



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

### February 2007

Prepared By:



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March 26, 2007

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

**Attention: Director of Monitoring and Evaluation**

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

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

- ◆ On February 4<sup>th</sup> the exhaust pump on the NO<sub>x</sub> analyzer failed. It was replaced on February 6<sup>th</sup>. There were forty-nine hours of data invalidated for the NO, NO<sub>2</sub> and NO<sub>x</sub> parameters.
- ◆ There was a steady decline in the daily spans in the NO<sub>x</sub> analyzer following the calibration performed on February 6<sup>th</sup>. A second calibration was performed February 22<sup>nd</sup> (due to the steady decline in the span values) and the problem was rectified. It was assumed that build up of perm tube gas in the span system contributed to this instability; this did not affect the data during this period.

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

- Monthly average concentrations of NO<sub>2</sub> was 8.5 ppb
- Monthly average concentrations for O<sub>3</sub> was 26.4 ppb
- Monthly average concentrations for CO was 0.2 ppm
- Monthly average concentrations for THC was 2.18 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 2.7 µg/m<sup>3</sup>

The Air Quality Index (AQI) recorded 638 hours of Good readings (100%) for the month of February.

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

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

- ◆ Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.4 to 0.6 ppb.
- ◆ Monthly average concentrations for NO<sub>2</sub> passives ranged from 3.8 ppb to 6.0 ppb.
- ◆ Monthly average concentrations for O<sub>3</sub> passives ranged from 29.6 ppb to 35.7 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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AQM Data Specialist

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AQM Project Coordinator



# Continuous Monitoring

## Ambient Air Monitoring Network

### Crescent Heights Station

#### General Station Issues

Calibrations were performed on February 6<sup>th</sup> (NO<sub>x</sub>), February 22<sup>nd</sup> (NO<sub>x</sub>) and February 23<sup>rd</sup> (THC, CO, O<sub>3</sub> and TEOM). On February 4<sup>th</sup> the exhaust pump on the NO<sub>x</sub> analyzer failed, it was replaced on February 6<sup>th</sup>; forty-nine hours were invalidated.

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational issues observed.
Nitrogen Dioxide	Teledyne - API	200E	ppb	Forty-nine hours were invalidated due to the exhaust pump failing. There was a steady decline in the daily spans in the NO <sub>x</sub> analyzer following the calibration performed on the 6 <sup>th</sup> to the second calibration on the 22 <sup>nd</sup> (this may have been related to the build up of perm tube gas in the span system). After the second calibration the problem was rectified and the spans were good.
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 were two (2) 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.



## February 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	Monthly Average	1-hr	24-hr					Conc	Day	
NO (ppb)				Crescent Heights	3.9	-	-	70.8	Feb-02 23:00	4.5	S	15.3	Feb-14 92.7%
NO <sub>2</sub> (ppb)	212	106		Crescent Heights	8.5	0	0	38.7	Feb-04 07:00	3.4	S	23.3	Feb-03 92.7%
NO <sub>x</sub> (ppb)				Crescent Heights	12.1	-	-	107.0	Feb-02 23:00	4.5	S	35.8	Feb-03 92.7%
O <sub>3</sub> (ppb)	82			Crescent Heights	26.4	0	-	45.6	Feb-25 14:00	12.7	ENE	38.2	Feb-25 100.0%
O <sub>3</sub> (ppb) - 8-hr		65		Crescent Heights		0						43.3	Feb-25
CO (ppm)	13			Crescent Heights	0.20	0	-	0.8	Feb-14 08:00	3.7	ESE	0.3	Feb-14 100.0%
CO (ppm) - 8-hr		5		Crescent Heights		0						0.5	Feb-14
THC (ppm)				Crescent Heights	2.18	-	-	3.0	Feb-23 23:00	5.0	S	2.4	Feb-03 100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>		Crescent Heights	2.7		0	17.3	Feb-23 23:00	5.0	S	5.7	Feb-23 99.7%
RH (%)				Crescent Heights	67.9	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )				Crescent Heights	85.2	-	-	-	-	-	-	-	100.0%
Temp (°C)				Crescent Heights	-8.0	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)				Crescent Heights	0.6	-	-	39.1	Feb-17 00:00	39.1	SW	20.5	Feb-18 100.0%
WSPD s (km/hr)				Crescent Heights	11.3	-	-	39.3	Feb-17 00:00	39.3	SW	22.8	Feb-18 100.0%
WDIR				Crescent Heights	N	-	-	-	-	-	-	-	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: February 1, 2007 to March 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:	638
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

#### Status Flag Characters

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

#### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	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-Feb-07	17	19	19	18	18	17	16	13	14	15	16	N	17	17	17	16	15	11	12	14	14	14	13	11		
2-Feb-07	13	12	9	9	8	9	10	13	13	16	N	17	18	18	18	17	14	12	7	7	8	8	9	9		
3-Feb-07	8	8	7	7	7	6	6	6	5	N	5	11	16	16	16	16	14	11	7	8	9	8	8	8		
4-Feb-07	6	6	7	8	6	7	8	9	N	6	15	16	14	14	14	11	13	11	11	10	10	6	6	8		
5-Feb-07	8	7	7	7	6	4	5	N	5	8	8	10	12	13	9	7	7	3	5	5	3	5	7	6		
6-Feb-07	9	10	10	11	11	12	N	13	13	13	13	14	14	14	14	14	14	13	13	13	13	14	14	14		
7-Feb-07	14	14	N	13	13	13	13	13	12	12	13	13	13	14	14	15	16	15	15	14	14	15	15	15		
8-Feb-07	14	N	13	14	14	13	12	13	13	14	14	15	15	15	14	15	15	14	13	13	13	13	13	13		
9-Feb-07	N	14	15	14	14	13	13	13	13	14	15	16	16	16	16	16	16	16	16	15	15	13	13	N		
10-Feb-07	13	13	12	12	8	6	8	8	8	10	12	14	15	16	16	16	18	18	16	14	15	8	11	N	11	
11-Feb-07	7	13	13	10	9	9	11	13	14	15	18	18	19	19	18	18	19	18	18	18	17	N	16	17		
12-Feb-07	16	17	17	17	17	17	16	15	15	16	17	18	18	18	18	18	18	17	17	16	N	16	15	14		
13-Feb-07	15	14	14	13	13	13	13	13	14	15	15	15	16	16	17	16	16	15	14	N	7	7	7	8		
14-Feb-07	7	7	8	7	7	5	6	8	10	14	12	14	16	17	16	14	11	16	N	20	20	20	21	20		
15-Feb-07	19	20	19	19	19	17	17	16	17	17	17	18	19	19	N	18	17	N	18	17	16	16	15	14		
16-Feb-07	12	12	10	7	11	9	5	6	9	13	14	14	15	16	17	15	N	11	13	11	11	16	15	13		
17-Feb-07	14	16	15	14	15	15	15	15	16	16	18	18	17	18	19	N	17	15	15	17	18	17	17	20		
18-Feb-07	21	20	20	20	21	21	20	20	20	19	19	19	17	N	19	18	18	18	18	18	17	14	12	14		
19-Feb-07	12	12	16	16	15	16	13	11	14	15	16	19	18	N	18	21	19	17	15	16	18	18	17			
20-Feb-07	17	16	15	16	15	14	12	12	15	15	17	18	N	18	18	18	19	18	12	17	17	10	8	7		
21-Feb-07	9	11	10	9	6	5	5	4	7	12	16	N	18	19	21	21	19	16	13	11	12	13	13	12		
22-Feb-07	11	10	5	5	6	5	4	4	4	8	N	15	16	15	16	17	16	16	16	16	15	14	13	13		
23-Feb-07	10	10	N	8	7	6	5	6	9	14	N	N	N	8	16	16	16	15	11	9	7	8	8	14		
24-Feb-07	9	9	N	6	6	6	7	7	8	9	17	19	19	20	22	22	23	23	21	21	21	19	19	20	19	
25-Feb-07	14	N	18	14	18	18	17	18	17	17	19	20	22	23	23	21	21	21	21	19	19	19	20	19		
26-Feb-07	N	18	18	18	16	16	16	15	16	16	17	18	19	19	20	20	20	19	18	17	16	16	15	N		
27-Feb-07	14	11	9	11	11	10	9	5	7	12	12	12	13	13	13	15	16	17	15	14	14	N	12			
28-Feb-07	12	12	11	11	12	13	11	11	11	13	13	14	15	15	16	16	16	18	18	16	N	16	17			



PAS - Crescent Heights - Nitrogen Dioxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

**Monitoring Dates:** February 1, 2007 to March 1, 2007

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

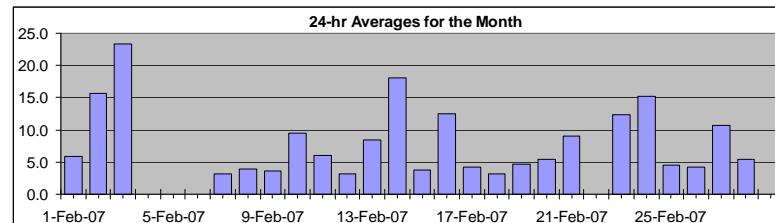
## Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	38.7 ppb
Maximum 24-hr Average:	23.3 ppb

AIC Time:	30 hrs			Operational Time:				585 hrs	
Calibration Time:	8 hrs			AMD Operational Uptime:				92.7%	
Percentile	99	95	75	50	25	5	1	Average	Median
	34.5	28.9	9.8	5.4	3.1	1.3	0.8	8.5 ppb	5.4 ppb

## HOURLY AVERAGE TABLE

### Nitrogen Dioxide ( $\text{NO}_2$ )



## Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Feb-07	2	1	1	3	2	3	4	9	8	6	5	A	5	4	5	5	6	14	12	7	7	8	12	5.9	14.3	
2-Feb-07	7	8	16	15	17	17	18	10	11	6	A	6	3	3	4	5	9	13	24	30	32	34	37	36	15.7	36.6
3-Feb-07	33	32	31	30	28	26	27	23	22	A	19	14	6	6	7	7	10	16	30	35	36	32	33	32	23.3	35.9
4-Feb-07	26	22	29	33	25	30	33	39	A	26	N	N	N	N	N	N	N	N	N	N	N	N	N	N	38.7	
5-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
6-Feb-07	N	N	N	N	N	N	N	N	N	N	N	C	C	C	A	6	4	5	4	4	3	2	2	2	6.5	
7-Feb-07	2	2	A	7	4	5	4	4	5	3	3	3	3	2	4	3	3	3	3	4	3	2	2	3	3.2	
8-Feb-07	3	A	6	4	3	4	6	6	5	4	3	2	2	3	4	4	3	4	5	4	4	3	4	2	3.9	
9-Feb-07	A	6	3	4	3	5	4	5	6	3	1	1	1	1	1	1	3	3	3	4	7	6	7	A	3.6	
10-Feb-07	9	6	9	8	16	19	17	16	15	12	8	5	4	3	2	3	4	8	5	5	5	19	13	A	9.5	
11-Feb-07	22	10	8	13	15	14	9	7	5	4	2	1	2	2	2	3	2	3	3	3	3	3	A	5	3	
12-Feb-07	3	2	3	3	3	2	4	5	6	3	2	1	1	1	1	1	2	3	4	5	A	6	6	7	3.2	
13-Feb-07	5	6	6	6	6	7	8	7	6	4	3	4	3	3	3	5	5	5	7	A	25	29	22	20	8.4	
14-Feb-07	31	29	35	29	27	21	27	34	30	31	26	12	9	6	7	14	21	12	A	4	2	2	1	2	18.1	
15-Feb-07	4	2	2	2	2	5	4	6	5	4	4	3	2	4	5	5	6	A	7	3	4	2	3	4	3.8	
16-Feb-07	10	9	12	19	10	16	23	27	20	11	10	9	7	7	5	9	A	19	12	17	14	6	9	8	12.6	
17-Feb-07	4	2	2	5	3	3	4	6	4	4	2	2	3	4	3	A	8	8	7	4	3	5	6	2	4.1	
18-Feb-07	1	1	2	2	1	0	1	1	3	1	1	1	4	6	A	5	6	5	4	2	2	9	10	6	3.2	
19-Feb-07	9	8	5	7	7	5	6	7	3	2	3	2	4	A	7	3	4	6	7	6	2	2	1	1	4.7	
20-Feb-07	1	1	3	2	1	2	8	7	2	2	2	1	A	4	3	4	4	6	15	6	4	12	16	17	5.4	
21-Feb-07	15	10	12	13	16	19	19	18	13	8	4	A	6	5	1	1	3	7	9	11	5	4	4	4	9.0	
22-Feb-07	6	7	20	19	23	19	18	18	13	8	A	5	3	3	2	C	C	C	C	A	4	4	3	N	23.1	
23-Feb-07	7	7	A	9	9	12	15	13	8	5	4	4	3	5	6	8	7	9	15	26	29	21	29	33	12.4	
24-Feb-07	28	28	A	24	24	24	29	29	20	18	19	7	2	3	3	3	4	9	13	13	17	14	11	8	15.2	
25-Feb-07	13	A	9	14	7	8	7	5	8	8	3	2	1	1	1	1	1	3	3	3	3	2	2	2	4.6	
26-Feb-07	A	4	3	3	5	4	5	6	6	4	4	3	2	2	2	2	2	4	5	6	7	6	7	A	4.3	
27-Feb-07	11	13	16	13	10	12	13	23	19	9	11	10	8	8	9	10	7	7	4	7	8	6	A	9	10.7	
28-Feb-07	8	8	9	9	7	6	8	9	10	6	6	4	3	3	3	4	4	4	2	2	3	A	4	3	5.5	

Hourly Avg 10.9 9.3 10.5 11.3 10.6 11.1 12.3 13.1 10.1 7.7 6.2 4.4 3.7 3.7 3.8 4.6 5.3 7.2 8.5 8.9 10.2 9.7 9.8 9.7

Hourly Avg 32.9 32.4 35.4 33.2 27.7 29.9 33.4 38.7 30.5 30.7 26.0 13.7 8.7 7.8 8.6 13.8 21.3 19.3 30.0 35.3 35.9 34.3 36.6 36.3

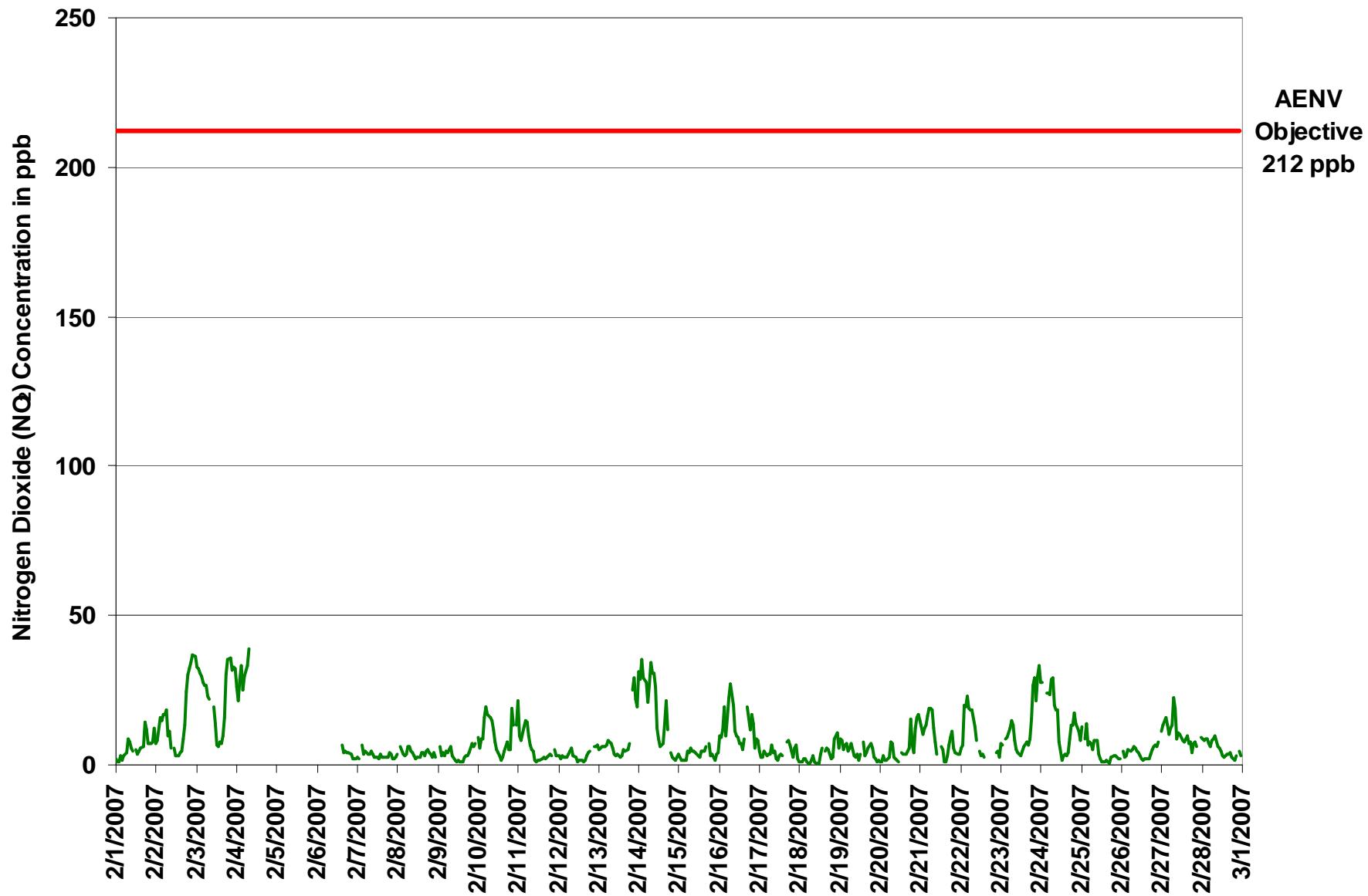


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

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

#### Summary

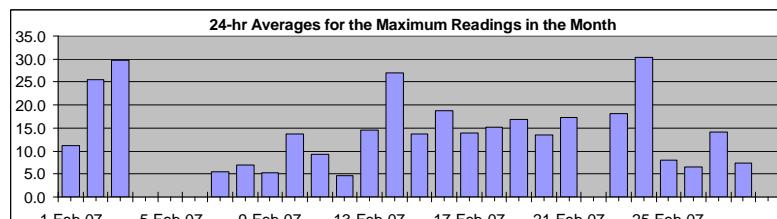
Maximum 1-hr Value:	77.3 ppb	14-Feb 0:00	1:00
Maximum 24-hr Value:	30.5 ppb	24-Feb	

AIC Time:	30 hrs	Operational Time:	585 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	92.7%
Percentile	99 95 75 50 25 5 1	Average	Median
	54.8 39.3 21.0 10.1 5.2 2.8 1.9	14.8 ppb	10.1 ppb

#### 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	
	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
	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	
1-Feb-07	4	2	2	6	3	5	7	15	12	7	6	A	8	6	8	9	10	17	16	10	39	28	10	24	11.1	38.6		
2-Feb-07	13	11	54	25	24	26	27	13	16	15	A	9	7	6	12	8	26	20	37	38	39	61	47	51	25.5	60.7		
3-Feb-07	48	35	33	32	36	34	29	25	25	A	24	45	11	10	13	11	14	29	40	38	40	41	38	34	29.7	47.9		
4-Feb-07	34	28	47	39	29	32	40	58	A	38	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	57.6		
5-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-		
6-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	C	C	C	A	10	7	8	6	6	6	4	3	3	9.9		
7-Feb-07	5	3	A	13	6	8	6	8	7	5	4	4	4	4	9	5	4	5	5	6	5	3	4	4	5.4	12.5		
8-Feb-07	6	A	9	5	4	6	10	8	7	6	18	3	3	4	19	7	4	5	8	7	8	4	5	3	7.0	18.6		
9-Feb-07	A	9	4	5	4	6	7	8	8	4	3	2	3	3	3	3	3	5	4	4	6	10	8	10	A	5.4	10.2	
10-Feb-07	13	11	12	12	19	22	21	20	20	16	11	6	5	4	3	5	8	11	7	8	34	27	A	19	13.6	34.3		
11-Feb-07	32	19	11	32	17	18	13	9	6	7	3	3	4	2	3	3	3	4	4	5	5	A	7	4	9.3	32.2		
12-Feb-07	4	3	4	3	3	3	5	7	8	4	4	2	3	3	2	2	2	5	6	6	A	8	10	9	4.6	10.1		
13-Feb-07	6	7	7	8	9	10	38	22	7	4	4	5	4	4	15	10	6	6	14	A	57	35	27	28	14.5	57.0		
14-Feb-07	77	33	42	37	37	25	37	37	38	38	30	18	11	9	17	17	33	41	A	7	3	11	2	21	27.0	77.3		
15-Feb-07	33	2	8	3	3	35	20	8	8	7	5	6	9	13	20	15	41	A	25	6	16	5	15	15	13.7	41.2		
16-Feb-07	18	12	19	28	11	22	28	30	27	16	13	16	10	10	7	12	A	29	19	23	25	11	15	28	18.7	30.2		
17-Feb-07	8	5	4	6	4	5	5	24	5	18	3	4	7	28	6	A	10	41	22	26	4	30	42	15	13.9	42.2		
18-Feb-07	13	29	21	31	2	1	17	22	29	5	2	3	28	22	A	12	19	15	15	3	9	18	20	10	15.1	31.4		
19-Feb-07	18	17	7	12	22	7	25	28	5	5	25	3	12	A	12	4	6	8	63	58	13	25	2	11	16.9	62.6		
20-Feb-07	3	2	18	3	3	7	32	11	4	3	3	2	A	16	16	18	16	14	37	35	9	20	20	20	13.5	37.2		
21-Feb-07	31	12	15	18	20	22	32	24	16	21	8	A	9	8	3	4	39	11	46	27	8	7	9	5	17.2	46.3		
22-Feb-07	25	27	28	27	35	29	23	21	17	11	A	7	5	7	3	C	C	C	C	C	A	7	7	7	N	35.2		
23-Feb-07	12	10	A	15	11	16	20	22	13	13	6	5	4	12	9	10	11	26	20	36	39	29	33	49	18.2	49.1		
24-Feb-07	37	52	A	28	49	29	32	43	27	21	40	27	3	47	54	33	21	33	24	19	23	22	18	19	30.5	53.5		
25-Feb-07	18	A	19	19	10	15	10	9	17	15	6	4	2	5	2	4	3	3	4	4	4	4	3	3	8.0	19.5		
26-Feb-07	A	7	5	4	7	6	7	8	8	6	5	22	3	3	4	4	3	5	6	8	8	8	9	A	6.6	21.5		
27-Feb-07	16	17	19	20	13	14	16	27	26	10	13	15	11	11	19	11	10	10	6	10	10	10	8	A	11	14.1	26.7	
28-Feb-07	11	11	11	10	9	8	9	12	14	7	8	5	4	4	4	6	6	6	5	4	6	A	6	4	7.4	13.7		

Hourly Avg	20.1	15.2	17.4	17.1	15.1	15.7	19.9	19.9	14.7	12.1	10.6	9.3	7.0	9.9	10.9	9.3	12.8	14.9	18.3	16.5	17.5	17.7	15.1	16.5
Hourly Max	77.3	52.2	54.4	39.4	48.9	35.4	40.0	57.6	37.6	38.3	39.6	44.7	28.2	46.6	53.5	33.1	41.2	40.7	62.6	57.7	57.0	60.7	47.3	50.9



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

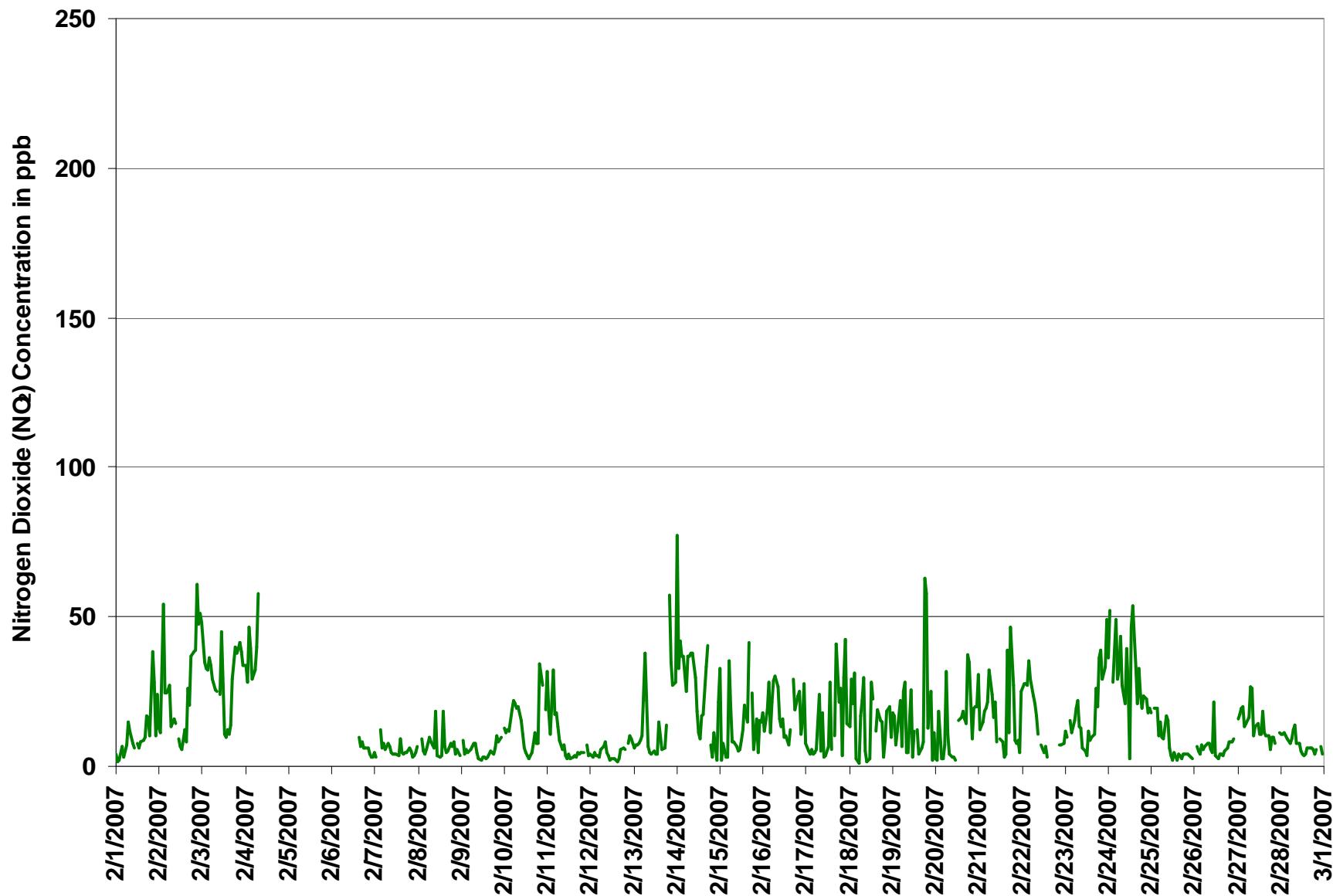
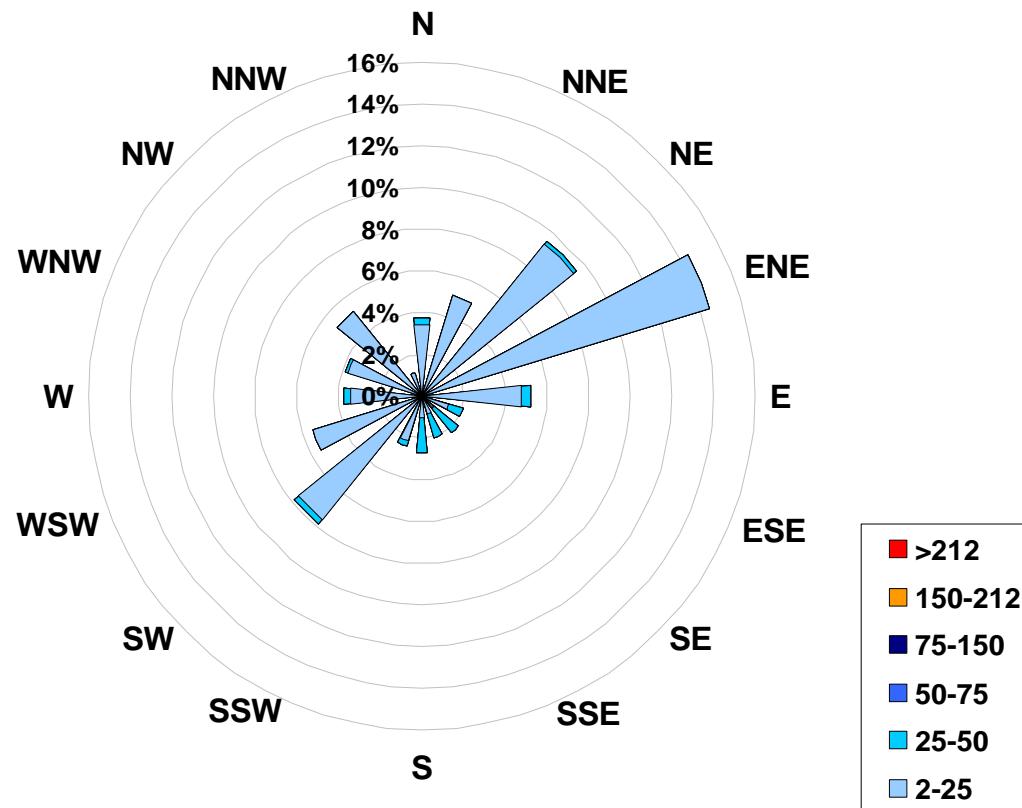


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms:	0%
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Frequency Distribution of NO <sub>2</sub> in ppb			Frequency (hrs)
Range		Frequency	
2.0	<	25	563
25	to	50	17
50	to	75	5
75	to	150	0
150	to	212	0
> 212			0
Total Non-Zero Values			585



## PAS - Crescent Heights - Nitric Oxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

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

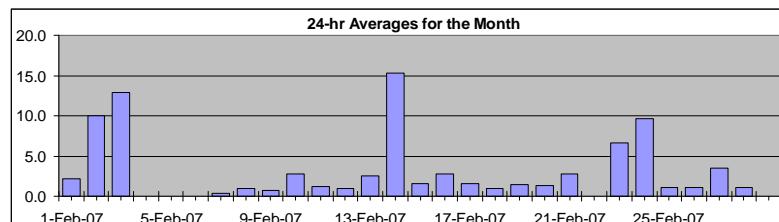
Maximum 1-hr Average: 70.8 ppb 2-Feb 23:00 0:00  
Maximum 24-hr Average: 15.3 ppb 14-Feb

AIC Time:	30 hrs	Operational Time:	585 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	92.7%						
Percentile	99	95	75	50	25	5	1	Average	Median
	43.2	17.4	3.2	1.4	0.6	0.0	0.0	3.9 ppb	1.4 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-Feb-07	1	0	1	1	1	2	2	2	3	3	3	3	A	3	3	4	3	2	3	2	1	3	4	1	2	2.2	3.8
2-Feb-07	1	1	6	2	2	2	3	1	3	2	A	3	2	2	3	3	4	3	6	14	12	35	51	71	10.0	70.8	
3-Feb-07	29	20	11	8	6	7	8	4	17	A	30	27	4	4	5	3	3	2	10	14	25	26	22	10	12.8	29.8	
4-Feb-07	3	1	38	17	2	12	28	66	A	25	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	66.4	
5-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-	
6-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	C	C	C	A	0	0	0	0	0	0	0	0	0	0.0	
7-Feb-07	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.3
8-Feb-07	0	A	0	0	0	0	0	1	2	1	2	1	2	2	4	2	1	0	1	0	1	0	0	0	0	0.9	3.7
9-Feb-07	A	0	0	0	0	0	0	1	2	1	1	1	2	1	1	1	0	0	1	0	1	1	0	0	A	0.7	2.1
10-Feb-07	0	0	1	2	3	1	2	5	8	9	9	5	4	3	1	2	2	1	0	0	2	1	A	1	1	2.8	9.2
11-Feb-07	5	1	1	1	4	2	1	1	1	2	1	1	1	1	1	1	0	0	1	1	A	1	1	0	1.3	4.7	
12-Feb-07	0	0	1	1	0	1	1	1	3	2	2	1	2	1	1	1	1	1	1	1	A	1	1	1	1.0	2.5	
13-Feb-07	0	0	0	0	0	1	3	3	2	2	3	4	4	3	3	4	2	1	1	1	A	7	8	4	1	2.5	8.3
14-Feb-07	21	3	30	12	10	5	12	26	42	66	49	17	10	6	7	12	14	4	A	1	0	1	0	1	1	15.3	66.1
15-Feb-07	2	0	0	0	0	4	1	1	2	2	3	3	2	3	3	1	3	A	1	1	1	0	1	1	1	1.6	4.3
16-Feb-07	1	0	1	2	0	1	3	6	4	4	6	7	5	5	3	3	2	A	2	1	2	2	1	1	2	2.8	7.1
17-Feb-07	0	0	0	1	0	0	0	0	3	1	3	2	2	2	3	1	A	1	1	1	0	2	6	0	1.6	5.8	
18-Feb-07	1	2	1	1	0	0	0	0	2	0	1	1	4	2	A	1	1	1	1	0	0	1	1	0	1.0	4.5	
19-Feb-07	1	1	0	0	1	0	4	5	1	1	2	1	3	A	3	1	1	1	2	4	0	1	0	1	1.5	5.5	
20-Feb-07	0	0	1	0	0	0	3	1	1	1	1	1	A	3	2	2	2	1	3	3	1	2	1	2	1.3	3.3	
21-Feb-07	4	1	2	1	2	2	5	7	8	6	2	A	3	3	1	1	3	1	6	5	1	1	0	0	2.8	7.8	
22-Feb-07	3	1	11	8	15	14	18	18	12	8	A	2	1	1	1	C	C	C	C	A	0	0	0	N	18.3		
23-Feb-07	1	1	A	2	1	2	4	3	3	3	2	2	2	3	4	4	3	3	2	7	14	5	18	63	6.6	62.6	
24-Feb-07	29	20	A	5	9	3	10	28	21	26	37	9	2	4	5	2	2	3	2	2	1	1	1	1	9.6	36.7	
25-Feb-07	2	A	1	1	0	1	0	1	3	4	3	2	1	1	1	1	0	0	0	0	0	0	0	1.1	4.3		
26-Feb-07	A	1	1	0	0	0	0	1	2	3	3	3	2	1	1	1	1	0	0	0	0	0	1	A	1.1	3.3	
27-Feb-07	0	1	1	1	1	1	3	9	11	6	10	10	7	6	5	4	2	1	0	1	1	1	A	1	3.6	10.5	
28-Feb-07	1	1	1	1	1	0	1	1	3	2	2	2	1	1	1	0	0	0	0	0	A	1	0	1.1	3.5		

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



Station: Crescent Heights  
Station Owner: PAS

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

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

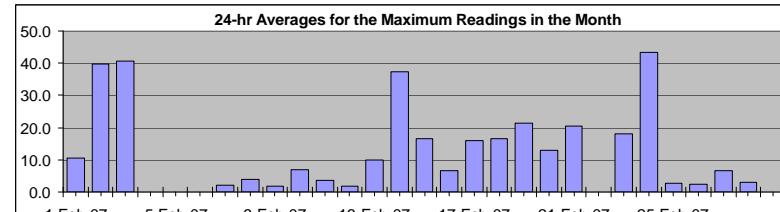
### Nitric Oxide (NO)

#### Summary

Maximum 1-hr Value:	214.2 ppb	2-Feb	21:00 22:00
Maximum 24-hr Value:	43.5 ppb	24-Feb	

AIC Time:	30 hrs	Operational Time:	585 hrs						
Calibration Time:	8 hrs	AMD Operational Uptime:	92.7%						
Percentile	99 150.9	95 72.1	75 14.1	50 3.3	25 1.8	5 0.9	1 0.6	Average 15.2 ppb	Median 3.3 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-Feb-07	2	1	1	2	2	4	4	10	5	4	5	A	6	5	6	7	3	5	3	2	86	59	2	17	10.5	85.8
2-Feb-07	2	3	135	15	3	3	5	2	5	4	A	5	5	5	10	7	25	8	40	70	30	214	110	211	39.9	214.2
3-Feb-07	127	28	17	13	36	28	15	8	31	A	42	166	7	7	10	7	5	28	34	30	42	110	124	16	40.5	166.1
4-Feb-07	14	3	151	49	6	49	64	121	A	94	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	150.5
5-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-
6-Feb-07	N	N	N	N	N	N	N	N	N	N	N	C	C	C	A	1	1	0	1	1	0	0	0	0	0	1.5
7-Feb-07	1	1	A	2	1	1	1	3	3	2	2	2	3	2	8	2	2	1	1	2	1	1	1	2	2.0	
8-Feb-07	1	A	1	1	1	1	1	2	3	3	12	3	2	3	33	5	2	1	2	2	5	1	1	1	3.9	
9-Feb-07	A	1	1	1	2	1	1	2	4	3	2	2	3	4	2	2	2	2	1	2	2	1	1	A	4.0	
10-Feb-07	1	1	5	5	5	4	4	18	14	26	21	6	5	4	3	4	3	4	1	1	18	5	A	2	7.0	
11-Feb-07	33	4	1	6	6	3	4	2	2	3	2	2	3	2	3	2	2	1	1	1	1	A	2	1	3.7	
12-Feb-07	1	1	1	1	1	1	1	3	5	3	3	2	3	2	2	2	2	2	2	1	A	1	1	1	1.9	
13-Feb-07	1	1	1	1	1	3	23	49	4	3	5	5	6	24	19	4	1	17	A	28	12	14	3	10.0		
14-Feb-07	184	7	64	36	46	13	33	33	58	90	57	29	15	10	18	18	35	32	A	6	1	37	1	35	37.2	
15-Feb-07	66	0	7	1	1	95	28	2	4	4	4	5	11	9	23	13	47	A	12	3	33	1	6	4	16.5	
16-Feb-07	4	2	2	6	2	2	6	9	10	8	8	14	8	11	5	5	A	4	3	3	9	2	2	27	6.6	
17-Feb-07	1	2	1	2	1	1	2	33	2	22	3	3	6	49	3	A	3	61	13	40	1	32	73	11	15.9	
18-Feb-07	26	72	25	68	1	1	18	14	57	5	1	2	56	11	A	2	3	3	1	1	3	3	1	1	16.4	
19-Feb-07	1	2	1	1	15	1	88	78	3	9	45	2	10	A	7	2	2	2	89	71	9	23	1	30	21.4	
20-Feb-07	1	1	17	1	1	2	68	2	2	2	2	2	A	57	19	21	15	2	23	43	2	4	2	6	12.9	
21-Feb-07	31	2	3	2	4	3	43	13	76	56	12	A	6	5	2	2	61	3	93	44	2	2	2	1	20.4	
22-Feb-07	40	37	25	61	61	38	58	24	17	11	A	3	2	12	2	C	C	C	C	C	A	2	1	1	N	
23-Feb-07	3	2	A	6	3	5	17	6	16	16	4	3	3	9	8	6	5	21	14	19	67	10	43	135	18.2	
24-Feb-07	90	189	A	11	81	11	20	76	41	30	153	34	2	82	73	26	30	32	4	4	3	2	2	6	43.5	
25-Feb-07	4	A	2	2	2	6	1	1	9	8	5	4	3	2	2	2	3	3	2	2	2	A	3	1	2.8	
26-Feb-07	A	2	2	1	2	1	1	3	4	5	5	6	3	3	3	2	1	1	1	1	1	2	A	6.4		
27-Feb-07	1	2	2	3	2	3	5	18	18	11	11	16	10	9	24	6	5	2	1	1	1	1	2	A	6.7	
28-Feb-07	2	2	2	1	1	1	3	24	2	3	2	2	2	2	2	3	3	2	2	2	2	A	3	1	3.1	



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

Hourly Avg 26.6 15.2 20.3 11.5 11.0 10.9 19.7 20.6 16.6 16.9 17.7 13.9 7.5 12.9 12.1 6.9 10.9 9.2 15.1 14.6 14.5 22.0 16.6 21.6  
Hourly Max 184.2 188.6 150.5 68.1 80.8 95.3 88.1 121.5 75.6 93.7 152.7 166.1 56.0 82.0 72.5 26.4 61.1 61.4 92.7 71.4 85.8 214.2 124.4 211.3



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

Station: Crescent Heights  
Station Owner: PAS

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

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

Maximum 1-hr Average:	107.0	ppb	2-Feb	23:00 0:00
Maximum 24-hr Average:	35.8	ppb	3-Feb	

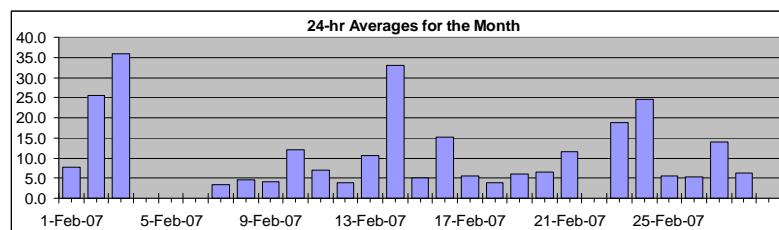
AIC Time:	30 hrs	Operational Time:	585 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	92.7%
Percentile	99 75 50 25 5 1	Average	Median
	72.7 43.8 13.6 6.6 3.7 1.7	12.1 ppb	6.6 ppb

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-Feb-07	2	1	1	3	2	5	6	11	10	8	8	A	8	6	8	8	8	17	13	8	10	11	8	14	7.6	17.2	
2-Feb-07	8	9	22	17	18	19	21	11	14	8	A	8	5	5	6	7	13	16	30	44	44	69	88	107	25.5	107.0	
3-Feb-07	62	52	42	37	33	33	34	27	39	A	49	40	10	10	12	10	12	18	40	49	61	58	55	41	35.8	62.0	
4-Feb-07	29	23	66	50	27	42	61	105	A	51	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	105.0	
5-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	-	
6-Feb-07	N	N	N	N	N	N	N	N	N	N	N	C	C	C	A	6	3	3	3	3	2	0	0	1	N	5.5	
7-Feb-07	2	2	A	6	4	4	3	4	6	4	3	4	3	3	5	3	3	3	2	2	4	3	2	2	3	3.3	6.4
8-Feb-07	3	A	6	3	3	3	6	7	6	5	5	3	4	4	8	6	4	5	5	4	5	3	4	3	4.6	7.9	
9-Feb-07	A	6	3	4	3	5	4	6	8	4	2	2	3	2	2	2	3	3	3	4	8	7	7	A	4.0	7.9	
10-Feb-07	10	6	10	10	19	21	19	21	22	21	16	10	7	5	3	4	6	9	5	5	21	15	A	14	12.1	22.4	
11-Feb-07	26	10	9	14	19	16	10	8	6	6	2	2	3	2	3	4	2	3	3	4	4	A	6	3	7.1	26.2	
12-Feb-07	3	2	3	3	2	3	4	6	8	5	4	2	3	2	2	2	3	5	5	5	A	6	6	7	3.8	8.0	
13-Feb-07	5	6	6	6	6	7	11	10	7	6	6	8	6	6	6	8	6	5	8	A	32	37	25	21	10.7	37.2	
14-Feb-07	52	32	65	41	37	26	39	59	72	97	75	29	19	12	14	25	35	15	A	4	3	3	1	3	33.0	96.6	
15-Feb-07	5	1	2	2	2	9	5	6	6	6	6	6	4	7	7	6	9	A	8	3	4	2	4	5	5.0	8.7	
16-Feb-07	11	9	12	22	10	16	25	33	24	15	16	16	12	12	7	12	A	21	13	18	16	6	9	10	15.1	32.9	
17-Feb-07	5	3	3	5	3	4	4	9	5	8	4	3	5	6	4	A	9	11	8	6	3	7	12	2	5.5	12.0	
18-Feb-07	1	2	3	3	1	0	1	1	5	1	1	1	8	7	A	5	6	6	4	2	2	10	11	6	3.9	11.1	
19-Feb-07	9	9	5	7	8	5	10	12	4	3	5	3	6	A	10	3	5	6	9	9	2	3	1	2	5.9	12.4	
20-Feb-07	1	1	4	2	1	3	11	8	3	3	3	2	A	7	5	5	6	6	18	9	5	14	17	19	6.6	18.7	
21-Feb-07	19	11	13	14	18	20	24	25	20	13	6	A	9	8	2	2	6	8	15	16	6	5	4	4	11.6	24.9	
22-Feb-07	9	8	31	28	38	33	36	36	25	15	A	6	4	4	3	C	C	C	C	C	A	4	4	2	N	38.4	
23-Feb-07	8	7	A	10	10	14	19	17	12	8	7	6	5	8	10	11	9	11	17	33	43	27	48	96	18.9	95.5	
24-Feb-07	57	47	A	29	33	26	38	57	41	45	55	16	3	7	8	5	6	11	15	14	19	15	12	9	24.6	56.8	
25-Feb-07	14	A	9	15	7	8	8	6	11	12	6	4	2	2	2	2	1	3	3	3	3	2	2	5.5	14.6		
26-Feb-07	A	5	3	3	6	5	5	7	8	8	7	6	4	3	3	3	4	5	6	7	6	8	A	5.2	7.9		
27-Feb-07	12	14	17	14	11	13	17	32	29	14	20	20	16	13	14	14	9	8	4	8	8	7	A	11	14.1	31.7	
28-Feb-07	9	9	9	9	8	6	9	10	13	7	8	6	4	4	4	5	4	4	3	2	3	A	5	3	6.2	12.8	

Hourly Avg	15.1	11.4	14.9	13.7	12.6	13.3	16.5	20.4	16.2	14.9	13.6	8.7	6.4	6.1	6.2	6.6	7.1	8.2	9.9	11.0	13.0	13.2	14.1	16.0
Hourly Max	62.0	51.7	66.5	49.8	38.4	41.7	61.3	105.0	72.3	96.6	75.1	40.2	18.9	13.2	13.9	25.3	35.1	21.4	39.8	49.2	60.9	68.6	87.7	107.0

### 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

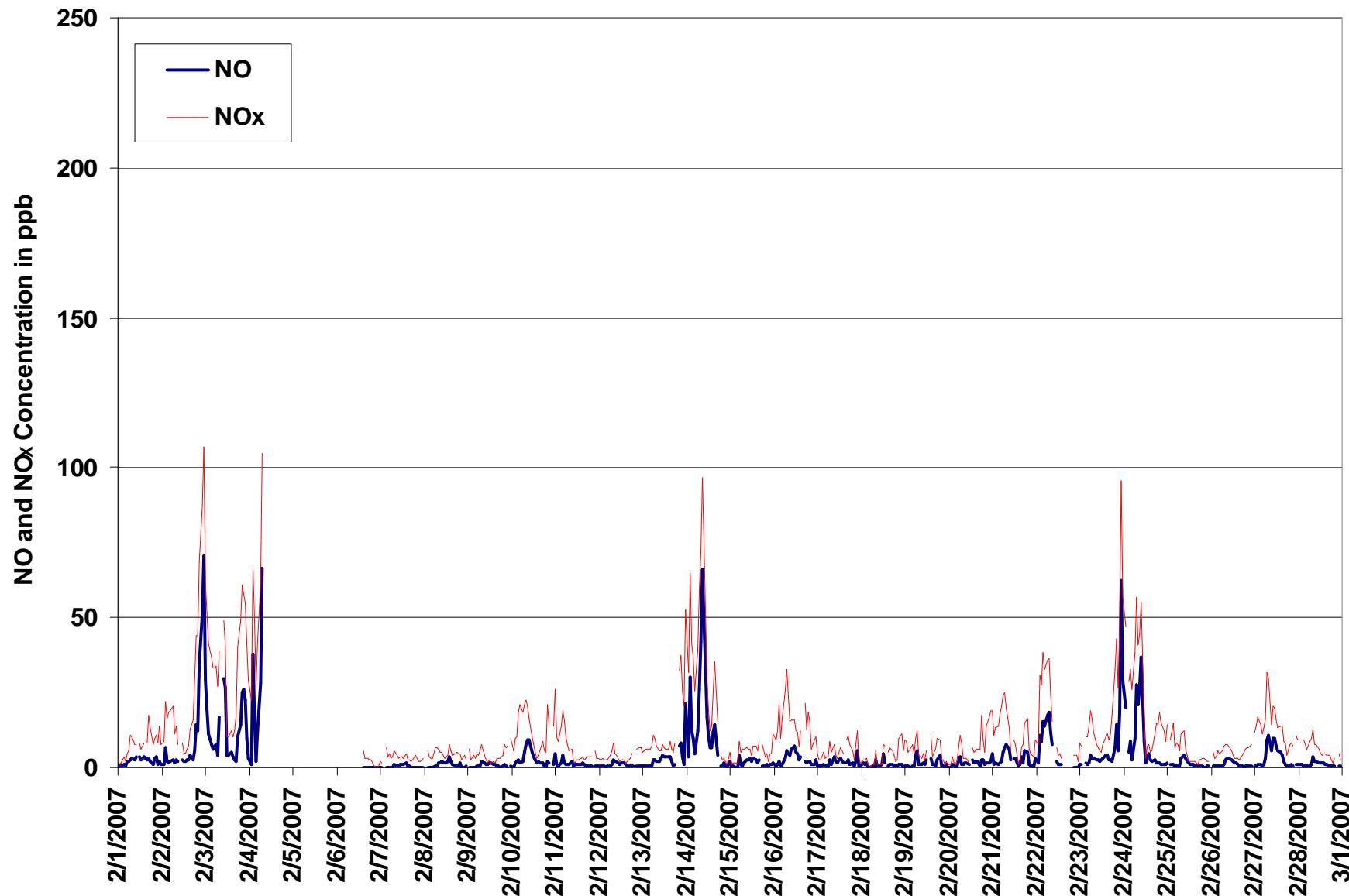


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

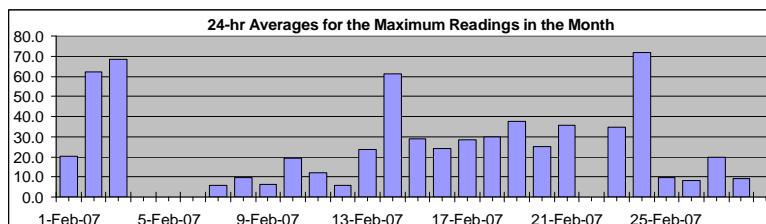
## **INSTANTANEOUS (30 Second) MAXIMUM TABLE**

## Oxides of Nitrogen ( $\text{NO}_x$ )

**Monitoring Dates:** February 1, 2007 to March 1, 2007

## Summary

Maximum 1-hr Value: 261.2 ppb 2-Feb 21:00  
Maximum 24-hr Value: 71.6 ppb 24-Feb



## 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

	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	-	
1-Feb-07	5	2	2	8	3	8	9	19	15	10	10	A	12	9	13	15	12	21	20	12	125	85	10	39	20.3	124.5
2-Feb-07	14	14	189	39	27	29	31	15	20	19	A	14	10	8	22	15	45	27	62	94	65	261	156	249	62.0	261.2
3-Feb-07	172	62	49	45	72	62	42	31	55	A	62	211	16	15	22	16	16	57	74	67	81	141	162	49	68.6	210.5
4-Feb-07	46	29	189	89	34	80	103	177	A	132	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	189.4
5-Feb-07	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
6-Feb-07	N	N	N	N	N	N	N	N	N	N	C	C	A	9	6	7	5	5	5	2	2	2	2	2	2	2
7-Feb-07	4	3	A	13	6	8	5	10	8	5	5	5	5	4	17	6	5	4	5	6	5	3	3	4	6.0	16.9
8-Feb-07	6	A	9	5	4	5	10	10	9	8	30	6	5	6	49	10	6	6	9	7	13	4	6	4	9.8	48.7
9-Feb-07	A	9	4	6	4	6	7	9	11	7	4	3	4	5	4	3	5	5	4	7	12	9	10	A	6.3	11.8
10-Feb-07	13	11	15	16	22	25	24	38	34	40	28	12	10	7	5	8	10	12	8	8	50	31	A	20	19.4	50.4
11-Feb-07	60	22	12	38	22	21	14	10	7	10	4	5	7	4	6	5	4	5	4	5	5	A	8	4	12.2	60.2
12-Feb-07	4	3	5	4	3	3	6	8	12	6	6	3	4	4	3	3	3	6	7	6	A	8	11	10	5.7	12.4
13-Feb-07	6	7	7	8	9	13	57	70	10	7	8	10	9	10	38	29	9	6	29	A	85	46	41	30	23.7	85.4
14-Feb-07	236	38	100	71	75	37	69	70	95	127	86	48	26	19	33	34	64	71	A	12	3	46	2	51	61.3	235.6
15-Feb-07	98	2	14	3	3	121	47	9	11	10	9	10	19	20	39	25	88	A	38	6	47	5	22	18	28.8	121.2
16-Feb-07	20	12	21	32	12	23	34	38	36	23	21	29	16	19	12	15	A	33	22	25	34	13	16	49	24.1	49.2
17-Feb-07	8	7	5	7	5	6	5	57	7	37	6	5	12	75	8	A	12	89	34	66	4	62	115	24	28.4	115.4
18-Feb-07	36	102	43	99	2	1	33	36	74	7	3	5	79	32	A	13	22	18	18	3	10	21	22	10	30.0	101.9
19-Feb-07	19	18	8	12	37	7	106	106	7	12	70	4	21	A	19	5	7	9	152	131	18	49	2	40	37.4	152.5
20-Feb-07	2	2	34	3	3	8	95	12	6	4	5	4	A	66	33	39	30	15	60	75	10	24	21	23	25.0	95.0
21-Feb-07	62	13	16	20	23	24	74	36	91	75	20	A	14	13	4	6	91	14	123	71	10	10	10	5	35.8	122.9
22-Feb-07	66	56	52	88	94	66	82	43	33	21	A	9	7	15	4	C	C	C	C	C	A	7	7	7	N	94.1
23-Feb-07	13	11	A	21	13	20	29	27	29	29	9	7	6	20	15	14	15	46	31	52	97	38	72	181	34.6	181.2
24-Feb-07	124	224	A	39	127	36	50	113	65	51	192	53	5	128	127	59	50	65	26	22	25	23	19	24	71.6	224.1
25-Feb-07	21	A	21	21	10	21	10	9	25	21	9	7	4	7	3	6	4	4	5	4	4	3	3	3	9.8	25.3
26-Feb-07	A	7	5	5	8	6	7	11	11	10	9	28	5	5	7	5	4	5	7	8	9	9	10	A	8.2	28.4
27-Feb-07	17	18	20	20	15	17	21	43	44	20	23	31	19	18	41	17	14	11	6	10	10	9	A	14	19.9	43.8
28-Feb-07	11	13	13	11	10	8	10	15	36	9	11	7	5	5	6	8	6	6	5	4	6	A	7	4	9.3	36.3
Hourly Avg	44.3	28.5	36.3	27.7	24.8	25.5	37.6	39.3	30.1	28.0	27.3	22.4	13.4	21.4	22.0	15.2	22.0	22.6	31.3	29.5	30.5	37.9	30.7	36.0		
Hourly Max	235.6	224.1	189.4	98.6	126.6	121.2	106.1	177.1	95.4	131.9	191.8	210.5	79.4	128.2	126.6	58.7	90.6	89.2	152.5	130.5	124.5	261.2	161.7	248.5		

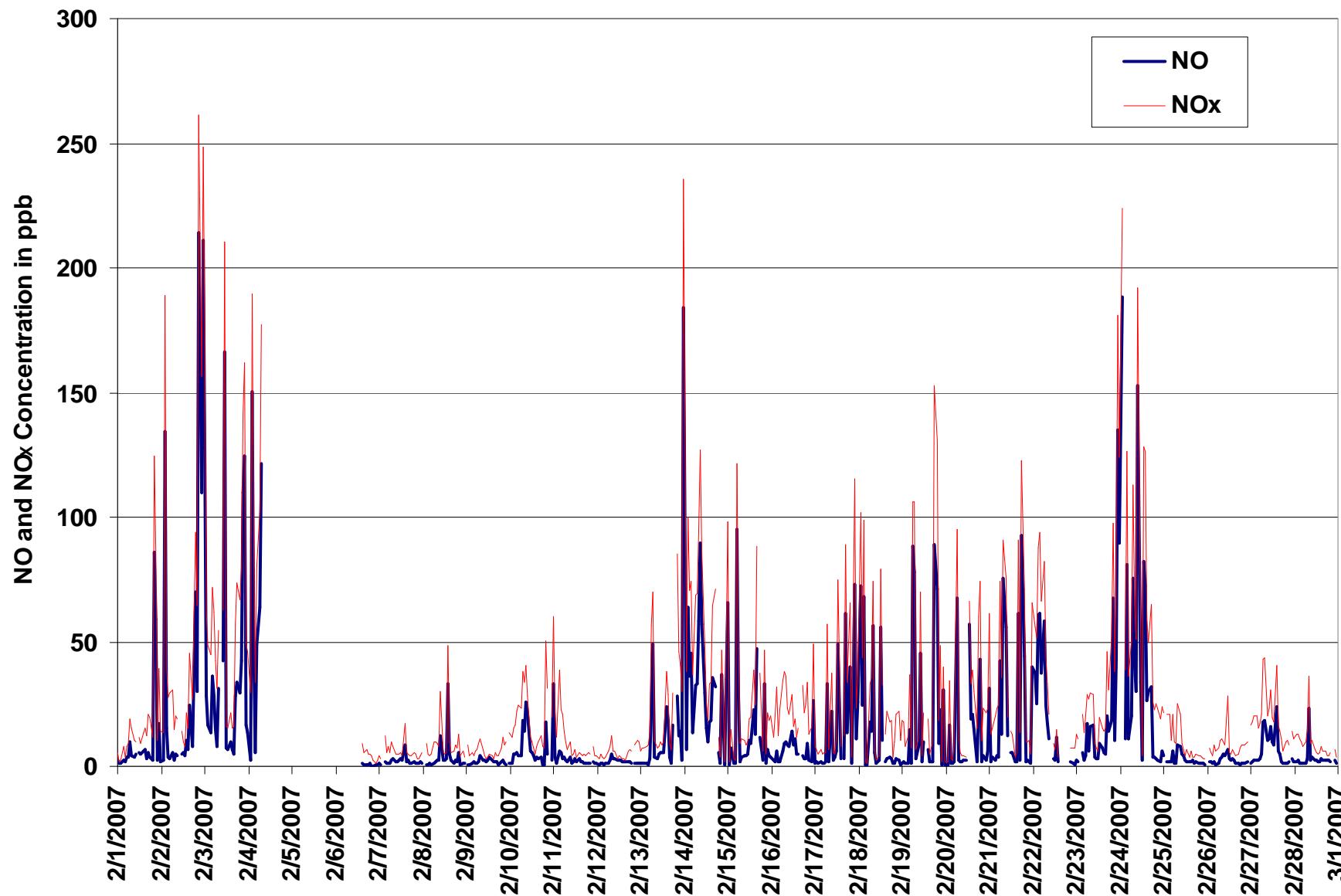


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



## PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

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

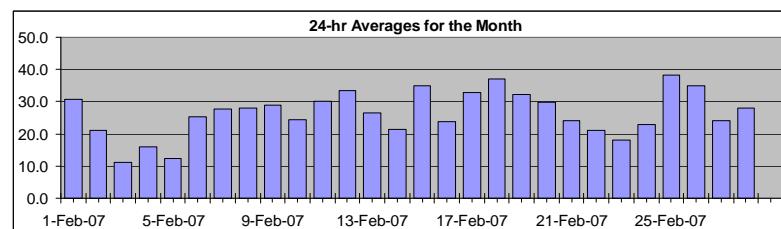
Number of 1-hr Exceedances: 0  
Maximum 1-hr Average: 45.6 ppb 25-Feb 14:00 15:00  
Maximum 24-hr Average: 38.2 ppb 25-Feb

AIC Time:	31 hrs	Operational Time:	639 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	41.9	39.3	33.4	28.7	22.2	3.8	1.6	26.4 ppb	28.7 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-Feb-07	35	37	38	35	35	33	32	27	28	30	32	A	33	34	33	33	31	23	24	28	28	27	26	22	30.7	37.9
2-Feb-07	26	24	17	17	17	18	20	27	26	32	A	34	36	36	35	34	29	24	14	8	4	2	2	2	21.0	36.3
3-Feb-07	2	2	2	2	3	4	2	4	5	A	10	23	32	32	31	31	28	21	8	2	2	4	3	2	11.1	32.2
4-Feb-07	8	12	7	3	6	2	2	2	A	10	30	32	28	29	28	23	26	22	21	20	20	12	11	15	16.0	31.7
5-Feb-07	15	13	13	15	12	7	10	A	11	16	16	20	24	26	17	14	15	7	2	7	6	1	4	12	12.4	25.8
6-Feb-07	19	19	19	23	23	23	A	26	25	26	27	27	28	27	28	28	28	27	26	26	26	27	27	27	25.3	28.1
7-Feb-07	27	28	A	26	26	25	27	26	24	25	26	26	27	29	28	30	31	30	29	28	29	30	30	29	27.6	31.3
8-Feb-07	28	A	27	27	27	26	24	26	26	27	29	30	30	29	28	29	29	28	27	28	29	29	28	30	27.9	30.0
9-Feb-07	A	29	30	28	28	27	27	25	25	29	30	31	31	32	33	33	31	31	30	29	26	27	26	A	29.0	32.6
10-Feb-07	25	27	24	24	16	13	15	16	17	20	24	27	29	33	35	35	32	28	30	30	17	22	A	22	24.5	35.4
11-Feb-07	14	25	25	21	18	18	22	26	28	31	36	37	37	36	36	37	37	36	34	34	34	A	33	34	30.1	37.2
12-Feb-07	33	34	33	34	34	33	32	30	30	33	33	35	36	36	36	37	36	34	33	33	A	32	30	29	33.4	36.9
13-Feb-07	29	28	27	27	27	26	25	26	28	30	30	31	32	33	31	31	31	31	29	A	14	8	14	15	26.4	33.1
14-Feb-07	7	4	2	5	6	11	6	2	9	13	19	27	31	33	33	28	21	32	A	41	41	41	40	21.4	41.2	
15-Feb-07	38	39	38	38	37	34	34	32	34	34	35	38	39	38	37	34	A	35	35	31	32	30	29	35.0	39.0	
16-Feb-07	23	23	20	15	23	18	11	9	17	25	27	29	30	31	33	30	A	23	26	22	22	33	30	23.8	33.4	
17-Feb-07	27	32	30	28	30	30	31	29	32	33	36	34	36	38	A	34	31	31	34	35	33	34	39	32.8	39.4	
18-Feb-07	41	41	40	39	41	42	41	41	40	40	39	39	38	34	A	38	35	36	36	37	35	27	24	37.1	42.1	
19-Feb-07	25	25	32	31	30	33	25	22	29	31	33	37	36	A	36	41	38	33	31	33	36	35	35	34	32.2	41.2
20-Feb-07	33	32	29	31	30	28	23	24	30	31	34	37	A	36	36	37	39	36	25	34	34	19	15	14	29.9	38.9
21-Feb-07	19	22	20	18	12	8	9	6	14	23	32	A	36	37	41	41	38	32	26	22	25	26	25	23	24.2	41.2
22-Feb-07	21	19	6	6	2	3	2	3	9	16	A	29	31	31	33	33	32	33	31	30	28	26	26	21.1	33.4	
23-Feb-07	20	19	A	16	15	11	10	12	18	28	30	C	C	A	33	32	33	31	23	11	7	10	2	2	18.1	32.7
24-Feb-07	1	1	A	8	10	9	4	5	12	16	18	33	38	38	40	40	38	34	30	31	26	28	31	22.9	40.2	
25-Feb-07	27	A	36	29	36	35	34	36	33	34	38	41	44	44	46	45	43	42	41	39	38	38	39	38.2	45.6	
26-Feb-07	A	36	37	36	32	32	31	30	32	33	34	35	37	39	39	40	41	38	36	34	33	32	30	A	34.8	40.9
27-Feb-07	27	22	18	21	23	20	19	10	15	24	23	24	25	26	26	25	30	32	34	30	29	29	A	24	24.2	34.2
28-Feb-07	24	24	23	22	24	25	23	23	22	26	25	27	29	30	30	32	33	33	35	37	33	A	32	34	28.1	36.5

HOURLY AVERAGE TABLE

Ozone (O<sub>3</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

Hourly Avg	22.9	23.7	23.8	22.3	22.3	21.3	20.1	20.1	23.0	26.5	28.8	31.3	32.8	33.4	33.5	33.0	32.4	29.8	27.9	27.5	25.5	24.3	24.2	24.3
Hourly Max	41.0	40.6	39.7	39.5	40.7	42.1	41.5	40.8	39.9	39.6	38.9	40.9	43.8	44.5	45.6	45.1	43.0	42.5	41.2	40.5	40.9	40.6	41.2	39.7

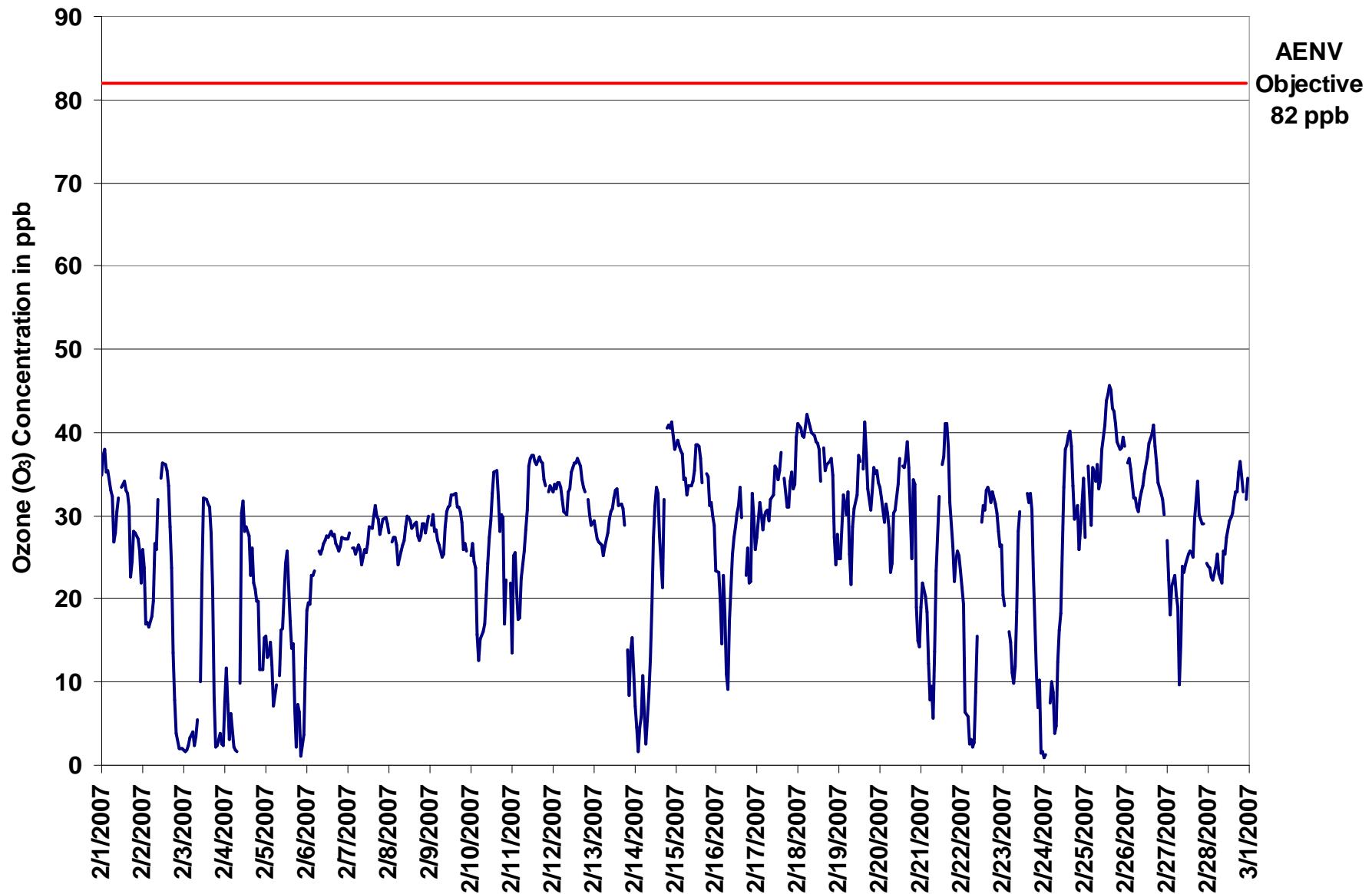


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

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

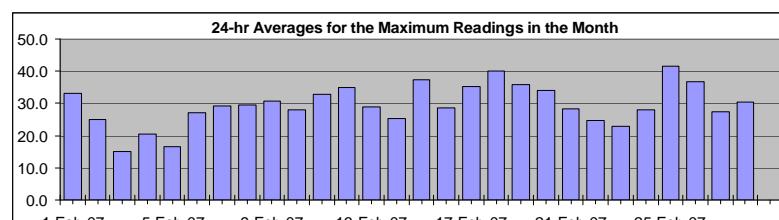
#### Summary

Maximum 1-hr Value:	46.8	ppb	25-Feb	14:00 15:00
Maximum 24-hr Value:	41.4	ppb	25-Feb	

AIC Time:	31 hrs	Operational Time:	639 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	43.5 42.0 36.0 31.1 25.9 9.7 3.0	29.6 ppb	31.1 ppb

#### 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-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-Feb-07	38	39	39	38	36	35	34	32	31	33	34	A	35	35	35	35	35	34	26	29	31	31	30	28	26	33.2	39.2
2-Feb-07	28	26	22	22	20	22	26	29	28	34	A	36	37	38	37	35	34	29	26	24	7	3	3	3	24.9	37.8	
3-Feb-07	3	3	4	5	5	9	6	6	8	A	13	33	34	35	34	34	32	26	22	4	6	13	6	4	15.0	34.9	
4-Feb-07	11	17	16	11	10	5	3	3	A	22	33	33	33	32	31	31	31	27	24	22	23	21	17	18	20.6	33.4	
5-Feb-07	17	17	15	17	15	12	14	A	17	18	20	22	28	27	25	19	19	13	8	14	14	3	10	15	16.4	27.7	
6-Feb-07	23	22	22	24	25	25	A	28	27	27	28	29	29	29	30	30	30	29	28	27	28	29	28	28	27.2	29.9	
7-Feb-07	29	29	A	27	28	28	28	26	26	27	27	29	30	30	32	32	31	31	29	31	31	31	31	31	29.2	32.5	
8-Feb-07	30	A	29	29	29	28	27	28	29	29	31	31	31	30	30	31	30	29	28	30	31	31	30	32	29.6	31.7	
9-Feb-07	A	31	31	30	30	28	29	27	29	30	32	32	32	34	33	34	32	33	32	31	30	28	27	A	30.7	33.9	
10-Feb-07	28	29	27	26	22	18	17	20	22	23	26	30	31	37	38	38	36	30	32	32	27	29	A	26	28.0	38.1	
11-Feb-07	23	27	29	26	22	22	25	30	31	34	39	38	39	38	38	38	39	40	38	38	35	A	35	35	32.9	39.6	
12-Feb-07	35	35	34	35	35	35	34	33	32	34	35	36	37	37	37	38	37	37	35	34	A	34	33	31	34.9	38.1	
13-Feb-07	31	30	29	28	30	29	28	28	31	31	32	32	33	35	35	33	33	32	32	A	19	14	19	21	29.0	34.7	
14-Feb-07	13	11	3	12	10	15	12	5	12	16	24	30	34	36	35	31	31	40	A	42	42	42	43	42	25.2	42.6	
15-Feb-07	40	40	40	39	39	38	37	35	35	35	38	40	41	40	39	37	A	37	36	35	33	34	33	37.3	40.6		
16-Feb-07	29	26	22	24	25	25	15	13	26	28	30	32	32	34	36	32	A	32	32	29	31	41	39	31	28.8	40.9	
17-Feb-07	31	34	32	31	31	32	33	34	34	35	38	37	36	37	41	A	37	35	33	37	37	38	39	34.3	41.6		
18-Feb-07	43	43	42	42	43	43	43	43	42	41	41	40	43	40	A	41	41	41	40	39	37	35	30	32	40.1	43.3	
19-Feb-07	29	30	35	40	36	37	30	27	31	32	36	40	40	A	42	43	41	38	34	37	37	36	37	36	35.8	43.1	
20-Feb-07	35	34	32	34	32	31	28	32	32	32	37	38	A	38	37	42	43	41	35	40	38	29	21	18	33.9	43.0	
21-Feb-07	24	24	22	22	16	14	18	10	20	28	37	A	40	41	43	43	42	37	31	30	28	29	28	26	28.3	43.1	
22-Feb-07	26	23	17	19	5	7	4	6	14	20	A	33	32	33	34	35	34	33	36	35	32	30	28	30	24.7	35.6	
23-Feb-07	26	23	A	20	17	15	15	16	27	31	32	C	C	A	36	34	35	33	28	26	17	21	4	3	22.9	36.1	
24-Feb-07	2	3	A	13	17	15	12	15	14	19	23	39	39	42	42	43	42	38	35	40	34	37	36	42	27.9	43.4	
25-Feb-07	38	A	42	41	41	38	36	39	38	38	40	43	46	46	47	47	45	44	44	40	39	39	41	40	41.4	46.8	
26-Feb-07	A	37	38	37	35	34	33	32	34	34	35	37	38	40	40	42	42	40	38	37	34	34	31	A	36.6	42.5	
27-Feb-07	30	28	21	25	25	23	22	16	22	26	25	26	27	28	27	26	34	35	37	33	31	31	A	28	37.3	36.8	
28-Feb-07	26	27	26	25	27	29	24	25	25	28	28	29	32	31	31	35	35	35	38	38	37	A	33	36	30.4	38.1	



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

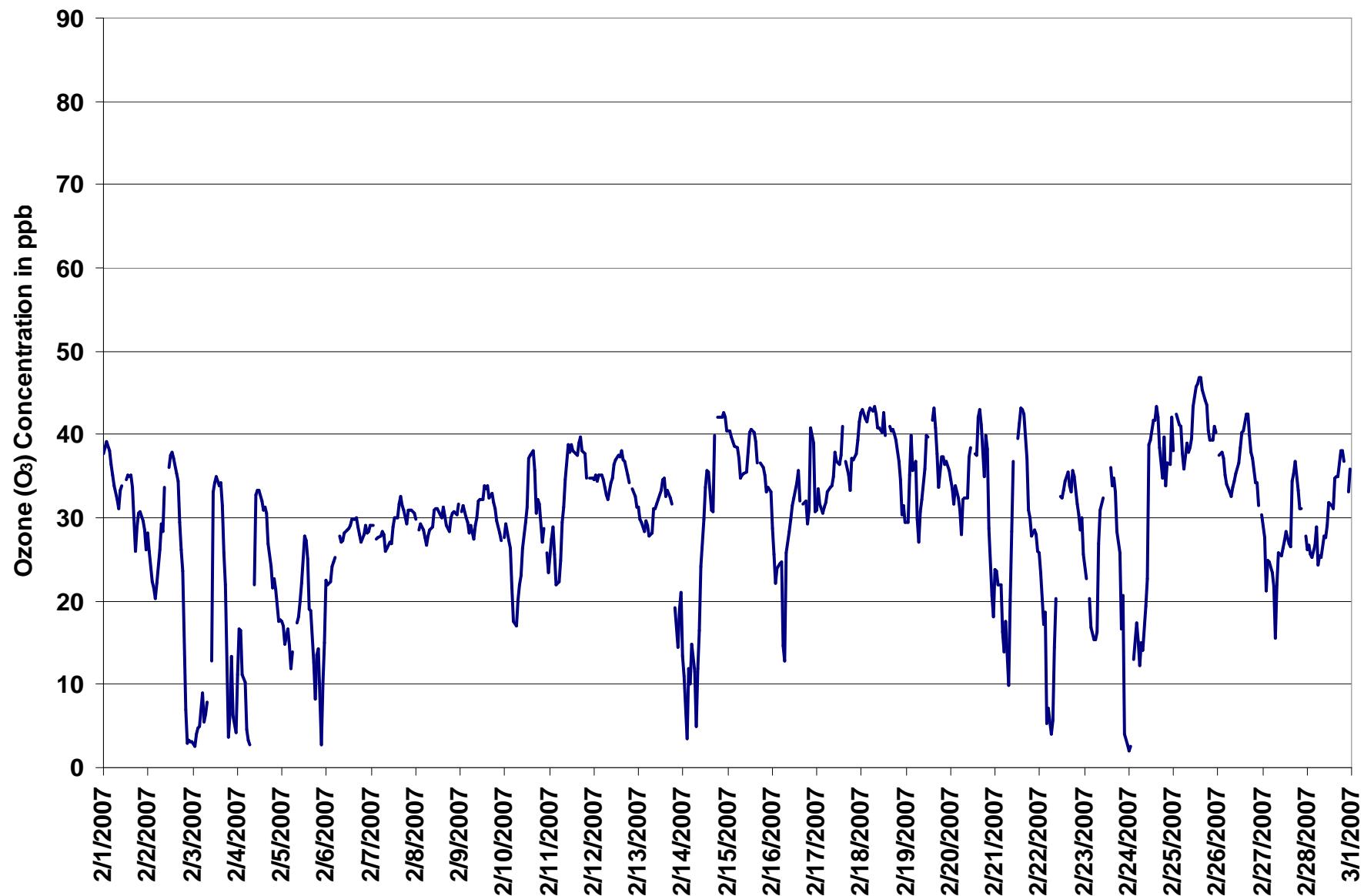
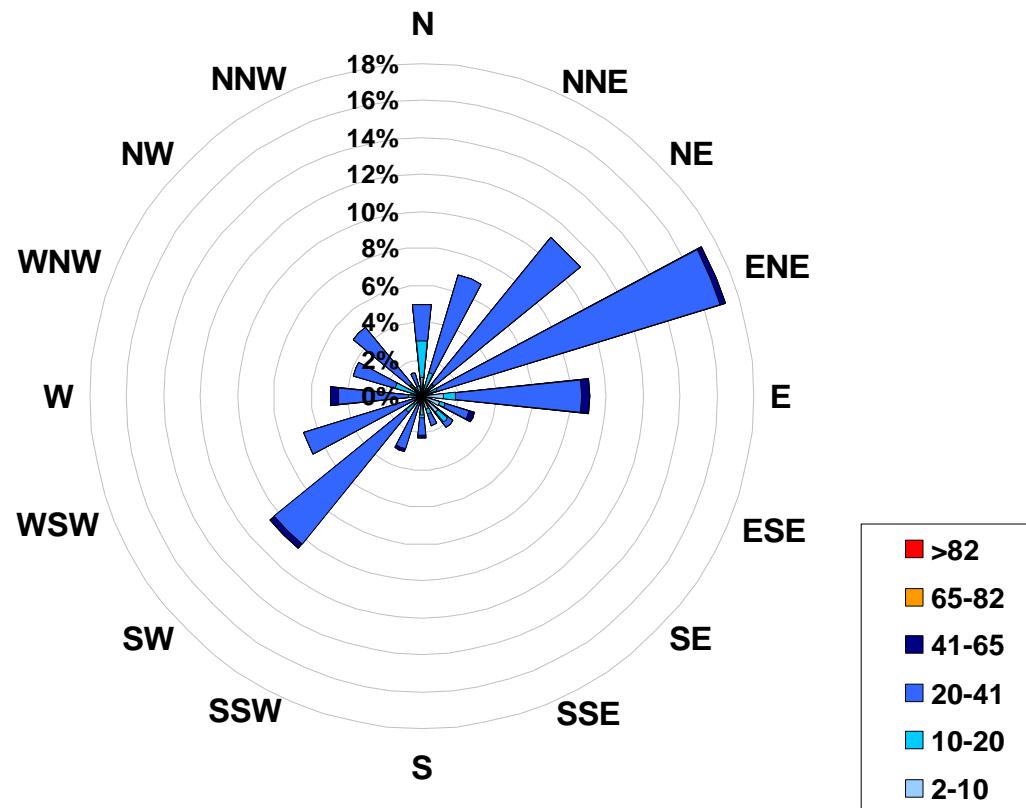


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of O <sub>3</sub> in ppb			Frequency (hrs)
Range		Frequency	
2.0	<	10	68
10	to	20	71
20	to	41	486
41	to	65	14
65	to	82	0
> 82			0
Total Non-Zero Values			639



## PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

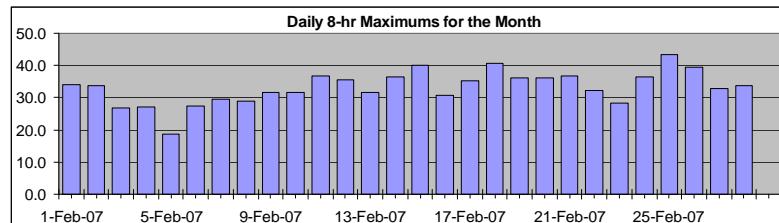
Objective Limit: Alberta Environment: 8-hr 65 ppb  
Summary

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 43.3 ppb 25-Feb 18:00 19:00

### EIGHT HOUR RUNNING AVERAGE TABLE

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

	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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	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	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:0



## PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

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

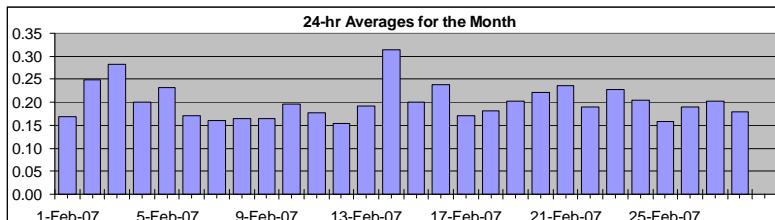
Number of 1-hr Exceedances: 0  
Maximum 1-hr Average: 0.8 ppm 14-Feb 8:00 9:00  
Maximum 24-hr Value: 0.3 ppm 14-Feb

AIC Time:	31 hrs	Operational Time:	639 hrs						
Calibration Time:	2 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 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-Feb-07	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.17	0.23	
2-Feb-07	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.4	0.5	0.25	0.55	
3-Feb-07	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	A	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.28	0.42	
4-Feb-07	0.3	0.2	0.2	0.2	0.3	0.2	0.3	A	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.20	0.34	
5-Feb-07	0.1	0.2	0.2	0.2	0.2	0.3	A	0.4	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.3	0.5	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.23	0.53
6-Feb-07	0.1	0.1	0.1	0.1	0.1	0.2	A	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	0.17	0.22	
7-Feb-07	0.2	0.2	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.16	0.21	
8-Feb-07	0.2	A	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	0.1	0.1	0.1	0.16	0.22	
9-Feb-07	A	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	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.22	
10-Feb-07	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.20	0.33	
11-Feb-07	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.18	0.31	
12-Feb-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	A	0.1	0.1	0.15	0.19	
13-Feb-07	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.19	0.34	
14-Feb-07	0.3	0.3	0.3	0.2	0.2	0.3	0.6	0.8	0.7	0.5	0.3	0.2	0.2	0.3	0.4	0.4	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.31	0.81	
15-Feb-07	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.26	
16-Feb-07	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.2	0.3	0.2	0.2	0.2	0.24	0.33	
17-Feb-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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.21	
18-Feb-07	0.1	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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.23	
19-Feb-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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.24	
20-Feb-07	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.31		
21-Feb-07	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.24	0.40	
22-Feb-07	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.2	A	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.19	0.39	
23-Feb-07	0.2	0.2	A	0.2	0.2	0.3	0.3	C	C	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.23	0.46		
24-Feb-07	0.3	0.3	A	0.2	0.2	0.2	0.3	0.3	0.3	0.4	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	0.20	0.38	
25-Feb-07	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16	0.24	
26-Feb-07	A	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	0.19	0.25	
27-Feb-07	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	A	0.2	0.20	0.31
28-Feb-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	A	0.1	0.18	0.26

### 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

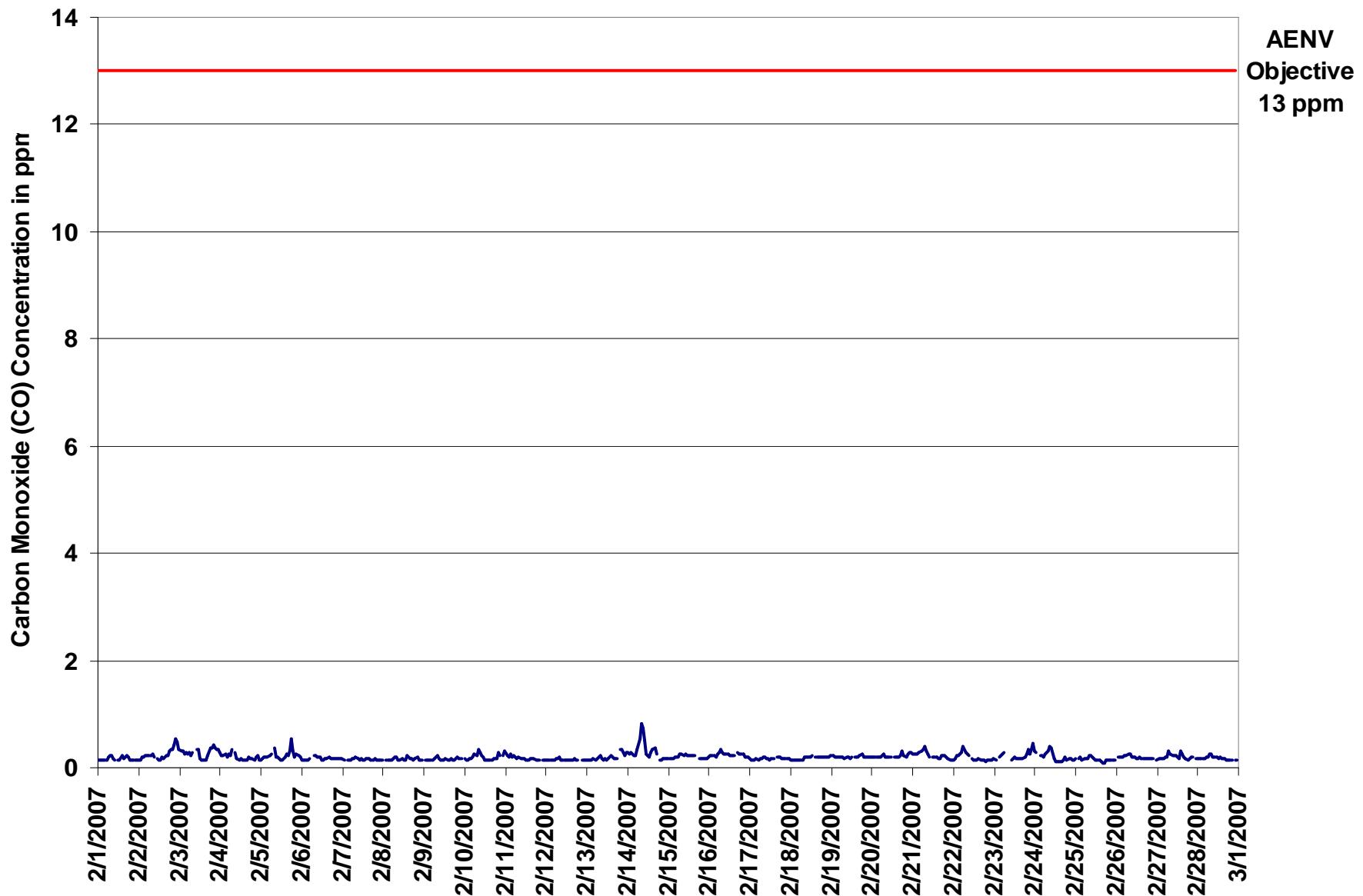


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Carbon Monoxide (CO)

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

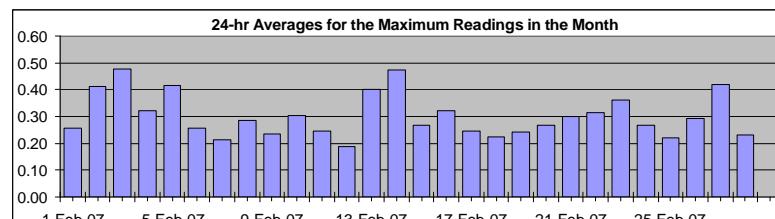
#### Summary

Maximum 1-hr Value:	1.6	ppm	27-Feb	7:00 8:00
Maximum 24-hr Value:	0.5	ppm	3-Feb	

AIC Time:	31 hrs	Operational Time:	639 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	1.2 0.7 0.3 0.2 0.2 0.1 0.1	0.3 ppm	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-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.2	0.2	A	0.2	0.2	0.8	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.83	
2-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.3	0.4	0.2	A	0.4	0.2	0.2	0.6	0.3	0.6	0.4	0.9	0.5	0.5	0.7	0.7	0.6	0.41	0.86	
3-Feb-07	0:00 1:00	0.4	0.4	0.4	0.3	1.4	0.5	0.4	0.3	0.4	A	0.5	1.1	0.5	0.3	0.2	0.3	0.3	0.7	0.5	0.4	0.5	0.5	0.4	0.4	0.48	1.43	
4-Feb-07	0:00 1:00	0.4	0.3	0.3	0.4	0.2	0.6	0.3	0.5	A	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.4	0.32	0.79		
5-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.3	0.3	0.4	A	0.8	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.9	1.1	1.0	0.3	0.4	0.3	0.2	0.41	1.13
6-Feb-07	0:00 1:00	0.2	0.2	0.2	0.1	0.2	0.2	A	0.4	0.3	0.2	0.2	0.6	0.2	0.2	0.3	0.3	0.3	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.26	0.59	
7-Feb-07	0:00 1:00	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.5	0.2	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.45	
8-Feb-07	0:00 1:00	0.2	A	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.8	0.3	0.4	0.2	0.2	0.2	1.0	0.2	0.2	0.2	0.29	0.98
9-Feb-07	0:00 1:00	A	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.23	0.49
10-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.8	0.7	0.6	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4	A	0.2	0.30	0.83
11-Feb-07	0:00 1:00	0.6	0.4	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.25	0.64
12-Feb-07	0:00 1:00	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.3	0.2	0.2	A	0.1	0.2	0.1	0.19	0.38	
13-Feb-07	0:00 1:00	0.1	0.2	0.1	0.1	0.3	0.2	0.3	0.2	0.2	0.2	1.1	0.2	0.3	1.2	0.5	0.2	0.2	0.2	A	1.4	0.5	0.3	0.5	0.40	1.42		
14-Feb-07	0:00 1:00	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.9	0.8	0.6	0.3	0.3	0.2	1.4	0.9	0.6	0.6	A	0.2	0.2	0.2	0.2	0.47	1.38		
15-Feb-07	0:00 1:00	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.3	0.7	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.27	0.65		
16-Feb-07	0:00 1:00	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.5	0.4	0.5	0.3	0.4	0.3	0.3	0.5	0.3	0.3	A	0.4	0.3	0.5	0.4	0.2	0.3	0.2	0.32	0.50
17-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.25	0.50
18-Feb-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	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.22	0.35
19-Feb-07	0:00 1:00	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.24	0.32		
20-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.27	0.50	
21-Feb-07	0:00 1:00	0.3	0.3	0.3	0.4	0.3	0.5	0.5	0.4	0.3	0.3	A	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.30	0.50	
22-Feb-07	0:00 1:00	0.2	0.2	0.3	0.3	0.8	1.4	0.6	0.4	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.31	1.40		
23-Feb-07	0:00 1:00	0.3	0.2	A	0.3	0.4	0.3	0.4	C	C	A	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.36	0.74		
24-Feb-07	0:00 1:00	0.4	0.4	A	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.27	0.46	
25-Feb-07	0:00 1:00	0.3	A	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.22	0.50		
26-Feb-07	0:00 1:00	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.2	0.1	1.0	0.3	0.3	0.2	0.2	0.3	0.2	0.2	A	0.29	0.99	
27-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.6	0.4	0.7	0.2	0.4	0.2	0.4	1.6	0.8	0.3	0.2	0.2	0.4	0.2	A	0.42	1.58			
28-Feb-07	0:00 1:00	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.23	0.49		



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

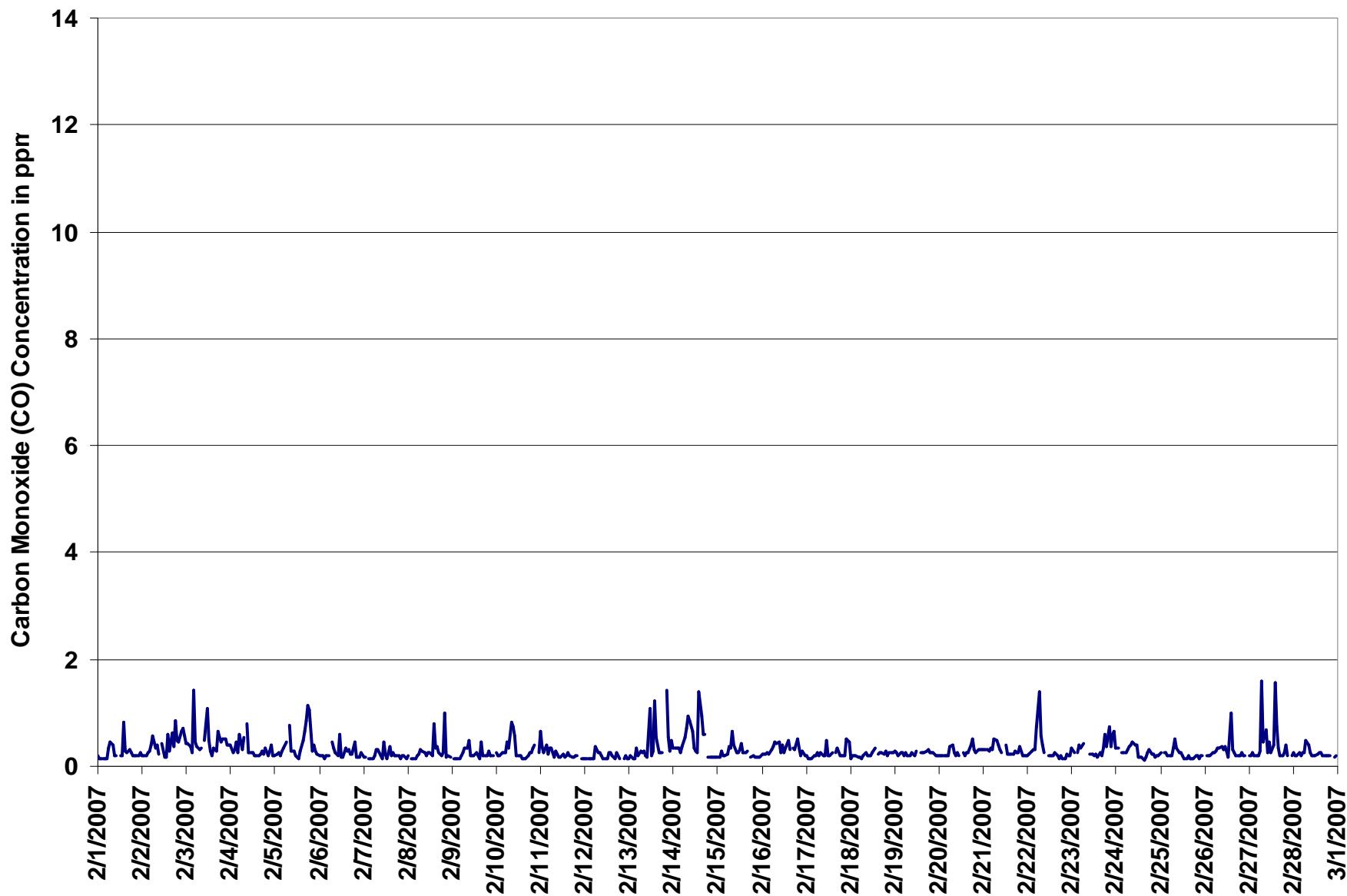
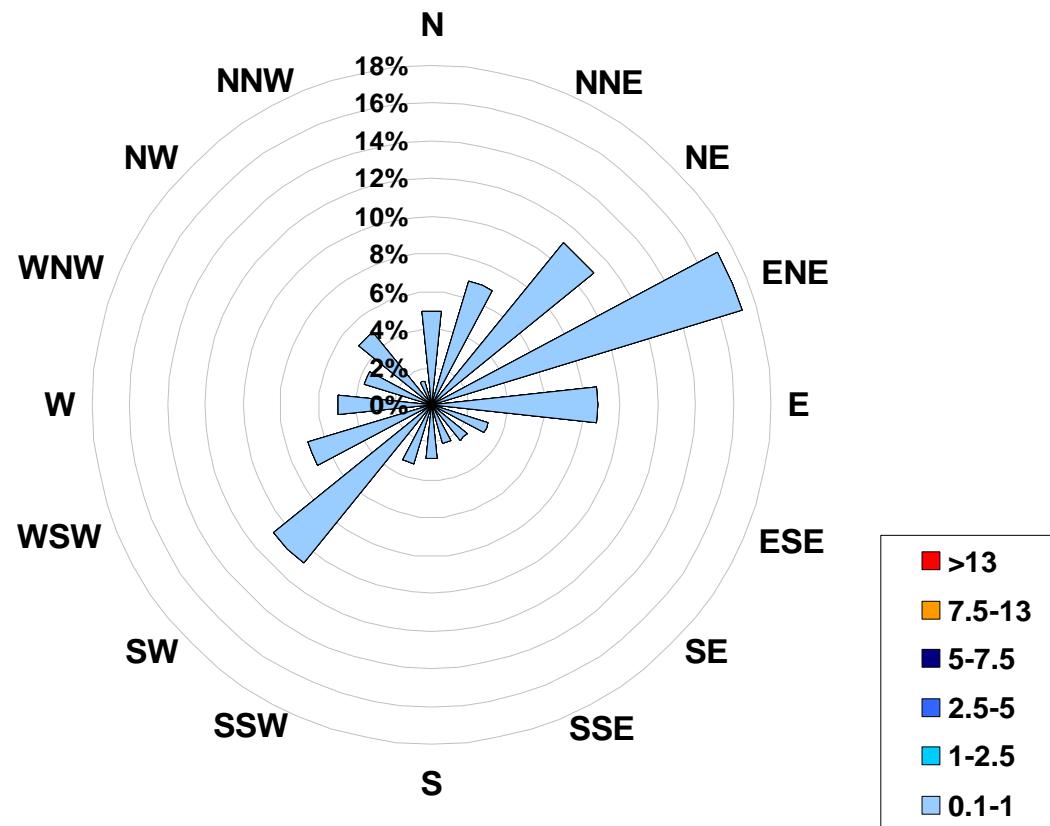


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



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





## PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

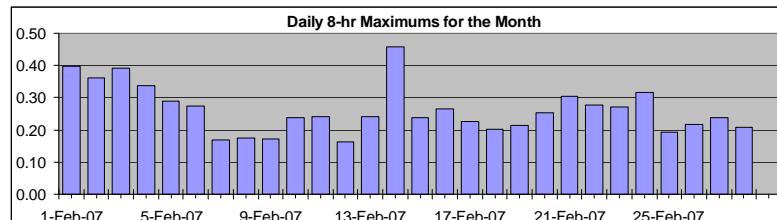
Monitoring Dates: February 1, 2007 to March 1, 2007

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

Number of 8-hr Exceedances: 0  
Maximum 8-hr Average: 0.5 ppm 14-Feb 10:00 11:00

### 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

	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
Hour End 2:00		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-Feb-07	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.40
2-Feb-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	0.36
3-Feb-07	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.39
4-Feb-07	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34
5-Feb-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	0.29
6-Feb-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	0.27
7-Feb-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	0.17
8-Feb-07	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17
9-Feb-07	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17
10-Feb-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	0.24
11-Feb-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	0.24
12-Feb-07	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.16
13-Feb-07	0.2	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	0.24
14-Feb-07	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.46
15-Feb-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	0.24
16-Feb-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
17-Feb-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	0.22
18-Feb-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	0.20
19-Feb-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	0.21
20-Feb-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	0.25
21-Feb-07	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30
22-Feb-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.28
23-Feb-07	0.1	0.1	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
24-Feb-07	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.32
25-Feb-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	0.1	0.1	0.1	0.1	0.1	0.1	0.19
26-Feb-07	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	0.22
27-Feb-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	0.24
28-Feb-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	0.21

Hourly Max 0.40 0.39 0.39 0.38 0.37 0.35 0.32 0.31 0.37 0.43 0.46 0.46 0.46 0.45 0.44 0.42 0.36 0.30 0.27 0.27 0.27 0.29 0.32 0.36



## PAS - Crescent Heights - Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

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

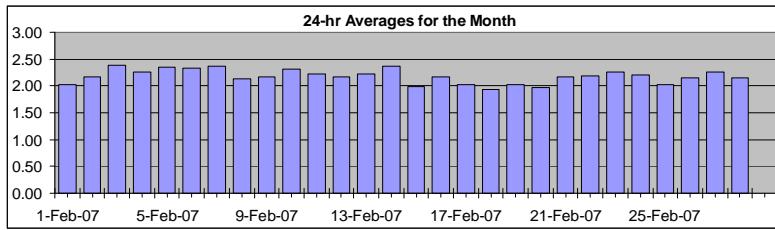
Maximum 1-hr Average:	3.0	ppm	23-Feb	23:00 0:00
Maximum 24-hr Value:	2.4	ppm	3-Feb	

AIC Time:	31 hrs	Operational Time:	639 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.7	2.5	2.3	2.1	2.0	1.9	1.9	2.2 ppm	2.1 ppm

		Mountain Standard Time																								24-hour Average	Daily Maximum		
Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Feb-07	1:00	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	A	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.02	2.13	
2-Feb-07	2:00	2.0	2.1	2.2	2.2	2.2	2.1	2.0	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.4	2.7	2.7	2.7	2.18	2.72		
3-Feb-07	3:00	2.5	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	A	2.7	2.3	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.6	2.8	2.4	2.4	2.39	2.76		
4-Feb-07	4:00	2.3	2.2	2.3	2.3	2.3	2.4	2.3	2.4	A	2.5	2.2	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.26	2.46		
5-Feb-07	5:00	2.5	2.5	2.6	2.5	2.5	2.5	2.4	A	2.3	2.3	2.4	2.2	2.2	2.1	2.1	2.0	2.0	2.2	2.4	2.9	2.5	2.3	2.3	2.3	2.2	2.35	2.93	
6-Feb-07	6:00	2.1	2.2	2.3	2.4	2.4	2.5	A	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.33	2.46	
7-Feb-07	7:00	2.4	2.3	A	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.2	2.2	2.37	2.58	
8-Feb-07	8:00	2.2	A	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.13	2.24	
9-Feb-07	9:00	A	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.16	2.24	
10-Feb-07	10:00	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.1	2.3	2.2	2.2	2.2	2.2	2.2	2.4	2.4	A	2.5	2.5	2.31	2.48	
11-Feb-07	11:00	2.6	2.3	2.3	2.4	2.4	2.4	2.3	2.2	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.4	A	2.3	2.3	2.23	2.55	
12-Feb-07	12:00	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.1	A	2.2	2.2	2.2	2.2	2.17	2.29	
13-Feb-07	13:00	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.3	2.5	2.4	2.6	2.22	2.60	
14-Feb-07	14:00	2.5	2.5	2.7	2.7	2.5	2.4	2.4	2.6	2.6	2.6	2.5	2.6	2.4	2.4	2.5	2.4	2.4	2.3	2.1	A	2.0	2.0	2.0	2.0	2.0	2.37	2.74	
15-Feb-07	15:00	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	1.9	A	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.99	2.12	
16-Feb-07	16:00	2.0	2.1	2.4	2.3	2.3	2.4	2.4	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.17	2.40	
17-Feb-07	17:00	2.1	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	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.03	2.16	
18-Feb-07	18:00	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.93	2.06		
19-Feb-07	19:00	2.1	2.2	2.2	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.21		
20-Feb-07	20:00	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.39		
21-Feb-07	21:00	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.5	2.3	2.2	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.16	2.46
22-Feb-07	22:00	2.1	2.1	2.3	2.3	2.5	2.5	2.7	2.6	2.6	2.5	2.5	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.20	2.65	
23-Feb-07	23:00	2.1	2.1	A	2.2	2.3	2.2	2.2	2.2	2.3	C	C	A	2.2	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.5	3.0	3.0	2.26	2.97		
24-Feb-07	24:00	2.8	2.5	A	2.5	2.4	2.4	2.4	2.5	2.7	2.6	2.6	2.1	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	2.21	2.75	
25-Feb-07	25:00	2.3	A	2.1	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.0	1.9	1.9	1.8	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.02	2.27		
26-Feb-07	26:00	A	2.1	2.1	2.1	2.4	2.3	2.1	2.1	2.1	2.3	2.4	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.15	2.40		
27-Feb-07	27:00	2.2	2.3	2.4	2.3	2.3	2.2	2.3	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.3	2.4	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.26	2.44	
28-Feb-07	28:00	2.2	2.3	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.15	2.32		

### HOURLY AVERAGE TABLE

### Total Hydrocarbons (THC)



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

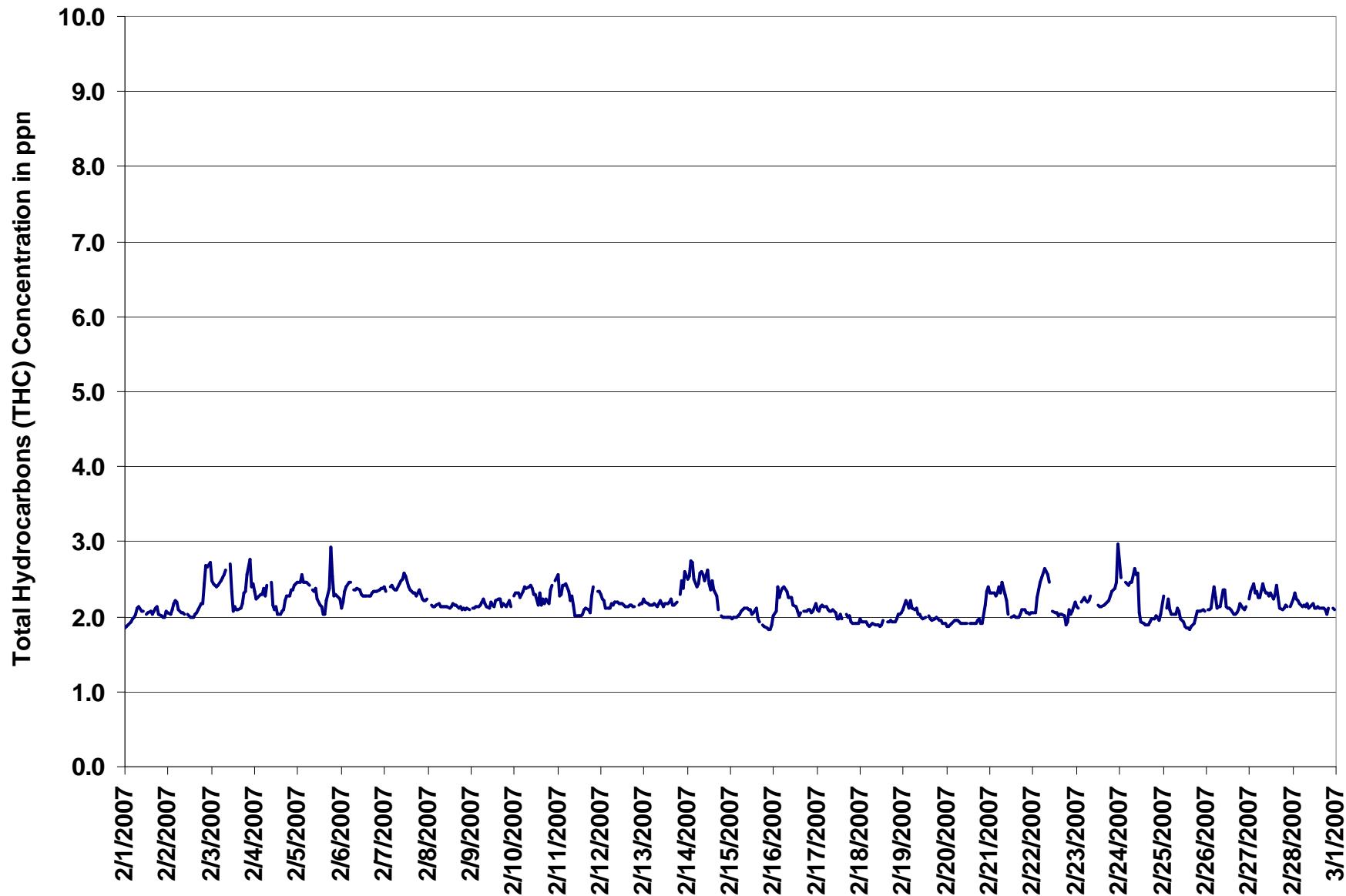


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

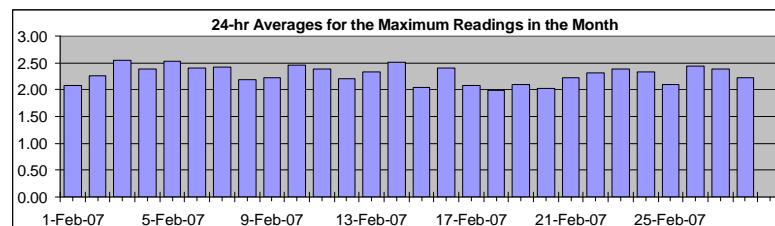
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Hydrocarbons (THC)

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

#### Summary

Maximum 1-hr Value:	6.1	ppm	16-Feb	2:00 3:00
Maximum 24-hr Value:	2.6	ppm	3-Feb	



AIC Time:	31 hrs							Operational Time:							639 hrs								
	Calibration Time: 2 hrs							AMD Operational Uptime: 100.0%															
Percentile	99	95	75	50	25	5	1	Average			Median												
	3.1	2.7	2.4	2.2	2.1	1.9	1.9	2.3	ppm			2.2	ppm			2.3				2.4			

#### Status Flag Characters

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

#### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Feb-07	1.9	1.9	1.9	2.0	2.0	2.0	2.2	2.2	2.2	2.1	2.1	A	2.1	2.1	2.1	2.1	2.3	2.3	2.1	2.0	2.0	2.0	2.0	2.1	2.09	2.29
2-Feb-07	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.1	2.1	2.1	A	2.1	2.0	2.1	2.1	2.1	2.2	2.3	2.3	2.6	2.9	2.8	2.8	2.8	2.26	2.92
3-Feb-07	2.8	2.5	2.5	2.4	3.0	2.8	2.6	2.7	2.7	A	2.8	2.9	2.2	2.2	2.2	2.2	2.2	2.3	2.5	2.4	3.1	3.0	2.5	2.5	2.55	3.10
4-Feb-07	2.6	2.3	2.3	2.4	2.4	2.5	2.5	2.5	2.5	A	2.8	2.3	2.3	2.4	2.1	2.1	2.1	2.2	2.3	2.4	2.3	2.5	2.5	2.38	2.77	
5-Feb-07	2.5	2.6	2.7	2.5	2.7	2.7	2.6	A	2.5	2.4	2.4	2.3	2.4	2.3	2.1	2.1	2.5	2.6	3.7	3.1	2.4	2.4	2.3	2.3	2.53	3.72
6-Feb-07	2.2	2.3	2.4	2.5	2.6	2.6	A	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.40	2.65
7-Feb-07	2.4	2.4	A	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.6	2.5	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.42	2.64
8-Feb-07	2.3	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.19	2.30
9-Feb-07	A	2.2	2.1	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.3	2.2	2.2	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.4	2.3	A	2.23	2.42
10-Feb-07	2.3	2.4	2.4	2.3	2.4	2.6	2.7	2.7	2.7	2.5	2.4	2.4	2.3	2.5	2.3	2.5	2.2	2.2	2.3	2.2	2.5	2.7	A	2.6	2.46	
11-Feb-07	2.9	2.6	2.4	2.7	2.8	2.6	2.3	2.6	2.3	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.4	2.4	2.4	2.4	2.4	2.38	2.93
12-Feb-07	2.4	2.3	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.20	2.36
13-Feb-07	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.4	2.5	2.2	2.3	2.4	2.5	2.8	2.5	2.7	2.7	2.33	2.78
14-Feb-07	2.6	2.7	3.1	3.0	2.6	2.5	2.6	2.6	2.6	2.6	2.8	2.8	2.5	2.6	2.5	2.3	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.50	3.09
15-Feb-07	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	A	1.9	1.9	1.9	1.8	1.9	2.0	2.04	2.34	
16-Feb-07	2.1	2.1	6.1	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.2	2.2	2.1	2.1	2.1	2.1	A	2.1	2.1	2.2	2.2	2.2	2.2	2.4	2.41	6.14
17-Feb-07	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	A	2.1	2.1	2.1	2.0	2.0	1.9	2.0	2.08	2.18	
18-Feb-07	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	1.98	2.18	
19-Feb-07	2.2	2.3	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.2	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.10	2.33	
20-Feb-07	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.0	2.3	2.4	2.02	2.44	
21-Feb-07	2.4	2.3	2.4	2.3	2.4	2.4	2.6	2.3	2.3	2.1	A	2.1	2.0	2.0	2.0	2.1	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.22	2.60
22-Feb-07	2.1	2.1	2.5	2.6	2.5	2.9	2.9	2.7	2.7	2.6	A	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.3	2.2	2.1	2.4	2.32	2.92
23-Feb-07	2.5	2.3	A	2.3	2.3	2.3	2.4	2.4	2.4	C	C	A	2.2	2.2	2.2	2.2	2.2	2.4	2.4	2.5	2.5	2.6	2.6	3.3	2.38	3.30
24-Feb-07	3.0	2.7	A	2.5	2.5	2.5	2.5	2.7	2.8	2.7	2.8	2.4	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.32	3.01
25-Feb-07	2.7	A	2.3	2.4	2.2	2.1	2.1	2.3	2.2	2.0	2.0	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.69
26-Feb-07	A	2.1	2.1	2.2	3.7	3.7	2.2	2.3	2.2	3.3	3.1	2.8	2.2	2.2	2.2	2.1	2.0	2.1	2.2	2.2	2.2	2.2	2.3	A	2.43	3.68
27-Feb-07	2.3	2.4	2.6	2.7	2.5	2.4	2.4	2.6	2.4	2.4	2.3	2.3	2.4	2.3	2.5	2.6	2.4	2.2	2.1	2.2	2.3	2.3	A	2.2	2.39	2.67
28-Feb-07	2.5	2.5	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.0	2.2	2.2	2.1	A	2.23	2.52

Hourly Avg 2.35 2.27 2.45 2.34 2.39 2.33 2.34 2.34 2.35 2.31 2.27 2.20 2.17 2.19 2.17 2.18 2.19 2.25 2.20 2.25 2.29 2.24 2.33

Hourly Max 3.01 2.68 6.14 3.04 3.67 3.68 2.92 2.72 2.81 3.33 3.13 2.85 2.75 2.65 2.63 2.56 2.49 2.59 3.72 3.15 3.10 3.03 2.82 3.30

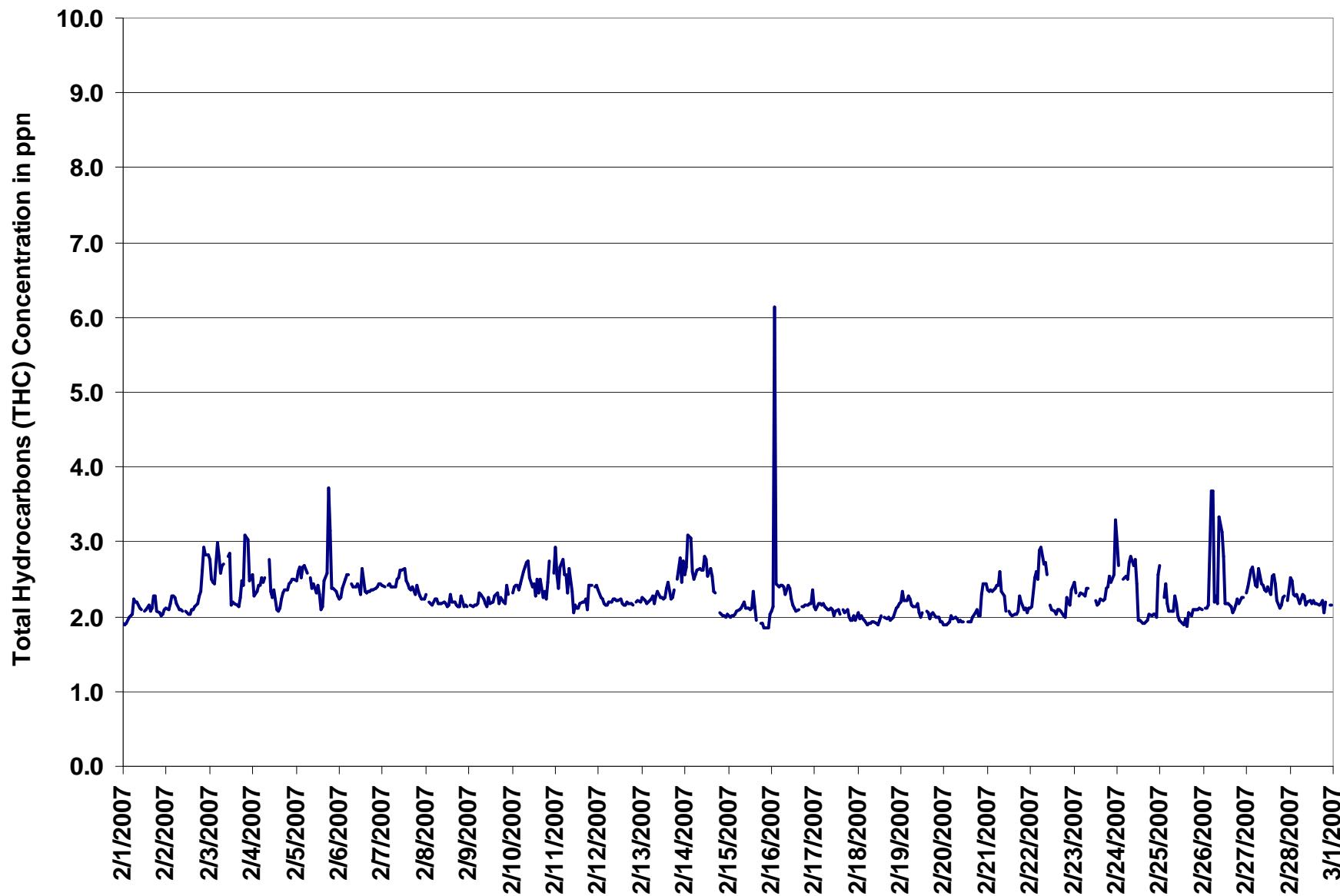
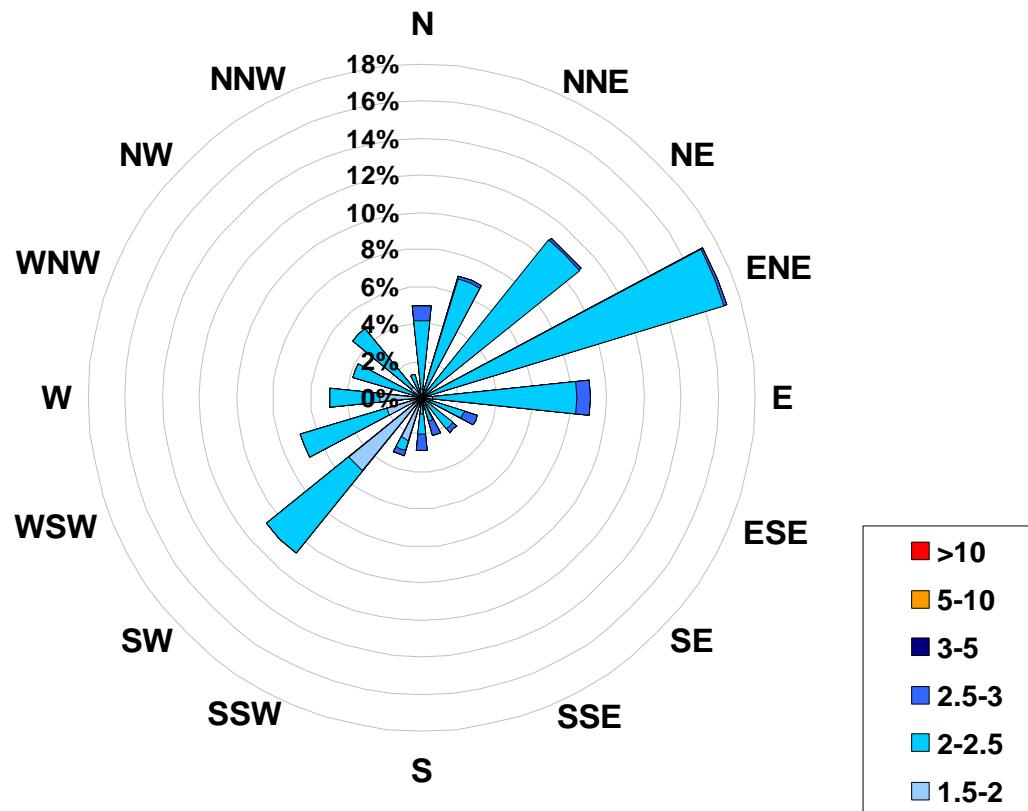


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms:	0%
--------	----

Frequency Distribution of THC in ppm			Frequency (hrs)
Range		Frequency (hrs)	
1.5	<	2	111
2	to	2.5	495
2.5	to	3	33
3	to	5	0
5	to	10	0
>	10		0
Total Non-Zero Values			639



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: February 1, 2007 to March 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:	17.3 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	5.7 $\mu\text{g}/\text{m}^3$
23-Feb	23:00 0:00

AIC Time:	0 hrs	Operational Time:	667 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	10.4	7.2	4.0	2.2	0.7	0.0	0.0	2.7	2 $\mu\text{g}/\text{m}^3$
									2.1 $\mu\text{g}/\text{m}^3$

### Day Mountain Standard Time

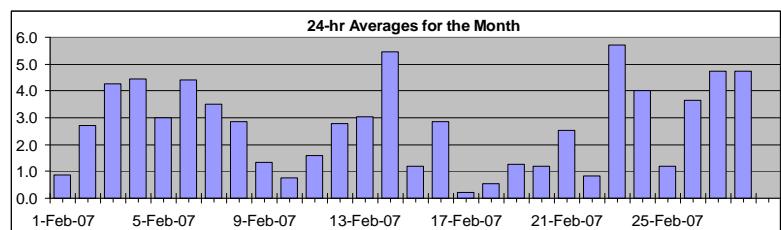
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	24-hour Average	Daily Maximum
1-Feb-07	1	1	0	2	2	3	4	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	3.5		
2-Feb-07	0	1	3	2	3	2	3	1	3	1	1	0	0	1	1	1	2	2	2	4	6	8	11	9					2.7	10.6			
3-Feb-07	4	5	4	5	4	4	3	3	6	5	6	2	1	1	2	2	2	4	6	6	8	5	6	5					4.3	8.0			
4-Feb-07	2	0	7	3	1	3	4	8	4	5	4	3	5	4	4	5	5	6	7	5	4	5	6	4					4.4	8.4			
5-Feb-07	4	3	2	2	1	2	2	1	1	1	3	1	1	1	2	3	3	4	6	6	4	6	8	6					3.0	7.9			
6-Feb-07	6	5	7	5	5	5	4	4	4	3	3	2	2	2	3	6	4	4	5	5	5	6	5	4	5					4.4	7.2		
7-Feb-07	4	3	4	4	5	2	4	4	4	4	4	3	4	4	4	3	3	3	3	4	2	3	3	3	4					3.5	4.5		
8-Feb-07	3	3	3	2	3	3	3	4	3	3	4	3	3	3	3	3	3	3	3	3	4	2	3	2	2	1				2.9	4.2		
9-Feb-07	1	1	1	2	1	2	1	2	2	1	1	3	1	2	1	2	1	1	0	1	0	2	0	1					1.3	2.7			
10-Feb-07	0	1	0	0	0	1	0	1	2	2	0	2	0	0	0	0	0	0	0	0	1	0	1	3	1	1			0.8	3.2			
11-Feb-07	2	0	2	0	2	3	1	2	2	2	1	1	0	0	0	1	1	2	2	2	1	2	2	3					1.6	2.8			
12-Feb-07	3	3	3	3	2	3	3	4	4	4	4	3	4	2	2	3	3	3	3	2	2	2	2	3	3			2.8	4.0				
13-Feb-07	2	2	3	2	3	2	2	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	4	4			3.0	3.9				
14-Feb-07	7	5	9	8	9	6	5	9	12	17	15	5	2	0	2	1	10	2	0	1	1	1	1	2	3			5.4	16.6				
15-Feb-07	3	1	1	2	2	3	3	2	3	2	1	1	0	0	0	D	0	0	D	0	0	0	0	0	0			1.2	3.4				
16-Feb-07	0	1	3	5	3	5	4	6	6	5	5	4	2	1	1	3	1	3	2	2	1	1	2	1				2.9	6.0				
17-Feb-07	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0			0.2	1.3					
18-Feb-07	0	0	0	0	0	0	0	0	1	1	1	2	1	1	0	0	0	0	0	0	0	0	1	1	2		0.6	2.3					
19-Feb-07	5	2	2	1	8	7	2	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0		1.3	8.4					
20-Feb-07	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	4	4	1	0	1	4	5	6			1.2	5.6					
21-Feb-07	5	7	5	5	6	6	4	5	4	2	0	0	0	1	0	0	1	2	3	2	1	0	1	0			2.5	6.6					
22-Feb-07	1	2	2	1	2	2	2	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0		0.8	2.3					
23-Feb-07	1	1	1	1	1	2	2	3	0	2	C	C	C	10	10	9	7	8	7	10	9	9	9	17			5.7	17.3					
24-Feb-07	11	11	7	6	7	7	8	8	9	8	8	1	0	0	0	0	0	1	1	1	1	2	0	0			4.0	10.9					
25-Feb-07	1	0	1	0	0	1	0	1	1	1	0	0	0	0	1	1	2	2	2	3	2	2	4			1.2	3.5						
26-Feb-07	4	5	5	6	4	4	3	4	4	4	3	4	2	3	3	3	3	4	4	4	4	3	2	3			3.6	5.6					
27-Feb-07	3	3	3	4	3	4	3	5	4	5	6	4	5	5	5	5	6	7	6	7	6	5	4	6			4.7	6.8					
28-Feb-07	6	5	4	5	5	5	4	4	4	5	5	4	4	3	4	4	4	5	4	4	6	6	7	7			4.7	7.1					

Hourly Avg 2.9 2.6 3.0 2.7 3.0 3.0 2.7 3.2 3.2 3.3 3.0 2.0 1.6 1.8 2.1 2.1 2.5 2.7 2.6 2.5 2.6 2.6 2.9 3.1 3.5

Hourly Max 10.9 10.6 9.1 7.5 8.7 7.2 8.2 9.4 12.1 16.6 14.7 4.6 5.4 10.2 9.9 9.3 10.1 8.2 7.2 10.4 8.6 9.1 10.6 17.3

### 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

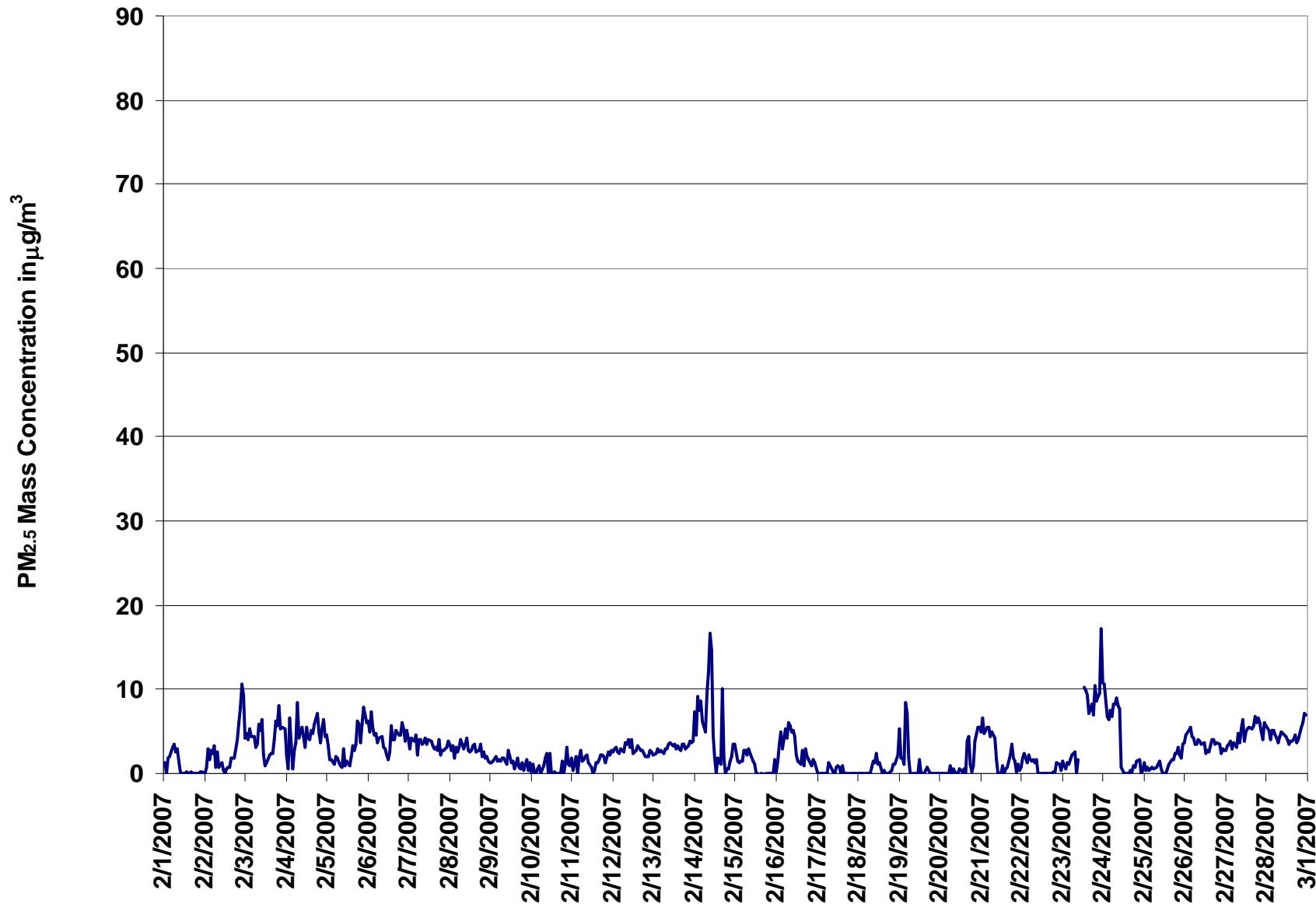


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

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

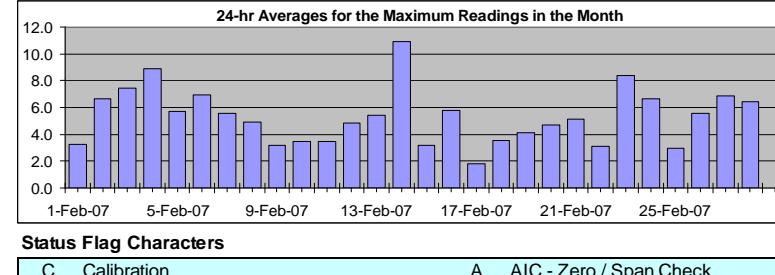
#### Summary

Maximum 1-hr Average:	41.9	µg/m <sup>3</sup>	14-Feb	16:00	17:00
Maximum 24-hr Value:	10.9	µg/m <sup>3</sup>	14-Feb		

AIC Time:	0 hrs	Operational Time:	667 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	99.7%
Percentile	99	95	75
	19.6	11.4	6.5
	50	25	5
	3.1	1.1	0.3
	Average / Median	5.3	5 µg/m <sup>3</sup>
	Geomean	4.9	4.9 µg/m <sup>3</sup>

#### 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-Feb-07	4 1:00	3 2:00	3 3:00	6 4:00	5 5:00	6 6:00	7 7:00	5 8:00	5 9:00	4 10:00	3 11:00	2 12:00	4 13:00	2 14:00	3 15:00	2 16:00	3 17:00	2 18:00	3 19:00	1 20:00	1 21:00	1 22:00	3 23:00	2 0:00	3.3	6.7	
2-Feb-07	2 2:00	4 3:00	7 4:00	4 5:00	5 6:00	6 7:00	4 8:00	5 9:00	3 10:00	5 11:00	2 12:00	2 13:00	3 14:00	4 15:00	3 16:00	4 17:00	4 18:00	4 19:00	10 20:00	8 21:00	23 22:00	25 21:00	18 20:00	6.6	25.4		
3-Feb-07	8 2:00	6 3:00	5 4:00	8 5:00	6 6:00	7 7:00	7 8:00	9 9:00	7 10:00	9 11:00	12 12:00	3 13:00	3 14:00	4 15:00	4 16:00	5 17:00	6 18:00	11 19:00	8 20:00	16 21:00	9 22:00	10 23:00	9 0:00	7.4	15.8		
4-Feb-07	6 2:00	4 3:00	24 4:00	18 5:00	5 6:00	7 7:00	18 8:00	7 9:00	12 10:00	9 11:00	7 12:00	8 13:00	9 14:00	7 15:00	8 16:00	7 17:00	9 18:00	9 19:00	7 20:00	6 21:00	7 22:00	8 23:00	8 0:00	8.9	23.7		
5-Feb-07	8 2:00	7 3:00	4 4:00	4 5:00	3 6:00	4 7:00	4 8:00	3 9:00	3 10:00	5 11:00	5 12:00	5 13:00	3 14:00	4 15:00	7 16:00	5 17:00	7 18:00	10 19:00	11 20:00	6 21:00	10 22:00	10 23:00	8 0:00	5.7	10.5		
6-Feb-07	10 2:00	7 3:00	11 4:00	8 5:00	6 6:00	7 7:00	8 8:00	6 9:00	5 10:00	6 11:00	4 12:00	4 13:00	9 14:00	9 15:00	6 16:00	5 17:00	6 18:00	7 19:00	7 20:00	6 21:00	7 22:00	6 23:00	6 0:00	6.9	11.4		
7-Feb-07	5 2:00	5 3:00	6 4:00	5 5:00	7 6:00	4 7:00	6 8:00	5 9:00	7 10:00	7 11:00	6 12:00	6 13:00	5 14:00	5 15:00	5 16:00	6 17:00	6 18:00	5 19:00	5 20:00	5 21:00	5 22:00	5 23:00	6 0:00	5.6	7.5		
8-Feb-07	6 2:00	5 3:00	5 4:00	4 5:00	5 6:00	6 7:00	5 8:00	5 9:00	5 10:00	4 11:00	4 12:00	4 13:00	4 14:00	5 15:00	5 16:00	5 17:00	5 18:00	5 19:00	5 20:00	4 21:00	4 22:00	4 23:00	3 0:00	4.9	6.2		
9-Feb-07	3 2:00	3 3:00	3 4:00	3 5:00	4 6:00	3 7:00	4 8:00	3 9:00	2 10:00	5 11:00	3 12:00	3 13:00	3 14:00	2 15:00	3 16:00	2 17:00	3 18:00	2 19:00	2 20:00	4 21:00	2 22:00	3 23:00	2 0:00	3.2	4.7		
10-Feb-07	2 2:00	3 3:00	3 4:00	1 5:00	2 6:00	2 7:00	2 8:00	2 9:00	2 10:00	5 11:00	6 12:00	3 13:00	3 14:00	4 15:00	4 16:00	4 17:00	4 18:00	4 19:00	3 20:00	6 21:00	7 22:00	3 23:00	3 0:00	3.5	7.1		
11-Feb-07	4 2:00	2 3:00	4 4:00	2 5:00	5 6:00	3 7:00	4 8:00	4 9:00	3 10:00	3 11:00	3 12:00	2 13:00	2 14:00	3 15:00	4 16:00	4 17:00	4 18:00	4 19:00	3 20:00	4 21:00	4 22:00	5 23:00	4 0:00	3.5	4.9		
12-Feb-07	4 2:00	5 3:00	5 4:00	5 5:00	5 6:00	4 7:00	6 8:00	5 9:00	6 10:00	6 11:00	6 12:00	5 13:00	6 14:00	5 15:00	5 16:00	4 17:00	4 18:00	3 19:00	4 20:00	4 21:00	4 22:00	4 23:00	4 0:00	4.8	6.0		
13-Feb-07	4 2:00	5 3:00	6 4:00	4 5:00	6 6:00	4 7:00	5 8:00	7 9:00	6 10:00	6 11:00	6 12:00	6 13:00	6 14:00	7 15:00	6 16:00	5 17:00	6 18:00	5 19:00	6 20:00	5 21:00	6 22:00	6 23:00	5 0:00	5.4	6.9		
14-Feb-07	14 2:00	7 3:00	15 4:00	12 5:00	11 6:00	10 7:00	12 8:00	19 9:00	23 10:00	21 11:00	10 12:00	6 13:00	2 14:00	7 15:00	6 16:00	6 17:00	42 18:00	11 19:00	2 20:00	3 21:00	3 22:00	3 23:00	7 0:00	10.9	41.9		
15-Feb-07	6 2:00	3 3:00	4 4:00	3 5:00	6 6:00	8 7:00	5 8:00	4 9:00	4 10:00	4 11:00	1 12:00	2 13:00	1 14:00	0 15:00	0 16:00	D 17:00	0 18:00	0 19:00	0 20:00	0 21:00	1 22:00	1 23:00	1 0:00	3.2	8.0		
16-Feb-07	5 2:00	4 3:00	6 4:00	7 5:00	6 6:00	9 7:00	6 8:00	10 9:00	7 10:00	7 11:00	5 12:00	4 13:00	4 14:00	3 15:00	5 16:00	5 17:00	5 18:00	5 19:00	4 20:00	4 21:00	4 22:00	4 23:00	4 0:00	5.8	10.5		
17-Feb-07	3 2:00	0 3:00	1 4:00	1 5:00	1 6:00	0 7:00	5 8:00	3 9:00	2 10:00	3 11:00	3 12:00	3 13:00	4 14:00	2 15:00	2 16:00	2 17:00	2 18:00	2 19:00	2 20:00	2 21:00	1 22:00	1 23:00	1 0:00	1.8	5.4		
18-Feb-07	2 2:00	2 3:00	1 4:00	0 5:00	1 6:00	2 7:00	3 8:00	4 9:00	5 10:00	7 11:00	2 12:00	1 13:00	7 14:00	7 15:00	5 16:00	4 17:00	4 18:00	3 19:00	4 20:00	2 21:00	2 22:00	4 23:00	5 0:00	3.5	7.9		
19-Feb-07	18 2:00	4 3:00	3 4:00	12 5:00	12 6:00	0 7:00	6 8:00	1 9:00	1 10:00	2 11:00	2 12:00	1 13:00	7 14:00	3 15:00	3 16:00	3 17:00	3 18:00	3 19:00	3 20:00	3 21:00	1 22:00	1 23:00	1 0:00	4.1	18.2		
20-Feb-07	2 2:00	2 3:00	3 4:00	2 5:00	2 6:00	1 7:00	2 8:00	2 9:00	2 10:00	2 11:00	3 12:00	3 13:00	3 14:00	2 15:00	2 16:00	17 17:00	8 18:00	6 19:00	5 20:00	3 21:00	3 22:00	3 23:00	2 0:00	4.7	16.9		
21-Feb-07	8 2:00	9 3:00	6 4:00	7 5:00	7 6:00	9 7:00	6 8:00	5 9:00	0 10:00	3 11:00	3 12:00	3 13:00	5 14:00	3 15:00	4 16:00	4 17:00	5 18:00	9 19:00	6 20:00	4 21:00	2 22:00	3 23:00	2 0:00	5.1	9.3		
22-Feb-07	3 2:00	4 3:00	5 4:00	4 5:00	4 6:00	4 7:00	4 8:00	5 9:00	3 10:00	2 11:00	2 12:00	3 13:00	3 14:00	2 15:00	2 16:00	3 17:00	1 18:00	1 19:00	1 20:00	1 21:00	1 22:00	1 23:00	1 0:00	3.1	10.2		
23-Feb-07	4 2:00	2 3:00	5 4:00	3 5:00	4 6:00	2 7:00	5 8:00	C 9:00	C 10:00	C 11:00	C 12:00	C 13:00	12 14:00	13 15:00	11 16:00	10 17:00	10 18:00	10 19:00	10 20:00	13 21:00	12 22:00	11 23:00	26 0:00	8.4	25.6		
24-Feb-07	16 2:00	17 3:00	9 4:00	8 5:00	10 6:00	11 7:00	10 8:00	11 9:00	11 10:00	12 11:00	11 12:00	5 13:00	1 14:00	2 15:00	1 16:00	1 17:00	2 18:00	2 19:00	2 20:00	2 21:00	2 22:00	3 23:00	1 0:00	6.6	16.8		
25-Feb-07	3 2:00	2 3:00	4 4:00	2 5:00	2 6:00	2 7:00	3 8:00	3 9:00	2 10:00	1 11:00	2 12:00	1 13:00	2 14:00	2 15:00	2 16:00	2 17:00	2 18:00	4 19:00	4 20:00	4 21:00	4 22:00	4 23:00	5 0:00	3.0	5.2		
26-Feb-07	5 2:00	7 3:00	7 4:00	6 5:00	6 6:00	5 7:00	7 8:00	7 9:00	6 10:00	6 11:00	7 12:00	7 13:00	7 14:00	7 15:00	6 16:00	7 17:00	6 18:00	5 19:00	5 20:00	5 21:00	5 22:00	5 23:00	6 0:00	5.6	7.2		
27-Feb-07	5 2:00	5 3:00	5 4:00	7 5:00	6 6:00	5 7:00	8 8:00	7 9:00	6 10:00	7 11:00	7 12:00	7 13:00	8 14:00	8 15:00	8 16:00	8 17:00	8 18:00	7 19:00	8 20:00	7 21:00	8 22:00	7 23:00	6 0:00	6.9	9.5		
28-Feb-07	7 2:00	7 3:00	6 4:00	7 5:00	6 6:00	6 7:00	6 8:00	5 9:00	6 10:00	6 11:00	6 12:00	6 13:00	5 14:00	6 15:00	6 16:00	6 17:00	6 18:00	5 19:00	6 20:00	6 21:00	8 22:00	8 23:00	8 0:00	6.5	9.4		



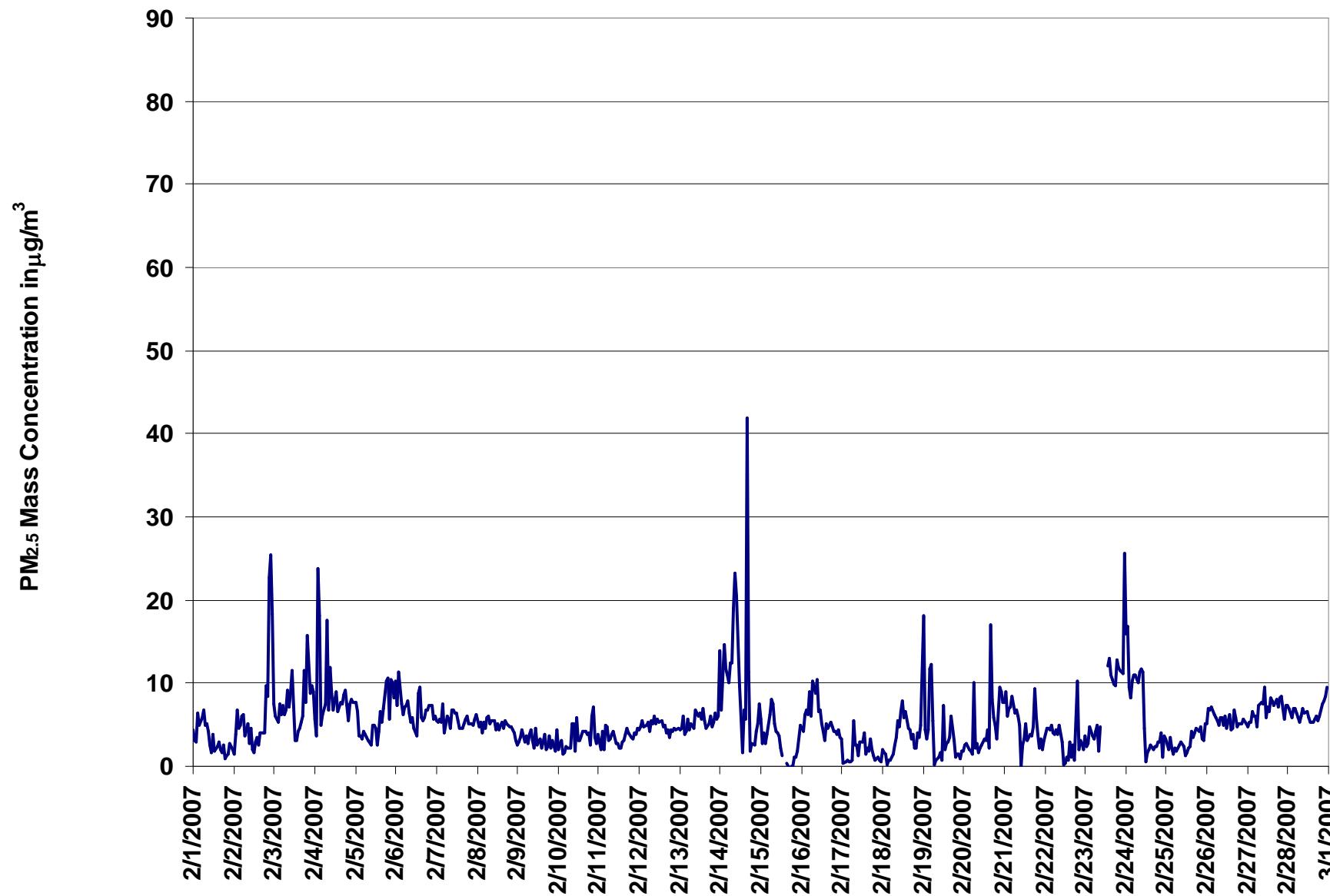
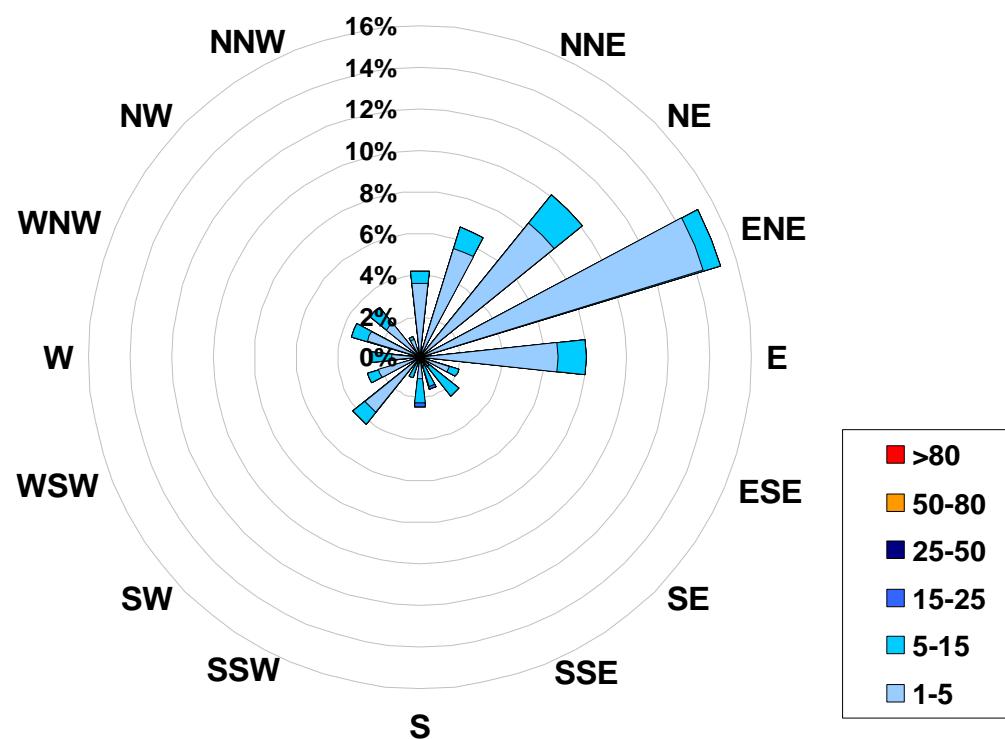


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



**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 February 2007**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$			Frequency (hrs)
Range			
1.0	<	5	563
5	to	15	102
15	to	25	2
25	to	50	0
50	to	80	0
>	80		0
Total Non-Zero Values			667



## PAS - Crescent Heights - Relative Humidity Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

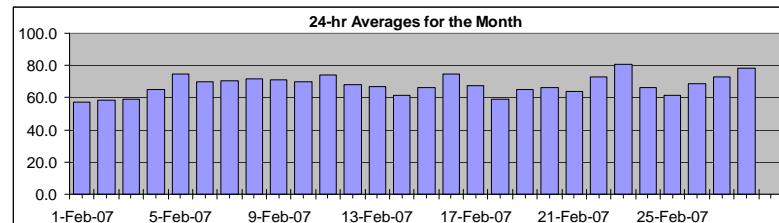
### Summary

Maximum 1-hr Average:	89.9	%	23-Feb	7:00 8:00
Maximum 24-hr Value:	80.8	%	23-Feb	

AIC Time:	0 hrs	Operational Time:	672 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	88.5	81.1	74.4
	50	68.9	62.7
	25	65	65
	5	65	65
	1	78	77
		Average	67.9 %
		Median	68.9 %
			38.5

### HOURLY AVERAGE TABLE

### Relative Humidity (RH)



### 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	24-hour Average	Daily Maximum
1-Feb-07	82	75	57	54	57	62	62	63	65	56	54	49	46	42	41	42	43	49	56	61	64	65	66	66	57.4	82.0
2-Feb-07	65	66	69	71	71	67	63	61	61	54	49	46	41	40	43	44	49	53	59	61	63	69	71	70	58.6	70.9
3-Feb-07	68	67	67	68	69	72	73	72	67	65	59	46	38	38	39	39	38	49	55	61	65	66	67	68	59.0	73.0
4-Feb-07	67	66	65	65	65	65	67	65	65	62	62	60	61	58	60	61	62	63	69	71	71	73	73	73	65.0	72.7
5-Feb-07	74	75	76	76	77	79	78	77	77	75	69	66	63	63	63	66	71	77	81	81	82	82	82	81	74.6	81.9
6-Feb-07	78	78	73	72	69	68	69	71	71	70	68	65	66	65	67	68	68	69	71	71	71	71	70	70	69.9	78.4
7-Feb-07	70	71	71	71	73	73	72	72	73	71	70	69	67	67	67	68	68	69	71	71	71	71	71	71	70.5	73.0
8-Feb-07	71	72	72	72	72	73	73	73	72	71	71	69	68	68	70	71	71	73	73	74	74	74	74	73	71.7	73.9
9-Feb-07	73	72	72	72	72	72	71	72	71	69	66	64	65	65	65	69	73	75	75	75	75	75	75	75	71.1	75.4
10-Feb-07	74	74	74	75	76	75	75	76	74	69	64	61	58	55	59	56	63	71	74	76	78	76	75	76	70.1	77.6
11-Feb-07	77	77	77	77	78	77	76	76	75	73	70	68	67	69	71	74	74	75	76	76	76	75	75	75	74.3	77.6
12-Feb-07	74	74	73	73	73	73	72	71	70	66	64	62	61	60	60	61	65	68	68	69	68	67	68	68	67.8	74.2
13-Feb-07	67	68	69	69	70	70	70	70	69	67	64	61	59	59	61	62	64	67	69	72	72	70	69	68	67.0	72.5
14-Feb-07	66	65	64	63	63	63	62	61	62	64	66	66	64	55	50	50	55	59	61	62	63	63	64	65	61.5	66.4
15-Feb-07	66	66	68	70	71	71	73	73	72	71	69	66	64	61	62	62	62	62	67	70	62	60	64	66	66.5	73.2
16-Feb-07	68	71	77	78	78	81	79	80	81	81	74	71	68	65	66	68	68	68	67	73	72	77	78	81	74.5	86.8
17-Feb-07	83	80	78	78	75	73	70	66	63	60	57	59	62	62	59	62	65	68	70	67	68	69	67	62	67.6	83.0
18-Feb-07	59	59	60	59	52	50	52	53	51	55	60	60	57	63	62	61	62	59	60	61	62	65	70	72	59.3	72.2
19-Feb-07	74	80	86	87	88	89	89	78	67	65	59	46	46	49	45	38	46	56	61	61	60	62	62	64	64.8	88.6
20-Feb-07	63	65	66	63	66	68	68	66	63	60	52	51	53	54	56	50	56	87	89	79	76	80	79	79	66.2	88.5
21-Feb-07	78	80	80	81	81	84	84	83	78	68	59	52	46	42	37	34	35	45	54	61	64	66	70	70	63.6	84.3
22-Feb-07	70	72	76	78	79	79	80	80	78	76	73	66	64	67	67	69	73	67	69	71	73	75	75	72.7	80.3	
23-Feb-07	78	81	88	89	89	90	90	90	88	86	83	79	71	70	70	69	70	71	76	80	83	84	83	81	80.8	89.9
24-Feb-07	80	78	77	76	76	75	77	77	78	80	71	55	53	51	48	48	48	53	60	61	63	65	63	63	66.3	80.5
25-Feb-07	68	67	63	67	65	66	68	67	63	60	54	47	45	48	51	52	57	64	70	72	68	64	60	63	61.2	71.5
26-Feb-07	66	70	72	73	73	73	72	67	62	63	61	61	60	59	63	69	73	73	73	73	74	74	75	75	68.9	74.6
27-Feb-07	74	74	74	74	74	75	75	75	73	67	60	64	63	66	68	71	74	76	77	78	79	79	80	72.8	80.1	
28-Feb-07	80	80	80	80	80	82	81	81	81	79	78	77	77	76	75	75	76	77	76	77	78	78	75	78.2	81.8	

Hourly Avg 71.9 72.2 72.3 72.5 72.6 73.0 72.9 72.2 70.5 68.0 64.7 61.1 59.1 58.5 58.4 58.9 61.7 66.3 68.6 69.8 70.8 71.1 71.3 71.7

Hourly Max 83.0 80.6 87.9 88.9 89.2 89.6 89.9 89.9 87.9 85.9 83.5 79.1 76.5 75.8 75.2 75.3 76.2 87.0 88.5 81.0 82.6 84.3 83.4 86.8

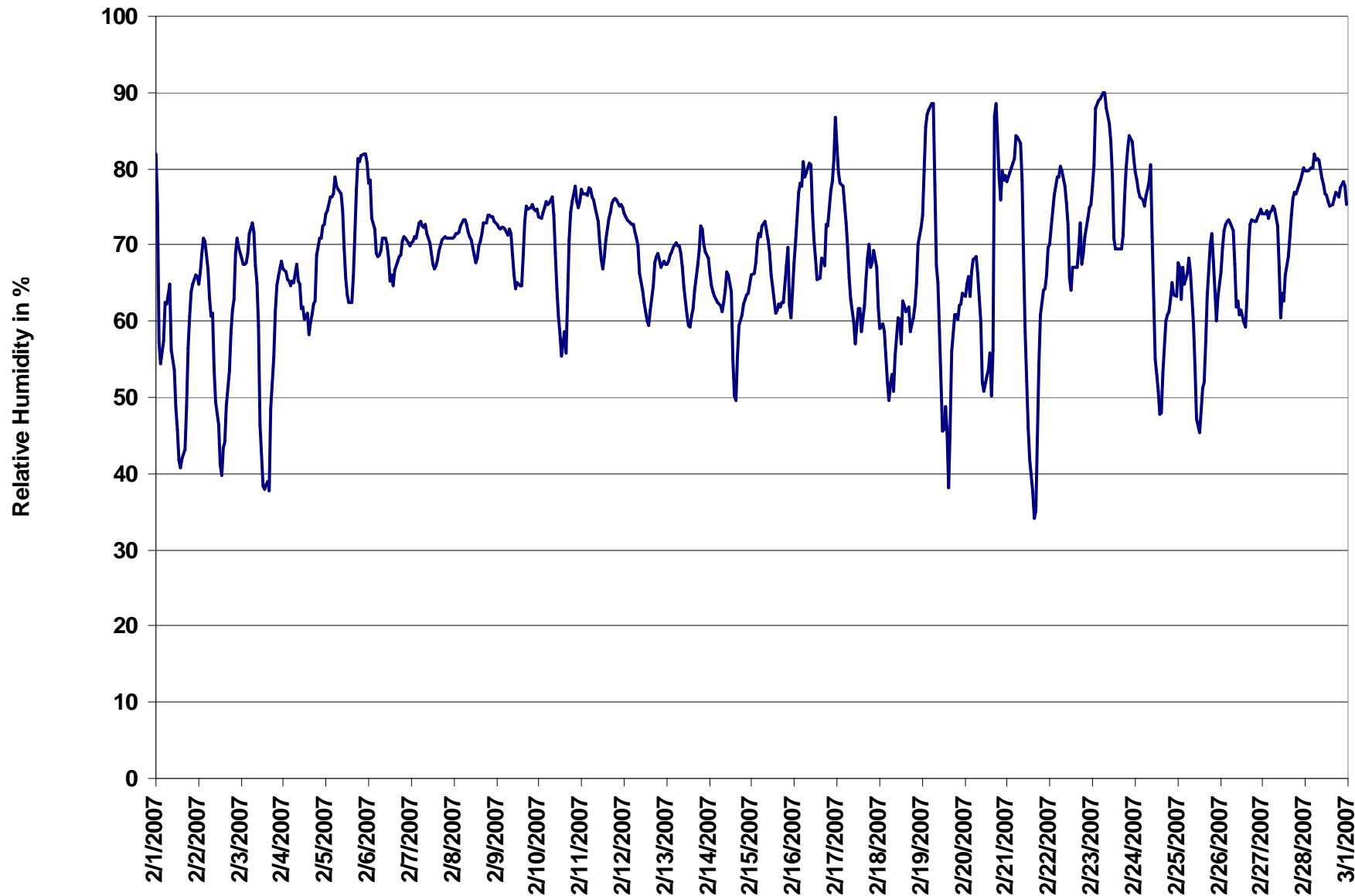


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



## PAS - Crescent Heights - Temperature Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

### Summary

Maximum 1-hr Average:	8.7	°C	20-Feb	15:00 16:00
Maximum 24-hr Value:	5.0	°C	18-Feb	

AIC Time:	0 hrs	Operational Time:	672 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	7.5	5.1	-1.0	-8.3	-14.6	-20.0	-28.5		

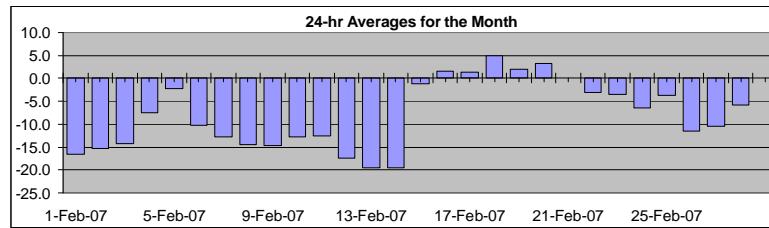
Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 24:00	23:00 0:00		
1-Feb-07	-7	-10	-10	-11	-14	-17	-19	-20	-21	-19	-18	-17	-16	-15	-15	-14	-15	-15	-17	-19	-20	-21	-21	-21	-21	-16.6	-6.9
2-Feb-07	-19	-20	-18	-18	-18	-18	-17	-16	-15	-14	-13	-12	-11	-10	-10	-11	-12	-13	-15	-15	-16	-18	-19	-19	-15.3	-10.2	
3-Feb-07	-20	-19	-19	-18	-18	-19	-19	-19	-17	-15	-12	-9	-8	-7	-7	-7	-6	-10	-11	-14	-16	-17	-17	-18	-14.3	-6.5	
4-Feb-07	-18	-19	-18	-17	-16	-15	-14	-14	-12	-9	-4	-3	-1	0	1	1	1	-1	-2	-3	-4	-4	-4	-5	-7.6	1.4	
5-Feb-07	-5	-5	-5	-5	-6	-6	-6	-6	-6	-5	-2	0	2	3	4	3	2	0	-1	-1	-2	-2	-2	-1	-2.2	3.9	
6-Feb-07	1	-3	-7	-10	-11	-11	-12	-12	-12	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-12	-12	-12	-12	-10.3	0.8	
7-Feb-07	-12	-12	-12	-12	-12	-12	-13	-13	-13	-13	-12	-12	-11	-11	-11	-11	-12	-13	-14	-14	-15	-16	-15	-17	-12.9	-10.9	
8-Feb-07	-15	-15	-15	-15	-15	-15	-15	-15	-16	-15	-14	-14	-13	-13	-13	-13	-13	-13	-14	-14	-14	-15	-15	-15	-14.5	-12.7	
9-Feb-07	-16	-16	-16	-15	-15	-15	-16	-16	-16	-16	-15	-14	-13	-13	-13	-13	-12	-13	-13	-14	-14	-15	-15	-15	-14.6	-12.3	
10-Feb-07	-15	-14	-14	-15	-15	-15	-15	-16	-15	-13	-13	-10	-9	-7	-7	-6	-9	-12	-13	-14	-15	-15	-14	-14	-12.8	-6.4	
11-Feb-07	-15	-14	-14	-14	-15	-14	-14	-13	-12	-11	-11	-10	-10	-10	-10	-11	-11	-11	-11	-12	-12	-12	-12	-12	-10.3	0.8	
12-Feb-07	-15	-16	-16	-16	-17	-17	-17	-18	-18	-18	-17	-16	-16	-16	-15	-16	-17	-18	-19	-20	-20	-21	-21	-21	-17.5	-15.3	
13-Feb-07	-21	-21	-21	-21	-20	-20	-20	-20	-20	-19	-18	-17	-16	-16	-17	-17	-17	-18	-18	-19	-21	-23	-24	-26	-19.5	-16.2	
14-Feb-07	-27	-29	-29	-30	-30	-30	-30	-31	-29	-24	-22	-21	-17	-14	-13	-12	-12	-12	-10	-11	-10	-10	-9	-8	-19.5	-8.2	
15-Feb-07	-6	-5	-5	-6	-7	-7	-9	-9	-8	-7	-5	-2	1	3	4	4	5	5	4	3	6	6	5	-1.1	5.7		
16-Feb-07	3	2	-1	-1	-2	-2	-1	-1	0	1	2	4	4	5	4	4	4	4	3	3	2	2	1	0	1.6	4.9	
17-Feb-07	-1	-1	-2	-4	-4	-5	-5	-4	-3	-1	2	3	4	6	6	6	5	4	4	4	4	4	4	4	1.3	6.4	
18-Feb-07	5	5	4	4	5	6	5	5	6	6	6	7	9	7	7	6	6	5	4	4	3	2	1	1	5.0	8.7	
19-Feb-07	1	-1	-1	-1	-1	-1	-3	-3	-1	0	3	5	6	5	6	7	6	3	2	2	2	2	2	1.9	7.2		
20-Feb-07	3	3	2	3	2	2	1	2	4	5	8	8	8	9	8	9	6	1	1	2	2	0	-3	3.3	8.7		
21-Feb-07	-4	-4	-3	-3	-3	-4	-3	-4	-3	0	2	3	5	5	6	7	6	4	2	0	-1	-1	-2	0.1	6.5		
22-Feb-07	-3	-4	-4	-5	-6	-7	-9	-10	-9	-7	-4	-2	-1	-2	-2	-1	-1	-1	1	1	1	1	1	-3.0	1.1		
23-Feb-07	1	1	0	-1	-1	-1	-1	-1	-2	-3	-3	-2	-2	-2	-2	-3	-3	-4	-6	-7	-8	-9	-10	-3.4	0.8		
24-Feb-07	-14	-15	-16	-17	-17	-17	-17	-17	-15	-12	-8	-3	1	2	4	4	5	3	0	-2	-4	-4	-5	-6.5	4.7		
25-Feb-07	-7	-7	-6	-8	-7	-7	-7	-6	-4	-3	0	3	4	4	3	3	1	-1	-4	-6	-7	-8	-10	-3.7	4.4		
26-Feb-07	-11	-12	-13	-14	-15	-15	-15	-16	-14	-12	-11	-10	-9	-7	-7	-7	-8	-10	-11	-11	-12	-13	-11.4	-6.5			
27-Feb-07	-13	-14	-15	-14	-14	-15	-15	-15	-15	-13	-10	-9	-7	-8	-8	-8	-7	-8	-8	-8	-8	-8	-8	-10.6	-7.4		
28-Feb-07	-8	-8	-7	-7	-7	-8	-7	-7	-7	-6	-5	-5	-4	-4	-3	-3	-4	-4	-5	-5	-6	-6	-6	-5.9	-3.4		

Hourly Avg -9.2 -9.7 -10.1 -10.4 -10.7 -10.9 -11.2 -11.2 -10.4 -8.9 -7.2 -5.8 -4.7 -4.2 -3.9 -3.9 -4.6 -5.9 -6.8 -7.4 -8.0 -8.3 -8.6 -9.0

Hourly Max 5.4 4.9 4.2 3.9 5.1 5.9 5.4 5.0 6.0 6.3 7.6 8.3 8.7 8.6 8.1 8.7 6.2 5.0 4.7 4.3 4.2 5.7 5.7 5.0

### 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

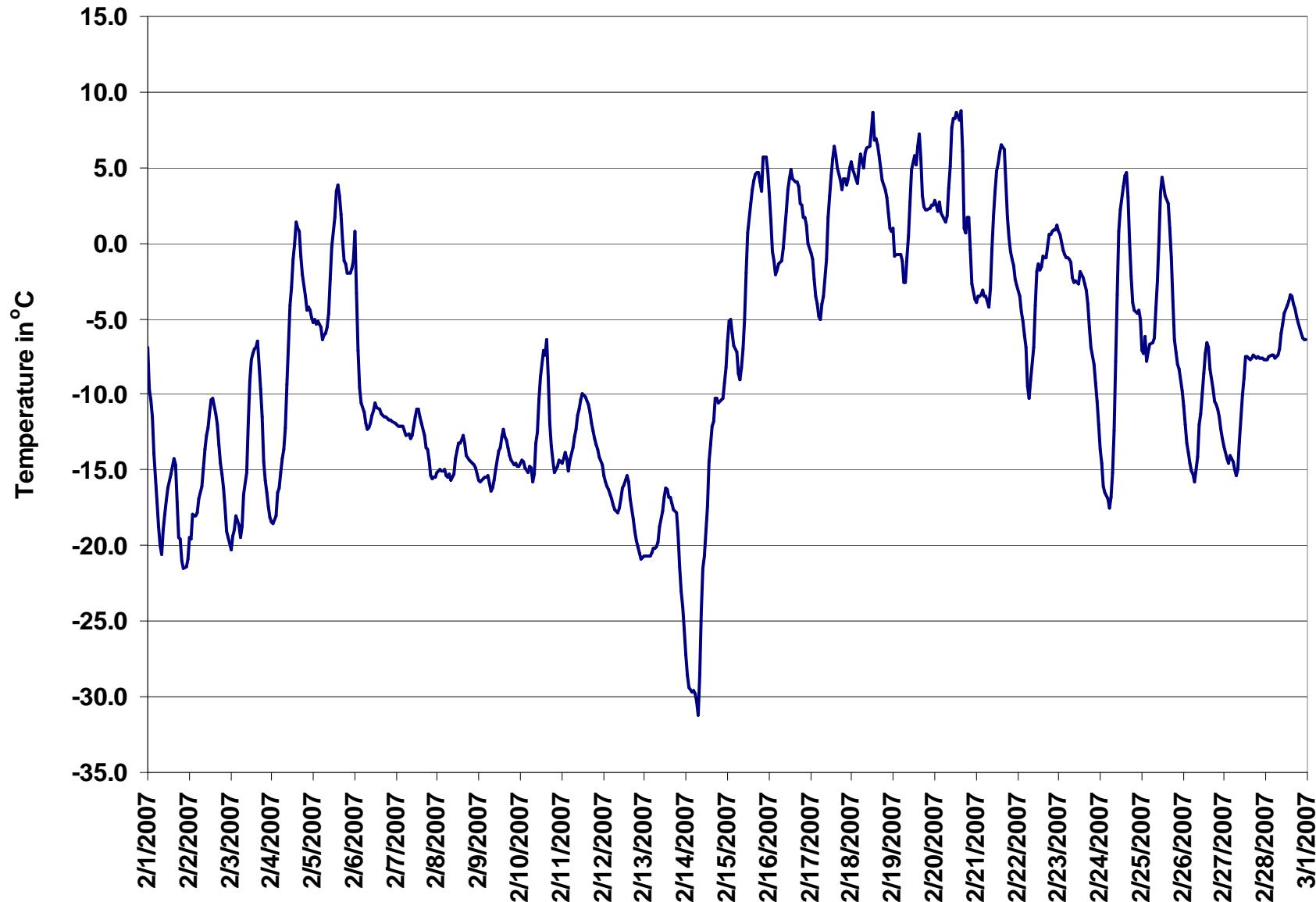


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



## PAS - Crescent Heights - Solar Radiation Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

### Summary

Maximum 1-hr Average:	569.4 W/m <sup>2</sup>	26-Feb 13:00 14:00
Maximum 24-hr Value:	146.6 W/m <sup>2</sup>	24-Feb

AIC Time:	0 hrs	Operational Time:	672 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	525.0	409.3	135.1	0.1	0.0	0.0	0.0	85.2 W/m <sup>2</sup>	0.1 W/m <sup>2</sup>

### 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	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00	52:00	53:00	54:00	55:00	56:00	57:00	58:00	59:00	60:00	61:00	62:00	63:00	64:00	65:00	66:00	67:00	68:00	69:00	70:00	71:00	72:00	73:00	74:00	75:00	76:00	77:00	78:00	79:00	80:00	81:00	82:00	83:00	84:00	85:00	86:00	87:00	88:00	89:00	90:00	91:00	92:00	93:00	94:00	95:00	96:00	97:00	98:00	99:00	100:00	101:00	102:00	103:00	104:00	105:00	106:00	107:00	108:00	109:00	110:00	111:00	112:00	113:00	114:00	115:00	116:00	117:00	118:00	119:00	120:00	121:00	122:00	123:00	124:00	125:00	126:00	127:00	128:00	129:00	130:00	131:00	132:00	133:00	134:00	135:00	136:00	137:00	138:00	139:00	140:00	141:00	142:00	143:00	144:00	145:00	146:00	147:00	148:00	149:00	150:00	151:00	152:00	153:00	154:00	155:00	156:00	157:00	158:00	159:00	160:00	161:00	162:00	163:00	164:00	165:00	166:00	167:00	168:00	169:00	170:00	171:00	172:00	173:00	174:00	175:00	176:00	177:00	178:00	179:00	180:00	181:00	182:00	183:00	184:00	185:00	186:00	187:00	188:00	189:00	190:00	191:00	192:00	193:00	194:00	195:00	196:00	197:00	198:00	199:00	200:00	201:00	202:00	203:00	204:00	205:00	206:00	207:00	208:00	209:00	210:00	211:00	212:00	213:00	214:00	215:00	216:00	217:00	218:00	219:00	220:00	221:00	222:00	223:00	224:00	225:00	226:00	227:00	228:00	229:00	230:00	231:00	232:00	233:00	234:00	235:00	236:00	237:00	238:00	239:00	240:00	241:00	242:00	243:00	244:00	245:00	246:00	247:00	248:00	249:00	250:00	251:00	252:00	253:00	254:00	255:00	256:00	257:00	258:00	259:00	260:00	261:00	262:00	263:00	264:00	265:00	266:00	267:00	268:00	269:00	270:00	271:00	272:00	273:00	274:00	275:00	276:00	277:00	278:00	279:00	280:00	281:00	282:00	283:00	284:00	285:00	286:00	287:00	288:00	289:00	290:00	291:00	292:00	293:00	294:00	295:00	296:00	297:00	298:00	299:00	300:00	301:00	302:00	303:00	304:00	305:00	306:00	307:00	308:00	309:00	310:00	311:00	312:00	313:00	314:00	315:00	316:00	317:00	318:00	319:00	320:00	321:00	322:00	323:00	324:00	325:00	326:00	327:00	328:00	329:00	330:00	331:00	332:00	333:00	334:00	335:00	336:00	337:00	338:00	339:00	340:00	341:00	342:00	343:00	344:00	345:00	346:00	347:00	348:00	349:00	350:00	351:00	352:00	353:00	354:00	355:00	356:00	357:00	358:00	359:00	360:00	361:00	362:00	363:00	364:00	365:00	366:00	367:00	368:00	369:00	370:00	371:00	372:00	373:00	374:00	375:00	376:00	377:00	378:00	379:00	380:00	381:00	382:00	383:00	384:00	385:00	386:00	387:00	388:00	389:00	390:00	391:00	392:00	393:00	394:00	395:00	396:00	397:00	398:00	399:00	400:00	401:00	402:00	403:00	404:00	405:00	406:00	407:00	408:00	409:00	410:00	411:00	412:00	413:00	414:00	415:00	416:00	417:00	418:00	419:00	420:00	421:00	422:00	423:00	424:00	425:00	426:00	427:00	428:00	429:00	430:00	431:00	432:00	433:00	434:00	435:00	436:00	437:00	438:00	439:00	440:00	441:00	442:00	443:00	444:00	445:00	446:00	447:00	448:00	449:00	450:00	451:00	452:00	453:00	454:00	455:00	456:00	457:00	458:00	459:00	460:00	461:00	462:00	463:00	464:00	465:00	466:00	467:00	468:00	469:00	470:00	471:00	472:00	473:00	474:00	475:00	476:00	477:00	478:00	479:00	480:00	481:00	482:00	483:00	484:00	485:00	486:00	487:00	488:00	489:00	490:00	491:00	492:00	493:00	494:00	495:00	496:00	497:00	498:00	499:00	500:00	501:00	502:00	503:00	504:00	505:00	506:00	507:00	508:00	509:00	510:00	511:00	512:00	513:00	514:00	515:00	516:00	517:00	518:00	519:00	520:00	521:00	522:00	523:00	524:00	525:00	526:00	527:00	528:00	529:00	530:00	531:00	532:00	533:00	534:00	535:00	536:00	537:00	538:00	539:00	540:00	541:00	542:00	543:00	544:00	545:00	546:00	547:00	548:00	549:00	550:00	551:00	552:00	553:00	554:00	555:00	556:00	557:00	558:00	559:00	560:00	561:00	562:00	563:00	564:00	565:00	566:00	567:00	568:00	569:00	570:00	571:00	572:00	573:00	574:00	575:00	576:00	577:00	578:00	579:00	580:00	581:00	582:00	583:00	584:00	585:00	586:00	587:00	588:00	589:00	590:00	591:00	592:00	593:00	594:00	595:00	596:00	597:00	598:00	599:00	600:00	601:00	602:00	603:00	604:00	605:00	606:00	607:00	608:00	609:00	610:00	611:00	612:00	613:00	614:00	615:00	616:00	617:00	618:00	619:00	620:00	621:00	622:00	623:00	624:00	625:00	626:00	627:00	628:00	629:00	630:00	631:00	632:00	633:00	634:00	635:00	636:00	637:00	638:00	639:00	640:00	641:00	642:00	643:00	644:00	645:00	646:00	647:00	648:00	649:00	650:00	651:00	652:00	653:00	654:00	655:00	656:00	657:00	658:00	659:00	660:00	661:00	662:00	663:00	664:00	665:00	666:00	667:00	668:00	669:00	670:00	671:00	672:00	673:00	674:00	675:00	676:00	677:00	678:00	679:00	680:00	681:00	682:00	683:00	684:00	685:00	686:00	687:00	688:00	689:00	690:00	691:00	692:00	693:00	694:00	695:00	696:00	697:00	698:00	699:00	700:00	701:00	702:00	703:00	704:00	705:00	706:00	707:00	708:00	709:00	710:00	711:00	712:00	713:00	714:00	715:00	716:00	717:00	718:00	719:00	720:00	721:00	722:00	723:00	724:00	725:00	726:00	727:00	728:00	729:00	730:00	731:00	732:00	733:00	734:00	735:00	736:00	737:00	738:00	739:00	740:00	741:00	742:00	743:00	744:00	745:00	746:00	747:00	748:00	749:00	750:00	751:00	752:00	753:00	754:00	755:00	756:00	757:00	758:00	759:00	760:00	761:00	762:00	763:00	764:00	765:00	766:00	767:00	768:00	769:00	770:00	771:00	772:00	773:00	774:00	775:00	776:00	777:00	778:00	779:00	780:00	781:00	782:00	783:00	784:00	785:00	786:00	787:00	788:00	789:00	790:00	791:00	792:00	793:00	794:00	795:00	796:00	797:00	798:00	799:00	800:00	801:00	802:00	803:00	804:00	805:00	806:00	807:00	808:00	809:00	810:00	811:00	812:00	813:00	814:00	815:00	816:00	817:00	818:00	819:00	820:00	821:00	822:00	823:00	824:00	825:00	826:00	827:00	828:00	829:00	830:00	831:00	832:00	833:00	834:00	835:00	836:00	837:00	838:00	839:00	840:00	841:00	842:00	843:00	844:00	845:00	846:00	847:00	848:00	849:00	850:00	851:00	852:00	853:00	854:00	855:00	856:00	857:00	858:00	859:00	860:00	861:00	862:00	863:00	864:00	865:00	866:00	867:00	868:00	869:00	870:00	871:00	872:00	873:00	874:00	875:00	876:00	877:00	878:00	879:00	880:00	881:00	882:00	883:00	884:00	885:00	886:00	887:00	888:00	889:00	890:00	891:00	892:00	893:00	894:00	895:00	896:00	897:00	898:00	899:00	900:00	901:00	902:00	903:00	904:00	905:00	906:00	907:00	908:00	909:00	910:00	911:00	912:00	913:00	914:00	915:00	916:00	917:00	918:00	919:00	920:00	921:00	922:00	923:00	924:00	925:00	926:00	927:00	928:00	929:00	930:00	931:00	932:00	933:00	934:00	935:00	936:00	937:00	938:00	939:00	940:00	941:00	942:00	943:00	944:00	945:00	946:00	947:00	948:00	949:00	950:00	951:00	952:00	953:00	954:00	955:00	956:00	957:00	958:00	959:00	960:00	961:00	962:00	963:00	964:00	965:00	966:00	967:00	968:00	969:00	970:00	971:00	972:00	973:00	974:00	975:00	976:00</th

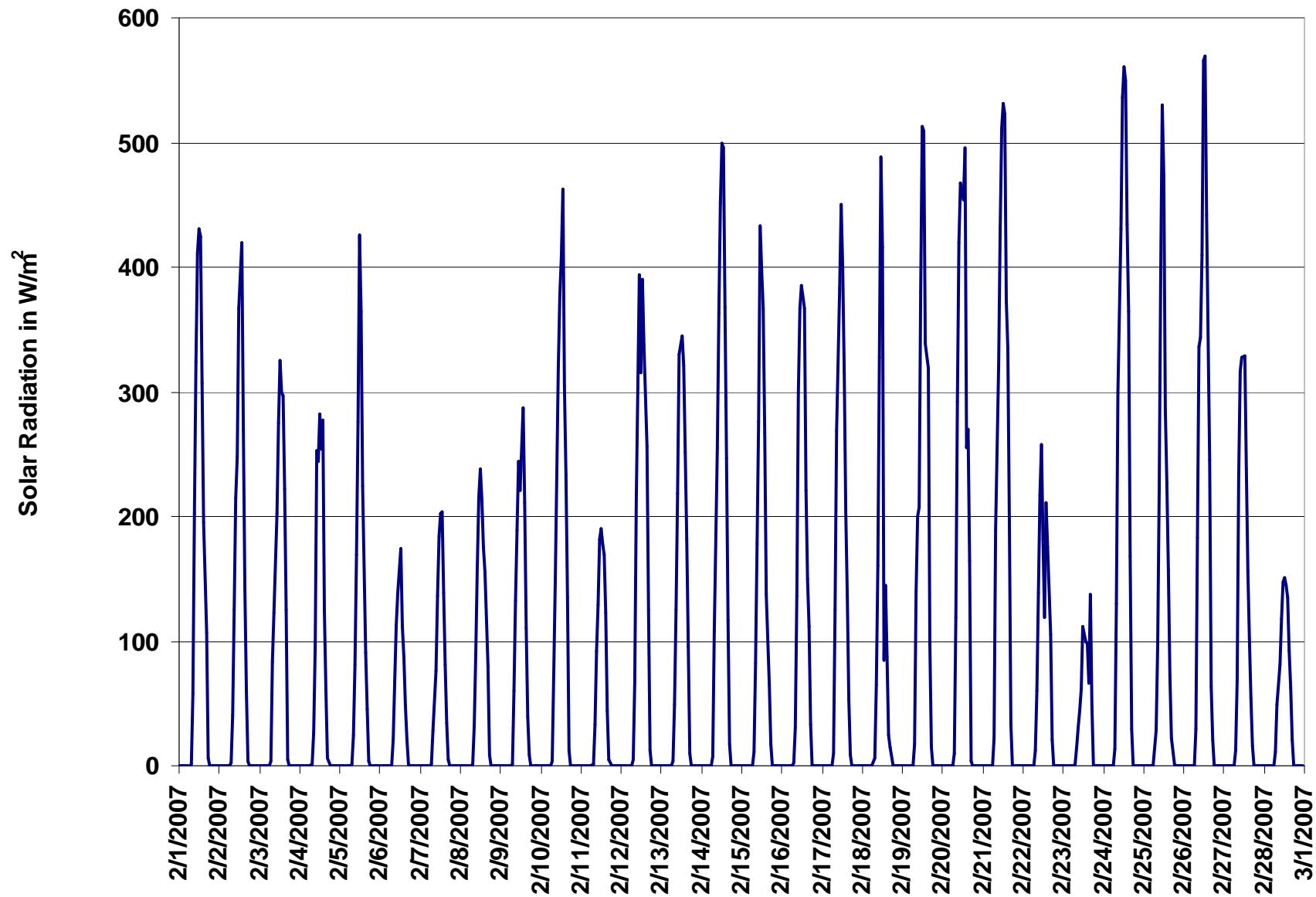


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



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

Station: Crescent Heights  
Station Owner: PAS

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

### Summary

Maximum 1-hr Average:	39.3 km/hr	18-Feb 0:00 1:00
Maximum 24-hr Value:	22.8 km/hr	18-Feb

Calm Time:	0 hrs	0% calms	Operational Time:	672 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	32.9	22.8	14.2	10.5	6.8	3.9	3.0	11.3 km/hr

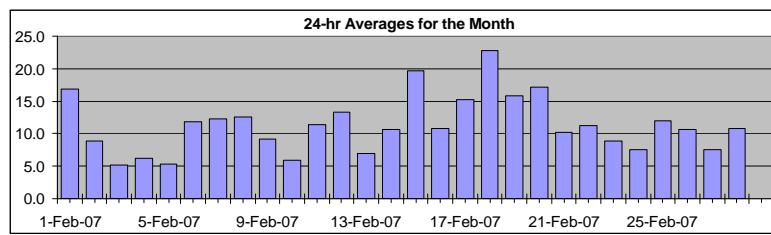
### Day Mountain Standard Time

	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-hr Scalar Average	Daily Max
1-Feb-07	16	27	28	24	25	20	17	13	14	13	17	18	16	15	14	12	9	11	14	19	18	18	14	14	16.9	28.5	
2-Feb-07	13	9	5	6	4	6	7	7	9	11	12	15	15	15	15	16	11	6	3	4	5	5	5	5	8.8	16.4	
3-Feb-07	6	4	3	2	4	4	4	4	4	3	3	7	7	8	8	7	5	6	5	6	7	7	6	5	5.1	8.2	
4-Feb-07	6	5	4	4	4	3	4	3	4	7	15	13	7	9	6	6	4	8	7	7	7	3	6	7	6.2	14.7	
5-Feb-07	4	6	6	5	7	4	7	5	6	5	3	5	7	7	6	4	5	3	3	6	4	4	6	7	5.3	7.4	
6-Feb-07	23	20	21	21	14	15	15	13	8	7	7	8	7	9	10	10	12	8	10	11	9	9	8	9	11.8	23.1	
7-Feb-07	9	10	10	10	11	12	12	9	13	11	11	13	12	14	13	15	16	17	12	14	15	13	12	12	12.2	17.3	
8-Feb-07	12	14	11	13	12	14	14	14	16	15	14	13	11	12	11	11	12	13	13	11	12	12	11	11	12.5	15.7	
9-Feb-07	12	12	11	10	9	11	12	11	11	12	11	9	10	10	9	9	8	9	9	7	7	5	4	4	9.2	12.2	
10-Feb-07	3	4	6	6	5	3	5	7	5	4	7	5	6	6	7	6	9	11	9	8	5	7	5	4	5.9	10.6	
11-Feb-07	7	12	6	7	9	4	7	11	11	10	13	11	10	12	13	16	16	13	12	13	15	17	15	15	11.3	16.5	
12-Feb-07	17	15	14	14	17	17	15	13	13	13	14	14	14	14	13	14	14	12	12	14	12	9	7	8	13.3	17.1	
13-Feb-07	8	9	8	9	8	6	7	9	7	6	6	7	6	7	9	7	8	6	6	6	5	5	3	6.9	9.2		
14-Feb-07	3	3	4	5	5	6	5	4	4	3	3	7	7	6	5	4	7	12	23	32	30	29	29	22	10.7	32.1	
15-Feb-07	18	18	22	18	20	21	20	17	19	18	17	18	19	12	18	20	22	19	26	27	22	22	19	18	19.6	27.1	
16-Feb-07	17	14	11	10	10	6	7	10	12	11	14	15	13	15	16	11	9	6	8	7	7	12	10	11	10.8	16.6	
17-Feb-07	12	19	17	10	11	14	15	15	13	16	16	17	17	16	14	14	13	15	17	18	13	11	19	26	15.3	26.5	
18-Feb-07	39	36	25	28	29	33	35	33	35	35	31	25	18	16	12	14	13	15	16	16	15	11	7	8	22.8	39.3	
19-Feb-07	7	10	7	4	8	11	12	18	21	20	17	18	18	14	11	14	12	11	18	22	26	28	27	26	15.9	27.5	
20-Feb-07	23	18	11	16	17	14	11	9	20	21	23	35	32	29	20	19	24	12	7	11	13	10	8	7	17.1	34.7	
21-Feb-07	9	7	6	5	4	6	8	10	12	11	12	15	16	16	12	9	12	13	11	10	9	10	13	8	10.2	16.3	
22-Feb-07	9	7	5	4	3	7	8	11	9	12	14	16	17	16	17	21	17	14	15	15	12	10	8	7	11.3	21.3	
23-Feb-07	6	7	10	8	5	3	4	7	12	13	14	14	14	14	14	13	13	8	8	4	5	5	5	5	8.8	14.3	
24-Feb-07	5	5	8	6	6	5	5	4	4	4	5	11	16	13	12	12	12	10	8	8	5	5	6	5	7.6	15.9	
25-Feb-07	7	5	10	9	9	8	9	9	6	6	5	8	11	13	13	14	16	18	17	18	17	21	21	19	11.9	21.3	
26-Feb-07	14	18	15	13	9	8	9	14	9	9	11	9	12	11	9	10	13	14	10	9	8	7	9	7	10.7	17.6	
27-Feb-07	7	5	6	5	8	7	9	8	8	5	5	8	8	8	8	10	11	11	8	6	10	9	9	5	7.6	10.6	
28-Feb-07	5	7	6	7	8	10	9	10	11	7	11	11	14	12	13	12	12	13	14	15	13	10	10	10.8	15.4		

1-hr Average	11.3	11.6	10.5	9.9	10.1	10.0	10.4	10.7	11.3	11.1	11.8	13.1	12.9	12.5	11.8	11.8	12.0	11.2	11.4	12.2	11.7	11.3	11.0	10.2
Hourly Max	39.3	36.5	28.5	28.3	28.7	32.8	34.7	33.4	35.4	35.2	31.3	34.7	32.3	29.2	20.3	21.3	24.4	19.0	25.8	32.1	30.0	29.1	29.1	26.5

### 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: February 1, 2007 to March 1, 2007

### Summary

Maximum 1-hr Average:	39.1	km/hr	18-Feb	0:00 1:00
Maximum 24-hr Value:	20.5	km/hr	18-Feb	

Calm Time:	0 hrs	0% calms	Operational Time:	672 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average V	0.6 km/hr
	32.9	22.3	14.0	10.2	6.4	3.1	2.0		

### 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 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 0:00	24-hr Vector Average	Daily Max
1-Feb-07	16 26 28 24 25 20 17 13 14 13 17 18 15 15 14 12 9 10 14 18 18 18 14 14	1:00	10.0	28.4
2-Feb-07	13 9 4 5 4 6 7 7 9 11 12 15 15 15 15 16 11 6 2 2 5 5 5 4	2:00	6.6	16.2
3-Feb-07	5 2 3 1 3 2 4 3 3 3 2 5 15 13 6 7 7 6 3 6 4 6 6 6 5	3:00	1.3	7.4
4-Feb-07	6 5 2 2 4 2 3 2 3 5 15 13 6 8 6 5 3 8 7 7 7 2 5 7	4:00	1.0	14.5
5-Feb-07	4 6 5 4 6 3 5 5 6 5 2 5 7 6 6 3 5 2 2 6 4 2 6 7	5:00	3.1	7.3
6-Feb-07	23 19 21 20 14 15 14 12 8 6 7 8 7 8 9 10 12 8 10 11 9 9 8 9	6:00	9.4	22.8
7-Feb-07	9 10 10 10 10 11 12 9 13 11 11 13 11 13 15 15 17 11 14 15 13 12 11	7:00	12.1	17.2
8-Feb-07	12 14 11 13 12 14 14 14 16 15 13 12 11 12 11 10 12 13 13 10 12 11 11	8:00	12.5	15.7
9-Feb-07	12 12 11 10 9 11 12 11 11 12 11 9 10 9 8 8 9 8 7 6 5 4 4	9:00	9.0	12.0
10-Feb-07	3 3 6 6 5 3 5 5 7 5 4 7 5 5 5 7 6 9 6 9 10 9 7 4 6 4	10:00	5.0	10.4
11-Feb-07	7 11 5 7 9 4 7 11 10 10 13 10 9 12 12 15 16 13 12 13 15 16 14 14	11:00	10.9	16.4
12-Feb-07	16 15 14 14 17 17 15 13 13 13 13 14 13 14 13 11 12 14 12 9 6 8	12:00	12.9	17.0
13-Feb-07	8 9 8 9 7 6 7 8 7 6 6 7 6 7 9 7 8 5 6 6 6 5 4 3	13:00	6.5	9.0
14-Feb-07	2 3 4 4 4 6 5 4 4 2 2 7 7 5 4 3 6 11 23 32 30 29 29 21	14:00	9.2	31.9
15-Feb-07	18 17 22 18 20 21 20 17 19 18 17 18 18 12 18 20 22 19 26 27 22 22 19 17	15:00	18.7	26.5
16-Feb-07	16 13 10 9 10 6 7 10 12 10 13 15 13 14 16 11 9 6 7 7 7 11 9 11	16:00	10.2	16.4
17-Feb-07	12 19 16 9 11 13 15 15 13 16 16 17 17 15 14 14 13 15 17 18 13 11 19 26	17:00	15.1	26.2
18-Feb-07	39 36 25 28 29 33 35 33 35 35 31 24 18 16 12 13 13 14 16 16 15 10 7 8	18:00	20.5	39.1
19-Feb-07	7 10 7 2 8 11 12 18 21 19 16 18 17 14 10 14 12 11 18 21 25 27 27 26	19:00	12.3	27.4
20-Feb-07	23 17 11 16 17 14 10 7 20 21 23 35 32 29 20 18 17 11 5 10 12 10 7 7	20:00	15.5	34.6
21-Feb-07	9 7 6 4 3 5 8 9 12 11 11 15 15 16 11 9 11 13 11 9 8 9 13 7	21:00	9.5	16.2
22-Feb-07	8 6 4 4 3 7 8 11 9 12 12 16 17 15 17 21 17 13 15 10 8 6	22:00	8.4	21.0
23-Feb-07	6 7 10 8 5 2 4 7 12 13 14 14 14 14 13 13 13 8 8 4 4 4 5 5	23:00	7.9	14.2
24-Feb-07	5 5 8 6 6 5 5 3 4 3 4 10 16 13 12 11 12 10 7 7 5 4 5 2	24:00	6.4	15.6
25-Feb-07	5 4 7 8 9 8 9 9 6 6 5 7 9 12 12 13 15 18 17 17 17 21 21 19	0:00	10.8	21.3
26-Feb-07	13 17 15 13 9 8 9 14 8 9 11 9 11 11 9 10 13 14 10 9 8 7 9 7	1:00	10.4	17.5
27-Feb-07	7 4 6 5 8 7 9 8 8 5 4 8 8 8 8 9 10 10 8 5 10 9 9 4	2:00	7.1	10.5
28-Feb-07	5 7 6 7 8 10 9 10 11 7 11 11 14 12 13 12 13 12 13 14 15 13 10	3:00	9.9	15.3
1-hr Vector	1.8 2.1 2.2 2.4 2.2 1.3 1.1 1.4 1.4 1.8 1.6 1.9 2.1 1.7 1.0 1.3 1.6 2.2 2.8 2.4 1.7 1.2 1.7 0.9			
Hourly Max	39.1 36.4 28.4 28.3 28.7 32.7 34.6 33.3 35.4 35.0 31.1 34.6 32.2 29.0 19.8 21.0 21.7 18.8 25.7 31.9 29.9 29.0 28.9 26.2			



## PAS - Crescent Heights - Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms								Operational Time: 672 hrs																		
Calibration Time: 0 hrs								AMD Operational Uptime: 100.0%																		
Percentile								99	95	75	50	25	5	1	Average											
								353.4	317.9	236.3	103.2	59.1	16.4	4.9	10 deg											

#### 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	WD Sector
1-Feb-07	18	25	9	7	13	1	352	333	319	315	318	326	313	308	282	268	256	237	236	237	236	236	238	235	237	317	NW
2-Feb-07	240	250	298	329	351	311	295	305	302	313	299	318	318	315	312	329	334	0	1	181	224	208	169	172	303	WNW	
3-Feb-07	172	140	109	50	105	98	101	96	95	87	106	350	322	312	280	281	232	216	128	133	174	170	152	124	151	SSE	
4-Feb-07	125	118	163	168	113	88	125	173	111	210	230	231	281	236	242	258	276	14	19	61	94	82	29	28	186	S	
5-Feb-07	46	51	94	97	37	91	79	32	50	72	77	107	73	103	142	72	34	68	56	9	353	256	260	258	64	ENE	
6-Feb-07	349	350	359	4	9	6	7	18	32	26	54	67	69	80	99	79	56	63	63	69	76	90	107	74	35	NE	
7-Feb-07	66	63	68	75	69	84	80	80	59	64	69	78	86	68	71	78	75	86	82	68	68	73	71	58	73	ENE	
8-Feb-07	47	59	62	56	64	46	46	59	54	53	60	65	57	58	59	63	56	58	67	67	54	55	62	54	57	ENE	
9-Feb-07	49	53	54	57	66	66	68	66	66	72	78	75	56	68	90	90	80	72	78	71	60	68	61	29	67	ENE	
10-Feb-07	70	67	7	360	4	10	12	5	5	23	19	49	77	82	82	105	64	56	85	88	74	29	63	72	50	NE	
11-Feb-07	11	34	75	35	7	21	14	18	24	25	47	43	24	19	35	33	47	53	60	55	57	60	57	49	40	NE	
12-Feb-07	51	59	61	55	55	57	62	60	60	59	75	92	92	89	89	89	94	72	68	70	79	84	77	78	71	ENE	
13-Feb-07	84	57	51	48	49	55	49	67	69	65	65	57	50	26	40	56	47	66	30	14	8	359	20	103	49	NE	
14-Feb-07	126	113	157	183	176	184	171	126	120	160	139	113	116	110	97	61	144	187	195	194	191	189	191	206	178	S	
15-Feb-07	227	231	232	241	240	239	235	235	240	239	229	233	235	230	218	226	219	207	204	215	238	265	266	283	234	SW	
16-Feb-07	287	311	303	298	320	289	284	292	305	305	289	287	304	298	300	298	289	290	265	275	238	269	249	246	289	WNW	
17-Feb-07	251	234	237	256	243	241	239	232	239	233	236	230	231	230	249	232	217	222	226	234	234	250	234	227	235	SW	
18-Feb-07	217	216	212	211	209	211	216	216	212	218	229	239	266	282	266	277	268	267	269	266	270	283	273	279	232	SW	
19-Feb-07	298	347	342	257	203	209	224	228	231	228	222	272	310	328	287	268	252	226	206	203	208	208	213	219	235	SW	
20-Feb-07	233	241	254	246	235	231	221	217	228	232	234	235	235	230	239	256	296	316	210	260	277	316	296	266	245	WSW	
21-Feb-07	272	261	278	236	219	223	219	233	223	228	246	276	281	280	271	265	240	232	226	239	255	247	237	246	249	WSW	
22-Feb-07	245	225	155	116	83	15	357	357	7	12	37	60	66	71	71	80	82	84	100	71	78	68	75	81	65	ENE	
23-Feb-07	355	344	347	341	326	293	308	296	320	323	319	320	310	306	311	309	313	315	314	276	272	249	233	185	313	NW	
24-Feb-07	162	165	129	132	133	117	134	155	140	166	209	224	215	195	194	189	190	188	157	157	150	178	151	73	173	S	
25-Feb-07	20	59	128	65	56	39	38	44	37	15	39	112	118	115	77	95	95	84	72	71	79	84	86	79	77	ENE	
26-Feb-07	37	56	56	57	40	49	50	53	58	23	38	51	66	85	72	65	51	49	72	68	55	46	26	39	53	NE	
27-Feb-07	35	28	25	15	19	14	1	354	8	15	8	14	27	45	35	39	41	63	81	60	44	28	31	19	30	NNE	
28-Feb-07	28	26	30	44	49	45	50	45	47	47	79	95	86	77	92	80	88	96	99	103	92	99	82	52	74	ENE	

Hourly Avg 314 8 22 16 28 20 6 351 326 298 292 294 324 346 350 18 44 86 133 148 155 167 172 197

#### 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 - Standard Deviation of Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

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

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms								Operational Time: 672 hrs							
Calibration Time: 0 hrs								AMD Operational Uptime: 100.0%							
Percentile								99	95	75	50	25	5	1	
								47.8	30.9	12.9	8.9	6.5	4.5	3.4	

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

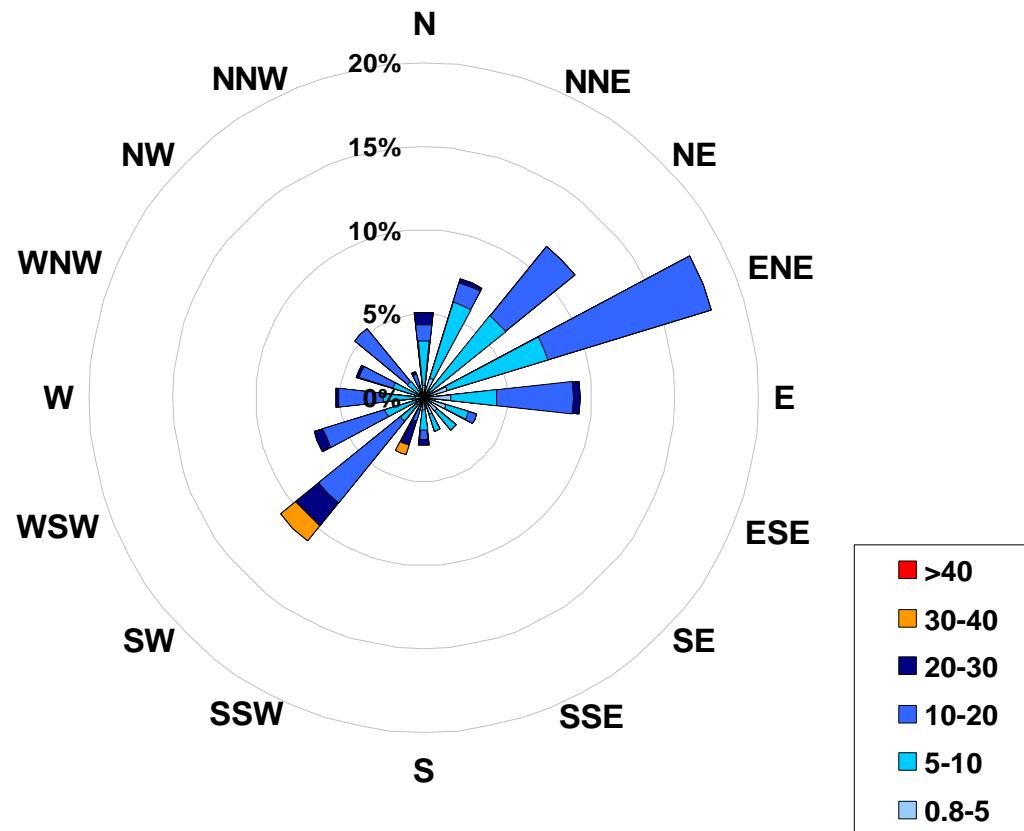
#### Day Mountain Standard Time

	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-Feb-07	8	6	4	4	5	5	5	7	5	8	7	8	11	11	10	10	10	9	7	8	5	4	4	3	11.0
2-Feb-07	7	7	35	27	25	11	11	12	13	11	13	9	7	10	11	6	7	12	33	22	11	13	20	27	35.5
3-Feb-07	23	36	27	41	19	39	19	19	33	30	38	27	23	22	19	17	45	10	24	12	13	11	10	8	45.0
4-Feb-07	6	14	47	31	20	27	48	50	35	28	6	6	23	15	15	13	26	11	9	11	9	36	12	6	50.0
5-Feb-07	16	14	13	27	12	32	14	10	14	18	36	25	15	15	17	19	6	13	23	9	35	48	13	10	47.9
6-Feb-07	9	7	6	5	10	7	5	7	12	13	17	16	19	10	12	9	8	12	12	8	9	11	8	9	19.1
7-Feb-07	10	9	8	11	13	11	7	11	7	11	10	10	14	11	13	9	9	5	8	9	6	9	6	6	13.9
8-Feb-07	6	7	10	7	9	6	6	6	5	6	7	9	8	7	8	9	8	7	6	6	5	5	6	5	9.6
9-Feb-07	5	5	7	7	11	7	10	8	8	9	10	15	8	14	15	10	9	7	8	9	8	9	9	7	15.2
10-Feb-07	12	13	4	5	5	13	5	3	8	9	11	17	13	22	15	20	9	11	14	17	26	20	23	31	30.5
11-Feb-07	12	7	13	14	6	13	8	5	7	10	7	13	13	8	10	6	6	7	6	5	5	5	7	7	13.6
12-Feb-07	5	6	6	6	5	4	6	6	5	7	8	9	9	9	12	11	7	8	5	4	5	6	11	8	11.6
13-Feb-07	9	8	6	6	6	10	6	6	10	13	14	16	13	13	15	14	13	20	15	5	6	9	14	15	19.6
14-Feb-07	23	22	23	13	9	7	12	7	14	42	44	10	8	12	26	32	45	49	9	5	5	6	5	11	48.9
15-Feb-07	9	9	9	8	6	5	4	7	5	5	5	6	11	9	6	5	5	6	5	11	7	5	5	6	11.1
16-Feb-07	7	8	12	16	9	21	12	9	7	11	9	9	10	10	7	8	14	15	11	11	9	11	12	8	21.1
17-Feb-07	7	6	11	8	12	6	8	9	7	6	10	6	6	7	10	8	7	5	4	6	12	12	4	8	12.1
18-Feb-07	4	3	5	3	4	3	3	4	4	4	5	6	6	7	15	11	11	6	5	6	5	10	13	14	15.4
19-Feb-07	15	6	11	43	10	12	10	4	5	5	8	8	11	11	16	10	8	9	5	5	5	5	5	5	42.8
20-Feb-07	7	8	11	7	9	8	10	36	6	6	6	4	4	6	8	8	15	15	29	18	8	16	21	16	36.3
21-Feb-07	11	11	10	25	60	17	8	6	6	8	12	8	8	8	15	16	15	5	6	14	11	10	7	16	60.5
22-Feb-07	12	35	22	22	20	11	7	3	6	7	7	4	6	7	11	8	9	11	7	11	6	5	8	17	35.3
23-Feb-07	22	12	7	10	20	51	20	9	7	7	8	7	8	8	8	7	9	6	34	20	21	9	9	51.1	
24-Feb-07	15	17	3	5	4	7	8	13	28	31	49	12	9	12	12	10	10	7	15	27	23	46	20	44	49.1
25-Feb-07	33	27	15	14	6	3	3	4	10	8	10	23	21	17	15	12	12	6	6	6	5	5	4	5	32.7
26-Feb-07	12	4	5	6	8	7	7	5	13	10	10	12	16	15	18	16	4	4	7	6	6	8	7	6	18.1
27-Feb-07	8	8	6	7	6	9	6	7	7	16	48	10	12	10	11	9	9	7	11	12	6	8	9	19	48.4
28-Feb-07	10	9	11	6	8	5	8	5	7	11	9	11	6	9	8	9	6	8	7	8	8	7	8	13	13.2

Hourly Max 33 36 47 43 60 51 48 50 35 42 49 27 23 22 26 32 45 49 33 34 35 48 23 44



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



Calms:	0%
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Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range		Frequency (hrs)	
0.8	<	5	79
5	to	10	245
10	to	20	295
20	to	30	41
30	to	40	12
> 40			0
Total Non-Zero Values			672

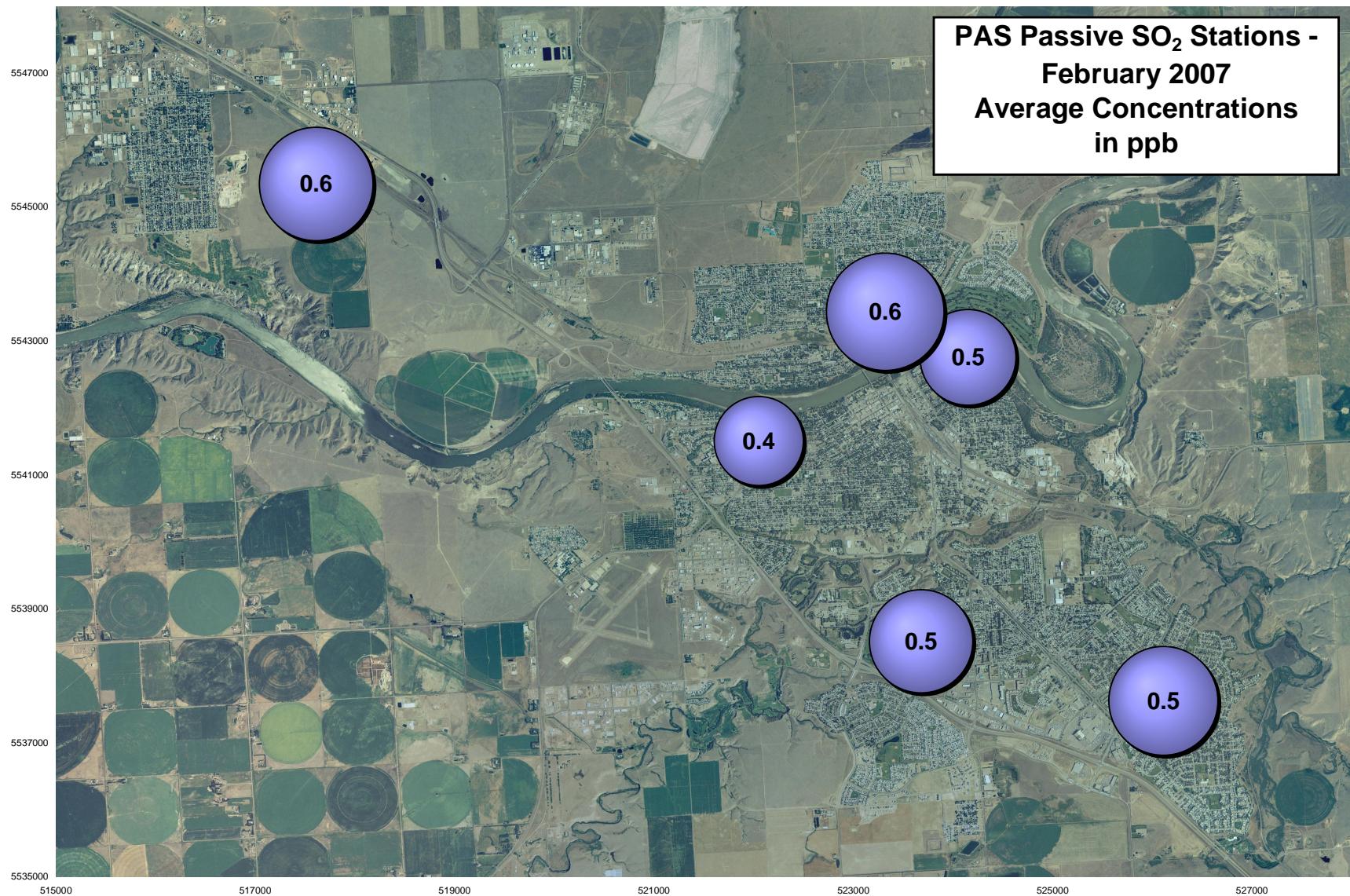


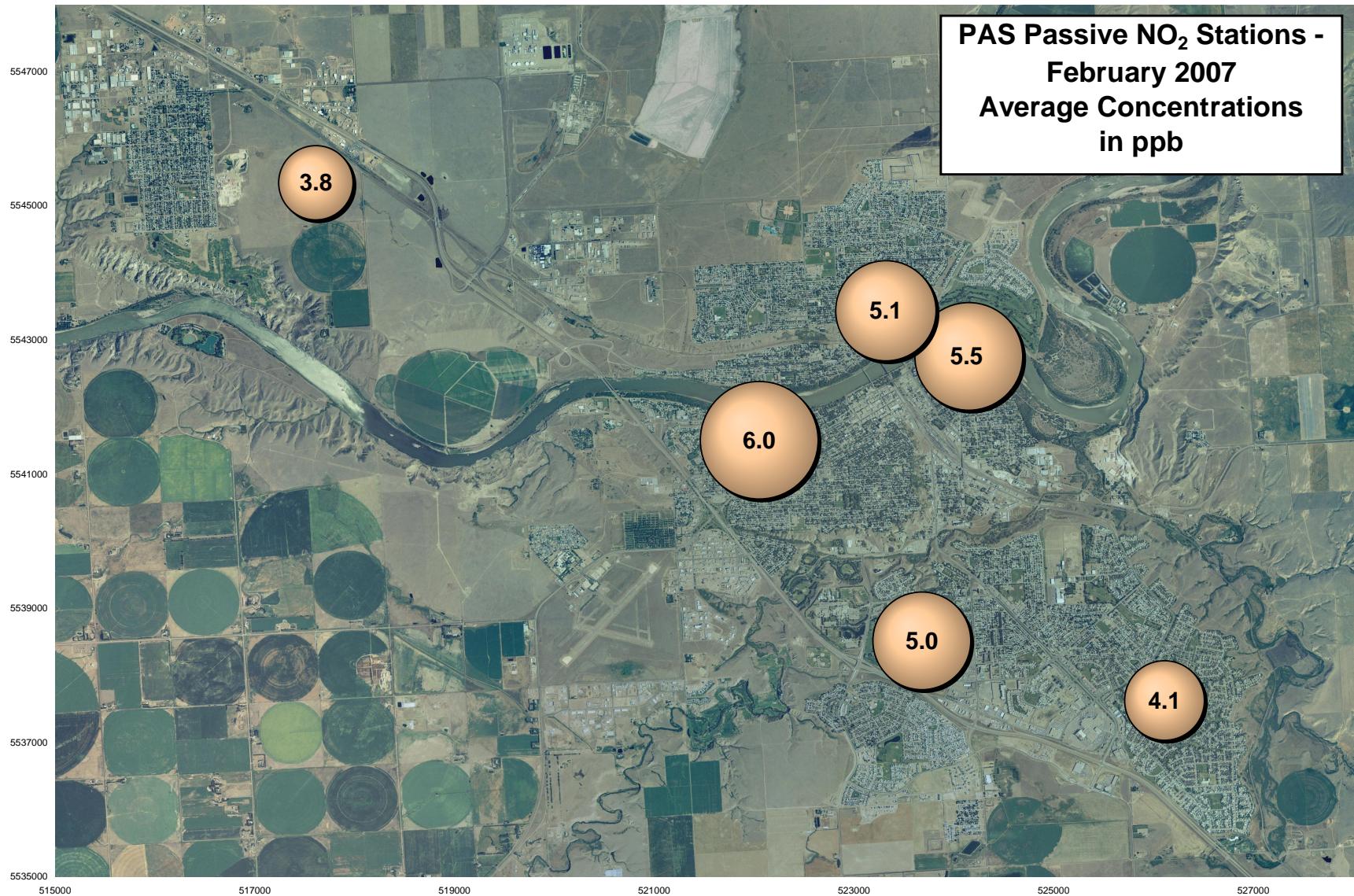
## Passive Monitoring – February 2007

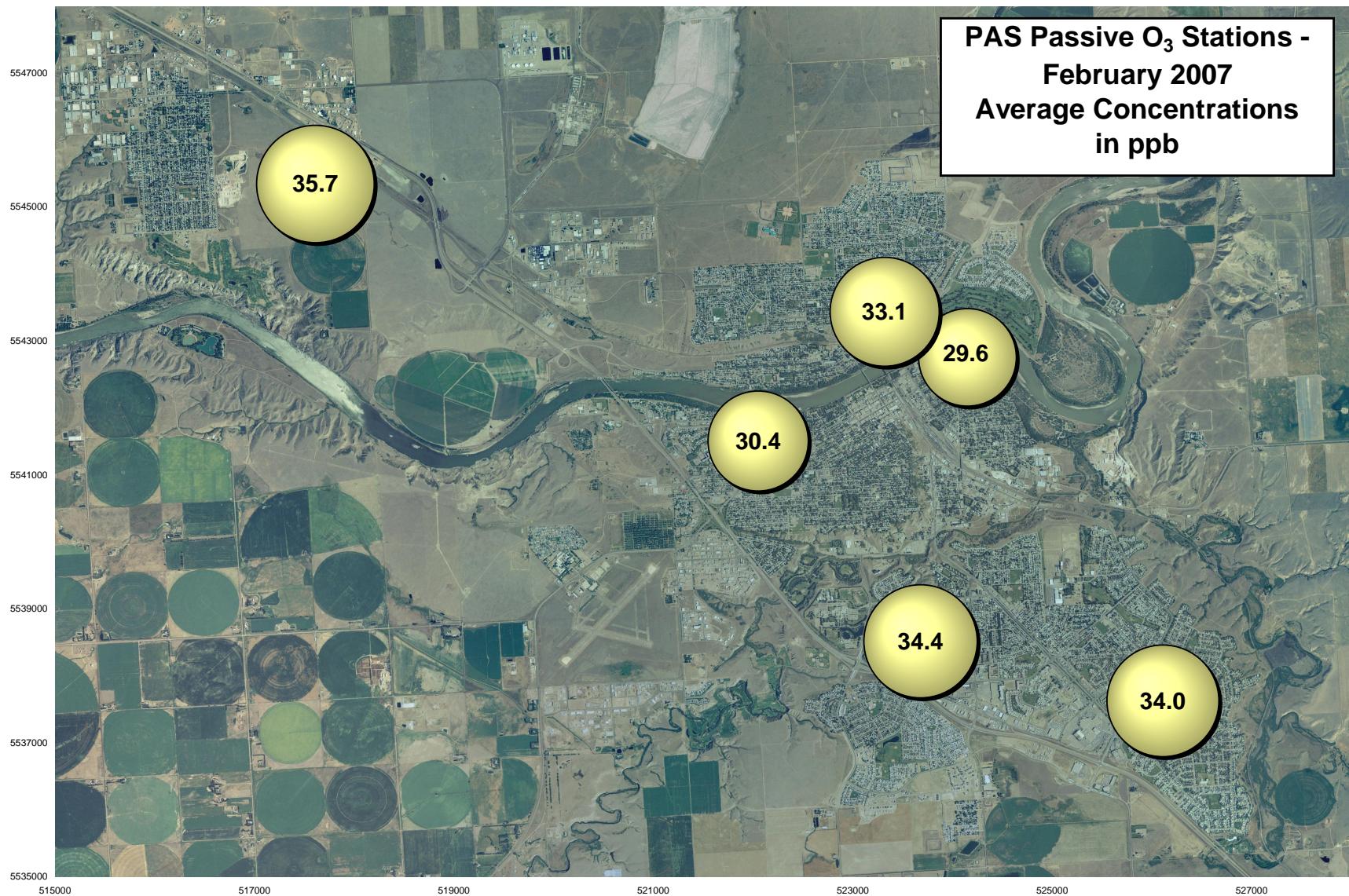
Station Number	Station Name	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Location		
Duplicates					Easting	Northing	Elevation
5a	Southridge	0.5	34.6	4.9			
5b	Southridge	0.5	34.1	5.1			
1	Hospital	0.4	30.4	6.0	521648	5542721	698
2	Ball Park	0.5	29.6	5.5	524019	5543686	660
3	Monitoring Station	0.6	33.1	5.1	522812	5544133	714
4	Redcliff	0.6	35.7	3.8	517448	5545608	725
5	Southridge	0.5	34.4	5.0	523172	5539016	721
6	Christian School Park	0.5	34.0	4.1	526577	5538133	709

Stats:

Mean	0.5	32.8	4.9			
Standard Deviation	0.1	2.4	0.8			
Minimum	0.4			1	Hospital	
Maximum	0.6			3	Monitoring Station	
Minimum		29.6		2	Ball Park	
Maximum		35.7		4	Redcliff	
Minimum			3.8	4	Redcliff	
Maximum			6.0	1	Hospital	







# **Palliser Airshed Society**

## **February 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	February 23, 2007	Previous Calibration	January 17, 2007	
Station Number	101	Station Location	Crescent Heights	
Reason:	Routine	Calibration	Removal	
			Other:	
Start Time (MST)	10:42	End Time (MST)	13:05	
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	0.969716	Calculated slope	1.001640	
Calculated intercept	3.475936	Calculated intercept	3.511203	
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	ppb
	-10.9	ppb	-10.9	ppb
	1.063		1.063	
	4843.5	mV	4884.8	mV
	4845.8	mV	4885.2	mV
	26.5	inches Hg	26.7	inches Hg
	683	ccm	664	ccm
	39.8	Deg C	39.4	Deg C

### Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.0	0.0	-3.6	N/A
4988	300.0	290.8	285.0	1.0202
4988	200.0	195.6	195.2	1.0021
4988	100.0	105.8	100.6	1.0521
4988	0.0	0.0	-3.6	0.0000
4988	300.0	290.8	285.0	1.0202
Average Correction Factor				1.0248

Calculated value of As Found Response: 283.3 ppm Percent Change of As Found: -2.6%

Auto zero Auto span	before calibration		after calibration	
	-1.1	ppb	-1.3	ppb
	370.7	ppb	369.1	ppb

Notes:

Calibration Performed By: Lenin Flores, Travis Mehrer

## Calibration Summary

Parameter O3

Air Monitoring Network

Palliser Airshed



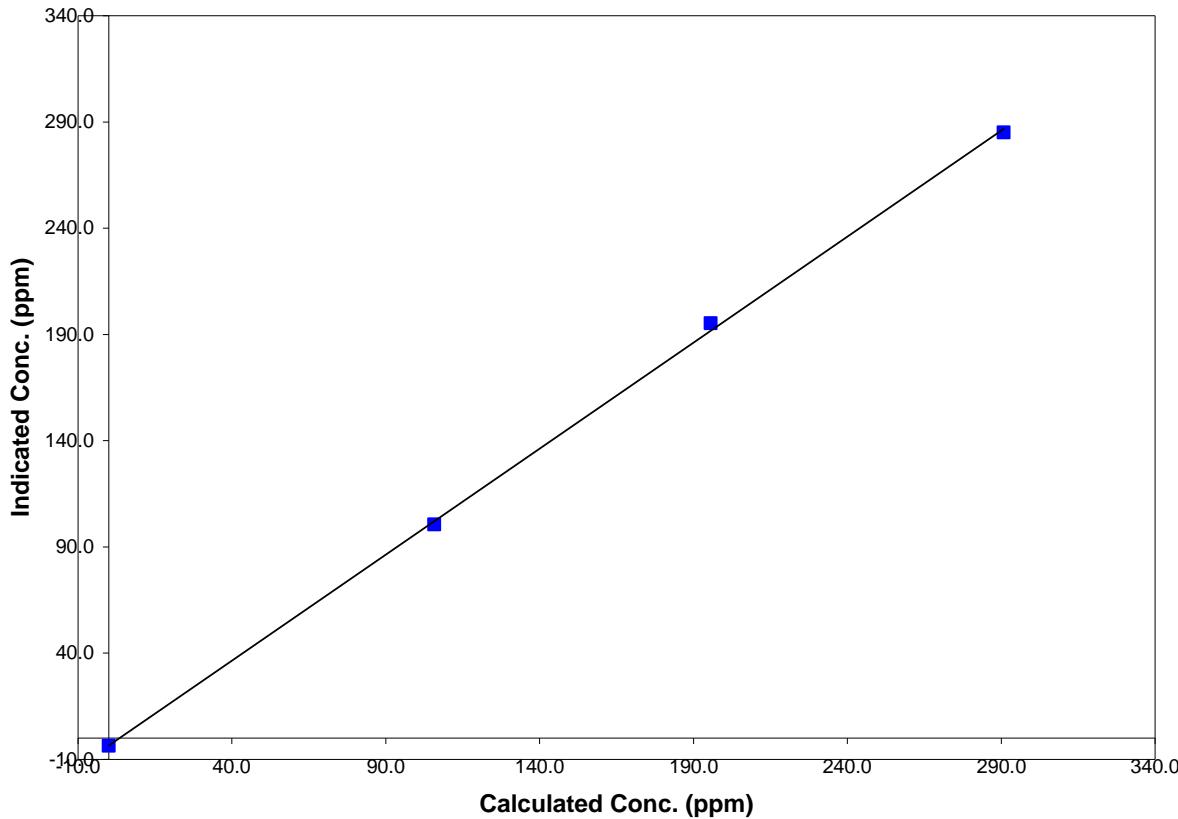
### Station Information

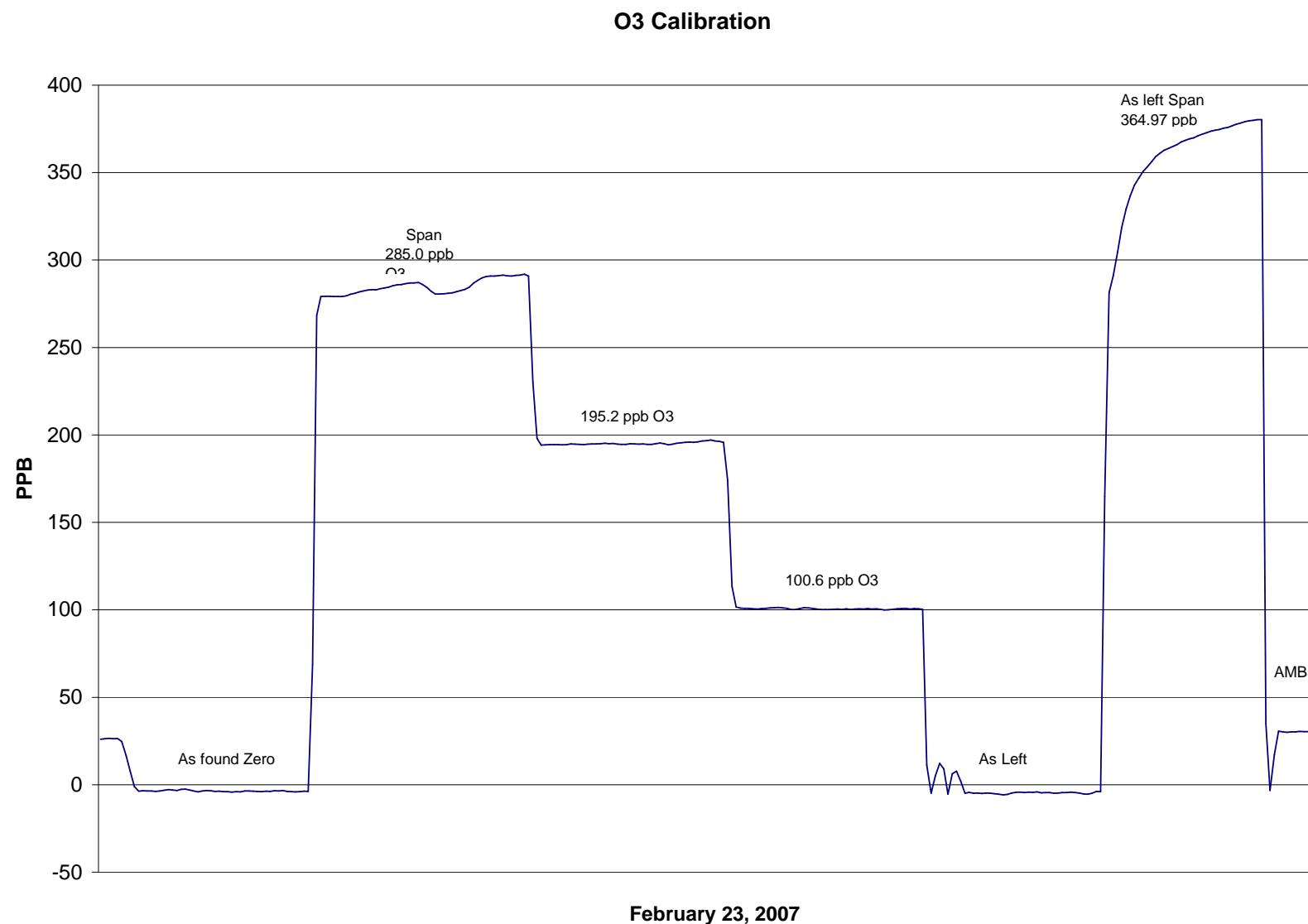
Calibration Date	February 23, 2007	Previous Calibration	January 17, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	10:42	End Time (MST)	13:05
Analyzer make/model	API Model 400E	Analyzer serial #	331

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
290.8	285.0	1.0202		
195.6	195.2	1.0021	Correlation Coefficient	0.999625
105.8	100.6	1.0521	Slope	1.001640
0.0	-3.6	N/A	Intercept	3.511203

### O3 Calibration Curve





# Calibration Report

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



## Station Information

Calibration Date	February 6, 2007	Previous Calibration	December 11, 2006
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Installation	Removal
Start Time (MST)	11:35	End Time (MST)	17:42
Barometric Pressure	27.2	inches Hg	25.3
Calibrator	Environics 6100	Serial Number	3474
NO Cal Gas Conc	49.9	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	49.9	ppm	15-Dec-07
			Cal Gas Serial #
			LL-50114

## DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45270
<hr/>			
Parameter	NO2	NOx	NO
Before	Data Slope 0.511037	0.999109 0.725960	0.998338 2.846580
After	Data Slope 0.511037	0.999109 0.725960	0.998338 2.846580
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	-0.2	mV
NOx background	1.1	mV	1.1	mV
NO coefficient	1.426		1.426	
NOx coefficient	1.455		1.455	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	7.0	Deg C	7.0	Deg C
Azero	41.8		41.8	
Perm Temp	40.0	Deg C	40.0	Deg C
Pressure	5.2	inches Hg	5.2	inches Hg
Sample Flow	450.0	ccm	450.0	ccm

Notes: Performed pump replacement and span adjustment. Spike in as left span caused by perm tube gas build-up due to pump failure.

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## Calibration Report

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



### Station Information

Calibration Date: February 6, 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	4990	0.00	0.0	0.0	0.0	-2.2	-1.6	-3.3	N/A	N/A
1	4990	39.83	395.1	395.1	0.0	1.6	-0.3	0.3	250.4351	-1303.8886
2	4990	19.90	198.2	198.2	0.0	-4.3	-1.5	-4.1	-45.7036	-135.5487
3	4990	9.95	99.3	99.3	0.0	302.3	300.2	1.2	0.3286	0.3309
AFZ	4990	0.00	0.0	0.0	0.0	-2.2	-1.6	-3.3	0.0000	0.0000
AFS	4990	39.86	395.5	395.5	0.0	-2.0	-1.4	-3.5	-196.3406	-282.8595
							Average Correction Factor	68.3534	-479.7022	

As Found Concentrations NO<sub>x</sub>= 0.9 NO= 3.1 As Found Percent Change NO<sub>x</sub>= -99.8% NO= -99.2%

### GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.86 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	392.1	398.3	-6.2	391.8	396.1	-3.3	N/A	N/A	N/A	N/A	
300	391.4	116.6	274.8	391.1	113.9	275.7	1.0010	1.0233	0.9970	100.3%	
200	23.1	2.0	21.0	22.4	-0.8	21.4	1.0316	-2.5023	0.9839	101.6%	
100	435.1	14.6	420.5	434.7	11.8	433.8	1.0008	1.2398	0.9692	103.2%	
							Average Correction Factor	1.0111	-0.0797	0.9834	101.7%

### AIC Data

	Previous calibration				Current calibration				
	Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb
Auto zero	-2.6	-3.7	-0.5	ppb	23.4	23.7	1.1	ppb	
Auto span	397.9	392.1	5.1	ppb	NA	NA	NA	ppb	

Calibration Performed By: Travis Mehrer, Tom Bourque

## Calibration Summary

## Parameter NO<sub>2</sub>

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Air Monitoring Network      Palliser Airshed

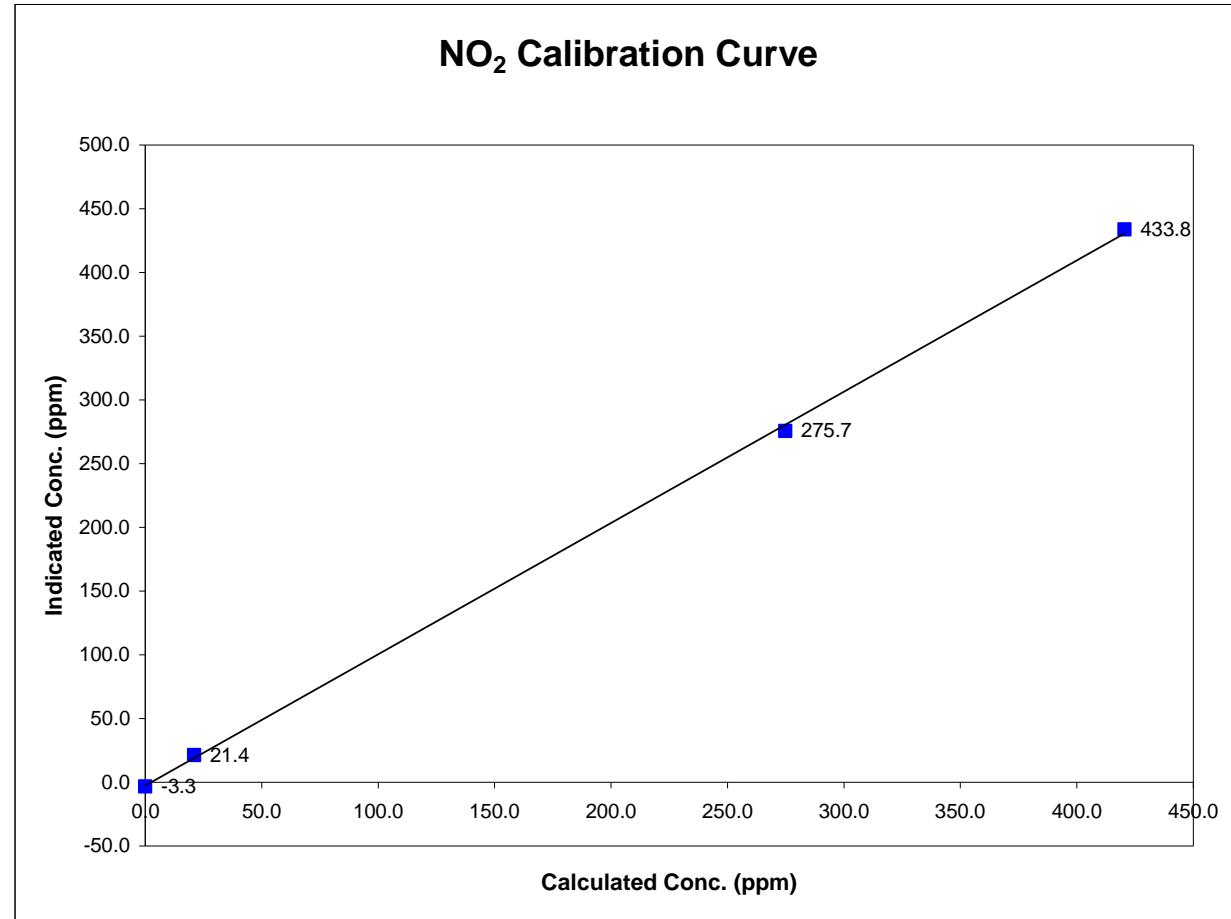


## ***Station Information***

Calibration Date	February 6, 2007	Previous Calibration	December 11, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:35	End Time (MST)	17:42
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	-3.3	0.0000		
274.8	275.7	0.9970	Correlation Coefficient	0.999696
21.0	21.4	0.9839		
420.5	433.8	0.9692	Slope	0.969716
			Intercept	2.711770



## Calibration Summary

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



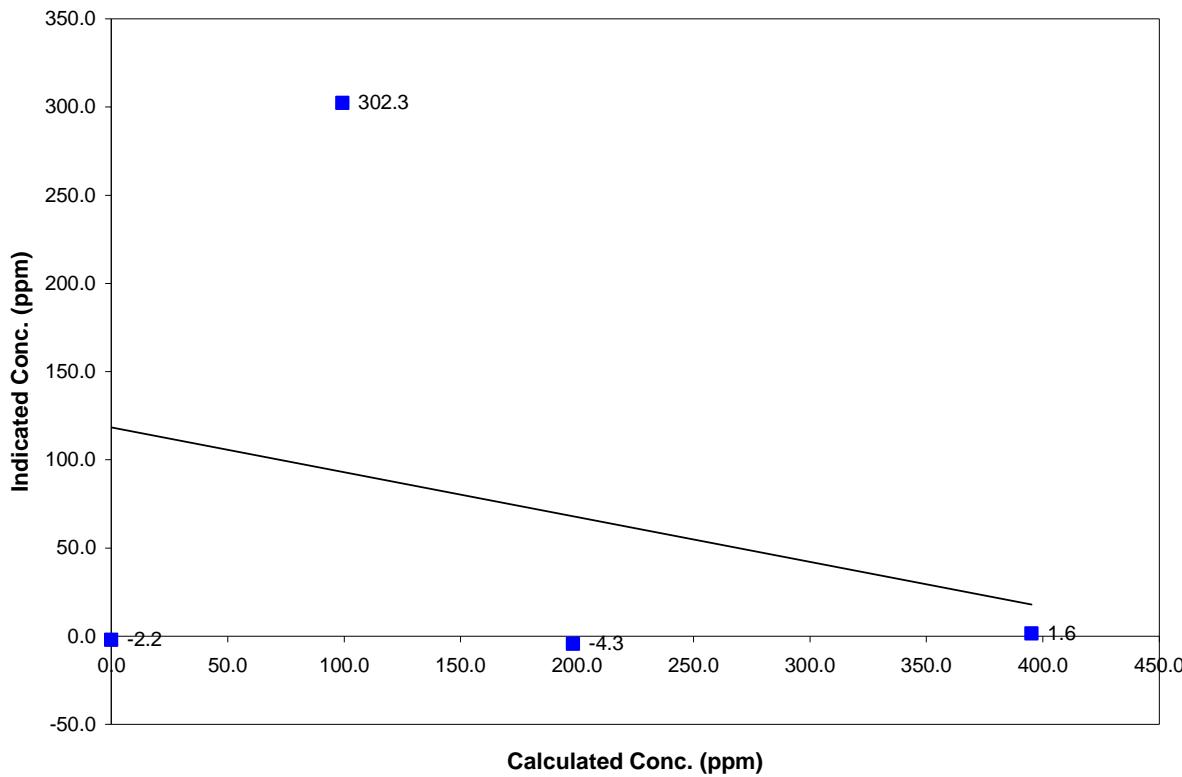
### Station Information

Calibration Date	February 6, 2007	Previous Calibration	December 11, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:35	End Time (MST)	17:42
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-2.2	0.0000	Correlation Coefficient	0.079645
395.1	1.6	250.4351		
198.2	-4.3	-45.7036		
99.3	302.3	0.3286		
			Slope	-0.313158
			Intercept	196.453662

### NOx Calibration Curve



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed



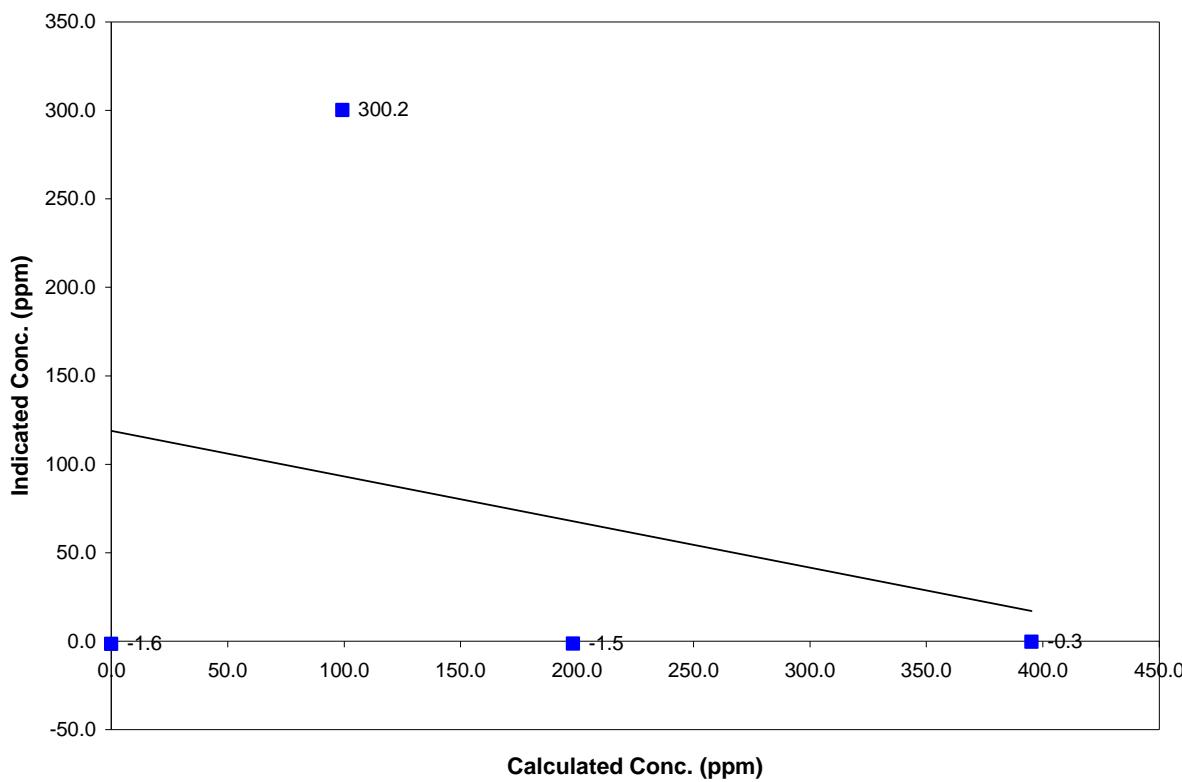
### Station Information

Calibration Date	February 6, 2007	Previous Calibration	December 11, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:35	End Time (MST)	17:42
Analyzer make	API Model 200E	Analyzer serial #	219

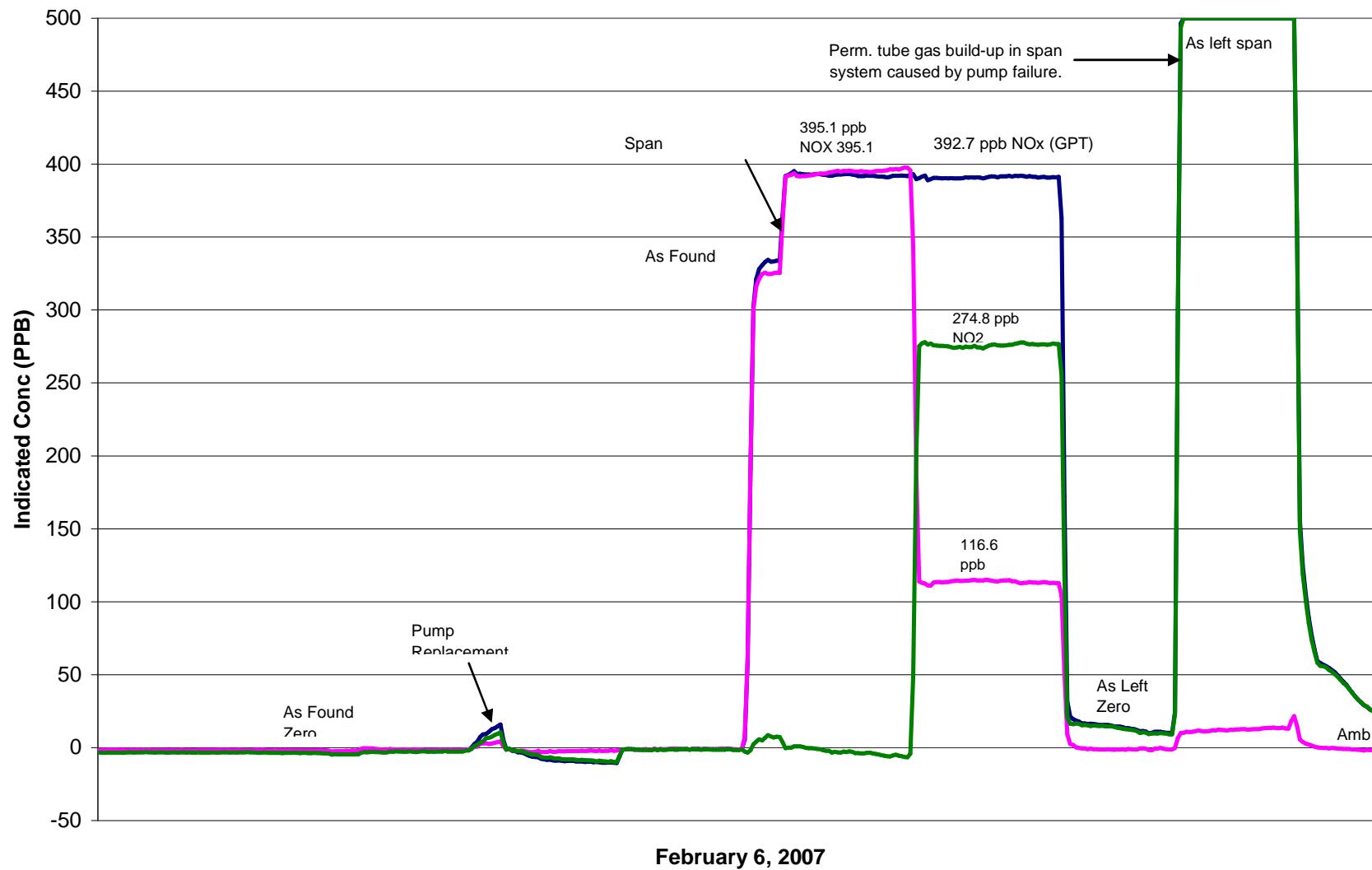
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.6	N/A	Correlation Coefficient	0.083188
395.1	-0.3	-1303.8886		
198.2	-1.5	-135.5487		
99.3	300.2	0.3309		
			Slope	-0.322833
			Intercept	197.129654

### NO Calibration Curve



## NOx Calibration



# Calibration Report

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



## Station Information

Calibration Date	February 22, 2007	Previous Calibration	February 6, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Installation	Removal
Start Time (MST)	15:36	End Time (MST)	21:00
Barometric Pressure	27.1	inches Hg	20.0
Calibrator	Environics 6100	Serial Number	3474
NO Cal Gas Conc	54.5	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	54.5	ppm	22-Nov-06
			Cal Gas Serial #
			FF-37169

## DACS Information

DACS make	FOCUS AP1000	DACS serial No.	45270
Parameter	NO2	NOx	NO
Before	Data Slope	1.001089	0.999109
	Data Offset	0.511037	0.725960
After	Data Slope	1.004688	1.007417
	Data Offset	0.956656	-0.518861
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	-0.2	mV
NOx background	1.1	mV	1.1	mV
NO coefficient	1.426		1.515	
NOx coefficient	1.455		1.532	
Chamber Temp	50.0	Deg C	50.1	Deg C
Cooler Temp	7.0	Deg C	6.9	Deg C
Azero	41.8		39.6	
Perm Temp	40.0	Deg C	40.3	Deg C
Pressure	5.2	inches Hg	5.3	inches Hg
Sample Flow	450.0	ccm	451.0	ccm

Notes: Zero and Span were adjusted...

## Calibration Report

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



### Station Information

Calibration Date: February 22, 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	4991	0.00	0.0	0.0	0.0	-1.4	-1.6	-1.4	N/A	N/A	
1	4991	39.84	431.6	431.6	0.0	427.8	426.7	-0.1	1.0090	1.0114	
2	4991	19.91	216.5	216.5	0.0	216.9	215.2	0.3	0.9980	1.0063	
3	4991	9.95	108.5	108.5	0.0	109.8	108.6	-0.6	0.9883	0.9990	
AFZ	4991	0.00	0.0	0.0	0.0	-12.0	-8.3	-5.2	0.0000	0.0000	
AFS	4991	39.84	431.6	431.6	0.0	408.0	420.3	-13.1	1.0580	1.0270	
								Average Correction Factor	0.9984	1.0056	

As Found Concentrations NO<sub>x</sub>= 420.7 NO= 431.4 As Found Percent Change NO<sub>x</sub>= -2.5% NO= 0.0%

### GPT Calibration Data

Dilution Flow	4991	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	433.2	429.9	3.3	430.5	425.8	-1.4	N/A	N/A	N/A	N/A	
300	435.1	329.3	105.8	432.5	326.1	105.0	1.0062	1.0098	1.0076	99.2%	
200	435.5	239.8	195.6	432.8	237.5	194.0	1.0062	1.0101	1.0082	99.2%	
100	436.3	145.6	290.8	433.6	144.0	288.0	1.0062	1.0107	1.0095	99.1%	
				Average Correction Factor	1.0062	1.0102	1.0084	1.0084	99.2%		

### AIC Data

	Previous calibration				Current calibration				
Parameter	NOx	NO <sub>2</sub>	NO		NOx	NO <sub>2</sub>	NO		
Auto zero	-2.6	-3.7	-0.5	ppb	-2.3	-1.4	-1.4	ppb	
Auto span	397.9	392.1	5.1	ppb	472.0	195.5	240.2	ppb	

Calibration Performed By: Lenin Flores, Reid Balawyder

## Calibration Summary

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



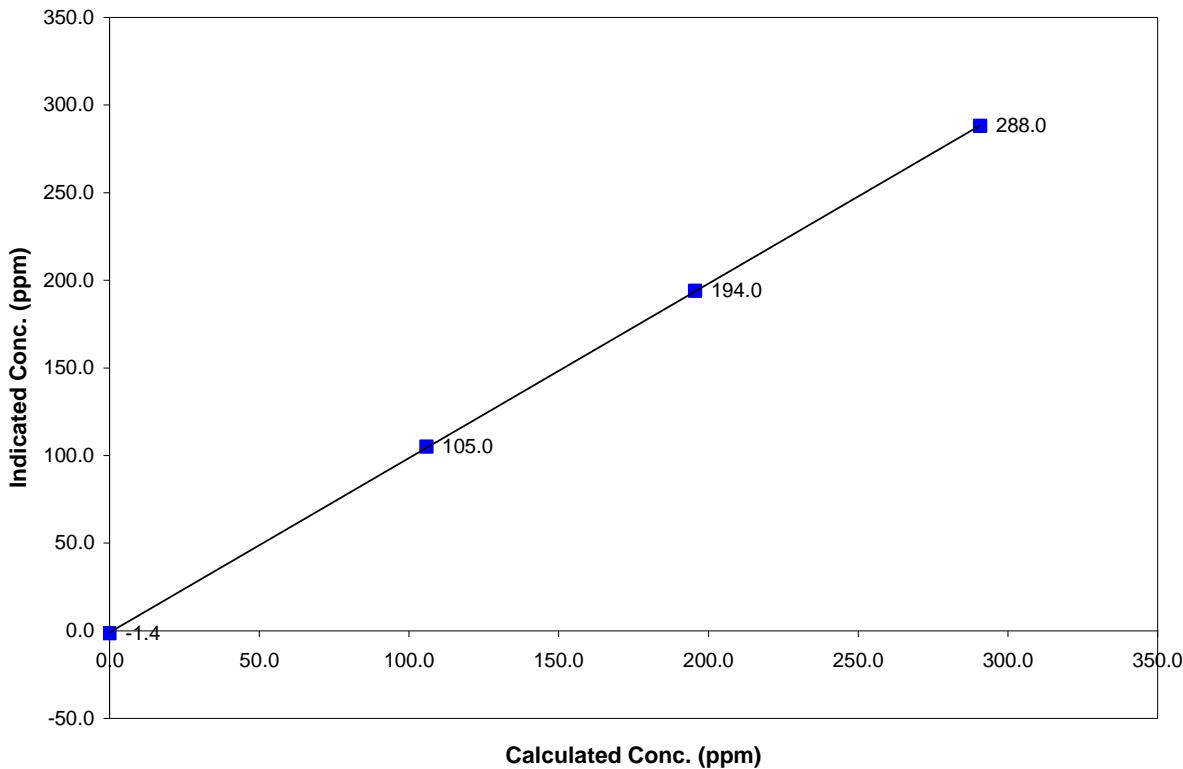
### Station Information

Calibration Date	February 22, 2007	Previous Calibration	February 6, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:36	End Time (MST)	21:00
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	-1.4	0.0000	Correlation Coefficient	0.999980
105.8	105.0	1.0076		
195.6	194.0	1.0082		
290.8	288.0	1.0095		
			Slope	1.004688
			Intercept	0.956656

### NO<sub>2</sub> Calibration Curve



## Calibration Summary

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



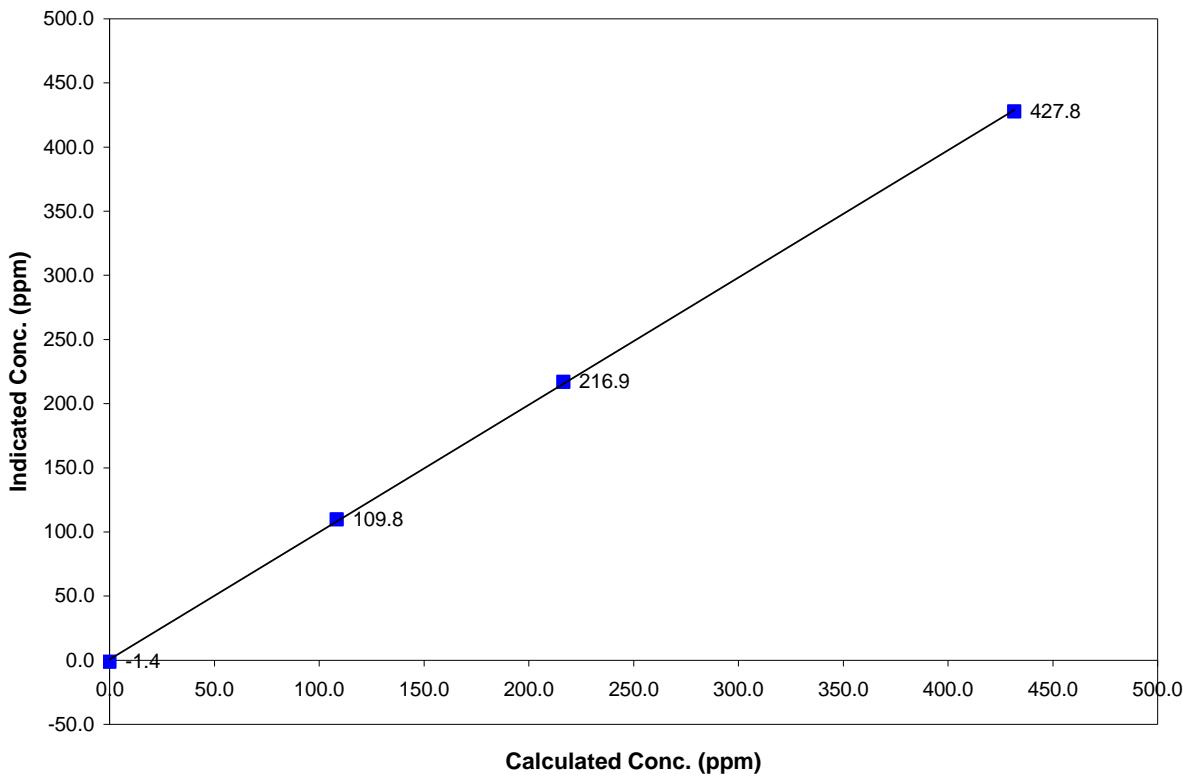
### Station Information

Calibration Date	February 22, 2007	Previous Calibration	February 6, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:36	End Time (MST)	21:00
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	-1.4	0.0000	Correlation Coefficient	0.999903
431.6	427.8	1.0090		
216.5	216.9	0.9980		
108.5	109.8	0.9883		
			Slope	1.007417
			Intercept	-0.518861

### NOx Calibration Curve



## Calibration Summary

Parameter NO  
Air Monitoring Network Palliser Airshed



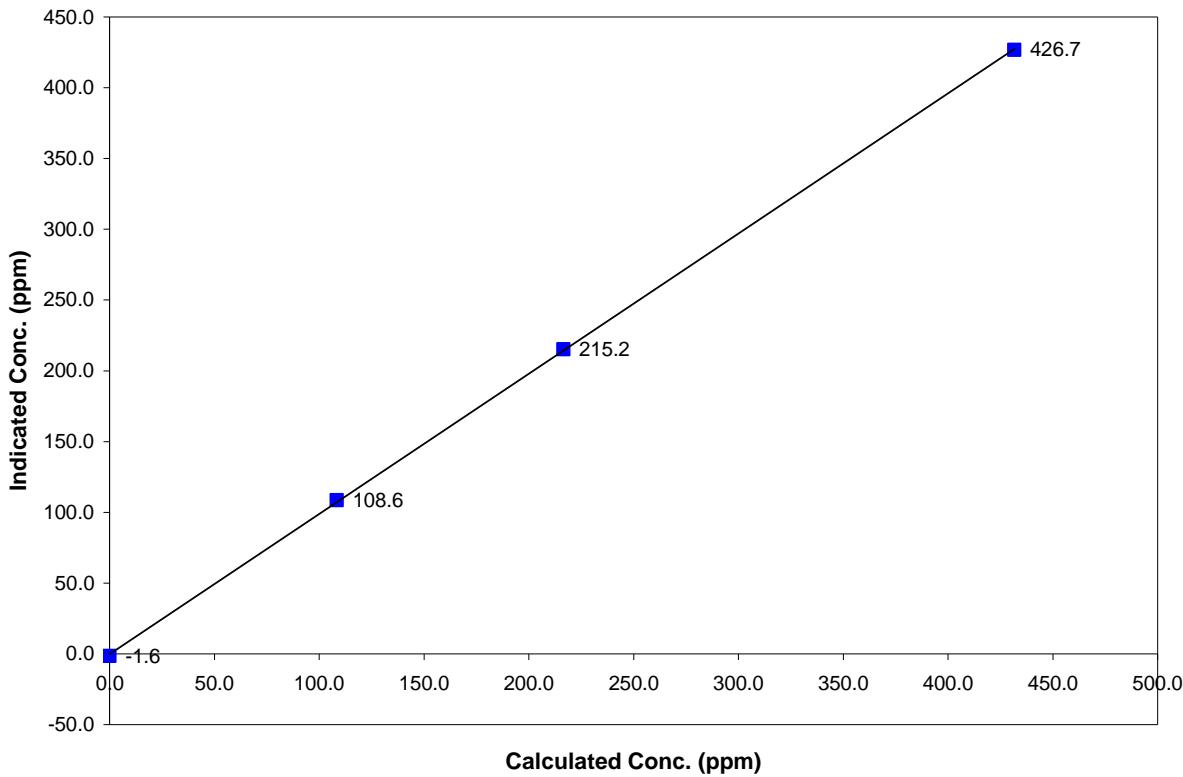
### Station Information

Calibration Date	February 22, 2007	Previous Calibration	February 6, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:36	End Time (MST)	21:00
Analyzer make	API Model 200E	Analyzer serial #	219

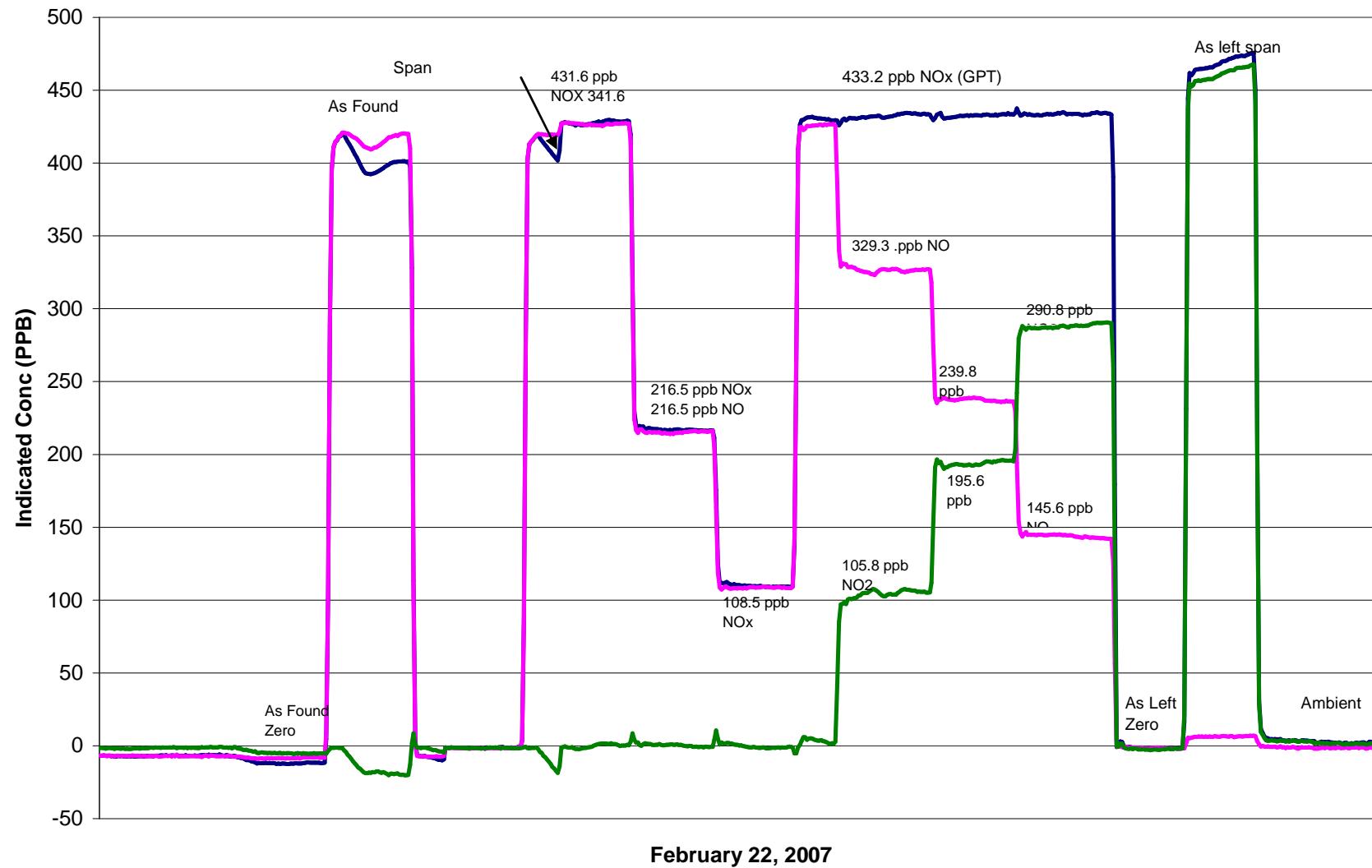
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.6	N/A	Correlation Coefficient	0.999951
431.6	426.7	1.0114		
216.5	215.2	1.0063		
108.5	108.6	0.9990		
			Slope	1.009116
			Intercept	0.229705

### NO Calibration Curve



## NOx Calibration



## Calibration Report

Parameter THC  
 Air Monitoring Network Palliser Airshed



### Station Information

Calibration Date	February 23, 2007	Previous Calibration	January 16, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:14	End Time (MST)	
Barometric Pressure	27.1 inches Hg	Station Temperature	20.0 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	1.003945	Calculated slope	1.002000
Calculated intercept	0.015558	Calculated intercept	0.240698
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596
	before		after
Concentration range	0 - 50	ppm	0 - 50
THC sample pressure	5.78	PSI	5.77
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	-0.24	N/A
4991	79.77	24.03	23.78	1.0109
4991	39.85	12.10	11.77	1.0283
4991	9.95	3.04	2.83	1.0729
zero	0.00	0.00	-0.24	As Found Zero
4991	79.77	24.03	23.78	As Found Span
	Average Correction Factor			1.0374

Calculated value of As Found Response: 24.126 ppm Percent Change of As Found: -0.4%

Auto zero Auto span	before calibration		after calibration	
	0.05	ppm	0.03	ppm
	21.19	ppm	21.08	ppm

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

Calibration Performed By: Lenin Flores, Reid Balawyder

## Calibration Summary

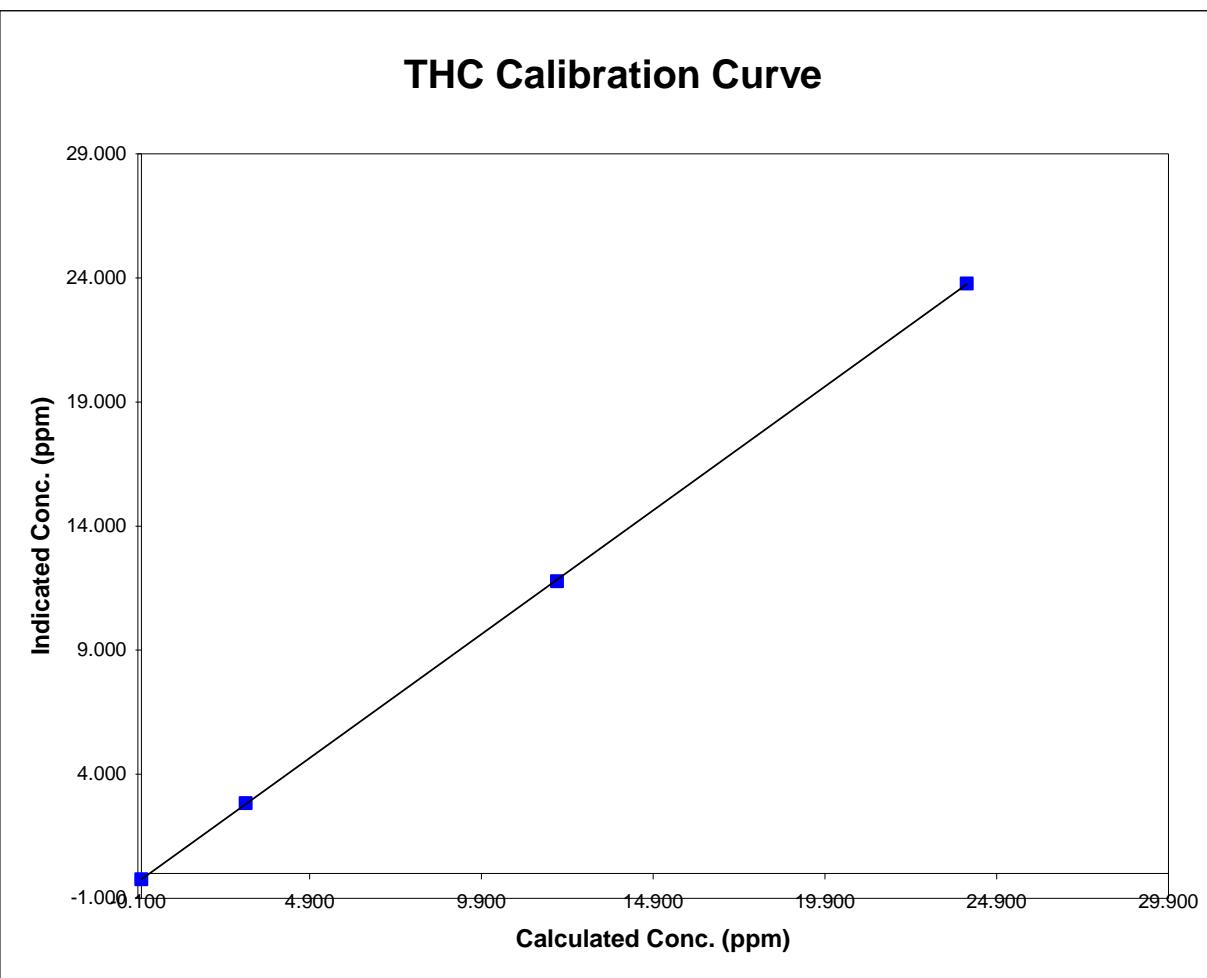
Parameter	THC
Air Monitoring Network	Palliser Airshed

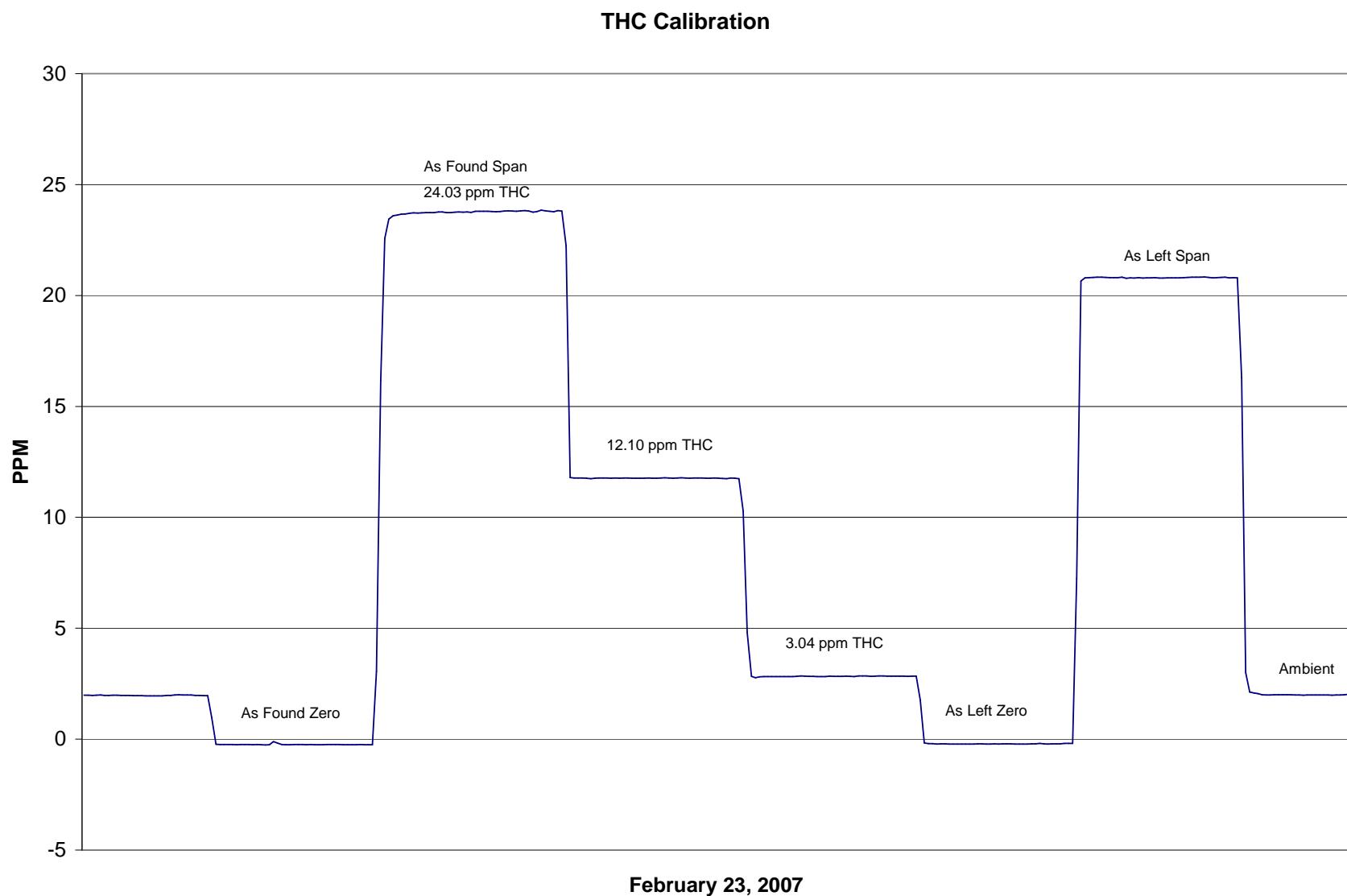


<b>Station Information</b>			
Calibration Date	February 23, 2007	Previous Calibration	January 16, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:14	End Time (MST)	0:00
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

## **Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.241	N/A		
24.034	23.775	1.0109	Correlation Coefficient	0.999980
12.101	11.768	1.0283		
3.040	2.834	1.0729	Slope	1.002000
			Intercept	0.240698





# Calibration Report



Parameter CO

Air Monitoring Network Palliser

## Station Information

Calibration Date	February 23, 2007	Previous Calibration	January 17, 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	0.996402	Calculated slope	0.990425
Calculated intercept	-0.048226	Calculated intercept	-0.432302
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	1.074	
Lamp ratio	0.001	0.001	
Lamp intensity	1.144651	1.143875	
Sample Flow	199763 Hz	199973 Hz	
	1.006 LPM	0.999 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	0.40	N/A
4991	49.87	29.66	30.36	0.9767
4991	19.90	11.91	12.48	0.9538
4991	9.95	5.97	6.49	0.9196
4991	0.00	0.00	0.40	0.0000
4991	49.87	29.66	30.36	0.9767
Average Correction Factor				0.9500

Calculated value of As Found Response: 29.809 ppm Percent Change of As Found: -0.5%

Auto zero	before calibration		after calibration	
	-0.15	ppm	20.74	ppm
	16.14	ppm	-0.04	ppm

Notes:

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Calibration Performed By: Lenin Flores, Reid Balawyder

## Calibration Summary

Parameter CO  
Air Monitoring Network Palliser



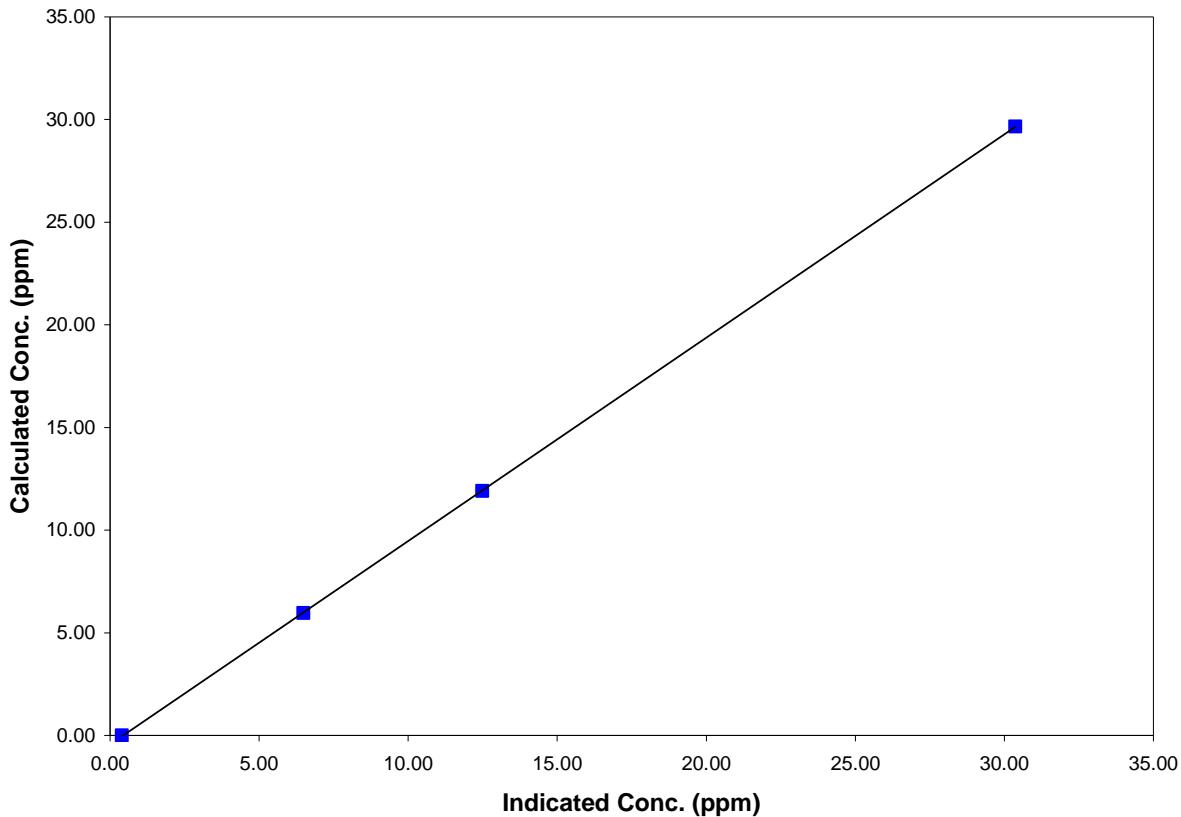
### Station Information

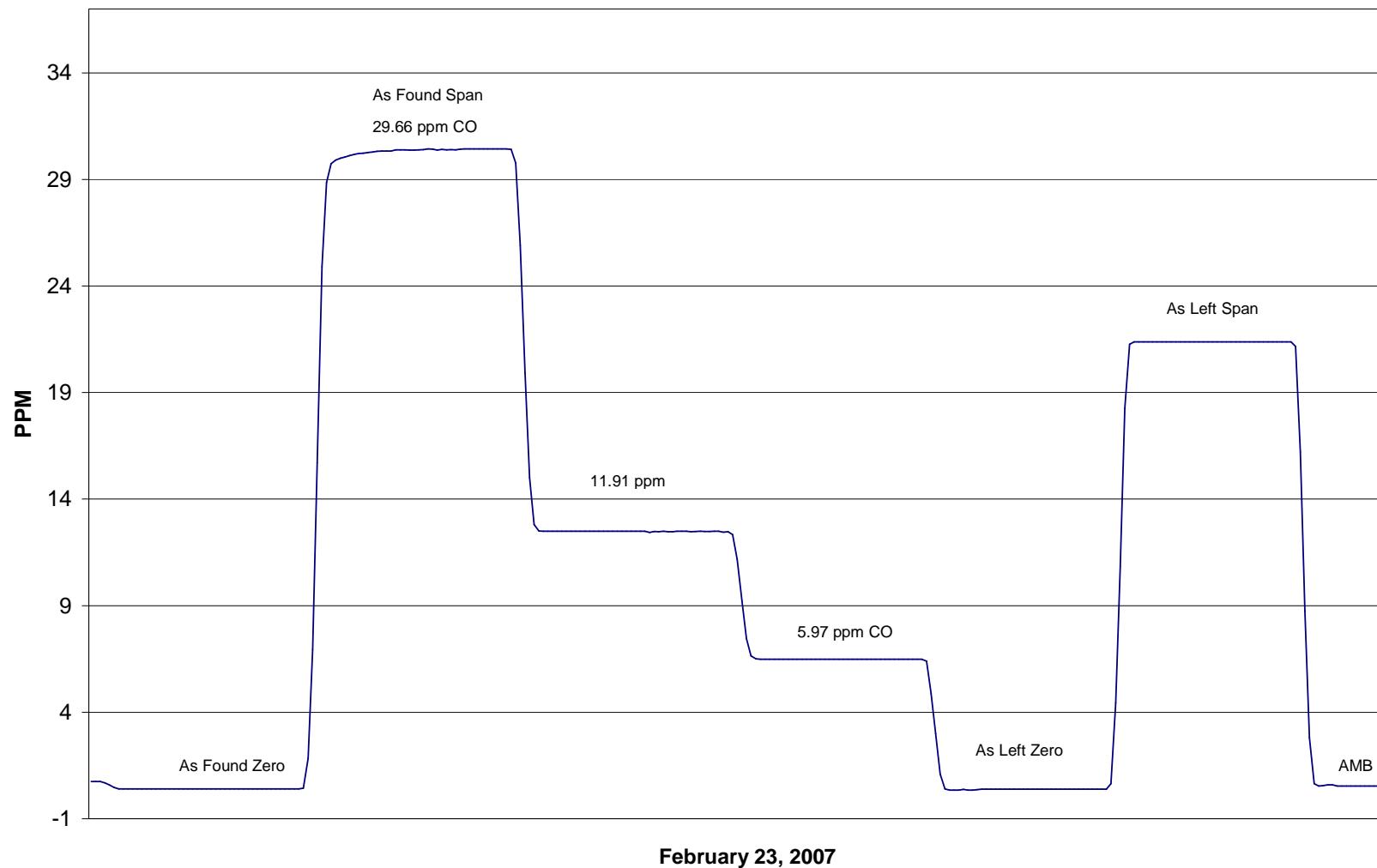
Calibration Date	February 23, 2007	Previous Calibration	January 17, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	7:43	End Time (MST)	10:05
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.40	N/A		
29.66	30.36	0.9767	Correlation Coefficient	0.999994
11.91	12.48	0.9538	Slope	0.990425
5.97	6.49	0.9196	Intercept	-0.432302

### CO Calibration Curve



**CO Calibration**

## Calibration Report

Parameter

**PM2.5**

Air Monitoring Network

**Palliser Airshed**



### Station Information

Calibration Date	February 23, 2007	Previous Calibration	January 17, 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	20.0
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	13.67
Filter Load	43%	%	20%
Ko Factor	NA		NA
Temperature	-3.2	Deg C	-2.7
Pressure	0.906	ATM	0.906

### 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	33.0	45 - 60 Seconds	33.0
flow recovery - aux	46 - 60 Seconds	55.0	46 - 60 Seconds	55.0
Temperature	measured	-3.2	+/- 1.0 Deg C	-2.7
Pressure	measured	0.906	+/- 1.5% ΔATM	0.906
Total Flow	16.67 SLPM	17.09		16.27
Auxiliary flow	13.67 SLPM	14.24	+/- 1.0 SLPM	13.25
Main flow	3.0 SLPM	3.055	+/- 0.2 SLPM	3.043
Leak Check - main	0.0	0.00	<0.15 SLPM	0.00
Leak Check - aux	0.0	-0.01	<0.15 SLPM	-0.02
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