



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

March 2007

Prepared By:



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April 26, 2007

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4999-98 Ave  
Edmonton Alberta T6B 2X3

**Attention: Director of Monitoring and Evaluation**

**RE: Palliser Airshed Society (PAS) Ambient Air Monitoring Report – March 2007**

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Enclosed is the PAS Ambient Monitoring Report for the month of **March 2007**.

**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 uptime of all instruments was 90% or greater 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 5.3 ppb
- Monthly average concentrations for O<sub>3</sub> was 31.7 ppb
- Monthly average concentrations for CO was 0.19 ppm
- Monthly average concentrations for THC was 2.02 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 2.8 µg/m<sup>3</sup>

The Air Quality Index (AQI) recorded 706 hours of Good readings and 4 hours of Fair readings for the month of March.

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

The following are the ranges for March 2007 recorded by the six passive stations located throughout the PAS zone.

- ◆ Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.2 to 0.3 ppb.
- ◆ Monthly average concentrations for NO<sub>2</sub> passives ranged from 3.2 ppb to 8.4 ppb.
- ◆ Monthly average concentrations for O<sub>3</sub> passives ranged from 29.6 ppb to 34.7 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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# Continuous Monitoring

## Ambient Air Monitoring Network Crescent Heights Station

### General Station Issues

Calibrations were performed on March 28<sup>th</sup> (THC and CO) and March 29<sup>th</sup> (NO<sub>x</sub>, O<sub>3</sub> and TEOM).

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational issues observed.
Nitrogen Dioxide	Teledyne - API	200E	ppb	No operational issues observed.
Total Hydrocarbons	Bendix	400A	ppm	No operational issues observed.
Carbon Monoxide	TEI	49C	ppm	No operational issues observed.
PM 2.5	R&P TEOM	1400ab	µg/m <sup>3</sup>	There was one (1) hours of excessive baseline drift flagged. No other operational issues observed.
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 2007 Monthly Overall Summary Report

### Ambient Air Quality Data

Pollutant (units)		Palliser Airshed Society					Maximum Recorded Values						Operational Time (%)
							1-hr		24-hr		Exceedence		
		1-hr	24-hr	1-hr	24-hr	1-hr	Day	Conc	Day	Conc	Day	Operational Time (%)	
NO (ppb)			Crescent Heights	2.1	-	-	59.8	Mar-29 07:00	5.0	SSE	6.8	Mar-29	100.0%
NO <sub>2</sub> (ppb)	212	106	Crescent Heights	5.3	0	0	29.3	Mar-13 20:00	3.9	SSE	14.9	Mar-02	100.0%
NO <sub>x</sub> (ppb)			Crescent Heights	7.2	-	-	87.8	Mar-29 07:00	5.0	SSE	19.6	Mar-02	100.0%
O <sub>3</sub> (ppb)	82		Crescent Heights	31.7	0	-	56.2	Mar-30 13:00	14.8	S	43.2	Mar-25	100.0%
O <sub>3</sub> (ppb) - 8-hr	65		Crescent Heights		0						48.9	Mar-25	
CO (ppm)	13		Crescent Heights	0.19	0	-	0.7	Mar-29 07:00	5.0	SSE	0.3	Mar-28	100.0%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.6	Mar-28	
THC (ppm)			Crescent Heights	2.02	-	-	2.6	Mar-06 21:00	4.5	N	2.3	Mar-02	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>	Crescent Heights	2.8		0		17.9	Mar-06 10:00	5.9	ENE	10.1	Mar-06	99.9%
RH (%)			Crescent Heights	57.1	-	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )			Crescent Heights	151.0	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	4.3	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	5.6	-	-	52.1	Mar-12 12:00	52.1	WSW	24.6	Mar-24	100.0%
WSPD s (km/hr)			Crescent Heights	14.8	-	-	52.2	Mar-12 12:00	52.2	WSW	30.6	Mar-12	100.0%
WDIR			Crescent Heights	WSW	-	-	-	-	-	-	-	-	100.0%

Note: <sup>a</sup> the draft 24-hr Alberta Ambient Air Quality Objectives



# **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, 2007 to April 1, 2007

#### Alberta's Air Quality Index

<b>Good</b>	<b>1</b>	<b>to</b>	<b>25</b>
<b>Fair</b>	<b>26</b>	<b>to</b>	<b>50</b>
<b>Poor</b>	<b>51</b>	<b>to</b>	<b>100</b>
<b>Very Poor</b>	<b>&gt;</b>	<b>100</b>	

#### Summary

Number of 1-hr Good Readings:	706
Number of 1-hr Fair Readings:	4
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	0:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Mar-07	17	16	15	16	15	15	13	13	13	15	16	17	18	20	21	22	21	20	19	16	N	14	11	14	
2-Mar-07	15	13	7	6	7	6	10	8	8	13	15	17	18	18	18	17	16	14	13	N	10	7	7	7	
3-Mar-07	12	19	21	21	21	19	19	20	20	19	19	18	20	22	20	19	17	15	N	12	13	14	15	15	
4-Mar-07	16	15	15	14	15	17	13	13	13	14	18	20	20	17	15	15	15	N	15	15	14	14	14	13	
5-Mar-07	12	11	10	11	8	8	11	12	12	13	13	13	12	12	11	11	11	N	10	11	9	7	5	7	9
6-Mar-07	11	13	14	14	12	12	11	11	12	13	15	13	11	11	11	N	11	9	8	9	5	6	6	7	
7-Mar-07	5	5	6	8	9	11	13	12	12	15	18	18	18	19	N	19	17	18	17	14	14	11	13	13	
8-Mar-07	12	16	16	17	16	17	15	12	11	14	18	17	15	N	21	23	22	20	19	20	19	15	15	15	
9-Mar-07	14	13	14	14	13	14	12	10	14	19	20	21	N	23	23	23	23	21	11	8	8	9	12	12	
10-Mar-07	13	13	13	14	13	15	14	15	16	17	18	N	23	24	23	24	22	22	20	15	16	17	18	18	
11-Mar-07	18	19	18	18	19	17	17	17	18	N	20	21	22	22	17	16	14	12	11	11	10	11	12		
12-Mar-07	13	14	14	13	12	12	9	11	14	N	20	24	25	23	23	23	21	19	22	21	16	15	16	20	
13-Mar-07	21	21	21	21	20	18	15	13	N	15	20	20	20	21	21	22	22	21	18	15	7	7	5	6	
14-Mar-07	9	11	14	15	17	16	13	N	17	16	17	17	16	17	20	20	18	17	15	14	13	13	14	14	
15-Mar-07	14	14	14	14	13	9	N	6	8	7	12	14	15	15	16	19	20	19	16	14	7	7	9	7	
16-Mar-07	6	5	5	8	6	N	5	6	6	6	18	21	21	22	20	18	17	15	9	13	12	11	7	7	
17-Mar-07	6	4	3	3	N	5	3	3	4	10	13	14	15	16	16	17	17	15	13	14	15	14	12	9	
18-Mar-07	10	10	12	N	7	8	14	16	19	18	18	17	14	15	15	15	14	15	14	16	16	18	19	18	
19-Mar-07	20	20	N	17	17	16	14	13	13	13	13	16	15	14	16	15	15	15	15	16	15	15	15	15	
20-Mar-07	14	N	13	13	13	12	9	11	13	15	17	21	27	21	18	19	23	23	21	20	20	18	10	14	
21-Mar-07	N	13	11	11	10	8	14	14	21	22	22	22	21	21	22	23	23	22	21	17	11	8	15	N	
22-Mar-07	17	15	14	15	15	9	17	14	18	20	22	24	25	25	25	25	23	20	17	16	17	N	16		
23-Mar-07	15	15	16	14	12	8	5	7	14	16	19	22	23	23	24	24	25	24	22	20	19	N	20	21	
24-Mar-07	21	20	21	22	21	19	16	15	16	17	20	21	22	21	21	20	20	20	19	20	N	18	19	19	
25-Mar-07	19	19	21	21	20	19	18	17	17	21	21	21	24	24	25	25	26	24	23	N	24	23	24	21	
26-Mar-07	22	22	21	19	16	11	6	6	17	19	19	20	22	23	24	25	25	24	22	N	22	20	19	19	
27-Mar-07	17	17	16	19	22	22	21	22	22	20	19	18	18	17	17	18	N	16	16	16	16	16	16	15	
28-Mar-07	18	18	18	19	18	18	18	17	18	18	20	22	22	23	24	24	25	24	24	21	19	17	14	11	
29-Mar-07	10	7	N	5	5	4	6	7	13	15	18	N	24	1	N	N	9	24	21	19	20	22	22	22	
30-Mar-07	21	21	N	20	19	18	10	14	17	21	22	25	25	30	27	24	22	22	20	19	18	17	15	13	
31-Mar-07	13	N	14	14	13	9	6	7	9	13	17	20	21	22	22	22	21	21	20	19	18	16	16	17	



## PAS - Crescent Heights - Nitrogen Dioxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

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

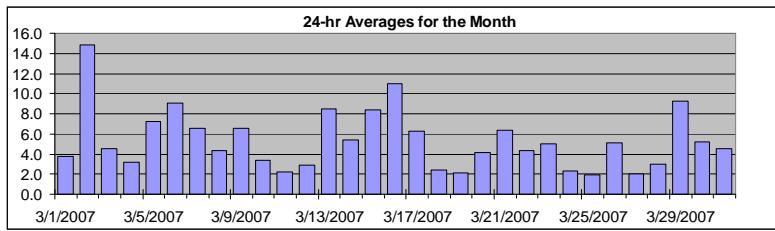
Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	29.3 ppb	13-Mar	20:00 21:00
Maximum 24-hr Average:	14.9 ppb	2-Mar	

AIC Time:	32 hrs	Operational Time:	708 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	24.3	17.1	6.2	3.4	2.0	0.9	0.3	5.3 ppb	3.4 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	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-07	0	0	0	0	0	1	4	6	4	2	2	2	1	0	1	1	3	5	11	A	14	17	10	3.7	16.9		
2-Mar-07	8	13	24	27	24	16	22	22	15	8	10	7	4	4	4	7	9	13	12	A	18	24	28	23	14.9	27.7	
3-Mar-07	16	5	1	1	1	4	4	3	2	1	1	1	3	1	4	4	7	8	A	16	8	6	5	3	4.5	16.3	
4-Mar-07	3	5	5	4	3	1	7	4	4	4	3	2	1	2	3	3	4	A	4	3	2	2	2	3.2	7.5		
5-Mar-07	4	5	6	5	11	10	5	6	5	3	2	3	4	4	5	6	A	10	9	12	13	17	14	8	7.3	16.6	
6-Mar-07	6	4	4	3	6	4	8	7	13	14	12	10	6	5	4	A	6	7	10	9	17	19	15	21	9.1	20.9	
7-Mar-07	18	15	12	9	8	6	5	8	9	6	2	2	2	2	2	A	5	6	5	4	7	4	10	4	3	6.6	17.7
8-Mar-07	4	1	3	1	2	1	3	6	9	9	4	6	7	A	7	4	3	6	7	3	3	2	4	3	4.3	9.2	
9-Mar-07	3	2	3	2	4	3	5	10	9	3	2	2	A	5	3	2	2	5	23	25	16	11	8	5	6.6	25.5	
10-Mar-07	4	3	3	2	3	2	4	4	3	2	3	A	6	2	4	3	5	3	5	8	5	3	2	1	3.4	8.4	
11-Mar-07	1	1	1	1	1	2	3	3	3	2	A	5	3	2	2	3	2	3	3	3	2	2	1	1	2.2	4.5	
12-Mar-07	1	1	0	1	1	2	6	3	1	A	3	2	2	2	2	3	3	3	1	2	9	11	5	2	2.9	11.3	
13-Mar-07	1	1	1	1	1	6	12	13	A	16	5	4	6	4	4	2	3	3	7	12	29	28	22	13	8.5	29.3	
14-Mar-07	10	9	9	7	2	5	12	A	5	5	4	6	9	7	4	3	3	3	3	3	5	4	2	2	5.4	11.6	
15-Mar-07	2	2	2	3	3	9	A	15	13	17	7	3	2	5	7	4	3	6	10	12	23	16	11	14	8.4	22.5	
16-Mar-07	15	22	17	11	17	A	23	23	17	20	8	4	3	2	2	3	4	5	17	7	5	7	11	9	11.0	23.3	
17-Mar-07	9	12	12	13	A	20	13	13	13	6	1	2	1	3	1	1	3	4	4	4	1	2	2	3	6	6.3	20.1
18-Mar-07	2	3	3	A	8	5	3	3	2	2	3	2	2	2	2	2	2	2	2	2	2	1	1	1	2.5	7.7	
19-Mar-07	1	1	A	3	2	1	2	1	1	2	2	1	4	6	3	3	2	2	2	3	2	1	1	1	2.1	5.6	
20-Mar-07	1	A	7	5	6	8	12	9	5	3	1	1	1	3	6	4	3	1	2	3	4	3	5	3	4.1	11.6	
21-Mar-07	A	7	8	7	7	10	9	11	3	2	2	2	3	3	3	3	3	3	4	9	15	20	5	A	6.4	19.7	
22-Mar-07	4	6	6	5	6	16	4	8	4	2	1	2	1	2	3	2	2	5	6	3	4	3	A	5	4.3	15.7	
23-Mar-07	3	5	3	6	7	12	19	16	7	5	3	2	2	2	2	2	2	3	3	4	2	A	4	5.1	18.8		
24-Mar-07	2	1	2	1	1	2	5	3	3	2	2	2	1	2	2	4	3	2	3	1	A	5	3	2	2.3	5.2	
25-Mar-07	1	3	1	1	1	1	2	2	2	3	2	1	1	1	2	2	2	1	1	2	A	6	4	2	3	2.0	6.2
26-Mar-07	2	2	2	3	4	12	23	21	5	4	3	4	4	3	3	3	2	3	A	4	3	2	1	5.1	23.2		
27-Mar-07	1	1	1	1	1	0	1	1	1	0	1	1	5	5	4	A	5	3	3	2	2	5	2.0	5.5			
28-Mar-07	3	2	2	1	2	2	3	4	3	3	2	2	2	1	1	1	1	1	2	3	4	5	9	14	3.0	13.9	
29-Mar-07	13	16	A	21	20	15	23	28	C	C	C	C	A	3	2	3	4	4	4	8	2	0	1	0	9.3	28.1	
30-Mar-07	2	2	A	4	5	7	25	16	8	2	2	1	2	2	2	3	3	4	4	4	4	6	11	5.2	24.6		
31-Mar-07	6	A	7	4	4	6	13	10	6	5	4	2	2	2	2	2	3	3	3	3	5	5	3	4.5	12.5		
Hourly Avg	4.9	5.1	5.1	5.0	5.4	6.4	9.2	9.2	6.1	5.3	3.3	2.9	2.9	2.8	3.2	3.1	3.3	4.3	5.8	6.4	7.5	7.8	6.6	5.9			
Hourly Max	17.7	21.8	23.9	27.1	23.8	20.1	24.6	28.1	17.5	20.3	11.6	9.5	8.9	6.7	7.4	7.1	8.7	12.7	22.6	25.5	29.3	27.9	27.7	22.7			

### HOURLY AVERAGE TABLE

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



### 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

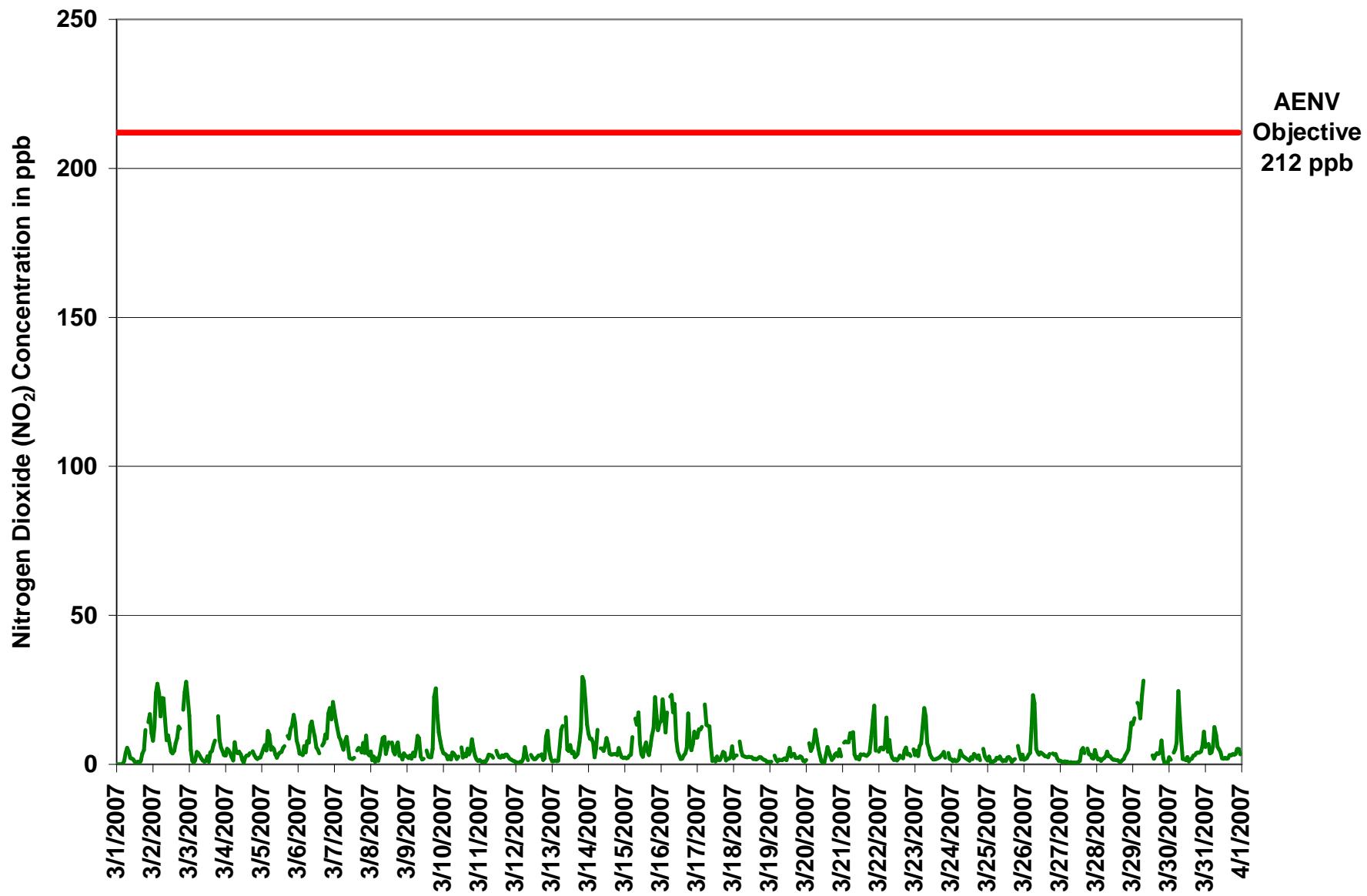


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: March 1, 2007 to April 1, 2007

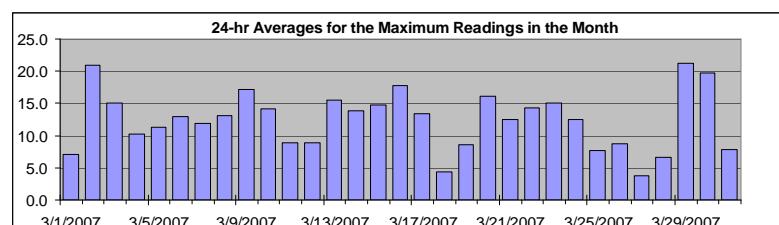
#### Summary

Maximum 1-hr Value:	63.5 ppb	13-Mar 20:00 21:00
Maximum 24-hr Value:	21.2 ppb	29-Mar

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	46.9 33.8 18.1 8.2 4.1 2.2 1.2	12.4 ppb	8.2 ppb

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	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-07	0	1	1	1	1	4	5	8	12	3	4	12	2	2	4	3	3	7	8	19	A	28	22	14	7.1	27.8	
2-Mar-07	11	21	35	34	34	23	35	30	24	10	14	11	6	5	7	9	12	18	18	A	25	36	36	28	20.9	36.0	
3-Mar-07	26	12	13	1	3	7	39	25	11	3	3	3	8	4	30	9	33	37	A	43	18	7	7	5	15.0	43.2	
4-Mar-07	5	26	30	5	6	11	32	11	30	7	19	7	2	5	4	4	5	A	7	4	4	3	3	3	10.2	31.9	
5-Mar-07	7	7	12	11	22	17	7	12	8	7	3	4	5	6	7	9	A	11	10	15	17	28	23	10	11.3	28.2	
6-Mar-07	10	5	12	6	14	6	11	12	16	17	13	12	7	6	5	A	8	10	11	12	29	30	23	24	13.0	30.4	
7-Mar-07	21	20	15	12	13	11	11	13	8	4	3	3	15	A	6	20	17	6	24	10	17	8	6	12.0	24.2		
8-Mar-07	9	12	32	2	19	15	18	10	20	19	13	12	14	A	14	14	8	9	13	5	14	3	13	12	13.1	31.9	
9-Mar-07	18	5	9	3	20	15	33	11	47	5	3	5	A	8	4	4	4	14	38	53	29	28	19	19	17.2	52.9	
10-Mar-07	18	30	6	3	20	3	37	13	23	5	21	A	9	4	31	5	27	15	7	12	14	13	8	3	14.1	36.8	
11-Mar-07	20	2	2	3	3	3	14	17	10	6	A	10	6	4	4	34	4	5	19	5	3	17	2	11	8.8	33.7	
12-Mar-07	1	3	4	25	21	20	14	8	3	A	5	3	2	3	22	4	6	5	2	5	16	20	7	5	8.9	24.6	
13-Mar-07	4	2	3	3	3	14	15	24	A	29	17	7	11	11	7	3	5	13	13	16	64	48	28	17	15.4	63.5	
14-Mar-07	20	23	51	47	4	23	16	A	10	31	7	9	11	14	9	4	6	6	5	4	8	5	4	3	13.9	51.1	
15-Mar-07	4	3	5	5	5	15	A	23	31	21	21	7	4	8	26	18	6	8	14	14	35	29	16	21	14.7	34.6	
16-Mar-07	25	33	25	25	31	A	26	35	20	33	19	8	5	3	3	21	6	8	25	13	7	8	15	13	17.7	35.3	
17-Mar-07	13	15	18	16	A	23	18	16	20	15	28	20	2	11	3	7	25	19	9	2	6	4	4	17	13.5	28.2	
18-Mar-07	4	8	9	A	9	8	4	5	4	5	4	3	3	4	4	2	3	4	3	3	4	3	3	2	4.4	9.5	
19-Mar-07	2	2	A	6	3	1	3	3	2	3	3	3	9	19	16	22	8	9	4	15	30	22	10	3	8.5	30.0	
20-Mar-07	6	A	37	7	8	35	22	13	27	21	3	2	5	10	11	19	25	3	21	31	31	16	12	6	16.2	37.1	
21-Mar-07	A	10	12	12	17	26	24	17	4	8	5	4	5	4	4	8	6	5	7	32	26	32	8	A	12.5	31.6	
22-Mar-07	25	21	25	11	14	40	6	13	9	4	4	4	5	4	22	4	3	31	40	5	4	4	A	29	14.3	40.3	
23-Mar-07	5	24	5	17	20	44	40	32	13	16	6	5	4	3	9	13	4	8	16	49	3	A	7	4	15.0	49.0	
24-Mar-07	20	3	22	3	2	3	38	22	4	4	26	3	2	38	4	21	6	5	25	3	A	27	3	2	12.5	38.2	
25-Mar-07	2	47	4	1	3	6	25	11	12	7	2	2	3	6	6	3	2	3	4	A	11	6	3	9	7.7	46.5	
26-Mar-07	7	3	4	9	7	23	29	25	13	8	5	5	5	5	4	4	3	17	A	7	6	6	3	2	8.8	29.4	
27-Mar-07	2	2	2	2	3	2	1	2	1	1	1	1	2	3	12	11	6	A	8	5	5	3	3	9	3.8	11.8	
28-Mar-07	7	4	5	2	3	3	5	11	4	9	10	3	3	4	2	2	2	2	3	5	14	7	23	24	6.6	24.4	
29-Mar-07	21	30	A	25	26	21	33	42	C	C	C	C	A	5	4	11	31	41	7	27	19	2	22	17	21.2	42.2	
30-Mar-07	20	17	A	7	14	32	63	35	36	4	4	4	34	2	3	23	18	5	7	6	7	32	44	37	19.7	62.7	
31-Mar-07	22	A	11	5	7	11	16	13	7	7	8	6	4	4	3	3	7	6	5	5	6	8	10	6	7.8	21.9	



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

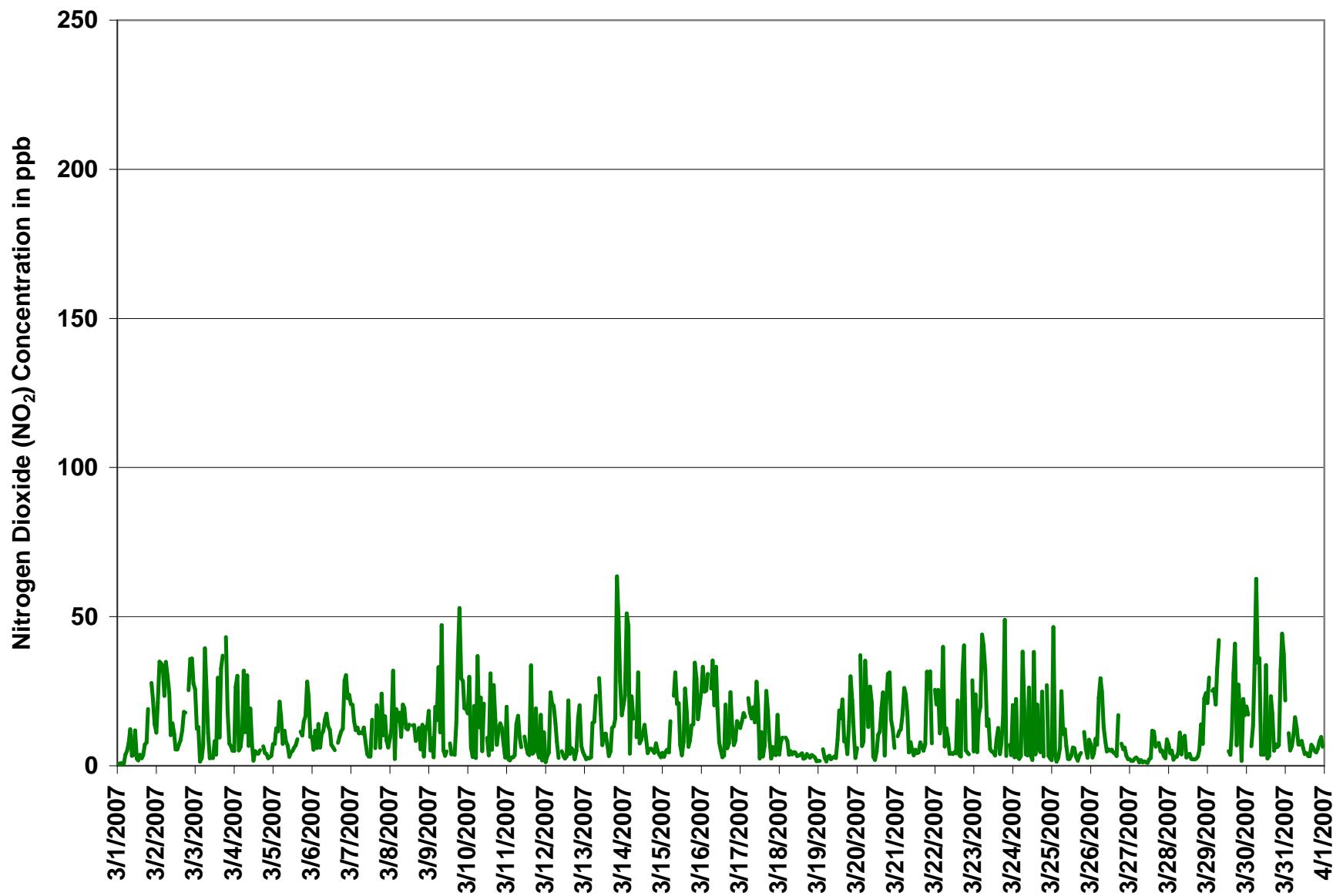
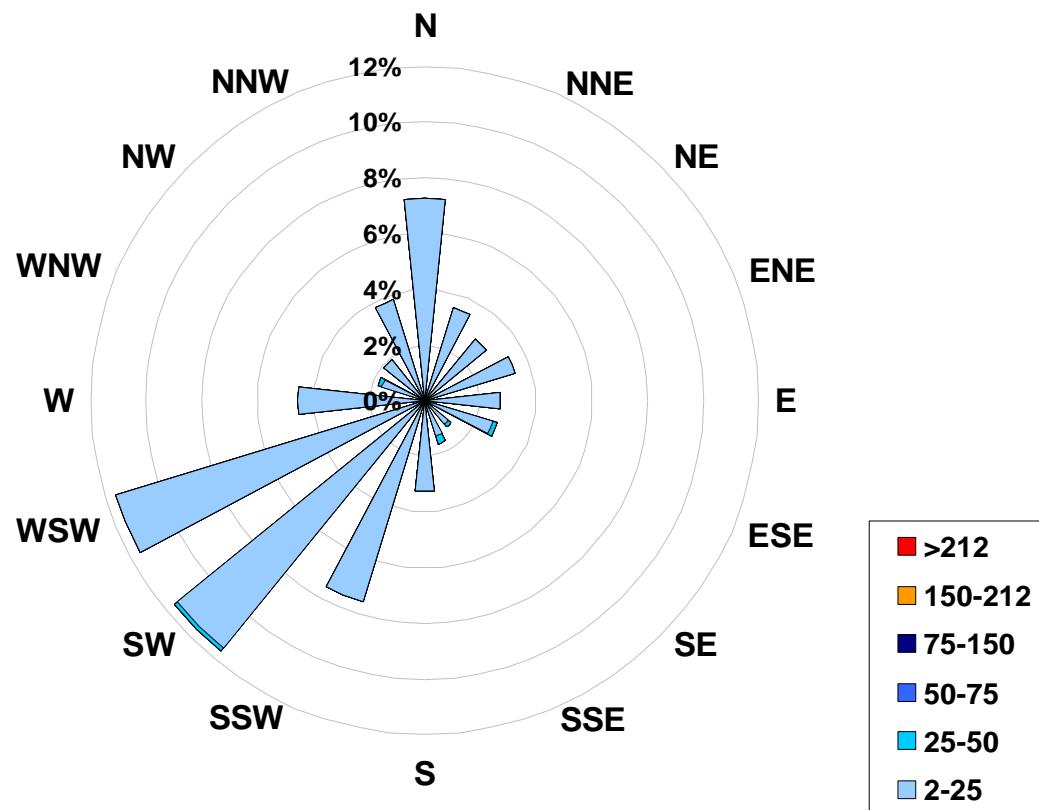


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at  
the Crescent Heights Site for March 2007





## PAS - Crescent Heights - Nitric Oxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

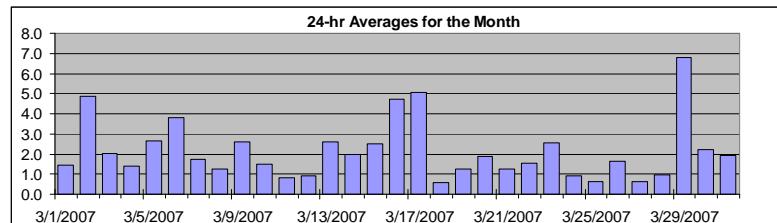
Guideline Limit: 1-hr na ppb 24-hr na ppb  
Summary

Maximum 1-hr Average:	59.8	ppb	29-Mar	7:00 8:00
Maximum 24-hr Average:	6.8	ppb	29-Mar	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	18.1 7.5 2.0 1.1 0.6 0.2 0.0	2.1 ppb	1.1 ppb

### HOURLY AVERAGE TABLE

### Nitric Oxide (NO)



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	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-07	0	0	0	0	0	0	1	2	3	2	3	3	2	2	2	1	1	1	1	2	A	3	2	1	1.4	3.4	
2-Mar-07	1	1	2	3	10	3	12	14	11	7	9	7	4	3	3	4	4	3	1	A	1	4	6	2	4.9	13.7	
3-Mar-07	1	1	2	0	1	1	2	2	2	1	2	2	3	1	3	2	4	6	A	9	1	1	1	1	2.0	8.9	
4-Mar-07	1	2	2	1	0	1	5	1	3	2	3	1	1	2	2	1	1	A	0	0	0	0	0	0	1.4	5.1	
5-Mar-07	0	0	2	2	4	4	4	4	4	3	2	4	4	4	3	2	A	2	1	1	3	4	2	1	2.6	4.4	
6-Mar-07	1	1	2	0	1	0	1	1	4	7	8	8	6	4	2	A	2	2	1	1	11	9	3	12	3.8	11.9	
7-Mar-07	5	2	1	1	1	0	1	1	4	7	8	8	1	1	1	A	1	2	1	1	5	0	2	0	0	1.7	5.4
8-Mar-07	0	0	2	0	1	1	2	1	4	6	2	1	2	A	1	1	1	1	1	1	1	0	0	1	0	1.3	6.2
9-Mar-07	1	0	1	0	2	1	4	3	7	2	1	2	A	2	1	1	1	1	2	16	4	4	2	1	2.6	15.8	
10-Mar-07	3	2	1	0	1	1	4	1	2	2	2	A	2	1	2	1	3	1	1	1	1	1	1	1	1.5	4.4	
11-Mar-07	1	0	0	0	0	0	1	1	1	1	A	1	1	1	1	2	1	1	1	2	1	1	1	0	0.8	2.3	
12-Mar-07	0	0	0	1	1	1	3	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0.9	2.9	
13-Mar-07	0	0	0	0	0	0	1	2	A	5	2	1	2	2	2	1	1	1	1	1	1	20	10	5	1	2.6	19.8
14-Mar-07	2	3	5	3	0	2	2	A	2	4	2	2	4	5	2	1	1	1	1	1	1	0	0	1	0	2.0	5.3
15-Mar-07	0	0	0	0	0	1	A	4	8	12	4	2	2	4	5	2	1	1	1	0	0	7	3	1	1	2.5	11.8
16-Mar-07	1	8	1	1	14	A	12	29	9	16	4	1	1	1	1	1	2	1	0	0	1	2	4.7	29.3			
17-Mar-07	2	2	3	3	A	18	13	21	28	9	2	3	1	2	1	1	2	1	1	0	1	0	0	4	5.1	27.5	
18-Mar-07	0	1	0	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0.6	1.2	
19-Mar-07	0	0	A	1	0	0	1	1	0	1	1	1	2	4	2	4	1	1	1	2	3	2	1	0	1.2	4.3	
20-Mar-07	0	A	3	0	1	4	4	2	3	3	1	1	1	2	2	3	2	1	2	2	3	1	1	1	1.9	4.1	
21-Mar-07	A	1	1	1	1	5	1	2	1	1	1	1	1	2	2	2	1	1	1	0	1	1	2	0	A	1.2	5.0
22-Mar-07	1	2	2	0	1	13	1	2	2	1	1	1	1	1	1	0	1	1	3	0	0	0	A	1	1.5	13.4	
23-Mar-07	0	2	0	1	1	4	21	12	3	3	2	1	1	1	1	1	1	1	1	2	0	A	0	0	2.6	21.3	
24-Mar-07	1	0	1	0	0	0	4	3	1	1	1	1	0	3	0	1	1	0	1	0	A	2	0	0	0.9	3.6	
25-Mar-07	0	2	0	0	0	0	2	0	1	1	1	1	1	1	1	0	0	0	0	A	1	0	0	0.6	1.7		
26-Mar-07	0	0	0	0	0	2	7	12	1	1	1	1	2	2	1	1	1	1	2	A	1	1	0	0	1.7	11.9	
27-Mar-07	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	A	1	1	1	1	1	0.6	1.7	
28-Mar-07	1	0	1	1	1	1	1	2	1	1	2	1	1	1	0	0	1	1	1	1	1	1	1	2	0.9	1.9	
29-Mar-07	1	2	A	10	9	3	33	60	C	C	C	C	A	0	0	0	1	2	0	0	0	0	0	1	0	6.8	59.8
30-Mar-07	1	0	A	0	1	2	9	7	5	1	1	1	4	1	1	2	1	1	1	1	1	1	1	3	6	2.2	9.3
31-Mar-07	2	A	1	1	1	1	3	5	4	3	3	2	2	2	1	1	2	1	1	1	1	1	1	2	1	1.9	4.5
Hourly Avg	1.0	1.2	1.2	1.1	1.8	2.4	5.1	6.6	4.0	3.4	2.1	1.9	1.8	1.8	1.7	1.5	1.3	1.3	1.0	1.8	2.2	1.9	1.2	1.4			
Hourly Max	5.1	8.5	5.3	10.3	14.1	18.3	33.0	59.8	27.5	16.3	8.8	8.4	5.9	4.6	5.5	4.4	4.2	5.5	3.1	15.8	19.8	9.9	6.0	11.9			



## PAS - Crescent Heights - Oxides of Nitrogen Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

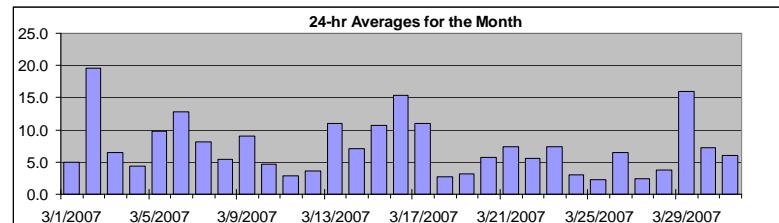
Guideline Limit: Alberta Environment: 1-hr na ppb 24-hr na ppb  
Summary

Maximum 1-hr Average:	87.8	ppb	29-Mar	7:00 8:00
Maximum 24-hr Average:	19.6	ppb	2-Mar	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	38.1 25.8 8.3 4.4 2.6 1.0 0.5	7.2 ppb	4.4 ppb

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

Day	Mountain Standard Time																									24-hour Average	Daily Maximum
	Hour Start 1:00	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-07	0	0	0	0	0	1	4	7	7	4	5	4	3	2	2	1	2	5	5	13	A	17	19	11	4.9	19.1	
2-Mar-07	8	13	26	30	33	19	34	36	26	15	18	13	8	6	8	11	12	15	13	A	20	28	34	25	19.6	35.6	
3-Mar-07	17	5	3	1	2	5	6	4	3	2	2	3	5	2	6	6	11	13	A	25	10	7	5	4	6.4	25.2	
4-Mar-07	3	8	7	5	3	2	12	5	7	6	7	3	1	4	5	4	4	A	5	3	2	2	2	4.4	12.4		
5-Mar-07	4	5	9	7	15	14	8	10	9	6	4	7	8	8	9	8	A	11	10	13	16	20	16	9	9.8	20.2	
6-Mar-07	7	5	5	3	7	4	9	8	17	22	19	18	11	9	6	A	8	9	11	9	28	28	18	33	12.8	32.7	
7-Mar-07	23	17	13	10	10	7	6	10	13	8	3	3	3	3	A	6	8	6	5	13	4	12	4	3	8.2	22.8	
8-Mar-07	5	2	4	1	3	2	5	7	13	15	5	6	9	A	9	5	4	7	8	3	3	2	4	3	5.5	15.4	
9-Mar-07	4	2	3	2	6	3	9	12	16	4	3	3	A	6	4	3	3	6	25	41	20	15	9	6	9.0	41.0	
10-Mar-07	7	5	4	2	4	2	8	5	5	3	5	A	7	3	6	3	8	4	5	9	6	4	2	1	4.6	8.9	
11-Mar-07	3	1	1	1	1	2	4	4	4	3	A	6	4	3	3	5	3	4	5	3	2	2	1	1	2.9	6.0	
12-Mar-07	1	1	1	2	2	3	9	4	2	A	4	3	2	2	4	4	4	4	2	2	10	12	5	2	3.6	11.9	
13-Mar-07	1	1	1	1	1	6	13	15	A	20	6	6	9	5	6	3	4	4	8	13	49	38	26	14	10.9	49.0	
14-Mar-07	12	12	14	10	3	7	13	A	7	9	6	8	12	11	5	4	5	4	4	3	6	4	3	2	7.1	13.5	
15-Mar-07	2	2	2	3	3	10	A	19	21	29	10	5	4	9	13	6	3	6	10	12	29	19	12	15	10.7	29.1	
16-Mar-07	15	30	18	11	31	A	34	52	26	36	12	5	4	2	2	4	4	6	18	8	5	7	12	11	15.4	52.3	
17-Mar-07	11	13	14	15	A	38	26	33	40	15	3	5	2	4	2	2	4	5	4	1	2	2	2	9	11.1	40.1	
18-Mar-07	2	4	3	A	8	5	3	3	3	3	3	3	3	3	3	2	2	2	3	2	2	1	1	1	2.8	8.0	
19-Mar-07	1	1	A	3	2	1	2	2	2	3	2	5	10	5	7	4	3	3	4	5	4	2	1	3.1	9.7		
20-Mar-07	2	A	10	5	6	12	15	11	8	6	2	1	1	5	8	7	5	2	4	5	6	4	6	3	5.7	15.0	
21-Mar-07	A	8	8	8	8	15	10	13	4	3	3	2	4	5	5	4	3	4	4	10	15	22	5	A	7.4	21.9	
22-Mar-07	5	7	7	5	6	29	5	10	5	3	2	2	2	2	4	3	2	6	9	4	4	4	3	A	5.6	29.0	
23-Mar-07	3	6	3	7	8	16	40	28	10	8	5	3	2	2	2	3	3	4	4	6	2	A	4	2	7.4	40.0	
24-Mar-07	2	1	2	1	1	2	8	5	3	3	2	1	1	5	2	5	3	2	4	1	A	7	3	2	3.0	7.9	
25-Mar-07	1	4	0	1	1	1	4	2	4	2	1	2	2	3	3	1	2	2	2	4	2	3	2	2.3	6.6		
26-Mar-07	2	2	2	3	4	14	30	32	6	5	4	5	5	4	4	3	3	5	A	4	3	4	2	1	6.4	32.2	
27-Mar-07	1	1	1	1	1	1	0	1	1	1	1	1	1	2	6	7	5	A	6	4	4	2	2	5	2.4	7.0	
28-Mar-07	3	2	2	1	2	2	4	6	3	4	3	2	2	2	2	1	1	2	2	4	5	5	5	11	15	3.7	15.0
29-Mar-07	14	17	A	31	29	18	56	88	C	C	C	C	A	2	1	3	5	5	3	8	2	0	2	1	15.9	87.8	
30-Mar-07	3	2	A	4	5	9	34	22	13	3	3	2	6	1	3	3	4	4	4	4	5	5	9	17	7.2	33.7	
31-Mar-07	8	A	8	5	5	7	16	14	10	8	6	3	3	4	3	3	5	4	4	4	5	6	7	2	6.1	15.7	
Hourly Avg	5.7	6.1	6.1	5.9	6.9	8.6	14.2	15.6	9.9	8.5	5.2	4.5	4.5	4.4	4.6	4.4	4.4	5.4	6.5	8.0	9.5	9.5	7.6	7.0			
Hourly Max	22.8	30.0	26.0	31.0	33.2	38.1	56.1	87.8	40.1	36.3	19.1	17.8	12.5	11.2	12.6	11.2	12.3	15.4	24.9	41.0	49.0	37.6	33.5	32.7			

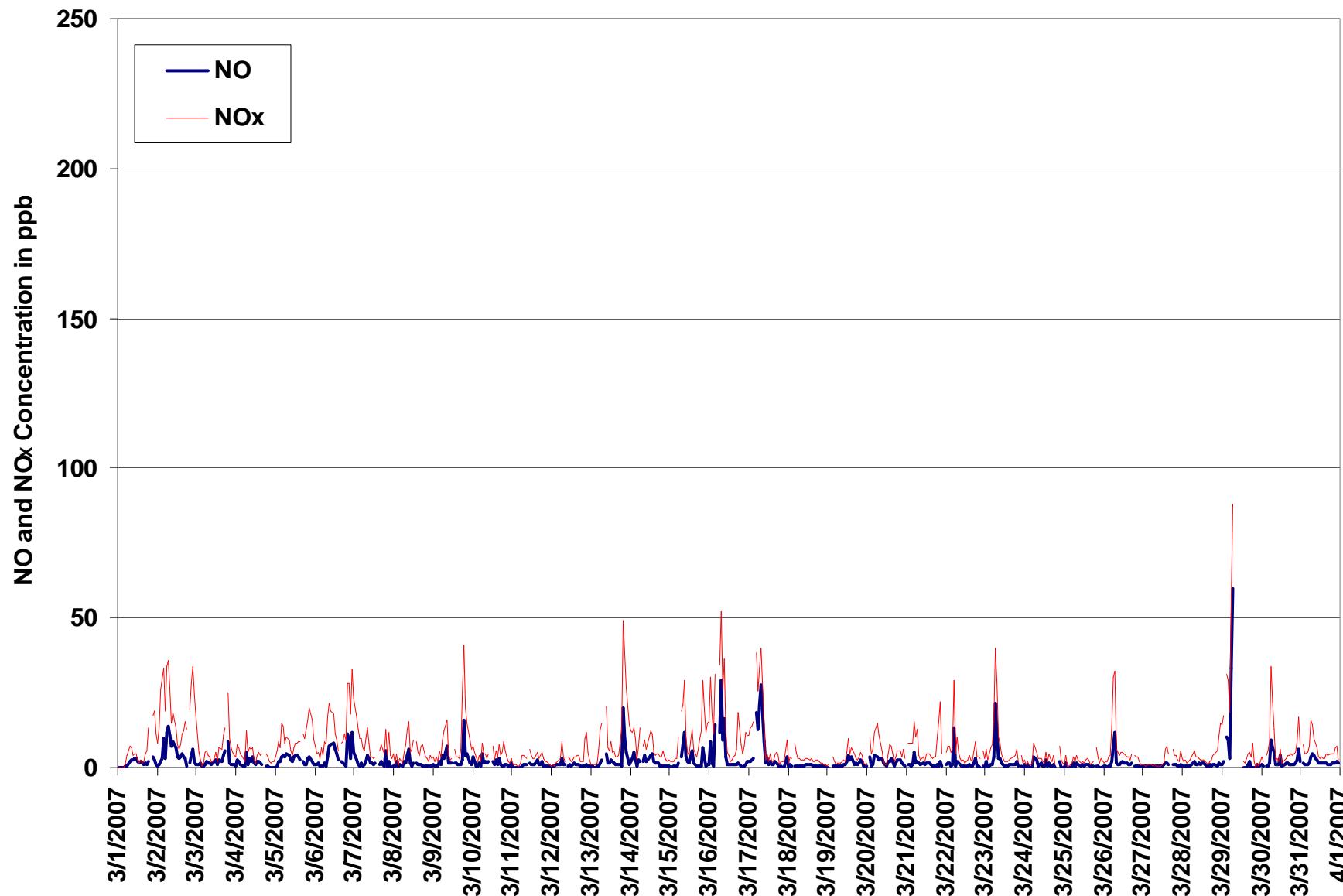


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Nitric Oxide (NO)

Monitoring Dates: March 1, 2007 to April 1, 2007

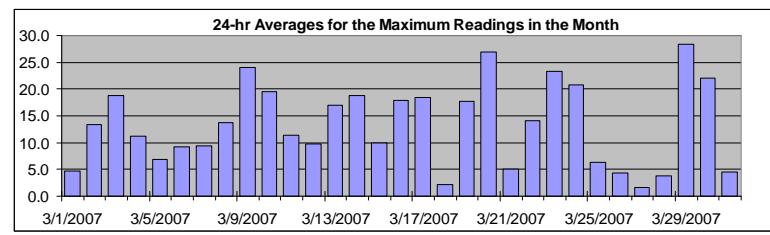
#### Summary

Maximum 1-hr Value:	165.5 ppb	9-Mar 19:00 20:00
Maximum 24-hr Value:	28.3 ppb	29-Mar

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	94.4 61.7 13.7 3.2 1.7 0.9 0.7	13.3 ppb	3.2 ppb

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Mar-07	1:00	1	1	1	1	1	1	4	15	3	4	18	3	3	5	4	3	8	A	7	18	2			4.8	18.3		
2-Mar-07	1:00	3	7	5	22	7	74	53	25	9	15	10	5	4	5	6	5	4	3	A	5	13	23	5		13.4	73.9	
3-Mar-07	1:00	2	43	1	1	3	58	19	33	2	3	3	6	3	19	4	65	68	A	78	4	2	2	10		18.8	77.8	
4-Mar-07	1:00	23	27	3	2	3	59	3	88	3	21	4	2	4	3	2	2	A	1	1	2	1	1	1		11.2	88.5	
5-Mar-07	1:00	2	15	7	24	7	6	14	7	5	3	6	5	6	5	5	A	3	2	2	5	22	5	2		6.8	23.6	
6-Mar-07	1:00	3	15	1	9	1	3	2	6	10	11	10	8	5	4	A	3	3	3	2	36	18	35	21		9.2	36.0	
7-Mar-07	1:00	8	2	2	4	1	18	5	6	4	2	3	3	27	A	2	27	15	2	59	4	8	1	1		9.4	59.4	
8-Mar-07	1:00	13	42	1	23	37	49	4	72	29	10	2	3	A	3	5	3	2	2	2	3	1	4	4		13.8	72.4	
9-Mar-07	1:00	33	2	3	1	32	14	55	5	90	3	2	4	A	3	2	3	2	2	9	166	38	48	15	19		24.1	165.5
10-Mar-07	1:00	64	45	3	1	28	1	91	8	32	3	42	A	3	2	32	2	29	7	1	1	20	17	10	2		19.4	91.4
11-Mar-07	1:00	49	2	1	2	2	2	9	13	8	5	A	5	3	3	2	51	2	3	57	3	2	25	1	12		11.3	56.7
12-Mar-07	1:00	1	6	17	36	25	32	51	3	2	A	2	2	1	2	29	2	3	3	2	1	1	3	1	1		9.8	51.2
13-Mar-07	1:00	1	1	1	1	1	4	12	A	19	15	3	4	10	4	2	2	7	2	1	148	88	59	3		16.9	148.0	
14-Mar-07	1:00	19	60	100	80	1	66	4	A	3	49	3	4	6	14	5	2	3	3	2	1	1	1	1	1		18.7	100.4
15-Mar-07	1:00	1	1	2	2	1	3	A	8	57	17	14	12	3	6	30	13	2	1	1	1	29	16	3	4		9.9	57.3
16-Mar-07	1:00	9	48	13	7	62	A	34	116	14	42	13	2	3	1	2	17	3	3	11	1	1	2	3	4		17.9	116.2
17-Mar-07	1:00	12	3	5	8	A	24	19	50	68	30	26	69	3	9	3	3	29	24	8	1	1	1	1	28		18.5	69.3
18-Mar-07	1:00	0	8	3	A	2	3	1	2	2	3	3	2	2	3	3	1	1	1	1	1	1	1	1	1		2.1	8.3
19-Mar-07	1:00	1	1	A	2	1	1	1	2	1	1	2	2	5	28	32	91	2	16	3	51	91	56	14	2		17.6	91.2
20-Mar-07	1:00	2	A	94	2	4	63	90	4	47	49	3	2	1	6	5	35	29	1	41	50	48	37	4	2		27.0	94.2
21-Mar-07	1:00	A	3	2	2	17	35	9	5	2	4	3	2	2	2	2	3	1	1	1	5	2	8	1	A		5.1	35.2
22-Mar-07	1:00	29	11	30	2	3	94	2	4	4	2	3	2	3	2	19	1	1	29	67	1	1	1	A	16		14.2	93.9
23-Mar-07	1:00	2	48	2	3	5	57	148	82	7	18	3	4	3	2	14	13	1	22	33	64	1	A	2	2		23.3	148.4
24-Mar-07	1:00	36	1	38	1	1	1	51	94	2	2	35	2	1	83	2	40	2	1	26	1	A	56	1	1		20.8	94.5
25-Mar-07	1:00	1	44	1	1	1	7	42	8	18	3	1	2	1	2	2	2	1	2	2	A	1	1	1	1		6.3	43.5
26-Mar-07	1:00	1	1	1	1	1	8	18	19	5	4	2	3	3	3	2	2	2	19	A	1	1	2	1		4.3	19.3	
27-Mar-07	1:00	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	2	A	2	2	3	1	1	2	1		1.6	4.2
28-Mar-07	1:00	1	1	1	1	2	1	3	8	2	4	9	2	4	6	2	2	2	2	3	8	2	11	13		3.7	12.6	
29-Mar-07	1:00	4	34	A	31	23	7	108	92	C	C	C	C	A	0	1	3	39	60	1	11	4	0	53	37		28.3	107.7
30-Mar-07	1:00	22	9	A	1	9	29	41	22	54	2	2	2	114	1	2	16	14	2	3	3	2	16	69	72		22.1	113.7
31-Mar-07	1:00	29	A	2	2	2	3	6	8	5	5	5	3	3	3	2	4	2	2	3	3	3	3	3		4.5	29.1	
Hourly Avg		11.5	13.2	16.9	6.9	10.3	17.3	35.2	22.3	23.5	11.4	8.9	6.4	7.1	8.1	8.2	11.3	9.5	10.8	10.0	18.1	16.1	15.2	11.5	9.1			
Hourly Max		64.1	60.4	100.4	79.7	62.4	93.9	148.4	116.2	90.4	48.9	41.9	69.3	113.7	83.1	32.3	91.2	65.2	68.4	66.5	165.5	148.0	87.7	68.8	71.7			



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

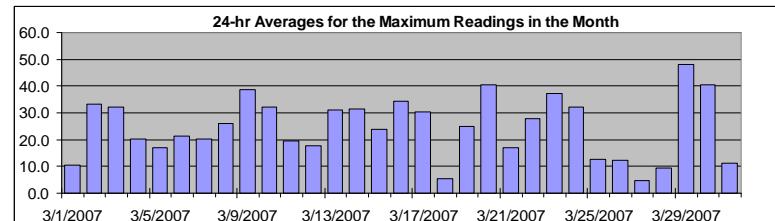


Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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



#### Summary

Maximum 1-hr Value:	214.8 ppb	9-Mar 19:00	20:00
Maximum 24-hr Value:	47.9 ppb	29-Mar	

AIC Time:	32 hrs	Operational Time:	708 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	
	134.8 89.3 31.2 11.2 5.3 2.5 1.3	24.5 ppb	Median 11.2 ppb

#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Mar-07	0:00 1:00	0	1	1	1	4	6	11	26	6	7	27	5	4	7	4	5	10	9	25	A	32	38	16	10.6	37.7	
2-Mar-07	0:00 1:00	12	23	41	39	55	30	107	78	47	18	29	20	10	8	11	14	17	20	20	A	28	48	59	33.3	107.1	
3-Mar-07	0:00 1:00	29	13	55	1	3	9	96	42	43	4	4	5	14	6	48	13	96	104	A	107	23	9	7	32.3	106.9	
4-Mar-07	0:00 1:00	6	47	57	6	7	14	86	14	119	9	40	11	3	8	7	6	6	A	7	5	4	2	3	20.4	118.7	
5-Mar-07	0:00 1:00	8	8	24	19	45	21	12	24	15	11	6	10	10	10	10	13	A	14	12	16	20	50	28	11	17.2	49.6
6-Mar-07	0:00 1:00	11	7	26	6	23	7	13	13	21	27	23	21	14	11	8	A	9	12	13	14	62	47	58	21.4	62.1	
7-Mar-07	0:00 1:00	32	29	16	13	16	12	25	15	19	12	6	6	5	40	A	7	48	30	7	78	14	22	9	20.3	77.7	
8-Mar-07	0:00 1:00	10	26	74	2	39	52	67	13	90	48	22	13	17	A	17	17	10	10	14	6	13	3	16	17	26.0	89.6
9-Mar-07	0:00 1:00	47	6	11	3	51	27	81	16	117	7	5	8	A	10	5	5	5	16	45	215	68	75	32	33	38.6	214.8
10-Mar-07	0:00 1:00	78	74	8	3	47	3	123	21	51	8	62	A	13	4	63	6	52	22	8	13	30	31	18	3	32.2	123.2
11-Mar-07	0:00 1:00	70	3	2	3	2	3	23	29	18	10	A	14	8	5	5	84	6	7	76	7	4	42	2	23	19.4	84.1
12-Mar-07	0:00 1:00	2	7	18	60	43	51	61	10	4	A	6	4	3	4	51	5	8	7	3	6	16	22	7	5	17.5	60.7
13-Mar-07	0:00 1:00	4	2	2	3	3	15	18	35	A	46	29	9	14	20	11	5	6	20	15	17	212	134	81	18	31.2	211.5
14-Mar-07	0:00 1:00	39	82	151	126	4	89	18	A	12	77	10	11	17	26	14	6	7	6	5	5	8	5	4	31.6	151.4	
15-Mar-07	0:00 1:00	5	3	5	5	4	18	A	31	85	38	35	19	5	13	56	30	8	10	14	15	62	45	18	23.8	85.1	
16-Mar-07	0:00 1:00	33	77	37	30	92	A	59	144	34	73	32	10	9	4	4	37	8	9	34	14	7	8	16	34.2	143.9	
17-Mar-07	0:00 1:00	24	18	21	22	A	44	30	63	85	44	52	89	4	20	5	9	54	40	12	2	7	4	4	45	30.3	89.0
18-Mar-07	0:00 1:00	3	16	10	A	10	11	5	6	5	6	4	4	5	5	6	3	3	4	4	3	4	4	3	5.4	15.7	
19-Mar-07	0:00 1:00	1	2	A	7	3	2	3	3	2	3	4	4	13	40	47	114	9	23	4	65	118	77	24	4	24.9	118.3
20-Mar-07	0:00 1:00	6	A	120	7	9	79	109	15	74	70	5	3	6	16	16	53	54	4	56	79	79	53	17	40.7	119.5	
21-Mar-07	0:00 1:00	A	11	12	13	33	61	32	22	6	11	7	5	7	6	6	11	8	5	8	36	28	39	7	17.0	60.8	
22-Mar-07	0:00 1:00	54	30	51	12	17	134	8	16	13	6	6	6	6	6	40	4	4	60	107	6	5	4	A	43	27.7	133.8
23-Mar-07	0:00 1:00	5	68	5	20	24	100	185	114	20	31	9	7	5	5	23	26	5	27	49	112	3	A	8	4	37.1	184.9
24-Mar-07	0:00 1:00	57	3	61	2	2	4	89	113	5	6	61	5	3	120	4	60	6	5	46	3	A	78	3	2	32.0	120.2
25-Mar-07	0:00 1:00	2	75	4	1	3	12	67	19	30	9	3	3	4	8	7	4	2	5	5	A	12	6	3	12.8	74.6	
26-Mar-07	0:00 1:00	8	3	4	10	7	29	47	43	17	12	6	8	7	8	6	5	3	34	A	9	6	7	3	12.4	46.9	
27-Mar-07	0:00 1:00	2	2	1	3	3	2	1	2	2	2	1	1	3	4	16	15	7	A	8	6	7	3	3	4.6	15.8	
28-Mar-07	0:00 1:00	8	5	6	2	3	4	6	15	5	13	18	4	6	9	4	3	3	3	4	8	20	8	33	9.3	33.2	
29-Mar-07	0:00 1:00	25	62	A	56	47	28	138	135	C	C	C	C	A	4	4	14	63	96	7	37	23	1	75	49	47.9	138.4
30-Mar-07	0:00 1:00	41	26	A	7	21	60	103	55	89	5	5	6	138	3	5	39	32	6	8	8	8	47	113	104	40.3	137.9
31-Mar-07	0:00 1:00	49	A	12	6	8	12	22	20	12	11	13	9	6	7	5	4	9	8	6	7	8	11	12	6	11.4	49.0
Hourly Avg		22.3	25.0	29.9	16.3	20.9	31.2	54.6	37.8	36.8	21.4	17.6	11.7	12.4	14.4	17.0	20.6	18.4	21.3	20.9	31.8	31.0	30.6	23.4	19.5		
Hourly Max		78.5	81.9	151.4	126.3	92.0	133.8	184.9	143.9	118.7	77.2	62.1	89.0	137.9	120.2	62.7	113.6	95.6	103.6	107.2	214.8	211.5	133.8	112.7	104.3		

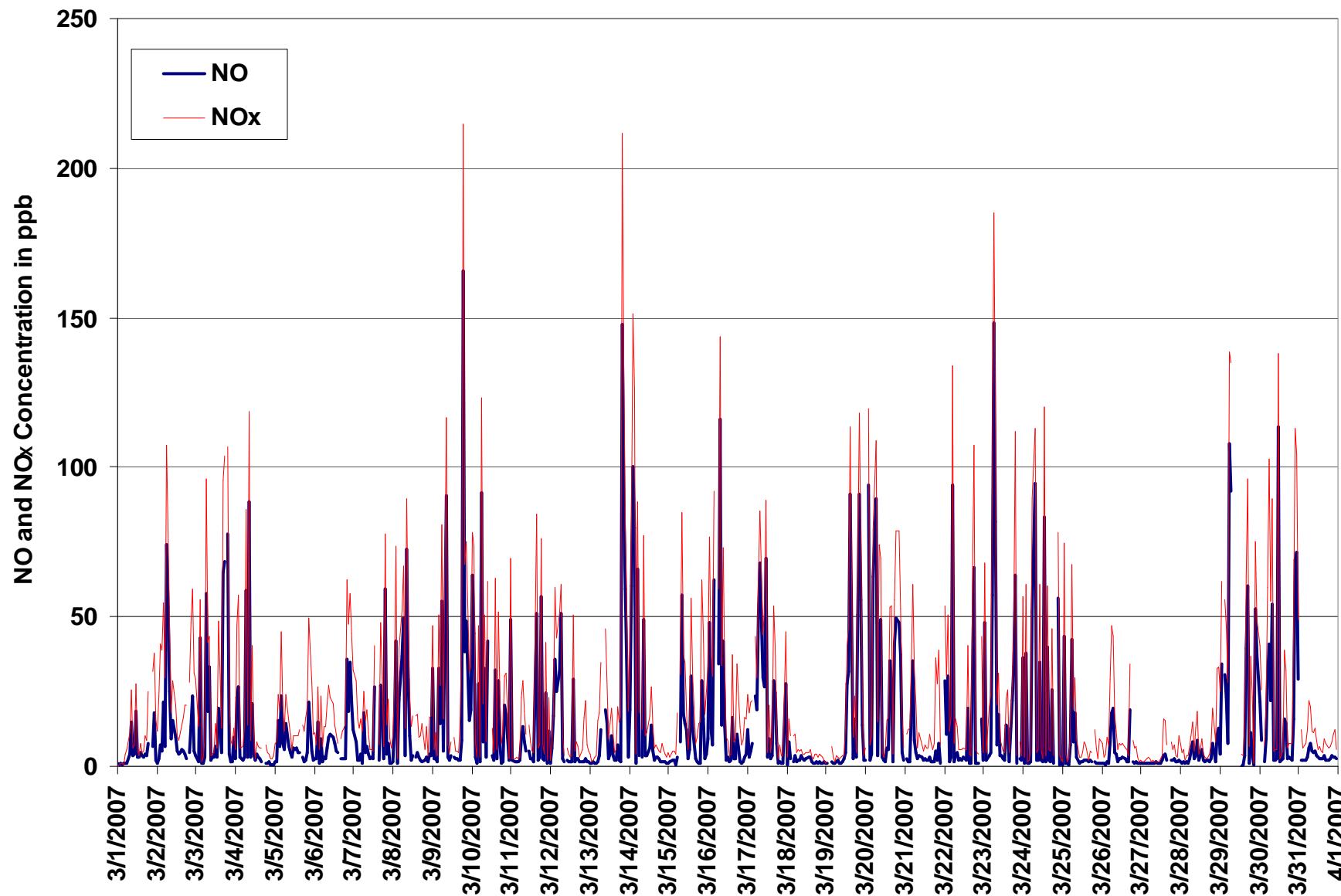


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



## PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

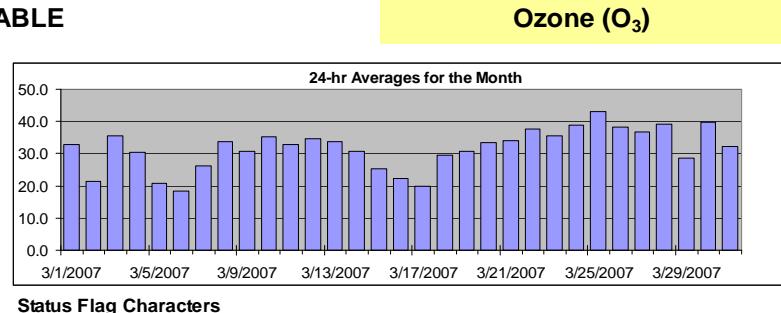
Monitoring Dates: March 1, 2007 to April 1, 2007

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

Number of 1-hr Exceedances: 0  
Maximum 1-hr Average: 56.2 ppb 30-Mar 13:00 14:00  
Maximum 24-hr Average: 43.2 ppb 25-Mar

AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	49.6	47.2	39.8	32.2	25.7	11.6	4.0	31.7 ppb	32.2 ppb

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-07	33	32	31	31	31	30	26	25	26	30	32	34	36	41	42	44	43	40	39	32	A	29	22	29	32.8	43.9
2-Mar-07	30	26	13	9	8	11	5	6	15	25	29	33	35	36	36	34	32	27	26	A	20	13	10	13	21.5	36.3
3-Mar-07	24	38	42	43	41	39	39	39	39	39	38	36	39	44	41	37	33	30	A	23	27	28	30	30	35.6	43.9
4-Mar-07	31	31	30	27	31	34	26	26	26	28	35	40	41	33	30	30	31	A	31	30	29	28	28	27	30.5	40.6
5-Mar-07	25	23	21	22	17	17	23	23	24	25	26	25	24	24	23	21	A	20	22	18	15	10	14	18	20.8	25.9
6-Mar-07	22	27	28	28	24	25	22	22	16	15	17	19	22	22	22	22	A	21	18	16	17	8	4	7	18.5	28.0
7-Mar-07	4	10	12	16	19	22	27	23	24	31	37	36	36	37	A	37	34	35	34	28	28	22	26	26	26.2	37.3
8-Mar-07	25	32	31	33	32	33	29	24	23	28	37	35	31	A	41	46	44	39	37	40	37	40	30	29	33.7	45.8
9-Mar-07	27	27	28	27	29	23	20	29	39	41	43	A	45	46	46	46	41	23	17	17	18	24	24	30.7	46.2	
10-Mar-07	25	26	26	29	27	29	28	30	32	33	36	A	45	48	47	48	44	44	44	40	30	32	35	36	35.2	48.4
11-Mar-07	36	37	37	36	37	34	34	35	35	35	A	39	42	45	43	33	32	29	24	22	22	21	22	23	32.7	45.0
12-Mar-07	26	27	28	26	25	23	18	22	27	A	40	48	49	47	46	45	42	39	45	43	33	29	31	34.8	49.4	
13-Mar-07	43	42	41	42	41	36	29	26	A	30	40	40	39	43	42	44	44	42	36	30	12	7	10	13	33.6	44.4
14-Mar-07	18	22	27	29	35	32	26	A	33	32	35	34	31	33	40	40	36	34	30	29	25	27	28	27	30.7	40.3
15-Mar-07	29	29	29	27	26	19	A	13	16	13	24	27	30	29	32	38	41	38	33	29	15	15	17	13	25.3	40.6
16-Mar-07	11	5	10	16	11	A	4	4	11	12	37	42	42	43	41	37	34	30	18	25	25	21	15	15	22.2	43.1
17-Mar-07	12	8	6	4	A	1	1	3	7	19	25	28	31	31	33	33	33	30	27	28	29	28	23	18	20.0	33.4
18-Mar-07	20	20	25	A	14	16	27	33	37	36	37	34	28	29	30	30	28	29	28	32	32	36	38	37	29.4	38.2
19-Mar-07	39	39	A	34	34	32	28	27	26	25	26	32	30	29	32	31	30	31	30	31	29	29	31	30	30.7	39.4
20-Mar-07	28	A	25	26	26	23	19	21	26	30	34	42	53	43	36	39	46	46	43	40	40	35	21	29	33.5	52.7
21-Mar-07	A	26	22	22	19	16	29	27	42	44	44	44	42	43	44	46	46	45	42	33	22	17	30	A	33.9	46.3
22-Mar-07	35	29	28	31	29	19	34	28	36	41	45	47	49	49	49	49	49	45	39	35	32	33	A	37.6	49.4	
23-Mar-07	31	30	32	27	24	17	10	15	28	32	39	43	46	45	47	48	49	48	45	39	39	A	40	41	35.4	49.1
24-Mar-07	41	41	42	44	42	38	32	31	33	33	40	42	43	42	42	41	40	40	37	39	A	36	37	38	38.8	43.6
25-Mar-07	39	38	42	41	39	38	36	34	35	41	42	42	48	48	48	50	50	51	49	47	A	47	46	48	43.2	51.1
26-Mar-07	45	43	43	39	32	22	9	12	35	38	39	40	43	47	48	49	50	50	47	A	43	40	39	38	38.3	49.6
27-Mar-07	34	34	33	38	44	44	43	43	45	44	41	39	37	36	33	33	36	A	31	32	31	31	31	36.7	44.8	
28-Mar-07	35	36	36	38	36	36	35	34	36	36	39	43	45	47	48	49	49	49	47	42	38	35	29	21	39.2	49.3
29-Mar-07	19	13	A	5	6	8	3	6	26	30	35	42	48	C	C	C	A	47	42	37	41	44	44	44	28.5	48.2
30-Mar-07	43	42	A	41	38	35	21	28	34	41	43	50	51	56	52	48	44	44	40	38	36	34	30	25	39.8	56.2
31-Mar-07	25	A	27	28	26	18	12	15	18	25	35	41	43	44	45	44	43	42	39	38	35	32	32	33	32.3	44.8
Hourly Avg	28.5	28.7	28.3	28.8	28.0	25.9	23.2	23.2	28.0	31.1	35.6	38.0	39.4	40.0	40.1	40.4	39.8	37.9	34.1	31.7	28.9	27.4	27.4	27.5		
Hourly Max	44.9	43.1	42.6	43.6	43.8	44.0	43.3	42.6	44.8	44.4	44.8	49.9	52.7	56.2	52.4	49.6	51.1	48.6	47.0	43.2	47.1	45.8	47.7	44.0		



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

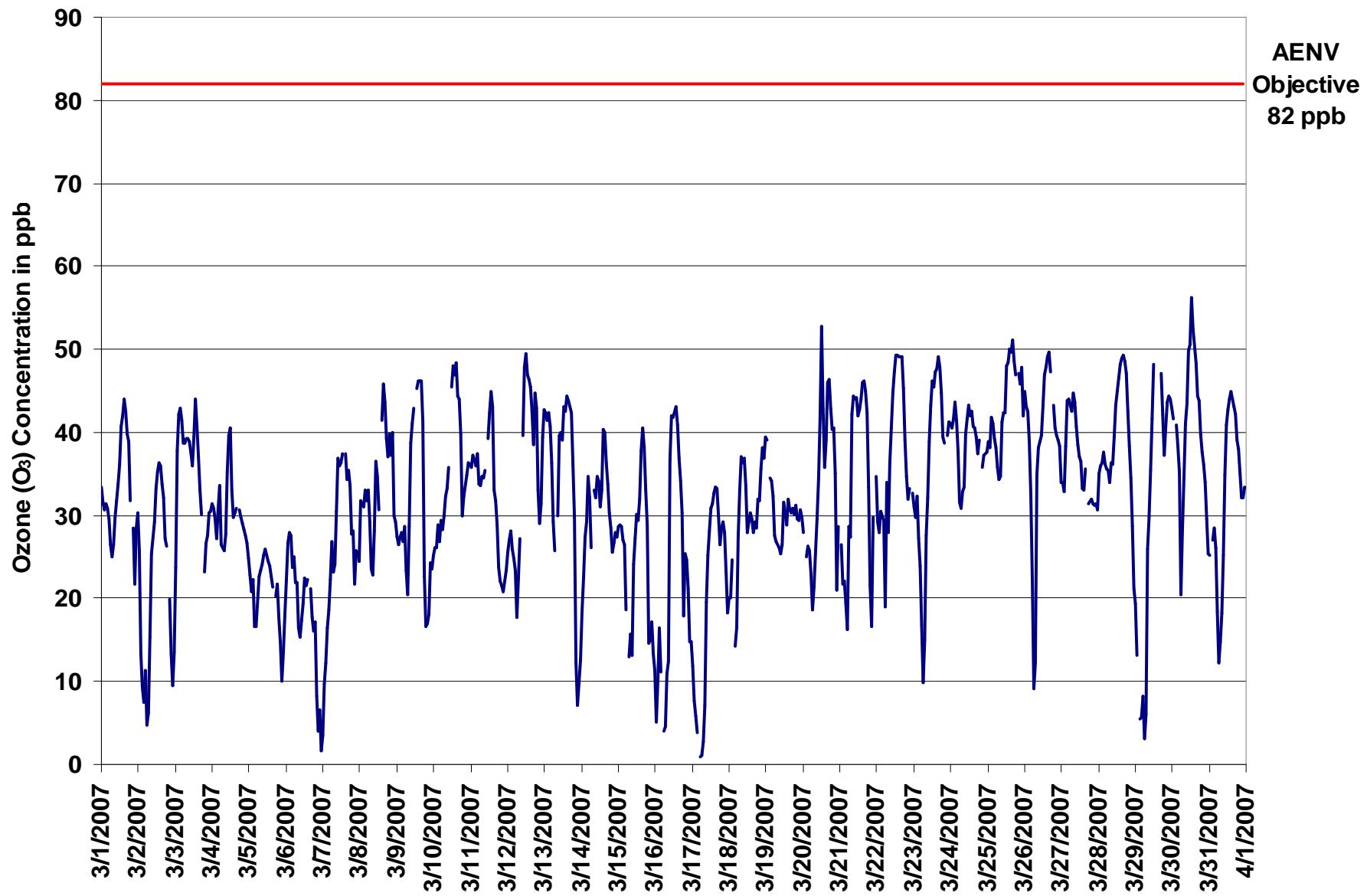


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: March 1, 2007 to April 1, 2007

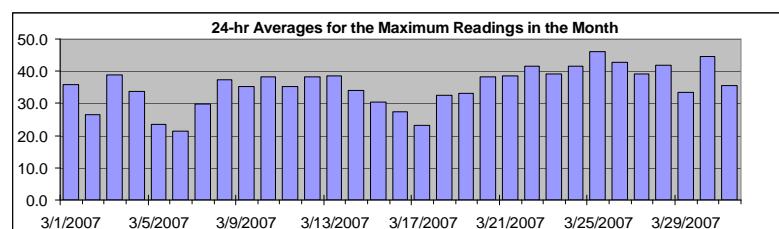
#### Summary

Maximum 1-hr Value:	60.4	ppb	30-Mar	13:00 14:00
Maximum 24-hr Value:	46.0	ppb	25-Mar	

AIC Time:	32 hrs	Operational Time:	709 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	52.7 49.9 43.2 35.7 29.3 18.1 8.4	35.4 ppb	35.7 ppb

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Mar-07	36	34	32	33	32	33	28	28	29	32	35	35	38	44	44	45	45	42	42	39	A	35	29	34	35.8	45.5	
2-Mar-07	34	30	23	15	17	17	9	12	21	30	33	36	37	39	38	36	35	33	30	A	28	22	14	23	26.6	38.9	
3-Mar-07	33	43	44	44	43	43	41	43	41	40	39	37	44	46	43	41	37	37	A	31	30	30	33	32	38.9	46.0	
4-Mar-07	34	36	36	31	35	36	35	30	28	33	40	42	43	42	31	33	35	A	32	31	30	29	29	33.9	43.0		
5-Mar-07	27	25	24	25	21	23	25	26	26	27	27	26	26	25	24	23	A	22	24	22	18	15	20	22	23.6	27.1	
6-Mar-07	28	29	30	30	26	27	24	25	20	19	19	22	24	23	23	A	22	20	18	19	18	8	13	5	21.4	29.9	
7-Mar-07	8	15	16	20	24	27	29	28	35	39	38	38	39	39	A	39	38	38	36	34	32	28	29	28	29.8	39.1	
8-Mar-07	30	34	34	35	34	35	32	29	27	34	39	40	34	A	45	50	48	43	42	42	41	42	37	32	37.3	49.6	
9-Mar-07	31	29	30	30	31	31	28	23	36	42	43	46	A	47	48	48	47	31	38	22	28	29	28	35.4	48.3		
10-Mar-07	29	29	29	32	30	33	33	32	36	34	44	A	49	49	50	51	49	46	43	35	36	37	38	38.3	50.6		
11-Mar-07	39	39	38	38	39	36	38	37	37	37	A	42	46	48	46	39	34	32	26	24	23	22	24	35.1	47.6		
12-Mar-07	27	29	30	28	26	26	22	24	35	A	45	52	51	49	48	48	47	46	47	45	44	34	35	43	38.3	51.5	
13-Mar-07	44	44	43	44	44	42	36	31	A	42	46	43	44	46	46	46	46	46	44	35	29	14	18	15	38.6	46.3	
14-Mar-07	24	33	32	33	37	35	30	A	36	36	37	38	33	36	43	43	40	37	33	30	28	29	29	29	34.0	43.5	
15-Mar-07	31	31	30	29	29	27	A	22	21	18	29	31	34	35	39	41	43	41	37	36	35	20	20	18	30.3	42.8	
16-Mar-07	16	12	19	23	23	A	9	11	16	19	44	46	46	45	44	40	37	33	27	28	27	25	21	18	27.4	46.1	
17-Mar-07	16	10	9	7	A	3	2	6	14	27	27	32	33	34	35	36	37	35	29	30	31	30	25	22	23.1	36.6	
18-Mar-07	21	22	30	A	19	25	32	36	40	39	40	38	30	31	32	31	30	32	32	34	34	41	41	39	32.6	41.0	
19-Mar-07	41	40	A	37	36	35	29	29	28	27	30	35	34	35	34	33	32	33	32	33	32	31	32	31	33.0	41.5	
20-Mar-07	30	A	29	28	28	27	22	25	30	33	42	46	55	52	39	47	49	48	47	44	45	42	41	32	38.4	54.8	
21-Mar-07	A	30	25	25	22	21	35	40	46	47	48	46	45	45	48	49	49	47	44	43	33	30	32	A	38.6	48.9	
22-Mar-07	37	34	31	33	34	32	37	34	42	43	48	50	52	52	52	52	51	50	47	38	34	35	A	35	41.4	52.3	
23-Mar-07	32	33	35	32	28	24	17	24	32	37	42	47	48	47	50	50	51	52	46	43	42	A	43	43	39.1	51.5	
24-Mar-07	43	41	44	47	43	42	36	33	36	37	43	45	45	45	45	45	43	42	40	41	A	39	39	39	41.4	46.5	
25-Mar-07	40	42	43	42	41	40	38	37	42	44	44	46	51	51	53	53	53	52	51	A	52	48	49	46	46.0	53.1	
26-Mar-07	48	46	47	47	36	33	23	23	41	43	41	42	46	49	50	51	51	51	51	A	45	44	42	41	42.7	51.1	
27-Mar-07	38	36	35	46	46	45	45	44	46	46	43	40	39	38	37	38	38	38	A	33	33	33	33	33	39.1	46.3	
28-Mar-07	38	38	39	39	38	38	37	38	40	38	42	45	47	48	50	50	51	50	49	45	43	37	33	29	42.0	50.9	
29-Mar-07	25	22	A	11	14	12	7	13	34	34	39	50	51	C	C	C	A	51	48	43	44	46	47	46	33.4	50.9	
30-Mar-07	46	45	A	43	42	42	35	36	42	44	46	54	56	60	57	53	48	47	43	41	39	37	34	33	44.5	60.4	
31-Mar-07	30	A	30	32	28	24	16	19	20	32	38	43	45	47	47	46	46	46	42	40	40	35	35	36	35.5	47.0	



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

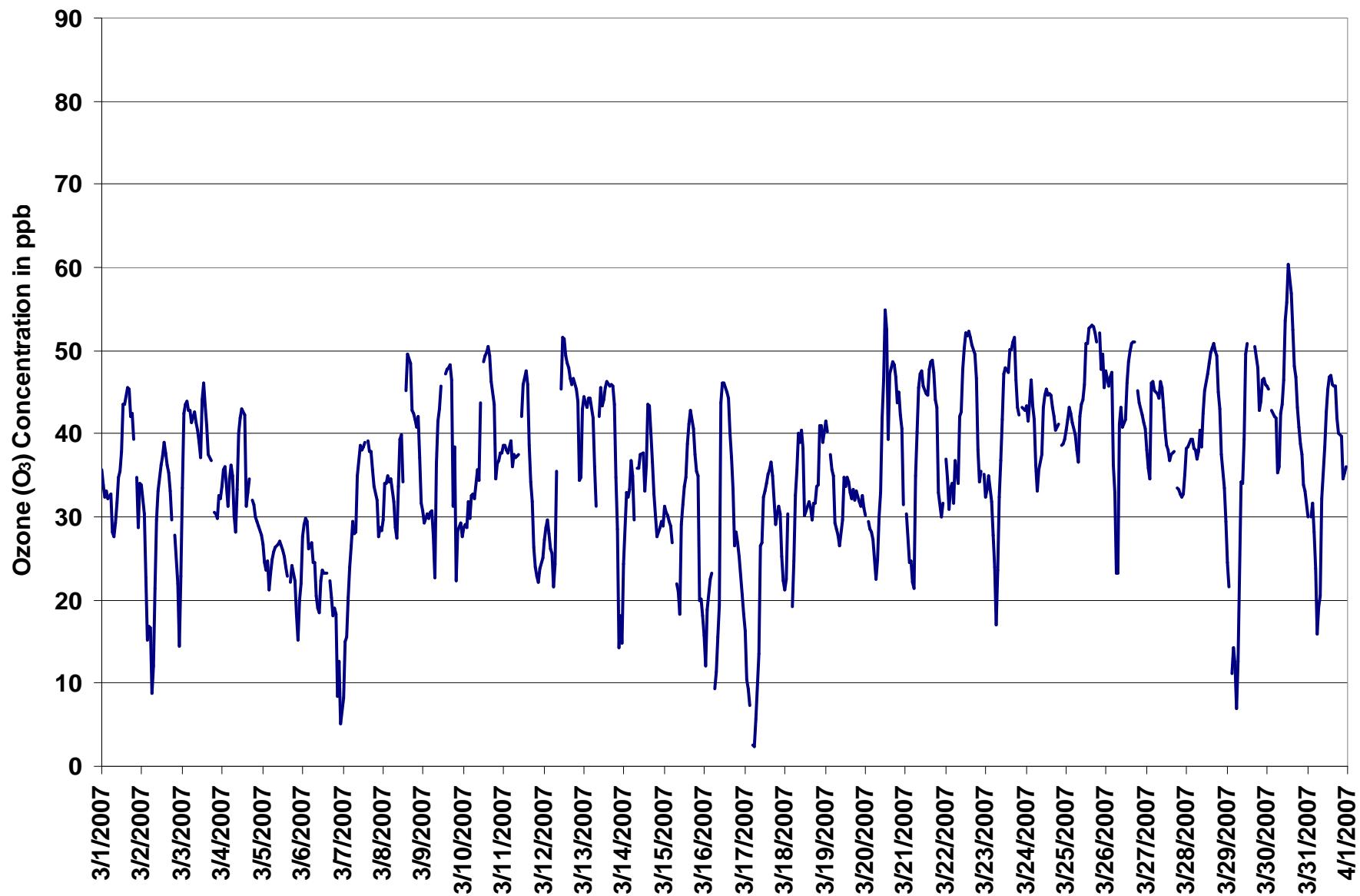
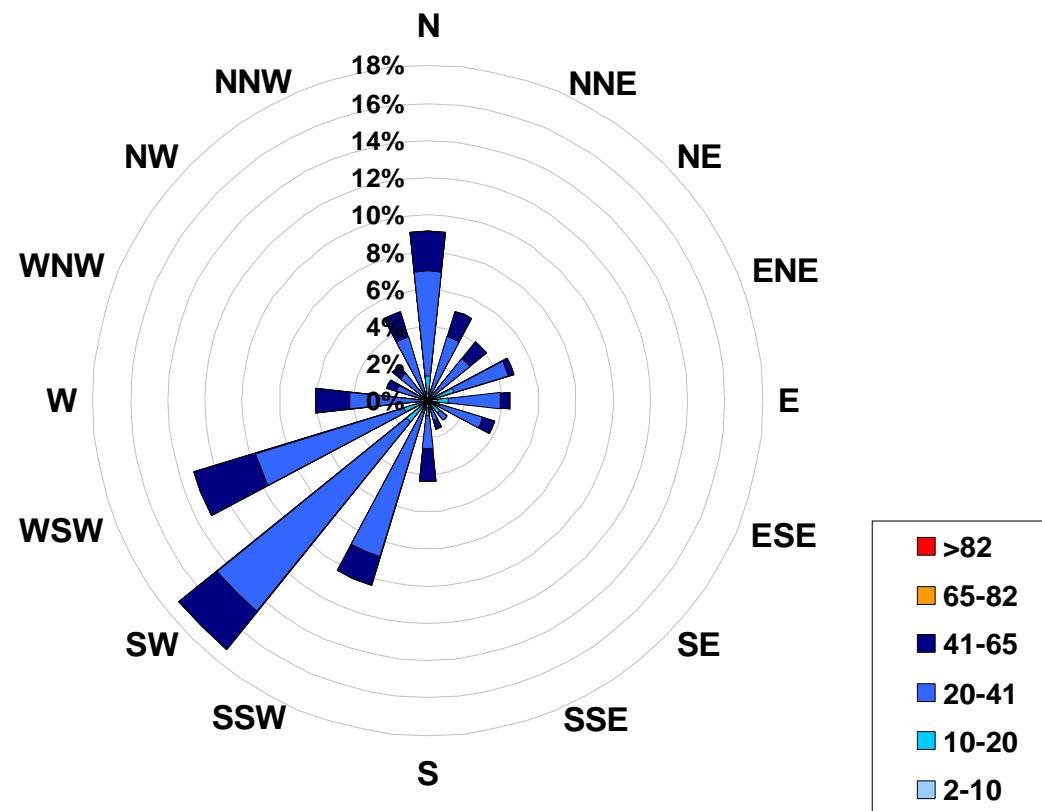


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Ozone (in ppb) Located at the  
Crescent Heights Site for March 2007



Calms:	0%
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Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range			
2.0	<	10	30
10	to	20	66
20	to	41	461
41	to	65	152
65	to	82	0
	>	82	0
Total Non-Zero Values			709



## PAS - Crescent Heights - Ozone Eight Hour Running Average Summary

Station: Crescent Heights  
Station Owner: PAS

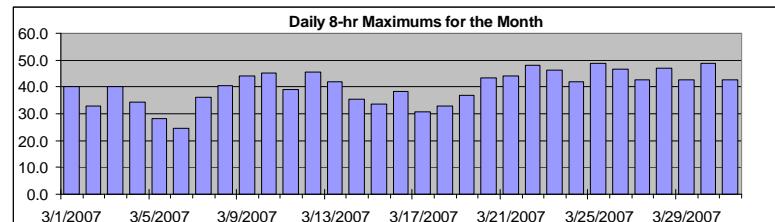
Monitoring Dates: March 1, 2007 to April 1, 2007

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

Number of 8-hr Exceedances: 0  
Maximum 8-hr Average: 48.9 ppb 25-Mar 19:00 20:00

### EIGHT HOUR RUNNING AVERAGE TABLE

### Ozone ( $O_3$ )



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum
1-Mar-07	33	33	33	33	32	32	31	30	29	29	29	29	29	30	31	33	36	38	39	40	39	40	38	35	33	39.9	
2-Mar-07	31	29	26	23	21	18	16	14	12	12	14	17	20	23	27	31	33	33	32	32	32	30	27	23	20	32.8	
3-Mar-07	19	21	23	25	28	31	35	38	40	40	40	39	38	39	39	39	38	37	37	35	34	31	30	29	29	40.1	
4-Mar-07	29	29	29	29	30	31	30	29	29	28	29	31	32	32	33	33	33	34	34	32	30	30	30	29	29	34.2	
5-Mar-07	28	27	26	25	24	22	22	21	21	21	22	22	23	24	24	24	24	23	23	22	20	18	17	17	17	28.1	
6-Mar-07	17	18	19	20	21	23	24	25	24	22	21	20	20	20	20	20	19	20	20	20	20	18	15	13	12	24.6	
7-Mar-07	9	8	8	8	9	11	14	17	19	22	25	27	29	31	32	34	36	36	36	35	33	31	31	29	29	36.2	
8-Mar-07	28	27	27	28	28	30	30	30	30	29	30	30	30	30	29	31	34	37	39	39	40	41	41	39	37	40.6	
9-Mar-07	35	33	32	31	29	28	27	26	26	28	29	31	32	34	38	41	44	44	41	38	35	32	29	26	26	44.1	
10-Mar-07	24	22	22	24	25	26	27	28	28	29	31	31	33	36	39	41	43	45	45	43	42	40	39	37	37	45.3	
11-Mar-07	36	35	35	36	36	36	36	36	36	35	35	36	36	38	39	39	39	38	36	34	31	28	26	24	24	39.2	
12-Mar-07	24	23	24	24	25	25	25	24	25	24	26	29	33	36	40	43	45	45	45	45	43	40	38	38	38	45.4	
13-Mar-07	38	38	38	38	39	40	39	38	37	35	35	34	34	35	37	40	40	42	41	40	37	32	28	24	41.8		
14-Mar-07	21	19	17	17	20	23	25	27	29	31	32	32	32	32	34	35	35	35	35	34	33	33	31	30	30	35.4	
15-Mar-07	29	28	28	28	28	27	27	24	23	20	20	20	20	22	23	26	29	32	34	34	32	30	28	25	25	33.7	
16-Mar-07	21	17	14	13	12	12	10	9	9	10	14	17	22	24	29	33	36	38	36	34	32	29	26	23	23	38.2	
17-Mar-07	20	17	16	13	11	9	7	5	4	6	9	12	14	18	22	26	29	31	31	31	30	29	27	27	30.8		
18-Mar-07	25	24	24	23	21	20	20	22	25	27	29	29	31	33	33	33	31	31	30	29	30	31	32	32	33.0		
19-Mar-07	34	35	36	36	37	36	35	33	32	30	29	29	28	28	28	29	29	29	30	31	30	30	30	30	30	36.8	
20-Mar-07	30	30	29	28	28	27	25	24	24	26	27	31	33	35	38	40	42	43	43	42	41	39	38	43.4			
21-Mar-07	36	34	31	28	25	22	23	23	25	28	31	33	36	39	41	44	44	44	44	43	40	37	35	34	44.2		
22-Mar-07	32	30	28	27	28	29	29	29	31	33	35	37	41	43	46	47	48	47	46	43	41	40	38	47.9			
23-Mar-07	35	33	32	31	30	28	25	23	23	24	26	29	32	37	41	44	46	46	45	45	44	43	43	43	46.4		
24-Mar-07	42	41	40	41	41	41	40	39	38	37	36	36	36	37	38	40	40	40	41	41	40	39	39	38	41.8		
25-Mar-07	38	38	38	39	39	39	38	38	38	38	39	40	41	43	45	47	48	48	49	49	48	48	47	47	48.9		
26-Mar-07	46	45	45	44	42	39	34	31	29	29	28	30	33	38	42	44	45	46	47	46	45	44	42	42	46.7		
27-Mar-07	40	38	38	37	37	38	39	39	40	42	43	42	41	40	38	37	36	35	34	33	33	32	32	32	42.7		
28-Mar-07	32	32	33	34	34	35	35	36	36	36	37	38	40	41	43	45	46	47	47	46	45	42	42	39	47.1		
29-Mar-07	35	31	28	23	18	15	11	9	10	12	15	19	25	27	N	N	N	N	N	N	N	N	N	N	42.7		
30-Mar-07	43	42	42	43	42	41	38	35	34	34	35	36	38	41	45	47	48	49	48	47	45	42	39	36	48.6		
31-Mar-07	34	32	31	29	28	26	23	22	21	21	22	24	26	29	33	37	40	42	43	42	41	40	38	37	42.6		

Hourly Max 46.1 45.4 44.8 44.0 42.3 41.0 39.9 39.1 40.5 41.7 42.6 42.7 41.8 41.2 44.5 47.0 48.3 48.6 48.2 48.9 48.8 48.4 48.1 47.0



## PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

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

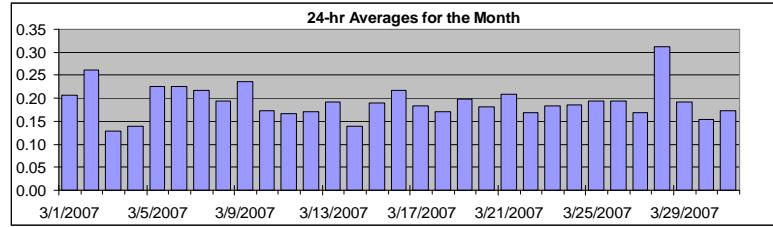
Number of 1-hr Exceedances: 0  
Maximum 1-hr Average: 0.7 ppm 29-Mar 7:00 8:00  
Maximum 24-hr Value: 0.3 ppm 28-Mar

AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 0.5	95 0.3	75 0.2	50 0.2	25 0.2	5 0.1	1 0.1	Average 0.2 ppm	Median 0.2 ppm

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	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-07	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	0.3	0.2	0.1	0.2	0.2	0.2	A	0.3	0.3	0.2	0.21	0.34
2-Mar-07	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.4	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	A	0.3	0.4	0.4	0.26	0.44
3-Mar-07	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.13	0.26
4-Mar-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.14	0.20	
5-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.2	0.2	0.2	0.2	0.23	0.28	
6-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.23	0.39	
7-Mar-07	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.22	0.31	
8-Mar-07	0.2	0.2	0.2	0.2	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	
9-Mar-07	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	A	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.2	0.24	0.36	
10-Mar-07	0.2	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	0.2	0.17	0.20	
11-Mar-07	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.20	
12-Mar-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.24	
13-Mar-07	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	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.19	0.32	
14-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.23	
15-Mar-07	0.1	0.2	0.1	0.2	0.2	0.2	A	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.19	0.37	
16-Mar-07	0.1	0.2	0.2	0.2	0.2	A	0.4	0.5	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.22	0.48	
17-Mar-07	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.40		
18-Mar-07	0.2	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.20		
19-Mar-07	0.2	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.23		
20-Mar-07	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.25	
21-Mar-07	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.29	
22-Mar-07	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.17	0.25		
23-Mar-07	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.18	0.39	
24-Mar-07	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	A	0.2	0.2	0.19	0.21	
25-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.19	0.20	
26-Mar-07	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	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	0.19	0.45	
27-Mar-07	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.17	0.21	
28-Mar-07	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.2	0.31	0.61	
29-Mar-07	0.2	0.2	A	0.2	0.2	0.2	0.5	0.7	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.19	0.73	
30-Mar-07	0.1	0.1	A	0.1	0.1	0.2	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	0.1	A	0.1	0.1	0.15	0.35	
31-Mar-07	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.21	
	Hourly Avg	0.17	0.17	0.17	0.17	0.18	0.20	0.24	0.28	0.23	0.20	0.20	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.19	0.18	0.19	0.19	0.18	0.18	
	Hourly Max	0.31	0.27	0.26	0.24	0.30	0.26	0.48	0.73	0.40	0.37	0.59	0.59	0.56	0.59	0.55	0.54	0.61	0.23	0.36	0.39	0.36	0.44	0.38			

### HOURLY AVERAGE TABLE

### Carbon Monoxide (CO)



### 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

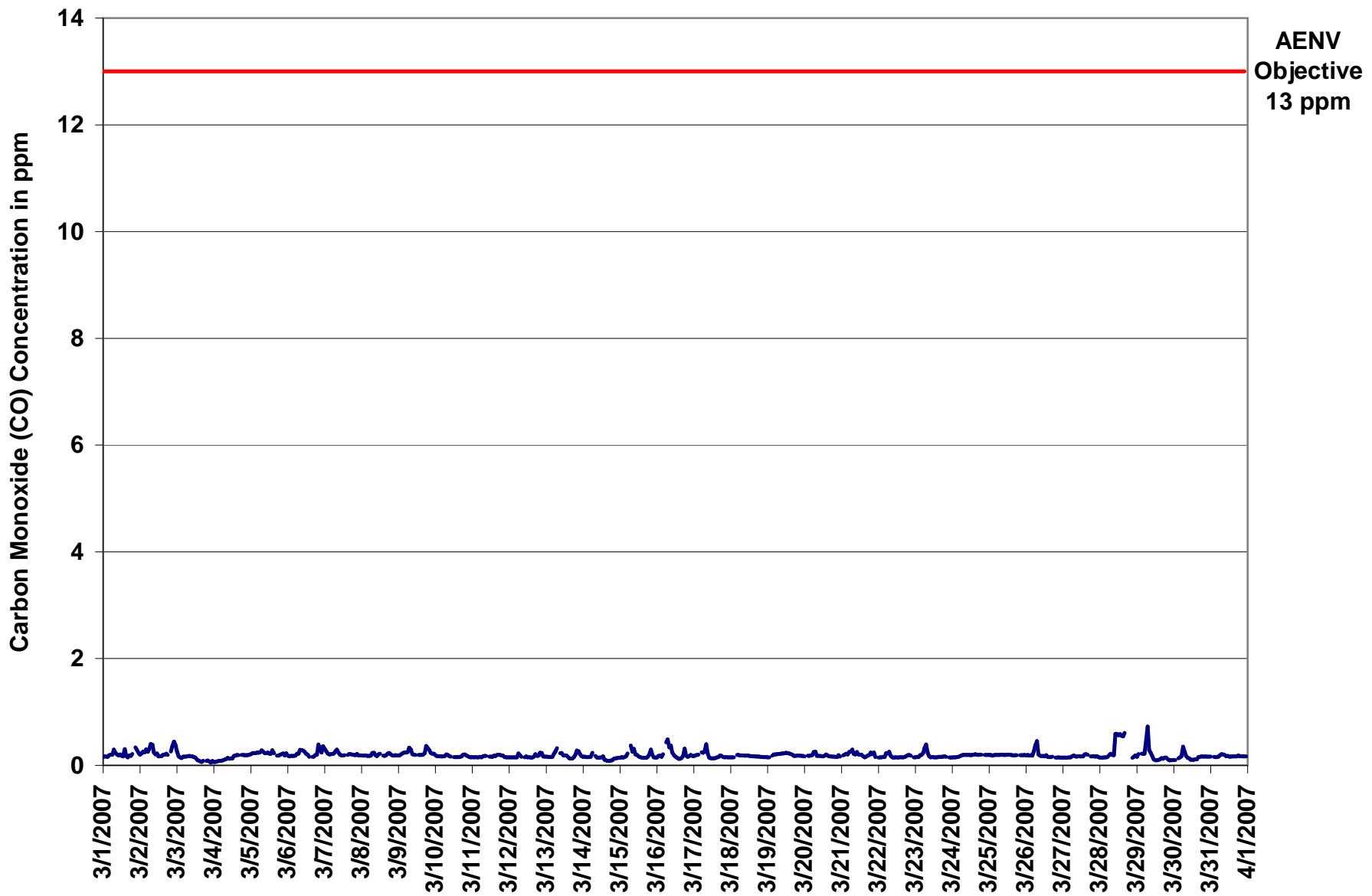


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Carbon Monoxide (CO)

Monitoring Dates: March 1, 2007 to April 1, 2007

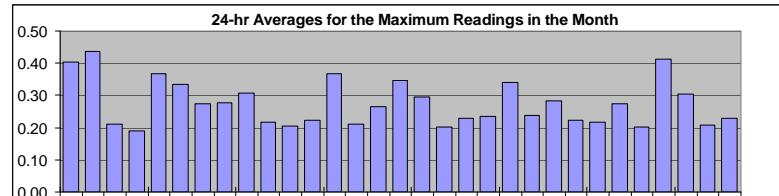
#### Summary

Maximum 1-hr Value:	1.5	ppm	2-Mar	8:00 9:00
Maximum 24-hr Value:	0.4	ppm	2-Mar	

AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 1.0	95 0.6	75 0.3	50 0.2	25 0.2	5 0.1	1 0.1	Average 0.3 ppm	Median 0.2 ppm

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0	0.3	0.3	0.2	0.6	0.3	0.4	1.1	0.4	0.2	0.5	0.2	0.3	A	0.9	0.6	0.3	0.40	1.06
2-Mar-07	0:00 1:00	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.6	1.5	0.3	0.2	1.0	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.4	0.6	0.7	0.44	1.52
3-Mar-07	0:00 1:00	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.5	A	0.1	0.2	0.1	0.1	0.21	0.47	
4-Mar-07	0:00 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.19	0.37
5-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.6	0.4	0.3	0.3	0.7	0.3	0.3	0.8	0.5	A	0.4	0.2	0.2	0.5	0.5	0.2	0.4	0.37	0.80
6-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.4	0.2	0.2	0.2	A	0.3	0.2	0.2	0.3	1.4	0.5	0.4	0.53	1.45	
7-Mar-07	0:00 1:00	0.4	0.5	0.3	0.2	0.2	0.2	0.3	0.4	0.6	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.27	0.57	
8-Mar-07	0:00 1:00	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	A	0.3	0.2	0.3	0.4	0.3	0.6	0.3	0.2	0.28	0.56	
9-Mar-07	0:00 1:00	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.4	0.7	0.4	0.4	0.3	0.31	0.73	
10-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.4	0.2	0.3	0.2	0.2	0.22	0.35	
11-Mar-07	0:00 1:00	0.2	0.2	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	0.20	0.25	
12-Mar-07	0:00 1:00	0.1	0.2	0.1	0.1	0.1	0.2	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	0.4	0.4	0.3	0.2	0.22	0.45	
13-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.3	0.4	1.0	A	0.3	1.1	0.2	0.2	0.7	0.5	0.2	0.2	0.3	0.3	0.5	0.7	0.4	0.2	0.37	1.12	
14-Mar-07	0:00 1:00	0.2	0.3	0.2	0.2	0.2	0.3	A	0.6	0.2	0.3	0.2	0.2	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.21	0.62		
15-Mar-07	0:00 1:00	0.1	0.4	0.1	0.2	0.2	0.3	A	0.6	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.5	0.4	0.2	0.2	0.27	0.64	
16-Mar-07	0:00 1:00	0.2	0.2	0.3	0.2	0.4	A	0.7	0.7	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.9	0.3	0.4	0.2	0.2	0.35	0.91	
17-Mar-07	0:00 1:00	0.3	0.2	0.4	0.2	A	0.2	0.3	0.6	0.9	0.4	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.30	0.88	
18-Mar-07	0:00 1:00	0.2	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.20	0.31	
19-Mar-07	0:00 1:00	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.36	
20-Mar-07	0:00 1:00	0.2	A	0.2	0.2	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.2	0.3	0.23	0.48	
21-Mar-07	0:00 1:00	A	0.2	0.2	0.3	0.3	0.6	0.4	0.7	0.4	0.3	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.2	A	0.34	0.89
22-Mar-07	0:00 1:00	0.1	0.2	0.2	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.24	0.45	
23-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.3	0.6	1.0	0.5	0.2	0.2	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	0.28	1.02	
24-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.22	0.35	
25-Mar-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.22	0.30
26-Mar-07	0:00 1:00	0.2	0.2	0.2	0.3	0.2	0.5	0.5	0.6	0.3	0.2	0.3	0.2	0.2	0.5	0.3	0.3	0.2	0.4	A	0.1	0.1	0.2	0.1	0.1	0.27	0.62
27-Mar-07	0:00 1:00	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	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.30	
28-Mar-07	0:00 1:00	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.8	0.7	0.7	1.0	0.6	0.6	0.7	C	C	C	A	0.2	0.4	0.3	0.41	0.99
29-Mar-07	0:00 1:00	0.2	0.8	A	0.3	0.3	0.3	1.0	1.0	0.6	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.30	1.01	
30-Mar-07	0:00 1:00	0.1	0.1	A	0.2	0.2	0.3	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.60	
31-Mar-07	0:00 1:00	0.2	A	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.41	



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

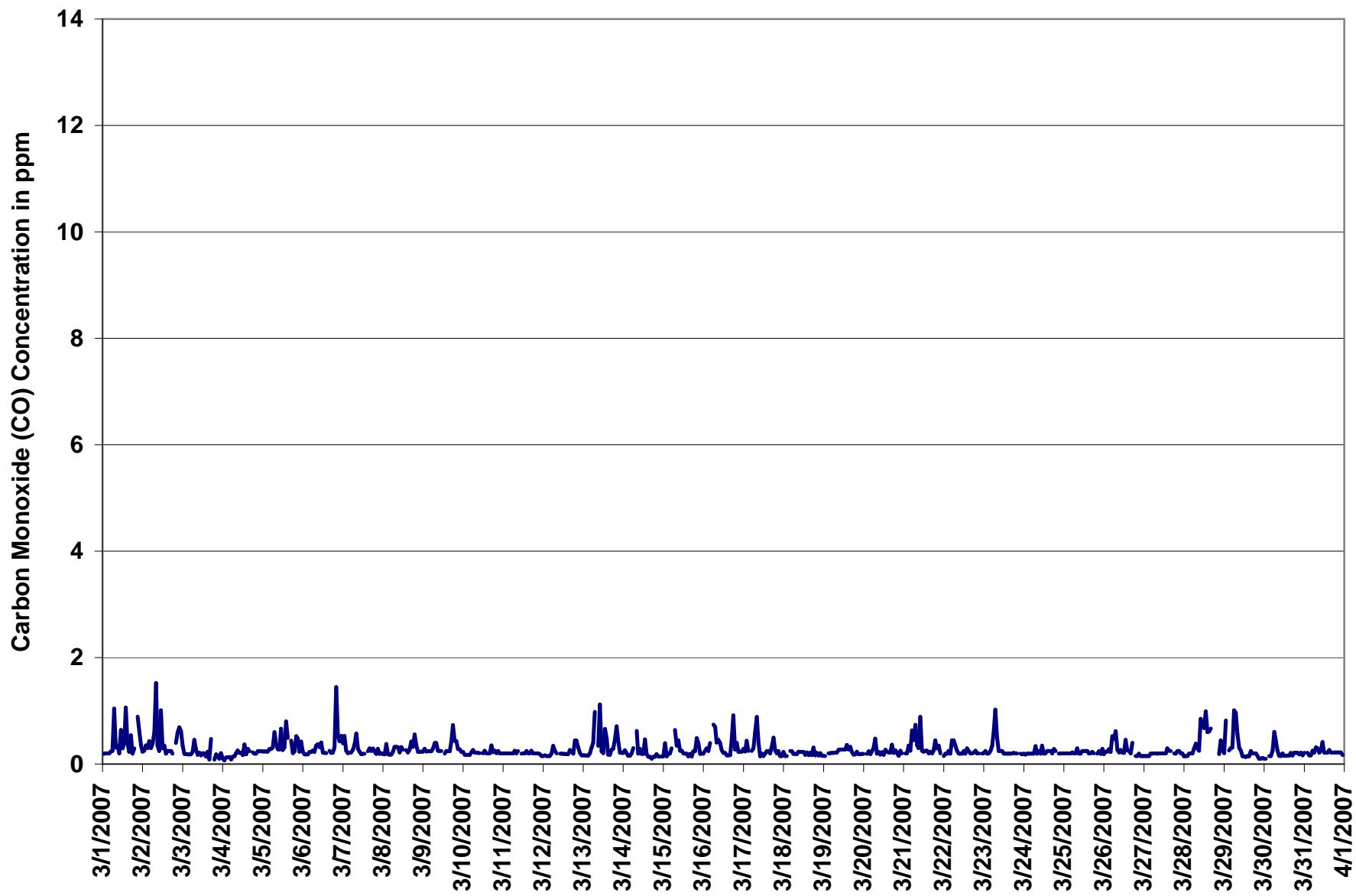
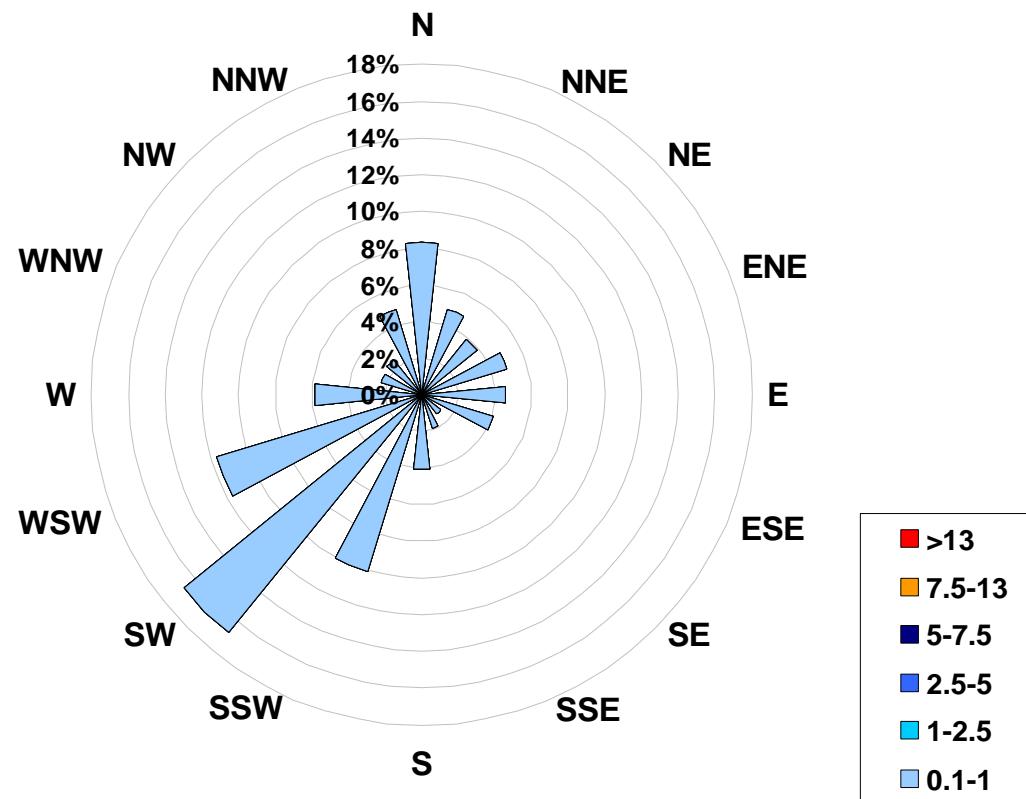


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located  
at the Crescent Heights Site for March 2007



Calms:	0%
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Frequency Distribution of CO in ppm		
Range		
0.1	<	1
1	to	2.5
2.5	to	5
5	to	7.5
7.5	to	13
>	13	0
Total Non-Zero Values		709



## PAS - Crescent Heights - Carbon Monoxide Eight Hour Running Average Summary

Station: Crescent Heights  
Station Owner: PAS

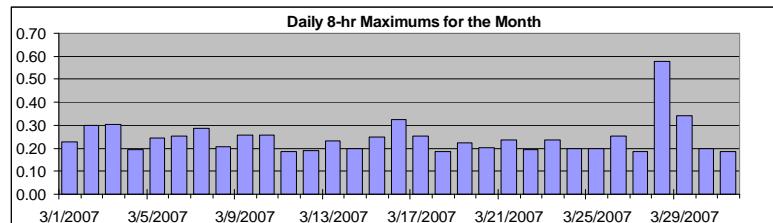
Monitoring Dates: March 1, 2007 to April 1, 2007

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

Number of 8-hr Exceedances: 0  
Maximum 8-hr Average: 0.6 ppm 28-Mar 17:00 18:00

### EIGHT HOUR RUNNING AVERAGE TABLE

### Carbon Monoxide (CO)



### 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

	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	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	25:00	26:00	27:00	28:00	29:00	30:00		
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	24:00	25:00	26:00	27:00	28:00	29:00	30:00			
1-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23			
2-Mar-07	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	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	0.30		
3-Mar-07	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.30		
4-Mar-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.19		
5-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25		
6-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25		
7-Mar-07	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.29		
8-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21		
9-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.26		
10-Mar-07	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26		
11-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18		
12-Mar-07	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19		
13-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23		
14-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.20		
15-Mar-07	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25		
16-Mar-07	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	0.2	0.2	0.2	0.2	0.2	0.32	
17-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25		
18-Mar-07	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19		
19-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22		
20-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20		
21-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24		
22-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20		
23-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24		
24-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20		
25-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20		
26-Mar-07	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	0.2	0.2	0.2	0.2	0.25		
27-Mar-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18		
28-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	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	0.4	0.5	0.5	0.6	N	N	N	N	N	0.58				
29-Mar-07	N	N	N	N	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	0.2	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	0.34	
30-Mar-07	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.20		
31-Mar-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19		

Hourly Max 0.30 0.30 0.29 0.29 0.27 0.25 0.25 0.32 0.34 0.34 0.32 0.32 0.34 0.39 0.44 0.48 0.53 0.58 0.58 0.22 0.24 0.25 0.25 0.27 0.27 0.29



## PAS - Crescent Heights - Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

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

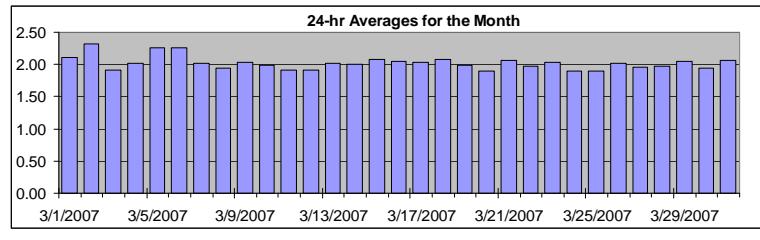
Maximum 1-hr Average:	2.6	ppm	6-Mar	21:00 22:00
Maximum 24-hr Value:	2.3	ppm	2-Mar	

AIC Time:	32 hrs	Operational Time:	710 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.5	2.3	2.1	2.0	1.9	1.8	1.8	2.0 ppm	2.0 ppm

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			
1-Mar-07	1.9	2.0	2.0	2.1	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	2.1	2.2	A	2.4	2.3	2.3	2.10	2.36	
2-Mar-07	2.3	2.3	2.4	2.4	2.5	2.4	2.4	2.5	2.6	2.5	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.3	2.3	2.3	2.32	2.61	
3-Mar-07	2.2	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.91	2.24	
4-Mar-07	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.2	2.2	A	2.1	2.1	2.1	2.2	2.2	2.02	2.23	
5-Mar-07	2.2	2.2	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.3	2.4	2.4	2.25	2.44	
6-Mar-07	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	A	2.2	2.2	2.3	2.4	2.4	2.27	2.61	
7-Mar-07	2.5	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.01	2.47
8-Mar-07	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	1.9	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.95	2.07
9-Mar-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.03	2.36	
10-Mar-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	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	1.99	2.05		
11-Mar-07	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.94		
12-Mar-07	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	A	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.0	1.91	2.08		
13-Mar-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	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	2.0	2.1	2.1	2.02	2.25		
14-Mar-07	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.12	2.12	
15-Mar-07	2.0	2.0	2.0	2.1	2.1	2.2	A	2.3	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	2.4	2.1	2.1	2.08	2.37	
16-Mar-07	2.1	2.2	2.2	2.3	2.3	A	2.3	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.0	2.0	2.0	2.05	2.32
17-Mar-07	2.2	2.2	2.3	2.4	A	2.5	2.6	2.3	2.3	2.0	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.04	2.57
18-Mar-07	1.9	1.9	1.9	A	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.08	2.17	
19-Mar-07	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.99	2.14
20-Mar-07	1.9	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.90	2.07
21-Mar-07	A	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.07	2.18
22-Mar-07	1.9	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.05	
23-Mar-07	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.20	
24-Mar-07	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.90	1.93	
25-Mar-07	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.90	2.02	
26-Mar-07	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.02	2.22	
27-Mar-07	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.95	2.04	
28-Mar-07	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	1.9	1.8	1.8	1.8	1.8	1.8	C	C	A	1.8	1.8	1.9	2.0	2.0	2.0	2.0	2.0	1.97	2.19
29-Mar-07	2.1	2.2	A	2.2	2.3	2.2	2.4	2.4	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.05	2.40	
30-Mar-07	2.0	1.9	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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.04	
31-Mar-07	2.2	A	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.07	2.24	
Hourly Avg	2.04	2.05	2.04	2.04	2.05	2.07	2.08	2.09	2.06	2.02	1.99	1.98	1.97	1.97	1.96	1.96	1.96	1.98	2.00	2.00	2.04	2.06	2.05	2.06				
Hourly Max	2.47	2.34	2.39	2.45	2.54	2.51	2.57	2.53	2.61	2.47	2.29	2.28	2.26	2.21	2.20	2.23	2.23	2.19	2.21	2.30	2.37	2.61	2.47	2.59				

**HOURLY AVERAGE TABLE**

**Total Hydrocarbons (THC)**



**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

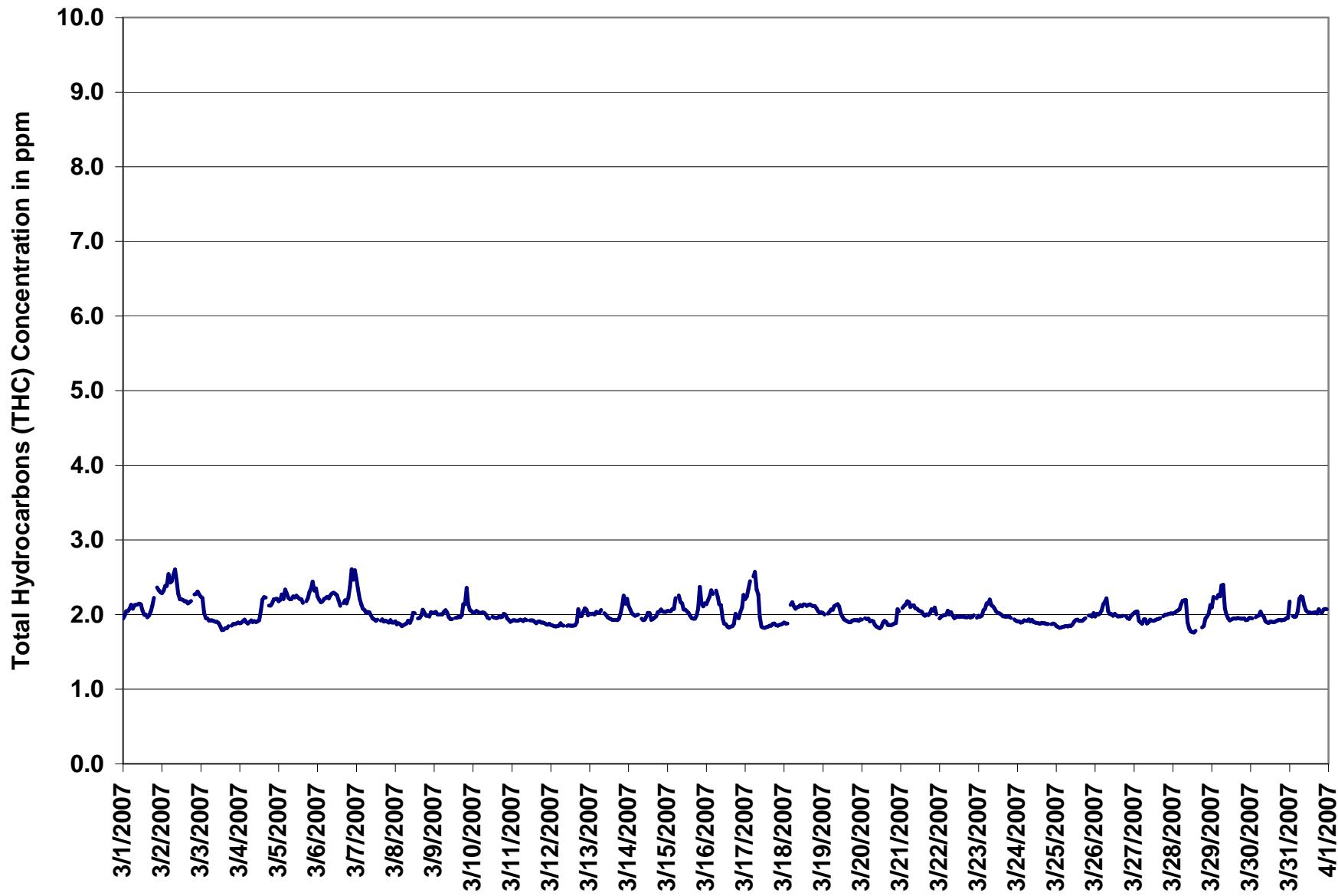


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Hydrocarbons (THC)

Monitoring Dates: March 1, 2007 to April 1, 2007

#### Summary

Maximum 1-hr Value:	4.4	ppm	31-Mar	0:00 1:00
Maximum 24-hr Value:	2.4	ppm	2-Mar	

AIC Time:	32 hrs	Operational Time:	710 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	2.9 2.5 2.2 2.0 2.0 1.9 1.8	2.1 ppm	2.0 ppm

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Mar-07	2.0 1:00	2.0 2:00	2.1 3:00	2.1 4:00	2.1 5:00	2.2 6:00	2.2 7:00	2.4 8:00	2.2 9:00	2.3 10:00	2.2 11:00	2.3 12:00	2.1 13:00	2.0 14:00	2.2 15:00	2.0 16:00	2.0 17:00	2.1 18:00	2.4 19:00	A 20:00	2.5 21:00	2.4 22:00	2.4 23:00	2.20	2.51		
2-Mar-07	2.4 2:00	2.6 3:00	2.5 4:00	2.5 5:00	2.9 6:00	2.6 7:00	2.5 8:00	2.9 9:00	2.8 10:00	2.5 11:00	2.4 12:00	2.4 13:00	2.2 14:00	2.2 15:00	2.2 16:00	2.2 17:00	2.2 18:00	2.2 19:00	A 20:00	2.4 21:00	2.4 22:00	2.4 23:00	2.44	2.90			
3-Mar-07	2.4 2:00	3.1 3:00	2.1 4:00	2.0 5:00	2.0 6:00	1.9 7:00	2.0 8:00	2.0 9:00	1.9 10:00	1.9 11:00	1.9 12:00	1.9 13:00	1.8 14:00	1.8 15:00	1.9 16:00	1.9 17:00	2.0 18:00	A 19:00	1.9 20:00	1.9 21:00	1.9 22:00	1.9 23:00	2.00	3.09			
4-Mar-07	1.9 2:00	1.9 3:00	1.9 4:00	2.0 5:00	1.9 6:00	1.9 7:00	1.9 8:00	1.9 9:00	1.9 10:00	1.9 11:00	1.9 12:00	1.9 13:00	2.2 14:00	2.3 15:00	2.3 16:00	2.3 17:00	A 18:00	2.1 19:00	2.1 20:00	2.2 21:00	2.2 22:00	2.2 23:00	2.07	2.31			
5-Mar-07	2.3 2:00	2.2 3:00	2.4 4:00	2.3 5:00	2.4 6:00	2.3 7:00	2.3 8:00	2.3 9:00	2.3 10:00	2.3 11:00	2.4 12:00	2.3 13:00	2.2 14:00	2.3 15:00	2.2 16:00	A 17:00	2.2 18:00	2.3 19:00	2.4 20:00	2.6 21:00	2.6 22:00	2.5 23:00	2.35	2.65			
6-Mar-07	2.3 2:00	2.3 3:00	2.2 4:00	2.3 5:00	2.3 6:00	2.3 7:00	2.3 8:00	2.3 9:00	2.3 10:00	2.3 11:00	2.3 12:00	2.3 13:00	2.2 14:00	2.1 15:00	A 16:00	2.2 17:00	2.4 18:00	2.2 19:00	2.3 20:00	2.9 21:00	3.1 22:00	2.8 23:00	2.38	3.10			
7-Mar-07	2.8 2:00	2.9 3:00	2.3 4:00	2.2 5:00	2.2 6:00	2.1 7:00	2.1 8:00	2.1 9:00	2.0 10:00	2.0 11:00	2.0 12:00	1.9 13:00	2.0 14:00	A 15:00	1.9 16:00	2.0 17:00	2.0 18:00	1.9 19:00	1.9 20:00	1.9 21:00	1.9 22:00	1.9 23:00	2.09	2.90			
8-Mar-07	1.9 2:00	1.9 3:00	1.9 4:00	1.9 5:00	1.9 6:00	1.9 7:00	1.9 8:00	1.9 9:00	2.0 10:00	2.0 11:00	2.1 12:00	2.1 13:00	2.1 14:00	2.1 15:00	A 16:00	2.0 17:00	2.1 18:00	2.1 19:00	2.0 20:00	2.0 21:00	2.1 22:00	2.0 23:00	2.00	2.15			
9-Mar-07	2.1 2:00	2.1 3:00	2.0 4:00	2.0 5:00	2.0 6:00	2.1 7:00	2.1 8:00	2.1 9:00	2.0 10:00	2.0 11:00	2.0 12:00	2.0 13:00	2.0 14:00	2.0 15:00	A 16:00	2.0 17:00	2.1 18:00	2.3 19:00	2.5 20:00	2.5 21:00	2.2 22:00	2.2 23:00	2.09	2.49			
10-Mar-07	2.0 2:00	2.0 3:00	2.1 4:00	2.0 5:00	2.1 6:00	2.1 7:00	2.0 8:00	2.0 9:00	2.0 10:00	A 11:00	2.0 12:00	2.0 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	2.0 19:00	2.0 20:00	2.1 21:00	2.1 22:00	1.9 23:00	2.02	2.12			
11-Mar-07	1.9 2:00	2.0 3:00	1.9 4:00	1.9 5:00	1.9 6:00	2.0 7:00	2.0 8:00	2.0 9:00	A 10:00	2.0 11:00	2.0 12:00	1.9 13:00	1.9 14:00	1.9 15:00	1.9 16:00	1.9 17:00	2.0 18:00	1.9 19:00	1.9 20:00	1.9 21:00	1.9 22:00	1.9 23:00	1.94	1.98			
12-Mar-07	1.9 2:00	1.9 3:00	1.9 4:00	1.9 5:00	1.9 6:00	1.9 7:00	1.9 8:00	1.9 9:00	1.9 10:00	A 11:00	1.9 12:00	1.9 13:00	1.9 14:00	1.9 15:00	1.9 16:00	2.2 17:00	2.1 18:00	2.1 19:00	2.0 20:00	2.1 21:00	2.2 22:00	2.1 23:00	1.96	2.23			
13-Mar-07	2.0 2:00	2.1 3:00	2.1 4:00	2.0 5:00	2.1 6:00	2.2 7:00	2.1 8:00	2.3 9:00	A 10:00	2.1 11:00	2.0 12:00	2.0 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	2.1 19:00	2.3 20:00	2.6 21:00	2.6 22:00	2.4 23:00	2.11	2.57			
14-Mar-07	2.2 2:00	2.1 3:00	2.1 4:00	2.0 5:00	2.0 6:00	2.0 7:00	2.0 8:00	2.0 9:00	A 10:00	2.1 11:00	2.0 12:00	2.1 13:00	2.1 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	2.1 19:00	2.1 20:00	2.2 21:00	2.1 22:00	2.1 23:00	2.05	2.16			
15-Mar-07	2.1 2:00	2.1 3:00	2.1 4:00	2.1 5:00	2.4 6:00	A 7:00	2.4 8:00	2.2 9:00	2.2 10:00	2.1 11:00	2.1 12:00	2.1 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	2.5 19:00	2.7 20:00	2.7 21:00	2.2 22:00	2.2 23:00	2.17	2.66			
16-Mar-07	2.3 2:00	2.3 3:00	2.5 4:00	2.4 5:00	A 6:00	2.5 7:00	2.3 8:00	2.2 9:00	2.2 10:00	2.1 11:00	1.9 12:00	1.9 13:00	1.8 14:00	1.9 15:00	1.9 16:00	2.0 17:00	1.9 18:00	2.1 19:00	2.1 20:00	2.3 21:00	2.3 22:00	2.3 23:00	2.16	2.53			
17-Mar-07	2.4 2:00	2.4 3:00	2.8 4:00	A 5:00	2.6 6:00	3.0 7:00	2.5 8:00	2.6 9:00	2.2 10:00	1.9 11:00	1.8 12:00	1.9 13:00	1.9 14:00	1.9 15:00	1.9 16:00	2.0 17:00	1.9 18:00	1.9 19:00	1.9 20:00	1.9 21:00	1.9 22:00	1.9 23:00	2.18	3.03			
18-Mar-07	1.9 2:00	1.9 3:00	A 4:00	1.9 5:00	2.4 6:00	2.1 7:00	2.1 8:00	2.1 9:00	2.2 10:00	2.2 11:00	2.2 12:00	2.2 13:00	2.2 14:00	2.2 15:00	2.2 16:00	2.2 17:00	2.2 18:00	2.2 19:00	2.2 20:00	2.1 21:00	2.1 22:00	2.1 23:00	2.12	2.40			
19-Mar-07	2.0 2:00	2.0 3:00	A 4:00	2.0 5:00	2.1 6:00	2.1 7:00	2.1 8:00	2.2 9:00	2.2 10:00	2.2 11:00	2.1 12:00	2.1 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	1.9 19:00	2.0 20:00	2.0 21:00	1.9 22:00	1.9 23:00	2.02	2.18			
20-Mar-07	2.0 2:00	A 3:00	2.0 4:00	2.0 5:00	2.0 6:00	1.9 7:00	2.0 8:00	1.9 9:00	1.9 10:00	1.8 11:00	1.8 12:00	1.8 13:00	1.9 14:00	1.9 15:00	1.9 16:00	1.9 17:00	1.9 18:00	1.9 19:00	1.9 20:00	1.9 21:00	1.9 22:00	1.9 23:00	1.95	2.21			
21-Mar-07	A 2:00	2.2 3:00	2.2 4:00	2.2 5:00	2.2 6:00	2.2 7:00	2.3 8:00	2.2 9:00	2.2 10:00	2.1 11:00	2.1 12:00	2.1 13:00	2.1 14:00	2.1 15:00	2.1 16:00	2.1 17:00	2.1 18:00	2.3 19:00	2.3 20:00	2.1 21:00	2.2 22:00	2.1 23:00	2.14	2.34			
22-Mar-07	2.0 2:00	2.0 3:00	2.0 4:00	2.0 5:00	2.1 6:00	2.0 7:00	2.1 8:00	2.0 9:00	2.0 10:00	2.0 11:00	2.0 12:00	2.0 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	2.0 19:00	2.0 20:00	2.0 21:00	2.0 22:00	2.0 23:00	2.02	2.14			
23-Mar-07	2.0 2:00	2.0 3:00	2.0 4:00	2.2 5:00	2.2 6:00	2.2 7:00	2.2 8:00	2.2 9:00	2.2 10:00	2.1 11:00	2.1 12:00	2.0 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	2.0 19:00	2.0 20:00	2.0 21:00	2.0 22:00	2.0 23:00	2.08	2.35			
24-Mar-07	1.9 2:00	1.9 3:00	1.9 4:00	1.9 5:00	1.9 6:00	1.9 7:00	1.9 8:00	1.9 9:00	1.9 10:00	1.9 11:00	1.9 12:00	1.9 13:00	1.9 14:00	1.9 15:00	1.9 16:00	1.9 17:00	1.9 18:00	1.9 19:00	1.9 20:00	1.9 21:00	1.9 22:00	1.9 23:00	1.92	2.02			
25-Mar-07	1.9 2:00	1.9 3:00	1.8 4:00	1.8 5:00	1.9 6:00	1.9 7:00	1.9 8:00	1.9 9:00	1.9 10:00	2.0 11:00	1.9 12:00	1.9 13:00	1.9 14:00	1.9 15:00	1.9 16:00	1.9 17:00	2.0 18:00	1.9 19:00	1.9 20:00	2.0 21:00	2.0 22:00	2.0 23:00	1.93	2.13			
26-Mar-07	2.0 2:00	2.1 3:00	2.1 4:00	2.1 5:00	2.4 6:00	2.2 7:00	2.1 8:00	2.0 9:00	2.0 10:00	2.0 11:00	2.0 12:00	2.0 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.1 18:00	A 19:00	2.1 20:00	2.0 21:00	2.0 22:00	2.1 23:00	2.08	2.38			
27-Mar-07	2.1 2:00	2.1 3:00	2.1 4:00	2.0 5:00	1.9 6:00	2.0 7:00	1.9 8:00	1.9 9:00	2.0 10:00	2.0 11:00	2.0 12:00	2.0 13:00	2.0 14:00	2.0 15:00	2.0 16:00	2.0 17:00	2.0 18:00	A 19:00	2.0 20:00	2.0 21:00	2.0 22:00	2.1 23:00	2.00	2.13			
28-Mar-07	2.0 2:00	2.1 3:00	2.1 4:00	2.1 5:00	2.2 6:00	2.2 7:00	2.2 8:00	2.2 9:00	2																		

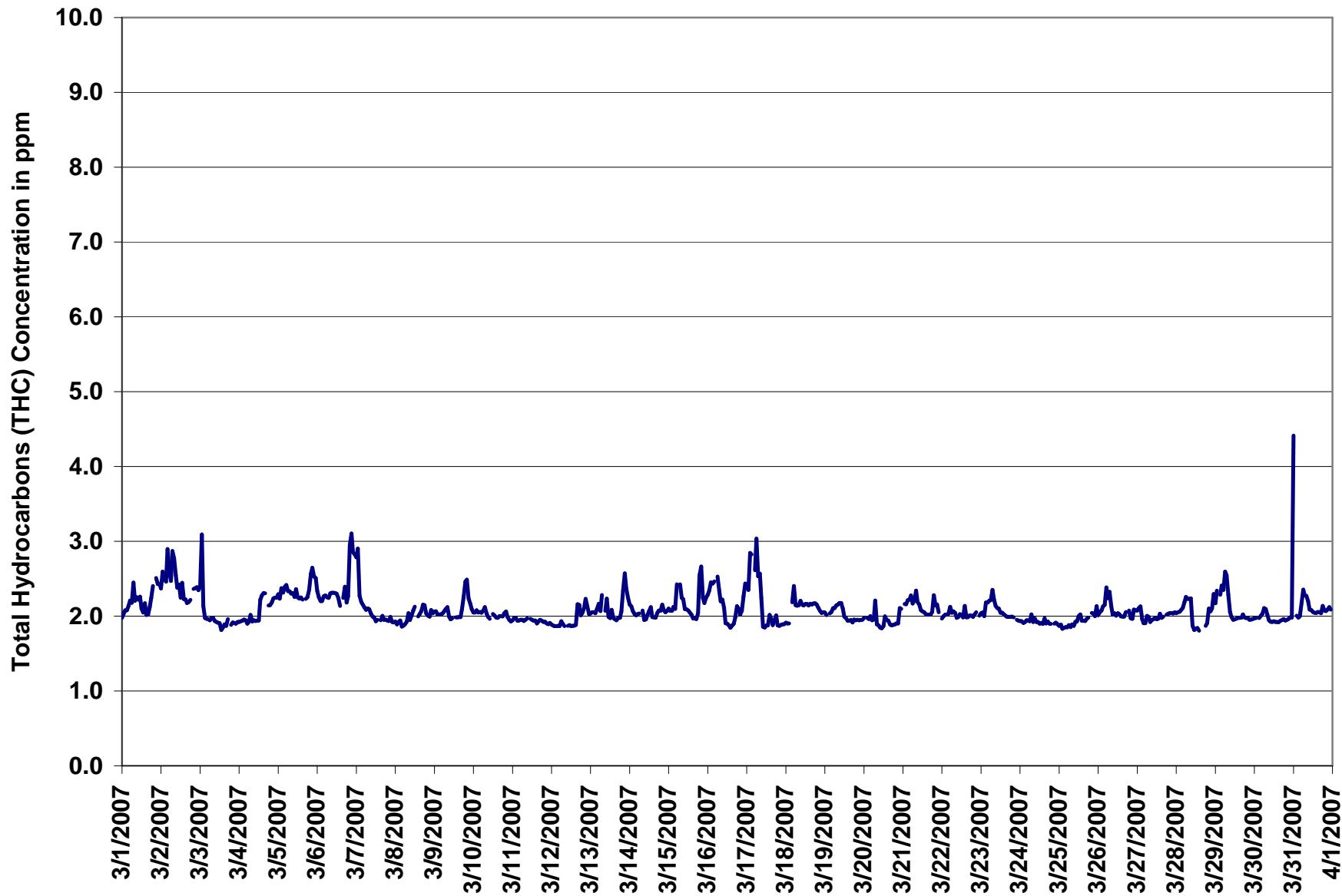
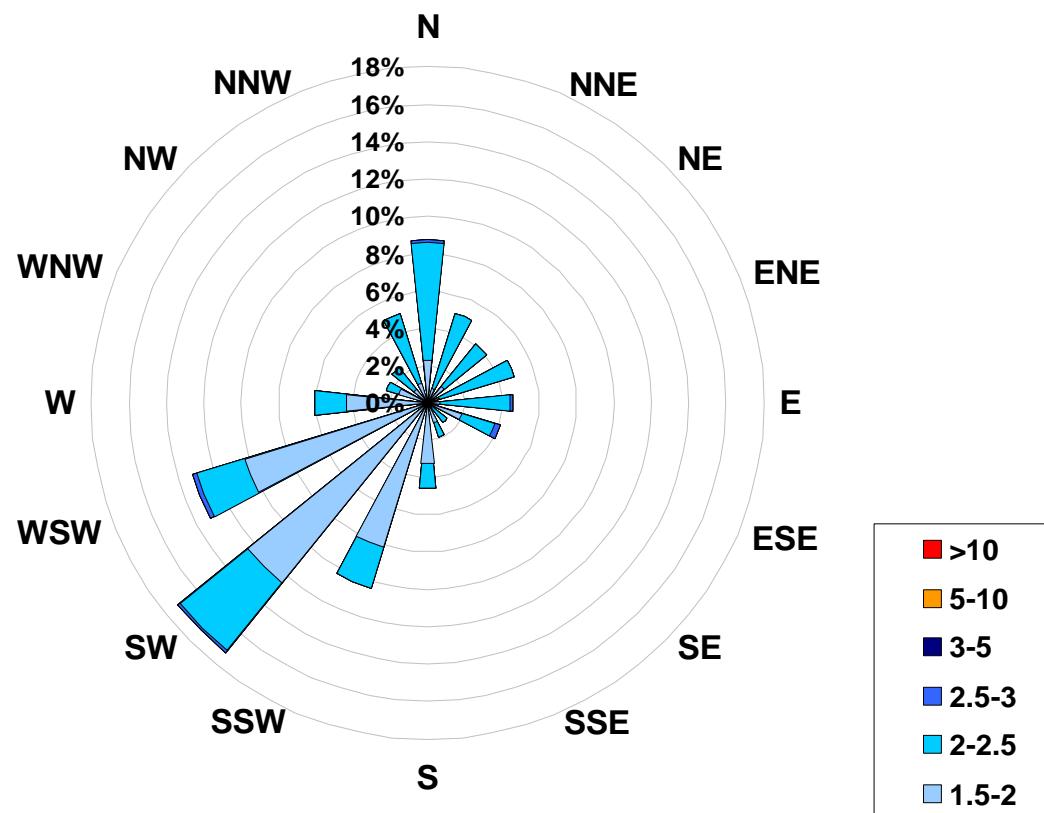


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)  
Located at the Crescent Heights Site for March 2007



Calms: 0%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	377
2	to	2.5	326
2.5	to	3	7
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			710



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

Draft Objective Limit: Alberta Environment: 1-hr -  $\mu\text{g}/\text{m}^3$  24-hr 30  $\mu\text{g}/\text{m}^3$   
Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	17.9 $\mu\text{g}/\text{m}^3$
6-Mar	10:00 11:00
Maximum 24-hr Value:	10.1 $\mu\text{g}/\text{m}^3$
6-Mar	

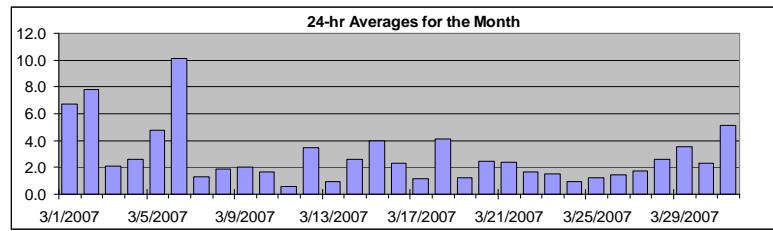
AIC Time:	0 hrs	Operational Time:	741 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.9%
Percentile	99 95 75 50 25 5 1	Average / Median	Geomean
	12.4 8.1 4.2 2.0 0.8 0.0 0.0	2.8 $\mu\text{g}/\text{m}^3$	2.3 $\mu\text{g}/\text{m}^3$

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End 2:00																												
1-Mar-07	7	8	11	10	9	8	7	8	7	7	7	6	7	7	7	6	5	4	5	5	6	6	6	6	5	5	6.7	10.9
2-Mar-07	5	5	6	7	8	7	12	10	9	10	8	8	8	6	7	9	10	10	7	6	7	8	9	9	6	7.8	11.9	
3-Mar-07	4	1	2	1	1	1	3	3	2	4	3	2	0	0	1	2	2	4	2	3	3	1	2	2		2.1	4.4	
4-Mar-07	1	1	2	1	0	1	2	1	1	2	1	1	1	4	3	3	4	3	5	5	7	6	5	4		2.6	6.7	
5-Mar-07	4	4	3	3	4	4	4	8	7	6	5	5	5	4	3	3	3	4	5	5	6	6	6	7		4.8	8.0	
6-Mar-07	8	10	10	11	14	13	13	11	15	16	18	16	13	9	6	7	6	8	5	6	7	7	7	8		10.1	17.9	
7-Mar-07	6	3	0	1	0	1	0	1	1	0	0	0	0	1	1	1	2	2	2	2	1	3	2	1		1.3	5.6	
8-Mar-07	2	0	2	0	2	1	2	2	1	0	5	5	3	0	0	1	5	7	1	1	1	0	2	1		1.9	7.0	
9-Mar-07	1	1	1	1	1	2	3	2	2	0	0	0	0	1	0	1	1	2	7	6	7	3	3	3		2.0	6.9	
10-Mar-07	2	1	1	1	2	2	3	5	2	2	2	0	0	0	0	0	1	3	1	2	3	2	3	2		1.6	4.9	
11-Mar-07	1	1	1	2	2	1	1	2	2	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0		0.6	1.9	
12-Mar-07	0	0	0	0	3	5	2	0	1	1	6	10	8	3	3	7	7	10	4	4	3	4	2	1		3.5	9.9	
13-Mar-07	1	2	0	0	0	0	0	1	0	2	1	0	0	0	0	0	1	0	2	1	3	3	2	1		1.0	3.3	
14-Mar-07	2	1	0	0	0	0	2	1	2	2	1	1	2	2	3	1	3	5	5	5	5	5	5	4		2.6	5.3	
15-Mar-07	5	4	4	4	4	5	5	5	6	7	5	5	4	3	2	2	1	2	3	4	7	4	3	2		4.0	7.0	
16-Mar-07	2	3	2	1	2	4	2	5	4	6	2	0	0	0	0	2	1	3	5	4	3	2	3	1		2.3	5.6	
17-Mar-07	1	1	0	0	2	1	2	3	4	1	0	0	0	0	0	1	1	3	4	0	0	1	1	2		1.1	4.1	
18-Mar-07	2	1	1	2	5	8	10	5	4	4	4	4	4	4	5	6	7	5	7	4	3	1	2	2		4.1	9.9	
19-Mar-07	1	1	0	0	1	0	1	2	3	2	1	0	0	0	0	0	4	2	1	1	2	2	2	2		1.2	4.3	
20-Mar-07	1	3	1	1	1	3	3	4	3	3	0	0	0	5	3	0	0	2	1	1	2	3	12	6		2.5	12.1	
21-Mar-07	5	7	6	5	5	7	2	4	0	0	0	0	1	1	0	0	1	1	2	2	4	3	0	0		2.4	7.3	
22-Mar-07	0	4	2	1	2	6	3	3	1	1	0	0	0	0	0	2	2	1	2	3	2	1	1	1		1.7	5.6	
23-Mar-07	2	2	0	2	2	3	6	6	1	1	0	0	0	0	0	0	1	2	3	2	1	0	1			1.5	6.3	
24-Mar-07	1	0	2	2	3	2	2	3	2	2	0	0	0	0	0	0	1	0	0	0	0	2	0	0		0.9	3.2	
25-Mar-07	1	0	0	0	1	1	3	0	2	0	0	1	0	1	0	0	1	0	0	3	3	3	2	2		1.2	4.8	
26-Mar-07	2	1	1	1	1	3	3	3	3	2	2	2	2	1	0	0	0	2	2	1	1	0	1	0		1.4	3.3	
27-Mar-07	0	0	0	2	1	1	0	0	0	0	0	0	2	3	4	5	5	4	4	2	3	2	2	2		1.7	4.8	
28-Mar-07	2	1	1	2	3	4	3	4	5	5	2	0	0	0	0	2	10	1	0	1	4	4	4	4		2.6	9.6	
29-Mar-07	4	3	3	2	4	3	7	9	0	0	0	0	D	0	0	C	C	11	6	6	5	3	1	3		3.5	10.9	
30-Mar-07	3	3	2	2	2	5	4	2	2	0	2	2	0	1	3	3	3	3	1	3	1	3	3		2.3	5.0		
31-Mar-07	0	3	2	3	3	5	7	5	8	8	6	6	6	7	6	4	5	6	7	4	5	5	5		5.1	8.3		
Hourly Avg	2.5	2.4	2.2	2.3	2.8	3.4	3.8	3.9	3.2	3.0	2.6	2.6	2.2	2.0	1.7	2.4	3.5	3.3	3.3	3.0	3.4	2.8	3.0	2.7				
Hourly Max	8.5	9.6	10.9	11.1	13.8	12.7	13.3	11.1	14.6	16.1	17.9	16.0	12.6	8.6	6.6	9.3	10.9	10.0	7.4	6.3	6.9	8.2	12.1	8.0				

### HOURLY AVERAGE TABLE

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



### 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

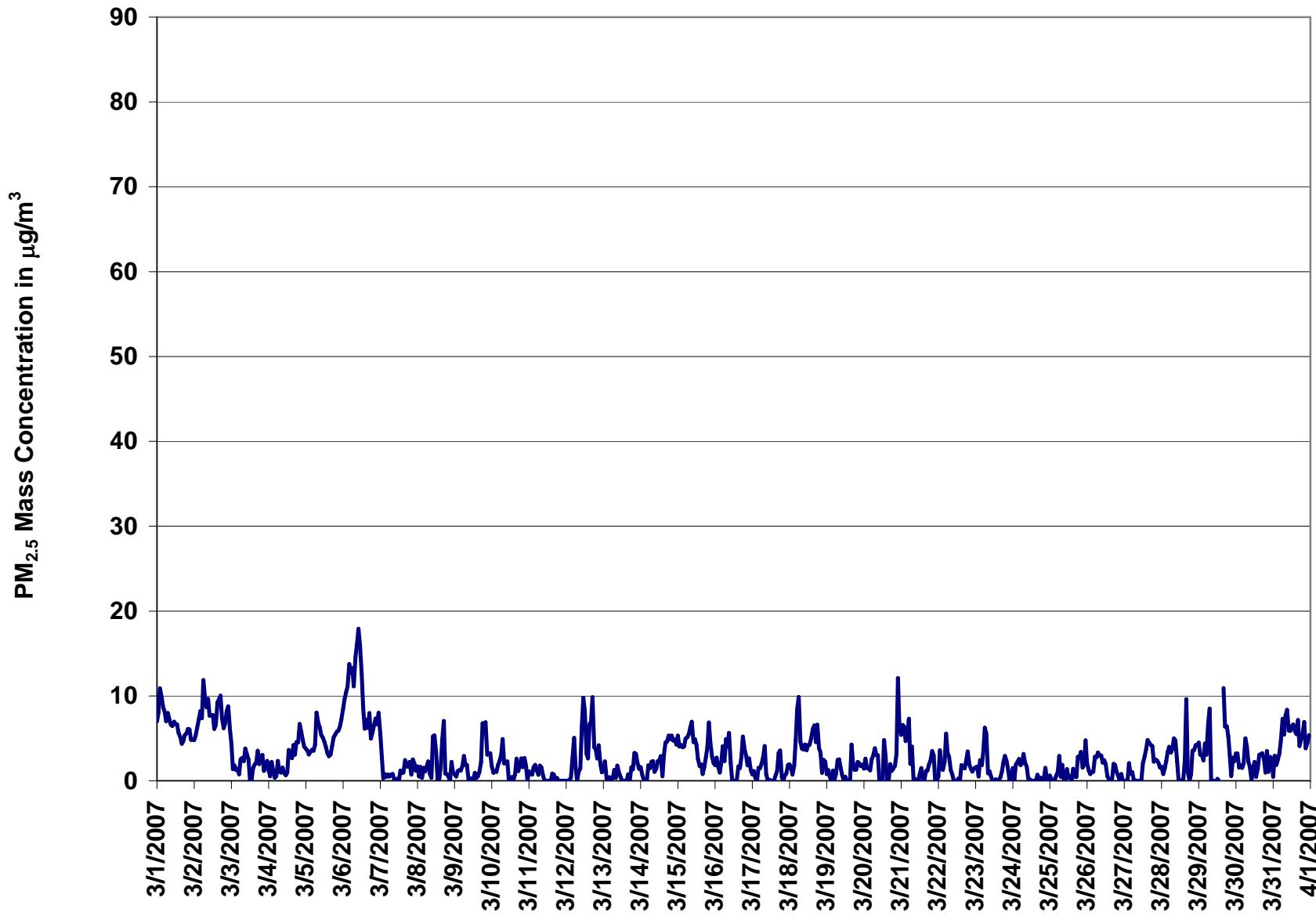


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

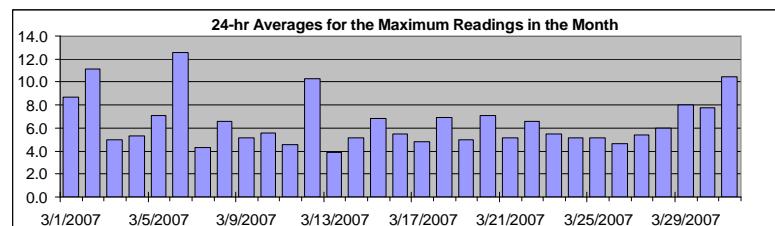
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: March 1, 2007 to April 1, 2007

#### Summary

Maximum 1-hr Average:	28.7	µg/m <sup>3</sup>	12-Mar	16:00	17:00
Maximum 24-hr Value:	12.6	µg/m <sup>3</sup>	6-Mar		

AIC Time:	0 hrs	Operational Time:	741 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.9%
Percentile	99	95	75
	18.8	13.4	7.9
Percentile	50	25	5
	5.7	4.1	2.1
Percentile	1	Average / Median	Geomean
	1.1	6.5	6.2 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 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	8.7	12.5		
1-Mar-07	9	11	13	12	10	10	9	10	9	9	8	9	8	7	7	6	6	8	8	8	9	7	7	7	11.2	28.2	
2-Mar-07	7	10	9	10	14	11	28	15	11	12	10	11	10	8	9	12	12	12	9	8	9	10	13	8	5.0	10.9	
3-Mar-07	7	4	4	4	4	3	11	7	5	6	6	4	2	2	5	4	4	6	6	6	6	3	4	5	5.3	9.6	
4-Mar-07	4	2	5	3	2	3	8	3	3	3	3	5	10	7	6	8	5	7	7	9	8	8	5	7.1	10.7		
5-Mar-07	7	5	5	5	6	5	8	11	10	9	7	7	6	6	5	5	7	8	7	9	7	8	10	12.6	19.9		
6-Mar-07	11	12	12	14	16	14	16	15	17	20	20	19	16	11	9	10	7	11	7	7	11	10	8	10	4.3	10.2	
7-Mar-07	8	5	2	2	2	3	2	2	3	2	1	3	4	5	5	4	7	5	6	8	6	10	8	3	6.6	14.0	
8-Mar-07	6	2	7	3	5	6	5	6	6	8	9	11	7	6	5	6	11	14	10	4	2	7	8	5	5.1	15.1	
9-Mar-07	3	3	3	3	3	4	7	3	4	1	1	4	2	5	4	4	5	9	10	11	15	5	5	6	5.6	16.5	
10-Mar-07	4	3	2	3	4	5	16	16	4	4	5	3	3	5	4	5	7	5	10	8	5	7	6	1	4.6	6.7	
11-Mar-07	4	5	4	6	6	5	5	5	6	4	3	4	3	3	4	7	5	5	4	3	6	5	7	3	10.3	28.7	
12-Mar-07	4	3	4	4	8	11	6	3	5	7	25	18	14	7	10	14	29	26	8	8	6	10	7	7	3.9	8.5	
13-Mar-07	5	6	5	3	5	1	4	5	3	5	4	3	2	3	2	3	3	2	4	3	7	9	4	3	5.2	9.7	
14-Mar-07	3	2	5	2	2	7	4	5	4	3	4	5	4	5	5	7	10	7	7	6	8	7	7	6	6.9	11.4	
15-Mar-07	9	6	6	6	6	7	8	8	8	9	7	7	8	4	6	11	3	4	5	7	10	10	5	4	5.5	10.6	
16-Mar-07	4	6	5	2	6	8	5	7	6	10	8	3	0	1	2	6	6	9	11	10	6	4	6	3	4.8	10.1	
17-Mar-07	3	4	3	3	4	4	5	6	6	6	4	4	3	4	3	4	5	6	10	5	5	6	6	6	6.9	12.5	
18-Mar-07	7	5	4	6	7	12	12	6	5	6	9	6	7	6	8	9	8	6	8	7	6	4	5	4.9	16.7		
19-Mar-07	5	3	3	4	4	2	3	4	6	5	3	2	3	4	1	1	17	8	7	6	8	7	8	6	7.1	16.4	
20-Mar-07	5	8	4	6	5	6	7	6	7	5	6	6	11	11	7	7	5	5	5	6	7	16	12	5.1	16.5		
21-Mar-07	8	10	8	7	7	16	5	7	2	2	2	0	3	3	2	6	5	3	5	6	6	6	3	1	6.6	25.0	
22-Mar-07	6	5	4	5	7	25	18	6	7	4	1	1	5	3	4	7	7	7	8	7	5	4	7	5.4	10.8		
23-Mar-07	5	4	4	7	5	6	10	11	4	4	4	4	4	4	2	5	6	7	7	8	8	5	3	5.1	11.9		
24-Mar-07	5	4	5	6	6	4	6	8	5	5	4	4	4	5	3	5	5	4	4	5	6	12	5	3	5.2	8.7	
25-Mar-07	5	3	5	3	4	5	6	5	6	4	3	4	4	5	4	6	4	5	7	9	8	5	5	9	4.7	6.7	
26-Mar-07	4	3	5	3	4	6	6	6	5	5	6	6	4	4	5	7	3	5	5	5	6	3	3	4	5.4	11.1	
27-Mar-07	3	5	3	7	4	5	3	2	1	3	2	5	5	9	9	11	9	7	7	10	7	5	4	4	6.0	18.3	
28-Mar-07	4	3	3	6	6	6	5	6	8	6	5	1	3	2	3	15	18	7	1	4	7	8	7	7	8.0	15.0	
29-Mar-07	13	6	8	7	7	6	13	12	6	4	1	D	5	4	C	C	15	12	13	13	9	3	6	5	7.8	12.5	
30-Mar-07	5	6	5	6	4	5	9	9	6	4	2	8	8	8	9	9	10	10	10	12	12	9	11	12	10.5	15.8	
31-Mar-07	3	7	5	4	5	7	11	10	12	13	12	15	13	13	14	13	16	13	14	15	15	8	7	8	12.0		
Hourly Avg	5.6	5.2	5.2	5.2	5.7	7.0	8.4	7.3	6.2	6.1	6.0	6.0	5.6	5.6	5.6	7.2	8.5	7.7	7.5	7.3	7.7	6.8	6.5	5.7			
Hourly Max	12.8	11.7	12.5	14.5	15.7	25.0	28.2	16.5	17.1	19.5	25.5	19.1	15.8	12.9	14.0	15.2	28.7	26.2	14.5	14.7	15.1	11.9	16.4	12.0			

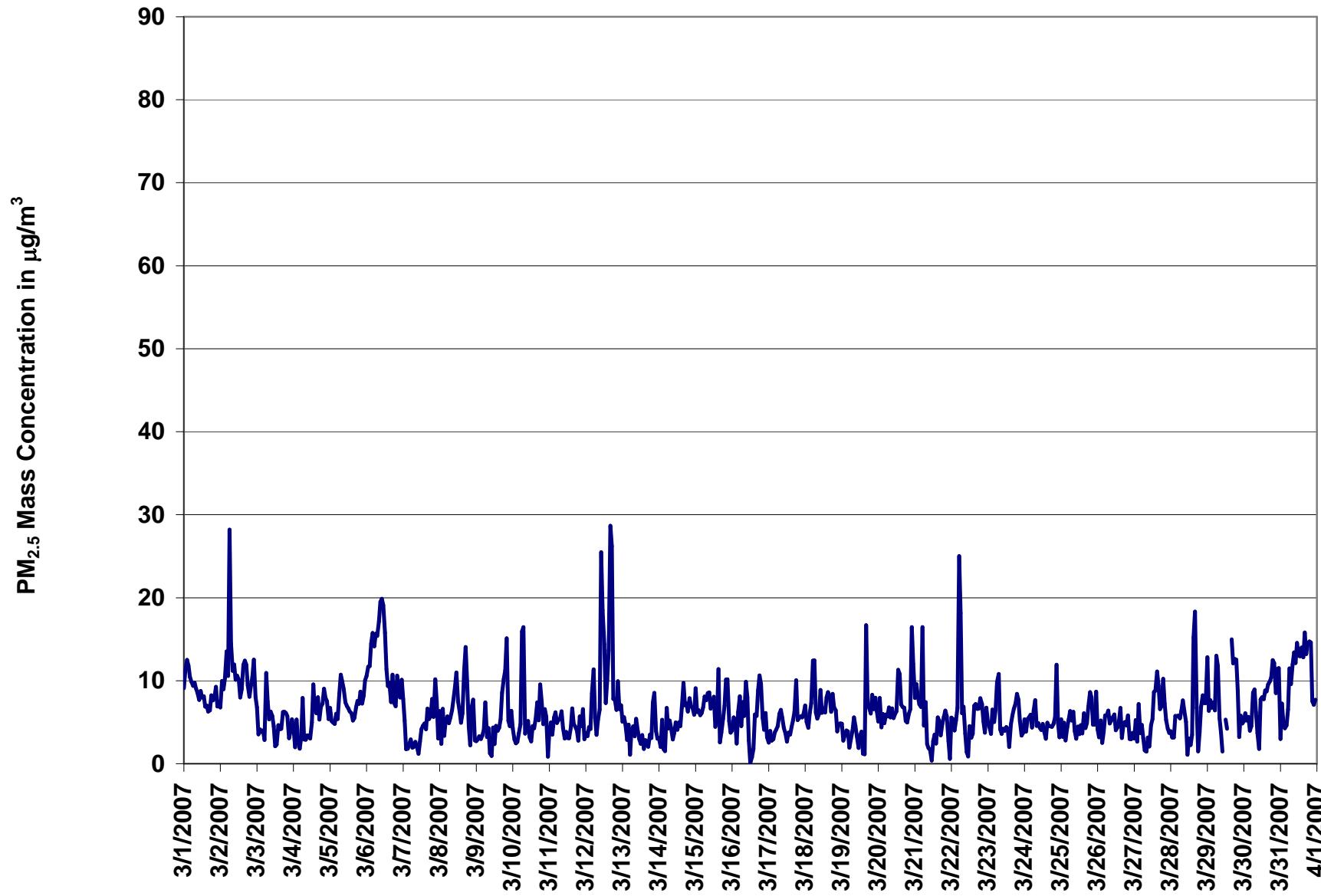
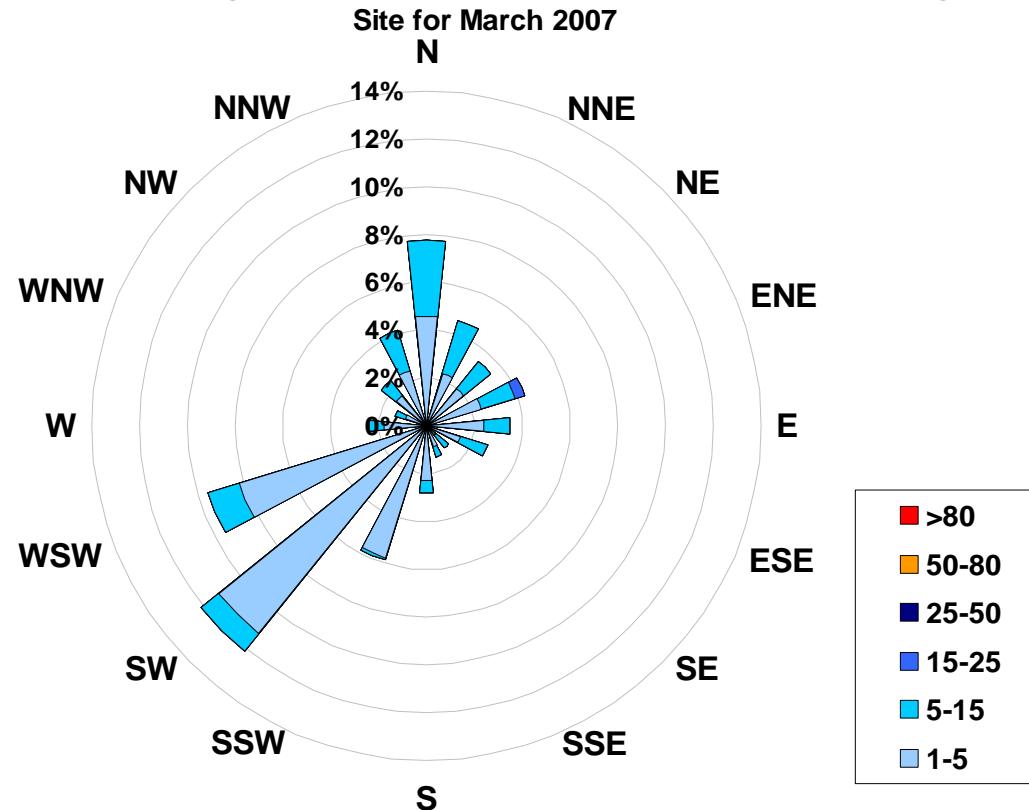


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Crescent Heights Site for March 2007



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	601
5	to	15	137
15	to	25	3
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			741



## PAS - Crescent Heights - Relative Humidity Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### Summary

Maximum 1-hr Average:	89.4	%	26-Mar	6:00 7:00
Maximum 24-hr Value:	80.9	%	6-Mar	

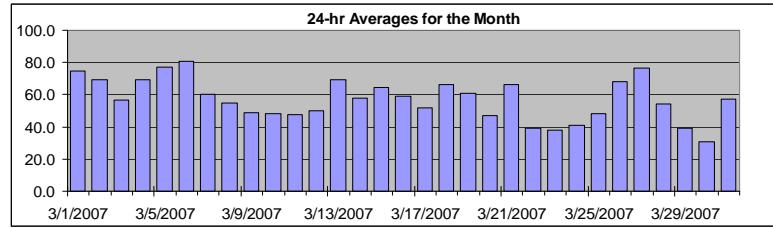
AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 87.0	95 84.2	75 72.3	50 57.5	25 44.1	5 22.9	1 12.4	Average 57.1 %	Median 57.5 %

### Day Mountain Standard Time

	Hour Start 1:00	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	Daily Average	Daily Maximum
1-Mar-07	75	77	78	79	80	81	81	80	78	76	72	69	69	67	66	63	65	69	74	77	80	79	79	80	74.8	80.9		
2-Mar-07	80	80	81	80	79	78	78	78	77	70	60	56	54	51	50	55	56	62	69	72	72	73	74	74	69.1	80.5		
3-Mar-07	70	65	62	61	60	58	57	57	57	58	53	50	38	34	40	48	54	58	58	62	65	66	62	64	56.5	70.4		
4-Mar-07	63	62	64	70	67	63	68	70	70	64	50	41	42	54	64	73	79	81	84	84	87	87	87	87	69.2	87.5		
5-Mar-07	86	85	84	83	82	82	80	79	77	75	72	69	66	65	66	70	72	74	78	80	81	82	83	83	77.3	85.9		
6-Mar-07	82	83	82	83	84	85	84	84	84	84	81	77	72	74	74	76	76	77	80	82	83	85	86	86	80.9	86.4		
7-Mar-07	87	85	84	82	79	76	70	68	61	53	45	45	44	42	41	40	40	40	47	56	60	64	66	69	60.1	86.6		
8-Mar-07	71	65	65	66	67	65	67	71	68	55	49	56	64	50	35	24	33	52	41	40	44	43	57	64	54.7	71.2		
9-Mar-07	68	69	66	66	65	67	73	70	56	46	38	33	29	27	25	24	23	26	32	39	50	60	58	65	49.0	73.2		
10-Mar-07	67	66	68	65	67	65	64	60	57	53	48	34	26	25	24	24	27	32	38	46	49	51	51	52	48.2	67.6		
11-Mar-07	52	51	53	56	56	60	58	52	49	45	42	38	35	33	33	37	41	45	47	51	52	54	53	53	47.9	60.0		
12-Mar-07	50	47	44	49	52	51	57	53	49	44	38	34	31	29	25	25	30	61	64	70	73	74	74	72	49.8	74.2		
13-Mar-07	78	82	87	86	87	86	84	83	77	70	73	73	68	55	48	46	47	47	55	57	63	67	69	73	69.3	87.4		
14-Mar-07	75	75	68	62	56	54	56	52	51	47	44	46	46	42	34	35	43	53	67	73	76	78	78	79	57.9	79.2		
15-Mar-07	78	78	80	81	81	81	82	81	78	74	72	70	65	57	45	38	36	37	41	46	54	59	62	65	64.2	81.7		
16-Mar-07	67	69	68	67	69	74	75	70	64	58	55	51	45	43	43	42	43	46	49	54	62	63	66	70	59.0	74.9		
17-Mar-07	74	76	78	80	80	81	84	80	67	50	42	32	25	23	21	21	22	27	37	41	43	45	51	55	51.6	83.8		
18-Mar-07	59	60	54	56	69	78	79	81	83	84	77	74	74	69	65	64	65	62	61	55	56	50	52	61	66.2	84.5		
19-Mar-07	61	65	72	70	70	71	72	72	71	69	64	59	56	50	49	50	49	53	52	53	55	55	55	61.1	72.0			
20-Mar-07	58	62	60	58	57	57	58	57	53	47	42	32	24	29	41	35	23	29	35	40	42	52	69	71	47.1	71.2		
21-Mar-07	70	86	87	85	84	85	79	82	80	76	78	72	65	59	52	44	43	41	47	54	62	60	54	50	66.5	87.0		
22-Mar-07	50	52	56	56	57	59	50	52	43	36	27	19	17	18	18	19	20	21	29	42	47	49	50	54	39.1	59.0		
23-Mar-07	58	57	54	54	59	64	65	56	47	38	30	25	22	22	20	17	15	16	19	26	33	38	36	37	37.9	65.5		
24-Mar-07	37	38	39	38	42	46	51	53	49	46	37	32	31	32	32	31	33	37	39	44	50	55	54	40.8	54.5			
25-Mar-07	54	55	50	50	51	53	56	57	53	45	42	41	36	36	33	33	35	39	46	53	58	61	78	47.9	77.7			
26-Mar-07	87	86	85	87	89	89	89	87	86	84	82	74	68	57	49	40	37	39	44	51	54	54	55	57	67.9	89.4		
27-Mar-07	61	63	64	66	77	86	85	86	83	82	80	78	72	70	69	70	74	79	81	82	82	81	80	76.6	86.3			
28-Mar-07	80	80	80	79	78	77	75	71	69	64	47	39	30	23	22	23	24	30	35	41	47	52	57	54.0	79.9			
29-Mar-07	63	66	72	78	79	76	75	65	56	47	37	20	6	6	8	10	10	9	19	26	31	29	24	39.1	78.5			
30-Mar-07	27	34	36	33	35	38	38	32	28	29	23	15	13	10	12	14	17	21	30	38	45	52	56	30.4	55.6			
31-Mar-07	60	59	57	55	55	63	64	66	68	63	56	51	48	45	44	45	47	53	58	62	65	68	71	57.0	70.8			
Hourly Avg	66.1	67.0	67.0	67.2	68.1	69.3	69.5	68.0	64.3	59.4	54.2	49.0	45.2	42.3	40.4	39.9	40.9	44.8	49.6	54.0	58.1	60.4	62.1	64.3				
Hourly Max	86.9	85.7	87.4	87.1	88.5	89.2	89.4	86.8	85.7	84.5	82.2	80.4	78.0	73.7	73.6	76.0	79.1	81.4	83.6	84.3	87.2	87.5	86.8	86.6				

### HOURLY AVERAGE TABLE

### Relative Humidity (RH)



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

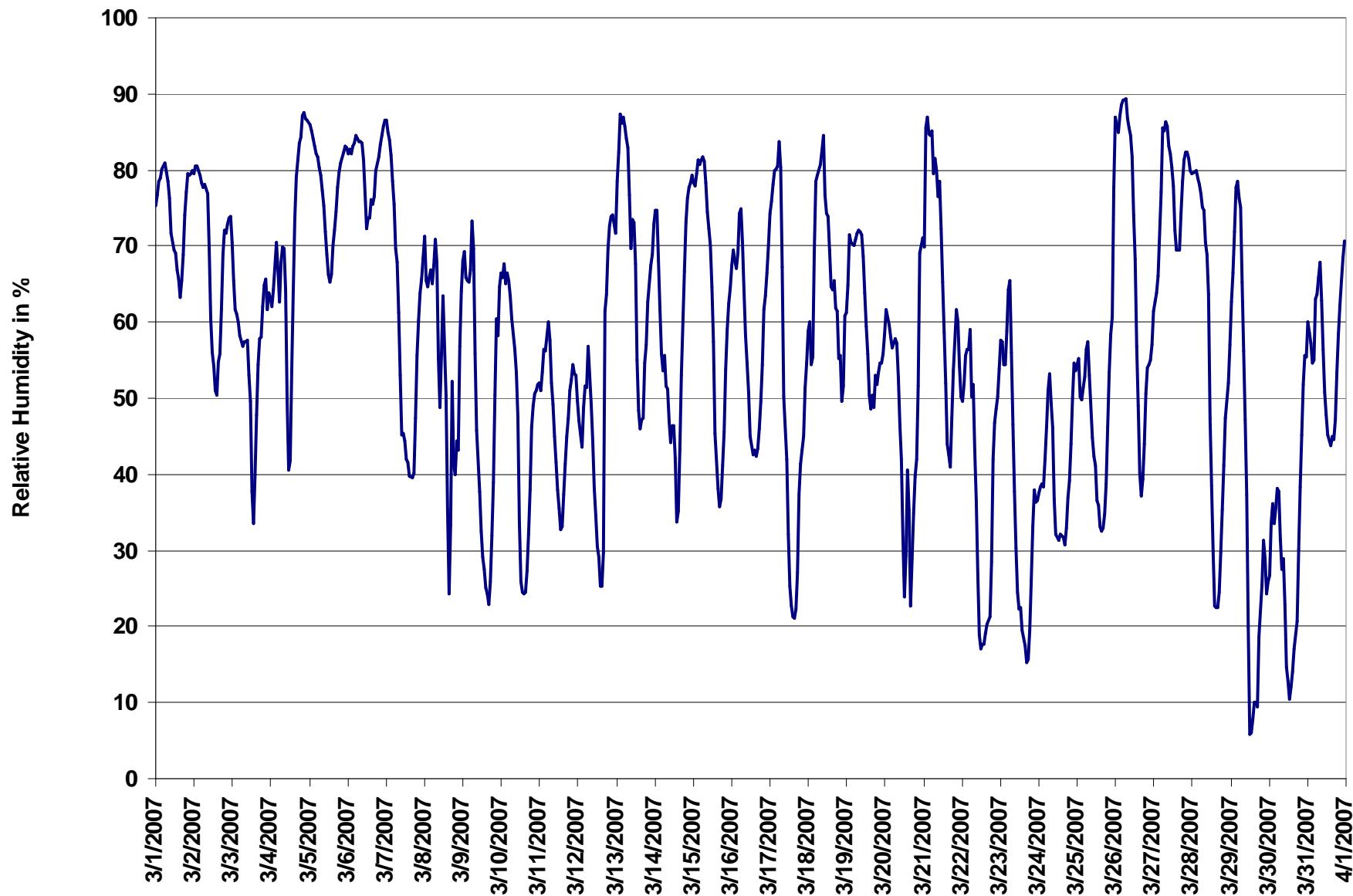


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



## PAS - Crescent Heights - Temperature Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### Summary

Maximum 1-hr Average:	22.0	°C	17-Mar	14:00 15:00
Maximum 24-hr Value:	15.1	°C	24-Mar	

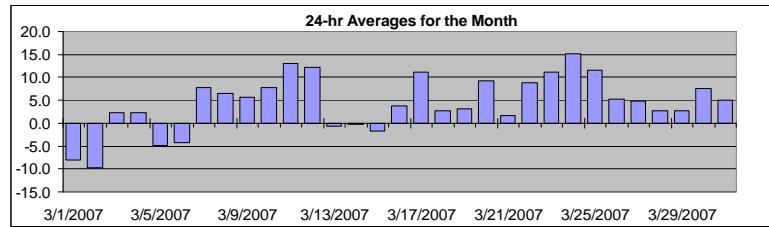
AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	20.3	16.5	9.9	4.1	-0.9	-8.0	-13.1		

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Mar-07	-6	-7	-8	-8	-8	-8	-8	-8	-8	-8	-7	-6	-6	-7	-6	-6	-6	-7	-9	-10	-11	-12	-12	-13	-8.1	-5.5	
2-Mar-07	-13	-13	-13	-14	-15	-15	-15	-14	-12	-9	-6	-5	-4	-3	-3	-4	-4	-6	-9	-10	-11	-12	-12	-12	-9.8	-2.5	
3-Mar-07	-9	-6	-5	-6	-6	-5	-4	-3	-1	0	3	6	11	13	12	10	9	7	6	5	4	4	5	5	2.3	12.5	
4-Mar-07	5	5	4	3	4	4	3	3	3	5	9	11	11	9	6	3	0	-3	-4	-5	-5	-5	-5	-5	2.3	11.2	
5-Mar-07	-6	-6	-6	-7	-7	-8	-9	-10	-10	-9	-7	-5	-3	-2	0	0	0	-1	-2	-3	-3	-4	-5	-6	-4.9	0.3	
6-Mar-07	-7	-7	-8	-8	-8	-8	-8	-8	-8	-7	-6	-5	-5	-2	0	0	0	1	1	-1	-2	-3	-3	-3	-4.3	0.9	
7-Mar-07	-2	0	0	1	2	2	4	4	6	9	12	12	13	15	16	16	16	15	12	9	7	6	6	5	7.8	16.1	
8-Mar-07	5	6	6	6	6	6	5	4	5	7	9	8	7	9	11	12	11	8	8	6	5	4	2	0	6.5	11.8	
9-Mar-07	0	0	1	2	2	2	0	0	4	7	9	11	11	12	13	13	13	12	9	7	4	2	3	1	5.7	12.8	
10-Mar-07	1	1	1	1	1	2	3	5	7	10	13	15	16	16	16	15	15	13	11	8	8	8	8	8	7.7	15.9	
11-Mar-07	8	8	7	7	8	7	8	10	11	13	15	16	17	18	19	19	18	17	16	15	15	14	14	13	13.0	18.9	
12-Mar-07	14	14	15	15	15	14	13	14	16	17	18	18	19	19	19	18	17	7	5	3	2	1	1	0	12.2	18.7	
13-Mar-07	-1	-1	-2	-2	-2	-2	-2	-2	-1	-1	-1	0	1	3	3	4	4	3	1	0	-2	-3	-4	-5	-0.6	3.7	
14-Mar-07	-5	-4	-3	-2	-2	-1	-1	0	2	3	4	3	3	5	5	5	4	3	-1	-3	-4	-4	-5	-5	-0.2	5.4	
15-Mar-07	-5	-5	-6	-6	-6	-7	-6	-6	-4	-3	-2	-1	0	2	4	5	5	4	2	1	-1	-3	-3	-4	-1.8	5.2	
16-Mar-07	-4	-4	-3	-3	-3	-3	-3	-2	0	3	7	8	10	10	11	11	11	9	8	6	5	4	3	3.7	11.2		
17-Mar-07	2	1	1	0	0	0	0	1	6	12	15	19	21	22	22	22	22	20	17	15	14	13	11	10	11.1	22.0	
18-Mar-07	9	9	10	10	6	4	3	3	3	3	2	3	2	2	1	1	1	0	-1	-1	-2	-2	-2	-2	2.8	10.4	
19-Mar-07	-3	-3	-3	-4	-4	-4	-5	-5	-4	-3	-1	2	5	8	9	10	10	11	10	10	10	10	10	9	3.2	11.2	
20-Mar-07	8	7	7	8	8	8	8	8	10	13	15	17	16	14	11	12	13	12	9	8	6	4	1	-1	9.3	16.5	
21-Mar-07	-1	-2	-2	-1	-1	-1	-1	-1	-1	0	0	1	3	4	5	6	7	7	5	4	2	2	3	4	1.8	7.0	
22-Mar-07	4	4	3	3	2	2	4	4	8	10	12	14	15	14	14	15	15	14	12	9	9	8	9	8	8.8	14.7	
23-Mar-07	7	7	7	6	4	3	2	5	7	10	13	15	16	17	17	18	19	19	19	17	14	12	12	12	11.1	19.3	
24-Mar-07	12	11	12	13	12	11	10	10	12	14	18	20	20	20	21	20	21	20	18	17	15	13	12	12	15.1	20.6	
25-Mar-07	12	12	14	14	13	13	12	12	13	14	15	15	15	14	14	13	12	10	9	8	7	7	6	4	11.6	15.1	
26-Mar-07	3	3	2	2	1	1	1	1	2	3	4	6	7	9	11	11	11	10	9	8	7	6	6	5	5.3	11.2	
27-Mar-07	4	4	4	5	5	4	4	4	4	4	5	6	8	8	8	7	6	5	4	4	4	3	3	3	4.9	7.9	
28-Mar-07	2	2	2	2	2	2	2	2	2	2	3	5	6	7	7	7	7	6	4	2	0	-2	-3	-4	2.7	7.1	
29-Mar-07	-4	-5	-6	-7	-7	-7	-7	-3	-1	3	6	10	11	12	12	12	11	7	5	4	3	3	2	2.8	12.4		
30-Mar-07	2	1	1	1	0	-1	0	2	5	7	10	13	15	15	16	16	16	14	11	9	8	7	6	6	7.5	16.1	
31-Mar-07	5	4	4	4	3	1	1	2	3	5	6	8	9	9	10	9	9	8	6	4	3	3	2	1	5.0	9.6	
Hourly Avg	1.2	1.2	1.2	1.1	0.8	0.5	0.3	1.0	2.4	4.2	6.1	7.6	8.7	9.4	9.8	9.9	9.5	8.1	6.2	4.7	3.6	2.8	2.3	1.7			
Hourly Max	13.5	14.1	15.3	14.7	14.5	14.5	12.8	14.4	15.5	17.5	18.0	19.7	21.0	21.8	22.0	21.6	19.7	18.0	16.8	14.9	14.0	13.7	13.3				

### HOURLY AVERAGE TABLE

### Ambient Temperature (T)



### 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

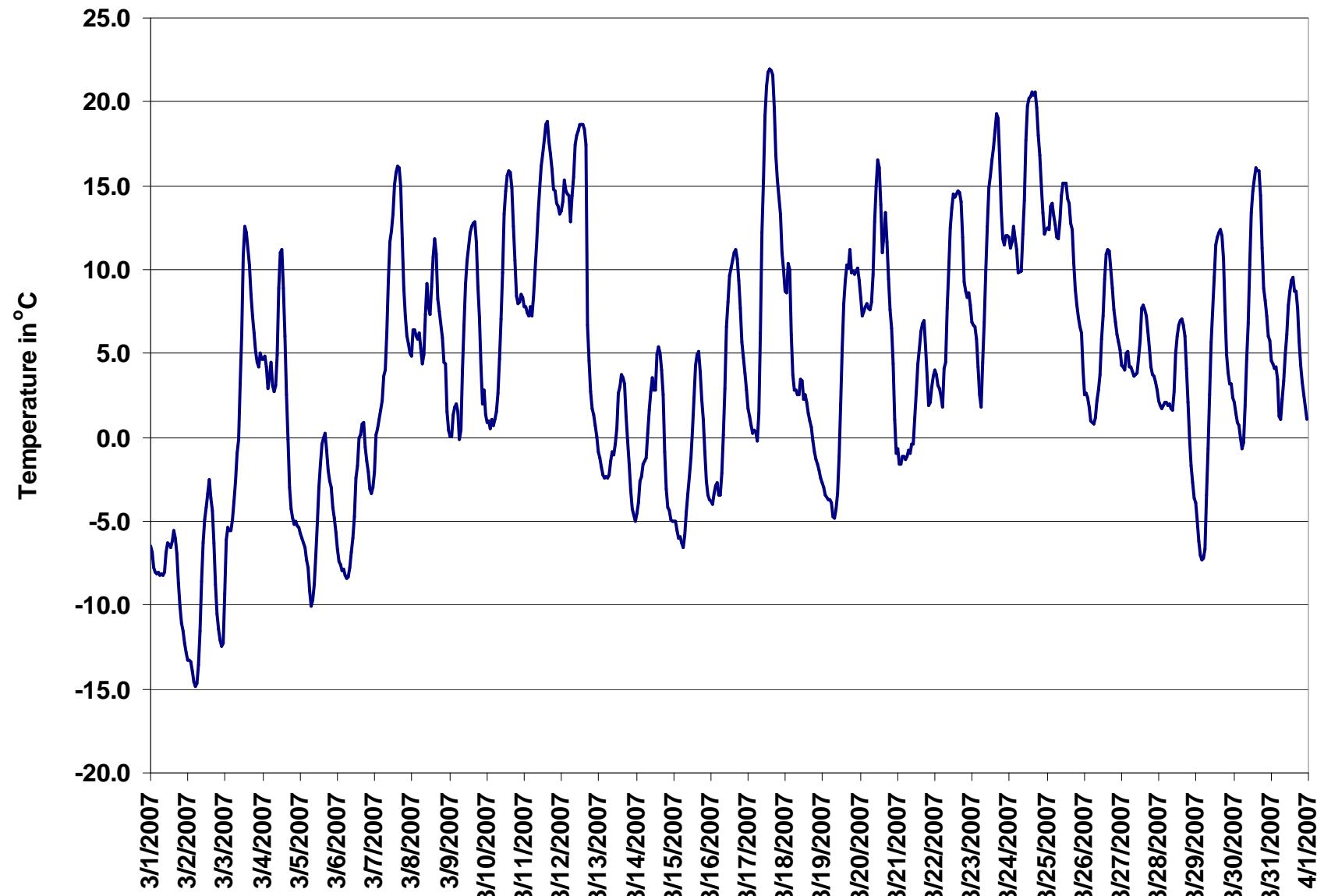


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



## PAS - Crescent Heights - Solar Radiation Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### Summary

Maximum 1-hr Average:	804.9	W/m <sup>2</sup>	30-Mar	12:00 13:00
Maximum 24-hr Value:	252.5	W/m <sup>2</sup>	30-Mar	

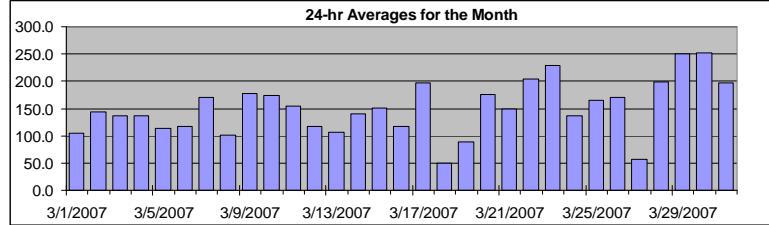
AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	749.9	628.4	267.7	4.2	0.0	0.0	0.0	151.0 W/m <sup>2</sup>	4.2 W/m <sup>2</sup>

### Day Mountain Standard Time

	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 0:00	23:00 24-hour Average	0:00 Daily Maximum		
1-Mar-07	0	0	0	0	0	0	0	0	17	51	146	293	359	357	388	331	350	152	50	2	0	0	0	0	0	0	104.0	387.8
2-Mar-07	0	0	0	0	0	0	0	0	16	125	297	434	526	458	465	455	372	230	64	2	0	0	0	0	0	0	143.5	526.5
3-Mar-07	0	0	0	0	0	0	0	0	40	115	286	471	550	599	503	375	187	107	31	1	0	0	0	0	0	0	136.1	598.6
4-Mar-07	0	0	0	0	0	0	0	1	37	84	204	452	532	578	551	472	232	99	30	2	0	0	0	0	0	0	136.3	577.6
5-Mar-07	0	0	0	0	0	0	0	0	39	149	227	361	465	515	432	255	126	120	36	2	0	0	0	0	0	0	113.7	514.9
6-Mar-07	0	0	0	0	0	0	0	0	15	68	139	225	404	604	465	370	267	161	79	3	0	0	0	0	0	0	116.8	604.3
7-Mar-07	0	0	0	0	0	0	0	1	63	214	374	501	585	606	594	398	397	256	78	2	0	0	0	0	0	0	169.6	606.0
8-Mar-07	0	0	0	0	0	0	0	1	21	52	281	344	84	207	394	220	411	301	109	4	0	0	0	0	0	0	101.2	411.3
9-Mar-07	0	0	0	0	0	0	0	1	73	234	390	520	605	627	613	418	406	272	93	4	0	0	0	0	0	0	177.4	627.1
10-Mar-07	0	0	0	0	0	0	0	2	78	233	411	438	605	626	613	431	394	257	74	3	0	0	0	0	0	0	173.6	626.1
11-Mar-07	0	0	0	0	0	0	1	30	228	345	435	538	590	573	419	378	137	42	2	0	0	0	0	0	0	154.9	589.8	
12-Mar-07	0	0	0	0	0	0	2	94	255	382	270	334	295	236	309	263	282	85	7	0	0	0	0	0	0	117.2	382.1	
13-Mar-07	0	0	0	0	0	0	1	27	70	88	119	226	361	607	330	390	239	109	6	0	0	0	0	0	0	107.3	607.1	
14-Mar-07	0	0	0	0	0	0	3	127	260	485	251	277	392	595	441	269	170	89	6	0	0	0	0	0	0	140.2	594.7	
15-Mar-07	0	0	0	0	0	0	4	40	112	174	225	451	666	653	551	383	271	86	8	0	0	0	0	0	0	151.0	666.2	
16-Mar-07	0	0	0	0	0	0	4	52	105	197	339	325	480	409	410	280	140	60	5	0	0	0	0	0	0	117.0	480.2	
17-Mar-07	0	0	0	0	0	0	4	70	231	444	547	630	708	692	564	444	304	90	7	0	0	0	0	0	0	197.3	708.3	
18-Mar-07	0	0	0	0	0	0	1	13	50	102	186	146	125	216	166	111	54	22	2	0	0	0	0	0	0	49.7	215.7	
19-Mar-07	0	0	0	0	0	0	3	26	54	70	168	254	343	295	361	221	173	153	15	0	0	0	0	0	0	88.9	361.4	
20-Mar-07	0	0	0	0	0	0	5	50	160	413	595	715	706	502	225	343	334	162	12	0	0	0	0	0	0	175.9	715.3	
21-Mar-07	0	0	0	0	0	0	4	48	174	227	256	429	371	669	602	418	234	122	21	0	0	0	0	0	0	149.1	669.5	
22-Mar-07	0	0	0	0	0	0	16	152	331	480	629	686	716	529	493	384	330	148	13	0	0	0	0	0	0	204.5	716.3	
23-Mar-07	0	0	0	0	0	0	18	160	335	499	630	717	748	717	617	512	356	161	12	0	0	0	0	0	0	228.5	747.8	
24-Mar-07	0	0	0	0	0	0	7	80	149	317	524	624	526	395	271	125	129	120	8	0	0	0	0	0	0	136.5	624.0	
25-Mar-07	0	0	0	0	0	0	11	53	225	471	638	693	712	307	260	193	332	56	10	0	0	0	0	0	0	165.1	712.3	
26-Mar-07	0	0	0	0	0	0	23	107	122	116	188	567	751	737	636	448	276	98	15	0	0	0	0	0	0	170.2	751.1	
27-Mar-07	0	0	0	0	0	0	1	11	24	104	119	242	192	247	195	143	77	22	6	0	0	0	0	0	0	57.6	246.5	
28-Mar-07	0	0	0	0	0	0	5	33	96	114	417	748	779	748	674	543	378	200	27	0	0	0	0	0	0	198.5	779.1	
29-Mar-07	0	0	0	0	0	0	52	218	398	550	679	777	790	747	685	527	347	202	22	0	0	0	0	0	0	249.8	789.5	
30-Mar-07	0	0	0	0	0	0	49	218	399	564	693	781	805	771	683	543	379	155	17	0	0	0	0	0	0	252.5	804.9	
31-Mar-07	0	0	0	0	0	0	40	109	247	392	504	683	769	682	476	329	324	139	19	0	0	0	0	0	0	196.5	769.2	
Hourly Avg	0.0	0.0	0.0	0.0	0.0	0.0	8.4	68.4	172.6	299.7	401.6	501.9	548.5	527.2	422.5	335.3	233.0	95.7	8.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Hourly Max	0.3	0.2	0.4	0.2	0.4	0.4	52.3	218.2	398.9	564.4	693.3	781.4	804.9	771.1	685.2	543.5	378.8	202.3	27.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	

### HOURLY AVERAGE TABLE

### Solar Radiation (SR)



### 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

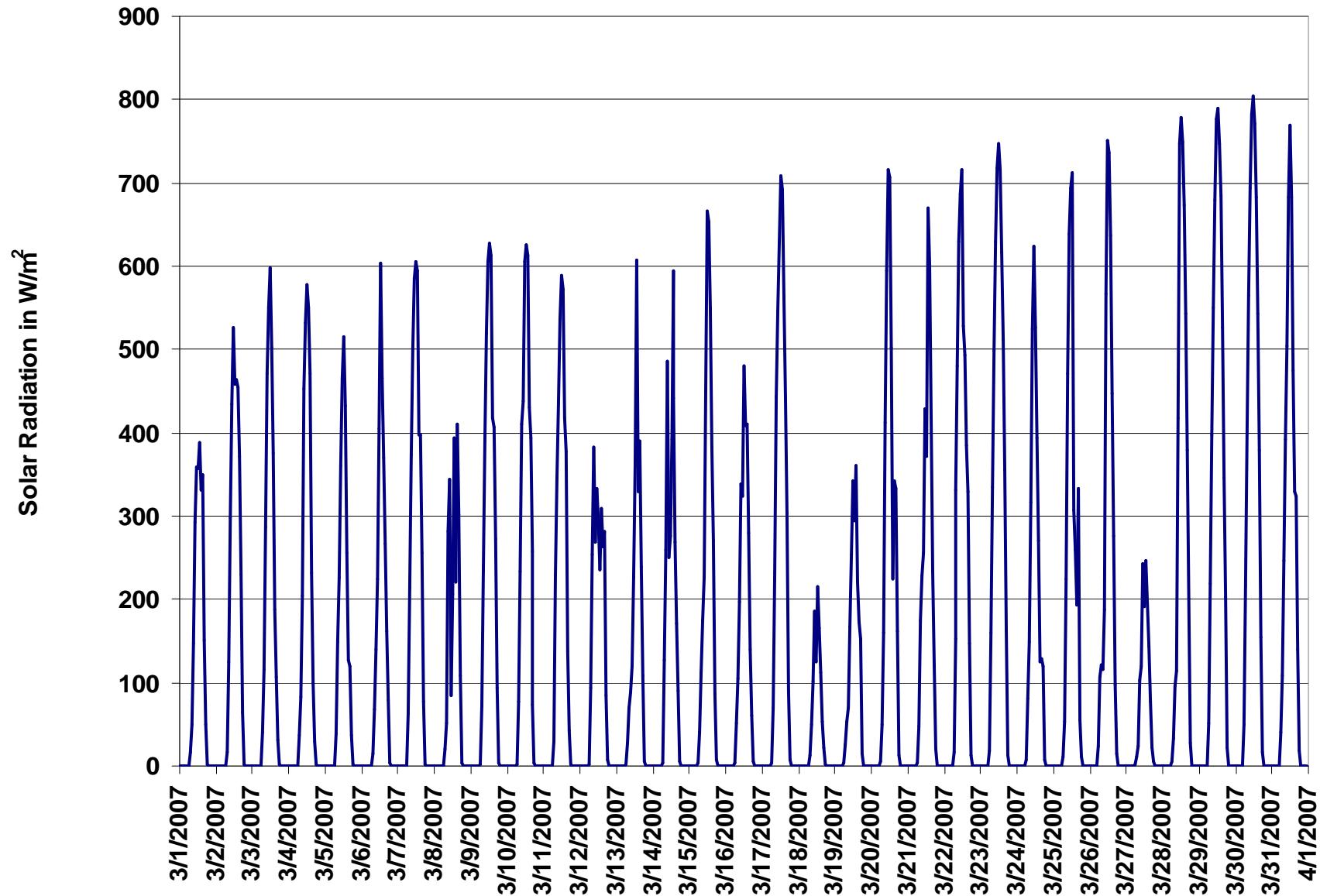


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### Summary

Maximum 1-hr Average:	52.2	km/hr	12-Mar	12:00 13:00
Maximum 24-hr Value:	30.6	km/hr	12-Mar	

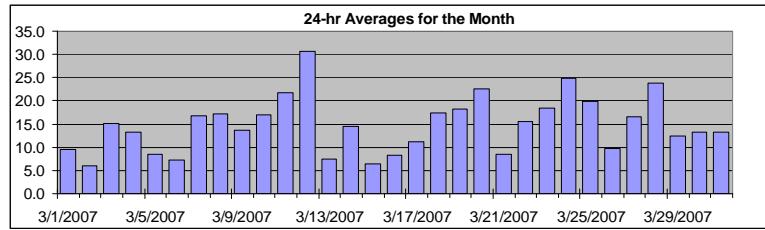
Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	37.1	29.8	18.8	14.0	8.5	4.3	3.1	14.8 km/hr

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	6:00 7:00	7:00 8:00	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	Daily Max
1-Mar-07	13	10	11	9	10	9	11	9	12	13	10	13	13	14	12	10	7	8	9	5	5	7	4	4	4	9.5	13.7	
2-Mar-07	3	3	4	3	3	5	4	5	4	6	7	6	5	5	5	7	11	13	12	9	9	7	6	4	2	6.0	12.5	
3-Mar-07	7	18	21	23	19	15	18	17	22	23	20	17	12	12	15	14	13	11	11	10	12	10	10	11		15.1	23.1	
4-Mar-07	12	14	9	8	10	17	10	11	12	15	14	15	14	16	17	16	14	15	13	12	15	16	14	12		13.3	17.0	
5-Mar-07	7	7	7	9	7	9	14	11	10	8	6	8	7	7	7	7	9	10	11	6	7	9	11	9		8.5	14.1	
6-Mar-07	11	8	10	5	5	8	7	4	3	4	6	7	8	10	11	12	12	11	9	8	4	4	2	3		7.2	12.2	
7-Mar-07	3	6	3	4	7	7	17	21	19	23	30	30	31	29	28	27	21	22	21	15	10	8	13	7		16.7	30.6	
8-Mar-07	9	18	15	19	24	25	23	16	20	23	23	17	9	17	15	17	18	14	14	15	14	17	16	16		17.2	24.6	
9-Mar-07	17	17	14	12	14	16	16	14	16	19	16	19	21	16	15	15	11	7	4	7	11	10	9	12		13.7	20.6	
10-Mar-07	17	13	11	15	16	17	15	18	18	18	20	15	14	15	18	18	20	14	10	9	20	25	24	26		16.9	25.5	
11-Mar-07	26	28	24	21	20	17	18	20	17	17	19	17	18	19	15	25	20	22	23	25	26	31	27	29		21.8	30.6	
12-Mar-07	31	31	34	36	40	30	21	35	36	36	46	51	52	42	40	33	33	30	24	10	5	7	9	22		30.6	52.2	
13-Mar-07	20	14	13	10	4	4	8	6	4	6	5	5	7	8	7	8	9	9	9	4	4	6	6	6		7.6	19.8	
14-Mar-07	9	10	9	14	21	19	16	16	14	12	12	16	14	16	20	21	19	16	16	12	11	12	11	9		14.4	20.8	
15-Mar-07	7	9	7	5	5	5	4	3	5	5	8	10	10	8	6	7	5	4	7	8	6	8	7	6		6.5	10.3	
16-Mar-07	6	3	5	4	4	4	3	3	3	5	12	11	13	19	22	19	12	5	6	8	10	9	6	7		8.3	21.7	
17-Mar-07	6	3	5	3	4	4	5	5	4	15	24	23	18	16	15	15	12	11	12	15	15	13	10	14		11.1	23.9	
18-Mar-07	14	15	16	18	15	24	25	19	18	15	16	17	18	18	18	17	14	16	18	18	19	18	18	16		17.5	25.2	
19-Mar-07	17	16	17	18	18	20	21	19	18	15	13	10	7	12	16	15	22	21	20	25	24	20	25	25		18.1	25.5	
20-Mar-07	17	12	13	15	15	16	16	13	25	30	35	38	37	29	16	18	28	26	30	28	23	19	22	19		22.5	38.2	
21-Mar-07	11	8	6	5	8	8	9	8	10	8	8	5	6	6	9	10	9	5	8	6	6	9	14	19		8.4	19.4	
22-Mar-07	20	13	13	10	10	9	11	12	16	18	20	16	15	17	18	19	21	15	18	14	16	16	20	17		15.6	20.8	
23-Mar-07	15	13	10	13	9	7	6	5	8	9	10	12	19	22	24	26	27	28	28	23	24	30	35	37		18.3	36.9	
24-Mar-07	37	33	25	30	27	24	23	24	20	23	28	22	23	24	14	13	19	27	27	30	28	23	25	29		24.9	37.1	
25-Mar-07	31	27	34	31	28	28	26	29	19	17	16	13	16	14	14	19	22	24	17	12	6	6	9	17		19.8	33.6	
26-Mar-07	19	13	7	6	7	5	5	6	9	6	5	5	9	7	6	7	8	11	11	16	15	15	16	17		9.6	18.5	
27-Mar-07	17	14	13	14	14	18	20	19	30	35	29	23	15	6	6	6	10	11	12	14	16	13	12	16		16.5	35.3	
28-Mar-07	23	25	24	26	27	29	29	28	30	30	30	32	31	32	31	29	28	24	18	13	14	11	6	3		23.9	31.9	
29-Mar-07	5	4	5	4	6	6	6	5	7	6	7	12	22	23	20	18	16	16	17	17	15	14	27	23		12.5	27.5	
30-Mar-07	14	17	22	16	13	11	8	11	9	13	15	18	17	15	14	17	14	13	12	11	10	10	7	9		13.2	22.3	
31-Mar-07	9	10	8	11	11	9	8	11	19	18	17	18	18	16	14	15	14	16	16	15	12	13	11	11		13.3	18.9	

### HOURLY AVERAGE TABLE

### Wind Speed (WSs)



### 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



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### Summary

Maximum 1-hr Average:	52.1	km/hr	12-Mar	12:00 13:00
Maximum 24-hr Value:	24.6	km/hr	24-Mar	

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%
Percentile				Average V
99	95	75	50	25 5 1
36.9	29.6	18.5	13.6	8.0 3.3 2.1
				5.6 km/hr

### Day Mountain Standard Time

Hour Start Hour End	0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 24:00	1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00	24-hr Vector Average	Daily Max
1-Mar-07	13 9 11 9 10 8 11 8 12 13 10 13 12 13 12 9 7 8 9 5 5 5 7 3 4	8.6	13.4	
2-Mar-07	2 2 3 2 2 4 4 5 4 5 7 6 5 3 6 11 12 12 9 9 7 6 4 2	1.9	12.4	
3-Mar-07	6 18 20 23 19 15 18 17 22 22 20 17 11 11 14 14 13 11 11 10 12 10 9 11	13.9	23.0	
4-Mar-07	12 14 9 7 10 16 10 10 12 15 14 14 14 15 17 15 14 14 13 12 15 16 14 12	1.7	16.8	
5-Mar-07	7 7 7 9 7 9 14 11 10 7 6 7 7 7 6 6 8 10 11 6 7 9 11 9 11 9	7.9	14.0	
6-Mar-07	11 8 10 5 4 8 6 4 2 3 5 6 7 9 11 12 12 11 8 8 2 4 2 2	5.5	11.9	
7-Mar-07	1 6 1 3 7 5 17 21 19 23 30 29 30 29 28 27 21 22 20 15 10 8 13 6	15.5	30.5	
8-Mar-07	8 18 14 18 24 24 23 16 20 22 22 16 9 16 14 16 15 13 14 15 14 17 15 16	14.0	24.5	
9-Mar-07	17 16 13 12 14 16 16 14 16 19 16 19 20 16 15 14 11 7 4 6 10 10 9 12	13.1	20.1	
10-Mar-07	16 13 11 14 16 17 15 18 18 18 20 14 13 14 18 17 20 14 10 8 20 25 24 25	16.2	25.5	
11-Mar-07	26 28 24 21 20 17 18 20 17 17 19 17 18 19 14 25 20 22 23 25 26 30 27 29	20.8	30.5	
12-Mar-07	31 31 34 36 40 30 21 34 35 36 46 51 52 42 40 33 27 30 24 10 3 5 9 22	22.9	52.1	
13-Mar-07	20 14 13 10 3 3 7 6 4 5 4 2 6 5 4 6 8 8 8 4 2 5 6 5	1.6	19.6	
14-Mar-07	9 10 9 13 21 19 16 16 14 12 12 15 14 16 20 21 19 16 16 12 11 12 11 9	3.3	20.6	
15-Mar-07	6 8 7 5 5 5 4 3 4 5 7 9 9 7 5 6 3 3 6 8 5 8 6 6	2.2	9.4	
16-Mar-07	5 3 5 4 4 3 3 3 3 5 12 10 13 19 21 18 12 2 6 8 10 9 5 7	3.4	21.3	
17-Mar-07	6 3 5 2 2 4 5 4 3 14 24 22 17 16 15 14 11 10 12 15 15 13 10 14	8.4	23.8	
18-Mar-07	14 14 15 17 15 22 25 19 18 15 15 17 18 18 18 17 14 16 18 18 18 18 16	12.5	25.1	
19-Mar-07	17 15 17 18 18 20 20 19 18 15 13 9 7 11 15 14 22 21 20 25 24 20 25 25	10.5	25.3	
20-Mar-07	17 11 13 15 15 16 16 12 25 30 34 38 37 28 16 17 28 26 30 28 23 18 20 19	19.3	37.9	
21-Mar-07	10 7 6 5 7 8 8 8 10 7 8 3 4 3 8 10 8 4 8 6 6 8 13 19	3.7	19.3	
22-Mar-07	20 13 13 10 10 8 11 12 16 18 19 15 13 17 17 18 20 15 18 14 16 16 20 17	14.5	20.4	
23-Mar-07	15 12 10 13 9 6 6 2 8 7 9 11 18 21 23 25 26 28 28 23 24 29 35 37	17.2	36.8	
24-Mar-07	37 33 25 30 27 23 23 24 20 23 28 21 23 23 14 11 19 26 27 30 28 23 25 29	24.6	37.0	
25-Mar-07	31 27 33 31 27 28 26 29 18 17 16 13 15 14 14 19 21 23 17 11 5 6 9 15	8.4	33.5	
26-Mar-07	18 12 5 4 6 3 4 6 8 5 3 3 8 5 4 4 8 11 11 16 15 15 16 17	4.1	18.4	
27-Mar-07	16 14 13 14 14 18 20 18 29 35 29 23 14 5 6 9 10 12 14 16 12 12 16 20	7.2	35.2	
28-Mar-07	23 25 24 26 27 29 29 28 29 30 32 31 31 30 29 28 24 18 13 14 11 6 2	23.8	31.6	
29-Mar-07	5 4 4 3 6 6 4 5 6 5 7 11 21 22 19 18 15 15 17 16 14 13 27 23	11.7	27.0	
30-Mar-07	12 15 22 16 12 10 8 11 8 12 14 17 16 14 13 16 14 13 12 11 10 9 7 9	12.1	21.9	
31-Mar-07	8 9 8 10 11 9 8 10 19 18 17 18 17 16 14 13 16 16 15 12 12 11 11	10.5	18.7	
1-hr Vector	5.3 6.4 5.7 6.4 7.5 6.4 5.6 6.0 6.0 7.3 8.0 7.4 7.6 7.5 6.6 6.5 5.6 3.6 3.2 3.0 4.0 4.5 5.4 5.3			
Hourly Max	37.0 33.3 34.3 35.6 39.6 29.8 28.6 34.4 35.4 36.2 46.2 51.3 52.1 41.9 40.1 32.8 28.1 29.5 29.6 29.6 27.6 30.5 35.3 36.8			



## PAS - Crescent Heights - Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Data Summary													

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs									
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%									
Percentile	99	95	75	50	25	5	1	Average					
	357.3	346.7	250.5	217.3	105.7	10.2	2.5		241 deg				

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector	
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Mar-07	73	60	60	72	68	42	25	36	12	15	15	19	37	48	35	34	23	9	17	8	330	351	332	338	32	NNE	
2-Mar-07	61	346	283	291	244	257	251	239	223	250	351	8	357	7	111	130	120	122	113	115	131	133	119	67	117	ESE	
3-Mar-07	198	197	189	193	189	192	222	235	232	235	229	226	249	260	240	244	252	258	241	243	234	244	225	252	226	SW	
4-Mar-07	258	271	251	199	250	267	245	221	224	236	257	282	320	358	12	28	60	68	72	66	80	90	90	85	331	NNW	
5-Mar-07	55	21	7	358	355	358	357	355	5	23	33	37	36	31	54	53	32	20	16	21	1	349	346	335	13	NNE	
6-Mar-07	341	351	2	29	14	28	19	78	4	60	58	78	94	90	109	100	88	71	61	80	66	3	68	102	58	ENE	
7-Mar-07	106	214	267	303	271	242	204	207	200	207	209	214	213	206	202	204	202	215	221	237	264	281	254	252	216	SW	
8-Mar-07	265	224	231	232	231	222	216	233	226	244	279	305	265	306	295	303	321	357	278	267	263	267	229	239	257	WSW	
9-Mar-07	231	233	245	243	239	238	233	227	226	240	263	257	258	269	267	248	268	261	280	230	221	230	217	218	243	WSW	
10-Mar-07	228	234	236	235	239	235	232	230	233	224	227	251	273	258	242	246	250	263	265	212	206	210	217	217	234	SW	
11-Mar-07	226	221	223	232	228	234	234	256	236	257	265	256	248	246	246	239	217	208	210	211	210	210	210	210	228	SW	
12-Mar-07	210	208	214	212	213	215	216	232	237	240	240	235	237	239	243	250	265	353	354	8	59	344	350	4	239	WSW	
13-Mar-07	12	17	23	27	62	186	208	238	305	340	341	286	206	210	293	208	229	223	229	263	150	138	187	210	271	W	
14-Mar-07	199	193	190	199	207	207	208	222	246	248	256	310	322	327	347	348	353	8	20	44	51	62	66	74	299	WNW	
15-Mar-07	46	34	74	100	106	20	5	66	131	180	214	217	224	234	256	202	123	52	63	64	99	120	124	115	118	ESE	
16-Mar-07	115	85	71	68	81	99	82	101	88	128	157	149	178	196	209	209	221	228	48	44	58	55	25	6	149	SSE	
17-Mar-07	3	15	10	4	248	99	115	160	177	215	229	244	271	271	293	293	257	241	259	266	268	250	248	242	256	WSW	
18-Mar-07	237	237	270	294	313	342	6	10	8	359	7	1	0	5	5	13	27	44	41	45	47	53	57	55	8	N	
19-Mar-07	61	67	69	75	82	92	98	93	91	90	94	91	108	181	185	185	190	189	198	197	200	189	193	201	142	SE	
20-Mar-07	198	224	212	202	197	202	204	223	217	224	225	229	246	275	281	245	256	253	236	234	241	235	312	351	238	WSW	
21-Mar-07	343	293	265	232	235	248	261	317	353	346	2	61	115	220	250	253	249	263	93	100	112	217	223	221	258	WSW	
22-Mar-07	225	245	239	244	247	233	262	205	258	266	270	291	261	249	242	248	244	243	235	243	213	204	215	217	242	WSW	
23-Mar-07	231	240	278	283	271	245	257	175	263	246	229	217	210	214	222	210	207	209	214	218	207	209	215	219	221	SW	
24-Mar-07	221	225	222	227	221	224	230	231	228	222	233	248	237	228	235	245	236	236	229	226	226	205	206	211	226	SW	
25-Mar-07	211	213	214	219	218	215	217	225	246	267	281	312	327	328	353	359	13	6	3	6	17	49	72	328	263	W	
26-Mar-07	1	11	47	161	231	255	191	223	233	251	271	32	44	17	53	50	48	32	50	99	113	116	110	106	73	ENE	
27-Mar-07	86	91	106	110	118	113	96	90	102	103	98	95	104	114	282	282	300	307	315	322	324	314	322	329	77	ENE	
28-Mar-07	342	342	343	345	344	343	344	342	347	347	351	348	348	352	352	354	353	358	359	354	352	1	5	6	349	N	
29-Mar-07	248	172	116	94	159	201	192	166	189	131	108	155	173	169	164	163	170	174	166	160	179	181	187	195	171	S	
30-Mar-07	221	235	215	201	214	195	163	141	142	191	183	189	184	187	175	195	166	172	187	179	182	194	217	231	191	SSW	
31-Mar-07	220	241	244	252	252	245	280	325	342	330	330	321	323	327	328	325	332	340	351	357	4	5	2	4	324	NW	
	Hourly Avg	233	235	230	226	226	229	230	232	241	244	251	258	254	259	261	254	256	276	263	232	213	210	215	232		



## PAS - Crescent Heights - Standard Deviation of Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: March 1, 2007 to April 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### 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	
								55.5	35.5	14.6	8.8	5.9	4.1	3.7	

Determined by the Yamartino 15-min interval calculation

#### 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

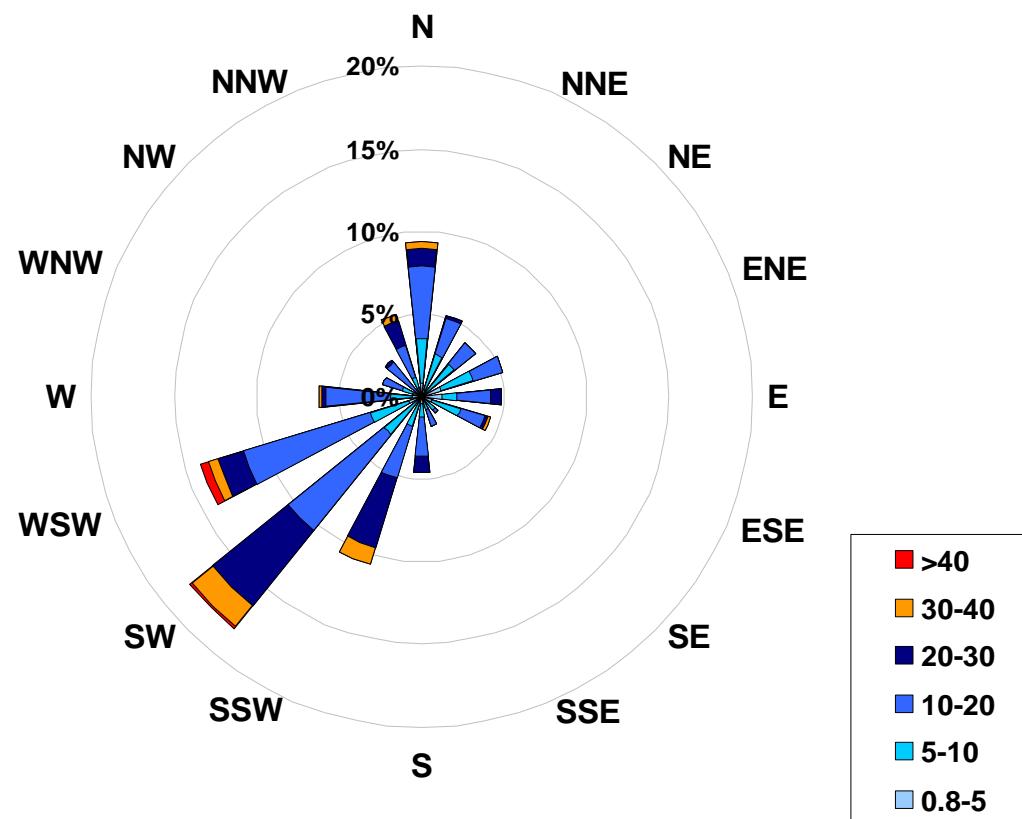
#### Day Mountain Standard Time

	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Mar-07	13	7	6	8	7	14	7	9	5	8	9	11	13	10	12	15	19	10	7	6	10	5	18	17	18.7
2-Mar-07	23	28	26	56	32	18	27	12	28	24	18	21	36	57	24	14	9	6	5	4	9	9	18	17	56.8
3-Mar-07	31	6	5	5	4	6	5	12	5	5	8	8	15	18	9	12	14	8	13	16	4	14	15	10	30.5
4-Mar-07	13	5	17	19	14	12	16	18	5	14	15	10	13	9	9	9	8	8	7	6	7	12	9	13	18.8
5-Mar-07	11	8	5	5	5	5	5	5	9	19	16	16	20	16	13	15	10	8	5	7	6	5	4	5	19.6
6-Mar-07	7	10	7	10	12	9	15	19	38	26	22	20	21	20	10	11	10	9	7	8	39	8	24	24	39.5
7-Mar-07	63	31	58	43	9	49	7	4	5	5	5	6	5	6	7	6	6	7	6	7	11	16	13	23	63.1
8-Mar-07	17	5	10	11	7	5	5	5	6	7	8	10	20	14	13	12	17	14	11	6	6	7	13	8	20.5
9-Mar-07	4	4	8	7	4	4	4	4	6	8	9	9	9	13	11	18	13	14	18	5	9	7	18	14	18.4
10-Mar-07	6	8	11	8	7	11	9	6	5	6	6	12	15	19	14	10	8	7	11	14	4	5	4	4	19.5
11-Mar-07	4	4	5	5	4	5	7	4	9	7	7	10	10	10	14	7	7	4	5	5	5	4	5	4	13.9
12-Mar-07	4	5	4	5	4	4	4	4	5	6	5	4	4	6	5	6	19	5	5	8	47	42	14	4	47.0
13-Mar-07	7	9	8	16	36	55	19	18	32	31	50	45	33	39	40	28	18	15	16	20	30	17	9	31	54.6
14-Mar-07	9	5	7	5	5	5	8	13	11	14	12	12	9	13	9	8	7	6	4	10	6	7	6	8	14.3
15-Mar-07	18	10	10	14	18	9	9	12	23	31	20	23	23	35	47	38	45	44	5	9	28	14	8	14	47.4
16-Mar-07	18	17	10	12	26	20	21	19	21	14	11	16	18	11	11	10	9	29	7	9	6	7	10	4	28.8
17-Mar-07	4	10	11	20	36	9	15	27	38	19	6	8	10	11	15	15	18	11	6	5	6	9	11	6	37.8
18-Mar-07	6	5	8	13	9	8	5	6	6	7	8	6	5	6	7	6	8	7	5	5	5	4	5	4	13.2
19-Mar-07	6	6	6	6	5	6	8	8	9	10	10	10	19	23	13	13	6	7	6	4	5	6	5	5	22.8
20-Mar-07	5	7	4	5	5	5	5	13	4	5	7	7	9	9	8	9	6	6	4	4	6	8	9	7	13.4
21-Mar-07	9	13	16	30	11	13	12	11	9	12	16	33	41	64	30	16	24	37	8	11	32	21	8	5	64.0
22-Mar-07	8	7	8	7	10	13	11	15	9	8	8	13	23	14	13	11	11	9	5	7	9	7	5	5	23.0
23-Mar-07	6	12	7	6	16	24	15	37	16	31	30	25	14	15	12	9	9	6	5	6	6	4	4	4	37.5
24-Mar-07	3	4	5	3	5	6	8	6	7	6	7	9	9	8	10	28	8	6	4	4	4	5	5	4	28.4
25-Mar-07	5	5	4	4	4	4	5	4	11	9	13	15	15	14	13	6	7	5	4	8	21	11	9	37	37.2
26-Mar-07	4	7	36	28	15	31	29	37	15	29	53	59	19	47	58	35	21	11	7	7	6	7	5	5	58.8
27-Mar-07	7	7	7	6	7	7	7	9	6	5	6	7	12	44	33	14	12	9	7	6	8	7	6	6	44.0
28-Mar-07	5	4	4	4	4	4	4	4	4	5	5	7	7	8	8	7	7	5	4	4	5	3	10	57.1	
29-Mar-07	8	17	10	17	12	13	29	22	24	34	18	18	9	11	9	9	10	8	6	7	13	40	8	8	40.0
30-Mar-07	30	22	9	17	15	11	15	10	23	15	13	15	13	16	15	14	12	9	8	9	12	17	13	19	30.5
31-Mar-07	11	41	17	11	9	6	17	12	8	10	11	13	15	14	14	13	14	9	5	4	4	3	3	5	40.7

Hourly Max 63 41 58 56 36 55 29 37 38 34 53 59 41 64 58 38 45 44 18 20 47 42 24 57



1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site  
for March 2007



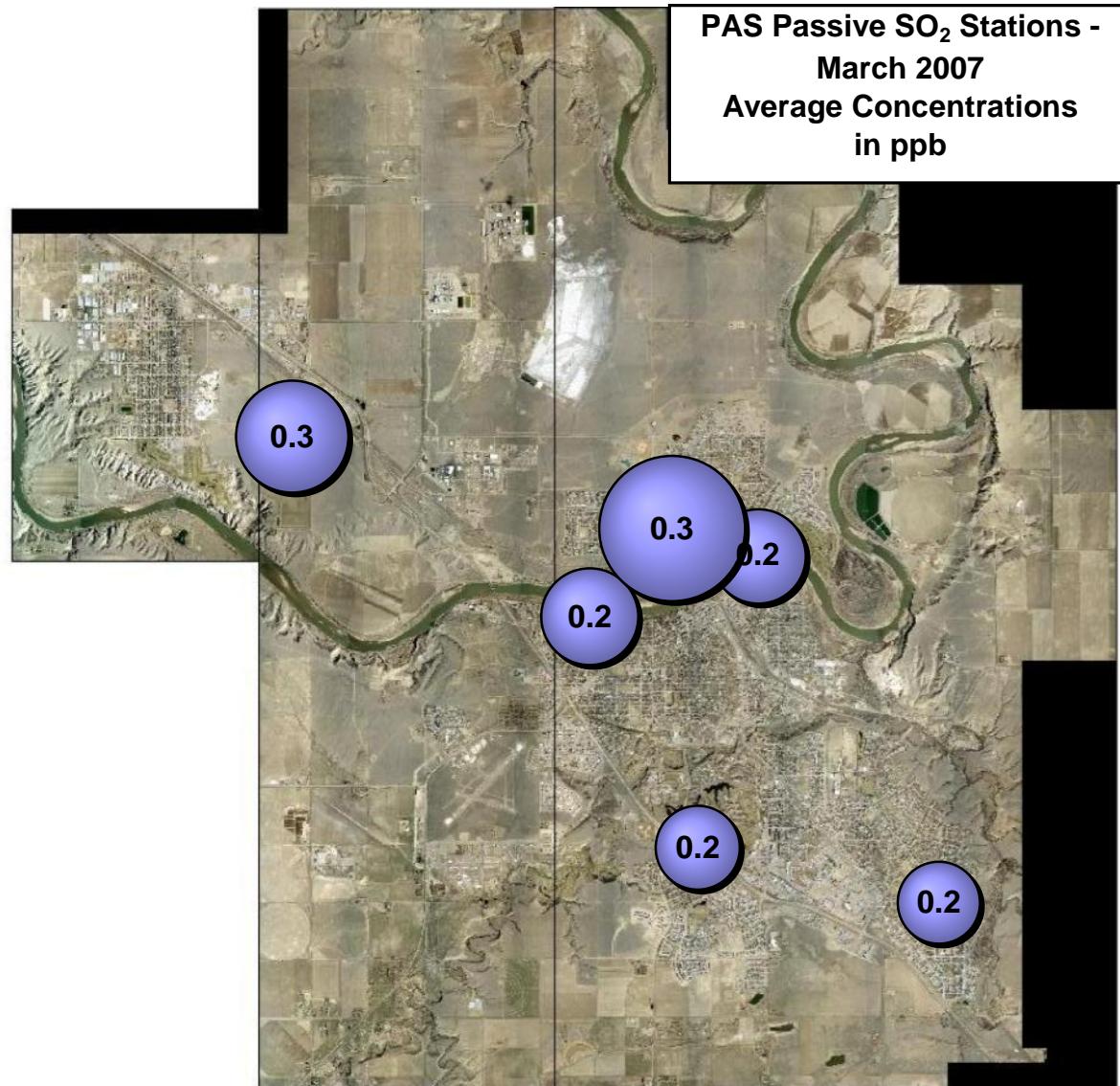
Calms:	0%
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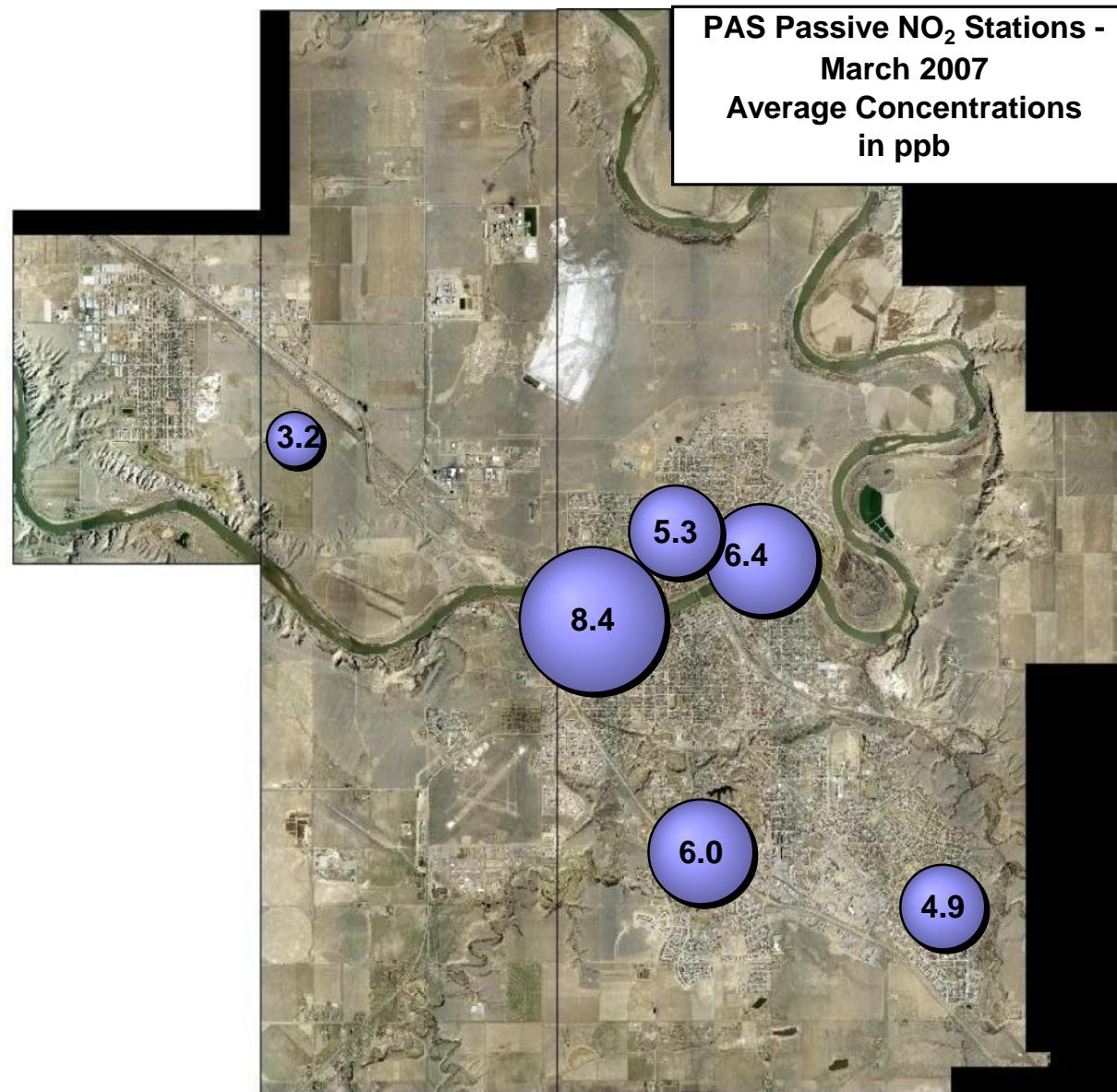
Frequency Distribution of Wind in km/hr			
Range			Frequency (hrs)
0.8	<	5	61
5	to	10	179
10	to	20	341
20	to	30	126
30	to	40	32
> 40			5
Total Non-Zero Values			744

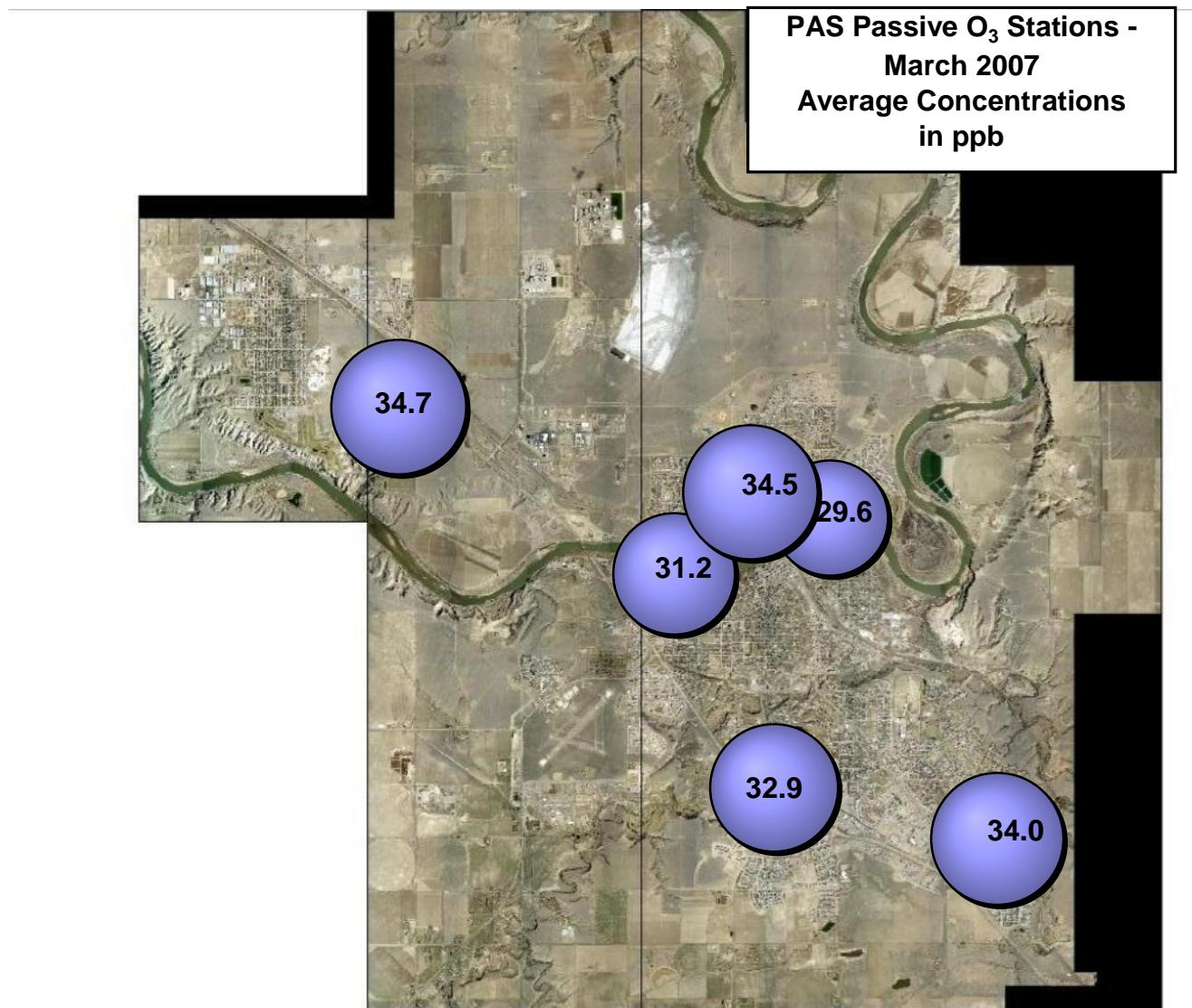


**Passive Monitoring – March 2007**

Station Number	Station Name	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Easting	Northing	Elevation
<b>Duplicates</b>							
6a	Christian School Park	0.2	33.2	4.1			
6b	Christian School Park	0.2	34.9	5.7			
1	Hospital	0.2	31.2	8.4	521648	5542721	698
2	Ball Park	0.2	29.6	6.4	524019	5543686	660
3	Monitoring Station	0.3	34.5	5.3	522812	5544133	714
4	Redcliff	0.3	34.7	3.2	517448	5545608	725
5	Southridge	0.2	32.9	6.0	523172	5539016	721
6	Christian School Park	0.2	34.0	4.9	526577	5538133	709
Stats:							
Mean		0.2	32.8	5.7			
Standard Deviation		0.1	2.0	1.7			
Minimum		0.2			6	Christian School Park	
Maximum		0.3			3	Monitoring Station	
Minimum			29.6		2	Ball Park	
Maximum			34.7		4	Redcliff	
Minimum				3.2	4	Redcliff	
Maximum				8.4	1	Hospital	







# **Palliser Airshed Society**

## **March 2007 - Calibration Reports**

**Crescent Heights Station: O<sub>3</sub>, NO<sub>x</sub>, NO, NO<sub>2</sub>, THC, CO and PM<sub>2.5</sub>**

## Calibration Report

Parameter

O3

Air Monitoring Network

Palliser Airshed

### Station Information

Calibration Date	March 29, 2007	Previous Calibration	February 23, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Calibration	Removal
			Other:
Start Time (MST)	13:15	End Time (MST)	16:40
Barometric Pressure	27.1 inches Hg	Station Temperature	19.3 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	1.001640	Calculated slope	1.046982
Calculated intercept	3.511203	Calculated intercept	-0.137321
Analyzer make	API Model 400E	Analyzer serial #	331
Concentration range Offset Slope Lamp measure Lamp Reference Pressure Sample Flow Sample temp	before	after	
	0 - 500	ppb	0 - 500
	-10.9	ppb	-9.7
	1.063		0.946
	4884.8	mV	4833.3
	4885.2	mV	4834.2
	26.7	inches Hg	26.5
	664	ccm	680
	39.4	Deg C	39.8

### Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.0	-3.3	N/A
4989	300.0	297.9	282.0	1.0565
4989	200.0	200.5	192.8	1.0397
4989	100.0	105.6	105.9	0.9974
4989	0.0	0.0	-3.4	0.0000
4989	300.0	297.9	314.7	0.9466
		Average Correction Factor		1.0312

Calculated value of As Found Response:

322.1 ppm

Percent Change of As Found: 8.1%

Auto zero Auto span	before calibration		after calibration	
	-1.3	ppb	-2.9	ppb
	369.1	ppb	367.1	ppb

Notes:

Calibration Performed By: Travis Mehrer

## Calibration Summary

Parameter O3  
 Air Monitoring Network Palliser Airshed



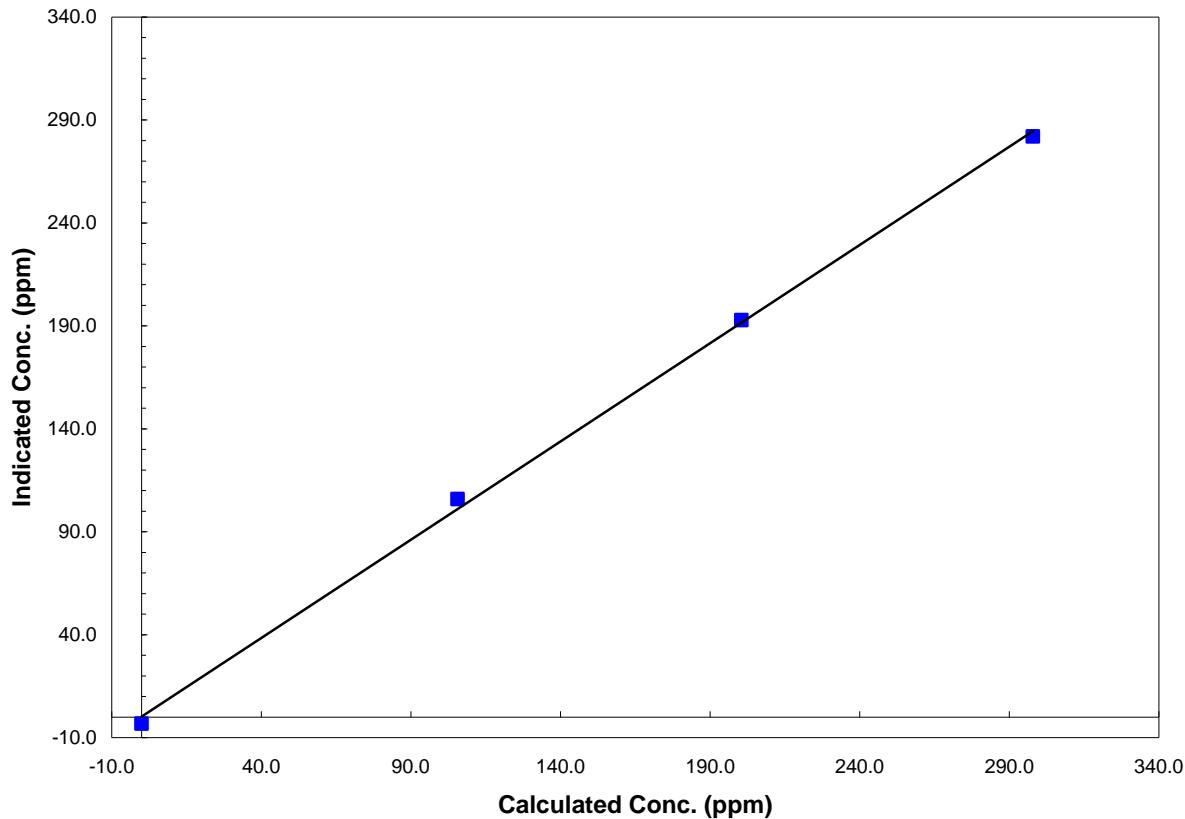
### Station Information

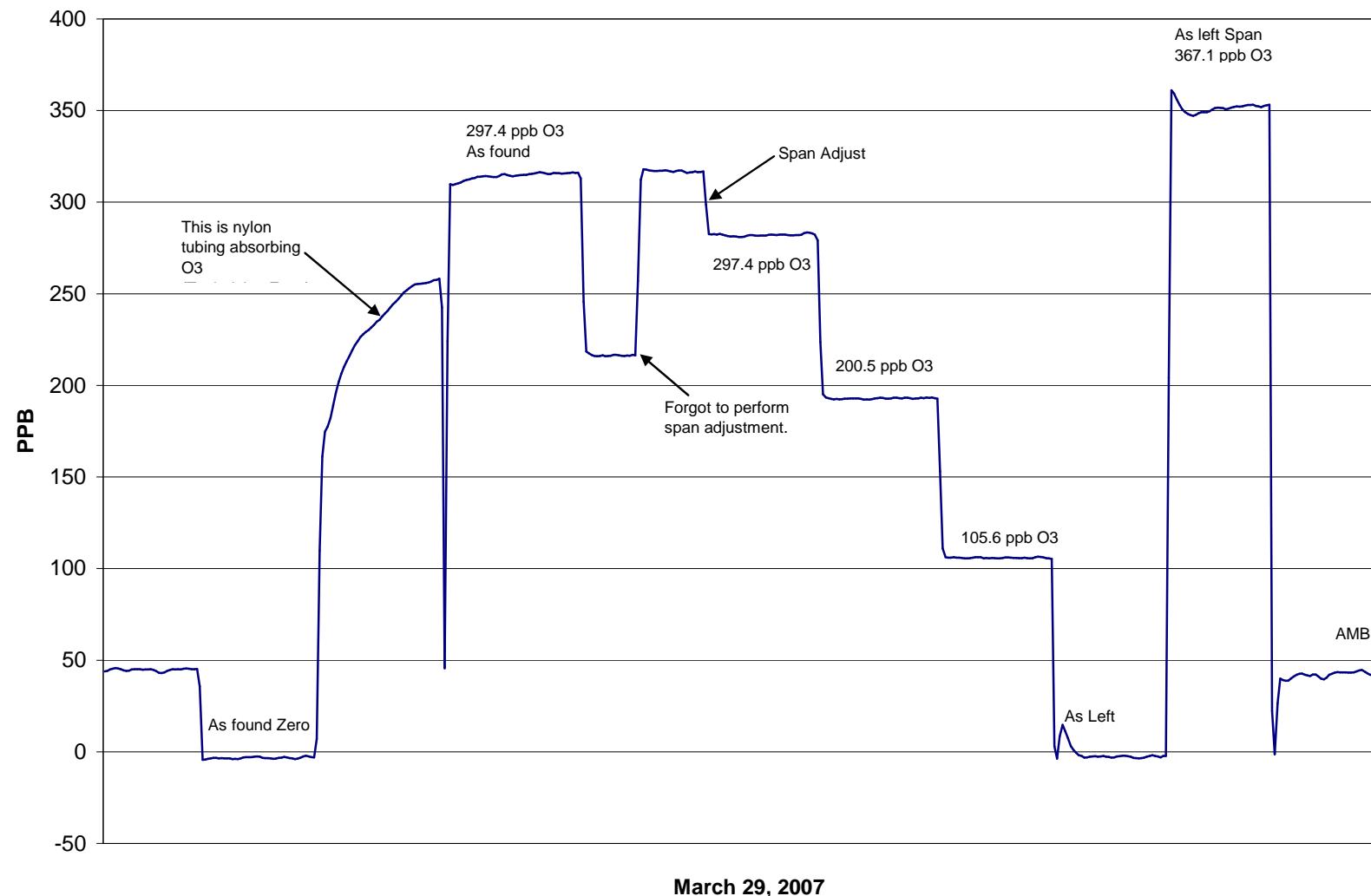
Calibration Date	March 29, 2007	Previous Calibration	February 23, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	13:15	End Time (MST)	16:40
Analyzer make/model	API Model 400E	Analyzer serial #	331

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			Correlation Coefficient	Slope
297.9	282.0	1.0565		
200.5	192.8	1.0397		
105.6	105.9	0.9974		
0.0	-3.3	N/A		
			Intercept	-0.137321

### O3 Calibration Curve



**O3 Calibration**

# Calibration Report

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



## **Station Information**

Calibration Date	March 29, 2007	Previous Calibration	February 22, 2007
Station Number	101	Station Location	Crescent Heights

Reason: **Routine** Installation Removal Other:

Start Time (MST)	8:00	End Time (MST)	13:47		
Barometric Pressure	27.1	inches Hg	Station Temperature	20.0	Deg C
Calibrator	Environics 6100		Serial Number	3474	
NO Cal Gas Conc	49.9	ppm	Cal Gas Expiry Date	5-Dec-07	
NOx Cal Gas Conc	49.9	ppm	Cal Gas Serial #	LL-50114	

## **DACS Information**

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO2	NOx	NO
Before	Data Slope	1.004688	1.007417	1.009116
	Data Offset	0.956656	-0.518861	0.229705
After	Data Slope	1.003130	1.003459	1.003039
	Data Offset	0.055699	-1.671455	-0.077559
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	-0.2	mV	0.3	mV
NOx background	1.1	mV	1.7	mV
NO coefficient	1.515		1.938	
NOx coefficient	1.532		1.941	
Chamber Temp	50.1	Deg C	50.0	Deg C
Cooler Temp	6.9	Deg C	7.1	Deg C
Azero	39.6		41.3	
Perm Temp	40.3	Deg C	40.0	Deg C
Pressure	5.3	inches Hg	4.1	inches Hg
Sample Flow	451.0	ccm	464.0	ccm

Notes: Span was adjusted...

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## Calibration Report

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



### Station Information

Calibration Date: March 29, 2007 Station Location: Crescent Heights

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor
zero	4988	0.00	0.0	0.0	0.0	-0.4	-1.7	-0.4	N/A	N/A
	4988	39.84	395.4	395.4	0.0	394.4	393.0	0.3	1.0025	1.0060
	4988	19.91	198.3	198.3	0.0	201.0	199.6	-0.2	0.9867	0.9937
	4988	9.94	99.2	99.2	0.0	102.1	100.3	0.0	0.9712	0.9894
AFZ	4988	0.00	0.0	0.0	0.0	-0.4	-1.7	-0.4	0.0000	0.0000
AFS	4988	39.84	395.4	395.4	0.0	380.8	372.4	7.2	1.0384	1.0618
								Average Correction Factor	0.9868	0.9964

As Found Concentrations NO<sub>x</sub>= 380.7 NO= 374.4 As Found Percent Change NO<sub>x</sub>= -3.7% NO= -5.3%

### GPT Calibration Data

Dilution Flow 4988 ccm Source Gas Flow 39.84 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	395.4	396.0	-0.6	395.7	394.8	-0.4	N/A	N/A	N/A	N/A
300	399.0	293.3	105.6	399.2	292.5	105.5	0.9993	1.0028	1.0006	99.9%
200	397.8	197.4	200.5	398.1	196.8	200.1	0.9993	1.0026	1.0020	99.8%
100	397.0	99.0	297.9	397.3	98.8	296.6	0.9993	1.0023	1.0044	99.6%
						Average Correction Factor	0.9993	1.0026	1.0023	99.8%

### AIC Data

	Previous calibration				Current calibration					
	Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb	
Auto zero	-2.3	-1.4	-1.4		ppb	0.2	0.6	-0.3	ppb	
Auto span	472.0	195.5	240.2	ppb		468.6	460.9	8.2	ppb	

Calibration Performed By: Travis Mehrer

## Calibration Summary

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

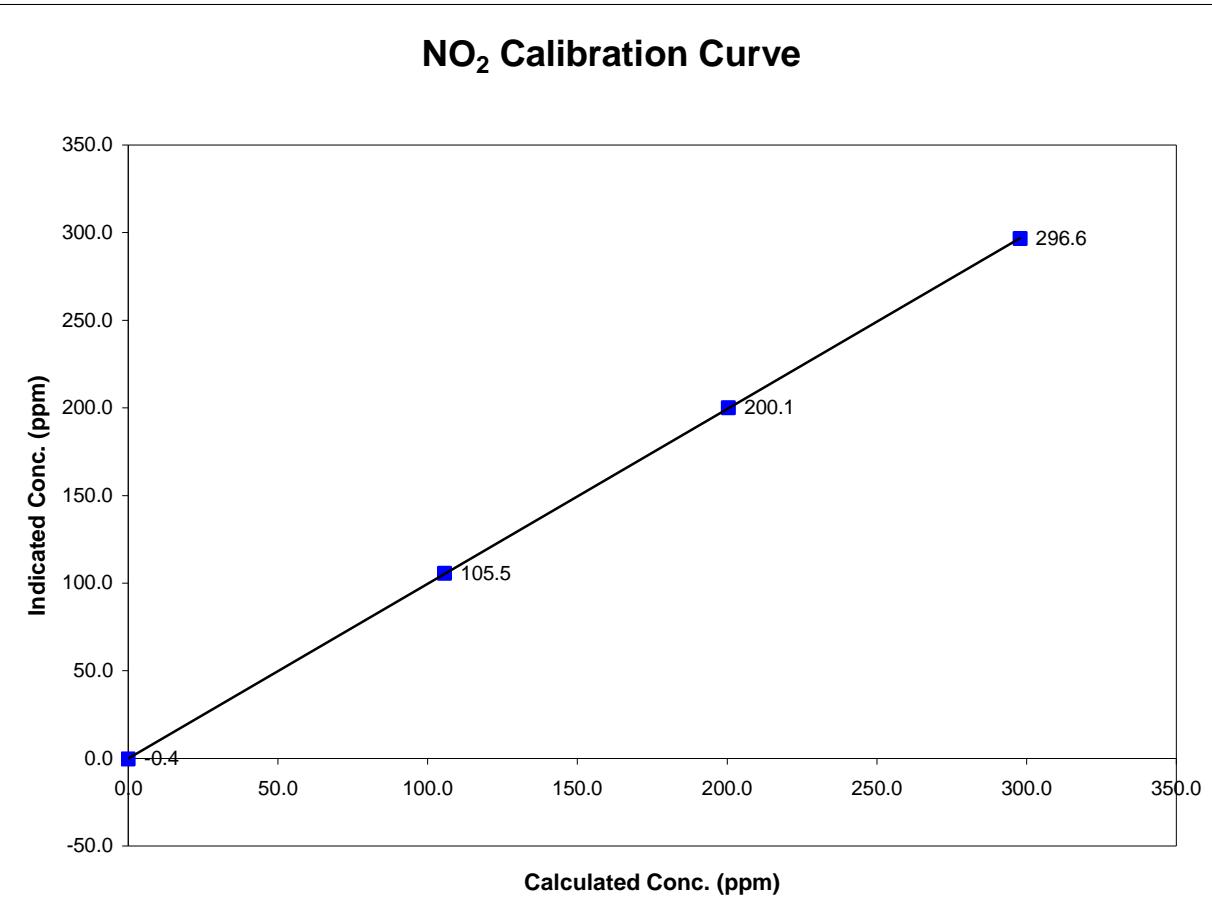


## ***Station Information***

Calibration Date	March 29, 2007	Previous Calibration	February 22, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:00	End Time (MST)	13:47
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	-0.4	0.0000	Correlation Coefficient	0.999992	
105.6	105.5	1.0006			
200.5	200.1	1.0020			
297.9	296.6	1.0044			
					Slope
					1.003130
			Intercept	0.055699	



## Calibration Summary

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



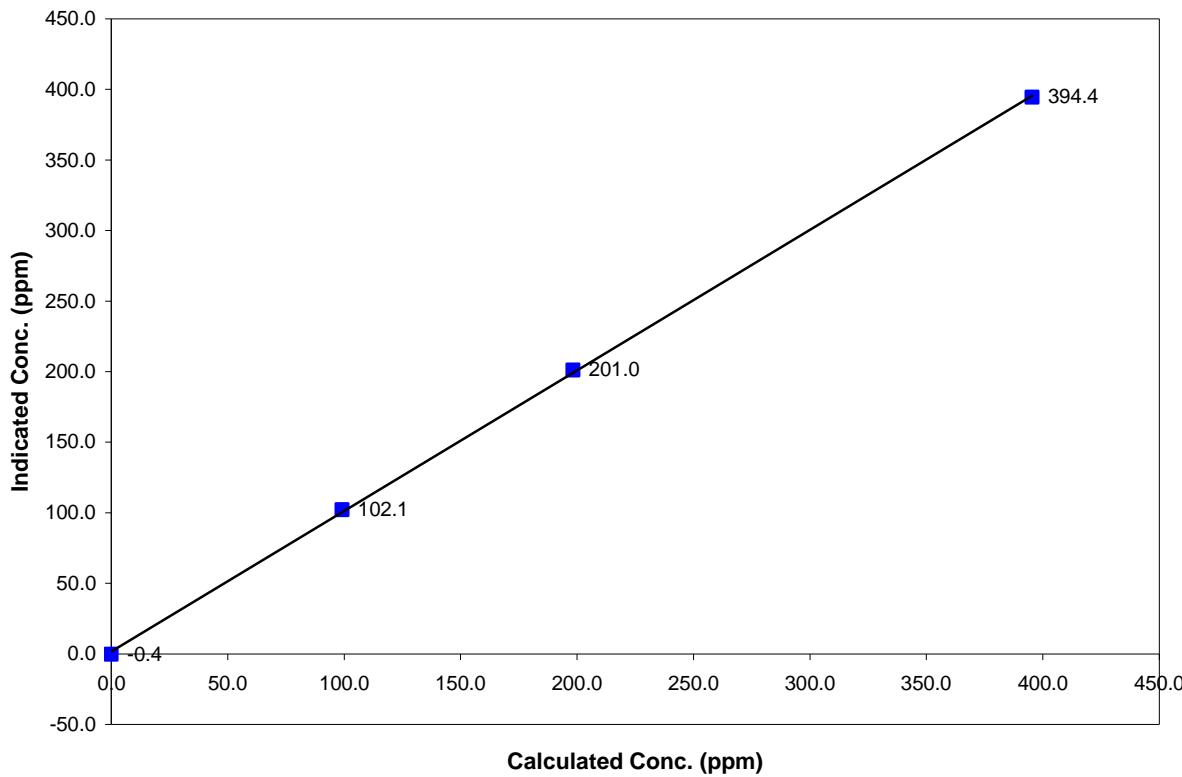
### Station Information

Calibration Date	March 29, 2007	Previous Calibration	February 22, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:00	End Time (MST)	13:47
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	-0.4	0.0000	Correlation Coefficient	0.999867
395.4	394.4	1.0025		
198.3	201.0	0.9867		
99.2	102.1	0.9712		
			Slope	1.003459
			Intercept	-1.671455

### NOx Calibration Curve



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed



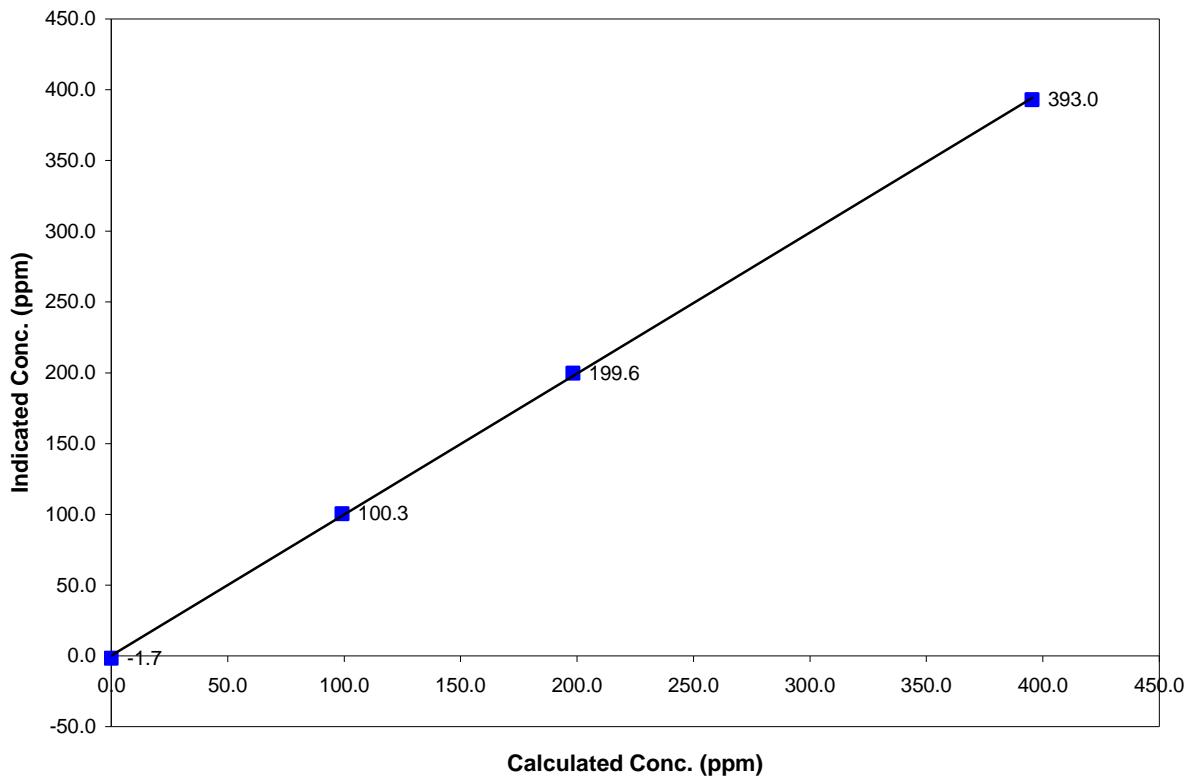
### Station Information

Calibration Date	March 29, 2007	Previous Calibration	February 22, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:00	End Time (MST)	13:47
Analyzer make	API Model 200E	Analyzer serial #	219

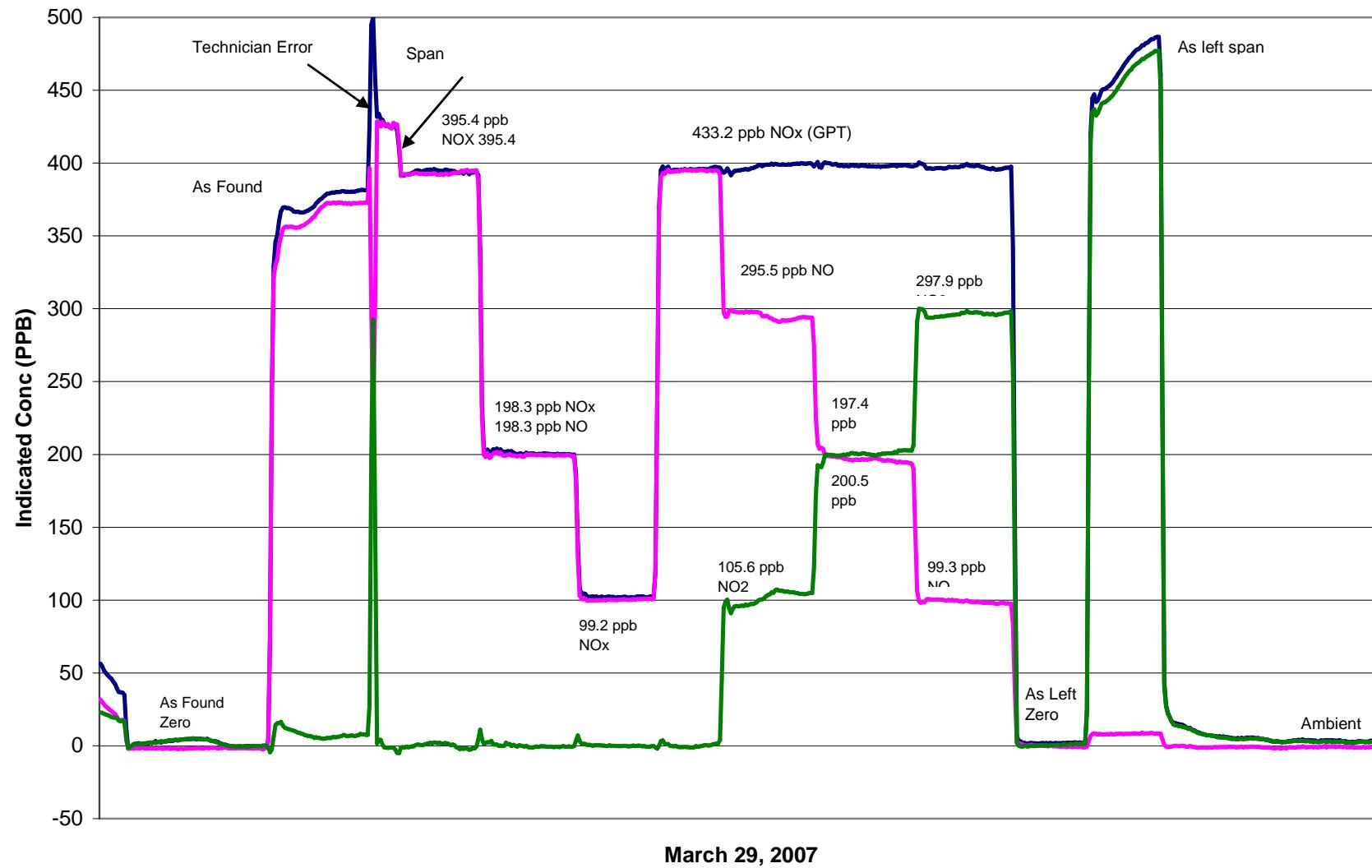
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.7	N/A	Correlation Coefficient	0.999887
395.4	393.0	1.0060		
198.3	199.6	0.9937		
99.2	100.3	0.9894		
			Slope	1.003039
			Intercept	-0.077559

### NO Calibration Curve



## NOx Calibration



## Calibration Report

Parameter THC  
 Air Monitoring Network Palliser Airshed



### Station Information

Calibration Date	March 28, 2007	Previous Calibration	February 23, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:14	End Time (MST)	
Barometric Pressure	27.8 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Environics 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 CH4 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
	Before		After
Calculated slope	1.002000	Calculated slope	0.993800
Calculated intercept	0.240698	Calculated intercept	-0.154096
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596
	before		after
Concentration range	0 - 50	ppm	0 - 50
THC sample pressure	5.77	PSI	5.75
THC span counts	12605	raw	12605
THC zero counts	1370	raw	1370
V Bias	-326	Volts	-326

### 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)
4991	0.00	0.00	0.12	N/A
4991	79.78	24.04	24.39	0.9855
4991	39.89	12.11	12.22	0.9913
4991	9.96	3.04	3.33	0.9146
zero	0.00	0.00	0.12	As Found Zero
4991	79.77	24.03	24.39	As Found Span
	Average Correction Factor			0.9638

Calculated value of As Found Response: 24.557 ppm Percent Change of As Found: -2.2%

Auto zero	before calibration		after calibration	
	0.03	ppm	0.07	ppm
Auto span	21.08	ppm	20.80	ppm

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

Calibration Performed By: Lenin Flores, Reid Balawyder

## Calibration Summary

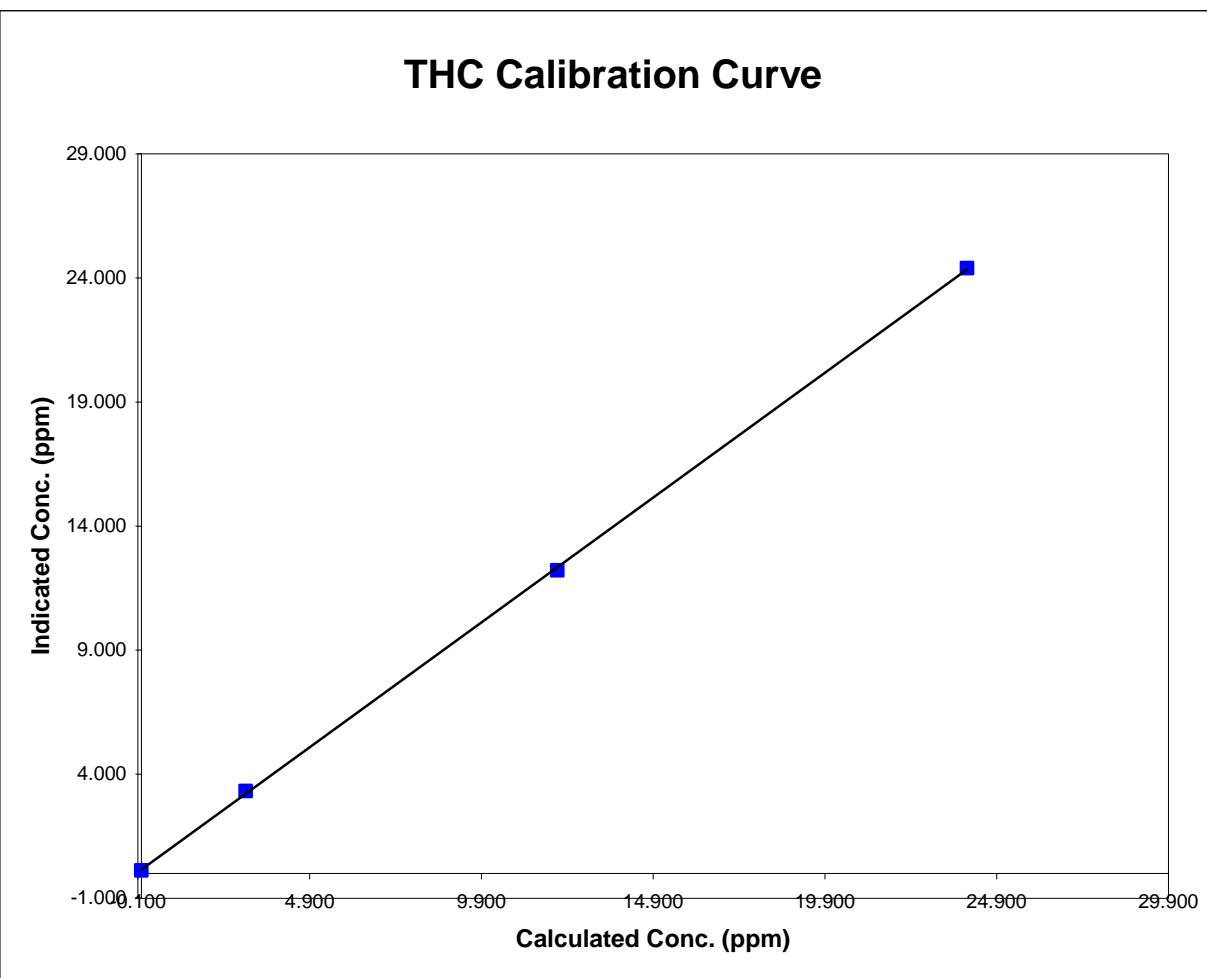
Parameter	THC
Air Monitoring Network	Palliser Airshed

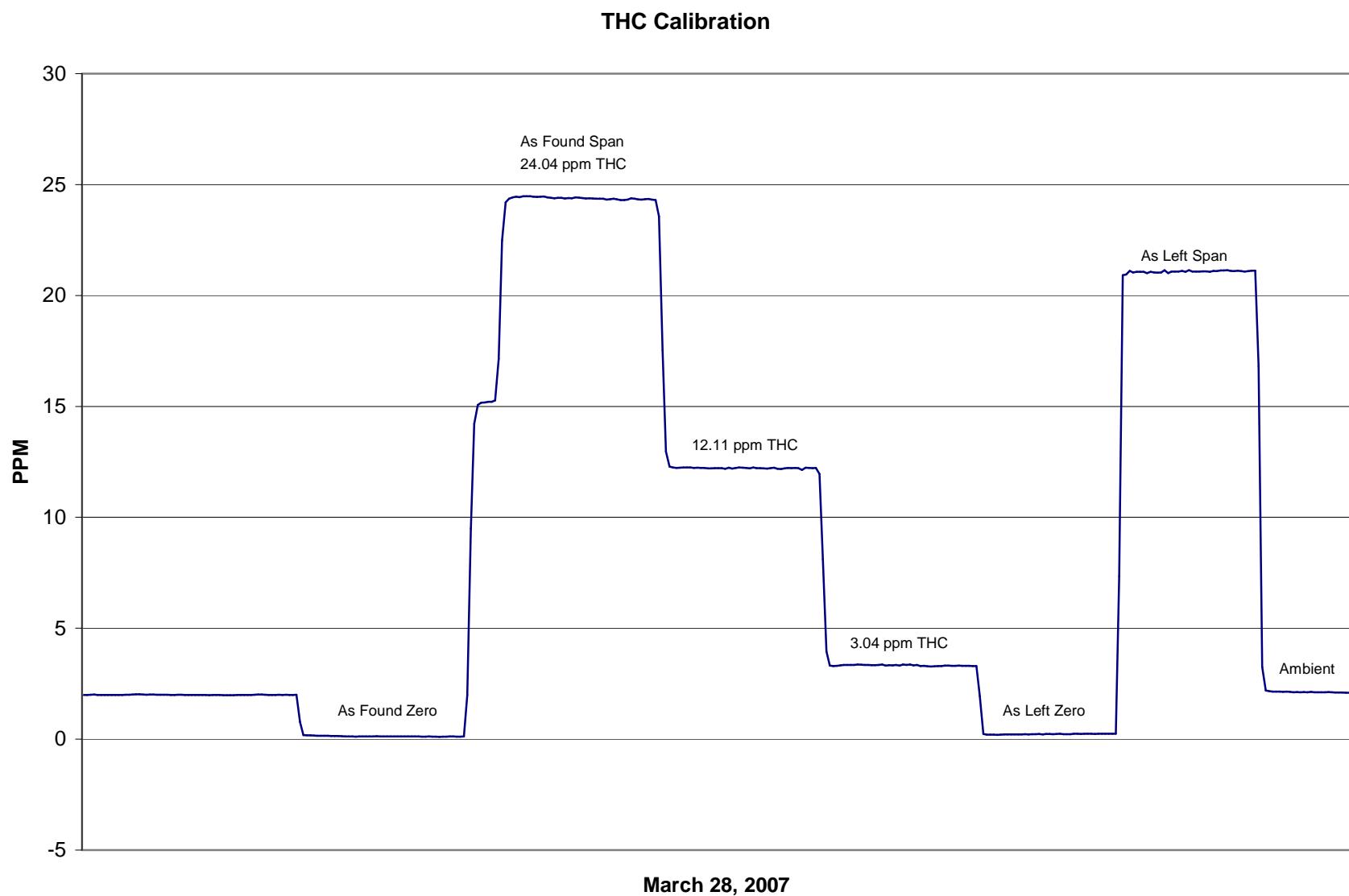


<b>Station Information</b>			
Calibration Date	March 28, 2007	Previous Calibration	February 23, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:14	End Time (MST)	0:00
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

## **Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.122	N/A		
24.037	24.390	0.9855	Correlation Coefficient	0.999912
12.113	12.219	0.9913		
3.043	3.327	0.9146	Slope	0.993800
			Intercept	-0.154096





# Calibration Report



Parameter CO  
Air Monitoring Network Palliser

## Station Information

Calibration Date	March 28, 2007	Previous Calibration	February 23, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	7:43	End Time (MST)	10:05
Barometric Pressure	27.11 in Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
DACS make	Focus AP1000	Cal Gas Cylinder #	BLM002248
DACS voltage range	0 - 1 volt	DACS serial No.	45270
	Before	DACS channel #	11
Calculated slope	0.990425	Calculated slope	1.002882
Calculated intercept	-0.432302	Calculated intercept	-0.043852
Analyzer make	TEI Model 48C	Analyzer serial #	436609887
Concentration range	before	after	
CO coefficient	0 - 50 ppm	0 - 50 ppm	
CO bkg setting	1.074	1.080	
Lamp ratio	0.001	0.677	
Lamp intensity	1.143875	1.143362	
Sample Flow	199973 Hz	199510 Hz	
	0.999 LPM	1.015 LPM	

## Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.00	0.00	N/A
4991	49.83	29.63	29.58	1.0018
4991	19.91	11.91	11.92	0.9989
4991	9.94	5.96	6.04	0.9866
4991	0.00	0.00	0.71	0.0000
4991	49.87	29.66	30.95	0.9583
Average Correction Factor				0.9958

Calculated value of As Found Response: 29.517 ppm Percent Change of As Found: 0.5%

Auto zero	before calibration		after calibration	
	-0.04	ppm	-0.06	ppm
	20.74	ppm	20.65	ppm

Notes:

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Calibration Performed By: Travis Mehrer

## Calibration Summary

Parameter CO  
Air Monitoring Network Palliser



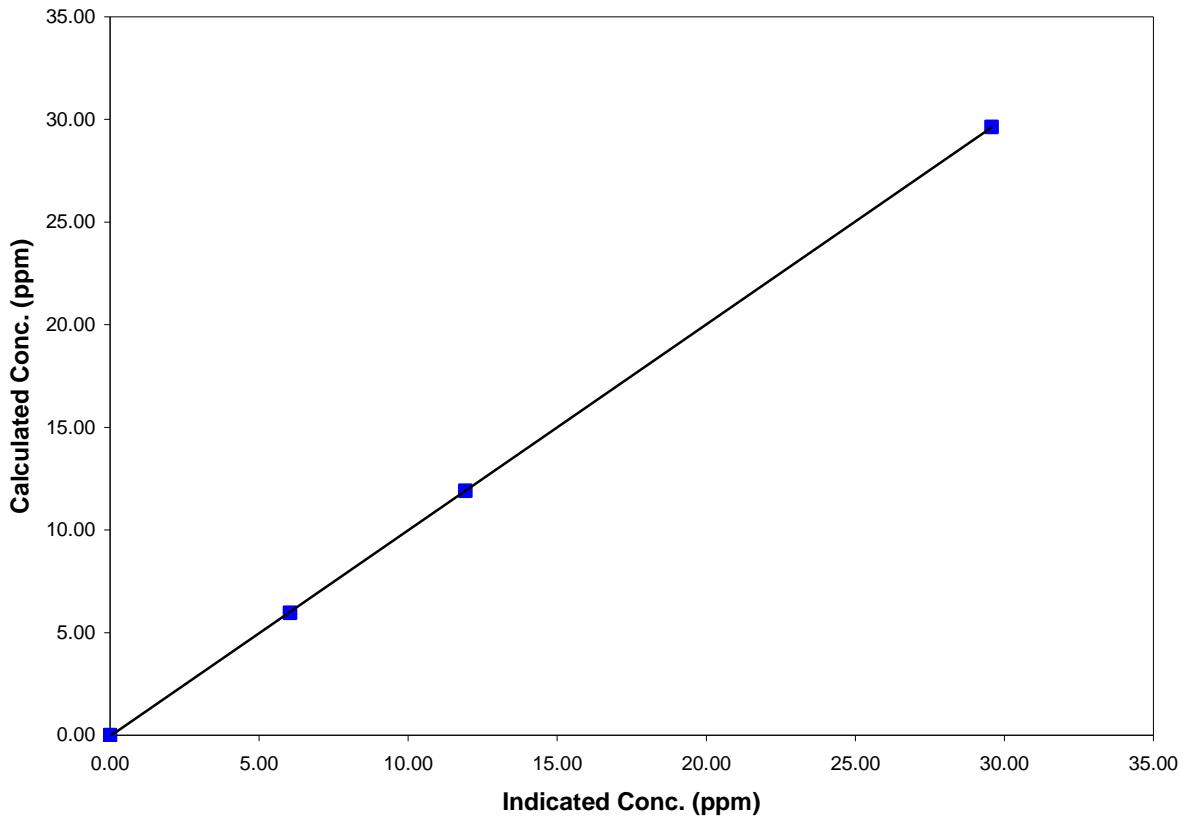
### Station Information

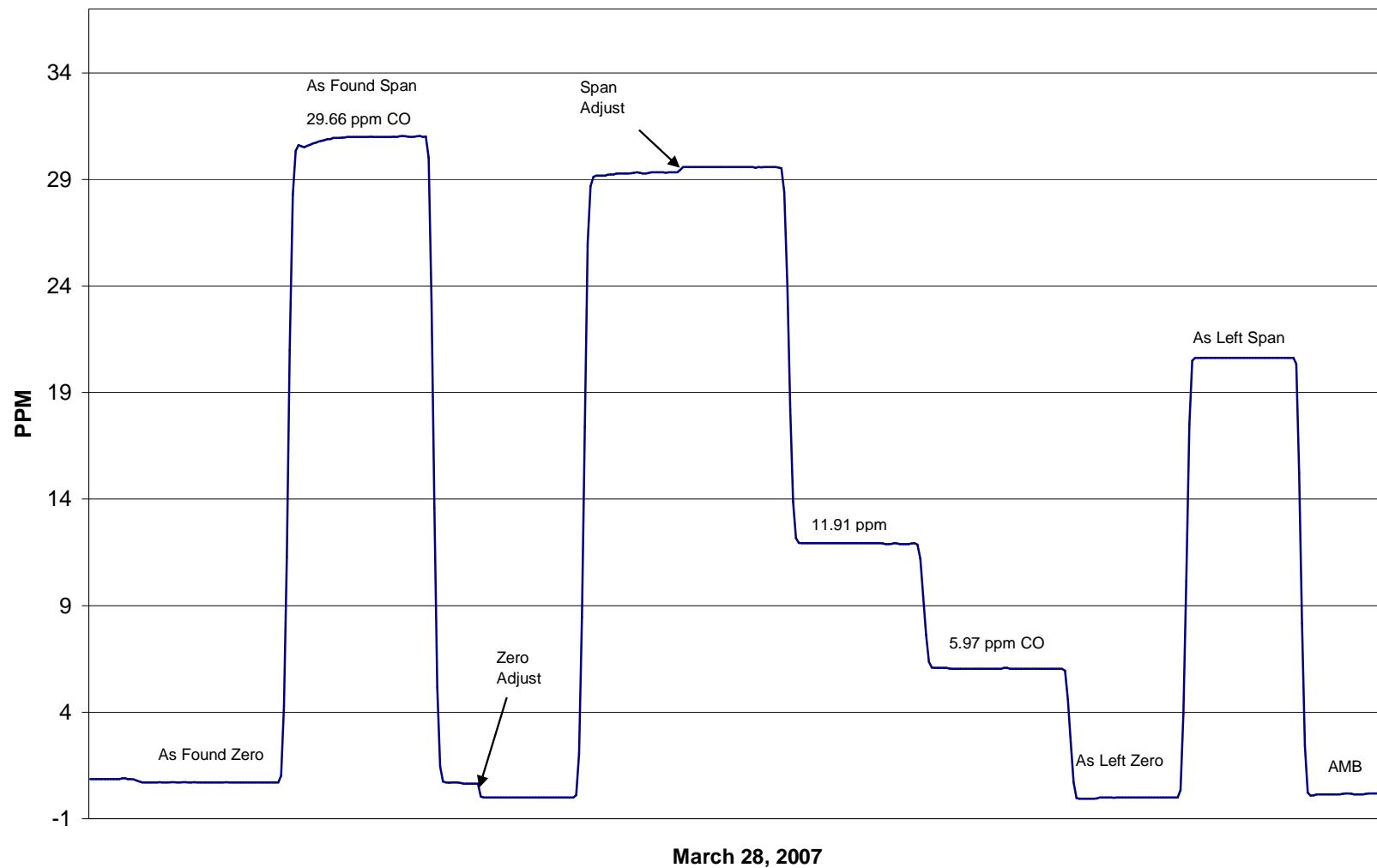
Calibration Date	March 28, 2007	Previous Calibration	February 23, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	7:43	End Time (MST)	10:05
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.00	N/A		
29.63	29.58	1.0018	Correlation Coefficient	0.999989
11.91	11.92	0.9989	Slope	1.002882
5.96	6.04	0.9866	Intercept	-0.043852

### CO Calibration Curve



**CO Calibration**

## Calibration Report

Parameter

**PM2.5**

Air Monitoring Network

**Palliser Airshed**



### Station Information

Calibration Date	March 29, 2007	Previous Calibration	February 23, 2007
Station Number	1	Station Location	Crescent Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:21	End Time (MST)	12:15
Barometric Pressure	0.906 ATM	Station Temperature	20.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	Before		After
DACS Scale High	450	DACS slope	450
DACS Scale Low	-50	DACS intercept	-50

### Analyzer Information

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

	before		after
Main Flow Set Point	3.000	SLPM	3.000
Aux Flow Set Point	13.67	SLPM	13.66
Filter Load	44%	%	18%
Ko Factor	NA		NA
Temperature	12.1	Deg C	12.1
Pressure	0.934	ATM	0.934

### Calibration Data

Parameter	Set Point	TEOM Reading (as found)	Tolerance	TEOM Reading (after adjustments)
zero flow - main	0.0	0.01	0.00	0.01
zero flow - auxillary	0.0	0.00	0.01	0.00
flow recovery - main	45 - 60 Seconds	35.0	45 - 60 Seconds	35.0
flow recovery - aux	46 - 60 Seconds	40.0	46 - 60 Seconds	40.0
Temperature	measured	-3.2	+/- 1.0 Deg C	-2.7
Pressure	measured	0.906	+/- 1.5% ΔATM	0.906
Total Flow	16.67 SLPM	16.31		16.31
Auxiliary flow	13.67 SLPM	13.40	+/- 1.0 SLPM	13.40
Main flow	3.0 SLPM	3.097	+/- 0.2 SLPM	3.097
Leak Check - main	0.0	0.00	<0.15 SLPM	0.00
Leak Check - aux	0.0	-0.01	<0.15 SLPM	-0.01
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	NA

Notes: Auxiliary flow was adjusted...

Calibration Performed By: Lenin F, Reid B