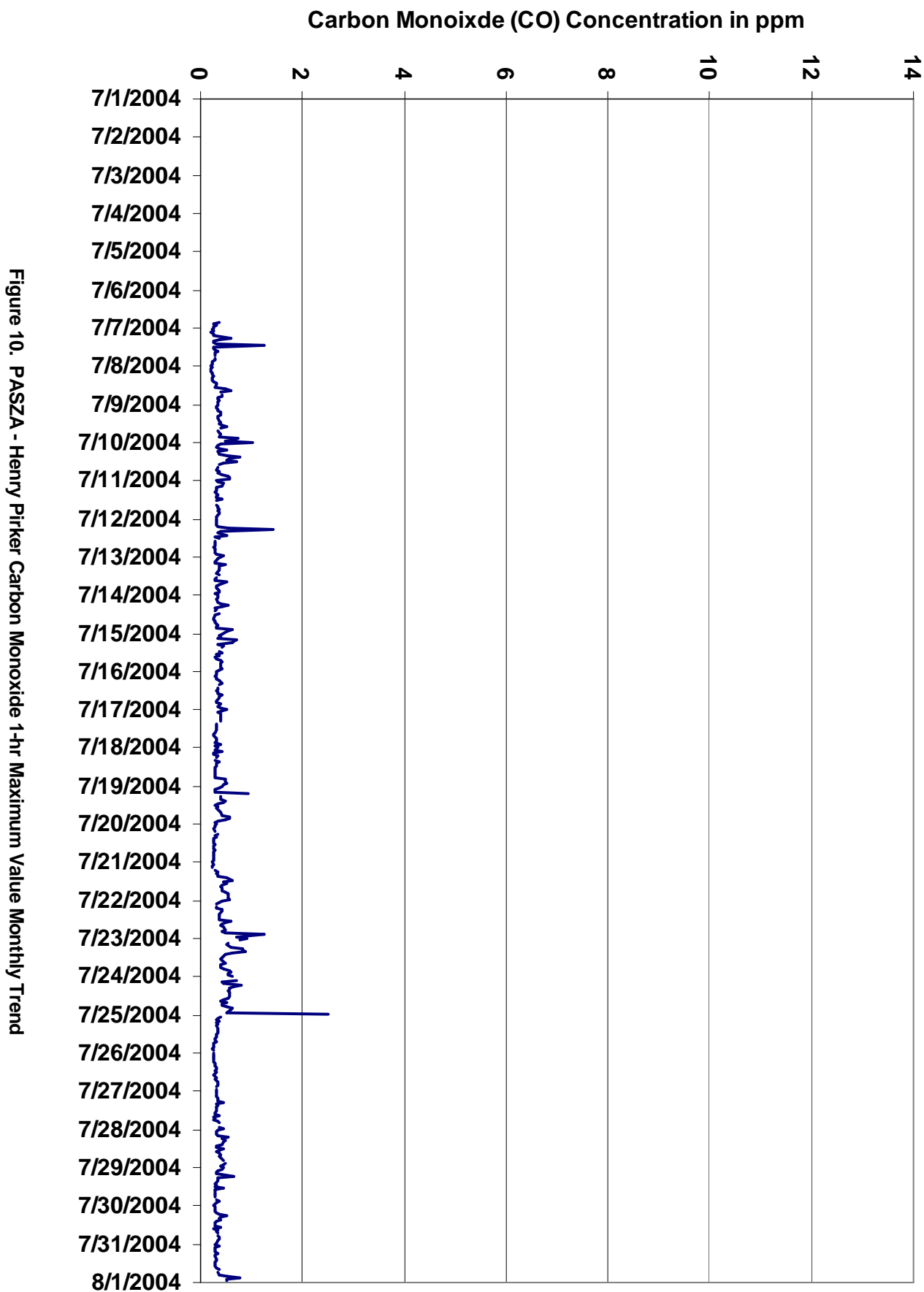


Figure 10. PASZA - Henry Pirkar Carbon Monoxide 1-hr Maximum Value Monthly Trend

Station: Henry Pirker

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

Station Owner: PASZA

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

Summary

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

Guideline Limit: Alberta Environment: 8-hr 5 ppm

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

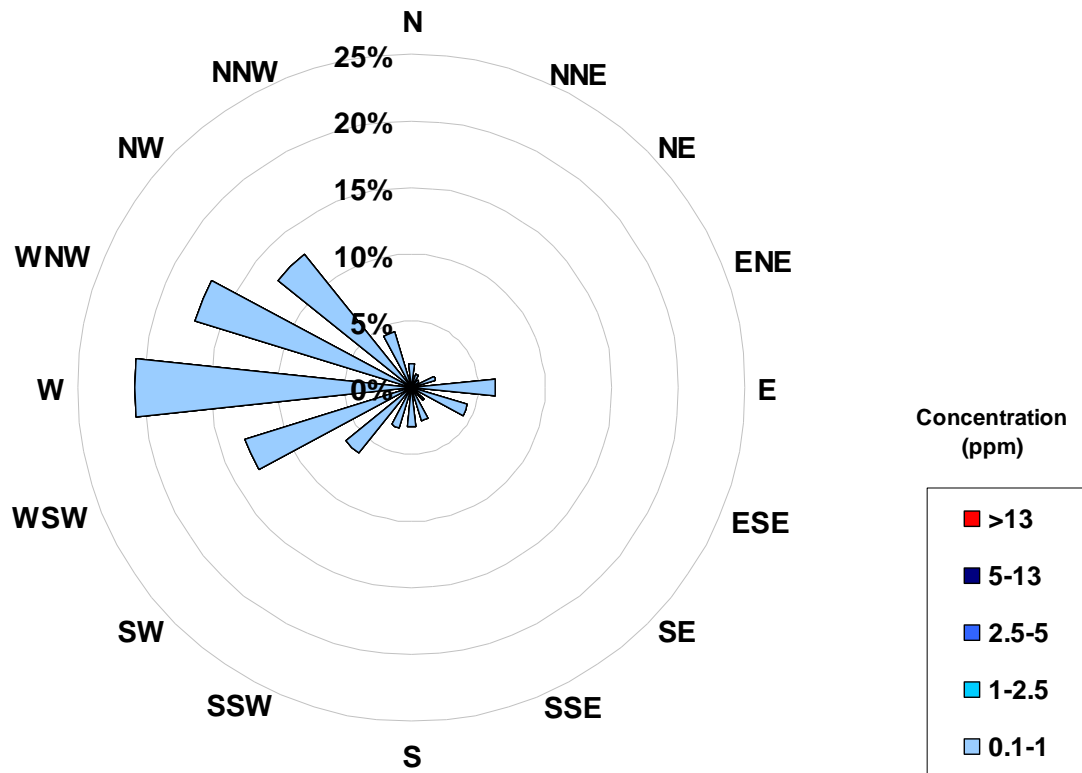
Status Flag Characters

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

Day Mountain Standard Time

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

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



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

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

PASZA - Henry Pirker Total Hydrocarbon Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Total HydroCarbons (THC)

Station Owner: PASZA

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

Summary

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

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

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

Status Flag Characters

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

Day Mountain Standard Time

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

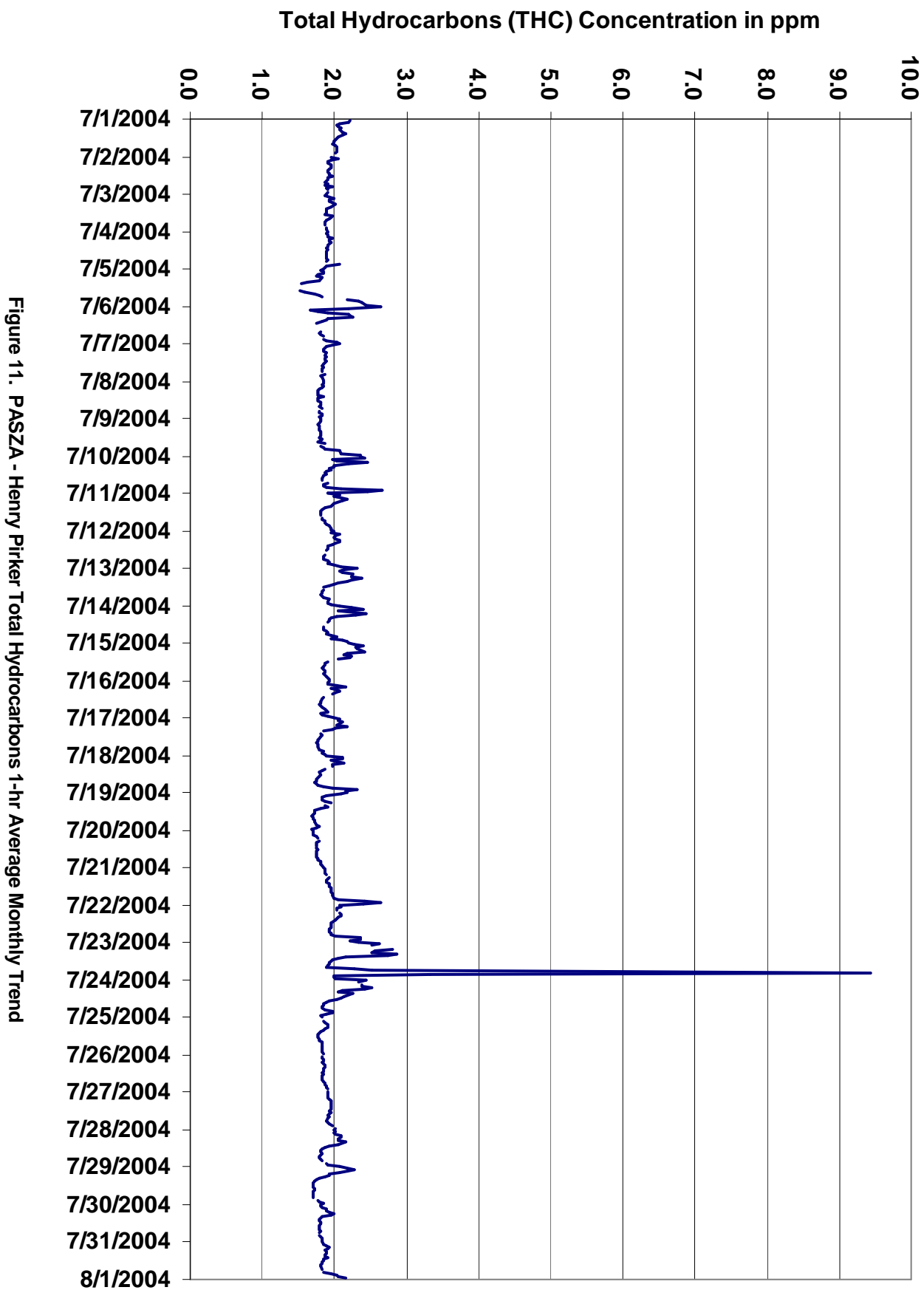


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

Station Owner: PASZA

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

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

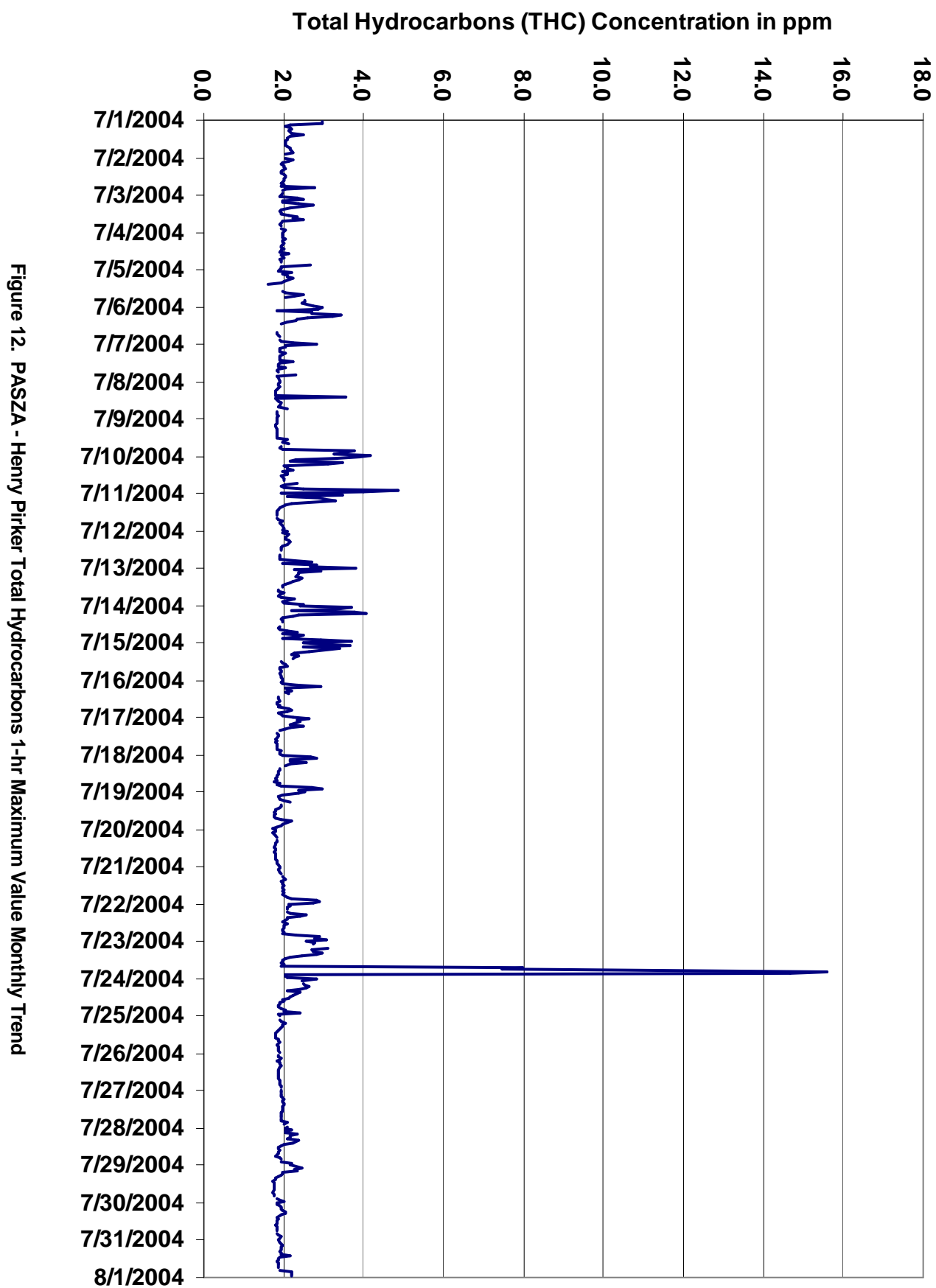
AIC Time:	34 hrs							Operational Time:	703 hrs						
Calibration Time:	3 hrs							AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average							
	4.0	2.9	2.2	2.0	1.9	1.8	1.7	2.1 ppm							

Status Flag Characters

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

Day Mountain Standard Time

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



PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Station Owner: PASZA

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

Summary

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

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

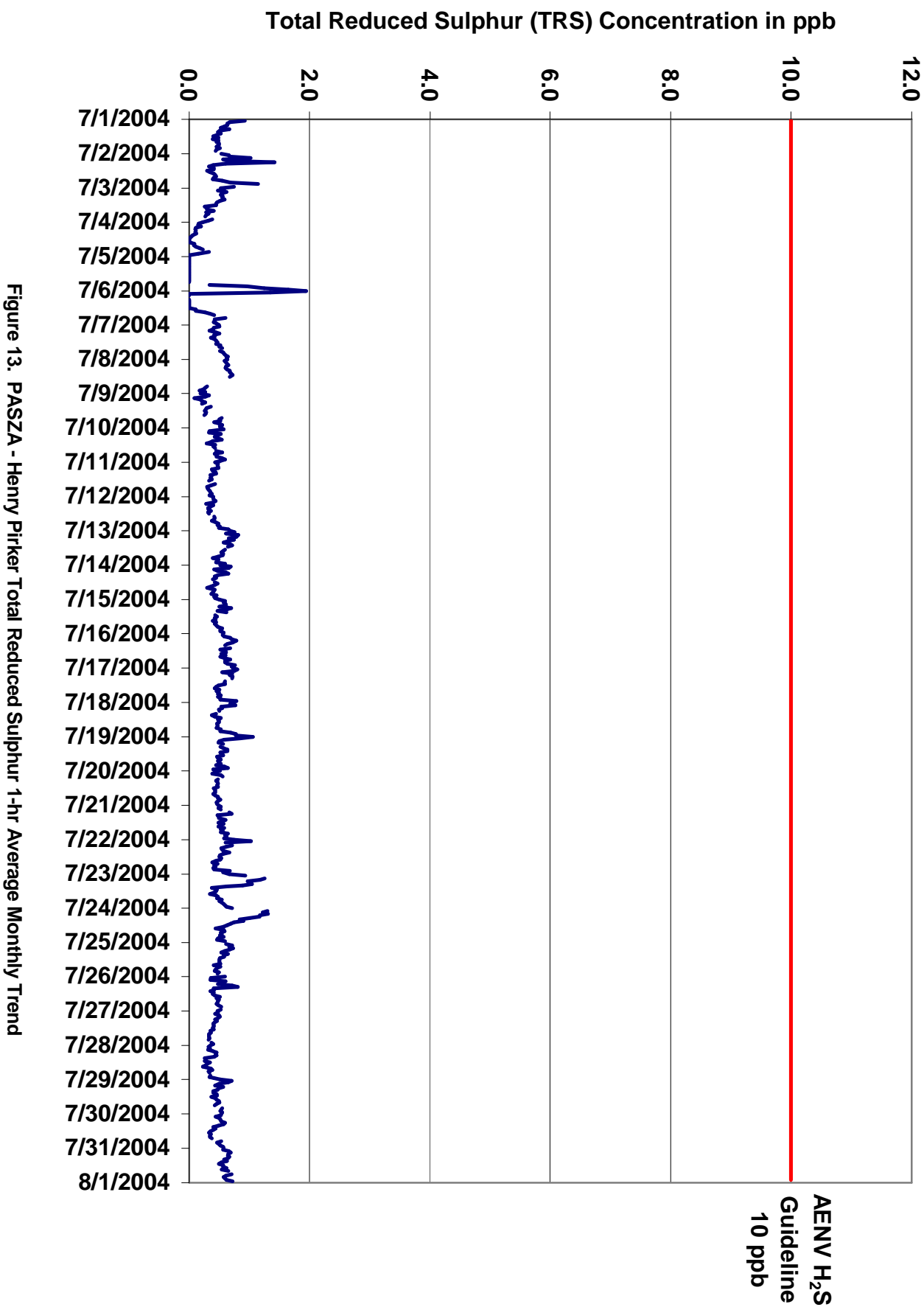
AIC Time:	33 hrs	Operational Time:	703 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%
Percentile	99 1.2	95 0.8	75 0.6
	50 0.5	25 0.4	5 0.1
	1 0.0	Average 0.5 ppb	

Status Flag Characters

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

Day Mountain Standard Time

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



Station: Henry Pirker

HOURLY MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Station Owner: PASZA

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

Summary

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

AIC Time:	33 hrs	Operational Time:	703 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.6%					
Percentile	99	95	75	50	25	5	1	Average
	1.8	1.3	1.0	0.9	0.8	0.5	0.0	0.9 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
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-Jul-04	A	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	2.8
2-Jul-04	1	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	A	1	1.1	1.9
3-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.1
4-Jul-04	1	1	0	1	1	1	1	1	0	0	1	0	0	0	1	1	1	1	1	1	A	1	1	0	0.5	0.8	
5-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	2	2	0.3	2.0	
6-Jul-04	2	3	0	0	D	D	0	0	0	0	0	0	0	0	0	1	1	A	1	1	1	1	1	1	1	0.7	2.6
7-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.0
8-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	C	A	1	1	1	1	1	1	1.0	1.2
9-Jul-04	1	1	1	1	0	1	1	1	D	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.1
10-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.2
11-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.0
12-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
13-Jul-04	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5
14-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
15-Jul-04	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
16-Jul-04	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5
17-Jul-04	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
18-Jul-04	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
19-Jul-04	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
20-Jul-04	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
21-Jul-04	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
22-Jul-04	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
23-Jul-04	1	1	A	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.2	1.7
24-Jul-04	1	A	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.8
25-Jul-04	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.2
26-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.5
27-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.0
28-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	0.9
29-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.2
30-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.1
31-Jul-04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.0	1.2
Hourly Avg	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.9	0.9	1.0	1.0	1.0		
Hourly Max	2.4	2.8	1.8	1.7	1.8	1.8	1.9	1.6	1.5	1.3	1.1	1.2	1.1	1.2	1.1	1.2	1.1	1.2	1.1	1.5	1.4	1.5	1.6	2.0			

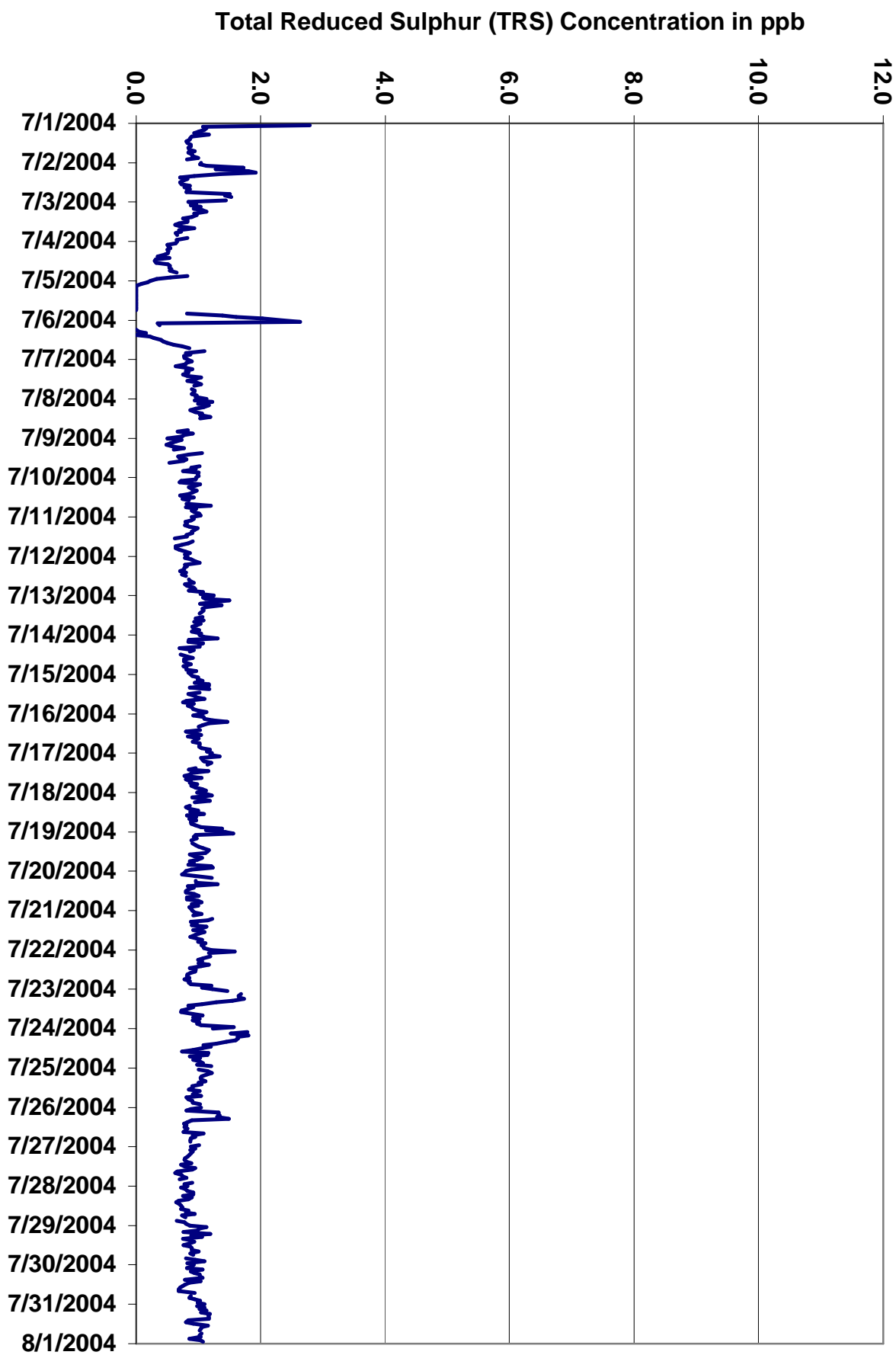


Figure 14. PASZA - Henry Pitker Total Reduced Sulphur 1-hr Maximum Value Monthly Trend

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: July 1, 2004 to August 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	33.4 $\mu\text{g}/\text{m}^3$ 23-Jul 8:00 9:00
Maximum 24-hr Average:	16.7 $\mu\text{g}/\text{m}^3$ 23-Jul

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)							

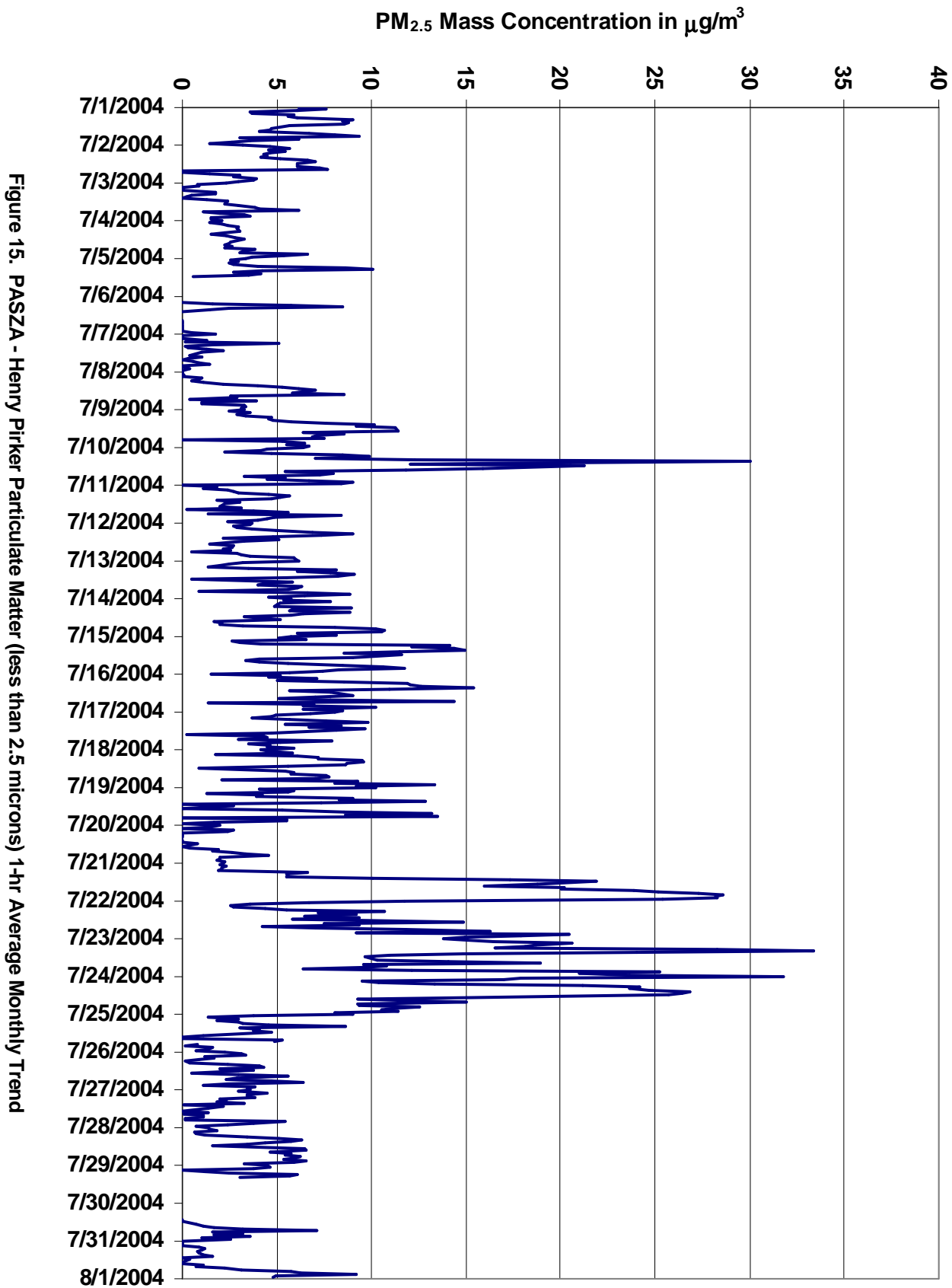
AIC Time:	0 hrs	Operational Time:	697 hrs						
Calibration Time:	26 hrs	AMD Operational Uptime:	97.2%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	27.3	17.4	7.3	4.3	2.0	0.0	0.0	5.6 $\mu\text{g}/\text{m}^3$	4.6 $\mu\text{g}/\text{m}^3$

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	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Jul-04	6	8	6	4	4	6	6	6	6	6	9	8	9	9	6	5	5	4	7	8	9	3	6	4	3	1	5.8	9.4
2-Jul-04	3	5	6	5	5	5	4	4	4	4	5	7	7	7	6	6	7	8	0	0	1	3	3	4	4	3	4.4	7.6
3-Jul-04	2	1	1	0	0	0	2	2	2	0	0	0	1	2	2	3	4	4	6	1	2	3	4	2	1	1.8	6.1	
4-Jul-04	2	1	2	2	3	3	3	3	3	2	2	2	3	3	3	2	2	3	2	4	3	3	7	5	4	2.9	6.6	
5-Jul-04	3	3	3	2	3	4	9	10	4	3	4	4	4	1	D	D	D	D	D	D	D	D	D	D	D	N	10.1	
6-Jul-04	D	D	D	D	0	2	6	8	3	1	0	D	D	D	D	0	0	0	0	0	0	0	0	0	1	N	8.5	
7-Jul-04	2	0	0	0	1	0	5	2	0	0	1	2	1	0	1	0	0	1	1	1	1	0	0	0	0	0.8	5.1	
8-Jul-04	0	0	0	0	1	1	0	1	2	4	5	6	7	6	9	3	3	0	4	1	1	3	3	3	3	2.7	8.6	
9-Jul-04	3	2	4	3	3	5	5	5	5	6	8	10	9	11	11	6	9	7	7	8	0	5	6	6	7	6.1	11.4	
10-Jul-04	6	4	4	2	5	8	10	7	12	30	21	12	21	16	12	5	8	7	3	5	4	7	9	8	9.5	30.0		
11-Jul-04	0	2	1	2	3	3	5	6	5	5	2	3	2	2	3	0	4	6	1	8	5	4	4	2	3.3	8.4		
12-Jul-04	4	4	3	3	4	5	7	9	7	5	2	5	3	1	3	3	2	3	0	3	3	4	6	6	6	3.9	9.0	
13-Jul-04	6	3	2	2	1	4	8	6	8	9	8	5	1	6	4	4	6	6	6	1	7	9	6	5	5.2	9.1		
14-Jul-04	6	5	8	5	5	5	9	6	6	9	6	6	3	5	2	2	2	3	8	10	11	11	6	8	6.1	10.7		
15-Jul-04	6	5	7	3	3	4	14	12	14	15	11	9	12	9	4	3	4	6	8	11	12	8	7	6	8.0	14.9		
16-Jul-04	2	5	5	7	5	9	12	12	13	15	11	6	8	9	7	5	8	14	1	7	6	10	6	8	8.0	15.4		
17-Jul-04	8	7	5	5	4	6	8	10	5	8	7	10	8	5	0	4	4	3	8	5	4	5	4	6	5.7	9.8		
18-Jul-04	4	5	6	2	6	7	7	9	10	9	9	6	1	5	6	6	8	8	7	2	9	8	13	9	6.7	13.3		
19-Jul-04	10	4	6	6	1	4	4	9	8	13	7	0	3	0	5	9	13	9	14	0	6	5	2	0	5.7	13.5		
20-Jul-04	2	1	0	3	2	0	0	0	0	0	D	0	0	1	0	0	2	2	3	3	5	2	2	2	2	1.4	4.6	
21-Jul-04	2	2	2	2	2	2	7	6	6	5	10	17	22	19	16	20	20	24	25	27	29	28	28	25	14.4	28.6		
22-Jul-04	12	7	4	3	3	4	5	11	7	9	6	9	6	15	7	9	4	7	12	16	9	20	18	15	9.1	20.5		
23-Jul-04	14	15	16	21	19	18	17	28	33	24	15	11	10	14	19	10	11	10	6	12	25	21	24	24	16.7	33.4		
24-Jul-04	32	18	17	10	10	13	21	24	24	25	27	26	26	15	9	12	15	9	9	13	11	11	11	8	16.5	31.7		
25-Jul-04	9	4	1	3	2	3	3	5	9	3	4	4	5	1	0	0	5	5	D	1	0	2	1	1	3.0	9.1		
26-Jul-04	2	3	3	1	2	1	0	0	2	4	4	2	4	1	3	6	3	2	5	6	2	1	4	3	2.7	6.4		
27-Jul-04	4	3	4	3	3	4	2	2	2	3	0	2	1	0	1	0	1	1	0	0	5	4	2	1	2.1	5.4		
28-Jul-04	1	1	2	1	1	1	3	5	6	6	4	3	2	6	7	5	6	5	6	6	5	7	6	3	4.1	6.6		
29-Jul-04	4	5	4	0	1	2	6	6	3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	N	6.1	6.1	
30-Jul-04	C	C	C	C	C	C	C	C	C	C	C	C	0	0	1	1	2	3	7	2	3	2	4	1	3	N	7.1	7.1
31-Jul-04	0	0	0	0	1	1	1	1	1	1	1	2	0	0	0	0	1	1	2	3	6	6	9	5	5	1.9	9.2	
Hourly Avg	5.4	4.2	4.2	3.4	3.4	4.3	6.3	7.2	7.1	8.2	6.7	6.1	6.0	5.7	5.0	5.0	5.2	5.7	5.7	5.4	5.9	7.3	6.5	5.8				
Hourly Max	31.7	17.9	17.0	20.6	18.7	18.2	21.2	28.3	33.4	30.0	26.8	26.4	25.7	18.8	15.9	20.2	20.0	23.9	25.1	27.3	28.6	28.1	28.3	25.4				



Station: Henry Pirker

HOURLY MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Station Owner: PASZA

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

Summary

Maximum 1-hr Value:	60.2	µg/m ³	18-Jul	22:00 23:00
Maximum 24-hr Value:	28.1	µg/m ³	24-Jul	

AIC Time:	0 hrs							Operational Time:	697 hrs		
Calibration Time:	26 hrs							AMD Operational Uptime:	97.2%		
Percentile	99	95	75	50	25	5	1	Average	Geomean		
	42.7	31.3	15.8	9.0	5.2	2.4	0.9	11.8 µg/m ³	10.5 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

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

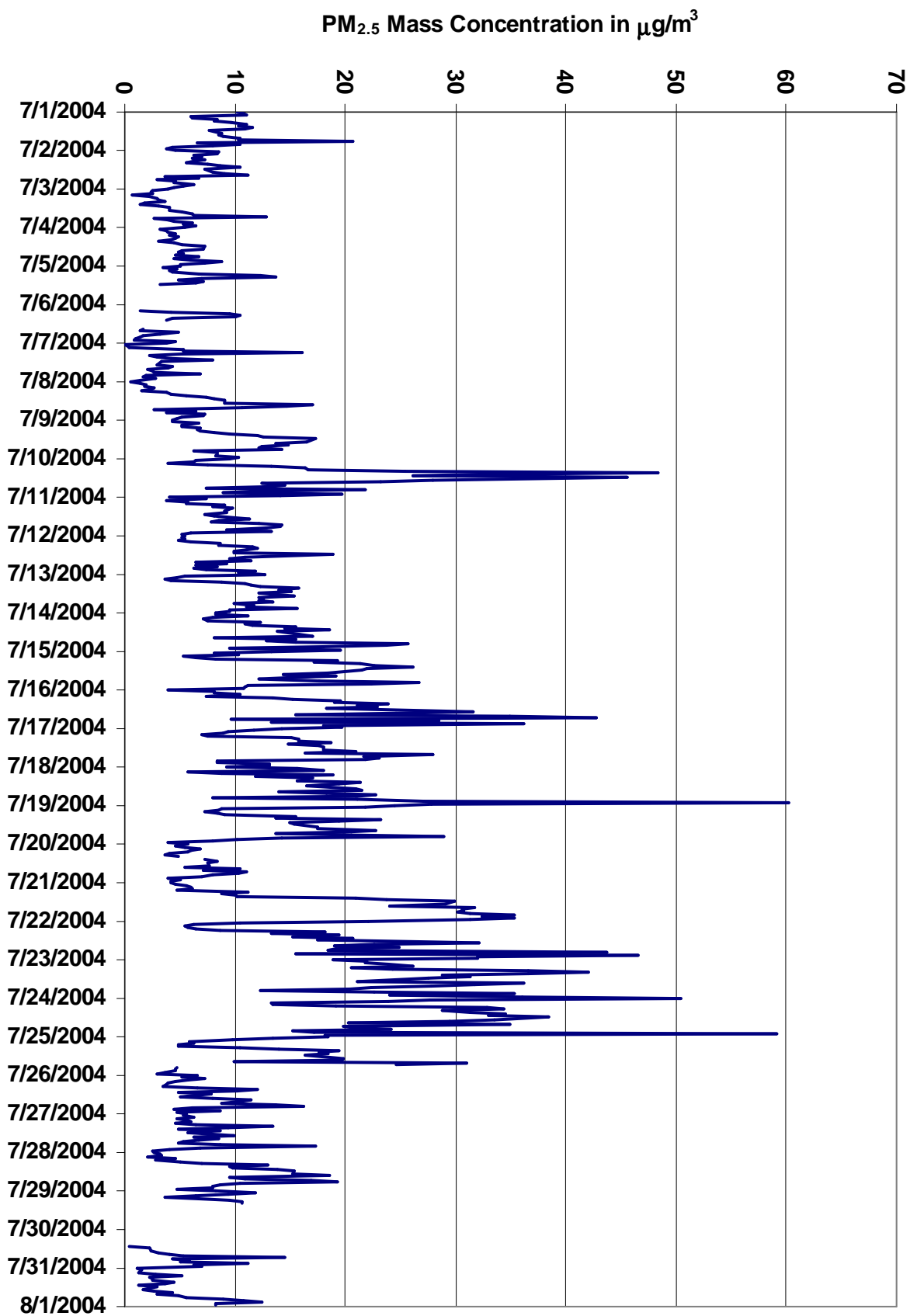
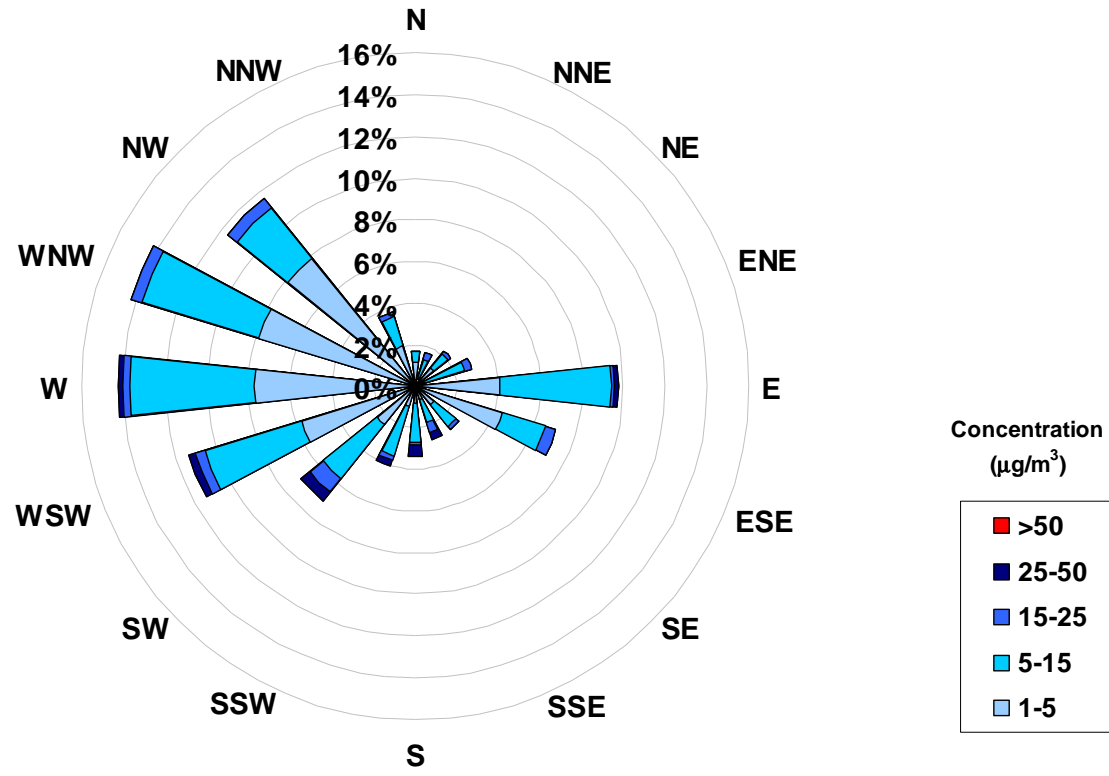


Figure 16. PASZA - Henry Pirkler Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly

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



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

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

PASZA - Henry Pirker Meteorological Parameters Monthly Summary

Station: Henry Pirker

HOURLY AVERAGE TABLE

Relative Humidity (RH - %)

Station Owner: PASZA

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

Summary

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

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

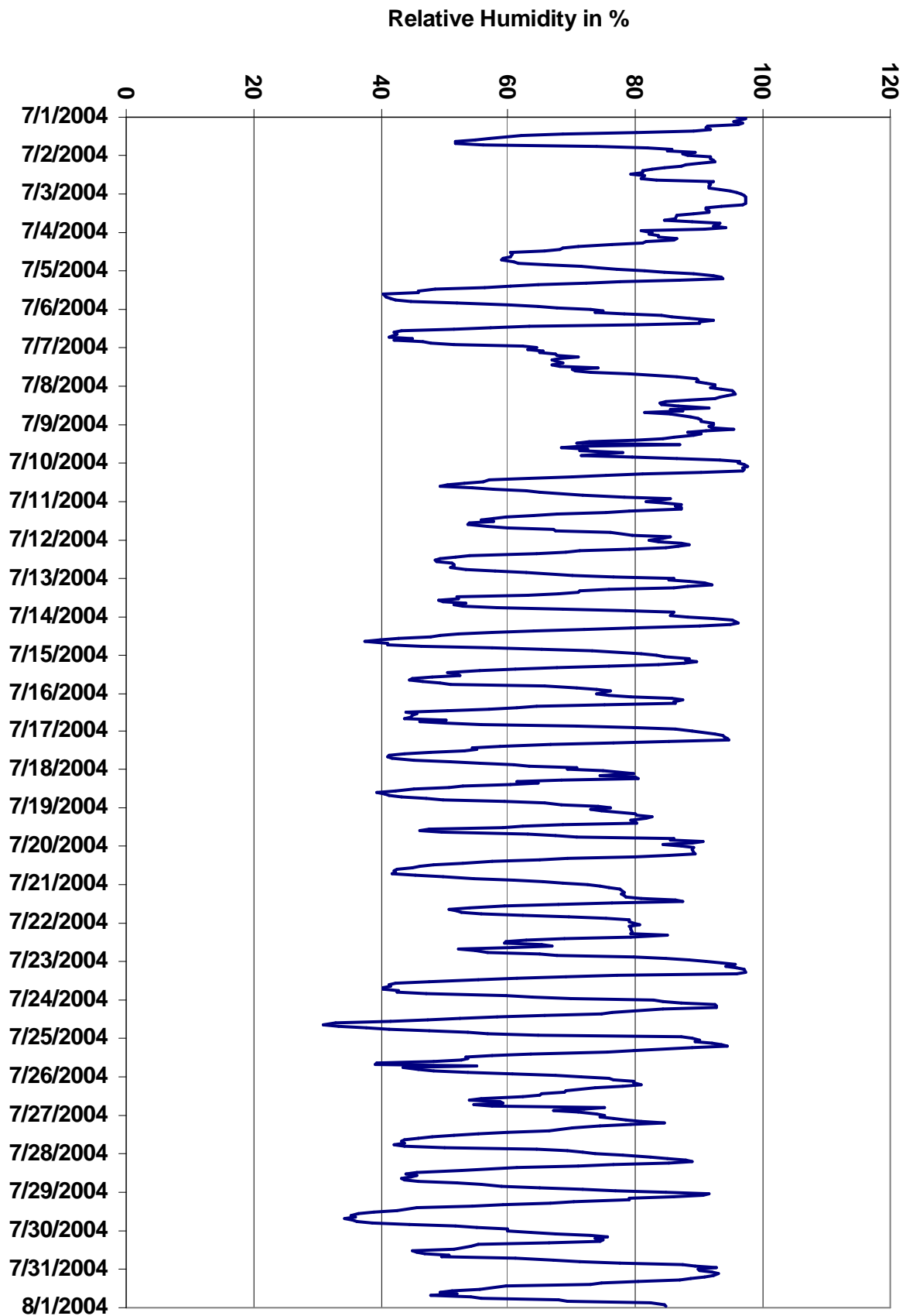
Status Flag Characters

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

Day Mountain Standard Time

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

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



Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (AT - °C)

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

Summary

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

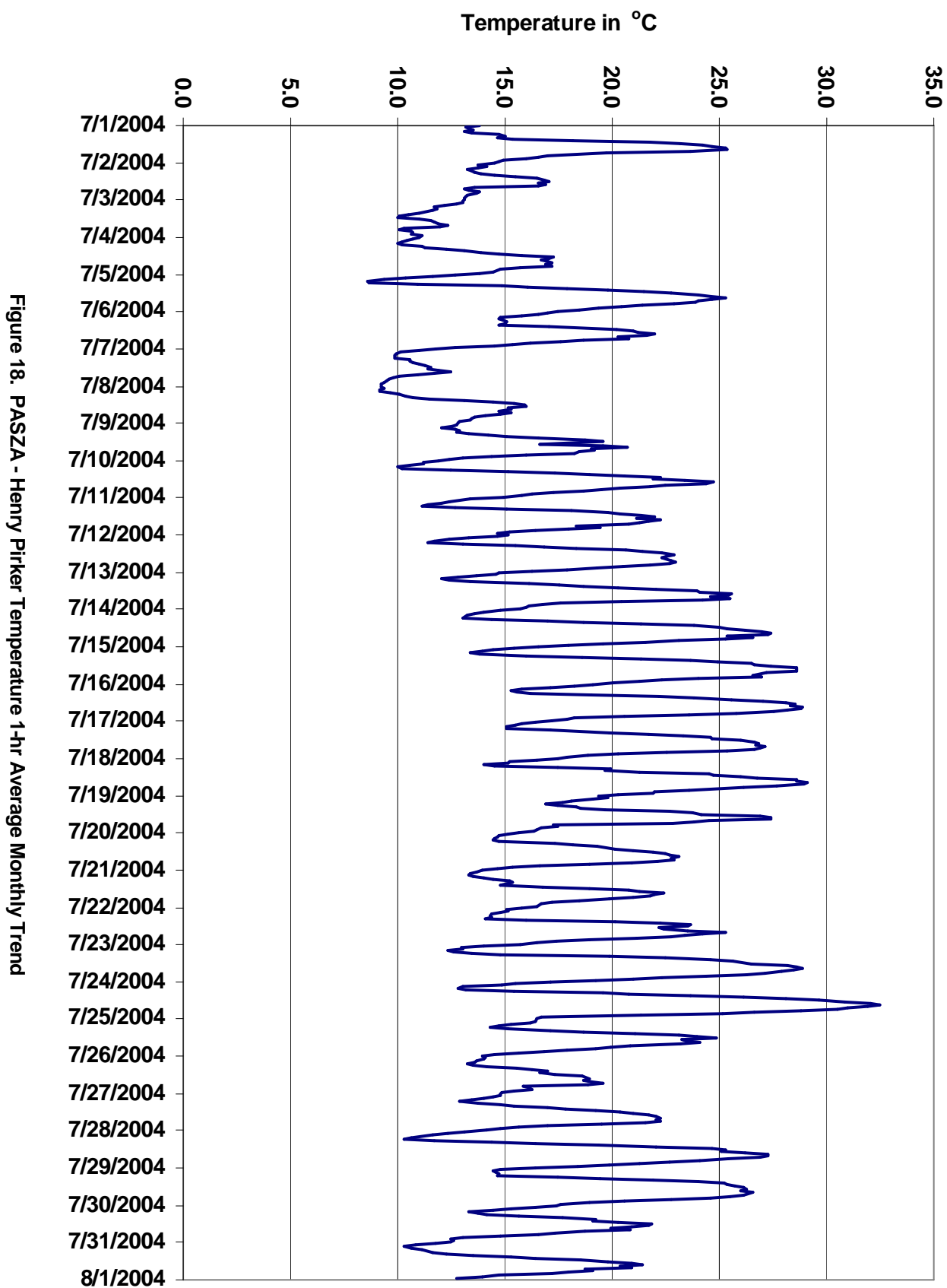
AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	29.0	27.1	21.9	17.0	14.0	10.6	9.4	18.0 ppb

Status Flag Characters

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

Day Mountain Standard Time

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



Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Solar Radiation (SR - W/m²)

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

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

AIC Time:	0 hrs		Operational Time:	743 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%				
Percentile	99	95	75	50	25	5	1	Average
	840.4	778.3	433.5	108.0	0.0	0.0	0.0	233.2 ppb

Status Flag Characters

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

Day Mountain Standard Time

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

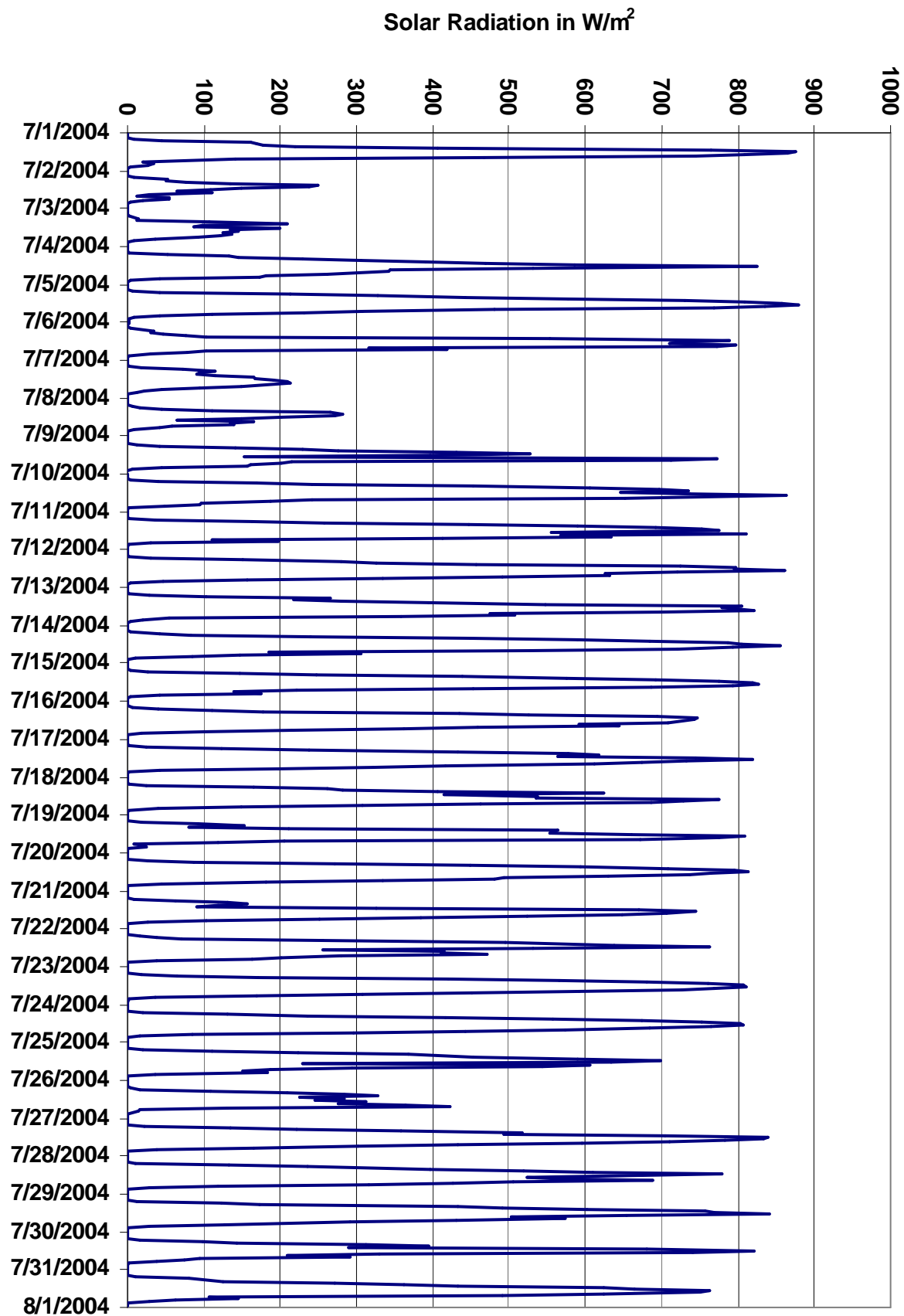


Figure 19. PASZA - Henry Pirkker Solar Radiation 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv - Km/hr)

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

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

Calm Time:	8 hrs	1% calms	Operational Time:	736 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	28.3	21.3	11.5	7.2	4.8	2.3	1.4	8.9 km/hr	4.8 km/hr

Status Flag Characters

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

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

Station: Henry Pirker

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

Station Owner: PASZA

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

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

Status Flag Characters

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

Day Mountain Standard Time

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

Station: Henry Pirker
 Station Owner: PASZA

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

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

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	56.7	47.2	24.2	14.4	8.5	5.2	4.3

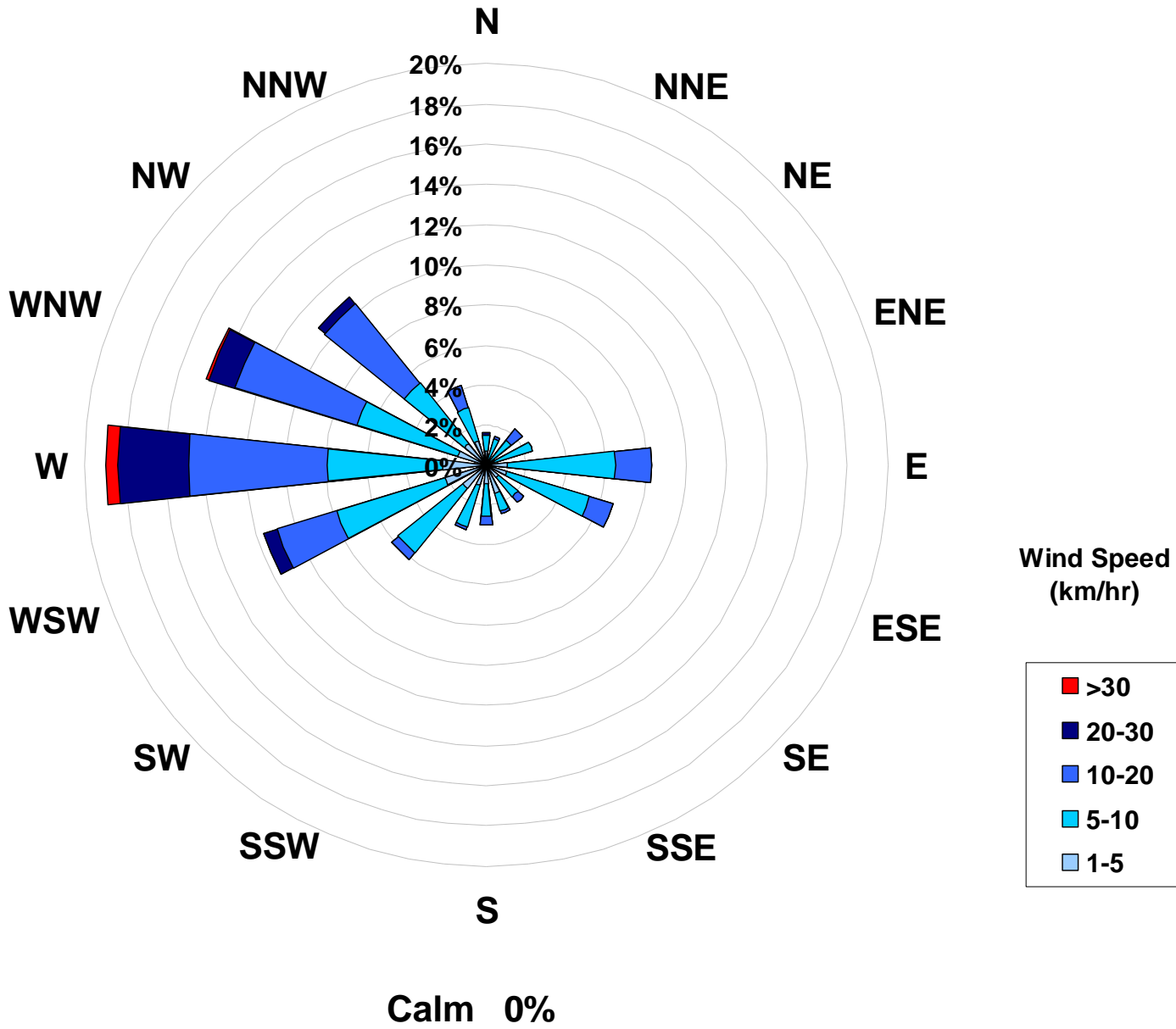
Status Flag Characters

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

Day Mountain Standard Time

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

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



PEACE AIRSHED ZONE ASSOCIATION

PASZA Monthly Passive Data Summary

Table 1. PASZA Passive Stations for July 2004

PASZA					
Station Number	Station Name	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Site Legal
Duplicates					
7a	Steepprock Creek	0.1	30.3	0.4	
7b	Steepprock Creek	0.1	28.3	0.4	
39a	Clouston Creek	0.2	27.1	0.6	
39b	Clouston Creek	0.2	27.3	0.4	
41a	Valleyview	0.3	28.1	0.7	
41b	Valleyview	0.3	25.5	0.6	
42a	Sunset House	0.2	29.1	0.4	
42b	Sunset House	0.3	31.1	0.3	
49a	Grande Prairie HP	0.2	28.1	3.1	
49b	Grande Prairie HP	0.2	32.3	3.2	
1	Silver Valley	0.3	25.6	1.3	08-27-081-11 W6M
2	Bay Tree	0.1	32.0	0.5	13-16-078-13 W6M
3	Forth Creek	0.2	33.2	0.5	04-13-082-07 W6M
4	Gordondale	0.2	29.9	0.7	04-34-078-10 W6M
5	Boone Creek	0.1	22.2	0.6	01-23-076-11 W6M
7	Steepprock Creek	0.1	29.3	0.4	09-35-072-13 W6M
9	Spirit River	0.3	29.6	1.0	08-12-079-07 W6M
10	Woking	0.3	29.8	0.6	01-13-076-07 W6M
11	Webber Creek	0.2	29.1	0.9	09-36-074-09 W6M
12	Hythe	0.2	31.3	1.2	14-36-072-11 W6M
14	Sylvester	0.1	20.2	0.6	08-06-069-12 W6M
16	Beaverlodge	0.2	29.5	1.4	15-36-071-10 W6M
17	Poplar	0.2	26.0	0.9	13-06-073-08 W6M

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

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

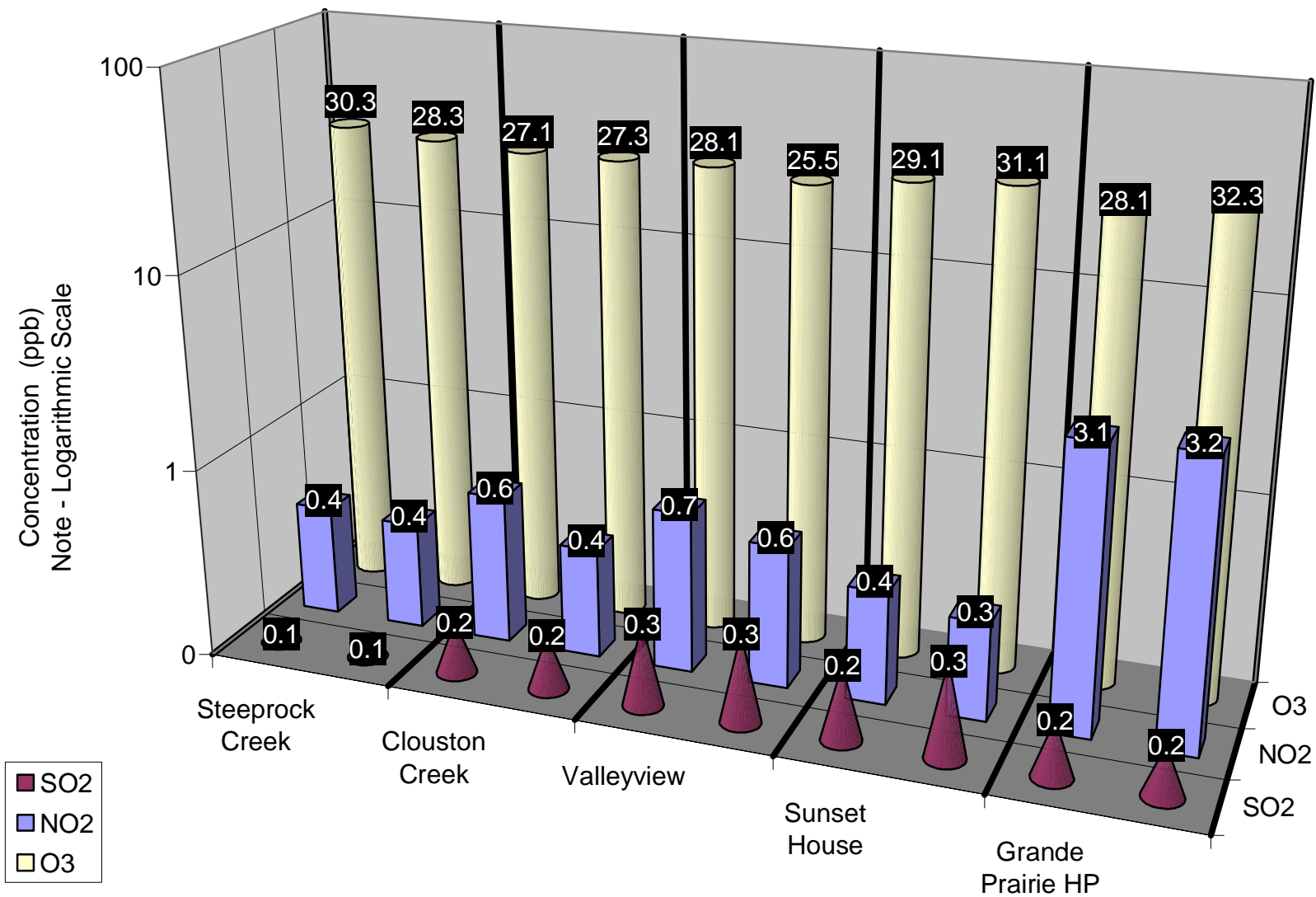


Figure 20. Duplicate Summary Chart

Table 2. Passive Summary Results for July 2004

Stats	Sulphur Dioxide	Ozone	Nitrogen Dioxide
	SO ₂	O ₃	NO ₂
	ppb	ppb	ppb
Passive Summary for July 2004 (PASZA Zone)			
Mean	0.2	25.9	0.8
Standard Deviation	0.1	4.2	0.6
Minimum	0.1	18.1	0.2
	Pinto Creek (#25)	Puskwaskau (#34)	Puskwaskau (#34)
Maximum	0.3	33.8	3.3
	Gold Creek (#32)	Clairmont Lake (#28)	Grande Prairie I (#27)
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)			
	SO ₂	O ₃	NO ₂
AENV Beaverlodge station	0.1	26.4	3.0
PASZA Beaverlodge passive	0.2	29.5	1.4
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)			
	SO ₂	O ₃	NO ₂
PASZA Henry Pirker station	0.2	22.7	4.2
PASZA Grande Prairie passive	0.2	30.2	3.2

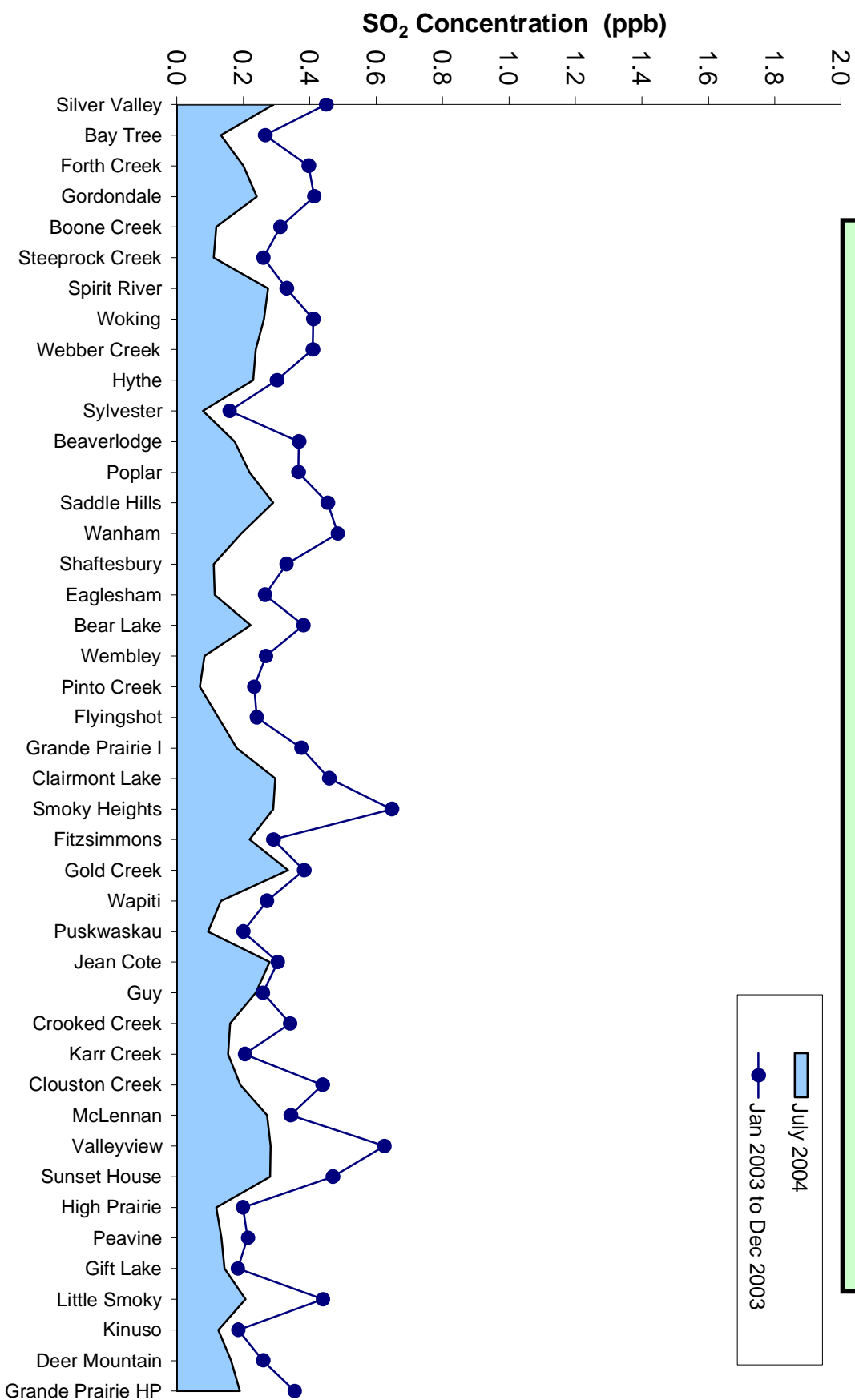


Figure 22. SO₂ Summary Chart

PASZA Passive O₃ Stations - July 2004
Average Concentrations in ppb

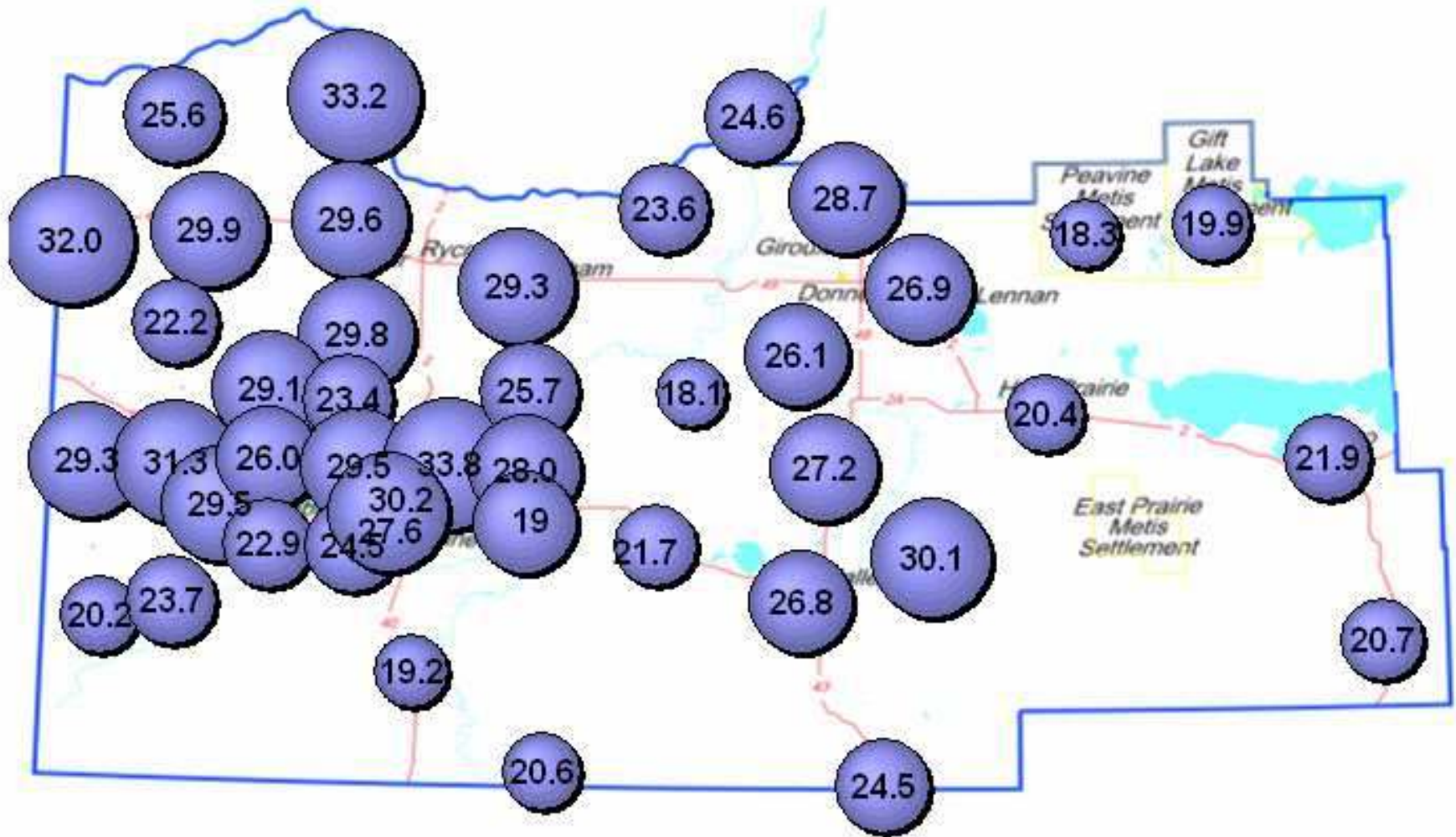


Figure 23. O₃ Bubble Chart

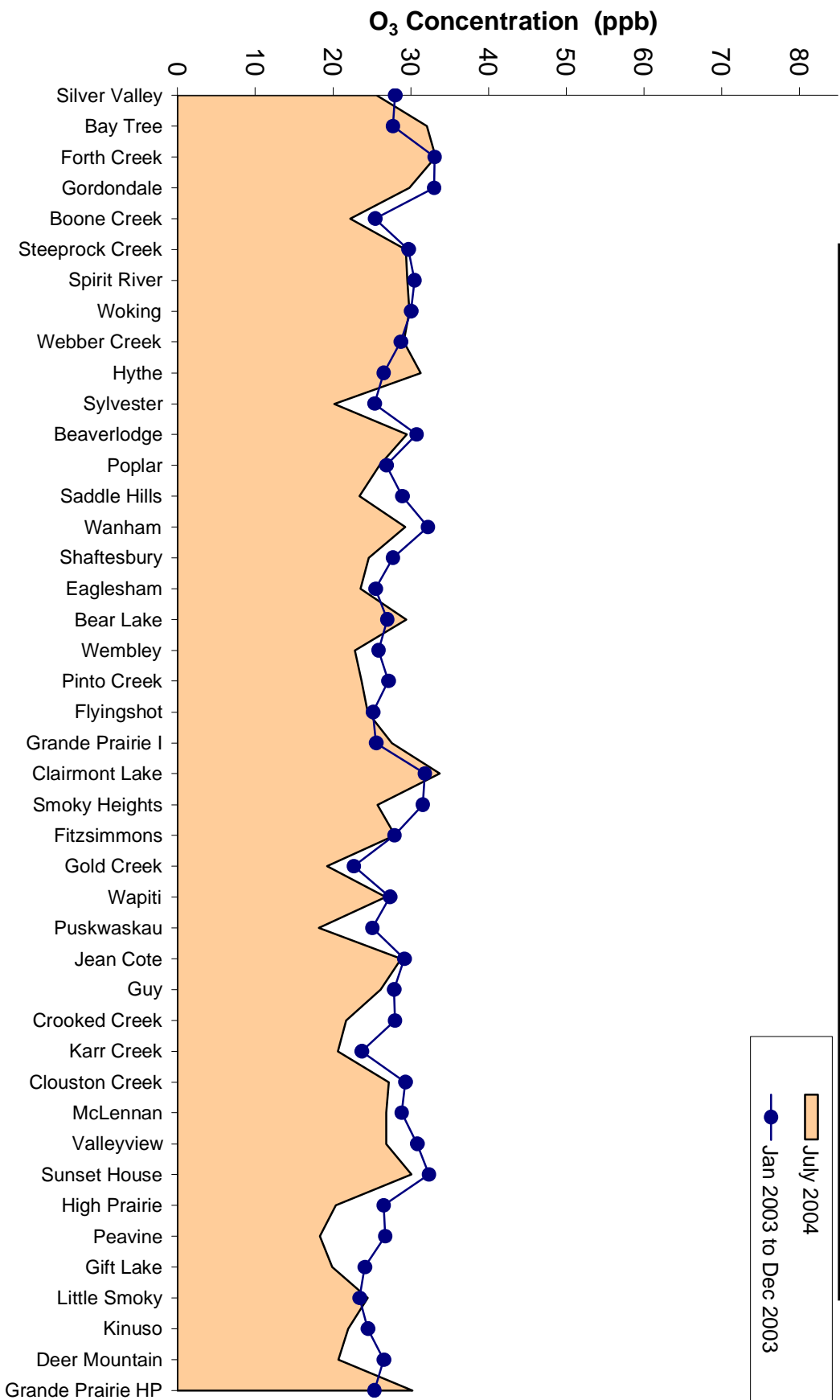


Figure 24. O₃ Summary Chart

Alberta Ambient Air Quality Guidelines - No Annual O₃ Guideline

July 2004
Jan 2003 to Dec 2003

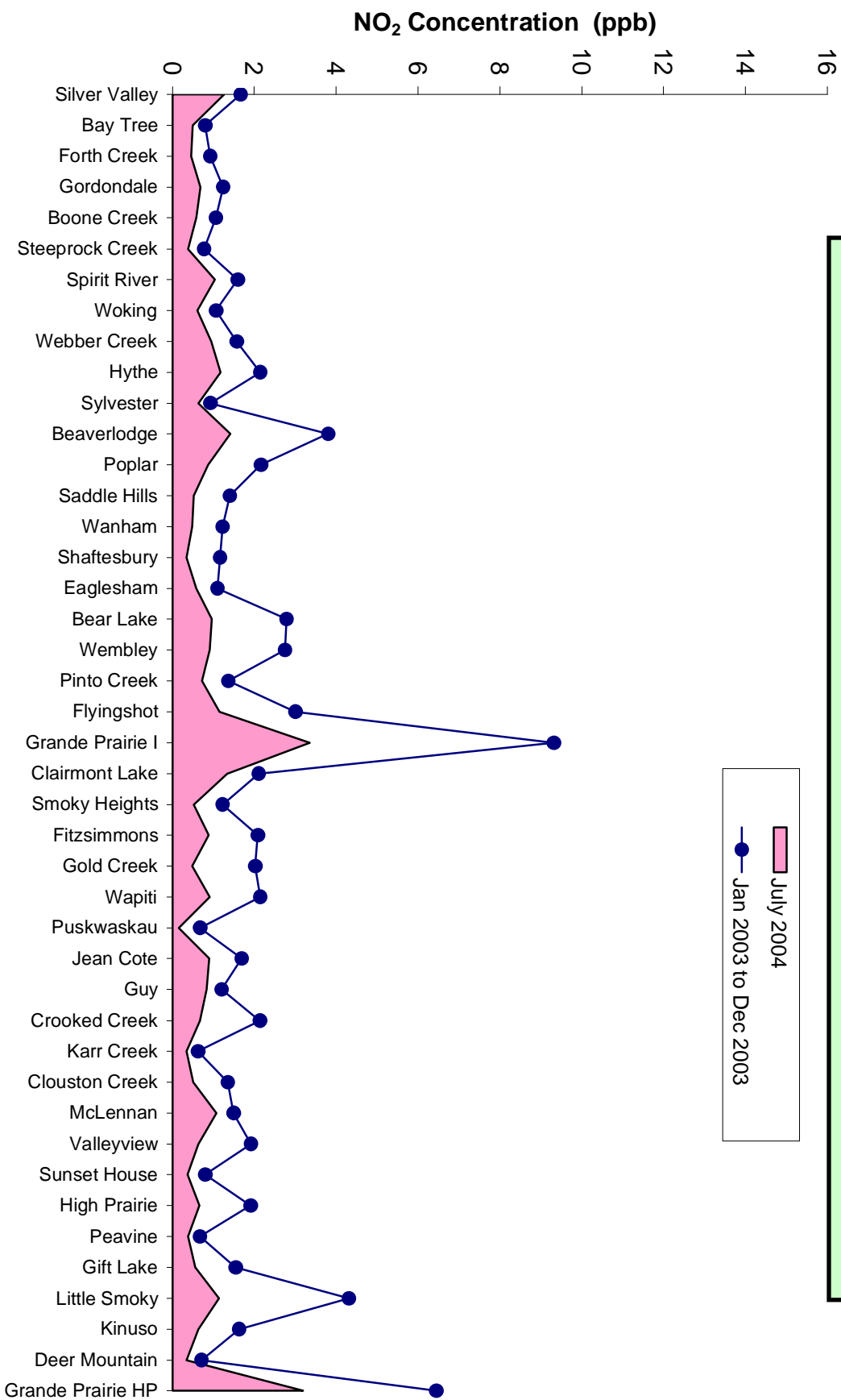


Figure 26. NO₂ Summary Chart

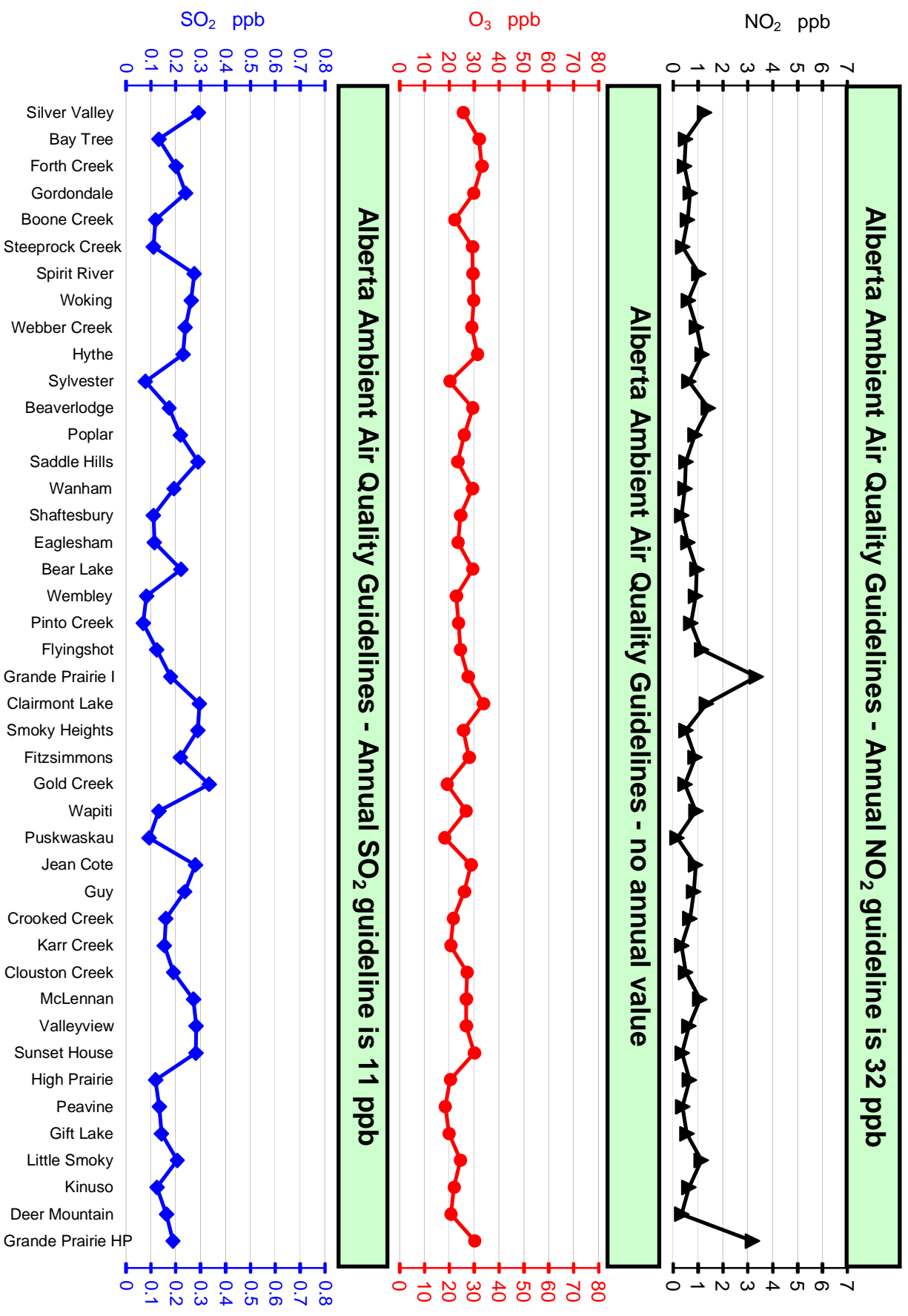


Figure 27. Overview Summary

July 2004 Calibration Reports

PASZA - Henry Pirker Station with the following calibrations:

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

Calibration ReportParameter SO2Air Monitoring Network PASZA**Station Information**

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

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

Calibration Data

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

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

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

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

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter SO2
 Air Monitoring Network PASZA

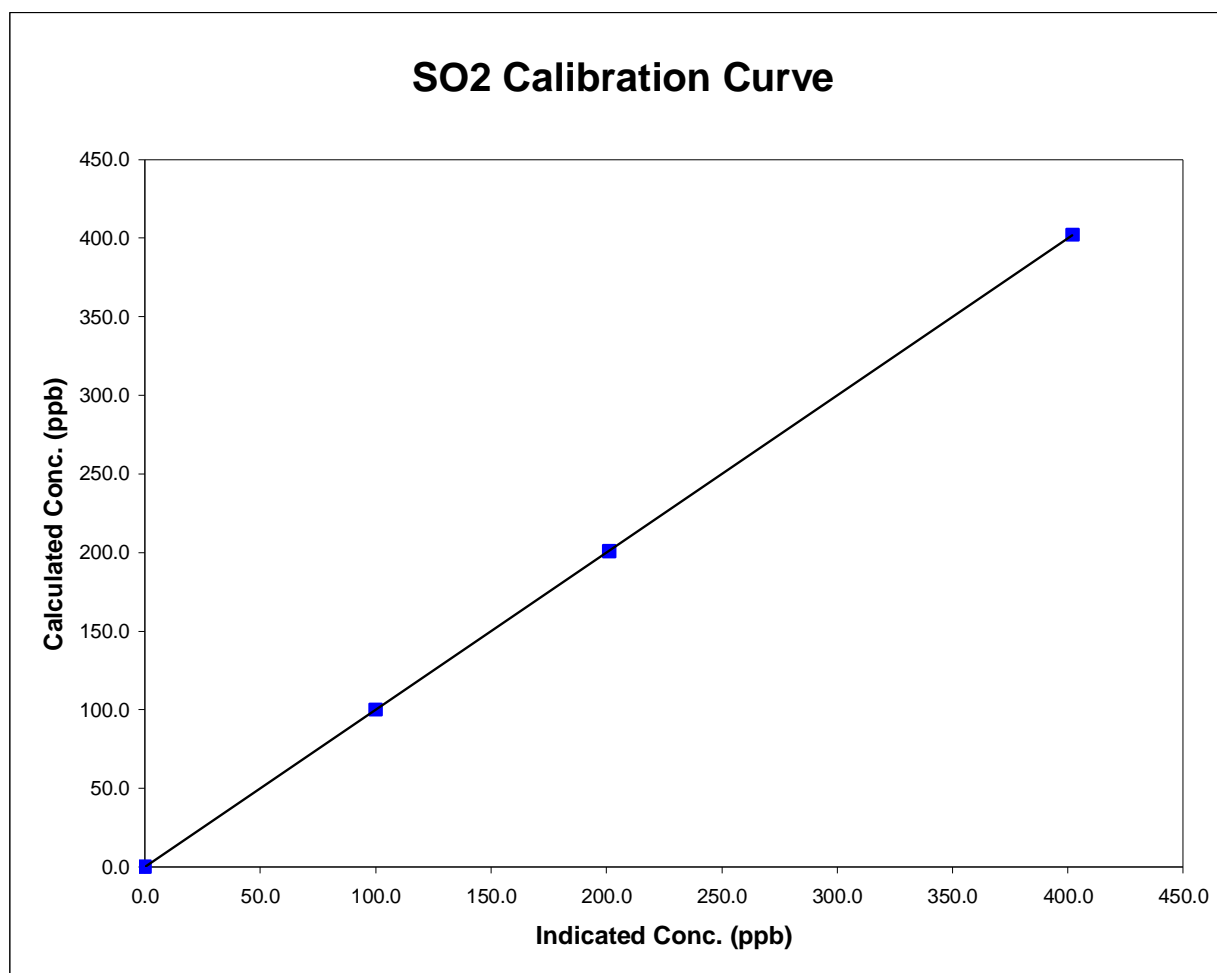


Station Information

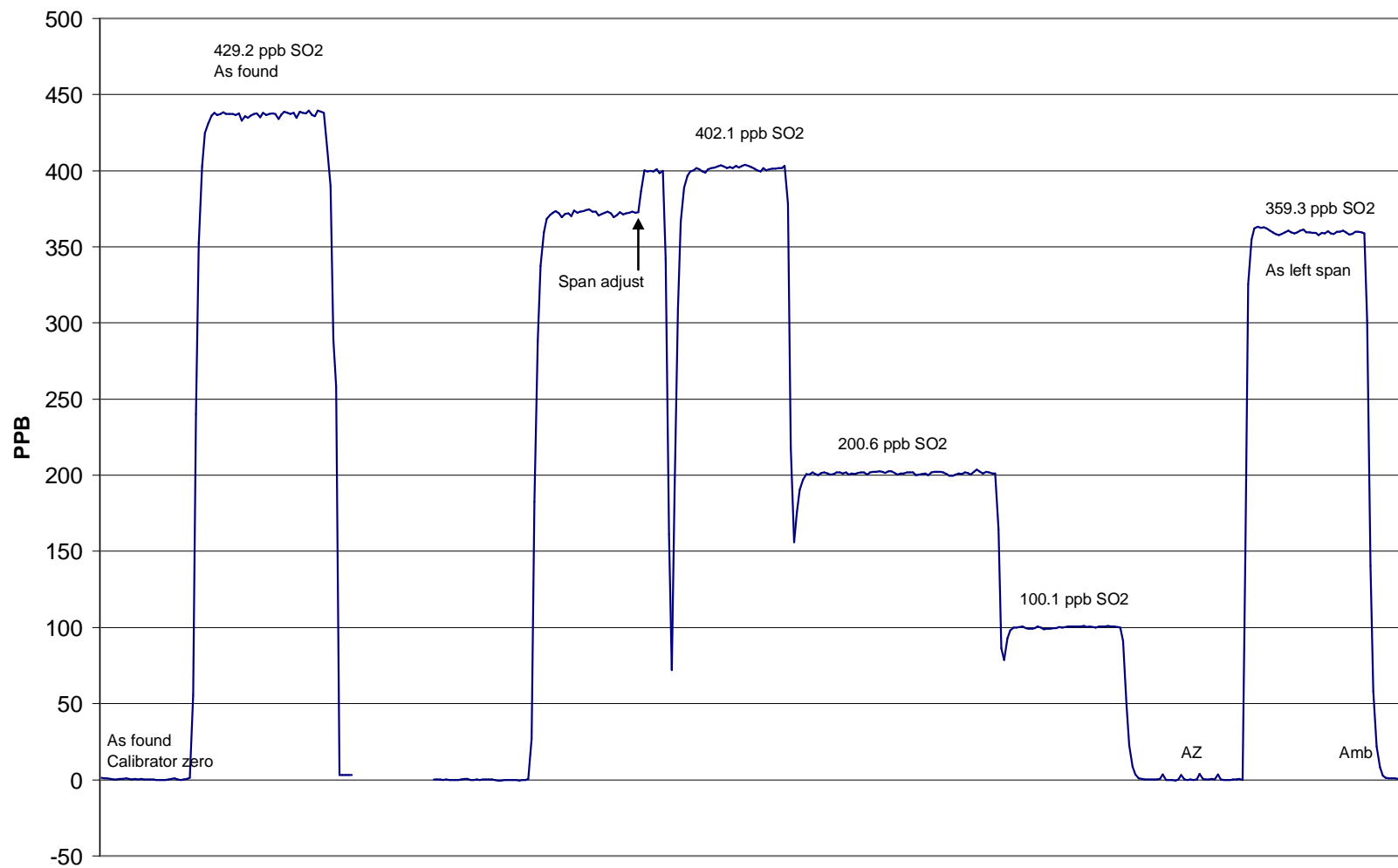
Calibration Date	July 8, 2004	Previous Calibration	June 10, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:40	End Time (MST)	19:05
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-21120-195

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
402.1	402.0	1.0004	Correlation Coefficient	0.999995
200.6	201.4	0.9964		
100.1	100.1	0.9999		
			Slope	1.000074
			Intercept	-0.152523



SO₂ Calibration



Calibration Report

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

**Station Information**

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

Reason: Routine Installation Removal Other: _____

Start Time (MST) 7:40 End Time (MST) 13:25
 Barometric Pressure 0.931 Atm Station Temperature 20.5 Deg C
 Calibrator EnviroNics 6100 Serial Number 3016
 NO Cal Gas Conc 50.3 ppm Cal Gas Expiry Date 19-Jan-06
 NOx Cal Gas Conc 50.5 ppm Cal Gas Serial # ALM025793

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45269

Parameter		NO2	NOx	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.008902	1.003073	1.002583
	Data Offset	1.147658	-0.356225	-0.479091
After	Data Slope	1.011004	1.006049	1.003997
	Data Offset	-0.250492	-0.623168	-0.547564
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

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

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	NA	ppb	6.1	mV
NOx background	NA	ppb	6.3	mV
NO coefficient	NA		1.111	
NOx coefficient	NA		1.003	
Chamber Temp	NA	Deg C	49.9	Deg C
Cooler Temp	NA	Deg C	-2.0	Deg C
Converter Temp	NA	Deg C	324.0	Deg C
Perm Temp	NA	Deg C	NA	Deg C
Vacuum	NA	inches Hg	20.8	inches Hg
Sample Flow	NA	ccm	NA	ccm

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

Calibration Report

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



Station Information

Calibration Date: July 8, 2004 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	0.3	0.0	0.5	N/A	N/A	
1	4993	39.98	401.2	399.6	1.6	399.2	398.3	1.0	1.0049	1.0032	
2	4993	19.98	201.3	200.5	0.8	200.8	200.5	0.2	1.0023	1.0001	
3	4993	9.98	100.7	100.3	0.4	101.1	101.0	0.0	0.9960	0.9933	
AFZ											
AFS											
									Average Correction Factor	1.0011	0.9989

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

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O3 Setpoint (ppb)	Calculated 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	401.3	398.9	2.4	398.4	397.8	0.5	N/A	N/A	N/A	N/A	
350	401.3	89.1	312.2	398.6	89.3	309.0	1.0067	0.9979	1.0101	99.0%	
200	401.3	220.5	180.8	399.2	220.2	179.2	1.0052	1.0015	1.0090	99.1%	
100	401.3	310.2	91.1	399.4	309.5	90.0	1.0047	1.0022	1.0122	98.8%	
							Average Correction Factor	1.0055	1.0005	1.0104	99.0%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	0.5	1.9	-0.5	ppb	-0.2	0.3	-0.5	ppb
Auto span	431.1	426.0	7.8	ppb	349.2	345.8	4.3	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter NO₂
 Air Monitoring Network PASZA

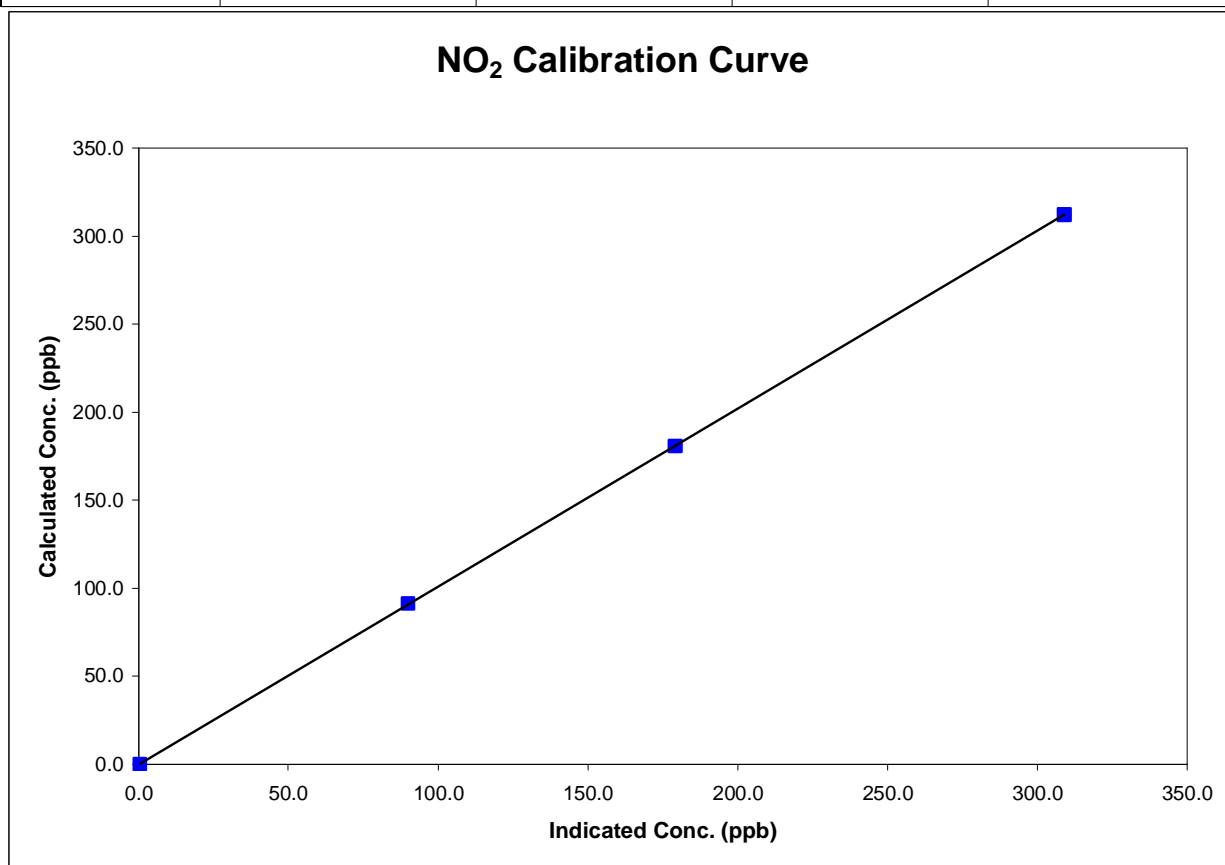


Station Information

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

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	0.0000	Correlation Coefficient	0.999996
312.2	309.0	1.0101		
180.8	179.2	1.0090		
91.1	90.0	1.0122		
			Slope	1.011004
			Intercept	-0.250492



Calibration Summary

Parameter NO_x
 Air Monitoring Network PASZA

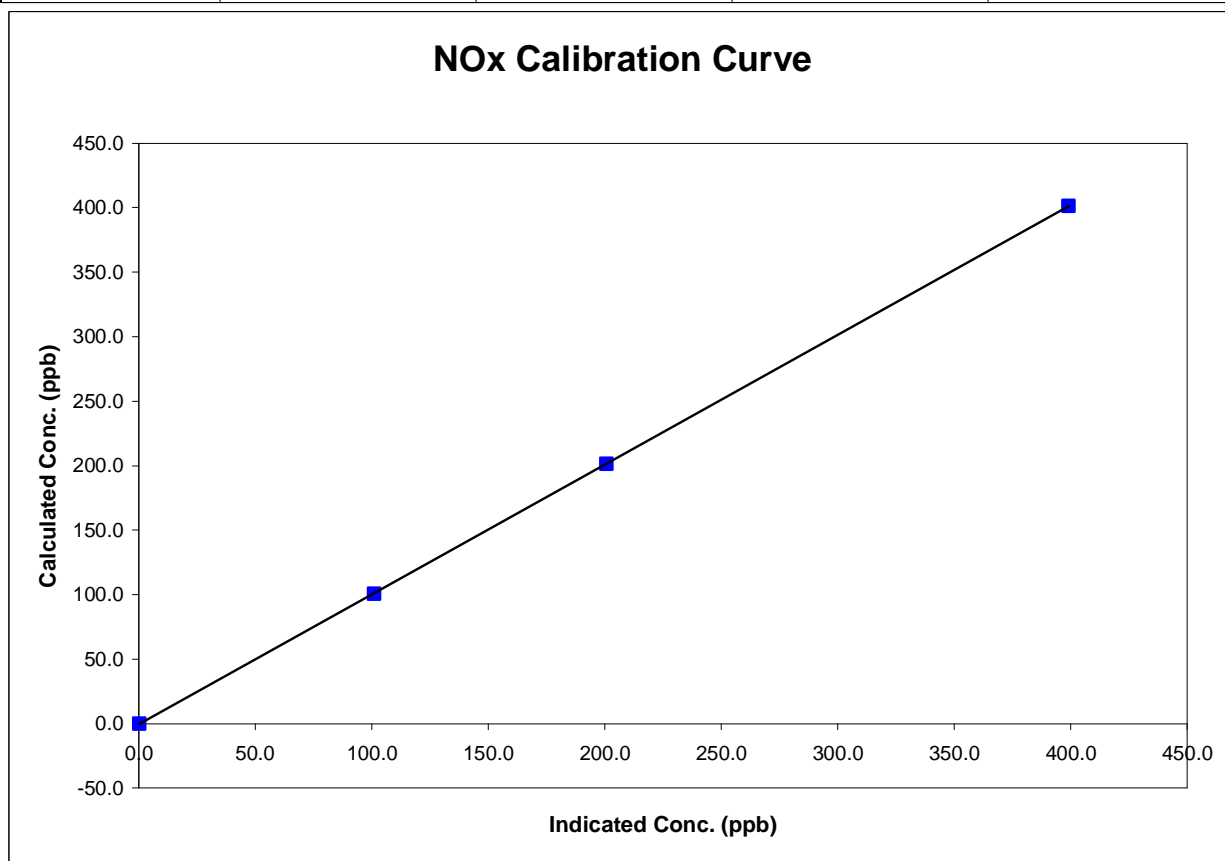


Station Information

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

Calibration Data

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



Calibration Summary

Parameter NO
 Air Monitoring Network PASZA

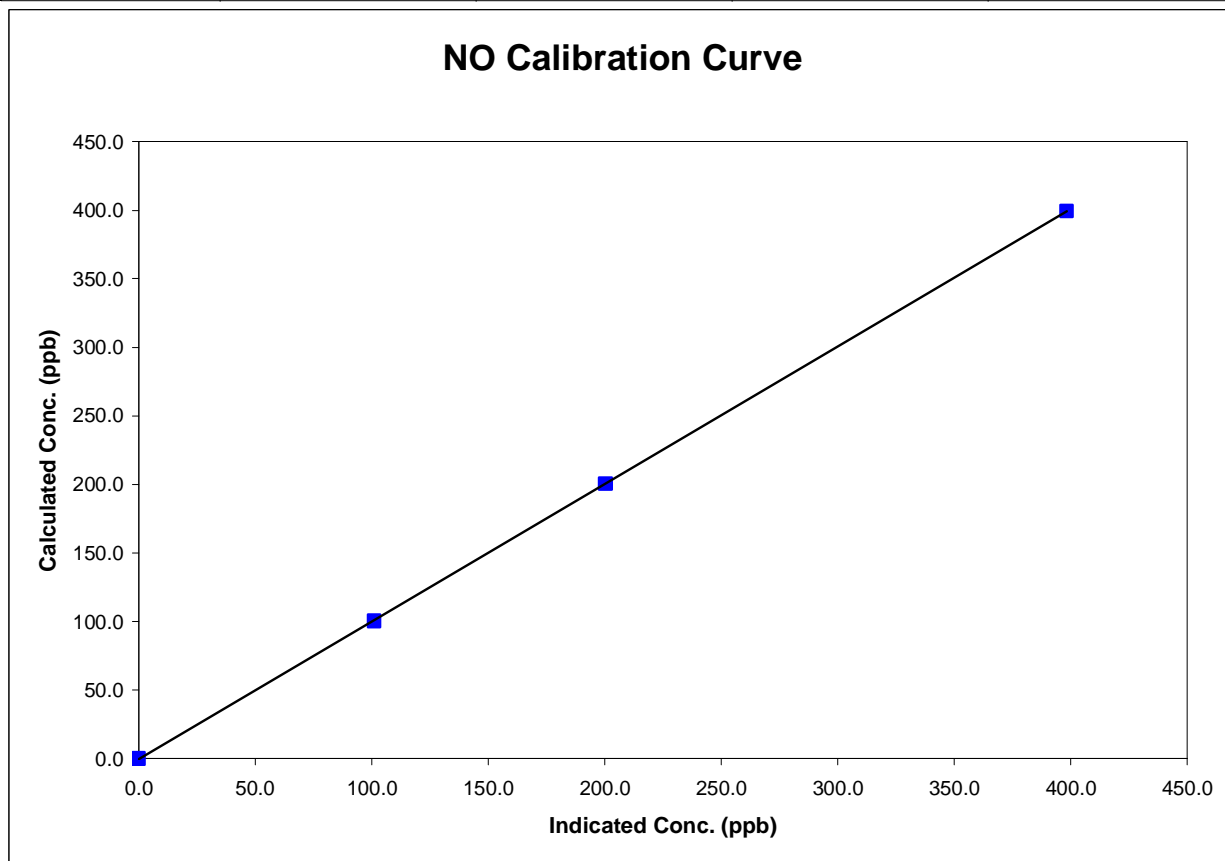


Station Information

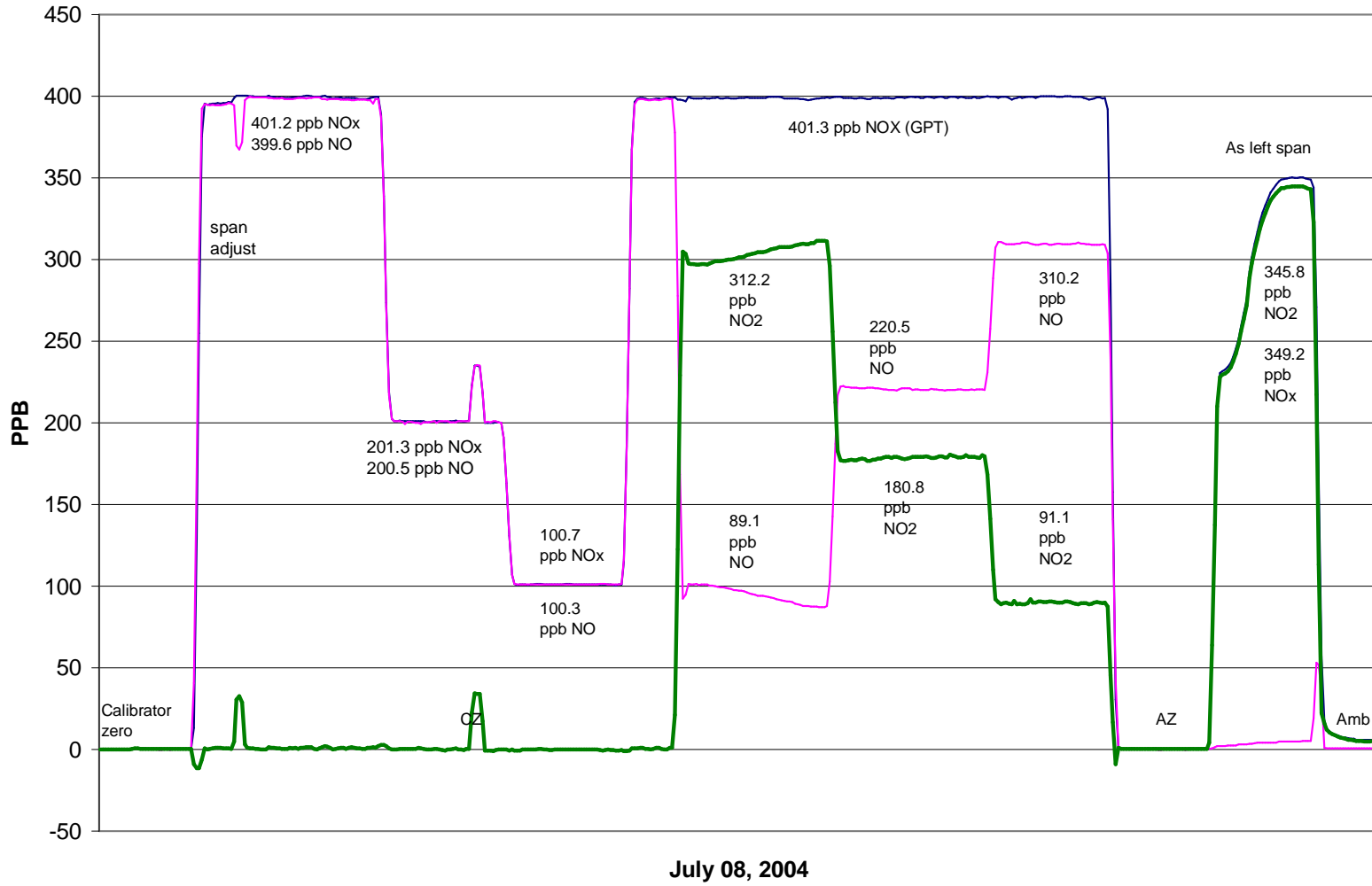
Calibration Date	July 8, 2004	Previous Calibration	June 29, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	7:40	End Time (MST)	13:25
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

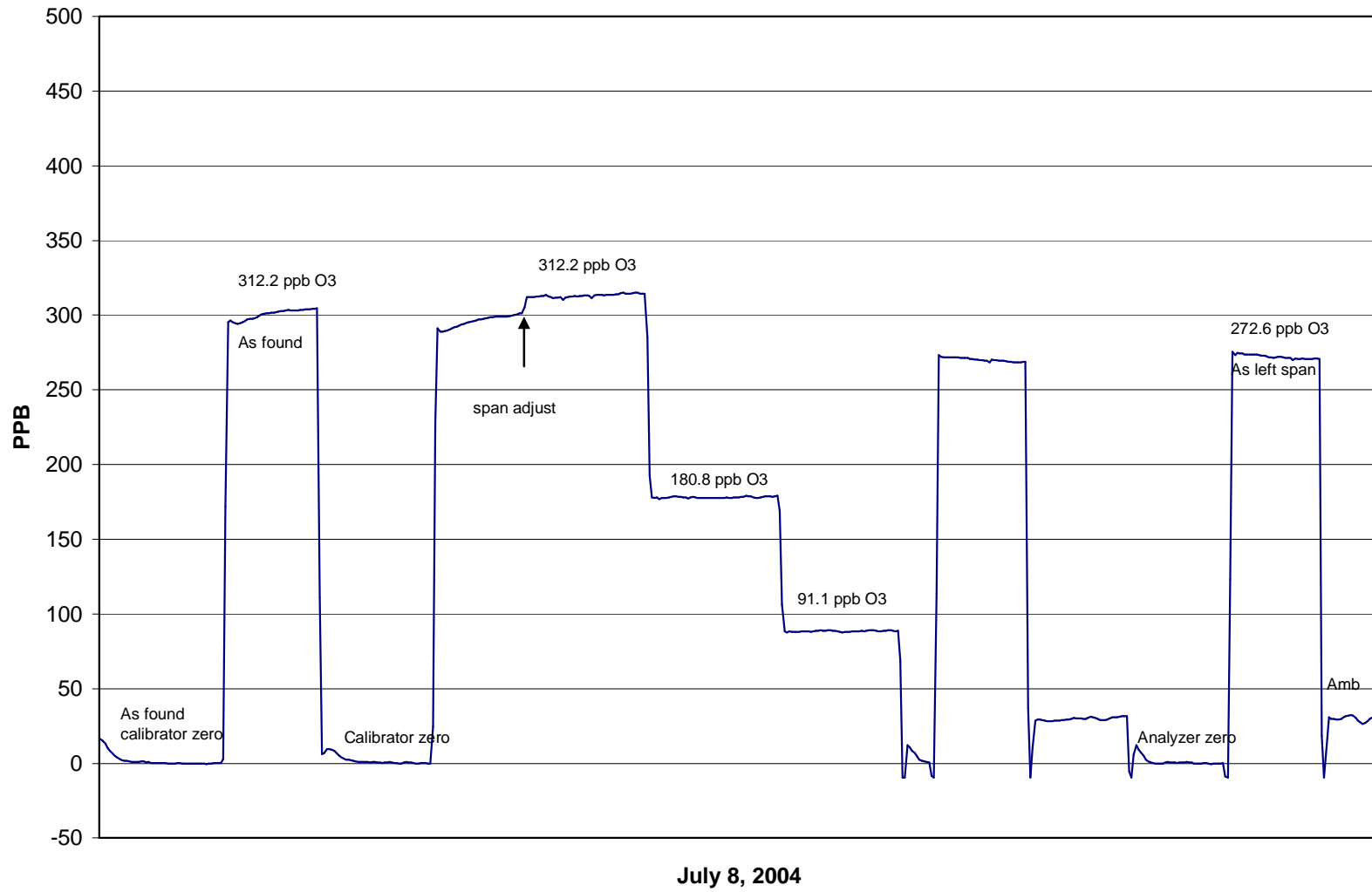
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
399.6	398.3	1.0032	Correlation Coefficient	0.999993
200.5	200.5	1.0001		
100.3	101.0	0.9933	Slope	1.003997
			Intercept	-0.547564



NOx Calibration



O3 Calibration

Calibration Report

Parameter COAir Monitoring Network PASZA

Station Information

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

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

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	0.21	N/A
4993	39.97	23.82	23.77	1.0022
4993	19.96	11.95	11.83	1.0096
4993	9.97	5.98	5.86	1.0204
4993				As Found Zero
				As Found Span
Average Correction Factor				1.0107

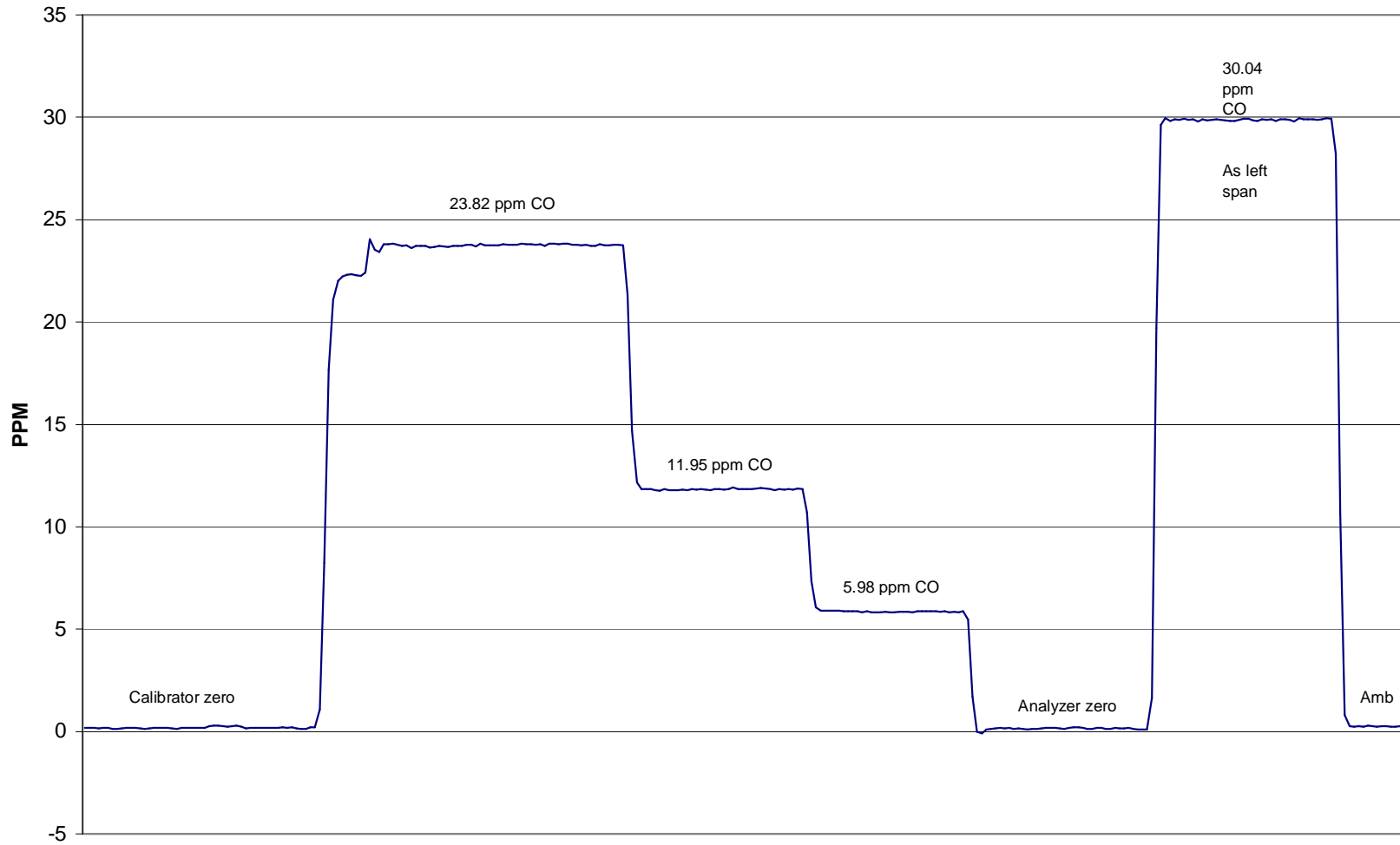
Calculated value of As Found Response: NA ppm Percent Change of As Found: NA

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

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

Calibration Performed By: Kelly Baragar

CO Calibration



July 06, 2004

Calibration Report

Parameter THCAir Monitoring Network PASZA

Station Information

Calibration Date	July 6, 2004	Previous Calibration	June 9, 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)	12:08	End Time (MST)	16:00
Barometric Pressure	27.50 inches Hg	Station Temperature	20.0 Deg C
Calibrator	Envionics 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
	<u>Before</u>		<u>After</u>
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.998335	Calculated slope	1.002050
Calculated intercept	0.017428	Calculated intercept	0.022832
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.09	psi	6.09	psi
THC span counts	6818	capture	6891	capture
THC zero counts	1271	capture	1293	capture

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	0.02	N/A
4993	64.97	19.55	19.54	1.0008
4993	34.98	10.59	10.46	1.0127
4993	9.97	3.03	3.01	1.0084
4993	0.00	0.00	0.09	As Found Zero
4993	64.97	19.55	19.77	As Found Span
Average Correction Factor				1.0073

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

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

Notes: Zero and span adjusted analyzer. All relative analyzer test values are within normal specs.Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter THC
 Air Monitoring Network PASZA

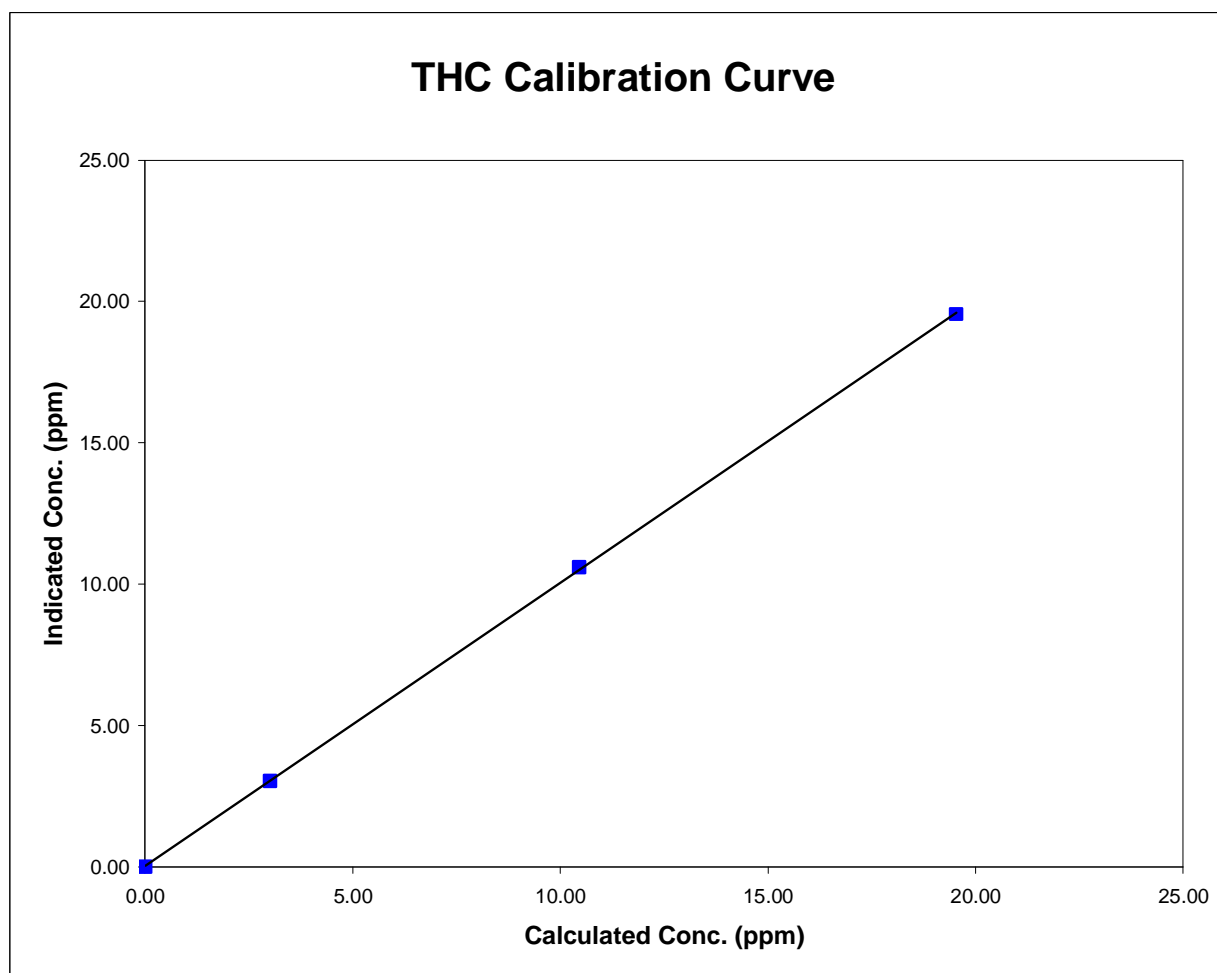


Station Information

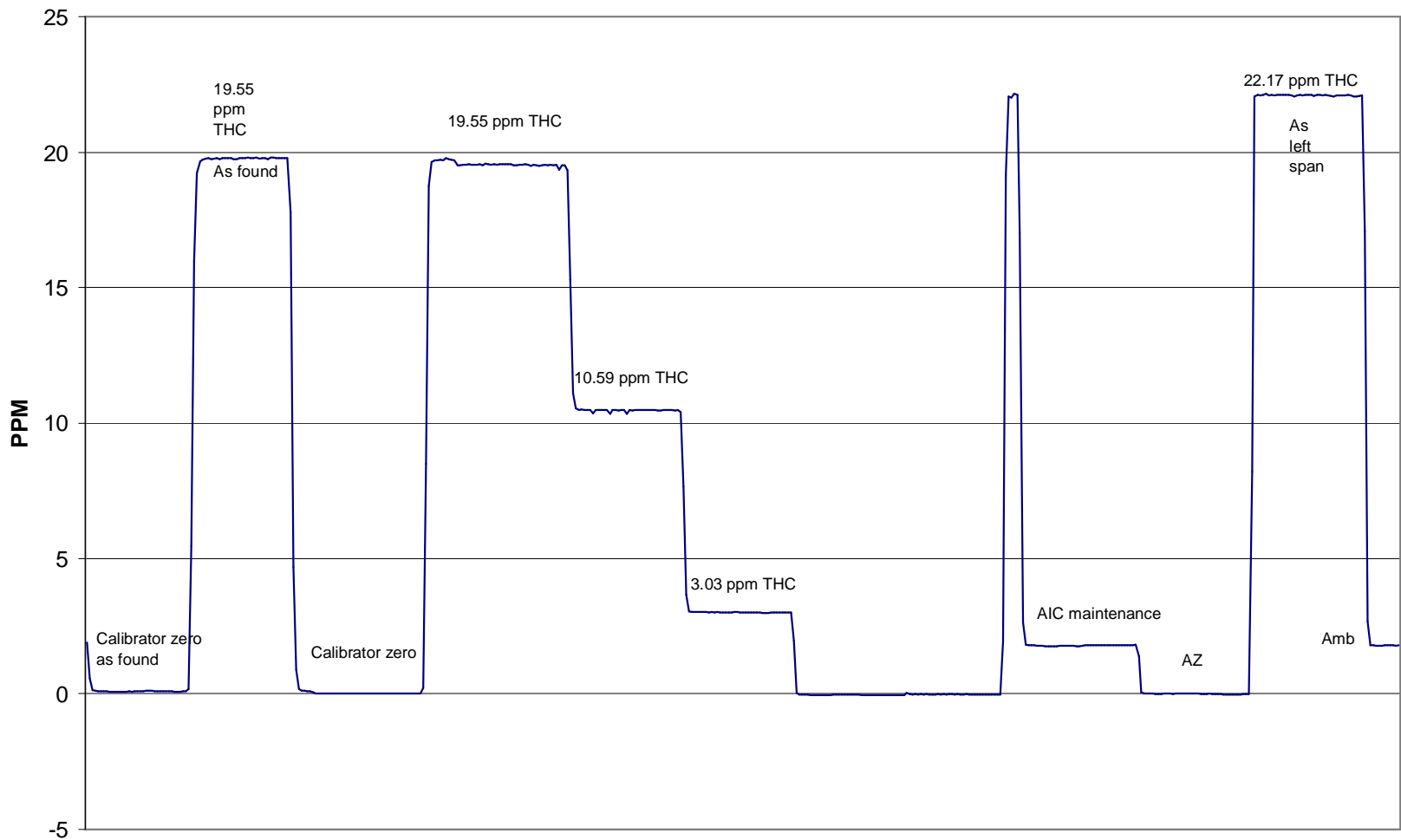
Calibration Date	July 6, 2004	Previous Calibration	June 9, 2004
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	12:08	End Time (MST)	16:00
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.015	N/A		
19.553	19.537	1.0008	Correlation Coefficient	0.999950
10.590	10.458	1.0127		
3.034	3.008	1.0084	Slope	1.002050
			Intercept	0.022832

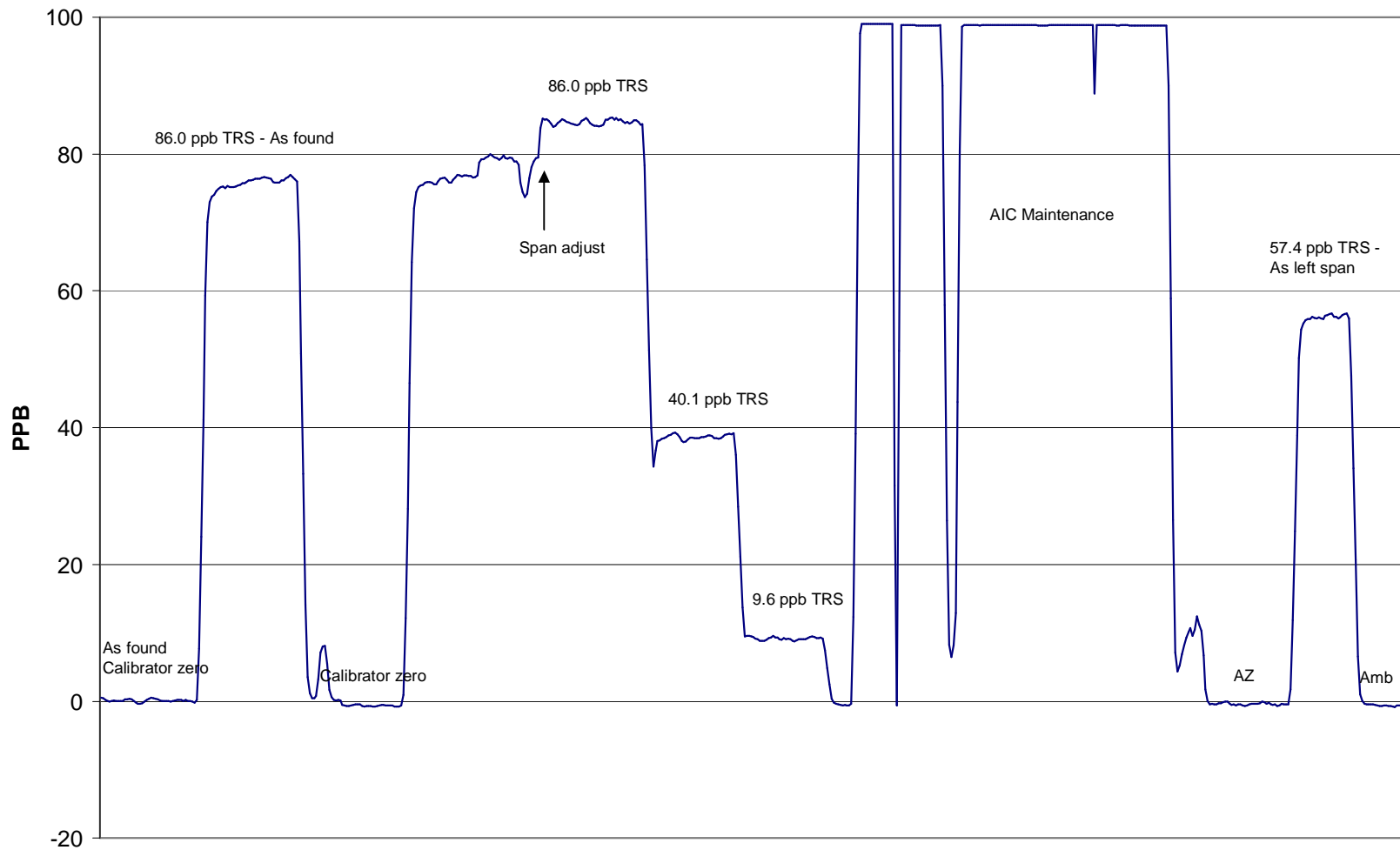


THC Calibration



July 06, 2004

TRS Calibration



July 8, 2004