Air Quality Monitoring Network for June 2006

Prepared by

FOCUS
AMBIENT AIR MONITORING

July 27, 2006

Environmental Service Response Centre
Alberta Environment
#111 Twin Atria Building
4999-98th Avenue
Edmonton, Alberta T6B 2X3

Re: Peace Airshed Zone Association (PASZA) – June Ambient Air Report

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **June 2006**.

Continuous Monitoring: **Four (4) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights and Beaverlodge**

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the "Monthly Summary" and "Continuous Monitoring" pages of the report. The measured ambient air quality was within the Provincial and Federal guidelines.

During the month of June the following events were noted:

Henry Pirker Station:

- On June 3rd a power bump resulted in one (1) hour of invalid data for the THC analyzer.
- A power outage on June 6th resulted in five (5) hours of invalid data for the NO_X, CO and O_3, analyzers and all the meteorological instruments (wind speed, wind direction, solar radiation; temperature and relative humidity); and six (6) hours of invalid data for the SO_2, TRS, THC, and $PM_{2.5}$ analyzer.
- On June 8th, maintenance activities resulted in one hour of downtime for the NO_X, O_3, and THC analyzers.
- On June 12th the air conditioner froze. This caused the station to get to temperatures greater than 50° C over the next twenty-four hours. The SO_2, NO_X, TRS CO, O_3, and $PM_{2.5}$ analyzers did not operate well in the increased temperature and a number of hours of data were deemed invalid.
- As the temperature increased in the station there was an also an observable effect on the spans of many of the analyzers. The SO_2, O_3 and CO spans either increased or decreased in intensity during this time; after June 14th all the spans stabilized. The TRS analyzer had the perm tube changed out at calibration and the span began to stabilize around June 21st. The THC analyzer spans did not appear to be directly affected by the station temperature, but the spans continue to drop and come back with no known cause at this time (a new span cylinder was installed on June 8th but pressure continues to be an ongoing issue - it was adjusted June 22nd).

Evergreen Park Station:

- The zero and spans could not be initiated in the SO_2 analyzer, a new relay and power supply was installed on June 2nd.
- There were a total of nineteen (19) hours flagged for excessive baseline drift in the SO2 analyzer, (the baseline would just drop) and the cause is indeterminate.
- The declination for the wind direction at Evergreen Park was out by 62°. A field investigation conducted on June 13 and 20, 2006 determined that the declination of the Evergreen Park's wind direction masthead was out by 62° and the unit was realigned to true north. The data has been adjusted accordingly. It was

determined this began in January 2006. Past monthly tables have been adjusted and are in the process of being resubmitted.

Smoky Heights Station:

- On June 1st at 03:00, there was one hour of data not captured (reason is indeterminate) for all the parameters (SO_2, TRS, $PM_{2.5}$, wind speed, wind direction and temperature).
- A power bump on June 3rd resulted in two (2) hours of invalid data of the SO2 analyzer.
- During calibration on June 15th, several attempts were made to bring the spans to scale, however in the process the flow sensor was damaged. The data from June 16th at 12:00 to June 19th at 10:00 was determined to be invalid as baseline had flatlined; seventy (70) hours were removed. The flow sensor was replaced on June 19th.
- All other analyzers / sensors in the network were above 90% uptime.

Passive Monitoring: **43 Stations throughout the PASZA zone:**

No problems were observed with any of the sampling sites for the month of June 2006.
A summary of the passive data collected are reported as follows.

- Monthly average concentrations for SO_2 passives ranged from 0.2 ppb to 0.7 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.3 ppb to 4.6 ppb.
- Monthly average concentrations for O_3 passives ranged from 27.0 ppb to 43.1 ppb.

If you have any questions, please contact the Focus office at 1-888-869-2252 (Gary Cross) or 1-888-466-6555 (Kevin McCullum).

On Behalf of the,
Peace Airshed Zone Association

Kevin Warren
PASZA Technical Program Manager

Kevin McCullum, Ph.D., P.Eng.
AQM Environmental Engineer

PASZA Monthly Continuous Data Summary

Jun-2006	Peace Airshed Zone Assocation						Maximum Recorded Values						
							1-hr				24-hr / 8-hr		
Pollutant	Objectives		Station	Monthly	Exceedence		Conc	Day	WSPD	WDIR	Conc	Day	Operational
(units)	1-hr	24-hr		Average	1-hr	24-hr			(km/hr)	(Sector)			Time (%)
SO_2 (**ppb**)	172	57	Henry Pirker	0.6	0	0	18.0	Jun-25 08:00	5.9	SW	2.6	Jun-22	96.1%
SO_2 (**ppb**)	172	57	Evergreen Park	2.4	0	0	67.4	Jun-04 15:00	18.6	W	6.9	Jun-04	96.5%
SO_2 (**ppb**)	172	57	Smoky Heights	0.4	0	0	8.2	Jun-17 23:00	19.0	W	1.7	Jun-17	99.6%
SO_2 (**ppb**)	172	57	Beaverlodge	0.3	0	0	3.6	Jun-10 06:00	2.1	SSE	0.8	Jun-13	100.0%
NO (**ppb**)			Henry Pirker	1.2	-	-	20.1	Jun-01 07:00	3.8	SSE	4.6	Jun-01	95.6%
NO_2 (**ppb**)	212	106	Henry Pirker	5.3	0	0	28.8	Jun-26 09:00	3.7	WSW	10.0	Jun-01	95.6%
NO_X (**ppb**)			Henry Pirker	6.6	-	-	43.4	Jun-26 09:00	3.7	WSW	14.7	Jun-01	95.6%
NO (**ppb**)			Beaverlodge	0.2	-	-	7.2	Jun-26 06:00	3.0	W	0.6	Jun-14	100.0%
NO_2 (**ppb**)	212	106	Beaverlodge	1.9	0	0	11.9	Jun-14 06:00	8.0	NW	3.9	Jun-14	100.0%
NO_X (**ppb**)			Beaverlodge	2.1	-	-	19.0	Jun-14 06:00	8.0	NW	4.5	Jun-14	100.0%
O_3 (**ppb**)	82		Henry Pirker	16.2	0	-	44.0	Jun-01 15:00	10.2	SE	33.9	Jun-04	93.2%
O_3 (**ppb**) - **8-hr**	65		Henry Pirker		0						43.0	Jun-01	
O_3 (**ppb**)	82		Beaverlodge	33.0	0	-	55.8	Jun-13 15:00	13.2	SE	39.6	Jun-11	100.0%
O_3 (**ppb**) - **8-hr**	65		Beaverlodge		0						49.4	Jun-13	
CO (**ppm**)	13		Henry Pirker	0.18	0	-	0.4	Jun-26 09:00	3.7	WSW	0.2	Jun-14	95.3%
CO (**ppm**) - **8-hr**	5		Henry Pirker		0						0.3	Jun-26	
THC (**ppm**)			Henry Pirker	1.93	-	-	2.7	Jun-01 03:00	3.2	NW	2.2	Jun-01	98.9%
TRS (**ppb**)			Henry Pirker	0.2	-	-	0.8	Jun-30 23:00	5.1	SSE	0.3	Jun-27	96.1%
TRS (**ppb**)			Evergreen Park	0.6	-	-	1.6	Jun-09 20:00	4.8	SSE	1.0	Jun-18	99.7%
TRS (**ppb**)			Smoky Heights	0.4	-	-	2.2	Jun-02 03:00	4.4	W	0.7	Jun-01	90.1%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Henry Pirker	3.8	0	0	36.0	Jun-26 22:00	3.5	WNW	10.1	Jun-26	95.4%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Evergreen Park	4.8	0	0	46.2	Jun-27 07:00	9.9	W	10.9	Jun-26	99.4%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Smoky Heights	3.6	0	0	24.0	Jun-30 21:00	4.4	NW	7.2	Jun-24	99.4%
$PM_{2.5}$ ($\mu g/m^3$)		30 [a]	Beaverlodge	4.1	0	0	71.5	Jun-13 09:00	3.9	E	18.5	Jun-13	99.0%
RH (**%**)			Henry Pirker	55.5	-	-	-	-	-	-	-	-	99.3%
RH (**%**)			Beaverlodge	50.3	-	-	-	-	-	-	-	-	100.0%
SR (W/m^2)			Henry Pirker	250.9	-	-	-	-	-	-	-	-	99.3%
Temp (^oC)			Henry Pirker	16.8	-	-	-	-	-	-	-	-	99.3%
Temp (^oC)			Evergreen Park	15.9	-	-	-	-	-	-	-	-	99.7%
Temp (^oC)			Smoky Heights	15.8	-	-	-	-	-	-	-	-	99.9%
Temp (^oC)			Beaverlodge	16.4	-	-	-	-	-	-	-	-	100.0%
WSPD v (**km/hr**)			Henry Pirker	4.5	-	-	39.8	Jun-03 12:00	39.8	WSW	21.7	Jun-03	99.3%
WSPD v (**km/hr**)			Evergreen Park	2.8	-	-	31.1	Jun-03 12:00	31.1	W	16.9	Jun-04	99.7%
WSPD v (**km/hr**)			Smoky Heights	7.1	-	-	51.2	Jun-03 14:00	51.2	WSW	30.3	Jun-03	99.9%
WSPD v (**km/hr**)			Beaverlodge	4.3	-	-	38.2	Jun-03 16:00	38.2	W	24.1	Jun-03	100.0%
WSPD s (**km/hr**)			Henry Pirker	10.9	-	-	40.0	Jun-03 12:00	40.0	WSW	22.1	Jun-03	99.3%
WSPD s (**km/hr**)			Evergreen Park	8.8	-	-	31.4	Jun-03 12:00	31.4	W	18.7	Jun-17	99.7%
WSPD s (**km/hr**)			Smoky Heights	13.5	-	-	51.4	Jun-03 14:00	51.4	WSW	30.7	Jun-03	99.9%
WSPD s (**km/hr**)			Beaverlodge	10.6	-	-	38.4	Jun-03 16:00	38.4	W	24.2	Jun-03	100.0%
WDIR (**Deg**)			Henry Pirker	WSW	-	-	-	-	-	-	-	-	99.3%
WDIR (**Deg**)			Evergreen Park	W	-	-	-	-	-	-	-	-	99.7%
WDIR (**Deg**)			Smoky Heights	WSW	-	-	-	-	-	-	-	-	99.9%
WDIR (**Deg**)			Beaverlodge	W	-	-	-	-	-	-	-	-	100.0%

Note: [a] the draft 24-hr Alberta Ambient Air Quality Objective

* Wind Direction is the predominate direction for the Month

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Calibrations were performed on June 5th (NO_X), June 6th (O3 and THC) and June 8th (SO_2, TRS, CO and TEOM). A power outage on June 6th resulted in five to six hours of downtime for all analyzers and sensors. Air conditioner coils began to freeze up on June 12th; this led to increased temperature in the station (50° C). The increased temperatures in the station caused spans to increase and or decrease in many of the analyzers; as well as create operational issues; this resulted in a number of hours being flagged invalid in the SO_2, NO_X, O_3, TRS, CO and TEOM analyzers.

Parameter	Make	Model	Notes
SO_2	TECO	43	Five (5) hours were removed due to power outage on June 6th. Twenty-two (22) hours were removed due to invalid data associated with high station temperature on June 12th and 13th.
NOx/NO/NO_2	TECO	42C	Five (5) hours were removed due to power outage on June 6th. Maintenance activity (cleaning the manifold resulted) in one (1) hour of downtime on June 8th. Twenty-six (26) hours were removed due to invalid data associated with high station temperature on June 12th and 13th.
O_3	API	400	Five (5) hours were removed due to power outage on June 6th. Maintenance activity (cleaning the manifold resulted) in one (1) hour of downtime on June 8th. Forty-three (43) hours were removed due to invalid data associated with high station temperature on June 12th, 13th and 14th.
CO	TECO	48C	Five (5) hours were removed due to power outage on June 6th. Twenty-nine (29) hours were removed due to invalid data associated with high station temperature on June 12th and 13th.
THC	TEI	51-CLT	Six (6) hours were removed due to power outage on June 6th. Continued span pressure issues (span drops and then comes back – cause unknown). Pressure adjusted on June 22nd.
TRS	TEI	42C	Perm tube replaced June 8th, this led to a steady increase in spans unti June 21st – then stabilized. Five (5) hours were removed due to power outage on June 6th. Twenty-two (22) hours were removed due to invalid data associated with high station temperature on June 12th and 13th.
$PM_{2.5}$	R&P	1400AB	Five (5) hours were removed due to power outage on June 6th. Twenty-six (26) hours were removed due to invalid data associated with high station temperature on June 12th and 13th. One (1) hour was removed due to baseline drift.
RH	Met One	083D	Five (5) hours were removed due to power outage on June 6th.
AT	Met One	083D	Five (5) hours were removed due to power outage on June 6th.
SR	Met One	096-1	Five (5) hours were removed due to power outage on June 6th.
WS	Met One	010C	Five (5) hours were removed due to power outage on June 6th.
WD	Met One	020C	Five (5) hours were removed due to power outage on June 6th.

PASZA – Evergreen Park Station

General Station Issues

Calibrations were performed on June 1st (SO_2, TRS and TEOM). On June 1st at 03:00 one (1) hour of data was flagged invalid as it was not captured by the DACS. A power failure on June 19th resulted in one (1) hour of downtime for all analyzers and sensors.

Parameter	Make	Model	Notes
SO_2	API	100	One (1) hour invalid on June 1st. There were four (4) hours of data flagged for maintenance on June 2nd as a new relay and power supply were installed in the analyzer. There were a total of nineteen (19) hours removed due to excessive drift for the month. One (1) hour was flagged due to power outage on June 19th.
TRS	TEI	42C	One (1) hour invalid on June 1st. One (1) hour was flagged due to power outage on June 19th.
$PM_{2.5}$	R&P	1400AB	One (1) hour invalid on June 1st. One (1) hour was flagged due to power outage on June 19th Two (2) hours were removed due to baseline drift.
AT	Met One	083D	One (1) hour invalid on June 1st. One (1) hour was flagged due to power outage on June 19th.
WS	Met One	010C	One (1) hour invalid on June 1st. One (1) hour was flagged due to power outage on June 19th.
WD	Met One	020C	On June 13th it was discovered that the declination in the wind direction is out by 62°. The wind head was realigned on June 20th. The data has been adjusted accordingly. One (1) hour invalid on June 1st. One (1) hour was flagged due to power outage on June 19th.

PASZA – Smoky Heights Station

General Station Issues

Calibrations were performed on June 15th (SO_2, TRS and TEOM) and June 19th (TRS). On June 1st at 03:00 one (1) hour of data was flagged invalid as it was not captured by the DACS. A power bump on June 3rd resulted in two (2) hours of downtime for the SO_2 analyzers only.

Parameter	Make	Model	Notes
SO_2	API	100A	One (1) hour invalid on June 1st. Two (2) hour was flagged due to power bump on June 3rd.
TRS	TEI	42C	One (1) hour invalid on June 1st. During calibration on June 15th, several attempts were made to bring the spans to scale, however in the process the flow sensor was damaged. The data from June 16th at 12:00 to June 19th at 10:00 was determined to be invalid as baseline had flatlined; seventy (70) hours were removed. The flow sensor was replaced on June 19th.
$PM_{2.5}$	R&P	1400AB	One (1) hour invalid on June 1st. Three (3) hours were removed due to baseline drift.
AT	Met One	083D	One (1) hour invalid on June 1st. .
WS	Met One	010C	One (1) hour invalid on June 1st.
WD	Met One	020C	One (1) hour invalid on June 1st.

PASZA – Beaverlodge Station

General Station Issues

No general station issues noted during the month of June. Calibrations were performed on June 12th (NO_X and O_3), and June 13th (TEOM and SO_2.

Parameter	Make	Model	Notes
SO_2	TECO	43CTL	No operational problems observed.
NOx/NO/NO_2	TECO	42C	No operational problems observed.
O_3	API	400	No operational problems observed.
$PM_{2.5}$	R&P	1400AB	Seven (7) hours were removed due to baseline drift.
AT	n/a	n/a	No operational problems observed.
RH	n/a	n/a	No operational problems observed.
WS	Blue Sky	857	No operational problems observed.
WD	Blue Sky	857	No operational problems observed.

PASZA - Henry Pirker Station

Monthly Summary Tables, Graphs, and Roses

PASZA - Henry Pirker - AQI Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

Air Quality Index (AQI)

Monitoring Dates: June 1, 2006 to July 1, 2006

Alberta's Air Quality Index

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

Summary

Number of 1-hr Good Readings:	652
Number of 1-hr Fair Readings:	1
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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00
1-Jun-06	8	8	9	8	11	10	9	12	10	9	13	19	20	21	21	22	21	22	22	21	N	13	14	12
2-Jun-06	12	9	9	7	7	7	6	9	16	18	19	19	19	15	17	18	19	19	16	N	15	12	12	15
3-Jun-06	13	11	11	14	13	15	19	17	14	16	17	19	19	20	19	19	18	18	N	18	17	17	15	14
4-Jun-06	16	16	15	15	14	15	15	15	16	17	18	18	18	19	19	19	20	N	20	20	18	16	16	16
5-Jun-06	14	13	13	13	13	10	13	13	14	17	18	18	16	16	17	17	17	17	19	18	15	11	13	11
6-Jun-06	11	8	N	N	N	N	N	N	4	2	2	2	3	4	5	6	6	6	6	5	4	3	3	2
7-Jun-06	2	2	3	2	3	N	4	3	3	4	5	6	7	8	10	11	11	11	11	10	9	8	9	11
8-Jun-06	10	10	9	10	N	7	6	6	8	6	N	N	N	N	4	4	4	4	4	4	5	5	4	4
9-Jun-06	5	5	5	5	4	N	4	4	6	6	6	7	7	7	7	8	8	8	8	8	8	8	10	10
10-Jun-06	8	5	6	6	N	5	7	6	7	7	7	4	4	4	4	4	4	4	4	5	4	10	5	2
11-Jun-06	2	2	2	N	2	3	4	3	4	4	4	5	5	4	4	4	4	4	4	4	4	5	5	4
12-Jun-06	3	3	N	3	3	3	4	4	3	3	2	2	2	2	2	N	N	N	N	N	N	N	N	N
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	8	9	9	6	7
14-Jun-06	N	6	6	5	5	6	5	7	7	7	7	7	7	8	11	12	13	13	13	12	10	8	7	N
15-Jun-06	7	7	6	5	5	6	6	5	4	5	6	7	8	8	9	9	8	8	8	9	7	6	N	5
16-Jun-06	3	5	4	4	4	5	4	4	6	4	2	5	6	6	7	8	7	7	7	7	N	N	9	11
17-Jun-06	12	11	10	9	7	7	7	7	7	8	8	8	8	8	8	8	7	8	8	8	N	6	6	6
18-Jun-06	6	6	6	6	5	5	5	5	6	6	7	8	8	8	9	9	9	9	9	N	9	8	6	6
19-Jun-06	5	5	5	4	3	2	3	2	6	7	8	9	9	9	7	5	4	3	N	6	7	6	5	5
20-Jun-06	4	4	3	5	5	5	4	4	6	5	6	7	8	7	8	8	9	9	8	8	6	5	4	3
21-Jun-06	3	4	5	5	5	N	4	4	6	8	9	11	12	13	13	13	12	13	12	12	10	7	9	9
22-Jun-06	8	8	7	8	N	6	4	4	6	8	10	10	10	10	11	10	10	10	10	10	10	9	11	11
23-Jun-06	9	7	6	6	7	N	6	6	7	9	11	11	12	12	12	13	13	13	13	12	9	8	9	7
24-Jun-06	9	10	7	6	N	7	6	8	8	7	8	11	12	12	12	12	11	10	10	9	8	6	5	5
25-Jun-06	4	4	6	N	4	4	7	6	7	6	8	10	10	10	12	12	12	13	13	12	11	10	8	8
26-Jun-06	7	6	N	5	5	3	3	7	14	16	16	14	17	17	15	13	14	14	15	14	11	15	28	25
27-Jun-06	15	N	11	8	9	6	12	16	9	7	9	9	9	9	9	10	10	10	10	8	8	9	9	11
28-Jun-06	N	9	9	8	5	3	4	4	6	4	8	10	10	10	11	12	13	12	12	12	12	13	11	N
29-Jun-06	11	11	10	8	8	5	3	5	8	9	10	10	10	9	10	9	10	10	10	10	9	6	N	7
30-Jun-06	7	8	8	8	8	7	7	6	7	9	10	10	10	10	10	11	11	11	10	9	8	N	13	13

PASZA - Henry Pirker - Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

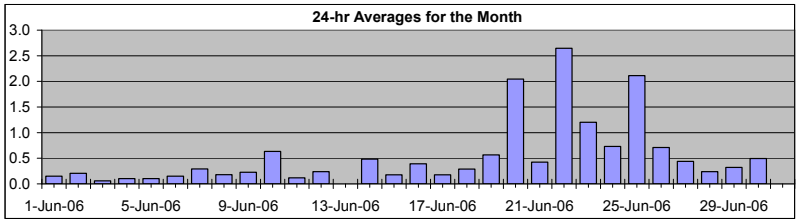
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	18.0	ppb	25-Jun	8:00 9:00
Maximum 24-hr Average:	2.6	ppb	22-Jun	



AIC Time:	29 hrs	Operational Time:	660 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	96.1%

Percentile	99	95	75	50	25	5	1	Average	Median
	8.0	1.7	0.4	0.2	0.1	0.0	0.0	0.6 ppb	0.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	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	0.4
2-Jun-06	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	0.5
3-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.1
4-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3
5-Jun-06	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
6-Jun-06	0	0	P	P	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Jun-06	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
8-Jun-06	0	0	0	0	A	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.2	0.4
9-Jun-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
10-Jun-06	1	1	0	0	A	0	1	1	1	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0.6	1.7
11-Jun-06	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
12-Jun-06	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	N	N	N	N	N	0.2	0.5
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0	N	0.4
14-Jun-06	A	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	0	1	0	1	0	0	0	A	0.5	0.8
15-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0.2	0.5
16-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	1	0	0	0	0	0	A	0	0	0.4	2.9
17-Jun-06	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	0.4
18-Jun-06	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.5
19-Jun-06	0	1	1	1	0	0	0	1	1	1	2	1	1	1	0	0	0	0	A	0	0	0	0	0	0.6	1.6
20-Jun-06	2	5	2	3	3	6	10	6	5	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	2.0	10.4
21-Jun-06	0	0	0	0	0	A	1	1	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.4	1.6
22-Jun-06	2	9	3	3	A	16	4	2	14	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2.6	15.6
23-Jun-06	0	0	0	0	7	A	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	10.4
24-Jun-06	0	1	1	1	A	1	3	3	2	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.7	2.9
25-Jun-06	0	0	0	A	0	0	1	11	18	6	2	3	2	0	0	0	0	0	0	0	0	1	1	0	2.1	18.0
26-Jun-06	0	0	A	0	0	0	1	2	3	2	2	1	1	0	0	0	0	0	1	1	0	0	0	0	0.7	2.8
27-Jun-06	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0.4	1.1
28-Jun-06	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.2	0.7
29-Jun-06	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	2.6
30-Jun-06	0	0	0	2	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	1	1	A	1	1	0.5	1.5
Hourly Avg	0.3	0.7	0.5	0.5	0.6	1.1	1.3	1.3	1.8	0.9	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2		
Hourly Max	1.9	8.9	3.4	3.0	7.4	15.6	10.4	11.3	18.0	6.4	1.8	3.5	1.5	1.2	2.9	1.1	0.5	0.6	0.9	0.6	0.8	0.6	1.1	0.7		

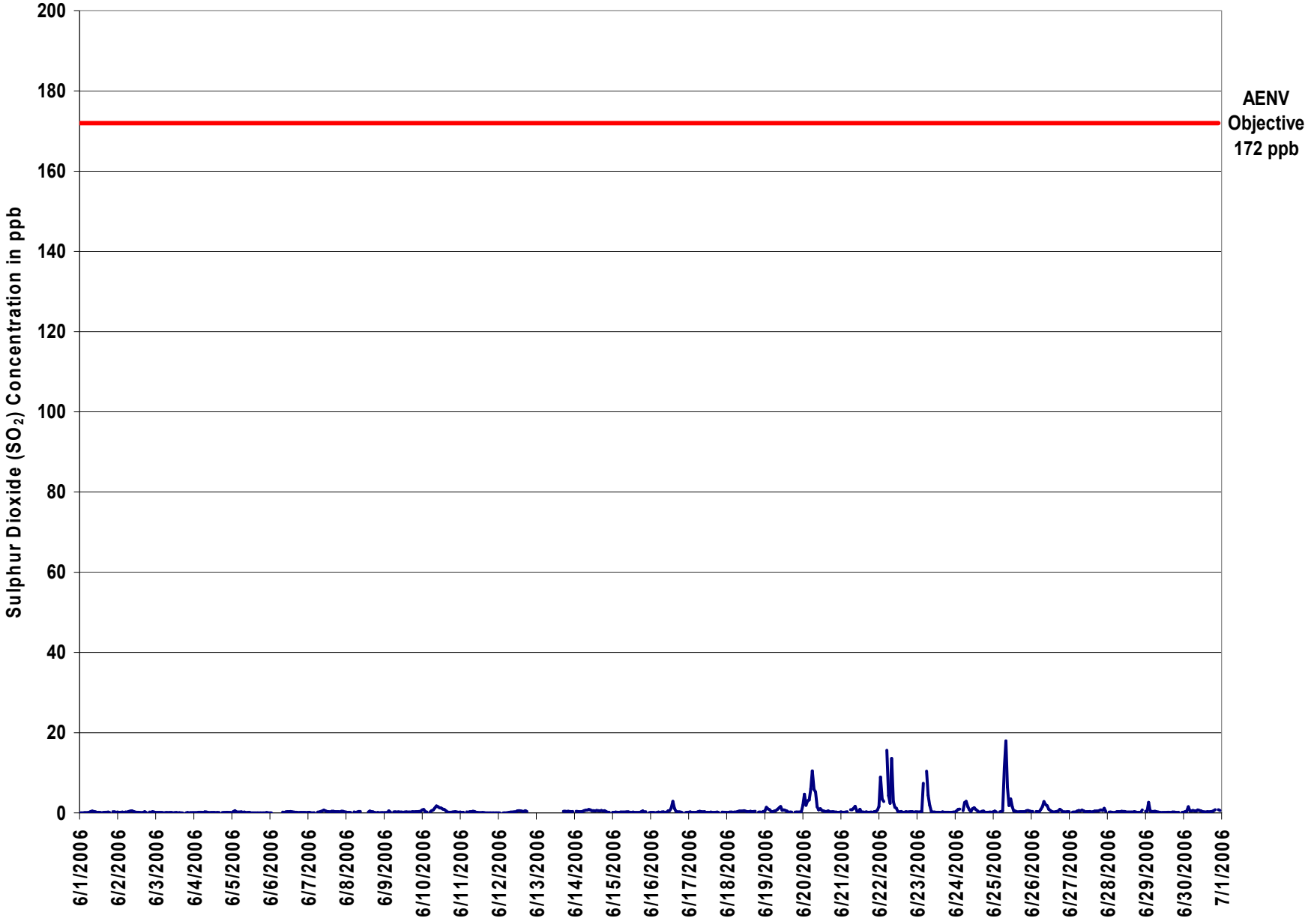


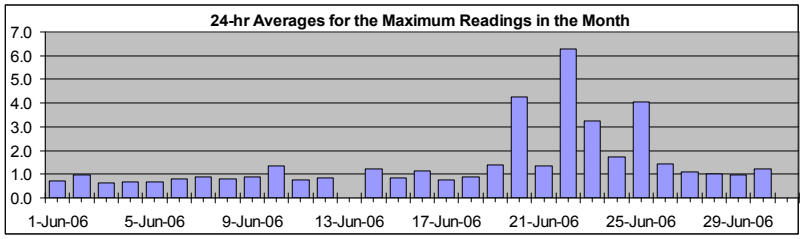
Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	27.1	ppb	23-Jun	4:00 5:00
Maximum 24-hr Value:	6.3	ppb	22-Jun	

AIC Time:	29 hrs	Operational Time:	661 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	96.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	16.0	3.8	1.1	0.9	0.7	0.6	0.5	1.5 ppb	0.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	1.1
2-Jun-06	1	1	1	1	1	1	1	1	2	4	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	3.6
3-Jun-06	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	A	1	1	0	0	1	0.6	0.9
4-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	0.7	0.9
5-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0	0	1	0	0.7	1.4
6-Jun-06	1	1	P	P	P	P	P	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.4
7-Jun-06	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
8-Jun-06	1	1	1	1	A	1	1	1	1	1	C	C	C	A	1	1	1	1	1	1	1	1	1	1	0.8	1.5
9-Jun-06	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5
10-Jun-06	2	2	1	1	A	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1.4	2.3
11-Jun-06	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0.8	1.5
12-Jun-06	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	N	N	N	N	N	0.8	1.1
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	1	N	1.0
14-Jun-06	A	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	4	1	1	1	1	1	A	1.2	3.8
15-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.2
16-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	2	1	1	1	1	1	A	1	1	1.1	4.0
17-Jun-06	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
18-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.3
19-Jun-06	2	2	2	2	1	1	1	1	2	2	5	1	2	1	1	1	1	1	A	1	1	1	1	1	1.4	5.0
20-Jun-06	7	9	8	8	4	14	15	10	9	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	4.3	14.7
21-Jun-06	1	1	1	1	1	A	1	2	3	5	1	1	3	1	1	1	2	1	1	1	1	1	1	1	1.4	4.7
22-Jun-06	4	25	8	6	A	27	10	10	23	14	3	2	1	1	1	1	1	1	1	1	1	1	1	1	6.3	27.0
23-Jun-06	1	1	1	1	27	A	18	9	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3.2	27.1
24-Jun-06	1	1	2	2	A	1	6	5	2	2	1	2	3	2	2	1	1	2	2	1	1	1	1	1	1.7	5.5
25-Jun-06	1	1	1	A	1	1	1	26	22	15	5	4	3	1	1	1	1	1	1	1	1	1	1	1	4.0	26.5
26-Jun-06	1	1	A	1	1	1	2	3	3	3	3	2	2	1	1	1	1	1	2	1	1	1	1	1	1.4	3.5
27-Jun-06	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1.1	2.9
28-Jun-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	A	1.0	4.2
29-Jun-06	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	4.2
30-Jun-06	1	1	1	4	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.2	3.6
Hourly Avg	1.2	2.1	1.5	1.4	2.0	2.5	2.6	3.0	3.2	2.3	1.4	1.3	1.2	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8	1.1	0.8		
Hourly Max	7.2	25.5	8.2	8.2	27.1	27.0	18.0	26.5	23.2	14.6	5.2	4.5	3.5	3.2	4.0	2.3	1.8	3.8	1.9	1.4	1.4	1.4	4.2	1.4		

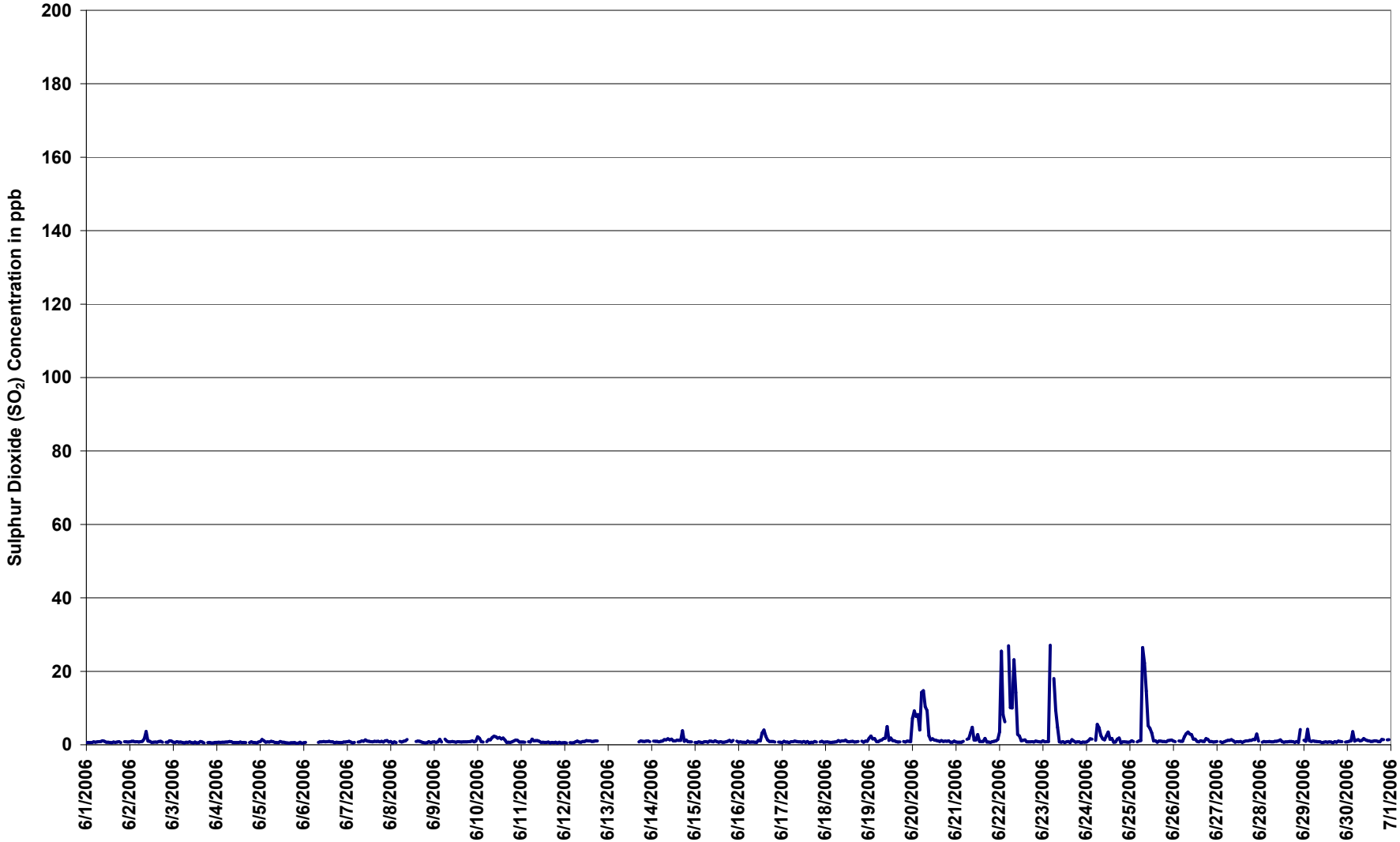
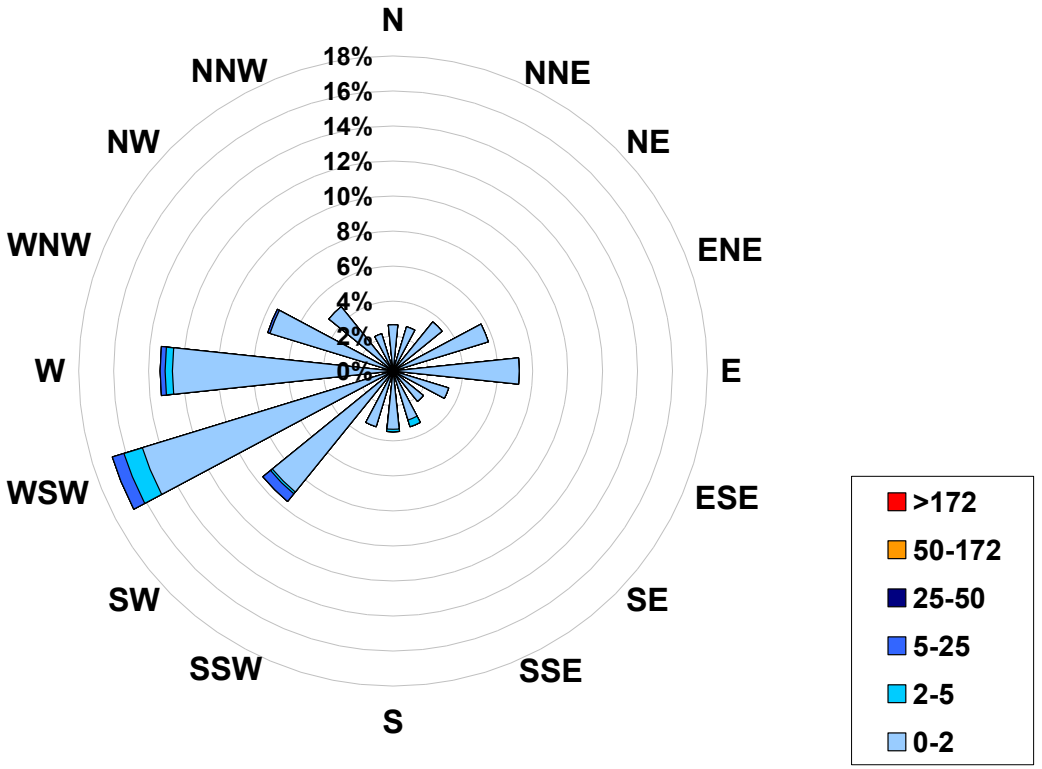


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Henry Pirker Site for June 2006



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	632
2	to	5	16
5	to	25	12
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			660

PASZA - Henry Pirker - Nitrogen Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

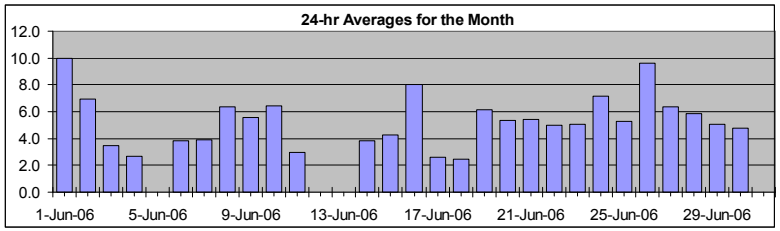
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	28.8	ppb	26-Jun	9:00 10:00
Maximum 24-hr Average:	10.0	ppb	1-Jun	



AIC Time:	29 hrs							Operational Time:	653 hrs																
Calibration Time:	6 hrs							AMD Operational Uptime:	95.6%																
Percentile	99	95	75	50	25	5	1	Average	Median																
	19.1	14.7	6.7	4.0	2.4	1.5	1.0	5.3 ppb	4.0 ppb																

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	14	17	18	16	17	15	15	21	18	14	5	2	2	2	2	2	2	2	2	2	A	16	14	11	10.0	21.0
2-Jun-06	8	11	15	11	11	14	16	9	5	4	3	3	3	3	3	3	2	3	6	A	9	9	6	5	7.0	15.7
3-Jun-06	5	7	5	3	4	4	2	5	7	3	3	2	2	2	2	2	2	2	A	4	3	3	5	5	3.5	7.2
4-Jun-06	2	2	3	4	4	3	3	2	2	2	2	1	2	1	1	2	2	A	4	3	4	5	5	3	2.7	5.3
5-Jun-06	4	6	6	5	7	13	9	9	7	3	C	C	C	C	C	C	A	5	3	2	5	9	4	6	N	12.6
6-Jun-06	5	7	P	P	P	P	P	5	3	3	2	3	3	2	2	2	2	3	3	3	5	7	6	7	3.8	7.3
7-Jun-06	5	3	2	4	12	A	14	4	3	2	2	2	1	1	2	1	3	3	3	5	6	6	5	3	3.9	13.8
8-Jun-06	4	3	2	2	A	10	10	13	7	7	6	6	M	7	7	7	7	6	7	7	6	5	5	5	6.3	13.1
9-Jun-06	3	3	3	4	7	A	9	7	5	4	3	3	2	2	2	2	3	3	3	4	5	13	19	18	5.6	18.7
10-Jun-06	11	9	12	11	A	14	12	8	7	7	6	4	2	2	3	3	3	3	4	4	5	10	4	4	6.4	14.0
11-Jun-06	3	2	3	A	5	4	3	2	2	2	2	2	3	2	2	2	2	2	2	2	3	6	6	5	2.9	6.5
12-Jun-06	3	3	A	7	5	6	4	4	3	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	6.7
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	5	6	8	7	6	4	N	8.1
14-Jun-06	A	4	4	4	5	8	8	5	3	3	4	3	3	3	3	3	4	3	3	3	5	3	3	A	3.8	7.9
15-Jun-06	4	3	4	5	7	9	11	5	4	4	2	1	2	1	2	1	2	2	5	6	6	6	A	7	4.3	10.5
16-Jun-06	7	5	5	7	9	19	16	17	16	8	9	7	8	4	6	4	7	6	6	6	4	A	6	3	8.0	19.4
17-Jun-06	2	1	1	2	5	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	A	6	4	3	2.6	6.1
18-Jun-06	3	3	2	3	3	4	3	2	1	1	1	1	1	1	1	1	1	1	1	A	6	5	8	5	2.5	8.5
19-Jun-06	5	4	4	6	8	10	11	7	3	2	2	2	2	3	6	12	14	9	A	6	7	4	8	5	6.1	14.5
20-Jun-06	6	6	5	3	3	6	7	8	10	3	2	2	2	3	4	5	2	2	7	5	9	9	8	12	5.3	11.7
21-Jun-06	12	5	4	4	5	A	10	7	4	3	3	3	3	3	3	3	5	3	3	3	8	16	7	6	5.4	15.5
22-Jun-06	6	5	6	6	A	10	11	8	7	3	3	3	2	2	3	4	5	4	4	5	6	6	4	3	5.0	10.8
23-Jun-06	4	5	4	3	3	A	8	6	4	3	2	2	2	2	2	2	2	2	2	3	12	17	13	12	5.1	17.2
24-Jun-06	15	15	13	10	A	15	15	12	12	8	6	3	2	2	2	2	2	2	2	2	3	5	7	9	7.2	15.4
25-Jun-06	8	9	6	A	12	13	14	7	4	3	2	2	2	2	2	1	2	2	2	4	4	8	8	5	5.3	14.1
26-Jun-06	4	4	A	5	5	8	10	12	19	29	21	12	7	5	3	2	2	2	2	4	8	15	22	19	9.6	28.8
27-Jun-06	18	A	15	9	14	14	18	11	9	3	1	1	1	1	1	1	2	2	3	7	4	4	3	1	6.3	18.4
28-Jun-06	A	4	3	5	8	12	16	13	8	7	3	2	3	3	3	3	4	5	6	6	5	4	4	A	5.8	15.9
29-Jun-06	5	2	6	7	7	12	12	8	4	4	2	3	2	2	2	3	3	3	3	3	6	10	A	7	5.1	12.4
30-Jun-06	5	4	4	4	5	7	6	6	6	2	2	2	2	2	2	1	2	2	2	4	6	A	20	15	4.8	20.1
Hourly Avg	6.3	5.5	5.9	5.8	7.2	9.8	9.8	7.8	6.4	4.9	3.7	3.0	2.5	2.5	2.7	2.8	3.3	3.1	3.5	4.0	5.9	7.9	7.7	6.9		
Hourly Max	18.2	17.0	17.8	16.5	16.7	19.4	18.4	21.0	18.9	28.8	21.3	12.4	7.9	6.6	7.3	11.9	14.5	8.7	7.1	7.0	11.6	17.2	21.6	19.3		

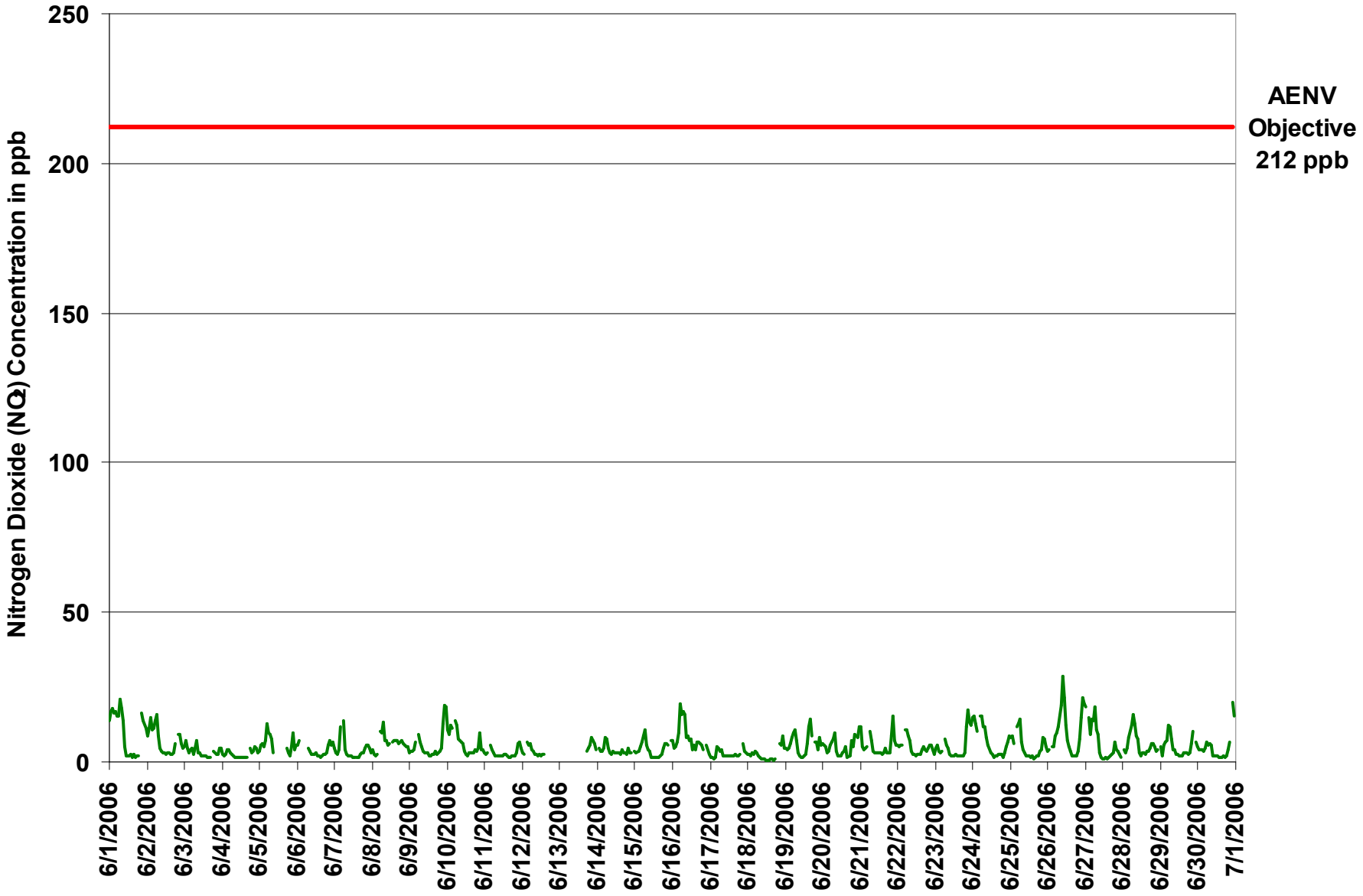


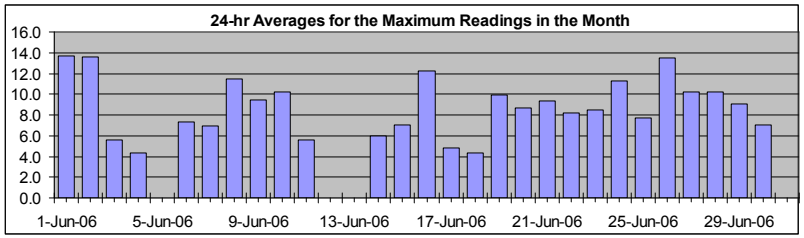
Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	34.0	ppb	2-Jun	9:00 10:00
Maximum 24-hr Value:	13.7	ppb	1-Jun	

AIC Time:	29 hrs	Operational Time:	653 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	95.6%

Percentile	99	95	75	50	25	5	1	Average	Median
	26.0	21.1	11.4	6.7	4.5	3.0	2.0	8.7 ppb	6.7 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	17	19	20	18	18	17	21	24	24	22	9	6	6	3	4	3	6	4	5	5	A	24	23	14	13.7	24.3
2-Jun-06	14	15	18	18	14	21	21	12	26	34	5	18	7	6	5	6	6	6	11	A	18	12	10	7	13.6	34.0
3-Jun-06	6	12	8	5	5	6	4	10	11	4	4	4	4	3	3	4	4	3	A	6	4	4	7	7	5.6	11.9
4-Jun-06	4	3	5	6	6	6	4	3	3	3	3	3	3	3	2	3	3	A	7	4	6	8	8	4	4.3	8.1
5-Jun-06	5	9	8	7	13	17	15	14	12	6	C	C	C	C	C	C	A	8	5	4	10	17	9	11	N	17.4
6-Jun-06	12	14	P	P	P	P	P	9	7	4	4	5	7	4	3	3	6	5	6	7	10	11	10	11	7.3	14.3
7-Jun-06	7	5	3	10	16	A	20	7	4	3	3	4	2	6	3	3	8	5	5	9	8	9	10	6	6.9	20.3
8-Jun-06	12	7	3	3	A	15	19	23	14	15	12	8	M	9	18	10	10	10	11	13	8	8	7	15	11.5	23.3
9-Jun-06	6	5	7	10	11	A	16	15	11	6	6	5	3	5	5	6	7	7	5	5	6	18	26	26	9.4	26.2
10-Jun-06	19	12	22	15	A	17	15	10	9	8	7	5	4	8	8	6	6	8	7	7	9	17	7	8	10.3	22.1
11-Jun-06	6	5	4	A	8	6	7	5	4	4	4	5	7	8	3	5	3	3	5	4	4	12	9	6	5.6	11.5
12-Jun-06	6	4	A	10	8	9	5	4	4	3	3	4	4	5	4	N	N	N	N	N	N	N	N	N	N	9.9
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	6	7	12	24	10	9	6	N	24.3
14-Jun-06	A	5	5	5	6	13	12	7	5	4	8	5	5	5	4	4	5	5	4	4	6	7	5	A	5.9	12.8
15-Jun-06	5	5	5	8	9	12	13	9	6	6	4	3	4	3	3	4	5	5	7	13	9	10	A	11	7.0	13.1
16-Jun-06	10	5	7	10	18	27	20	21	19	16	15	12	11	6	10	8	12	13	10	8	8	A	8	4	12.2	27.1
17-Jun-06	2	2	2	3	11	9	9	10	3	3	4	3	3	3	3	3	4	3	4	4	A	9	6	4	4.9	11.4
18-Jun-06	4	4	3	6	4	5	4	3	3	2	2	3	2	2	3	2	2	2	3	A	12	12	12	6	4.4	12.1
19-Jun-06	6	8	6	9	12	15	13	13	6	3	3	3	4	8	12	18	24	15	A	10	10	6	17	7	10.0	23.8
20-Jun-06	9	7	6	4	5	7	10	12	13	7	7	6	4	7	8	11	4	6	14	6	17	9	14	15	8.7	16.7
21-Jun-06	16	7	6	8	8	A	14	14	6	5	6	6	6	6	5	6	8	5	8	7	26	24	12	8	9.4	25.8
22-Jun-06	7	6	8	8	A	15	14	11	13	6	6	13	5	5	5	7	9	6	7	10	9	9	5	4	8.2	15.0
23-Jun-06	6	7	4	4	5	A	11	7	6	6	4	4	4	4	4	5	5	4	6	6	25	26	21	18	8.5	25.8
24-Jun-06	20	19	15	17	A	21	20	17	16	10	8	6	4	3	4	5	4	3	5	3	9	13	11	21	11.3	21.5
25-Jun-06	11	13	8	A	13	16	18	12	6	5	3	3	3	4	3	3	7	6	3	5	6	11	9	7	7.7	18.2
26-Jun-06	5	5	A	12	6	10	13	13	28	33	29	16	11	8	7	4	5	2	2	7	15	27	25	25	13.5	33.4
27-Jun-06	24	A	23	13	17	19	22	20	18	11	4	2	2	3	3	3	4	5	7	11	9	6	4	2	10.2	23.9
28-Jun-06	A	6	5	9	12	26	23	16	12	12	7	4	5	6	7	11	8	12	10	10	8	7	8	A	10.2	25.9
29-Jun-06	9	4	16	13	12	17	17	12	8	6	4	6	4	4	4	5	6	9	5	6	14	15	A	9	9.0	17.3
30-Jun-06	7	5	6	6	6	9	8	8	9	4	3	4	3	4	5	3	3	3	4	7	10	A	25	18	7.1	25.0
Hourly Avg	9.5	7.9	8.7	9.1	10.3	14.0	13.9	11.8	10.6	8.9	6.4	6.1	4.8	5.1	5.4	5.6	6.5	6.1	6.5	7.2	11.3	12.7	11.8	10.5		
Hourly Max	23.9	19.2	23.4	18.4	18.0	27.1	23.3	23.9	28.2	34.0	29.2	18.5	11.4	9.3	18.0	17.9	23.8	14.9	14.2	13.1	25.8	26.7	26.2	25.6		

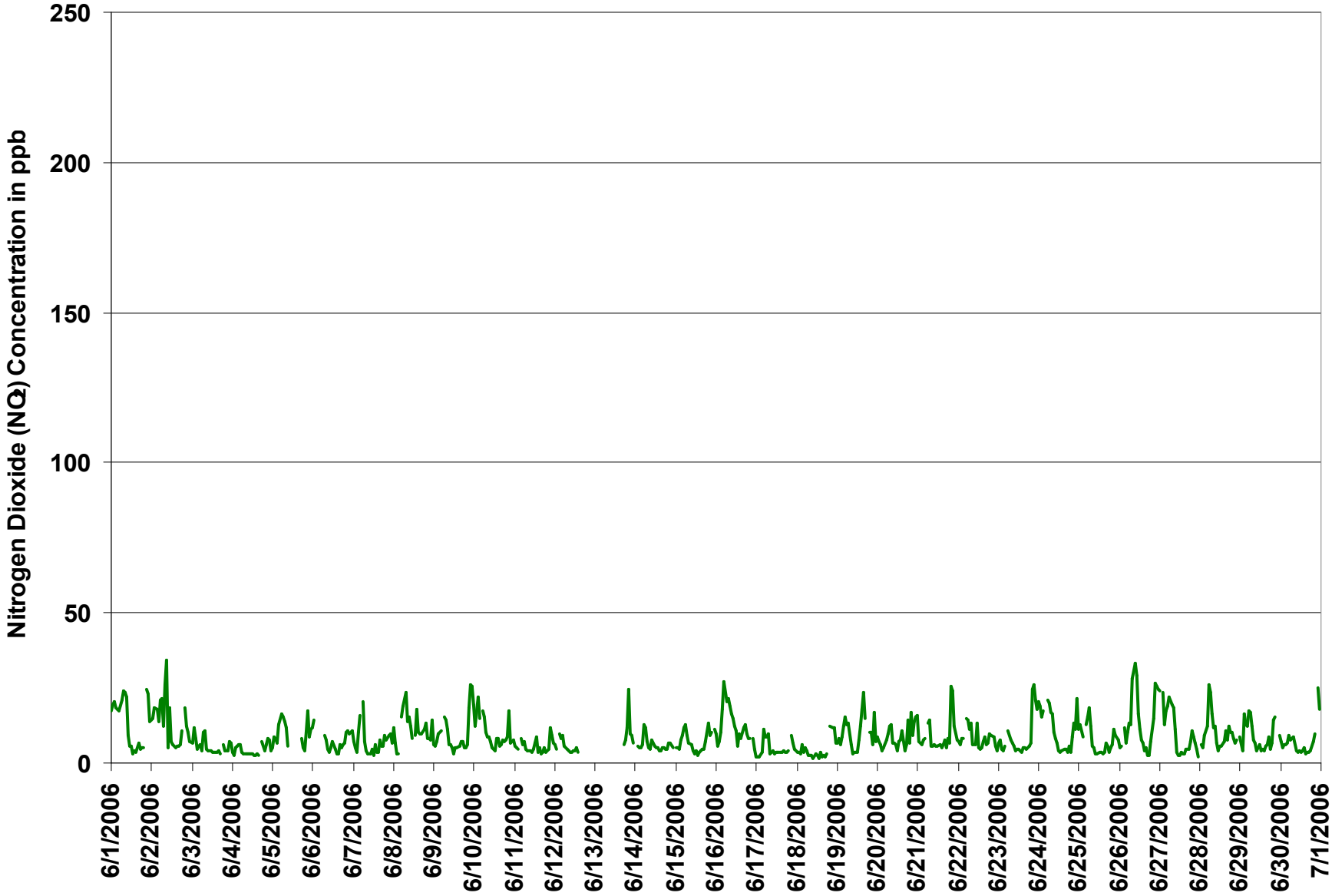
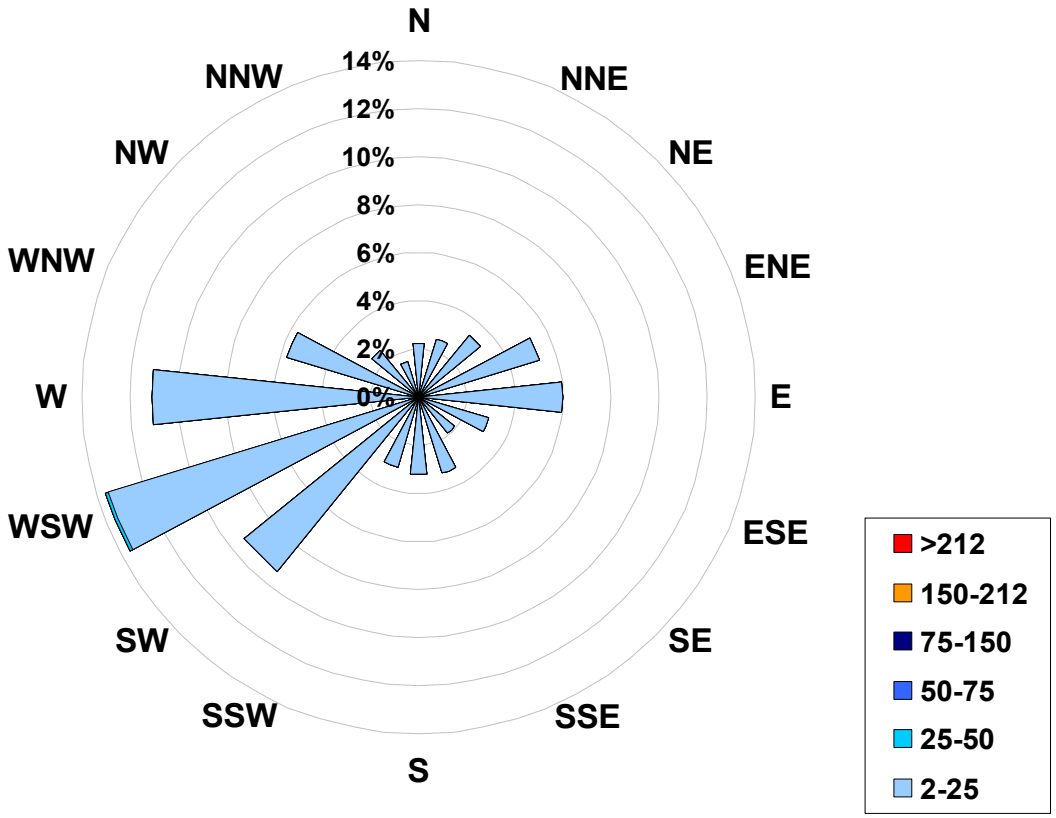


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Henry Pirker Site for June 2006



Calms:	0%

Frequency Distribution of NO_2 in ppb			
Range			Frequency (hrs)
2.0	<	25	653
25	to	50	0
50	to	75	0
75	to	150	0
150	to	212	0
	>	212	0
Total Non-Zero Values			653

PASZA - Henry Pirker - Nitric Oxide Monthly Summary

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

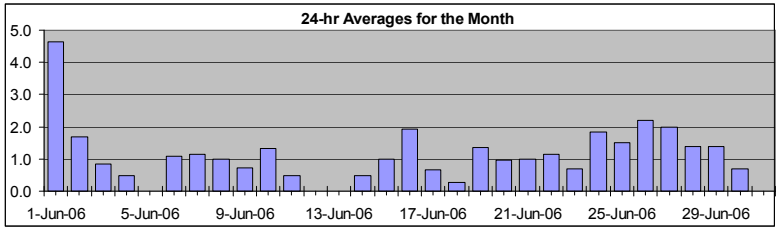
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Maximum 1-hr Average:	20.1	ppb	1-Jun	7:00 8:00
Maximum 24-hr Average:	4.6	ppb	1-Jun	



AIC Time:	29 hrs	Operational Time:	653 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	95.6%

Percentile	99	95	75	50	25	5	1	Average	Median
	11.1	5.1	1.2	0.6	0.3	0.0	0.0	1.2 ppb	0.6 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

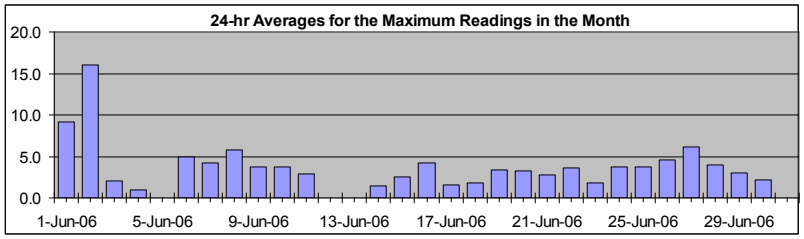
Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	1	3	6	8	9	12	14	20	14	9	2	1	1	1	1	0	1	0	0	0	A	1	2	0	4.6	20.1
2-Jun-06	0	0	1	0	0	4	8	4	5	5	1	1	1	1	1	1	1	0	0	A	0	0	0	0	1.7	8.2
3-Jun-06	0	0	0	0	0	0	0	1	1	1	1	1	6	1	1	1	1	1	A	0	0	0	0	0	0.8	5.8
4-Jun-06	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0.5	0.8
5-Jun-06	0	0	0	0	0	2	3	3	3	1	C	C	C	C	C	C	A	1	1	0	0	0	0	0	N	3.0
6-Jun-06	0	0	P	P	P	P	P	3	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0	1	1.1	3.3
7-Jun-06	0	0	0	0	5	A	10	2	1	1	1	1	0	0	0	0	1	1	1	1	1	0	0	0	1.1	10.4
8-Jun-06	0	0	0	0	A	1	1	1	1	2	2	1	M	1	2	2	2	1	1	1	1	0	0	1	1.0	2.5
9-Jun-06	0	0	0	0	1	A	3	2	2	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0.7	2.8
10-Jun-06	0	0	0	1	A	3	5	4	3	3	2	1	0	0	1	1	1	1	1	1	0	1	1	1	1.3	5.4
11-Jun-06	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	0.8
12-Jun-06	0	0	A	0	1	2	3	3	2	1	1	1	1	2	3	N	N	N	N	N	N	N	N	N	N	3.4
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3	1	1	1	0	0	0	N	2.6
14-Jun-06	A	0	0	0	0	1	2	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	A	0.5	1.8
15-Jun-06	0	0	0	0	1	4	7	3	2	1	0	0	0	0	0	0	0	0	1	1	1	0	A	0	1.0	7.3
16-Jun-06	0	0	0	0	0	4	5	6	7	4	5	2	3	1	1	1	1	1	1	1	0	A	0	0	1.9	7.1
17-Jun-06	0	0	0	0	0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0	A	0	0	0	0.7	1.6
18-Jun-06	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.9
19-Jun-06	0	0	0	0	1	3	7	5	1	1	0	0	1	1	1	2	3	2	A	1	1	0	0	0	1.4	6.9
20-Jun-06	0	0	0	0	0	1	2	2	3	2	1	1	1	1	1	2	1	1	1	1	1	0	0	0	1.0	3.0
21-Jun-06	1	0	0	0	0	A	4	4	2	1	2	1	1	1	1	1	1	1	1	0	1	1	0	0	1.0	4.2
22-Jun-06	0	0	0	0	A	2	4	4	4	1	1	3	1	1	1	1	1	1	1	0	0	0	0	0	1.2	4.5
23-Jun-06	0	0	0	0	0	A	2	2	2	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0.7	2.4
24-Jun-06	0	0	0	0	A	4	10	7	8	4	2	1	0	0	1	1	1	1	1	0	0	0	0	0	1.8	10.1
25-Jun-06	0	0	0	A	1	6	17	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	17.0
26-Jun-06	0	0	A	0	0	1	4	6	9	15	6	2	1	0	0	0	0	0	0	0	1	1	1	2	2.2	14.6
27-Jun-06	1	A	1	0	7	6	14	5	4	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	2.0	14.2
28-Jun-06	A	0	0	0	1	2	7	5	4	4	1	1	1	1	1	1	0	0	1	0	0	0	0	A	1.4	6.7
29-Jun-06	0	0	0	0	0	3	7	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1.4	6.6
30-Jun-06	0	0	0	0	0	1	1	3	3	1	1	1	1	1	1	0	1	0	0	1	1	A	0	0	0.7	2.6
Hourly Avg	0.2	0.2	0.4	0.5	1.2	2.7	5.1	3.8	3.1	2.4	1.4	1.1	1.0	0.8	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.4	0.3	0.3		
Hourly Max	1.1	2.6	6.3	8.2	8.7	11.8	17.0	20.1	14.2	14.6	5.9	3.1	5.8	1.5	3.4	2.3	2.9	2.6	1.3	1.3	1.2	1.0	1.7	2.1		

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	212.8	ppb	2-Jun	9:00 10:00
Maximum 24-hr Value:	16.0	ppb	2-Jun	

AIC Time:	29 hrs	Operational Time:	653 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	95.6%

Percentile	99	95	75	50	25	5	1	Average	Median
	26.6	12.9	4.1	2.0	1.0	0.3	0.0	3.9 ppb	2.0 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	2	8	14	13	16	17	28	30	21	21	4	2	1	1	1	1	2	1	1	1	A	6	15	3	9.2	30.3
2-Jun-06	3	1	3	2	1	15	19	8	58	213	2	21	3	3	3	5	3	1	1	A	1	1	1	0	16.0	212.8
3-Jun-06	0	0	0	0	1	0	1	2	2	1	2	2	26	2	2	2	2	2	A	1	0	0	0	0	2.1	25.7
4-Jun-06	0	0	0	0	0	1	1	1	2	2	1	2	2	2	1	1	1	A	1	0	0	0	0	0	0.9	1.8
5-Jun-06	0	0	0	0	2	4	5	5	5	3	C	C	C	C	C	C	A	1	1	1	1	1	1	4	N	5.2
6-Jun-06	1	1	P	P	P	P	P	18	7	3	3	10	7	2	2	3	9	4	5	2	2	2	1	10	5.0	18.3
7-Jun-06	1	1	7	1	18	A	24	3	2	2	2	5	1	3	1	1	4	2	3	5	2	3	1	2	4.2	23.7
8-Jun-06	9	2	0	0	A	3	10	5	7	9	9	3	M	2	13	5	7	5	8	6	2	6	3	14	5.8	14.4
9-Jun-06	6	2	2	8	9	A	10	10	7	4	5	4	1	6	2	1	2	4	1	0	0	0	1	1	3.8	10.1
10-Jun-06	1	1	2	2	A	7	8	5	5	4	3	1	1	5	4	3	3	4	4	4	1	8	4	6	3.7	8.2
11-Jun-06	6	3	3	A	5	6	5	3	3	3	2	5	5	5	2	4	2	1	0	0	0	1	1	0	2.9	6.3
12-Jun-06	1	0	A	1	2	6	4	4	3	2	2	2	2	3	4	N	N	N	N	N	N	N	N	N	N	6.4
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	1	2	4	0	0	0	N	4.9
14-Jun-06	A	0	1	1	1	5	3	2	2	5	1	1	1	1	1	1	1	1	0	0	0	0	0	A	1.4	4.8
15-Jun-06	0	0	0	1	2	9	11	7	3	2	2	3	1	1	2	1	1	1	1	3	2	3	A	0	2.5	11.3
16-Jun-06	1	0	1	1	1	10	11	12	10	11	12	5	4	2	2	2	3	2	2	1	1	A	0	0	4.2	11.9
17-Jun-06	0	0	0	0	1	1	4	4	2	2	2	2	2	2	2	2	2	1	1	1	A	1	1	1	1.5	4.4
18-Jun-06	0	0	0	0	0	1	1	1	1	1	1	8	1	2	8	1	1	1	2	A	5	5	0	0	1.8	7.6
19-Jun-06	0	0	0	0	3	8	11	12	4	1	1	1	1	3	3	5	8	3	A	5	3	0	1	0	3.4	11.7
20-Jun-06	1	1	1	0	0	1	4	3	5	6	11	10	5	4	4	4	2	6	2	1	2	1	1	1	3.3	10.7
21-Jun-06	2	0	0	0	1	A	8	10	3	3	5	10	2	2	2	2	2	1	2	1	3	2	0	0	2.8	10.4
22-Jun-06	0	0	0	1	A	3	7	7	10	2	2	29	1	2	1	1	2	1	1	1	9	0	0	0	3.7	28.8
23-Jun-06	0	0	0	0	0	A	4	3	3	4	1	2	2	2	1	2	2	1	1	1	4	3	0	0	1.8	4.4
24-Jun-06	2	2	1	2	A	8	18	12	13	6	3	2	1	1	1	1	1	1	1	1	1	1	1	3	3.7	18.1
25-Jun-06	3	1	1	A	1	17	30	10	3	2	1	1	2	2	1	2	4	2	1	1	0	0	0	1	3.8	30.2
26-Jun-06	0	1	A	9	1	3	7	7	20	19	9	3	1	1	2	0	0	0	0	0	6	3	4	5	4.6	19.7
27-Jun-06	7	A	5	4	21	13	30	17	12	6	3	1	2	4	2	1	1	2	2	2	2	1	1	0	6.1	30.2
28-Jun-06	A	0	1	1	2	18	18	10	6	8	3	6	2	3	2	3	1	2	1	1	0	0	1	A	4.0	18.2
29-Jun-06	0	0	1	0	1	7	12	8	4	4	2	6	3	2	2	3	3	4	1	2	1	1	A	0	3.1	11.7
30-Jun-06	0	0	0	0	0	2	2	4	5	2	1	2	1	2	3	1	1	1	1	3	13	A	2	0	2.2	13.3
Hourly Avg	1.8	0.9	1.7	1.9	3.9	6.9	10.6	7.8	7.9	12.1	3.5	5.3	3.2	2.5	2.8	2.2	2.6	2.2	1.9	1.8	2.5	1.9	1.7	2.1		
Hourly Max	9.5	8.1	14.3	12.9	21.2	18.2	30.2	30.3	58.2	212.8	11.7	28.8	25.7	5.7	13.5	5.2	9.2	6.2	8.2	5.8	13.3	8.2	15.4	14.4		

PASZA - Henry Pirker - Oxides of Nitrogen Monthly Summary

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

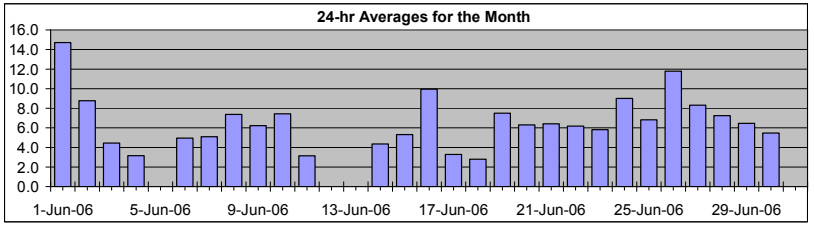
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Maximum 1-hr Average:	43.4	ppb	26-Jun	9:00 10:00
Maximum 24-hr Average:	14.7	ppb	1-Jun	



AIC Time:	29 hrs	Operational Time:	653 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	95.6%

Percentile	99	95	75	50	25	5	1	Average	Median
	27.7	18.4	7.9	4.5	3.1	1.9	1.3	6.6 ppb	4.5 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	14	20	24	25	25	27	29	41	32	23	7	3	3	3	3	2	3	2	2	2	A	18	15	12	14.7	41.2
2-Jun-06	9	11	16	11	12	18	24	13	10	9	4	5	3	4	4	4	3	4	7	A	10	10	6	5	8.8	24.1
3-Jun-06	5	8	5	4	4	5	3	5	8	4	4	3	8	4	3	3	2	3	A	4	3	3	5	5	4.4	8.4
4-Jun-06	3	2	3	4	4	4	3	3	3	2	2	2	2	2	2	2	2	A	5	3	4	5	5	3	3.2	5.5
5-Jun-06	4	6	6	5	8	15	13	13	10	5	C	C	C	C	C	C	A	6	3	3	6	10	4	6	N	14.9
6-Jun-06	6	8	P	P	P	P	P	8	5	4	4	4	6	3	3	2	3	4	4	4	6	8	6	7	4.9	8.1
7-Jun-06	5	3	3	4	16	A	24	6	4	3	3	3	2	2	2	2	3	4	4	5	6	6	5	3	5.1	24.2
8-Jun-06	4	3	2	2	A	11	10	15	9	9	7	7	M	8	10	9	9	8	8	8	6	6	6	6	7.4	14.5
9-Jun-06	3	4	4	4	7	A	12	9	7	5	4	4	2	3	3	3	4	3	3	4	5	13	19	18	6.2	18.8
10-Jun-06	11	9	12	11	A	17	17	11	10	9	8	4	2	2	3	4	4	4	5	4	5	10	4	4	7.4	17.2
11-Jun-06	3	2	3	A	5	4	4	3	2	2	2	2	3	3	2	2	2	2	2	2	3	6	7	5	3.1	6.6
12-Jun-06	3	2	A	7	6	8	7	7	4	3	3	3	3	4	6	N	N	N	N	N	N	N	N	N	N	8.2
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	6	6	6	9	7	6	4	N	8.8
14-Jun-06	A	5	4	4	5	9	9	6	4	3	4	4	3	4	3	3	4	4	3	3	5	3	3	A	4.3	9.5
15-Jun-06	4	3	4	5	7	12	18	9	6	5	2	2	2	2	2	2	2	3	5	7	7	6	A	7	5.3	17.9
16-Jun-06	7	5	5	7	10	23	21	23	23	12	14	10	10	5	7	5	8	7	7	6	4	A	6	3	9.9	23.4
17-Jun-06	2	1	1	2	6	5	5	6	3	3	3	3	3	3	3	3	4	3	3	3	A	6	4	3	3.3	6.4
18-Jun-06	3	3	2	3	3	4	3	3	2	2	1	2	1	1	1	1	1	1	1	A	7	6	9	5	2.8	8.6
19-Jun-06	5	4	5	6	9	13	18	12	4	3	2	2	3	3	8	14	17	11	A	7	8	4	8	6	7.5	17.8
20-Jun-06	6	6	5	3	4	7	9	10	13	5	4	4	3	4	5	7	2	3	8	6	10	9	8	12	6.3	12.6
21-Jun-06	12	5	4	5	6	A	14	12	6	5	5	5	4	4	3	4	6	4	4	3	9	16	7	6	6.4	16.1
22-Jun-06	6	5	6	6	A	12	15	13	11	5	4	6	3	3	4	5	6	5	4	5	6	6	4	3	6.2	15.3
23-Jun-06	4	5	4	3	4	A	10	8	6	4	3	3	3	3	3	3	3	3	3	3	13	18	14	12	5.8	18.2
24-Jun-06	15	16	13	10	A	19	26	19	20	12	8	4	3	2	2	2	3	3	3	2	4	5	7	9	9.0	25.5
25-Jun-06	8	9	6	A	12	18	31	10	6	5	2	2	2	2	2	2	2	2	2	4	5	8	8	5	6.8	31.1
26-Jun-06	4	4	A	6	5	10	13	18	28	43	27	14	8	6	4	2	2	2	2	4	8	16	23	21	11.8	43.4
27-Jun-06	19	A	15	9	21	20	33	16	14	4	2	2	2	2	2	2	3	3	4	7	5	4	3	1	8.3	32.6
28-Jun-06	A	4	3	5	9	14	23	18	13	12	4	2	4	4	4	4	4	5	7	7	6	4	4	A	7.2	22.6
29-Jun-06	5	2	6	7	8	16	19	12	6	6	3	4	3	3	3	4	4	4	4	4	7	11	A	7	6.5	18.6
30-Jun-06	5	4	4	4	5	8	7	9	8	3	3	3	3	2	2	2	3	2	2	4	7	A	20	15	5.5	20.5
Hourly Avg	6.5	5.7	6.3	6.3	8.4	12.4	15.0	11.6	9.5	7.3	5.0	4.0	3.5	3.2	3.5	3.6	4.1	3.9	4.1	4.5	6.4	8.3	8.0	7.2		
Hourly Max	19.3	19.6	24.2	24.7	25.4	27.0	32.6	41.2	32.2	43.4	27.2	14.3	10.5	7.7	9.8	14.2	17.4	11.0	8.0	8.3	12.8	18.2	22.8	21.3		

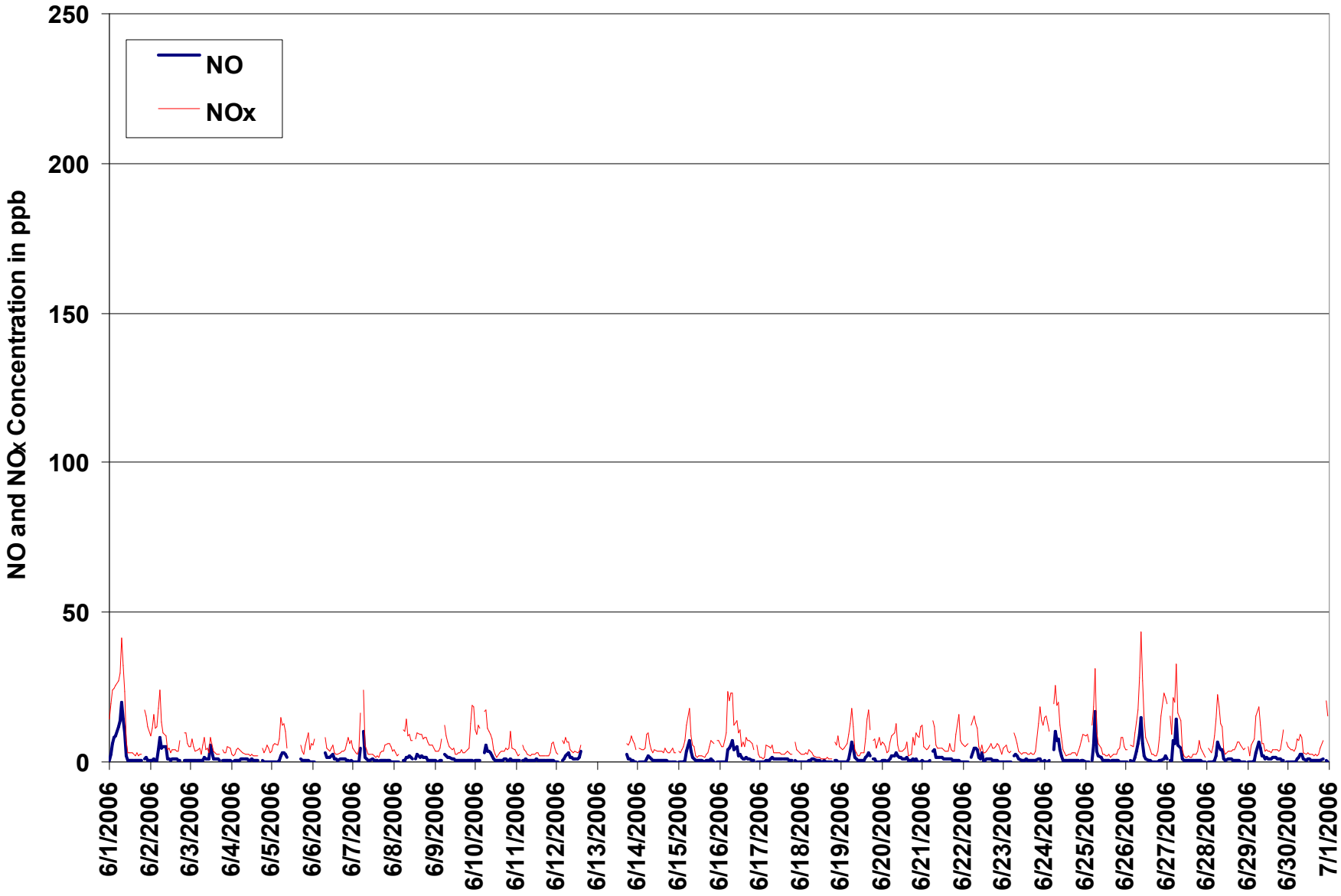


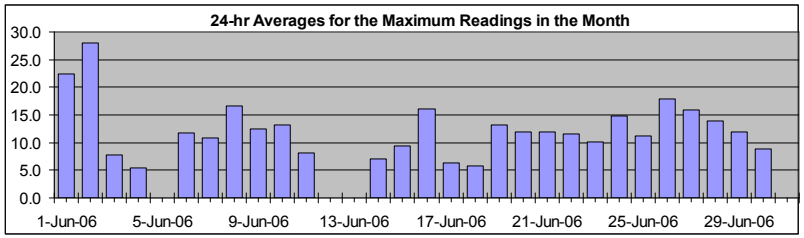
Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	239.9	ppb	2-Jun	9:00 10:00
Maximum 24-hr Value:	28.1	ppb	2-Jun	

AIC Time:	29 hrs	Operational Time:	653 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	95.6%

Percentile	99	95	75	50	25	5	1	Average	Median
	48.2	30.8	14.6	8.8	5.9	4.0	2.7	12.3 ppb	8.8 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-Jun-06	19	26	32	31	33	33	48	52	45	43	13	7	7	4	6	5	8	6	6	6	A	30	38	17	22.5	52.0
2-Jun-06	17	15	21	19	15	36	39	21	63	240	8	40	8	9	7	11	9	7	11	A	19	13	11	7	28.1	239.9
3-Jun-06	7	12	8	5	6	6	5	12	13	6	6	6	28	5	5	5	6	5	A	7	4	4	7	7	7.8	28.1
4-Jun-06	4	3	5	6	6	7	5	4	5	5	4	5	5	4	4	4	4	A	8	5	6	8	8	4	5.4	8.3
5-Jun-06	5	9	8	7	14	20	20	19	17	8	C	C	C	C	C	C	A	9	6	4	11	18	9	16	N	20.4
6-Jun-06	13	15	P	P	P	P	P	27	14	7	6	10	14	7	5	6	14	9	12	8	12	13	10	19	11.8	27.4
7-Jun-06	7	6	11	12	34	A	43	9	6	5	5	8	4	9	4	5	12	7	8	14	10	12	11	8	10.9	43.4
8-Jun-06	19	9	3	3	A	18	28	27	18	24	21	11	M	11	32	15	15	13	19	18	10	14	9	29	16.7	31.7
9-Jun-06	12	5	9	17	15	A	23	25	18	9	10	8	4	11	7	7	9	11	5	6	6	18	27	26	12.5	26.6
10-Jun-06	20	13	24	17	A	23	23	14	13	12	10	6	5	12	13	8	8	11	11	10	9	18	9	13	13.1	24.2
11-Jun-06	12	7	7	A	13	11	12	7	7	7	5	9	12	13	5	9	5	4	5	4	5	12	10	6	8.1	13.3
12-Jun-06	7	5	A	11	11	16	8	8	7	6	5	6	6	8	8	N	N	N	N	N	N	N	N	N	N	15.5
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	10	9	14	29	10	9	7	N	28.7	
14-Jun-06	A	5	5	6	6	15	15	9	7	9	9	6	6	6	5	4	6	5	5	4	6	7	5	A	7.0	15.4
15-Jun-06	5	5	5	8	12	21	24	16	10	8	6	4	5	3	5	5	6	6	9	16	11	12	A	12	9.4	23.7
16-Jun-06	10	6	7	10	19	37	31	34	29	26	27	17	14	8	12	10	14	14	12	9	9	A	8	4	16.0	36.7
17-Jun-06	2	2	2	3	13	10	12	14	5	5	6	5	5	5	6	5	6	5	5	5	A	10	7	5	6.3	14.1
18-Jun-06	4	4	3	6	4	5	5	4	4	4	2	9	4	3	11	2	4	2	5	A	17	14	12	7	5.9	16.6
19-Jun-06	6	8	6	9	16	23	24	25	11	4	5	5	5	10	15	22	32	18	A	15	13	6	17	8	13.3	32.2
20-Jun-06	10	8	6	4	5	9	13	16	17	13	18	17	9	12	11	15	5	12	16	7	19	10	15	16	11.8	19.3
21-Jun-06	17	7	6	8	9	A	22	25	9	8	10	14	8	8	7	8	10	6	10	8	29	26	13	8	12.0	28.6
22-Jun-06	7	6	8	8	A	19	21	18	24	8	8	40	6	7	6	9	11	7	7	11	16	9	5	4	11.7	40.0
23-Jun-06	6	7	4	4	6	A	15	11	10	10	6	6	6	6	5	7	7	6	7	7	29	29	21	18	10.2	28.9
24-Jun-06	22	20	15	20	A	28	38	28	29	17	12	8	5	4	5	6	6	4	7	4	10	14	13	25	14.8	38.0
25-Jun-06	13	14	9	A	15	32	48	23	9	7	4	4	5	5	3	5	10	7	4	5	6	11	9	7	11.3	48.4
26-Jun-06	5	6	A	21	7	13	20	20	48	51	38	19	13	8	8	4	6	3	3	8	20	30	29	29	17.9	51.2
27-Jun-06	31	A	25	16	38	31	52	37	30	17	6	3	4	6	5	4	5	7	9	12	10	8	4	2	15.8	52.1
28-Jun-06	A	6	5	9	14	44	41	26	18	20	10	7	8	8	9	14	8	14	11	11	9	7	8	A	14.0	44.3
29-Jun-06	9	4	17	13	13	24	29	20	12	11	6	11	7	7	6	8	9	13	6	8	15	17	A	9	11.9	28.5
30-Jun-06	7	5	6	6	7	10	9	12	14	6	5	7	5	6	7	4	4	4	4	8	21	A	27	18	8.9	26.7
Hourly Avg	11.0	8.6	10.0	10.8	13.8	20.6	24.1	19.4	17.6	20.6	9.7	10.6	7.7	7.4	7.9	7.7	8.9	8.1	8.2	8.8	13.5	14.1	13.2	12.3		
Hourly Max	30.5	26.3	31.8	30.7	38.0	44.3	52.1	52.0	62.8	239.9	37.6	40.0	28.1	12.7	31.7	22.0	32.2	18.2	19.4	18.4	28.9	30.4	38.2	29.2		

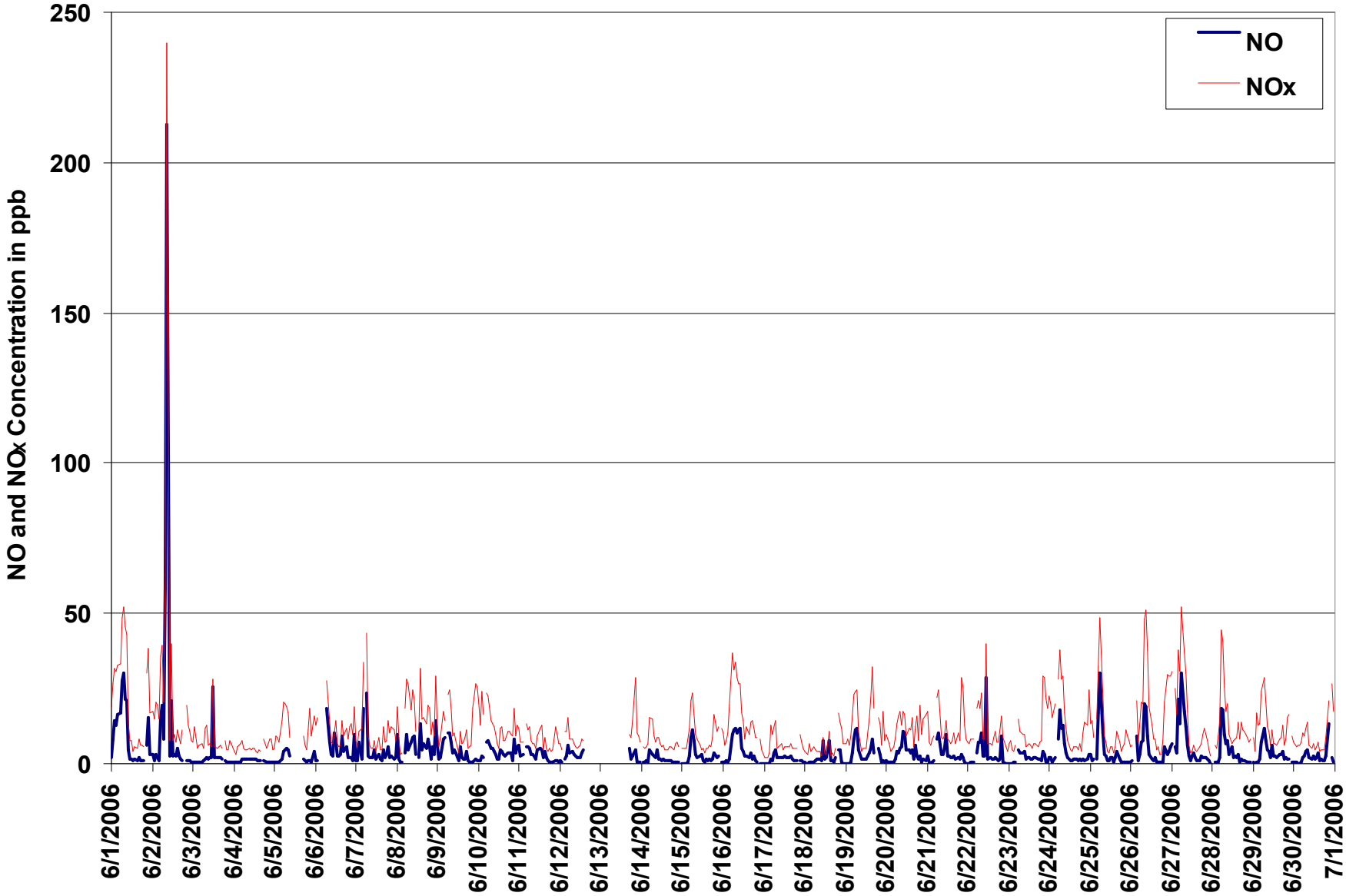


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Henry Pirker - Ozone Monthly Summary

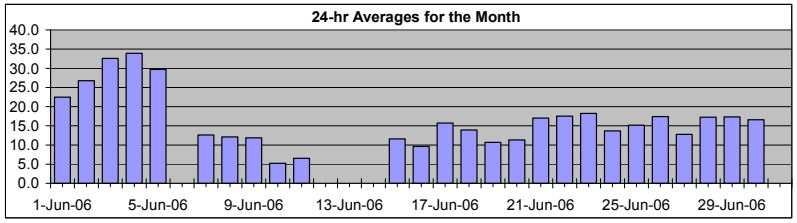
Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ozone (O_3)

Monitoring Dates: June 1, 2006 to July 1, 2006

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



Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	44.0	ppb	1-Jun	15:00 16:00
Maximum 24-hr Average:	33.9	ppb	4-Jun	

AIC Time:	28 hrs	Operational Time:	639 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	93.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	41.2	36.2	21.8	15.2	8.7	2.1	0.5	16.2 ppb	15.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	10	2	0	0	0	0	3	2	7	15	27	37	39	43	43	44	43	44	43	42	A	25	26	25	22.5	44.0
2-Jun-06	25	17	8	14	12	11	10	19	32	36	39	38	38	30	34	36	37	38	33	A	29	24	25	30	26.8	38.7
3-Jun-06	26	22	23	28	25	31	38	34	29	33	35	38	39	39	39	37	37	37	A	36	35	33	30	29	32.6	39.5
4-Jun-06	32	32	31	29	29	29	30	30	32	33	35	36	37	37	38	39	40	A	39	40	36	33	31	31	33.9	39.9
5-Jun-06	27	26	26	26	26	21	25	25	28	35	36	35	31	33	33	35	33	35	38	36	30	23	26	23	29.7	37.6
6-Jun-06	23	16	P	P	P	P	P	13	C	C	C	C	A	9	10	11	12	12	12	11	8	6	6	4	N	22.6
7-Jun-06	4	4	5	5	1	A	1	6	6	7	9	11	13	16	20	21	23	22	21	20	17	17	18	22	12.6	22.5
8-Jun-06	20	20	19	19	A	15	12	12	16	12	11	15	M	11	7	8	7	9	9	7	9	10	9	9	12.1	20.4
9-Jun-06	9	10	9	10	8	A	8	9	11	12	13	13	14	14	15	16	15	16	17	17	16	10	6	4	11.9	16.8
10-Jun-06	4	3	2	2	A	2	2	2	3	3	5	6	7	7	7	8	9	9	9	9	9	6	4	4	5.2	9.4
11-Jun-06	4	3	3	A	3	4	4	5	7	8	8	9	9	9	8	7	8	9	9	9	8	6	5	4	6.5	9.4
12-Jun-06	4	4	A	3	2	2	2	2	5	6	2	2	2	2	2	N	N	N	N	N	N	N	N	N	N	6.1
13-Jun-06	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	0.0
14-Jun-06	N	N	N	N	N	N	N	N	N	N	10	13	15	16	21	24	26	27	25	25	20	16	13	A	N	27.0
15-Jun-06	14	15	12	8	5	1	0	3	7	10	13	15	16	16	17	18	17	16	15	12	12	11	A	11	11.6	17.5
16-Jun-06	6	10	7	8	5	1	1	1	1	3	4	10	9	12	14	16	14	14	14	15	16	A	18	22	9.6	21.9
17-Jun-06	23	23	20	18	15	13	14	13	15	15	16	16	16	16	16	15	14	15	16	15	A	12	12	12	15.7	23.4
18-Jun-06	12	12	12	11	11	10	10	11	12	13	14	15	15	16	17	18	18	19	19	A	17	16	11	11	13.9	18.8
19-Jun-06	9	11	10	8	5	4	2	5	11	15	17	18	18	17	15	10	6	7	A	12	13	13	10	10	10.7	17.9
20-Jun-06	8	8	7	9	10	9	8	8	6	9	13	15	16	15	16	16	18	19	16	16	11	9	7	5	11.3	18.7
21-Jun-06	2	9	10	10	10	A	7	8	13	16	19	22	25	26	25	25	24	25	25	24	19	13	18	17	17.0	25.7
22-Jun-06	17	16	15	15	A	11	9	9	11	17	20	19	20	21	21	21	20	20	20	20	20	18	21	22	17.5	22.2
23-Jun-06	19	14	13	13	14	A	11	12	14	18	21	22	24	25	25	25	26	25	25	24	18	10	11	11	18.2	25.8
24-Jun-06	8	5	6	8	A	4	2	4	6	10	16	22	25	24	24	23	23	21	19	18	16	13	11	9	13.7	24.8
25-Jun-06	9	6	6	A	5	2	1	5	9	12	15	19	20	21	23	24	24	25	25	24	23	18	15	15	15.2	25.3
26-Jun-06	14	12	A	11	10	6	5	5	8	5	16	29	34	35	30	26	28	29	30	28	22	15	3	1	17.4	34.7
27-Jun-06	1	A	2	3	0	1	0	4	9	13	17	18	18	19	19	20	20	20	19	16	15	18	18	21	12.8	21.5
28-Jun-06	A	19	18	15	10	5	2	3	5	7	16	21	19	20	22	25	26	25	25	24	24	26	23	A	17.2	25.8
29-Jun-06	22	23	21	16	16	10	7	11	16	18	20	20	19	19	19	18	19	20	21	20	18	12	A	15	17.3	22.9
30-Jun-06	15	16	16	16	16	14	13	13	13	18	20	19	20	20	20	22	22	21	20	18	17	A	7	6	16.6	21.9
Hourly Avg	13.6	13.2	12.0	12.2	10.3	9.0	8.4	9.7	12.3	14.7	17.4	19.8	20.7	20.2	20.8	21.7	21.8	21.4	21.6	20.6	18.4	15.8	14.8	14.3		
Hourly Max	32.4	32.4	30.7	29.1	28.9	30.7	37.6	34.3	32.3	36.1	38.7	37.9	39.3	42.5	42.8	44.0	42.8	43.8	43.1	42.0	36.2	33.0	31.5	31.1		

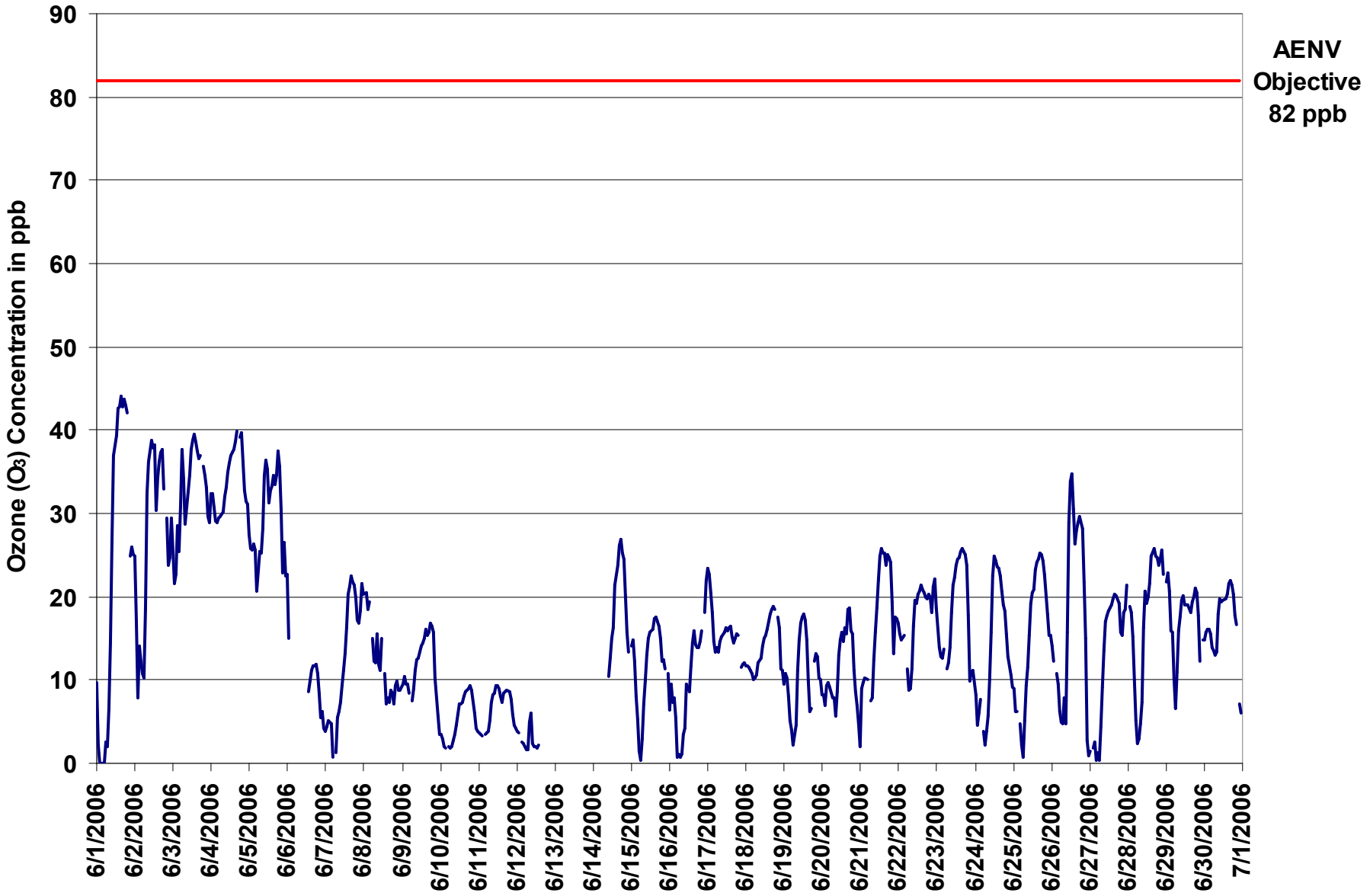


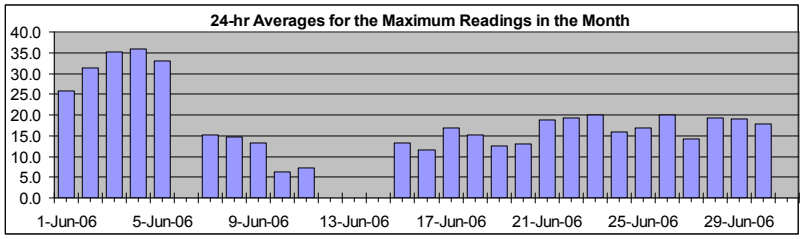
Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	46.3	ppb	1-Jun	15:00 16:00
Maximum 24-hr Value:	36.0	ppb	4-Jun	

AIC Time:	28 hrs	Operational Time:	639 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	93.2%

Percentile	99	95	75	50	25	5	1	Average	Median
	44.6	38.7	23.9	16.9	10.6	3.4	2.1	18.2 ppb	16.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	22	7	0	1	1	1	6	4	11	20	32	41	43	44	46	46	45	46	46	45	A	31	29	28	25.8	46.3
2-Jun-06	28	24	20	21	16	16	16	29	36	39	41	40	40	33	37	39	39	41	41	A	33	29	29	33	31.3	40.8
3-Jun-06	29	27	26	33	28	33	40	39	33	36	37	39	41	41	40	39	38	38	A	37	37	34	32	32	35.2	41.2
4-Jun-06	34	33	32	31	31	31	31	32	34	34	36	38	39	39	40	41	43	A	45	43	40	35	33	33	36.0	45.1
5-Jun-06	31	30	28	28	29	25	29	29	32	38	39	38	34	36	36	38	36	37	39	38	34	30	29	29	33.0	39.4
6-Jun-06	29	22	P	P	P	P	P	16	C	C	C	C	A	12	12	13	14	14	14	14	12	8	9	6	N	29.2
7-Jun-06	5	6	8	7	2	A	5	8	8	10	11	13	16	21	23	25	25	24	23	23	20	19	23	24	15.3	25.2
8-Jun-06	23	23	21	22	A	20	15	14	19	15	14	18	M	14	14	9	9	11	11	10	11	12	10	10	14.8	23.2
9-Jun-06	11	12	11	11	10	A	9	12	13	13	14	14	15	15	16	17	16	17	18	17	17	14	7	5	13.2	17.7
10-Jun-06	4	4	3	2	A	3	3	3	4	4	6	7	8	8	8	9	9	10	10	10	10	8	6	4	6.1	10.0
11-Jun-06	4	4	4	A	4	4	5	7	8	9	9	10	10	9	9	8	9	9	9	9	9	7	5	5	7.3	10.0
12-Jun-06	4	4	A	3	3	3	3	2	17	17	3	2	3	3	3	N	N	N	N	N	N	N	N	N	N	17.5
13-Jun-06	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	0.0
14-Jun-06	N	N	N	N	N	N	N	N	N	N	12	15	19	21	23	26	28	29	27	26	24	18	15	A	N	28.9
15-Jun-06	15	16	15	10	8	3	2	6	10	11	15	16	17	18	18	19	18	17	17	14	14	13	A	13	13.3	18.6
16-Jun-06	8	11	10	10	8	2	3	2	3	6	7	12	10	14	15	18	17	16	15	16	19	A	20	25	11.6	24.7
17-Jun-06	24	24	22	20	17	15	15	15	16	17	17	17	17	17	17	16	15	16	16	16	A	13	13	13	16.8	24.4
18-Jun-06	12	12	12	12	12	11	11	12	13	14	15	16	16	17	18	19	20	20	20	A	20	18	15	13	15.1	20.2
19-Jun-06	11	12	12	10	7	5	3	8	15	17	18	19	19	18	17	13	8	9	A	15	15	14	13	12	12.6	19.5
20-Jun-06	10	10	9	10	11	10	9	9	7	11	15	17	17	17	17	18	20	20	19	17	15	10	8	8	13.0	19.7
21-Jun-06	8	10	11	11	11	A	8	11	14	18	20	24	27	27	26	26	25	26	26	26	22	17	20	19	18.8	26.5
22-Jun-06	18	17	16	16	A	14	12	11	14	19	21	22	22	22	23	22	23	21	21	22	22	20	23	23	19.3	23.1
23-Jun-06	22	17	13	14	15	A	12	13	16	20	22	24	25	25	26	27	27	26	26	25	22	13	14	14	20.0	27.1
24-Jun-06	12	7	8	10	A	6	3	7	8	13	20	26	27	25	25	25	24	22	21	19	18	14	12	12	15.8	26.6
25-Jun-06	12	8	8	A	8	4	2	8	11	14	18	21	22	22	25	25	26	27	27	25	24	21	17	16	16.9	26.6
26-Jun-06	15	14	A	12	11	9	7	7	10	9	23	33	36	38	34	27	29	30	31	30	25	20	7	2	20.0	37.9
27-Jun-06	2	A	3	4	1	3	1	7	12	17	18	19	19	19	20	21	21	21	20	18	19	19	20	23	14.3	22.8
28-Jun-06	A	20	20	17	16	8	4	5	6	14	20	22	21	21	23	27	27	27	26	24	25	27	25	A	19.4	27.3
29-Jun-06	23	24	24	19	18	14	10	14	18	18	21	21	20	20	20	19	21	21	22	22	20	15	A	16	19.1	23.6
30-Jun-06	16	17	18	17	17	16	15	14	16	20	20	20	20	21	21	22	23	22	22	20	19	A	9	7	17.9	22.7
Hourly Avg	16.1	15.3	14.2	14.2	12.3	11.1	10.3	12.3	15.0	17.4	19.4	21.6	22.3	21.9	22.6	23.4	23.4	22.8	23.5	22.3	20.9	18.5	17.0	16.3		
Hourly Max	33.5	33.3	32.1	33.3	30.9	32.7	40.2	39.4	36.2	38.5	40.8	40.5	42.6	44.3	45.8	46.3	44.9	45.8	46.2	44.8	39.9	35.4	33.0	33.0		

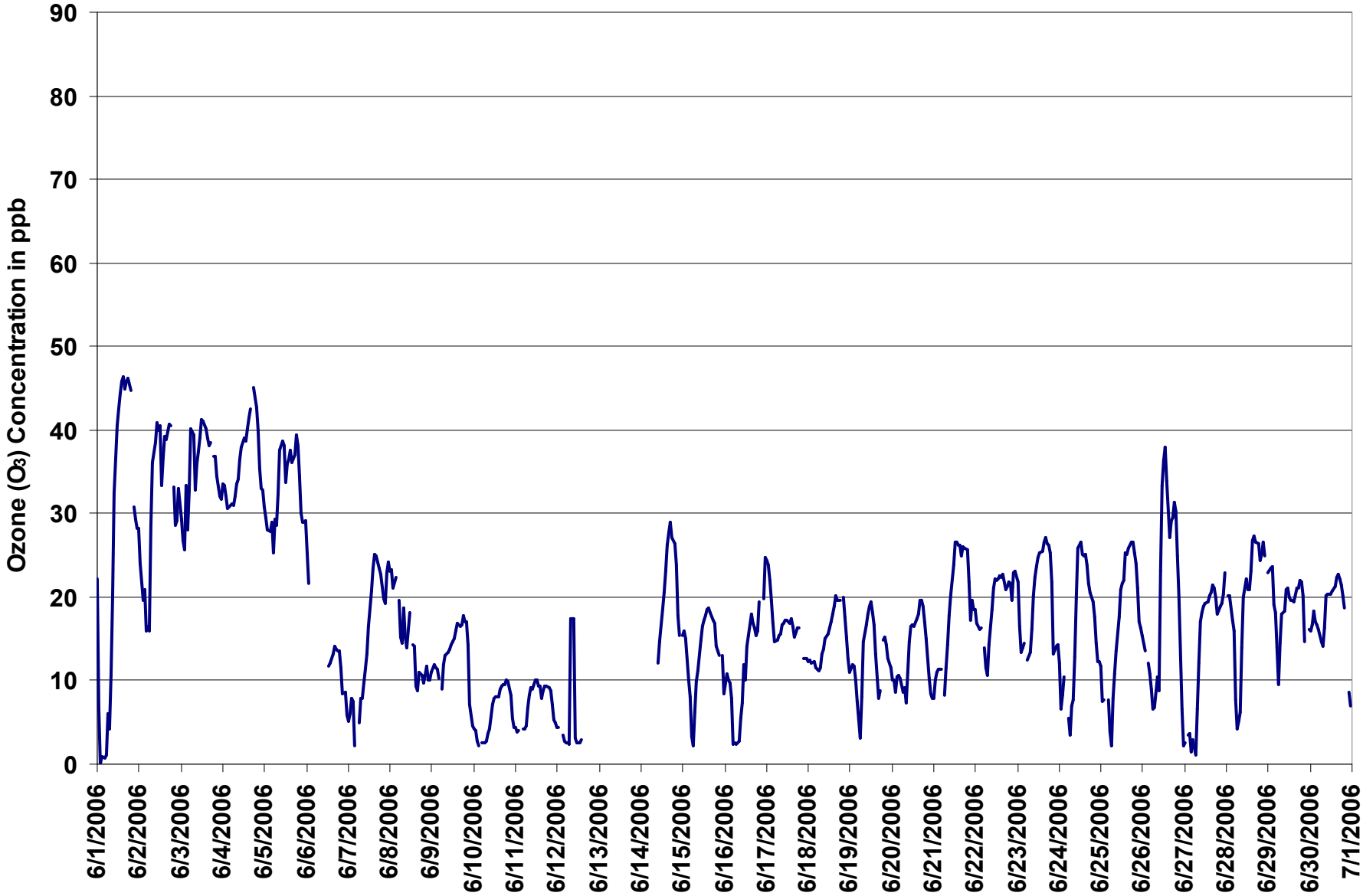
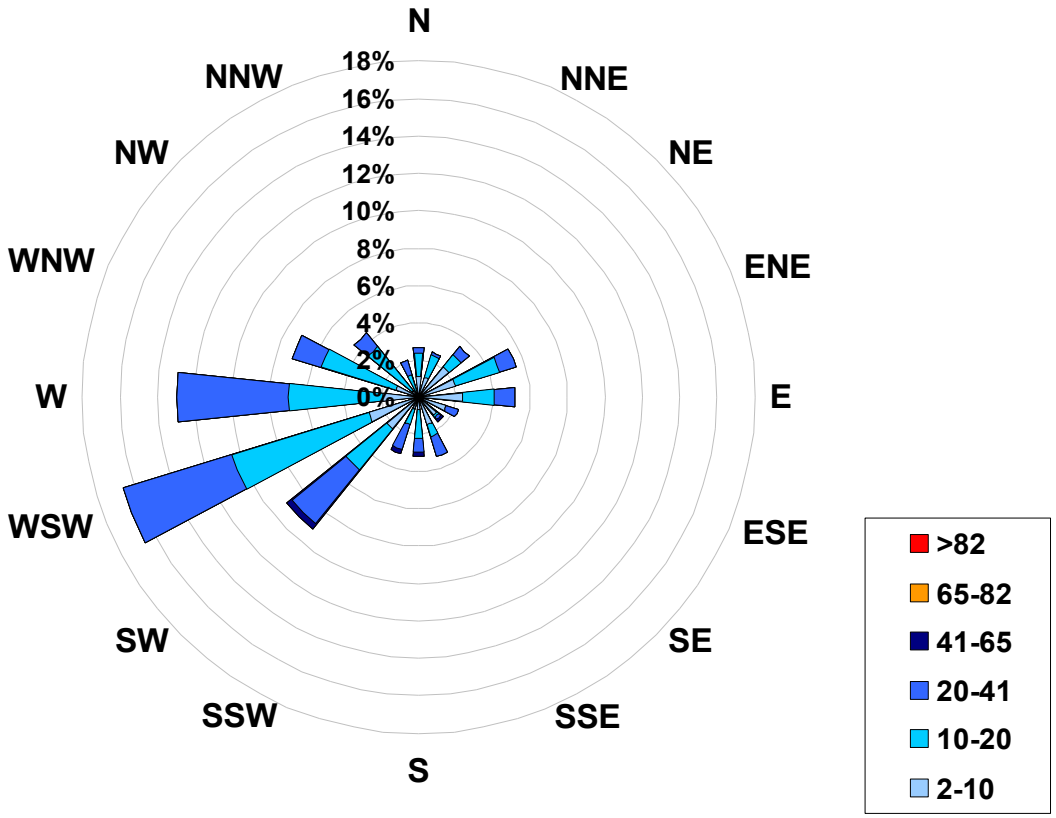


Figure 8. PASZA - Henry Pirker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Henry Pirker Site for June 2006



Calms:	0%

Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
2.0	<	10	195
10	to	20	248
20	to	41	189
41	to	65	7
65	to	82	0
	>	82	0
Total Non-Zero Values			639

PASZA - Henry Pirker - Ozone Monthly Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

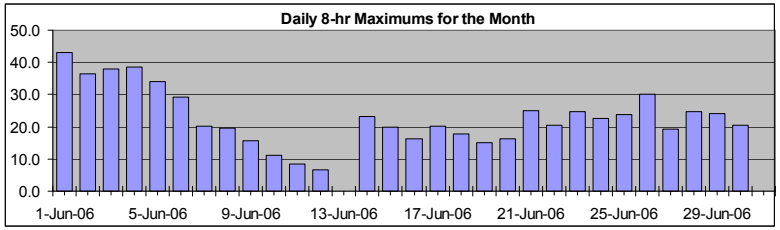
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Objective Limit: **Alberta Environment:** 8-hr 65 ppb

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	43.0	ppb	1-Jun	20:00 21:00



Percentile	99	95	75	50	25	5	1
	38.2	34.5	20.4	15.2	9.4	3.7	2.3

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Jun-06	33	29	24	19	15	10	6	2	2	3	7	11	16	21	26	32	36	40	42	43	43	40	38	35	43.0
2-Jun-06	33	29	24	20	19	17	15	14	15	18	22	25	28	30	33	36	36	36	36	35	34	33	32	31	36.3
3-Jun-06	29	27	25	26	25	26	28	28	29	30	32	33	34	35	36	36	37	37	38	38	37	36	35	34	37.9
4-Jun-06	33	32	32	31	31	30	30	30	30	30	31	32	33	34	35	36	37	37	38	38	38	38	37	36	38.5
5-Jun-06	34	33	31	30	28	27	26	25	25	26	28	29	30	31	32	33	34	34	34	34	34	33	32	30	34.2
6-Jun-06	29	27	25	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	11	11	10	10	9	29.1
7-Jun-06	8	7	6	5	4	4	3	4	4	4	5	6	8	9	11	13	15	17	18	20	20	20	20	20	20.2
8-Jun-06	20	20	19	19	19	19	18	17	16	15	14	13	13	13	12	11	10	10	9	8	8	8	8	9	19.7
9-Jun-06	9	9	9	9	9	9	9	9	9	10	10	11	11	12	13	14	14	15	15	16	16	15	14	12	15.7
10-Jun-06	11	9	8	6	4	3	2	2	2	2	3	3	4	4	5	6	6	7	8	8	8	8	8	7	11.0
11-Jun-06	7	6	5	5	4	4	4	4	4	5	6	6	7	8	8	8	8	9	9	8	8	8	7	7	8.6
12-Jun-06	7	6	5	5	4	3	3	3	3	3	3	3	3	3	3	3	N	N	N	N	N	N	N	N	6.5
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
14-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	18	19	21	22	23	23	22	22	23.1
15-Jun-06	20	18	16	14	12	10	8	7	7	6	6	7	8	10	12	14	15	16	16	16	16	15	15	14	20.0
16-Jun-06	12	11	10	9	8	7	6	5	4	3	3	3	4	5	7	9	10	12	13	13	14	15	15	16	16.1
17-Jun-06	17	19	20	20	20	19	19	17	16	15	15	15	15	15	15	16	16	16	16	16	15	15	14	14	20.1
18-Jun-06	13	13	12	12	12	11	11	11	11	11	11	12	13	13	14	15	16	17	17	17	18	18	17	16	17.8
19-Jun-06	15	14	12	12	10	9	8	7	7	8	8	10	11	13	14	15	14	13	13	12	11	11	10	10	15.1
20-Jun-06	10	11	10	10	9	9	9	8	8	8	9	10	10	11	12	13	15	16	16	16	16	15	14	13	16.4
21-Jun-06	10	9	8	8	8	8	8	8	10	11	12	13	16	17	19	21	23	24	25	25	24	23	22	21	24.9
22-Jun-06	20	19	17	16	16	16	14	13	12	12	13	14	15	16	17	19	20	20	20	20	20	20	20	20	20.5
23-Jun-06	20	19	18	17	17	16	15	14	13	14	15	16	18	18	20	22	23	24	25	25	24	22	21	19	24.8
24-Jun-06	17	14	12	10	8	7	6	5	5	6	7	9	11	14	16	19	21	22	23	22	21	19	18	16	22.6
25-Jun-06	14	13	11	10	8	7	5	5	5	6	7	9	11	13	16	18	20	22	23	23	24	23	22	21	23.8
26-Jun-06	20	18	17	15	14	12	10	9	8	7	8	10	13	17	20	23	25	28	30	30	29	26	23	19	30.1
27-Jun-06	16	14	10	7	4	2	1	2	3	4	6	8	10	12	15	17	18	19	19	19	18	18	18	19	19.1
28-Jun-06	18	18	18	18	17	15	13	10	10	8	8	9	10	12	14	17	19	22	23	23	24	24	25	25	24.6
29-Jun-06	24	24	23	22	21	19	16	16	15	14	14	15	15	16	18	19	19	19	19	19	19	18	18	18	24.0
30-Jun-06	17	17	16	15	15	15	15	15	15	15	15	16	16	17	18	19	20	20	21	20	20	20	18	16	20.5
Hourly Max	34.0	33.0	32.2	31.4	30.6	30.2	30.2	30.3	30.3	30.4	31.5	32.7	34.4	35.5	35.6	36.0	36.9	39.9	41.9	42.6	43.0	40.5	38.1	35.7	

PASZA - Henry Pirker - Carbon Monoxide Monthly Summary

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

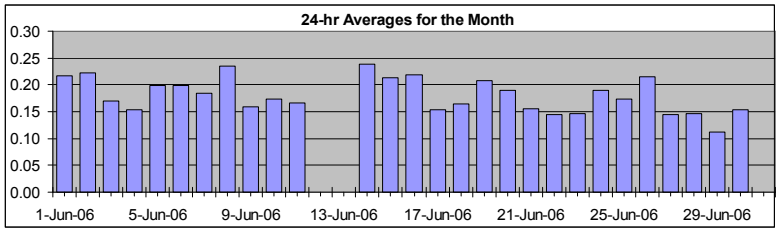
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	0.4	ppm	26-Jun	9:00 10:00
Maximum 24-hr Value:	0.2	ppm	14-Jun	



AIC Time:	29 hrs	Operational Time:	654 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	95.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.2 ppm	0.2 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	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	0.2	0.2	0.2	A	0.3	0.3	0.2	0.22	0.33
2-Jun-06	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	0.22	0.27
3-Jun-06	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	A	0.2	0.2	0.2	0.2	0.2	0.17	0.24
4-Jun-06	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	A	0.2	0.1	0.2	0.2	0.2	0.2	0.15	0.18
5-Jun-06	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.25
6-Jun-06	0.2	0.2	P	P	P	P	P	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	0.20	0.35
7-Jun-06	0.2	0.2	0.2	0.2	0.2	A	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.30
8-Jun-06	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.2	0.2	C	C	C	A	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.23	0.29
9-Jun-06	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3	0.3	0.16	0.29
10-Jun-06	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.17	0.23
11-Jun-06	0.1	0.1	0.1	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.17	0.21
12-Jun-06	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	N	N	N	N	N	N	N	N	N	N	N	0.22
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.1	0.2	0.3	0.3	0.3	N	0.28
14-Jun-06	A	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.24	0.31
15-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.21	0.27
16-Jun-06	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	0.2	0.2	0.2	0.2	A	0.2	0.2	0.22	0.29
17-Jun-06	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	A	0.2	0.2	0.2	0.15	0.17
18-Jun-06	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	A	0.2	0.2	0.2	0.2	0.16	0.24
19-Jun-06	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	A	0.2	0.2	0.2	0.2	0.2	0.21	0.32
20-Jun-06	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.24
21-Jun-06	0.2	0.2	0.1	0.1	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.16	0.22
22-Jun-06	0.1	0.1	0.1	0.1	A	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.14	0.18
23-Jun-06	0.2	0.2	0.2	0.1	0.1	A	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.15	0.25
24-Jun-06	0.2	0.3	0.2	0.2	A	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	0.19	0.29
25-Jun-06	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	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.17	0.26
26-Jun-06	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.22	0.38
27-Jun-06	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.15	0.25
28-Jun-06	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.15	0.23
29-Jun-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	A	0.1	0.11	0.17
30-Jun-06	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.4	0.3	0.15	0.35
Hourly Avg	0.18	0.18	0.17	0.17	0.18	0.20	0.21	0.21	0.19	0.19	0.18	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.18	0.21	0.21	0.19		
Hourly Max	0.25	0.28	0.25	0.23	0.25	0.30	0.31	0.35	0.32	0.38	0.31	0.27	0.26	0.25	0.26	0.31	0.32	0.27	0.25	0.26	0.26	0.29	0.35	0.32		

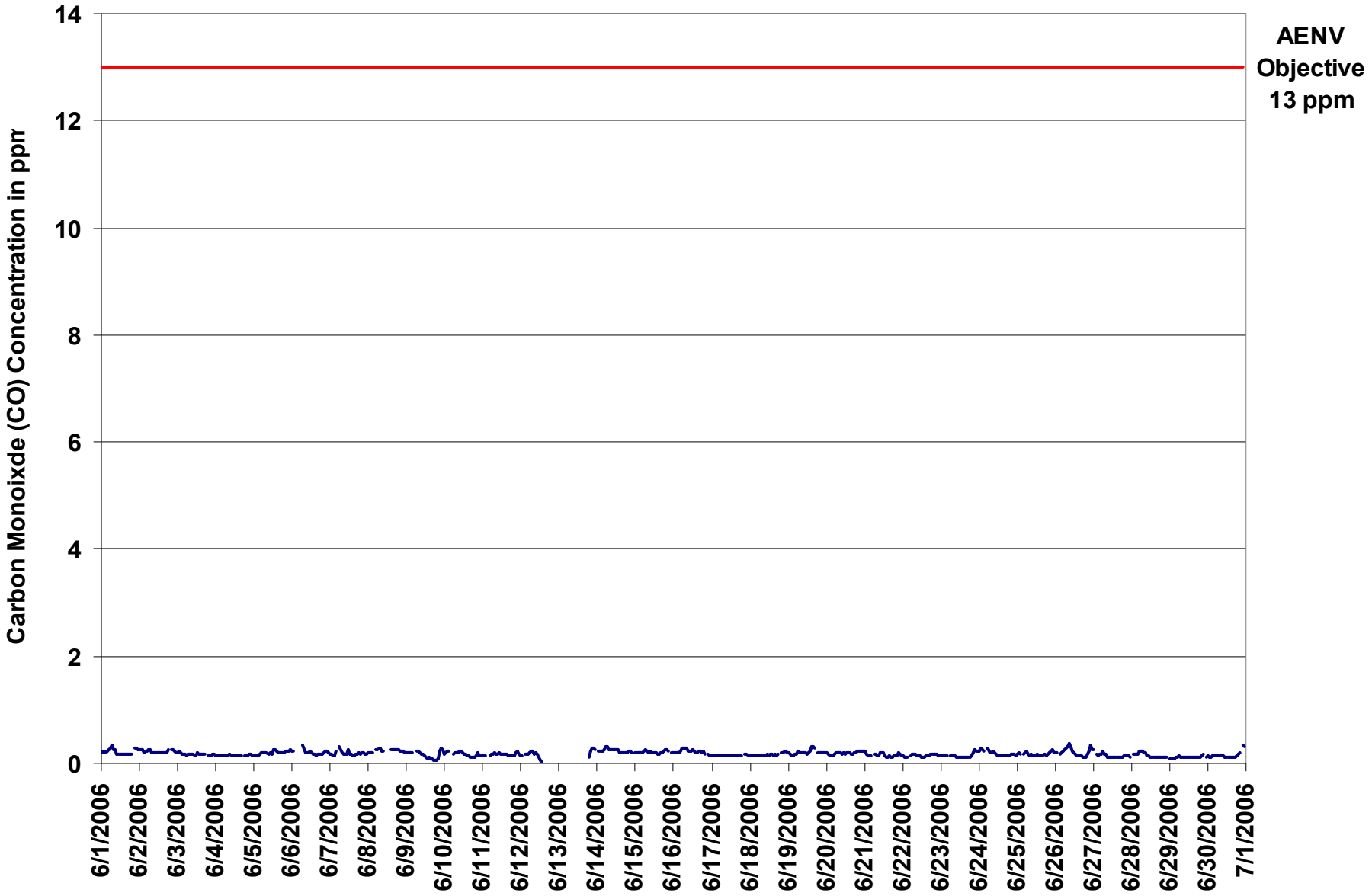


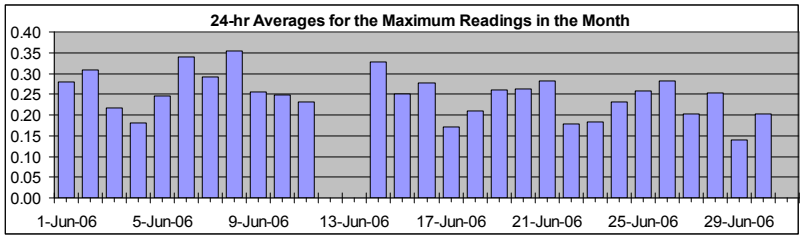
Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Carbon Monoxide (CO)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	1.5	ppm	28-Jun	5:00 6:00
Maximum 24-hr Value:	0.4	ppm	8-Jun	

AIC Time:	29 hrs	Operational Time:	654 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	95.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	0.8	0.4	0.3	0.2	0.2	0.2	0.1	0.2 ppm	0.2 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.4	0.4	0.5	0.28	0.46
2-Jun-06	0.9	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.6	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	A	0.3	0.4	0.3	0.2	0.31	0.85
3-Jun-06	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.22	0.50
4-Jun-06	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.20
5-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.25	0.39
6-Jun-06	0.3	0.9	P	P	P	P	P	0.6	0.3	0.3	0.2	0.8	0.4	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.4	0.3	0.3	0.34	0.87
7-Jun-06	0.2	0.2	0.2	0.2	0.5	A	0.5	0.2	0.2	0.2	0.3	1.1	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.29	1.05
8-Jun-06	0.2	0.3	0.2	0.3	A	0.4	0.4	0.7	0.3	0.3	C	C	C	A	0.4	0.4	0.3	0.4	0.3	0.8	0.3	0.3	0.3	0.3	0.35	0.79
9-Jun-06	0.3	0.2	0.3	0.2	0.3	A	0.5	0.7	0.2	0.3	0.5	0.3	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.26	0.70
10-Jun-06	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.4	0.2	0.3	0.2	0.2	0.25	0.37
11-Jun-06	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.2	0.23	0.50
12-Jun-06	0.2	0.2	A	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.4	0.2	0.1	0.1	N	N	N	N	N	N	N	N	N	N	N	0.38
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.2	0.4	0.4	0.4	0.3	N	0.41
14-Jun-06	A	0.4	0.4	0.3	0.3	0.6	0.6	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.4	0.2	0.3	0.3	0.3	A	0.33	0.55
15-Jun-06	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	A	0.4	0.25	0.35
16-Jun-06	0.3	0.2	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.3	A	0.2	0.2	0.28	0.35
17-Jun-06	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	A	0.2	0.2	0.2	0.17	0.21
18-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.2	0.21	0.32
19-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.4	A	0.3	0.3	0.3	0.2	0.2	0.26	0.50
20-Jun-06	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.26	0.42
21-Jun-06	0.3	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	1.4	0.9	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.28	1.39
22-Jun-06	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.21
23-Jun-06	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.18	0.35
24-Jun-06	0.4	0.4	0.3	0.3	A	0.4	0.3	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	0.3	0.2	0.3	0.2	0.23	0.40
25-Jun-06	0.2	0.3	0.2	A	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.6	0.2	0.4	0.3	0.3	0.3	0.3	0.26	0.57
26-Jun-06	0.2	0.3	A	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.4	0.5	0.5	0.3	0.28	0.47
27-Jun-06	0.4	A	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.42
28-Jun-06	A	0.2	0.2	0.2	0.2	1.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	A	0.25	1.52
29-Jun-06	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	A	0.2	0.14	0.21
30-Jun-06	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	A	0.4	0.5	0.20	0.45
Hourly Avg	0.24	0.24	0.21	0.20	0.22	0.31	0.30	0.29	0.24	0.24	0.28	0.30	0.24	0.22	0.21	0.22	0.21	0.22	0.21	0.23	0.27	0.28	0.28	0.25		
Hourly Max	0.85	0.87	0.35	0.30	0.46	1.52	0.55	0.70	0.39	0.56	1.39	1.05	0.50	0.42	0.40	0.45	0.50	0.57	0.35	0.79	0.45	0.47	0.50	0.46		

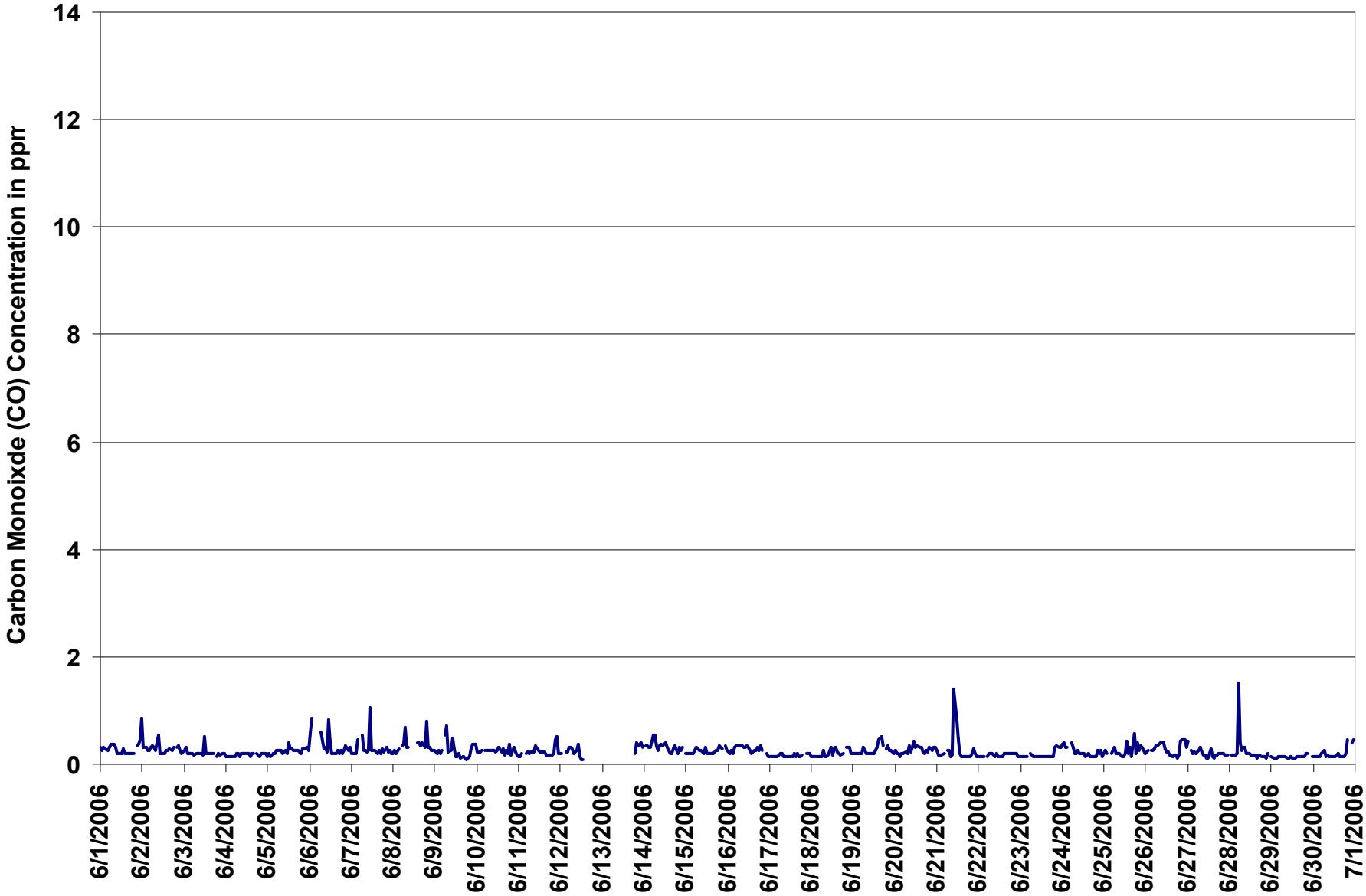
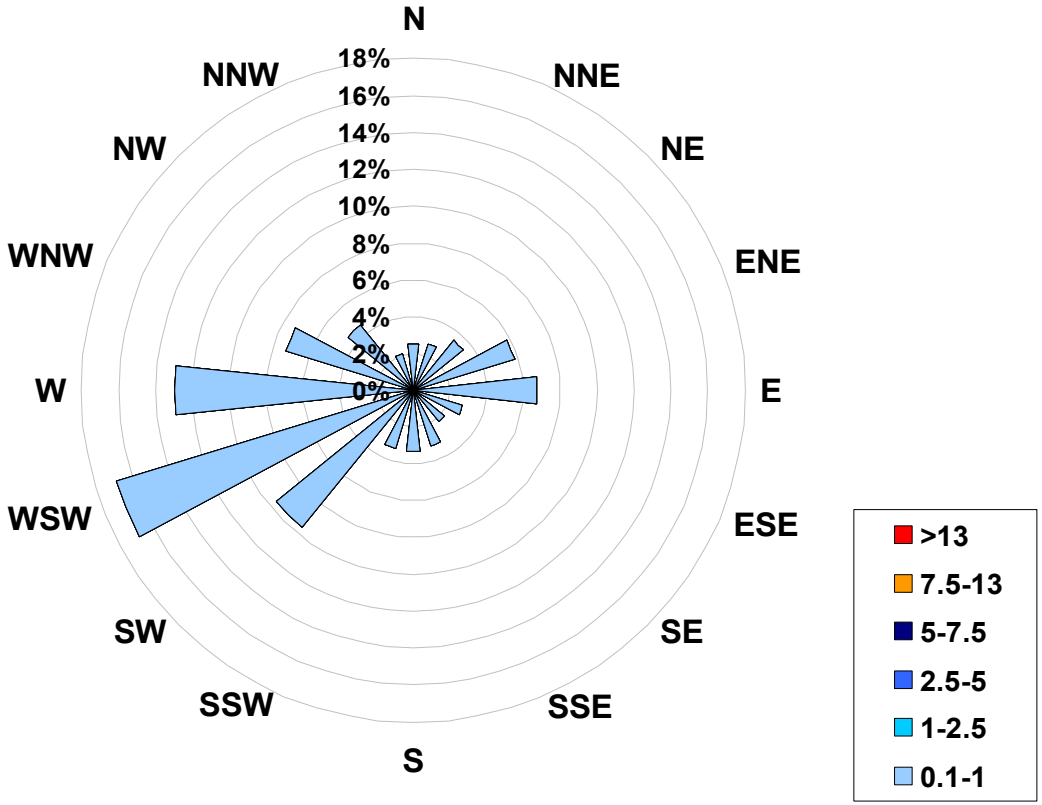


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located at the Henry Pirker Site for June 2006



Calms:	0%

Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0.1	<	1	654
1	to	2.5	0
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			654

PASZA - Henry Pirker - Carbon Monoxide Monthly Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

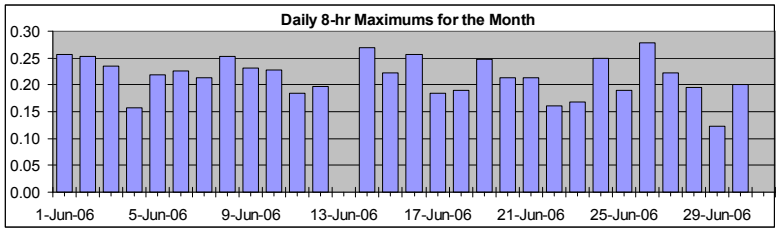
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Objective Limit: **Alberta Environment:** 8-hr 5 ppm

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	0.3	ppm	26-Jun	12:00 13:00



Percentile	99	95	75	50	25	5	1
	0.3	0.2	0.2	0.2	0.2	0.1	0.1

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
2-Jun-06	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
3-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
4-Jun-06	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	0.16
5-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
6-Jun-06	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
7-Jun-06	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
8-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	0.3	0.2	0.2	0.2	0.25
9-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.23
10-Jun-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.23
11-Jun-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
12-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	N	N	N	N	N	N	N	N	N	0.20
13-Jun-06	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
14-Jun-06	N	N	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
15-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
16-Jun-06	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
17-Jun-06	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	0.18
18-Jun-06	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	0.19
19-Jun-06	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	0.25
20-Jun-06	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
21-Jun-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.21
22-Jun-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.16
23-Jun-06	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.17
24-Jun-06	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	0.25
25-Jun-06	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	0.19
26-Jun-06	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	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.28
27-Jun-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.22
28-Jun-06	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.20
29-Jun-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12
30-Jun-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.20
Hourly Max	0.23	0.24	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.27	0.28	0.28	0.27	0.26	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.24	

PASZA - Henry Pirker - Total Hydrocarbons Monthly Summary

HOURLY AVERAGE TABLE

Total Hydrocarbons (THC)

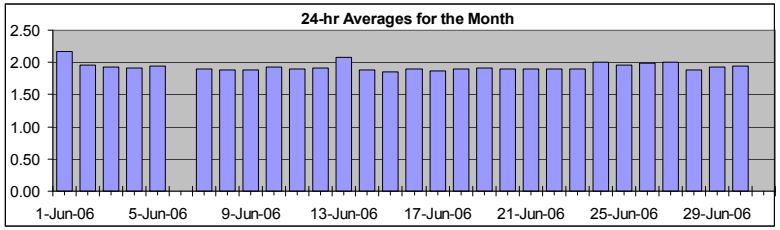
Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Objective Limit: **Alberta Environment:** 1-hr na ppm | 24-hr na ppm

Summary

Maximum 1-hr Average:	2.7	ppm	1-Jun	3:00 4:00
Maximum 24-hr Value:	2.2	ppm	1-Jun	



AIC Time:	34 hrs	Operational Time:	674 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	98.9%

Percentile	99	95	75	50	25	5	1	Average	Median
	2.5	2.2	2.0	1.9	1.9	1.8	1.8	1.9 ppm	1.9 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	2.2	2.3	2.4	2.7	2.7	2.7	2.6	2.5	2.3	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.16	2.69
2-Jun-06	2.0	2.2	2.3	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	A	1.9	1.9	1.9	1.9	1.96	2.27
3-Jun-06	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	P	1.9	1.9	1.9	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.92	1.99
4-Jun-06	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	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.94
5-Jun-06	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.94	2.03
6-Jun-06	2.0	2.1	P	P	P	P	P	P	2.3	2.2	2.2	C	C	C	C	A	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	N	2.27
7-Jun-06	1.9	1.9	1.9	1.9	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.89	2.01
8-Jun-06	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	M	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.88	1.93
9-Jun-06	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	1.88	2.04
10-Jun-06	2.0	2.0	2.0	2.1	A	2.1	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.93	2.15
11-Jun-06	1.8	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.90	1.97
12-Jun-06	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	1.92	2.01
13-Jun-06	2.0	A	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.0	2.2	2.1	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.08	2.26
14-Jun-06	A	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.88	2.00
15-Jun-06	1.8	1.8	1.9	1.9	1.9	1.9	2.0	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	1.9	A	1.9	1.85	1.95
16-Jun-06	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	A	1.9	1.9	1.89	2.02
17-Jun-06	1.8	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	1.8	1.8	A	1.9	1.9	1.9	1.87	1.91
18-Jun-06	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	A	1.9	1.9	1.9	2.0	1.90	1.97
19-Jun-06	2.1	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.91	2.06
20-Jun-06	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	1.90	1.99
21-Jun-06	2.0	1.9	1.9	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.90	2.05
22-Jun-06	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.90	1.99
23-Jun-06	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.0	1.90	2.02
24-Jun-06	2.1	2.2	2.2	2.2	A	2.6	2.2	2.1	2.0	2.1	2.1	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.00	2.62
25-Jun-06	2.0	2.0	2.0	A	2.1	2.1	2.2	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.95	2.18
26-Jun-06	2.0	2.0	A	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.2	1.99	2.23
27-Jun-06	2.3	A	2.3	2.4	2.6	2.5	2.5	2.1	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	2.00	2.61
28-Jun-06	A	1.8	1.8	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.88	1.98
29-Jun-06	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	1.92	2.00
30-Jun-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.3	1.95	2.33
Hourly Avg	1.98	1.96	1.99	2.01	2.02	2.06	2.02	1.98	1.97	1.95	1.93	1.90	1.88	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.88	1.92	1.94	1.96		
Hourly Max	2.31	2.30	2.36	2.69	2.67	2.65	2.61	2.49	2.30	2.25	2.23	2.24	2.05	2.01	2.18	2.07	1.99	1.94	1.93	1.93	1.99	2.08	2.23	2.33		

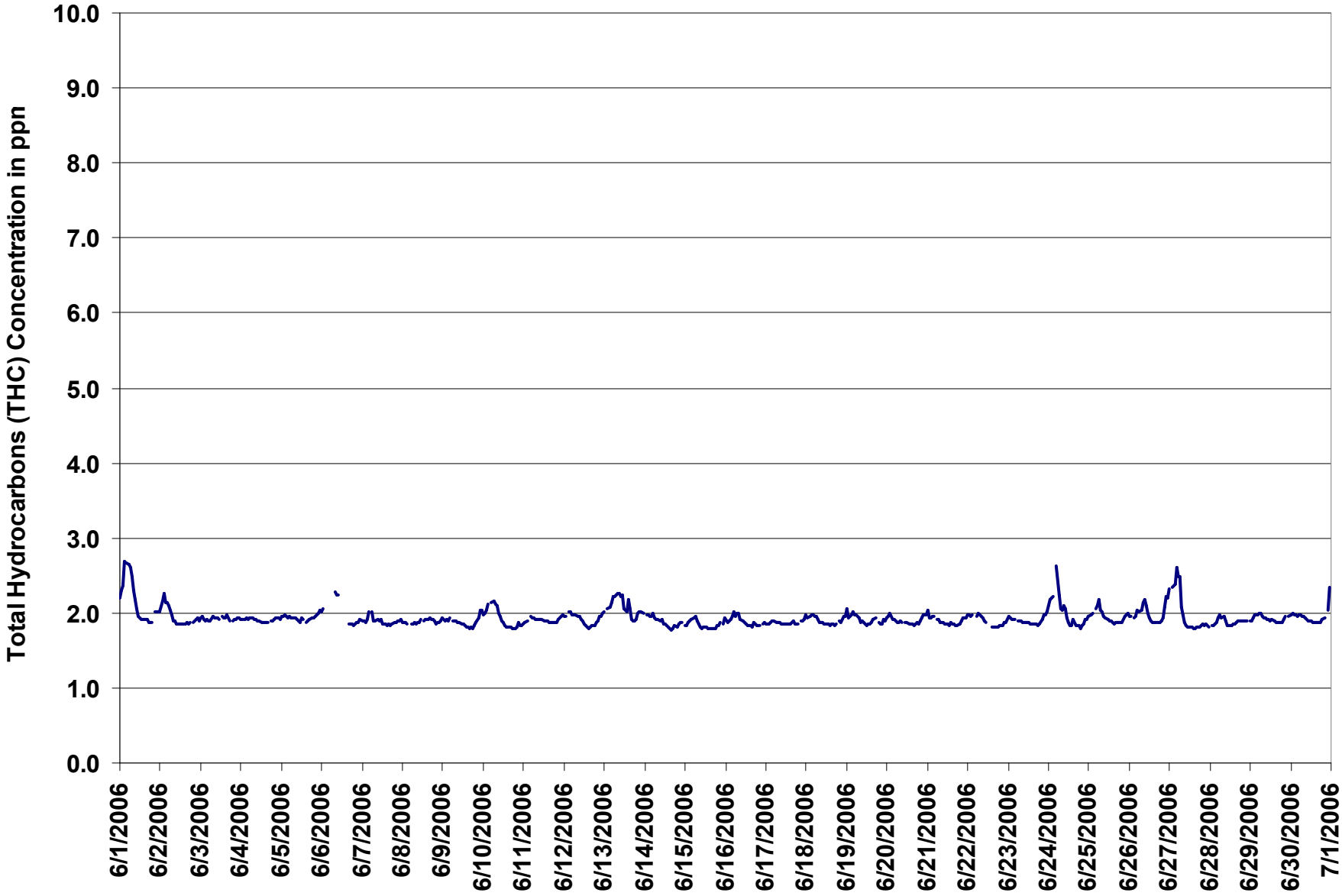


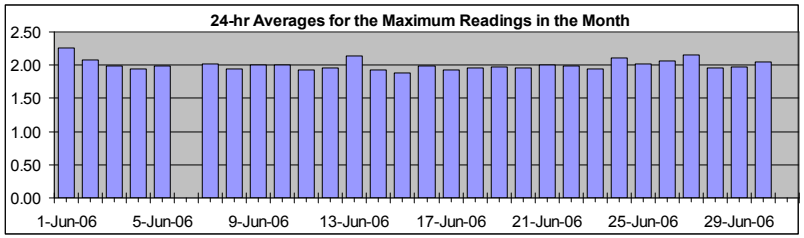
Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Hydrocarbons (THC)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	3.5	ppm	30-Jun	23:00 0:00
Maximum 24-hr Value:	2.3	ppm	1-Jun	

AIC Time:	34 hrs	Operational Time:	674 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	98.9%

Percentile	99	95	75	50	25	5	1	Average	Median
	2.8	2.4	2.0	2.0	1.9	1.9	1.8	2.0 ppm	2.0 ppm

Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	2.3	2.4	2.5	3.2	2.8	2.8	2.8	2.7	2.4	2.3	2.1	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	A	2.0	2.1	2.1	2.27	3.20
2-Jun-06	2.8	2.3	2.4	2.5	2.3	2.2	2.2	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	2.1	2.0	2.0	2.08	2.76
3-Jun-06	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.0	2.0	P	2.0	2.0	2.0	2.4	1.9	A	1.9	1.9	2.0	2.0	2.0	1.99	2.43
4-Jun-06	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	1.94	1.97
5-Jun-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	1.9	2.0	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	1.99	2.09
6-Jun-06	2.1	2.2	P	P	P	P	P	P	2.4	2.3	2.3	C	C	C	C	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	N	2.35
7-Jun-06	1.9	1.9	1.9	2.1	2.2	A	2.2	1.9	1.9	2.0	2.1	2.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.7	2.02	2.71
8-Jun-06	1.9	1.9	2.1	1.9	A	1.9	1.9	2.0	1.9	1.9	1.9	1.9	M	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.94	2.07
9-Jun-06	2.1	1.9	2.0	1.9	2.0	A	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	2.2	1.8	1.9	1.9	2.0	2.6	2.6	2.00	2.65
10-Jun-06	2.1	2.1	2.1	2.2	A	2.2	2.2	2.2	2.8	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	2.01	2.81
11-Jun-06	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	1.93	2.01
12-Jun-06	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	1.95	2.04
13-Jun-06	2.0	A	2.1	2.1	2.2	2.3	2.2	2.3	2.3	2.3	2.2	2.3	2.2	2.1	2.3	2.2	2.0	1.9	1.9	2.0	2.1	2.1	2.1	2.2	2.14	2.32
14-Jun-06	A	2.0	2.0	2.0	2.0	2.2	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	A	1.93	2.18
15-Jun-06	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	2.0	1.8	1.9	1.9	2.0	A	1.9	1.89	2.01
16-Jun-06	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.4	2.0	1.9	2.0	A	1.9	1.9	1.99	2.35
17-Jun-06	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	2.3	2.2	1.9	1.9	A	1.9	1.9	2.0	1.93	2.29
18-Jun-06	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	1.9	2.0	1.9	1.9	1.9	A	2.1	1.9	2.1	2.1	1.96	2.14
19-Jun-06	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.2	A	2.0	2.0	1.9	2.0	1.9	1.98	2.21
20-Jun-06	2.0	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	1.96	2.11
21-Jun-06	2.2	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	1.9	1.9	1.9	1.9	2.4	2.4	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.0	2.01	2.44
22-Jun-06	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.4	2.2	2.1	1.9	A	A	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.98	2.45
23-Jun-06	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	1.94	2.10
24-Jun-06	2.2	2.3	2.3	2.5	A	2.7	2.5	2.1	2.1	2.2	2.1	2.0	1.9	1.9	2.0	2.6	1.9	1.9	1.9	1.8	1.9	2.0	2.0	2.1	2.11	2.68
25-Jun-06	2.0	2.1	2.1	A	2.1	2.2	2.3	2.2	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	2.0	2.1	2.0	2.02	2.31
26-Jun-06	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.2	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	2.4	2.3	2.06	2.39
27-Jun-06	2.5	A	2.5	2.6	3.2	2.6	2.6	2.4	2.1	2.0	2.3	1.8	1.9	1.8	1.8	1.8	1.8	2.0	1.9	1.9	2.0	1.9	1.9	1.9	2.15	3.20
28-Jun-06	A	1.9	1.9	1.9	1.9	2.3	2.3	2.0	2.0	2.0	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	A	1.95	2.34
29-Jun-06	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	1.97	2.05
30-Jun-06	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	1.9	1.9	1.9	2.2	2.0	2.0	A	2.1	3.5	2.05	3.55
Hourly Avg	2.07	2.02	2.05	2.09	2.10	2.13	2.10	2.05	2.06	2.02	2.00	1.96	1.93	1.93	1.94	1.93	1.92	1.95	1.91	1.91	1.95	1.99	2.03	2.11		
Hourly Max	2.76	2.42	2.51	3.20	3.20	2.80	2.76	2.71	2.81	2.29	2.34	2.69	2.22	2.37	2.44	2.57	2.43	2.35	2.17	2.03	2.13	2.36	2.65	3.55		

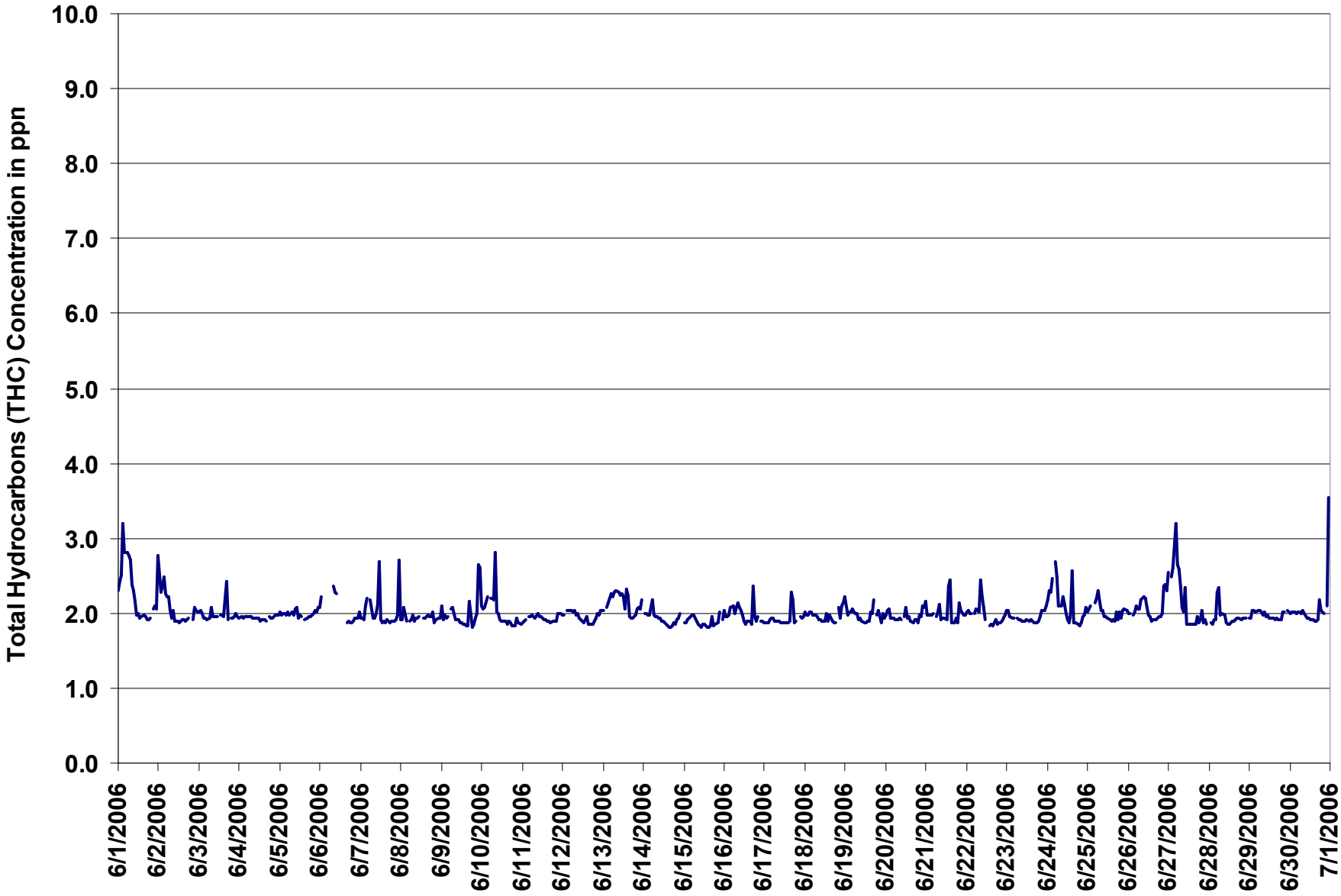
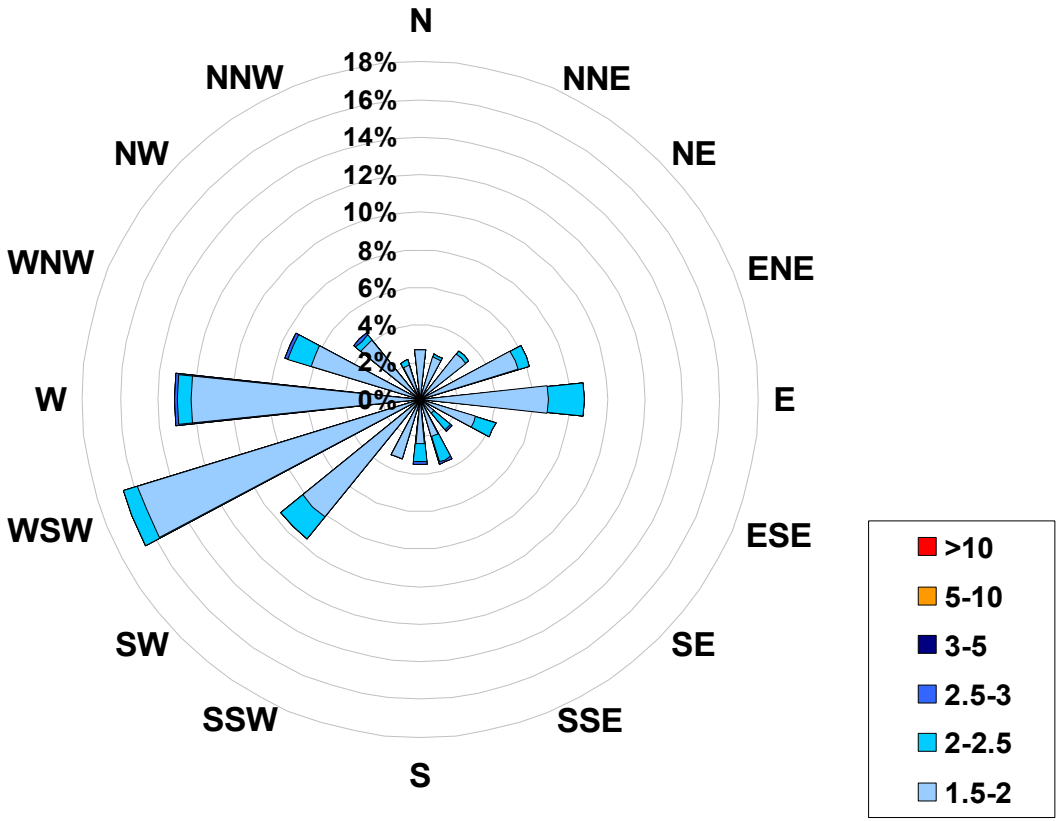


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)
Located at the Henry Pirker Site for June 2006



Calms:	0%

Frequency Distribution of THC in ppm			
Range			Frequency (hrs)
1.5	<	2	577
2	to	2.5	91
2.5	to	3	6
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			674

PASZA - Henry Pirker - Total Reduced Sulphur Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

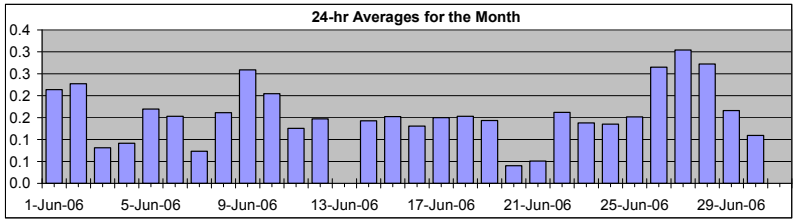
Total Reduced Sulphur (TRS)

Monitoring Dates: June 1, 2006 to July 1, 2006

Objective Limit: **Alberta Environment:** 1-hr na ppb | 24-hr na ppb

Summary

Maximum 1-hr Average:	0.8	ppb	30-Jun	23:00 0:00
Maximum 24-hr Value:	0.3	ppb	27-Jun	



AIC Time:	29 hrs	Operational Time:	660 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	96.1%

Percentile	99	95	75	50	25	5	1	Average	Median
	0.5	0.4	0.2	0.1	0.1	0.0	0.0	0.2 ppb	0.1 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.6
2-Jun-06	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
3-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3
4-Jun-06	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
5-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
6-Jun-06	0	0	P	P	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Jun-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
8-Jun-06	0	0	0	0	A	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.2	0.4
9-Jun-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
10-Jun-06	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
11-Jun-06	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
12-Jun-06	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	N	N	N	N	0.1	0.3
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0	N	0.2
14-Jun-06	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.3
15-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.3
16-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.3
17-Jun-06	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
18-Jun-06	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	0.2
19-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3
20-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
21-Jun-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
22-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
23-Jun-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
24-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
25-Jun-06	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
26-Jun-06	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
27-Jun-06	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
28-Jun-06	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.6
29-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4
30-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0.1	0.8
Hourly Avg	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
Hourly Max	0.5	0.4	0.5	0.5	0.7	0.7	0.8	0.6	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.8		

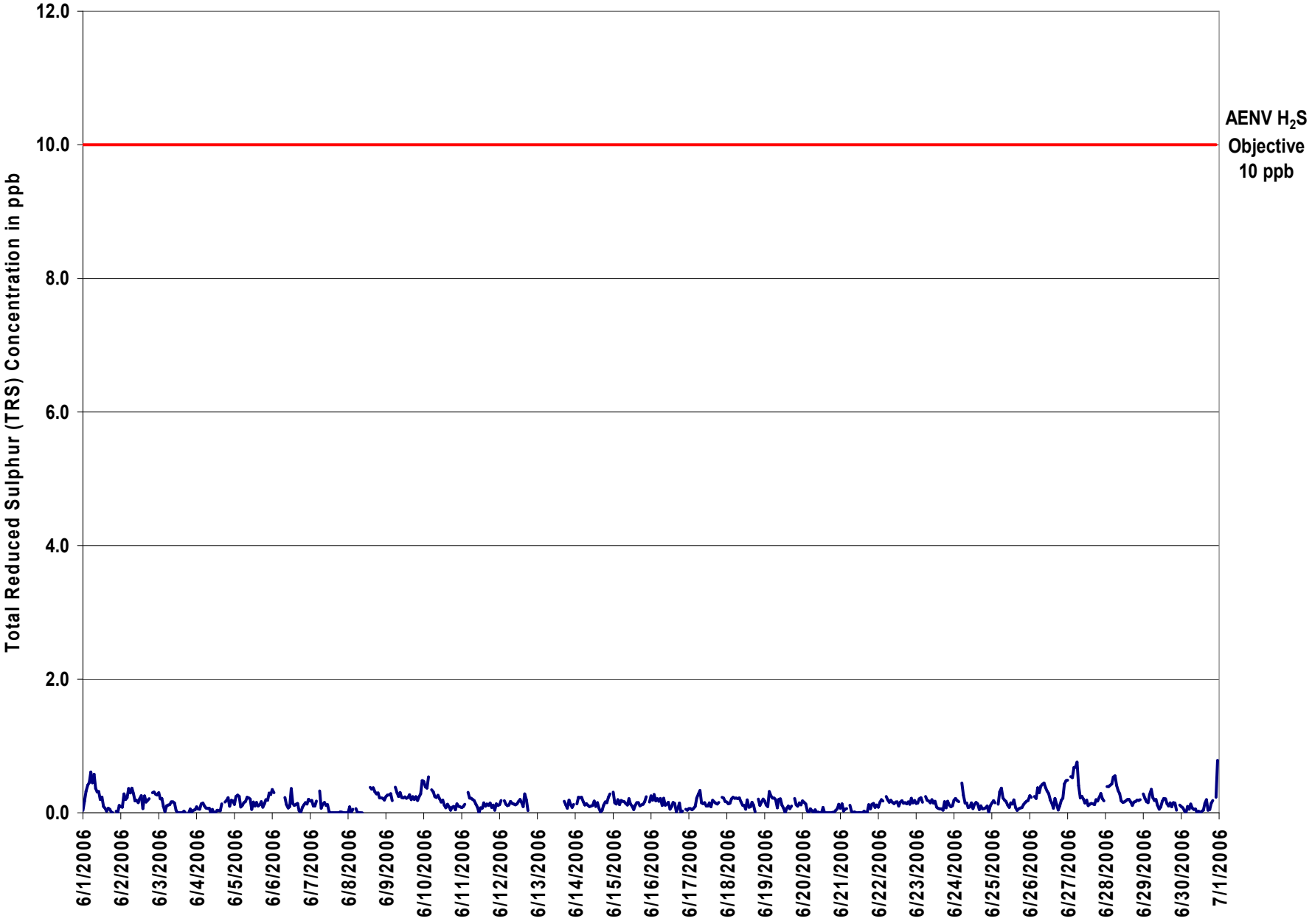


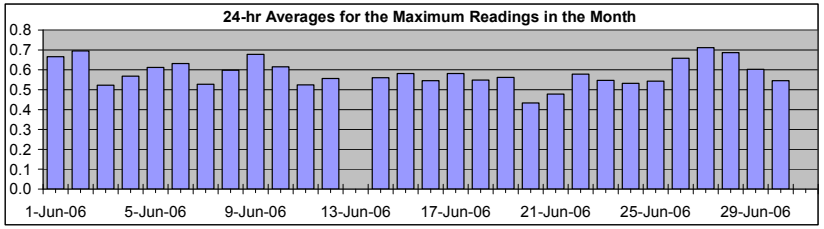
Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	1.4	ppb	6-Jun	1:00 2:00
Maximum 24-hr Value:	0.7	ppb	27-Jun	

AIC Time:	29 hrs	Operational Time:	660 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	96.1%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.0	0.8	0.6	0.6	0.5	0.4	0.3	0.6 ppb	0.6 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	A	0	0	1	0.7	1.1
2-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	1.0
3-Jun-06	1	1	1	1	0	1	1	1	1	1	1	0	1	0	0	0	0	0	A	0	1	0	0	1	0.5	0.7
4-Jun-06	0	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	A	1	0	1	1	1	1	0.6	0.9
5-Jun-06	1	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	0.6	0.8
6-Jun-06	1	1	P	P	P	P	P	P	1	1	1	0	1	1	1	1	1	1	0	0	1	0	1	1	0.6	1.4
7-Jun-06	1	0	1	1	1	A	1	0	1	1	1	1	0	1	1	0	0	0	1	1	1	0	1	0	0.5	1.0
8-Jun-06	1	0	0	1	A	0	0	0	0	1	C	C	C	A	1	1	1	1	1	1	1	1	1	1	0.6	0.9
9-Jun-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
10-Jun-06	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	0	1	1	0	0.6	1.0
11-Jun-06	0	1	0	A	1	1	1	1	0	1	0	0	1	0	1	0	1	0	1	1	1	0	0	1	0.5	0.8
12-Jun-06	0	0	A	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	1	N	N	N	N	N	0.6	0.7
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1	1	0	1	1	1	0	N	0.7
14-Jun-06	A	0	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	A	0.6	0.8
15-Jun-06	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	A	1	0.6	0.9
16-Jun-06	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	0	1	0	0	0	A	0	1	0.5	0.8
17-Jun-06	1	0	0	0	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	1	A	1	1	1	0.6	0.9
18-Jun-06	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	A	1	0	0	1	0.5	0.7
19-Jun-06	1	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	0	1	A	1	1	1	0	0	0.6	0.9
20-Jun-06	0	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0.4	0.6
21-Jun-06	1	1	0	0	1	A	1	0	0	0	0	1	1	0	0	0	0	1	0	0	1	1	1	1	0.5	0.7
22-Jun-06	0	1	1	1	A	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0.6	0.9
23-Jun-06	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	0.5	0.7
24-Jun-06	1	1	1	0	A	1	1	0	1	1	0	1	1	1	1	1	0	1	0	1	0	1	0	0	0.5	0.7
25-Jun-06	0	1	1	A	1	1	1	1	1	1	1	0	1	0	1	0	0	1	0	0	1	1	0	0	0.5	0.8
26-Jun-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0.7	1.0
27-Jun-06	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	0.7	1.2
28-Jun-06	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1	1	A	0.7	1.0
29-Jun-06	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	A	1	0.6	0.8
30-Jun-06	1	1	1	0	1	0	0	0	1	1	0	1	0	0	0	1	1	1	0	1	1	A	1	1	0.5	1.3
Hourly Avg	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6		
Hourly Max	1.0	1.4	0.9	1.0	1.2	1.1	1.2	1.1	1.0	0.9	0.9	0.7	1.0	0.9	0.8	0.7	0.9	0.7	0.7	0.7	0.8	0.9	0.8	1.3		

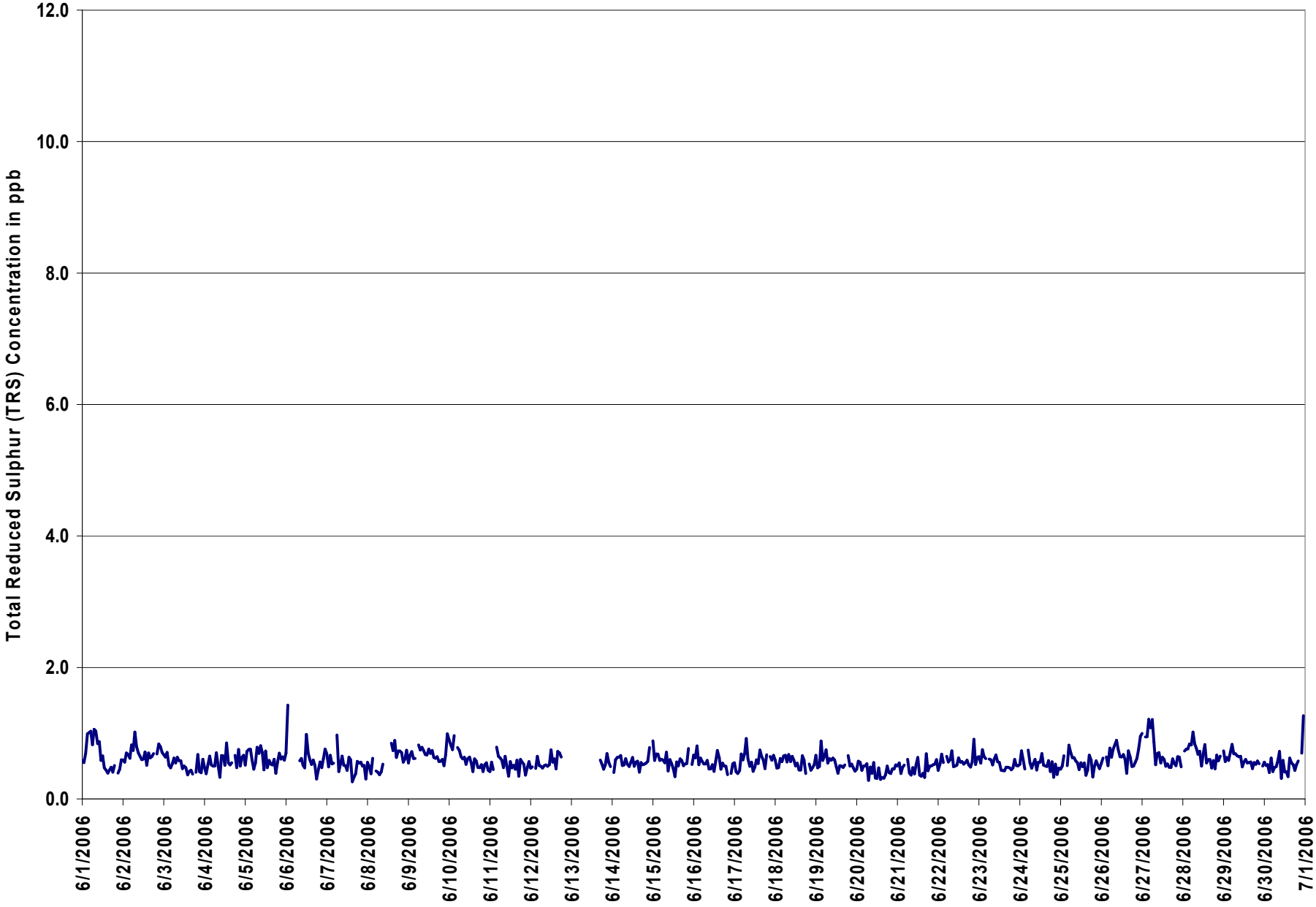
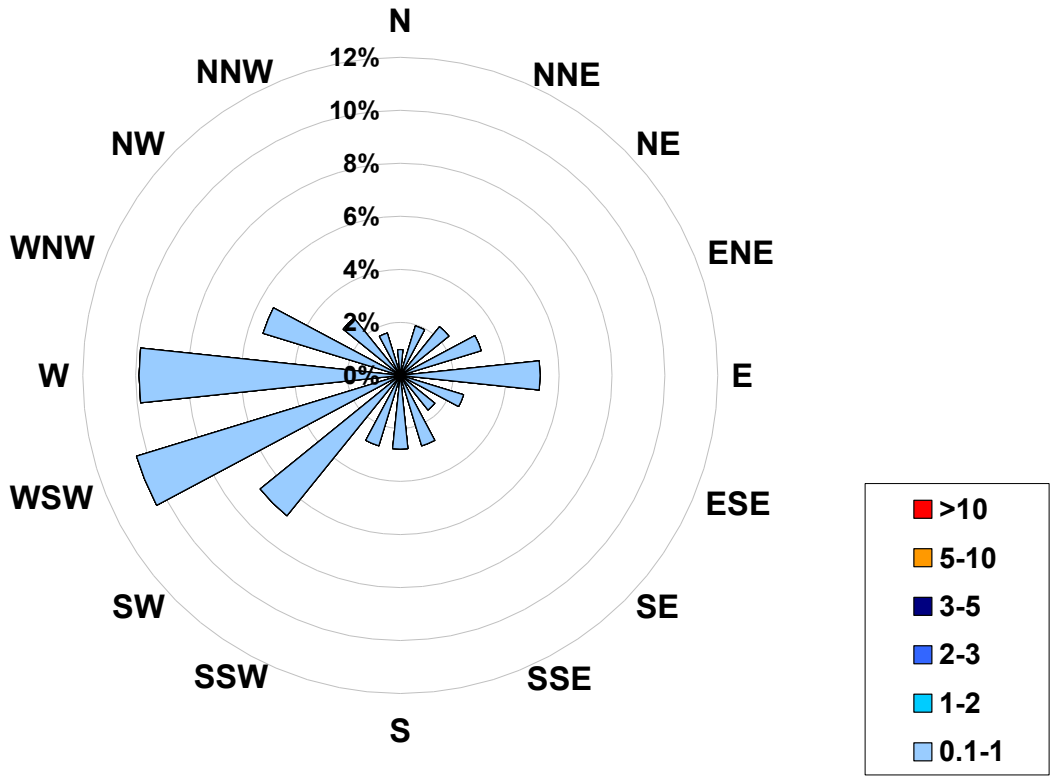


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb) Located at the Henry Pirker Site for June 2006



Calms: 0%

Frequency Distribution of TRS in ppb			
Range			Frequency (hrs)
0.1	<	1	660
1	to	2	0
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			660

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

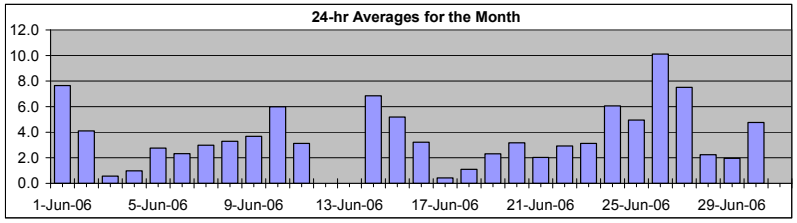
Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2006 to July 1, 2006

Draft Objective Limit: **Alberta Environment:** 1-hr - µg/m³ | 24-hr 30 µg/m³



Summary

Number of 24-hr Exceedances (draft):	0			
Maximum 1-hr Average:	36.0	µg/m³	26-Jun	22:00 23:00
Maximum 24-hr Value:	10.1	µg/m³	26-Jun	

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

AIC Time:	0 hrs	Operational Time:	684 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	95.4%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	17.8	10.5	5.0	3.0	1.3	0.0	0.0	3.8 / 3 µg/m³	3.0 µg/m³

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	10	9	10	9	13	12	11	14	12	11	6	3	2	2	3	1	3	2	3	2	6	16	17	5	7.7	17.3
2-Jun-06	5	8	11	8	8	9	7	6	4	3	2	2	2	3	0	1	0	2	5	1	1	3	4	2	4.1	10.6
3-Jun-06	3	3	1	0	1	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	1	0	0	0.6	3.2
4-Jun-06	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	3	3	3	4	3	2	1.0	4.2
5-Jun-06	2	2	3	3	2	4	4	4	3	1	1	2	5	2	1	1	3	3	2	1	4	5	5	4	2.8	5.2
6-Jun-06	2	3	P	P	P	P	P	P	5	2	3	2	4	3	2	0	0	1	0	1	4	4	3	2	2.3	5.1
7-Jun-06	2	1	1	1	2	6	5	2	2	3	3	3	2	0	1	2	3	5	4	5	5	6	5	5	3.0	6.2
8-Jun-06	5	4	3	3	3	4	5	4	4	5	5	C	C	C	2	3	4	4	4	2	2	2	1	1	3.3	5.4
9-Jun-06	2	2	1	2	2	4	3	2	2	2	1	3	2	2	3	2	2	3	4	6	5	10	12	12	3.7	12.2
10-Jun-06	10	6	7	8	6	6	8	7	9	8	8	5	4	4	5	4	3	2	4	6	5	12	6	2	6.0	12.1
11-Jun-06	2	3	2	2	2	3	4	3	4	5	5	3	3	3	3	0	0	2	2	3	4	6	6	4	3.1	5.9
12-Jun-06	4	4	4	4	4	4	5	5	4	4	2	3	2	3	3	3	2	N	N	N	N	N	N	N	N	4.7
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	10	11	11	7	8	N	10.9
14-Jun-06	6	7	7	6	7	7	6	8	8	8	8	8	8	5	4	4	6	5	8	7	9	9	7	4	6.9	9.3
15-Jun-06	6	4	5	5	7	8	8	6	4	5	4	4	2	3	2	4	4	5	6	11	8	7	0	4	5.2	11.2
16-Jun-06	3	0	3	1	4	2	3	4	7	5	2	4	7	4	3	5	7	4	1	3	D	0	0	0	3.2	7.2
17-Jun-06	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	1	0	1	1	1	2	0	1	0.4	2.1
18-Jun-06	0	0	0	1	0	2	1	1	0	0	1	1	0	0	0	1	2	0	1	3	2	1	5	2	1.1	5.0
19-Jun-06	2	1	2	1	1	3	4	3	3	4	2	1	0	2	4	5	5	4	4	0	2	0	1	1	2.3	5.2
20-Jun-06	1	2	1	2	2	4	5	4	7	5	3	2	3	4	5	0	3	1	2	1	5	6	3	3	3.2	6.7
21-Jun-06	0	0	1	2	2	3	3	3	2	1	0	0	1	2	1	1	2	3	2	5	4	4	4	4	2.0	4.6
22-Jun-06	3	4	3	3	3	5	5	4	5	2	0	1	0	0	1	4	7	4	4	1	4	4	2	2	2.9	6.7
23-Jun-06	4	4	2	1	3	4	4	4	2	0	0	0	0	1	1	1	1	2	2	5	5	9	11	9	3.1	11.0
24-Jun-06	11	12	9	7	8	8	7	9	9	9	6	4	3	4	4	3	2	4	3	4	4	6	4	4	6.1	11.9
25-Jun-06	4	4	7	4	5	5	9	7	9	5	4	4	2	1	1	0	2	4	4	4	9	12	10	6	4.9	11.7
26-Jun-06	6	4	3	2	3	3	4	8	16	19	19	13	11	8	5	5	5	6	6	8	3	19	36	31	10.1	36.0
27-Jun-06	18	22	13	9	10	7	15	19	11	2	0	1	0	1	1	4	3	5	4	7	8	9	7	3	7.5	22.4
28-Jun-06	6	6	3	1	4	4	4	5	8	1	0	1	0	0	0	1	0	0	0	2	2	3	2	1	2.2	7.5
29-Jun-06	2	1	2	0	2	3	3	2	0	1	0	0	1	1	1	1	1	4	1	2	5	6	3	4	2.0	5.9
30-Jun-06	5	4	3	4	5	8	7	6	7	1	1	1	0	0	1	1	4	4	3	10	4	8	15	15	4.8	15.5
Hourly Avg	4.3	4.1	3.8	3.2	3.9	4.5	5.1	5.1	5.0	3.9	3.0	2.6	2.4	2.1	2.0	2.1	2.6	2.8	3.1	4.0	4.5	6.3	6.2	4.9		
Hourly Max	17.6	22.4	13.2	9.3	12.6	11.9	14.8	19.5	16.3	19.5	19.0	13.0	10.7	7.6	4.9	5.4	7.2	6.1	8.0	11.2	10.9	18.6	36.0	30.8		

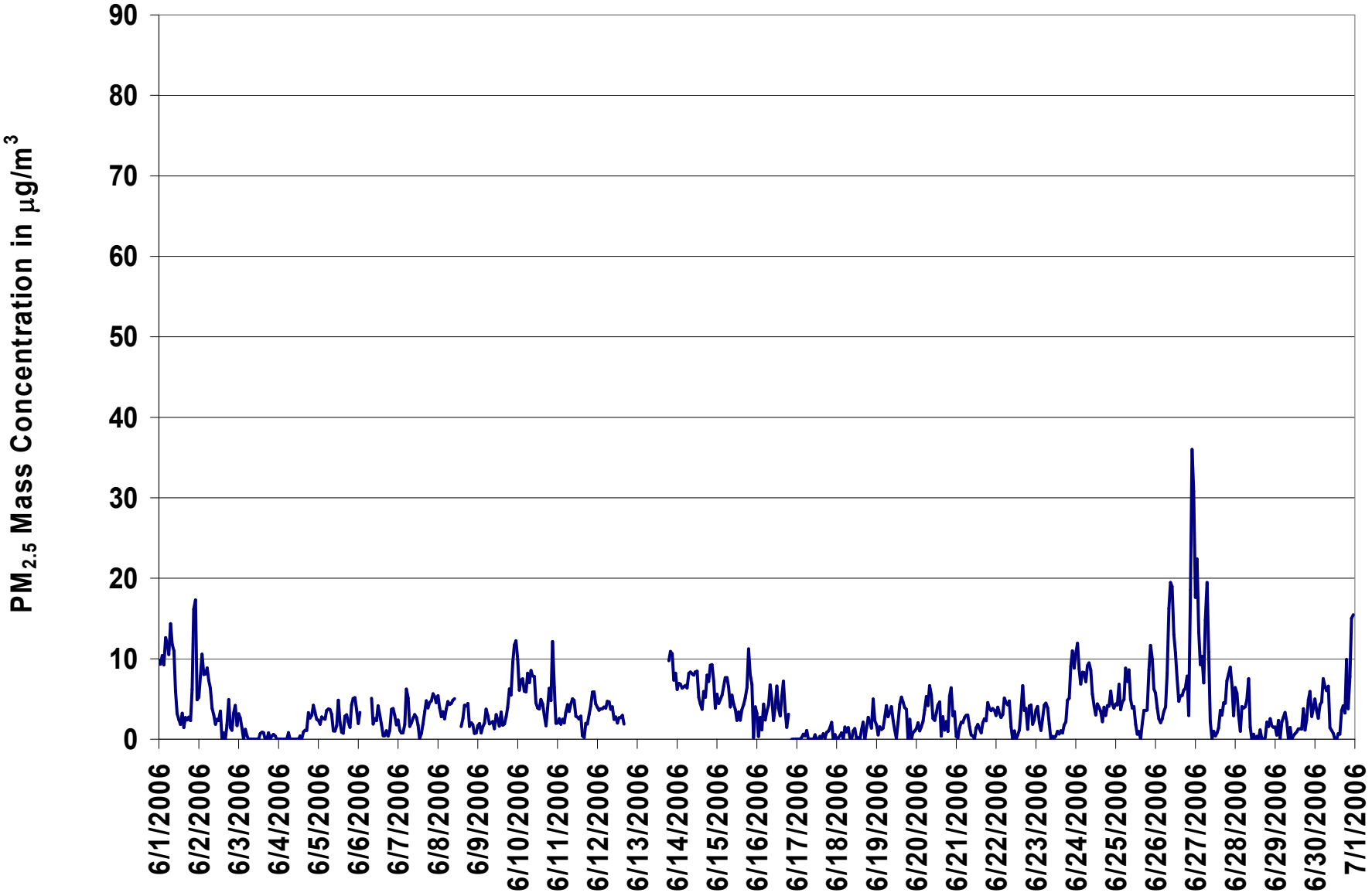


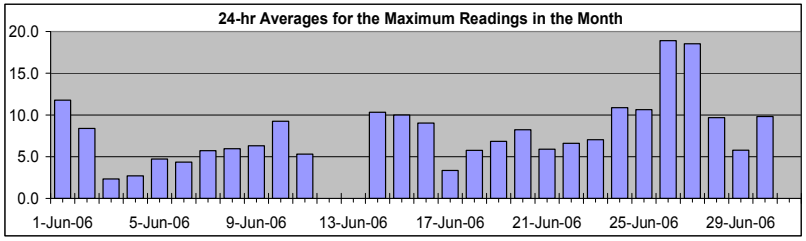
Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	79.2	µg/m³	26-Jun	21:00 22:00
Maximum 24-hr Value:	18.9	µg/m³	26-Jun	

AIC Time:	0 hrs	Operational Time:	685 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	95.6%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	29.1	16.5	9.9	6.7	4.5	2.0	0.9	8.0 / 7 µg/m³	7.1 µg/m³

Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	14	13	14	12	15	14	12	19	14	14	9	6	7	6	6	4	6	5	6	5	21	22	32	6	11.8	31.6
2-Jun-06	11	12	13	11	10	12	12	11	10	12	6	6	9	13	2	3	2	7	11	6	3	7	10	4	8.4	13.5
3-Jun-06	6	6	4	2	3	2	1	2	1	0	1	1	1	2	3	3	4	2	2	2	2	2	2	2	2.3	6.2
4-Jun-06	1	1	1	1	1	2	3	3	1	1	0	1	2	2	2	6	4	4	6	5	5	5	5	4	2.7	6.0
5-Jun-06	4	4	4	4	4	5	5	5	6	3	3	6	8	5	3	2	4	5	5	3	6	7	7	6	4.7	8.1
6-Jun-06	4	8	P	P	P	P	P	P	7	3	4	4	6	5	4	2	2	3	2	3	6	6	5	5	4.4	7.8
7-Jun-06	5	3	2	2	3	10	10	4	4	5	6	5	4	4	5	5	8	7	6	7	7	8	9	8	5.7	10.4
8-Jun-06	9	6	5	7	4	6	7	6	7	9	8	C	C	C	5	7	7	7	6	3	4	3	3	3	6.0	9.4
9-Jun-06	4	3	3	3	4	6	5	4	4	5	4	5	6	5	7	7	4	5	8	8	7	13	15	15	6.3	15.4
10-Jun-06	14	11	9	9	8	8	11	11	10	10	11	9	9	9	8	7	6	5	7	10	8	18	10	3	9.2	17.8
11-Jun-06	5	4	3	4	4	5	6	6	7	7	8	6	4	6	6	4	3	5	4	5	6	8	8	6	5.3	8.2
12-Jun-06	5	5	5	5	6	5	7	7	6	8	5	6	5	6	8	6	6	N	N	N	N	N	N	N	N	7.7
13-Jun-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	14	13	13	10	13	N	13.5
14-Jun-06	8	9	8	8	9	8	8	11	11	11	12	15	13	13	8	8	10	9	13	10	16	15	9	6	10.3	15.8
15-Jun-06	9	8	6	7	9	9	10	9	9	9	8	9	7	10	9	8	9	12	16	22	11	14	6	14	10.0	21.6
16-Jun-06	10	4	8	7	12	5	7	9	12	13	9	15	16	12	11	15	15	11	8	9	3	3	2	0	9.0	16.3
17-Jun-06	1	0	1	2	2	3	4	1	3	7	5	5	3	2	5	3	7	3	5	6	4	4	2	2	3.4	7.4
18-Jun-06	2	2	2	2	1	3	3	4	5	2	4	7	4	6	5	9	7	7	11	12	12	5	14	9	5.8	13.9
19-Jun-06	4	2	4	2	4	6	6	6	7	9	7	4	7	10	13	15	15	6	7	10	8	7	3	3	6.8	15.3
20-Jun-06	4	4	3	3	4	6	9	6	10	9	9	6	8	10	16	16	8	11	10	9	14	9	6	7	8.2	16.3
21-Jun-06	7	3	3	3	4	5	4	6	6	5	6	3	6	6	6	7	6	7	8	7	11	8	8	5	5.9	11.3
22-Jun-06	4	6	5	5	5	9	7	7	8	5	5	6	5	7	5	9	14	8	7	5	8	8	4	5	6.6	14.4
23-Jun-06	7	7	5	3	5	7	8	8	6	4	5	4	5	4	5	6	5	6	6	10	12	15	14	13	7.0	15.4
24-Jun-06	13	17	16	11	11	14	12	15	14	12	11	10	9	8	9	8	5	8	8	9	9	11	11	9	10.9	17.3
25-Jun-06	10	12	19	14	14	11	15	12	11	12	14	8	9	7	5	5	10	7	7	7	12	13	12	8	10.6	19.5
26-Jun-06	7	6	4	4	4	5	6	12	21	24	29	19	18	16	10	11	12	12	13	22	16	79	60	43	18.9	79.2
27-Jun-06	70	41	30	24	26	21	23	28	18	16	5	8	4	8	8	9	7	7	10	20	22	13	20	10	18.5	70.0
28-Jun-06	18	21	12	10	10	9	7	11	15	13	11	9	7	10	5	9	10	8	9	6	4	7	6	5	9.7	20.7
29-Jun-06	7	4	6	4	6	6	6	7	4	5	4	4	4	5	4	6	5	7	5	6	11	12	5	7	5.8	11.7
30-Jun-06	8	5	7	11	10	10	10	9	11	9	6	7	4	4	4	5	8	9	10	23	10	14	21	21	9.8	22.8
Hourly Avg	9.4	7.8	7.3	6.4	7.2	7.5	8.0	8.5	8.6	8.3	7.4	7.0	6.8	7.2	6.4	7.1	7.2	6.9	7.7	9.1	9.4	12.0	11.0	8.4		
Hourly Max	70.0	41.0	30.2	23.8	26.4	21.4	22.6	27.6	20.9	24.3	28.9	19.4	18.2	16.0	16.3	16.1	15.3	11.9	16.5	22.8	21.7	79.2	59.7	43.2		

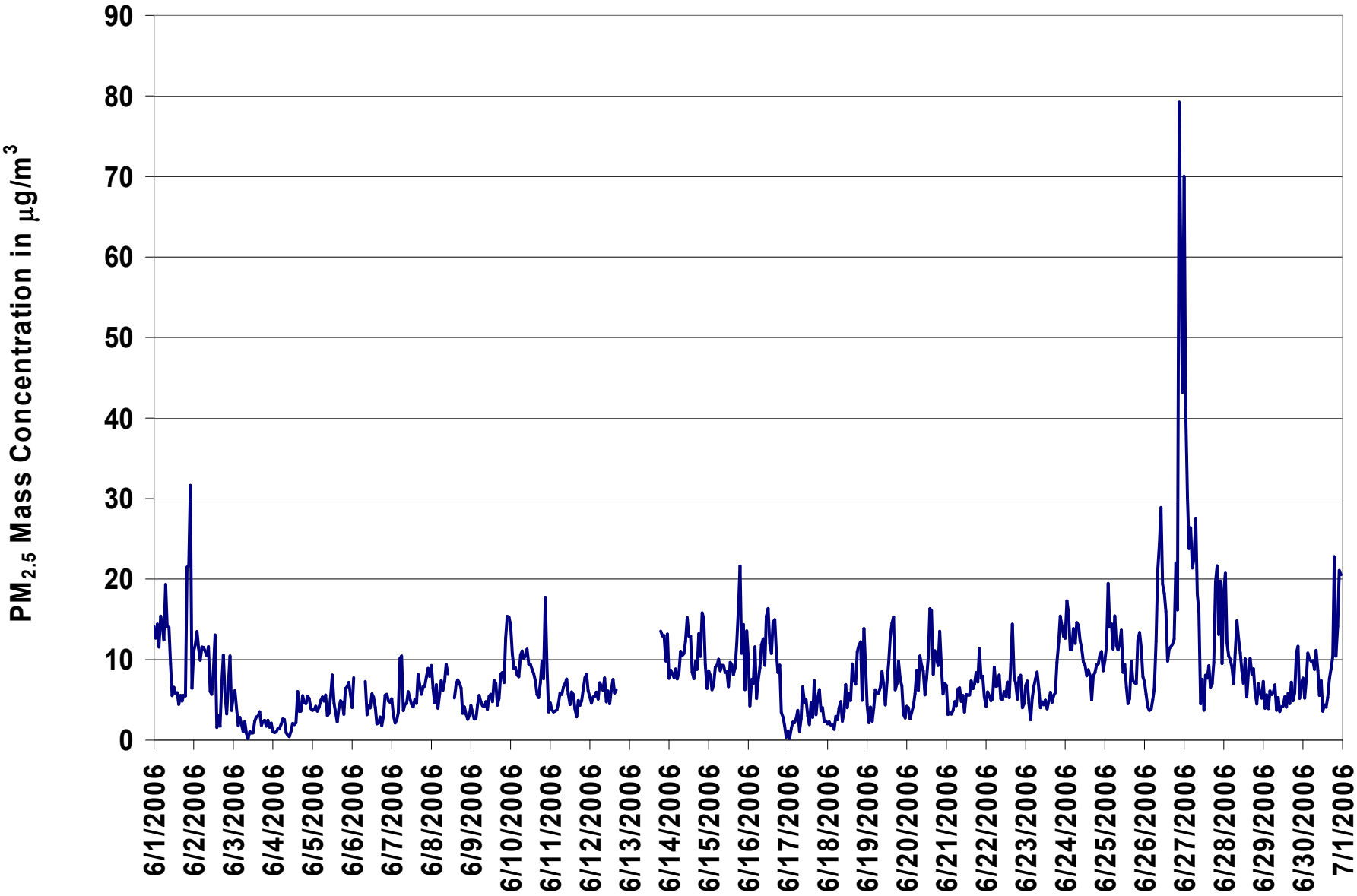
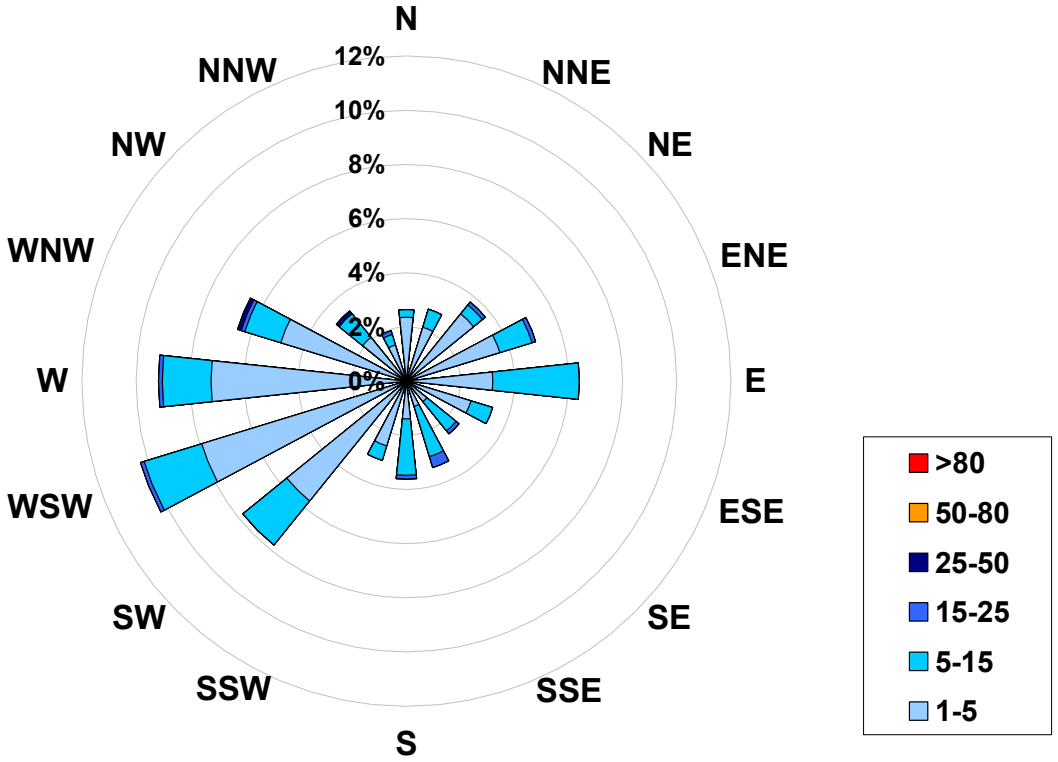


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Henry Pirker Site for June 2006



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	515
5	to	15	156
15	to	25	11
25	to	50	2
50	to	80	0
	>	80	0
Total Non-Zero Values			684

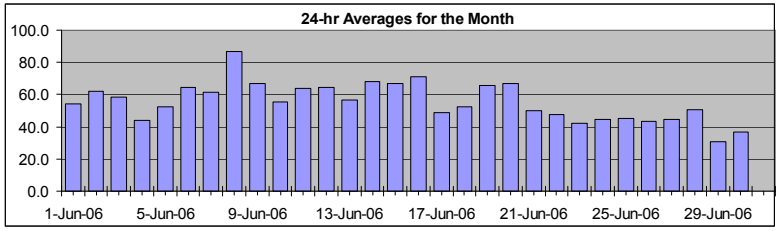
PASZA - Henry Pirker - Relative Humidity Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	94.1	%	8-Jun	19:00 20:00
Maximum 24-hr Value:	87.0	%	8-Jun	

AIC Time:	0 hrs	Operational Time:	715 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	92.3	88.1	70.7	55.1	39.4	24.5	20.6	55.5 %	55.1 %

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	71	75	84	81	81	81	76	68	63	53	46	37	38	34	34	36	36	34	34	34	38	48	53	58	53.9	84.1
2-Jun-06	62	69	74	71	74	74	70	64	53	46	43	42	42	59	51	48	44	45	73	71	75	78	80	75	61.8	80.4
3-Jun-06	85	89	86	79	80	79	76	86	76	62	53	45	40	38	39	38	37	36	38	39	40	45	53	57	58.2	88.9
4-Jun-06	58	60	62	62	62	61	59	56	48	44	39	34	31	30	29	28	28	27	32	32	36	41	44	48	43.8	61.9
5-Jun-06	55	55	55	60	61	63	59	60	57	47	43	42	47	45	42	39	41	44	45	44	50	56	66	79	52.3	78.5
6-Jun-06	77	83	P	P	P	P	P	82	81	75	68	64	57	54	52	50	47	47	47	47	58	75	78	81	64.4	82.8
7-Jun-06	83	87	90	93	94	94	83	76	72	66	59	56	51	41	31	32	32	34	39	42	48	50	56	67	61.5	94.1
8-Jun-06	82	90	90	92	92	91	92	90	85	78	74	76	81	87	84	80	83	85	90	94	94	92	92	92	87.0	94.1
9-Jun-06	91	91	92	92	93	92	89	84	77	71	65	59	55	52	48	42	41	40	39	45	53	59	63	69	66.7	92.8
10-Jun-06	74	81	89	89	85	80	75	69	64	54	49	40	36	31	33	34	32	29	31	36	44	52	65	68	55.7	88.6
11-Jun-06	68	74	78	83	85	84	78	69	58	56	55	52	52	55	54	49	44	49	53	55	62	67	72	76	63.8	85.1
12-Jun-06	80	84	87	88	90	90	85	79	70	64	60	56	52	47	45	43	45	44	45	47	53	59	63	69	64.4	90.4
13-Jun-06	72	76	79	83	85	85	79	70	62	59	55	52	45	39	35	33	32	33	37	38	45	52	55	58	56.6	85.3
14-Jun-06	63	70	74	80	85	85	80	76	71	67	67	62	58	57	51	52	50	50	61	66	71	79	82	81	68.2	85.0
15-Jun-06	83	85	86	89	90	89	84	77	71	67	60	53	53	50	45	45	46	46	50	58	62	70	72	77	67.0	89.5
16-Jun-06	86	82	87	84	88	87	87	83	79	79	70	60	61	58	55	52	63	69	66	66	58	58	65	58	70.9	88.4
17-Jun-06	59	60	61	68	71	69	62	55	48	44	42	40	38	36	36	36	36	36	38	40	42	50	54	56	49.0	70.8
18-Jun-06	59	61	62	64	67	66	65	60	51	50	47	45	43	40	36	39	39	36	37	49	56	59	68	67	52.7	67.9
19-Jun-06	71	66	69	74	77	76	71	63	58	57	51	45	41	44	52	73	74	77	72	65	70	75	74	75	65.5	76.9
20-Jun-06	78	77	78	73	72	70	70	68	70	62	56	52	49	56	58	63	53	53	65	63	71	78	82	84	66.6	84.5
21-Jun-06	85	73	73	73	73	70	66	60	55	47	41	35	32	32	31	29	31	31	33	39	47	46	49	52	50.1	84.9
22-Jun-06	55	57	59	61	65	64	60	55	48	43	37	35	32	29	29	33	36	46	47	45	48	53	51	57	47.8	65.3
23-Jun-06	62	67	72	70	66	66	60	54	47	38	33	30	27	24	23	23	22	22	23	25	30	36	41	47	41.9	72.1
24-Jun-06	54	62	63	63	71	70	62	54	50	45	38	32	28	27	26	27	27	29	29	31	37	45	48	51	44.6	70.5
25-Jun-06	57	64	71	69	72	72	65	56	51	43	39	37	33	29	26	24	22	25	26	30	34	41	48	52	45.2	71.6
26-Jun-06	58	64	67	69	70	75	67	60	52	44	42	35	31	25	20	20	20	19	18	20	21	30	56	63	43.6	74.8
27-Jun-06	62	69	68	78	78	70	63	50	45	36	30	28	26	25	23	22	22	23	24	28	38	44	57	61	44.6	77.9
28-Jun-06	70	82	87	88	90	89	84	78	77	66	48	41	38	33	31	27	23	22	19	20	22	25	29	29	50.8	90.1
29-Jun-06	34	32	36	40	45	45	46	40	33	29	25	24	23	23	23	22	22	23	22	23	26	33	34	40	30.9	45.9
30-Jun-06	44	45	44	47	46	48	44	41	39	37	33	32	31	29	28	24	24	26	28	31	30	35	42	48	36.5	48.3
Hourly Avg	68.0	70.9	73.2	74.5	76.1	75.4	70.9	66.0	60.3	54.3	48.9	44.7	42.5	40.9	39.0	38.7	38.5	39.3	42.0	44.1	48.7	54.4	59.9	63.2		
Hourly Max	91.0	91.1	91.8	92.9	94.1	93.7	92.2	89.9	85.0	78.5	74.5	76.2	81.2	87.2	83.7	80.1	82.8	84.9	89.8	94.1	93.9	92.4	91.9	91.6		

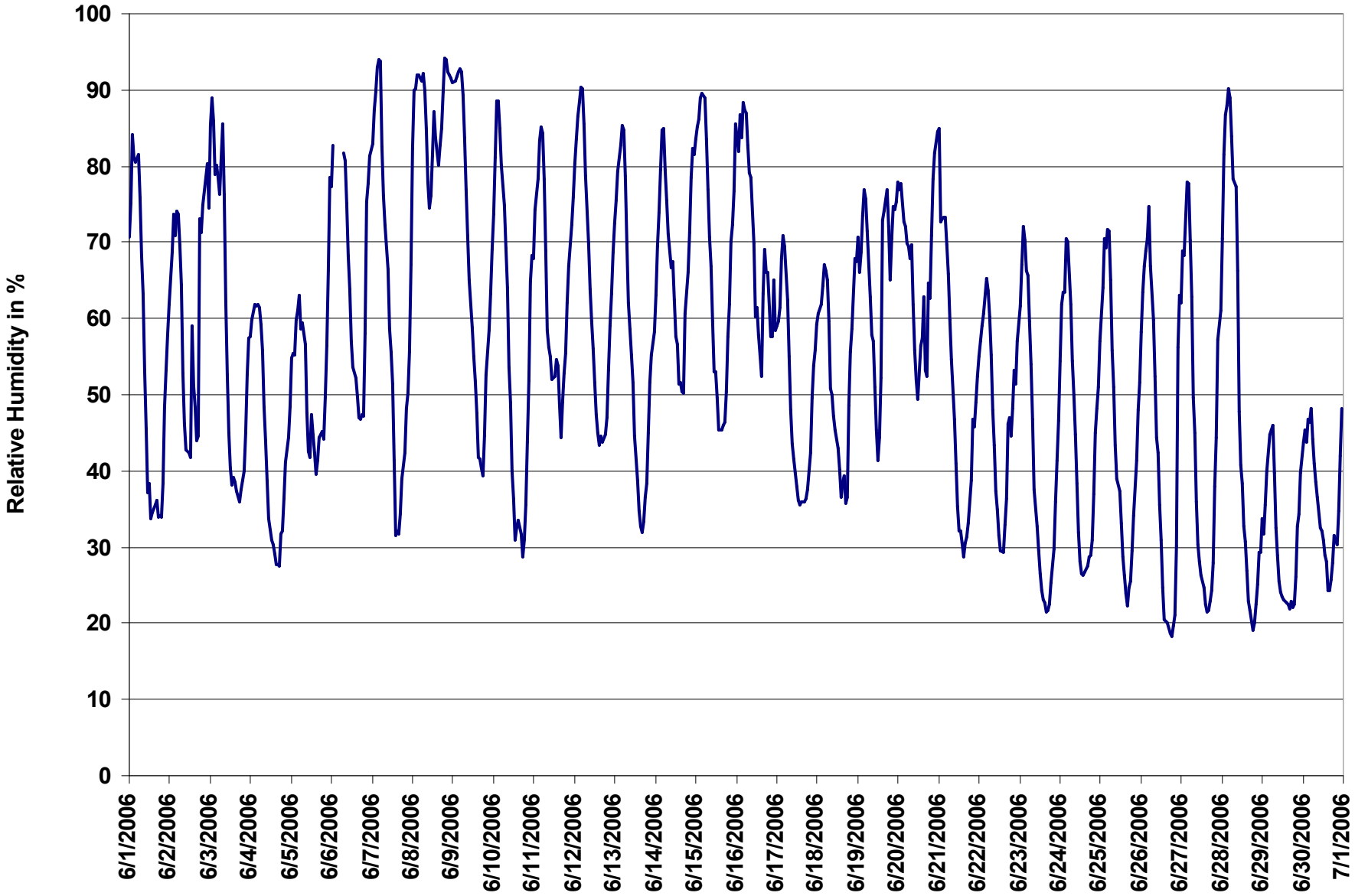


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

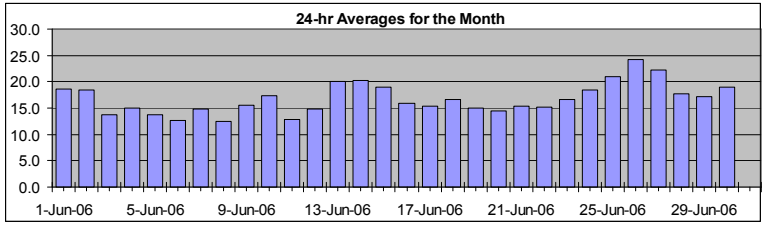
PASZA - Henry Pirker - Temperature Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	33.0	°C	26-Jun	14:00 15:00
Maximum 24-hr Value:	24.1	°C	26-Jun	

AIC Time:	0 hrs	Operational Time:	715 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	30.7	25.7	20.6	16.2	12.7	9.3	7.4	16.8 °C	16.2 °C

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	13	11	10	10	10	11	12	14	15	18	21	24	24	26	26	24	24	25	25	24	23	21	19	17	18.7	25.8
2-Jun-06	16	15	15	15	15	15	16	18	21	23	24	24	24	19	21	21	23	22	16	16	16	15	15	15	18.4	24.5
3-Jun-06	13	13	12	12	12	11	11	9	11	12	13	15	16	17	17	18	18	18	17	16	15	13	11	10	13.7	17.7
4-Jun-06	10	10	9	9	9	9	11	12	14	16	17	18	19	19	20	20	20	20	18	18	17	16	14	13	15.0	20.2
5-Jun-06	11	11	11	10	10	10	12	13	14	16	17	17	16	16	17	17	16	16	15	15	14	13	12	10	13.7	17.3
6-Jun-06	10	8	P	P	P	P	P	7	7	9	11	12	15	16	16	17	17	17	16	16	14	12	11	11	12.7	16.8
7-Jun-06	10	9	8	7	5	7	10	11	13	15	17	18	19	21	22	22	22	21	20	18	17	17	16	14	14.9	21.7
8-Jun-06	12	11	11	11	11	11	11	12	13	15	15	14	14	13	13	14	14	13	13	12	12	12	12	11	12.5	14.8
9-Jun-06	11	11	11	11	11	11	11	12	14	15	16	18	19	19	20	22	21	21	21	20	18	16	14	13	15.6	21.6
10-Jun-06	12	11	9	8	8	9	11	13	15	19	21	23	24	25	24	23	23	23	22	22	20	19	16	14	17.3	24.7
11-Jun-06	13	12	11	10	9	9	11	13	14	14	14	15	15	14	15	16	16	15	14	14	13	12	11	10	12.9	16.4
12-Jun-06	9	8	8	7	7	7	8	10	12	14	15	17	18	19	21	21	22	22	21	21	19	17	16	15	14.8	21.7
13-Jun-06	14	13	13	12	11	12	13	16	18	20	22	23	25	26	27	27	27	27	25	25	24	22	21	20	20.1	27.0
14-Jun-06	19	18	18	17	16	16	18	19	20	22	21	23	25	24	24	24	24	24	22	21	20	18	17	16	20.3	24.6
15-Jun-06	16	15	15	14	13	14	15	17	18	19	21	23	22	23	24	24	24	24	23	22	21	19	16	15	19.1	24.5
16-Jun-06	14	14	13	13	13	13	13	14	15	15	17	19	18	20	20	20	19	17	17	17	17	15	13	13	15.8	19.9
17-Jun-06	12	12	11	10	10	10	12	14	15	16	16	18	19	19	19	20	20	19	19	18	18	16	14	14	15.4	19.9
18-Jun-06	13	12	12	11	10	11	11	14	17	17	19	20	21	22	23	22	22	23	22	18	16	16	14	14	16.6	23.0
19-Jun-06	13	13	12	10	9	10	12	15	17	18	20	22	22	21	18	15	15	15	16	16	14	13	13	12	15.0	22.4
20-Jun-06	11	11	10	11	10	11	12	12	13	17	18	19	20	18	17	17	20	19	15	15	15	13	12	11	14.5	20.0
21-Jun-06	10	10	9	9	9	9	11	13	15	17	18	20	21	21	21	21	20	20	19	18	16	15	14	12	15.4	21.2
22-Jun-06	11	10	10	9	8	8	10	13	16	17	19	20	20	21	21	20	19	17	18	17	17	16	15	13	15.2	21.1
23-Jun-06	12	11	9	8	9	9	11	13	15	18	19	20	21	22	23	23	23	23	22	22	20	18	15	14	16.6	22.8
24-Jun-06	11	10	10	9	8	9	12	14	17	20	22	25	26	26	26	25	24	25	25	25	22	19	17	16	18.5	26.1
25-Jun-06	15	13	12	11	11	11	14	17	20	23	24	25	26	28	28	28	29	28	27	26	25	23	21	19	20.9	29.1
26-Jun-06	18	17	16	15	15	14	16	18	21	25	26	29	30	32	33	33	32	33	32	31	29	26	20	18	24.1	33.0
27-Jun-06	17	16	15	13	12	13	15	20	22	25	26	27	28	29	30	31	30	29	28	28	24	21	18	16	22.3	30.7
28-Jun-06	15	14	13	13	12	13	14	15	16	19	22	23	22	23	23	23	20	19	19	19	18	17	16	16	17.7	23.5
29-Jun-06	14	14	13	11	10	10	11	13	15	16	18	19	20	21	22	22	23	23	23	22	21	18	17	15	17.1	22.8
30-Jun-06	14	13	13	12	12	12	14	16	19	20	21	22	22	22	22	25	25	24	24	23	22	21	19	18	18.9	24.7
Hourly Avg	13.0	12.2	11.7	11.0	10.5	10.8	12.4	14.0	15.7	17.6	19.1	20.3	21.0	21.4	21.8	21.8	21.7	21.4	20.6	19.9	18.5	16.8	15.3	14.2		
Hourly Max	19.0	18.0	17.6	16.8	15.9	16.0	17.5	20.3	22.2	24.8	26.2	28.8	29.9	32.0	33.0	32.5	32.4	32.9	32.4	31.5	29.0	25.7	20.7	19.9		

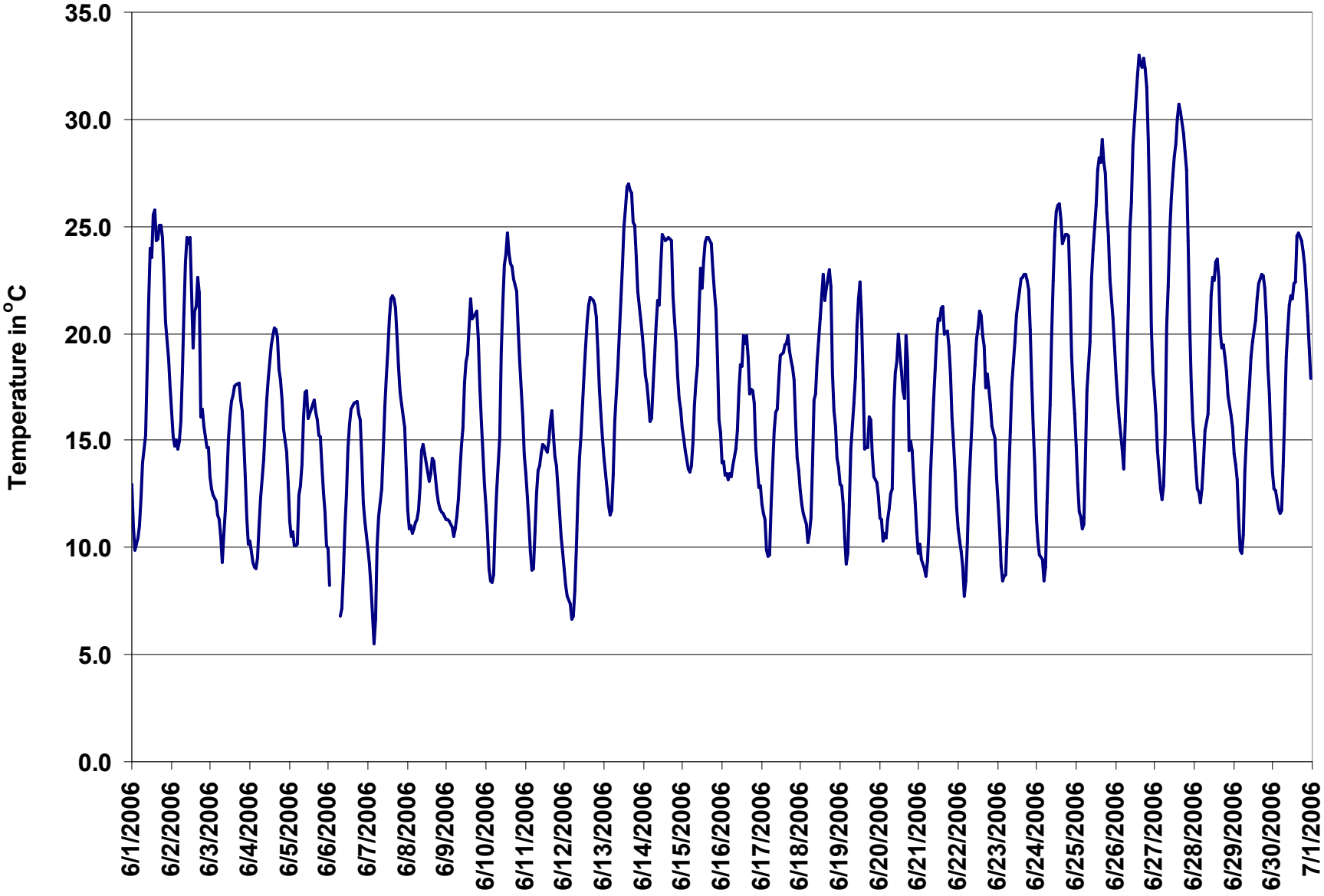


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

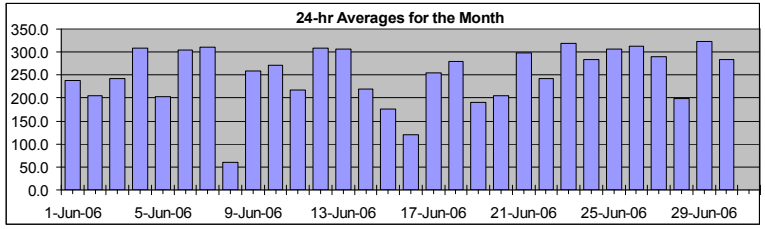
PASZA - Henry Pirker - Solar Radiation Monthly Summary

HOURLY AVERAGE TABLE

Solar Radiation (SR)

Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	853.8	W/m²	6-Jun	12:00 13:00
Maximum 24-hr Value:	323.1	W/m²	29-Jun	

AIC Time:	0 hrs	Operational Time:	715 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.3%

Percentile	99	95	75	50	25	5	1	Average	Median
	807.5	768.3	465.5	139.8	2.0	0.1	0.0	250.9 W/m²	139.8 W/m²

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0	0	0	0	6	45	100	94	205	294	532	620	545	653	710	530	465	420	299	162	38	5	0	0	238.5	710.1
2-Jun-06	0	0	0	0	5	24	114	261	404	515	624	548	476	355	443	345	486	194	48	22	44	6	0	0	204.8	623.9
3-Jun-06	0	0	0	0	3	17	20	51	118	202	327	680	716	799	720	645	578	446	297	168	34	4	0	0	242.8	799.5
4-Jun-06	0	0	0	0	8	38	193	303	487	618	714	782	816	808	766	673	564	407	120	69	24	4	0	0	308.0	816.0
5-Jun-06	0	0	0	0	11	53	226	175	300	604	645	419	249	368	466	441	309	198	227	132	19	3	0	0	201.9	644.6
6-Jun-06	0	0	P	P	P	P	P	98	123	270	360	481	854	786	710	644	557	404	293	174	16	3	0	0	303.9	853.8
7-Jun-06	0	0	0	0	7	44	199	297	466	600	700	767	805	835	768	682	567	433	175	64	24	2	0	0	309.8	834.9
8-Jun-06	0	0	0	0	4	9	27	81	180	279	185	97	68	56	90	131	84	87	33	17	16	2	0	0	60.3	279.5
9-Jun-06	0	0	0	0	5	21	109	174	331	414	413	782	765	499	655	696	416	398	300	168	39	7	0	0	258.0	781.8
10-Jun-06	0	0	0	0	10	47	212	289	450	603	694	687	664	738	482	520	395	296	200	162	51	5	0	0	271.1	737.5
11-Jun-06	0	0	1	2	8	36	195	300	432	531	560	437	341	283	448	591	502	243	135	158	31	6	0	0	218.4	591.0
12-Jun-06	0	0	0	0	8	34	194	298	471	596	609	692	787	790	745	666	559	436	304	174	30	6	0	0	308.4	789.7
13-Jun-06	0	0	0	0	12	50	230	360	490	593	685	747	787	764	771	626	568	361	166	128	26	5	0	0	307.1	787.2
14-Jun-06	0	0	0	0	10	40	172	285	451	439	203	496	553	460	662	550	438	378	61	65	23	5	0	0	220.5	661.7
15-Jun-06	0	0	0	0	11	39	139	316	224	181	363	515	296	470	521	379	365	211	126	54	29	2	1	0	176.7	521.5
16-Jun-06	0	0	0	0	4	12	43	75	121	216	312	242	274	425	246	309	190	103	173	98	29	7	0	0	120.0	425.3
17-Jun-06	0	0	0	0	7	33	142	282	493	481	359	672	802	730	615	499	439	258	146	109	47	6	0	0	255.0	801.8
18-Jun-06	0	0	0	0	6	43	83	271	479	453	682	756	792	784	792	324	451	443	266	55	42	10	0	0	280.6	792.2
19-Jun-06	0	0	0	0	8	36	136	273	432	551	705	777	820	257	95	75	51	140	128	44	23	5	0	0	189.8	820.0
20-Jun-06	0	0	0	0	11	44	98	95	86	552	671	660	731	324	190	438	578	264	32	72	44	8	0	0	204.2	731.5
21-Jun-06	0	0	0	0	7	36	193	314	458	601	701	791	794	649	777	656	351	387	276	131	39	7	0	0	298.8	793.7
22-Jun-06	0	0	0	0	8	33	198	320	463	612	709	775	567	530	438	344	286	198	202	87	38	7	0	0	242.3	775.2
23-Jun-06	0	0	0	0	6	35	196	320	463	610	707	704	772	842	766	641	578	450	314	182	38	6	0	0	318.0	841.9
24-Jun-06	0	0	0	0	11	50	183	283	419	586	672	757	823	618	676	571	326	373	242	187	35	4	0	0	284.1	823.5
25-Jun-06	0	0	0	1	6	37	178	316	448	596	685	748	718	785	736	663	538	428	264	140	56	8	0	0	306.3	784.6
26-Jun-06	0	0	0	0	7	35	178	301	434	580	682	755	792	790	739	665	556	438	305	177	47	10	0	0	312.2	791.6
27-Jun-06	0	0	0	1	9	51	144	267	341	584	704	769	803	797	738	644	477	310	155	137	47	3	0	0	290.9	802.9
28-Jun-06	0	0	0	0	6	33	99	172	229	504	666	772	441	574	529	333	97	93	104	64	26	6	0	0	197.9	771.8
29-Jun-06	0	0	0	0	6	30	196	326	459	609	709	777	811	804	761	681	576	448	320	188	43	8	1	0	323.1	810.8
30-Jun-06	0	0	0	0	7	29	187	316	447	597	690	748	680	635	556	637	530	373	220	116	32	5	0	0	283.6	748.2
Hourly Avg	0.2	0.2	0.2	0.4	7.4	35.7	151.2	243.8	363.5	495.7	575.6	648.4	644.7	606.9	587.0	519.9	429.3	320.7	197.7	116.8	34.4	5.4	0.3	0.2		
Hourly Max	0.4	0.4	0.8	1.8	11.6	53.4	230.3	360.5	493.1	618.2	713.8	791.3	853.8	841.9	792.1	696.1	578.2	450.2	320.0	187.9	55.8	10.2	1.2	0.4		

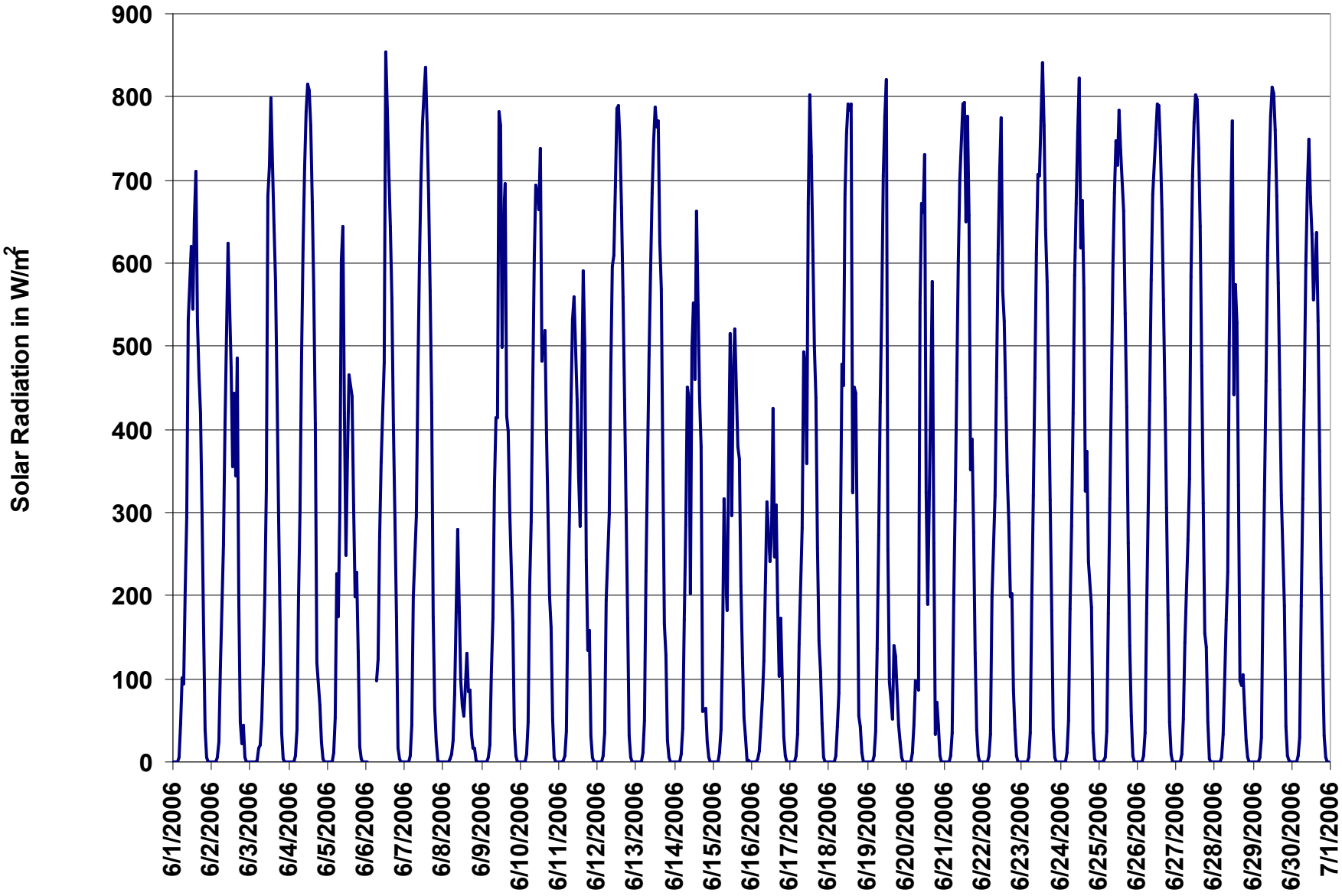


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

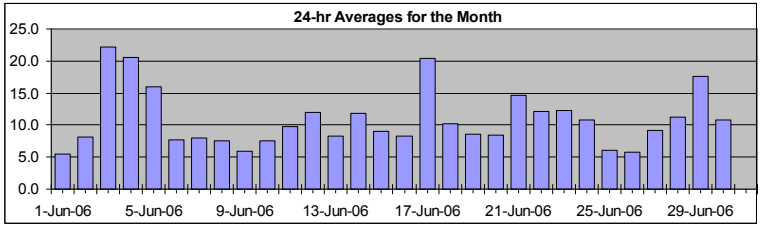
PASZA - Henry Pirker - Scalar Wind Speed Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	40.0	km/hr	3-Jun	12:00 13:00
Maximum 24-hr Value:	22.1	km/hr	3-Jun	

Calm Time:	0 hrs	**0%** calms	Operational Time: 715 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 99.3%

Percentile	99	95	75	50	25	5	1	AverageS
	31.2	24.8	13.2	9.3	6.6	4.0	2.8	10.9 km/hr

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Scalar Average	Daily Max
1-Jun-06	3	5	3	3	3	3	5	4	5	6	7	7	8	5	7	10	9	7	7	6	4	5	5	4	5.5	10.2
2-Jun-06	4	4	3	6	4	6	8	8	8	4	5	7	8	21	14	12	12	13	8	8	11	6	9	7	8.2	20.7
3-Jun-06	6	4	8	12	9	16	26	13	14	25	31	38	40	39	34	34	36	31	28	24	21	20	10	10	22.1	40.0
4-Jun-06	14	13	15	16	17	17	19	16	22	23	27	30	31	29	26	26	27	27	25	21	17	11	11	12	20.5	31.1
5-Jun-06	8	8	10	10	12	11	14	13	15	22	20	19	20	22	21	24	26	25	26	23	15	9	9	3	16.0	26.5
6-Jun-06	4	9	P	P	P	P	P	8	7	6	4	5	7	7	9	10	10	11	12	11	10	8	5	5	7.7	11.6
7-Jun-06	7	8	5	3	2	4	5	10	10	8	8	8	8	8	8	8	12	12	13	10	10	7	10	8	8.0	12.7
8-Jun-06	8	8	8	9	8	7	5	7	11	7	6	7	9	10	7	6	9	10	7	9	9	6	6	5	7.6	10.5
9-Jun-06	6	5	5	6	4	6	5	7	8	7	7	6	6	5	5	6	5	5	5	7	7	6	6	5	5.8	8.2
10-Jun-06	6	5	6	5	6	6	7	7	6	5	5	4	6	6	10	12	13	15	9	8	6	8	12	8	7.6	14.8
11-Jun-06	11	11	7	8	9	8	9	10	9	11	11	12	11	11	13	13	11	11	10	10	8	7	7	7	9.8	13.0
12-Jun-06	8	8	8	9	10	9	11	10	11	13	15	15	15	14	14	14	14	16	15	14	11	10	11	12	11.9	15.8
13-Jun-06	10	10	9	6	7	8	7	6	4	6	6	6	7	8	8	10	12	11	10	11	9	8	8	8	8.2	12.1
14-Jun-06	9	9	9	10	8	6	7	10	9	9	9	9	11	14	21	22	21	20	12	13	11	12	12	11	11.8	21.7
15-Jun-06	9	10	10	9	10	7	7	12	13	11	7	7	9	8	10	9	8	6	9	8	7	11	12	7	9.1	12.5
16-Jun-06	6	8	5	4	3	6	7	5	5	5	7	5	6	6	7	7	14	11	12	11	20	13	8	17	8.3	20.3
17-Jun-06	19	20	19	11	9	8	14	19	26	30	29	29	30	32	29	28	25	24	21	18	15	12	13	11	20.4	32.3
18-Jun-06	11	12	13	10	9	11	13	12	17	17	14	12	12	11	9	7	6	5	7	12	9	4	7	5	10.2	17.3
19-Jun-06	5	4	6	5	7	7	8	12	12	12	10	10	11	11	11	8	9	9	7	11	9	9	7	8	8.6	12.2
20-Jun-06	7	9	7	12	11	11	11	12	8	7	12	12	10	12	8	4	6	10	9	4	9	5	6	3	8.5	11.8
21-Jun-06	5	7	9	10	12	12	12	13	19	23	22	18	18	20	23	22	22	23	20	13	8	6	9	8	14.7	23.1
22-Jun-06	8	10	10	9	8	9	10	11	10	13	17	17	18	15	14	15	17	18	11	11	11	11	12	7	12.1	17.8
23-Jun-06	7	7	5	7	9	10	16	14	20	19	21	18	16	15	15	15	16	16	14	10	8	7	6	5	12.3	20.5
24-Jun-06	3	5	4	5	5	3	4	5	5	5	6	10	14	14	20	22	25	19	17	16	16	13	11	11	10.8	24.6
25-Jun-06	5	5	3	4	3	4	4	6	6	6	6	6	6	5	6	9	5	8	8	10	10	7	6	7	6.1	10.1
26-Jun-06	8	6	8	8	6	3	4	4	3	4	4	4	6	6	7	10	10	7	7	6	9	5	3	3	5.8	9.9
27-Jun-06	3	3	4	3	6	7	5	8	7	15	17	16	13	14	9	6	6	7	5	7	13	12	16	16	9.1	17.2
28-Jun-06	13	15	12	8	8	7	5	6	6	7	10	11	13	16	15	19	14	10	7	9	12	18	14	15	11.2	18.9
29-Jun-06	9	16	13	10	8	9	12	15	20	22	26	25	29	26	24	23	25	20	21	22	13	9	12	9	17.6	29.5
30-Jun-06	8	10	9	7	9	8	12	14	11	14	16	19	19	15	14	13	14	12	8	5	6	5	4	5	10.8	19.1
1-hr Average	7.7	8.5	8.0	7.9	7.7	7.9	9.4	9.9	10.9	12.0	12.8	13.1	13.9	14.2	14.0	14.1	14.6	14.0	12.4	11.6	10.8	9.0	9.0	8.1		
Hourly Max	19.5	19.9	19.1	16.4	16.6	17.0	26.5	18.6	25.7	29.6	31.2	38.2	40.0	38.8	34.1	34.2	35.5	31.0	28.2	24.4	21.1	19.9	16.5	17.2		

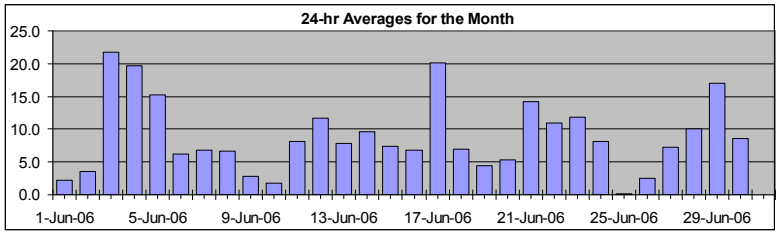
PASZA - Henry Pirker - Vector Wind Speed Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	39.8	km/hr	3-Jun	12:00 13:00
Maximum 24-hr Value:	21.7	km/hr	3-Jun	

Calm Time:	2 hrs	**0%** calms			Operational Time:			713 hrs				
Calibration Time:	0 hrs				AMD Operational Uptime:			99.3%				
Percentile	99	95	75	50	25	5	1					AverageV
	31.0	24.2	12.6	8.7	5.9	2.6	1.5					4.5 km/hr

Status Flag Characters

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

Day	Mountain Standard Time																									
Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Vector Average	Daily Max
1-Jun-06	3	4	3	3	2	3	4	4	5	5	7	5	7	3	5	9	9	6	6	5	2	5	5	4	2.2	8.8
2-Jun-06	3	2	2	6	2	3	7	8	8	4	2	5	5	20	14	12	12	6	6	7	11	5	9	7	3.5	20.1
3-Jun-06	3	2	7	12	9	15	26	13	14	25	31	38	40	38	34	34	35	31	28	24	21	20	10	10	21.7	39.8
4-Jun-06	14	13	15	16	16	17	19	16	21	22	26	30	31	29	25	26	26	26	24	21	17	11	11	12	19.6	30.6
5-Jun-06	7	8	10	10	12	11	14	13	15	21	19	19	19	22	20	24	26	25	26	23	14	8	8	1	15.3	26.2
6-Jun-06	3	8	P	P	P	P	P	8	7	6	2	3	4	5	7	9	9	10	11	11	10	8	4	5	6.2	11.0
7-Jun-06	6	8	4	1	2	4	4	10	10	8	7	7	7	7	6	7	10	12	12	10	10	7	9	8	6.7	12.4
8-Jun-06	7	8	7	8	7	7	3	7	10	6	6	6	8	9	6	5	8	10	7	8	9	6	6	5	6.6	10.4
9-Jun-06	6	4	4	6	4	6	5	7	7	6	6	4	4	3	2	3	2	calm	3	6	7	6	5	5	2.9	7.4
10-Jun-06	6	4	5	5	6	6	7	7	6	4	3	1	4	4	9	12	12	15	8	5	6	7	11	8	1.8	14.6
11-Jun-06	11	11	7	8	9	8	9	9	9	10	11	11	10	11	12	13	10	10	10	10	8	7	7	7	8.1	12.6
12-Jun-06	8	8	8	9	9	9	11	10	10	12	15	14	14	13	13	13	14	15	15	14	11	10	11	12	11.7	15.3
13-Jun-06	10	10	9	6	7	8	7	5	2	4	5	5	5	7	8	9	12	11	10	11	9	8	8	8	7.8	11.9
14-Jun-06	9	9	9	10	8	6	7	10	8	9	8	9	11	13	21	21	20	20	10	13	10	12	11	10	9.7	21.4
15-Jun-06	9	10	10	9	10	7	7	12	12	11	6	6	9	8	10	8	8	6	9	7	6	8	12	6	7.3	12.3
16-Jun-06	6	8	4	4	2	6	7	5	5	5	7	4	5	5	6	7	13	9	11	11	20	12	8	17	6.8	20.2
17-Jun-06	19	20	19	10	9	8	14	18	25	29	29	29	29	32	28	27	25	24	21	17	15	12	13	11	20.2	32.0
18-Jun-06	11	12	13	10	9	11	12	11	17	16	14	12	12	10	8	4	2	3	2	2	5	4	6	5	7.0	17.1
19-Jun-06	5	4	5	5	7	7	8	12	11	12	9	9	10	9	10	7	6	9	7	10	9	8	7	8	4.4	11.6
20-Jun-06	6	9	7	12	10	11	11	11	7	7	11	11	9	11	5	2	5	8	3	2	6	5	1	1	5.3	11.7
21-Jun-06	4	7	8	10	12	12	12	13	19	22	21	17	17	20	22	21	21	23	20	13	8	6	8	8	14.2	22.9
22-Jun-06	8	10	10	9	7	9	9	11	10	12	16	16	17	14	13	14	16	17	10	11	11	10	12	7	11.0	17.3
23-Jun-06	7	4	5	7	9	9	16	14	19	18	20	17	15	14	14	15	15	15	14	9	8	7	6	5	11.8	19.6
24-Jun-06	2	5	4	5	5	2	4	5	5	4	5	8	13	14	19	22	24	19	17	16	16	12	11	11	8.2	24.2
25-Jun-06	4	4	2	4	3	3	4	6	6	5	4	2	calm	2	2	8	3	7	8	10	10	7	6	7	0.1	10.0
26-Jun-06	8	6	7	8	6	3	4	4	1	3	4	3	5	3	6	9	9	5	5	4	9	5	3	2	2.5	9.0
27-Jun-06	2	2	3	2	6	6	5	8	5	15	17	15	12	13	7	3	5	6	5	6	13	12	16	16	7.2	16.8
28-Jun-06	12	13	11	6	7	4	4	6	6	7	8	10	11	15	14	18	14	10	6	9	11	18	14	15	10.1	18.2
29-Jun-06	9	16	13	10	8	8	12	15	20	22	25	25	29	26	23	22	24	19	21	22	13	9	12	9	17.1	29.0
30-Jun-06	8	8	7	7	9	8	12	14	10	13	14	19	19	14	13	12	14	12	8	4	5	4	4	5	8.6	18.7
1-hr Vector	1.9	3.1	3.2	3.3	3.6	3.9	5.5	5.1	6.2	7.2	7.8	7.7	7.4	7.2	5.5	5.4	5.8	5.1	3.8	3.1	2.1	2.6	2.6	2.5		
Hourly Max	19.4	19.8	19.1	16.3	16.5	16.8	25.9	18.5	25.4	29.3	31.0	37.9	39.8	38.5	33.7	33.8	35.2	30.7	27.9	24.2	20.9	19.8	16.2	17.2		

PASZA - Henry Pirker - Wind Direction Monthly Summary

HOURLY AVERAGE TABLE

Wind Direction (WD)

Station: Henry Pirker
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Summary

Calm Time:	0 hrs	**0%** calms		Operational Time:		715 hrs					
Calibration Time:	0 hrs			AMD Operational Uptime:		99.3%					
Percentile	99	95	75	50	25	5	1	Average			
	351.3	319.6	265.8	234.0	104.6	43.0	8.3	254 deg			

Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	WD Sector
1-Jun-06	282	314	253	307	281	144	162	159	167	255	282	273	270	228	202	142	172	176	197	220	346	57	54	55	215	SW
2-Jun-06	79	152	231	231	270	244	230	275	292	298	245	226	235	279	308	334	338	289	121	127	111	149	190	196	257	WSW
3-Jun-06	190	294	210	240	261	248	255	273	232	243	244	247	242	244	244	252	258	248	247	250	252	244	228	222	246	WSW
4-Jun-06	217	219	221	225	230	236	234	212	225	237	247	253	259	266	264	265	266	266	264	253	248	234	237	240	247	WSW
5-Jun-06	225	219	229	229	230	228	231	229	220	240	252	263	249	239	238	247	242	253	252	253	262	268	326	308	245	WSW
6-Jun-06	303	284	P	P	P	P	P	65	96	76	84	53	30	44	71	82	76	78	70	74	100	97	69	51	70	ENE
7-Jun-06	129	95	83	279	337	4	66	108	108	109	79	94	96	89	91	82	61	65	60	52	49	58	17	28	73	ENE
8-Jun-06	45	5	20	65	55	77	67	335	350	6	58	62	75	88	56	60	55	52	40	50	89	71	71	58	50	NE
9-Jun-06	61	30	32	9	25	24	19	34	0	12	358	28	65	6	265	348	51	308	301	169	160	153	132	134	31	NNE
10-Jun-06	99	118	142	143	219	234	238	235	235	238	209	222	307	333	359	352	354	350	5	35	109	74	55	61	4	N
11-Jun-06	50	62	50	33	23	35	45	42	37	28	11	8	20	63	72	64	66	97	119	127	126	98	96	100	59	ENE
12-Jun-06	99	101	87	89	100	90	105	106	114	114	102	113	103	106	104	106	96	91	91	86	82	76	81	89	98	E
13-Jun-06	93	95	91	80	92	102	115	116	150	165	107	115	105	82	81	72	82	81	77	88	87	89	95	90	94	E
14-Jun-06	90	89	87	84	81	75	78	98	106	104	100	76	71	79	98	99	111	112	149	163	146	172	187	216	110	ESE
15-Jun-06	219	227	234	242	247	233	230	246	253	274	282	296	285	290	298	277	281	283	304	352	28	207	256	247	262	W
16-Jun-06	201	233	286	243	237	215	208	190	178	157	211	202	124	140	153	179	243	247	205	224	248	241	259	253	222	SW
17-Jun-06	251	251	247	270	258	296	277	262	265	265	262	258	253	250	255	255	256	255	262	267	253	237	240	237	257	WSW
18-Jun-06	240	243	248	261	294	294	268	276	272	281	305	316	312	307	312	285	322	276	351	182	78	48	176	172	279	W
19-Jun-06	156	151	213	226	269	283	269	258	289	297	282	264	242	312	72	85	219	161	158	356	326	283	242	259	266	W
20-Jun-06	277	264	271	259	267	261	253	253	279	307	307	335	2	12	329	231	321	311	46	65	177	166	293	278	291	WNW
21-Jun-06	240	225	235	235	245	248	247	245	247	257	255	251	253	274	268	259	261	269	273	283	279	241	233	227	256	WSW
22-Jun-06	226	234	238	244	248	255	251	244	236	234	242	254	270	265	249	196	212	206	217	213	198	209	194	162	231	SW
23-Jun-06	182	241	258	290	290	290	253	256	245	262	262	260	261	248	256	261	257	268	269	277	260	247	242	221	259	WSW
24-Jun-06	19	171	179	146	141	175	179	159	184	176	178	230	218	269	272	271	265	269	267	282	277	284	278	279	255	WSW
25-Jun-06	289	295	230	240	222	284	278	232	233	252	244	246	329	205	97	329	355	79	66	95	105	99	93	89	202	SSW
26-Jun-06	89	85	75	75	94	119	132	146	163	248	182	173	156	192	176	164	160	177	160	285	344	329	299	322	143	SE
27-Jun-06	137	281	302	276	289	280	284	284	273	282	289	294	306	322	329	341	51	58	49	27	336	321	319	320	313	NW
28-Jun-06	306	281	301	264	227	246	224	212	244	222	270	320	268	267	269	277	286	280	226	209	231	271	265	265	266	W
29-Jun-06	278	290	280	268	243	243	231	241	242	234	251	248	254	246	248	246	260	246	264	263	248	237	241	231	251	WSW
30-Jun-06	225	237	302	286	285	286	271	252	265	310	302	312	313	319	320	299	308	305	302	313	22	74	151	158	295	WNW
Hourly Avg	211	243	247	248	255	258	244	241	244	257	262	266	265	269	266	261	264	260	254	247	236	226	238	233		

PASZA - Henry Pirker - Standard Deviation of Wind Direction Monthly Summary

Station: Henry Pirker
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2006 to July 1, 2006

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms	Operational Time: 715 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 99.3%

Percentile	99	95	75	50	25	5	1
	60.9	45.7	19.3	12.4	8.3	5.7	4.9

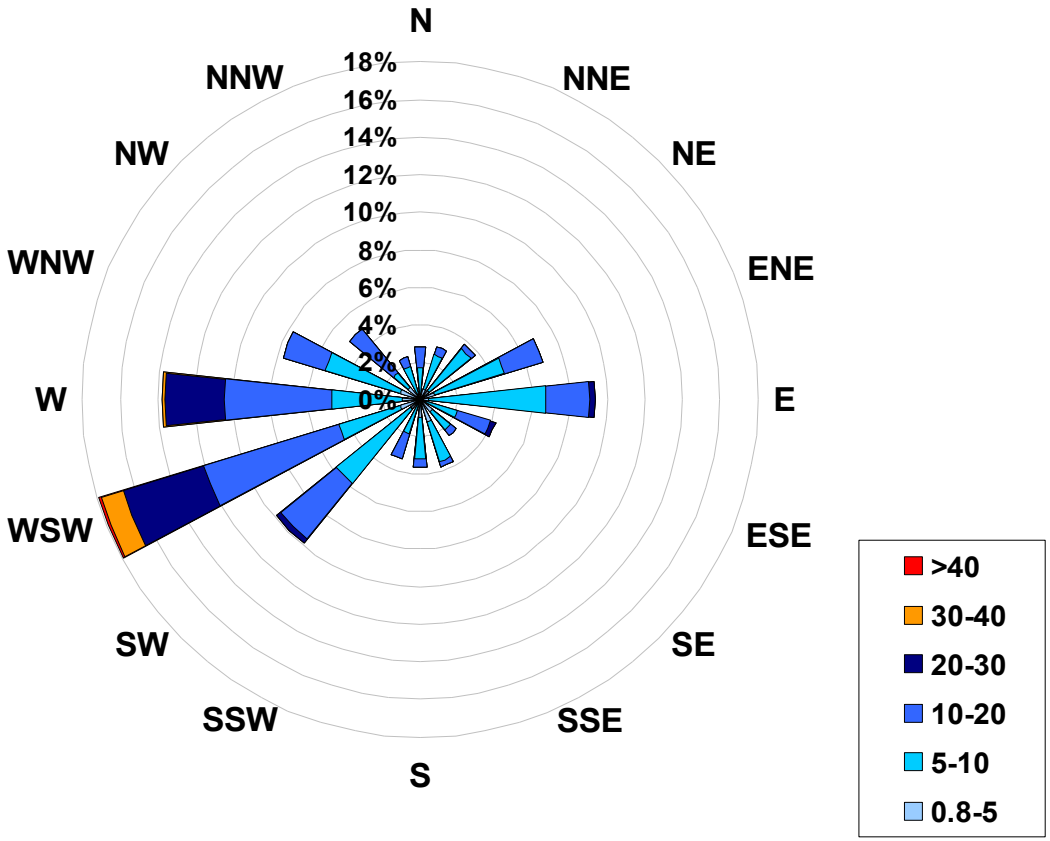
Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Jun-06	61	13	17	16	16	37	29	13	16	14	16	37	20	44	42	27	18	27	21	26	19	10	7	15	61.4
2-Jun-06	38	40	39	20	50	21	13	11	13	32	51	51	39	9	10	12	11	22	52	25	8	24	12	21	51.7
3-Jun-06	38	40	12	7	12	6	5	9	8	7	6	6	35	7	7	9	7	7	7	8	6	5	8	7	39.5
4-Jun-06	7	6	5	6	6	7	8	9	11	11	10	8	10	10	9	9	10	8	7	5	6	6	7	6	10.7
5-Jun-06	8	8	8	8	6	6	8	9	8	11	12	14	16	10	13	8	6	6	7	7	8	18	16	44	44.5
6-Jun-06	20	13	P	P	P	P	P	16	19	29	57	63	54	47	39	28	22	20	15	14	11	8	22	15	62.9
7-Jun-06	16	9	34	51	14	19	23	14	15	23	26	30	37	40	47	41	30	13	14	11	10	19	12	11	51.2
8-Jun-06	20	17	15	19	13	11	40	15	8	24	19	16	15	11	19	23	14	12	15	15	8	14	14	14	40.3
9-Jun-06	11	18	16	9	16	16	18	18	17	24	26	49	45	56	58	61	39	48	47	32	6	6	9	11	60.9
10-Jun-06	8	14	9	14	17	11	11	19	16	38	56	70	48	61	23	16	17	9	17	24	15	11	8	10	69.9
11-Jun-06	9	8	18	12	10	12	14	17	17	18	16	17	18	16	13	15	20	16	19	13	12	8	7	6	20.3
12-Jun-06	5	6	7	5	6	7	8	11	15	16	13	15	13	18	18	17	18	12	11	9	8	7	5	5	18.1
13-Jun-06	6	6	7	10	8	8	16	25	55	36	44	43	37	30	24	20	12	13	10	8	7	5	5	5	54.9
14-Jun-06	5	5	6	6	7	13	12	13	20	20	14	21	16	17	11	8	10	9	12	10	11	9	11	9	20.7
15-Jun-06	9	9	8	7	7	10	9	7	11	8	22	31	17	15	19	16	13	17	10	17	14	16	11	15	31.0
16-Jun-06	6	8	19	21	35	6	8	11	12	14	16	36	19	31	16	21	12	18	13	10	6	11	13	5	36.3
17-Jun-06	5	5	5	7	8	8	5	7	8	7	7	8	9	8	9	9	9	9	6	5	5	6	6	6	9.5
18-Jun-06	6	6	5	10	8	6	11	11	8	8	15	16	15	21	33	45	44	50	33	26	57	23	15	12	57.3
19-Jun-06	9	17	8	10	11	6	9	10	13	13	17	21	22	17	15	16	21	7	8	36	9	12	11	9	36.2
20-Jun-06	9	6	7	7	9	6	8	7	11	23	15	19	24	19	37	34	35	41	24	61	26	8	26	41	60.6
21-Jun-06	33	10	7	6	5	5	7	11	7	9	13	14	15	8	11	12	9	8	8	7	7	9	7	6	32.9
22-Jun-06	6	6	6	6	16	12	12	11	13	15	13	18	14	15	27	12	10	8	12	8	9	13	8	9	26.6
23-Jun-06	8	20	18	14	7	9	9	11	8	12	12	14	19	18	20	18	13	14	12	11	8	6	8	7	19.8
24-Jun-06	33	10	9	10	7	26	14	16	24	32	31	21	22	19	14	12	9	11	9	9	4	5	5	7	33.2
25-Jun-06	20	36	46	15	20	21	16	18	17	26	36	56	81	65	61	26	49	28	20	10	12	8	7	8	80.6
26-Jun-06	7	8	6	6	11	29	17	28	45	37	35	59	49	44	46	27	23	42	40	36	6	9	15	35	58.6
27-Jun-06	66	35	41	36	12	22	14	9	19	11	12	12	18	19	47	69	42	21	26	17	13	6	7	9	68.6
28-Jun-06	18	19	11	25	17	29	33	22	19	19	19	19	18	15	15	11	9	14	18	10	11	6	6	5	32.5
29-Jun-06	7	5	5	6	11	11	7	9	9	14	10	12	10	10	12	12	15	12	10	7	8	8	5	6	15.2
30-Jun-06	6	25	33	11	10	9	8	8	16	12	19	11	11	15	17	19	11	11	11	21	13	17	8	5	32.9
Hourly Max	66	40	46	51	50	37	40	28	55	38	57	70	81	65	61	69	49	50	52	61	57	24	26	44	

1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for June 2006



Calms:	0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	79
5	to	10	322
10	to	20	242
20	to	30	61
30	to	40	10
	>	40	1
Total Non-Zero Values			715

PASZA – Evergreen Park Station

Monthly Summary Tables, Graphs, and Roses

PASZA - Evergreen Park - Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

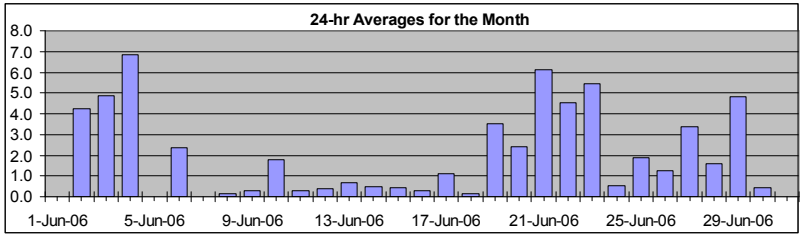
Station: Evergreen Park
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	67.4	ppb	4-Jun	15:00 16:00
Maximum 24-hr Average:	6.9	ppb	4-Jun	



AIC Time:	34 hrs	Operational Time:	657 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	96.5%

Percentile	99	95	75	50	25	5	1	Average	Median
	52.9	12.8	0.5	0.3	0.2	0.0	0.0	2.4 ppb	0.3 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	A	0	0	N	0	0	1	2	1	0	57	C	C	C	C	A	0	0	0	53	0	0	0	0	N	56.7
2-Jun-06	0	1	1	1	0	A	3	4	3	4	M	M	M	M	0	0	0	9	12	42	0	0	0	0	4.2	42.2
3-Jun-06	0	0	0	0	0	A	1	1	0	0	0	0	0	23	31	0	0	53	0	0	0	0	0	0	4.9	53.3
4-Jun-06	0	0	0	0	A	0	0	0	0	1	19	1	34	4	3	67	5	12	10	0	1	0	0	0	6.9	67.4
5-Jun-06	0	0	0	A	0	0	0	0	0	1	61	25	2	A	A	20	8	D	D	D	D	D	0	0	N	61.0
6-Jun-06	0	0	A	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	2.4	52.7
7-Jun-06	0	A	0	0	0	0	0	0	0	0	D	D	D	D	D	D	D	D	D	0	0	0	0	0	N	0.3
8-Jun-06	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
9-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.7
10-Jun-06	0	0	0	A	0	0	1	12	3	10	8	1	1	1	1	1	0	0	0	0	0	0	0	0	1.8	12.1
11-Jun-06	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
12-Jun-06	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
13-Jun-06	A	0	0	0	0	0	1	1	1	2	3	2	1	0	0	0	0	0	0	0	0	0	0	A	0.7	3.0
14-Jun-06	1	1	0	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0.5	1.7
15-Jun-06	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	A	0	0	0.5	1.4
16-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0.3	1.1
17-Jun-06	0	0	0	0	0	0	0	0	17	4	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1.1	16.7
18-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3
19-Jun-06	0	0	0	0	0	0	1	11	1	26	P	7	20	10	0	0	0	A	0	0	0	0	0	0	3.5	26.5
20-Jun-06	0	0	0	0	1	1	1	29	17	2	1	1	0	0	0	0	A	0	0	0	0	0	0	0	2.4	28.6
21-Jun-06	0	0	0	D	D	D	D	D	1	54	23	1	1	11	6	A	1	10	1	0	0	0	1	1	6.1	54.2
22-Jun-06	0	0	0	0	0	0	4	3	13	19	18	9	20	13	A	0	0	5	0	0	0	0	0	0	4.6	20.3
23-Jun-06	0	0	0	0	4	0	1	62	21	1	9	14	0	A	7	4	0	0	0	0	0	0	0	0	5.4	62.4
24-Jun-06	0	0	0	0	0	0	0	0	1	1	1	0	A	1	1	1	0	1	1	0	0	0	0	0	0.5	1.4
25-Jun-06	0	0	0	0	0	0	2	13	11	8	4	A	1	2	0	0	0	0	0	0	0	0	0	0	1.9	12.6
26-Jun-06	0	0	0	0	0	0	0	1	8	9	A	1	0	0	0	0	1	1	1	0	0	1	1	1	1.2	9.5
27-Jun-06	0	0	0	0	0	0	14	53	4	A	3	0	0	0	0	0	0	0	0	0	0	0	1	0	3.4	52.6
28-Jun-06	0	0	0	0	0	0	0	0	A	11	3	0	0	10	9	0	0	0	0	0	0	0	0	0	1.6	10.9
29-Jun-06	0	0	0	0	0	0	1	A	48	16	1	7	32	0	0	0	0	0	0	0	0	0	0	0	4.8	48.3
30-Jun-06	0	1	1	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.7
Hourly Avg	0.2	0.2	0.2	0.2	0.3	0.2	1.2	7.0	5.4	6.0	8.1	2.8	6.5	3.1	2.4	3.6	0.7	3.6	1.1	3.7	0.3	0.3	0.3	0.3		
Hourly Max	0.5	0.6	0.5	0.5	3.8	1.4	13.5	62.4	48.3	54.2	61.0	25.3	52.7	22.8	30.8	67.4	8.3	53.3	11.9	53.2	0.7	1.3	1.0	1.4		

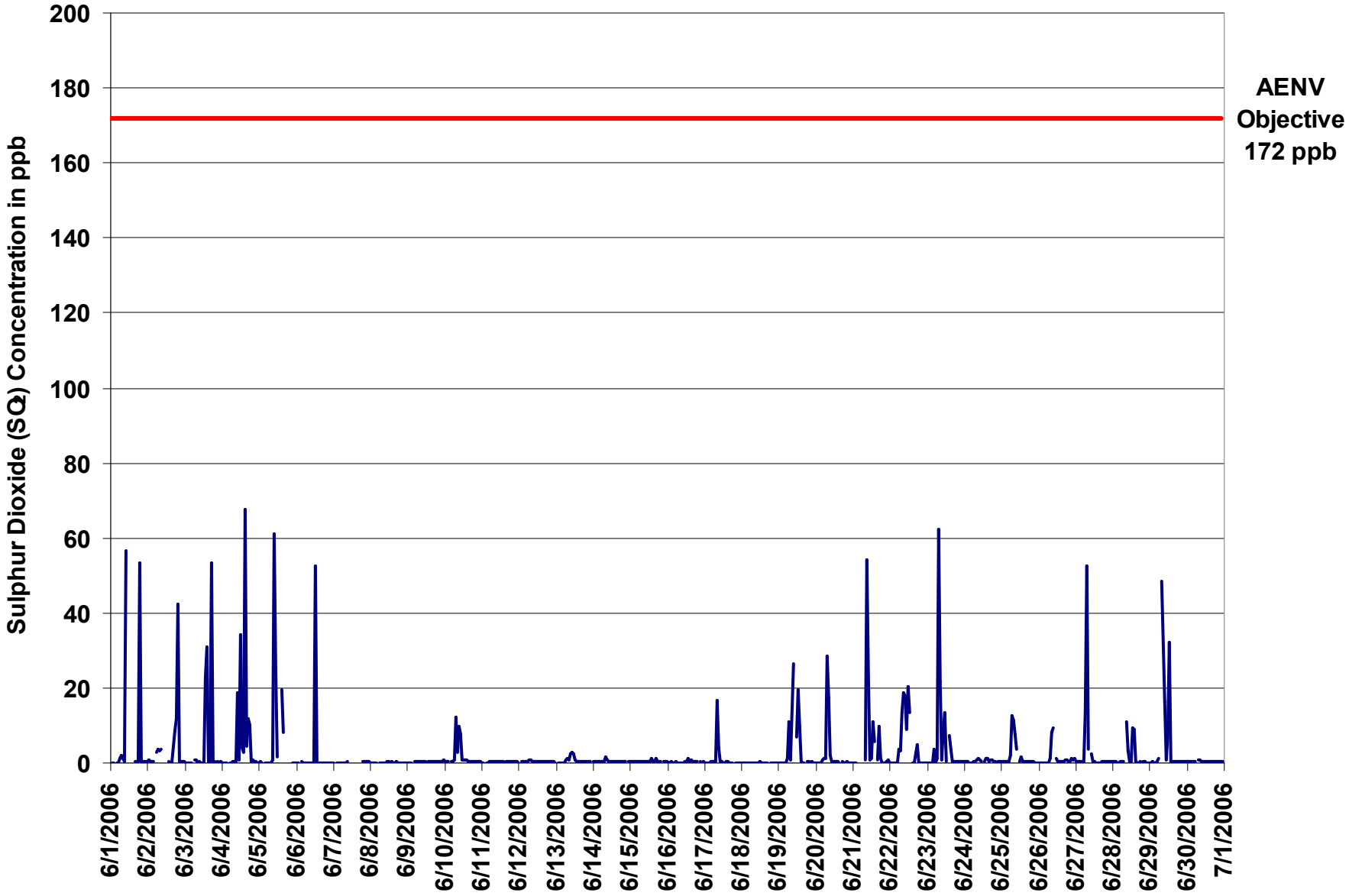


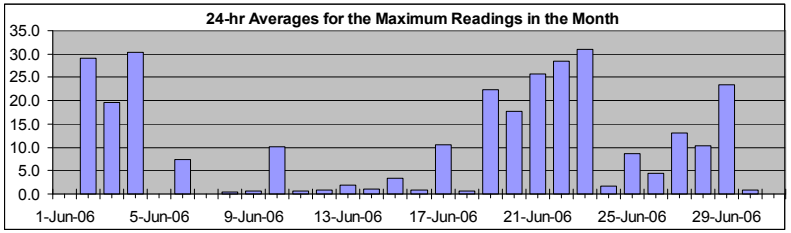
Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	240.6	ppb	5-Jun	10:00 11:00
Maximum 24-hr Value:	31.0	ppb	23-Jun	

AIC Time:	34 hrs	Operational Time:	657 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	96.5%

Percentile	99	95	75	50	25	5	1	Average	Median
	159.8	85.0	1.2	0.7	0.5	0.4	0.2	11.7 ppb	0.7 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	A	0	0	N	0	0	3	3	2	1	121	C	C	C	C	A	1	1	1	160	1	1	1	1	N	159.8
2-Jun-06	1	1	1	1	1	A	49	49	14	25	M	M	M	M	5	1	1	82	159	161	1	1	1	1	29.2	161.5
3-Jun-06	1	1	1	0	0	A	5	7	1	8	1	2	0	111	148	1	1	160	1	1	1	1	1	1	19.6	159.8
4-Jun-06	0	1	0	0	A	0	1	1	1	3	82	9	106	41	31	160	59	93	96	1	11	1	1	0	30.3	159.8
5-Jun-06	1	1	1	A	1	0	1	0	1	10	241	103	17	A	A	131	139	D	D	D	D	D	0	1	N	240.6
6-Jun-06	0	0	A	2	1	0	0	0	0	0	0	0	158	1	0	0	0	0	0	0	0	0	0	1	7.3	157.7
7-Jun-06	0	A	0	1	1	1	0	0	1	1	D	D	D	D	D	D	D	D	D	1	1	1	1	1	N	0.9
8-Jun-06	1	1	0	0	0	A	0	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0	1	0	0.5	0.7
9-Jun-06	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
10-Jun-06	1	1	1	A	1	1	2	85	22	43	66	1	1	1	1	1	1	1	1	1	1	1	1	1	10.1	84.7
11-Jun-06	0	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0.6	0.9
12-Jun-06	1	A	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.3
13-Jun-06	A	1	0	0	1	1	1	1	1	16	5	5	2	1	1	1	1	1	1	1	1	1	1	A	1.9	16.4
14-Jun-06	1	1	1	1	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	4.1
15-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	2	1	50	1	1	1	A	1	1	3.3	49.6
16-Jun-06	1	1	1	1	1	1	1	1	0	1	0	1	1	2	1	1	1	1	1	1	A	1	1	1	0.8	2.5
17-Jun-06	0	0	0	1	1	1	1	2	140	85	4	1	1	1	1	1	0	1	0	A	1	0	0	0	10.5	140.4
18-Jun-06	1	0	0	1	0	1	0	0	1	0	1	0	3	0	1	0	1	0	A	1	1	1	0	1	0.6	3.0
19-Jun-06	1	0	0	0	0	0	18	141	4	112	P	68	86	55	1	0	1	A	1	1	0	2	0	0	22.4	141.0
20-Jun-06	1	1	0	1	2	2	5	184	200	4	3	1	1	1	1	1	A	1	1	0	2	0	0	0	17.8	200.1
21-Jun-06	0	0	0	D	D	D	D	D	6	143	99	1	13	52	40	A	4	84	8	1	1	1	5	6	25.8	143.2
22-Jun-06	0	0	0	0	0	0	35	41	84	94	138	79	63	68	A	0	1	44	1	0	0	1	0	1	28.4	138.1
23-Jun-06	0	0	0	0	159	0	29	135	151	4	66	72	1	A	67	22	1	1	1	1	1	1	1	1	31.0	158.6
24-Jun-06	1	1	1	0	0	1	1	1	1	2	1	1	A	1	8	9	1	2	2	4	1	0	2	1	1.7	9.5
25-Jun-06	1	1	1	1	1	1	11	68	35	35	23	A	1	14	1	1	1	1	1	1	1	1	1	0	8.7	68.3
26-Jun-06	1	0	0	0	0	0	1	2	37	38	A	5	1	1	1	1	1	1	1	1	2	2	2	2	4.3	37.8
27-Jun-06	1	1	1	1	1	1	60	124	68	A	32	2	4	0	1	1	1	1	1	1	1	1	1	1	13.1	123.6
28-Jun-06	1	1	0	1	1	1	1	1	A	73	20	1	1	77	52	1	0	0	2	1	1	1	1	1	10.4	77.3
29-Jun-06	1	1	1	1	1	1	14	A	213	108	2	51	136	1	1	1	1	1	1	1	1	2	1	2	23.5	212.7
30-Jun-06	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
Hourly Avg	0.6	0.6	0.5	0.7	6.5	0.7	8.7	30.5	34.2	28.0	35.1	15.7	23.1	17.3	14.4	12.6	7.8	19.6	10.5	12.2	1.1	0.9	0.9	0.9		
Hourly Max	1.2	1.4	1.1	2.3	158.6	2.0	60.2	183.5	212.7	143.2	240.6	103.4	157.7	110.9	147.7	159.8	139.3	159.8	159.0	161.5	10.8	2.4	5.4	6.3		

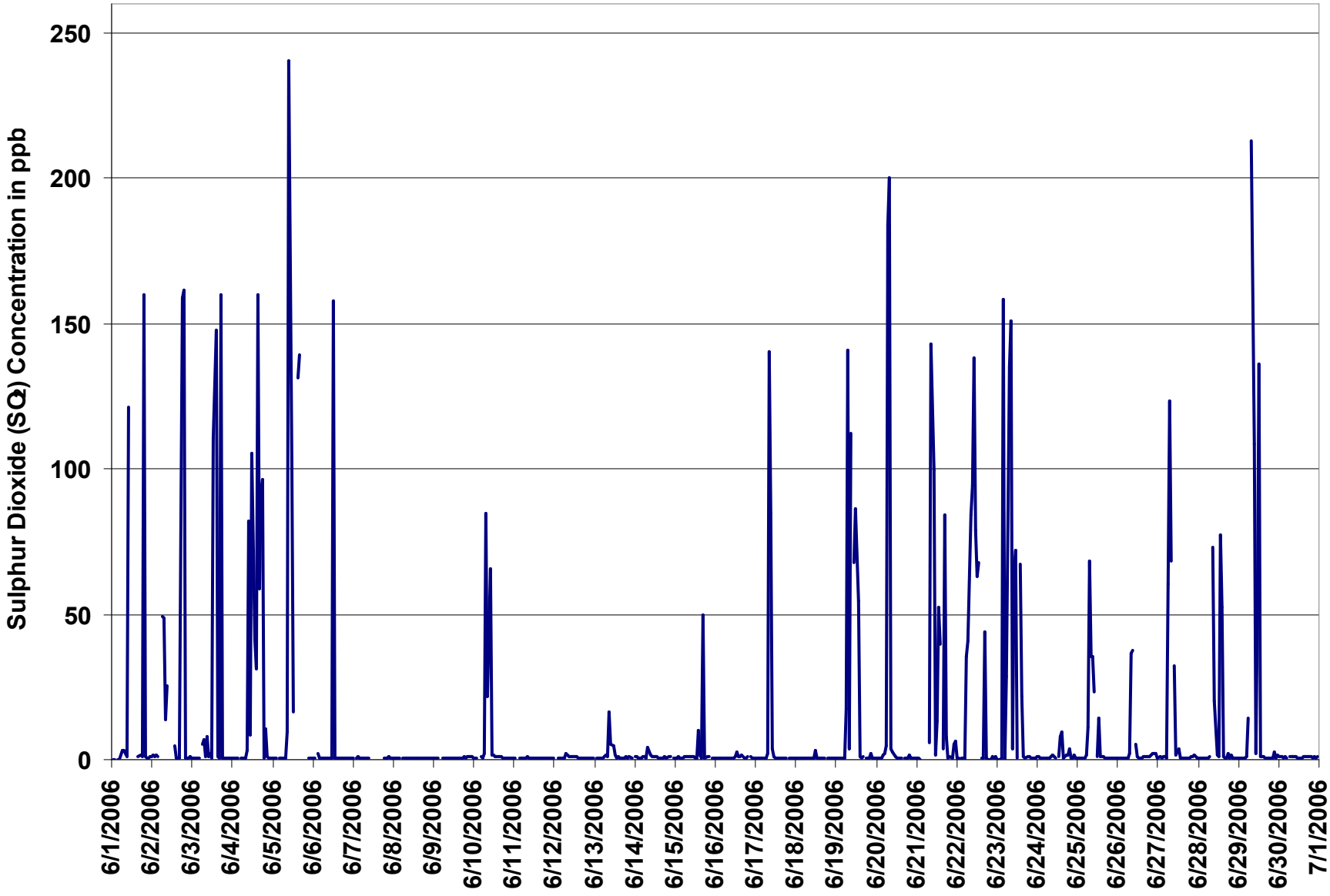
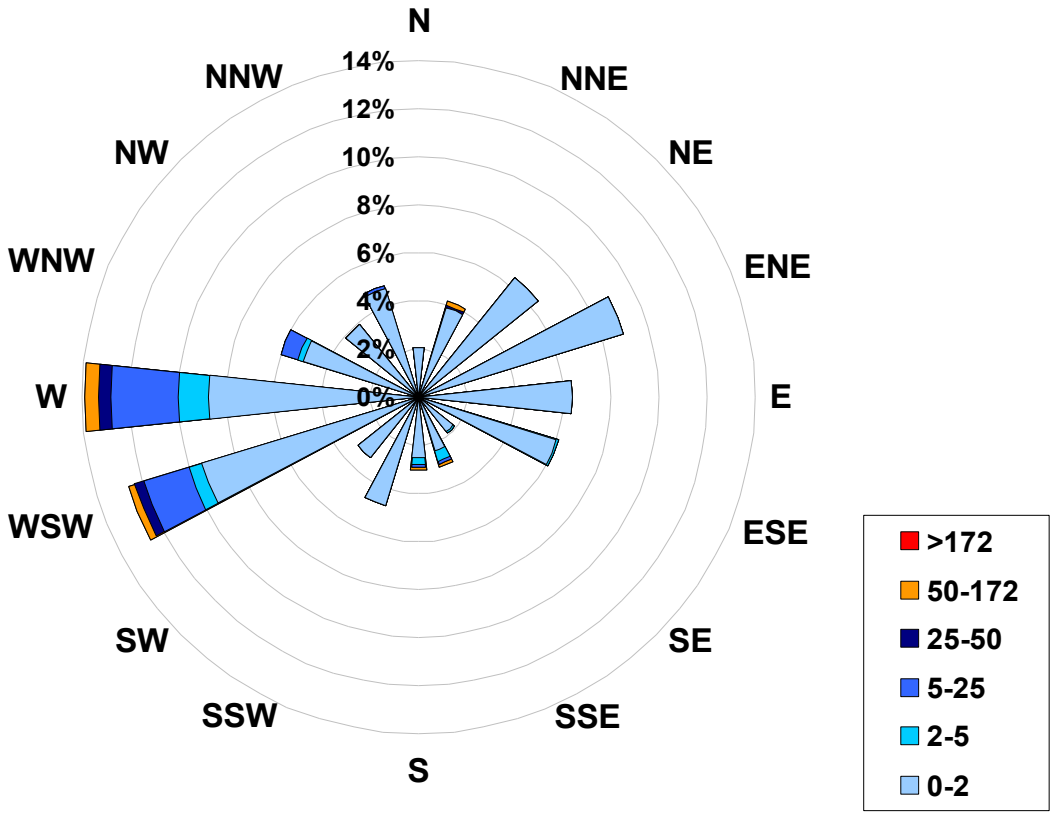


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Evergreen Park Site for June 2006



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	576
2	to	5	22
5	to	25	42
25	to	50	8
50	to	172	9
	>	172	0
Total Non-Zero Values			657

PASZA - Evergreen Park - Total Reduced Sulphur Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

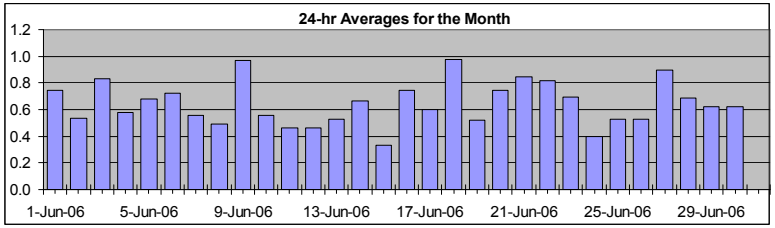
Total Reduced Sulphur (TRS)

Monitoring Dates: June 1, 2006 to July 1, 2006

Objective Limit: **Alberta Environment:** 1-hr na ppb | 24-hr na ppb

Summary

Maximum 1-hr Average:	1.6	ppb	9-Jun	20:00 21:00
Maximum 24-hr Value:	1.0	ppb	18-Jun	



AIC Time:	32 hrs	Operational Time:	683 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.4	1.2	0.8	0.6	0.5	0.2	0.0	0.6 ppb	0.6 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	A	1	1	N	0	0	1	1	1	0	0	C	C	C	A	1	1	1	1	1	1	1	1	1	0.7	1.1
2-Jun-06	1	1	0	1	0	A	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	0.5	0.7
3-Jun-06	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
4-Jun-06	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0.6	0.8
5-Jun-06	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
6-Jun-06	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.1
7-Jun-06	0	A	1	1	1	0	0	0	0	1	0	1	1	1	1	0	1	1	1	0	0	0	1	0	0.6	1.1
8-Jun-06	0	0	0	0	0	A	1	1	0	0	0	1	1	1	1	1	0	1	0	0	1	1	0	1	0.5	0.7
9-Jun-06	1	0	0	1	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1.0	1.6
10-Jun-06	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	0	0	0.6	1.1
11-Jun-06	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	1	1	1	0	0.5	0.8
12-Jun-06	0	A	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	1	1	1	1	1	1	1	0.5	0.6
13-Jun-06	A	0	1	1	1	0	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	A	0.5	0.8
14-Jun-06	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	1	0.7	1.1
15-Jun-06	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	1	0.3	0.8
16-Jun-06	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	A	1	1	1	0.7	1.4
17-Jun-06	1	0	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	A	0	0	0	0	0.6	1.2
18-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	1.4
19-Jun-06	1	0	0	0	0	1	0	0	0	0	P	1	1	1	0	1	0	A	0	1	1	1	1	1	0.5	1.0
20-Jun-06	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	1	A	1	1	1	1	1	1	1	0.7	1.3
21-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.8	1.4
22-Jun-06	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	1.2
23-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	0	1	0	1	1	0.7	1.1
24-Jun-06	0	0	0	0	0	0	1	1	0	1	0	0	A	1	0	0	0	0	0	0	0	1	1	0	0.4	0.6
25-Jun-06	0	1	1	1	0	1	0	0	0	0	0	A	1	0	0	0	0	1	0	1	1	1	1	1	0.5	0.8
26-Jun-06	1	1	1	0	0	0	0	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0	1	0.5	1.2
27-Jun-06	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
28-Jun-06	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	0.7	1.3
29-Jun-06	1	1	1	1	0	1	1	A	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	1	0.6	0.9
30-Jun-06	0	0	0	1	1	1	A	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
Hourly Avg	0.6	0.6	0.6	0.6	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.7		
Hourly Max	1.2	1.3	1.3	1.0	1.0	1.0	1.3	1.3	1.4	1.3	1.3	1.4	1.3	1.4	1.2	1.3	1.4	1.4	1.5	1.4	1.6	1.4	1.4	1.3		

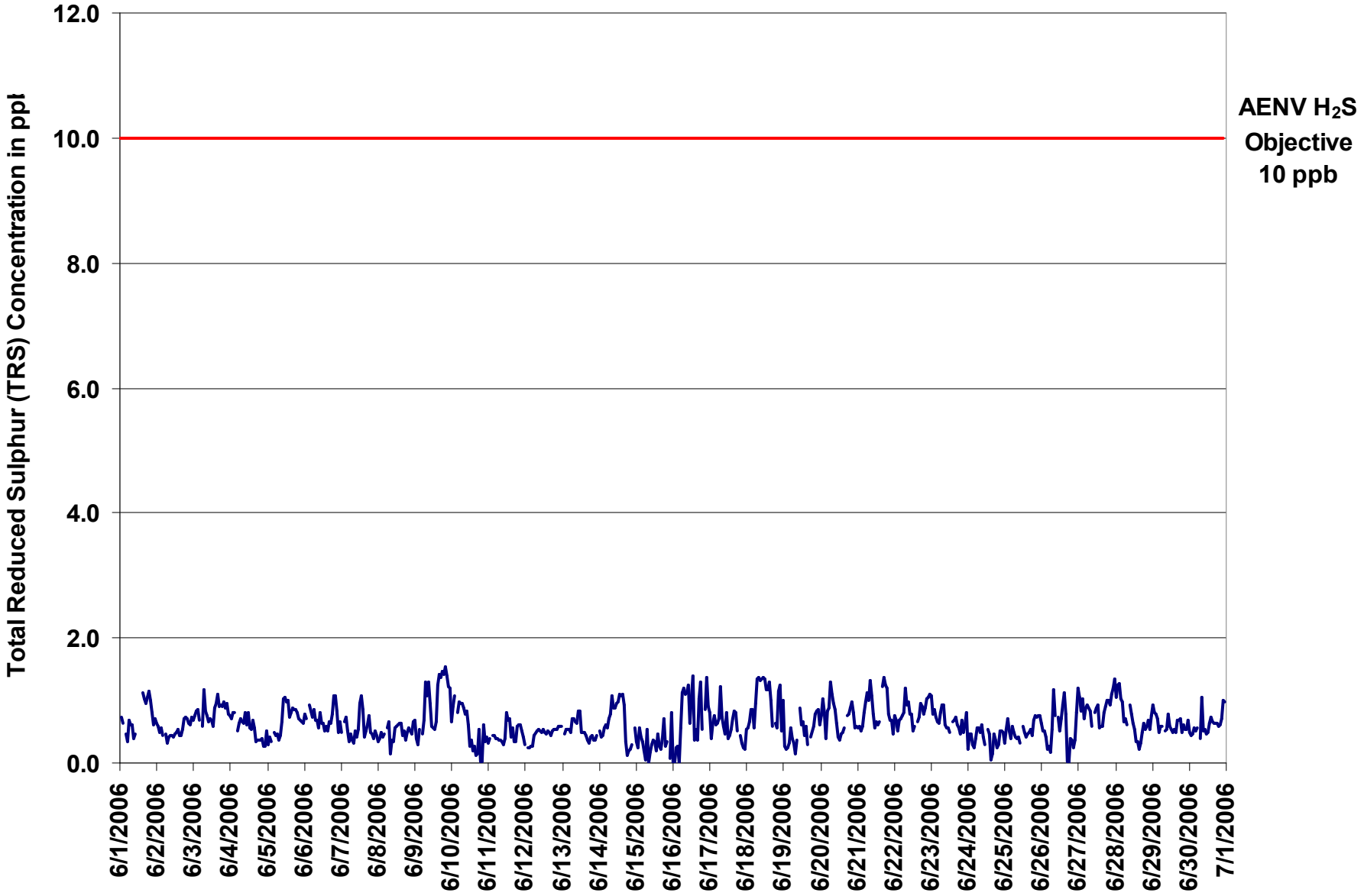


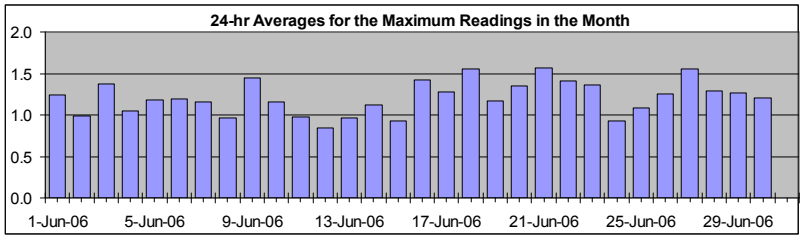
Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	3.9	ppb	23-Jun	4:00 5:00
Maximum 24-hr Value:	1.6	ppb	21-Jun	

AIC Time:	32 hrs	Operational Time:	683 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average	Median
	2.7	1.8	1.4	1.2	0.9	0.7	0.6	1.2 ppb	1.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	A	1	1	N	1	1	1	1	1	1	1	C	C	C	A	2	2	1	2	2	2	1	1	1	1.2	1.8
2-Jun-06	1	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	1.3
3-Jun-06	1	1	1	1	1	A	1	3	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1.4	2.8
4-Jun-06	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	1.3
5-Jun-06	1	1	1	A	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1.2	1.7
6-Jun-06	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6
7-Jun-06	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.5
8-Jun-06	1	1	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5
9-Jun-06	1	1	1	1	A	1	2	2	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	1.4	1.9
10-Jun-06	1	1	2	A	1	1	2	2	1	2	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1.2	1.8
11-Jun-06	1	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	1.3
12-Jun-06	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
13-Jun-06	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.5
14-Jun-06	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	A	2	1.1	1.7
15-Jun-06	1	1	1	1	1	1	1	3	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	2.6
16-Jun-06	1	0	1	1	1	2	2	2	1	2	2	1	2	2	1	1	1	2	2	2	A	1	2	2	1.4	1.9
17-Jun-06	1	1	1	1	1	1	1	2	2	1	1	2	1	1	1	1	2	2	1	A	1	1	1	1	1.3	2.0
18-Jun-06	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	1	A	1	1	2	2	1	1.6	2.4
19-Jun-06	2	1	1	1	1	2	1	1	1	1	P	2	1	1	1	1	1	A	1	1	1	2	1	1	1.2	2.3
20-Jun-06	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1.4	2.0
21-Jun-06	1	1	1	1	1	1	2	2	3	4	1	1	1	1	2	A	2	2	2	2	2	1	1	1	1.6	3.9
22-Jun-06	2	1	1	1	1	1	1	2	2	1	2	2	1	1	A	1	1	1	2	1	1	2	1	2	1.4	2.1
23-Jun-06	2	2	1	1	4	1	1	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.4	3.9
24-Jun-06	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	1.3
25-Jun-06	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	1.4
26-Jun-06	1	1	1	1	1	1	1	1	3	1	A	1	1	2	1	2	1	0	1	1	1	1	2	2	1.2	2.7
27-Jun-06	2	2	1	2	2	2	2	1	1	A	2	1	2	2	1	1	1	1	1	2	2	2	2	2	1.6	2.0
28-Jun-06	1	2	2	2	2	1	1	1	A	2	1	1	1	1	1	1	1	2	2	1	1	1	1	2	1.3	1.9
29-Jun-06	1	2	1	1	1	1	1	A	1	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.7
30-Jun-06	1	1	1	1	1	1	A	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.2	3.4
Hourly Avg	1.1	1.1	1.1	1.2	1.2	1.1	1.3	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.3		
Hourly Max	1.9	1.8	1.9	1.7	3.9	1.9	2.0	2.8	3.4	3.9	2.7	2.7	2.4	1.9	1.6	2.1	1.8	1.8	1.9	1.9	1.8	2.3	1.9	2.0		

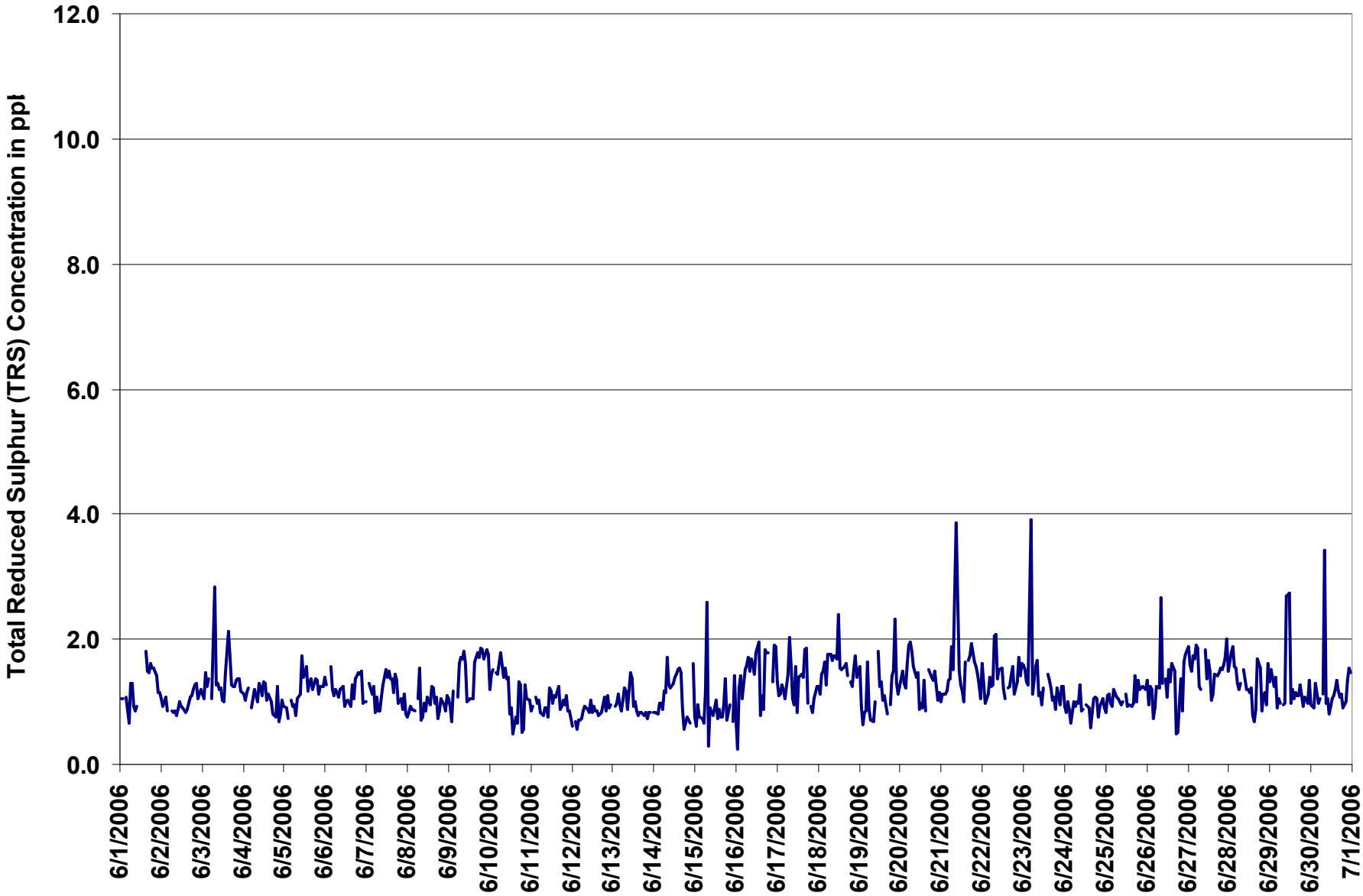
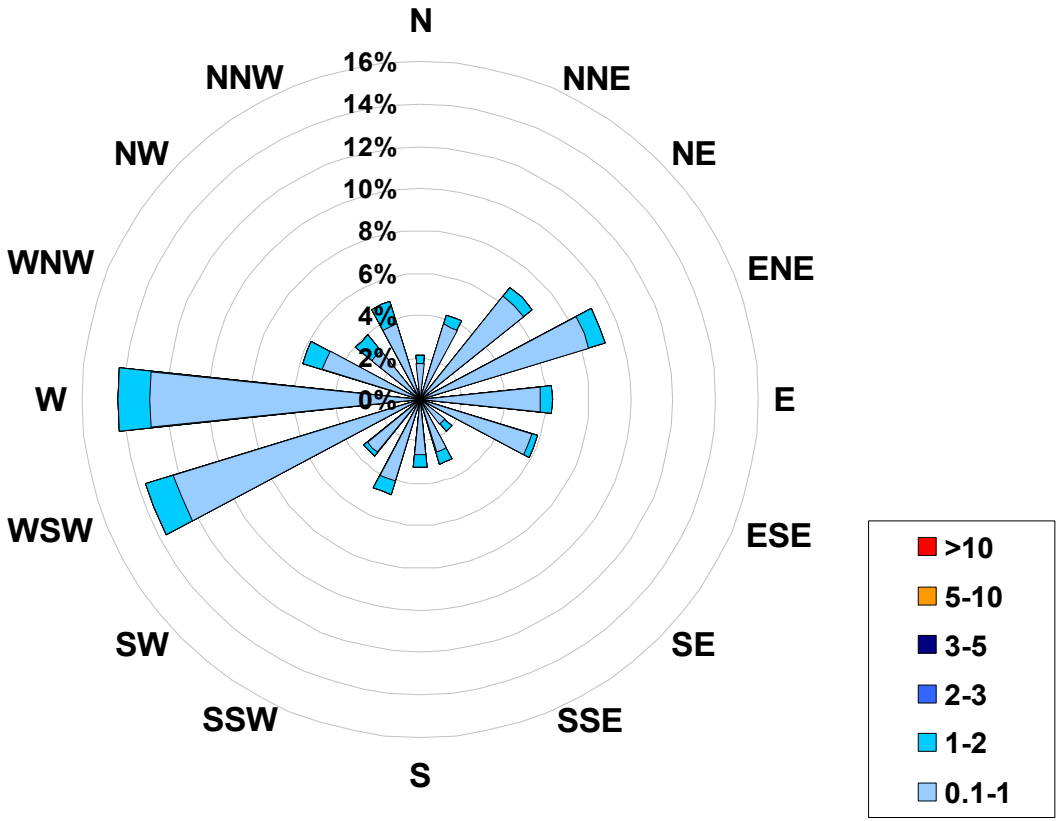


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Evergreen Park Site for June 2006



Calms:	0%

Frequency Distribution of TRS in ppb			
Range			Frequency (hrs)
0.1	<	1	600
1	to	2	83
2	to	3	0
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			683

PASZA - Evergreen Park - Particulate Matter (less than 2.5 microns) Monthly Summary

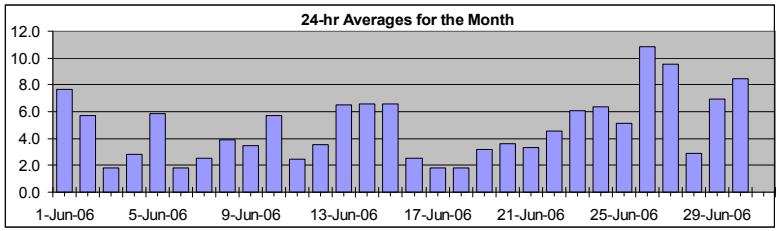
Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2006 to July 1, 2006

Draft Objective Limit: **Alberta Environment:** 1-hr - µg/m³ | 24-hr 30 µg/m³



Summary

Number of 24-hr Exceedances (draft):	0			
Maximum 1-hr Average:	46.2	µg/m³	27-Jun	7:00 8:00
Maximum 24-hr Value:	10.9	µg/m³	26-Jun	

AIC Time:	0 hrs	Operational Time:	712 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.4%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	23.8	12.1	6.5	3.7	2.1	0.0	0.0	4.8 4 µg/m³	4.2 µg/m³

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	11	11	11	N	9	9	7	10	10	17	9	9	9	C	C	C	C	0	0	2	4	4	5	10	7.7	17.4
2-Jun-06	6	15	15	13	8	8	9	9	9	8	3	5	6	3	0	0	0	7	2	1	0	5	2	2	5.7	15.3
3-Jun-06	3	3	3	1	0	0	0	2	0	0	0	0	1	10	11	3	2	2	3	0	0	1	0	0	1.8	10.8
4-Jun-06	0	0	0	0	0	0	2	0	0	2	5	1	10	3	3	8	4	5	5	3	6	5	3	3	2.8	10.5
5-Jun-06	2	2	2	2	3	5	6	6	6	8	19	11	5	5	2	8	9	8	8	4	4	5	4	5	5.8	18.9
6-Jun-06	3	2	2	3	3	2	3	0	1	0	1	1	2	2	1	0	1	2	1	1	6	1	2	2	1.8	5.6
7-Jun-06	2	0	0	1	1	4	6	0	1	2	3	2	3	0	0	1	2	3	4	4	4	6	7	4	2.5	7.0
8-Jun-06	4	4	4	4	3	3	5	5	5	5	5	5	5	5	5	4	4	4	4	2	3	2	3	2	3.9	5.4
9-Jun-06	2	3	2	2	2	4	4	1	2	2	2	3	2	2	3	3	3	2	4	5	4	6	6	12	3.5	12.0
10-Jun-06	6	5	5	6	6	8	6	9	10	11	7	7	5	4	5	5	2	2	4	5	4	8	5	2	5.7	10.6
11-Jun-06	1	2	2	1	2	3	3	3	3	5	4	3	3	2	3	1	0	1	2	3	4	4	2	2	2.5	5.2
12-Jun-06	1	2	2	3	3	8	6	2	3	3	3	2	2	4	3	3	5	3	4	4	4	5	5	4	3.5	7.5
13-Jun-06	3	2	2	4	4	9	7	8	12	12	14	12	4	7	4	1	2	5	7	6	8	8	8	7	6.5	13.9
14-Jun-06	7	7	8	5	6	9	8	8	9	9	8	6	7	5	3	2	3	4	8	7	9	7	6	5	6.6	9.3
15-Jun-06	6	5	6	7	6	7	8	12	8	13	7	7	3	3	5	1	6	1	11	10	7	10	5	1	6.6	12.6
16-Jun-06	3	1	3	2	3	2	3	4	4	3	2	5	7	2	1	2	6	5	0	2	D	0	0	0	2.5	6.8
17-Jun-06	0	0	0	0	1	1	2	0	3	3	2	2	5	6	5	3	2	1	2	3	2	1	0	0	1.8	6.3
18-Jun-06	1	0	1	0	0	1	1	2	2	0	1	2	3	0	1	6	2	0	3	6	5	2	0	3	1.8	5.7
19-Jun-06	1	0	0	1	1	5	1	5	5	12	P	4	10	9	3	3	0	4	4	1	0	1	2	1	3.2	11.9
20-Jun-06	1	2	0	0	3	5	6	10	9	5	3	3	4	7	1	3	0	4	3	7	4	2	1	2	3.6	9.7
21-Jun-06	1	0	3	0	2	8	0	2	2	11	2	0	2	7	3	5	4	6	3	2	3	6	3	4	3.3	10.8
22-Jun-06	6	3	3	1	3	4	8	9	9	6	6	4	7	5	6	0	8	8	0	3	5	3	0	4	4.6	8.6
23-Jun-06	3	3	2	2	1	4	7	18	7	3	7	9	2	3	6	7	5	4	5	6	11	12	12	6	6.1	18.2
24-Jun-06	8	9	10	8	6	10	5	3	6	9	9	3	4	6	8	6	5	6	6	5	5	4	5	6	6.3	9.9
25-Jun-06	6	7	5	4	4	6	8	13	11	8	3	2	2	0	0	3	5	4	4	4	3	7	6	7	5.1	12.9
26-Jun-06	4	4	5	5	2	8	4	10	25	31	29	12	1	3	7	8	6	5	7	21	16	21	14	12	10.9	30.8
27-Jun-06	7	15	12	13	11	10	21	46	24	17	2	4	1	2	1	4	4	4	6	9	6	3	5	2	9.5	46.2
28-Jun-06	6	7	3	1	2	7	4	5	4	6	0	1	1	3	3	1	D	0	5	2	2	0	3	2	2.9	7.0
29-Jun-06	3	0	1	2	2	7	6	11	13	5	3	8	26	15	9	8	10	9	7	5	5	6	2	3	6.9	26.0
30-Jun-06	5	7	10	7	6	7	9	14	14	6	1	2	0	0	1	9	7	9	7	8	10	10	25	26	8.4	26.3
Hourly Avg	3.7	4.0	4.2	3.4	3.4	5.5	5.4	7.7	7.2	7.4	5.5	4.7	4.7	4.3	3.5	3.8	3.8	4.0	4.3	4.7	4.9	5.2	4.7	4.7		
Hourly Max	10.8	15.3	14.5	13.1	11.0	9.7	20.7	46.2	24.8	30.8	28.8	12.2	26.0	15.4	10.8	9.3	9.6	9.4	11.1	21.2	15.9	20.8	25.1	26.3		

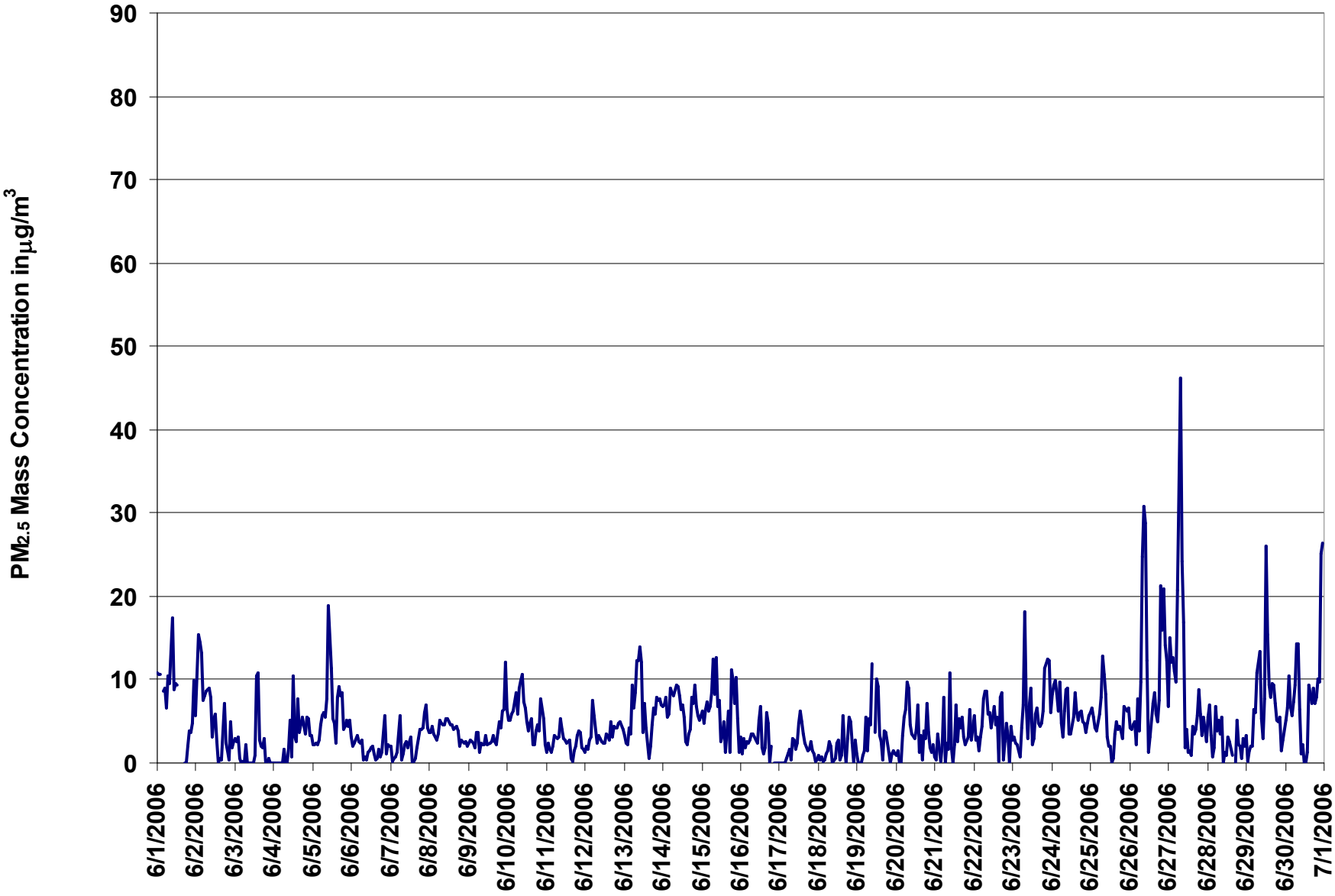


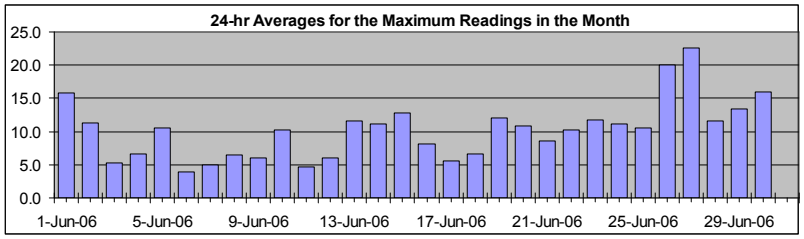
Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	73.9	µg/m³	27-Jun	7:00 8:00
Maximum 24-hr Value:	22.7	µg/m³	27-Jun	

AIC Time:	0 hrs	Operational Time:	712 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.4%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	41.0	23.6	13.1	8.2	4.9	1.7	1.0	10.2 8 µg/m˘	9.3 µg/m˘

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	19	15	15	N	10	14	14	17	15	29	24	15	70	C	C	C	C	1	1	5	8	6	7	16	15.8	70.0
2-Jun-06	10	21	18	17	10	10	12	15	15	14	5	10	14	14	2	3	3	37	10	4	2	9	9	7	11.3	36.6
3-Jun-06	7	5	5	4	1	2	2	5	1	1	1	3	8	24	25	6	6	7	7	1	2	2	1	1	5.3	24.8
4-Jun-06	1	2	0	1	1	1	3	0	2	6	13	4	21	10	7	13	11	13	14	6	11	10	5	6	6.7	21.0
5-Jun-06	3	4	4	3	4	7	8	7	8	15	37	20	14	15	10	13	16	15	14	6	7	8	7	7	10.5	37.2
6-Jun-06	6	4	4	7	4	4	4	1	2	2	3	3	3	4	4	2	4	4	2	4	10	3	5	4	3.9	10.3
7-Jun-06	4	2	1	2	3	7	9	3	3	4	5	4	6	4	4	3	4	5	7	5	5	9	10	11	5.0	10.5
8-Jun-06	10	6	8	9	5	5	11	7	8	9	9	7	7	6	7	6	6	6	5	3	4	3	4	3	6.4	10.8
9-Jun-06	4	4	4	3	4	5	5	4	4	5	6	6	4	5	5	6	6	5	7	8	6	11	12	16	6.0	16.3
10-Jun-06	11	8	7	9	9	12	13	19	15	18	19	10	10	9	9	8	5	7	9	7	9	10	8	5	10.2	19.0
11-Jun-06	4	4	3	3	4	5	4	5	6	8	7	5	6	5	5	3	4	3	5	6	7	6	4	4	4.7	7.5
12-Jun-06	3	4	4	4	6	13	12	5	6	6	6	6	4	6	6	4	7	5	7	6	6	6	8	6	6.1	13.1
13-Jun-06	5	4	5	6	6	15	15	11	17	22	24	24	10	13	10	5	8	9	11	11	15	14	11	9	11.6	24.0
14-Jun-06	11	10	11	10	8	13	13	13	16	12	13	13	16	17	7	7	5	12	13	11	12	11	8	8	11.2	16.5
15-Jun-06	10	7	8	9	8	10	11	16	11	19	13	13	8	9	10	8	16	8	20	22	21	31	10	8	12.8	30.5
16-Jun-06	6	3	7	4	4	5	5	8	8	8	8	23	16	17	20	7	14	14	4	5	D	3	0	1	8.2	22.7
17-Jun-06	0	2	2	2	2	3	3	3	21	20	5	8	11	11	7	7	6	4	4	5	3	3	2	2	5.6	21.0
18-Jun-06	2	2	2	1	1	2	3	4	5	2	4	6	11	4	5	23	15	7	12	15	12	10	4	6	6.6	23.1
19-Jun-06	3	2	0	3	5	12	6	21	8	27	P	23	27	21	33	12	8	12	10	21	5	5	7	4	12.0	33.2
20-Jun-06	4	5	2	3	8	8	8	23	29	10	10	8	11	16	19	23	7	11	13	15	10	7	4	5	10.8	29.0
21-Jun-06	4	3	8	1	8	17	4	6	5	24	11	4	6	15	10	11	7	13	7	6	6	11	8	11	8.5	23.6
22-Jun-06	10	6	6	4	5	7	13	12	18	14	23	14	14	11	11	6	18	15	6	6	6	6	3	10	10.2	22.8
23-Jun-06	4	5	4	4	3	9	9	26	24	7	14	21	7	8	11	12	8	8	10	11	19	19	22	13	11.7	25.6
24-Jun-06	13	14	12	10	8	15	10	9	13	14	13	8	11	11	18	14	9	11	12	12	8	6	8	9	11.2	17.8
25-Jun-06	11	13	8	7	6	14	17	17	15	15	10	6	9	7	8	7	13	12	9	10	6	11	11	10	10.5	17.3
26-Jun-06	8	6	9	8	4	15	15	17	33	39	41	20	9	13	16	18	16	12	14	57	43	30	21	17	20.0	57.0
27-Jun-06	17	25	18	17	22	18	43	74	68	26	17	11	12	9	12	12	17	10	29	30	20	7	17	14	22.7	73.9
28-Jun-06	11	15	8	4	9	16	9	11	14	26	9	15	10	15	16	7	D	7	12	16	17	6	5	5	11.5	25.9
29-Jun-06	6	4	4	4	6	11	9	21	33	23	8	21	37	33	13	12	17	14	12	9	7	8	3	6	13.4	37.1
30-Jun-06	7	9	19	10	8	13	14	18	23	13	5	8	6	4	17	17	12	17	12	18	27	29	41	38	16.0	41.4
Hourly Avg	7.0	7.1	6.9	5.8	6.1	9.5	10.1	13.3	14.8	14.5	12.5	11.3	13.3	11.6	11.3	9.5	9.5	10.1	10.0	11.4	10.9	10.0	8.8	8.7		
Hourly Max	18.5	25.1	18.7	16.9	21.9	18.4	42.8	73.9	67.9	39.3	41.3	24.0	70.0	32.5	33.2	23.1	18.0	36.6	29.4	57.0	43.0	30.5	41.4	37.8		

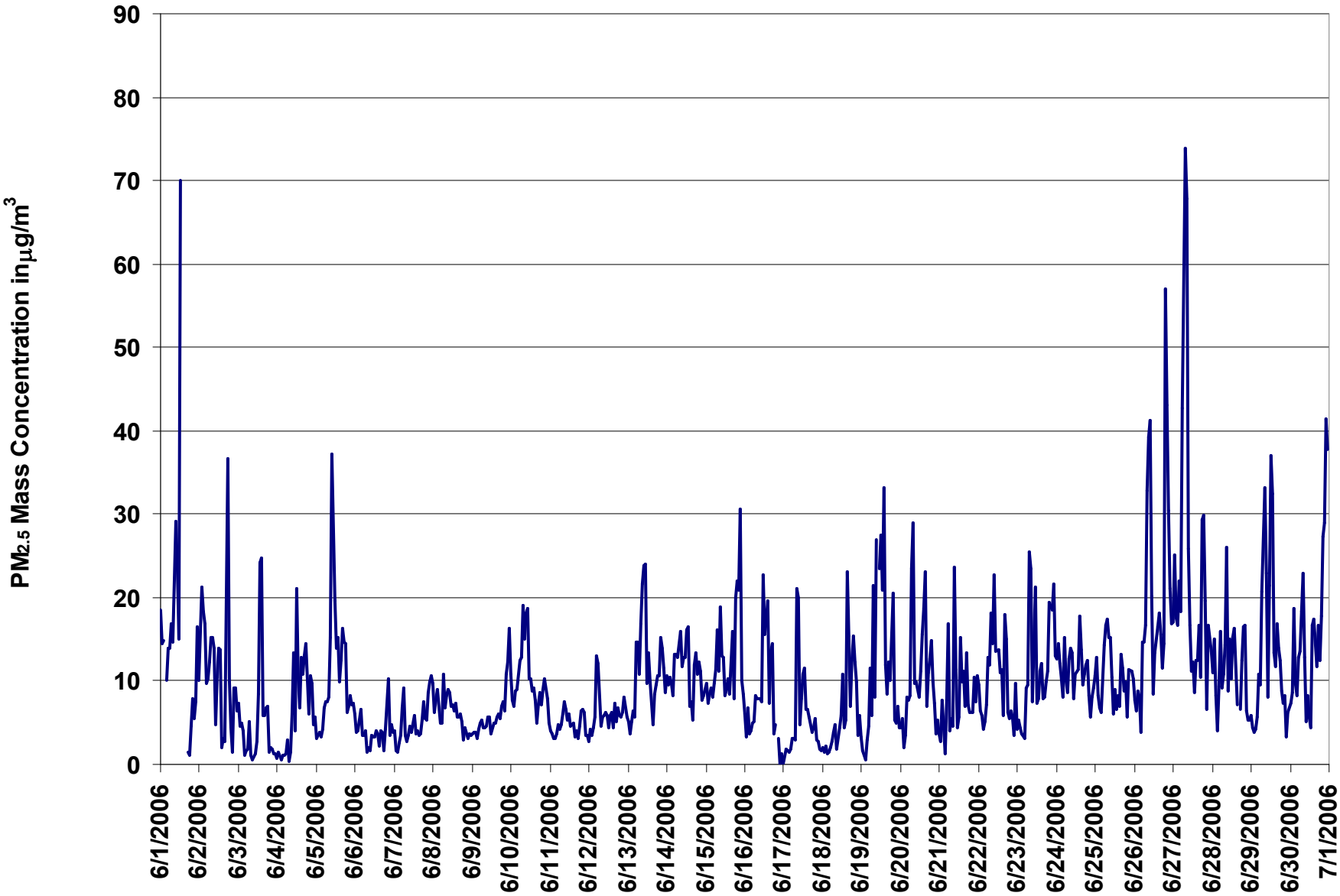
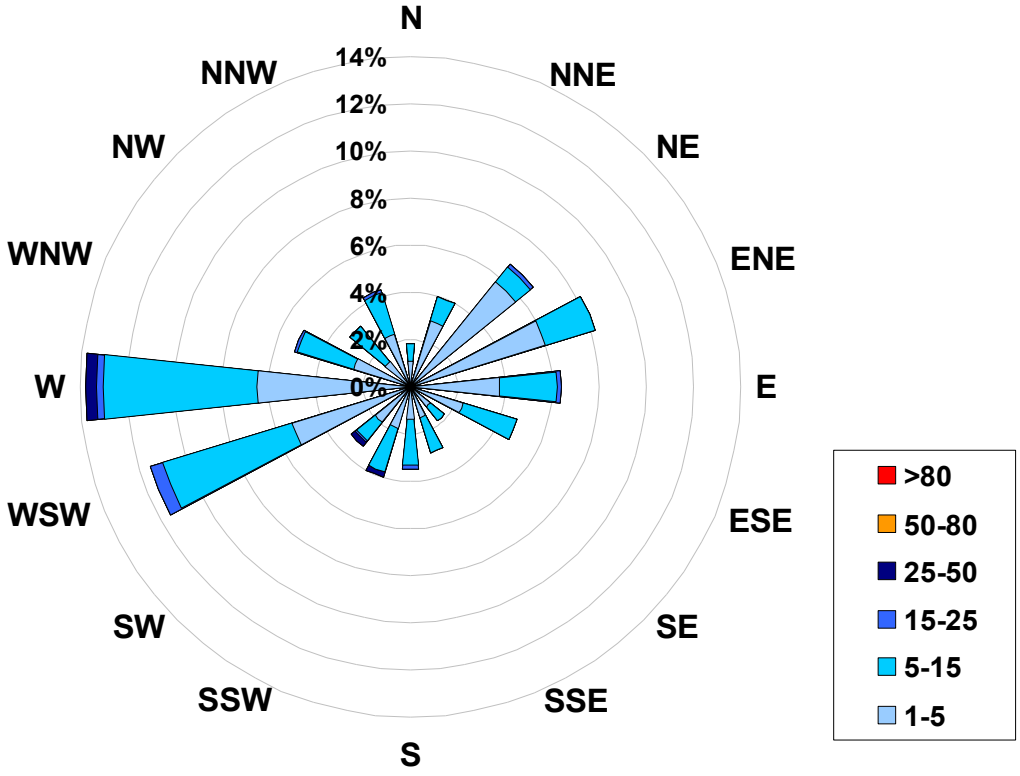


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Evergreen Park Site for June 2006



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	440
5	to	15	254
15	to	25	12
25	to	50	6
50	to	80	0
	>	80	0
Total Non-Zero Values			712

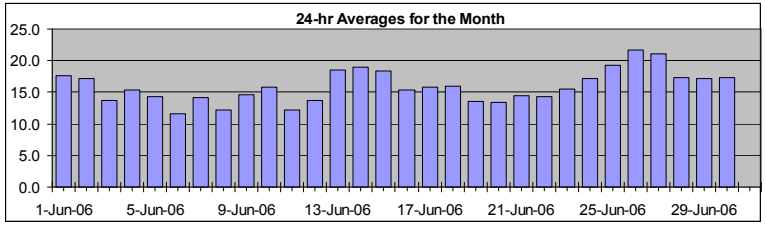
PASZA - Evergreen Park - Temperature Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	32.4	°C	26-Jun	17:00 18:00
Maximum 24-hr Value:	21.7	°C	26-Jun	

AIC Time:	0 hrs	Operational Time:	718 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.7%

Percentile	99	95	75	50	25	5	1	Average	Median
	29.2	25.3	19.9	15.4	12.1	7.2	4.2	15.9 °C	15.4 °C

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	9	8	7	N	8	10	12	13	14	18	21	22	23	24	24	25	25	25	25	25	22	18	14	13	17.6	25.3
2-Jun-06	12	12	12	13	13	13	16	18	19	21	23	23	23	19	21	22	23	21	16	15	15	15	15	14	17.2	23.4
3-Jun-06	13	12	11	12	11	11	11	10	11	12	13	15	16	17	17	18	18	18	17	17	15	13	12	11	13.7	17.6
4-Jun-06	10	10	10	10	10	10	11	12	14	16	17	18	19	20	20	20	20	20	19	18	17	16	16	14	15.4	20.5
5-Jun-06	13	12	12	12	11	12	13	13	14	16	17	18	15	16	17	17	16	16	15	16	14	14	13	11	14.2	17.6
6-Jun-06	10	9	8	8	8	8	8	7	7	9	10	12	14	15	16	17	17	17	17	16	13	11	10	9	11.6	17.2
7-Jun-06	9	8	7	5	4	4	8	11	12	14	16	18	19	19	21	21	22	21	20	19	17	16	14	13	14.1	21.5
8-Jun-06	11	11	11	11	11	11	11	12	13	14	15	14	13	13	13	14	14	13	12	12	12	12	11	11	12.2	14.6
9-Jun-06	11	11	11	11	10	11	11	12	13	14	15	16	17	18	19	19	20	21	20	20	18	14	11	9	14.7	20.7
10-Jun-06	8	7	6	6	6	7	10	12	14	17	20	22	23	23	23	23	23	22	22	22	20	15	15	13	15.9	23.4
11-Jun-06	13	12	10	9	8	9	10	12	13	13	14	14	15	14	15	16	16	15	14	14	13	10	8	6	12.2	16.1
12-Jun-06	5	4	3	3	2	4	8	10	12	14	16	17	19	20	21	22	22	22	22	21	20	16	14	13	13.7	21.9
13-Jun-06	12	10	8	8	7	8	13	15	17	19	21	23	24	26	27	27	27	27	26	26	23	19	16	15	18.5	27.5
14-Jun-06	13	12	13	13	12	13	16	18	20	21	22	23	24	24	24	25	24	24	22	20	19	18	17	16	18.9	24.7
15-Jun-06	15	15	15	14	14	13	14	17	18	18	20	21	21	23	24	24	23	24	23	22	21	17	14	14	18.4	23.8
16-Jun-06	13	13	13	12	12	12	13	13	14	15	16	18	18	19	20	20	19	17	17	17	17	15	14	13	15.4	19.7
17-Jun-06	13	13	12	12	11	11	13	14	15	16	16	18	19	19	19	20	19	19	19	19	18	16	15	15	15.8	19.6
18-Jun-06	14	13	13	13	12	12	12	14	16	17	18	19	20	20	21	21	21	21	20	16	13	12	12	11	16.0	21.5
19-Jun-06	11	10	8	8	7	8	11	13	15	17	P	19	21	21	15	15	14	14	17	16	14	14	12	11	13.5	20.7
20-Jun-06	9	10	10	7	9	12	13	13	13	15	17	18	19	18	17	16	19	18	12	13	14	12	10	9	13.5	19.5
21-Jun-06	7	6	7	6	5	8	11	13	15	16	18	19	20	20	20	21	20	20	19	18	17	14	13	12	14.4	20.6
22-Jun-06	9	8	6	8	5	6	10	12	15	17	18	19	20	20	20	20	19	17	18	18	17	16	15	13	14.3	20.2
23-Jun-06	11	10	7	6	8	9	11	13	15	17	18	19	19	21	21	22	22	22	22	22	21	15	11	9	15.5	22.2
24-Jun-06	7	7	5	5	4	6	10	13	15	18	21	24	24	25	25	25	25	25	24	25	23	21	19	17	17.2	25.4
25-Jun-06	13	12	12	9	8	9	13	16	18	20	22	23	24	25	27	27	27	28	27	25	25	21	16	14	19.2	27.5
26-Jun-06	12	11	10	10	10	10	14	17	19	22	25	27	29	31	31	32	32	32	32	32	28	22	18	16	21.7	32.4
27-Jun-06	14	13	11	11	11	14	15	19	20	22	25	26	27	28	29	29	29	28	27	26	24	22	19	17	21.1	29.3
28-Jun-06	16	14	13	12	11	12	13	15	16	18	21	22	22	22	22	22	20	19	19	19	17	17	16	15	17.3	22.5
29-Jun-06	15	14	14	12	10	10	11	13	15	16	17	19	20	21	21	22	22	22	22	22	21	19	18	16	17.1	22.4
30-Jun-06	15	14	11	7	6	7	12	15	17	20	20	21	21	22	23	23	24	24	24	23	20	17	16	15	17.3	23.9
Hourly Avg	11.4	10.6	9.9	9.3	8.9	9.7	11.8	13.6	15.0	16.7	18.3	19.5	20.3	20.8	21.1	21.4	21.4	21.2	20.3	19.7	18.4	15.8	14.1	12.8		
Hourly Max	15.5	14.5	14.6	14.3	13.5	13.6	15.7	18.7	20.2	22.1	25.4	26.7	28.9	30.6	31.0	32.0	32.2	32.4	32.3	31.8	27.9	21.8	19.3	16.9		

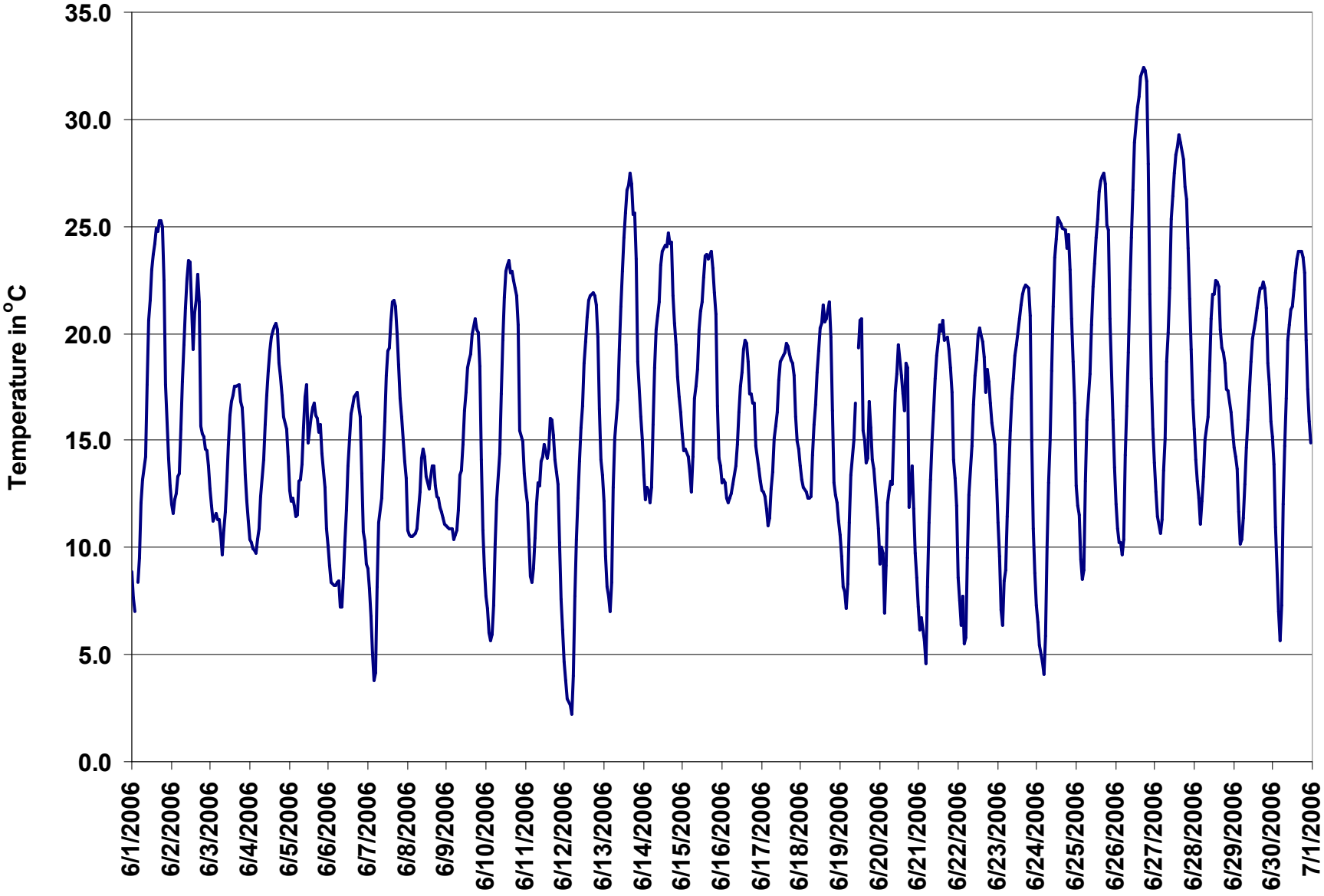


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

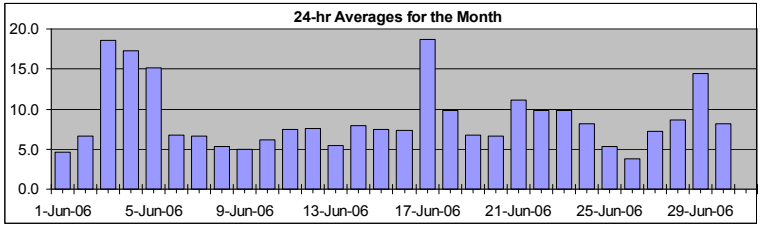
PASZA - Evergreen Park - Scalar Wind Speed Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	31.4	km/hr	3-Jun	12:00 13:00
Maximum 24-hr Value:	18.7	km/hr	17-Jun	

Calm Time:	0 hrs	**0%** calms	Operational Time: 718 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 99.7%

Percentile	99	95	75	50	25	5	1	AverageS
	26.5	20.1	11.4	7.3	4.7	2.7	1.8	8.8 km/hr

Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Scalar Average	Daily Max
1-Jun-06	3	3	4	N	4	3	4	3	5	4	6	7	6	6	6	8	8	6	4	4	4	3	2	2	4.6	8.0
2-Jun-06	3	4	3	4	4	5	6	6	6	5	6	8	8	14	13	8	9	11	4	7	6	4	9	6	6.6	14.2
3-Jun-06	7	5	6	11	8	13	16	9	14	21	23	30	31	31	31	28	24	27	26	22	17	16	15	13	18.5	31.4
4-Jun-06	14	16	16	17	17	20	19	17	22	20	20	19	20	20	20	19	19	18	16	15	14	12	13	13	17.3	22.1
5-Jun-06	11	10	14	14	13	13	16	14	15	20	18	17	15	20	16	21	21	20	20	17	13	12	11	3	15.1	20.7
6-Jun-06	3	6	7	9	7	8	8	7	5	4	5	6	7	8	8	9	9	9	9	7	5	6	5	3	6.7	8.9
7-Jun-06	5	5	3	2	2	3	3	7	9	7	8	6	7	7	9	9	10	10	9	8	8	6	7	8	6.6	10.2
8-Jun-06	8	5	6	6	4	5	4	4	5	6	4	6	7	6	4	5	6	7	6	5	5	3	4	4	5.3	8.0
9-Jun-06	3	3	3	5	3	4	5	7	8	7	6	6	6	5	6	6	4	5	7	5	5	3	3	3	5.0	7.9
10-Jun-06	3	3	4	4	5	4	10	8	7	6	5	6	7	7	8	9	10	9	7	5	3	4	7	7	6.1	9.8
11-Jun-06	6	6	3	5	7	7	8	9	11	9	10	11	11	10	9	10	8	7	8	6	5	4	4	3	7.5	11.1
12-Jun-06	2	2	3	4	3	4	5	7	10	11	10	11	10	11	10	11	11	10	11	9	8	6	6	6	7.6	11.3
13-Jun-06	5	5	5	3	2	2	4	4	4	5	5	6	6	8	9	9	8	10	6	7	5	5	5	4	5.4	10.2
14-Jun-06	2	4	4	5	3	3	4	7	7	7	6	6	8	11	17	15	16	13	9	9	8	10	10	8	8.0	16.6
15-Jun-06	8	7	8	7	4	3	4	11	11	8	7	9	7	6	8	9	6	8	8	6	4	16	5	5	7.4	15.7
16-Jun-06	3	6	5	3	4	6	6	5	3	4	8	5	4	6	4	5	13	9	12	11	18	12	11	14	7.3	18.5
17-Jun-06	20	22	21	18	10	12	11	12	23	24	21	25	28	27	26	22	23	22	15	13	15	13	13	13	18.7	28.3
18-Jun-06	13	11	12	14	14	15	14	13	15	12	12	10	10	7	9	7	7	5	4	12	6	4	7	3	9.8	14.9
19-Jun-06	3	2	4	6	3	3	6	10	12	12	P	11	11	10	8	7	9	6	5	7	6	7	4	4	6.8	12.4
20-Jun-06	3	5	4	2	6	8	11	11	7	8	10	12	10	8	7	4	5	8	12	4	5	3	3	4	6.6	12.3
21-Jun-06	4	2	6	3	4	9	11	14	19	20	17	15	16	16	16	18	14	16	13	10	7	5	7	6	11.2	20.5
22-Jun-06	3	4	4	6	4	3	9	10	12	14	13	14	14	10	10	13	18	15	12	11	9	12	10	7	9.8	17.6
23-Jun-06	6	6	3	4	6	7	9	16	16	17	18	16	13	15	15	14	13	12	10	8	5	2	3	3	9.8	17.9
24-Jun-06	4	2	2	2	2	3	4	4	6	7	7	9	12	12	15	17	17	15	9	12	11	9	8	6	8.1	17.2
25-Jun-06	4	3	4	3	2	3	4	8	7	7	6	10	9	7	6	6	7	6	7	6	6	3	2	3	5.3	9.7
26-Jun-06	2	2	4	4	1	2	3	4	4	4	4	6	5	5	8	5	6	5	5	4	3	3	2	2	3.8	7.9
27-Jun-06	2	2	3	2	5	6	7	10	8	7	12	14	9	8	7	7	5	6	4	4	7	11	12	14	7.2	14.1
28-Jun-06	9	10	8	6	5	6	6	6	7	7	9	9	9	12	13	13	10	7	6	8	8	13	11	9	8.6	12.8
29-Jun-06	7	7	8	8	9	7	12	15	16	21	19	19	23	22	21	20	20	20	19	16	11	8	10	8	14.5	22.6
30-Jun-06	8	8	5	3	3	3	7	11	11	11	12	14	17	14	11	11	13	10	8	4	3	2	3	4	8.2	16.5
1-hr Average	5.8	5.8	6.0	6.2	5.5	6.4	7.9	9.0	10.2	10.5	10.7	11.4	11.5	11.6	11.7	11.4	11.6	11.1	9.7	8.7	7.6	7.2	7.1	6.2		
Hourly Max	20.1	21.5	20.8	17.8	16.5	19.7	18.8	17.2	23.2	23.6	22.8	30.2	31.4	30.8	30.7	28.1	24.2	26.5	26.2	22.1	18.5	15.7	15.5	14.1		

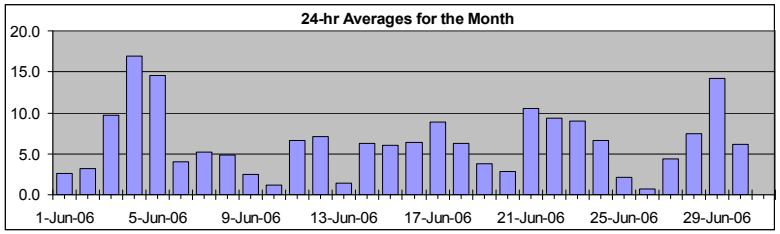
PASZA - Evergreen Park - Vector Wind Speed Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	31.1	km/hr	3-Jun	12:00 13:00
Maximum 24-hr Value:	16.9	km/hr	4-Jun	

Calm Time:	15 hrs	**2%** calms	Operational Time: 703 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 99.7%

Percentile	99	95	75	50	25	5	1	AverageV
	25.9	19.6	10.9	6.6	4.0	1.9	1.0	2.8 km/hr

Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Vector Average	Daily Max
1-Jun-06	calm	calm	4	N	4	3	4	3	3	3	5	7	5	4	3	7	5	4	2	3	3	3	calm	1	2.6	6.7
2-Jun-06	calm	calm	2	3	4	5	6	6	6	4	4	6	7	14	12	7	8	6	3	4	5	4	9	5	3.2	13.5
3-Jun-06	1	3	6	11	7	13	16	9	14	21	23	13	31	30	30	27	23	26	26	22	17	16	15	13	9.7	31.1
4-Jun-06	14	16	15	17	16	20	19	17	22	20	20	18	19	19	19	18	18	18	16	15	14	12	13	13	16.9	21.8
5-Jun-06	11	10	14	14	13	13	15	14	15	19	18	16	14	19	16	20	20	19	20	16	13	12	10	2	14.5	20.5
6-Jun-06	2	6	7	8	7	8	6	7	5	3	3	5	5	6	7	8	8	8	8	7	4	6	4	3	4.0	8.4
7-Jun-06	4	5	1	calm	calm	3	3	6	9	6	6	4	6	6	8	8	10	10	9	8	8	3	7	8	5.2	9.6
8-Jun-06	6	3	4	6	3	5	3	4	5	5	4	5	6	6	4	4	6	7	6	5	5	3	4	3	4.9	6.9
9-Jun-06	3	3	3	5	3	4	5	6	7	6	6	4	5	3	3	4	1	1	6	5	5	3	3	2	2.4	7.3
10-Jun-06	2	1	3	4	5	3	9	8	7	5	2	2	5	5	6	9	9	8	7	4	3	3	7	7	1.2	9.5
11-Jun-06	6	5	3	5	7	7	8	9	10	9	10	10	10	9	9	9	7	6	7	6	4	4	4	3	6.6	10.5
12-Jun-06	2	2	3	4	3	4	5	6	9	10	9	10	9	9	9	10	10	10	10	9	8	6	6	6	7.2	10.5
13-Jun-06	5	5	5	2	1	1	3	2	3	2	3	4	3	5	5	8	7	9	5	6	5	5	5	4	1.4	9.3
14-Jun-06	2	4	4	4	2	3	4	6	6	6	5	4	7	8	16	14	16	12	8	8	7	10	9	8	6.2	16.0
15-Jun-06	8	7	8	6	4	2	2	11	11	8	6	8	6	5	6	8	6	7	7	6	3	15	4	5	6.1	15.1
16-Jun-06	2	6	5	3	4	6	6	4	2	4	7	3	3	5	4	4	13	8	12	11	18	12	11	14	6.4	18.3
17-Jun-06	20	21	21	18	10	11	11	12	20	23	21	24	28	26	26	21	22	22	15	13	15	13	13	13	8.9	27.9
18-Jun-06	13	11	12	14	14	15	14	12	14	11	11	9	9	5	8	5	7	2	3	8	4	calm	7	2	6.3	14.8
19-Jun-06	3	1	3	6	3	2	6	10	12	11	P	10	10	8	8	6	5	5	5	4	4	5	4	3	3.8	11.9
20-Jun-06	2	5	2	1	5	8	10	10	5	7	9	11	9	6	6	3	4	5	10	3	4	3	calm	4	2.9	11.5
21-Jun-06	3	1	6	3	4	9	11	14	19	20	17	14	15	14	15	17	14	16	13	10	6	4	7	6	10.6	20.1
22-Jun-06	3	4	4	6	3	2	9	10	11	13	12	14	13	10	9	13	17	15	11	11	8	12	10	7	9.3	17.3
23-Jun-06	6	6	1	3	6	7	9	16	16	16	17	15	12	14	14	13	11	11	10	7	5	2	3	3	9.0	17.3
24-Jun-06	4	1	1	2	2	3	4	4	6	7	6	7	10	11	15	16	17	15	9	11	10	9	7	5	6.6	16.7
25-Jun-06	2	3	3	3	calm	1	4	8	6	5	4	9	7	5	3	2	4	5	6	5	6	3	2	2	2.1	9.0
26-Jun-06	2	2	3	2	1	calm	1	4	2	2	2	4	4	5	7	2	4	3	4	3	2	2	calm	calm	0.7	6.5
27-Jun-06	1	calm	1	calm	4	6	6	10	8	7	12	12	8	5	4	5	2	5	4	4	6	11	11	14	4.4	13.7
28-Jun-06	8	8	7	4	5	5	5	5	7	7	9	7	7	11	11	12	10	6	5	7	7	13	11	8	7.5	12.7
29-Jun-06	7	7	8	8	9	7	11	15	16	20	19	19	22	21	20	19	19	20	19	16	11	8	10	8	14.2	21.9
30-Jun-06	8	8	2	2	1	3	7	10	11	10	11	13	16	13	10	10	12	9	7	4	2	2	3	4	6.1	15.9
1-hr Vector	1.1	0.8	0.5	1.2	1.9	1.9	3.1	3.7	4.1	5.1	4.6	5.1	5.7	5.5	5.2	5.3	4.3	3.5	2.3	2.3	1.6	1.5	1.4	0.9		
Hourly Max	20.0	21.4	20.7	17.7	16.5	19.6	18.6	17.0	21.8	23.2	22.6	24.4	31.1	30.3	30.3	27.4	23.2	26.0	25.9	21.9	18.3	15.6	15.3	13.7		

PASZA - Evergreen Park - Wind Direction Monthly Summary

HOURLY AVERAGE TABLE

Wind Direction (WD)

Station: Evergreen Park
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Summary

Calm Time:	0 hrs		**0%** calms		Operational Time:		718 hrs	
Calibration Time:		0 hrs			AMD Operational Uptime:		99.7%	
Percentile	99	95	75	50	25	5	1	Average
	353.0	334.5	264.9	213.2	85.5	34.0	14.2	265 deg

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	WD Sector
1-Jun-06	113	153	82	N	84	80	80	74	96	170	175	139	176	232	71	71	76	76	106	148	276	290	254	191	114	ESE
2-Jun-06	208	96	110	108	79	101	120	174	148	150	197	165	158	178	195	243	269	176	345	16	357	76	102	75	153	SSE
3-Jun-06	81	57	79	112	124	130	147	143	117	122	121	204	262	261	262	267	252	255	261	259	249	246	246	244	229	SW
4-Jun-06	236	244	247	242	244	253	250	241	249	263	260	266	273	270	272	274	275	275	273	261	255	242	246	241	258	WSW
5-Jun-06	220	221	241	239	241	244	248	242	243	251	261	254	238	246	235	245	243	257	261	261	258	262	295	5	249	WSW
6-Jun-06	276	274	309	319	310	319	334	60	61	75	62	339	21	54	79	61	46	54	60	64	116	94	81	46	32	NNE
7-Jun-06	149	77	91	149	120	43	63	99	125	145	172	99	74	53	54	51	60	64	56	56	54	30	37	33	74	ENE
8-Jun-06	36	0	47	65	90	75	58	357	16	35	61	75	91	73	50	68	74	54	53	54	77	62	60	62	56	NE
9-Jun-06	50	42	31	25	38	42	34	31	11	13	36	42	26	51	7	3	248	323	215	190	164	175	146	169	31	NNE
10-Jun-06	80	115	163	203	204	224	246	263	254	255	248	183	33	14	24	29	25	27	37	71	105	68	63	57	27	NNE
11-Jun-06	64	78	51	46	47	45	53	55	53	39	23	41	43	78	82	68	71	103	120	124	133	81	89	99	65	ENE
12-Jun-06	76	78	71	78	85	67	109	115	122	134	123	126	123	121	110	115	104	107	97	90	91	68	74	88	106	ESE
13-Jun-06	86	81	78	36	45	98	137	177	247	174	162	146	155	66	329	321	334	337	309	334	325	313	320	312	355	N
14-Jun-06	305	297	309	302	289	299	292	354	4	17	356	319	325	319	334	337	338	354	32	31	24	61	65	70	352	N
15-Jun-06	67	78	90	99	111	293	200	111	123	128	157	120	167	168	113	147	159	124	117	188	120	92	101	88	120	ESE
16-Jun-06	75	95	92	60	51	64	68	60	44	48	83	47	343	18	343	42	109	96	71	80	103	90	101	107	80	E
17-Jun-06	113	110	104	104	116	114	144	137	153	260	259	265	265	262	265	267	259	257	261	261	247	242	244	245	233	SW
18-Jun-06	248	251	248	248	247	247	252	267	266	291	326	339	325	297	335	314	80	61	185	348	52	277	196	187	277	W
19-Jun-06	192	177	199	200	235	295	293	264	264	265	P	270	251	265	76	48	226	176	176	28	347	273	234	210	253	WSW
20-Jun-06	190	264	285	29	276	274	265	252	261	262	327	345	41	41	32	42	347	341	23	215	213	188	173	210	307	NW
21-Jun-06	206	166	233	228	237	249	249	248	255	260	271	284	269	284	286	274	280	285	281	285	294	233	243	250	267	W
22-Jun-06	263	258	256	252	239	262	248	260	269	255	259	271	258	247	245	227	230	242	236	232	230	223	211	194	244	WSW
23-Jun-06	189	197	164	228	259	264	282	257	265	266	268	260	272	258	254	265	282	283	285	277	267	225	196	185	261	W
24-Jun-06	194	101	108	203	210	206	196	205	200	199	209	213	264	262	284	286	285	276	265	273	273	289	280	268	260	W
25-Jun-06	303	295	263	275	255	260	273	258	242	280	287	236	259	289	320	316	34	33	80	79	121	119	90	74	286	WNW
26-Jun-06	81	74	63	88	213	339	70	176	252	266	235	245	201	342	344	313	219	169	186	219	34	327	21	89	248	WSW
27-Jun-06	196	55	212	167	273	272	283	263	256	250	292	294	312	358	354	17	71	68	85	37	344	343	343	331	317	NW
28-Jun-06	316	285	283	250	213	237	214	240	252	256	262	313	309	274	295	297	308	304	227	224	242	262	261	266	272	W
29-Jun-06	279	267	285	244	247	257	247	251	255	249	253	261	264	272	276	271	266	260	251	250	253	250	247	232	259	W
30-Jun-06	239	244	330	345	292	314	276	273	273	290	301	321	337	341	350	338	339	348	337	354	71	167	201	202	313	NW
Hourly Avg	185	205	222	214	234	255	242	240	238	251	261	264	276	279	297	296	284	287	276	278	258	255	240	224		

PASZA - Evergreen Park - Standard Deviation of Wind Direction Monthly Summary

Station: Evergreen Park
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2006 to July 1, 2006

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms	Operational Time: 718 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 99.7%

Percentile	99	95	75	50	25	5	1
	64.7	51.1	28.7	17.8	11.8	6.2	5.2

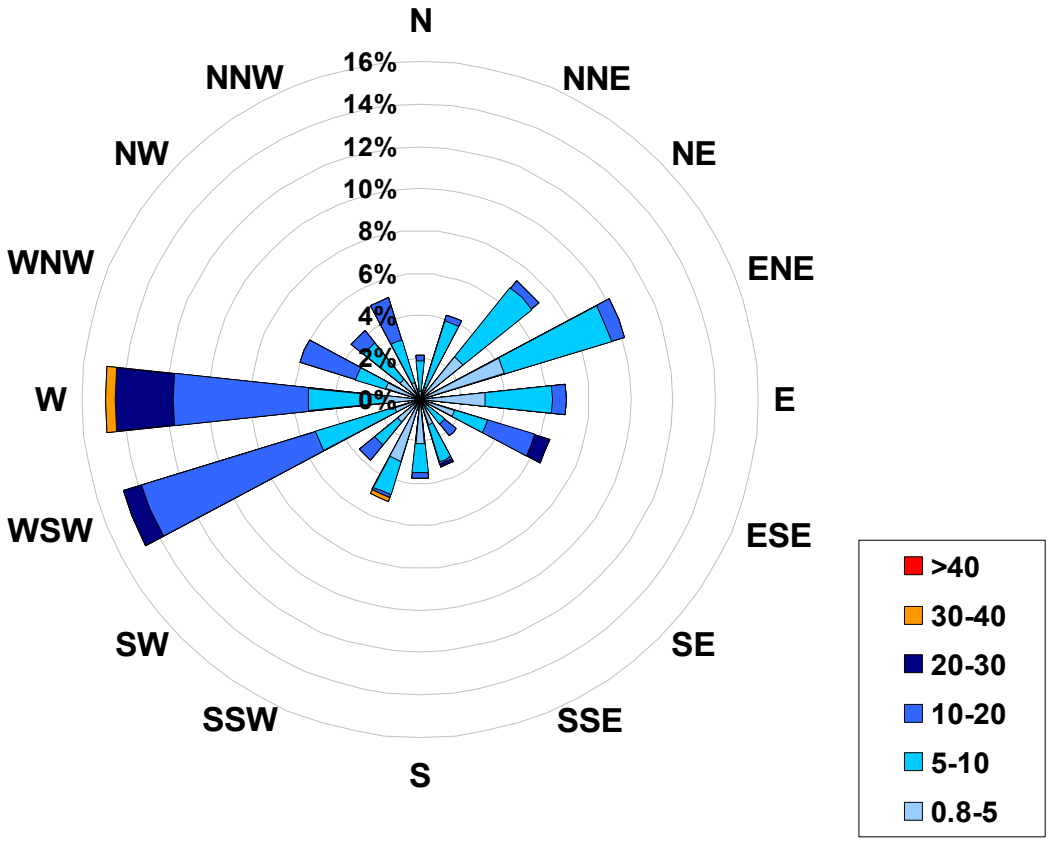
Status Flag Characters

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	Daily Maximum
1-Jun-06	79	39	42	N	8	16	10	16	27	26	29	26	39	47	52	36	48	49	69	33	20	25	40	52	78.9
2-Jun-06	23	49	27	26	41	12	14	22	26	61	50	39	17	24	18	23	22	28	51	37	24	41	7	24	61.0
3-Jun-06	27	39	14	9	11	7	11	13	8	7	8	20	9	9	9	13	9	9	8	8	8	7	7	7	39.0
4-Jun-06	5	5	6	6	6	6	8	9	10	12	12	16	15	15	18	15	14	13	11	9	6	6	5	6	18.3
5-Jun-06	4	5	6	6	6	5	8	9	10	9	12	14	10	10	17	10	10	10	9	11	6	9	21	44	43.8
6-Jun-06	60	15	13	13	13	14	15	17	23	33	67	43	52	33	33	32	25	22	18	18	34	12	16	18	67.4
7-Jun-06	28	10	34	44	40	16	21	25	20	32	37	44	29	26	29	28	19	20	16	14	13	45	14	15	44.5
8-Jun-06	31	30	31	19	20	13	46	24	20	20	19	16	16	15	18	20	18	14	15	18	19	17	14	14	46.0
9-Jun-06	14	15	14	13	22	11	20	18	21	20	29	54	46	58	73	35	65	60	20	26	10	20	18	32	72.6
10-Jun-06	38	30	48	40	31	35	6	20	23	30	48	44	56	36	33	20	19	17	18	16	19	13	13	9	55.6
11-Jun-06	14	17	17	12	7	11	14	17	16	19	19	16	19	28	25	27	29	35	17	17	27	15	9	14	34.8
12-Jun-06	7	9	15	8	21	12	15	20	23	20	30	27	33	31	32	29	25	21	18	17	13	10	9	8	33.2
13-Jun-06	7	7	7	16	37	42	30	51	61	69	63	55	71	54	35	28	31	19	20	19	12	7	8	9	71.3
14-Jun-06	38	18	24	16	36	26	22	23	24	31	29	47	32	29	15	17	15	23	16	16	15	12	9	8	47.5
15-Jun-06	11	12	8	16	32	41	28	13	15	18	25	22	23	41	33	21	27	25	16	19	37	11	45	9	45.2
16-Jun-06	45	5	13	12	10	6	8	17	16	23	13	32	40	32	29	18	17	14	8	9	6	7	9	10	44.7
17-Jun-06	6	7	5	6	10	9	14	15	14	9	9	11	10	10	11	11	10	7	10	9	6	6	5	6	15.3
18-Jun-06	5	6	6	6	6	7	7	13	11	19	21	32	34	43	33	32	30	48	45	27	43	50	9	45	50.4
19-Jun-06	23	62	38	11	19	26	15	14	15	14	P	20	26	41	17	18	38	37	14	23	21	19	30	31	62.0
20-Jun-06	20	16	32	35	17	15	11	31	44	25	26	22	25	23	24	50	59	42	18	37	42	39	36	19	59.4
21-Jun-06	11	49	4	13	10	6	7	6	8	10	14	18	18	20	17	13	13	14	13	14	10	17	6	7	49.2
22-Jun-06	14	10	8	10	28	41	7	11	15	13	19	15	20	19	21	10	11	8	12	7	11	5	7	11	41.3
23-Jun-06	7	4	28	14	11	15	13	9	12	13	15	17	24	15	20	17	20	19	16	16	12	12	5	9	28.3
24-Jun-06	17	42	48	12	21	23	10	18	14	16	21	37	27	25	18	16	14	12	17	12	11	12	12	12	48.5
25-Jun-06	49	35	46	36	40	58	25	16	21	32	54	25	33	46	65	58	53	35	21	17	13	15	27	53	64.5
26-Jun-06	20	39	24	32	15	22	40	25	61	67	60	39	38	34	35	64	39	63	31	34	41	17	21	56	67.2
27-Jun-06	51	40	57	40	21	20	18	9	15	19	19	25	37	44	42	34	52	18	13	19	21	12	17	14	57.0
28-Jun-06	20	21	25	20	18	21	23	25	17	26	28	37	23	27	20	16	16	15	24	20	18	7	8	14	37.0
29-Jun-06	18	14	14	8	9	17	8	8	11	12	10	12	13	13	15	14	16	14	10	9	7	6	6	7	18.4
30-Jun-06	6	6	24	42	46	27	13	11	14	20	23	21	15	19	25	25	19	24	23	34	12	14	8	7	45.8
Hourly Max	79	62	57	44	46	58	46	51	61	69	67	55	71	58	73	64	65	63	69	37	43	50	45	56	

1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for June 2006



Calms:	0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	197
5	to	10	286
10	to	20	198
20	to	30	33
30	to	40	4
	>	40	0
Total Non-Zero Values			718

PASZA – Smoky Heights Station

Monthly Summary Tables, Graphs, and Roses

PASZA - Smoky Heights - Sulphur Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

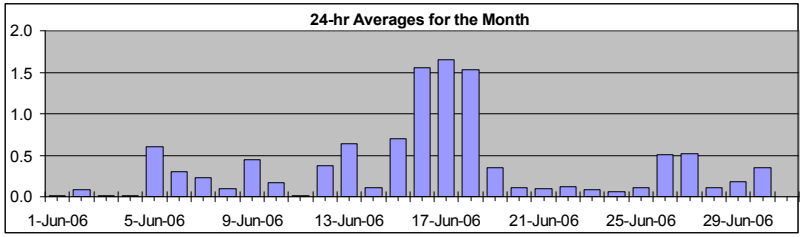
Station: Smoky Heights
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	8.2	ppb	17-Jun	23:00 0:00
Maximum 24-hr Average:	1.7	ppb	17-Jun	



AIC Time:	32 hrs	Operational Time:	681 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.6%

Percentile	99	95	75	50	25	5	1	Average	Median
	4.2	1.7	0.4	0.1	0.0	0.0	0.0	0.4 ppb	0.1 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0	A	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
2-Jun-06	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.9
3-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	P	P	0	0	0	0	0	0	0	0	A	0	0.0	0.1
4-Jun-06	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
5-Jun-06	6	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	1	0	0	1	A	1	1	0	0.6	5.5
6-Jun-06	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.8
7-Jun-06	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0.2	0.7
8-Jun-06	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	0.4
9-Jun-06	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1	A	1	1	1	0	1	0	0	0.5	1.0
10-Jun-06	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.8
11-Jun-06	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	0.2
12-Jun-06	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	0	0	0	1	0	0	1	1	0.4	1.4
13-Jun-06	2	1	1	1	1	1	0	1	1	2	1	1	A	0	1	0	0	0	0	0	1	0	0	0	0.6	1.7
14-Jun-06	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
15-Jun-06	0	0	0	0	0	0	0	0	1	C	C	C	C	A	0	2	2	2	1	1	1	1	1	1	0.7	2.4
16-Jun-06	2	1	1	3	4	A	3	2	1	2	2	1	2	2	1	1	1	0	0	1	1	2	0	1	1.6	3.7
17-Jun-06	3	3	6	1	A	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	5	3	8	1.7	8.2
18-Jun-06	4	3	5	A	3	4	4	4	4	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1.5	4.7
19-Jun-06	0	0	A	0	0	0	2	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.4
20-Jun-06	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
21-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0.1	0.6
22-Jun-06	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
23-Jun-06	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.3
24-Jun-06	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	0.9
25-Jun-06	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0.1	0.7
26-Jun-06	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	4	0	0	1	0	1	A	2	0.5	3.7
27-Jun-06	0	1	1	2	0	0	1	0	1	0	1	1	0	0	2	0	0	0	1	0	A	1	0	0.5	2.1
28-Jun-06	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.8
29-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	1	0	1	0	0.2	0.6
30-Jun-06	0	1	0	1	1	0	1	1	1	1	0	0	1	0	0	0	0	0	A	0	0	0	0	1	0.4	0.9
Hourly Avg	0.7	0.5	0.6	0.4	0.4	0.4	0.6	0.5	0.5	0.5	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.4	0.6		
Hourly Max	5.5	3.4	5.5	3.1	3.7	4.3	4.1	3.7	3.7	2.9	1.7	1.3	1.8	2.2	1.6	2.0	3.7	1.7	1.1	1.0	1.0	4.9	3.1	8.2		

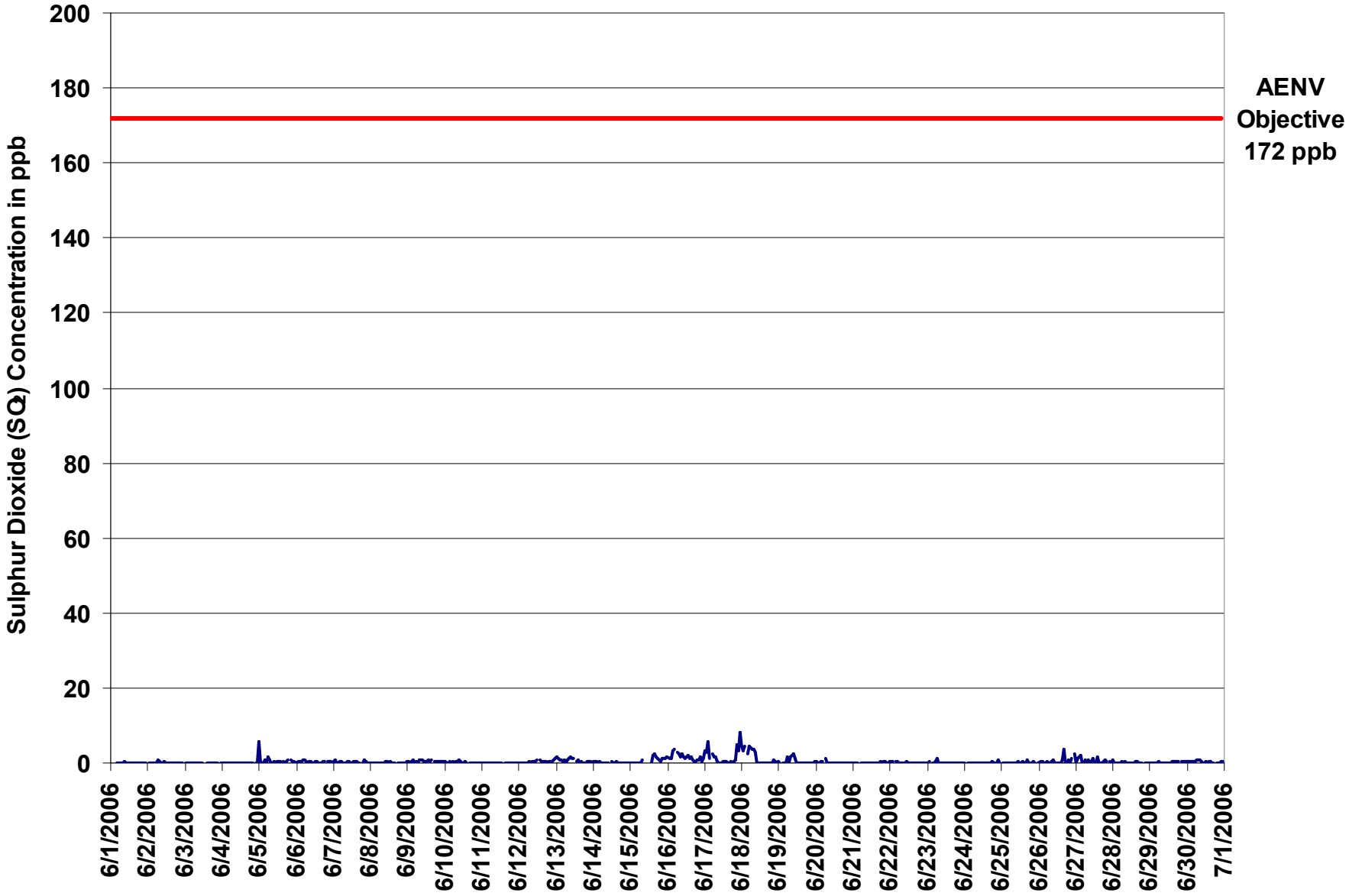


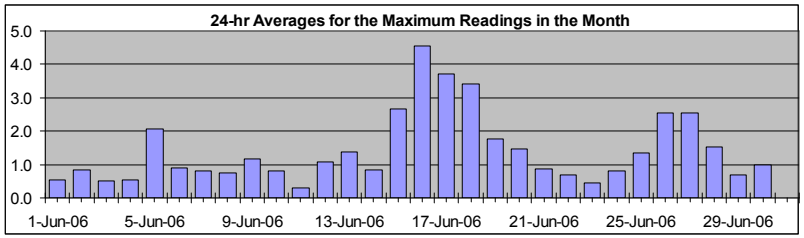
Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	20.1	ppb	17-Jun	23:00 0:00
Maximum 24-hr Value:	4.6	ppb	16-Jun	

AIC Time:	32 hrs	Operational Time:	681 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	99.6%

Percentile	99	95	75	50	25	5	1	Average	Median
	6.9	4.7	1.6	1.0	0.5	0.1	0.0	1.4 ppb	1.0 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0	A	0	N	0	0	1	1	1	1	1	0	1	1	0	0	1	0	0	1	1	0	0	1	0.5	1.3
2-Jun-06	A	1	1	0	0	0	0	5	4	0	1	1	0	1	0	0	1	1	0	1	0	1	0	A	0.8	5.0
3-Jun-06	1	1	1	0	0	0	0	0	1	1	0	0	P	P	1	1	1	0	1	1	0	1	A	0	0.5	1.3
4-Jun-06	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	1	2	1	1	A	0	2	0.5	2.0
5-Jun-06	18	1	0	0	3	1	4	5	1	0	1	1	1	1	1	1	1	1	1	2	A	1	1	1	2.1	18.3
6-Jun-06	0	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	0.9	2.1
7-Jun-06	1	1	1	0	1	1	1	1	1	1	2	1	1	1	1	1	0	0	A	0	1	1	0	0	0.8	1.6
8-Jun-06	1	2	1	0	0	0	1	1	0	1	1	1	1	1	1	1	1	A	0	0	1	1	1	0	0.7	1.8
9-Jun-06	1	1	0	2	1	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	2.1
10-Jun-06	1	1	1	1	1	1	1	1	1	2	1	0	1	1	0	A	0	0	1	1	1	0	1	0	0.8	2.0
11-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	1	0	0	0	1	0	0	0	0	0.3	0.6
12-Jun-06	0	1	1	1	0	0	1	1	1	1	1	1	2	A	2	1	1	1	1	1	2	1	1	2	1.1	2.0
13-Jun-06	2	2	2	2	1	1	1	2	2	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1.4	2.3
14-Jun-06	1	1	1	2	1	1	0	1	1	1	0	A	1	1	1	1	1	1	1	1	0	1	1	0	0.8	1.5
15-Jun-06	1	0	1	0	1	0	1	1	3	C	C	C	C	A	4	5	5	4	4	4	3	4	5	5	2.7	5.4
16-Jun-06	6	4	4	6	6	A	5	4	5	6	5	6	5	5	4	4	4	3	3	4	3	4	2	7	4.6	7.2
17-Jun-06	9	6	7	5	A	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	2	8	6	20	3.7	20.1
18-Jun-06	9	5	8	A	6	7	6	5	5	5	2	2	2	2	2	2	2	1	1	2	1	2	1	1	3.4	8.7
19-Jun-06	1	1	A	1	0	0	4	2	5	5	3	0	2	1	1	3	2	2	2	1	0	0	2	2	1.8	5.0
20-Jun-06	2	2	1	1	2	A	2	1	2	2	2	1	3	2	2	2	1	1	2	1	2	0	2	0	1.5	2.5
21-Jun-06	1	0	0	0	A	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
22-Jun-06	1	1	1	A	1	1	0	1	1	0	0	1	0	1	0	0	1	1	0	0	1	1	1	1	0.7	1.5
23-Jun-06	0	1	A	0	0	3	2	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0.4	2.6
24-Jun-06	1	A	0	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	1	0	1	2	2	1	0.8	2.4
25-Jun-06	A	1	1	0	1	0	1	1	2	2	1	2	2	2	2	1	1	2	1	1	1	2	2	A	1.3	2.3
26-Jun-06	1	2	2	1	1	2	1	2	3	3	3	3	1	0	1	4	6	4	1	4	3	5	A	5	2.5	6.4
27-Jun-06	3	3	3	4	1	1	5	3	4	3	3	3	1	3	3	1	1	2	3	3	3	A	2	1	2.5	4.7
28-Jun-06	2	1	1	1	1	1	3	3	3	2	3	2	2	1	1	2	1	1	0	0	A	0	0	0	1.5	3.5
29-Jun-06	1	1	0	0	1	1	2	0	1	0	0	0	0	1	1	1	1	1	1	A	1	1	1	1	0.7	1.5
30-Jun-06	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	0	0	1	1	2	1.0	1.7
Hourly Avg	2.3	1.4	1.4	1.1	1.2	1.1	1.7	1.7	1.8	1.6	1.4	1.2	1.2	1.2	1.2	1.3	1.4	1.2	1.1	1.3	1.2	1.5	1.3	2.1		
Hourly Max	18.3	5.6	7.8	5.5	6.2	6.8	6.3	5.3	5.4	5.8	5.5	5.6	4.7	5.1	4.1	4.7	6.4	4.3	4.2	4.0	3.4	8.3	5.7	20.1		

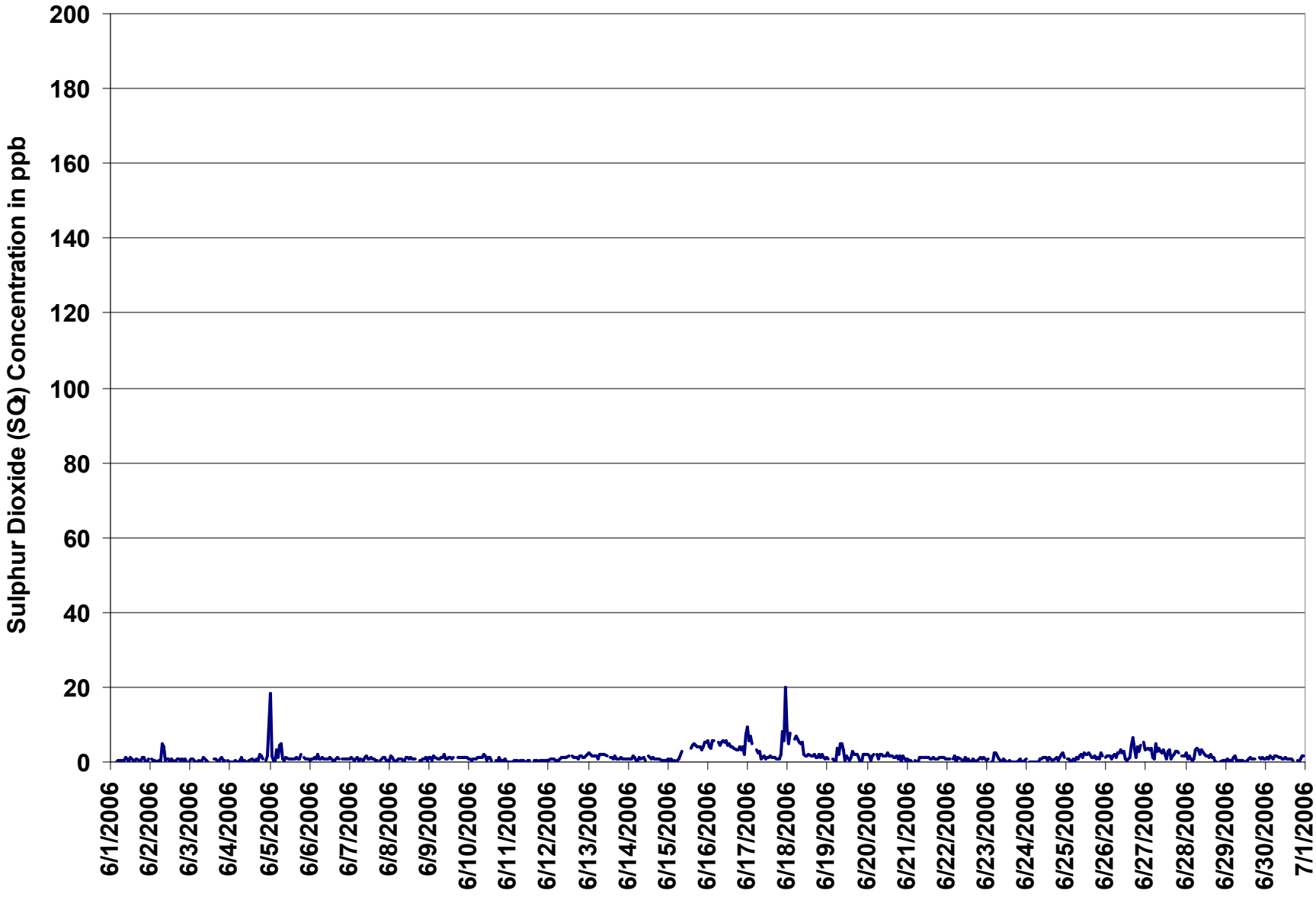
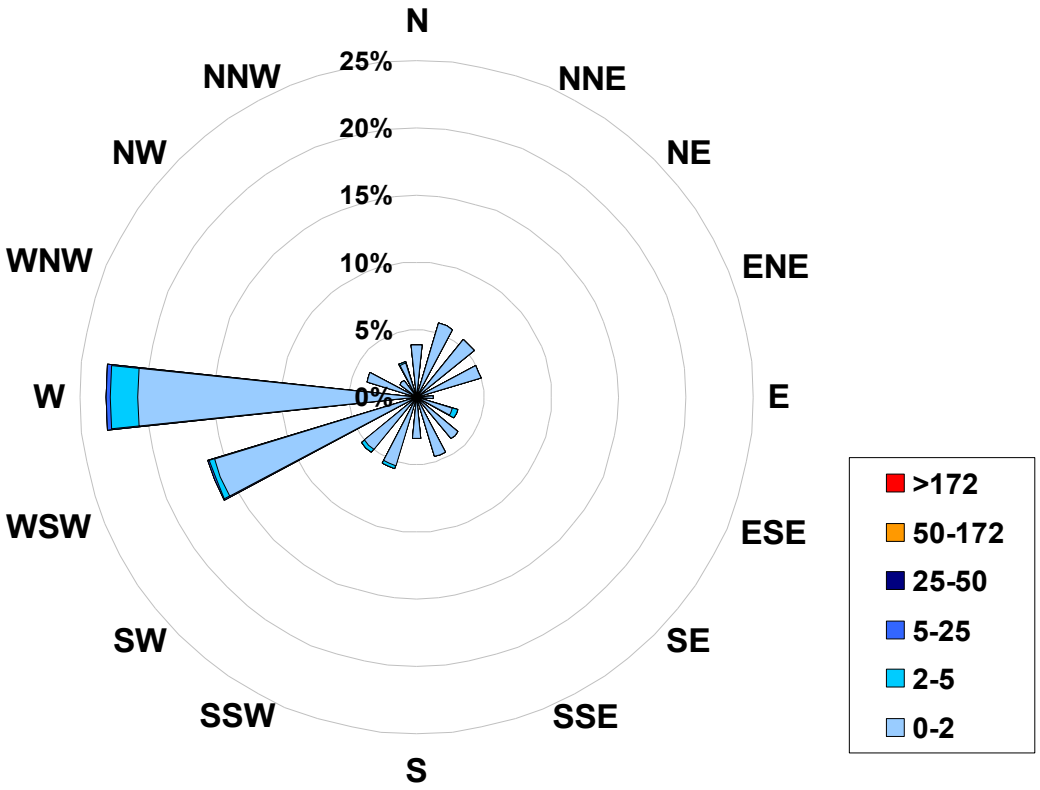


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Smoky Heights Site for June 2006



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	652
2	to	5	26
5	to	25	3
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			681

PASZA - Smoky Heights - Total Reduced Sulphur Monthly Summary

HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

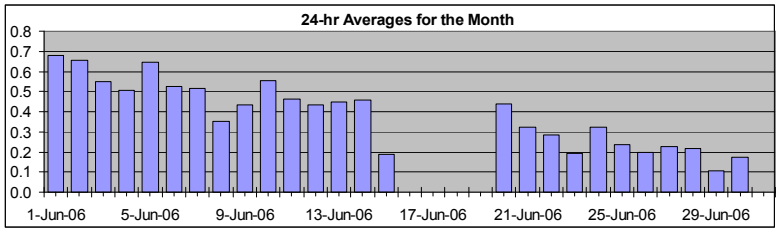
Station: Smoky Heights
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Objective Limit: **Alberta Environment:** 1-hr na ppb | 24-hr na ppb

Summary

Maximum 1-hr Average:	2.2	ppb	2-Jun	3:00 4:00
Maximum 24-hr Value:	0.7	ppb	1-Jun	



AIC Time:	30 hrs	Operational Time:	611 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	90.1%

Percentile	99	95	75	50	25	5	1	Average	Median
	0.9	0.6	0.5	0.4	0.2	0.0	0.0	0.4 ppb	0.4 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	1	A	1	N	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.7
2-Jun-06	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	2.2
3-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	A	1	0.6	0.7
4-Jun-06	1	1	1	1	1	0	1	0	1	1	1	0	0	0	1	0	0	0	0	0	0	A	1	1	0.5	0.6
5-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	1	1	1	0.6	1.4
6-Jun-06	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	0	1	A	1	1	1	0	0.5	0.7
7-Jun-06	0	0	1	0	1	0	0	0	1	1	1	1	0	0	1	1	1	1	A	1	0	1	0	1	0.5	0.7
8-Jun-06	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5
9-Jun-06	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	1	0	0.4	0.6
10-Jun-06	0	1	0	1	0	1	1	1	1	1	0	1	1	0	1	A	1	1	1	1	1	1	1	1	0.6	0.7
11-Jun-06	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	0.6
12-Jun-06	0	0	0	0	0	0	0	1	1	1	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0.4	0.5
13-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	1	1	1	1	0.4	0.6
14-Jun-06	0	1	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0.5	0.7
15-Jun-06	0	0	0	0	0	0	0	0	0	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.2	0.4
16-Jun-06	0	0	0	0	0	A	0	0	0	0	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	0.3
17-Jun-06	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	0.0
18-Jun-06	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	0.0
19-Jun-06	N	N	N	N	N	N	N	N	N	N	C	C	C	C	A	0	0	0	0	0	0	0	0	0	N	0.5
20-Jun-06	1	1	1	1	1	A	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.8
21-Jun-06	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.7
22-Jun-06	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
23-Jun-06	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.7
24-Jun-06	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
25-Jun-06	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.7
26-Jun-06	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.7
27-Jun-06	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	1.3
28-Jun-06	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	0.4
29-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4
30-Jun-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.4
Hourly Avg	0.4	0.4	0.5	0.6	0.5	0.5	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	0.4	0.4	0.4		
Hourly Max	1.4	0.9	1.4	2.2	1.7	0.7	0.8	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6		

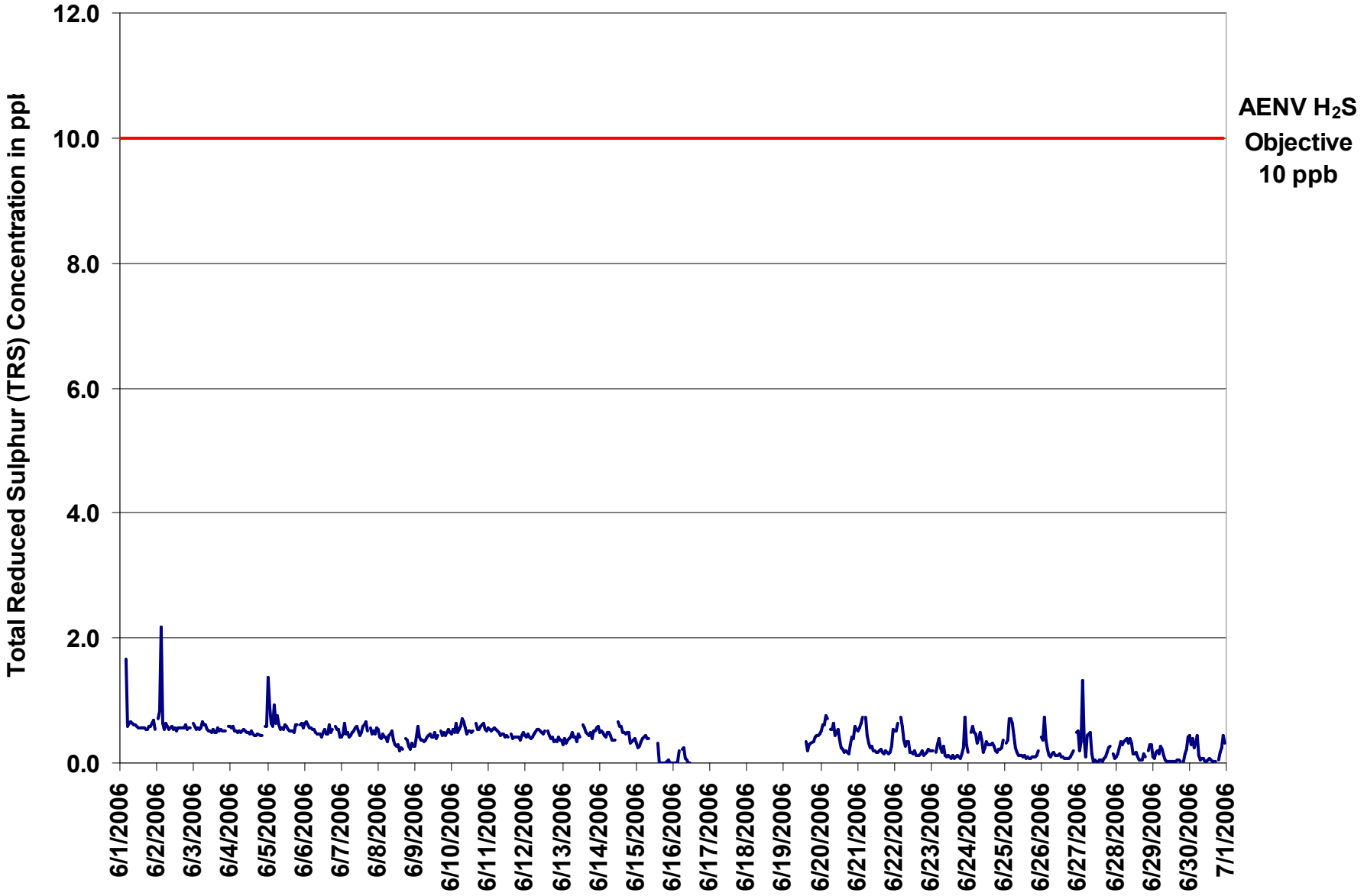


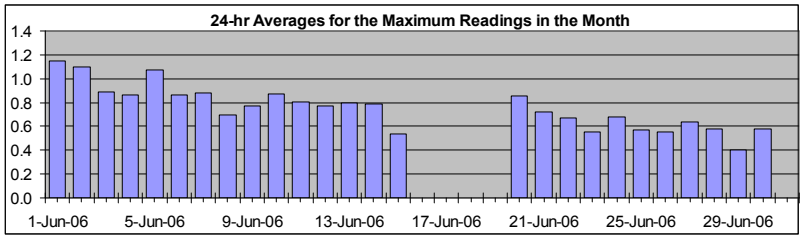
Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	3.6	ppb	2-Jun	3:00 4:00
Maximum 24-hr Value:	1.2	ppb	1-Jun	

AIC Time:	30 hrs	Operational Time:	611 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	90.1%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.6	1.1	0.9	0.8	0.6	0.3	0.2	0.8 ppb	0.8 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	1	A	4	N	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	3.6
2-Jun-06	A	1	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	3.6
3-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.1
4-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.1
5-Jun-06	3	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	3.0
6-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.1
7-Jun-06	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
8-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	1	1	1	1	1	1	0.7	1.2
9-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.1
10-Jun-06	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	1.1
11-Jun-06	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-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	0.9
13-Jun-06	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
14-Jun-06	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	1.1
15-Jun-06	1	1	1	1	1	1	1	1	1	C	C	C	C	A	1	0	0	0	0	0	0	1	0	0	0.5	0.9
16-Jun-06	0	1	1	0	1	A	1	1	0	0	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	0.9
17-Jun-06	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	0.0
18-Jun-06	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	0.0
19-Jun-06	N	N	N	N	N	N	N	N	N	N	C	C	C	C	A	1	1	1	1	1	1	1	1	1	N	1.0
20-Jun-06	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0.9	1.4
21-Jun-06	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	1	1	0.7	1.4
22-Jun-06	1	1	1	A	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	0	0	0	0	1	0.7	1.2
23-Jun-06	1	0	A	1	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2	1	0.6	1.6
24-Jun-06	0	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	1.0
25-Jun-06	A	1	1	1	1	1	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1	A	0.6	1.2
26-Jun-06	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	A	1	0.6	1.1
27-Jun-06	1	1	1	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0.6	2.3
28-Jun-06	0	0	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	A	1	1	1	0.6	0.8
29-Jun-06	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0.4	0.9
30-Jun-06	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	0.6	1.3
Hourly Avg	0.8	0.8	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8		
Hourly Max	3.0	1.2	3.6	3.6	3.3	1.4	1.3	1.1	1.0	1.0	0.9	0.9	1.0	1.1	1.0	1.0	1.1	0.9	1.1	1.0	1.1	1.2	1.6	1.4		

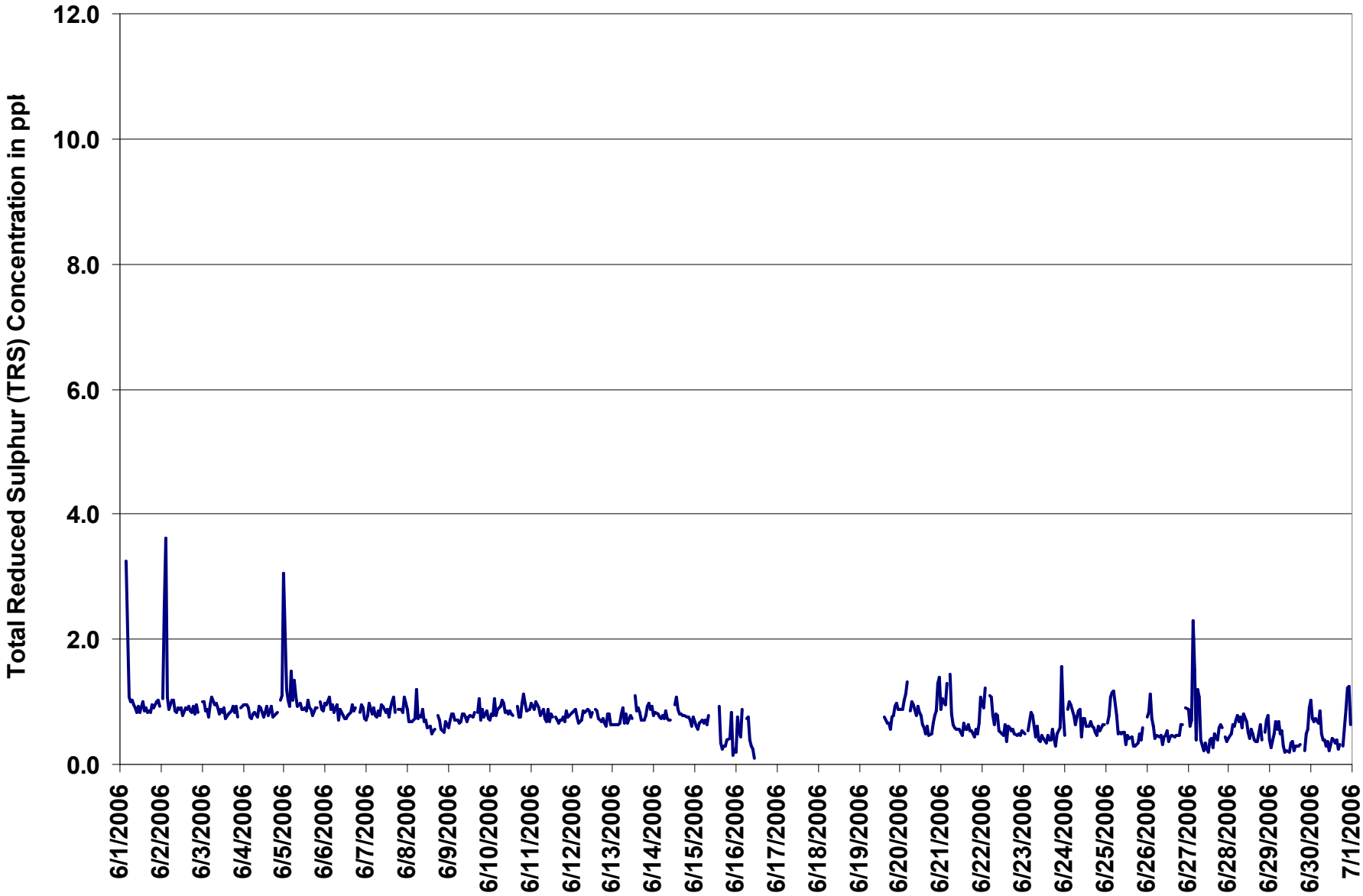
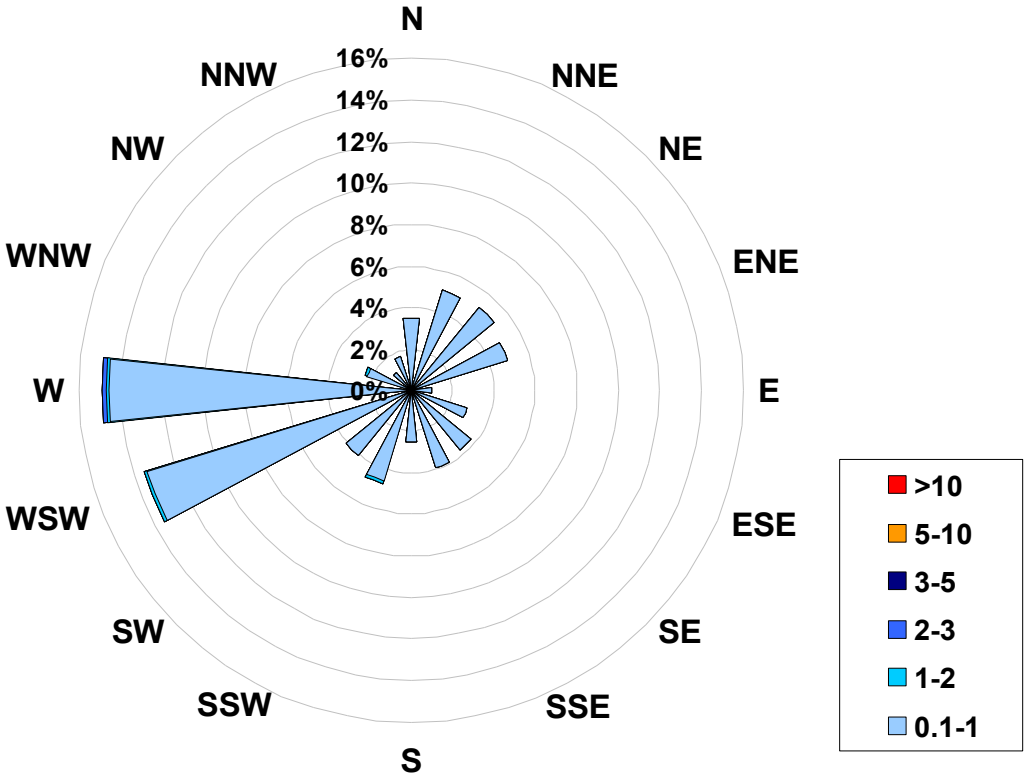


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Smoky Heights Site for June 2006



Calms:	0%

Frequency Distribution of TRS in ppb			
Range			Frequency (hrs)
0.1	<	1	606
1	to	2	4
2	to	3	1
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			611

PASZA - Smoky Heights - Particulate Matter (less than 2.5 microns) Monthly Summary

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

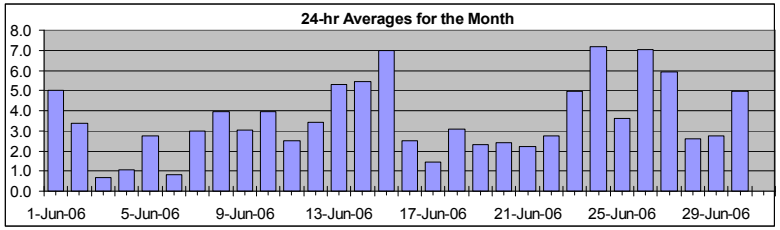
Station: Smoky Heights
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Draft Objective Limit: **Alberta Environment:** 1-hr - µg/m³ | 24-hr 30 µg/m³

Summary

Number of 24-hr Exceedances (draft):	0			
Maximum 1-hr Average:	24.0	µg/m³	30-Jun	21:00 22:00
Maximum 24-hr Value:	7.2	µg/m³	24-Jun	



AIC Time:	0 hrs	Operational Time:	714 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.4%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	16.0	9.6	4.9	2.7	1.3	0.0	0.0	3.6 / 3 µg/m³	3.1 µg/m³

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	7	4	1	N	3	7	9	9	12	3	7	2	1	3	1	5	4	3	3	4	9	11	7	2	5.0	11.5
2-Jun-06	2	3	4	5	2	7	8	6	2	3	4	1	0	5	6	D	1	1	4	5	4	0	4	1	3.4	7.8
3-Jun-06	3	2	3	3	0	D	0	0	0	0	D	0	0	0	0	1	0	0	1	1	0	0	1	0	0.7	3.0
4-Jun-06	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	2	2	2	3	2	4	5	3	1.0	4.6
5-Jun-06	2	2	4	2	4	3	4	3	2	1	1	0	3	3	8	1	0	2	2	1	9	3	4	2	2.8	8.8
6-Jun-06	0	2	3	1	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	1	2	2	2	0	0.8	3.0
7-Jun-06	0	2	0	6	2	5	5	3	4	1	2	2	2	1	0	0	1	3	3	4	4	3	6	12	3.0	12.4
8-Jun-06	4	4	3	5	5	4	5	5	6	5	8	4	5	4	2	4	4	5	3	3	2	1	1	3	3.9	8.3
9-Jun-06	2	2	2	1	2	2	3	2	1	0	2	2	2	0	1	2	2	2	4	4	6	6	14	8	3.0	14.1
10-Jun-06	1	5	4	0	0	5	5	9	10	10	7	0	1	6	3	0	6	2	0	11	5	3	0	2	3.9	10.5
11-Jun-06	3	1	1	1	2	5	6	2	5	3	3	2	2	3	1	0	0	1	4	4	5	4	2	0	2.5	5.9
12-Jun-06	0	0	1	0	3	13	4	1	4	4	3	2	4	4	5	4	3	3	2	5	4	3	5	6	3.4	12.6
13-Jun-06	6	5	5	4	5	6	5	6	7	8	6	9	8	5	4	4	5	7	2	5	2	2	6	8	5.3	8.6
14-Jun-06	11	7	6	5	5	8	8	8	9	5	6	5	2	1	6	4	3	1	9	0	3	4	10	6	5.4	11.0
15-Jun-06	6	5	5	6	5	8	9	7	5	7	7	9	C	C	3	5	6	6	6	17	11	9	7	5	7.0	16.5
16-Jun-06	0	1	2	2	2	2	3	3	3	3	2	5	4	6	5	3	5	3	3	3	1	0	0	0	2.5	5.8
17-Jun-06	0	1	1	0	1	2	2	1	1	1	1	0	0	2	2	2	3	4	2	2	2	1	1	2	1.4	3.6
18-Jun-06	1	1	1	1	1	1	1	2	2	3	3	2	2	11	1	1	1	1	1	1	16	9	7	4	3.1	15.6
19-Jun-06	2	1	2	2	3	10	4	3	3	3	2	1	3	1	1	1	1	3	2	1	0	2	1	2	2.3	9.6
20-Jun-06	1	2	1	2	2	3	3	5	4	3	4	3	2	0	2	3	4	2	1	3	3	3	1	0	2.4	4.6
21-Jun-06	2	1	2	2	2	3	2	2	1	1	0	1	2	1	2	2	2	3	3	4	3	2	5	4	2.2	5.1
22-Jun-06	3	3	2	2	2	3	3	2	2	0	1	0	2	0	3	2	3	4	6	5	5	5	5	2	2.7	5.5
23-Jun-06	2	2	2	3	3	4	3	4	3	2	1	3	2	5	1	2	3	11	9	5	10	16	13	12	5.0	15.7
24-Jun-06	6	6	7	6	6	14	7	8	7	8	6	4	2	5	4	6	3	3	18	13	10	9	6	7	7.2	18.2
25-Jun-06	5	2	3	3	3	4	4	5	5	0	3	1	4	1	2	1	1	3	3	5	3	5	3	20	3.6	20.4
26-Jun-06	3	1	1	1	2	8	4	6	6	7	8	10	8	5	5	9	7	9	16	12	13	11	8	7	7.0	16.1
27-Jun-06	6	6	7	7	23	15	11	10	5	2	3	4	4	3	5	5	3	6	4	4	5	2	4	0	6.0	23.5
28-Jun-06	3	7	4	2	2	4	3	4	3	5	1	0	1	2	2	1	0	2	0	2	2	3	5	3	2.6	7.3
29-Jun-06	1	0	1	1	10	4	2	1	0	1	0	1	1	1	1	1	2	4	2	4	6	5	16	3	2.8	16.0
30-Jun-06	3	1	2	2	3	7	6	4	4	1	3	1	2	2	1	2	4	1	1	2	20	24	14	9	5.0	24.0
Hourly Avg	2.8	2.7	2.6	2.6	3.4	5.4	4.3	4.1	3.8	3.0	3.3	2.5	2.4	2.8	2.6	2.5	2.7	3.2	3.9	4.4	5.5	5.1	5.5	4.5		
Hourly Max	11.0	7.3	6.7	6.8	23.5	15.0	10.6	10.2	11.5	10.3	8.3	9.6	8.0	10.5	7.9	8.9	7.0	11.2	18.2	16.5	19.8	24.0	16.0	20.4		

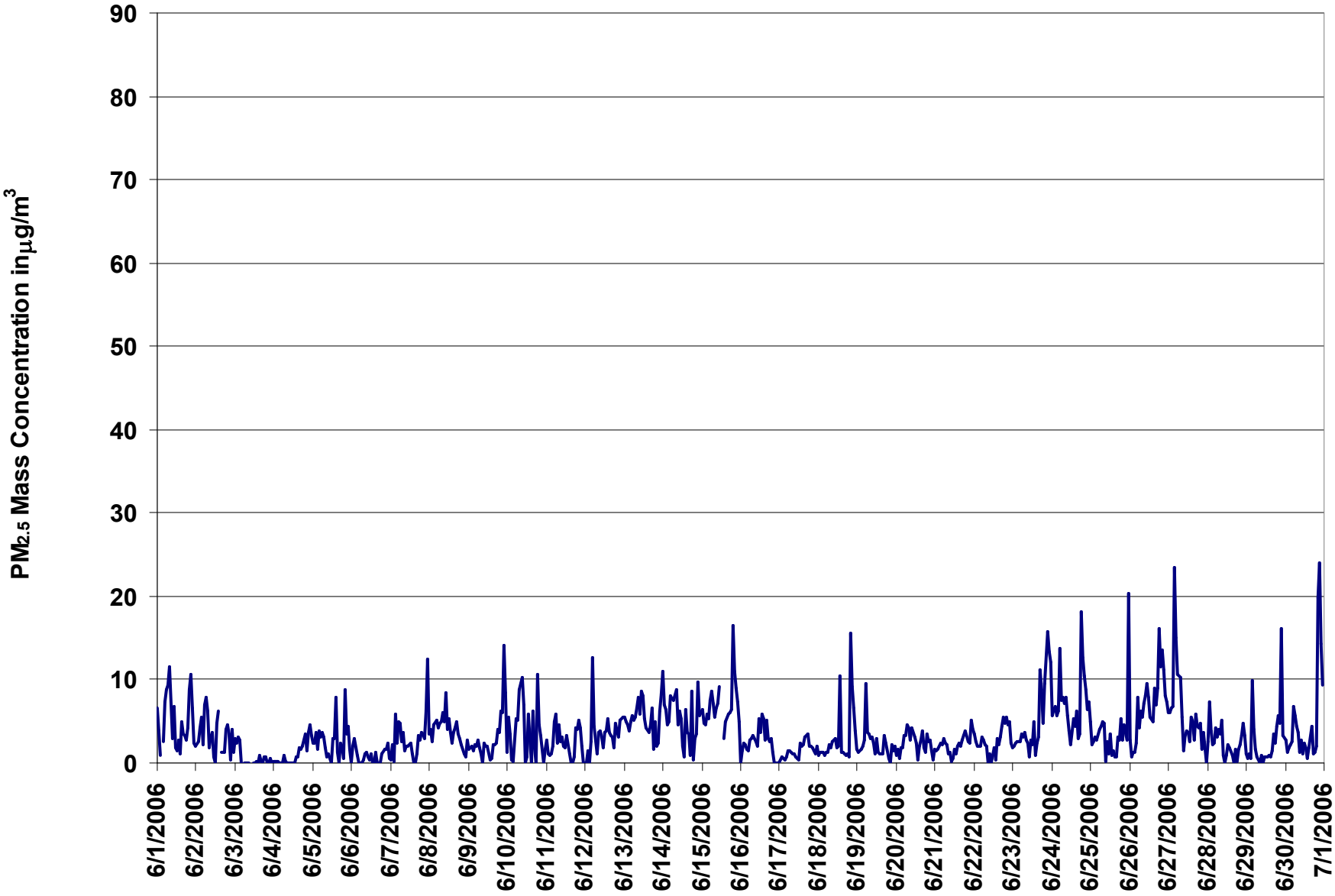


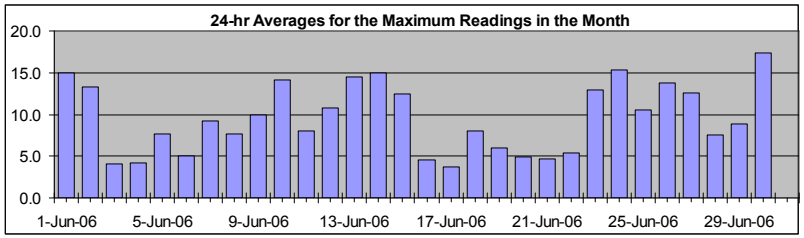
Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	124.6	µg/m³	30-Jun	20:00 21:00
Maximum 24-hr Value:	17.3	µg/m³	30-Jun	

AIC Time:	0 hrs	Operational Time:	714 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.4%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	43.7	23.1	11.4	7.1	4.4	2.4	1.0	9.6 / 7 µg/m˘	8.6 µg/m˘

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	18	11	8	N	8	13	12	16	18	14	15	14	9	10	7	24	15	12	12	27	42	20	14	5	14.9	41.9
2-Jun-06	4	8	8	14	10	15	13	12	12	27	20	15	11	15	16	D	17	6	21	27	13	7	9	5	13.2	27.2
3-Jun-06	9	5	8	5	2	D	1	1	2	4	D	3	2	5	6	7	7	4	5	7	2	1	2	1	4.1	8.7
4-Jun-06	2	1	2	1	1	2	3	3	2	2	2	4	5	5	6	7	8	9	8	6	4	6	7	6	4.2	9.4
5-Jun-06	5	4	6	3	6	5	6	7	7	6	12	4	7	8	18	9	5	5	13	7	20	6	9	5	7.6	20.3
6-Jun-06	3	5	5	6	3	2	2	4	4	3	7	5	8	7	4	8	8	4	4	5	6	4	10	3	5.0	9.7
7-Jun-06	4	7	5	8	6	9	11	7	8	6	7	12	9	15	10	12	10	14	10	8	5	7	9	23	9.3	23.0
8-Jun-06	13	8	7	7	8	8	7	10	9	8	15	10	8	12	7	7	7	7	5	4	4	5	5	5	7.7	14.8
9-Jun-06	3	3	4	3	4	4	5	5	6	10	10	10	16	9	14	15	12	17	14	13	15	11	20	17	10.0	19.9
10-Jun-06	8	10	9	5	5	10	8	14	16	18	22	20	19	25	23	13	30	24	11	24	10	7	4	4	14.2	29.9
11-Jun-06	5	4	3	3	4	7	9	7	14	11	10	11	6	8	7	7	4	15	14	16	12	8	4	1	8.0	15.9
12-Jun-06	3	7	8	10	7	22	23	9	11	11	12	10	14	15	15	14	11	8	7	10	10	6	7	8	10.8	22.8
13-Jun-06	8	7	6	7	8	7	9	11	11	15	18	16	20	18	20	21	31	15	23	27	17	5	13	16	14.5	31.5
14-Jun-06	19	9	10	9	18	13	16	16	16	15	20	25	21	12	16	17	11	9	21	22	9	6	21	9	15.0	25.0
15-Jun-06	12	10	8	10	7	13	13	12	12	16	23	22	C	C	5	7	9	8	8	30	17	17	9	7	12.5	30.0
16-Jun-06	2	3	4	4	4	3	5	4	5	5	5	7	7	9	8	5	8	5	7	5	3	1	1	0	4.6	8.9
17-Jun-06	1	2	2	2	2	3	3	3	4	4	3	4	3	8	4	5	6	11	4	4	4	3	3	3	3.7	10.7
18-Jun-06	2	2	2	3	2	3	3	3	3	4	5	3	7	32	5	5	4	3	3	3	50	21	17	10	8.1	49.5
19-Jun-06	3	3	3	5	6	22	5	6	6	5	6	4	14	5	9	5	4	7	10	3	4	4	3	3	6.0	21.9
20-Jun-06	2	4	2	3	3	5	5	7	6	5	6	6	6	3	4	6	6	6	8	6	8	5	5	2	5.0	7.8
21-Jun-06	4	4	4	6	4	4	4	4	4	3	3	3	4	2	6	6	5	5	5	7	4	4	10	6	4.7	10.3
22-Jun-06	5	4	3	3	3	5	4	4	5	2	3	4	4	4	10	7	9	7	8	7	9	7	6	5	5.3	9.9
23-Jun-06	4	3	4	5	6	8	5	6	4	5	5	9	8	27	3	5	9	36	23	8	22	53	31	22	13.0	53.3
24-Jun-06	14	9	9	7	8	36	9	9	9	10	8	8	7	8	8	11	6	6	71	26	18	26	21	25	15.3	70.6
25-Jun-06	20	4	4	5	7	8	7	8	11	4	6	4	12	4	5	3	3	13	9	10	7	6	4	88	10.5	88.0
26-Jun-06	12	2	3	3	4	20	9	8	8	10	10	13	13	10	14	17	11	18	25	23	44	27	14	11	13.8	44.0
27-Jun-06	8	10	9	10	46	19	17	17	10	5	13	10	10	9	16	15	11	13	13	7	9	9	8	8	12.6	45.6
28-Jun-06	9	13	8	13	5	9	8	8	8	9	6	5	7	6	6	5	7	5	2	5	6	15	9	9	7.5	15.2
29-Jun-06	4	4	3	2	38	11	3	3	2	3	1	3	2	3	3	3	4	12	6	19	20	15	39	5	8.8	39.5
30-Jun-06	5	3	4	4	4	15	18	7	5	11	6	3	6	6	5	9	10	4	4	3	125	109	33	19	17.3	124.6
Hourly Avg	7.0	5.6	5.3	5.6	8.0	10.4	8.1	7.7	7.9	8.4	9.5	8.9	9.1	10.4	9.4	9.5	9.6	10.2	12.5	12.3	17.3	14.1	11.6	11.0		
Hourly Max	20.3	13.2	10.2	13.7	45.6	35.8	22.8	17.0	18.1	26.9	23.4	25.0	20.6	31.8	22.6	23.7	31.5	36.1	70.6	30.0	124.6	108.8	39.5	88.0		

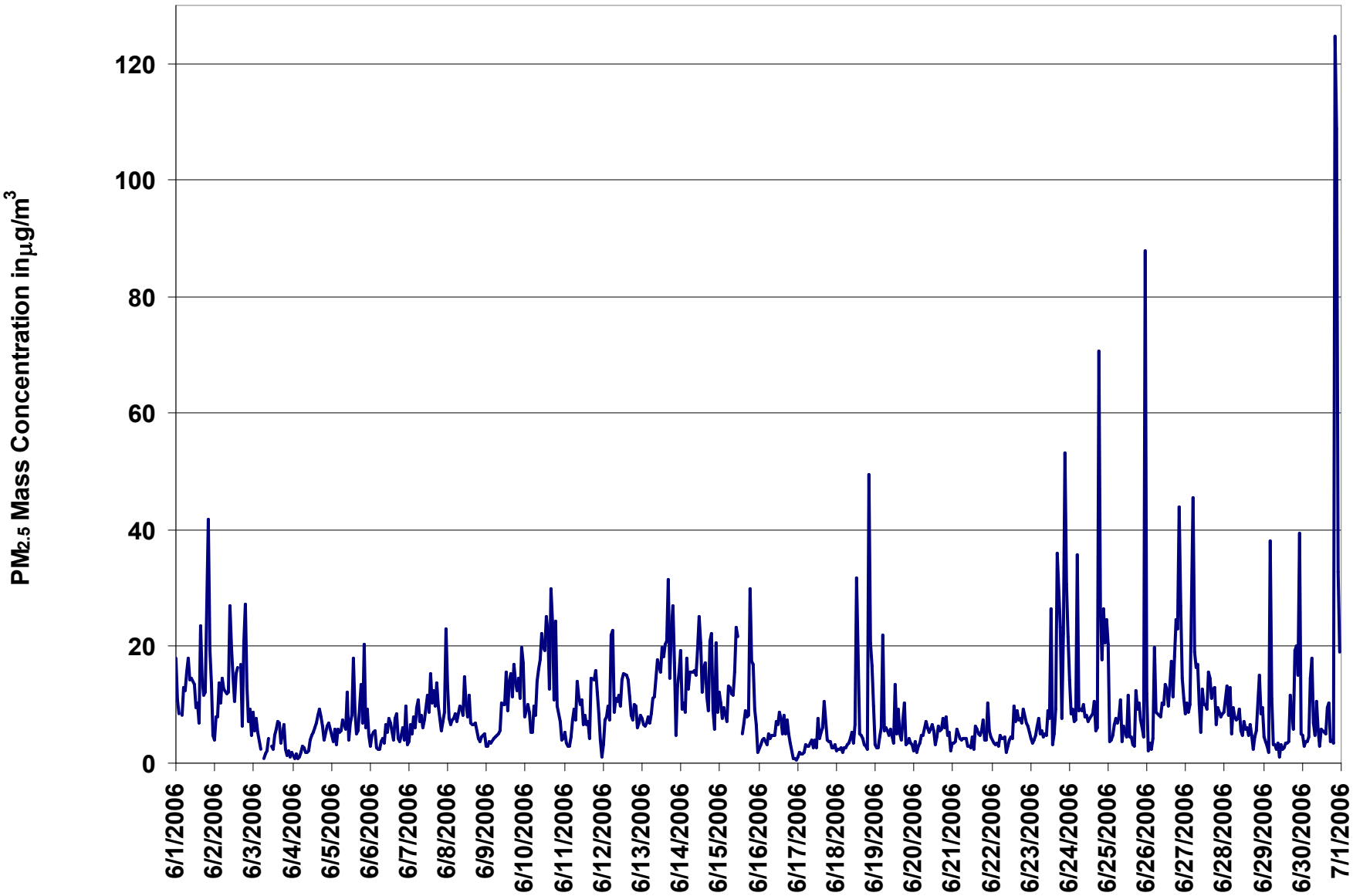
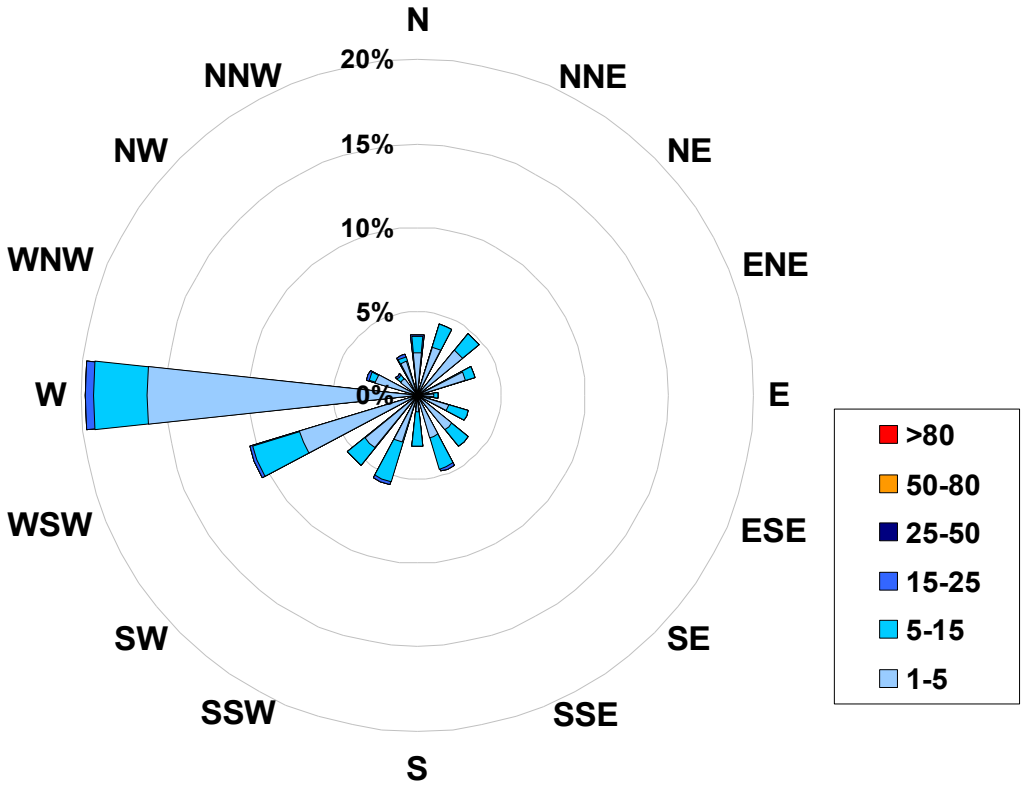


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Smoky Heights Site for June 2006



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	547
5	to	15	157
15	to	25	10
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			714

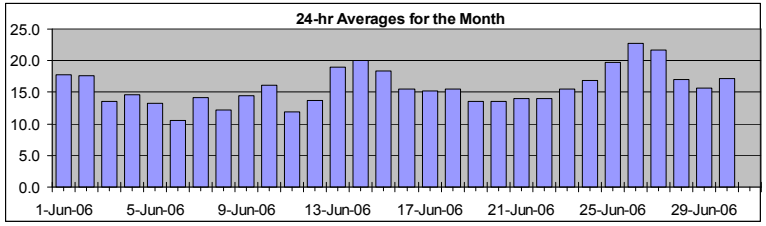
PASZA - Smoky Heights - Temperature Monthly Summary

Station: Smoky Heights
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	32.0	°C	26-Jun	17:00 18:00
Maximum 24-hr Value:	22.7	°C	26-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	29.8	24.6	19.7	15.3	12.1	7.7	5.7	15.8 °C	15.3 °C

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	11	10	9	N	8	10	11	13	16	18	19	21	24	23	24	24	24	24	24	24	22	19	16	15	17.8	24.5
2-Jun-06	14	14	12	12	13	13	14	16	20	22	22	23	23	22	18	22	23	22	20	18	16	15	14	14	17.6	23.3
3-Jun-06	14	14	13	12	12	11	10	10	10	10	12	14	15	16	17	17	17	17	17	16	15	13	12	11	13.6	17.5
4-Jun-06	10	10	9	8	8	9	11	13	14	15	16	17	18	19	20	20	20	20	19	17	17	15	13	13	14.6	20.2
5-Jun-06	11	10	9	9	9	10	11	13	14	16	17	18	18	17	15	16	17	16	15	15	13	11	10	10	13.3	17.9
6-Jun-06	9	8	9	8	6	5	5	5	6	8	9	11	12	14	14	15	15	16	15	14	13	12	11	11	10.5	15.6
7-Jun-06	9	9	7	7	6	7	10	11	13	14	16	17	19	19	20	20	20	20	19	18	15	14	14	13	14.1	20.4
8-Jun-06	13	12	11	11	11	11	11	12	12	12	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12.1	13.3
9-Jun-06	11	11	11	11	10	10	11	11	12	14	15	16	17	18	19	19	20	20	19	18	16	14	13	12	14.5	19.7
10-Jun-06	12	10	9	9	8	9	11	12	15	17	19	21	22	22	21	21	22	22	22	20	17	16	15	14	16.1	21.9
11-Jun-06	12	10	9	9	8	9	10	12	12	13	13	14	13	14	14	15	16	16	14	14	11	11	9	8	11.9	15.8
12-Jun-06	6	6	6	5	5	6	9	11	12	14	15	16	17	18	19	20	20	20	20	20	18	17	16	15	13.7	20.3
13-Jun-06	15	14	13	12	12	13	14	15	16	18	20	21	22	23	25	25	26	26	25	25	23	19	16	17	19.0	25.8
14-Jun-06	18	18	17	17	15	16	18	18	20	22	22	23	24	23	23	22	23	22	22	21	20	20	18	17	20.0	24.4
15-Jun-06	15	16	15	14	14	13	15	16	19	19	20	20	20	20	22	23	23	22	22	21	21	20	17	16	18.4	23.1
16-Jun-06	14	14	13	13	13	13	13	14	14	15	16	17	18	18	18	18	18	18	18	18	17	17	16	14	15.6	18.3
17-Jun-06	13	12	11	11	9	9	11	13	15	15	17	18	18	19	19	19	19	19	18	18	16	16	15	14	15.2	19.1
18-Jun-06	14	13	13	13	12	12	12	13	13	14	15	17	19	20	20	20	21	21	20	19	16	13	11	12	15.5	21.4
19-Jun-06	11	10	9	8	7	8	12	13	15	18	19	20	17	14	13	17	20	19	15	13	12	12	12	11	13.6	20.0
20-Jun-06	11	11	11	10	10	10	11	12	13	15	16	17	17	19	18	18	16	18	14	15	14	11	9	8	13.6	18.5
21-Jun-06	8	7	7	7	7	8	11	12	14	16	18	18	19	20	20	21	21	20	19	17	16	13	10	8	14.0	20.7
22-Jun-06	8	7	6	5	5	6	10	13	15	17	18	19	19	20	20	20	20	19	18	17	16	13	12	14	14.0	20.3
23-Jun-06	14	13	10	9	8	9	11	13	15	17	18	19	20	20	21	22	22	22	21	21	19	14	10	9	15.6	21.8
24-Jun-06	8	7	7	6	7	8	10	13	15	18	20	23	24	25	25	25	25	24	23	24	21	17	17	15	16.9	25.2
25-Jun-06	13	11	11	9	10	11	14	18	20	22	23	24	25	25	26	27	27	27	27	26	24	20	19	17	19.7	27.0
26-Jun-06	15	15	13	14	14	16	17	18	20	22	24	26	28	30	31	31	32	32	31	30	27	23	21	16	22.7	32.0
27-Jun-06	15	14	13	11	14	15	16	19	23	24	25	26	27	28	29	30	30	29	26	24	23	21	20	18	21.7	29.9
28-Jun-06	16	15	14	13	12	12	13	15	17	17	19	21	22	22	22	23	22	20	19	18	16	15	13	13	17.1	22.8
29-Jun-06	13	14	13	10	6	7	11	13	15	16	17	18	19	20	21	22	22	22	22	21	19	15	12	10	15.7	21.9
30-Jun-06	10	9	8	9	8	10	13	16	18	20	20	20	21	21	23	23	24	24	23	23	20	17	16	15	17.2	23.7
Hourly Avg	12.0	11.4	10.7	10.1	9.6	10.3	11.9	13.4	15.1	16.5	17.8	18.9	19.7	20.1	20.3	21.0	21.2	20.9	20.0	19.3	17.5	15.4	13.9	13.0		
Hourly Max	18.2	17.9	16.9	16.6	14.8	15.9	17.5	18.9	23.0	23.9	25.2	26.5	28.5	30.2	31.2	31.5	31.9	32.0	31.0	29.8	27.0	22.6	20.8	17.9		

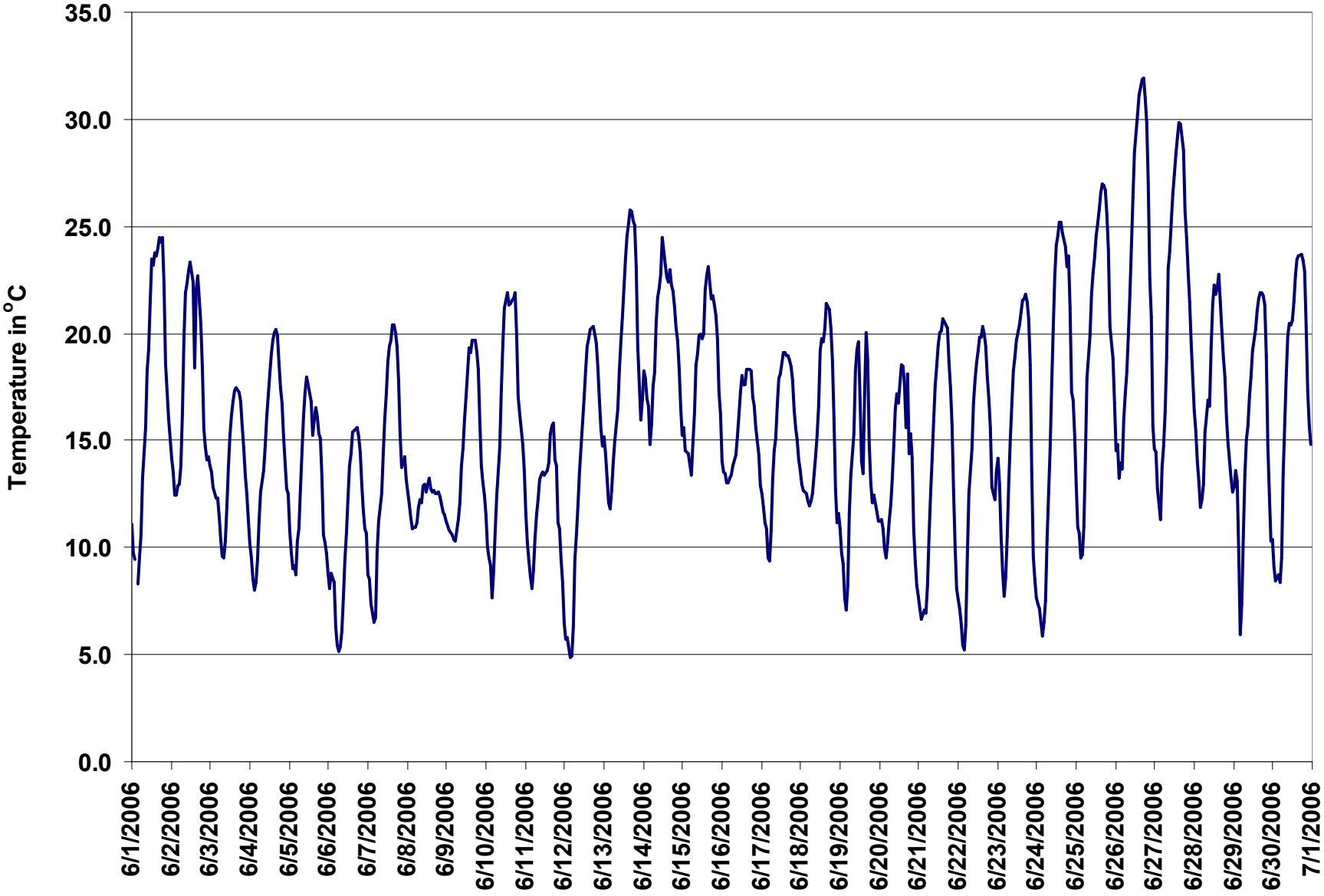


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

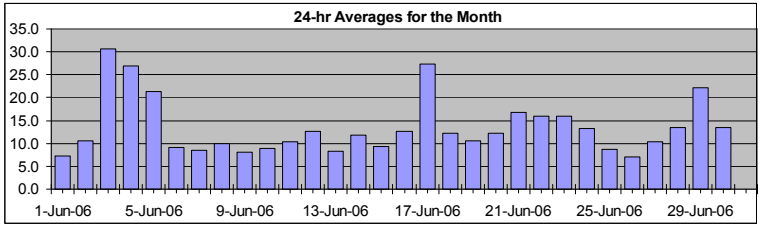
PASZA - Smoky Heights - Scalar Wind Speed Monthly Summary

Station: Smoky Heights
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	51.4	km/hr	3-Jun	14:00 15:00
Maximum 24-hr Value:	30.7	km/hr	3-Jun	

Calm Time:	0 hrs	**0%** calms	Operational Time: 719 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 99.9%

Percentile	99	95	75	50	25	5	1	AverageS
	41.9	31.2	16.9	10.7	7.8	4.8	3.5	13.5 km/hr

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Scalar Average	Daily Max
1-Jun-06	5	5	5	N	4	6	8	10	10	13	13	11	7	7	6	9	9	6	6	3	5	6	7	6	7.3	13.3
2-Jun-06	5	5	3	4	7	8	5	9	8	7	6	8	14	23	30	23	20	10	5	13	12	6	6	15	10.6	30.0
3-Jun-06	12	10	9	9	16	21	31	34	27	18	30	40	45	47	51	49	45	45	40	40	29	28	32	28	30.7	51.4
4-Jun-06	22	20	16	17	21	27	29	36	40	43	42	37	35	32	31	29	27	30	26	23	21	15	12	14	26.9	42.7
5-Jun-06	14	15	12	15	13	18	20	24	27	30	29	26	31	29	29	25	27	24	25	27	18	7	16	10	21.3	30.6
6-Jun-06	8	4	8	9	13	12	11	10	9	7	6	6	7	7	9	9	10	10	10	13	11	10	11	9	9.0	13.0
7-Jun-06	6	6	5	7	6	3	4	7	9	10	10	9	10	9	10	11	13	14	14	13	8	7	7	10	8.6	14.1
8-Jun-06	15	16	18	12	7	12	6	9	8	9	10	11	11	9	11	10	10	9	8	8	8	7	8	7	10.0	18.3
9-Jun-06	6	8	7	7	6	6	6	9	10	9	9	9	8	6	8	7	6	7	6	8	12	11	10	10	8.0	12.3
10-Jun-06	6	7	5	7	9	8	9	10	8	5	6	5	11	12	11	11	9	8	8	7	10	14	13	13	8.8	13.8
11-Jun-06	8	7	8	9	10	10	10	10	14	15	15	17	15	15	13	11	11	12	9	8	9	4	3	4	10.4	17.1
12-Jun-06	4	5	7	4	5	3	5	8	13	14	16	20	19	21	21	21	20	20	22	16	10	9	12	11	12.6	21.9
13-Jun-06	16	13	10	5	7	8	9	10	9	9	10	10	9	7	7	7	6	10	9	6	6	4	3	5	8.3	15.9
14-Jun-06	12	10	6	7	4	5	6	8	8	9	17	12	14	22	17	16	22	20	11	12	9	10	14	11	11.8	22.5
15-Jun-06	10	13	12	16	9	6	7	11	9	13	9	11	11	10	6	5	6	6	6	7	6	4	13	17	9.3	16.5
16-Jun-06	20	19	10	6	11	11	8	11	10	7	10	11	8	8	10	9	6	11	10	9	17	27	26	27	12.7	27.4
17-Jun-06	32	33	28	28	22	21	28	34	41	36	35	34	33	36	32	28	27	24	20	18	13	15	19	19	27.4	41.0
18-Jun-06	19	21	21	19	21	19	19	18	17	16	11	5	5	7	5	6	6	7	9	7	9	7	8	10	12.2	21.2
19-Jun-06	11	11	10	9	6	7	8	11	9	6	11	8	16	21	10	7	8	9	17	22	11	9	6	10	10.5	21.8
20-Jun-06	13	15	19	20	21	23	21	11	6	6	7	9	8	12	11	17	15	11	24	7	5	5	4	6	12.3	23.6
21-Jun-06	9	6	8	13	15	9	14	16	21	24	25	23	21	23	22	23	24	24	19	16	13	9	11	13	16.8	25.0
22-Jun-06	14	14	14	14	13	9	12	17	21	25	23	24	19	18	11	16	15	22	20	13	13	9	11	14	15.9	24.5
23-Jun-06	18	15	11	11	10	12	18	20	23	24	26	25	22	23	21	20	16	14	14	11	7	6	10	9	16.0	26.3
24-Jun-06	8	8	7	8	8	8	9	8	8	7	11	12	20	21	26	28	25	24	16	9	8	13	13	12	13.2	28.2
25-Jun-06	10	11	12	12	12	14	11	5	7	6	7	10	11	11	11	7	6	5	4	6	7	11	8	3	8.7	14.2
26-Jun-06	4	4	4	7	7	7	8	8	10	9	8	8	7	9	10	10	8	7	9	7	4	6	6	5	7.1	10.0
27-Jun-06	3	5	4	5	8	10	8	9	8	15	21	18	17	18	11	6	5	7	10	9	8	15	10	19	10.4	21.4
28-Jun-06	22	17	9	13	7	6	6	10	13	15	16	18	15	14	12	15	26	20	13	12	12	13	9	9	13.4	25.8
29-Jun-06	11	14	15	10	11	13	16	22	33	35	36	39	36	32	33	32	30	27	22	17	12	11	10	14	22.1	38.9
30-Jun-06	16	15	15	16	15	16	17	19	17	15	14	18	18	15	13	14	14	13	12	11	4	4	8	7	13.5	18.6
1-hr Average	12.0	11.8	10.7	11.0	10.9	11.3	12.3	14.1	15.1	15.3	16.3	16.5	16.7	17.5	16.7	16.1	15.7	15.3	14.2	12.5	10.5	10.0	10.8	11.5		
Hourly Max	32.2	32.6	28.4	27.6	22.0	26.5	30.9	36.2	41.0	42.7	42.1	39.6	44.9	46.5	51.4	48.9	45.3	44.8	40.4	40.3	29.1	27.5	32.0	28.3		

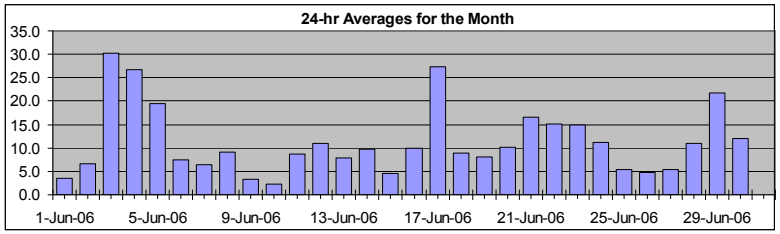
PASZA - Smoky Heights - Vector Wind Speed Monthly Summary

Station: Smoky Heights
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	51.2	km/hr	3-Jun	14:00 15:00
Maximum 24-hr Value:	30.3	km/hr	3-Jun	

Calm Time:	1 hrs	**0%** calms	
Calibration Time:	0 hrs		
Operational Time:			718 hrs
AMD Operational Uptime:			99.9%

Percentile	99	95	75	50	25	5	1	AverageV
	41.6	30.8	16.4	10.2	7.0	3.5	1.9	7.1 km/hr

Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Vector Average	Daily Max
1-Jun-06	4	5	5	N	4	6	8	10	10	13	13	10	6	6	4	8	8	5	6	2	4	6	7	6	3.6	13.0
2-Jun-06	5	5	2	3	5	6	2	7	5	4	3	7	14	21	29	23	19	10	4	12	11	6	4	14	6.7	29.4
3-Jun-06	11	9	5	9	16	21	31	34	27	18	30	39	45	46	51	49	45	45	40	40	29	27	32	28	30.3	51.2
4-Jun-06	22	20	16	17	21	26	28	36	40	43	42	37	35	31	31	28	27	30	26	23	21	15	12	14	26.8	42.6
5-Jun-06	14	15	12	15	13	18	20	24	27	29	29	26	30	29	28	24	27	24	25	27	13	4	16	9	19.4	29.9
6-Jun-06	6	3	7	8	13	11	11	9	9	6	5	2	3	5	8	9	9	9	10	12	10	10	5	8	7.4	12.8
7-Jun-06	6	6	5	7	5	1	3	6	8	10	8	8	8	8	10	10	12	13	14	13	8	7	7	3	6.3	13.9
8-Jun-06	14	16	18	11	4	11	6	9	8	9	10	11	11	9	11	10	9	9	8	8	8	7	8	7	9.1	18.1
9-Jun-06	5	7	7	7	6	6	6	9	9	9	9	9	8	6	7	6	4	5	6	8	12	11	10	7	3.4	12.3
10-Jun-06	4	6	5	7	9	8	9	10	7	4	5	4	10	12	10	11	9	8	8	6	10	14	13	13	2.4	13.7
11-Jun-06	8	7	8	9	10	10	10	10	14	15	15	17	15	15	13	11	11	11	8	5	6	2	2	4	8.7	16.8
12-Jun-06	4	5	7	4	5	3	5	8	12	13	16	19	19	20	20	20	20	19	22	16	9	9	12	10	11.0	21.7
13-Jun-06	16	13	10	5	7	8	9	10	8	8	9	9	8	6	7	6	5	9	9	6	6	4	3	5	7.9	15.7
14-Jun-06	12	10	6	6	3	4	6	8	8	8	17	12	13	22	17	16	22	20	11	12	9	10	13	10	9.8	22.3
15-Jun-06	10	13	12	16	8	6	6	11	9	13	4	11	11	10	5	4	3	5	6	6	5	3	13	16	4.6	15.6
16-Jun-06	20	19	10	6	11	11	8	11	9	7	10	10	6	8	10	8	6	7	9	9	16	27	26	27	9.9	27.4
17-Jun-06	32	33	28	28	22	21	28	34	41	36	35	34	33	36	32	28	27	24	20	18	13	15	19	19	27.3	40.8
18-Jun-06	19	21	21	19	21	19	19	18	17	16	11	5	3	4	3	3	5	7	9	6	8	7	7	8	8.9	21.2
19-Jun-06	11	11	8	8	4	7	8	11	8	5	10	6	15	20	7	6	8	8	14	21	7	5	5	10	8.1	20.8
20-Jun-06	13	15	19	20	21	23	21	11	6	5	5	8	7	11	10	16	15	11	17	1	3	4	2	4	10.2	22.6
21-Jun-06	9	6	7	13	15	9	13	16	21	24	25	23	21	22	20	23	24	24	19	16	13	9	11	13	16.6	24.7
22-Jun-06	14	14	13	14	13	9	11	17	21	24	23	24	18	17	11	15	15	22	20	13	12	8	10	14	15.1	24.3
23-Jun-06	17	15	11	10	10	12	18	20	23	24	26	24	21	23	21	20	15	13	14	11	7	6	10	9	15.0	26.0
24-Jun-06	8	8	7	8	8	8	9	8	7	7	10	12	18	20	26	28	24	24	16	9	7	12	13	12	11.2	27.8
25-Jun-06	10	11	12	12	12	14	11	4	4	2	6	8	9	10	10	4	5	2	2	6	7	11	7	3	5.5	14.1
26-Jun-06	2	3	4	6	7	6	8	8	9	9	7	7	6	7	8	8	6	5	8	7	2	5	5	4	4.8	9.4
27-Jun-06	2	5	3	4	8	9	7	9	8	15	21	17	16	17	10	calm	3	7	9	9	8	14	9	19	5.3	21.0
28-Jun-06	21	15	7	9	5	4	4	9	12	15	16	17	14	13	11	13	26	19	13	12	11	13	7	7	10.9	25.5
29-Jun-06	11	14	15	10	11	13	16	22	33	35	36	38	36	31	33	31	29	26	21	16	12	11	9	14	21.8	38.3
30-Jun-06	16	15	15	16	15	16	17	19	17	13	13	16	17	14	12	13	13	12	12	10	3	4	7	7	12.0	18.5
1-hr Vector	6.7	7.5	6.6	7.1	7.5	7.5	8.7	9.7	10.0	9.8	9.5	8.5	8.9	8.7	8.5	7.4	7.3	5.7	5.1	4.3	3.3	2.9	4.4	6.8		
Hourly Max	32.2	32.5	28.4	27.6	22.0	26.4	30.8	36.1	40.8	42.6	41.8	39.4	44.7	46.3	51.2	48.7	45.0	44.6	40.2	40.1	29.0	27.5	31.9	28.3		

PASZA - Smoky Heights - Wind Direction Monthly Summary

HOURLY AVERAGE TABLE

Wind Direction (WD)

Station: Smoky Heights
Station Owner: PASZA

Monitoring Dates: **June 1, 2006** to **July 1, 2006**

Summary

Calm Time:	0 hrs	**0%** calms		Operational Time:		719 hrs		
Calibration Time:	0 hrs			AMD Operational Uptime:		99.9%		
Percentile	99	95	75	50	25	5	1	Average
	353.0	313.2	265.8	240.3	125.6	19.9	5.7	259 deg

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	WD Sector
1-Jun-06	17	327	292	N	197	193	201	201	236	233	246	282	275	190	197	217	196	184	159	156	50	42	30	20	225	SW
2-Jun-06	7	16	360	265	221	206	197	244	304	22	153	193	245	250	280	286	293	326	111	273	200	112	279	248	264	W
3-Jun-06	208	230	253	196	246	254	259	263	261	241	252	254	254	252	250	249	249	251	253	253	251	245	247	240	250	WSW
4-Jun-06	246	246	246	251	246	249	252	248	245	250	251	249	251	251	257	260	262	256	265	253	251	258	255	253	252	WSW
5-Jun-06	251	250	263	260	282	259	264	257	248	247	259	267	265	245	213	207	245	242	253	267	320	8	290	285	256	WSW
6-Jun-06	269	331	306	40	45	34	54	65	61	115	61	72	82	41	58	40	57	62	69	62	64	87	72	14	54	NE
7-Jun-06	34	152	66	2	5	105	93	84	127	137	100	108	76	69	72	62	59	66	61	62	42	29	17	265	69	ENE
8-Jun-06	15	345	356	10	62	59	16	12	27	10	6	39	41	50	54	43	44	50	56	48	51	62	63	53	32	NNE
9-Jun-06	35	29	31	32	35	5	12	12	4	10	1	355	343	353	26	50	56	62	107	175	173	176	172	190	36	NE
10-Jun-06	155	236	234	256	239	207	229	243	231	205	148	27	3	6	6	360	7	29	353	45	62	54	45	50	7	N
11-Jun-06	57	42	25	18	21	22	30	54	52	25	34	54	54	72	70	55	71	69	76	167	139	184	352	26	53	NE
12-Jun-06	29	33	27	16	19	27	149	155	161	145	144	134	125	129	123	119	133	126	135	127	116	90	114	120	124	SE
13-Jun-06	147	155	159	158	174	177	175	166	154	157	138	141	151	131	134	130	146	137	146	120	129	73	116	163	148	SSE
14-Jun-06	156	166	164	154	233	179	38	58	65	110	129	113	108	129	122	105	108	123	125	130	127	152	195	195	129	SE
15-Jun-06	194	200	218	241	243	208	253	249	257	252	239	116	138	138	167	113	102	82	49	5	6	26	163	211	202	SSW
16-Jun-06	256	275	290	215	252	275	245	263	239	205	231	210	175	105	187	150	127	174	226	221	242	254	264	265	241	WSW
17-Jun-06	265	267	267	266	269	271	263	266	267	271	267	265	273	273	278	280	280	274	273	277	259	262	265	267	270	W
18-Jun-06	269	264	259	260	262	263	261	264	257	264	299	289	12	31	334	47	9	30	32	57	301	238	287	256	277	W
19-Jun-06	262	272	265	202	247	224	232	249	249	227	210	235	264	261	319	199	279	337	308	329	291	335	215	233	266	W
20-Jun-06	262	268	268	272	268	267	262	279	274	343	15	34	9	346	273	279	237	292	300	283	269	296	329	245	282	WNW
21-Jun-06	276	240	259	267	271	260	244	242	255	266	275	270	277	267	271	267	264	260	273	274	271	260	275	277	266	W
22-Jun-06	271	278	268	274	263	224	218	244	254	250	254	268	263	275	309	259	239	240	251	247	249	251	234	231	255	WSW
23-Jun-06	218	206	203	209	221	252	258	257	264	275	275	268	264	265	264	262	271	270	266	260	268	266	280	271	258	WSW
24-Jun-06	261	261	258	258	218	217	204	189	180	175	184	195	238	246	264	268	260	269	277	281	274	268	294	287	251	WSW
25-Jun-06	270	258	267	271	268	274	268	215	162	277	252	255	247	261	240	254	270	269	136	95	101	109	127	210	249	WSW
26-Jun-06	227	214	211	168	194	180	193	196	192	196	174	160	152	157	235	253	195	170	164	141	68	340	12	346	188	S
27-Jun-06	352	9	51	280	252	222	227	240	258	265	274	278	286	280	280	42	166	52	72	66	31	357	354	346	300	WNW
28-Jun-06	332	305	10	305	218	239	223	224	219	249	250	263	274	274	285	285	282	259	234	206	218	257	262	238	265	W
29-Jun-06	273	274	283	281	261	265	260	253	256	255	253	258	250	256	266	260	263	280	273	281	270	265	267	268	263	W
30-Jun-06	271	276	269	268	271	281	266	263	258	295	313	314	299	297	329	341	328	329	333	330	346	306	275	262	293	WNW
Hourly Avg	262	264	271	264	258	253	250	250	250	253	254	257	261	257	263	264	260	261	264	263	257	270	264	259		

PASZA - Smoky Heights - Standard Deviation of Wind Direction Monthly Summary

Station: Smoky Heights
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2006 to July 1, 2006

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms		Operational Time:		719 hrs	
Calibration Time:	0 hrs			AMD Operational Uptime:		99.9%	
Percentile	99	95	75	50	25	5	1
	56.1	42.1	17.5	9.9	5.9	2.9	2.3

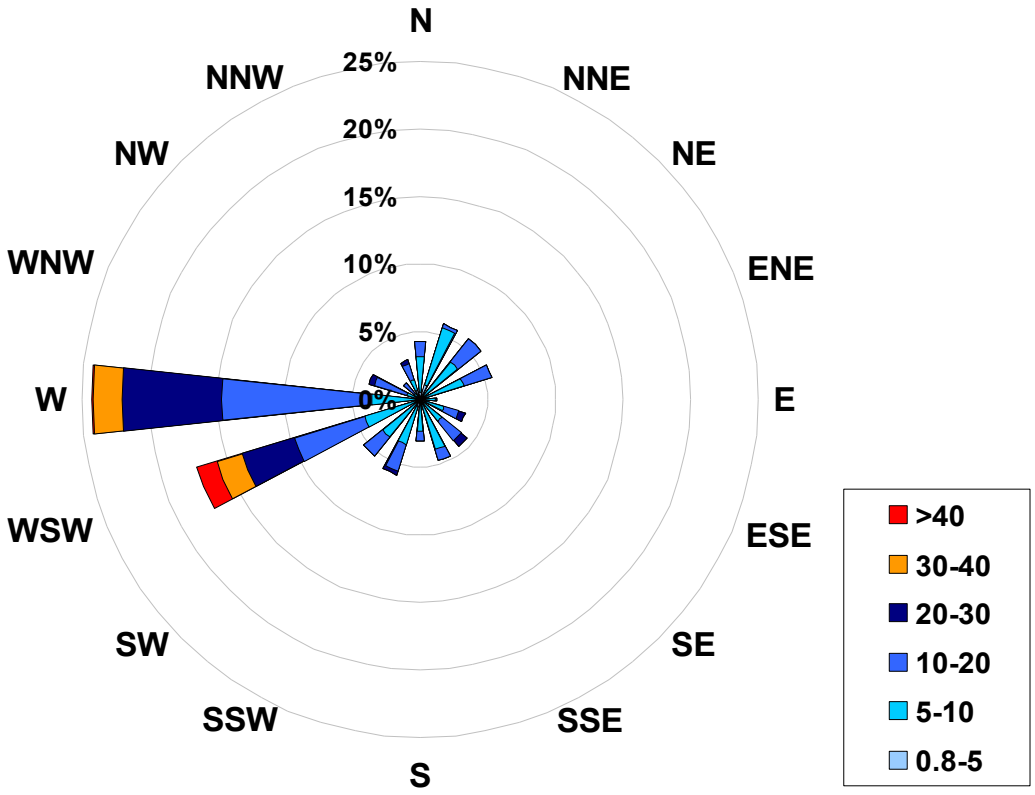
Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Jun-06	21	14	9	N	11	10	9	6	10	10	10	12	42	20	40	24	26	26	19	23	23	7	4	5	42.3
2-Jun-06	6	4	32	24	32	21	53	28	25	36	38	34	15	10	10	7	11	14	33	14	8	22	50	11	52.6
3-Jun-06	14	11	32	14	5	4	4	4	4	5	4	5	32	5	5	6	6	5	5	4	4	3	5	3	32.4
4-Jun-06	3	3	3	3	3	3	4	5	6	5	7	8	10	10	7	11	10	8	6	3	4	4	3	2	10.8
5-Jun-06	3	3	4	4	11	4	4	5	6	8	9	10	9	7	6	11	7	5	6	4	17	18	9	11	17.9
6-Jun-06	15	30	23	15	9	8	7	11	15	31	45	54	51	59	26	20	18	16	12	6	6	6	28	10	58.9
7-Jun-06	9	28	14	8	9	53	55	17	17	21	27	24	26	31	23	20	15	14	10	5	5	4	19	37	55.3
8-Jun-06	8	6	5	9	56	9	11	8	9	11	10	8	7	10	8	8	7	8	8	6	7	7	8	8	56.3
9-Jun-06	11	8	7	7	11	9	12	10	10	16	17	19	27	34	34	28	45	39	21	14	4	4	4	46	45.9
10-Jun-06	23	9	11	9	6	8	7	10	18	50	43	56	21	19	16	13	13	13	16	11	5	6	5	6	55.9
11-Jun-06	7	13	7	5	5	6	10	14	10	10	10	10	12	13	13	16	17	21	13	32	16	36	44	17	43.8
12-Jun-06	18	5	7	23	14	30	20	12	12	15	14	11	12	12	12	12	11	11	7	7	8	7	6	8	30.1
13-Jun-06	6	6	9	23	7	8	11	11	24	22	21	20	18	37	29	24	35	14	10	12	6	13	21	33	36.8
14-Jun-06	5	8	12	12	45	28	11	9	14	14	11	14	17	6	8	6	8	8	6	8	6	4	15	5	44.6
15-Jun-06	6	4	4	4	12	8	12	6	15	8	29	8	7	10	30	31	56	13	10	8	7	8	12	6	56.2
16-Jun-06	3	3	8	44	5	6	9	5	12	15	9	12	23	17	7	14	13	18	9	11	9	3	4	2	43.9
17-Jun-06	3	2	3	3	3	4	3	4	5	5	5	7	7	6	6	7	7	5	4	3	3	2	3	2	7.4
18-Jun-06	3	2	2	2	2	3	3	4	4	4	9	36	64	45	54	51	39	23	15	10	23	17	17	23	64.4
19-Jun-06	7	6	13	5	19	8	12	8	10	39	33	30	19	16	35	21	16	15	29	15	24	28	27	8	39.3
20-Jun-06	3	3	2	2	2	3	3	8	12	42	30	18	25	17	21	12	9	12	19	70	42	29	54	62	69.6
21-Jun-06	12	15	24	2	2	6	5	7	6	7	8	12	11	14	20	12	10	7	6	4	4	3	3	3	23.8
22-Jun-06	2	3	8	4	3	5	6	6	7	7	12	11	13	11	15	13	10	9	4	4	3	5	9	11	15.1
23-Jun-06	5	3	3	6	6	4	3	4	5	8	8	11	13	11	12	12	15	19	15	7	4	6	5	4	18.8
24-Jun-06	6	11	12	6	7	4	4	12	15	16	17	18	15	13	9	9	8	9	8	9	7	4	5	6	18.2
25-Jun-06	8	8	3	3	4	3	5	21	36	39	39	41	34	23	32	60	38	42	54	11	5	5	23	28	59.8
26-Jun-06	52	35	25	15	9	15	10	9	10	19	24	27	33	36	43	31	43	40	10	7	17	12	25	23	51.9
27-Jun-06	44	5	19	17	5	10	29	8	21	9	9	15	15	15	36	44	58	11	11	9	14	12	16	8	58.1
28-Jun-06	11	13	30	27	42	48	26	14	14	7	11	13	17	31	21	22	7	7	5	4	5	6	14	12	48.0
29-Jun-06	6	7	3	6	7	12	4	6	6	7	8	10	9	9	10	8	8	10	9	7	3	3	5	6	11.7
30-Jun-06	2	5	7	3	4	4	4	4	7	18	24	20	13	20	26	21	20	16	16	12	15	13	4	8	26.0
Hourly Max	52	35	32	44	56	53	55	28	36	50	45	56	64	59	54	60	58	42	54	70	42	36	54	62	

1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for June 2006



Calms:	0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	41
5	to	10	283
10	to	20	257
20	to	30	97
30	to	40	29
	>	40	12
Total Non-Zero Values			719

PASZA - Beaverlodge Station

Monthly Summary Tables, Graphs, and Roses

PASZA - Beaverlodge - AQI Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

Air Quality Index (AQI)

Monitoring Dates: June 1, 2006 to July 1, 2006

Alberta's Air Quality Index

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

Summary

Number of 1-hr Good Readings:	663
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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00
1-Jun-06	14	15	10	9	N	11	10	9	10	14	18	20	21	22	23	23	24	24	24	24	20	20	20	20
2-Jun-06	20	11	10	11	N	11	10	14	16	18	20	20	16	18	N	20	21	21	22	22	17	16	18	18
3-Jun-06	16	15	17	19	N	20	21	18	18	18	20	20	21	20	20	20	19	19	19	19	19	18	18	17
4-Jun-06	17	16	15	15	N	14	15	16	17	18	18	18	19	20	19	19	20	21	21	21	20	19	16	15
5-Jun-06	15	15	14	15	N	14	15	17	18	19	20	18	18	19	19	19	19	21	20	19	19	18	17	17
6-Jun-06	16	12	10	10	N	10	9	9	10	11	12	14	14	15	17	17	18	19	18	16	14	14	13	10
7-Jun-06	8	8	10	9	N	7	10	14	13	13	16	18	20	24	24	26	27	27	24	22	22	21	22	22
8-Jun-06	22	24	25	19	N	15	12	17	19	21	23	24	19	16	16	17	16	17	16	15	14	14	14	14
9-Jun-06	13	12	12	11	N	8	9	12	16	19	19	21	22	24	24	24	25	25	25	24	21	17	18	18
10-Jun-06	18	19	19	14	N	10	9	13	16	20	23	23	24	24	24	25	26	26	24	23	19	18	18	16
11-Jun-06	17	16	16	15	N	14	15	17	21	23	24	24	24	25	26	23	22	23	23	22	20	17	16	16
12-Jun-06	15	14	13	12	N	10	10	12	13	14	14	16	17	N	3	4	4	21	20	20	18	17	18	18
13-Jun-06	17	17	31	36	N	37	20	11	14	46	19	N	N	N	28	30	25	23	22	22	19	19	19	19
14-Jun-06	19	19	18	15	N	12	9	10	16	19	21	21	21	24	24	26	29	26	22	21	19	15	14	16
15-Jun-06	15	14	13	13	N	7	6	9	13	15	15	17	17	17	18	18	19	17	16	15	13	15	15	14
16-Jun-06	12	11	11	10	N	5	6	6	8	9	10	12	17	17	18	17	16	17	18	N	N	20	23	23
17-Jun-06	22	19	17	16	N	17	16	15	15	15	16	15	16	15	15	14	15	15	15	14	14	13	12	12
18-Jun-06	12	12	10	10	N	9	9	12	12	13	14	14	14	14	15	15	15	16	16	16	17	16	13	13
19-Jun-06	13	11	11	10	N	8	8	10	11	13	15	16	16	16	16	18	19	19	19	16	16	14	13	12
20-Jun-06	10	8	8	8	N	7	11	12	13	15	16	16	15	16	17	17	17	16	16	15	12	N	15	15
21-Jun-06	13	11	11	11	N	10	11	12	15	19	22	23	24	23	22	22	22	22	22	23	21	19	17	17
22-Jun-06	17	16	14	13	N	10	10	16	18	19	19	19	20	20	20	20	19	20	19	19	18	16	15	15
23-Jun-06	13	10	10	11	N	10	11	13	16	18	19	20	20	21	21	21	21	20	20	20	18	17	18	18
24-Jun-06	19	14	13	13	N	10	10	12	14	16	19	20	20	20	21	19	18	18	16	15	14	13	14	13
25-Jun-06	13	12	12	11	N	9	9	9	11	14	15	16	18	17	17	17	16	16	19	19	19	17	17	15
26-Jun-06	15	14	13	12	N	7	10	12	17	22	23	27	23	20	19	20	22	22	23	22	21	24	20	19
27-Jun-06	17	13	10	12	N	10	13	13	15	15	15	16	16	16	16	16	17	16	15	16	17	17	17	17
28-Jun-06	16	18	18	10	N	8	7	9	10	N	17	16	17	20	N	N	22	23	22	20	21	19	18	17
29-Jun-06	16	16	16	14	N	12	12	14	16	16	16	16	16	16	16	16	17	18	17	17	16	14	14	14
30-Jun-06	13	14	13	12	N	11	10	11	14	16	16	16	16	17	18	18	18	18	17	15	13	15	14	13

PASZA - Beaverlodge - Sulphur Dioxide Monthly Summary

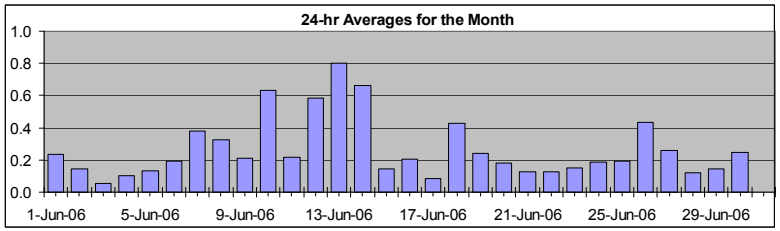
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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



Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	3.6	ppb	10-Jun	6:00 7:00
Maximum 24-hr Average:	0.8	ppb	13-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	1.5	0.9	0.3	0.2	0.1	0.0	0.0	0.3 ppb	0.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	1.0
2-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
3-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
4-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
5-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	0.5
6-Jun-06	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
7-Jun-06	0	0	0	1	A	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
8-Jun-06	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
9-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0.2	0.6
10-Jun-06	0	0	0	0	A	4	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.6
11-Jun-06	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
12-Jun-06	1	0	0	2	A	2	2	1	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0.6	2.3
13-Jun-06	1	1	1	1	A	1	1	1	1	1	C	C	C	A	1	1	0	0	1	0	0	0	1	2	0.8	1.7
14-Jun-06	2	2	1	1	A	1	1	0	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0.7	2.3
15-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
16-Jun-06	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
17-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
18-Jun-06	0	0	0	0	A	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.5
19-Jun-06	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
20-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
21-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
22-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
24-Jun-06	1	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
25-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.2	0.8
26-Jun-06	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
27-Jun-06	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	0.8
28-Jun-06	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
29-Jun-06	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
30-Jun-06	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
Hourly Avg	0.4	0.3	0.2	0.4	N	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3		
Hourly Max	2.3	1.8	1.4	2.3	0.0	3.5	3.6	1.1	1.5	1.5	1.2	1.0	0.7	1.0	0.5	1.0	0.7	0.6	0.8	0.5	0.4	0.8	0.7	1.7		

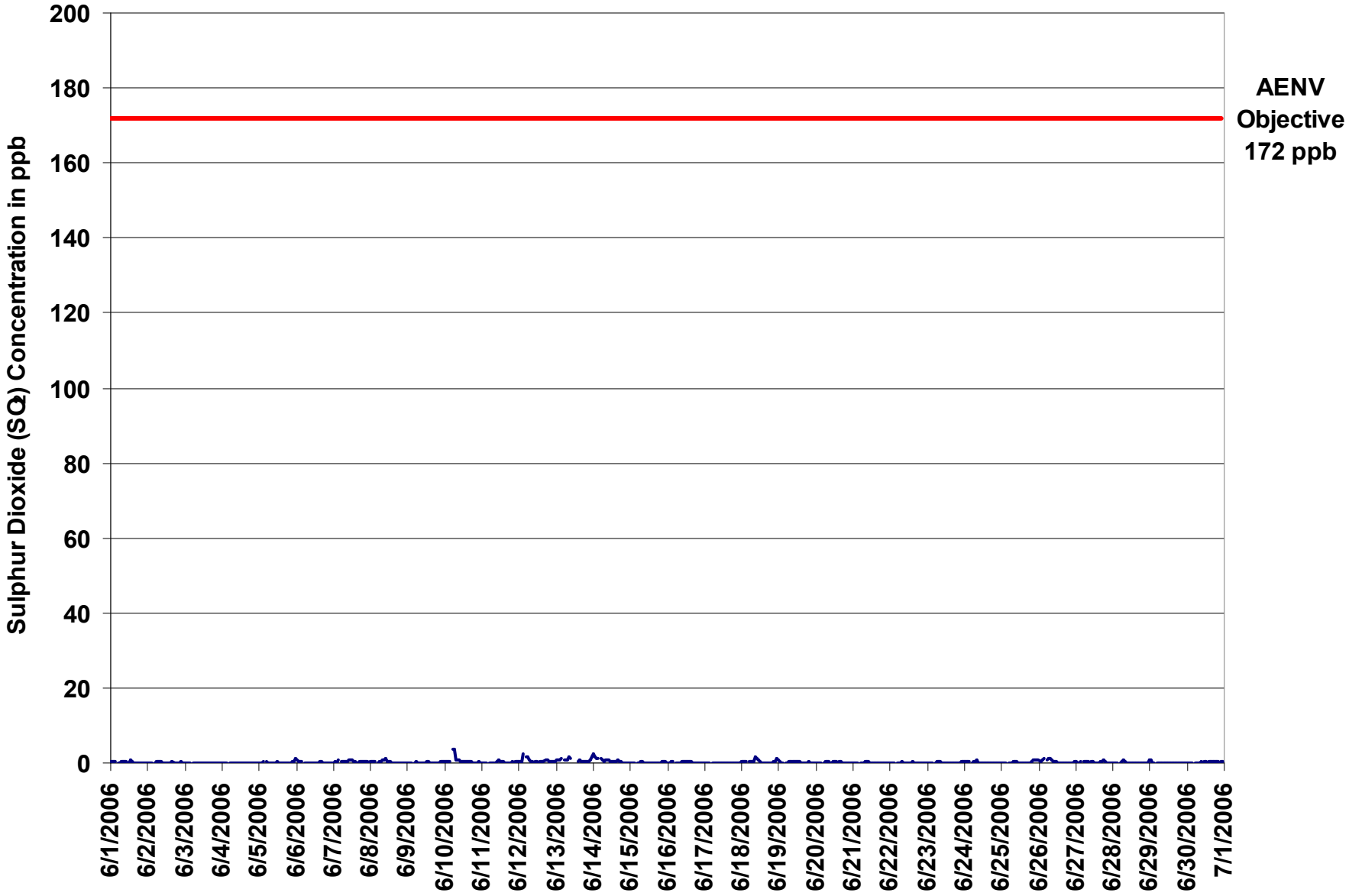


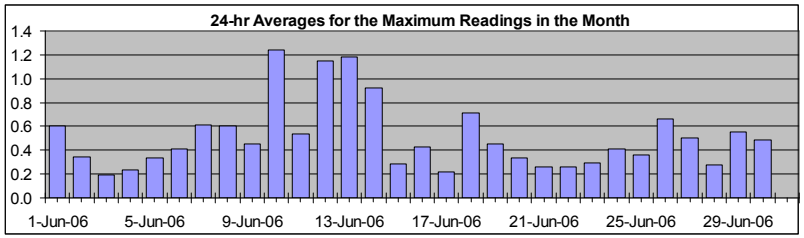
Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	9.8	ppb	12-Jun	3:00 4:00
Maximum 24-hr Value:	1.2	ppb	10-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	2.8	1.5	0.5	0.3	0.2	0.1	0.1	0.5 ppb	0.3 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	1	1	1	0	A	0	0	0	0	1	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0.6	5.0
2-Jun-06	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0.3	1.3
3-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
4-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
5-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	1.2
6-Jun-06	3	1	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.5
7-Jun-06	0	1	0	1	A	1	1	1	1	1	1	2	1	1	0	0	0	0	0	0	1	0	0	0	0.6	1.5
8-Jun-06	0	1	1	0	A	0	1	1	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	1.7
9-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1	1	1	0.4	1.6
10-Jun-06	1	0	0	3	A	7	7	2	1	1	1	1	0	0	0	1	1	0	0	0	0	0	1	0	1.2	7.4
11-Jun-06	0	0	0	0	A	0	0	0	0	0	3	2	1	1	1	0	0	0	0	0	0	1	0	1	0.5	3.1
12-Jun-06	1	1	0	10	A	2	2	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1.1	9.8
13-Jun-06	1	1	1	1	A	1	1	1	2	2	C	C	C	A	1	2	1	1	1	1	1	1	1	2	1.2	2.5
14-Jun-06	3	3	2	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0.9	2.7
15-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.7
16-Jun-06	0	0	1	0	A	0	0	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0.4	1.9
17-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Jun-06	1	1	0	0	A	0	1	1	1	2	2	1	0	0	0	0	0	0	0	1	0	1	1	2	0.7	2.4
19-Jun-06	2	1	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0.5	1.6
20-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
21-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
22-Jun-06	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.5
23-Jun-06	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
24-Jun-06	1	1	1	1	A	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.5
25-Jun-06	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.4	1.3
26-Jun-06	1	1	1	2	A	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	1.7
27-Jun-06	0	0	0	0	A	0	1	1	1	0	1	0	0	0	0	0	1	1	1	1	0	0	0	0	0.5	1.2
28-Jun-06	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
29-Jun-06	3	3	0	0	A	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.6	2.9
30-Jun-06	0	0	0	0	A	0	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0.5	1.4
Hourly Avg	0.7	0.5	0.4	0.9	N	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.4	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.5		
Hourly Max	2.9	2.8	1.6	9.8	0.0	7.4	6.7	1.9	2.5	2.4	3.1	1.7	1.6	5.0	2.0	1.9	1.3	1.1	1.2	1.0	1.2	1.3	1.3	2.5		

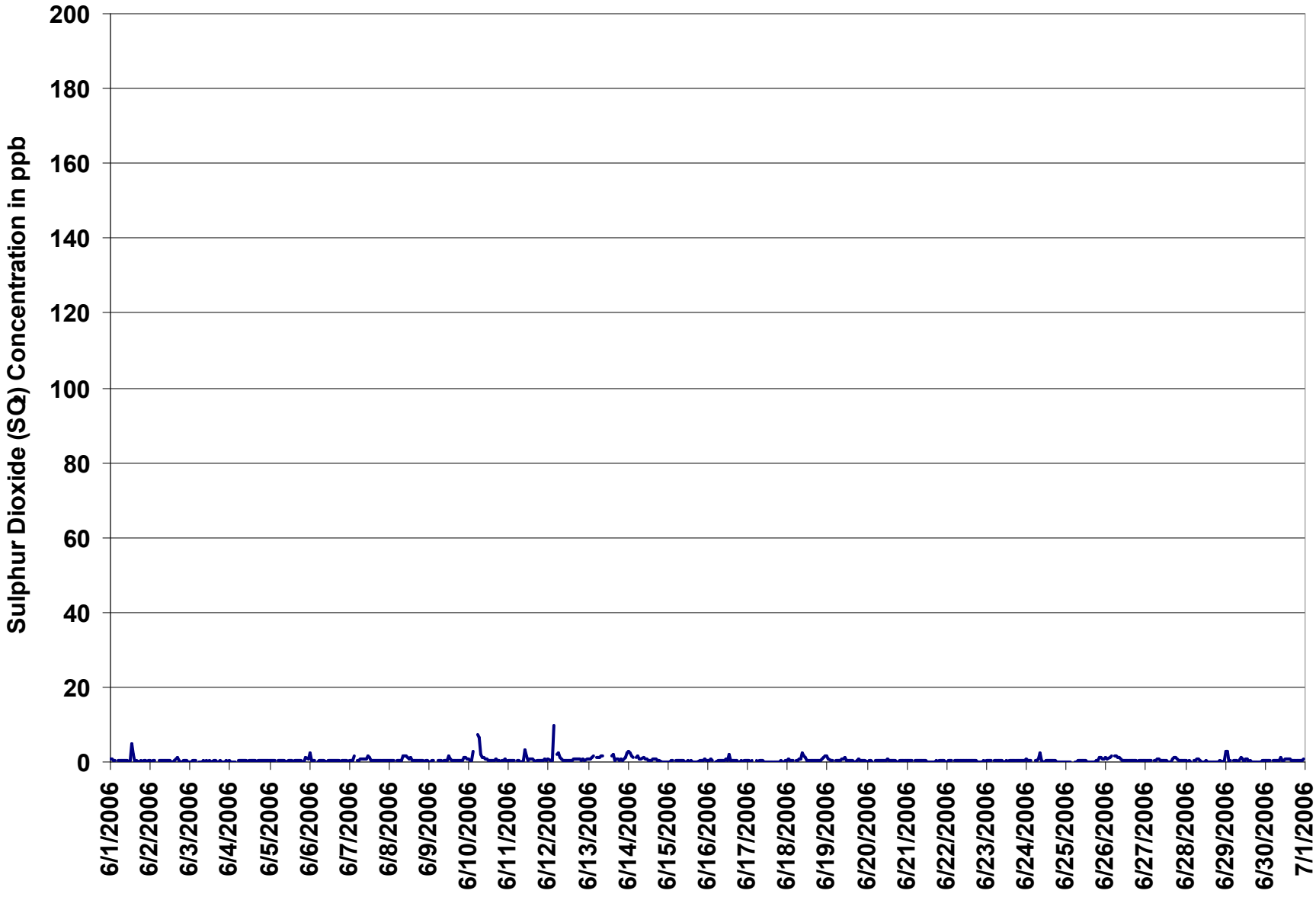
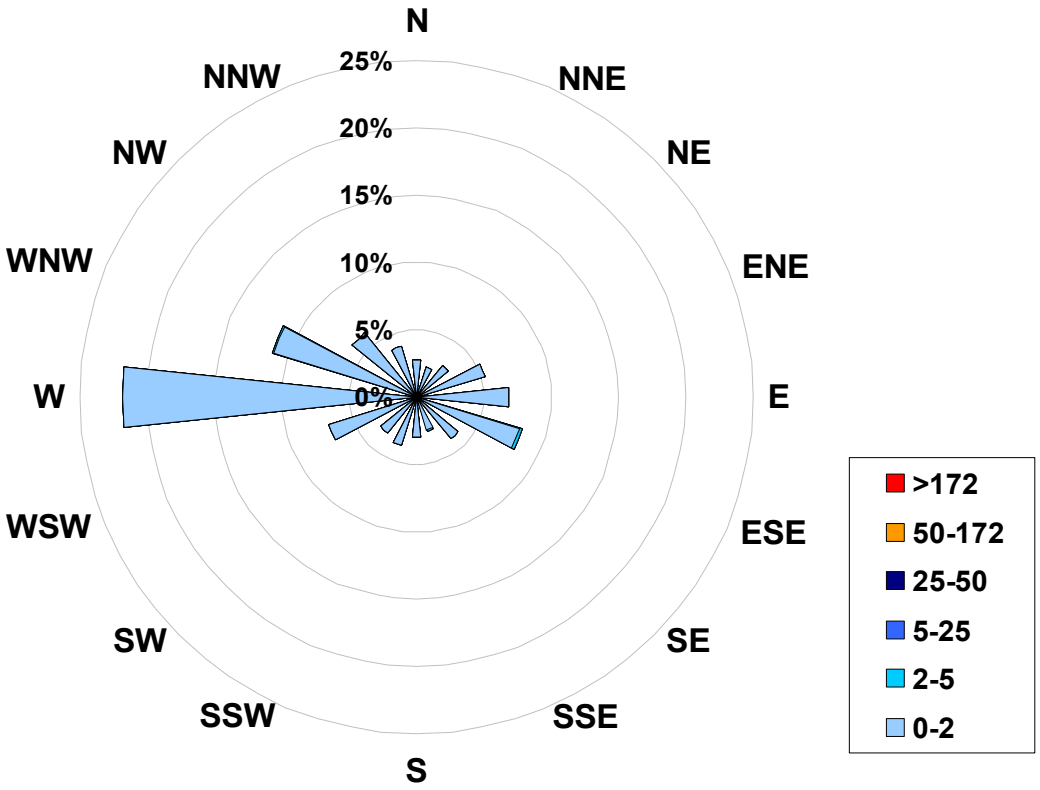


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Beaverlodge Site for June 2006



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	682
2	to	5	4
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			686

PASZA - Beaverlodge - Nitrogen Dioxide Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

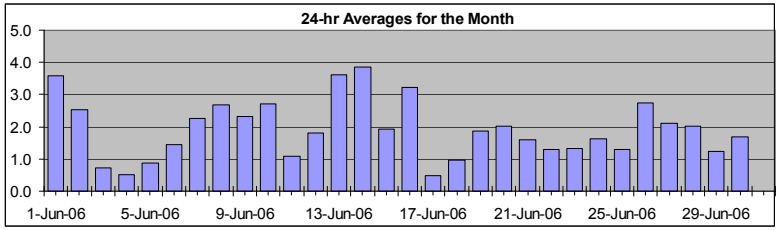
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	11.9	ppb	14-Jun	6:00 7:00
Maximum 24-hr Average:	3.9	ppb	14-Jun	



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

Percentile	99	95	75	50	25	5	1	Average	Median
	8.3	5.5	2.5	1.3	0.8	0.1	0.0	1.9 ppb	1.3 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	6	6	8	7	A	5	7	9	8	3	2	1	1	1	1	1	1	1	1	2	3	2	2	2	3.6	9.1
2-Jun-06	2	6	6	4	A	5	4	4	2	1	1	1	1	1	1	1	1	1	1	1	3	3	2	2	2.5	6.5
3-Jun-06	3	3	3	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	3.4
4-Jun-06	0	0	1	1	A	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0.5	1.7
5-Jun-06	1	1	2	2	A	3	1	1	1	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	0.9	3.2
6-Jun-06	1	2	2	2	A	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3	1.5	2.7
7-Jun-06	5	4	2	6	A	6	3	2	2	3	2	2	2	1	1	1	1	1	1	1	1	2	1	2	2.3	5.9
8-Jun-06	2	1	1	3	A	4	9	7	4	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2.7	9.4
9-Jun-06	2	2	2	2	A	4	4	4	1	1	2	1	1	1	1	1	1	1	1	1	3	6	5	5	2.3	6.1
10-Jun-06	4	3	3	5	A	7	6	5	5	3	2	1	1	1	1	1	1	1	1	1	4	4	2	1	2.7	6.8
11-Jun-06	1	1	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1.1	2.1
12-Jun-06	2	2	2	3	A	3	3	2	2	1	C	C	C	A	1	1	1	1	1	1	2	2	2	2	1.8	3.2
13-Jun-06	3	2	3	4	A	5	11	7	5	5	4	3	2	2	2	2	2	2	3	3	4	3	3	4	3.6	10.7
14-Jun-06	4	4	4	6	A	9	12	8	5	3	3	3	2	2	2	2	2	3	2	3	3	3	2	1	3.9	11.9
15-Jun-06	2	3	3	3	A	4	5	2	1	1	1	1	1	1	1	1	1	1	2	2	3	2	2	3	1.9	5.3
16-Jun-06	3	4	3	3	A	8	8	6	4	4	4	4	2	4	2	4	5	2	1	1	1	1	1	1	3.2	7.7
17-Jun-06	1	1	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	1.4
18-Jun-06	1	1	1	1	A	2	2	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	3	3	1.0	3.5
19-Jun-06	3	3	2	2	A	4	5	3	2	1	1	1	1	1	1	0	1	1	1	1	1	3	3	2	1.9	5.0
20-Jun-06	2	3	3	4	A	5	3	2	2	1	1	1	1	1	1	1	1	2	2	2	4	3	1	1	2.0	5.1
21-Jun-06	2	3	3	2	A	4	3	2	1	0	0	0	0	0	0	0	0	1	1	0	2	3	5	3	1.6	5.3
22-Jun-06	1	1	2	2	A	4	4	1	1	0	0	0	0	0	0	0	1	1	1	1	1	2	3	2	1.3	4.1
23-Jun-06	3	3	3	3	A	3	4	2	1	0	0	0	0	0	0	0	0	0	0	1	2	2	2	1	1.3	3.6
24-Jun-06	1	2	3	3	A	4	4	3	2	2	1	1	1	0	0	0	0	0	0	0	1	3	2	1	1.6	4.0
25-Jun-06	2	1	1	2	A	3	3	3	2	2	1	0	0	0	0	0	0	0	0	1	1	2	3	2	1.3	3.0
26-Jun-06	2	2	2	4	A	7	11	7	5	4	3	2	1	1	0	0	0	0	0	1	2	2	1	4	2.7	11.0
27-Jun-06	5	7	6	6	A	5	4	4	1	0	0	0	1	0	0	0	0	1	1	1	1	1	1	2	2.1	6.9
28-Jun-06	2	1	1	6	A	6	8	5	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2.0	7.9
29-Jun-06	2	1	1	3	A	3	3	1	0	2	1	0	0	1	0	0	0	1	1	1	2	3	2	2	1.2	2.8
30-Jun-06	2	1	2	3	A	3	3	2	1	1	1	1	1	2	1	1	1	1	1	3	3	1	2	3	1.7	3.0
Hourly Avg	2.3	2.6	2.6	3.2	N	4.1	4.5	3.3	2.1	1.5	1.2	0.9	0.8	0.9	0.7	0.8	0.9	0.9	1.0	1.2	1.9	2.2	2.0	2.0		
Hourly Max	6.4	6.9	7.6	7.4	0.0	8.7	11.9	9.1	8.2	5.2	3.9	3.5	2.2	4.3	2.0	4.0	5.0	2.5	2.6	3.0	4.4	6.1	5.3	4.7		

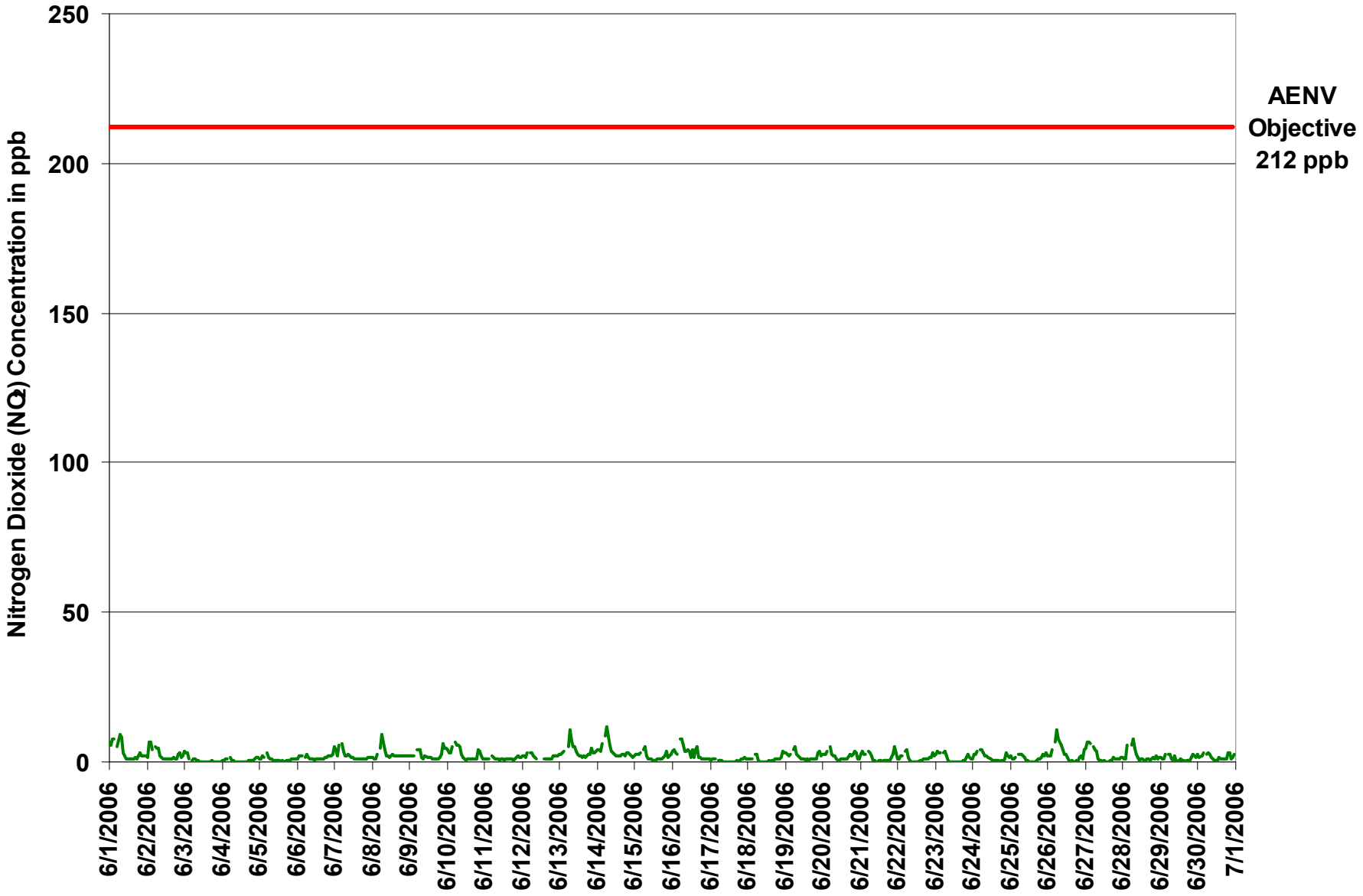


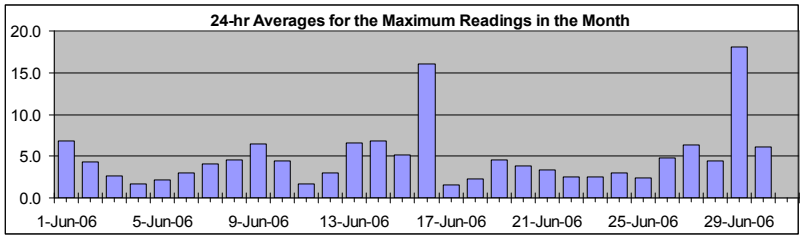
Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	244.1	ppb	16-Jun	13:00 14:00
Maximum 24-hr Value:	18.1	ppb	29-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	27.3	10.9	5.0	2.9	1.7	1.0	0.9	4.9 ppb	2.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	9	7	12	11	A	7	11	12	16	5	3	5	18	10	2	2	2	2	2	3	9	4	3	3	6.9	17.5
2-Jun-06	5	10	7	6	A	8	8	8	4	3	2	2	2	2	2	2	2	3	4	4	4	5	3	3	4.3	10.3
3-Jun-06	5	7	9	3	A	1	3	2	2	1	1	1	1	1	1	1	1	1	2	2	2	1	14	1	2.7	13.9
4-Jun-06	1	1	2	2	A	5	2	1	1	1	1	1	1	1	1	1	1	2	1	2	2	3	3	3	1.6	5.0
5-Jun-06	2	2	3	2	A	8	5	2	1	1	1	1	1	1	1	1	1	2	2	2	2	3	2	4	2.1	7.9
6-Jun-06	2	4	6	3	A	2	4	3	10	2	5	1	1	3	1	1	1	1	2	2	5	3	3	4	2.9	10.0
7-Jun-06	9	9	3	9	A	10	7	3	3	5	7	2	2	2	2	1	2	2	2	2	2	4	3	3	4.0	10.0
8-Jun-06	3	2	3	4	A	8	20	13	7	4	2	4	3	4	3	3	2	3	3	3	3	3	3	3	4.6	20.0
9-Jun-06	3	3	3	3	A	6	9	16	3	2	30	10	6	18	1	2	1	2	2	2	5	10	5	5	6.4	30.1
10-Jun-06	6	4	4	7	A	12	9	8	7	4	6	3	2	2	2	1	2	1	2	2	8	5	6	1	4.5	12.2
11-Jun-06	2	2	1	2	A	3	3	2	2	1	1	1	1	1	1	1	1	1	1	2	2	4	3	2	1.7	4.0
12-Jun-06	3	3	3	9	A	5	4	3	2	3	C	C	C	A	2	2	2	2	2	2	2	3	3	3	3.0	9.0
13-Jun-06	3	3	3	5	A	15	16	15	7	7	4	18	9	5	2	3	3	3	5	6	7	5	4	5	6.6	17.7
14-Jun-06	4	5	6	8	A	20	23	11	9	5	5	4	2	13	3	3	4	5	4	5	7	6	3	3	6.8	23.4
15-Jun-06	4	8	6	9	A	7	11	4	2	1	2	2	2	2	27	2	1	3	3	6	5	4	4	6	5.1	26.8
16-Jun-06	5	11	9	4	A	10	11	8	5	5	5	6	8	244	2	10	11	4	3	2	2	2	3	2	16.1	244.1
17-Jun-06	2	1	2	2	A	2	2	1	2	1	1	1	1	1	1	1	2	1	1	2	2	2	4	2	1.6	4.2
18-Jun-06	1	1	2	2	A	5	6	2	1	1	1	1	1	1	2	1	2	1	4	2	2	3	6	5	2.2	6.4
19-Jun-06	4	6	3	3	A	12	8	6	4	2	2	8	9	5	8	2	2	2	2	2	1	7	7	3	4.6	12.4
20-Jun-06	3	3	4	6	A	6	5	2	10	2	1	1	2	3	2	1	2	6	3	5	7	8	3	3	3.8	10.4
21-Jun-06	5	5	3	3	A	10	7	3	1	1	1	1	1	1	1	1	1	2	2	1	4	5	15	4	3.4	14.8
22-Jun-06	3	2	2	3	A	6	6	3	1	2	1	1	1	1	1	1	4	1	3	2	3	4	4	4	2.6	6.2
23-Jun-06	4	4	4	4	A	4	7	3	2	1	1	1	1	1	1	2	2	1	1	2	4	4	3	3	2.6	6.7
24-Jun-06	2	6	5	5	A	7	6	5	4	2	2	1	1	1	1	1	1	1	1	1	3	7	4	2	3.0	7.0
25-Jun-06	5	2	2	2	A	6	4	7	3	2	1	1	1	1	1	1	1	1	1	1	3	3	3	4	2.4	6.7
26-Jun-06	4	3	3	6	A	10	25	13	7	6	3	3	2	1	1	1	1	1	2	1	3	4	1	10	4.8	24.9
27-Jun-06	8	15	8	12	A	8	6	5	2	1	1	1	61	1	1	1	1	1	2	2	2	3	2	3	6.4	61.2
28-Jun-06	3	2	5	9	A	8	15	8	7	2	2	2	4	2	2	2	3	2	3	3	3	5	3	7	4.4	15.1
29-Jun-06	3	2	3	9	A	6	7	2	1	185	55	1	19	103	1	1	1	1	2	2	3	5	3	3	18.1	184.6
30-Jun-06	3	2	3	4	A	5	6	4	2	1	1	1	2	75	1	1	1	2	2	5	6	3	6	5	6.1	74.7
Hourly Avg	3.9	4.5	4.2	5.2	N	7.4	8.4	5.8	4.3	8.7	5.1	2.9	5.6	17.4	2.5	1.8	2.0	2.0	2.3	2.6	3.7	4.3	4.3	3.6		
Hourly Max	9.2	15.4	11.8	12.0	0.0	20.1	24.9	16.4	15.6	184.6	55.1	17.7	61.2	244.1	26.8	10.0	10.8	6.0	5.3	6.0	9.0	10.0	14.8	10.0		

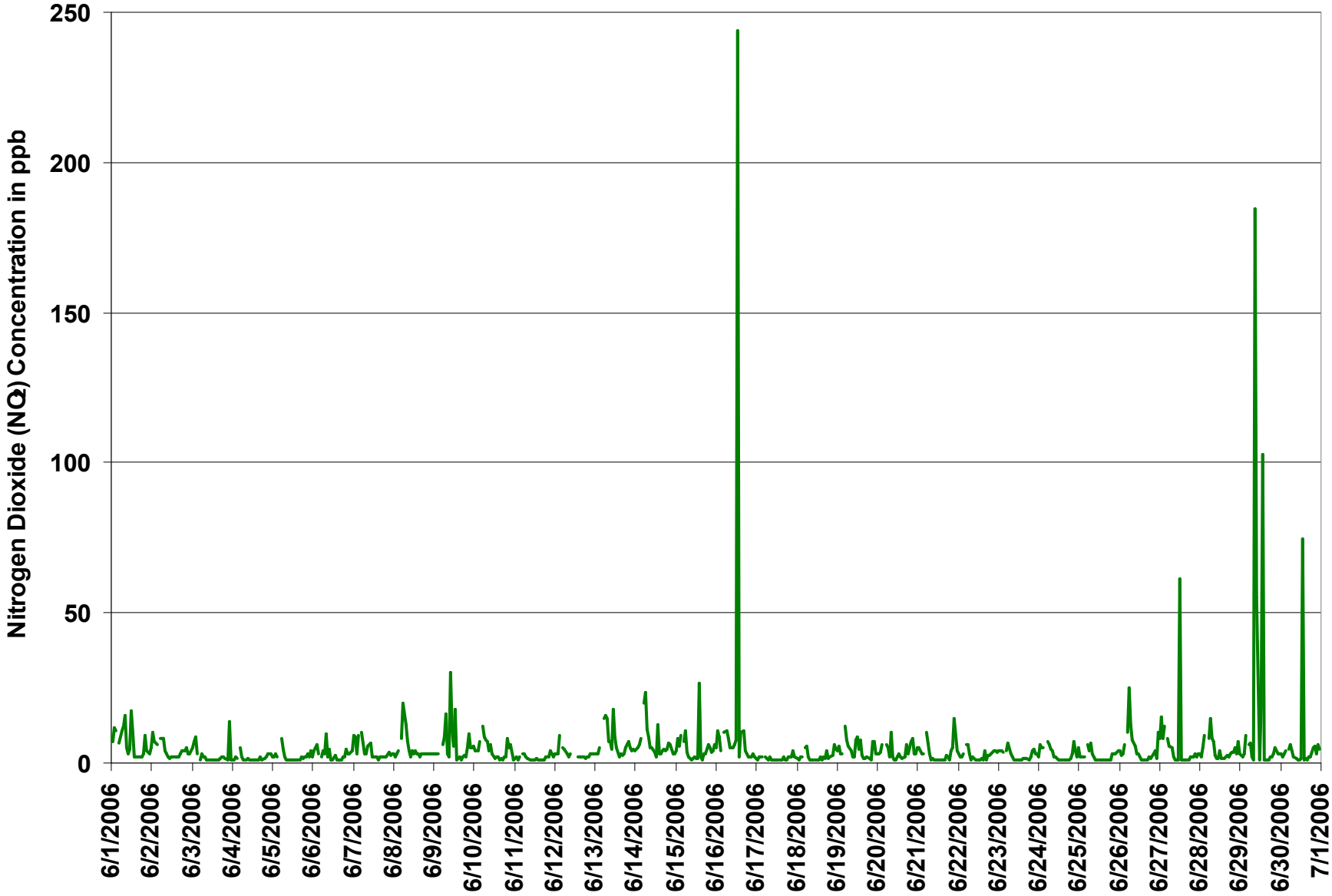
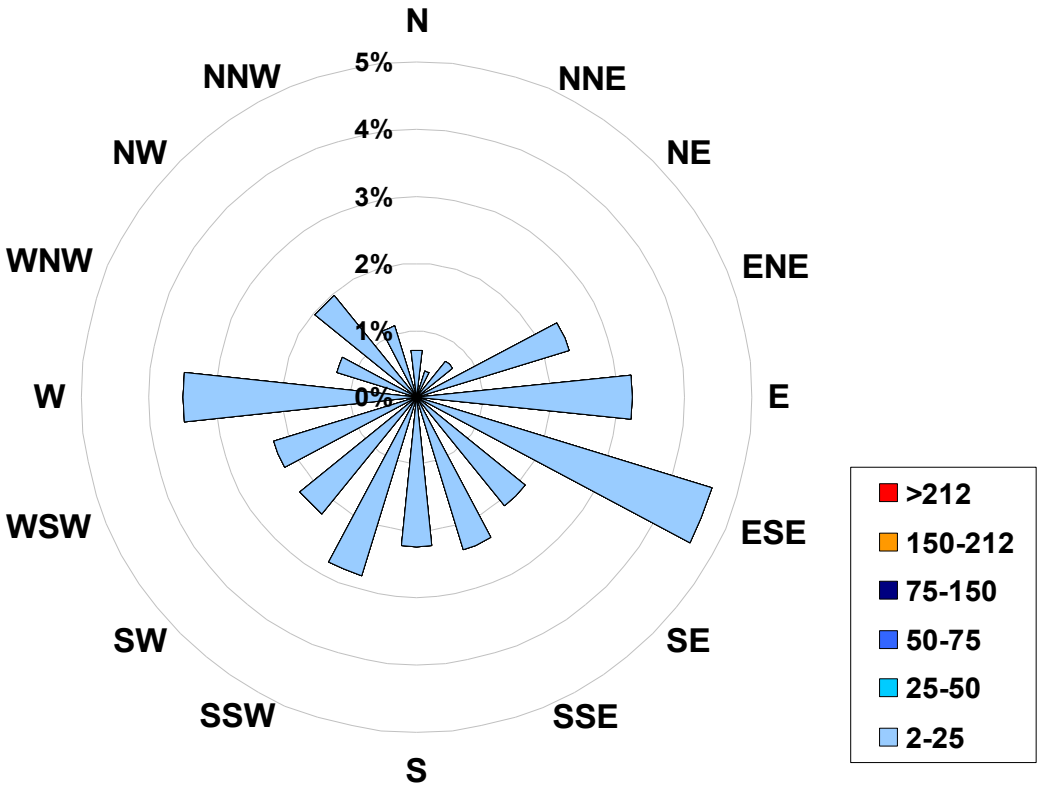


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Beaverlodge Site for June 2006



Calms:	0%

Frequency Distribution of NO_2 in ppb			
Range			Frequency (hrs)
2.0	<	25	686
25	to	50	0
50	to	75	0
75	to	150	0
150	to	212	0
	>	212	0
Total Non-Zero Values			686

PASZA - Beaverlodge - Nitric Oxide Monthly Summary

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

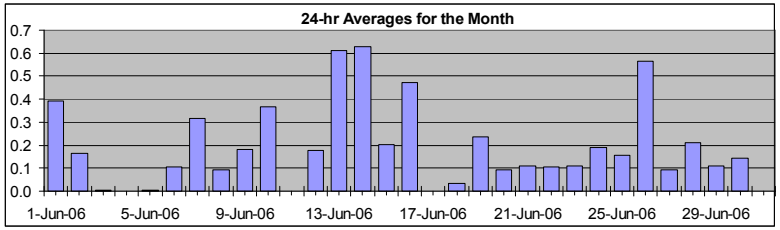
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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

Summary

Maximum 1-hr Average:	7.2	ppb	26-Jun	6:00 7:00
Maximum 24-hr Average:	0.6	ppb	14-Jun	



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

Percentile	99	95	75	50	25	5	1	Average	Median
	2.6	1.2	0.0	0.0	0.0	0.0	0.0	0.2 ppb	0.0 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

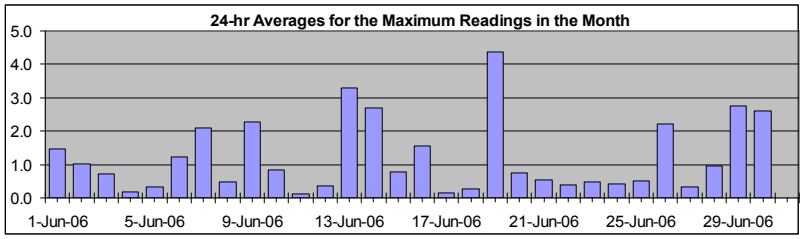
Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0	0	0	0	A	0	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.6
2-Jun-06	0	0	0	0	A	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
3-Jun-06	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
4-Jun-06	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
5-Jun-06	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
6-Jun-06	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
7-Jun-06	0	0	0	0	A	1	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7
8-Jun-06	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
9-Jun-06	0	0	0	0	A	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.9
10-Jun-06	0	0	0	0	A	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.3
11-Jun-06	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
12-Jun-06	0	0	0	0	A	0	1	1	1	0	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.2	1.2
13-Jun-06	0	0	0	0	A	1	6	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	5.8
14-Jun-06	0	0	0	0	A	1	7	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	7.2
15-Jun-06	0	0	0	0	A	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.9
16-Jun-06	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0.5	1.5
17-Jun-06	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
18-Jun-06	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.6
19-Jun-06	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
20-Jun-06	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
21-Jun-06	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1
22-Jun-06	0	0	0	0	A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.6
23-Jun-06	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.3
24-Jun-06	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
25-Jun-06	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
26-Jun-06	0	0	0	0	A	1	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	7.2
27-Jun-06	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
28-Jun-06	0	0	0	0	A	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
29-Jun-06	0	0	0	0	A	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.1	1.1
30-Jun-06	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
Hourly Avg	0.0	0.0	0.0	0.0	N	0.5	1.6	1.0	0.6	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Hourly Max	0.0	0.1	0.1	0.0	0.0	1.5	7.2	3.5	2.6	2.0	1.3	1.5	0.5	1.1	0.1	0.6	1.2	0.1	0.1	0.3	0.4	0.1	0.1	0.0		

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	40.0	ppb	29-Jun	13:00 14:00
Maximum 24-hr Value:	4.4	ppb	19-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	23.6	5.0	0.9	0.0	0.0	0.0	0.0	1.2 ppb	0.0 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	0	0	1	2	A	1	4	5	5	3	1	0	2	8	0	0	0	0	0	0	1	0	0	0	1.5	8.2
2-Jun-06	0	0	0	0	A	2	2	4	2	9	2	0	1	1	0	1	0	0	0	0	0	0	0	0	1.0	8.7
3-Jun-06	0	0	0	0	A	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	1	13	0	0.7	13.2
4-Jun-06	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
5-Jun-06	0	0	0	0	A	1	1	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0.3	3.4
6-Jun-06	0	0	0	0	A	0	1	2	15	1	4	1	1	3	0	0	0	0	0	0	0	0	0	1	1.2	15.2
7-Jun-06	0	0	0	0	A	6	4	1	1	33	2	1	0	0	0	0	0	0	0	0	0	0	0	0	2.1	33.0
8-Jun-06	0	0	0	0	A	1	4	2	1	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0.5	3.9
9-Jun-06	0	0	0	0	A	3	7	8	3	13	3	8	2	5	0	0	0	0	0	0	0	0	0	0	2.3	13.4
10-Jun-06	0	0	0	0	A	3	5	3	3	1	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0.8	4.9
11-Jun-06	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
12-Jun-06	0	0	0	0	A	1	2	1	1	1	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0.4	2.0
13-Jun-06	0	0	0	0	A	21	23	8	3	3	1	7	3	6	0	0	0	0	1	1	0	0	0	0	3.3	22.7
14-Jun-06	0	0	0	0	A	15	29	6	4	2	1	0	0	6	0	0	0	0	0	0	0	0	0	0	2.7	28.8
15-Jun-06	0	0	0	0	A	5	8	2	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0.8	8.0
16-Jun-06	0	2	2	0	A	3	4	2	2	2	2	3	3	5	0	2	3	1	1	0	0	0	0	0	1.6	5.0
17-Jun-06	0	0	0	0	A	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0.1	1.0
18-Jun-06	0	0	0	0	A	1	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	1.9
19-Jun-06	0	0	0	0	A	8	3	3	2	1	1	39	4	8	3	29	0	0	0	0	0	0	0	0	4.4	39.4
20-Jun-06	0	0	0	0	A	1	2	1	6	1	0	0	1	1	1	0	0	1	0	1	1	0	0	0	0.7	6.0
21-Jun-06	0	0	0	0	A	5	3	2	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.5	4.9
22-Jun-06	0	0	0	0	A	2	3	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	3.0
23-Jun-06	0	0	0	0	A	1	3	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	6.3
24-Jun-06	0	0	0	0	A	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0
25-Jun-06	0	0	0	0	A	2	3	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.9
26-Jun-06	0	0	0	0	A	4	36	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2	35.9
27-Jun-06	0	0	0	0	A	2	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0
28-Jun-06	0	0	0	0	A	1	5	3	8	1	1	0	2	0	0	0	1	0	0	0	0	0	0	0	1.0	8.1
29-Jun-06	0	0	0	0	A	2	3	1	1	1	1	0	14	40	0	0	0	0	1	0	0	0	0	0	2.8	40.0
30-Jun-06	0	0	0	0	A	1	3	2	1	1	1	0	35	14	1	0	0	0	0	0	1	0	0	0	2.6	34.8
Hourly Avg	0.0	0.1	0.1	0.1	N	3.1	5.4	2.7	2.3	2.6	0.8	2.1	2.3	3.3	0.2	1.3	0.2	0.2	0.1	0.1	0.1	0.0	0.5	0.0		
Hourly Max	0.0	1.5	2.0	1.5	0.0	20.7	35.9	8.0	15.2	33.0	3.6	39.4	34.8	40.0	2.7	29.1	2.5	1.0	1.0	1.0	1.3	0.7	13.2	0.5		

PASZA - Beaverlodge - Oxides of Nitrogen Monthly Summary

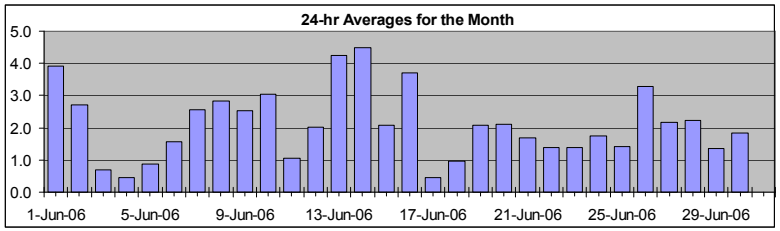
Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: June 1, 2006 to July 1, 2006

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



Summary

Maximum 1-hr Average:	19.0	ppb	14-Jun	6:00 7:00
Maximum 24-hr Average:	4.5	ppb	14-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	10.3	6.3	2.7	1.4	0.8	0.1	0.0	2.1 ppb	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-Jun-06	6	6	8	7	A	6	9	12	11	4	2	1	1	1	1	1	1	1	1	2	3	2	2	2	3.9	11.7
2-Jun-06	2	6	6	4	A	6	5	6	3	2	1	1	1	1	1	1	1	1	1	1	2	3	2	2	2.7	6.4
3-Jun-06	3	3	3	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	3.3
4-Jun-06	0	0	1	1	A	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0.5	1.7
5-Jun-06	1	1	2	2	A	3	2	1	1	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	0.9	3.5
6-Jun-06	1	2	2	2	A	1	3	2	2	2	1	1	1	1	1	1	1	1	2	2	2	2	2	3	1.6	2.9
7-Jun-06	5	4	2	5	A	7	5	3	3	4	3	2	2	1	1	1	1	1	1	1	1	1	1	2	2.6	7.3
8-Jun-06	2	1	1	2	A	5	10	7	5	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.8	10.4
9-Jun-06	2	2	2	2	A	5	6	5	2	1	2	2	1	2	1	1	1	1	1	1	3	6	5	5	2.5	6.2
10-Jun-06	4	3	3	5	A	8	8	8	7	3	2	1	1	1	1	1	1	1	1	1	4	3	2	1	3.0	7.8
11-Jun-06	1	1	1	1	A	2	2	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	1	2	1.1	2.4
12-Jun-06	2	2	2	3	A	3	4	3	2	2	C	C	C	A	1	1	1	1	1	1	2	2	2	2	2.0	4.3
13-Jun-06	3	2	3	4	A	6	17	10	7	7	4	3	2	2	2	2	2	2	3	3	4	3	3	4	4.2	16.7
14-Jun-06	4	4	4	6	A	10	19	12	7	4	4	3	2	2	2	2	2	3	2	3	3	3	2	1	4.5	19.0
15-Jun-06	2	3	3	3	A	5	8	3	1	1	1	1	0	0	1	1	1	1	2	2	4	2	2	3	2.1	8.3
16-Jun-06	3	4	3	3	A	9	9	7	5	5	5	5	2	4	2	5	6	2	2	1	1	1	1	1	3.7	9.0
17-Jun-06	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.4	1.3
18-Jun-06	1	1	1	1	A	3	3	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	3	3	1.0	3.3
19-Jun-06	3	2	2	2	A	5	6	4	3	2	1	1	1	1	1	1	1	1	1	1	1	3	3	2	2.1	6.1
20-Jun-06	2	3	2	4	A	6	3	2	2	1	1	1	1	1	1	1	1	3	2	3	4	3	1	1	2.1	5.6
21-Jun-06	2	3	3	2	A	4	4	3	1	0	0	0	0	0	0	0	0	1	0	0	2	3	5	3	1.7	5.2
22-Jun-06	1	1	2	2	A	4	6	2	1	0	0	0	0	0	0	0	1	1	1	1	1	2	3	2	1.4	5.6
23-Jun-06	2	3	3	3	A	4	5	3	1	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	1.4	5.0
24-Jun-06	1	2	3	3	A	4	5	4	3	3	2	1	0	0	0	0	0	0	0	0	1	3	2	1	1.8	5.3
25-Jun-06	2	1	1	2	A	3	3	4	3	2	0	0	0	0	0	0	0	0	1	1	2	3	2	3	1.4	4.0
26-Jun-06	2	2	2	4	A	8	18	10	7	4	3	2	1	1	0	0	0	0	0	1	2	2	1	4	3.3	18.3
27-Jun-06	5	7	6	6	A	6	5	5	1	0	0	0	1	0	0	0	0	0	1	1	1	1	1	2	2.2	6.8
28-Jun-06	2	1	1	6	A	6	10	6	4	2	1	1	1	1	1	1	1	0	1	1	1	2	1	2	2.2	9.5
29-Jun-06	2	1	1	3	A	3	3	1	1	2	1	0	1	2	0	0	0	1	1	1	2	3	2	2	1.3	3.4
30-Jun-06	2	1	2	3	A	3	4	3	2	1	1	1	1	2	1	1	1	1	1	3	3	1	2	3	1.8	4.0
Hourly Avg	2.3	2.5	2.5	3.1	N	4.6	6.2	4.3	2.8	1.9	1.3	1.0	0.9	1.0	0.7	0.9	1.0	0.9	1.0	1.2	1.9	2.2	1.9	2.0		
Hourly Max	6.3	6.8	7.7	7.4	0.0	9.8	19.0	12.0	10.9	7.4	5.2	5.0	2.4	4.5	2.0	4.6	6.2	2.6	2.8	3.1	4.5	6.1	5.2	4.6		

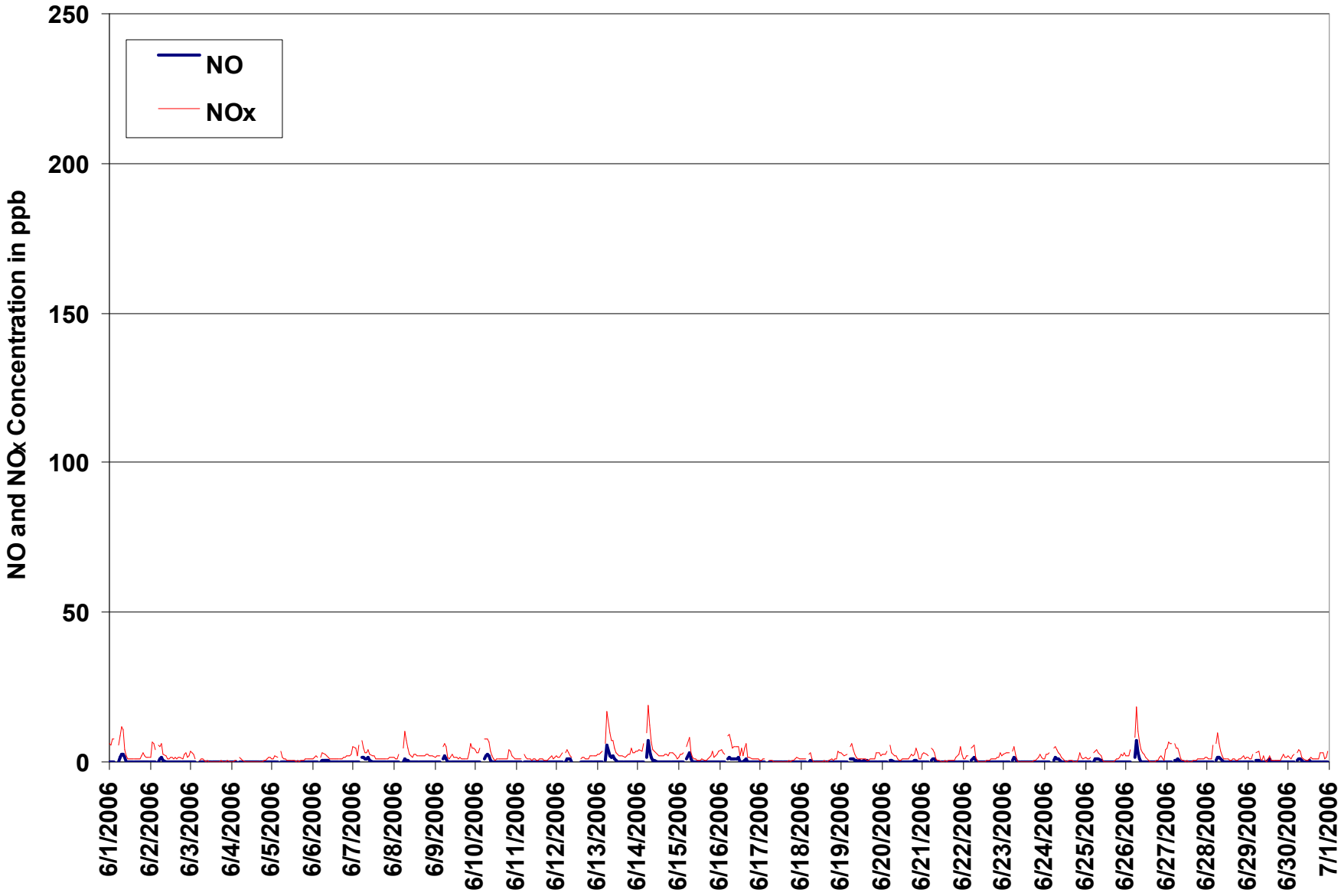


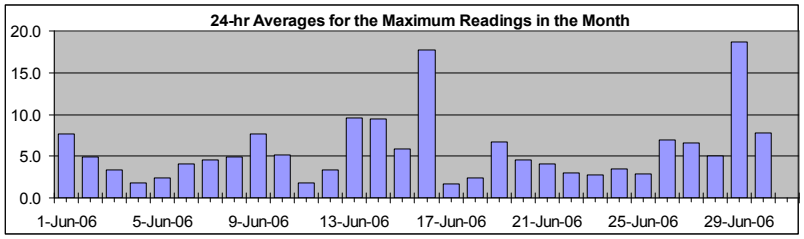
Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	256.2	ppb	16-Jun	13:00 14:00
Maximum 24-hr Value:	18.7	ppb	29-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	52.3	14.9	5.7	2.9	1.9	0.9	0.9	5.7 ppb	2.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	9	8	13	12	A	7	15	16	21	8	3	5	18	10	2	2	2	2	2	3	9	4	4	3	7.7	21.0
2-Jun-06	5	10	8	6	A	10	10	12	6	3	2	2	3	3	2	3	3	3	5	4	4	5	3	3	4.9	11.7
3-Jun-06	5	7	8	3	A	2	3	3	2	1	1	1	1	1	1	1	1	1	3	2	2	1	27	1	3.4	27.5
4-Jun-06	1	1	2	1	A	6	3	2	2	2	1	1	1	1	1	1	1	3	2	2	2	3	3	3	1.8	5.9
5-Jun-06	2	2	3	2	A	9	5	3	1	2	2	1	1	1	2	2	1	2	2	2	2	3	2	4	2.4	8.9
6-Jun-06	2	4	6	2	A	2	5	5	25	3	6	1	2	5	1	1	1	1	2	2	5	3	4	5	4.0	25.2
7-Jun-06	9	9	3	9	A	13	10	4	4	6	7	2	3	2	2	1	2	2	2	2	2	4	3	3	4.5	12.9
8-Jun-06	3	2	3	4	A	8	24	14	8	4	3	4	3	4	3	4	2	3	3	3	3	3	3	3	4.9	24.4
9-Jun-06	3	3	3	3	A	9	16	22	4	3	31	15	6	22	1	3	1	2	2	2	5	10	5	5	7.6	31.0
10-Jun-06	6	4	4	7	A	14	13	11	10	5	7	4	2	2	3	1	2	1	2	2	8	5	6	1	5.1	14.1
11-Jun-06	2	2	1	2	A	3	4	3	2	1	1	1	1	1	1	1	1	1	1	2	2	4	3	2	1.8	3.9
12-Jun-06	3	3	3	9	A	7	6	4	3	4	C	C	C	A	2	2	2	2	2	2	2	3	3	3	3.4	8.9
13-Jun-06	3	3	3	5	A	36	38	23	10	10	6	25	10	6	2	3	3	3	6	6	7	5	4	5	9.6	38.4
14-Jun-06	4	5	6	8	A	33	52	17	13	7	6	4	3	18	4	3	5	5	4	5	7	6	3	3	9.5	51.9
15-Jun-06	4	8	5	9	A	11	19	5	3	1	2	2	1	2	27	2	2	3	4	7	5	3	4	6	5.9	27.3
16-Jun-06	6	12	11	4	A	13	13	10	6	8	7	8	9	256	3	12	13	4	4	2	2	2	3	2	17.8	256.2
17-Jun-06	1	1	2	2	A	2	2	1	3	1	1	1	1	1	1	1	2	2	1	2	2	2	4	2	1.6	4.2
18-Jun-06	1	1	2	2	A	6	7	2	2	1	1	1	1	1	2	1	2	2	5	2	2	2	7	4	2.4	6.7
19-Jun-06	4	6	4	3	A	20	10	8	5	3	2	28	13	10	11	3	2	2	2	2	1	7	7	3	6.7	28.3
20-Jun-06	3	3	4	6	A	7	6	3	16	3	1	1	3	4	3	2	2	7	3	6	8	8	3	3	4.5	16.4
21-Jun-06	5	5	3	3	A	15	9	5	2	2	2	1	1	1	1	2	1	3	3	2	4	5	15	4	4.0	15.0
22-Jun-06	3	2	2	3	A	8	9	5	2	2	2	1	1	1	2	2	5	2	3	3	3	4	4	4	3.0	8.8
23-Jun-06	4	4	4	3	A	5	9	4	2	1	2	1	1	1	1	2	2	2	1	2	4	4	3	3	2.8	9.3
24-Jun-06	2	6	5	5	A	9	9	6	6	3	3	2	1	1	2	1	1	1	2	2	3	7	4	2	3.5	8.9
25-Jun-06	5	2	2	2	A	8	7	12	4	3	1	1	1	1	1	0	1	1	1	1	3	3	3	4	2.8	11.6
26-Jun-06	4	2	3	6	A	14	58	20	11	7	3	3	3	1	1	2	1	1	2	1	3	4	1	10	6.9	57.7
27-Jun-06	8	15	8	12	A	9	6	7	3	2	2	1	61	1	1	1	1	1	2	2	2	2	2	3	6.6	60.7
28-Jun-06	3	2	5	9	A	10	20	10	9	4	2	2	6	2	2	2	3	2	3	4	3	5	3	7	5.0	19.7
29-Jun-06	3	2	3	9	A	8	10	3	2	185	55	1	24	104	1	1	1	2	3	2	3	5	3	3	18.7	184.8
30-Jun-06	3	2	3	4	A	6	9	6	4	2	1	1	15	90	2	2	1	2	2	5	7	3	6	6	7.8	89.9
Hourly Avg	3.8	4.5	4.3	5.1	N	10.3	13.5	8.1	6.3	9.5	5.6	4.1	6.7	19.1	2.9	2.0	2.2	2.2	2.6	2.7	3.8	4.2	4.8	3.6		
Hourly Max	8.9	15.3	12.8	12.0	0.0	35.7	57.7	22.7	25.2	184.8	55.0	28.3	60.7	256.2	27.3	11.7	13.0	6.7	6.0	6.6	9.4	10.0	27.5	10.0		

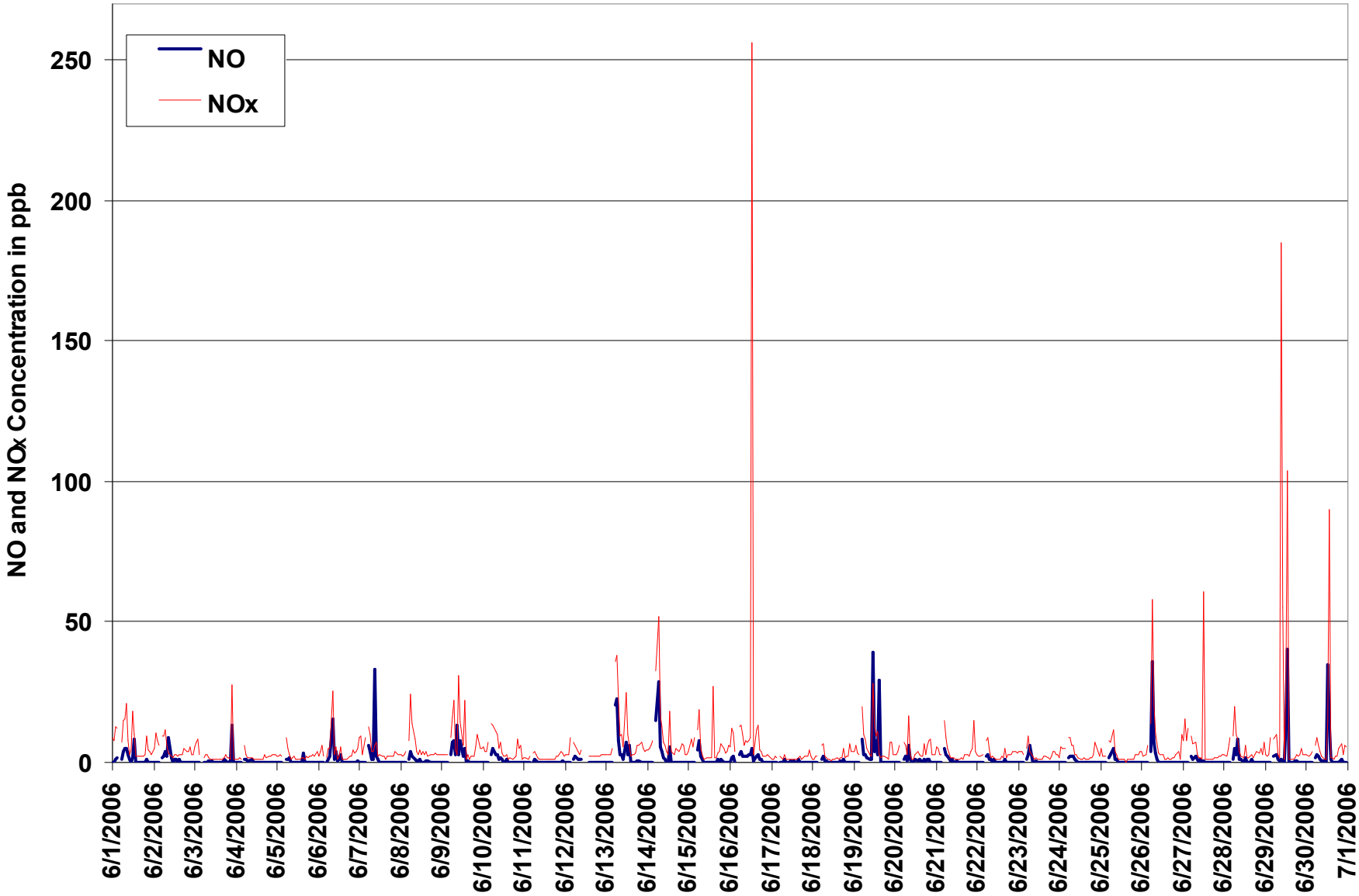


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Beaverlodge - Ozone Monthly Summary

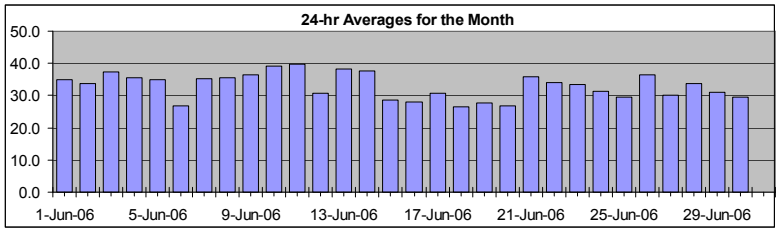
HOURLY AVERAGE TABLE

Ozone (O_3)

Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

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



Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	55.8	ppb	13-Jun	15:00 16:00
Maximum 24-hr Average:	39.6	ppb	11-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	51.7	47.6	38.8	32.9	27.5	18.8	14.3	33.0 ppb	32.9 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	28	29	20	18	A	22	20	19	19	29	35	41	42	44	46	46	47	48	47	47	40	40	40	40	35.1	48.2
2-Jun-06	41	21	20	21	A	22	20	27	33	36	40	40	33	36	38	40	43	42	44	43	34	31	37	37	33.9	43.9
3-Jun-06	32	29	33	38	A	40	41	37	35	36	39	40	41	41	40	39	39	39	38	38	38	37	35	35	37.5	41.4
4-Jun-06	34	32	31	31	A	28	30	31	34	35	35	36	37	39	38	38	39	41	42	42	40	38	33	31	35.4	42.5
5-Jun-06	30	30	28	29	A	28	30	34	36	38	40	37	37	37	38	38	38	41	39	37	37	37	34	34	35.1	41.1
6-Jun-06	31	25	20	21	A	20	18	19	20	21	24	28	28	31	33	34	37	37	36	32	27	28	25	20	26.7	37.4
7-Jun-06	15	16	20	18	A	13	19	29	27	27	32	36	41	47	49	51	53	52	48	45	44	42	45	44	35.4	52.8
8-Jun-06	45	49	49	38	A	30	24	33	37	42	45	49	39	32	32	33	33	34	32	30	28	28	29	29	35.6	49.2
9-Jun-06	27	24	23	22	A	16	17	23	33	37	39	43	44	47	48	48	50	50	50	49	42	33	36	36	36.3	50.3
10-Jun-06	37	38	37	29	A	20	19	25	31	40	47	47	47	48	48	50	51	52	49	45	38	37	36	33	39.3	51.6
11-Jun-06	34	31	31	31	A	27	30	35	42	45	47	47	48	50	51	45	43	45	46	43	40	34	31	32	39.6	51.4
12-Jun-06	30	28	27	24	A	21	20	23	27	27	29	31	33	C	C	C	A	41	41	39	36	35	36	35	30.7	41.1
13-Jun-06	35	34	33	33	A	25	14	22	28	29	39	44	49	52	54	56	50	46	44	44	38	38	37	37	38.3	55.8
14-Jun-06	37	38	37	31	A	24	15	21	31	38	43	41	42	48	47	51	55	52	44	43	39	30	28	31	37.6	54.6
15-Jun-06	29	28	26	26	A	15	10	18	25	30	31	34	35	35	35	35	37	34	33	30	26	31	30	28	28.8	37.1
16-Jun-06	23	21	21	20	A	11	12	12	16	17	20	23	33	34	35	34	31	35	35	37	40	41	46	45	28.0	45.7
17-Jun-06	44	39	34	32	A	33	32	30	30	31	31	31	31	30	29	29	30	30	30	29	28	26	24	23	30.7	43.5
18-Jun-06	24	24	19	20	A	17	18	23	25	26	27	28	28	29	29	30	30	31	31	32	33	32	26	26	26.5	33.3
19-Jun-06	25	22	22	20	A	16	15	20	23	26	29	31	32	32	31	36	38	38	37	32	32	28	26	25	27.7	38.0
20-Jun-06	19	17	15	17	A	14	21	23	26	31	32	32	31	32	33	34	35	32	31	31	24	25	31	31	26.8	34.7
21-Jun-06	26	22	22	23	A	19	22	23	30	37	44	47	48	47	45	44	45	44	44	45	43	39	34	33	35.8	47.8
22-Jun-06	34	32	28	27	A	20	21	31	36	38	38	39	39	40	39	39	38	39	39	38	36	33	29	30	33.9	39.7
23-Jun-06	25	21	20	21	A	20	21	25	32	35	38	40	40	41	42	43	42	40	40	39	36	34	35	36	33.4	42.9
24-Jun-06	37	29	26	26	A	19	19	24	28	31	38	40	40	41	41	37	37	35	33	30	27	25	28	27	31.3	41.3
25-Jun-06	26	25	24	22	A	18	17	19	23	28	30	33	36	35	35	33	32	32	37	38	38	35	33	30	29.5	38.0
26-Jun-06	29	28	26	23	A	15	16	23	34	43	46	52	47	40	38	41	44	45	45	45	41	38	41	39	36.5	52.1
27-Jun-06	35	26	20	25	A	19	26	26	30	31	31	31	32	33	33	33	34	33	30	32	34	34	35	34	30.2	34.7
28-Jun-06	33	36	36	21	A	17	14	19	20	29	33	33	34	39	43	43	44	46	44	41	42	37	36	34	33.8	46.2
29-Jun-06	32	33	32	28	A	25	24	29	31	32	33	32	32	33	33	33	34	36	35	34	32	28	29	28	31.2	35.7
30-Jun-06	27	28	25	24	A	22	21	22	29	33	33	33	33	34	35	36	36	35	33	29	26	29	28	26	29.5	36.4
Hourly Avg	30.8	28.5	27.0	25.3	N	21.1	20.9	24.9	29.0	32.7	35.6	37.2	37.7	38.8	39.3	39.6	40.2	40.2	39.2	38.0	35.3	33.3	33.1	32.3		
Hourly Max	44.9	48.7	49.2	38.3	0.0	39.6	41.3	36.5	42.2	45.1	47.3	52.1	48.7	51.7	53.5	55.8	54.6	52.1	50.0	48.9	43.6	41.8	45.7	45.3		

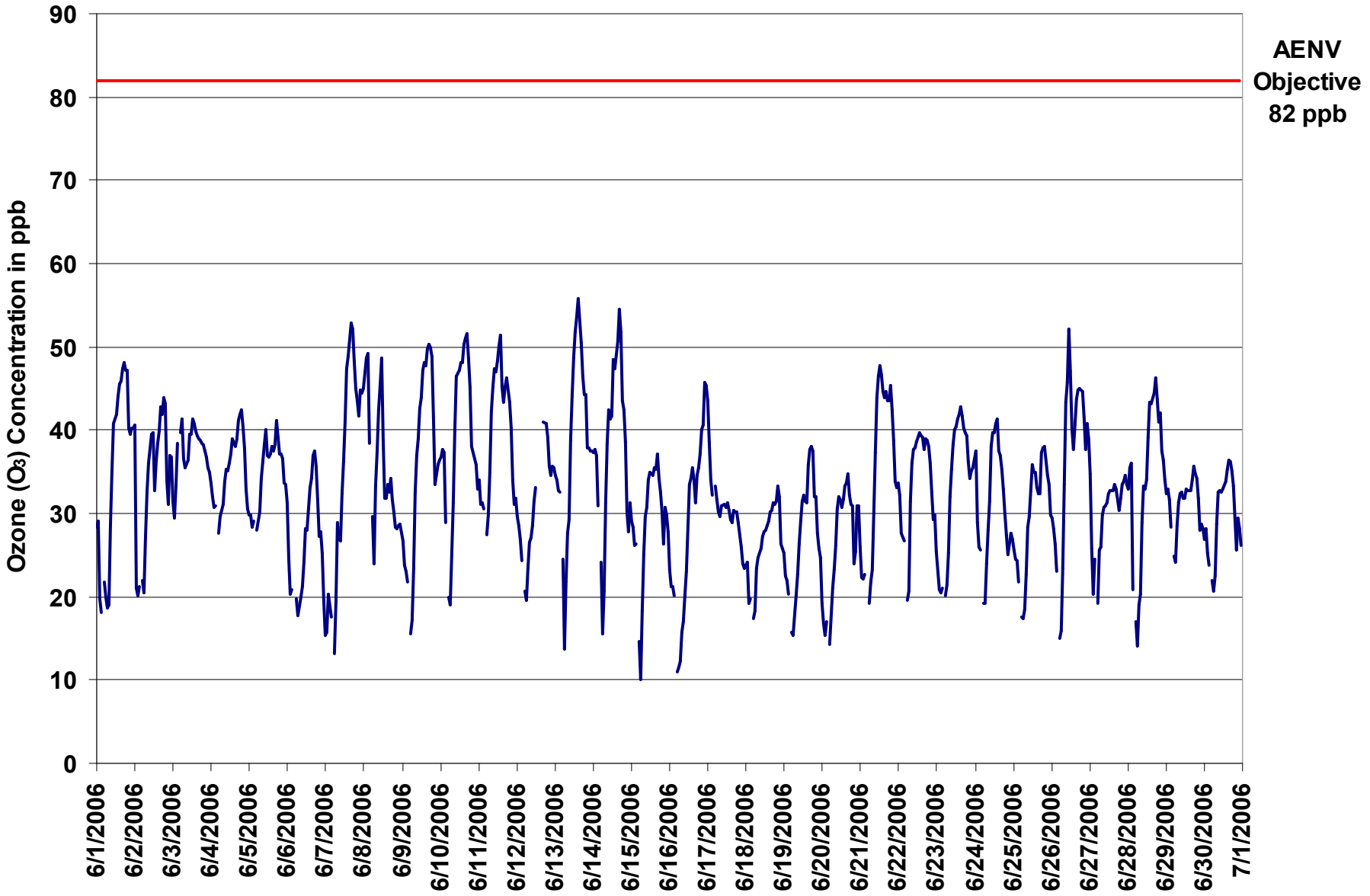


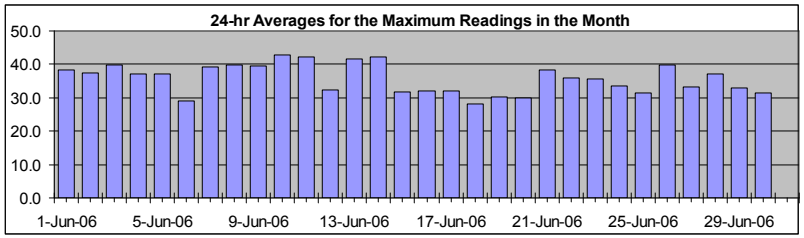
Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Value:	61.1	ppb	13-Jun	15:00 16:00
Maximum 24-hr Value:	42.7	ppb	10-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	54.3	50.3	41.2	35.4	30.0	22.2	18.9	35.7 ppb	35.4 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	31	32	32	21	A	24	25	23	23	35	40	43	44	46	47	47	49	49	49	49	46	42	42	43	38.3	49.4
2-Jun-06	43	31	24	28	A	25	27	33	35	39	41	41	41	39	41	42	45	44	47	46	36	35	39	42	37.5	46.6
3-Jun-06	39	35	39	41	A	42	44	39	37	39	43	42	44	42	41	41	40	40	39	39	39	38	37	36	39.8	44.3
4-Jun-06	35	33	32	32	A	31	31	33	36	36	36	38	39	41	40	39	42	42	44	45	42	40	36	31	37.2	44.7
5-Jun-06	31	31	30	30	A	33	33	37	37	41	42	38	39	38	39	39	39	44	41	39	38	38	38	35	37.1	44.3
6-Jun-06	34	28	23	22	A	22	20	20	21	23	27	31	30	33	34	36	39	39	38	35	31	33	28	23	28.9	38.9
7-Jun-06	20	21	22	20	A	19	32	32	28	36	37	39	44	51	51	53	54	54	51	46	46	44	50	50	39.2	54.3
8-Jun-06	51	51	53	48	A	36	30	39	43	47	49	52	47	35	34	37	36	40	34	32	32	30	30	31	39.9	52.7
9-Jun-06	29	27	26	25	A	21	24	33	34	39	42	45	47	49	50	51	52	52	52	51	48	37	37	38	39.5	52.1
10-Jun-06	38	38	38	35	A	28	27	30	34	46	49	49	49	50	49	53	53	53	52	47	44	41	41	35	42.7	53.3
11-Jun-06	35	34	34	34	A	29	35	39	47	47	49	48	50	54	53	51	45	47	48	46	43	38	33	33	42.3	53.7
12-Jun-06	31	30	28	28	A	22	21	28	28	28	31	33	35	C	C	C	A	42	42	41	38	36	37	37	32.4	42.4
13-Jun-06	36	35	34	34	A	32	23	28	30	36	41	48	52	53	58	61	54	50	47	47	40	40	39	38	41.6	61.1
14-Jun-06	38	39	39	34	A	30	27	26	36	42	45	44	44	53	51	56	59	58	48	46	46	44	31	33	42.1	59.3
15-Jun-06	31	32	30	31	A	20	14	23	30	31	33	36	37	36	36	37	40	37	35	34	30	32	32	31	31.6	40.0
16-Jun-06	28	26	28	26	A	14	16	15	19	19	24	31	37	36	39	42	38	38	40	42	42	45	47	47	32.1	47.5
17-Jun-06	46	41	36	34	A	35	33	31	31	33	32	32	32	31	30	30	31	31	31	30	29	28	26	24	32.0	45.5
18-Jun-06	25	25	21	23	A	19	22	25	26	27	28	29	29	29	30	31	32	33	33	33	34	33	32	29	28.3	34.4
19-Jun-06	27	25	23	23	A	19	20	24	25	28	32	32	33	33	33	39	41	40	41	33	33	32	28	28	30.2	41.0
20-Jun-06	21	19	18	19	A	18	25	25	30	33	33	33	32	35	36	36	36	38	40	39	27	30	33	33	29.8	39.7
21-Jun-06	30	25	24	26	A	25	25	27	33	41	46	49	50	48	49	46	46	45	45	46	45	41	38	36	38.4	49.5
22-Jun-06	35	34	29	28	A	22	25	35	39	39	39	39	40	40	40	40	41	40	40	41	38	35	32	32	35.9	41.5
23-Jun-06	30	23	22	22	A	23	26	29	36	38	41	43	42	43	44	44	43	42	41	41	39	36	37	37	35.6	44.2
24-Jun-06	39	38	28	28	A	22	23	26	31	35	41	41	41	42	44	40	38	38	35	32	29	28	29	28	33.6	44.1
25-Jun-06	26	25	25	24	A	20	20	20	26	31	31	36	37	36	37	34	33	34	40	40	41	36	35	32	31.3	41.1
26-Jun-06	31	29	27	26	A	23	22	29	39	45	47	55	54	43	39	43	46	46	46	47	43	42	44	45	39.7	55.4
27-Jun-06	39	41	26	30	A	27	27	29	31	31	32	32	34	33	34	34	35	34	33	34	34	37	38	37	33.2	40.7
28-Jun-06	38	39	38	28	A	24	19	24	23	35	35	36	36	42	45	46	47	49	46	42	45	40	38	36	37.1	48.8
29-Jun-06	34	34	34	30	A	29	29	31	33	33	33	33	33	34	33	34	35	37	36	35	34	30	30	29	32.8	36.9
30-Jun-06	28	30	29	26	A	27	24	24	33	34	34	33	34	35	37	38	37	37	35	34	30	30	31	29	31.6	37.9
Hourly Avg	33.2	31.6	29.8	28.6	N	25.3	25.6	28.6	31.8	35.6	37.8	39.3	40.1	40.7	41.3	42.1	42.3	42.4	41.7	40.4	38.1	36.4	35.5	34.6		
Hourly Max	51.1	50.6	52.7	48.1	0.0	41.5	44.3	39.3	46.7	47.3	49.2	55.4	54.2	53.7	58.2	61.1	59.3	58.3	52.3	51.4	48.5	45.0	50.4	50.0		

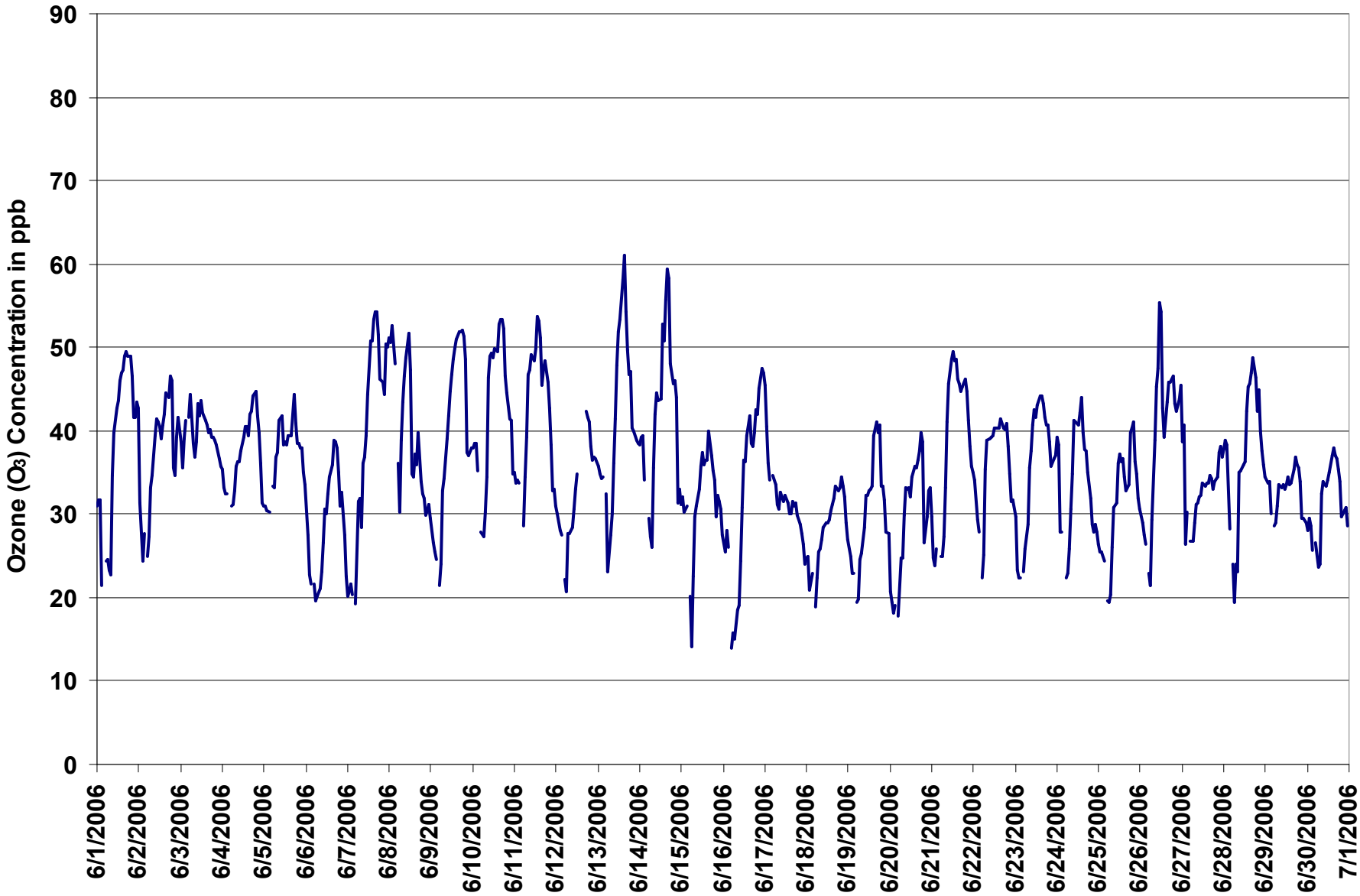
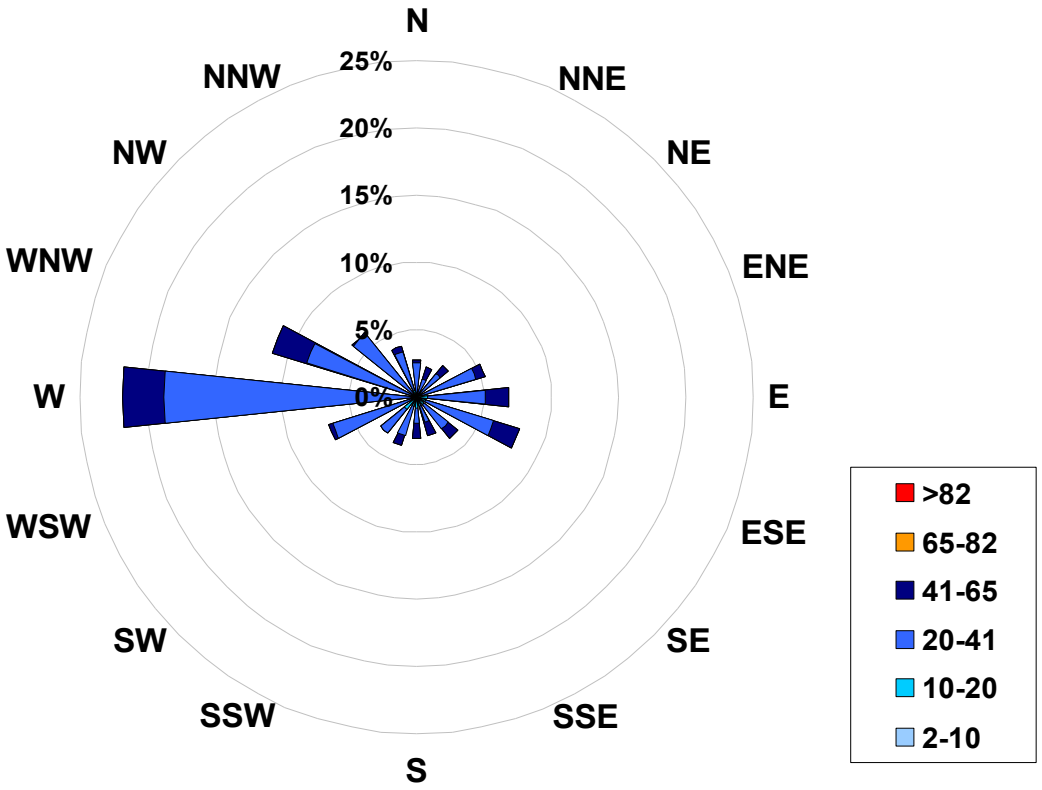


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Beaverlodge Site for June 2006



Calms:	0%

Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
2.0	<	10	0
10	to	20	54
20	to	41	511
41	to	65	121
65	to	82	0
	>	82	0
Total Non-Zero Values			686

PASZA - Beaverlodge - Ozone Monthly Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

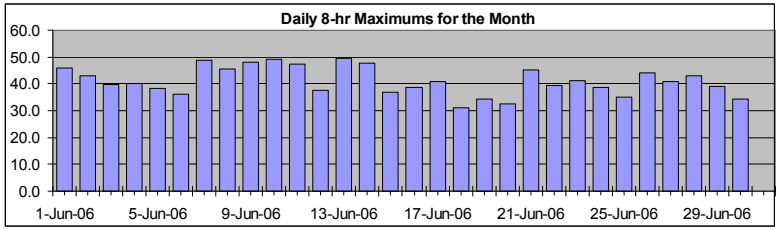
Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Objective Limit: **Alberta Environment:** 8-hr 65 ppb

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	49.4	ppb	13-Jun	19:00 20:00



Percentile	99	95	75	50	25	5	1
	48.3	45.6	38.0	32.5	27.6	21.4	18.2

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	Daily Maximum
1-Jun-06	38	37	35	32	31	28	25	22	21	21	23	26	28	31	34	38	41	44	45	46	46	45	44	44	45.9
2-Jun-06	43	40	36	33	32	29	27	25	24	26	28	31	31	33	35	37	38	39	39	40	40	39	39	39	42.9
3-Jun-06	37	36	35	34	34	35	36	36	36	37	38	38	39	39	39	39	39	40	40	39	39	38	38	37	39.8
4-Jun-06	37	36	35	34	33	32	31	31	31	31	32	33	33	35	36	37	37	38	39	40	40	40	39	38	40.1
5-Jun-06	37	36	34	32	31	30	29	30	31	32	34	35	35	36	37	38	38	38	38	38	38	38	38	37	38.2
6-Jun-06	36	34	32	30	29	26	24	22	20	20	20	21	22	24	26	27	30	32	33	33	33	33	32	30	36.2
7-Jun-06	28	25	23	21	20	18	17	19	20	22	24	26	28	32	36	39	42	45	47	48	49	48	47	47	48.6
8-Jun-06	46	45	45	44	45	43	40	38	37	36	36	37	37	38	39	39	38	37	35	33	32	31	31	30	45.6
9-Jun-06	30	28	27	26	26	24	22	22	23	24	27	30	31	35	39	42	44	46	47	48	48	46	45	43	48.2
10-Jun-06	42	40	38	36	35	33	31	29	28	29	30	33	34	38	42	45	47	49	49	49	48	46	45	43	49.0
11-Jun-06	40	38	36	34	33	32	31	31	32	34	37	39	40	43	46	47	47	47	47	47	46	44	41	39	47.3
12-Jun-06	38	36	33	31	29	28	26	25	24	24	24	25	26	27	N	N	N	N	N	N	N	N	N	38	37.7
13-Jun-06	37	36	35	34	34	33	30	28	27	26	27	29	31	34	39	44	47	49	49	49	48	46	44	42	49.4
14-Jun-06	40	39	38	37	37	35	31	29	28	28	29	31	32	35	39	43	46	47	47	48	47	45	42	40	47.6
15-Jun-06	37	34	32	30	28	26	24	22	21	21	22	23	25	27	30	32	34	35	35	34	33	33	32	31	36.9
16-Jun-06	29	28	26	25	25	22	19	17	16	16	15	16	18	21	24	27	29	31	33	34	35	36	37	39	38.8
17-Jun-06	40	41	41	40	40	39	37	35	33	32	31	31	31	31	30	30	30	30	30	30	29	29	28	28	40.8
18-Jun-06	27	26	25	23	23	22	21	21	21	21	22	24	24	26	27	28	28	29	30	30	31	31	31	30	31.1
19-Jun-06	30	28	27	26	25	23	21	20	20	20	21	23	24	26	28	30	32	33	34	35	34	34	33	32	34.5
20-Jun-06	30	27	24	22	21	19	18	18	19	21	23	26	26	28	30	31	32	32	32	32	31	31	30	30	32.5
21-Jun-06	29	28	27	26	26	25	24	22	23	25	28	32	34	37	40	43	44	45	45	45	44	43	42	41	45.2
22-Jun-06	39	38	36	34	32	30	28	27	28	29	30	32	33	35	37	38	39	39	39	39	38	38	36	35	39.3
23-Jun-06	34	31	29	27	26	24	23	22	23	25	28	30	32	34	37	39	40	41	41	41	40	40	39	38	41.0
24-Jun-06	37	36	34	32	32	30	27	26	24	25	27	29	30	33	35	37	38	39	38	37	35	33	32	30	38.6
25-Jun-06	29	27	26	25	25	24	23	21	21	22	22	24	25	28	30	32	33	33	34	35	35	35	35	34	35.1
26-Jun-06	34	34	32	30	29	26	24	23	24	26	29	33	34	38	40	43	44	44	44	43	42	42	42	42	44.0
27-Jun-06	41	39	36	33	32	29	27	25	24	25	27	28	28	30	31	32	32	32	32	32	33	33	33	33	41.0
28-Jun-06	33	33	34	33	32	30	27	25	23	22	22	24	25	28	31	34	37	40	41	42	43	43	42	41	42.9
29-Jun-06	39	38	36	34	33	32	30	29	29	29	29	29	30	31	32	32	33	33	33	34	34	33	32	32	39.2
30-Jun-06	31	30	29	28	27	26	25	24	24	25	26	27	28	30	31	33	34	34	34	34	33	33	32	30	34.5
Hourly Max	45.6	45.2	45.3	44.5	44.6	42.9	39.9	38.3	37.2	37.3	38.2	39.1	40.3	43.1	45.8	47.1	47.3	48.7	49.4	49.4	48.6	47.9	47.4	46.6	

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

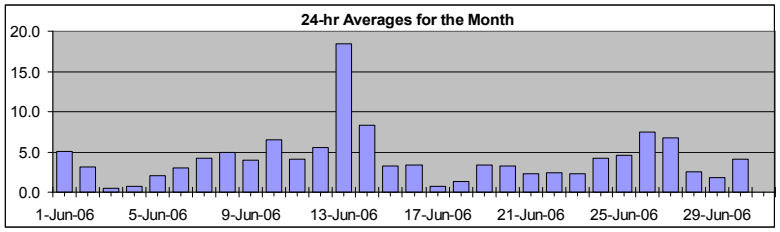
Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2006 to July 1, 2006

Draft Objective Limit: **Alberta Environment:** 1-hr - µg/m³ | 24-hr 30 µg/m³



Summary

Number of 24-hr Exceedances (draft):	0			
Maximum 1-hr Average:	71.5	µg/m³	13-Jun	9:00 10:00
Maximum 24-hr Value:	18.5	µg/m³	13-Jun	

AIC Time:	0 hrs	Operational Time:	710 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.0%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	17.0	10.5	5.1	3.2	1.4	0.0	0.0	4.1 / 3 µg/m³	3.2 µg/m³

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	7	6	8	7	7	6	7	7	6	7	7	0	1	3	3	2	3	3	2	3	12	5	9	1	5.1	12.2
2-Jun-06	2	10	9	6	1	4	4	3	4	2	3	0	5	2	D	0	0	0	0	0	8	8	0	0	3.1	9.7
3-Jun-06	2	1	0	1	0	0	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0.4	2.2
4-Jun-06	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	2	1	2	2	3	2	0.8	3.3
5-Jun-06	2	3	2	3	2	2	5	3	2	1	0	3	1	2	0	2	2	1	0	1	3	4	4	2	2.1	4.9
6-Jun-06	3	4	3	2	2	2	2	3	5	2	1	1	3	2	3	3	3	3	1	9	8	3	3	3	3.0	9.1
7-Jun-06	3	3	2	3	3	4	4	2	3	3	3	3	3	2	0	2	5	4	8	17	8	6	7	3	4.2	16.9
8-Jun-06	1	4	5	4	2	5	5	5	5	4	10	6	6	7	7	8	7	8	5	4	5	2	2	2	4.9	9.8
9-Jun-06	3	2	1	3	0	2	4	5	6	4	4	4	4	3	5	3	4	1	7	4	7	10	5	7	4.0	9.6
10-Jun-06	7	6	7	7	6	9	10	8	11	10	5	3	0	3	5	3	6	2	4	5	8	17	11	3	6.5	16.7
11-Jun-06	2	9	2	3	3	3	4	4	3	4	5	6	4	3	4	5	2	3	0	2	4	5	10	7	4.1	10.5
12-Jun-06	5	9	6	4	5	5	5	4	4	4	4	5	6	0	4	5	5	9	7	6	9	10	5	6	5.5	10.0
13-Jun-06	5	5	42	52	14	55	23	9	17	71	19	C	C	C	0	5	7	5	8	10	8	14	13	7	18.5	71.5
14-Jun-06	8	9	8	7	9	11	11	12	13	11	10	10	9	7	12	5	2	10	9	5	8	5	3	3	8.3	13.2
15-Jun-06	4	6	4	4	6	8	7	5	3	0	1	1	2	3	1	1	0	2	4	5	5	0	1	5	3.2	7.8
16-Jun-06	5	2	5	1	7	2	3	4	4	5	3	6	0	5	4	10	2	0	2	D	D	0	0	2	3.3	9.5
17-Jun-06	0	0	0	1	1	0	0	0	1	0	2	2	0	0	0	0	0	0	0	1	2	1	3	3	0.7	3.2
18-Jun-06	2	0	2	2	2	2	2	0	0	1	0	1	0	0	1	0	1	0	3	4	4	1	4	2	1.4	4.1
19-Jun-06	3	3	2	2	3	5	4	4	4	4	3	3	1	0	3	0	5	2	3	7	1	4	8	6	3.3	7.7
20-Jun-06	5	2	2	2	3	4	5	4	4	3	1	5	5	4	3	2	1	4	1	7	4	D	1	3	3.3	7.1
21-Jun-06	3	4	3	0	2	4	2	4	1	0	0	0	0	2	3	2	1	2	3	2	3	4	5	5	2.3	5.4
22-Jun-06	3	2	3	3	3	4	4	1	1	0	1	0	0	0	1	2	9	2	2	0	5	4	4	3	2.4	9.4
23-Jun-06	3	4	3	3	3	4	4	4	0	0	0	0	1	0	0	0	1	2	2	2	5	4	4	5	2.3	5.2
24-Jun-06	5	6	7	7	6	8	6	5	5	5	2	4	1	2	2	3	1	1	2	3	3	4	7	5	4.2	8.1
25-Jun-06	4	4	3	4	5	4	6	6	5	1	1	0	1	1	2	2	4	3	6	10	10	10	11	9	4.6	11.1
26-Jun-06	6	5	3	6	8	8	12	11	13	14	11	10	5	5	7	5	2	3	2	2	5	28	3	6	7.5	28.4
27-Jun-06	5	14	12	9	11	11	14	15	4	2	3	3	1	2	3	4	4	5	9	5	5	8	9	4	6.7	14.6
28-Jun-06	7	2	0	6	3	4	4	4	5	D	0	2	1	0	D	D	0	0	3	3	0	3	2	3	2.6	7.5
29-Jun-06	4	3	3	2	3	3	0	3	0	0	0	0	0	0	1	1	1	1	1	2	4	4	5	3	1.8	5.0
30-Jun-06	4	3	3	3	2	4	4	6	2	0	1	2	1	1	1	5	7	4	4	7	16	8	4	5	4.1	15.9
Hourly Avg	3.8	4.4	5.1	5.3	4.1	6.1	5.3	4.7	4.4	5.5	3.4	2.8	2.2	2.1	2.8	2.8	2.9	2.6	3.3	4.4	5.5	6.0	4.9	3.9		
Hourly Max	7.6	13.9	41.6	51.7	13.9	54.7	23.4	14.6	17.0	71.5	18.9	10.5	9.2	7.3	12.0	9.5	9.4	10.4	9.1	16.9	15.9	28.4	12.9	8.9		

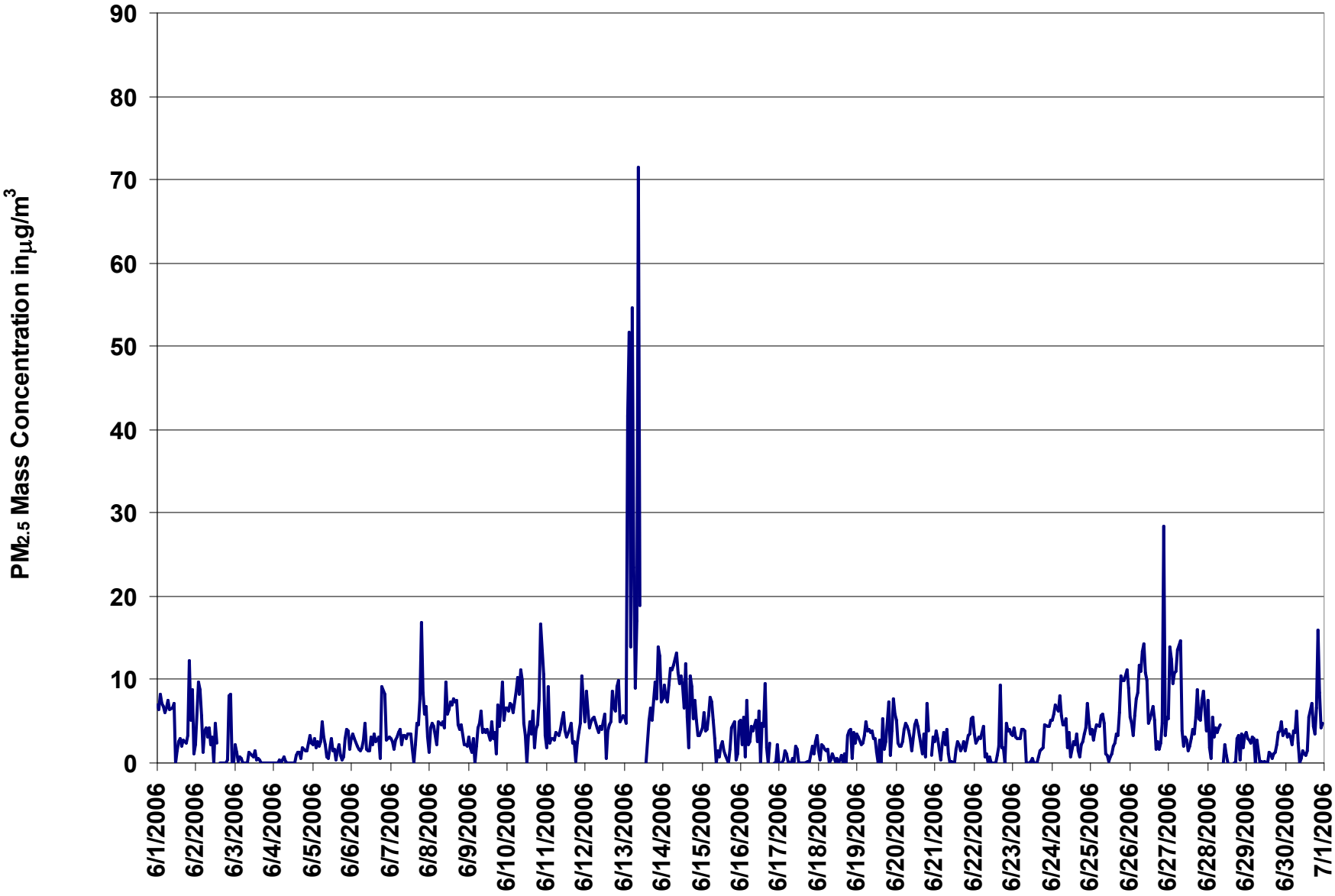


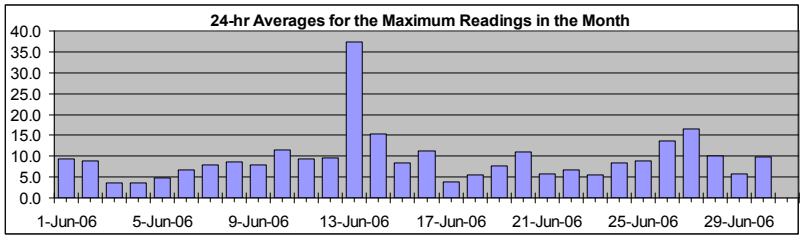
Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge
Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	193.1	µg/m³	13-Jun	9:00 10:00
Maximum 24-hr Value:	37.3	µg/m³	13-Jun	

AIC Time:	0 hrs	Operational Time:	710 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.0%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	43.1	22.4	10.3	6.8	4.8	2.6	1.0	9.3 / 7 µg/m³	8.3 µg/m³

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	9	8	14	9	10	8	10	13	9	9	10	1	5	4	6	5	7	5	5	6	31	7	30	4	9.3	31.0
2-Jun-06	5	14	12	10	8	6	7	6	7	6	6	2	17	23	D	4	3	3	1	17	18	26	2	3	8.9	25.7
3-Jun-06	4	5	4	3	3	3	2	0	1	9	7	5	7	5	5	4	3	3	4	1	3	3	2	1	3.6	8.7
4-Jun-06	1	1	1	1	2	2	3	6	5	3	4	2	5	6	5	4	5	4	5	4	5	5	5	4	3.6	6.3
5-Jun-06	4	5	3	4	3	4	11	6	5	4	5	6	6	5	5	3	6	5	2	2	5	5	8	3	4.9	11.0
6-Jun-06	6	7	4	4	3	3	3	4	16	4	5	4	6	6	6	6	7	8	4	25	14	7	5	5	6.7	25.0
7-Jun-06	5	5	3	4	7	6	7	4	4	6	6	7	6	6	4	4	9	7	16	35	12	11	13	6	8.0	35.4
8-Jun-06	5	7	11	6	5	10	7	9	7	8	28	10	9	9	9	11	11	11	7	6	7	4	4	4	8.6	28.3
9-Jun-06	5	4	4	6	3	4	7	10	11	7	8	6	7	7	8	7	10	4	14	7	10	24	7	10	7.9	24.3
10-Jun-06	8	8	11	10	8	12	12	11	15	16	12	11	5	7	9	8	11	6	7	7	14	43	17	8	11.5	43.2
11-Jun-06	4	34	5	15	11	4	6	5	7	6	9	11	7	7	6	8	5	11	2	6	6	9	23	14	9.2	33.6
12-Jun-06	6	11	8	7	7	8	8	6	6	7	6	10	11	8	7	7	18	19	12	12	15	17	7	8	9.6	18.7
13-Jun-06	11	8	98	81	22	114	43	11	29	193	43	C	C	C	4	15	12	10	15	13	11	28	15	10	37.3	193.1
14-Jun-06	11	22	10	9	14	18	15	14	19	20	14	17	15	15	23	21	9	29	21	13	16	11	7	5	15.4	28.8
15-Jun-06	10	12	7	9	11	13	10	11	8	5	6	7	8	7	5	3	5	5	11	14	12	4	5	15	8.5	15.4
16-Jun-06	14	12	19	9	12	6	9	11	8	11	7	14	8	10	20	38	10	10	11	D	D	1	2	5	11.2	38.3
17-Jun-06	2	1	2	3	3	1	3	2	8	10	6	6	2	5	3	2	3	3	3	4	5	4	5	5	3.8	10.3
18-Jun-06	6	2	4	3	3	3	4	3	3	3	3	5	4	5	3	3	9	5	10	17	18	3	6	6	5.5	18.0
19-Jun-06	5	6	4	5	6	10	8	7	7	9	8	10	6	6	10	8	15	5	9	12	3	8	12	9	7.8	14.6
20-Jun-06	10	5	5	5	5	7	10	7	11	7	6	14	12	19	22	17	10	13	16	33	12	D	3	5	11.0	33.4
21-Jun-06	4	6	5	4	5	9	5	7	5	6	4	4	5	6	7	7	4	4	7	5	5	6	8	7	5.7	9.0
22-Jun-06	6	4	4	5	5	7	7	12	5	3	4	3	3	4	5	6	32	6	7	5	9	7	6	6	6.6	31.6
23-Jun-06	9	6	5	5	5	7	7	6	2	2	3	4	6	5	4	5	5	6	5	7	7	7	8	7	5.5	8.6
24-Jun-06	6	8	8	7	10	11	8	8	8	10	8	7	4	6	5	6	4	4	7	6	8	7	30	12	8.3	30.0
25-Jun-06	8	9	4	7	7	6	10	8	7	10	7	6	6	6	8	8	6	7	12	19	14	13	15	14	9.0	19.5
26-Jun-06	7	7	7	8	10	17	16	14	18	21	16	17	15	12	13	18	7	8	6	8	11	45	10	17	13.6	45.0
27-Jun-06	15	26	25	21	27	17	20	23	8	4	9	8	10	7	7	8	8	15	21	10	9	34	45	24	16.6	44.5
28-Jun-06	37	20	9	8	10	11	8	13	11	D	8	12	9	7	D	D	3	8	8	7	5	6	7	7	10.1	36.5
29-Jun-06	6	6	6	6	6	13	5	14	5	3	5	4	4	3	5	3	5	5	4	6	6	6	8	6	5.8	13.9
30-Jun-06	6	5	5	5	5	12	5	9	9	5	6	5	5	5	8	10	16	9	10	19	28	25	12	10	9.8	28.3
Hourly Avg	7.8	9.0	10.2	9.2	7.8	11.7	9.2	8.7	8.8	14.0	9.0	7.4	7.3	7.6	7.9	8.6	8.5	7.9	8.8	11.3	11.1	12.9	10.8	8.0		
Hourly Max	36.5	33.6	97.7	80.8	27.2	113.5	42.8	22.9	29.1	193.1	43.2	16.9	17.3	23.1	22.6	38.3	31.6	28.8	21.2	35.4	31.0	45.0	44.5	24.0		

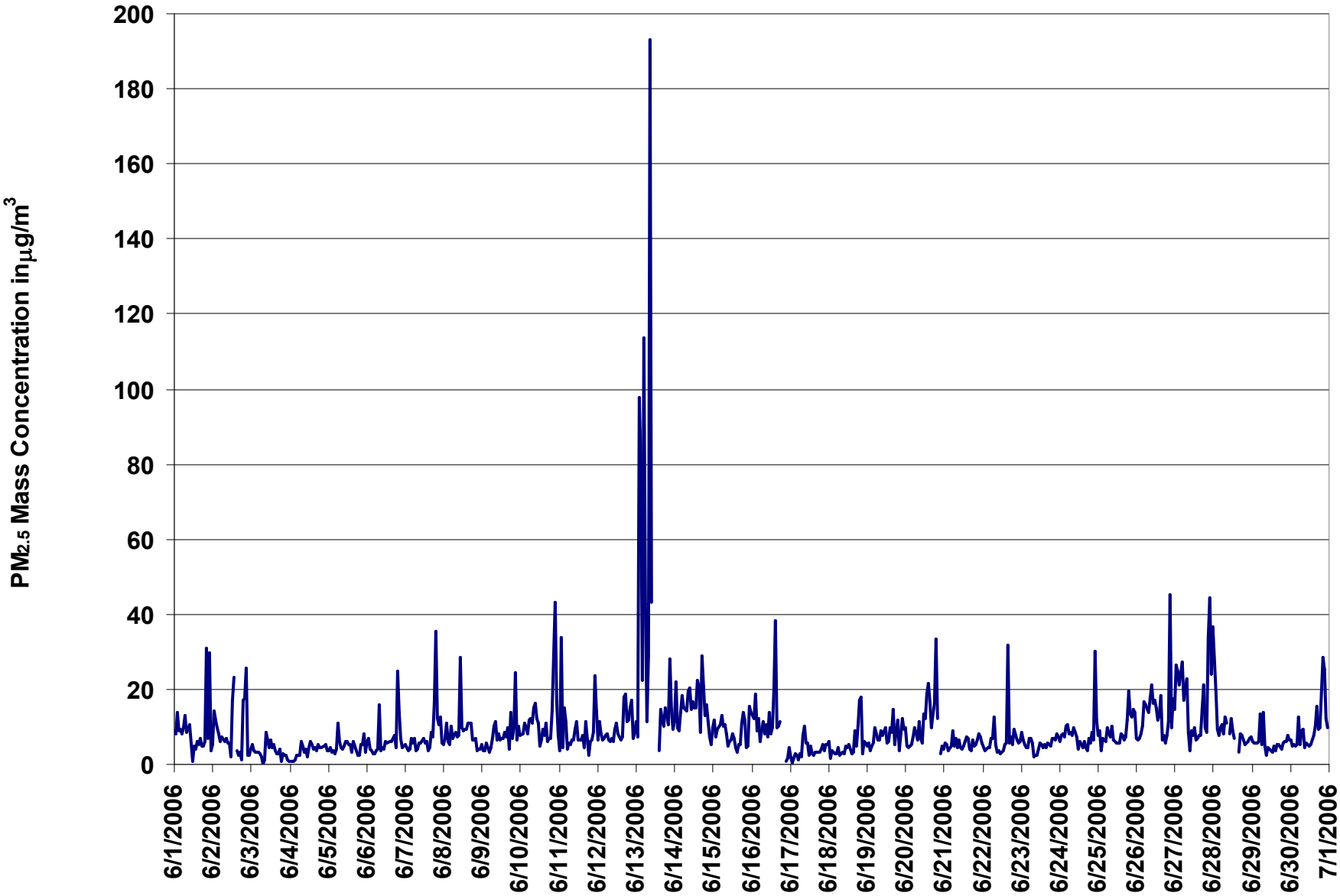
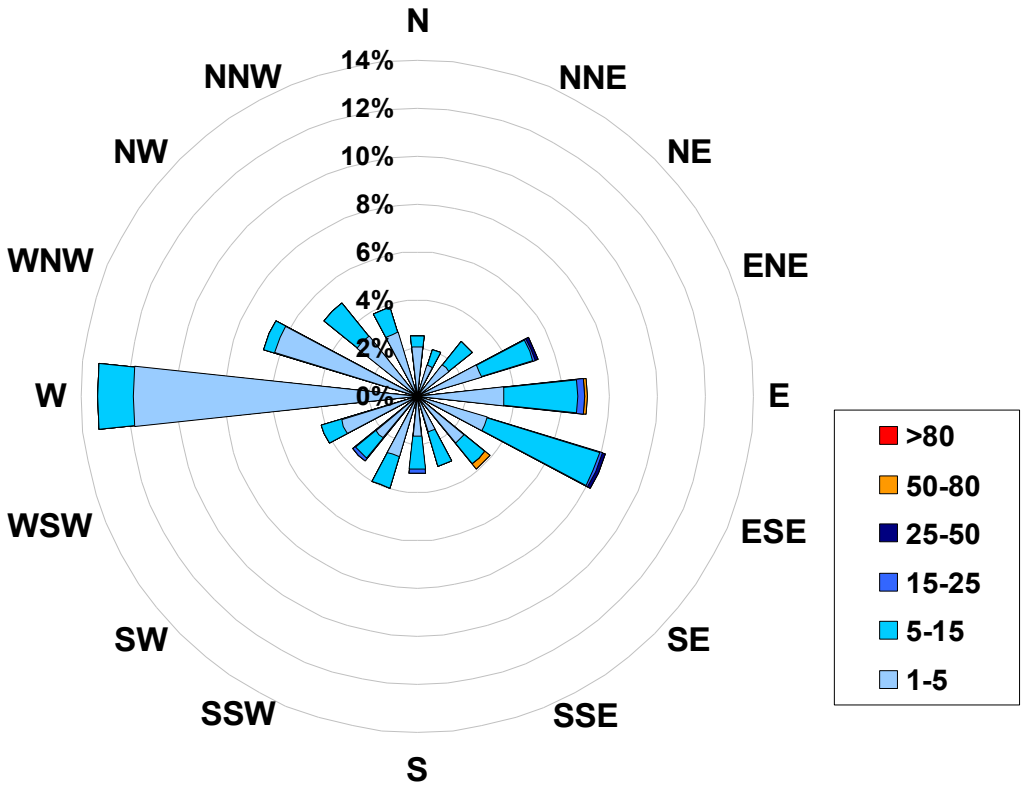


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Beaverlodge Site for June 2006



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	521
5	to	15	178
15	to	25	6
25	to	50	2
50	to	80	3
	>	80	0
Total Non-Zero Values			710

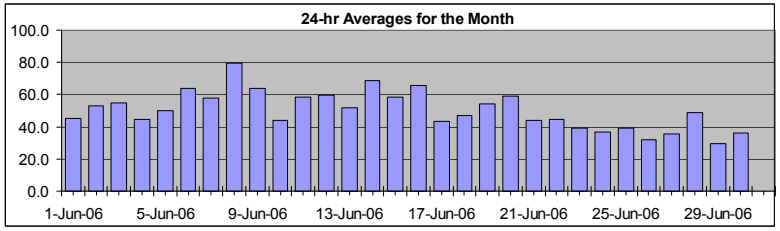
PASZA - Beaverlodge - Relative Humidity Monthly Summary

HOURLY AVERAGE TABLE

Relative Humidity (RH)

Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	93.9	%	9-Jun	3:00 4:00
Maximum 24-hr Value:	79.7	%	8-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	91.7	85.7	66.0	48.4	33.3	21.1	15.9	50.3 %	48.4 %

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	51	53	65	67	60	61	56	53	55	46	44	38	35	35	32	31	31	31	31	30	40	48	46	44	45.2	67.3
2-Jun-06	46	69	70	72	63	71	69	55	51	45	41	39	62	53	41	37	32	34	31	31	60	63	63	69	52.9	72.1
3-Jun-06	75	79	75	72	76	81	84	78	66	57	46	42	36	36	35	35	34	35	38	37	41	48	54	60	55.1	84.3
4-Jun-06	62	66	67	68	72	67	60	55	44	38	35	33	31	27	27	28	28	29	28	31	35	40	51	55	44.8	72.2
5-Jun-06	58	57	61	64	65	62	60	53	48	42	35	47	43	41	39	39	40	44	44	41	45	51	61	63	50.1	65.2
6-Jun-06	70	82	86	86	85	85	83	78	68	62	59	54	54	51	47	48	44	42	43	50	58	60	68	75	64.1	85.8
7-Jun-06	81	86	86	91	93	85	79	72	68	60	52	48	43	33	31	29	29	28	31	38	41	43	67	74	57.7	92.7
8-Jun-06	63	67	76	87	92	92	91	86	80	75	68	64	76	82	81	78	76	76	78	78	83	87	88	89	79.7	91.8
9-Jun-06	91	92	92	94	92	90	87	86	78	63	60	52	53	45	41	43	38	37	38	39	44	56	61	64	64.0	93.9
10-Jun-06	65	68	71	79	73	71	66	56	47	39	31	24	22	21	22	21	24	21	23	26	29	42	52	63	44.0	79.1
11-Jun-06	61	69	73	77	82	81	77	69	57	52	48	47	44	43	42	49	50	46	42	45	49	60	70	75	58.6	81.9
12-Jun-06	79	82	85	86	87	83	79	71	64	60	56	51	48	44	41	38	37	38	39	41	48	55	56	60	59.4	86.7
13-Jun-06	64	68	72	76	81	76	78	76	64	57	47	38	32	32	29	28	30	31	32	34	43	47	51	54	51.6	80.8
14-Jun-06	58	64	69	72	76	74	72	73	65	63	60	63	60	53	55	57	52	58	78	80	82	89	87	83	68.5	88.7
15-Jun-06	88	91	92	90	94	87	84	76	64	51	47	41	38	38	36	35	33	36	40	42	50	46	49	54	58.5	93.8
16-Jun-06	68	73	79	82	87	86	82	81	74	71	62	60	43	49	49	62	68	65	59	53	51	56	53	57	65.4	87.3
17-Jun-06	59	65	69	70	63	52	49	43	38	33	32	32	32	30	29	29	29	30	30	34	38	47	53	57	43.5	70.3
18-Jun-06	58	59	67	68	71	68	59	47	42	38	35	33	31	31	30	27	28	29	33	40	49	54	59	64	46.7	70.5
19-Jun-06	66	71	74	78	76	73	69	56	56	48	43	37	35	33	33	28	31	38	34	49	57	65	71	74	54.0	78.4
20-Jun-06	79	84	85	78	75	74	66	63	54	43	37	39	48	56	55	45	41	50	54	53	70	64	52	55	59.2	85.2
21-Jun-06	64	70	77	75	77	69	62	56	45	36	29	27	25	24	25	26	25	27	27	27	30	40	44	50	44.0	76.7
22-Jun-06	52	55	63	66	68	65	57	43	35	31	29	27	25	24	24	24	46	40	41	36	45	54	65	60	44.7	67.7
23-Jun-06	68	73	72	73	74	70	58	52	35	29	25	23	22	20	19	18	18	19	19	20	26	32	34	37	39.1	74.1
24-Jun-06	37	49	55	55	58	58	51	45	39	35	29	26	22	22	22	25	24	23	23	26	30	38	42	45	36.7	58.1
25-Jun-06	47	52	53	57	68	68	57	53	42	33	28	26	24	21	21	21	21	22	24	27	31	41	46	50	38.9	68.5
26-Jun-06	50	51	51	56	59	62	57	54	46	40	33	27	21	17	16	14	11	11	11	12	14	21	20	19	32.1	62.1
27-Jun-06	24	36	47	40	46	53	37	35	30	27	26	24	22	20	20	19	19	23	28	33	43	45	74	77	35.3	77.3
28-Jun-06	89	89	81	91	91	89	87	78	75	50	36	35	33	26	21	18	17	16	19	22	21	25	27	30	48.6	90.9
29-Jun-06	33	34	38	46	45	42	40	34	29	24	23	23	21	20	20	20	20	20	20	21	25	34	39	41	29.7	46.2
30-Jun-06	44	43	48	52	53	50	50	42	31	29	28	29	29	26	24	23	23	25	27	30	39	37	41	44	36.1	53.2
Hourly Avg	61.6	66.6	70.0	72.3	73.4	71.6	66.9	60.6	53.0	45.9	40.9	38.3	37.0	35.0	33.5	33.2	33.3	34.1	35.5	37.6	43.7	49.6	54.8	58.0		
Hourly Max	90.9	92.0	92.4	93.9	93.8	91.8	91.3	86.0	80.1	75.2	68.4	64.0	75.7	82.2	80.7	77.8	76.0	75.7	78.0	79.9	83.0	88.7	87.7	88.9		

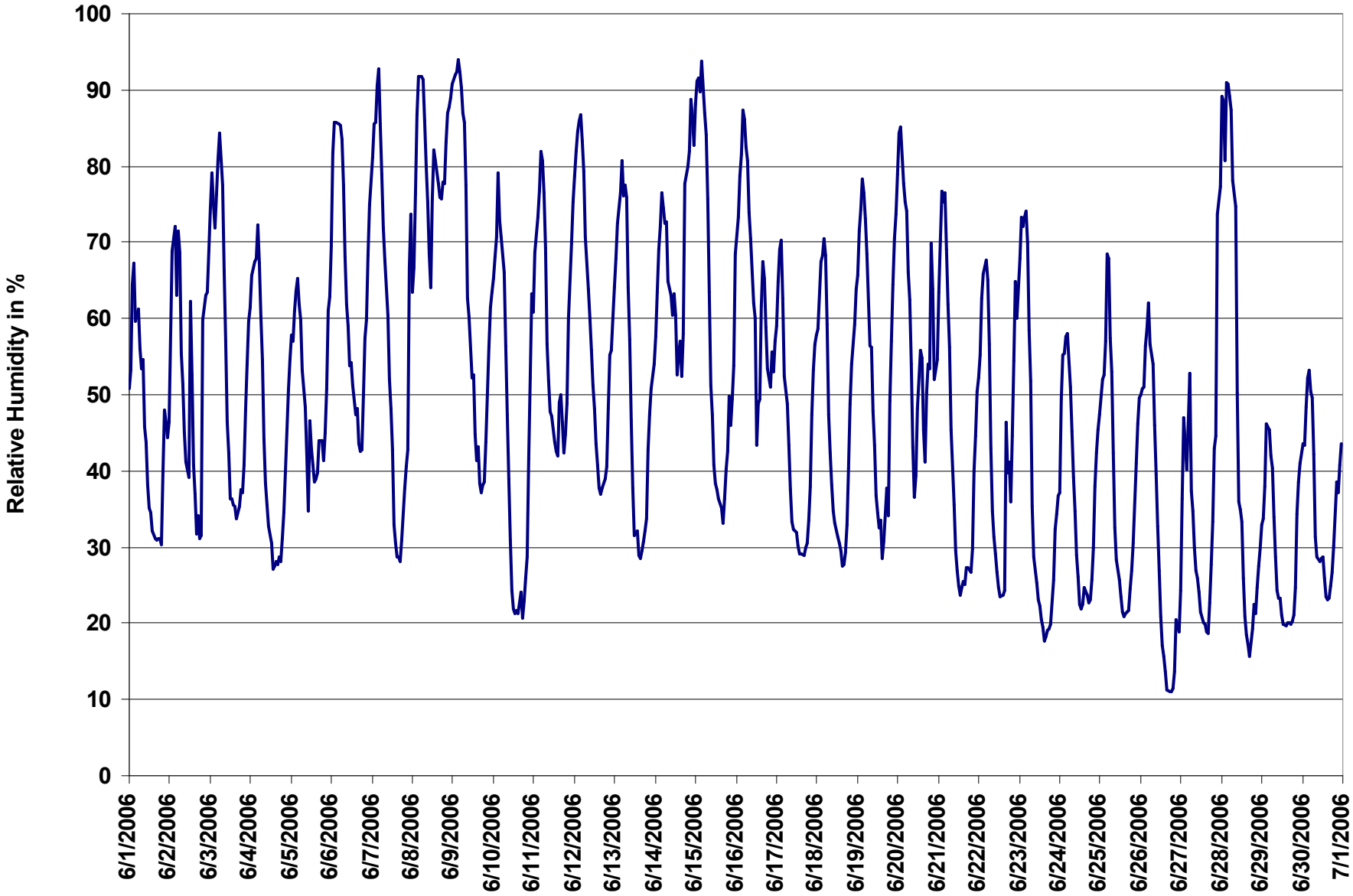


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

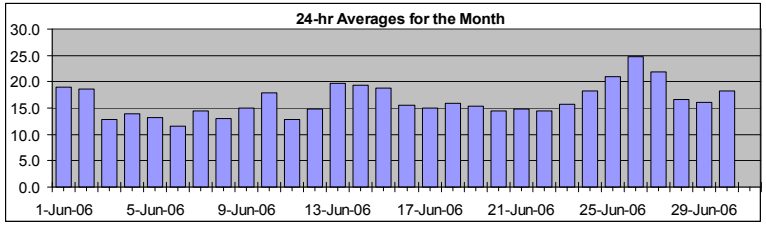
PASZA - Beaverlodge - Temperature Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	32.9	°C	26-Jun	16:00 17:00
Maximum 24-hr Value:	24.7	°C	26-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	31.0	25.0	20.2	16.2	12.2	8.0	6.9	16.4 °C	16.2 °C

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-06	15	14	12	12	13	13	14	15	16	20	21	21	23	23	24	25	25	24	24	25	22	19	19	19	19.0	24.8
2-Jun-06	19	15	15	14	15	14	16	18	20	22	23	23	18	20	22	23	23	21	22	22	18	17	15	14	18.6	23.1
3-Jun-06	13	12	11	11	10	9	9	9	10	12	13	14	16	16	17	17	17	16	16	15	14	12	11	10	12.9	16.7
4-Jun-06	9	8	7	7	6	8	10	12	14	15	16	17	18	19	20	20	20	18	19	17	16	14	11	11	13.8	19.6
5-Jun-06	10	10	9	8	9	10	11	13	14	16	17	15	16	16	16	16	16	15	15	15	14	12	11	10	13.1	17.1
6-Jun-06	9	8	8	8	7	7	7	8	10	12	13	14	14	15	16	16	16	16	16	15	13	12	10	9	11.6	16.3
7-Jun-06	8	8	8	7	7	8	10	11	13	14	16	18	19	20	21	21	20	20	20	18	17	16	13	12	14.4	20.6
8-Jun-06	13	13	12	11	10	10	10	12	13	14	16	17	15	14	14	14	15	15	14	14	13	12	12	12	13.1	16.9
9-Jun-06	12	11	11	10	10	10	10	11	12	15	16	18	17	19	20	19	19	20	20	20	19	15	14	13	15.0	20.2
10-Jun-06	12	11	10	8	9	10	11	14	17	20	22	23	24	24	24	24	23	23	22	22	23	18	17	15	17.8	24.1
11-Jun-06	14	13	12	11	9	9	10	12	13	13	14	14	15	15	16	15	15	15	15	15	14	12	9	8	12.9	15.7
12-Jun-06	7	7	8	7	7	8	9	11	12	14	15	16	18	19	20	21	21	21	21	21	19	17	17	16	14.8	21.3
13-Jun-06	15	14	13	12	11	12	12	13	16	19	22	24	25	26	26	26	26	26	25	25	23	20	20	19	19.6	26.2
14-Jun-06	19	18	17	16	16	17	17	18	21	21	22	21	22	24	23	23	23	22	19	18	18	17	16	16	19.3	23.6
15-Jun-06	15	13	13	13	12	13	15	16	19	21	21	22	23	24	24	24	25	23	22	22	20	19	17	17	18.8	24.6
16-Jun-06	15	14	13	13	13	13	13	13	14	15	17	18	21	20	20	18	17	17	18	17	15	13	12	11	15.5	20.9
17-Jun-06	10	9	8	8	10	12	13	14	15	17	18	18	18	19	20	20	20	19	19	18	17	14	12	12	15.0	19.8
18-Jun-06	11	11	9	9	9	9	12	15	17	18	19	20	21	21	22	22	22	21	20	19	16	15	14	13	15.9	21.9
19-Jun-06	12	10	10	9	9	9	11	14	14	17	18	20	21	22	21	22	21	19	20	17	15	13	12	11	15.3	21.6
20-Jun-06	10	9	8	9	9	9	12	13	15	18	20	20	18	17	17	19	20	17	16	17	15	13	13	12	14.4	19.8
21-Jun-06	11	9	8	7	7	8	10	13	16	17	19	20	19	20	20	20	20	19	19	19	18	14	12	10	14.8	20.4
22-Jun-06	10	9	7	6	6	7	10	14	16	17	18	20	20	21	21	21	16	17	17	17	17	14	12	12	14.4	20.8
23-Jun-06	9	8	7	6	6	7	10	13	16	18	19	20	20	21	22	22	22	22	22	22	20	16	15	14	15.7	22.3
24-Jun-06	14	10	9	9	9	10	12	14	17	20	22	23	24	24	24	23	24	25	25	24	22	19	17	16	18.3	24.9
25-Jun-06	16	14	14	13	10	11	14	16	20	23	24	25	26	27	28	28	29	29	27	26	25	21	19	18	20.9	28.6
26-Jun-06	18	18	17	16	15	15	17	18	21	24	27	29	31	32	32	33	33	32	32	31	30	25	23	23	24.7	32.9
27-Jun-06	21	17	14	16	15	14	19	21	23	25	25	27	28	29	29	30	30	28	26	23	20	19	14	14	21.9	30.3
28-Jun-06	12	12	13	11	12	12	13	15	16	19	21	21	21	23	23	20	20	19	19	18	17	16	15	14	16.7	22.7
29-Jun-06	13	12	10	8	8	10	11	13	15	16	17	18	19	21	21	22	22	22	22	22	20	16	14	13	16.0	22.0
30-Jun-06	12	12	10	9	9	11	12	16	20	20	20	21	21	22	24	24	24	24	23	23	21	20	18	18	18.2	24.5
Hourly Avg	12.7	11.6	10.8	10.2	9.9	10.5	12.1	13.9	15.8	17.7	19.0	19.9	20.4	21.0	21.5	21.5	21.4	20.9	20.5	19.9	18.3	16.0	14.5	13.7		
Hourly Max	20.5	18.1	17.1	16.5	15.7	16.7	18.6	21.0	23.2	24.5	26.8	29.0	31.2	31.9	32.5	32.8	32.9	32.3	31.9	31.3	29.7	25.0	23.3	23.0		

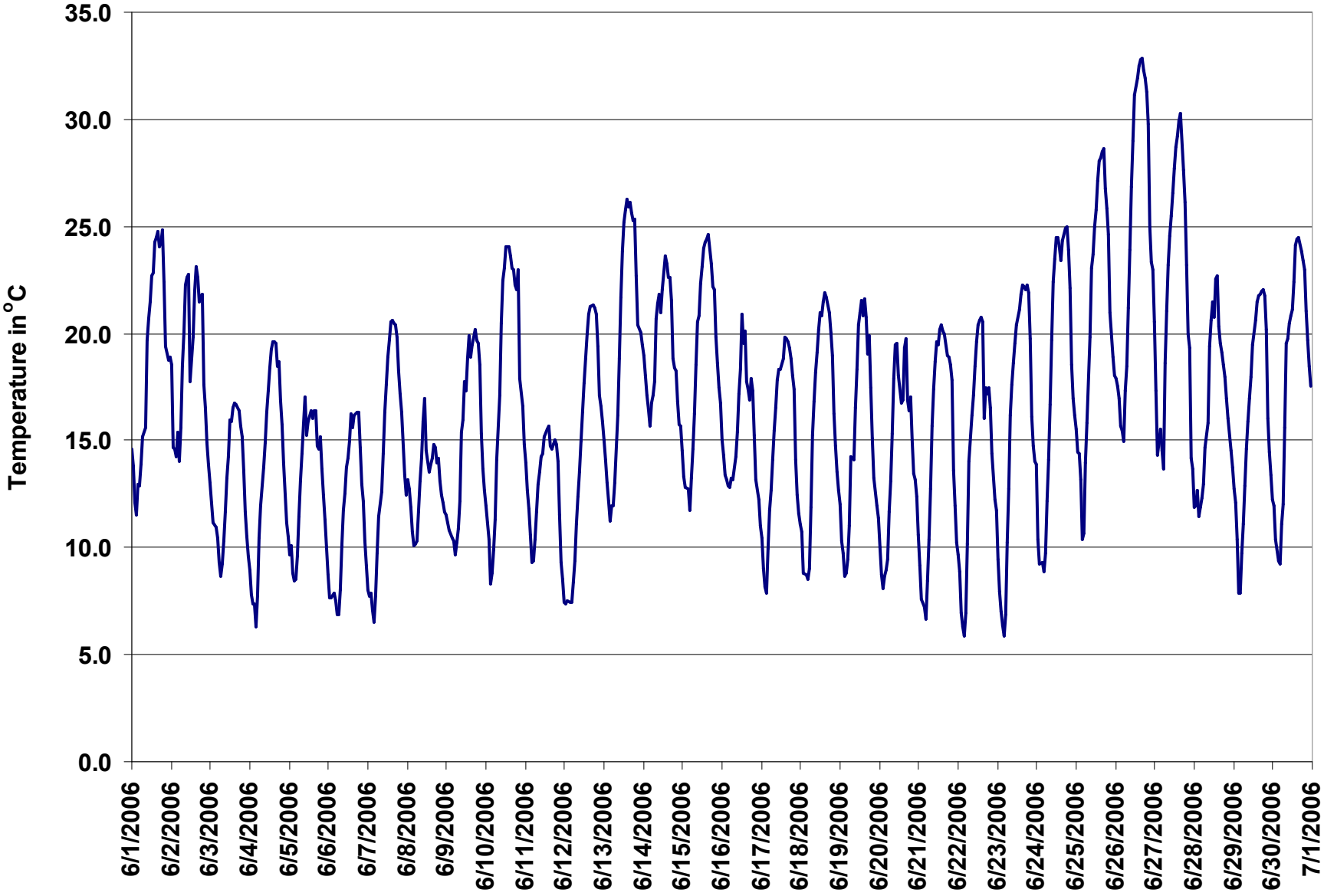


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

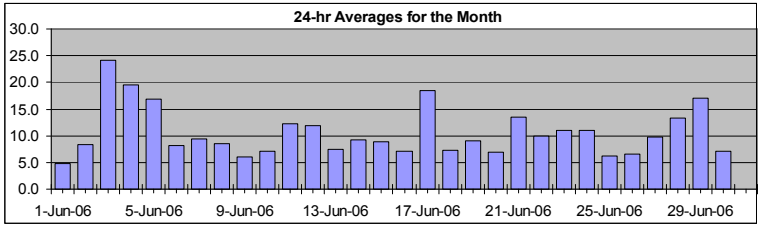
PASZA - Beaverlodge - Scalar Wind Speed Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	38.4	km/hr	3-Jun	16:00 17:00
Maximum 24-hr Value:	24.2	km/hr	3-Jun	

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

Percentile	99	95	75	50	25	5	1	AverageS
	32.8	25.2	13.8	9.0	5.2	2.7	2.0	10.6 km/hr

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Scalar Average	Daily Max
1-Jun-06	3	4	3	4	3	4	2	4	4	6	7	7	5	7	4	6	6	5	6	4	5	6	7	7	4.9	7.5
2-Jun-06	7	10	7	6	10	5	4	4	5	3	6	8	18	9	11	8	14	12	8	5	9	12	14	6	8.3	17.6
3-Jun-06	5	4	7	7	18	22	17	14	19	25	33	36	35	37	37	37	38	32	28	27	26	25	25	24	24.2	38.4
4-Jun-06	19	13	16	13	9	7	10	20	32	35	26	25	26	25	24	25	25	24	24	21	15	12	12	12	19.5	34.7
5-Jun-06	8	11	9	9	7	8	13	16	18	18	18	21	23	29	28	26	31	27	22	18	16	13	9	9	16.9	30.7
6-Jun-06	7	7	5	9	10	10	8	7	5	5	4	6	7	9	9	11	11	12	14	11	11	9	7	5	8.2	13.7
7-Jun-06	7	8	5	5	3	3	6	12	10	8	6	8	10	9	11	10	14	15	15	14	13	13	11	12	9.5	14.7
8-Jun-06	10	12	9	7	4	5	7	6	6	7	9	9	10	11	9	9	13	11	11	12	11	8	6	4	8.6	12.5
9-Jun-06	4	4	4	5	6	10	9	7	6	3	5	5	6	6	5	7	6	10	9	8	6	4	4	4	6.0	9.9
10-Jun-06	4	3	4	3	3	1	2	3	6	5	7	9	9	11	11	12	13	11	9	5	2	4	15	18	7.1	18.3
11-Jun-06	14	9	10	11	11	13	14	16	15	12	13	12	15	15	14	15	14	14	15	12	12	7	6	7	12.2	16.2
12-Jun-06	8	7	9	9	8	6	10	12	12	14	15	15	13	13	13	14	14	16	16	14	11	11	13	13	11.9	16.0
13-Jun-06	13	12	9	4	2	2	2	2	2	4	5	5	7	10	11	13	13	11	9	10	8	7	8	8	7.4	13.2
14-Jun-06	9	6	3	3	4	3	8	8	5	9	10	13	12	13	18	17	18	17	8	4	4	9	11	11	9.3	17.8
15-Jun-06	8	7	6	5	2	3	4	5	9	16	16	14	12	11	12	14	14	13	8	7	7	10	8	4	8.9	16.2
16-Jun-06	1	3	4	4	2	3	2	4	4	4	2	5	5	5	5	11	7	14	11	22	16	12	13	12	7.1	22.4
17-Jun-06	10	10	7	4	13	20	18	19	24	28	28	28	29	32	27	26	23	22	20	16	13	11	8	8	18.5	32.0
18-Jun-06	8	6	2	3	3	3	3	6	12	13	11	8	7	8	5	5	8	12	10	12	13	8	5	3	7.3	13.2
19-Jun-06	4	3	2	2	4	5	4	8	9	12	9	10	10	11	15	14	20	16	15	13	10	6	8	8	9.1	20.2
20-Jun-06	1	2	2	5	5	3	4	3	6	13	13	15	13	10	9	8	8	6	5	6	8	5	9	7	7.0	14.6
21-Jun-06	8	5	2	4	3	4	9	8	16	22	21	19	23	23	22	24	23	19	18	17	11	11	9	4	13.5	23.6
22-Jun-06	7	4	2	2	2	3	4	11	16	16	16	15	16	16	15	14	17	10	14	13	10	5	3	5	9.9	16.5
23-Jun-06	3	3	4	3	3	4	5	8	16	19	19	16	17	16	16	16	16	15	13	14	11	10	10	7	11.0	19.3
24-Jun-06	8	3	3	3	3	3	4	5	6	6	9	11	19	23	25	19	18	20	19	20	15	8	7	6	10.9	24.6
25-Jun-06	6	5	7	4	2	2	2	3	3	4	9	7	9	7	7	6	4	4	12	11	9	7	8	7	6.2	11.9
26-Jun-06	7	7	7	4	3	1	3	3	3	3	4	4	5	9	11	14	16	13	14	11	2	4	3	6	6.6	15.6
27-Jun-06	5	7	4	7	7	4	6	5	14	20	16	15	12	10	8	5	6	6	7	13	14	16	15	13	9.7	19.5
28-Jun-06	12	13	9	6	6	2	3	3	5	9	12	13	15	21	22	23	24	25	19	20	17	16	12	11	13.3	24.7
29-Jun-06	9	10	9	9	8	4	8	13	21	30	28	25	25	25	26	23	24	22	23	20	14	12	9	9	17.1	29.6
30-Jun-06	10	10	4	5	6	4	4	3	12	15	14	12	12	11	9	10	6	5	3	2	4	4	4	3	7.1	14.8
1-hr Average	7.5	7.0	5.8	5.4	5.7	5.6	6.5	7.9	10.7	12.7	13.0	13.3	14.2	14.7	14.6	14.6	15.4	14.6	13.5	12.8	10.8	9.5	9.3	8.5		
Hourly Max	18.9	13.2	15.7	12.7	18.3	22.5	18.0	19.7	31.7	34.7	33.0	36.3	35.0	37.3	37.2	36.5	38.4	31.9	28.2	27.4	25.6	25.4	24.7	23.7		

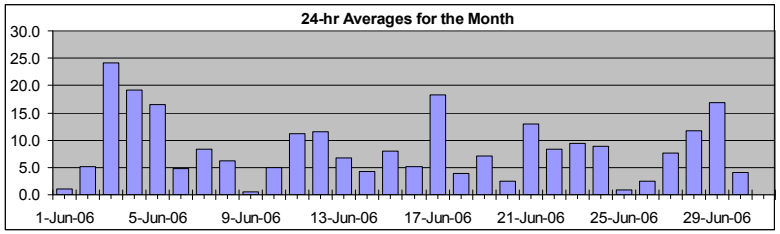
PASZA - Beaverlodge - Vector Wind Speed Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: June 1, 2006 to July 1, 2006



Summary

Maximum 1-hr Average:	38.2	km/hr	3-Jun	16:00 17:00
Maximum 24-hr Value:	24.1	km/hr	3-Jun	

Calm Time:	6 hrs	**1%** calms			Operational Time:			714 hrs				
Calibration Time:	0 hrs				AMD Operational Uptime:			100.0%				
Percentile	99	95	75	50	25	5	1					AverageV
	32.7	24.7	13.5	8.5	4.4	1.9	1.1					4.3 km/hr

Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hr Vector Average	Daily Max
1-Jun-06	2	3	1	3	2	4	2	2	3	5	6	7	4	6	1	5	5	4	5	3	5	6	7	7	1.0	7.4
2-Jun-06	7	9	5	4	7	4	3	3	5	1	5	7	16	9	11	6	14	11	8	4	9	11	14	5	5.2	16.0
3-Jun-06	5	3	6	7	18	22	17	14	19	25	33	36	35	37	37	36	38	32	28	27	25	25	25	24	24.1	38.2
4-Jun-06	19	13	15	13	9	7	10	20	32	35	26	25	25	25	24	25	25	24	24	20	15	12	12	12	19.2	34.6
5-Jun-06	8	11	9	9	7	8	12	16	18	17	18	21	23	28	28	25	31	26	22	18	16	13	7	9	16.4	30.6
6-Jun-06	6	7	5	9	10	10	7	6	3	3	3	4	6	7	8	10	10	12	13	11	5	8	7	4	4.7	13.5
7-Jun-06	6	8	5	5	1	2	6	12	10	7	5	7	8	7	10	10	13	14	15	14	13	12	11	12	8.4	14.5
8-Jun-06	10	12	4	6	3	4	6	6	5	7	9	9	9	11	9	9	12	10	11	11	11	8	6	4	6.2	12.2
9-Jun-06	4	4	4	4	6	10	8	6	6	1	3	3	5	3	2	5	4	9	9	8	6	4	4	4	0.5	9.8
10-Jun-06	4	3	3	2	3	1	2	2	6	5	6	8	7	9	10	12	13	11	9	5	1	3	14	18	5.0	18.3
11-Jun-06	14	9	10	11	11	13	14	16	15	11	12	11	14	14	13	15	13	14	15	12	11	7	6	6	11.2	16.0
12-Jun-06	8	7	9	8	8	6	10	11	12	13	15	15	12	13	12	13	14	15	16	14	11	11	13	13	11.6	15.8
13-Jun-06	13	12	8	4	1	2	2	2	1	4	4	5	6	10	11	13	12	11	9	9	7	7	8	8	6.7	12.9
14-Jun-06	9	6	2	2	2	2	8	8	calm	8	10	13	12	12	17	17	18	14	8	4	4	9	11	11	4.3	17.6
15-Jun-06	8	7	5	3	2	1	3	5	8	15	16	13	12	11	11	14	14	13	8	7	7	10	8	3	8.0	15.9
16-Jun-06	1	2	calm	4	2	2	2	4	3	4	1	5	calm	4	3	11	6	14	11	22	16	12	13	12	5.2	21.9
17-Jun-06	10	10	7	2	13	20	18	19	24	28	28	28	29	32	27	25	23	22	20	16	13	11	7	8	18.3	31.8
18-Jun-06	8	6	1	2	2	3	2	6	12	12	10	6	5	6	3	4	7	12	7	12	13	8	5	2	3.9	13.1
19-Jun-06	1	3	2	2	4	4	3	7	9	12	9	9	9	10	14	14	20	16	15	8	9	5	8	8	7.1	19.6
20-Jun-06	1	1	2	5	4	3	4	3	6	12	12	13	13	6	8	6	7	4	3	4	8	4	9	3	2.4	13.0
21-Jun-06	8	5	1	4	calm	2	9	7	15	22	21	19	22	23	22	23	22	19	18	17	11	11	8	4	12.9	23.3
22-Jun-06	7	4	2	2	2	3	2	11	15	16	16	15	16	16	15	14	15	10	13	13	10	5	1	5	8.4	15.8
23-Jun-06	1	3	3	2	3	3	4	8	15	18	19	15	16	16	15	15	16	15	13	14	11	10	10	7	9.4	18.8
24-Jun-06	8	2	3	3	3	3	3	5	5	5	8	10	19	22	24	19	18	20	19	20	15	8	6	6	8.8	24.4
25-Jun-06	6	5	7	3	2	2	2	3	2	2	8	6	8	6	2	4	2	1	12	11	9	7	8	7	0.8	11.6
26-Jun-06	7	7	7	3	3	calm	3	2	2	3	3	3	2	6	10	13	15	13	14	11	2	4	3	6	2.5	15.1
27-Jun-06	4	6	3	6	4	4	6	5	13	19	15	14	11	8	5	2	4	6	6	12	14	14	12	11	7.6	19.3
28-Jun-06	10	11	7	5	5	1	2	2	5	8	11	12	14	20	21	23	24	25	19	20	17	16	12	11	11.7	24.6
29-Jun-06	9	10	9	9	7	3	6	13	21	29	28	25	25	25	26	22	24	22	23	20	14	12	9	9	16.8	29.3
30-Jun-06	10	10	3	4	5	calm	3	2	11	15	14	11	11	10	8	9	5	4	3	1	3	4	4	3	4.1	14.5
1-hr Vector	1.0	0.8	0.1	1.5	1.6	1.6	2.4	3.9	6.4	8.5	8.4	7.3	7.5	8.5	7.3	7.0	7.3	6.2	5.0	4.0	2.2	2.4	2.6	1.6		
Hourly Max	18.8	12.7	15.4	12.6	18.2	22.4	17.9	19.5	31.5	34.6	32.8	36.2	34.6	37.0	37.1	36.3	38.2	31.7	28.0	27.3	25.5	25.4	24.7	23.7		

PASZA - Beaverlodge - Wind Direction Monthly Summary

HOURLY AVERAGE TABLE

Wind Direction (WD)

Station: Beaverlodge
Station Owner: PASZA

Monitoring Dates: June 1, 2006 to July 1, 2006

Summary

Calm Time:	0 hrs	**0%** calms			Operational Time:		720 hrs		
Calibration Time:	0 hrs				AMD Operational Uptime:		100.0%		
Percentile	99	95	75	50	25	5	1	Average	
	348.1	326.5	279.2	248.5	110.7	42.2	5.9	277 deg	

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	WD Sector
1-Jun-06	169	77	156	74	80	88	142	170	215	219	259	271	268	282	298	267	195	197	198	138	77	60	62	77	182	S
2-Jun-06	87	315	309	322	338	273	250	338	274	275	250	248	283	307	293	346	309	298	276	186	150	179	236	261	283	WNW
3-Jun-06	232	274	259	249	266	265	284	267	261	265	267	260	268	262	264	264	265	268	270	272	263	262	263	257	265	W
4-Jun-06	250	237	242	247	239	249	250	247	260	265	266	266	268	285	269	262	262	264	272	273	268	264	264	266	262	W
5-Jun-06	256	255	265	264	260	226	250	258	258	259	282	272	261	258	261	268	270	269	265	274	288	286	323	293	267	W
6-Jun-06	330	323	306	333	334	341	343	346	28	53	72	68	82	88	86	114	99	109	107	100	76	93	68	99	61	ENE
7-Jun-06	166	96	102	140	190	7	102	141	140	140	130	124	125	90	98	90	84	101	95	90	92	105	82	56	105	ESE
8-Jun-06	54	107	78	275	202	311	317	342	5	17	23	20	83	81	79	75	72	75	78	74	91	72	81	95	63	ENE
9-Jun-06	39	35	23	18	5	343	357	6	27	312	280	251	241	191	182	170	164	161	171	184	182	116	96	87	127	SE
10-Jun-06	76	84	52	325	312	301	151	268	311	316	335	358	4	344	17	34	44	24	29	25	202	61	78	82	26	NNE
11-Jun-06	77	87	78	69	58	52	67	80	90	74	66	54	51	60	69	108	118	115	113	118	128	122	102	97	84	E
12-Jun-06	111	105	111	107	109	118	131	125	133	138	135	139	125	135	134	122	118	110	114	108	101	95	105	110	119	ESE
13-Jun-06	114	108	112	132	218	137	224	226	107	90	183	161	163	139	111	135	127	141	131	119	115	101	110	110	127	SE
14-Jun-06	111	112	158	163	148	78	320	326	92	135	111	92	81	110	94	113	133	160	212	184	253	246	274	279	128	SE
15-Jun-06	278	265	291	271	64	83	173	208	250	287	303	302	294	282	276	271	287	277	290	292	275	290	279	266	282	WNW
16-Jun-06	192	230	335	63	180	175	180	207	184	207	186	117	71	264	220	249	242	224	217	258	258	266	267	276	242	WSW
17-Jun-06	269	257	266	248	273	274	282	285	283	287	279	275	274	270	275	278	282	282	290	288	276	268	265	263	277	W
18-Jun-06	255	255	120	226	87	103	142	270	298	315	305	315	329	325	322	335	318	320	5	56	49	51	210	86	329	NNW
19-Jun-06	94	64	68	234	258	273	280	295	309	316	331	332	291	279	307	314	285	264	280	15	24	291	274	270	302	WNW
20-Jun-06	231	172	158	210	207	131	210	204	280	313	354	18	43	349	52	11	338	53	27	198	189	255	289	293	339	NNW
21-Jun-06	240	235	251	237	159	222	240	242	263	271	283	286	283	272	277	275	271	275	290	294	280	273	277	264	273	W
22-Jun-06	262	261	168	153	160	88	210	259	269	266	277	275	287	287	279	276	239	214	213	227	213	213	215	257	255	WSW
23-Jun-06	199	152	177	106	80	68	200	235	274	283	280	287	270	273	283	282	281	277	282	279	277	285	290	305	276	W
24-Jun-06	309	160	117	106	121	106	149	201	209	219	259	256	279	280	275	280	274	270	289	291	296	291	287	322	275	W
25-Jun-06	307	333	318	326	110	84	108	209	242	319	273	308	277	281	324	289	4	30	112	106	117	112	105	107	354	N
26-Jun-06	97	105	109	182	235	223	277	207	189	200	154	200	152	280	270	267	274	292	292	298	340	66	47	48	266	W
27-Jun-06	47	311	64	334	14	312	328	306	298	296	296	295	305	305	316	285	4	42	49	6	35	352	338	10	333	NNW
28-Jun-06	333	357	27	249	297	82	224	228	221	280	278	282	287	274	284	291	292	283	278	278	279	276	272	294	286	WNW
29-Jun-06	297	285	290	280	307	284	252	254	266	271	274	259	275	287	287	281	273	269	268	271	270	259	270	262	274	W
30-Jun-06	269	266	212	242	228	289	167	155	299	315	324	353	7	2	9	342	338	338	317	352	89	66	80	97	327	NNW
Hourly Avg	273	278	318	262	281	293	260	255	269	279	284	284	286	282	285	277	275	265	269	278	268	273	283	304		

PASZA - Beaverlodge - Standard Deviation of Wind Direction Monthly Summary

Station: Beaverlodge
Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2006 to July 1, 2006

Summary

Determined by the Yamartino 15-min interval calculation

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

Percentile	99	95	75	50	25	5	1
	58.5	44.9	21.6	12.0	6.7	3.2	2.3

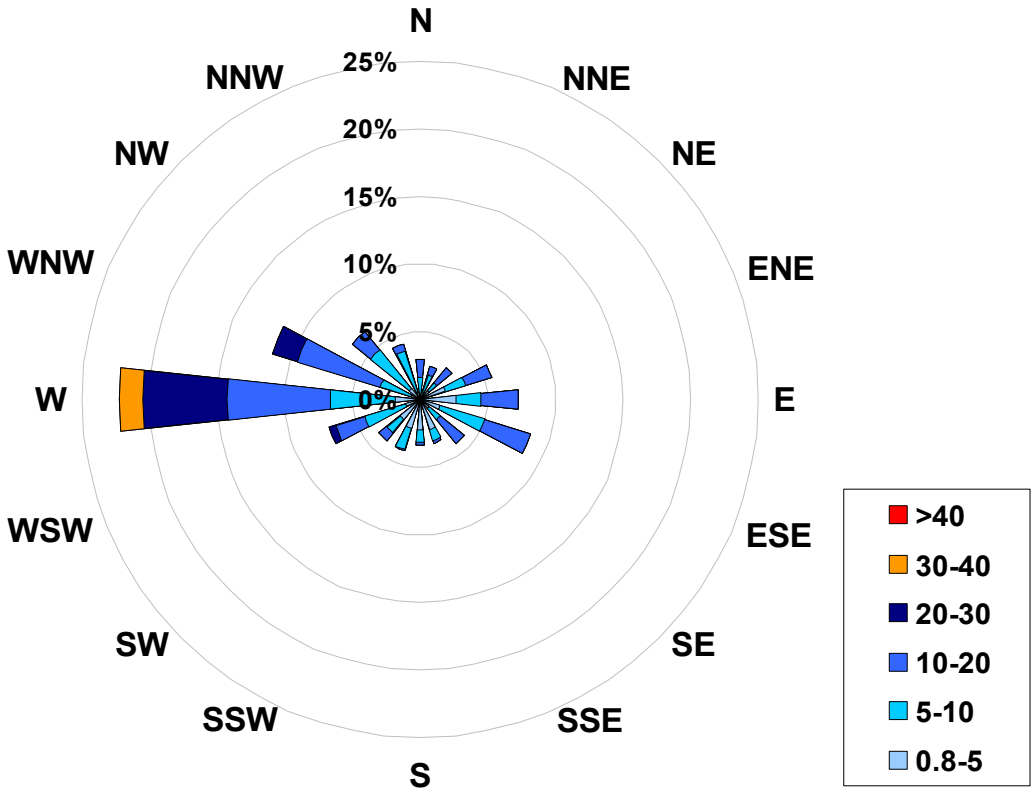
Status Flag Characters

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

Day — **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Jun-06	16	20	34	9	24	13	23	19	13	20	21	14	40	22	52	38	33	36	36	25	6	3	4	8	52.4
2-Jun-06	19	18	17	26	16	40	29	21	15	58	39	18	9	15	12	20	11	10	8	15	11	10	6	29	58.3
3-Jun-06	33	34	12	14	4	3	5	4	3	4	5	5	5	6	5	6	5	6	6	5	4	3	3	3	34.0
4-Jun-06	3	2	4	3	4	10	9	6	5	5	7	9	9	10	8	7	9	7	7	3	3	2	2	1	9.7
5-Jun-06	3	5	8	3	16	13	5	5	6	10	12	6	5	7	7	7	5	6	4	5	4	5	24	7	24.2
6-Jun-06	8	13	12	6	6	7	13	19	42	57	52	46	42	28	27	21	16	15	10	9	22	24	8	13	57.2
7-Jun-06	11	4	4	8	43	55	11	9	12	17	33	24	24	30	22	20	15	12	8	4	4	6	12	3	54.7
8-Jun-06	9	20	49	18	28	18	5	10	11	12	12	13	18	6	7	8	10	11	7	10	6	6	7	13	48.7
9-Jun-06	10	15	11	11	10	5	8	18	19	42	52	47	28	58	65	19	32	20	11	8	5	13	5	6	64.7
10-Jun-06	5	8	26	30	34	48	26	26	14	22	24	19	34	27	16	13	9	10	7	6	36	24	7	3	48.0
11-Jun-06	4	6	10	5	3	3	5	8	11	13	13	18	14	10	18	9	9	12	8	6	5	5	4	5	18.3
12-Jun-06	3	4	17	4	8	13	8	7	9	12	12	15	20	14	20	15	17	12	8	6	5	4	3	3	20.4
13-Jun-06	3	3	9	17	19	26	16	25	45	17	33	38	28	18	16	12	18	11	15	9	4	6	4	4	44.9
14-Jun-06	4	28	24	19	36	33	47	6	38	16	12	11	11	21	17	6	6	11	14	41	22	8	5	7	47.3
15-Jun-06	8	14	13	18	46	34	19	13	11	11	10	16	21	21	22	12	15	6	5	13	7	4	7	29	46.3
16-Jun-06	43	21	40	5	18	14	22	9	22	22	41	12	44	22	24	13	11	10	10	15	15	12	3	4	43.5
17-Jun-06	7	4	39	27	5	3	4	6	7	8	7	8	9	6	8	8	8	7	5	5	3	2	11	4	39.2
18-Jun-06	3	10	42	29	56	15	17	19	8	14	18	43	38	54	47	45	27	9	23	8	4	20	8	33	55.8
19-Jun-06	29	28	19	10	7	11	12	11	7	9	15	27	23	21	12	11	7	7	9	25	7	42	4	4	42.5
20-Jun-06	43	25	24	5	8	17	14	16	13	10	17	23	14	37	28	24	18	45	25	18	6	17	8	23	45.1
21-Jun-06	4	7	33	15	37	50	6	17	7	9	9	11	9	10	10	7	9	9	6	6	5	2	6	34	50.4
22-Jun-06	18	42	16	23	22	18	23	9	8	13	16	16	16	12	11	9	23	11	8	8	3	10	31	11	42.0
23-Jun-06	32	14	17	19	20	12	18	10	7	8	9	17	14	18	19	18	13	9	14	8	3	2	2	6	32.4
24-Jun-06	3	36	16	7	8	13	32	11	17	25	25	21	10	11	7	7	10	8	14	5	6	6	13	8	36.5
25-Jun-06	15	7	6	39	22	18	30	25	47	59	37	34	29	51	69	43	67	47	13	13	13	5	3	3	69.3
26-Jun-06	3	4	4	17	11	55	12	20	39	33	47	54	67	33	28	19	14	11	6	6	28	12	27	3	67.3
27-Jun-06	22	41	27	31	23	24	8	12	9	8	11	17	24	36	49	70	47	20	12	8	6	21	27	35	69.8
28-Jun-06	24	18	23	24	48	66	25	29	12	17	16	22	10	15	11	5	5	5	4	3	4	2	3	4	66.0
29-Jun-06	4	3	4	6	21	19	46	7	8	7	8	9	10	10	8	9	11	7	6	4	3	2	3	3	45.8
30-Jun-06	2	2	32	23	35	32	19	44	26	12	12	14	16	20	28	20	35	38	15	24	15	10	23	16	44.2
Hourly Max	43	42	49	39	56	66	47	44	47	59	52	54	67	58	69	70	67	47	36	41	36	42	31	35	

1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for June 2006



Calms:	0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	163
5	to	10	241
10	to	20	241
20	to	30	63
30	to	40	12
	>	40	0
Total Non-Zero Values			720

PASZA

Monthly Passive Data Summary

Table 1. PASZA Passive Stations for June 2006

Peace Airshed Zone Association - PASZA Passive Stations for June 2006

		PASZA			
Station Number	**Station Name**	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
3a	Forth Creek	**0.2**	**40.5**	**0.8**	
3b	Forth Creek	**0.2**	**45.8**	**0.7**	
4a	Gordondale	**0.4**	**41.5**	**0.8**	
4b	Gordondale	**0.4**	**44.0**	**0.9**	
9a	Spirit River	**0.4**	**34.0**	**2.4**	
9b	Spirit River	**0.4**	**34.9**	**2.4**	
49a	Grande Prairie HP	**0.4**	**39.5**	**4.8**	
49b	Grande Prairie HP	**0.4**	**38.5**	**4.4**	
1	Silver Valley	**0.4**	**33.1**	**1.5**	08-27-081-11 W6M
2	Bay Tree	**0.2**	**33.1**	**0.5**	13-16-078-13 W6M
3	Forth Creek	**0.2**	**43.1**	**0.7**	04-13-082-07 W6M
4	Gordondale	**0.4**	**42.8**	**0.8**	04-34-078-10 W6M
5	Boone Creek	**0.3**	**34.9**	**1.8**	01-23-076-11 W6M
7	Steeprock Creek	**0.2**	**37.8**	**0.8**	09-35-072-13 W6M
9	Spirit River	**0.4**	**34.5**	**2.4**	08-12-079-07 W6M
10	Woking	**0.4**	**32.3**	**1.2**	01-13-076-07 W6M
11	Webber Creek	**0.6**	**36.6**	**1.6**	09-36-074-09 W6M
12	Hythe	**0.3**	**30.9**	**1.9**	14-36-072-11 W6M
14	Sylvester	**0.2**	**29.0**	**0.8**	08-06-069-12 W6M
16	Beaverlodge	**0.2**	**41.1**	**1.6**	15-36-071-10 W6M
17	Poplar	**0.3**	**35.2**	**2.0**	13-06-073-08 W6M
18	Saddle Hills	**0.4**	**35.6**	**1.0**	04-25-074-07 W6M
19	Wanham	**0.4**	**40.0**	**0.5**	16-22-077-03 W6M
20	Shaftesbury	**0.2**	**29.2**	**0.7**	04-03-082-23 W5M

Table 1. PASZA Passive Stations for June 2006 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
21	Eaglesham	**0.2**	**32.5**	**0.9**	16-21-079-25 W5M
23	Bear Lake	**0.3**	**31.3**	**1.7**	15-31-072-06 W6M
24	Wembley	**0.7**	**31.5**	**1.9**	12-31-070-08 W6M
25	Pinto Creek	**0.2**	**32.1**	**0.6**	04-24-069-11 W6M
26	Flyingshot	**0.3**	**36.3**	**1.3**	15-36-070-07 W6M
27	Grande Prairie I	**0.4**	**34.6**	**4.3**	08-15-071-06 W6M
28	Clairmont Lake	**0.4**	**37.0**	**1.5**	09-06-073-04 W6M
29	Smoky Heights	**0.6**	**39.8**	**1.1**	04-06-075-02 W6M
30	Fitzsimmons	**0.3**	**36.6**	**1.1**	15-36-072-03 W6M
32	Gold Creek	**0.4**	**27.0**	**2.1**	06-33-067-05 W6M
33	Wapiti	**0.2**	**36.0**	**1.0**	02-25-071-03 W6M
34	Puskwaskau	**0.2**	**34.0**	**0.3**	15-35-074-25 W5M
35	Jean Cote	**0.4**	**39.0**	**1.2**	12-35-079-21 W5M
36	Guy	**0.2**	**37.5**	**1.0**	03-04-076-22 W5M
37	Crooked Creek	**0.3**	**36.4**	**1.0**	16-01-071-26 W5M
38	Karr Creek	**n/a**	**30.7**	**0.4**	10-16-065-02 W6M
39	Clouston Creek	**0.3**	**33.4**	**0.6**	12-01-073-22 W5M
40	McLennan	**0.3**	**35.9**	**1.0**	03-29-077-19 W5M
41	Valleyview	**0.4**	**38.8**	**0.8**	09-30-069-22 W5M
42	Sunset House	**0.3**	**41.4**	**0.4**	05-32-070-19 W5M
43	High Prairie	**0.2**	**33.4**	**0.8**	16-13-074-17 W5M
44	Peavine	**0.2**	**33.6**	**0.4**	03-05-079-15 W5M
45	Gift Lake	**0.2**	**29.0**	**0.7**	10-07-079-12 W5M
46	Little Smoky	**0.3**	**30.8**	**1.6**	12-01-065-21 W5M
47	Kinuso	**0.2**	**31.0**	**0.4**	12-10-073-10 W5M
48	Deer Mountain	**0.2**	**30.3**	**0.6**	15-22-068-09 W5M
49	Grande Prairie HP	**0.4**	**39.0**	**4.6**	17-26-071-06 W6M

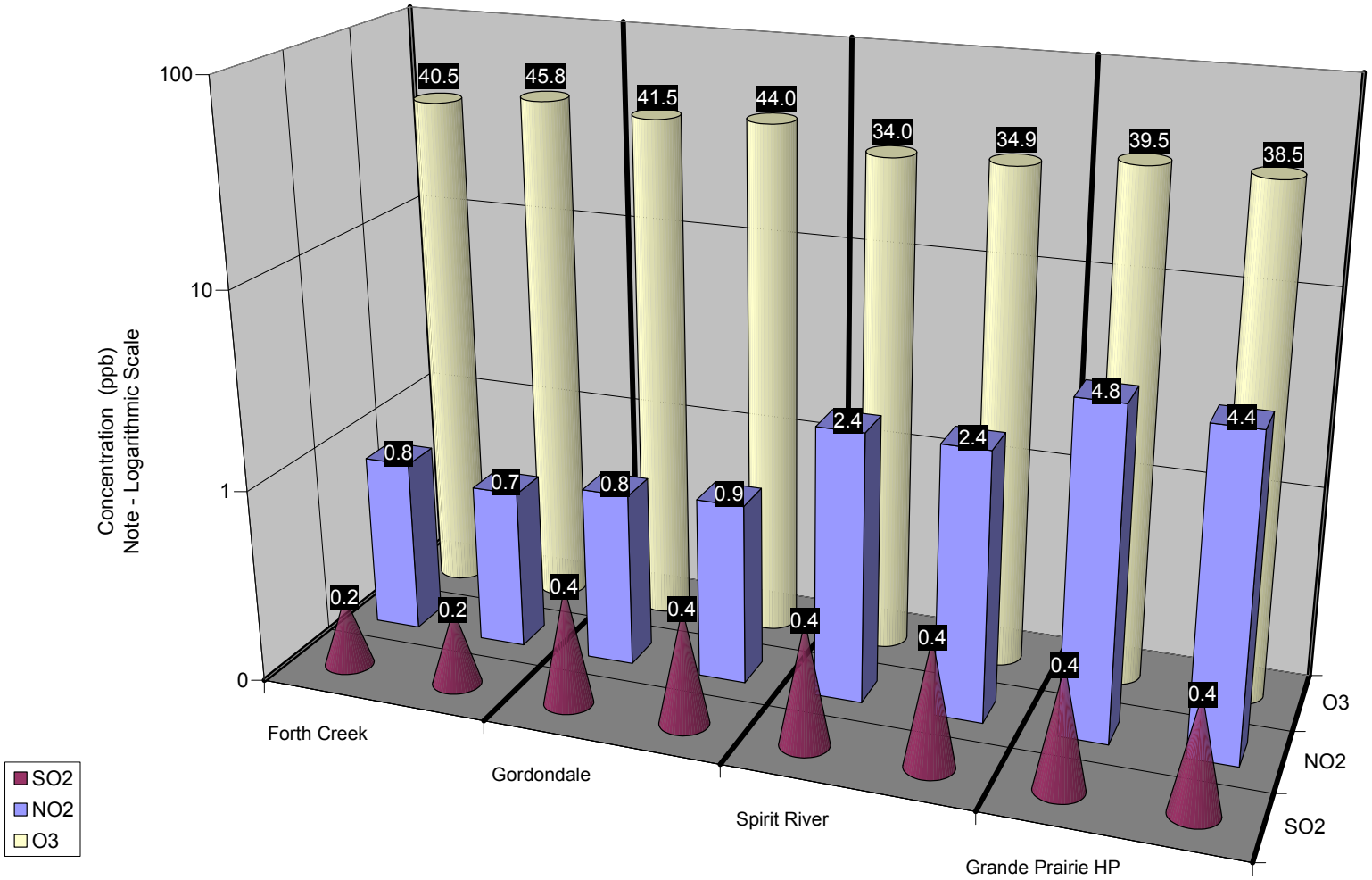


Figure 46. Duplicate Summary Chart

Table 2. Passive Summary Results for June 2006

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for June 2006 (PASZA Zone)		
Mean	**0.3**	**34.8**	**1.2**
Standard Deviation	**0.1**	**3.9**	**0.9**
Minimum	**0.2**	**27.0**	**0.3**
	Gift Lake (#45)	**Gold Creek (#32)**	**Puskwaskau (#34)**
Maximum	**0.7**	**43.1**	**4.6**
	Wembley (#24)	**Forth Creek (#3)**	**Grande Prairie HP (#49)**

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

	SO_2	O_3	NO_2
AENV Beaverlodge station	**0.3**	**33.0**	**1.9**
PASZA Beaverlodge passive	**0.2**	**41.1**	**1.6**

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

	SO_2	O_3	NO_2
PASZA Henry Pirker station	**0.6**	**16.2**	**5.3**
PASZA Grande Prairie passive	**0.4**	**39.0**	**4.6**

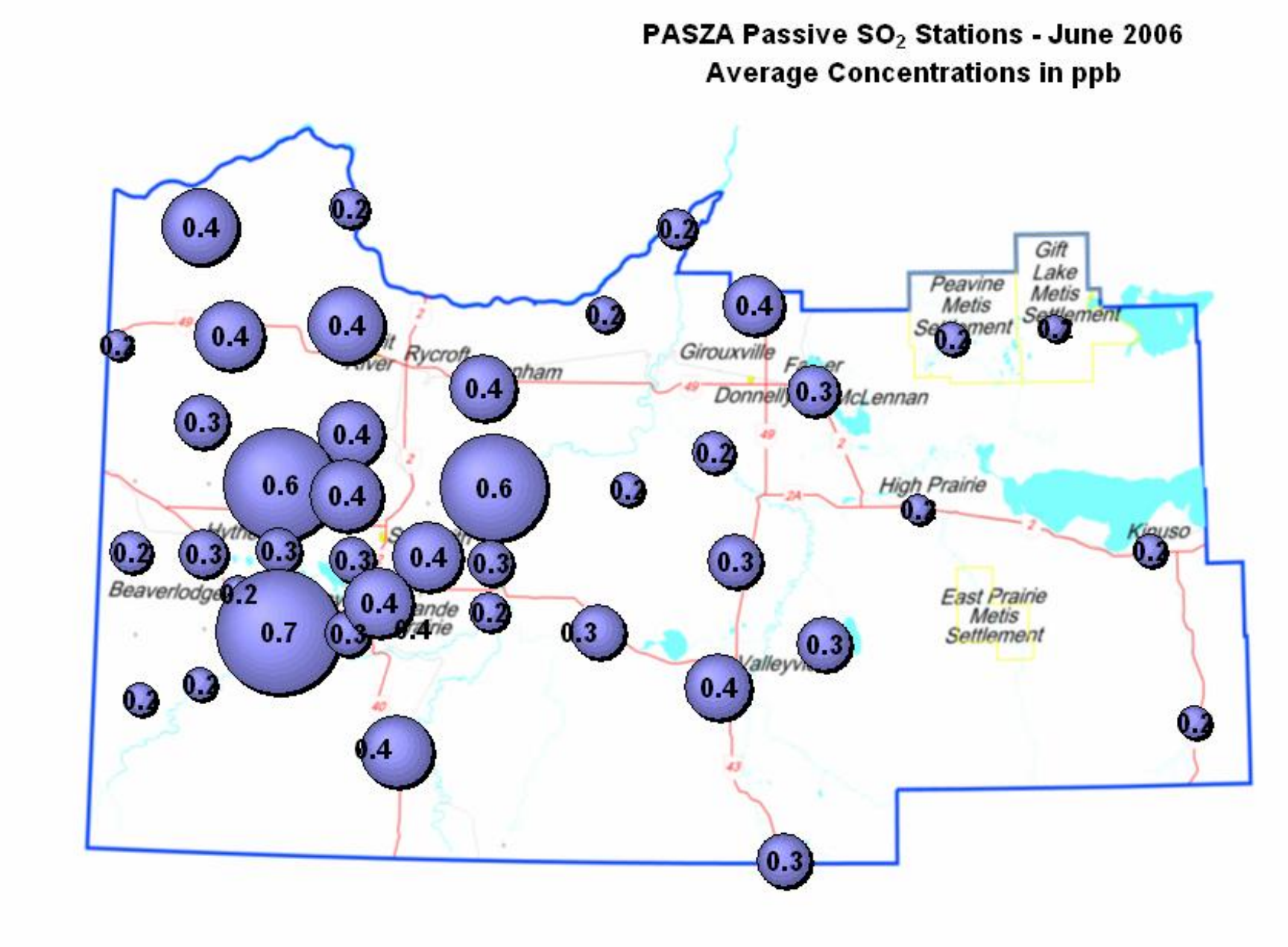


Figure 47. SO_2 Bubble Chart

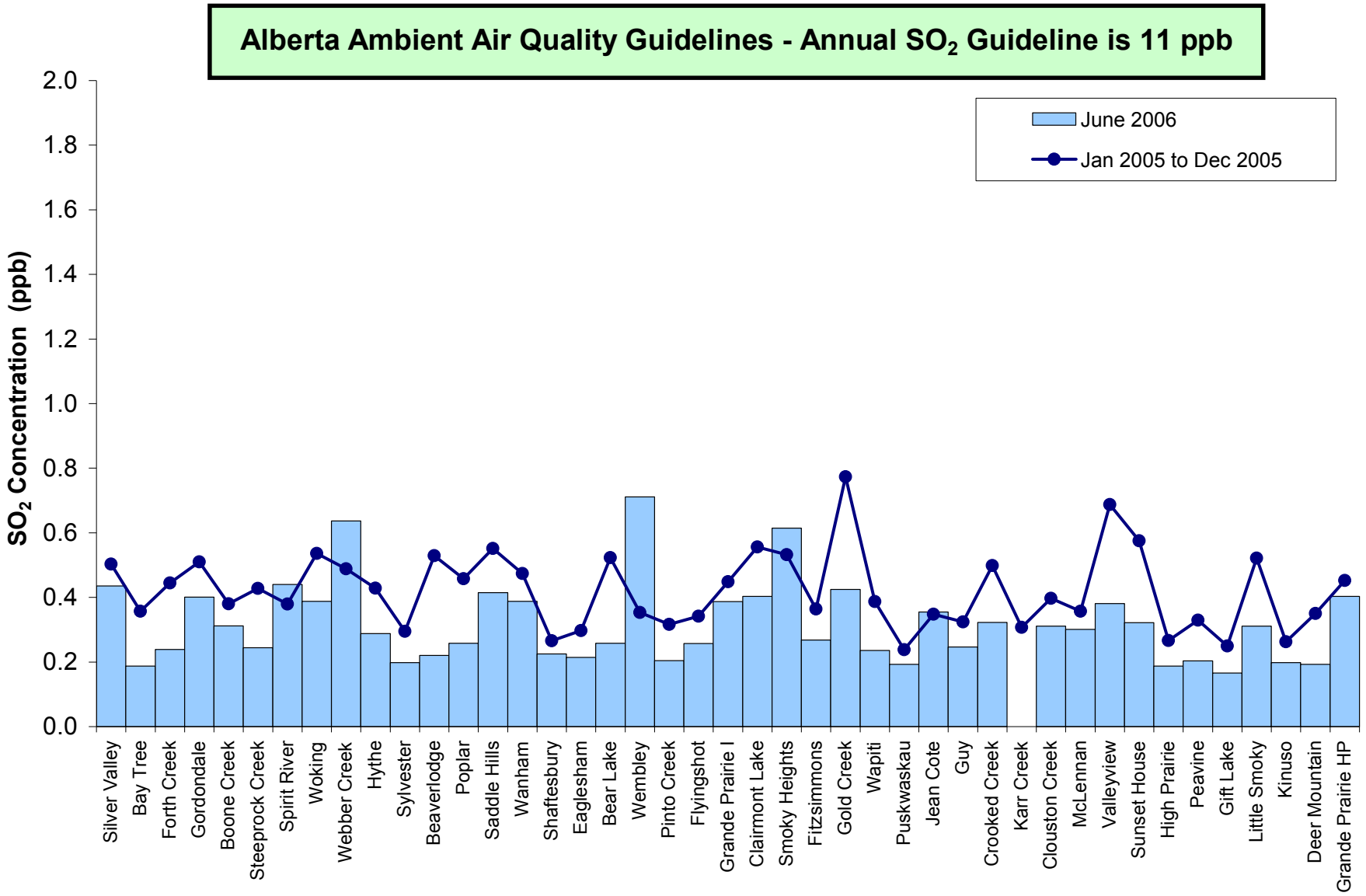


Figure 48. SO_2 Summary Chart

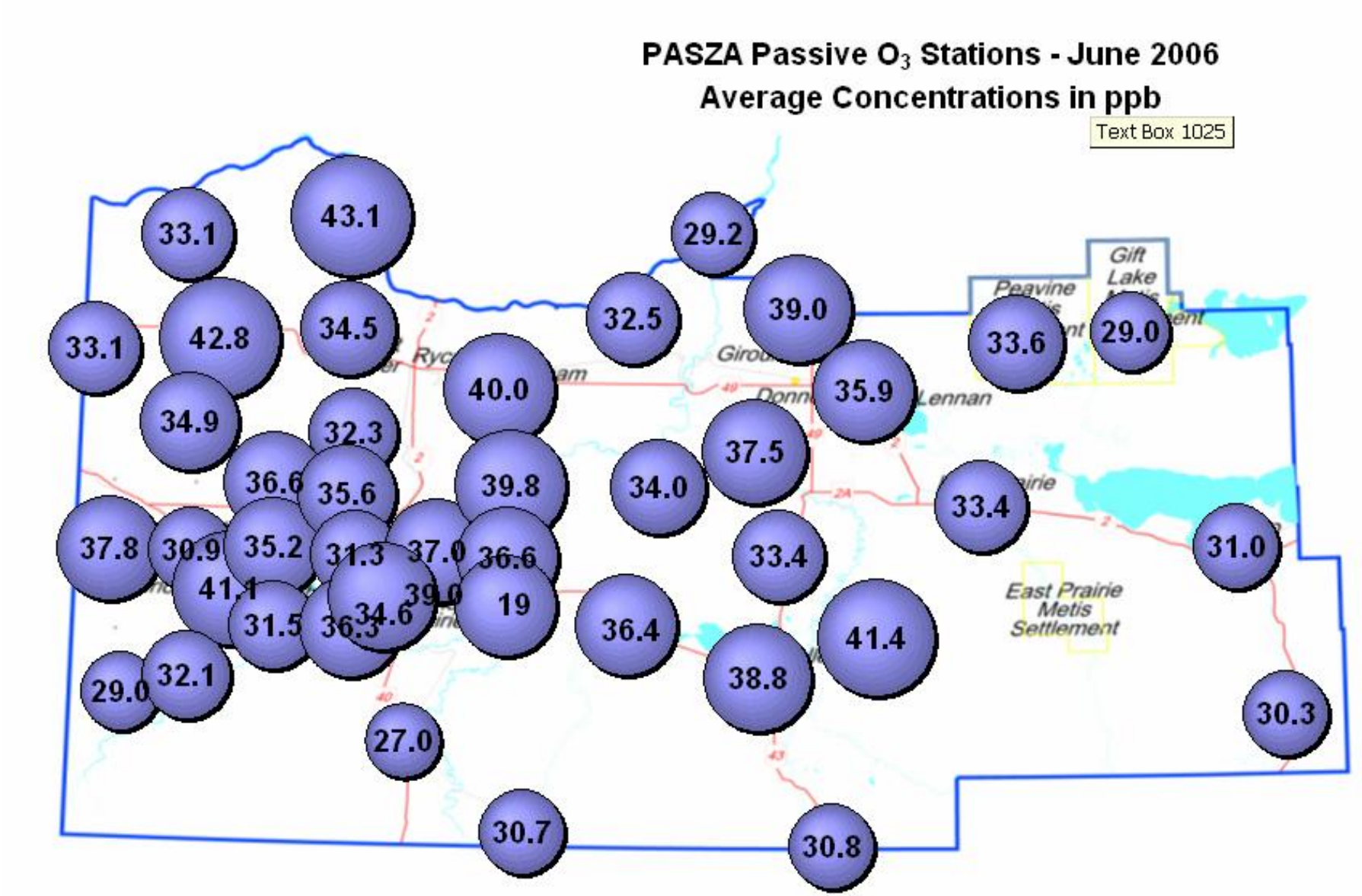


Figure 49. O_3 Bubble Chart

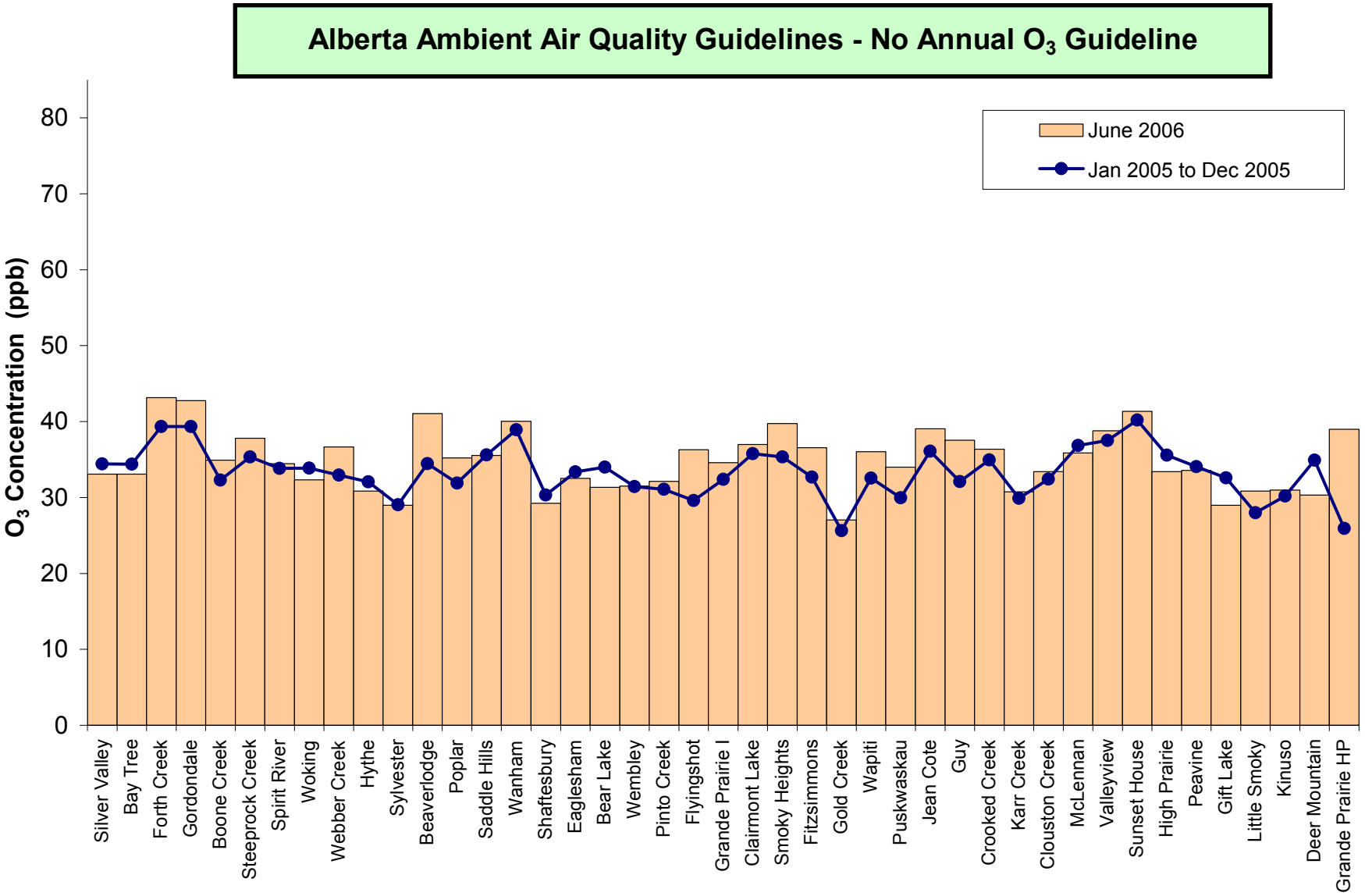


Figure 50. O_3 Summary Chart

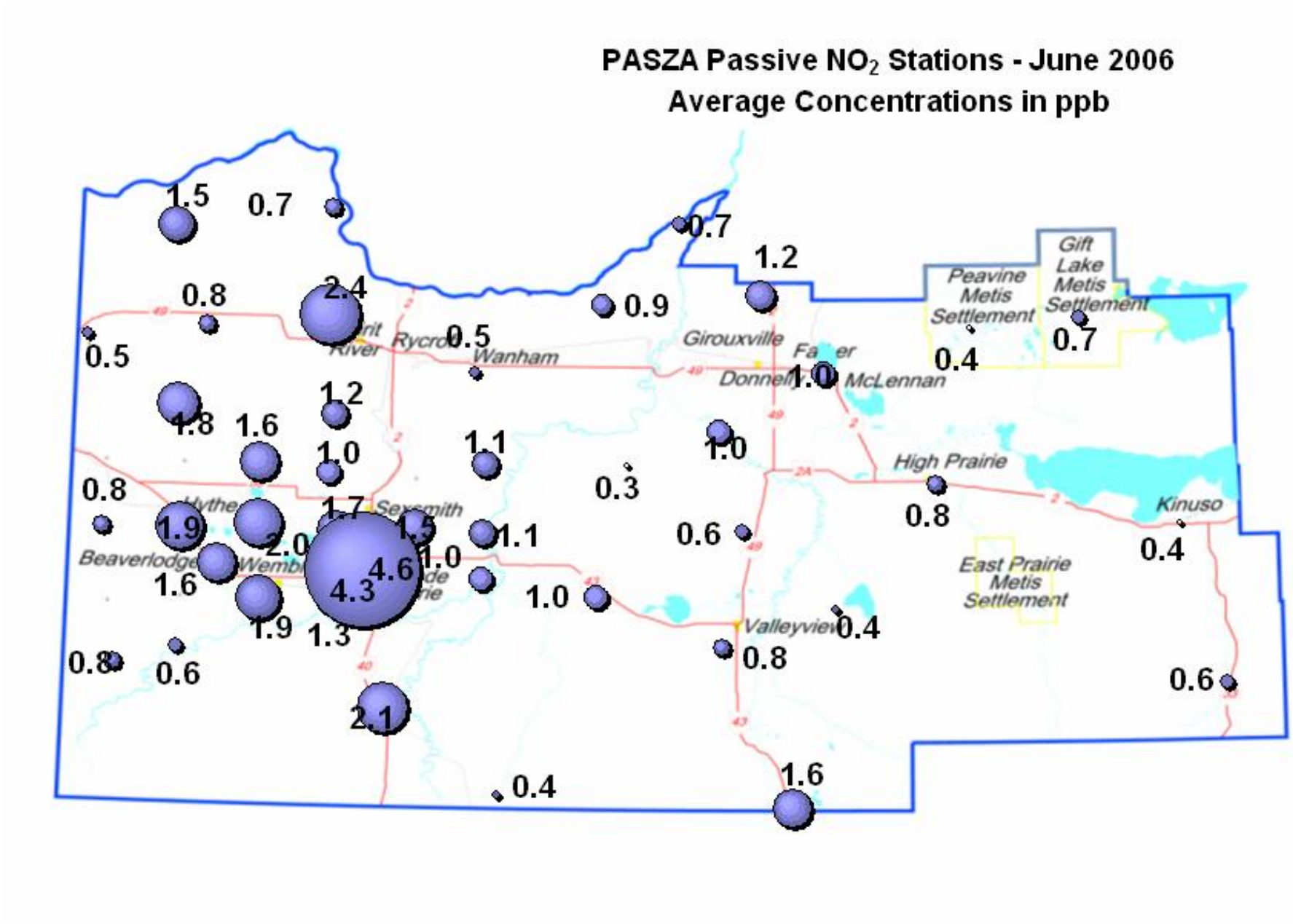


Figure 51. NO_2 Bubble Chart

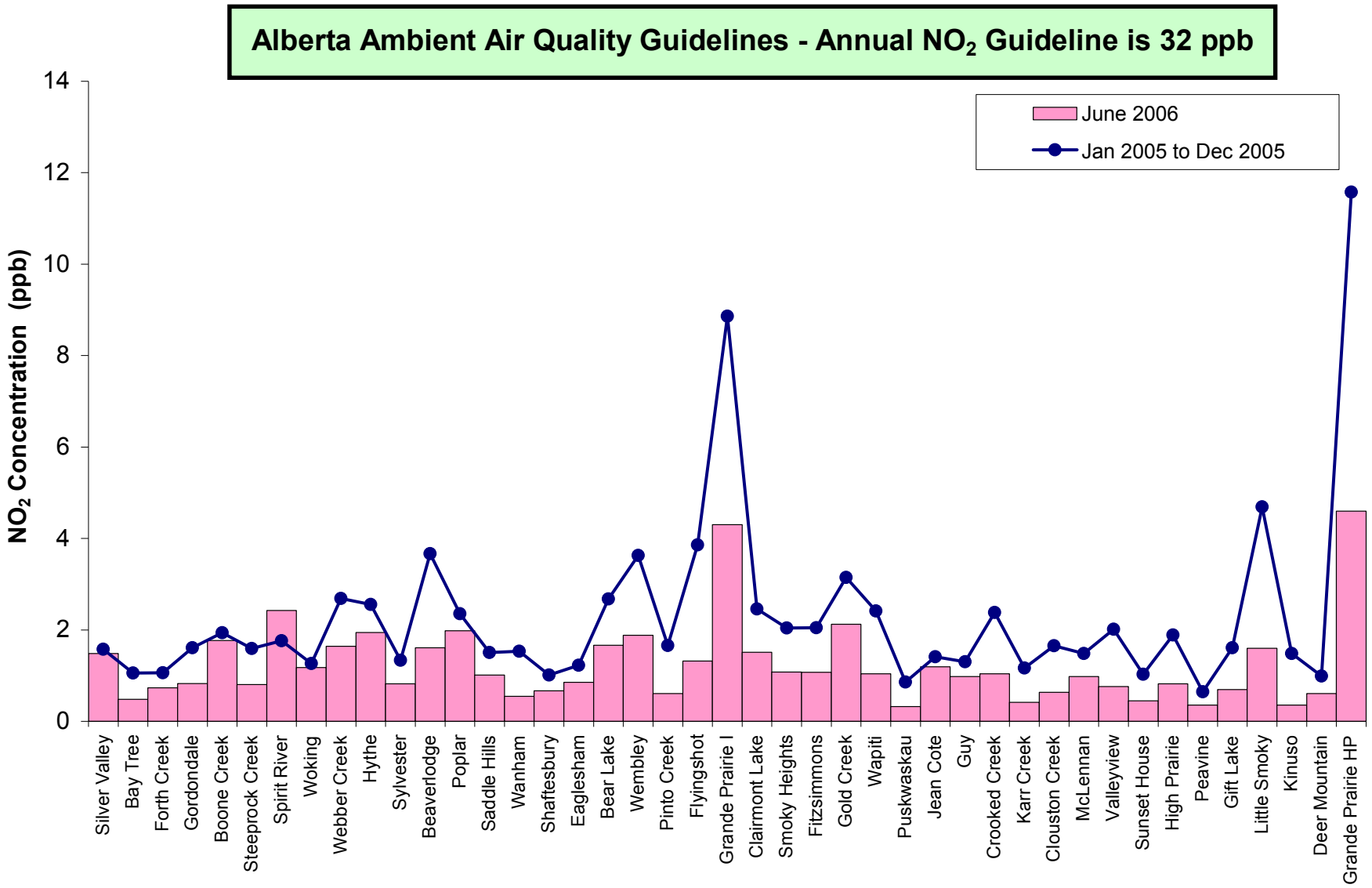


Figure 52. NO_2 Summary Chart

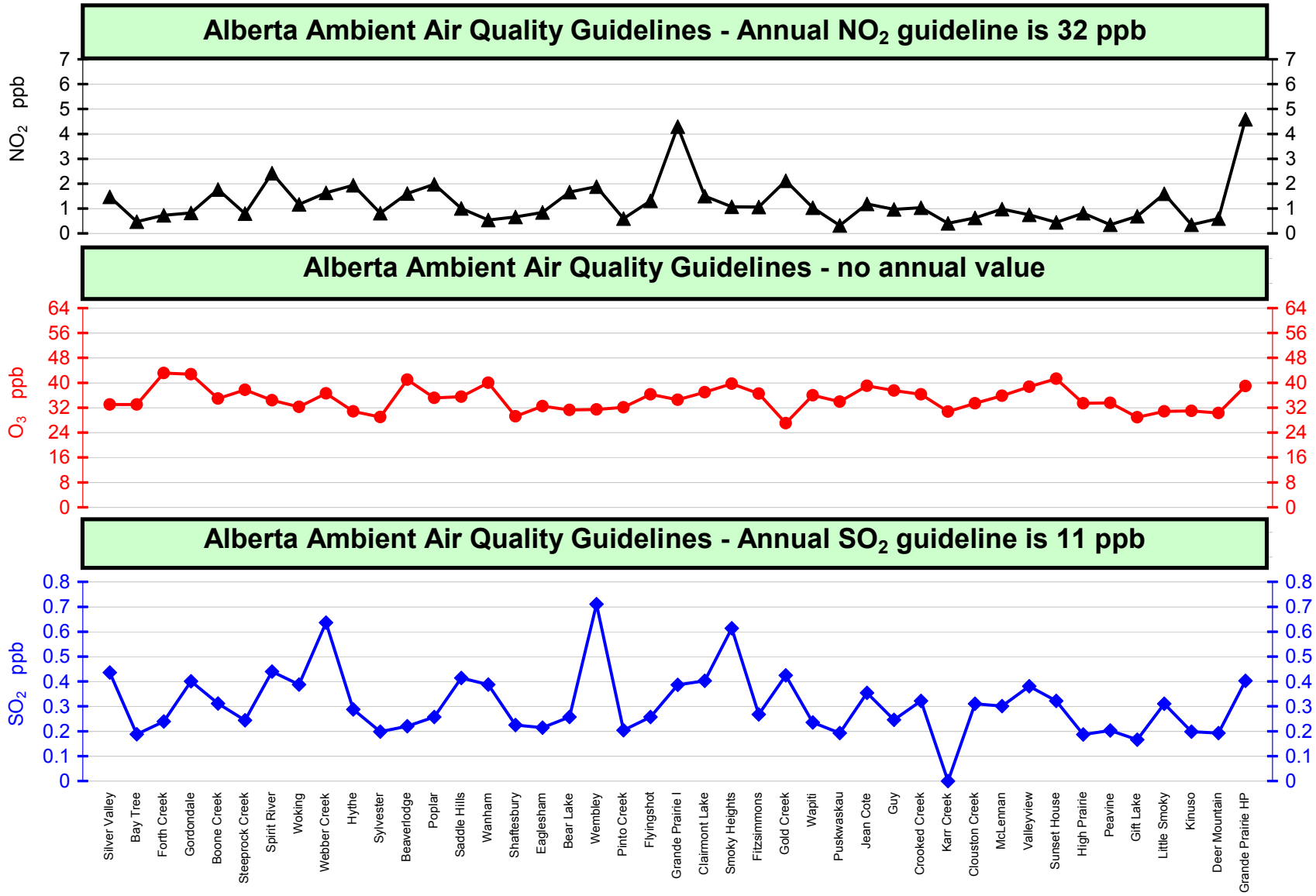


Figure 53. Overview Summary

June 2006 Calibration Reports

PASZA - Henry Pirker Station with the following calibrations:

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

PASZA – Evergreen Park Station with the following calibrations:

SO_2, TRS, $PM_{2.5}$

PASZA – Smoky Heights Station with the following calibrations:

SO_2, TRS, $PM_{2.5}$

PASZA – Beaverlodge Station with the following calibrations:

SO_2, NO, NO_2, NO_x, O_3, $PM_{2.5}$

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 8, 2006	Previous Calibration	May 2, 2006
Station Number	1	Station Location	Muskoseepi Park

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

Start Time (MST)	10:50	End Time (MST)	13:38
Barometric Pressure	27.8 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,097 ng/min	Perm-tube Expiry Date	
Correction factor	0.945000	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	1.006944	Calculated slope	1.005234
Calculated intercept	0.149606	Calculated intercept	-0.822300

Analyzer make: TEI Model 43A — Analyzer serial #: 43A-21120-195

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
SO2 zero pot	167		176	
SO2 span pot	356		421	
UV Lamp voltage	948	V	947	V
Vacuum	17.5	" Hg	17.8	" Hg
Sample Flow	425	ccm	425	ccm

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	1890.0	0.0	-0.6	N/A
2000	1890.0	423.5	421.3	1.0052
5000	4725.0	169.4	171.0	0.9908
9025	8528.6	93.9	94.7	0.9908
zero	1890.0	0.0	0.6	As Found Zero
2000	1890.0	423.5	417.5	As Found Span
			Average Correction Factor	0.9956

Calculated value of As Found Response: 419.878 ppm Percent Change of As Found: 0.9%

	before calibration		after calibration	
Auto zero	0.2	ppm	-1.5	ppm
Auto span	207.2	ppm	193.7	ppm

Notes:

Calibration Performed By: Dawn Ewan

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

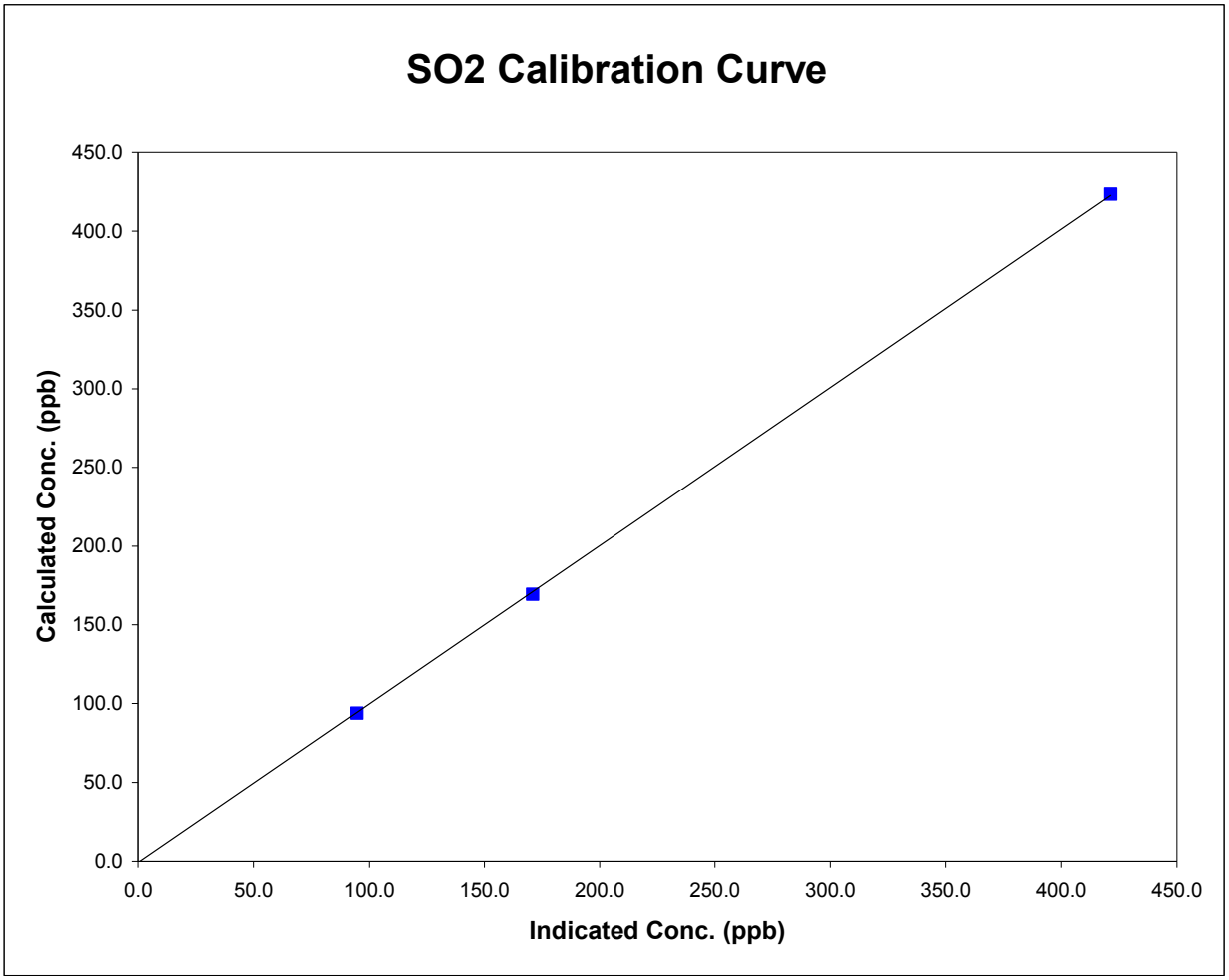
FOCUS AIR QUALITY MONITORING

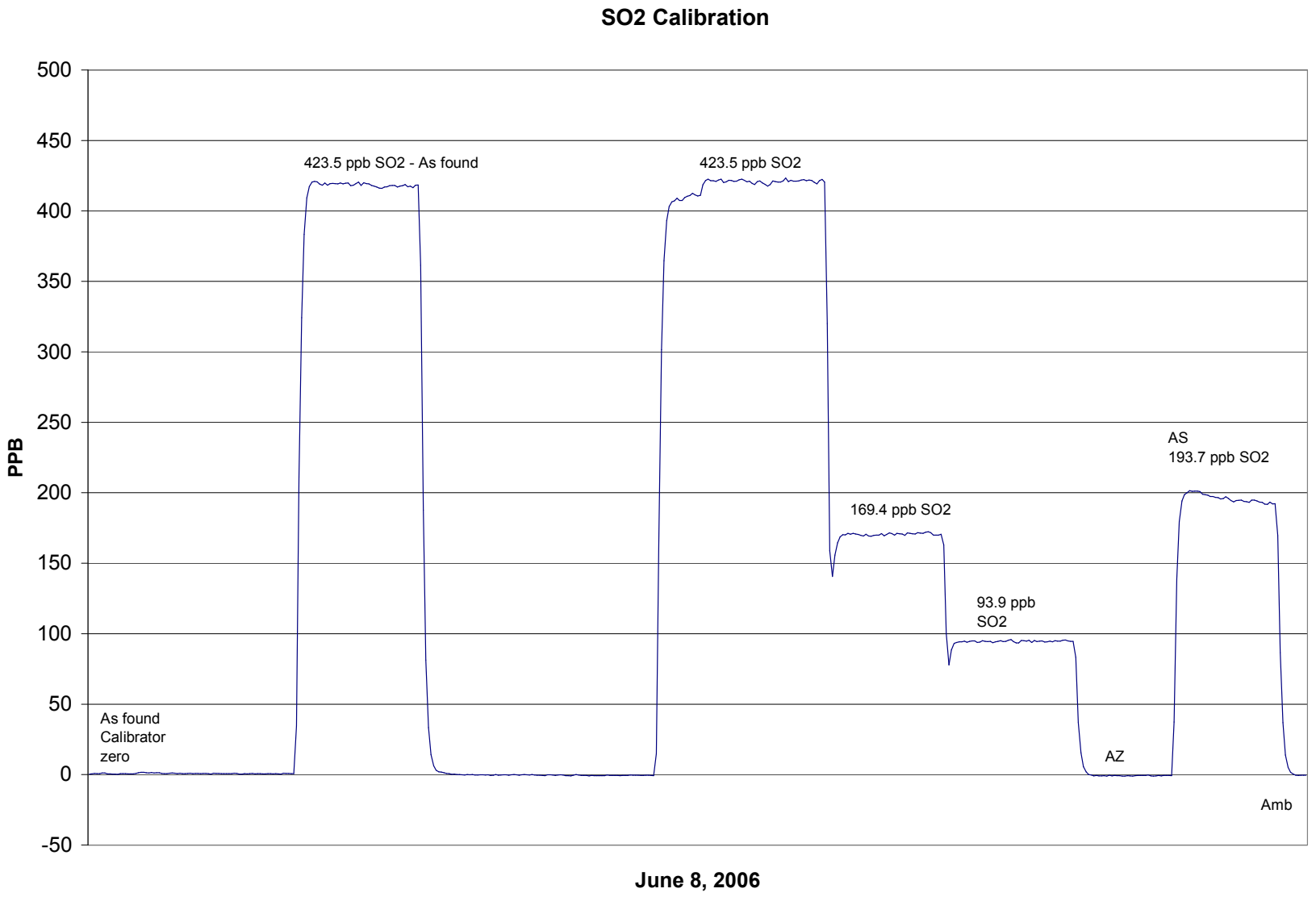
Station Information

Calibration Date	June 8, 2006	Previous Calibration	May 2, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:50	End Time (MST)	13:38
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	-0.6	N/A		
423.5	421.3	1.0052	Correlation Coefficient	0.999943
169.4	171.0	0.9908		
93.9	94.7	0.9908	Slope	1.005234
			Intercept	-0.822300




SO2 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
423.5 ppb SO2 - As found
423.5 ppb SO2
169.4 ppb SO2
93.9 ppb
SO2
AS
193.7 ppb SO2
As found
Calibrator
zero
AZ
Amb
June 8, 2006

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2006	Previous Calibration	May 11, 2006
Station Number	1	Station Location	Muskoseepi Park

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	10:15		End Time (MST)	16:57	
Barometric Pressure	0.924	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics 6103		Serial Number	2977	
NO Cal Gas Conc	50.3	ppm	Cal Gas Expiry Date	22-Nov-06	
NOx Cal Gas Conc	50.5	ppm	Cal Gas Serial #	BAL786	

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269

Parameter		NO2	NOx	NO
Before	Data Slope	0.995754	0.997146	0.996594
	Data Offset	0.053842	-1.126199	-1.113969
After	Data Slope	0.992628	0.992117	0.990479
	Data Offset	-0.140191	-0.323758	-0.394072
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model	Teco 42C	Analyzer serial #	508011073

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	9.1	ppb	8.5	mV
NOx background	9.4	ppb	8.7	mV
NO coefficient	0.939		0.857	
NOx coefficient	0.987		0.987	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	-2.4	Deg C	-2.5	Deg C
Converter Temp	318.0	Deg C	318.0	Deg C
Vacuum	213.8	mm Hg	193.5	mm Hg

Notes: Rebuilt vacuum pump.
Replaced mode valve.
Adjusted zero and span.

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date: June 5, 2006 Station Location: Muskoseepi Park

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4992	0.00	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A
1	4992	39.93	400.7	399.1	1.6	403.8	402.9	0.9	0.9925	0.9907
2	4992	19.91	200.6	199.8	0.8	203.6	203.2	0.5	0.9853	0.9834
3	4992	10.00	101.0	100.6	0.4	101.9	101.7	0.3	0.9911	0.9886
AFZ	4992	0.00	0.0	0.0	0.0	0.1	0.1	-0.1	0.0000	0.0000
AFS	4992	39.93	400.7	399.1	1.6	406.7	408.2	-1.6	0.9854	0.9777
							Average Correction Factor		0.9896	0.9876

As Found Concentrations: NO_X= 405.5 NO= 407.0 As Found Percent Change NO_X= 1.2% NO= 2.0%

GPT Calibration Data

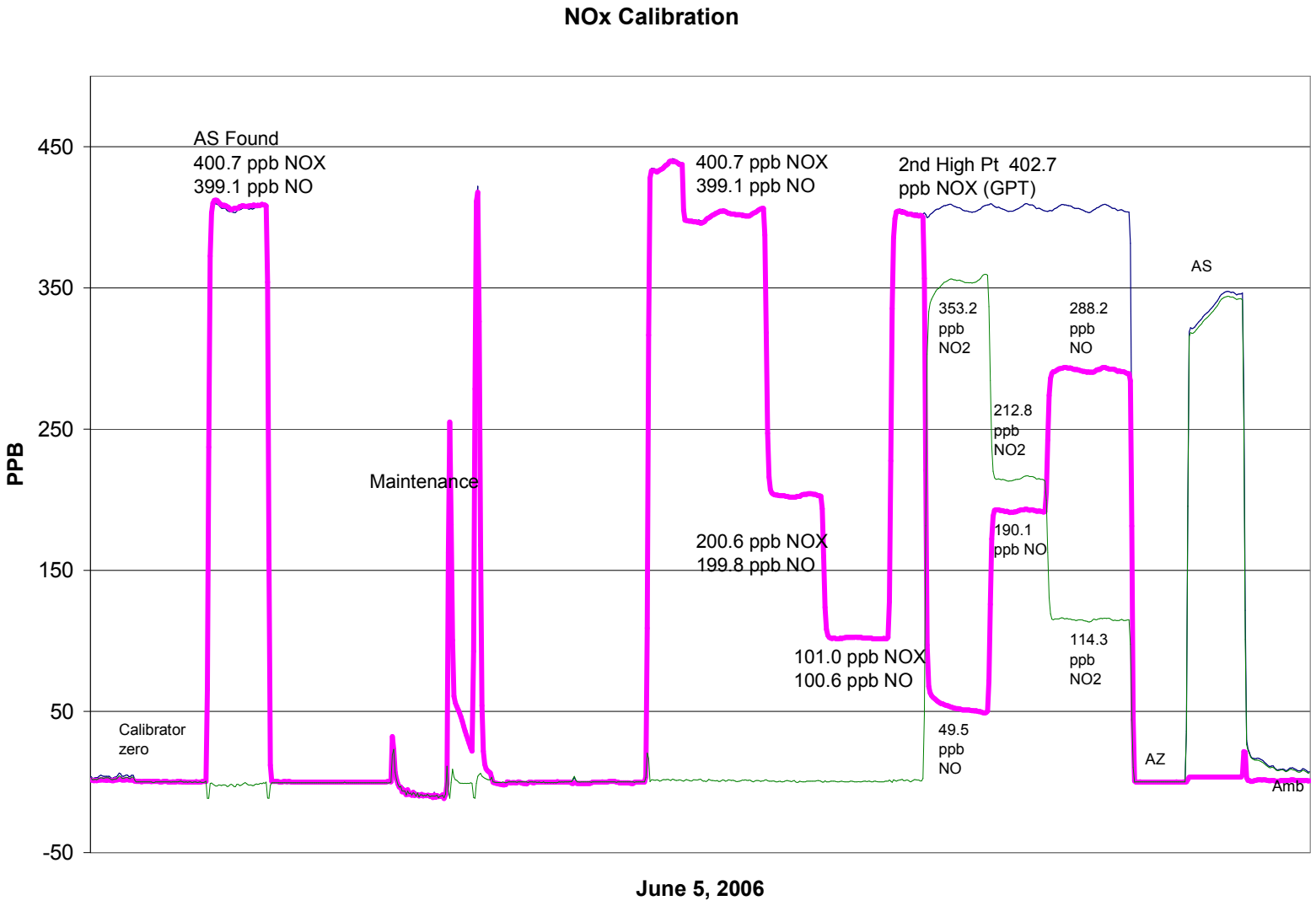
Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	402.7	398.3	4.3	403.8	402.6	1.2	0.9973	0.9895	N/A	N/A
350	402.7	49.5	353.2	405.3	50.3	355.4	0.9934	0.9827	0.9939	100.6%
200	402.7	190.1	212.5	407.5	192.4	215.5	0.9882	0.9884	0.9862	101.4%
100	402.7	288.2	114.5	405.8	291.3	114.9	0.9924	0.9891	0.9963	100.4%
					Average Correction Factor		0.9913	0.9867	0.9921	100.8%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	1.0	1.0	1.0	ppb	1.0	1.0	1.0	ppb
Auto span	318.3	315.8	2.3	ppb	343.4	340.3	3.2	ppb

Calibration Performed By: Dawn Ewan


NOx Calibration
PPB
450
350
250
150
50
-50
AS Found
400.7 ppb NOX
399.1 ppb NO
Maintenance
400.7 ppb NOX
399.1 ppb NO
200.6 ppb NOX
199.8 ppb NO
101.0 ppb NOX
100.6 ppb NO
2nd High Pt 402.7
ppb NOX (GPT)
353.2
ppb
NO2
212.8
ppb
NO2
190.1
ppb NO
49.5
ppb
NO
288.2
ppb
NO
114.3
ppb
NO2
AS
AZ
Amb
Calibrator
zero
June 5, 2006

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

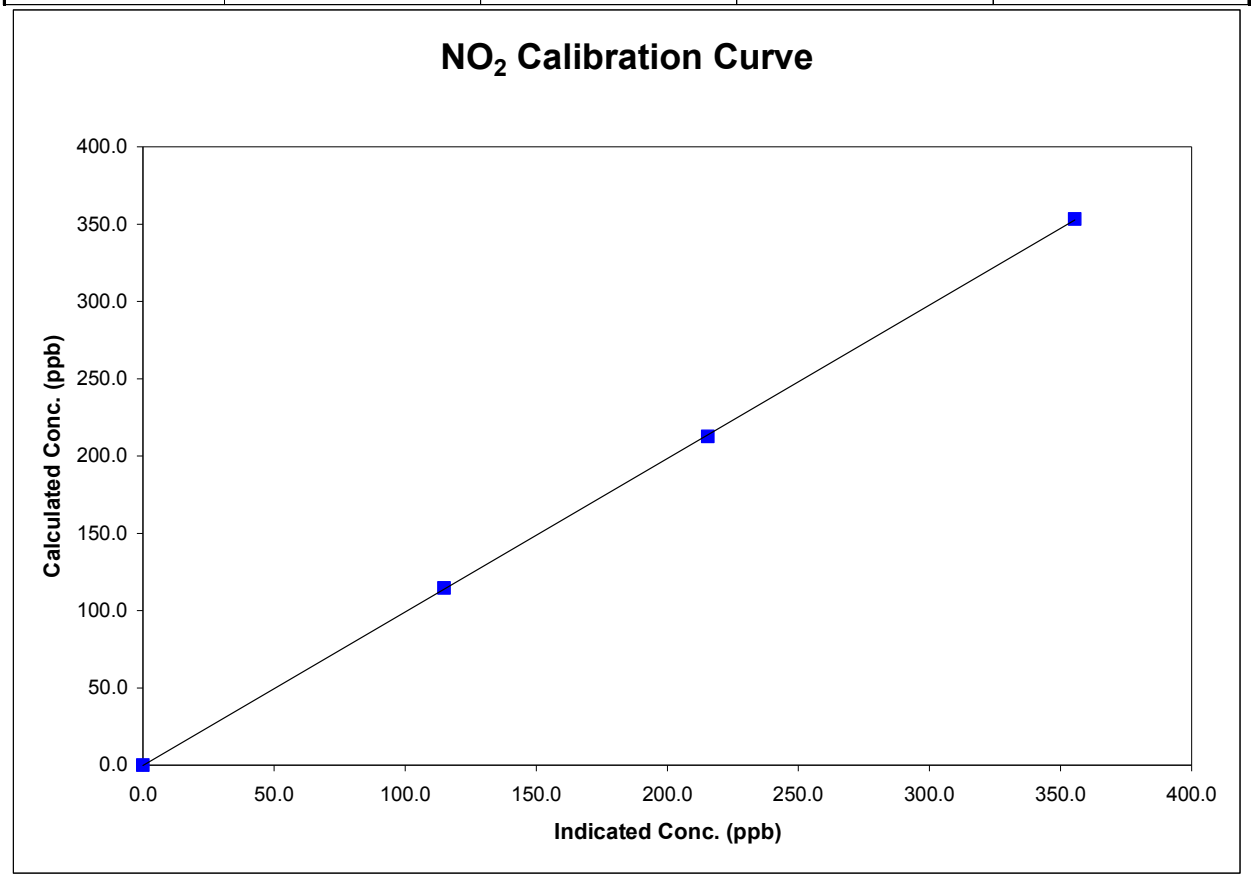
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2006	Previous Calibration	May 11, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:15	End Time (MST)	16:57
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	0.0000		
353.2	355.4	0.9939	Correlation Coefficient	0.999967
212.5	215.5	0.9862		
114.5	114.9	0.9963	Slope	0.992628
			Intercept	-0.140191



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

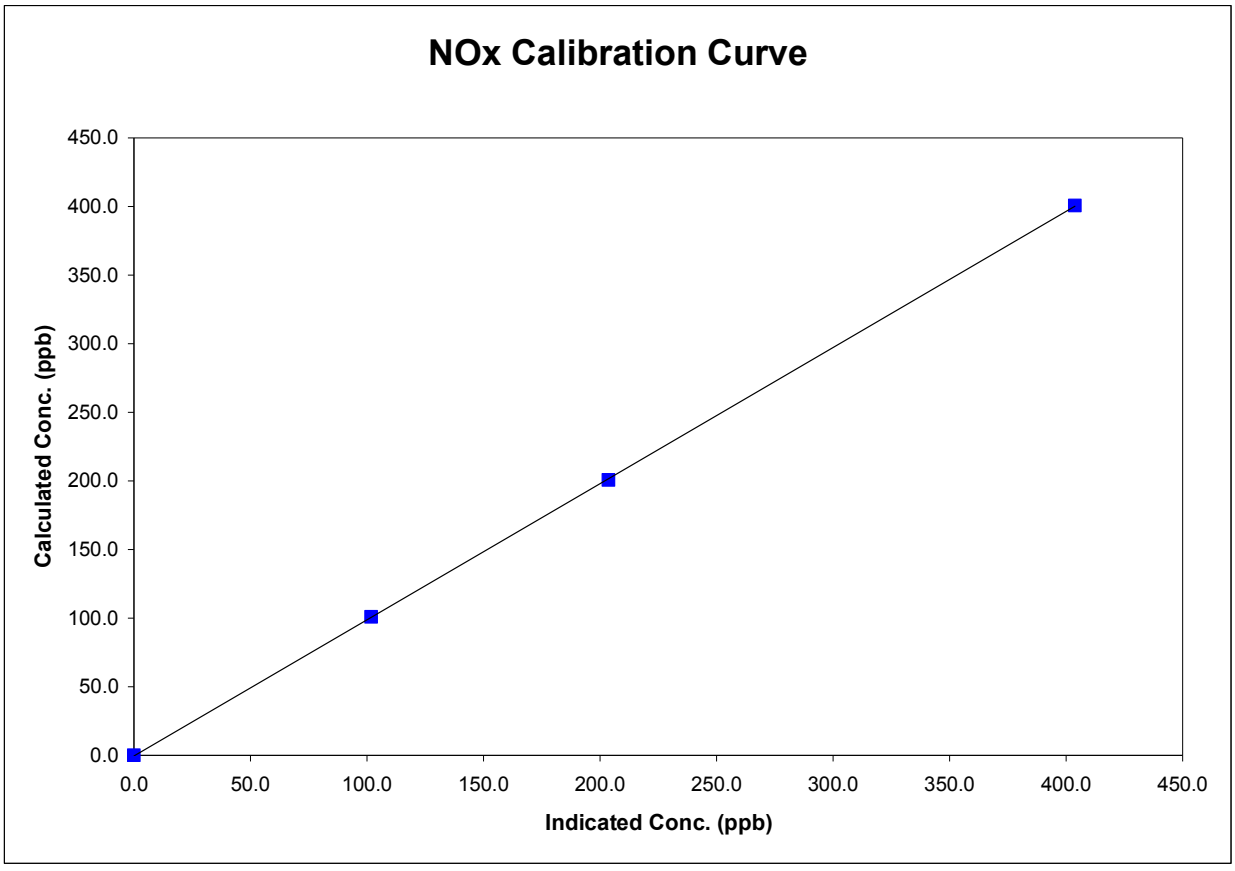
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2006	Previous Calibration	May 11, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:15	End Time (MST)	16:57
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	0.0000		
400.7	403.8	0.9925	Correlation Coefficient	0.999982
200.6	203.6	0.9853		
101.0	101.9	0.9911	Slope	0.992117
			Intercept	-0.323758



Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **NO**

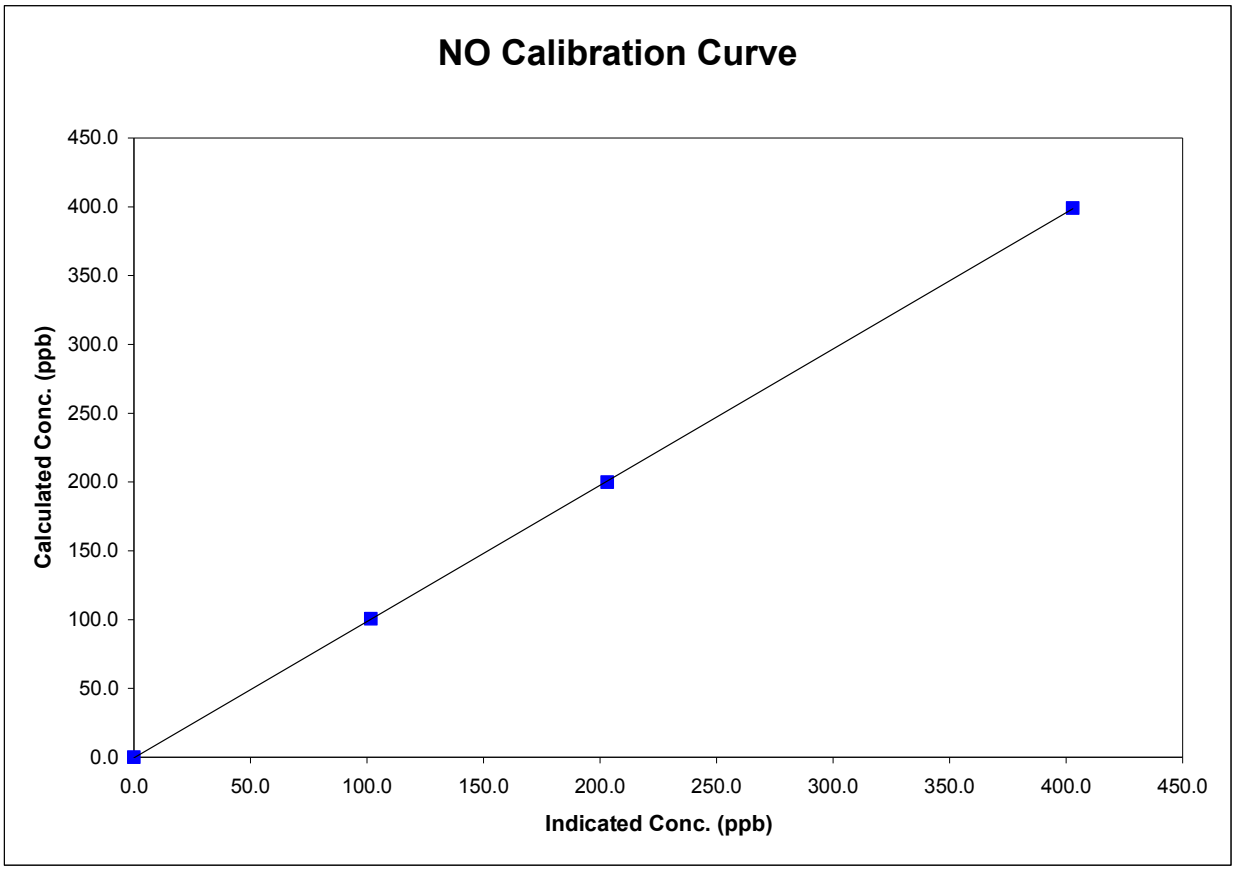
Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 5, 2006	Previous Calibration	May 11, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:15	End Time (MST)	16:57
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
399.1	402.9	0.9907	Correlation Coefficient	0.999983
199.8	203.2	0.9834		
100.6	101.7	0.9886	Slope	0.990479
			Intercept	-0.394072



Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 6, 2006	Previous Calibration	May 15, 2006
Station Number	1	Station Location	Muskoseepi Park

Reason: Routine | Install | Removal | Other:

Start Time (MST)	8:32	End Time (MST)	12:04
Barometric Pressure	0.932 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2977
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	0.988367	Calculated slope	0.997075
Calculated intercept	3.268527	Calculated intercept	3.492454
Analyzer make	API Model 400	Analyzer serial #	383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.7	ppb	-0.6	ppb
slope	1.065		1.037	
Lamp measure	4004	mV	3921	mV
Lamp Reference	4006	mV	3921	mV
Pressure	27.5	inches Hg	27.8	inches Hg
Sample Flow	696	ccm	698	ccm
ANA Lamp temp	52	Deg C	52	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.0	0.4	N/A
4992	0.00	353.2	353.8	0.9982
4992	0.00	212.8	206.5	1.0307
4992	0.00	114.3	107.6	1.0621
4992	0.00	0.0	1.2	As found zero
4992	0.00	353.2	368.0	As found span
			Average Correction Factor	1.0304

Calculated value of As Found Response: 365.8 ppm Percent Change of As Found: 3.6%

	before calibration		after calibration	
Auto zero	4.2	ppb	4.2	ppb
Auto span	222.9	ppb	214.0	ppb

Notes: Ajusted span and zero.

Calibration Performed By: Dawn Ewan

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

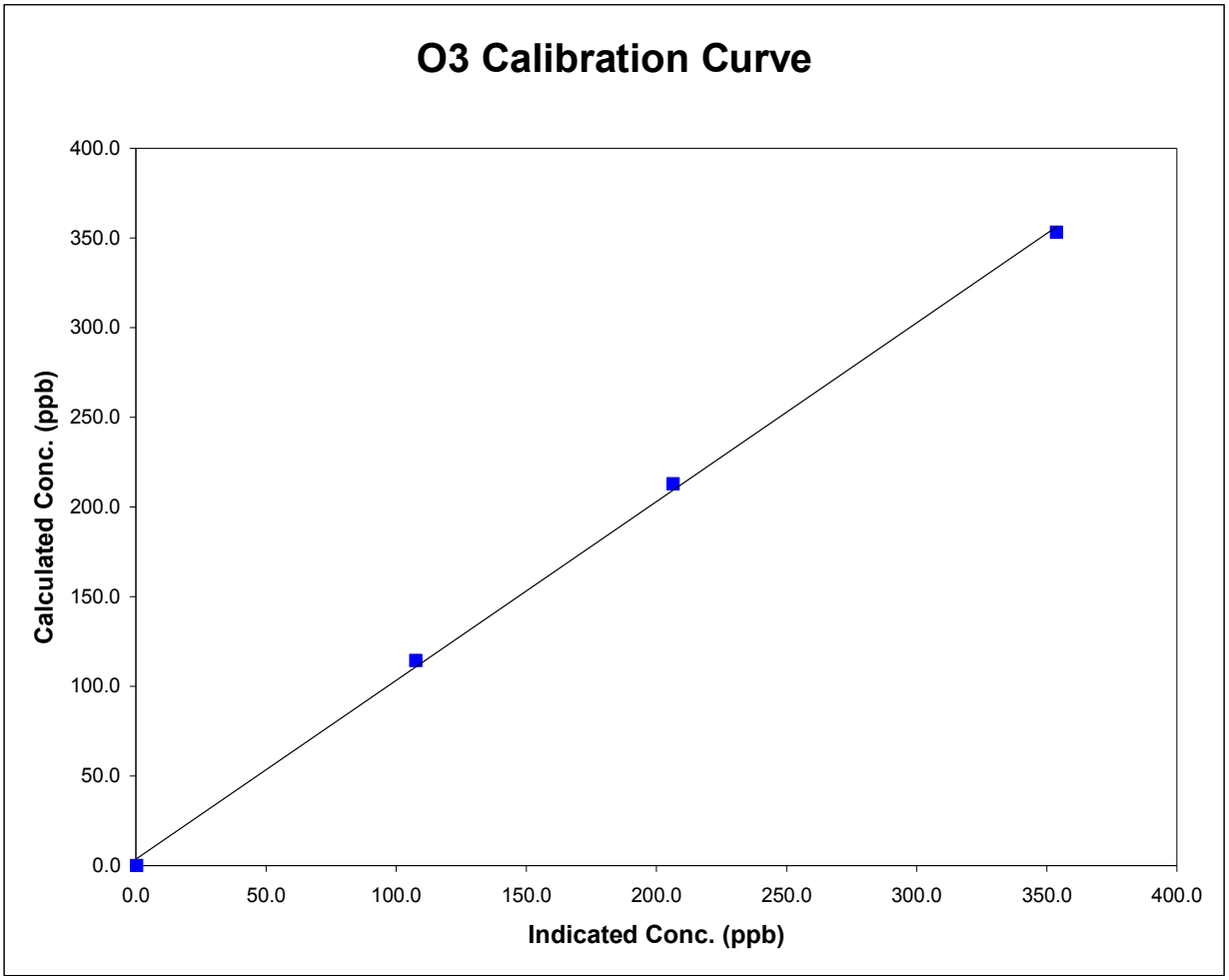
FOCUS AIR QUALITY MONITORING

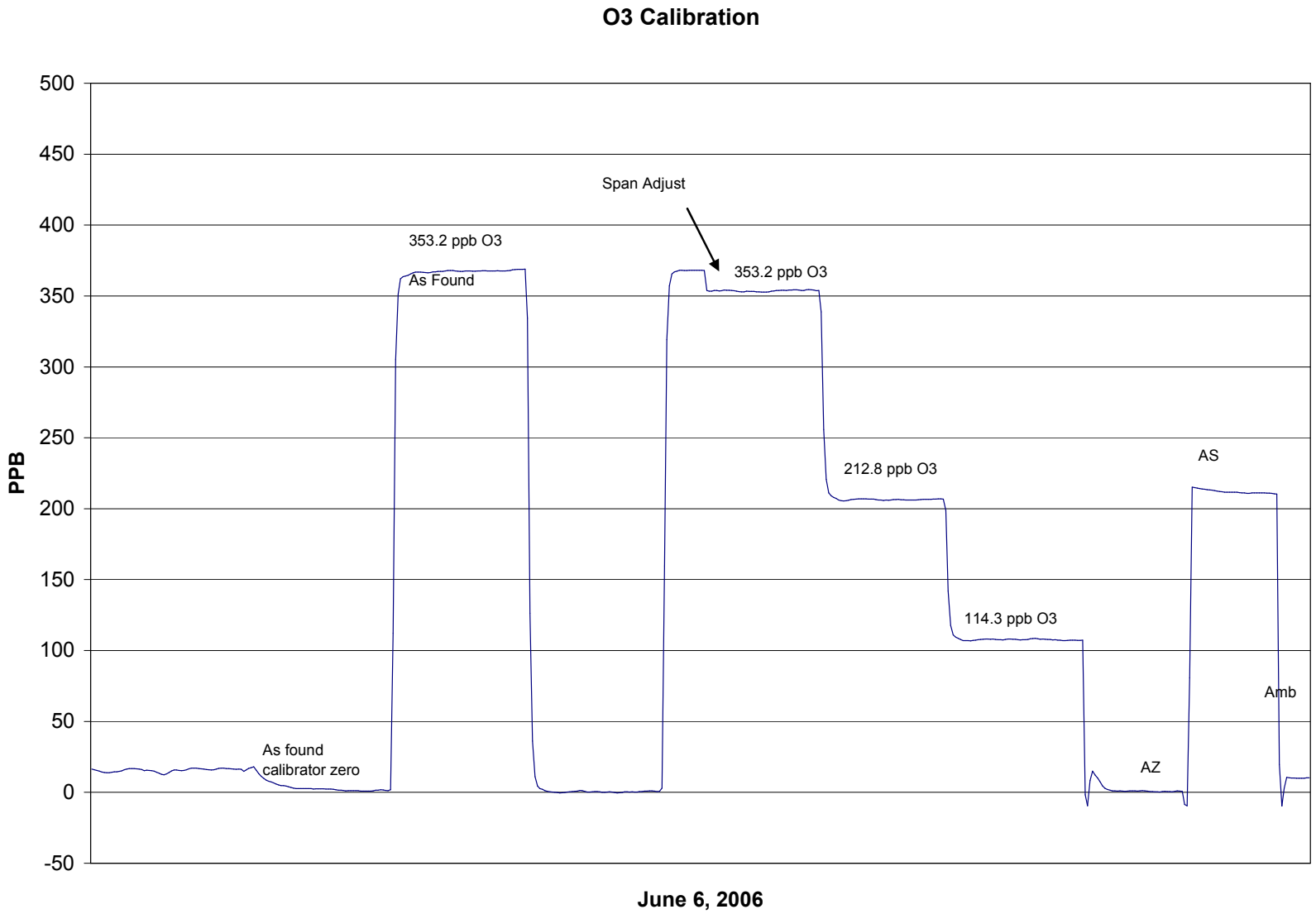
Station Information

Calibration Date	June 6, 2006	Previous Calibration	May 15, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	8:32	End Time (MST)	12:04
Analyzer make/model	API Model 400	Analyzer serial #	383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	NA		
353.2	353.8	0.9982	Correlation Coefficient	0.999276
212.8	206.5	1.0307		
114.3	107.6	1.0621	Slope	0.997075
			Intercept	3.492454




O3 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
Span Adjust
353.2 ppb O3
As Found
353.2 ppb O3
212.8 ppb O3
114.3 ppb O3
AS
Amb
AZ
As found
calibrator zero
June 6, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **CO**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 8, 2006	Previous Calibration	May 2, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine ☒	Install ☐	Removal ☐	Other: ☐
Start Time (MST)	10:50	End Time (MST)	13:19
Barometric Pressure	0.929 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2977
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.007669	Calculated slope	1.004370
Calculated intercept	-0.056727	Calculated intercept	-0.088779
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
CO span setting	1.042		1.042	
CO zero setting	5.687		5.911	
Sample pressure	690.4	mm Hg	684.2	mm Hg
Sample Flow	1.075	LPM	1.072	LPM

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)
4994	0.00	0.00	0.02	N/A
4994	39.94	23.80	23.79	1.0004
4994	19.91	11.91	11.87	1.0037
4994	9.50	5.70	5.90	0.9657
4994	0.00	0.00	0.18	As Found Zero
4994	39.94	23.80	24.09	As Found Span
			Average Correction Factor	0.9899

Calculated value of As Found Response: 24.034 ppm Percent Change of As Found: -1.0%

	before calibration		after calibration	
Auto zero	-0.08	ppm	-0.01	ppm
Auto span	20.73	ppm	20.73	ppm

Notes:

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **CO**

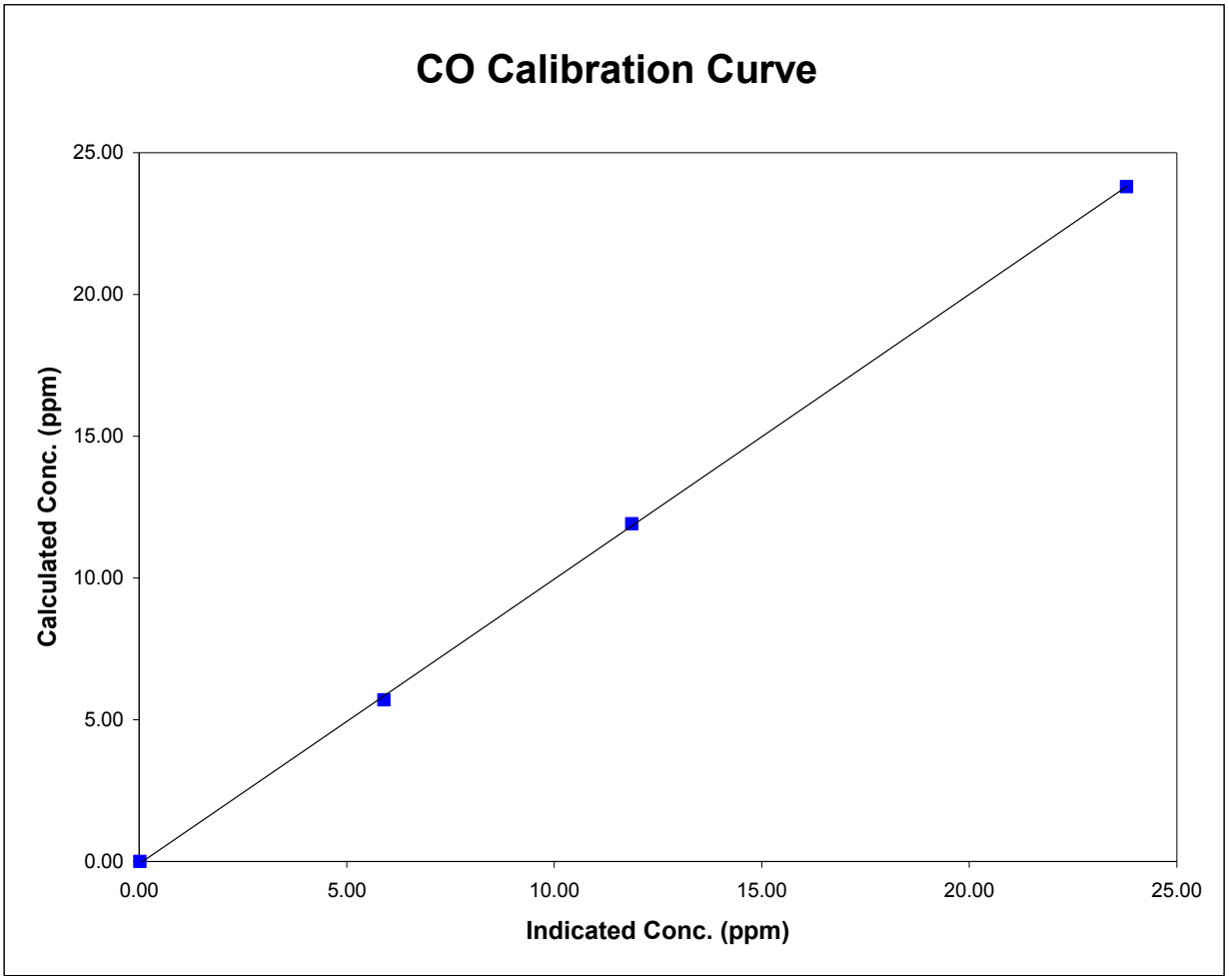
Air Monitoring Network **PASZA**

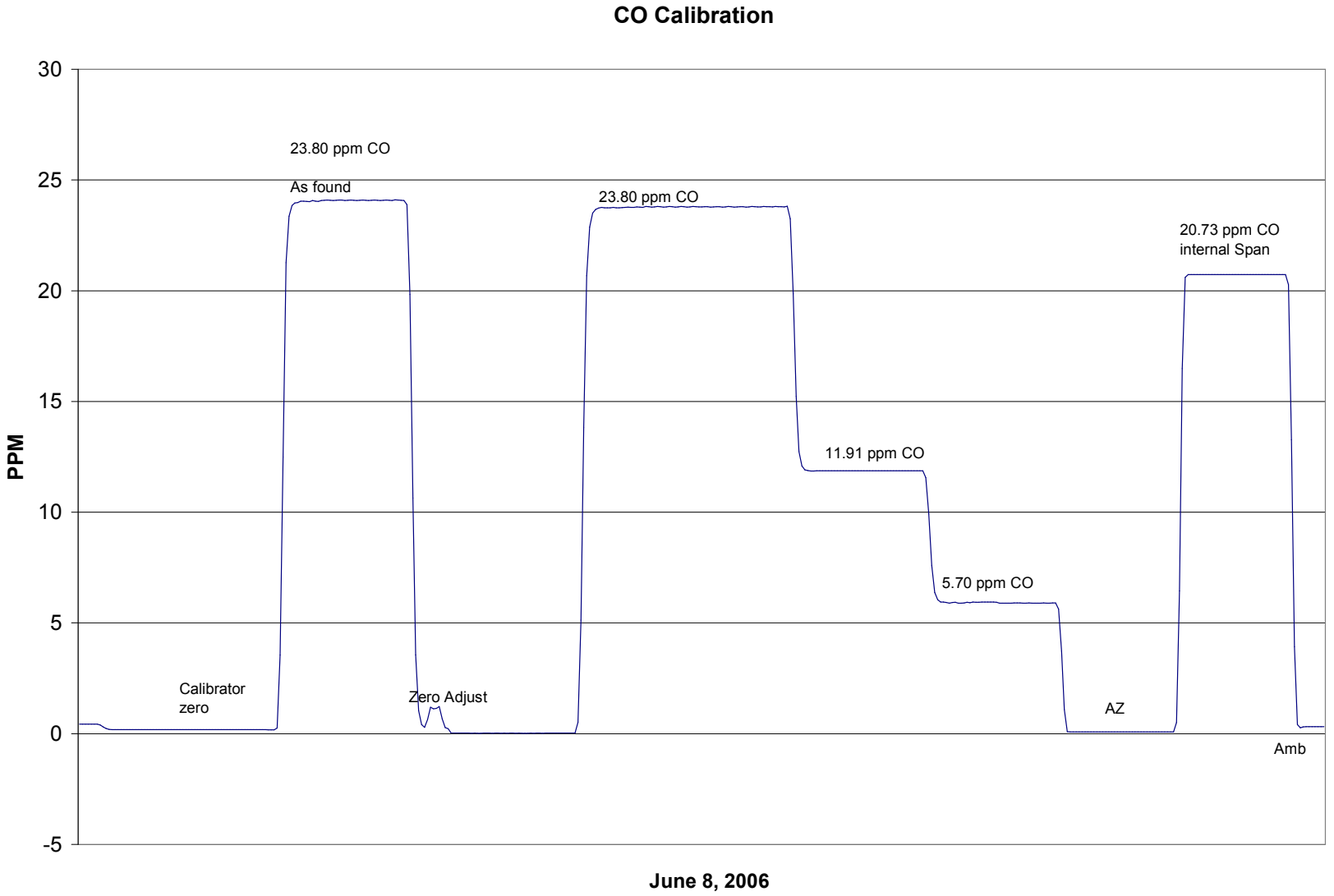
Station Information

Calibration Date	June 8, 2006	Previous Calibration	May 2, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:50	End Time (MST)	13:19
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.024	N/A		
23.802	23.793	1.0004	Correlation Coefficient	0.999903
11.913	11.869	1.0037		
5.696	5.898	0.9657	Slope	1.004370
			Intercept	-0.088779




CO Calibration
30
25
20
15
10
5
0
-5
PPM
23.80 ppm CO
As found
23.80 ppm CO
20.73 ppm CO
internal Span
11.91 ppm CO
5.70 ppm CO
Calibrator
zero
Zero Adjust
AZ
Amb
June 8, 2006

Calibration Report

Parameter **THC**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 6, 2006	Previous Calibration	May 23, 2006
Station Number	1	Station Location	Muskoseepi Park

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

Start Time (MST)	11:25	End Time (MST)	15:02
Barometric Pressure	0.921 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2977
Cal Gas Concentration	700 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1522.25 ppm	Cal Gas Cylinder #	ALM 030358
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.009974	Calculated slope	0.995336
Calculated intercept	-0.136352	Calculated intercept	0.115112

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

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.1	psi	6.1	psi
THC span counts	6943	capture	6968	capture
THC zero counts	1394	capture	1414	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)
4992	0.00	0.00	-0.05	N/A
4992	64.92	19.54	19.56	0.9989
4992	34.95	10.58	10.44	1.0133
4992	9.92	3.02	2.88	1.0500
4992	0.00	0.00	0.09	As Found Zero
4992	64.92	19.54	19.62	As Found Span
			Average Correction Factor	1.0207

Calculated value of As Found Response: 19.582 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	-0.02	ppm	0.07	ppm
Auto span	22.33	ppm	22.89	ppm

Notes:

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **THC**

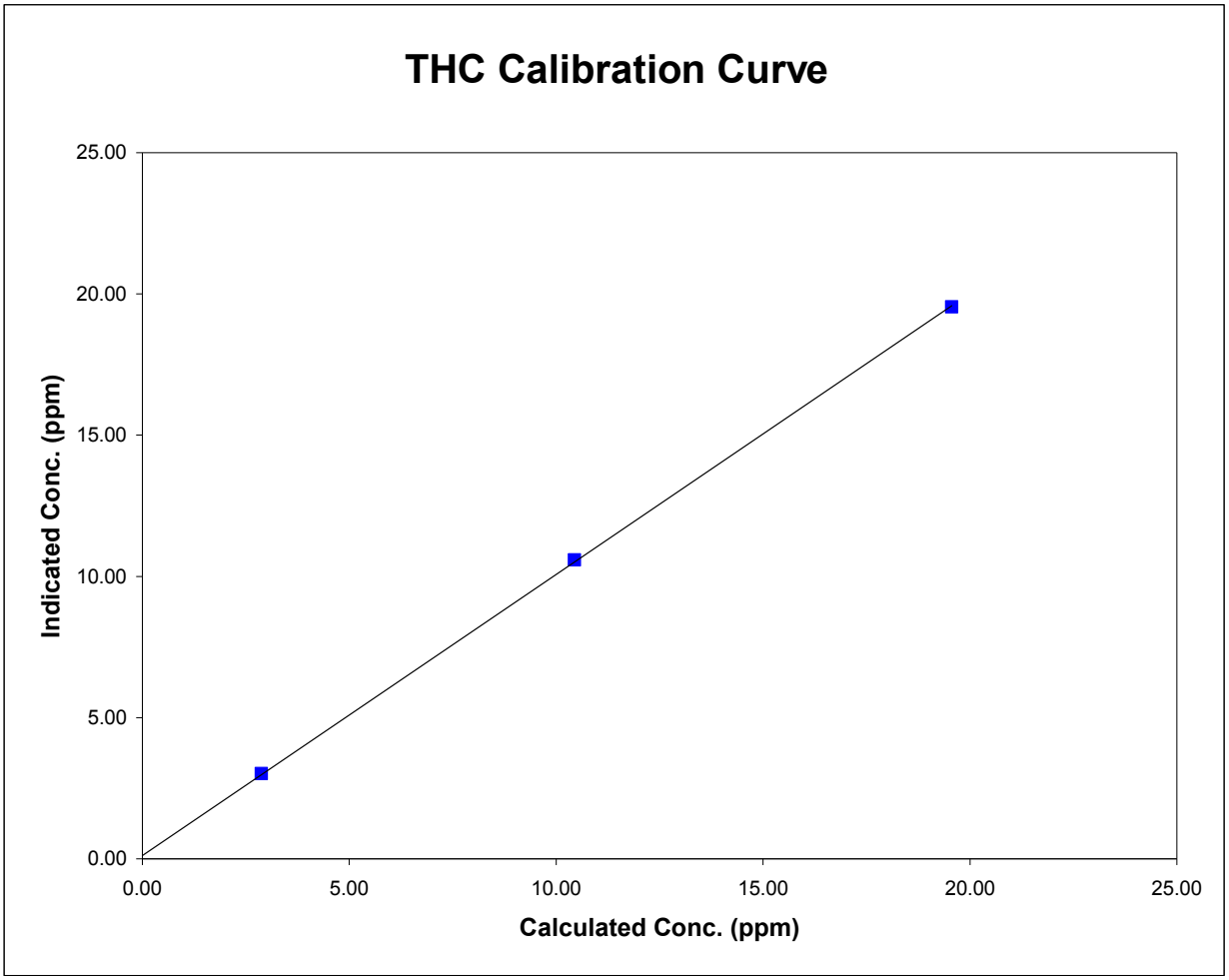
Air Monitoring Network **PASZA**

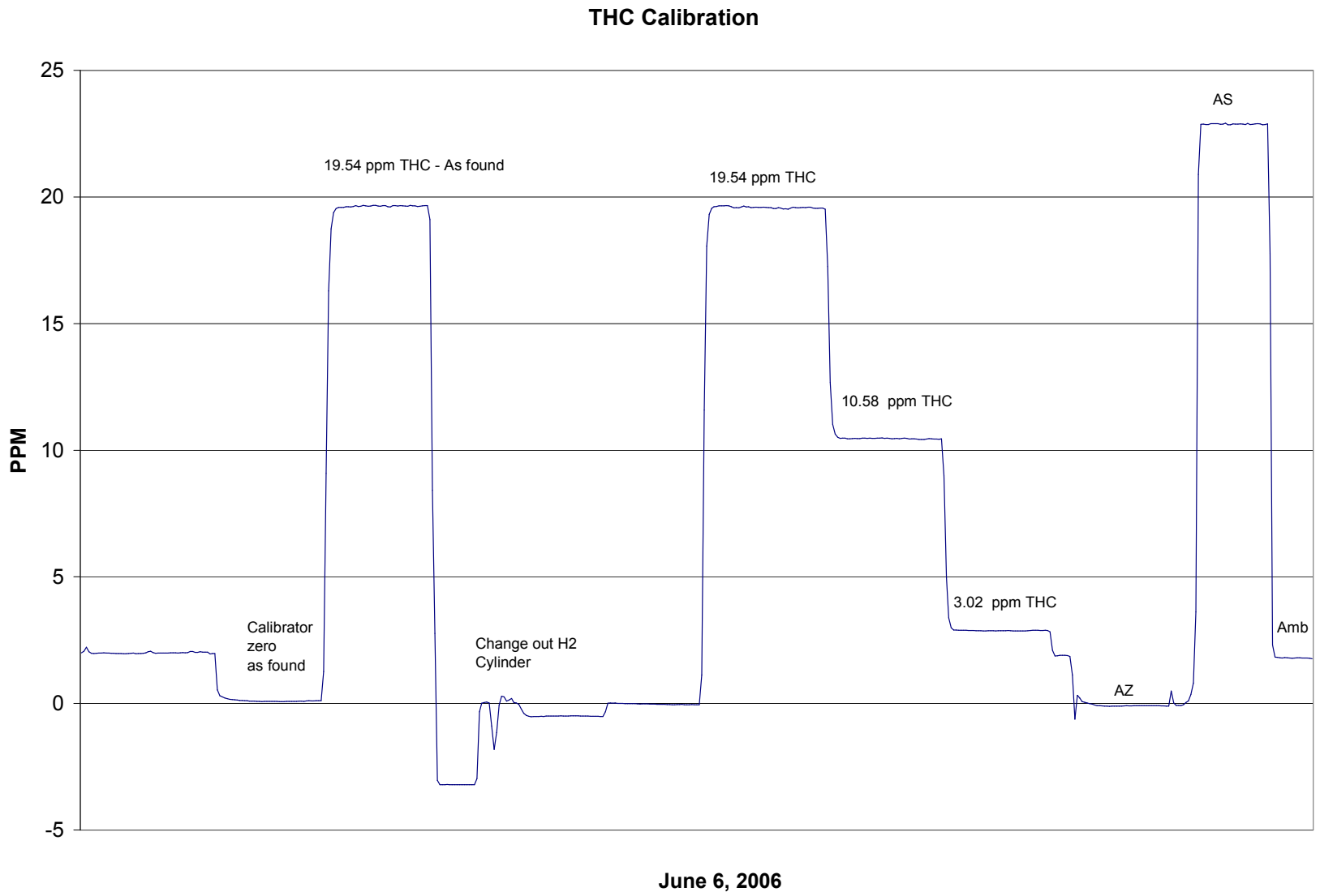
Station Information

Calibration Date	June 6, 2006	Previous Calibration	May 23, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	11:25	End Time (MST)	15:02
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	-0.046	N/A		
19.542	19.563	0.9989	Correlation Coefficient	0.999939
10.583	10.445	1.0133		
3.019	2.875	1.0500	Slope	0.995336
			Intercept	0.115112




THC Calibration
25
20
15
10
5
0
-5
PPM
19.54 ppm THC - As found
19.54 ppm THC
10.58 ppm THC
3.02 ppm THC
AS
Amb
AZ
Calibrator
zero
as found
Change out H2
Cylinder
June 6, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 8, 2006	Previous Calibration	May 2, 2006
Station Number	1	Station Location	Muskoseepi Park
Reason:	Routine: Install	Removal	Other:

Start Time (MST)	10:50	End Time (MST)	13:38
Barometric Pressure	27.8 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	12/10/2005
Correction factor	0.945000	Perm-tube Cert #	04-19367
DACS make	Focus AP1000	DACS serial No.	45266
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	1.009239	Calculated slope	0.983103
Calculated intercept	0.362194	Calculated intercept	-0.017289

Analyzer make: TEI Model 43C — Analyzer serial #: 31990000000491

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	27.3	ppb	25.7	ppb
coefficient	1.218		1.173	
Lamp Voltage	891	volts	891	volts
Chamber Temp	44.7	Deg C	44.6	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	635.5	mm Hg	663.2	mm Hg
Sample Flow	768	ccm	504	ccm
Lamp Intensity	39,400	mv	39,450	mv

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	1890.0	0.0	0.2	N/A
2000	1890.0	68.9	70.1	0.9819
5000	4725.0	27.5	28.0	0.9840
9025	8528.6	15.3	15.3	0.9963
zero	1890.0	0.0	0.0	As Found Zero
2000	1890.0	68.9	71.3	As Found Span
			Average Correction Factor	0.9874

Calculated value of As Found Response: 72.31 ppm Percent Change of As Found: -5.0%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.0	ppm
Auto span	71.0	ppm	47.4	ppm

Notes: Increased flow to accommodate new perm tube.

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

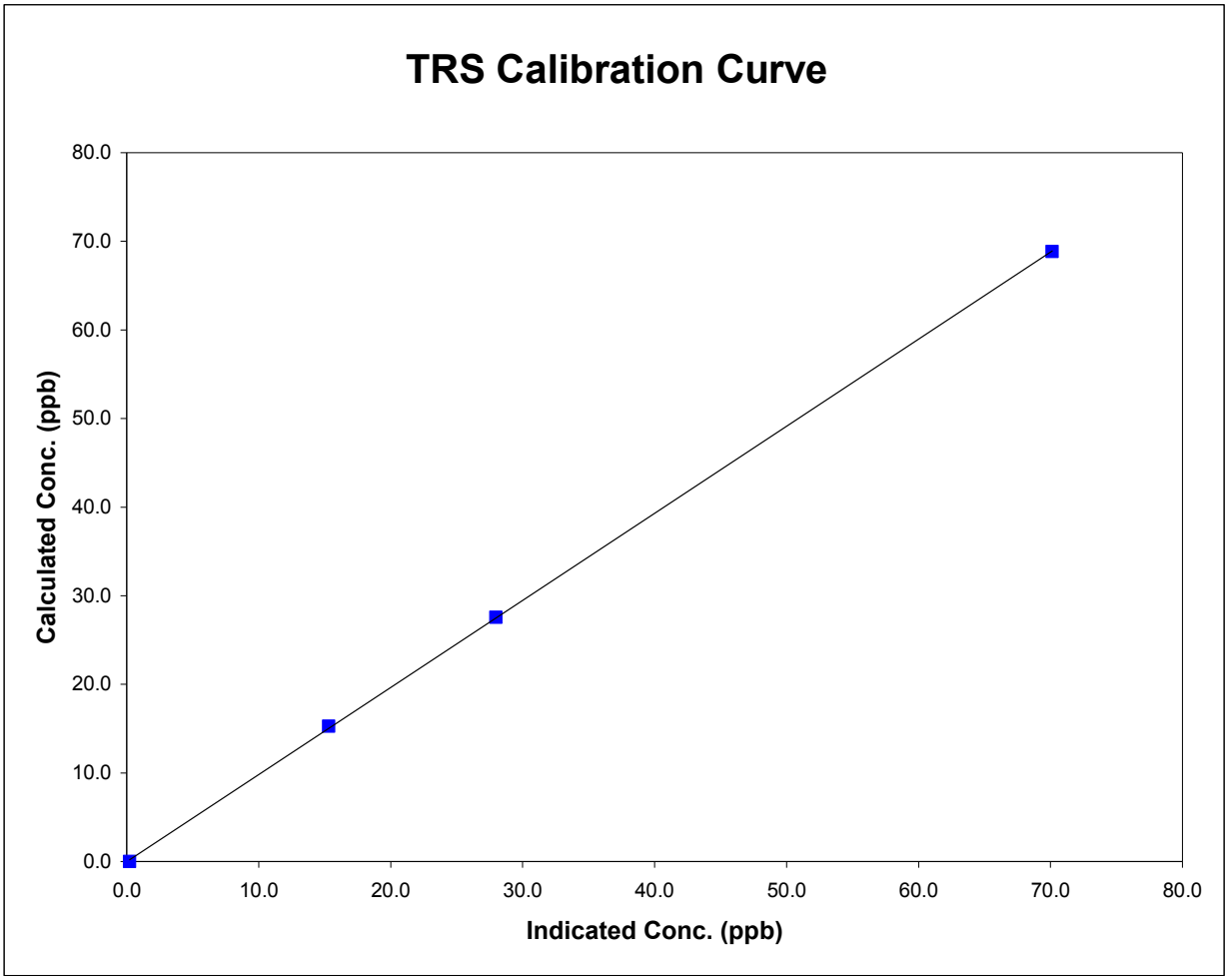
Air Monitoring Network **PASZA**

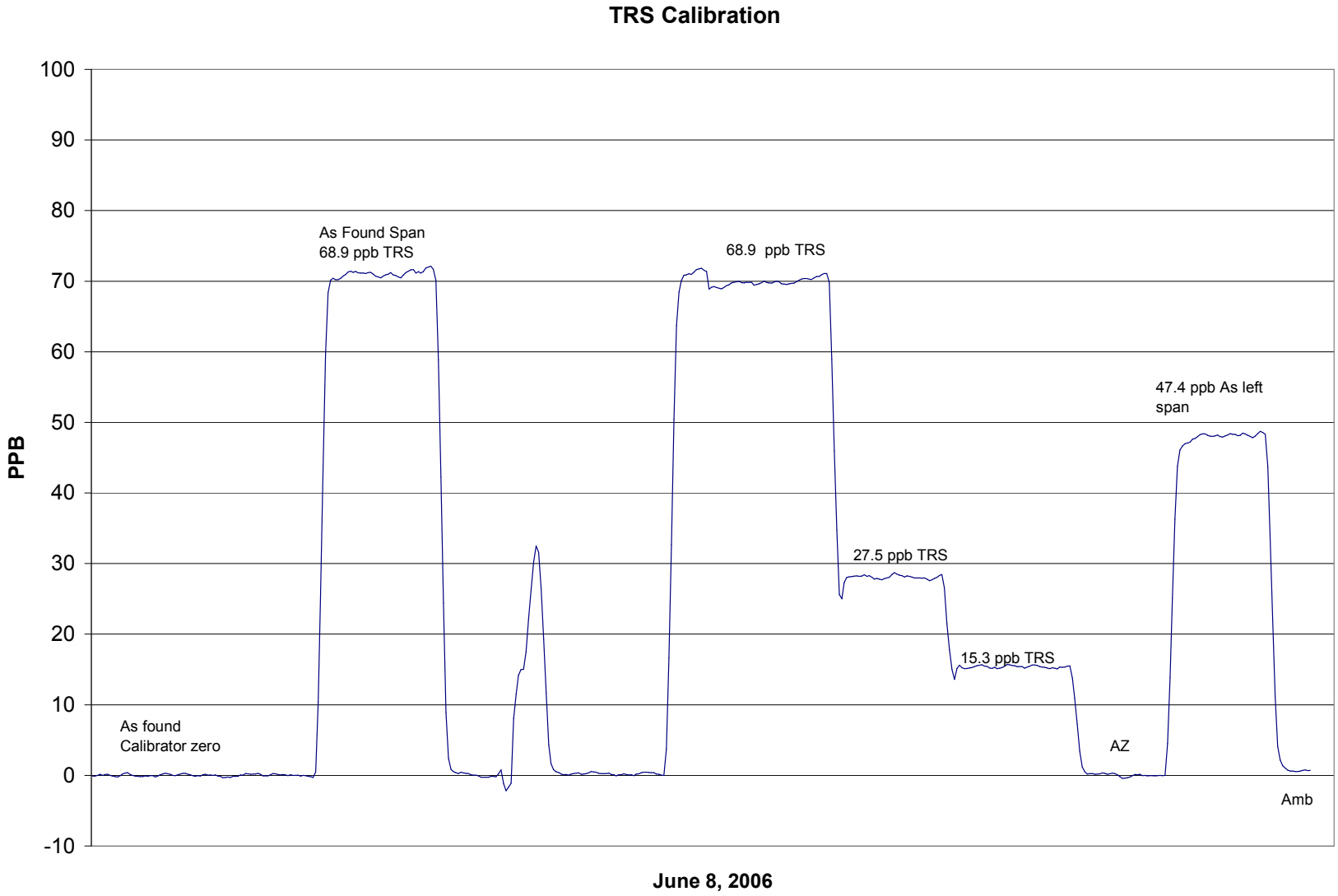
Station Information

Calibration Date	June 8, 2006	Previous Calibration	May 2, 2006
Station Number	1	Station Location	Muskoseepi Park
Start Time (MST)	10:50	End Time (MST)	13:38
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
68.9	70.1	0.9819	Correlation Coefficient	0.999964
27.5	28.0	0.9840		
15.3	15.3	0.9963	Slope	0.983103
			Intercept	-0.017289




TRS Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
As Found Span
68.9 ppb TRS
68.9 ppb TRS
47.4 ppb As left
span
27.5 ppb TRS
15.3 ppb TRS
As found
Calibrator zero
AZ
Amb
June 8, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **PM2.5**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 8, 2006	Previous Calibration	May 23, 2006
Station Number	1	Station Location	Muskoseepi Park

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

Start Time (MST)	11:00	End Time (MST)	13:00
Barometric Pressure	0.929 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	2.990	SLPM
Aux Flow Set Point	13.67	SLPM	13.68	SLPM
Filter Load	20	%	21	%
Ko Factor	13020		13020	
Temperature	14.90	Deg C	14.9	Deg C
Pressure	0.929	ATM	0.929	ATM

Calibration Data

Parameter	Set Point	As Found	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.00
zero flow - auxillary	0.0	0.02		0.02
flow recovery - main	45 - 60 Seconds	27.00	45 - 60 Seconds	27.00
flow recovery - aux	46 - 60 Seconds	53.00	46 - 60 Seconds	53.00
Temperature	measured	14.6	+/- 1.0 Deg C	14.6
Pressure	measured	0.924	+/- 1.5% Δ_{ATM}	0.924
Total Flow	16.67 SLPM	16.67		16.67
Main Flow	13.67 SLPM	14.19	+/- 1.0 SLPM	14.19
Auxillary Flow	3.0 SLPM	3.016	+/- 0.2 SLPM	3.016
Leak Check - main	0.0	0.07	<0.15 SLPM	0.07
Leak Check - aux	0.0	0.01	<0.15 SLPM	0.01
Ko Factor (w/o filter)	measured	337.764	filter weight (g)	0.11112
Ko Factor (w/ filter)	measured	239.522	% Ko difference	1.51%

Notes: Cleaned head.
Used old filter.

Calibration Performed By: Dawn Ewan

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 1, 2006	Previous Calibration	May 18, 2006
Station Number	2	Station Location	Evergreen Park

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

Start Time (MST)	10:50	End Time (MST)	14:50
Barometric Pressure	27.6 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,097 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.939561	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	0.992547	Calculated slope	0.982706
Calculated intercept	-2.272391	Calculated intercept	1.756185

Analyzer make	TECO	Analyzer serial # 43A-25573-221

	before		after	
Concentration range	1000	ppb	1000	ppb
Sample Flow	450	ccm	450	ccm
Lamp Voltage	790	mv	780	mv
Vacuum	22.2	" Hg	22	" Hg
Span Pot	524		748	Deg C
Zero Pot	83		102	Deg C
				Deg C

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	1879.1	0.0	-1.9	N/A
2000	1879.1	426.0	431.3	0.9876
4980	4679.0	171.1	173.7	0.9849
9500	8925.8	89.7	88.6	1.0125
zero	1879.1		1.3	As Found Zero
2000	1879.1	426.0	396.4	As Found Span
			Average Correction Factor	0.9950

Calculated value of As Found Response: 389.818 ppm Percent Change of As Found: 8.5%

	before calibration		after calibration	
Auto zero	-7.1	ppm	-1.5	ppm
Auto span	213.6	ppm	156.8	ppm

Notes:

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **SO2**

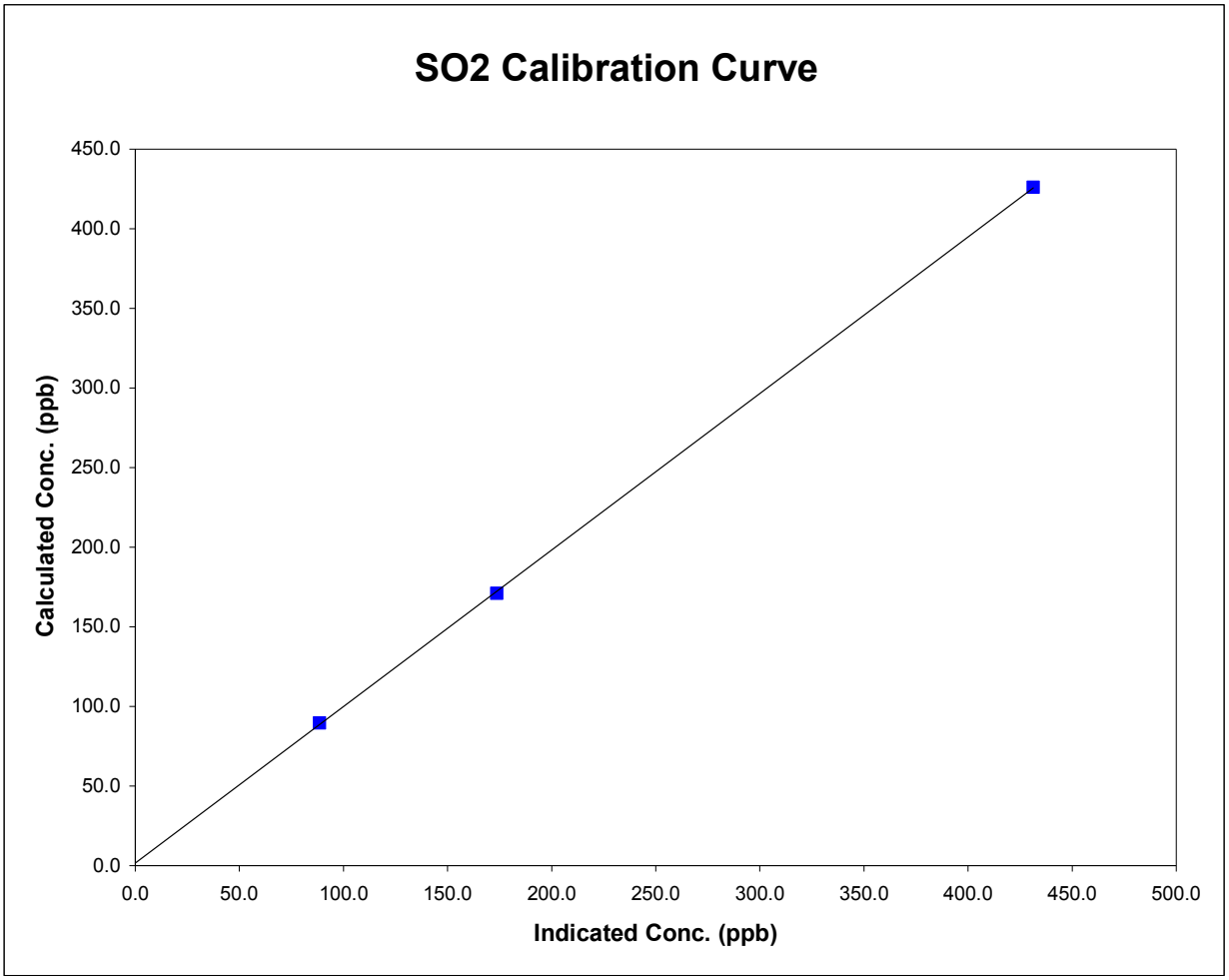
Air Monitoring Network **PASZA**

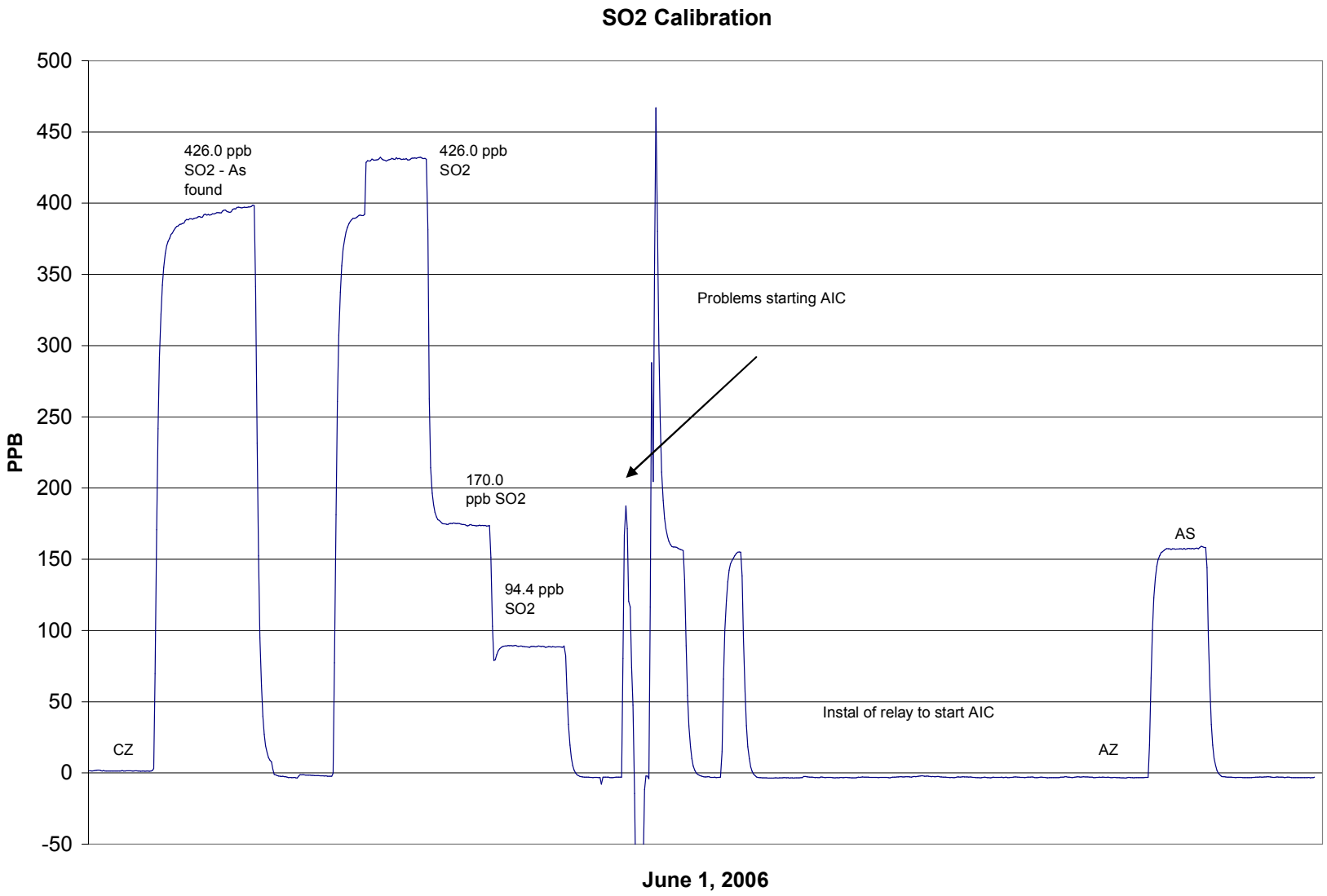
Station Information

Calibration Date	June 1, 2006	Previous Calibration	May 18, 2006
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:50	End Time (MST)	14:50
Analyzer make/model	TECO	Analyzer serial #	43A-25573-221

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.9	N/A		
426.0	431.3	0.9876	Correlation Coefficient	0.999972
171.1	173.7	0.9849		
89.7	88.6	1.0125	Slope	0.982706
			Intercept	1.756185




SO2 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
426.0 ppb SO2 - As found
426.0 ppb SO2
Problems starting AIC
170.0 ppb SO2
94.4 ppb SO2
AS
Instal of relay to start AIC
CZ
AZ
June 1, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 1, 2006	Previous Calibration	May 8, 2006
Station Number	2	Station Location	Evergreen Park

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

Start Time (MST)	10:50	End Time (MST)	14:24
Barometric Pressure	27.71 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.941941	Perm-tube Cert #	04-19367
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	1.001320	Calculated slope	1.004054
Calculated intercept	-0.321504	Calculated intercept	-0.098645

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	13.6	ppb	13.9	ppb
coefficient	1.235		1.295	
Lamp Voltage	759	volts	756	volts
Chamber Temp	44.2	Deg C	44.2	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	646	mm Hg	637.8	mm Hg
Sample Flow	474	ccm	471	ccm
Lamp Intesity	32,200	mv	32,800	mv

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	1883.9	0.0	0.1	N/A
2000	1883.9	69.1	68.9	1.0025
4980	4690.9	27.7	27.7	1.0003
9500	8948.4	14.5	14.5	1.0010
zero	1883.9	0.0	-0.3	As Found Zero
2000	1883.9	69.1	64.9	As Found Span
			Average Correction Factor	1.0013

Calculated value of As Found Response: 64.98 ppm Percent Change of As Found: 5.9%

	before calibration		after calibration	
Auto zero	0.1	ppm	-0.3	ppm
Auto span	86.2	ppm	81.9	ppm

Notes:

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

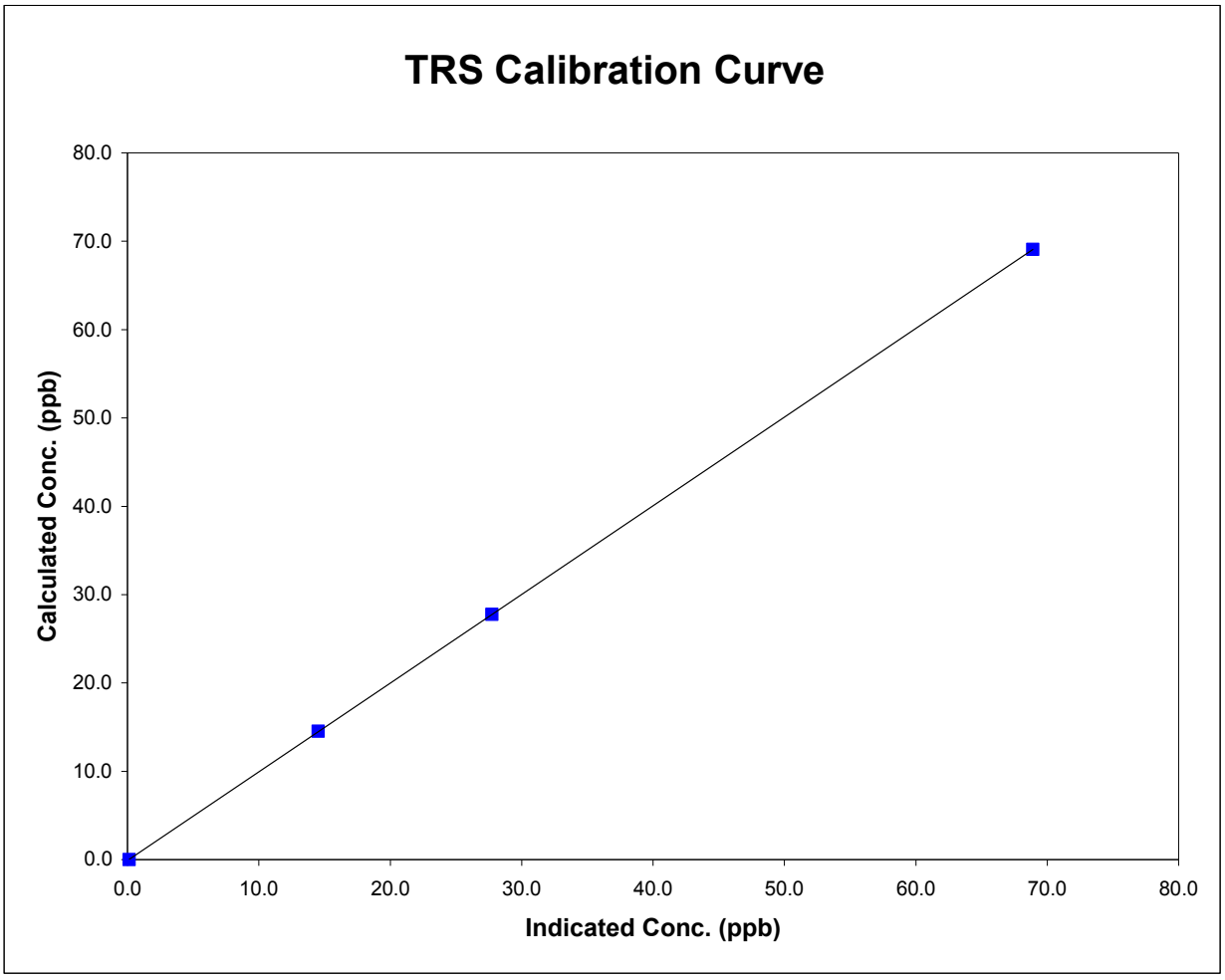
Air Monitoring Network **PASZA**

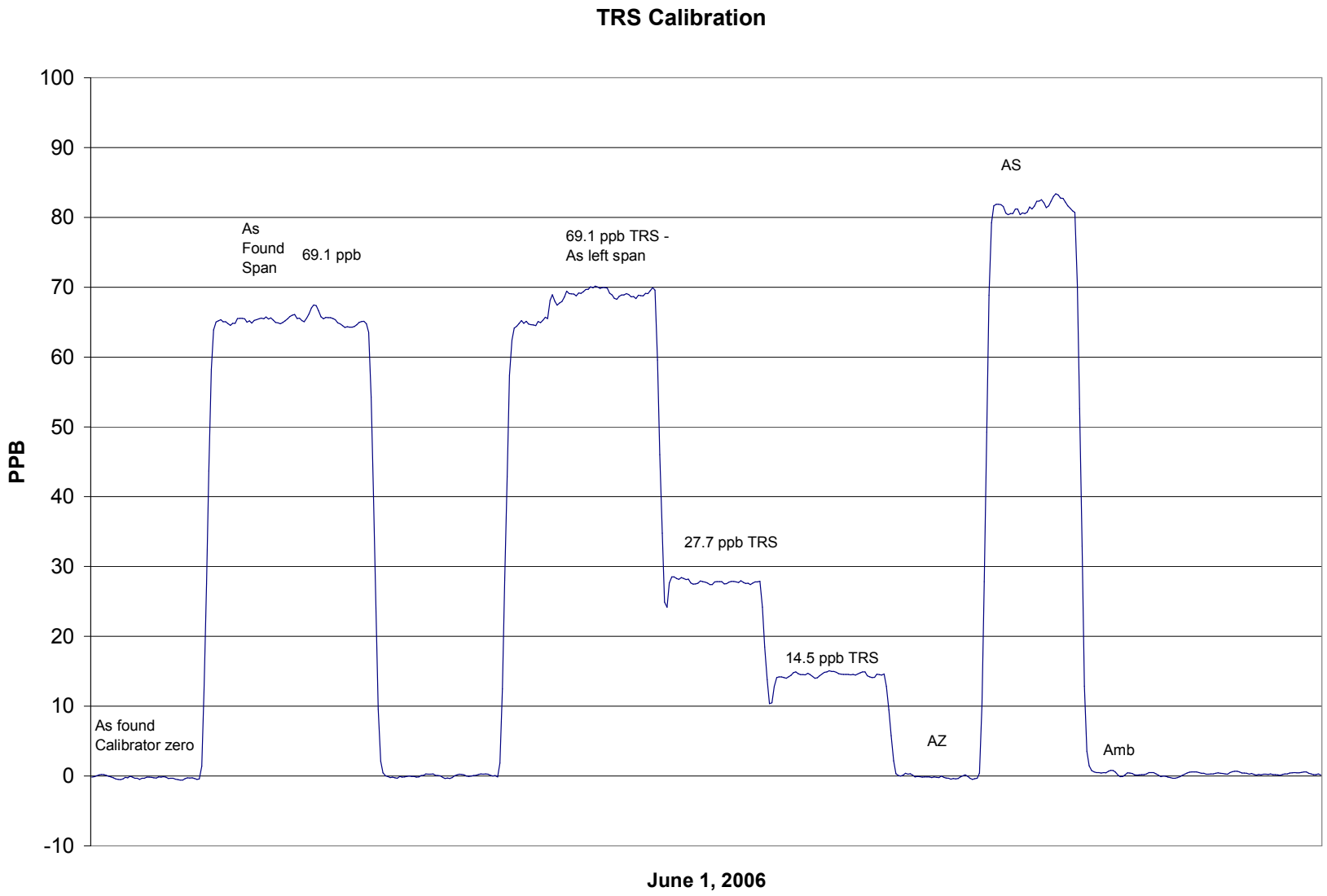
Station Information

Calibration Date	June 1, 2006	Previous Calibration	May 8, 2006
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:50	End Time (MST)	14:24
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
69.1	68.9	1.0025	Correlation Coefficient	0.999998
27.7	27.7	1.0003		
14.5	14.5	1.0010	Slope	1.004054
			Intercept	-0.098645




TRS Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
As
Found
Span
69.1 ppb
69.1 ppb TRS -
As left span
27.7 ppb TRS
14.5 ppb TRS
AS
AZ
Amb
As found
Calibrator zero
June 1, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **PM2.5**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 1, 2006	Previous Calibration	May 9, 2006
Station Number	2	Station Location	Evergreen Park

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

Start Time (MST)	12:10	End Time (MST)	15:00
Barometric Pressure	0.926 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	Before		After
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.66	SLPM	13.65	SLPM
Filter Load	30	%	16	%
Ko Factor	10124		10124	
Temperature	23.7	Deg C	23.7	Deg C
Pressure	0.928	ATM	0.928	ATM

Calibration Data

Parameter	Set Point	As Found	Tolerance	TEOM Reading
zero flow - main	0.0	0.01		0.05
zero flow - auxillary	0.0	-0.04		-0.03
flow recovery - main	45 - 60 Seconds	38.0	45 - 60 Seconds	35.0
flow recovery - aux	46 - 60 Seconds	43.0	46 - 60 Seconds	45.0
Temperature	measured	22.8	+/- 1.0 Deg C	22.8
Pressure	measured	0.925	+/- 1.5% Δ_{ATM}	0.926
Total Flow	16.67 SLPM	15.58		16.00
Main Flow	13.67 SLPM	13.08	+/- 1.0 SLPM	13.60
Auxillary Flow	3.0 SLPM	2.870	+/- 0.2 SLPM	2.983
Leak Check - main	0.0	-0.01	<0.15 SLPM	0.06
Leak Check - aux	0.0	0.16	<0.15 SLPM	0.17
Ko Factor (w/o filter)	measured		filter weight (g)	0.11012
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: Calibrated flows.
New filter.
Cleaned head.

Calibration Performed By: Dawn Ewan

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 15, 2006	Previous Calibration	May 4, 2006
Station Number	3	Station Location	Smoky Heights
Reason: Routine	Install	Removal	Other: Check on lack of span
Start Time (MST)	8:55	End Time (MST)	14:05
Barometric Pressure	27.46 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	2,097 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.933443	Perm-tube Cert #	19-9955
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
Calculated slope	1.002111	Calculated slope	1.001491
Calculated intercept	-1.200673	Calculated intercept	-1.034765
Analyzer make	API 102A	Analyzer serial #	212

	before		after	
Concentration range	500	ppb	500	ppb
Sample Flow	567	ccm	561	ccm
UV Lamp Voltage	2660	mv	2220	mv
Lamp Ratio	76	%	63.7	%
Rx Cell Temp	51	Deg C	51	Deg C
PMT Temp	7	Deg C	7	Deg C
IZS Temp	45	Deg C	45	Deg C
Slope	1.155		1.093	
Intercept	21.2		20.1	

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	1880.9	0.0	0.1	N/A
2015	1880.9	425.6	425.5	1.0002
5100	4760.6	168.1	169.8	0.9901
9800	9147.7	87.5	89.0	0.9836
zero	1866.9	0.0	2.8	As Found Zero
2000	1866.9	428.7	447.4	As Found Span
			Average Correction Factor	0.9913

Calculated value of As Found Response: 444.394 ppm Percent Change of As Found: -3.6%

	before calibration		after calibration	
Auto zero	-0.2	ppm	-0.8	ppm
Auto span	245.9	ppm	227.0	ppm

Notes:

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **SO2**

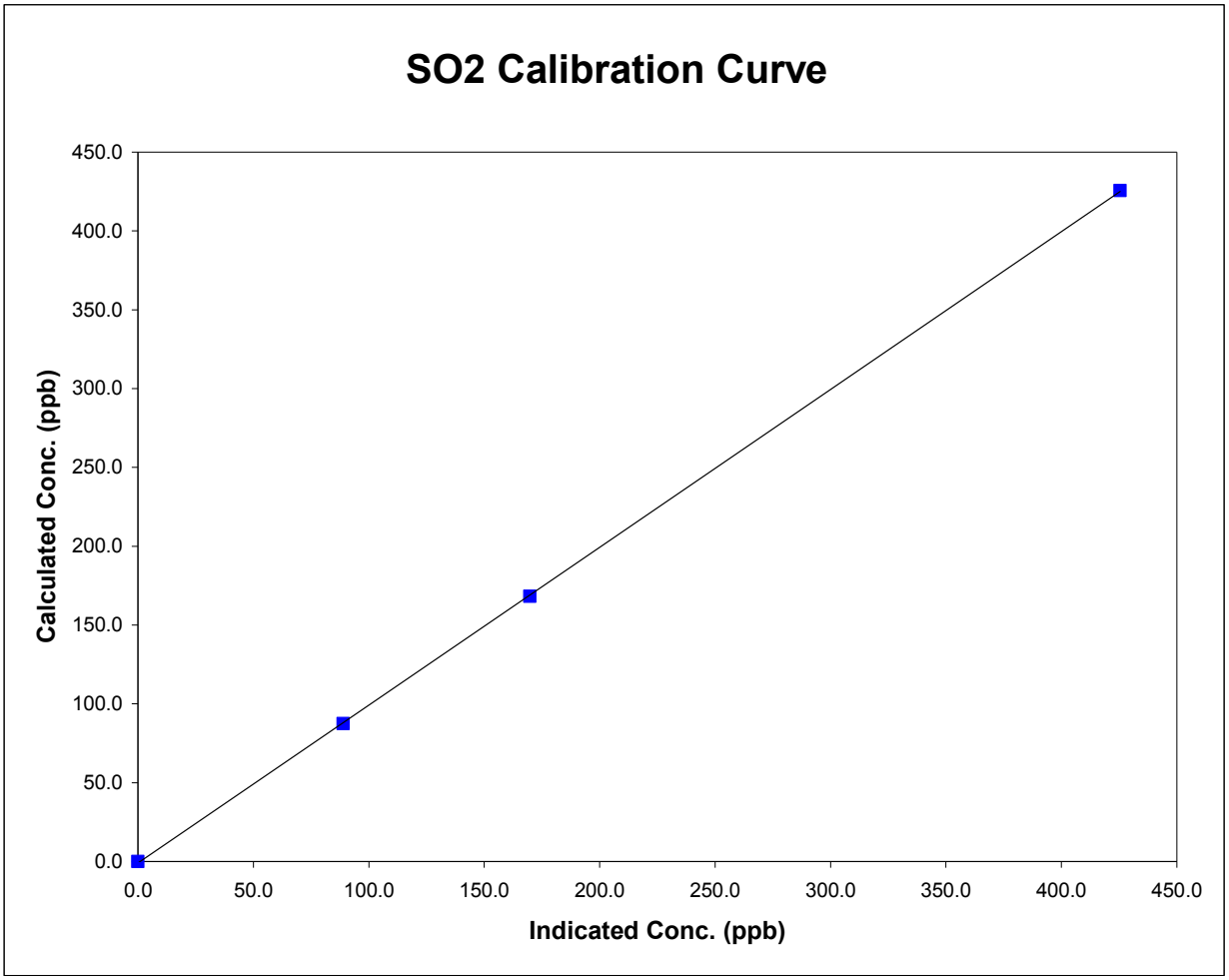
Air Monitoring Network **PASZA**

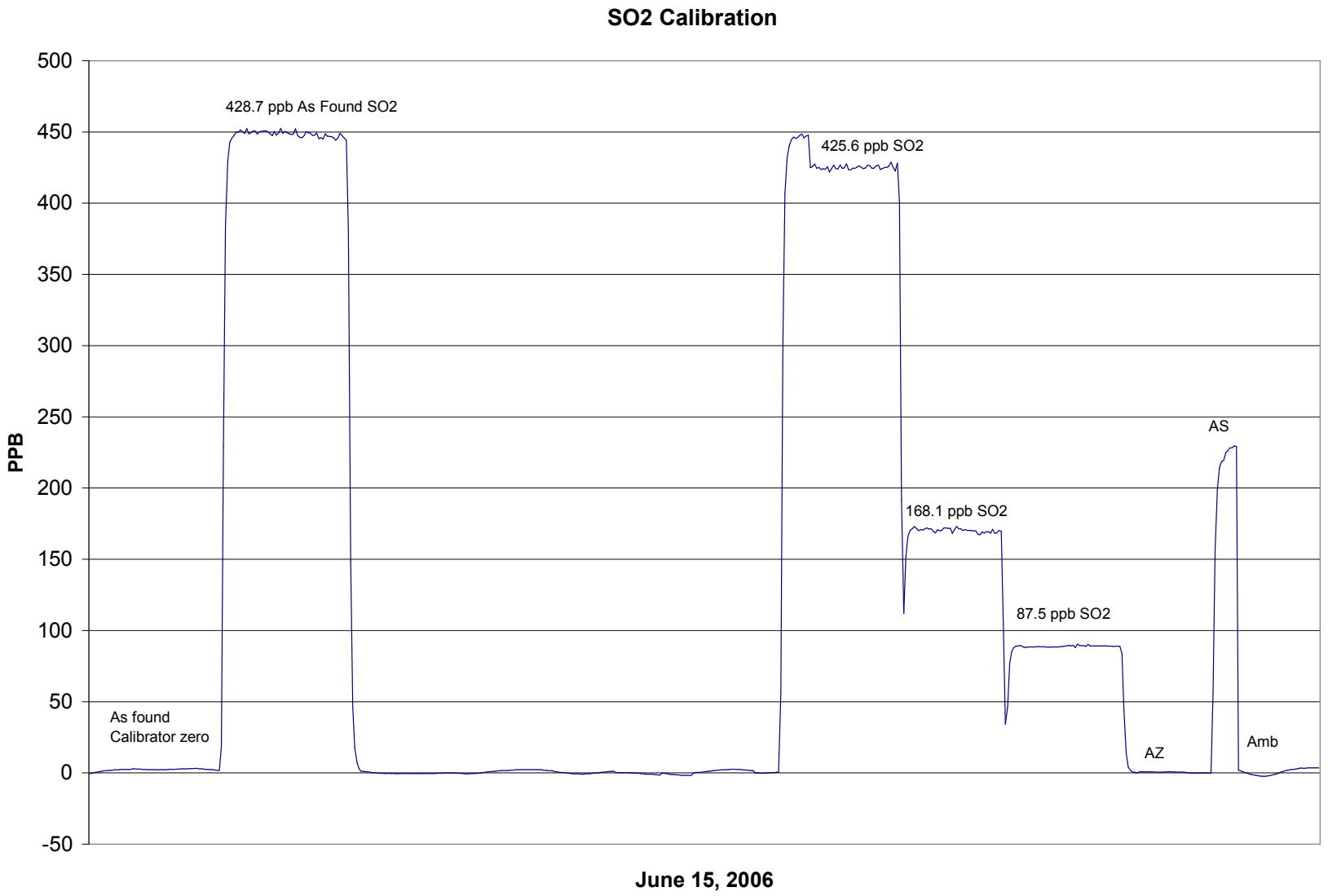
Station Information

Calibration Date	June 15, 2006	Previous Calibration	May 4, 2006
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	8:55	End Time (MST)	14:05
Analyzer make/model	API 102A	Analyzer serial #	212

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
425.6	425.5	1.0002	Correlation Coefficient	0.999977
168.1	169.8	0.9901		
87.5	89.0	0.9836	Slope	1.001491
			Intercept	-1.034765




SO2 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
428.7 ppb As Found SO2
425.6 ppb SO2
168.1 ppb SO2
87.5 ppb SO2
AS
As found
Calibrator zero
AZ
Amb
June 15, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter: **TRS**

Air Monitoring Network: **PASZA**

Station Information

Calibration Date	June 15, 2006	Previous Calibration	May 4, 2006
Station Number	3	Station Location	Smoky Heights
Reason:	Routine (selected) / Install / Removal		Other:
Start Time (MST)	8:55	End Time (MST)	14:05
Barometric Pressure	27.46 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.933443	Perm-tube Cert #	03-13509
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.998048	Calculated slope	0.995088
Calculated intercept	-0.070997	Calculated intercept	0.550360
Analyzer make	TEI Model 43C	Analyzer serial #	436610004

	before		after	
Concentration range	100	ppb	100	ppb
Background	10.2	ppb	15.6	ppb
coefficient	1.131		1.067	
Lamp Voltage	780	volts	772	volts
Chamber Temp	44.1	Deg C	43.8	Deg C
Perm Gas Temp	49.96	Deg C	45	Deg C
Pressure	644.8	mm Hg	741	mm Hg
Sample Flow	471	ccm	597.2	ccm
Lamp Intesity	32,300	mv	32,100	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
zero	1880.9	0.0	-0.1	N/A
2015	1880.9	69.2	69.1	1.0006
5100	4760.6	27.3	26.7	1.0244
9800	9147.7	14.2	13.3	1.0662
zero	1866.9	0.0	0.3	As Found Zero
2000	1866.9	69.7	67.7	As Found Span
			Average Correction Factor	1.0304

Calculated value of As Found Response: 67.15 ppm   Percent Change of As Found: 3.7%

	before calibration		after calibration	
Auto zero	0.2	ppm	-0.6	ppm
Auto span	92.3	ppm	71.4	ppm

Notes: Adjusted span and zero.
Installed needle valve.

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

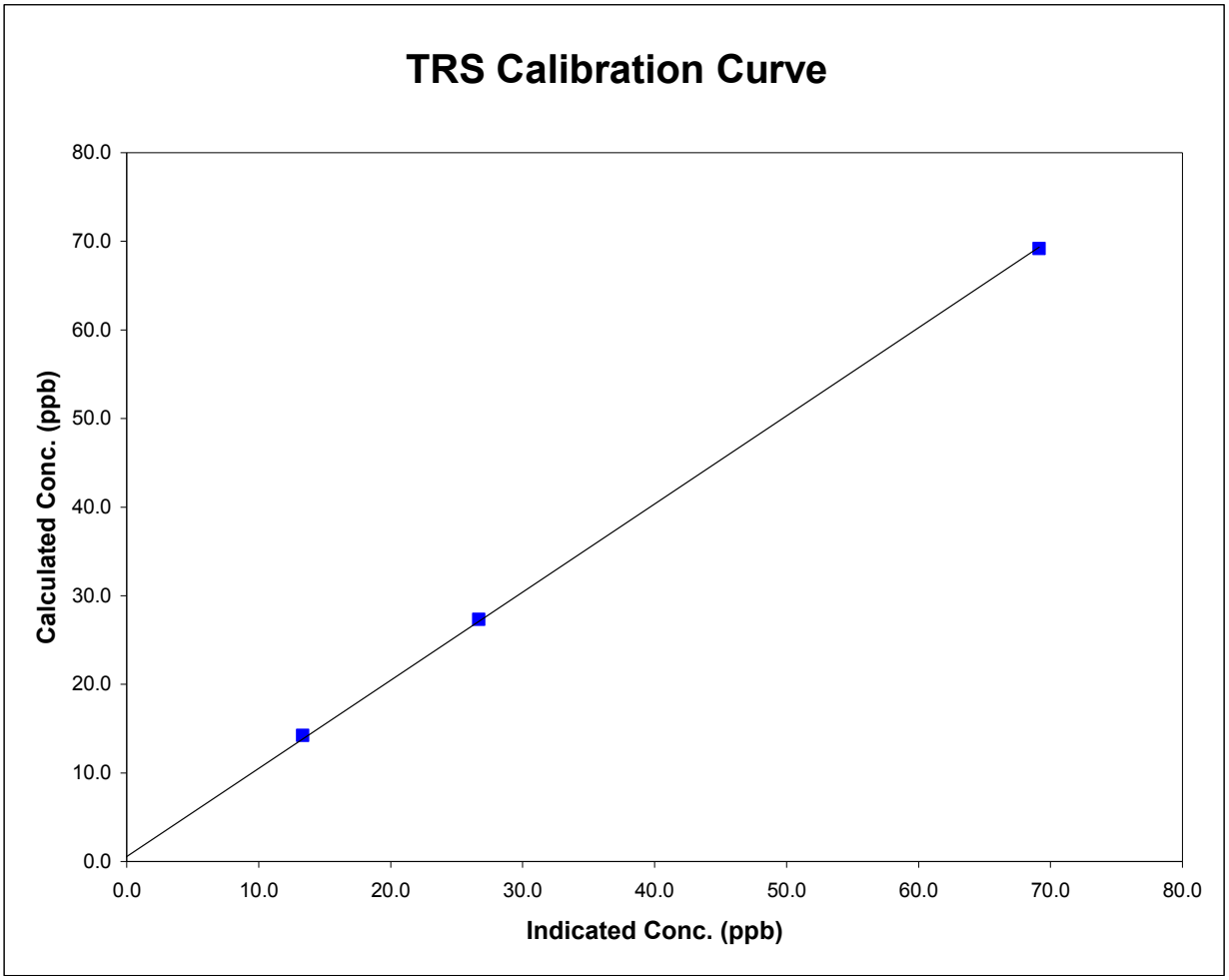
Air Monitoring Network **PASZA**

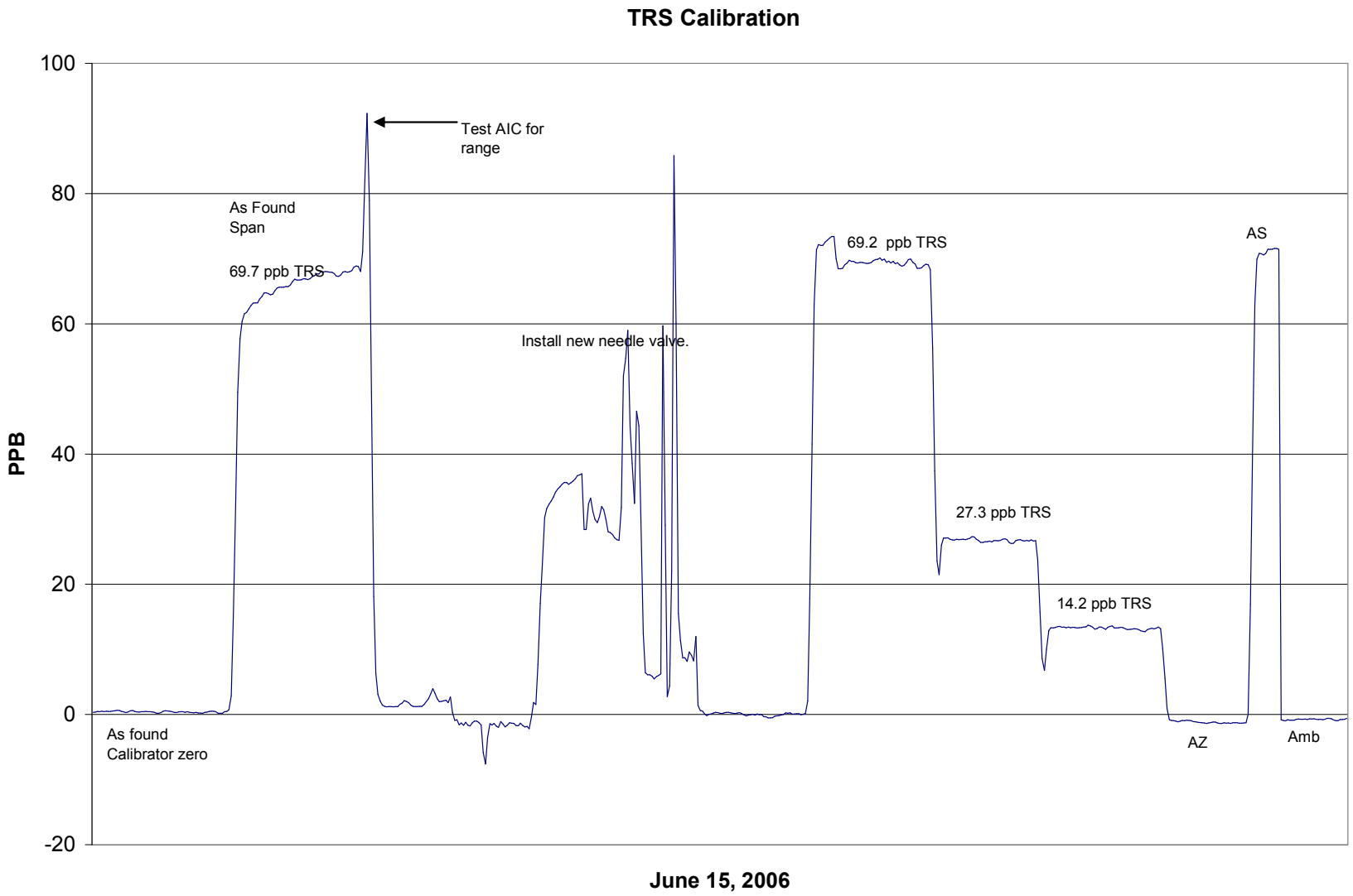
Station Information

Calibration Date	June 15, 2006	Previous Calibration	May 4, 2006
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	8:55	End Time (MST)	14:05
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610004

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
69.2	69.1	1.0006	Correlation Coefficient	0.999829
27.3	26.7	1.0244		
14.2	13.3	1.0662	Slope	0.995088
			Intercept	0.550360




TRS Calibration
100
80
60
40
20
0
-20
PPB
Test AIC for range
As Found Span
69.7 ppb TRS
Install new needle valve.
69.2 ppb TRS
AS
27.3 ppb TRS
14.2 ppb TRS
As found Calibrator zero
AZ
Amb
June 15, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 19, 2006	Previous Calibration	June 15, 2006
Station Number	3	Station Location	Smoky Heights
Reason:	Routine ☐ Install ☐	Removal ☐	Other: ☐
Start Time (MST)	10:06	End Time (MST)	14:30
Barometric Pressure	27.70 inches Hg	Station Temperature	20.0 Deg C
Calibrator	VICI Metronics	Serial Number	111-1695
Perm-tube Conc	181 ng/min	Perm-tube Expiry Date	June 30/05
Correction factor	0.941601	Perm-tube Cert #	03-13509
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.995088	Calculated slope	1.005670
Calculated intercept	0.550360	Calculated intercept	0.364985
Analyzer make	TEI Model 43C	Analyzer serial #	436610004

	before		after	
Concentration range	100	ppb	100	ppb
Background	15.6	ppb	13.4	ppb
coefficient	1.067		1.031	
Lamp Voltage	772	volts	773	volts
Chamber Temp	43.8	Deg C	44	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	741	mm Hg	507.6	mm Hg
Sample Flow	597.2	ccm	785	ccm
Lamp Intesity	32,100	mv	32,500	mv

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	2052.7	0.0	0.0	N/A
2180	2052.7	63.4	62.8	1.0088
5700	5367.1	24.2	23.5	1.0316
8900	8380.2	15.5	14.7	1.0529
zero	1977.4	0.0	-2.3	As Found Zero
2100	1977.4	65.8	61.9	As Found Span
			Average Correction Factor	1.0311

Calculated value of As Found Response: 64.38 ppm Percent Change of As Found: 2.2%

	before calibration		after calibration	
Auto zero	-0.6	ppm	-0.7	ppm
Auto span	71.4	ppm	44.6	ppm

Notes: Install new flow/pressure sensor.

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

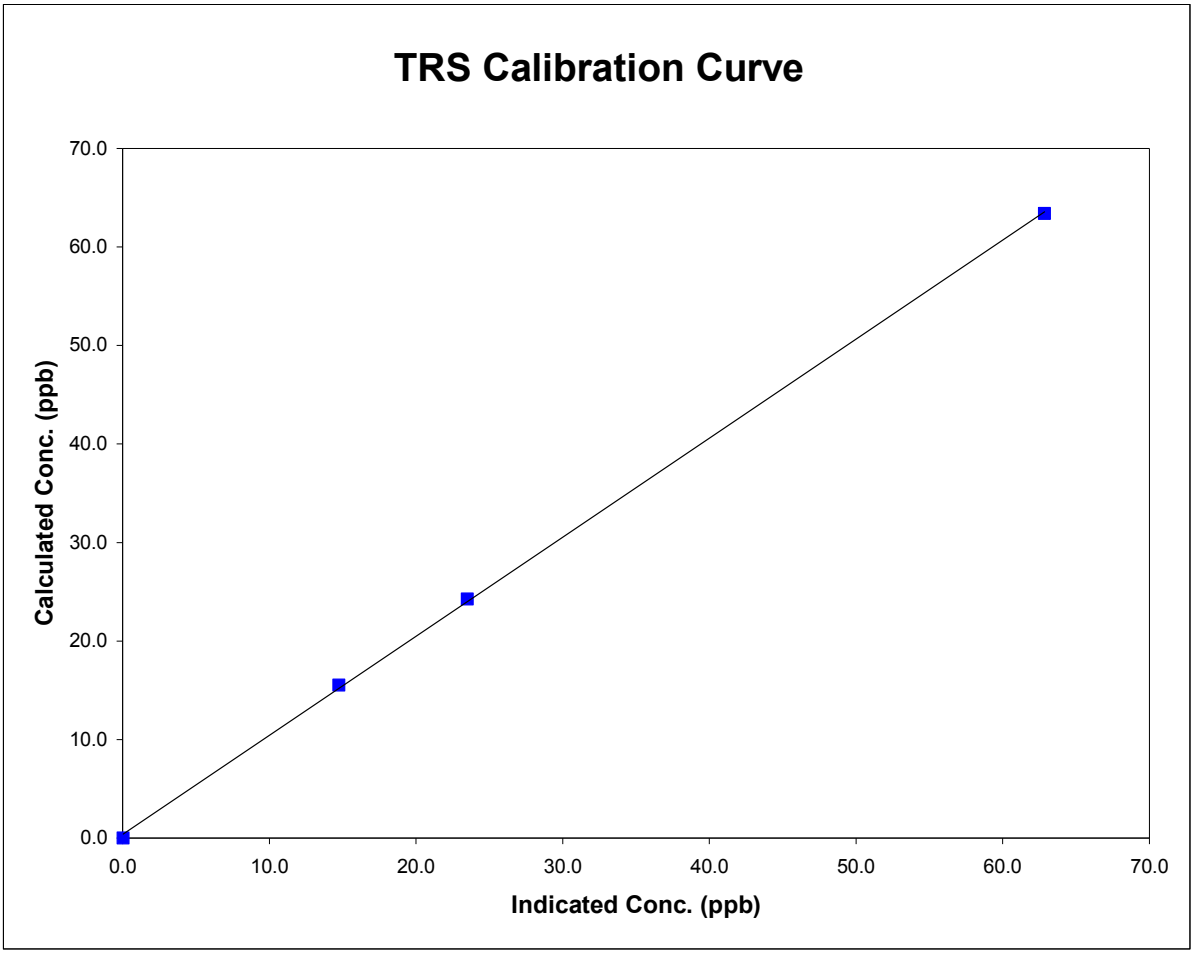
Air Monitoring Network **PASZA**

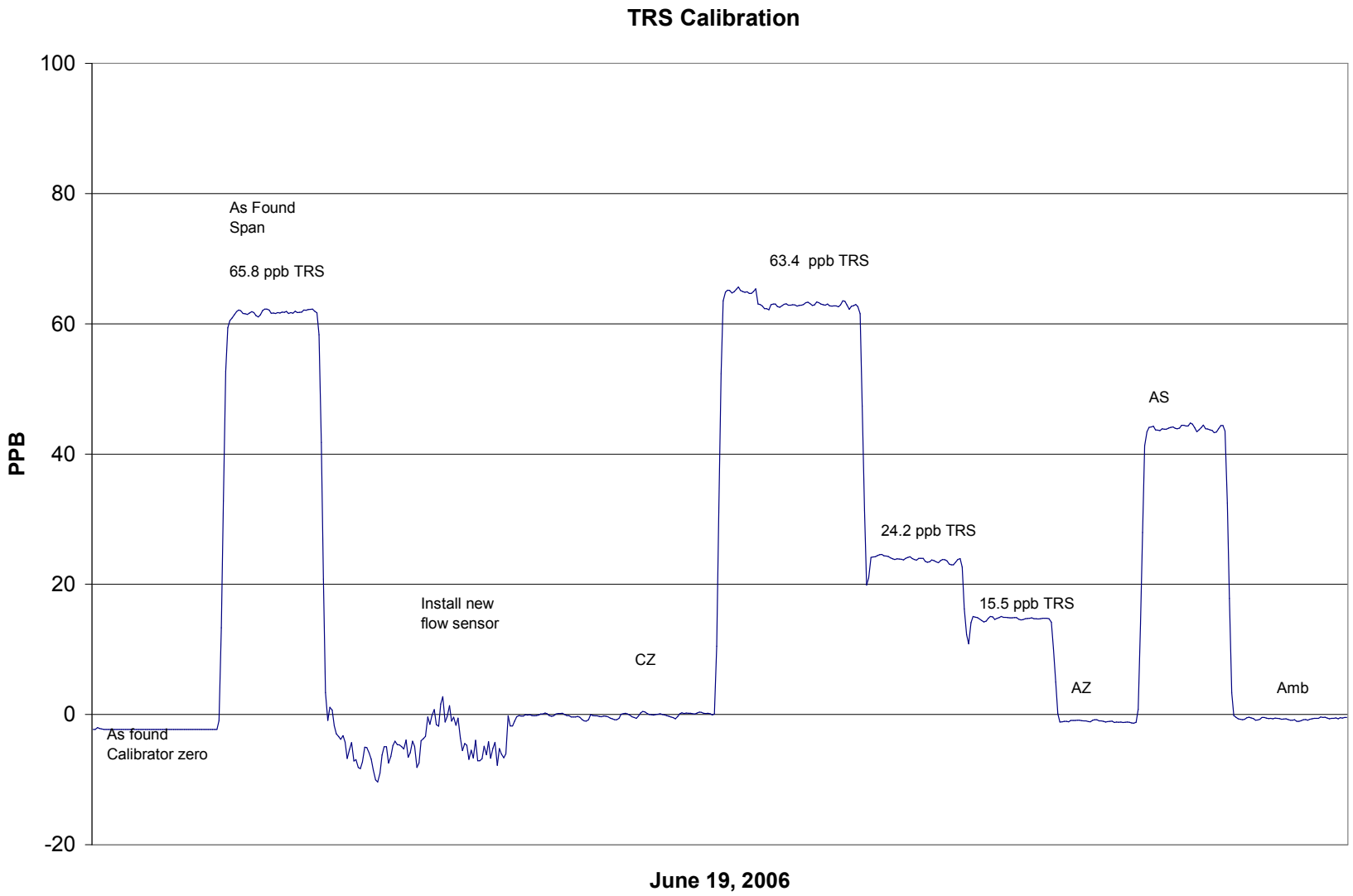
Station Information

Calibration Date	June 19, 2006	Previous Calibration	June 15, 2006
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:06	End Time (MST)	14:30
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610004

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
63.4	62.8	1.0088	Correlation Coefficient	0.999833
24.2	23.5	1.0316		
15.5	14.7	1.0529	Slope	1.005670
			Intercept	0.364985




TRS Calibration
100
80
60
40
20
0
-20
PPB
As Found
Span
65.8 ppb TRS
63.4 ppb TRS
AS
24.2 ppb TRS
15.5 ppb TRS
Install new
flow sensor
CZ
AZ
Amb
As found
Calibrator zero
June 19, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **PM2.5**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 15, 2006	Previous Calibration	May 4, 2006
Station Number	3	Station Location	Smoky Heights
Reason:	Routine ☒	Install ☐	Removal ☐	Other: ☐
Start Time (MST)	11:30	End Time (MST)	16:00
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	31	%	16	%
Ko Factor	12122		12122	
Temperature	20.8	Deg C	20.8	Deg C
Pressure	0.923	ATM	0.923	ATM
Main Fadj	1.000		1.000	
Aux Fadj	1.000		1.000	

Calibration Data

Parameter	Set Point	As Found	Tolerance	New Reading
zero flow - main	0.0	0.01		0.01
zero flow - auxillary	0.0	-0.03		-0.03
flow recovery - main	45 - 60 Seconds	35	45 - 60 Seconds	35
flow recovery - aux	46 - 60 Seconds	40	46 - 60 Seconds	40
Temperature	measured	20.4	+/- 1.0 Deg C	20.4
Pressure	measured	0.923	+/- 1.5% Δ_{ATM}	0.923
Total Flow	16.67 SLPM	15.85		15.85
Main Flow	13.67 SLPM	13.29	+/- 1.0 SLPM	13.29
Auxillary Flow	3.0 SLPM	2.980	+/- 0.2 SLPM	2.980
Leak Check - main	0.0	0.01	<0.15 SLPM	0.01
Leak Check - aux	0.0	-0.04	<0.15 SLPM	-0.04
Ko Factor (w/o filter)	measured	324.843	filter weight (g)	0.11014
Ko Factor (w/ filter)	measured	232.305	% Ko difference	0.36%

Notes: Cleaned head.
Installed new filter.
Audit filter.

Calibration Performed By: Dawn Ewan

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 13, 2006	Previous Calibration	May 25, 2006
Station Number	4	Station Location	Beaverlodge

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

Start Time (MST)	9:55	End Time (MST)	13:20
Barometric Pressure	0.913 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2977
Cal Gas Make	Scott	Cal Gas Expiry Date	December 12, 2005
Cal Gas Conc.	10.3 ppm	Cal Gas Cylinder #	BLM002816
DACS make	Focus AP1000	DACS serial No.	45267
DACS voltage range	0 - 10 volt	DACS channel #	3

	Before		After
Calculated slope	0.991036	Calculated slope	0.991403
Calculated intercept	0.349887	Calculated intercept	0.174942

Analyzer make	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.44	ppb	2.23	ppb
Coefficient	0.862		0.824	
Lamp Voltage	899.0	Volts	898.0	Volts
Chamber Temp	43.3	Deg C	43.7	Deg C
Sample Flow	617	ccm	649.8	ccm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.00	-0.01	N/A
4992	39.98	81.84	82.37	0.9936
4992	19.93	40.96	41.31	0.9915
4992	9.95	20.49	20.15	1.0167
4992	0.00	0.00	-0.17	As Found Zero
4992	39.98	81.84	85.85	As Found Span
			Average Correction Factor	1.0006

Calculated value of As Found Response: 85.601 ppm Percent Change of As Found: -4.6%

	before calibration		after calibration	
Auto zero	0.18	ppm	0.09	ppm
Auto span	27.59	ppm	27.43	ppm

Notes: Adjusted zero and span.

Calibration Performed By: Dawn Ewan

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

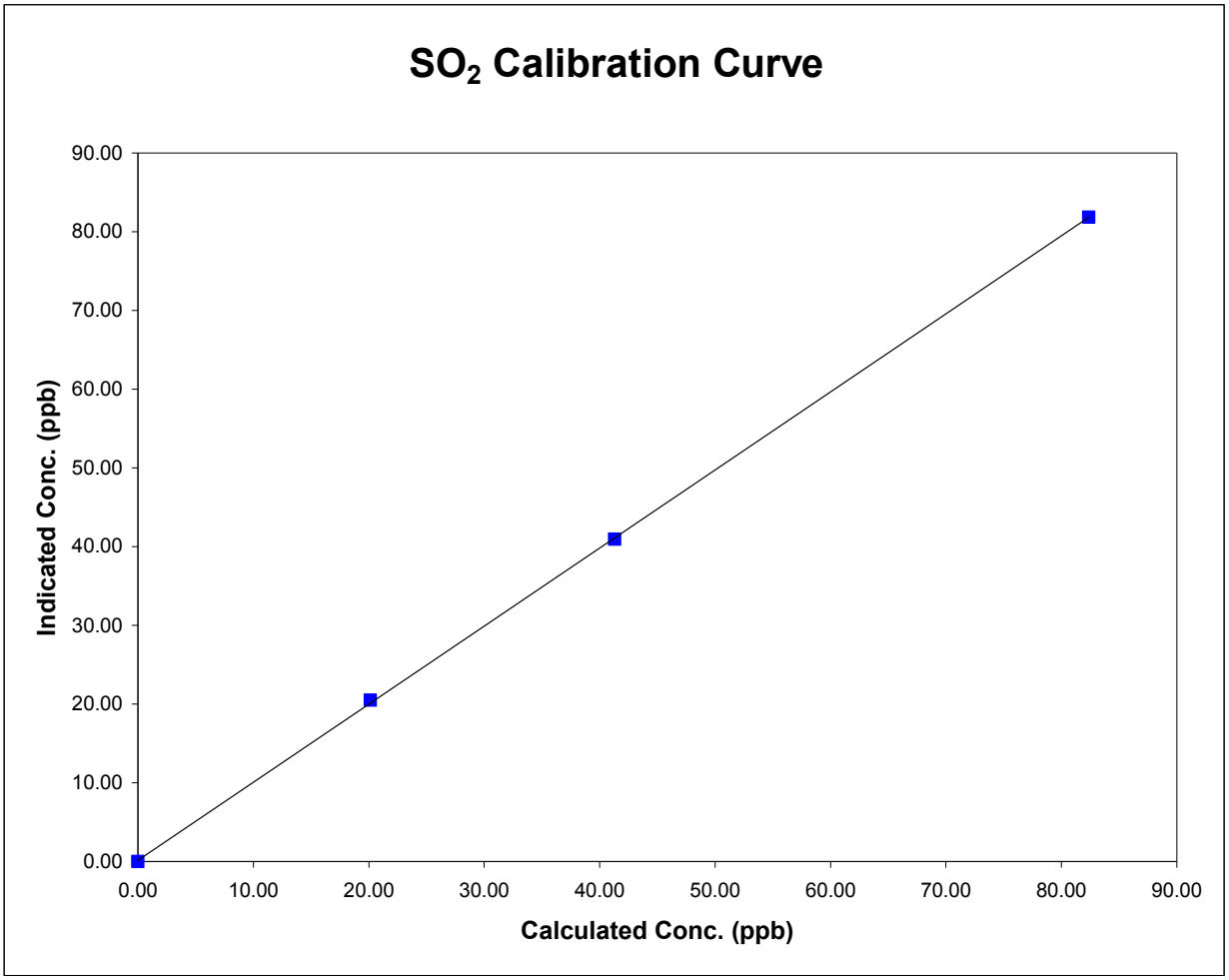
FOCUS AIR QUALITY MONITORING

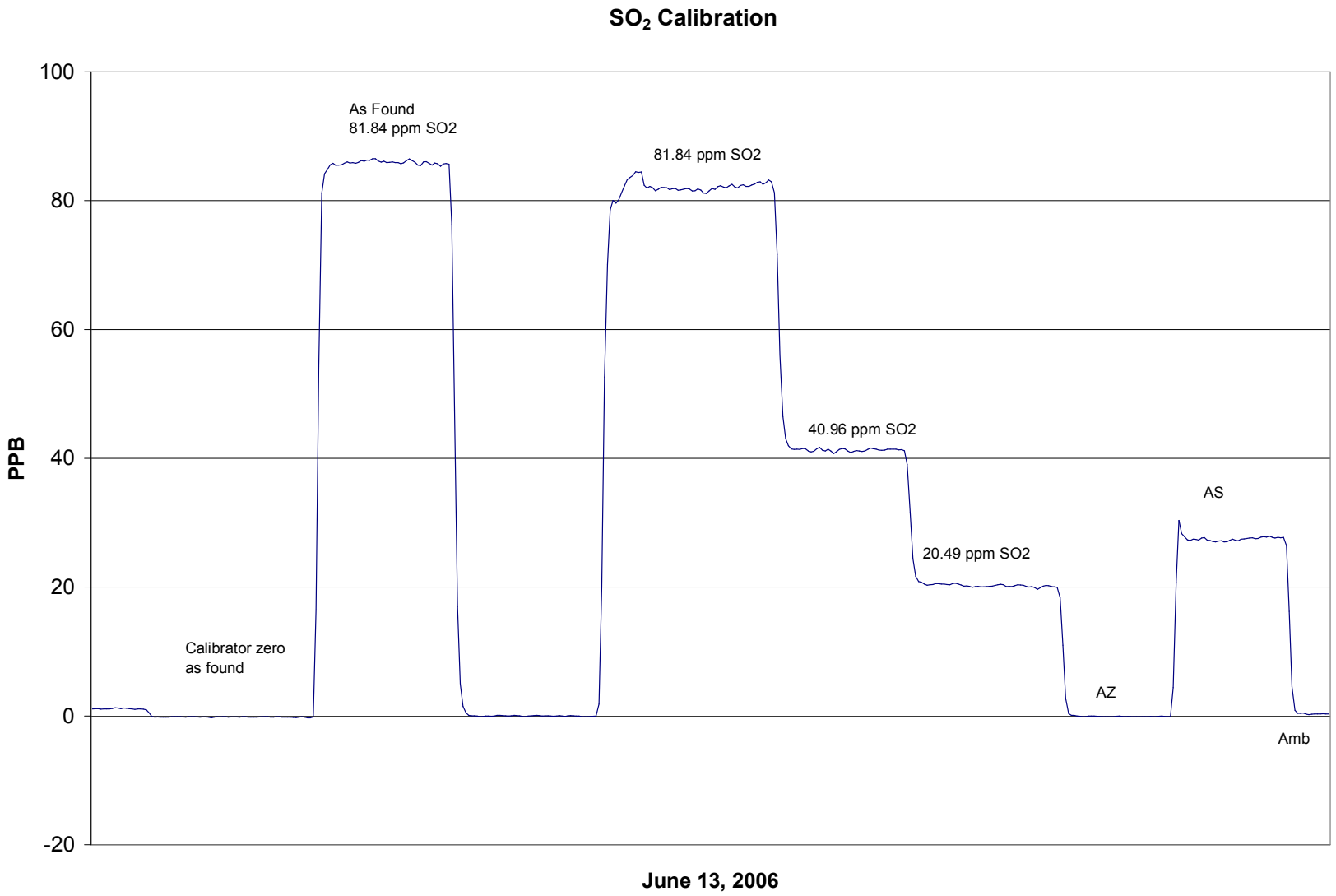
Station Information

Calibration Date	June 13, 2006	Previous Calibration	May 25, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:55	End Time (MST)	13:20
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.006	N/A		
81.835	82.366	0.9936	Correlation Coefficient	0.999954
40.958	41.307	0.9915		
20.489	20.152	1.0167	Slope	0.991403
			Intercept	0.174942




SO2 Calibration
100
80
60
40
20
0
-20
PPB
As Found
81.84 ppm SO2
81.84 ppm SO2
40.96 ppm SO2
20.49 ppm SO2
AS
AZ
Amb
Calibrator zero
as found
June 13, 2006

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 12, 2006	Previous Calibration	May 24, 2006
Station Number	4	Station Location	AG Canada Research Station

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	9:49		End Time (MST)	13:35	
Barometric Pressure	0.916	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics 6103		Serial Number	2977	
NO Cal Gas Conc	50.3	ppm	Cal Gas Expiry Date	Nov 22/06	
NOx Cal Gas Conc	50.5	ppm	Cal Gas Serial #	BAL786	

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45269

Parameter		NO2	NOx	NO
Before	Data Slope	1.001328	1.000025	0.999981
	Data Offset	0.029693	-0.014692	0.112771
After	Data Slope	1.007654	1.004496	1.004528
	Data Offset	-0.160600	0.970243	1.018879
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	0-1000	ppb	0-1000	ppb
NO background	1.2	ppb	1.2	mV
NOx background	1.4	ppb	1.4	mV
NO coefficient	0.970		0.970	
NOx coefficient	0.994		0.994	
Box Temp	28.4	ccm	31.8	ccm
Chamber Temp	49.1	Deg C	49.2	Deg C
Cooler Temp	-2.0	Deg C	-2.1	Deg C
Converter Temp	325.0	Deg C	323.0	Deg C
Sample Flow	824.0	LPM	824.0	LPM
Ozonator Flow	0.087	LPM	0.087	LPM
Pressure	164.2	inches HG	161.9	inches Hg

Notes: No adjustments made.

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 12, 2006 Station Location: AG Canada Research Station

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4992	0.00	0.0	0.0	0.0	-0.4	-0.4	-0.4	N/A	N/A
1	4992	79.92	795.7	792.6	3.2	791.4	788.2	2.3	1.0054	1.0055
2	4992	39.98	401.2	399.6	1.6	398.4	396.7	1.1	1.0072	1.0074
3	4992	20.00	201.5	200.7	0.8	199.0	198.1	0.3	1.0129	1.0133
AFZ	4992	0.00	0.0	0.0	0.0	-0.4	-0.4	-0.4	0.0000	0.0000
AFS	4992	79.92	795.7	792.6	3.2	791.4	788.2	2.3	1.0054	1.0055
							Average Correction Factor		1.0085	1.0088

As Found Concentrations: NO_X= 791.8 NO= 788.8 As Found Percent Change NO_X= -0.5% NO= -0.5%

GPT Calibration Data

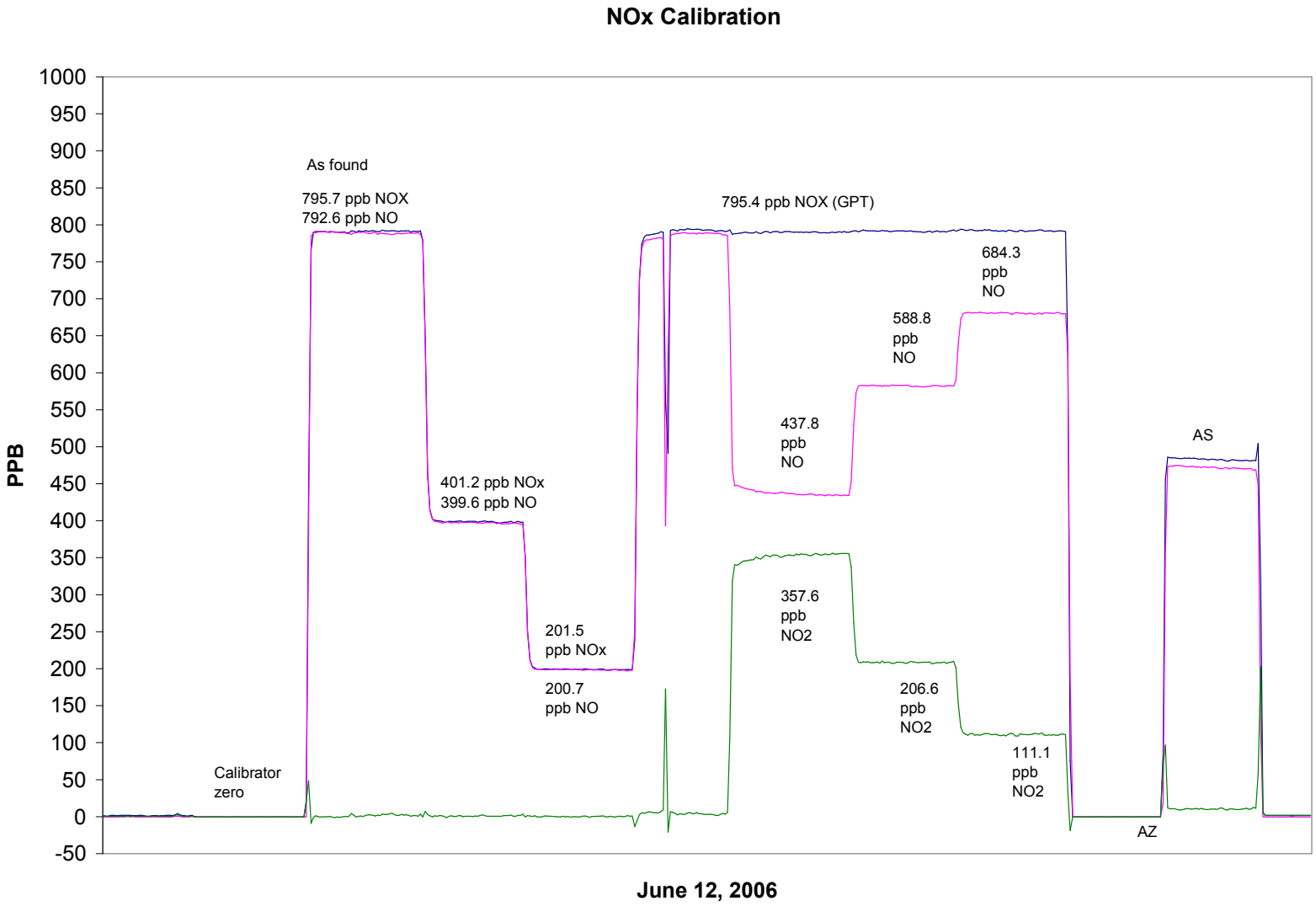
Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	795.4	793.1	2.3	793.0	788.5	3.5	1.0030	1.0058	N/A	N/A
350	795.4	437.8	357.6	789.9	434.8	354.8	1.0070	1.0069	1.0081	99.2%
200	795.4	588.8	206.6	791.0	585.2	205.3	1.0055	1.0063	1.0062	99.4%
100	795.4	684.3	111.1	791.7	680.2	111.1	1.0047	1.0060	0.9994	100.1%
					Average Correction Factor		1.0057	1.0064	1.0046	99.5%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.3	-0.3	-0.2	ppb	0.7	-0.5	0.7	ppb
Auto span	494.6	9.7	484.5	ppb	485.2	10.3	474.3	ppb

Calibration Performed By: Dawn Ewan


NOx Calibration
PPB
1000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
-50
As found
795.7 ppb NOX
792.6 ppb NO
795.4 ppb NOX (GPT)
684.3
ppb
NO
588.8
ppb
NO
437.8
ppb
NO
AS
401.2 ppb NOx
399.6 ppb NO
201.5
ppb NOx
200.7
ppb NO
357.6
ppb
NO2
206.6
ppb
NO2
111.1
ppb
NO2
Calibrator
zero
AZ
June 12, 2006

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

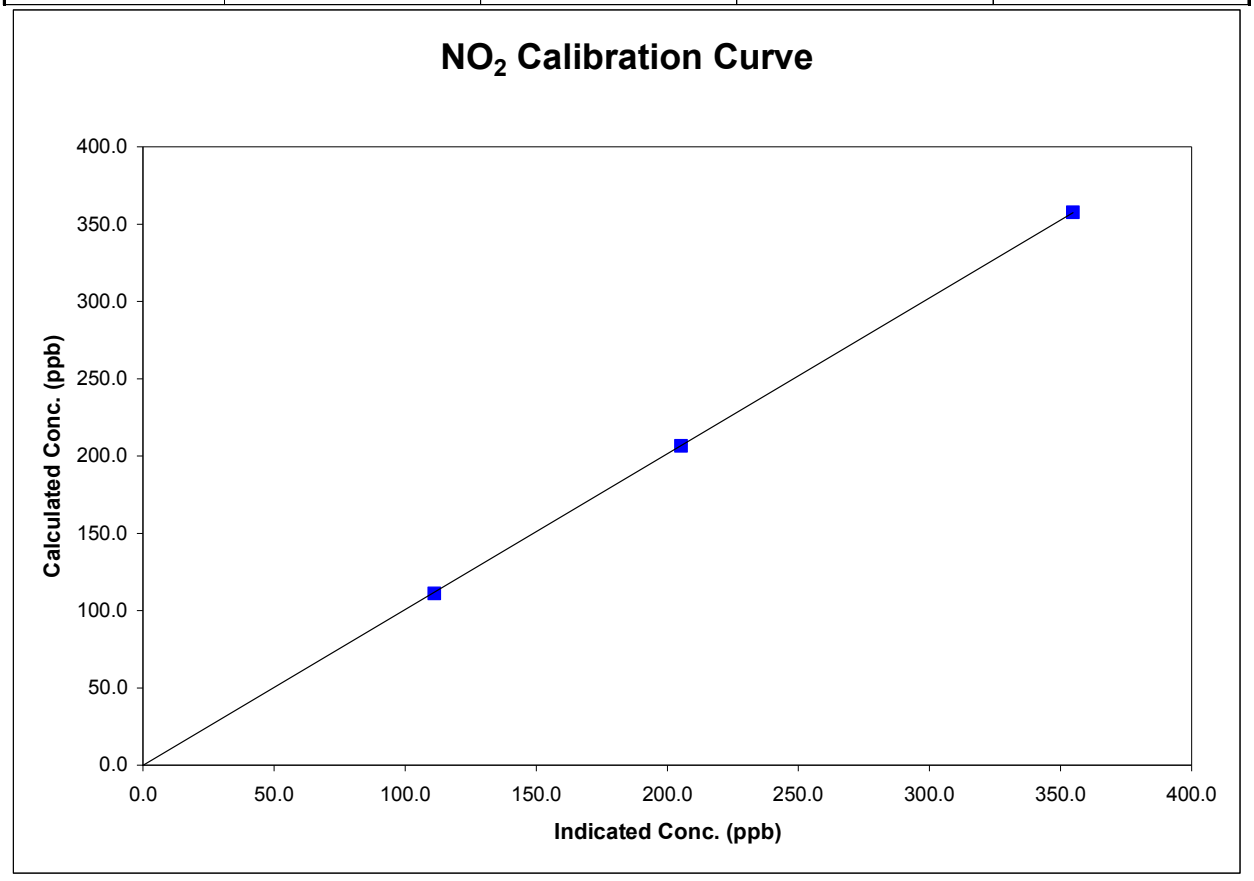
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 12, 2006	Previous Calibration	May 24, 2006
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:49	End Time (MST)	13:35
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	0.0000		
357.6	354.8	1.0081	Correlation Coefficient	0.999985
206.6	205.3	1.0062		
111.1	111.1	0.9994	Slope	1.007654
			Intercept	-0.160600



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

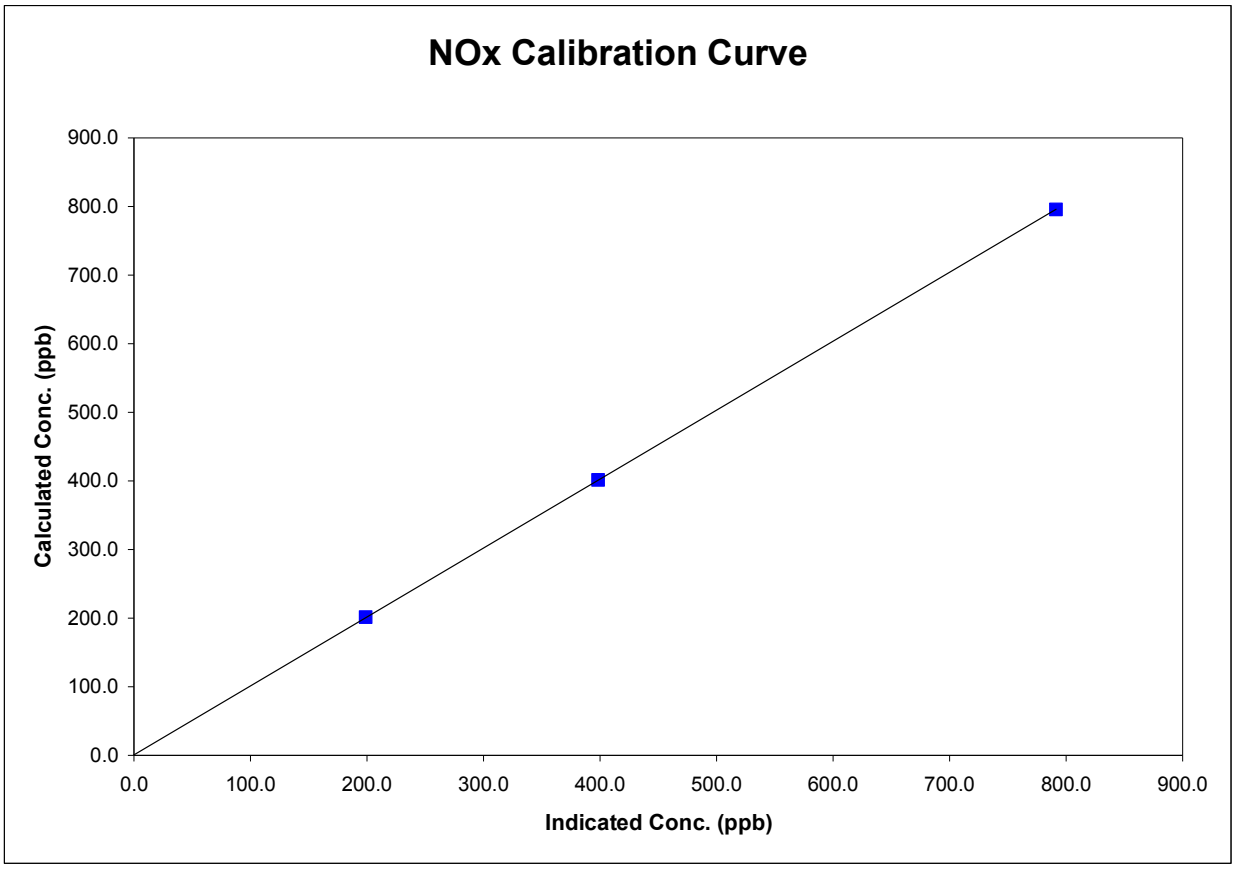
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 12, 2006	Previous Calibration	May 24, 2006
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:49	End Time (MST)	13:35
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	0.0000		
795.7	791.4	1.0054	Correlation Coefficient	0.999997
401.2	398.4	1.0072		
201.5	199.0	1.0129	Slope	1.004496
			Intercept	0.970243



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

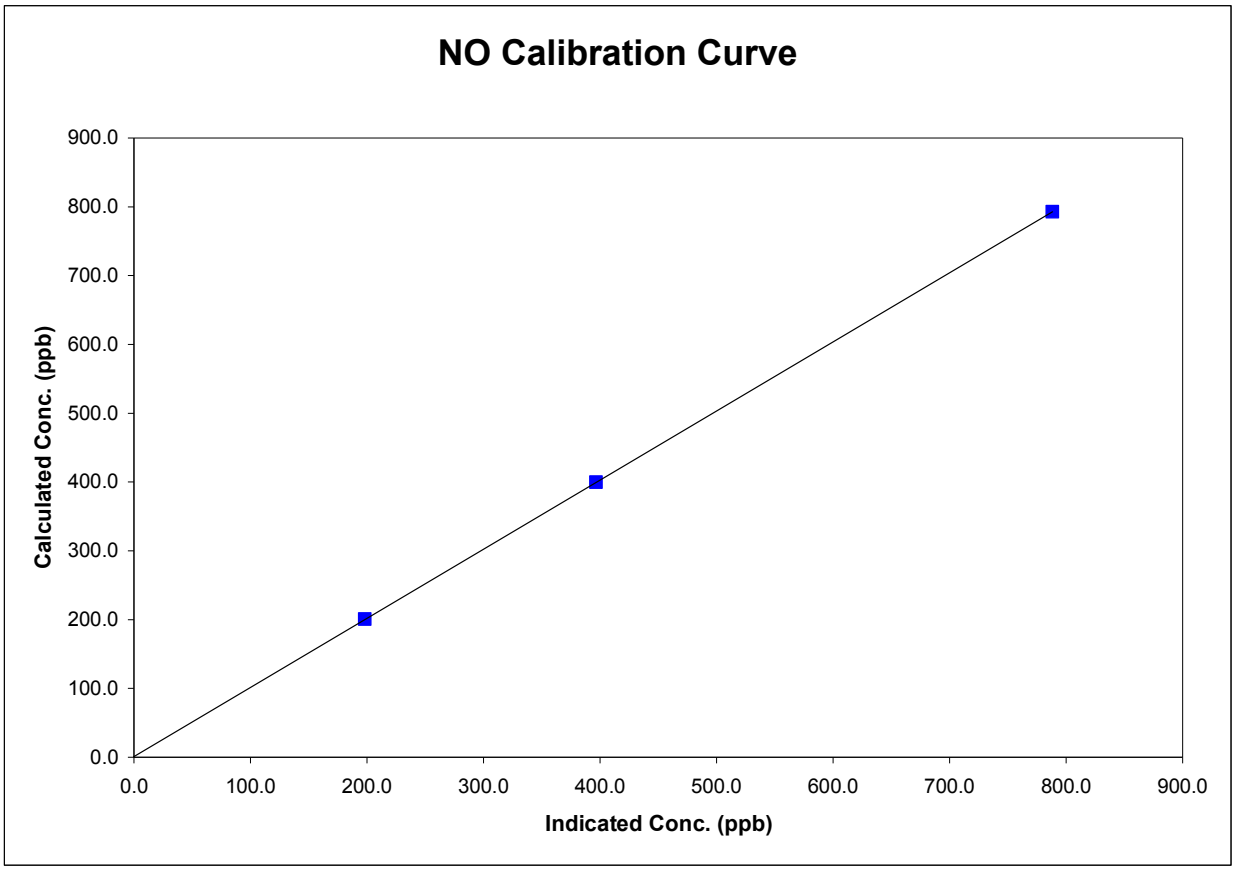
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 12, 2006	Previous Calibration	May 24, 2006
Station Number	4	Station Location	AG Canada Research Station
Start Time (MST)	9:49	End Time (MST)	13:35
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A		
792.6	788.2	1.0055	Correlation Coefficient	0.999997
399.6	396.7	1.0074		
200.7	198.1	1.0133	Slope	1.004528
			Intercept	1.018879



Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 12, 2006	Previous Calibration	May 25, 2006
Station Number	4	Station Location	Beaverlodge

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

Start Time (MST)	12:52	End Time (MST)	16:37
Barometric Pressure	0.916 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2977
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	0.988115	Calculated slope	0.994609
Calculated intercept	3.064112	Calculated intercept	3.119545

Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	0.20	ppb	-0.50	ppb
slope	1.11		1.07	
Lamp temp	70.9	mV	71	mV
Lamp Intensity A/B	85100/83400	mV	86500/84700	mV
Pressure	667.5	inches Hg	686.2	inches Hg
Flow A	740	ccm	751	ccm
Flow B	699	Deg C	708	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.0	0.1	N/A
4992	0.00	357.6	358.1	0.9987
4992	0.00	206.6	203.8	1.0140
4992	0.00	111.1	104.5	1.0629
4992	0.00	0.0	-0.7	As found zero
4992	0.00	357.6	365.7	As found span
			Average Correction Factor	1.0252

Calculated value of As Found Response: 365.1 ppm Percent Change of As Found: 2.1%

	before calibration		after calibration	
Auto zero	2.6	ppb	3.5	ppb
Auto span	122.2	ppb	131.7	ppb

Notes: Adjusted zero and span.

Calibration Performed By: Dawn Ewan

Calibration Summary

FOCUS AIR QUALITY MONITORING

Parameter **O3**

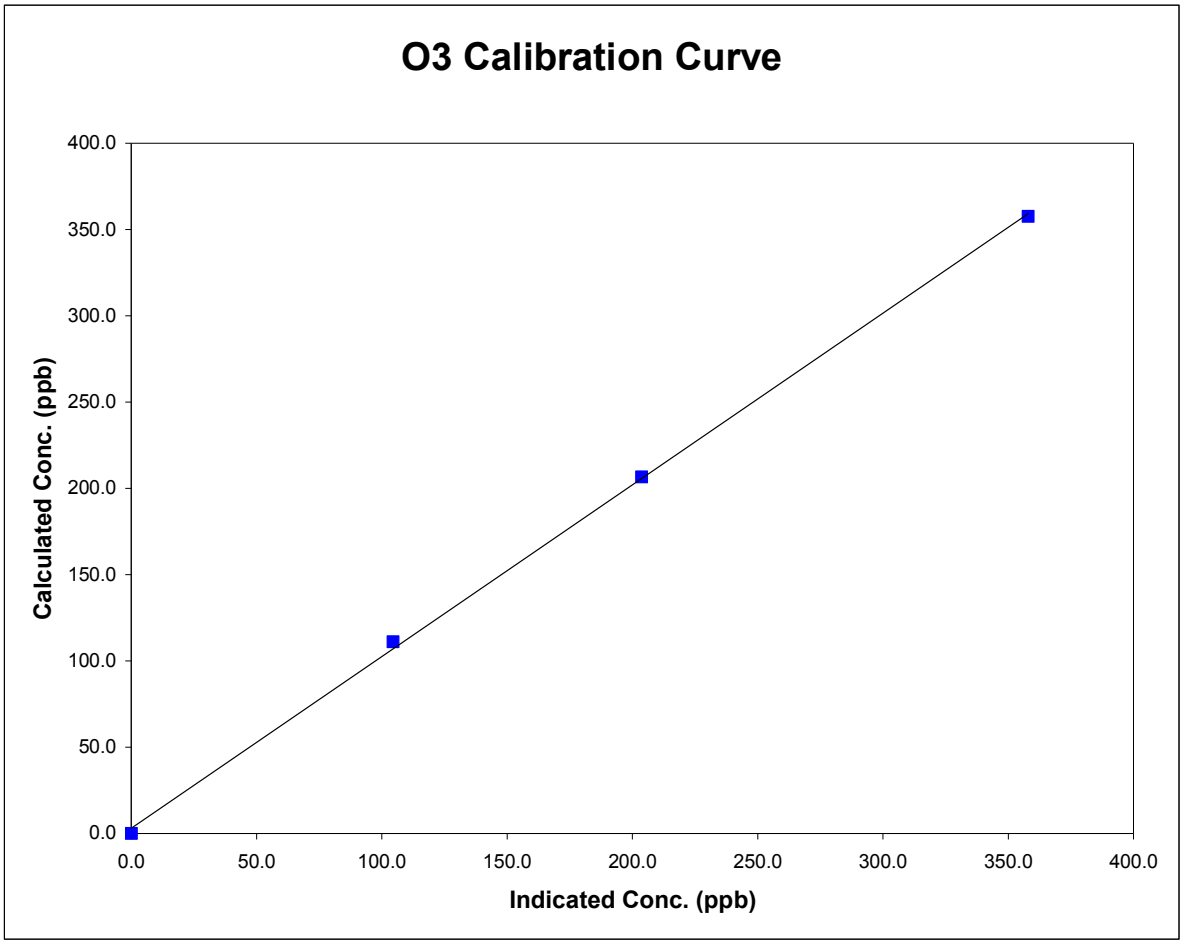
Air Monitoring Network **PASZA**

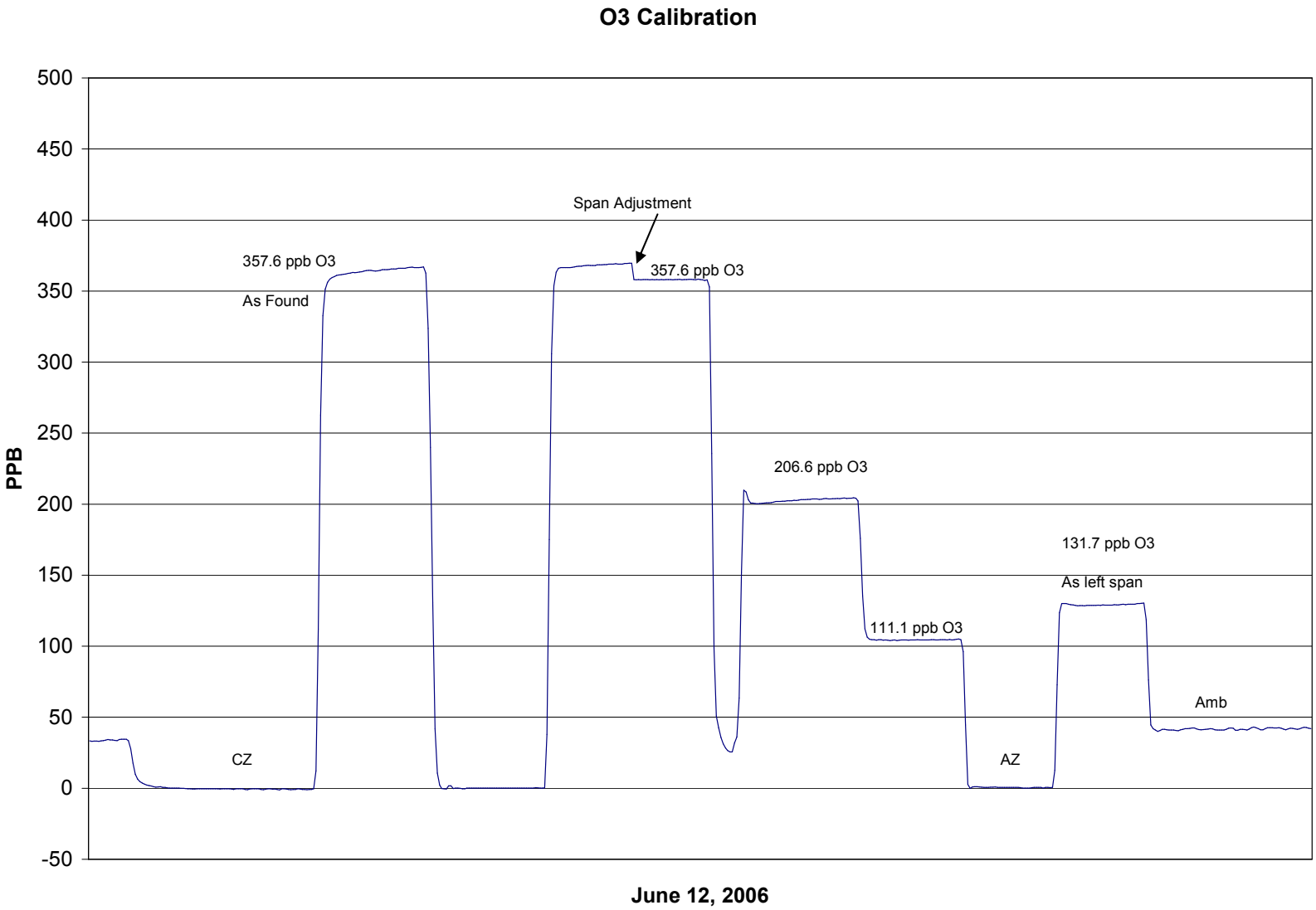
Station Information

Calibration Date	June 12, 2006	Previous Calibration	May 25, 2006
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:52	End Time (MST)	16:37
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
357.6	358.1	0.9987	Correlation Coefficient	0.999567
206.6	203.8	1.0140		
111.1	104.5	1.0629	Slope	0.994609
			Intercept	3.119545




O3 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
Span Adjustment
357.6 ppb O3
As Found
357.6 ppb O3
206.6 ppb O3
131.7 ppb O3
As left span
111.1 ppb O3
Amb
CZ
AZ
June 12, 2006

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **PM2.5**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 13, 2006	Previous Calibration	May 25, 2006
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:20	End Time (MST)	
Barometric Pressure	0.913 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	10

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.68	SLPM	13.68	SLPM
Filter Load	20	%	22	%
Ko Factor	14287		14287	
Temperature	25.3	Deg C	25.3	Deg C
Pressure	0.913	ATM	0.912	ATM

Calibration Data

Parameter	Set Point	Teom Reading (As Found)	Tolerance	Teom Reading (After Adjustments)
zero flow - main	0.0	0.01		0.04
zero flow - auxillary	0.0	0.00		0.10
flow recovery - main	45 - 60 Seconds	25.00	45 - 60 Seconds	28.00
flow recovery - aux	46 - 60 Seconds	44.00	46 - 60 Seconds	40.00
Temperature	measured	25.4	+/- 1.0 Deg C	25.4
Pressure	measured	0.913	+/- 1.5% Δ_{ATM}	0.912
Total Flow	16.67 SLPM	15.00		15.55
Auxillary Flow	13.67 SLPM	12.71	+/- 1.0 SLPM	13.21
Main Flow	3.0 SLPM	2.780	+/- 0.2 SLPM	2.980
Leak Check - main	0.0		<0.15 SLPM	-0.02
Leak Check - aux	0.0		<0.15 SLPM	0.15
Ko Factor (w/o filter)	measured		filter weight (g)	
Ko Factor (w/ filter)	measured		% Ko difference	N/A

Notes: Calibrated flows
New blue filter
Leak check
Cleaned head

Calibration Performed By: Dawn Ewan