Palliser Airshed Society

Ambient Air Monitoring Network Summary

June 2008

Prepared By:

FOCUS
AIR QUALITY MONITORING

TABLE OF CONTENTS

July 29, 2008

Alberta Environment
12th Floor, Oxbridge Place
9820-106 Street
Edmonton Alberta T6B 2X3

Attention: Director of Monitoring and Evaluation

RE: Palliser Airshed Society (PAS) Ambient Air Monitoring Report – June 2008

Enclosed is the PAS Ambient Monitoring Report for the month of **June 2008**.

Continuous Monitoring – Crescent Heights and Portable-Brooks
Included in this report are; monthly sampling table, detailed hourly average reports and multipoint calibration reports of all instruments.

Crescent Heights:

- All analyzers and instruments at the Crescent Heights Station were greater than 90% operational for for the month of June.
- The measured ambient air quality was within the Alberta Objectives and Federal guidelines with no exceedences recorded at the Crescent Heights Station.
- The following is a summary of the monthly averages recorded during sampling:
  - Monthly average concentrations of NO_2 was 4.8 ppb
  - Monthly average concentrations for O_3 was 35.1 ppb
  - Monthly average concentrations for CO was 0.18 ppm
  - Monthly average concentrations for THC was 1.92 ppm
  - Monthly average concentrations for $PM_{2.5}$ was 3.4 µg/m³
- The Air Quality Index (AQI) recorded 610 hours of Good readings and 56 hours of Fair readings for the month of June.

Portable-Brooks:

- All pollutant analyzers at the Portable Brooks Station were 100% operational for the month of June.
- The measured ambient air quality was within the Alberta Objectives and Federal guidelines for SO_2 and O_3 pollutants recorded at the Portable - Brooks Station. The H_2S analyzer recorded one (1) exceedence greater then the Alberta Objective of 10 (ppb):
  1. June 29: 22:00 26.1 ppb Alberta Environment Reference **# 203314.**
  2. June 29: 23:00 14.3 ppb Alberta Environment Reference **# 203314**
  3. ***** June 30: 00:00 10.1 ppb Alberta Environment Reference **# 203314.** (This reading was called in to Alberta Environment but after zero baseline adjustment it was no longer greater than the Alberta Objective.)
- The following is a summary of the monthly averages recorded during sampling:
  - Monthly average concentrations of SO_2 was 0.4 ppb
  - Monthly average concentrations for H_2S was 0.4 ppb
  - Monthly average concentrations for O_3 was 34.4 ppb

Passive Monitoring – Twenty Sites throughout the PAS zone:
Due to technician error there is no sample result for O_3 at Site 14. There were two duplicate sites sampled in the month of June: Site 10 and Site 20 – Redcliff. The passive sample analyses were performed by MAXXAM Analytics Inc. The following are the ranges for June 2008 recorded by the twenty passive stations located throughout the PAS zone.

- Average concentrations for SO_2 passives ranged from 0.1 to 0.4 ppb with a mean of 0.2 ppb.
- Average concentrations for NO_2 passives ranged from 0.2 to 3.2 ppb with a mean of 1.2 ppb.
- Average concentrations for O_3 passives ranged from 36.6 to 51.8 ppb with a mean of 44.5 ppb.

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

Sharon Whiteley, B.Sc.
AQM Data Specialist

Kelly Baragar, C.E.T
AQM Technical Field Supervisor

Continuous Monitoring

Ambient Air Monitoring Network

Crescent Heights Station

General Station Issues

Routine monthly calibrations were performed on June 20th (NO_X, O_3 and $PM_{2.5}$) and June 25th (CO and THC).

Parameter	Make	Model	Units	Notes
Ozone	TECO	43I	ppb	No operational problems observed.
Nitrogen Dioxide	Teledyne - API	200E	ppb	No operational problems observed.
Total Hydrocarbons	Bendix	400A	ppm	THC span cylinder replaced June 25th.
Carbon Monoxide	TEI	49C	ppm	CO spans dropped June 4th to the 25th - the span cylinder was empty – it was replaced June 25th.
$PM_{2.5}$	R&P TEOM	1400ab	$\mu g/m^3$	Nineteen (19) hours were flagged for excessive baseline drift
Wind Speed	Met One	010C	kph	No operational problems observed.
Wind Direction	Met One	020C	Deg	No operational problems observed.
Ambient Temperature	Met One	083D	DegC	No operational problems observed.
Relative Humidity	Met One	083D	%	No operational problems observed.
Solar Radiation	Met One	096-1	W/m^2	No operational problems observed.
Data Acquisition System	Titan Logix	AP1000		No operational problems observed.

Continuous Monitoring

Ambient Air Monitoring Network

Portable-Brooks Station

General Station Issues

Routine monthly calibrations were performed on June 19th (SO_2 and H_2S) and June 25th (O_3)

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational problems observed.
Sulphur Dioxide	TEI	43A	ppb	No operational problems observed.
Hydrogen Sulphide	TEI	43A	ppb	No operational problems observed.
Wind Speed	Blue Sky		kph	No operational problems observed.
Wind Direction	Blue Sky		Deg	No operational problems observed.
Data Acquisition System	Titan Logix	AP1000		No operational problems observed.

June 2008 Monthly Overall Summary Report

Ambient Air Quality Data

Jun-2008	Palliser Airshed Society						Maximum Recorded Values						
							1-hr				24-hr / 8-hr		
Pollutant (units)	**Objectives** 1-hr	24-hr	**Station**	**Monthly Average**	**Exceedence** 1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	**Operational Time (%)**
NO (**ppb**)			Crescent Heights	1.5	-	-	23.8	Jun-05 06:00	5.7	S	4.7	Jun-05	100.0%
NO_2 (**ppb**)	212	106	Crescent Heights	4.8	0	0	24.3	Jun-27 23:00	4.0	SE	8.5	Jun-20	100.0%
NO_X (**ppb**)			Crescent Heights	6.1	-	-	40.1	Jun-05 04:00	4.2	S	11.6	Jun-05	100.0%
O_3 (**ppb**)	82		Crescent Heights	35.1	0	-	62.7	Jun-30 18:00	22.0	NNW	42.2	Jun-04	100.0%
O_3 (**ppb**) - **8-hr**	65		Crescent Heights		0						57.7	Jun-18	
CO (**ppm**)	13		Crescent Heights	0.18	0	-	0.5	Jun-16 21:00	5	ESE	0.2	Jun-08	100.0%
CO **(ppm) - 8-hr**	5		Crescent Heights		0						0.3	Jun-01	
THC (**ppm**)			Crescent Heights	1.92	-	-	2.6	Jun-30 05:00	3.7	ESE	2.0	Jun-01	100.0%
$PM_{2.5}$ (**µg/m^3**)	80	30	Crescent Heights	3.4	0	0	22.8	Jun-30 19:00	22.1	NNW	10.2	Jun-30	97.4%
RH **(%)**			Crescent Heights	58.3	-	-	-	-	-	-	-	-	100.0%
SR **(W/m2)**			Crescent Heights	275.5	-	-	-	-	-	-	-	-	100.0%
Temp **(°C)**			Crescent Heights	16.8	-	-	-	-	-	-	-	-	100.0%
WSPD v (**km/hr**)			Crescent Heights	10.9	-	-	33.2	Jun-11 01:00	33.2	ENE	21.1	Jun-11	100.0%
WSPD s (**km/hr**)			Crescent Heights	11.7	-	-	33.4	Jun-11 01:00	33.4	ENE	22.7	Jun-11	100.0%
WDIR			Crescent Heights	WNW	-	-	-	-	-	-	-	-	100.0%
SO_2 **(ppb)**	172	57	Portable-Brooks	0.4	0	0	2.7	Jun-01 18:00	11.5	E	0.9	Jun-30	100.0%
O_3 (**ppb**)	82		Portable-Brooks	34.4	0	-	76.7	Jun-30 15:00	13.3	NNW	41.8	Jun-18	100.0%
O_3 (**ppb**) - **8-hr**	65		Portable-Brooks		0						61.3	Jun-05	
H_2S **(ppb)**	10	3	Portable-Brooks	0.36	3	0	26.1	Jun-29 22:00	10	S	2.1	Jun-29	100.0%
WSPD v (**km/hr**)			Portable-Brooks	10.4	-	-	40.9	Jun-11 10:00	40.9	NE	26.4	Jun-11	100.0%
WSPD s (**km/hr**)			Portable-Brooks	11.1	-	-	41.0	Jun-11 10:00	41.0	NE	27.1	Jun-11	100.0%
WDIR			Portable-Brooks	E	-	-	-	-	-	-	-	-	100.0%

PAS - Crescent Heights

Monthly Summary Tables, Graphs and Roses

PAS - Crescent Heights - AQI Monthly Summary

Station: Crescent Heights
Station Owner: PAS

Air Quality Index (AQI)

Monitoring Dates: June 1, 2008 to July 1, 2008

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:	610
Number of 1-hr Fair Readings:	56
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-08	N	6	6	9	8	6	7	11	13	15	20	23	21	22	23	24	26	27	25	23	23	21	18	N
2-Jun-08	18	15	13	15	15	15	14	8	12	17	18	17	18	20	20	20	21	20	20	19	18	16	N	11
3-Jun-08	11	10	13	N	17	17	14	15	15	15	18	19	19	19	20	21	22	18	18	15	16	N	15	14
4-Jun-08	13	13	13	11	13	12	14	16	19	21	23	25	29	31	31	30	30	31	31	26	N	25	25	21
5-Jun-08	19	12	11	5	5	6	7	11	17	21	28	33	32	30	32	31	31	30	28	N	23	23	22	23
6-Jun-08	22	24	21	19	16	13	12	N	N	22	22	22	23	23	23	25	23	21	N	21	20	17	19	19
7-Jun-08	18	17	14	10	13	12	13	14	15	16	17	16	16	16	16	17	18	N	20	21	22	21	20	21
8-Jun-08	18	15	14	12	12	14	14	15	16	16	16	16	18	21	23	23	N	25	24	21	19	19	18	17
9-Jun-08	15	14	17	15	15	13	10	9	10	13	17	18	20	21	22	N	23	22	22	20	18	16	16	14
10-Jun-08	16	17	17	15	15	19	16	14	16	16	18	19	20	21	N	19	20	20	20	20	20	21	20	19
11-Jun-08	18	17	18	18	19	21	21	20	19	19	19	21	27	N	32	30	27	23	22	21	20	19	19	20
12-Jun-08	20	20	16	15	12	18	16	14	18	15	17	19	N	22	21	20	25	28	25	23	21	19	15	15
13-Jun-08	12	15	11	8	9	10	9	10	12	15	18	N	22	21	22	21	20	19	19	16	24	14	18	19
14-Jun-08	17	14	13	14	14	16	14	18	18	20	N	22	23	23	24	24	25	25	25	23	18	15	15	12
15-Jun-08	6	5	4	4	6	6	10	13	15	N	20	22	23	24	24	25	25	24	22	20	18	14	11	11
16-Jun-08	9	13	12	12	14	9	9	9	N	19	20	19	20	N	22	22	22	23	23	22	13	9	8	6
17-Jun-08	7	6	7	5	4	7	7	N	12	16	22	24	N	31	31	32	31	33	31	27	20	19	21	23
18-Jun-08	23	19	16	15	9	9	N	12	17	21	26	30	34	34	33	32	31	N	28	26	19	15	12	N
19-Jun-08	17	17	18	16	12	N	13	15	22	25	29	29	30	30	30	30	29	27	26	25	18	16	13	10
20-Jun-08	5	5	8	10	N	8	10	13	14	N	N	N	N	N	1	21	20	21	19	19	16	13	15	14
21-Jun-08	6	6	N	4	7	5	7	9	14	19	N	21	20	20	20	20	19	20	19	15	12	11	N	16
22-Jun-08	18	N	17	18	17	18	16	13	13	16	18	N	N	21	20	20	20	19	21	21	18	17	17	17
23-Jun-08	N	18	12	12	12	10	13	16	16	18	21	21	N	22	N	24	25	24	21	20	16	13	9	N
24-Jun-08	8	10	15	14	11	8	11	16	17	21	21	20	20	21	23	22	22	23	23	23	21	18	N	12
25-Jun-08	9	5	6	8	5	6	7	11	13	15	17	N	20	20	21	22	22	22	22	20	16	12	10	8
26-Jun-08	8	11	N	8	9	7	10	12	14	17	17	20	21	N	25	N	24	23	21	19	17	17	14	13
27-Jun-08	12	N	12	12	9	9	9	11	13	14	16	18	18	20	21	22	23	23	23	22	20	16	12	14
28-Jun-08	N	7	6	8	6	6	7	10	16	23	25	26	26	26	24	23	22	22	22	21	21	15	12	N
29-Jun-08	16	18	16	11	12	10	14	17	19	19	N	23	23	23	23	23	23	24	25	23	18	15	N	10
30-Jun-08	12	7	8	10	11	9	9	12	16	20	N	22	23	22	23	25	32	31	36	26	24	22	24	21

PAS - Crescent Heights Nitrogen Dioxide Monthly Summary

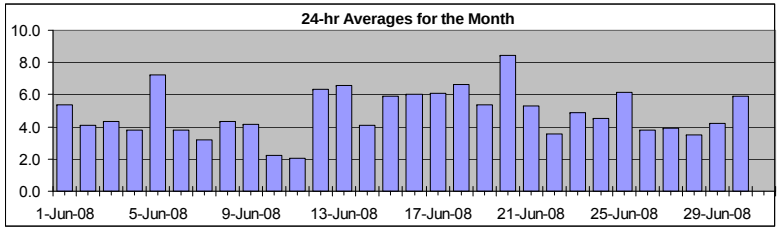
Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: June 1, 2008 to July 1, 2008

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:	24.3	ppb	27-Jun	23:00 0:00
Maximum 24-hr Average:	8.5	ppb	20-Jun	

AIC Time:	32 hrs	Operational Time:	684 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	17.9	13.5	6.1	3.6	2.0	0.7	0.0	4.8 ppb	3.6 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-08	A	21	15	7	11	14	11	6	5	3	2	2	2	1	1	1	1	1	1	2	1	3	6	A	5.3	20.8
2-Jun-08	5	4	7	3	3	4	4	11	8	3	2	2	2	2	2	2	2	3	4	6	5	5	A	8	4.1	11.4
3-Jun-08	6	9	5	2	4	3	7	5	5	4	4	4	4	4	4	3	2	3	2	4	4	A	5	5	4.3	8.8
4-Jun-08	6	6	5	7	7	7	5	4	3	3	2	2	1	1	1	1	1	1	1	5	A	6	4	6	3.8	7.4
5-Jun-08	7	15	9	14	20	17	16	11	10	8	3	3	4	5	2	2	2	2	2	A	5	4	3	2	7.2	20.3
6-Jun-08	2	2	4	3	4	6	5	4	3	2	3	4	4	4	4	3	3	4	A	6	7	5	4	2	3.8	6.8
7-Jun-08	3	3	3	8	4	6	3	3	3	2	2	2	3	2	3	2	3	A	4	3	2	3	4	4	3.2	7.8
8-Jun-08	4	9	6	6	7	6	6	5	5	3	3	3	2	2	1	2	A	5	4	5	4	4	5	4	4.4	8.9
9-Jun-08	5	5	3	5	5	6	8	8	7	5	5	2	2	1	1	A	4	4	4	4	3	2	2	3	4.2	8.2
10-Jun-08	2	1	2	5	8	3	3	2	1	1	2	1	1	1	A	4	3	2	2	2	2	1	1	2	2.2	8.2
11-Jun-08	1	1	1	1	1	2	2	2	4	2	2	2	1	A	5	3	2	2	2	3	2	3	2	2	2.0	4.6
12-Jun-08	2	2	5	7	14	2	8	15	4	6	3	3	A	5	5	7	3	3	5	7	7	8	13	12	6.3	14.8
13-Jun-08	11	5	7	12	10	7	6	6	4	3	4	A	6	4	3	3	3	3	3	11	2	23	11	4	6.6	22.8
14-Jun-08	5	4	7	5	5	3	4	4	4	3	A	5	4	3	2	2	2	2	2	3	6	8	5	7	4.1	8.2
15-Jun-08	15	15	17	12	8	9	6	3	3	A	8	5	3	3	3	3	2	2	2	2	2	5	4	3	5.9	16.8
16-Jun-08	4	2	3	4	4	9	9	10	A	4	4	4	2	2	1	2	2	3	3	4	17	23	13	11	6.0	22.5
17-Jun-08	7	9	7	10	15	15	10	A	13	9	3	2	2	2	2	2	3	3	4	5	7	5	4	3	6.1	14.8
18-Jun-08	3	8	7	8	15	16	A	10	9	8	4	4	2	3	2	2	2	3	4	5	12	11	10	4	6.6	15.8
19-Jun-08	12	4	3	4	6	A	12	10	5	4	3	2	2	2	2	2	2	2	2	3	12	13	9	7	5.4	13.2
20-Jun-08	14	13	7	5	A	8	6	4	3	C	C	C	C	A	3	4	5	3	5	4	10	13	23	24	8.5	24.0
21-Jun-08	17	8	A	17	7	13	9	14	6	2	1	1	1	1	1	1	3	1	1	3	6	5	3	1	5.3	17.4
22-Jun-08	2	A	9	4	5	3	2	5	4	3	2	2	4	2	4	3	3	6	2	2	4	5	3	2	3.5	8.9
23-Jun-08	A	3	9	6	8	8	5	3	2	4	1	2	2	1	1	1	2	2	6	4	9	13	16	A	4.9	15.8
24-Jun-08	11	9	5	3	4	9	8	4	6	2	2	4	2	3	2	2	3	2	2	2	3	5	A	10	4.5	11.1
25-Jun-08	10	16	12	6	10	10	10	4	2	2	2	2	2	3	2	2	2	1	1	3	10	11	11	12	6.1	16.0
26-Jun-08	10	5	A	14	7	9	4	2	3	1	4	2	2	1	1	2	1	1	3	1	1	2	4	5	3.8	14.2
27-Jun-08	3	A	6	3	6	5	6	3	2	0	0	0	0	0	1	1	0	1	1	1	5	11	12	24	3.9	24.3
28-Jun-08	A	17	12	7	7	7	5	5	2	0	0	0	0	0	0	0	0	0	0	1	1	4	7	A	3.5	16.7
29-Jun-08	12	2	5	12	9	15	5	2	0	0	0	1	0	0	0	0	0	0	0	3	10	9	A	13	4.2	14.8
30-Jun-08	8	17	16	10	9	16	11	10	6	4	0	1	0	1	2	1	0	1	3	5	6	6	2	4	5.9	16.7
Hourly Avg	6.9	7.6	7.0	7.0	7.7	8.2	6.7	6.0	4.6	3.3	2.6	2.3	2.1	2.1	2.1	2.1	2.2	2.2	2.6	3.8	5.8	7.5	7.0	6.8		
Hourly Max	17.4	20.8	16.8	17.3	20.3	17.0	15.6	14.8	12.8	8.8	8.1	5.1	5.5	5.4	5.0	6.8	5.3	5.8	5.7	11.4	17.0	22.8	22.7	24.3		

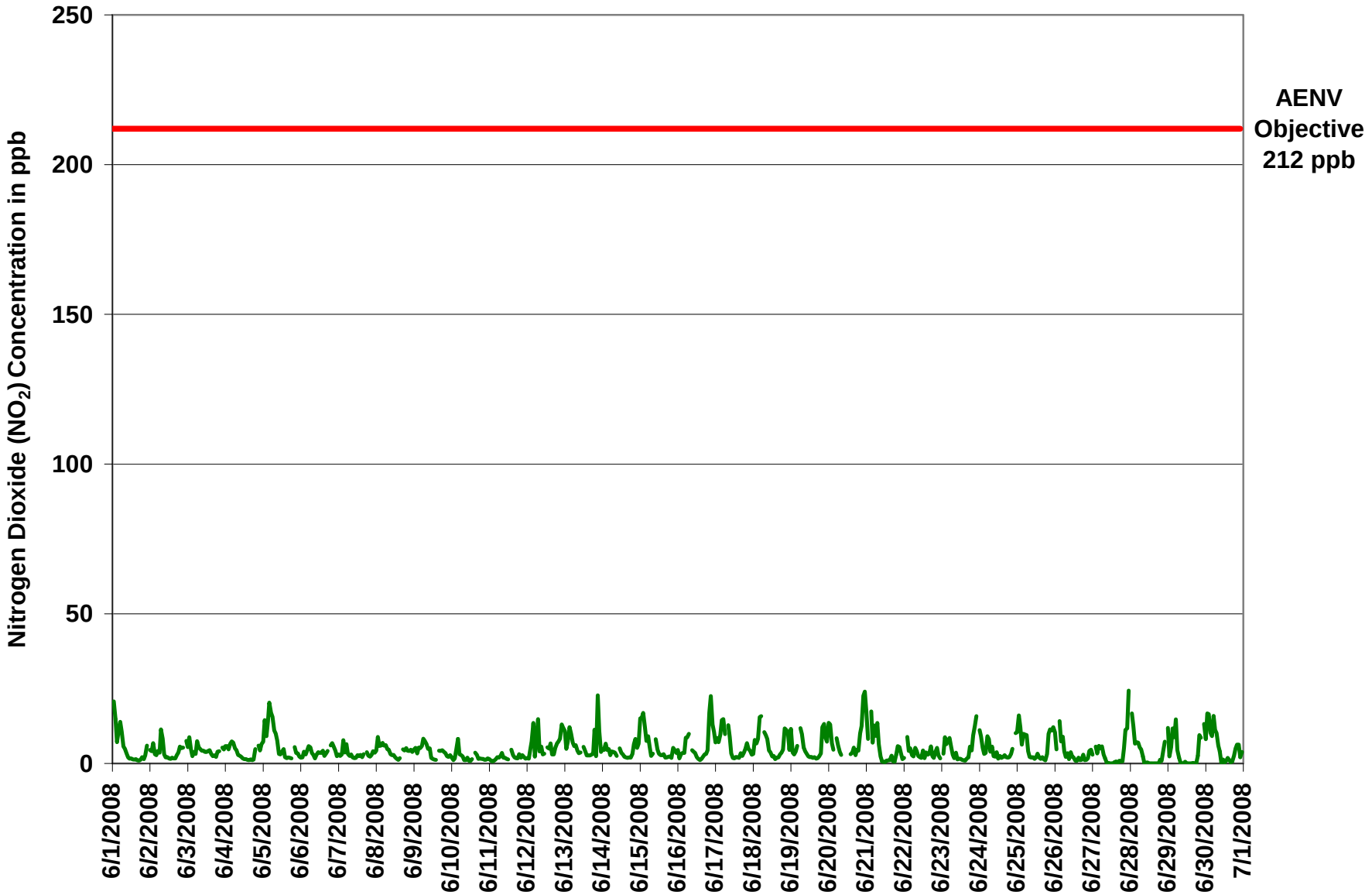


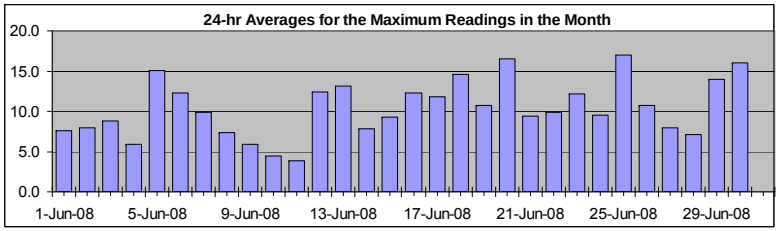
Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	68.3	ppb	25-Jun	6:00 7:00
Maximum 24-hr Value:	17.0	ppb	25-Jun	

AIC Time:	32 hrs	Operational Time:	684 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	38.0	27.9	14.1	7.4	4.0	2.1	0.7	10.4 ppb	7.4 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-08	A	25	22	10	13	18	14	8	9	6	3	4	3	2	2	2	2	2	2	3	2	6	9	A	7.6	24.6
2-Jun-08	8	6	25	8	4	6	5	17	15	5	3	3	3	4	4	3	2	4	7	8	24	7	A	10	8.0	25.4
3-Jun-08	7	22	9	5	16	7	30	15	10	7	8	6	6	6	8	5	4	4	4	5	5	A	7	7	8.8	29.7
4-Jun-08	9	10	7	8	9	9	8	7	4	5	3	3	3	3	3	2	3	2	3	7	A	9	7	12	5.9	12.2
5-Jun-08	13	61	14	23	37	25	22	15	13	12	6	8	16	19	4	3	4	5	3	A	25	5	5	7	15.0	61.3
6-Jun-08	3	4	28	16	38	14	7	6	5	4	10	15	17	32	17	5	7	9	A	10	13	8	9	5	12.2	38.2
7-Jun-08	25	7	5	21	8	28	12	4	6	6	5	4	10	19	15	14	5	A	6	4	3	9	6	6	9.8	27.9
8-Jun-08	8	15	11	9	15	11	13	7	6	5	4	4	3	3	2	4	A	7	6	8	8	6	8	6	7.3	15.3
9-Jun-08	6	8	5	6	7	8	9	9	8	6	8	3	3	2	3	A	6	9	6	7	6	4	3	4	5.9	9.5
10-Jun-08	3	3	4	17	17	5	5	4	2	2	3	2	2	4	A	5	5	3	3	2	3	2	3	3	4.4	17.4
11-Jun-08	2	2	2	2	2	5	4	4	6	3	4	3	3	A	11	4	3	3	3	5	3	6	5	3	3.8	10.8
12-Jun-08	3	2	15	17	25	9	22	24	13	12	5	5	A	13	15	16	4	5	9	10	11	12	20	19	12.4	25.4
13-Jun-08	22	6	12	23	17	13	7	13	23	5	8	A	8	7	4	4	5	6	10	25	13	40	24	7	13.1	40.0
14-Jun-08	9	9	24	9	8	5	9	9	6	5	A	8	5	4	3	3	3	5	3	7	9	17	10	11	7.9	24.4
15-Jun-08	21	20	21	19	13	17	15	4	9	A	12	7	4	5	4	4	3	4	4	6	3	9	6	5	9.3	21.4
16-Jun-08	7	3	14	10	8	16	11	23	A	7	8	21	9	3	2	3	4	5	22	8	26	43	18	14	12.3	42.8
17-Jun-08	9	14	14	19	24	30	13	A	17	25	8	3	3	19	3	3	6	5	9	7	12	11	11	4	11.8	29.9
18-Jun-08	6	27	10	13	27	32	A	14	35	12	8	6	5	6	3	3	3	7	31	8	17	23	30	6	14.5	35.4
19-Jun-08	38	7	5	6	9	A	19	18	9	6	7	5	4	5	5	5	3	3	4	6	28	29	14	14	10.7	37.9
20-Jun-08	19	22	13	6	A	20	12	11	10	C	C	C	C	A	5	12	37	4	29	6	14	14	32	32	16.5	37.0
21-Jun-08	24	12	A	25	13	18	19	28	10	5	1	2	2	3	2	4	7	3	2	6	9	11	8	4	9.4	28.2
22-Jun-08	5	A	23	8	19	5	17	19	6	5	14	3	19	4	12	9	12	13	11	3	7	7	4	4	9.9	23.2
23-Jun-08	A	5	18	15	20	21	11	8	3	19	2	3	5	14	3	3	5	16	22	6	16	28	26	A	12.2	28.1
24-Jun-08	14	14	15	6	10	25	24	12	12	5	4	10	3	5	5	6	6	5	4	4	6	10	A	14	9.5	24.5
25-Jun-08	14	31	26	24	18	18	68	19	11	16	6	15	12	17	9	4	18	4	3	9	16	13	13	21	17.0	68.3
26-Jun-08	23	11	A	31	15	14	7	4	7	11	36	4	26	3	2	4	3	4	8	3	4	4	11	11	10.7	36.1
27-Jun-08	6	A	12	6	10	10	11	7	4	1	2	1	2	2	3	3	3	4	4	4	11	16	23	41	8.0	40.8
28-Jun-08	A	20	20	10	9	19	20	11	7	3	3	1	2	1	1	0	0	0	1	3	4	8	15	A	7.1	20.0
29-Jun-08	47	4	19	20	15	36	10	4	11	1	0	28	13	13	1	2	14	1	2	32	21	13	A	16	13.9	46.8
30-Jun-08	11	31	23	14	34	22	14	14	26	26	1	17	3	18	6	3	3	5	11	34	35	23	6	6	16.0	34.7
Hourly Avg	13.4	14.4	14.9	13.4	15.9	16.0	15.0	11.6	10.4	8.0	6.6	7.0	6.9	8.3	5.4	4.7	6.3	5.0	8.0	8.4	12.1	13.5	12.4	10.8		
Hourly Max	46.8	61.3	27.7	31.3	38.2	35.5	68.3	28.2	35.4	25.7	36.1	27.9	25.5	32.0	16.7	16.4	37.0	15.6	30.5	33.9	34.7	42.8	31.7	40.8		

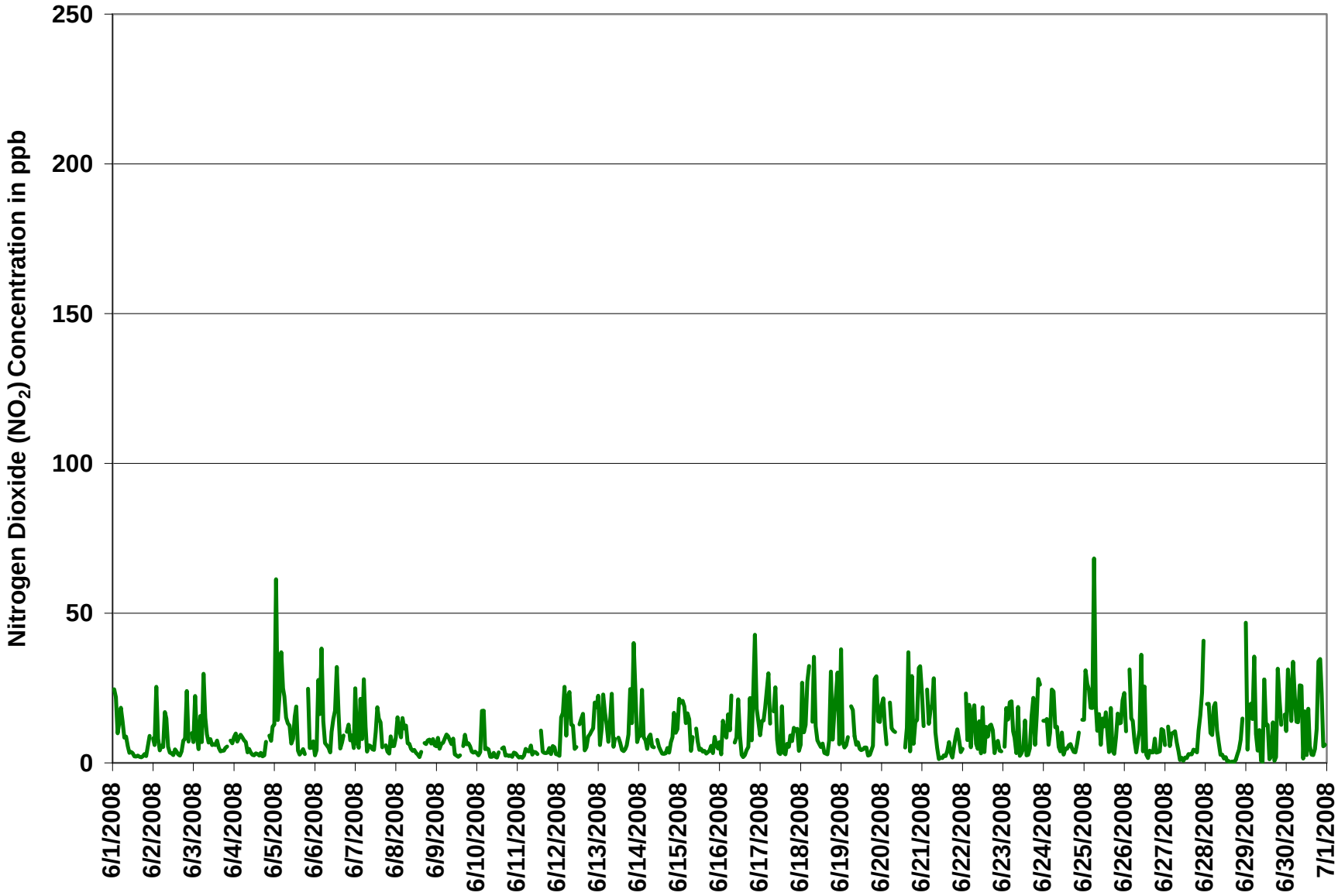
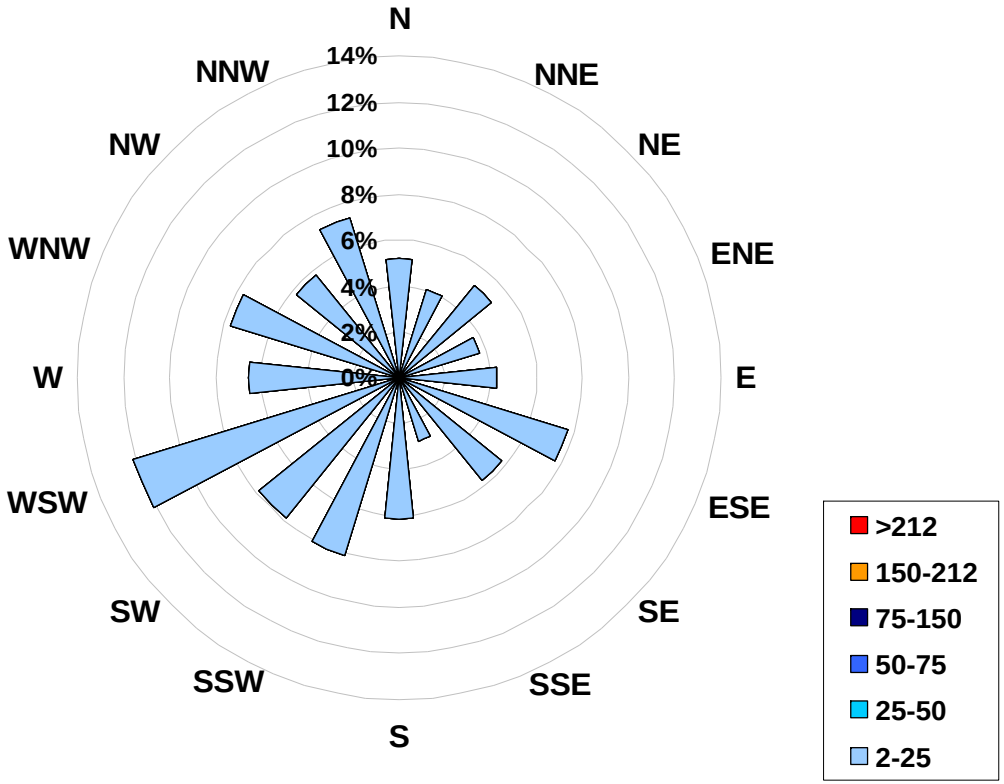


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Crescent Heights Site for June 2008



Calms:	0%

Frequency Distribution of NO_2 in ppb

Range			Frequency (hrs)
2.0	<	25	684
25	to	50	0
50	to	75	0
75	to	150	0
150	to	212	0
	>	212	0
Total Non-Zero Values			684

PAS - Crescent Heights Nitric Oxide Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

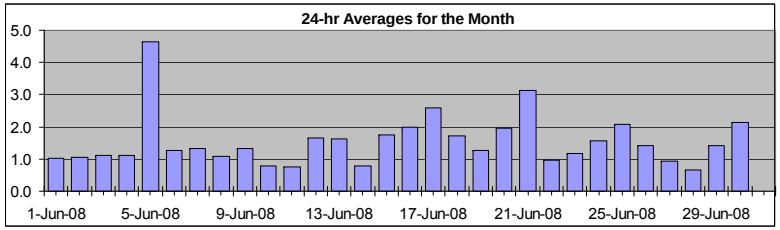
Nitric Oxide (NO)

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Maximum 1-hr Average:	23.8	ppb	5-Jun	6:00 7:00
Maximum 24-hr Average:	4.7	ppb	5-Jun	



AIC Time:	32 hrs			Operational Time:	684 hrs						
Calibration Time:	4 hrs			AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average		Median	
	12.3	5.2	1.5	0.9	0.6	0.0	0.0	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-08	A	1	2	1	1	3	2	2	2	2	1	1	1	1	0	1	0	0	1	0	0	1	1	A	1.0	2.7
2-Jun-08	1	1	1	0	1	0	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.1	2.8
3-Jun-08	1	2	1	0	1	0	2	1	1	1	1	1	2	1	2	1	1	1	1	1	1	A	1	1	1.1	2.4
4-Jun-08	2	2	1	1	2	2	3	2	1	1	1	1	1	1	0	1	0	1	0	1	A	1	1	1	1.1	2.6
5-Jun-08	1	9	1	2	20	20	24	8	5	4	1	1	1	2	1	1	1	1	1	A	2	1	1	1	4.7	23.8
6-Jun-08	1	1	1	1	3	2	2	2	1	1	2	2	2	2	2	1	1	1	A	1	1	1	1	0	1.3	3.1
7-Jun-08	1	0	0	3	1	4	1	1	1	1	1	1	3	2	2	2	1	A	1	1	1	1	1	1	1.3	3.6
8-Jun-08	1	1	1	1	1	1	1	1	2	2	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1.1	1.9
9-Jun-08	1	1	1	1	1	1	2	4	3	3	3	1	1	1	1	A	1	1	1	1	1	0	1	1	1.3	4.0
10-Jun-08	1	0	0	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	0	0.8	1.3
11-Jun-08	1	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	1	1	1	1	0.7	1.4
12-Jun-08	1	1	1	1	3	1	3	6	2	4	2	2	A	2	3	3	1	1	1	1	1	1	1	1	1.7	5.8
13-Jun-08	1	0	1	2	1	2	4	6	4	2	2	A	1	1	1	1	1	1	1	2	1	1	1	0	1.6	5.5
14-Jun-08	0	0	2	1	0	1	1	1	1	1	A	1	1	1	1	1	0	1	0	1	1	2	0	0	0.8	1.8
15-Jun-08	2	1	5	2	2	5	4	2	2	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1.7	5.1
16-Jun-08	1	1	1	1	1	2	3	11	A	2	2	3	1	1	1	1	1	1	1	0	1	10	0	1	2.0	10.8
17-Jun-08	0	1	1	3	9	19	9	A	8	5	1	0	0	2	0	0	0	0	0	0	0	0	1	0	2.6	18.7
18-Jun-08	0	1	0	0	1	10	A	5	6	4	1	1	0	0	1	1	1	1	2	0	1	1	2	0	1.7	9.7
19-Jun-08	2	0	1	1	1	A	4	5	2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1.3	4.7
20-Jun-08	1	3	1	1	A	3	3	2	2	C	C	C	C	A	0	0	1	0	1	0	1	1	3	12	2.0	12.2
21-Jun-08	7	0	A	15	1	8	8	20	4	1	0	0	0	1	1	1	1	0	1	1	1	1	0	0	3.1	20.1
22-Jun-08	0	A	2	0	0	0	1	2	1	1	1	1	3	1	1	1	1	3	1	1	1	1	0	0	1.0	2.6
23-Jun-08	A	0	1	0	1	3	3	1	1	2	1	1	1	1	1	1	1	1	2	1	1	2	2	A	1.2	2.8
24-Jun-08	1	1	1	1	1	6	5	1	3	2	1	2	1	2	1	1	1	1	1	1	1	1	A	0	1.6	6.0
25-Jun-08	1	7	2	3	3	6	9	5	2	2	1	1	2	3	1	1	1	0	0	0	0	0	0	0	2.1	9.4
26-Jun-08	2	0	A	6	1	3	2	2	2	1	4	1	2	1	0	1	1	0	0	1	1	1	0	1	1.4	5.7
27-Jun-08	0	A	0	0	1	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0.9	10.2
28-Jun-08	A	0	0	0	0	4	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.7	4.6
29-Jun-08	5	0	2	2	1	13	2	1	1	1	0	1	0	1	0	1	1	0	0	1	0	0	A	0	1.4	12.6
30-Jun-08	0	3	2	1	9	9	7	6	3	3	1	2	1	1	1	0	0	0	0	1	0	0	0	0	2.1	9.2
Hourly Avg	1.2	1.4	1.1	1.6	2.3	4.5	4.0	3.7	2.4	1.8	1.4	1.1	1.1	1.1	0.9	0.8	0.7	0.7	0.7	0.6	0.7	1.1	0.9	1.4		
Hourly Max	6.9	9.3	4.6	15.0	19.9	19.9	23.8	20.1	8.2	5.1	3.9	2.5	2.5	3.4	2.6	2.5	1.5	2.6	1.6	1.6	1.7	10.2	3.1	12.2		

PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

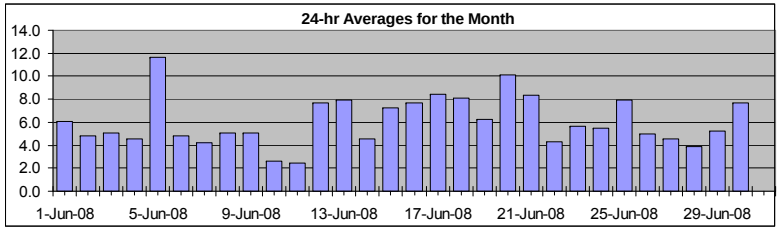
Oxides of Nitrogen (NO_x)

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Maximum 1-hr Average:	40.1	ppb	5-Jun	4:00 5:00
Maximum 24-hr Average:	11.6	ppb	5-Jun	



AIC Time:	32 hrs	Operational Time:	684 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	32.9	16.9	7.4	4.3	2.5	0.7	0.0	6.1 ppb	4.3 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-08	A	22	17	7	12	17	13	7	6	4	3	2	2	2	1	2	1	1	2	2	1	3	6	A	6.0	21.9
2-Jun-08	5	4	8	3	3	4	4	14	10	4	3	3	2	2	3	2	2	4	4	6	6	6	A	8	4.8	13.9
3-Jun-08	6	11	5	3	4	3	10	6	6	5	5	5	5	5	6	4	3	3	3	5	4	A	6	5	5.1	10.8
4-Jun-08	7	7	5	7	9	9	7	6	4	3	3	2	2	2	1	1	1	1	1	5	A	7	5	7	4.6	9.0
5-Jun-08	8	24	10	16	40	37	39	19	15	11	4	4	5	7	3	2	3	3	2	A	7	4	4	3	11.6	40.1
6-Jun-08	2	3	5	4	7	7	7	5	4	2	4	5	5	5	6	3	4	5	A	7	7	6	5	3	4.8	7.2
7-Jun-08	4	3	3	10	4	10	4	3	4	3	3	3	5	5	5	3	4	A	4	3	3	3	5	4	4.2	10.2
8-Jun-08	5	9	6	7	8	7	7	6	6	4	4	4	3	2	2	2	A	5	5	6	5	4	5	4	5.0	9.3
9-Jun-08	5	6	4	6	6	6	10	11	9	8	8	2	2	2	2	A	5	5	5	4	4	3	2	3	5.1	11.2
10-Jun-08	2	1	2	5	9	3	4	3	2	1	3	1	1	2	A	4	4	2	2	2	2	1	2	2	2.6	8.8
11-Jun-08	2	1	1	1	2	2	2	3	4	2	3	2	2	A	5	3	2	2	2	3	2	3	3	2	2.4	5.5
12-Jun-08	3	2	5	8	16	3	10	20	5	9	5	5	A	7	7	9	4	3	6	7	8	9	14	13	7.7	20.4
13-Jun-08	12	5	8	14	11	9	9	11	8	5	6	A	7	5	3	3	3	4	4	13	3	24	12	4	7.9	24.1
14-Jun-08	5	5	8	5	5	3	5	5	4	3	A	6	4	4	3	2	2	2	2	3	7	10	5	7	4.5	9.8
15-Jun-08	17	16	21	14	9	14	9	4	5	A	11	6	4	3	4	4	3	2	3	3	2	6	5	4	7.3	21.2
16-Jun-08	5	2	4	4	4	11	12	20	A	6	5	6	3	2	1	2	3	4	3	4	18	33	13	11	7.7	32.8
17-Jun-08	7	9	7	12	23	33	18	A	21	14	4	2	2	4	2	2	4	3	4	5	7	5	4	3	8.5	33.4
18-Jun-08	3	8	7	8	17	25	A	16	16	11	6	4	3	2	2	2	3	4	5	4	12	12	13	4	8.1	25.4
19-Jun-08	13	4	4	4	6	A	16	14	7	5	4	3	2	3	2	2	2	2	3	3	13	14	9	8	6.2	15.8
20-Jun-08	15	16	7	5	A	11	9	6	4	C	C	C	C	A	3	3	6	2	5	4	11	13	26	36	10.1	36.4
21-Jun-08	24	9	A	32	8	20	17	34	11	4	1	1	1	1	1	2	3	1	1	3	6	6	4	1	8.4	33.6
22-Jun-08	2	A	10	4	5	3	3	7	5	4	3	3	7	2	5	4	5	8	3	2	4	6	3	2	4.3	10.3
23-Jun-08	A	4	9	7	8	11	8	4	3	5	2	2	2	2	1	1	2	2	7	5	10	14	17	A	5.7	16.9
24-Jun-08	12	9	5	3	4	15	13	4	8	3	3	5	2	4	3	3	3	2	2	2	4	5	A	10	5.5	14.7
25-Jun-08	11	23	14	9	12	15	19	8	4	4	3	2	4	6	2	2	2	1	1	3	10	11	11	13	7.9	22.6
26-Jun-08	12	5	A	20	8	12	6	4	6	2	7	3	3	1	1	2	1	1	3	2	2	2	4	5	4.9	19.8
27-Jun-08	3	A	6	3	6	7	9	5	3	0	0	0	0	0	0	0	0	0	0	0	4	11	12	35	4.6	34.6
28-Jun-08	A	16	12	5	6	11	10	8	3	0	0	0	0	0	0	0	0	0	0	1	1	4	8	A	3.9	15.7
29-Jun-08	17	2	7	13	9	27	6	3	1	0	0	1	0	0	0	0	0	0	0	3	9	8	A	13	5.2	27.0
30-Jun-08	8	20	18	10	18	24	18	16	9	6	1	3	0	2	2	1	0	1	3	6	6	6	2	4	7.6	24.4
Hourly Avg	7.9	8.7	7.8	8.3	9.6	12.4	10.4	9.4	6.6	4.7	3.6	3.0	2.8	2.9	2.6	2.5	2.6	2.6	2.9	4.1	6.2	8.3	7.6	7.9		
Hourly Max	24.4	23.7	21.2	32.3	40.1	36.8	39.2	33.6	21.0	14.0	10.8	6.1	6.8	6.7	7.3	8.9	6.4	8.5	6.6	12.8	18.4	32.8	25.9	36.4		

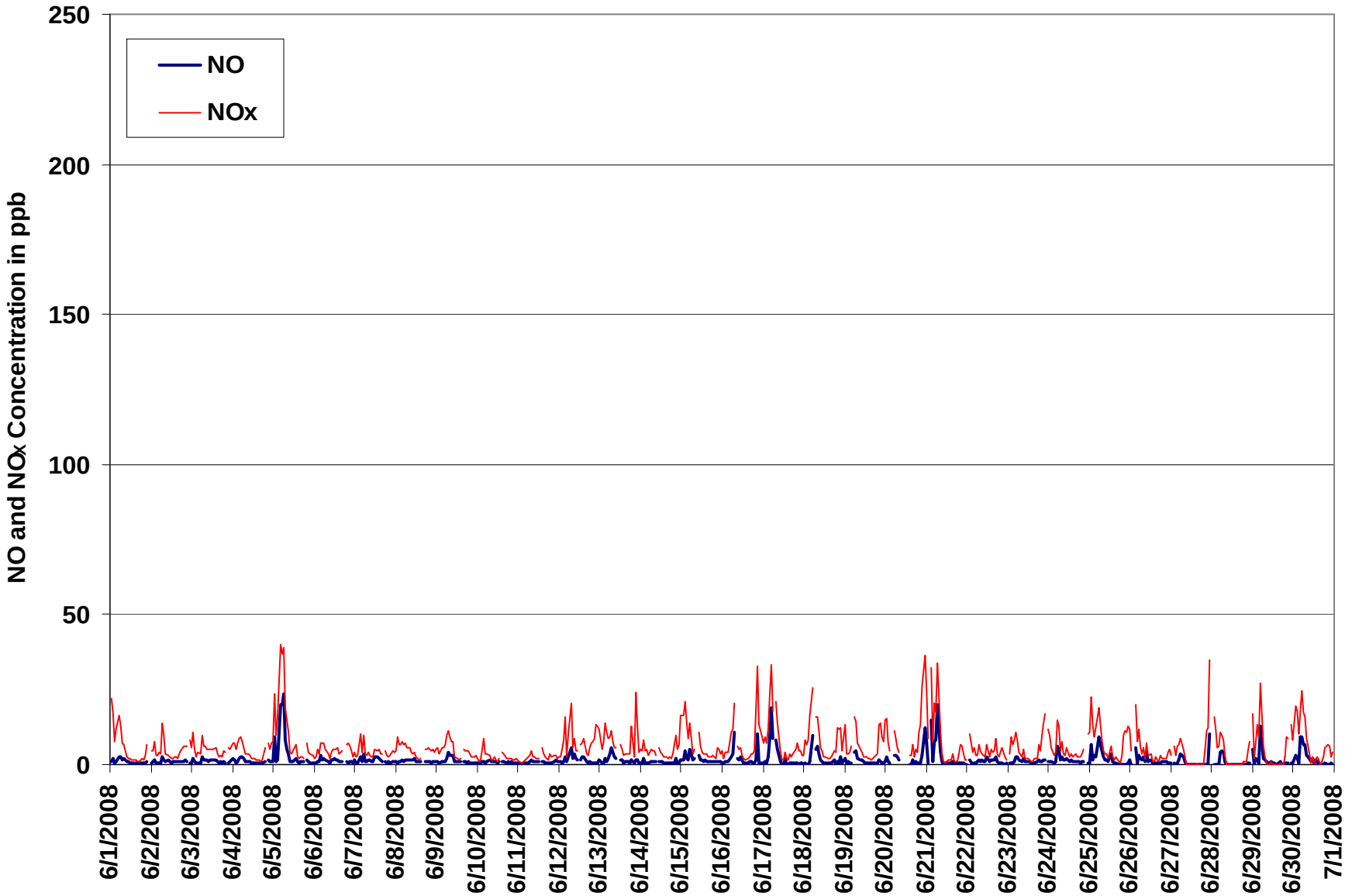


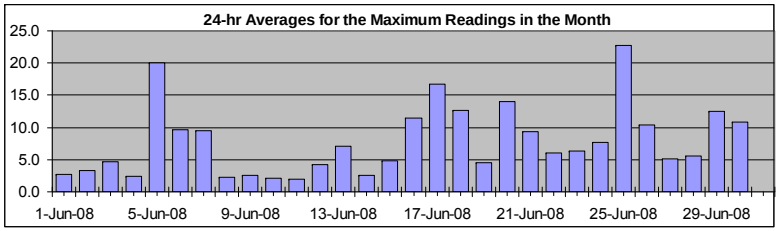
Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	165.3	ppb	17-Jun	5:00 6:00
Maximum 24-hr Value:	22.8	ppb	25-Jun	

AIC Time:	32 hrs	Operational Time:	684 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	84.2	33.0	5.7	2.3	1.7	1.0	0.5	7.8 ppb	2.3 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**

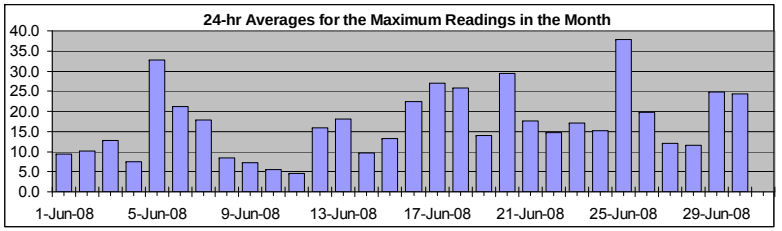
Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-08	A	11	5	2	2	5	4	3	4	3	3	2	2	1	1	2	1	1	1	1	1	2	2	A	2.8	11.0
2-Jun-08	3	1	12	1	1	1	2	6	3	2	2	2	2	3	3	2	2	2	2	2	17	3	A	2	3.3	17.2
3-Jun-08	1	23	2	1	2	1	23	7	4	3	14	3	4	3	3	2	2	2	2	2	1	A	2	3	4.7	23.4
4-Jun-08	4	4	2	2	3	4	5	4	2	2	2	2	2	2	2	1	1	1	1	2	A	3	2	3	2.5	5.4
5-Jun-08	2	144	2	4	82	64	50	15	8	8	4	3	12	19	2	2	2	2	2	A	27	2	2	7	20.1	144.2
6-Jun-08	1	2	17	7	87	4	4	4	3	2	8	13	16	30	10	3	2	2	A	2	1	2	3	1	9.6	86.8
7-Jun-08	30	1	2	26	2	37	9	2	3	3	3	2	15	26	28	18	2	A	2	2	2	2	2	2	9.6	37.3
8-Jun-08	2	2	2	2	4	2	2	2	2	3	3	3	2	2	2	2	A	2	2	2	2	2	2	2	2.2	4.2
9-Jun-08	2	2	1	2	2	2	3	5	4	5	7	2	2	3	2	A	2	3	2	2	2	2	2	1	2.5	6.9
10-Jun-08	1	1	1	12	2	1	2	2	2	2	2	2	1	1	A	2	2	2	2	2	2	1	1	2	2.1	12.0
11-Jun-08	2	1	1	1	2	2	2	2	2	2	2	2	2	A	5	2	2	2	2	2	2	2	2	2	1.9	5.0
12-Jun-08	2	2	2	2	7	2	7	12	5	10	4	3	A	10	7	7	2	1	2	2	2	2	2	1	4.2	11.6
13-Jun-08	5	1	3	6	2	3	6	24	47	4	9	A	3	3	2	2	2	3	2	19	2	6	7	2	7.0	46.5
14-Jun-08	1	1	10	1	2	1	3	4	3	2	A	2	2	2	1	2	1	2	1	2	2	12	1	1	2.6	11.8
15-Jun-08	8	3	10	6	11	16	13	2	7	A	6	3	2	3	2	2	2	2	2	2	2	2	2	2	4.8	15.8
16-Jun-08	1	1	6	3	2	6	6	56	A	4	5	30	9	2	1	2	2	3	12	1	5	100	2	2	11.4	100.4
17-Jun-08	1	3	3	10	31	165	15	A	13	33	4	2	1	89	1	1	2	1	1	2	1	2	2	2	16.8	165.3
18-Jun-08	1	4	1	1	13	77	A	8	84	7	4	4	3	3	2	2	2	4	28	2	3	8	29	1	12.6	83.7
19-Jun-08	19	2	3	1	2	A	7	13	5	3	3	3	2	3	3	3	2	2	2	2	16	7	2	2	4.6	19.3
20-Jun-08	3	9	2	2	A	30	23	20	19	C	C	C	C	A	2	11	36	1	16	2	1	3	17	56	14.0	56.2
21-Jun-08	18	2	A	32	5	17	28	73	9	4	1	2	2	2	2	3	3	3	2	2	1	1	1	2	9.3	73.2
22-Jun-08	3	A	12	2	8	3	20	20	2	3	8	3	21	2	4	5	7	6	4	2	2	2	1	3	6.1	20.8
23-Jun-08	A	3	2	3	6	13	7	5	2	20	2	2	4	22	2	3	3	6	10	2	3	14	5	A	6.3	22.4
24-Jun-08	3	3	2	3	3	60	52	4	6	4	2	5	2	3	3	3	3	3	3	1	2	2	A	3	7.6	59.9
25-Jun-08	3	51	63	92	10	29	95	45	25	24	8	13	16	37	7	2	14	2	1	2	1	1	2	3	22.8	95.4
26-Jun-08	33	3	A	53	3	8	4	3	7	13	37	3	46	2	1	2	2	2	2	4	4	2	2	2	10.4	53.3
27-Jun-08	2	A	2	1	2	4	11	7	3	1	1	0	1	1	1	1	1	1	1	1	1	2	2	12	5.1	60.9
28-Jun-08	A	0	0	0	0	44	41	19	6	1	1	0	1	0	1	0	1	1	1	1	1	3	2	A	5.6	43.8
29-Jun-08	58	1	16	10	2	72	3	3	15	2	2	25	10	9	1	3	21	1	1	27	1	1	A	3	12.5	72.1
30-Jun-08	2	42	7	1	81	23	10	10	6	15	2	20	4	17	2	1	2	1	1	4	3	2	3	1	10.8	81.2
Hourly Avg	7.7	11.6	6.8	9.6	13.1	24.0	15.8	13.1	10.4	6.5	5.3	5.5	6.8	10.7	3.6	3.1	4.3	2.2	3.7	3.2	3.8	6.6	4.1	6.3		
Hourly Max	57.9	144.2	62.6	92.4	86.8	165.3	95.4	73.2	83.7	33.1	37.1	30.4	46.1	89.4	27.9	17.8	36.1	6.2	28.0	26.9	26.8	100.4	29.4	60.9		

Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	199.4	ppb	5-Jun	1:00 2:00
Maximum 24-hr Value:	37.9	ppb	25-Jun	

AIC Time:	32 hrs	Operational Time:	684 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	109.6	57.5	19.0	8.6	4.8	2.4	0.8	16.9 ppb	8.6 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-08	A	36	26	10	14	22	17	11	12	7	5	4	4	3	2	3	2	2	2	3	2	6	11	A	9.3	35.8
2-Jun-08	8	6	35	8	4	6	6	23	17	6	4	4	3	7	7	3	3	5	9	9	41	9	A	10	10.2	41.0
3-Jun-08	7	43	10	4	17	7	54	22	12	9	21	8	9	8	10	5	5	5	5	6	6	A	8	10	12.7	54.2
4-Jun-08	12	13	7	10	12	12	12	9	5	6	5	3	4	5	5	3	3	2	3	8	A	11	9	13	7.5	13.3
5-Jun-08	13	199	15	27	104	85	70	30	21	17	7	8	24	37	5	3	5	6	4	A	51	6	6	12	32.9	199.4
6-Jun-08	4	5	43	22	122	18	9	9	7	5	18	27	32	64	26	6	8	10	A	12	13	8	11	6	21.1	122.0
7-Jun-08	50	7	5	46	9	63	15	5	8	8	8	6	24	42	43	26	6	A	7	4	4	11	7	6	17.8	62.8
8-Jun-08	9	16	12	10	18	13	14	8	8	6	6	6	4	3	3	4	A	8	7	8	8	7	8	6	8.4	18.3
9-Jun-08	6	9	5	7	7	9	12	13	11	10	14	4	4	4	4	A	6	11	6	7	6	5	4	4	7.3	13.9
10-Jun-08	4	3	4	28	19	5	6	6	3	2	5	3	3	4	A	6	6	3	3	3	3	2	3	3	5.4	27.7
11-Jun-08	3	2	2	2	3	5	5	5	6	3	4	4	4	A	15	5	4	4	4	5	4	7	7	4	4.6	15.2
12-Jun-08	4	4	17	19	33	10	29	35	17	22	9	8	A	22	21	23	5	6	10	10	11	13	21	19	15.9	34.6
13-Jun-08	27	6	12	29	18	14	12	34	62	8	14	A	11	9	5	5	5	8	12	29	15	42	30	8	18.1	62.3
14-Jun-08	10	10	34	9	7	5	12	13	7	6	A	9	7	5	4	4	3	6	3	7	10	26	11	12	9.6	34.1
15-Jun-08	29	22	31	24	25	32	26	5	15	A	16	9	6	6	5	5	4	4	5	7	4	10	7	5	13.1	32.1
16-Jun-08	7	3	19	12	8	20	16	77	A	9	14	53	18	4	2	3	6	7	34	7	28	133	19	15	22.4	132.6
17-Jun-08	9	16	17	27	55	194	26	A	29	56	9	4	4	101	4	3	7	6	10	7	12	11	12	4	27.0	193.7
18-Jun-08	6	29	11	13	40	109	A	19	119	16	9	7	6	6	4	3	4	11	58	8	18	31	57	6	25.7	119.4
19-Jun-08	55	7	7	6	10	A	25	31	10	8	9	5	5	6	5	7	3	3	5	6	44	35	15	14	13.9	55.1
20-Jun-08	22	30	14	7	A	50	34	29	28	C	C	C	C	A	5	20	71	4	43	7	14	15	49	88	29.4	88.0
21-Jun-08	41	13	A	53	16	35	47	96	18	9	2	2	2	4	3	7	7	5	2	6	9	12	8	4	17.5	96.1
22-Jun-08	4	A	32	8	27	6	38	36	7	7	22	5	37	5	16	13	16	19	15	4	6	7	4	5	14.7	37.9
23-Jun-08	A	6	19	16	25	33	17	13	4	37	3	4	8	36	3	4	4	18	30	7	18	42	30	A	17.2	42.0
24-Jun-08	14	14	15	5	9	85	72	14	15	8	5	14	4	7	6	6	8	5	5	4	8	11	A	15	15.3	84.8
25-Jun-08	15	78	87	113	26	47	162	58	33	34	14	27	22	54	17	5	32	5	3	9	17	14	14	23	37.9	161.8
26-Jun-08	52	11	A	85	18	19	11	6	14	23	74	6	71	4	2	6	4	3	8	6	5	5	11	12	19.8	84.7
27-Jun-08	7	A	14	5	11	13	21	12	6	2	2	0	2	2	3	4	3	5	4	2	12	17	35	97	12.1	97.2
28-Jun-08	A	20	19	9	8	62	57	27	13	3	2	1	2	0	0	0	0	0	1	2	4	7	15	A	11.5	61.7
29-Jun-08	104	4	35	26	16	102	12	6	25	2	1	53	20	21	1	2	31	0	2	58	22	13	A	17	24.9	104.2
30-Jun-08	11	67	29	14	109	44	22	22	13	40	2	37	3	32	7	4	3	5	12	37	38	23	7	6	24.4	108.9
Hourly Avg	19.8	24.3	20.5	21.8	27.2	38.8	29.7	23.3	18.9	13.2	10.8	11.5	12.2	17.8	8.0	6.5	9.1	6.1	10.7	10.0	14.9	18.6	15.5	15.8		
Hourly Max	104.2	199.4	87.4	112.9	122.0	193.7	161.8	96.1	119.4	56.1	73.7	53.0	70.9	101.2	42.7	26.2	70.8	18.9	58.2	57.5	51.4	132.6	57.2	97.2		

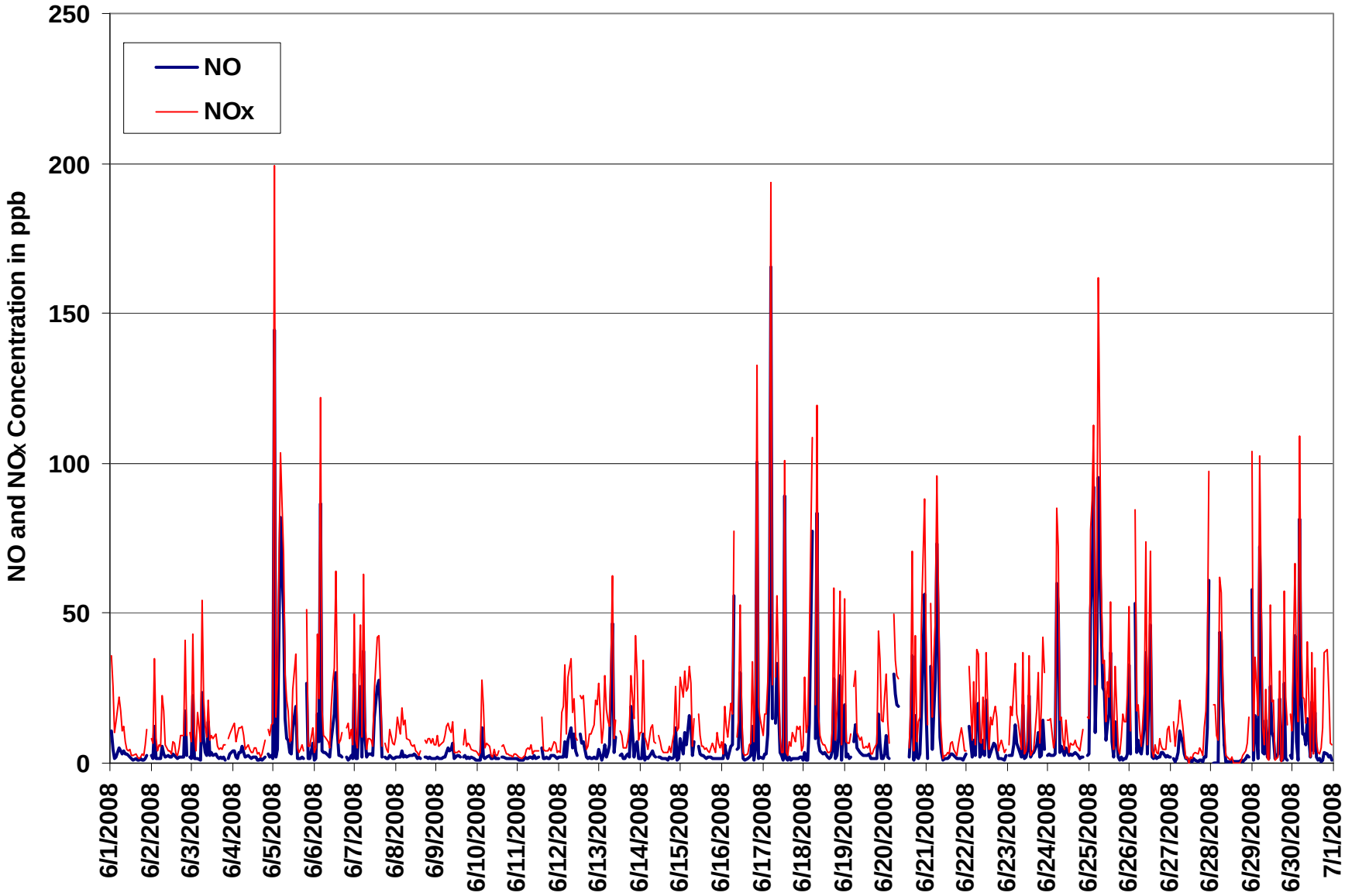


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PAS - Crescent Heights Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O_3)

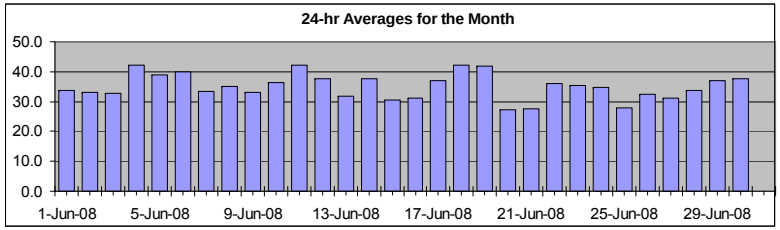
Station: Crescent Heights
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	62.7	ppb	30-Jun	18:00 19:00
Maximum 24-hr Average:	42.2	ppb	4-Jun	



AIC Time:	32 hrs							Operational Time:	686 hrs																
Calibration Time:	2 hrs							AMD Operational Uptime:	100.0%																
Percentile	99	95	75	50	25	5	1		Average		Median														
	58.9	55.2	43.7	36.3	26.8	11.8	7.6		35.1 ppb		36.3 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-08	A	6	9	18	15	10	14	22	26	31	39	45	41	45	47	49	51	52	50	47	46	41	36	A	33.7	52.2
2-Jun-08	36	30	27	29	30	30	29	17	23	34	35	35	35	40	40	39	41	41	41	38	37	32	A	21	33.1	41.4
3-Jun-08	23	19	25	35	35	35	29	29	30	30	36	38	37	37	40	43	43	36	35	31	32	A	30	29	32.9	43.5
4-Jun-08	25	26	26	21	26	23	27	31	37	41	45	50	55	57	57	56	57	57	57	51	A	50	50	42	42.2	57.3
5-Jun-08	38	24	22	11	2	4	9	22	34	41	54	59	58	57	59	58	57	56	54	A	46	47	44	45	39.1	59.4
6-Jun-08	45	47	43	37	32	26	24	30	40	44	44	43	45	46	45	49	47	42	A	41	40	34	37	38	40.1	49.0
7-Jun-08	35	33	27	20	27	23	26	28	29	32	33	32	32	32	33	35	37	A	41	42	43	42	40	42	33.3	43.1
8-Jun-08	36	30	28	24	24	28	28	30	31	33	32	31	36	41	46	46	A	51	47	42	39	38	35	34	35.1	50.6
9-Jun-08	30	29	35	31	29	26	20	19	20	25	33	36	40	42	44	A	46	45	44	41	35	32	32	29	33.1	45.6
10-Jun-08	31	35	33	30	31	38	33	28	32	32	35	38	39	41	A	38	40	41	39	39	40	42	41	38	36.3	41.7
11-Jun-08	35	34	35	37	38	43	43	40	37	38	38	43	52	A	59	57	52	45	44	42	40	38	38	39	42.1	58.8
12-Jun-08	41	40	32	31	24	36	32	28	36	31	34	38	A	45	42	39	49	54	49	46	41	38	30	30	37.6	53.9
13-Jun-08	25	29	23	17	18	19	19	21	24	29	36	A	44	43	45	42	39	38	39	32	48	27	37	39	31.8	48.2
14-Jun-08	35	29	26	27	28	32	28	36	36	40	A	45	46	47	48	48	50	50	49	46	36	30	30	25	37.7	49.6
15-Jun-08	12	11	5	8	11	12	20	25	31	A	40	44	46	48	49	50	49	48	45	40	37	27	22	22	30.5	50.2
16-Jun-08	19	26	24	25	27	19	18	18	A	37	39	39	40	43	44	44	45	45	46	44	26	18	16	11	31.0	46.2
17-Jun-08	13	11	13	10	8	8	15	A	24	33	43	47	54	58	58	59	58	59	57	53	41	39	42	46	36.9	59.1
18-Jun-08	45	39	31	30	19	18	A	24	34	42	51	57	61	61	59	59	57	54	54	51	37	30	25	33	42.2	61.0
19-Jun-08	33	34	36	32	25	A	26	30	44	50	54	55	56	56	56	56	54	52	52	50	37	32	26	20	42.0	56.0
20-Jun-08	11	11	17	20	A	17	21	25	27	34	41	47	C	C	A	41	40	42	38	38	32	25	11	5	27.2	47.0
21-Jun-08	6	12	A	6	14	9	14	13	27	39	45	42	40	40	40	39	39	40	37	30	23	23	27	33	27.8	44.8
22-Jun-08	35	A	33	36	35	35	32	27	26	31	35	43	42	41	39	39	40	38	43	41	36	34	34	34	36.1	43.2
23-Jun-08	A	35	25	24	24	20	27	32	33	37	41	43	44	44	45	48	51	48	42	39	32	25	17	A	35.4	50.6
24-Jun-08	16	21	30	29	22	16	22	32	33	42	42	39	40	42	45	45	44	45	46	45	41	36	A	24	34.7	45.7
25-Jun-08	18	10	11	16	10	11	14	21	25	31	35	39	40	41	43	44	44	44	44	41	32	23	19	16	28.1	43.8
26-Jun-08	15	22	A	16	18	15	21	24	29	34	35	39	43	48	50	47	48	47	42	37	35	33	28	26	32.6	49.7
27-Jun-08	25	A	24	24	19	17	18	23	25	29	32	36	37	40	42	45	46	46	46	44	39	31	23	11	31.3	46.4
28-Jun-08	A	10	11	15	11	12	14	19	32	46	50	51	51	51	48	47	45	45	44	41	41	30	23	A	33.7	51.4
29-Jun-08	32	37	32	22	23	20	28	34	38	39	44	45	47	46	47	47	46	48	49	45	35	26	A	20	37.0	49.2
30-Jun-08	24	14	11	20	22	10	18	25	33	39	45	45	46	45	46	50	59	57	63	51	49	44	47	42	37.7	62.7
Hourly Avg	27.4	25.1	24.8	23.3	22.3	21.2	22.9	26.0	31.0	35.9	40.3	42.9	44.6	45.6	47.0	46.8	47.3	47.1	46.1	42.4	37.9	33.4	31.2	29.4		
Hourly Max	45.3	47.4	42.9	37.4	38.3	42.9	42.9	40.1	43.5	50.2	54.4	59.4	60.8	61.0	59.3	58.9	58.6	59.1	62.7	52.7	48.8	50.3	50.5	46.1		

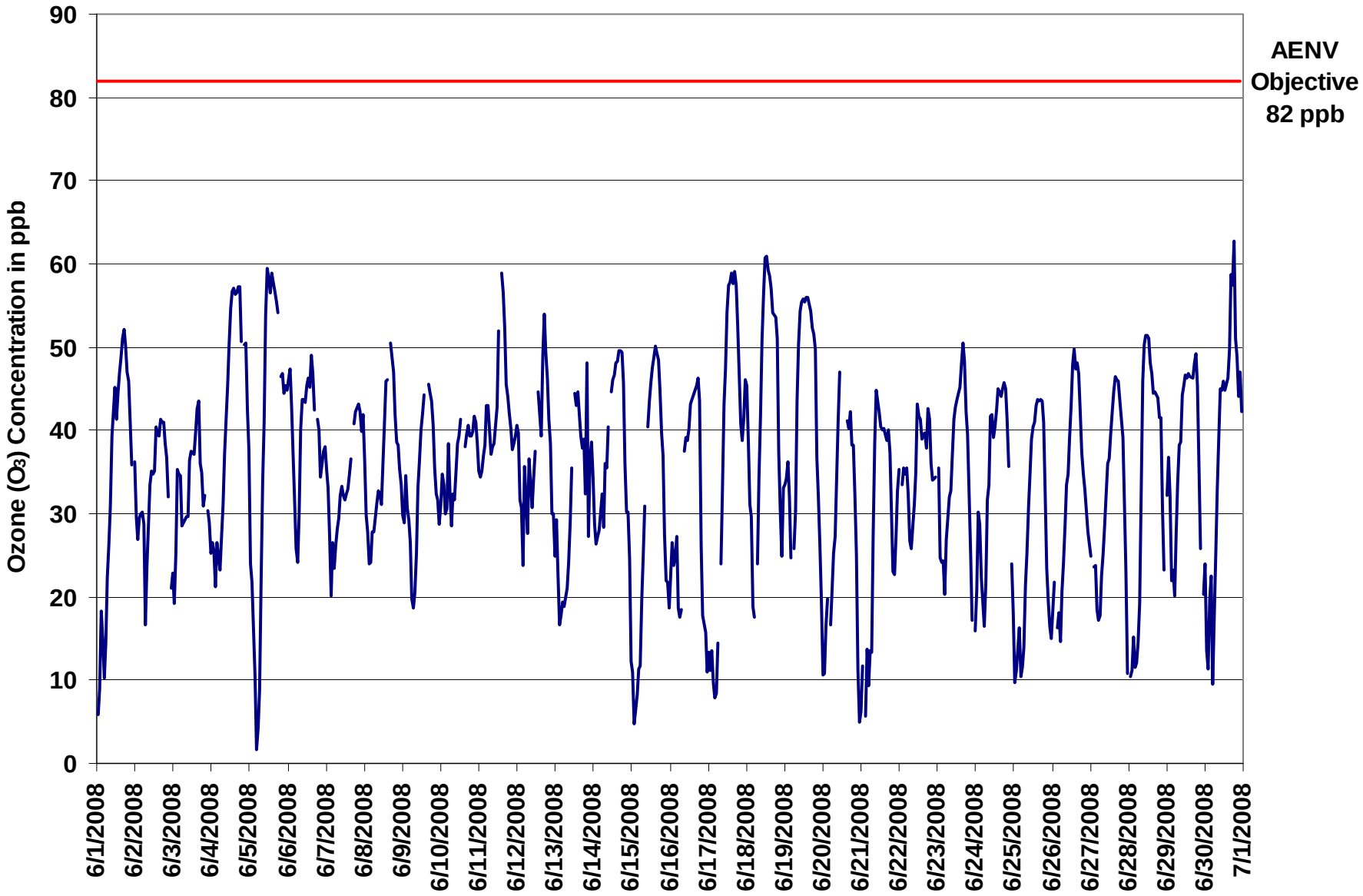


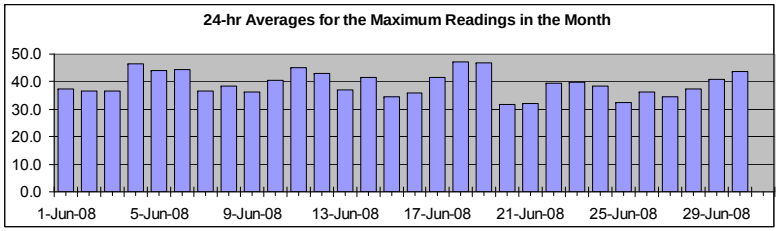
Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend

Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	74.1	ppb	30-Jun	17:00 18:00
Maximum 24-hr Value:	47.2	ppb	18-Jun	

AIC Time:	32 hrs	Operational Time:	686 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	62.9	58.3	46.7	40.5	31.3	18.4	13.0	39.2 ppb	40.5 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-08	A	8	20	20	17	14	19	27	30	37	44	50	44	48	49	52	52	54	52	49	47	45	40	A	37.1	53.9
2-Jun-08	40	31	31	31	33	33	31	26	32	38	39	37	37	44	43	41	44	43	44	41	42	37	A	25	36.7	44.4
3-Jun-08	28	24	34	37	38	38	35	33	34	34	40	43	40	40	44	45	47	39	38	34	36	A	33	33	36.8	46.6
4-Jun-08	29	32	31	28	32	30	30	38	41	45	50	52	57	58	58	59	59	60	61	58	A	56	54	50	46.4	60.6
5-Jun-08	47	35	27	23	6	6	14	28	47	51	59	63	62	61	61	60	59	58	58	A	49	49	46	46	44.2	63.0
6-Jun-08	49	51	48	41	37	30	28	39	43	45	46	46	49	50	49	53	52	47	A	45	46	39	43	40	44.2	52.7
7-Jun-08	38	37	32	27	28	29	28	29	32	35	36	35	34	34	35	38	41	A	46	44	45	44	45	50	36.7	49.7
8-Jun-08	40	39	31	26	28	31	30	32	34	35	34	35	38	46	49	49	A	54	52	45	42	41	37	36	38.4	54.4
9-Jun-08	31	34	36	33	31	31	23	20	24	30	40	39	43	44	46	A	47	47	46	46	38	34	34	32	36.1	47.3
10-Jun-08	33	36	36	37	45	45	38	44	36	33	39	42	43	44	A	42	42	42	41	41	42	43	43	41	40.3	45.4
11-Jun-08	38	35	36	41	46	45	45	42	39	40	40	51	56	A	64	60	60	47	46	45	43	40	40	41	45.2	63.5
12-Jun-08	42	42	38	38	38	39	40	40	41	35	37	43	A	50	46	46	53	57	53	49	43	43	37	39	43.0	56.9
13-Jun-08	34	31	26	24	23	22	21	27	27	33	43	A	48	47	47	44	41	41	43	41	55	44	51	41	37.1	55.1
14-Jun-08	42	34	32	31	30	39	33	40	40	44	A	47	49	49	51	51	51	51	51	50	42	36	33	30	41.4	51.4
15-Jun-08	18	19	11	13	15	18	26	28	35	A	45	46	48	50	51	52	53	53	49	42	39	34	25	24	34.5	52.7
16-Jun-08	27	29	28	27	32	28	23	26	A	40	42	42	43	46	47	47	47	48	49	47	39	31	26	14	36.0	49.1
17-Jun-08	15	15	19	21	13	13	18	A	28	41	46	51	59	61	60	61	61	63	63	57	49	43	46	49	41.4	63.0
18-Jun-08	48	47	35	34	22	26	A	28	41	55	54	60	63	63	61	61	60	57	58	55	48	34	30	45	47.2	63.3
19-Jun-08	45	38	38	37	29	A	30	40	49	54	57	58	57	58	58	58	57	54	54	54	50	41	36	22	46.8	58.4
20-Jun-08	19	19	20	24	A	18	24	27	30	39	45	52	C	C	A	44	44	45	43	42	37	30	24	10	31.8	51.7
21-Jun-08	16	16	A	16	18	13	20	20	36	44	46	44	42	42	43	41	41	41	39	35	27	27	30	35	31.9	46.4
22-Jun-08	38	A	38	38	39	37	34	31	29	37	38	47	46	43	42	42	43	43	44	43	40	39	38	36	39.3	47.1
23-Jun-08	A	37	35	29	31	26	31	35	35	41	43	45	46	46	48	52	54	51	47	44	40	35	24	A	39.8	54.1
24-Jun-08	19	33	35	36	24	21	32	35	41	45	44	44	43	44	47	46	46	46	47	47	43	39	A	27	38.5	47.0
25-Jun-08	21	18	16	18	18	16	20	25	31	33	38	41	42	44	45	46	46	46	46	45	42	28	22	25	32.2	46.3
26-Jun-08	19	27	A	26	23	19	24	26	33	36	38	42	46	50	51	52	51	49	46	40	37	35	33	30	36.3	51.7
27-Jun-08	28	A	26	25	23	21	22	25	27	30	34	39	38	41	45	47	48	48	48	45	44	36	29	24	34.5	48.3
28-Jun-08	A	16	16	18	13	16	17	22	42	49	52	53	53	52	60	49	46	46	46	44	44	35	30	A	37.2	59.8
29-Jun-08	40	39	36	32	31	28	30	39	40	41	47	48	48	48	49	48	49	50	51	49	44	31	A	22	40.9	51.3
30-Jun-08	27	23	18	25	30	16	24	30	40	44	49	48	48	48	53	56	67	74	72	58	53	51	49	48	43.8	74.1
Hourly Avg	32.2	30.1	29.7	28.6	27.4	25.8	27.2	31.2	35.8	40.1	43.7	46.3	47.3	48.3	50.1	49.6	50.3	50.2	49.4	46.1	43.0	38.7	36.1	33.9		
Hourly Max	49.3	50.8	47.9	41.3	45.8	45.2	44.8	43.8	49.5	55.1	59.4	63.0	62.9	63.3	63.5	61.3	67.4	74.1	71.6	58.4	55.1	56.0	53.9	50.2		

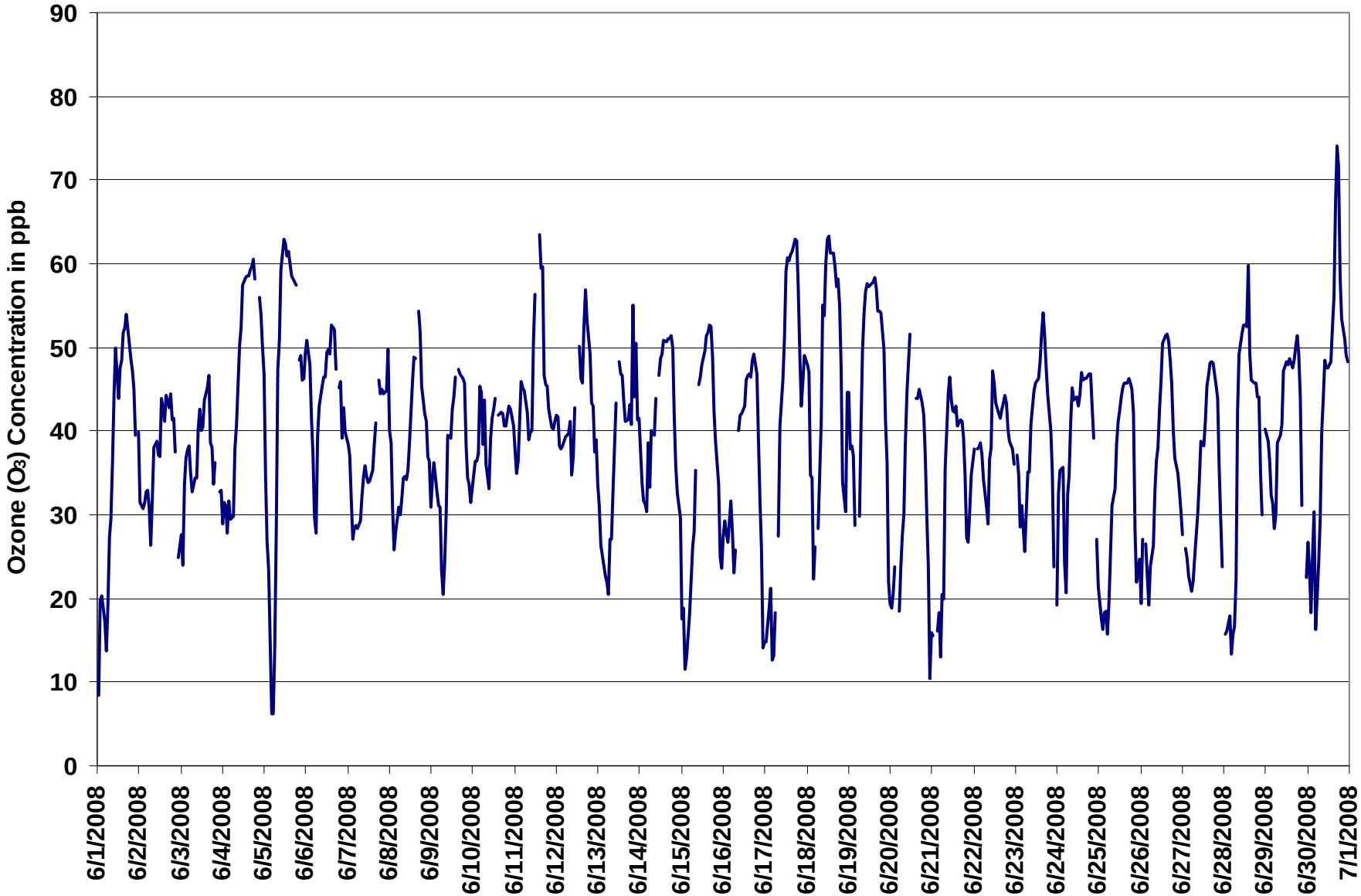
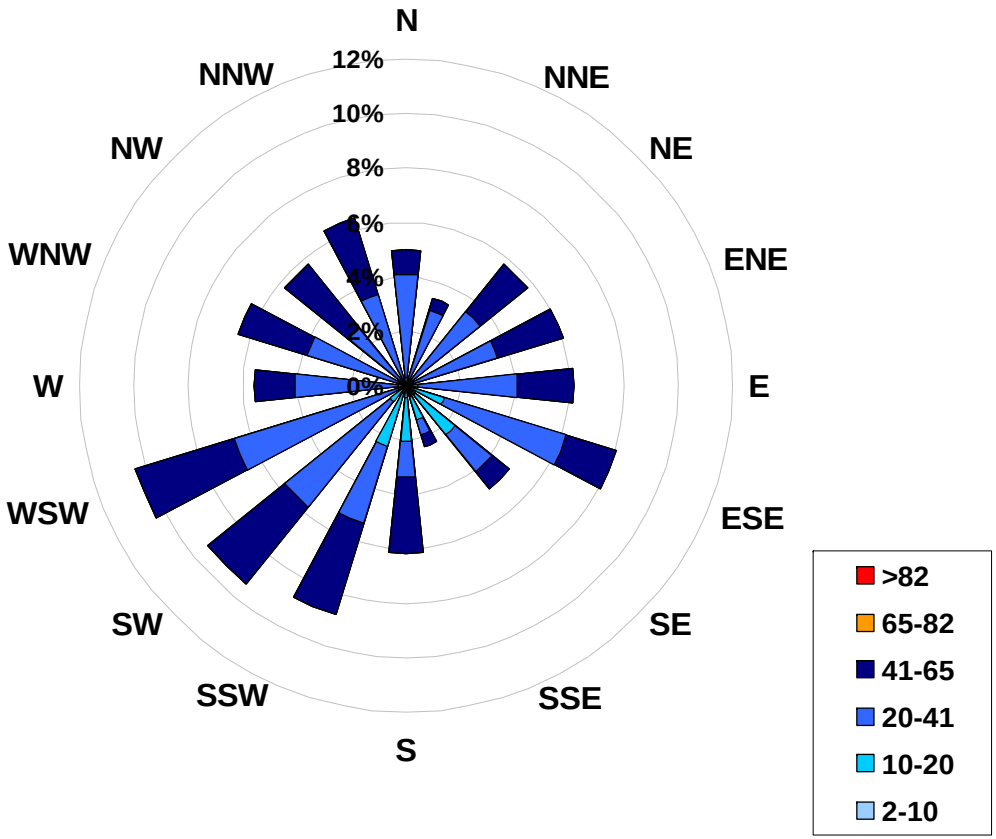


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Crescent Heights Site for June 2008



Calms:	0%

Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
2.0	<	10	16
10	to	20	72
20	to	41	360
41	to	65	238
65	to	82	0
	>	82	0
Total Non-Zero Values			686

PAS - Crescent Heights Ozone Eght Hour Average Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

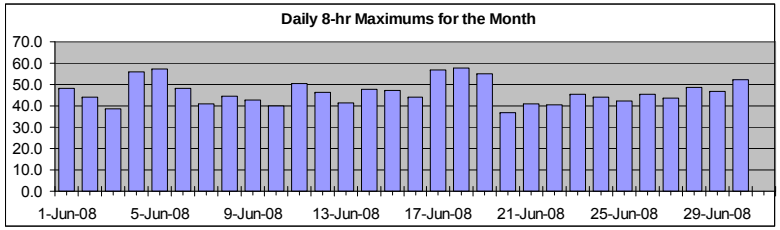
Station: Crescent Heights
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	57.7	ppb	18-Jun	18:00 19:00



Percentile	99	95	75	50	25	5	1
	56.2	51.6	41.7	35.1	28.6	16.9	11.4

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	Daily Maximum
1-Jun-08	34	28	22	18	15	12	11	14	15	18	22	25	29	33	37	40	44	46	48	48	48	48	47	46	48.3
2-Jun-08	44	41	38	35	33	31	30	28	27	27	28	29	30	31	32	35	37	38	39	40	40	39	39	36	44.1
3-Jun-08	33	30	28	28	27	28	28	29	30	31	32	33	33	33	35	36	38	39	39	38	37	37	36	34	38.8
4-Jun-08	31	30	29	27	26	26	26	26	27	29	32	35	39	43	47	50	52	54	56	56	56	55	54	52	56.0
5-Jun-08	49	45	40	34	30	24	19	16	16	18	22	28	35	42	48	52	55	57	57	57	55	54	52	50	57.2
6-Jun-08	48	47	45	44	43	40	37	36	35	34	35	35	37	40	42	45	45	45	45	45	44	43	42	40	48.2
7-Jun-08	38	37	36	33	32	30	29	27	27	27	27	29	30	31	32	32	33	33	34	36	38	39	40	41	41.0
8-Jun-08	41	40	38	36	33	31	30	28	28	28	29	30	31	33	35	37	38	40	43	44	44	44	43	41	44.5
9-Jun-08	39	37	35	34	33	31	29	27	26	26	25	26	27	29	32	34	38	41	42	43	42	41	39	38	42.9
10-Jun-08	36	35	34	32	32	32	32	32	33	32	32	33	35	35	35	37	38	39	40	40	40	40	40	40	39.9
11-Jun-08	39	39	38	38	38	38	38	38	38	39	39	40	42	42	44	46	48	49	50	50	49	47	45	42	50.3
12-Jun-08	41	40	39	37	35	35	34	33	32	31	31	32	33	35	36	38	40	43	45	46	46	45	43	42	46.4
13-Jun-08	39	36	33	29	26	24	22	21	21	21	23	24	27	31	35	38	40	41	41	40	41	39	38	37	41.4
14-Jun-08	37	36	34	33	31	32	31	30	30	32	33	35	38	40	42	44	46	48	48	48	47	45	42	39	47.9
15-Jun-08	35	30	24	20	17	14	13	13	15	16	21	26	31	36	40	44	47	47	47	47	46	43	40	36	47.3
16-Jun-08	32	30	27	25	24	23	22	22	22	24	26	28	30	34	37	41	41	42	43	44	42	39	35	31	43.9
17-Jun-08	27	23	19	15	12	11	11	11	13	16	20	25	32	39	45	47	51	54	56	57	55	53	51	49	56.9
18-Jun-08	48	45	42	39	36	34	32	29	28	28	31	35	41	47	49	53	56	57	58	57	54	50	46	43	57.7
19-Jun-08	40	37	35	33	31	31	31	31	32	35	37	41	45	46	50	53	55	55	55	54	52	49	45	40	55.0
20-Jun-08	35	30	25	22	19	17	16	17	20	23	26	30	30	N	N	N	N	N	N	N	N	37	34	29	36.8
21-Jun-08	25	21	19	14	11	9	9	11	14	17	21	25	29	32	36	39	41	41	40	38	36	34	32	32	40.7
22-Jun-08	31	30	29	30	32	34	34	33	32	32	32	33	34	35	35	37	39	40	41	40	40	39	38	38	40.6
23-Jun-08	37	37	34	32	30	28	27	27	28	28	30	32	35	38	40	42	44	46	46	45	44	41	38	36	45.7
24-Jun-08	31	28	26	24	23	22	22	23	26	28	30	31	33	37	39	41	42	43	43	44	44	43	43	40	44.2
25-Jun-08	36	31	26	22	18	14	14	14	15	18	21	23	27	31	34	37	40	41	42	42	41	39	36	33	42.5
26-Jun-08	29	27	24	21	19	17	18	19	21	22	24	27	30	34	38	40	43	45	45	45	44	42	40	37	45.5
27-Jun-08	34	32	30	28	25	23	22	21	21	22	23	25	27	30	33	36	38	40	42	43	43	42	40	36	43.5
28-Jun-08	34	29	24	20	16	13	12	13	16	20	25	30	35	39	44	47	49	49	48	46	45	43	40	39	48.7
29-Jun-08	37	36	34	31	29	27	28	28	29	29	31	34	37	40	42	44	45	46	47	47	45	43	42	39	46.9
30-Jun-08	35	30	25	21	20	17	17	18	19	22	26	30	33	37	40	44	47	49	51	52	52	52	52	52	52.5
Hourly Max	49.4	47.1	45.4	44.4	42.6	40.0	38.0	38.2	38.5	38.9	39.3	40.6	45.1	47.0	50.1	53.4	55.8	57.3	57.7	57.0	56.0	55.1	54.1	52.1	

PAS - Crescent Heights Carbon Monoxide Monthly Summary

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

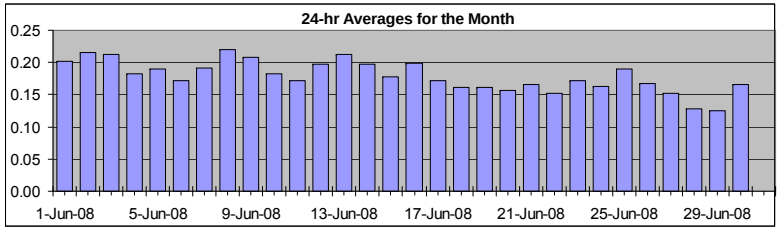
Station: Crescent Heights
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	0.5	ppm	16-Jun	21:00 22:00
Maximum 24-hr Value:	0.2	ppm	8-Jun	



AIC Time:	34 hrs	Operational Time:	683 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	0.3	0.2	0.2	0.2	0.1	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-08	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.20	0.25
2-Jun-08	0.2	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	0.2	A	0.4	0.22	0.43
3-Jun-08	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	A	0.2	0.2	0.21	0.25
4-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.18	0.22
5-Jun-08	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	0.1	0.1	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.19	0.32
6-Jun-08	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	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.17	0.20
7-Jun-08	0.2	0.2	0.2	0.2	0.2	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	0.19	0.21
8-Jun-08	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.28
9-Jun-08	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.27
10-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.19
11-Jun-08	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	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.17	0.19
12-Jun-08	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.20	0.25
13-Jun-08	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	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.21	0.26
14-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.20	0.26
15-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.25
16-Jun-08	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.20	0.55
17-Jun-08	0.2	0.2	0.1	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.27
18-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.16	0.23
19-Jun-08	0.1	0.1	0.1	0.1	0.2	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	0.2	0.2	0.4	0.3	0.2	0.1	0.16	0.39
20-Jun-08	0.2	0.1	0.1	0.1	A	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.5	0.4	0.16	0.49
21-Jun-08	0.3	0.1	A	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	0.2	0.2	0.2	0.1	0.17	0.26
22-Jun-08	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	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	0.2	0.1	0.1	0.15	0.20
23-Jun-08	A	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	A	0.17	0.34
24-Jun-08	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.16	0.20
25-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	C	C	C	A	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.19	0.29
26-Jun-08	0.2	0.2	A	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.17	0.22
27-Jun-08	0.1	A	0.1	0.1	0.1	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	0.2	0.2	0.3	0.4	0.15	0.36
28-Jun-08	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.13	0.20
29-Jun-08	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	A	0.2	0.13	0.22
30-Jun-08	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	A	A	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	0.2	0.17	0.30
Hourly Avg	0.18	0.18	0.17	0.17	0.18	0.19	0.20	0.19	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.15	0.16	0.17	0.19	0.22	0.22	0.21	0.20		
Hourly Max	0.28	0.26	0.29	0.23	0.24	0.27	0.32	0.30	0.24	0.21	0.23	0.22	0.22	0.24	0.23	0.21	0.20	0.26	0.23	0.25	0.49	0.55	0.49	0.43		

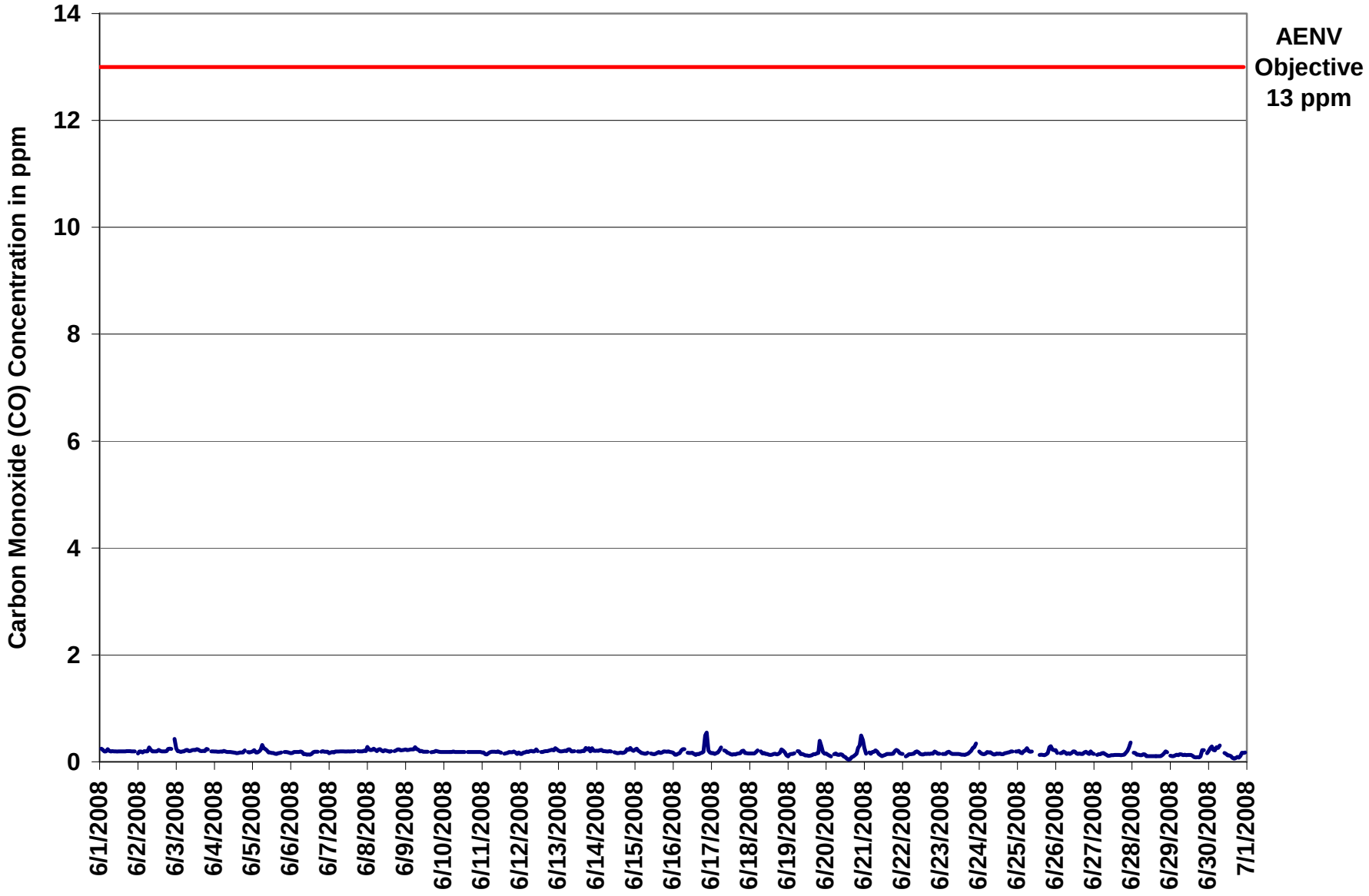


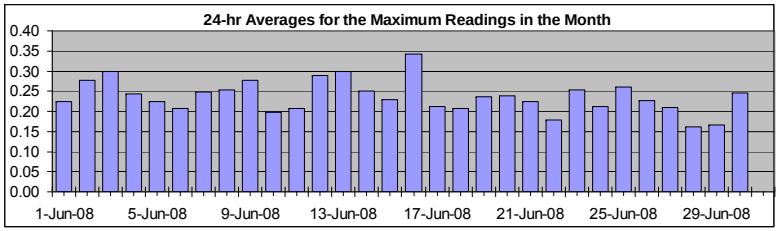
Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend

Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Carbon Monoxide (CO)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	1.8	ppm	16-Jun	21:00 22:00
Maximum 24-hr Value:	0.3	ppm	16-Jun	

AIC Time:	34 hrs	Operational Time:	683 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	0.7	0.4	0.3	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-08	A	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	A	0.22	0.35
2-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.6	0.3	0.3	0.2	0.2	0.3	0.4	0.4	0.4	A	0.6	0.28	0.60
3-Jun-08	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.3	A	0.2	0.2	0.30	0.52
4-Jun-08	0.2	0.3	0.2	0.2	0.2	0.2	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.2	0.2	0.24	0.57
5-Jun-08	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.23	0.42
6-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	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	0.21	0.24
7-Jun-08	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.25	0.34
8-Jun-08	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.25	0.34
9-Jun-08	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.3	0.3	0.2	0.4	0.2	0.4	0.4	0.3	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.28	0.54
10-Jun-08	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.28
11-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.29
12-Jun-08	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.3	0.3	0.3	0.5	0.3	A	0.6	0.4	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.29	0.55
13-Jun-08	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.2	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.2	0.8	0.3	0.4	0.30	0.83
14-Jun-08	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.25	0.40
15-Jun-08	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.23	0.49
16-Jun-08	0.2	0.1	0.2	0.2	0.2	0.5	0.4	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.5	1.8	0.3	0.2	0.34	1.79
17-Jun-08	0.2	0.2	0.2	0.2	0.2	0.3	0.4	A	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.21	0.42
18-Jun-08	0.2	0.2	0.2	0.2	0.3	0.4	A	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.21	0.40
19-Jun-08	0.2	0.2	0.2	0.2	0.3	A	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.9	0.5	0.2	0.2	0.24	0.85
20-Jun-08	0.2	0.2	0.2	0.1	A	0.3	0.6	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.5	0.6	0.7	0.6	0.24	0.65
21-Jun-08	0.9	0.2	A	0.3	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	0.3	0.3	0.3	0.2	0.2	0.23	0.91
22-Jun-08	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	0.3	0.2	0.2	0.2	0.18	0.25
23-Jun-08	A	0.2	0.2	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.9	A	0.25	0.90
24-Jun-08	0.3	0.2	0.2	0.1	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	0.4	0.3	A	0.2	0.21	0.38
25-Jun-08	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.2	0.2	0.2	C	C	C	A	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.2	0.26	0.71
26-Jun-08	0.3	0.5	A	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.23	0.45
27-Jun-08	0.2	A	0.1	0.1	0.2	0.3	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.21	0.52
28-Jun-08	A	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	A	0.16	0.26
29-Jun-08	0.2	0.1	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	0.2	0.1	0.2	0.4	0.3	A	0.2	0.17	0.38
30-Jun-08	0.3	0.6	0.4	0.3	0.3	0.3	0.3	0.3	A	A	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.3	0.4	0.25	0.58
Hourly Avg	0.25	0.24	0.21	0.19	0.23	0.28	0.31	0.26	0.22	0.22	0.21	0.19	0.19	0.24	0.20	0.19	0.18	0.19	0.21	0.25	0.33	0.35	0.28	0.26		
Hourly Max	0.91	0.58	0.35	0.30	0.36	0.54	0.71	0.41	0.33	0.35	0.48	0.40	0.40	0.59	0.40	0.30	0.25	0.43	0.40	0.40	1.50	1.79	0.90	0.60		

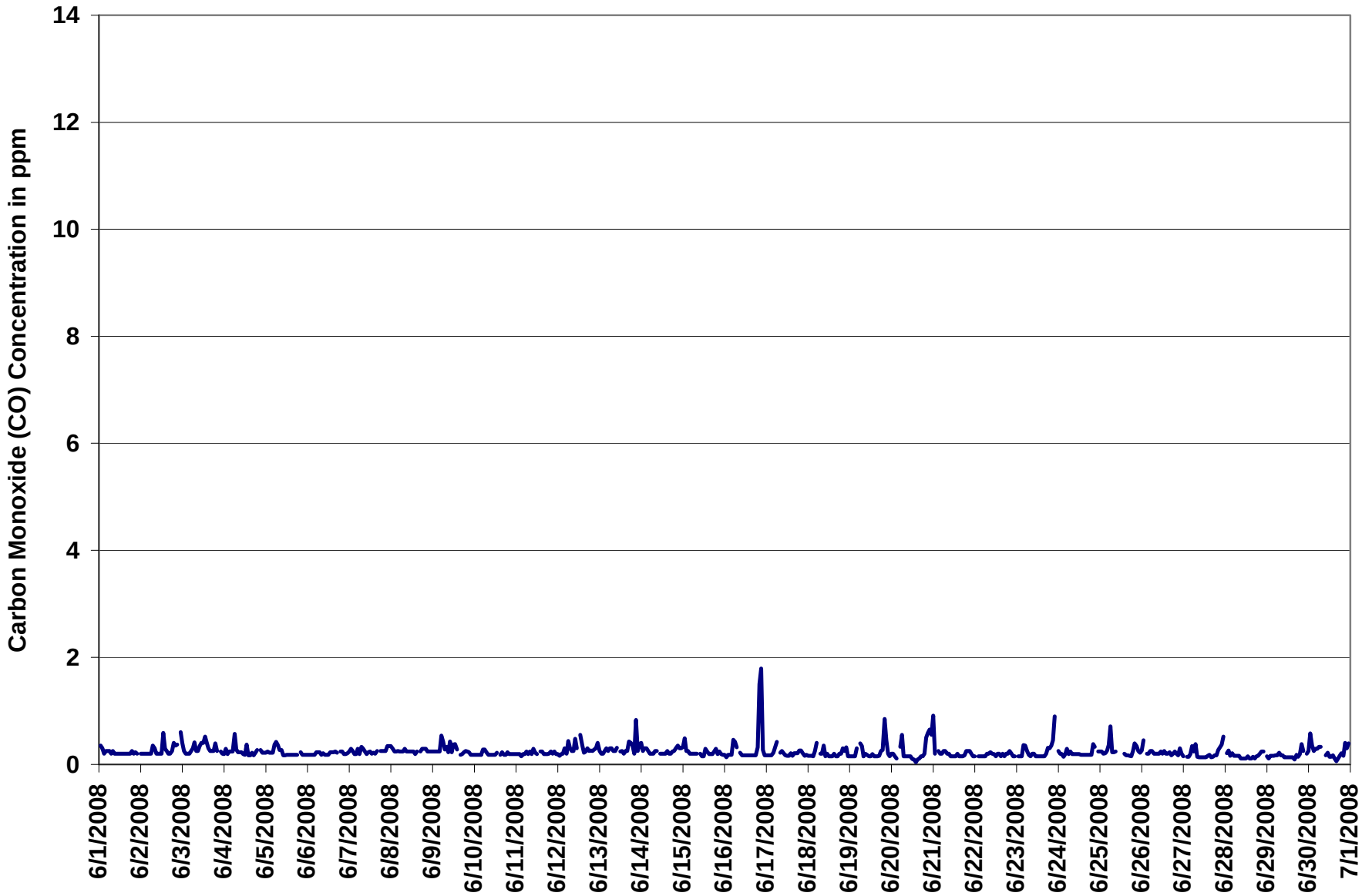
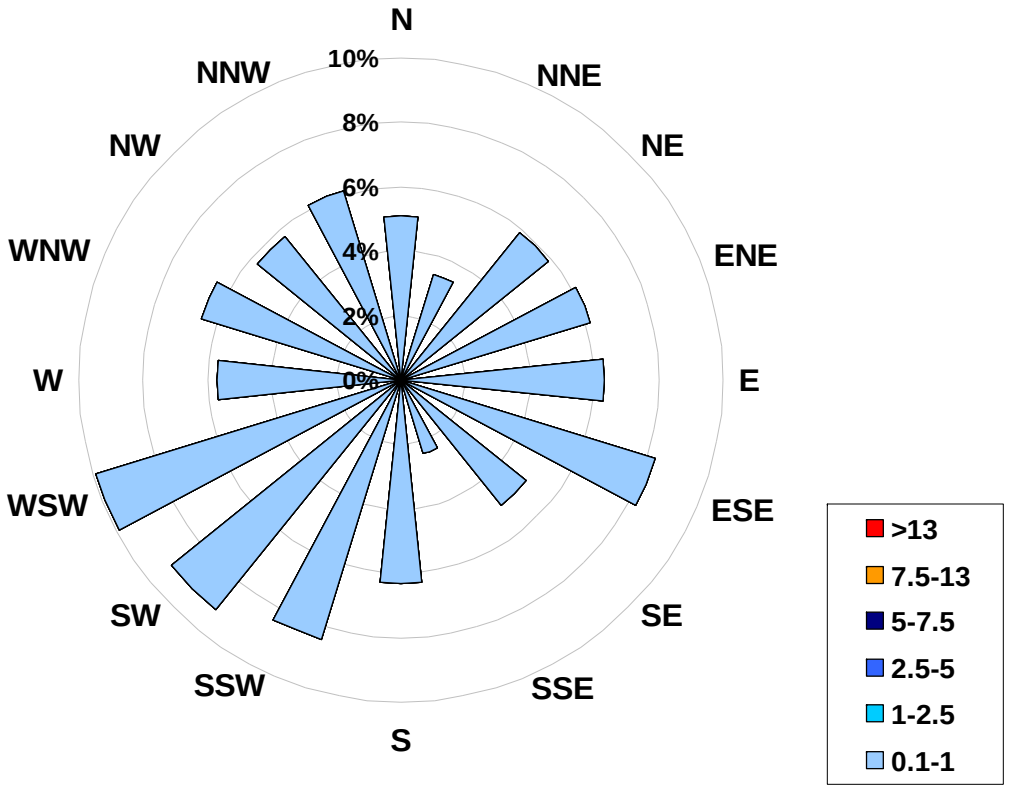


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located at the Crescent Heights Site for June 2008



Calms:	0%

Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0.1	<	1	683
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			683

PAS - Crescent Heights Carbon Monoxide Eight Hour Average Summary

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

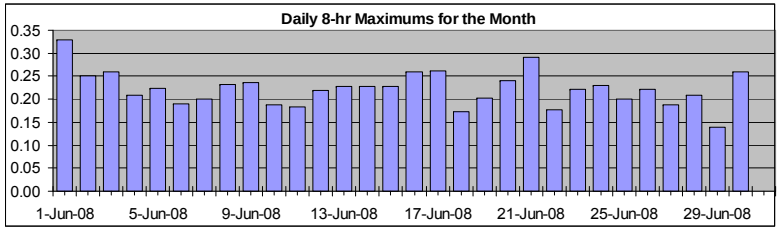
Station: Crescent Heights
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	0.3	ppm	1-Jun	2:00 3:00



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-08	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
2-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.25
3-Jun-08	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
4-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
5-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
7-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
8-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
9-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
10-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
11-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
13-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
14-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
15-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
16-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.26
17-Jun-08	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.26
18-Jun-08	0.2	0.2	0.2	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	0.2	0.2	0.2	0.2	0.17
19-Jun-08	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.20
20-Jun-08	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	0.24
21-Jun-08	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.29
22-Jun-08	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.18
23-Jun-08	0.2	0.2	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	0.2	0.2	0.2	0.2	0.2	0.22
24-Jun-08	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.23
25-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.20
26-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
27-Jun-08	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	0.1	0.1	0.1	0.2	0.2	0.19
28-Jun-08	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	0.1	0.1	0.1	0.1	0.21
29-Jun-08	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	0.14
30-Jun-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	N	N	N	N	N	N	N	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.26
Hourly Max	0.32	0.32	0.33	0.32	0.31	0.30	0.25	0.25	0.26	0.23	0.23	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.21	0.22	0.22	0.25	0.26	0.26	

PAS - Crescent Heights Total Hydrocarbons Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

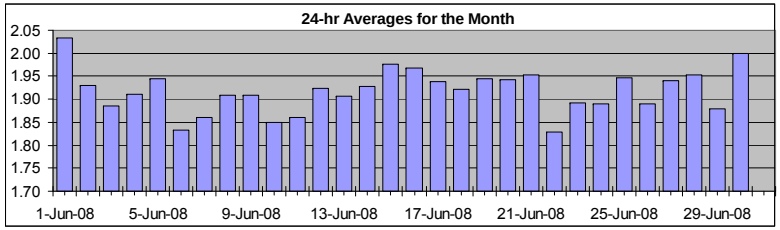
Total Hydrocarbons (THC)

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Maximum 1-hr Average:	2.6	ppm	30-Jun	5:00 6:00
Maximum 24-hr Value:	2.0	ppm	1-Jun	



AIC Time:	32 hrs					Operational Time:	686 hrs																		
Calibration Time:	2 hrs					AMD Operational Uptime:	100.0%																		
Percentile	99	95	75	50	25	5	1																		
	2.3	2.1	2.0	1.9	1.9	1.8	1.8																		
								Average	1.9	ppm	Median	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-08	A	2.2	2.4	2.3	2.2	2.3	2.3	2.1	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	2.03	2.43
2-Jun-08	2.0	1.9	2.0	1.9	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	1.9	1.9	1.9	1.9	A	2.1	1.93	2.07
3-Jun-08	2.0	1.9	1.9	1.9	1.8	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	A	1.9	1.9	1.89	1.96
4-Jun-08	1.9	1.9	1.9	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	A	1.9	1.9	2.0	1.91	1.99
5-Jun-08	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.95	2.23
6-Jun-08	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	A	1.9	1.9	1.9	1.8	1.8	1.83	1.88
7-Jun-08	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.9	A	1.8	1.9	1.9	1.9	1.9	1.9	1.86	1.95
8-Jun-08	2.0	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.98
9-Jun-08	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.91	2.00
10-Jun-08	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.85	1.90
11-Jun-08	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.86	1.93
12-Jun-08	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	1.9	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.92	2.05
13-Jun-08	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.91	2.05
14-Jun-08	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	1.93	2.06
15-Jun-08	2.1	2.1	2.1	2.1	2.2	2.1	2.0	2.0	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	2.0	2.0	2.0	1.98	2.16
16-Jun-08	2.1	2.0	2.1	2.0	2.0	2.0	1.9	1.9	A	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.3	2.0	1.97	2.31
17-Jun-08	2.1	2.1	2.1	2.1	2.2	2.1	2.0	A	2.0	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.94	2.21
18-Jun-08	1.9	1.9	2.0	2.0	2.0	2.0	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.92	2.07
19-Jun-08	1.9	1.9	1.9	2.0	2.0	A	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	2.1	2.2	2.1	2.0	1.95	2.22
20-Jun-08	2.0	2.0	2.0	1.9	A	1.9	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	1.9	2.0	2.0	2.2	2.3	1.94	2.29
21-Jun-08	2.2	2.2	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.95	2.19
22-Jun-08	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.83	1.91
23-Jun-08	A	1.8	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	1.89	2.02
24-Jun-08	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.1	1.89	2.06
25-Jun-08	2.2	2.1	2.1	2.0	2.1	2.0	2.0	1.9	1.9	C	C	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.1	2.0	2.0	1.95	2.16
26-Jun-08	2.0	2.0	A	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	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.89	2.02
27-Jun-08	1.9	A	1.9	1.9	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	1.9	2.0	2.2	2.4	1.94	2.36
28-Jun-08	A	2.2	2.2	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	1.9	1.9	1.9	1.9	1.9	1.9	A	1.95	2.16
29-Jun-08	1.9	1.9	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	2.0	2.0	A	2.0	1.88	2.01
30-Jun-08	2.0	2.3	2.4	2.2	2.3	2.6	2.4	2.0	1.9	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.2	2.00	2.59
Hourly Avg	1.96	1.98	1.99	1.99	2.00	1.99	1.97	1.94	1.91	1.89	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.88	1.92	1.96	1.96	1.98		
Hourly Max	2.16	2.25	2.44	2.27	2.32	2.59	2.38	2.08	2.03	1.98	1.97	1.95	1.95	1.92	1.91	1.91	1.91	1.91	1.92	1.94	2.07	2.31	2.25	2.36		

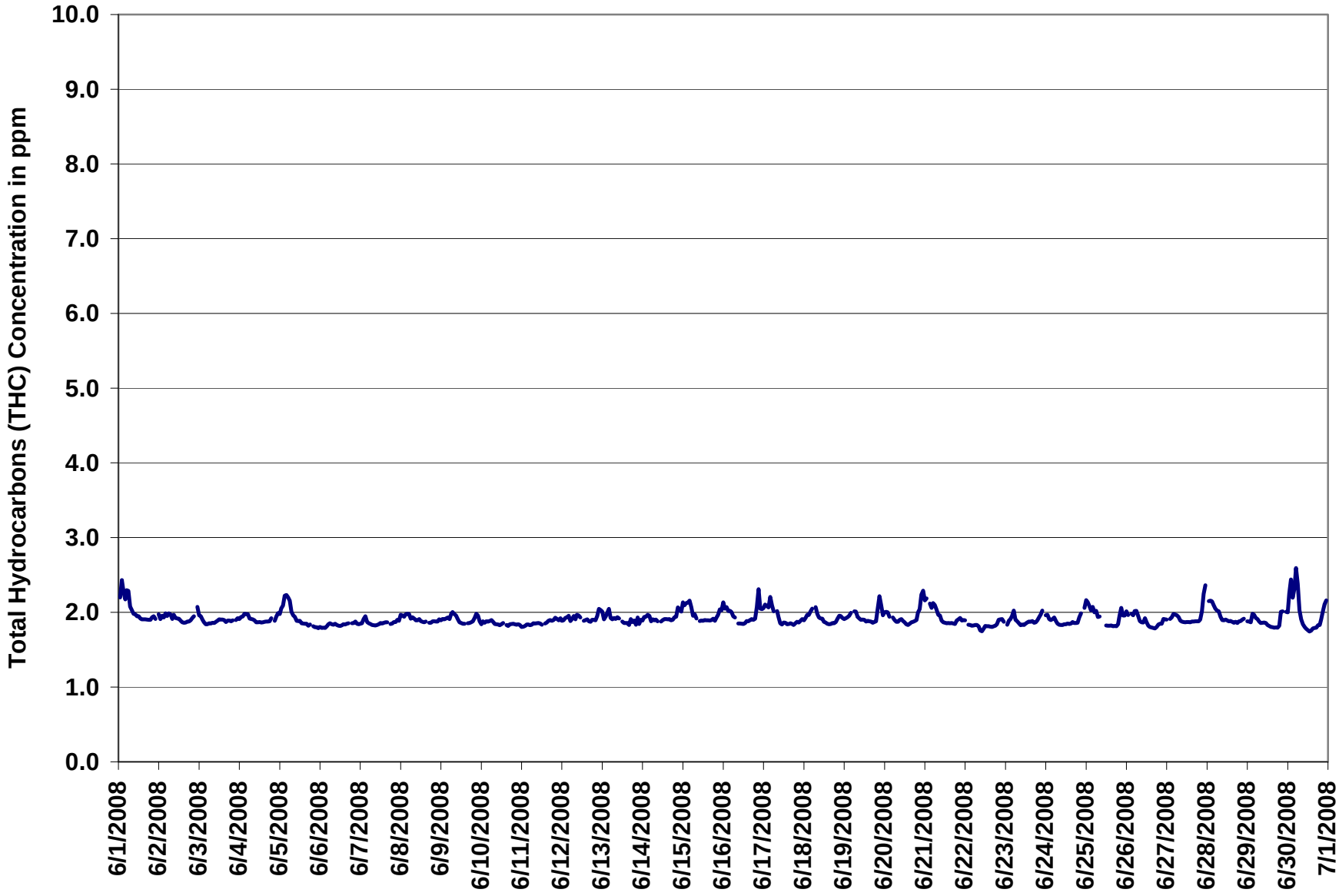


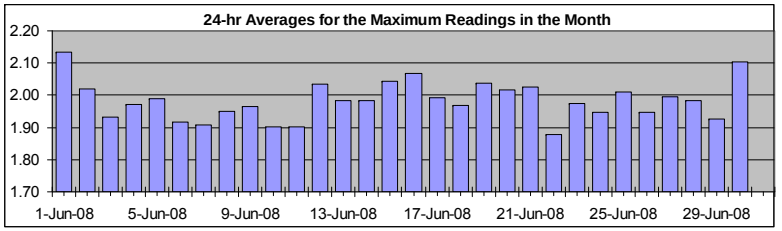
Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend

Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Hydrocarbons (THC)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	3.0	ppm	30-Jun	2:00 3:00
Maximum 24-hr Value:	2.1	ppm	1-Jun	

AIC Time:	32 hrs	Operational Time:	686 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	2.6	2.3	2.0	1.9	1.9	1.8	1.8	2.0 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-08	A	2.7	2.9	2.4	2.3	2.5	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	A	2.13	2.87
2-Jun-08	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.3	2.0	2.0	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.0	A	2.2	2.02	2.34
3-Jun-08	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	A	2.0	2.1	1.93	2.05
4-Jun-08	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	A	1.9	2.1	2.2	1.97	2.20
5-Jun-08	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.99	2.32
6-Jun-08	2.4	1.8	1.8	1.8	1.8	1.9	2.0	1.9	2.0	2.2	1.9	1.9	1.8	1.9	1.9	1.9	2.0	1.9	A	2.0	1.9	1.9	1.9	1.9	1.92	2.40
7-Jun-08	2.0	2.0	2.0	2.1	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	2.0	2.0	1.91	2.06
8-Jun-08	2.0	2.0	2.0	2.0	2.1	2.0	2.0	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	1.9	2.0	1.95	2.05
9-Jun-08	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	1.9	2.0	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	2.1	2.1	1.9	1.96	2.14
10-Jun-08	1.9	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.9	1.9	A	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.90	2.00
11-Jun-08	1.8	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	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.90	2.01
12-Jun-08	1.9	1.9	2.0	2.0	2.1	1.9	2.1	2.0	2.0	2.1	2.1	2.0	A	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.5	2.3	2.03	2.51
13-Jun-08	2.1	1.9	2.0	2.1	2.1	2.0	1.9	2.0	1.9	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	2.3	2.0	2.0	1.9	2.1	1.9	2.0	1.98	2.25
14-Jun-08	1.9	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.2	2.1	2.2	1.98	2.17
15-Jun-08	2.2	2.2	2.2	2.2	2.3	2.2	2.0	2.1	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.2	2.0	2.1	2.2	2.04	2.26
16-Jun-08	2.2	2.2	2.3	2.2	2.1	2.2	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.4	2.9	2.1	2.1	2.07	2.93
17-Jun-08	2.1	2.2	2.1	2.1	2.3	2.2	2.1	A	2.1	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	1.99	2.28
18-Jun-08	2.0	2.0	2.1	2.0	2.1	2.1	A	2.2	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.97	2.20
19-Jun-08	2.0	2.0	2.0	2.0	2.0	A	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	1.9	2.6	2.7	2.3	2.0	2.04	2.65
20-Jun-08	2.0	2.1	2.1	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.3	2.4	2.4	2.01	2.42
21-Jun-08	2.3	2.5	A	2.2	2.1	2.3	2.2	2.1	2.0	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	1.9	2.1	2.02	2.52
22-Jun-08	2.0	A	1.9	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.0	2.1	2.0	1.88	2.07
23-Jun-08	A	1.9	2.0	1.9	2.3	2.2	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.4	A	1.97	2.37
24-Jun-08	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	A	2.1	1.95	2.18
25-Jun-08	2.2	2.2	2.1	2.1	2.2	2.0	2.3	2.0	2.0	C	C	A	1.9	1.8	1.9	1.9	1.8	1.8	1.8	1.9	2.2	2.2	2.0	2.0	2.01	2.27
26-Jun-08	2.1	2.1	A	2.1	2.0	2.2	2.1	2.1	1.9	1.9	1.9	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	1.95	2.23
27-Jun-08	2.0	A	2.0	2.0	2.0	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.4	2.5	1.99	2.52
28-Jun-08	A	2.2	2.2	2.2	2.2	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	1.9	1.9	1.9	1.9	1.9	A	1.98	2.20
29-Jun-08	1.9	1.9	1.9	2.1	2.2	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	1.9	2.2	2.1	A	2.0	1.93	2.23
30-Jun-08	2.1	2.5	3.0	2.3	2.7	2.7	2.6	2.2	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.2	2.10	2.95
Hourly Avg	2.04	2.08	2.09	2.05	2.08	2.09	2.05	2.00	1.95	1.95	1.91	1.90	1.89	1.90	1.88	1.89	1.89	1.90	1.90	1.93	2.05	2.08	2.06	2.06		
Hourly Max	2.40	2.71	2.95	2.41	2.66	2.70	2.56	2.20	2.08	2.29	2.12	2.00	1.97	2.05	2.04	2.03	1.97	2.25	1.99	2.03	2.64	2.93	2.51	2.52		

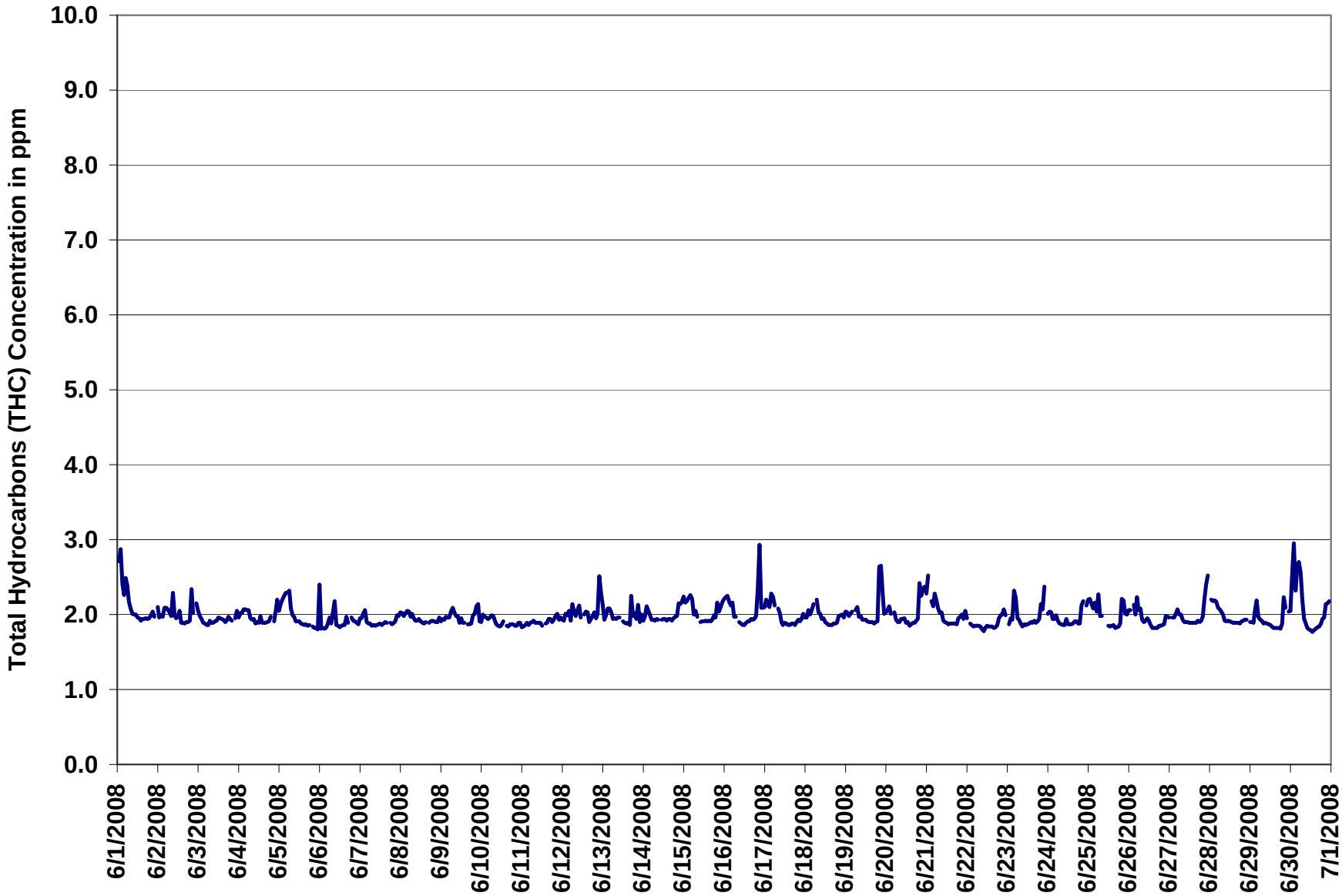
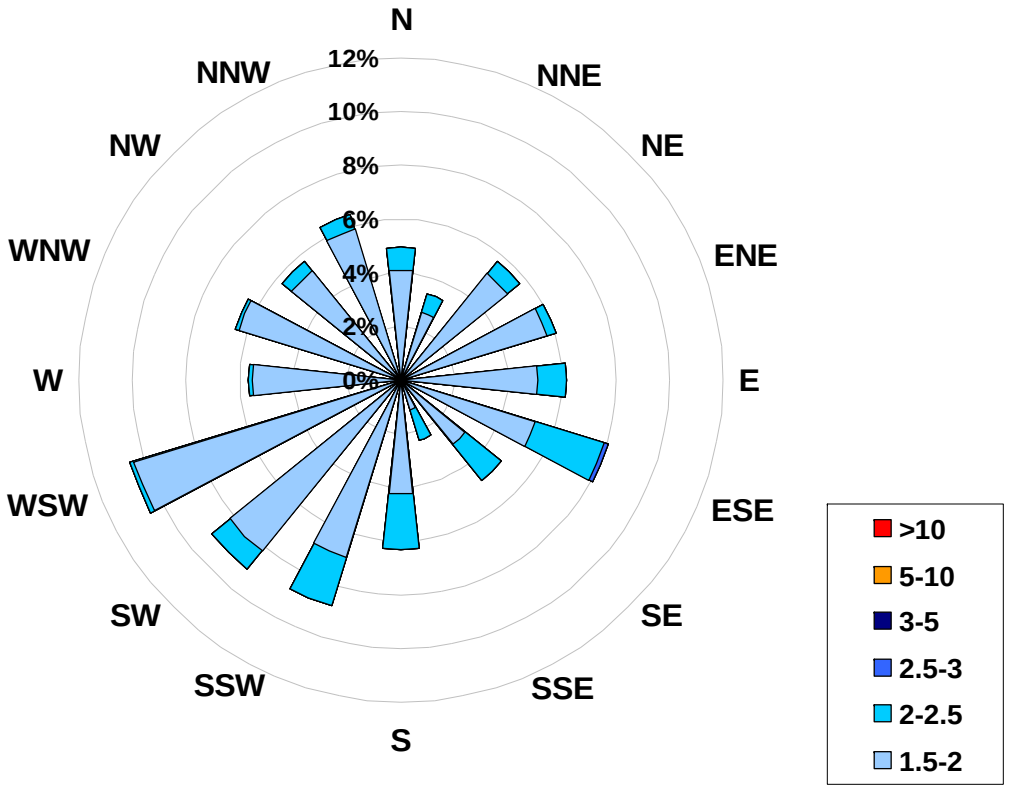


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)
Located at the Crescent Heights Site for June 2008



Calms:	0%

Frequency Distribution of THC in ppm			
Range			Frequency (hrs)
1.5	<	2	578
2	to	2.5	105
2.5	to	3	1
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			686

PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Monthly Summary

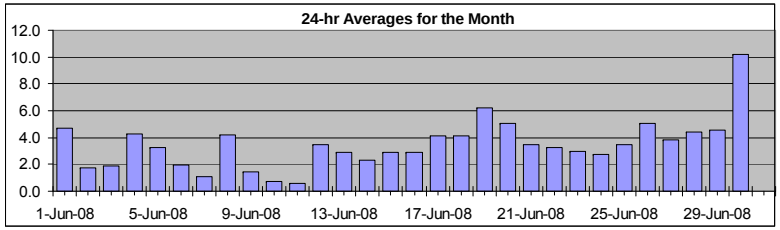
Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2008 to July 1, 2008

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:	22.8	µg/m³	30-Jun	19:00 20:00
Maximum 24-hr Value:	10.2	µg/m³	30-Jun	

AIC Time:	0 hrs	Operational Time:	698 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	97.4%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	16.4	10.4	4.9	2.6	0.9	0.0	0.0	3.4 / 3 µg/m³	3.0 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-08	9	7	7	3	5	7	7	3	6	4	2	3	4	2	2	1	2	4	5	5	5	7	6	4	4.7	9.4
2-Jun-08	3	3	1	2	2	1	0	6	2	3	3	3	2	1	2	0	0	0	0	0	1	0	1	3	1.7	6.2
3-Jun-08	2	2	0	D	0	0	1	2	2	2	1	3	6	5	3	3	4	3	2	1	0	0	1	2	1.9	5.6
4-Jun-08	2	2	2	3	3	4	4	4	4	4	4	3	2	3	5	6	6	6	5	9	7	8	2	4	4.2	8.7
5-Jun-08	5	7	4	3	7	8	9	6	7	4	0	1	4	2	1	0	1	1	4	3	1	0	1	1	3.3	8.7
6-Jun-08	2	5	3	1	2	0	0	D	D	0	0	0	0	1	9	3	2	4	1	6	2	1	0	0	1.9	9.2
7-Jun-08	0	2	0	1	0	2	3	1	0	0	0	0	0	1	0	0	3	4	3	1	2	1	1	0	1.1	4.4
8-Jun-08	2	3	4	2	3	3	3	4	5	7	8	11	8	5	3	5	3	0	4	7	5	2	2	3	4.2	10.8
9-Jun-08	4	3	2	3	2	1	1	0	2	1	2	3	1	0	0	0	1	0	2	3	3	2	0	1	1.4	3.5
10-Jun-08	0	0	0	2	1	0	2	3	1	2	1	0	0	0	0	2	1	0	1	1	0	0	0	0	0.7	2.6
11-Jun-08	0	1	0	0	0	0	0	1	1	1	0	1	0	0	0	2	1	1	0	1	1	1	0	0	0.6	2.4
12-Jun-08	0	1	1	0	3	1	0	1	2	3	3	1	0	0	4	10	7	5	8	6	7	7	7	6	3.5	9.7
13-Jun-08	5	2	2	2	3	4	5	4	3	4	3	3	0	0	3	2	5	3	0	1	0	4	11	1	2.9	10.6
14-Jun-08	3	1	0	3	3	1	1	0	2	0	0	1	1	2	3	4	0	2	1	5	5	6	6	5	2.3	6.5
15-Jun-08	6	5	3	3	3	3	4	6	3	2	0	0	1	3	1	2	1	2	7	4	4	3	2	1	2.9	7.4
16-Jun-08	2	0	3	1	1	5	3	6	0	3	2	1	2	D	0	0	0	1	1	2	7	11	10	5	2.9	10.6
17-Jun-08	2	3	2	2	3	8	5	7	11	7	3	0	D	1	0	0	1	2	5	6	10	1	12	3	4.1	11.8
18-Jun-08	4	3	5	4	4	6	7	7	4	0	2	0	2	0	3	3	0	D	1	4	10	12	9	D	4.1	12.4
19-Jun-08	2	15	3	3	3	3	5	7	3	5	3	4	6	7	7	8	8	6	6	7	10	11	11	6	6.2	15.5
20-Jun-08	6	4	3	1	3	6	4	6	7	C	C	C	1	0	1	0	4	4	3	5	7	7	18	17	5.0	18.4
21-Jun-08	7	4	5	3	2	5	5	11	3	4	D	0	1	1	0	0	0	2	7	11	4	0	D	0	3.4	11.0
22-Jun-08	0	1	0	2	2	5	7	7	15	9	0	D	D	10	5	2	1	0	0	0	1	1	2	0	3.2	15.1
23-Jun-08	0	0	1	1	2	2	1	1	4	0	0	0	D	0	D	0	1	11	6	7	4	8	10	5	3.0	11.5
24-Jun-08	3	0	2	6	3	5	0	3	0	0	5	5	1	4	1	1	3	2	2	2	3	5	3	4	2.7	6.4
25-Jun-08	4	4	2	1	2	6	7	1	4	6	2	D	0	0	2	1	2	0	2	2	6	13	6	5	3.5	13.4
26-Jun-08	7	2	3	3	4	5	6	3	2	6	10	6	5	D	0	D	3	3	14	18	6	0	2	3	5.1	18.2
27-Jun-08	2	0	0	1	2	3	1	3	1	2	2	4	3	3	3	2	4	4	4	6	7	8	11	16	3.8	16.3
28-Jun-08	11	8	6	3	3	5	6	7	3	1	1	3	2	2	1	4	2	0	2	4	10	10	4	D	4.4	11.5
29-Jun-08	0	2	3	4	3	5	11	3	5	4	D	2	2	5	3	2	3	3	3	4	11	18	6	3	4.6	18.2
30-Jun-08	3	7	10	3	7	10	6	10	14	12	D	6	5	12	8	0	12	16	12	23	17	18	6	15	10.2	22.8
Hourly Avg	3.2	3.3	2.6	2.4	2.7	3.9	3.9	4.3	3.9	3.2	2.2	2.4	2.2	2.5	2.5	2.3	2.6	3.1	3.8	5.1	5.2	5.6	5.1	4.1		
Hourly Max	11.5	15.5	10.1	6.4	7.3	10.5	10.5	10.7	15.1	12.1	9.9	10.8	7.9	12.5	9.2	9.7	11.7	15.8	14.3	22.8	16.9	18.2	18.4	17.0		

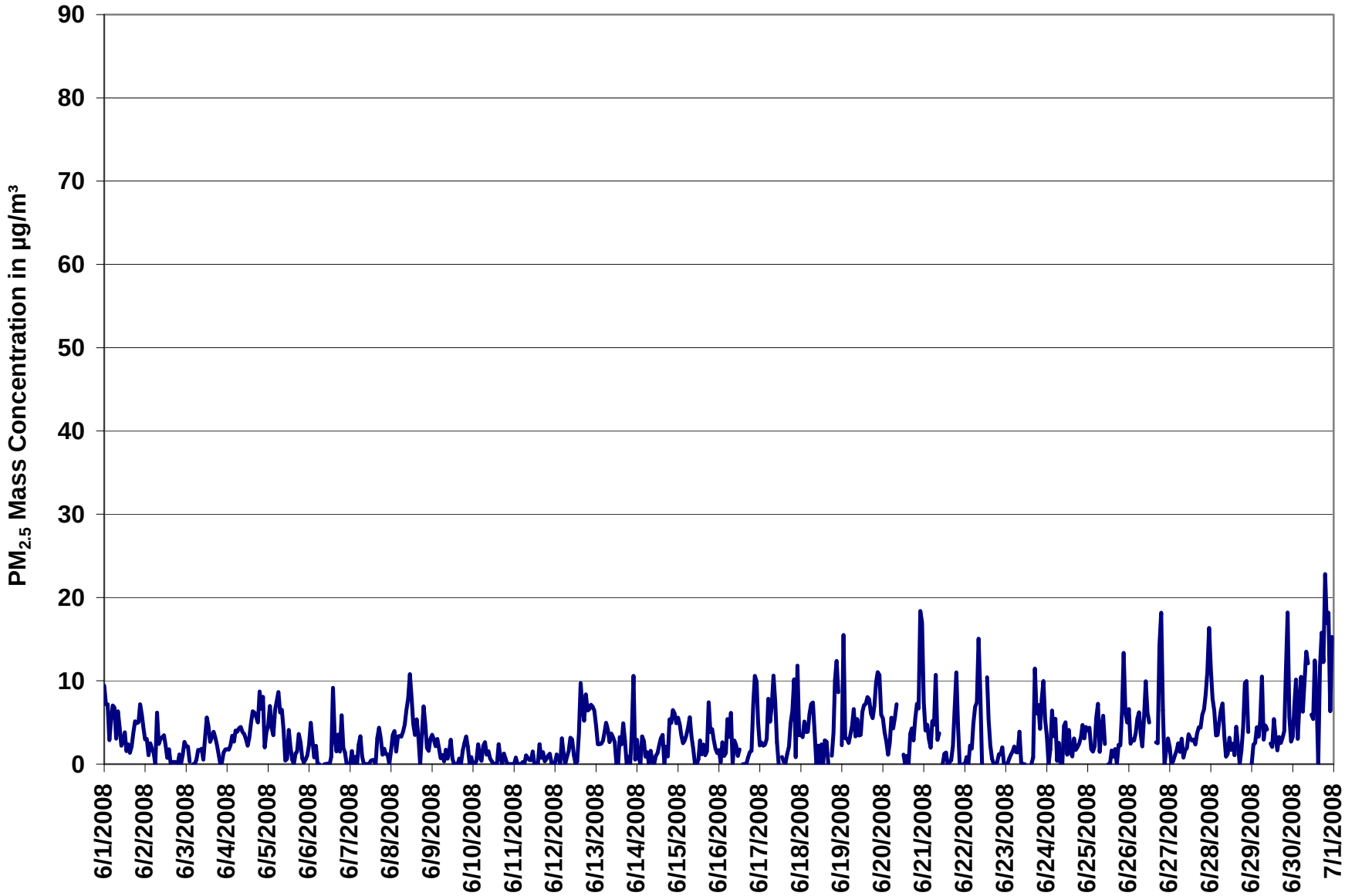


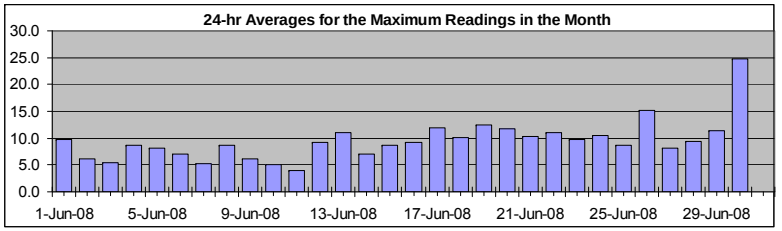
Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Average:	70.8	µg/m³	26-Jun	18:00 19:00
Maximum 24-hr Value:	24.8	µg/m³	30-Jun	

AIC Time:	0 hrs	Operational Time:	717 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	34.2	20.3	11.6	8.1	5.5	2.9	1.5	9.5 / 8 µg/m˜	8.9 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-08	18	14	13	6	11	11	11	6	12	13	8	12	10	6	9	7	6	8	8	8	7	14	10	7	9.7	18.4
2-Jun-08	10	11	5	8	6	4	4	12	8	7	10	7	8	8	9	3	4	3	3	1	4	2	4	5	6.1	11.8
3-Jun-08	5	5	3	0	2	2	3	4	3	5	3	5	10	10	6	9	16	14	4	5	3	4	4	4	5.4	15.6
4-Jun-08	4	4	5	5	4	6	6	7	7	8	9	11	7	8	11	12	11	11	10	14	16	18	6	6	8.7	18.5
5-Jun-08	8	9	8	5	11	10	12	13	15	11	10	8	12	7	7	9	7	9	11	5	3	2	2	4	8.2	15.0
6-Jun-08	7	14	7	5	5	5	6	2	0	1	5	4	6	8	22	7	6	18	6	10	10	6	6	2	7.1	22.2
7-Jun-08	1	5	3	2	3	11	8	2	3	3	6	7	7	4	7	3	11	9	11	3	5	5	4	2	5.3	11.0
8-Jun-08	4	7	7	4	6	6	5	7	8	10	13	16	13	11	10	16	16	2	8	17	8	5	4	6	8.7	17.2
9-Jun-08	5	6	5	5	5	4	3	4	4	6	10	15	6	6	9	8	8	6	6	7	7	6	4	3	6.1	14.7
10-Jun-08	2	2	3	12	7	8	4	6	5	6	12	8	4	4	5	6	6	4	3	4	3	2	3	3	5.0	12.0
11-Jun-08	2	3	4	4	2	5	1	4	3	3	3	7	6	4	4	11	5	6	4	3	3	3	3	2	3.9	10.7
12-Jun-08	3	3	3	4	7	5	3	5	13	8	7	8	17	6	9	21	13	20	12	12	10	10	9	9	9.2	21.4
13-Jun-08	7	5	5	6	7	9	8	10	8	13	8	11	11	7	14	9	18	21	9	15	9	11	32	15	11.1	32.1
14-Jun-08	13	4	3	6	6	6	5	5	5	5	5	6	8	5	8	12	5	6	8	9	8	12	10	9	7.1	13.1
15-Jun-08	9	8	6	5	5	7	11	12	11	14	13	8	8	12	9	9	10	6	17	8	6	5	4	5	8.6	16.8
16-Jun-08	5	4	10	4	8	11	6	12	10	11	10	8	12	7	18	5	7	7	6	10	12	18	14	8	9.3	18.4
17-Jun-08	5	5	5	7	6	18	13	11	17	17	23	12	8	12	10	7	12	9	17	12	16	15	19	8	11.9	23.2
18-Jun-08	8	8	9	6	7	12	10	10	8	14	10	11	13	12	10	9	7	9	7	9	13	15	16	7	10.0	15.9
19-Jun-08	19	27	6	7	5	7	7	11	6	12	14	12	16	12	13	18	12	12	12	12	15	21	14	9	12.5	26.8
20-Jun-08	9	7	7	5	5	20	7	11	11	C	C	C	7	14	13	8	8	11	10	10	12	12	34	24	11.7	33.5
21-Jun-08	15	11	9	8	5	12	9	24	16	16	8	5	8	9	5	7	8	12	13	15	11	8	9	5	10.2	23.7
22-Jun-08	2	7	5	9	5	9	11	17	25	27	9	10	4	47	18	12	8	8	5	5	5	6	8	3	11.0	46.9
23-Jun-08	3	3	6	5	7	6	6	6	10	6	5	8	3	7	8	11	11	21	13	10	11	14	32	17	9.7	32.3
24-Jun-08	11	9	23	16	10	18	15	12	6	5	10	18	11	12	7	6	7	10	5	8	9	8	7	10	10.5	23.2
25-Jun-08	8	7	6	6	5	11	11	12	11	12	9	4	8	7	9	9	7	5	8	7	13	18	11	10	8.8	17.5
26-Jun-08	10	9	14	15	8	10	10	8	13	12	17	14	13	12	12	13	12	8	71	53	12	5	6	7	15.1	70.8
27-Jun-08	6	2	3	4	4	5	4	9	7	6	8	13	6	7	8	6	8	11	9	10	9	13	16	25	8.2	24.7
28-Jun-08	25	13	9	8	5	9	8	10	9	7	9	8	7	9	8	9	8	7	6	12	16	14	8	0	9.4	25.3
29-Jun-08	6	8	5	9	8	20	20	12	13	10	2	12	9	13	11	8	10	13	8	8	23	22	14	8	11.4	22.8
30-Jun-08	7	13	34	10	31	31	11	16	20	23	6	17	21	30	46	19	35	70	29	35	30	23	15	20	24.8	70.3
Hourly Avg	8.0	7.8	7.6	6.5	6.8	9.9	8.0	9.3	9.6	10.0	9.1	9.8	9.4	10.5	11.1	9.7	10.0	11.9	11.3	11.3	10.3	10.5	11.0	8.1		
Hourly Max	25.3	26.8	34.3	15.6	30.8	31.3	19.9	23.7	25.4	26.7	23.2	17.9	21.2	46.9	45.8	21.4	35.4	70.3	70.8	53.0	29.8	23.4	33.5	24.7		

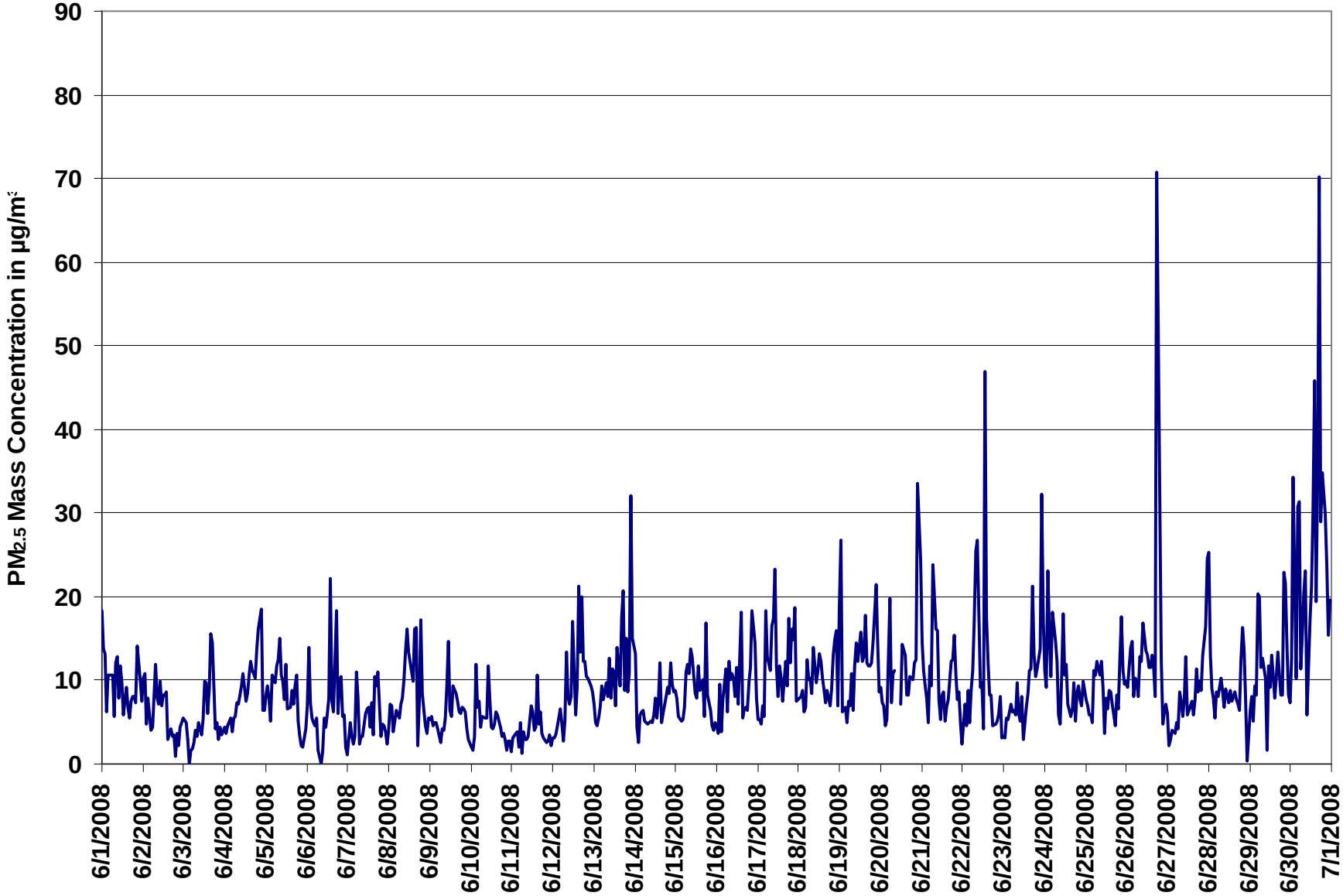
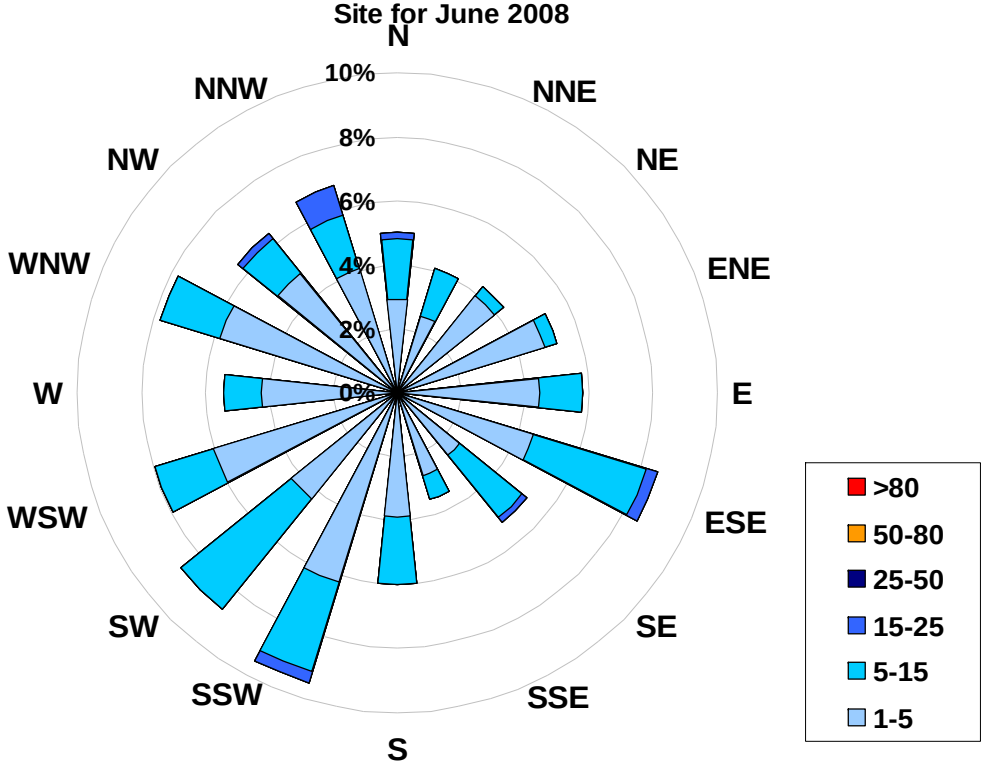


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Crescent Heights Site for June 2008



Calms:	0%

Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
1.0	<	5	530
5	to	15	156
15	to	25	12
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			698

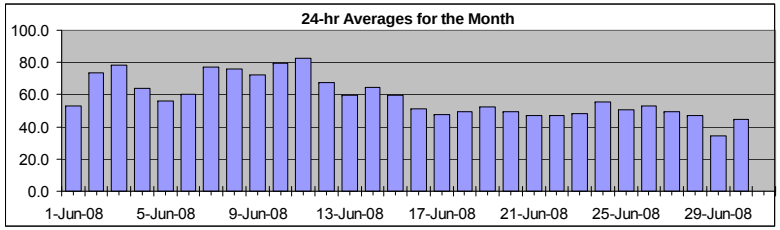
PAS - Crescent Heights Relative Humidity Monthly Summary

Station: Crescent Heights
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

HOURLY AVERAGE TABLE

Relative Humidity (RH)



Summary

Maximum 1-hr Average:	91.0	%	8-Jun	4:00 5:00
Maximum 24-hr Value:	82.7	%	11-Jun	

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

Percentile	99	95	75	50	25	5	1	Average	Median
	88.9	86.4	76.2	60.5	41.3	23.9	18.7	58.3 %	60.5 %

Status Flag Characters

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

Day **Mountain Standard Time**

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-08	68	70	72	70	69	70	69	64	59	56	48	41	45	42	41	38	37	37	39	41	42	47	51	54	52.8	72.3
2-Jun-08	53	62	62	63	68	67	67	74	83	84	81	81	79	70	75	75	72	71	70	73	77	80	86	90	73.5	89.9
3-Jun-08	90	88	86	82	84	86	84	86	87	83	77	71	66	66	64	63	63	79	78	80	78	78	80	84	78.4	89.9
4-Jun-08	85	86	87	88	85	86	85	82	79	72	63	53	46	40	38	38	40	40	40	46	56	66	65	70	64.1	87.9
5-Jun-08	75	82	84	88	89	81	76	67	58	52	43	37	36	35	31	31	33	35	39	47	53	54	57	58	55.9	89.3
6-Jun-08	60	68	81	80	82	77	70	61	48	42	38	37	35	33	43	46	47	52	63	72	79	76	79	77	60.3	81.9
7-Jun-08	74	79	79	78	76	77	86	88	84	80	74	72	70	65	63	61	65	74	85	86	86	86	86	83	77.3	88.1
8-Jun-08	84	85	88	91	91	88	87	83	77	73	72	72	69	65	60	58	63	60	60	71	79	80	82	85	75.9	91.0
9-Jun-08	88	88	88	89	88	87	84	80	79	74	67	72	66	63	57	51	48	50	53	57	67	77	79	78	72.0	88.6
10-Jun-08	79	75	75	74	81	82	83	81	75	74	71	78	85	83	78	84	81	74	80	84	86	81	84	87	79.8	86.7
11-Jun-08	85	86	83	84	88	90	87	87	86	86	87	84	76	67	61	68	74	83	83	85	88	88	89	88	82.7	90.5
12-Jun-08	86	87	89	87	89	87	83	77	70	72	65	60	47	40	38	52	54	53	58	58	61	66	69	73	67.5	89.1
13-Jun-08	82	84	85	85	84	77	69	64	63	57	52	52	42	34	35	37	40	42	46	47	54	51	74	77	59.8	85.4
14-Jun-08	80	84	85	86	87	86	84	78	74	64	59	55	49	47	47	46	42	40	39	44	55	62	72	78	64.2	86.6
15-Jun-08	81	83	85	86	85	77	72	69	64	55	44	41	38	37	36	35	33	34	42	51	59	69	77	77	59.6	86.2
16-Jun-08	80	73	73	72	69	74	83	75	60	50	45	45	43	34	25	26	23	22	21	24	34	45	63	73	51.2	82.5
17-Jun-08	76	78	79	80	79	70	64	56	53	47	44	37	29	24	24	22	22	22	21	27	38	40	51	58	47.5	80.4
18-Jun-08	61	65	71	73	76	71	70	66	60	51	44	40	36	34	34	37	34	26	24	29	39	50	54	47	49.7	76.3
19-Jun-08	38	72	85	86	86	79	74	68	58	51	45	40	35	34	34	33	33	32	30	31	38	46	61	71	52.4	86.2
20-Jun-08	74	74	73	67	69	68	59	54	52	46	43	40	35	30	26	26	28	31	35	38	44	46	59	70	49.5	74.2
21-Jun-08	73	74	78	79	77	70	62	54	45	39	28	24	24	24	23	23	23	24	32	44	55	58	52	47	47.2	79.4
22-Jun-08	42	39	33	33	34	38	44	51	71	75	64	43	32	34	43	44	42	41	41	45	52	58	65	66	47.1	75.1
23-Jun-08	64	66	73	74	74	73	66	59	55	46	39	36	29	25	21	18	19	29	34	39	42	52	60	65	48.2	73.8
24-Jun-08	67	60	53	56	64	65	58	65	54	40	44	53	49	47	46	44	45	47	47	50	59	65	72	76	55.4	76.3
25-Jun-08	80	82	84	84	85	79	76	63	55	49	43	33	30	24	24	24	24	23	24	28	35	48	56	58	50.4	84.7
26-Jun-08	67	65	62	66	67	67	64	60	49	46	47	45	42	36	27	26	22	25	30	71	72	71	73	74	53.0	74.4
27-Jun-08	77	73	70	70	70	72	66	55	45	40	36	34	34	32	31	30	29	29	31	36	44	50	57	66	49.1	77.4
28-Jun-08	69	73	77	76	78	71	65	58	46	36	32	30	29	27	23	24	24	23	23	27	42	55	63	56	47.0	78.2
29-Jun-08	44	43	46	54	55	47	47	40	34	31	23	20	19	19	18	17	16	16	16	20	30	49	59	58	34.3	59.2
30-Jun-08	57	60	65	61	60	70	55	48	41	36	27	26	25	27	26	23	23	26	34	43	55	62	61	64	44.7	69.5
Hourly Avg	71.3	73.4	75.0	75.4	76.3	74.4	71.2	67.1	62.1	56.9	51.5	48.4	44.6	41.2	39.7	40.0	40.0	41.3	43.9	49.7	56.6	61.8	67.9	70.3		
Hourly Max	89.9	88.3	89.1	90.9	91.0	90.5	87.3	88.1	86.5	86.0	86.7	84.4	84.7	83.0	78.3	83.8	81.2	83.4	85.2	86.2	88.0	88.1	88.9	89.9		

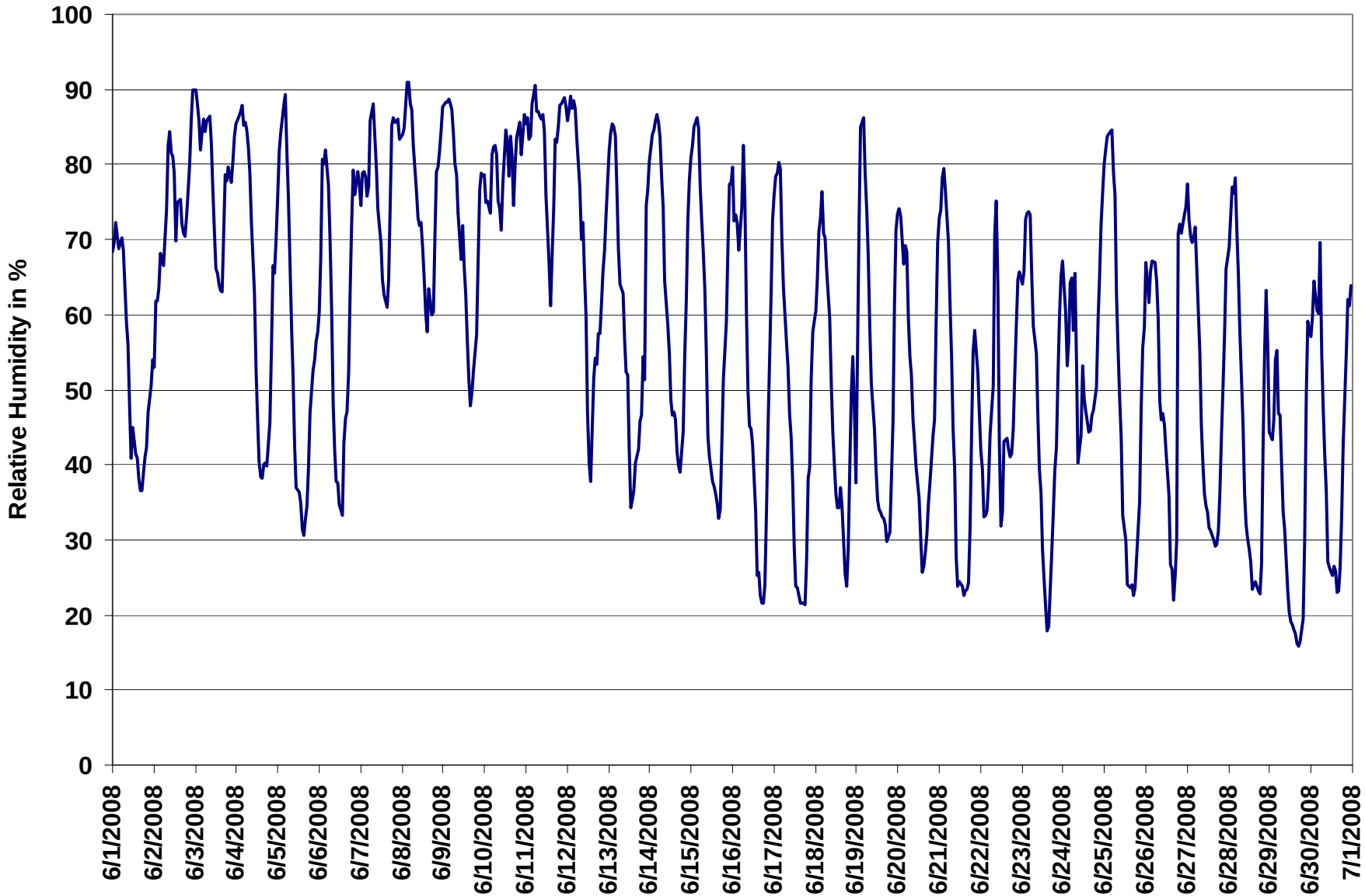


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend

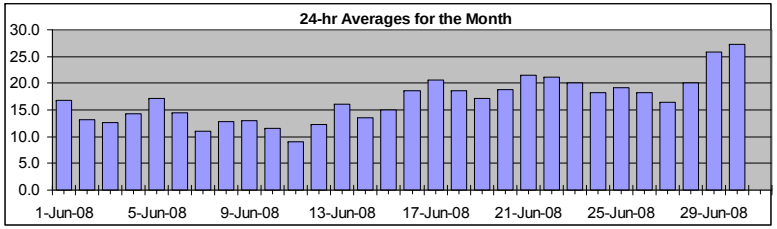
PAS - Crescent Heights Temperature Monthly Summary

Station: Crescent Heights
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

HOURLY AVERAGE TABLE

Ambient Temperature (T)



Summary

Maximum 1-hr Average:	35.8	°C	30-Jun	14:00 15:00
Maximum 24-hr Value:	27.2	°C	30-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
	34.4	28.0	21.4	15.7	11.5	8.7	7.3	16.8 °C	15.7 °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-08	12	11	11	10	11	12	12	13	16	18	19	21	20	21	21	22	22	21	20	19	19	18	17	17	16.9	22.4
2-Jun-08	16	14	13	13	12	12	12	11	10	10	12	13	13	16	15	14	15	15	15	15	14	13	12	11	13.2	16.2
3-Jun-08	11	12	12	11	10	10	10	11	11	12	13	14	15	15	15	16	16	14	14	14	13	13	12	10	12.6	16.5
4-Jun-08	9	9	8	8	8	9	9	10	10	12	15	18	19	20	20	21	21	21	20	19	17	15	14	13	14.4	21.2
5-Jun-08	12	11	10	9	8	10	12	15	18	20	21	22	21	22	23	24	23	23	22	20	18	17	17	16	17.2	23.6
6-Jun-08	15	14	12	13	12	12	13	14	15	16	17	17	19	20	19	18	18	16	13	12	11	11	10	10	14.5	19.9
7-Jun-08	10	10	10	10	10	10	9	9	10	11	11	12	13	14	14	15	14	13	11	10	10	10	10	10	11.1	14.9
8-Jun-08	10	10	10	9	9	10	10	11	13	14	14	14	15	15	16	17	15	16	15	14	13	12	12	11	12.8	16.6
9-Jun-08	11	11	11	11	10	10	10	11	11	12	13	13	14	15	16	17	18	17	16	15	13	12	12	11	13.0	18.1
10-Jun-08	11	12	12	12	11	10	11	12	14	14	14	12	10	10	12	11	12	13	12	11	10	10	10	10	11.6	14.0
11-Jun-08	10	10	9	8	8	8	8	9	9	8	8	9	11	13	13	12	11	8	8	7	7	7	7	7	8.9	13.0
12-Jun-08	8	7	8	8	8	8	8	10	11	12	13	14	16	17	18	17	16	15	15	15	14	12	12	11	12.2	18.2
13-Jun-08	9	9	8	8	8	11	14	16	16	18	19	19	21	23	23	23	22	22	19	18	16	17	13	13	16.1	23.0
14-Jun-08	12	11	10	10	10	10	10	10	11	14	15	16	17	17	17	18	18	18	18	17	14	13	11	10	13.6	18.2
15-Jun-08	9	8	7	6	6	9	11	13	15	17	19	19	20	21	22	22	23	22	20	19	17	14	12	11	15.1	22.6
16-Jun-08	11	12	12	12	13	13	12	14	18	21	23	23	24	25	25	25	26	26	25	24	21	18	15	13	18.7	25.8
17-Jun-08	11	11	10	10	10	13	15	18	21	24	26	26	27	28	28	28	28	28	29	27	24	21	17	15	20.6	29.1
18-Jun-08	14	13	12	11	10	12	14	16	18	20	21	22	24	24	24	24	24	24	24	22	20	18	16	15	18.6	24.4
19-Jun-08	15	11	10	10	9	11	12	14	16	18	20	21	22	23	23	23	23	23	23	22	20	17	14	12	17.3	23.3
20-Jun-08	11	11	11	12	11	12	14	16	18	21	22	23	24	25	26	25	25	25	24	23	21	19	16	15	18.7	26.0
21-Jun-08	13	12	11	10	10	12	15	19	22	25	27	29	29	30	30	30	30	29	27	25	22	20	19	20	21.6	30.4
22-Jun-08	21	21	23	23	22	22	21	20	18	19	21	24	25	25	24	24	24	24	23	22	19	17	15	15	21.2	25.1
23-Jun-08	15	14	12	12	12	13	15	17	20	22	24	25	26	26	27	26	26	25	25	23	22	20	18	17	20.1	26.5
24-Jun-08	16	17	18	18	16	16	17	15	18	20	20	19	20	21	21	22	22	21	21	20	18	16	14	14	18.3	21.7
25-Jun-08	12	12	11	10	10	11	13	16	18	20	23	24	25	26	26	27	27	27	26	24	21	18	16	16	19.1	26.7
26-Jun-08	14	14	14	13	12	13	15	17	19	21	23	24	25	25	26	26	26	26	24	14	13	12	11	11	18.2	26.4
27-Jun-08	10	10	9	9	9	9	11	14	17	19	20	20	21	22	22	22	23	23	22	21	19	17	15	13	16.4	22.6
28-Jun-08	12	11	10	9	8	10	13	16	21	23	24	26	26	27	28	29	29	29	29	27	23	20	17	17	20.1	29.0
29-Jun-08	18	18	18	16	16	18	20	23	26	28	30	31	32	33	34	34	34	34	34	32	28	23	20	18	25.9	34.5
30-Jun-08	18	18	17	17	17	17	21	24	28	31	34	34	35	35	36	35	35	34	32	30	27	25	25	25	27.2	35.8
Hourly Avg	12.5	12.0	11.6	11.3	11.0	11.8	12.9	14.5	16.2	18.0	19.4	20.2	21.0	21.8	22.2	22.3	22.2	21.7	20.9	19.3	17.4	15.9	14.4	13.5		
Hourly Max	20.7	21.3	23.1	22.9	22.3	21.7	21.1	23.9	27.7	31.4	34.1	34.5	34.5	35.4	35.8	35.1	35.4	34.5	34.1	32.4	27.9	25.3	25.4	24.7		

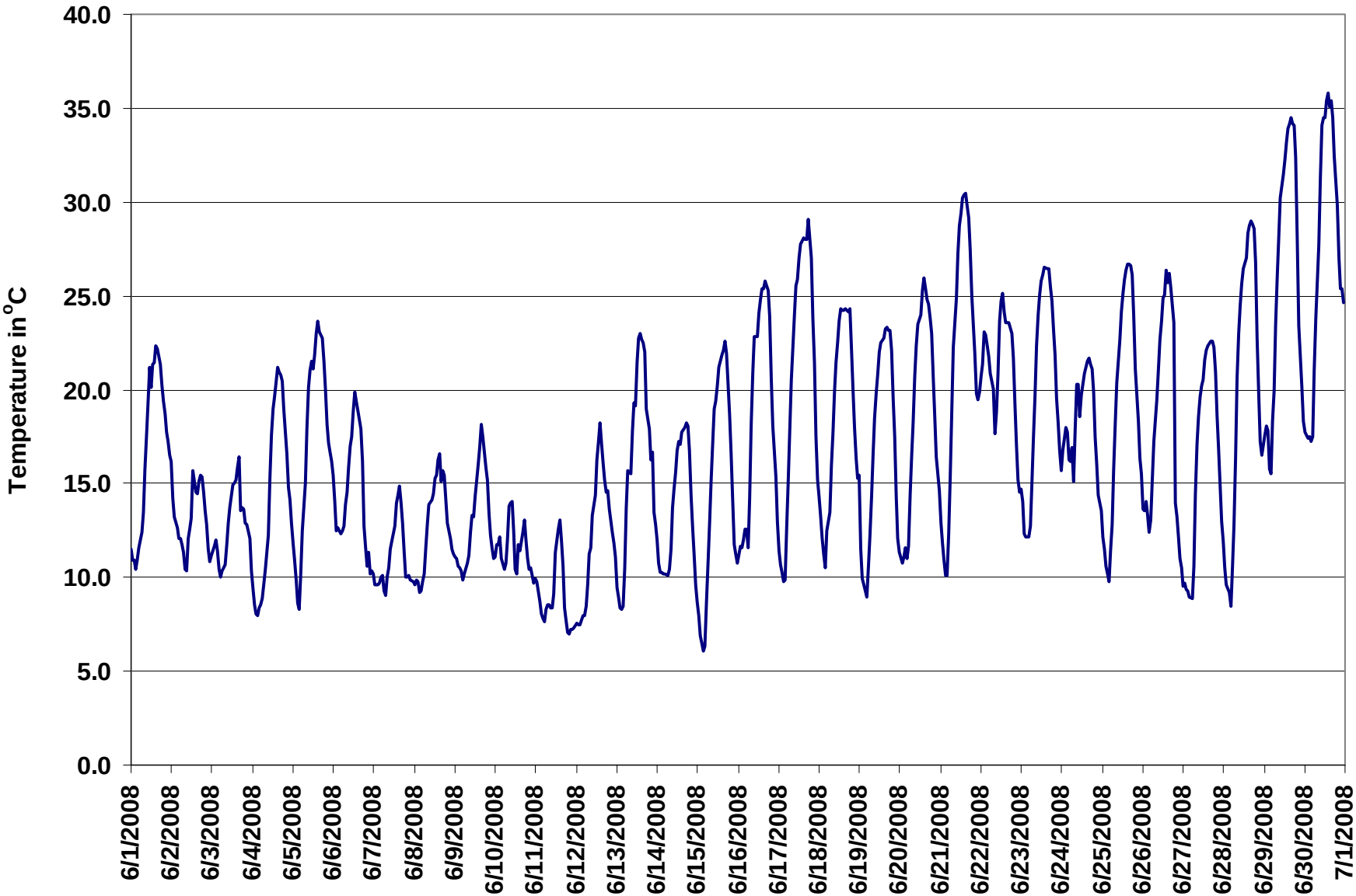


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend

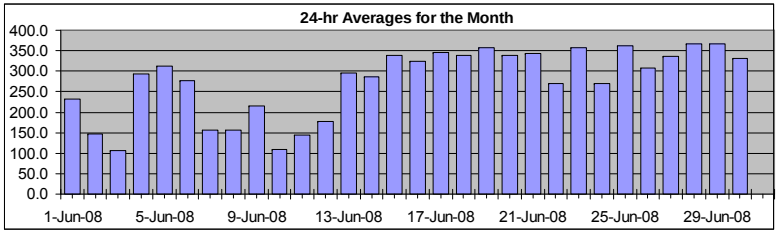
PAS - Crescent Heights Solar Radiation Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Solar Radiation (SR)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Average:	990.6	W/m²	19-Jun	12:00 13:00
Maximum 24-hr Value:	367.1	W/m²	29-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
	933.5	867.9	537.3	117.1	0.0	0.0	0.0	275.5 W/m²	117.1 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-08	0	0	0	0	8	62	72	127	271	465	656	610	556	770	536	703	464	236	44	11	0	0	0	0	232.9	770.3
2-Jun-08	0	0	0	0	1	9	25	37	67	210	424	296	406	566	279	447	316	241	164	49	3	0	0	0	147.4	565.7
3-Jun-08	0	0	0	0	1	16	30	44	50	141	170	292	451	287	243	317	288	71	80	48	4	0	0	0	105.5	451.0
4-Jun-08	0	0	0	0	7	60	137	195	287	529	847	929	833	777	745	717	466	307	166	51	1	0	0	0	294.0	928.5
5-Jun-08	0	0	0	0	15	115	263	433	600	746	810	775	363	511	794	776	528	470	212	78	4	0	0	0	312.2	810.0
6-Jun-08	0	0	0	0	10	64	117	381	383	682	826	606	856	726	727	735	312	156	62	11	0	0	0	0	277.3	856.3
7-Jun-08	0	0	0	0	3	9	31	62	205	344	355	322	525	601	484	490	105	124	65	27	3	0	0	0	156.4	600.7
8-Jun-08	0	0	0	0	4	22	57	116	160	290	252	423	415	501	525	298	282	279	122	22	2	0	0	0	157.1	525.4
9-Jun-08	0	0	0	0	4	22	70	194	198	306	334	334	563	799	633	683	568	285	94	53	5	0	0	0	214.3	798.6
10-Jun-08	0	0	0	0	3	21	62	176	371	271	229	188	76	186	358	239	192	150	62	23	1	0	0	0	108.7	371.2
11-Jun-08	0	0	0	0	2	7	29	70	86	99	133	267	853	612	556	340	265	80	56	18	1	0	0	0	144.7	852.8
12-Jun-08	0	0	0	0	2	18	53	163	202	374	491	421	723	393	581	278	258	132	104	49	7	0	0	0	177.1	722.5
13-Jun-08	0	0	0	0	9	137	338	421	361	672	698	334	868	820	843	586	478	417	91	29	3	0	0	0	296.1	868.0
14-Jun-08	0	0	0	0	3	30	113	150	221	555	612	688	921	863	686	667	558	433	263	82	7	0	0	0	285.6	921.4
15-Jun-08	0	0	0	0	25	140	248	369	469	562	888	895	813	978	800	630	630	378	217	83	8	0	0	0	338.8	978.3
16-Jun-08	0	0	0	0	18	54	69	278	413	761	824	740	915	919	778	660	595	431	263	85	8	0	0	0	325.4	918.7
17-Jun-08	0	0	0	0	18	127	279	448	609	748	852	928	953	897	688	612	401	349	268	108	9	0	0	0	345.5	953.2
18-Jun-08	0	0	0	0	18	123	275	442	604	743	849	920	906	797	668	570	534	370	266	57	7	0	0	0	339.5	919.6
19-Jun-08	0	0	0	0	19	123	275	440	604	749	831	839	991	864	753	679	609	427	254	84	9	0	0	0	356.3	990.6
20-Jun-08	0	0	0	1	10	115	277	445	607	747	857	888	722	922	857	591	389	356	239	86	7	0	0	0	338.2	922.2
21-Jun-08	0	0	0	1	19	129	273	446	611	739	848	934	902	888	710	692	447	330	179	64	13	1	0	0	342.6	934.3
22-Jun-08	0	0	0	1	8	32	80	40	48	416	582	905	926	868	630	638	545	410	257	89	9	1	0	0	270.2	926.4
23-Jun-08	0	0	0	1	7	118	280	440	606	746	857	923	939	920	836	721	566	345	190	63	14	1	0	0	357.2	939.4
24-Jun-08	0	0	0	1	4	37	67	98	454	744	643	540	450	743	752	654	522	425	257	86	8	1	0	0	270.2	752.3
25-Jun-08	0	0	0	0	18	122	232	438	601	742	846	875	947	930	806	732	633	440	278	56	7	0	0	0	362.6	946.7
26-Jun-08	0	0	0	0	13	114	259	393	555	729	841	727	871	759	682	488	501	316	73	29	8	0	0	0	306.6	870.8
27-Jun-08	0	0	0	0	10	45	155	440	613	734	819	845	669	877	768	697	600	435	266	87	8	0	0	0	336.1	877.1
28-Jun-08	0	0	0	0	14	119	272	441	608	748	859	924	940	913	846	731	588	429	261	85	8	0	0	0	366.1	940.4
29-Jun-08	0	0	0	0	14	118	273	445	610	757	859	924	943	917	835	736	593	431	263	85	8	0	0	0	367.1	943.3
30-Jun-08	0	0	0	0	13	86	263	425	596	723	846	853	799	874	849	465	556	368	195	59	5	0	0	0	332.3	873.6
Hourly Avg	0.0	0.0	0.0	0.2	9.9	73.1	165.8	286.6	402.4	569.1	664.5	671.6	736.5	749.2	674.9	585.6	459.5	320.6	177.1	58.6	5.9	0.1	0.0	0.0		
Hourly Max	0.0	0.0	0.0	0.8	24.6	139.6	338.4	447.9	612.7	761.1	887.8	934.3	990.6	978.3	856.7	776.2	632.6	470.0	278.4	108.1	14.1	0.6	0.0	0.0		

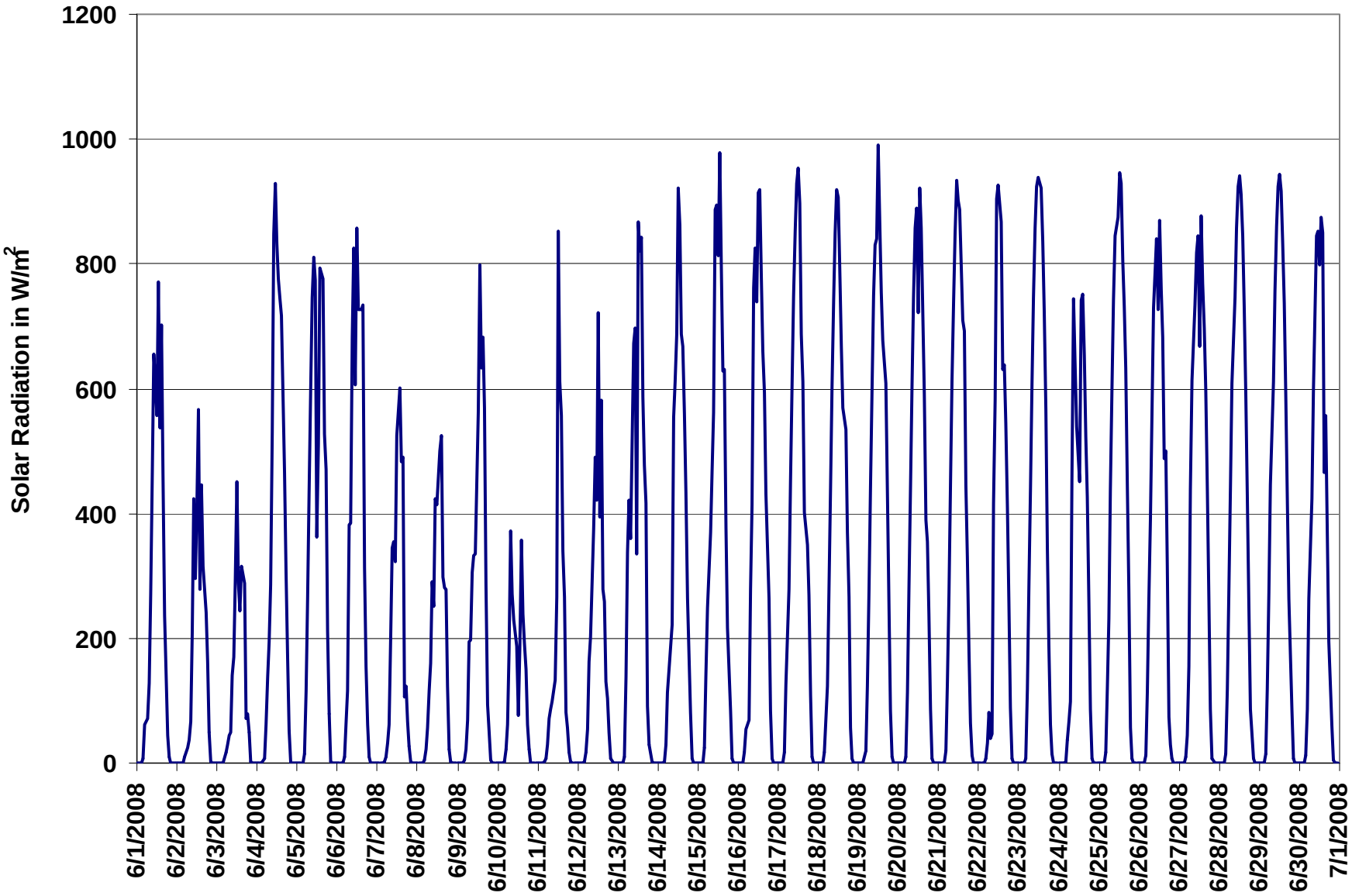


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend

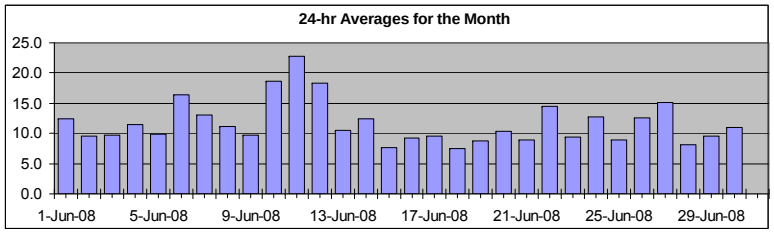
PAS - Crescent Heights Scalar Wind Speed Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Average:	33.4	km/hr	11-Jun	1:00 2:00
Maximum 24-hr Value:	22.7	km/hr	11-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
	28.4	22.6	14.5	10.5	7.5	4.9	3.9	11.7 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-08	6	4	6	8	6	6	10	10	8	10	15	17	21	22	19	20	19	18	16	14	13	10	8	13	12.4	21.6
2-Jun-08	11	11	7	9	9	9	9	6	10	9	12	12	13	11	14	17	9	8	7	8	5	9	9	5	9.5	17.2
3-Jun-08	5	7	10	16	14	12	8	9	8	8	8	9	11	11	10	10	13	14	10	6	6	7	12	12	9.8	15.6
4-Jun-08	10	10	10	7	9	12	14	13	12	11	10	12	17	20	18	13	12	10	6	7	15	12	9	6	11.5	20.1
5-Jun-08	5	6	7	4	4	4	6	5	6	7	7	8	11	12	14	15	16	17	17	13	13	12	13	14	9.9	17.3
6-Jun-08	21	22	8	10	13	12	10	17	22	26	23	18	16	15	18	18	15	18	21	18	9	13	16	17	16.4	25.8
7-Jun-08	18	11	11	10	12	11	13	13	13	16	15	15	15	16	13	11	8	13	20	19	13	9	10	10	13.1	20.2
8-Jun-08	6	4	6	8	9	11	12	12	17	17	15	14	13	11	9	8	18	14	9	11	10	11	11	9	11.1	17.8
9-Jun-08	9	10	9	9	10	10	9	9	9	9	12	10	10	15	11	9	7	6	5	9	11	11	10	9	9.6	15.1
10-Jun-08	12	16	7	8	9	13	9	10	14	20	16	25	22	16	21	19	17	26	28	28	26	27	29	30	18.6	30.0
11-Jun-08	31	33	24	17	15	16	28	29	29	25	24	19	22	18	21	25	28	28	26	18	12	16	20	21	22.7	33.4
12-Jun-08	23	21	16	21	22	23	23	20	21	19	18	20	23	27	28	21	18	19	13	13	10	6	6	6	18.3	28.3
13-Jun-08	6	8	7	5	8	8	6	10	12	10	10	10	11	14	16	14	14	15	15	9	17	6	12	12	10.6	17.2
14-Jun-08	6	12	12	7	11	15	15	13	12	16	16	16	18	17	17	17	15	14	12	9	8	9	7	6	12.4	17.6
15-Jun-08	5	6	6	7	6	6	6	7	7	5	7	9	9	9	8	7	7	8	13	14	12	8	6	6	7.6	14.2
16-Jun-08	5	8	10	13	9	7	9	8	11	12	9	12	11	13	12	12	12	11	9	4	4	5	8	9	9.3	13.1
17-Jun-08	6	5	5	5	5	5	6	5	6	6	14	17	16	17	16	15	10	6	5	8	9	12	19	10	9.5	19.2
18-Jun-08	5	5	7	7	4	5	7	6	7	7	7	8	9	8	10	11	11	12	9	5	7	6	8	9	7.5	12.4
19-Jun-08	11	13	9	9	7	8	7	9	9	9	12	10	10	10	9	10	12	11	8	5	4	6	7	7	8.8	12.9
20-Jun-08	6	7	8	10	9	11	12	14	16	14	13	13	13	13	11	13	12	12	10	6	6	5	5	6	10.3	16.3
21-Jun-08	8	8	7	6	5	6	4	4	5	8	11	13	13	12	11	12	11	12	14	10	8	8	9	11	9.0	14.3
22-Jun-08	10	9	13	10	7	9	17	16	15	10	17	24	26	25	17	19	14	12	14	13	13	14	10	13	14.5	26.4
23-Jun-08	13	13	6	5	4	9	9	11	8	8	8	9	14	14	15	15	12	13	11	7	5	4	5	6	9.4	15.5
24-Jun-08	5	6	8	11	11	10	15	13	12	19	21	18	18	19	19	18	16	16	12	11	8	7	6	7	12.8	20.9
25-Jun-08	4	7	7	8	5	7	8	13	12	13	10	11	12	13	11	11	11	11	9	5	4	7	6	6	8.9	13.3
26-Jun-08	5	8	7	6	5	5	7	7	8	13	15	15	16	18	16	17	17	20	20	32	21	10	5	8	12.6	32.5
27-Jun-08	10	11	12	12	11	10	11	14	16	19	23	23	24	22	23	23	22	19	17	13	8	7	7	4	15.1	23.7
28-Jun-08	7	6	7	9	7	6	6	7	7	7	8	8	10	9	8	9	9	10	8	8	12	10	10	6	8.1	12.2
29-Jun-08	9	12	9	5	5	5	6	10	15	14	12	13	13	14	14	14	12	11	8	5	5	7	8	7	9.6	15.1
30-Jun-08	4	3	3	4	3	4	4	5	6	9	13	18	18	18	15	13	16	18	22	22	15	12	9	9	11.0	22.1
1-hr Average	9.4	10.0	8.8	8.9	8.6	9.1	10.2	10.8	11.8	12.5	13.4	14.2	15.1	15.2	14.9	14.6	13.7	14.1	13.1	11.7	10.4	9.6	10.0	9.7		
Hourly Max	30.9	33.4	23.8	21.4	21.7	22.6	28.1	28.9	28.6	25.8	23.8	24.8	26.4	27.0	28.3	25.1	27.9	28.4	27.9	32.5	25.9	26.6	28.7	30.0		

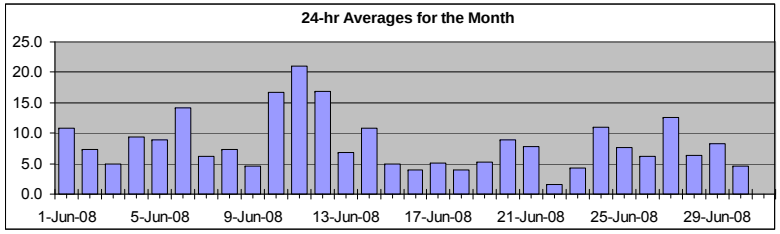
PAS - Crescent Heights Vector Wind Speed Monthly Summary

Station: Crescent Heights
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

HOURLY AVERAGE TABLE

Wind Speed (WSv)



Summary

Maximum 1-hr Average:	33.2	km/hr	11-Jun	1:00 2:00
Maximum 24-hr Value:	21.1	km/hr	11-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			AverageV
	28.2	22.1	14.0	9.8	6.5	3.4	1.6			2.1 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-08	6	2	4	6	3	3	9	10	7	9	15	15	21	21	19	19	19	17	15	14	13	5	6	12	10.8	21.2
2-Jun-08	11	11	6	8	9	9	9	5	10	9	11	11	13	9	14	17	8	6	7	7	5	9	9	3	7.3	16.7
3-Jun-08	4	7	10	15	14	11	8	9	8	7	7	8	11	10	10	10	12	14	9	5	6	6	12	11	5.0	15.4
4-Jun-08	10	9	9	7	9	12	14	12	12	10	9	11	15	19	17	12	11	8	5	7	11	12	8	5	9.3	19.3
5-Jun-08	3	6	6	2	2	4	4	5	5	5	3	3	9	10	13	14	16	17	16	13	13	12	13	14	9.0	16.9
6-Jun-08	20	22	7	10	13	12	10	16	22	25	22	17	16	13	18	17	13	18	21	17	7	12	15	17	14.2	25.4
7-Jun-08	18	11	10	9	12	11	13	12	13	16	15	15	15	16	13	10	3	13	19	19	13	8	10	10	6.2	19.2
8-Jun-08	4	3	5	8	8	11	12	11	16	16	15	14	12	9	8	7	18	14	8	11	10	11	11	9	7.3	17.6
9-Jun-08	9	10	9	9	10	10	9	9	9	9	11	10	9	14	10	8	4	4	5	9	11	11	10	8	4.6	14.5
10-Jun-08	12	16	4	5	5	13	9	9	13	20	15	25	22	16	21	18	16	26	28	28	26	27	28	30	16.8	29.8
11-Jun-08	31	33	23	17	14	15	28	29	29	25	24	18	22	18	20	25	28	28	26	18	12	16	20	21	21.1	33.2
12-Jun-08	23	21	16	21	22	23	23	20	21	19	18	19	22	27	28	21	17	19	12	13	10	3	1	2	16.8	28.1
13-Jun-08	4	8	5	3	8	7	5	10	12	10	9	10	10	13	16	13	14	12	15	5	17	2	8	10	6.9	16.6
14-Jun-08	5	12	11	5	11	14	14	13	11	15	16	15	17	17	17	16	14	13	12	9	8	9	6	6	10.9	17.3
15-Jun-08	4	5	4	4	5	5	6	6	5	3	4	8	3	5	7	4	1	5	12	14	12	7	6	5	4.9	14.2
16-Jun-08	4	8	9	12	8	6	9	8	11	11	8	11	10	12	11	11	11	10	9	4	4	5	8	8	3.9	12.3
17-Jun-08	6	4	5	4	4	4	2	5	5	3	13	16	16	16	15	15	10	5	5	8	9	12	18	9	5.1	18.2
18-Jun-08	2	5	6	7	2	4	6	5	5	4	6	4	7	6	9	10	11	12	8	5	6	5	8	9	4.0	11.8
19-Jun-08	11	11	4	8	6	8	6	7	8	8	10	7	6	7	7	9	11	10	7	3	4	5	7	7	5.2	11.4
20-Jun-08	6	6	7	10	9	11	12	14	16	14	12	12	12	12	10	12	11	11	10	6	6	4	2	6	9.0	16.0
21-Jun-08	7	7	7	5	4	4	4	2	4	8	11	13	12	10	9	12	10	12	14	9	7	8	9	10	7.8	14.2
22-Jun-08	9	7	12	2	5	5	17	16	15	10	17	23	26	20	16	18	14	12	13	13	13	14	9	13	1.7	26.0
23-Jun-08	12	13	5	5	2	8	8	11	8	6	6	7	13	13	15	14	11	13	11	7	5	4	5	5	4.3	14.7
24-Jun-08	4	3	7	10	11	9	15	13	12	19	20	17	18	18	18	18	15	15	12	11	8	7	5	7	11.0	20.2
25-Jun-08	4	6	7	8	5	7	8	13	11	12	10	9	10	12	9	10	9	10	8	5	4	6	6	6	7.6	12.6
26-Jun-08	4	5	2	5	4	2	7	6	7	13	15	14	15	18	15	17	17	20	16	32	21	9	5	8	6.3	32.4
27-Jun-08	10	11	12	12	11	10	10	13	16	18	22	23	23	22	22	23	21	19	16	13	8	7	6	3	12.6	23.1
28-Jun-08	7	6	7	9	7	6	6	6	6	4	6	6	7	6	5	8	7	9	8	7	12	10	9	5	6.4	11.9
29-Jun-08	9	12	9	4	5	5	6	9	15	13	12	12	12	13	14	13	11	10	8	5	4	7	8	7	8.3	14.8
30-Jun-08	3	0	2	4	2	3	3	5	6	8	13	17	17	17	15	13	16	18	22	22	15	11	8	9	4.7	22.0
1-hr Vector	1.4	0.4	1.2	1.9	2.2	2.0	2.2	2.9	2.5	2.5	2.8	2.6	2.3	2.9	3.3	3.2	4.0	3.3	3.8	4.1	4.2	3.3	2.8	1.6		
Hourly Max	30.8	33.2	23.2	21.2	21.5	22.6	28.0	28.8	28.5	25.4	23.6	24.7	26.0	26.8	28.1	24.8	27.7	28.2	27.7	32.4	25.7	26.5	28.5	29.8		

PAS - Crescent Heights Wind Direction Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2008 to July 1, 2008

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																				
	355.2	339.6	264.6	203.7	105.8	22.1	4.8	290 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-08	115	5	29	350	348	161	35	49	114	65	72	78	54	65	75	82	87	86	81	80	88	115	21	41	70	ENE
2-Jun-08	100	69	101	105	77	68	92	142	106	103	96	91	85	73	66	62	66	20	5	355	13	336	340	320	69	ENE
3-Jun-08	247	232	223	241	266	273	245	248	245	246	266	307	297	301	307	319	347	36	48	20	54	32	31	15	300	WNW
4-Jun-08	7	16	19	8	1	1	6	21	34	32	53	65	64	71	72	93	98	98	71	325	17	347	5	353	37	NE
5-Jun-08	242	204	222	150	179	144	188	196	133	148	106	133	138	147	178	182	189	191	187	184	178	174	172	173	174	S
6-Jun-08	204	207	200	195	225	246	237	232	238	236	238	247	242	239	284	299	312	279	291	290	247	252	249	241	248	WSW
7-Jun-08	247	250	231	242	256	251	259	267	268	269	268	261	256	247	242	237	359	32	60	76	66	41	330	337	272	W
8-Jun-08	338	155	306	259	272	286	277	300	337	355	12	15	74	82	36	321	327	330	333	261	275	296	301	289	324	NW
9-Jun-08	296	301	297	291	292	299	289	286	299	322	360	42	33	47	46	37	79	79	53	36	53	81	98	133	6	N
10-Jun-08	105	92	108	199	46	43	80	92	97	105	117	109	107	110	93	73	63	82	69	76	66	58	50	49	81	E
11-Jun-08	56	69	95	70	59	47	35	39	48	58	36	74	58	44	49	49	41	43	55	49	36	7	355	349	47	NE
12-Jun-08	359	353	337	343	337	342	341	335	345	329	314	333	342	344	342	327	315	307	293	289	295	343	74	217	333	NNW
13-Jun-08	190	228	165	176	211	196	192	225	234	245	251	266	262	273	253	260	258	311	345	339	322	326	260	22	264	W
14-Jun-08	306	318	355	280	285	307	296	303	297	307	306	292	293	301	313	317	308	314	320	324	335	11	81	120	311	NW
15-Jun-08	132	143	164	146	87	202	93	109	126	153	48	59	115	63	114	128	295	7	17	50	72	115	113	94	91	E
16-Jun-08	84	84	18	34	85	129	137	140	126	128	155	190	198	206	227	220	233	249	254	261	22	106	120	130	160	SSE
17-Jun-08	127	134	117	117	150	169	178	7	20	219	215	217	225	210	205	211	244	243	211	195	247	268	345	5	220	SW
18-Jun-08	337	293	293	302	322	175	249	240	237	70	106	110	109	174	205	181	188	206	210	184	223	192	225	242	208	SSW
19-Jun-08	257	342	1	225	234	283	235	281	320	287	263	298	286	241	233	208	231	223	242	278	4	102	114	118	262	W
20-Jun-08	160	197	211	246	243	231	228	225	217	231	237	242	265	248	256	254	257	247	246	257	297	333	106	194	238	WSW
21-Jun-08	176	175	187	150	122	143	179	143	110	93	109	108	115	126	179	182	133	112	112	121	125	118	115	87	130	SE
22-Jun-08	87	34	138	64	169	176	197	211	212	187	210	235	246	265	329	347	335	350	9	17	35	44	79	97	265	W
23-Jun-08	97	98	136	66	15	25	44	105	111	172	190	203	213	214	222	222	246	232	238	245	265	206	183	149	189	S
24-Jun-08	169	232	221	229	227	233	246	264	242	244	248	277	272	281	295	291	295	302	306	309	308	309	314	232	269	W
25-Jun-08	197	195	208	217	164	193	218	226	219	234	230	245	227	242	256	225	235	231	231	249	141	109	136	165	219	SW
26-Jun-08	158	258	293	205	206	52	95	108	196	215	222	239	233	232	246	247	255	242	316	2	360	360	278	267	262	W
27-Jun-08	249	273	275	271	268	248	260	279	290	309	313	312	319	320	329	335	340	343	340	355	2	359	4	138	313	NW
28-Jun-08	198	182	209	205	183	188	189	203	208	145	107	122	93	86	180	176	178	191	164	139	114	133	132	162	160	SSE
29-Jun-08	181	195	199	287	225	229	231	213	205	199	197	195	192	200	204	204	203	223	192	183	115	110	118	117	196	SSW
30-Jun-08	115	120	117	74	106	118	134	206	200	185	205	222	218	225	255	296	316	330	339	342	341	333	338	305	285	WNW
Hourly Avg	146	151	208	247	260	265	257	256	242	239	244	245	244	252	277	277	300	314	352	5	21	30	33	58		

PAS - Crescent Heights Standard Deviation of Wind Direction Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2008 to July 1, 2008

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
	83.6	66.0	30.0	17.0	11.7	6.7	5.0

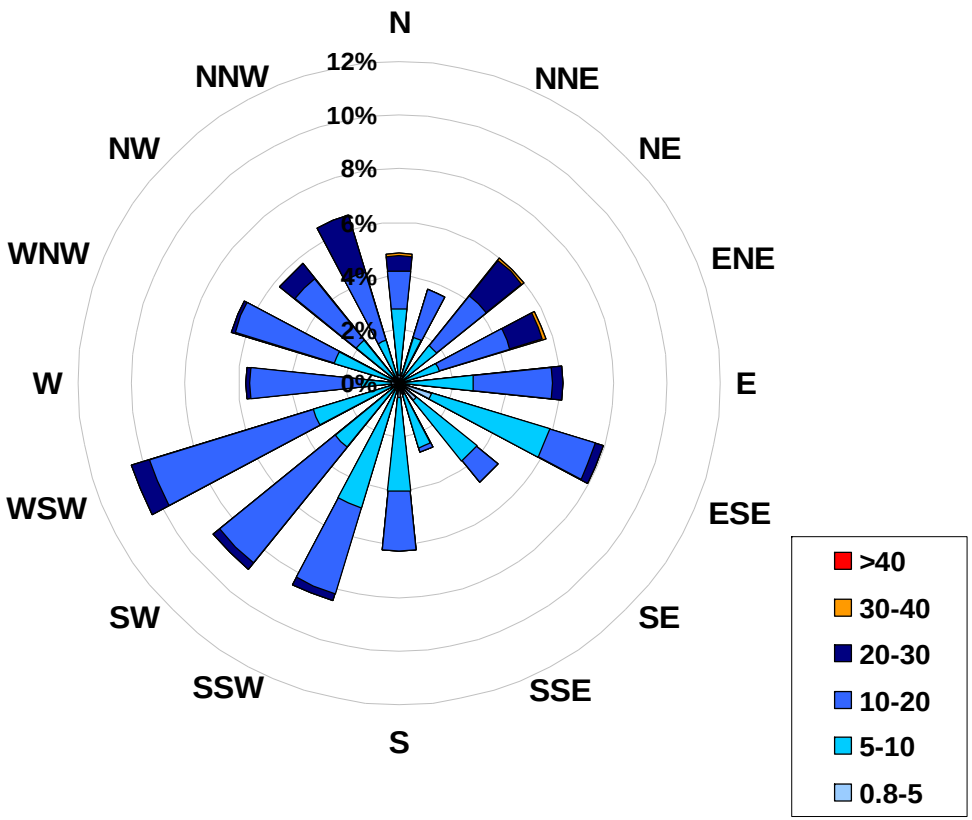
Status Flag Characters

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	Daily Maximum
1-Jun-08	16	63	52	49	73	72	35	24	30	31	16	26	8	11	12	14	12	9	7	7	10	68	56	28	73.1
2-Jun-08	14	10	34	16	15	14	13	33	27	13	17	17	11	29	16	14	33	33	20	16	36	8	8	60	59.7
3-Jun-08	27	10	14	9	9	9	19	18	12	16	34	23	15	16	21	16	29	9	15	21	17	21	9	11	34.0
4-Jun-08	6	15	11	14	6	5	6	16	15	25	40	26	25	17	17	23	27	31	40	12	50	7	37	51	51.2
5-Jun-08	56	20	36	68	57	29	39	30	42	39	74	86	31	29	26	20	17	13	11	12	9	8	8	9	86.2
6-Jun-08	13	14	46	15	7	12	14	7	9	10	12	12	15	27	19	17	23	14	8	10	37	23	14	7	45.9
7-Jun-08	9	10	11	9	10	10	10	9	10	7	12	12	11	14	17	30	75	14	20	9	14	33	22	9	75.1
8-Jun-08	75	55	35	11	20	14	9	14	12	14	9	14	24	36	30	44	8	10	27	19	16	10	10	12	74.7
9-Jun-08	14	11	11	11	11	11	12	15	16	22	19	20	25	18	33	35	74	51	38	15	18	10	13	13	73.6
10-Jun-08	10	9	84	63	79	13	17	14	13	9	11	5	8	13	10	12	11	7	7	6	6	5	7	6	84.2
11-Jun-08	6	6	12	11	13	17	6	5	5	10	7	15	8	12	14	8	8	7	6	7	12	5	6	5	17.2
12-Jun-08	5	5	10	8	7	5	6	6	9	10	11	19	12	7	6	10	9	11	12	10	14	68	85	90	90.0
13-Jun-08	56	8	45	63	24	35	32	14	13	17	20	17	23	19	16	19	13	37	9	83	16	84	67	58	83.7
14-Jun-08	58	11	17	49	14	12	11	13	15	15	13	15	12	15	12	18	17	15	13	10	7	15	41	10	57.8
15-Jun-08	53	39	51	46	34	37	19	22	37	71	58	44	68	73	28	74	83	62	23	7	14	14	15	19	83.4
16-Jun-08	38	14	21	20	29	31	18	16	11	15	26	17	29	21	32	25	24	15	16	32	27	26	7	20	38.5
17-Jun-08	19	35	31	18	19	39	78	33	45	77	31	17	17	19	19	16	17	42	27	11	19	16	19	35	78.0
18-Jun-08	73	32	25	16	83	43	26	41	52	67	46	66	42	45	26	24	19	20	20	12	17	20	17	19	83.0
19-Jun-08	16	31	90	19	24	21	24	34	25	27	28	45	55	58	51	38	21	24	28	48	12	42	6	12	90.0
20-Jun-08	22	24	36	22	14	12	9	12	11	17	20	31	20	21	26	20	17	20	10	25	19	56	72	17	71.7
21-Jun-08	11	20	11	34	31	45	19	56	42	22	13	14	20	36	37	19	23	8	5	10	13	15	18	16	55.8
22-Jun-08	30	46	31	84	48	63	12	11	12	16	13	19	10	40	14	14	18	16	13	12	7	13	15	11	83.8
23-Jun-08	13	9	39	34	76	15	21	15	19	46	47	47	22	28	21	23	17	14	10	9	26	30	34	22	76.1
24-Jun-08	36	69	31	29	17	16	15	10	18	11	15	15	10	15	14	15	18	14	16	11	12	11	25	27	69.1
25-Jun-08	26	21	11	13	31	19	13	19	16	27	23	45	33	26	37	30	36	32	17	22	34	8	24	18	44.7
26-Jun-08	52	49	81	37	43	71	18	24	36	17	15	16	21	12	16	11	10	11	34	5	7	31	15	10	81.1
27-Jun-08	15	7	8	7	10	11	15	14	14	15	12	12	12	13	12	13	13	12	13	8	3	5	48	50	50.3
28-Jun-08	10	15	11	15	10	18	15	17	25	57	58	50	48	59	56	33	45	28	23	29	12	10	14	26	58.6
29-Jun-08	11	8	13	46	15	17	17	17	11	19	17	19	19	21	19	17	19	20	20	14	37	5	8	5	46.0
30-Jun-08	45	84	67	20	39	24	33	19	30	19	18	16	12	17	16	19	14	13	7	4	6	15	28	12	83.9
Hourly Max	75	84	90	84	83	72	78	56	52	77	74	86	68	73	56	74	83	62	40	83	50	84	85	90	

1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site for June 2008



Calms:	0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	37
5	to	10	292
10	to	20	326
20	to	30	62
30	to	40	3
	>	40	0
Total Non-Zero Values			720

PAS – Portable-Brooks

Monthly Summary Tables, Graphs and Roses

PAS – Brooks Sulphur Dioxide Monthly Summary

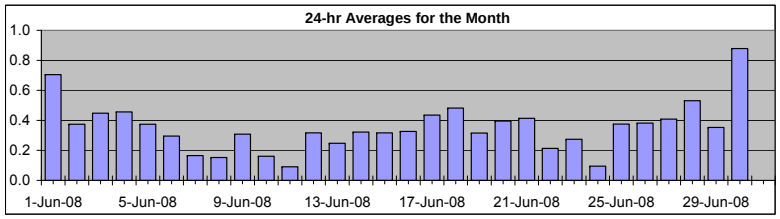
Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: June 1, 2008 to July 1, 2008

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:	2.7	ppb	1-Jun	18:00 19:00
Maximum 24-hr Average:	0.9	ppb	30-Jun	

AIC Time:	32 hrs	Operational Time:	686 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	1.2	0.9	0.5	0.3	0.2	0.0	0.0	0.4 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-08	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	3	1	1	A	0	0	0.7	2.7
2-Jun-08	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	A	0	0	0	0.4	0.7
3-Jun-08	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	1	A	0	0	0	0	0.4	1.2
4-Jun-08	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0.5	1.2
5-Jun-08	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0.4	0.6
6-Jun-08	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.6
7-Jun-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.4
8-Jun-08	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0.2	0.6
9-Jun-08	0	0	0	0	0	0	0	0	0	1	1	0	0	A	1	1	1	0	0	0	0	0	0	0	0.3	1.1
10-Jun-08	0	0	0	0	0	1	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
11-Jun-08	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
12-Jun-08	0	0	0	0	0	0	0	0	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
13-Jun-08	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
14-Jun-08	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.2
15-Jun-08	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
16-Jun-08	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
17-Jun-08	0	0	1	1	1	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0.4	1.0
18-Jun-08	0	0	0	0	A	0	0	1	2	2	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0.5	2.3
19-Jun-08	0	0	0	A	0	0	0	0	0	C	C	A	1	0	0	0	0	1	1	0	1	0	0	0	0.3	0.6
20-Jun-08	0	A	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4	0.7
21-Jun-08	A	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0.4	1.2
22-Jun-08	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	A	0	0.2	1.9
23-Jun-08	0	0	0	0	0	0	1	0	1	1	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0.3	0.6
24-Jun-08	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.7
25-Jun-08	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0.4	0.8
26-Jun-08	0	A	1	1	0	0	0	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7
27-Jun-08	A	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	A	0.4	1.1
28-Jun-08	1	1	0	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	1	A	1	0.5	0.8
29-Jun-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	0.4	0.7
30-Jun-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	0.9	2.1
Hourly Avg	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.2	0.3		
Hourly Max	1.2	1.2	0.9	0.6	0.9	0.9	1.1	1.3	1.8	2.3	1.1	1.2	1.2	1.2	1.2	2.1	1.3	1.2	2.7	1.2	0.8	1.9	1.0	1.0		

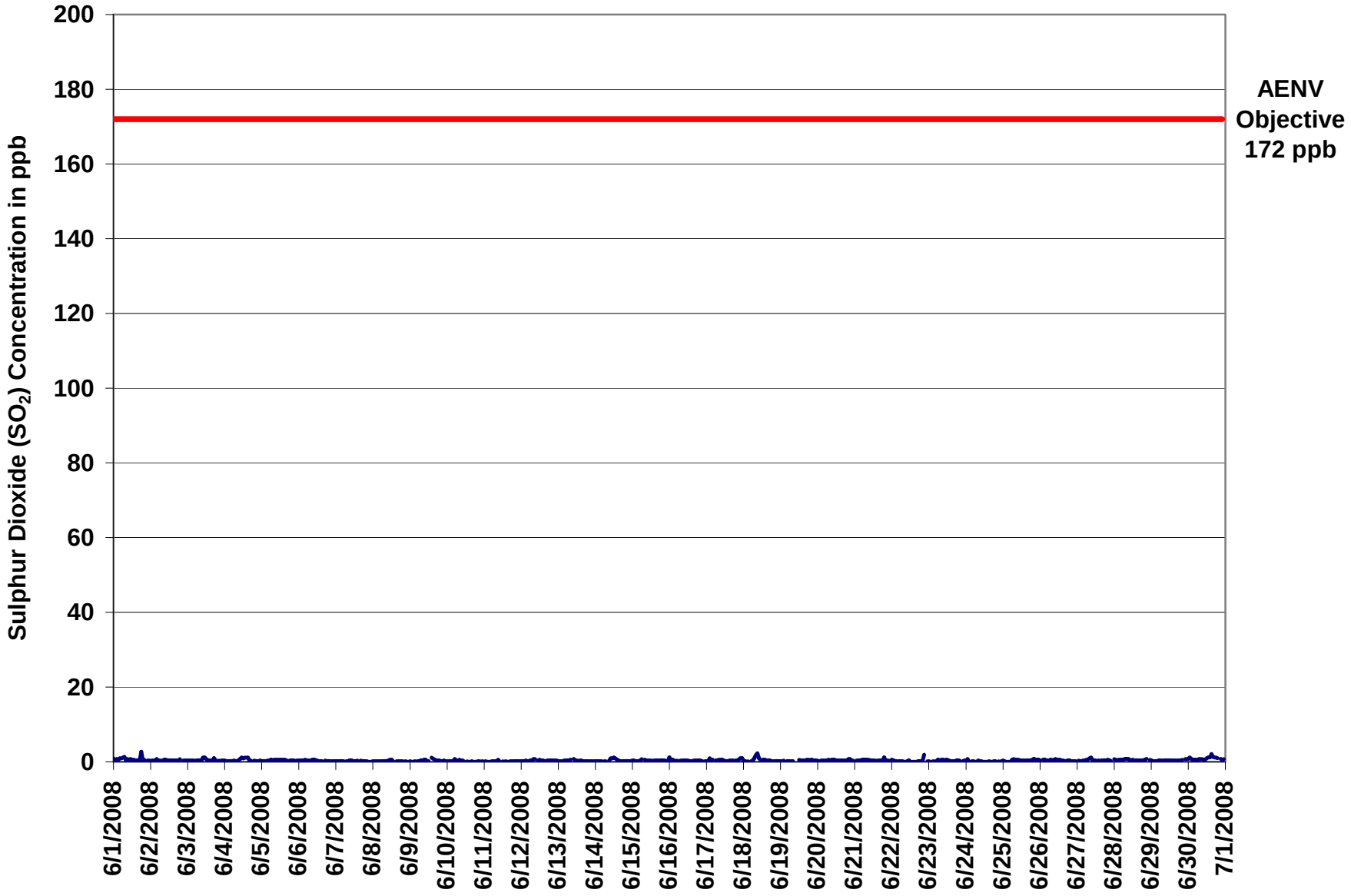


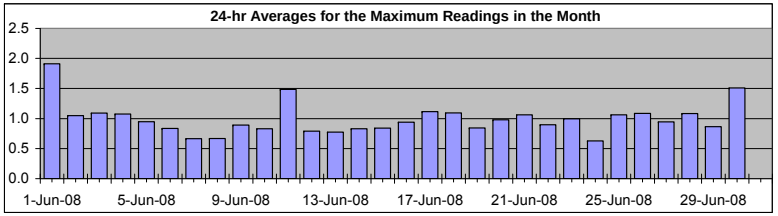
Figure 16. PAS – Brooks Sulphur Dioxide 1-hr Average Monthly Trend

Station: Portable-Brooks
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO_2)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	22.1	ppb	11-Jun	9:00 10:00
Maximum 24-hr Value:	1.9	ppb	1-Jun	

AIC Time:	32 hrs	Operational Time:	686 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	3.9	1.9	1.0	0.8	0.6	0.5	0.4	1.0 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-08	2	1	2	1	4	3	5	4	1	1	1	2	1	1	1	1	1	1	9	1	1	A	1	1	1.9	8.5
2-Jun-08	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1.0	3.2
3-Jun-08	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	4	1	A	1	1	1	1	1.1	3.7
4-Jun-08	1	1	1	1	1	1	1	1	1	1	2	2	1	2	2	3	1	1	A	1	1	1	1	1	1.1	2.8
5-Jun-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.4
6-Jun-08	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	1.3
7-Jun-08	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0.7	1.2
8-Jun-08	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	0	1	0	0.7	1.6
9-Jun-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	1	1	1	1	1	1	1	0.9	2.3
10-Jun-08	1	1	1	1	1	3	2	1	2	1	1	1	A	1	1	1	1	1	0	0	1	1	1	1	0.8	2.9
11-Jun-08	1	1	1	0	1	1	1	1	1	22	1	A	1	1	1	1	1	1	1	1	0	1	1	0	1.5	22.1
12-Jun-08	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
13-Jun-08	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5
14-Jun-08	1	1	1	1	1	0	1	1	A	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	0.8	1.8
15-Jun-08	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5
16-Jun-08	4	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	3.8
17-Jun-08	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	2	2	1.1	3.2
18-Jun-08	1	1	1	1	A	1	1	2	3	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	3.6
19-Jun-08	1	1	1	A	1	1	1	1	1	C	C	A	1	1	1	1	1	1	2	1	1	1	1	1	0.8	1.7
20-Jun-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1.0	2.8
21-Jun-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	A	1.1	5.4
22-Jun-08	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	5	A	1	0.9	5.2
23-Jun-08	1	1	0	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	3	1	A	1	1	1.0	3.4
24-Jun-08	1	2	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	A	1	1	1	0.6	2.1
25-Jun-08	1	1	1	0	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1.1	2.8
26-Jun-08	1	A	1	2	1	1	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	3.9
27-Jun-08	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.6
28-Jun-08	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1.1	1.9
29-Jun-08	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	1.4
30-Jun-08	2	2	1	1	1	1	1	1	1	1	1	1	2	2	3	3	2	2	2	2	A	2	1	1	1.5	2.8
Hourly Avg	1.0	0.8	0.8	0.8	1.0	0.9	1.0	1.1	1.0	1.8	1.2	1.0	0.9	0.9	1.0	1.0	0.9	0.9	1.1	1.1	1.0	1.1	0.8	0.8		
Hourly Max	3.8	2.2	2.2	2.4	4.2	2.9	4.7	4.1	2.5	22.1	3.9	1.9	1.8	2.0	2.5	2.8	2.3	3.7	8.5	5.4	3.2	5.2	1.5	1.7		

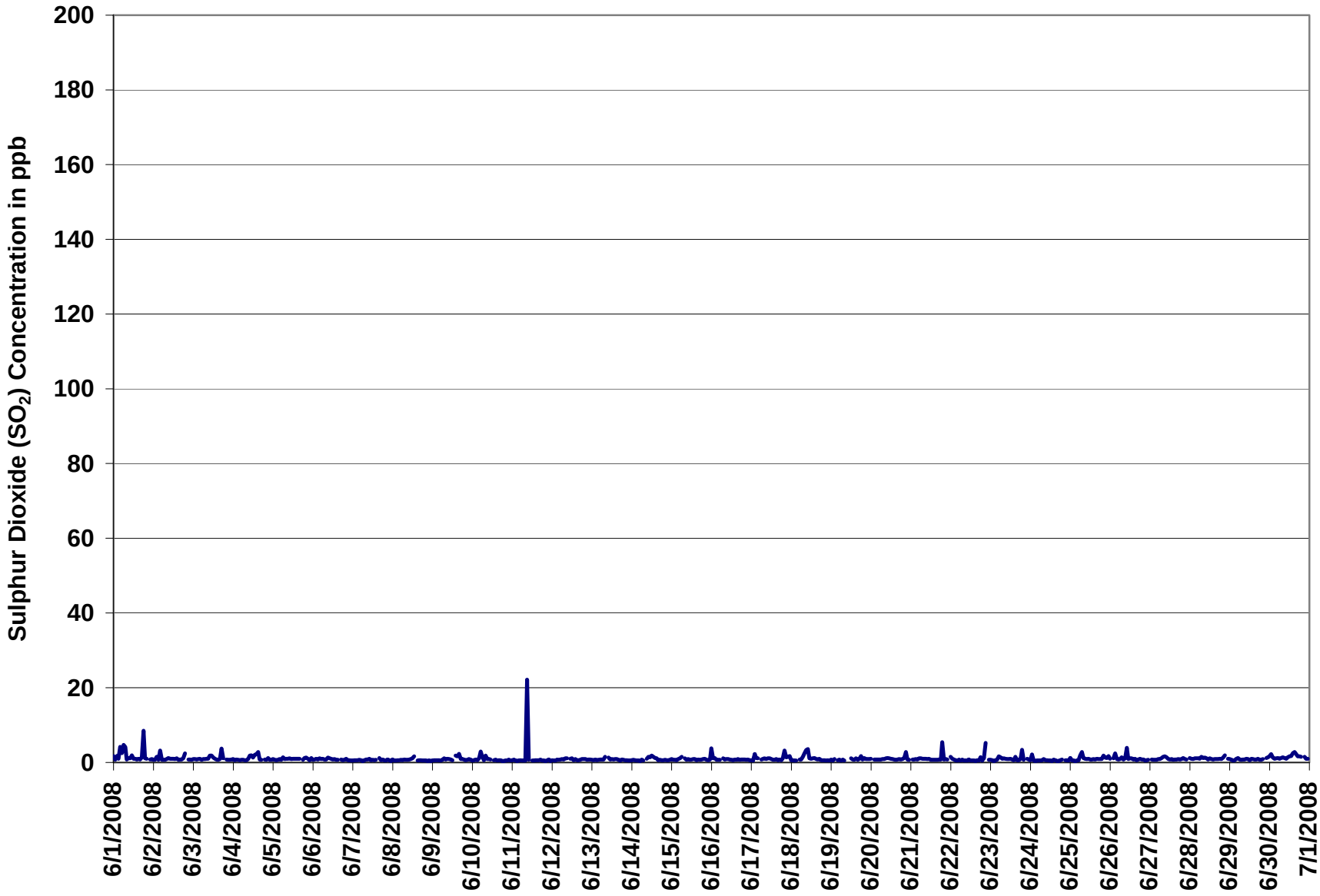
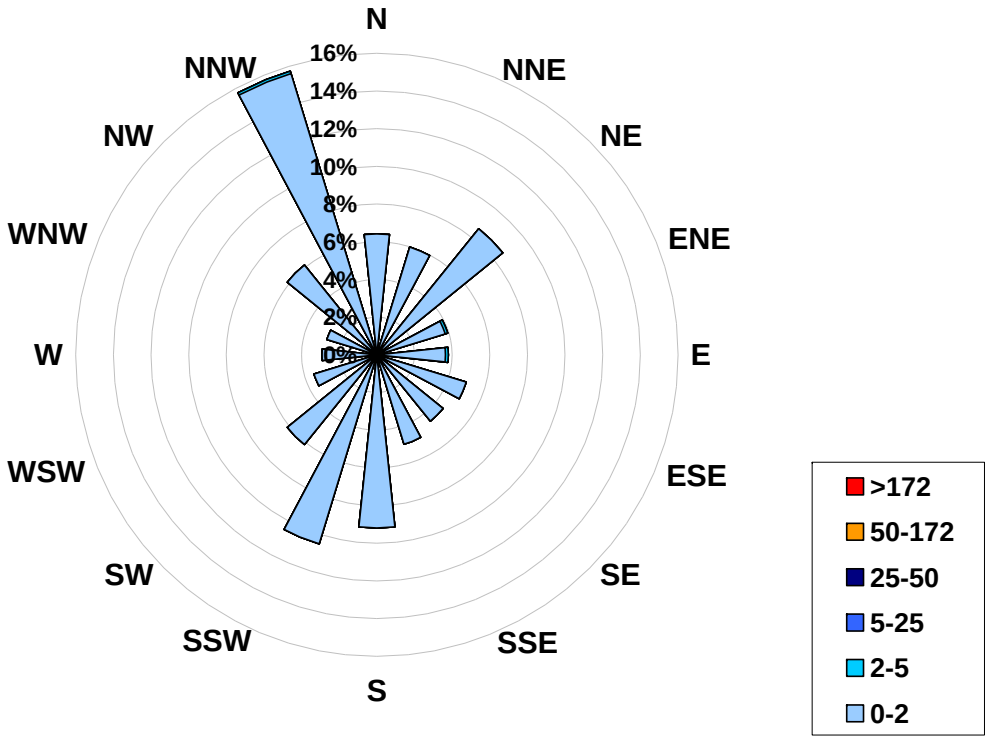


Figure 17. PAS – Brooks Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Portable-Brooks Site for June 2008



Calms:	0%

Frequency Distribution of SO_2 in ppb			
Range			Frequency (hrs)
0.0	<	2	683
2	to	5	3
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			686

PAS – Brooks Ozone Monthly Summary

Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

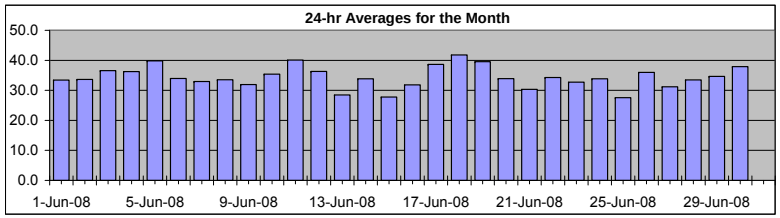
Ozone (O_3)

Monitoring Dates: June 1, 2008 to July 1, 2008

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

Summary

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	76.7	ppb	30-Jun	15:00 16:00
Maximum 24-hr Average:	41.8	ppb	18-Jun	



AIC Time:	32 hrs	Operational Time:	686 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	61.4	54.4	44.0	35.0	25.0	14.9	9.9	34.4 ppb	35.0 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-08	16	16	16	17	20	21	22	28	28	29	38	41	46	47	48	50	52	49	43	38	39	A	37	28	33.4	51.5
2-Jun-08	25	29	27	24	25	28	29	29	29	33	30	30	36	40	41	42	47	49	43	38	A	33	34	32	33.7	48.8
3-Jun-08	37	42	43	41	39	34	29	31	33	34	36	41	41	45	44	44	42	47	47	A	31	24	17	21	36.6	47.2
4-Jun-08	22	16	16	11	11	15	24	28	37	51	55	59	61	63	61	51	52	50	A	44	34	32	23	20	36.3	62.7
5-Jun-08	22	19	18	10	10	13	28	39	44	50	58	60	62	61	63	64	62	A	51	45	42	39	29	28	39.9	63.8
6-Jun-08	27	27	29	30	30	29	34	36	36	34	38	41	44	45	44	42	A	37	35	34	29	29	27	26	33.9	45.2
7-Jun-08	27	27	27	24	23	24	25	23	21	23	30	42	47	47	49	A	45	42	39	38	36	35	34	32	32.9	48.8
8-Jun-08	32	32	33	33	28	24	21	25	28	31	36	38	42	40	A	43	46	46	40	39	32	26	25	32	33.6	45.6
9-Jun-08	35	32	19	17	16	13	16	27	32	35	41	42	44	A	44	45	45	45	43	40	29	22	29	28	31.9	45.3
10-Jun-08	24	26	29	31	35	28	34	34	40	34	38	39	A	41	42	39	37	38	37	38	37	38	38	38	35.4	41.8
11-Jun-08	38	39	38	36	35	33	40	40	41	47	47	A	43	45	44	46	46	42	40	39	37	37	36	35	40.1	47.1
12-Jun-08	32	32	33	30	16	25	30	27	29	32	A	43	43	46	46	49	53	51	52	45	34	29	29	29	36.3	52.9
13-Jun-08	24	18	21	16	8	11	10	15	18	A	34	40	44	44	45	38	36	30	48	44	37	31	20	24	28.5	48.0
14-Jun-08	28	24	24	25	24	26	26	30	A	38	38	37	40	43	46	48	47	46	45	38	34	32	21	19	33.8	47.5
15-Jun-08	14	16	14	7	4	9	14	A	18	18	34	41	44	46	47	48	48	48	45	39	24	21	22	17	27.8	48.4
16-Jun-08	17	17	19	26	27	28	A	32	33	33	35	38	40	41	45	46	45	46	42	34	20	21	24	21	31.8	46.4
17-Jun-08	23	17	20	14	12	A	19	21	26	36	44	52	59	61	58	54	55	55	50	46	49	46	39	35	38.6	61.0
18-Jun-08	26	19	21	21	A	23	26	37	44	48	54	56	57	57	56	56	56	54	46	39	38	37	45	45	41.8	57.1
19-Jun-08	37	31	26	A	24	16	24	30	42	49	51	56	57	55	54	55	54	55	47	35	32	26	28	26	39.6	57.0
20-Jun-08	29	A	19	15	14	12	16	23	28	33	38	48	52	52	53	52	52	51	46	38	29	34	25	22	33.9	52.7
21-Jun-08	A	23	22	19	11	11	18	29	34	36	39	41	41	41	41	41	41	38	33	31	25	25	25	A	30.3	41.3
22-Jun-08	18	23	24	25	27	24	21	35	28	45	49	36	42	43	45	46	46	45	42	35	34	30	A	27	34.3	48.5
23-Jun-08	23	21	20	15	17	19	22	23	27	32	35	40	45	48	50	51	51	49	48	42	31	A	23	22	32.7	51.0
24-Jun-08	23	22	27	29	26	22	21	25	27	35	39	37	44	45	46	46	47	46	45	41	A	36	30	18	33.8	47.3
25-Jun-08	8	18	13	7	12	10	13	28	41	41	43	44	47	49	C	C	A	41	32	25	21	21	26	37	27.5	48.9
26-Jun-08	35	A	39	29	22	18	20	34	40	42	44	49	51	50	47	47	45	39	36	36	33	28	26	20	36.0	50.5
27-Jun-08	A	18	16	14	14	18	20	25	30	31	32	36	39	41	44	45	47	46	46	36	30	28	31	A	31.2	47.1
28-Jun-08	20	10	12	15	17	15	16	31	40	47	49	48	48	47	47	47	46	46	45	40	30	29	A	27	33.5	49.2
29-Jun-08	21	23	19	25	24	23	27	28	32	35	38	40	43	46	49	48	49	52	46	39	36	A	28	26	34.6	52.0
30-Jun-08	25	23	20	20	19	17	18	22	26	37	47	57	60	56	59	77	63	53	45	40	A	36	27	26	37.9	76.7
Hourly Avg	25.2	23.5	23.4	21.6	20.4	20.4	22.8	28.7	32.1	36.8	40.9	43.9	46.9	47.8	48.4	48.4	48.3	46.1	43.3	38.4	32.7	30.4	28.5	27.2		
Hourly Max	37.6	41.5	42.6	40.8	38.6	34.1	40.0	39.8	44.2	50.6	57.5	59.7	61.6	62.7	62.6	76.7	62.9	55.4	51.5	45.9	48.5	46.2	45.3	45.0		

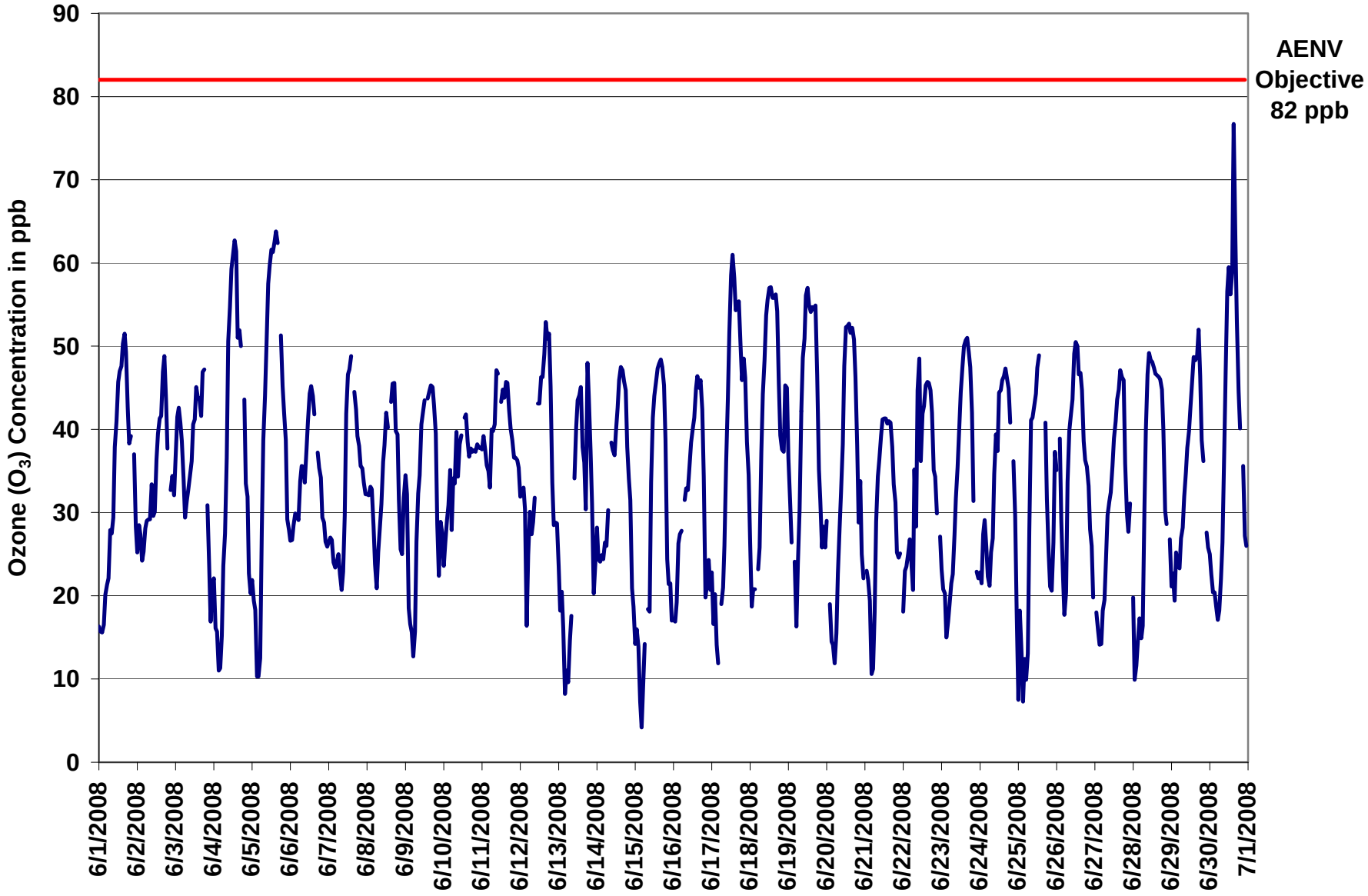


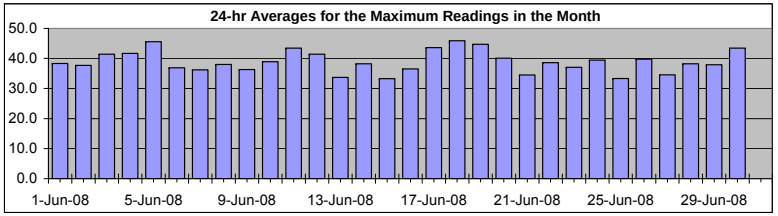
Figure 18. PAS – Brooks Ozone 1-hr Average Monthly Trend

Station: Portable-Brooks
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O_3)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	83.7	ppb	30-Jun	15:00 16:00
Maximum 24-hr Value:	45.9	ppb	18-Jun	

AIC Time:	32 hrs	Operational Time:	686 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Median
	65.2	58.6	47.7	39.4	29.9	20.3	14.7	39.0 ppb	39.4 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-08	21	19	21	22	26	27	28	35	35	33	45	46	50	49	51	54	56	54	47	43	45	A	41	35	38.3	55.7
2-Jun-08	30	32	30	27	31	30	32	32	36	36	33	33	43	44	45	46	52	52	48	42	A	37	39	38	37.7	52.2
3-Jun-08	48	48	48	44	44	39	34	35	36	38	40	43	44	48	48	46	46	50	51	A	38	37	21	27	41.4	51.2
4-Jun-08	27	22	23	15	17	20	30	35	43	56	59	63	64	65	66	55	56	53	A	51	40	39	33	29	41.7	65.9
5-Jun-08	30	30	23	15	21	21	37	47	48	59	60	63	64	64	65	67	65	A	58	50	47	44	36	31	45.6	66.8
6-Jun-08	30	30	32	32	32	32	36	39	39	36	40	44	47	47	47	45	A	40	38	37	34	32	31	30	36.9	47.2
7-Jun-08	30	30	30	30	25	26	27	26	23	30	32	47	50	50	51	A	48	46	42	41	38	39	37	35	36.2	51.4
8-Jun-08	34	34	35	36	35	28	25	29	31	33	40	43	48	47	A	48	49	49	48	45	38	28	33	38	38.0	49.4
9-Jun-08	37	37	27	20	18	18	20	34	35	39	44	45	46	A	47	48	48	49	47	43	38	29	34	32	36.3	48.5
10-Jun-08	26	29	35	35	38	34	38	39	44	41	41	42	A	44	45	41	40	42	40	41	40	40	40	40	38.9	44.7
11-Jun-08	39	41	40	38	38	40	44	42	43	53	51	A	47	47	47	50	49	45	44	42	40	39	41	41	43.4	53.0
12-Jun-08	36	36	39	40	23	32	34	29	32	35	A	48	51	49	51	53	56	54	54	52	38	37	38	38	41.4	56.3
13-Jun-08	29	22	23	24	12	17	13	19	22	A	42	44	46	47	49	43	40	35	59	52	43	37	30	28	33.7	59.2
14-Jun-08	34	31	27	27	28	31	31	35	A	41	40	40	42	46	50	49	49	48	48	44	39	36	32	31	38.2	49.6
15-Jun-08	22	27	23	13	9	12	20	A	21	25	43	46	47	49	50	51	51	50	50	49	36	26	26	20	33.2	50.9
16-Jun-08	25	22	30	32	30	32	A	36	36	35	39	42	42	45	49	49	49	49	49	46	26	25	27	27	36.6	49.3
17-Jun-08	30	27	27	17	15	A	21	23	32	44	48	58	65	65	63	57	60	59	54	50	54	51	42	42	43.6	65.1
18-Jun-08	33	23	23	24	A	26	31	42	49	52	58	59	61	61	61	59	59	59	49	44	43	41	50	49	45.9	60.9
19-Jun-08	43	36	35	A	30	20	29	37	49	51	54	59	60	58	58	58	57	58	56	41	42	31	31	35	44.7	59.9
20-Jun-08	35	A	25	23	19	14	19	29	31	35	45	53	55	56	55	55	55	55	54	45	40	55	33	37	40.1	56.2
21-Jun-08	A	27	28	26	24	17	26	33	38	39	42	44	43	44	44	43	43	43	38	33	32	27	27	A	34.5	43.8
22-Jun-08	23	26	27	28	29	27	23	48	34	51	52	47	44	47	47	48	48	48	47	42	38	36	A	30	38.6	52.1
23-Jun-08	27	24	25	24	22	24	24	25	33	35	39	44	47	51	54	54	55	52	51	48	39	A	27	27	37.1	55.0
24-Jun-08	49	28	35	33	29	28	27	29	31	42	44	42	47	47	49	49	51	48	47	45	A	42	33	33	39.4	50.6
25-Jun-08	20	25	19	18	17	15	20	39	45	44	45	47	50	51	C	C	A	45	38	31	28	29	37	40	33.3	51.4
26-Jun-08	38	A	41	39	27	22	26	42	43	45	48	52	53	52	49	50	48	42	39	37	36	31	29	25	39.7	52.9
27-Jun-08	A	21	17	18	19	20	22	29	33	33	34	38	41	43	46	47	49	50	49	45	36	34	36	A	34.6	50.2
28-Jun-08	32	26	16	20	22	21	26	41	44	50	51	50	50	49	49	49	48	48	48	44	35	32	A	30	38.2	51.4
29-Jun-08	24	26	21	28	27	28	29	32	35	38	41	42	45	49	51	51	52	55	53	46	41	A	31	28	37.9	54.6
30-Jun-08	28	26	23	24	23	21	22	25	33	44	53	65	65	63	73	84	71	62	48	44	A	44	32	28	43.4	83.7
Hourly Avg	31.4	28.7	28.3	26.6	25.1	24.8	27.4	33.9	36.3	41.1	44.9	47.9	50.2	51.0	52.0	51.7	51.7	49.6	48.1	43.9	38.5	36.1	33.8	33.0		
Hourly Max	48.5	47.7	47.7	44.1	43.8	39.9	43.9	47.6	48.9	59.3	60.3	65.4	65.1	65.1	72.7	83.7	71.0	62.1	59.2	52.3	53.6	54.8	49.7	49.1		

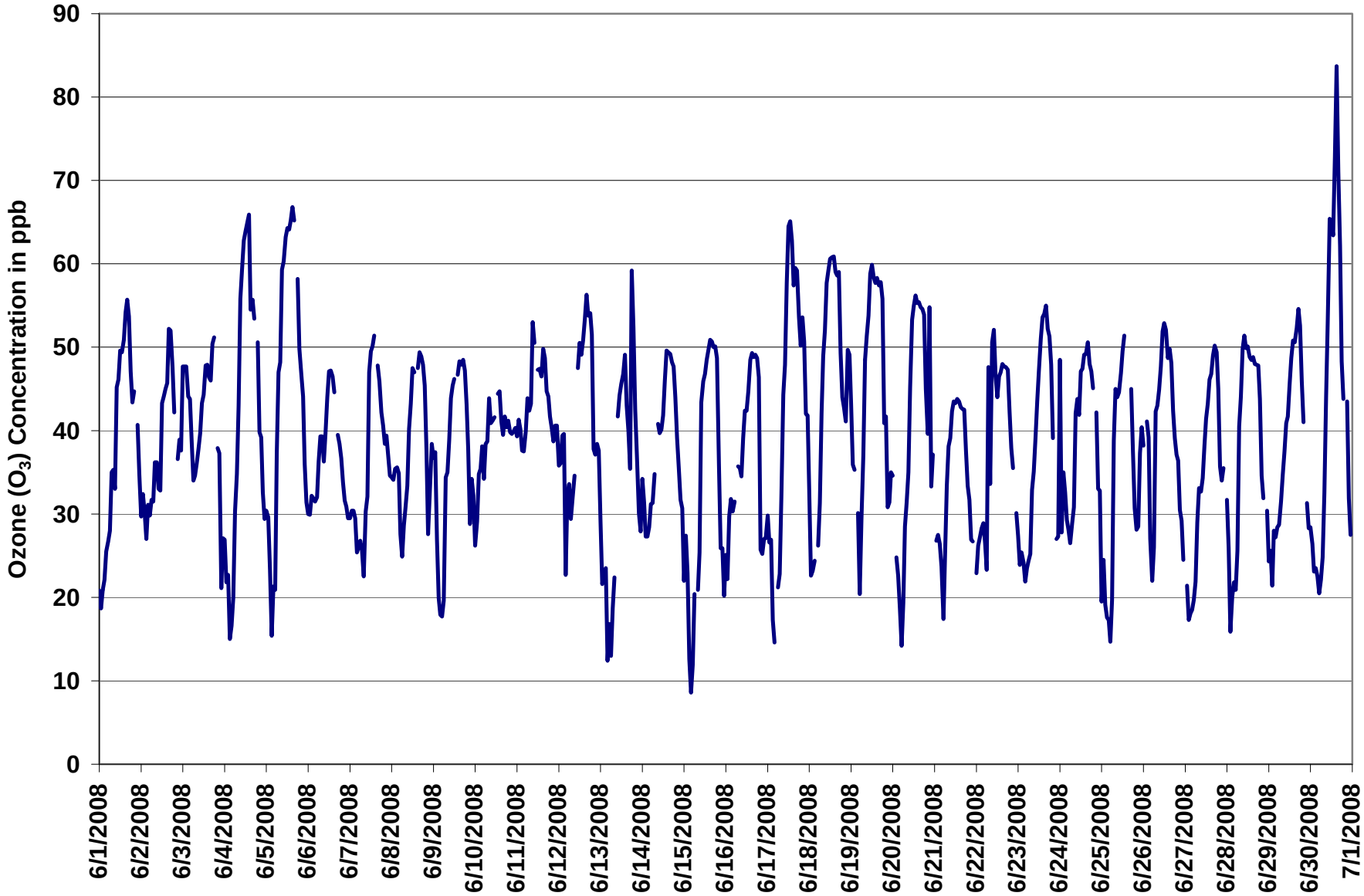
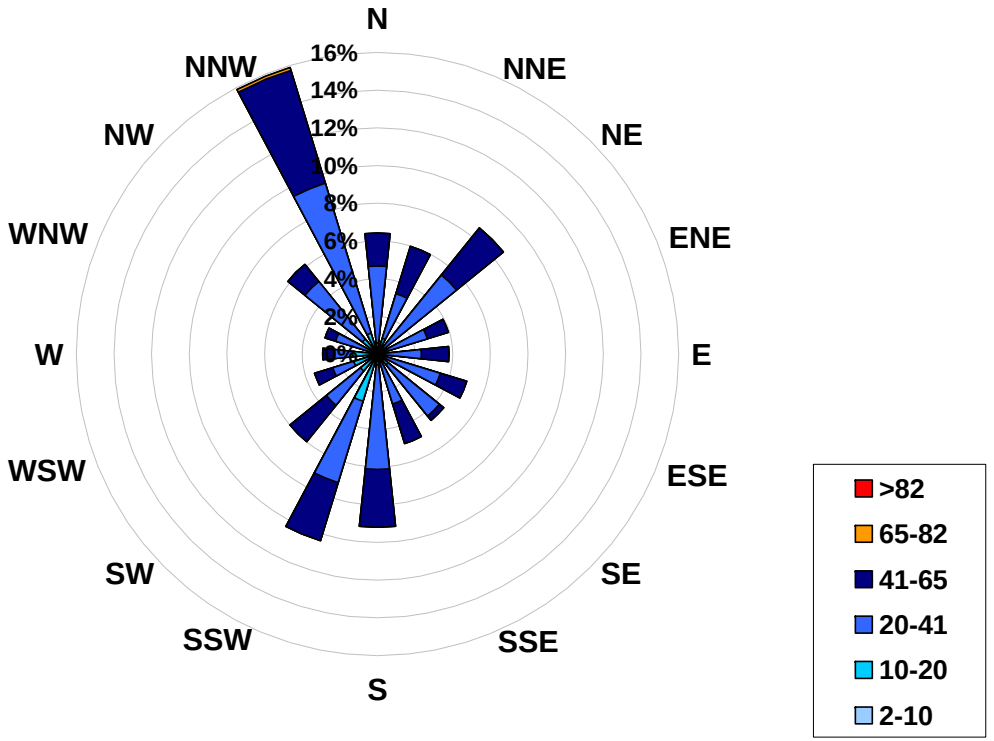


Figure 19. PAS – Brooks Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Portable-Brooks Site for June 2008



Calms:	0%

Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
2.0	<	10	9
10	to	20	80
20	to	41	373
41	to	65	223
65	to	82	1
	>	82	0
Total Non-Zero Values			686

PAS – Brooks Ozone Eight Hour Average Summary

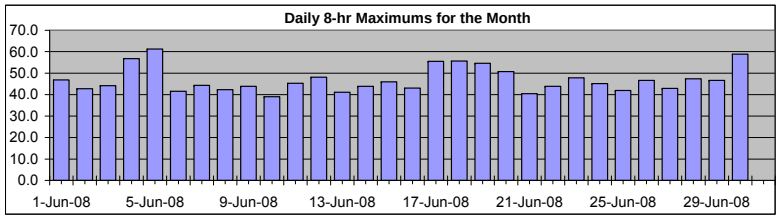
Station: Portable-Brooks
Station Owner: PAS

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

Monitoring Dates: June 1, 2008 to July 1, 2008

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



Summary

Number of 8-hr Exceedances:	0			
Maximum 8-hr Average:	61.3	ppb	5-Jun	17:00 18:00

Percentile	99	95	75	50	25	5	1
	56.9	51.6	41.2	34.8	27.1	18.5	14.0

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	Daily Maximum
1-Jun-08	33	27	23	20	19	18	19	19	21	23	25	28	32	35	38	41	44	46	47	47	46	46	44	41	46.9
2-Jun-08	37	34	32	30	28	28	27	27	28	28	29	29	31	32	34	35	37	39	41	42	43	42	41	39	42.7
3-Jun-08	38	37	37	37	37	38	37	37	36	36	35	35	35	36	38	40	41	42	44	44	43	40	36	33	44.2
4-Jun-08	30	25	21	20	17	16	17	18	20	24	29	35	41	47	52	55	57	57	57	55	51	46	41	36	56.8
5-Jun-08	32	28	26	22	19	17	18	20	23	27	31	38	44	50	54	58	60	61	60	58	56	52	48	42	61.3
6-Jun-08	37	36	33	31	30	28	29	30	31	32	33	34	36	38	40	40	41	42	41	40	38	36	33	31	41.6
7-Jun-08	30	29	28	27	26	26	25	25	24	24	24	26	29	32	35	37	40	43	44	44	42	41	38	38	44.4
8-Jun-08	36	35	34	33	32	31	29	29	28	28	28	29	31	33	34	37	39	42	42	42	41	39	37	36	42.3
9-Jun-08	34	32	30	27	25	23	22	22	21	22	24	28	31	34	38	40	42	44	44	44	41	39	37	35	43.9
10-Jun-08	32	30	28	27	28	29	29	30	32	33	34	35	35	37	38	39	39	39	39	39	39	38	38	38	39.1
11-Jun-08	38	38	38	38	37	37	37	37	38	39	40	40	42	43	44	45	45	45	44	43	42	41	40	39	45.3
12-Jun-08	37	36	35	34	32	30	29	28	28	28	27	29	33	36	38	41	45	47	48	48	47	45	43	40	48.2
13-Jun-08	36	32	28	25	22	19	17	15	14	14	16	19	24	29	34	38	40	39	41	41	40	39	36	34	41.1
14-Jun-08	33	32	29	27	25	25	25	26	26	28	30	31	34	36	39	41	42	43	44	44	43	42	39	35	43.9
15-Jun-08	31	27	23	20	16	13	12	11	12	12	15	20	26	31	36	37	41	44	46	46	43	40	37	33	45.9
16-Jun-08	29	25	22	20	21	22	22	24	26	28	31	32	34	36	37	39	41	42	43	43	40	38	35	32	43.1
17-Jun-08	29	25	23	20	19	19	18	18	18	21	25	30	37	40	45	49	52	55	55	55	54	52	49	47	55.5
18-Jun-08	43	39	35	32	29	26	24	25	27	31	36	41	43	47	51	53	55	56	55	53	50	48	46	45	55.7
19-Jun-08	43	40	37	37	35	32	29	27	28	30	34	37	41	45	49	52	54	55	54	51	48	45	41	38	54.6
20-Jun-08	35	32	28	25	22	20	19	18	18	20	22	26	31	36	41	44	47	50	51	50	47	44	41	37	50.7
21-Jun-08	35	31	28	25	22	19	18	19	21	23	25	27	31	35	38	39	40	40	40	38	36	34	32	31	40.4
22-Jun-08	28	26	24	24	24	24	23	25	26	29	32	33	35	37	40	42	44	44	43	43	42	40	40	37	43.8
23-Jun-08	34	30	27	24	22	20	20	20	20	22	24	27	30	34	37	41	44	46	48	48	46	46	42	38	47.8
24-Jun-08	34	30	27	25	25	24	24	24	25	27	28	29	31	34	37	40	43	44	45	45	45	44	42	38	45.1
25-Jun-08	32	28	23	19	18	15	12	14	18	21	24	29	33	38	42	N	N	N	N	N	N	N	N	29	42.0
26-Jun-08	30	28	29	30	30	30	29	28	29	30	31	34	37	41	44	46	47	46	45	44	41	39	36	33	46.7
27-Jun-08	31	28	25	22	19	18	17	18	19	21	23	26	29	32	35	37	39	41	43	43	42	40	39	38	42.9
28-Jun-08	34	29	24	21	19	17	15	17	19	24	29	33	37	41	45	47	47	47	47	46	43	41	40	38	47.4
29-Jun-08	34	31	27	25	24	23	24	24	25	27	29	31	33	36	39	41	43	46	47	46	46	46	43	39	46.6
30-Jun-08	36	32	28	25	23	22	21	21	21	23	26	30	36	40	45	52	57	59	59	56	56	53	49	41	58.9
Hourly Max	43.2	39.7	37.9	37.6	37.4	37.6	37.0	37.2	37.6	38.6	39.7	41.1	44.0	50.1	54.4	57.6	59.9	61.3	60.4	58.3	56.1	53.1	49.2	46.7	

PAS – Brooks Hydrogen Sulphide Monthly Summary

HOURLY AVERAGE TABLE

Hydrogen Sulphide (H_2S)

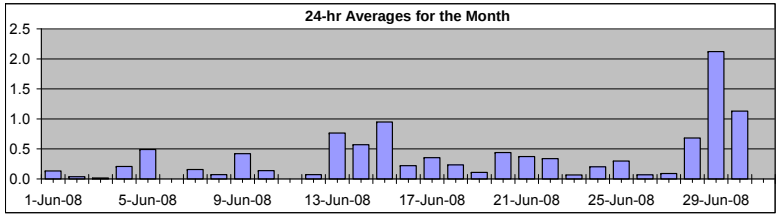
Station: Portable-Brooks
Station Owner: PAS

Monitoring Dates: June 1, 2008 to July 1, 2008

Objective Limit: **Alberta Environment:** 1-hr 10 ppb | 24-hr 3 ppb

Summary

Number of 1-hr Exceedances:	3			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	26.1	ppb	29-Jun	22:00 23:00
Maximum 24-hr Value:	2.1	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
	5.8	1.5	0.2	0.0	0.0	0.0	0.0	0.4 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-08	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	0.7
2-Jun-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.2
3-Jun-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.4
4-Jun-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	4	0	0.2	3.9
5-Jun-08	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	9	0	0	0.5	8.6
6-Jun-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.0
7-Jun-08	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	1.0
8-Jun-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.4
9-Jun-08	0	0	0	1	3	2	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	3.2
10-Jun-08	0	0	0	0	3	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	2.5
11-Jun-08	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
12-Jun-08	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.2
13-Jun-08	1	4	3	2	2	1	0	2	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	4.2
14-Jun-08	0	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0.6	6.6
15-Jun-08	10	2	1	3	3	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	9.8
16-Jun-08	0	2	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
17-Jun-08	0	0	1	2	4	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.5
18-Jun-08	1	1	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
19-Jun-08	0	1	0	A	1	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0.1	1.0
20-Jun-08	0	A	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0.4	3.2
21-Jun-08	A	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0.4	2.3
22-Jun-08	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	5.3
23-Jun-08	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	1.2
24-Jun-08	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	0.2	2.3
25-Jun-08	0	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
26-Jun-08	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
27-Jun-08	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	0.2
28-Jun-08	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	1	0.7	5.7
29-Jun-08	3	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	26	14	2.1	26.1
30-Jun-08	10	0	1	0	5	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1.1	10.1
Hourly Avg	1.4	0.8	0.4	0.4	1.0	0.7	0.3	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.5	1.2	0.9		
Hourly Max	10.1	5.7	3.2	2.7	5.3	8.4	1.8	2.2	1.1	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.6	1.0	0.5	0.4	1.1	8.6	26.1	14.3		

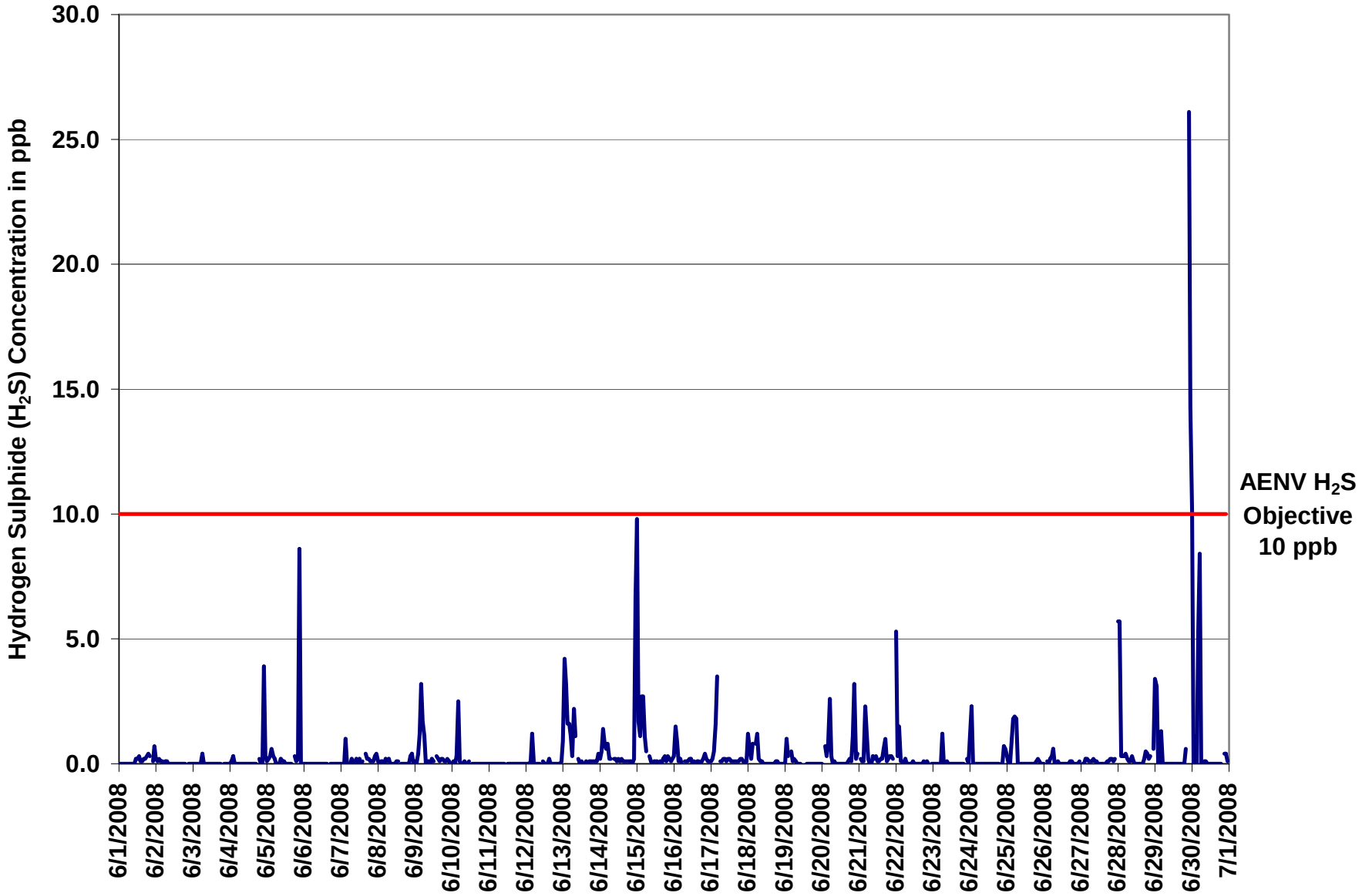


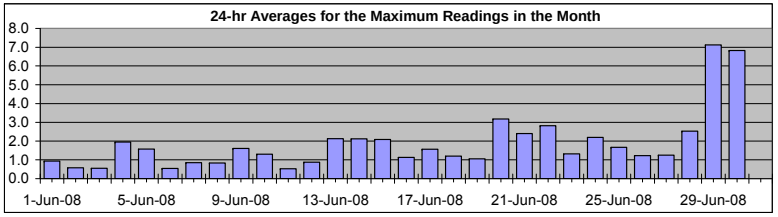
Figure 20. PAS – Brooks Hydrogen Sulphide 1-hr Average Monthly Trend

Station: Portable-Brooks
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

Hydrogen Sulphide (H_2S)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Value:	54.8	ppb	29-Jun	22:00 23:00
Maximum 24-hr Value:	7.1	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
	22.1	5.9	1.2	0.9	0.7	0.5	0.3	1.9 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-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	A	1	3	0.9	3.3
2-Jun-08	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	0	0	0.6	0.8
3-Jun-08	0	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	A	1	1	1	1	0.6	1.2
4-Jun-08	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	A	1	1	1	30	1	2.0	29.9
5-Jun-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	17	1	1	1.6	17.3
6-Jun-08	1	1	1	1	1	0	0	1	0	0	0	0	0	1	1	1	A	1	1	1	1	1	1	0.5	1.3
7-Jun-08	1	0	0	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	2.4
8-Jun-08	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	0.8	2.3
9-Jun-08	1	1	2	4	7	6	4	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.6	6.7
10-Jun-08	1	1	1	7	8	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	1.3	8.1
11-Jun-08	1	0	1	1	1	0	1	1	1	1	1	A	1	1	0	1	0	1	0	1	1	0	1	0.5	0.8
12-Jun-08	1	1	1	2	4	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	4.1
13-Jun-08	3	7	6	3	4	2	1	7	4	A	1	1	1	1	1	1	1	1	1	1	1	1	4	2.1	7.2
14-Jun-08	1	2	4	3	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	21	2.1	21.1
15-Jun-08	15	3	3	4	5	2	3	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2.1	14.8
16-Jun-08	2	6	2	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	6.0
17-Jun-08	1	1	3	8	10	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	9.7
18-Jun-08	4	2	1	5	A	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1.2	4.9
19-Jun-08	1	4	1	A	2	1	1	1	1	0	1	C	C	C	0	1	1	1	1	1	1	1	1	1.1	3.8
20-Jun-08	1	A	2	1	7	13	2	1	1	1	1	2	1	1	1	1	1	1	1	1	6	22	1	2	3.2	21.6
21-Jun-08	A	1	1	1	7	14	2	1	1	2	2	1	1	1	1	2	3	5	2	1	1	1	1	A	2.4	13.5
22-Jun-08	21	3	17	3	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	2	1	A	1	2.8	21.0
23-Jun-08	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.3	7.9
24-Jun-08	10	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	4	3	2.2	17.4
25-Jun-08	2	1	1	4	3	5	4	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1.7	5.3
26-Jun-08	1	A	2	2	2	1	3	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1.2	2.6
27-Jun-08	A	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	2	1	1	2	1	1	A	1.3	1.6
28-Jun-08	16	14	2	1	2	2	1	1	1	2	1	2	1	1	1	1	1	1	2	2	1	1	A	2	2.5	15.5
29-Jun-08	9	25	1	1	14	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	4	A	55	40	7.1	54.8
30-Jun-08	36	1	15	1	45	40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	2	6.8	45.1
Hourly Avg	4.6	3.5	2.5	2.1	4.6	3.5	1.5	1.1	0.9	0.9	0.8	0.9	0.9	0.9	0.8	0.8	0.9	1.0	1.0	1.0	1.3	2.3	4.0	3.3		
Hourly Max	36.4	24.7	17.0	7.6	45.1	40.1	7.9	7.0	3.5	1.6	1.5	1.7	1.6	1.4	1.5	2.2	2.8	4.8	2.2	2.4	6.1	21.6	54.8	39.9		

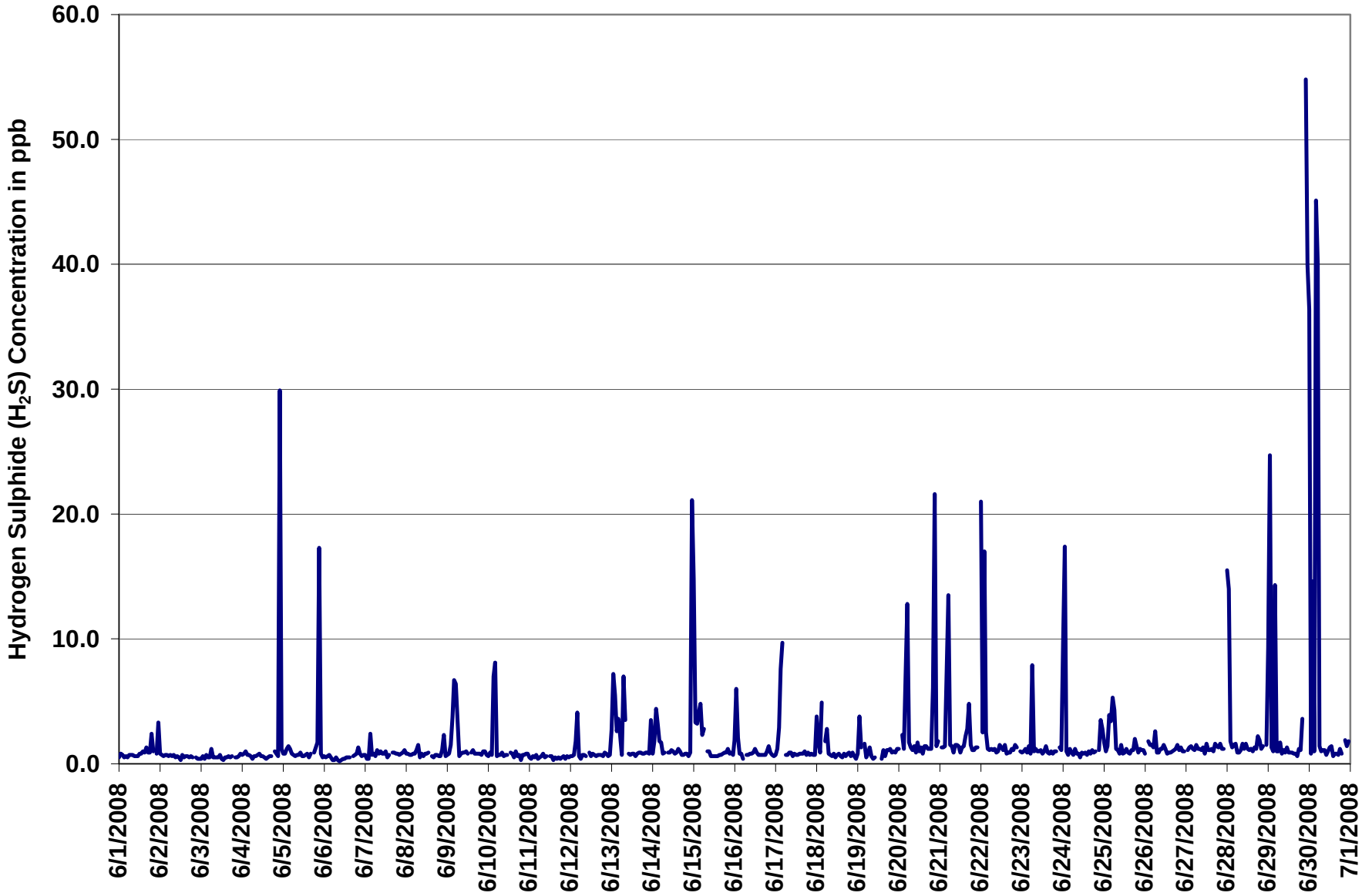
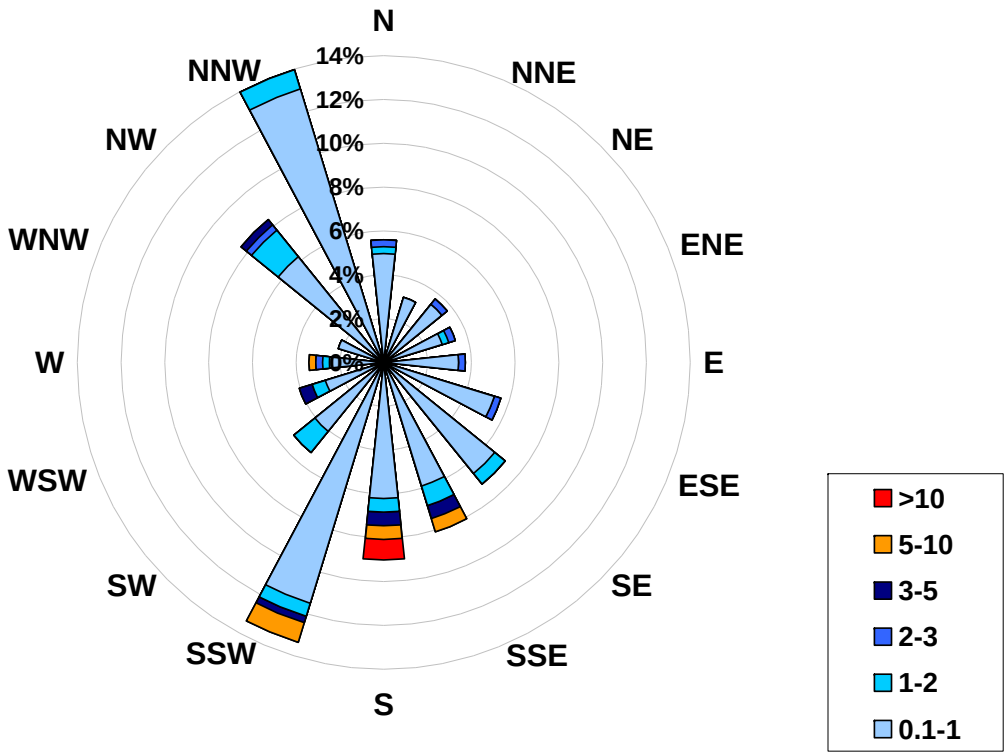


Figure 21. PAS – Brooks Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Hydrogen Sulphide (in ppb) Located at the Portable-Brooks Site for June 2008



Calms:	0%

Frequency Distribution of H_2S in ppb			
Range			Frequency (hrs)
0.1	<	1	630
1	to	2	26
2	to	3	7
3	to	5	8
5	to	10	8
	>	10	3
Total Non-Zero Values			686

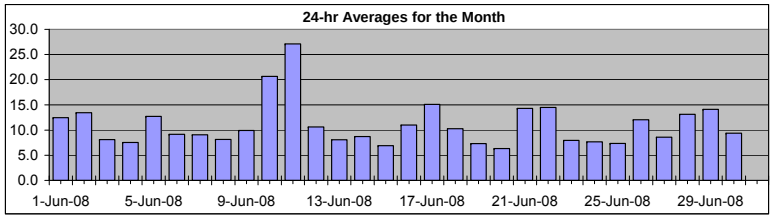
PAS – Brooks Scalar Wind Speed Monthly Summary

Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Speed (WSs)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Average:	41.0	km/hr	11-Jun	10:00 11:00
Maximum 24-hr Value:	27.1	km/hr	11-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
	32.5	22.4	14.2	9.7	6.4	3.7	2.8	11.1 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 Scalar Average	Daily Max
1-Jun-08	10	8	5	9	6	8	9	10	16	15	19	19	21	23	21	19	16	14	12	9	10	8	5	7	12.5	22.5
2-Jun-08	7	9	11	10	14	19	19	14	10	14	12	10	19	20	19	20	17	18	18	14	7	8	8	7	13.4	19.6
3-Jun-08	6	5	4	3	5	5	5	8	9	8	8	6	7	8	13	11	12	19	16	13	8	4	8	6	8.1	19.1
4-Jun-08	5	5	7	7	2	2	7	7	9	12	10	10	9	9	9	19	12	6	7	6	4	3	8	7	7.5	19.0
5-Jun-08	7	4	4	4	4	4	6	8	12	15	15	14	16	19	20	22	23	22	22	17	15	13	12	8	12.7	22.9
6-Jun-08	8	9	13	11	9	12	12	12	10	7	9	10	12	12	11	12	11	8	7	9	5	5	4	5	9.1	12.8
7-Jun-08	5	5	6	6	5	5	6	6	10	8	18	17	11	12	13	19	8	8	11	11	12	9	4	4	9.1	18.5
8-Jun-08	3	4	6	6	6	4	4	7	8	10	11	10	10	16	18	14	14	9	8	9	5	3	6	6	8.1	17.5
9-Jun-08	9	6	4	6	4	4	4	9	11	12	13	13	14	16	15	14	14	14	14	8	3	9	13	11	9.9	15.9
10-Jun-08	10	15	15	6	15	17	11	14	16	20	28	28	26	31	32	20	19	23	24	25	24	24	25	29	20.7	31.5
11-Jun-08	30	34	33	32	30	31	31	32	32	39	41	35	33	26	28	31	33	23	19	14	7	9	13	17	27.1	41.0
12-Jun-08	12	7	8	5	5	11	12	9	9	13	16	18	19	15	15	13	13	18	7	6	5	5	8	8	10.6	18.6
13-Jun-08	4	5	4	3	5	6	5	4	6	6	9	10	7	8	9	10	14	7	17	10	17	12	8	7	8.1	16.9
14-Jun-08	5	4	5	7	6	7	6	9	13	15	15	13	14	12	11	12	13	11	10	6	6	3	3	4	8.7	15.2
15-Jun-08	3	7	5	5	6	4	6	8	7	7	12	12	8	8	7	5	6	5	5	6	6	9	10	11	6.9	12.1
16-Jun-08	12	9	5	11	13	19	17	16	18	16	11	9	8	7	8	7	10	7	7	8	10	11	13	13	11.0	19.2
17-Jun-08	13	17	13	11	10	13	14	13	14	13	14	17	22	20	18	17	20	21	15	14	21	17	11	8	15.1	21.5
18-Jun-08	5	3	2	3	4	4	6	6	5	7	9	9	12	15	16	17	17	16	13	13	13	11	21	20	10.2	21.0
19-Jun-08	12	5	6	4	6	4	4	6	6	7	5	7	5	10	10	9	7	5	7	10	9	8	10	12	7.3	11.7
20-Jun-08	7	8	4	6	6	7	8	7	6	5	5	6	7	6	6	6	6	4	7	5	6	7	10	8	6.3	9.9
21-Jun-08	11	7	8	7	4	6	6	7	11	13	16	19	21	22	21	22	23	18	15	15	17	19	18	19	14.3	22.6
22-Jun-08	17	16	18	12	14	15	15	18	18	17	23	17	16	16	14	11	13	12	13	11	12	10	11	10	14.5	22.9
23-Jun-08	8	5	8	9	8	12	15	11	5	6	8	11	13	9	7	7	7	9	8	5	5	7	4	7	8.0	15.0
24-Jun-08	10	7	8	10	8	4	8	10	7	6	10	7	11	13	12	9	7	10	9	6	3	3	2	6	7.7	12.6
25-Jun-08	8	8	5	3	3	3	5	4	5	5	5	6	5	7	4	8	8	8	8	10	13	11	16	19	7.3	19.0
26-Jun-08	16	17	14	8	4	4	3	10	10	8	6	7	9	13	14	15	8	16	36	30	18	10	8	6	12.0	35.6
27-Jun-08	6	6	4	5	6	5	5	7	10	12	14	15	14	14	15	14	13	12	11	8	3	4	3	3	8.6	15.0
28-Jun-08	5	7	10	8	5	5	7	9	12	16	15	15	16	17	17	17	19	18	17	14	13	17	19	18	13.1	19.3
29-Jun-08	17	14	12	14	15	17	18	19	18	17	18	19	19	13	12	13	13	13	9	6	9	12	10	12	14.1	19.2
30-Jun-08	12	12	12	13	13	10	9	9	7	7	7	7	8	10	13	13	16	14	11	7	5	5	4	3	9.4	16.3
1-hr Average	9.4	9.0	8.6	8.2	7.9	8.8	9.3	10.2	10.9	11.9	13.3	13.2	13.7	14.2	14.2	14.1	13.6	12.9	12.7	10.7	9.6	9.2	9.8	9.9		
Hourly Max	30.4	34.1	32.5	32.4	29.8	30.7	31.1	31.7	31.8	38.6	41.0	34.9	33.2	31.0	31.5	30.7	32.9	23.3	35.6	29.8	23.9	23.6	25.3	28.8		

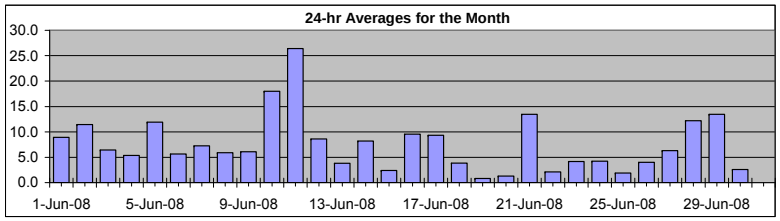
PAS – Brooks Vector Wind Speed Monthly Summary

Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: June 1, 2008 to July 1, 2008



Summary

Maximum 1-hr Average:	40.9	km/hr	11-Jun	10:00 11:00
Maximum 24-hr Value:	26.4	km/hr	11-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	AverageV
	32.4	22.1	13.9	9.2	5.6	2.5	1.3	2.3 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-08	10	7	2	7	5	8	8	10	16	15	18	19	20	22	21	18	16	13	11	6	10	7	4	5	8.9	22.1
2-Jun-08	7	9	11	10	13	19	19	14	10	13	12	10	18	19	18	19	17	18	18	13	7	8	7	7	11.5	19.4
3-Jun-08	6	5	3	2	4	4	5	8	9	7	7	5	6	7	13	10	11	19	16	13	7	4	8	6	6.4	18.8
4-Jun-08	4	5	7	7	1	1	7	7	9	11	9	9	7	8	6	19	11	6	7	6	2	3	7	7	5.4	18.7
5-Jun-08	6	4	3	1	2	3	6	8	12	15	15	14	15	18	19	21	22	21	22	17	15	13	12	8	11.9	22.3
6-Jun-08	8	9	13	11	9	12	12	11	10	6	8	9	11	12	11	11	10	8	6	9	4	4	3	4	5.7	12.7
7-Jun-08	5	4	6	6	4	4	5	5	10	8	18	16	10	11	12	13	4	8	11	11	12	9	2	3	7.3	18.1
8-Jun-08	2	3	5	6	5	3	3	7	8	10	11	10	9	15	17	14	13	8	8	8	5	3	6	6	5.9	17.2
9-Jun-08	9	6	3	6	4	3	4	8	11	11	13	12	13	15	14	13	13	13	14	5	2	9	13	11	6.1	14.9
10-Jun-08	10	15	15	5	13	16	10	14	16	19	27	27	26	31	31	20	19	23	24	25	24	24	25	29	18.0	31.2
11-Jun-08	30	34	32	32	30	30	31	32	32	38	41	35	33	25	28	30	33	22	19	14	6	9	13	17	26.4	40.9
12-Jun-08	11	7	8	4	4	10	12	8	8	13	15	18	19	15	15	12	12	17	7	4	5	4	8	7	8.6	18.5
13-Jun-08	4	5	4	3	5	4	5	3	5	6	8	10	6	6	9	9	14	6	17	4	17	12	8	4	3.8	16.8
14-Jun-08	3	2	4	7	6	7	6	9	13	15	15	12	13	12	11	11	13	11	10	6	5	3	1	4	8.2	15.0
15-Jun-08	3	6	5	3	3	2	6	8	6	6	12	12	7	5	4	3	3	3	4	6	6	8	10	11	2.4	11.8
16-Jun-08	12	8	3	11	13	19	17	16	18	16	11	9	6	6	7	6	9	6	6	7	9	11	13	13	9.6	19.2
17-Jun-08	13	17	12	11	10	13	14	13	14	13	14	17	21	20	18	17	20	20	14	13	20	16	11	7	9.3	21.3
18-Jun-08	4	2	1	2	3	3	6	6	3	5	8	9	11	15	15	16	16	16	13	12	13	11	20	19	3.9	19.9
19-Jun-08	11	5	6	2	5	4	2	6	5	6	3	2	1	8	8	8	6	3	7	10	9	8	10	12	0.8	11.6
20-Jun-08	6	5	1	5	6	7	7	7	6	4	3	3	4	3	1	3	4	3	6	5	6	7	10	6	1.3	9.9
21-Jun-08	11	7	7	6	2	6	5	7	11	13	16	19	21	22	20	22	22	18	15	15	16	19	18	19	13.5	22.3
22-Jun-08	17	16	18	9	14	15	15	18	18	17	23	16	16	15	13	11	12	11	13	11	12	10	11	10	2.1	22.7
23-Jun-08	8	4	8	7	8	11	15	10	3	4	7	11	12	8	6	5	6	8	7	5	5	3	3	6	4.2	14.5
24-Jun-08	9	1	7	9	6	3	7	9	6	6	10	7	11	12	12	8	7	10	8	5	3	3	1	6	4.2	12.3
25-Jun-08	8	8	4	2	2	2	4	3	3	3	2	4	2	6	3	7	7	8	7	10	13	11	15	18	1.9	18.4
26-Jun-08	16	16	14	7	4	3	2	9	9	7	5	6	9	12	14	15	8	14	35	30	18	10	7	4	4.0	35.4
27-Jun-08	5	6	3	4	5	4	4	6	9	12	14	15	14	14	15	13	13	12	10	8	3	4	3	2	6.3	14.7
28-Jun-08	5	6	9	8	5	4	7	9	12	15	15	15	16	17	16	17	18	18	17	14	13	17	19	18	12.2	19.2
29-Jun-08	17	14	11	14	15	17	18	19	18	17	18	18	18	13	12	13	12	13	9	6	9	12	10	12	13.5	19.1
30-Jun-08	12	12	12	13	12	10	9	9	7	6	6	6	7	10	13	13	16	14	10	6	2	4	3	1	2.6	16.0
1-hr Vector	1.8	1.5	0.9	0.9	0.8	1.6	2.0	1.7	0.5	1.2	2.2	2.9	2.2	1.5	1.7	1.3	1.9	2.4	2.8	2.5	2.7	2.8	3.5	2.7		
Hourly Max	30.3	34.0	32.4	32.4	29.7	30.4	30.9	31.6	31.7	37.9	40.9	34.7	32.7	30.8	31.2	30.4	32.7	23.2	35.4	29.6	23.7	23.6	25.1	28.7		

PAS – Brooks Wind Direction Monthly Summary

Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2008 to July 1, 2008

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																			
	356.8	342.6	301.3	191.5	95.4	16.5	3.1	82 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-08	26	24	73	27	60	72	59	72	55	51	66	73	106	118	112	115	111	91	84	159	219	222	282	2	84	E
2-Jun-08	17	41	57	37	92	107	114	121	141	138	119	123	108	96	91	93	98	98	86	70	47	46	16	9	91	E
3-Jun-08	338	334	335	256	332	332	328	334	333	343	350	14	13	36	44	25	20	67	69	66	38	4	21	22	20	NNE
4-Jun-08	43	328	344	20	274	18	19	34	41	26	14	17	65	54	46	8	348	336	335	346	355	161	199	248	13	NNE
5-Jun-08	227	227	248	65	210	204	178	202	186	177	173	167	168	162	164	165	172	169	167	167	170	164	191	211	175	S
6-Jun-08	210	208	205	214	221	214	217	230	245	315	322	324	327	327	330	326	322	320	304	333	321	297	302	301	279	W
7-Jun-08	281	305	329	324	313	301	280	320	335	1	36	37	31	19	345	32	79	337	339	336	338	342	313	312	354	N
8-Jun-08	321	300	288	332	350	226	293	333	337	335	339	336	342	14	35	41	38	8	249	254	269	327	339	335	345	NNW
9-Jun-08	346	333	333	326	324	320	323	342	5	358	6	28	35	43	69	72	99	108	102	197	37	54	107	107	45	NE
10-Jun-08	97	111	99	116	96	71	94	101	84	71	87	92	97	115	126	111	69	47	42	53	56	41	38	27	78	ENE
11-Jun-08	28	36	39	37	40	43	48	42	36	51	40	36	49	45	41	45	56	42	49	43	349	331	357	23	39	NE
12-Jun-08	3	335	331	319	332	331	345	335	333	337	346	338	333	348	341	330	331	37	345	315	225	216	234	218	336	NNW
13-Jun-08	232	249	258	230	216	226	238	281	317	327	338	348	318	281	234	250	194	204	207	268	7	15	359	2	280	W
14-Jun-08	205	299	334	324	308	326	329	328	331	334	335	332	334	341	340	341	337	339	338	343	347	317	338	261	331	NNW
15-Jun-08	208	215	250	352	43	4	131	168	215	338	14	17	36	359	36	347	50	174	126	55	84	110	122	126	64	ENE
16-Jun-08	154	140	208	176	187	175	182	188	183	179	193	212	196	212	219	221	196	214	176	126	120	126	128	126	175	S
17-Jun-08	123	136	174	196	169	175	193	191	200	200	202	202	201	210	213	212	198	201	231	251	1	17	19	324	199	SSW
18-Jun-08	264	236	272	325	311	292	326	359	22	71	123	161	181	175	185	196	201	203	201	183	188	187	19	21	190	S
19-Jun-08	11	314	267	317	227	242	293	324	335	346	289	9	20	216	182	174	179	8	56	54	90	111	113	115	49	NE
20-Jun-08	87	52	0	332	321	321	357	13	18	8	17	72	105	232	330	318	283	319	183	205	156	147	128	192	18	NNE
21-Jun-08	200	192	199	193	122	197	192	180	183	158	159	159	156	154	152	164	161	152	141	138	134	132	135	142	157	SSE
22-Jun-08	165	166	145	184	187	183	195	207	189	222	242	320	328	333	339	347	4	22	50	53	62	73	83	103	180	S
23-Jun-08	120	135	143	43	46	130	166	200	182	221	208	215	209	251	293	291	249	226	232	218	213	201	80	119	193	SSW
24-Jun-08	150	77	338	3	22	304	179	187	263	319	339	328	324	331	335	326	327	328	335	337	247	293	3	205	326	NW
25-Jun-08	204	218	256	63	239	312	64	136	236	269	93	10	13	36	5	217	196	194	155	128	134	138	28	59	122	ESE
26-Jun-08	51	70	92	354	344	333	330	104	130	147	223	235	217	222	240	246	273	357	6	10	8	353	343	274	2	N
27-Jun-08	253	264	267	256	261	269	281	294	318	324	330	331	332	334	334	340	354	1	21	38	45	100	103	162	330	NNW
28-Jun-08	209	208	204	214	202	193	198	188	187	184	191	174	165	170	183	182	173	163	153	145	136	139	141	146	170	S
29-Jun-08	155	177	183	180	171	173	180	186	193	198	195	190	197	223	222	213	208	199	198	182	150	167	172	178	187	S
30-Jun-08	178	180	176	176	171	175	196	202	205	235	254	311	335	331	334	343	350	339	359	359	304	275	254	310	265	W
Hourly Avg	116	122	146	359	123	157	165	174	198	21	28	30	70	73	67	56	106	71	73	64	68	95	71	81		

PAS – Brooks Standard Deviation of Wind Direction Monthly Summary

Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: June 1, 2008 to July 1, 2008

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
	85.0	66.4	33.0	15.8	9.9	4.5	2.7

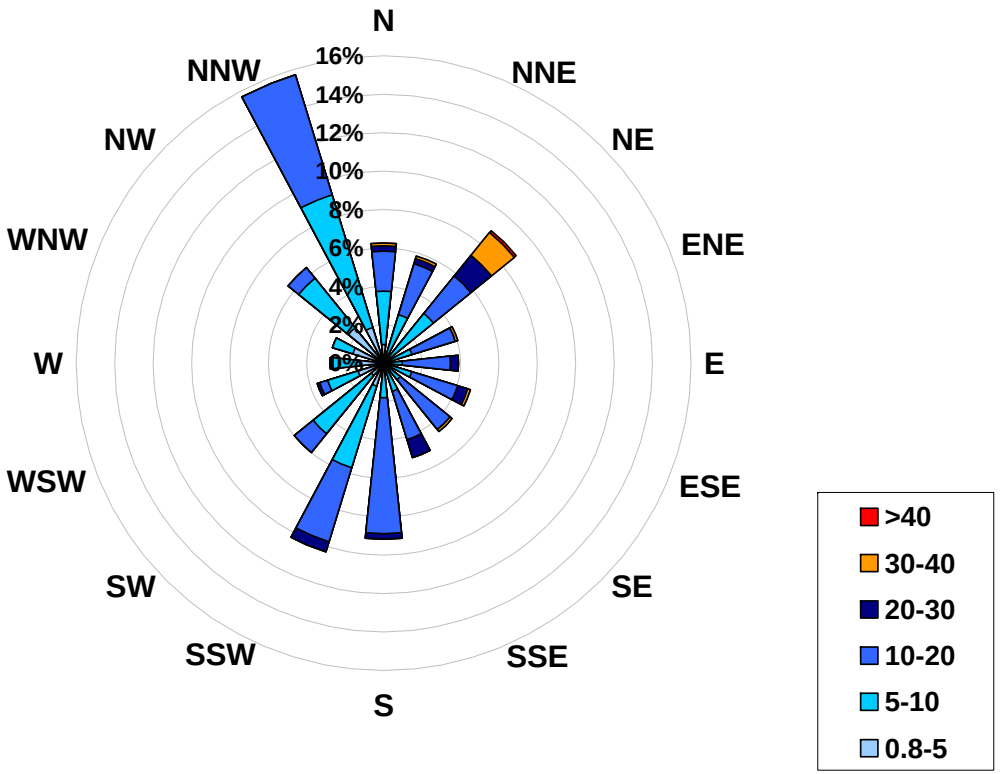
Status Flag Characters

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-08	8	21	72	52	48	26	28	19	16	6	16	11	15	9	9	11	13	11	10	53	16	15	29	45	72.1
2-Jun-08	23	16	14	9	24	3	4	8	9	11	10	14	10	8	7	6	11	9	6	10	10	10	20	17	24.4
3-Jun-08	19	21	47	74	49	40	26	13	16	33	17	38	35	45	20	18	14	9	10	7	15	18	5	16	73.5
4-Jun-08	21	8	21	23	59	67	9	17	13	15	25	35	49	34	61	10	14	19	16	17	57	33	34	18	67.4
5-Jun-08	26	26	33	85	63	43	15	12	13	12	16	18	19	16	15	9	15	12	7	8	5	21	7	8	85.3
6-Jun-08	8	7	7	14	11	9	10	14	14	37	21	26	14	15	12	14	13	28	37	12	53	38	61	51	60.7
7-Jun-08	26	50	42	33	49	64	45	37	11	20	8	26	19	26	14	43	87	14	9	10	7	13	76	64	87.4
8-Jun-08	68	72	52	26	44	22	41	15	18	12	12	16	24	15	9	8	20	27	10	12	31	49	14	13	71.5
9-Jun-08	11	14	56	16	30	58	52	21	10	16	15	19	16	21	22	19	21	21	7	59	92	13	7	11	92.2
10-Jun-08	7	11	9	60	33	6	15	10	15	13	7	7	11	7	8	14	14	6	7	11	8	4	7	5	60.0
11-Jun-08	5	5	3	3	3	8	7	4	6	11	5	5	10	8	7	9	7	12	10	12	27	14	17	13	26.6
12-Jun-08	5	14	13	37	53	11	12	10	19	10	10	8	7	12	12	16	13	18	20	44	18	34	10	22	53.3
13-Jun-08	32	17	27	33	30	46	35	38	44	37	22	18	33	41	22	17	12	33	9	64	6	19	16	65	64.5
14-Jun-08	60	65	48	21	38	18	26	14	10	11	10	16	12	16	16	19	13	13	9	11	13	21	75	22	74.7
15-Jun-08	35	15	25	52	53	83	28	20	19	39	14	17	46	59	75	73	69	68	37	24	11	16	5	10	83.0
16-Jun-08	17	36	76	11	12	5	5	8	10	11	19	19	47	46	34	34	28	22	18	9	10	2	2	5	76.0
17-Jun-08	5	2	20	12	11	12	6	8	9	10	10	8	8	7	12	11	9	7	22	8	25	8	12	19	24.5
18-Jun-08	36	50	77	66	45	41	21	27	62	49	25	23	22	13	15	16	10	9	5	7	4	18	30	9	76.6
19-Jun-08	16	39	33	76	16	49	68	25	49	50	62	89	89	37	40	38	41	60	16	3	14	5	2	7	89.3
20-Jun-08	24	69	75	36	22	19	13	16	20	43	62	82	66	72	90	62	52	54	48	10	10	21	7	35	89.7
21-Jun-08	20	36	12	28	51	25	15	12	11	15	11	10	10	9	9	7	9	5	4	3	2	3	4	4	51.2
22-Jun-08	15	5	6	37	6	8	5	11	9	12	8	13	11	10	13	18	21	15	9	5	6	9	22	7	36.5
23-Jun-08	14	16	7	42	22	29	15	17	69	57	35	22	18	40	34	50	26	22	15	14	7	77	32	32	76.6
24-Jun-08	23	86	33	33	37	54	35	55	36	34	16	25	17	16	14	23	30	14	15	17	31	18	70	13	86.3
25-Jun-08	7	18	42	54	68	61	35	55	54	67	82	59	89	30	66	43	37	20	17	3	6	7	35	15	88.8
26-Jun-08	9	20	8	22	16	43	56	39	22	27	47	38	28	23	9	11	27	50	5	6	4	10	22	46	55.7
27-Jun-08	26	15	37	53	15	30	35	38	23	16	14	11	11	13	13	15	13	13	17	9	15	21	39	55	55.2
28-Jun-08	11	17	9	10	14	20	11	9	13	12	14	16	15	13	13	15	11	7	5	5	3	3	3	3	20.4
29-Jun-08	3	10	7	4	5	4	4	6	7	9	10	12	15	17	18	18	13	8	5	17	4	3	17	4	18.4
30-Jun-08	4	4	4	5	8	9	11	10	23	30	24	42	31	14	10	11	11	7	15	34	71	33	46	84	83.9
Hourly Max	68	86	77	85	68	83	68	55	69	67	82	89	89	72	90	73	87	68	48	64	92	77	76	84	

1-hr Average Wind Rose (in km/hr) Located at the Portable-Brooks Site for June 2008



Calms:	0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	95
5	to	10	271
10	to	20	294
20	to	30	35
30	to	40	16
	>	40	1
Total Non-Zero Values			720

Palliser Airshed Society
Passive Monitoring – June 2008

Palliser Airshed Society - Palliser Passive Stations for June 2008
Palliser Passive Monitoring Expansion

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Location Easting	Location Northing	Elevation meter
Duplicates							
10a	Site 10	**0.3**	**43.9**	**1.3**			
10b	Site 10	**0.3**	**41.6**	**1.2**			
20a	Site 20 - Redcliff	**0.2**	**40.6**	**2.4**			
20b	Site 20 - Redcliff	**0.2**	**38.3**	**2.5**			
1	Site 1	**0.2**	**46.1**	**0.5**	562434	5583139	719
2	Site 2	**0.3**	**47.7**	**0.4**	565416	5616277	
3	Site 3	**0.2**	**45.3**	**0.3**	533794	5675379	779
4	Site 4	**0.3**	**44.6**	**0.6**	554771	5717338	718
5	Site 5	**0.3**	**40.9**	**0.8**	494218	5715862	735
6	Site 6	**0.3**	**44.2**	**0.9**	433039	5673766	818
7	Site 7	**0.3**	**39.9**	**1.4**	400808	5620907	780
8	Site 8	**0.3**	**51.1**	**0.7**	498530	5621839	747
9	Site 9	**0.2**	**47.4**	**1.5**	487701	5591707	763
10	Site 10	**0.3**	**42.7**	**1.3**	478223	5613583	774
11	Site 11 - Brooks	**0.4**	**42.3**	**3.0**	439773	5604548	736
12	Site 12	**0.3**	**36.6**	**1.5**	450287	5587201	726
13	Site 13	**0.2**	**51.8**	**0.7**	464279	5548934	
14	Site 14	**0.2**	**N/A**	**0.3**	493206	5521201	870
15	Site 15	**0.2**	**41.4**	**0.4**	465824	5485742	874
16	Site 16	**0.2**	**50.5**	**0.2**	503827	5446942	903
17	Site 17	**0.1**	**49.3**	**BDL**	557668	5452307	942
18	Site 18 - Christian School Park	**0.2**	**40.6**	**3.1**	526575	5538135	709
19	Site 19 - Monitoring Station	**0.2**	**43.4**	**3.2**	522813	5544137	714
20	Site 20 - Redcliff	**0.2**	**39.4**	**2.4**	517479	5546059	725

BDL = Below Detection Limit

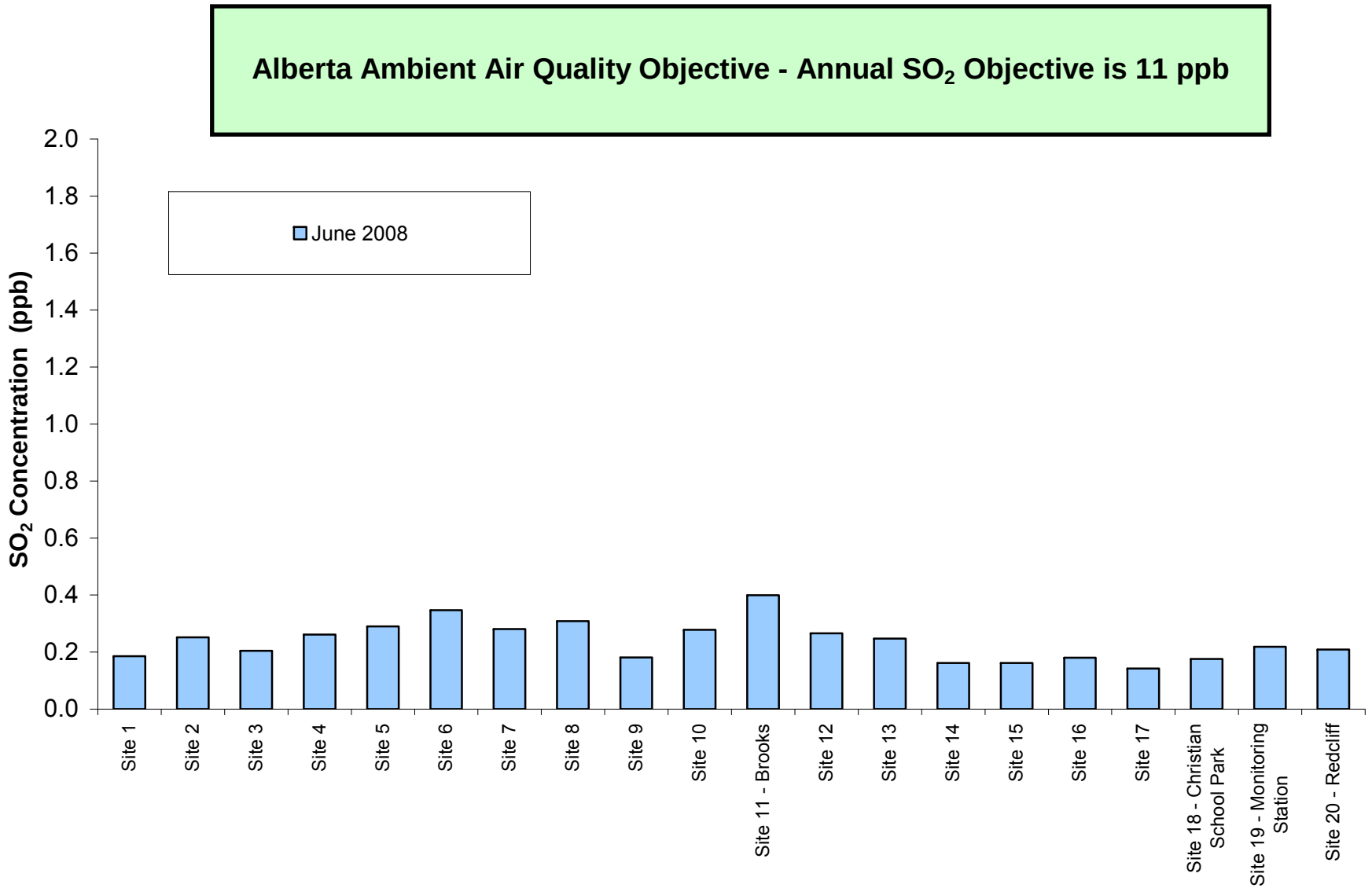


Figure 24. PAS – Sulphur Dioxide Passive Summary Chart

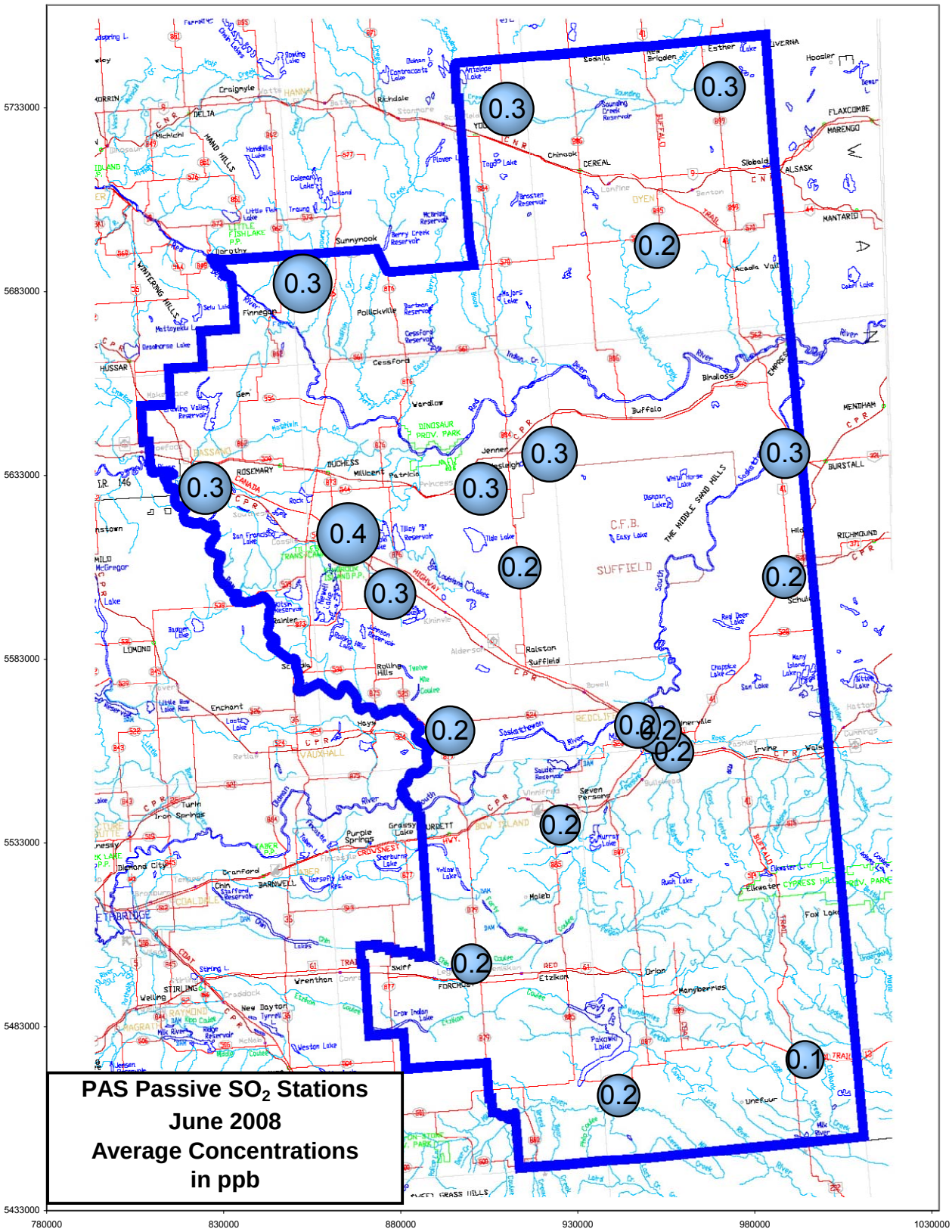


Figure 25. PAS – Sulphur Dioxide Passive Summary Bubble Chart

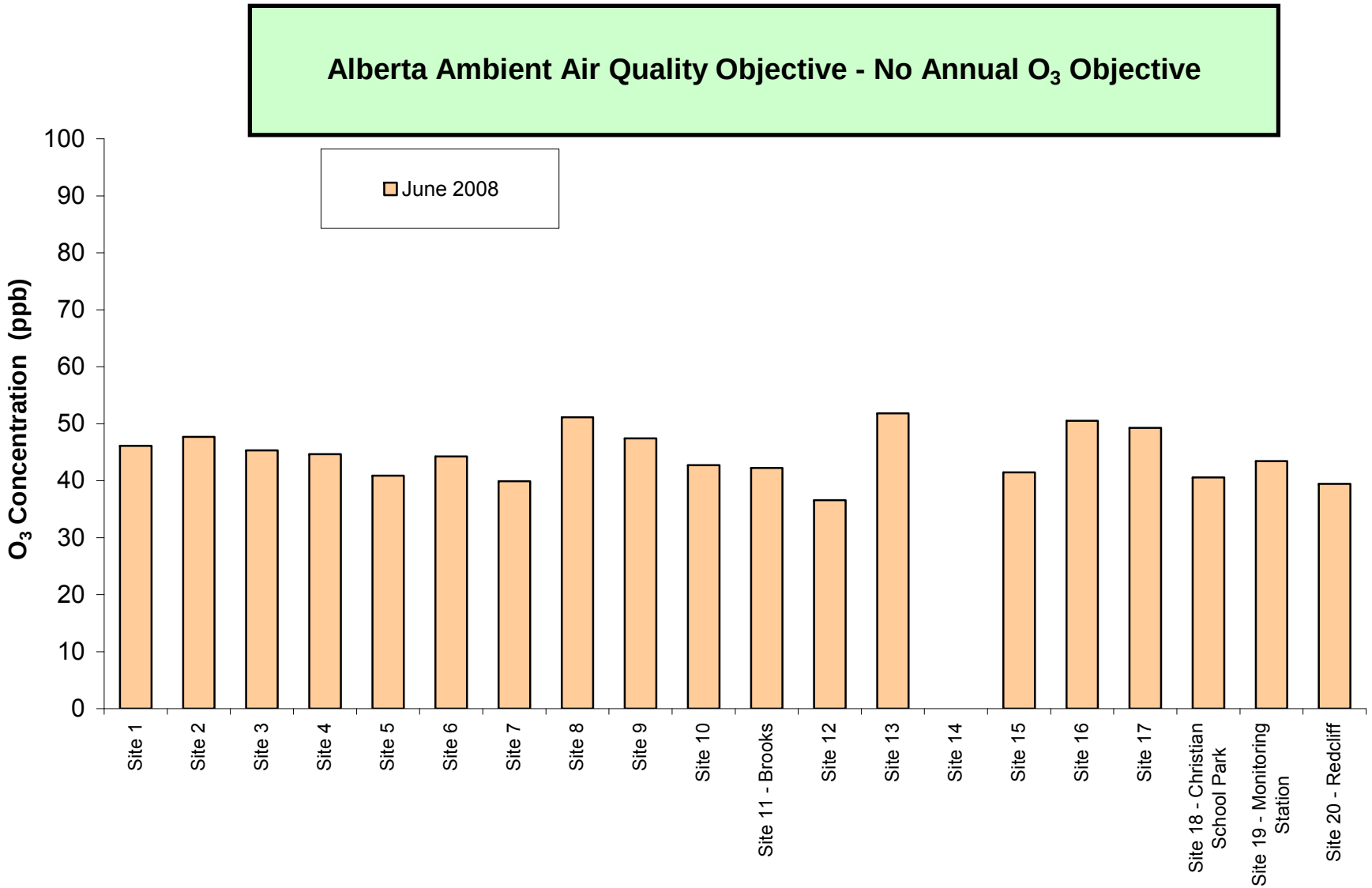


Figure 26. PAS – Ozone Passive Summary Chart

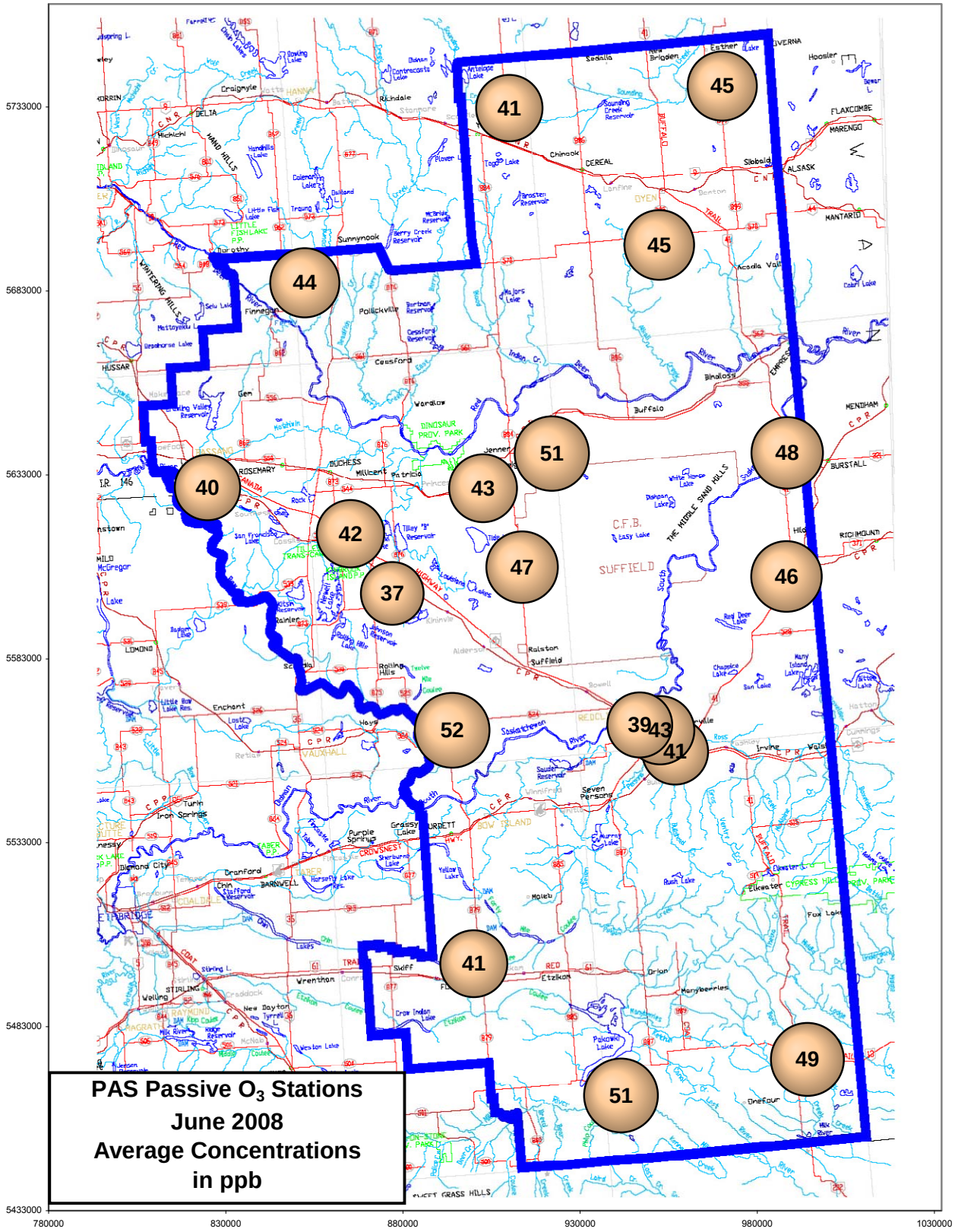


Figure 27. PAS – Ozone Passive Summary Bubble Chart

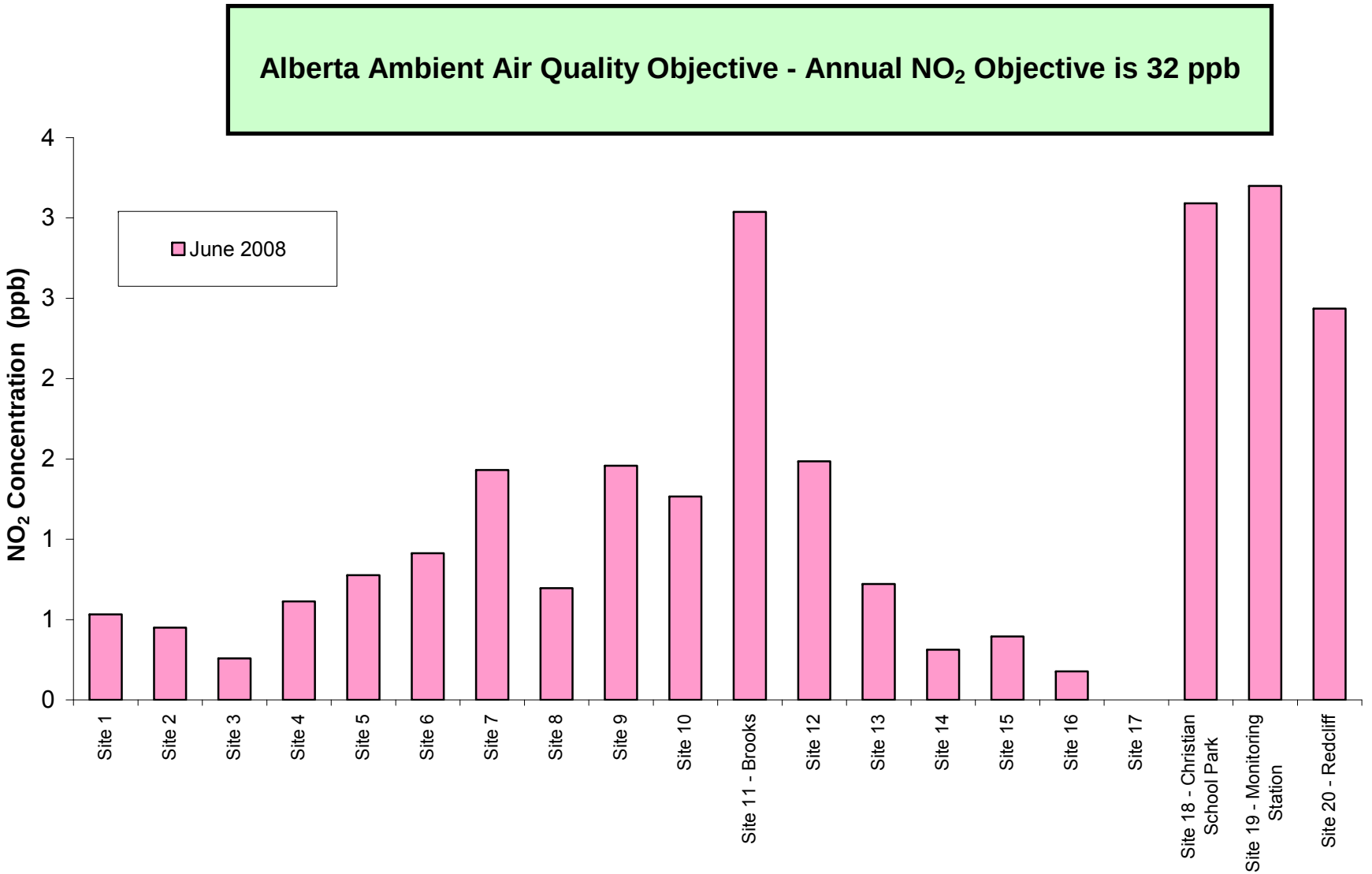


Figure 28. PAS – Nitrogen Dioxide Passive Summary Chart

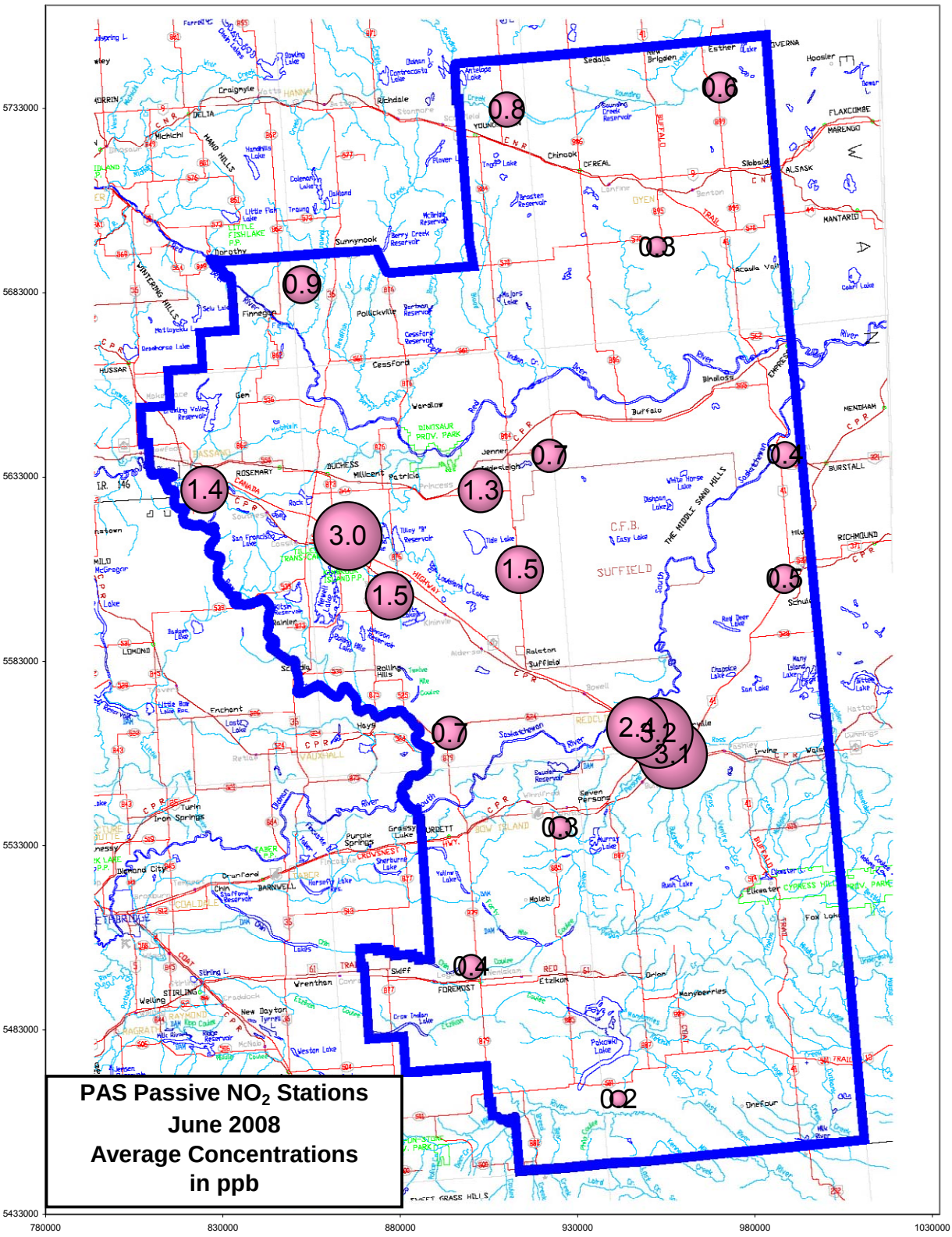


Figure 29. PAS – Nitrogen Dioxide Passive Summary Bubble Chart

Palliser Airshed Society
June 2008 - Calibration Reports

Crescent Heights Station: O_3, NO_x, NO, NO_2, THC, CO and $PM_{2.5}$

Portable-Brooks: O_3, SO_2, and H_2S

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **Palliser Airshed**

Station Information

Calibration Date	June 20, 2008	Previous Calibration	May 21, 2008
Station Number	101	Station Location	Crescent Heights
Reason: **Routine**	Calibration	Removal	Other:

Start Time (MST)	12:20		End Time (MST)	14:45	
Barometric Pressure	27.4	inches Hg	Station Temperature	20.0	Deg C
Calibrator	Environics 6103		Serial Number	2844	
Cal Gas Concentration	NA		Cal Gas Expiry Date	NA	

DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	1.030015	Calculated slope	0.958179
Calculated intercept	1.037075	Calculated intercept	-1.417486

Analyzer make	TEI 49i	Analyzer serial #	713021144	

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
O3 Background	0.5	ppb	0.5	ppb
O3 Coeff	1.033		1.033	
CellA	69634	Hz	68040	Hz
CellB	104582	Hz	104797	Hz
Pressure	686.1	mmHg	706.0	mmHg
Cell A Flow	716	ccm	725	ccm
Cell B Flow	698	ccm	710	ccm
Bench	33.2	Deg C	36.2	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4987	0.0	0.0	0.3	N/A
4987	300.0	266.8	279.7	0.9538
4987	200.0	180.3	188.7	0.9553
4987	100.0	90.8	98.5	0.9217
4987	0.0	0.0	0.3	0.0000
4987	300.0	266.8	279.7	0.9538
			Average Correction Factor	0.9436

Calculated value of As Found Response: 288.9 ppm Percent Change of As Found: 8.3%

	before calibration		after calibration	
Auto zero		ppb	-1.7	ppb
Auto span		ppb	146.5	ppb

Notes: No adjustments were done…

Calibration Performed By: Lenin Flores

Calibration Summary

FOCUS AIR QUALITY MONITORING

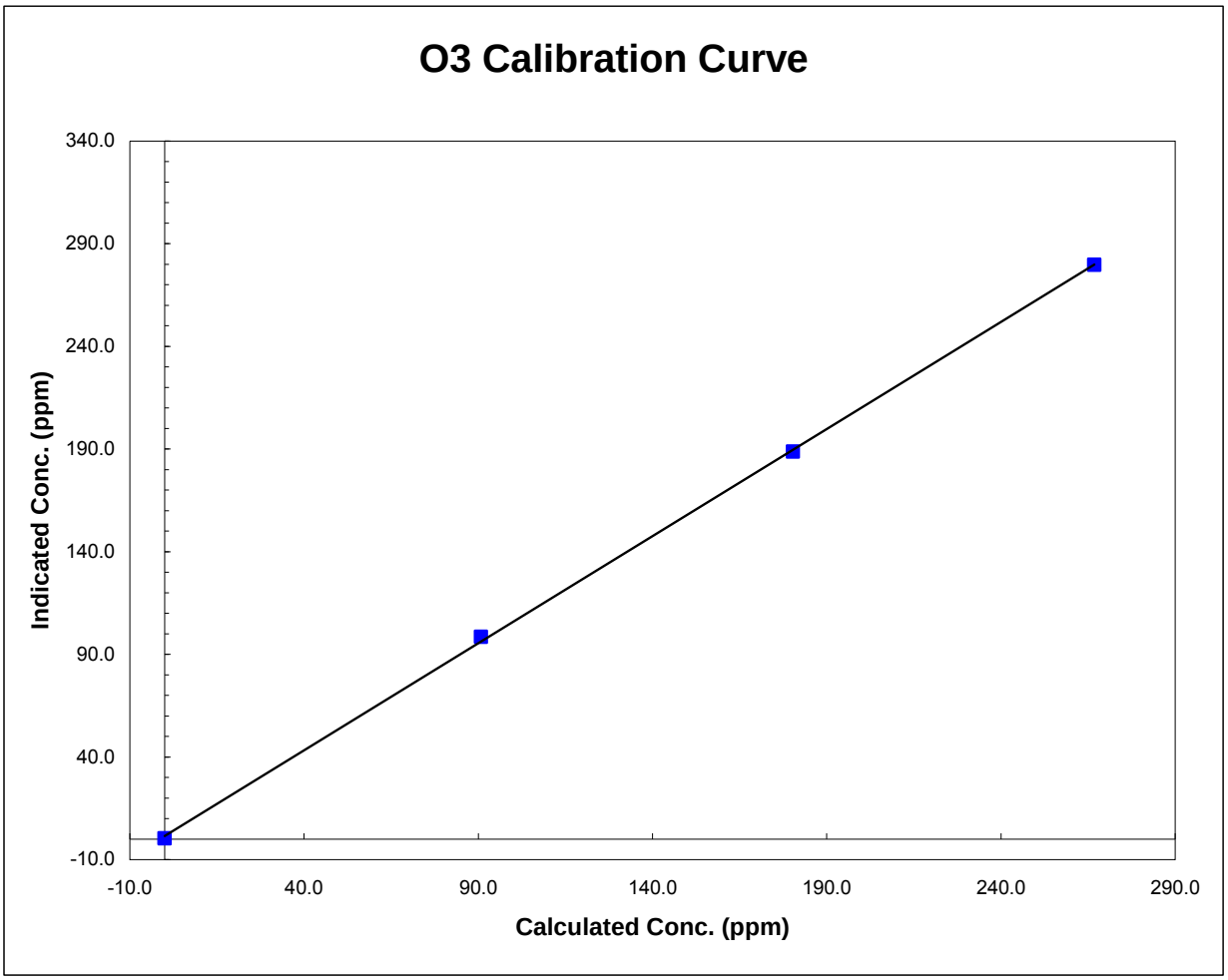
Parameter	O3
Air Monitoring Network	Palliser Airshed

Station Information

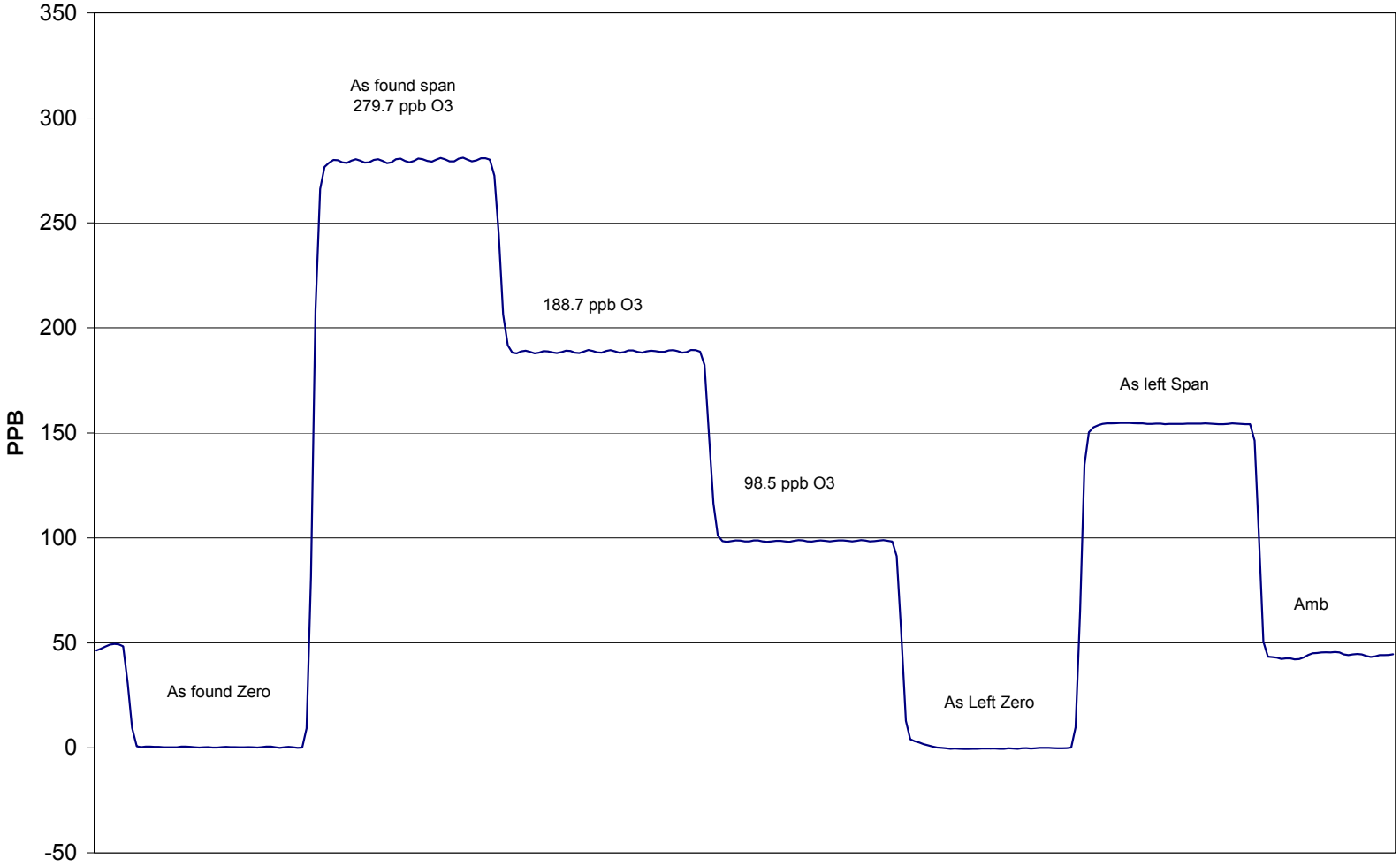
Calibration Date	June 20, 2008	Previous Calibration	May 21, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	12:20	End Time (MST)	14:45
Analyzer make/model	TEI 49i	Analyzer serial #	713021144

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
266.8	279.7	0.9538		
180.3	188.7	0.9553	Correlation Coefficient	0.999828
90.8	98.5	0.9217		
0.0	0.3	N/A	Slope	0.958179
			Intercept	-1.417486



Crescent Heights O_3 Calibration



June 20, 2008

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2008	Previous Calibration	May 21, 2008
Station Number	101	Station Location	Crescent Heights

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	9:25	End Time (MST)	13:15
Barometric Pressure	0.943 Atm	Station Temperature	20.0 Deg C
Calibrator	Dasibi	Serial Number	723
NO Cal Gas Conc	48.9 ppm	Cal Gas Expiry Date	January 29, 2008
NOx Cal Gas Conc	48.9 ppm	Cal Gas Serial #	LL-50114

DACS Information

DACS make: FOCUS AP1000 DACS serial No.: 45270

Parameter		NO2	NOx	NO
Before	Data Slope	0.992614	1.008401	1.014930
	Data Offset	1.935014	2.341284	2.885782
After	Data Slope	1.017869	1.010413	0.981007
	Data Offset	7.227957	3.450770	2.666749
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model: API Model 200E Analyzer serial #: 219

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	-9.0	mV	-9.0	mV
NOx offset	-5.5	mV	-5.5	mV
NO slope	1.312		1.435	
NOx slope	1.376		1.376	
R Cell Temp	49.6	Deg C	49.6	Deg C
PMT Temp	7.0	Deg C	7.1	Deg C
Azero	57.8	mV	57.8	mV
IZS Temp	37.0	Deg C	37.2	Deg C
R Cell Press	4.2	in Hg	4.2	in Hg
Sample Press	26.9	in Hg	26.3	in Hg
O3 Flow	74.0	ccm	75.0	ccm
Sample Flow	441.0	ccm	445.0	ccm

Notes: No adjustments were made…

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 20, 2008 Station Location: Crescent Heights

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	4987	0.00	0.0	0.0	0.0	-2.2	-1.3	-4.7	N/A	N/A
1	4987	39.93	388.4	388.4	0.0	381.4	393.7	-16.0	1.0185	0.9865
2	4987	19.96	194.9	194.9	0.0	189.6	195.8	-10.3	1.0279	0.9952
3	4987	9.97	97.6	97.6	0.0	91.4	94.9	-7.6	1.0674	1.0276
AFZ	4987	0.00	0.0	0.0	0.0	-2.2	-1.3	-4.7	0.0000	0.0000
AFS	4987	39.93	388.4	388.4	0.0	381.4	393.7	-16.0	1.0185	0.9865
							Average Correction Factor		1.0379	1.0031

As Found Concentrations: NO_X= 385.9 NO= 397.9 As Found Percent Change NO_X= -0.7% NO= 2.4%

GPT Calibration Data

Dilution Flow 4996 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop 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	-1.3	-1.3	0.0	-2.2	-1.3	-4.7	N/A	N/A	N/A	N/A
NO point	378.8	378.8	0.0	375.6	378.8	-6.6	1.0086	1.0000	N/A	N/A
300	378.8	112.0	266.8	373.0	112.0	256.7	1.0155	1.0000	1.0390	96.2%
200	378.8	198.4	180.3	371.4	198.4	168.8	1.0199	1.0000	1.0681	93.6%
100	378.8	288.0	90.8	371.3	288.0	79.1	1.0202	1.0000	1.1476	87.1%
					Average Correction Factor		1.0185	1.0000	1.0849	92.3%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero				ppb	2.2	2.2	1.7	ppb
Auto span				ppb	266.5	264.4	5.6	ppb

Calibration Performed By: Jorge Lenin Flores

Calibration Summary

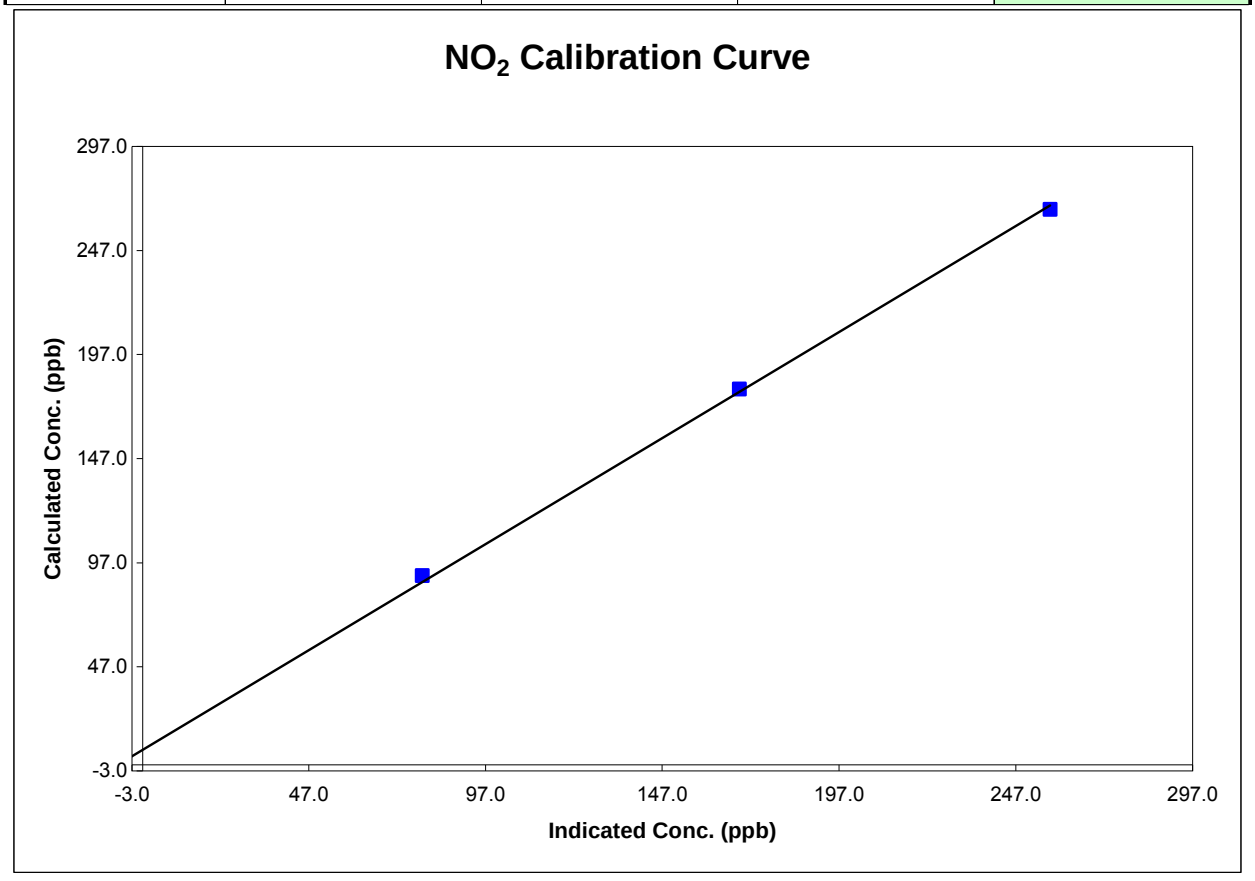
Parameter	NO_2
Air Monitoring Network	Palliser Airshed

Station Information

Calibration Date	June 20, 2008	Previous Calibration	May 21, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:25	End Time (MST)	13:15
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-4.7	N/A		
266.8	256.7	1.0390	Correlation Coefficient	0.999489
180.3	168.8	1.0681		
90.8	79.1	1.1476	Slope	1.017869
			Intercept	7.227957



Calibration Summary

Parameter	NO_x
Air Monitoring Network	Palliser Airshed

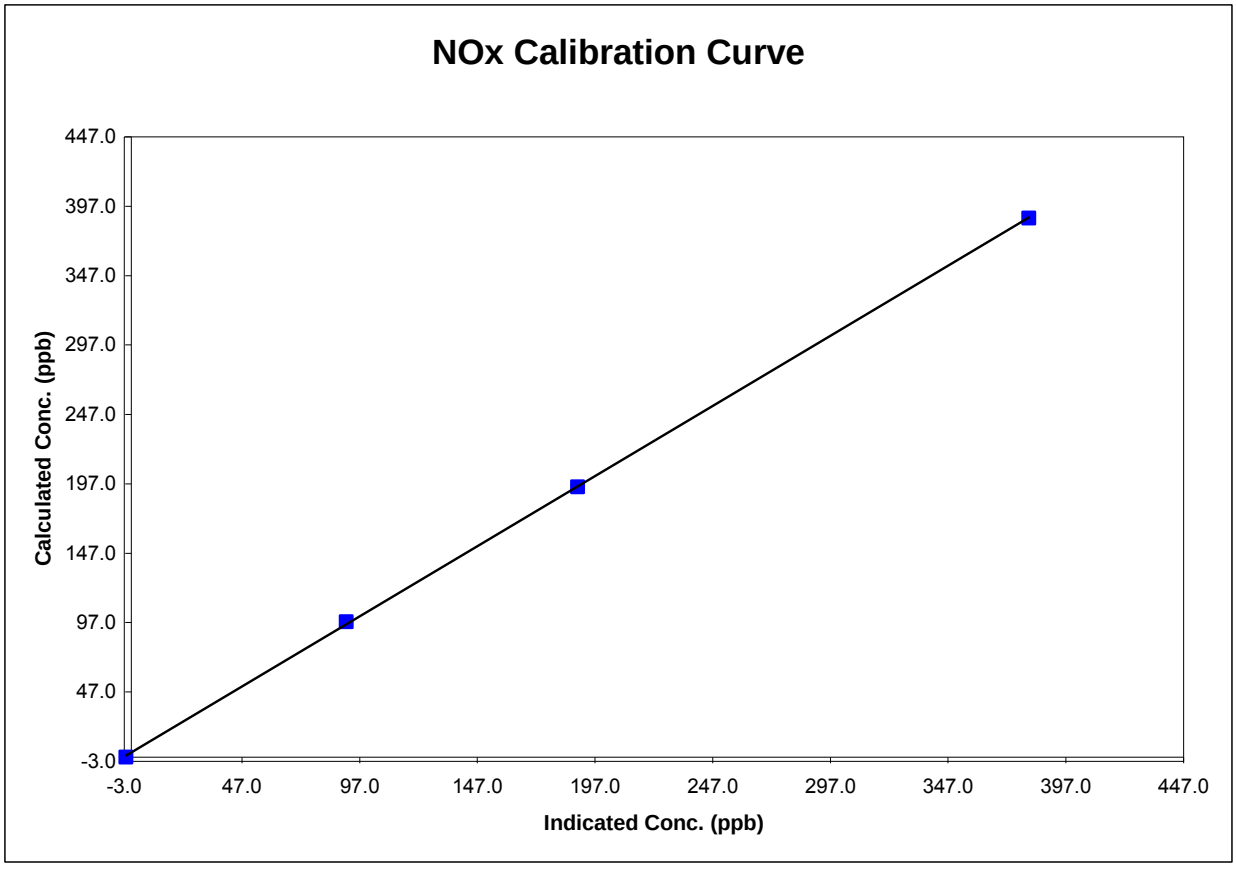
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2008	Previous Calibration	May 21, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:25	End Time (MST)	13:15
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-2.2	N/A		
388.4	381.4	1.0185	Correlation Coefficient	0.999942
194.9	189.6	1.0279		
97.6	91.4	1.0674	Slope	1.010413
			Intercept	3.450770



Calibration Summary

FOCUS AIR QUALITY MONITORING

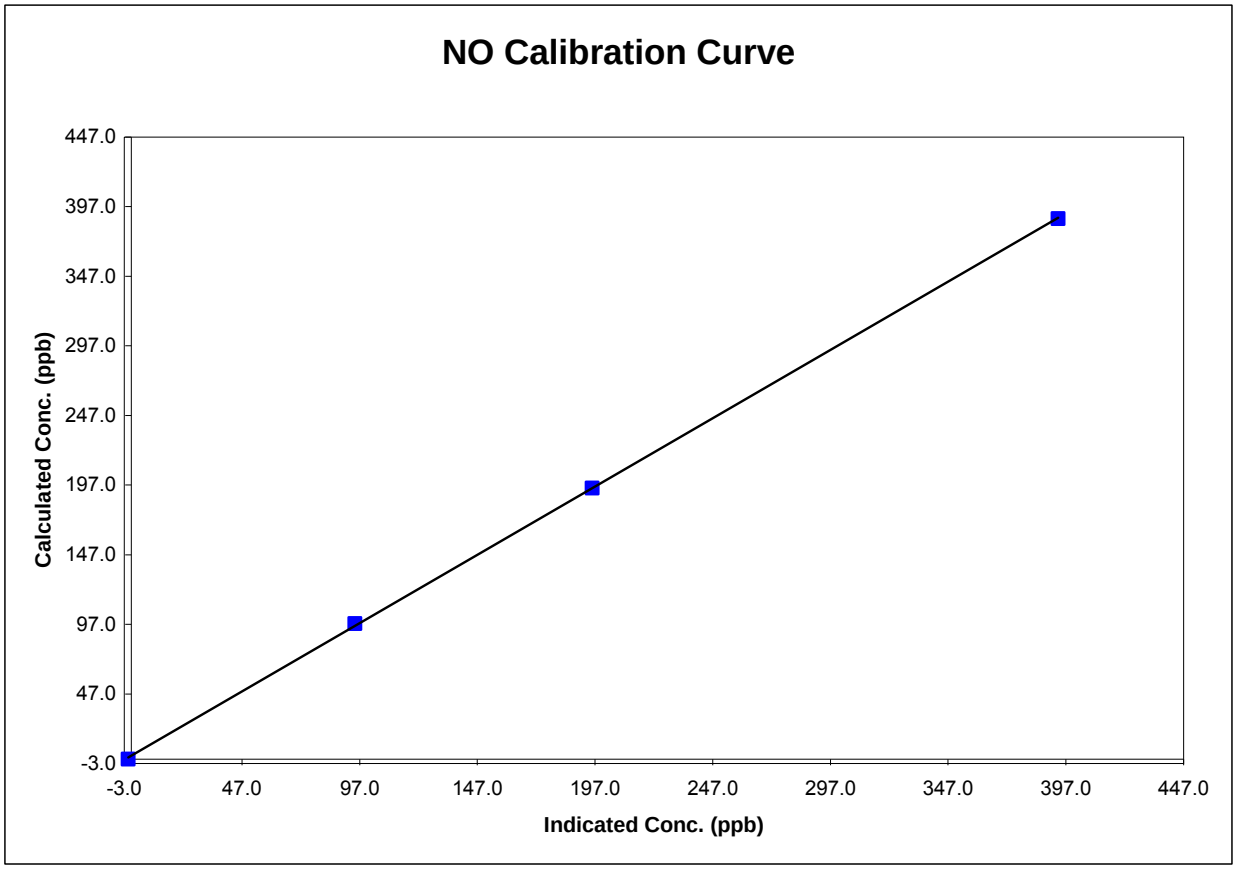
Parameter	**NO**
Air Monitoring Network	**Palliser Airshed**

Station Information

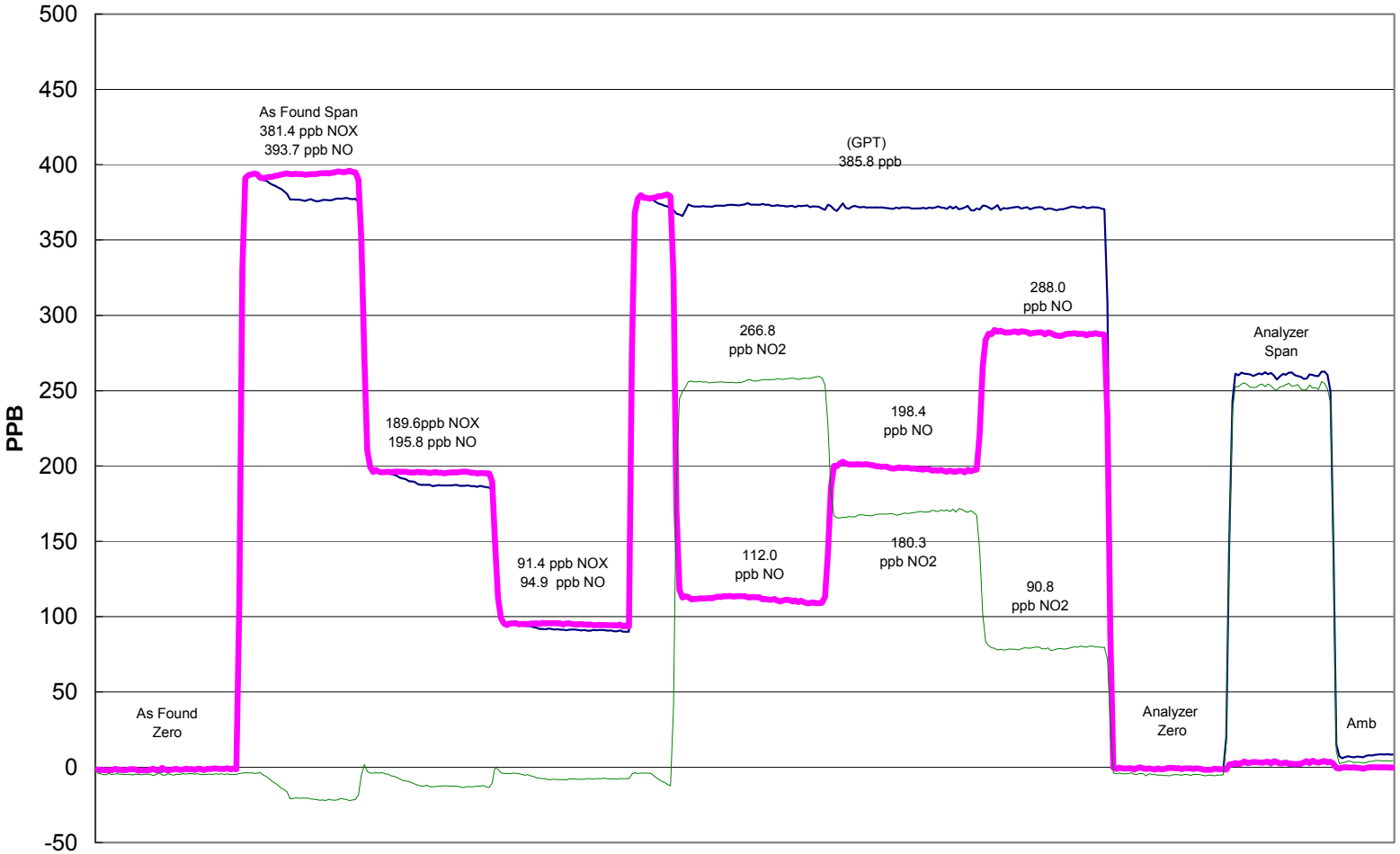
Calibration Date	June 20, 2008	Previous Calibration	May 21, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:25	End Time (MST)	13:15
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.3	N/A		
388.4	393.7	0.9865	Correlation Coefficient	0.999936
194.9	195.8	0.9952		
97.6	94.9	1.0276	Slope	0.981007
			Intercept	2.666749



Crescent Heights NOx Calibration



June 20, 2008

Calibration Report

Parameter **THC**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 25, 2008	Previous Calibration	May 29, 2008
Station Number	101	Station Location	Crescent Heights
Reason: **Routine**	Install	Removal	Other:
Start Time (MST)	9:25	End Time (MST)	13:48
Barometric Pressure	27.1 inches Hg	Station Temperature	20.0 Deg C
Calibrator	API700	Serial Number	
Cal Gas Concentration	708 ppm CH_4 / 299 ppm C_3H_8	Cal Gas Expiry Date	1/25/2009
Cal Gas CH4 equiv	1530.25 ppm	Cal Gas Cylinder #	LL-41839
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.999296	Calculated slope	0.997023
Calculated intercept	0.121693	Calculated intercept	0.115626
Analyzer make	TEI 51C-LT	Analyzer serial #	0407505596

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.75	PSI	5.74	PSI
THC span counts	12033	raw	19864	raw
THC zero counts	1282	raw	1478	raw
V Bias	-326	Volts	-326	Volts

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)
2995	0.00	0.00	0.05	N/A
2995	79.86	39.74	39.83	0.9979
2995	39.93	20.13	19.95	1.0094
2995	9.96	5.07	4.86	1.0440
2995	0.00	0.00	0.05	As Found Zero
2995	79.86	39.74	39.83	As Found Span
			Average Correction Factor	1.0171

Calculated value of As Found Response: 39.872 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero		ppm	0.11	ppm
Auto span		ppm	24.64	ppm

Notes: No adjustments made…

Calibration Performed By: Lenin Flores

Calibration Summary

Parameter	THC
Air Monitoring Network	Palliser Airshed

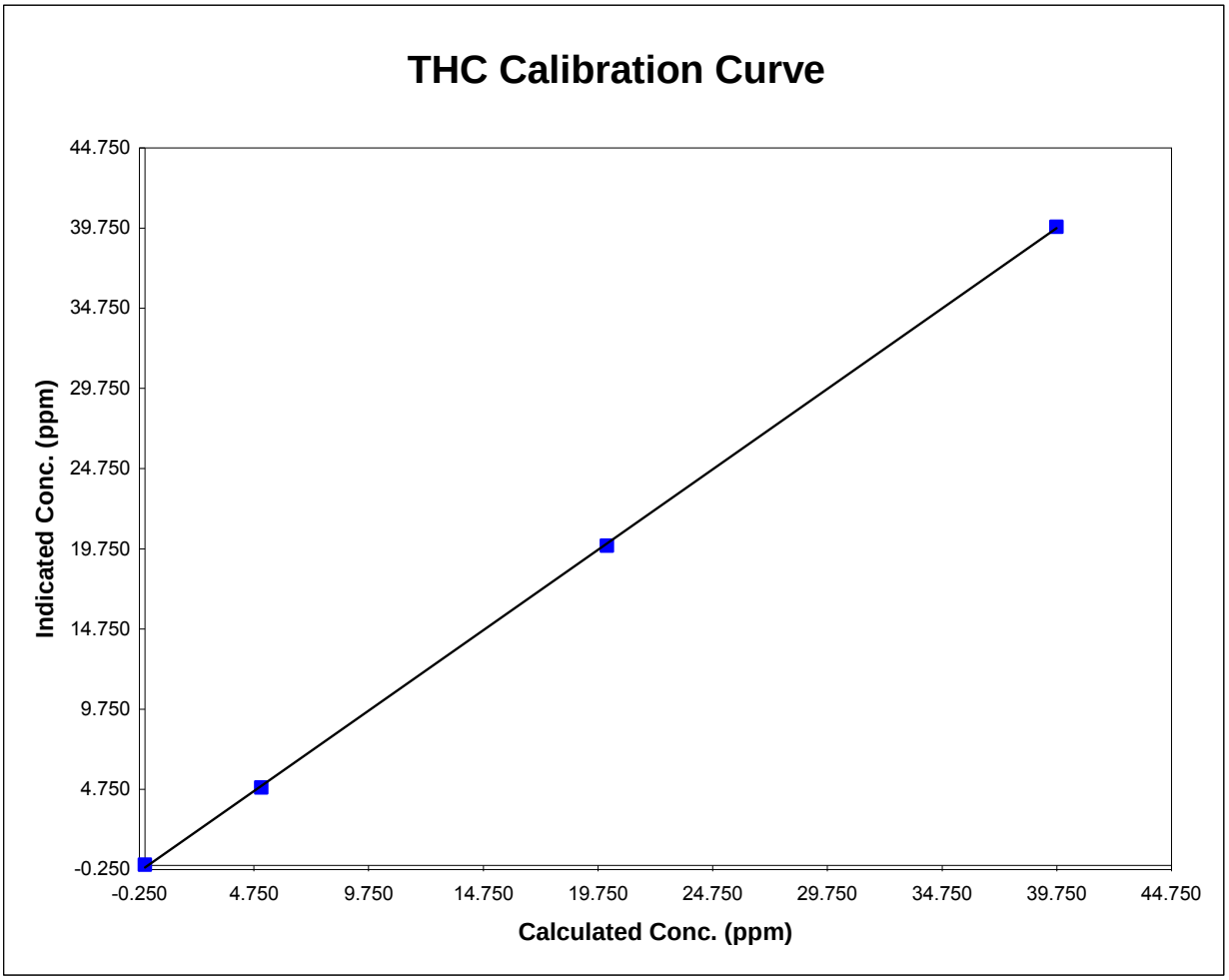
FOCUS AIR QUALITY MONITORING

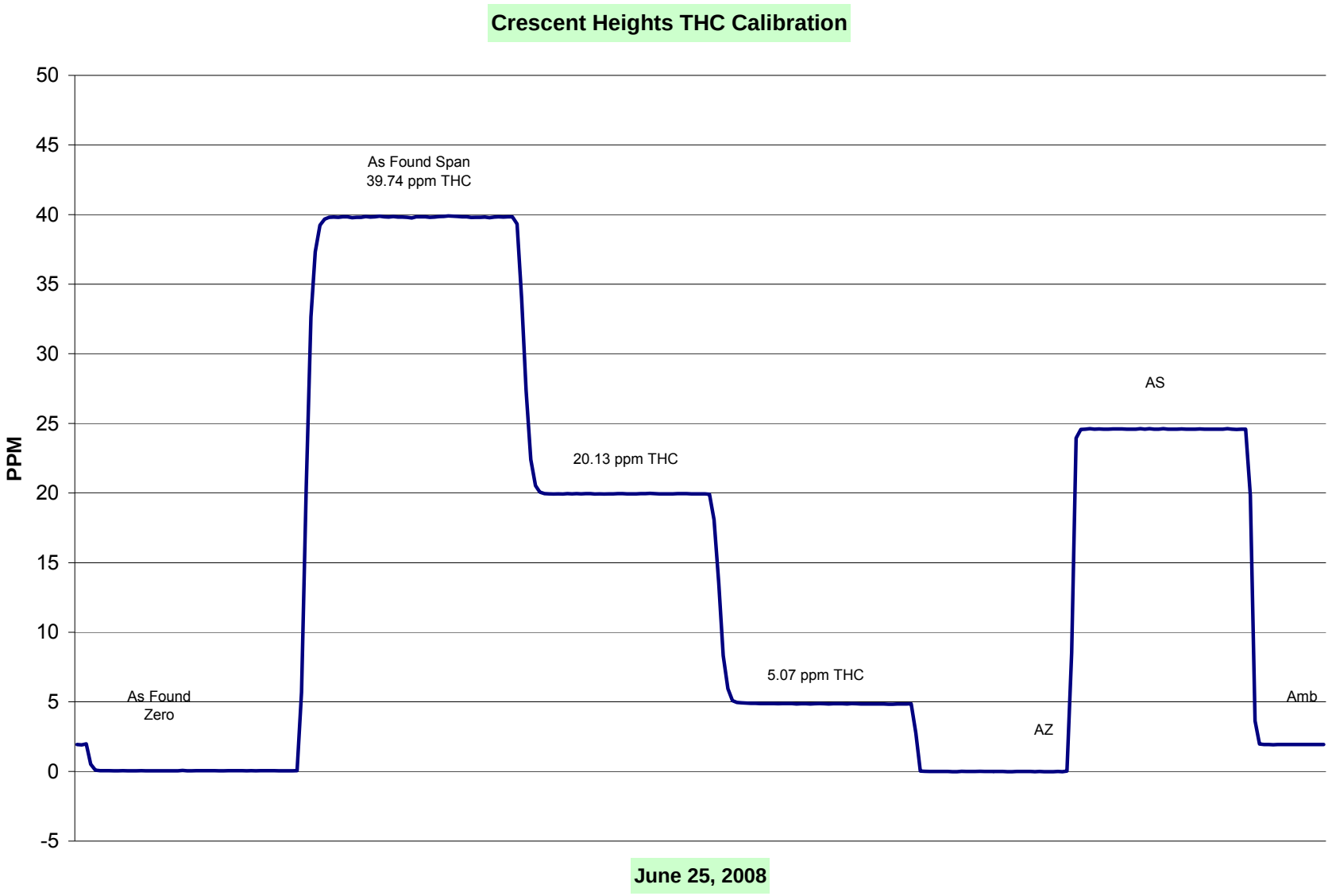
Station Information

Calibration Date	June 25, 2008	Previous Calibration	May 29, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:25	End Time (MST)	13:48
Analyzer make/model	TEI 51C-LT	Analyzer serial #	0407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.049	N/A		
39.745	39.827	0.9979	Correlation Coefficient	0.999934
20.133	19.945	1.0094		
5.074	4.860	1.0440	Slope	0.997023
			Intercept	0.115626




Crescent Heights THC Calibration
PPM
50
45
40
35
30
25
20
15
10
5
0
-5
As Found Span
39.74 ppm THC
20.13 ppm THC
5.07 ppm THC
As Found
Zero
AZ
AS
Amb
June 25, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter: **CO**

Air Monitoring Network: **Palliser**

Station Information

Calibration Date	June 25, 2008	Previous Calibration	May 29, 2008
Station Number	101	Station Location	Crescent Heights

Reason: Routine | Install | Removal | Other:

Start Time (MST)	11:00	End Time (MST)	13:20
Barometric Pressure	27.05 in Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
		Cal Gas Cylinder #	BLM002248
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	11
	Before		After
Calculated slope	0.998091	Calculated slope	1.003296
Calculated intercept	0.032414	Calculated intercept	0.076350

Analyzer make	TEI Model 48C	Analyzer serial #	436609887

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.106		1.106	
CO bkg setting	4.070		4.025	
Lamp ratio	1.137516		1.110767	
Lamp intensity	199566	Hz	199040	Hz
Sample Flow	1.005	LPM	1.015	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)
2995	0.00	0.00	0.03	N/A
2995	39.93	39.45	39.29	1.0041
2995	19.95	19.84	19.67	1.0087
2995	9.96	9.93	9.70	1.0238
2995	0.00	0.00	0.03	0.0000
2995	39.93	39.44	39.29	1.0040
			Average Correction Factor	1.0122

Calculated value of As Found Response: 39.212 ppm Percent Change of As Found: 0.6%

	before calibration		after calibration	
Auto zero		ppm	0.12	ppm
Auto span		ppm	19.96	ppm

Notes: Changed the Span cylinder and adjusted the excess flow to 450ccm…

Calibration Performed By: Lenin Flores

Calibration Summary

Parameter	CO
Air Monitoring Network	Palliser

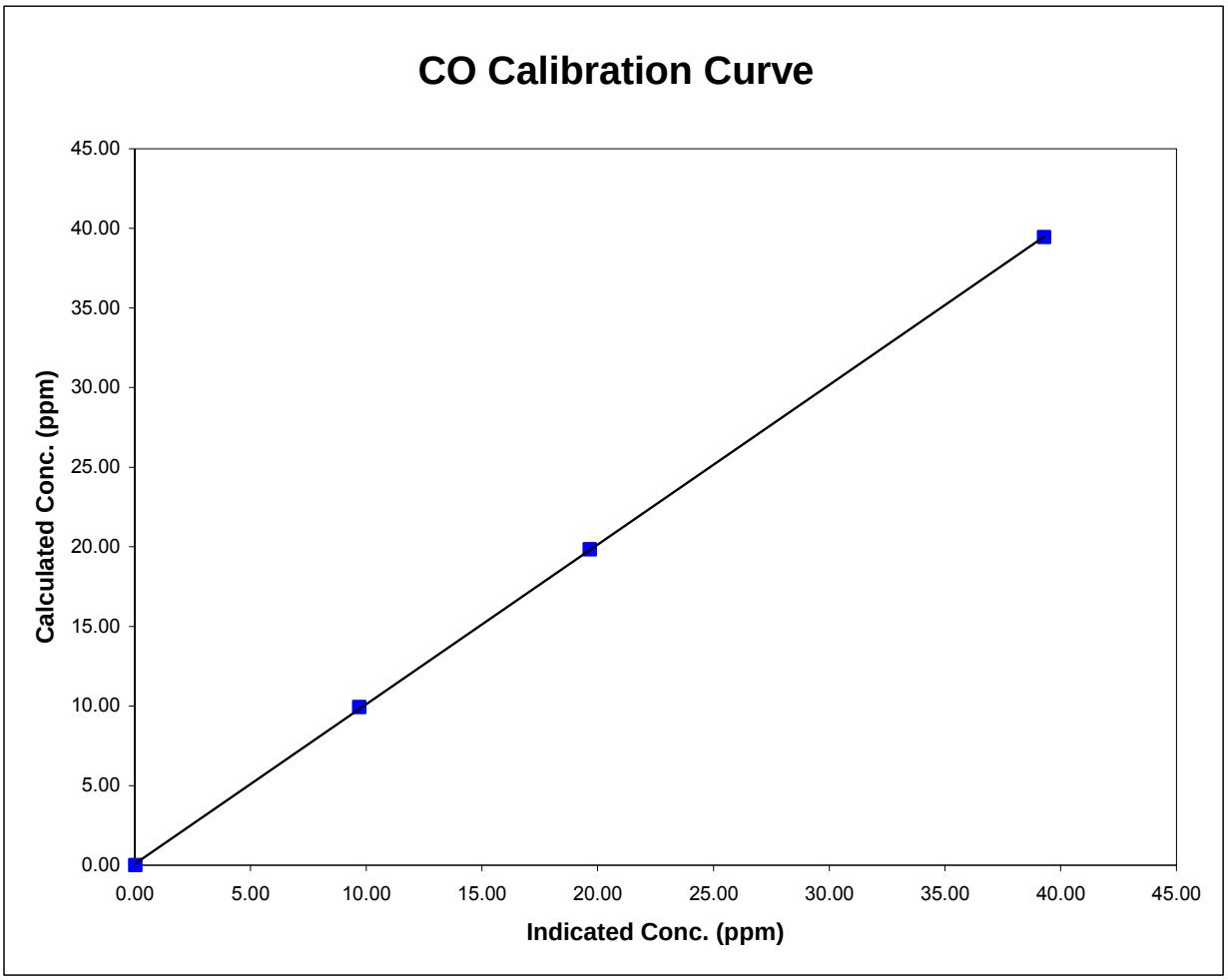
FOCUS AIR QUALITY MONITORING

Station Information

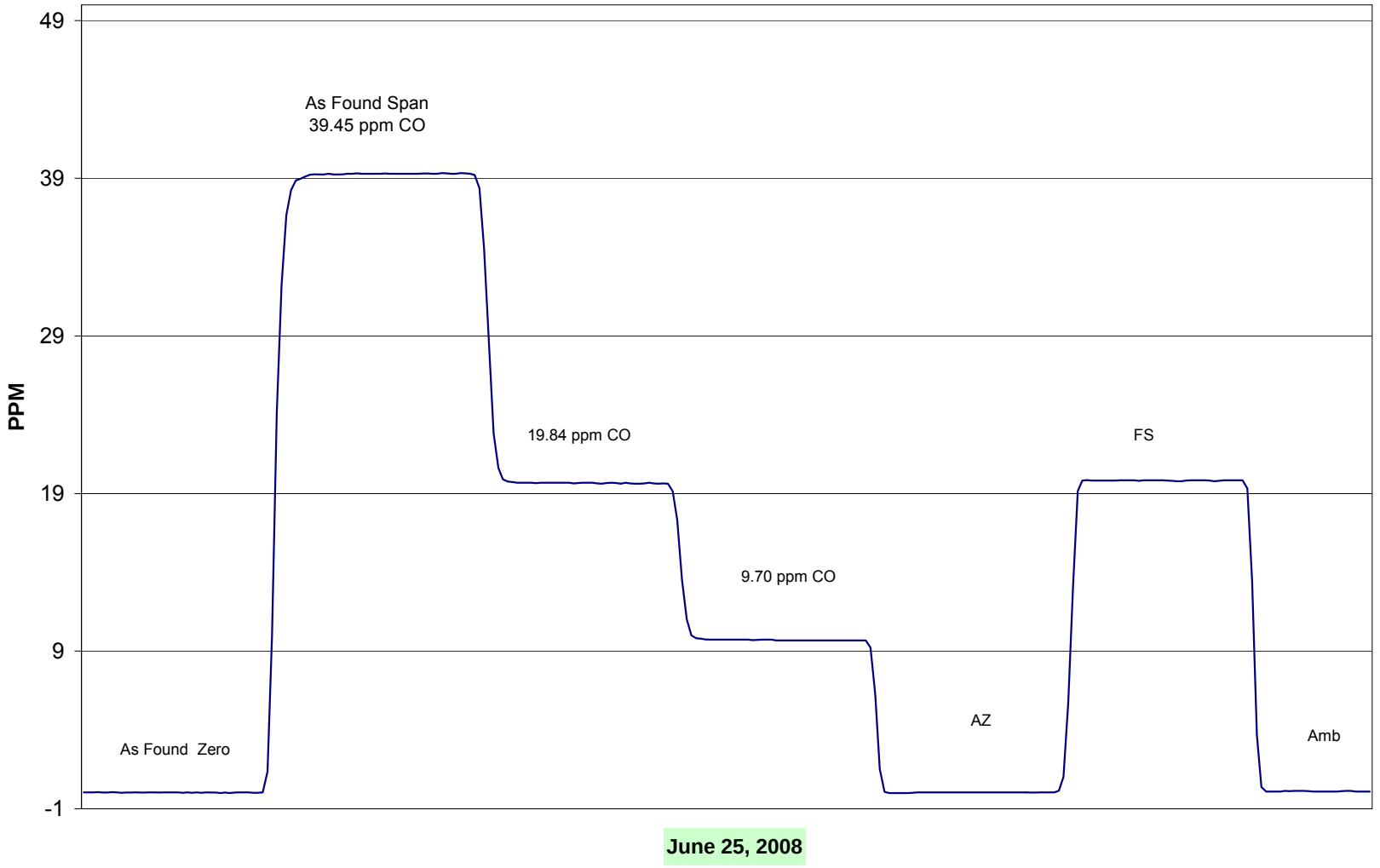
Calibration Date	June 25, 2008	Previous Calibration	May 29, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:00	End Time (MST)	13:20
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.03	N/A		
39.45	39.29	1.0041	Correlation Coefficient	0.999965
19.84	19.67	1.0087		
9.93	9.70	1.0238	Slope	1.003296
			Intercept	0.076350



Crescent Heights CO Calibration



June 25, 2008

Calibration Report

Parameter **PM2.5**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2008	Previous Calibration	May 29, 2008
Station Number	101	Station Location	Crescent Heights
Reason: **Routine**	Install	Removal	Other:

Start Time (MST)	9:30	End Time (MST)	11:50
Barometric Pressure	0.923 ATM	Station Temperature	25.0 Deg C
Flow Calibrator	BIOS Drycal Definer 220	Serial Number	111860
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	Before		After
DACS Scale High	450	DACS slope	450
DACS Scale Low	-50	DACS intercept	-50

Analyzer Information

Analyzer make	R&P	Control Unit serial #	140AB237960110
Analyzer model	TEOM 1400AB	Sensor Unit serial #	140AB237960110

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.67	SLPM	13.67	SLPM
Filter Load	41%	%	41%	%
Ko Factor	NA		NA	
Temperature	24.0	Deg C	24.0	Deg C
Pressure	0.923	ATM	0.923	ATM

Calibration Data

Parameter	Set Point	TEOM Reading (as found)	Tolerance	TEOM Reading (after adjustments)
zero flow - main	0.0	0.01	0.00	0.01
zero flow - auxillary	0.0	-0.01	0.01	-0.01
flow recovery - main	45 - 60 Seconds	43	45 - 60 Seconds	43
flow recovery - aux	46 - 60 Seconds	51	46 - 60 Seconds	51
Temperature	measured	23.0	+/- 1.0 Deg C	23.0
Pressure	measured	0.923	+/- 1.5% Δ_{ATM}	0.923
Total Flow	16.67 SLPM	15.62		16.62
Auxiliary flow	13.67 SLPM	12.85	+/- 1.0 SLPM	13.58
Main flow	3.0 SLPM	2.860	+/- 0.2 SLPM	3.006
Leak Check - main	0.0	0.01	<0.15 SLPM	0.01
Leak Check - aux	0.0	-0.01	<0.15 SLPM	-0.01
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	NA

Notes: Adjusted both flows and cleaned the PM10 and 2.5 heads…

Calibration Performed By: Lenin Flores

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PAS**

Station Information

Calibration Date	June 25, 2008	Previous Calibration	May 21, 2008
Station Number	110	Station Location	Rover - Brooks
Reason: Routine	Install	Removal	Other:

Start Time (MST)	14:20	End Time (MST)	16:50
Barometric Pressure	27.3 inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	Focus AP1000	DACS serial No.	45265
DACS voltage range	0 - 1 volt	DACS channel #	7
	Before		After
Calculated slope	1.025051	Calculated slope	0.998519
Calculated intercept	-0.011084	Calculated intercept	-4.934128

Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Offset	-10.5	ppb	-10.5	ppb
Slope	0.988		0.988	
Lamp measure	4246.7	mV	4139.5	mV
Lamp Reference	4250.7	mV	4143.5	mV
Pressure	26.6	inches Hg	27.0	inches Hg
Sample Flow	609	ccm	552	ccm
Sample temp	36.2	Deg C	38.0	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4996	0.0	0.0	3.1	N/A
4996	300.0	266.8	270.9	0.9849
4996	200.0	180.3	186.0	0.9694
4996	100.0	90.8	98.5	0.9223
4996	0.0	0.0	3.1	As Found Zero
4996	300.0	266.8	270.9	As Found Span
			Average Correction Factor	0.9589

Calculated value of As Found Response: 274.4 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	-0.2	ppb	3.4	ppb
Auto span	393.0	ppb	223.7	ppb

Notes: No adjustents were made…

Calibration Performed By: Lenin Flores

Calibration Summary

Parameter	O3
Air Monitoring Network	PAS

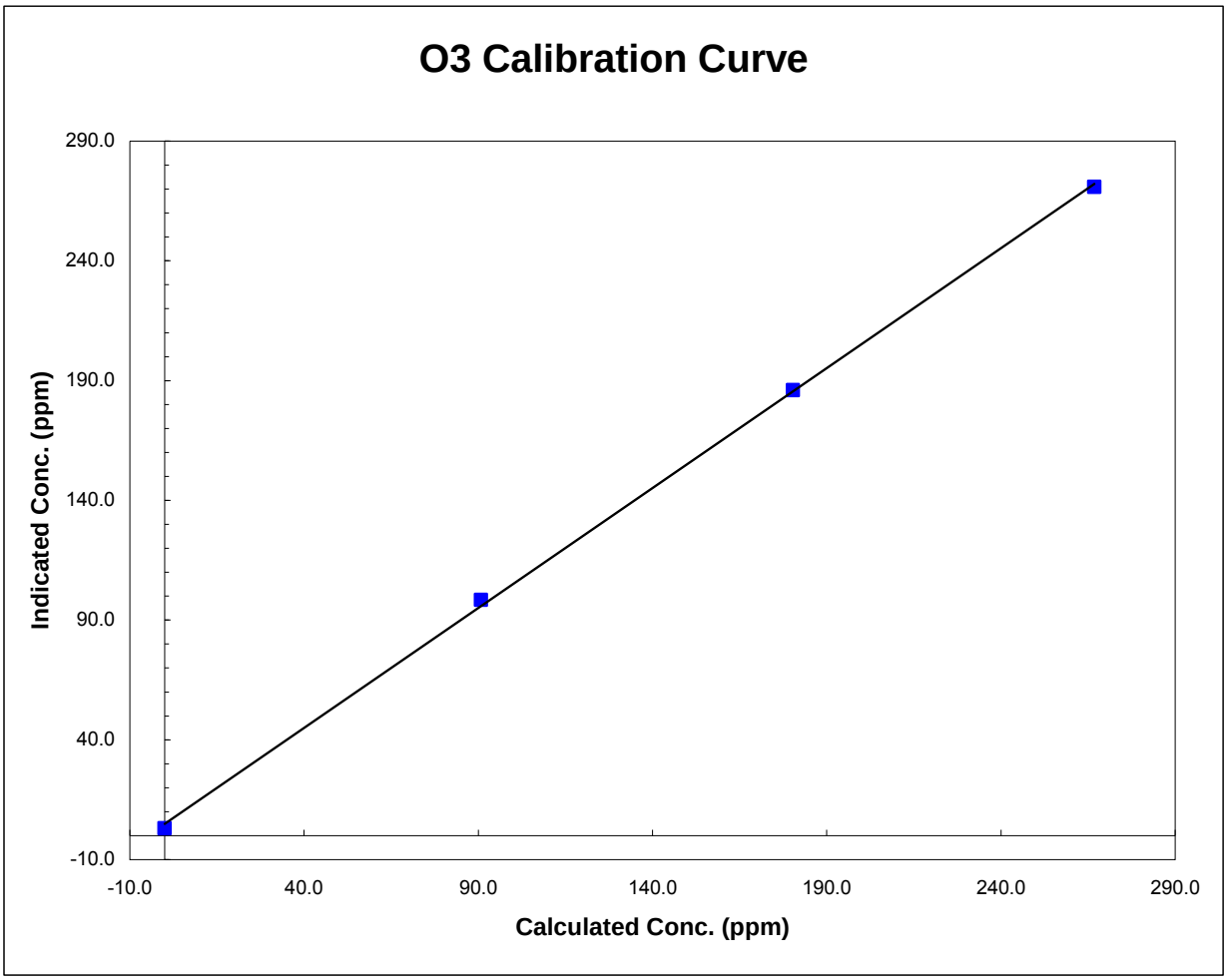
FOCUS AIR QUALITY MONITORING

Station Information

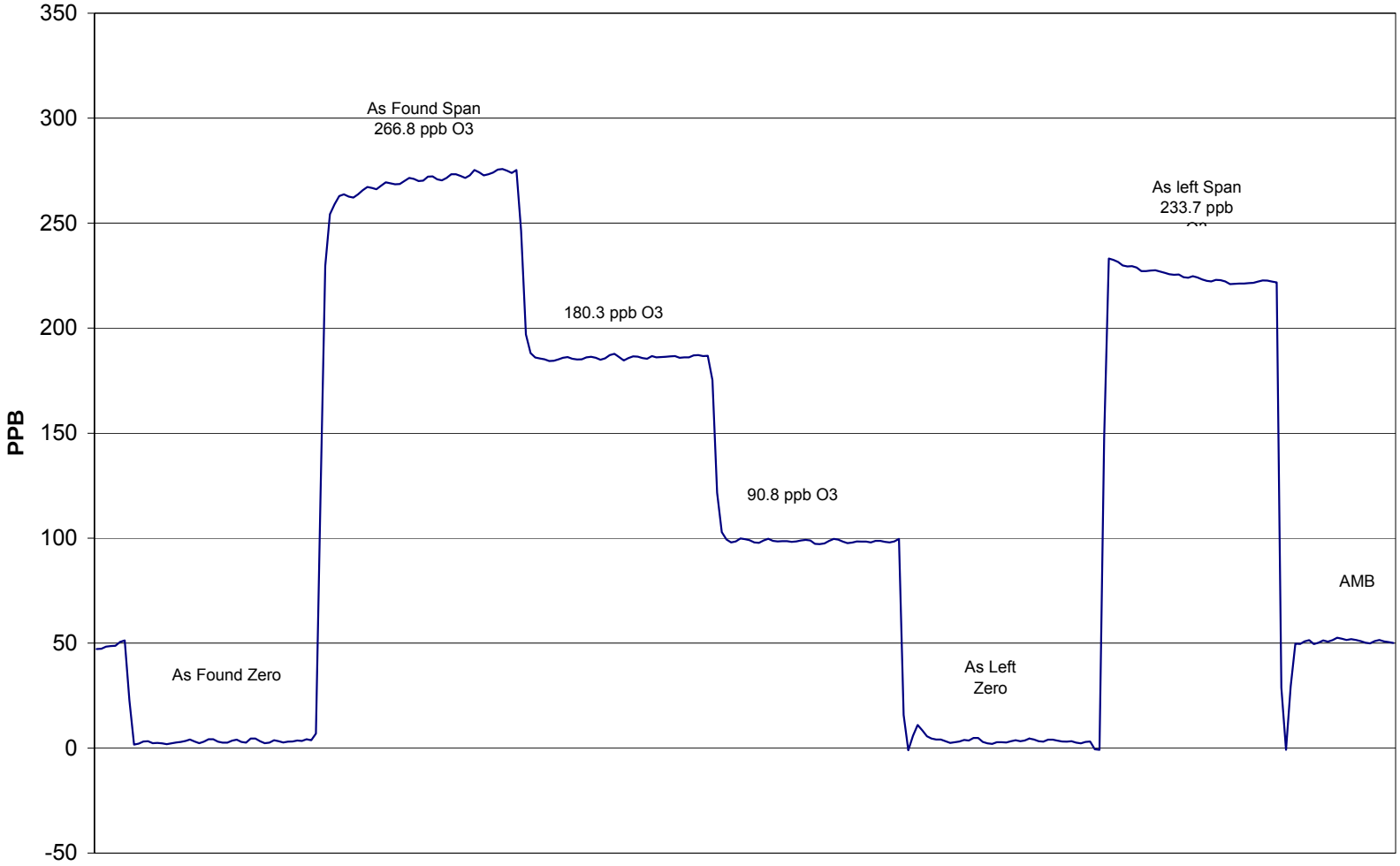
Calibration Date	June 25, 2008	Previous Calibration	May 21, 2008
Station Number	110	Station Location	Rover - Brooks
Start Time (MST)	14:20	End Time (MST)	16:50
Analyzer make/model	API Model 400E	Analyzer serial #	331

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
266.8	270.9	0.9849		
180.3	186.0	0.9694	Correlation Coefficient	0.999707
90.8	98.5	0.9223		
0.0	3.1	N/A	Slope	0.998519
			Intercept	-4.934128



Portable - Brooks O_3 Calibration



June 25, 2008

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter: **SO2**

Air Monitoring Network: **PAS**

Station Information

Calibration Date	June 19, 2007	Previous Calibration	May 28, 2007
Station Number	110	Station Location	Rover - Brooks
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	9:15	End Time (MST)	11:55
Barometric Pressure	27.80 inches Hg	Station Temperature	22.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	27-Jul-09
Gas Cert Reference	LL-16136		
DACS make	Focus AP1000	DACS serial No.	45265
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.998424	Calculated slope	0.989299
Calculated intercept	3.397378	Calculated intercept	6.939647
Analyzer make	TEI Model 43A	Analyzer serial #	NA

	before		after	
Concentration range	0-500	ppb	0-500	ppb
SO2 zero pot	1.5		1.5	
SO2 span pot	3.75		3.75	
Analyzer flow	3.96	LPM	0.5	LPM
UV Lamp voltage	858	V	857	V
Vacuum	21.5	in Hg	22	in Hg

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4996	0.00	0.0	-1.2	N/A
4996	39.93	398.8	399.4	0.9986
4996	19.96	200.1	190.6	1.0501
4996	9.99	100.4	90.1	1.1145
4996	0.00	0.0	-1.2	As found zero
4996	39.93	398.8	396.4	As found span
			Average Correction Factor	1.0544

Calculated value of As Found Response: 400.331 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	-7.0	ppm	-1.1	ppm
Auto span	203.9	ppm	193.8	ppm

Notes: No adjustments made, though maintenance is required…

Calibration Performed By: Lenin Flores

Calibration Summary

Parameter	SO2
Air Monitoring Network	PAS

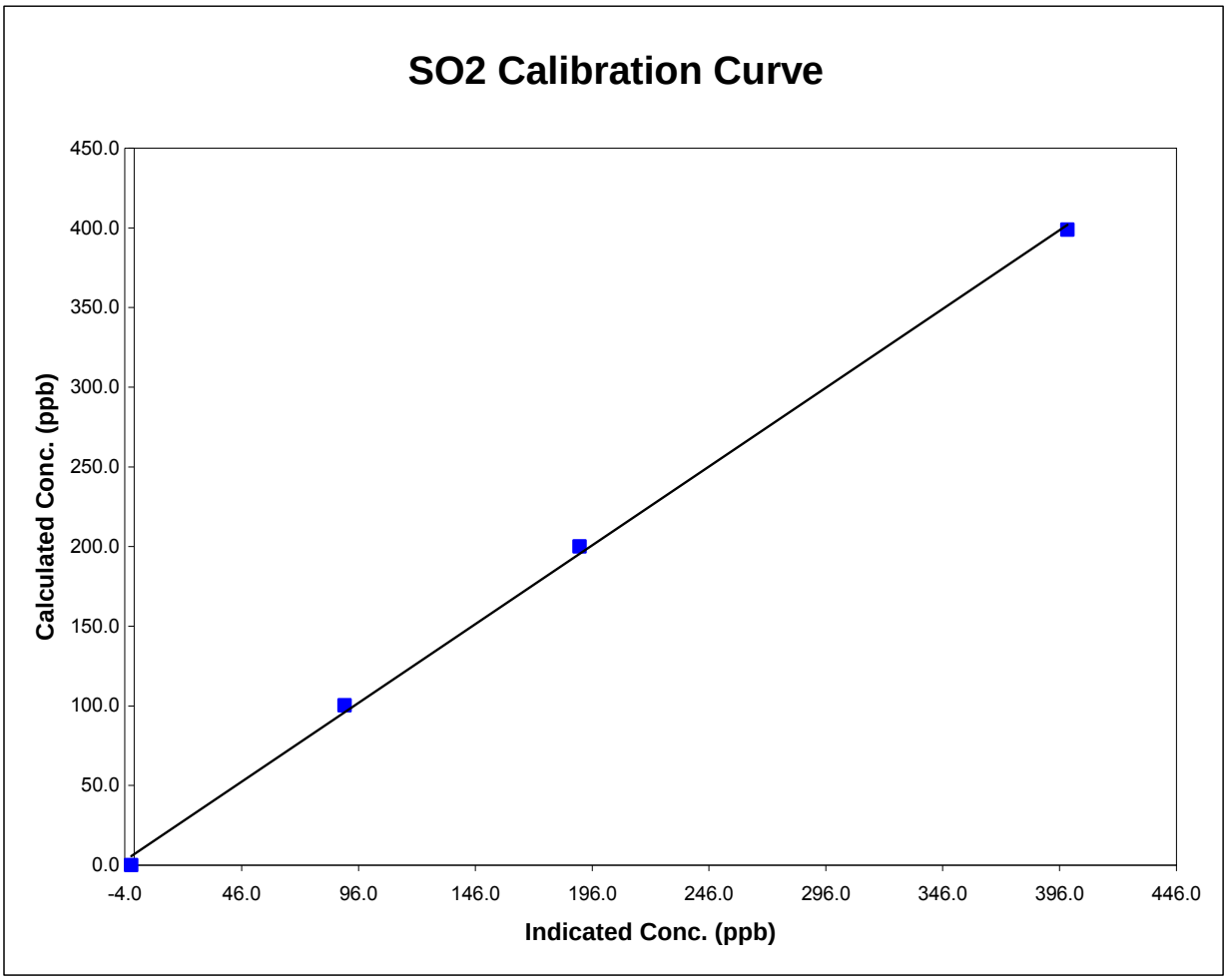
FOCUS AIR QUALITY MONITORING

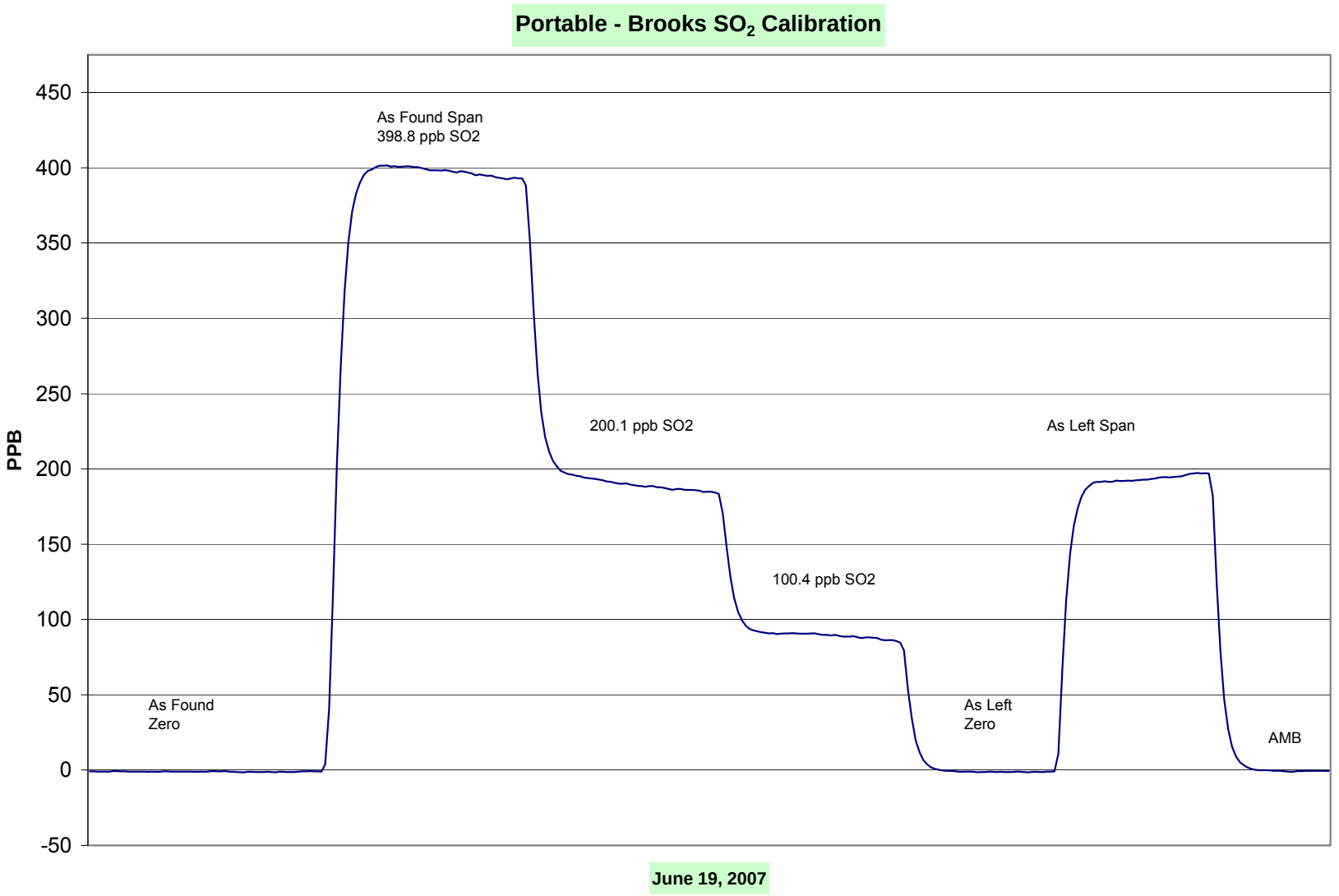
Station Information

Calibration Date	June 19, 2007	Previous Calibration	May 28, 2007
Station Number	110	Station Location	Rover - Brooks
Start Time (MST)	9:15	End Time (MST)	11:55
Analyzer make/model	TEI Model 43A	Analyzer serial #	NA

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.2	N/A		
398.8	399.4	0.9986	Correlation Coefficient	0.999033
200.1	190.6	1.0501		
100.4	90.1	1.1145	Slope	0.989299
			Intercept	6.939647




Portable - Brooks SO2 Calibration
PPB
450
400
350
300
250
200
150
100
50
0
-50
As Found Span
398.8 ppb SO2
200.1 ppb SO2
100.4 ppb SO2
As Left Span
As Found
Zero
As Left
Zero
AMB
June 19, 2007

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter: **H2S**

Air Monitoring Network: **PAS**

Station Information

Calibration Date	June 19, 2008	Previous Calibration	May 28, 2008
Station Number	110	Station Location	Brooks Rover
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	11:15	End Time (MST)	13:55
Barometric Pressure	27.8 inches Hg	Station Temperature	22.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	5.12 ppm	Cal Gas Expiry Date	15-Nov-05
Gas Cert Reference	BLM003489		
DACS make	Focus AP1000	DACS serial No.	45265
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.970332	Calculated slope	0.965845
Calculated intercept	-0.027800	Calculated intercept	-0.257886
Analyzer make	TEI Model 43A	Analyzer serial #	43A-25575-221

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
H2S zero pot	9.60		9.60	
H2S span pot	7.35		7.35	
Analyzer flow	0.900	LPM	0.900	LPM
UV Lamp voltage	933	V	924	V
Vacuum	21.5	in Hg	21.5	in Hg

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
3996	0.00	0.0	0.8	N/A
3996	69.89	88.0	91.8	0.9587
3996	39.95	50.7	52.1	0.9732
3996	9.96	12.7	13.1	0.9689
3996	0.00	0.0	0.8	As found zero
3996	69.89	88.0	91.8	As found span
			Average Correction Factor	0.9669

Calculated value of As Found Response: 88.25 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	1.3	ppm	1.2	ppm
Auto span	36.1	ppm	44.3	ppm

Notes: No adjustments were performed…

Calibration Performed By: Lenin Flores

Calibration Summary

Parameter	H2S
Air Monitoring Network	PAS

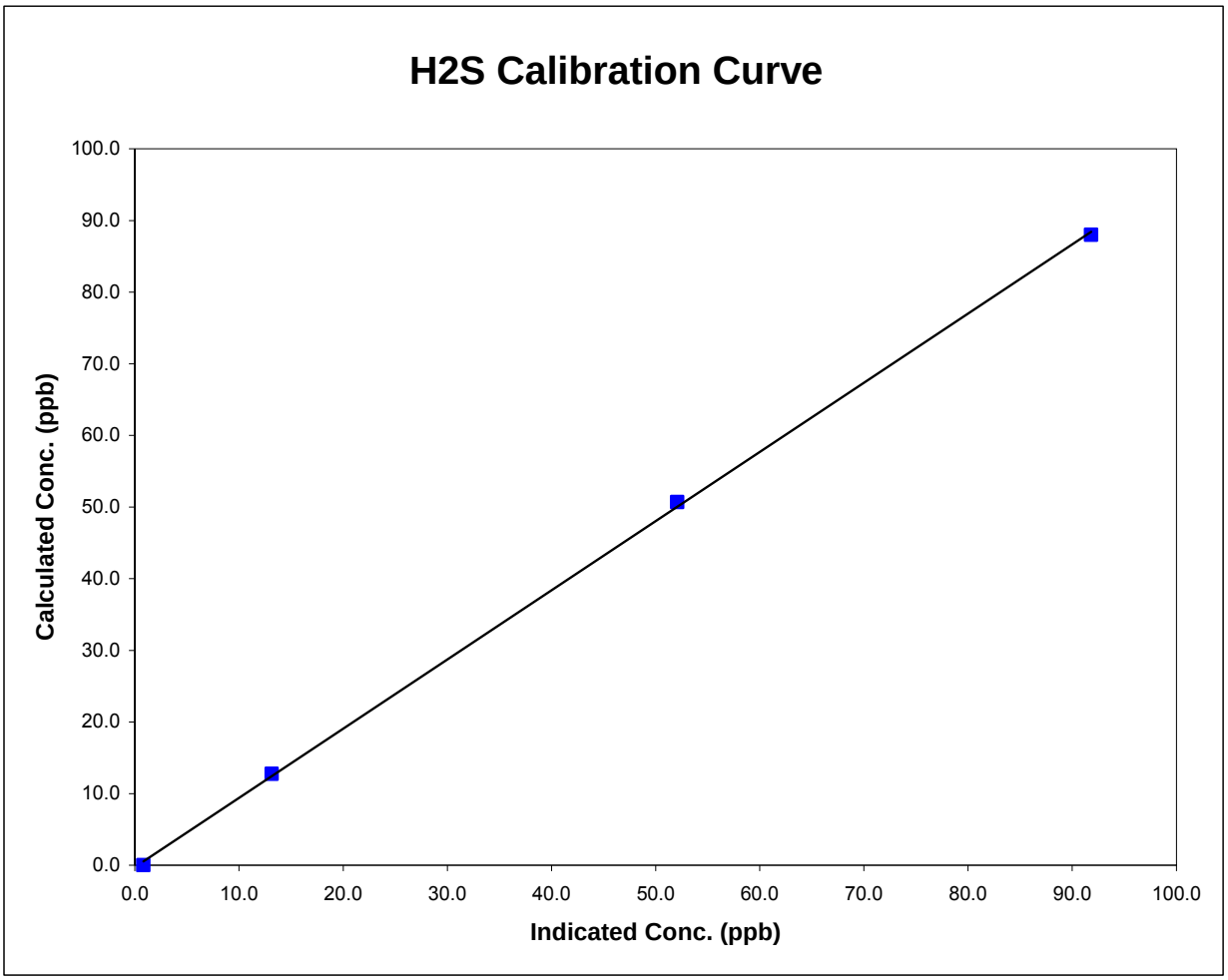
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 19, 2008	Previous Calibration	May 28, 2008
Station Number	110	Station Location	Brooks Rover
Start Time (MST)	11:15	End Time (MST)	13:55
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-25575-221

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.8	N/A		
88.0	91.8	0.9587	Correlation Coefficient	0.999799
50.7	52.1	0.9732		
12.7	13.1	0.9689	Slope	0.965845
			Intercept	-0.257886



Portable - Brooks H_2S Calibration