



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

October 2007

Prepared By:



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November 28, 2007

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

**Attention: Director of Monitoring and Evaluation**

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

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Enclosed is the PAS Ambient Monitoring Report for the month of **October 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. All analyzers and instruments were 100% operational for the month of October.

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

- Monthly average concentrations of NO<sub>2</sub> was 4.8 ppb
- Monthly average concentrations for O<sub>3</sub> was 25.0 ppb
- Monthly average concentrations for CO was 0.14 ppm
- Monthly average concentrations for THC was 2.05 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 2.9 µg/m<sup>3</sup>

The Air Quality Index (AQI) recorded 707 hours of Good readings for the month of October.

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

On August 30<sup>th</sup> 2007 the PAS Passive Monitoring program was expanded to twenty sites throughout the Palliser region. Three of the original sites (Monitoring Station, Redcliff and Christian School Park) remained (however, their site numbers changed), the other three were removed (Hospital, Ball Park and Southridge) and seventeen new sites were installed - site documentation to follow. The passive sample analyses were performed by MAXXAM Analytics Inc. The following are the ranges for October 2007 recorded by the twenty passive stations located throughout the PAS zone.

- ◆ Average concentrations for SO<sub>2</sub> passives ranged from 0.1 to 1.2 ppb with a mean of 0.3 ppb.
- ◆ Average concentrations for NO<sub>2</sub> passives ranged from 0.6 to 8.1 ppb with a mean of 3.0 ppb.
- ◆ Average concentrations for O<sub>3</sub> passives ranged from 22.8 to 31.5 ppb with a mean of 26.4 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 October 29<sup>th</sup> (NO<sub>x</sub>, O<sub>3</sub>, THC and CO) and October 30<sup>th</sup> (O<sub>3</sub> and TEOM).

Parameter	Make	Model	Units	Notes
Ozone	TECO	43I	ppb	No operational problems observed.
Nitrogen Dioxide	Teledyne - API	200E	ppb	No operational problems observed.
Total Hydrocarbons	Bendix	400A	ppm	Analyzer did not zero or span after the calibration on October 29 <sup>th</sup> due to a connector that was not affixed properly, it was reconnected on November 2 <sup>nd</sup> .
Carbon Monoxide	TEI	49C	ppm	No operational problems observed.
PM <sub>2.5</sub>	R&P TEOM	1400ab	µg/m <sup>3</sup>	No operational problems observed.
Wind Speed	Met One	010C	kph	No operational problems observed.
Wind Direction	Met One	020C	Deg	No operational problems observed.
Ambient Temperature	Met One	083D	DegC	No operational problems observed.
Relative Humidity	Met One	083D	%	No operational problems observed.
Solar Radiation	Met One	096-1	W/m <sup>2</sup>	No operational problems observed.
Data Acquisition System	Titan Logix	AP1000		No operational problems observed.



## October 2007 Monthly Overall Summary Report

### Ambient Air Quality Data

Oct-2007		Palliser Airshed Society					Maximum Recorded Values						
							1-hr		24-hr / 8-hr				
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	Operational Time (%)
	1-hr	24-hr			1-hr	24-hr							
NO (ppb)			Crescent Heights	3.0	-	-	58.2	Oct-15 08:00	5.2	ENE	11.2	Oct-12	100.0%
NO <sub>2</sub> (ppb)	212	106	Crescent Heights	4.8	0	0	27.2	Oct-08 20:00	4.2	N	10.6	Oct-12	100.0%
NO <sub>x</sub> (ppb)			Crescent Heights	7.5	-	-	75.9	Oct-15 08:00	5.2	ENE	21.7	Oct-12	100.0%
O <sub>3</sub> (ppb)	82		Crescent Heights	25.0	0	-	45.5	Oct-16 13:00	12.2	SSW	36.7	Oct-29	100.0%
O <sub>3</sub> (ppb) - 8-hr	65		Crescent Heights		0						41.5	Oct-15	
CO (ppm)	13		Crescent Heights	0.14	0	-	1.0	Oct-12 21:00	3	NNE	0.3	Oct-12	100.0%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.4	Oct-15	
THC (ppm)			Crescent Heights	2.05	-	-	3.1	Oct-13 02:00	4.1	NNE	2.4	Oct-13	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	30 <sup>a</sup>		Crescent Heights	2.9	0	0	13.9	Oct-30 01:00	18.5	NW	7.6	Oct-29	100.0%
RH (%)			Crescent Heights	55.4	-	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )			Crescent Heights	117.6	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	9.3	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	12.5	-	-	34.9	Oct-24 08:00	34.9	SSW	21.4	Oct-02	100.0%
WSPD s (km/hr)			Crescent Heights	13.1	-	-	35.1	Oct-24 08:00	35.1	SSW	24.3	Oct-24	100.0%
WDIR			Crescent Heights	SW	-	-	-	-	-	-	-	-	100.0%

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



# **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: October 1, 2007 to November 1, 2007

#### Alberta's Air Quality Index

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

#### Summary

Number of 1-hr Good Readings:	707
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

#### Status Flag Characters

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

#### Day Mountain Standard Time

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



## PAS - Crescent Heights Nitrogen Dioxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 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:	27.2 ppb	8-Oct	20:00 21:00
Maximum 24-hr Average:	10.6 ppb	12-Oct	

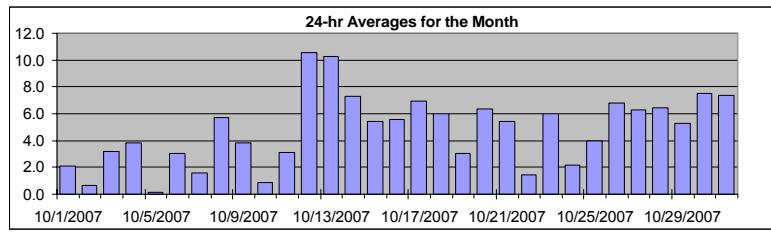
AIC Time:	35 hrs	Operational Time:	705 hrs								
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%								
Percentile	99	95	75	50	25	5	1	Average	4.8 ppb	Median	2.4 ppb
	20.5	16.4	7.5	2.4	0.1	0.0	0.0				

### 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	24:00	0:00			
1-Oct-07	A	1	1	1	4	8	6	7	4	0	0	0	2	0	2	1	3	5	0	1	1	0	0	0	A	2.1	7.7	
2-Oct-07	0	0	0	0	2	2	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.7	5.9	
3-Oct-07	0	0	0	1	7	7	13	14	5	1	0	0	0	0	0	0	2	2	5	7	4	A	5	2		3.2	13.6	
4-Oct-07	2	2	2	2	6	12	15	16	2	0	0	0	0	0	0	2	2	4	3	19	0	A	0	0	0	3.9	19.0	
5-Oct-07	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	1.3		
6-Oct-07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	A	12	13	16	14	10		3.0	16.3
7-Oct-07	11	6	1	1	3	8	3	0	0	0	0	0	0	0	0	0	0	0	0	A	0	3	0	1	0	0	1.6	10.7
8-Oct-07	0	1	0	1	0	1	4	4	1	0	0	0	0	0	0	0	0	A	4	8	19	27	26	18	17	5.7	27.2	
9-Oct-07	12	12	13	12	11	10	14	5	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	3.9	14.0		
10-Oct-07	0	0	0	0	0	0	0	4	0	0	0	1	0	0	A	0	0	1	6	0	7	1	0	0	0.9	6.8		
11-Oct-07	0	0	0	0	0	2	6	5	4	4	2	2	1	A	1	2	3	1	3	11	8	8	5	2		3.1	10.7	
12-Oct-07	6	2	11	15	11	11	11	12	15	12	11	7	A	2	3	2	2	6	12	14	18	22	20	16		10.6	22.1	
13-Oct-07	13	15	14	15	13	11	13	17	13	12	10	A	4	2	1	2	4	7	14	14	10	14	10	10		10.3	16.9	
14-Oct-07	8	14	15	18	13	14	12	11	11	12	A	4	0	0	0	0	1	2	12	10	7	3	0	2		7.3	17.8	
15-Oct-07	1	4	10	9	11	11	17	18	18	A	2	0	0	0	0	0	4	7	5	1	4	1	2	0		5.4	18.1	
16-Oct-07	0	0	0	0	0	6	19	22	A	2	0	1	0	0	0	2	4	7	10	11	19	19	4	3		5.6	21.8	
17-Oct-07	2	1	0	1	1	4	6	A	10	8	5	3	2	1	4	5	8	14	18	17	19	15	10	6		7.0	18.6	
18-Oct-07	1	1	1	0	2	9	A	19	12	5	4	3	1	1	0	1	2	7	16	4	5	10	19	15		6.0	19.4	
19-Oct-07	1	0	0	1	0	A	6	5	6	3	4	1	0	0	5	8	14	4	0	2	1	3	3	2		3.0	13.6	
20-Oct-07	7	4	2	3	A	5	8	8	9	6	3	1	2	0	0	0	1	6	12	10	9	10	19	20		6.4	20.4	
21-Oct-07	21	23	17	A	6	5	6	5	3	1	0	1	0	1	2	2	6	7	7	5	3	2	1	1		5.4	22.9	
22-Oct-07	5	0	A	3	6	3	2	3	2	0	0	1	2	0	0	1	0	1	1	1	0	0	0	0		1.4	6.1	
23-Oct-07	0	A	1	0	4	6	9	13	12	9	10	12	4	3	3	4	8	10	9	7	6	5	2	2		6.0	13.5	
24-Oct-07	A	2	1	2	2	2	2	4	2	2	1	1	0	0	0	1	2	5	6	8	5	1	0	A		2.2	7.5	
25-Oct-07	0	0	0	0	1	5	10	7	5	5	5	1	2	1	0	0	1	2	3	6	11	12	A	13		4.0	13.2	
26-Oct-07	17	9	6	13	11	10	14	14	9	5	2	1	1	1	1	0	1	2	2	5	11	A	9	8		6.8	17.4	
27-Oct-07	10	11	15	16	19	17	16	11	3	0	0	0	0	0	1	1	3	3	5	A	3	3	2		6.3	18.6		
28-Oct-07	3	9	7	12	2	2	7	9	21	15	5	5	3	2	8	5	2	9	10	A	4	3	1	5		6.4	21.2	
29-Oct-07	1	3	1	1	1	4	8	10	5	5	C	C	C	C	A	6	5	7	4	8	16	10	4	2		5.3	15.6	
30-Oct-07	6	10	A	3	5	4	8	6	6	6	4	1	1	1	2	6	7	17	16	14	22	15	5	5		7.5	22.4	
31-Oct-07	5	6	A	10	7	9	15	12	A	A	8	5	7	7	4	4	14	14	7	8	5	4	3	2		7.4	15.0	
	Hourly Avg	4.5	4.5	4.2	4.7	4.9	6.3	8.5	8.8	6.1	3.8	2.7	1.8	1.1	0.8	1.4	1.8	3.4	5.2	7.0	6.9	8.2	7.1	5.4	5.1			
	Hourly Max	20.5	22.9	17.4	17.8	18.6	17.1	18.7	21.8	21.2	15.1	10.7	11.5	6.7	6.5	7.6	7.8	13.9	17.2	19.0	19.3	27.2	25.7	19.7	20.4			

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

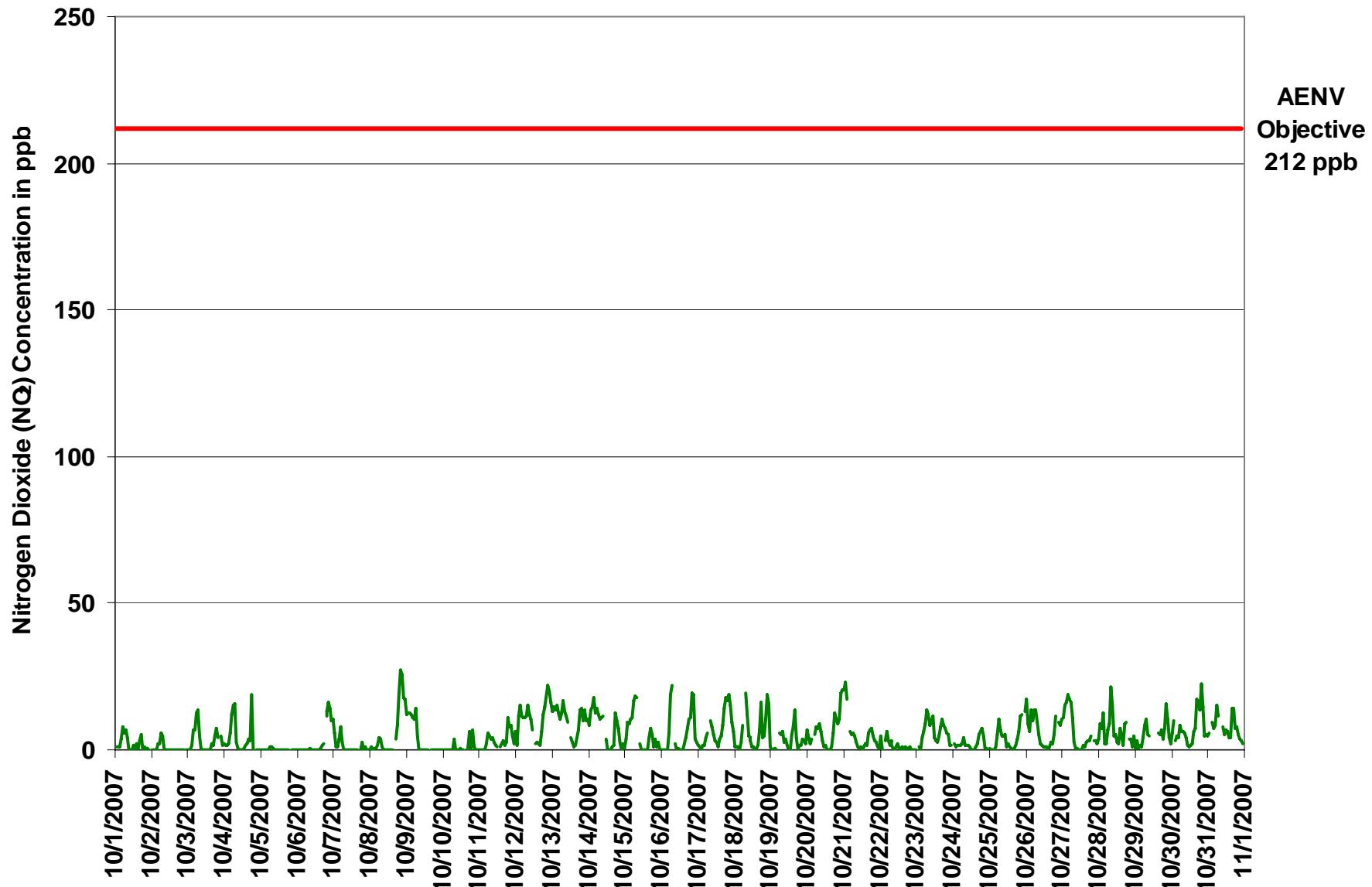


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: October 1, 2007 to November 1, 2007

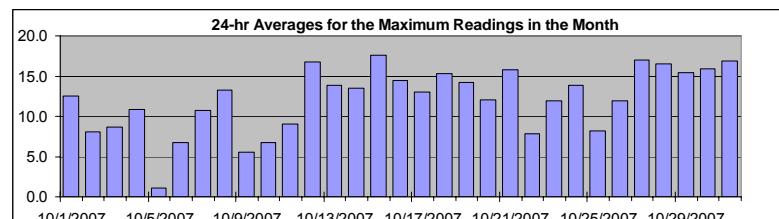
#### Summary

Maximum 1-hr Value:	42.8 ppb	24-Oct 17:00 18:00
Maximum 24-hr Value:	17.6 ppb	15-Oct

AIC Time:	35 hrs	Operational Time:	705 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	38.2 31.2 18.9 10.2 3.0 0.0 0.0	12.1 ppb	10.2 ppb

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
1-Oct-07	A 1:00	3	13	3	24	14	13	10	30	1	25	3	18	0	29	7	23	27	3	5	4	19	0	A	12.5	29.8		
2-Oct-07	0 0:00	0	0	3	20	16	9	9	7	1	0	1	21	0	0	1	6	1	22	29	1	1	A	37	8.1	36.5		
3-Oct-07	0 0:00	13	4	13	11	17	21	10	14	1	6	1	3	2	2	4	4	12	13	9	A	26	12	8.7	25.6			
4-Oct-07	13 1:00	17	4	7	14	18	17	25	10	2	1	24	21	3	3	12	6	16	30	2	A	1	1	1	10.8	30.3		
5-Oct-07	0 0:00	0	0	0	0	0	9	10	2	0	2	0	0	0	0	0	0	0	0	A	2	1	0	0	1.1	10.2		
6-Oct-07	0 0:00	0	0	0	1	0	0	1	4	15	0	14	0	8	2	3	3	5	A	21	18	22	25	13	6.8	25.1		
7-Oct-07	20 1:00	9	25	8	26	19	17	2	2	0	0	22	0	0	0	10	0	A	2	31	2	31	17	4	10.7	31.1		
8-Oct-07	26 1:00	15	17	13	11	13	11	8	7	2	3	2	1	4	3	1	A	8	16	41	31	30	23	19	13.2	41.2		
9-Oct-07	16 1:00	14	16	15	13	20	22	13	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	5.6	21.6		
10-Oct-07	0 0:00	0	0	0	1	0	12	22	1	1	1	13	2	3	A	2	5	5	16	3	18	12	19	20	6.8	22.4		
11-Oct-07	14 0:00	18	19	0	7	11	6	7	6	5	2	3	A	6	5	8	8	8	20	19	15	18	4	9.0	19.6			
12-Oct-07	37 1:00	4	17	19	18	15	14	24	17	17	13	9	A	5	6	5	3	14	22	27	25	34	22	18	16.7	37.3		
13-Oct-07	15 1:00	17	16	17	14	13	15	20	19	14	13	A	5	4	2	4	9	13	21	24	13	20	18	13.9	24.4			
14-Oct-07	12 1:00	20	22	23	17	17	14	12	18	15	A	6	15	2	17	5	23	9	20	19	11	6	3	13.5	23.1			
15-Oct-07	4 1:00	25	22	29	25	30	34	30	29	A	42	10	0	0	2	2	24	11	31	5	10	8	16	14	17.6	42.3		
16-Oct-07	0 0:00	2	0	4	1	32	30	38	A	19	1	3	0	0	2	4	19	9	34	37	27	35	13	22	14.5	38.5		
17-Oct-07	33 1:00	3	1	3	4	14	9	A	22	17	11	5	6	4	6	6	15	17	22	22	25	21	14	24	13.0	33.2		
18-Oct-07	3 1:00	4	7	1	4	18	A	35	17	19	10	17	5	4	4	21	4	12	36	20	10	31	31	38	15.3	38.4		
19-Oct-07	11 0:00	2	3	1	1	A	8	32	21	5	33	27	1	1	33	29	19	27	2	21	7	16	23	6	14.3	33.1		
20-Oct-07	31 1:00	20	5	28	A	8	13	12	10	8	6	2	5	0	1	1	3	9	22	14	11	12	30	26	12.0	30.5		
21-Oct-07	35 1:00	33	24	A	15	20	17	21	4	16	13	25	3	3	7	4	25	22	26	25	18	4	3	3	15.8	35.2		
22-Oct-07	29 0:00	A	5	27	17	3	8	8	4	1	14	11	4	4	10	2	7	2	6	10	0	3	5	7.9	29.3			
23-Oct-07	4 1:00	A	11	2	12	10	15	15	16	13	22	14	8	4	5	29	12	16	11	12	8	7	21	8	11.9	28.7		
24-Oct-07	A 1:00	24	13	18	3	14	8	27	7	3	3	4	2	1	1	27	5	43	24	31	42	2	3	A	13.9	42.8		
25-Oct-07	2 1:00	1	1	1	2	9	21	10	7	12	8	3	4	4	3	2	2	5	6	15	26	26	A	8	26.5			
26-Oct-07	19 20:00	20	9	18	28	14	19	31	13	7	5	12	3	3	5	1	3	4	5	8	25	A	11	11	11.9	30.9		
27-Oct-07	19 1:00	14	19	19	37	21	23	35	26	15	13	19	2	9	30	3	19	6	12	35	A	6	5	5	17.0	36.6		
28-Oct-07	9 1:00	33	25	39	5	4	10	11	31	27	6	13	5	14	12	8	9	28	19	A	6	35	2	29	16.4	38.7		
29-Oct-07	3 1:00	23	2	3	3	14	28	32	25	21	C	C	C	C	A	31	10	10	7	15	22	23	14	6	15.4	32.4		
30-Oct-07	17 1:00	18	A	6	12	8	17	9	9	8	8	4	4	6	6	38	12	37	34	20	31	24	31	7	15.9	38.2		
31-Oct-07	6 1:00	15	A	12	24	11	18	16	A	A	24	19	30	33	9	11	31	21	11	19	8	7	25	4	16.8	32.7		
Hourly Avg		13.0	11.2	10.8	10.7	12.4	13.6	15.1	18.2	13.0	9.7	9.3	10.1	6.2	4.2	6.9	9.5	10.2	13.1	15.9	18.6	15.0	15.4	14.3	12.8			
Hourly Max		37.3	33.2	25.3	38.7	36.6	32.5	33.8	38.5	31.1	26.8	42.3	27.0	30.3	32.7	32.6	38.2	30.7	42.8	35.9	41.2	42.5	35.4	30.7	38.4			



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

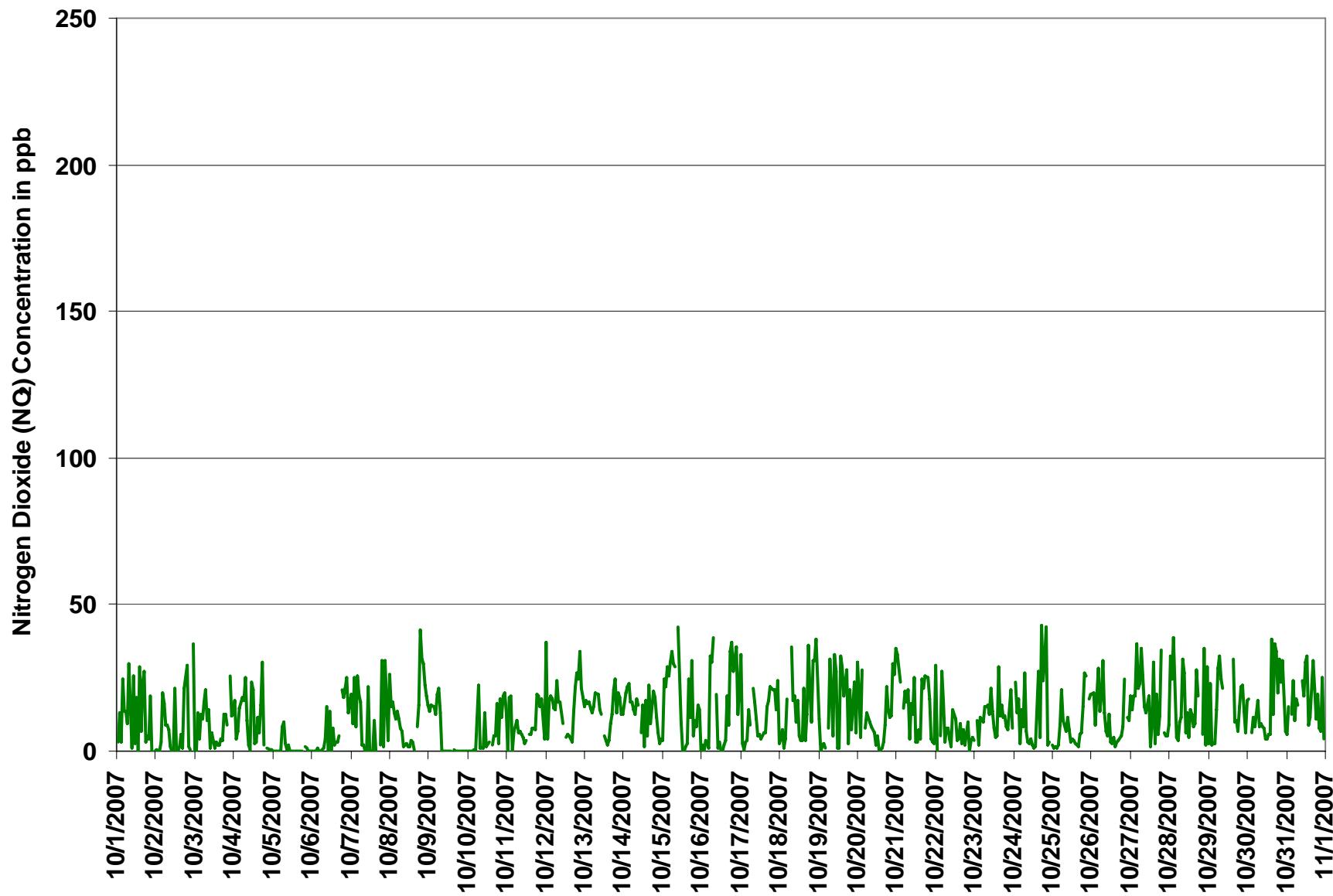
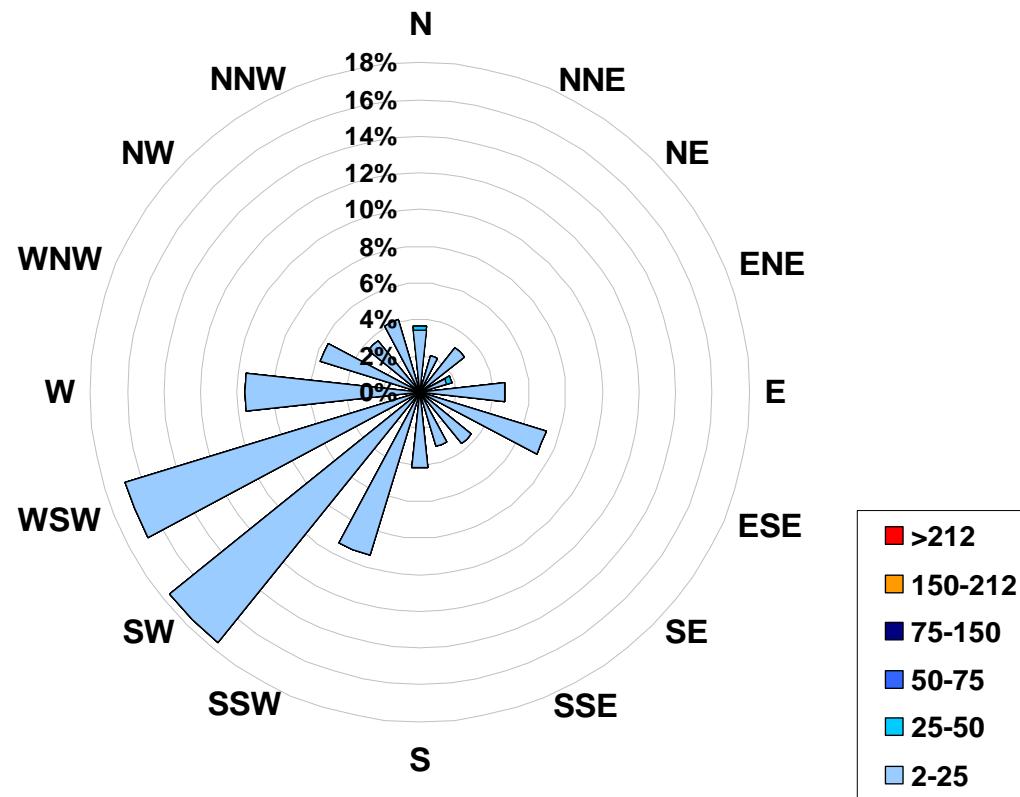


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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





## PAS - Crescent Heights Nitric Oxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

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

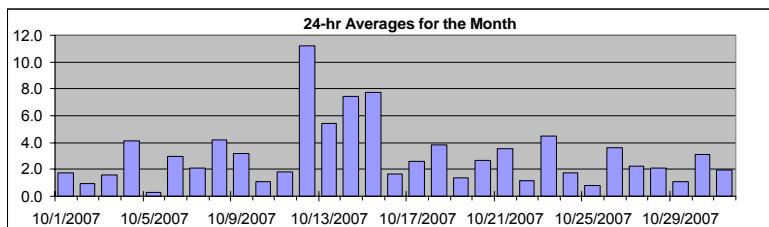
Maximum 1-hr Average:	58.2	ppb	15-Oct	8:00 9:00
Maximum 24-hr Average:	11.2	ppb	12-Oct	

AIC Time:	35 hrs	Operational Time:	705 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	36.6	13.2	2.8	1.2	0.4	0.0	0.0	3.0 ppb	1.2 ppb

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-Oct-07	A	0	0	1	3	1	1	3	4	1	2	1	2	1	4	2	3	4	0	0	0	0	1	0	A	1.7	4.5
2-Oct-07	0	0	0	0	2	2	1	2	2	1	1	1	2	1	1	1	0	0	1	2	0	0	0	A	0.9	2.3	
3-Oct-07	0	0	1	0	0	1	3	9	3	2	1	3	1	1	1	1	0	1	1	1	1	1	A	7	0	1.6	9.3
4-Oct-07	1	3	0	0	1	7	16	37	5	2	1	2	3	2	3	2	1	0	7	0	A	0	0	0	4.2	36.8	
5-Oct-07	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0.3	1.2		
6-Oct-07	0	0	0	0	0	0	0	1	1	2	1	2	1	1	1	2	1	0	A	3	3	28	17	3	3.0	27.7	
7-Oct-07	9	2	7	0	4	5	2	1	2	1	1	2	1	1	1	0	1	1	A	1	3	0	3	1	0	2.1	9.5
8-Oct-07	4	3	3	5	2	2	1	2	2	1	0	0	1	0	1	0	A	1	0	9	14	25	12	10	4.2	24.7	
9-Oct-07	2	7	13	13	10	4	20	2	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	3.1	19.6	
10-Oct-07	0	0	0	0	0	0	1	3	2	2	2	2	2	2	2	A	1	1	1	1	0	2	1	1	1	1.1	2.8
11-Oct-07	1	0	1	1	0	2	5	5	4	4	5	4	2	A	2	1	0	0	0	1	0	1	3	0	1.8	4.8	
12-Oct-07	2	0	3	2	2	3	6	23	53	24	24	10	A	2	1	1	0	2	5	6	13	51	14	12	11.2	52.8	
13-Oct-07	5	5	4	9	5	3	4	22	25	16	10	A	3	2	1	1	1	0	2	1	0	3	3	0	5.4	24.7	
14-Oct-07	0	5	9	38	14	15	7	21	31	22	A	4	1	0	0	1	1	0	1	1	0	0	0	0	7.5	38.4	
15-Oct-07	0	3	3	5	5	6	38	51	58	A	2	1	1	0	1	0	2	1	1	0	0	0	1	0	7.7	58.2	
16-Oct-07	0	0	0	0	0	3	2	13	A	2	1	1	0	0	0	1	2	0	3	3	1	6	0	2	1.7	13.1	
17-Oct-07	2	0	0	0	0	1	1	A	5	3	2	2	2	1	3	2	1	3	7	8	12	2	0	3	2.6	11.6	
18-Oct-07	0	0	0	0	0	4	A	39	9	3	4	3	1	1	0	1	1	0	6	2	0	2	5	5	3.8	39.1	
19-Oct-07	0	0	0	0	0	A	0	2	3	1	3	3	1	1	5	3	3	2	0	2	0	1	2	0	1.4	4.6	
20-Oct-07	6	2	0	3	A	1	2	2	4	6	3	1	1	1	1	0	0	1	1	1	1	1	10	12	2.7	11.7	
21-Oct-07	11	28	7	A	1	3	6	4	3	3	2	3	1	1	1	1	1	1	3	1	1	0	0	0	3.5	27.5	
22-Oct-07	3	0	A	0	3	2	1	1	1	1	2	2	1	1	2	1	1	1	0	1	1	0	0	1	1.2	3.4	
23-Oct-07	0	A	1	0	1	1	3	13	17	12	16	15	4	2	1	3	2	2	2	1	1	1	1	3	1	4.5	16.8
24-Oct-07	A	1	2	3	1	1	1	3	2	2	2	2	1	0	1	2	1	2	4	4	4	0	0	A	1.8	4.4	
25-Oct-07	0	0	0	0	0	0	1	1	1	2	3	1	1	1	0	1	0	0	0	1	1	A	0	0.8	3.1		
26-Oct-07	2	2	0	3	2	5	14	25	11	6	3	2	1	1	1	1	0	1	1	0	1	A	0	0	3.6	25.1	
27-Oct-07	1	1	3	3	14	5	4	5	3	1	1	1	0	1	3	1	1	1	0	1	2	A	0	0	2.2	13.9	
28-Oct-07	0	3	1	10	0	0	0	0	11	8	2	2	1	1	1	0	0	1	0	A	0	1	0	2	2.1	11.2	
29-Oct-07	0	1	0	0	0	1	4	2	2	C	C	C	C	A	5	1	1	0	1	1	1	0	0	0	1.1	4.6	
30-Oct-07	1	3	A	0	1	0	2	1	3	3	3	1	1	1	5	1	4	3	2	24	8	2	0	3.1	24.4		
31-Oct-07	0	0	A	0	3	1	3	3	A	A	5	3	5	5	2	1	3	2	1	2	1	0	2	0	1.9	5.3	
	Hourly Avg	1.8	2.4	2.1	3.3	2.4	2.6	4.9	10.0	9.2	4.6	3.5	2.5	1.5	1.1	1.3	1.4	1.2	1.0	1.7	1.9	2.9	4.7	2.9	2.0		
	Hourly Max	11.2	27.5	13.2	38.4	14.0	14.5	38.0	51.4	58.2	24.2	23.6	14.8	4.5	5.3	4.6	4.7	3.5	3.9	7.2	8.8	24.4	50.7	16.9	12.2		

**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



## PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

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

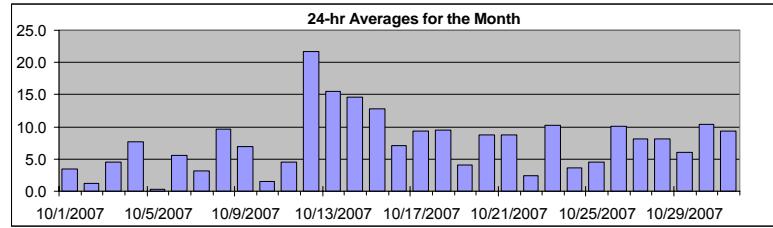
Maximum 1-hr Average:	75.9	ppb	15-Oct	8:00 9:00
Maximum 24-hr Average:	21.7	ppb	12-Oct	

AIC Time:	35 hrs	Operational Time:	705 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	52.5	28.8	9.5	3.7	0.6	0.0	0.0	7.5 ppb	3.7 ppb

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-Oct-07	A	1	1	2	7	9	7	9	8	1	2	0	4	0	6	2	6	9	0	1	1	1	1	0	A	3.5	9.5	
2-Oct-07	0	0	0	0	4	4	7	7	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	A	1.2	7.0		
3-Oct-07	0	0	0	1	7	8	15	23	7	2	0	2	0	1	0	0	3	2	5	8	4	A	12	2	4.5	22.7		
4-Oct-07	2	4	2	2	6	19	31	53	8	2	1	1	3	3	4	4	5	3	26	0	A	0	0	0	7.7	52.6		
5-Oct-07	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	2.3		
6-Oct-07	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	3	2	A	14	16	44	31	13	5.6	44.0	
7-Oct-07	20	7	8	1	7	13	5	1	1	0	0	0	0	0	0	0	0	0	0	A	0	6	0	4	0	0	3.2	20.1
8-Oct-07	3	4	3	5	2	3	5	5	2	0	0	0	0	0	0	0	0	0	A	4	8	28	41	50	30	27	9.6	50.3
9-Oct-07	14	20	26	25	21	14	33	6	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	6.9	33.5	
10-Oct-07	0	0	0	0	0	0	0	6	0	1	1	2	1	1	A	1	1	2	7	0	8	2	0	1	1.5	8.3		
11-Oct-07	0	0	0	0	0	4	10	9	8	8	7	5	4	A	2	3	3	1	3	12	8	9	7	2	4.5	11.7		
12-Oct-07	8	2	15	17	13	14	16	35	68	36	34	17	A	4	4	3	2	8	17	20	32	73	34	29	21.7	72.8		
13-Oct-07	17	20	18	24	17	14	17	39	38	28	19	A	7	5	2	2	5	6	15	15	10	16	13	11	15.5	38.5		
14-Oct-07	9	19	23	56	26	29	19	32	42	33	A	7	1	0	0	0	2	1	13	11	7	3	0	2	14.6	56.3		
15-Oct-07	0	6	12	14	15	16	55	69	76	A	4	0	0	0	0	0	6	8	5	1	3	0	2	12.8	75.9			
16-Oct-07	0	0	0	0	0	8	21	35	A	4	0	1	0	0	0	2	6	7	13	13	20	24	4	4	7.1	34.6		
17-Oct-07	3	1	0	1	1	5	6	A	15	10	7	5	4	2	6	6	9	16	25	25	30	17	10	9	9.3	29.9		
18-Oct-07	1	1	1	0	2	12	A	58	20	8	8	7	3	2	0	1	2	7	22	6	5	12	23	21	9.5	58.4		
19-Oct-07	1	0	0	0	0	A	6	7	8	3	6	4	0	0	10	11	17	6	0	4	1	4	5	2	4.1	16.8		
20-Oct-07	13	6	2	6	A	6	9	10	13	12	6	2	3	0	0	0	1	6	13	11	9	11	29	32	8.7	31.8		
21-Oct-07	31	50	24	A	7	8	11	8	5	4	2	3	1	2	3	2	7	8	10	5	4	2	1	1	8.7	50.3		
22-Oct-07	8	0	A	3	9	5	2	4	3	1	0	3	4	1	1	2	0	2	1	1	2	0	0	0	2.4	9.1		
23-Oct-07	0	A	2	0	4	7	12	26	29	20	26	26	9	5	4	8	10	12	10	8	7	5	4	2	10.2	28.8		
24-Oct-07	A	3	3	5	2	2	3	7	3	3	3	2	1	0	0	3	3	7	10	11	9	1	1	A	3.6	11.3		
25-Oct-07	1	0	0	0	1	5	11	8	5	7	8	2	3	2	0	0	0	1	3	6	13	13	A	4.5	14.2			
26-Oct-07	19	10	6	16	13	15	27	39	20	12	5	3	2	1	1	0	1	3	2	5	12	A	9	8	10.1	38.8		
27-Oct-07	11	11	18	18	32	22	20	16	5	1	1	1	0	0	4	1	4	3	4	7	A	3	3	2	8.2	32.3		
28-Oct-07	4	12	8	22	2	2	7	9	32	23	6	7	3	3	3	9	5	1	9	9	A	3	5	1	8.2	32.0		
29-Oct-07	0	4	0	1	1	4	9	14	7	6	C	C	C	C	A	10	6	8	4	8	17	11	4	1	6.1	16.7		
30-Oct-07	7	13	A	3	5	4	10	7	9	8	7	3	2	2	2	11	8	21	19	15	47	22	7	5	10.4	46.7		
31-Oct-07	5	6	A	10	10	9	18	15	A	A	13	8	11	12	6	5	17	16	8	10	6	4	5	2	9.3	18.3		
Hourly Avg	6.1	6.7	6.1	7.7	7.2	8.7	13.2	18.6	15.1	8.1	5.8	3.9	2.3	1.6	2.3	2.8	4.2	6.0	8.4	8.7	10.9	11.6	8.0	6.8				
Hourly Max	31.4	50.3	25.7	56.3	32.3	28.5	54.8	69.4	75.9	36.2	34.2	26.1	11.3	11.8	9.8	11.0	16.9	21.0	26.0	27.9	46.7	72.8	33.8	31.8				

**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

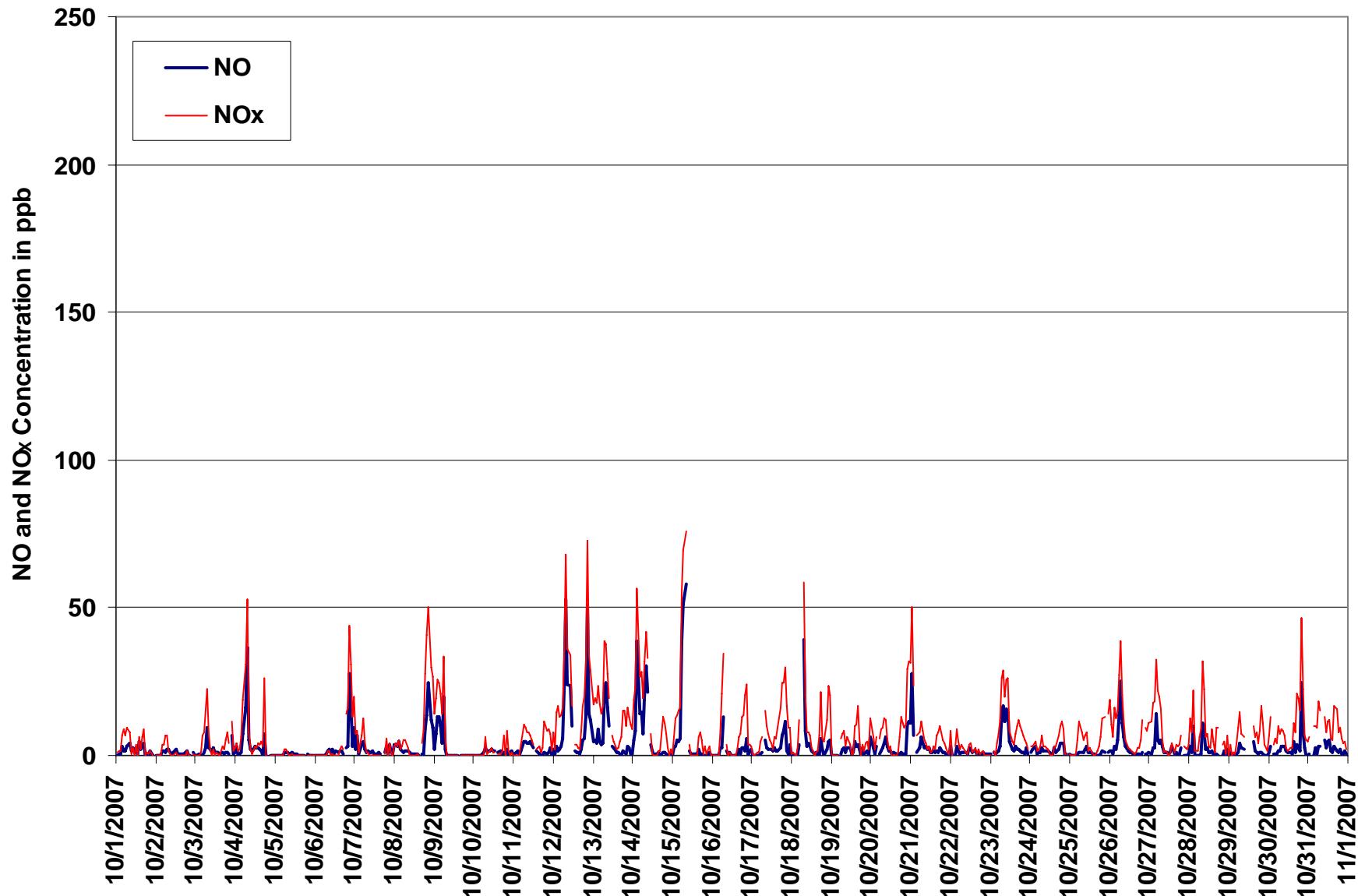


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

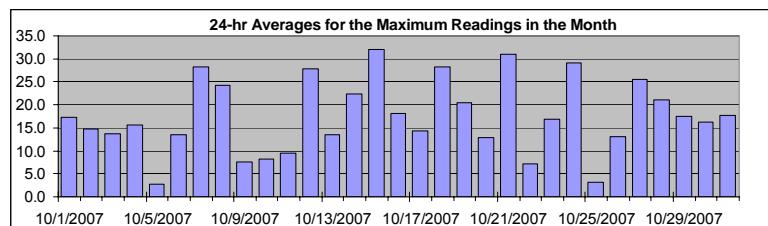
### Nitric Oxide (NO)

Monitoring Dates: October 1, 2007 to November 1, 2007

#### Summary

Maximum 1-hr Value:	229.9 ppb	18-Oct 7:00	8:00
Maximum 24-hr Value:	32.0 ppb	15-Oct	

AIC Time:	35 hrs	Operational Time:	705 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	115.2 72.2 25.3 4.0 1.6 0.7 0.4	17.5 ppb	4.0 ppb



#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start	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-Oct-07	A	1	17	3	64	5	3	5	64	3	45	3	18	1	54	6	32	28	1	2	1	25	1	A	17.3	64.0	
2-Oct-07	7	1	1	1	40	20	3	4	16	2	2	6	30	2	2	3	6	1	38	84	1	1	A	67	14.7	84.3	
3-Oct-07	1	0	20	1	2	3	7	22	13	24	2	56	2	2	4	2	2	1	3	2	3	A	136	7	13.6	135.7	
4-Oct-07	30	53	2	2	5	26	29	74	18	3	3	30	30	4	4	10	2	5	29	1	A	1	1	0	15.6	73.8	
5-Oct-07	1	1	1	1	1	1	22	18	4	1	4	1	1	1	1	1	1	1	1	A	1	1	1	2.8	22.2		
6-Oct-07	1	1	1	1	1	1	1	2	3	30	2	54	2	15	4	3	2	2	A	7	11	50	109	8	13.5	109.1	
7-Oct-07	42	4	157	1	84	43	61	2	3	2	2	30	1	1	1	24	1	A	2	54	2	90	31	11	28.3	157.4	
8-Oct-07	91	43	41	56	41	38	4	2	6	3	2	2	2	3	3	1	A	15	1	78	35	32	39	20	24.2	90.7	
9-Oct-07	12	12	22	20	14	30	38	12	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	7.6	38.2	
10-Oct-07	1	2	1	1	1	1	15	18	3	3	2	15	3	6	A	2	14	2	4	1	8	3	29	54	8.3	54.4	
11-Oct-07	26	1	30	43	1	7	19	6	8	5	6	6	4	A	5	2	2	1	1	4	2	2	32	1	9.4	42.9	
12-Oct-07	61	2	8	6	7	7	15	97	63	43	33	18	A	3	4	2	1	7	26	38	47	106	28	20	27.9	106.0	
13-Oct-07	10	15	10	12	8	10	23	65	51	22	14	A	4	4	2	1	3	1	7	4	2	11	26	2	13.5	64.8	
14-Oct-07	3	22	45	81	60	28	13	38	57	37	A	6	28	12	28	10	30	3	4	5	1	1	0	1	22.4	81.5	
15-Oct-07	1	45	40	48	50	46	114	115	126	A	25	12	1	1	2	1	34	2	39	0	1	1	17	15	32.0	125.7	
16-Oct-07	1	1	0	0	0	26	18	98	A	26	2	2	1	1	1	2	49	1	49	54	8	54	2	21	18.1	98.3	
17-Oct-07	94	0	0	2	1	9	3	A	25	13	8	3	5	4	6	3	3	5	17	37	30	14	1	46	14.3	94.0	
18-Oct-07	1	2	1	1	1	18	A	230	23	35	11	16	3	3	2	13	2	1	79	52	1	41	40	72	28.2	229.9	
19-Oct-07	1	1	1	1	1	A	1	29	40	2	67	65	2	2	64	28	6	44	1	63	2	14	35	2	20.4	67.0	
20-Oct-07	59	51	2	52	A	2	4	4	6	8	7	2	3	2	2	2	2	3	2	2	2	2	50	33	13.0	59.0	
21-Oct-07	58	151	21	A	2	52	71	110	4	50	35	52	2	2	3	3	12	4	28	21	28	1	1	1	31.0	151.5	
22-Oct-07	37	0	A	1	28	9	2	2	5	3	2	18	14	3	3	10	2	5	1	2	7	1	3	3	7.1	36.7	
23-Oct-07	2	A	5	1	3	5	19	23	36	22	78	19	8	4	3	53	4	3	3	2	5	2	81	6	16.9	81.5	
24-Oct-07	A	53	25	64	2	26	12	60	13	3	3	10	2	1	2	70	2	46	46	100	99	1	1	A	29.2	100.5	
25-Oct-07	1	1	1	1	1	1	5	2	2	7	5	2	2	3	2	2	1	1	1	2	22	6	A	3	22.2		
26-Oct-07	3	4	1	19	26	32	59	89	20	9	6	13	2	2	2	1	1	2	2	1	4	A	1	1	13.1	88.6	
27-Oct-07	4	2	8	6	130	14	14	56	49	38	28	30	2	30	78	1	21	1	17	51	A	3	2	25.6	130.1		
28-Oct-07	3	105	30	119	1	2	2	2	43	21	3	17	2	19	4	2	1	7	1	A	2	53	1	47	21.2	119.2	
29-Oct-07	1	22	1	1	15	27	97	49	22	C	C	C	C	A	82	4	4	4	73	2	16	12	7	88	28	17.6	96.6
30-Oct-07	5	9	A	1	2	1	3	2	4	5	18	3	4	4	4	73	2	15	3	36	2	1	41	1	16.3	87.9	
31-Oct-07	1	3	A	2	68	2	8	5	A	A	28	31	52	45	3	3	20	15	3	36	2	1	41	1	17.7	67.7	

Hourly Avg 19.2 20.2 17.6 18.2 21.5 16.1 20.6 42.9 26.0 15.3 15.2 18.1 8.0 6.3 10.1 13.9 8.8 7.5 14.1 24.7 14.4 18.9 27.3 15.6

Hourly Max 94.0 151.5 157.4 119.2 130.1 52.3 114.3 229.9 125.7 50.2 78.4 65.0 52.5 45.4 77.9 81.9 49.1 46.1 79.0 100.5 98.7 106.0 135.7 72.5



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: October 1, 2007 to November 1, 2007

#### Summary

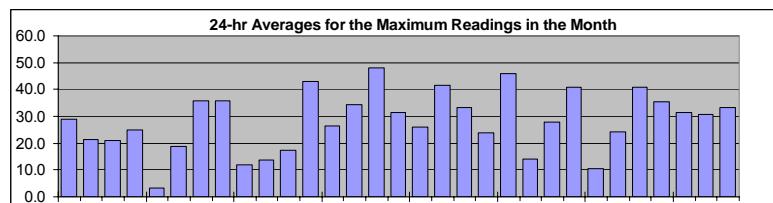
Maximum 1-hr Value:	250.0 ppb	18-Oct	7:00 8:00
Maximum 24-hr Value:	48.1 ppb	15-Oct	

AIC Time:	35 hrs	Operational Time:	705 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	142.9 99.1 42.9 13.8 4.2 0.0 0.0	28.2 ppb	13.8 ppb

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Oct-07	A 1:00	3	27	6	88	18	16	13	93	3	68	5	35	1	82	12	55	55	3	6	4	45	0	A	29.0	93.1	
2-Oct-07	6 0	0	0	3	53	33	11	12	20	3	2	5	48	1	1	3	11	2	58	114	2	1	A	104	21.5	114.2	
3-Oct-07	0 0	0	32	4	14	13	23	42	23	35	3	61	2	5	5	2	5	4	16	14	11	A	152	19	21.1	152.2	
4-Oct-07	43 68	5	8	19	44	46	99	28	4	2	53	40	6	6	21	7	20	55	2	A	1	0	0	25.1	99.2		
5-Oct-07	0 0	0	0	0	0	0	31	28	5	1	5	0	0	0	0	0	0	0	0	A	1	1	0	0	3.2	30.8	
6-Oct-07	0 0	0	0	1	0	0	3	7	39	1	68	2	20	6	6	5	4	A	28	26	71	130	21	19.0	129.7		
7-Oct-07	57 12	157	9	102	62	78	3	3	1	0	52	0	0	0	35	0	A	2	84	3	103	48	13	35.8	156.7		
8-Oct-07	104 56	56	65	52	50	15	10	12	4	4	2	3	5	5	1	A	22	16	119	63	59	62	36	35.8	118.7		
9-Oct-07	28 25	37	34	26	46	54	24	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	12.0	54.1		
10-Oct-07	0 0	0	0	1	0	26	38	3	3	3	28	4	7	A	3	18	7	20	3	25	13	47	65	13.6	64.6		
11-Oct-07	40 0	48	54	0	14	29	11	14	10	8	8	7	A	11	6	9	8	8	24	21	17	49	3	17.4	54.3		
12-Oct-07	97 5	21	24	24	21	28	115	79	59	46	28	A	7	9	6	4	17	42	63	69	134	49	38	42.9	134.4		
13-Oct-07	24 30	26	28	21	23	35	80	70	35	26	A	9	7	4	4	12	13	27	28	15	31	43	14	26.2	79.8		
14-Oct-07	14 41	67	101	72	44	25	48	71	52	A	12	42	14	42	14	48	12	24	23	13	7	2	4	34.4	101.3		
15-Oct-07	4 67	59	76	75	77	143	142	149	A	67	23	0	0	2	3	55	12	70	5	10	9	28	29	48.1	149.2		
16-Oct-07	0 1	0	3	1	56	48	133	A	44	2	5	0	0	2	4	68	9	78	90	32	87	15	42	31.3	133.2		
17-Oct-07	127 3	0	4	3	22	12	A	34	27	18	7	11	8	12	8	18	22	38	57	48	35	14	70	26.0	127.1		
18-Oct-07	2 4	7	1	4	35	A	250	40	54	21	34	8	5	5	34	4	12	109	68	11	70	70	108	41.6	250.0		
19-Oct-07	10 0	1	2	2	A	9	56	56	7	99	92	2	2	95	56	24	70	2	83	8	28	57	6	33.4	99.5		
20-Oct-07	89 71	5	79	A	8	16	15	14	15	13	4	8	1	1	1	4	10	24	16	12	13	77	58	24.0	89.3		
21-Oct-07	88 183	43	A	15	70	87	129	7	67	47	76	4	5	10	6	36	25	54	44	44	5	3	3	45.7	182.7		
22-Oct-07	65 0	A	5	53	26	4	10	12	8	2	31	25	5	7	20	4	13	2	7	15	0	5	7	14.3	65.3		
23-Oct-07	5 A	16	3	14	15	32	37	51	34	97	32	15	7	8	81	16	19	14	14	12	8	98	13	27.8	98.5		
24-Oct-07	A 75	33	82	3	40	20	87	20	5	4	14	4	1	3	96	6	73	70	124	136	2	3	A	40.9	136.4		
25-Oct-07	2 0	1	1	2	9	25	12	7	17	12	5	6	6	3	3	2	5	7	17	47	30	A	19	10.4	46.7		
26-Oct-07	23 22	10	36	53	44	77	120	33	16	10	25	4	4	6	2	3	4	5	9	28	A	11	11	24.1	119.7		
27-Oct-07	23 15	25	24	159	35	35	90	71	50	39	47	2	39	104	3	39	6	27	85	A	7	5	5	40.7	158.7		
28-Oct-07	12 128	52	153	4	4	9	12	70	46	9	30	6	34	15	10	10	33	20	A	6	87	2	60	35.4	153.4		
29-Oct-07	2 37	2	3	3	29	52	130	69	43	C	C	C	C	A	110	13	14	7	18	23	24	14	6	31.4	130.0		
30-Oct-07	22 27	A	6	13	10	20	10	13	12	22	6	6	7	8	109	13	51	46	26	115	51	105	8	30.7	115.3		
31-Oct-07	6 17	A	13	87	12	25	20	A	A	52	49	82	76	12	14	51	30	12	54	9	7	63	5	33.2	87.2		

Hourly Avg 30.8 29.7 26.0 27.5 32.1 28.7 34.4 59.3 37.1 23.9 23.6 27.6 12.9 9.5 15.9 22.5 18.0 19.1 28.5 42.2 27.8 32.6 39.8 26.5  
Hourly Max 127.1 182.7 156.7 153.4 158.7 76.6 142.9 250.0 149.2 66.6 99.5 91.7 82.4 75.9 103.9 109.8 67.8 73.0 108.9 124.3 136.4 134.4 152.2 108.1



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

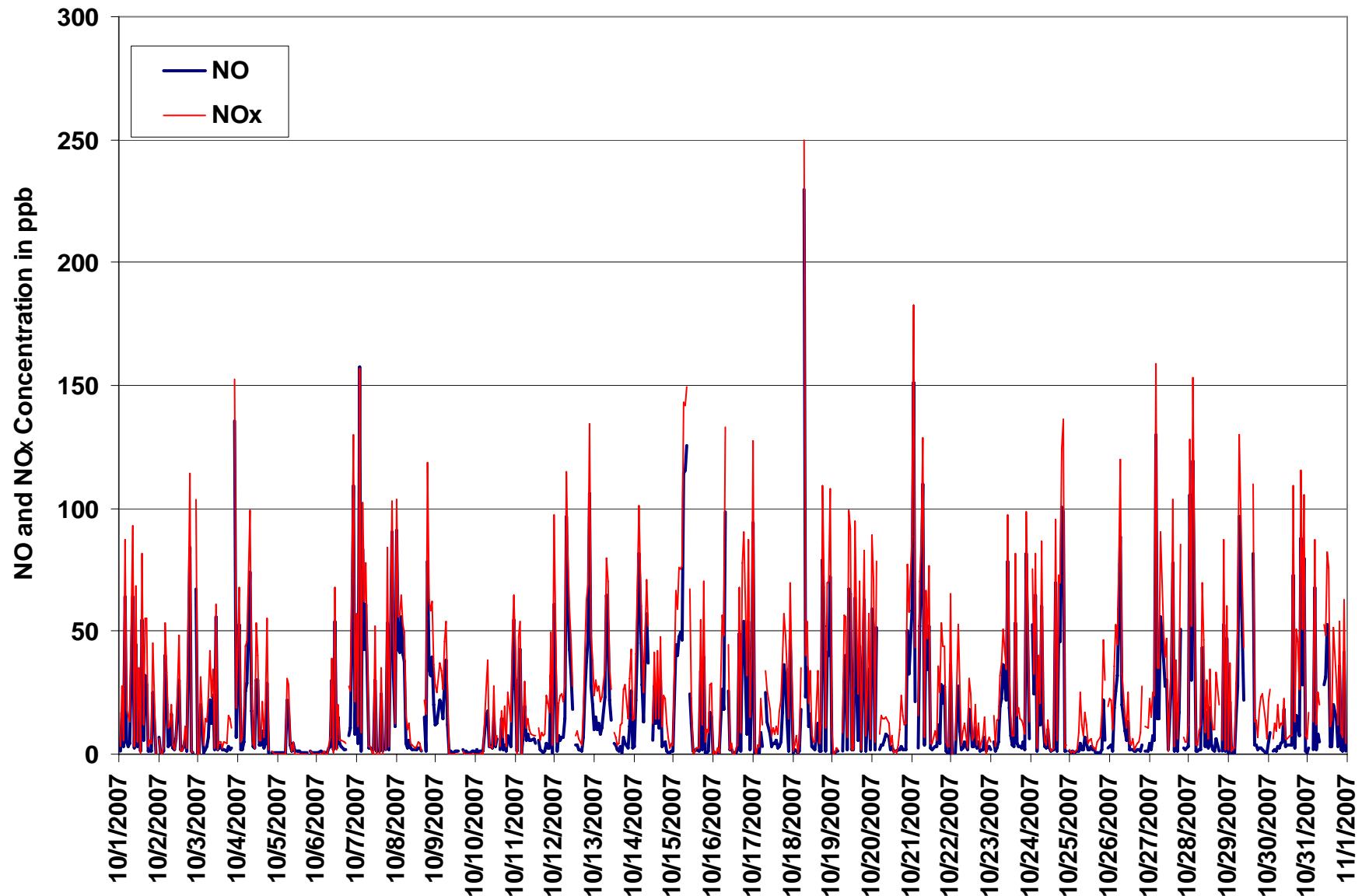


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



## PAS - Crescent Heights Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

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

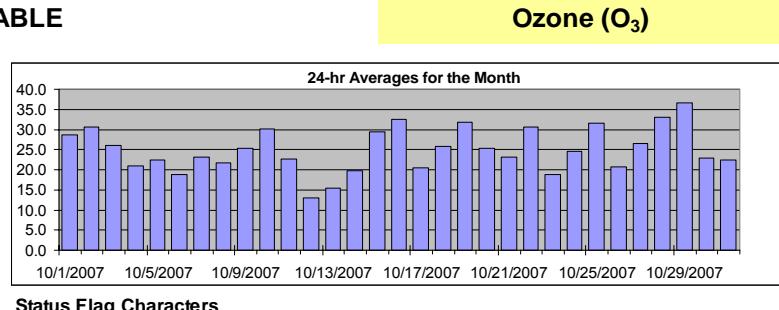
Number of 1-hr Exceedances:	0
Maximum 1-hr Average:	45.5 ppb
Maximum 24-hr Average:	36.7 ppb

16-Oct 13:00 14:00  
29-Oct

AIC Time:	35 hrs	Operational Time:	707 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median

43.6 40.5 34.2 26.8 16.8 3.6 1.3  
25.0 ppb 26.8 ppb

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-Oct-07	A	20	20	18	17	16	17	17	21	31	37	38	38	40	36	37	35	32	29	32	40	29	32	A	28.7	40.3	
2-Oct-07	31	29	27	22	21	21	18	22	27	33	35	36	37	41	40	39	37	34	34	32	28	30	A	33	30.7	40.6	
3-Oct-07	34	33	28	22	14	15	8	9	20	30	33	34	37	34	35	36	32	30	25	21	23	A	21	21	25.9	36.7	
4-Oct-07	18	16	16	16	12	5	2	5	15	19	24	26	27	29	30	33	32	32	14	35	A	30	24	22	21.0	35.4	
5-Oct-07	22	22	21	20	20	19	15	15	16	17	18	22	26	27	31	33	33	30	28	A	21	20	19	19	22.4	33.3	
6-Oct-07	20	20	20	18	16	17	16	15	15	21	26	28	28	29	31	32	30	28	A	21	20	19	19	18.9	31.5		
7-Oct-07	5	12	17	19	16	11	18	24	27	31	31	32	32	33	34	33	30	A	23	20	23	21	21	21	23.2	33.7	
8-Oct-07	19	17	17	14	12	11	12	16	28	33	37	38	39	41	41	42	A	35	28	13	3	1	2	1	21.7	42.3	
9-Oct-07	2	0	0	0	1	3	2	20	32	35	38	43	42	40	40	A	39	40	38	35	33	32	32	35	25.4	43.3	
10-Oct-07	37	36	37	37	36	35	34	26	28	28	29	28	32	34	A	33	31	28	22	26	17	25	32	24	30.1	37.3	
11-Oct-07	23	26	28	32	30	16	6	7	9	11	15	22	30	A	41	39	35	32	30	17	16	15	18	23	22.6	40.9	
12-Oct-07	19	22	9	4	6	5	4	3	3	6	8	17	A	37	34	31	30	22	16	11	5	3	2	3	13.1	37.2	
13-Oct-07	5	2	3	1	3	6	4	4	7	9	12	A	27	33	40	42	38	35	24	17	15	9	11	8	15.5	42.1	
14-Oct-07	11	6	4	3	3	3	4	4	7	12	A	28	36	40	40	39	37	34	19	18	19	26	30	29	19.8	40.2	
15-Oct-07	30	25	14	14	10	11	5	5	8	A	39	41	42	44	43	44	39	35	35	39	37	39	38	40	29.3	43.6	
16-Oct-07	41	39	41	38	37	29	15	14	A	35	38	44	46	45	40	37	31	27	25	15	17	30	27	32.5	45.5		
17-Oct-07	25	24	25	24	24	22	20	A	23	18	24	24	32	35	31	29	20	10	5	4	4	10	16	20	20.5	35.3	
18-Oct-07	24	25	25	24	20	10	A	3	11	22	26	33	41	44	45	43	42	34	21	31	25	18	11	16	25.8	44.5	
19-Oct-07	36	36	32	31	30	A	24	26	26	29	29	32	36	36	34	31	24	34	38	35	35	35	32	31	31.8	37.6	
20-Oct-07	26	27	24	24	A	20	17	18	17	20	29	34	36	40	40	40	37	29	22	25	23	19	10	6	25.4	40.3	
21-Oct-07	4	3	6	A	14	13	14	14	17	20	24	28	39	41	39	40	34	28	25	26	24	26	26	27	23.1	40.9	
22-Oct-07	28	35	A	27	25	29	32	31	33	34	36	35	35	36	34	32	31	28	27	27	26	28	28	28	30.6	35.9	
23-Oct-07	28	A	27	28	20	15	9	5	6	11	13	16	23	29	31	29	22	16	15	14	15	16	21	21	18.7	30.8	
24-Oct-07	A	19	20	20	18	20	19	18	21	22	25	29	32	34	33	32	28	25	22	19	24	27	33	A	24.5	34.2	
25-Oct-07	39	40	40	39	37	32	26	28	31	30	32	37	37	39	42	38	36	33	29	24	16	13	A	10	31.6	41.9	
26-Oct-07	5	12	14	5	8	5	2	2	10	15	23	32	38	39	41	38	37	35	35	29	19	A	17	15	20.8	40.8	
27-Oct-07	12	9	4	3	2	3	14	25	33	36	37	40	41	41	40	39	36	33	33	29	A	35	34	34	26.6	41.4	
28-Oct-07	32	25	29	24	33	38	31	29	14	22	33	36	42	43	38	42	44	31	27	A	38	38	39	32	33.0	44.3	
29-Oct-07	36	38	38	39	40	37	32	30	37	38	41	40	44	41	36	39	39	36	35	33	26	32	35	40	36.7	44.1	
30-Oct-07	27	15	A	26	31	27	20	C	C	A	26	31	33	35	36	31	29	17	17	14	1	9	18	16	22.9	36.3	
31-Oct-07	17	15	A	12	17	14	8	13	A	A	24	27	27	35	39	38	27	21	23	18	21	23	25	26	22.4	38.6	
	Hourly Avg	22.6	21.6	20.9	20.2	19.1	16.9	14.9	15.5	19.4	23.9	28.0	31.5	35.0	37.2	37.3	36.4	33.4	29.6	25.5	23.4	20.6	21.6	22.8	21.8		
	Hourly Max	40.8	39.6	40.5	39.1	40.5	37.6	33.5	31.4	37.4	38.2	40.8	43.3	44.1	45.5	45.3	43.6	44.3	39.7	37.9	38.7	40.3	39.4	39.0	39.7		



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

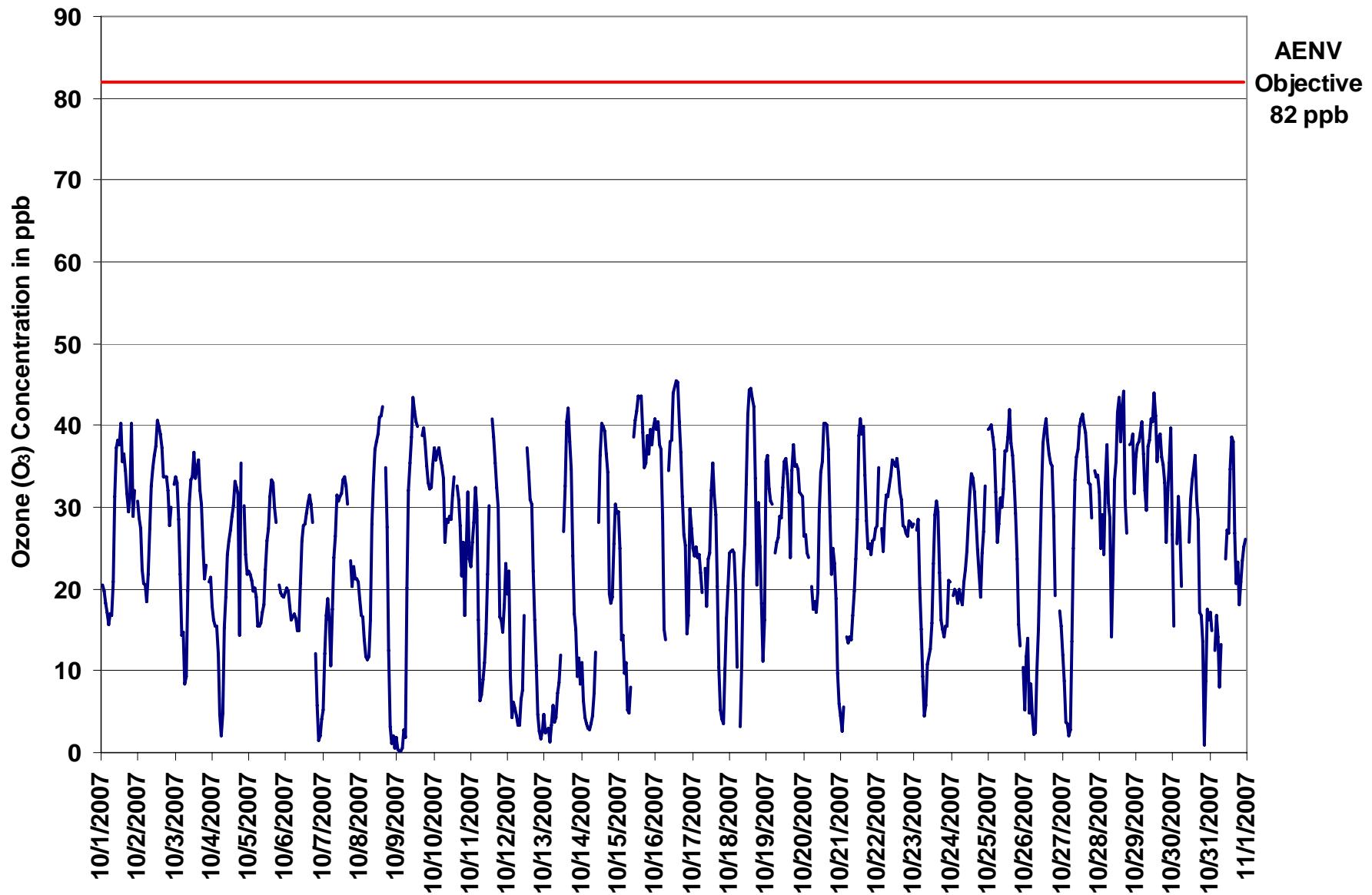


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: October 1, 2007 to November 1, 2007

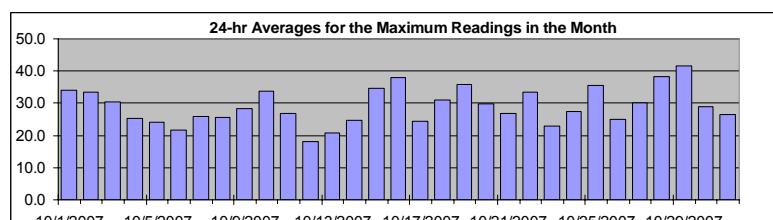
#### Summary

Maximum 1-hr Value:	53.1 ppb	1-Oct 19:00 20:00
Maximum 24-hr Value:	41.6 ppb	29-Oct

AIC Time:	35 hrs	Operational Time:	707 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99 95 75 50 25 5 1	Average	Median
	47.3 43.6 37.8 31.4 21.4 7.9 2.6	29.2 ppb	31.4 ppb

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
1-Oct-07	A 1:00	22	22	24	26	26	21	22	27	36	41	41	41	42	41	39	39	38	34	53	48	32	33	A	34.1	53.1		
2-Oct-07	32 2:00	32	30	26	24	24	22	27	32	35	38	38	40	42	41	41	40	37	36	36	30	31	A	33.5	41.9			
3-Oct-07	35 3:00	35	32	25	19	18	14	21	27	35	36	40	38	37	39	38	37	34	30	30	27	A	25	25	30.3	39.8		
4-Oct-07	20 4:00	19	20	20	18	13	4	11	18	22	27	29	31	33	32	36	35	36	33	39	A	35	27	23	25.3	38.8		
5-Oct-07	23 5:00	23	22	21	21	20	18	17	17	19	21	26	28	31	34	35	34	32	30	A	24	21	20	20	24.2	35.3		
6-Oct-07	21 6:00	21	21	19	18	18	17	17	19	24	29	30	30	31	34	35	33	31	A	26	11	2	6	7	21.8	35.1		
7-Oct-07	9 7:00	19	20	24	20	15	23	26	32	34	33	33	33	35	35	35	33	A	25	23	24	24	23	22	26.0	34.7		
8-Oct-07	21 8:00	19	18	17	14	14	16	23	34	37	39	42	41	42	44	44	A	42	37	23	14	2	6	1	25.7	44.4		
9-Oct-07	5 9:00	1	2	0	4	6	11	30	35	37	43	45	43	42	41	A	40	41	40	41	35	34	35	38	28.2	44.8		
10-Oct-07	39 10:00	37	38	38	38	36	36	34	31	31	32	32	36	35	A	36	34	31	29	28	26	29	38	31	33.7	39.4		
11-Oct-07	24 11:00	29	31	36	34	26	8	8	10	13	17	29	36	A	43	43	42	36	33	29	20	19	25	26	26.9	43.0		
12-Oct-07	25 12:00	25	20	7	11	10	10	5	5	10	12	25	A	40	38	35	33	28	21	21	14	7	3	11	18.1	40.3		
13-Oct-07	11 13:00	6	8	2	10	13	9	7	13	16	16	A	32	38	45	48	42	43	35	21	18	15	15	12	20.7	47.8		
14-Oct-07	19 14:00	18	9	8	7	6	8	10	10	18	A	36	40	42	42	41	53	37	27	23	23	30	33	32	24.7	52.9		
15-Oct-07	32 15:00	32	21	23	18	18	16	7	31	A	42	42	44	45	45	45	45	40	41	42	42	43	42	34.7	45.5			
16-Oct-07	42 16:00	41	42	40	39	37	24	23	A	38	41	43	45	47	48	44	41	36	37	34	28	34	35	32	37.8	47.7		
17-Oct-07	28 17:00	25	27	27	30	26	26	A	26	21	29	29	36	38	34	32	27	12	10	7	8	18	21	26	24.5	38.1		
18-Oct-07	26 18:00	26	27	27	23	19	A	5	15	29	29	39	46	47	47	46	46	40	33	35	29	30	22	29	31.0	47.3		
19-Oct-07	38 19:00	38	34	32	32	A	29	29	32	32	33	36	37	38	41	39	35	39	40	39	41	40	36	36	35.9	41.2		
20-Oct-07	36 20:00	30	27	28	A	24	25	25	22	22	35	37	40	42	42	42	40	34	30	28	25	22	18	16	30.0	41.7		
21-Oct-07	11 21:00	5	11	A	18	16	18	16	19	22	28	32	44	44	43	43	42	32	31	28	27	30	29	29	26.8	44.4		
22-Oct-07	35 22:00	36	A	33	33	33	33	34	35	36	38	38	38	38	37	35	33	31	29	29	29	29	30	29	33.4	38.4		
23-Oct-07	29 23:00	A	30	29	28	21	15	12	9	14	15	21	25	34	33	33	28	22	21	19	17	21	23	24	22.8	33.7		
24-Oct-07	A 0:00	22	22	22	20	22	21	22	22	24	26	31	35	35	35	34	32	28	29	24	28	28	38	A	27.3	38.3		
25-Oct-07	42 1:00	42	42	42	41	39	36	35	34	34	38	39	39	41	44	41	39	36	32	32	22	18	A	17	44.3			
26-Oct-07	11 2:00	17	19	17	12	9	5	5	16	19	27	35	42	44	43	40	39	38	38	33	29	A	20	19	25.1	43.7		
27-Oct-07	16 3:00	15	6	7	7	8	23	33	37	37	39	43	42	43	42	41	41	37	37	33	A	37	36	36	30.2	43.4		
28-Oct-07	36 4:00	33	35	36	37	40	37	32	29	30	35	38	47	46	44	47	47	41	33	A	40	41	37	38.3	46.8			
29-Oct-07	39 5:00	41	40	42	42	40	37	37	43	44	44	48	49	46	47	42	43	39	39	40	37	38	38	43	41.6	48.7		
30-Oct-07	42 6:00	23	A	35	39	32	24	C	C	A	30	34	36	37	39	38	34	28	26	22	5	16	20	19	28.9	41.9		
31-Oct-07	18 7:00	20	A	15	21	19	14	18	A	A	27	29	34	41	42	42	34	28	26	21	25	26	28	27	26.5	42.5		



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

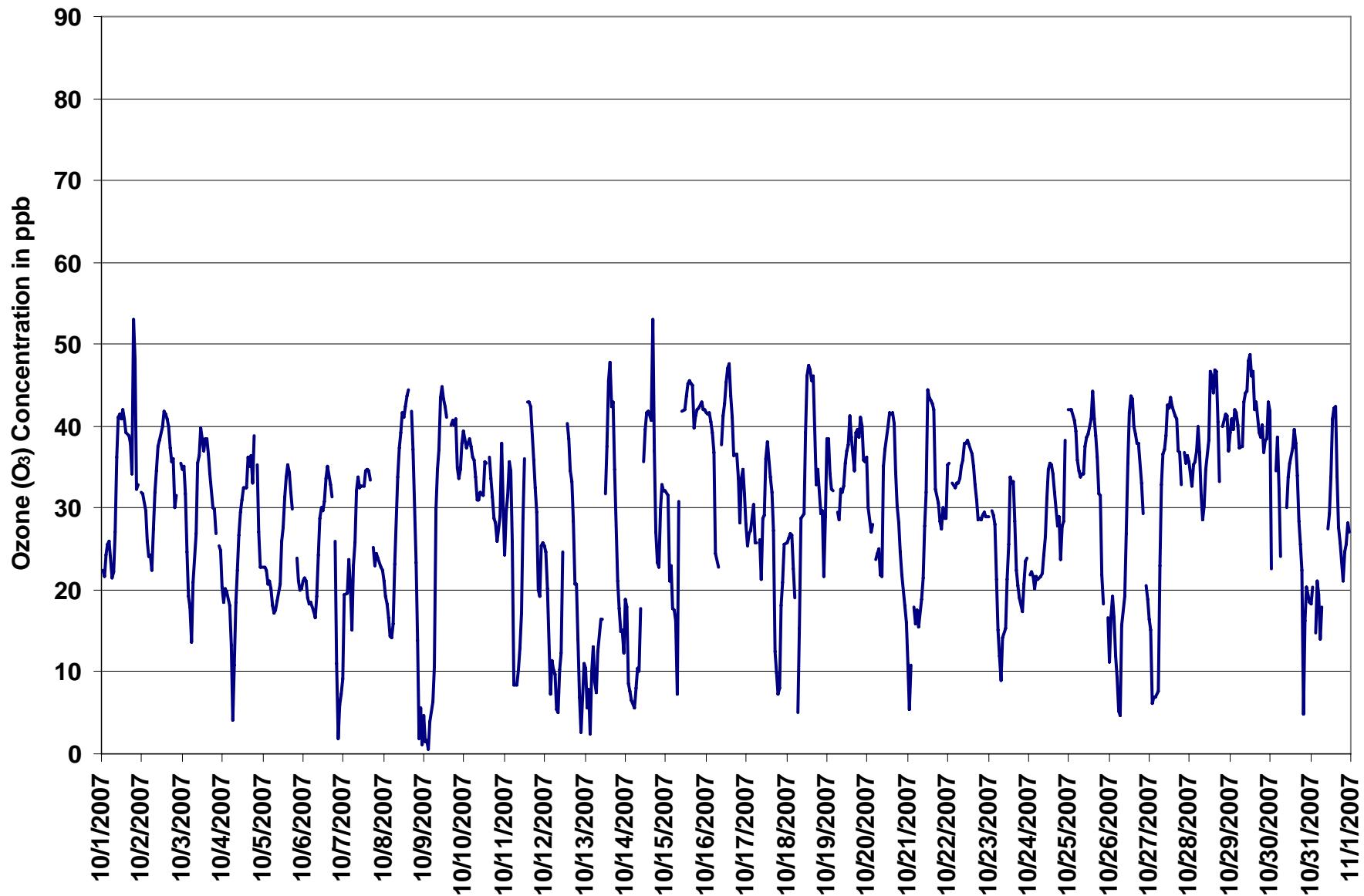
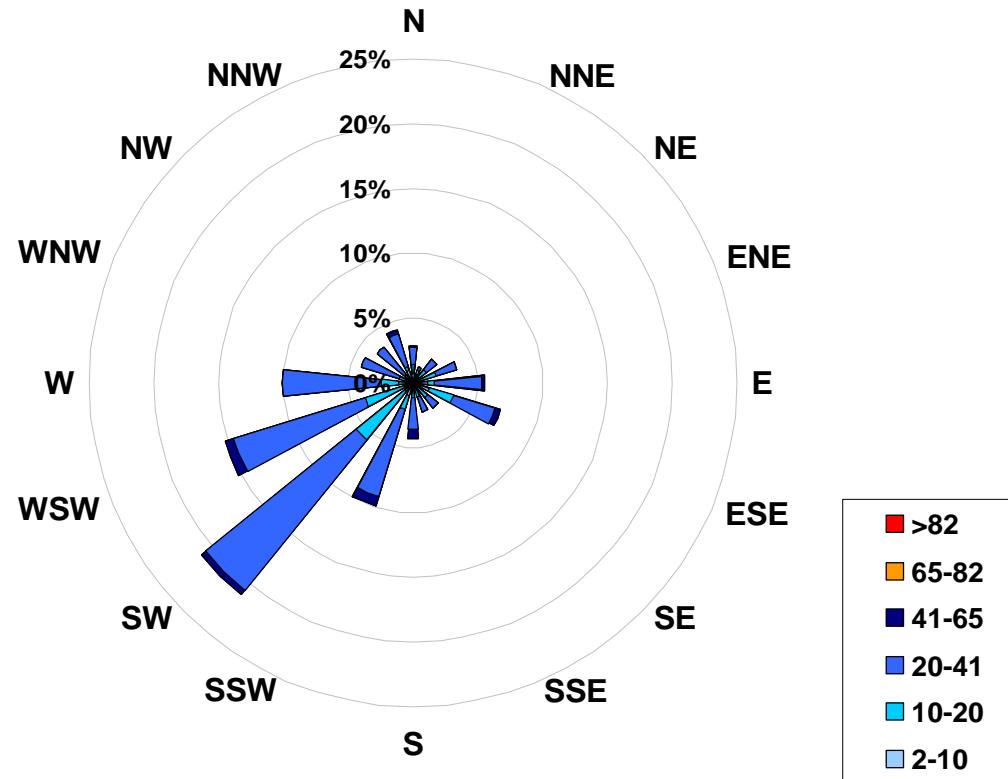


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms:	0%	Frequency Distribution of O <sub>3</sub> in ppb		
		Range	Frequency (hrs)	
2.0	<	10	88	
10	to	20	144	
20	to	41	450	
41	to	65	25	
65	to	82	0	
>	82		0	
Total Non-Zero Values			707	



## PAS - Crescent Heights Ozone Eight Hour Average Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

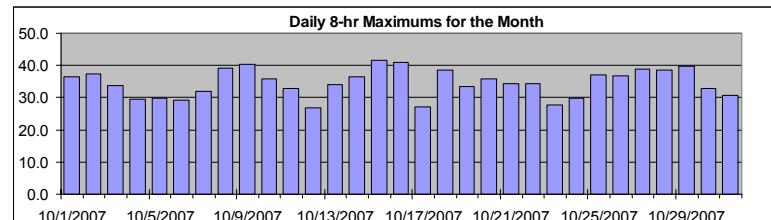
Objective Limit: Alberta Environment: 8-hr 65 ppb  
Summary

Number of 8-hr Exceedances: 0

Maximum 8-hr Average: 41.5 ppb 15-Oct 16:00 17:00

### 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 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	Daily Maximum	
	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-Oct-07	32	30	27	25	23	21	19	18	18	20	22	24	27	30	32	35	36	36	35	35	35	34	33	33	36.4		
2-Oct-07	32	32	31	30	27	26	24	24	23	24	25	27	29	31	34	36	37	37	37	37	35	34	33	32	37.4		
3-Oct-07	32	32	31	30	28	26	23	20	19	18	19	21	23	26	29	32	34	34	33	31	30	29	27	25	33.8		
4-Oct-07	23	21	19	19	17	16	13	11	11	11	12	14	15	18	22	25	28	29	28	29	29	30	29	27	29.6		
5-Oct-07	26	24	25	23	23	21	20	19	19	18	18	18	19	20	22	24	26	28	29	30	29	28	26	24	29.9		
6-Oct-07	22	21	20	19	19	19	18	18	17	17	18	19	21	22	24	26	28	29	29	27	24	20	16	12	29.4		
7-Oct-07	8	6	7	8	10	11	13	15	18	20	22	24	25	28	30	31	32	32	31	29	28	26	25	23	32.0		
8-Oct-07	21	21	20	19	18	16	15	15	16	18	20	23	27	31	34	37	39	39	38	34	29	23	18	12	39.1		
9-Oct-07	10	6	3	1	1	1	1	3	7	12	16	22	27	32	36	39	40	40	40	39	38	37	36	36	40.4		
10-Oct-07	35	35	35	35	35	36	36	35	34	33	32	31	30	30	29	30	31	31	30	29	27	26	26	25	35.8		
11-Oct-07	24	24	25	26	27	26	23	21	19	17	16	14	14	14	19	24	27	31	33	32	30	28	25	23	32.8		
12-Oct-07	21	20	17	16	15	14	12	9	7	5	5	7	7	11	16	20	23	26	27	26	23	19	15	11	26.8		
13-Oct-07	8	6	4	3	3	3	3	4	4	4	5	6	6	10	14	19	24	29	32	34	32	30	28	24	20	34.1	
14-Oct-07	16	13	10	9	7	6	5	5	4	5	5	9	14	19	24	29	33	36	34	33	31	29	28	27	36.4		
15-Oct-07	26	25	24	23	22	20	17	14	11	10	13	17	21	26	32	37	42	41	40	39	39	38	38	38	41.5		
16-Oct-07	38	38	39	39	39	38	35	32	30	30	29	29	30	33	37	41	40	40	38	37	33	30	28	26	40.9		
17-Oct-07	25	24	24	23	25	25	24	23	23	22	22	22	23	25	27	27	27	26	24	21	17	14	12	11	27.0		
18-Oct-07	12	14	16	19	21	21	21	19	17	16	17	18	21	26	28	33	37	38	38	38	36	32	28	25	38.5		
19-Oct-07	24	24	26	26	26	28	29	31	29	28	28	28	29	30	31	32	31	32	33	33	33	33	33	33	33.4		
20-Oct-07	33	32	31	29	28	26	24	23	21	20	21	22	24	27	29	32	35	36	35	34	32	29	26	21	35.7		
21-Oct-07	17	14	12	10	9	8	9	10	11	14	17	18	21	25	28	31	33	34	34	32	30	29	27	34.3			
22-Oct-07	26	27	27	28	28	28	29	30	30	30	31	32	33	34	34	34	34	33	32	31	30	29	28	28	34.3		
23-Oct-07	28	28	28	28	27	25	22	19	16	15	13	12	12	14	17	20	22	22	23	22	20	19	18	27.7			
24-Oct-07	17	17	18	19	19	20	20	19	19	20	20	21	23	25	27	28	29	30	29	28	27	26	25	25	29.7		
25-Oct-07	27	29	32	35	36	37	35	34	33	32	32	32	32	32	34	36	36	37	36	35	32	29	27	23	37.0		
26-Oct-07	19	16	13	11	10	8	8	7	7	8	9	12	16	20	25	30	33	35	37	37	34	33	30	27	36.9		
27-Oct-07	23	20	15	11	9	8	8	9	12	15	19	24	29	33	37	38	39	38	37	36	35	34	33	33	38.8		
28-Oct-07	33	32	31	30	31	31	31	30	28	27	28	29	30	31	32	34	38	39	38	38	37	36	35	35	38.6		
29-Oct-07	34	35	37	37	38	37	36	36	36	36	37	37	37	38	38	40	40	39	39	38	36	34	34	34	39.7		
30-Oct-07	33	30	30	29	29	29	27	N	N	N	N	N	N	N	N	N	N	N	31	30	29	26	22	19	17	15	32.9
31-Oct-07	13	13	13	13	15	16	14	14	N	N	N	N	N	N	N	N	N	N	31	30	30	28	26	25	23	30.8	

Hourly Max 37.9 38.4 39.1 39.0 39.0 37.7 36.5 36.2 36.4 36.4 36.8 36.9 37.4 37.9 38.4 40.9 41.5 40.7 40.3 40.0 39.4 38.9 38.1 37.7



## PAS - Crescent Heights Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

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

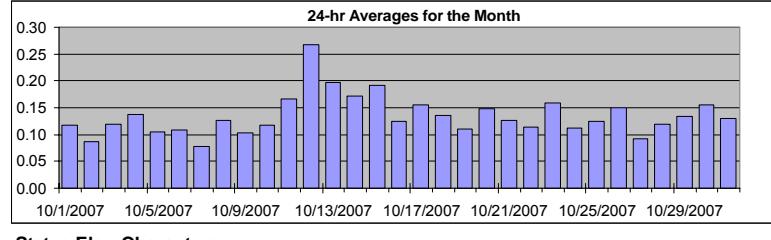
Number of 1-hr Exceedances:	0		
Maximum 1-hr Average:	1.0 ppm	12-Oct	21:00 22:00
Maximum 24-hr Value:	0.3 ppm	12-Oct	

AIC Time:	35 hrs	Operational Time:	706 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1 ppm	0.1 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-Oct-07	A	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.12	0.17	
2-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.09	0.16	
3-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	A	0.1	0.1	
4-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.1	A	0.1	0.1	0.1	A	0.14	0.44
5-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	
6-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	
7-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	
8-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	
9-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	
10-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	A	0.1	0.16	
11-Oct-07	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.17	0.23	
12-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	0.4	0.4	0.2	0.2	A	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	1.0	0.3	0.3	0.3	A	0.27	1.01
13-Oct-07	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	A	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.3	0.2	0.1	0.1	A	0.20	0.38	
14-Oct-07	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	A	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	A	0.17	0.33	
15-Oct-07	0.1	0.1	0.1	0.1	0.2	0.2	0.8	0.9	0.7	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.19	0.92	
16-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	A	0.12	0.29	
17-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	A	0.15	0.28	
18-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	A	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	A	0.14	0.47	
19-Oct-07	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.11	0.15	
20-Oct-07	0.1	0.1	0.1	0.1	A	0.1	0.1	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	0.2	0.2	0.2	0.2	0.2	A	0.15	0.23	
21-Oct-07	0.2	0.2	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.13	0.24	
22-Oct-07	0.1	0.1	A	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.11	0.15	
23-Oct-07	0.1	A	0.1	0.1	0.1	0.1	0.2	0.4	0.3	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	A	0.16	0.42	
24-Oct-07	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.11	0.15	
25-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	A	0.12	0.18	
26-Oct-07	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	A	0.1	0.1	A	0.15	0.43	
27-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.09	0.15	
28-Oct-07	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	A	0.1	0.1	0.1	0.1	0.12	0.28	
29-Oct-07	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	C	C	C	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.13	0.20	
30-Oct-07	0.1	0.1	A	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.1	A	0.16	0.26	
31-Oct-07	0.1	0.1	A	0.1	0.1	0.2	0.2	A	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	A	0.13	0.20	
Hourly Avg	0.10	0.10	0.10	0.11	0.11	0.13	0.19	0.24	0.19	0.14	0.13	0.12	0.11	0.10	0.11	0.11	0.13	0.15	0.16	0.15	0.16	0.17	0.12	0.11					
Hourly Max	0.22	0.24	0.19	0.26	0.19	0.23	0.77	0.92	0.74	0.36	0.36	0.27	0.19	0.15	0.19	0.17	0.19	0.23	0.42	0.34	0.48	1.01	0.34	0.29					

**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

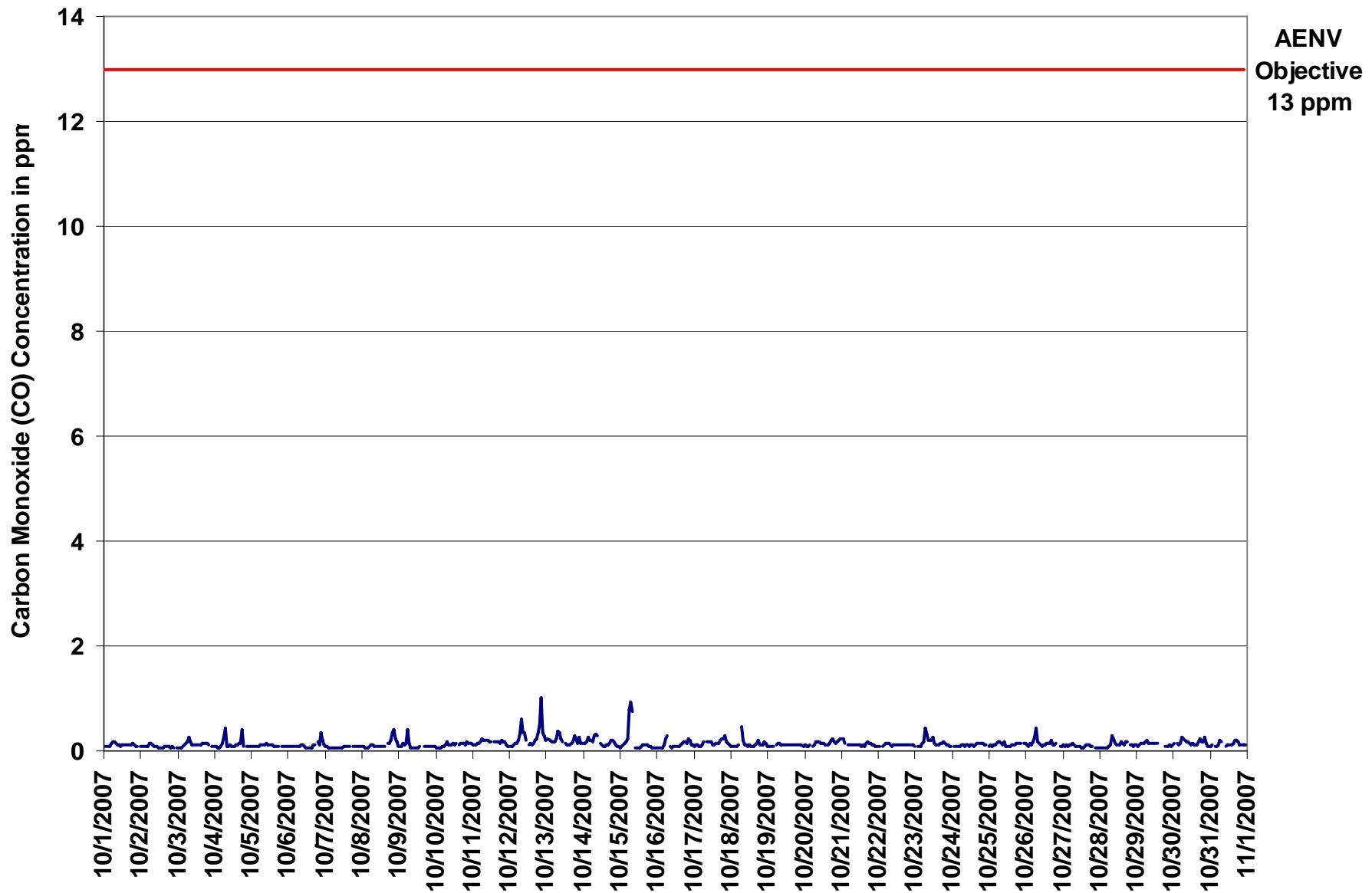


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Carbon Monoxide (CO)

Monitoring Dates: October 1, 2007 to November 1, 2007

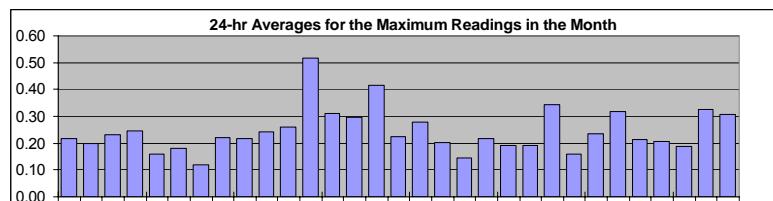
#### Summary

Maximum 1-hr Value:	2.9	ppm	12-Oct	21:00 22:00
Maximum 24-hr Value:	0.5	ppm	12-Oct	

AIC Time:	35 hrs	Operational Time:	706 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 1.2	95 0.6	75 0.2	50 0.2	25 0.1	5 0.1	1 0.1	Average 0.2 ppm	Median 0.2 ppm

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Oct-07	A 1:00	0.1	0.1	0.1	0.1	0.2	0.5	0.2	0.2	0.1	0.5	0.1	0.4	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.1	0.1	0.1	A 0.1	0.22	0.55
2-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	0.2	0.7	0.8	0.1	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.3	0.1	0.1	0.1	A 0.1	0.20	0.77	
3-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.2	0.3	0.9	0.4	0.1	0.2	0.2	0.6	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.1	A 0.1	0.1	0.1	0.1	0.23	0.94
4-Oct-07	0.1 1:00	0.3	0.1	0.1	0.2	0.3	0.4	0.6	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.9	0.1	A 0.1	0.1	0.1	0.1	0.25	0.94	
5-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.7	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A 0.1	0.1	0.1	0.1	0.16	0.69	
6-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A 0.1	0.3	0.4	0.5	0.3	0.2	0.18	0.55	
7-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	A 0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.19	
8-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	1.0	0.7	0.4	0.2	0.22	1.03	
9-Oct-07	0.1 1:00	0.1	0.3	0.3	0.1	0.1	1.1	1.0	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.22	1.14	
10-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	1.2	0.4	0.2	0.2	0.1	0.1	0.3	0.4	A 0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.24	1.18	
11-Oct-07	0.2 1:00	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.3	0.3	0.4	0.2	0.5	A 0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.26	0.50	
12-Oct-07	0.1 1:00	0.2	0.1	0.1	0.2	0.2	0.4	0.7	0.8	0.5	0.5	0.3	A 0.3	0.3	0.2	0.4	0.4	0.4	0.8	1.1	2.9	0.7	0.4	0.52	2.88		
13-Oct-07	0.3 1:00	0.4	0.3	0.2	0.3	0.3	0.4	0.9	0.5	0.3	0.2	A 0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.5	0.2	0.31	0.86		
14-Oct-07	0.2 1:00	0.2	0.3	0.4	1.2	0.3	0.3	0.4	0.4	0.3	A 0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.2	0.2	0.1	0.1	0.30	1.23		
15-Oct-07	0.1 1:00	0.2	0.2	0.5	0.3	0.6	2.3	2.4	1.2	A 0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.42	2.38			
16-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.3	0.5	0.5	A 0.5	0.5	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.4	0.2	0.5	0.5	0.4	0.22	0.50		
17-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	0.2	0.3	A 0.1	0.2	0.2	1.0	0.8	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.6	0.2	0.2	0.2	0.28	1.05	
18-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.3	A 0.1	0.7	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.20	0.70		
19-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	A 0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.20		
20-Oct-07	0.4 1:00	0.1	0.1	0.1	0.1	A 0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.22	0.39	
21-Oct-07	0.2 1:00	0.3	0.2	A 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	0.4	0.2	0.2	0.2	0.3	0.1	0.1	0.19	0.39	
22-Oct-07	0.1 1:00	0.1	A 0.1	0.1	0.4	0.3	0.4	0.2	0.2	0.6	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	0.19	0.59		
23-Oct-07	0.1 1:00	A 0.1	0.1	0.1	0.2	0.4	2.5	0.8	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.3	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.34	2.51		
24-Oct-07	A 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.16	0.35		
25-Oct-07	0.1 1:00	0.1	0.2	0.1	0.1	0.2	0.4	0.2	0.2	0.1	1.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	A 0.4	0.23	1.09		
26-Oct-07	0.2 1:00	0.2	0.1	0.2	0.2	0.4	0.7	1.9	0.3	0.2	0.1	0.3	0.1	0.3	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	A 0.1	0.32	1.92		
27-Oct-07	0.1 1:00	0.1	0.1	0.1	0.6	0.6	0.7	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	A 0.4	0.21	0.71			
28-Oct-07	0.1 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.9	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.4	0.3	A 0.1	0.2	0.1	0.1	0.21	0.93	
29-Oct-07	0.2 1:00	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	C 0.2	C 0.2	C 0.2	A 0.1	0.1	0.1	0.1	0.19	0.34		
30-Oct-07	0.1 1:00	0.1	A 0.1	0.2	0.2	0.2	1.1	0.3	0.3	0.2	0.6	0.2	0.7	0.4	0.2	0.1	0.3	0.4	0.3	0.4	0.3	0.1	0.1	0.32	1.12		
31-Oct-07	0.1 1:00	A 0.1	0.1	0.1	0.1	0.2	0.3	0.2	A 0.1	A 0.1	0.1	0.2	0.4	0.4	0.5	1.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31	1.79		



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

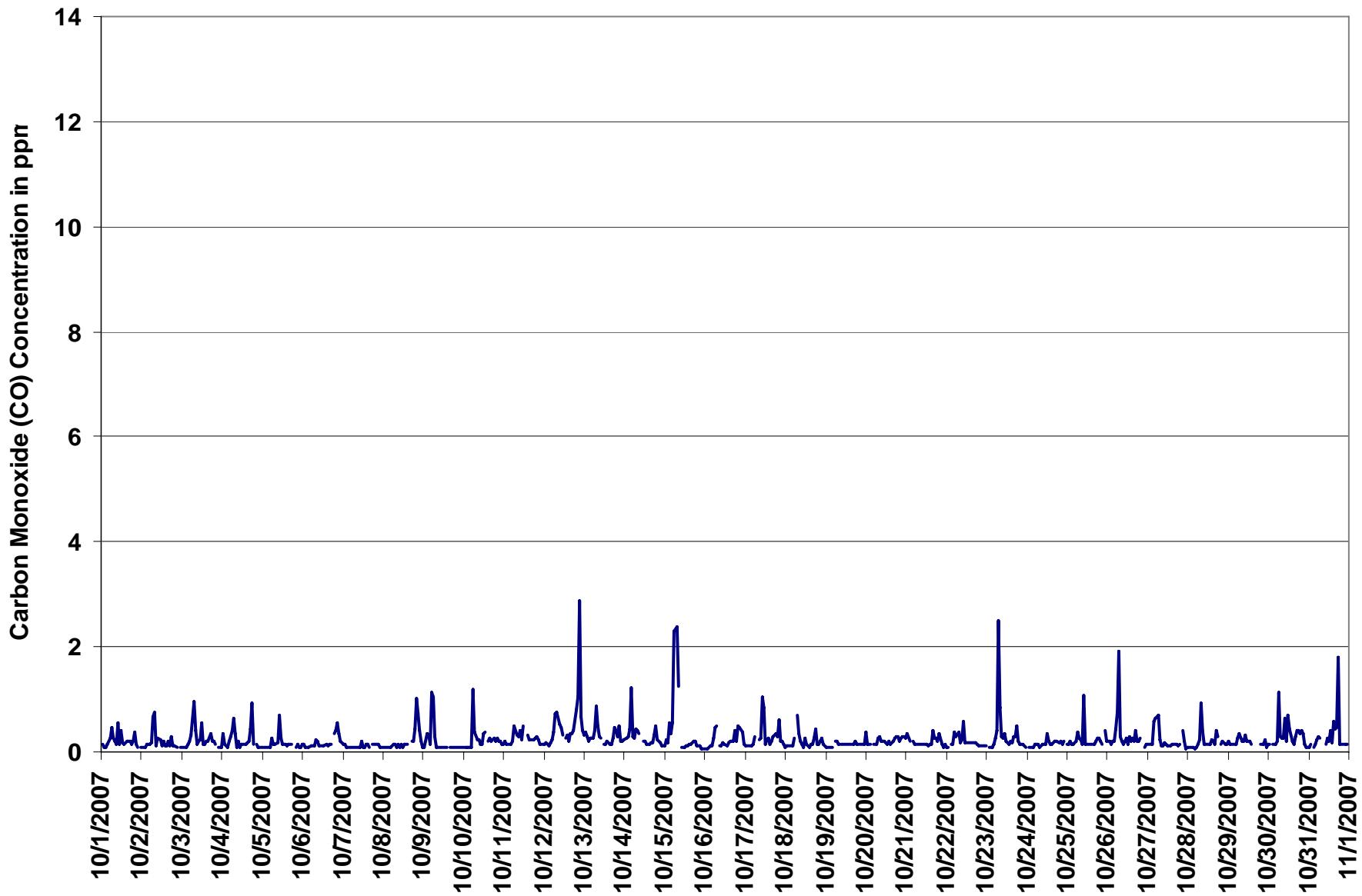
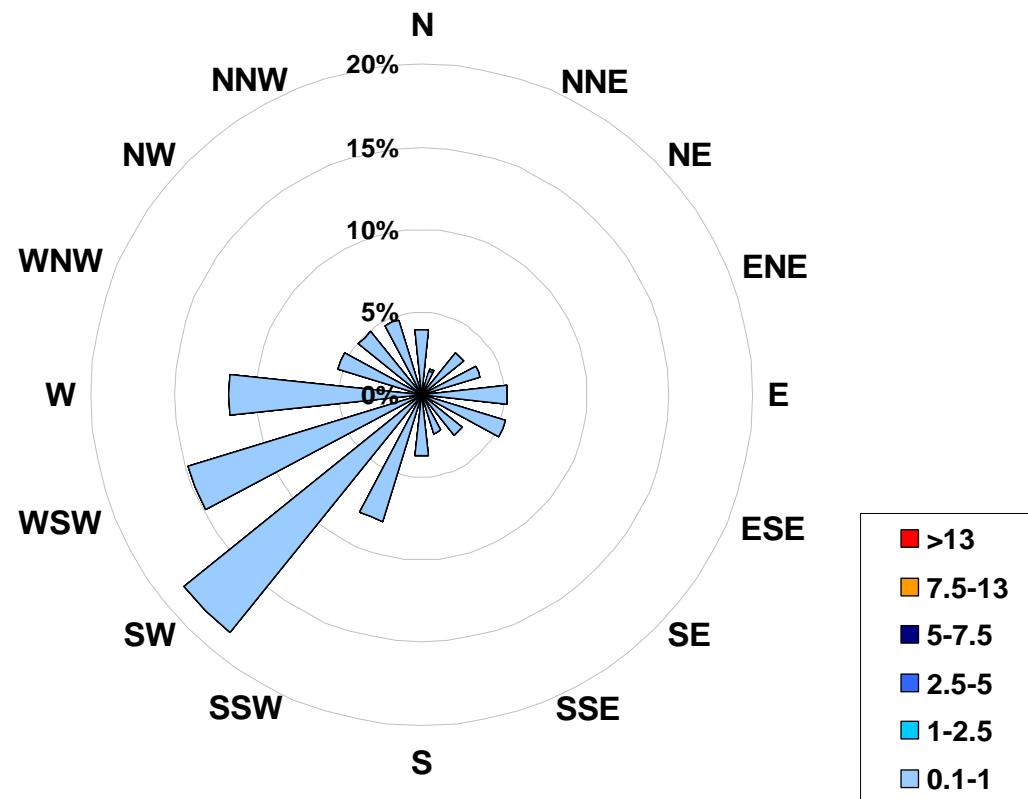


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms:	0%
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Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	<	1	705
1	to	2.5	1
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
>	13		0
Total Non-Zero Values			706



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

Station: Crescent Heights  
Station Owner: PAS

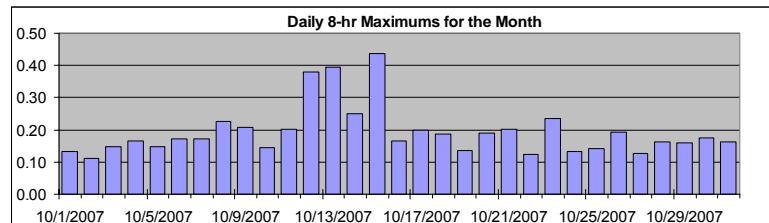
Monitoring Dates: October 1, 2007 to November 1, 2007

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

Number of 8-hr Exceedances: 0  
Maximum 8-hr Average: 0.4 ppm 15-Oct 9:00 10:00

### 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	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	923:0



## PAS - Crescent Heights Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

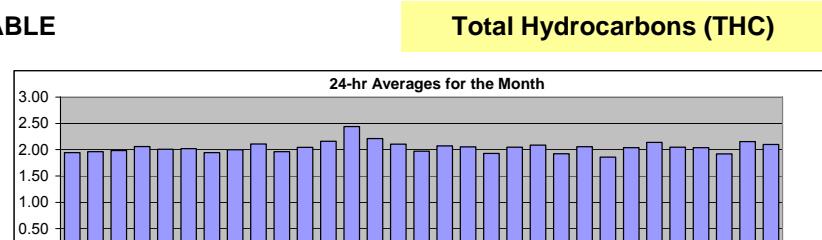
Monitoring Dates: October 1, 2007 to November 1, 2007

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

Maximum 1-hr Average:	3.1	ppm	13-Oct	2:00 3:00
Maximum 24-hr Value:	2.4	ppm	13-Oct	

AIC Time:	31 hrs	Operational Time:	711 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.7	2.4	2.1	2.0	1.9	1.9	1.9	2.0 ppm	2.0 ppm

Day	Mountain Standard Time																								24-hour Average	Daily Maximum			
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00				
1-Oct-07	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	A	1.95	1.99	
2-Oct-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	A	1.96	2.01	
3-Oct-07	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.98	2.12		
4-Oct-07	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	M	2.06	2.24	
5-Oct-07	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	P	2.01	2.07	
6-Oct-07	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	X	2.02	2.26	
7-Oct-07	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.3	2.2	X	1.94	2.10	
8-Oct-07	1.8	1.9	1.8	1.9	1.9	1.9	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.3	2.2	S	2.00	2.32	
9-Oct-07	2.2	2.4	2.4	2.5	2.5	2.3	2.6	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	N	2.11	2.57	
10-Oct-07	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	2.0	1.9	2.0	1.9	2.4	1.9	1.9	A	1.96	2.42	
11-Oct-07	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.1	A	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.05	2.23
12-Oct-07	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.1	A	1.9	2.0	2.0	2.0	2.1	2.1	2.3	2.4	2.6	2.4	2.6	2.6	X	2.16	2.62	
13-Oct-07	2.7	2.9	3.1	2.8	2.7	2.6	2.7	2.9	2.7	2.5	2.4	A	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.2	C	2.44	3.10	
14-Oct-07	2.2	2.3	2.3	2.5	2.6	2.6	2.7	2.7	2.6	2.4	A	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.0	2.0	M	2.21	2.72		
15-Oct-07	2.0	2.0	2.2	2.4	2.5	2.4	2.6	2.6	2.5	2.5	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	N	2.11	2.65		
16-Oct-07	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	P	1.97	2.08		
17-Oct-07	2.0	2.0	2.0	2.0	1.9	2.0	2.0	A	1.9	2.0	2.0	2.0	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.2	2.2	2.1	2.1	X	2.07	2.36	
18-Oct-07	2.1	2.0	2.0	2.1	2.1	2.1	A	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	X	2.05	2.24	
19-Oct-07	2.0	2.0	2.0	2.0	2.0	A	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.93	2.00	
20-Oct-07	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	X	2.05	2.26	
21-Oct-07	2.2	2.3	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.1	2.0	2.0	X	2.09	2.26	
22-Oct-07	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.92	1.98	
23-Oct-07	1.9	A	1.9	1.9	2.0	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	C	2.06	2.34	
24-Oct-07	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	A	1.86	1.92	
25-Oct-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	A	2.04	2.20	
26-Oct-07	2.3	2.3	2.4	2.4	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	A	2.14	2.37	
27-Oct-07	2.1	2.2	2.1	2.2	2.2	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	A	2.05	2.36	
28-Oct-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	A	2.04	2.25	
29-Oct-07	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.92	2.05	
30-Oct-07	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	A	2.15	2.42	
31-Oct-07	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	A	2.10	2.25	



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

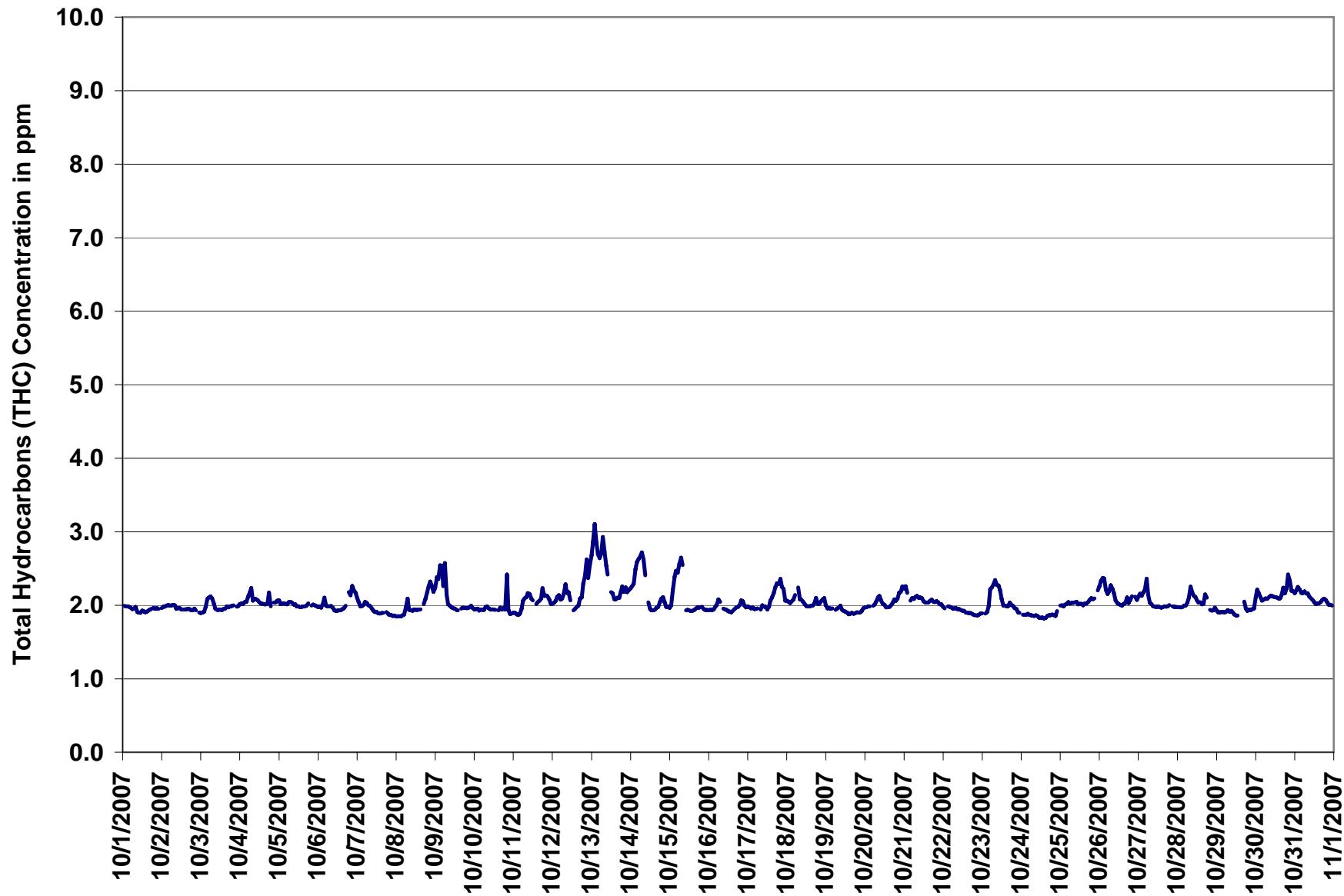


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Hydrocarbons (THC)

Monitoring Dates: October 1, 2007 to November 1, 2007

#### Summary

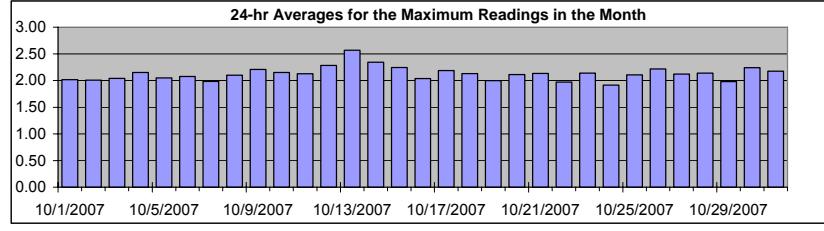
Maximum 1-hr Value:	5.5	ppm	10-Oct	20:00 21:00
Maximum 24-hr Value:	2.6	ppm	13-Oct	

AIC Time:	31 hrs	Operational Time:	711 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 3.0	95 2.6	75 2.2	50 2.1	25 2.0	5 1.9	1 1.9	Average 2.1 ppm	Median 2.1 ppm

#### 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-Oct-07	A	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.0	2.3	1.9	2.1	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.02	2.27	
2-Oct-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.01	2.21	
3-Oct-07	2.0	1.9	1.9	2.0	2.2	2.2	2.2	2.3	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.04	2.34	
4-Oct-07	2.0	2.1	2.1	2.1	2.3	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.6	2.4	2.1	A	2.2	2.1	2.1	2.15	2.64	
5-Oct-07	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.0	2.0	2.0	2.05	2.19		
6-Oct-07	2.0	2.0	2.2	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.1	A	2.3	2.3	2.3	2.2	2.3	2.08	2.33		
7-Oct-07	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.98	2.15	
8-Oct-07	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.3	2.4	2.7	2.5	2.4	2.3	2.2	2.10	2.74
9-Oct-07	2.3	2.7	2.6	2.8	2.6	2.5	3.0	2.3	2.1	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	2.21	3.02		
10-Oct-07	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.0	5.5	2.1	1.9	1.9	2.15	5.46		
11-Oct-07	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.2	2.3	2.3	2.1	2.1	A	2.1	2.1	2.1	2.3	2.4	2.4	2.2	2.2	2.2	2.1	2.1	2.13	2.41	
12-Oct-07	2.1	2.1	2.2	2.2	2.1	2.1	2.4	2.4	2.2	2.2	2.2	A	2.0	2.0	2.1	2.1	2.3	2.2	2.5	2.6	3.1	2.5	2.8	2.28	3.11			
13-Oct-07	2.9	3.0	3.4	3.0	2.9	2.8	2.9	3.1	3.0	2.6	2.5	A	2.2	2.2	2.2	2.1	2.1	2.2	2.4	2.4	2.3	2.3	2.3	2.2	2.25	3.44		
14-Oct-07	2.4	2.4	2.4	2.8	3.1	2.8	2.8	3.1	2.9	2.5	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.1	2.0	2.34	3.13		
15-Oct-07	2.0	2.1	2.5	2.9	2.8	2.7	3.0	3.0	2.8	A	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.24	3.05		
16-Oct-07	2.0	2.0	2.0	2.0	2.1	2.2	2.2	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.0	2.04	2.22		
17-Oct-07	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.5	2.5	2.0	2.1	2.1	2.2	2.2	2.3	2.5	2.4	2.5	2.3	2.3	2.1	2.19	2.53		
18-Oct-07	2.1	2.1	2.0	2.1	2.1	2.2	A	2.4	2.2	2.2	2.2	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.3	2.1	2.1	2.1	2.1	2.13	2.38		
19-Oct-07	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.2	2.0	1.9	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.00	2.21		
20-Oct-07	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.2	2.11	2.47		
21-Oct-07	2.3	2.4	2.3	A	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.13	2.38		
22-Oct-07	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.17		
23-Oct-07	1.9	A	1.9	2.0	2.1	2.4	2.4	2.5	2.4	2.4	2.4	2.3	2.1	2.1	2.1	2.1	2.0	2.0	2.3	2.1	2.0	2.0	2.0	1.9	2.14	2.49		
24-Oct-07	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.92	2.09		
25-Oct-07	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.2	A	2.11	2.37		
26-Oct-07	2.4	2.4	2.5	2.4	2.3	2.2	2.3	2.6	2.3	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.3	A	2.22	2.56			
27-Oct-07	2.2	2.2	2.2	2.2	2.3	2.7	2.5	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.12	2.68		
28-Oct-07	2.0	2.0	2.0	2.0	2.0	2.1	2.2	3.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.2	A	2.0	2.0	2.0	2.0	2.14	3.22		
29-Oct-07	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	C	C	A	2.2	2.1	2.0	2.0	2.0	2.0	1.98	2.22		
30-Oct-07	2.3	2.3	2.2	2.2	2.1	2.1	2.3	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.3	2.5	2.5	2.3	2.2	2.24	2.53		
31-Oct-07	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.7	2.1	2.1	2.0	2.0	2.18	2.66		

Hourly Avg	2.11	2.13	2.14	2.16	2.18	2.20	2.23	2.26	2.23	2.13	2.13	2.05	2.04	2.04	2.02	2.01	2.02	2.05	2.13	2.14	2.14	2.25	2.14	2.09	2.10
Hourly Max	2.87	3.05	3.44	2.99	3.13	2.85	3.05	3.12	3.22	2.63	2.51	2.53	2.23	2.22	2.16	2.17	2.23	2.64	2.66	2.74	5.46	3.11	2.48	2.80	



Status Flag Characters											
C	Calibration	A	AIC - Zero / Span Check								

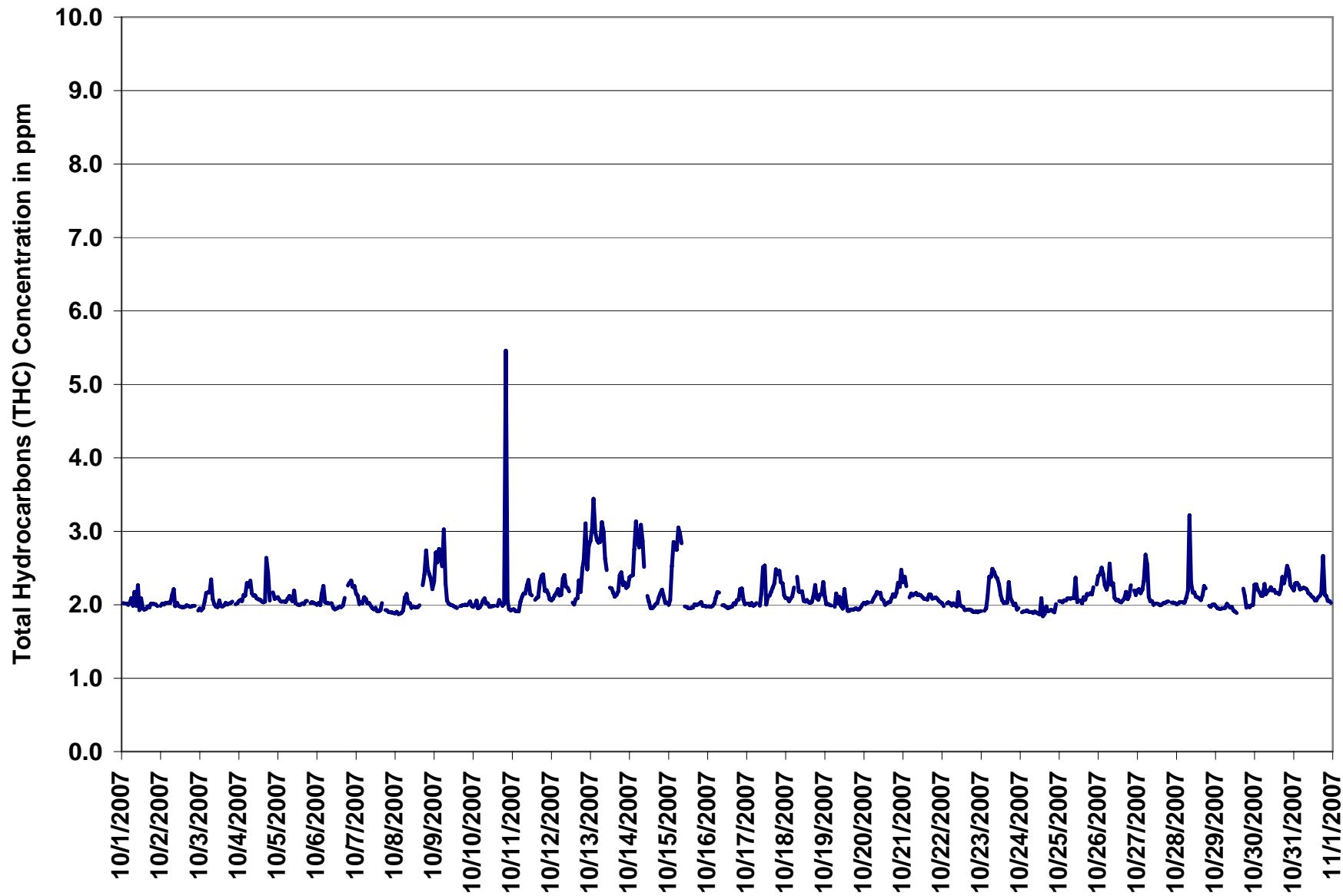
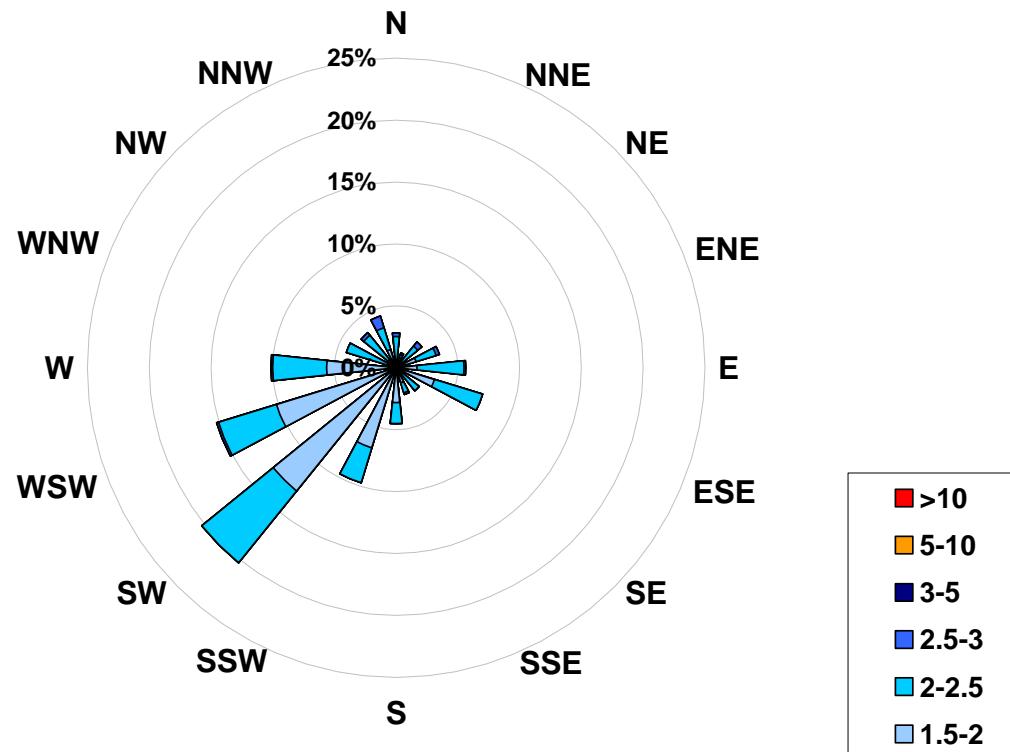


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend



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



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

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	361
2	to	2.5	327
2.5	to	3	22
3	to	5	1
5	to	10	0
	>	10	0
Total Non-Zero Values			711



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 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:	13.9 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	7.6 $\mu\text{g}/\text{m}^3$
30-Oct	1:00 2:00
29-Oct	

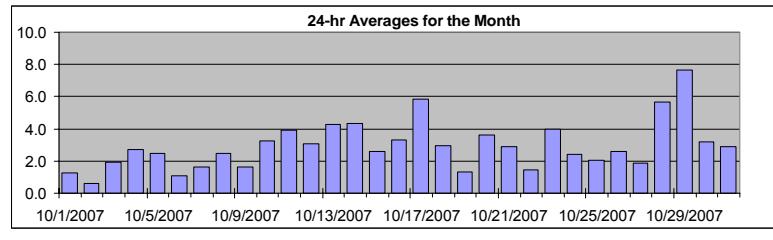
AIC Time:	0 hrs	Operational Time:	741 hrs							
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%							
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean	
	10.2	7.6	4.1	2.4	1.1	0.0	0.0	2.9	2 $\mu\text{g}/\text{m}^3$	2.6 $\mu\text{g}/\text{m}^3$

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	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	24:00			
1-Oct-07	1	1	1	1	1	2	1	2	4	2	0	0	0	1	0	1	4	2	2	0	2	3	1	1	1.3	3.5	
2-Oct-07	0	1	0	0	1	1	0	1	1	0	0	0	0	0	1	1	1	2	0	1	1	1	1	0	0	0.6	1.6
3-Oct-07	1	0	1	1	4	3	4	4	3	1	2	2	2	3	2	1	2	2	2	3	2	1	0	1	1.9	3.9	
4-Oct-07	1	1	1	1	1	2	3	7	3	6	6	5	3	3	3	3	2	2	8	1	1	0	2	2	2.7	7.7	
5-Oct-07	2	3	2	3	3	4	5	6	6	5	5	5	3	3	2	0	0	0	0	0	1	1	0	0	2.5	6.4	
6-Oct-07	0	1	0	0	1	1	0	2	1	0	0	0	0	0	1	0	1	2	1	2	3	3	3	4	1	1.1	3.8
7-Oct-07	4	3	2	3	2	3	2	2	2	1	3	2	1	1	1	1	0	0	1	1	0	1	1	1	1	1.6	3.6
8-Oct-07	1	2	1	1	3	2	3	4	3	2	2	1	1	0	1	1	1	2	2	3	5	7	5	5	2.5	7.4	
9-Oct-07	2	3	3	3	2	2	4	3	2	2	0	0	0	0	0	0	1	0	0	1	2	3	3	2	0	1.6	3.5
10-Oct-07	0	1	0	0	1	1	3	4	4	4	3	4	4	4	3	5	5	4	5	4	8	5	6	3	3.2	7.9	
11-Oct-07	3	3	3	4	6	5	7	7	7	6	7	4	4	2	2	3	4	4	3	4	3	1	0	0	3.9	7.3	
12-Oct-07	1	0	2	2	2	2	1	3	6	5	5	4	1	0	2	2	3	3	3	5	8	6	6	3.1	7.7		
13-Oct-07	4	4	4	4	3	3	4	5	8	7	6	4	3	2	1	3	3	4	5	6	5	4	5	4.3	7.8		
14-Oct-07	4	6	6	10	4	4	4	6	7	7	5	4	0	1	2	8	3	3	4	4	3	3	3	4.3	9.6		
15-Oct-07	2	3	2	3	2	2	4	8	11	3	2	2	2	2	3	2	2	1	1	1	0	1	1	2	2.6	11.2	
16-Oct-07	2	2	1	2	2	2	3	6	4	3	2	3	2	2	3	3	4	4	5	4	4	5	5	3	3.3	5.9	
17-Oct-07	4	4	4	5	5	6	6	7	8	6	0	3	0	2	4	5	7	10	12	10	10	9	8	5	5.9	12.0	
18-Oct-07	4	3	3	3	3	4	5	8	6	4	4	4	2	2	0	0	1	1	4	2	2	1	3	1	2.9	7.8	
19-Oct-07	0	1	0	1	1	0	2	3	3	2	1	1	1	0	0	1	1	2	1	2	1	4	2	2	1.3	3.8	
20-Oct-07	2	2	2	3	2	2	2	4	6	6	4	3	2	2	4	3	4	5	6	4	4	4	6	6	3.6	6.1	
21-Oct-07	6	8	5	5	4	3	5	4	4	5	4	3	1	0	0	0	2	4	2	2	2	0	0	1	2.9	7.6	
22-Oct-07	1	0	0	0	1	2	1	1	0	0	0	0	0	0	2	3	2	3	3	2	3	3	3	3	1.4	3.5	
23-Oct-07	3	3	2	3	7	3	5	7	6	6	6	6	4	1	3	3	3	2	9	7	2	1	1	1	4.0	8.8	
24-Oct-07	1	1	2	0	1	0	0	0	1	3	3	1	2	2	2	3	4	6	5	5	4	4	2	2.4	6.4		
25-Oct-07	3	3	2	2	1	2	2	2	2	3	2	0	0	1	1	5	1	2	3	2	2	3	3	2	2.0	5.3	
26-Oct-07	4	3	2	3	2	2	3	5	6	4	4	0	1	2	2	8	2	2	0	2	2	1	1	1	2.6	7.8	
27-Oct-07	1	1	1	0	1	1	3	4	1	2	2	1	2	2	2	3	2	2	4	3	2	2	1	1	1.9	4.1	
28-Oct-07	1	3	3	3	3	5	8	7	9	8	7	6	5	4	5	3	3	8	8	6	7	9	8	8	5.7	8.9	
29-Oct-07	7	7	8	8	9	9	10	11	9	9	9	8	9	7	6	5	7	9	6	9	7	6	6	4	7.6	10.6	
30-Oct-07	10	14	11	6	2	2	3	C	C	C	2	0	0	0	1	3	0	2	1	2	3	2	1	1	3.2	13.9	
31-Oct-07	0	0	1	0	1	1	1	3	3	2	2	3	4	1	2	4	5	7	7	6	5	4	4	4	2.9	7.0	
Hourly Avg	2.4	2.7	2.4	2.6	2.7	2.6	3.4	4.5	4.6	3.8	3.2	2.5	1.9	1.7	1.9	2.8	2.6	3.2	3.8	3.4	3.3	3.2	2.9	2.4			
Hourly Max	9.9	13.9	10.8	9.6	8.8	8.8	10.2	10.6	11.2	9.3	8.6	7.7	9.1	7.4	5.7	8.4	7.5	10.3	12.0	10.1	10.4	8.9	7.7	7.6			

### 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

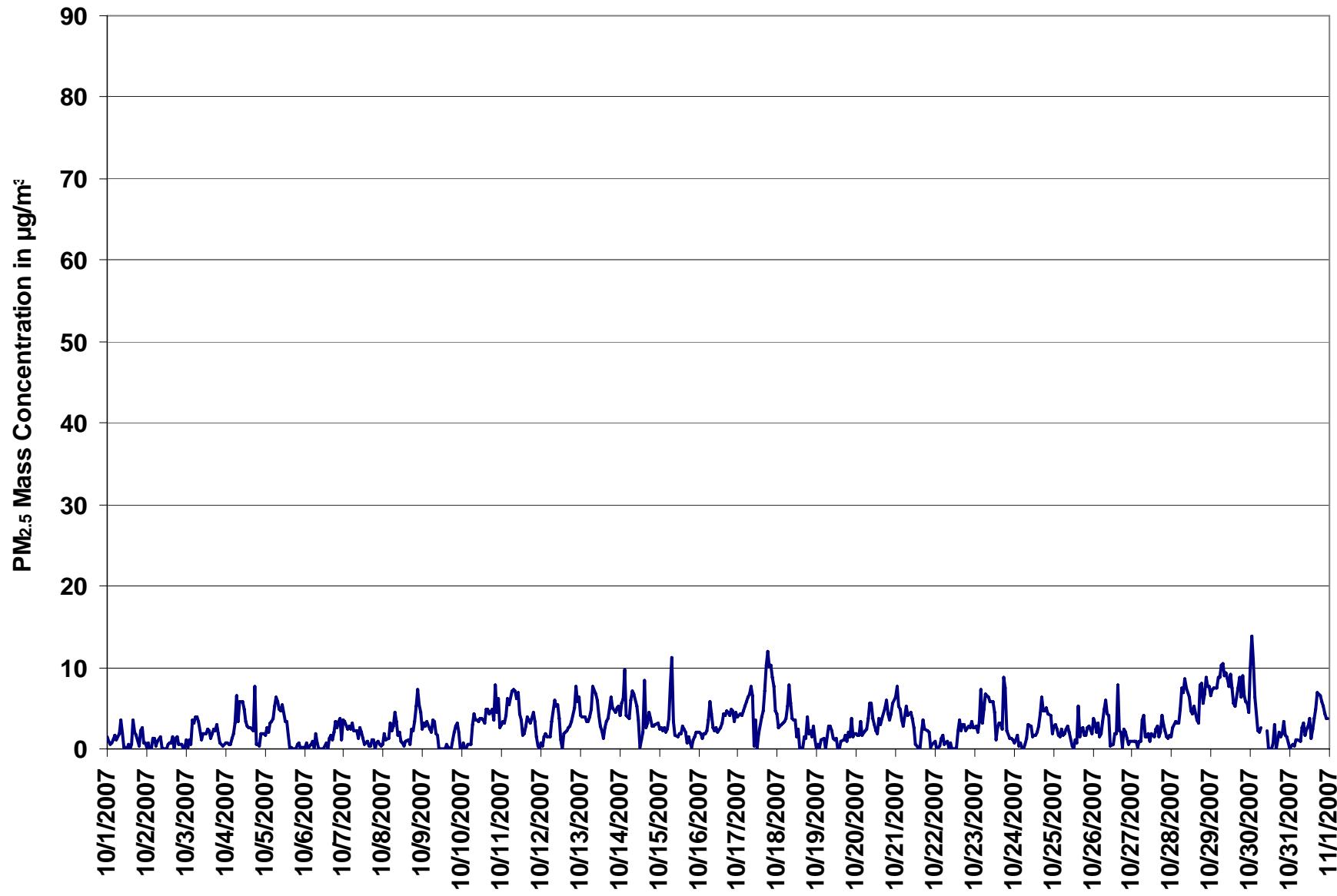


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

Monitoring Dates: October 1, 2007 to November 1, 2007

#### Summary

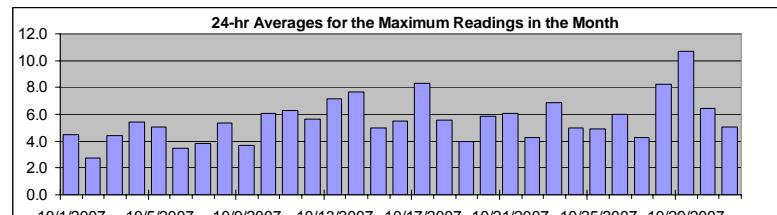
Maximum 1-hr Average:	35.7	$\mu\text{g}/\text{m}^3$	14-Oct	15:00	16:00
Maximum 24-hr Value:	10.7	$\mu\text{g}/\text{m}^3$	29-Oct		

AIC Time:	0 hrs	Operational Time:	741 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 15.5	95 10.8	75 6.9	50 5.0	25 3.5	5 2.0	1 1.2	Average / Median 5.6	Geomean 5.4 $\mu\text{g}/\text{m}^3$

#### 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-Oct-07	4 1:00	3	3	2	5	5	3	3	6	6	2	2	2	3	3	2	3	17	5	3	6	8	6	4	3	4.5	16.6
2-Oct-07	2 1:00	3	1	2	4	4	2	2	4	3	3	1	1	5	4	3	4	2	4	4	3	2	1	2	2.7	4.9	
3-Oct-07	3 1:00	3	3	4	9	6	6	7	6	4	4	6	3	4	4	3	4	5	6	5	3	2	4	3	4.4	8.8	
4-Oct-07	2 1:00	3	2	2	4	4	7	10	6	9	7	7	7	5	5	6	4	5	11	6	3	4	4	5	5.4	11.2	
5-Oct-07	5 1:00	6	4	7	6	7	9	9	7	7	7	7	6	5	4	3	3	3	2	3	4	4	4	1	3	5.0	9.1
6-Oct-07	3 1:00	2	3	2	3	4	3	4	3	2	1	4	2	4	2	4	3	3	4	6	5	7	6	4	3.5	7.3	
7-Oct-07	7 1:00	5	4	5	4	9	4	4	4	5	6	4	3	2	2	2	2	3	3	1	3	3	2	2	3.8	9.3	
8-Oct-07	2 1:00	4	3	4	7	5	6	8	6	5	5	3	2	2	3	6	3	6	5	9	8	12	9	8	5.4	11.9	
9-Oct-07	4 1:00	5	5	7	4	4	6	6	4	4	2	1	1	1	3	4	2	1	3	5	5	5	4	2	3.7	6.6	
10-Oct-07	3 1:00	5	2	3	4	4	6	7	6	6	6	6	6	6	5	9	8	6	7	6	15	6	9	6	6.1	14.9	
11-Oct-07	6 1:00	6	6	6	10	8	10	9	9	8	9	8	6	5	4	5	7	5	5	6	6	5	2	1	6.3	9.8	
12-Oct-07	3 1:00	2	4	6	4	3	3	5	9	8	7	7	5	3	5	4	5	5	5	5	5	9	10	8	5.7	10.7	
13-Oct-07	9 1:00	5	6	7	7	8	6	9	12	9	8	7	6	4	5	6	7	5	7	10	7	7	8	7.1	11.5		
14-Oct-07	6 1:00	9	7	13	11	6	6	8	9	9	8	6	3	3	4	36	5	5	7	5	4	4	5	4	7.7	35.7	
15-Oct-07	3 1:00	4	5	4	4	5	8	10	16	10	4	3	4	4	5	4	5	2	3	2	2	2	5	5	5.0	15.5	
16-Oct-07	3 1:00	3	2	5	5	5	5	9	7	5	4	4	5	5	5	7	6	7	6	6	7	7	5	8	5.5	8.5	
17-Oct-07	6 1:00	6	6	6	7	8	9	9	10	9	3	6	5	5	7	6	10	12	15	13	13	10	10	9	8.3	14.8	
18-Oct-07	6 1:00	6	6	5	6	6	10	11	7	6	7	6	4	6	3	2	4	4	7	5	4	4	6	3	5.6	11.5	
19-Oct-07	2 1:00	2	2	4	3	2	4	4	7	4	4	4	3	3	3	3	7	3	5	5	6	4	5	4	4.0	7.9	
20-Oct-07	4 1:00	5	3	7	4	4	5	5	8	8	7	5	4	4	6	6	7	7	8	6	5	6	8	9	5.9	9.2	
21-Oct-07	10 1:00	12	8	8	6	6	13	6	6	6	5	4	4	4	3	2	9	6	5	5	6	3	3	4	6.1	13.5	
22-Oct-07	2 1:00	1	3	2	5	7	3	4	3	4	5	1	3	4	5	6	6	5	7	4	6	6	6	5	4.3	7.2	
23-Oct-07	5 1:00	6	3	8	16	5	7	10	9	8	8	7	3	6	8	5	5	11	14	4	3	3	3	3	6.9	15.5	
24-Oct-07	3 1:00	3	3	2	4	2	2	2	3	5	5	5	4	4	6	6	6	8	7	7	7	7	13	6	5.0	12.6	
25-Oct-07	8 1:00	6	6	4	8	5	4	3	4	6	4	3	2	6	6	11	4	4	4	3	4	6	5	3	4.9	11.1	
26-Oct-07	5 1:00	5	4	5	4	6	7	7	8	7	6	4	5	5	18	19	7	4	3	4	4	3	2	3	6.0	19.3	
27-Oct-07	3 1:00	3	2	3	2	3	7	13	3	3	4	3	4	4	4	6	4	4	4	7	6	5	3	4	4.3	12.9	
28-Oct-07	4 1:00	7	6	5	6	8	11	10	14	10	9	8	6	7	7	6	7	10	10	8	10	11	9	10	8.2	13.8	
29-Oct-07	8 1:00	10	9	10	10	10	12	14	12	11	12	18	18	12	9	7	11	11	9	11	8	7	8	10	10.7	18.1	
30-Oct-07	12 1:00	18	14	10	6	5	5	C	C	C	5	2	3	3	5	6	2	8	5	6	8	5	5	2	6.4	17.8	
31-Oct-07	2 1:00	2	2	2	3	3	3	5	6	6	5	5	7	4	4	6	7	10	10	8	7	6	5	6	5.1	9.6	
Hourly Avg		4.6	5.2	4.5	5.2	5.8	5.3	6.2	7.2	7.2	6.5	5.6	5.1	4.8	4.4	5.0	6.6	5.6	5.6	6.2	6.0	6.0	5.6	5.3	4.9		
Hourly Max		12.3	17.8	14.1	13.4	15.5	10.5	13.5	14.3	15.5	11.3	11.6	18.1	17.6	11.5	17.6	35.7	16.6	12.3	14.8	13.6	14.9	11.9	12.6	10.7		

#### 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

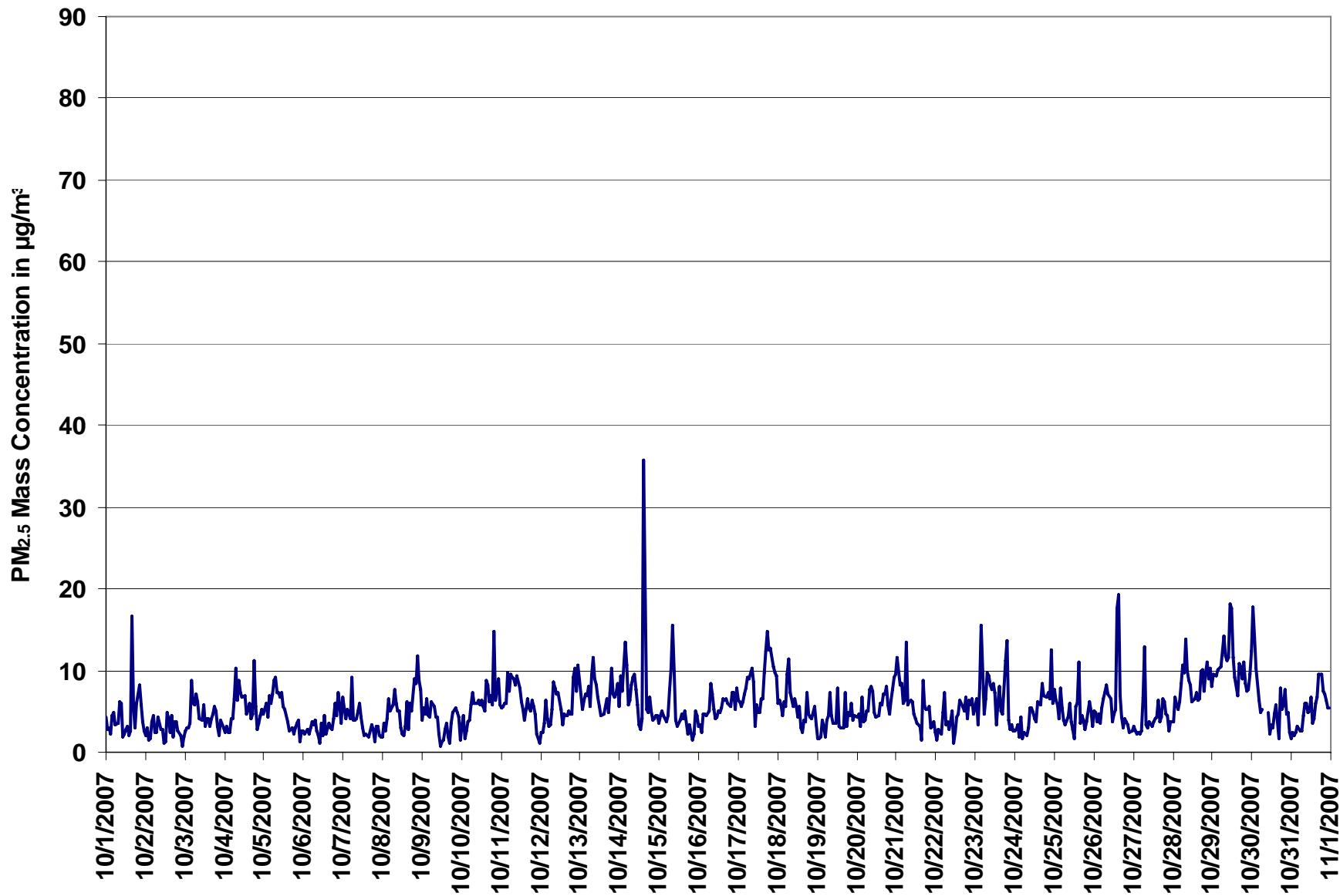
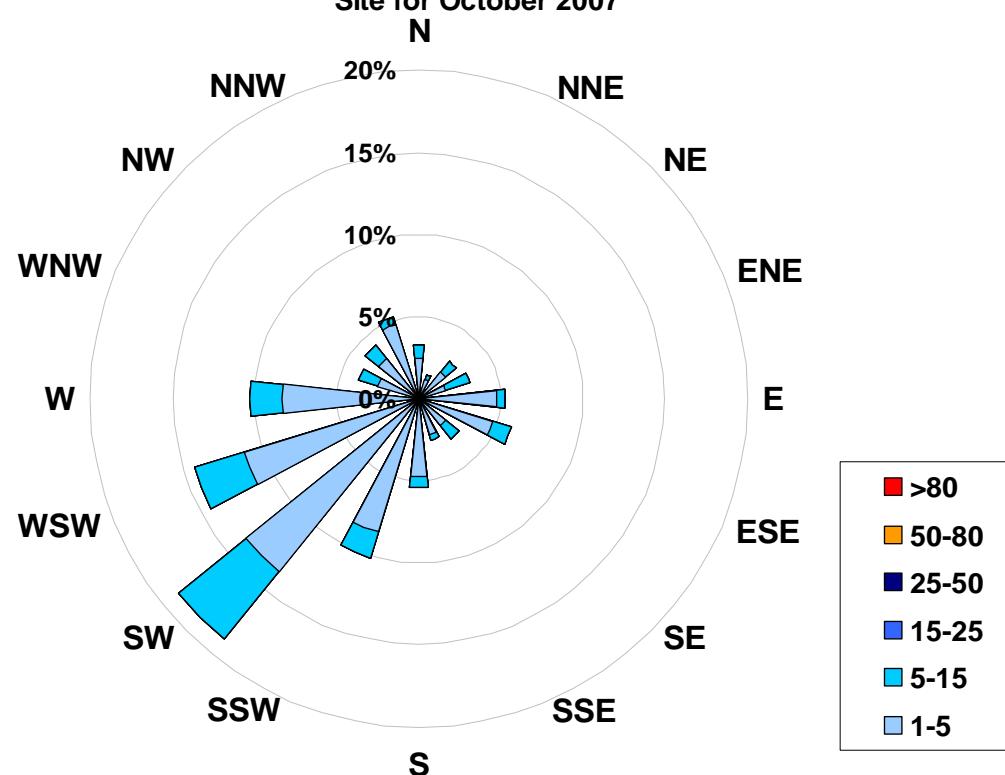


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



**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 October 2007**



Calms: 0%

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			Frequency (hrs)
Range			
1.0	<	5	614
5	to	15	127
15	to	25	0
25	to	50	0
50	to	80	0
>	80		0
Total Non-Zero Values			741



## PAS - Crescent Heights Relative Humidity Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

### Summary

Maximum 1-hr Average:	87.9 %	6-Oct 4:00	5:00
Maximum 24-hr Value:	80.1 %	5-Oct	

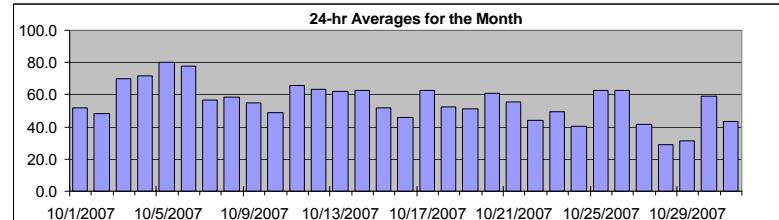
AIC Time:	0 hrs	Operational Time:	744 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99 86.2	95 82.9	75 70.4

Percentile 50 25 15 5 1

Average 55.4 % Median 54.5 %

### 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

	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	

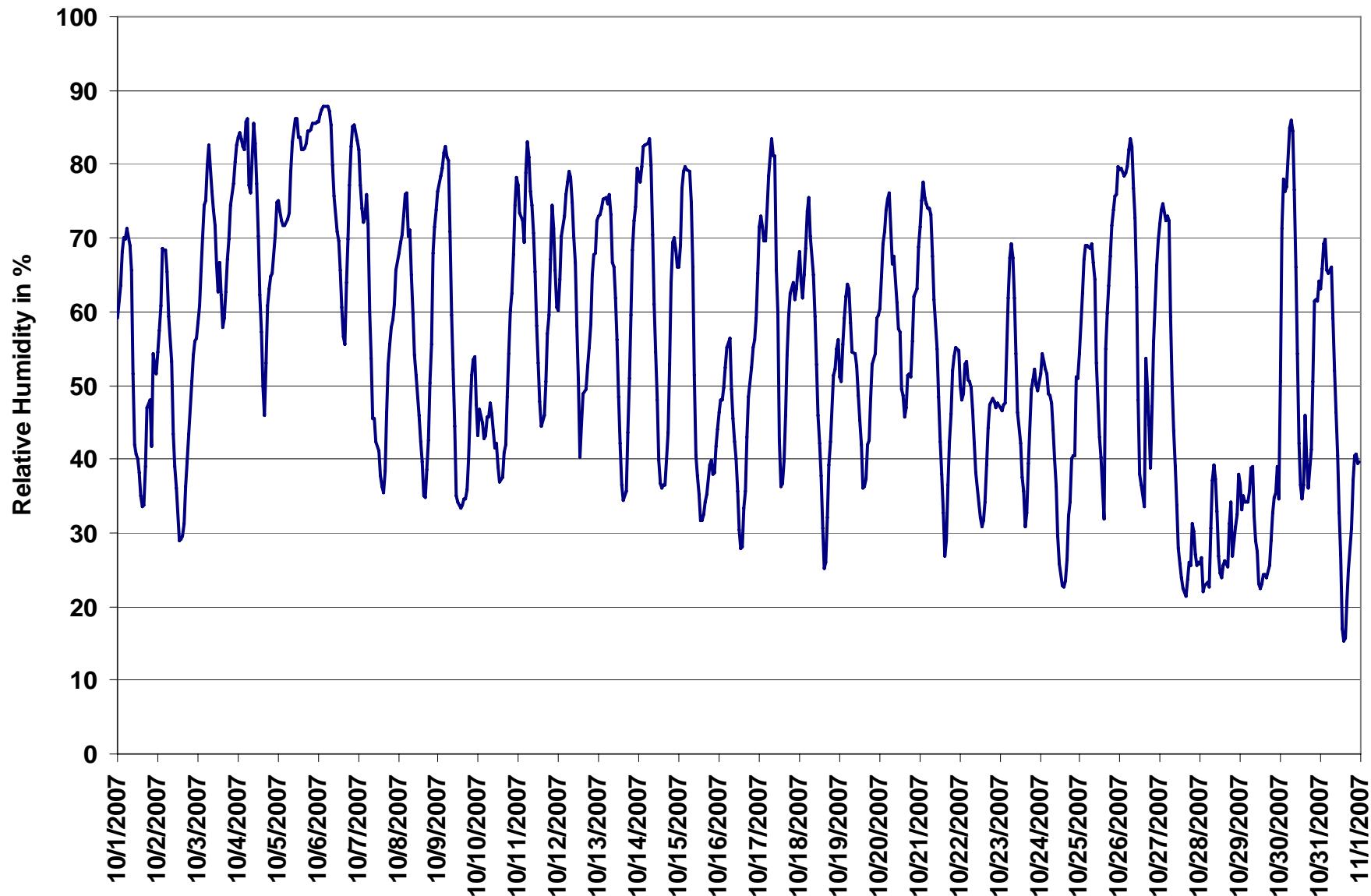


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



## PAS - Crescent Heights Temperature Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

### Summary

Maximum 1-hr Average:	25.0	°C	24-Oct	14:00 15:00
Maximum 24-hr Value:	18.1	°C	24-Oct	

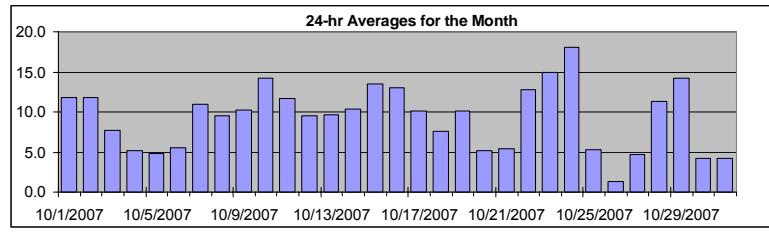
AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	21.7	18.8	13.6	9.0	5.3	0.0	-4.2		

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
	Hour End 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Oct-07	9	8	8	7	7	7	7	8	9	14	16	16	16	17	17	17	17	15	13	12	13	10	10	10	11.8	17.3	
2-Oct-07	9	8	7	5	6	6	7	8	11	13	15	16	17	18	18	18	17	16	14	13	11	11	10	10	11.8	18.2	
3-Oct-07	9	9	8	7	6	6	6	6	7	8	8	10	10	9	10	10	10	9	8	8	7	6	5	4	7.7	10.3	
4-Oct-07	3	2	1	1	1	0	0	2	3	2	4	5	7	10	11	12	13	10	9	8	7	7	5	4	5.2	13.0	
5-Oct-07	4	4	4	4	4	4	5	5	5	5	5	6	7	6	5	5	5	5	4	4	4	4	4	4	4.8	6.6	
6-Oct-07	4	4	4	4	4	4	4	4	5	5	6	7	8	8	10	11	11	9	7	5	3	2	2	2	5.5	11.4	
7-Oct-07	2	3	3	4	3	2	3	6	9	12	14	17	18	20	20	20	19	16	14	13	12	12	11	10	11.0	20.3	
8-Oct-07	9	8	8	7	7	8	7	10	11	12	12	13	14	14	15	14	13	11	9	8	5	4	3	9.5	14.8		
9-Oct-07	2	2	1	1	1	1	2	5	9	12	14	17	18	19	19	19	17	15	14	13	12	11	11	11	10.3	18.8	
10-Oct-07	11	10	11	12	11	11	13	13	14	16	18	18	20	20	20	19	19	19	16	13	11	11	11	11	14.2	20.4	
11-Oct-07	10	11	11	12	10	9	9	10	10	10	12	14	16	17	17	16	15	14	13	11	9	8	7	8	11.6	17.2	
12-Oct-07	8	6	5	5	4	4	4	4	6	9	11	14	15	17	16	14	14	13	12	11	10	9	9	8	9.5	16.7	
13-Oct-07	8	8	8	8	7	7	7	7	9	10	10	12	14	15	16	16	16	13	11	9	6	5	5	4	9.7	16.5	
14-Oct-07	4	4	3	3	2	2	2	4	7	11	14	17	19	19	20	19	19	19	16	14	11	9	9	10	10.4	19.6	
15-Oct-07	11	10	7	7	6	6	6	6	11	15	18	19	20	22	22	21	20	17	15	14	13	13	12	13.5	21.8		
16-Oct-07	12	11	11	10	9	9	8	11	12	14	15	17	19	20	20	19	18	15	13	11	10	10	10	13.0	20.4		
17-Oct-07	7	7	8	8	9	8	8	8	9	9	10	11	14	15	15	14	13	12	11	10	10	10	9	8	10.1	15.4	
18-Oct-07	6	6	5	4	3	2	2	4	5	7	9	12	13	14	14	14	13	10	8	8	6	5	5	5	7.5	14.1	
19-Oct-07	6	7	7	7	7	6	6	8	10	11	12	13	14	15	17	16	15	14	12	10	9	9	7	6	10.1	16.6	
20-Oct-07	5	3	2	2	2	1	1	1	3	5	8	9	9	10	10	10	10	8	7	6	4	3	3	2	5.2	10.4	
21-Oct-07	1	0	0	0	0	1	1	1	2	4	7	10	11	12	12	12	11	9	8	7	6	5	5	6	5.5	12.4	
22-Oct-07	8	8	8	7	7	8	8	9	10	12	14	16	17	18	18	18	16	15	14	15	15	15	15	12.8	18.4		
23-Oct-07	15	15	15	15	13	10	8	7	8	10	13	16	18	20	21	22	22	19	17	15	14	14	14	14	14.9	22.4	
24-Oct-07	15	14	15	15	15	16	16	16	17	18	20	23	24	25	25	25	24	21	19	17	17	17	17	17	18.1	25.0	
25-Oct-07	7	6	5	5	5	5	5	5	6	6	8	9	9	10	11	8	6	5	3	2	1	0	0	-1	5.3	11.1	
26-Oct-07	-1	-1	0	0	0	-1	-2	-2	0	2	5	7	8	9	8	6	5	3	1	-1	-2	-3	-5	-6	1.3	8.5	
27-Oct-07	-7	-7	-7	-7	-7	-3	-3	0	3	5	8	11	12	13	14	15	13	11	11	9	8	8	8	8	4.6	14.5	
28-Oct-07	8	7	8	8	7	8	7	6	6	8	10	14	15	16	16	16	15	13	12	15	15	15	15	11.3	16.1		
29-Oct-07	12	13	12	13	13	12	11	10	12	15	16	18	19	19	19	18	17	15	14	14	14	14	12	11	14.3	19.0	
30-Oct-07	7	4	3	5	4	3	2	2	3	5	6	8	9	10	8	8	8	6	4	2	0	-1	-1	-2	4.3	9.5	
31-Oct-07	-2	-2	-3	-3	-2	-3	-3	-2	1	3	6	8	11	14	14	14	12	9	7	5	5	5	5	5	4.2	13.9	

### 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

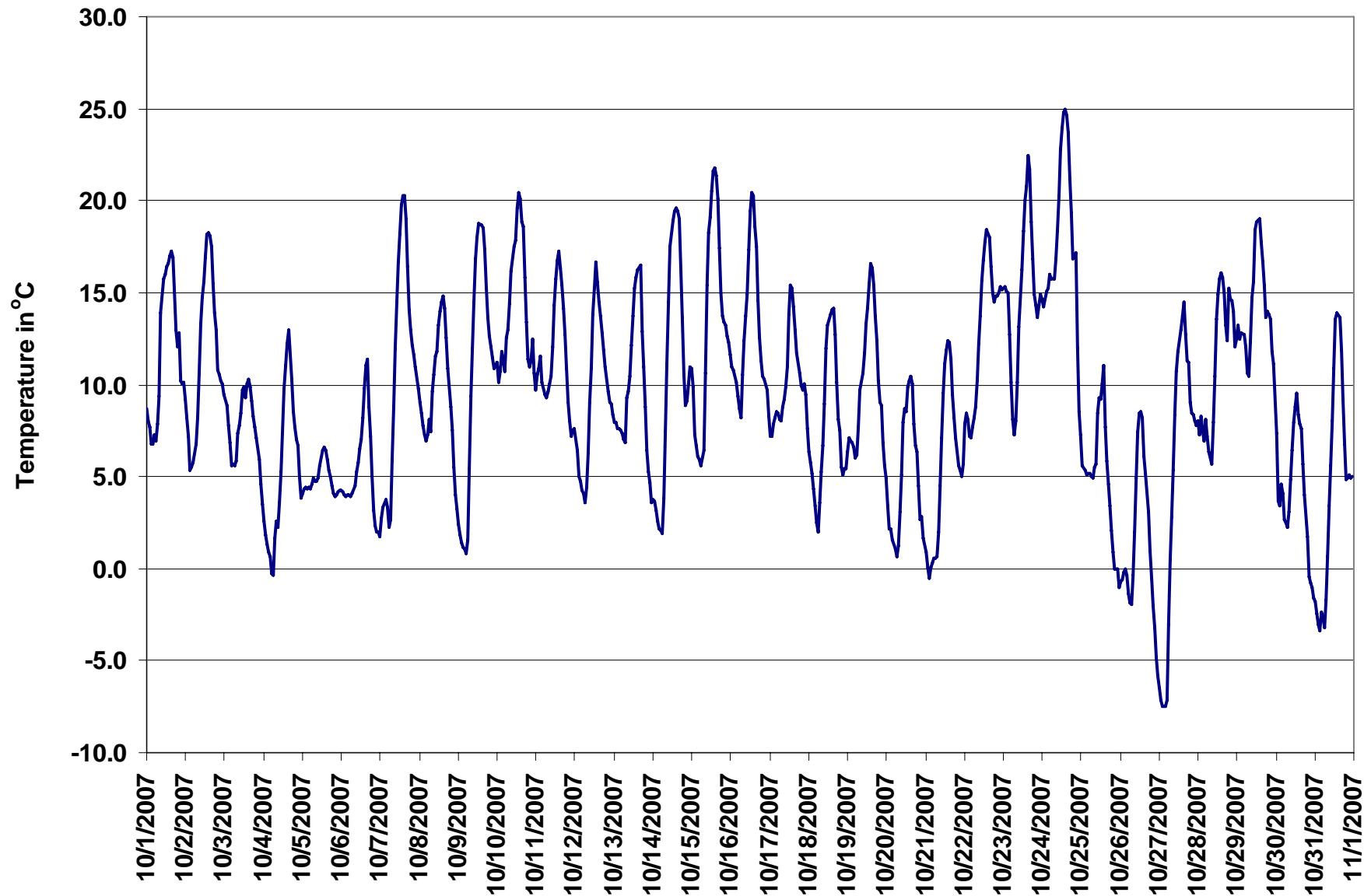


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



## PAS - Crescent Heights Solar Radiation Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

### Summary

Maximum 1-hr Average:	644.4	W/m <sup>2</sup>	2-Oct	12:00 13:00
Maximum 24-hr Value:	170.4	W/m <sup>2</sup>	7-Oct	

AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99 590.5	95 510.0	75 207.4	50 0.2	25 0.0	5 0.0	1 0.0	Average 117.6 W/m <sup>2</sup>	Median 0.2 W/m <sup>2</sup>

### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	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	95

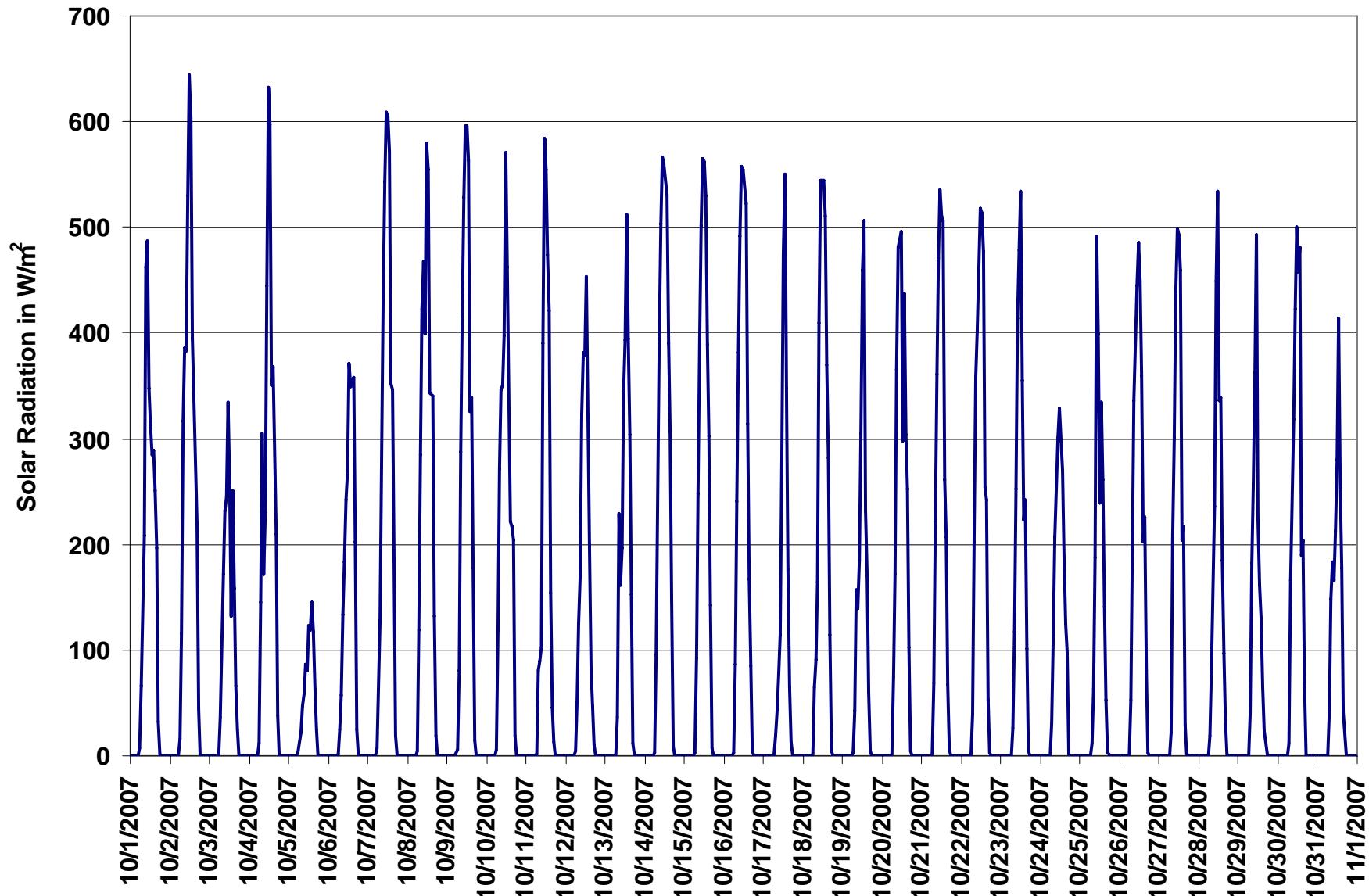


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



## PAS - Crescent Heights Scalar Wind Speed Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

### Summary

Maximum 1-hr Average:	35.1	km/hr	24-Oct	8:00 9:00
Maximum 24-hr Value:	24.3	km/hr	24-Oct	

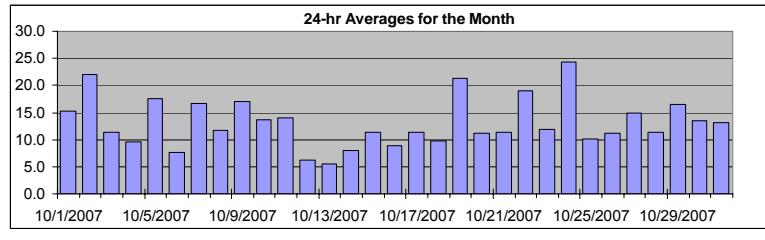
Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	29.7	25.4	17.6	12.0	7.7	4.5	3.6	13.1 km/hr

### Day Mountain Standard Time

	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	6:00 7:00	7:00 8:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hr Scalar Average	Daily Max
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00			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-Oct-07	14	9	7	6	10	9	10	16			12	18	23	20	19	20	19	18	19	18	13	17	13	16	19	19	15.2	23.5	
2-Oct-07	17	16	18	18	19	14	13	16			18	23	27	25	29	24	29	29	24	21	28	23	22	22	27	26	22.0	29.1	
3-Oct-07	26	22	16	10	9	8	8	7			8	14	14	12	14	13	12	10	9	9	7	6	8	10	13	8	11.3	26.0	
4-Oct-07	10	9	8	8	5	4	4	6			13	16	15	13	12	7	6	5	5	5	8	14	12	18	15	15	9.6	17.6	
5-Oct-07	19	20	21	21	21	13	10	13			11	18	20	19	20	21	23	22	24	25	18	16	15	12	11	10	17.6	25.3	
6-Oct-07	9	9	8	7	6	7	8	7			6	9	10	11	10	11	7	6	6	7	7	7	6	5	7	7	7.7	10.9	
7-Oct-07	6	10	11	11	8	8	10	12			17	24	25	24	22	20	20	21	23	16	15	19	19	19	21	21	19	16.7	24.9
8-Oct-07	20	17	16	18	14	6	9	9			15	19	18	17	13	15	13	14	9	6	7	6	4	4	6	4	11.7	19.9	
9-Oct-07	6	5	3	4	5	5	7	12			15	18	19	24	22	23	27	27	29	27	26	22	20	19	18	23	17.0	28.8	
10-Oct-07	27	21	22	20	13	26	13	10			8	9	11	13	10	9	11	13	13	10	9	10	9	12	16	13	13.6	26.5	
11-Oct-07	21	21	25	27	24	11	14	15			17	12	11	13	13	11	13	8	6	9	11	8	8	9	12	14	13.9	27.2	
12-Oct-07	12	8	5	4	6	8	7	6			4	3	5	5	5	6	8	12	11	9	8	5	4	3	4	4	6.3	12.5	
13-Oct-07	4	4	4	4	4	3	3	4			4	6	6	7	7	7	6	6	4	4	6	9	9	6	8	4	5.5	9.2	
14-Oct-07	5	5	4	3	5	5	4	4			4	4	4	6	14	17	19	17	12	11	11	9	9	8	8	8	8.0	18.7	
15-Oct-07	8	5	5	6	6	6	6	7			5	12	17	23	20	19	18	16	16	15	12	10	11	10	11	10.4	23.2		
16-Oct-07	10	9	10	9	8	6	7	7			9	10	9	8	13	12	12	15	9	8	8	7	5	6	8	8.9	14.5		
17-Oct-07	11	14	13	12	11	8	10	12			14	15	18	16	12	13	13	11	10	7	6	6	9	10	10	11.4	17.8		
18-Oct-07	10	12	10	10	7	5	7	6			7	9	10	10	12	15	16	17	14	7	9	13	9	6	5	8	9.7	17.1	
19-Oct-07	18	25	26	25	20	11	13	18			22	24	24	27	31	29	20	16	17	24	29	24	21	16	14	14	21.3	31.3	
20-Oct-07	11	14	15	12	9	11	10	8			8	9	13	16	16	18	18	15	12	8	8	10	12	5	6	4	11.1	18.2	
21-Oct-07	5	5	7	8	10	12	11	12			13	13	15	14	12	13	11	12	7	13	10	11	12	17	15	14	11.3	16.5	
22-Oct-07	14	17	15	12	12	14	14	15			17	18	19	17	17	21	21	24	23	20	22	24	24	24	25	19.0	25.4		
23-Oct-07	24	23	23	22	14	11	7	5			5	5	5	5	6	7	11	8	12	11	10	11	14	16	14	11	12	11.9	23.8
24-Oct-07	16	24	18	20	23	27	29	31			35	31	29	30	31	33	30	27	22	19	17	11	12	21	24	25	24.3	35.1	
25-Oct-07	21	15	15	8	7	8	8	10			12	11	9	9	7	7	7	21	18	11	7	6	7	6	10	5	10.2	21.0	
26-Oct-07	3	6	5	8	8	9	6	7			10	14	15	17	16	15	23	21	20	16	10	8	7	8	7	11.2	22.6		
27-Oct-07	6	7	6	4	5	4	10	16			20	26	21	25	26	26	23	16	16	18	20	11	12	12	14	12	14.8	26.5	
28-Oct-07	14	12	18	10	9	16	12	6			4	7	9	8	9	9	8	9	9	6	7	20	20	18	21	11	11.3	20.6	
29-Oct-07	11	12	11	15	15	18	12	14			14	11	16	22	27	23	24	25	20	20	17	18	13	14	9	13	16.4	26.8	
30-Oct-07	20	19	13	16	23	12	9	12			14	15	14	16	16	16	21	14	9	8	8	8	6	11	14	9	13.4	23.1	
31-Oct-07	7	7	7	5	11	7	8	15			13	11	18	19	12	16	17	15	9	10	17	14	16	18	21	20	13.1	20.9	
	1-hr Average	13.1	12.9	12.4	11.7	11.2	10.1	9.7			10.8	12.2	14.1	15.2	15.8	16.0	16.1	16.3	15.9	14.0	12.9	12.7	12.4	11.8	12.3	13.2	12.2		
	Hourly Max	26.5	25.4	25.9	27.2	23.7	27.0	28.6			31.0	35.1	30.7	28.6	30.0	31.3	32.7	30.1	28.8	28.8	26.9	29.3	24.0	23.5	24.5	26.7	26.1		

### 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: October 1, 2007 to November 1, 2007

### Summary

Maximum 1-hr Average:	34.9	km/hr	24-Oct	8:00 9:00
Maximum 24-hr Value:	21.4	km/hr	2-Oct	

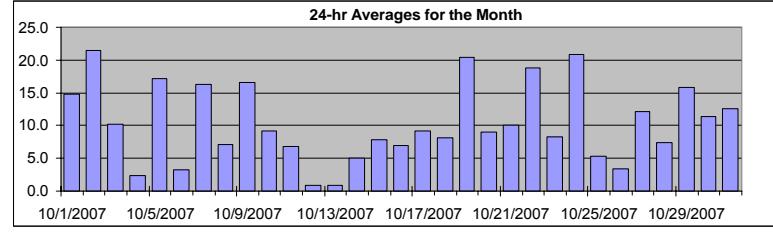
Calm Time:	1 hrs	0% calms	Operational Time:	743 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageV	
	29.6	25.3	17.5	11.5	7.2	2.8	1.8		28.7 km/hr

### Day Mountain Standard Time

	Hour Start Hour End	0:00 2:00	1:00 3:00	2:00 4:00	3:00 5:00	4:00 6:00	5:00 7:00	6:00 8:00	7:00 9:00	8:00 10:00	9:00 11:00	10:00 12:00	11:00 13:00	12:00 14:00	13:00 15:00	14:00 16:00	15:00 17:00	16:00 18:00	17:00 19:00	18:00 20:00	19:00 21:00	20:00 22:00	21:00 23:00	22:00 0:00	23:00 1:00	24-hr Vector Average	Daily Max
1-Oct-07	14 14	7 17	6 18	5 19	10 14	8 12	9 16	15 17	12 23	18 27	23 25	19 29	20 24	19 29	18 24	19 21	17 28	13 23	11 22	10 22	16 22	19 27	19 26	19 26	14.8	23.3	
2-Oct-07	17 17	14 15	17 18	18 19	14 12	14 16	12 17	16 23	17 27	23 27	25 29	20 29	21 24	23 29	22 24	24 25	21 17	15 28	13 23	11 22	16 22	19 27	19 26	19 26	21.4	28.7	
3-Oct-07	26 26	22 22	15 15	9 9	9 7	7 8	6 6	8 13	13 14	11 14	11 13	11 14	11 13	11 11	9 9	9 9	8 8	6 6	6 6	8 8	10 10	13 13	13 13	13 13	10.3	25.9	
4-Oct-07	10 10	9 9	7 7	7 7	2 2	calm	1 1	5 5	13 15	15 15	12 12	11 11	5 5	3 3	3 3	3 3	4 4	7 7	14 14	11 11	17 17	15 15	15 15	15 15	2.4	17.3	
5-Oct-07	19 19	20 20	21 21	21 21	12 12	10 13	13 11	11 18	20 20	19 20	19 20	21 21	23 23	22 22	24 24	25 25	17 17	15 15	14 14	12 12	11 11	10 10	10 10	10 10	17.1	25.0	
6-Oct-07	9 9	9 9	8 8	7 7	6 6	7 7	7 6	4 4	8 8	10 11	9 9	10 10	5 5	3 3	5 5	7 7	7 7	7 7	6 6	2 2	6 6	5 5	5 5	5 5	3.3	10.6	
7-Oct-07	5 5	10 10	11 11	10 10	7 7	8 8	10 12	12 17	17 24	25 23	23 22	19 20	20 20	20 23	16 16	15 15	19 19	19 19	19 19	21 21	21 21	19 19	19 19	19 19	16.3	24.7	
8-Oct-07	20 20	16 16	18 18	12 12	5 5	9 9	9 9	15 19	19 18	16 13	15 15	13 13	13 13	13 13	9 9	6 6	7 7	4 4	2 2	2 2	5 5	4 4	4 4	7.1	19.9		
9-Oct-07	6 6	3 3	3 3	3 3	4 4	4 4	6 6	12 15	15 18	19 19	23 22	23 23	27 27	27 29	27 27	26 26	22 22	20 20	19 19	18 18	18 18	23 23	23 23	23 23	16.5	28.7	
10-Oct-07	26 26	20 20	21 21	19 19	10 10	25 25	12 12	2 2	7 9	6 6	12 12	8 8	3 3	10 10	9 9	11 11	9 9	8 8	10 10	5 5	12 12	13 13	13 13	9.2	26.4		
11-Oct-07	21 21	21 21	25 25	27 27	23 23	11 14	14 15	17 17	11 11	12 12	13 13	10 10	13 13	7 7	5 5	9 9	11 11	8 8	8 8	7 7	12 12	13 13	13 13	6.8	27.1		
12-Oct-07	12 12	6 6	4 4	3 3	5 5	8 8	6 6	5 5	1 2	4 4	2 2	3 3	2 2	7 7	12 12	11 11	9 9	8 8	4 4	3 3	2 2	1 1	3 3	0.8	12.3		
13-Oct-07	3 3	3 3	2 2	3 3	2 2	2 2	4 4	3 3	5 5	5 6	6 6	6 6	4 4	4 4	2 2	3 3	6 6	9 9	9 9	6 6	7 7	3 3	3	0.9	9.1		
14-Oct-07	5 5	4 4	3 3	2 2	4 4	5 3	3 3	2 2	2 2	5 5	13 13	17 17	18 18	17 17	12 12	11 11	11 11	9 9	9 9	8 8	8 8	8 8	6 6	5.0	18.3		
15-Oct-07	8 8	3 3	5 5	6 6	5 5	5 5	7 7	2 2	12 12	16 23	19 19	19 19	18 18	16 16	15 15	14 14	12 12	10 10	9 9	9 9	9 9	6 6	7.8	22.9			
16-Oct-07	9 9	6 6	7 7	7 7	5 5	5 5	6 6	8 8	10 10	8 8	6 6	12 12	12 12	12 12	14 14	8 8	7 7	7 7	6 6	3 3	5 5	7 8	8 8	6.9	14.3		
17-Oct-07	11 11	14 14	13 13	12 12	10 10	7 7	9 9	12 14	15 18	18 16	11 11	13 13	13 13	13 13	11 11	10 10	7 7	5 5	4 4	8 8	10 10	10 10	9.2	17.7			
18-Oct-07	10 10	12 12	10 10	10 10	6 6	2 5	5 5	7 7	9 9	9 9	12 14	14 15	17 17	13 13	7 7	9 9	12 12	9 9	4 4	5 6	8 8	10 10	10 10	8.1	16.6		
19-Oct-07	18 18	25 25	26 26	24 24	20 20	11 11	12 12	18 18	22 23	24 24	27 31	28 31	20 20	16 16	17 17	24 24	29 29	23 23	21 21	16 16	14 14	14 14	14 14	20.5	30.9		
20-Oct-07	11 11	14 14	15 15	11 11	8 8	11 10	6 6	8 8	9 9	11 15	16 16	18 18	18 18	15 15	12 12	8 8	8 8	10 10	11 11	2 2	6 6	2 2	6 6	9.1	17.7		
21-Oct-07	2 2	4 4	6 6	9 9	12 12	11 11	12 12	13 13	12 12	15 13	12 12	13 11	12 12	7 7	12 12	10 10	10 10	12 12	16 16	15 15	14 14	14 14	10.1	16.4			
22-Oct-07	14 14	17 17	15 15	12 12	12 12	13 13	14 14	15 15	17 18	19 19	17 17	20 20	21 21	24 24	23 23	20 20	22 22	24 24	23 23	24 24	25 25	24 24	24 24	18.8	25.4		
23-Oct-07	24 24	23 23	21 21	14 14	11 11	6 6	4 4	4 4	4 4	4 4	6 6	11 11	8 8	11 11	9 9	11 11	14 14	16 16	13 13	11 11	12 12	21 21	22 22	25 25	8.3	23.7	
24-Oct-07	16 16	23 23	18 18	20 20	23 23	27 27	28 28	31 31	35 35	31 31	28 30	30 31	33 33	30 30	27 27	22 22	19 19	16 16	11 11	12 12	21 21	22 22	25 25	20.9	34.9		
25-Oct-07	21 21	15 15	15 15	8 8	3 3	8 8	6 6	9 9	12 11	9 9	8 8	6 6	5 5	5 5	20 20	18 18	11 11	7 7	6 6	7 7	5 5	10 10	4 4	4 4	5.3	20.9	
26-Oct-07	3 3	6 6	4 4	7 7	8 8	9 9	5 5	7 7	10 10	13 13	15 15	15 15	22 22	21 21	20 20	16 16	10 10	8 8	7 7	8 8	7 7	7 7	7 7	3.4	22.3		
27-Oct-07	5 5	7 7	6 6	4 4	4 4	4 4	9 9	15 15	20 20	26 26	20 20	25 25	23 23	16 16	16 16	18 18	19 19	11 11	11 11	12 12	13 13	12 12	12 12	12.1	26.1		
28-Oct-07	13 13	12 12	17 17	10 10	9 9	16 16	12 12	4 4	2 5	8 8	8 8	8 8	7 7	8 8	8 8	5 5	5 5	20 20	19 19	18 18	20 20	11 11	7.5	20.4			
29-Oct-07	11 11	12 12	11 11	15 15	15 15	18 18	11 11	13 13	14 14	11 11	16 16	21 21	27 27	23 23	24 24	25 25	20 20	20 20	17 17	18 18	13 13	14 14	8 8	12	15.8	26.6	
30-Oct-07	20 20	18 18	13 13	16 16	23 23	11 11	9 9	12 12	14 14	15 15	15 15	20 20	13 13	9 9	7 7	8 8	8 8	4 4	11 11	13 13	9 9	18 18	21 21	19 19	11.5	22.8	
31-Oct-07	6 6	6 6	7 7	4 4	11 11	6 6	7 7	14 14	13 13	11 11	18 18	19 19	12 12	16 16	17 17	15 15	9 9	10 10	17 17	14 14	16 16	18 18	21 21	19 19	12.6	20.8	
1-hr Vector	6.1	6.6	6.0	5.8	5.3	4.5	4.7	6.0	7.1	8.7	9.9	10.0	9.8	9.4	7.9	6.0	4.2	4.1	4.9	5.2	5.2	6.0	6.8	6.0			
Hourly Max	26.4	25.3	25.8	27.1	23.3	26.8	28.4	30.9	34.9	30.5	28.4	29.9	30.9	32.6	30.0	28.6	28.7	26.8	29.1	24.0	23.4	24.4	26.6	26.0			

### HOURLY AVERAGE TABLE

### Wind Speed (WSv)



### Status Flag Characters

C Calibration	A AIC - Zero / Span Check
<



## PAS - Crescent Heights Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Wind Direction (WD) Summary											

Calm Time:	0 hrs							Operational Time: 744 hrs						
	0% calms							AMD Operational Uptime: 100.0%						
Calibration Time:	0 hrs													
Percentile	99	95	75	50	25	5	1	Average						
	353.0	333.5	254.9	225.7	155.8	59.3	10.1	230 deg						

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-07	237	264	245	279	244	239	254	223	234	238	250	257	250	250	257	261	253	247	250	289	269	262	266	265	253	WSW
2-Oct-07	255	228	225	226	227	236	227	222	227	242	240	249	244	256	253	247	245	229	237	236	222	212	214	214	235	SW
3-Oct-07	215	228	241	283	276	276	302	253	223	226	229	235	254	262	278	289	284	266	278	256	214	219	235	241	247	WSW
4-Oct-07	224	224	243	220	269	244	166	192	199	223	233	230	232	237	65	103	145	95	52	60	37	44	94	92	179	S
5-Oct-07	91	83	83	79	84	79	62	66	66	61	53	62	67	77	93	93	92	89	100	91	67	56	66	68	78	ENE
6-Oct-07	69	66	70	74	98	112	106	114	160	222	223	221	214	233	249	212	73	74	78	122	107	88	192	194	142	SE
7-Oct-07	153	215	215	211	236	214	186	185	203	213	222	230	214	215	228	235	223	223	217	210	215	210	218	223	216	SW
8-Oct-07	228	239	245	242	235	223	326	299	331	337	347	331	326	334	338	353	346	335	315	316	4	60	120	106	306	NW
9-Oct-07	111	104	47	40	87	88	34	95	106	110	104	110	110	110	108	110	109	112	109	100	102	104	98	95	104	ESE
10-Oct-07	108	102	103	102	104	94	68	98	4	337	177	154	137	44	136	91	89	105	111	99	174	176	235	236	112	ESE
11-Oct-07	219	204	209	216	228	251	263	275	281	281	294	324	338	347	350	343	83	85	82	134	116	188	234	233	246	WSW
12-Oct-07	218	233	189	101	253	215	217	193	123	51	98	104	313	350	31	42	40	9	1	6	50	15	244	340	11	N
13-Oct-07	321	328	27	333	339	340	324	328	261	243	274	231	302	326	300	343	198	88	94	111	113	121	124	92	334	NNW
14-Oct-07	81	102	82	39	360	347	18	65	153	145	146	181	203	206	201	204	189	170	143	132	133	119	122	156	164	SSE
15-Oct-07	164	190	344	14	25	38	35	2	59	153	179	195	188	186	183	179	163	152	128	131	158	166	154	190	165	SSE
16-Oct-07	178	231	205	138	110	109	136	156	157	175	212	187	202	198	195	204	189	207	236	217	111	279	244	252	192	SSW
17-Oct-07	217	233	237	223	230	255	235	208	207	211	211	210	254	279	294	308	309	306	278	279	292	291	286	272	250	WSW
18-Oct-07	277	277	273	277	247	166	188	182	225	232	238	255	252	234	232	228	252	270	201	205	270	186	148	163	236	SW
19-Oct-07	196	204	206	208	217	233	228	218	208	213	210	215	210	215	248	251	248	240	233	231	245	252	230	237	223	SW
20-Oct-07	243	239	231	239	232	244	253	260	296	252	273	313	328	312	316	315	307	310	297	304	328	357	263	284	228	WNW
21-Oct-07	113	127	117	194	241	236	242	235	229	220	212	207	233	239	253	255	262	235	244	236	237	219	223	222	228	SW
22-Oct-07	246	258	254	228	248	259	264	266	266	265	272	267	262	274	272	264	265	261	261	260	263	264	263	264	262	W
23-Oct-07	263	264	262	264	331	337	345	356	3	43	143	182	210	242	229	235	249	251	231	224	220	210	191	199	249	WSW
24-Oct-07	228	236	238	226	216	205	209	215	213	214	216	221	230	232	234	232	223	211	237	247	238	224	340	339	228	SW
25-Oct-07	348	348	353	347	310	287	271	274	285	300	284	269	301	227	249	22	47	52	71	115	127	116	2	357	NNW	
26-Oct-07	14	359	12	208	208	233	245	217	225	213	229	225	294	306	333	354	352	352	357	55	121	104	122	120	298	WNW
27-Oct-07	114	117	114	91	88	82	227	212	198	193	186	203	200	201	194	190	191	193	205	228	228	265	273	201	SSW	
28-Oct-07	260	245	238	250	260	279	284	342	72	221	218	203	199	188	128	112	98	78	134	216	232	230	227	224	227	SW
29-Oct-07	241	247	232	233	222	216	198	208	222	223	233	242	241	240	243	225	225	223	239	258	254	261	247	286	235	SW
30-Oct-07	325	326	313	311	335	301	265	273	281	284	296	313	311	299	299	262	288	292	261	238	238	243	243	292	WNW	
31-Oct-07	243	186	187	211	232	234	200	217	237	253	232	220	236	253	254	256	239	248	236	235	236	235	235	234	234	SW
Hourly Avg	226	232	229	229	239	235	239	224	227	228	228	228	237	243	248	245	229	218	217	218	216	219	228	233		



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2007 to November 1, 2007

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms							Operational Time: 744 hrs														
Calibration Time: 0 hrs							AMD Operational Uptime: 100.0%														
Percentile	99	95	75	50	25	5	1														
	62.0	46.1	18.7	10.1	6.9	4.6	4.0														

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

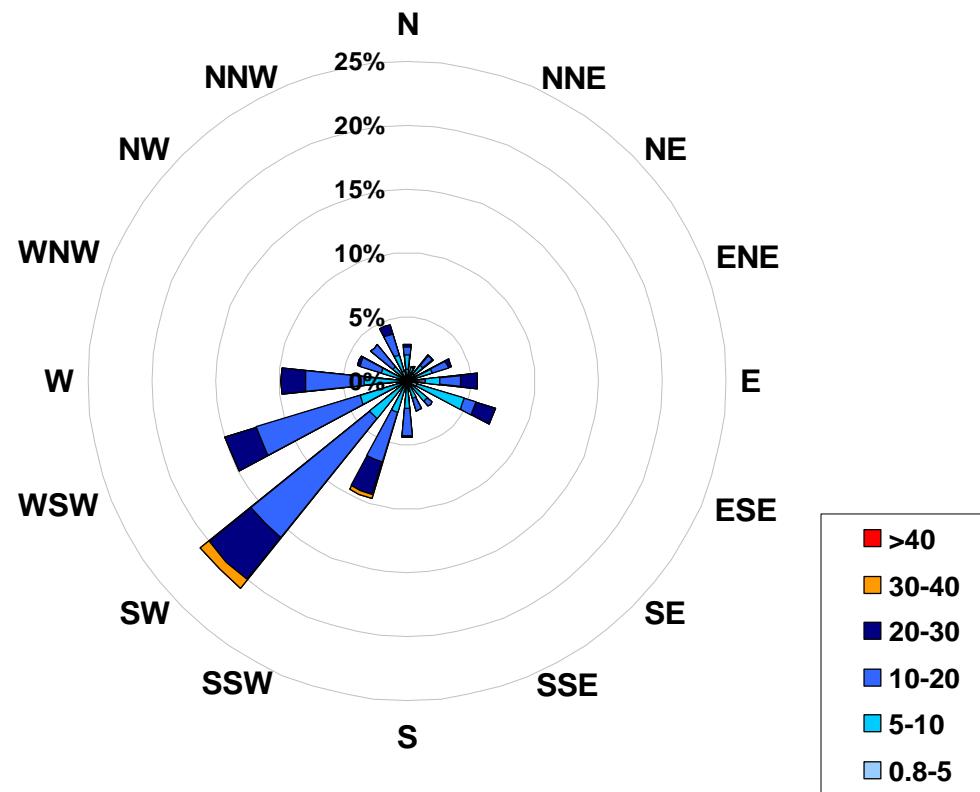
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								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	
Hour End	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-Oct-07	7	21	36	51	25	33	22	8	11	9	8	6	8	9	8	9	8	6	11	15	19	5	6	5	50.7
2-Oct-07	5	10	7	4	4	7	12	8	7	8	7	8	9	8	7	7	9	12	5	8	5	5	4	4	11.9
3-Oct-07	4	8	8	13	11	16	13	14	21	8	10	12	11	12	15	16	10	11	24	17	10	9	8	14	24.0
4-Oct-07	10	8	35	18	42	70	47	38	9	10	7	18	23	60	48	43	54	20	7	6	12	9	8	6	69.9
5-Oct-07	5	5	6	6	5	11	12	11	11	7	6	7	7	7	8	6	6	10	10	9	7	9	7	12.0	
6-Oct-07	8	8	12	9	10	10	13	29	18	15	13	23	23	42	51	26	10	7	7	9	61	11	21	61.3	
7-Oct-07	32	9	13	26	18	11	8	7	5	7	7	9	9	10	9	11	5	5	5	4	5	4	5	32.2	
8-Oct-07	4	8	8	5	36	34	32	12	12	9	9	11	18	11	14	15	13	9	10	56	62	49	16	22	61.7
9-Oct-07	13	56	26	22	24	33	8	9	7	8	9	7	7	6	6	6	4	5	5	6	6	5	6	55.8	
10-Oct-07	5	13	11	10	52	7	37	42	28	18	21	22	28	46	23	29	21	21	24	20	29	12	25	12	52.0
11-Oct-07	7	5	5	5	7	10	7	7	6	11	15	17	16	19	12	20	28	8	9	14	6	17	9	9	28.2
12-Oct-07	4	32	37	18	27	10	19	31	58	32	29	47	73	51	19	6	5	5	3	16	28	23	55	41	73.3
13-Oct-07	52	41	40	40	15	48	37	12	63	28	27	33	23	30	43	44	65	41	9	6	5	7	8	21	64.8
14-Oct-07	10	18	30	19	15	19	15	16	25	65	62	41	19	11	13	10	11	8	7	8	6	7	11	33	65.5
15-Oct-07	10	48	12	10	23	18	26	10	68	18	11	9	10	11	9	10	8	9	10	14	14	27	33	53	67.9
16-Oct-07	45	40	49	36	20	42	49	36	19	15	25	49	17	17	17	8	16	43	24	16	19	27	14	18	49.2
17-Oct-07	10	5	11	11	16	24	13	7	6	6	8	9	15	14	14	12	8	8	9	23	18	13	10	8	23.7
18-Oct-07	6	5	6	6	22	41	21	38	8	10	20	25	16	19	13	12	7	10	16	11	18	39	27	18	40.9
19-Oct-07	4	5	4	5	8	17	16	7	6	5	7	8	7	9	10	8	8	7	5	4	6	8	9	8	16.8
20-Oct-07	6	4	5	11	23	7	10	30	23	20	17	12	13	11	13	10	9	7	10	7	5	52	13	35	51.6
21-Oct-07	44	27	14	15	8	7	10	6	6	11	7	14	17	17	19	13	24	8	10	11	7	7	7	4	43.8
22-Oct-07	7	6	6	6	7	6	6	6	7	6	7	9	11	9	8	5	6	6	5	4	6	5	5	5	10.9
23-Oct-07	5	5	5	7	8	6	26	23	42	19	37	52	50	15	20	9	8	9	10	5	4	7	5	8	51.8
24-Oct-07	6	4	8	10	5	6	5	4	5	6	6	5	5	5	4	5	4	5	10	11	13	8	18	4	17.6
25-Oct-07	5	6	7	21	64	19	27	11	9	12	19	30	36	54	49	12	8	10	8	12	14	37	5	19	63.6
26-Oct-07	30	9	24	13	10	10	31	18	12	14	9	12	19	15	9	6	5	4	12	8	17	7	11	8	31.3
27-Oct-07	11	5	10	19	13	23	20	9	6	6	8	9	9	9	8	9	6	5	6	16	28	13	7	9	28.3
28-Oct-07	8	6	6	7	12	5	39	44	41	30	25	17	27	18	12	6	24	33	40	4	4	5	4	8	43.8
29-Oct-07	14	12	8	6	6	7	13	11	23	19	8	11	7	6	6	11	5	4	8	5	6	7	24	36	36.2
30-Oct-07	7	6	9	8	5	13	9	6	8	8	12	12	12	14	16	11	11	8	5	10	37	24	10	15	37.4
31-Oct-07	33	17	8	57	17	44	39	6	22	14	6	5	9	9	10	8	11	12	5	8	6	6	4	4	56.9

Hourly Max 52 56 49 57 64 70 49 44 68 65 62 52 73 60 49 51 65 43 40 56 62 61 55 53



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



Calms:		Frequency Distribution of Wind in km/hr		
		Range		Frequency (hrs)
0.8	<	5		57
5	to	10		233
10	to	20		326
20	to	30		120
30	to	40		8
	>	40		0
Total Non-Zero Values				744



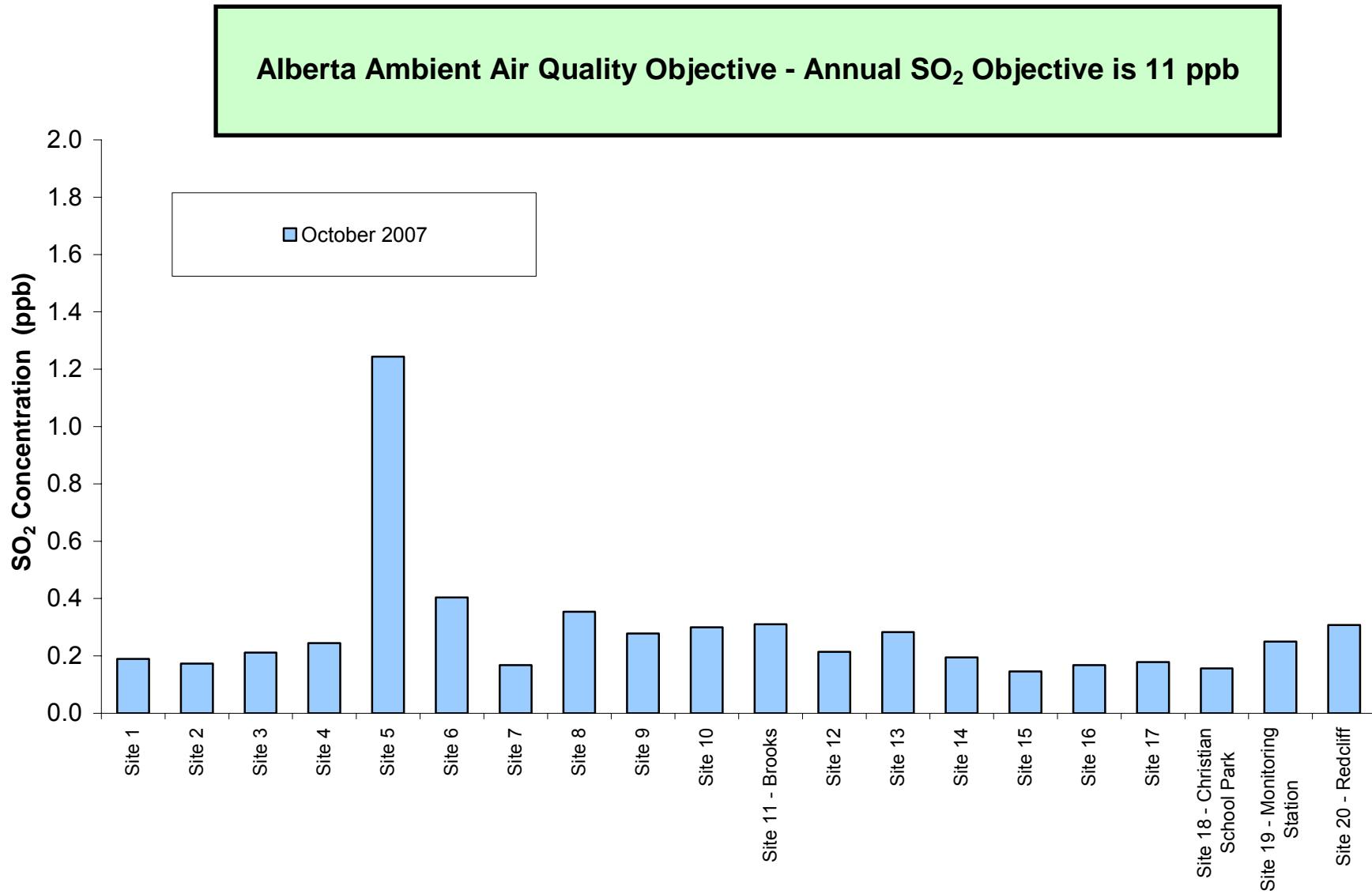
# **PALLISER AIRSHED SOCIETY**

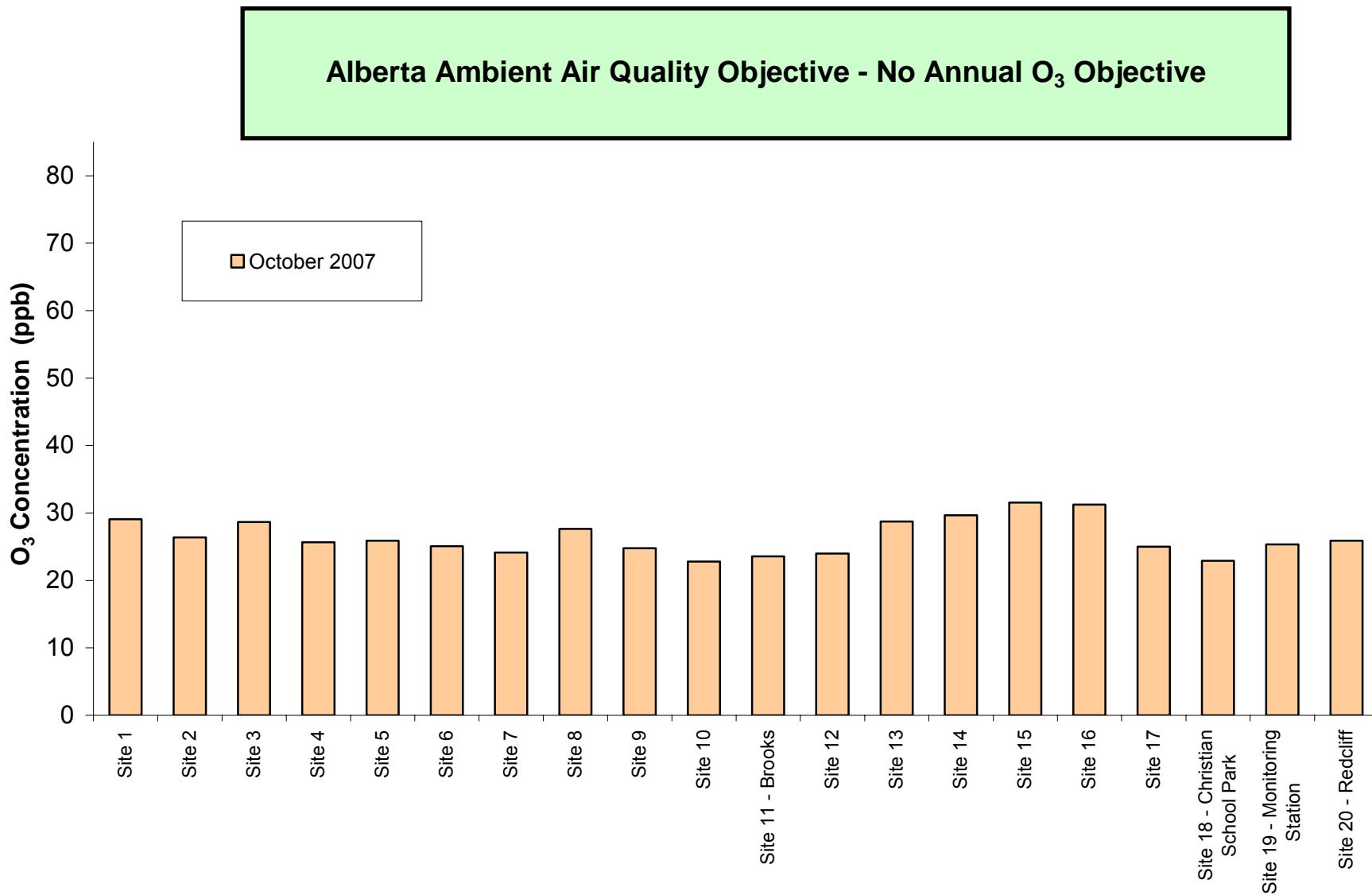
## **Passive Monitoring – October 2007**

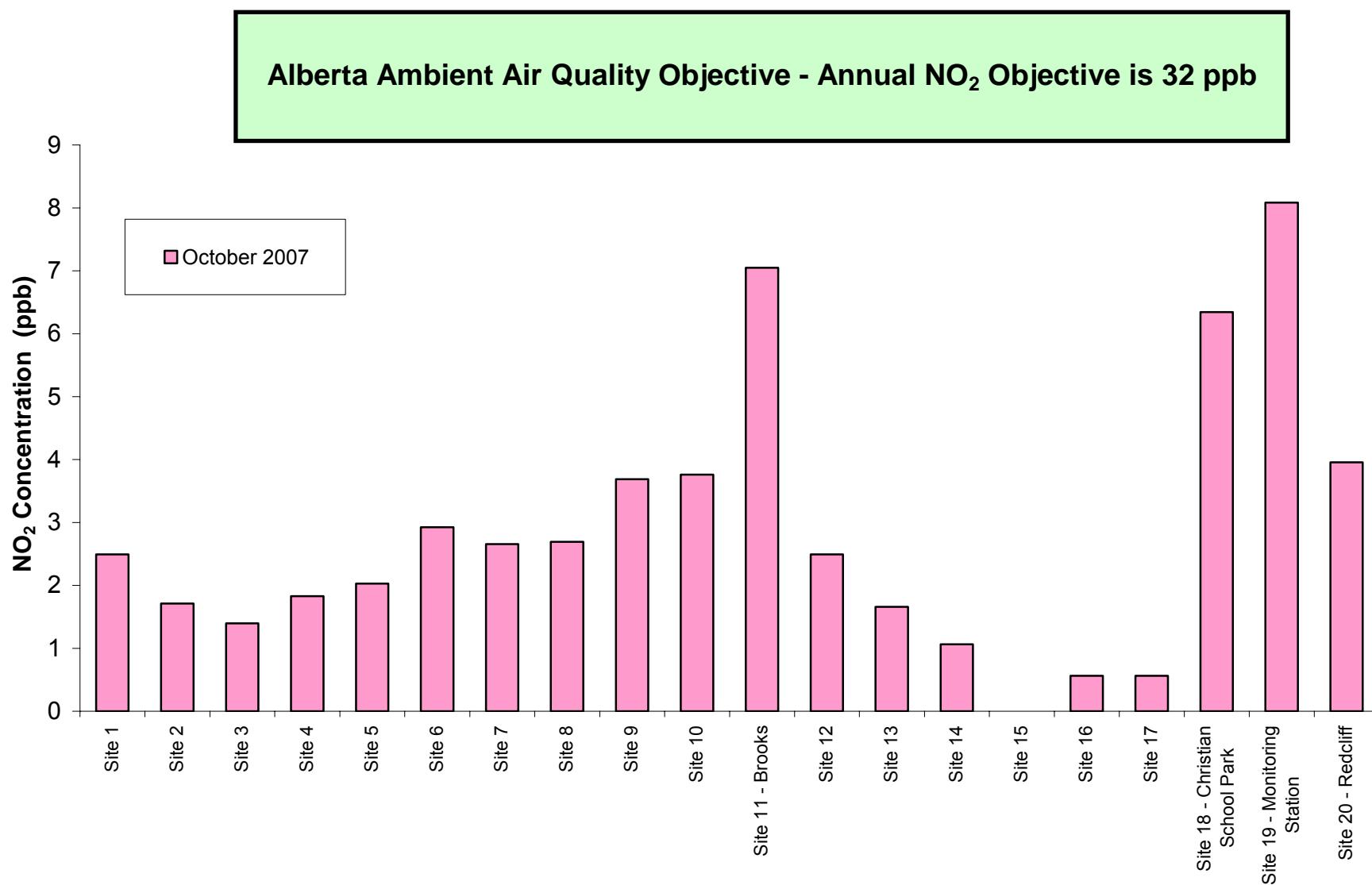


**Palliser Airshed Society - Palliser Passive Stations for October 2007**  
**Palliser Passive Monitoring Expansion**

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Location Easting	Location Northing	Elevation meter
<b>Duplicates</b>							
2a	Site 2	0.1	26.9	1.9			
2b	Site 2	0.2	25.8	1.6			
12a	Site 12	0.2	24.8	2.3			
12b	Site 12	0.2	23.1	2.7			
1	Site 1	0.2	29.1	2.5	562434	5583139	719
2	Site 2	0.2	26.4	1.7	565416	5616277	
3	Site 3	0.2	28.7	1.4	533794	5675379	779
4	Site 4	0.2	25.7	1.8	554771	5717338	718
5	Site 5	1.2	25.9	2.0	494218	5715862	735
6	Site 6	0.4	25.1	2.9	433039	5673766	818
7	Site 7	0.2	24.1	2.7	400808	5620907	780
8	Site 8	0.4	27.7	2.7	498530	5621839	747
9	Site 9	0.3	24.8	3.7	487701	5591707	763
10	Site 10	0.3	22.8	3.8	478223	5613583	774
11	Site 11 - Brooks	0.3	23.6	7.0	439773	5604548	736
12	Site 12	0.2	24.0	2.5	450287	5587201	726
13	Site 13	0.3	28.7	1.7	464279	5548934	
14	Site 14	0.2	29.7	1.1	493206	5521201	870
15	Site 15	0.1	31.5	N/A	465824	5485742	874
16	Site 16	0.2	31.2	0.6	503827	5446942	903
17	Site 17	0.2	25.0	0.6	557668	5452307	942
18	Site 18 - Christian School Park	0.2	22.9	6.3	526575	5538135	709
19	Site 19 - Monitoring Station	0.3	25.3	8.1	522813	5544137	714
20	Site 20 - Redcliff	0.3	25.9	4.0	517479	5546059	725







# **Palliser Airshed Society October 2007 - Calibration Reports**

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

## Calibration Report



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

### Station Information

Calibration Date	October 30, 2007	Previous Calibration	September 12, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Calibration	Removal
			Other:
Start Time (MST)	7:00	End Time (MST)	9:40
Barometric Pressure	27.4 inches Hg	Station Temperature	22.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	5
Calculated slope	Before	Calculated slope	After
	1.029755		0.946123
Calculated intercept	3.927812	Calculated intercept	1.601577
Analyzer make	TEI 49i	Analyzer serial #	713021144
Concentration range O3 Background O3 Coeff CellA CellB Pressure Cell A Flow Cell B Flow Bench	before	after	
	0 - 500	ppb	0 - 500
	0.6	ppb	0.6
	1.099		1.099
	86926.0	Hz	86926.0
	116655.0	Hz	116655.0
	699.1	mmHg	699.1
	724.0	ccm	724.0
	714	ccm	714
	32.2	Deg C	32.2

### Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4997	0.0	0.0	0.2	N/A
4997	300.0	268.6	284.2	0.9450
4997	200.0	183.5	190.0	0.9656
4997	100.0	86.8	88.3	0.9828
4997	0.0	0.0	0.2	0.0000
4997	300.0	268.6	281.1	0.9555
		Average Correction Factor		0.9645

Calculated value of As Found Response: 293.2 ppm Percent Change of As Found: 9.1%

Auto zero Auto span	before calibration		after calibration	
	-3.4	ppb	4.4	ppb
	370.3	ppb	295.3	ppb

Notes: No adjustments made... Calculated values

Calibration Performed By: Lenin Flores

## Calibration Summary

### Parameter

## Air Monitoring Network

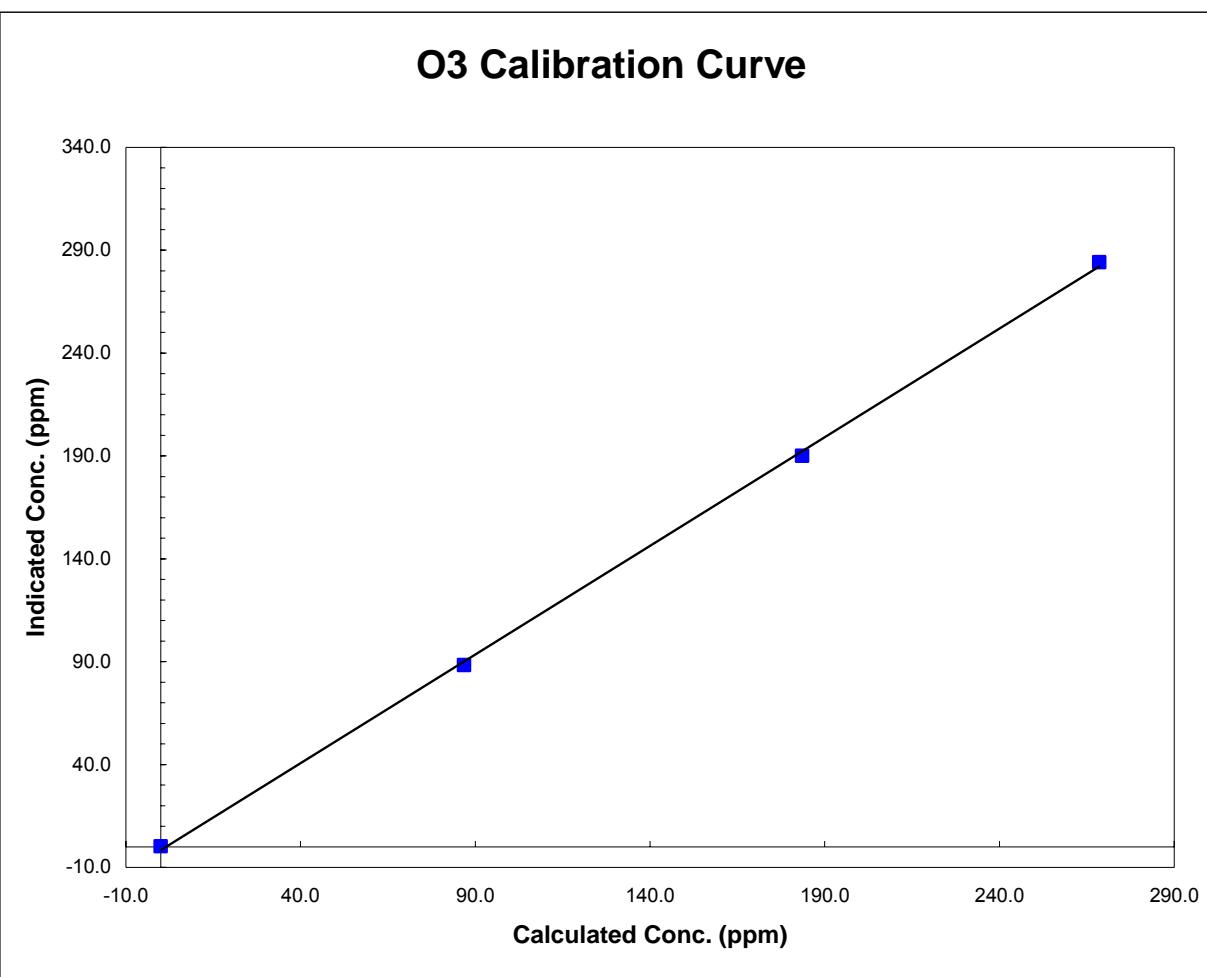
Palliser Airshed

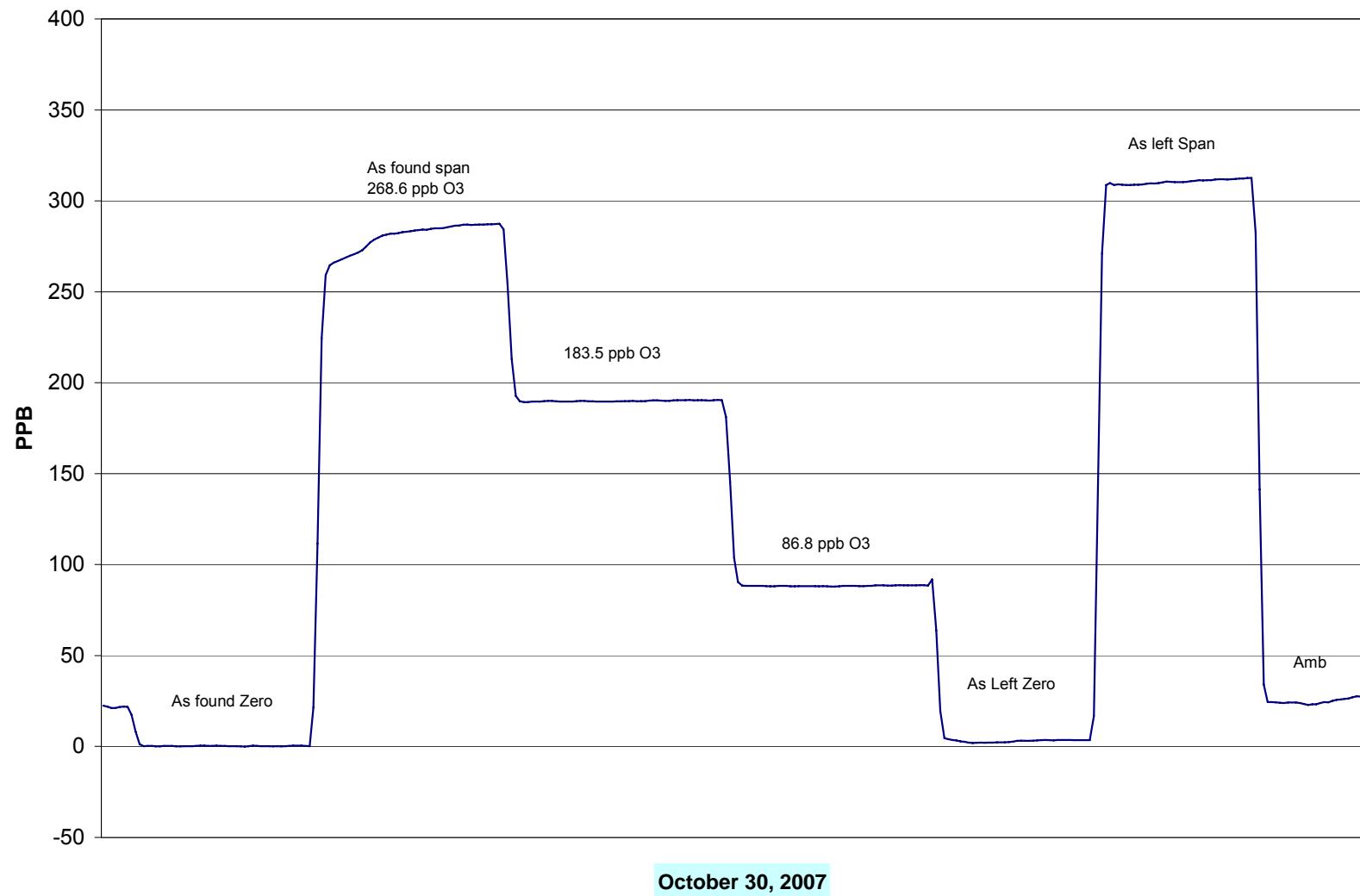


<b>Station Information</b>			
Calibration Date	October 30, 2007	Previous Calibration	September 12, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	7:00	End Time (MST)	9:40
Analyzer make/model	TEI 49i	Analyzer serial #	713021144

## **Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
268.6	284.2	0.9450	Correlation Coefficient	0.999654
183.5	190.0	0.9656		
86.8	88.3	0.9828		
0.0	0.2	N/A		
			Intercept	1.601577



**Crescent Heights - O3 Calibration**

October 30, 2007

# Calibration Report

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



## Station Information

Calibration Date	October 29, 2007	Previous Calibration	September 12, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Installation	Removal
Start Time (MST)	10:00	End Time (MST)	14:57
Barometric Pressure	27.4	inches Hg	21.5 Deg C
Calibrator	Environics 6103	Serial Number	2844
NO Cal Gas Conc	48.9	Cal Gas Expiry Date	5-Dec-07
NOx Cal Gas Conc	48.9	Cal Gas Serial #	LL-50114

## DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO2	NOx	NO
Before	Data Slope	1.012615	1.012981	1.010324
	Data Offset	1.182718	-1.615911	-1.162354
After	Data Slope	1.003328	1.002476	1.005770
	Data Offset	-0.398505	-0.404648	1.440454
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	-0.1	mV	-0.1	mV
NOx background	0.8	mV	0.8	mV
NO coefficient	2.406		2.701	
NOx coefficient	2.468		2.786	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	7.1	Deg C	7.0	Deg C
Azero	42.3		41.8	
Perm Temp	40.2	Deg C	40.2	Deg C
Pressure	3.9	inches Hg	3.8	inches Hg
Sample Flow	455.0	ccm	457.0	ccm

Notes: Adjusted Span. As found was 11% lower than expected. Not surprising though since maintenance was performed on this analyzer and a drift was expected. The Span adjustment, however caused the final span to be >500ppb, I adjusted the IZS Temp to 37 (from 40) this will give me a lower response on the internal Span tonight...

## Calibration Report

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



### Station Information

Calibration Date: **October 29, 2007** Station Location: **Crescent Heights**

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4997	0.00	0.0	0.0	0.0	0.5	-1.6	0.1	N/A	N/A
	4997	39.96	387.9	387.9	0.0	387.2	384.1	1.4	1.0019	1.0101
	4997	19.96	194.5	194.5	0.0	195.0	192.5	0.3	0.9974	1.0108
	4997	9.95	97.2	97.2	0.0	96.9	95.1	-0.5	1.0032	1.0215
AFZ	4997	0.00	0.0	0.0	0.0	0.5	-1.6	0.1	0.0000	0.0000
	4997	39.96	387.9	387.9	0.0	346.3	344.1	0.8	1.1201	1.1275
								Average Correction Factor	1.0008	1.0141

As Found Concentrations NO<sub>x</sub>= 344.3 NO= 344.6 As Found Percent Change NO<sub>x</sub>= -11.3% NO= -11.2%

### GPT Calibration Data

Dilution Flow **4997** ccm Source Gas Flow **39.96** 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	375.3	371.7	3.6	374.8	368.1	0.1	N/A	N/A	N/A	N/A
300	385.5	116.9	268.6	385.0	114.8	267.9	1.0014	1.0183	1.0027	99.7%
200	386.1	202.6	183.5	385.6	200.0	183.5	1.0014	1.0130	1.0002	100.0%
100	379.6	292.9	86.8	379.1	289.8	87.2	1.0014	1.0107	0.9947	100.5%
						Average Correction Factor	1.0014	1.0140	0.9992	100.1%

### AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb
Auto zero	0.2	-2.4	-0.6	ppb	-0.6	-0.6	-0.2	ppb
Auto span	432.3	418.3	8.2	ppb	341.8	332.4	9.3	ppb

Calibration Performed By: Lenin Flores

## Calibration Summary

Parameter

**NO<sub>2</sub>**

Air Monitoring Network

**Palliser Airshed**

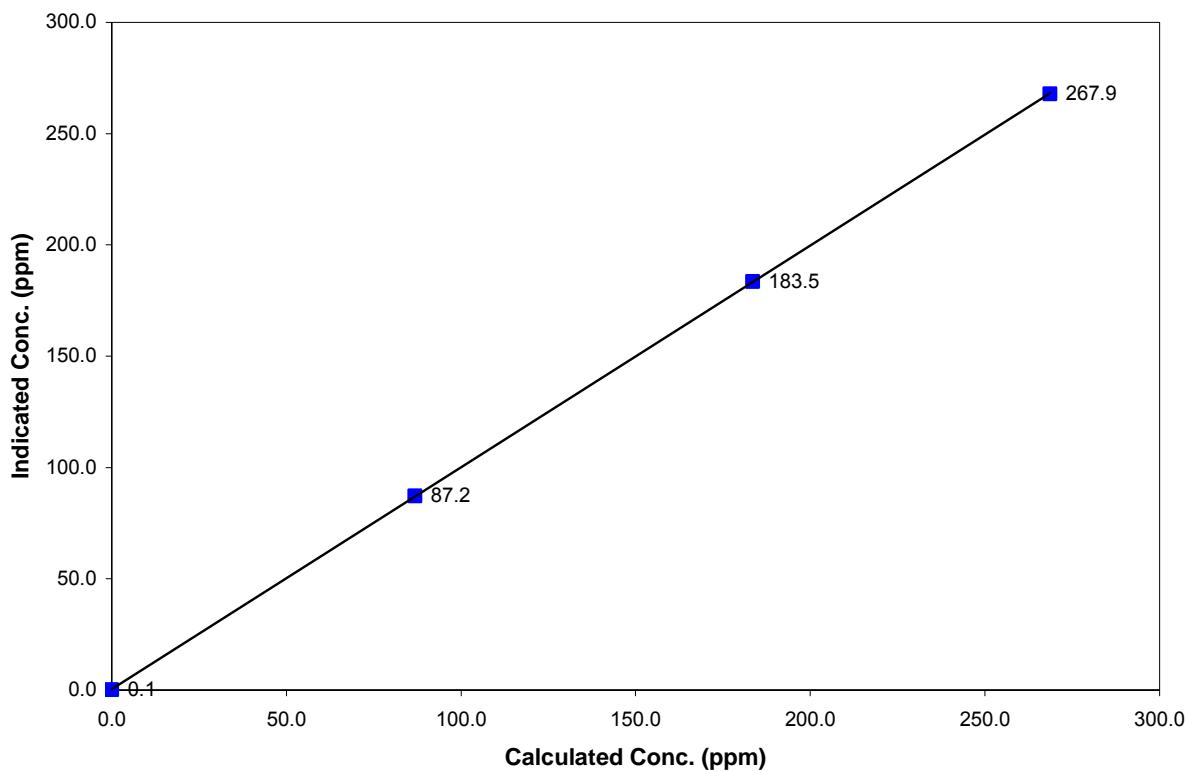
### Station Information

Calibration Date	October 29, 2007	Previous Calibration	September 12, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	10:00	End Time (MST)	14:57
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			Correlation Coefficient	Slope
0.0	0.1	0.0000	Correlation Coefficient 0.999993	Slope 1.003328
268.6	267.9	1.0027		
183.5	183.5	1.0002		Intercept -0.398505
86.8	87.2	0.9947		

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



## Calibration Summary

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



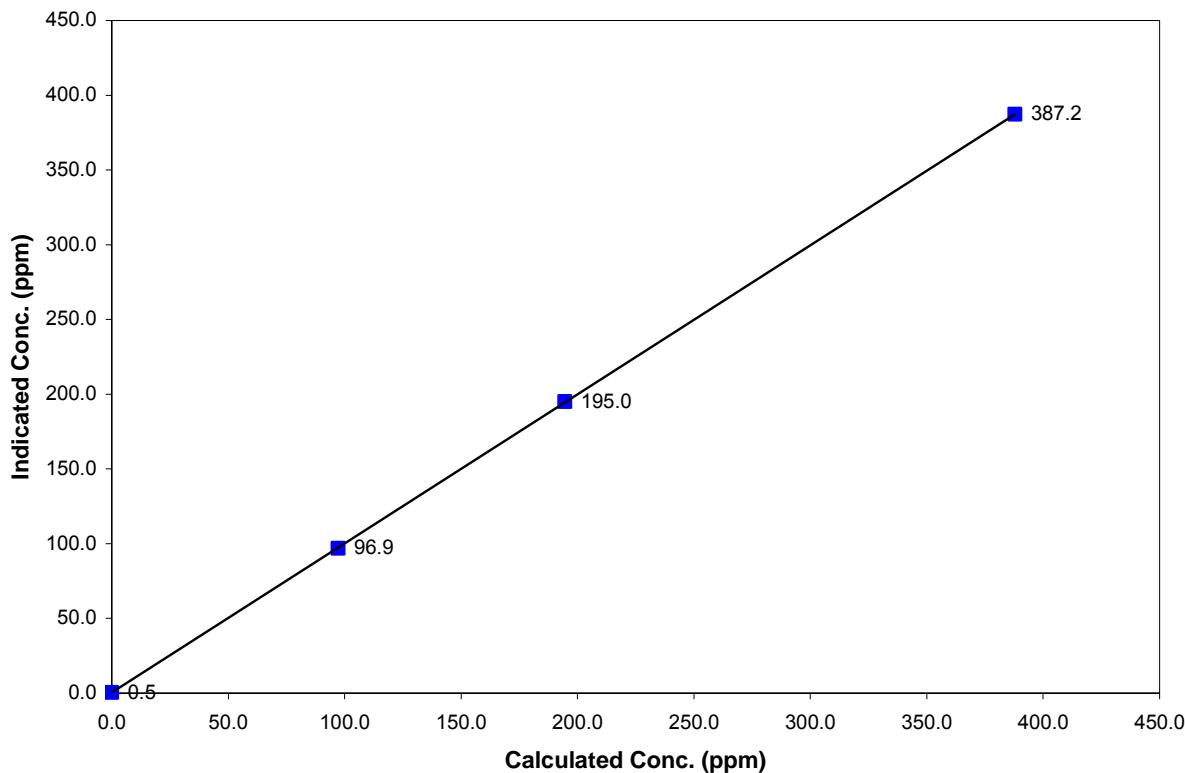
### Station Information

Calibration Date	October 29, 2007	Previous Calibration	September 12, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	10:00	End Time (MST)	14:57
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	0.0000	Correlation Coefficient	0.999993
387.9	387.2	1.0019		
194.5	195.0	0.9974		
97.2	96.9	1.0032		
			Slope	1.002476
			Intercept	-0.404648

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



## Calibration Summary

Parameter

**NO**

Air Monitoring Network

**Palliser Airshed**

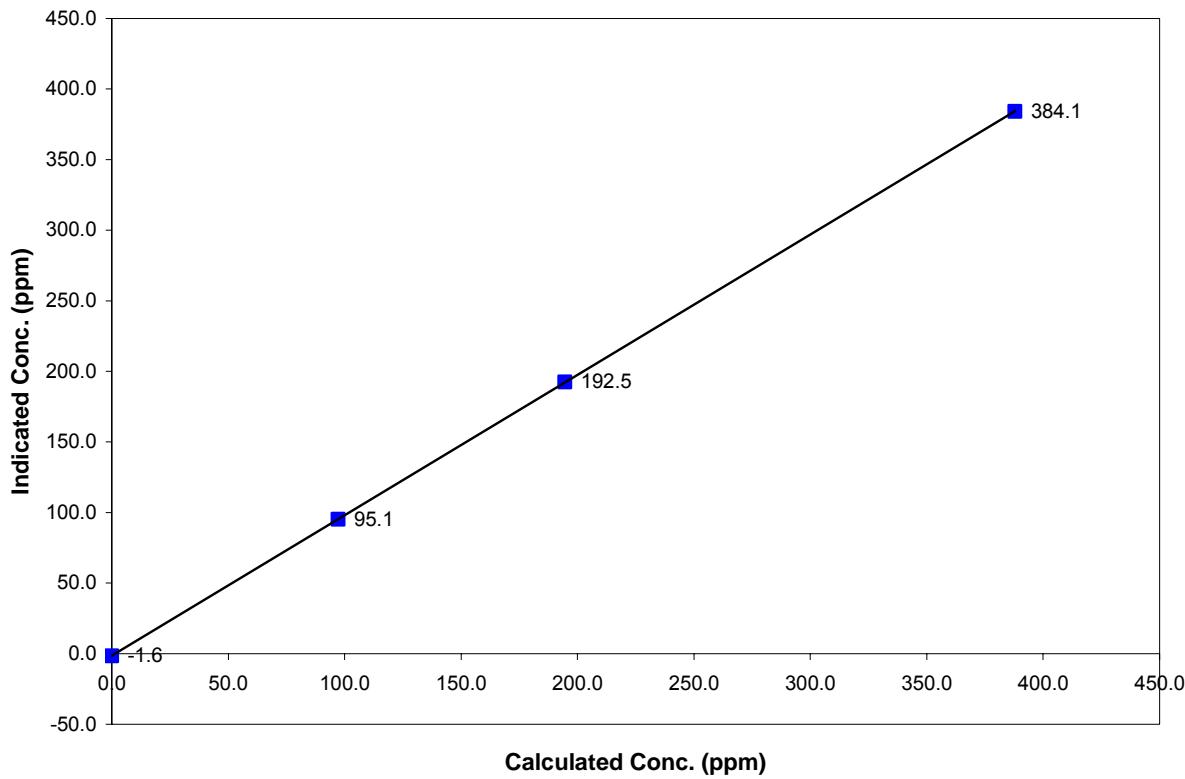
### Station Information

Calibration Date	October 29, 2007	Previous Calibration	September 12, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	10:00	End Time (MST)	14:57
Analyzer make	API Model 200E	Analyzer serial #	219

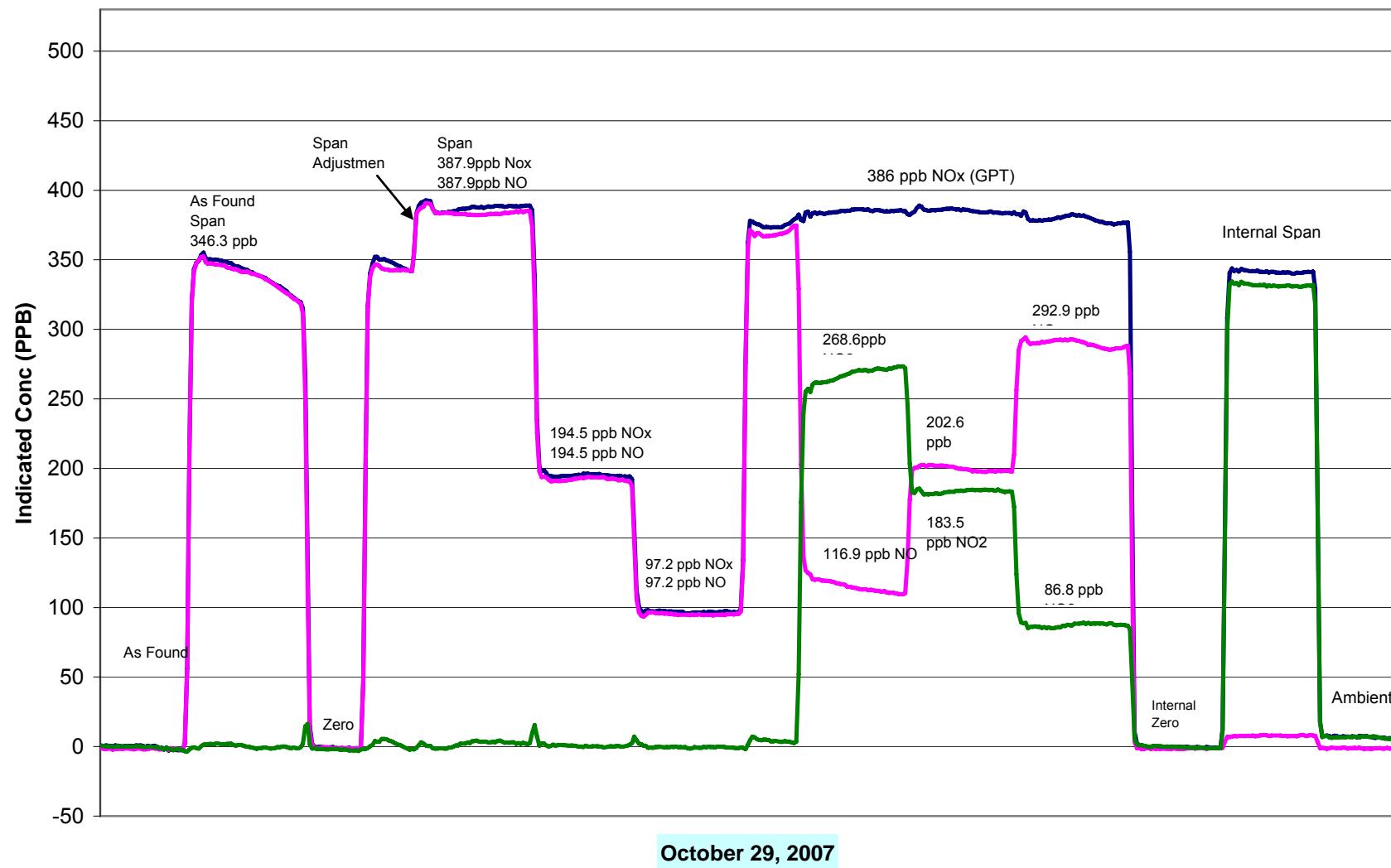
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.6	N/A	Correlation Coefficient	0.999996
387.9	384.1	1.0101		
194.5	192.5	1.0108		
97.2	95.1	1.0215		
			Slope	1.005770
			Intercept	1.440454

### NO Calibration Curve



### Crescent Heights - NOx Calibration



## Calibration Report



Parameter THC  
 Air Monitoring Network Palliser Airshed

### Station Information

Calibration Date	October 29, 2007		Previous Calibration	September 12, 2007
Station Number	101		Station Location	Crescent Heights
Reason:	<u>Routine</u>	<u>Install</u>	<u>Removal</u>	<u>Other:</u>
Start Time (MST)	13:50		End Time (MST)	16:10
Barometric Pressure	27.5	inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6103		Serial Number	2844
Cal Gas Concentration	708 ppm CH <sub>4</sub> / 299 ppm C <sub>3</sub> H <sub>8</sub>		Cal Gas Expiry Date	1/25/2009
Cal Gas CH4 equiv	1530.25	ppm	Cal Gas Cylinder #	LL-41839
DACS make	Focus AP1000		DACS serial No.	45270
DACS voltage range	0 - 10 volt		DACS channel #	9
	<u>Before</u>		<u>After</u>	
Calculated slope	1.000383		Calculated slope	0.988037
Calculated intercept	0.001958		Calculated intercept	0.112221
Analyzer make	TEI model 51C-LT		Analyzer serial #	407505596
	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.75	PSI	5.74	PSI
THC span counts	12605	raw	12328	raw
THC zero counts	1370	raw	1471	raw
V Bias	-327	Volts	-326	Volts

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	-0.09	N/A
4995	79.85	24.08	24.28	0.9916
4995	39.94	12.14	12.12	1.0018
4995	9.99	3.05	2.98	1.0232
zero	0.00	0.00	-0.09	As Found Zero
4995	79.85	24.08	24.28	As Found Span
Average Correction Factor				1.0055

Calculated value of As Found Response: 24.386 ppm Percent Change of As Found: -1.3%

Auto zero	before calibration		after calibration	
	-0.06	ppm	0.00	ppm
Auto span	18.57	ppm	20.94	ppm

Notes: No adjustments made

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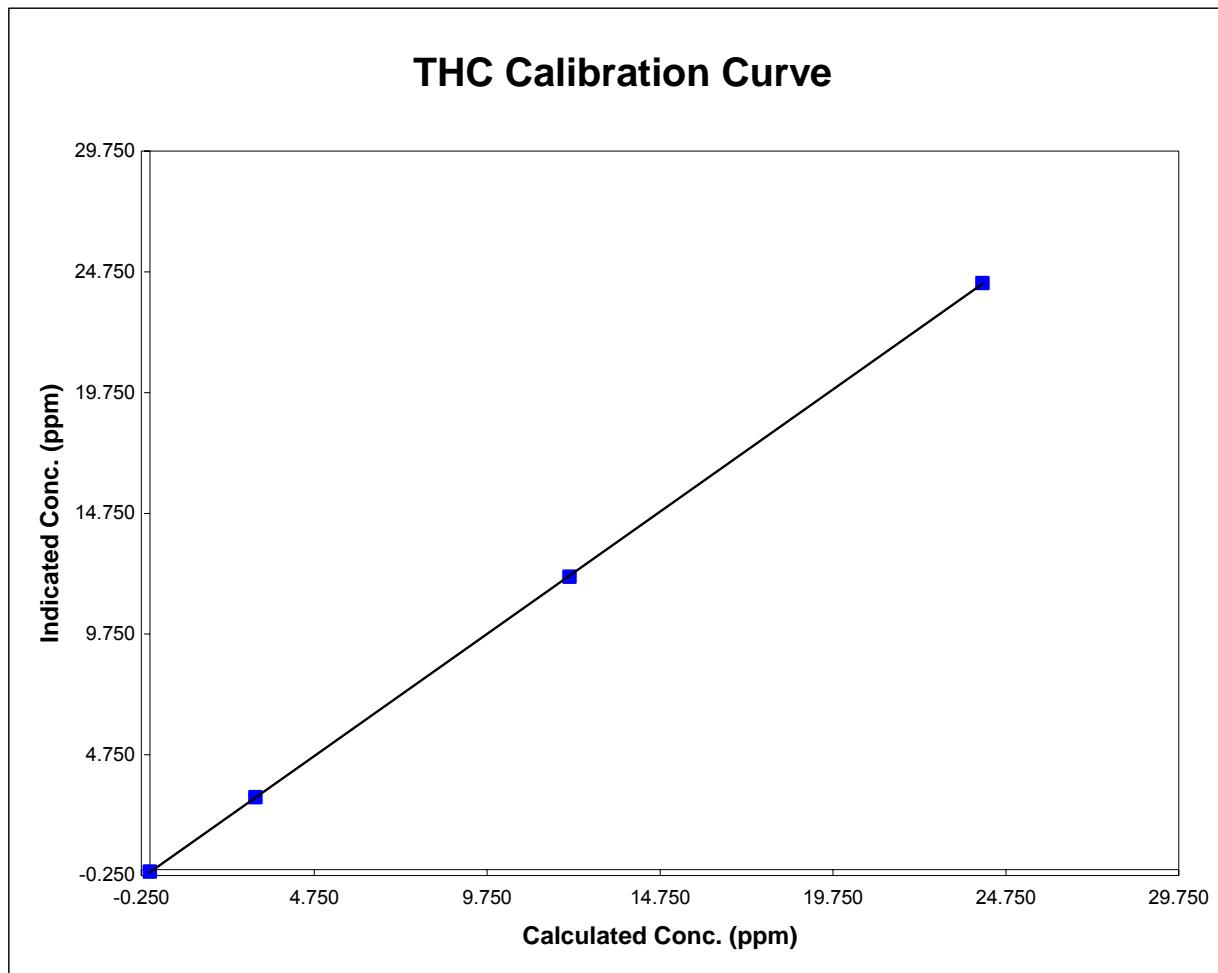
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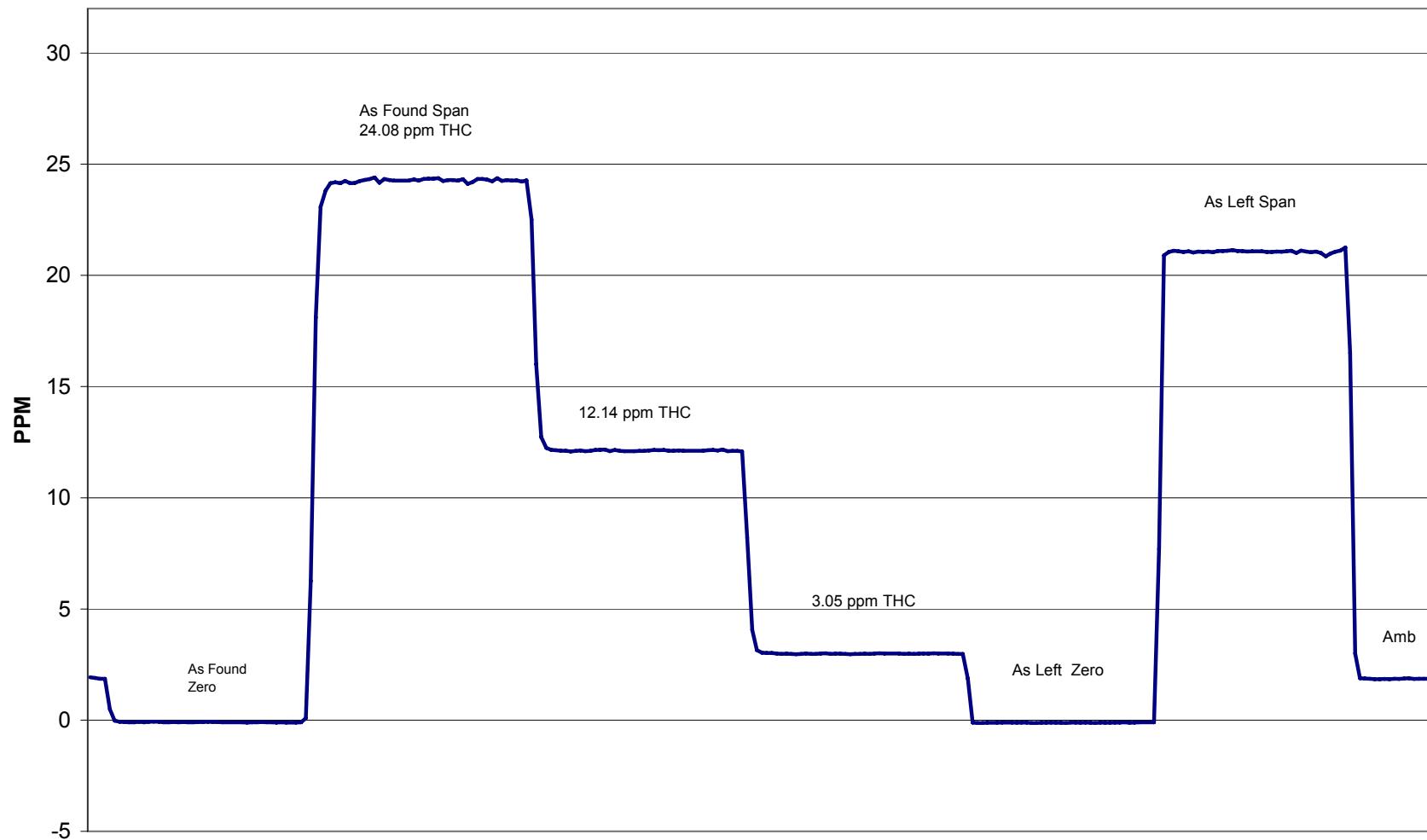
Calibration Performed By: Lenin Flores

## Calibration Summary



Parameter	THC	Palliser Airshed	
Air Monitoring Network			
<b>Station Information</b>			
Calibration Date	October 29, 2007	Previous Calibration	September 12, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	13:50	End Time (MST)	16:10
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596
<b>Calibration Data</b>			
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation
0.000	-0.093	N/A	
24.078	24.282	0.9916	Correlation Coefficient
12.139	12.117	1.0018	
3.053	2.984	1.0232	Slope
			Intercept
			0.112221



**Crescent Heights - THC Calibration**

## Calibration Report



Parameter CO  
Air Monitoring Network Palliser

### Station Information

Calibration Date	October 29, 2007	Previous Calibration	September 11, 2007
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	15:24	End Time (MST)	18:51
Barometric Pressure	27.40 in Hg	Station Temperature	22.0 Deg C
Calibrator	Environics 6103	Serial Number	2844
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	11
	Before		After
Calculated slope	0.997565	Calculated slope	0.998623
Calculated intercept	-0.613590	Calculated intercept	-0.010323
Analyzer make	TEI Model 48C	Analyzer serial #	436609887
Concentration range	before	after	
CO coefficient	0 - 50 ppm	0 - 50 ppm	
CO bkg setting	1.080	1.080	
Lamp ratio	1.204	1.202	
Lamp intensity	1.142139	1.141572	
Sample Flow	199157 Hz	199242 Hz	
	1.011 LPM	1.011 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)
4996	0.00	0.00	0.01	N/A
4996	69.89	41.36	41.42	0.9986
4996	39.94	23.78	23.84	0.9974
4996	9.98	5.98	5.98	0.9986
4996	0.00	0.00	0.90	0.0000
4996	69.89	41.36	43.03	0.9612
		Average Correction Factor	0.9982	

Calculated value of As Found Response: 41.414 ppm Percent Change of As Found: -0.1%

Auto zero	before calibration		after calibration	
	-0.07	ppm	-0.03	ppm
	19.20	ppm	19.28	ppm

Notes: Adjusted Zero and Span

Calibration Performed By: Lenin Flores

## Calibration Summary

Parameter

co

Air Monitoring Network

Palliser



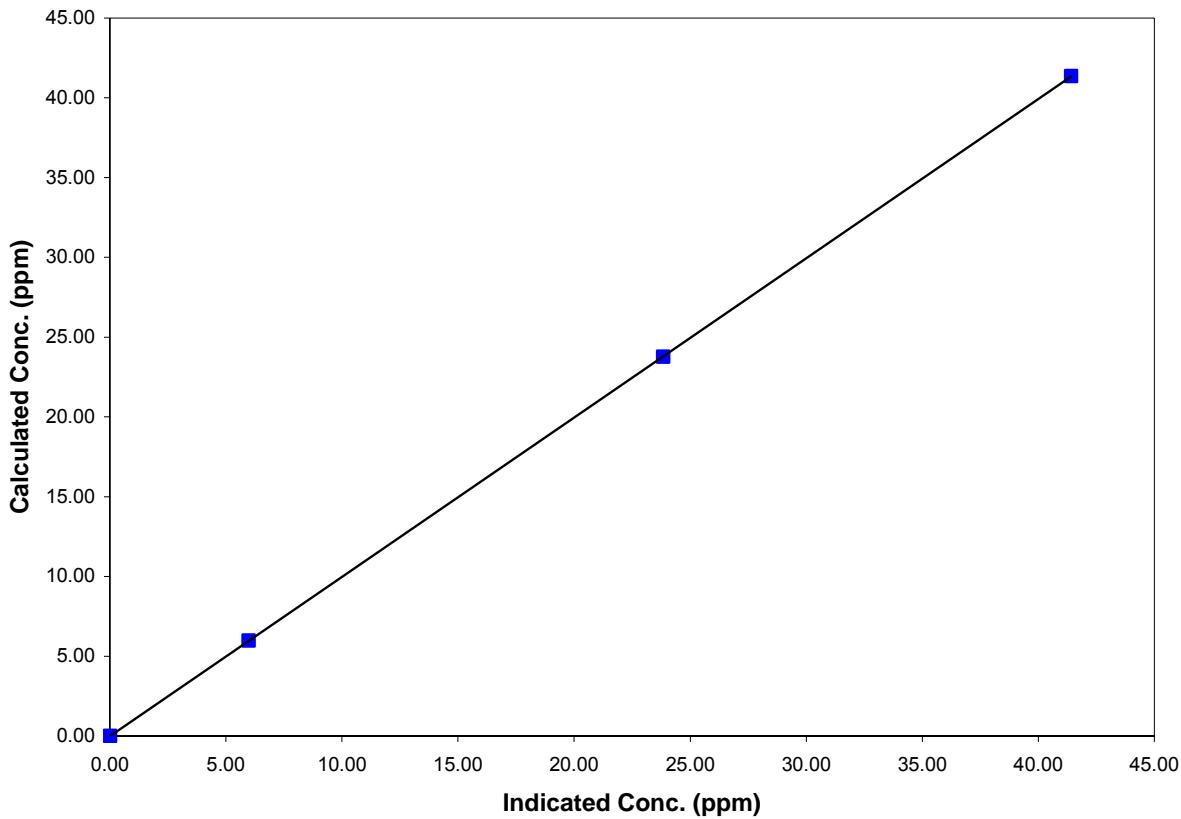
### Station Information

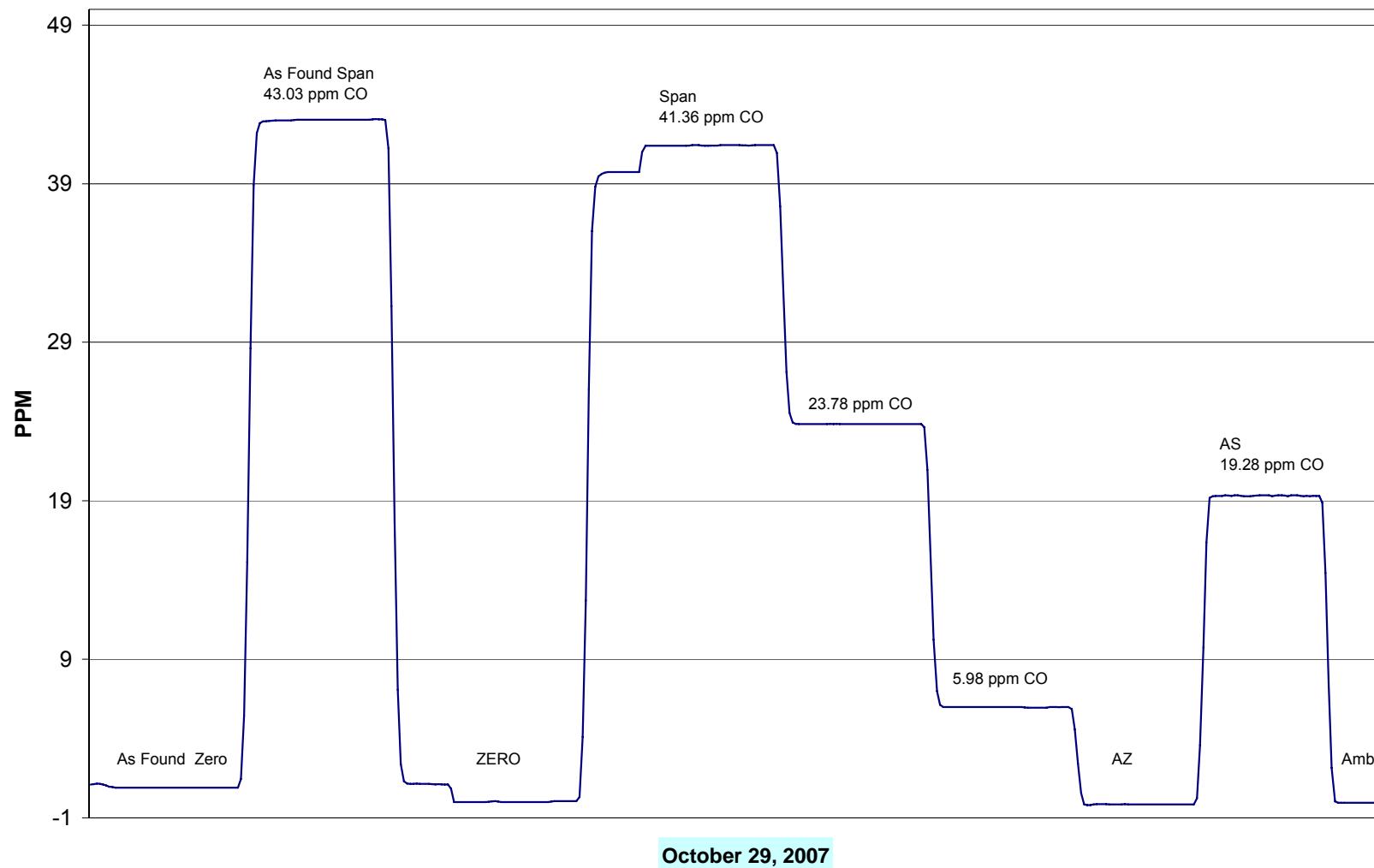
Calibration Date	October 29, 2007	Previous Calibration	September 11, 2007
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:24	End Time (MST)	18:51
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.01	N/A		
41.36	41.42	0.9986	Correlation Coefficient	0.999999
23.78	23.84	0.9974	Slope	0.998623
5.98	5.98	0.9986	Intercept	-0.010323

### CO Calibration Curve



**Crescent Heights - CO Calibration**

# Calibration Report



Parameter **PM2.5**  
 Air Monitoring Network **Palliser Airshed**

## Station Information

Calibration Date	October 30, 2007	Previous Calibration	September 28, 2007
Station Number	1	Station Location	Crescent Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	7:37	End Time (MST)	8:50
Barometric Pressure	0.917 ATM	Station Temperature	21.0 Deg C
Flow Calibrator	BIOS Drycal Definer 220	Serial Number	111860
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	Before		After
DACS Scale High	450	DACS slope	450
DACS Scale Low	-50	DACS intercept	-50

## Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	13.65	SLPM	13.65	SLPM
Filter Load	45%	%	23%	%
Ko Factor	NA		NA	
Temperature	2.3	Deg C	4.2	Deg C
Pressure	0.917	ATM	0.917	ATM

## Calibration Data

Parameter	Set Point	TEOM Reading (as found)	Tolerance	TEOM Reading (after adjustments)
zero flow - main	0.0	0.00	0.00	0.00
zero flow - auxillary	0.0	0.02	0.01	-0.01
flow recovery - main	45 - 60 Seconds	33.0	45 - 60 Seconds	33.0
flow recovery - aux	46 - 60 Seconds	41.0	46 - 60 Seconds	41.0
Temperature	measured	2.3	+/- 1.0 Deg C	4.2
Pressure	measured	0.917	+/- 1.5% ΔATM	0.917
Total Flow	16.67 SLPM	17.51		16.78
Auxiliary flow	13.67 SLPM	14.45	+/- 1.0 SLPM	13.68
Main flow	3.0 SLPM	3.080	+/- 0.2 SLPM	3.100
Leak Check - main	0.0	0.01	<0.15 SLPM	0.01
Leak Check - aux	0.0	-0.01	<0.15 SLPM	-0.01
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	NA

Notes: Auxiliary flow was adjusted, all else OK

Calibration Performed By: Lenin Flores