



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

March 2006

Prepared By:



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April 24, 2006

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

**Attention: Director of Monitoring and Evaluation**

**RE: Palliser Airshed Society (PAS) Ambient Air Monitoring Report – March 2006**

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Enclosed is the PAS Ambient Monitoring Report for the month of **March 2006**.

Please note that this report has been prepared in partial fulfillment of the City of Medicine Hat's air monitoring requirement as well as all members of the Palliser Airshed Society.

**Continuous Monitoring – Crescent Heights**

Included in this report are; monthly sampling table, detailed hourly average reports and multipoint calibration reports of all instruments. The measured ambient air quality was within the Provincial and Federal guidelines with no exceedences recorded. Operational time of all instruments was greater than 99% uptime for the month of March. There were no significant events leading to emergency response for the month of March.

The following is a summary of the monthly averages recorded during sampling:

- Monthly average concentrations of NO<sub>2</sub> was 7.7 ppb
- Monthly average concentrations for O<sub>3</sub> was 29.2 ppb
- Monthly average concentrations for CO was 0.2 ppm
- Monthly average concentrations for THC was 2.1 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 3.2 µg/m<sup>3</sup>

**Passive Monitoring – Six Sites throughout the PAS zone:**

The following are the ranges for March 2006 recorded by the six passive stations located throughout the PAS zone.

- Monthly average concentrations for SO<sub>2</sub> passives were all <0.5 ppb
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 3.4 ppb to 6.1 ppb
- Monthly average concentrations for O<sub>3</sub> passives ranged from 21.4 ppb to 29.5 ppb

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

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AQM Technical Supervisor

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AQM Environmental Specialist



# Continuous Monitoring

## Ambient Air Monitoring Network

### Crescent Heights Station

#### General Station Issues

There were no general station issues observed for the month of March.

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational issues observed.
Nitrogen Dioxide	Teledyne - API	200E	ppb	No operational issues observed. Four (4) hours of maintenance was performed on the NO <sub>x</sub> analyzer on March 28 <sup>th</sup> .
Total Hydrocarbons	Bendix	400A	ppm	No operational issues observed.
Carbon Monoxide	TEI	49C	ppm	No operational issues observed. One (1) hour of maintenance was performed on the CO analyzer on March 29 <sup>th</sup> .
PM 2.5	R&P TEOM	1400ab	µg/m <sup>3</sup>	There was 1 hour of data removed due to excessive instrument drift.
Wind Speed	Met One	010C	kph	No operational issues observed.
Wind Direction	Met One	020C	Deg	No operational issues observed.
Ambient Temperature	Met One	083D	DegC	No operational issues observed.
Relative Humidity	Met One	083D	%	No operational issues observed.
Solar Radiation	Met One	096-1	W/m <sup>2</sup>	No operational issues observed.
Data Acquisition System	Titan Logix	AP1000		No operational issues observed.



## March 2006 Monthly Overall Summary Report Ambient Air Quality Data

Mar-2006 Palliser Airshed Society							Maximum Recorded Values						Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr			24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	
NO (ppb)			Crescent Heights	3.1	-	-	81.4	Mar-28 07:00	3.8	SW	15.0	Mar-28	99.5%
NO <sub>2</sub> (ppb)	212	106	Crescent Heights	7.7	0	0	40.0	Mar-14 02:00	calm	SSW	15.7	Mar-06	99.5%
NO <sub>x</sub> (ppb)			Crescent Heights	10.6	-	-	104.0	Mar-28 07:00	3.8	SW	27.4	Mar-28	99.5%
O <sub>3</sub> (ppb)	82		Crescent Heights	29.2	0	-	47.4	Mar-17 13:00	14.6	SSW	38.2	Mar-20	100.0%
O <sub>3</sub> (ppb) - 8-hr	65		Crescent Heights		0						44.4	Mar-31	
CO (ppm)	13		Crescent Heights	0.22	0	-	1.0	Mar-23 07:00	calm	NW	0.3	Mar-28	99.9%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.5	Mar-23	
THC (ppm)			Crescent Heights	2.13	-	-	3.4	Mar-29 13:00	11.8	E	2.5	Mar-29	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Crescent Heights	3.2		0	34.4	Mar-05 06:00	2.2	WSW	7.5	Mar-01	99.9%
RH (%)			Crescent Heights	68.2	-	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )			Crescent Heights	142.8	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	0.0	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	1.3	-	-	33.9	Mar-09 10:00	33.9	SW	20.6	9-Mar	100.0%
WSPD s (km/hr)			Crescent Heights	9.0	-	-	34.1	Mar-09 10:00	34.1	SW	24.5	9-Mar	100.0%
WDIR (Deg)			Crescent Heights	SW	-	-	-	-	-	-	-	-	100.0%

Note: <sup>a</sup> the draft 24-hr Alberta Ambient Air Quality Objectives  
\* Wind Direction is the predominate direction for the Month



# **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, 2006 to April 1, 2006

### Alberta's Air Quality Index

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

### Summary

Number of 1-hr Good Readings:	705
Number of 1-hr Fair Readings:	1
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

### Status Flag Characters

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

Day	Mountain Standard Time																							
Hour Start	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-06	13	N	13	11	10	9	9	8	10	12	14	15	17	17	17	17	17	16	15	14	13	11	12	15
2-Mar-06	N	13	12	11	6	7	8	6	9	13	13	15	15	16	15	17	17	16	15	15	15	13	13	N
3-Mar-06	12	11	10	12	10	10	10	10	12	15	15	15	16	17	17	18	17	17	15	13	13	11	N	13
4-Mar-06	13	13	15	16	16	15	11	9	11	11	13	13	15	16	17	16	17	17	19	20	N	20	20	
5-Mar-06	20	20	18	17	13	10	27	7	10	11	14	18	19	18	18	18	18	18	18	N	11	7	8	
6-Mar-06	7	9	11	16	18	17	14	14	15	17	18	19	19	18	16	15	13	7	8	N	9	8	8	7
7-Mar-06	16	15	15	15	16	18	17	17	16	18	18	19	21	21	21	20	19	17	N	12	14	12	12	13
8-Mar-06	10	11	12	9	9	10	11	9	14	16	19	19	21	22	22	21	20	N	18	18	17	17	18	18
9-Mar-06	18	18	18	17	16	15	14	14	19	21	21	21	20	19	21	19	N	19	21	21	22	22	22	21
10-Mar-06	21	21	22	20	18	18	15	14	15	17	17	19	21	21	21	N	22	21	20	16	17	15	15	15
11-Mar-06	15	14	13	12	9	9	10	13	17	17	18	18	19	19	N	19	20	19	18	18	17	17	16	16
12-Mar-06	14	15	15	15	13	13	12	9	11	13	14	15	16	N	17	18	17	16	15	13	10	8	6	6
13-Mar-06	7	8	7	5	6	6	6	6	13	17	19	20	N	19	19	19	20	18	16	12	11	7	6	6
14-Mar-06	9	9	10	9	9	7	7	6	8	14	16	N	21	23	21	19	18	19	17	16	13	10	15	16
15-Mar-06	16	15	15	14	14	13	8	5	9	11	N	13	14	15	15	15	16	16	14	13	11	7	8	5
16-Mar-06	6	4	4	5	5	6	6	7	9	N	11	11	13	20	21	22	20	17	17	16	16	15	14	15
17-Mar-06	13	12	13	13	11	9	5	5	N	10	16	19	20	24	22	21	18	18	17	16	18	18	18	17
18-Mar-06	13	14	14	14	9	5	6	N	10	11	12	14	17	15	16	16	17	17	17	16	16	16	16	16
19-Mar-06	15	14	14	14	15	16	N	16	16	17	17	18	19	19	20	20	20	20	22	21	18	20	20	21
20-Mar-06	21	20	20	20	20	N	19	17	17	18	20	20	20	21	21	20	19	18	18	18	20	17	18	19
21-Mar-06	20	20	19	19	N	18	16	15	18	20	20	20	19	19	21	22	22	18	17	16	19	15	15	13
22-Mar-06	17	16	14	N	13	13	8	8	12	13	16	20	21	23	22	22	21	19	17	14	15	13	16	17
23-Mar-06	17	16	N	6	5	6	5	6	8	9	14	18	21	22	22	22	21	20	16	13	13	13	9	11
24-Mar-06	11	N	9	5	7	5	4	5	6	9	15	19	20	20	21	21	18	19	17	16	14	18	16	13
25-Mar-06	N	12	11	11	7	6	7	6	9	10	12	15	17	16	19	20	20	18	16	14	16	12	9	N
26-Mar-06	9	10	10	7	7	8	8	8	13	15	13	14	16	17	18	19	21	22	20	11	13	16	N	12
27-Mar-06	15	12	11	13	14	11	10	10	13	15	18	19	21	22	22	22	22	21	16	9	9	N	8	8
28-Mar-06	7	7	7	6	6	6	5	7	6	10	15	16	17	19	20	20	20	20	15	13	11	10	9	10
29-Mar-06	10	9	N	8	7	7	6	7	7	N	N	N	N	N	1	N	20	20	22	22	21	21	21	20
30-Mar-06	19	18	N	16	16	16	17	17	17	16	17	20	23	22	23	22	23	23	19	10	18	18	19	18
31-Mar-06	18	N	16	15	16	14	12	14	17	21	23	22	21	23	22	22	22	21	19	13	7	11	10	11



# PAS - Crescent Heights - Nitrogen Dioxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

## HOURLY AVERAGE TABLE

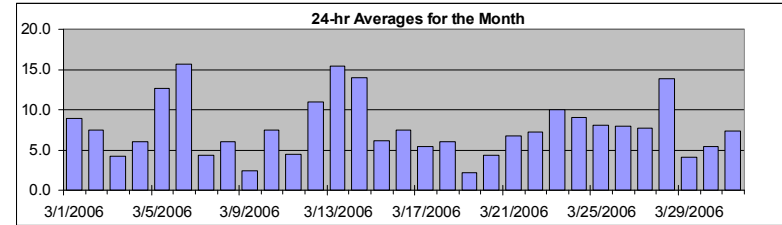
## Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: March 1, 2006 to April 1, 2006

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

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	40.0 ppb 14-Mar 2:00 3:00
Maximum 24-hr Average:	15.7 ppb 6-Mar

AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	33.0	24.4	10.1	5.3	2.7	1.0	0.3	7.7 ppb	5.3 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																							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-06	5	A	9	10	10	14	13	15	12	8	5	5	4	4	5	5	6	9	11	12	10	15	13	7		8.9	15.0
2-Mar-06	A	9	8	11	21	19	32	18	14	5	5	2	2	1	1	1	1	3	3	3	1	3	2	A		7.5	31.9
3-Mar-06	6	4	7	4	7	6	6	8	3	0	0	1	0	0	1	1	1	3	4	7	7	11	A	7		4.2	11.1
4-Mar-06	5	4	2	2	2	3	10	15	12	14	10	10	7	6	4	6	4	5	7	3	3	A	5	3		6.0	14.7
5-Mar-06	2	3	6	7	13	19	27	28	27	17	14	7	6	9	8	6	5	4	2	2	A	14	31	35		12.7	34.7
6-Mar-06	22	18	17	11	4	7	13	11	9	6	3	3	4	5	13	14	13	29	36	A	39	24	32	28		15.7	39.0
7-Mar-06	4	4	2	5	3	1	4	3	4	1	4	5	1	0	1	2	2	5	A	15	8	11	8	6		4.3	15.1
8-Mar-06	13	10	8	15	14	12	10	17	8	3	2	1	1	1	1	2	2	A	8	4	3	2	1	1		6.0	16.7
9-Mar-06	1	0	0	0	1	2	3	6	3	1	1	1	2	4	2	5	A	5	3	4	2	2	2	4		2.4	5.9
10-Mar-06	5	4	2	6	9	8	15	16	13	7	8	7	3	3	3	A	6	5	7	12	9	13	8	6		7.5	15.8
11-Mar-06	5	6	7	8	11	11	9	6	4	2	1	1	1	2	A	3	3	3	3	3	4	4	4	3		4.5	11.2
12-Mar-06	8	5	5	6	6	6	9	17	12	8	7	5	4	A	6	5	9	12	11	14	20	32	24	22		11.0	32.1
13-Mar-06	28	32	27	22	20	25	25	25	11	2	2	2	A	4	5	3	3	7	9	16	14	23	24	25		15.4	31.5
14-Mar-06	14	14	40	36	36	30	29	23	16	5	6	A	6	3	5	6	6	4	4	6	11	14	6	1		14.0	40.0
15-Mar-06	0	1	1	1	1	1	10	21	9	3	A	6	4	6	7	6	3	4	6	6	6	15	10	14		6.1	20.6
16-Mar-06	11	17	15	12	12	10	11	10	8	A	8	8	9	3	2	2	4	9	5	3	2	2	4	3		7.4	17.2
17-Mar-06	4	6	4	3	5	7	17	20	A	11	2	2	2	2	2	5	9	7	4	2	2	1	3	4		5.4	20.2
18-Mar-06	10	4	3	4	12	22	25	A	9	8	7	6	3	5	4	3	2	2	2	2	2	2	1	1		6.0	25.0
19-Mar-06	2	2	2	2	2	2	A	4	3	3	2	2	2	2	1	1	1	1	1	3	6	2	1	1		2.2	5.6
20-Mar-06	1	2	1	1	1	A	4	8	7	6	4	4	3	3	2	2	6	8	9	7	2	8	6	6		4.4	8.6
21-Mar-06	2	2	1	1	A	2	6	14	7	5	4	4	7	8	5	5	5	12	14	15	3	10	14	11		6.8	15.2
22-Mar-06	6	5	4	A	7	6	14	15	11	13	10	4	4	1	3	2	3	5	7	11	10	14	10	3		7.2	14.5
23-Mar-06	3	2	A	16	19	25	23	23	20	13	9	7	3	3	3	2	3	3	7	12	10	5	11	7		10.0	24.8
24-Mar-06	4	A	10	15	9	12	17	19	19	7	2	2	4	3	5	4	12	7	9	9	13	6	7	12		9.0	19.4
25-Mar-06	A	13	10	7	17	18	27	24	5	3	3	2	5	7	5	3	2	2	4	7	1	7	6	A		8.0	27.4
26-Mar-06	11	6	4	7	9	9	11	11	6	3	6	7	5	4	5	5	3	4	6	22	16	9	A	15		8.0	21.8
27-Mar-06	4	4	9	5	3	6	9	10	3	2	1	1	0	2	1	0	1	2	9	22	16	A	33	33		7.7	33.3
28-Mar-06	31	28	30	25	26	24	19	23	16	5	4	3	3	5	4	4	5	5	M	M	M	M	9	7		13.8	31.0
29-Mar-06	6	6	A	8	7	7	7	6	C	C	C	C	A	3	4	2	3	3	3	2	2	2	1	1		4.0	7.5
30-Mar-06	3	3	A	5	4	4	3	2	2	4	5	2	2	4	4	6	5	4	12	29	6	5	2	4		5.4	28.8
31-Mar-06	3	A	6	6	4	7	10	10	8	3	2	2	3	3	2	2	3	4	8	18	24	14	15	13		7.4	24.5
Hourly Avg	7.6	7.6	8.6	8.6	9.8	10.8	13.9	14.3	9.7	5.8	4.8	3.8	3.5	3.6	3.7	3.8	4.4	5.8	7.4	9.3	8.7	9.5	10.2	9.7			
Hourly Max	31.0	31.5	40.0	36.2	36.0	30.4	31.9	28.5	27.2	16.9	13.8	9.5	9.3	9.4	13.0	13.8	13.3	29.3	35.6	28.8	39.0	32.1	33.1	34.7			

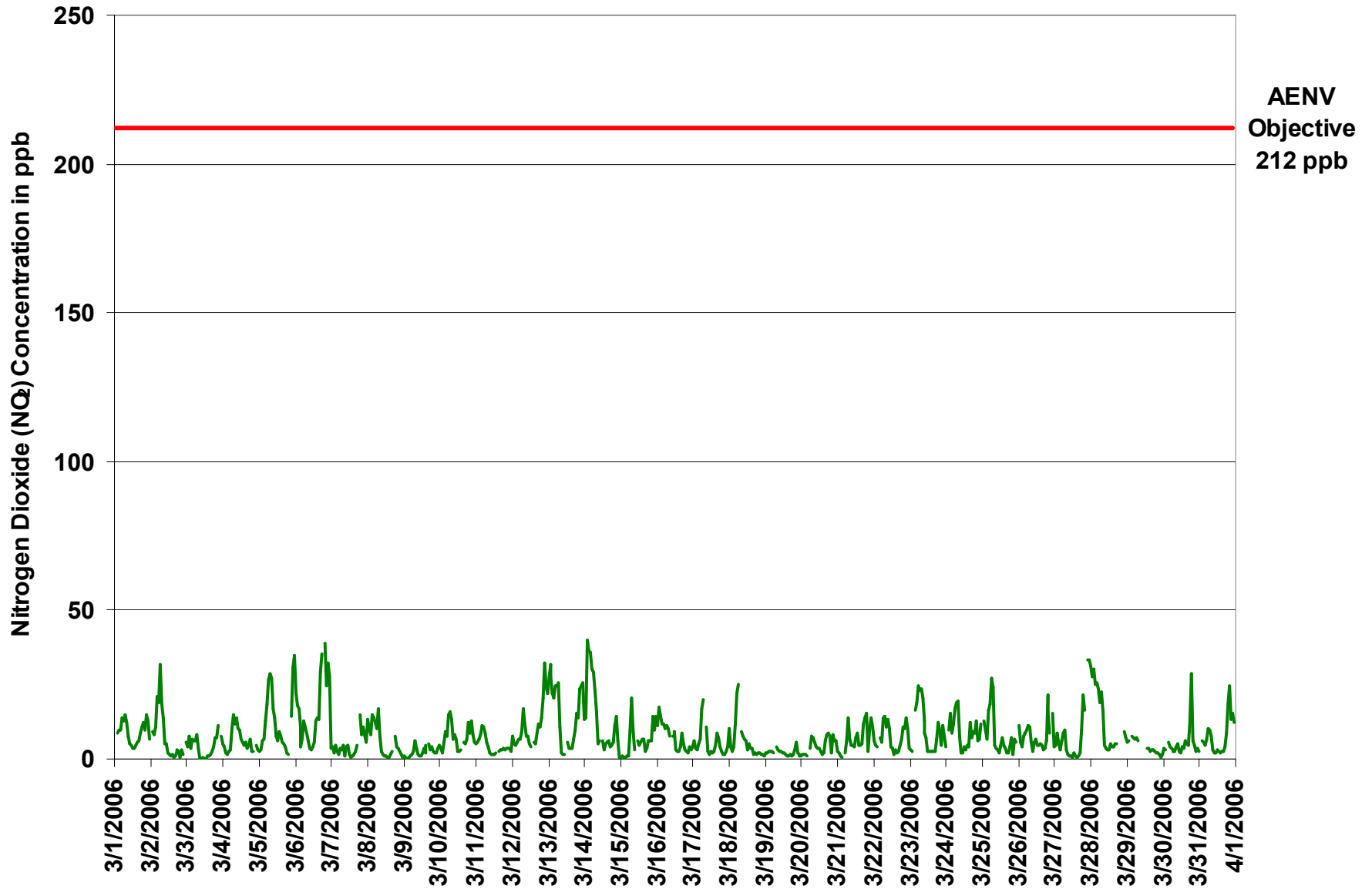


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend





Station: Cresent Heights  
 Station Owner: PAS

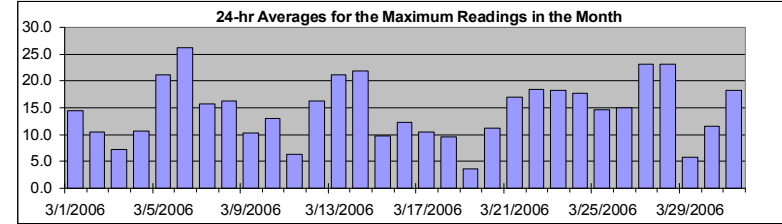
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitrogen Dioxide (NO<sub>2</sub>)**

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Value:	69.9	ppb	22-Mar	11:00 12:00
Maximum 24-hr Value:	26.3	ppb	6-Mar	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	48.3	39.4	21.7	10.6	5.1	2.2	1.3	14.6 ppb	10.6 ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Mar-06	9	A	15	15	16	18	22	20	16	9	7	9	23	6	9	11	10	12	15	16	19	26	17	13	14.4	25.8	
2-Mar-06	A	13	10	17	27	25	40	21	23	7	7	4	3	3	3	2	3	4	4	6	2	4	3	A	10.5	39.8	
3-Mar-06	8	6	10	9	10	9	14	12	8	1	1	2	1	1	7	2	2	4	6	15	10	18	A	13	7.2	18.0	
4-Mar-06	6	5	3	3	4	5	16	21	14	40	14	11	13	11	7	8	6	7	32	4	4	A	7	5	10.7	39.9	
5-Mar-06	4	5	15	10	24	28	63	52	35	23	17	10	8	24	9	8	6	6	3	3	A	29	66	39	21.2	65.8	
6-Mar-06	32	24	37	18	10	15	22	19	17	23	5	4	29	9	27	21	29	52	42	A	46	37	41	45	26.3	51.6	
7-Mar-06	9	19	4	38	23	3	16	5	21	4	33	10	7	1	3	6	6	9	A	36	31	46	23	10	15.8	46.0	
8-Mar-06	33	43	18	20	26	42	31	41	22	4	4	2	2	2	2	3	5	A	19	27	12	4	11	2	16.3	43.4	
9-Mar-06	12	1	1	1	25	16	22	29	22	2	2	2	27	17	4	14	A	12	5	5	4	3	4	5	10.3	29.0	
10-Mar-06	6	5	4	16	26	19	26	28	24	10	12	9	4	3	5	A	9	7	13	21	16	15	7	13.1	27.5		
11-Mar-06	6	7	8	12	14	14	11	9	6	4	2	2	2	2	4	A	5	4	4	6	4	5	6	5	4	6.3	14.4
12-Mar-06	11	9	8	8	11	8	11	21	19	14	10	8	6	A	8	9	33	18	14	18	35	40	28	27	16.2	39.5	
13-Mar-06	33	34	34	27	23	27	32	33	19	3	3	4	A	10	4	8	4	29	15	25	23	32	33	31	21.1	34.5	
14-Mar-06	15	21	46	41	46	37	48	29	33	7	8	A	11	5	27	10	13	11	7	15	26	22	22	3	21.8	48.3	
15-Mar-06	1	2	2	1	2	2	22	24	23	5	A	10	6	7	12	10	3	6	8	9	15	22	15	18	9.7	23.6	
16-Mar-06	14	20	17	14	13	14	14	14	15	A	11	9	18	9	17	4	20	13	16	5	4	3	14	4	12.2	19.8	
17-Mar-06	7	8	5	4	8	11	24	27	A	29	4	3	7	4	9	9	15	25	8	3	4	3	7	18	10.5	28.8	
18-Mar-06	16	8	7	6	28	26	31	A	16	11	11	9	5	11	6	7	3	3	3	3	3	3	3	2	9.5	30.8	
19-Mar-06	3	3	4	3	3	3	A	6	4	4	3	3	3	3	2	2	2	2	5	9	7	3	2	3.6	9.4		
20-Mar-06	2	3	2	3	2	A	7	15	13	7	27	19	32	4	12	7	10	15	11	10	4	17	12	23	11.1	32.0	
21-Mar-06	5	3	2	2	A	5	35	25	10	11	9	8	32	39	8	8	20	30	18	25	5	26	36	30	17.0	39.3	
22-Mar-06	24	10	8	A	11	12	26	26	15	18	17	70	28	3	44	4	10	6	10	19	14	20	23	7	18.4	69.9	
23-Mar-06	7	7	A	22	22	30	28	27	24	15	11	12	8	24	13	27	37	5	10	29	18	14	16	12	18.2	37.1	
24-Mar-06	8	A	16	19	12	14	20	23	27	16	16	5	17	5	8	28	55	17	13	15	26	11	10	26	17.7	54.6	
25-Mar-06	A	23	23	12	22	39	41	30	7	5	5	3	13	12	10	16	5	6	11	21	5	9	8	A	14.7	40.8	
26-Mar-06	18	9	7	13	12	19	19	18	15	4	8	8	6	6	6	7	4	5	19	47	47	21	A	24	14.9	46.9	
27-Mar-06	10	27	45	28	7	11	23	25	16	40	22	30	6	36	14	2	20	4	26	32	28	A	40	39	23.1	45.0	
28-Mar-06	33	35	47	28	40	40	34	44	54	6	8	5	5	18	11	8	8	16	M	M	M	M	13	9	23.2	54.2	
29-Mar-06	8	10	A	10	9	9	9	8	C	C	C	C	A	5	6	4	4	5	4	3	3	2	2	3	5.8	10.0	
30-Mar-06	5	5	A	9	6	4	4	3	3	9	9	4	3	7	6	13	8	9	30	39	23	19	5	39	11.5	39.5	
31-Mar-06	4	A	25	31	8	11	27	27	17	29	3	4	31	4	9	22	5	6	11	44	34	19	32	17	18.3	43.6	
Hourly Avg	12.1	13.0	15.1	14.6	16.3	17.2	24.6	22.7	18.6	12.4	10.0	9.6	12.3	9.8	10.2	9.5	12.0	11.6	13.1	17.3	16.4	17.1	17.6	16.6			
Hourly Max	33.4	43.4	46.9	40.6	45.7	42.0	62.7	52.2	54.2	40.1	32.6	69.9	32.0	39.3	44.5	27.9	54.6	51.6	42.2	46.9	46.8	46.0	65.8	45.3			

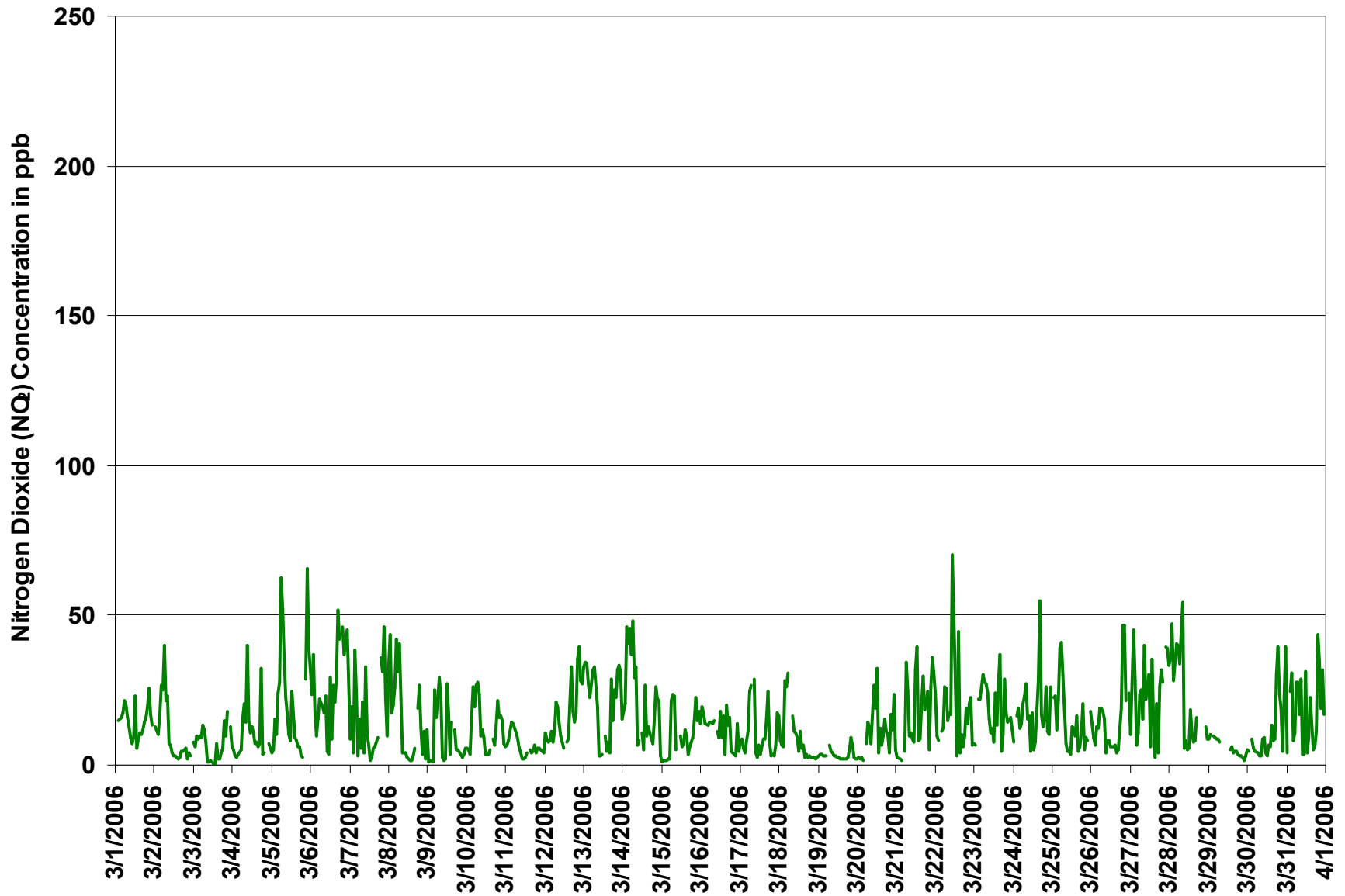
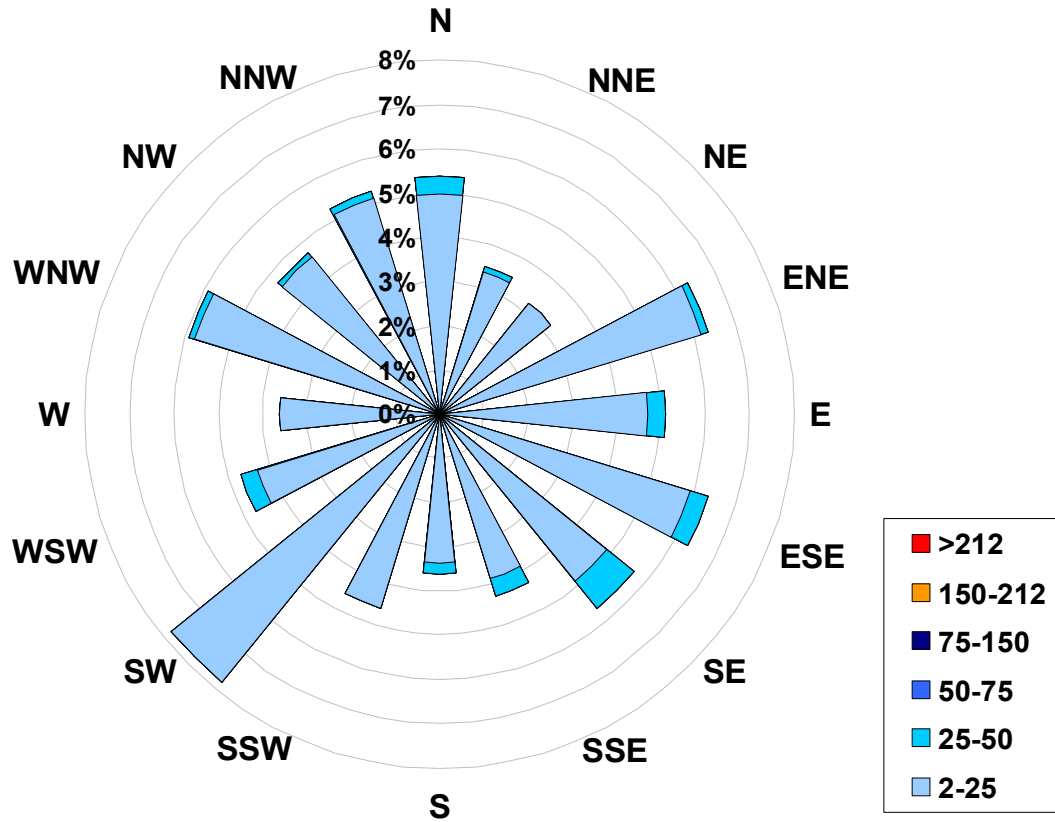


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb)  
Located at the Crescent Heights Site for March 2006**



<b>Calms:</b>	<b>1%</b>
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Frequency Distribution of NO <sub>2</sub> in ppb		
Range	Frequency (hrs)	
2.0 < 25	688	
25 to 50	13	
50 to 75	1	
75 to 150	1	
150 to 212	0	
> 212	0	
<b>Total Non-Zero Values</b>	<b>703</b>	



## PAS - Crescent Heights - Nitric Oxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

### Nitric Oxide (NO)

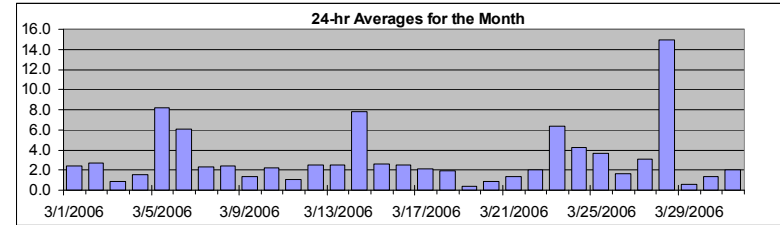
Monitoring Dates: March 1, 2006 to April 1, 2006

Guideline Limit: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	81.4	ppb	28-Mar	7:00 8:00	
Maximum 24-hr Average:	15.0	ppb	28-Mar		



AIC Time:	33 hrs	Operational Time:	703 hrs									
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%									
Percentile	99	95	75	50	25	5	1	Average	3.1	Median	1.2	ppb
	32.5	12.5	2.5	1.2	0.5	0.1	0.0					

#### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00			22:00 23:00	23:00 0:00
1-Mar-06	0	A	1	2	2	2	2	4	5	5	4	4	2	2	3	3	2	2	1	2	1	5	1	0	2.4	5.0	
2-Mar-06	A	1	1	1	2	2	12	6	10	5	6	3	2	2	2	1	1	1	1	1	0	1	1	A	2.7	11.8	
3-Mar-06	1	1	1	1	1	1	1	2	2	1	1	2	1	1	2	1	1	0	0	1	0	A	A	1	0.9	1.7	
4-Mar-06	0	0	0	0	0	0	1	2	2	6	5	4	3	2	2	2	1	1	2	1	1	A	A	1	1.5	5.9	
5-Mar-06	0	0	0	0	1	1	43	28	30	18	15	6	5	9	5	3	1	1	0	0	A	1	5	15	8.2	43.1	
6-Mar-06	2	2	3	1	1	1	1	2	4	5	3	2	3	4	6	5	4	13	16	A	30	4	7	22	6.1	30.2	
7-Mar-06	0	1	0	3	2	1	3	1	4	2	5	4	2	1	1	2	1	1	A	7	4	6	2	1	2.3	6.9	
8-Mar-06	7	7	0	1	1	4	4	7	5	3	2	2	1	1	1	1	1	A	1	1	1	1	1	0	2.4	7.4	
9-Mar-06	1	0	0	0	2	1	2	5	2	1	1	1	3	2	1	2	A	1	1	1	1	1	1	0	1.4	5.0	
10-Mar-06	0	0	0	1	1	1	2	5	7	5	7	6	2	2	2	A	1	1	1	1	1	1	1	1	2.3	7.2	
11-Mar-06	1	1	1	1	1	1	1	1	2	2	1	2	1	1	A	1	1	1	1	1	1	0	1	0	1.1	1.8	
12-Mar-06	1	0	1	1	1	1	1	6	8	7	7	4	3	A	2	2	6	3	1	0	2	4	1	0	2.5	8.2	
13-Mar-06	2	4	2	1	0	1	4	16	7	2	1	1	A	3	2	2	1	2	1	1	0	2	3	2	2.5	16.4	
14-Mar-06	0	0	30	17	37	16	17	21	21	4	5	A	2	1	2	1	1	1	0	0	1	1	0	0	7.8	36.7	
15-Mar-06	0	0	0	0	0	0	1	19	11	3	A	3	3	4	4	3	1	1	1	0	0	1	1	2	2.6	19.1	
16-Mar-06	2	2	3	3	3	3	3	5	5	A	7	7	7	2	1	1	2	1	0	0	0	0	0	0	2.5	7.3	
17-Mar-06	0	1	0	0	1	1	4	15	A	14	1	1	1	1	1	2	2	2	0	0	0	0	0	1	2.1	14.7	
18-Mar-06	2	0	1	1	1	2	11	A	4	5	5	4	2	2	1	1	0	0	0	0	0	0	0	0	2.0	10.7	
19-Mar-06	0	0	0	0	0	0	A	0	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0.4	0.8	
20-Mar-06	0	0	0	0	0	A	0	1	1	2	2	2	2	1	1	0	1	1	1	0	0	1	0	1	0.8	2.3	
21-Mar-06	0	0	0	0	A	0	2	2	1	1	1	1	3	5	1	2	1	3	2	1	0	1	3	1	1.4	4.9	
22-Mar-06	0	0	0	A	0	0	3	7	6	8	6	5	2	1	2	1	1	1	1	1	1	1	1	0	2.0	8.4	
23-Mar-06	0	0	A	2	3	8	15	47	43	10	5	4	1	2	1	1	1	1	0	1	0	0	1	0	6.4	47.4	
24-Mar-06	0	A	1	3	1	2	6	24	33	8	2	1	2	2	2	2	4	1	1	1	1	0	0	2	4.3	32.6	
25-Mar-06	A	1	1	0	1	5	20	29	3	3	3	2	3	3	2	1	1	0	0	1	0	1	1	A	3.7	29.0	
26-Mar-06	1	1	0	1	1	1	2	3	1	1	2	3	3	2	2	1	1	1	0	2	7	0	A	0	1.6	6.8	
27-Mar-06	0	3	5	3	0	0	3	9	4	3	2	2	2	2	1	1	1	1	1	2	2	A	12	13	3.1	12.9	
28-Mar-06	10	9	67	17	31	25	20	81	39	0	0	0	0	0	0	0	0	0	0	M	M	M	M	0	0	15.0	81.4
29-Mar-06	0	1	A	1	2	2	2	3	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.6	2.6	
30-Mar-06	1	0	A	1	0	0	0	0	1	1	3	1	1	2	2	2	1	1	1	4	1	1	0	5	1.3	4.8	
31-Mar-06	0	A	1	2	1	0	4	4	4	2	1	1	3	1	1	3	1	1	1	3	4	1	3	1	2.0	4.5	
Hourly Avg	1.2	1.3	4.4	2.2	3.2	2.8	6.3	11.8	9.1	4.4	3.5	2.7	2.3	2.0	1.8	1.7	1.4	1.4	1.3	1.2	2.1	1.2	1.5	2.4			
Hourly Max	9.9	8.7	67.1	17.4	36.7	25.3	43.1	81.4	42.9	17.7	14.5	7.3	7.3	9.4	6.4	5.4	5.5	12.5	16.3	6.9	30.2	5.8	12.1	21.8			



Station: Cresent Heights  
 Station Owner: PAS

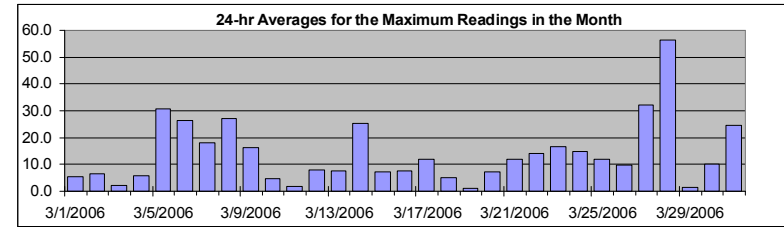
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitric Oxide (NO)**

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Value:	301.1	ppb	5-Mar	6:00 7:00
Maximum 24-hr Value:	56.5	ppb	28-Mar	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	141.7	64.8	11.2	3.1	1.6	0.7	0.3	13.8 ppb	3.1 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-06	1	A	3	3	4	5	7	6	6	7	6	5	3	4	13	15	3	3	3	4	3	22	2	1	5.6	22.0
2-Mar-06	A	2	4	2	3	4	29	32	20	6	8	4	4	4	3	3	2	2	2	2	1	1	2	A	6.3	31.9
3-Mar-06	2	1	2	2	1	1	2	4	3	1	2	2	2	1	11	2	1	2	1	3	1	A	A	3	2.3	10.5
4-Mar-06	1	1	1	1	1	1	4	3	4	49	8	6	8	5	3	3	2	2	26	1	2	A	2	1	5.9	48.6
5-Mar-06	1	1	1	2	2	3	301	127	50	36	22	10	7	31	7	5	3	2	1	1	A	10	58	31	30.9	301.1
6-Mar-06	25	4	26	17	3	3	5	4	38	57	3	3	32	6	19	11	20	47	35	A	73	16	14	142	26.2	142.0
7-Mar-06	1	11	2	53	32	1	24	3	22	4	51	8	5	2	2	4	3	2	A	66	25	68	29	2	18.2	68.1
8-Mar-06	50	151	2	4	7	81	39	94	52	4	3	3	3	2	2	2	17	A	9	40	28	1	26	2	27.1	151.1
9-Mar-06	38	1	1	1	40	35	46	76	36	2	2	2	37	21	2	27	A	2	1	1	2	1	2	1	16.3	75.5
10-Mar-06	1	1	1	2	4	2	4	19	16	8	12	9	3	3	3	A	3	2	1	3	6	2	2	2	4.8	18.9
11-Mar-06	2	2	2	2	2	1	2	2	3	3	2	2	2	3	A	2	2	2	2	2	1	1	1	1	2.0	3.2
12-Mar-06	3	3	2	2	1	1	3	10	21	16	11	5	4	A	3	4	49	5	2	1	26	11	1	1	8.0	49.5
13-Mar-06	9	9	15	1	1	2	12	30	15	2	2	2	A	11	2	3	2	18	1	4	2	10	13	5	7.5	29.9
14-Mar-06	1	1	71	32	119	32	82	60	79	7	7	A	5	2	49	2	2	2	1	2	6	14	2	1	25.2	119.3
15-Mar-06	1	1	1	1	1	1	13	39	43	4	A	6	5	5	19	6	1	1	8	1	1	4	3	4	7.3	43.3
16-Mar-06	3	4	5	5	4	8	5	15	17	A	8	9	17	6	18	2	42	3	3	0	1	1	1	1	7.8	42.2
17-Mar-06	1	2	1	1	2	2	14	58	A	101	3	1	3	2	6	4	4	54	1	1	1	2	1	6	11.8	100.7
18-Mar-06	5	2	2	2	16	5	27	A	9	10	9	7	3	8	3	2	1	1	1	1	1	1	1	1	5.0	27.0
19-Mar-06	1	1	2	1	1	1	A	1	1	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1.1	1.7
20-Mar-06	1	1	1	1	1	A	1	4	3	3	39	16	53	2	18	2	2	2	2	2	1	3	1	9	7.3	52.9
21-Mar-06	1	1	1	1	A	1	31	5	3	3	2	3	31	96	3	4	10	28	3	3	1	14	26	5	12.0	95.9
22-Mar-06	4	1	1	A	1	1	17	18	9	13	13	163	6	2	52	2	13	2	2	1	2	2	2	1	14.2	162.8
23-Mar-06	1	1	A	3	4	35	26	78	76	15	6	8	4	16	7	44	36	2	2	6	2	2	2	1	16.5	78.0
24-Mar-06	1	A	2	8	4	6	17	53	74	19	18	2	17	3	3	16	65	4	2	2	3	1	1	15	14.7	73.8
25-Mar-06	A	3	16	3	4	43	83	41	4	4	5	3	19	7	4	7	1	1	1	11	1	2	2	A	12.0	83.2
26-Mar-06	3	3	1	3	2	6	6	7	6	2	3	4	4	3	3	2	2	2	2	52	109	2	A	2	9.9	109.1
27-Mar-06	1	56	94	86	1	1	56	80	45	58	33	52	12	30	10	11	19	1	2	6	5	A	59	22	32.2	93.5
28-Mar-06	18	29	246	25	97	121	126	228	207	2	11	0	4	9	4	0	0	0	M	M	M	M	0	1	56.5	246.4
29-Mar-06	3	3	A	4	3	4	3	4	C	C	C	C	A	0	1	0	0	0	0	0	1	1	0	1	1.5	4.3
30-Mar-06	1	1	A	2	1	1	1	1	1	4	6	3	2	3	3	11	3	2	13	10	3	17	1	146	10.3	145.7
31-Mar-06	1	A	29	49	2	1	99	24	22	40	2	3	81	3	13	99	3	3	3	34	28	3	19	3	24.5	99.3
Hourly Avg	6.2	10.6	19.1	10.6	12.2	13.7	36.2	37.5	30.5	16.6	10.3	11.8	13.0	9.7	9.5	9.9	10.5	6.6	4.6	9.0	11.6	7.6	9.4	14.2		
Hourly Max	50.2	151.1	246.4	85.7	119.3	120.7	301.1	228.0	207.2	100.7	51.0	162.8	80.5	95.9	52.0	98.9	65.3	54.1	35.1	65.9	109.1	68.1	59.3	145.7		



# PAS - Crescent Heights - Oxides of Nitrogen Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## HOURLY AVERAGE TABLE

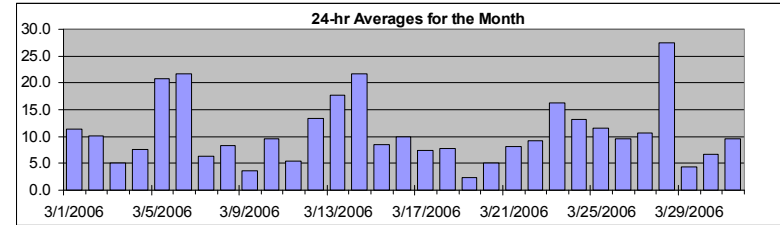
## Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: March 1, 2006 to April 1, 2006

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

Maximum 1-hr Average:	104.0	ppb	28-Mar	7:00 8:00
Maximum 24-hr Average:	27.4	ppb	28-Mar	

AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	63.3	36.4	13.1	6.7	3.5	1.3	0.6	10.6 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-06	6	A	10	11	12	16	15	19	17	13	9	9	5	6	7	9	8	10	12	14	11	20	14	7	11.3	19.6	
2-Mar-06	A	10	9	12	23	21	44	25	24	10	11	5	4	3	3	2	2	3	4	3	1	4	2	A	10.1	43.6	
3-Mar-06	6	5	8	4	7	7	7	10	5	1	1	2	1	1	3	2	2	3	5	8	8	11	A	8	5.0	11.5	
4-Mar-06	5	4	2	2	2	3	11	16	14	20	15	14	9	8	6	7	5	5	8	3	3	A	5	4	7.5	19.6	
5-Mar-06	2	3	6	7	14	19	70	56	57	35	28	14	11	19	13	9	6	5	2	2	A	15	36	50	20.8	69.9	
6-Mar-06	24	19	19	11	5	8	14	13	12	11	6	5	7	9	19	19	17	42	52	A	69	29	39	49	21.7	69.0	
7-Mar-06	4	5	2	8	4	1	6	4	8	3	9	9	3	1	2	3	4	6	A	22	12	16	10	6	6.4	21.9	
8-Mar-06	20	17	8	16	15	16	14	24	12	5	3	3	2	1	1	3	4	A	9	5	4	3	2	1	8.2	23.7	
9-Mar-06	2	1	0	0	3	3	5	11	6	2	2	2	4	6	3	7	A	6	4	4	3	2	3	4	3.6	10.8	
10-Mar-06	5	4	3	6	10	8	17	21	20	12	15	13	5	5	5	A	6	6	7	13	10	14	9	7	9.6	20.6	
11-Mar-06	6	7	7	9	12	12	9	7	6	4	3	3	3	3	A	4	4	4	4	4	4	4	4	3	5.4	11.9	
12-Mar-06	8	6	5	6	7	7	10	22	20	14	14	9	7	A	8	7	14	14	11	14	22	36	24	22	13.4	35.6	
13-Mar-06	29	36	30	22	21	25	28	42	17	4	2	3	A	8	5	5	4	8	10	16	14	25	27	27	17.8	41.7	
14-Mar-06	14	14	70	53	73	46	46	44	36	9	11	A	9	4	7	6	7	4	4	6	12	15	6	0	21.7	72.6	
15-Mar-06	0	1	1	0	1	1	11	40	21	6	A	9	8	9	11	10	3	4	7	7	6	16	11	16	8.6	39.7	
16-Mar-06	13	20	17	14	15	13	14	15	12	A	14	15	17	5	3	3	6	10	6	3	2	2	4	3	9.9	19.5	
17-Mar-06	4	7	4	3	6	7	21	35	A	25	3	2	3	3	3	6	11	9	4	2	2	1	3	4	7.4	34.8	
18-Mar-06	12	4	3	4	13	24	35	A	13	13	12	10	5	7	5	4	2	2	1	2	2	2	1	1	7.7	35.4	
19-Mar-06	2	2	2	2	2	2	A	4	4	3	3	2	2	2	1	1	1	1	1	3	6	2	1	1	2.3	6.0	
20-Mar-06	1	2	1	1	1	A	4	9	8	7	6	5	6	3	2	2	7	10	9	8	2	9	6	7	5.1	9.5	
21-Mar-06	2	2	1	1	A	2	8	16	8	6	5	5	10	13	6	6	6	15	16	16	3	10	17	11	8.1	16.6	
22-Mar-06	6	5	4	A	7	6	17	21	16	22	16	9	5	2	5	3	3	5	7	11	11	14	11	3	9.2	21.9	
23-Mar-06	3	2	A	18	22	32	38	71	63	23	13	11	4	4	3	4	4	3	7	14	10	5	12	8	16.3	70.9	
24-Mar-06	4	A	10	18	10	14	23	43	52	15	4	3	6	5	6	6	16	8	10	9	13	6	7	14	13.2	51.8	
25-Mar-06	A	13	10	7	17	23	47	53	7	6	6	4	8	10	6	4	3	2	4	8	2	7	7	A	11.6	52.9	
26-Mar-06	12	7	5	8	9	11	14	13	7	4	7	10	7	6	7	6	4	4	7	24	23	9	A	16	9.6	24.1	
27-Mar-06	4	7	14	8	3	6	12	19	7	4	3	3	2	4	2	1	2	3	11	23	18	A	45	46	10.7	46.0	
28-Mar-06	41	36	97	42	56	49	38	104	55	5	3	1	1	3	1	1	1	0	M	M	M	M	8	7	27.4	104.0	
29-Mar-06	6	7	A	9	9	9	9	8	C	C	C	C	A	2	3	2	3	3	2	2	2	1	0	1	4.2	9.1	
30-Mar-06	4	3	A	6	5	4	4	3	3	5	8	4	3	6	5	8	7	5	14	32	7	5	3	8	6.6	32.3	
31-Mar-06	3	A	7	7	5	7	14	14	11	5	3	3	6	4	4	6	4	5	10	21	29	15	18	19	9.6	28.9	
Hourly Avg	8.6	8.8	12.8	10.7	12.9	13.5	20.2	26.0	18.7	10.0	8.2	6.4	5.6	5.4	5.2	5.2	5.5	6.9	8.6	10.4	10.7	10.6	11.5	12.2			
Hourly Max	40.6	36.0	97.2	53.4	72.6	48.7	69.9	104.0	63.4	34.5	28.3	15.0	16.5	18.8	19.3	19.1	17.2	41.6	51.6	32.3	69.0	35.6	44.9	50.0			

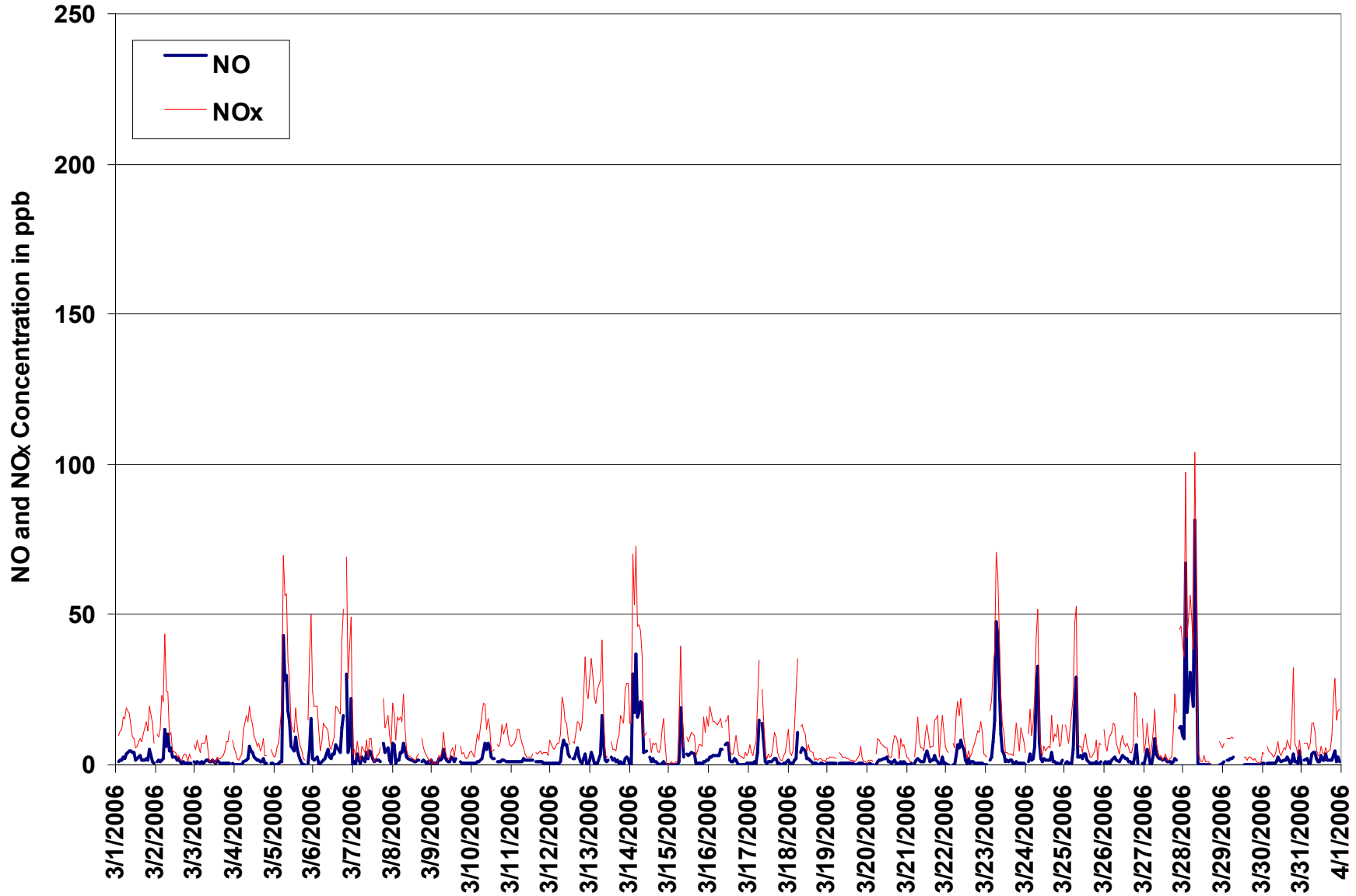


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

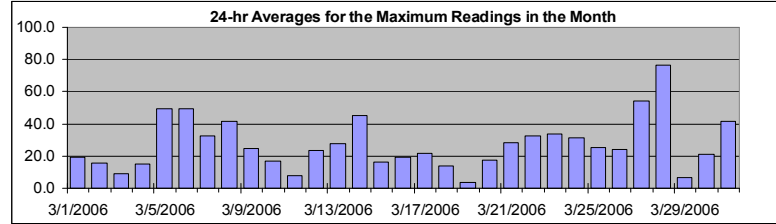
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Oxides of Nitrogen (NO<sub>x</sub>)**

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Value:	359.6	ppb	5-Mar	6:00 7:00
Maximum 24-hr Value:	76.8	ppb	28-Mar	



AIC Time:	33 hrs	Operational Time:	703 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average	Median
	184.9	98.2	30.3	14.4	6.4	2.5	1.6	27.2 ppb	14.4 ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Mar-06	9	A	17	18	20	22	29	25	21	15	13	13	26	10	21	20	13	15	18	20	21	45	18	14	19.2	44.7
2-Mar-06	A	14	14	19	29	28	69	45	42	13	14	8	6	6	5	5	4	5	5	6	2	5	4	A	15.8	68.7
3-Mar-06	9	7	12	10	11	10	16	15	10	2	2	3	2	1	19	4	3	5	7	18	10	20	A	15	9.2	19.8
4-Mar-06	7	6	3	2	4	5	18	23	18	74	23	15	18	15	10	10	8	8	58	4	5	A	8	7	15.2	74.5
5-Mar-06	4	5	16	12	26	30	360	173	81	58	39	20	15	52	16	12	8	7	3	3	A	37	97	69	49.7	359.6
6-Mar-06	52	27	60	30	13	17	26	21	52	77	8	6	49	14	36	32	44	95	73	A	118	52	52	187	49.6	186.6
7-Mar-06	8	28	5	87	55	4	38	6	42	7	84	18	12	3	4	9	8	11	A	96	56	107	48	11	32.5	106.8
8-Mar-06	81	190	19	23	32	114	70	135	65	8	7	5	4	3	3	5	19	A	28	66	41	4	33	2	41.5	189.7
9-Mar-06	48	1	2	2	63	49	66	101	53	4	3	3	62	35	5	37	A	13	6	6	4	3	4	6	25.0	100.7
10-Mar-06	6	5	4	17	29	21	30	42	40	18	24	18	7	6	8	A	9	8	15	24	21	17	16	8	17.1	41.6
11-Mar-06	8	8	10	12	16	15	11	10	8	7	4	4	4	6	A	6	5	6	8	6	6	6	6	6	7.7	15.9
12-Mar-06	12	11	10	8	12	9	13	30	40	30	21	12	8	A	10	12	82	21	15	18	61	48	29	28	23.5	81.8
13-Mar-06	41	43	49	28	23	28	44	58	34	5	4	5	A	21	6	10	6	46	16	28	24	42	46	36	27.9	58.4
14-Mar-06	16	21	113	71	159	69	127	88	109	13	14	A	15	7	68	11	15	13	7	17	30	36	23	3	45.4	158.8
15-Mar-06	1	2	1	1	2	2	34	62	67	9	A	15	10	12	31	15	4	7	16	10	16	25	17	20	16.5	66.6
16-Mar-06	16	23	22	18	17	21	20	28	32	A	18	18	34	15	33	5	58	15	18	5	4	3	14	5	19.1	57.8
17-Mar-06	8	9	6	5	10	12	36	84	A	130	6	3	9	4	15	11	19	78	9	3	4	3	7	24	21.5	129.7
18-Mar-06	21	9	8	7	41	30	56	A	23	20	19	16	7	19	8	8	3	4	2	3	3	3	2	2	13.7	56.3
19-Mar-06	4	3	4	3	3	3	A	7	4	4	4	3	3	3	2	2	2	2	2	5	11	7	2	2	3.8	10.5
20-Mar-06	2	3	2	3	2	A	8	18	15	10	65	36	85	5	24	8	12	17	12	12	4	20	12	32	17.7	85.1
21-Mar-06	5	3	2	2	A	5	66	29	11	14	11	10	62	133	10	12	30	57	21	28	5	40	61	35	28.3	133.0
22-Mar-06	27	10	9	A	12	13	43	44	24	30	30	233	33	4	97	5	23	8	11	20	16	22	25	7	32.4	233.2
23-Mar-06	7	7	A	25	26	64	54	105	99	31	17	20	11	40	19	68	72	6	11	34	18	15	17	12	33.8	104.7
24-Mar-06	7	A	18	26	14	19	37	72	101	34	35	7	32	7	10	45	120	21	14	16	29	12	10	41	31.5	119.5
25-Mar-06	A	25	32	15	22	82	112	70	10	9	9	6	30	19	13	23	5	7	12	26	6	11	9	A	25.0	111.6
26-Mar-06	20	12	7	16	14	24	24	25	21	6	11	12	9	8	9	8	5	6	20	92	150	23	A	25	23.8	150.4
27-Mar-06	10	79	138	113	8	11	79	104	57	97	55	82	18	62	25	9	33	5	28	38	32	A	98	60	54.0	137.8
28-Mar-06	48	62	280	53	133	160	152	268	255	7	17	5	6	27	15	6	6	15	M	M	M	M	11	9	76.8	280.1
29-Mar-06	11	12	A	12	12	11	11	C	C	C	C	A	4	6	4	4	4	3	3	3	3	2	1	4	6.6	12.4
30-Mar-06	6	5	A	10	6	5	5	4	4	12	14	7	5	9	8	23	9	10	42	49	27	35	4	185	21.1	185.1
31-Mar-06	5	A	53	80	10	11	115	50	39	68	5	6	108	6	20	122	8	8	13	77	57	20	45	24	41.3	121.7
Hourly Avg	17.2	22.4	32.7	24.2	27.4	29.9	59.0	58.4	47.4	28.0	19.8	21.1	23.8	18.5	18.5	18.2	21.3	17.5	16.9	25.2	27.0	23.6	24.8	30.2		
Hourly Max	81.2	189.7	280.1	112.8	158.8	160.5	359.6	268.4	254.5	129.7	83.7	233.2	107.5	133.0	96.7	121.7	119.5	95.0	73.5	96.1	150.4	106.8	98.3	186.6		



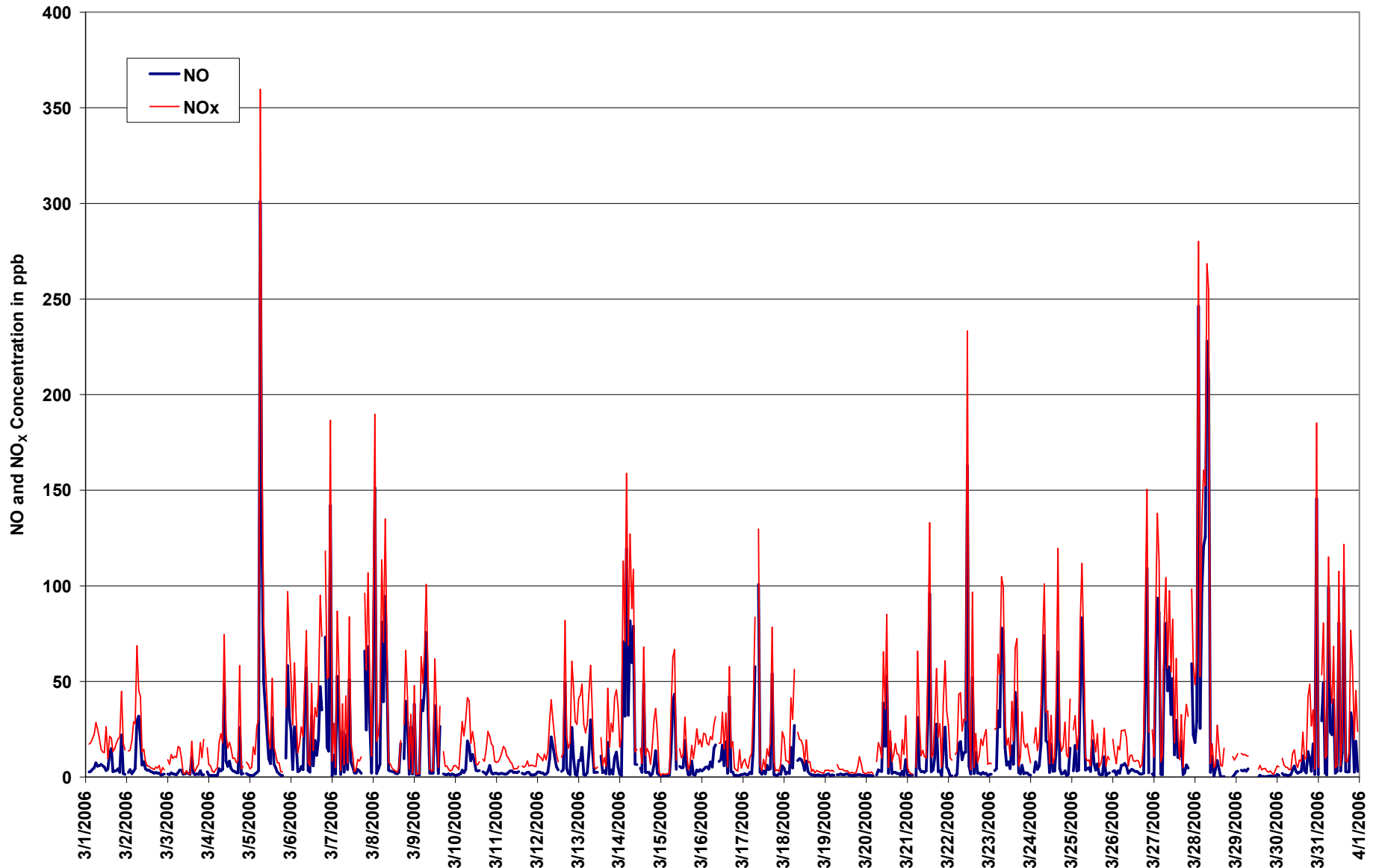


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



# PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

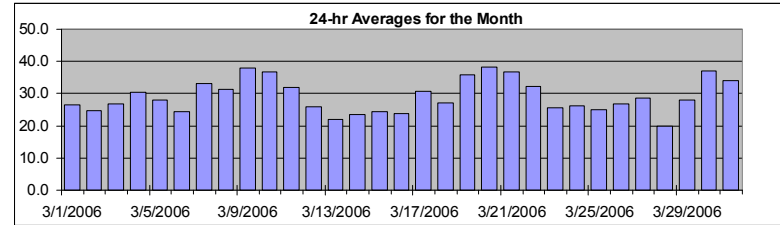
## HOURLY AVERAGE TABLE

## Ozone (O<sub>3</sub>)

Monitoring Dates: March 1, 2006 to April 1, 2006

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

Number of 1-hr Exceedances:	0		
Maximum 1-hr Average:	47.4 ppb	17-Mar	13:00 14:00
Maximum 24-hr Average:	38.2 ppb	20-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
	45.1	43.1	37.2	31.3	22.7	6.9	1.4	29.2 ppb	31.3 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																							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-06	26	A	26	22	21	17	18	16	20	25	28	30	33	34	34	35	34	32	29	27	27	22	23	29	26.5	34.7	
2-Mar-06	A	27	25	21	13	14	5	13	17	25	26	29	30	31	31	33	33	31	30	30	30	26	27	A	24.8	33.2	
3-Mar-06	24	23	19	23	20	21	20	19	24	29	30	30	33	34	35	35	35	33	30	25	26	22	A	27	26.9	35.4	
4-Mar-06	25	26	31	32	31	30	23	19	22	23	25	26	30	31	33	33	34	34	35	39	40	A	40	40	30.5	40.5	
5-Mar-06	40	39	36	35	26	20	14	11	14	22	28	35	38	35	36	36	35	35	36	36	A	23	7	4	27.9	40.1	
6-Mar-06	13	17	22	31	36	33	27	29	31	33	37	38	38	37	31	29	26	11	5	A	2	15	8	13	24.4	37.8	
7-Mar-06	32	31	31	29	32	35	33	34	32	36	36	38	42	41	41	40	38	34	A	24	28	25	24	26	33.1	41.5	
8-Mar-06	20	22	23	18	19	20	22	18	27	33	37	38	41	43	43	42	39	A	36	36	35	35	37	37	31.4	43.1	
9-Mar-06	36	36	36	35	32	30	28	28	37	41	42	42	40	38	41	39	A	39	42	41	43	43	43	42	38.0	43.3	
10-Mar-06	41	43	44	40	35	36	30	28	30	34	35	37	42	43	43	A	44	43	40	33	34	29	31	31	36.7	44.4	
11-Mar-06	31	29	26	23	19	18	19	27	33	35	36	37	37	38	A	38	40	39	36	36	35	35	33	33	31.8	40.2	
12-Mar-06	28	30	31	29	27	26	23	18	23	26	28	31	32	A	35	37	35	31	30	26	19	8	12	12	26.0	36.8	
13-Mar-06	5	3	6	11	12	8	10	11	26	34	37	39	A	39	38	39	39	36	32	23	22	13	12	9	21.9	39.3	
14-Mar-06	18	18	1	1	1	1	3	7	17	27	32	A	41	45	42	39	36	39	34	32	25	19	29	32	23.5	45.1	
15-Mar-06	33	30	30	28	28	26	17	6	17	23	A	26	29	29	30	31	33	32	27	26	22	15	16	11	24.5	32.7	
16-Mar-06	12	6	7	7	6	11	12	14	18	A	21	23	26	40	42	43	40	35	33	32	32	29	28	30	23.9	43.2	
17-Mar-06	27	24	25	25	22	19	9	9	A	20	32	37	41	47	45	42	36	35	34	32	36	36	36	34	30.6	47.4	
18-Mar-06	26	28	29	27	18	7	4	A	20	21	24	27	34	31	32	32	35	34	35	33	32	32	33	33	27.2	34.9	
19-Mar-06	31	29	28	29	30	31	A	32	33	34	35	37	38	38	39	40	40	41	43	41	37	41	39	42	35.9	43.1	
20-Mar-06	41	40	40	40	39	A	37	33	34	37	40	40	40	42	42	41	38	36	36	35	39	34	36	38	38.2	41.8	
21-Mar-06	39	39	38	37	A	37	33	29	36	40	41	41	39	38	43	44	43	37	34	31	38	30	30	26	36.7	43.8	
22-Mar-06	33	32	28	A	25	25	16	16	25	27	32	41	43	46	44	44	42	38	34	29	29	25	31	34	32.1	45.9	
23-Mar-06	34	31	A	12	7	3	4	4	7	17	28	36	43	44	44	44	42	40	33	25	26	27	17	21	25.7	44.2	
24-Mar-06	23	A	18	9	13	11	5	5	8	19	30	38	39	41	41	42	35	38	33	32	29	36	33	26	26.3	42.1	
25-Mar-06	A	24	22	22	15	12	3	6	18	19	24	29	33	33	39	40	40	36	32	28	33	23	19	A	25.0	40.1	
26-Mar-06	17	20	20	14	15	17	17	16	27	29	26	28	31	34	35	37	43	44	40	23	26	32	A	24	26.7	44.1	
27-Mar-06	29	23	22	27	27	23	19	20	27	31	35	38	41	43	44	45	45	42	33	18	19	A	3	2	28.5	44.9	
28-Mar-06	2	4	1	1	1	1	2	3	10	20	29	32	34	37	40	39	40	39	31	26	23	19	17	20	19.7	40.1	
29-Mar-06	21	19	A	16	14	14	12	13	15	20	18	C	C	C	A	39	39	41	43	43	42	43	41	40	28.1	43.1	
30-Mar-06	38	36	A	33	31	33	34	34	34	33	34	39	47	44	45	44	45	47	37	19	35	36	38	36	37.1	46.8	
31-Mar-06	35	A	33	31	32	27	25	27	33	42	45	45	43	45	45	45	45	43	37	25	14	22	20	22	34.0	45.3	
Hourly Avg	26.9	25.9	24.9	23.7	21.6	20.3	17.4	18.2	23.8	28.6	31.7	34.7	37.2	38.7	39.1	38.9	38.4	36.5	33.7	30.3	29.3	27.4	26.3	26.8			
Hourly Max	41.4	42.9	43.9	39.7	39.4	36.9	37.5	34.3	37.2	42.4	45.0	44.8	46.8	47.4	45.2	44.9	45.3	46.6	43.1	43.1	43.1	43.3	43.2	42.0			

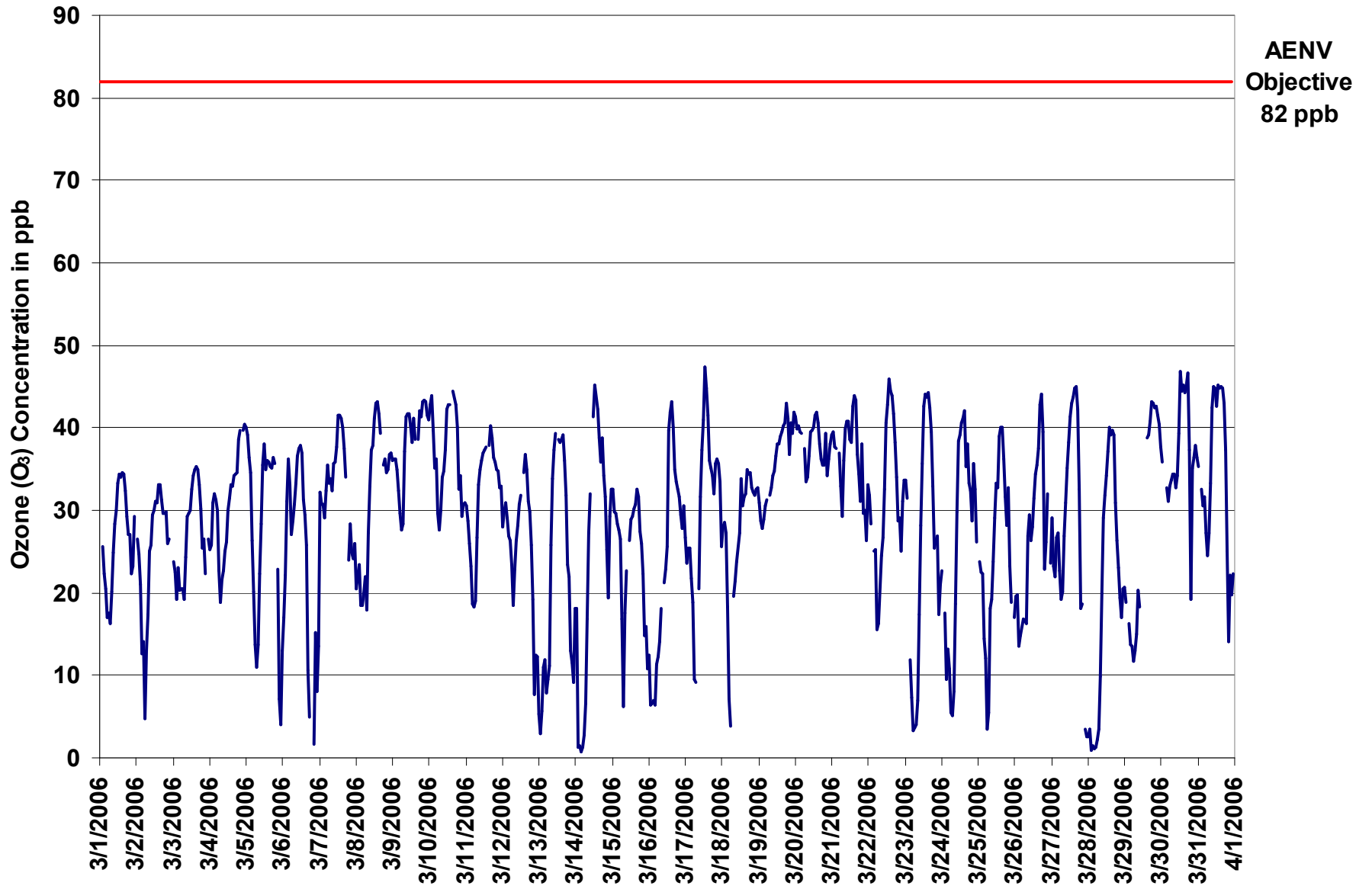


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

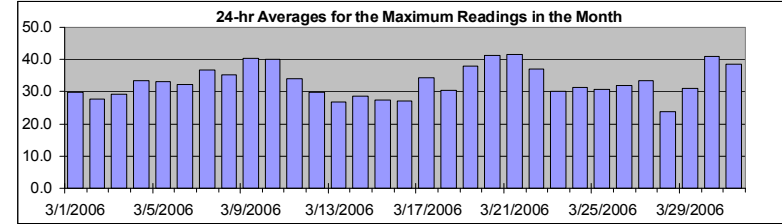
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Ozone (O<sub>3</sub>)**

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Value:	50.7	ppb	30-Mar	12:00 13:00
Maximum 24-hr Value:	41.4	ppb	21-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
	47.7	46.0	40.3	34.9	27.9	13.2	5.6	33.1 ppb	34.9 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-Mar-06	29	A	29	26	25	22	21	20	24	27	29	33	36	36	36	38	36	35	33	31	30	28	28	33	29.8	37.6
2-Mar-06	A	29	26	25	18	18	13	19	25	28	29	31	31	33	32	35	35	34	31	31	31	29	28	A	27.8	34.6
3-Mar-06	26	24	23	25	23	23	25	22	28	31	31	31	35	35	36	37	36	35	32	30	29	25	A	29	29.2	36.8
4-Mar-06	27	29	33	34	33	32	30	25	25	26	28	28	33	35	36	35	36	37	39	41	41	A	41	43	33.4	42.6
5-Mar-06	42	41	41	38	34	27	28	23	18	27	36	39	40	39	37	38	37	38	37	A	A	32	14	19	33.2	42.0
6-Mar-06	26	25	32	39	40	38	35	36	36	37	38	39	41	42	36	34	32	21	17	A	6	30	26	34	32.1	41.8
7-Mar-06	35	34	33	34	35	39	36	36	35	37	39	40	44	43	44	43	40	39	A	33	34	34	29	29	36.8	43.6
8-Mar-06	28	30	29	27	23	24	27	26	33	36	39	40	44	45	45	44	42	A	38	39	36	37	38	38	35.2	44.8
9-Mar-06	38	37	38	36	35	31	31	33	40	43	44	43	43	41	44	A	43	43	43	43	44	45	45	43	40.2	44.8
10-Mar-06	42	46	47	46	41	41	36	33	35	36	38	42	44	44	44	A	46	44	44	37	37	35	33	33	40.2	46.6
11-Mar-06	33	31	28	26	23	20	21	35	35	37	37	38	39	40	A	39	42	41	39	37	37	38	35	35	34.2	41.8
12-Mar-06	32	32	33	32	29	28	26	23	27	30	31	32	34	A	36	40	40	38	36	32	28	13	15	16	29.8	40.3
13-Mar-06	7	9	9	13	14	10	16	17	32	36	40	41	A	41	40	41	41	39	38	32	28	22	29	19	26.7	41.1
14-Mar-06	21	23	11	7	2	5	5	12	25	31	35	A	44	47	47	43	42	41	40	39	34	31	35	35	28.5	47.0
15-Mar-06	34	32	31	29	29	28	26	11	23	24	A	29	30	32	32	33	34	34	30	28	27	21	20	13	27.4	34.1
16-Mar-06	15	11	9	9	8	17	15	18	21	A	23	25	29	44	44	47	44	40	37	34	33	31	33	33	27.0	46.8
17-Mar-06	29	26	27	27	24	22	16	16	A	28	36	41	47	50	47	45	41	39	37	33	38	38	39	40	34.2	50.2
18-Mar-06	34	32	31	30	27	13	8	A	25	24	26	31	36	35	34	36	36	36	36	36	34	34	34	35	30.5	36.5
19-Mar-06	33	30	30	30	32	32	A	33	35	36	37	39	40	40	41	41	42	43	45	44	40	43	42	44	37.9	44.6
20-Mar-06	43	41	42	41	41	A	39	39	38	40	42	42	42	44	44	43	41	41	40	40	41	40	39	42	41.1	44.0
21-Mar-06	41	42	39	40	A	39	39	37	40	43	44	44	43	44	45	47	46	45	39	41	42	38	39	38	41.4	46.8
22-Mar-06	39	39	33	A	31	29	29	25	29	31	42	44	47	47	47	46	45	41	38	34	34	31	36	37	37.2	47.3
23-Mar-06	38	35	A	18	12	10	7	9	13	23	34	40	46	46	46	47	45	43	38	32	32	33	24	24	30.1	46.6
24-Mar-06	26	A	23	13	15	14	11	8	13	24	40	40	45	45	45	45	43	42	38	39	37	41	38	37	31.4	45.4
25-Mar-06	A	30	28	27	19	20	9	18	21	24	27	36	40	37	43	45	43	43	36	38	37	30	24	A	30.6	45.2
26-Mar-06	21	21	22	22	19	22	25	23	32	32	30	33	34	36	38	41	46	45	45	36	38	39	A	29	31.8	46.4
27-Mar-06	34	27	29	32	31	31	23	25	30	33	39	42	44	46	46	46	47	45	40	30	27	A	9	15	33.5	46.7
28-Mar-06	8	13	2	6	2	4	5	9	19	24	35	35	39	41	43	42	43	43	36	29	27	22	21	25	23.9	43.3
29-Mar-06	26	25	A	19	18	15	15	15	18	22	22	C	C	A	41	42	44	46	45	44	45	43	42	42	31.0	46.0
30-Mar-06	40	39	A	38	35	34	35	36	36	36	40	44	51	48	47	48	48	49	49	33	38	39	41	40	41.1	50.7
31-Mar-06	37	A	35	34	34	33	29	30	41	45	46	46	46	48	48	47	46	46	43	35	27	26	30	29	38.4	47.8
Hourly Avg	30.5	29.8	28.3	27.4	25.1	24.0	22.7	23.8	28.5	31.7	35.3	37.6	40.2	41.5	41.5	41.6	41.2	40.2	38.0	35.6	33.7	32.7	31.4	32.0		
Hourly Max	42.7	45.6	46.6	45.8	41.0	40.7	39.2	38.7	41.1	45.0	46.4	46.4	50.7	50.2	47.8	47.6	47.7	49.3	49.0	45.0	44.3	44.7	44.8	43.6		

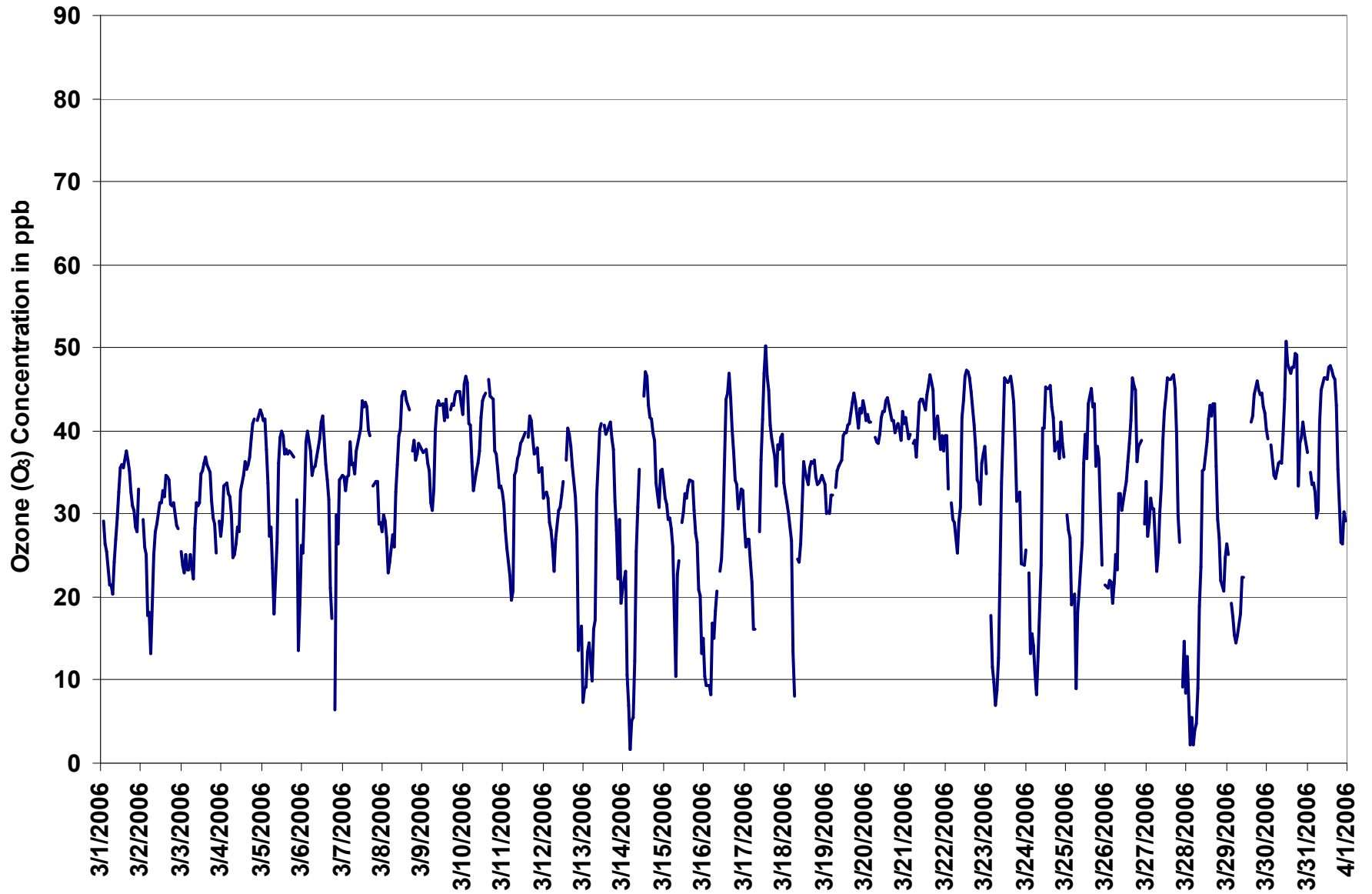
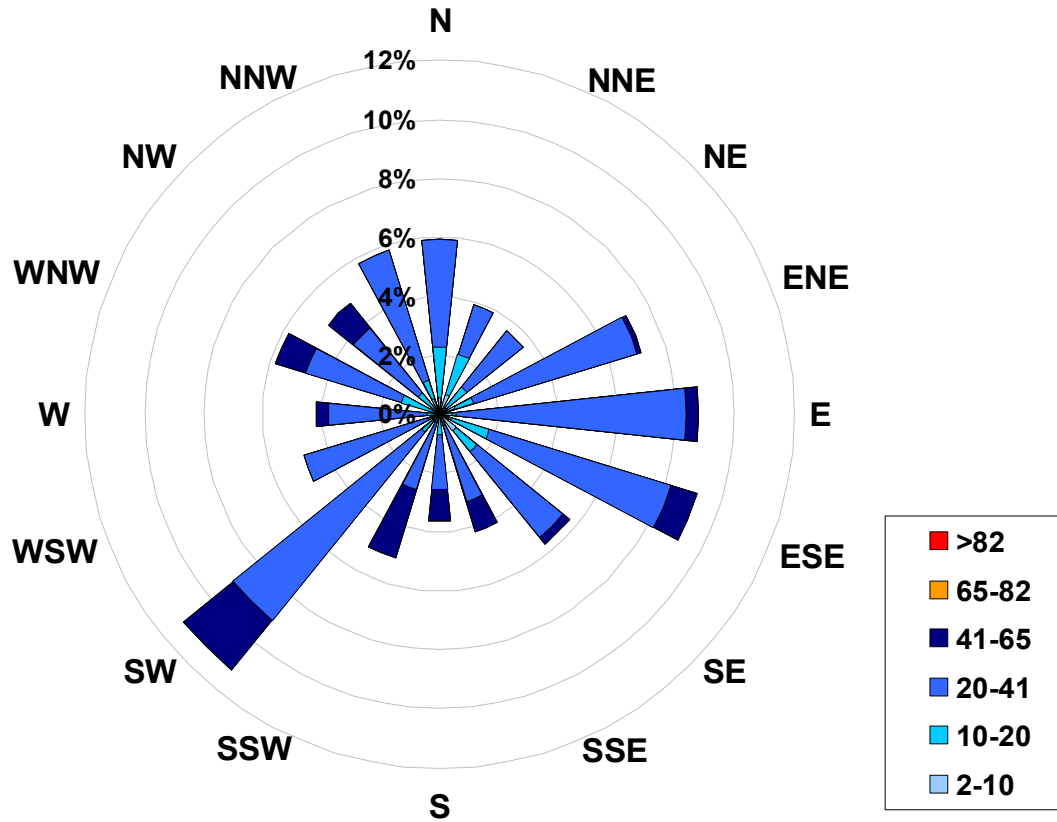


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Ozone (in ppb)  
Located at the Crescent Heights Site for March 2006**



**Calms: 1%**

Frequency Distribution of O <sub>3</sub> in ppb			
Range		Frequency (hrs)	
2.0	< 10	50	
10	to 20	90	
20	to 41	486	
41	to 65	82	
65	to 82	0	
	> 82	0	
Total Non-Zero Values			708



# PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## EIGHT HOUR RUNNING AVERAGE TABLE

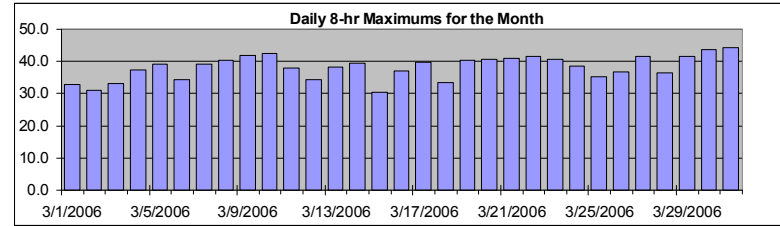
## Ozone (O<sub>3</sub>)

Monitoring Dates: March 1, 2006 to April 1, 2006

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

Number of 8-hr Exceedances:	0		
Maximum 8-hr Average:	44.4 ppb	31-Mar	17:00 18:00

Percentile	99	95	75	50	25	5	1
	42.3	40.5	36.0	30.6	23.8	11.9	6.2



### 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	23:00	0:00		
1-Mar-06	26	26	26	26	25	24	22	21	20	21	21	22	23	26	28	30	32	33	33	32	32	30	29	28			32.8	
2-Mar-06	27	26	26	25	23	22	19	17	17	17	17	18	20	22	25	28	30	31	31	31	31	30	30	29			31.1	
3-Mar-06	28	27	25	24	23	22	21	21	21	22	23	24	26	27	29	31	33	33	33	33	32	30	30	28			33.2	
4-Mar-06	27	26	26	27	28	29	28	27	27	26	26	25	25	25	26	28	29	31	32	34	35	35	36	37			37.4	
5-Mar-06	38	39	39	39	37	35	31	28	24	22	21	21	23	25	27	31	33	35	36	36	36	34	30	25			39.2	
6-Mar-06	22	19	17	17	19	20	23	26	28	30	32	33	33	34	34	34	34	31	27	25	20	17	14	11			34.2	
7-Mar-06	12	15	19	20	24	27	30	32	32	33	33	35	36	36	37	38	39	39	39	37	35	33	30	28			39.0	
8-Mar-06	26	24	24	23	22	22	21	20	21	23	24	27	30	32	35	38	40	40	40	40	40	39	38	37	36			40.5
9-Mar-06	36	36	36	36	36	35	34	33	33	33	34	35	36	37	39	40	40	40	40	40	40	40	41	41	42			41.9
10-Mar-06	42	42	43	42	41	40	39	37	36	35	33	33	34	35	36	38	40	41	42	41	40	38	36	36			42.6	
11-Mar-06	34	32	30	29	27	26	24	24	24	25	26	28	30	33	35	36	37	38	38	38	37	37	36	36			37.9	
12-Mar-06	34	33	33	32	31	30	28	27	26	26	25	25	26	26	28	30	32	33	33	32	30	28	25	22			34.3	
13-Mar-06	18	14	11	10	9	9	8	8	11	15	19	22	24	28	32	36	38	38	37	35	33	30	27	23			38.2	
14-Mar-06	21	18	15	12	9	8	7	6	6	7	11	12	18	25	30	35	38	39	39	39	39	37	33	32	31			39.5
15-Mar-06	30	29	29	28	29	30	28	25	23	22	21	20	21	21	23	26	29	30	30	30	29	27	25	23			30.5	
16-Mar-06	20	17	14	12	10	10	9	10	10	11	13	15	18	22	26	30	34	34	35	36	37	36	34	33			37.2	
17-Mar-06	31	29	28	28	26	25	23	20	19	19	20	21	24	28	33	38	38	39	40	39	38	37	36	35			39.7	
18-Mar-06	34	33	32	31	29	26	22	20	19	18	17	17	20	23	27	27	29	31	32	33	33	33	33	33			33.5	
19-Mar-06	33	32	31	31	31	30	30	30	30	31	32	33	34	35	36	37	38	38	39	40	40	40	40	40			40.5	
20-Mar-06	41	41	40	40	40	40	40	39	38	37	37	37	37	38	38	39	40	40	39	39	39	38	37	37			40.6	
21-Mar-06	37	37	37	38	37	38	37	36	36	36	36	37	37	37	38	40	41	41	40	39	39	37	36	34			41.0	
22-Mar-06	32	32	31	31	29	29	27	25	24	23	24	26	28	31	34	38	40	41	41	41	40	38	36	34	33			41.5
23-Mar-06	32	31	30	28	25	22	18	14	10	8	10	13	18	23	28	33	37	40	41	39	37	35	32	29			40.6	
24-Mar-06	27	25	22	20	18	16	14	12	10	11	13	16	19	23	28	32	36	38	39	38	36	36	35	33			38.5	
25-Mar-06	32	30	29	27	25	22	18	15	15	15	15	16	18	21	25	29	32	34	35	35	35	34	31	30			35.3	
26-Mar-06	27	24	23	21	18	17	17	17	18	19	20	22	24	26	29	31	33	35	37	36	35	35	35	33			36.7	
27-Mar-06	31	28	26	26	25	24	24	23	24	26	28	29	32	35	38	40	42	41	39	36	35	29	23			41.7		
28-Mar-06	17	12	7	5	2	2	2	2	3	5	9	12	16	21	26	30	34	36	37	36	34	32	29	27			36.6	
29-Mar-06	25	22	21	19	18	17	16	15	15	15	15	15	N	N	N	N	N	N	N	N	N	41	41	42			41.6	
30-Mar-06	41	41	41	39	37	36	35	34	34	33	33	34	36	37	39	40	42	43	44	41	40	39	38	37			43.6	
31-Mar-06	36	34	33	35	34	33	31	30	30	31	33	35	36	38	41	43	44	44	43	41	37	35	31	29			44.4	

Hourly Max	41.8	42.3	42.6	42.3	41.3	40.5	40.0	38.8	37.7	37.2	37.1	37.2	37.3	38.1	40.7	42.9	44.4	44.4	43.6	41.1	40.5	41.4	41.5	41.9
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# PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## HOURLY AVERAGE TABLE

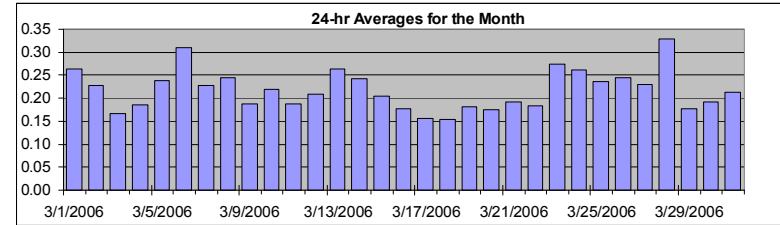
## Carbon Monoxide (CO)

Monitoring Dates: March 1, 2006 to April 1, 2006

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

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	1.0	ppm	23-Mar	7:00 8:00
Maximum 24-hr Value:	0.3	ppm	28-Mar	

AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.6	0.4	0.2	0.2	0.2	0.1	0.1	0.2 ppm	0.2 ppm



### Status Flag Characters

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

Day	Mountain Standard Time																								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-06	0.2	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.26	0.41
2-Mar-06	A	0.2	0.2	0.3	0.4	0.3	0.4	0.5	0.4	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	A	0.23	0.49
3-Mar-06	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	A	0.2	0.17	0.23
4-Mar-06	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.19	0.24
5-Mar-06	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	A	0.3	0.4	0.5	0.24	0.49
6-Mar-06	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.6	A	0.5	0.4	0.4	0.4	0.31	0.55
7-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.23	0.29
8-Mar-06	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	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	0.24	0.43
9-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.24
10-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.22	0.31
11-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.23
12-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.21	0.30
13-Mar-06	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.8	0.4	0.2	0.1	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.26	0.78
14-Mar-06	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.24	0.52
15-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.3	0.2	A	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.20	0.57
16-Mar-06	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.18	0.35
17-Mar-06	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.6	A	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16	0.61
18-Mar-06	0.1	0.1	0.1	0.1	0.2	0.3	0.3	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.32
19-Mar-06	0.2	0.1	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.22
20-Mar-06	0.2	0.2	0.2	0.2	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.17	0.22
21-Mar-06	0.1	0.1	0.1	0.1	A	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.19	0.27
22-Mar-06	0.2	0.2	0.1	A	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.18	0.34
23-Mar-06	0.1	0.1	A	0.2	0.3	0.3	0.5	1.0	0.8	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.27	0.99
24-Mar-06	0.2	A	0.2	0.2	0.2	0.3	0.4	0.6	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.61
25-Mar-06	A	0.3	0.2	0.2	0.3	0.3	0.3	0.5	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	A	0.24	0.53
26-Mar-06	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	A	0.25	0.32
27-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.4	0.4	0.23	0.37
28-Mar-06	0.4	0.3	0.5	0.4	0.4	0.4	0.3	0.7	0.6	0.3	0.2	0.2	C	C	A	0.2	0.2	C	0.5	0.2	0.2	0.2	0.2	0.2	0.33	0.69
29-Mar-06	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	M	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.22
30-Mar-06	0.2	0.2	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	0.3	0.4	0.2	0.2	0.1	0.19	0.45
31-Mar-06	0.2	A	0.1	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	0.3	0.3	0.3	0.21	0.35	
Hourly Avg	0.19	0.19	0.20	0.20	0.21	0.23	0.28	0.38	0.31	0.24	0.21	0.20	0.19	0.18	0.19	0.18	0.18	0.19	0.21	0.21	0.20	0.22	0.21	0.21		
Hourly Max	0.36	0.32	0.47	0.38	0.39	0.37	0.48	0.99	0.83	0.40	0.29	0.27	0.25	0.26	0.29	0.31	0.33	0.46	0.55	0.45	0.53	0.41	0.37	0.49		



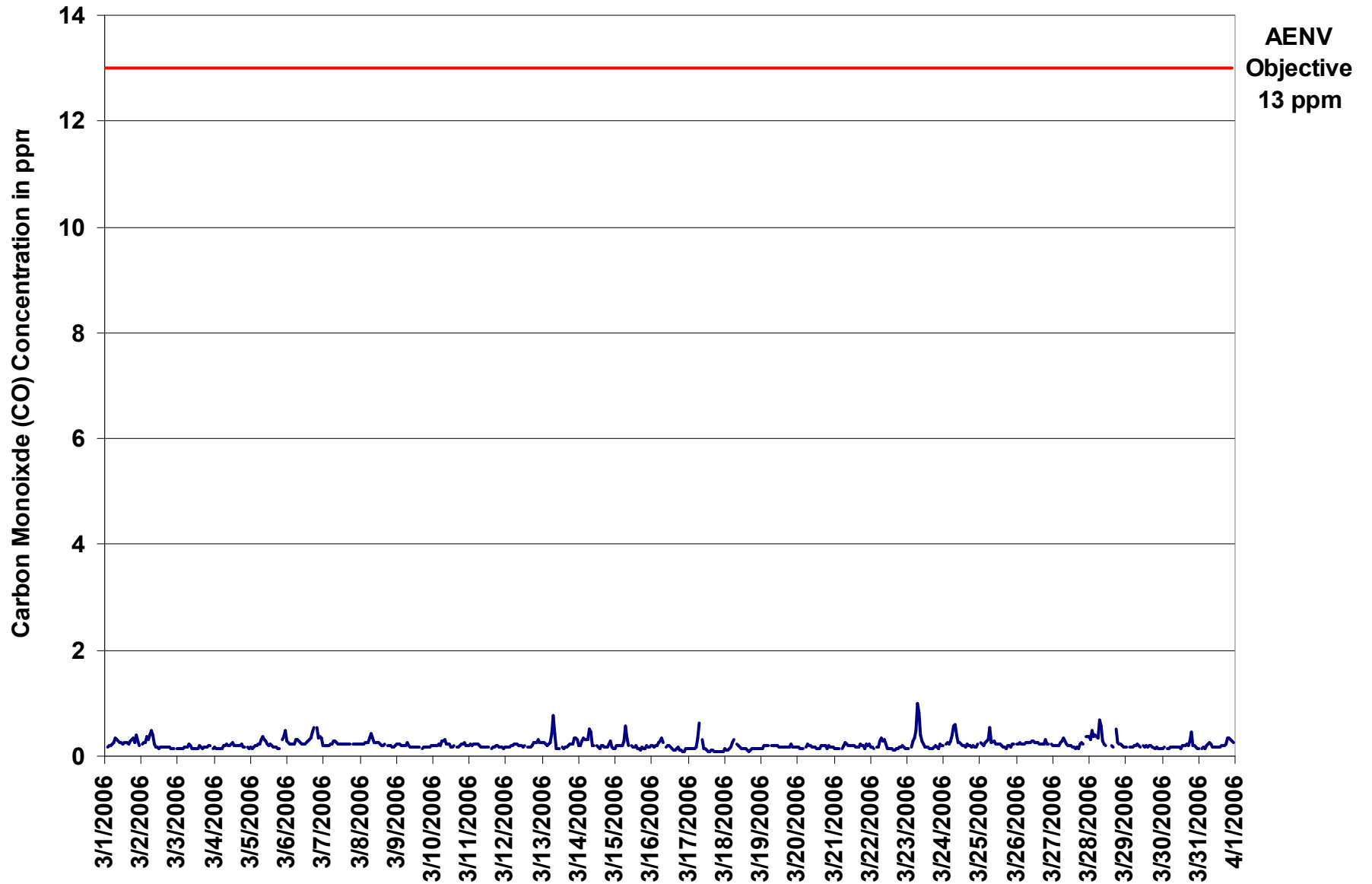


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

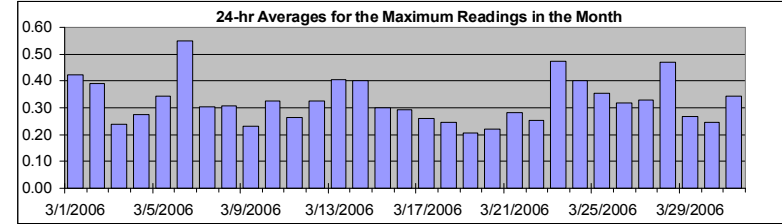
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Carbon Monoxide (CO)**

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Value:	2.1	ppm	23-Mar	7:00 8:00
Maximum 24-hr Value:	0.6	ppm	6-Mar	



AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.2	0.8	0.3	0.3	0.2	0.1	0.1	0.3 ppm	0.3 ppm

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start 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-06	0.2	A	0.2	0.2	0.2	0.3	0.4	0.6	0.5	0.3	0.3	0.3	0.3	0.7	0.7	0.6	0.3	0.6	0.5	0.4	0.3	1.0	0.5	0.2	0.42	0.98	
2-Mar-06	A	0.2	0.3	0.3	0.9	0.3	0.8	1.1	0.7	0.4	0.2	0.4	0.2	0.6	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	A	0.39	1.13	
3-Mar-06	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.3	0.1	0.1	0.2	0.1	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.24	0.58	
4-Mar-06	0.2	0.1	0.1	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.3	0.5	0.3	0.3	0.2	0.3	0.4	0.2	0.4	0.2	0.2	A	0.3	0.1	0.27	0.50	
5-Mar-06	0.2	0.2	0.2	0.3	0.2	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	A	1.3	0.5	0.8	0.34	1.34	
6-Mar-06	0.7	0.6	0.3	0.3	0.3	0.3	0.8	0.6	0.5	0.4	0.2	0.2	0.3	0.5	0.7	0.8	1.1	0.9	0.8	A	0.7	0.5	0.5	0.7	0.55	1.08	
7-Mar-06	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.7	0.6	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	A	0.4	0.3	0.4	0.3	0.3	0.31	0.67	
8-Mar-06	0.2	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	A	0.2	0.2	0.2	0.2	0.2	0.2	0.31	0.66	
9-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.44	
10-Mar-06	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.4	0.6	0.3	0.3	0.5	0.2	0.4	0.5	A	0.2	0.2	0.2	0.5	0.5	0.3	0.2	0.2	0.32	0.62	
11-Mar-06	0.2	0.3	0.2	0.4	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4	A	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.26	0.41	
12-Mar-06	0.2	0.2	0.2	0.2	0.3	1.0	0.3	0.3	0.2	0.7	0.3	0.2	0.2	A	0.2	0.3	0.2	0.2	0.6	0.3	0.3	0.3	0.3	0.3	0.33	0.96	
13-Mar-06	0.3	0.3	0.3	0.3	0.3	0.4	0.8	1.7	0.9	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.6	0.6	0.4	0.41	1.69	
14-Mar-06	0.3	0.3	0.3	0.6	0.4	0.4	0.4	1.2	1.0	0.3	0.2	A	0.2	0.2	0.2	0.8	0.3	0.2	0.2	0.3	0.3	0.7	0.3	0.2	0.40	1.20	
15-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.7	0.8	0.2	A	0.2	0.2	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.30	0.85	
16-Mar-06	0.4	0.3	0.3	0.3	0.3	0.4	0.5	1.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.3	0.1	0.1	0.2	0.29	1.20	
17-Mar-06	0.2	0.2	0.1	0.1	0.2	0.2	0.6	1.0	A	0.9	0.2	0.1	0.2	0.1	0.5	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.26	0.98	
18-Mar-06	0.3	0.2	0.2	0.1	0.4	0.7	0.7	A	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.25	0.68	
19-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.20	0.32	
20-Mar-06	0.2	0.2	0.2	0.2	0.2	A	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.22	0.44	
21-Mar-06	0.2	0.2	0.2	0.1	A	0.1	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.6	0.3	0.8	0.28	0.78	
22-Mar-06	0.2	0.2	0.2	A	0.2	0.2	0.5	0.6	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.25	0.60	
23-Mar-06	0.1	0.2	A	0.2	0.5	1.4	0.9	2.1	1.3	0.5	0.4	0.3	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.47	2.09	
24-Mar-06	0.2	A	0.4	0.5	0.3	0.4	0.9	0.8	0.8	0.8	0.3	0.5	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.4	0.40	0.91	
25-Mar-06	A	0.7	0.3	0.3	0.3	0.5	0.4	1.0	0.3	0.5	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.4	A	0.35	1.02	
26-Mar-06	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.5	0.4	0.3	A	0.32	0.50	
27-Mar-06	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.2	0.3	0.5	0.3	A	0.5	0.4	0.33	0.64	
28-Mar-06	0.5	0.4	0.8	0.5	0.6	0.5	0.5	1.1	1.0	0.3	0.5	0.3	C	C	A	0.3	0.2	C	0.8	0.4	0.3	0.3	0.3	0.2	0.47	1.11	
29-Mar-06	0.2	0.2	A	0.2	0.2	0.2	0.3	0.4	0.3	1.2	0.2	M	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.27	1.18	
30-Mar-06	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.3	0.2	0.2	0.2	0.25	0.65	
31-Mar-06	0.2	A	0.1	0.2	0.2	0.4	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.9	0.6	0.8	0.5	0.5	0.34	0.94
Hourly Avg	0.24	0.26	0.25	0.26	0.29	0.36	0.46	0.69	0.49	0.37	0.27	0.27	0.23	0.27	0.32	0.28	0.28	0.27	0.31	0.32	0.28	0.37	0.29	0.30			
Hourly Max	0.68	0.75	0.75	0.55	0.92	1.40	0.91	2.09	1.35	1.18	0.50	0.50	0.35	0.70	0.68	0.83	1.08	0.94	0.83	0.94	0.75	1.34	0.60	0.81			

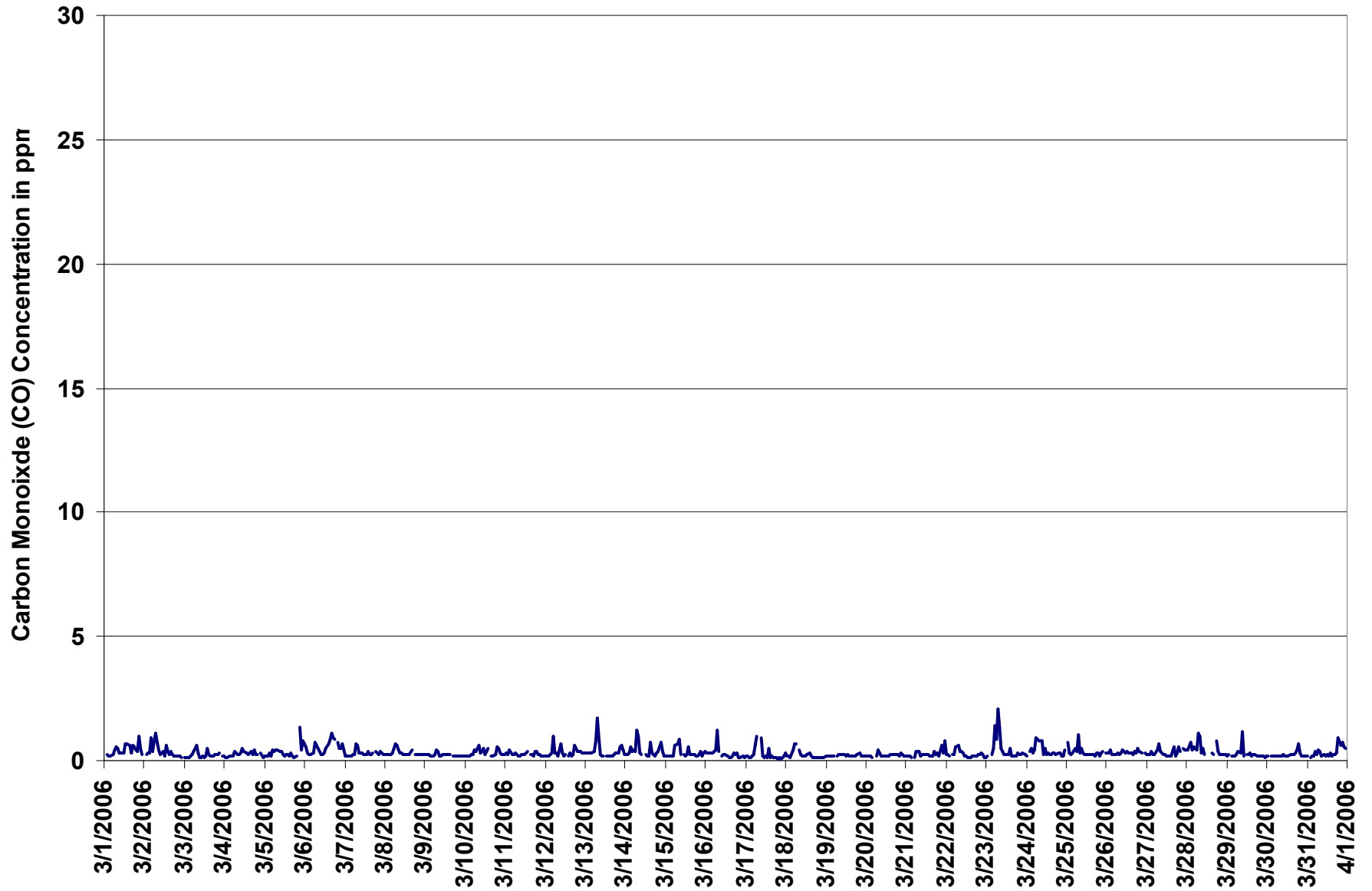
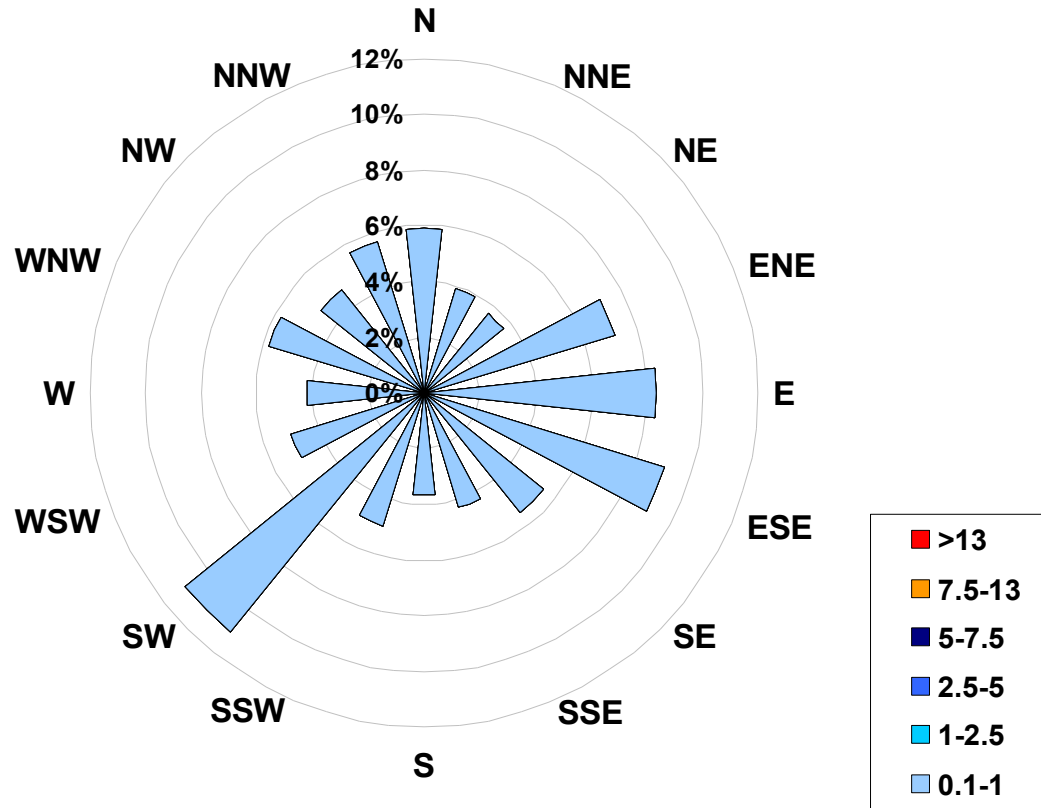


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Carbon Monoxide (in ppm)  
Located at the Crescent Heights Site for March 2006**



**Calms: 1%**

Frequency Distribution of CO in ppm			
Range		Frequency (hrs)	
0.1	< 1		707
1	to 2.5		0
2.5	to 5		0
5	to 7.5		0
7.5	to 13		0
	> 13		0
Total Non-Zero Values			707



# PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## EIGHT HOUR RUNNING AVERAGE TABLE

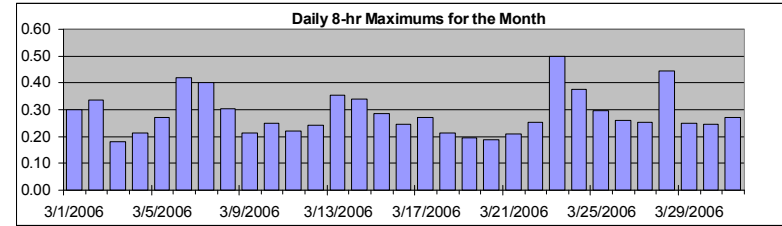
## Carbon Monoxide (CO)

Monitoring Dates: March 1, 2006 to April 1, 2006

Objective Limit: Alberta Environment: 8-hr 5 ppm

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	0.5	ppm	23-Mar	9:00	10:00		

Percentile	99	95	75	50	25	5	1
	0.4	0.3	0.2	0.2	0.2	0.1	0.1



### Status Flag Characters

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

Day	Mountain Standard Time																							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-06	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30
2-Mar-06	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
3-Mar-06	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
4-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
5-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.27
6-Mar-06	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.42
7-Mar-06	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	0.2	0.40
8-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31
9-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
10-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
11-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
12-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
13-Mar-06	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.35
14-Mar-06	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34
15-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
16-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.24
17-Mar-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.27
18-Mar-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.21
19-Mar-06	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
20-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
21-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
22-Mar-06	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	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.25
23-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.50
24-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.37
25-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30
26-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
27-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.25
28-Mar-06	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	N	N	N	N	N	N	N	N	N	N	N	0.3	0.3	0.44
29-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
30-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
31-Mar-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.27
Hourly Max	0.40	0.37	0.34	0.36	0.38	0.38	0.38	0.42	0.46	0.50	0.47	0.48	0.47	0.45	0.41	0.30	0.27	0.29	0.33	0.35	0.39	0.40	0.41	0.42			



# PAS - Crescent Heights - Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

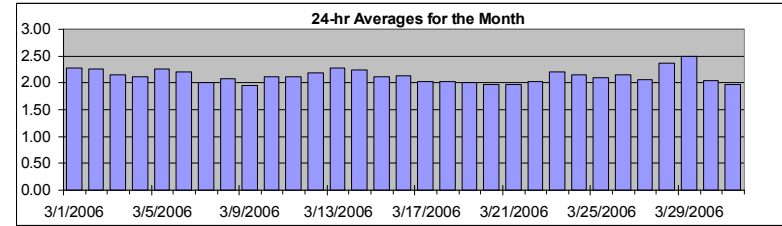
## HOURLY AVERAGE TABLE

## Total Hydrocarbons (THC)

Monitoring Dates: March 1, 2006 to April 1, 2006

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

Maximum 1-hr Average:	3.4	ppm	29-Mar	13:00 14:00
Maximum 24-hr Value:	2.5	ppm	29-Mar	



AIC Time:	36 hrs	Operational Time:	704 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.8	2.5	2.2	2.1	2.0	1.9	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-06	2.1	A	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.3	2.3	2.3	2.3	2.2		2.28	2.44	
2-Mar-06	A	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	A		2.25	2.51	
3-Mar-06	2.2	2.4	2.3	2.2	2.3	2.2	2.3	2.2	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.2	A	2.1		2.15	2.35	
4-Mar-06	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	A	2.1	2.0		2.11	2.26	
5-Mar-06	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.5	2.6	2.6	2.4	2.2	2.2	2.3	2.3	2.1	2.1	2.2	2.1	2.1	A	2.4	2.4	2.5		2.27	2.63	
6-Mar-06	3.3	2.6	2.3	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	2.1	2.2	2.4	A	2.5	2.3	2.3	2.2		2.21	3.33	
7-Mar-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	2.1	2.0	2.1	2.1	2.1		2.01	2.10	
8-Mar-06	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	1.9		2.07	2.21	
9-Mar-06	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0		1.95	2.03	
10-Mar-06	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	A	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2		2.11	2.19	
11-Mar-06	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1		2.12	2.27	
12-Mar-06	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	A	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.3		2.18	2.32	
13-Mar-06	2.4	2.4	2.3	2.3	2.3	2.5	2.8	2.8	2.3	2.2	2.1	2.1	A	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.3	2.3	2.3	2.3		2.28	2.82	
14-Mar-06	2.5	2.3	2.3	2.5	2.5	2.7	2.6	2.8	2.7	2.3	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1		2.24	2.78	
15-Mar-06	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.2	2.1	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2		2.11	2.38	
16-Mar-06	2.3	2.3	2.4	2.5	2.5	2.4	2.2	2.3	2.2	A	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1		2.13	2.53	
17-Mar-06	2.0	2.0	2.1	2.2	2.1	2.2	2.3	2.4	A	2.2	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	1.9	2.0		2.02	2.37
18-Mar-06	2.1	2.0	2.0	2.1	2.1	2.3	2.3	A	2.2	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0		2.03	2.34	
19-Mar-06	2.0	2.0	2.0	2.0	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	2.0		2.00	2.05	
20-Mar-06	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0		1.97	2.02	
21-Mar-06	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.2		1.97	2.16
22-Mar-06	2.0	2.1	2.1	A	2.2	2.2	2.3	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1		2.03	2.28	
23-Mar-06	2.1	2.2	A	2.4	2.6	2.5	2.5	2.7	2.5	2.3	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.4	2.3	2.5		2.20	2.67
24-Mar-06	2.5	A	2.2	2.3	2.5	2.4	2.4	2.6	2.5	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1		2.14	2.64	
25-Mar-06	A	2.1	2.1	2.1	2.2	2.6	2.3	2.6	2.4	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.2	A		2.10	2.58	
26-Mar-06	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.0	A	2.1		2.14	2.22	
27-Mar-06	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	A	2.2	2.3		2.05	2.26	
28-Mar-06	2.4	2.5	2.9	2.8	2.8	2.7	2.4	2.7	2.3	2.0	2.0	2.1	C	C	C	C	A	2.1	A	2.2	2.3	2.3	2.2		2.37	2.87		
29-Mar-06	2.2	2.2	A	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.1	A	A	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3		2.49	3.35	
30-Mar-06	2.2	2.2	A	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0		2.04	2.23	
31-Mar-06	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0		1.96	2.02	
Hourly Avg	2.19	2.16	2.17	2.18	2.22	2.25	2.25	2.29	2.20	2.13	2.09	2.05	2.02	2.05	2.03	2.02	2.03	2.04	2.07	2.08	2.10	2.14	2.12	2.14				
Hourly Max	3.33	2.62	2.87	2.79	2.78	2.68	2.82	2.78	2.68	2.63	2.41	2.28	2.21	3.35	3.24	3.12	2.98	2.85	2.77	2.71	2.60	2.54	2.39	2.52				

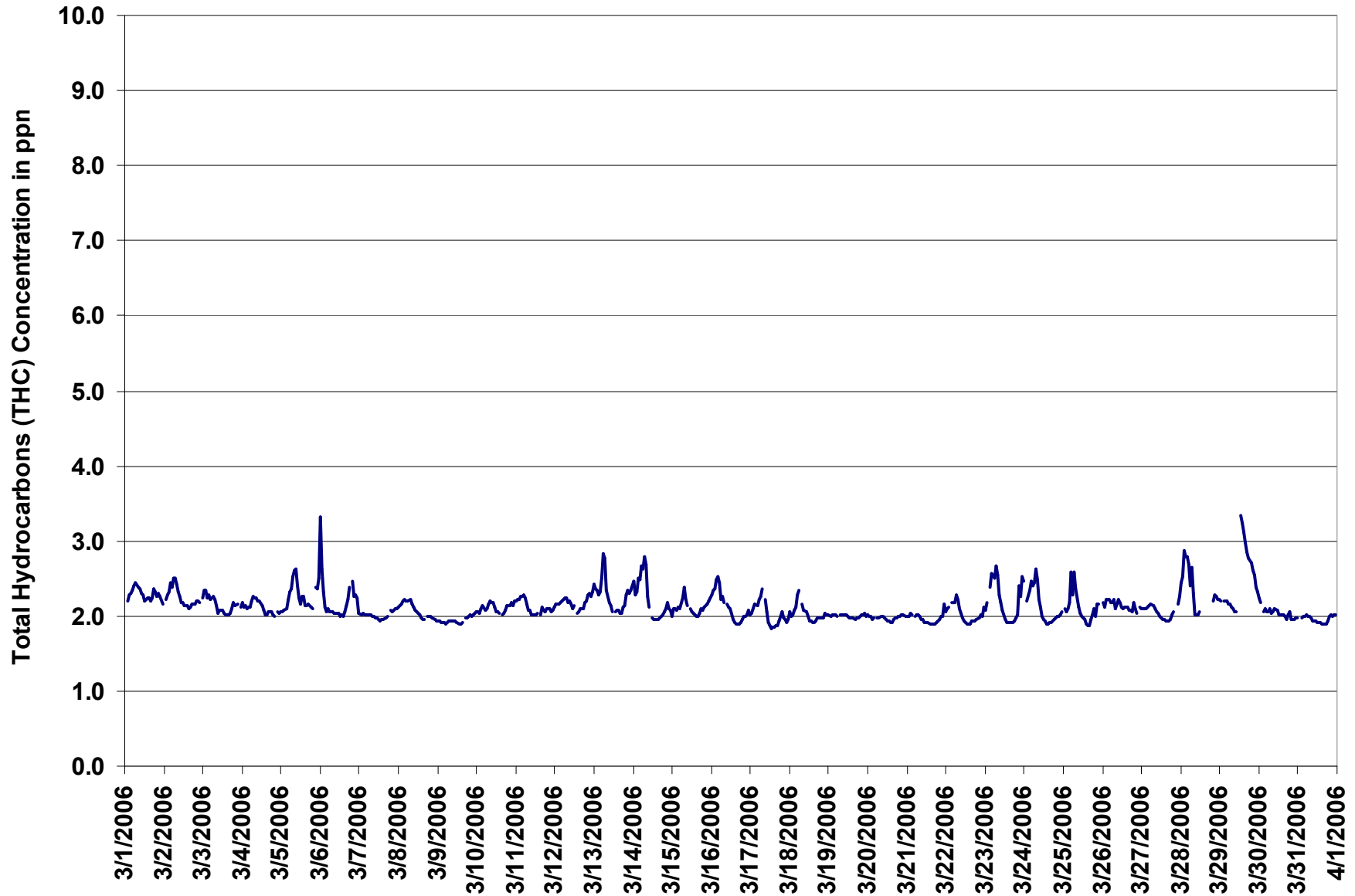


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

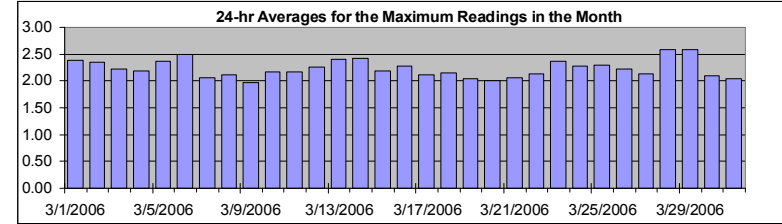
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Total Hydrocarbons (THC)**

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Value:	5.4	ppm	6-Mar	0:00 1:00
Maximum 24-hr Value:	2.6	ppm	28-Mar	



AIC Time:	36 hrs	Operational Time:	704 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.3	2.8	2.3	2.1	2.0	1.9	1.9	2.2 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**

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-06	2.2	A	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.3	2.3	2.3	2.5	2.3	2.6	2.3	2.4	2.6	2.4	2.4	2.5	2.3	2.2	2.38	2.59
2-Mar-06	A	2.3	2.4	2.4	2.5	2.4	2.8	2.7	2.5	2.5	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	A	2.36	2.82
3-Mar-06	2.3	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.3	2.2	2.2	A	2.2	2.21	2.46
4-Mar-06	2.2	2.2	2.2	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.2	2.2	2.1	2.0	2.1	2.3	2.1	2.1	2.1	A	2.1	2.1	2.19	2.34
5-Mar-06	2.1	2.1	2.1	2.2	2.3	2.5	2.4	2.7	2.8	2.7	2.7	2.3	2.2	2.3	2.4	2.2	2.2	2.2	2.2	A	A	2.6	2.5	2.7	2.37	2.75
6-Mar-06	5.4	3.4	2.6	2.3	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.5	2.5	2.7	A	2.7	2.5	2.4	2.6	2.49	5.42
7-Mar-06	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	A	2.1	2.1	2.1	2.1	2.1	2.05	2.14
8-Mar-06	2.1	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.12	2.30
9-Mar-06	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	1.98	2.07
10-Mar-06	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.2	A	2.0	2.1	2.2	2.3	2.3	2.2	2.2	2.2	2.18	2.29
11-Mar-06	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.18	2.32
12-Mar-06	2.2	2.2	2.3	2.2	2.2	2.4	2.3	2.3	2.2	2.4	2.2	2.1	2.2	A	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.4	2.3	2.4	2.25	2.43
13-Mar-06	2.5	2.4	2.4	2.4	2.5	2.7	3.6	3.3	2.8	2.2	2.2	2.1	A	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.4	2.41	3.57
14-Mar-06	3.3	2.4	2.5	2.8	2.6	3.0	2.8	3.0	3.0	2.4	2.2	A	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.3	2.3	2.3	2.3	2.41	3.25
15-Mar-06	2.0	2.2	2.1	2.1	2.1	2.1	2.3	2.5	2.5	2.2	A	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.1	2.3	2.3	2.4	2.4	2.19	2.52
16-Mar-06	2.5	2.6	2.6	2.6	2.7	3.1	2.6	2.5	2.3	A	2.2	2.1	2.1	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.3	2.27	3.05
17-Mar-06	2.1	2.2	2.2	2.3	2.2	2.3	2.4	2.5	A	2.4	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.1	2.0	2.0	2.1	2.11	2.52
18-Mar-06	2.3	2.1	2.1	2.3	2.2	3.0	2.6	A	2.4	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.15	3.03
19-Mar-06	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.03	2.13
20-Mar-06	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.01	2.07
21-Mar-06	2.0	2.0	2.2	2.1	A	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	3.2	2.06	3.17
22-Mar-06	2.2	2.6	2.2	A	2.6	2.3	2.4	2.4	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.13	2.57
23-Mar-06	2.2	2.3	A	2.5	2.9	3.2	2.6	2.8	2.8	2.4	2.2	2.2	2.1	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.3	2.7	2.5	2.8	2.36	3.16
24-Mar-06	2.6	A	2.4	2.8	2.7	2.6	2.9	2.8	2.7	2.4	2.3	2.1	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.2	2.28	2.86
25-Mar-06	A	2.3	2.2	2.2	2.2	4.5	2.4	2.9	2.8	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	2.1	2.1	2.2	2.1	2.3	2.3	A	2.30	4.53
26-Mar-06	2.3	2.2	2.5	2.4	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.2	A	2.22	2.46
27-Mar-06	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	2.2	2.9	2.12	2.89
28-Mar-06	2.5	2.7	3.3	3.1	3.1	3.0	2.6	3.2	2.7	2.1	2.1	2.1	2.1	C	C	C	C	A	2.2	A	2.3	2.5	2.4	2.7	2.59	3.28
29-Mar-06	2.3	2.5	A	2.4	2.3	2.2	2.2	2.2	2.2	2.4	2.2	A	A	3.4	3.3	3.2	3.0	2.9	2.8	2.7	2.6	2.6	2.4	2.4	2.58	3.39
30-Mar-06	2.3	2.4	A	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.0	2.0	2.0	2.0	2.10	2.36
31-Mar-06	2.0	A	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.1	2.1	2.2	2.5	2.05	2.52
Hourly Avg	2.37	2.30	2.28	2.29	2.33	2.46	2.38	2.43	2.34	2.21	2.16	2.10	2.06	2.10	2.08	2.07	2.08	2.10	2.15	2.16	2.18	2.24	2.21	2.32		
Hourly Max	5.42	3.43	3.28	3.08	3.13	4.53	3.57	3.33	3.00	2.71	2.66	2.31	2.29	3.39	3.29	3.16	3.02	2.89	2.82	2.74	2.71	2.66	2.51	3.17		



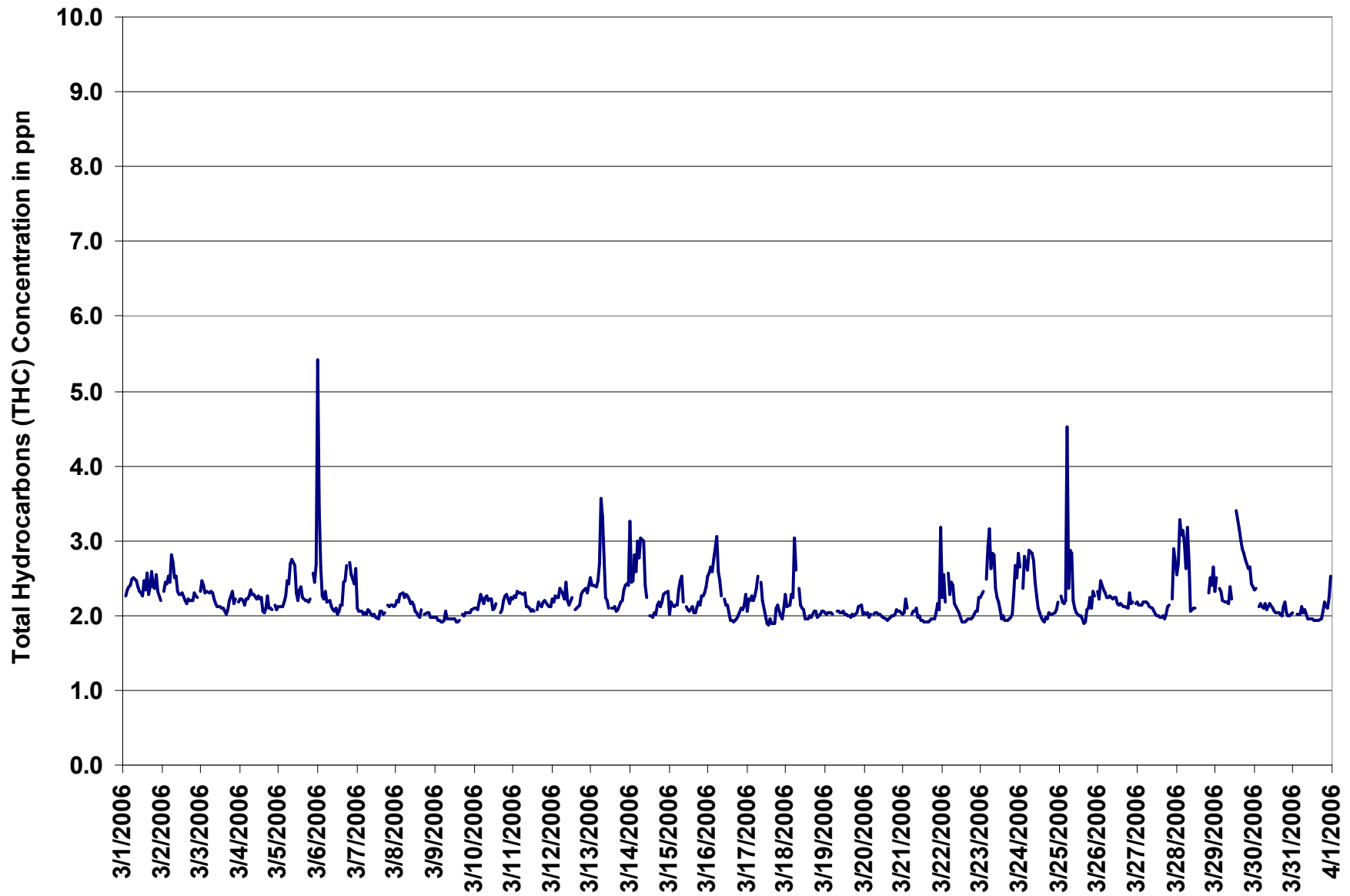
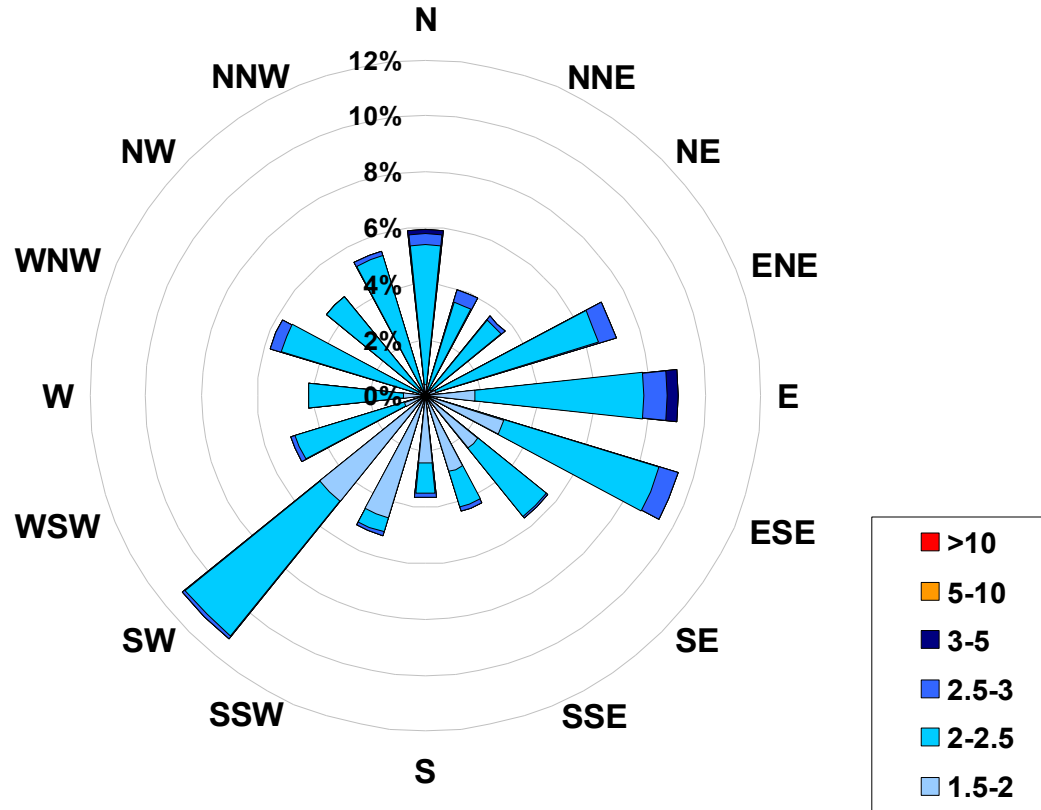


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)  
Located at the Crescent Heights Site for March 2006**



**Calms: 1%**

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	< 2		188
2	to 2.5		476
2.5	to 3		36
3	to 5		4
5	to 10		0
	> 10		0
Total Non-Zero Values			704



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

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

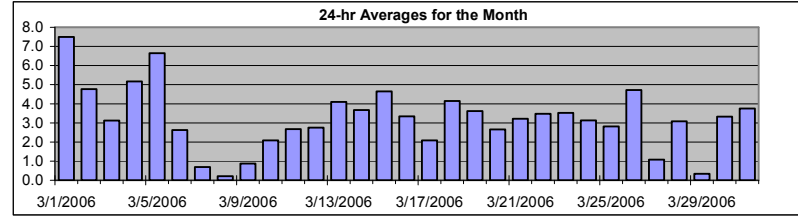
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: March 1, 2006 to April 1, 2006

Draft Objective Limit: Alberta Environment: 1-hr - µg/m<sup>3</sup> 24-hr 30 µg/m<sup>3</sup>  
 Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	34.4 µg/m <sup>3</sup> 5-Mar 6:00 7:00
Maximum 24-hr Value:	7.5 µg/m <sup>3</sup> 1-Mar

AIC Time:	0 hrs	Operational Time:	738 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	9.3	7.2	4.5	3.1	1.7	0.0	0.0	3.2 3.1 µg/m <sup>3</sup>	2.6 µg/m <sup>3</sup>



#### 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		
1-Mar-06	8	7	6	6	7	8	8	7	9	9	9	9	9	6	7	8	8	7	8	7	8	8	7	6	7.5	9.3
2-Mar-06	5	5	5	6	7	6	7	7	8	5	5	5	4	3	5	5	4	4	5	5	3	2	2	1	4.8	7.8
3-Mar-06	2	2	2	3	3	4	3	3	4	3	3	3	2	2	2	3	3	4	2	5	4	4	3	4	3.1	5.1
4-Mar-06	10	8	4	2	3	4	4	5	5	5	4	5	6	4	6	7	7	8	7	5	4	4	3	3	5.2	9.8
5-Mar-06	3	3	3	2	5	6	34	8	12	10	9	5	5	7	7	6	4	3	4	3	4	3	4	3	6.6	34.4
6-Mar-06	2	3	2	2	2	2	2	2	2	1	1	2	2	1	2	3	2	4	4	7	7	3	3	3	2.6	7.1
7-Mar-06	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	3	2	1	1	1	1	1	0	0.7	2.5
8-Mar-06	0	1	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.8
9-Mar-06	0	0	0	0	0	0	2	1	0	0	0	0	0	2	1	1	1	3	1	2	2	1	2	2	0.9	2.9
10-Mar-06	2	2	0	1	2	0	2	2	2	2	2	3	1	1	2	3	2	3	3	3	3	4	4	3	2.1	4.0
11-Mar-06	3	4	3	4	6	5	4	3	1	1	1	1	1	1	1	2	5	4	3	3	2	2	2	2	2.7	6.2
12-Mar-06	2	2	1	1	1	1	1	5	5	4	3	3	2	1	2	2	2	3	5	4	5	4	4	2	2.8	5.2
13-Mar-06	2	3	2	1	3	3	3	6	6	3	4	4	5	5	5	4	4	4	5	5	5	6	6	4	4.1	6.5
14-Mar-06	3	3	5	4	5	4	5	7	6	4	5	5	3	1	1	3	3	2	4	3	4	3	3	2	3.7	6.6
15-Mar-06	3	3	4	3	4	4	4	6	5	5	5	4	5	5	5	7	5	5	4	4	5	7	4	4	4.6	6.8
16-Mar-06	4	5	5	6	7	4	3	7	7	7	6	6	5	0	0	0	1	2	2	1	2	1	1	0	3.3	6.9
17-Mar-06	0	1	2	1	1	2	2	4	6	3	1	0	0	0	1	3	4	5	3	2	2	2	2	2	2.1	5.9
18-Mar-06	2	3	2	2	3	3	4	3	4	5	3	3	3	3	4	4	5	5	5	6	6	7	7	7	4.1	7.4
19-Mar-06	5	5	7	6	4	4	3	4	3	4	4	4	3	2	2	1	2	2	3	3	4	5	4	4	3.6	6.6
20-Mar-06	1	2	2	2	3	3	2	2	2	3	4	2	1	2	2	3	3	5	5	5	4	3	3	2	2.7	5.2
21-Mar-06	4	3	2	1	2	3	2	4	4	4	4	3	3	4	4	5	3	4	3	4	2	4	3	2	3.2	4.9
22-Mar-06	2	2	1	2	1	1	2	4	5	5	4	3	4	4	4	5	5	4	4	4	5	4	4	4	3.5	5.2
23-Mar-06	3	3	2	2	2	4	3	7	9	5	5	4	2	2	2	2	2	3	3	4	5	2	4	3	3.5	9.2
24-Mar-06	2	2	1	2	2	2	3	5	8	5	3	2	2	2	2	3	4	5	4	4	3	3	3	3	3.1	7.5
25-Mar-06	2	2	2	1	2	3	6	6	2	2	2	1	3	3	1	2	3	4	4	6	4	4	3	2	2.8	6.0
26-Mar-06	1	2	2	3	4	5	2	2	4	5	6	6	7	10	11	8	5	5	4	8	5	1	2	2	4.7	10.8
27-Mar-06	1	0	0	1	1	1	2	3	2	1	0	0	0	0	0	0	0	0	1	4	2	2	3	3	1.1	3.9
28-Mar-06	2	1	6	4	4	4	4	9	7	2	0	3	0	0	2	2	1	5	5	5	3	1	3	0	3.1	8.9
29-Mar-06	0	0	0	0	0	1	1	2	2	C	C	C	C	C	0	D	0	0	0	0	0	0	0	0	0.3	1.7
30-Mar-06	0	0	2	2	3	2	3	3	3	4	4	4	3	4	3	4	5	3	0	3	6	5	4	4	3.3	6.2
31-Mar-06	4	3	3	3	4	3	4	5	4	3	3	3	5	3	2	3	3	2	3	6	7	4	5	4	3.8	6.9
Hourly Avg	2.5	2.6	2.5	2.5	2.9	3.0	4.1	4.2	4.4	3.7	3.3	3.1	2.8	2.7	2.9	3.5	3.2	3.5	3.5	4.2	3.8	3.2	3.1	2.6		
Hourly Max	9.8	7.9	6.6	6.3	7.3	8.1	34.4	8.9	12.2	10.3	9.4	8.5	7.3	10.4	10.8	8.5	7.9	8.5	7.9	8.4	7.5	6.8	7.4	6.8		

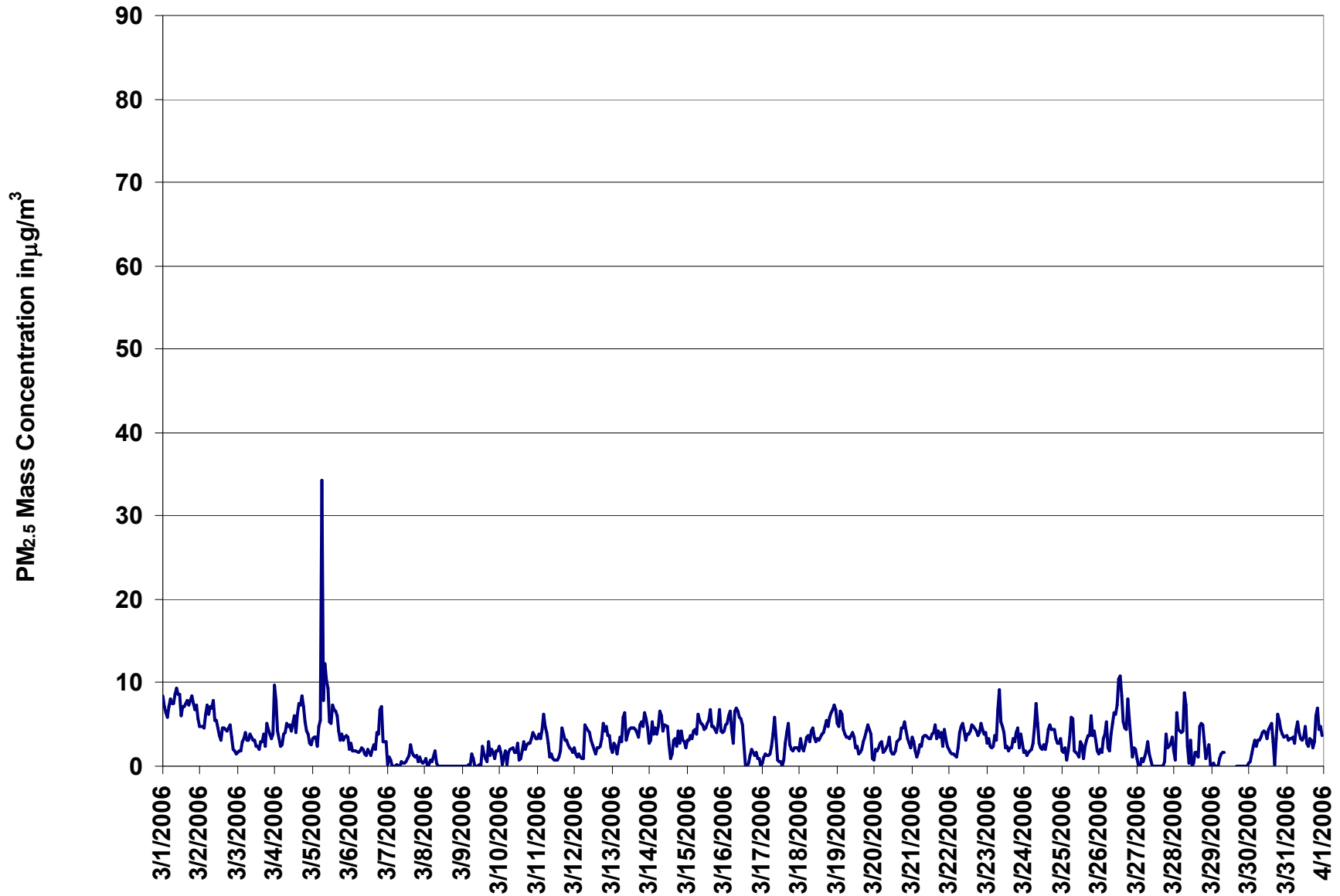


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

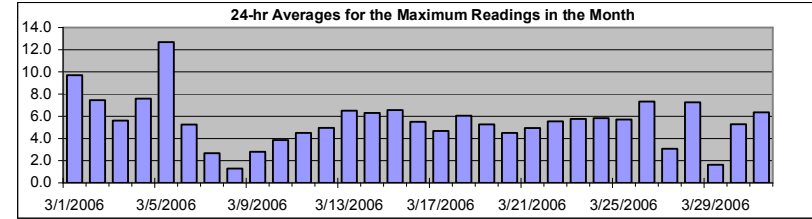
**Particulate Matter (PM<sub>2.5</sub>)**

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Average:	109.0	µg/m <sup>3</sup>	5-Mar	6:00 7:00
Maximum 24-hr Value:	12.7	µg/m <sup>3</sup>	5-Mar	

AIC Time:	0 hrs	Operational Time:	738 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	13.9	10.2	6.8	5.2	3.7	1.3	0.0	5.6 5.2 µg/m <sup>3</sup>	5.1 µg/m <sup>3</sup>



**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-06	11	10	8	7	9	10	9	10	10	12	10	11	9	9	9	10	11	9	9	11	11	8	10	9	9.7	11.5	
2-Mar-06	9	7	8	8	11	9	9	12	12	8	9	6	6	6	8	7	6	6	7	6	6	4	5	5	7.4	12.1	
3-Mar-06	5	5	6	5	6	7	6	6	6	7	5	5	4	4	4	6	5	6	5	7	7	5	6	8	5.6	7.9	
4-Mar-06	14	11	7	4	4	6	7	8	7	6	7	8	8	8	8	10	9	12	9	7	7	6	5	4	7.6	14.4	
5-Mar-06	7	5	6	4	9	8	109	13	18	16	15	10	10	10	8	9	9	7	5	6	5	5	5	6	12.7	109.0	
6-Mar-06	6	5	4	3	4	4	5	5	4	3	4	3	3	3	6	6	5	6	6	9	15	6	5	8	5.3	14.5	
7-Mar-06	2	3	3	2	1	1	4	2	1	2	2	2	3	3	5	4	4	3	4	4	3	4	2	2	2.7	5.0	
8-Mar-06	3	3	1	2	2	2	8	2	1	1	0	0	0	0	0	1	0	2	0	1	0	1	0	0	1.3	8.0	
9-Mar-06	1	0	0	1	2	2	3	3	3	1	2	4	4	5	3	2	5	5	3	4	3	2	4	3	2.8	5.2	
10-Mar-06	4	4	2	3	4	2	3	4	5	4	3	5	2	2	3	5	4	4	5	4	5	6	5	5	3.9	5.6	
11-Mar-06	5	5	5	6	8	6	6	6	5	3	3	3	2	3	3	5	6	5	5	4	4	4	5	4	4.5	8.1	
12-Mar-06	4	4	3	4	4	3	3	8	8	9	5	5	5	3	4	4	5	7	6	6	6	6	5	4	5.0	8.8	
13-Mar-06	4	5	5	4	4	7	5	11	11	5	6	8	7	7	7	6	5	6	7	8	7	9	8	7	6.5	11.4	
14-Mar-06	5	6	8	6	6	6	9	10	9	6	7	7	5	5	5	6	6	4	8	6	8	5	5	4	6.3	9.9	
15-Mar-06	5	4	5	5	6	6	6	7	9	7	7	6	7	8	8	9	7	7	5	5	8	10	6	6	6.6	10.0	
16-Mar-06	6	6	6	8	8	7	4	9	9	10	8	8	7	4	2	4	4	4	4	2	3	2	3	2	5.5	10.2	
17-Mar-06	1	3	3	3	2	3	5	6	10	8	4	4	4	5	2	7	8	8	6	3	3	4	4	4	4.7	10.2	
18-Mar-06	3	6	4	3	5	6	5	5	6	6	5	5	6	5	6	6	6	7	7	7	9	8	9	8	6.1	8.8	
19-Mar-06	7	7	8	7	7	5	5	5	5	5	5	5	4	4	4	4	4	5	5	6	6	6	6	2	5.3	7.6	
20-Mar-06	2	3	3	3	4	4	3	4	4	4	11	4	3	3	4	5	6	6	6	7	6	4	5	4	4.5	11.5	
21-Mar-06	5	4	4	2	3	4	4	5	7	5	5	4	5	6	7	7	6	7	5	5	4	8	5	4	4.9	7.7	
22-Mar-06	4	4	3	3	3	2	6	6	7	7	6	6	6	6	6	6	7	6	6	6	8	7	6	6	5.5	8.1	
23-Mar-06	5	6	5	4	5	5	4	10	12	8	7	7	6	4	5	4	5	5	5	6	6	4	8	5	5.8	11.7	
24-Mar-06	3	4	4	3	3	4	5	8	9	8	5	5	5	11	5	6	9	9	7	6	5	5	4	6	5.8	11.3	
25-Mar-06	5	4	4	2	4	6	8	9	5	5	4	3	5	4	4	5	5	6	6	9	8	9	10	5	5.7	10.0	
26-Mar-06	4	5	5	5	6	10	5	3	5	7	8	8	8	10	13	14	12	10	7	6	12	10	3	4	4	7.3	14.0
27-Mar-06	4	1	2	3	2	3	4	8	3	3	1	2	0	1	2	1	1	2	3	6	6	6	6	6	3.1	7.8	
28-Mar-06	3	3	11	7	9	8	13	15	12	6	3	11	7	4	5	5	6	14	8	8	6	3	5	2	7.3	15.1	
29-Mar-06	1	2	0	2	3	3	5	5	4	C	C	C	C	C	0	D	0	0	1	0	0	1	0	2	1.6	5.1	
30-Mar-06	2	2	3	4	5	4	4	5	5	6	7	7	5	7	8	7	5	3	6	8	8	7	5	5	5.3	8.3	
31-Mar-06	5	5	5	6	5	4	6	8	7	7	5	6	8	5	5	6	8	3	4	14	12	6	8	5	6.4	13.6	
Hourly Avg	4.7	4.6	4.5	4.2	5.0	5.0	9.0	6.9	7.0	6.2	5.6	5.5	5.2	5.2	5.1	5.8	5.6	5.7	5.4	6.3	6.3	5.1	5.3	4.7			
Hourly Max	14.4	11.3	10.5	8.3	10.9	9.8	109.0	15.1	17.9	15.7	15.3	10.8	9.9	13.4	14.0	12.0	10.6	13.5	9.5	13.6	14.5	10.0	10.0	8.7			

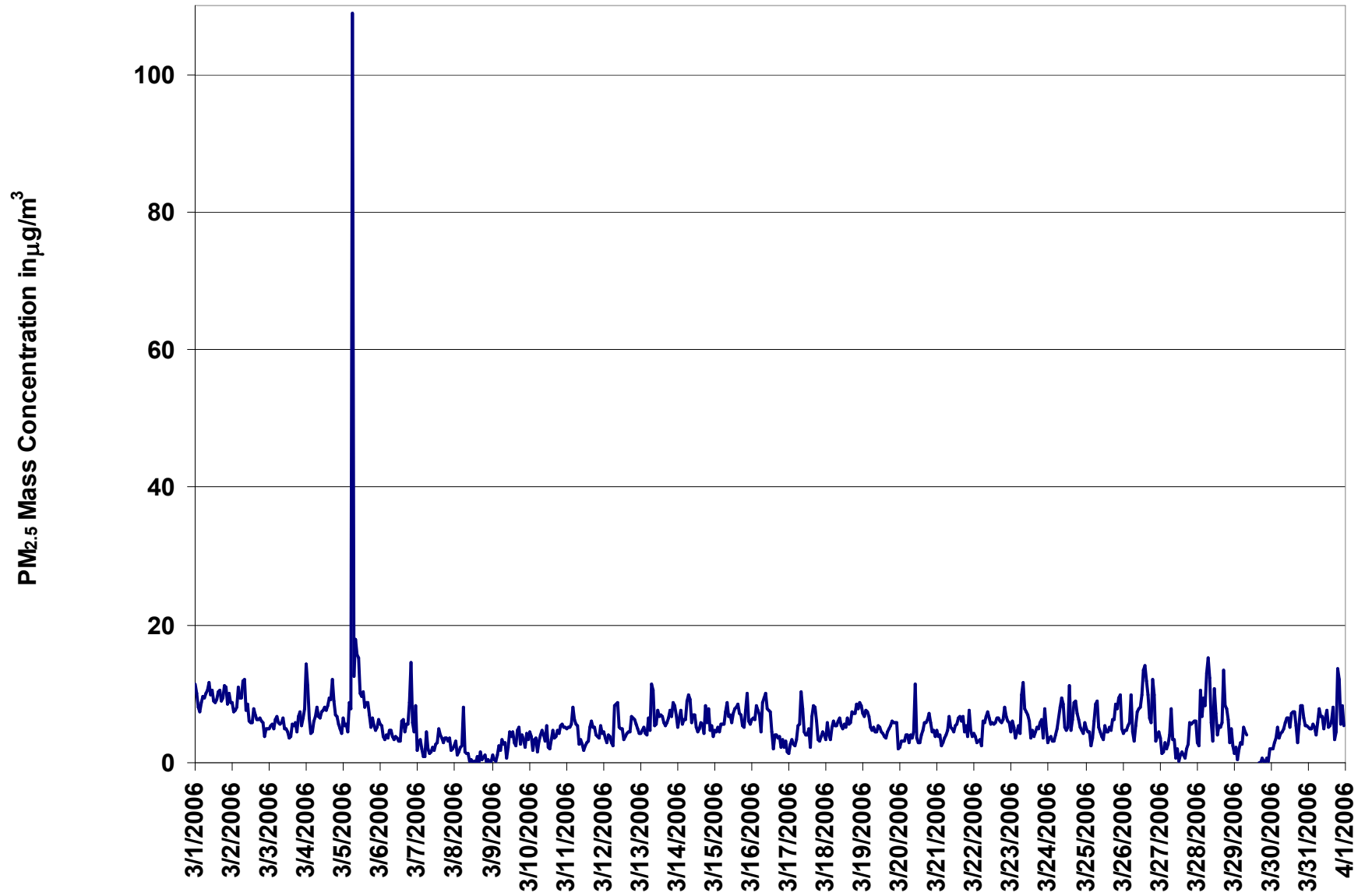
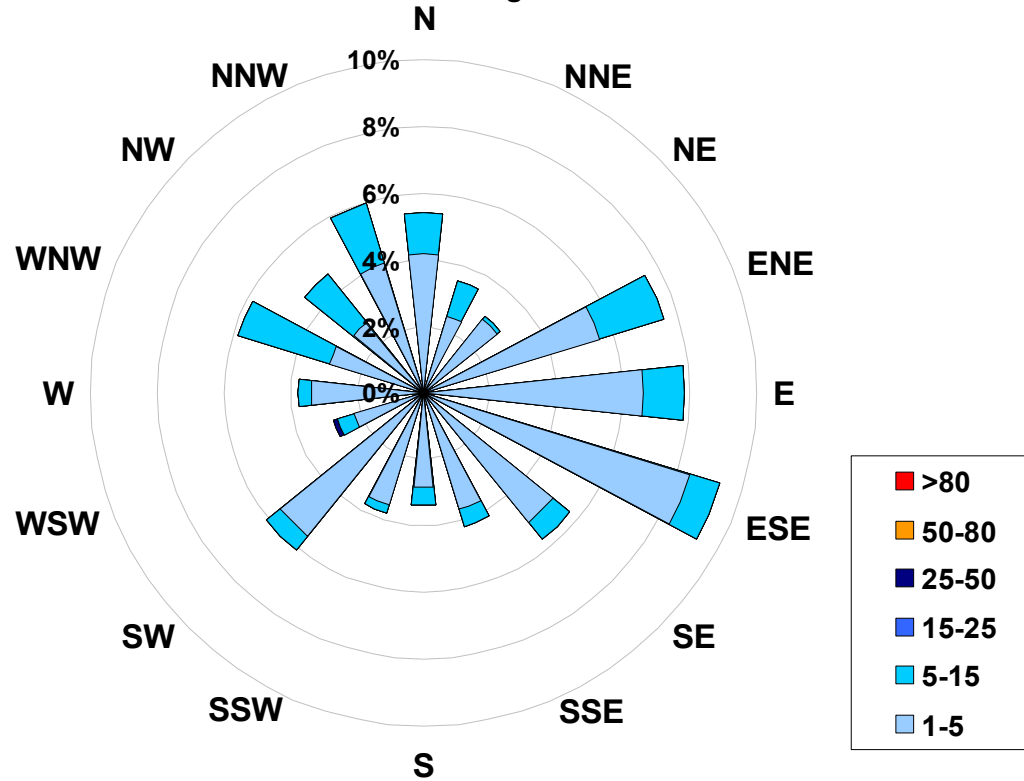


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 1%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	< 5		610
5	to 15		127
15	to 25		0
25	to 50		1
50	to 80		0
	> 80		0
Total Non-Zero Values			738



# PAS - Crescent Heights - Relative Humidity Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

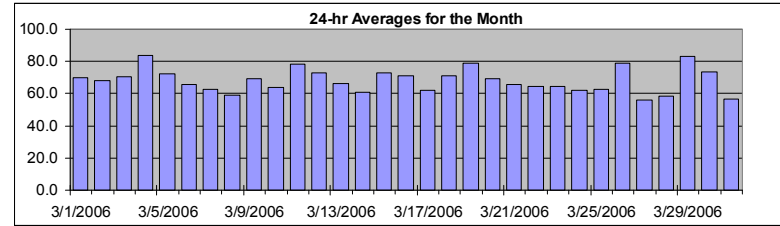
## HOURLY AVERAGE TABLE

## Relative Humidity (RH)

Monitoring Dates: March 1, 2006 to April 1, 2006

### Summary

Maximum 1-hr Average:	91.2 %	26-Mar	8:00 9:00
Maximum 24-hr Value:	84.0 %	4-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
	90.1	85.5	78.2	71.4	59.9	41.2	32.3	68.2 %	71.4 %

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00		
1-Mar-06	81	79	79	78	77	75	75	74	72	69	65	61	59	57	57	57	61	65	69	70	73	74	73	73		69.7	81.0	
2-Mar-06	73	74	77	78	78	78	77	76	71	68	63	59	57	55	57	55	60	63	65	67	66	69	73	76		68.2	78.0	
3-Mar-06	77	77	76	74	75	75	75	75	71	63	62	62	60	60	62	63	65	67	72	73	73	74	77	80		70.3	79.8	
4-Mar-06	85	85	86	86	85	84	84	85	85	84	84	85	85	85	85	85	85	84	84	84	83	82	80	79		84.0	85.5	
5-Mar-06	78	78	78	80	82	81	80	80	75	68	60	58	55	57	61	65	69	70	73	74	76	79	81	81		72.4	81.6	
6-Mar-06	78	74	68	61	62	66	66	64	63	61	58	57	55	52	54	58	64	68	72	74	76	71	73	76		65.4	77.5	
7-Mar-06	76	77	78	75	69	66	66	65	62	58	53	50	50	50	48	50	51	54	62	69	65	68	73	72		62.8	78.0	
8-Mar-06	70	72	70	70	72	72	71	67	61	57	53	50	45	43	42	45	47	52	56	60	62	61	58	58		58.9	72.1	
9-Mar-06	58	58	60	63	67	69	71	66	58	46	43	41	43	61	76	90	90	90	89	89	86	83	81	82		69.2	90.0	
10-Mar-06	81	77	71	70	70	68	63	59	55	53	49	47	48	50	50	53	59	66	69	74	74	76	77	79		64.1	81.1	
11-Mar-06	79	78	79	79	81	82	84	84	81	77	75	71	72	73	72	71	76	78	78	80	81	81	81	81		78.1	84.0	
12-Mar-06	81	81	81	81	81	81	81	79	73	68	63	62	67	62	65	61	61	64	70	75	76	78	78	78		72.8	81.5	
13-Mar-06	79	78	78	77	77	78	77	75	66	62	56	50	49	54	55	54	51	54	63	72	73	71	73	74		66.5	79.0	
14-Mar-06	73	72	71	74	77	77	76	72	63	57	47	45	38	34	36	41	48	49	61	63	66	70	70	71		60.6	77.4	
15-Mar-06	72	77	78	78	80	82	84	83	76	70	66	61	59	58	57	57	65	67	74	77	81	82	83	85		73.0	85.3	
16-Mar-06	86	87	88	87	87	85	84	82	85	83	76	65	57	49	46	42	43	48	60	66	70	74	76	74		70.8	87.7	
17-Mar-06	78	79	78	77	78	78	81	76	67	61	56	49	42	32	35	37	43	52	64	71	64	62	61	62		61.8	80.6	
18-Mar-06	68	74	76	75	77	81	82	80	75	67	62	59	53	58	63	66	67	70	72	74	75	76	75	75		70.8	81.7	
19-Mar-06	77	79	81	84	85	86	85	85	83	80	80	79	77	77	74	70	68	70	73	74	77	82	85	82		78.8	85.7	
20-Mar-06	82	82	83	80	76	77	75	71	67	63	61	58	56	54	55	61	60	64	66	72	81	76	74	68		69.2	82.7	
21-Mar-06	71	73	75	74	74	75	73	70	65	61	57	58	57	57	57	56	56	60	61	64	70	73	69	74		65.8	74.7	
22-Mar-06	74	74	77	79	80	80	81	74	66	59	54	49	44	43	43	46	51	55	64	69	71	73	71	74		64.6	81.5	
23-Mar-06	74	76	76	81	83	84	83	77	69	65	54	45	46	43	44	40	41	46	57	65	71	75	79	80		64.7	83.8	
24-Mar-06	80	79	80	83	84	85	84	81	75	70	60	46	39	36	35	35	38	46	52	58	61	58	61	64		62.1	84.5	
25-Mar-06	67	70	74	76	78	79	80	78	75	72	61	50	40	39	35	36	40	46	54	57	62	73	80	80		62.6	79.8	
26-Mar-06	82	82	83	85	86	88	89	91	91	90	88	84	78	74	65	66	61	60	64	72	74	77	80	79		78.7	91.2	
27-Mar-06	80	83	76	69	70	72	73	68	62	56	49	43	39	33	32	30	31	33	39	50	60	65	67	67		56.1	82.6	
28-Mar-06	70	72	77	78	82	80	80	78	70	63	49	43	39	32	29	30	29	33	45	54	63	69	73	72		58.7	81.8	
29-Mar-06	76	77	80	80	82	82	83	82	79	76	79	78	77	80	84	85	87	88	89	90	91	91	90	89		83.1	90.7	
30-Mar-06	90	90	89	89	90	89	89	88	86	85	78	74	64	62	60	58	56	48	50	56	67	69	70	70		73.7	90.2	
31-Mar-06	71	72	73	75	76	80	77	70	62	50	45	44	44	39	38	37	38	37	40	47	57	61	63	65		56.7	79.6	
Hourly Avg	76.4	77.0	77.3	77.3	78.0	78.5	78.3	76.0	71.4	66.4	61.4	57.5	54.7	53.5	54.0	54.7	56.7	59.5	64.8	69.0	71.8	73.3	74.4	74.9				
Hourly Max	90.0	90.2	89.4	88.8	89.5	89.2	89.1	90.7	91.2	90.4	88.3	84.4	85.1	84.7	84.8	90.0	89.9	89.8	89.4	90.1	90.7	90.5	90.4	89.4				



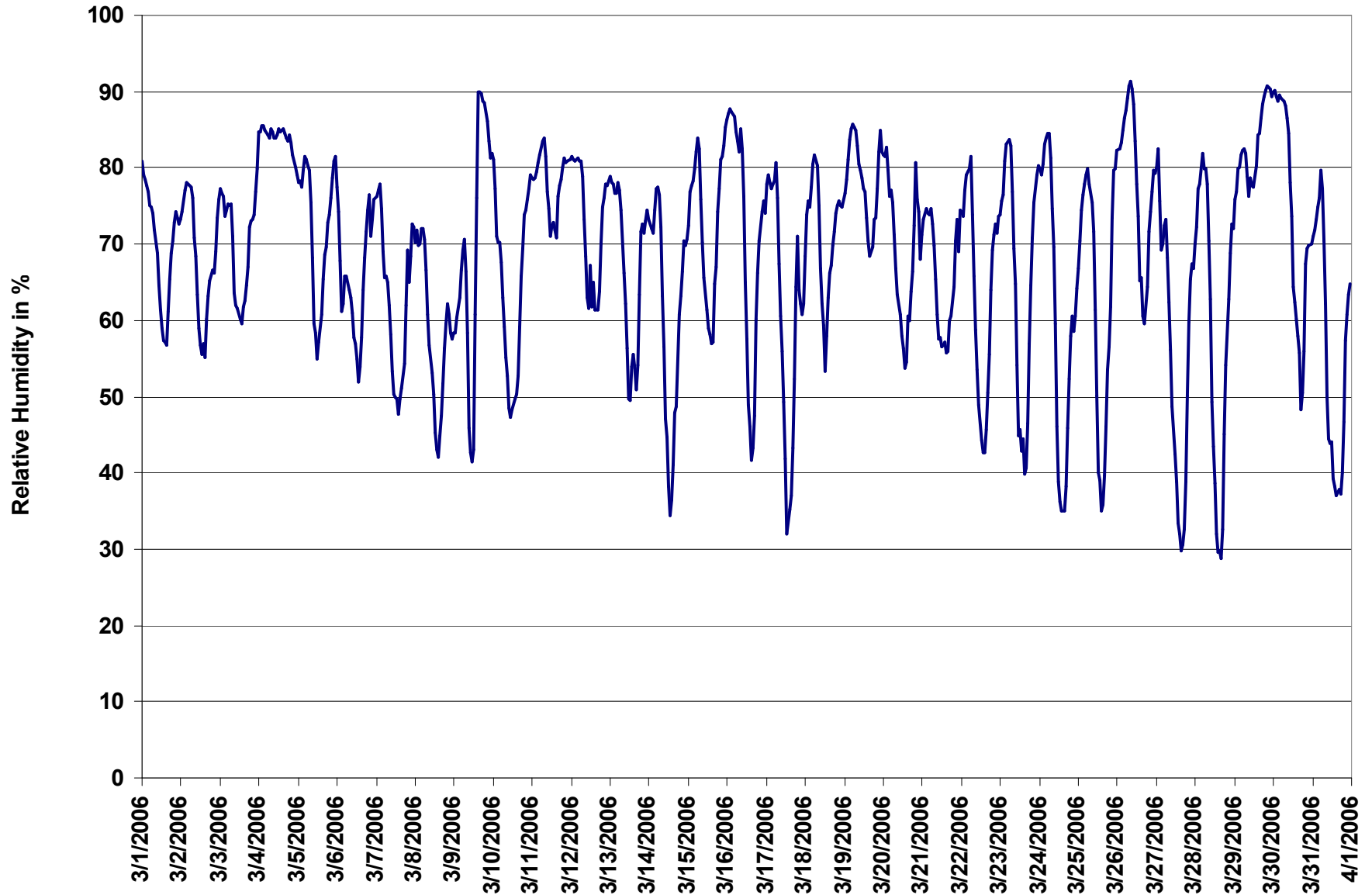


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



# PAS - Crescent Heights Temperature Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

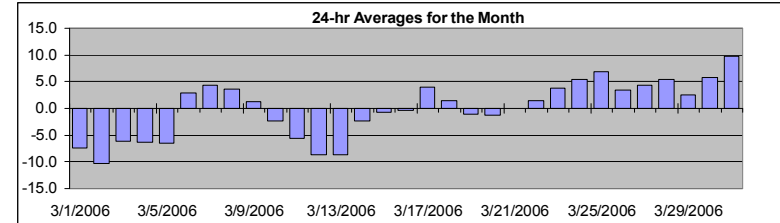
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: March 1, 2006 to April 1, 2006

### Summary

Maximum 1-hr Average:	16.0 °C	31-Mar	15:00 16:00
Maximum 24-hr Value:	9.8 °C	31-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
	14.2	11.2	4.0	-0.1	-4.0	-10.5	-14.8	0.0 °C	-0.1 °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																								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-06	-7	-7	-8	-8	-8	-8	-9	-10	-9	-8	-7	-6	-5	-5	-5	-4	-5	-6	-8	-8	-9	-10	-10	-9	-7.5	-4.3	
2-Mar-06	-10	-11	-13	-14	-14	-15	-15	-15	-14	-12	-9	-8	-8	-7	-6	-6	-7	-8	-8	-8	-8	-9	-11	-12	-10.3	-6.3	
3-Mar-06	-12	-12	-12	-11	-10	-10	-9	-9	-7	-5	-5	-5	-4	-3	-3	-2	-2	-3	-4	-3	-4	-4	-4	-4	-6.1	-2.3	
4-Mar-06	-4	-4	-5	-5	-5	-6	-6	-7	-8	-8	-7	-6	-5	-5	-5	-5	-6	-6	-7	-8	-8	-8	-9	-9	-6.3	-4.2	
5-Mar-06	-9	-9	-9	-11	-12	-13	-14	-14	-10	-8	-4	-4	-2	-2	-2	-3	-2	-2	-3	-3	-4	-5	-5	-5	-6.5	-2.0	
6-Mar-06	-5	-5	-3	0	0	0	0	1	2	3	5	6	7	8	8	7	7	6	5	4	3	4	4	3	2.9	8.5	
7-Mar-06	2	2	2	2	2	3	2	2	3	4	6	7	8	9	9	9	9	7	5	3	2	1	1	1	4.3	9.0	
8-Mar-06	1	0	0	0	-1	-1	-1	0	2	4	5	6	7	8	9	9	8	7	5	3	3	3	3	3	3.5	8.8	
9-Mar-06	3	3	3	3	3	2	2	2	2	3	4	5	5	3	1	0	0	-1	-2	-2	-2	-2	-2	-2	1.3	4.7	
10-Mar-06	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	0	0	0	0	0	-1	-2	-3	-4	-4	-4	-4	-5	-2.3	0.4	
11-Mar-06	-5	-6	-6	-6	-5	-5	-5	-5	-5	-4	-4	-3	-3	-4	-4	-4	-5	-6	-7	-7	-8	-8	-8	-8	-5.6	-3.4	
12-Mar-06	-9	-9	-9	-9	-10	-11	-11	-11	-9	-7	-6	-6	-6	-6	-6	-5	-6	-7	-8	-9	-10	-12	-13	-14	-8.7	-4.9	
13-Mar-06	-14	-15	-16	-16	-16	-16	-15	-14	-11	-8	-5	-2	-2	-2	-2	-1	-1	-2	-5	-7	-8	-9	-10	-10	-8.7	-0.6	
14-Mar-06	-10	-10	-10	-10	-11	-11	-11	-9	-6	-2	2	4	6	6	5	4	3	3	1	0	0	-1	0	0	-2.4	5.7	
15-Mar-06	0	-1	-2	-2	-3	-4	-5	-5	-3	-1	0	2	3	3	4	4	3	2	0	-1	-2	-2	-3	-0.7	4.4		
16-Mar-06	-4	-5	-5	-5	-6	-6	-7	-7	-6	-3	-1	2	5	6	7	7	7	6	3	2	1	0	-1	-1	-0.4	7.0	
17-Mar-06	-1	-2	-1	-1	-2	-2	-3	-2	2	5	7	9	11	12	12	11	9	7	5	3	4	4	4	3	4.0	12.4	
18-Mar-06	2	0	0	-1	-1	-2	-2	-2	0	3	4	5	6	6	5	4	3	2	1	1	0	0	0	0	1.4	6.4	
19-Mar-06	0	-1	-1	-1	-1	-1	-1	-2	-1	-1	-1	0	0	0	0	0	-1	-1	-2	-2	-2	-3	-3	-3	-1.1	0.2	
20-Mar-06	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	0	1	1	2	1	0	0	0	-1	-1	-2	-1	-1	-1	-1.2	1.6	
21-Mar-06	-1	-2	-2	-2	-2	-2	-2	-1	0	0	1	2	2	2	2	4	3	2	1	0	-1	-2	-1	-2	0.0	3.7	
22-Mar-06	-2	-2	-3	-4	-4	-5	-5	-3	0	2	4	6	8	9	9	8	7	5	3	1	1	0	0	0	1.4	9.2	
23-Mar-06	-1	-1	-1	-2	-3	-3	-3	-1	2	4	7	10	10	11	10	12	12	10	7	5	3	2	1	0	3.9	11.9	
24-Mar-06	0	0	-1	-2	-2	-3	-3	-1	2	4	9	12	14	14	14	14	12	10	9	7	6	6	5	4	5.4	13.9	
25-Mar-06	4	3	2	1	1	0	0	1	3	4	7	11	14	15	15	14	13	12	10	9	9	7	5	5	6.9	14.9	
26-Mar-06	5	4	3	3	2	2	2	1	0	1	1	2	4	5	7	7	8	7	6	4	3	3	2	1	3.4	7.8	
27-Mar-06	1	0	0	0	0	-1	-1	1	3	5	7	8	9	10	10	11	10	10	8	5	3	2	1	1	4.3	10.6	
28-Mar-06	0	-1	-2	-2	-3	-2	-2	-1	2	5	8	10	12	13	13	13	13	13	11	10	8	7	6	5	5.5	13.2	
29-Mar-06	4	4	3	3	2	2	2	2	3	3	4	4	4	4	4	3	3	2	1	1	1	1	1	1	2.6	4.5	
30-Mar-06	1	1	1	1	1	1	1	1	2	2	4	6	8	10	11	12	13	13	11	10	8	8	7	7	5.8	13.1	
31-Mar-06	6	6	5	5	4	3	4	6	9	11	13	13	14	15	15	16	16	15	14	12	9	8	8	7	9.8	16.0	
Hourly Avg	-2.3	-2.7	-3.0	-3.3	-3.6	-3.9	-4.0	-3.4	-1.9	-0.2	1.6	3.0	4.0	4.4	4.5	4.5	3.9	3.0	1.5	0.5	-0.2	-0.8	-1.2	-1.5			
Hourly Max	6.0	5.9	5.4	4.9	4.5	3.3	4.0	6.2	8.7	11.4	13.3	13.3	13.9	14.9	15.0	16.0	15.7	15.2	13.8	11.8	9.1	8.4	7.6	7.0			

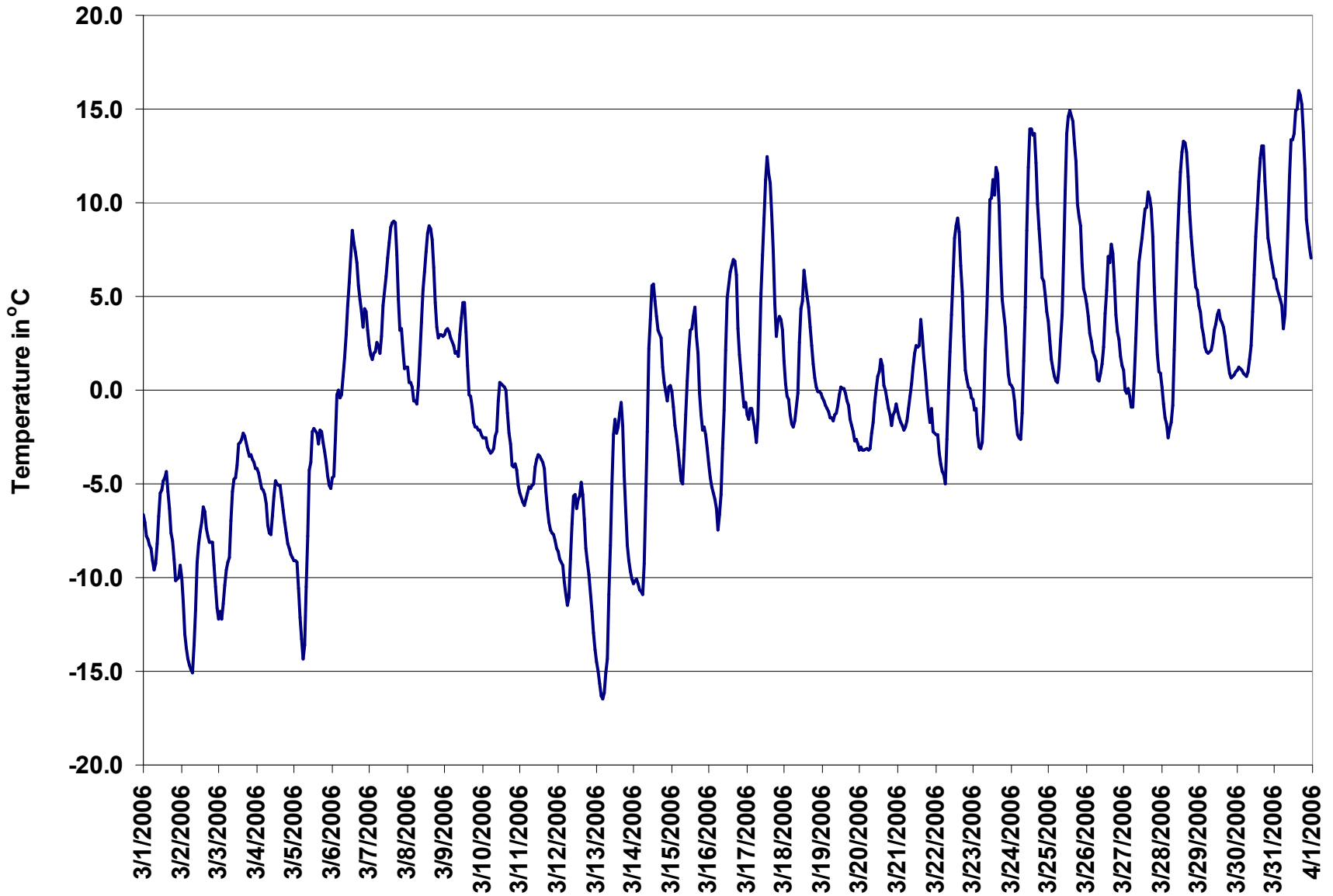


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



# PAS - Crescent Heights - Solar Radiation Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

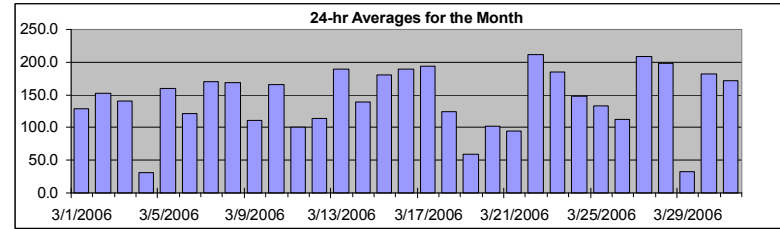
## HOURLY AVERAGE TABLE

## Solar Radiation (SR)

Monitoring Dates: March 1, 2006 to April 1, 2006

### Summary

Maximum 1-hr Average:	742.6	W/m <sup>2</sup>	30-Mar	12:00 13:00
Maximum 24-hr Value:	210.9	W/m <sup>2</sup>	22-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
	668.1	586.0	260.0	5.1	0.0	0.0	0.0	142.5 W/m <sup>2</sup>	5.1 W/m <sup>2</sup>

### 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-06	0	0	0	0	0	0	1	17	83	262	475	582	409	438	342	349	109	34	2	0	0	0	0	0	129.3	582.0	
2-Mar-06	0	0	0	0	0	0	1	46	199	344	462	557	566	560	407	334	137	35	2	0	0	0	0	0	152.0	565.7	
3-Mar-06	0	0	0	0	0	0	1	20	154	302	464	549	570	557	302	229	147	66	2	0	0	0	0	0	140.1	570.2	
4-Mar-06	0	0	0	0	0	0	1	6	29	73	119	112	101	103	78	75	43	18	2	0	0	0	0	0	31.7	119.5	
5-Mar-06	0	0	0	0	0	0	1	60	229	382	524	537	581	579	376	324	172	53	2	0	0	0	0	0	159.2	581.5	
6-Mar-06	0	0	0	0	0	0	1	33	132	278	443	423	526	497	263	175	99	28	2	0	0	0	0	0	120.8	526.0	
7-Mar-06	0	0	0	0	0	0	1	37	229	381	505	587	606	593	391	401	257	78	3	0	0	0	0	0	169.6	605.8	
8-Mar-06	0	0	0	0	0	0	2	75	235	388	513	596	614	600	395	364	198	56	3	0	0	0	0	0	168.3	613.8	
9-Mar-06	0	0	0	0	0	0	2	26	110	392	522	606	522	239	112	72	48	15	3	0	0	0	0	0	111.2	605.8	
10-Mar-06	0	0	0	0	0	0	4	104	231	400	514	627	648	570	407	302	117	42	5	0	0	0	0	0	165.4	648.0	
11-Mar-06	0	0	0	0	0	0	2	36	115	239	336	359	331	247	268	279	140	54	4	0	0	0	0	0	100.5	358.7	
12-Mar-06	0	0	0	0	0	0	4	69	194	356	348	284	250	285	257	368	246	82	5	0	0	0	0	0	114.6	367.8	
13-Mar-06	0	0	0	0	0	0	3	87	275	407	532	625	635	633	507	436	284	113	7	0	0	0	0	0	189.3	634.6	
14-Mar-06	0	0	0	0	0	0	7	73	276	438	539	444	499	430	245	175	119	71	6	0	0	0	0	0	138.4	538.8	
15-Mar-06	0	0	0	0	0	0	5	75	252	392	501	634	668	500	512	452	216	105	5	0	0	0	0	0	179.8	668.4	
16-Mar-06	0	0	0	0	0	0	7	106	171	341	540	633	655	638	543	473	295	126	9	0	0	0	0	0	189.0	654.6	
17-Mar-06	0	0	0	0	0	0	9	104	273	456	569	665	669	649	550	387	223	98	10	0	0	0	0	0	194.2	669.2	
18-Mar-06	0	0	0	0	0	0	8	73	206	409	533	505	589	263	205	92	58	32	5	0	0	0	0	0	124.0	588.6	
19-Mar-06	0	0	0	0	0	0	3	20	114	108	177	196	263	212	132	89	58	27	5	0	0	0	0	0	58.5	263.0	
20-Mar-06	0	0	0	0	0	0	8	79	113	206	346	381	439	381	253	104	65	52	6	0	0	0	0	0	101.4	438.6	
21-Mar-06	0	0	0	0	0	0	8	58	158	193	307	223	245	159	227	409	231	51	13	0	0	0	0	0	95.2	408.8	
22-Mar-06	0	0	0	0	0	0	21	152	312	466	587	670	693	668	578	464	311	126	13	0	0	0	0	0	210.9	693.2	
23-Mar-06	0	0	0	0	0	0	16	131	279	358	468	642	610	659	372	427	315	155	19	0	0	0	0	0	185.5	659.2	
24-Mar-06	0	0	0	0	0	0	20	123	238	408	447	404	552	448	345	343	151	56	15	0	0	0	0	0	147.9	552.3	
25-Mar-06	0	0	0	0	0	0	14	107	173	249	467	547	574	428	259	154	149	77	13	0	0	0	0	0	133.8	574.3	
26-Mar-06	0	0	0	0	0	0	2	16	55	158	131	304	412	413	423	298	326	147	29	0	0	0	0	0	113.0	423.0	
27-Mar-06	0	0	0	0	0	0	35	182	349	502	605	664	676	576	409	515	322	139	26	0	0	0	0	0	208.3	675.9	
28-Mar-06	0	0	0	0	0	0	23	89	256	427	621	694	578	630	617	487	282	57	12	0	0	0	0	0	198.8	693.9	
29-Mar-06	0	0	0	0	0	0	15	46	67	89	84	99	93	85	81	63	37	15	4	0	0	0	0	0	32.4	98.7	
30-Mar-06	0	0	0	0	0	0	9	50	120	155	374	713	743	567	600	505	349	164	22	0	0	0	0	0	182.1	742.6	
31-Mar-06	0	0	0	0	0	0	54	186	334	450	528	384	438	436	366	478	296	144	32	0	0	0	0	0	172.1	527.9	
Hourly Avg	0.0	0.0	0.0	0.0	0.0	0.0	9.3	73.8	192.2	322.9	438.1	491.8	508.2	453.0	349.1	310.4	187.1	74.7	9.2	0.0	0.0	0.0	0.0	0.0			
Hourly Max	0.0	0.0	0.0	0.0	0.0	0.0	54.2	186.5	349.0	501.8	621.3	712.9	742.6	667.7	617.4	514.7	349.5	164.4	32.0	0.4	0.4	0.5	0.4	0.4			

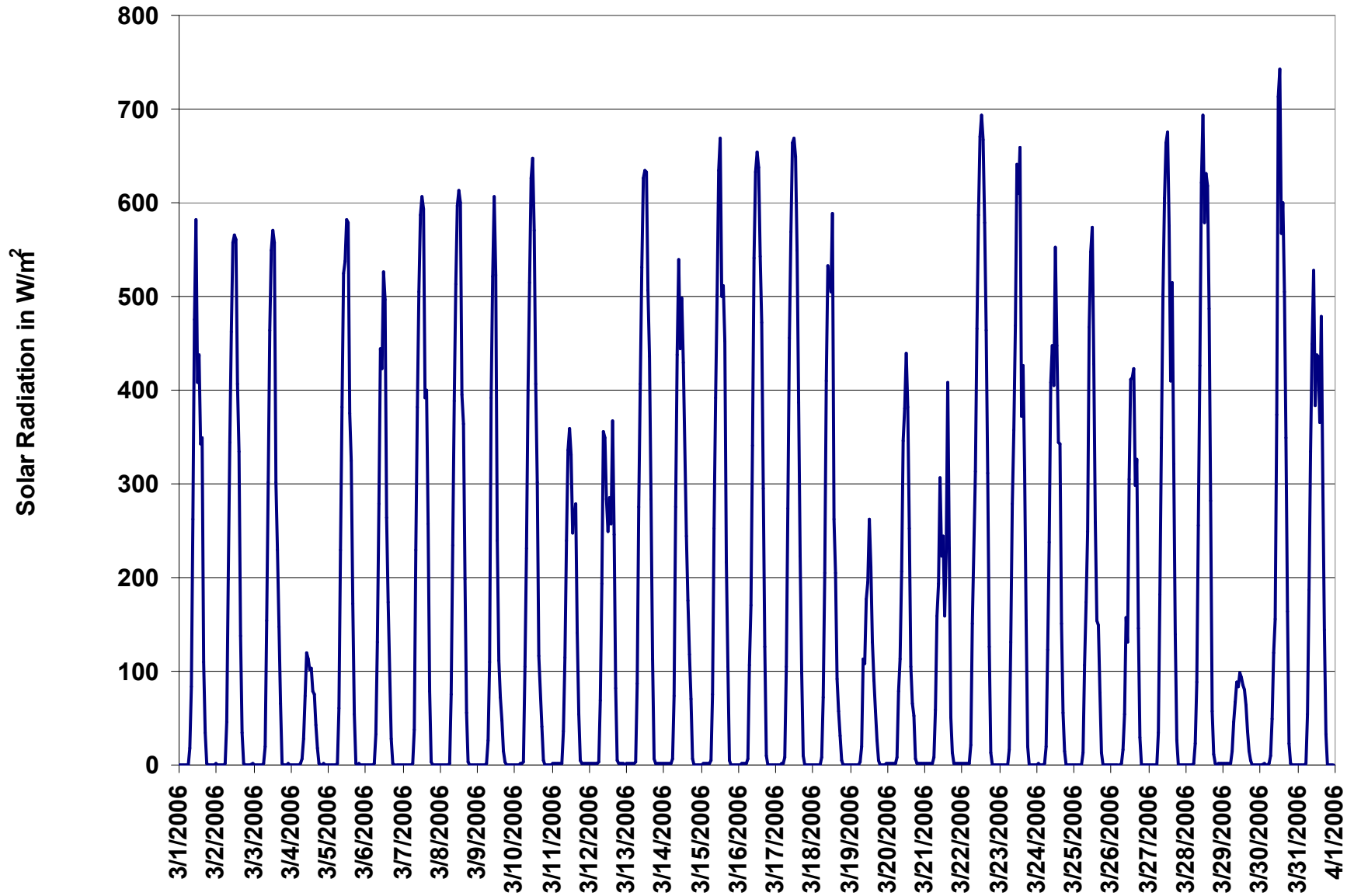


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



## PAS - Crescent Heights - Scalar Wind Speed Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

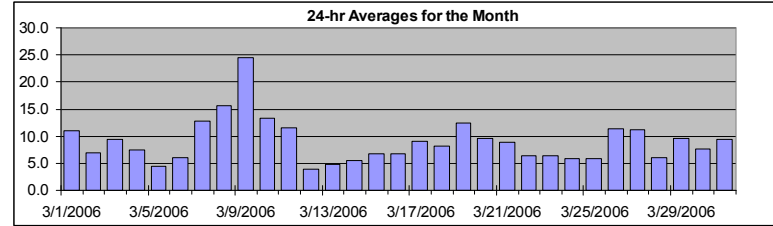
### Wind Speed (WSs)

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Average:	34.1	km/hr	9-Mar	10:00 11:00
Maximum 24-hr Value:	24.5	km/hr	9-Mar	

Calm Time:	6 hrs	1% calms	Operational Time:	738 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	27.3	19.9	12.0	7.7	4.9	2.2	1.4	9.0 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 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-06	8	11	13	15	15	15	13	12	13	12	15	15	14	13	11	10	11	9	8	7	6	4	4	7	10.9	15.0
2-Mar-06	8	8	9	3	3	3	4	3	4	4	3	5	7	7	7	7	8	11	12	12	11	10	8	7	6.9	12.5
3-Mar-06	6	3	5	6	4	5	6	6	6	13	15	16	14	15	15	17	16	12	11	8	8	3	7	11	9.5	16.9
4-Mar-06	8	9	11	6	6	3	4	5	7	10	7	6	6	6	8	9	10	10	10	11	9	8	7	6	7.5	11.4
5-Mar-06	5	3	4	5	4	2	2	1	1	2	3	3	3	4	5	9	8	9	11	10	7	2	2	2	4.5	11.0
6-Mar-06	2	5	6	6	7	11	6	9	12	12	14	8	7	3	3	4	3	3	3	2	5	5	2	6	6.0	14.1
7-Mar-06	7	5	14	14	13	16	17	16	14	17	18	17	18	15	17	14	12	10	7	7	10	9	9	10	12.7	17.7
8-Mar-06	5	3	3	4	4	6	7	8	12	12	18	22	26	26	24	21	17	18	21	22	22	24	27	25	15.7	27.3
9-Mar-06	27	27	30	25	26	24	26	22	21	31	34	33	29	20	27	20	22	23	20	21	21	19	20	18	24.5	34.1
10-Mar-06	20	20	18	15	14	14	11	14	11	11	12	13	18	18	17	14	14	11	9	8	9	9	9	12	13.4	20.2
11-Mar-06	13	13	11	9	10	11	8	11	10	11	13	13	13	13	15	17	18	15	14	11	8	8	7	6	11.5	17.9
12-Mar-06	4	5	5	5	4	5	3	4	4	4	3	2	4	4	4	7	7	6	4	2	2	3	4	3	4.0	7.0
13-Mar-06	3	4	4	3	2	2	1	3	3	6	5	4	7	11	9	8	5	4	7	7	6	6	3	3	4.8	10.8
14-Mar-06	2	1	calm	calm	calm	2	1	1	4	5	5	7	6	7	8	6	9	9	7	6	6	4	8	11	5.4	11.2
15-Mar-06	15	13	11	8	8	7	3	1	4	3	4	4	5	5	5	7	9	10	10	7	5	5	5	5	6.7	14.7
16-Mar-06	4	3	4	6	5	7	6	6	4	4	5	4	4	10	11	11	10	7	9	8	8	9	7	10	6.7	10.9
17-Mar-06	9	8	9	9	8	6	2	3	2	4	7	9	6	15	12	12	14	13	14	14	13	16	9	7	9.1	15.9
18-Mar-06	7	10	11	6	1	2	2	4	4	2	5	5	3	5	8	8	14	15	15	15	14	13	13	13	8.1	15.3
19-Mar-06	12	14	13	12	15	13	10	9	11	11	11	12	13	13	13	14	13	12	18	13	12	9	10	13	12.4	18.1
20-Mar-06	10	11	11	9	10	9	8	7	6	6	12	12	11	9	9	15	14	13	8	8	7	8	7	12	9.6	14.8
21-Mar-06	11	11	9	7	6	6	3	4	8	11	12	10	12	11	11	13	16	11	13	10	5	2	7	2	8.8	15.8
22-Mar-06	5	6	6	5	3	5	2	2	3	3	5	8	8	8	8	14	18	11	7	6	5	5	7	6	6.4	17.5
23-Mar-06	6	4	4	4	2	calm	3	calm	2	2	2	4	14	14	12	9	12	14	7	5	6	6	4	3	6.3	14.3
24-Mar-06	5	7	4	5	6	5	2	2	1	4	6	3	6	9	10	11	9	9	11	7	5	6	4	3	5.9	11.2
25-Mar-06	7	4	6	5	2	2	calm	3	6	4	6	4	5	4	7	9	7	6	7	7	9	8	9	8	5.8	9.1
26-Mar-06	6	9	8	7	10	12	12	13	15	14	14	19	20	18	18	18	17	12	6	4	5	5	4	6	11.4	20.5
27-Mar-06	11	9	7	7	7	8	9	11	13	13	16	18	21	22	20	22	19	15	8	6	4	2	1	2	11.2	22.3
28-Mar-06	3	2	3	3	2	4	3	4	5	5	7	8	7	5	6	7	7	6	10	12	12	9	8	6	6.0	12.5
29-Mar-06	8	6	8	6	8	9	11	8	8	9	7	10	9	12	12	13	13	10	11	10	10	13	13	10	9.7	12.9
30-Mar-06	9	9	8	8	8	7	6	6	5	5	6	8	6	6	5	5	5	6	5	6	10	12	18	14	7.7	18.1
31-Mar-06	8	10	6	7	9	4	9	8	10	16	17	20	16	11	13	14	14	11	8	5	4	3	4	1	9.4	19.5
1-hr Average	8.2	8.1	8.7	7.7	7.4	7.5	6.8	6.8	7.4	8.6	9.8	10.3	10.9	11.0	11.2	11.7	11.9	10.7	10.0	8.9	8.5	7.9	8.0	8.0		
Hourly Max	27.3	27.3	30.0	25.1	25.8	23.9	26.1	21.6	21.1	31.1	34.1	33.4	28.8	26.0	27.5	21.5	22.1	22.9	21.2	21.7	22.1	24.3	27.3	25.3		



## PAS - Crescent Heights - Vector Wind Speed Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

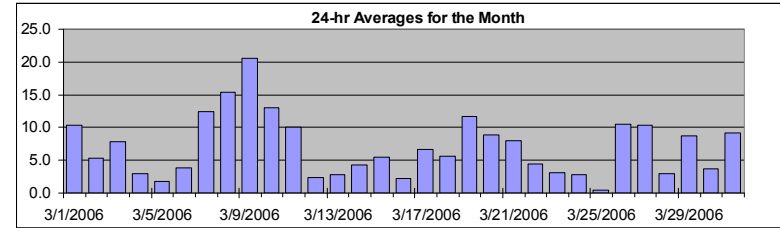
### HOURLY AVERAGE TABLE

### Wind Speed (WSv)

Monitoring Dates: March 1, 2006 to April 1, 2006

**Summary**

Maximum 1-hr Average:	33.9	km/hr	9-Mar	10:00 11:00
Maximum 24-hr Value:	20.6	km/hr	9-Mar	



Calm Time:	10 hrs	1% calms	Operational Time:	734 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	27.2	19.6	11.9	7.5	4.6	1.8	1.1	1.3 km/hr

**Status Flag Characters**

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

Day	Mountain Standard Time																							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
1-Mar-06	8	11	13	15	15	15	13	12	13	12	15	15	14	13	11	10	11	9	8	7	6	4	4	7	10.4	14.8
2-Mar-06	8	8	9	2	3	3	4	3	3	4	3	5	7	7	6	6	8	11	12	11	10	10	8	7	5.3	12.4
3-Mar-06	6	3	5	6	4	5	5	6	6	13	14	16	14	14	15	17	15	12	10	5	7	2	7	11	7.9	16.8
4-Mar-06	8	9	11	6	5	3	4	5	6	10	6	6	5	6	8	8	10	9	10	11	9	7	7	6	2.9	11.3
5-Mar-06	4	3	3	5	4	1	2	1	calm	2	2	1	2	4	4	9	8	9	11	10	7	2	1	2	1.7	10.9
6-Mar-06	1	5	5	5	6	11	5	9	12	12	14	8	7	3	3	4	2	3	1	1	5	5	2	6	3.9	14.0
7-Mar-06	7	5	14	14	13	16	17	16	14	17	18	17	18	15	16	14	12	9	7	7	9	8	9	9	12.4	17.5
8-Mar-06	5	1	2	3	3	6	6	8	12	12	18	21	26	26	24	20	17	17	21	22	22	24	27	25	15.3	27.2
9-Mar-06	27	27	30	25	26	24	26	21	21	31	34	33	28	19	27	20	21	23	20	21	21	19	20	18	20.6	33.9
10-Mar-06	20	20	18	15	14	14	11	14	11	11	12	12	17	18	17	14	13	11	9	8	9	8	9	12	13.0	20.1
11-Mar-06	13	13	11	9	10	10	8	10	10	10	10	12	13	13	13	15	17	18	15	14	11	8	7	5	10.1	17.8
12-Mar-06	3	5	5	5	4	5	2	4	3	3	2	2	1	4	3	6	7	5	4	2	2	3	4	3	2.4	6.5
13-Mar-06	3	4	4	3	2	1	1	3	3	5	5	3	4	10	8	7	5	4	7	6	6	6	3	3	2.8	10.4
14-Mar-06	2	1	calm	calm	calm	2	1	calm	4	5	4	7	5	6	7	5	8	8	6	5	5	3	7	11	4.3	10.9
15-Mar-06	14	13	11	8	8	7	3	1	4	3	3	3	3	4	4	6	9	10	10	6	5	4	4	5	5.4	14.5
16-Mar-06	4	3	4	6	5	7	6	6	4	3	4	3	4	10	10	10	9	6	8	8	8	9	6	9	2.2	10.5
17-Mar-06	8	7	9	9	8	6	2	3	2	4	7	8	3	14	11	11	14	13	14	13	12	16	8	6	6.6	15.7
18-Mar-06	6	7	11	6	calm	2	2	3	4	2	5	4	2	4	8	5	14	15	15	14	13	13	13	12	5.6	15.1
19-Mar-06	12	14	13	12	14	13	10	9	11	11	12	13	13	13	13	13	13	12	18	13	12	8	10	13	11.6	18.0
20-Mar-06	10	10	11	9	10	9	8	7	5	6	12	12	11	8	9	14	14	12	8	8	7	7	7	11	8.9	14.4
21-Mar-06	11	11	9	7	6	6	3	4	8	10	11	9	11	10	11	13	16	11	13	9	5	1	6	2	8.0	15.5
22-Mar-06	5	5	6	5	3	5	2	2	2	2	4	7	7	7	7	14	17	11	7	5	4	5	6	6	4.5	17.3
23-Mar-06	5	4	4	4	2	calm	3	calm	1	2	2	2	14	13	12	8	11	13	7	4	5	6	4	3	3.1	13.9
24-Mar-06	5	7	4	5	6	4	2	1	calm	4	6	1	6	8	10	11	9	9	11	6	4	5	4	2	2.8	10.8
25-Mar-06	7	3	6	4	2	2	calm	3	6	4	6	3	4	1	6	8	6	6	6	6	8	7	8	7	0.5	8.3
26-Mar-06	6	9	8	7	9	12	12	13	14	14	14	19	20	18	17	18	17	12	6	4	5	4	3	6	10.5	20.2
27-Mar-06	11	9	6	6	7	8	9	11	12	12	16	17	20	22	20	21	19	14	8	5	3	2	1	2	10.3	21.7
28-Mar-06	2	1	2	2	1	4	3	3	5	5	6	7	7	4	5	6	6	6	10	12	12	9	8	6	3.0	12.4
29-Mar-06	7	6	7	6	7	9	10	7	7	9	7	10	9	12	11	13	13	10	11	10	10	13	13	9	8.7	12.8
30-Mar-06	9	8	8	8	8	7	6	6	5	5	6	8	5	5	4	4	5	6	4	6	10	12	18	14	3.7	18.0
31-Mar-06	8	9	6	6	9	4	9	7	9	16	16	19	15	11	13	14	14	10	7	4	3	3	3	1	9.1	19.2
1-hr Vector	0.2	0.7	0.8	1.0	1.1	1.5	2.1	2.1	1.7	2.3	3.0	2.7	3.8	4.3	3.6	2.3	2.4	1.1	2.5	2.1	1.9	1.3	1.2	0.6		
Hourly Max	27.2	27.2	29.9	25.0	25.7	23.7	26.0	21.4	20.9	30.9	33.9	33.2	28.3	25.8	27.4	21.1	20.7	22.7	21.0	21.6	22.0	24.2	27.2	25.2		



# PAS - Crescent Heights - Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

Monitoring Dates: March 1, 2006 to April 1, 2006

#### 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
	355.7	345.6	264.8	182.5	93.9	28.6	3.0	216 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 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-06	295	291	287	283	283	288	286	292	297	297	308	310	310	313	303	319	327	327	328	341	350	348	336	336	305	NW
2-Mar-06	353	358	356	303	323	313	351	349	4	30	58	45	28	53	80	55	61	60	74	82	97	87	81	67	48	NE
3-Mar-06	68	85	36	64	37	44	65	46	92	108	102	85	85	82	60	60	66	50	64	151	219	348	31	31	71	ENE
4-Mar-06	85	93	94	102	86	94	275	262	225	216	233	240	309	296	323	335	350	341	342	349	350	345	349	357	342	NNW
5-Mar-06	342	312	289	278	277	292	243	183	138	104	220	271	225	66	73	64	81	89	99	102	95	89	127	6	81	E
6-Mar-06	0	301	216	230	248	230	236	229	216	232	221	219	225	281	341	360	17	334	3	313	114	109	167	249	235	SW
7-Mar-06	234	252	244	244	245	238	243	241	252	243	252	255	261	265	274	271	272	259	261	256	268	243	234	238	252	WSW
8-Mar-06	239	193	359	244	187	228	247	221	218	222	230	218	216	220	222	229	230	218	210	209	211	215	216	215	219	SW
9-Mar-06	214	214	217	220	221	227	227	241	235	225	222	224	236	251	235	244	240	318	302	296	302	305	298	294	244	WSW
10-Mar-06	291	293	298	291	281	276	279	280	278	272	285	297	312	310	309	312	306	306	302	277	274	282	269	270	291	WNW
11-Mar-06	275	276	270	272	297	307	312	360	7	352	353	348	347	343	345	347	346	347	347	349	336	330	332	321	332	NNW
12-Mar-06	330	323	349	342	335	337	309	319	269	242	298	354	313	332	309	263	253	255	258	237	223	113	120	132	299	WNW
13-Mar-06	134	138	141	117	115	59	28	15	60	79	111	106	198	226	237	218	182	190	125	129	115	130	110	132	150	SSE
14-Mar-06	132	104	192	49	164	118	100	119	116	119	128	123	148	202	186	139	121	102	70	79	71	30	86	101	114	ESE
15-Mar-06	111	82	95	98	86	91	78	102	74	67	68	44	56	1	11	23	45	26	26	50	89	16	355	345	60	ENE
16-Mar-06	3	348	334	344	347	354	6	19	20	76	99	114	153	201	197	205	187	137	107	96	98	101	94	65	100	E
17-Mar-06	49	45	71	74	68	66	62	56	71	102	85	94	103	198	200	172	148	131	112	93	102	96	103	57	105	ESE
18-Mar-06	31	353	2	31	175	265	319	343	19	55	129	42	2	326	320	356	93	89	96	74	80	81	90	84	58	ENE
19-Mar-06	70	64	65	69	70	68	67	71	66	72	78	79	79	85	102	104	108	100	113	124	126	108	104	117	88	E
20-Mar-06	114	122	120	121	111	108	112	127	130	149	164	164	180	177	109	116	135	142	157	134	107	148	129	141	135	SE
21-Mar-06	125	123	106	94	103	102	110	134	121	128	133	137	147	160	181	163	166	164	152	145	102	108	136	57	138	SE
22-Mar-06	116	84	73	81	80	90	121	90	139	258	217	192	167	192	197	206	201	192	183	159	202	151	138	117	168	SSE
23-Mar-06	103	106	74	3	21	284	43	306	298	15	336	160	230	223	219	207	207	208	173	172	114	110	113	96	187	S
24-Mar-06	87	76	70	15	16	15	30	59	27	53	69	34	197	218	155	168	155	175	152	136	128	156	221	254	135	SE
25-Mar-06	229	230	241	211	141	115	134	353	359	338	353	10	228	214	139	164	190	84	87	62	59	333	336	343	15	NNE
26-Mar-06	340	350	318	293	286	282	281	283	296	304	293	302	311	295	293	314	321	319	314	286	262	241	219	234	299	WNW
27-Mar-06	228	241	236	230	235	232	232	225	217	218	217	221	221	221	219	224	218	191	167	138	140	126	151	100	216	SW
28-Mar-06	95	62	253	303	156	206	226	217	213	209	235	227	229	300	315	338	322	333	339	340	2	8	359	14	314	NW
29-Mar-06	27	10	19	43	16	34	44	67	33	29	52	80	71	79	81	82	76	82	83	80	69	94	101	78	65	ENE
30-Mar-06	3	40	70	36	41	50	71	109	115	125	123	118	121	148	133	151	127	180	187	171	182	202	203	205	135	SE
31-Mar-06	218	209	219	212	212	241	216	223	213	203	196	201	197	198	191	194	186	187	182	181	161	225	188	188	201	SSW
Hourly Avg	53	357	327	284	282	277	267	267	248	219	212	212	229	236	231	221	182	139	107	105	107	109	140	94		





# 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, 2006 to April 1, 2006

#### Summary


Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	56.0	40.9	17.5	10.4	7.2	5.2	4.2

#### Status Flag Characters

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

#### Day Mountain Standard Time

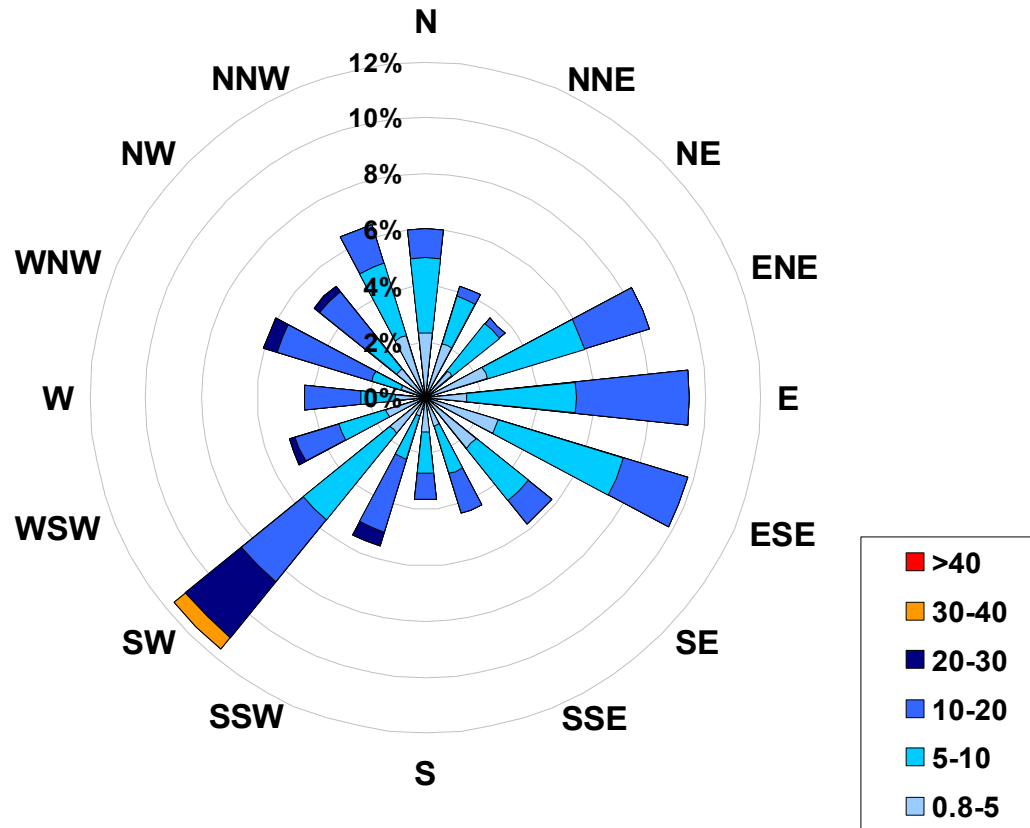
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Mar-06	11	9	7	6	7	7	7	9	8	10	9	10	11	13	13	14	9	8	9	7	8	11	15	10
2-Mar-06	7	7	5	30	20	24	11	15	22	14	29	20	20	23	24	20	12	8	7	7	8	7	9	8
3-Mar-06	5	11	9	17	11	13	14	20	14	11	12	10	12	11	10	7	10	8	6	13	12	36	25	9
4-Mar-06	11	6	6	9	8	22	47	13	12	7	8	10	21	12	10	8	6	6	5	5	6	7	7	10
5-Mar-06	10	14	13	9	10	44	32	39	47	26	40	60	54	23	25	9	9	7	6	5	5	22	27	27
6-Mar-06	50	29	54	29	25	8	14	15	6	7	6	15	13	29	16	15	19	28	53	51	18	9	42	15
7-Mar-06	13	24	6	7	7	6	6	8	8	7	7	6	6	8	7	8	8	10	7	8	6	10	7	7
8-Mar-06	12	44	58	32	17	9	9	7	7	10	7	8	7	7	7	7	6	5	5	5	5	5	5	5
9-Mar-06	4	5	5	5	5	5	4	7	6	5	6	7	8	7	4	6	17	6	7	7	6	8	7	5
10-Mar-06	6	7	7	7	6	5	5	5	9	8	11	14	9	8	9	10	9	8	8	7	8	9	8	7
11-Mar-06	6	6	7	12	10	8	8	8	8	8	9	8	7	7	5	5	5	5	5	6	8	9	6	8
12-Mar-06	22	11	6	11	8	5	13	12	31	31	50	38	45	29	40	19	17	11	11	15	15	23	4	8
13-Mar-06	7	5	8	5	11	12	12	10	14	16	19	36	37	17	21	21	26	20	9	11	11	9	15	9
14-Mar-06	15	36	47	55	40	15	16	49	15	12	22	16	34	28	24	28	15	16	20	18	18	28	13	8
15-Mar-06	7	6	7	7	9	11	13	16	16	32	28	25	32	35	43	29	17	8	4	11	36	27	13	5
16-Mar-06	7	15	5	4	5	7	6	7	15	28	26	42	28	22	17	17	15	13	9	7	5	3	9	5
17-Mar-06	5	4	3	4	4	8	47	11	55	34	16	15	36	13	12	11	10	7	6	7	12	7	21	27
18-Mar-06	9	13	9	23	52	32	42	12	28	44	32	30	57	38	15	40	8	10	7	7	6	7	7	7
19-Mar-06	6	6	6	7	6	7	9	11	8	10	9	9	10	8	9	6	7	5	5	6	6	7	6	6
20-Mar-06	6	7	5	6	5	5	6	9	19	18	12	12	14	19	15	9	8	9	10	9	7	9	9	10
21-Mar-06	8	8	7	11	8	9	19	17	16	9	11	17	17	12	13	11	8	8	8	9	12	59	15	36
22-Mar-06	16	15	8	15	16	6	16	23	37	59	41	27	25	28	28	13	9	10	14	14	21	22	8	5
23-Mar-06	9	12	17	11	11	30	33	31	30	26	37	64	15	13	11	19	13	7	12	22	15	7	18	9
24-Mar-06	5	5	33	9	16	11	50	40	56	23	14	48	22	20	14	11	10	12	10	17	17	23	18	41
25-Mar-06	9	29	15	13	13	20	59	34	12	15	17	39	31	56	20	18	39	15	22	29	36	17	17	30
26-Mar-06	50	9	15	20	12	8	7	6	6	8	7	7	8	9	8	8	9	7	7	11	16	13	13	9
27-Mar-06	6	5	7	10	8	9	8	9	11	12	11	13	12	12	9	11	11	8	6	6	38	50	32	20
28-Mar-06	10	22	35	36	26	6	9	18	14	20	27	30	23	42	29	33	19	11	5	5	7	7	8	9
29-Mar-06	8	12	9	11	13	6	10	15	9	8	12	6	8	7	7	7	6	8	5	6	6	6	6	17
30-Mar-06	5	13	7	11	7	6	8	9	9	12	13	15	30	33	41	37	31	13	8	12	9	9	5	4
31-Mar-06	9	15	22	11	6	14	7	10	13	10	12	9	13	17	14	14	10	9	10	41	19	15	16	24

Daily Maximum
15.0
29.6
36.2
47.0
59.7
53.8
24.3
57.9
16.7
14.3
11.6
49.7
36.6
55.5
43.5
42.2
54.7
56.8
10.9
19.0
58.7
58.5
64.1
56.1
59.2
50.0
50.5
41.5
17.3
40.9
40.9

Hourly Max	50	44	58	55	52	44	59	49	56	59	50	64	57	56	43	40	39	28	53	51	38	59	42	41
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**1-hr Average Wind Rose (in km/hr)  
Located at the Crescent Heights Site for March 2006**



<b>Calms:</b>	<b>1%</b>
---------------	-----------

Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	193
5	to	10	284
10	to	20	226
20	to	30	31
30	to	40	4
	>	40	0
Total Non-Zero Values			738

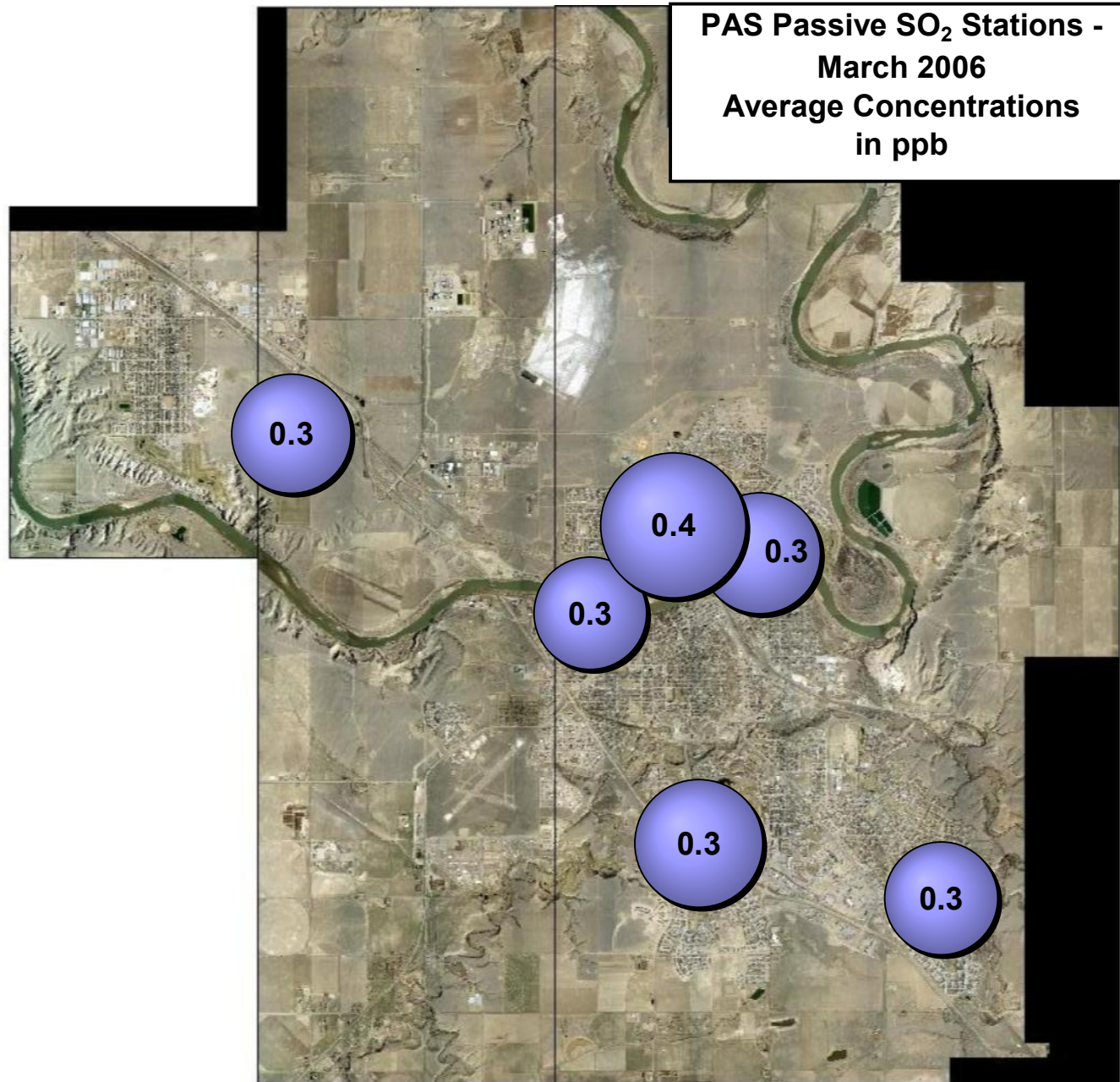


# Passive Monitoring – March 2006

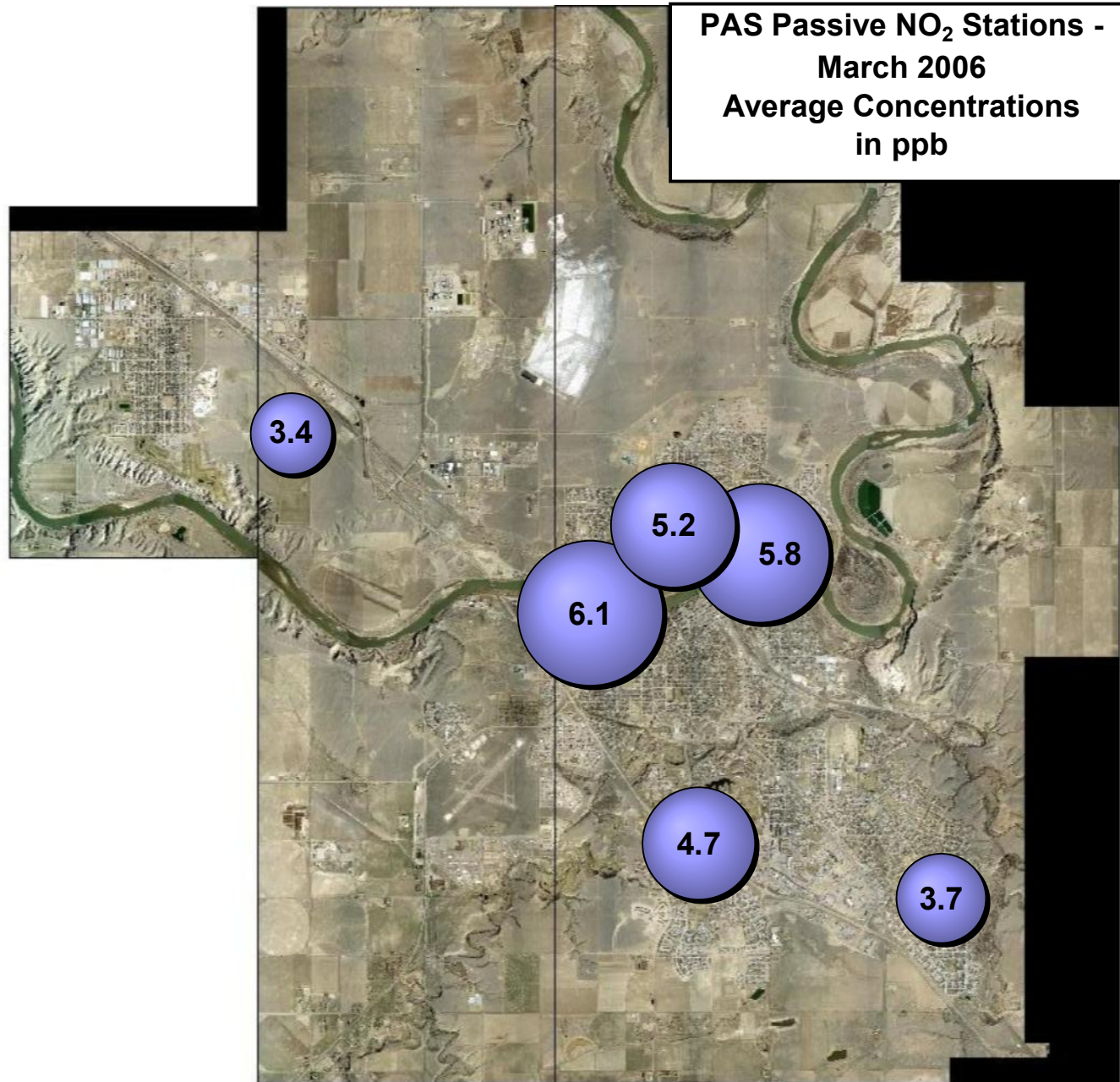
Ambient Air Compliance Network

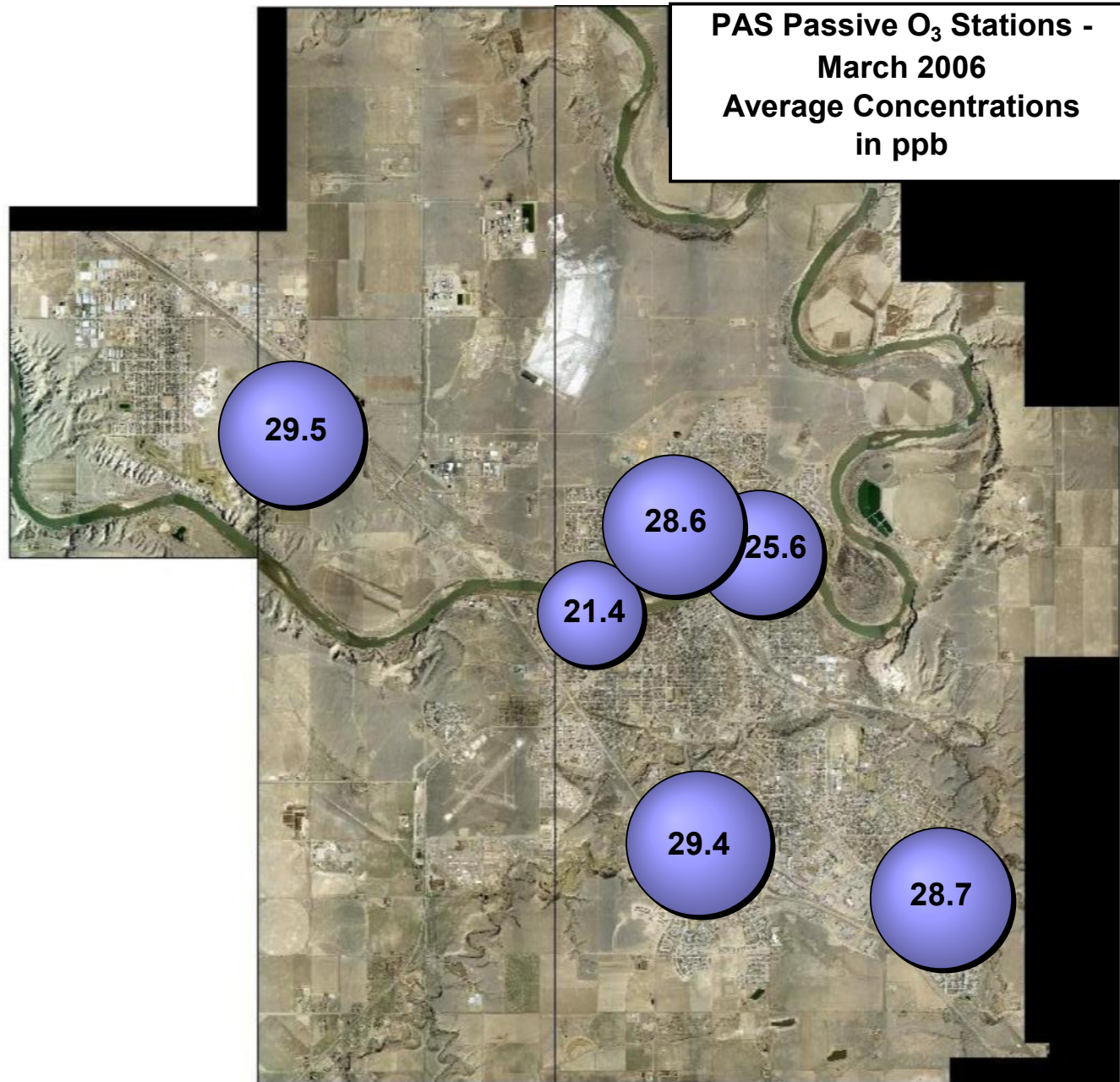
## Palliser Airshed Society - PAS Passive Stations for March 2006

Station Number	Station	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Location		
	Name				Easting	Northing	Elevation
<b>Duplicates</b>							
6a	Christian School Park	0.3	29.8	3.6			
6b		0.3	27.6	3.9			
1	Hospital	0.3	21.4	6.1	521648	5542721	698
2	Ball Park	0.3	25.6	5.8	524019	5543686	660
3	Monitoring Station	0.4	28.6	5.2	522812	5544133	714
4	Redcliff	0.3	29.5	3.4	517448	5545608	725
5	Southridge	0.3	29.4	4.7	523172	5539016	721
6	Christian School Park	0.3	28.7	3.7	526577	5538133	709
Stats:							
	<b>Mean</b>	0.3	27.2	4.8			
	<b>Standard Deviation</b>	0.0	3.2	1.1			
	<b>Minimum</b>	0.3			1		Hospital
	<b>Maximum</b>	0.4			3		Monitoring Station
	<b>Minimum</b>		21.4		1		Hospital
	<b>Maximum</b>		29.5		4		Redcliff
	<b>Minimum</b>			3.4	4		Redcliff
	<b>Maximum</b>			6.1	1		Hospital









## **March 2006 - Calibration Reports**

**PAS - Crescent Heights Station:**

**O<sub>3</sub>, NO<sub>x</sub>, NO, NO<sub>2</sub>, THC, CO, PM<sub>2.5</sub>, and Wind Speed / Wind Direction**

# Calibration Report

Parameter                     03                      
 Air Monitoring Network                     Palliser Airshed                    



## Station Information

Calibration Date	March 29, 2006	Previous Calibration	February 27, 2006
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Calibration	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	11:20	End Time (MST)	15:00
Barometric Pressure	27.3 inches Hg	Station Temperature	19.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentrator	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.996288	Calculated slope	1.015791
Calculated intercept	0.222153	Calculated intercept	-3.784941
Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Offset	-11.7	ppb	NA	ppb
Slope	1.122		NA	
Lamp measure	3795.0	mV	3795.0	mV
Lamp Reference	3802.0	mV	3802.0	mV
Pressure	25.1	inches Hg	25.1	inches Hg
Sample Flow	711	ccm	725	ccm
Lamp temp	48	Deg C	48	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)
4986	0.0	0.0	1.4	N/A
4986	350.0	336.1	332.4	1.0112
4986	200.0	188.8	192.7	0.9798
4986	100.0	97.0	100.6	0.9641
4986	0.0	0.0	1.4	0.0000
4986	350.0	336.1	313.5	1.0722
Average Correction Factor				0.9850

Calculated value of As Found Response: 311.1 ppm      Percent Change of As Found: -7.4%

	before calibration		after calibration	
Auto zero	-0.3	ppb	-5.0	ppb
Auto span	345.8	ppb	356.8	ppb

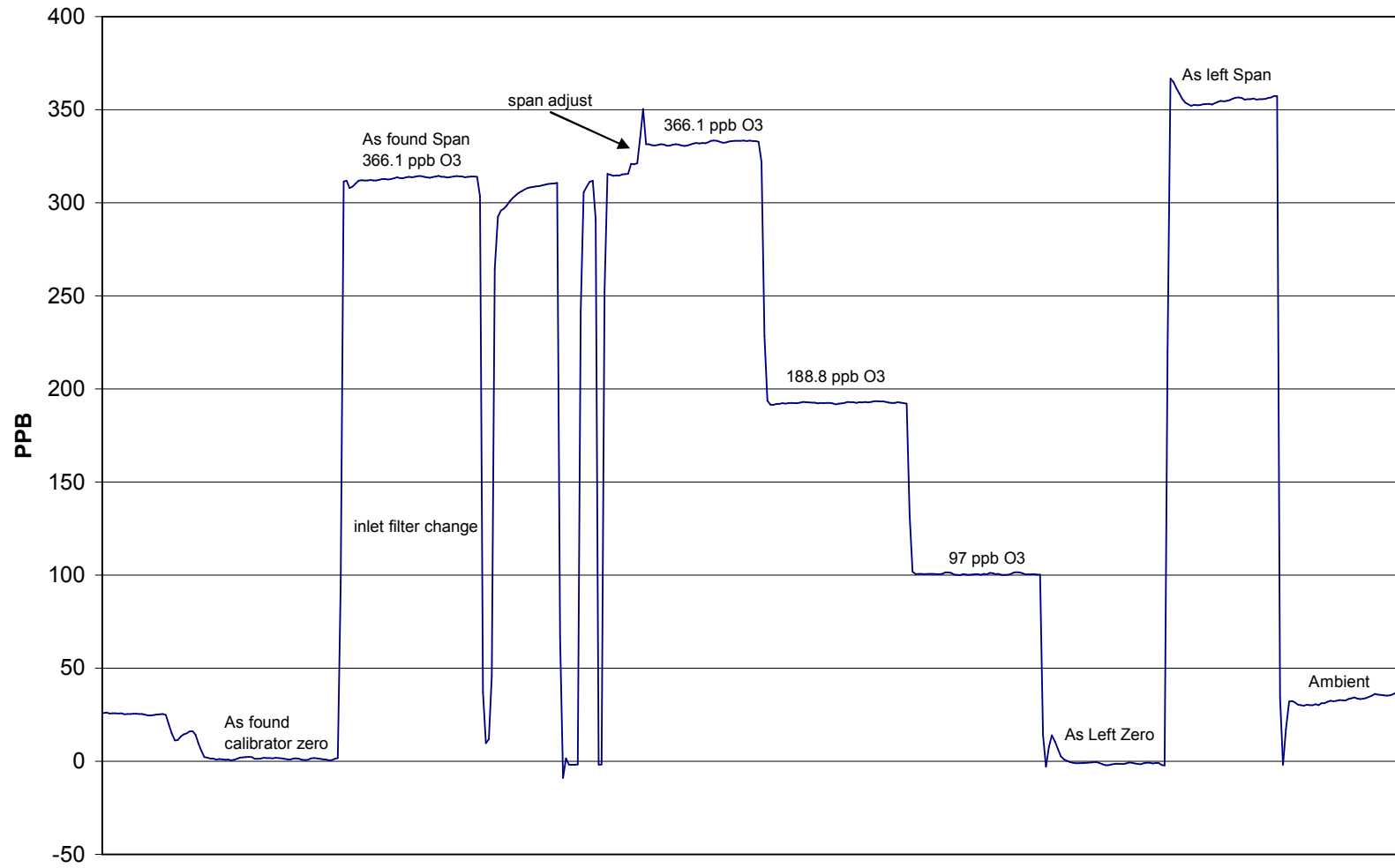
Notes: A span adjustment was made. Calculated O3 conc derived from NOX GPT calibration.

Calibration Performed By: KB, LF, TM





### O3 Calibration



March 29, 2006

# Calibration Report

Parameter **NOx-NO-NO<sub>2</sub>**  
 Air Monitoring Network **Palliser Airshed**



## Station Information

Calibration Date March 29, 2006 Previous Calibration February 27, 2006  
 Station Number 101 Station Location Crescent Heights

Reason:  Routine  Installation  Removal  Other: \_\_\_\_\_

Start Time (MST) 8:25 End Time (MST) 12:30  
 Barometric Pressure 27.3 inches Hg Station Temperature 17.0 Deg C  
 Calibrator Envionics 6100 Serial Number 3474  
 NO Cal Gas Conc 50.5 ppm Cal Gas Expiry Date 12-Dec-05  
 NOx Cal Gas Conc 50.5 ppm Cal Gas Serial # BAL786

## DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO2	NOx	NO
Before	Data Slope	1.021756	1.021416	1.020968
	Data Offset	-0.151755	-0.531380	-0.324463
After	Data Slope	1.001530	1.002021	1.002249
	Data Offset	-0.034874	1.060620	1.581415
Channel #		8	6	7
Voltage Range		0 - 1 VDC	0 - 1 VDC	0 - 1 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 background	-1.2	mV	-10.7	mV
NOx background	1.1	mV	-7.9	mV
NO coefficient	1.482		1.094	
NOx coefficient	1.470		1.109	
Chamber Temp	49.9	Deg C	49.9	Deg C
Cooler Temp	7.0	Deg C	7.0	Deg C
Azero	36.6		49.4	
Perm Temp	40.2	Deg C	40.2	Deg C
Pressure	4.1	inches Hg	4.4	inches Hg
Sample Flow	440.0	ccm	442.0	ccm

Notes: Major maintenance performed March 28th. Zero adjustment performed.

# Calibration Report

Parameter **NO<sub>x</sub>-NO-NO<sub>2</sub>**  
 Air Monitoring Network **Palliser Airshed**



## Station Information

Calibration Date: **March 29, 2006** Station Location: **Crescent Heights**

## Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	
zero	4985	0.00	0.0	0.0	0.0	-0.2	-0.7	-0.3	N/A	N/A	
1	4985	39.94	401.4	401.4	0.0	400.0	399.4	0.7	1.0036	1.0050	
2	4985	19.80	199.8	199.8	0.0	197.8	197.1	0.3	1.0098	1.0135	
3	4985	9.70	98.1	98.1	0.0	96.0	95.5	-0.2	1.0213	1.0269	
AFZ											
AFS											
									Average Correction Factor	1.0116	1.0151

As Found Concentrations      NO<sub>x</sub>= NA      NO= NA      As Found Percent Change      NO<sub>x</sub>= NA      NO= NA

## GPT Calibration Data

Dilution Flow 4985 ccm      Source Gas Flow 39.80 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency	
0	406.6	403.3	3.3	404.8	400.9	-0.3	N/A	N/A	N/A	N/A	
300	403.7	306.7	97.0	401.9	304.4	97.2	1.0047	1.0074	0.9984	100.2%	
200	404.9	216.1	188.8	403.0	214.0	188.8	1.0047	1.0096	1.0000	100.0%	
100	405.6	69.4	336.1	403.7	67.7	335.4	1.0046	1.0256	1.0021	99.8%	
							Average Correction Factor	1.0047	1.0142	1.0002	100.0%

## AIC Data

Parameter	Previous calibration				Current calibration			
	NO <sub>x</sub>	NO <sub>2</sub>	NO		NO <sub>x</sub>	NO <sub>2</sub>	NO	
Auto zero	-0.3	-1.4	0.8	ppb	2.1	-0.7	2.1	ppb
Auto span	433.7	427.1	7.0	ppb	413.7	404.2	8.6	ppb

Calibration Performed By: Kelly Baragar

## Calibration Summary

Parameter NO<sub>2</sub>  
 Air Monitoring Network Palliser Airshed

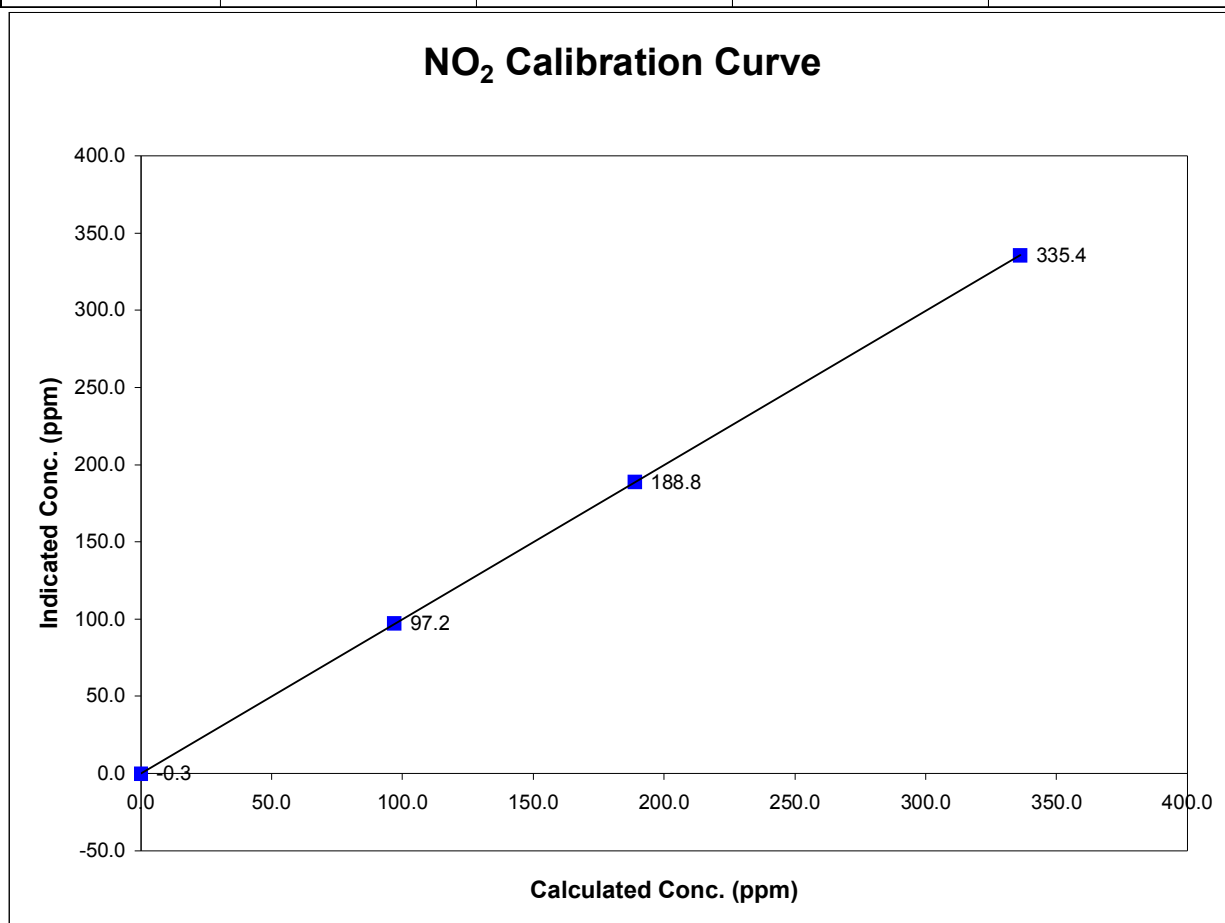


### Station Information

Calibration Date	March 29, 2006	Previous Calibration	February 27, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:25	End Time (MST)	12:30
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	-0.3	0.0000	Correlation Coefficient	0.999995
97.0	97.2	0.9984		
188.8	188.8	1.0000		
336.1	335.4	1.0021		
			Slope	1.001530
			Intercept	-0.034874



## Calibration Summary

Parameter NO<sub>x</sub>  
 Air Monitoring Network Palliser Airshed



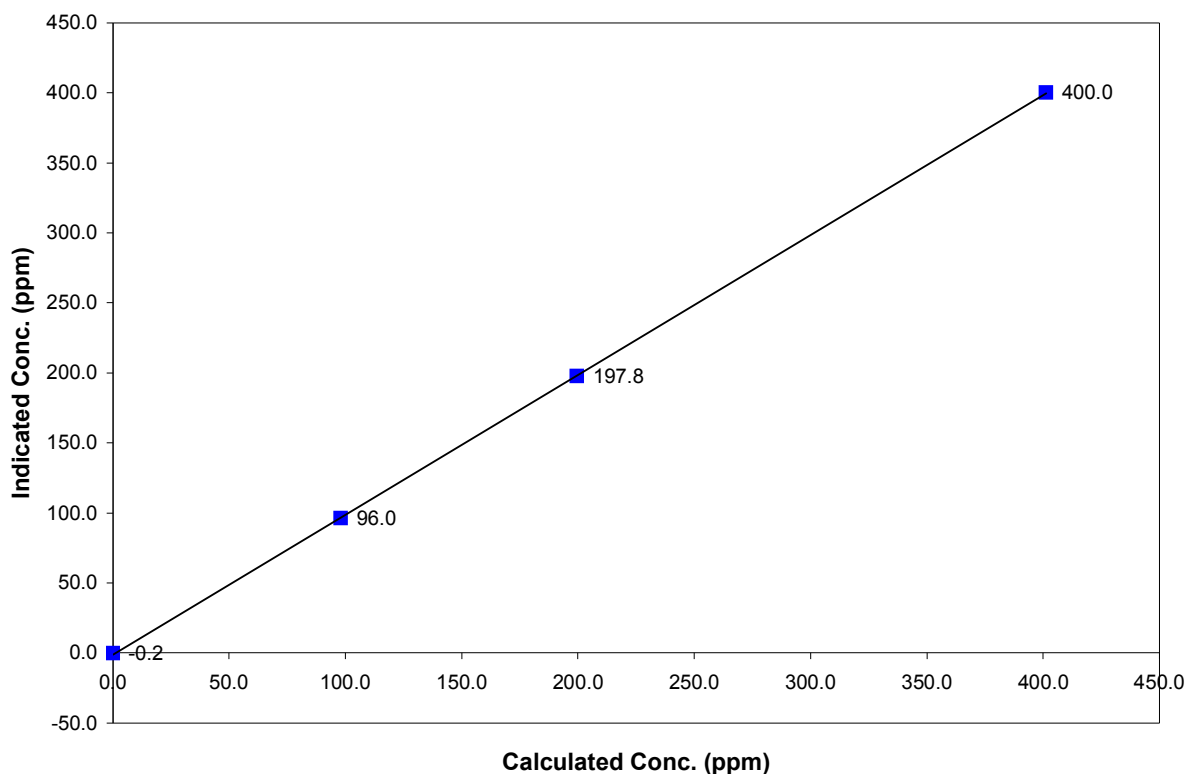
### Station Information

Calibration Date	March 29, 2006	Previous Calibration	February 27, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:25	End Time (MST)	12:30
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	-0.2	0.0000	Correlation Coefficient	0.999980
401.4	400.0	1.0036		
199.8	197.8	1.0098		
98.1	96.0	1.0213		
			Slope	1.002021
			Intercept	1.060620

### NO<sub>x</sub> Calibration Curve



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed



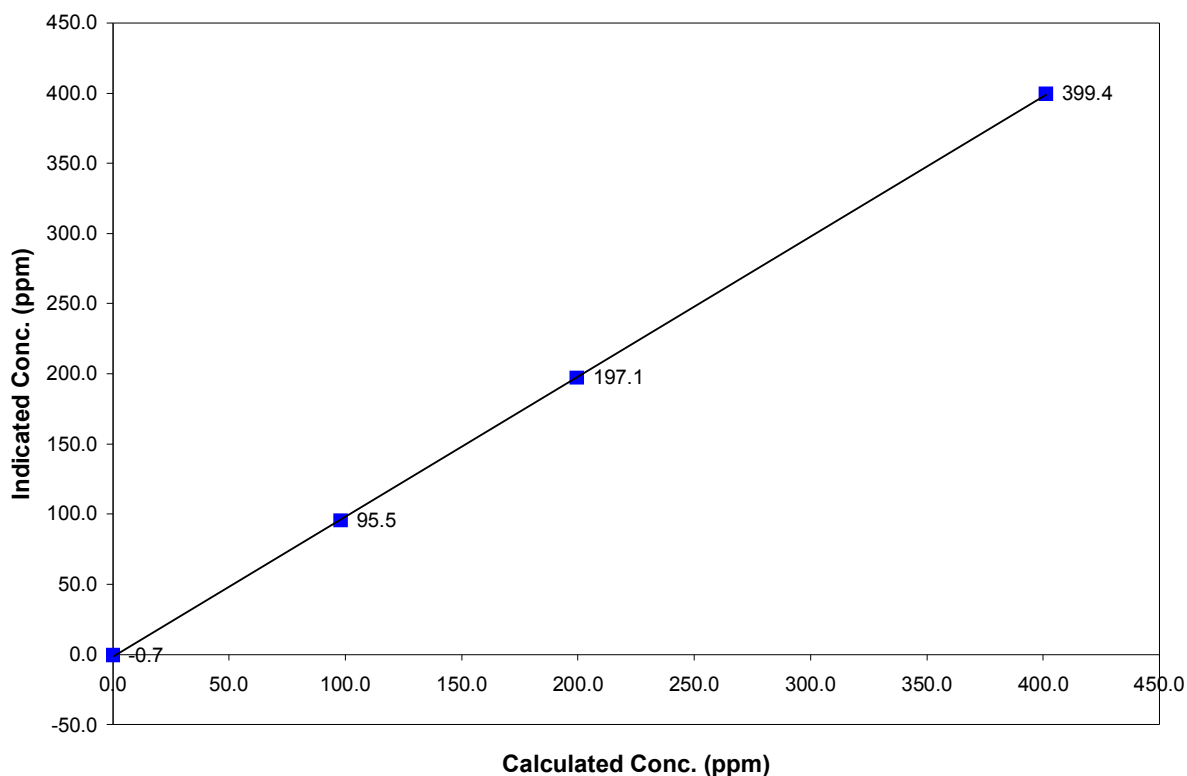
### Station Information

Calibration Date	March 29, 2006	Previous Calibration	February 27, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:25	End Time (MST)	12:30
Analyzer make	API Model 200E	Analyzer serial #	219

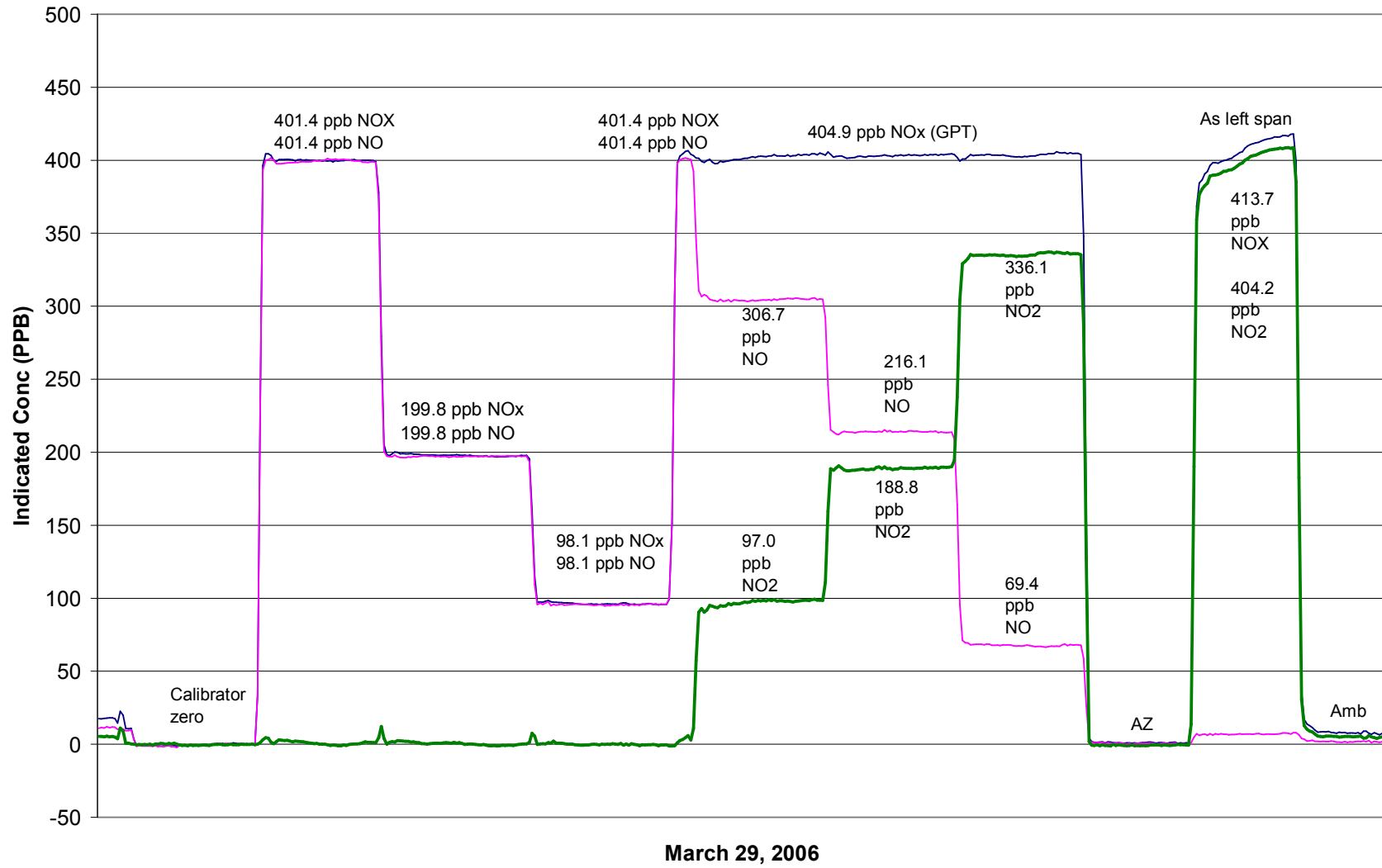
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.7	N/A	Correlation Coefficient	0.999976
401.4	399.4	1.0050		
199.8	197.1	1.0135		
98.1	95.5	1.0269		
			Slope	1.002249
			Intercept	1.581415

### NO Calibration Curve



## NOx Calibration





# Calibration Report

Parameter THC  
 Air Monitoring Network Palliser Airshed



## Station Information

Calibration Date	March 28, 2006	Previous Calibration	February 22, 2006
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)	13:30	End Time (MST)	17:40
Barometric Pressure	27.3 inches Hg	Station Temperature	19.0 Deg C
Calibrator	Envionics 6100	Serial Number	3747
Cal Gas Concentration	700 ppm CH <sub>4</sub> / 301 ppm C <sub>3</sub> H <sub>8</sub>	Cal Gas Expiry Date	8/28/2005
Cal Gas CH <sub>4</sub> equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	0.998478	Calculated slope	1.001897
Calculated intercept	0.064087	Calculated intercept	-0.008479
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.75	PSI	5.75	PSI
THC span counts	12713	raw	12620	raw
THC zero counts	1123	raw	1557	raw

## Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	0.10	N/A
4995	79.92	24.06	24.08	0.9993
4995	39.80	12.08	11.96	1.0095
4995	9.70	2.96	2.91	1.0158
zero	0.00	0.00	0.10	As Found Zero
4995	79.92	24.06	24.08	As Found Span
Average Correction Factor				1.0082

Calculated value of As Found Response: 24.003 ppm      Percent Change of As Found: 0.2%

	before calibration		after calibration	
Auto zero	0.06	ppm	0.01	ppm
Auto span	23.35	ppm	21.81	ppm

Notes: Initiated calibration; thought there was an error and redid calibration.  
March 29th indicates internal span settings; cylinder did not supply sufficient pressure on the 28th.

Calibration Performed By: Kelly Baragar

## Calibration Summary

Parameter THC  
 Air Monitoring Network Palliser Airshed

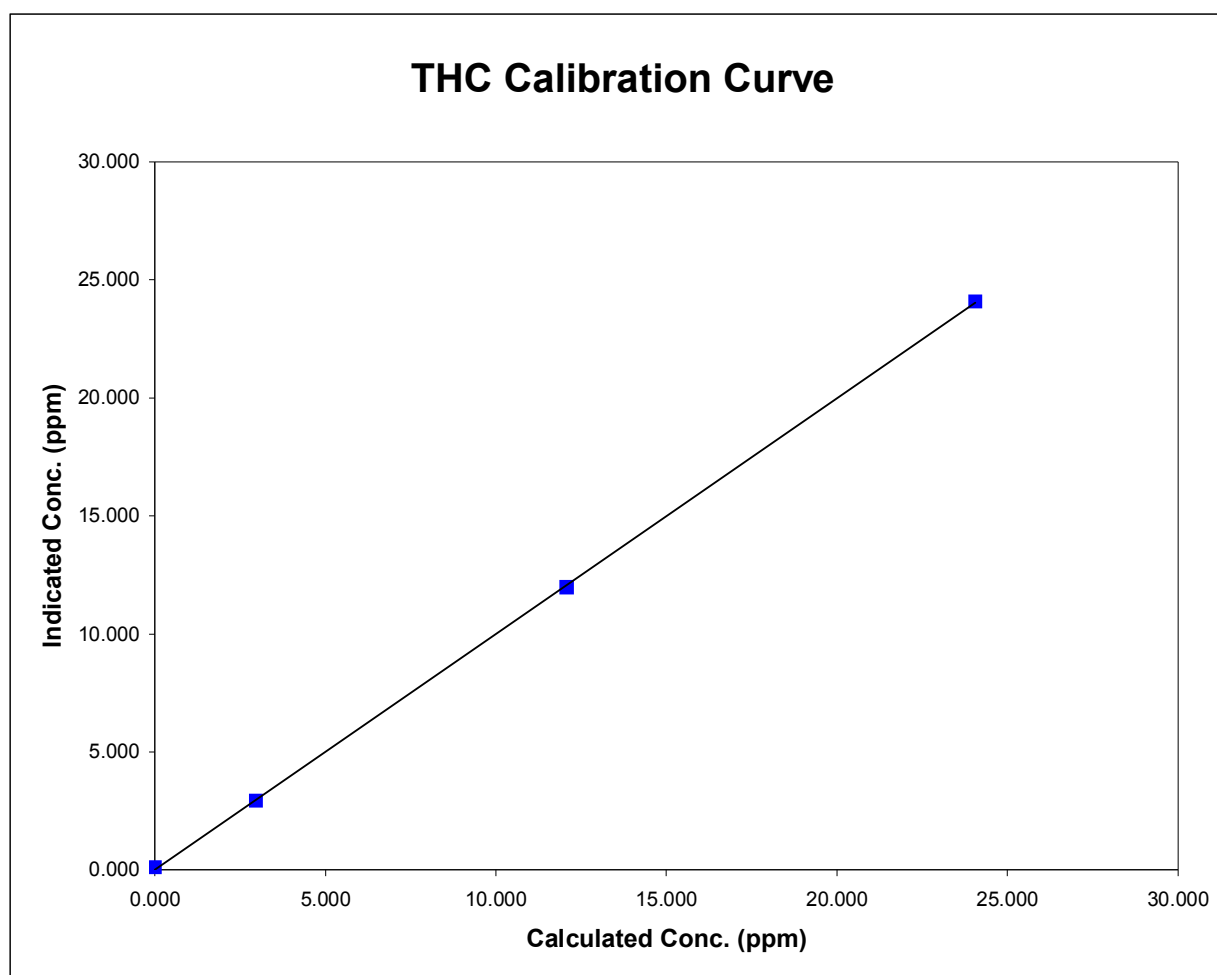


### Station Information

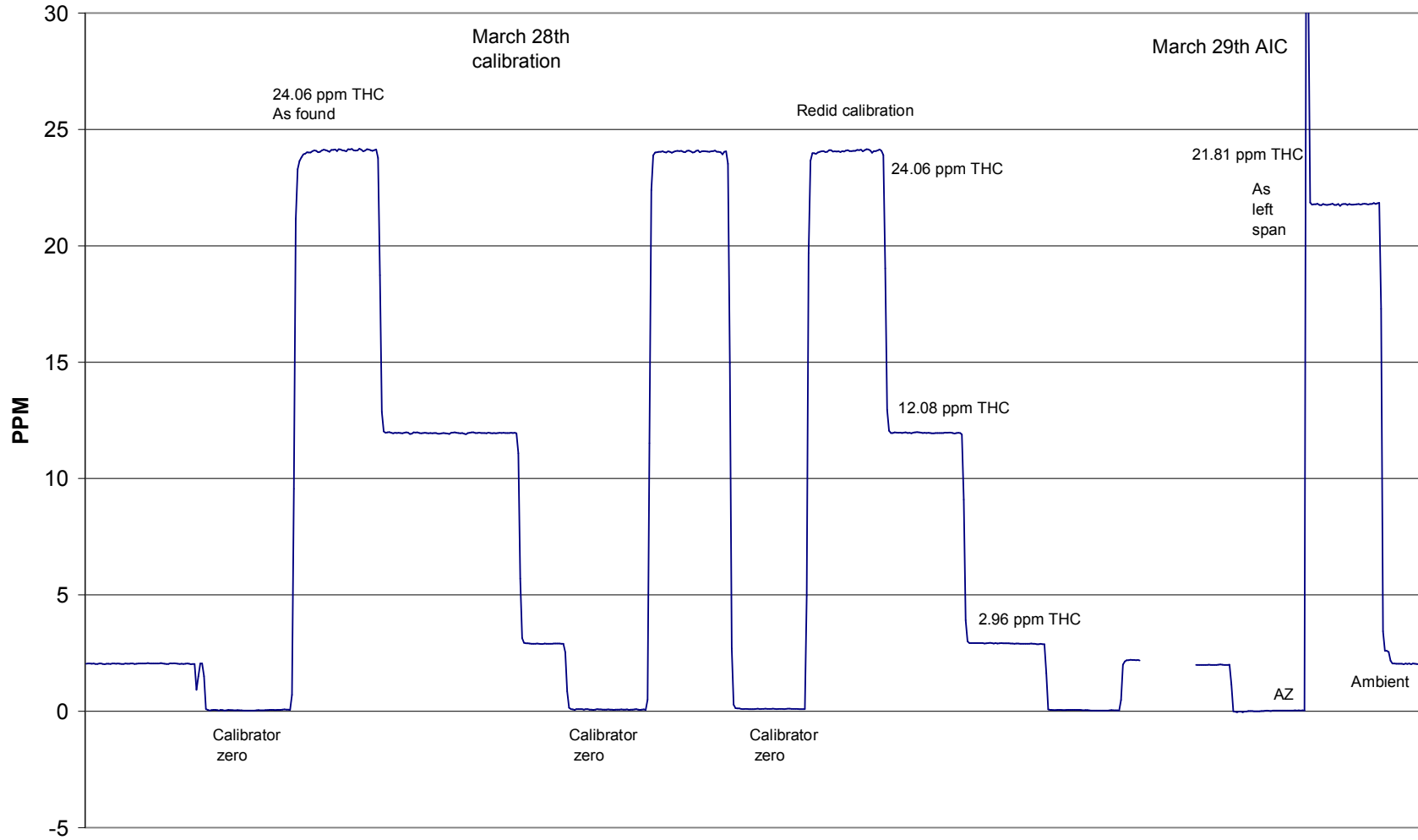
Calibration Date	March 28, 2006	Previous Calibration	February 22, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	13:30	End Time (MST)	17:40
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.102	N/A		
24.059	24.077	0.9993	Correlation Coefficient	0.999932
12.077	11.963	1.0095		
2.961	2.915	1.0158	Slope	1.001897
			Intercept	-0.008479



### THC Calibration



March 28, 2006

# Calibration Report



Parameter CO  
 Air Monitoring Network Palliser

## Station Information

Calibration Date	March 28, 2006	Previous Calibration	February 22, 2006
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)	11:50	End Time (MST)	15:45
Barometric Pressure	27.3 in Hg	Station Temperature	15.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
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	0.994380	Calculated slope	0.990087
Calculated intercept	0.108388	Calculated intercept	-0.143400
Analyzer make	TEI Model 48C	Analyzer serial #	436609887

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.052		1.052	
CO bkg setting	8.53		8.56	
Lamp ratio	1.1512		1.1503	
Lamp intensity	200150	Hz	200150	Hz
Sample Flow	1.002	LPM	1.000	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)
4992	0.00	0.00	0.40	N/A
4992	49.94	29.69	30.24	0.9821
4992	19.96	11.94	12.04	0.9914
4992	9.98	5.98	6.00	0.9977
4992	0.00	0.00	0.40	0.0000
4992	49.94	29.69	30.24	0.9821
Average Correction Factor				0.9904

Calculated value of As Found Response: 29.778 ppm      Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.10	ppm	0.30	ppm
Auto span	20.38	ppm	20.77	ppm

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Calibration Performed By: Kelly Baragar

# Calibration Summary

Parameter CO  
 Air Monitoring Network Palliser

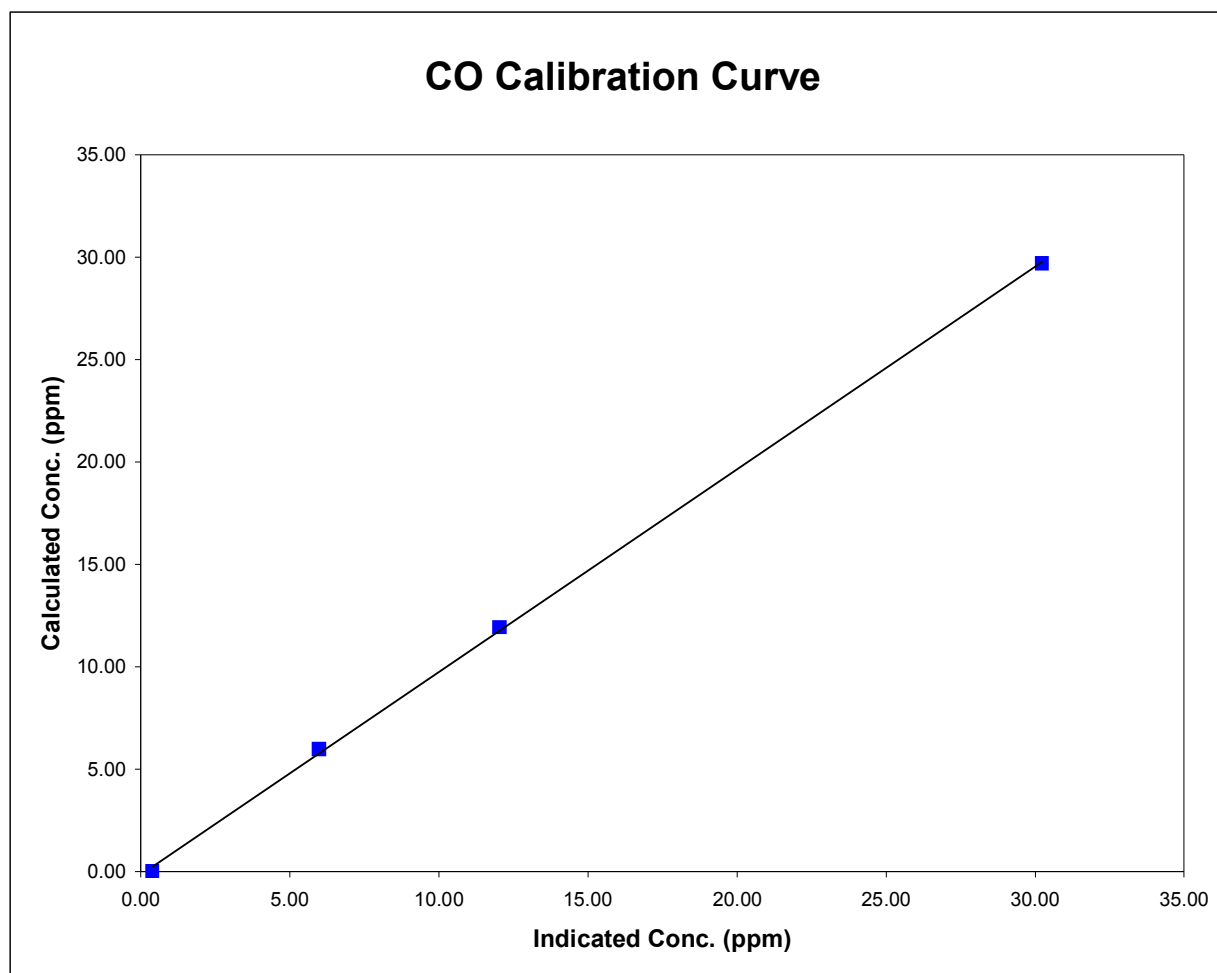


## Station Information

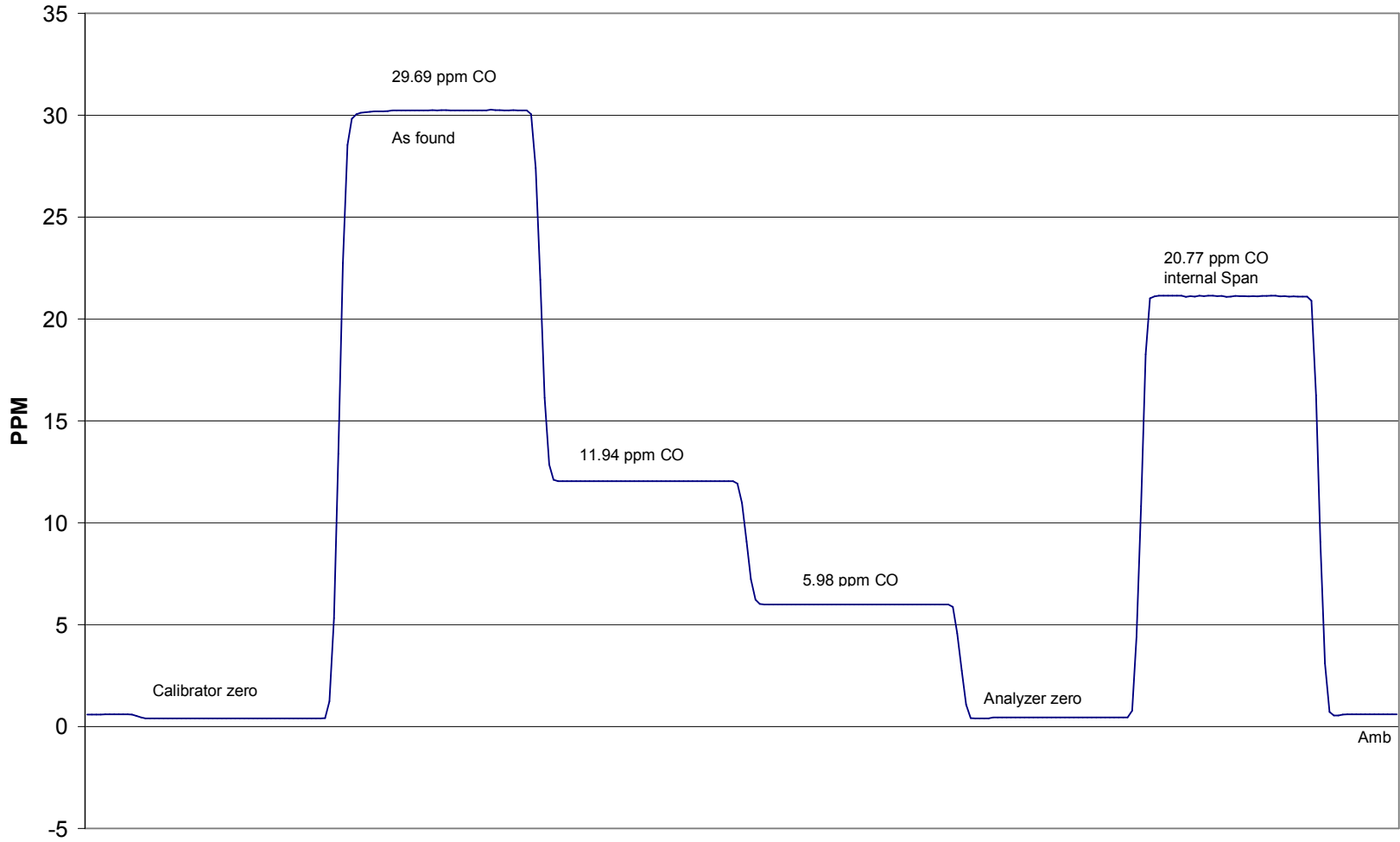
Calibration Date	March 28, 2006	Previous Calibration	February 22, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:50	End Time (MST)	15:45
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

## Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.40	N/A		
29.69	30.24	0.9821	Correlation Coefficient	0.999729
11.94	12.04	0.9914		
5.98	6.00	0.9977	Slope	0.990087
			Intercept	-0.143400



### CO Calibration



March 28, 2006

# Calibration Report

Parameter PM2.5  
 Air Monitoring Network Palliser Airshed



## Station Information

Calibration Date	March 29, 2006	Previous Calibration	February 22, 2006
Station Number	1	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)	9:00	End Time (MST)	13:20
Barometric Pressure	0.911 ATM	Station Temperature	17.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

## Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	34	%	37	%
Ko Factor	12758		12758	
Temperature	3.2	Deg C	3.2	Deg C
Pressure	0.913	ATM	0.913	ATM

## Calibration Data

Parameter	Set Point	TEOM Reading (as found)	Tolerance	TEOM Reading (after adjustments)
zero flow - main	0.0	0.01	0.00	0.00
zero flow - auxillary	0.0	-0.01	0.01	-0.01
flow recovery - main	45 - 60 Seconds	40.0	45 - 60 Seconds	40.0
flow recovery - aux	46 - 60 Seconds	40.0	46 - 60 Seconds	40.0
Temperature	measured	3.2	+/- 1.0 Deg C	4.0
Pressure	measured	0.908	+/- 1.5% ΔATM	0.909
Total Flow	16.67 SLPM	16.17		16.70
Auxiliary flow	13.67 SLPM	13.27	+/- 1.0 SLPM	13.66
Main flow	3.0 SLPM	2.990	+/- 0.2 SLPM	3.000
Leak Check - main	0.0	0.02	<0.15 SLPM	0.02
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.00
Ko Factor (w/o filter)	measured	328.790	filter weight (g)	0.11352
Ko Factor (w/ filter)	measured	234.733	% Ko difference	0.0%

Notes: Flows were slightly low but all sensor readings within factory specs.  
Adjusted MFC's.

Calibration Performed By: Kelly Baragar