



Palliser Airshed Society

Ambient Air Monitoring Network Summary

March 2008

Prepared By:



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April 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 – March 2008

Enclosed is the PAS Ambient Monitoring Report for the month of **March 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 the month of March.
- ◆ Alberta Environment performed a follow-up audit on the NO_x and O₃ analyzers on March 11th, for further information regarding the audit contact Dr. Kevin McCullum, Program Manager.
- ◆ 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 NO₂ was 8.7 ppb
 - Monthly average concentrations for O₃ was 27.3 ppb
 - Monthly average concentrations for CO was 0.21 ppm
 - Monthly average concentrations for THC was 2.14 ppm
 - Monthly average concentrations for PM_{2.5} was 3.2 µg/m³
- ◆ The Air Quality Index (AQI) recorded 704 hours of Good readings for the month of March.

Portable-Brooks:

- ◆ All pollutant analyzers at the Portable Brooks Station were 100% operational for the month of March.
- ◆ The measured ambient air quality was within the Alberta Objectives and Federal guidelines with no exceedences recorded at the Portable - Brooks Station
- ◆ The following is a summary of the monthly averages recorded during sampling:
 - Monthly average concentrations of SO₂ was 0.4 ppb
 - Monthly average concentrations for H₂S was 0.2 ppb
 - Monthly average concentrations for O₃ was 30.0 ppb



Passive Monitoring – Twenty Sites throughout the PAS zone:

The passive sample analyses were performed by MAXXAM Analytics Inc. There were two duplicate sites sampled in the month of March: Site 7 and Site 17. The following are the ranges for March 2008 recorded by the twenty passive stations located throughout the PAS zone.

- ◆ Average concentrations for SO₂ passives ranged from 0.2 to 0.5 ppb with a mean of 0.3 ppb.
- ◆ Average concentrations for NO₂ passives ranged from 0.1 to 5.0 ppb with a mean of 1.7 ppb.
- ◆ Average concentrations for O₃ passives ranged from 28.0 to 48.8 ppb with a mean of 40.3 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

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



Continuous Monitoring

Ambient Air Monitoring Network

Crescent Heights Station

General Station Issues

Routine monthly calibrations were performed on March 28th (NO_x and), and March 31st (CO, O₃, and THC). An Alberta Environment follow-up audit was performed on March 11th.

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	No operational problems observed.
Carbon Monoxide	TEI	49C	ppm	No operational problems observed.
PM _{2.5}	R&P TEOM	1400ab	µg/m ³	A power bump on March 18 th resulted in one (1) hour of invalid data. Six (6) hours were flagged for excessive baseline drift. No other operational problems observed.
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 March 28th (SO₂ and H₂S) and March 31st (O₃).

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.



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: March 1, 2008 to April 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:	704
Number of 1-hr Fair Readings:	0
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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Mar-08	14	14	N	14	12	14	15	16	17	18	17	19	19	20	19	19	18	16	16	13	18	21	19	14
2-Mar-08	15	N	7	8	15	14	14	14	15	16	16	15	15	15	14	15	15	14	11	9	11	9	6	6
3-Mar-08	N	7	16	16	14	14	13	14	15	17	19	19	20	20	19	14	10	9	7	8	11	14	21	N
4-Mar-08	13	14	9	7	8	10	12	12	13	16	16	15	16	17	17	18	18	17	12	6	10	12	N	13
5-Mar-08	13	13	12	11	12	13	11	10	11	16	16	17	17	18	19	18	18	14	8	8	7	N	18	17
6-Mar-08	17	19	19	18	15	15	15	13	13	15	16	18	20	21	21	21	20	16	15	15	N	10	7	8
7-Mar-08	8	16	17	15	15	16	13	13	11	14	15	14	20	22	22	22	22	18	13	N	9	7	8	7
8-Mar-08	8	7	8	7	6	6	6	6	5	6	13	18	21	22	22	21	21	18	N	10	14	6	5	6
9-Mar-08	7	7	6	5	6	6	11	11	12	13	13	15	17	20	21	22	23	N	18	14	16	16	15	14
10-Mar-08	13	14	14	12	9	6	4	5	5	9	11	14	15	20	20	20	N	17	14	11	13	11	12	13
11-Mar-08	11	13	15	13	12	12	10	12	13	14	3	18	N	N	22	23	22	19	20	19	19	18	N	15
12-Mar-08	16	16	N	16	16	16	15	15	15	15	17	18	20	20	20	20	20	19	16	11	12	11	7	12
13-Mar-08	15	N	14	11	7	7	5	7	7	14	17	18	19	20	21	21	22	21	18	16	15	15	14	8
14-Mar-08	N	7	10	4	6	4	6	9	11	12	14	20	22	23	22	21	19	21	21	20	18	18	16	N
15-Mar-08	17	15	14	12	11	9	6	9	10	8	9	10	12	13	17	18	18	18	16	11	12	15	N	8
16-Mar-08	7	5	7	5	5	5	5	5	8	12	13	14	15	15	15	13	13	12	9	6	5	N	5	5
17-Mar-08	5	13	16	17	17	16	13	10	13	16	17	18	21	21	22	23	22	19	11	17	N	13	14	15
18-Mar-08	13	11	6	7	5	5	4	5	9	12	15	18	N	22	22	N	21	21	19	N	12	11	13	13
19-Mar-08	10	12	8	9	10	7	9	10	11	10	13	15	17	17	19	18	20	22	N	19	18	16	14	15
20-Mar-08	13	5	4	6	6	7	10	9	8	8	20	20	21	23	22	23	22	N	18	18	16	14	10	6
21-Mar-08	7	6	4	5	7	7	6	8	7	10	15	19	21	21	22	22	N	20	20	14	12	12	14	8
22-Mar-08	9	4	3	5	5	5	5	10	7	14	15	16	19	20	21	N	21	21	19	13	10	9	12	16
23-Mar-08	16	16	15	15	13	11	11	13	17	20	21	20	21	21	N	21	21	20	19	18	18	17	16	16
24-Mar-08	16	15	13	13	12	13	14	17	16	13	16	19	20	N	20	N	20	20	19	17	18	17	16	14
25-Mar-08	13	11	10	10	7	5	6	5	12	15	18	20	N	20	20	20	18	N	16	12	10	8	8	10
26-Mar-08	11	11	9	13	11	10	5	5	11	16	19	N	22	22	23	23	23	23	19	12	8	9	6	5
27-Mar-08	5	6	6	6	6	5	5	6	8	8	N	16	21	23	21	20	20	20	20	20	19	18	15	14
28-Mar-08	15	13	16	17	11	8	9	10	15	N	19	20	21	22	23	23	23	23	21	17	19	17	15	16
29-Mar-08	14	13	N	13	15	17	16	18	18	19	18	18	19	20	20	21	22	22	20	18	16	15	13	14
30-Mar-08	14	N	12	13	15	15	15	16	16	16	17	18	19	20	20	20	19	19	17	17	17	17	17	17
31-Mar-08	N	18	18	15	13	13	16	16	17	17	N	4	2	18	18	18	19	17	17	12	11	14	14	11



PAS - Crescent Heights Nitrogen Dioxide Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

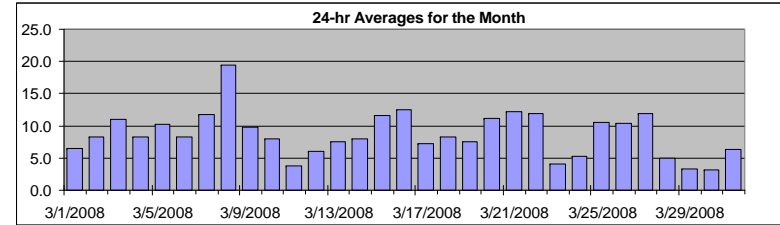
HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: March 1, 2008 to April 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:	43.4	ppb	8-Mar	20:00	21:00
Maximum 24-hr Average:	19.5	ppb	8-Mar		



AIC Time:	32 hrs	Operational Time:	704 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	34.0	25.8	10.9	5.5	3.5	2.0	1.4	8.7 ppb	5.5 ppb

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Mar-08	5	4	A	5	11	7	6	4	3	3	6	4	7	5	8	8	6	9	8	10	7	3	5	14	6.5	13.7	
2-Mar-08	7	A	21	14	5	3	3	3	3	3	2	3	4	4	5	4	4	6	10	14	9	13	23	27	8.2	26.8	
3-Mar-08	A	21	4	4	6	5	7	9	7	5	4	3	4	4	5	14	20	23	29	34	17	11	4	A	11.0	34.4	
4-Mar-08	18	9	11	8	6	5	6	6	6	4	4	4	3	4	4	4	6	7	16	27	14	10	A	7	8.3	26.5	
5-Mar-08	5	5	7	8	9	9	9	11	10	6	6	6	5	5	6	7	6	13	34	35	20	A	6	5	10.2	35.3	
6-Mar-08	5	3	3	3	4	3	3	5	6	4	3	2	1	2	2	3	5	11	7	9	A	43	30	33	8.2	42.7	
7-Mar-08	21	6	3	4	5	3	9	7	11	6	7	11	6	4	5	4	4	9	13	A	39	30	33	30	11.7	39.4	
8-Mar-08	32	28	33	30	26	27	26	21	19	21	8	5	4	3	4	5	4	11	A	27	43	25	21	24	19.5	43.4	
9-Mar-08	31	28	24	16	14	18	9	9	5	3	4	3	3	3	3	3	3	A	9	11	9	8	7	5	9.8	31.3	
10-Mar-08	7	3	3	5	11	13	17	22	18	10	7	5	5	3	5	3	A	8	10	9	5	5	7	4	8.0	21.5	
11-Mar-08	7	4	2	3	6	6	10	C	C	C	3	3	3	3	2	3	3	3	3	2	3	3	3	3	3.8	10.4	
12-Mar-08	3	2	A	4	3	4	5	7	4	6	5	2	2	3	3	4	4	3	6	15	13	11	18	12	6.1	18.3	
13-Mar-08	5	A	6	8	12	14	18	29	16	9	5	4	4	5	3	3	2	3	4	4	3	2	3	13	7.5	28.7	
14-Mar-08	A	12	7	17	24	19	26	25	5	3	3	2	4	4	4	4	7	2	1	1	1	1	2	A	8.0	25.7	
15-Mar-08	4	3	3	4	4	9	14	9	9	14	12	11	11	11	6	4	3	5	7	18	38	36	A	32	11.5	37.6	
16-Mar-08	29	22	11	21	22	23	21	17	5	3	3	2	2	2	2	4	6	6	11	17	22	A	22	15	12.4	29.0	
17-Mar-08	22	7	2	2	2	4	9	14	9	4	6	5	2	3	3	1	3	8	24	9	A	11	10	6	7.2	24.3	
18-Mar-08	8	9	16	12	15	15	13	13	6	5	4	4	2	2	3	3	5	5	8	A	15	12	10	6	8.3	15.5	
19-Mar-08	11	6	8	6	5	11	11	12	12	10	8	8	6	9	7	9	7	5	A	7	3	3	5	3	7.5	11.9	
20-Mar-08	5	17	18	25	24	27	26	23	18	11	6	6	6	3	5	4	3	A	5	4	3	3	6	9	11.1	26.8	
21-Mar-08	10	25	17	21	31	28	25	15	8	4	2	2	2	2	2	4	A	8	6	17	17	13	7	16	12.2	31.2	
22-Mar-08	8	15	13	21	20	22	21	20	13	3	4	5	3	3	2	A	6	5	9	18	21	20	16	4	11.8	22.3	
23-Mar-08	3	3	4	5	7	10	11	8	4	3	3	3	3	2	A	4	3	4	4	4	2	2	2	2	4.1	10.6	
24-Mar-08	2	1	9	9	6	7	9	8	4	6	7	5	4	A	5	3	2	2	4	5	5	5	6	7	5.3	9.5	
25-Mar-08	7	8	9	11	17	23	23	20	8	5	4	3	A	5	5	4	9	4	10	15	17	16	13	8	10.6	23.1	
26-Mar-08	5	7	14	6	11	13	21	20	10	4	2	A	4	4	3	3	2	2	9	21	27	15	18	20	10.5	26.7	
27-Mar-08	23	25	26	25	26	23	21	18	20	18	A	5	2	1	3	6	5	4	3	2	4	4	5	5	11.9	26.2	
28-Mar-08	4	3	3	4	5	9	9	8	5	A	5	4	4	3	3	C	C	C	C	C	3	6	7	5	5.0	9.1	
29-Mar-08	5	6	A	5	3	2	4	4	3	2	2	2	2	2	2	2	1	2	3	3	6	6	5	3	3.3	6.3	
30-Mar-08	3	A	6	5	3	2	2	2	2	2	2	2	2	2	2	2	5	4	6	4	4	3	3	2	3.2	6.3	
31-Mar-08	A	5	4	8	8	10	5	4	2	3	5	3	2	4	5	5	4	9	8	14	13	7	7	13	6.4	14.3	
Hourly Avg	10.5	10.3	10.3	10.3	11.4	12.1	12.9	12.3	8.4	6.2	4.7	4.4	3.8	3.5	3.9	4.4	4.9	6.4	9.5	12.7	13.2	11.4	10.3	11.5			
Hourly Max	32.4	27.7	33.3	30.3	31.2	28.0	26.1	28.7	20.2	21.1	12.2	11.5	11.5	10.6	8.3	13.8	20.5	23.4	34.0	35.3	43.4	42.7	33.4	33.5			

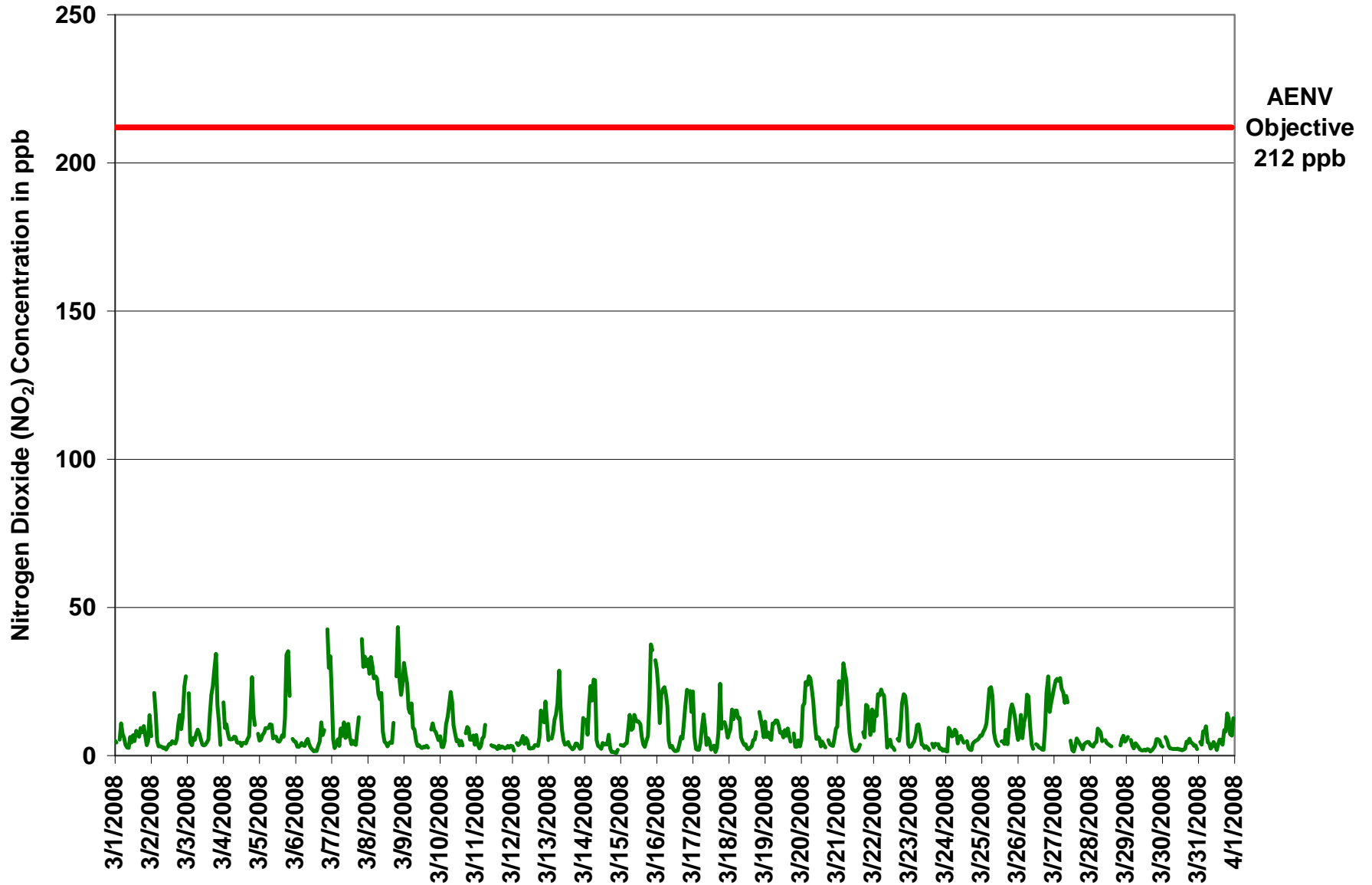


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights
Station Owner: PAS

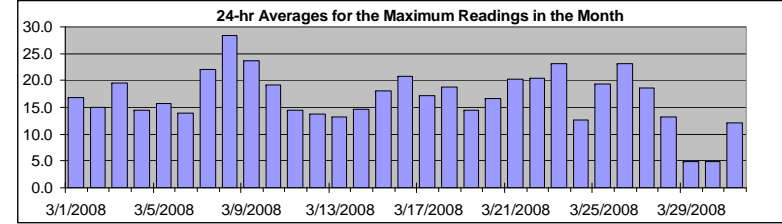
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	68.6	ppb	16-Mar	3:00 4:00
Maximum 24-hr Value:	28.4	ppb	8-Mar	



AIC Time:	32 hrs	Operational Time:	704 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	54.2	41.6	25.7	12.3	6.5	3.3	2.7	16.9 ppb	12.3 ppb

Status Flag Characters

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

Day Mountain Standard Time

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-Mar-08	7	7	A	7	26	10	29	21	4	4	30	9	11	7	18	24	23	45	15	14	15	7	17	37	16.8	45.0
2-Mar-08	10	A	31	21	9	5	5	4	5	6	3	5	6	7	7	7	37	7	13	38	11	43	29	37	15.0	42.7
3-Mar-08	A	28	11	6	9	7	11	11	11	8	21	12	16	8	8	51	33	31	44	50	25	19	8	A	19.5	51.1
4-Mar-08	36	13	16	12	9	7	7	10	9	5	6	9	4	24	12	10	8	11	26	32	28	27	A	10	14.4	36.5
5-Mar-08	6	7	14	13	31	21	12	14	15	8	11	8	6	6	8	11	9	27	43	46	32	A	9	6	15.8	45.8
6-Mar-08	8	6	5	4	6	5	6	8	7	6	4	3	2	3	3	5	15	37	13	12	A	51	44	63	13.9	63.3
7-Mar-08	35	40	3	22	25	8	30	27	34	10	8	15	12	7	11	6	6	14	22	A	43	43	46	41	22.1	46.0
8-Mar-08	41	37	38	34	32	29	39	29	27	25	15	7	8	4	6	34	7	38	A	49	56	33	30	37	28.4	56.1
9-Mar-08	36	38	36	23	36	34	20	23	29	5	23	5	4	23	22	36	4	A	12	42	12	49	11	19	23.6	48.7
10-Mar-08	36	23	5	8	23	25	31	36	26	15	15	7	30	4	54	19	A	9	12	16	6	10	24	5	19.1	54.3
11-Mar-08	29	30	4	26	32	20	56	C	C	C	17	11	5	5	4	5	3	6	7	7	6	5	11	13	14.5	56.5
12-Mar-08	13	3	A	14	11	8	11	12	10	21	15	4	5	14	7	6	5	7	16	23	31	24	26	27	13.7	30.6
13-Mar-08	9	A	7	12	16	19	25	44	41	13	8	6	7	17	7	4	3	4	6	6	5	3	6	36	13.2	44.2
14-Mar-08	A	16	13	29	28	37	43	39	10	5	5	6	23	20	8	6	13	5	3	3	3	2	4	A	14.6	43.3
15-Mar-08	7	6	5	9	8	21	19	16	15	25	16	20	23	13	10	5	4	11	11	34	44	55	A	41	18.1	54.6
16-Mar-08	35	32	16	69	37	28	26	23	13	6	6	3	3	3	4	19	10	9	18	43	30	A	24	21	20.7	68.6
17-Mar-08	30	24	10	3	14	12	25	32	29	10	9	9	5	12	7	3	5	23	40	17	A	18	35	24	17.2	40.3
18-Mar-08	13	16	24	30	20	22	25	37	9	18	18	18	5	16	35	6	11	11	18	A	29	22	22	8	18.8	37.2
19-Mar-08	36	14	14	9	7	18	14	18	50	28	12	11	11	10	22	9	7	A	11	5	4	8	4	4	14.5	49.9
20-Mar-08	23	28	29	29	26	34	31	26	24	22	8	10	8	5	7	5	4	A	9	6	5	6	20	16	16.6	34.3
21-Mar-08	15	34	25	31	45	46	27	20	15	6	4	3	3	3	4	36	A	19	8	33	22	21	12	31	20.2	45.6
22-Mar-08	36	32	21	25	23	25	24	27	19	4	9	27	6	6	3	A	8	7	38	23	31	39	31	8	20.5	38.6
23-Mar-08	16	18	38	62	20	26	25	32	5	56	33	9	20	3	A	15	4	28	28	42	4	24	2	20	23.0	62.3
24-Mar-08	3	3	43	28	10	28	22	31	7	8	9	10	9	A	7	5	3	4	14	9	9	8	10	14	12.7	42.7
25-Mar-08	9	13	12	14	39	34	35	26	11	7	5	5	A	7	13	7	34	7	23	23	45	47	17	12	19.4	47.4
26-Mar-08	8	34	37	12	35	49	36	34	26	5	3	A	13	19	11	21	3	4	18	40	42	27	30	25	23.1	49.3
27-Mar-08	29	33	32	32	28	29	23	21	34	22	A	7	3	3	5	38	25	7	7	5	10	7	6	21	18.6	37.7
28-Mar-08	5	21	5	40	18	25	35	10	7	A	7	6	9	6	5	C	C	C	C	C	5	8	18	6	13.2	39.9
29-Mar-08	7	9	A	8	4	4	6	5	4	3	3	3	3	3	4	3	2	3	4	6	10	8	7	5	4.9	9.6
30-Mar-08	4	A	8	7	5	4	3	3	3	3	4	3	3	2	4	6	7	7	9	8	6	6	5	4	5.0	9.0
31-Mar-08	A	7	4	12	13	14	12	7	3	5	7	13	4	6	19	8	8	19	11	26	18	11	13	37	12.2	36.6
Hourly Avg	19.4	20.5	18.0	21.0	20.9	21.1	23.0	21.6	16.7	12.4	11.2	8.8	8.9	8.9	10.8	14.5	10.8	14.5	17.5	23.7	20.3	21.6	18.2	21.6		
Hourly Max	41.2	40.3	42.7	68.6	45.5	49.3	56.5	44.2	49.9	56.2	32.9	26.6	30.1	23.5	54.3	51.1	36.9	45.0	44.5	50.0	56.1	54.6	46.0	63.3		

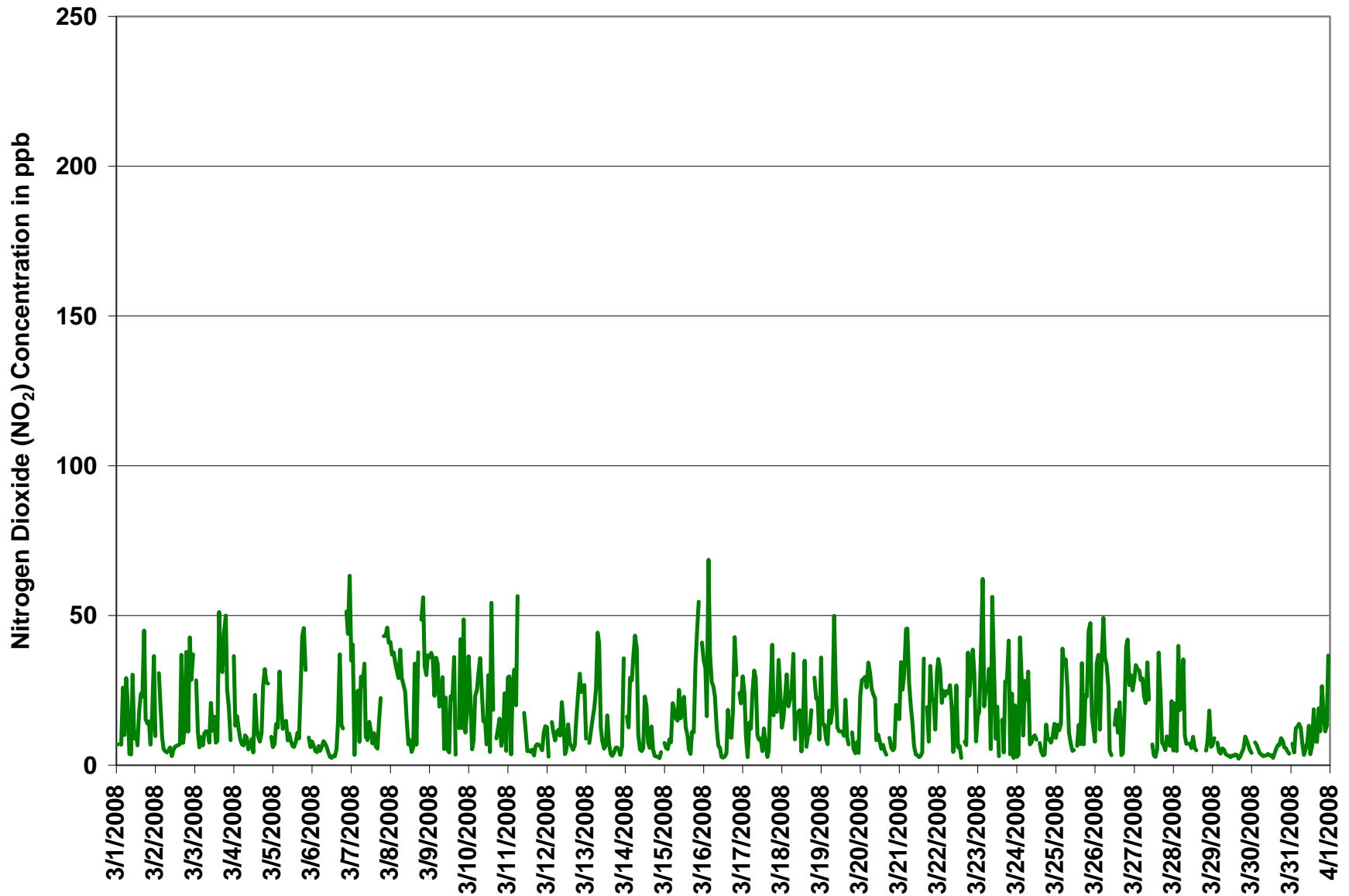
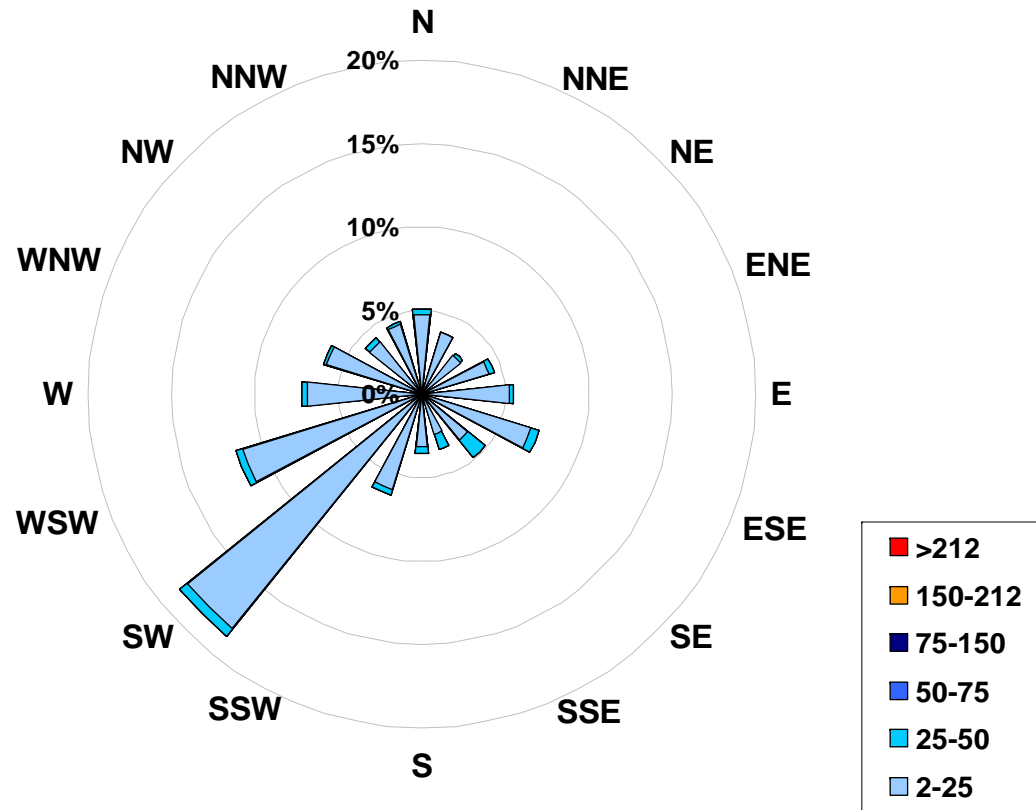


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of NO ₂ in ppb			Frequency (hrs)
Range			
2.0	< 25		681
25	to 50		20
50	to 75		3
75	to 150		0
150	to 212		0
	> 212		0
Total Non-Zero Values			704



PAS - Crescent Heights Nitric Oxide Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

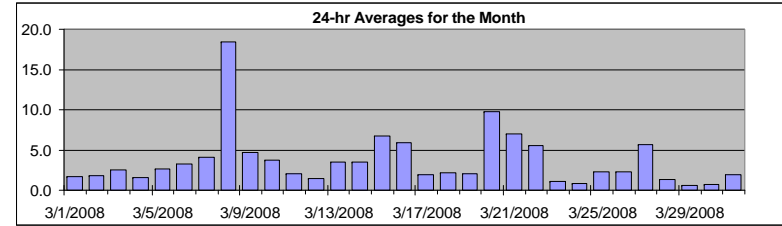
Nitric Oxide (NO)

Monitoring Dates: March 1, 2008 to April 1, 2008

Guideline Limit:
Summary

1-hr	na	ppb	24-hr	na	ppb
------	----	-----	-------	----	-----

Maximum 1-hr Average:	60.1	ppb	20-Mar	5:00	6:00
Maximum 24-hr Average:	18.4	ppb	8-Mar		



AIC Time:	32 hrs	Operational Time:	704 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	43.0	16.2	2.8	1.4	0.7	0.2	0.0	3.7 ppb	1.4 ppb

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-Mar-08	1	1	A	1	2	1	2	2	1	1	5	2	2	1	2	2	1	4	1	1	1	1	1	4	1.7	4.6	
2-Mar-08	1	A	1	1	1	1	1	1	1	1	2	3	2	2	3	2	3	1	0	3	0	3	2	6	1.9	6.3	
3-Mar-08	A	3	0	0	0	0	1	1	2	2	2	2	1	1	1	6	5	3	9	12	2	1	1	A	2.6	11.5	
4-Mar-08	1	1	2	2	2	1	1	2	2	1	2	2	2	2	2	2	2	1	1	2	1	2	A	A	0	1.6	2.5
5-Mar-08	0	0	1	1	3	1	1	3	3	1	2	2	2	2	2	2	2	2	8	16	5	A	1	1	2.6	15.5	
6-Mar-08	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	2	4	1	1	A	28	10	16	3.2	28.1	
7-Mar-08	3	2	0	1	2	0	6	2	6	3	4	5	2	2	2	2	1	2	2	A	10	8	20	11	4.1	19.9	
8-Mar-08	18	13	41	39	31	43	58	25	33	33	6	2	2	1	2	2	1	3	A	7	49	2	4	7	18.4	58.5	
9-Mar-08	23	20	14	3	3	7	1	4	4	2	4	2	2	2	2	3	1	A	1	6	1	3	0	1	4.7	22.9	
10-Mar-08	5	2	1	1	3	4	8	16	17	6	5	3	4	2	3	2	A	1	1	1	1	1	3	1	3.8	16.8	
11-Mar-08	5	5	0	1	3	2	5	C	C	C	3	2	2	1	2	2	1	1	1	1	1	1	1	1	2.0	5.5	
12-Mar-08	1	1	A	1	1	1	1	2	1	3	2	1	2	2	1	1	1	1	1	2	3	2	1	1	1.4	2.8	
13-Mar-08	0	A	1	1	1	3	4	34	13	5	2	2	2	2	1	1	1	0	0	0	0	0	0	7	3.5	34.0	
14-Mar-08	A	0	0	1	8	4	14	35	2	1	1	1	2	1	1	1	2	1	0	0	0	0	0	A	3.5	34.8	
15-Mar-08	0	0	0	0	0	1	0	1	2	10	9	7	5	4	1	1	0	0	0	1	18	45	A	50	6.8	49.7	
16-Mar-08	37	16	1	13	11	10	11	13	1	1	1	1	1	0	1	3	3	1	1	3	6	A	2	0	5.9	37.0	
17-Mar-08	4	0	0	0	1	1	4	7	6	2	3	2	1	1	1	1	1	1	2	1	A	1	3	1	2.0	6.9	
18-Mar-08	1	0	1	3	1	2	5	11	4	4	3	3	1	1	2	1	1	1	1	A	1	1	1	1	2.1	11.0	
19-Mar-08	4	1	1	1	1	1	2	2	6	6	3	3	2	4	3	3	1	1	A	0	0	0	0	0	2.1	6.3	
20-Mar-08	0	5	3	10	23	60	59	26	19	9	2	2	2	1	1	1	0	A	0	0	0	0	0	1	9.7	60.1	
21-Mar-08	0	19	4	5	43	38	27	10	5	2	1	0	0	0	1	2	A	1	0	0	1	0	0	1	7.0	43.1	
22-Mar-08	3	7	2	6	5	16	20	33	13	1	2	3	1	1	0	A	1	0	1	2	2	3	3	0	5.5	33.1	
23-Mar-08	1	1	2	2	1	2	1	3	1	2	0	1	1	0	A	1	0	2	1	3	0	1	0	1	1.1	2.7	
24-Mar-08	0	0	5	2	0	1	1	2	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0.8	5.2	
25-Mar-08	0	0	0	0	3	5	7	10	4	2	2	1	A	1	1	1	3	1	1	0	8	2	0	0	2.3	10.2	
26-Mar-08	0	4	3	0	2	7	7	10	7	1	1	A	1	1	1	1	0	0	0	1	2	1	0	1	2.3	10.4	
27-Mar-08	3	4	4	7	12	8	12	17	32	20	A	2	1	1	1	3	1	1	0	0	1	1	0	2	5.7	31.6	
28-Mar-08	0	1	1	4	1	3	3	2	1	A	2	2	2	1	1	C	C	C	C	C	1	0	0	0	1.4	3.7	
29-Mar-08	0	1	A	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.6	1.1	
30-Mar-08	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	0.7	1.8	
31-Mar-08	A	1	1	3	3	2	1	2	1	2	4	4	2	3	4	4	2	2	1	0	0	0	0	1	1.9	4.4	
Hourly Avg	4.0	3.9	3.3	3.5	5.4	7.3	8.6	9.3	6.3	4.4	2.5	2.0	1.6	1.5	1.5	1.8	1.4	1.3	1.3	2.3	4.0	3.7	2.0	4.0			
Hourly Max	37.0	19.6	41.2	39.1	43.1	60.1	59.5	34.8	33.5	33.0	8.8	6.8	5.0	4.0	3.9	5.9	5.3	4.3	8.8	15.5	48.7	44.8	19.9	49.7			



PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

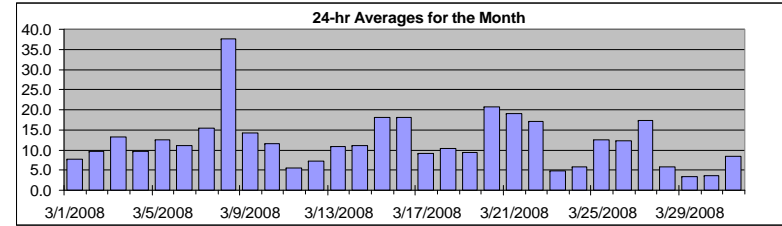
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: March 1, 2008 to April 1, 2008

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

Maximum 1-hr Average:	91.6	ppb	8-Mar	20:00 21:00
Maximum 24-hr Average:	37.5	ppb	8-Mar	



AIC Time:	32 hrs	Operational Time:	704 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	73.8	41.2	13.3	6.7	4.2	2.2	1.5	12.1 ppb	6.7 ppb

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Mar-08	5	5	A	6	13	8	7	5	3	4	10	5	9	6	10	10	8	13	9	11	8	4	5	18	7.8	17.6	
2-Mar-08	7	A	22	15	5	4	4	4	3	4	3	5	6	6	8	6	6	6	11	17	9	15	25	33	9.7	32.7	
3-Mar-08	A	24	4	4	6	5	8	10	9	7	6	5	5	6	7	20	25	27	37	46	18	13	4	A	13.4	45.7	
4-Mar-08	19	10	12	10	8	6	6	8	8	5	6	6	5	6	7	6	7	7	17	28	15	11	A	7	9.6	27.8	
5-Mar-08	5	5	7	8	12	10	10	13	13	7	8	8	6	6	7	9	8	15	42	50	24	A	6	6	12.4	50.4	
6-Mar-08	5	3	3	3	4	4	3	5	7	5	4	3	2	2	2	4	7	15	7	9	A	70	40	49	11.1	70.4	
7-Mar-08	24	7	3	4	7	3	15	8	17	9	10	15	9	5	7	5	4	10	14	A	49	38	53	41	15.5	52.9	
8-Mar-08	50	40	74	69	57	70	84	46	52	54	14	7	6	4	5	7	5	13	A	34	92	27	24	30	37.5	91.6	
9-Mar-08	54	47	38	18	17	25	10	12	8	5	8	4	4	5	5	6	3	A	9	16	9	11	7	6	14.2	53.8	
10-Mar-08	11	4	3	5	13	17	25	37	34	16	12	7	9	5	7	5	A	8	10	10	6	6	10	4	11.5	37.3	
11-Mar-08	12	9	3	4	9	8	15	C	C	C	6	5	5	4	3	4	3	4	4	3	3	4	3	4	5.5	15.4	
12-Mar-08	4	2	A	5	4	4	6	8	5	8	7	4	4	4	4	5	4	4	7	17	16	13	19	13	7.3	19.1	
13-Mar-08	5	A	6	8	13	17	21	62	29	13	7	5	5	7	4	3	2	3	4	4	3	2	2	19	10.8	62.4	
14-Mar-08	A	12	7	18	32	22	39	60	7	4	4	3	6	5	5	5	8	3	3	1	1	1	2	A	11.2	59.9	
15-Mar-08	4	4	3	4	4	9	14	10	11	23	21	18	16	14	7	4	3	5	6	18	55	80	A	82	18.1	81.7	
16-Mar-08	66	38	12	33	33	33	32	29	6	3	4	3	2	2	2	7	10	7	11	19	28	A	24	15	18.1	65.6	
17-Mar-08	26	7	3	2	3	5	13	21	15	6	9	7	3	4	5	2	3	9	27	10	A	12	13	7	9.1	26.6	
18-Mar-08	8	10	17	15	16	17	18	24	10	8	6	6	3	3	4	4	6	6	8	A	16	13	10	7	10.2	23.6	
19-Mar-08	15	7	8	6	6	12	13	14	18	16	11	10	8	12	10	12	8	5	A	8	3	3	5	3	9.3	17.8	
20-Mar-08	5	22	21	34	46	87	85	49	37	20	7	8	7	3	6	4	3	A	5	4	3	3	6	10	20.6	86.5	
21-Mar-08	10	43	20	25	74	66	52	25	13	6	2	2	2	2	3	5	A	8	6	17	18	13	7	16	19.0	73.9	
22-Mar-08	11	22	15	26	25	38	41	53	26	3	7	8	4	3	2	A	6	5	10	20	22	23	18	4	17.0	53.2	
23-Mar-08	3	3	6	7	7	12	11	10	4	5	2	4	3	2	A	4	3	5	4	6	2	3	1	3	4.9	11.9	
24-Mar-08	1	1	14	11	6	8	10	10	4	8	8	6	5	A	5	3	2	2	4	4	5	5	5	7	5.8	14.3	
25-Mar-08	7	8	9	11	20	27	30	30	11	7	5	4	A	5	5	4	12	4	11	16	25	17	13	8	12.6	30.0	
26-Mar-08	5	11	17	6	13	20	27	30	17	5	2	A	4	4	3	3	2	2	9	22	29	15	18	21	12.4	30.1	
27-Mar-08	25	29	30	32	37	31	32	35	51	38	A	7	2	2	4	8	6	4	3	2	4	5	5	6	17.3	51.4	
28-Mar-08	4	4	3	8	5	12	11	10	6	A	7	5	5	4	4	C	C	C	C	C	4	5	5	3	5.8	11.5	
29-Mar-08	4	7	A	5	3	3	5	4	3	3	2	2	3	2	3	3	1	2	2	3	6	6	5	3	3.5	7.1	
30-Mar-08	3	A	6	5	3	2	2	2	3	2	3	2	3	2	2	3	6	5	6	5	4	4	4	3	3.6	6.3	
31-Mar-08	A	5	4	11	11	12	6	5	4	5	9	7	4	7	10	9	6	12	9	15	13	8	7	14	8.4	15.0	
Hourly Avg	14.2	13.9	13.2	13.5	16.6	19.1	21.2	21.3	14.5	10.3	6.9	6.1	5.1	4.7	5.2	5.9	6.0	7.4	10.6	14.8	16.9	14.8	12.0	15.2			
Hourly Max	65.6	46.9	74.0	69.0	73.9	86.5	85.2	62.4	52.3	53.8	20.8	18.2	16.4	14.5	9.7	19.6	25.4	26.8	41.7	50.4	91.6	80.1	52.9	81.7			

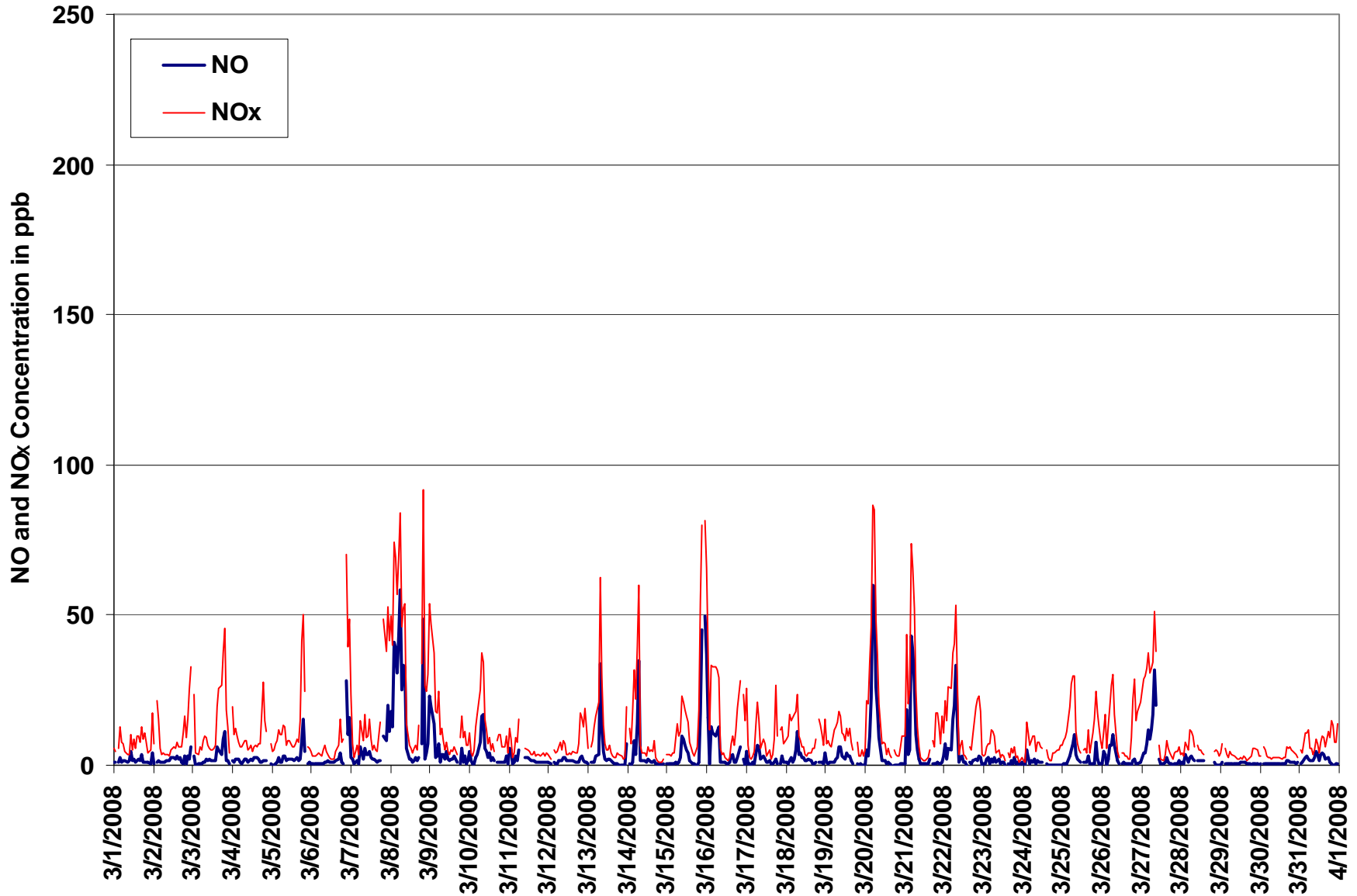


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

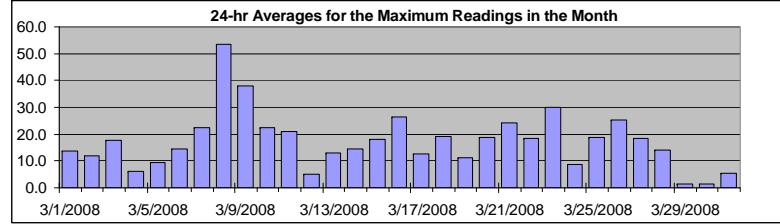
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	296.8	ppb	8-Mar	6:00 7:00
Maximum 24-hr Value:	53.3	ppb	8-Mar	



AIC Time:	32 hrs	Operational Time:	704 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	127.1	76.3	22.1	3.8	1.9	1.0	0.8	17.3 ppb	3.8 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-Mar-08	2	2	A	2	20	2	35	39	2	2	46	3	4	3	4	16	11	74	5	4	3	3	6	27	13.7	74.0	
2-Mar-08	2	A	4	9	3	2	2	2	3	4	3	5	5	5	5	4	69	3	2	64	2	60	6	15	12.1	68.9	
3-Mar-08	A	8	2	2	2	1	3	3	8	2	33	45	7	4	4	54	18	12	101	68	5	4	2	A	17.7	100.9	
4-Mar-08	7	4	5	4	4	3	2	12	5	2	6	7	3	9	10	7	3	3	4	4	26	12	A	2	6.2	26.0	
5-Mar-08	1	1	19	4	22	3	3	7	5	3	4	7	3	3	4	4	3	4	41	46	27	A	1	2	9.4	46.1	
6-Mar-08	1	1	1	1	2	2	1	2	2	2	3	2	2	2	2	3	5	101	2	2	A	65	28	101	14.4	100.8	
7-Mar-08	32	66	1	22	18	1	87	26	50	6	5	6	5	4	6	4	3	7	13	A	17	38	61	35	22.2	87.1	
8-Mar-08	37	80	103	52	44	51	297	77	92	49	14	4	4	3	4	39	3	17	A	53	155	6	13	29	53.3	296.8	
9-Mar-08	57	55	72	11	36	54	7	27	70	4	105	4	3	24	44	70	1	A	1	82	2	107	1	38	38.1	106.6	
10-Mar-08	54	49	3	3	24	23	52	80	30	28	14	5	46	3	36	14	A	2	2	3	1	3	37	1	22.4	80.2	
11-Mar-08	73	140	1	34	57	16	57	C	C	C	18	15	3	2	2	3	2	2	2	2	2	2	3	3	3	21.0	140.2
12-Mar-08	3	2	A	4	2	3	3	3	4	11	6	2	4	13	7	2	2	3	5	14	7	10	2	2	4.9	14.2	
13-Mar-08	1	A	2	2	3	7	14	104	51	9	4	3	4	12	5	2	1	1	1	1	1	2	1	67	13.0	104.4	
14-Mar-08	A	2	2	8	20	47	77	91	4	2	3	2	19	26	2	2	3	1	1	2	2	2	A	1	14.6	91.0	
15-Mar-08	2	2	2	2	2	5	2	6	7	30	13	26	27	6	3	2	1	2	1	11	55	123	A	89	18.1	123.2	
16-Mar-08	69	52	5	82	142	30	26	40	4	3	3	2	2	2	3	24	7	3	18	67	23	A	4	1	26.6	142.2	
17-Mar-08	25	4	32	3	37	4	19	37	41	10	6	4	3	5	5	2	1	3	7	5	A	2	27	10	12.8	40.7	
18-Mar-08	2	2	3	68	3	4	54	127	5	46	20	29	3	12	37	4	3	1	2	A	3	3	3	3	19.0	127.2	
19-Mar-08	43	4	3	2	3	3	4	8	77	39	19	5	5	6	7	19	2	1	A	1	1	2	1	2	11.2	76.8	
20-Mar-08	2	20	29	24	38	88	82	45	32	38	4	4	4	3	2	1	1	A	1	1	1	1	4	5	18.7	87.7	
21-Mar-08	4	81	10	34	110	177	38	14	13	4	2	2	1	1	2	53	A	4	1	2	3	2	2	3	24.4	176.6	
22-Mar-08	41	25	12	12	11	28	33	66	25	3	7	41	3	2	1	A	2	1	23	17	4	49	17	1	18.5	66.3	
23-Mar-08	24	22	71	98	5	19	7	50	3	70	12	4	27	2	A	14	1	50	28	101	1	44	1	34	29.9	101.4	
24-Mar-08	1	2	56	29	2	38	15	32	3	3	2	2	3	A	1	1	1	1	1	1	1	1	1	1	8.6	55.8	
25-Mar-08	1	1	1	1	68	44	28	19	5	3	2	2	A	2	3	2	36	2	3	10	129	66	1	1	18.7	128.5	
26-Mar-08	1	158	47	1	26	108	73	35	44	2	1	A	9	20	12	11	1	2	2	14	11	3	2	3	25.5	157.9	
27-Mar-08	5	23	15	35	21	35	15	22	85	34	A	3	1	1	2	49	12	2	1	1	2	1	1	58	18.5	84.9	
28-Mar-08	1	27	1	94	15	27	56	3	2	A	2	3	11	3	2	C	C	C	C	C	3	3	0	0	14.0	93.6	
29-Mar-08	1	2	A	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	2	1	1	1	1	1.5	2.4	
30-Mar-08	1	A	1	1	1	2	1	1	1	1	1	2	2	1	1	2	4	3	2	2	1	2	1	2	1.6	3.7	
31-Mar-08	A	2	1	6	8	5	9	3	3	5	7	16	3	6	17	6	5	7	2	2	1	1	2	4	5.3	17.1	
Hourly Avg	17.5	29.9	17.9	21.0	24.2	26.8	35.7	32.8	22.6	14.4	12.3	8.5	7.2	6.2	7.9	14.3	7.2	11.1	9.8	20.7	16.9	21.3	8.0	18.7			
Hourly Max	72.9	157.9	103.5	97.9	142.2	176.6	296.8	127.2	92.0	69.7	104.8	45.3	45.8	26.4	44.4	69.8	68.9	100.7	100.9	101.4	154.6	123.2	60.6	100.8			



Station: Crescent Heights
 Station Owner: PAS

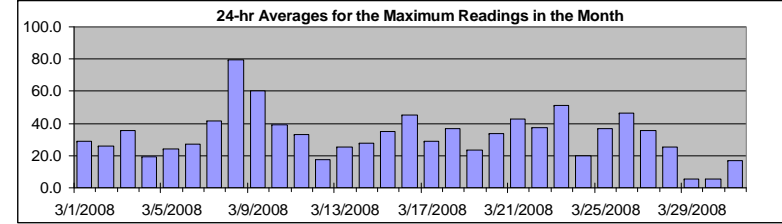
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	329.5	ppb	8-Mar	6:00 7:00
Maximum 24-hr Value:	79.7	ppb	8-Mar	



AIC Time:	32 hrs	Operational Time:	704 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	162.9	112.8	45.8	14.7	7.6	3.8	2.8	32.7 ppb	14.7 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Mar-08	8	7	A	7	44	11	64	57	5	5	75	11	14	8	20	36	32	119	19	15	8	23	61	28.7	119.1	
2-Mar-08	10	A	34	25	11	6	6	5	6	7	6	8	10	11	11	11	105	8	14	98	11	103	33	51	25.7	105.3
3-Mar-08	A	35	11	5	9	6	14	14	14	9	54	56	22	9	10	102	50	43	144	111	28	21	10	A	35.4	144.5
4-Mar-08	43	17	21	15	13	8	8	21	13	7	13	15	7	27	23	16	9	12	29	33	47	39	A	11	19.4	46.6
5-Mar-08	6	7	33	17	53	23	14	21	19	10	14	12	9	8	9	13	12	29	84	90	58	A	10	7	24.1	89.7
6-Mar-08	8	7	5	5	6	5	6	9	8	7	6	4	3	4	4	7	19	129	15	13	A	116	72	163	27.0	162.9
7-Mar-08	61	90	4	44	40	9	113	52	81	13	13	21	17	10	13	7	7	16	36	A	58	77	105	75	41.8	113.3
8-Mar-08	73	117	137	85	74	79	330	105	115	73	29	10	12	6	8	72	9	54	A	98	204	37	42	65	79.7	329.5
9-Mar-08	92	91	97	34	70	85	25	48	99	8	127	6	6	47	66	105	4	A	13	120	14	154	11	57	59.9	154.2
10-Mar-08	90	70	6	10	48	47	78	110	56	35	29	11	70	6	82	32	A	10	13	18	7	12	50	6	39.0	110.0
11-Mar-08	100	151	4	60	87	35	110	C	C	C	35	23	6	6	6	8	4	7	8	8	8	6	14	16	33.4	150.7
12-Mar-08	15	4	A	16	12	9	13	14	13	32	21	5	8	24	13	8	6	8	18	37	37	35	28	29	17.7	37.4
13-Mar-08	10	A	8	13	17	25	38	149	91	21	11	8	10	28	12	5	4	4	6	6	5	3	6	102	25.3	149.0
14-Mar-08	A	16	13	37	47	86	116	130	13	6	6	7	42	46	8	7	16	6	3	2	2	2	5	A	28.0	130.0
15-Mar-08	7	6	5	9	8	23	20	21	19	55	28	45	50	17	13	6	4	12	11	44	98	177	A	127	35.1	177.2
16-Mar-08	103	82	21	151	180	56	48	59	13	9	8	4	3	3	7	43	15	10	32	98	52	A	27	21	45.4	179.8
17-Mar-08	52	28	41	5	51	16	41	69	66	20	14	12	5	19	10	3	6	26	48	21	A	18	59	33	28.8	69.1
18-Mar-08	14	18	25	98	24	26	79	163	14	63	37	45	6	27	71	7	11	11	19	A	31	23	24	9	36.8	162.7
19-Mar-08	73	16	15	9	8	21	18	25	121	63	29	14	14	15	17	38	11	7	A	11	6	4	8	4	23.7	120.9
20-Mar-08	25	45	58	52	61	118	110	70	55	59	11	12	10	6	8	5	3	A	9	6	5	5	23	16	33.6	118.3
21-Mar-08	19	103	34	64	154	209	64	33	27	10	4	4	3	4	6	84	A	23	8	34	23	23	13	33	42.5	208.7
22-Mar-08	76	57	33	34	33	50	57	93	44	5	14	67	7	8	3	A	9	7	59	36	35	86	43	8	37.5	92.5
23-Mar-08	40	38	108	160	23	41	31	80	6	125	46	13	43	3	A	24	4	77	55	133	4	67	2	54	51.2	160.0
24-Mar-08	3	3	96	55	10	61	36	62	9	9	11	12	11	A	8	5	3	3	15	8	9	8	9	14	19.9	95.8
25-Mar-08	10	14	12	13	101	76	62	44	15	10	7	6	A	7	15	8	70	7	25	32	172	113	16	12	36.8	172.5
26-Mar-08	8	179	81	12	61	150	106	69	64	6	4	A	22	38	23	32	4	4	18	48	53	28	31	27	46.4	179.5
27-Mar-08	34	56	47	65	49	56	37	40	116	55	A	9	4	3	7	86	36	8	7	5	11	7	6	79	35.8	116.3
28-Mar-08	5	47	5	126	33	51	83	12	9	A	9	8	20	8	6	C	C	C	C	C	6	9	17	5	25.5	126.0
29-Mar-08	6	11	A	8	5	3	7	6	4	4	3	3	4	5	5	5	2	3	5	5	10	8	7	5	5.4	11.0
30-Mar-08	4	A	8	7	5	4	4	3	3	4	4	4	4	5	3	4	7	9	9	10	7	6	5	4	5.6	9.7
31-Mar-08	A	8	5	18	20	17	22	11	5	9	14	29	7	12	36	14	11	26	13	28	19	12	15	40	16.9	40.4
Hourly Avg	35.5	47.2	34.6	40.6	43.8	45.5	56.6	53.2	37.5	25.5	22.7	16.2	14.9	13.9	17.5	27.5	16.9	24.3	26.2	41.7	35.7	41.7	24.6	39.1		
Hourly Max	102.9	179.5	137.0	160.0	179.8	208.7	329.5	162.7	120.9	125.1	126.6	67.1	69.5	46.7	82.5	105.1	105.3	129.2	144.5	133.2	204.2	177.2	104.7	162.9		

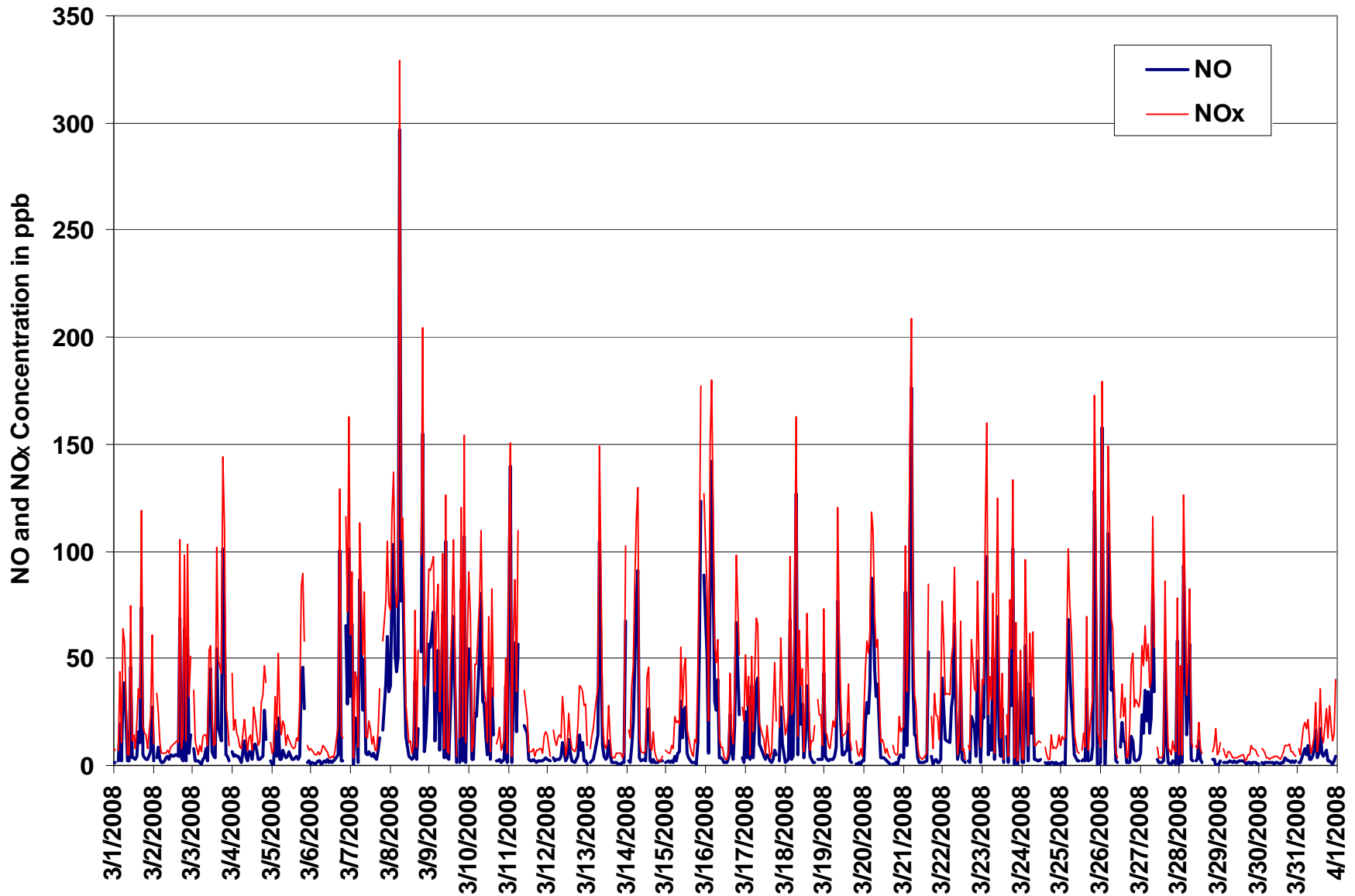


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



PAS - Crescent Heights Ozone Monthly Summary

Station: Crescent Heights
Station Owner: PAS

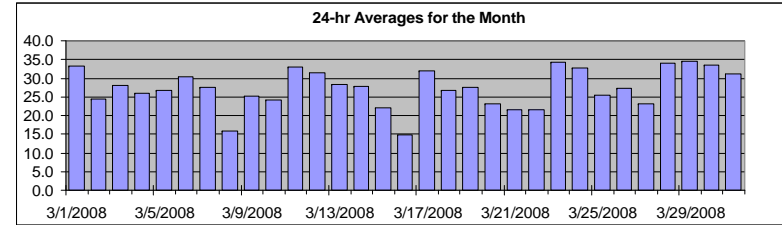
HOURLY AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: March 1, 2008 to April 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:	46.2 ppb	20-Mar	15:00 16:00
Maximum 24-hr Average:	34.6 ppb	29-Mar	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	45.6	43.6	36.5	29.6	21.3	1.6	0.0	27.3 ppb	29.6 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																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Mar-08	28	28	A	28	23	27	29	32	35	37	34	38	38	40	37	37	37	32	31	26	36	42	38	28	33.2	42.4	
2-Mar-08	30	A	14	17	30	29	29	29	31	31	31	30	30	30	28	30	29	27	22	19	21	17	5	5	24.5	31.3	
3-Mar-08	A	14	31	32	28	28	27	27	31	34	37	39	40	39	37	28	19	18	13	6	21	27	41	A	28.0	41.4	
4-Mar-08	25	27	17	14	16	19	23	25	26	32	32	30	32	34	34	37	36	34	23	12	19	23	A	25	26.0	37.0	
5-Mar-08	26	26	24	22	25	26	22	19	22	32	33	34	35	35	38	36	35	27	8	4	15	A	37	33	26.7	37.5	
6-Mar-08	35	38	39	35	31	31	30	27	27	30	31	36	39	41	43	42	39	33	31	30	A	0	9	4	30.4	42.9	
7-Mar-08	17	32	34	31	31	32	26	27	22	27	30	28	40	43	44	43	44	35	27	A	2	8	5	6	27.6	44.2	
8-Mar-08	1	1	0	0	0	0	0	2	5	9	26	35	42	44	44	42	42	35	A	17	0	6	8	5	15.9	43.9	
9-Mar-08	0	1	2	11	13	11	22	22	23	25	26	30	34	39	42	44	46	A	35	28	32	32	29	28	25.1	46.1	
10-Mar-08	27	29	28	24	18	13	7	3	8	18	22	29	31	41	39	40	A	35	28	22	25	23	23	25	24.3	40.5	
11-Mar-08	22	26	29	27	25	23	21	24	26	27	C	36	38	44	44	46	44	39	39	38	39	37	34	31	33.0	46.1	
12-Mar-08	31	32	A	32	32	32	30	29	31	30	34	37	39	41	40	39	40	37	32	22	25	23	14	24	31.5	40.8	
13-Mar-08	30	A	27	21	15	13	9	3	15	27	34	36	38	40	42	42	43	42	36	32	30	29	28	15	28.3	43.5	
14-Mar-08	A	15	19	7	1	7	2	4	22	25	28	40	44	45	45	43	38	42	42	39	37	36	32	A	27.9	45.1	
15-Mar-08	34	30	28	24	23	19	13	18	20	16	17	21	23	26	33	35	36	35	32	22	2	0	A	0	22.0	36.2	
16-Mar-08	0	3	15	6	2	0	2	3	17	24	25	29	30	31	29	26	25	24	19	13	5	A	3	10	14.9	30.9	
17-Mar-08	4	26	32	34	35	31	25	21	25	31	34	36	43	43	44	46	45	39	23	34	A	26	28	29	31.9	45.9	
18-Mar-08	26	22	12	14	10	9	9	10	18	23	29	36	44	44	45	44	41	41	38	A	23	23	27	25	26.7	44.5	
19-Mar-08	20	24	16	17	21	15	18	19	22	21	26	30	34	34	37	36	41	43	A	38	35	31	28	30	27.6	43.2	
20-Mar-08	26	10	5	0	0	0	0	0	4	16	39	40	43	45	45	46	45	A	37	36	32	28	20	12	23.0	46.2	
21-Mar-08	14	0	4	0	0	0	0	5	15	21	31	37	42	43	44	43	A	41	39	28	24	23	27	15	21.6	44.0	
22-Mar-08	18	8	7	0	0	0	0	1	13	27	30	33	38	41	43	A	42	41	38	25	19	18	24	32	21.6	43.0	
23-Mar-08	33	33	30	30	25	21	22	25	34	39	41	40	42	41	A	42	42	40	38	37	35	34	33	32	34.4	42.4	
24-Mar-08	32	31	26	25	24	25	27	34	31	22	32	38	39	A	41	41	41	40	37	35	36	34	32	29	32.8	40.8	
25-Mar-08	26	22	20	19	13	8	8	10	24	31	35	39	A	41	40	41	36	41	33	25	19	17	17	20	25.5	40.9	
26-Mar-08	21	23	19	26	22	20	9	10	22	33	38	A	43	44	45	45	46	46	37	25	15	18	13	8	27.3	45.9	
27-Mar-08	7	3	1	0	0	1	2	5	8	13	A	32	42	45	41	39	40	41	41	40	38	36	30	27	23.1	45.3	
28-Mar-08	30	26	31	33	23	16	18	21	30	A	38	40	42	44	45	46	46	46	43	33	38	34	30	32	34.1	45.8	
29-Mar-08	29	27	A	25	29	34	33	36	36	37	36	36	38	39	40	42	44	43	40	37	31	29	27	28	34.6	43.7	
30-Mar-08	28	A	23	26	30	31	30	31	31	31	35	36	38	40	41	40	37	37	34	34	34	34	33	35	33.5	40.5	
31-Mar-08	A	36	36	29	27	26	32	32	34	33	C	C	A	36	36	36	37	35	34	24	23	28	28	22	31.2	37.0	
Hourly Avg	22.1	21.2	20.4	19.7	18.4	17.7	16.9	17.8	22.8	26.8	31.6	34.5	37.9	39.7	40.3	39.9	39.2	36.9	32.0	26.9	24.6	24.7	24.3	21.3			
Hourly Max	34.7	37.9	38.8	35.2	34.5	33.5	32.9	35.6	36.3	39.1	41.3	40.4	44.3	45.3	45.1	46.2	46.1	45.9	42.7	40.3	38.8	42.4	41.4	34.8			

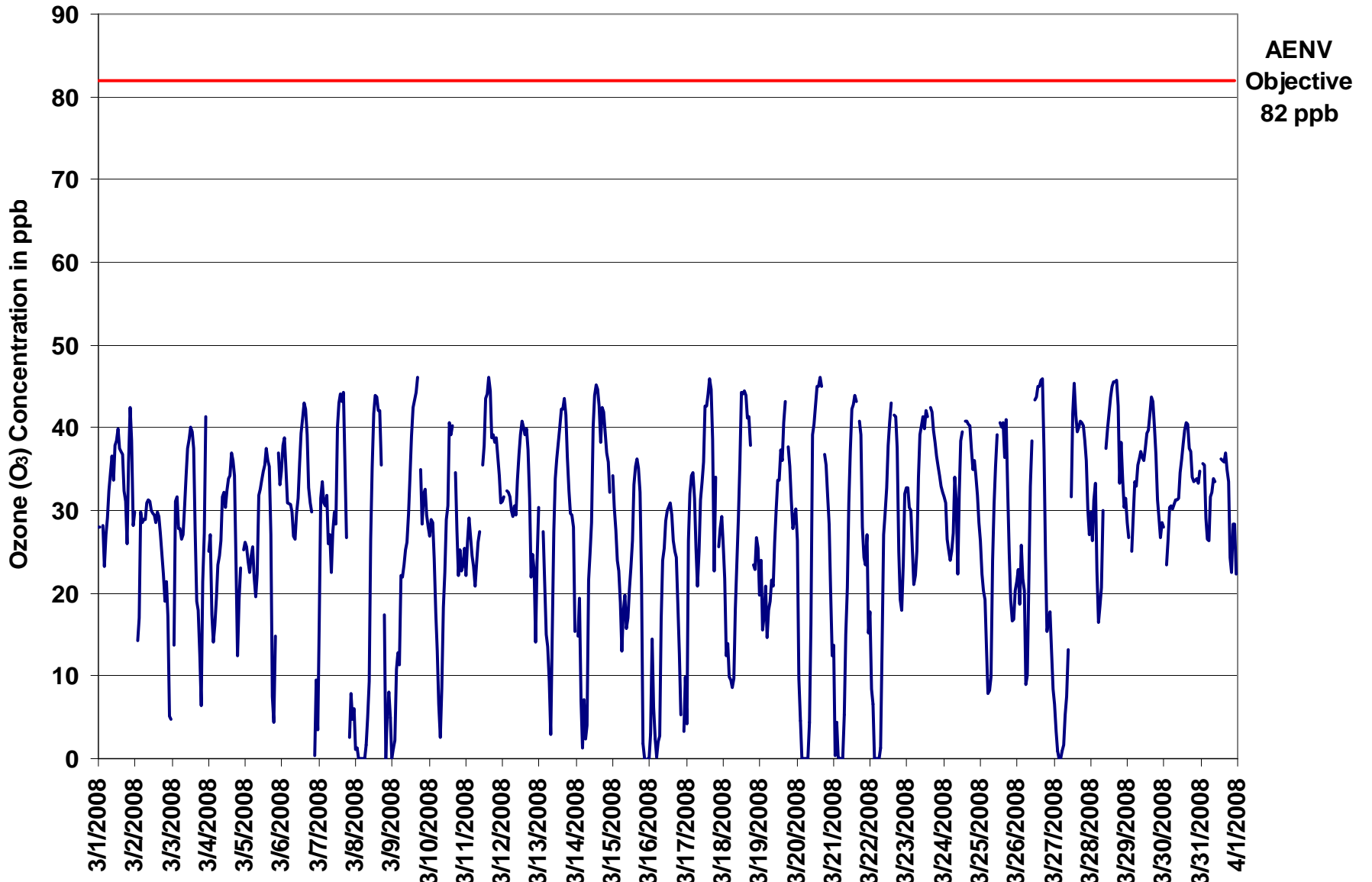


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights
Station Owner: PAS

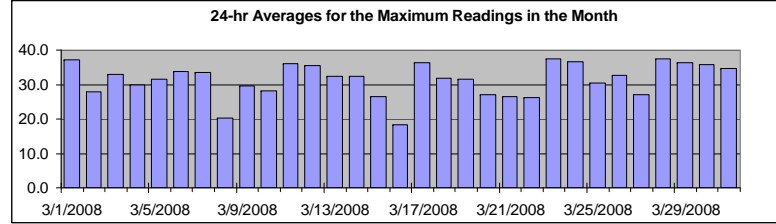
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O₃)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	49.6	ppb	20-Mar	15:00 16:00
Maximum 24-hr Value:	37.5	ppb	28-Mar	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	48.1	46.2	40.0	33.1	26.3	7.0	0.0	31.4 ppb	33.1 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Mar-08	31	30	A	31	29	31	32	35	36	38	38	44	43	42	41	41	40	37	35	31	45	44	43	40	37.2	45.0
2-Mar-08	33	A	23	27	32	30	30	30	33	33	33	32	32	31	31	31	31	29	25	24	25	23	10	13	27.9	33.3
3-Mar-08	A	26	33	33	30	29	28	30	33	37	40	41	42	41	41	36	29	24	21	14	29	43	44	A	33.0	44.4
4-Mar-08	30	31	24	17	19	21	28	28	31	34	34	32	34	36	37	40	39	37	34	21	24	29	A	27	29.9	39.8
5-Mar-08	27	27	26	26	32	32	27	24	28	34	36	38	37	39	39	40	39	36	18	16	29	A	39	37	31.6	40.1
6-Mar-08	38	40	40	39	32	32	32	30	28	32	33	38	42	43	44	44	43	38	34	33	A	7	22	12	33.9	44.4
7-Mar-08	31	35	35	33	34	34	31	30	26	29	34	33	45	47	47	45	47	41	34	A	6	29	21	21	33.4	47.3
8-Mar-08	10	6	0	0	0	0	0	6	8	18	36	42	44	45	45	46	45	43	A	33	2	11	15	12	20.2	45.6
9-Mar-08	1	7	11	17	18	23	26	25	26	26	29	33	39	45	45	49	48	A	40	35	40	39	32	31	29.7	48.6
10-Mar-08	32	32	31	27	24	17	14	6	14	23	26	31	35	45	42	44	A	37	34	25	27	25	28	28	28.2	45.0
11-Mar-08	27	29	31	29	29	27	26	28	28	30	C	38	42	47	45	48	47	42	41	40	41	40	39	34	36.0	48.5
12-Mar-08	33	33	A	34	34	33	32	32	32	34	37	39	42	43	41	42	43	40	36	28	38	30	23	38	35.5	43.2
13-Mar-08	35	A	29	27	19	20	17	10	21	36	37	39	42	44	44	44	45	44	39	36	32	31	32	23	32.4	44.6
14-Mar-08	A	18	21	16	12	13	7	21	23	30	34	47	48	48	48	45	43	44	44	41	38	37	35	A	32.4	48.1
15-Mar-08	36	33	30	27	28	26	18	22	24	26	26	23	25	30	36	37	38	38	36	35	14	1	A	0	26.4	38.0
16-Mar-08	2	9	18	13	8	4	7	9	23	26	28	30	31	32	30	30	27	27	23	18	10	A	7	13	18.4	32.1
17-Mar-08	11	31	34	37	36	34	33	28	31	34	36	39	44	46	47	47	47	47	35	39	A	32	35	33	36.4	47.0
18-Mar-08	31	26	21	19	13	16	15	16	22	29	31	43	48	47	47	48	46	45	46	A	30	29	33	31	31.8	48.4
19-Mar-08	25	27	20	21	23	21	24	26	28	26	29	34	36	37	39	39	43	46	A	43	40	33	30	32	31.4	46.1
20-Mar-08	32	19	12	1	0	0	0	2	9	39	44	42	46	46	48	50	47	A	38	38	35	31	26	16	27.0	49.6
21-Mar-08	17	9	13	2	0	0	1	11	19	26	38	39	44	45	46	46	A	44	42	40	36	32	31	27	26.3	45.6
22-Mar-08	23	13	11	7	3	0	2	6	26	29	34	36	40	43	45	A	44	43	43	38	28	24	31	34	26.3	44.9
23-Mar-08	34	34	34	32	32	27	27	32	40	42	43	42	45	43	A	44	44	42	41	40	39	36	34	33	37.4	45.1
24-Mar-08	33	32	35	31	30	32	32	41	41	29	35	42	42	A	42	43	42	42	40	38	41	37	34	33	36.7	42.8
25-Mar-08	29	26	25	22	21	16	17	19	29	34	38	41	A	43	44	44	41	44	42	33	30	21	21	25	30.5	43.9
26-Mar-08	24	28	27	28	28	30	16	17	31	36	42	A	45	45	46	47	47	48	47	34	33	23	18	15	32.8	47.6
27-Mar-08	17	10	4	5	0	4	3	9	13	15	A	36	45	47	46	45	44	44	43	45	43	43	34	29	27.1	46.8
28-Mar-08	34	31	39	37	30	21	22	24	36	A	40	42	44	46	47	47	47	47	45	41	40	36	33	33	37.5	47.3
29-Mar-08	30	29	A	27	32	35	35	37	38	38	38	37	40	41	41	44	44	45	42	40	35	31	29	32	36.4	44.8
30-Mar-08	32	A	27	30	31	32	33	33	32	34	37	37	41	41	41	42	42	40	39	38	36	36	35	37	35.7	42.5
31-Mar-08	A	36	36	34	29	32	34	34	35	35	C	C	A	38	38	38	40	39	37	33	26	33	33	33	34.8	40.4
Hourly Avg	26.3	25.3	24.6	23.6	22.3	21.7	20.9	22.6	27.2	31.0	35.3	37.5	40.7	42.2	42.6	42.8	42.1	40.5	36.9	33.3	30.6	29.8	29.1	26.6		
Hourly Max	38.5	40.0	40.2	39.0	36.3	34.5	34.7	40.5	40.9	41.8	44.1	47.0	48.1	47.9	48.5	49.6	48.1	47.6	46.5	44.9	45.0	44.4	44.4	39.6		

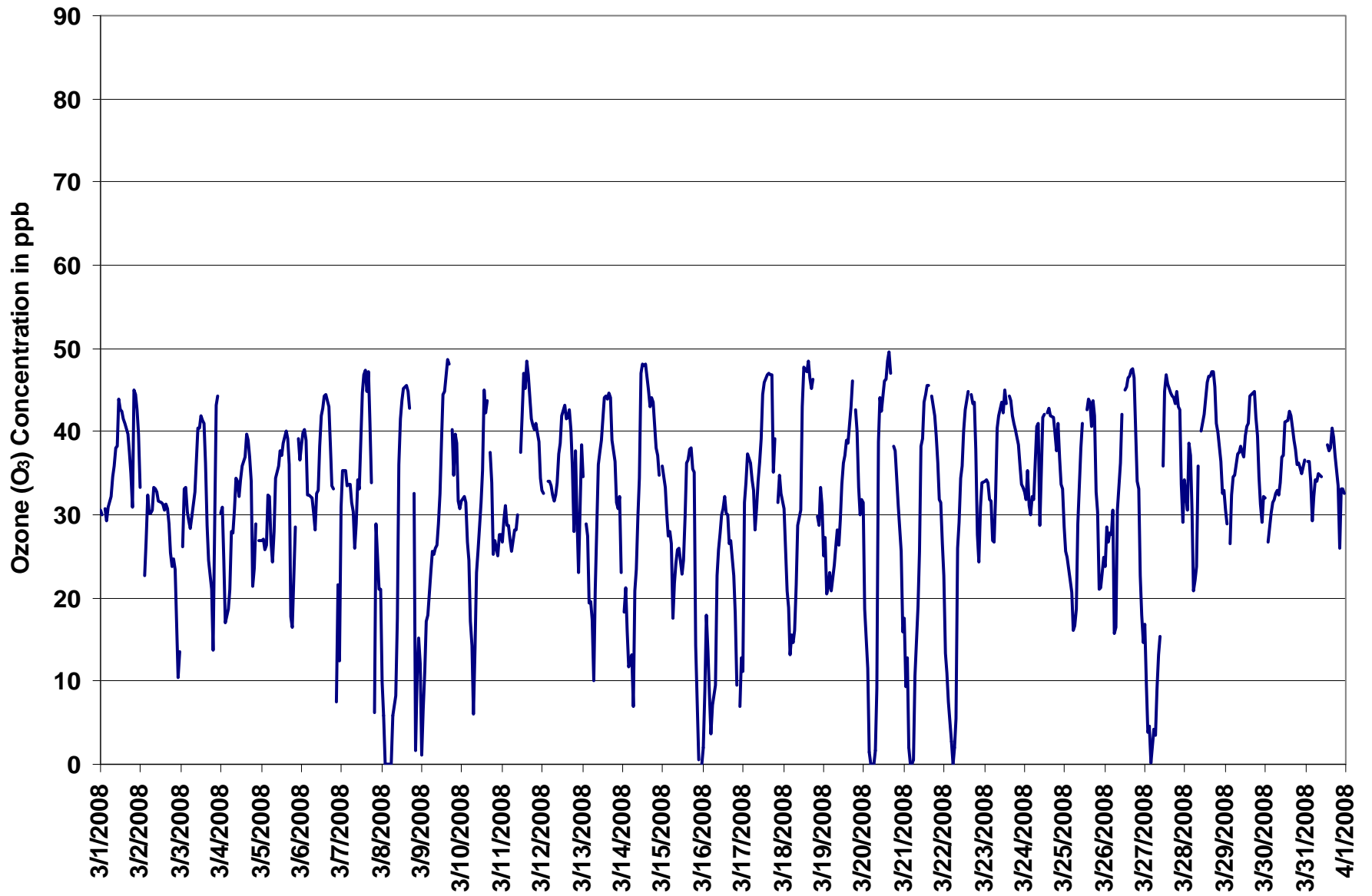
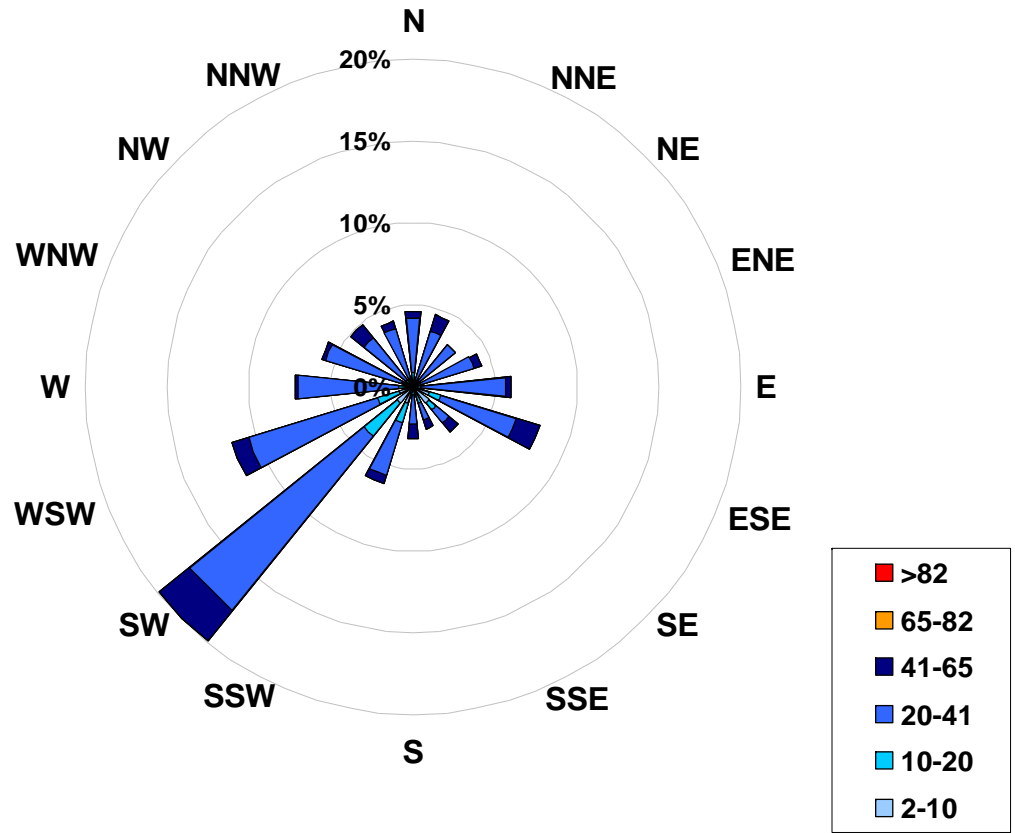


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of O ₃ in ppb			
Range			Frequency (hrs)
2.0	<	10	93
10	to	20	72
20	to	41	464
41	to	65	79
65	to	82	0
	>	82	0
Total Non-Zero Values			708



PAS - Crescent Heights Ozone Eight Hour Average Summary

Station: Crescent Heights
Station Owner: PAS

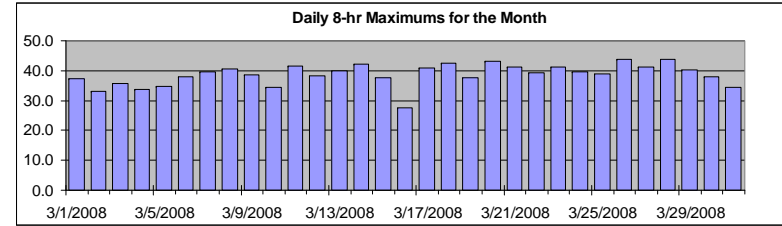
EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: March 1, 2008 to April 1, 2008

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

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	43.9	ppb	26-Mar	17:00	18:00		



Percentile	99	95	75	50	25	5	1
	42.6	40.2	34.7	29.1	21.8	6.2	2.5

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																							Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Mar-08	32	32	32	31	30	29	28	28	29	30	31	32	34	35	36	37	37	37	36	35	35	35	35	34	37.2
2-Mar-08	33	33	31	29	29	27	25	25	25	26	28	30	30	30	30	30	30	29	28	27	26	24	21	18	33.1
3-Mar-08	17	15	16	18	19	20	23	27	27	30	30	31	33	34	36	36	34	32	29	25	23	21	22	21	35.7
4-Mar-08	22	23	24	25	24	23	20	21	21	22	23	25	28	29	31	32	33	34	33	30	29	27	26	25	33.8
5-Mar-08	23	22	22	24	24	25	24	24	23	24	25	27	28	29	31	33	35	34	31	27	25	23	23	23	34.6
6-Mar-08	23	24	29	33	35	35	34	33	32	31	30	30	31	33	34	36	38	38	38	37	37	31	26	21	38.1
7-Mar-08	18	17	18	18	20	23	26	28	29	29	28	28	29	31	33	35	38	38	38	39	34	29	23	18	39.5
8-Mar-08	12	7	3	3	3	2	1	1	1	2	5	10	15	20	26	31	36	39	41	38	32	27	22	16	40.6
9-Mar-08	10	5	5	4	6	6	8	10	13	16	19	22	24	28	30	33	36	37	39	39	38	37	35	33	38.7
10-Mar-08	30	30	29	29	27	25	22	19	16	15	14	15	16	20	24	29	31	34	35	34	33	30	28	26	34.5
11-Mar-08	25	24	25	25	25	25	25	25	25	25	25	26	28	31	34	37	40	41	41	42	42	41	40	38	41.6
12-Mar-08	36	35	35	34	33	32	31	31	31	31	31	32	33	34	35	36	37	38	38	36	34	32	29	27	38.3
13-Mar-08	26	24	24	24	22	21	20	17	15	16	17	19	22	25	29	34	38	40	40	40	39	37	35	32	40.1
14-Mar-08	30	27	24	21	16	13	10	8	10	11	12	16	22	26	32	36	38	41	42	42	41	40	39	38	42.3
15-Mar-08	38	36	34	32	30	27	24	24	22	20	19	18	18	19	22	24	26	28	30	30	28	24	23	18	37.5
16-Mar-08	13	8	6	4	4	4	4	4	6	9	10	13	16	20	24	26	28	28	27	25	22	20	17	14	27.6
17-Mar-08	11	12	13	16	21	22	25	26	29	29	30	30	31	32	35	38	40	41	40	39	39	37	34	32	41.0
18-Mar-08	29	27	25	22	21	19	16	14	13	13	15	18	22	27	31	35	38	40	42	42	39	36	34	31	42.5
19-Mar-08	28	26	23	22	22	21	19	19	19	18	20	21	23	25	28	30	32	35	36	37	38	37	36	35	37.7
20-Mar-08	33	28	25	21	16	12	9	5	2	3	7	13	18	23	29	35	40	43	43	42	41	38	35	30	43.3
21-Mar-08	26	22	18	14	10	6	4	3	3	6	9	14	19	24	30	34	37	40	41	40	37	35	32	28	41.3
22-Mar-08	27	23	19	15	12	9	6	4	4	6	9	13	18	23	28	32	36	38	39	38	35	32	29	30	39.2
23-Mar-08	29	28	27	27	28	28	28	27	28	28	30	31	33	36	38	40	41	41	41	40	39	38	38	36	41.2
24-Mar-08	35	34	33	31	30	29	28	28	28	27	28	29	31	32	34	35	36	39	40	39	39	38	37	35	39.7
25-Mar-08	34	31	29	27	25	21	18	16	16	17	19	21	22	27	31	36	38	39	39	37	34	31	29	26	39.0
26-Mar-08	24	22	20	20	21	21	20	19	19	20	22	22	25	28	34	39	42	44	44	41	38	35	31	26	43.9
27-Mar-08	21	16	11	8	6	4	3	2	2	4	4	9	15	21	27	31	36	40	40	41	41	40	38	37	41.2
28-Mar-08	35	34	32	32	30	27	26	25	25	25	26	27	29	33	37	41	43	43	44	43	42	41	39	38	43.8
29-Mar-08	36	33	32	31	29	29	30	30	31	33	33	35	36	36	37	38	39	40	40	40	39	38	37	35	40.3
30-Mar-08	33	31	29	28	27	28	28	29	29	29	31	32	33	34	35	37	37	38	38	38	37	36	35	35	38.0
31-Mar-08	34	34	34	34	33	32	31	31	31	31	30	N	N	N	N	N	N	N	N	34	33	32	31	29	34.4

Hourly Max 37.5 35.8 34.5 33.7 35.4 34.8 33.9 33.1 32.1 32.8 33.3 34.6 35.7 36.4 37.5 40.5 42.7 43.9 43.8 42.9 42.5 41.2 39.5 38.1



PAS - Crescent Heights Carbon Monoxide Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

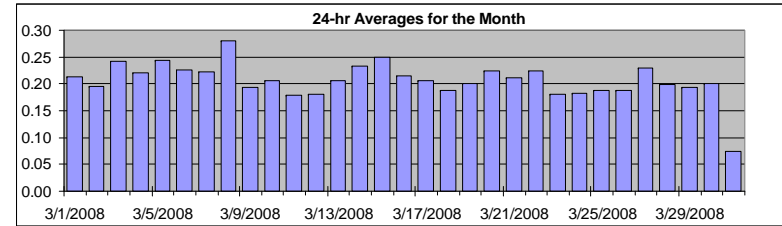
HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

Monitoring Dates: March 1, 2008 to April 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:	1.0 ppm	14-Mar	7:00 8:00
Maximum 24-hr Value:	0.3 ppm	8-Mar	



AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.5	0.3	0.2	0.2	0.2	0.1	0.0	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																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.27
2-Mar-08	0.2	A	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	0.3	0.3	0.20	0.28	
3-Mar-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	0.3	0.4	0.5	0.5	0.3	0.3	0.2	A	0.24	0.47		
4-Mar-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	0.3	0.2	0.2	0.2	0.2	A	0.2	0.22	0.33	
5-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.4	A	0.2	0.2	0.24	0.51	
6-Mar-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	0.3	0.2	0.3	A	0.4	0.3	0.4	0.23	0.38	
7-Mar-08	0.3	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	0.3	A	0.4	0.3	0.4	0.3	0.22	0.40	
8-Mar-08	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	A	0.4	0.6	0.3	0.3	0.3	0.28	0.59	
9-Mar-08	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1	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	0.1	0.19	0.42	
10-Mar-08	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	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	0.21	0.40	
11-Mar-08	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.18	0.21	
12-Mar-08	0.1	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.18	0.25	
13-Mar-08	0.1	A	0.2	0.2	0.3	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.21	0.48	
14-Mar-08	A	0.2	0.1	0.2	0.2	0.2	0.2	0.6	1.0	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	A	0.23	1.02	
15-Mar-08	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.7	A	0.4	0.25	0.72
16-Mar-08	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	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.22	0.29	
17-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.21	0.33	
18-Mar-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	0.2	0.19	0.24	
19-Mar-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	A	0.2	0.2	0.2	0.2	0.2	0.20	0.24	
20-Mar-08	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.4	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	0.2	0.2	0.22	0.53	
21-Mar-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	A	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.21	0.28	
22-Mar-08	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.22	0.35	
23-Mar-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	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.19	
24-Mar-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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.22	
25-Mar-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	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	0.19	0.30	
26-Mar-08	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.19	0.31	
27-Mar-08	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	A	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.45	
28-Mar-08	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	0.3	0.2	0.2	0.2	0.2	0.20	0.26	
29-Mar-08	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.20	
30-Mar-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	0.2	0.2	0.2	0.2	0.2	0.20	0.23	
31-Mar-08	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.21	
Hourly Avg	0.20	0.19	0.19	0.19	0.20	0.21	0.25	0.28	0.22	0.20	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.20	0.23	0.24	0.24	0.22	0.21	0.20			
Hourly Max	0.42	0.35	0.39	0.39	0.33	0.34	0.61	1.02	0.40	0.35	0.24	0.25	0.23	0.23	0.26	0.25	0.32	0.38	0.46	0.51	0.59	0.72	0.40	0.36				

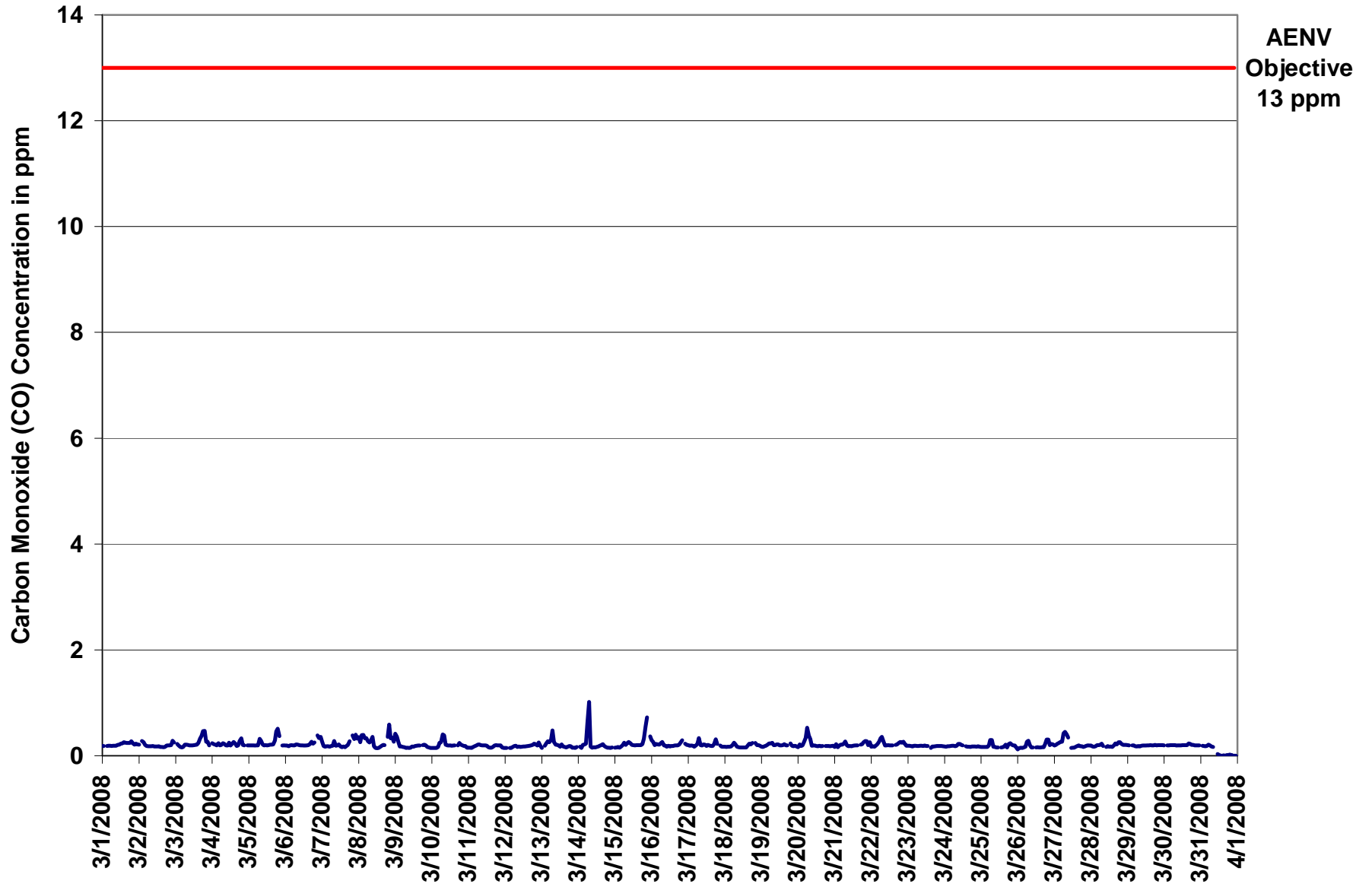


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Crescent Heights
Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

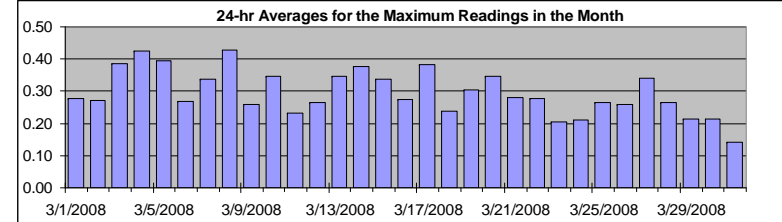
Carbon Monoxide (CO)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	2.4	ppm	14-Mar	7:00 8:00
Maximum 24-hr Value:	0.4	ppm	8-Mar	

AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.1	0.6	0.3	0.2	0.2	0.2	0.1	0.3 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-Mar-08	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.2	0.2	0.2	0.28	0.44
2-Mar-08	0.2	A	0.4	0.5	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.27	0.51
3-Mar-08	A	0.3	0.2	0.2	0.2	0.2	0.5	0.2	0.5	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.5	0.5	1.4	1.0	0.4	0.4	0.3	A	0.39	1.43
4-Mar-08	0.3	0.3	0.3	0.2	0.6	0.2	0.3	0.6	0.4	0.2	0.2	0.9	0.2	1.1	1.0	0.8	0.3	0.3	0.6	0.5	0.3	0.2	A	0.2	0.43	1.07
5-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.5	0.5	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.5	0.9	1.0	1.0	A	0.2	0.6	0.39	1.00
6-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	A	0.5	0.5	0.4	0.27	0.54
7-Mar-08	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	1.0	0.3	0.4	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.4	A	0.5	0.5	0.7	0.5	0.34	1.02
8-Mar-08	0.5	0.4	0.5	0.5	0.4	0.5	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.2	0.4	0.2	0.6	0.3	A	0.8	0.7	0.6	0.6	0.4	0.43	0.84
9-Mar-08	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.3	0.3	0.3	0.2	0.2	0.2	0.26	0.59
10-Mar-08	0.2	0.2	0.2	0.2	0.2	1.1	0.7	0.8	0.6	0.3	0.3	0.2	0.3	0.3	0.2	0.2	A	0.2	0.3	0.3	0.2	0.2	0.7	0.2	0.35	1.09
11-Mar-08	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.23	0.40
12-Mar-08	0.2	0.2	A	0.2	0.2	0.3	0.2	0.3	0.2	0.4	0.3	0.2	0.3	0.4	0.3	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.4	0.4	0.26	0.40
13-Mar-08	0.2	A	0.3	0.4	0.5	0.4	0.5	0.7	0.4	0.5	0.5	0.3	0.3	0.7	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.35	0.71
14-Mar-08	A	0.3	0.2	0.3	0.3	0.3	1.3	2.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	A	0.38	2.44
15-Mar-08	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.8	0.8	1.1	A	0.5	0.34	1.05
16-Mar-08	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	A	0.3	0.3	0.27	0.40
17-Mar-08	0.2	0.2	0.3	0.2	0.2	0.3	0.4	2.3	0.4	0.3	0.6	0.3	0.2	0.4	0.3	0.3	0.2	0.4	0.5	0.2	A	0.3	0.2	0.2	0.38	2.26
18-Mar-08	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	A	0.3	0.3	0.3	0.2	0.24	0.45
19-Mar-08	0.2	0.2	0.2	0.2	0.5	0.4	0.4	0.4	0.3	0.2	0.4	0.3	0.3	0.3	0.5	0.2	0.2	0.2	A	0.7	0.2	0.2	0.2	0.2	0.30	0.65
20-Mar-08	0.2	0.9	0.2	0.2	0.4	0.5	1.4	0.5	0.5	0.2	0.3	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	0.35	1.42
21-Mar-08	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.5	0.4	0.2	0.6	0.28	0.64
22-Mar-08	0.2	0.3	0.2	0.2	0.3	0.3	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.28	0.54
23-Mar-08	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	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.28
24-Mar-08	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.28
25-Mar-08	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.2	0.3	0.2	0.2	A	0.2	0.3	0.2	0.3	0.2	0.5	0.4	0.3	0.3	0.3	0.3	0.27	0.51
26-Mar-08	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.4	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.6	0.3	0.3	0.3	0.26	0.56
27-Mar-08	0.3	0.3	0.3	0.3	1.1	0.4	0.6	0.9	0.6	0.4	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.34	1.14
28-Mar-08	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.7	0.2	A	0.3	0.2	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.27	0.72
29-Mar-08	0.3	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.21	0.29
30-Mar-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	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.22	0.35
31-Mar-08	A	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	C	C	0.4	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.40
Hourly Avg	0.23	0.26	0.23	0.24	0.29	0.31	0.40	0.51	0.33	0.28	0.26	0.26	0.22	0.29	0.28	0.25	0.26	0.26	0.36	0.38	0.34	0.29	0.28	0.28		
Hourly Max	0.59	0.86	0.54	0.54	1.14	1.09	1.42	2.44	1.02	0.54	0.56	0.94	0.34	1.07	1.03	0.81	0.63	0.50	1.43	1.00	1.00	1.05	0.69	0.64		

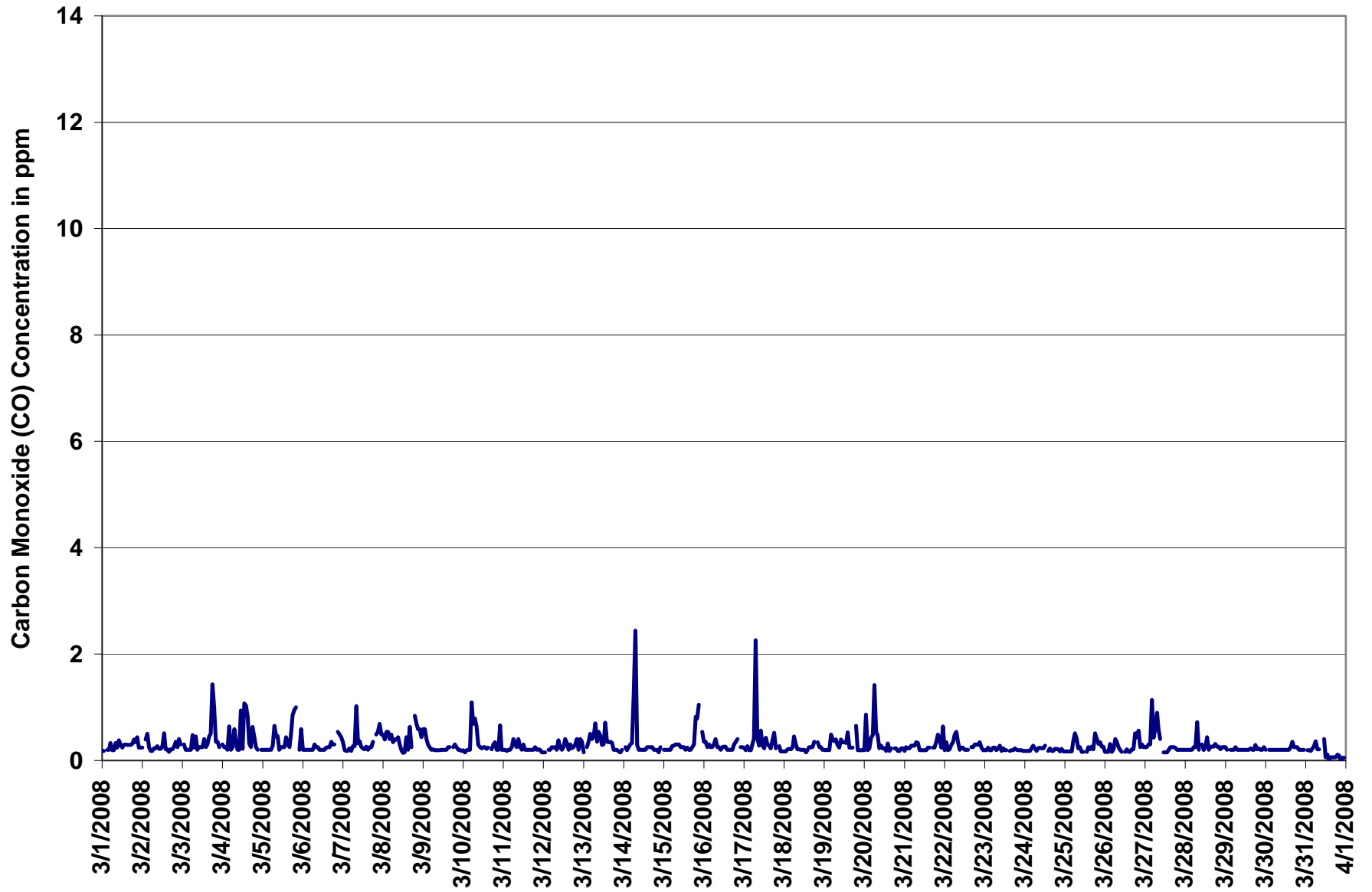
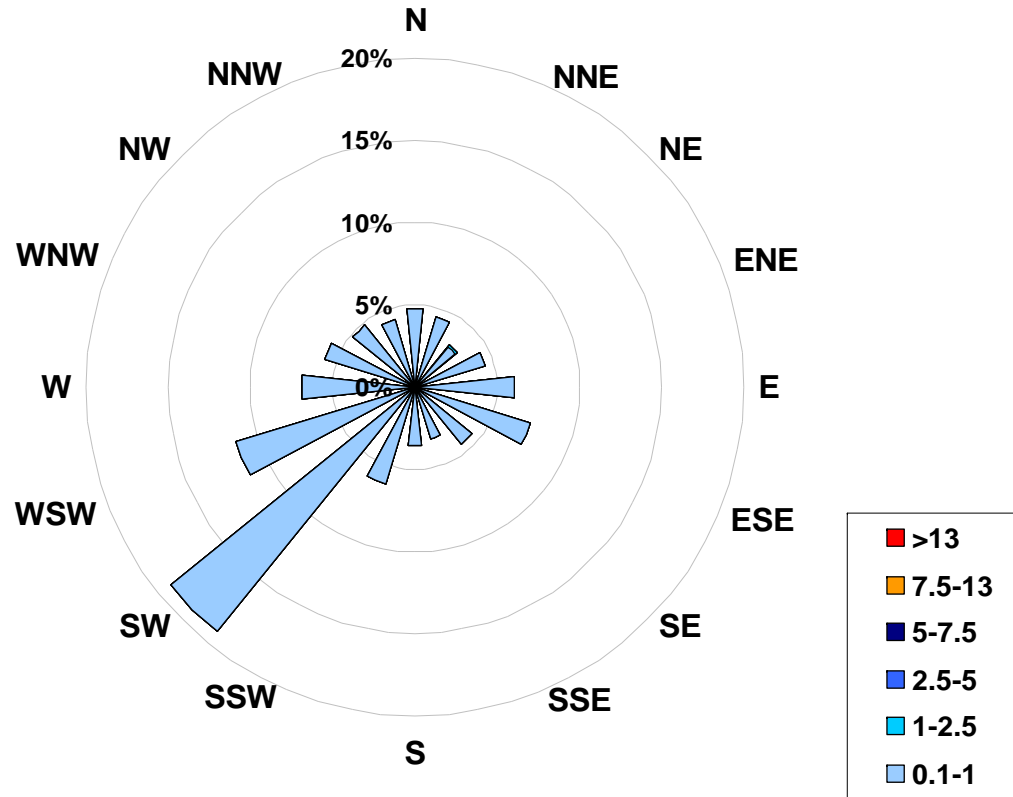


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	<	1	709
1	to	2.5	1
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			710



PAS - Crescent Heights Carbon Monoxide Eight Hour Average Summary

Station: Crescent Heights
 Station Owner: PAS

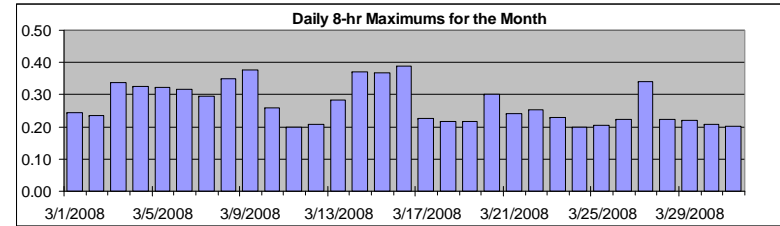
EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

Monitoring Dates: March 1, 2008 to April 1, 2008

Objective Limit: Alberta Environment: 8-hr 5 ppm

Number of 8-hr Exceedances:	0
Maximum 8-hr Average:	0.4 ppm 16-Mar 1:00 2:00



Percentile	99	95	75	50	25	5	1
	0.4	0.3	0.2	0.2	0.2	0.2	0.2

Status Flag Characters

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

Day	Mountain Standard Time																								Daily Maximum		
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		23:00	0:00
1-Mar-08	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	0.25	
2-Mar-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	0.2	0.2	0.23
3-Mar-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	0.2	0.2	0.34
4-Mar-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	0.2	0.2	0.32
5-Mar-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	0.2	0.2	0.32
6-Mar-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	0.3	0.3	0.32
7-Mar-08	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.30
8-Mar-08	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.35
9-Mar-08	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.38
10-Mar-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	0.3	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	0.26
11-Mar-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	0.2	0.2	0.20
12-Mar-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	0.2	0.2	0.21
13-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
14-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.37
15-Mar-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	0.3	0.3	0.37
16-Mar-08	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.39
17-Mar-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	0.2	0.2	0.23
18-Mar-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	0.2	0.2	0.22
19-Mar-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	0.2	0.2	0.22
20-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30
21-Mar-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	0.2	0.2	0.24
22-Mar-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	0.3	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	0.25
23-Mar-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	0.2	0.2	0.23
24-Mar-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	0.2	0.2	0.20
25-Mar-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	0.2	0.2	0.20
26-Mar-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	0.2	0.2	0.22
27-Mar-08	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34
28-Mar-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	0.2	0.2	0.22
29-Mar-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	0.2	0.2	0.22
30-Mar-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	0.2	0.2	0.21
31-Mar-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	N	N	N	N	N	N	N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
Hourly Max	0.38	0.39	0.39	0.37	0.34	0.35	0.33	0.37	0.35	0.34	0.34	0.34	0.33	0.33	0.27	0.22	0.23	0.24	0.28	0.31	0.32	0.33	0.34	0.37			



PAS - Crescent Heights Total Hydrocarbons Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

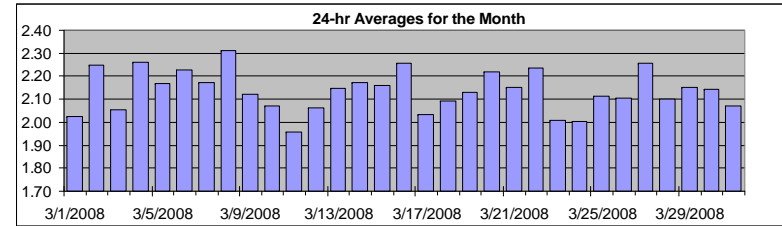
HOURLY AVERAGE TABLE

Total Hydrocarbons (THC)

Monitoring Dates: March 1, 2008 to April 1, 2008

Objective Limit: Alberta Environment: 1-hr na ppm 24-hr na ppm
 Summary

Maximum 1-hr Average:	2.8	ppm	27-Mar	4:00 5:00
Maximum 24-hr Value:	2.3	ppm	8-Mar	



AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.7	2.4	2.2	2.1	2.0	2.0	1.9	2.1 ppm	2.1 ppm

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Mar-08	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.03	2.10
2-Mar-08	2.1	A	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.25	2.34
3-Mar-08	A	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.0	A	2.05	2.26
4-Mar-08	2.1	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	A	A	2.2	2.26	2.38
5-Mar-08	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.4	A	2.1	2.1	2.17	2.38
6-Mar-08	2.2	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	A	2.3	2.3	2.3	2.23	2.45	
7-Mar-08	2.2	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	A	2.5	2.4	2.5	2.6	2.17	2.58
8-Mar-08	2.7	2.3	2.5	2.7	2.7	2.7	2.6	2.5	2.5	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.4	2.3	2.2	2.3	2.31	2.70
9-Mar-08	2.5	2.4	2.4	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.12	2.49
10-Mar-08	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.27
11-Mar-08	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.96	2.00
12-Mar-08	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.5	2.2	2.06	2.52
13-Mar-08	2.1	A	2.1	2.3	2.4	2.3	2.3	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.15	2.37
14-Mar-08	A	2.2	2.3	2.3	2.3	2.3	2.7	2.7	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.1	A	2.17	2.71
15-Mar-08	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.5	A	2.4	2.16	2.49
16-Mar-08	2.4	2.3	2.2	2.2	2.3	2.3	2.5	2.5	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	A	2.3	2.2	2.26	2.50
17-Mar-08	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.1	2.0	2.0	2.0	2.03	2.23
18-Mar-08	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.0	2.0	2.1	2.09	2.24
19-Mar-08	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.4	2.1	2.1	2.0	2.1	2.1	2.13	2.36
20-Mar-08	2.1	2.2	2.2	2.4	2.5	2.7	2.7	2.6	2.6	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.22	2.71
21-Mar-08	2.1	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.2	2.1	2.2	2.1	2.15	2.33
22-Mar-08	2.1	2.3	2.3	2.5	2.6	2.7	2.8	2.8	2.3	2.1	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.24	2.81
23-Mar-08	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	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	2.01	2.09
24-Mar-08	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.00	2.12
25-Mar-08	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.11	2.19
26-Mar-08	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.2	2.2	2.2	2.1	2.10	2.34
27-Mar-08	2.3	2.3	2.3	2.4	2.8	2.8	2.7	2.6	2.5	2.4	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.26	2.82
28-Mar-08	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.10	2.22
29-Mar-08	2.3	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.15	2.31
30-Mar-08	2.2	A	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.30
31-Mar-08	A	2.1	2.1	2.1	2.1	2.1	2.1	C	C	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.07	2.15	
Hourly Avg	2.15	2.15	2.17	2.18	2.21	2.21	2.23	2.24	2.18	2.15	2.11	2.10	2.08	2.06	2.05	2.05	2.06	2.07	2.09	2.13	2.16	2.14	2.13	2.16	2.16		
Hourly Max	2.66	2.44	2.53	2.70	2.82	2.79	2.77	2.81	2.56	2.41	2.36	2.34	2.27	2.23	2.23	2.25	2.25	2.24	2.32	2.38	2.47	2.49	2.52	2.58			

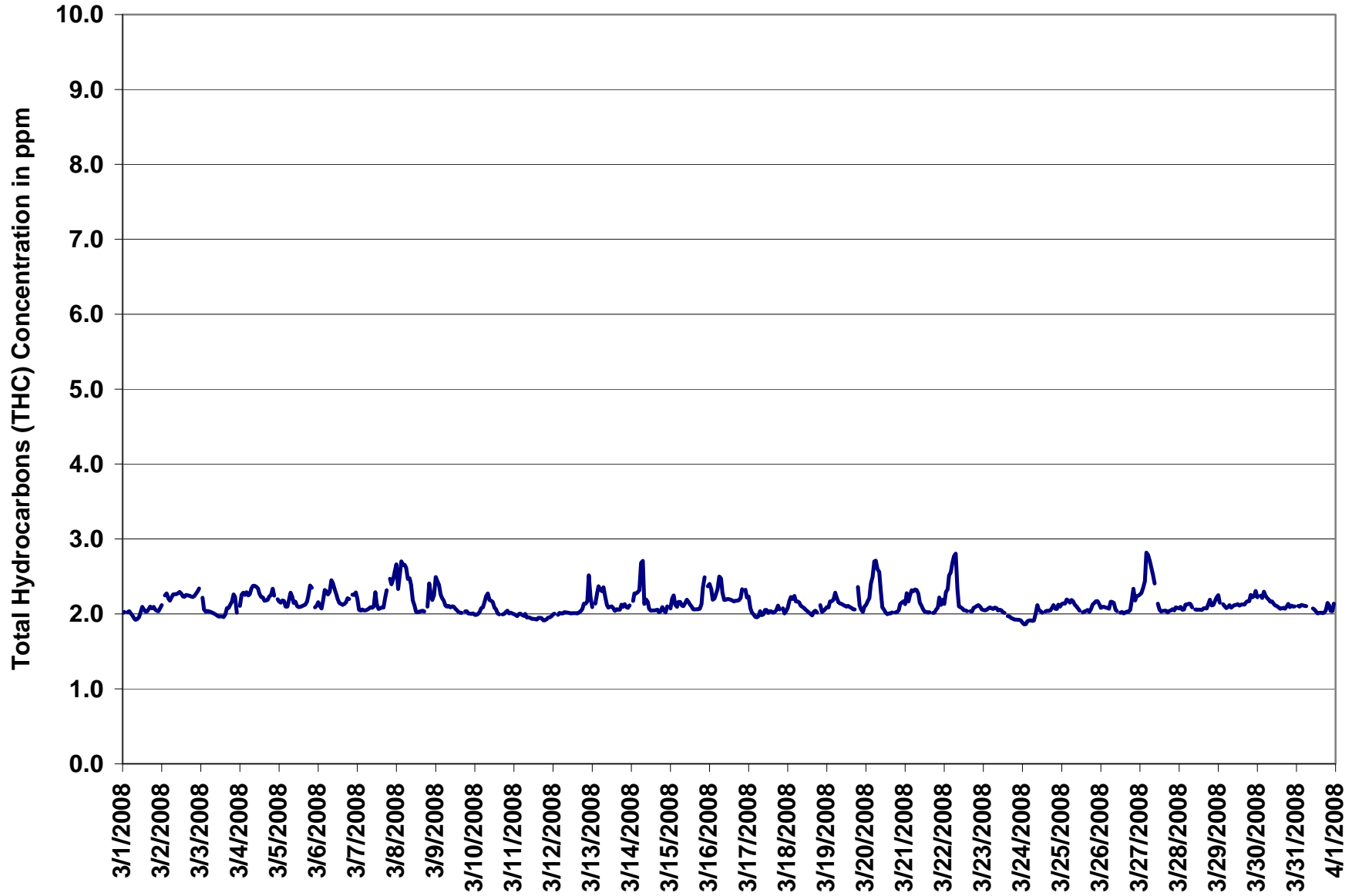


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

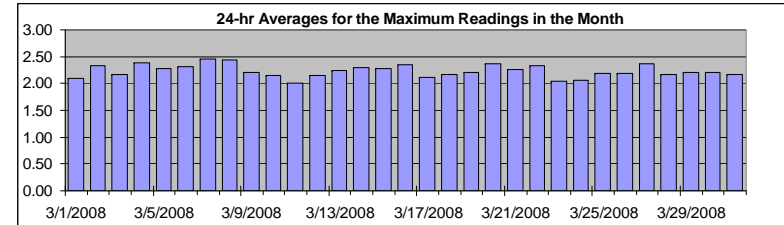
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Hydrocarbons (THC)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	6.9	ppm	7-Mar	23:00 0:00
Maximum 24-hr Value:	2.5	ppm	7-Mar	



AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.0	2.7	2.3	2.2	2.1	2.0	2.0	2.2 ppm	2.2 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	2.1	2.1	A	2.1	2.1	2.2	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.09	2.21
2-Mar-08	2.2	A	2.3	2.3	2.4	2.2	2.4	2.3	2.3	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.5	2.33	2.46
3-Mar-08	A	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.8	2.6	2.4	2.4	2.1	A	2.16	2.83	
4-Mar-08	2.3	2.4	2.4	2.4	2.8	2.4	2.3	2.5	2.5	2.5	2.4	2.6	2.4	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.5	2.4	A	2.2	2.39	2.77	
5-Mar-08	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.8	2.8	A	2.2	2.2	2.28	2.81	
6-Mar-08	2.2	2.2	2.1	2.3	2.5	2.4	2.5	2.4	2.6	2.5	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	A	2.4	2.4	2.4	2.32	2.57	
7-Mar-08	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.1	2.2	2.4	2.3	2.2	2.2	2.1	2.2	2.3	2.4	A	2.8	2.7	2.7	6.9	2.46	6.85	
8-Mar-08	3.0	2.5	2.8	2.8	2.8	2.8	2.8	2.6	2.6	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	A	2.5	2.5	2.4	2.3	2.4	2.44	2.99	
9-Mar-08	2.8	2.7	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.0	2.1	2.0	2.1	2.20	2.82	
10-Mar-08	2.0	2.0	2.1	2.1	2.1	2.4	2.3	2.4	2.4	2.3	2.2	2.3	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.15	2.39	
11-Mar-08	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.08
12-Mar-08	2.0	2.1	A	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.3	2.2	2.3	2.3	2.8	2.6	2.16	2.84	
13-Mar-08	2.2	A	2.2	2.4	2.6	2.4	2.4	2.4	2.4	2.3	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.3	2.2	2.1	2.2	2.23	2.55	
14-Mar-08	A	2.3	2.4	2.4	2.4	2.4	3.5	3.5	2.2	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.3	A	2.30	3.52	
15-Mar-08	2.3	2.3	2.6	2.5	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.6	2.7	A	2.28	2.68	
16-Mar-08	2.5	2.5	2.3	2.3	2.3	2.4	2.9	2.8	2.5	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.4	A	2.4	2.3	2.36	2.94	
17-Mar-08	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.8	2.1	2.0	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	A	2.1	2.0	2.1	2.12	2.84	
18-Mar-08	2.1	2.3	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	A	2.3	2.1	2.1	2.1	2.16	2.38	
19-Mar-08	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	A	2.6	2.4	2.2	2.1	2.2	2.21	2.56	
20-Mar-08	2.2	2.3	2.3	3.0	3.0	3.1	3.2	2.8	2.9	2.7	2.2	2.1	2.1	2.0	2.0	2.0	2.1	A	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.38	3.18
21-Mar-08	2.2	2.4	2.3	2.4	2.8	2.4	2.4	2.4	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.2	2.3	2.3	2.3	2.25	2.75	
22-Mar-08	2.2	2.5	2.4	2.6	2.6	2.8	2.9	3.2	2.6	2.2	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.33	3.15	
23-Mar-08	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.05	2.15	
24-Mar-08	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.2	2.2	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.3	2.2	2.2	2.1	2.2	2.1	2.07	2.31	
25-Mar-08	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.19	2.31	
26-Mar-08	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.3	2.1	2.1	A	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.3	2.7	2.3	2.4	2.3	2.18	2.67	
27-Mar-08	2.4	2.4	2.4	2.8	3.1	3.0	2.9	2.8	2.7	2.5	A	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.36	3.07	
28-Mar-08	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.3	2.3	2.4	2.17	2.39	
29-Mar-08	2.4	2.2	A	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.21	2.40	
30-Mar-08	2.3	A	2.3	2.3	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.20	2.37	
31-Mar-08	A	2.2	2.2	2.2	2.2	2.2	2.2	C	C	A	2.2	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.3	2.3	2.1	2.1	2.7	2.16	2.71	
Hourly Avg	2.25	2.24	2.25	2.29	2.33	2.31	2.37	2.38	2.29	2.23	2.18	2.18	2.13	2.12	2.11	2.10	2.11	2.12	2.19	2.25	2.28	2.22	2.22	2.41			
Hourly Max	2.99	2.65	2.75	2.99	3.07	3.07	3.49	3.52	2.88	2.66	2.43	2.57	2.37	2.33	2.31	2.30	2.30	2.30	2.83	2.81	2.79	2.68	2.84	6.85			

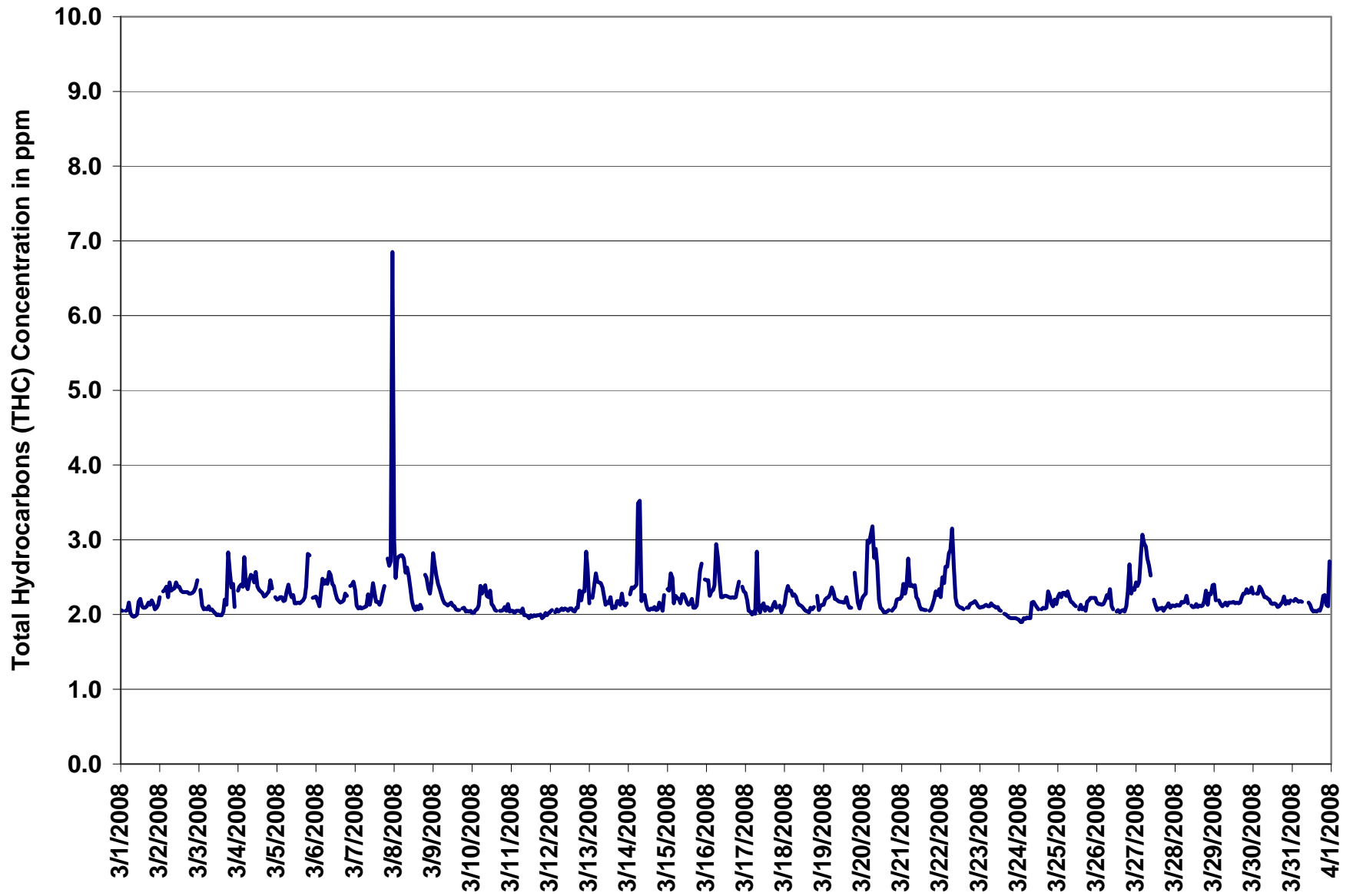
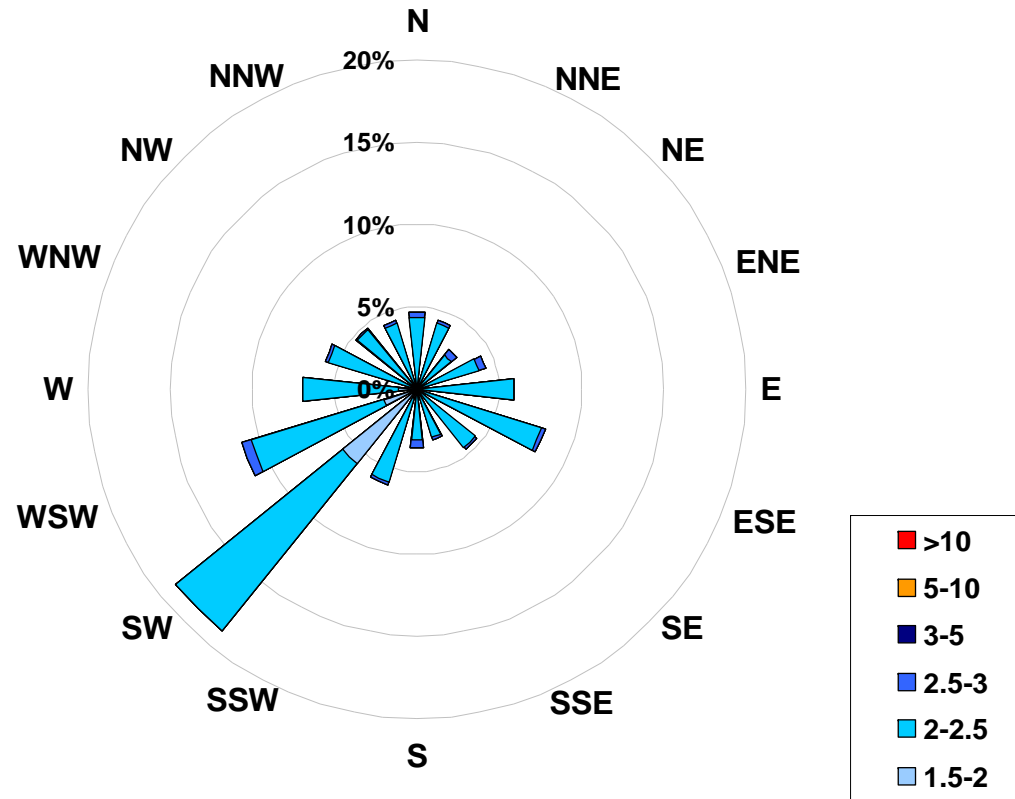


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	69
2	to	2.5	614
2.5	to	3	24
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			709



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

Station: Crescent Heights
 Station Owner: PAS

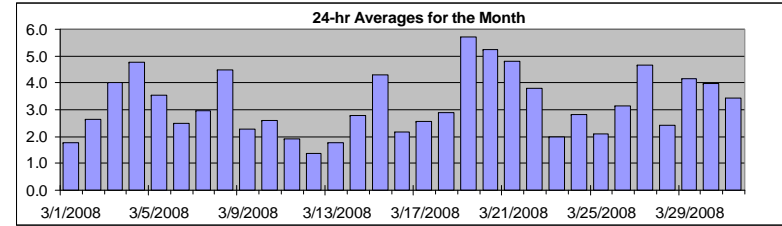
HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: March 1, 2008 to April 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:	18.3 µg/m ³ 15-Mar 21:00 22:00
Maximum 24-hr Value:	5.7 µg/m ³ 19-Mar



AIC Time:	0 hrs	Operational Time:	737 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	99.1%
Percentile	99	95	75
	8.2	4.4	2.8
	1.4	0.0	0.0
	Average / Median		3.2 3 µg/m ³
	Geomean		3.0 µg/m ³

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			0:00
1-Mar-08	0	0	0	0	1	0	1	3	4	3	3	0	4	5	4	2	4	2	2	1	0	2	0	1	1.8	4.9	
2-Mar-08	1	2	5	5	1	3	2	2	4	1	2	2	3	3	2	4	2	3	2	2	3	2	3	3	2.6	5.3	
3-Mar-08	3	7	3	2	2	2	2	2	3	2	3	4	2	3	3	4	5	6	8	9	5	6	5	4	4.0	9.2	
4-Mar-08	3	4	3	4	6	5	6	8	8	5	4	4	5	4	4	4	3	4	5	8	6	5	4	5	4.8	8.3	
5-Mar-08	4	5	6	5	6	5	4	5	4	1	1	1	2	1	0	1	2	3	9	9	4	1	3	0	3.5	9.3	
6-Mar-08	0	2	0	1	3	3	3	3	4	3	3	3	2	1	2	4	2	4	2	3	3	5	3	3	2.5	5.5	
7-Mar-08	3	1	1	0	1	1	3	3	4	5	5	2	1	2	2	4	3	4	3	5	6	4	5	3	3.0	6.1	
8-Mar-08	4	3	5	4	4	4	4	7	4	7	6	3	0	1	2	3	3	2	4	12	17	4	3	3	4.5	16.6	
9-Mar-08	5	4	3	1	2	4	3	3	5	4	4	4	2	2	2	0	0	0	2	1	0	1	1	1	2.3	5.2	
10-Mar-08	1	2	3	2	3	3	4	5	6	4	4	3	3	0	5	1	2	3	5	2	0	0	1	1	2.6	5.9	
11-Mar-08	0	1	0	0	1	1	1	3	2	3	4	2	D	D	1	0	2	3	10	4	3	0	D	0	1.9	10.2	
12-Mar-08	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3	0	1	4	3	4	5	2	4	4	1.4	4.6	
13-Mar-08	0	0	0	0	1	0	3	7	5	3	2	1	0	0	0	2	0	3	5	3	3	1	1	2	1.8	7.3	
14-Mar-08	2	3	1	2	3	3	6	11	2	2	2	0	3	3	5	4	3	2	2	2	2	1	2	2	2.8	10.7	
15-Mar-08	2	1	2	0	3	1	3	0	2	5	5	4	3	2	1	2	1	1	3	8	14	18	12	10	4.3	18.3	
16-Mar-08	6	5	1	3	4	4	5	7	0	0	0	1	2	1	1	2	1	1	1	2	1	1	1	2	2.2	6.5	
17-Mar-08	4	4	2	2	2	3	2	3	3	2	1	3	0	0	1	0	2	4	10	6	4	1	1	1	2.6	9.6	
18-Mar-08	2	3	2	2	2	3	3	4	4	3	2	0	D	0	3	P	3	8	3	4	6	3	2	0	2.9	8.3	
19-Mar-08	3	4	7	6	6	6	4	6	6	7	9	9	10	11	8	9	5	3	4	4	7	2	1	1	5.7	11.1	
20-Mar-08	2	2	4	6	7	9	12	11	9	9	5	2	0	2	2	8	10	7	5	5	4	3	2	2	5.2	11.7	
21-Mar-08	2	4	3	4	9	7	7	10	4	7	4	2	2	3	4	2	5	5	5	5	6	7	3	7	4.8	10.1	
22-Mar-08	4	4	3	3	4	4	6	13	4	5	5	4	2	0	0	2	3	2	0	6	4	5	4	3	3.8	12.6	
23-Mar-08	1	1	0	0	0	1	7	2	0	2	3	3	3	2	2	0	2	6	3	3	2	2	2	1	2.0	6.6	
24-Mar-08	0	0	0	1	1	0	0	0	15	16	10	1	0	1	0	D	0	1	3	4	3	3	3	2	2.8	16.1	
25-Mar-08	2	1	1	0	1	2	2	6	1	1	0	0	2	6	2	0	2	D	3	4	4	3	2	2	2.1	5.7	
26-Mar-08	2	1	2	1	7	3	3	5	4	2	0	0	0	0	0	1	1	1	4	10	9	8	6	3	3.1	10.5	
27-Mar-08	5	6	4	5	5	3	5	7	10	9	7	1	0	0	0	10	4	4	1	3	2	5	4	5	6	4.7	10.2
28-Mar-08	6	3	5	3	2	3	2	3	6	5	3	0	0	0	0	1	0	1	5	2	4	1	2	1	2.4	6.3	
29-Mar-08	2	2	5	4	3	1	2	3	3	4	4	6	5	4	4	4	5	4	6	6	6	5	7	5	4.2	6.8	
30-Mar-08	5	5	5	5	6	5	5	6	5	5	6	4	5	4	1	1	8	4	3	2	2	1	1	1	4.0	7.6	
31-Mar-08	1	3	2	2	1	4	4	4	4	4	7	6	4	2	3	5	4	4	3	3	4	3	3	3	3.4	6.7	
Hourly Avg	2.5	2.7	2.5	2.4	3.0	3.0	3.6	4.9	4.4	4.2	3.6	2.4	2.2	2.2	2.5	2.5	2.9	3.2	4.1	4.5	4.6	3.4	3.1	2.6			
Hourly Max	6.3	6.7	6.5	5.6	8.7	8.9	11.7	12.6	14.6	16.1	10.5	9.4	9.5	11.1	10.1	8.6	9.8	8.3	10.2	11.7	16.6	18.3	12.3	9.5			

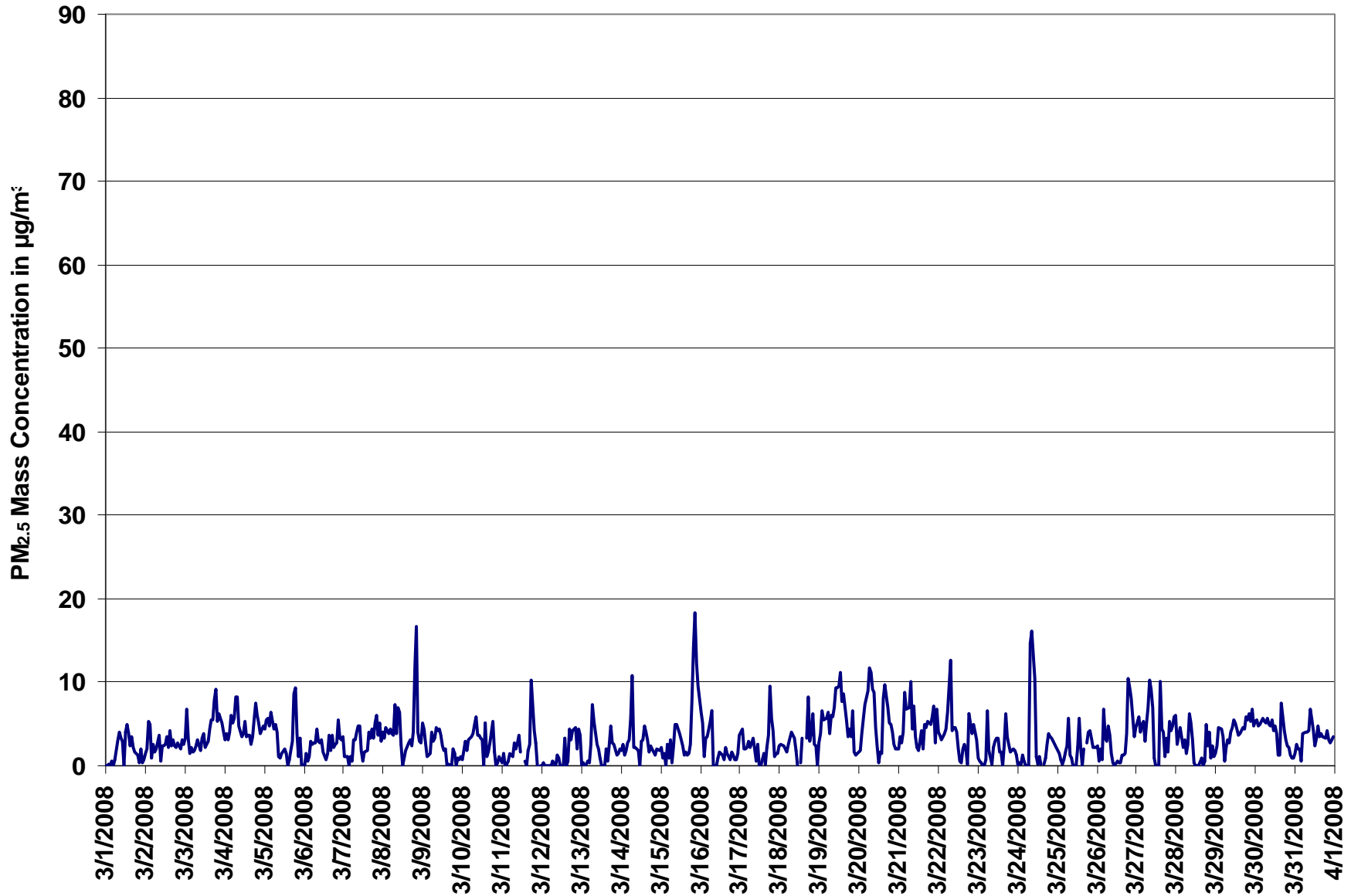


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

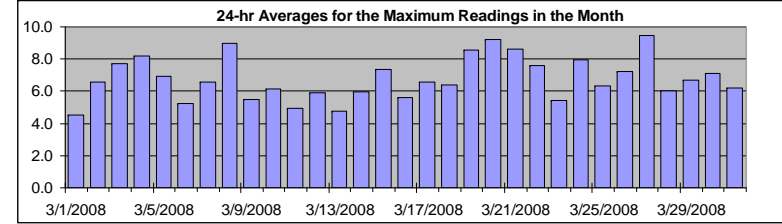
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	30.7	µg/m ³	27-Mar	14:00 15:00
Maximum 24-hr Value:	9.4	µg/m ³	27-Mar	



AIC Time:	0 hrs	Operational Time:	743 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	20.5	14.1	8.2	6.0	4.3	2.3	1.3	6.8	6 µg/m ³
									6.6 µg/m ³

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Mar-08	1	2	2	1	2	1	6	6	7	7	7	6	6	6	5	7	5	5	4	4	6	3	3	4.5	7.4	
2-Mar-08	4	5	12	9	8	8	6	5	11	7	5	6	7	10	6	7	6	5	5	5	4	6	6	6.6	11.9	
3-Mar-08	10	12	7	4	5	4	4	5	6	6	6	6	6	5	5	7	9	8	15	18	12	10	10	6	7.7	18.1
4-Mar-08	5	6	6	6	9	7	9	11	12	8	5	8	9	10	12	7	7	6	11	11	9	9	7	6	8.2	12.5
5-Mar-08	6	7	8	8	8	7	8	7	8	4	6	5	6	7	4	4	5	5	17	16	8	4	6	3	6.9	16.6
6-Mar-08	2	5	2	3	5	4	5	4	6	5	6	9	6	5	4	6	5	6	6	4	5	10	8	6	5.2	10.2
7-Mar-08	6	4	3	2	3	2	10	6	8	7	11	7	5	6	6	6	6	7	5	11	10	7	11	8	6.6	11.5
8-Mar-08	8	6	9	6	9	7	10	13	11	13	10	4	3	4	8	8	9	6	8	23	21	7	6	6	9.0	23.5
9-Mar-08	9	8	6	4	4	11	9	6	7	7	7	6	5	6	9	3	4	3	4	4	2	2	3	4	5.5	10.6
10-Mar-08	4	4	5	4	6	9	6	12	10	7	6	8	7	7	8	6	7	5	9	8	2	2	3	3	6.2	11.6
11-Mar-08	3	3	1	3	6	7	2	6	4	5	7	4	2	3	6	4	6	6	15	11	7	4	2	3	4.9	14.6
12-Mar-08	2	3	1	0	3	1	2	3	6	5	6	5	5	2	16	5	8	15	7	7	16	5	8	12	5.9	16.2
13-Mar-08	2	3	2	2	3	2	7	10	8	6	9	5	3	2	4	6	4	6	9	6	5	3	4	3	4.8	10.1
14-Mar-08	4	4	3	4	5	5	12	15	5	5	5	3	8	8	9	9	7	5	6	4	5	3	6	5.9	15.3	
15-Mar-08	6	4	4	3	5	3	5	3	5	8	7	7	8	5	4	4	3	5	4	11	19	24	15	16	7.4	23.5
16-Mar-08	9	10	3	9	6	10	8	11	10	4	2	3	4	4	4	7	5	3	3	6	5	3	3	5	5.6	10.5
17-Mar-08	7	13	5	4	5	10	4	4	5	6	4	8	4	5	6	4	7	13	16	13	6	4	3	3	6.6	16.0
18-Mar-08	4	4	5	4	3	4	10	6	6	6	5	5	7	8	11	P	8	14	7	9	9	5	6	2	6.4	14.4
19-Mar-08	5	7	9	8	8	9	8	8	8	12	13	12	12	15	11	12	10	6	8	5	11	4	3	2	8.6	14.9
20-Mar-08	4	4	9	8	11	12	18	17	14	12	10	7	6	5	5	17	18	12	7	6	5	5	3	4	9.2	18.0
21-Mar-08	4	6	5	6	13	11	9	12	12	9	8	6	8	6	12	5	10	11	7	7	8	10	5	14	8.6	14.1
22-Mar-08	6	8	5	5	5	7	11	15	12	7	8	8	5	4	4	6	8	5	14	13	5	7	6	6	7.6	15.3
23-Mar-08	3	3	3	1	2	10	20	4	5	5	6	6	10	5	4	5	5	10	5	5	4	4	4	4	5.4	20.1
24-Mar-08	1	2	2	4	2	2	6	7	26	27	28	6	8	7	9	6	5	4	10	9	8	5	5	4	8.0	28.4
25-Mar-08	4	3	2	2	5	4	6	10	5	4	3	1	8	20	18	8	6	2	8	8	8	6	6	4	6.3	20.3
26-Mar-08	5	2	4	2	18	11	4	8	9	4	5	5	4	3	5	5	5	3	14	16	17	11	9	5	7.2	17.8
27-Mar-08	13	11	7	8	7	5	9	10	13	12	12	4	1	2	31	21	19	3	6	4	8	7	7	8	9.4	30.7
28-Mar-08	9	5	7	5	5	10	5	5	11	8	5	4	7	3	3	6	4	3	10	7	9	2	7	3	6.0	10.6
29-Mar-08	4	5	7	6	6	3	4	5	6	6	6	8	7	8	7	8	10	8	9	7	9	7	9	6	6.7	9.9
30-Mar-08	7	7	7	7	7	7	7	7	7	7	8	7	9	12	8	7	19	7	5	5	5	3	3	4	7.1	18.7
31-Mar-08	3	4	3	3	4	5	7	6	9	11	9	10	5	6	10	7	7	5	6	6	7	5	5	6	6.2	10.9
Hourly Avg	5.3	5.4	4.9	4.6	6.1	6.4	7.6	7.9	8.7	7.7	7.6	6.1	6.2	6.4	8.1	7.0	7.7	6.5	8.4	8.7	8.2	6.1	5.7	5.5		
Hourly Max	12.7	13.2	11.9	8.8	17.8	12.2	20.1	17.2	25.8	27.5	28.4	11.8	12.2	20.3	30.7	20.6	19.1	14.9	16.6	23.5	20.8	23.5	14.8	16.0		

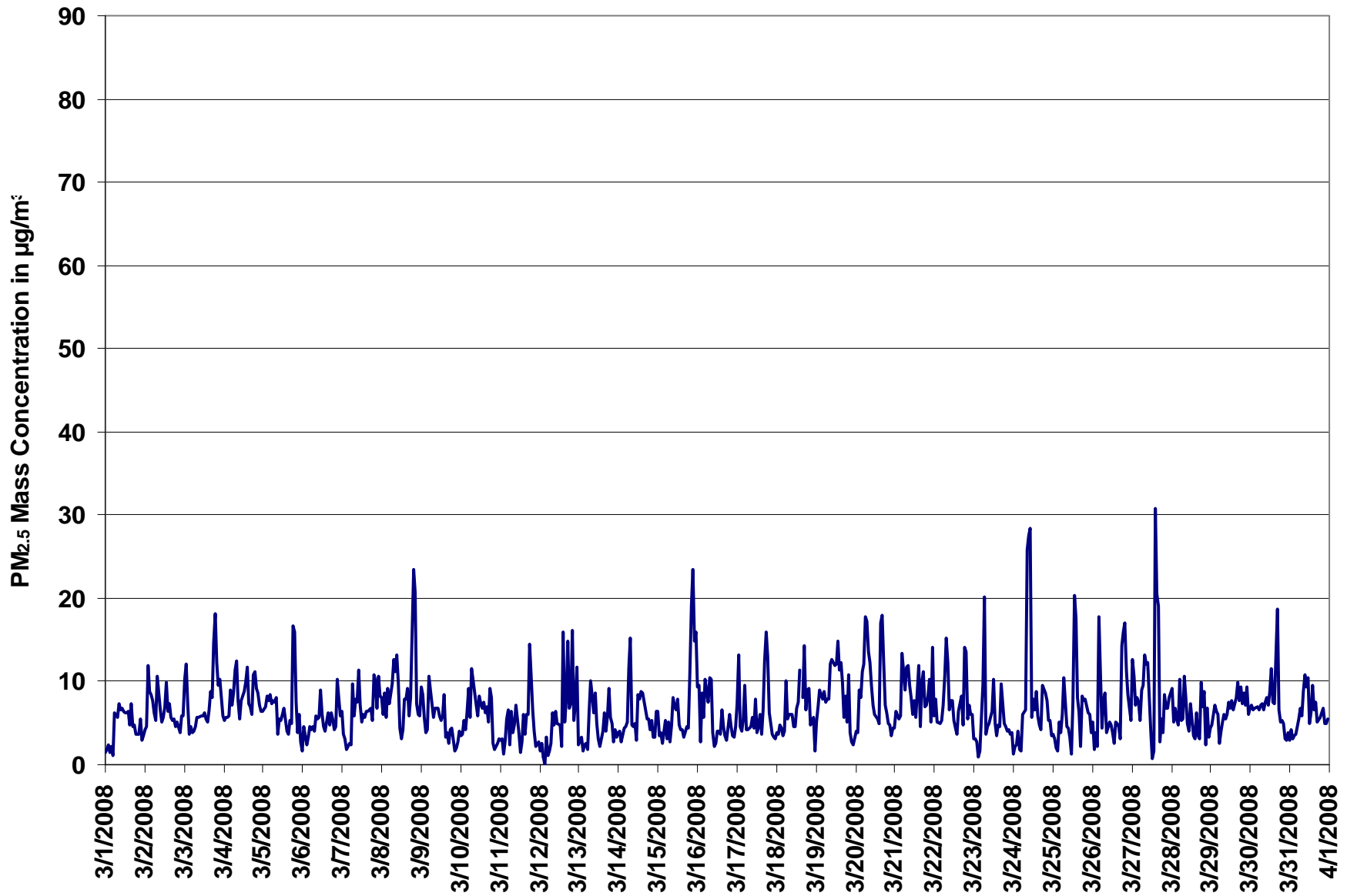
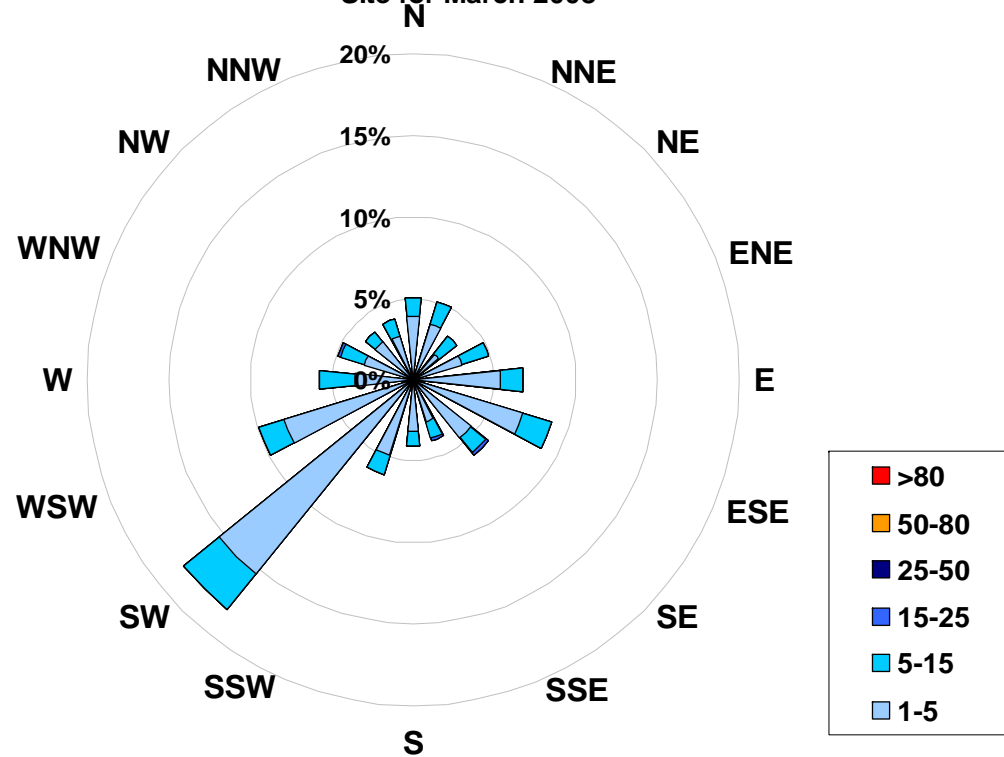


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



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 March 208



Calms: 0%

Frequency Distribution of PM _{2.5} in µg/m ³			
	Range		Frequency (hrs)
1.0	<	5	597
5	to	15	137
15	to	25	3
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			737



PAS - Crescent Heights Relative Humidity Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

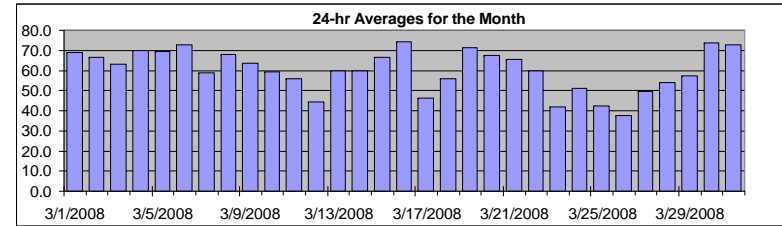
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	90.3	%	19-Mar	7:00 8:00
Maximum 24-hr Value:	74.4	%	16-Mar	



AIC Time:	0 hrs	Operational Time:	744 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	89.0	84.2	73.9
			61.8
			49.7
			26.8
			18.6
		Average	Median
		60.2 %	61.8 %

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
1-Mar-08	64	63	65	64	65	63	61	63	65	61	62	57	56	66	77	75	76	76	77	79	72	76	84	83	68.7	83.7
2-Mar-08	79	83	85	84	78	76	70	64	67	61	54	54	53	53	52	53	57	60	64	64	68	70	73	72	66.4	85.4
3-Mar-08	72	70	65	64	68	70	71	68	63	57	55	55	54	54	57	58	57	56	60	64	59	63	72	81	63.0	80.5
4-Mar-08	77	74	79	81	83	86	85	82	79	78	73	68	63	60	56	52	47	50	57	62	67	72	75	76	70.1	86.3
5-Mar-08	75	74	74	75	73	68	70	72	73	72	69	70	71	70	63	57	54	60	64	67	69	65	73	84	69.2	84.3
6-Mar-08	82	81	82	83	83	82	81	80	78	75	71	68	66	61	58	56	58	61	70	73	76	77	75	75	73.0	83.2
7-Mar-08	74	68	66	69	66	65	66	66	64	59	48	42	34	36	35	39	42	50	61	66	69	71	74	74	58.6	74.5
8-Mar-08	79	80	81	84	85	85	86	81	73	66	62	57	48	45	42	48	48	53	60	68	73	75	77	78	68.1	85.5
9-Mar-08	80	82	82	79	80	80	77	75	71	67	62	59	55	51	48	43	40	41	50	60	58	59	65	67	63.8	82.3
10-Mar-08	68	68	69	73	72	74	74	73	66	58	55	48	50	39	42	43	39	45	54	63	61	64	62	63	59.4	74.2
11-Mar-08	65	62	61	64	63	64	63	61	57	56	50	48	44	30	29	28	31	40	57	82	86	80	64	60	55.9	85.7
12-Mar-08	54	56	59	55	55	51	49	47	47	47	39	34	27	23	29	27	24	34	43	49	48	54	57	58	44.5	59.4
13-Mar-08	60	63	66	72	75	76	78	75	70	63	60	53	46	41	38	40	38	41	49	58	65	68	69	74	60.0	78.3
14-Mar-08	75	77	77	81	82	80	78	75	70	67	59	41	33	34	38	44	47	47	51	53	54	55	57	60	59.8	82.3
15-Mar-08	68	68	69	72	78	83	84	77	69	63	62	61	58	56	55	54	55	55	60	63	67	72	75	75	66.6	83.6
16-Mar-08	77	77	80	83	84	84	84	84	84	78	75	68	65	63	61	59	60	63	69	74	77	77	79	80	74.4	84.2
17-Mar-08	77	62	58	57	56	58	60	61	59	53	41	37	26	22	21	22	23	26	34	46	55	56	50	50	46.3	77.2
18-Mar-08	50	56	63	67	69	70	73	69	64	56	47	37	27	27	31	40	42	52	59	61	70	71	70	68	55.7	73.2
19-Mar-08	67	67	79	87	89	89	90	90	90	90	84	76	69	58	52	47	45	44	48	53	68	76	78	77	71.4	90.3
20-Mar-08	77	83	83	83	83	83	82	81	78	74	59	48	42	31	28	30	46	60	66	71	77	80	83	85	67.2	85.1
21-Mar-08	84	85	84	85	85	85	84	79	73	69	59	48	43	40	43	41	41	45	54	60	67	71	70	74	65.4	85.4
22-Mar-08	77	79	82	83	85	86	86	80	73	67	57	51	46	41	38	35	34	36	31	46	52	56	56	60	59.9	86.0
23-Mar-08	61	60	60	58	59	63	60	55	42	32	30	30	25	25	22	18	19	25	31	36	40	45	52	61	42.1	63.3
24-Mar-08	66	68	63	65	69	69	59	45	48	62	86	78	63	47	40	23	22	22	27	33	34	41	45	48	51.0	86.1
25-Mar-08	52	56	58	54	55	55	54	50	40	34	29	26	26	35	42	37	35	22	26	32	40	50	54	57	42.4	57.9
26-Mar-08	61	57	58	56	55	55	61	58	48	35	28	22	20	19	16	15	13	13	16	21	28	43	49	53	37.6	60.8
27-Mar-08	54	59	63	66	67	66	67	62	54	45	40	35	24	19	35	36	44	40	42	44	46	55	60	68	49.6	68.4
28-Mar-08	81	81	82	81	80	75	74	71	71	67	57	47	35	29	28	24	19	17	28	36	43	53	58	58	53.8	81.7
29-Mar-08	59	62	67	72	73	65	61	58	57	54	53	53	52	47	43	42	38	40	49	56	63	68	71	72	57.3	73.1
30-Mar-08	72	74	76	76	75	76	75	72	68	60	54	54	58	62	58	60	81	88	90	89	89	88	86	84	73.5	89.5
31-Mar-08	84	82	81	82	84	84	84	84	82	76	68	62	60	56	52	53	55	65	70	77	79	78	77	77	72.9	84.3
Hourly Avg	70.0	70.2	71.5	72.7	73.4	73.2	72.5	69.5	66.0	61.4	56.3	51.1	46.3	43.2	42.8	41.9	42.8	46.1	52.1	58.2	61.9	65.5	67.5	69.4		
Hourly Max	84.2	84.9	85.4	86.9	89.5	89.4	89.7	90.3	90.3	89.5	86.1	78.1	70.5	70.4	77.2	74.8	81.2	88.4	89.5	89.1	88.8	87.6	86.1	85.1		

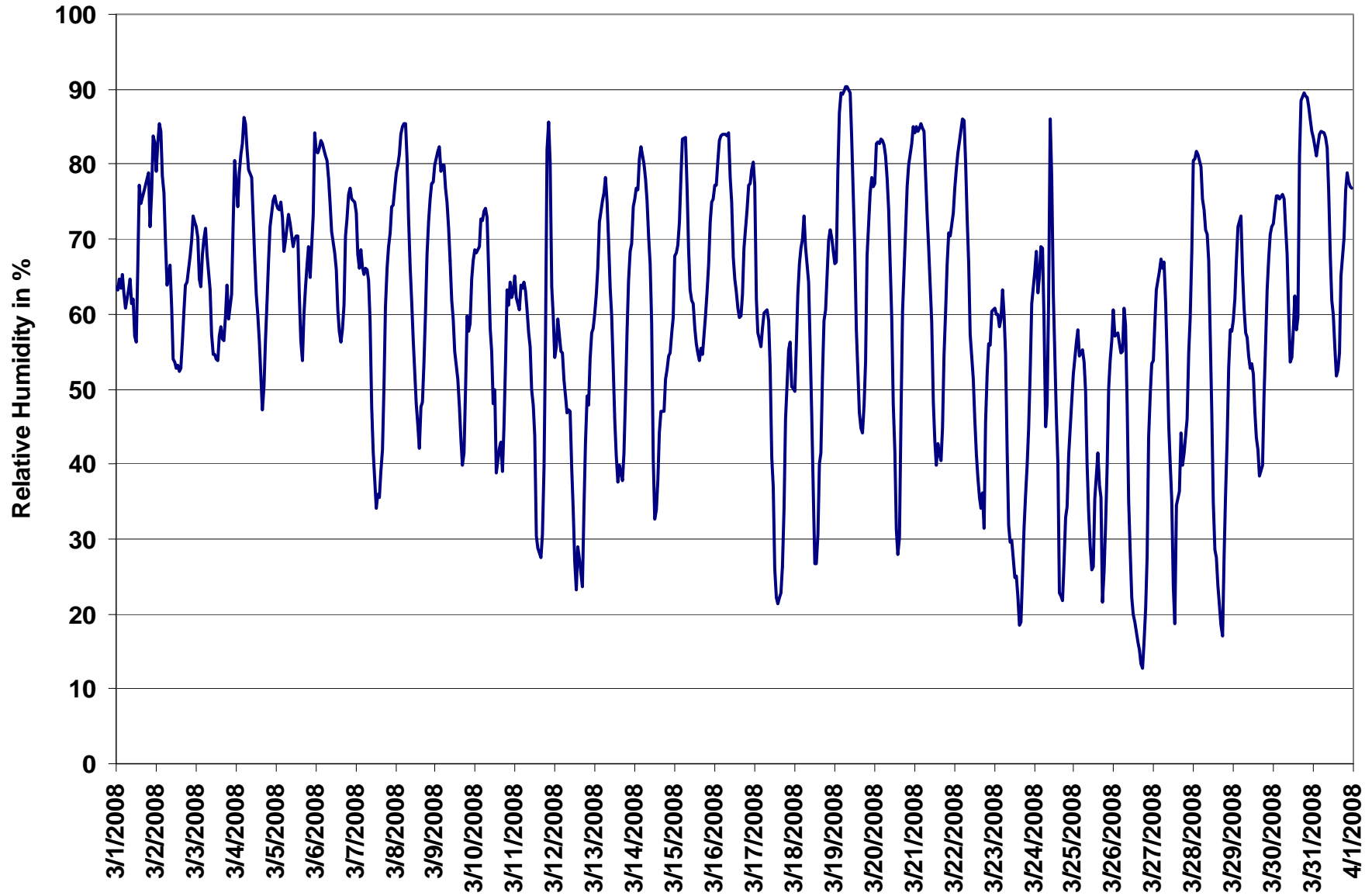


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



PAS - Crescent Heights Temperature Monthly Summary

Station: Crescent Heights
Station Owner: PAS

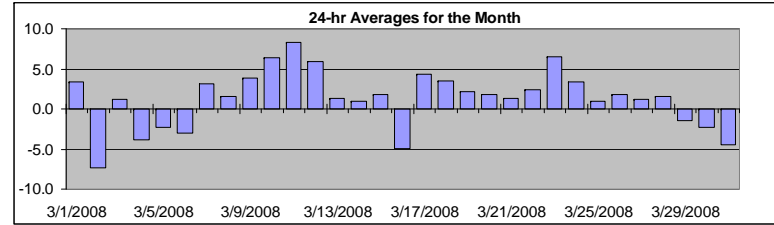
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	14.6 °C	11-Mar	13:00 14:00
Maximum 24-hr Value:	8.3 °C	11-Mar	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	13.2	9.7	5.1	1.3	-2.6	-6.9	-9.6	1.3 °C	1.3 °C

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	24-hour Average	Daily Maximum
1-Mar-08	4	4	3	3	3	3	4	4	6	7	7	6	5	4	3	3	3	3	2	2	2	2	0	0	3.4	7.3	
2-Mar-08	-1	-1	-2	-2	-3	-7	-8	-9	-11	-11	-11	-9	-9	-8	-7	-6	-6	-8	-9	-9	-9	-10	-10	-10	-7.3	-0.6	
3-Mar-08	-9	-6	-3	-2	-3	-3	-4	-2	0	2	3	4	5	6	6	6	5	4	4	4	3	3	2	2	1.2	6.0	
4-Mar-08	2	2	0	-1	-1	-2	-3	-4	-6	-7	-7	-6	-5	-4	-3	-3	-3	-3	-5	-5	-4	-6	-7	-7	-7	-3.8	2.0
5-Mar-08	-7	-7	-6	-6	-4	-2	-3	-4	-4	-4	-3	-2	-1	0	0	1	2	0	-1	-1	-1	-1	-2	-3	-2.3	1.6	
6-Mar-08	-4	-5	-5	-6	-6	-6	-7	-7	-6	-5	-4	-3	-2	0	1	3	3	1	-1	-2	-3	-3	-2	-2	-3.0	2.8	
7-Mar-08	-2	0	0	-1	-1	-1	-1	-1	0	3	7	8	9	9	10	10	9	8	5	3	2	1	0	-1	3.2	9.7	
8-Mar-08	-2	-2	-3	-4	-4	-5	-5	-4	-1	1	4	6	8	8	10	9	8	7	5	3	2	0	-1	-1	1.6	9.6	
9-Mar-08	-1	-2	-2	-2	-3	-2	-1	-1	1	3	5	7	8	10	11	12	12	11	8	5	5	4	3	2	3.9	12.0	
10-Mar-08	2	2	2	1	1	1	0	1	3	5	6	9	10	12	13	14	14	13	11	8	7	6	6	6	6.4	14.3	
11-Mar-08	6	6	7	6	6	6	6	7	8	9	12	13	13	15	15	13	12	10	8	4	4	5	5	5	8.3	14.6	
12-Mar-08	5	5	4	4	4	4	4	4	5	5	8	9	11	11	10	10	11	8	6	4	4	3	2	2	5.9	10.9	
13-Mar-08	2	1	0	-1	-2	-3	-3	-2	0	2	3	4	5	5	5	5	4	3	2	0	-1	-1	-2	-2	1.3	5.3	
14-Mar-08	-3	-3	-3	-4	-5	-4	-4	-3	-2	0	2	5	6	6	6	5	4	4	3	3	2	2	1	1	0.9	6.5	
15-Mar-08	1	0	0	0	-1	-2	-2	-1	0	2	3	4	5	6	5	6	5	5	3	2	2	0	0	0	1.8	5.9	
16-Mar-08	-1	0	-1	-2	-2	-2	-1	-1	-3	-7	-8	-7	-6	-6	-6	-5	-4	-5	-7	-8	-9	-10	-10	-9	-4.9	-0.5	
17-Mar-08	-7	-1	1	2	2	2	2	2	3	5	6	8	10	11	10	10	9	8	6	5	3	2	3	3	4.3	10.6	
18-Mar-08	2	0	-1	-2	-3	-3	-3	-2	0	3	6	9	10	11	10	9	10	7	6	5	3	3	2	1	3.5	10.9	
19-Mar-08	1	0	-1	-2	-2	-2	-2	-1	0	0	1	2	4	7	8	9	8	7	6	4	3	1	0	0	2.2	9.1	
20-Mar-08	0	-2	-3	-3	-4	-3	-3	-2	-1	2	6	7	7	9	9	9	7	5	4	2	1	0	-1	-3	1.8	9.2	
21-Mar-08	-3	-4	-5	-5	-5	-6	-6	-3	-1	2	5	7	8	9	8	8	8	6	5	3	2	0	0	-1	1.3	8.8	
22-Mar-08	-1	-3	-4	-4	-5	-5	-5	-3	0	3	6	8	9	9	9	9	9	7	4	2	1	2	2	2	2.4	9.4	
23-Mar-08	2	2	1	1	0	-1	-1	1	5	7	8	8	10	11	12	13	13	13	12	10	9	8	6	5	6.5	13.3	
24-Mar-08	4	4	5	4	3	2	3	4	4	3	0	1	3	5	5	5	5	5	4	3	3	2	1	1	3.3	5.3	
25-Mar-08	0	-2	-2	-2	-3	-4	-4	-2	1	4	5	6	6	5	4	4	5	6	4	2	0	-2	-4	-4	0.9	6.3	
26-Mar-08	-4	-3	-3	-3	-3	-3	-4	-4	0	4	6	8	8	8	9	9	9	9	6	4	2	-2	-3	-4	1.8	9.0	
27-Mar-08	-4	-5	-6	-6	-7	-7	-7	-5	-1	2	5	6	8	9	7	7	5	6	5	4	4	3	2	0	1.2	9.4	
28-Mar-08	0	-1	-1	0	-1	-2	-3	-2	-1	1	3	5	6	6	6	7	7	7	4	2	0	-1	-2	-1	1.5	7.1	
29-Mar-08	-2	-2	-2	-2	-3	-3	-3	-3	-3	-2	-1	-1	0	1	2	3	3	2	0	-2	-3	-4	-5	-5	-1.4	2.8	
30-Mar-08	-5	-5	-6	-6	-6	-7	-6	-5	-3	0	2	2	3	2	3	2	0	-1	-1	-2	-2	-3	-4	-5	-2.3	3.1	
31-Mar-08	-5	-5	-5	-6	-8	-8	-8	-7	-7	-5	-2	-2	-2	0	2	1	0	-3	-4	-6	-7	-7	-7	-7	-4.4	1.5	
Hourly Avg	-1.1	-1.1	-1.3	-1.7	-2.1	-2.4	-2.5	-1.8	-0.5	1.1	2.8	3.9	4.9	5.7	5.9	6.1	5.8	4.8	3.2	1.7	0.8	-0.1	-0.7	-1.1			
Hourly Max	5.7	6.3	6.7	5.9	6.0	5.8	6.0	6.5	7.7	9.0	12.1	12.9	13.2	14.6	14.5	14.0	14.3	13.3	11.8	10.1	8.7	7.6	6.5	6.5			

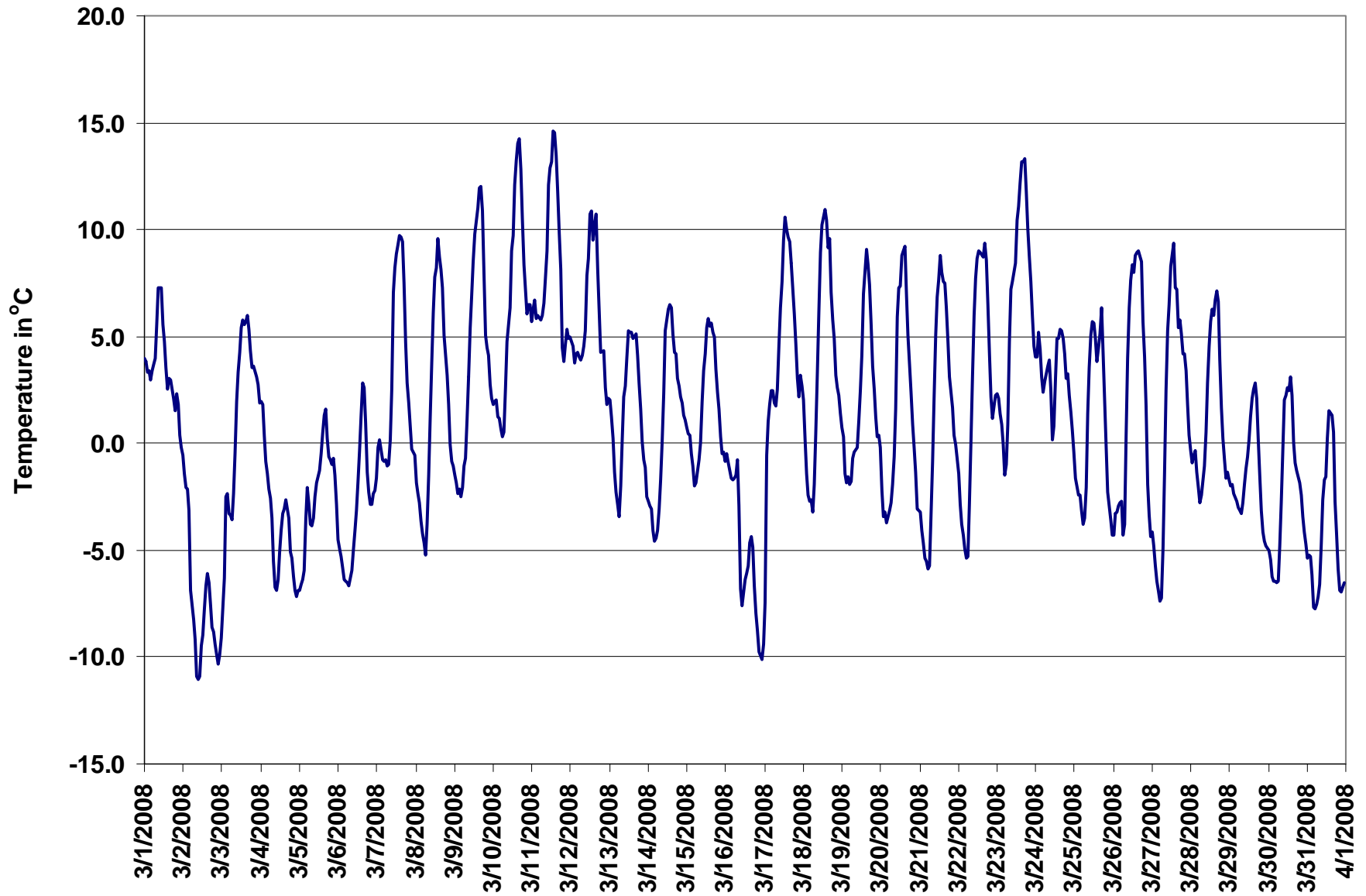


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



PAS - Crescent Heights Solar Radiation Monthly Summary

Station: Crescent Heights
Station Owner: PAS

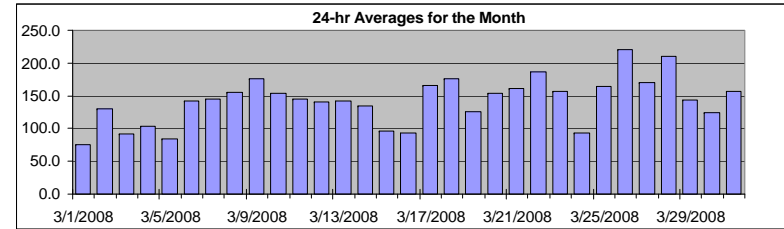
HOURLY AVERAGE TABLE

Solar Radiation (SR)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	749.4	W/m ²	26-Mar	12:00 13:00
Maximum 24-hr Value:	220.9	W/m ²	26-Mar	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	666.6	550.9	276.5	5.2	0.0	0.0	0.0	142.4 W/m ²	5.2 W/m ²

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	0	0	0	0	0	0	0	31	208	383	332	219	187	74	104	132	99	30	1	0	0	0	0	0	75.0	383.4	
2-Mar-08	0	0	0	0	0	0	0	15	36	180	343	533	500	489	380	368	227	62	2	0	0	0	0	0	130.6	532.6	
3-Mar-08	0	0	0	0	0	0	1	50	139	244	373	348	360	275	165	127	91	33	1	0	0	0	0	0	91.9	372.9	
4-Mar-08	0	0	0	0	0	0	0	11	49	89	152	229	486	472	336	359	244	69	2	0	0	0	0	0	104.1	485.8	
5-Mar-08	0	0	0	0	0	0	0	16	53	104	223	272	298	309	282	297	156	19	1	0	0	0	0	0	84.5	308.6	
6-Mar-08	0	0	0	0	0	0	0	20	85	179	360	463	599	581	389	393	248	83	2	0	0	0	0	0	141.9	599.4	
7-Mar-08	0	0	0	0	0	0	1	39	133	360	486	373	450	499	387	400	256	80	3	0	0	0	0	0	144.4	498.9	
8-Mar-08	0	0	0	0	0	0	2	74	207	365	526	560	559	422	410	366	149	89	4	0	0	0	0	0	155.5	559.7	
9-Mar-08	0	0	0	0	0	0	2	80	236	388	511	593	615	599	419	406	264	93	3	0	0	0	0	0	175.4	615.0	
10-Mar-08	0	0	0	0	0	0	4	64	238	253	441	540	505	600	404	346	236	55	5	0	0	0	0	0	153.8	600.4	
11-Mar-08	0	0	0	0	0	0	1	30	91	225	533	439	385	571	471	425	266	41	2	0	0	0	0	0	145.1	571.2	
12-Mar-08	0	0	0	0	0	0	2	55	188	170	509	450	651	498	228	309	261	45	4	0	0	0	0	0	140.4	651.2	
13-Mar-08	0	0	0	0	0	0	5	106	271	347	375	552	646	341	282	212	205	75	3	0	0	0	0	0	142.5	645.7	
14-Mar-08	0	0	0	0	0	0	5	110	174	254	371	520	461	431	389	264	122	105	7	0	0	0	0	0	134.0	520.1	
15-Mar-08	0	0	0	0	0	0	5	56	124	277	362	327	287	330	223	159	108	48	5	0	0	0	0	0	96.3	362.4	
16-Mar-08	0	0	0	0	0	0	5	26	32	62	132	286	303	296	350	331	263	131	8	0	0	0	0	0	92.8	349.8	
17-Mar-08	0	0	0	0	0	0	4	80	176	390	485	488	685	626	482	282	190	63	7	0	0	0	0	0	165.0	684.7	
18-Mar-08	0	0	0	0	0	0	12	122	280	443	573	658	687	636	316	234	215	29	4	0	0	0	0	0	175.4	687.1	
19-Mar-08	0	0	0	0	0	0	6	18	48	93	212	258	310	570	592	467	303	130	13	0	0	0	0	0	125.9	592.0	
20-Mar-08	0	0	0	0	0	0	5	45	143	284	559	471	461	562	414	507	188	40	10	0	0	0	0	0	153.7	561.5	
21-Mar-08	0	0	0	0	0	0	17	141	276	370	524	561	491	545	391	280	181	68	12	0	0	0	0	0	160.7	561.4	
22-Mar-08	0	0	0	0	0	0	20	168	327	478	602	685	564	536	415	254	227	166	17	0	0	0	0	0	185.8	684.6	
23-Mar-08	0	0	0	0	0	0	25	157	325	435	337	470	545	419	454	320	168	86	11	0	0	0	0	0	156.3	544.5	
24-Mar-08	0	0	0	0	0	0	10	56	129	105	119	204	388	438	288	232	170	90	16	0	0	0	0	0	93.5	438.0	
25-Mar-08	0	0	0	0	0	0	28	172	345	499	633	520	431	376	295	197	248	183	23	0	0	0	0	0	164.6	633.0	
26-Mar-08	0	0	0	0	0	0	13	95	346	481	619	728	749	529	673	517	348	179	23	0	0	0	0	0	220.9	749.4	
27-Mar-08	0	0	0	0	0	0	30	157	331	468	581	648	645	537	276	246	87	60	16	0	0	0	0	0	170.2	647.8	
28-Mar-08	0	0	0	0	0	0	24	111	168	409	643	712	748	648	481	511	381	174	17	0	0	0	0	0	209.5	747.7	
29-Mar-08	0	0	0	0	0	0	8	59	138	247	346	405	427	471	443	454	312	103	21	0	0	0	0	0	143.1	470.7	
30-Mar-08	0	0	0	0	0	0	24	187	238	415	361	370	407	436	418	91	16	12	9	0	0	0	0	0	124.4	436.4	
31-Mar-08	0	0	0	0	0	0	23	80	141	293	414	420	459	544	504	398	341	105	27	1	0	0	0	0	156.2	543.9	
Hourly Avg	0.0	0.0	0.0	0.0	0.0	0.0	9.1	78.4	183.1	299.8	420.5	461.2	493.2	473.0	376.1	318.8	212.0	82.2	9.1	0.0	0.0	0.0	0.0	0.0			
Hourly Max	0.0	0.0	0.2	0.0	0.0	0.4	30.5	187.1	346.1	498.6	642.7	727.8	749.4	647.9	673.5	517.2	380.7	183.1	27.0	0.6	0.0	0.0	0.0	0.0			

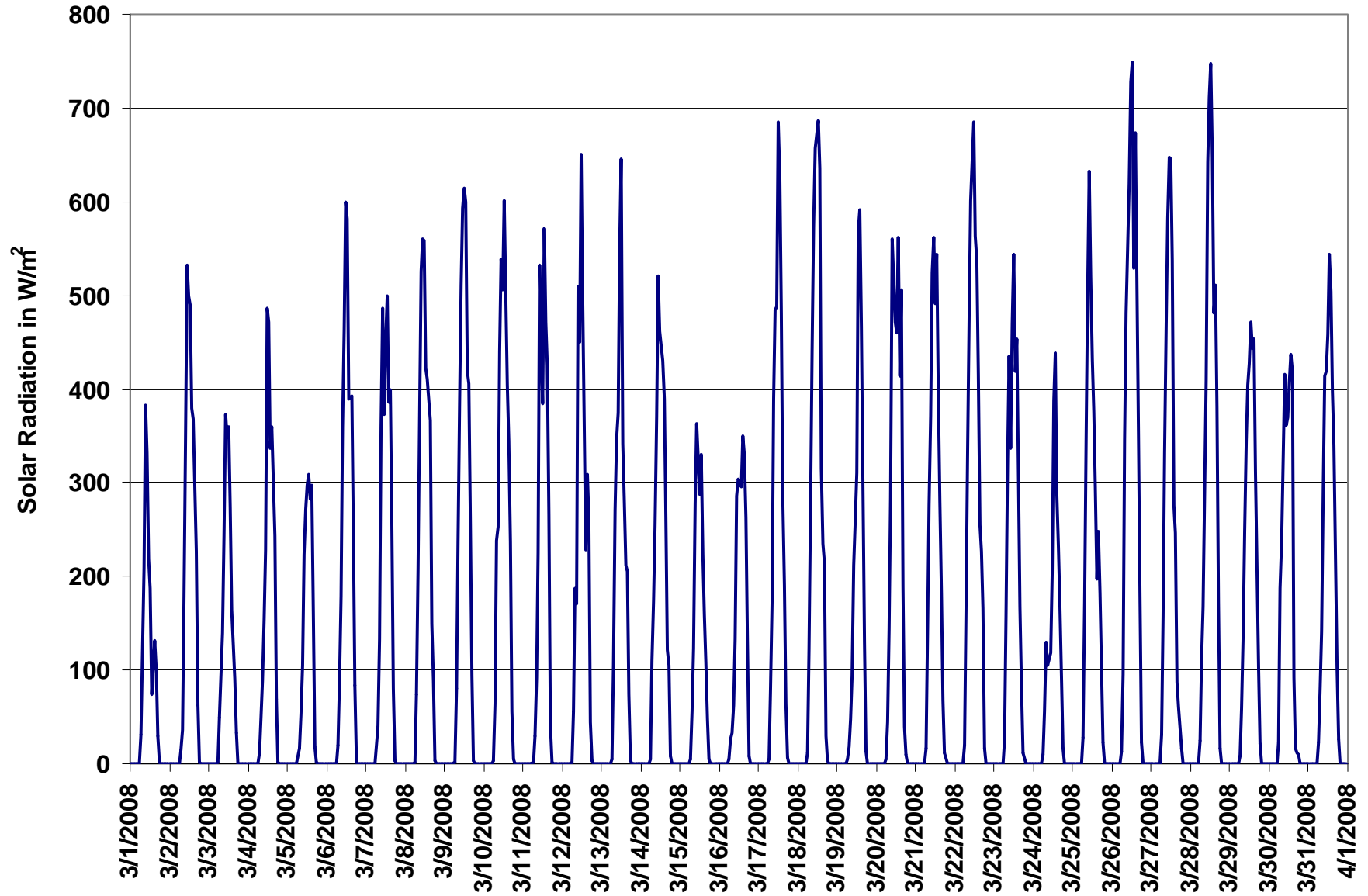


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



PAS - Crescent Heights Scalar Wind Speed Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

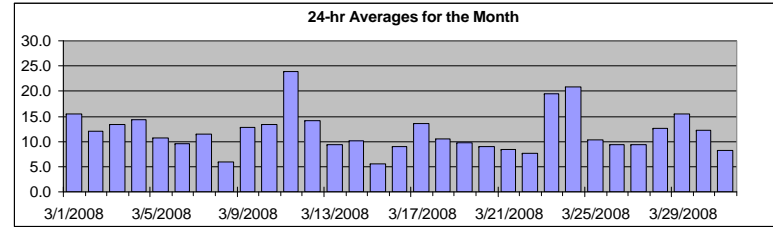
Wind Speed (WSs)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	40.9	km/hr	11-Mar	14:00 15:00
Maximum 24-hr Value:	23.9	km/hr	11-Mar	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	29.6	22.9	15.0	11.1	7.3	4.8	3.6	11.9 km/hr



Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	12	18	16	15	8	11	19	24	21	23	19	25	20	15	8	10	13	13	12	12	16	16	12	10	15.4	25.2	
2-Mar-08	8	11	7	8	20	19	19	18	18	16	15	12	12	10	10	12	13	12	10	10	10	8	5	5	12.0	20.1	
3-Mar-08	4	13	15	22	15	16	14	20	15	17	23	21	21	20	14	10	6	6	4	8	8	12	10	5	13.3	22.8	
4-Mar-08	6	6	11	13	14	14	16	24	25	20	20	16	17	17	19	18	11	8	4	8	13	14	14	15	14.3	24.9	
5-Mar-08	18	17	13	9	14	18	13	13	8	6	8	10	12	12	13	11	7	4	5	6	10	13	13	13	10.8	17.8	
6-Mar-08	15	11	8	9	8	8	7	8	7	11	13	16	16	13	12	9	12	10	10	7	6	5	5	5	9.6	15.9	
7-Mar-08	6	13	13	13	15	18	17	20	13	13	8	8	11	14	15	14	13	11	8	7	5	8	6	6	11.5	19.8	
8-Mar-08	4	6	5	4	5	4	6	5	4	4	7	7	7	7	7	11	8	7	5	4	5	7	6	6	5.9	11.1	
9-Mar-08	5	5	6	8	8	7	11	12	12	15	13	15	15	17	17	20	20	15	12	11	14	17	18	16	12.9	20.0	
10-Mar-08	17	20	17	12	11	10	8	7	8	9	11	13	15	18	16	19	18	14	7	9	13	16	14	19	13.3	19.8	
11-Mar-08	16	22	20	17	16	18	20	18	17	18	22	30	31	31	41	35	40	31	30	29	20	15	22	18	23.9	40.9	
12-Mar-08	19	17	19	19	19	17	19	18	16	16	18	19	16	14	16	8	12	13	10	6	11	7	4	8	14.2	18.8	
13-Mar-08	6	7	9	8	7	9	6	7	7	7	9	11	9	11	13	14	12	12	9	9	11	13	13	7	9.4	13.5	
14-Mar-08	7	7	6	5	4	5	6	7	10	9	9	12	12	13	12	14	13	17	14	15	15	13	9	9	10.2	17.0	
15-Mar-08	9	7	6	7	7	5	3	5	5	4	7	7	6	6	6	5	6	3	5	3	4	6	6	5	5.6	9.1	
16-Mar-08	5	7	7	5	6	4	6	5	18	23	17	14	12	13	11	8	8	8	5	4	7	9	7	7	9.0	23.2	
17-Mar-08	9	26	28	27	22	17	16	10	11	12	15	14	15	11	13	9	8	5	5	9	8	8	11	12	13.5	28.4	
18-Mar-08	14	9	8	7	6	12	9	10	13	14	14	13	15	13	12	13	12	9	8	7	9	8	8	9	10.6	14.9	
19-Mar-08	10	10	9	10	12	10	11	11	11	10	11	11	11	7	6	7	7	8	8	9	9	14	13	8	9.8	13.8	
20-Mar-08	7	6	5	4	4	5	5	5	8	7	6	7	9	8	9	14	20	19	14	12	12	12	11	7	9.1	20.4	
21-Mar-08	7	5	7	7	5	4	4	4	7	6	9	10	11	13	18	15	14	12	10	6	7	8	6	7	8.5	18.1	
22-Mar-08	6	8	6	3	4	3	4	5	9	9	8	7	7	7	8	7	9	12	11	8	9	9	11	12	7.6	12.2	
23-Mar-08	15	16	15	12	8	7	6	9	12	23	22	20	21	25	23	24	19	28	29	25	25	29	30	22	19.5	29.5	
24-Mar-08	21	27	20	15	12	17	20	23	29	27	23	23	20	26	26	26	26	24	20	14	17	15	15	15	20.9	28.5	
25-Mar-08	13	13	12	9	7	6	7	7	10	13	14	15	15	19	14	9	9	9	6	7	7	8	8	10	10.2	18.6	
26-Mar-08	8	14	7	6	5	10	8	9	11	13	14	14	13	13	13	12	9	7	4	6	8	7	5	5	9.3	13.9	
27-Mar-08	6	6	5	4	4	6	6	4	5	5	6	9	13	13	16	14	12	10	15	11	15	14	13	13	9.3	16.1	
28-Mar-08	16	15	13	15	14	12	13	14	13	13	13	13	13	15	13	10	9	10	6	11	12	17	13	11	12	12.6	16.6
29-Mar-08	13	12	14	18	20	24	11	11	16	21	20	20	18	18	18	19	19	18	16	13	12	10	7	8	15.6	24.0	
30-Mar-08	9	9	10	11	12	13	12	13	11	12	8	9	7	12	12	9	13	16	15	16	14	16	14	17	12.1	16.8	
31-Mar-08	14	13	13	11	10	8	7	7	7	6	6	5	7	7	5	5	8	10	9	6	8	9	8	7	8.2	14.3	
1-hr Average	10.5	12.1	11.2	10.8	10.4	10.9	10.6	11.3	12.2	13.1	13.1	13.7	13.7	14.0	14.0	13.3	13.3	12.3	10.7	9.9	11.2	11.5	10.6	10.4			
Hourly Max	20.6	27.5	28.4	26.9	22.1	24.0	20.3	24.3	28.5	26.8	22.8	30.2	30.5	30.6	40.9	34.5	40.3	31.0	29.7	28.5	25.3	29.5	29.5	22.3			



PAS - Crescent Heights Vector Wind Speed Monthly Summary

Station: Crescent Heights
Station Owner: PAS

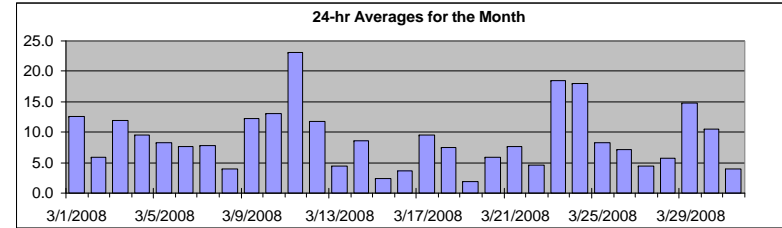
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	40.6	km/hr	11-Mar	14:00 15:00
Maximum 24-hr Value:	23.0	km/hr	11-Mar	



Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	29.5	22.7	14.6	10.5	6.5	3.2	1.8	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																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	12	18	15	15	7	11	18	24	21	23	18	24	20	15	8	10	13	13	12	12	14	16	11	10	10	12.7	24.4
2-Mar-08	7	11	6	7	20	18	19	18	18	16	15	12	11	9	9	9	12	12	10	10	7	4	4	10	5.9	19.9	
3-Mar-08	3	12	15	22	15	16	14	20	15	17	23	21	21	20	14	10	6	6	3	7	7	12	10	4	11.9	22.6	
4-Mar-08	5	6	11	13	14	14	16	24	25	20	19	16	17	16	19	18	11	8	3	8	13	14	14	15	9.6	24.7	
5-Mar-08	18	17	13	9	13	18	12	12	7	6	5	8	9	10	12	13	11	7	4	4	6	10	13	13	8.2	17.6	
6-Mar-08	14	11	8	9	8	8	7	8	7	10	13	15	16	13	11	7	11	10	10	7	6	5	5	4	7.7	15.7	
7-Mar-08	5	13	13	13	15	18	17	20	13	13	4	7	11	14	15	14	13	11	8	6	5	5	1	5	7.7	19.7	
8-Mar-08	3	6	3	2	4	3	5	5	3	3	7	6	4	6	3	11	8	7	5	3	4	7	6	5	3.9	10.6	
9-Mar-08	5	5	5	8	7	6	10	12	12	15	12	15	15	17	17	19	20	15	12	11	13	17	18	15	12.3	19.8	
10-Mar-08	17	20	17	12	11	10	8	6	8	8	11	13	15	17	16	19	18	14	6	9	13	16	14	19	13.1	19.6	
11-Mar-08	16	22	20	16	16	18	20	18	17	18	22	30	30	30	41	34	40	31	29	28	20	15	22	18	23.0	40.6	
12-Mar-08	19	17	19	19	19	17	18	18	16	16	17	19	16	14	16	7	10	12	10	3	11	7	1	6	11.8	18.7	
13-Mar-08	5	7	9	7	7	9	2	7	6	6	9	11	8	10	13	13	11	12	8	9	11	13	12	6	4.4	13.0	
14-Mar-08	7	6	6	5	3	5	6	6	10	8	9	10	11	12	12	14	13	17	14	15	15	13	8	8	8.6	16.8	
15-Mar-08	9	7	5	7	6	5	2	5	4	2	6	5	5	4	4	3	5	3	5	2	4	6	5	3	2.4	8.6	
16-Mar-08	4	7	7	5	6	3	5	5	18	23	17	13	12	12	11	6	7	8	5	2	7	9	7	7	3.6	23.0	
17-Mar-08	7	26	28	27	22	17	15	10	11	12	15	14	15	10	12	8	4	4	3	9	7	8	11	12	9.6	28.3	
18-Mar-08	14	8	8	6	6	12	9	10	13	14	14	13	14	12	11	7	11	7	5	6	9	8	6	9	7.4	14.4	
19-Mar-08	9	9	8	10	12	10	11	10	11	10	11	11	5	1	3	5	8	8	9	9	14	13	8	12	1.9	13.6	
20-Mar-08	5	6	3	3	2	2	2	4	6	2	5	4	4	4	5	9	20	19	14	11	12	12	10	7	5.9	19.8	
21-Mar-08	6	5	6	7	5	4	3	4	6	6	8	9	10	13	18	15	14	12	9	5	6	6	5	6	7.6	17.8	
22-Mar-08	3	7	4	2	3	2	2	5	9	9	7	6	3	4	8	6	8	12	10	8	9	9	11	12	4.6	11.9	
23-Mar-08	14	15	15	12	8	7	6	8	12	22	22	20	21	24	23	24	19	28	29	25	25	29	29	22	18.5	29.4	
24-Mar-08	20	27	20	15	12	17	20	23	27	26	23	23	20	26	25	26	26	24	20	13	16	15	14	14	18.0	27.4	
25-Mar-08	13	12	12	9	5	5	6	6	9	13	13	14	14	15	13	3	8	8	6	7	7	7	8	9	8.3	14.9	
26-Mar-08	7	14	6	5	4	10	7	9	11	13	13	13	11	12	12	10	7	6	3	6	7	7	5	5	7.2	13.5	
27-Mar-08	3	2	4	0	3	5	6	2	3	1	5	8	12	12	13	10	12	9	15	10	14	13	12	13	4.4	14.9	
28-Mar-08	16	15	13	15	13	12	13	14	13	12	12	11	12	12	8	7	10	5	10	12	16	12	11	12	5.8	16.5	
29-Mar-08	11	11	14	18	20	24	9	10	16	20	20	20	18	17	19	18	18	16	13	11	9	7	8	14.8	23.8		
30-Mar-08	9	9	10	10	12	13	12	13	11	12	7	6	5	10	11	6	9	15	15	15	14	16	14	17	10.5	16.7	
31-Mar-08	14	13	13	11	10	8	7	6	6	5	5	4	4	5	2	4	8	9	9	6	8	9	8	6	4.0	14.2	
1-hr Vector	3.5	5.4	5.3	5.2	3.7	4.3	4.2	4.8	4.8	5.0	5.0	4.1	4.4	4.9	4.5	4.8	4.0	2.6	0.9	1.7	2.3	3.0	3.6	3.6			
Hourly Max	20.4	27.4	28.3	26.7	21.9	23.8	20.0	24.2	27.4	26.4	22.6	29.9	30.1	30.3	40.6	34.1	40.1	30.6	29.5	28.4	25.2	29.4	29.4	22.1			



PAS - Crescent Heights Wind Direction Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	355.2	331.8	255.5	219.4	115.6	20.8	2.5	244 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																								24-hour Average	WD Sector	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	271	238	236	218	240	253	224	221	227	238	246	334	328	318	279	229	238	238	244	227	264	235	217	242	249	WSW	
2-Mar-08	285	357	209	290	1	3	355	348	353	358	1	341	323	281	279	258	218	220	211	221	229	207	144	167	314	NW	
3-Mar-08	243	225	241	240	247	240	239	226	236	226	220	221	218	221	227	238	216	199	252	221	290	332	322	183	234	SW	
4-Mar-08	288	358	0	355	355	9	15	14	8	14	2	358	345	335	337	344	336	329	231	226	225	229	229	241	341	NNW	
5-Mar-08	238	235	229	235	262	280	324	340	339	348	286	250	247	256	291	290	298	312	268	321	318	325	330	358	287	WNW	
6-Mar-08	47	68	77	61	67	92	86	82	87	92	99	105	117	116	123	149	171	149	116	122	125	163	221	206	107	ESE	
7-Mar-08	244	238	238	241	240	238	241	234	229	224	286	321	344	345	332	316	315	327	326	285	283	10	114	245	273	W	
8-Mar-08	147	140	199	258	112	187	135	187	143	148	115	113	121	85	155	223	234	246	262	190	160	128	121	145	160	SSE	
9-Mar-08	174	162	217	200	207	238	242	237	230	235	220	219	222	223	219	215	217	207	197	195	184	195	210	226	214	SW	
10-Mar-08	237	231	236	235	238	231	244	217	212	215	212	213	229	216	219	220	210	206	235	244	237	233	236	233	226	SW	
11-Mar-08	236	227	228	234	240	235	234	239	232	233	229	229	227	236	233	239	231	237	274	273	275	258	261	265	241	WSW	
12-Mar-08	272	268	268	270	271	271	275	276	265	265	266	271	300	298	322	297	310	4	14	22	351	10	184	305	287	WNW	
13-Mar-08	309	315	323	330	331	347	283	219	242	294	313	329	335	358	0	14	23	31	72	108	90	96	106	140	4	N	
14-Mar-08	119	99	98	123	133	104	63	44	59	73	75	105	142	144	155	173	156	119	103	95	104	103	79	138	113	ESE	
15-Mar-08	97	78	84	56	73	125	132	122	159	249	225	226	199	223	16	317	22	122	91	53	132	136	145	92	114	ESE	
16-Mar-08	150	212	233	212	204	202	341	266	323	337	325	322	322	326	324	268	250	230	241	154	128	125	130	125	293	WNW	
17-Mar-08	182	200	205	209	221	227	238	248	251	262	282	287	317	309	348	12	305	279	215	190	229	232	259	269	244	WSW	
18-Mar-08	279	287	283	217	203	223	237	231	226	226	224	225	214	209	230	238	135	259	90	121	125	118	178	216	219	SW	
19-Mar-08	241	273	266	265	266	283	266	256	257	259	271	284	278	275	78	135	84	67	76	81	98	103	99	96	255	WSW	
20-Mar-08	103	120	147	350	114	306	69	54	45	314	83	93	110	185	263	32	56	52	50	85	92	103	106	133	76	ENE	
21-Mar-08	65	143	116	122	136	135	139	120	109	115	99	89	106	108	118	128	138	151	172	141	150	95	72	66	119	ESE	
22-Mar-08	85	346	14	292	72	180	102	239	202	194	185	146	176	102	57	83	160	131	160	152	156	160	157	183	150	SSE	
23-Mar-08	186	191	211	202	231	251	253	226	204	192	189	179	184	189	187	192	189	229	229	223	217	217	215	221	206	SSW	
24-Mar-08	225	221	243	245	235	235	241	255	284	301	290	287	284	296	301	313	312	316	320	299	292	293	290	292	281	W	
25-Mar-08	286	280	279	280	235	238	240	234	272	288	298	298	265	265	351	246	177	246	240	208	214	227	217	235	263	W	
26-Mar-08	238	198	206	234	288	227	211	222	217	222	228	232	231	247	239	230	238	235	229	36	113	123	120	136	221	SW	
27-Mar-08	35	350	92	269	333	2	11	14	246	196	150	82	81	103	200	199	192	114	119	107	123	139	195	205	140	SE	
28-Mar-08	230	222	247	237	224	235	226	231	252	249	236	261	257	292	299	321	223	223	22	51	56	78	105	97	244	WSW	
29-Mar-08	64	11	24	22	33	44	5	32	38	43	34	33	20	12	5	7	16	11	15	25	47	61	66	75	29	NNE	
30-Mar-08	77	73	68	71	92	101	87	91	66	75	119	89	84	88	60	24	345	12	49	46	44	36	36	31	60	ENE	
31-Mar-08	21	23	20	1	353	18	54	43	8	356	299	1	327	262	233	132	114	125	118	113	115	119	117	113	47	NE	
Hourly Avg	239	232	239	248	256	257	259	251	265	263	256	270	259	259	272	255	232	238	215	174	167	161	188	208			



PAS - Crescent Heights Standard Deviation of Wind Direction Monthly Summary

Station: Crescent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	81.2	62.1	25.4	14.2	8.9	6.0	4.7

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

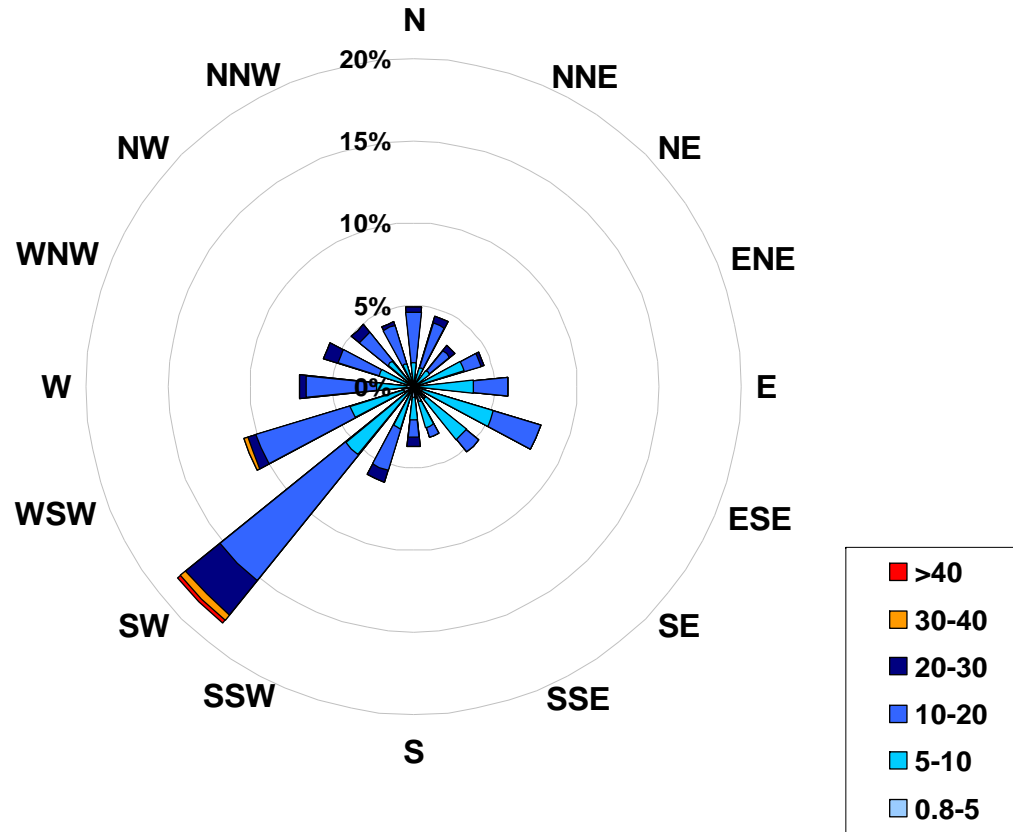
Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	Daily Maximum
1-Mar-08	11	14	11	10	24	17	18	5	6	8	14	15	9	11	26	11	14	14	10	7	24	15	17	19	19	25.7	
2-Mar-08	32	14	36	33	8	10	7	6	9	11	8	19	23	29	30	36	16	9	10	7	8	26	25	34	34	36.2	
3-Mar-08	53	16	11	8	8	6	10	6	9	9	7	9	8	8	9	9	21	15	49	23	26	11	22	51	51	53.0	
4-Mar-08	38	21	7	5	5	7	6	7	6	7	8	10	11	13	10	8	13	13	54	10	7	10	8	11	11	54.0	
5-Mar-08	6	5	12	18	12	8	18	7	12	19	27	21	20	30	14	16	18	21	16	45	22	8	9	16	16	45.0	
6-Mar-08	8	11	11	17	7	11	7	7	13	18	14	13	9	14	15	34	22	10	7	6	7	21	25	58	58	58.1	
7-Mar-08	65	10	11	8	5	7	8	6	12	12	56	23	17	11	14	12	15	7	8	17	19	75	77	49	49	76.7	
8-Mar-08	64	24	51	76	40	52	34	21	41	49	23	26	61	40	64	18	17	18	9	40	37	7	7	30	30	76.1	
9-Mar-08	22	16	22	14	24	23	10	10	9	10	15	11	13	12	10	10	7	7	6	12	10	6	6	24	24	24.0	
10-Mar-08	7	8	7	10	11	7	9	11	12	17	13	15	11	11	13	12	8	6	34	14	8	9	8	4	4	33.7	
11-Mar-08	11	4	4	7	9	6	7	6	7	9	7	8	10	8	6	9	5	9	8	5	10	11	6	6	6	6	10.9
12-Mar-08	6	7	6	5	6	5	5	5	8	7	8	8	17	19	13	28	34	17	10	67	34	9	96	45	45	96.0	
13-Mar-08	29	11	8	11	7	8	79	9	29	37	20	20	31	28	17	17	17	11	25	12	15	10	16	21	21	79.2	
14-Mar-08	8	25	15	21	56	23	24	11	8	16	15	38	22	25	20	13	16	8	7	6	6	7	20	33	33	55.6	
15-Mar-08	19	15	27	22	29	19	53	23	44	70	41	51	32	58	50	62	45	36	14	35	12	14	26	76	76	76.2	
16-Mar-08	29	16	21	22	14	52	46	30	9	8	8	10	12	13	17	44	23	16	8	52	12	7	8	8	8	52.5	
17-Mar-08	38	6	4	7	7	8	9	9	8	10	12	12	14	26	23	36	56	32	57	9	40	20	12	12	12	56.6	
18-Mar-08	5	17	20	30	16	4	11	10	7	8	14	15	18	22	26	63	21	43	58	25	9	19	48	12	12	63.4	
19-Mar-08	17	19	23	9	17	14	13	8	9	9	16	13	65	85	68	52	27	16	11	15	9	11	22	10	10	84.7	
20-Mar-08	56	23	67	65	66	83	77	43	55	85	50	57	71	83	74	73	15	8	6	16	11	8	20	15	15	84.7	
21-Mar-08	34	25	25	6	20	19	34	22	17	19	22	29	23	19	10	15	13	18	13	19	23	40	60	39	39	60.0	
22-Mar-08	64	43	62	63	55	56	75	21	13	23	34	49	74	77	27	27	24	10	11	11	12	8	10	16	16	76.9	
23-Mar-08	17	20	18	7	24	13	14	18	16	8	9	10	11	9	8	9	9	10	4	5	7	5	5	8	8	24.3	
24-Mar-08	7	5	12	8	8	7	11	8	17	8	9	11	13	9	12	10	6	7	7	14	11	7	8	7	7	16.5	
25-Mar-08	8	11	11	40	53	45	37	18	22	15	16	17	18	40	38	84	25	23	18	21	24	8	9	10	10	84.3	
26-Mar-08	29	11	32	48	35	17	20	10	13	15	18	26	37	25	31	31	42	44	63	15	24	11	9	21	21	62.6	
27-Mar-08	60	61	48	95	35	19	37	69	79	93	41	32	28	27	44	44	14	29	8	17	18	18	14	14	14	94.5	
28-Mar-08	10	8	14	7	9	9	14	9	17	19	19	35	38	20	44	41	24	49	35	6	7	24	17	11	11	49.1	
29-Mar-08	24	12	8	6	5	6	34	27	14	12	10	13	12	14	13	11	10	9	7	7	7	9	11	10	10	33.7	
30-Mar-08	10	12	8	6	7	8	12	13	12	15	35	49	60	28	18	57	57	20	11	8	9	8	7	6	6	60.4	
31-Mar-08	7	6	9	5	4	13	17	27	25	27	43	45	56	37	79	53	16	12	10	9	12	10	19	23	23	78.8	

Hourly Max	65	61	67	95	66	83	79	69	79	93	56	57	74	85	79	84	57	49	63	67	40	75	96	76	76
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1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site for March 2008



Calms: 0%

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	46
5	to	10	286
10	to	20	347
20	to	30	58
30	to	40	5
	>	40	2
Total Non-Zero Values			744



PAS – Portable-Brooks

Monthly Summary Tables, Graphs and Roses



PAS – Brooks Sulphur Dioxide Monthly Summary

Station: Portable-Brooks
 Station Owner: PAS

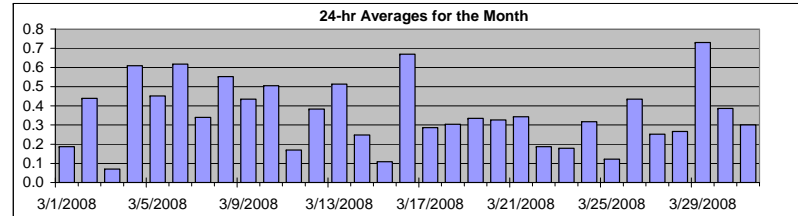
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: March 1, 2008 to April 1, 2008

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

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	4.7 ppb	4-Mar	7:00 8:00	
Maximum 24-hr Average:	0.7 ppb	29-Mar		



AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.2	1.0	0.4	0.2	0.1	0.0	0.0	0.4 ppb	0.2 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	24:00	
1-Mar-08	0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
2-Mar-08	1:00	0	0	0	0	0	0	1	0	0	0	0	1	2	1	1	A	0	0	0	0	0	0	0	0	0	0	0.4	1.6
3-Mar-08	2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
4-Mar-08	3:00	0	0	0	0	1	1	1	5	1	1	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0.6	4.7	
5-Mar-08	4:00	0	0	0	0	0	0	0	0	0	2	1	1	A	1	1	0	0	0	1	0	1	1	1	1	1	0.5	1.5	
6-Mar-08	5:00	2	1	1	1	1	1	2	2	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.4	
7-Mar-08	6:00	0	0	0	0	0	0	0	0	1	1	A	1	1	1	1	0	0	0	0	0	0	1	0	0	0.3	0.8		
8-Mar-08	7:00	0	0	0	0	0	0	0	0	0	1	A	2	2	1	1	1	1	0	1	0	1	1	1	0	0.6	2.3		
9-Mar-08	8:00	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.2		
10-Mar-08	9:00	0	0	1	0	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	1.3		
11-Mar-08	10:00	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4		
12-Mar-08	11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0.4	1.7		
13-Mar-08	12:00	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.5	1.5		
14-Mar-08	13:00	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7		
15-Mar-08	14:00	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3		
16-Mar-08	15:00	0	A	0	0	0	1	2	2	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.7	2.1		
17-Mar-08	16:00	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	A	0.3	0.7		
18-Mar-08	17:00	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0.3	0.9		
19-Mar-08	18:00	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	A	0	0	0.3	1.0		
20-Mar-08	19:00	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	1	0	A	0	0	0.3	0.8		
21-Mar-08	20:00	0	0	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	1.6		
22-Mar-08	21:00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0.2	0.9		
23-Mar-08	22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.3		
24-Mar-08	23:00	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	A	0	0	0	0	0	0.3	0.9		
25-Mar-08	0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3		
26-Mar-08	1:00	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	1	1	0	1	0	0	0	0	0	0.4	1.4		
27-Mar-08	2:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0.3	1.0		
28-Mar-08	3:00	0	0	0	0	0	1	1	1	1	1	C	C	A	0	0	0	0	0	0	0	0	1	1	0	0.3	1.0		
29-Mar-08	4:00	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	2	1	0	0	0	0.7	3.7		
30-Mar-08	5:00	A	0	0	0	1	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	1.7		
31-Mar-08	6:00	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0.3	1.1		
Hourly Avg		0.2	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.2	0.3	0.2	0.2				
Hourly Max		1.6	0.6	1.4	0.9	1.6	1.4	2.0	4.7	2.4	1.5	2.2	2.3	1.6	1.4	1.4	0.9	2.4	3.7	3.6	2.2	0.8	1.0	0.7	1.2				

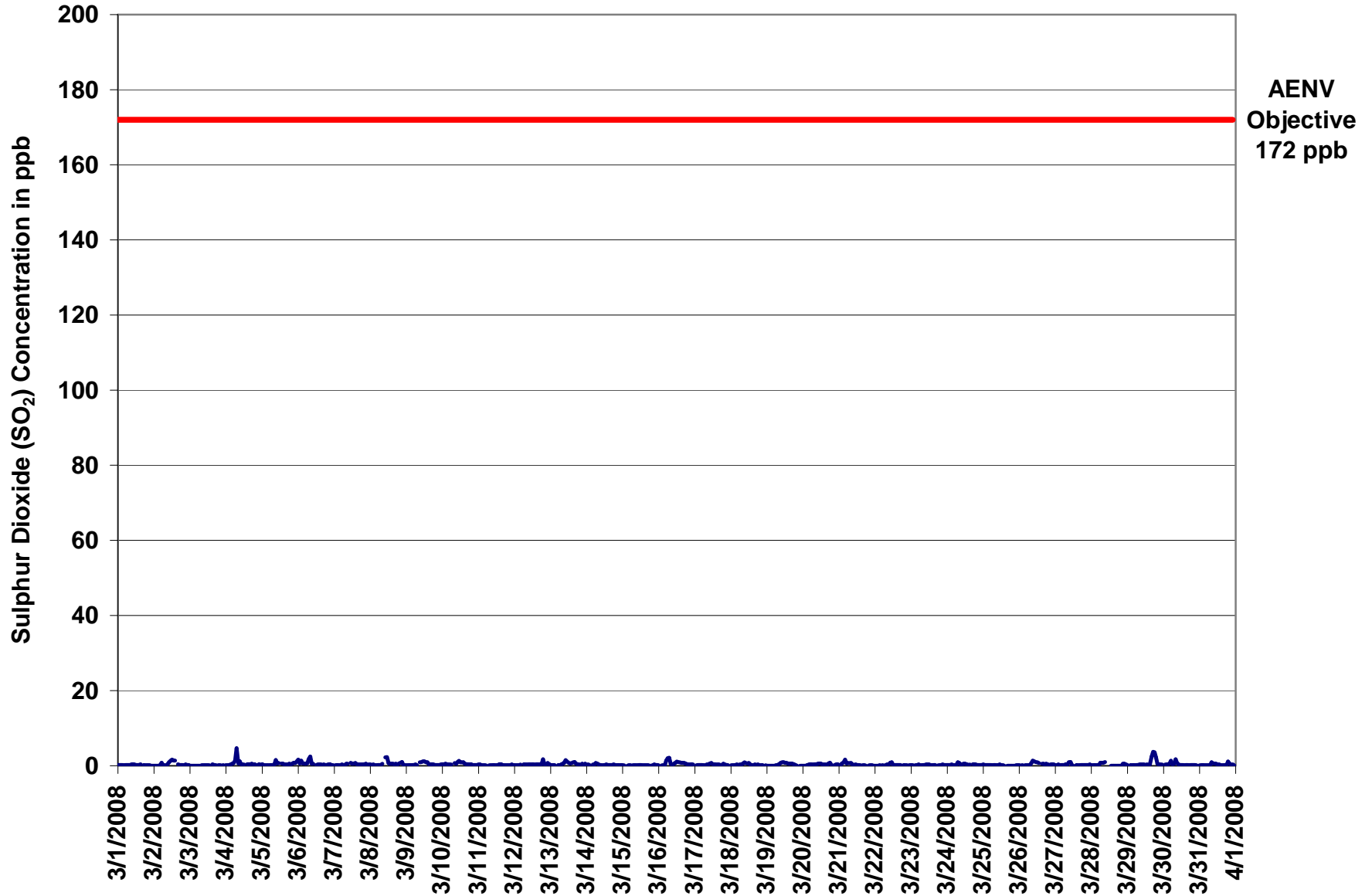


Figure 16. PAS – Brooks Sulphur Dioxide 1-hr Average Monthly Trend



Station: Portable-Brooks
 Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

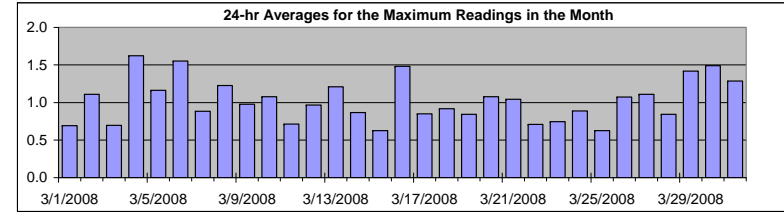
Sulphur Dioxide (SO₂)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	9.5	ppb	4-Mar	7:00 8:00
Maximum 24-hr Value:	1.6	ppb	4-Mar	

AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	4.8	2.7	1.0	0.8	0.6	0.5	0.3	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																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Mar-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	1	0.7	0.9
2-Mar-08	1	0	1	1	1	3	1	1	0	1	2	2	2	2	2	A	1	1	1	1	1	1	1	1	1	1.1	3.0
3-Mar-08	1	1	1	0	0	0	1	1	1	1	1	1	1	2	A	2	1	1	1	1	1	1	1	1	1	0.7	1.6
4-Mar-08	1	1	1	1	1	1	8	10	2	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.6	9.5
5-Mar-08	1	1	1	1	1	1	1	1	1	3	2	1	A	1	1	1	1	1	1	1	1	1	3	3	1.2	2.9	
6-Mar-08	5	2	4	1	1	1	3	3	5	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.6	4.9	
7-Mar-08	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
8-Mar-08	1	1	1	1	1	1	1	1	1	A	3	3	1	1	1	1	1	1	1	2	2	2	1	1	1.2	3.3	
9-Mar-08	1	1	1	1	1	1	1	1	A	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1.0	2.0	
10-Mar-08	1	1	1	1	1	1	1	A	1	1	2	2	1	2	2	1	1	1	1	1	1	1	1	1	1.1	1.8	
11-Mar-08	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3	
12-Mar-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1.0	3.1	
13-Mar-08	1	0	1	1	A	1	1	1	1	2	2	2	1	1	2	2	1	1	1	1	1	1	1	2	1.2	2.3	
14-Mar-08	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	0.9	1.6	
15-Mar-08	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	0.6	0.9	
16-Mar-08	1	A	1	1	1	3	5	5	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1.5	4.9	
17-Mar-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.4	
18-Mar-08	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	3	1	1	1	A	1	0.9	2.5	
19-Mar-08	1	1	1	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0	A	1	0	0.8	1.5	
20-Mar-08	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	1	A	1	1	1	1.1	4.0	
21-Mar-08	1	1	3	3	4	1	1	1	1	1	1	1	1	1	1	0	1	1	0	A	1	0	1	1	1.0	3.5	
22-Mar-08	0	1	0	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	A	1	1	1	0	1	0.7	1.6	
23-Mar-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	0.7	1.0	
24-Mar-08	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	2.0	
25-Mar-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	0	1	1	1	0.6	0.9	
26-Mar-08	1	1	1	1	1	1	1	1	2	2	2	2	1	1	A	1	1	1	1	1	1	1	3	1	1.1	2.8	
27-Mar-08	1	1	1	1	1	1	1	3	1	2	2	1	1	A	1	1	1	1	1	1	2	1	1	2	1.1	3.2	
28-Mar-08	1	1	1	1	1	1	2	1	1	1	C	C	A	0	0	0	0	0	0	0	0	4	1	1	0.8	4.1	
29-Mar-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	4	4	4	1	1	1	1	1.4	4.4	
30-Mar-08	A	1	1	1	2	4	2	3	7	4	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.5	6.7	
31-Mar-08	1	1	1	1	1	1	1	1	5	3	2	1	1	1	1	1	1	1	1	1	4	3	1	1	1.3	5.1	
Hourly Avg	0.8	0.7	0.8	0.7	0.9	1.0	1.3	1.5	1.4	1.3	1.3	1.2	1.0	1.0	0.9	0.9	0.9	1.0	1.1	1.1	0.9	0.9	0.9	0.9			
Hourly Max	4.9	1.9	3.7	2.7	3.5	3.6	7.7	9.5	6.7	4.4	3.3	3.3	2.2	2.2	1.8	2.4	4.1	4.3	4.4	3.8	3.4	4.1	2.8	2.9			



Station: Portable-Brooks
 Station Owner: PAS

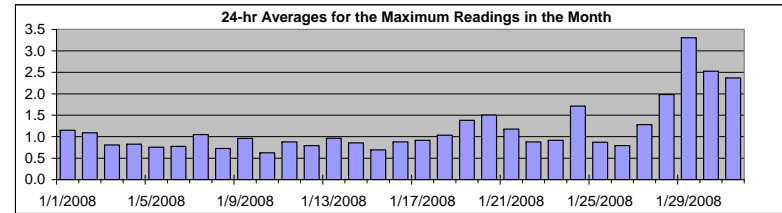
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

Maximum 1-hr Value:	8.5	ppb	31-Jan	21:00 22:00
Maximum 24-hr Value:	3.3	ppb	29-Jan	



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	5.1	3.1	1.2	0.9	0.7	0.5	0.5	1.2 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-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	3	2	A	2	1	1	1	1	1	1.2	2.8
2-Jan-08	1	1	1	1	1	1	1	1	2	2	1	2	2	1	1	1	A	1	1	1	1	1	1	1	1.1	2.0
3-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.1
4-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.3
5-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	0.9
6-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
7-Jan-08	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1.1	1.5
8-Jan-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	0.7	1.4
9-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	2	2	1	1	1	1	1	1.0	1.6
10-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	1.1
11-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.2
12-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	1	0.8	2.0
13-Jan-08	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	A	1	1	1.0	2.2
14-Jan-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.3
15-Jan-08	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.7
16-Jan-08	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	2.0
17-Jan-08	1	1	1	1	1	1	1	1	1	1	2	C	C	C	A	1	1	1	2	1	1	1	1	1	0.9	2.1
18-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1.0	1.9
19-Jan-08	A	1	1	1	1	2	1	3	2	1	1	1	1	2	3	2	1	2	2	1	1	1	1	A	1.4	2.9
20-Jan-08	1	1	1	1	1	3	3	1	1	2	2	2	1	1	3	3	2	2	1	1	1	1	A	1	1.5	3.4
21-Jan-08	2	1	1	3	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.2	3.1
22-Jan-08	1	A	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	0.9	1.7
23-Jan-08	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.4
24-Jan-08	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	4	5	4	1	1	A	1	1.7	4.9
25-Jan-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
26-Jan-08	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	0.8	1.9
27-Jan-08	1	1	1	1	1	0	1	1	1	1	1	5	7	2	2	1	1	1	1	A	1	1	1	1	1.3	7.0
28-Jan-08	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3	A	3	2	3	3	3	2.0	3.1
29-Jan-08	3	3	2	2	2	2	3	3	3	3	4	7	4	6	8	3	2	A	2	2	2	2	4	3	3.3	8.4
30-Jan-08	3	3	2	2	2	2	2	2	2	2	4	2	3	5	4	A	1	4	1	2	2	2	1	1	2.5	5.1
31-Jan-08	3	4	1	1	1	2	2	1	1	1	1	1	1	1	1	A	3	3	2	1	3	9	6	5	2.4	8.5
Hourly Avg	1.1	1.1	0.9	1.0	0.9	1.0	1.0	1.0	1.1	1.0	1.3	1.4	1.4	1.4	1.6	1.4	1.4	1.2	1.3	1.1	1.1	1.3	1.2	1.1		
Hourly Max	3.2	3.9	2.4	3.1	2.3	2.7	2.8	2.9	3.3	3.3	4.2	7.2	7.0	6.2	8.4	4.3	3.2	3.7	4.9	3.8	3.2	8.5	6.3	5.3		

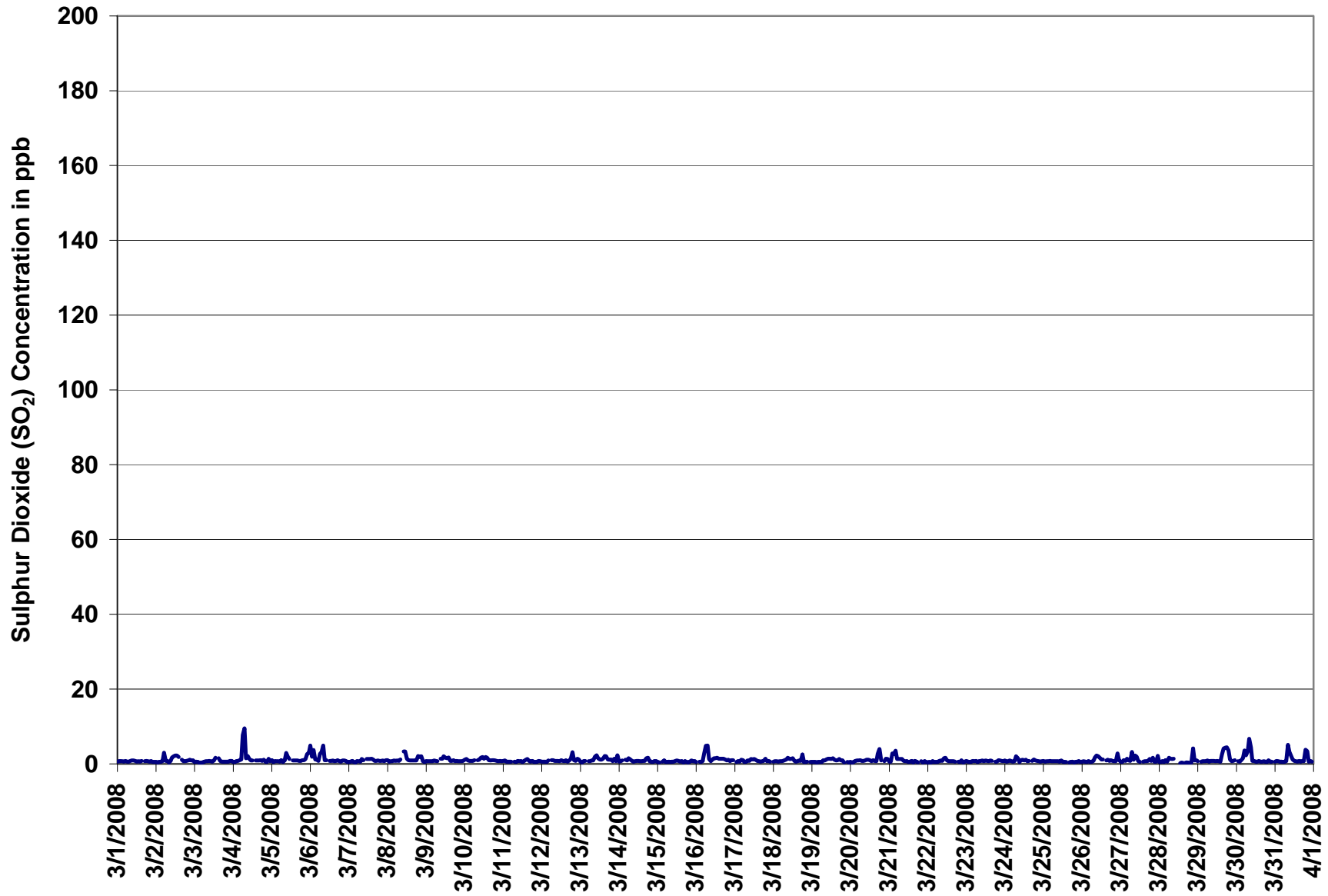
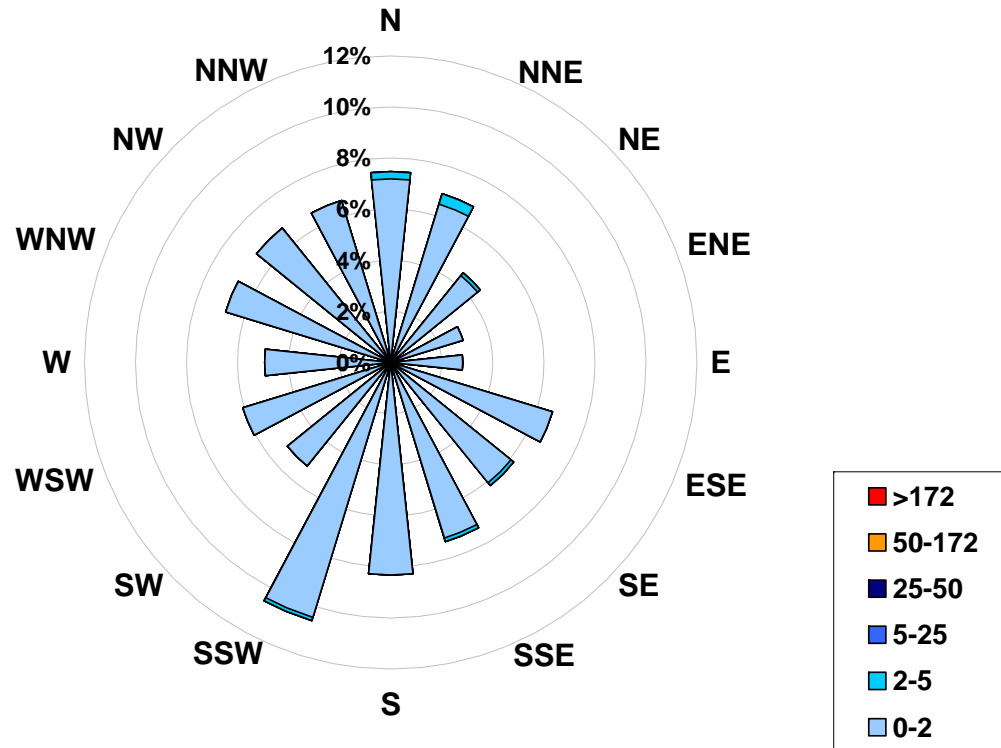


Figure 17. PAS – Brooks Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of SO ₂ in ppb			Frequency (hrs)
Range			
0.0	<	2	700
2	to	5	9
5	to	25	0
25	to	50	0
50	to	172	0
	>	172	0
Total Non-Zero Values			710



PAS – Brooks Ozone Monthly Summary

Station: Portable-Brooks
 Station Owner: PAS

HOURLY AVERAGE TABLE

Ozone (O₃)

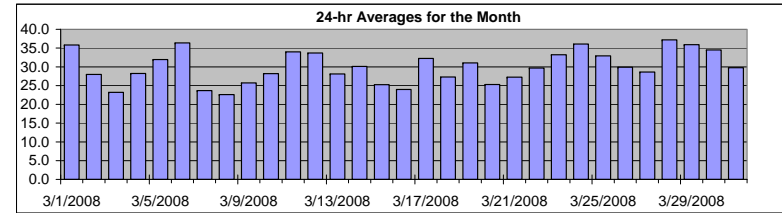
Monitoring Dates: March 1, 2008 to April 1, 2008

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

Summary

Number of 1-hr Exceedances:	0		
Maximum 1-hr Average:	54.4 ppb	19-Mar	16:00 17:00
Maximum 24-hr Average:	37.2 ppb	28-Mar	

AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	51.5	47.8	40.4	30.7	21.0	8.8	3.9	30.0 ppb	30.7 ppb



Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00		
1-Mar-08	37	34	33	28	30	31	31	31	32	32	42	44	45	45	43	41	A	37	45	42	39	34	25	23	35.8	45.1
2-Mar-08	24	18	25	30	32	31	32	33	34	33	32	32	32	32	31	A	29	26	22	24	22	21	24	25	28.0	34.0
3-Mar-08	21	19	11	10	11	8	13	18	21	22	31	38	41	39	A	41	34	25	18	18	28	24	20	21	23.2	40.9
4-Mar-08	17	21	20	21	20	27	23	29	33	32	34	36	37	A	41	41	41	38	32	13	19	24	26	23	28.2	41.3
5-Mar-08	22	25	27	28	27	21	18	21	27	32	35	36	A	36	42	43	43	36	33	33	37	39	38	37	32.0	43.0
6-Mar-08	37	39	41	41	40	40	35	32	31	36	39	A	42	42	42	44	44	38	37	33	30	27	25	23	36.4	44.0
7-Mar-08	18	15	8	9	7	3	5	10	12	20	A	32	37	44	44	46	45	37	30	28	28	24	16	26	23.6	46.3
8-Mar-08	24	7	10	10	7	8	5	4	10	A	33	34	40	41	44	46	44	38	27	34	21	18	6	11	22.6	45.7
9-Mar-08	5	4	4	4	8	6	2	7	A	24	32	37	41	47	50	50	48	46	34	33	32	28	27	24	25.7	50.2
10-Mar-08	22	24	24	22	20	17	13	A	9	13	29	41	45	50	48	47	41	36	29	23	23	21	27	25	28.2	50.2
11-Mar-08	28	26	27	16	20	23	A	23	31	37	41	45	45	50	51	48	41	38	39	36	32	30	29	26	34.0	50.5
12-Mar-08	20	33	32	28	27	A	21	25	28	28	30	37	41	46	46	46	47	46	41	33	29	28	30	32	33.7	46.7
13-Mar-08	15	24	19	13	A	10	4	9	21	33	39	39	42	43	44	45	45	42	35	31	26	22	21	25	28.1	44.7
14-Mar-08	17	13	10	A	9	5	13	13	24	29	37	40	42	45	46	46	46	43	41	39	35	34	35	30	30.1	46.0
15-Mar-08	26	26	A	18	16	9	9	12	12	16	23	32	39	41	42	42	42	36	29	27	15	10	17	17	25.3	42.4
16-Mar-08	22	A	14	12	12	24	26	28	29	30	28	30	29	29	30	31	31	30	24	18	19	20	19	18	24.0	30.6
17-Mar-08	A	21	36	25	25	16	4	5	8	25	38	40	45	49	49	49	49	50	42	32	35	37	28	A	32.2	50.2
18-Mar-08	21	11	11	9	6	2	1	5	10	16	31	37	49	49	48	48	47	45	40	41	39	33	A	29	27.3	48.5
19-Mar-08	17	20	18	23	24	8	3	9	21	24	40	46	48	52	53	54	54	51	40	38	33	A	20	20	31.0	54.4
20-Mar-08	20	23	17	9	14	15	13	17	22	23	22	29	36	42	42	42	42	43	37	31	A	14	11	20	25.3	43.2
21-Mar-08	14	15	13	11	14	12	9	12	17	22	32	40	44	47	44	47	47	46	40	A	30	28	24	21	27.3	46.7
22-Mar-08	19	21	20	18	12	7	6	11	17	22	31	36	44	47	51	52	51	50	A	38	37	35	30	30	29.7	51.9
23-Mar-08	27	23	19	18	16	20	19	22	26	31	34	35	41	47	47	48	46	A	43	42	44	40	38	36	33.2	47.7
24-Mar-08	37	36	35	35	33	24	28	23	35	44	41	41	42	45	46	46	A	45	39	35	33	33	28	26	36.1	46.0
25-Mar-08	28	27	24	22	21	17	20	24	34	44	45	45	47	48	48	A	47	45	38	29	29	30	27	21	32.9	47.9
26-Mar-08	18	16	16	14	10	11	12	12	19	27	37	45	47	48	A	49	49	48	44	38	36	34	30	30	29.9	49.3
27-Mar-08	26	19	15	14	12	10	5	10	20	23	28	34	40	A	43	46	45	47	44	41	40	38	30	29	28.6	47.1
28-Mar-08	29	32	28	29	31	28	25	34	34	39	41	39	46	48	52	52	53	51	41	36	36	31	27	30	37.2	52.7
29-Mar-08	28	A	34	33	35	35	36	37	42	45	45	45	46	47	47	46	43	39	33	24	21	22	25	21	35.9	47.0
30-Mar-08	A	16	16	21	19	23	31	35	37	38	37	39	43	45	44	43	44	41	38	38	37	38	35	A	34.5	45.3
31-Mar-08	30	32	35	21	20	18	14	16	25	39	42	42	44	C	C	A	40	39	36	30	30	29	24	20	29.7	43.9
Hourly Avg	23.1	22.0	21.4	19.7	19.3	16.9	15.9	18.8	24.1	29.2	34.9	38.2	41.9	44.4	44.9	45.6	44.0	41.3	35.9	31.8	31.0	28.4	25.1	24.7		
Hourly Max	37.4	39.4	40.5	41.0	39.5	39.9	36.3	36.7	41.5	44.5	45.1	45.7	48.5	51.6	53.1	53.6	54.4	50.8	44.6	42.1	44.3	40.3	38.4	37.2		

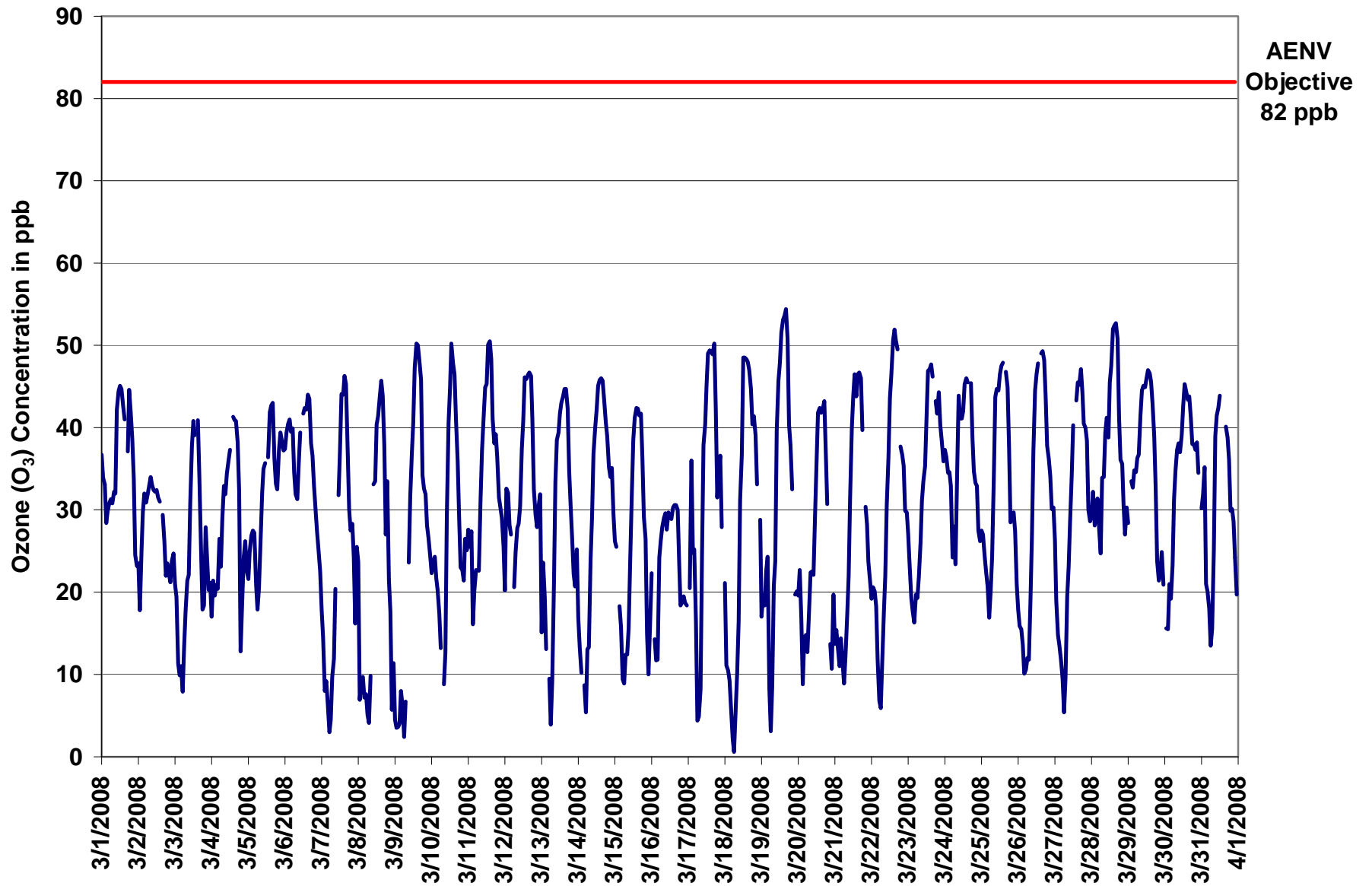


Figure 18. PAS – Brooks Ozone 1-hr Average Monthly Trend



Station: Portable-Brooks
 Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

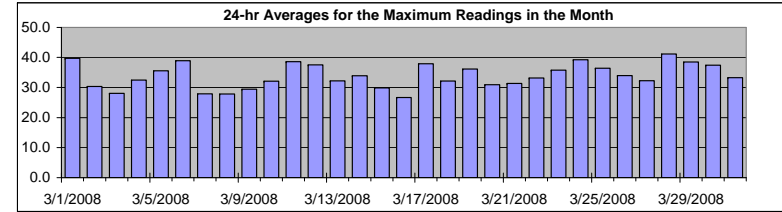
Ozone (O₃)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	59.3	ppb	11-Mar	15:00 16:00
Maximum 24-hr Value:	41.1	ppb	28-Mar	

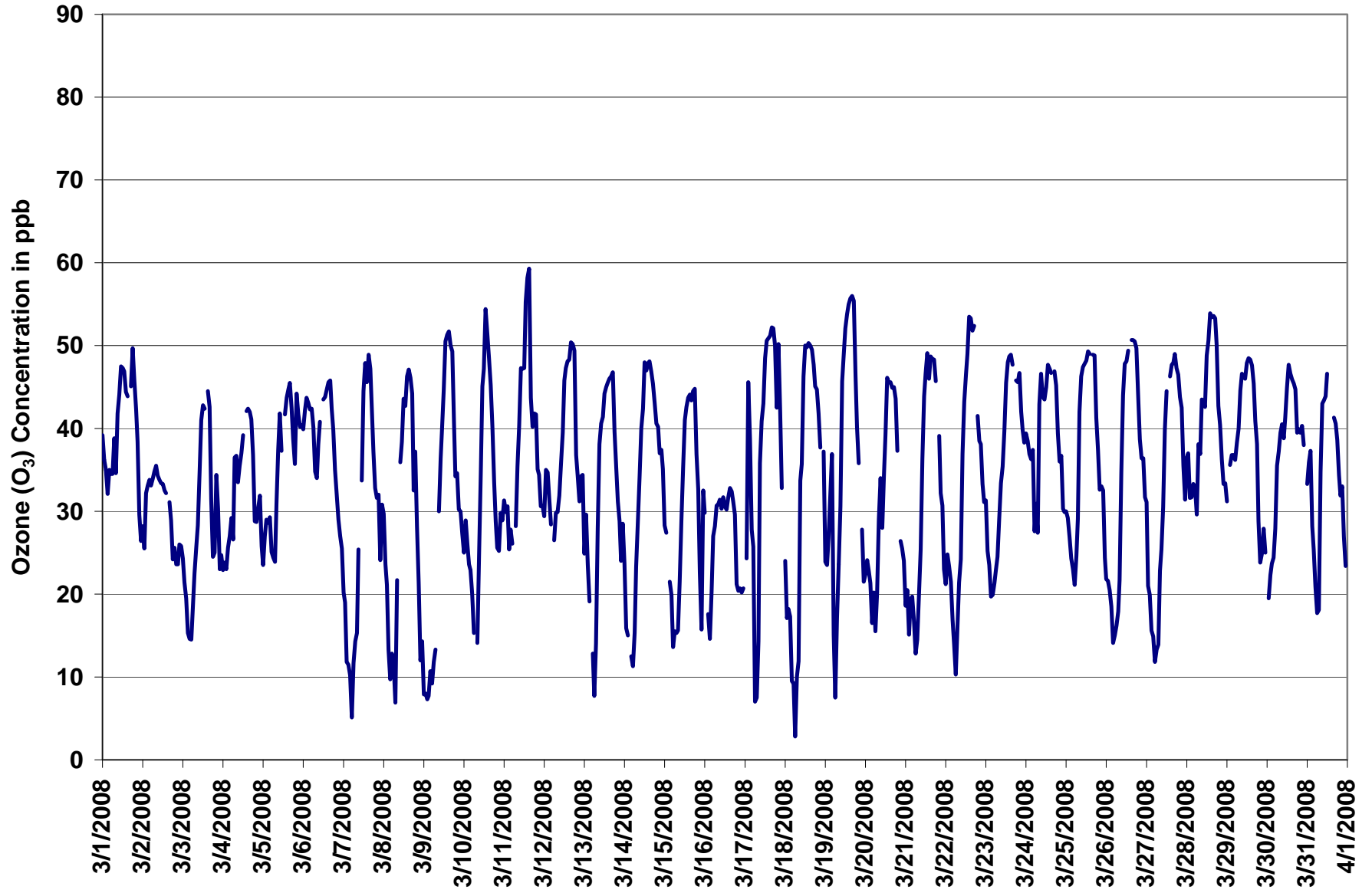
AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	54.4	50.1	43.7	34.6	25.2	13.7	7.7	33.9 ppb	34.6 ppb



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																								24-hour Average	Daily Maximum	
	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00			22:00
1-Mar-08	39	36	35	32	35	35	35	39	35	42	44	48	47	47	44	44	A	45	50	46	42	38	30	26	39.7	49.7	
2-Mar-08	28	26	32	33	34	33	34	35	36	34	34	33	33	33	32	A	31	29	24	26	24	24	26	26	30.4	35.5	
3-Mar-08	24	21	20	15	15	15	18	23	26	28	35	41	43	42	A	45	43	31	25	25	34	30	23	25	28.1	44.5	
4-Mar-08	23	24	23	26	27	29	27	37	37	34	36	37	39	A	42	42	42	41	37	29	29	30	32	26	32.5	42.4	
5-Mar-08	24	27	29	29	29	25	24	24	31	37	42	37	A	42	44	45	46	43	39	36	44	42	40	40	35.5	45.5	
6-Mar-08	40	42	44	43	42	42	40	35	34	38	41	A	44	44	44	45	46	46	42	40	35	32	29	27	26	38.9	45.8
7-Mar-08	20	19	12	12	10	5	12	14	15	25	A	34	45	48	46	49	47	42	37	33	32	32	24	31	27.9	48.9	
8-Mar-08	30	24	21	13	10	13	11	7	22	A	36	38	44	43	46	47	46	44	33	37	28	21	12	14	27.8	47.1	
9-Mar-08	8	8	7	8	11	9	12	13	A	30	36	40	45	51	51	52	50	49	41	34	35	30	30	27	29.4	51.7	
10-Mar-08	25	29	26	24	23	20	15	A	14	25	35	45	47	54	52	49	45	40	34	29	26	25	30	29	32.1	54.4	
11-Mar-08	31	30	31	25	28	26	A	28	35	40	47	47	47	55	58	59	44	40	42	42	35	34	31	31	38.6	59.3	
12-Mar-08	29	35	35	31	28	A	27	30	30	32	36	40	46	47	48	48	50	50	49	37	34	31	34	34	37.5	50.4	
13-Mar-08	25	30	24	19	A	13	8	14	28	38	41	41	44	45	46	46	46	47	40	35	31	29	24	29	32.2	46.8	
14-Mar-08	24	16	15	A	13	11	15	23	29	34	40	42	48	47	48	48	47	45	43	41	40	37	37	35	33.9	48.1	
15-Mar-08	28	27	A	22	20	14	16	15	16	22	29	35	41	43	44	44	43	45	45	37	33	23	16	33	29.9	44.8	
16-Mar-08	30	A	18	15	20	27	28	31	31	31	30	32	31	30	32	33	32	31	30	21	20	21	20	21	26.7	32.8	
17-Mar-08	A	24	46	39	28	26	7	8	14	36	41	43	49	51	51	51	52	52	50	43	50	42	33	A	37.9	52.2	
18-Mar-08	24	17	18	17	10	9	3	10	12	34	36	46	50	50	50	50	50	48	45	45	42	38	A	37	32.2	50.3	
19-Mar-08	24	24	27	32	37	15	8	17	24	31	46	49	52	54	55	56	56	55	46	40	36	A	28	22	36.1	56.0	
20-Mar-08	22	24	23	21	17	20	16	20	29	34	28	35	39	46	46	46	45	45	44	37	A	26	26	24	30.9	46.1	
21-Mar-08	19	21	15	19	20	17	13	15	20	25	36	44	47	49	46	49	48	48	46	A	39	32	31	23	31.3	49.1	
22-Mar-08	21	25	23	22	17	14	10	16	21	24	37	43	47	49	54	53	52	52	A	42	39	38	33	31	33.1	53.5	
23-Mar-08	31	25	24	20	20	21	23	25	29	33	35	40	46	48	49	49	48	A	46	46	47	42	40	38	35.8	48.9	
24-Mar-08	39	39	37	36	37	28	31	27	43	47	44	44	45	48	47	47	A	47	45	39	36	37	30	30	39.2	47.7	
25-Mar-08	30	29	27	24	23	21	25	29	42	46	47	48	48	49	49	A	49	49	41	37	33	33	33	24	36.4	49.3	
26-Mar-08	22	22	21	19	14	15	16	18	22	35	44	48	48	49	A	51	51	51	50	44	39	36	36	32	33.9	50.7	
27-Mar-08	31	21	20	16	15	12	13	14	23	25	31	40	45	A	46	48	48	49	47	47	44	43	36	31	32.3	49.0	
28-Mar-08	37	37	32	32	33	33	30	38	37	44	43	43	49	51	54	53	54	53	50	43	40	36	33	33	41.1	53.9	
29-Mar-08	31	A	36	37	37	36	38	40	45	47	46	46	48	49	48	48	45	41	38	29	24	25	28	25	38.5	48.5	
30-Mar-08	A	20	22	24	24	28	36	37	40	41	39	41	45	48	47	46	45	45	40	40	40	40	38	A	37.4	47.7	
31-Mar-08	33	36	37	28	25	21	18	18	35	43	43	44	47	C	C	A	41	41	39	34	32	33	27	23	33.3	46.6	
Hourly Avg	27.3	26.1	25.9	24.4	23.4	21.1	20.2	23.3	28.4	34.5	38.6	41.4	44.8	46.8	47.1	47.9	46.3	44.7	41.1	36.9	35.3	32.6	29.5	28.5			
Hourly Max	39.9	42.2	45.6	43.1	42.3	42.4	40.1	40.0	44.6	46.6	47.4	48.7	52.1	55.3	58.2	59.3	56.0	55.4	50.1	46.5	50.2	42.5	40.2	40.4			



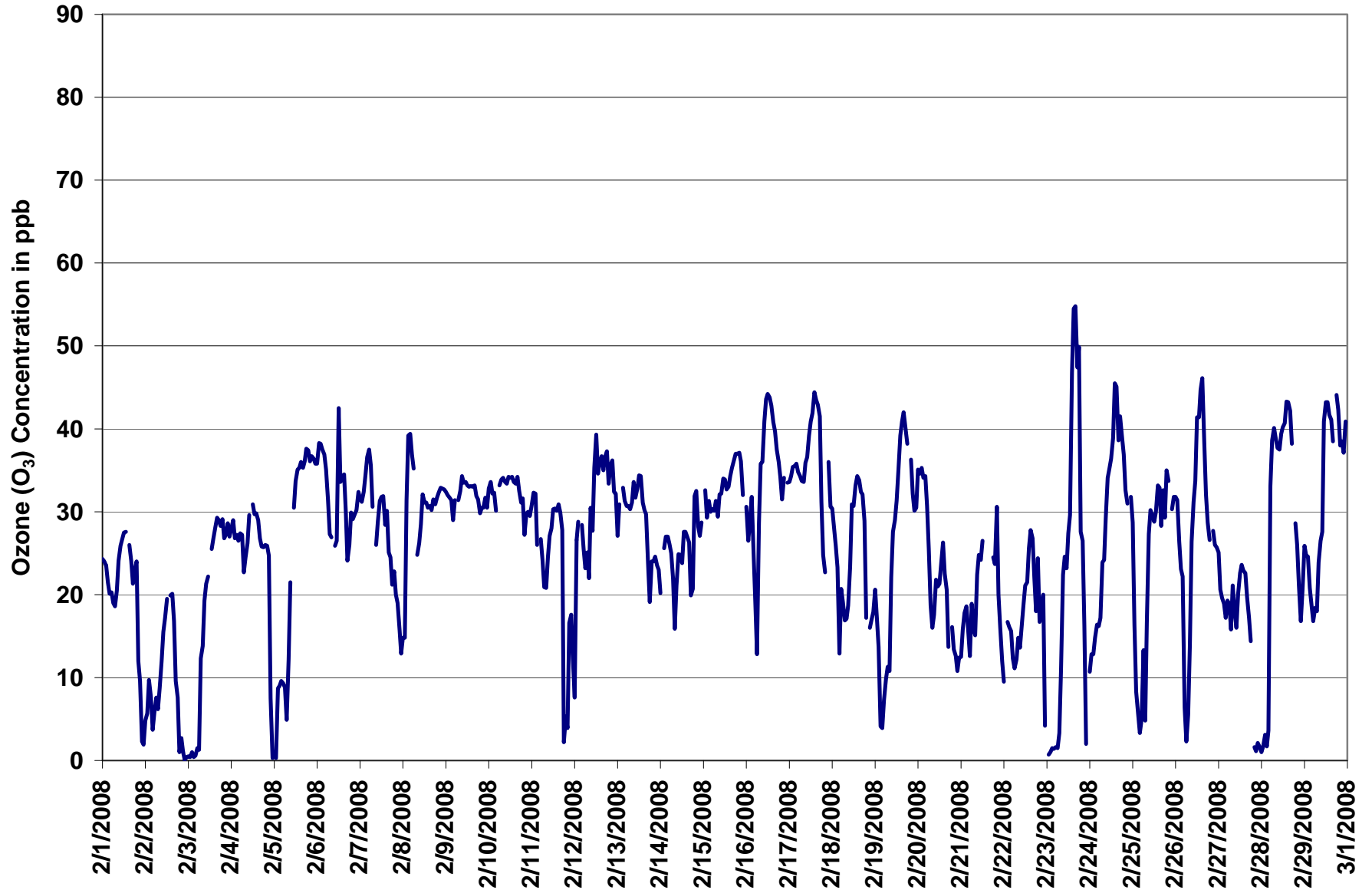
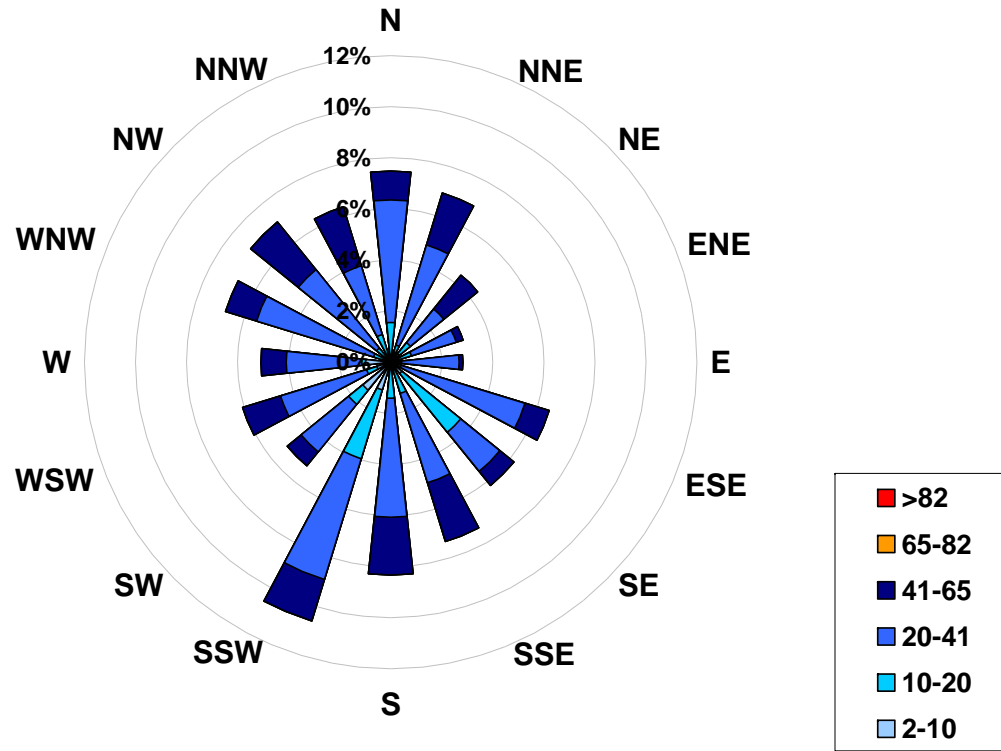


Figure 19. PAS – Brooks Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of O ₃ in ppb			Frequency (hrs)
Range			Frequency (hrs)
2.0	<	10	51
10	to	20	104
20	to	41	393
41	to	65	161
65	to	82	0
	>	82	0
Total Non-Zero Values			710



PAS – Brooks Ozone Eight Hour Average Summary

Station: Portable-Brooks
 Station Owner: PAS

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

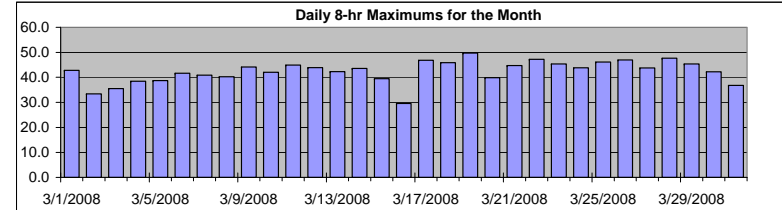
Monitoring Dates: March 1, 2008 to April 1, 2008

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

Summary

Number of 8-hr Exceedances:	0		
Maximum 8-hr Average:	49.7 ppb	19-Mar	18:00 19:00

Percentile	99	95	75	50	25	5	1
	47.0	44.6	38.2	30.9	22.8	13.4	7.6



Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Mar-08	36	35	35	34	34	33	33	32	31	31	32	34	36	38	39	41	42	42	43	42	42	40	37	35	42.8
2-Mar-08	33	31	29	27	26	26	27	28	29	31	32	32	32	33	32	32	32	31	29	28	27	25	24	24	33.4
3-Mar-08	23	22	21	19	18	16	15	14	14	14	17	20	24	28	30	33	35	36	34	31	29	27	26	24	35.5
4-Mar-08	21	21	21	22	21	21	21	22	24	26	27	29	31	32	35	36	38	38	38	35	32	31	29	27	38.4
5-Mar-08	25	23	22	24	25	25	24	23	24	25	26	27	29	33	36	38	39	38	38	38	38	38	38	37	38.7
6-Mar-08	36	37	38	39	39	39	39	38	37	37	37	36	36	37	38	40	41	42	41	40	39	37	35	32	41.6
7-Mar-08	29	26	22	19	16	13	11	9	8	9	9	13	17	23	28	34	38	41	40	39	38	35	32	29	40.9
8-Mar-08	27	23	20	18	15	13	12	9	7	8	11	14	19	24	29	35	40	40	39	39	37	34	29	25	40.3
9-Mar-08	20	16	13	9	7	6	5	5	5	8	12	16	21	27	34	40	41	44	44	44	43	40	37	34	44.1
10-Mar-08	31	28	27	25	24	23	21	20	18	17	18	20	24	29	33	35	39	42	42	40	37	33	31	28	42.0
11-Mar-08	26	25	25	24	24	24	24	23	24	25	27	31	35	39	40	44	45	45	45	44	42	39	37	34	44.9
12-Mar-08	31	31	30	29	28	28	27	27	28	27	27	28	30	32	35	38	40	43	44	43	42	40	38	36	43.8
13-Mar-08	32	29	26	24	23	20	17	13	14	16	18	22	25	29	34	38	41	42	42	41	39	36	33	31	42.3
14-Mar-08	27	24	21	19	17	14	13	12	13	15	19	21	25	30	35	39	41	43	44	43	43	41	40	38	43.6
15-Mar-08	35	33	32	29	26	23	19	17	15	13	15	16	19	23	27	31	35	38	39	39	38	34	30	27	39.5
16-Mar-08	25	22	19	17	15	16	18	20	21	22	24	26	28	29	29	29	30	30	29	28	26	25	24	22	29.6
17-Mar-08	21	20	21	22	23	23	21	19	18	18	18	20	23	27	32	38	43	46	47	46	44	43	40	39	46.8
18-Mar-08	35	29	25	22	18	13	9	8	7	8	10	14	19	25	31	36	41	44	45	46	45	43	42	39	45.9
19-Mar-08	35	31	28	26	23	20	18	15	16	16	19	22	25	30	36	42	46	50	50	49	47	46	41	37	49.7
20-Mar-08	32	28	24	20	17	17	16	16	16	16	17	19	22	25	29	32	35	37	39	39	40	36	31	28	39.9
21-Mar-08	24	20	17	14	14	14	13	13	13	14	16	20	23	28	32	36	40	43	44	45	43	40	37	34	44.7
22-Mar-08	30	26	23	23	20	18	16	14	14	14	15	18	22	27	32	37	42	45	47	47	46	45	42	39	47.2
23-Mar-08	35	31	30	27	25	23	22	21	20	21	23	25	29	32	35	39	41	43	44	45	45	44	43	41	45.3
24-Mar-08	40	40	39	38	36	34	33	31	31	32	33	34	35	37	40	42	44	44	43	43	41	40	37	34	43.8
25-Mar-08	33	31	29	28	26	24	23	23	24	26	28	31	34	38	42	44	46	46	45	43	40	38	35	33	46.1
26-Mar-08	30	26	23	21	19	17	15	13	14	15	18	21	26	31	33	39	43	46	47	46	45	43	41	39	47.0
27-Mar-08	36	32	29	26	23	19	16	14	13	13	15	18	21	23	28	33	37	41	43	44	44	43	41	39	43.7
28-Mar-08	37	35	33	32	31	30	29	30	30	31	33	34	36	38	42	44	46	48	48	47	46	44	41	38	47.6
29-Mar-08	35	33	32	31	31	32	33	34	36	37	38	40	41	43	44	45	45	45	43	40	37	34	32	29	45.3
30-Mar-08	26	23	21	20	20	20	21	23	25	28	30	33	35	38	40	41	42	42	42	42	41	41	39	39	42.2
31-Mar-08	37	35	35	33	30	27	24	23	23	23	24	27	30	32	N	N	N	N	N	N	N	N	33	31	36.8

Hourly Max 40.2 39.7 38.6 38.8 39.1 39.2 38.7 38.0 37.3 36.8 38.3 39.8 41.2 42.8 44.0 45.2 46.2 49.6 49.7 48.7 46.8 46.1 43.1 41.4



PAS – Brooks Hydrogen Sulphide Monthly Summary

HOURLY AVERAGE TABLE

Hydrogen Sulphide (H₂S)

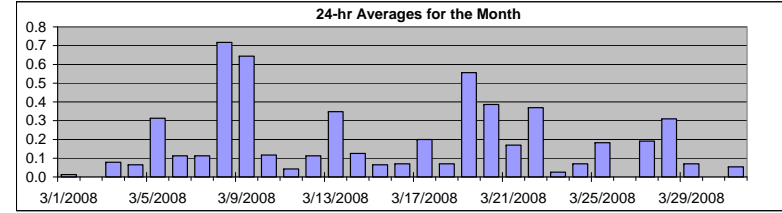
Station: Portable-Brooks
 Station Owner: PAS

Monitoring Dates: March 1, 2008 to April 1, 2008

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	6.5 ppb	19-Mar	6:00	7:00
Maximum 24-hr Value:	0.7 ppb	8-Mar		



AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.3	0.5	0.2	0.1	0.0	0.0	0.0	0.2 ppb	0.1 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
2-Mar-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	0.0	0.0
3-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0.1	1.0
4-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
5-Mar-08	0	0	0	0	0	4	2	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.8
6-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
7-Mar-08	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	0.1	0.3
8-Mar-08	0	0	0	0	0	0	3	5	4	A	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0.7	4.5
9-Mar-08	0	0	1	4	1	2	3	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.6
10-Mar-08	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
11-Mar-08	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
12-Mar-08	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
13-Mar-08	0	1	1	1	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
14-Mar-08	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
15-Mar-08	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	0.6
16-Mar-08	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
17-Mar-08	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	A	0.2	2.1	
18-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3
19-Mar-08	0	0	0	0	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.6	6.5	
20-Mar-08	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	A	1	1	1	0.4	1.0
21-Mar-08	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	1.3	
22-Mar-08	0	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	5.1	
23-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.2	
24-Mar-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	0.1	0.2	
25-Mar-08	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.9	
26-Mar-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	0.0	0.0	
27-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
28-Mar-08	0	0	0	0	0	0	0	0	0	0	0	0	C	C	A	1	0	0	0	0	0	0	0	0	0.3	0.5	
29-Mar-08	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
30-Mar-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	0.0	0.0	
31-Mar-08	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0	
Hourly Avg	0.1	0.1	0.1	0.2	0.1	0.5	0.7	0.3	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	0.1	0.1	0.1	0.1		
Hourly Max	0.4	1.3	1.2	3.6	1.1	5.1	6.5	4.5	3.9	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	2.1	0.6	0.6	1.0	1.0		

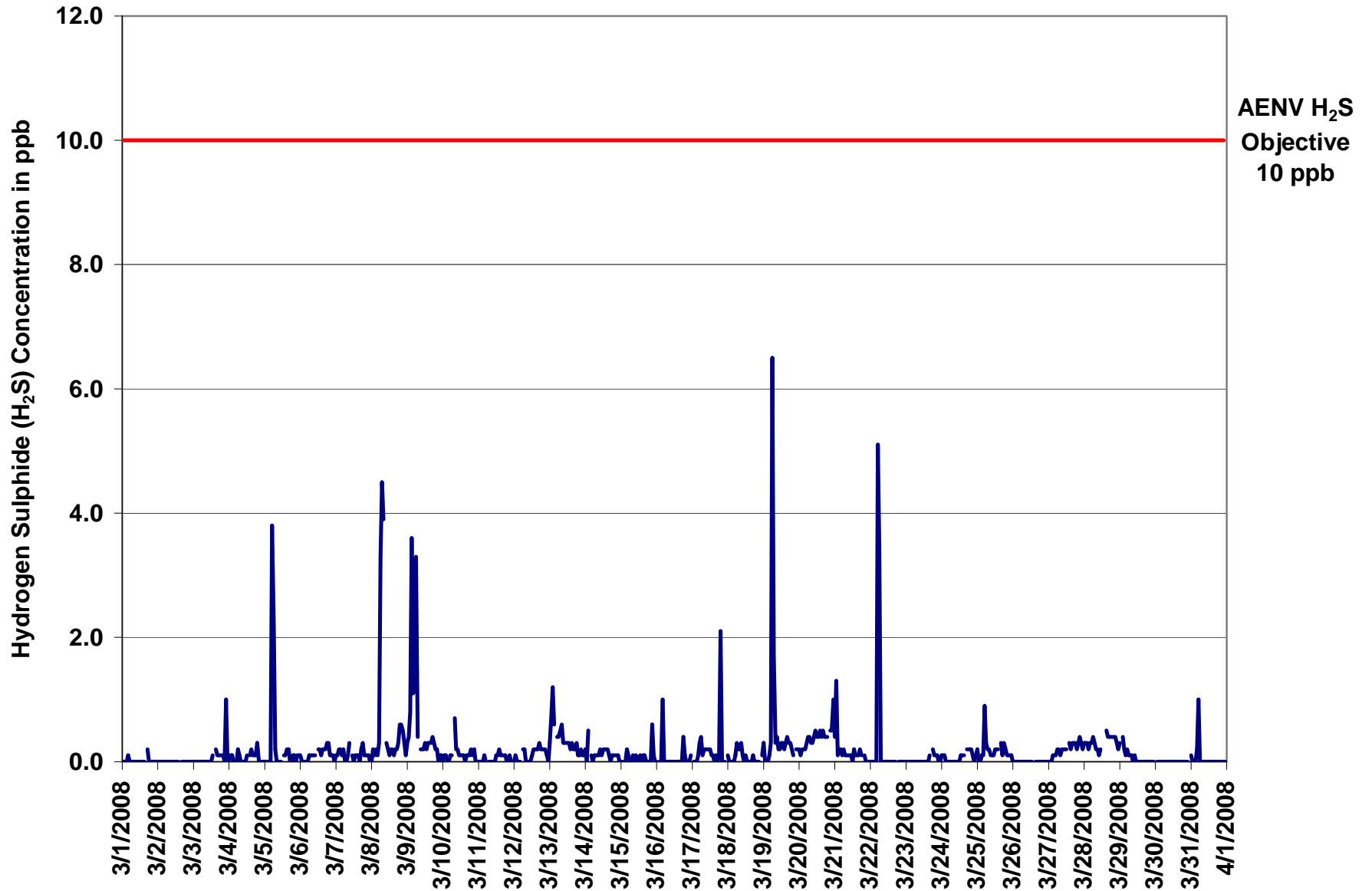


Figure 20. PAS – Brooks Hydrogen Sulphide 1-hr Average Monthly Trend



Station: Portable-Brooks
 Station Owner: PAS

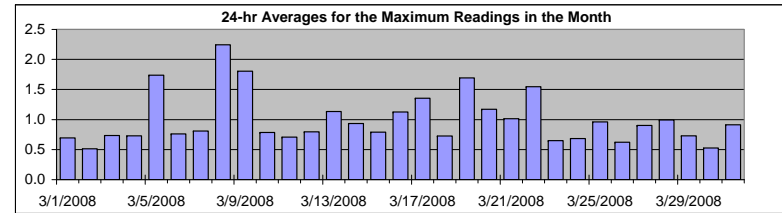
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Hydrogen Sulphide (H₂S)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Value:	14.4	ppb	22-Mar	5:00 6:00
Maximum 24-hr Value:	2.2	ppb	8-Mar	



AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	8.4	1.5	0.9	0.8	0.6	0.4	0.3	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-Mar-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0.7	1.0	
2-Mar-08	1	1	0	1	1	1	1	0	0	1	0	1	1	1	A	1	1	1	1	0	1	0	1	0.5	0.8	
3-Mar-08	0	0	0	0	0	1	0	0	0	0	0	0	1	A	1	1	1	1	1	1	6	1	1	0.7	5.6	
4-Mar-08	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	1	1	1	1	0.7	1.5	
5-Mar-08	1	1	1	0	0	12	7	7	1	1	0	1	A	1	1	1	1	0	1	1	1	1	1	1.7	12.4	
6-Mar-08	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
7-Mar-08	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4	
8-Mar-08	1	1	1	1	1	1	10	9	8	A	1	1	1	1	1	1	2	1	2	4	3	1	1	2.2	10.3	
9-Mar-08	1	1	2	8	5	4	7	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.8	7.7	
10-Mar-08	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
11-Mar-08	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
12-Mar-08	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
13-Mar-08	1	2	3	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	3.4	
14-Mar-08	1	1	3	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	3.4	
15-Mar-08	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	0.8	2.6	
16-Mar-08	0	A	1	1	9	1	1	0	1	1	1	1	0	1	1	1	1	5	1	1	1	1	1	1.1	8.5	
17-Mar-08	A	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	1	1	13	1	1	0	A	1.4	13.0	
18-Mar-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	1	0.7	1.1	
19-Mar-08	2	1	1	1	2	1	13	6	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.7	12.6	
20-Mar-08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	4	1.2	4.3	
21-Mar-08	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	6.0	
22-Mar-08	1	1	0	0	1	14	8	1	0	0	1	1	1	1	1	1	1	A	1	1	0	1	0	1.5	14.4	
23-Mar-08	0	0	0	1	1	2	0	0	0	1	0	1	0	1	1	1	1	A	1	1	1	1	1	0.6	2.2	
24-Mar-08	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	0.7	1.0	
25-Mar-08	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	3.1	
26-Mar-08	1	1	1	1	1	0	1	0	1	1	0	1	1	A	1	1	1	1	1	1	1	0	1	0.6	0.9	
27-Mar-08	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
28-Mar-08	1	1	1	1	1	1	1	1	1	1	1	1	C	C	A	1	1	1	1	1	1	2	1	1.0	1.5	
29-Mar-08	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.7	1.2	
30-Mar-08	A	1	1	0	1	1	0	1	1	0	1	1	0	0	1	1	1	1	0	1	1	1	A	0.5	0.8	
31-Mar-08	1	1	1	1	4	4	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0.9	4.2	
Hourly Avg	0.7	0.9	0.9	0.9	1.2	2.0	2.2	1.4	1.0	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	1.0	1.2	0.9	0.9	0.9	0.8			
Hourly Max	1.5	6.0	3.4	7.7	8.5	14.4	12.6	9.0	7.9	1.4	1.2	1.2	1.2	1.2	1.3	1.2	1.1	1.7	4.5	13.0	3.7	2.9	5.6	4.3		

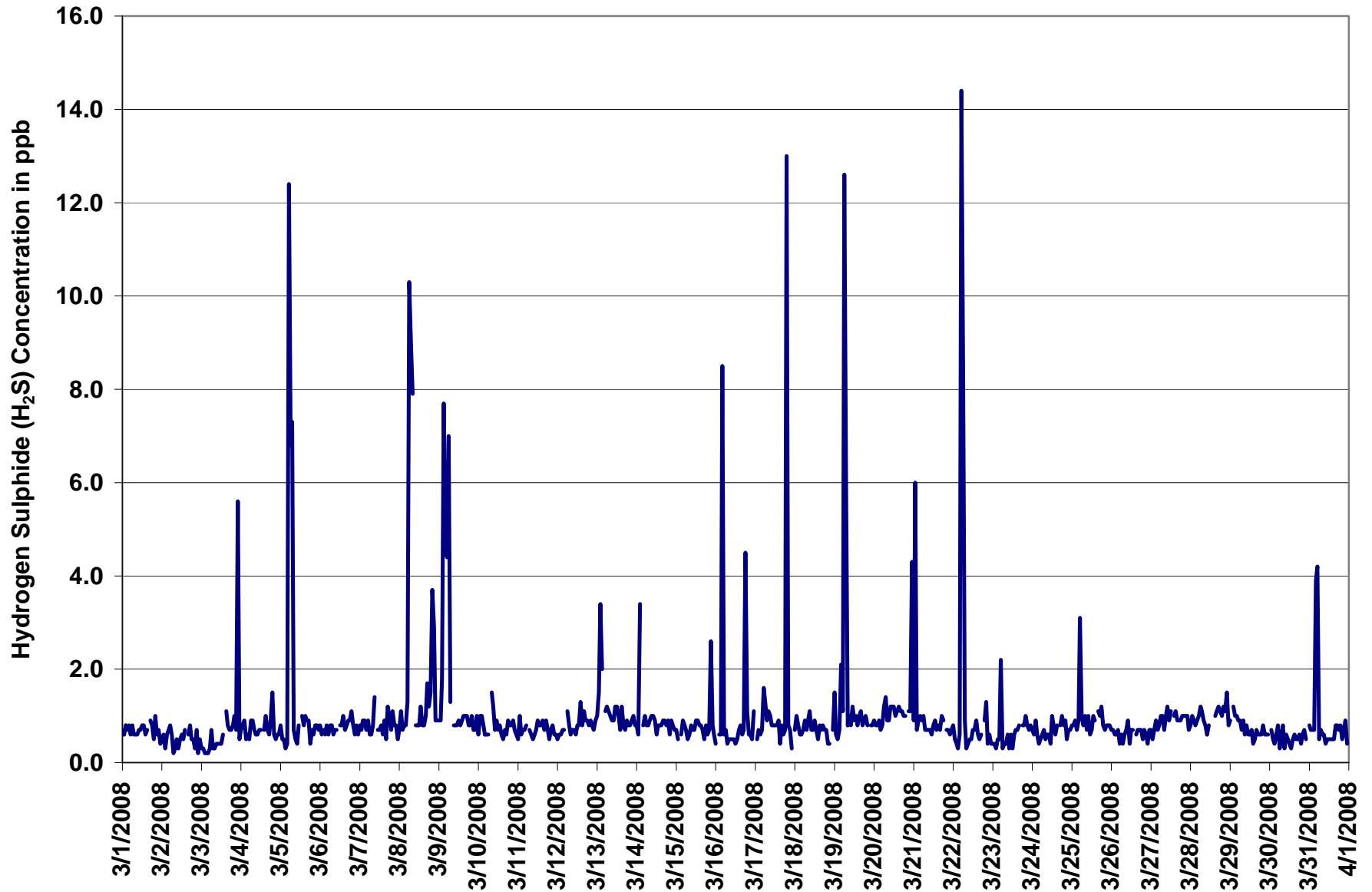
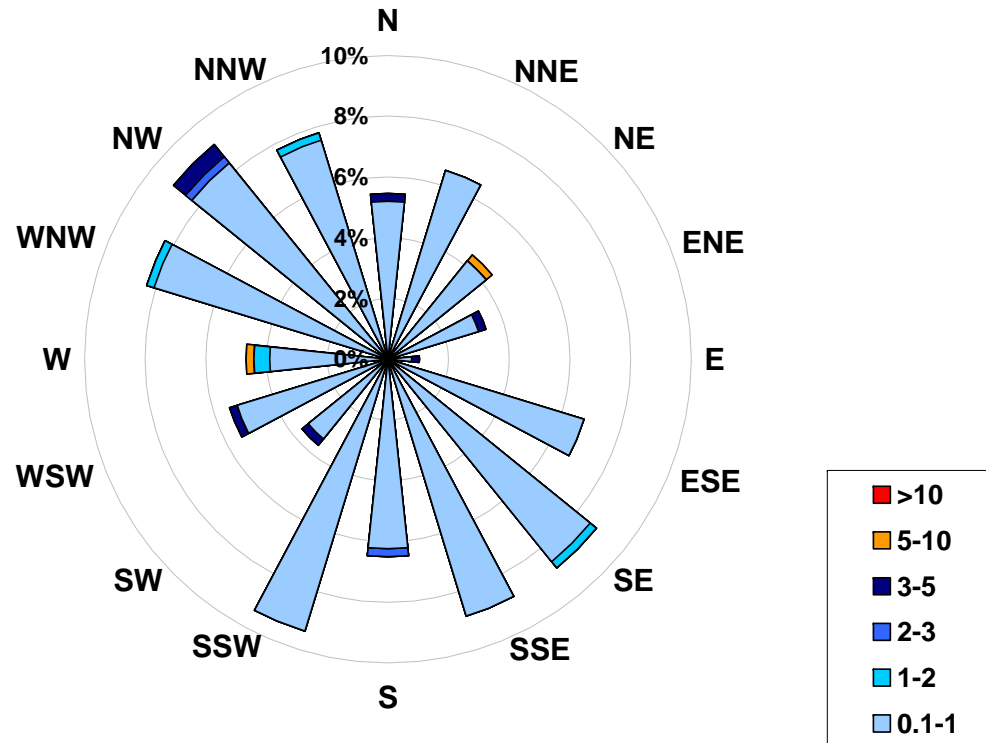


Figure 21. PAS – Brooks Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of H ₂ S in ppb			Frequency (hrs)
Range			
0.1	<	1	690
1	to	2	5
2	to	3	2
3	to	5	7
5	to	10	2
	>	10	0
Total Non-Zero Values			710



PAS – Brooks Scalar Wind Speed Monthly Summary

Station: Portable-Brooks
 Station Owner: PAS

HOURLY AVERAGE TABLE

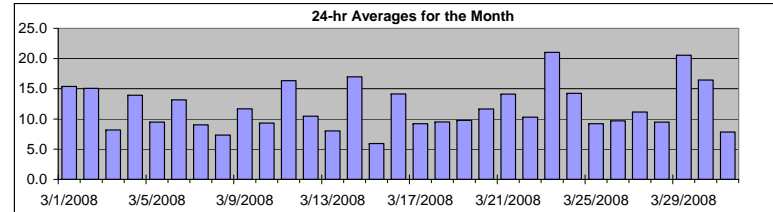
Wind Speed (WSs)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	36.4	km/hr	29-Mar	9:00 10:00
Maximum 24-hr Value:	21.0	km/hr	23-Mar	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	29.9	23.3	15.6	10.3	7.3	4.6	3.2	11.9 km/hr



Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Scalar Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Mar-08	18	22	17	21	18	23	23	22	15	19	21	18	9	6	9	11	10	11	11	14	20	12	8	12	15.4	23.4
2-Mar-08	12	3	11	19	28	26	26	24	19	14	11	9	6	7	7	12	16	13	14	19	18	17	16	17	15.1	27.7
3-Mar-08	11	11	9	9	10	12	12	12	12	9	8	9	6	6	6	6	7	5	4	5	8	6	6	7	8.2	12.3
4-Mar-08	9	9	9	13	11	23	34	29	26	22	19	15	14	16	14	10	10	7	2	6	8	9	9	10	13.9	34.0
5-Mar-08	11	10	9	11	11	7	6	8	8	3	6	8	9	10	13	11	12	11	8	6	13	14	11	14	9.5	14.2
6-Mar-08	14	9	6	6	7	9	10	9	11	13	12	15	16	18	20	21	20	18	16	15	15	16	15	9	13.2	20.5
7-Mar-08	10	15	15	14	6	9	10	9	6	7	6	8	13	14	11	12	10	5	6	5	4	7	10	7	9.0	15.3
8-Mar-08	5	7	8	5	3	4	4	3	4	6	6	8	9	10	10	10	10	9	12	14	8	9	6	6	7.3	14.2
9-Mar-08	8	5	5	4	4	4	8	10	9	7	7	9	13	17	20	22	19	19	13	16	18	17	16	10	11.7	21.6
10-Mar-08	9	6	6	5	4	5	4	5	6	10	9	14	16	17	18	13	9	8	11	11	11	10	8	8	9.3	17.9
11-Mar-08	7	7	7	10	9	11	9	10	18	23	24	25	26	30	33	30	21	14	20	14	11	12	14	9	16.3	33.2
12-Mar-08	7	11	9	8	7	7	8	12	11	8	10	10	11	12	13	11	12	13	10	11	10	12	13	16	10.5	15.6
13-Mar-08	8	5	5	4	4	5	4	5	6	8	12	10	9	9	6	6	6	7	8	10	11	11	14	20	8.0	20.1
14-Mar-08	14	11	10	9	11	14	15	17	19	22	21	22	23	23	23	22	24	19	17	15	14	17	17	11	17.0	23.6
15-Mar-08	9	9	10	7	6	6	5	5	6	6	8	7	5	6	6	3	3	4	5	6	6	6	5	5	5.9	9.5
16-Mar-08	7	8	5	4	13	24	24	24	21	21	18	17	11	8	7	6	7	11	9	13	16	17	22	27	14.1	27.0
17-Mar-08	21	17	13	5	8	6	6	3	5	8	14	13	11	10	9	10	11	4	7	8	9	9	8	7	9.2	21.0
18-Mar-08	6	8	6	7	6	5	3	3	4	5	11	14	14	14	17	19	13	14	10	16	15	6	8	4	9.5	18.9
19-Mar-08	6	7	8	7	6	6	6	6	9	10	8	7	7	7	9	8	7	7	17	21	18	17	17	15	9.8	20.6
20-Mar-08	15	16	17	14	13	12	5	7	5	9	6	7	11	13	15	12	12	13	9	12	15	16	15	12	11.7	16.9
21-Mar-08	10	14	16	17	13	13	14	15	14	11	11	15	14	20	22	22	22	20	10	10	12	7	8	12	14.1	22.1
22-Mar-08	13	16	8	5	4	5	3	5	8	5	5	5	10	9	10	8	11	9	12	18	23	19	16	20	10.3	23.1
23-Mar-08	19	17	15	14	15	17	19	22	24	23	25	28	29	28	30	28	19	20	21	23	27	17	17	10	21.0	30.1
24-Mar-08	15	18	11	10	8	6	8	19	22	18	16	15	17	20	22	22	20	19	13	8	8	10	9	9	14.2	21.7
25-Mar-08	9	9	9	7	6	5	4	8	9	14	11	11	11	9	10	8	6	8	8	11	11	14	12	13	9.2	14.2
26-Mar-08	13	13	11	10	8	11	13	12	7	6	5	8	9	7	8	7	7	7	7	10	11	13	14	19	9.7	18.9
27-Mar-08	18	15	9	11	8	6	7	8	10	8	10	13	15	16	16	19	15	15	13	8	7	10	5	7	11.2	19.3
28-Mar-08	6	8	8	6	8	5	6	7	5	7	9	9	8	7	7	7	8	11	12	14	18	18	17	16	9.5	18.4
29-Mar-08	18	19	22	21	21	19	24	27	33	36	36	31	29	23	21	19	20	20	17	11	9	7	4	6	20.6	36.4
30-Mar-08	10	9	9	6	9	12	15	18	18	19	21	22	23	22	20	19	19	19	24	21	17	16	14	13	16.4	24.2
31-Mar-08	9	10	12	8	6	6	5	3	9	8	5	4	5	6	5	8	8	10	9	9	12	16	11	4	7.8	15.7
1-hr Average	11.2	11.1	10.1	9.6	9.4	10.4	10.9	11.8	12.2	12.3	12.6	13.1	13.1	13.5	14.1	13.5	12.6	11.9	11.4	12.1	12.9	12.5	11.8	11.5		
Hourly Max	21.0	21.6	22.1	21.2	27.7	26.1	34.0	28.6	32.7	36.4	35.8	31.2	29.0	29.8	33.2	30.0	23.6	20.2	24.2	22.8	26.9	18.8	22.0	27.0		



PAS – Brooks Vector Wind Speed Monthly Summary

Station: Portable-Brooks
 Station Owner: PAS

HOURLY AVERAGE TABLE

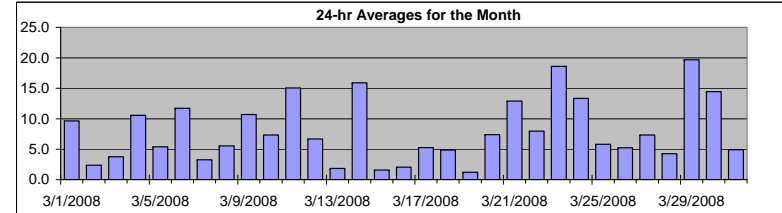
Wind Speed (WSv)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Maximum 1-hr Average:	36.3	km/hr	29-Mar	9:00 10:00
Maximum 24-hr Value:	19.7	km/hr	29-Mar	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	29.7	23.1	15.4	9.9	6.6	3.3	1.5	1.2 km/hr



Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
	Hour Start 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		
1-Mar-08	18	21	16	21	17	23	23	22	15	15	20	18	8	6	8	11	9	11	8	14	20	12	6	11	9.6	23.3
2-Mar-08	12	3	10	19	28	26	26	24	18	14	11	9	5	7	6	12	16	13	14	18	18	17	16	17	2.4	27.6
3-Mar-08	11	11	9	9	10	12	12	12	12	9	8	8	6	3	6	6	7	5	3	4	7	5	6	7	3.8	12.3
4-Mar-08	8	9	9	13	11	23	34	28	26	22	19	14	14	15	14	10	10	7	2	6	8	9	9	10	10.5	33.9
5-Mar-08	11	10	9	11	11	7	5	8	8	1	6	7	8	9	13	11	12	11	7	5	12	14	11	14	5.4	14.2
6-Mar-08	14	8	6	6	7	9	9	9	11	13	12	14	16	18	19	20	19	18	16	15	15	16	15	9	11.7	20.3
7-Mar-08	10	15	15	14	6	9	9	8	6	6	6	8	13	14	11	12	10	5	5	4	3	7	9	6	3.3	15.3
8-Mar-08	5	7	7	5	1	2	2	3	4	6	4	8	9	9	9	10	10	9	12	14	8	9	6	6	5.5	14.1
9-Mar-08	8	5	4	4	3	2	8	10	9	7	7	9	13	17	20	22	19	19	13	16	18	17	16	10	10.7	21.5
10-Mar-08	8	6	5	5	4	5	4	5	5	10	9	14	16	17	18	13	9	8	11	11	11	10	8	8	7.3	17.8
11-Mar-08	7	7	7	10	9	11	9	9	18	23	24	25	26	30	33	30	20	14	19	13	9	11	14	9	15.1	33.1
12-Mar-08	7	11	9	8	7	7	7	12	10	8	9	9	10	12	12	11	11	12	9	11	10	12	13	16	6.7	15.5
13-Mar-08	6	5	4	4	4	5	4	5	6	8	11	9	7	9	6	5	5	5	8	10	10	11	14	20	1.8	20.0
14-Mar-08	14	11	10	9	11	14	15	17	19	22	20	21	23	23	23	21	23	19	17	15	14	17	16	11	15.9	23.4
15-Mar-08	9	9	9	5	5	6	5	4	6	6	7	6	2	2	5	2	2	4	4	5	6	6	4	1	1.6	9.4
16-Mar-08	7	8	4	3	12	23	24	24	21	21	17	16	11	8	6	4	5	10	9	13	16	17	22	27	2.1	26.9
17-Mar-08	21	17	13	2	8	5	6	1	5	7	14	13	10	9	8	8	9	2	7	8	8	8	7	7	5.3	20.9
18-Mar-08	6	6	5	7	6	5	1	2	4	5	11	14	13	13	16	18	12	13	9	16	15	3	6	3	4.9	18.0
19-Mar-08	6	7	8	7	6	5	6	6	9	10	7	5	4	6	7	6	5	6	17	21	18	17	17	15	1.2	20.6
20-Mar-08	15	16	17	14	13	12	4	4	2	4	3	5	9	12	15	12	11	13	9	12	15	16	15	11	7.4	16.9
21-Mar-08	10	13	16	17	13	13	13	15	14	11	11	13	13	18	21	21	21	19	10	10	12	5	7	12	12.9	21.4
22-Mar-08	13	16	6	5	3	4	1	5	8	5	4	1	9	8	8	7	9	8	12	18	23	19	16	20	8.0	23.1
23-Mar-08	19	17	15	14	15	17	19	22	24	23	25	27	28	27	30	26	19	19	21	23	27	17	17	9	18.6	30.0
24-Mar-08	15	18	11	10	8	6	8	19	22	17	16	15	17	20	21	22	20	19	13	8	8	10	9	9	13.3	21.6
25-Mar-08	9	9	9	7	6	4	3	7	9	13	11	11	10	8	9	7	5	6	7	11	11	14	12	13	5.8	14.2
26-Mar-08	13	12	11	10	8	11	13	12	6	5	3	7	5	5	5	2	7	7	7	9	11	13	13	19	5.2	18.9
27-Mar-08	18	13	7	11	4	5	7	8	10	7	9	12	14	15	15	18	14	13	12	6	6	7	3	5	7.3	18.0
28-Mar-08	3	7	8	6	8	5	6	7	5	6	9	8	7	6	6	6	7	10	12	14	18	18	17	16	4.3	18.3
29-Mar-08	18	18	22	21	21	19	24	27	33	36	36	31	29	23	20	19	19	20	17	11	9	7	4	6	19.7	36.3
30-Mar-08	10	9	9	6	9	12	15	18	18	18	21	22	23	21	20	19	18	19	24	21	17	16	14	13	14.4	24.1
31-Mar-08	9	10	12	8	6	6	5	3	9	7	3	3	2	2	3	7	7	9	9	9	12	16	11	4	4.9	15.6
1-hr Vector	3.9	4.1	1.8	1.1	0.9	0.9	1.2	1.0	0.9	2.4	2.7	2.0	2.4	2.4	2.7	2.8	1.7	1.9	2.8	5.0	6.0	4.7	3.4	3.9		
Hourly Max	20.9	21.4	22.0	21.1	27.6	25.9	33.9	28.4	32.6	36.3	35.6	30.8	28.7	29.7	33.1	29.6	23.4	20.1	24.1	22.7	26.8	18.7	22.0	26.9		



PAS – Brooks Wind Direction Monthly Summary

Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	357.8	343.7	276.4	192.7	116.5	18.0	2.6	187 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																								24-hour Average	WD Sector	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Mar-08	217	208	209	194	202	202	208	216	240	329	357	343	333	296	258	255	238	253	269	185	203	213	268	348	235	SW	
2-Mar-08	22	332	349	8	18	15	8	9	10	359	344	344	288	274	209	182	186	179	175	174	175	170	157	172	22	NNE	
3-Mar-08	187	207	212	204	202	206	204	207	206	209	220	249	280	24	111	104	126	124	35	329	352	355	314	2	210	SSW	
4-Mar-08	0	9	3	5	4	24	17	6	4	8	2	343	345	343	346	331	334	338	274	236	206	213	233	233	354	N	
5-Mar-08	256	277	279	288	296	307	321	31	19	155	208	237	239	300	320	331	340	359	357	350	40	29	32	60	330	NNW	
6-Mar-08	75	89	88	96	100	108	134	138	145	175	159	149	168	166	161	158	154	157	156	160	168	168	177	191	151	SSE	
7-Mar-08	204	206	210	213	217	225	225	225	230	318	308	337	358	358	330	334	341	314	336	324	0	24	48	69	291	WNW	
8-Mar-08	79	212	221	279	101	69	59	245	100	107	167	192	210	184	187	191	185	157	142	163	171	185	190	197	176	S	
9-Mar-08	210	211	273	316	344	274	234	216	213	256	242	229	209	201	203	211	213	202	190	193	193	201	211	217	212	SSW	
10-Mar-08	241	296	336	312	316	303	316	300	239	203	203	184	183	187	203	212	204	219	210	209	199	210	216	216	215	SW	
11-Mar-08	223	223	262	214	214	202	233	237	247	246	249	250	245	246	247	249	274	268	309	254	235	291	296	284	252	WSW	
12-Mar-08	246	289	281	270	275	287	250	245	255	262	259	299	311	327	339	331	345	355	355	30	51	37	16	18	320	NW	
13-Mar-08	348	300	286	274	276	255	266	262	287	334	354	8	12	24	40	48	80	53	131	126	113	140	128	147	59	ENE	
14-Mar-08	142	137	155	146	127	132	134	143	155	171	178	166	152	152	147	155	156	137	115	109	104	114	111	108	142	SE	
15-Mar-08	98	114	116	77	27	9	346	357	358	342	343	359	262	298	319	358	108	167	158	122	152	196	209	57	51	NE	
16-Mar-08	165	203	208	242	352	359	3	2	2	1	352	352	346	323	335	286	215	201	173	161	169	168	165	165	348	NNW	
17-Mar-08	177	192	241	219	234	316	18	284	217	289	313	316	334	320	286	262	268	170	169	178	264	314	301	290	264	W	
18-Mar-08	288	231	251	235	229	244	332	22	248	147	172	191	207	216	188	162	159	113	116	107	108	341	39	326	174	S	
19-Mar-08	292	338	349	317	311	289	278	276	292	295	317	347	353	341	284	280	327	358	107	110	122	129	126	124	17	NNE	
20-Mar-08	117	123	130	128	127	142	162	152	186	17	315	152	53	41	8	8	36	68	96	113	125	130	136	176	107	ESE	
21-Mar-08	185	145	135	133	141	139	138	136	162	149	158	164	186	145	111	111	113	102	118	127	127	117	64	122	134	SE	
22-Mar-08	121	126	128	53	352	34	1	84	120	161	190	154	184	218	209	224	163	172	157	148	156	170	177	170	158	SSE	
23-Mar-08	173	177	186	186	187	174	181	178	182	184	177	174	188	211	207	221	239	236	240	240	244	241	243	264	204	SSW	
24-Mar-08	254	252	262	257	276	283	285	313	316	312	297	305	307	312	311	316	315	313	307	316	293	298	301	303	300	WNW	
25-Mar-08	300	297	298	291	294	320	338	302	306	320	310	295	285	313	295	294	286	230	195	184	182	193	192	196	271	W	
26-Mar-08	205	212	209	211	218	208	207	201	230	303	270	238	204	321	305	264	180	150	124	112	108	115	111	114	186	S	
27-Mar-08	122	135	47	31	73	36	17	35	125	127	123	118	128	132	124	143	191	165	29	3	122	108	338	67	110	ESE	
28-Mar-08	213	269	321	309	314	302	284	292	268	273	269	309	312	319	325	331	21	47	63	64	70	71	55	65	5	N	
29-Mar-08	61	61	42	25	29	18	21	29	29	28	27	21	18	21	13	16	14	27	32	40	55	48	111	115	30	NNE	
30-Mar-08	135	136	124	82	68	77	87	85	81	53	36	35	31	35	37	41	35	23	33	32	33	32	24	27	48	NE	
31-Mar-08	19	10	15	359	323	337	3	352	72	82	54	37	162	347	105	53	59	90	89	83	91	122	150	127	62	ENE	
Hourly Avg	172	190	219	242	322	347	344	323	283	326	306	286	254	278	246	232	208	142	120	140	146	148	149	140			



PAS – Brooks Standard Deviation of Wind Direction Monthly Summary

Station: Portable-Brooks
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: March 1, 2008 to April 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	80.9	57.5	21.4	11.5	6.2	3.4	2.3

Status Flag Characters

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

Day Mountain Standard Time

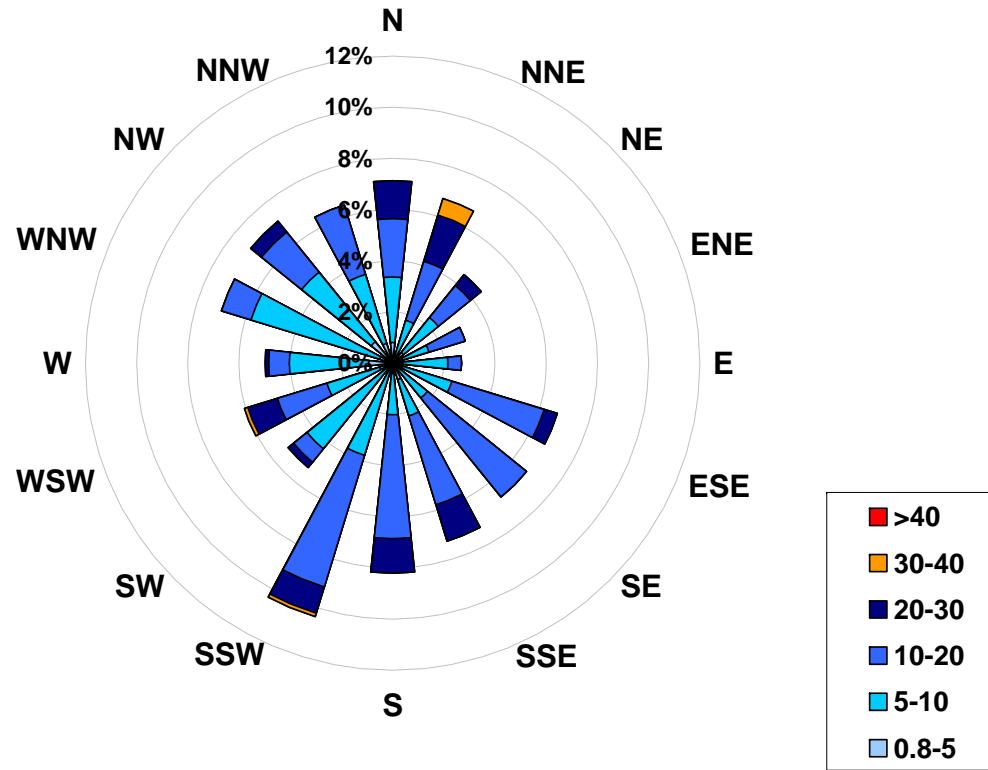
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Mar-08	14	11	14	3	11	7	4	5	9	39	13	7	11	16	13	7	15	14	40	10	4	5	39	21	
2-Mar-08	9	27	32	4	5	7	5	5	6	7	13	19	34	22	49	9	5	5	4	2	4	7	2	9	
3-Mar-08	10	3	6	5	5	3	2	3	4	9	15	19	13	58	18	12	16	17	44	63	32	36	12	15	
4-Mar-08	6	10	9	4	6	5	4	6	5	6	8	11	11	12	10	14	11	14	50	13	13	13	8	7	
5-Mar-08	14	12	7	6	6	7	21	17	13	79	14	16	27	17	10	11	11	11	14	33	11	5	7	15	
6-Mar-08	8	10	12	6	8	5	11	10	12	10	9	10	13	10	9	8	5	3	3	5	4	2	9	9	
7-Mar-08	6	4	3	5	19	9	17	14	24	22	18	13	14	11	10	9	6	15	20	32	30	9	10	24	
8-Mar-08	30	12	14	22	87	75	69	27	36	15	50	14	17	15	13	13	7	17	3	9	14	13	28	21	
9-Mar-08	15	19	15	20	49	63	26	9	28	17	24	14	15	8	6	5	5	10	4	5	9	3	4		
10-Mar-08	13	18	24	17	20	14	23	17	39	7	9	12	8	11	7	13	15	16	7	7	4	3	13	7	
11-Mar-08	13	19	8	11	8	5	16	14	4	4	6	5	5	6	5	10	7	9	11	27	26	10	3	14	
12-Mar-08	20	4	9	8	8	13	32	7	8	7	16	12	13	12	18	15	29	26	23	21	9	6	7	9	
13-Mar-08	35	15	34	24	20	10	11	17	13	17	16	25	44	26	35	45	45	41	9	12	7	14	12	5	
14-Mar-08	5	6	10	14	9	3	3	8	6	7	8	15	9	10	10	10	7	8	4	3	4	3	3	6	
15-Mar-08	14	17	10	38	31	9	17	19	11	16	16	37	82	81	41	66	41	10	11	39	21	12	32	93	
16-Mar-08	28	5	61	43	22	6	5	6	7	8	10	11	15	21	33	54	50	14	16	7	3	2	2	4	
17-Mar-08	4	12	19	67	17	41	14	69	20	26	7	9	17	34	31	52	36	85	14	24	34	22	23	8	
18-Mar-08	9	34	54	14	12	10	78	44	30	38	21	14	22	21	17	18	20	18	30	6	6	65	42	33	
19-Mar-08	20	21	13	11	17	12	15	13	7	6	24	54	65	45	45	43	54	32	6	4	4	4	8	2	
20-Mar-08	4	4	3	8	7	13	39	74	81	79	73	63	56	22	7	16	22	10	17	7	4	5	12	14	
21-Mar-08	10	16	5	5	4	8	9	12	5	12	20	25	19	20	10	9	15	13	9	13	12	53	29	3	
22-Mar-08	2	2	72	41	50	32	70	31	19	27	58	96	29	37	47	40	37	29	6	3	5	3	4	2	
23-Mar-08	4	3	2	5	3	6	4	4	6	7	7	6	11	10	4	18	9	7	7	7	4	5	5	31	
24-Mar-08	17	6	11	11	13	14	12	6	5	4	7	7	7	7	7	6	4	5	8	10	8	5	4	5	
25-Mar-08	5	6	5	6	11	28	53	10	14	11	22	22	23	29	28	25	27	46	16	4	5	3	5	7	
26-Mar-08	3	4	4	4	5	10	2	5	35	33	69	52	69	63	57	83	26	24	21	13	5	6	20	3	
27-Mar-08	5	30	42	8	65	34	17	23	16	24	21	19	17	16	18	30	25	31	25	38	48	43	48	60	
28-Mar-08	75	16	13	9	5	11	12	9	15	9	14	21	24	40	33	36	37	19	8	7	4	4	6	8	
29-Mar-08	4	10	5	3	5	5	3	5	5	5	6	9	8	13	12	12	9	8	6	4	5	11	22	9	
30-Mar-08	4	7	5	18	14	9	5	5	8	12	4	5	4	9	5	6	5	6	6	4	5	7	4	5	
31-Mar-08	4	6	6	9	17	20	12	51	15	35	52	66	78	88	74	36	28	12	5	6	12	8	6	26	

Daily Maximum
39.5
48.6
63.1
49.8
78.9
12.9
32.3
87.2
63.2
38.9
26.5
32.1
45.1
14.6
92.6
60.7
84.8
77.5
64.9
81.0
52.9
95.6
30.8
16.5
53.2
82.9
64.5
74.9
21.7
17.7
88.2

Hourly Max	75	34	72	67	87	75	78	74	81	79	73	96	82	88	74	83	54	85	50	63	48	65	48	93
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1-hr Average Wind Rose (in km/hr) Located at the Portable-Brooks Site for March 2008



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	57
5	to	10	298
10	to	20	301
20	to	30	78
30	to	40	7
	>	40	0
Total Non-Zero Values			744



Palliser Airshed Society

Passive Monitoring – March 2008



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

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Location		Elevation meter
					Easting	Northing	
Duplicates							
7a	Site 7	0.2	41.9	1.6			
7b	Site 7	0.3	46.2	1.6			
17a	Site 17	0.2	41.6	BDL			
17b	Site 17	0.2	27.2	BDL			
1	Site 1	0.2	46.6	0.6	562434	5583139	719
2	Site 2	0.2	28.0	0.5	565416	5616277	
3	Site 3	0.3	39.5	0.4	533794	5675379	779
4	Site 4	0.3	39.8	0.3	554771	5717338	718
5	Site 5	0.3	39.3	0.9	494218	5715862	735
6	Site 6	0.3	36.2	1.1	433039	5673766	818
7	Site 7	0.2	44.1	1.6	400808	5620907	780
8	Site 8	0.5	42.0	1.2	498530	5621839	747
9	Site 9	0.3	43.2	1.4	487701	5591707	763
10	Site 10	0.3	44.6	1.5	478223	5613583	774
11	Site 11 - Brooks	0.4	35.5	4.8	439773	5604548	736
12	Site 12	0.3	35.9	1.9	450287	5587201	726
13	Site 13	0.3	41.6	0.6	464279	5548934	
14	Site 14	0.2	41.5	0.1	493206	5521201	870
15	Site 15	0.2	45.2	0.6	465824	5485742	874
16	Site 16	0.2	48.8	BDL	503827	5446942	903
17	Site 17	0.2	34.4	BDL	557668	5452307	942
18	Site 18 - Christian School Park	0.2	39.1	4.4	526575	5538135	709
19	Site 19 - Monitoring Station	0.4	39.8	5.0	522813	5544137	714
20	Site 20 - Redcliff	0.3	40.7	3.1	517479	5546059	725

BDL = Below Detection Limit



Alberta Ambient Air Quality Objective - Annual SO₂ Objective is 11 ppb

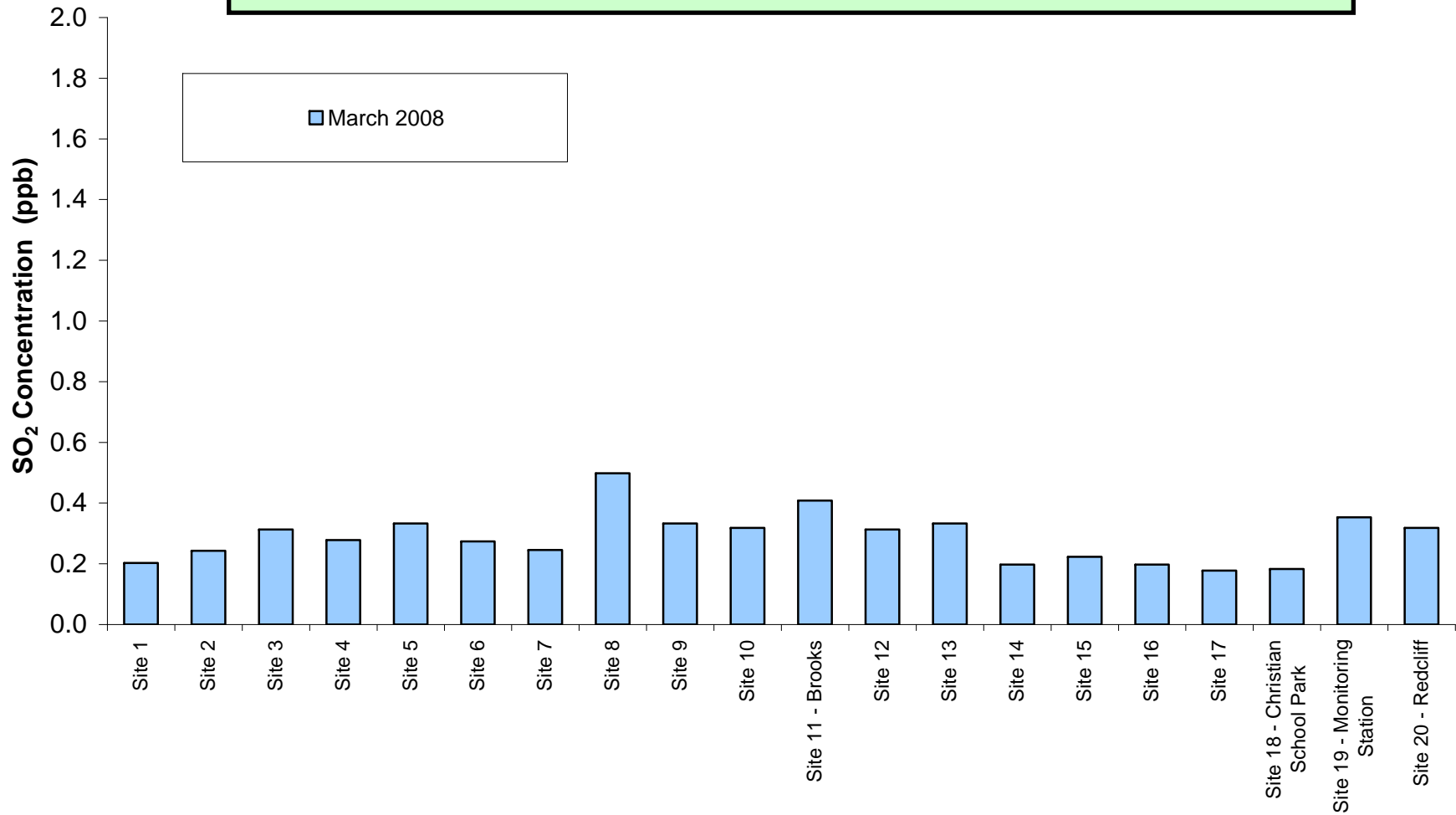


Figure 22. PAS – Sulphur Dioxide Passive Summary Chart

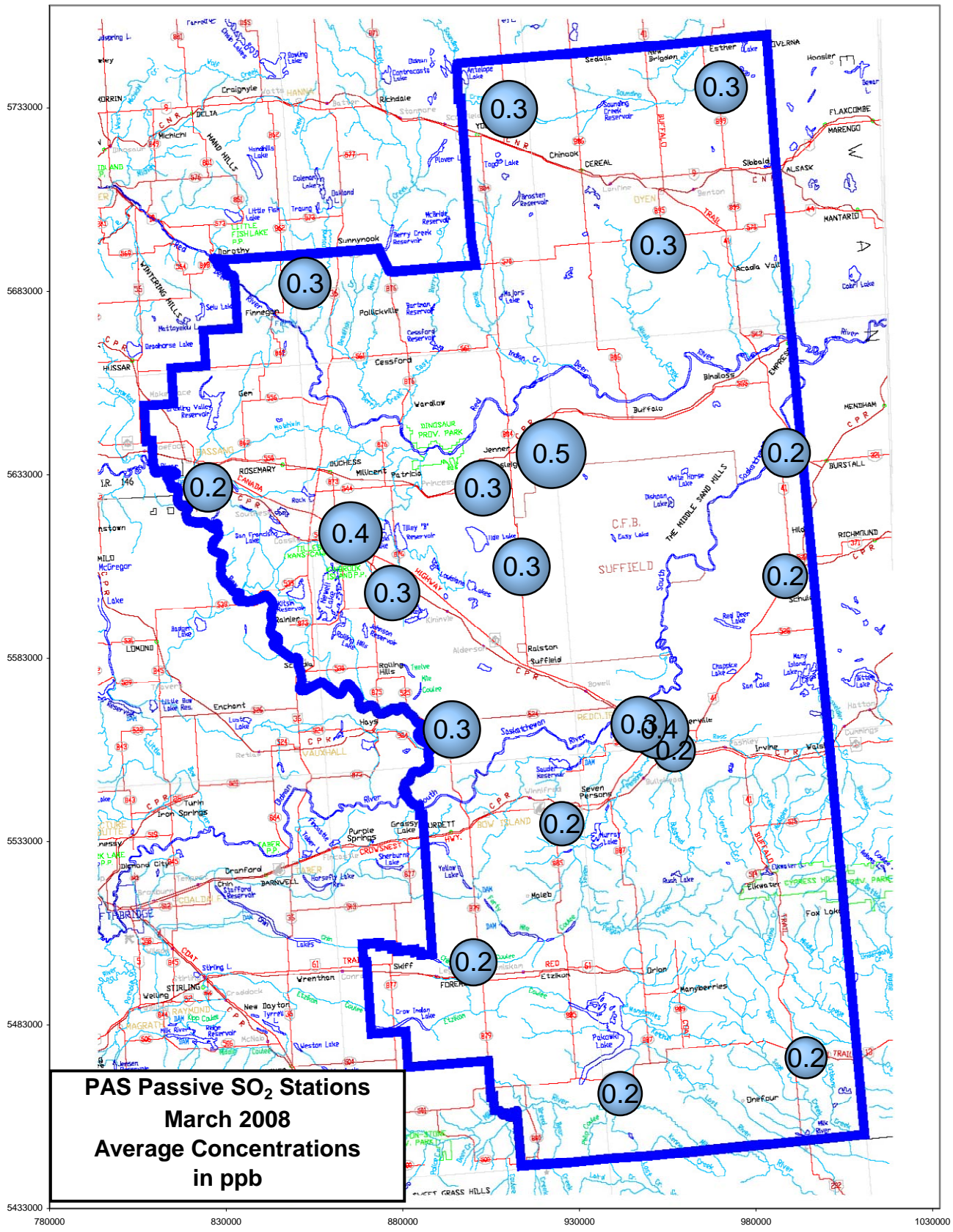


Figure 53. PAS – Sulphur Dioxide Passive Summary Bubble Chart

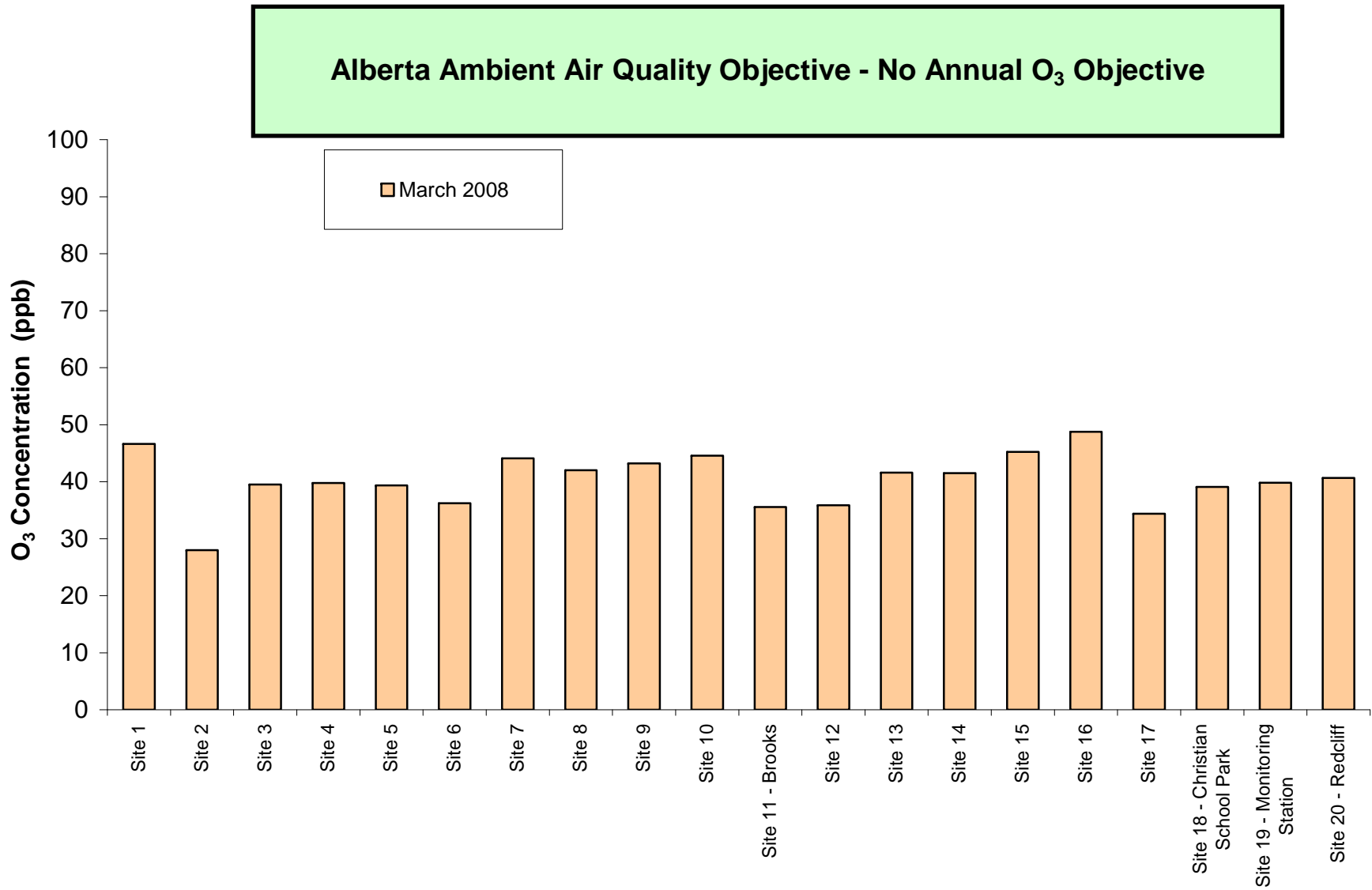


Figure 54. PAS – Ozone Passive Summary Chart

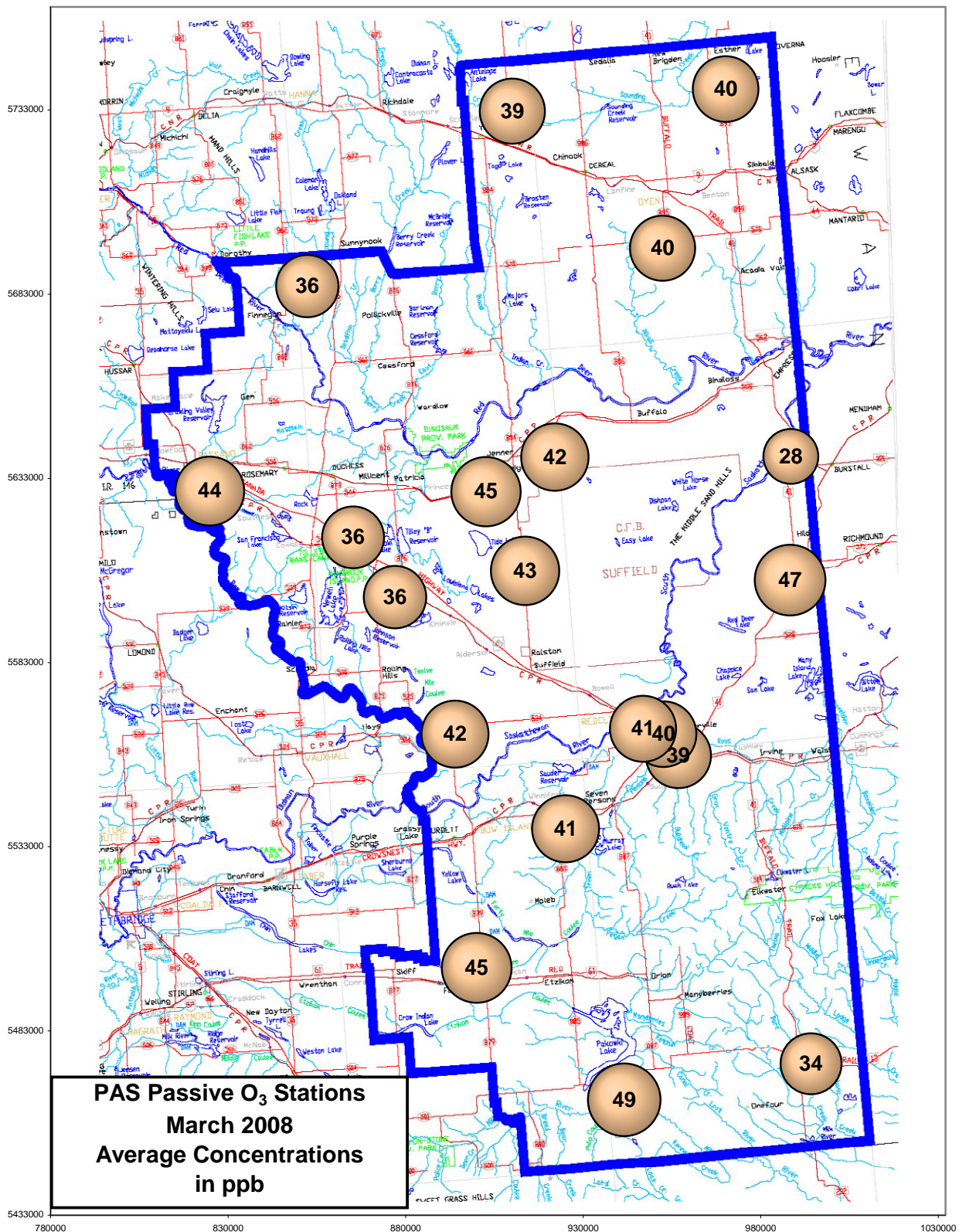


Figure 55. PAS – Ozone Passive Summary Bubble Chart



Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 32 ppb

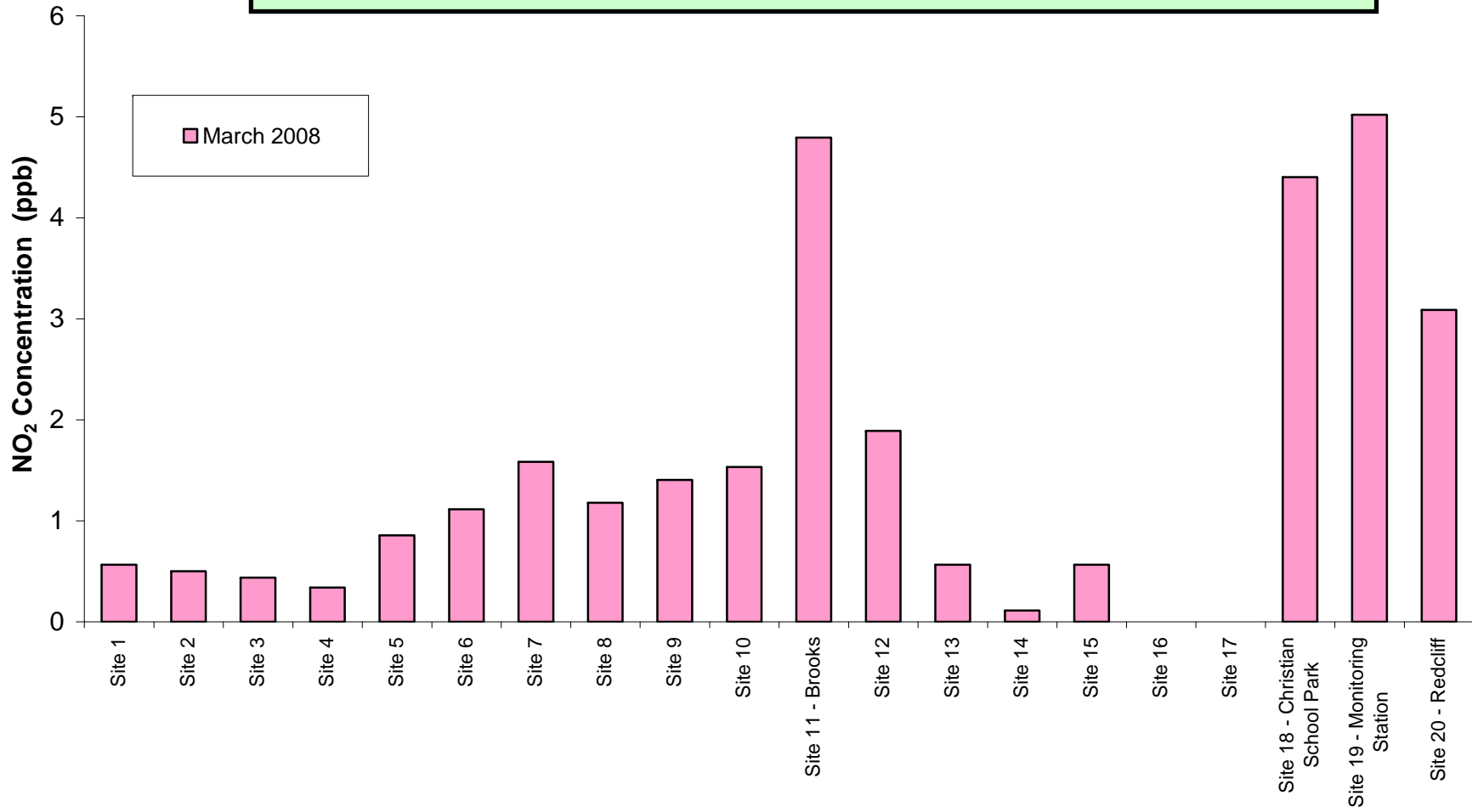


Figure 56. PAS – Nitrogen Dioxide Passive Summary Chart

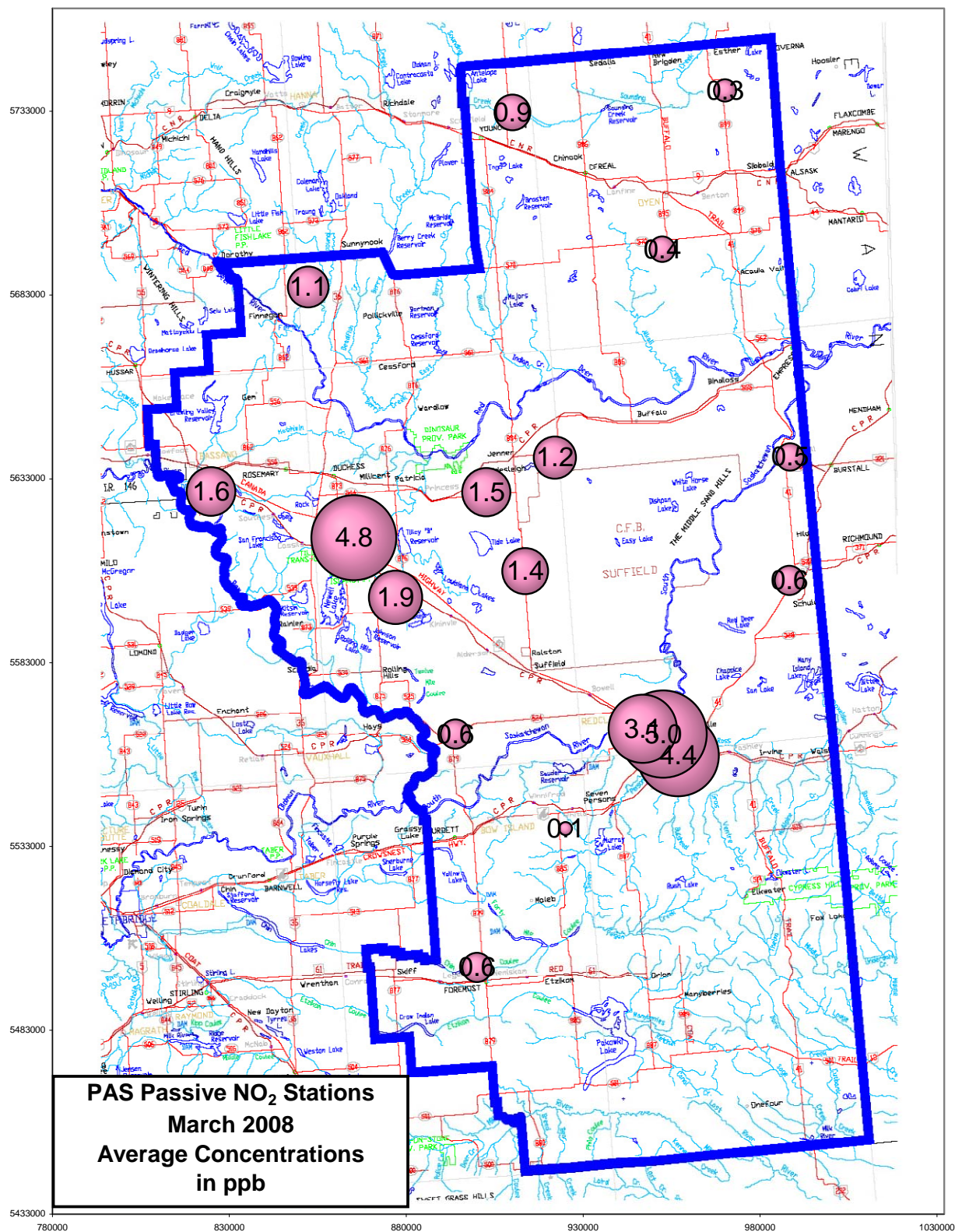


Figure 23. PAS – Nitrogen Dioxide Passive Summary Bubble Chart

Palliser Airshed Society

March 2008 - Calibration Reports

Crescent Heights Station: O₃, NO_x, NO, NO₂, THC, CO and PM_{2.5}

Portable-Brooks: O₃, SO₂, and H₂S

Calibration Report

Parameter 03Air Monitoring Network Palliser Airshed

Station Information

Calibration Date	March 31, 2008	Previous Calibration	February 20, 2008
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Calibration	Removal
			Other:
Start Time (MST)	10:00	End Time (MST)	12:40
Barometric Pressure	27.3 inches Hg	Station Temperature	20.0 Deg C
Calibrator	API700	Serial Number	
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
	<u>Before</u>		<u>After</u>
Calculated slope	0.995967	Calculated slope	0.965994
Calculated intercept	-0.692125	Calculated intercept	0.145275
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		1.004	
CellA	73690	Hz	74419.0	Hz
CellB	106923	Hz	105907.0	Hz
Pressure	698.5	mmHg	692.1	mmHg
Cell A Flow	723	ccm	725.0	ccm
Cell B Flow	708	ccm	709	ccm
Bench	34.7	Deg C	29.2	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)
5000	0.0	0.0	0.6	N/A
5000	400.0	280.6	291.2	0.9637
5000	300.0	199.2	205.4	0.9699
5000	200.0	117.2	120.3	0.9740
5000	0.0	0.0	0.6	0.0000
5000	400.0	280.6	291.2	0.9637
Average Correction Factor				0.9692

Calculated value of As Found Response: 288.7 ppm Percent Change of As Found: 2.9%

	before calibration		after calibration	
Auto zero	1.5	ppb	3.4	ppb
Auto span	277.8	ppb	149.9	ppb

Notes: No adjustments were done...

Calibration Performed By: Lenin Flores

Calibration Summary

Parameter **O3**
 Air Monitoring Network **Palliser Airshed**

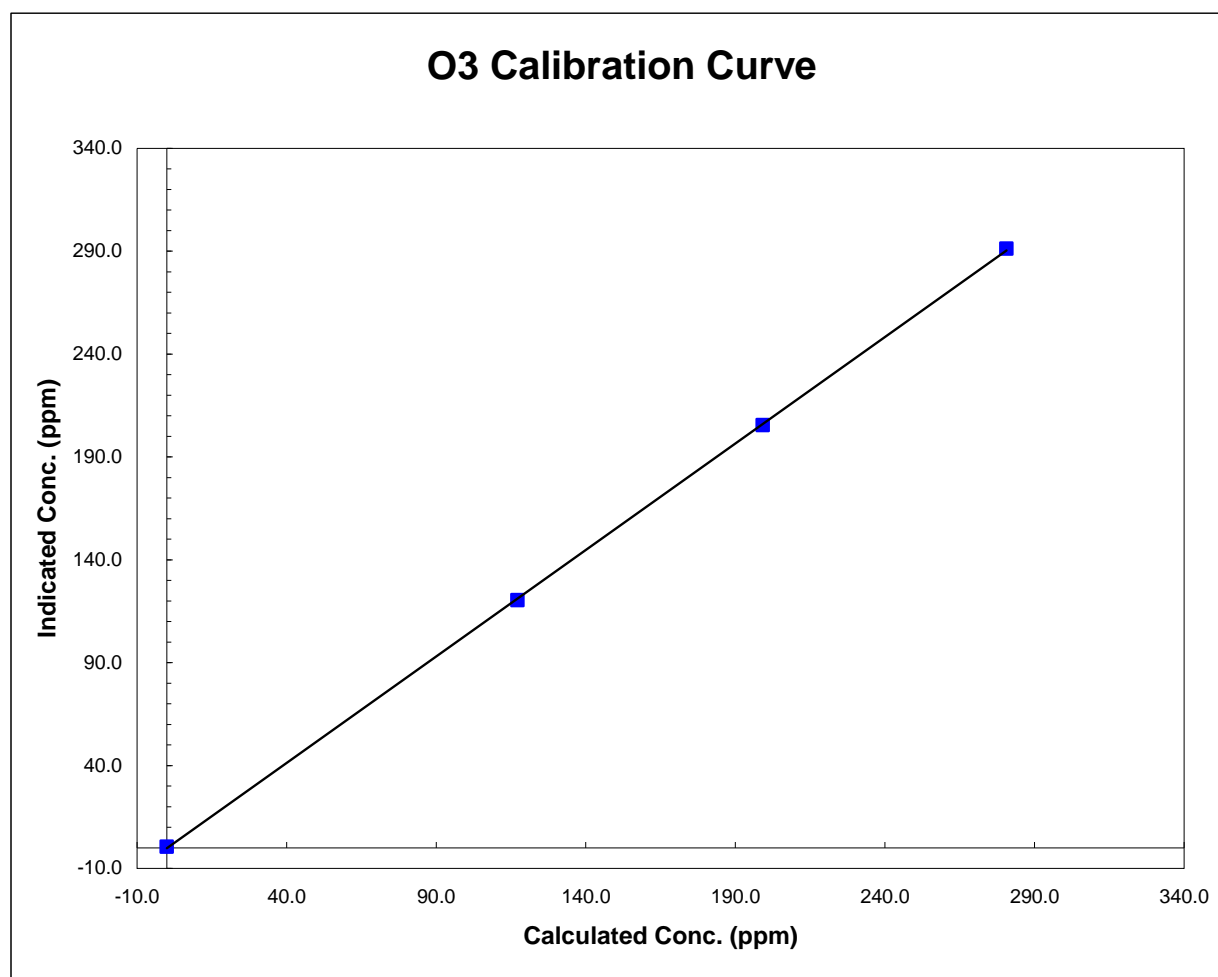


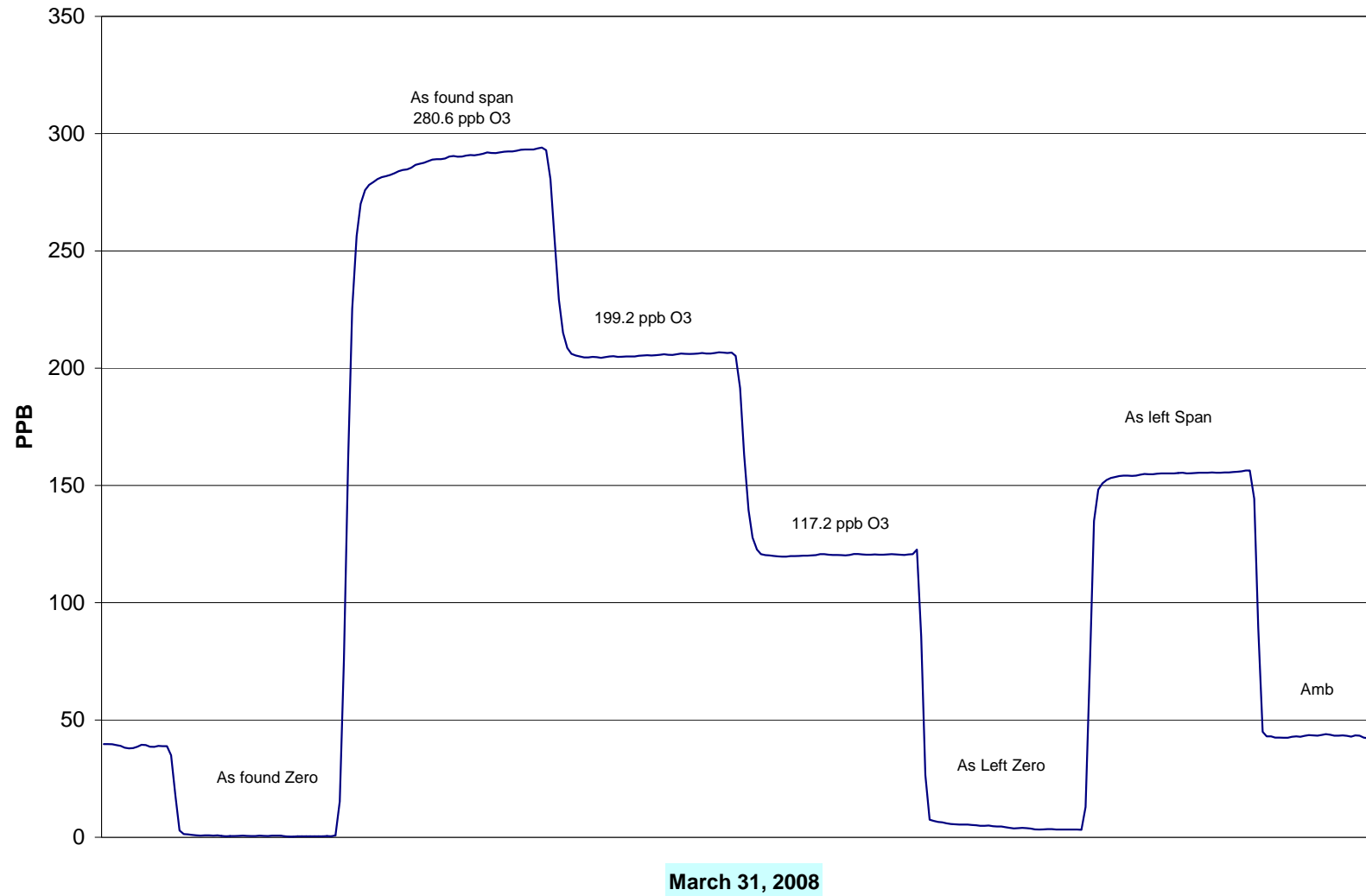
Station Information

Calibration Date	March 31, 2008	Previous Calibration	February 20, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	10:00	End Time (MST)	12:40
Analyzer make/model	TEI 49i	Analyzer serial #	713021144

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
280.6	291.2	0.9637	Correlation Coefficient	0.999948
199.2	205.4	0.9699		
117.2	120.3	0.9740		
0.0	0.6	N/A	Slope	0.965994
			Intercept	0.145275



Crescent Heights O₃ Calibration

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

Palliser Airshed



Station Information

Calibration Date	March 28, 2008	Previous Calibration	February 20, 2008
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal
Start Time (MST)	15:41	End Time (MST)	21:30
Barometric Pressure	0.912	Atm	Station Temperature
Calibrator	API700	Serial Number	20.0
NO Cal Gas Conc	48.9	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	48.9	ppm	Cal Gas Serial #
			January 29, 2008
			LL-50114

DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45270
Parameter	NO2	NOx	NO
Before	Data Slope	0.997913	0.994813
	Data Offset	0.027442	2.083881
After	Data Slope	1.010183	1.007694
	Data Offset	2.145940	0.443072
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	1.258		1.237	
NOx slope	1.260		1.227	
R Cell Temp	50.1	Deg C	49.6	Deg C
PMT Temp	7.1	Deg C	7.0	Deg C
Azero	58.7	mV	57.9	mV
IZS Temp	37.1	Deg C	37.1	Deg C
R Cell Press	4.2	in Hg	4.2	in Hg
Sample Press	26.1	in Hg	26.1	in Hg
O3 Flow	75.0	ccm	75.0	ccm
Sample Flow	450.0	ccm	450.0	ccm

Notes: Adjusted Span...

Calibration Report



Parameter **NO_x-NO-NO₂**
 Air Monitoring Network **Palliser Airshed**

Station Information

Calibration Date: **March 28, 2008** Station Location: **Crescent Heights**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4995	0.00	0.0	0.0	0.0	-1.2	-1.0	-2.2	N/A	N/A
1	4995	39.95	388.0	388.0	0.0	383.7	384.2	-2.1	1.0111	1.0096
2	4995	19.96	194.6	194.6	0.0	194.5	194.2	-1.6	1.0006	1.0021
3	4995	9.99	97.6	97.6	0.0	96.2	96.1	-1.8	1.0143	1.0161
AFZ	4995	0.00	0.0	0.0	0.0	-1.2	-1.0	-2.2	0.0000	0.0000
AFS	4995	39.95	388.0	388.0	0.0	369.8	367.6	0.6	1.0490	1.0555
Average Correction Factor									1.0087	1.0093

As Found Concentrations: NO_x= 373.1 NO= 371.2 As Found Percent Change NO_x= -3.8% NO= -4.3%

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 NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	-1.0	-1.0	0.0	-1.2	-1.0	-2.2	N/A	N/A	N/A	N/A
NO point	384.4	384.4	0.0	386.7	384.4	0.7	0.9940	1.0000	N/A	N/A
300	384.4	103.9	280.6	381.6	103.9	275.5	1.0075	1.0000	1.0185	98.2%
200	384.4	185.3	199.2	382.5	185.3	195.2	1.0050	1.0000	1.0201	98.0%
100	384.4	267.3	117.2	383.1	267.3	113.9	1.0036	1.0000	1.0292	97.2%
Average Correction Factor							1.0054	1.0000	1.0226	97.8%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero				ppb	-0.9	-0.7	-0.4	ppb
Auto span				ppb	288.2	285.3	3.6	ppb

Calibration Performed By: Jorge Lenin Flores

Calibration Summary

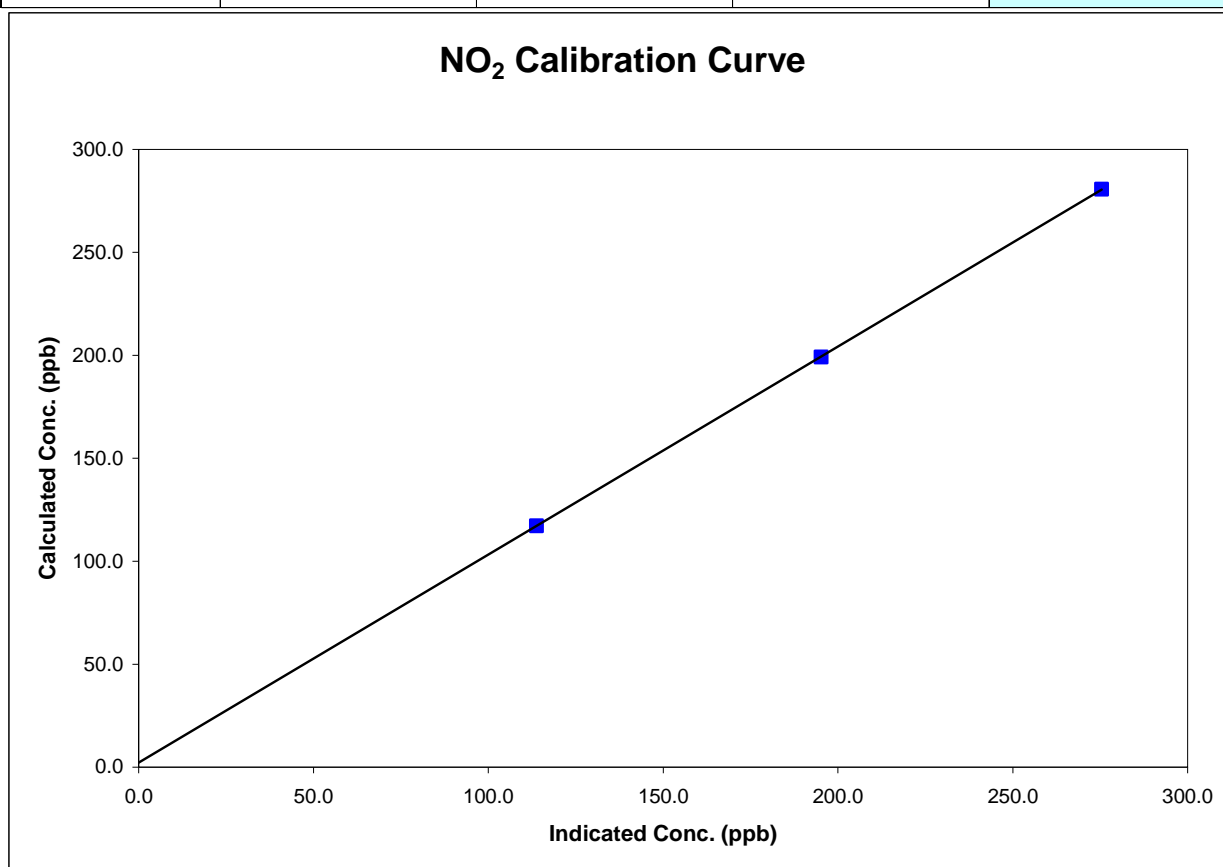
Parameter **NO₂**Air Monitoring Network **Palliser Airshed**

Station Information

Calibration Date	March 28, 2008	Previous Calibration	February 20, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:41	End Time (MST)	21:30
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		
280.6	275.5	1.0185	Correlation Coefficient	0.999998
199.2	195.2	1.0201		
117.2	113.9	1.0292	Slope	1.010183
			Intercept	2.145940



Calibration Summary

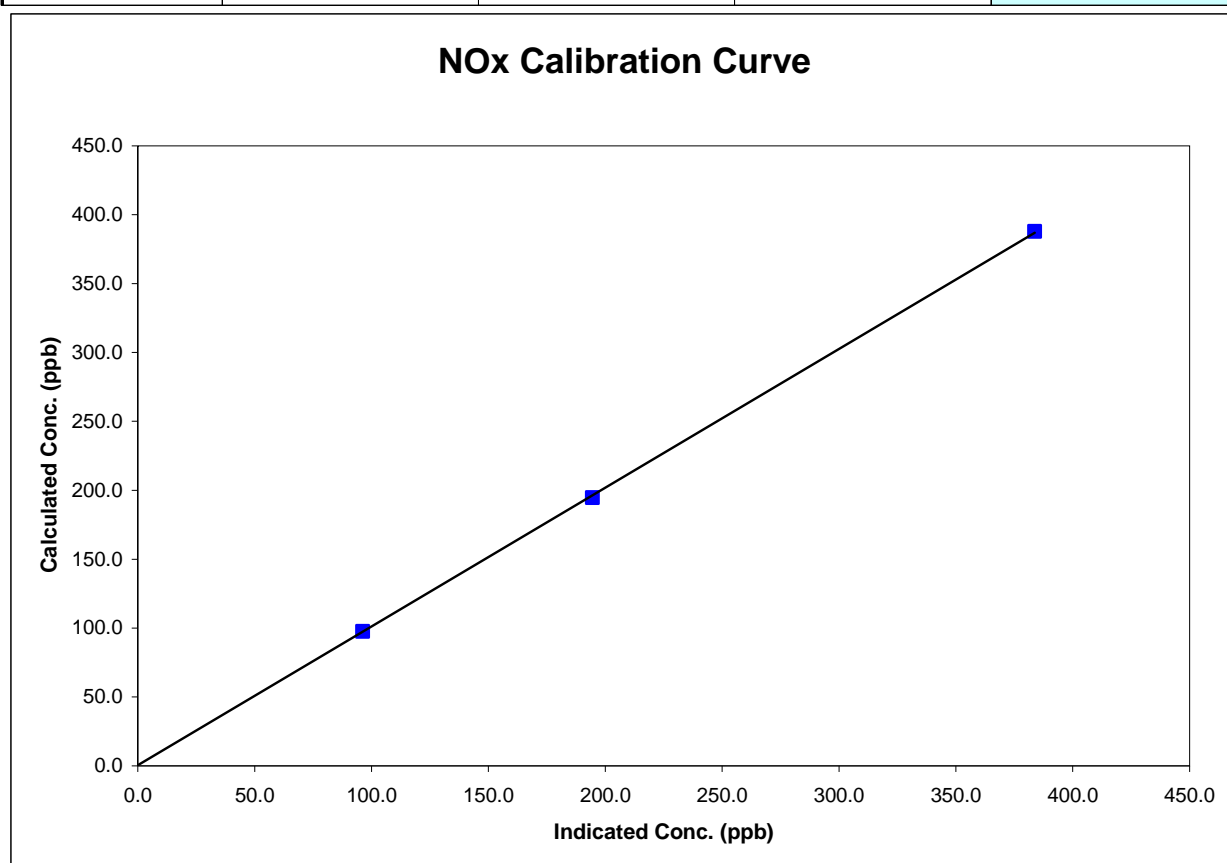
Parameter **NO_x**Air Monitoring Network **Palliser Airshed**

Station Information

Calibration Date	March 28, 2008	Previous Calibration	February 20, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:41	End Time (MST)	21:30
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	-1.2	N/A		
388.0	383.7	1.0111	Correlation Coefficient	0.999942
194.6	194.5	1.0006		
97.6	96.2	1.0143	Slope	1.007694
			Intercept	0.443072



Calibration Summary

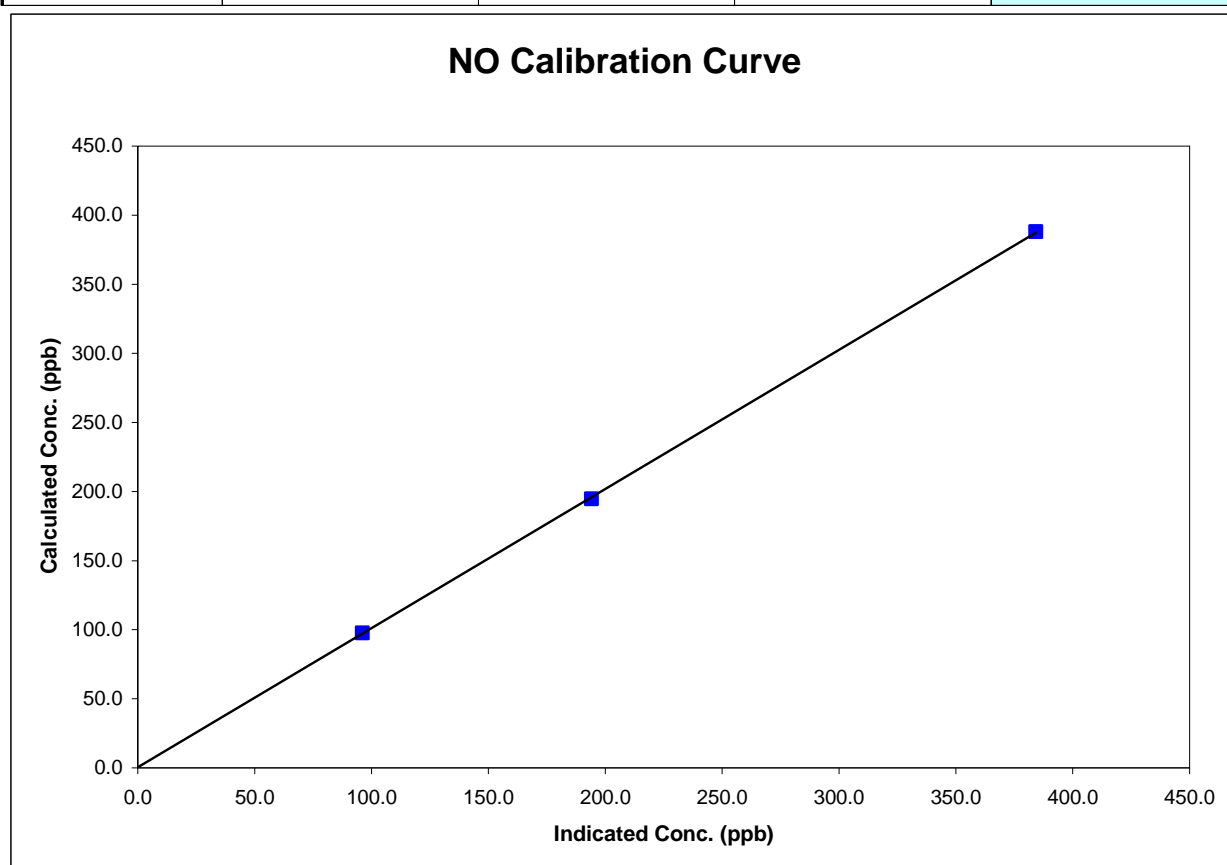
Parameter **NO**Air Monitoring Network **Palliser Airshed**

Station Information

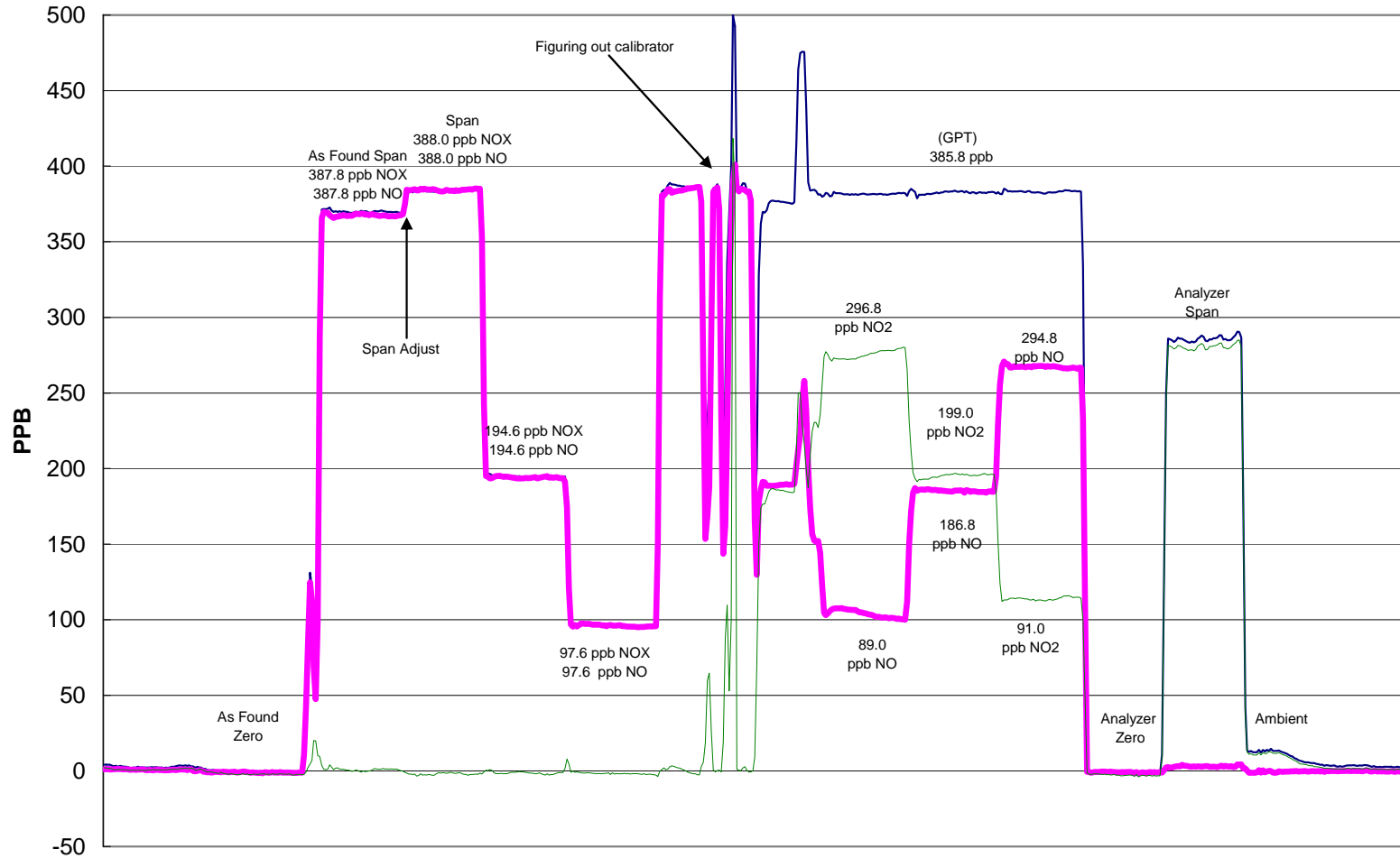
Calibration Date	March 28, 2008	Previous Calibration	February 20, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:41	End Time (MST)	21:30
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.0	N/A		
388.0	384.2	1.0096	Correlation Coefficient	0.999967
194.6	194.2	1.0021		
97.6	96.1	1.0161	Slope	1.006578
			Intercept	0.546559



Crescent Heights NOx Calibration Graph



March 28, 2008

Calibration Report

Parameter **THC**
Air Monitoring Network **Palliser Airshed**



Station Information

Calibration Date	March 31, 2008	Previous Calibration	February 29, 2008
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	7:20	End Time (MST)	9:40
Barometric Pressure	27.6 inches Hg	Station Temperature	20.0 Deg C
Calibrator	API700	Serial Number	
Cal Gas Concentration	708 ppm CH ₄ / 299 ppm C ₃ H 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	1.008656	Calculated slope	0.996226
Calculated intercept	-0.006346	Calculated intercept	-0.129358
Analyzer make	TEI 51C-LT	Analyzer serial #	0407505596

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.74	PSI	5.75	PSI
THC span counts	12558	raw	12558	raw
THC zero counts	1591	raw	1591	raw
V Bias	-327	Volts	-327	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)
5000	0.00	0.00	0.17	N/A
5000	80.00	24.10	24.35	0.9895
5000	40.00	12.14	12.25	0.9913
5000	10.00	3.05	3.19	0.9565
5000	0.00	0.00	0.17	As Found Zero
5000	80.00	24.10	24.35	As Found Span
Average Correction Factor				0.9791

Calculated value of As Found Response: 24.391 ppm Percent Change of As Found: -1.2%

	before calibration		after calibration	
Auto zero	0.00	ppm	0.06	ppm
Auto span	21.07	ppm	19.72	ppm

Notes: No adjustments made...

Calibration Performed By: Lenin Flores

Calibration Summary

Parameter **THC**
 Air Monitoring Network **Palliser Airshed**

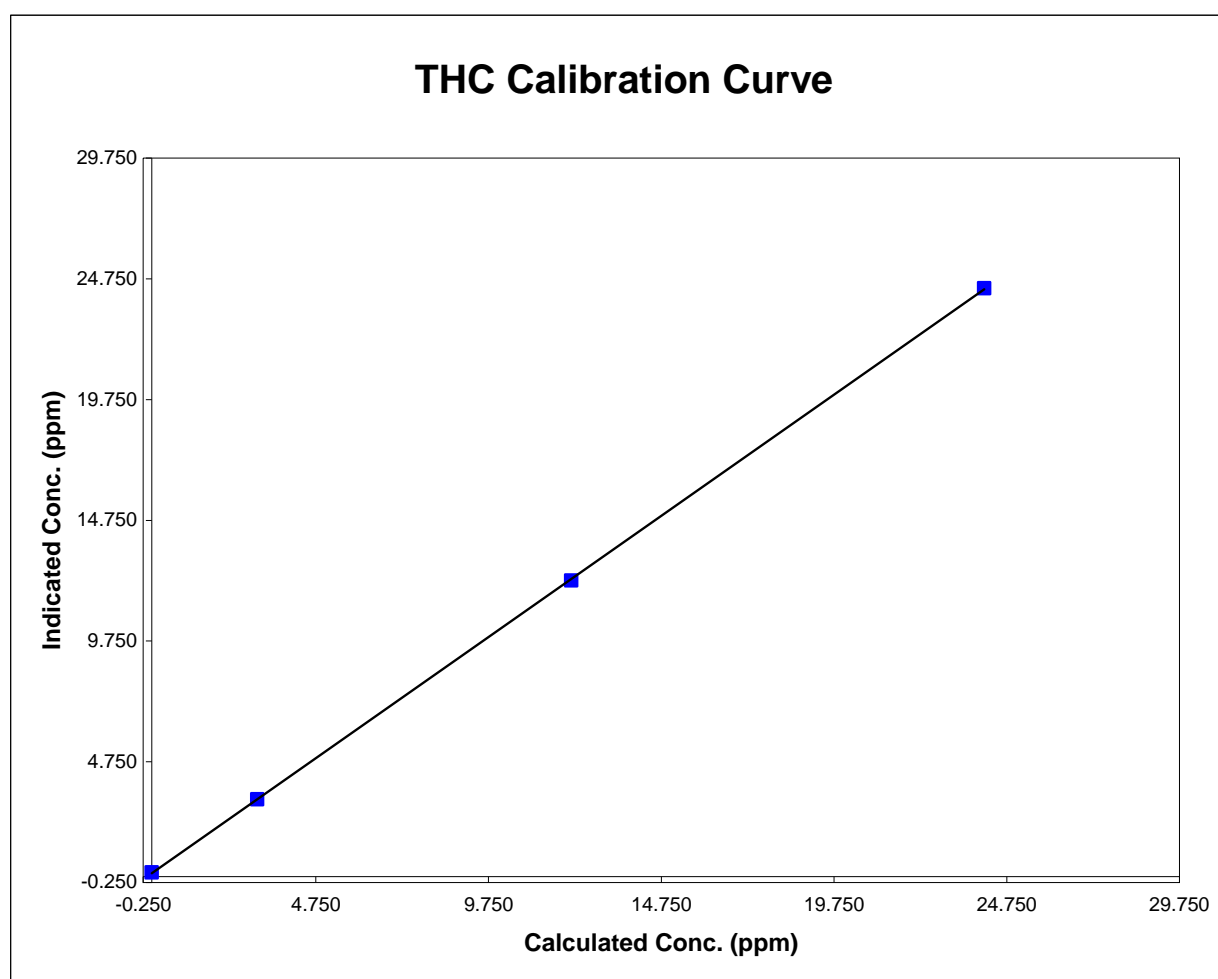


Station Information

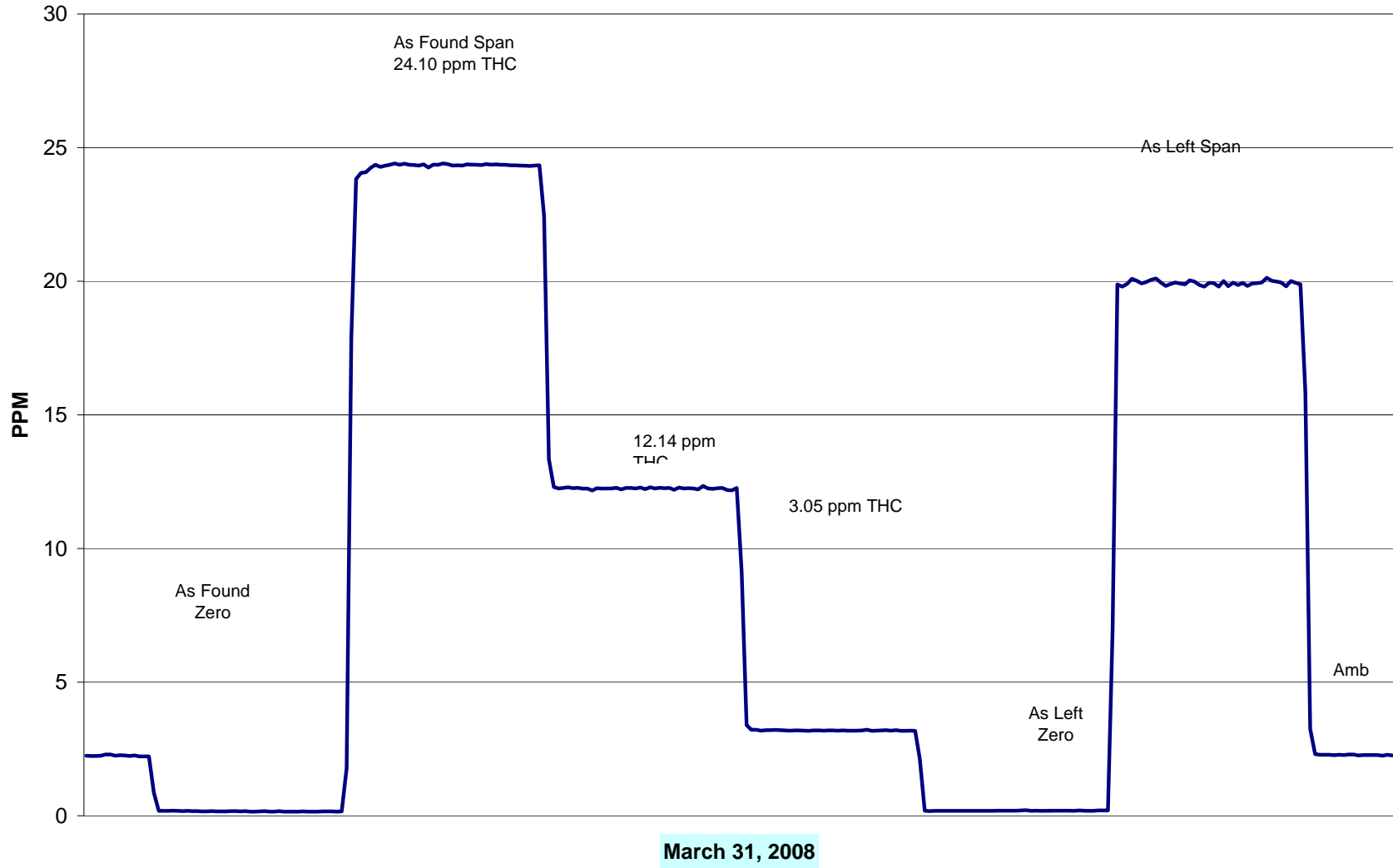
Calibration Date	March 31, 2008	Previous Calibration	February 29, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	7:20	End Time (MST)	9:40
Analyzer make/model	TEI 51C-LT	Analyzer serial #	0407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.167	N/A		
24.098	24.354	0.9895	Correlation Coefficient	0.999979
12.145	12.252	0.9913		
3.054	3.193	0.9565	Slope	0.996226
			Intercept	-0.129358



Crescent Heights THC Calibration



Calibration Report



Parameter CO
 Air Monitoring Network Palliser

Station Information

Calibration Date	March 31, 2008	Previous Calibration	February 21, 2008
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	8:40	End Time (MST)	11:15
Barometric Pressure	27.28 in Hg	Station Temperature	20.0 Deg C
Calibrator	API 700	Serial Number	
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
	<u>Before</u>		<u>After</u>
Calculated slope	0.997044	Calculated slope	1.006691
Calculated intercept	0.090744	Calculated intercept	-0.259028
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	3.56		3.56	
Lamp ratio	1.138325		1.138325	
Lamp intensity	199960	Hz	1999456	Hz
Sample Flow	1.008	LPM	1.008	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)
4000	0.00	0.00	0.27	N/A
4000	50.00	37.01	37.05	0.9989
4000	30.00	22.32	22.38	0.9974
4000	10.00	7.48	7.70	0.9713
4000	0.00	0.00	0.27	0.0000
4000	50.00	37.01	37.05	0.9989
Average Correction Factor				0.9892

Calculated value of As Found Response: 36.766 ppm Percent Change of As Found: 0.7%

	before calibration		after calibration	
Auto zero	-0.11	ppm	0.05	ppm
Auto span	19.35	ppm	19.52	ppm

Notes: No adjustments made...

Calibration Performed By: Lenin Flores

Calibration Summary



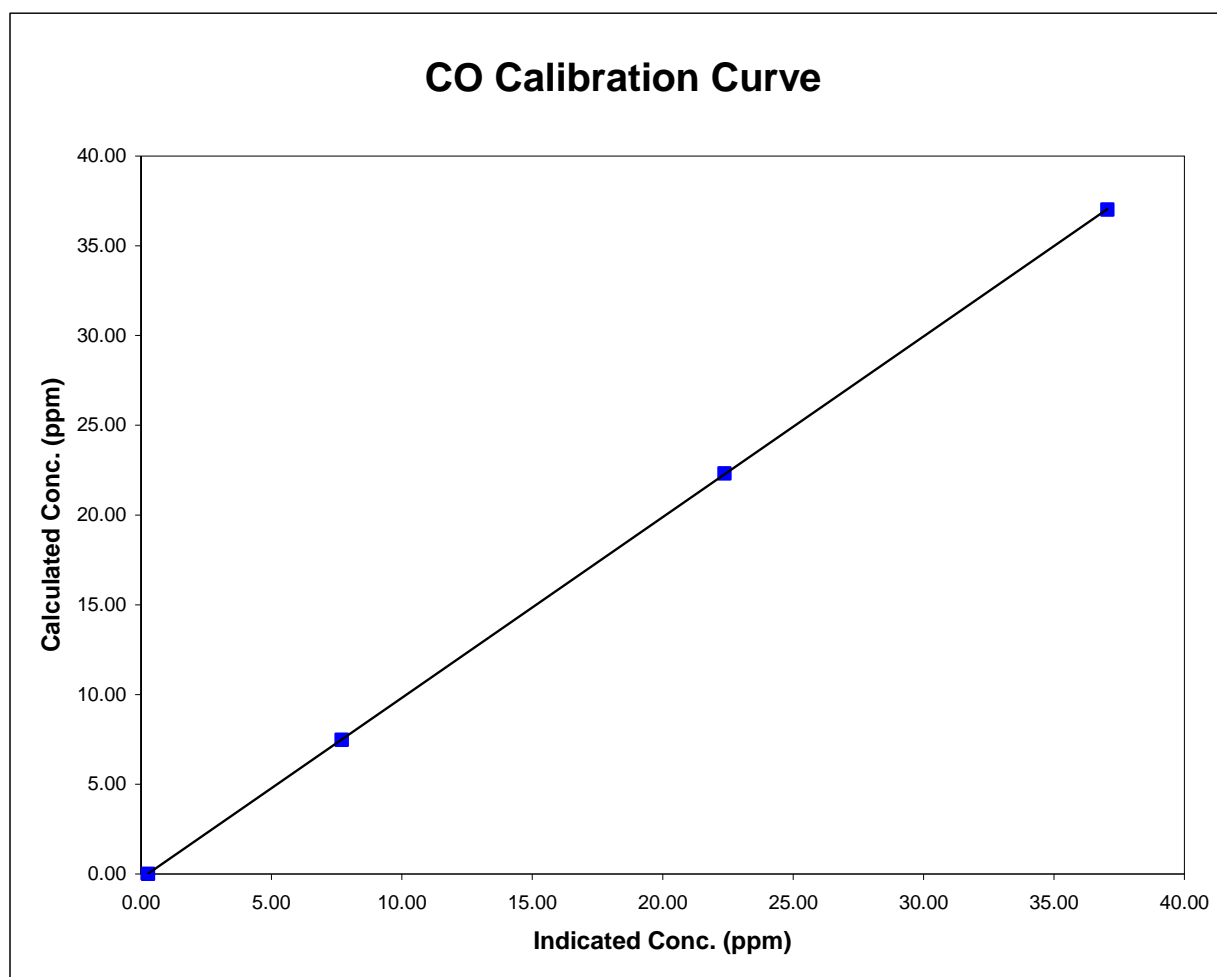
Parameter **CO**
 Air Monitoring Network **Palliser**

Station Information

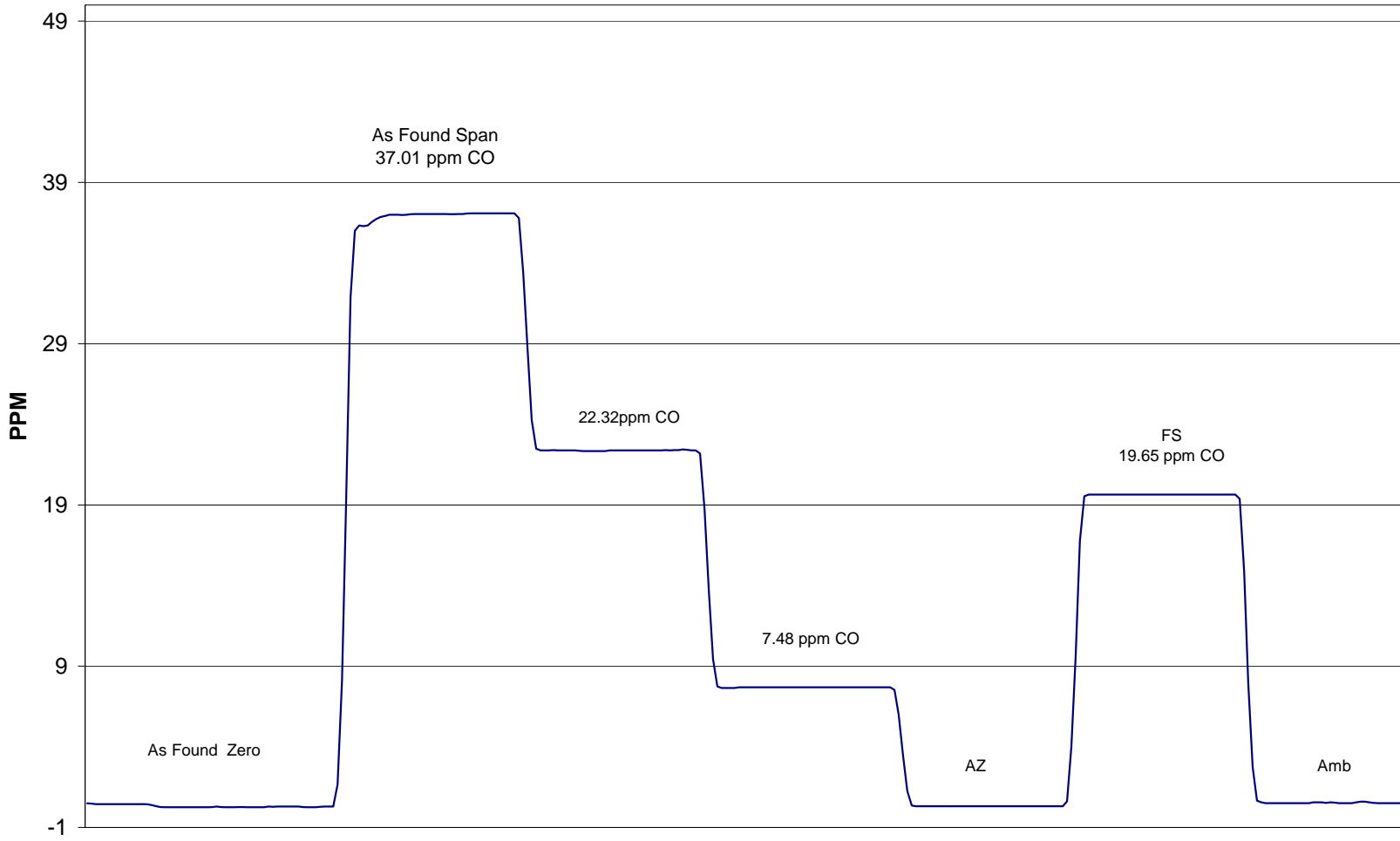
Calibration Date	March 31, 2008	Previous Calibration	February 21, 2008
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:40	End Time (MST)	11:15
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.27	N/A		
37.01	37.05	0.9989	Correlation Coefficient	0.999996
22.32	22.38	0.9974		
7.48	7.70	0.9713	Slope	1.006691
			Intercept	-0.259028



Crescent Heights CO Calibration



March 31, 2008

Calibration Report



Parameter 03
 Air Monitoring Network PAS

Station Information

Calibration Date	March 31, 2008	Previous Calibration	February 21, 2008
Station Number	110	Station Location	Rover - Brooks
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="text"/>
Start Time (MST)	13:00	End Time (MST)	15:20
Barometric Pressure	27.5 inches Hg	Station Temperature	20.0 Deg C
Calibrator	API	Serial Number	
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	0.995967	Calculated slope	0.939395
Calculated intercept	-0.692125	Calculated intercept	-2.596195
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	4328.7	mV	4276.6	mV
Lamp Reference	4329.8	mV	4277.0	mV
Pressure	26.5	inches Hg	26.6	inches Hg
Sample Flow	636	ccm	609	ccm
Sample temp	37.0	Deg C	35.8	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)
4900	0.0	0.0	3.2	N/A
4900	400.0	280.6	301.6	0.9303
4900	300.0	199.2	215.1	0.9261
4900	200.0	117.2	126.6	0.9254
4900	0.0	0.0	3.2	As Found Zero
4900	400.0	280.6	301.6	As Found Span
Average Correction Factor				0.9273

Calculated value of As Found Response: 296.5 ppm Percent Change of As Found: 5.7%

	before calibration		after calibration	
Auto zero	-0.2	ppb	4.0	ppb
Auto span	393.0	ppb	213.4	ppb

Notes: No adjustments were made...

Calibration Performed By: Lenin Flores

Calibration Summary



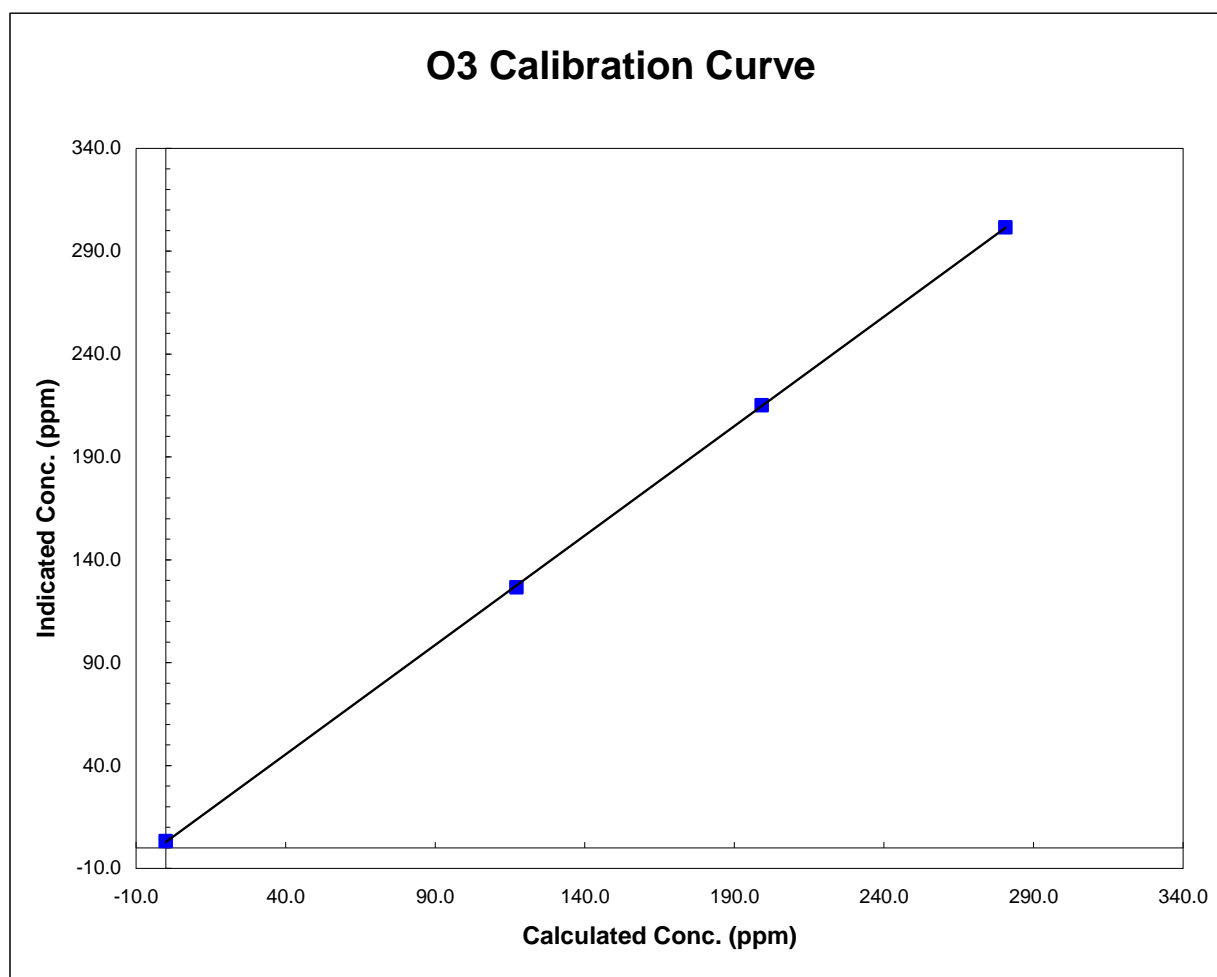
Parameter **O3**
 Air Monitoring Network **PAS**

Station Information

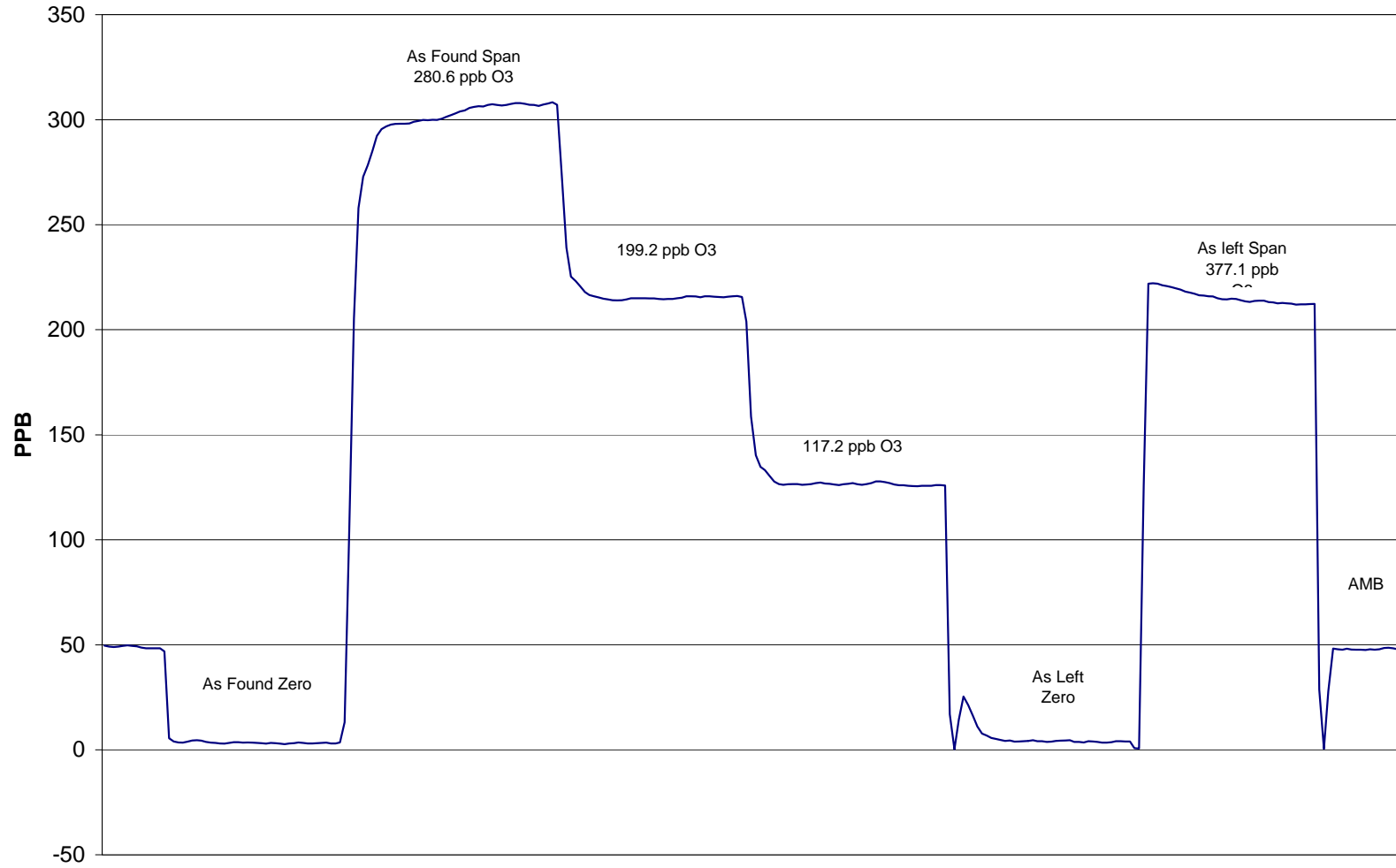
Calibration Date	March 31, 2008	Previous Calibration	February 21, 2008
Station Number	110	Station Location	Rover - Brooks
Start Time (MST)	13:00	End Time (MST)	15:20
Analyzer make/model	API Model 400E	Analyzer serial #	331

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
280.6	301.6	0.9303	Correlation Coefficient	0.999978
199.2	215.1	0.9261		
117.2	126.6	0.9254		
0.0	3.2	N/A		
			Slope	0.939395
			Intercept	-2.596195



Brooks O₃ Calibration



March 31, 2008

Calibration Report



Parameter **SO2**
 Air Monitoring Network **PAS**

Station Information

Calibration Date	March 28, 2007	Previous Calibration	February 21, 2007
Station Number	110	Station Location	Rover - Brooks
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:15	End Time (MST)	13:00
Barometric Pressure	27.80 inches Hg	Station Temperature	22.0 Deg C
Calibrator	API	Serial Number	
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
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.995437	Calculated slope	0.984153
Calculated intercept	2.516079	Calculated intercept	1.717270
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	4.65		4.65	
Analyzer flow	4.75	LPM	4.75	LPM
UV Lamp voltage	859	V	858	V
Vacuum	23.5	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)
5000	0.00	0.0	-0.3	N/A
5000	40.00	399.2	404.7	0.9863
5000	20.00	200.4	200.7	0.9983
5000	10.00	100.4	99.1	1.0130
5000	0.00	0.0	-0.3	As found zero
5000	40.00	399.2	404.7	As found span
Average Correction Factor				0.9992

Calculated value of As Found Response: 405.700 ppm Percent Change of As Found: -1.6%

	before calibration		after calibration	
Auto zero	-7.0	ppm	-1.2	ppm
Auto span	203.9	ppm	194.2	ppm

Notes: No adjustments were made...

Calibration Performed By: Lenin Flores

Calibration Summary



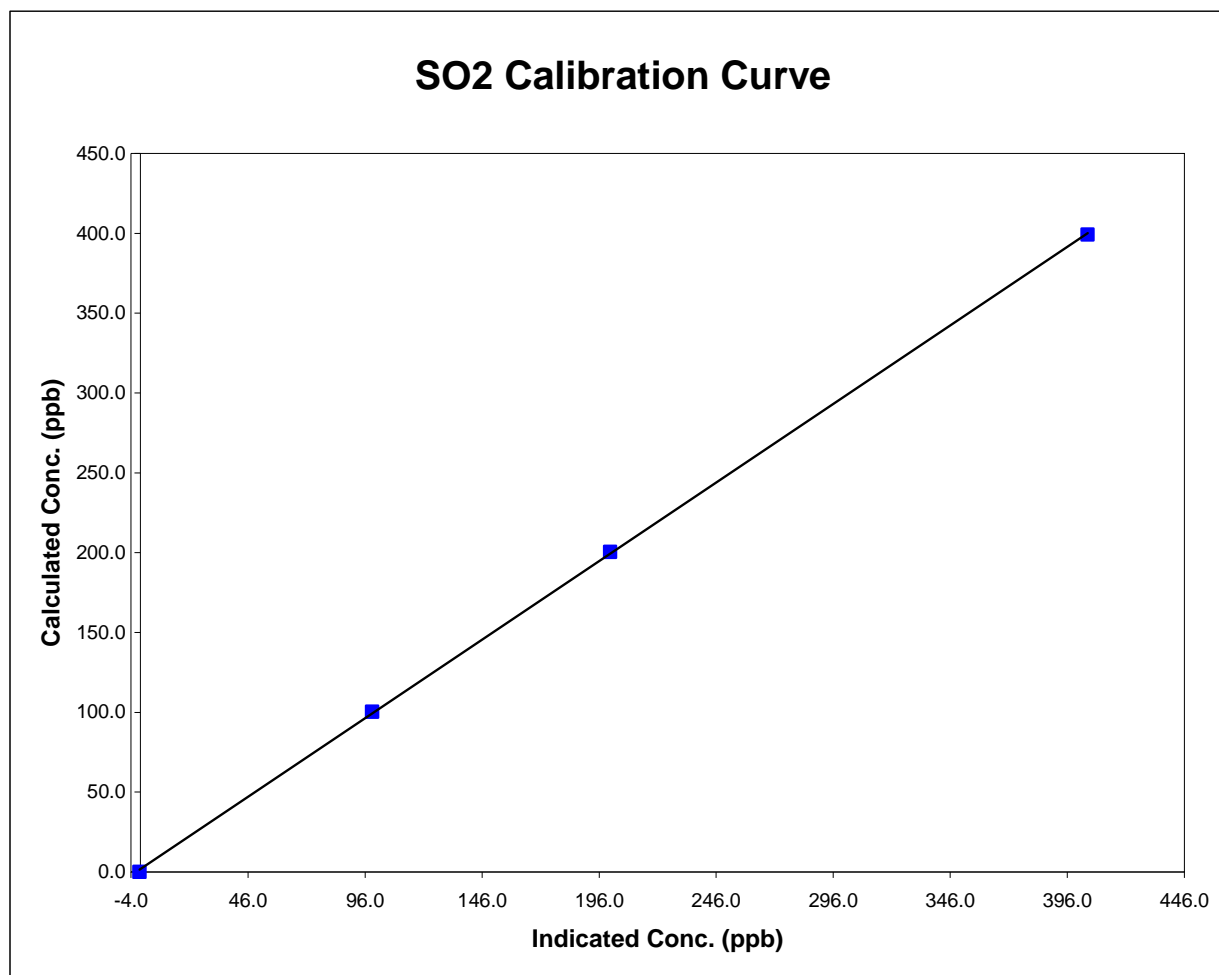
Parameter **SO2**
 Air Monitoring Network **PAS**

Station Information

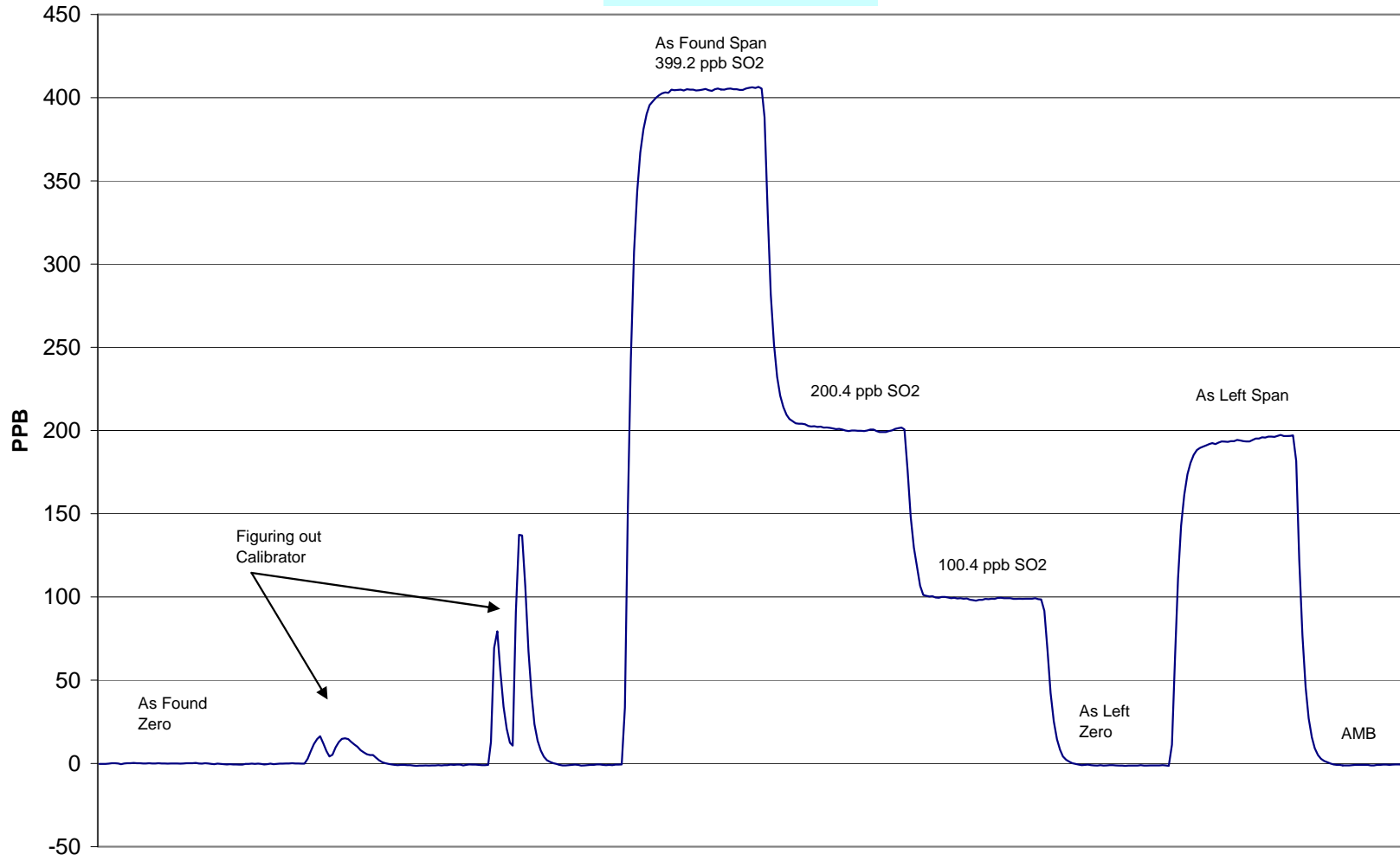
Calibration Date	March 28, 2007	Previous Calibration	February 21, 2007
Station Number	110	Station Location	Rover - Brooks
Start Time (MST)	9:15	End Time (MST)	13:00
Analyzer make/model	TEI Model 43A	Analyzer serial #	NA

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
399.2	404.7	0.9863	Correlation Coefficient	0.999939
200.4	200.7	0.9983		
100.4	99.1	1.0130	Slope	0.984153
			Intercept	1.717270



Brooks SO₂ Calibration



March 28, 2007

Calibration Report



Parameter **H2S**
 Air Monitoring Network **PAS**

Station Information

Calibration Date	March 28, 2008	Previous Calibration	February 21, 2008
Station Number	110	Station Location	Brooks Rover
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	11:30	End Time (MST)	15:00
Barometric Pressure	27.8 inches Hg	Station Temperature	22.0 Deg C
Calibrator	API	Serial Number	
Cal Gas Concentration	5.02 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
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.000160	Calculated slope	0.987857
Calculated intercept	-0.400211	Calculated intercept	-0.125590
Analyzer make	TEI Model 43A	Analyzer serial #	43A-25575-221

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
H2S zero pot	959		9.60	
H2S span pot	555		7.35	
Analyzer flow	0.900	LPM	0.900	LPM
UV Lamp voltage	935	V	933	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)
5000	0.00	0.0	0.7	N/A
5000	80.00	79.1	80.5	0.9820
5000	40.00	39.8	39.8	1.0010
5000	10.00	10.0	10.0	0.9980
5000	0.00	0.0	0.7	As found zero
5000	80.00	79.1	74.3	As found span
Average Correction Factor				0.9937

Calculated value of As Found Response: 73.26 ppm Percent Change of As Found: 7.3%

	before calibration		after calibration	
Auto zero	1.3	ppm	0.4	ppm
Auto span	36.1	ppm	41.2	ppm

Notes: Adjusted Span...

Calibration Performed By: Lenin Flores

Calibration Summary



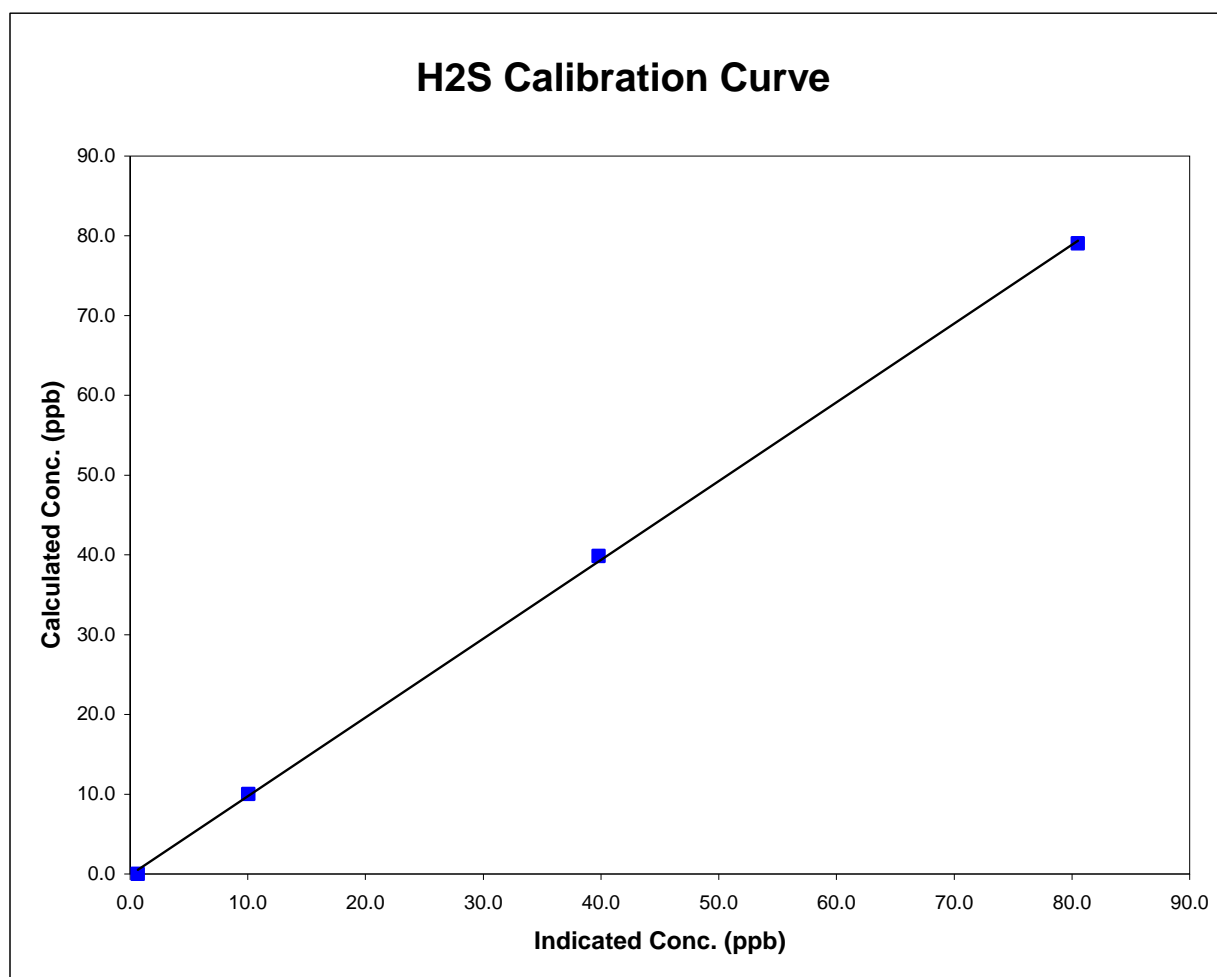
Parameter **H2S**
 Air Monitoring Network **PAS**

Station Information

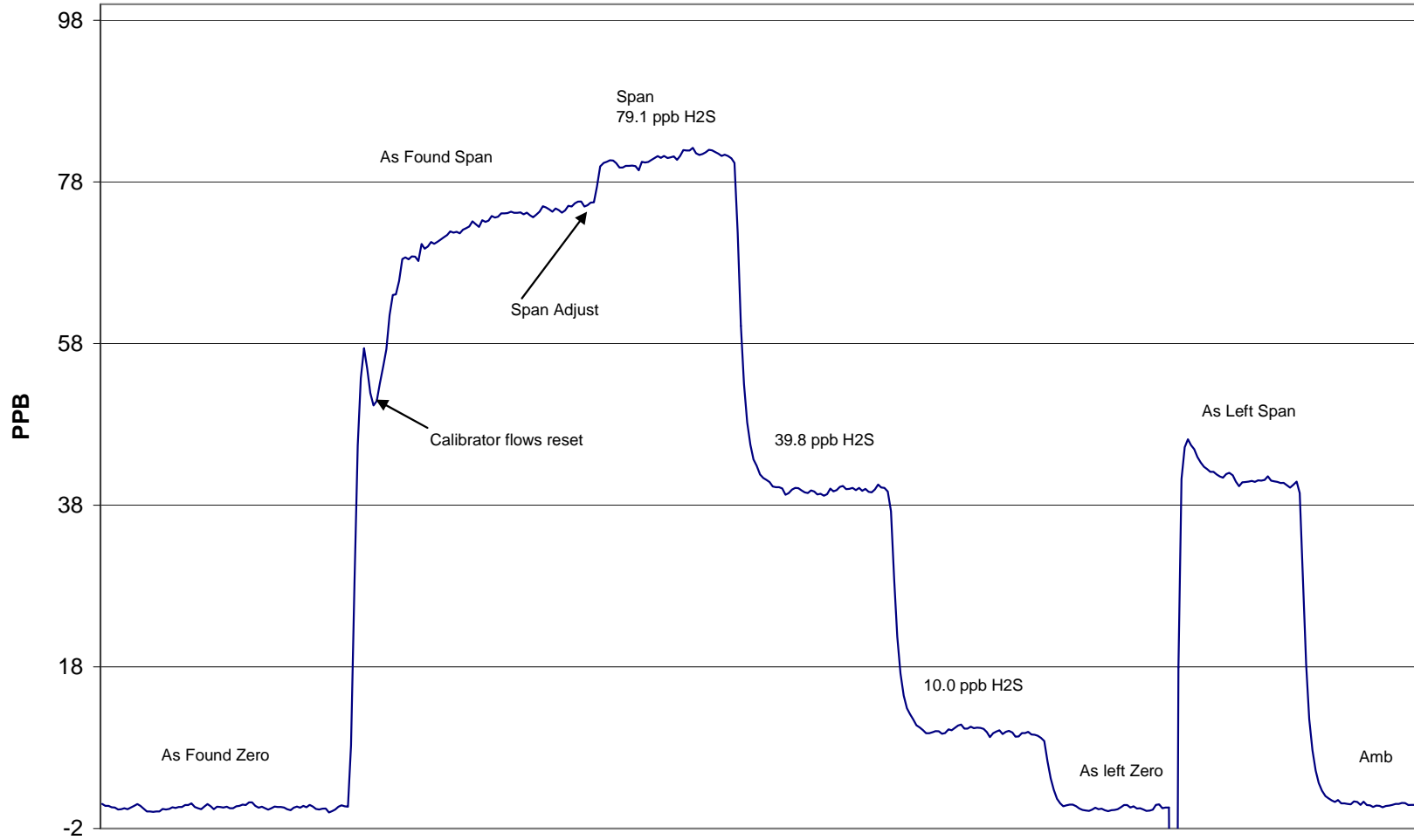
Calibration Date	March 28, 2008	Previous Calibration	February 21, 2008
Station Number	110	Station Location	Brooks Rover
Start Time (MST)	11:30	End Time (MST)	15:00
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-25575-221

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	N/A		
79.1	80.5	0.9820	Correlation Coefficient	0.999770
39.8	39.8	1.0010		
10.0	10.0	0.9980	Slope	0.987857
			Intercept	-0.125590



Brooks H₂S Calibration



March 28, 2008