



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

**October 2006**

Prepared By:



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November 21, 2006

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

**Attention: Director of Monitoring and Evaluation**

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

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

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

**Continuous Monitoring – Crescent Heights**

Included in this report are; monthly sampling table, detailed hourly average reports and multipoint calibration reports of all instruments. The measured ambient air quality was within the Provincial and Federal guidelines with no exceedences recorded. Operational uptime of all instruments was 90% or greater for the month of October. There were no significant events leading to emergency response 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 8.9 ppb
- Monthly average concentrations for O<sub>3</sub> was 19.1 ppb
- Monthly average concentrations for CO was 0.14 ppm
- Monthly average concentrations for THC was 2.08 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 2.6 µg/m<sup>3</sup>

The Air Quality Index (AQI) recorded 667 hours of "Good" readings for the month of October.

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

The following are the ranges for October 2006 recorded by the six passive stations located throughout the PAS zone. Upon arrival at the Southridge passive station site the technician found the NO<sub>2</sub> passive sampler missing from the shelter, and the O<sub>3</sub> and SO<sub>2</sub> sample were damaged. A search was made of the area but the NO<sub>2</sub> sample filter was not found. Laboratory results were obtained from the damaged O<sub>3</sub> and SO<sub>2</sub> samplers and have been included in this report, however a cautionary note that the samples may have been compromised.

- ◆ Monthly average concentrations for SO<sub>2</sub> passives were all <0.5 ppb.
- ◆ Monthly average concentrations for NO<sub>2</sub> passives ranged from 3.3 ppb to 5.5 ppb
- ◆ Monthly average concentrations for O<sub>3</sub> passives ranged from 17.2 ppb to 25.2 ppb

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

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# Continuous Monitoring

## Ambient Air Monitoring Network

### Crescent Heights Station

#### General Station Issues

Calibrations were performed on October 11<sup>th</sup> (NO<sub>x</sub>, O<sub>3</sub>, THC, and CO) and 12<sup>th</sup> (TEOM). On October 3<sup>rd</sup> the DACS stopped collecting data and this resulted in twenty-two (22) hours of invalid data for all parameters (NO, NO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub>, THC, CO, PM<sub>2.5</sub>, wind speed, wind direction, relative humidity, temperature and solar radiation. Maintenance was performed on the DACS on October 6<sup>th</sup> to fix the issues surrounding its failure to collect the data.

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No spans on October 7 <sup>th</sup> , 8 <sup>th</sup> & 9 <sup>th</sup> due to DACS errors in the DACS..
Nitrogen Dioxide	Teledyne - API	200E	ppb	No spans on October 7 <sup>th</sup> , 8 <sup>th</sup> & 9 <sup>th</sup> due to DACS errors in the DACS..
Total Hydrocarbons	Bendix	400A	ppm	No spans on October 7 <sup>th</sup> , 8 <sup>th</sup> & 9 <sup>th</sup> due to DACS errors in the DACS..
Carbon Monoxide	TEI	49C	ppm	No spans on October 7 <sup>th</sup> , 8 <sup>th</sup> & 9 <sup>th</sup> due to DACS errors in the DACS..
PM 2.5	R&P TEOM	1400ab	µg/m <sup>3</sup>	There were seventeen (17) hours of excessive baseline drift flagged.
Wind Speed	Met One	010C	kph	No operational issues observed.
Wind Direction	Met One	020C	Deg	No operational issues observed.
Ambient Temperature	Met One	083D	DegC	No operational issues observed.
Relative Humidity	Met One	083D	%	No operational issues observed.
Solar Radiation	Met One	096-1	W/m <sup>2</sup>	No operational issues observed.
Data Acquisition System	Titan Logix	AP1000		On October 3 <sup>rd</sup> the DACS stopped collecting data and this resulted in twenty-two (22) hours of invalid data. Maintenance was performed on the DACS on October 6 <sup>th</sup> to fix the issues surrounding its failure to collect the data. On October 10th the DACS was reset in order to collect the daily zero and span data.



## October 2006 Monthly Overall Summary Report

### Ambient Air Quality Data

Oct-2006		Palliser Airshed Society					Maximum Recorded Values						
							1-hr		24-hr / 8-hr		Conc	Day	
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence	1-hr	24-hr						Operational Time (%)
NO (ppb)		Crescent Heights	4.4	-	-	84.1	Oct-13 07:00	2.8	E	13.9	Oct-05	96.9%	
NO <sub>2</sub> (ppb)	212	106	Crescent Heights	8.9	0	0	37.6	Oct-05 20:00	5.8	SSE	17.2	Oct-05	96.9%
NO <sub>x</sub> (ppb)		Crescent Heights	12.9	-	-	106.5	Oct-13 07:00	2.8	E	30.8	Oct-05	96.9%	
O <sub>3</sub> (ppb)	82		Crescent Heights	19.1	0	-	40.7	Oct-09 15:00	23.6	SW	26.7	Oct-07	96.9%
O <sub>3</sub> (ppb) - 8-hr	65		Crescent Heights		0						37.1	Oct-09	
CO (ppm)	13		Crescent Heights	0.14	0	-	0.9	Oct-13 07:00	2.8	E	0.2	Oct-05	96.9%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.4	Oct-13	
THC (ppm)			Crescent Heights	2.08	-	-	3.2	Oct-04 20:00	4.7	S	2.3	Oct-28	96.9%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Crescent Heights	2.6		0	22.2	Oct-06 19:00	3.8	NNW	6.0	Oct-06	94.6%
RH (%)			Crescent Heights	64.4	-	-	-	-	-	-	-	-	96.8%
SR (W/m <sup>2</sup> )			Crescent Heights	89.0	-	-	-	-	-	-	-	-	96.8%
Temp (°C)			Crescent Heights	4.6	-	-	-	-	-	-	-	-	96.8%
WSPD v (km/hr)			Crescent Heights	2.6	-	-	27.3	Oct-24 11:00	27.3	SSW	17.8	Oct-29	96.8%
WSPD s (km/hr)			Crescent Heights	10.6	-	-	27.5	Oct-24 11:00	27.5	SSW	18.3	Oct-29	96.8%
WDIR			Crescent Heights	NW	-	-	-	-	-	-	-	-	96.8%

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



# **PAS - Crescent Heights**

## **Monthly Summary Tables, Graphs, and Roses**



## PAS - Crescent Heights - AQI Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

### Air Quality Index (AQI)

Monitoring Dates: October 1, 2006 to November 1, 2006

Alberta's Air Quality Index

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

**Summary**

Number of 1-hr Good Readings:	667
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	24:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
1-Oct-06	15	17	12	11	8	7	7	11	14	15	15	N	18	19	18	N	18	16	13	14	N	10	9	5	
2-Oct-06	8	6	6	4	7	5	3	6	10	13	15	N	N	19	19	19	18	17	16	N	14	14	13	13	
3-Oct-06	12	13	13	12	12	11	10	7	8	11	13	14	N	N	N	N	N	N	N	N	N	N	N	N	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	10	13	15	17	18	19	20	N	10	8	8	9	5	
5-Oct-06	6	5	4	4	4	4	9	6	5	12	15	16	17	18	18	18	N	16	9	7	9	9	7	5	
6-Oct-06	7	6	9	6	10	6	5	N	N	N	N	N	17	18	19	N	18	14	8	18	13	9	10	5	
7-Oct-06	14	11	N	13	14	12	16	13	10	11	11	14	15	18	19	19	18	13	16	14	11	10	11	12	
8-Oct-06	10	8	7	7	6	5	5	7	8	9	9	8	10	13	16	15	14	14	8	7	9	5	6		
9-Oct-06	4	6	6	3	3	3	3	4	5	9	12	N	19	19	20	20	19	18	16	13	15	16	16	15	
10-Oct-06	N	16	N	15	12	9	N	5	N	N	11	14	12	12	15	14	14	12	13	12	11	13	15	14	
11-Oct-06	13	N	N	10	N	8	5	6	9	10	11	11	N	N	17	14	1	1	3	5	6	5	4	7	
12-Oct-06	4	4	N	3	5	7	4	N	N	N	N	N	N	N	N	17	17	18	17	17	16	14	13	14	
13-Oct-06	13	12	N	4	6	4	5	6	4	7	12	15	17	18	18	19	18	14	16	15	11	7	4	3	
14-Oct-06	4	N	5	4	5	4	5	4	3	7	9	11	13	17	17	17	15	14	10	13	13	12	10	6	
15-Oct-06	N	6	6	4	4	3	3	4	4	6	5	4	5	4	4	3	2	2	4	6	5	5	6	N	
16-Oct-06	10	11	11	11	10	10	10	10	10	10	10	10	11	11	10	11	11	12	11	11	11	13	N	11	
17-Oct-06	9	9	9	6	4	5	3	4	7	8	9	10	11	12	13	10	9	7	5	3	4	N	3	3	
18-Oct-06	6	9	10	10	10	9	8	8	10	10	10	13	12	11	10	7	7	5	5	7	N	5	4	4	
19-Oct-06	4	4	4	3	3	4	3	3	4	6	9	11	11	11	13	14	14	14	12	N	10	10	10	10	
20-Oct-06	8	5	6	5	6	5	4	3	5	5	8	8	6	3	5	5	7	9	N	8	6	4	5	4	
21-Oct-06	4	3	3	3	2	2	3	3	4	7	9	10	11	13	15	15	14	N	13	10	6	6	5	3	
22-Oct-06	3	4	5	5	5	4	3	3	3	4	8	11	16	17	17	N	7	7	6	10	9	6	4		
23-Oct-06	4	5	4	8	10	11	8	5	5	4	8	8	11	13	16	N	14	8	8	6	5	5	5	4	
24-Oct-06	5	4	4	4	8	5	5	6	8	11	16	19	19	18	N	19	15	15	14	13	13	8	9	12	
25-Oct-06	11	10	11	13	11	8	6	7	6	8	15	15	16	N	16	17	16	7	7	9	10	10	10		
26-Oct-06	10	10	10	10	10	9	9	13	13	15	17	N	15	16	17	16	15	15	15	13	16	17	14	8	
27-Oct-06	8	9	5	5	8	6	7	8	5	4	4	N	8	15	19	19	17	16	15	12	5	5	6	4	
28-Oct-06	5	5	5	4	5	3	3	3	4	N	6	8	9	10	10	8	10	9	9	6	6	5	4		
29-Oct-06	4	9	11	11	10	9	12	12	12	N	14	13	14	12	13	12	12	14	15	15	15	16	16		
30-Oct-06	16	16	16	15	13	9	10	9	9	N	15	16	16	17	17	17	15	11	9	8	10	13	12		
31-Oct-06	12	13	13	12	12	10	7	N	8	11	13	13	15	16	16	16	13	13	14	13	13	13	12		



## PAS - Crescent Heights - Nitrogen Dioxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

Objective Limit:	Alberta Environment:	1-hr 212 ppb	24-hr 106 ppb
<b>Summary</b>			
Number of 1-hr Exceedances:	0		
Number of 24-hr Exceedances:	0		
Maximum 1-hr Average:	37.6 ppb	5-Oct	20:00 21:00
Maximum 24-hr Average:	17.2 ppb	5-Oct	

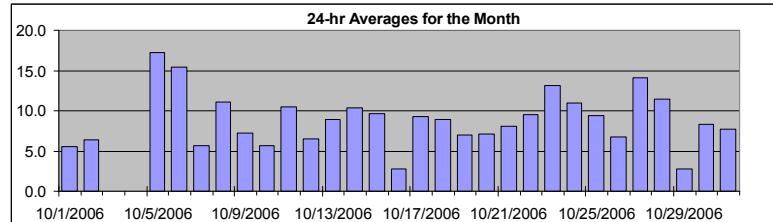
AIC Time:	29 hrs	Operational Time:	684 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	29.8 21.1 12.6 7.3 3.8 1.7 1.2	8.9 ppb	7.3 ppb

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	24-hour Average	Daily Maximum
1-Oct-06	9	4	13	11	10	9	6	3	1	1	1	1	1	1	1	1	1	1	3	7	5	A	11	10	16	5.6	16.1						
2-Oct-06	9	12	10	17	7	12	14	13	7	3	3	2	2	1	2	2	3	3	3	A	7	5	6	5	6.4	17.0	N	13.8					
3-Oct-06	6	4	3	3	3	4	6	14	12	6	4	4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	34.0				
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	13	11	8	7	5	4	3	A	24	34	33	28	21	23	N	34.0						
5-Oct-06	25	22	17	16	17	19	21	21	19	8	3	3	3	3	3	8	12	A	17	26	30	38	31	21	17	17.2	37.6						
6-Oct-06	14	15	9	13	5	14	19	M	C	C	C	9	10	7	7	7	8	14	24	32	33	24	18	17	15.4	33.3							
7-Oct-06	10	5	4	4	5	5	3	5	8	5	7	5	4	3	3	3	4	10	5	6	11	10	6	6	5.7	10.8							
8-Oct-06	9	10	8	7	8	9	10	7	6	7	10	17	16	11	6	8	9	8	9	16	17	12	22	23	11.0	23.1							
9-Oct-06	18	21	19	14	14	14	10	7	5	3	4	3	2	2	2	2	3	4	5	8	4	3	3	3	7.2	20.7							
10-Oct-06	2	2	1	2	4	7	15	20	A	A	11	9	10	9	4	5	3	4	3	3	3	2	3	3	5.6	20.5							
11-Oct-06	2	2	A	7	9	10	13	10	7	C	C	C	A	3	3	3	4	14	20	27	22	19	13	10.5	26.8								
12-Oct-06	16	18	A	14	14	15	15	14	10	5	3	3	1	2	1	1	2	2	2	2	2	3	3	1	6.5	17.5							
13-Oct-06	1	2	A	16	25	18	20	23	17	7	3	2	1	2	1	2	2	8	3	3	6	14	15	14	8.9	24.9							
14-Oct-06	13	A	11	15	20	18	21	15	13	12	11	12	8	2	3	3	5	5	5	12	6	5	8	9	12	10.4	20.6						
15-Oct-06	A	15	10	13	15	14	14	18	15	9	12	10	7	7	7	9	10	8	6	3	4	4	4	A	9.6	17.8							
16-Oct-06	6	4	4	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	3	3	2	A	2.8	6.1							
17-Oct-06	6	5	5	8	12	10	13	14	9	10	7	8	9	7	5	8	6	10	12	14	17	A	11	7	9.3	16.6							
18-Oct-06	6	3	3	3	4	6	8	10	5	3	7	4	7	7	7	11	11	20	19	9	A	23	17	15	8.9	22.7							
19-Oct-06	13	10	8	9	10	11	11	13	10	8	5	4	6	6	5	4	4	4	4	A	5	4	4	4	7.0	12.9							
20-Oct-06	5	7	6	7	4	4	7	11	12	13	7	5	7	7	4	6	5	4	A	8	10	11	7	8	7.1	12.8							
21-Oct-06	7	7	9	9	10	10	14	13	10	7	4	3	3	2	2	3	3	A	7	9	15	13	12	11	8.0	14.9							
22-Oct-06	10	8	7	6	7	9	12	12	9	13	10	9	3	3	3	4	A	21	15	14	6	8	11	17	9.5	21.2							
23-Oct-06	16	20	18	7	6	5	9	12	10	10	6	5	3	3	5	A	12	23	34	25	20	20	20	13.1	33.6								
24-Oct-06	19	14	17	14	10	21	20	15	14	9	4	3	3	3	3	A	7	10	8	7	6	8	17	15	7	10.9	20.7						
25-Oct-06	5	5	5	4	4	11	13	17	15	14	9	5	4	A	9	8	7	21	21	12	11	6	4	4	9.4	21.1							
26-Oct-06	3	3	2	3	4	6	8	9	5	4	4	5	A	14	11	7	6	7	7	13	4	3	8	18	6.7	18.0							
27-Oct-06	15	10	21	22	13	20	19	16	18	18	A	23	10	3	2	4	4	4	6	19	22	24	13	14.1	24.3								
28-Oct-06	10	20	20	22	19	19	13	14	14	9	A	11	7	6	5	7	9	5	6	5	11	9	10	10	11.4	22.4							
29-Oct-06	10	4	2	3	4	4	2	2	2	A	4	3	2	2	2	2	2	2	2	2	1	1	1	2.7	10.3								
30-Oct-06	1	1	2	2	6	13	12	15	A	6	4	4	6	4	4	5	8	16	21	23	14	8	9	8	8.3	22.6							
31-Oct-06	7	4	5	6	5	9	15	A	17	10	6	7	5	4	4	4	10	11	9	8	10	8	7	8	7.7	16.5							
Hourly Avg	9.4	8.9	8.8	9.3	9.2	11.0	12.2	12.4	10.2	7.8	6.4	5.7	5.7	5.0	4.2	4.8	5.5	8.8	10.8	11.6	12.3	11.5	11.0	10.6									
Hourly Max	25.1	22.3	20.9	22.4	24.9	20.7	21.3	22.5	19.4	17.6	17.9	17.2	22.9	14.1	11.0	11.6	11.5	23.0	33.6	34.0	37.6	31.1	24.3	23.1									

### 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

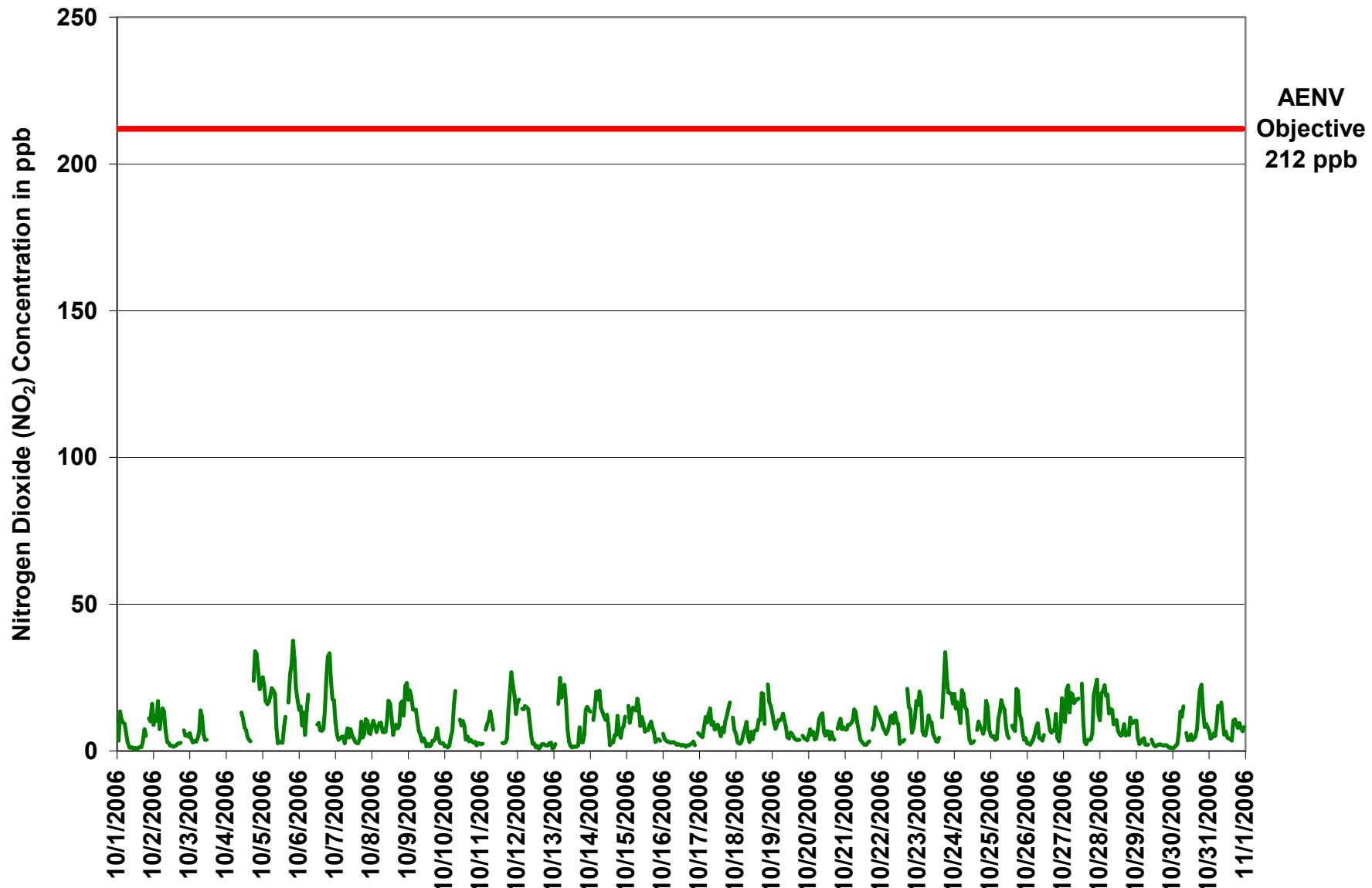


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

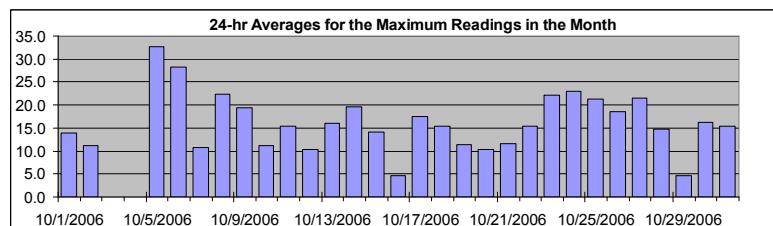
### Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: October 1, 2006 to November 1, 2006

#### Summary

Maximum 1-hr Value:	87.6 ppb	5-Oct 20:00 21:00
Maximum 24-hr Value:	32.8 ppb	5-Oct

AIC Time:	29 hrs	Operational Time:	684 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	51.7 37.9 23.1 13.8 6.6 3.2 2.3	16.1 ppb	13.8 ppb



#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	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-06	77 17 33 22 13 14 8 6 2 3 3 2 4 3 4 4 3 6 13 11 A 24 22 25	13.9	77.3																								
2-Oct-06	27 28 22 32 10 15 20 22 11 4 4 3 3 3 4 5 5 4 A 12 6 7 7	11.3	32.4																								
3-Oct-06	8 6 4 4 4 6 10 18 15 15 5 6 N N N N	N	17.7																								
4-Oct-06	N N N N N N N N N N 16 22 20 11 7 7 5 A 35 54 36 43 29 26	N	54.2																								
5-Oct-06	28 26 25 24 20 26 36 29 30 23 4 27 18 7 41 41 A 45 50 48 88 54 40 25	32.8	87.6																								
6-Oct-06	47 24 37 47 9 24 32 M C C C C 34 21 14 11 16 27 42 37 42 29 23 23	28.3	47.1																								
7-Oct-06	20 19 5 10 13 11 4 12 12 9 12 10 9 5 5 4 10 18 11 12 15 15 9 7	10.7	20.3																								
8-Oct-06	28 35 12 8 25 26 26 28 28 16 17 22 18 20 8 23 29 11 14 23 28 16 39 39	22.4	38.7																								
9-Oct-06	24 23 23 18 16 28 13 9 7 4 62 25 8 18 3 4 32 17 7 31 6 35 29 26	19.5	62.3																								
10-Oct-06	16 27 3 5 7 17 24 25 A A 17 15 15 16 13 7 5 6 6 5 4 3 5 4	11.1	26.7																								
11-Oct-06	4 4 A 9 11 14 17 17 11 C C C C A 4 6 6 16 28 26 36 27 24 16	15.3	36.1																								
12-Oct-06	20 26 A 22 16 17 18 16 26 23 4 4 3 10 2 3 4 3 4 3 3 5 5 2	10.3	26.4																								
13-Oct-06	2 4 A 21 54 26 31 29 25 14 5 4 3 3 3 4 5 15 6 13 27 28 24 21	15.9	54.5																								
14-Oct-06	21 A 15 22 23 22 47 20 15 16 13 15 12 4 9 15 39 7 40 9 8 21 33 27	19.7	46.9																								
15-Oct-06	A 31 15 14 20 22 18 20 18 26 23 11 10 9 10 11 11 11 4 5 5 5 A	14.1	31.1																								
16-Oct-06	9 6 4 4 4 4 4 4 3 4 3 3 13 3 3 3 4 3 6 4 3 6 4 A 8	4.7	12.9																								
17-Oct-06	7 6 9 12 16 20 16 17 24 16 21 14 49 17 8 13 9 15 16 18 25 A 22 30	17.4	48.8																								
18-Oct-06	30 5 4 3 6 16 9 17 23 4 13 7 10 11 10 14 12 26 36 15 A 27 22 30	15.3	36.3																								
19-Oct-06	30 12 10 13 21 22 14 20 15 20 7 8 9 10 6 6 5 6 5 5 A 8 5 6 5	11.3	30.1																								
20-Oct-06	7 10 8 10 5 7 10 13 14 15 10 9 11 11 8 9 8 6 A 10 13 14 10 19	10.4	18.7																								
21-Oct-06	19 11 13 11 15 16 17 17 12 10 5 5 4 3 3 4 6 A 11 12 24 16 18 15	11.6	23.9																								
22-Oct-06	18 11 11 8 9 18 14 15 17 24 15 29 4 8 5 6 A 41 24 22 11 12 13 20	15.4	41.3																								
23-Oct-06	22 31 36 10 10 12 24 21 14 13 10 8 5 7 12 A 21 26 38 42 52 28 43 21	22.1	52.3																								
24-Oct-06	26 26 34 22 15 40 24 24 34 13 20 5 6 26 A 9 32 13 19 26 26 30 32 26	22.9	39.9																								
25-Oct-06	32 23 29 30 7 27 18 25 23 20 25 8 8 A 12 26 14 35 33 19 25 12 23 15	21.2	35.2																								
26-Oct-06	4 4 3 6 6 40 23 14 7 36 20 28 A 28 17 20 8 28 24 41 10 6 20 31	18.5	41.4																								
27-Oct-06	31 22 40 34 19 31 25 24 26 23 23 A 29 19 5 3 6 5 6 17 28 27 27 23	21.4	40.4																								
28-Oct-06	14 24 23 32 23 21 16 16 15 12 A 17 8 8 7 9 12 7 10 8 22 12 13 13	14.8	31.9																								
29-Oct-06	14 12 4 4 8 7 3 3 3 A 7 4 3 3 3 4 4 3 3 4 5 2 2 2	4.7	14.0																								
30-Oct-06	2 2 4 5 9 18 20 20 A 10 5 6 9 9 8 11 15 41 25 40 25 16 34 37	16.2	40.5																								
31-Oct-06	12 7 33 8 7 35 52 A 25 20 10 11 7 7 7 14 15 15 11 14 12 15 11	15.4	51.5																								
Hourly Avg	20.7 16.6 17.0 15.7 14.1 20.0 19.8 17.9 17.0 15.2 13.6 11.6 11.5 11.0 8.3 9.9 12.1 16.3 18.6 20.2 21.5 18.4 20.5 19.0																										
Hourly Max	77.3 34.6 40.4 47.1 54.5 40.4 51.5 28.8 33.7 35.8 62.3 28.9 48.8 27.6 40.8 40.9 39.3 44.9 49.7 54.2 87.6 53.9 42.7 38.6																										

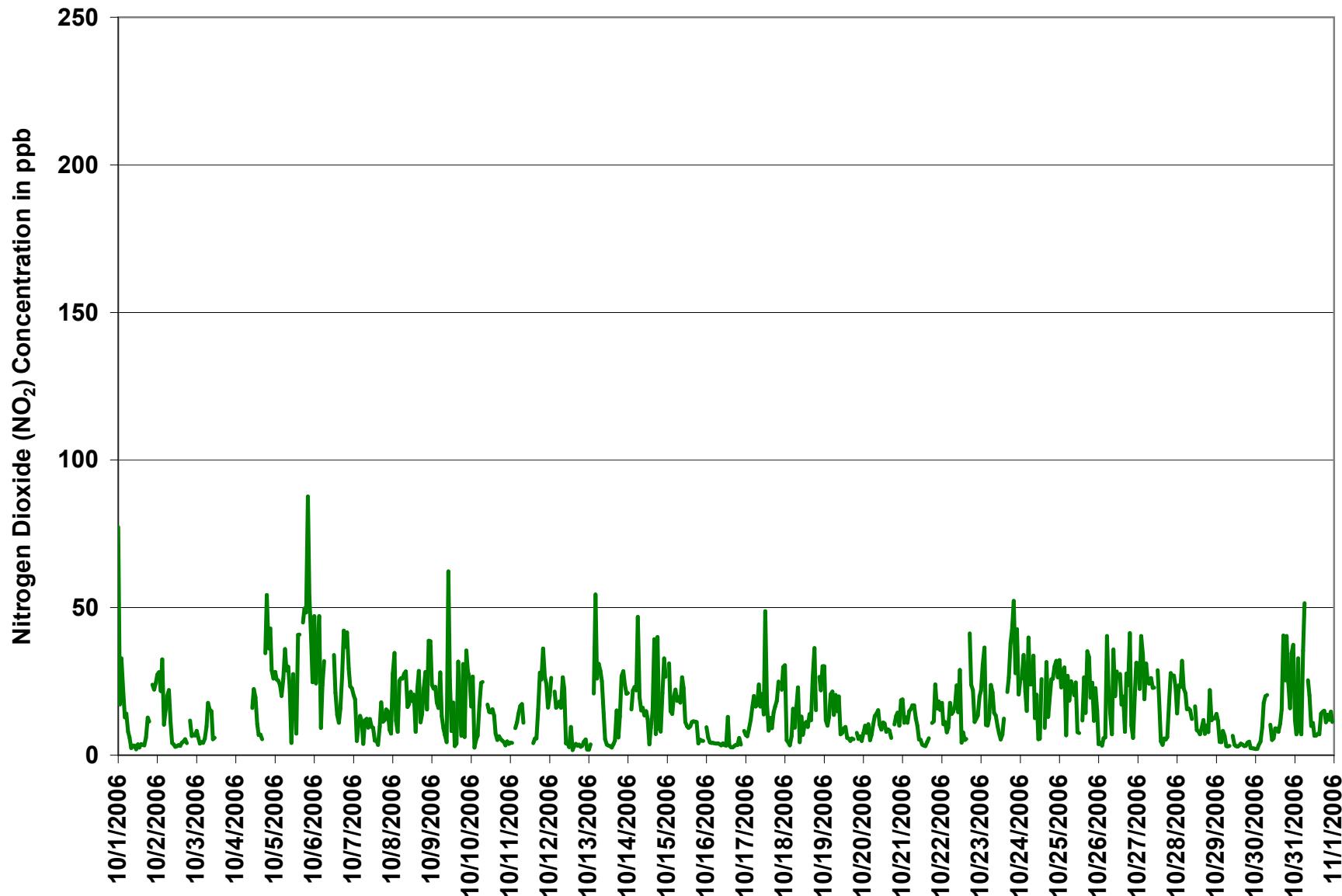
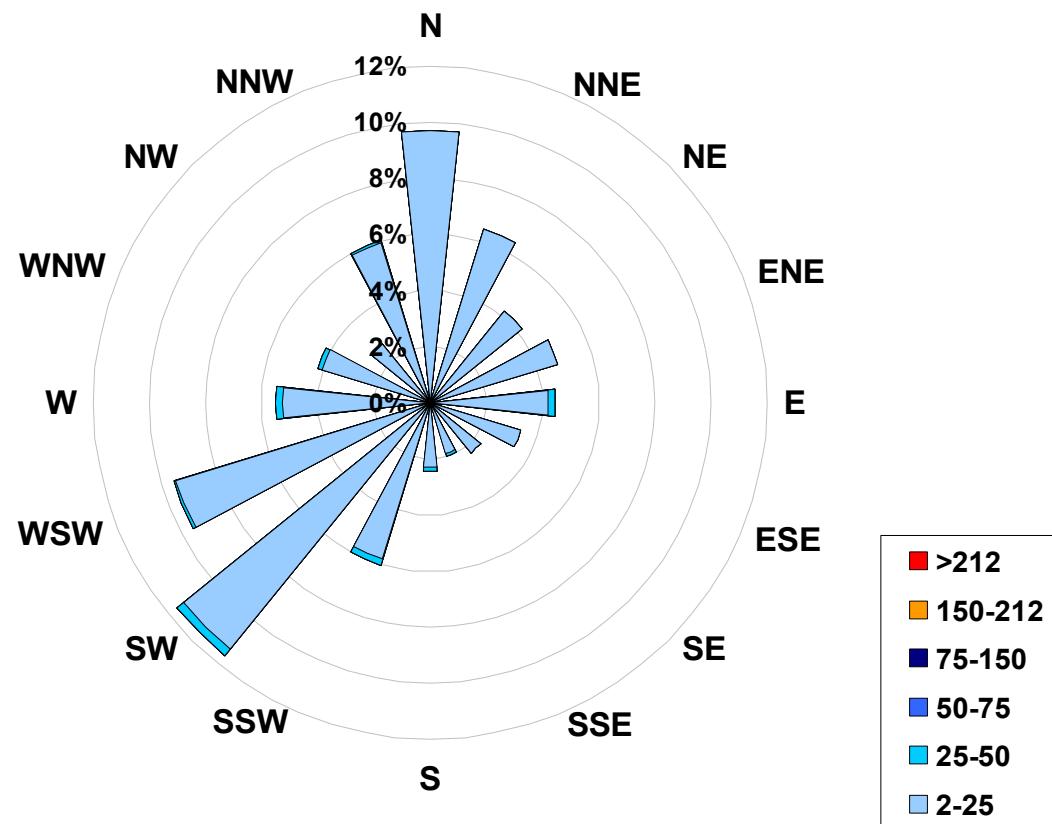


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of NO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
2.0	<	25	668
25	to	50	14
50	to	75	1
75	to	150	1
150	to	212	0
		> 212	0
Total Non-Zero Values			684



## PAS - Crescent Heights - Nitric Oxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

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

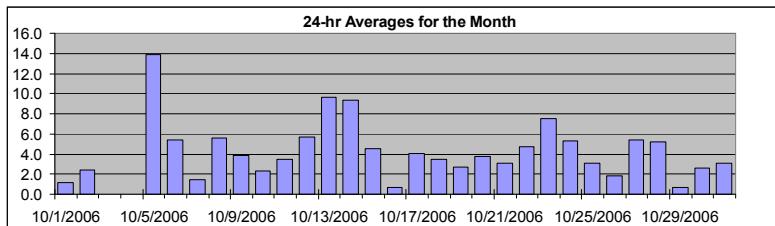
Maximum 1-hr Average:	84.1	ppb	13-Oct	7:00 8:00
Maximum 24-hr Average:	13.9	ppb	5-Oct	

AIC Time:	29 hrs	Operational Time:	684 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	33.2 15.1 4.9 2.0 0.9 0.3 0.0	4.4 ppb	2.0 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-06	5	0	5	1	0	1	1	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	A	1	1	2	1.2	5.5
2-Oct-06	4	8	3	13	1	2	5	6	3	2	1	1	1	1	1	1	0	1	0	1	0	A	1	0	1	0	2.4	12.5
3-Oct-06	0	0	0	0	0	0	1	3	6	2	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5.9
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	11	7	4	3	1	1	0	A	4	24	21	23	5	3	N	23.6	
5-Oct-06	13	7	8	5	8	25	54	45	40	5	1	2	1	1	8	5	A	2	8	7	32	33	7	2	13.9	54.2		
6-Oct-06	5	2	3	7	0	2	8	M	C	C	C	7	5	3	2	2	2	2	7	9	28	8	3	2	5.4	27.8		
7-Oct-06	2	1	1	1	1	1	2	3	2	4	2	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1.5	3.5	
8-Oct-06	6	10	1	1	4	7	6	4	5	5	8	18	14	7	2	2	2	1	0	1	2	1	13	11	5.5	18.0		
9-Oct-06	3	9	15	5	6	11	5	4	5	3	6	4	0	2	1	1	2	2	0	3	0	2	2	1	3.8	14.5		
10-Oct-06	1	2	0	0	1	2	6	15	A	A	3	2	3	3	2	2	2	1	1	1	1	1	0	1	1	2.3	15.5	
11-Oct-06	1	0	A	1	1	1	3	4	3	C	C	C	C	A	0	0	0	0	2	3	14	13	15	2	3.5	14.8		
12-Oct-06	19	27	A	4	7	11	22	16	13	4	1	2	1	2	1	1	0	0	0	0	0	0	0	0	5.7	26.5		
13-Oct-06	0	0	A	1	28	6	28	84	37	8	3	1	1	1	1	1	2	0	0	0	2	11	4	3	9.7	84.1		
14-Oct-06	3	A	1	6	14	14	45	41	31	15	10	10	5	1	2	2	3	1	4	1	1	2	4	3	9.4	44.9		
15-Oct-06	A	3	1	1	3	7	3	16	15	5	9	7	4	3	4	3	4	3	2	1	1	1	1	A	4.5	16.2		
16-Oct-06	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	A	1	0.7	1.4		
17-Oct-06	0	0	0	1	3	7	4	11	4	3	5	4	6	3	2	2	2	2	3	5	15	A	7	3	4.0	14.5		
18-Oct-06	2	0	1	0	1	2	1	4	4	2	5	3	4	4	3	4	3	8	13	3	A	5	2	6	3.5	13.1		
19-Oct-06	6	1	0	1	3	6	4	10	6	8	3	3	3	3	2	1	0	0	0	A	0	0	0	0	2.7	9.9		
20-Oct-06	1	2	2	1	1	1	2	5	11	15	2	3	5	9	4	5	3	2	A	1	1	3	2	5	3.8	14.9		
21-Oct-06	10	2	3	2	7	4	8	5	3	3	2	2	2	2	1	2	2	A	2	1	2	2	2	2	3.1	9.7		
22-Oct-06	3	2	1	1	1	3	3	8	17	29	11	9	1	1	1	1	A	4	1	2	0	1	2	8	4.7	29.3		
23-Oct-06	4	12	13	0	1	1	6	6	8	9	5	4	2	3	2	A	2	3	15	25	6	17	18	11	7.6	24.6		
24-Oct-06	23	7	9	3	1	11	11	7	11	5	3	1	2	3	A	2	3	1	2	1	3	6	6	2	5.3	23.2		
25-Oct-06	3	1	1	2	0	7	4	7	7	4	3	3	2	A	2	3	1	4	3	1	6	1	2	1	3.1	7.4		
26-Oct-06	0	0	0	1	0	2	2	2	2	2	2	4	A	5	3	3	1	1	1	6	1	1	1	3	1.8	5.6		
27-Oct-06	1	1	9	8	1	8	4	4	7	13	15	A	14	4	1	1	1	0	0	1	5	7	13	4	5.4	15.2		
28-Oct-06	1	6	5	12	11	21	5	7	15	9	A	6	4	3	2	2	2	0	0	0	2	1	2	2	5.2	20.7		
29-Oct-06	2	1	0	0	1	1	0	0	0	A	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0.7	1.7		
30-Oct-06	0	0	0	0	1	2	1	2	A	2	2	2	3	2	2	1	2	7	5	13	2	1	4	2	2.6	13.4		
31-Oct-06	0	0	3	0	0	4	9	A	11	8	5	6	4	3	2	2	2	2	1	1	1	1	1	1	1	3.0	10.9	
	Hourly Avg	4.1	3.7	3.2	2.6	3.5	5.7	8.4	11.5	9.9	6.3	4.5	3.9	3.5	2.8	2.0	1.8	1.6	1.9	2.8	4.1	5.4	5.0	4.1	2.9			
	Hourly Max	23.2	26.5	14.5	12.5	28.0	25.1	54.2	84.1	39.6	29.3	15.2	18.0	14.1	8.5	7.6	5.1	4.2	7.8	15.3	24.6	32.5	32.5	17.8	11.4			

### 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

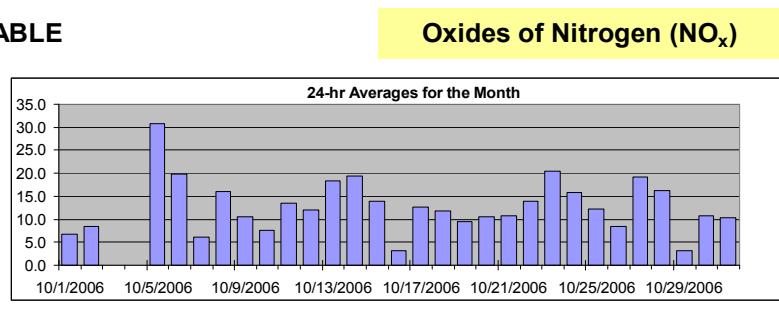
Monitoring Dates: October 1, 2006 to November 1, 2006

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

Maximum 1-hr Average:	106.5	ppb	13-Oct	7:00 8:00
Maximum 24-hr Average:	30.8	ppb	5-Oct	

AIC Time:	29 hrs	Operational Time:	684 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	59.1 34.7 17.2 9.5 4.6 2.1 1.4	12.9 ppb	9.5 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Oct-06	14	4	19	12	10	10	7	5	2	2	2	2	1	2	1	2	2	2	3	8	6	A	12	11	18	6.7	19.0
2-Oct-06	13	20	13	29	8	14	19	19	10	4	4	2	2	2	2	2	3	3	3	A	7	5	6	5	8.5	29.4	
3-Oct-06	6	4	3	3	3	4	7	17	17	8	5	5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	17.5
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	24	18	12	10	6	5	4	A	28	58	53	51	26	26	N	57.5
5-Oct-06	38	30	25	21	25	43	75	66	59	13	3	5	4	4	15	16	A	18	34	36	70	63	28	19	30.8	75.4	
6-Oct-06	19	17	11	20	5	16	27	M	C	C	C	C	14	13	9	8	8	15	30	39	60	30	19	18	19.9	59.9	
7-Oct-06	11	6	3	4	5	5	2	6	9	6	10	6	6	4	3	3	5	11	5	6	11	11	6	6	6.2	11.4	
8-Oct-06	14	20	9	7	12	16	15	10	11	11	18	35	29	18	7	9	11	8	9	17	19	12	35	34	16.0	34.7	
9-Oct-06	20	29	33	19	20	24	15	11	10	5	10	7	2	4	2	2	5	5	5	11	4	4	4	3	10.6	32.6	
10-Oct-06	2	4	1	2	5	8	21	36	A	A	14	11	14	12	5	6	4	5	4	3	4	2	3	3	7.7	35.8	
11-Oct-06	3	3	A	8	10	11	16	14	10	C	C	C	A	2	2	2	4	16	22	40	34	33	15	13.6	40.2		
12-Oct-06	34	44	A	18	21	26	37	30	22	10	4	4	2	3	1	2	3	3	2	2	2	3	3	1	12.0	43.7	
13-Oct-06	1	3	A	17	53	24	47	106	54	15	6	3	2	2	2	2	10	3	3	7	25	19	17	18.4	106.5		
14-Oct-06	16	A	11	21	34	31	65	55	44	27	20	22	13	3	4	4	8	6	16	7	5	9	12	15	19.5	65.2	
15-Oct-06	A	19	11	13	17	21	16	34	30	13	20	17	10	10	11	12	14	11	8	4	5	5	4	A	13.8	33.7	
16-Oct-06	6	4	4	3	3	4	4	4	3	2	3	3	2	3	3	2	2	2	3	3	4	2	A	7	3.2	6.7	
17-Oct-06	6	5	5	8	14	16	16	25	13	13	11	11	14	10	6	9	8	11	14	19	30	A	17	10	12.6	29.8	
18-Oct-06	7	3	2	2	4	7	9	14	9	5	11	6	10	10	10	14	14	27	32	12	A	27	18	21	11.9	32.3	
19-Oct-06	19	10	8	10	14	17	15	22	16	16	8	7	9	8	6	5	4	4	4	A	5	4	4	3	9.4	22.3	
20-Oct-06	6	9	7	8	4	6	10	16	23	28	8	8	11	15	8	11	7	6	A	9	11	14	9	13	10.6	27.6	
21-Oct-06	17	9	11	10	16	14	22	18	13	10	6	5	4	3	3	4	4	4	A	9	10	17	15	14	13	10.7	22.0
22-Oct-06	12	9	8	6	7	11	15	19	26	42	21	18	3	4	4	5	A	25	16	16	6	8	13	25	13.9	42.0	
23-Oct-06	20	31	31	7	6	7	14	18	18	19	11	9	6	5	7	A	13	26	48	49	26	37	37	27	20.4	49.3	
24-Oct-06	42	21	25	17	10	31	30	22	25	14	7	3	4	5	A	8	12	9	9	7	10	23	21	9	15.8	42.2	
25-Oct-06	8	6	6	5	4	18	17	24	22	18	11	8	6	A	11	11	8	25	24	14	17	7	6	6	12.2	25.2	
26-Oct-06	2	3	2	4	4	8	10	11	6	6	6	9	A	19	14	9	7	8	8	18	5	4	8	20	8.4	20.4	
27-Oct-06	17	11	30	30	14	28	23	20	25	30	33	A	37	14	4	3	4	4	4	6	24	29	37	16	19.2	37.4	
28-Oct-06	11	26	25	34	30	40	17	21	29	17	A	17	11	8	7	8	10	5	6	5	13	11	12	16.3	39.5		
29-Oct-06	12	5	3	3	4	5	2	2	2	A	4	3	2	2	3	3	3	3	2	2	1	1	1	3.2	11.7		
30-Oct-06	1	1	2	2	6	15	13	18	A	8	5	6	9	5	6	6	9	22	26	36	16	9	13	10	10.7	35.7	
31-Oct-06	7	4	7	6	5	13	24	A	27	18	10	12	8	7	6	5	12	12	11	9	11	9	7	7	10.2	27.1	
Hourly Avg	13.2	12.3	11.6	11.6	12.4	16.4	20.3	23.6	19.8	13.8	10.5	9.3	8.8	7.4	5.8	6.2	6.7	10.3	13.3	15.3	17.3	16.1	14.7	13.0			
Hourly Max	42.2	43.7	32.6	34.0	52.6	43.5	75.4	106.5	58.9	42.0	32.9	34.6	36.6	19.4	15.1	16.3	13.9	27.2	48.5	57.5	69.8	63.3	37.4	34.0			



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

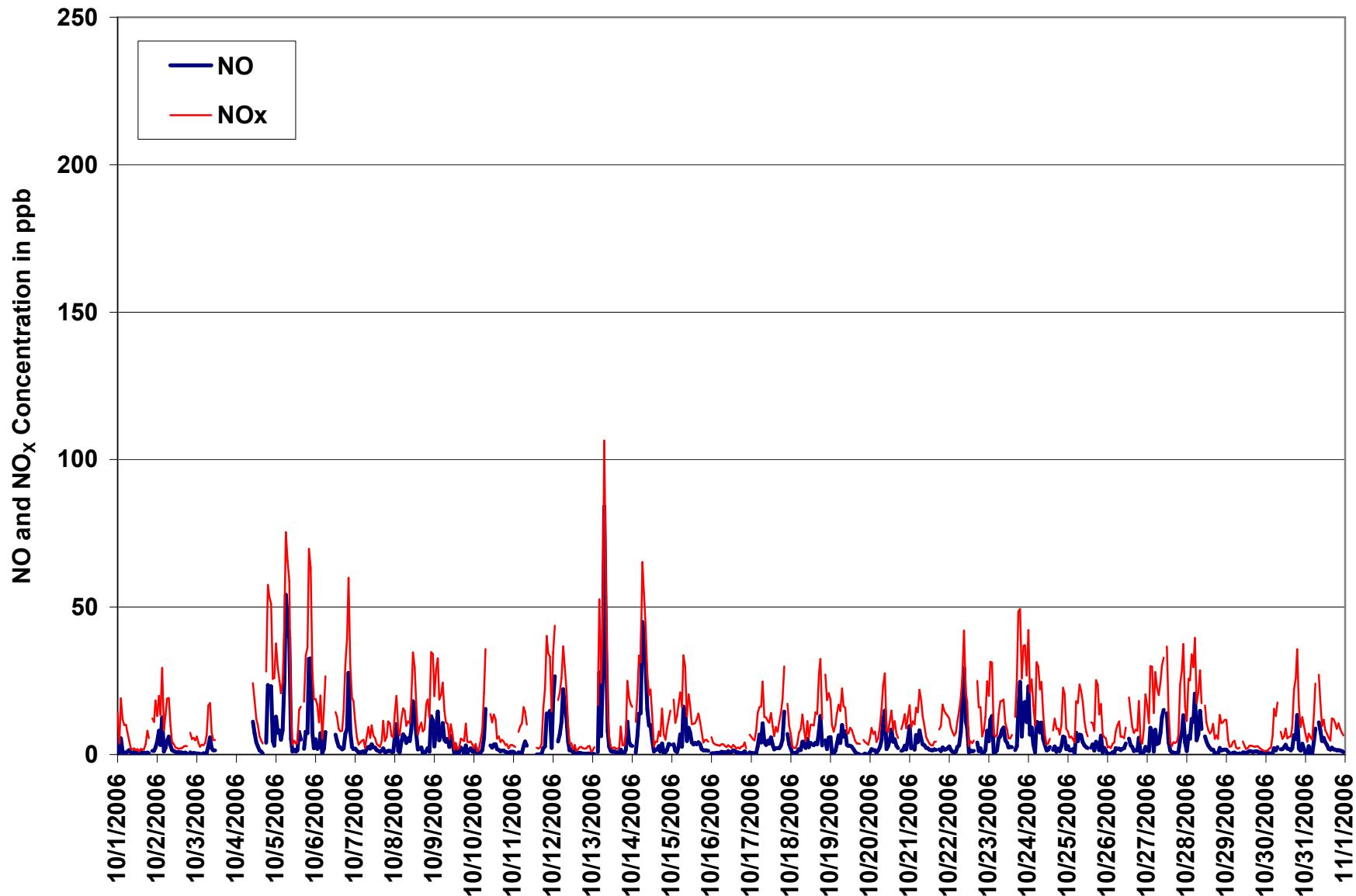


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Nitric Oxide (NO)

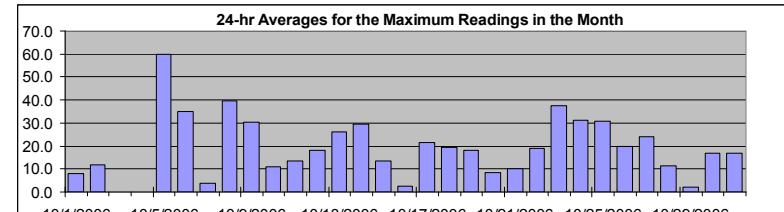
#### Summary

Maximum 1-hr Value:	283.0 ppb	5-Oct 20:00 21:00
Maximum 24-hr Value:	59.9 ppb	5-Oct

AIC Time:	29 hrs	Operational Time:	684 hrs
Calibration Time:	8 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	145.4 81.7 25.9 6.1 2.4 1.3 0.9	20.4 ppb	6.1 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-06	96	3	21	9	1	2	3	4	2	2	3	3	3	2	3	2	3	2	2	2	A	6	5	7	8.1	96.3		
2-Oct-06	61	60	14	46	2	6	13	33	5	3	2	2	2	3	2	2	3	3	2	A	2	1	2	11.8	60.8			
3-Oct-06	1	1	1	1	1	1	2	9	13	11	3	3	N	N	N	N	N	N	N	N	N	N	N	N	12.9	12.9		
4-Oct-06	N	N	N	N	N	N	N	N	N	N	19	27	16	5	3	3	2	A	15	159	77	142	19	11	N	159.1		
5-Oct-06	24	12	30	24	18	38	223	65	102	35	3	40	14	35	91	32	A	20	52	70	283	118	41	8	59.9	283.0		
6-Oct-06	83	13	96	116	2	14	47	M	C	C	C	74	16	6	4	4	6	61	27	68	15	5	6	34.9	116.3			
7-Oct-06	9	7	2	1	2	3	1	4	4	5	6	7	5	3	3	2	3	4	2	2	11	3	2	2	3.9	10.9		
8-Oct-06	40	87	5	2	67	147	65	60	56	26	17	28	19	33	3	18	22	2	2	4	6	3	131	111	39.7	147.1		
9-Oct-06	8	13	37	13	14	44	11	6	7	4	181	72	7	29	2	2	49	70	1	60	1	35	46	18	30.4	180.6		
10-Oct-06	31	57	1	2	3	18	32	31	A	A	5	5	5	16	17	3	2	3	3	3	2	1	2	2	11.1	57.4		
11-Oct-06	2	2	A	2	1	2	7	21	5	C	C	C	A	1	10	2	5	22	25	50	35	37	14	13.4	49.8			
12-Oct-06	44	71	A	12	13	17	50	27	96	51	3	3	2	11	2	2	2	1	1	1	1	1	1	18.0	95.9			
13-Oct-06	1	1	A	2	158	29	75	109	72	20	5	3	3	3	2	1	2	10	1	2	37	39	15	26.2	157.9			
14-Oct-06	12	A	2	15	33	50	165	56	53	28	12	13	10	2	4	13	55	2	79	1	2	11	35	28	29.6	164.8		
15-Oct-06	A	24	3	2	12	35	6	31	23	48	46	11	9	5	8	5	7	7	4	3	3	3	2	A	13.4	47.6		
16-Oct-06	1	3	1	1	2	2	2	2	2	3	3	2	13	2	2	2	1	2	1	3	2	A	2	2.4	12.5			
17-Oct-06	1	2	2	2	12	46	8	19	35	11	26	21	65	14	4	4	5	4	5	11	39	A	74	82	21.4	82.0		
18-Oct-06	78	2	3	1	2	34	3	25	58	5	13	5	7	10	5	6	5	18	66	13	A	13	4	74	19.5	77.7		
19-Oct-06	85	4	2	4	44	53	8	56	17	112	5	6	5	5	3	2	1	1	1	A	1	1	1	18.1	112.0			
20-Oct-06	2	4	4	3	2	4	5	12	17	28	3	6	11	16	12	9	6	4	A	4	2	6	4	33	8.5	32.9		
21-Oct-06	77	5	8	3	44	13	17	9	6	6	4	4	3	3	3	4	3	A	4	2	6	3	4	4	10.2	76.6		
22-Oct-06	36	7	3	2	2	25	9	10	72	101	22	53	2	5	2	3	A	35	7	11	1	2	8	19	19.0	101.3		
23-Oct-06	25	80	101	2	15	8	39	17	17	14	24	7	5	9	16	A	3	5	28	145	98	59	121	37.6	145.1			
24-Oct-06	43	54	57	13	2	45	26	21	84	8	65	4	4	40	A	3	47	2	42	32	26	16	51	34	31.3	84.2		
25-Oct-06	76	40	51	59	3	59	9	20	18	7	14	4	5	A	4	67	2	36	31	12	68	2	84	36	30.7	83.5		
26-Oct-06	2	2	1	5	2	55	18	5	3	41	40	49	A	21	6	12	2	21	11	88	1	2	3	67	19.9	88.4		
27-Oct-06	29	16	132	58	4	51	8	9	31	45	35	A	24	9	2	2	1	1	1	4	30	19	26	16	24.2	131.7		
28-Oct-06	3	12	11	45	29	34	9	16	22	15	A	9	6	5	4	3	4	1	2	2	20	4	4	4	11.5	45.0		
29-Oct-06	4	3	3	1	3	1	1	2	1	A	2	1	1	2	2	2	3	3	2	2	2	2	1	2.0	3.7			
30-Oct-06	1	1	1	2	1	10	4	4	A	3	3	4	6	5	4	4	5	61	7	70	21	9	85	80	17.0	85.5		
31-Oct-06	1	3	114	2	2	75	86	A	19	21	9	8	6	6	4	4	5	4	3	2	3	3	3	2	16.8	114.1		



#### 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



Station: Crescent Heights  
Station Owner: PAS

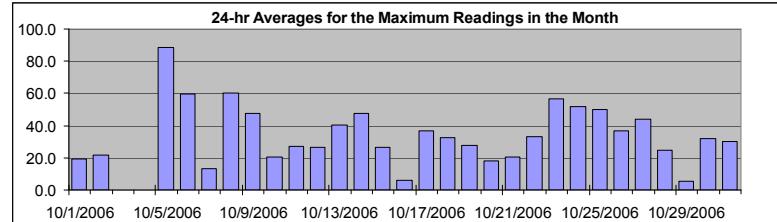
Monitoring Dates: October 1, 2006 to November 1, 2006

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

#### Summary

Maximum 1-hr Value:	370.7 ppb	5-Oct 20:00 21:00
Maximum 24-hr Value:	88.8 ppb	5-Oct



#### Status Flag Characters

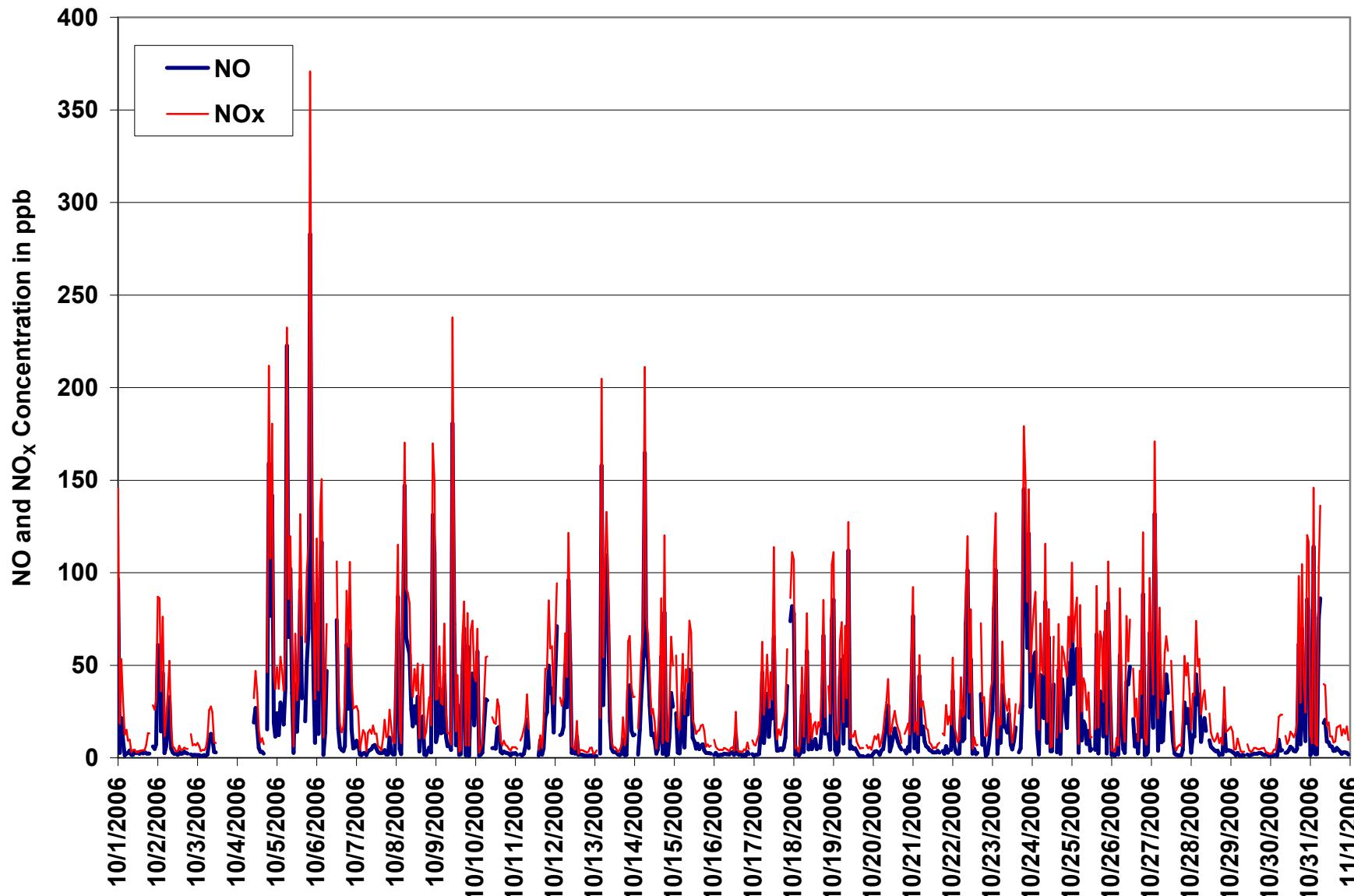
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Average	Daily Maximum
1-Oct-06	145 19	53	30	13	15	9	10	3	4	4	3	3	4	4	4	4	4	4	7	13	13	A	28	26	31	19.4	145.4	
2-Oct-06	87 86	36	76	12	21	33	52	15	6	5	3	4	7	4	4	5	5	5	A	13	7	7	7	21.8	86.9			
3-Oct-06	8 6	4	4	4	6	11	26	28	25	9	8	N	N	N	N	N	N	N	N	N	N	N	N	N	27.6	N		
4-Oct-06	N N N	N	N	N	N	N	N	N	N	N	32	47	35	15	8	11	7	A	46	212	108	180	47	37	N	211.7		
5-Oct-06	49 37	55	47	36	61	232	86	120	58	6	67	31	42	132	66	A	63	101	117	371	161	75	32	88.8	370.7			
6-Oct-06	118 36	134	150	11	36	72	M	C	C	C	106	36	18	14	17	31	90	60	106	44	27	27	59.7	150.5				
7-Oct-06	28 25	4	10	15	13	4	14	15	13	17	13	13	6	6	4	11	20	11	12	26	16	9	8	13.1	28.0			
8-Oct-06	64 115	15	8	88	170	91	89	84	40	33	48	36	51	10	39	50	11	14	24	33	18	170	149	60.5	170.2			
9-Oct-06	32 32	60	30	29	72	24	13	13	7	238	95	14	45	3	4	66	84	7	78	7	69	74	44	47.5	237.8			
10-Oct-06	41 70	3	5	8	32	54	55	A	A	22	19	18	32	28	9	7	9	7	6	5	4	6	6	20.3	69.7			
11-Oct-06	6 5	A	9	12	15	20	34	16	C	C	C	A	4	12	5	19	48	48	85	59	60	29	27.1	85.0				
12-Oct-06	62 94	A	32	28	33	67	44	121	60	6	5	4	20	2	4	4	4	3	3	3	5	5	2	26.8	121.5			
13-Oct-06	2 4	A	21	205	54	103	133	95	34	9	5	6	4	3	4	7	22	7	14	63	66	38	33	40.6	204.7			
14-Oct-06	33 A	16	36	57	68	211	75	67	42	23	26	20	5	13	26	86	8	120	10	9	29	65	50	47.6	211.0			
15-Oct-06	A 55	17	15	31	56	24	48	41	74	68	21	18	13	14	15	17	18	15	6	7	6	7	A	26.6	74.0			
16-Oct-06	10 6	5	4	4	4	5	5	4	4	5	6	4	25	4	3	3	3	5	4	8	5	A	10	5.9	24.7			
17-Oct-06	7 7	10	13	26	63	23	35	56	27	46	31	114	29	10	15	12	17	20	25	59	A	86	111	36.6	113.8			
18-Oct-06	107 5	6	3	8	49	12	41	78	8	24	11	18	19	13	19	17	43	85	22	A	39	24	104	32.8	106.9			
19-Oct-06	111 14	10	13	63	73	19	71	32	127	11	12	11	15	9	7	5	5	5	A	7	5	6	4	27.7	127.3			
20-Oct-06	9 12	10	13	6	9	14	24	30	42	13	14	21	25	19	16	13	8	A	13	15	19	13	50	17.8	50.5			
21-Oct-06	92 14	19	13	55	27	30	24	16	15	8	7	5	6	5	7	8	A	13	12	29	18	22	18	20.2	92.2			
22-Oct-06	54 17	13	8	10	43	22	24	88	120	35	80	5	11	7	7	A	73	31	33	12	13	21	37	33.2	119.8			
23-Oct-06	42 107	132	11	21	18	63	36	29	25	32	16	8	15	29	A	24	31	65	179	149	84	145	47	56.8	179.0			
24-Oct-06	68 80	90	34	15	73	48	45	116	19	80	6	6	66	A	11	72	14	60	57	50	44	76	59	51.6	115.6			
25-Oct-06	105 63	77	87	8	82	25	43	40	26	35	11	11	A	15	93	16	68	64	30	80	13	106	50	49.9	105.9			
26-Oct-06	4 4	3	11	7	91	42	18	9	77	52	75	A	48	22	32	9	47	35	122	11	7	24	97	36.8	121.7			
27-Oct-06	59 34	171	87	21	81	33	31	57	66	58	A	53	28	6	4	6	7	6	20	55	44	51	37	44.2	170.8			
28-Oct-06	15 35	34	74	50	53	24	32	36	26	A	24	14	10	9	10	13	8	11	7	38	14	15	16	24.6	74.0			
29-Oct-06	17 14	4	5	10	7	3	3	3	A	7	4	3	4	5	5	5	5	5	5	5	3	3	2	5.6	16.8			
30-Oct-06	2 3	4	4	10	22	23	23	A	12	7	10	14	13	11	14	20	98	30	105	45	24	120	117	31.8	120.2			
31-Oct-06	13 8	146	8	7	103	136	A	40	39	17	19	12	12	8	9	16	17	18	12	15	13	17	10	30.1	145.8			

Hourly Avg 48.0 34.7 41.9 28.7 29.0 48.4 49.3 40.5 46.3 38.4 32.3 24.5 21.6 21.5 14.6 16.2 18.9 26.6 32.4 44.6 50.4 35.8 46.4 42.2

Hourly Max 145.4 115.1 170.8 150.5 204.7 170.2 232.4 132.7 121.5 127.3 237.8 94.9 113.8 65.5 131.5 92.8 86.2 98.1 120.2 211.7 370.7 180.4 169.8 149.1



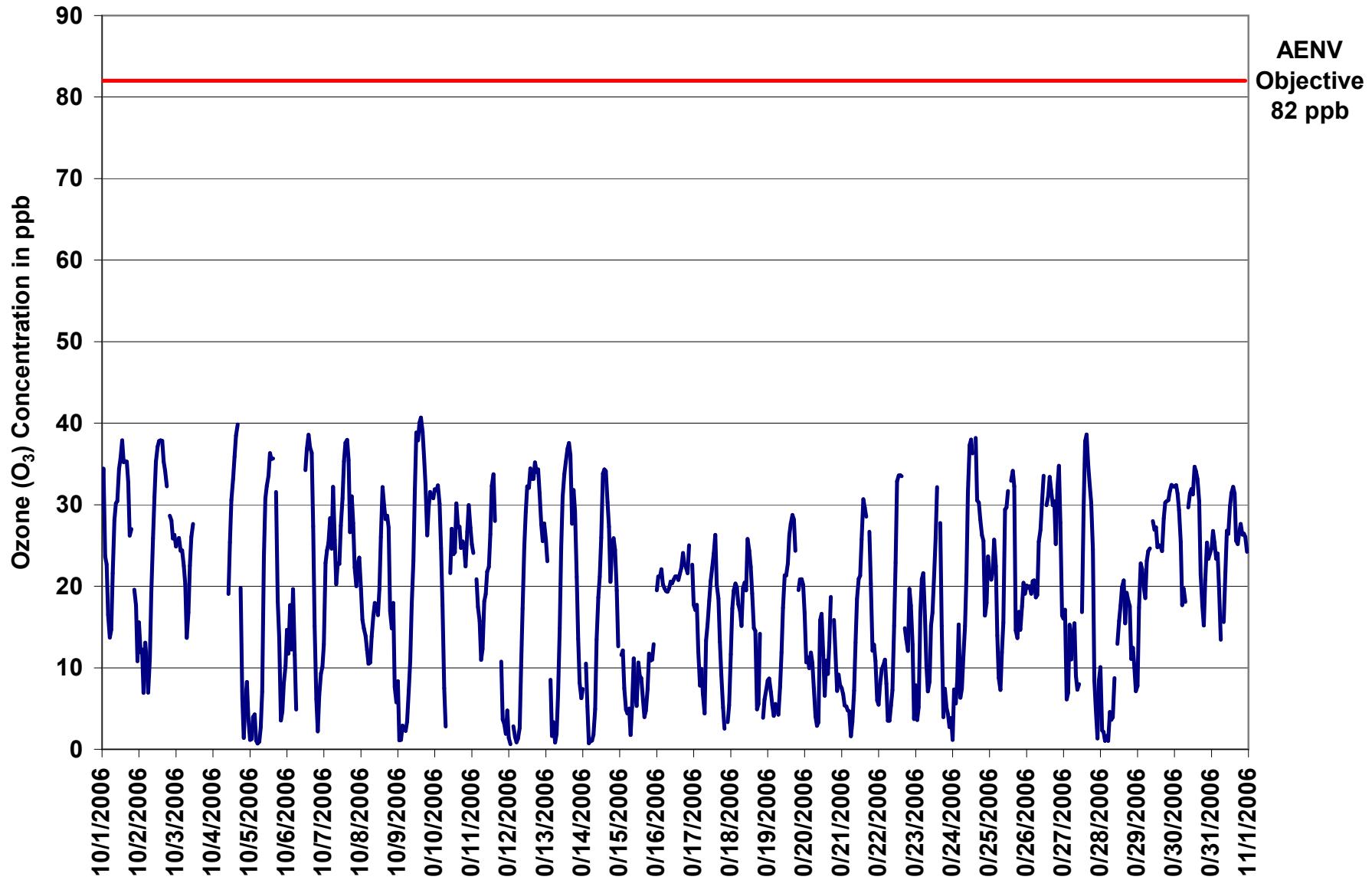


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



## PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

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

Number of 1-hr Exceedances: 0  
Maximum 1-hr Average: 40.7 ppb 9-Oct 15:00 16:00  
Maximum 24-hr Average: 26.7 ppb 7-Oct

AIC Time:	29 hrs	Operational Time:	686 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	96.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	38.5	35.3	27.3	19.7	10.2	2.6	1.0	19.1 ppb	19.7 ppb

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
1-Oct-06	30	34	24	23	17	14	15	22	28	30	30	34	36	38	35	35	33	26	27	A	20	18	11	26.7	37.9	
2-Oct-06	16	12	12	7	13	11	7	11	19	26	31	35	37	38	38	35	34	32	A	29	28	26	26	24.4	37.9	
3-Oct-06	25	26	26	24	24	22	20	14	17	23	26	28	N	N	N	N	N	N	N	N	N	N	N	N	N	27.6
4-Oct-06	N	N	N	N	N	N	N	N	N	N	19	25	31	33	36	38	40	A	20	6	1	6	8	4	N	39.8
5-Oct-06	1	1	4	4	1	1	1	3	7	24	31	32	34	36	36	36	A	32	18	14	4	5	8	10	14.8	36.3
6-Oct-06	15	12	18	12	20	12	5	M	C	C	C	C	34	37	39	37	36	27	15	6	2	7	9	10	18.5	38.6
7-Oct-06	13	23	24	25	28	25	32	26	20	23	23	27	31	35	38	38	36	27	31	28	22	20	23	24	26.7	38.0
8-Oct-06	20	16	15	14	12	10	11	14	16	18	18	16	20	26	32	30	28	29	27	17	15	18	8	6	18.1	32.2
9-Oct-06	8	1	1	3	3	2	3	7	11	18	23	32	39	38	40	41	39	36	32	26	30	32	31	31	21.9	40.7
10-Oct-06	32	32	32	30	25	18	7	3	A	A	22	27	24	24	30	27	27	25	25	25	22	27	30	27	24.6	32.4
11-Oct-06	25	24	A	21	17	16	11	12	18	19	22	22	26	32	34	28	C	C	A	11	4	3	2	5	17.6	33.7
12-Oct-06	1	1	A	3	2	1	1	3	10	17	25	29	32	32	34	33	33	35	34	34	31	28	26	28	20.6	35.2
13-Oct-06	26	23	A	9	2	3	1	2	7	15	25	31	34	35	37	38	36	28	32	29	21	14	8	6	20.0	37.6
14-Oct-06	7	A	11	5	1	1	1	2	5	13	19	21	26	34	34	34	30	27	21	25	26	24	19	13	17.4	34.3
15-Oct-06	A	12	12	7	5	4	5	2	5	11	7	5	11	9	9	6	4	5	7	12	11	11	13	A	7.8	12.9
16-Oct-06	19	21	21	22	20	20	19	19	20	21	20	21	21	21	21	22	22	24	23	22	22	25	A	23	21.3	25.0
17-Oct-06	18	17	18	12	8	10	7	4	13	15	18	21	22	24	26	20	18	13	9	5	3	A	3	5	13.5	26.3
18-Oct-06	12	17	19	20	20	18	17	15	20	20	19	26	24	22	19	15	15	5	6	14	A	4	6	7	15.7	25.8
19-Oct-06	8	9	7	5	4	6	5	4	8	12	17	21	21	23	26	28	29	28	24	A	20	21	21	20	16.0	28.7
20-Oct-06	17	11	11	10	12	11	8	4	3	3	16	17	12	7	11	9	13	19	A	16	12	7	9	8	10.6	18.7
21-Oct-06	7	7	5	5	5	5	2	3	7	13	18	21	21	26	31	30	29	A	27	20	12	13	11	6	14.1	30.7
22-Oct-06	5	8	10	10	11	8	3	4	5	7	15	23	33	34	34	33	A	15	14	12	20	18	13	4	14.7	33.6
23-Oct-06	8	4	5	17	21	22	16	10	7	8	15	17	21	26	32	A	28	15	4	7	5	4	3	4	13.0	32.2
24-Oct-06	1	7	6	8	15	6	7	11	15	21	32	37	38	36	A	38	31	30	28	26	26	16	18	24	20.8	38.2
25-Oct-06	22	21	22	26	22	14	9	7	12	16	29	30	32	A	33	34	32	15	14	17	15	18	20	19	20.7	34.1
26-Oct-06	20	20	20	19	21	19	19	19	25	27	30	34	A	30	31	33	32	30	30	25	32	35	28	16	25.9	34.8
27-Oct-06	16	17	6	7	15	11	14	15	9	7	8	A	17	30	38	39	35	32	30	25	8	5	1	9	17.1	38.6
28-Oct-06	10	2	2	1	2	1	5	4	4	9	A	13	16	18	20	21	15	19	18	18	11	12	10	7	10.3	20.7
29-Oct-06	8	17	23	22	20	19	23	24	25	28	A	28	27	25	25	24	28	30	30	31	32	32	32	25.1	32.4	
30-Oct-06	32	32	31	29	25	18	20	18	A	30	31	32	31	35	34	33	30	21	18	15	21	25	23	24	26.5	34.7
31-Oct-06	25	27	25	23	24	20	13	A	16	22	27	26	30	31	32	31	26	25	27	28	26	26	24	25.3	32.2	
Hourly Avg	15.4	15.6	15.2	14.2	13.8	11.6	10.2	10.1	13.1	17.3	22.2	25.2	26.9	28.8	30.5	30.0	28.1	24.3	22.2	19.3	17.1	17.3	15.6	14.9		
Hourly Max	32.2	34.4	32.4	30.1	28.4	24.6	32.2	25.7	28.1	30.2	31.5	37.3	38.9	37.9	40.0	40.7	39.8	35.9	34.0	34.3	32.2	34.8	32.4	32.3		

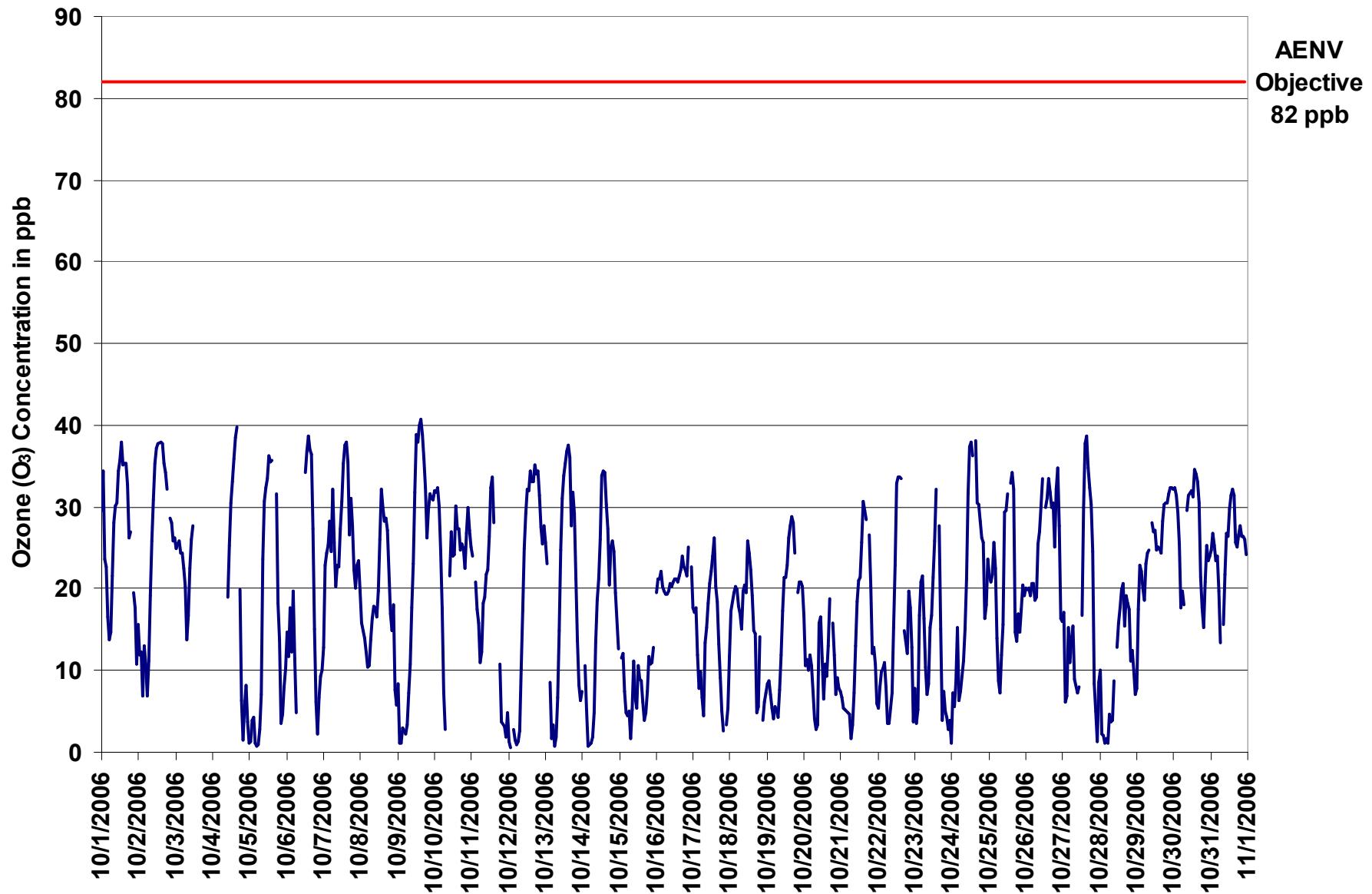


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

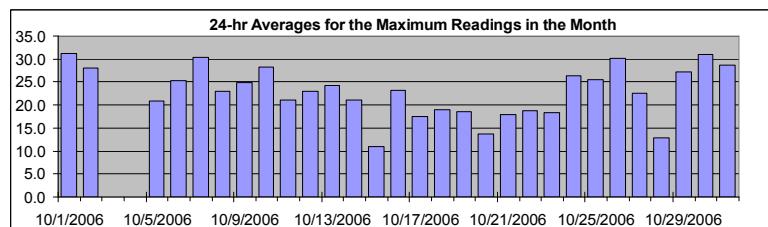
### Ozone (O<sub>3</sub>)

Monitoring Dates: October 1, 2006 to November 1, 2006

#### Summary

Maximum 1-hr Value:	45.0 ppb	5-Oct	15:00 16:00
Maximum 24-hr Value:	31.3 ppb	1-Oct	

AIC Time:	29 hrs	Operational Time:	686 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	41.7 38.7 31.4 23.4 14.8 5.3 2.3	23.0 ppb	23.4 ppb



#### Status Flag Characters

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

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Oct-06	38	39	36	33	21	16	16	27	32	32	33	37	38	40	38	37	37	36	33	29	A	27	25	22	31.3	39.8	
2-Oct-06	22	19	19	14	16	16	11	18	24	29	34	38	39	39	40	39	37	36	34	A	32	29	29	28	28.0	39.9	
3-Oct-06	26	27	27	26	26	25	23	19	22	25	28	30	N	N	N	N	N	N	N	N	N	N	N	N	N	N	30.4
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	27	30	34	37	38	41	42	A	31	18	3	16	13	9	N	42.1
5-Oct-06	3	5	11	9	2	2	2	7	18	30	33	34	36	39	43	45	A	40	36	24	15	10	15	21	20.9	45.0	
6-Oct-06	19	22	22	21	21	20	12	M	C	C	C	C	40	42	43	40	42	34	26	16	4	20	20	16	25.2	43.5	
7-Oct-06	16	25	26	30	32	30	35	33	26	26	28	30	33	38	39	40	39	35	33	32	25	24	25	25	30.3	40.1	
8-Oct-06	25	23	18	16	14	13	13	17	18	21	22	23	23	31	34	35	32	33	31	29	24	25	17	15	23.0	34.9	
9-Oct-06	15	3	2	6	5	5	6	10	15	22	27	39	41	39	42	42	42	39	36	30	33	33	33	32	24.8	42.4	
10-Oct-06	34	33	34	32	28	21	13	9	A	A	26	35	30	29	33	32	31	28	29	28	24	30	34	29	28.2	35.0	
11-Oct-06	27	27	A	22	21	19	16	16	21	21	24	24	33	35	36	30	C	C	A	15	11	10	4	7	21.1	35.6	
12-Oct-06	5	1	A	5	3	2	3	4	18	21	27	34	34	34	36	36	36	35	36	36	34	29	28	29	22.9	36.4	
13-Oct-06	27	25	A	13	5	7	2	3	14	19	31	33	36	37	38	39	39	31	35	35	28	24	22	12	24.2	39.0	
14-Oct-06	10	A	12	12	2	3	2	3	7	18	22	25	33	35	38	36	34	30	27	29	29	28	29	19	21.1	37.9	
15-Oct-06	A	15	16	10	8	9	9	4	12	13	14	7	15	11	11	9	6	7	11	14	12	12	14	A	10.9	16.4	
16-Oct-06	21	23	23	24	22	21	21	22	22	22	22	23	22	23	22	23	25	26	25	24	24	28	A	26	23.1	27.9	
17-Oct-06	20	19	20	14	13	13	13	10	20	19	23	25	28	29	30	24	23	19	12	9	7	A	6	7	17.5	30.2	
18-Oct-06	17	20	21	21	22	21	19	19	23	23	24	28	28	26	21	17	16	12	11	17	A	8	9	10	19.0	28.4	
19-Oct-06	11	10	9	8	6	8	8	6	11	15	19	26	23	26	29	31	30	31	30	A	21	23	23	22	18.5	31.1	
20-Oct-06	21	14	13	13	13	12	11	8	4	10	20	20	18	9	13	12	18	21	A	20	16	10	11	11	13.8	20.9	
21-Oct-06	10	9	8	8	8	9	4	5	13	18	21	24	24	32	33	32	32	A	30	24	23	16	19	12	17.9	32.7	
22-Oct-06	8	13	12	13	14	12	8	7	8	14	21	31	36	36	36	35	A	22	18	16	23	21	16	11	18.7	36.4	
23-Oct-06	13	7	13	21	24	26	21	16	9	14	18	21	24	30	38	A	35	20	17	23	9	9	6	18.4	37.9		
24-Oct-06	5	14	8	15	19	16	14	20	20	30	36	40	40	39	A	42	34	35	31	29	30	30	28	26.3	41.6		
25-Oct-06	25	23	25	29	25	23	13	13	17	20	36	33	35	A	37	39	38	25	20	22	21	22	24	22	25.6	38.8	
26-Oct-06	22	21	22	20	25	23	22	23	28	29	36	37	A	38	39	36	34	34	36	36	35	38	34	24	30.1	38.9	
27-Oct-06	21	24	14	16	20	19	20	21	18	11	11	A	28	36	40	41	38	34	34	29	15	11	4	14	22.7	41.0	
28-Oct-06	12	8	4	3	4	4	7	5	6	12	A	15	18	19	23	24	18	23	22	19	17	14	13	9	12.9	23.8	
29-Oct-06	11	21	24	24	23	23	25	26	26	A	30	30	30	26	27	27	26	32	32	32	33	34	34	34	27.2	33.9	
30-Oct-06	33	33	34	31	29	26	26	25	A	32	34	34	37	37	36	35	33	25	27	27	29	27	27	27	30.9	37.3	
31-Oct-06	28	29	27	25	26	24	22	A	23	26	29	32	33	34	34	29	29	31	32	31	30	31	28	28.7	34.1		

Hourly Avg 18.9 19.2 18.5 17.8 16.6 15.5 13.9 14.2 17.6 21.2 26.0 28.7 30.4 32.0 33.4 32.9 31.4 29.0 27.6 24.7 21.6 22.0 20.4 19.3  
Hourly Max 37.7 38.7 35.9 32.6 32.1 30.4 34.7 33.1 31.7 32.1 36.3 39.9 40.7 42.1 43.5 45.0 42.1 40.4 36.2 35.9 34.6 37.8 34.0 33.9

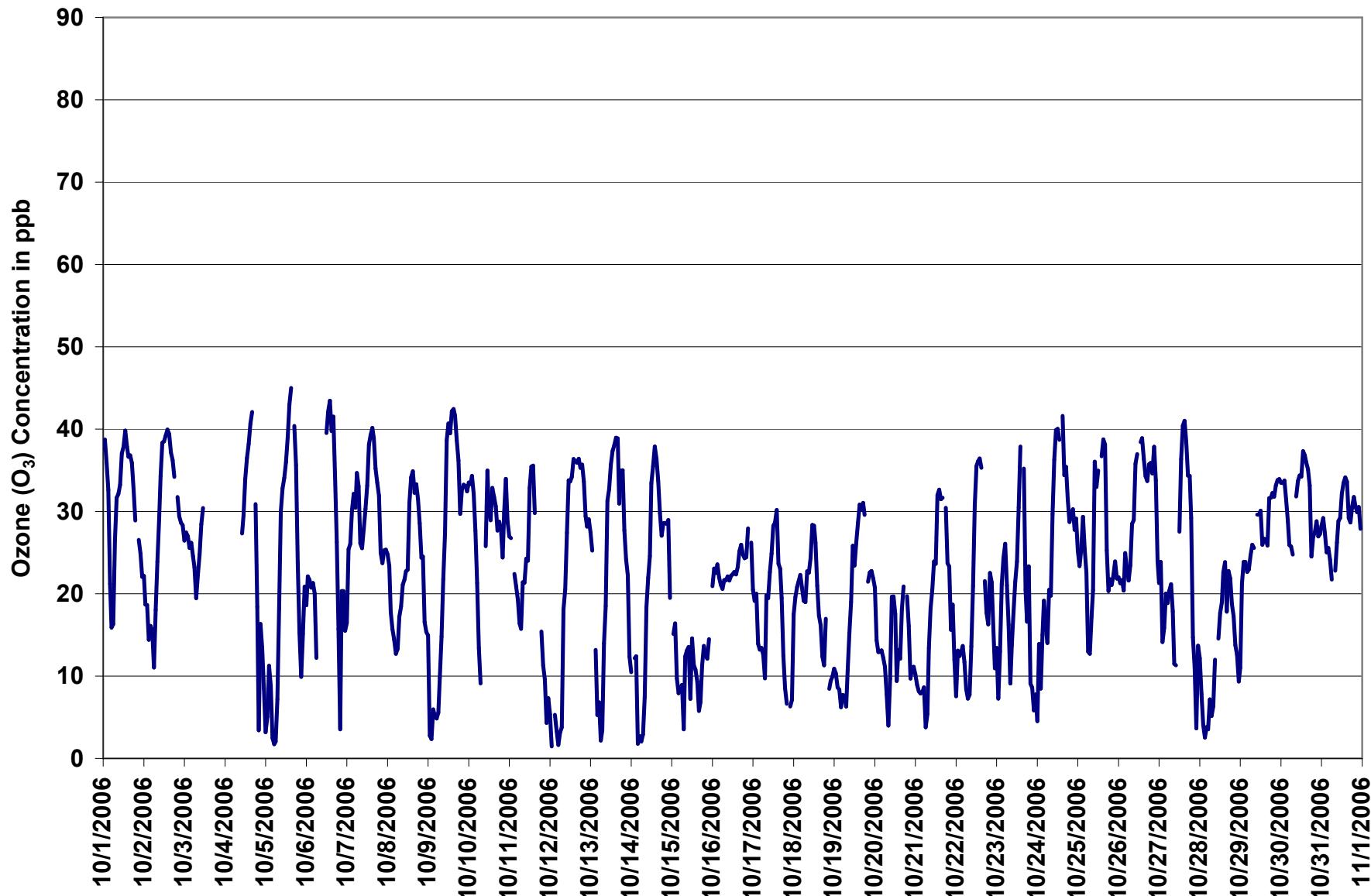
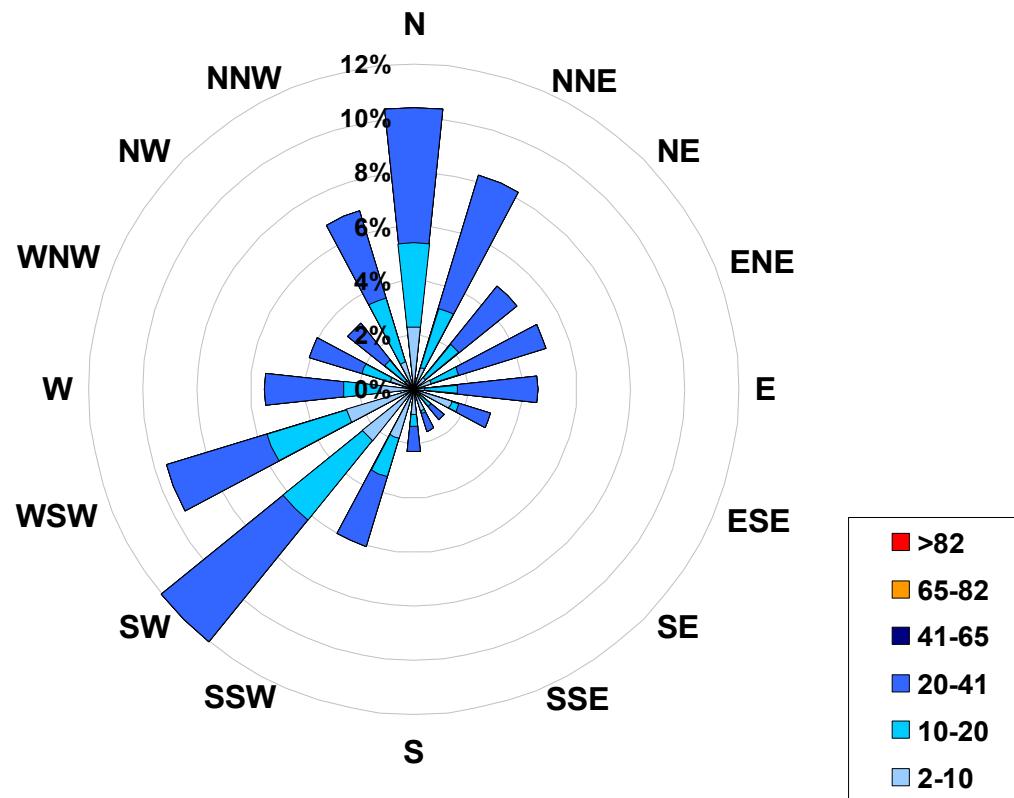


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



Calms:	0%	Frequency Distribution of O <sub>3</sub> in ppb		
		Range	Frequency (hrs)	
2.0	<	10	167	
10	to	20	184	
20	to	41	335	
41	to	65	0	
65	to	82	0	
	>	82	0	
Total Non-Zero Values			686	



## PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

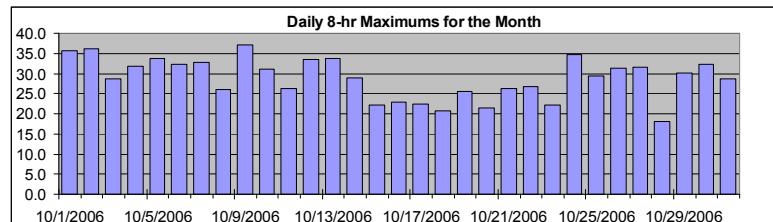
Monitoring Dates: October 1, 2006 to November 1, 2006

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

Number of 8-hr Exceedances: 0  
Maximum 8-hr Average: 37.1 ppb 9-Oct 18:00 19:00

### EIGHT HOUR RUNNING AVERAGE TABLE

### Ozone ( $O_3$ )



### Status Flag Characters

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

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Maximum
1-Oct-06	36	35	33	31	28	25	23	22	22	21	22	24	26	29	32	33	34	35	34	33	33	33	30	28	24	35.7	
2-Oct-06	21	18	16	14	13	12	11	11	12	13	16	19	22	26	29	33	35	36	36	36	36	35	33	32	30	36.0	
3-Oct-06	29	27	26	26	26	25	24	23	22	21	21	22	21	N	N	N	N	N	N	N	N	N	N	N	N	N	28.6
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	32	32	32	29	25	21	17	12	31.9		
5-Oct-06	7	6	4	4	4	3	2	2	3	6	9	12	16	21	25	29	33	34	32	29	25	25	20	16	13	33.7	
6-Oct-06	13	11	11	10	12	13	13	13	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	32.2	
7-Oct-06	11	11	12	14	17	20	23	25	25	25	26	26	27	28	29	31	32	33	33	32	30	28	26	26	26	32.8	
8-Oct-06	24	23	21	19	18	17	15	14	14	14	14	15	17	20	22	24	25	26	26	26	25	21	18	16	18	26.1	
9-Oct-06	16	12	9	7	6	4	3	4	4	6	9	12	17	21	26	30	34	36	37	36	35	34	33	32	37.1		
10-Oct-06	31	31	31	31	29	26	22	21	N	N	N	N	N	N	N	26	26	26	26	26	26	26	26	26	26	31.2	
11-Oct-06	26	26	25	24	23	20	18	17	16	17	17	18	20	23	25	26	N	N	N	N	N	N	N	N	N	26.2	
12-Oct-06	N	4	4	3	2	2	2	2	3	5	8	11	15	19	23	27	30	32	33	34	33	33	32	31	31	33.6	
13-Oct-06	30	29	28	24	20	17	13	9	7	5	8	11	15	19	23	28	31	33	34	34	32	29	26	22	33.7		
14-Oct-06	18	17	14	10	7	6	5	4	4	5	6	8	11	15	19	23	26	28	28	29	29	28	26	23	28.9		
15-Oct-06	22	20	19	16	13	10	8	7	7	6	6	6	6	7	7	8	8	7	7	8	8	8	9	9	22.2		
16-Oct-06	11	14	15	17	18	20	20	20	20	20	20	20	20	20	21	21	22	22	22	22	23	23	23	23	22.9		
17-Oct-06	22	21	21	19	17	15	14	12	11	11	12	14	16	18	20	21	20	19	17	15	14	10	8	8	22.3		
18-Oct-06	7	8	9	11	14	14	16	17	18	19	19	19	20	21	21	21	20	18	16	15	14	11	9	8	20.8		
19-Oct-06	7	8	8	7	6	7	6	6	6	8	10	12	14	17	20	22	24	25	26	25	25	24	23	23	25.6		
20-Oct-06	22	19	17	16	15	14	12	10	9	8	8	9	9	9	9	10	11	13	12	12	12	12	12	12	21.5		
21-Oct-06	11	9	9	8	7	6	5	5	5	6	7	9	11	14	18	21	24	25	26	26	25	23	20	17	26.2		
22-Oct-06	13	13	11	9	9	8	7	7	7	8	10	12	16	19	23	26	27	26	25	23	21	18	13	26.6			
23-Oct-06	13	11	10	11	11	12	12	13	13	15	15	15	15	17	18	21	22	20	19	17	14	9	9	22.0			
24-Oct-06	5	4	5	5	6	6	7	8	10	11	15	18	21	25	27	31	33	35	34	33	31	28	27	25	34.6		
25-Oct-06	24	23	22	22	21	21	20	18	17	16	17	17	19	19	23	26	29	27	25	23	22	21	19	29.4			
26-Oct-06	17	18	19	19	20	20	20	20	20	21	23	24	25	26	28	30	31	31	31	30	30	31	31	29	31.4		
27-Oct-06	27	25	22	20	18	15	13	13	12	11	11	12	14	18	21	25	28	32	31	30	26	22	18	31.5			
28-Oct-06	15	11	8	5	4	4	4	3	3	3	4	5	7	10	12	14	16	17	17	18	17	17	16	14	18.0		
29-Oct-06	13	13	13	14	15	16	17	20	22	22	23	24	25	26	26	26	26	26	27	27	28	28	29	30	30.0		
30-Oct-06	31	32	32	32	31	29	28	26	25	24	24	25	26	28	30	32	32	31	29	27	26	25	23	22	32.3		
31-Oct-06	22	22	23	24	25	24	23	22	21	20	21	21	22	24	26	27	28	29	29	28	28	27	26	26	28.7		

Hourly Max 35.7 34.9 32.8 31.5 30.9 29.1 27.6 25.8 25.5 25.4 25.2 25.5 26.1 29.1 31.7 33.4 34.8 35.9 37.1 36.4 35.2 34.4 33.3 32.1



## PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

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

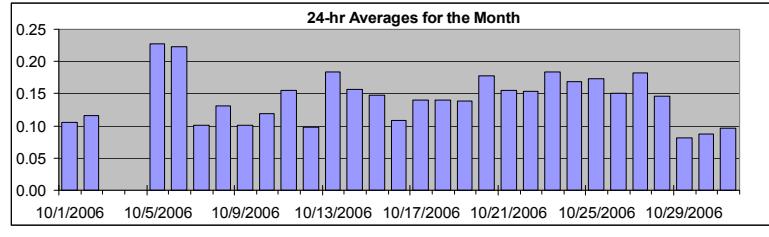
Number of 1-hr Exceedances: 0  
Maximum 1-hr Average: 0.9 ppm 13-Oct 7:00 8:00  
Maximum 24-hr Value: 0.2 ppm 5-Oct

AIC Time:	29 hrs	Operational Time:	685 hrs
Calibration Time:	7 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	0.4 0.3 0.2 0.1 0.1 0.0	0.1 ppm	0.1 ppm

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Oct-06	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	0.1	0.11	0.15		
2-Oct-06	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.12	0.29		
3-Oct-06	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	N	N	N	N	N	N	N	N	N	N	N	N	N	0.21	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.3	0.4	0.4	0.2	0.2		
5-Oct-06	0.3	0.2	0.2	0.1	0.1	0.2	0.3	0.6	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.3	0.4	0.3	0.2		
6-Oct-06	0.1	0.2	0.1	0.1	0.1	0.2	0.4	M	C	C	C	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.6	0.4	0.3	0.2		
7-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	C	C	C	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		
8-Oct-06	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	0.2	0.2	0.2	0.2	0.3		
9-Oct-06	0.3	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	0.1	0.1		
10-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	A	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		
11-Oct-06	0.1	0.1	A	0.1	0.1	0.2	0.3	0.3	0.0	0.1	0.1	C	C	C	A	0.0	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.16	0.31		
12-Oct-06	0.1	0.1	A	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.10	0.32	
13-Oct-06	0.0	0.1	A	0.1	0.2	0.2	0.5	0.9	0.5	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	0.3	0.2	0.2	0.18	0.90
14-Oct-06	0.1	A	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.16	0.36
15-Oct-06	A	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.26
16-Oct-06	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	0.1	0.1	0.11	0.15
17-Oct-06	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	A	0.1	0.1	0.1	0.14	0.28	
18-Oct-06	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	0.2	0.2	0.3	0.3	0.2	A	0.2	0.2	0.1	0.14	0.31		
19-Oct-06	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	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	0.19
20-Oct-06	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.2	0.18	0.31		
21-Oct-06	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.23	
22-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.15	0.29	
23-Oct-06	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	A	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.18	0.34	
24-Oct-06	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.17	0.33	
25-Oct-06	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.17	0.27	
26-Oct-06	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.24	
27-Oct-06	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18	0.37	
28-Oct-06	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	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	0.15	0.32	
29-Oct-06	0.1	0.0	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.08	0.11	
30-Oct-06	0.0	0.1	0.1	0.1	0.1	0.1	0.1	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	0.09	0.17		
31-Oct-06	0.1	0.0	0.0	0.0	0.1	0.1	0.1	A	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10	0.26	
Hourly Avg	0.12	0.11	0.11	0.11	0.12	0.15	0.21	0.26	0.21	0.15	0.13	0.11	0.12	0.11	0.11	0.12	0.14	0.15	0.16	0.16	0.18	0.16	0.14	0.13				
Hourly Max	0.26	0.23	0.18	0.18	0.18	0.32	0.48	0.90	0.48	0.30	0.22	0.21	0.32	0.21	0.16	0.16	0.19	0.33	0.34	0.49	0.63	0.42	0.28	0.35				

### HOURLY AVERAGE TABLE

### Carbon Monoxide (CO)



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

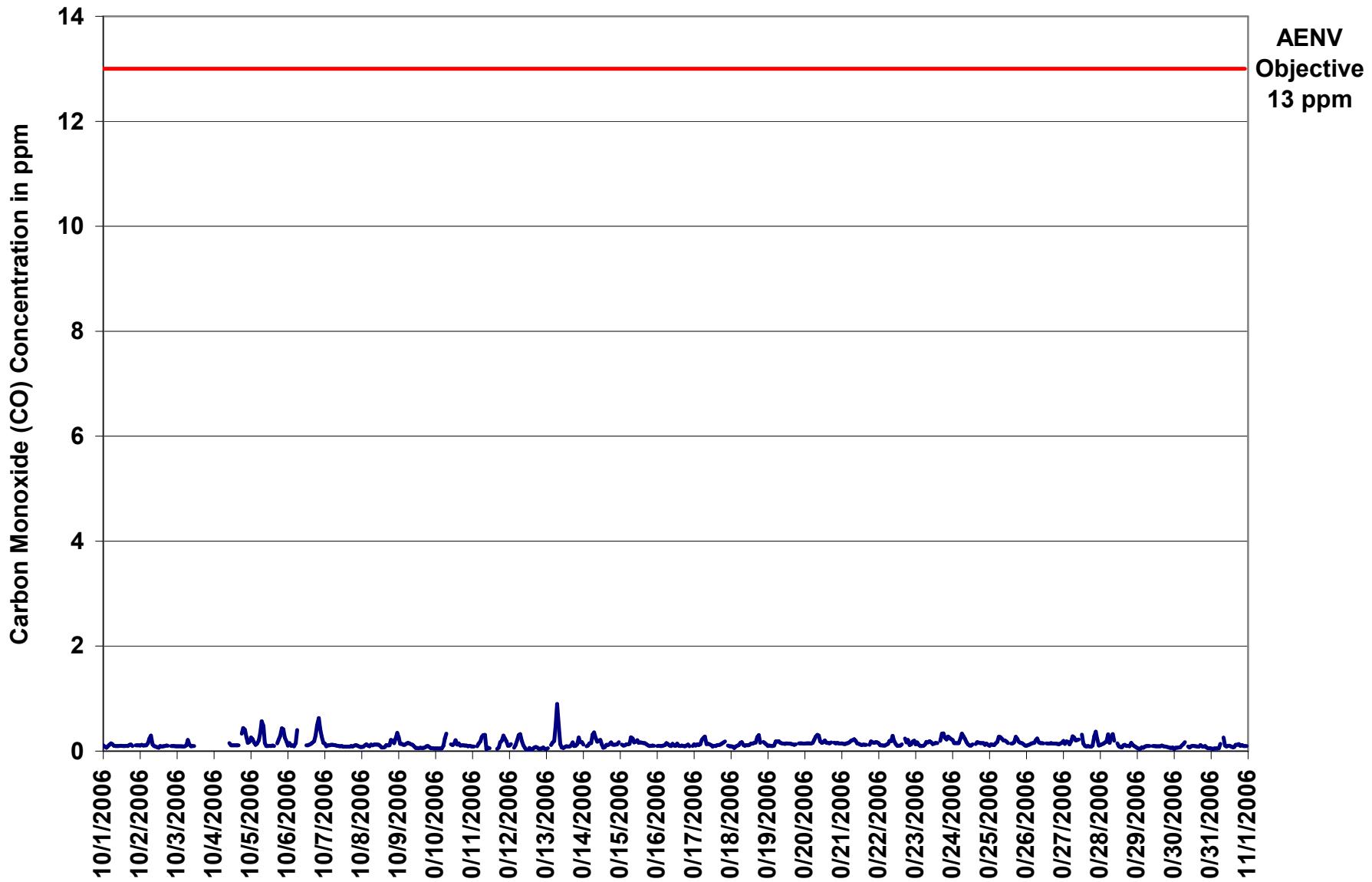


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Carbon Monoxide (CO)

Monitoring Dates: October 1, 2006 to November 1, 2006

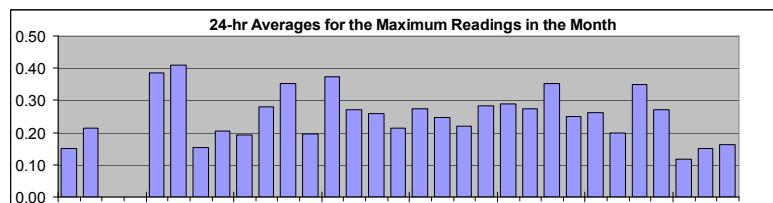
#### Summary

Maximum 1-hr Value:	1.5	ppm	17-Oct	5:00 6:00
Maximum 24-hr Value:	0.4	ppm	6-Oct	

AIC Time:	29 hrs	Operational Time:	685 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	96.9%						
Percentile	99 1.1	95 0.6	75 0.3	50 0.2	25 0.1	5 0.1	1 0.1	Average 0.3 ppm	Median 0.2 ppm

#### Day Mountain Standard Time

	Hour Start Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum		
1-Oct-06	0:00 1:00	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.15	0.26		
2-Oct-06	0:00 1:00	0.1	0.3	0.1	0.1	0.1	0.2	0.6	0.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.21	0.80		
3-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.2	0.1	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.44	
4-Oct-06	0:00 1:00	N	N	N	N	N	N	N	N	N	N	0.3	0.1	N	N	N	N	N	N	N	N	N	N	N	N	N	0.81		
5-Oct-06	0:00 1:00	0.4	0.3	0.3	0.2	0.2	0.3	1.0	0.9	0.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	A	0.3	0.5	0.3	1.0	0.7	0.4	0.3	0.39	1.00		
6-Oct-06	0:00 1:00	0.1	0.3	0.2	0.1	0.1	0.3	1.0	M	C	C	C	C	0.2	0.3	0.2	0.2	0.2	0.2	0.6	1.1	1.1	0.6	0.4	0.2	0.2	0.2	0.41	1.13
7-Oct-06	0:00 1:00	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.15	0.32	
8-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	A	0.7	0.8	0.7	0.5	0.3	0.5	0.8	0.21	0.82		
9-Oct-06	0:00 1:00	1.4	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.4	0.4	0.3	0.5	0.8	0.19	1.42	
10-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.7	0.6	0.7	A	A	0.2	0.2	0.2	0.7	0.2	0.3	0.1	0.3	0.2	0.4	0.3	0.1	0.3	0.1	0.1	0.28	0.75		
11-Oct-06	0:00 1:00	0.1	0.1	A	0.1	0.1	0.3	0.3	0.5	0.4	0.1	0.4	0.1	C	C	C	A	0.2	0.4	1.0	0.5	1.1	0.4	0.4	0.2	0.35	1.10		
12-Oct-06	0:00 1:00	0.2	0.3	A	0.1	0.2	0.4	0.5	0.6	0.5	0.2	0.1	0.1	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.20	0.55		
13-Oct-06	0:00 1:00	0.1	0.1	A	0.2	0.2	0.4	1.4	1.1	1.0	0.3	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.4	0.2	0.2	0.6	0.7	0.3	0.3	0.37	1.43		
14-Oct-06	0:00 1:00	0.2	A	0.1	0.1	0.2	0.3	0.6	0.5	0.4	0.3	0.2	0.3	0.2	0.1	0.1	0.5	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.27	0.57		
15-Oct-06	0:00 1:00	A	0.3	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.7	0.2	0.3	0.2	0.4	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.26	0.69		
16-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.1	0.5	0.2	0.1	0.1	0.5	0.1	0.1	0.1	0.6	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.22	0.61		
17-Oct-06	0:00 1:00	0.2	0.1	0.1	0.1	0.1	1.5	0.4	0.7	0.2	0.3	0.2	0.2	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	A	0.2	0.1	0.27	1.45		
18-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.5	0.3	0.2	0.3	0.5	0.6	0.4	A	0.3	0.2	0.1	0.25	0.60		
19-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	1.1	0.4	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.2	A	0.1	0.1	0.1	0.22	1.07		
20-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.6	0.3	0.2	0.2	0.4	0.3	0.3	0.5	A	0.3	0.2	0.2	0.2	0.2	0.2	0.28	0.61		
21-Oct-06	0:00 1:00	0.4	0.2	0.2	0.2	0.4	0.2	0.3	0.8	0.3	0.3	0.3	0.2	0.2	0.6	0.3	0.2	A	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.29	0.79		
22-Oct-06	0:00 1:00	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.5	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.2	A	0.4	0.2	0.4	0.2	0.2	0.2	1.1	0.27	1.14		
23-Oct-06	0:00 1:00	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.5	0.8	0.2	0.3	0.6	0.4	A	0.4	0.5	0.5	0.5	0.3	0.5	0.4	0.3	0.35	0.82			
24-Oct-06	0:00 1:00	0.2	0.2	0.2	0.2	0.5	0.6	0.7	0.4	0.2	0.2	0.1	0.1	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.25	0.66			
25-Oct-06	0:00 1:00	0.2	0.2	0.2	0.2	0.5	0.5	0.4	0.3	0.2	0.5	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.26	0.55			
26-Oct-06	0:00 1:00	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.45			
27-Oct-06	0:00 1:00	0.9	0.2	0.3	0.3	0.2	0.5	0.6	0.6	0.3	0.4	0.3	A	0.4	0.3	0.1	0.1	0.2	0.1	0.1	0.3	0.6	0.9	0.4	0.35	0.90			
28-Oct-06	0:00 1:00	0.1	0.2	0.2	0.2	0.4	0.6	0.3	0.8	0.6	0.3	A	0.2	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.6	0.2	0.1	0.27	0.84		
29-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.19		
30-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	A	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.15	0.27			
31-Oct-06	0:00 1:00	0.1	0.1	0.1	0.1	0.1	0.1	0.4	A	0.5	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.16	0.50			



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

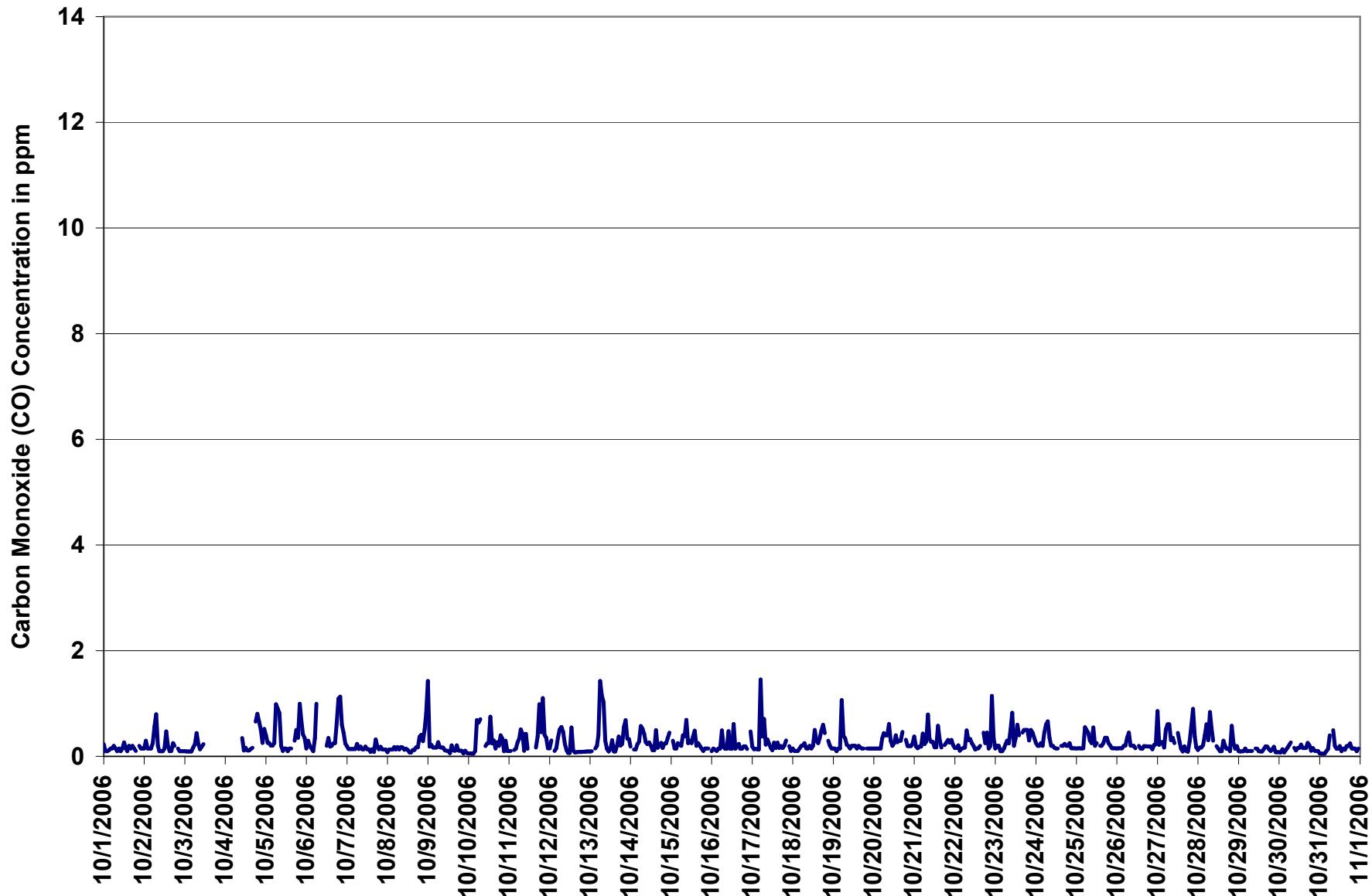
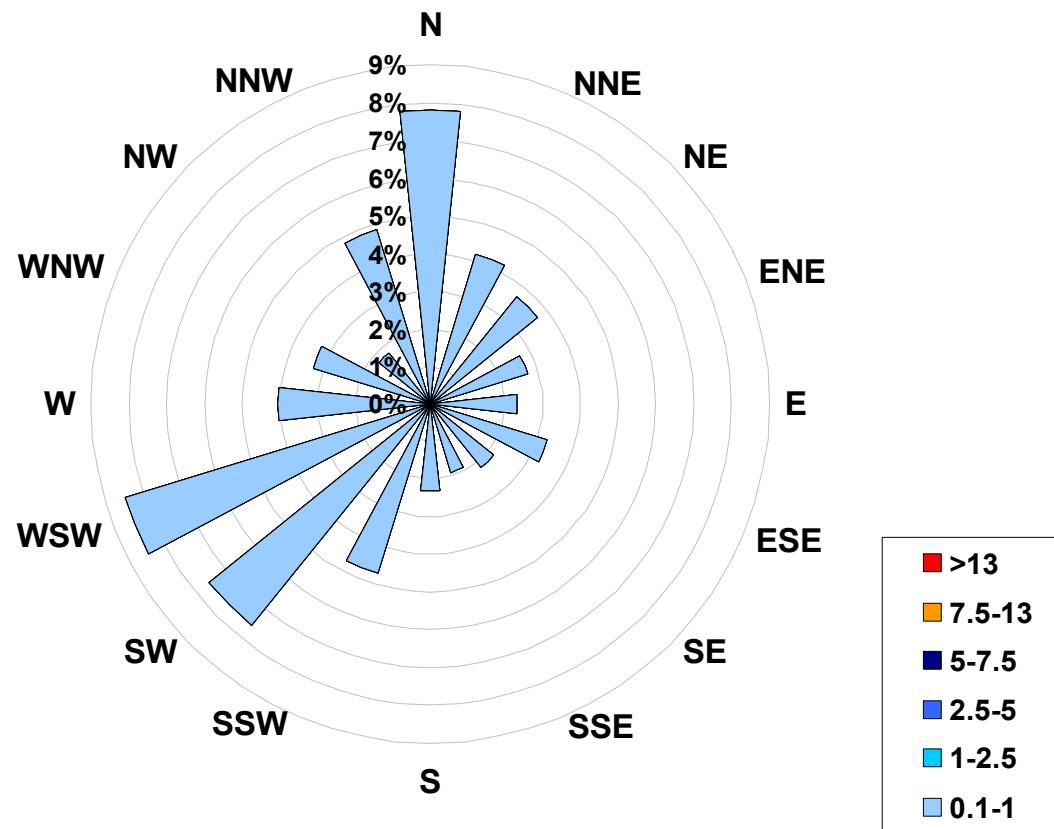


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

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



Calms: 0%

Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	<	1	685
1	to	2.5	0
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
> 13			0
Total Non-Zero Values			685



# PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

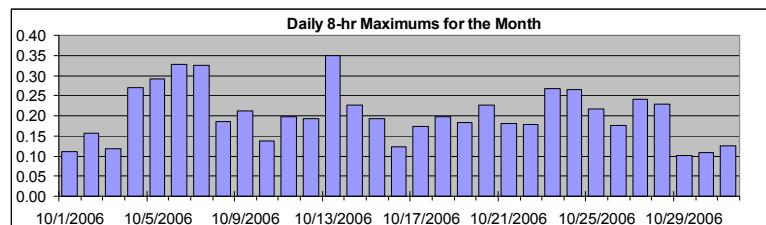
## EIGHT HOUR RUNNING AVERAGE TABLE

Monitoring Dates: October 1, 2006 to November 1, 2006

Objective Limit: Alberta Environment: 8-hr 5 ppm

Number of 8-hr Exceedances: 0  
Maximum 8-hr Average: 0.4 ppm 13-Oct 9:00 10:00

## Carbon Monoxide (CO)



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

### Status Flag Characters

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

### Day Mountain Standard Time

	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 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-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	
2-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16	
3-Oct-06	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	N	N	N	N	N	N	N	N	N	N	N	N	0.12
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.27	
5-Oct-06	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.29	
6-Oct-06	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.33	
7-Oct-06	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.33
8-Oct-06	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	0.2	0.2	0.19	
9-Oct-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.21	
10-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.14	
11-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	N	N	0.2	0.20
12-Oct-06	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.19	
13-Oct-06	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.35	
14-Oct-06	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.23	
15-Oct-06	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	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.19	
16-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	
17-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	
18-Oct-06	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	
19-Oct-06	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18	
20-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	
21-Oct-06	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	
22-Oct-06	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27	
23-Oct-06	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	
24-Oct-06	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.22	
25-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	
26-Oct-06	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17
27-Oct-06	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.24	
28-Oct-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.23
29-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10
30-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11
31-Oct-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.13

Hourly Max 0.33 0.31 0.29 0.24 0.20 0.19 0.21 0.28 0.34 0.35 0.32 0.31 0.30 0.28 0.24 0.21 0.18 0.18 0.21 0.22 0.27 0.31 0.33 0.33



## PAS - Crescent Heights - Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

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

Maximum 1-hr Average:	3.2	ppm	4-Oct	20:00 21:00
Maximum 24-hr Value:	2.3	ppm	28-Oct	

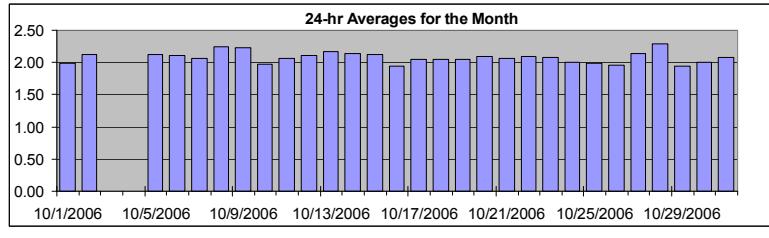
AIC Time:	29 hrs	Operational Time:	685 hrs
Calibration Time:	7 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	2.6 2.4 2.2 2.0 2.0 1.9 1.9	2.1 ppm	2.0 ppm

### 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-06	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	A	2.1	2.2	2.2	1.99	2.25		
2-Oct-06	2.2	2.5	2.4	2.4	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0	2.12	2.47	
3-Oct-06	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	N	N	N	N	N	N	N	N	N	N	N	N	N	2.23	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	2.0	1.9	1.9	1.9	2.0	2.0	1.9	A	2.1	2.4	3.2	2.2	2.1	2.2	N	3.15
5-Oct-06	2.3	2.5	3.0	2.4	2.3	2.3	2.3	2.2	2.2	2.2	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.1	2.2	2.1	2.2	2.2	2.13	2.95
6-Oct-06	2.0	2.1	2.0	2.0	1.9	2.0	2.2	M	C	C	C	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.4	2.4	2.3	2.3	2.2	2.12	2.40
7-Oct-06	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.06	2.27	
8-Oct-06	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.3	2.4	2.3	2.6	2.24	2.60	
9-Oct-06	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.23	2.65	
10-Oct-06	2.0	1.9	1.9	1.9	2.0	2.0	2.1	2.1	A	A	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.97	2.11	
11-Oct-06	2.0	2.0	A	2.1	2.1	2.1	2.3	2.2	2.1	1.8	1.8	1.8	1.8	1.7	C	C	C	A	2.1	2.1	2.1	2.2	2.4	2.2	2.2	2.06	2.44
12-Oct-06	2.2	2.2	A	2.2	2.4	2.5	2.5	2.4	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.0	2.1	2.0	2.11	2.52	
13-Oct-06	2.0	2.1	A	2.3	2.4	2.4	2.6	2.7	2.5	2.2	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.2	2.1	2.0	2.1	2.2	2.2	2.16	2.74	
14-Oct-06	2.2	A	2.2	2.5	2.5	2.4	2.6	2.7	2.4	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.14	2.70	
15-Oct-06	A	2.1	2.1	2.3	2.4	2.3	2.3	2.6	2.4	2.0	2.0	2.1	2.2	2.1	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.12	2.57	
16-Oct-06	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.94	2.00	
17-Oct-06	2.0	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.2	2.1	2.04	2.17	
18-Oct-06	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.05	2.23	
19-Oct-06	2.2	2.2	2.3	2.2	2.3	2.2	2.1	2.1	2.0	2.0	2.0	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	2.05	2.30	
20-Oct-06	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.0	1.9	2.0	2.1	2.1	2.2	2.1	2.1	2.1	A	2.2	2.2	2.2	2.2	2.09	2.21	
21-Oct-06	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.25	
22-Oct-06	2.1	2.1	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.1	2.0	1.9	1.9	1.9	1.9	A	2.0	2.0	2.1	1.9	2.4	2.5	2.4	2.09	2.48		
23-Oct-06	2.2	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.2	2.2	2.0	2.0	2.0	1.9	A	2.0	2.0	2.1	1.9	2.4	2.3	2.3	2.08	2.34		
24-Oct-06	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.00	2.30		
25-Oct-06	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.98	2.19		
26-Oct-06	1.9	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	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.95	2.13		
27-Oct-06	2.3	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	A	2.1	2.0	2.0	1.9	2.0	2.1	2.0	2.0	2.1	2.3	2.2	2.14	2.30	
28-Oct-06	2.2	2.2	2.2	2.3	2.4	2.9	2.5	2.6	2.7	2.5	A	2.3	2.2	2.1	2.1	2.1	2.3	2.3	2.2	2.4	2.1	2.0	2.0	2.29	2.93		
29-Oct-06	1.9	1.9	1.9	1.9	2.1	2.0	1.9	1.9	2.0	A	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.07		
30-Oct-06	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.0	2.00	2.07		
31-Oct-06	2.0	2.0	2.0	2.0	2.0	2.0	2.2	A	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.07	2.23		
Hourly Avg	2.11	2.11	2.12	2.13	2.15	2.16	2.19	2.20	2.17	2.07	2.01	1.99	1.98	1.97	1.97	1.98	2.00	2.03	2.05	2.06	2.11	2.10	2.12	2.13			
Hourly Max	2.65	2.56	2.95	2.52	2.50	2.93	2.64	2.74	2.70	2.49	2.21	2.27	2.16	2.13	2.14	2.18	2.16	2.34	2.29	2.38	3.15	2.39	2.48	2.60			

### HOURLY AVERAGE TABLE

### Total Hydrocarbons (THC)



### Status Flag Characters

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

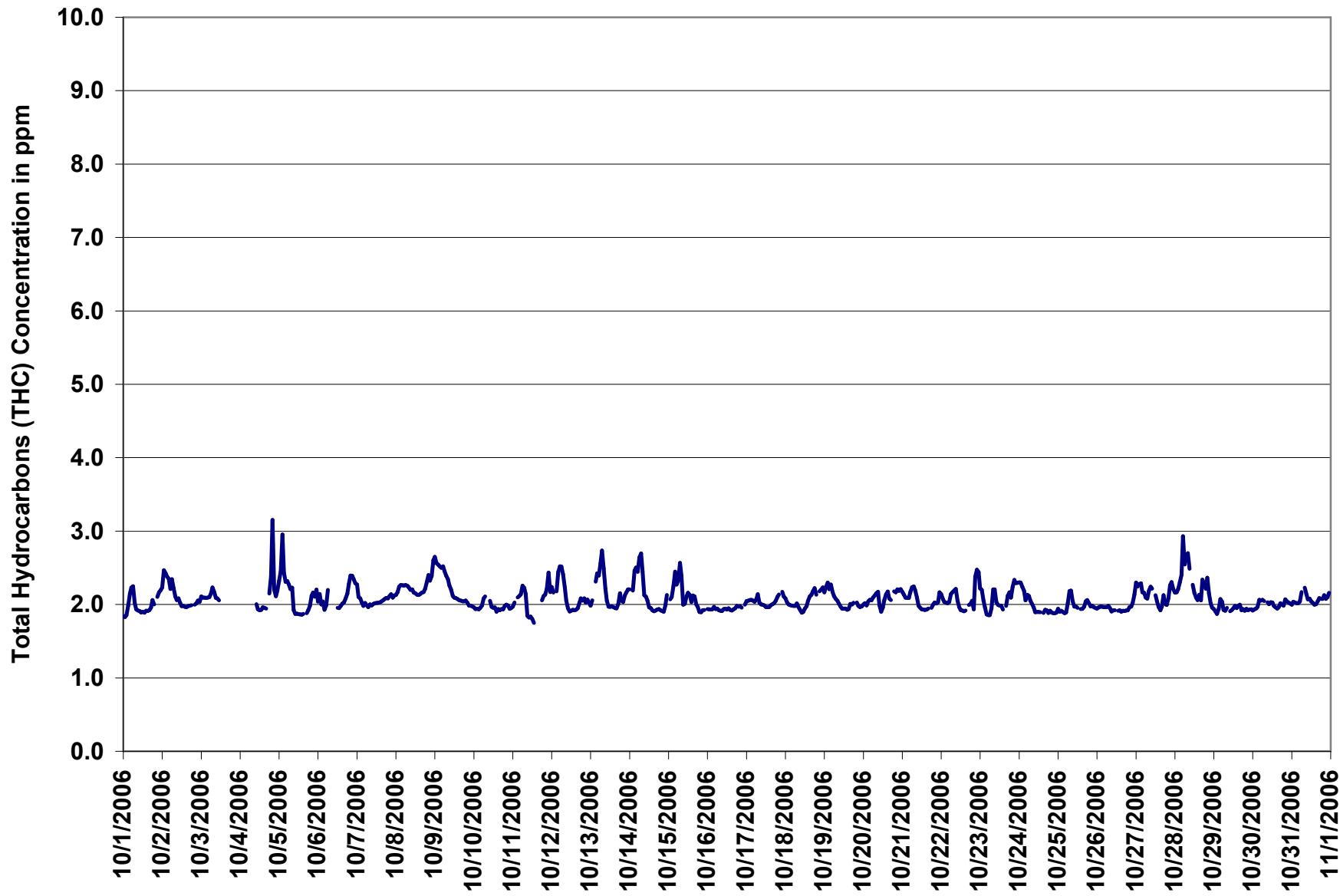


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Total Hydrocarbons (THC)

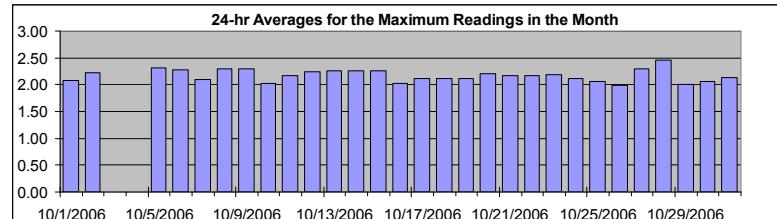
Monitoring Dates: October 1, 2006 to November 1, 2006

#### Summary

Maximum 1-hr Value:	3.6	ppm	5-Oct	2:00 3:00
Maximum 24-hr Value:	2.5	ppm	28-Oct	

AIC Time:	29 hrs	Operational Time:	685 hrs
Calibration Time:	7 hrs	AMD Operational Uptime:	96.9%
Percentile	99 95 75 50 25 5 1	Average	Median
	3.1 2.7 2.3 2.1 2.0 1.9 1.9	2.2 ppm	2.1 ppm

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Oct-06	1.9	1.8	2.0	2.1	2.2	2.3	2.3	2.2	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.1	2.2	2.3	A	2.2	2.4	2.3	2.08	2.39	
2-Oct-06	2.5	2.6	2.6	2.5	2.7	2.4	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.1	2.1	2.1	2.22	2.65	
3-Oct-06	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.4	2.2	2.1	2.2	2.1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.37
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	2.1	2.0	1.9	2.0	2.0	2.0	A	2.5	2.6	3.5	2.7	2.3	2.3	N	3.53	
5-Oct-06	2.5	2.9	3.6	2.9	2.4	2.4	2.5	2.4	2.6	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	2.1	2.0	2.4	2.3	2.2	2.6	2.32	3.62	
6-Oct-06	2.2	2.9	2.1	2.2	2.0	2.1	2.6	M	C	C	C	C	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.5	2.6	2.5	2.4	2.3	2.27	2.88	
7-Oct-06	2.4	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.2	2.10	2.36	
8-Oct-06	2.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.5	2.5	2.4	2.4	2.8	2.30	2.78	
9-Oct-06	2.9	2.7	2.7	2.6	2.5	2.6	2.6	2.4	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.29	2.95	
10-Oct-06	2.0	2.0	2.0	2.0	2.1	2.2	2.2	A	A	2.1	2.2	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	2.03	2.23	
11-Oct-06	2.0	2.1	A	2.1	2.1	2.2	2.4	2.5	2.2	1.9	1.9	1.9	1.8	C	C	C	A	2.3	2.2	2.3	2.6	2.6	2.3	2.18	2.57		
12-Oct-06	2.3	2.2	A	2.3	2.5	2.7	2.6	3.1	3.1	2.1	2.0	2.0	1.9	2.1	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.24	3.13	
13-Oct-06	2.0	2.2	A	2.4	2.6	2.5	2.9	2.8	2.8	2.4	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.1	2.2	2.2	2.2	2.2	2.27	2.92	
14-Oct-06	2.3	A	2.4	2.6	2.6	2.6	3.0	2.9	2.7	2.3	2.2	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.26	2.97	
15-Oct-06	A	2.2	2.2	2.4	2.6	2.4	2.8	2.7	2.7	2.1	2.1	2.2	2.4	2.2	2.1	2.2	2.3	2.1	2.0	2.0	2.0	2.0	2.0	A	2.25	2.75	
16-Oct-06	2.0	2.0	2.0	1.9	2.0	2.0	2.5	1.9	1.9	2.0	2.3	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	A	2.0	2.03	2.52		
17-Oct-06	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.2	2.2	A	2.3	2.1	2.11	2.26	
18-Oct-06	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.2	2.2	A	2.3	2.2	2.11	2.34	
19-Oct-06	2.2	2.3	2.5	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	A	2.1	2.1	2.0	2.12	2.47		
20-Oct-06	2.1	2.1	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.1	1.9	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	3.1	2.3	2.3	2.20	3.15	
21-Oct-06	2.2	2.3	2.2	2.1	2.2	2.3	2.4	2.9	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.1	2.1	2.1	2.17	2.90		
22-Oct-06	2.2	2.1	2.1	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.1	2.0	2.0	1.9	1.9	1.9	A	2.0	2.1	2.1	2.0	2.7	2.7	2.17	2.66		
23-Oct-06	2.4	2.3	2.1	2.1	1.9	1.9	1.9	2.2	2.3	2.3	2.2	2.0	2.1	2.1	2.1	2.1	A	2.0	2.3	2.3	2.3	2.4	2.4	2.19	2.45		
24-Oct-06	2.6	2.7	2.4	2.3	2.1	2.4	2.4	2.2	2.0	2.1	1.9	1.9	1.9	1.9	1.9	A	1.9	2.0	2.0	1.9	2.0	2.0	1.9	2.11	2.74		
25-Oct-06	2.1	2.0	2.0	1.9	1.9	2.1	2.2	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.0	2.2	2.0	2.06	2.30	
26-Oct-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.1	2.2	1.99	2.23	
27-Oct-06	3.1	2.4	2.5	2.5	2.2	2.2	2.2	2.1	2.4	2.3	2.3	A	2.2	2.1	2.0	2.0	2.1	2.2	2.1	2.0	2.2	2.4	2.4	2.5	2.29	3.09	
28-Oct-06	2.2	2.2	2.3	2.4	2.7	3.4	2.7	3.1	2.8	2.7	A	2.3	2.3	2.1	2.1	2.3	2.2	2.6	2.4	2.3	2.6	2.4	2.3	2.0	2.45	3.40	
29-Oct-06	2.0	2.0	1.9	2.0	2.3	2.3	1.9	1.9	2.0	A	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	2.1	2.0	2.0	2.01	2.26		
30-Oct-06	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	A	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.05	2.15		
31-Oct-06	2.0	2.1	2.1	2.0	2.0	2.1	2.3	A	2.4	2.2	2.1	2.2	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.1	2.2	2.2	2.14	2.38		
Hourly Avg	2.23	2.24	2.24	2.21	2.23	2.27	2.34	2.33	2.33	2.15	2.07	2.05	2.03	2.03	2.02	2.03	2.07	2.11	2.14	2.18	2.23	2.22	2.21	2.23			
Hourly Max	3.09	2.94	3.62	2.86	2.71	3.40	2.97	3.06	3.13	2.66	2.28	2.33	2.38	2.19	2.24	2.28	2.31	2.55	2.51	3.15	3.53	2.68	2.66	2.78			



#### 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

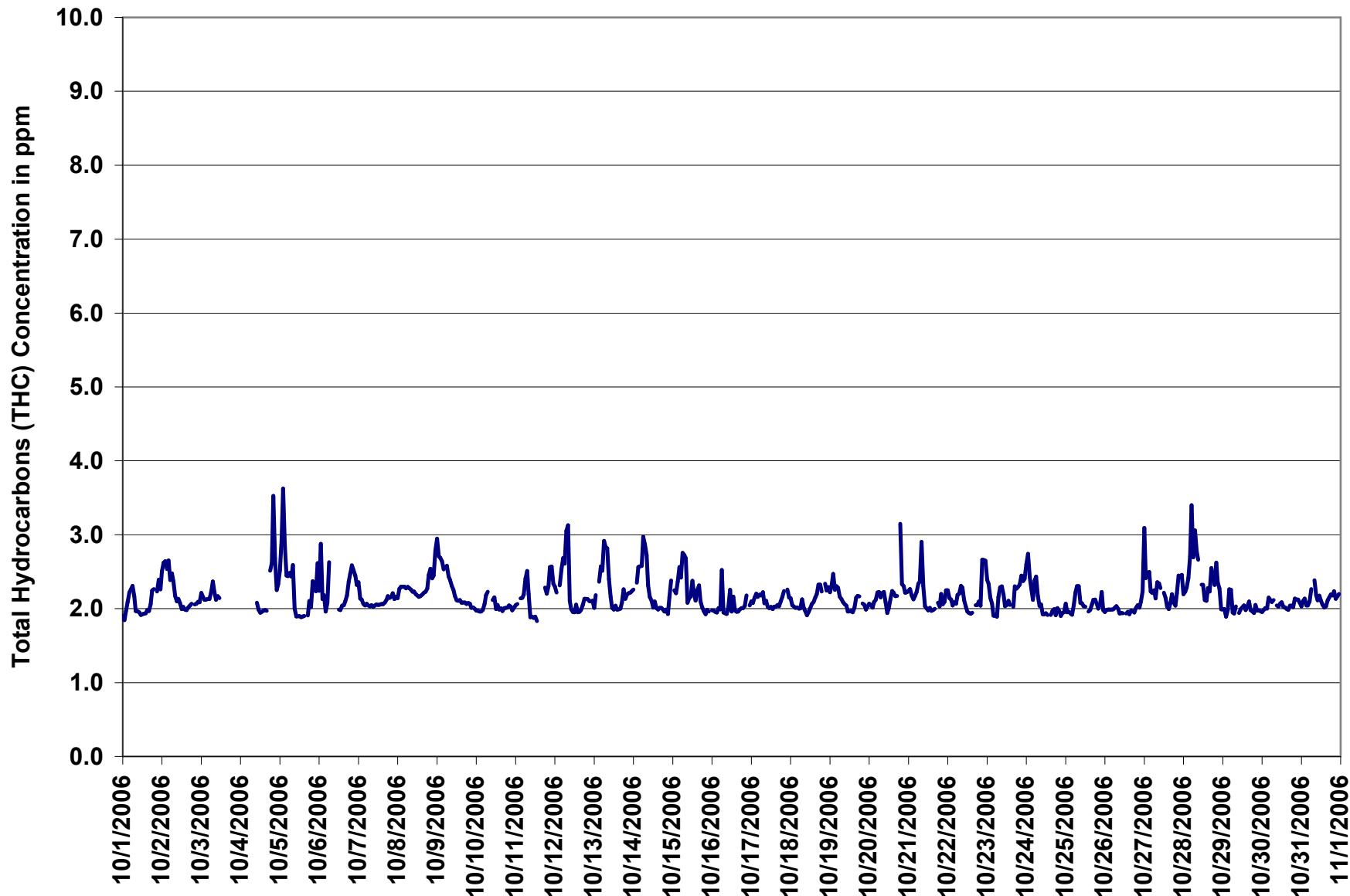
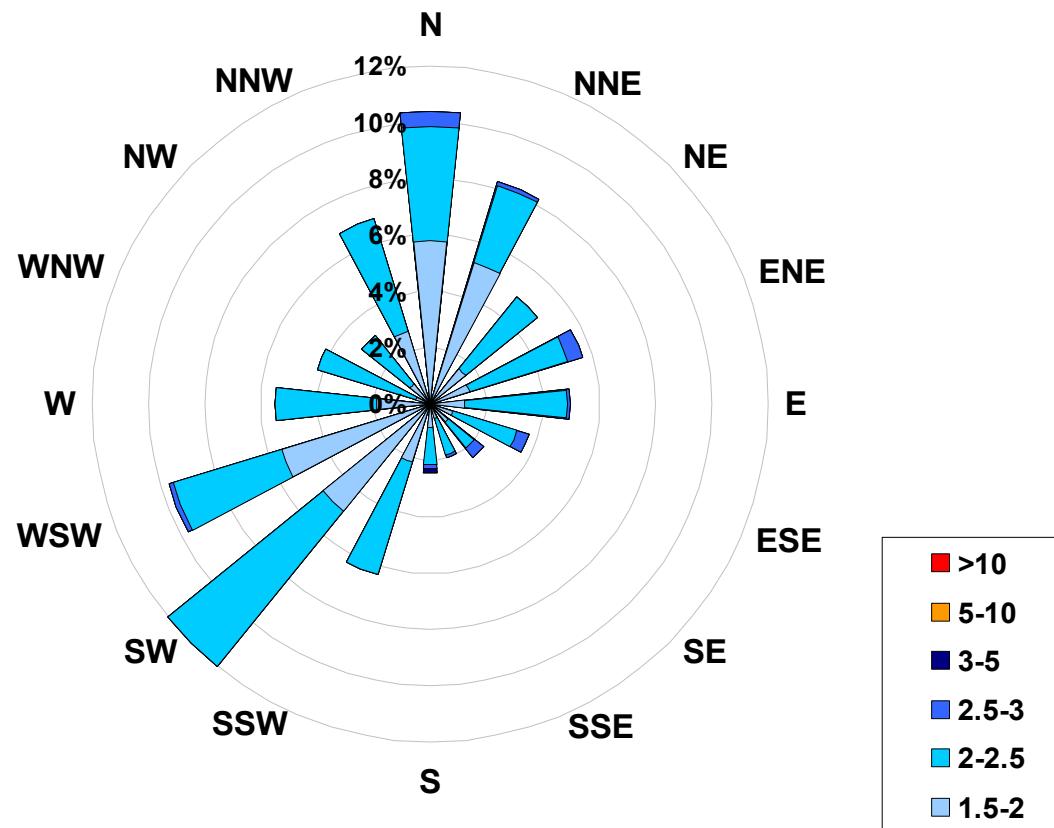


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

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



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

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	274
2	to	2.5	391
2.5	to	3	19
3	to	5	1
5	to	10	0
	>	10	0
Total Non-Zero Values			685



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

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:	22.2 $\mu\text{g}/\text{m}^3$
Maximum 24-hr Value:	6.0 $\mu\text{g}/\text{m}^3$
6-Oct	19:00 20:00
6-Oct	6-Oct

AIC Time:	0 hrs	Operational Time:	695 hrs
Calibration Time:	9 hrs	AMD Operational Uptime:	94.6%
Percentile	99 95 75 50 25 5 1	Average / Median	Geomean
	11.0 7.0 3.5 2.1 0.9 0.0 0.0	2.6 $\mu\text{g}/\text{m}^3$	2.3 $\mu\text{g}/\text{m}^3$

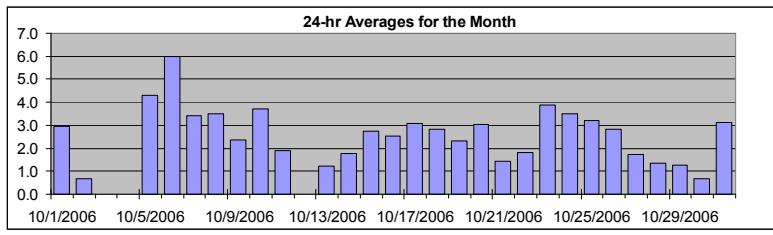
### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	24-hour Average	Daily Maximum
1-Oct-06	12	7	9	7	9	8	7	1	0	0	0	0	D	0	0	0	D	0	0	0	0	0	0	1	2	2	3.0	12.0						
2-Oct-06	1	0	0	4	0	0	2	1	0	0	0	0	D	D	0	0	0	0	0	0	2	1	3	0	0	0.7	3.6							
3-Oct-06	1	0	0	0	1	1	3	3	0	0	0	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.9			
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	N	4	1	1	2	3	1	2	3	8	8	10	11	6	4	N	10.7						
5-Oct-06	8	6	2	2	3	2	11	8	4	0	0	1	0	0	1	2	3	3	4	7	11	11	8	6	4.3	10.8								
6-Oct-06	4	4	1	5	2	3	5	M	C	C	C	C	3	2	9	D	1	0	2	22	16	11	12	6	6.0	22.2								
7-Oct-06	16	2	D	11	0	1	3	1	1	2	2	2	0	3	9	7	2	2	0	4	6	2	1	0	3.4	16.4								
8-Oct-06	5	8	3	5	5	4	4	4	4	3	2	5	2	0	0	2	4	3	2	2	4	5	5	5	3.5	7.8								
9-Oct-06	1	7	7	1	3	0	4	3	2	3	6	D	3	0	0	0	4	0	0	3	1	5	0	1	2.3	7.0								
10-Oct-06	D	6	D	0	11	4	D	0	8	17	2	2	3	6	1	5	2	2	1	3	0	3	1	3	3.7	16.6								
11-Oct-06	2	D	D	0	D	4	4	0	1	3	0	3	0	D	0	0	1	1	2	0	2	3	4	9	1.9	9.0								
12-Oct-06	1	3	4	2	6	9	0	D	C	C	C	C	C	D	D	0	0	0	0	0	0	0	0	0	N	8.6								
13-Oct-06	0	0	0	0	1	1	2	7	3	1	0	0	1	1	1	2	2	3	1	0	0	1	0	2	1.2	6.9								
14-Oct-06	1	1	1	1	1	1	6	4	4	3	3	2	1	1	0	0	1	1	2	2	2	1	1	2	1.8	5.6								
15-Oct-06	2	2	1	2	3	2	1	3	3	6	6	4	3	3	1	2	3	2	2	2	3	3	4	3	2.7	5.9								
16-Oct-06	4	6	4	4	3	3	3	3	3	3	4	1	2	1	1	2	2	1	2	2	2	2	2	2.5	5.6									
17-Oct-06	3	2	2	3	3	4	4	5	3	3	3	2	1	2	3	5	4	4	5	4	4	3	1	0	3.1	5.0								
18-Oct-06	0	1	0	0	1	1	2	3	3	4	3	4	3	3	3	4	3	6	7	2	3	4	4	4	2.8	6.6								
19-Oct-06	4	3	3	3	3	5	3	2	3	2	1	0	1	2	0	1	1	0	2	3	3	2	3	4	2.3	5.2								
20-Oct-06	4	4	3	3	3	3	5	4	6	6	1	0	0	2	1	3	2	3	3	4	4	3	2	3	3.1	6.3								
21-Oct-06	2	2	2	1	1	2	2	2	3	2	1	0	1	1	0	0	1	1	1	2	3	2	2	3	1.4	3.2								
22-Oct-06	1	1	2	2	2	2	1	3	3	2	3	1	0	2	2	2	4	3	2	1	1	1	1	1	1.8	4.1								
23-Oct-06	3	3	3	1	1	3	3	7	7	5	4	4	4	4	4	2	2	4	6	6	6	3	4	4	3.9	6.6								
24-Oct-06	2	2	2	2	3	5	3	4	4	3	1	2	2	3	2	2	4	5	4	5	5	5	4	6	3.5	6.4								
25-Oct-06	6	6	5	4	4	10	7	8	7	4	2	2	1	0	0	0	2	2	2	1	0	1	1	1	3.2	10.1								
26-Oct-06	1	2	2	2	4	5	6	4	3	3	2	2	2	2	2	3	3	4	3	5	3	2	2	1	2.8	6.1								
27-Oct-06	2	2	3	2	2	4	2	2	2	4	3	2	1	0	0	0	0	0	0	0	1	2	4	1	1.7	4.4								
28-Oct-06	1	1	1	2	2	2	0	1	2	3	2	1	0	2	1	1	2	1	2	1	1	1	0	1	1.3	2.6								
29-Oct-06	2	3	2	1	1	2	1	3	2	1	1	1	1	1	1	1	1	0	1	0	1	1	0	1	1.3	3.2								
30-Oct-06	1	0	0	1	2	2	1	2	1	1	0	0	0	0	0	2	1	1	0	1	0	0	0	0	0.7	2.3								
31-Oct-06	0	0	1	1	1	2	7	5	5	4	2	3	3	3	4	4	4	4	4	4	4	3	4	4	3.1	6.7								

Hourly Avg	3.1	3.0	2.5	2.3	2.9	3.1	3.5	3.3	3.1	3.1	2.0	1.9	1.5	1.5	1.7	2.0	2.1	2.1	2.3	3.2	3.1	3.2	2.7	2.5
Hourly Max	16.4	7.8	9.1	11.0	10.9	10.1	10.7	7.9	7.6	16.6	6.1	5.0	3.8	5.6	9.4	7.4	4.7	6.4	7.6	22.2	15.6	11.1	12.1	9.0

### HOURLY AVERAGE TABLE

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



### Status Flag Characters

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

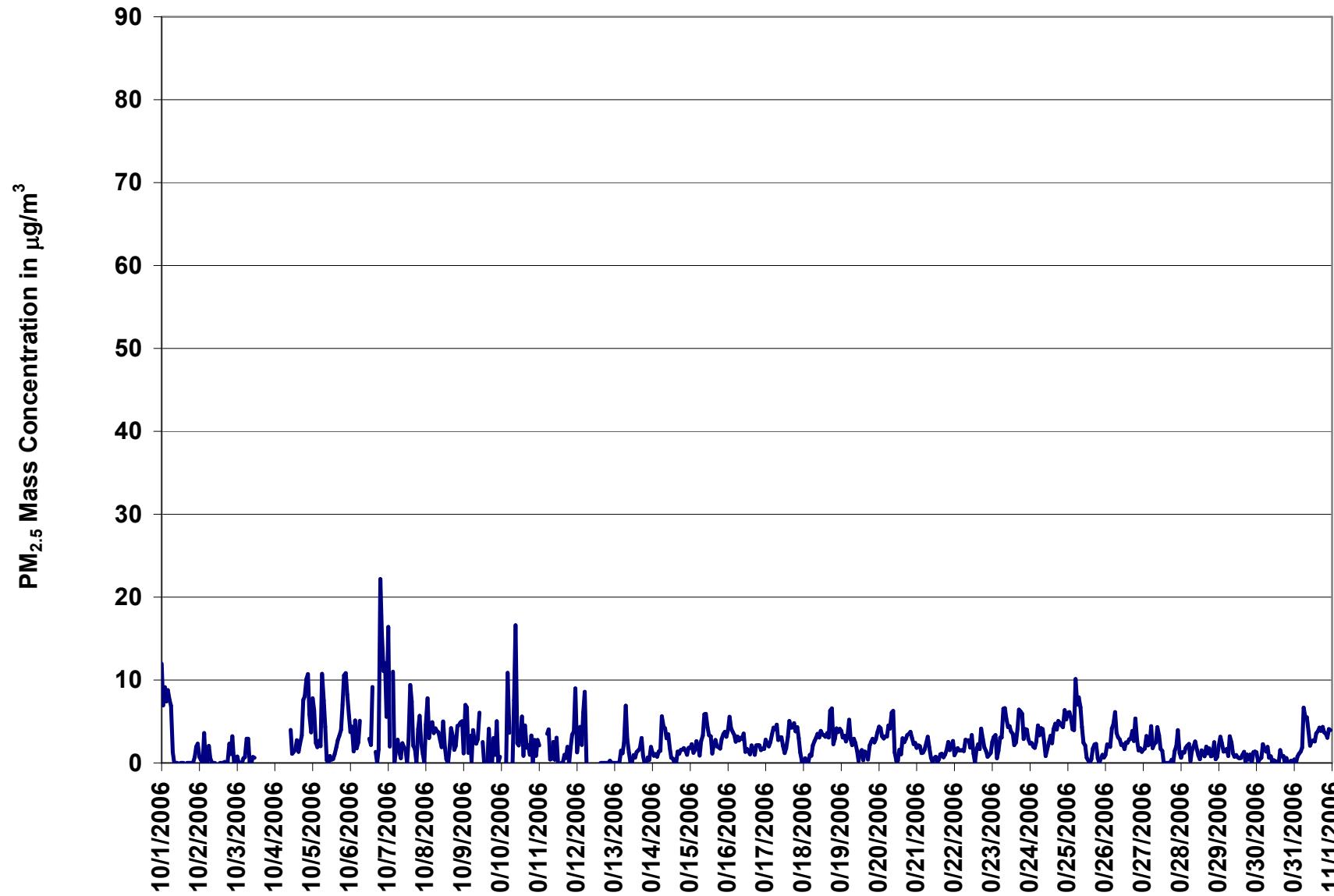


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: October 1, 2006 to November 1, 2006

#### Summary

Maximum 1-hr Average:	110.2	µg/m <sup>3</sup>	7-Oct	0:00 1:00
Maximum 24-hr Value:	23.5	µg/m <sup>3</sup>	7-Oct	

AIC Time:	0 hrs	Operational Time:	695 hrs							
Calibration Time:	9 hrs	AMD Operational Uptime:	94.6%							
Percentile	99 41.9	95 24.7	75 8.6	50 5.9	25 4.0	5 2.1	1 0.8	Average / Median 8.2	6 µg/m <sup>3</sup>	Geomean 7.0 µg/m <sup>3</sup>

#### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Oct-06	28	13	18	13	14	12	14	7	5	4	6	D	5	6	9	D	4	6	5	5	7	9	9	9	8	9.5	27.6
2-Oct-06	10	12	8	12	7	3	6	6	7	4	8	D	6	11	7	8	5	7	9	6	8	3	6	N	11.7	7.2	
3-Oct-06	8	4	4	5	6	7	8	9	5	8	7	6	N	N	N	N	N	N	N	N	N	N	N	N	N	9.3	N
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	10	7	10	10	13	12	11	12	20	16	17	17	11	12	19.6	19.5
5-Oct-06	14	10	7	9	9	5	32	16	11	6	8	8	11	11	12	13	13	13	14	14	20	16	15	9	12.3	31.7	
6-Oct-06	9	11	8	12	8	8	11	M	C	C	C	C	17	12	40	D	26	31	38	47	25	20	17	10	19.3	46.9	
7-Oct-06	110	27	D	64	31	7	15	10	6	9	11	5	25	29	48	24	22	25	32	9	10	11	6	5	23.5	110.2	
8-Oct-06	40	28	12	18	16	22	25	10	20	9	9	12	10	8	4	7	11	14	6	6	20	10	10	17	14.4	39.6	
9-Oct-06	10	40	17	11	17	21	15	21	9	31	47	D	17	2	5	6	21	12	7	8	7	38	4	24	17.0	47.0	
10-Oct-06	D	34	D	13	42	10	D	30	15	73	13	12	15	35	19	33	38	8	7	8	5	8	6	20	21.1	72.8	
11-Oct-06	6	D	D	7	D	16	34	9	6	8	7	11	6	D	27	4	6	8	8	5	6	43	10	19	12.4	42.6	
12-Oct-06	5	24	13	10	14	21	27	D	C	C	C	C	C	D	D	2	0	0	0	1	2	2	2	0	N	26.9	
13-Oct-06	0	2	1	2	6	3	4	8	8	4	1	3	3	3	3	4	3	7	3	3	2	3	3	3	3.5	8.5	
14-Oct-06	3	3	4	2	3	4	16	7	6	5	5	4	2	3	2	3	4	3	4	3	5	4	5	4	4.4	15.8	
15-Oct-06	4	4	4	4	4	4	4	4	6	8	9	7	6	6	5	5	7	4	4	4	6	6	7	7	5.5	8.5	
16-Oct-06	7	9	6	5	5	5	5	4	6	6	6	3	4	4	3	5	4	2	4	3	4	3	3	4	4.4	9.3	
17-Oct-06	4	3	4	4	4	5	12	9	6	5	4	5	3	3	3	6	7	7	6	8	6	7	5	3	5.3	12.1	
18-Oct-06	2	2	1	1	3	3	3	5	6	5	5	7	6	6	6	7	6	24	23	7	6	10	6	8	6.6	23.5	
19-Oct-06	7	5	6	5	5	13	6	8	8	6	5	3	5	5	4	4	4	7	3	6	8	7	5	7	6.0	13.2	
20-Oct-06	8	8	5	6	6	5	7	6	11	8	8	4	2	5	2	6	5	5	4	6	5	6	4	4	5.7	10.7	
21-Oct-06	4	4	5	5	4	4	5	6	4	3	2	5	3	2	3	4	5	2	3	4	4	4	5	5	3.9	5.7	
22-Oct-06	2	3	3	4	4	8	3	6	5	5	5	6	3	4	5	6	5	8	8	5	4	2	2	3	4.6	7.8	
23-Oct-06	4	6	7	2	3	9	6	10	10	7	8	7	8	7	5	6	8	10	11	10	6	7	11	5.2	10.8		
24-Oct-06	5	4	4	3	4	8	5	8	6	5	4	4	5	7	6	8	8	9	9	8	8	6	9	6.4	9.5		
25-Oct-06	11	10	8	7	8	22	9	10	9	7	6	6	3	4	3	3	6	7	7	4	2	3	3	2	6.6	21.7	
26-Oct-06	2	4	4	3	6	7	12	6	5	6	7	6	5	5	6	9	8	8	6	8	8	7	6	6	6.2	11.8	
27-Oct-06	4	4	6	5	5	9	5	7	5	7	7	4	5	1	0	2	3	4	4	3	3	7	3	5	4.5	9.3	
28-Oct-06	2	2	3	5	7	4	2	3	4	5	5	2	5	5	4	4	4	6	4	6	5	4	2	3	4.2	6.8	
29-Oct-06	5	7	5	5	4	5	8	5	5	5	2	2	5	3	3	4	4	4	4	4	6	7	2	4	4.6	8.0	
30-Oct-06	4	3	3	2	4	3	3	4	3	4	1	2	3	1	1	3	2	3	2	3	1	2	3	2	2.6	4.4	
31-Oct-06	3	2	3	3	3	5	27	9	8	6	3	4	5	5	6	5	6	5	5	5	5	5	5	5	5.9	26.5	
Hourly Avg	11.1	9.9	6.3	8.3	8.8	8.8	11.2	8.6	7.2	9.2	7.5	5.6	7.0	7.1	9.0	7.3	8.8	8.5	8.9	7.6	7.4	9.0	6.3	7.3			
Hourly Max	110.2	39.6	18.3	64.2	41.8	22.2	34.4	30.5	20.4	72.8	47.0	12.0	24.7	35.2	48.3	33.2	38.0	31.3	37.7	46.9	24.8	42.6	16.9	23.6			

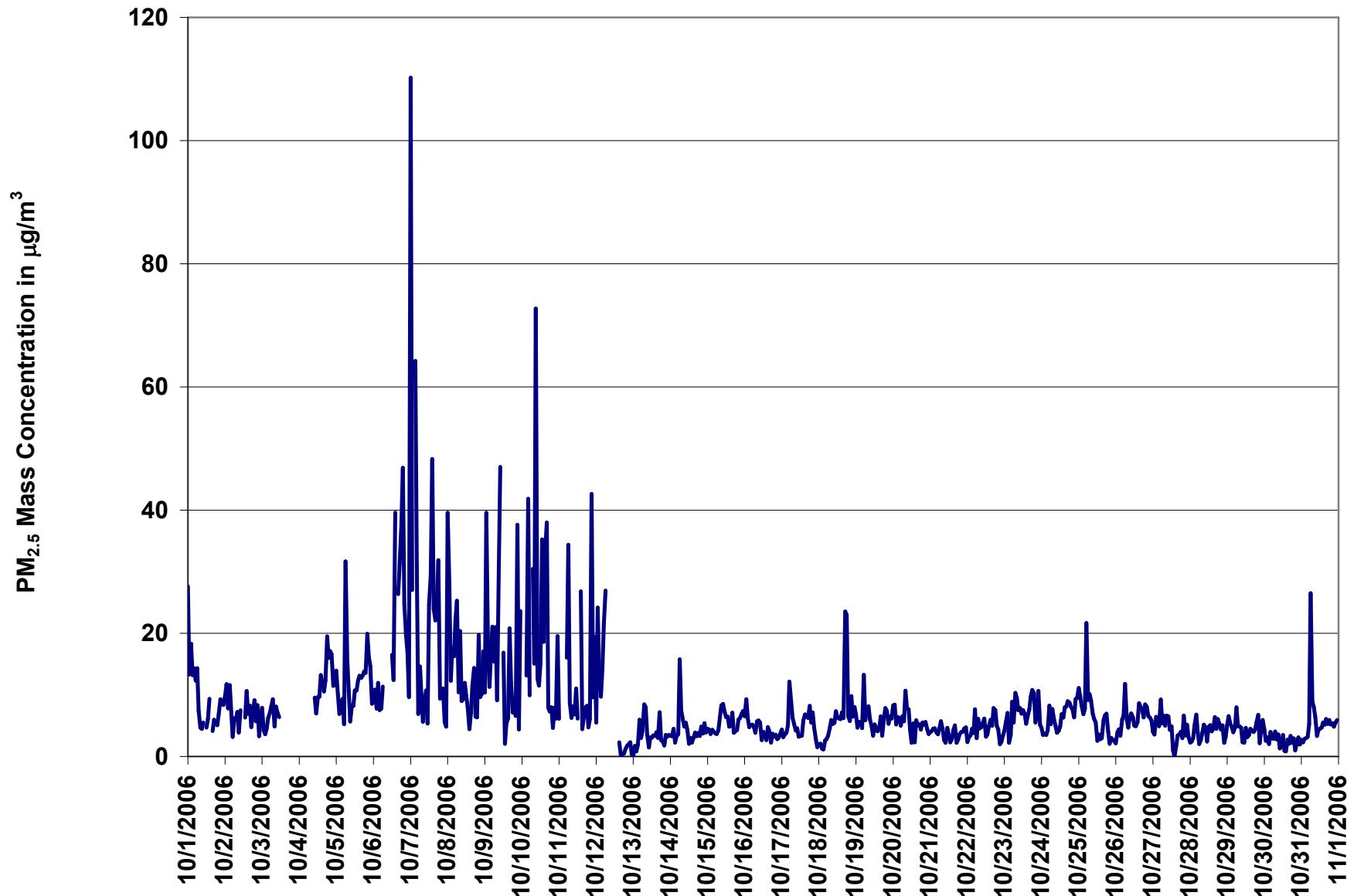
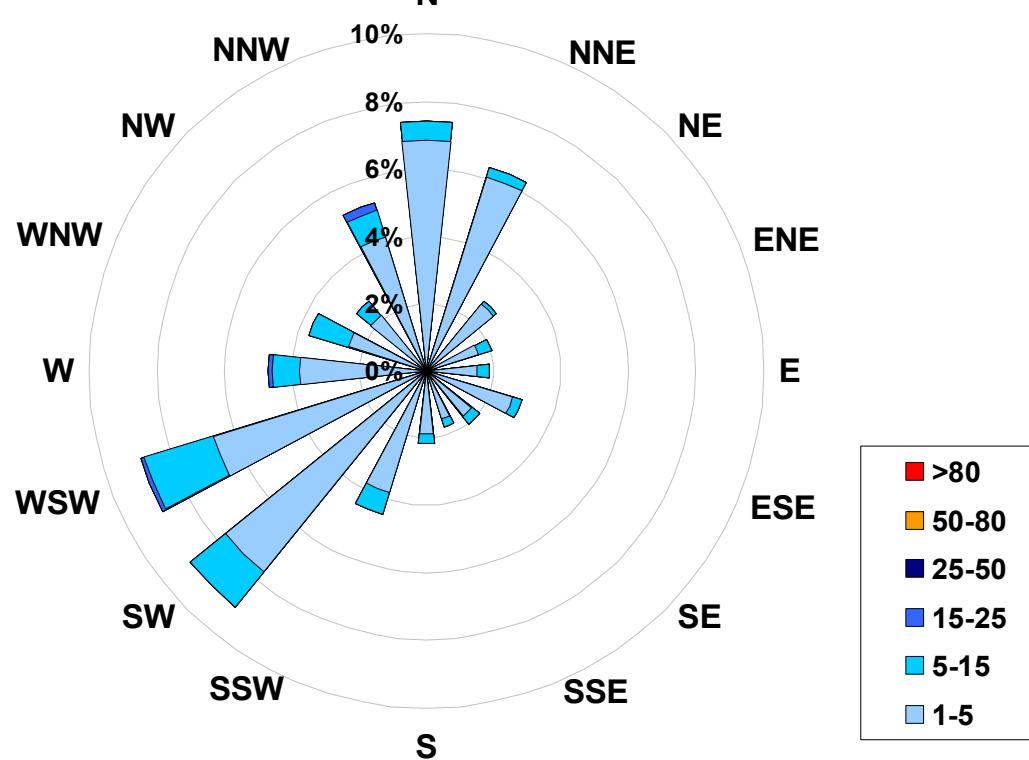


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



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 2006



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

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>		
Range		Frequency (hrs)
1.0	< 5	614
5	to 15	77
15	to 25	4
25	to 50	0
50	to 80	0
	> 80	0
Total Non-Zero Values		695



## PAS - Crescent Heights - Relative Humidity Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

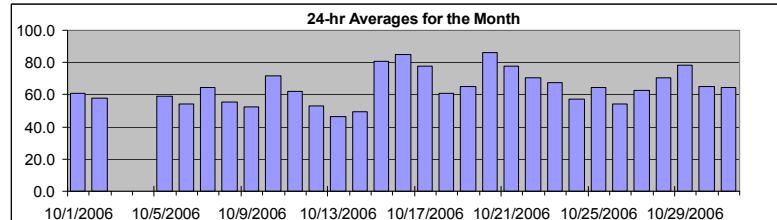
### Summary

Maximum 1-hr Average:	91.3	%	16-Oct	1:00 2:00
Maximum 24-hr Value:	86.3	%	20-Oct	

AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	96.8%
Percentile	99	95	75
	90.5	87.7	78.6
Percentile	50	25	5
	67.1	51.8	34.2
Percentile	1		
	25.5		

### 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	24-hour Average	Daily Maximum
	Hour Start	Hour End																									
	Hour Start	Hour End																									
1-Oct-06	37	35	39	44	59	74	82	82	77	73	69	67	60	53	54	53	52	55	55	60	66	70	74	78	61.1	81.7	
2-Oct-06	78	81	81	82	82	81	83	78	66	55	46	38	35	34	34	36	40	43	45	49	52	54	56	57	57.8	82.7	
3-Oct-06	58	59	59	59	60	61	63	66	63	60	53	48	N	N	N	N	N	N	N	N	N	N	N	N	N	65.7	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	57	51	47	44	43	40	41	47	54	61	67	71	75	79	N	78.8	
5-Oct-06	84	87	89	88	89	89	88	78	68	55	48	43	40	37	32	25	26	32	40	42	52	59	61	62	59.0	89.4	
6-Oct-06	62	66	64	69	63	64	52	M	52	47	41	35	35	35	33	36	44	51	57	63	68	72	70	54.4	71.9		
7-Oct-06	74	73	76	77	78	82	80	79	77	74	68	63	54	49	43	39	41	50	54	58	60	65	66	65	64.4	82.0	
8-Oct-06	71	74	77	78	79	79	75	69	64	54	45	39	37	36	35	37	39	36	40	44	46	49	53	55.7	79.0		
9-Oct-06	59	68	74	78	78	80	83	79	75	68	51	36	27	27	25	23	24	31	39	45	44	43	46	48	52.1	83.2	
10-Oct-06	47	47	49	51	54	58	64	72	71	69	60	62	77	81	83	86	88	87	87	88	89	87	82	83	71.8	89.2	
11-Oct-06	86	77	76	71	68	69	74	75	68	74	71	68	56	43	37	35	31	36	43	49	54	68	79	84	62.2	86.0	
12-Oct-06	85	85	86	86	85	85	86	83	77	65	50	35	28	24	19	22	22	26	32	33	35	38	39	40	52.8	86.0	
13-Oct-06	43	48	56	61	65	66	71	66	56	51	40	33	34	33	33	36	41	41	37	37	41	42	47	46.3	70.8		
14-Oct-06	48	49	51	54	58	61	69	70	64	53	44	38	36	34	29	28	32	40	47	50	52	51	58	65	49.2	70.2	
15-Oct-06	68	65	69	74	73	74	74	75	70	71	81	87	84	84	85	86	88	90	90	89	89	89	90	91	80.7	90.5	
16-Oct-06	91	91	91	90	90	89	88	88	87	86	86	84	84	82	82	81	82	81	82	81	82	79	78	79	84.7	91.3	
17-Oct-06	82	82	81	83	84	84	83	83	79	78	80	74	69	66	65	66	66	69	74	79	82	85	85	77.5	85.0		
18-Oct-06	82	78	75	72	70	68	66	65	61	61	53	44	42	45	51	52	52	55	57	59	60	61	67	60.9	81.9		
19-Oct-06	70	72	74	73	74	73	74	71	65	58	47	46	43	42	43	49	55	62	73	82	82	82	82	65.1	82.5		
20-Oct-06	84	90	91	91	90	91	91	90	90	90	89	85	83	84	83	83	82	79	81	83	84	86	86	85	86.3	90.8	
21-Oct-06	85	84	85	87	88	88	88	88	89	89	86	81	77	77	71	63	63	64	64	70	74	78	82	77.8	88.7		
22-Oct-06	84	86	87	86	85	87	89	89	81	75	66	57	51	47	47	44	46	56	68	72	72	73	78	70.7	89.4		
23-Oct-06	76	76	77	69	60	56	60	65	74	74	69	67	59	51	48	49	53	62	67	74	79	82	84	85	67.4	85.2	
24-Oct-06	87	85	85	84	81	81	78	73	66	58	43	34	32	33	30	28	35	37	44	50	52	55	58	61	57.1	86.9	
25-Oct-06	67	69	69	67	72	75	79	77	80	76	74	67	57	51	43	40	44	54	58	61	65	66	65	68	64.4	79.7	
26-Oct-06	70	70	70	70	68	67	68	65	56	52	46	38	38	37	36	37	40	44	46	45	53	55	60	65	54.0	70.4	
27-Oct-06	67	69	71	71	71	73	75	77	78	76	72	64	54	44	36	33	38	45	49	57	66	71	74	76	62.9	77.8	
28-Oct-06	75	77	75	77	80	80	79	80	78	76	67	63	57	54	53	52	57	63	66	68	72	78	81	83	70.5	82.8	
29-Oct-06	84	80	75	72	71	72	70	76	82	85	86	85	81	81	82	83	83	83	83	87	70	66	66	78.1	85.6		
30-Oct-06	66	67	68	71	73	78	77	76	73	68	64	60	60	51	50	54	54	62	62	64	67	67	68	67	65.2	77.6	
31-Oct-06	68	68	69	70	70	71	72	72	68	63	60	58	55	55	56	63	63	64	65	66	66	66	66	64.7	72.2		

Hourly Avg 71.2 71.9 72.8 73.6 74.1 75.2 76.8 76.3 72.9 68.4 62.3 56.8 53.2 50.3 48.5 48.1 50.0 54.5 57.9 61.3 64.6 66.6 68.7 70.4  
Hourly Max 91.0 91.3 90.8 90.7 90.5 90.6 90.6 90.4 89.8 89.5 89.1 86.5 84.2 84.2 85.0 86.3 87.9 90.2 89.6 88.6 89.2 89.1 90.4 90.5

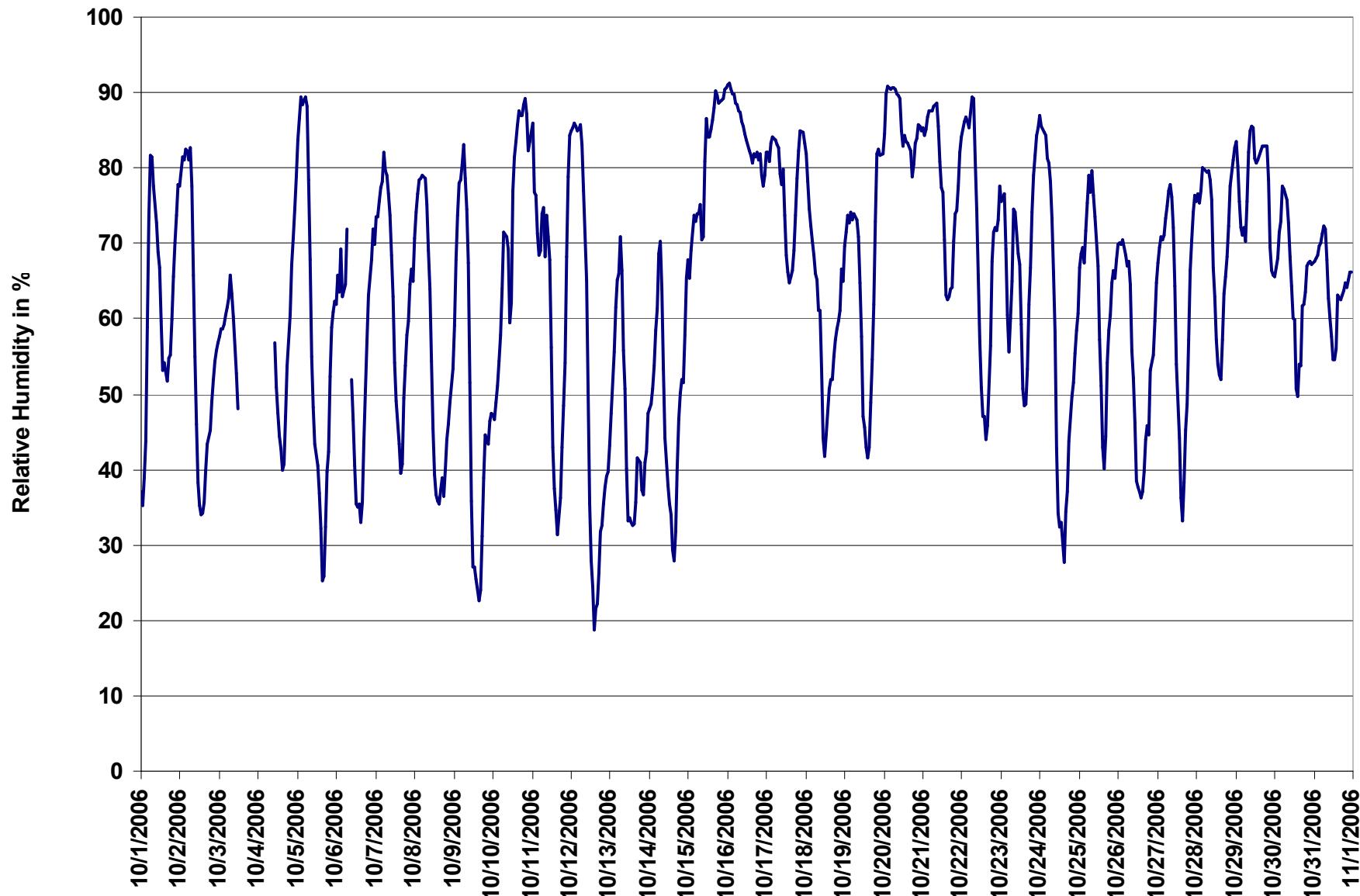


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



## PAS - Crescent Heights - Temperature Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

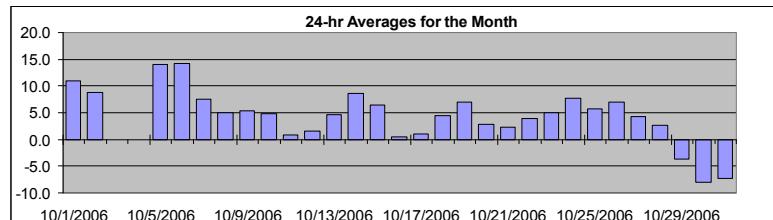
### Summary

Maximum 1-hr Average:	25.1 °C	5-Oct 15:00 16:00
Maximum 24-hr Value:	14.2 °C	6-Oct

AIC Time:	0 hrs	Operational Time:	720 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	96.8%						
Percentile	99	95	75	50	25	5	1	Average	Median
	20.4	14.8	8.7	4.1	0.7	-5.1	-13.5	4.6 °C	4.1 °C

### 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

### Day Mountain Standard Time

	Hour Start 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00 6:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
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	11.0	15.2		
1-Oct-06	14	15	14	12	9	8	7	8	10	11	12	13	14	15	14	14	14	13	11	9	8	7	7	6	8.7	13.7	
2-Oct-06	6	4	4	4	5	5	5	6	8	10	11	13	13	14	14	14	13	13	12	11	9	9	8	8	8	N	11.4
3-Oct-06	7	7	7	7	7	7	6	6	7	8	10	11	N	N	N	N	N	N	N	N	N	N	N	N	N	19.5	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	N	14	16	17	18	18	20	19	17	14	12	10	10	9	8	
5-Oct-06	7	6	5	4	4	4	4	8	12	17	19	20	22	23	24	25	25	22	19	17	15	13	12	12	12	14.1	
6-Oct-06	12	11	12	11	12	11	9	M	15	17	19	20	20	20	20	20	20	20	17	15	13	12	10	9	9	14.2	
7-Oct-06	7	8	9	8	8	8	8	8	7	7	7	8	10	11	11	11	11	8	6	5	5	3	3	3	3	7.6	
8-Oct-06	2	1	0	-1	-1	-1	-2	-1	1	4	7	10	11	12	11	11	10	10	9	8	6	5	5	4	5.1	11.5	
9-Oct-06	3	1	-1	-2	-3	-3	-3	-2	1	5	9	11	12	12	13	13	12	10	8	6	6	6	6	5	5.3	12.8	
10-Oct-06	6	6	6	5	4	4	4	4	4	7	9	9	8	7	6	6	5	4	3	2	2	1	1	1	4.8	9.2	
11-Oct-06	1	0	0	-1	-1	-2	-2	-1	0	0	1	2	4	5	5	6	5	3	2	1	0	-2	-3	-3	0.9	5.7	
12-Oct-06	-3	-4	-4	-4	-5	-4	-4	-3	-1	2	4	6	7	8	8	8	6	5	3	3	3	3	3	3	1.6	7.9	
13-Oct-06	2	1	-1	-2	-2	-3	-4	-2	1	4	7	10	11	12	13	13	12	10	8	6	5	4	2	1	4.6	13.3	
14-Oct-06	2	2	2	2	1	0	0	0	3	7	10	14	16	17	18	18	17	14	12	12	12	12	10	7	8.6	18.2	
15-Oct-06	7	8	7	6	6	6	5	6	7	9	9	8	9	8	7	7	7	6	6	5	4	4	4	3	6.4	9.4	
16-Oct-06	3	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.6	
17-Oct-06	-1	-1	-1	-1	-1	-1	0	0	0	1	1	2	3	3	4	4	4	3	3	2	1	0	0	0	1.0	3.8	
18-Oct-06	-1	0	0	0	1	1	1	1	4	5	8	10	10	9	8	7	7	6	5	4	4	4	4	4.5	10.2		
19-Oct-06	4	4	3	3	3	3	3	3	4	7	9	12	13	14	14	13	12	10	9	7	5	5	5	5	7.0	13.6	
20-Oct-06	4	4	3	3	2	2	2	2	3	4	5	5	5	4	3	2	3	2	2	2	1	1	1	2	2.8	5.2	
21-Oct-06	2	2	2	2	2	1	2	2	2	2	3	3	4	4	4	4	3	3	2	1	2	1	1	1	2.3	4.1	
22-Oct-06	1	0	0	0	0	-1	-2	-1	1	3	5	8	10	11	11	11	10	8	5	4	3	3	3	1	3.9	11.5	
23-Oct-06	2	2	2	2	2	4	5	4	3	2	3	4	5	8	11	12	12	12	9	8	5	4	2	1	1	5.1	12.3
24-Oct-06	0	1	1	0	1	1	2	3	5	9	12	14	14	15	16	17	15	12	10	9	8	7	6	6	7.8	16.8	
25-Oct-06	4	4	4	4	3	2	1	2	4	6	6	8	10	11	12	12	11	8	7	5	4	3	2	2	5.7	12.2	
26-Oct-06	1	1	1	1	2	2	2	3	6	8	11	13	13	13	13	13	11	10	7	5	4	3	2	1	7.0	13.4	
27-Oct-06	2	2	2	3	3	3	3	3	3	4	6	8	9	10	11	9	7	5	4	2	1	1	0	4.3	10.6		
28-Oct-06	-1	-1	-1	-1	-1	-2	-2	-2	-1	1	4	6	8	9	10	10	8	6	5	5	4	2	1	-1	2.7	9.9	
29-Oct-06	-1	-2	-2	-2	-2	-1	-1	-1	-2	-2	-2	-3	-3	-4	-4	-4	-5	-6	-6	-7	-7	-8	-8	-8	-3.7	-0.7	
30-Oct-06	-9	-9	-9	-9	-8	-8	-8	-7	-7	-6	-5	-5	-4	-4	-5	-5	-8	-9	-9	-10	-12	-13	-14	-14	-8.0	-4.2	
31-Oct-06	-14	-13	-14	-14	-14	-14	-13	-10	-6	-4	-3	-2	-2	-3	-3	-3	-3	-4	-4	-4	-5	-5	-5	-5	-7.3	-1.9	
Hourly Avg	2.2	2.0	1.8	1.4	1.3	1.1	0.9	1.2	2.7	4.8	6.8	8.2	8.9	9.5	9.6	9.7	9.0	7.4	6.0	4.9	3.9	3.2	2.5	2.0			
Hourly Max	14.5	15.2	13.7	12.2	11.7	10.7	9.0	8.4	12.1	17.1	19.1	20.5	21.7	23.0	24.3	25.1	24.6	22.0	18.7	17.3	14.6	12.6	11.7	11.5			

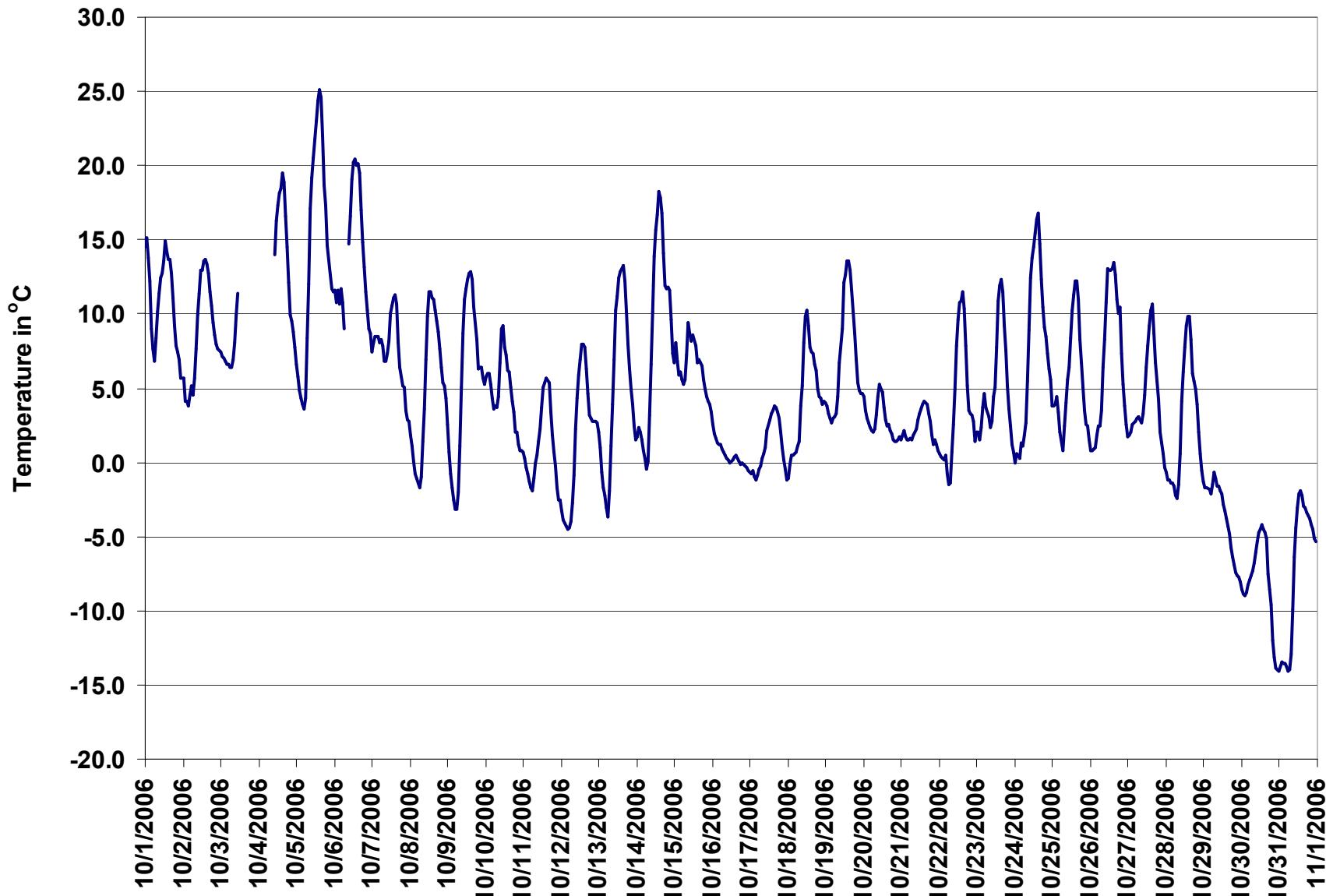


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



## PAS - Crescent Heights - Solar Radiation Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

### Summary

Maximum 1-hr Average:	574.2 W/m <sup>2</sup>	4-Oct 11:00 12:00
Maximum 24-hr Value:	160.0 W/m <sup>2</sup>	5-Oct

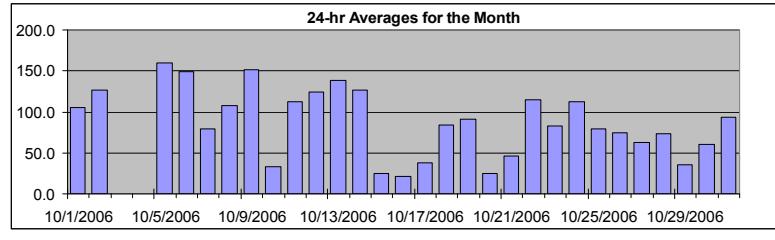
AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	96.8%
Percentile	99 95 75 50 25 5 1	Average	Median
	540.7 419.5 137.9 0.3 0.1 0.0 0.0	89.0 W/m <sup>2</sup>	0.3 W/m <sup>2</sup>

### Day Mountain Standard Time

	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Oct-06	0	0	0	0	0	0	18	142	206	256	403	212	316	414	187	173	153	40	2	0	0	0	0	0	0	105.1	413.7
2-Oct-06	0	0	0	0	0	0	9	77	206	343	415	517	392	432	327	191	104	25	0	0	0	0	0	0	0	126.6	517.2
3-Oct-06	0	0	0	0	0	0	1	16	64	131	205	225	N	N	N	N	N	N	N	N	N	N	N	N	N	N	225.1
4-Oct-06	N	N	N	N	N	N	N	N	N	N	500	574	559	527	318	315	169	29	0	0	0	0	0	0	0	N	574.2
5-Oct-06	0	0	0	0	0	0	10	122	261	400	505	568	568	539	330	333	180	24	0	0	0	0	0	0	0	160.0	567.7
6-Oct-06	0	0	0	0	0	0	4	M	M	380	480	541	543	515	318	312	171	22	0	0	0	0	0	0	0	149.4	543.2
7-Oct-06	0	0	0	0	0	0	1	4	21	125	150	188	314	338	243	305	185	24	0	0	0	0	0	0	0	79.1	338.4
8-Oct-06	0	0	0	0	0	0	6	84	185	210	327	475	510	398	207	134	38	10	0	0	0	0	0	0	0	107.6	510.1
9-Oct-06	0	0	0	0	0	0	6	104	251	385	489	552	550	516	300	307	159	16	0	0	0	0	0	0	0	151.4	551.8
10-Oct-06	0	0	0	0	0	0	0	15	55	117	149	117	132	80	85	35	13	3	0	0	0	0	0	0	0	33.4	148.9
11-Oct-06	0	0	0	0	0	0	11	139	152	188	232	299	402	438	352	300	185	14	0	0	0	0	0	0	0	113.0	438.0
12-Oct-06	0	0	0	0	0	0	3	41	181	319	387	475	387	489	366	229	81	14	0	0	0	0	0	0	0	123.9	488.6
13-Oct-06	0	0	0	0	0	0	4	78	210	346	454	517	514	456	364	282	100	9	0	0	0	0	0	0	0	139.0	517.4
14-Oct-06	0	0	0	0	0	0	3	78	218	347	446	511	397	384	329	200	106	8	0	0	0	0	0	0	0	126.1	510.6
15-Oct-06	0	0	0	0	0	0	2	22	68	72	46	98	120	64	52	25	16	5	0	0	0	0	0	0	0	24.6	120.5
16-Oct-06	0	0	0	0	0	0	0	6	21	33	35	50	65	113	77	75	33	4	0	0	0	0	0	0	0	21.4	113.3
17-Oct-06	0	0	0	0	0	0	1	13	35	40	95	193	178	136	107	65	28	4	0	0	0	0	0	0	0	37.3	192.6
18-Oct-06	0	0	0	0	0	0	2	51	221	255	339	344	311	164	146	99	68	3	0	0	0	0	0	0	0	83.5	344.2
19-Oct-06	0	0	0	0	0	0	1	13	89	184	359	481	301	338	211	157	37	4	0	0	0	0	0	0	0	90.7	481.1
20-Oct-06	0	0	0	0	0	0	0	10	50	40	57	113	81	88	73	50	22	2	0	0	0	0	0	0	0	24.4	113.2
21-Oct-06	0	0	0	0	0	0	0	5	22	85	131	214	210	216	134	61	26	3	0	0	0	0	0	0	0	46.2	215.6
22-Oct-06	0	0	0	0	0	0	1	55	190	304	410	463	392	420	245	206	74	5	0	0	0	0	0	0	0	115.2	463.2
23-Oct-06	0	0	0	0	0	0	1	23	102	144	182	258	297	426	281	185	77	3	0	0	0	0	0	0	0	82.5	426.3
24-Oct-06	0	0	0	0	0	0	1	45	180	303	400	457	451	420	211	197	39	4	0	0	0	0	0	0	0	112.9	457.0
25-Oct-06	0	0	0	0	0	0	0	9	46	80	132	328	412	406	210	212	72	2	0	0	0	0	0	0	0	79.6	411.5
26-Oct-06	0	0	0	0	0	0	1	38	183	186	291	375	215	138	121	180	66	2	0	0	0	0	0	0	0	74.9	374.7
27-Oct-06	0	0	0	0	0	0	0	5	38	76	130	208	256	371	194	184	33	1	0	0	0	0	0	0	0	62.4	370.7
28-Oct-06	0	0	0	0	0	0	0	0	16	75	162	279	254	321	304	198	100	33	1	0	0	0	0	0	0	72.8	321.4
29-Oct-06	0	0	0	0	0	0	0	0	3	24	87	131	139	142	122	114	60	20	1	0	0	0	0	0	0	35.2	142.4
30-Oct-06	0	0	0	0	0	0	0	0	11	65	160	222	260	260	216	143	72	41	2	0	0	0	0	0	0	60.5	260.3
31-Oct-06	0	0	0	0	0	0	0	25	128	277	373	374	421	348	174	94	33	1	0	0	0	0	0	0	0	93.7	421.1

### HOURLY AVERAGE TABLE

### Solar Radiation (SR)



### Status Flag Characters

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

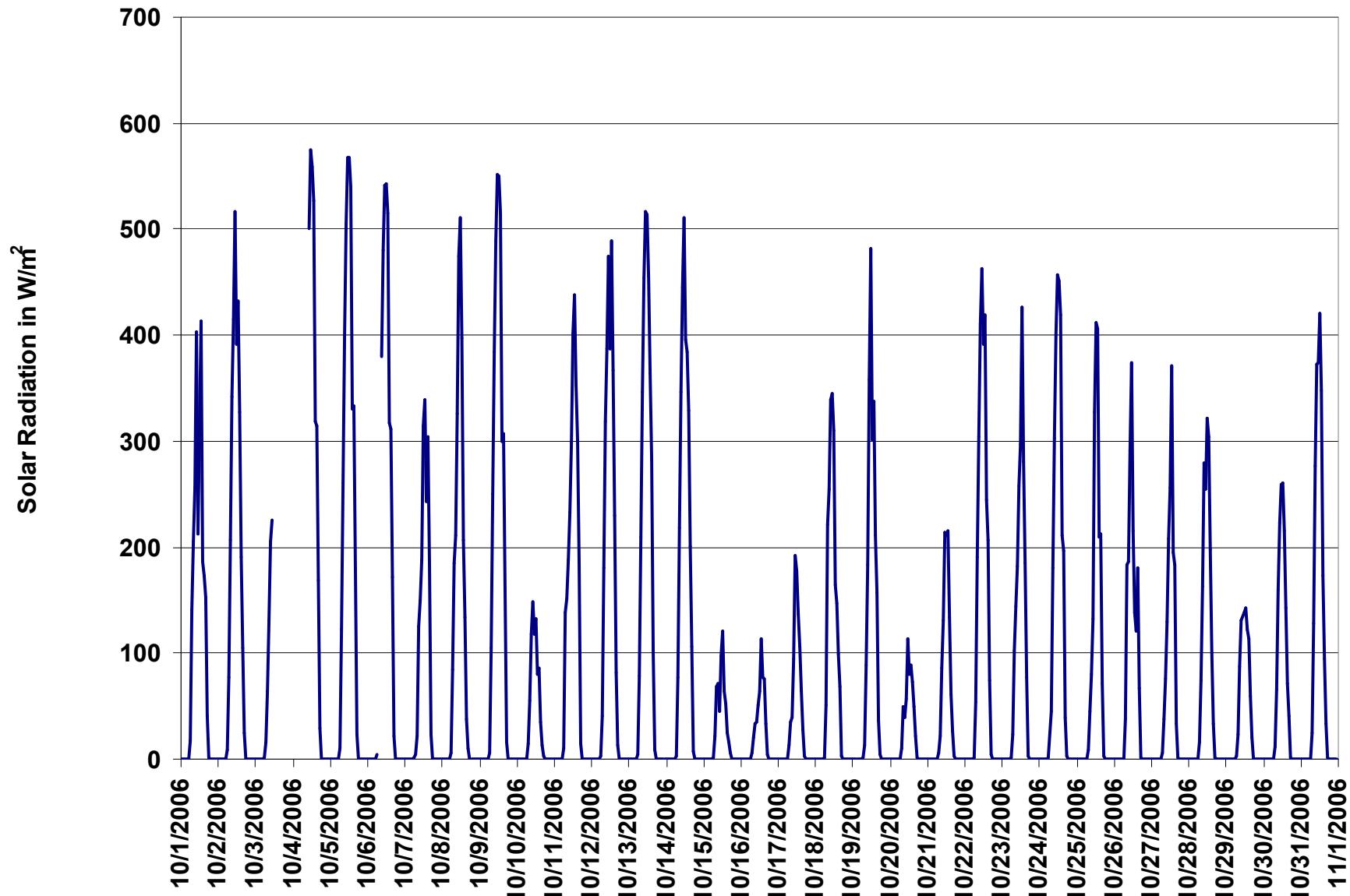


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

### Summary

Maximum 1-hr Average:	27.5 km/hr	24-Oct 11:00 12:00
Maximum 24-hr Value:	18.3 km/hr	29-Oct

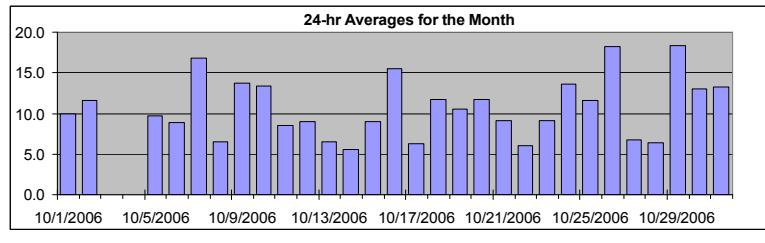
Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	96.8%				
Percentile	99	95	75	50	25	5	1	AverageS
	25.5	21.4	14.0	9.6	5.9	3.6	2.8	10.6 km/hr

### Day Mountain Standard Time

	Hour Start 1:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily Max
	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-06	12	14	10	9	8	11	10	11	12	10	12	12	10	11	12	13	12	8	11	9	7	8	5	5	10.0	14.4	
2-Oct-06	5	6	7	5	10	11	6	6	11	13	13	15	16	14	15	14	16	17	14	11	13	13	12	12	11.6	17.3	
3-Oct-06	13	14	11	11	14	13	9	10	14	13	12	11	N	N	N	N	N	N	N	N	N	N	N	N	N	14.1	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	N	N	5	6	5	7	5	4	4	5	7	5	5	5	4	6.7	
5-Oct-06	3	3	3	3	4	3	3	2	5	9	25	27	24	23	21	18	13	8	4	5	6	7	7	6	9.7	26.6	
6-Oct-06	6	6	7	10	12	5	5	M	M	10	13	13	16	17	14	15	11	6	4	4	4	5	4	8	8.9	17.0	
7-Oct-06	13	13	13	14	16	16	20	22	24	25	23	20	21	21	22	22	21	19	14	10	10	8	8	9	16.8	24.9	
8-Oct-06	8	8	7	7	8	7	8	11	10	8	4	4	7	8	9	6	5	4	6	5	6	3	2	5	6.5	10.8	
9-Oct-06	4	4	5	6	6	6	7	9	9	13	13	17	20	20	21	24	24	20	15	14	18	22	18	17	13.8	24.2	
10-Oct-06	22	21	19	16	14	8	5	8	11	9	12	17	15	13	14	12	16	13	15	13	13	15	11	8	13.3	22.1	
11-Oct-06	10	9	9	6	5	4	5	5	6	8	10	11	15	17	17	15	14	10	5	3	5	4	5	5	8.5	16.9	
12-Oct-06	5	4	4	5	4	4	3	4	6	7	12	13	11	11	12	13	14	16	14	12	10	10	11	12	9.0	15.6	
13-Oct-06	11	9	5	3	3	3	3	3	4	6	7	5	6	6	7	7	8	9	11	13	10	7	6	4	6.5	13.1	
14-Oct-06	3	4	3	2	4	4	4	5	5	5	4	5	6	6	8	11	9	9	7	9	5	5	5	4	5.6	10.7	
15-Oct-06	7	7	8	4	3	7	4	3	8	9	7	6	10	8	10	9	13	15	17	14	13	10	10	14	9.0	17.0	
16-Oct-06	13	16	17	17	15	17	19	21	19	20	16	17	19	18	17	19	16	16	13	12	9	12	9	5	15.6	21.4	
17-Oct-06	5	5	4	5	5	5	5	5	6	6	7	7	8	7	8	6	7	5	6	5	7	10	10	6.3	10.5		
18-Oct-06	13	15	15	15	13	16	20	12	17	20	16	13	13	13	11	8	6	4	5	9	5	5	7	8	11.8	20.4	
19-Oct-06	8	9	11	8	9	11	8	9	7	10	9	5	4	5	6	8	13	15	17	20	21	13	16	13	10.6	21.5	
20-Oct-06	10	12	10	10	10	8	6	3	2	5	15	26	23	23	24	20	19	15	10	6	6	6	6	6	11.8	25.6	
21-Oct-06	7	10	6	4	7	7	6	8	9	15	14	15	16	14	14	11	13	12	8	5	5	5	4	9.1	16.2		
22-Oct-06	3	6	6	6	6	6	5	3	4	5	6	7	8	9	10	9	8	6	7	6	6	5	5	3	6.1	9.7	
23-Oct-06	5	5	4	8	15	14	13	11	10	9	12	11	11	9	13	11	8	7	6	7	8	7	6	7	9.1	14.5	
24-Oct-06	5	4	5	5	4	6	13	9	9	8	18	28	26	25	26	22	18	16	14	15	13	13	9	13	13.6	27.5	
25-Oct-06	8	15	15	15	12	11	8	8	12	10	12	14	13	15	11	14	12	7	9	8	7	8	17	18	11.6	18.3	
26-Oct-06	19	17	18	19	21	23	12	13	25	26	26	27	23	20	23	20	18	16	13	16	11	6	5	5	18.2	27.3	
27-Oct-06	5	5	3	6	6	5	5	6	5	4	3	4	4	8	9	9	10	12	14	14	15	3	4	8	6.7	14.2	
28-Oct-06	6	3	3	3	3	4	6	4	3	5	4	5	8	8	7	6	9	13	9	10	6	7	8	11	6.4	12.6	
29-Oct-06	15	15	15	14	10	13	22	21	16	18	20	21	25	23	22	18	18	20	20	17	20	20	18	17	18.3	24.6	
30-Oct-06	19	17	12	10	12	11	11	13	13	14	15	13	14	14	15	14	14	10	12	10	11	13	13	13	13.0	18.6	
31-Oct-06	13	16	17	13	14	12	10	10	10	11	13	14	16	17	18	15	14	12	13	13	13	11	10	12	13.2	17.5	
1-hr Average	9.2	9.8	9.0	8.7	9.1	9.1	8.7	8.9	10.1	11.0	12.3	13.2	13.8	13.6	13.9	13.1	12.8	11.6	10.7	10.0	9.4	9.0	8.6	8.9			
Hourly Max	22.1	21.1	18.9	19.1	21.2	23.5	22.1	22.1	24.8	25.7	26.5	27.5	26.3	25.5	25.5	23.6	24.2	20.4	19.8	20.0	21.5	21.8	17.8	18.3			

### 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, 2006 to November 1, 2006

### Summary

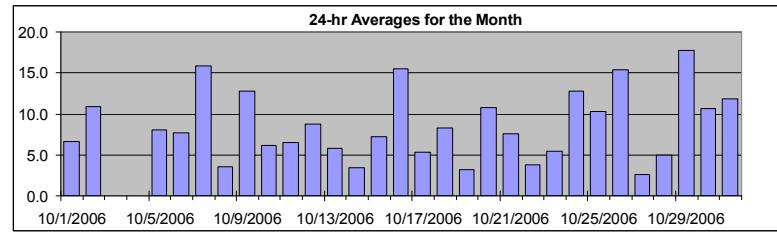
Maximum 1-hr Average:	27.3 km/hr	24-Oct 11:00 12:00
Maximum 24-hr Value:	17.8 km/hr	29-Oct

Calm Time:	2 hrs	0% calms	Operational Time:	718 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	96.8%				
Percentile	99	95	75	50	25	5	1	Average V
	25.3	21.2	13.8	9.5	5.3	2.6	1.5	2.6 km/hr

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max	
	Hour Start 1:00 Hour End 2:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-Oct-06	11	14	9	6	7	11	10	10	11	9	11	12	10	11	11	13	11	8	11	9	7	7	7	4	4	6.7	14.2
2-Oct-06	5	6	6	4	9	11	6	6	11	12	13	14	15	13	14	14	16	17	14	11	13	13	12	12	10.8	17.2	
3-Oct-06	13	14	11	11	14	13	9	10	14	13	12	11	N	N	N	N	N	N	N	N	N	N	N	N	N	14.0	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	3	3	1	5	3	2	3	5	6	3	3	5	4	3	N	6.5	
5-Oct-06	2	3	3	3	4	2	2	1	4	9	24	26	24	23	20	18	13	8	4	5	5	6	6	4	8.1	26.1	
6-Oct-06	5	5	6	9	12	3	4	M	M	9	13	12	16	17	14	14	11	5	4	3	1	5	3	8	7.7	16.7	
7-Oct-06	13	13	13	14	16	15	20	22	23	25	22	20	21	21	21	21	19	14	10	10	8	8	8	8	15.8	24.9	
8-Oct-06	8	7	7	7	8	7	8	11	10	7	3	3	6	7	8	6	4	2	6	5	5	3	calm	5	3.5	10.7	
9-Oct-06	3	4	4	5	6	5	7	9	9	13	12	16	20	19	21	23	24	20	15	14	18	22	18	17	12.8	24.1	
10-Oct-06	22	21	19	16	14	8	2	8	11	8	12	16	15	13	13	12	16	13	14	13	13	15	11	8	6.1	22.0	
11-Oct-06	10	9	8	6	5	4	5	5	5	7	10	11	14	16	17	15	14	10	5	3	4	2	4	5	6.5	16.5	
12-Oct-06	4	4	4	5	3	4	3	4	6	7	11	13	10	10	11	12	13	15	14	12	10	9	11	12	8.7	15.5	
13-Oct-06	10	9	4	3	2	3	2	2	4	5	6	4	5	5	6	7	8	8	11	13	10	6	5	3	5.8	13.0	
14-Oct-06	2	3	3	1	2	3	2	5	5	5	3	4	5	6	4	10	9	9	6	8	4	4	calm	2	3.4	10.4	
15-Oct-06	7	7	8	3	2	7	3	2	6	8	6	5	10	7	10	9	12	15	17	14	13	10	10	14	7.2	16.9	
16-Oct-06	13	16	17	16	15	17	19	21	19	20	16	17	18	18	17	19	16	16	12	12	9	12	9	5	15.5	21.2	
17-Oct-06	5	5	4	5	4	5	5	5	6	7	7	7	7	7	7	6	7	5	5	5	4	6	10	10	5.3	10.4	
18-Oct-06	13	15	15	15	12	16	20	11	17	20	15	13	13	12	11	8	5	4	5	9	3	4	6	8	8.3	20.2	
19-Oct-06	8	9	11	8	9	11	8	8	7	10	8	3	3	1	5	7	13	15	16	20	21	13	16	12	3.1	21.3	
20-Oct-06	10	12	10	10	10	8	6	3	1	4	15	26	23	23	23	20	18	15	9	6	6	6	6	6	10.8	25.5	
21-Oct-06	7	9	6	4	7	7	6	7	9	14	14	15	16	13	14	11	13	12	8	5	5	5	4	3	7.5	16.0	
22-Oct-06	2	5	5	6	6	6	5	2	3	4	5	6	7	9	9	9	8	6	7	6	6	5	4	2	3.8	9.0	
23-Oct-06	4	4	3	8	14	13	13	10	10	8	12	11	11	9	12	11	8	7	6	7	8	7	5	6	5.4	14.3	
24-Oct-06	5	3	5	4	3	5	12	9	8	7	18	27	26	25	25	22	18	16	14	15	13	13	8	12	12.8	27.3	
25-Oct-06	8	14	14	15	11	11	7	8	11	9	12	13	12	14	10	14	12	7	8	8	6	8	17	18	10.3	18.3	
26-Oct-06	19	17	17	19	21	23	12	25	25	26	27	22	20	22	20	18	16	12	14	10	4	4	4	15.4	27.0		
27-Oct-06	5	5	1	6	6	5	5	6	5	4	2	3	1	7	8	9	10	12	14	13	2	2	4	8	2.7	14.1	
28-Oct-06	6	3	2	3	2	4	6	4	3	4	3	4	7	8	6	6	9	12	9	10	4	7	8	11	4.9	12.5	
29-Oct-06	15	15	15	14	10	13	22	21	16	18	20	21	24	23	22	18	18	20	20	17	20	20	18	17	17.8	24.4	
30-Oct-06	19	17	12	9	11	11	13	13	13	14	15	13	14	14	14	15	14	14	10	11	10	10	13	13	10.7	18.6	
31-Oct-06	13	16	17	13	14	12	10	10	10	13	14	16	16	17	15	14	12	13	13	13	11	10	12	11.8	17.3		

HOURLY AVERAGE TABLE

Wind Speed (WSv)



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 - Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Summary												

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs								
Calibration Time:	0 hrs		AMD Operational Uptime:	96.8%								
Percentile	99	95	75	50	25	5	1	Average				
	359.5	352.1	272.0	217.1	79.4	12.9	3.6		306 deg			

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Oct-06	247	268	265	327	319	347	354	359	16	31	348	359	10	21	6	25	28	41	38	59	85	84	82	71	7	N
2-Oct-06	78	22	100	54	18	13	21	24	51	63	87	74	61	62	55	56	37	39	44	35	30	24	42	56	48	NE
3-Oct-06	76	77	75	82	75	81	68	42	44	43	59	62	N	N	N	N	N	N	N	N	N	N	N	N	N	-
4-Oct-06	N	N	N	N	N	N	N	N	N	N	359	239	228	118	113	106	61	24	8	90	172	239	251	344	N	-
5-Oct-06	97	67	102	109	134	164	161	343	196	192	204	210	213	216	228	239	246	265	225	207	167	205	206	177	210	SSW
6-Oct-06	205	209	230	223	239	296	13	M	M	233	240	251	255	247	252	243	277	291	272	335	270	249	265	300	253	WSW
7-Oct-06	327	341	342	336	334	336	348	337	337	343	335	329	328	327	324	320	325	332	317	300	288	261	259	266	327	NNW
8-Oct-06	257	228	210	211	216	216	222	233	227	206	204	41	176	208	206	201	187	34	51	42	332	24	357	357	221	SW
9-Oct-06	70	115	137	157	184	169	191	200	206	213	214	217	227	216	212	218	217	210	222	228	215	208	217	205	210	SSW
10-Oct-06	209	219	234	241	244	247	247	221	233	254	273	321	333	342	3	352	8	6	10	15	10	17	4	359	306	NW
11-Oct-06	360	32	23	31	49	35	10	359	330	316	324	319	348	349	356	353	5	11	360	14	264	178	195	218	354	N
12-Oct-06	135	122	100	114	122	61	71	75	75	83	90	93	97	91	76	78	71	75	87	96	86	59	84	105	87	E
13-Oct-06	104	91	115	48	133	102	63	80	106	74	59	127	62	60	49	50	39	48	85	103	108	95	116	102	83	E
14-Oct-06	112	6	59	63	248	213	136	124	122	134	147	148	124	84	161	180	179	181	173	181	226	187	329	25	156	SSE
15-Oct-06	341	356	353	82	31	354	23	115	193	233	329	46	16	360	360	11	360	1	353	357	359	352	360	13	0	N
16-Oct-06	18	14	18	24	18	18	24	27	28	26	29	23	22	15	18	16	19	19	14	18	12	16	13	358	20	NNE
17-Oct-06	345	338	295	245	274	254	233	245	251	264	256	234	244	267	234	276	258	264	226	211	250	224	205	204	247	WSW
18-Oct-06	205	214	221	220	221	221	217	233	237	234	253	279	285	313	328	339	352	300	2	360	24	262	248	242	250	WSW
19-Oct-06	237	223	234	227	235	241	249	234	228	221	214	197	120	152	81	57	81	98	86	91	93	64	55	52	126	SE
20-Oct-06	357	2	5	359	349	350	350	9	68	305	324	341	333	334	341	336	352	351	340	321	308	284	256	254	339	NNW
21-Oct-06	258	275	290	345	277	281	285	307	324	348	349	350	356	7	3	358	352	347	345	315	323	324	266	239	332	NNW
22-Oct-06	165	225	231	225	239	241	212	257	115	136	130	135	124	151	141	158	160	133	115	122	93	77	47	5	152	SSE
23-Oct-06	209	174	248	235	233	245	254	260	301	300	327	329	6	7	340	317	306	290	293	223	213	190	192	187	276	W
24-Oct-06	147	160	163	218	188	215	207	235	218	192	198	209	209	209	218	219	213	220	238	243	252	258	241	217	217	SW
25-Oct-06	212	237	238	229	242	247	274	295	289	302	332	279	266	238	252	241	231	208	228	223	245	272	236	231	250	WSW
26-Oct-06	239	241	234	238	227	224	251	235	219	227	231	247	250	254	254	244	224	238	248	259	359	34	28	337	242	WSW
27-Oct-06	348	346	163	235	247	251	268	261	233	225	201	115	75	67	87	93	78	84	101	102	81	41	104	135	103	ESE
28-Oct-06	137	113	73	125	90	7	357	3	15	20	38	35	24	31	51	51	51	81	72	86	50	5	349	348	43	NE
29-Oct-06	356	14	25	31	13	16	26	31	17	23	33	21	15	10	5	8	10	358	1	2	352	357	356	344	11	N
30-Oct-06	344	345	327	299	289	280	293	293	304	307	310	300	285	277	276	272	265	255	256	250	219	228	231	220	284	WNW
31-Oct-06	229	235	236	229	230	235	233	245	252	252	274	283	285	295	300	311	291	289	279	279	281	276	274	292	267	W
Hourly Avg	271	286	268	257	260	278	299	304	291	291	299	303	311	314	319	316	334	355	360	14	344	325	291	279		



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

Station: Crescent Heights  
Station Owner: PAS

Monitoring Dates: October 1, 2006 to November 1, 2006

### HOURLY AVERAGE TABLE

### Wind Direction (WD)

#### Summary

Calm Time: 0 hrs 0% calms								Operational Time: 720 hrs							
Calibration Time: 0 hrs								AMD Operational Uptime: 96.8%							
Percentile	99	95	75	50	25	5	1	59.3	44.6	17.4	10.0	6.9	4.6	3.5	

Determined by the Yamartino 15-min interval calculation

#### Status Flag Characters

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

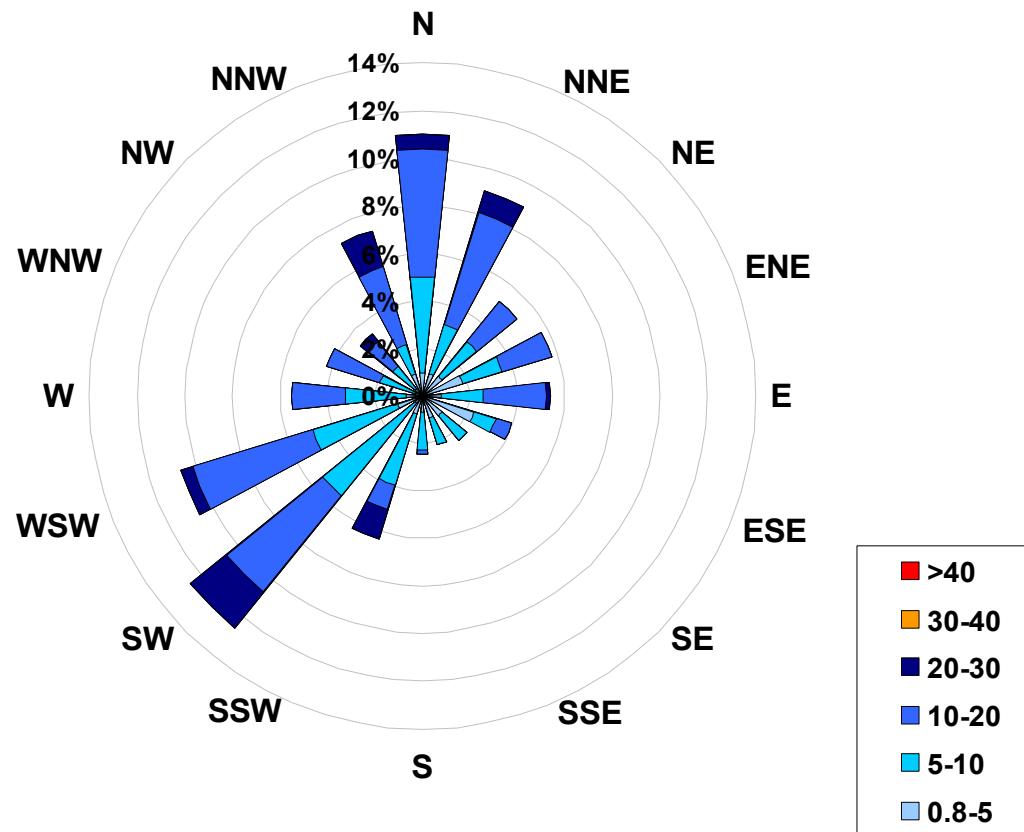
#### Day Mountain Standard Time

	Hour Start 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum	
1-Oct-06	48	6	22	38	11	4	4	6	14	15	12	11	12	17	13	8	8	8	7	10	11	26	23	15	47.9	
2-Oct-06	16	20	18	34	10	7	8	12	10	11	12	17	14	14	16	12	8	6	4	5	7	8	6	7	34.1	
3-Oct-06	7	7	9	8	7	6	9	7	6	6	11	20	N	N	N	N	N	N	N	N	N	N	N	N	19.6	
4-Oct-06	N	N	N	N	N	N	N	N	N	N	55	61	57	34	59	67	34	10	4	29	35	25	33	43	67.4	
5-Oct-06	20	21	22	19	17	55	34	54	55	21	10	9	10	10	12	8	9	9	29	13	29	20	15	34	55.0	
6-Oct-06	16	27	15	13	9	18	17	M	M	19	11	12	12	9	14	13	13	32	22	22	45	17	54	12	53.7	
7-Oct-06	8	6	7	8	7	5	5	5	6	5	6	8	8	8	9	10	9	7	8	8	8	10	8	8	9.9	
8-Oct-06	9	9	23	9	12	6	5	5	9	10	66	48	33	33	15	31	33	50	8	10	43	10	61	8	66.1	
9-Oct-06	18	25	15	9	16	10	14	8	11	9	13	14	10	13	10	9	6	5	7	6	5	6	6	6	24.9	
10-Oct-06	5	6	7	7	7	14	50	10	5	11	9	10	6	8	5	6	6	6	4	8	6	6	7	5	6	49.6
11-Oct-06	7	11	7	9	10	9	6	10	24	15	14	16	11	13	10	11	11	6	9	17	40	46	35	10	46.1	
12-Oct-06	18	13	13	7	25	15	19	14	13	15	15	15	17	24	16	13	8	6	7	6	6	8	8	6	25.4	
13-Oct-06	7	6	11	7	38	17	27	41	25	23	17	46	38	32	39	17	9	6	6	7	9	11	13	20	46.3	
14-Oct-06	31	27	21	39	59	50	39	10	17	17	40	48	33	23	46	12	13	9	12	13	55	51	52	30	58.6	
15-Oct-06	16	8	9	15	21	7	29	44	14	26	48	17	7	8	7	8	10	3	4	4	4	7	5	5	47.5	
16-Oct-06	6	5	5	7	6	6	5	7	7	6	8	8	8	8	7	7	8	6	6	9	7	6	6	8	8.9	
17-Oct-06	6	8	21	18	22	21	12	16	16	17	13	20	20	19	19	22	14	19	24	11	31	9	8	6	30.9	
18-Oct-06	6	5	6	7	10	12	6	20	7	6	8	11	13	12	10	13	28	26	14	6	44	18	20	7	43.5	
19-Oct-06	7	6	4	7	5	6	10	12	11	13	35	66	56	72	23	11	7	6	9	8	8	16	7	12	71.7	
20-Oct-06	8	3	3	5	6	8	10	33	43	39	9	5	5	6	5	6	6	5	8	11	13	15	13	11	43.3	
21-Oct-06	11	7	16	13	11	9	18	11	11	5	7	8	7	10	9	7	8	5	11	14	14	12	14	48	47.9	
22-Oct-06	46	38	35	26	22	8	9	50	35	34	25	27	26	22	21	14	8	9	6	6	5	12	9	18	50.0	
23-Oct-06	26	21	50	19	9	12	9	13	13	14	10	13	12	16	13	11	10	6	10	12	5	18	19	14	50.4	
24-Oct-06	23	33	24	19	34	41	5	25	10	19	8	7	9	8	7	6	7	7	10	10	8	8	22	8	40.7	
25-Oct-06	16	11	11	8	15	11	12	15	9	9	11	10	17	13	17	11	7	6	14	12	28	18	10	5	27.9	
26-Oct-06	3	4	5	4	4	5	18	17	8	6	7	7	7	8	7	6	5	5	7	11	10	19	45	41	45.4	
27-Oct-06	23	31	64	11	15	14	25	18	28	33	59	36	52	18	18	16	6	7	6	8	25	34	9	6	64.1	
28-Oct-06	12	33	25	36	32	37	7	9	9	21	29	26	13	10	13	12	9	6	11	11	40	6	6	6	39.8	
29-Oct-06	5	4	5	6	12	6	6	6	6	6	7	5	5	3	5	5	4	4	4	5	4	5	7	12.1		
30-Oct-06	5	5	7	9	8	7	8	8	9	8	9	12	9	9	8	8	6	8	7	4	4	4	5	11.7		
31-Oct-06	4	4	3	4	4	2	5	11	12	11	10	11	8	10	10	7	8	8	7	6	7	8	9	7	12.3	

Hourly Max 48 38 64 39 59 55 50 54 55 39 66 66 57 72 59 67 34 50 29 29 55 51 61 48



1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site  
for October 2006



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

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	112
5	to	10	262
10	to	20	290
20	to	30	56
30	to	40	0
>	40		0
Total Non-Zero Values			720

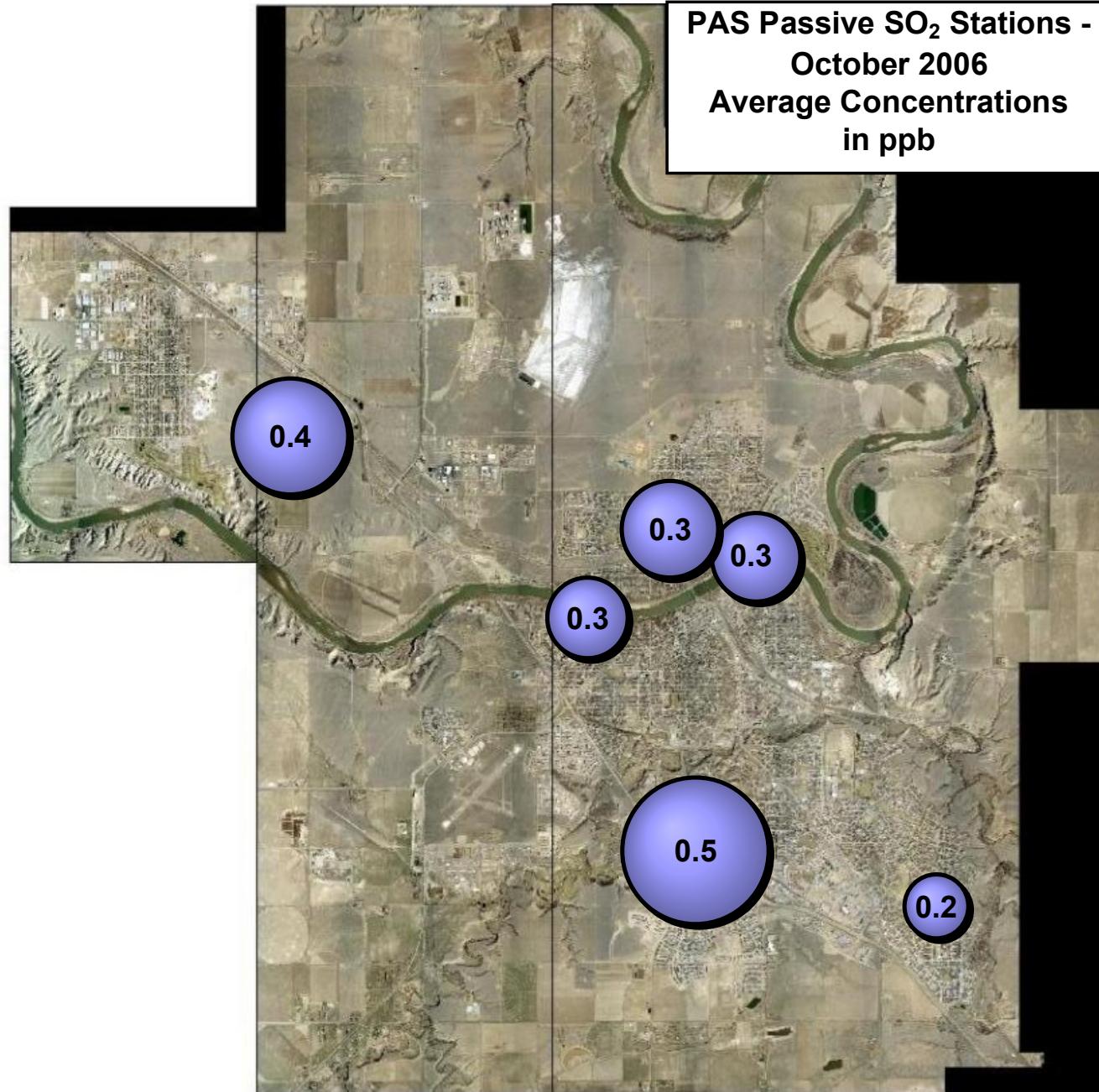


## Passive Monitoring – October 2006

Station Number	Station Name	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Location		
					Easting	Northing	Elevation
<b>Duplicates</b>							
1a	Hospital	0.3	19.0	4.4			
1b		0.3	17.8	5.0			
1	Hospital	0.3	18.4	4.7	521648	5542721	698
2	Ball Park	0.3	17.2	4.9	524019	5543686	660
3	Monitoring Station	0.3	22.6	5.5	522812	5544133	714
4	Redcliff	0.4	23.6	3.3	517448	5545608	725
5	Southridge	0.5	25.2	N/A	523172	5539016	721
6	Christian School Park	0.2	22.8	3.7	526577	5538133	709
Stats:							
Mean	0.4	21.6	4.4				
Standard Deviation	0.1	3.1	0.9				
Minimum	0.2			6	Christian School Park		
Maximum	0.5			5	Southridge		
Minimum		17.2		2	Ball Park		
Maximum		25.2		5	Southridge		
Minimum			3.3	4	Redcliff		
Maximum			5.5	3	Monitoring Station		

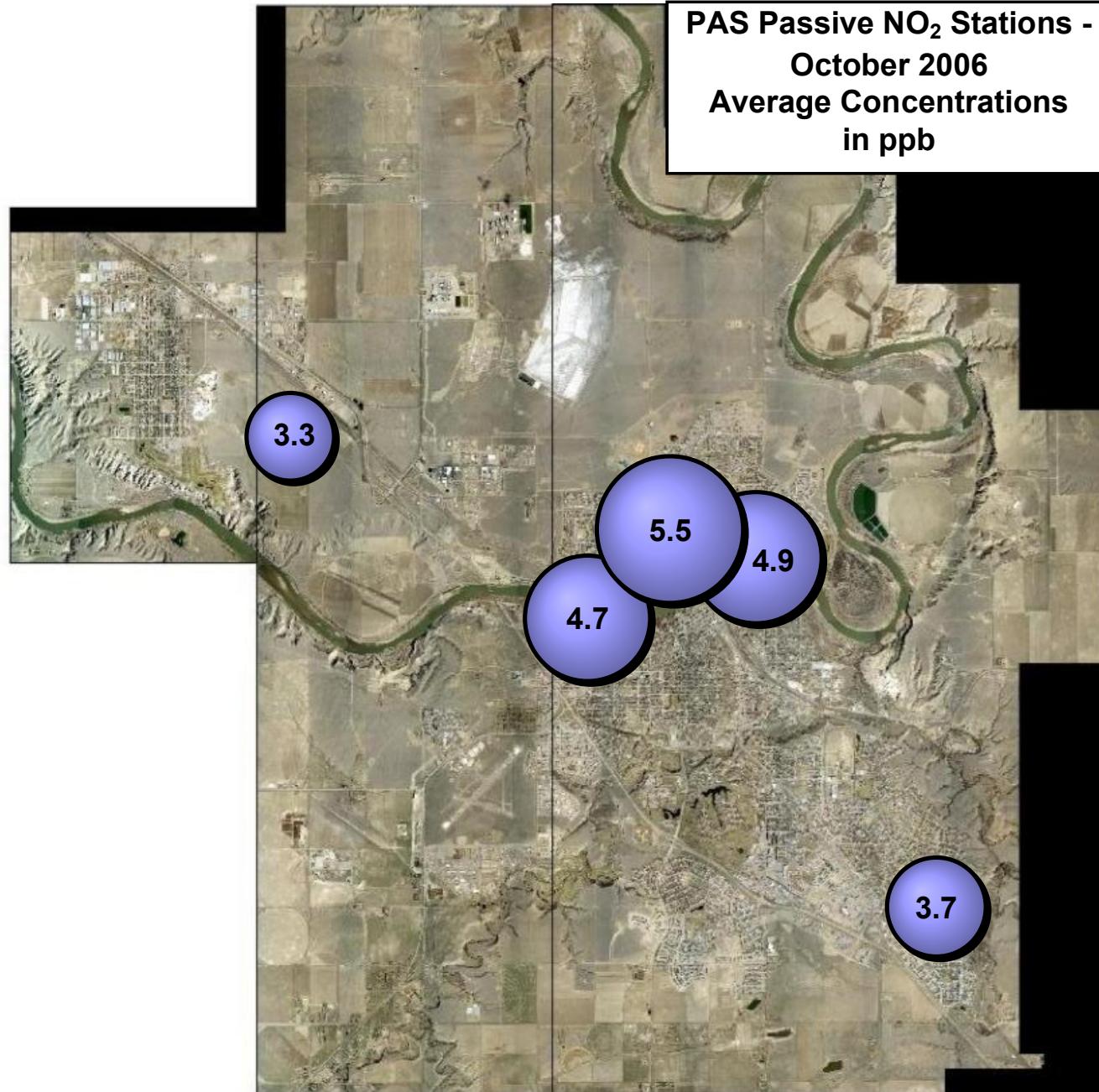


**PAS Passive SO<sub>2</sub> Stations -  
October 2006  
Average Concentrations  
in ppb**



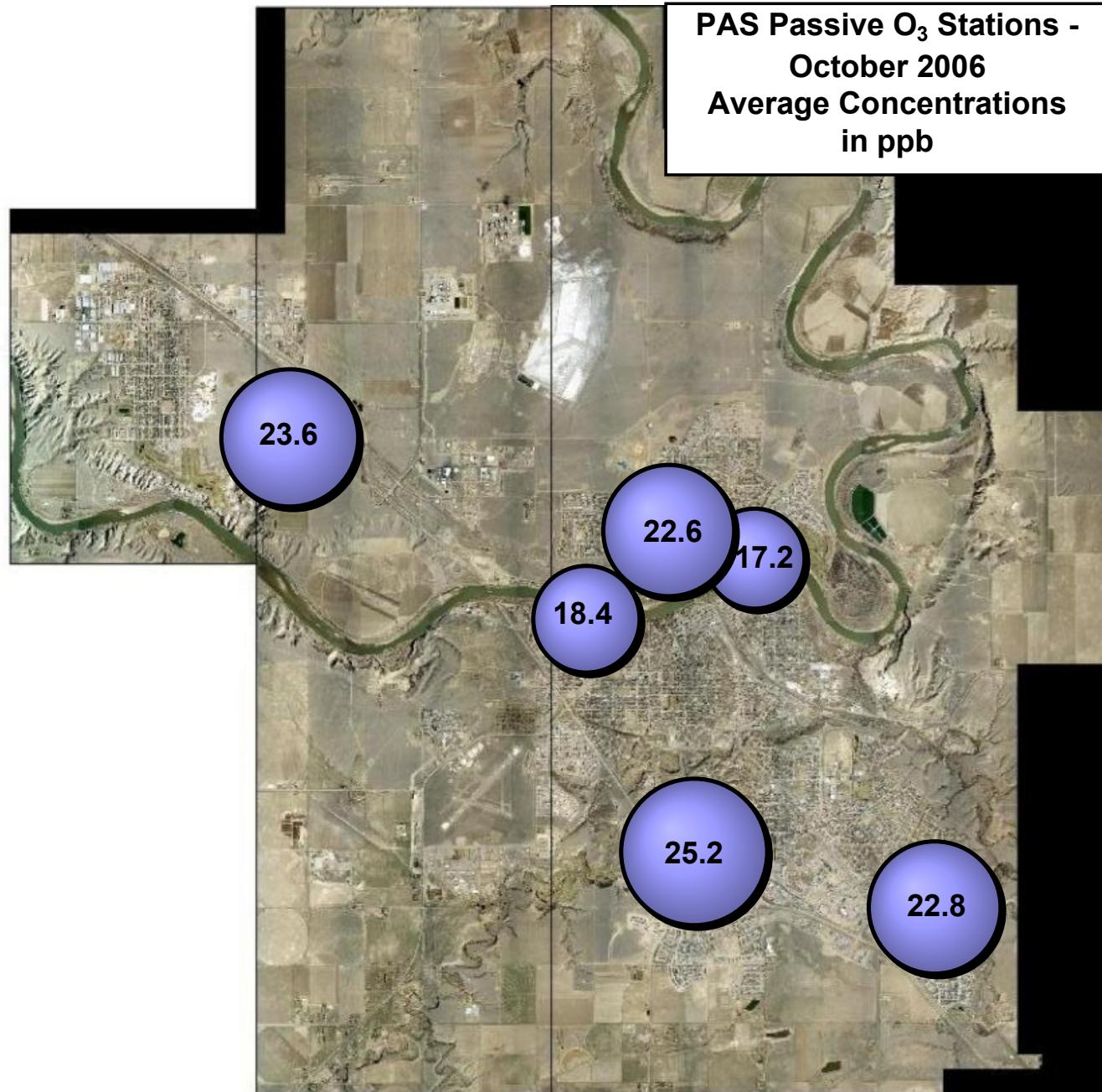


**PAS Passive NO<sub>2</sub> Stations -  
October 2006  
Average Concentrations  
in ppb**





**PAS Passive O<sub>3</sub> Stations -  
October 2006  
Average Concentrations  
in ppb**



# **Palliser Airshed Society**

## **October 2006 - Calibration Reports**

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

## Calibration Report

Parameter

O3

Air Monitoring Network

Palliser Airshed

### Station Information

Calibration Date	October 11, 2006	Previous Calibration	September 21, 2006
Station Number	101	Station Location	Crescent Heights
Reason:	Routine	Calibration	Removal
			Other:
Start Time (MST)	16:20	End Time (MST)	19:00
Barometric Pressure	27.2 inches Hg	Station Temperature	21.9 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	1.021142	Calculated slope	1.022824
Calculated intercept	0.857092	Calculated intercept	-5.097908
Analyzer make	API Model 400E	Analyzer serial #	331
Concentration range Offset Slope Lamp measure Lamp Reference Pressure Sample Flow Sample temp	before	after	
	0 - 500	ppb	0 - 500
	-7.6	ppb	-7.6
	1.113		1.113
	4792.1	mV	4732.6
	4793.1	mV	4732.7
	25.8	inches Hg	26.0
	666	ccm	669
	37.8	Deg C	36.2

### Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.0	-1.0	N/A
4990	300.0	297.9	291.9	1.0205
4990	200.0	202.0	203.5	0.9924
4990	100.0	100.8	112.7	0.8941
4990	0.0	0.0	-1.0	0.0000
4990	300.0	297.9	291.9	1.0205
Average Correction Factor				0.9690

Calculated value of As Found Response: 299.9 ppm Percent Change of As Found: 0.7%

Auto zero Auto span	before calibration		after calibration	
	-1.4	ppb	-7.1	ppb
	344.4	ppb	380.0	ppb

Notes: The Analyzer reads 0 but the AP1000 software is reading around -2 on the as found zero.

Calibration Performed By: Travis Mehrer

**Calibration Summary**

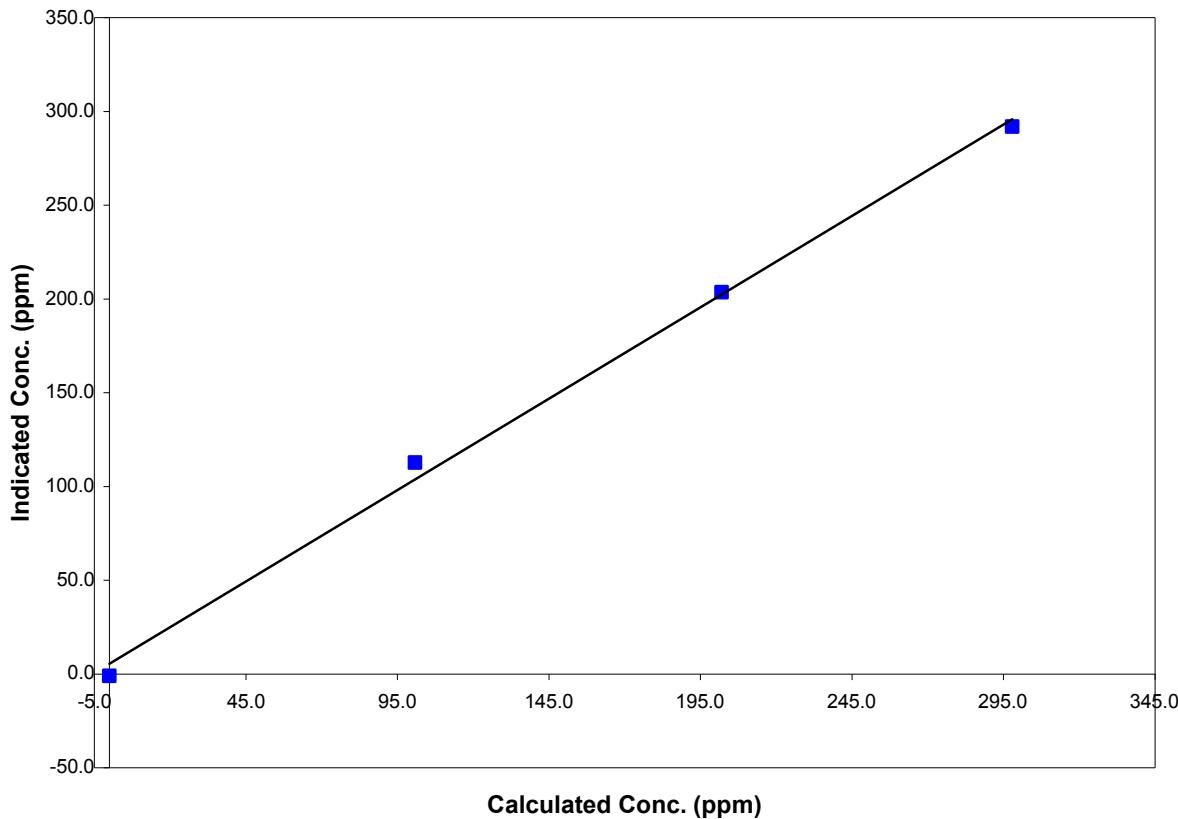
Parameter O3  
 Air Monitoring Network Palliser Airshed

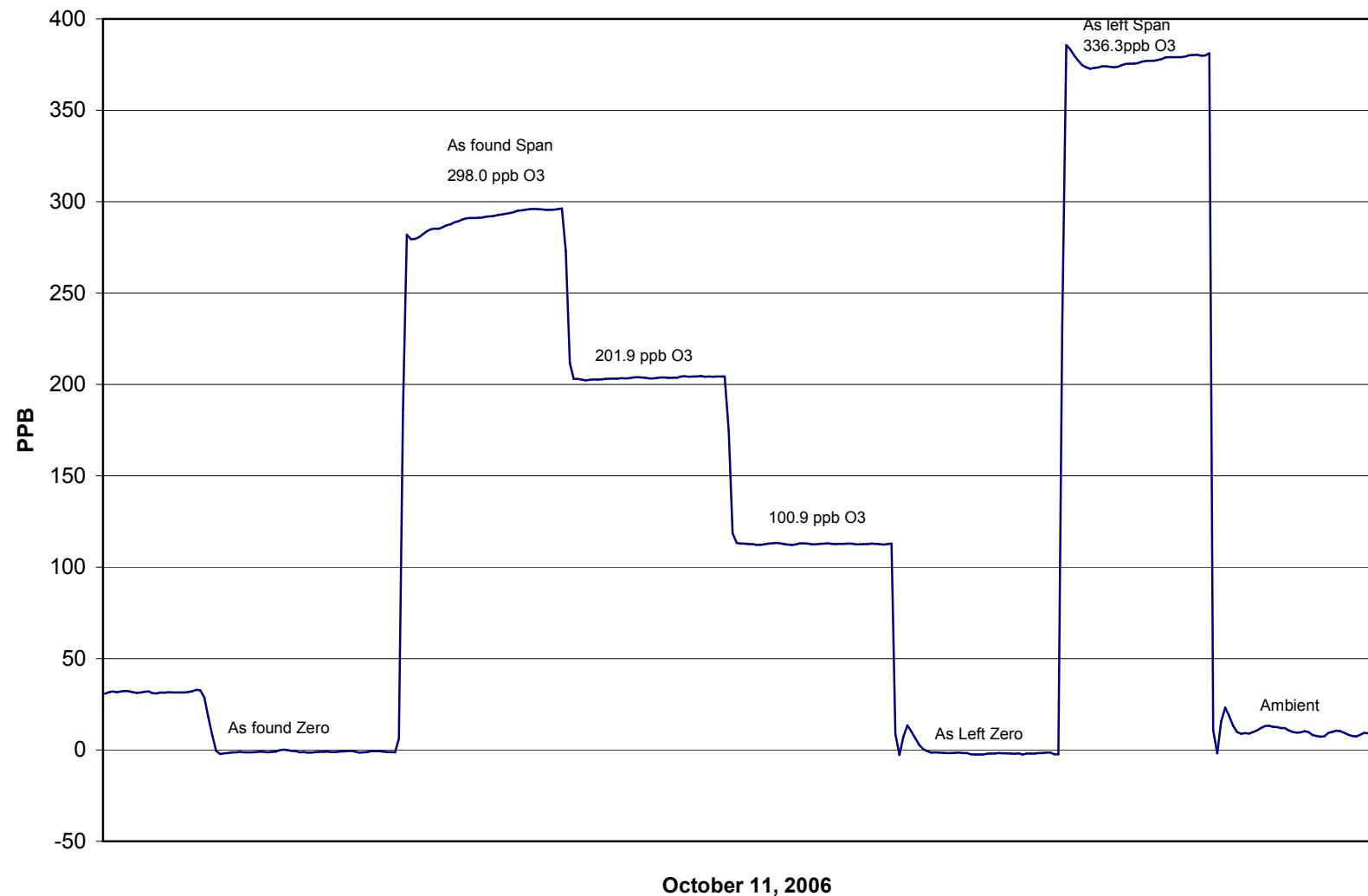
**Station Information**

Calibration Date	October 11, 2006	Previous Calibration	September 21, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	16:20	End Time (MST)	19:00
Analyzer make/model	API Model 400E	Analyzer serial #	331

**Calibration Data**

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
297.9	291.9	1.0205	Correlation Coefficient	0.997041
202.0	203.5	0.9924		
100.8	112.7	0.8941		
0.0	-1.0	N/A		
			Slope	1.022824
			Intercept	-5.097908

**O3 Calibration Curve**

**O3 Calibration**

# Calibration Report

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



## Station Information

Calibration Date	<u>October 11, 2006</u>			Previous Calibration	<u>September 22, 2006</u>	
Station Number	<u>101</u>			Station Location	<u>Crescent Heights</u>	
Reason:	Routine			Installation	Removal	Other: _____
Start Time (MST)	9:00			End Time (MST)	13:28	
Barometric Pressure	27.2	inches Hg		Station Temperature	20.8	Deg C
Calibrator	Environics 6100			Serial Number	3474	
NO Cal Gas Conc	49.9	ppm		Cal Gas Expiry Date	15-Dec-07	
NOx Cal Gas Conc	49.9	ppm		Cal Gas Serial #	LL-50114	

## DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter	NO2	NOx	NO
Before	Data Slope	1.008477	1.008640
	Data Offset	0.072196	-0.240292
After	Data Slope	0.992902	0.991380
	Data Offset	-2.230585	-0.980927
Channel #	8	6	7
Voltage Range	0 - 1 VDC	0 - 1 VDC	0 - 1 VDC

## Analyzer Information

Analyzer make/model API Model 200E Analyzer serial # 219

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	-0.2	mV	-0.2	mV
NOx background	1.1	mV	1.1	mV
NO coefficient	1.243		1.293	
NOx coefficient	1.266		1.314	
Chamber Temp	49.9	Deg C	50.0	Deg C
Cooler Temp	7.0	Deg C	7.0	Deg C
Azero	40.6		40.3	
Perm Temp	40.4	Deg C	40.4	Deg C
Pressure	5.5	inches Hg	5.5	inches Hg
Sample Flow	443.0	ccm	451.0	ccm

Notes: Performed a Span Adjustment...

## Calibration Report

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



### Station Information

Calibration Date: October 11, 2006 Station Location: Crescent Heights

### Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor
zero	4990	0.00	0.0	0.0	0.0	0.7	-1.4	2.0	N/A	N/A
	4990	39.86	395.4	395.4	0.0	399.6	397.0	3.0	0.9897	0.9960
	4990	19.91	198.3	198.3	0.0	201.6	199.6	1.7	0.9836	0.9934
	4990	9.96	99.4	99.4	0.0	101.2	99.9	1.0	0.9815	0.9943
AFZ	4990	0.00	0.0	0.0	0.0	0.7	-1.4	2.0	0.0000	0.0000
AFS	4990	39.85	395.3	395.3	0.0	381.8	380.3	1.6	1.0355	1.0396
								Average Correction Factor	0.9849	0.9946

As Found Concentrations NO<sub>x</sub>= 380.8 NO= 384.2 As Found Percent Change NO<sub>x</sub>= -3.7% NO= -2.8%

### GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.86 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NOx Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	393.2	392.3	0.9	397.6	394.4	2.0	N/A	N/A	N/A	N/A
300	395.9	296.3	99.6	400.3	297.7	102.8	0.9889	0.9954	0.9684	103.3%
200	397.8	198.1	199.6	402.2	198.8	203.5	0.9889	0.9965	0.9808	102.0%
100	396.2	101.8	294.4	400.7	101.9	298.5	0.9889	0.9997	0.9863	101.4%
						Average Correction Factor	0.9889	0.9972	0.9785	102.2%

### AIC Data

	Previous calibration				Current calibration					
	Parameter	NOx	NO <sub>2</sub>	NO	ppb	NOx	NO <sub>2</sub>	NO	ppb	
Auto zero	2.1	-0.7	2.1		ppb	-1.4	-4.3	-0.7	ppb	
Auto span	413.7	404.2	8.6	ppb		389.0	383.1	3.0	ppb	

Calibration Performed By: Travis Mehrer

## Calibration Summary

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



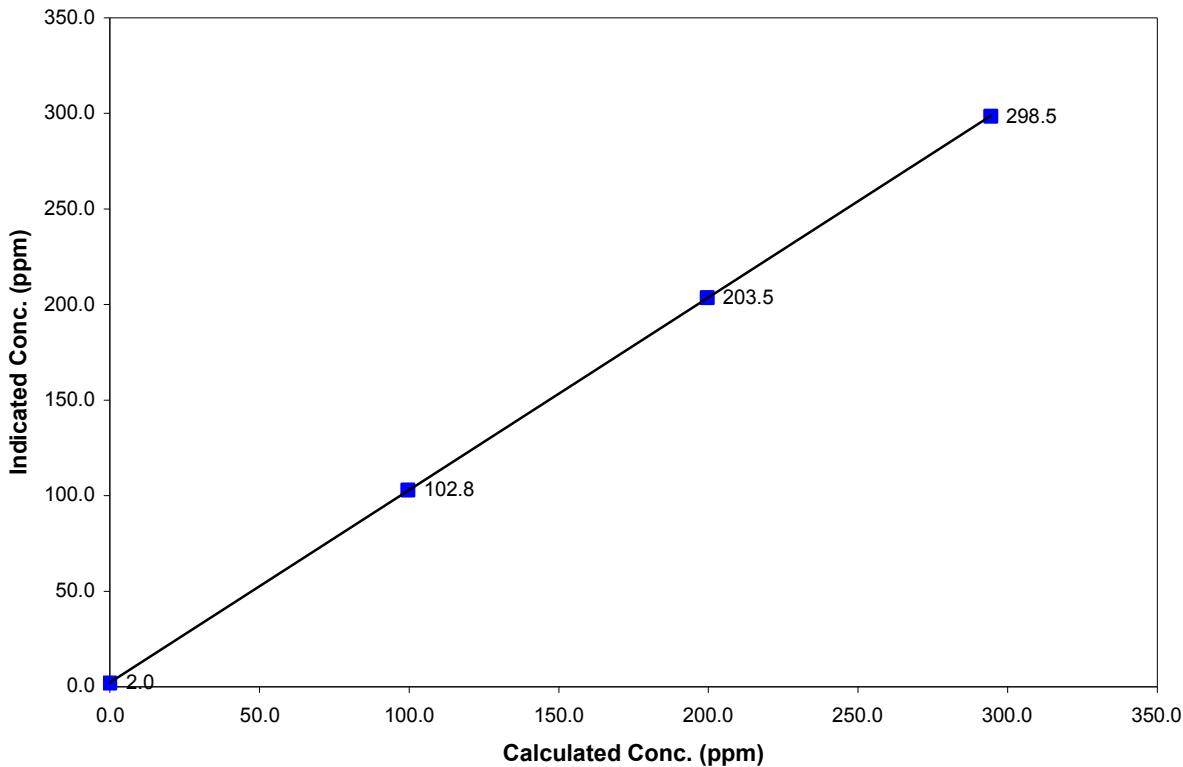
### Station Information

Calibration Date	October 11, 2006	Previous Calibration	September 22, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:00	End Time (MST)	13:28
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	2.0	0.0000	Correlation Coefficient	0.999994
99.6	102.8	0.9684		
199.6	203.5	0.9808		
294.4	298.5	0.9863		
			Slope	0.992902
			Intercept	-2.230585

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



## Calibration Summary

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



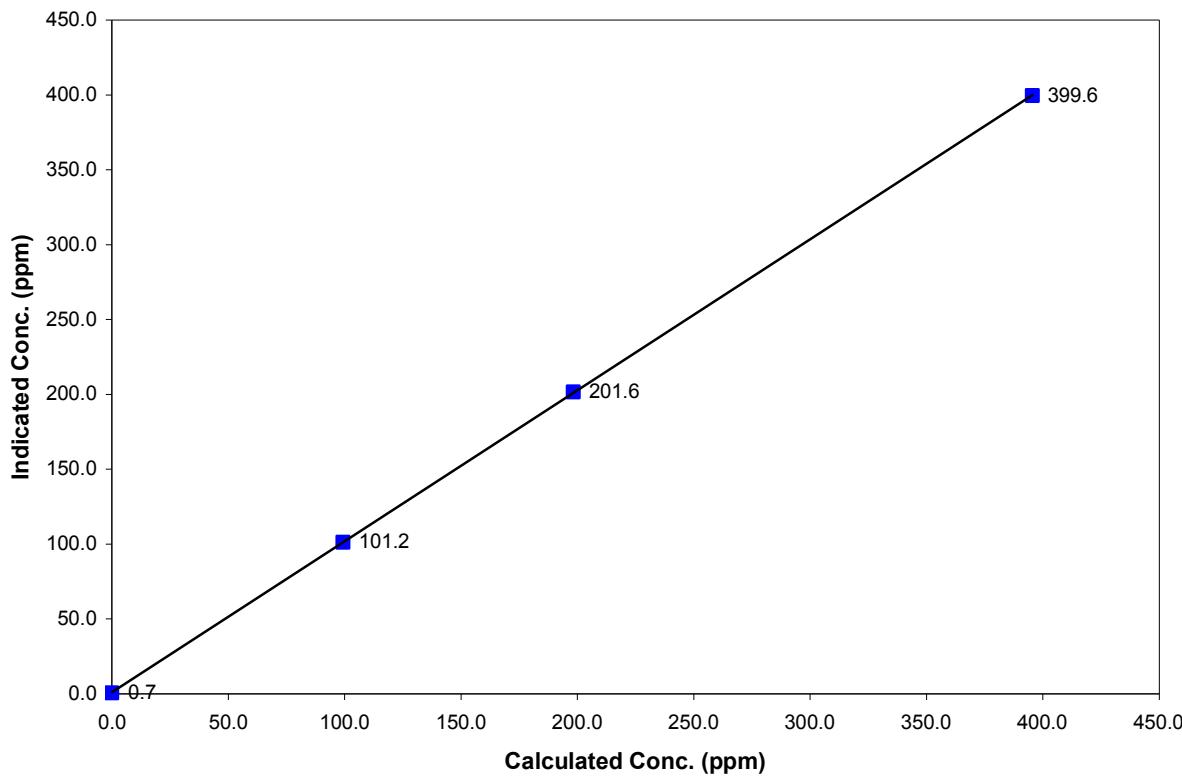
### Station Information

Calibration Date	October 11, 2006	Previous Calibration	September 22, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:00	End Time (MST)	13:28
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	0.0000	Correlation Coefficient	0.999994
395.4	399.6	0.9897		
198.3	201.6	0.9836		
99.4	101.2	0.9815		
			Slope	0.991380
			Intercept	-0.980927

### NOx Calibration Curve



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed



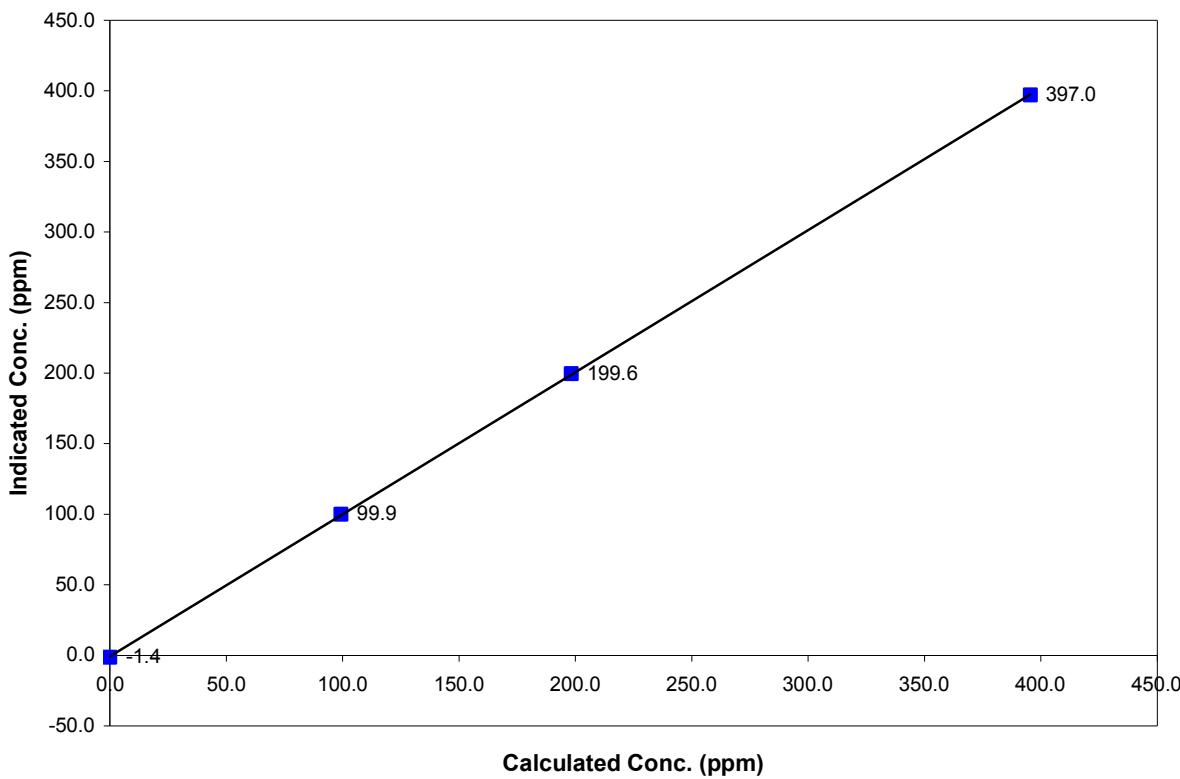
### Station Information

Calibration Date	October 11, 2006	Previous Calibration	September 22, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:00	End Time (MST)	13:28
Analyzer make	API Model 200E	Analyzer serial #	219

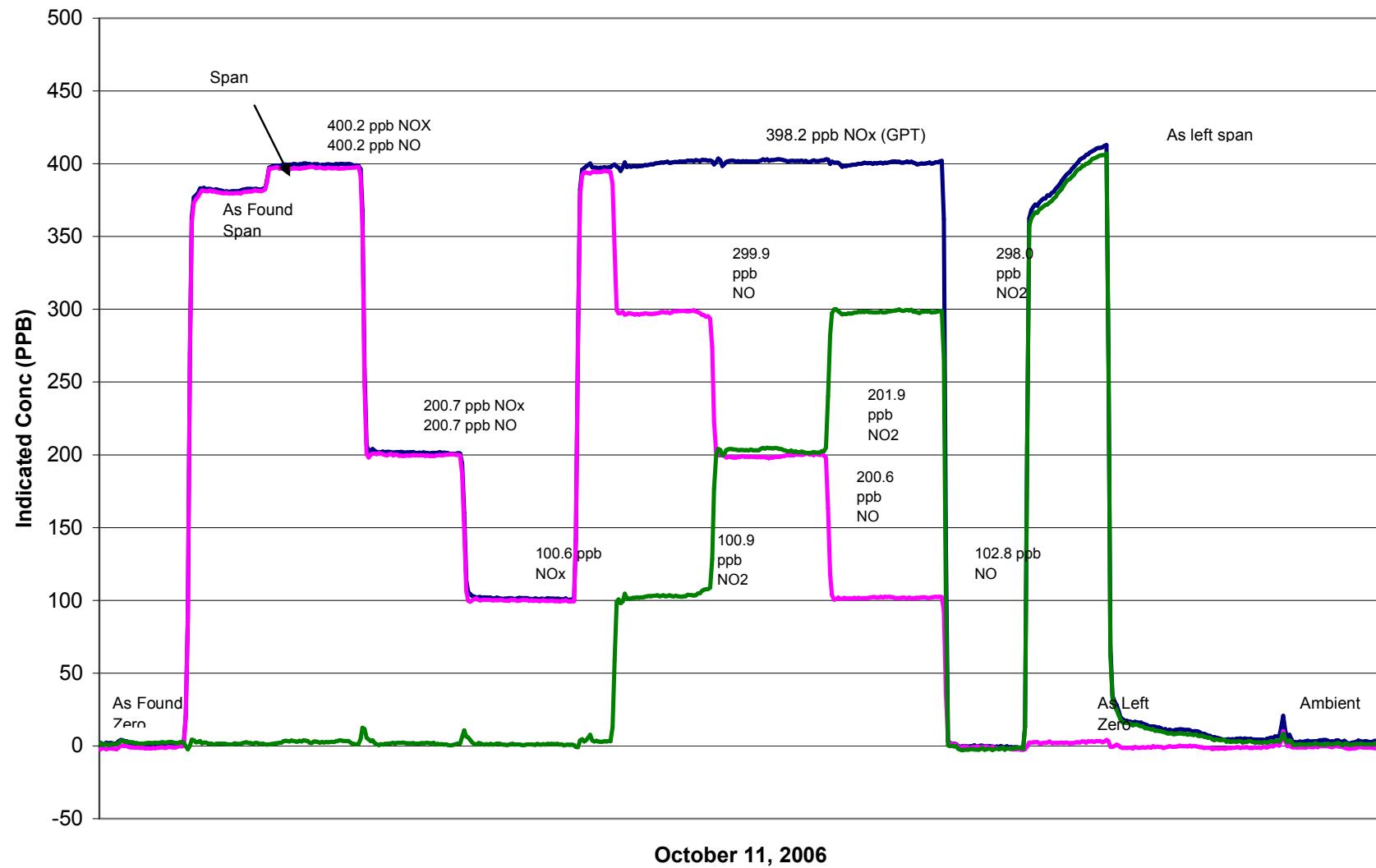
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.4	N/A	Correlation Coefficient	0.999983
395.4	397.0	0.9960		
198.3	199.6	0.9934		
99.4	99.9	0.9943		
			Slope	0.993163
			Intercept	0.667798

### NO Calibration Curve



## NOx Calibration



## Calibration Report

Parameter THC  
 Air Monitoring Network Palliser Airshed



### Station Information

Calibration Date	October 11, 2006		Previous Calibration	September 22, 2006
Station Number	101		Station Location	Crescent Heights
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	14:30		End Time (MST)	15:50
Barometric Pressure	27.2	inches Hg	Station Temperature	20.8 Deg C
Calibrator	Environics 6100		Serial Number	3747
Cal Gas Concentration	700 ppm CH <sub>4</sub> / 301 ppm C <sub>3</sub> H <sub>8</sub>		Cal Gas Expiry Date	8/28/2005
Cal Gas CH4 equiv	1527.75	ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000		DACS serial No.	45270
DACS voltage range	0 - 10 volt		DACS channel #	9
	Before			After
Calculated slope	1.000829		Calculated slope	0.994708
Calculated intercept	0.103289		Calculated intercept	-0.072260
Analyzer make	TEI model 51C-LT		Analyzer serial #	407505596
	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.75	PSI	5.75	PSI
THC span counts	12605	raw	12605	raw
THC zero counts	1370	raw	1370	raw

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.00	0.12	N/A
4991	79.77	24.03	24.29	0.9897
4991	39.84	12.10	12.13	0.9971
4991	9.96	3.04	3.14	0.9697
zero	0.00	0.00	0.07	As Found Zero
4991	79.77	24.03	24.29	As Found Span
Average Correction Factor				0.9855

Calculated value of As Found Response: 24.335 ppm Percent Change of As Found: -1.2%

Auto zero	before calibration		after calibration	
	0.06	ppm	0.05	ppm
	21.18	ppm	21.12	ppm

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

Calibration Performed By: Lenin Flores, Travis Mehrer

## Calibration Summary

Parameter THC  
 Air Monitoring Network Palliser Airshed



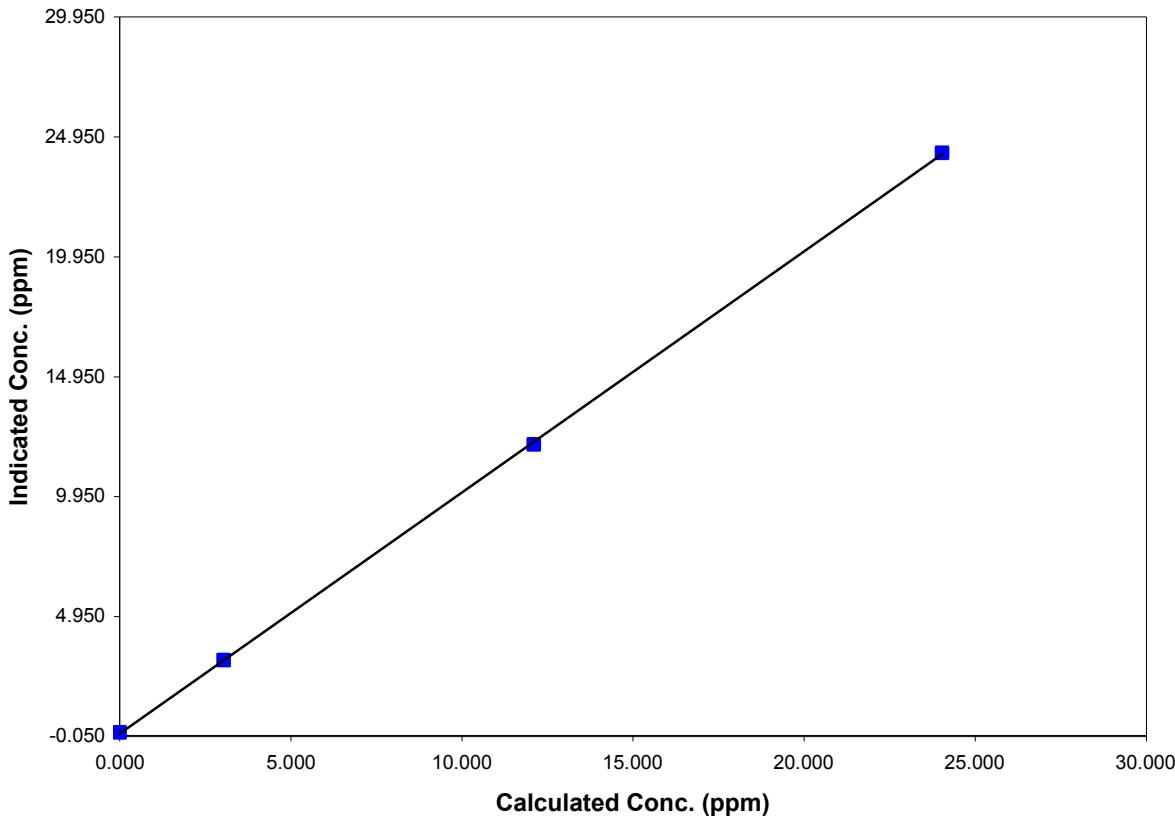
### Station Information

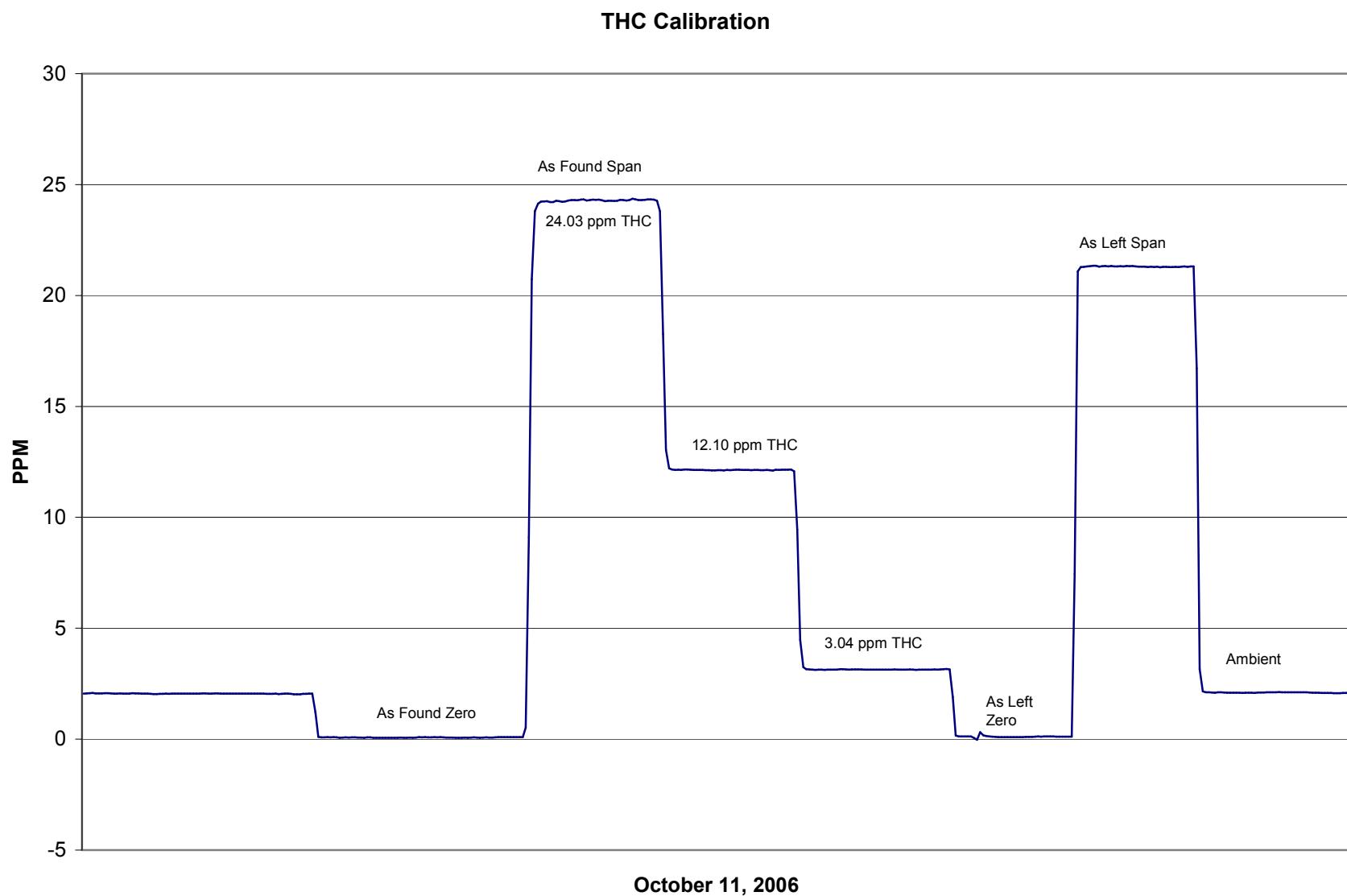
Calibration Date	October 11, 2006	Previous Calibration	September 22, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	14:30	End Time (MST)	15:50
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.119	N/A	Correlation Coefficient	0.999957
24.035	24.285	0.9897		
12.098	12.133	0.9971		
3.042	3.137	0.9697		
			Slope	0.994708
			Intercept	-0.072260

### THC Calibration Curve





## Calibration Report



Parameter CO  
Air Monitoring Network Palliser

### Station Information

Calibration Date	October 11, 2006		Previous Calibration	September 22, 2006
Station Number	101		Station Location	Crescent Heights
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	11:27		End Time (MST)	14:37
Barometric Pressure	27.60	in Hg	Station Temperature	22.1 Deg C
Calibrator	Environics 6100		Serial Number	3474
Cal Gas Conc	2998	ppm	Cal Gas Expiry Date	3/14/2008
DACS make	Focus AP1000		Cal Gas Cylinder #	BLM002248
DACS voltage range	0 - 1 volt		DACS serial No.	45270
	Before		DACS channel #	11
Calculated slope	1.001980		Calculated slope	0.998371
Calculated intercept	0.014782		Calculated intercept	-0.232401
Analyzer make	TEI Model 48C		Analyzer serial #	436609887
Concentration range	before		after	
	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.064		1.064	
CO bkg setting	10.626		10.633	
Lamp ratio	1.1473		1.1469	
Lamp intensity	199743	Hz	200116	Hz
Sample Flow	1.007	LPM	1.005	LPM

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.00	0.29	N/A
4991	49.84	29.64	29.95	0.9896
4991	19.91	11.91	12.09	0.9847
4991	9.95	5.97	6.19	0.9640
4991	0.00	0.00	0.20	0.0000
4991	49.84	29.64	29.95	0.9896
Average Correction Factor				0.9794

Calculated value of As Found Response: 29.822 ppm Percent Change of As Found: -0.6%

Auto zero	before calibration		after calibration	
	0.06	ppm	0.06	ppm
	18.09	ppm	19.85	ppm

Notes: Adjusted Auto span gas flow. There is 750 PSI left in the span cylinder.

Calibration Performed By: LeninF,Travis Mehrer

## Calibration Summary

Parameter CO  
Air Monitoring Network Palliser



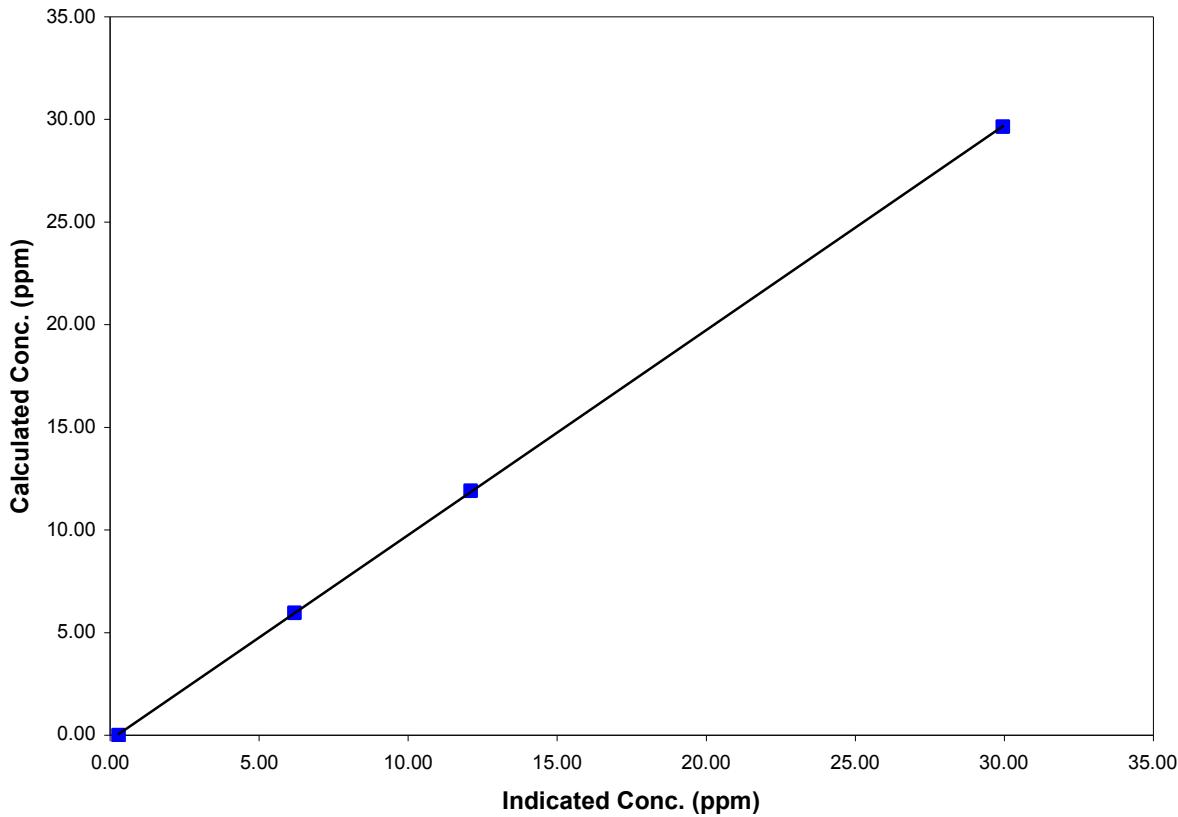
### Station Information

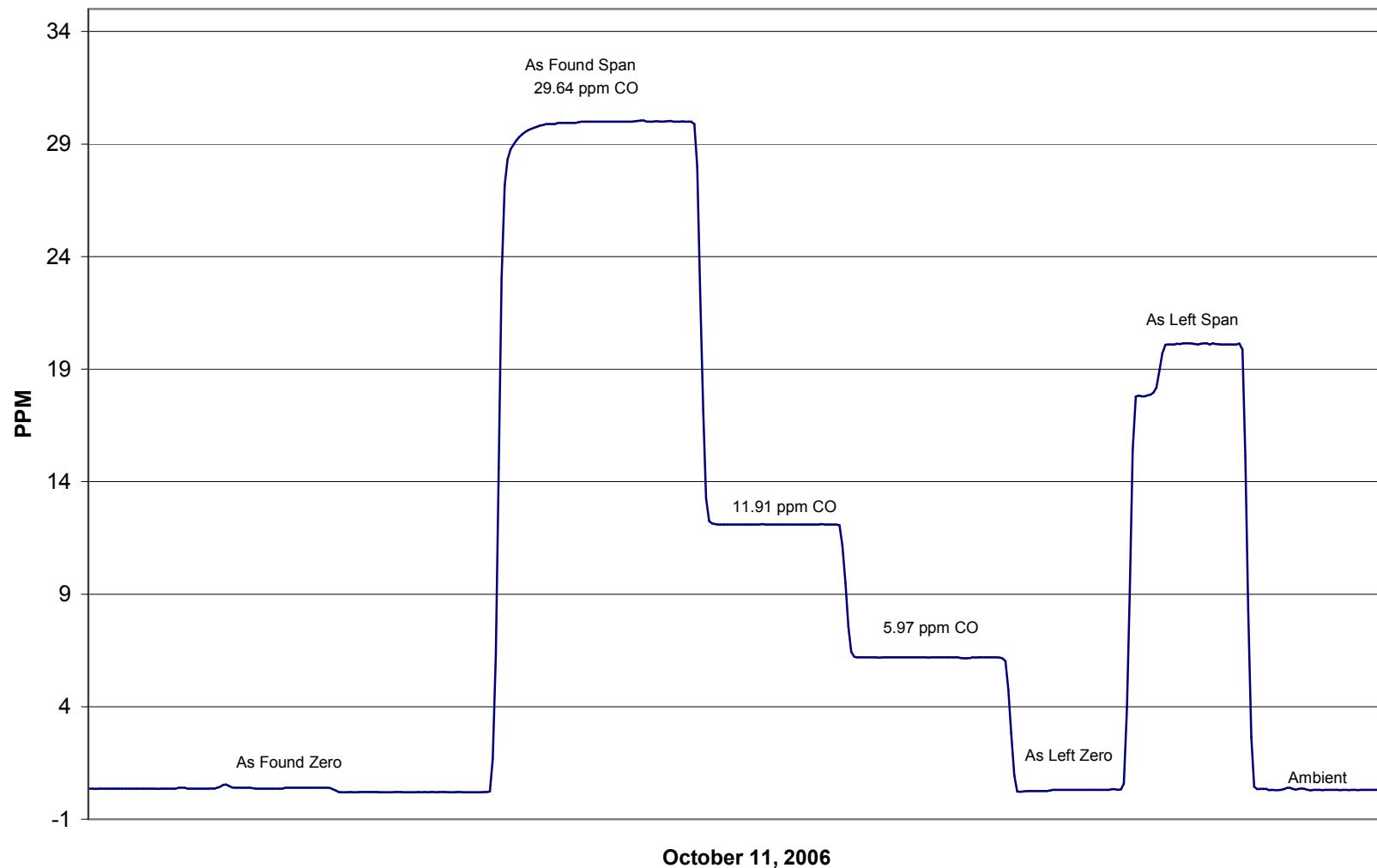
Calibration Date	October 11, 2006	Previous Calibration	September 22, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:27	End Time (MST)	14:37
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.29	N/A		
29.64	29.95	0.9896	Correlation Coefficient	0.999982
11.91	12.09	0.9847	Slope	0.998371
5.97	6.19	0.9640	Intercept	-0.232401

### CO Calibration Curve



**CO Calibration**

## Calibration Report

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



### Station Information

Calibration Date	October 12, 2006		Previous Calibration	September 21, 2006
Station Number	1		Station Location	Crescent Heights
Reason:	Routine	Install	Removal	Other:
Start Time (MST)	8:00	End Time (MST)	8:45	
Barometric Pressure	0.907	ATM	21.9	Deg C
Flow Calibrator	BIOS Drycal DCL-MH		101780	
DACS make	AP 1000	DACS serial No.	45269	
DACS voltage range	0 - 1 V	DACS channel #	15	
	Before		After	
DACS Scale High	450	DACS slope	450	
DACS Scale Low	-50	DACS intercept	-50	

### Analyzer Information

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

	before		after
Main Flow Set Point	2.990	SLPM	2.990
Aux Flow Set Point	13.67	SLPM	13.67
Filter Load	32%	%	18%
Ko Factor	NA		NA
Temperature	12.1	Deg C	12.1
Pressure	0.905	ATM	0.905

### Calibration Data

Parameter	Set Point	TEOM Reading (as found)	Tolerance	TEOM Reading (after adjustments)
zero flow - main	0.0	-0.01	0.00	-0.01
zero flow - auxillary	0.0	-0.01	0.01	-0.01
flow recovery - main	45 - 60 Seconds	20.0	45 - 60 Seconds	20.0
flow recovery - aux	46 - 60 Seconds	25.0	46 - 60 Seconds	25.0
Temperature	measured	-0.8	+/- 1.0 Deg C	-0.8
Pressure	measured	0.919	+/- 1.5% ΔATM	0.919
Total Flow	16.67 SLPMP	17.16		17.16
Auxiliary flow	13.67 SLPMP	14.19	+/- 1.0 SLPMP	14.19
Main flow	3.0 SLPMP	3.110	+/- 0.2 SLPMP	3.110
Leak Check - main	0.0	0.00	<0.15 SLPMP	0.00
Leak Check - aux	0.0	-0.02	<0.15 SLPMP	-0.02
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	N/A

Notes: No adjustments were necessary

Calibration Performed By: Lenin Flores, Travis Mehrer