



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

May 2006

Prepared By:



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June 28, 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 – May 2006**

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

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

**Continuous Monitoring – Crescent Heights**

Included in this report are; monthly sampling table, detailed hourly average reports and multipoint calibration reports of all instruments. The measured ambient air quality was within the Provincial and Federal guidelines with no exceedences recorded. Operational time of all instruments was 100% uptime for the month of May. There were no significant events leading to emergency response for the month of May.

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

- Monthly average concentrations of NO<sub>2</sub> was 5.5 ppb
- Monthly average concentrations for O<sub>3</sub> was 34.8 ppb
- Monthly average concentrations for CO was 0.18 ppm
- Monthly average concentrations for THC was 1.96 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 3.6 µg/m<sup>3</sup>

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

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

- Monthly average concentrations for SO<sub>2</sub> passives were all <0.3 ppb
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 3.3 ppb to 4.7 ppb
- Monthly average concentrations for O<sub>3</sub> passives ranged from 32.8 ppb to 35.5 ppb

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

Sharon Whiteley, B.Sc.  
AQM Data Specialist

Kevin McCullum, Ph.D., P.Eng.  
AQM Environmental Specialist



# Continuous Monitoring

## Ambient Air Monitoring Network

### Crescent Heights Station

#### General Station Issues

There were no general station issues observed for the month of May. Calibrations were performed on May 18<sup>th</sup> and 19<sup>th</sup> on all the pollutant analyzers.

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational issues observed.
Nitrogen Dioxide	Teledyne - API	200E	ppb	No operational issues observed.
Total Hydrocarbons	Bendix	400A	ppm	No operational issues observed.
Carbon Monoxide	TEI	49C	ppm	No operational issues observed.
PM 2.5	R&P TEOM	1400ab	µg/m <sup>3</sup>	No operational issues observed.
Wind Speed	Met One	010C	kph	There were three (3) hours of calm noted. No other operational issues were observed.
Wind Direction	Met One	020C	Deg	No operational issues observed.
Ambient Temperature	Met One	083D	DegC	No operational issues observed.
Relative Humidity	Met One	083D	%	No operational issues observed.
Solar Radiation	Met One	096-1	W/m <sup>2</sup>	No operational issues observed.
Data Acquisition System	Titan Logix	AP1000		No operational issues observed.



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

May-2006 Palliser Airshed Society						Maximum Recorded Values						Operational Time (%)	
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr			24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc		Day
NO (ppb)			Crescent Heights	1.4	-	-	34.2	May-04 06:00	1.9	SE	4.8	May-04	100.0%
NO <sub>2</sub> (ppb)	212	106	Crescent Heights	5.5	0	0	24.1	May-31 21:00	4.7	E	9.2	May-17	100.0%
NO <sub>x</sub> (ppb)			Crescent Heights	6.7	-	-	57.0	May-04 06:00	1.9	SE	13.7	May-04	100.0%
O <sub>3</sub> (ppb)	82		Crescent Heights	34.8	0	-	64.4	May-14 14:00	8.2	ESE	45.1	May-25	100.0%
O <sub>3</sub> (ppb) - 8-hr	65		Crescent Heights		0						63.5	May-14	
CO (ppm)	13		Crescent Heights	0.18	0	-	0.5	May-04 06:00	1.9	SE	0.3	May-17	100.0%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.3	May-04	
THC (ppm)			Crescent Heights	1.96	-	-	2.8	May-14 04:00	1.7	NNE	2.1	May-14	100.0%
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Crescent Heights	3.6		0	41.5	May-20 10:00	19.7	ESE	7.7	May-06	100.0%
RH (%)			Crescent Heights	54.7	-	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )			Crescent Heights	242.3	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	14.8	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	3.7	-	-	29.9	May-02 13:00	29.9	NW	16.7	19-May	100.0%
WSPD s (km/hr)			Crescent Heights	11.8	-	-	30.1	May-02 13:00	30.1	NW	17.6	19-May	100.0%
WDIR (Deg)			Crescent Heights	W	-	-	-	-	-	-	-	-	100.0%

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



# **PAS - Crescent Heights**

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



# PAS - Crescent Heights - AQI Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

## Air Quality Index (AQI)

Monitoring Dates: May 1, 2006 to June 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:	601
Number of 1-hr Fair Readings:	105
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 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-May-06	17	16	15	16	18	16	14	12	N	20	22	24	25	25	27	28	29	28	26	23	22	19	20	23
2-May-06	23	19	18	16	15	16	16	N	21	20	20	20	20	20	19	18	19	18	18	17	16	17	17	16
3-May-06	16	16	16	16	16	15	N	15	17	16	17	17	17	18	20	20	21	22	21	19	14	15	14	11
4-May-06	10	8	5	5	4	N	5	7	19	22	23	24	25	26	26	27	26	26	24	21	16	15	14	16
5-May-06	18	18	19	19	N	16	17	20	23	25	26	25	23	24	23	23	21	20	17	11	9	12	15	16
6-May-06	13	15	17	N	15	15	15	15	20	26	30	32	31	32	37	37	36	33	28	26	23	17	13	13
7-May-06	14	12	N	11	19	18	16	16	18	21	24	27	28	28	29	30	31	24	21	20	18	17	17	19
8-May-06	16	N	20	16	15	13	15	18	20	21	23	25	24	28	28	26	25	24	26	22	23	21	18	19
9-May-06	N	13	16	15	15	15	17	17	18	19	18	18	18	18	17	16	17	16	17	14	16	15	N	
10-May-06	11	9	10	11	9	9	8	8	10	11	10	14	17	17	19	22	22	22	22	18	13	10	N	6
11-May-06	6	9	5	6	4	7	9	11	15	22	24	25	25	25	27	27	26	24	19	18	20	N	26	22
12-May-06	18	15	14	14	13	13	12	18	21	25	27	27	29	29	28	29	28	26	28	31	N	32	27	26
13-May-06	23	21	18	20	16	12	13	14	17	19	20	21	23	24	25	27	29	27	29	N	23	20	12	8
14-May-06	7	7	6	5	6	7	9	13	19	30	34	36	36	37	37	36	36	35	N	31	26	22	21	21
15-May-06	22	21	19	16	13	13	14	16	22	26	31	32	32	30	29	28	27	N	23	20	16	17	27	32
16-May-06	31	27	22	17	17	15	13	14	21	24	24	25	26	26	29	26	N	24	23	22	21	18	17	18
17-May-06	18	12	9	7	6	8	9	9	13	20	25	26	24	24	24	N	24	28	29	21	11	11	11	8
18-May-06	9	13	11	7	7	7	9	9	11	14	15	N	N	N	26	24	N	N	23	18	14	15	17	
19-May-06	14	17	N	18	17	14	15	6	5	6	23	23	24	24	24	24	26	26	25	23	22	20	18	17
20-May-06	17	16	N	15	13	13	13	15	18	21	31	24	23	23	24	24	22	20	17	16	16	10	10	11
21-May-06	9	N	10	9	10	9	11	11	14	18	21	22	23	23	25	26	26	25	22	20	17	12	18	13
22-May-06	N	16	13	13	9	7	11	12	17	19	23	26	29	28	24	23	22	22	21	18	11	15	15	N
23-May-06	19	16	16	11	9	6	6	10	14	16	16	19	19	19	19	19	19	19	18	16	21	20	N	15
24-May-06	13	12	9	7	7	9	10	12	15	18	23	25	24	24	25	27	28	29	29	25	22	N	16	14
25-May-06	12	12	17	21	21	18	18	17	20	22	24	30	32	34	32	32	31	31	30	27	N	22	20	18
26-May-06	15	12	9	9	9	8	9	8	7	7	7	10	12	11	10	11	9	9	9	N	7	5	3	5
27-May-06	6	3	3	3	4	4	5	6	6	7	8	8	9	10	10	9	9	8	N	9	11	11	10	10
28-May-06	10	11	11	12	13	13	12	13	12	13	12	12	12	12	12	12	N	14	13	13	13	13	10	
29-May-06	10	12	12	11	10	8	9	12	15	15	17	17	19	18	18	19	N	21	19	17	15	16	18	14
30-May-06	11	12	10	9	7	6	7	12	13	16	18	21	21	20	17	N	22	22	21	19	11	13	9	7
31-May-06	10	10	9	10	10	9	10	12	13	16	18	20	23	23	N	24	24	24	24	21	13	9	6	6



# PAS - Crescent Heights - Nitrogen Dioxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

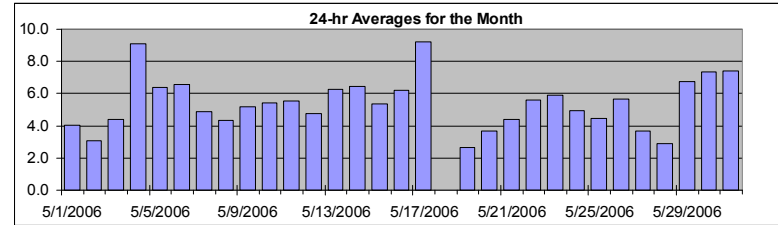
## HOURLY AVERAGE TABLE

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

Monitoring Dates: May 1, 2006 to June 1, 2006

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

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	24.1 ppb 31-May 21:00 22:00
Maximum 24-hr Average:	9.2 ppb 17-May



AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	21.6	13.3	6.9	4.3	2.7	1.6	1.2	5.5 ppb	4.3 ppb

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			23:00
1-May-06	2	5	5	6	2	3	4	5	A	7	4	3	2	3	3	3	3	4	4	4	6	7	7	2	4.0	7.0	
2-May-06	2	6	3	2	5	5	8	A	4	4	3	2	2	2	2	2	2	3	2	3	2	3	1	1	3.1	8.1	
3-May-06	1	1	2	1	2	4	A	6	3	3	4	3	4	3	2	2	3	3	3	5	13	13	9	12	4.4	12.7	
4-May-06	12	15	17	22	17	A	23	22	7	3	2	2	2	2	3	2	4	3	5	9	14	10	7	5	9.1	22.9	
5-May-06	4	4	3	2	A	11	11	8	5	4	5	3	2	2	2	2	4	7	10	20	14	11	8	3	6.4	20.2	
6-May-06	4	6	3	A	7	7	7	9	5	8	4	4	5	6	4	3	3	7	11	6	3	11	17	12	6.5	17.5	
7-May-06	9	10	A	14	6	8	5	3	4	3	3	3	3	2	2	3	3	6	7	6	3	2	4	3	4.9	13.8	
8-May-06	6	A	4	5	6	8	5	5	4	3	2	2	2	2	2	3	4	5	3	10	4	3	7	4	4.3	9.7	
9-May-06	A	14	4	7	7	7	6	5	5	4	4	3	4	4	4	5	6	4	5	3	8	2	3	A	5.2	14.2	
10-May-06	10	10	7	3	5	6	8	8	5	4	6	5	3	5	5	3	4	2	2	2	5	7	A	11	5.4	10.9	
11-May-06	10	7	11	8	10	7	4	3	2	2	2	2	2	2	2	2	3	4	6	13	12	7	A	4	5.5	13.3	
12-May-06	6	5	5	3	5	7	10	5	3	6	3	5	3	3	4	3	3	9	5	3	A	5	6	3	4.7	10.0	
13-May-06	5	6	6	5	11	13	10	5	3	2	2	2	3	3	2	3	3	5	3	A	10	10	14	19	6.3	18.7	
14-May-06	15	15	15	18	18	15	9	4	3	1	1	2	1	1	1	1	1	1	A	4	4	6	5	5	6.4	18.3	
15-May-06	3	6	3	5	7	9	9	8	4	3	3	2	2	3	2	2	3	A	11	11	9	12	4	1	5.3	12.3	
16-May-06	1	2	3	11	10	14	16	15	7	3	3	2	2	3	3	3	A	6	7	8	6	7	8	4	6.2	16.5	
17-May-06	4	6	8	9	10	13	14	12	10	5	3	3	2	1	2	A	9	4	5	7	23	23	22	14	9.2	23.3	
18-May-06	11	7	7	9	9	12	11	9	8	7	C	C	C	C	3	1	2	3	C	C	C	C	C	A	N	11.6	
19-May-06	7	3	A	5	4	5	4	3	3	2	2	2	1	1	2	2	2	2	1	2	2	2	2	2	2.7	7.0	
20-May-06	2	2	A	6	6	4	3	3	2	2	2	2	3	3	3	3	2	3	6	5	2	10	7	4	3.7	9.6	
21-May-06	5	A	6	5	4	6	3	3	3	3	2	3	4	2	2	2	2	3	6	6	7	14	4	7	4.4	13.5	
22-May-06	A	7	9	8	11	9	7	7	5	4	2	2	1	1	2	3	3	3	3	3	7	11	8	10	A	5.6	11.3
23-May-06	7	9	4	10	13	12	9	7	7	3	4	3	3	3	4	3	3	6	7	9	3	3	A	6	5.9	13.0	
24-May-06	6	7	12	11	9	8	5	5	5	4	4	3	3	3	3	3	2	2	2	3	4	A	6	4	4.9	12.4	
25-May-06	4	8	4	3	5	7	5	5	5	6	7	4	3	3	4	3	2	2	3	4	A	7	6	5	4.5	7.5	
26-May-06	6	4	4	3	3	4	4	5	7	6	4	3	5	7	7	5	5	4	3	A	7	9	11	15	5.7	14.8	
27-May-06	5	8	8	6	6	7	5	3	2	2	2	1	1	1	1	2	2	2	A	6	6	4	3	4	4	3.7	8.3
28-May-06	3	3	3	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	A	6	5	3	3	8	2.9	8.1	
29-May-06	8	5	5	7	7	8	9	9	7	7	4	6	3	5	5	4	A	9	6	9	9	11	7	7	6.8	10.9	
30-May-06	9	4	7	5	7	9	7	6	6	6	5	3	3	4	10	A	7	5	5	9	18	9	12	11	7.3	18.4	
31-May-06	5	5	7	3	5	5	4	4	3	3	4	5	3	4	A	7	6	6	4	7	21	24	22	14	7.4	24.1	
Hourly Avg	6.0	6.5	6.2	6.8	7.3	7.9	7.7	6.5	4.6	3.9	3.4	2.9	2.6	2.8	3.1	2.8	3.5	4.3	5.4	6.5	8.0	8.3	7.9	6.8			
Hourly Max	14.8	15.4	17.3	22.1	18.3	15.1	22.9	21.8	10.1	8.0	7.3	5.5	4.9	6.9	10.2	6.9	9.0	9.4	13.3	20.2	23.3	24.1	22.5	18.7			

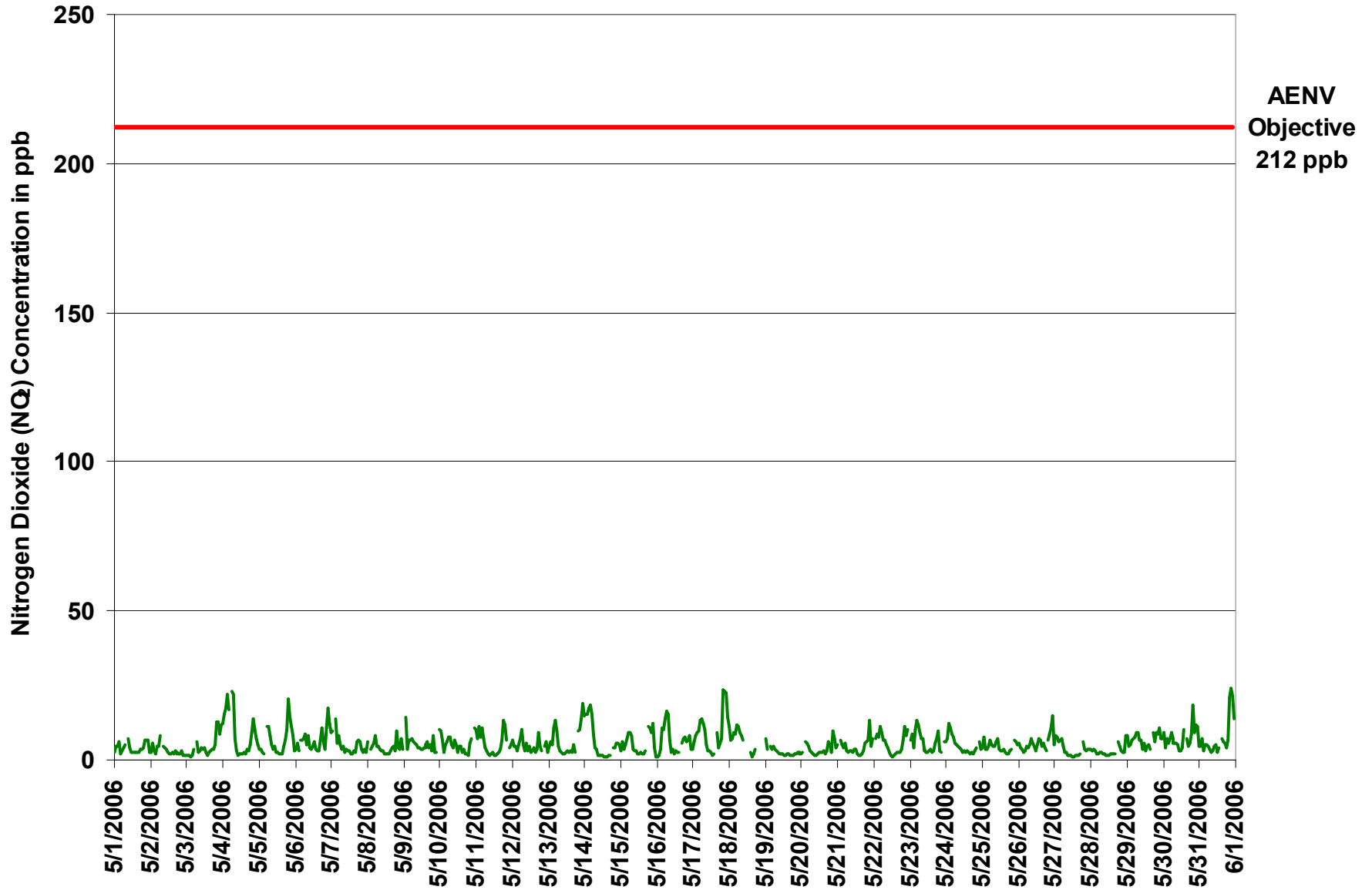


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend





Station: Crescent Heights  
 Station Owner: PAS

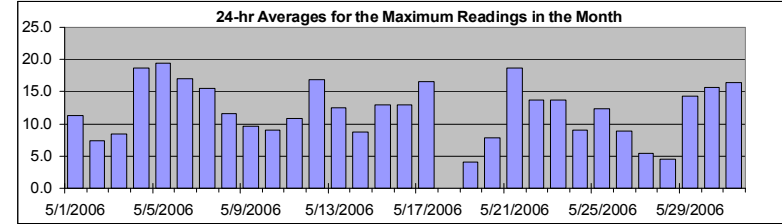
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: May 1, 2006 to June 1, 2006

**Summary**

Maximum 1-hr Value:	68.1	ppb	21-May	12:00 13:00
Maximum 24-hr Value:	19.4	ppb	5-May	



AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	46.2	33.4	15.9	9.3	4.7	2.6	2.0	12.2 ppb	9.3 ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-06	11	15	14	10	7	7	6	8	A	14	6	4	4	5	4	5	4	6	5	33	39	10	37	5	11.2	38.8
2-May-06	5	48	5	5	15	12	11	A	7	6	8	4	3	3	5	3	5	4	4	4	4	7	3	5	7.4	47.6
3-May-06	3	3	2	2	7	10	A	10	4	9	14	11	10	5	3	4	5	7	6	10	20	22	12	13	8.4	21.6
4-May-06	16	18	26	25	20	A	26	26	16	6	3	4	3	20	24	4	31	5	30	42	36	17	10	21	18.7	41.8
5-May-06	21	43	12	3	A	28	28	56	36	10	39	4	14	3	8	3	24	9	19	31	22	16	12	4	19.4	56.2
6-May-06	6	19	5	A	10	26	29	29	13	44	10	8	11	46	6	5	6	11	19	19	6	17	26	21	16.9	45.9
7-May-06	12	14	A	24	14	13	11	17	38	11	17	21	27	4	6	8	5	35	27	10	4	4	26	9	15.5	38.2
8-May-06	33	A	7	25	27	29	7	10	5	5	7	3	3	3	4	4	12	12	4	33	7	5	14	8	11.6	33.5
9-May-06	A	28	6	10	12	9	9	10	8	6	7	5	6	14	11	13	10	8	11	6	15	3	4	A	9.6	28.5
10-May-06	15	13	12	4	6	7	10	12	9	6	11	7	7	16	17	4	6	3	3	3	12	10	A	16	9.1	17.1
11-May-06	13	11	13	10	14	14	5	4	3	4	4	4	3	2	5	11	16	15	39	28	12	A	7	16	10.9	38.9
12-May-06	17	34	15	5	21	23	13	10	9	59	23	23	5	27	9	5	6	39	11	9	A	8	16	4	16.9	58.8
13-May-06	19	21	9	17	22	19	17	7	4	4	3	3	5	7	5	6	8	12	6	A	14	18	31	30	12.5	30.9
14-May-06	24	18	17	23	20	17	12	6	5	2	3	3	2	2	2	2	2	3	A	6	8	7	7	8	8.7	24.3
15-May-06	5	25	5	9	11	10	11	11	6	4	4	4	3	23	4	5	21	A	55	22	10	38	12	2	13.0	55.2
16-May-06	2	3	5	33	31	46	20	19	14	4	22	3	3	9	5	5	A	12	11	11	9	9	17	5	13.0	46.0
17-May-06	11	8	16	12	12	16	17	15	15	23	5	12	24	2	3	A	14	12	13	13	46	37	31	26	16.6	46.2
18-May-06	15	9	27	27	13	18	13	14	15	10	C	C	C	C	6	3	6	9	C	C	C	C	C	A	N	27.2
19-May-06	13	8	A	6	5	6	5	4	4	3	3	4	2	3	4	2	3	2	3	3	3	3	3	3	4.1	13.1
20-May-06	3	4	A	9	7	5	5	4	3	2	2	3	4	4	4	26	4	22	25	11	3	15	10	6	7.8	25.8
21-May-06	32	A	9	13	6	21	4	4	24	9	4	15	68	19	2	3	22	23	15	44	11	36	21	26	18.7	68.1
22-May-06	A	9	21	11	14	12	10	9	7	5	4	3	2	2	18	34	29	17	27	11	21	18	17	A	13.7	34.2
23-May-06	14	22	5	28	29	19	24	9	13	6	19	4	9	9	12	6	6	13	12	20	8	9	A	17	13.7	28.6
24-May-06	21	19	18	16	16	11	13	7	6	7	6	5	5	5	11	7	5	5	3	5	6	A	10	5	9.1	20.9
25-May-06	6	21	6	5	43	33	6	8	10	14	39	10	8	6	9	6	4	4	9	7	A	13	8	9	12.3	42.6
26-May-06	10	6	7	4	4	8	12	7	10	10	7	5	8	11	11	7	10	7	6	A	9	12	20	17	8.9	19.5
27-May-06	11	12	9	7	10	10	7	4	3	2	2	2	2	2	2	3	3	3	A	10	5	4	5	5	5.4	11.9
28-May-06	4	4	4	4	3	3	3	4	3	3	2	3	3	4	3	3	3	A	12	6	4	4	4	17	4.5	16.7
29-May-06	13	8	6	13	11	12	12	13	10	11	6	12	5	11	9	10	A	17	14	46	18	28	12	34	14.4	45.9
30-May-06	30	5	49	7	24	31	9	9	12	11	8	6	7	7	20	A	11	8	10	12	37	12	17	16	15.6	49.5
31-May-06	9	20	39	4	27	25	6	5	4	10	11	8	7	9	A	11	12	11	7	13	58	36	27	20	16.5	57.6
Hourly Avg	13.6	16.2	13.2	12.3	15.3	16.7	12.0	11.8	10.6	10.3	10.0	6.7	8.7	9.5	7.7	7.3	10.0	11.5	14.5	16.6	16.0	14.8	14.9	13.1		
Hourly Max	33.1	47.6	49.5	32.6	42.6	46.0	28.9	56.2	38.2	58.8	39.4	23.2	68.1	45.9	24.5	34.2	31.4	39.2	55.2	45.9	57.6	37.7	37.1	34.0		

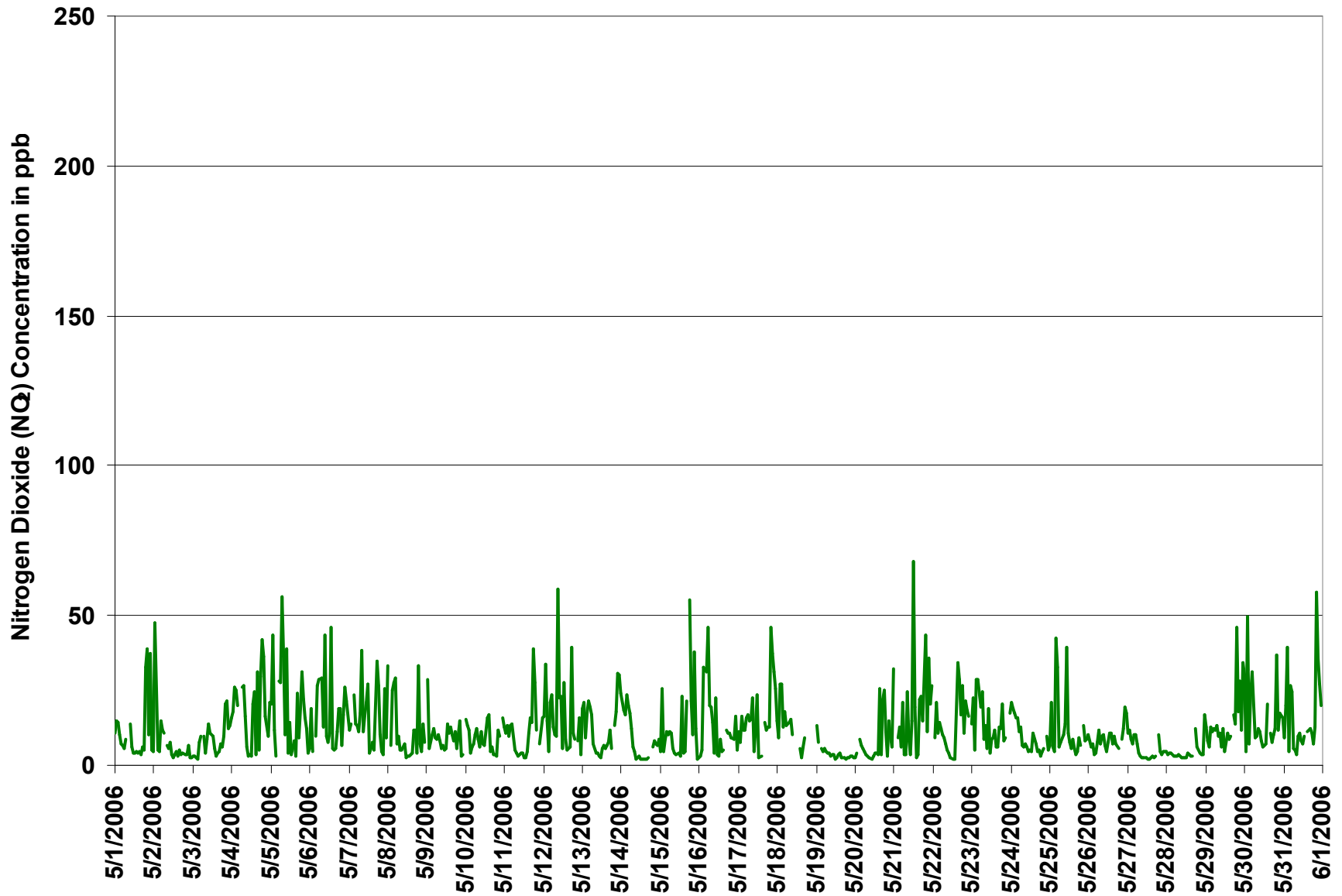
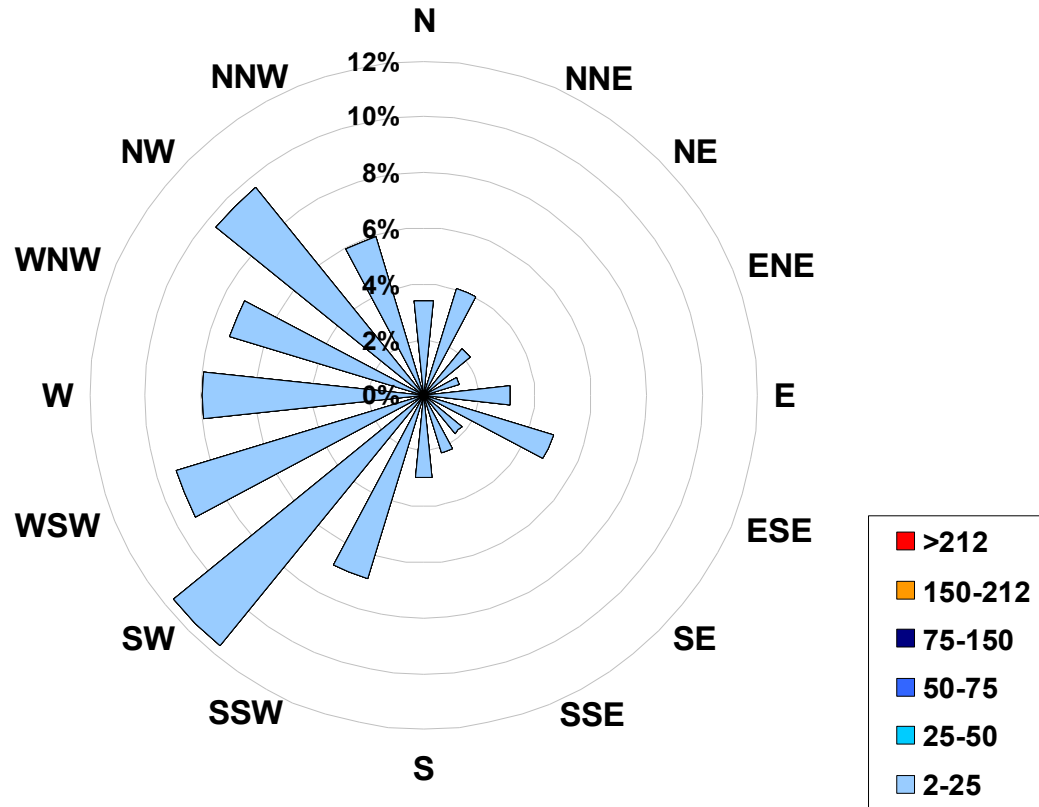


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of NO <sub>2</sub> in ppb			
Range		Frequency (hrs)	
2.0	< 25	700	
25	to 50	2	
50	to 75	0	
75	to 150	0	
150	to 212	0	
	> 212	0	
Total Non-Zero Values			702



## PAS - Crescent Heights - Nitric Oxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

### Nitric Oxide (NO)

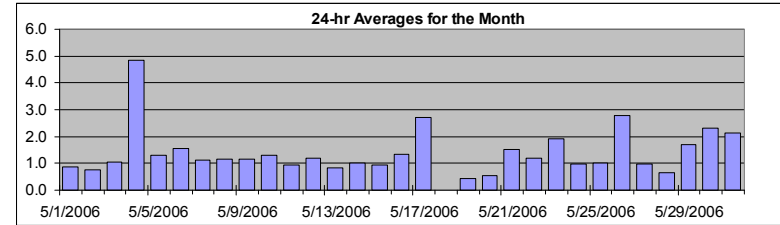
Monitoring Dates: May 1, 2006 to June 1, 2006

Guideline Limit: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	34.2	ppb	4-May	6:00 7:00
Maximum 24-hr Average:	4.8	ppb	4-May	



AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	9.9	3.9	1.6	0.9	0.5	0.2	0.1	1.4 ppb	0.9 ppb

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	23:00
1-May-06	0:00	0	0	1	0	0	0	1	2	A	3	2	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0.9	2.5
2-May-06	0:00	0	2	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.7	2.4
3-May-06	0:00	0	0	0	0	0	1	A	2	1	2	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.0	2.6
4-May-06	0:00	1	1	2	16	10	A	34	27	4	1	1	1	1	1	1	1	1	2	1	2	2	2	0	0	1	4.8	34.2
5-May-06	0:00	1	4	0	0	A	1	3	3	3	3	1	2	1	1	1	1	1	0	2	1	1	2	0	0	0	1.3	3.9
6-May-06	0:00	0	1	0	A	0	3	3	9	2	3	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.6	8.7
7-May-06	0:00	1	0	A	1	0	1	1	1	4	1	2	1	1	1	1	1	1	1	3	1	1	0	0	1	0	1.1	4.3
8-May-06	0:00	3	A	0	1	4	3	1	2	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	1.1	3.8	
9-May-06	0:00	A	2	0	1	0	1	1	1	1	1	1	1	1	2	2	1	2	1	1	1	2	1	0	A	1.1	2.0	
10-May-06	0:00	1	1	1	0	0	1	2	3	2	2	5	3	1	2	2	1	1	0	0	0	0	0	A	1	1.3	4.8	
11-May-06	0:00	0	0	1	1	1	3	2	2	1	1	1	1	1	1	1	1	1	1	2	2	0	A	0	0	1.0	2.5	
12-May-06	0:00	0	2	0	0	1	1	3	2	1	4	3	2	1	1	1	1	1	1	3	0	0	A	0	0	1.2	3.5	
13-May-06	0:00	0	1	0	0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	0.8	1.7
14-May-06	0:00	1	1	1	2	3	6	4	2	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1.0	5.8
15-May-06	0:00	0	2	0	0	1	1	3	3	1	1	1	1	1	1	1	1	1	1	A	3	0	0	1	0	0	1.0	3.2
16-May-06	0:00	0	0	0	1	1	6	5	7	2	1	2	1	1	1	1	1	1	1	A	1	1	0	0	0	0	1.4	6.9
17-May-06	0:00	0	0	0	1	10	14	10	6	2	1	1	1	1	1	1	1	A	2	1	1	1	4	3	2	1	2.7	13.9
18-May-06	0:00	0	0	3	5	1	5	7	8	7	3	C	C	C	C	1	0	0	0	0	C	C	C	C	C	A	N	7.7
19-May-06	0:00	0	0	A	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
20-May-06	0:00	0	0	A	0	0	0	1	1	1	0	0	1	1	1	1	1	0	1	2	0	0	1	0	0	0	0.5	1.7
21-May-06	0:00	3	A	0	1	1	4	1	1	3	1	1	2	3	2	1	1	1	1	1	1	2	1	3	1	2	1.5	3.9
22-May-06	0:00	A	1	1	1	1	2	3	4	2	2	1	1	0	0	1	1	2	1	1	1	1	0	1	A	1.2	3.7	
23-May-06	0:00	1	1	1	3	4	5	6	5	4	1	2	1	1	2	2	1	1	2	1	1	0	0	A	1	1.9	6.3	
24-May-06	0:00	1	1	1	1	1	2	2	3	2	2	1	1	1	1	1	1	0	0	0	0	0	A	0	0	1.0	2.9	
25-May-06	0:00	0	1	0	0	2	2	1	2	2	2	3	1	1	1	1	1	0	0	1	0	A	1	0	0	1.0	3.0	
26-May-06	0:00	0	0	2	0	0	1	1	2	3	3	3	2	2	5	4	3	4	3	2	A	2	1	9	12	2.8	11.7	
27-May-06	0:00	1	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	1.0	2.3
28-May-06	0:00	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	1	0.6	1.3
29-May-06	0:00	0	0	0	0	1	2	3	3	2	3	1	3	1	2	2	2	A	1	1	1	4	1	1	0	5	1.7	4.8
30-May-06	0:00	4	0	3	1	3	7	5	4	4	4	3	2	1	2	4	A	2	1	1	1	1	2	1	1	1	2.3	7.2
31-May-06	0:00	1	2	9	0	4	2	3	3	2	2	3	2	2	2	A	1	2	1	1	1	1	4	2	1	1	2.1	8.8
Hourly Avg	0:00	0.7	0.9	1.1	1.3	1.5	2.5	3.9	3.7	2.2	1.6	1.6	1.2	1.0	1.2	1.2	0.9	1.1	1.1	1.1	0.9	0.9	0.7	0.9	1.0	2.1	8.8	
Hourly Max	0:00	3.5	3.9	8.8	15.5	9.9	10.3	34.2	26.5	6.8	3.8	4.8	2.9	2.8	4.8	4.0	2.7	3.7	3.0	3.2	3.8	4.5	2.6	9.1	11.7			



Station: Crescent Heights  
 Station Owner: PAS

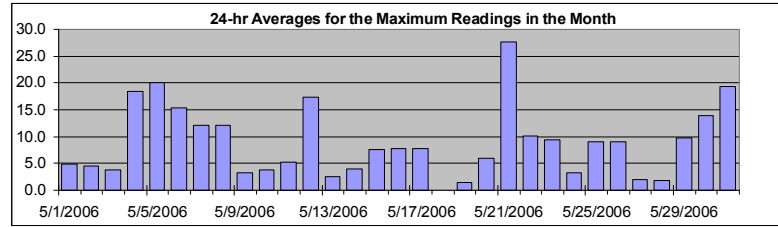
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitric Oxide (NO)**

Monitoring Dates: May 1, 2006 to June 1, 2006

**Summary**

Maximum 1-hr Value:	168.7	ppb	5-May	1:00 2:00
Maximum 24-hr Value:	27.6	ppb	21-May	



AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	83.4	47.2	6.4	2.3	1.5	0.9	0.7	9.3 ppb	2.3 ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-06	2	2	17	1	2	2	3	4	A	16	4	3	2	2	2	1	1	2	1	6	8	2	29	1	4.9	28.5
2-May-06	2	62	2	2	2	2	4	A	2	2	3	1	2	2	2	2	1	2	2	2	2	2	2	1	4.5	62.4
3-May-06	1	2	1	1	1	12	A	3	3	9	10	11	4	6	2	2	4	2	3	1	2	2	1	3.8	12.1	
4-May-06	2	6	20	26	20	A	42	48	11	4	2	2	2	12	17	1	25	2	49	47	53	1	1	32	18.4	52.6
5-May-06	17	169	5	1	A	7	23	27	48	18	43	2	11	1	7	1	67	2	2	6	1	2	1	1	20.1	168.7
6-May-06	1	12	1	A	1	41	46	121	7	47	3	3	5	37	2	2	1	3	2	2	1	2	8	4	15.4	121.3
7-May-06	1	1	A	4	2	2	2	16	81	11	11	11	21	1	2	2	2	41	12	2	1	1	50	1	12.1	81.3
8-May-06	38	A	2	47	108	41	3	4	3	3	3	1	2	2	1	1	2	4	1	8	1	1	1	2	12.1	107.8
9-May-06	A	5	2	2	2	2	3	3	3	2	3	3	3	15	5	3	3	2	3	2	3	2	1	A	3.3	15.4
10-May-06	3	2	2	1	1	2	4	5	4	3	11	5	3	19	13	2	2	1	1	1	1	1	A	3	3.9	18.6
11-May-06	1	2	2	2	3	7	3	3	2	1	2	2	1	1	2	11	8	2	33	28	2	A	1	2	5.2	32.7
12-May-06	1	43	1	1	28	26	5	4	17	83	105	29	3	11	3	1	2	29	1	1	A	1	1	1	17.3	104.8
13-May-06	2	9	1	1	2	4	4	2	2	2	2	2	3	3	2	2	2	3	1	A	1	1	1	3	2.5	9.2
14-May-06	2	3	2	46	6	8	7	3	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	4.0	46.4
15-May-06	1	18	1	2	2	3	4	4	2	2	1	1	2	19	2	2	12	A	76	2	1	18	1	1	7.6	76.0
16-May-06	1	1	1	11	5	57	7	11	6	2	58	1	1	3	1	2	A	2	2	1	1	1	1	1	7.7	58.3
17-May-06	1	1	1	1	1	20	20	12	12	16	2	6	12	2	2	A	4	3	2	2	26	17	11	3	7.7	25.6
18-May-06	2	1	65	81	5	37	11	25	34	8	C	C	C	C	3	1	2	1	C	C	C	C	C	A	N	80.7
19-May-06	0	1	A	1	1	1	2	2	2	2	5	1	1	2	1	1	1	1	1	1	1	1	1	1	1.4	5.4
20-May-06	1	1	A	1	1	1	1	1	1	2	1	1	1	2	1	25	1	41	47	1	1	1	1	1	6.0	46.9
21-May-06	109	A	1	13	2	65	2	2	78	7	2	13	62	40	2	2	22	17	5	74	1	55	25	37	27.6	108.9
22-May-06	A	2	6	2	2	3	5	5	3	3	1	1	1	18	21	48	46	47	2	3	2	3	A	A	10.2	48.3
23-May-06	1	2	1	28	27	13	57	7	8	2	23	2	5	8	7	3	3	4	3	3	2	2	A	3	9.4	57.4
24-May-06	7	3	3	3	4	5	9	4	3	3	2	2	2	2	8	3	2	3	2	2	2	A	1	2	3.3	8.6
25-May-06	1	31	0	1	56	41	2	7	5	5	31	4	3	2	3	3	2	2	4	2	A	2	1	1	9.0	56.0
26-May-06	1	1	6	1	1	3	21	5	6	7	11	4	6	19	8	6	9	5	2	A	4	2	51	28	9.0	51.1
27-May-06	1	2	3	2	3	3	4	3	3	2	2	2	2	2	3	3	2	1	A	1	1	1	1	1	2.0	3.6
28-May-06	1	1	1	1	1	1	1	1	1	1	1	2	1	3	2	2	2	A	9	2	1	1	1	2	1.8	9.2
29-May-06	1	1	1	2	1	4	4	4	5	5	2	7	2	7	4	3	A	3	3	85	3	8	1	68	9.8	85.4
30-May-06	19	1	81	1	71	58	8	9	15	8	5	3	3	4	8	A	5	3	2	2	8	2	2	2	13.9	80.9
31-May-06	3	34	167	1	53	35	3	4	6	17	7	4	28	3	A	4	4	3	2	5	28	26	4	2	19.3	166.5
Hourly Avg	7.6	14.4	14.1	9.6	13.8	16.9	10.3	11.7	12.5	9.4	11.9	4.4	6.5	7.8	4.5	3.9	8.2	8.0	11.4	10.3	5.7	5.6	7.3	7.3		
Hourly Max	108.9	168.7	166.5	80.7	107.8	65.1	57.4	121.3	81.3	83.4	104.8	29.4	62.0	40.3	17.5	24.9	66.8	45.7	76.0	85.4	52.6	54.9	51.1	67.7		



# PAS - Crescent Heights - Oxides of Nitrogen Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## HOURLY AVERAGE TABLE

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

Monitoring Dates: May 1, 2006 to June 1, 2006

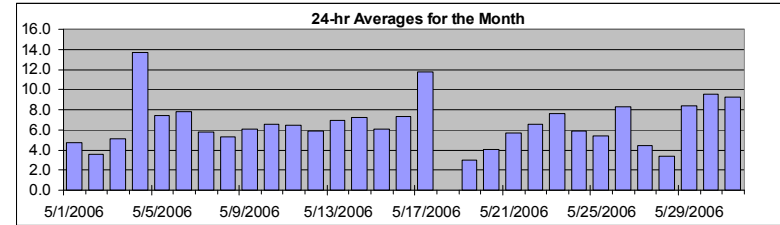
Guideline Limit: Alberta Environment: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	57.0	ppb	4-May	6:00 7:00
Maximum 24-hr Average:	13.7	ppb	4-May	

AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	26.3	16.0	8.4	5.2	3.3	1.9	1.2	6.7 ppb	5.2 ppb



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00		
1-May-06	2	5	6	6	2	3	5	7	A	9	6	3	3	4	4	3	3	4	4	4	7	7	8	2		4.7	9.4	
2-May-06	2	8	3	2	5	5	9	A	5	5	4	3	3	3	3	3	4	3	3	2	2	3	1	1		3.6	9.3	
3-May-06	1	1	1	1	2	4	A	8	3	4	7	5	6	4	3	3	4	4	4	6	13	13	9	12		5.1	13.1	
4-May-06	13	16	19	37	27	A	57	48	10	4	2	2	2	3	4	3	5	4	7	11	16	11	7	6		13.7	57.0	
5-May-06	4	7	3	2	A	12	14	11	8	5	6	3	3	2	3	2	6	8	11	22	15	12	8	3		7.4	22.1	
6-May-06	4	6	3	A	7	9	9	17	6	11	5	5	6	8	4	4	3	8	12	6	4	11	18	13		7.8	18.5	
7-May-06	10	10	A	15	6	9	6	4	8	4	5	4	4	2	3	3	3	9	8	7	4	3	5	3		5.8	14.6	
8-May-06	9	A	4	6	10	12	6	6	5	4	4	2	2	3	3	4	5	6	3	11	4	3	7	4		5.3	11.7	
9-May-06	A	16	4	7	7	8	7	6	6	5	5	4	5	6	6	6	7	5	6	4	9	3	3	A		6.1	15.7	
10-May-06	11	11	7	3	5	7	10	10	7	5	11	8	4	7	6	3	4	2	2	2	6	7	A	12		6.5	11.8	
11-May-06	11	7	12	8	12	10	6	5	3	2	3	3	2	2	2	3	5	7	15	13	7	A	4	5		6.4	15.4	
12-May-06	7	6	5	4	6	9	13	7	4	9	6	7	3	4	5	3	4	12	5	3	A	5	6	3		5.9	13.0	
13-May-06	5	7	6	5	11	15	12	6	4	3	3	2	3	4	3	4	3	6	3	A	10	10	14	19		6.9	19.3	
14-May-06	15	16	16	20	21	21	13	5	4	1	1	1	1	1	1	1	1	1	A	4	4	6	5	5		7.2	21.2	
15-May-06	3	8	3	5	8	10	12	11	5	3	3	2	2	3	2	2	4	A	14	11	9	13	4	1		6.1	14.3	
16-May-06	1	1	3	11	11	19	21	22	9	3	5	2	3	3	3	3	A	6	8	8	6	7	8	4		7.4	21.9	
17-May-06	4	6	8	9	10	23	28	22	16	7	4	4	3	2	2	A	11	5	6	8	28	26	24	15		11.8	27.7	
18-May-06	12	7	10	14	10	16	19	17	15	10	C	C	C	C	4	2	3	4	C	C	C	C	C	A		N	18.7	
19-May-06	7	3	A	5	4	5	4	4	3	3	3	2	2	2	2	2	2	2	2	2	2	3	2	2		3.0	6.8	
20-May-06	2	3	A	6	6	5	4	3	3	2	2	2	3	3	3	4	2	4	8	5	2	10	7	4		4.1	10.0	
21-May-06	8	A	7	6	5	9	4	4	6	4	3	5	6	4	2	2	3	3	7	8	7	16	5	9		5.7	15.9	
22-May-06	A	8	10	8	12	11	9	10	7	5	3	2	1	2	3	4	4	4	4	4	7	12	8	11	A		6.6	12.1
23-May-06	7	9	5	13	17	16	15	11	10	4	6	4	4	4	5	4	4	7	8	10	3	3	A	6		7.6	16.6	
24-May-06	7	8	14	12	10	10	8	8	7	6	5	3	4	3	4	3	3	3	2	3	4	A	6	4		5.9	13.7	
25-May-06	4	9	4	3	7	9	6	6	6	8	10	5	4	4	5	3	2	2	3	4	A	7	6	6		5.4	10.3	
26-May-06	6	4	5	3	3	5	5	7	10	8	7	5	7	12	11	7	9	6	4	A	8	10	19	26		8.2	26.3	
27-May-06	6	9	8	7	7	9	7	3	4	3	3	2	2	2	2	3	2	3	A	7	4	3	4	4		4.5	9.0	
28-May-06	4	3	3	3	2	2	2	3	3	2	2	2	2	3	3	3	3	A	7	5	3	3	3	9		3.4	8.7	
29-May-06	9	5	5	7	8	10	12	12	8	9	5	8	4	7	7	5	A	10	7	13	9	12	7	11		8.4	12.8	
30-May-06	13	4	10	6	10	16	12	9	10	9	8	5	4	5	14	A	9	6	6	9	20	10	12	12		9.6	20.3	
31-May-06	5	6	16	4	9	7	7	6	4	5	7	7	4	5	A	8	7	7	5	8	25	26	23	11		9.2	26.4	
Hourly Avg	6.6	7.2	7.2	7.9	8.6	10.2	11.4	10.0	6.6	5.3	4.8	3.8	3.4	3.8	4.0	3.5	4.4	5.2	6.3	7.3	8.7	8.9	8.6	7.6				
Hourly Max	15.3	16.3	19.2	37.4	26.8	23.4	57.0	48.2	15.7	10.8	11.1	8.3	7.2	11.5	13.9	8.0	10.6	11.9	15.4	22.1	27.7	26.4	23.9	26.3				

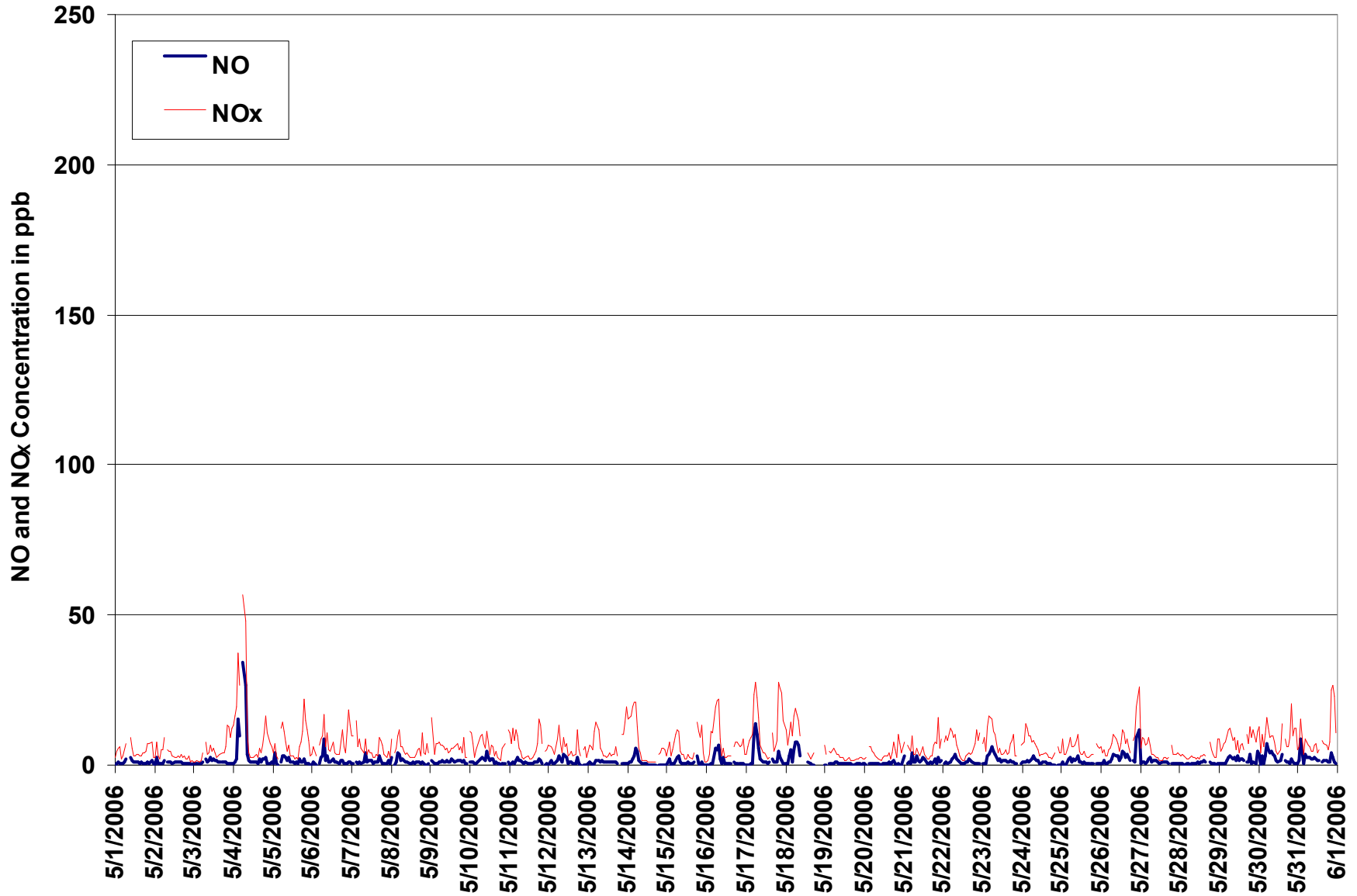


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

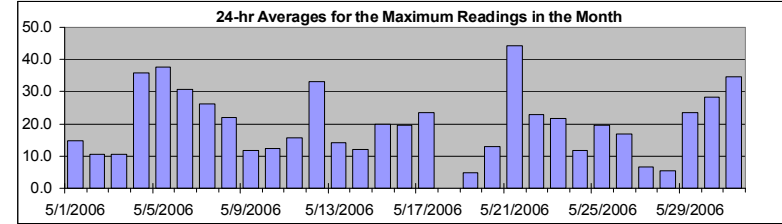
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: May 1, 2006 to June 1, 2006

**Summary**

Maximum 1-hr Value:	202.2	ppb	31-May	2:00 3:00
Maximum 24-hr Value:	44.3	ppb	21-May	



AIC Time:	33 hrs	Operational Time:	702 hrs						
Calibration Time:	9 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	128.8	75.9	20.8	11.6	5.6	3.2	2.2	20.4 ppb	11.6 ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-06	12	17	27	11	7	8	7	12	A	26	9	5	6	7	5	5	7	6	38	46	11	59	5	14.9	58.7	
2-May-06	4	106	5	4	17	13	12	A	8	7	10	4	4	5	7	4	6	4	5	4	3	7	2	3	10.6	106.0
3-May-06	3	2	2	2	8	15	A	12	6	17	21	20	13	8	5	5	6	11	7	12	21	22	12	14	10.7	21.7
4-May-06	17	24	44	46	39	A	66	74	26	9	4	5	4	31	42	4	56	7	78	88	78	17	10	53	35.7	88.4
5-May-06	36	201	16	4	A	35	43	76	78	29	82	5	26	4	15	3	89	11	21	37	22	16	12	4	37.6	201.3
6-May-06	6	29	4	A	10	56	75	150	19	89	13	9	15	81	7	7	14	20	20	8	17	29	24	30.8	149.8	
7-May-06	12	14	A	28	15	14	14	30	120	21	26	31	47	5	8	9	6	70	38	11	5	4	68	9	26.3	119.7
8-May-06	67	A	7	68	119	67	10	13	7	5	8	4	4	4	5	5	13	14	5	40	8	5	14	9	21.8	119.2
9-May-06	A	33	7	11	13	10	10	12	9	7	8	6	6	29	15	15	13	10	13	6	17	4	A	11.7	32.8	
10-May-06	16	15	13	4	6	9	14	17	12	8	22	12	10	35	30	5	7	4	3	3	13	10	A	19	12.4	34.8
11-May-06	13	12	15	12	17	21	8	6	4	5	5	6	3	3	6	22	25	16	72	49	13	A	8	16	15.6	71.7
12-May-06	17	76	16	5	48	49	17	14	26	142	129	49	8	38	12	6	8	56	11	9	A	8	16	4	33.2	142.2
13-May-06	21	27	10	19	23	22	20	8	5	5	5	4	8	9	7	8	10	14	7	A	14	18	33	33	14.3	33.1
14-May-06	25	20	19	69	26	25	19	9	5	3	2	3	2	2	2	2	2	A	6	8	7	7	9	9	11.9	68.9
15-May-06	5	43	5	10	13	13	16	14	7	4	4	4	4	43	5	5	33	A	130	23	11	55	13	2	20.0	130.3
16-May-06	2	3	6	39	35	99	27	30	20	5	77	4	4	11	6	6	A	13	13	11	10	9	17	5	19.6	98.9
17-May-06	12	8	16	12	12	36	37	27	27	34	6	18	35	3	4	A	18	14	14	14	72	52	42	29	23.6	71.7
18-May-06	16	10	92	102	18	53	22	39	49	18	C	C	C	C	7	4	8	11	C	C	C	C	C	A	N	102.1
19-May-06	13	8	A	6	5	6	6	5	5	4	8	4	2	3	4	5	3	3	2	3	3	4	3	3	4.8	13.1
20-May-06	3	4	A	10	7	6	5	4	4	3	2	4	5	5	4	50	4	62	70	12	4	16	10	6	12.9	70.4
21-May-06	134	A	10	23	8	83	5	5	92	15	5	27	130	59	3	4	42	40	20	117	12	89	39	60	44.3	134.1
22-May-06	A	10	26	11	15	14	15	14	10	7	5	3	2	2	33	52	75	61	75	11	24	20	18	A	22.8	75.1
23-May-06	15	24	6	54	47	32	78	15	21	8	42	6	14	15	17	7	8	16	15	22	7	10	A	20	21.7	77.6
24-May-06	27	22	20	19	20	16	21	11	9	11	8	5	7	6	18	8	6	6	3	6	6	A	10	5	11.8	27.1
25-May-06	6	46	6	5	79	74	8	15	15	18	71	15	10	7	12	7	5	5	11	7	A	14	9	9	19.7	79.4
26-May-06	11	6	12	4	4	10	32	12	16	16	16	7	13	29	17	11	17	11	8	A	11	14	68	43	16.9	68.3
27-May-06	12	13	11	8	13	13	9	6	5	4	4	3	3	3	4	5	4	4	A	11	5	4	5	5	6.6	12.9
28-May-06	5	4	5	4	4	4	4	4	3	3	3	3	4	6	5	5	5	A	20	7	5	4	4	19	5.5	19.9
29-May-06	13	9	7	14	13	15	15	18	14	15	8	19	6	17	13	13	A	19	17	124	21	36	12	100	23.4	123.7
30-May-06	49	5	126	7	89	88	17	18	23	19	13	9	8	11	27	A	13	9	12	13	45	13	18	17	28.2	125.6
31-May-06	12	54	202	5	75	57	9	9	10	27	17	12	33	12	A	14	17	13	9	17	82	62	31	17	34.6	202.2
Hourly Avg	20.1	29.1	26.2	20.5	26.9	32.0	21.3	22.5	21.9	18.8	21.1	10.2	14.4	16.4	11.4	10.3	17.6	18.1	25.1	25.7	20.5	19.6	20.4	19.3		
Hourly Max	134.1	201.3	202.2	102.1	119.2	98.9	77.6	149.8	119.7	142.2	128.8	48.7	129.9	80.9	41.6	52.0	89.5	69.5	130.3	123.7	82.1	88.8	68.4	100.3		



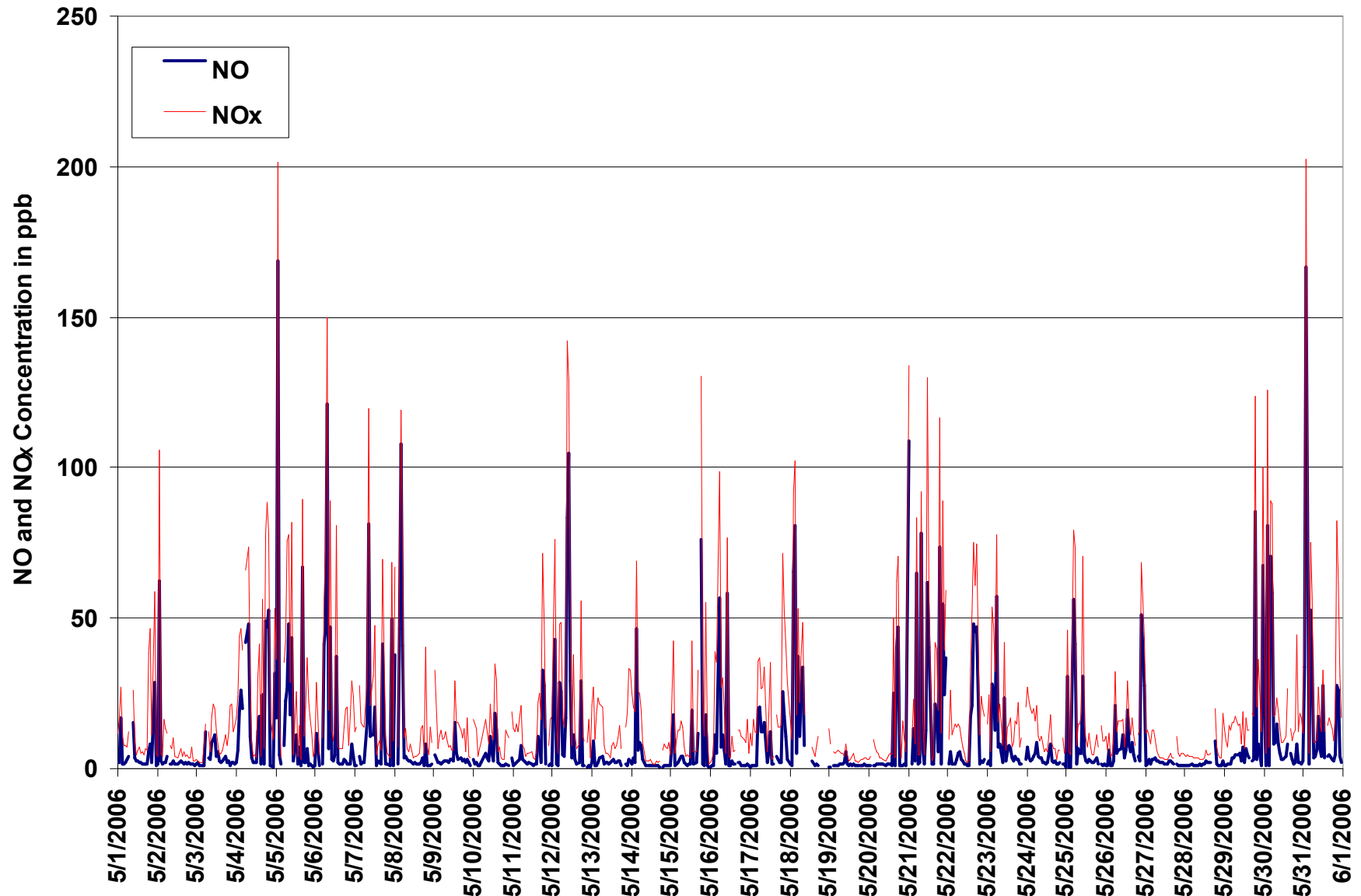


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



# PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

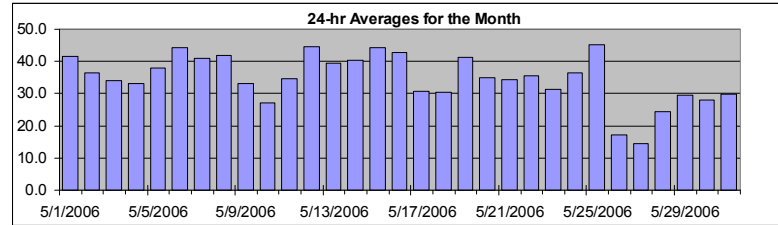
## HOURLY AVERAGE TABLE

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

Monitoring Dates: May 1, 2006 to June 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:	64.4 ppb	14-May	14:00 15:00
Maximum 24-hr Average:	45.1 ppb	25-May	



AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	63.2	55.6	45.7	34.9	24.7	12.5	6.3	34.8 ppb	34.9 ppb

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-06	33	32	30	32	35	32	29	23	A	39	45	49	49	50	53	54	55	53	51	47	43	39	40	47	41.7	54.9	
2-May-06	46	39	36	31	31	31	32	A	42	40	40	39	40	41	39	38	37	37	36	35	34	32	34	32	36.5	45.7	
3-May-06	32	31	33	33	32	31	A	31	34	33	34	35	34	37	40	41	42	43	43	39	29	29	29	22	34.1	43.4	
4-May-06	20	17	9	1	1	A	5	15	38	44	46	48	50	51	52	52	51	51	48	41	32	30	29	32	33.2	52.4	
5-May-06	35	37	38	38	A	32	34	39	45	50	51	50	46	47	46	46	43	39	35	21	18	24	30	32	38.0	50.8	
6-May-06	26	30	34	A	30	31	30	30	40	51	56	58	57	59	64	64	63	60	53	52	45	34	25	27	44.3	64.0	
7-May-06	28	24	A	23	38	37	31	33	36	42	49	52	53	54	55	56	57	48	43	39	36	35	33	39	40.9	56.6	
8-May-06	32	A	39	32	30	27	30	37	39	42	46	49	48	53	54	51	49	49	51	43	46	42	35	37	41.8	53.6	
9-May-06	A	25	33	30	30	31	34	34	37	37	36	37	36	36	37	33	31	34	33	33	28	32	30	A	33.0	37.3	
10-May-06	22	19	20	22	19	18	17	17	21	22	21	28	34	35	39	44	43	44	45	36	27	19	A	12	27.0	44.6	
11-May-06	12	17	10	13	8	13	18	21	29	44	48	49	50	51	52	52	51	48	39	36	41	A	51	44	34.6	52.3	
12-May-06	35	30	28	28	26	27	24	36	42	49	53	53	55	54	53	54	54	51	53	57	A	58	52	51	44.5	58.3	
13-May-06	46	41	35	40	32	24	26	29	33	38	40	43	46	47	50	53	54	52	55	A	45	39	24	14	39.4	54.7	
14-May-06	14	11	9	6	4	7	16	26	37	56	61	63	64	64	64	64	63	62	A	57	51	44	41	41	40.4	64.4	
15-May-06	45	41	38	32	27	25	27	31	43	52	57	59	58	57	54	54	52	A	46	40	32	35	53	58	44.2	58.7	
16-May-06	57	52	44	35	33	30	26	27	42	47	47	50	51	51	55	51	A	48	46	44	43	36	33	37	42.8	57.2	
17-May-06	35	25	19	14	9	4	9	14	27	41	50	51	48	47	49	A	49	54	54	41	22	18	11	16	30.8	54.4	
18-May-06	18	26	22	14	10	8	8	11	14	28	31	38	48	52	51	48	47	47	41	43	36	29	30	33	30.6	52.3	
19-May-06	28	35	A	35	34	29	30	C	C	A	45	46	48	48	48	49	51	51	50	46	44	39	37	35	41.3	51.2	
20-May-06	35	32	A	30	27	25	26	29	35	42	44	48	46	47	47	48	45	41	33	32	32	20	20	21	35.0	47.9	
21-May-06	18	A	20	19	20	18	22	22	28	36	41	44	46	47	49	51	52	50	43	40	33	24	35	26	34.2	51.6	
22-May-06	A	32	26	25	17	15	21	24	33	39	46	51	54	54	49	47	44	44	42	35	23	31	30	A	35.5	54.5	
23-May-06	38	32	32	22	17	13	12	20	29	32	32	37	38	37	38	39	39	38	35	33	42	40	A	30	31.5	41.6	
24-May-06	27	24	18	14	14	17	21	24	29	36	46	49	48	48	50	52	54	54	55	50	44	A	32	28	36.3	55.1	
25-May-06	23	25	34	43	43	35	35	33	39	44	48	56	58	60	58	58	58	57	56	53	A	45	40	36	45.1	60.3	
26-May-06	30	25	17	18	18	16	17	15	13	14	15	20	25	22	20	21	18	17	19	A	14	10	7	3	17.1	30.4	
27-May-06	12	7	5	6	8	8	9	13	12	14	15	16	18	20	19	18	18	17	A	18	21	21	20	19	14.5	21.1	
28-May-06	20	22	23	25	26	26	25	26	25	25	25	24	24	24	25	25	25	A	28	25	26	26	25	19	24.5	27.9	
29-May-06	19	23	23	22	21	17	19	24	29	30	34	33	37	36	36	38	A	42	39	33	31	32	36	28	29.6	42.3	
30-May-06	22	24	19	18	14	11	14	24	26	31	36	41	42	40	33	A	43	44	43	37	23	25	19	15	28.1	44.0	
31-May-06	20	19	17	20	20	19	21	23	26	31	35	41	46	46	A	49	49	48	48	42	26	18	12	12	29.8	48.9	
Hourly Avg	28.6	27.5	25.5	23.9	22.5	21.9	22.3	25.2	31.9	37.6	41.0	43.7	45.0	45.7	46.0	46.5	46.1	45.7	43.5	39.7	33.3	31.2	30.8	29.1			
Hourly Max	57.2	51.8	43.6	42.5	42.8	36.5	35.1	39.5	45.1	56.5	61.3	62.7	63.7	64.3	64.4	63.9	63.4	62.4	55.9	57.5	50.8	58.3	52.7	58.3			

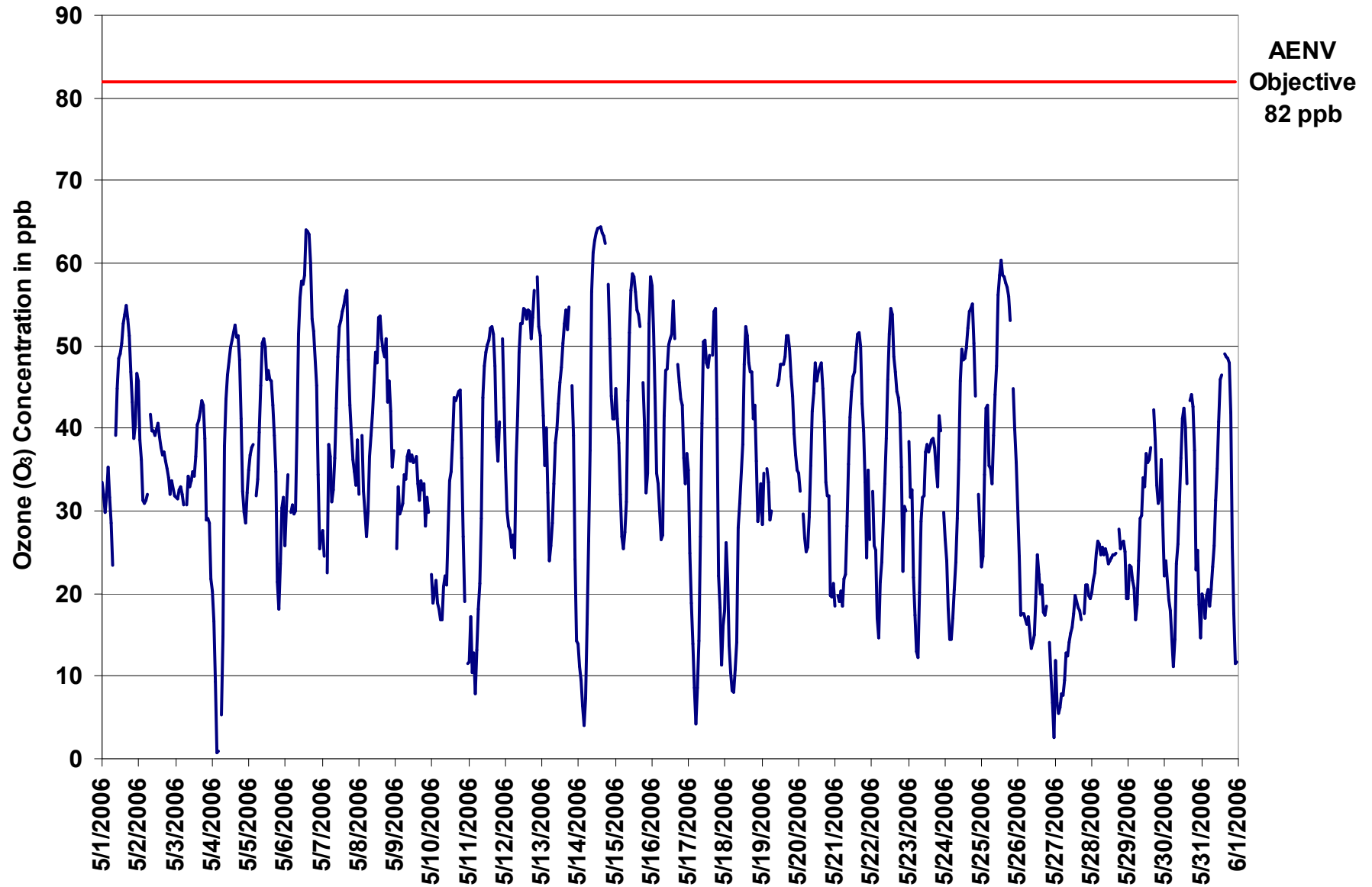


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

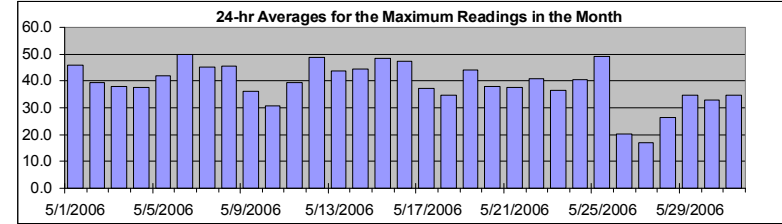
**Ozone (O<sub>3</sub>)**

Monitoring Dates: May 1, 2006 to June 1, 2006

**Summary**

Maximum 1-hr Value:	68.5	ppb	6-May	14:00 15:00
Maximum 24-hr Value:	49.8	ppb	6-May	

AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	65.3	59.5	49.6	39.2	28.6	16.4	9.3	38.9 ppb	39.2 ppb



**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	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-May-06	36	36	33	37	37	35	31	28	A	43	47	51	52	53	55	56	57	58	55	51	55	55	46	50	45.9	57.6
2-May-06	50	44	43	35	35	34	36	A	44	42	43	42	42	42	41	40	40	39	38	36	36	35	35	35	39.5	49.6
3-May-06	34	33	34	34	34	34	A	37	36	36	40	39	38	40	42	44	45	45	46	44	40	36	36	25	37.9	45.5
4-May-06	26	25	20	2	2	A	8	27	45	47	48	51	52	53	54	55	55	53	53	48	37	37	31	36	37.6	54.9
5-May-06	38	39	39	39	A	35	38	46	48	54	54	54	49	49	48	48	48	45	39	32	22	26	35	35	41.8	54.2
6-May-06	28	37	38	A	33	36	33	37	54	56	60	61	61	64	68	67	66	65	62	57	47	43	37	35	49.8	68.5
7-May-06	31	34	A	36	41	44	35	36	40	47	52	55	56	56	57	59	60	56	49	43	39	36	36	40	45.2	59.9
8-May-06	39	A	41	38	34	31	32	41	42	45	53	53	52	56	56	54	53	53	53	48	49	44	40	41	45.5	56.3
9-May-06	A	33	36	32	33	35	37	38	40	40	39	39	38	38	40	38	34	38	36	35	32	33	32	A	36.2	40.4
10-May-06	27	24	24	24	21	19	19	20	26	25	24	32	37	39	43	47	49	47	48	39	34	25	A	17	30.8	48.8
11-May-06	20	22	16	15	12	17	22	25	35	47	50	52	52	53	55	55	55	52	48	45	53	A	53	52	39.4	55.2
12-May-06	41	35	31	30	28	33	28	41	48	56	57	57	57	57	57	57	60	60	60	A	61	57	54		48.8	60.7
13-May-06	49	47	40	47	37	35	30	31	38	40	42	46	49	50	53	55	57	56	57	A	51	46	33	19	43.8	57.2
14-May-06	18	15	13	11	7	16	25	31	51	62	63	65	66	65	66	66	65	64	A	62	55	47	43	46	44.4	65.7
15-May-06	49	48	41	36	30	29	30	39	48	56	59	61	60	60	57	56	55	A	54	47	36	47	57	60	48.5	60.6
16-May-06	59	56	49	43	39	37	31	35	48	49	51	52	53	53	58	55	A	55	50	48	48	40	39	40	47.3	59.2
17-May-06	38	29	27	21	12	6	13	17	38	50	53	53	51	49	51	A	58	60	60	49	39	40	16	22	37.1	60.3
18-May-06	24	29	26	18	12	10	11	13	17	33	34	44	54	56	57	50	51	51	51	49	39	32	34	40	34.8	56.9
19-May-06	36	38	A	37	37	32	31	C	C	A	47	48	50	50	49	52	53	53	52	49	45	43	39	37	43.9	53.0
20-May-06	37	34	A	32	29	26	28	32	41	45	46	50	48	49	50	50	48	44	42	37	35	27	22	23	38.0	50.3
21-May-06	20	A	21	20	22	21	25	25	33	39	44	48	49	50	51	55	55	54	47	44	38	35	38	32	37.6	54.9
22-May-06	A	37	29	33	22	18	28	31	39	42	52	55	56	55	54	50	48	46	45	40	32	40	43	A	40.7	56.0
23-May-06	43	39	35	34	23	21	16	29	33	33	37	39	41	39	41	42	41	43	41	45	44	42	A	36	36.5	45.2
24-May-06	32	31	29	19	19	20	24	29	33	42	50	52	51	51	53	56	56	57	58	54	49	A	38	30	40.6	57.9
25-May-06	25	27	42	45	49	41	37	37	45	50	56	60	62	63	63	62	60	59	59	56	A	48	45	38	49.0	63.0
26-May-06	33	31	19	18	19	19	19	18	15	16	17	25	28	26	23	23	22	20	21	A	17	13	13	7	20.1	32.5
27-May-06	15	11	7	9	11	10	12	16	14	16	17	18	20	22	24	20	22	22	A	20	23	22	21	21	17.1	23.6
28-May-06	23	23	24	26	27	28	26	27	26	27	26	25	25	26	27	27	27	A	30	28	28	28	27	24	26.3	29.8
29-May-06	25	26	25	25	25	20	23	30	32	34	40	39	40	39	41	41	A	47	44	40	39	43	45	34	34.7	47.2
30-May-06	28	26	23	22	17	15	18	29	32	38	41	44	45	44	41	A	47	47	48	43	34	29	26	19	32.8	47.6
31-May-06	22	23	20	23	24	20	24	25	29	36	38	47	49	51	A	53	52	52	52	47	37	35	20	16	34.5	52.8
Hourly Avg	32.7	32.2	29.5	28.1	25.7	26.0	25.7	30.0	37.0	41.5	44.5	46.9	47.8	48.4	49.2	49.3	49.5	49.7	48.2	44.7	39.1	37.5	35.7	33.2		
Hourly Max	59.2	56.4	49.3	46.8	48.7	44.4	38.5	45.6	54.5	62.4	62.9	64.9	65.6	65.4	68.5	66.5	65.7	65.4	61.5	61.6	55.0	60.7	57.2	59.9		

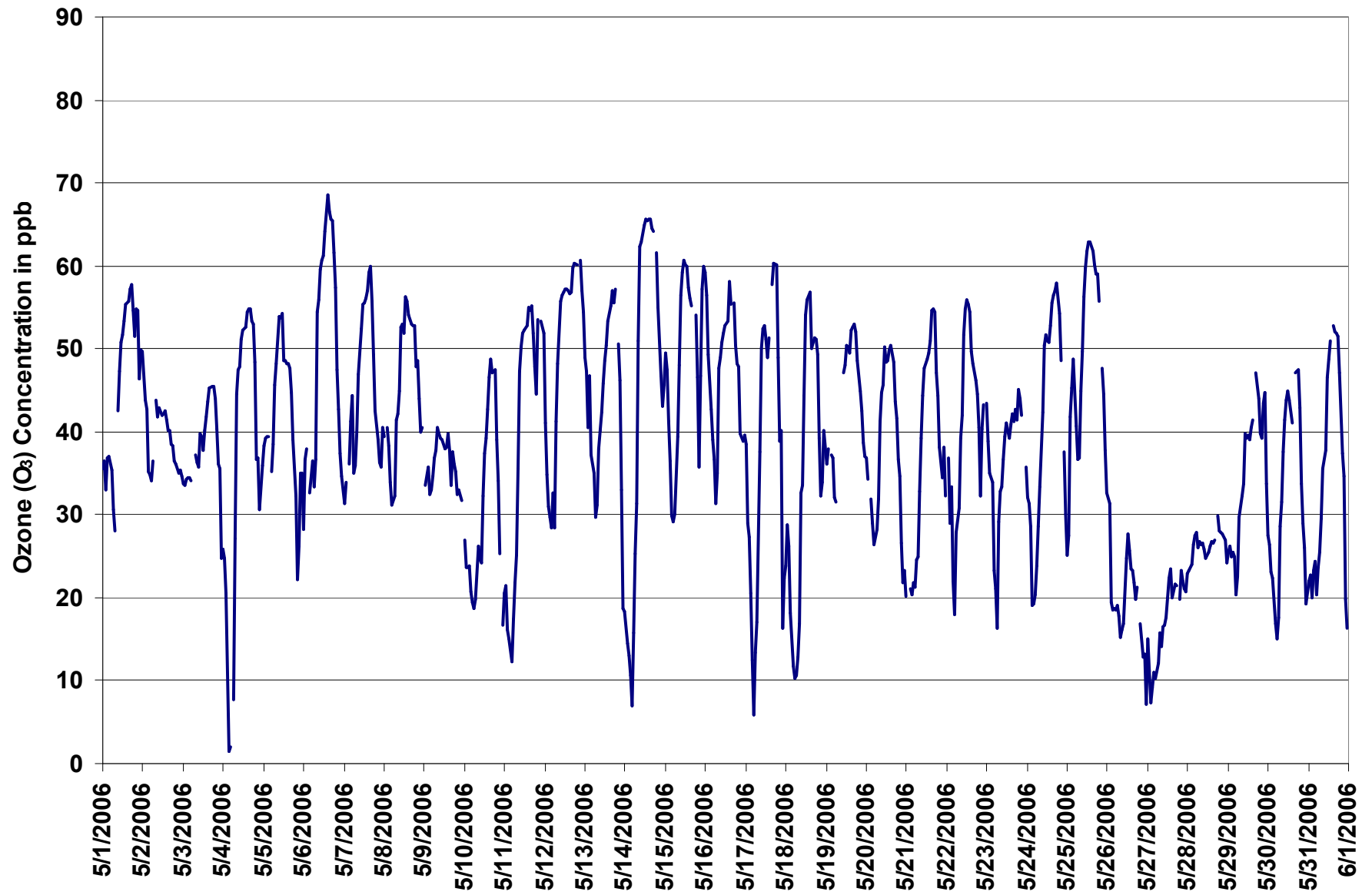
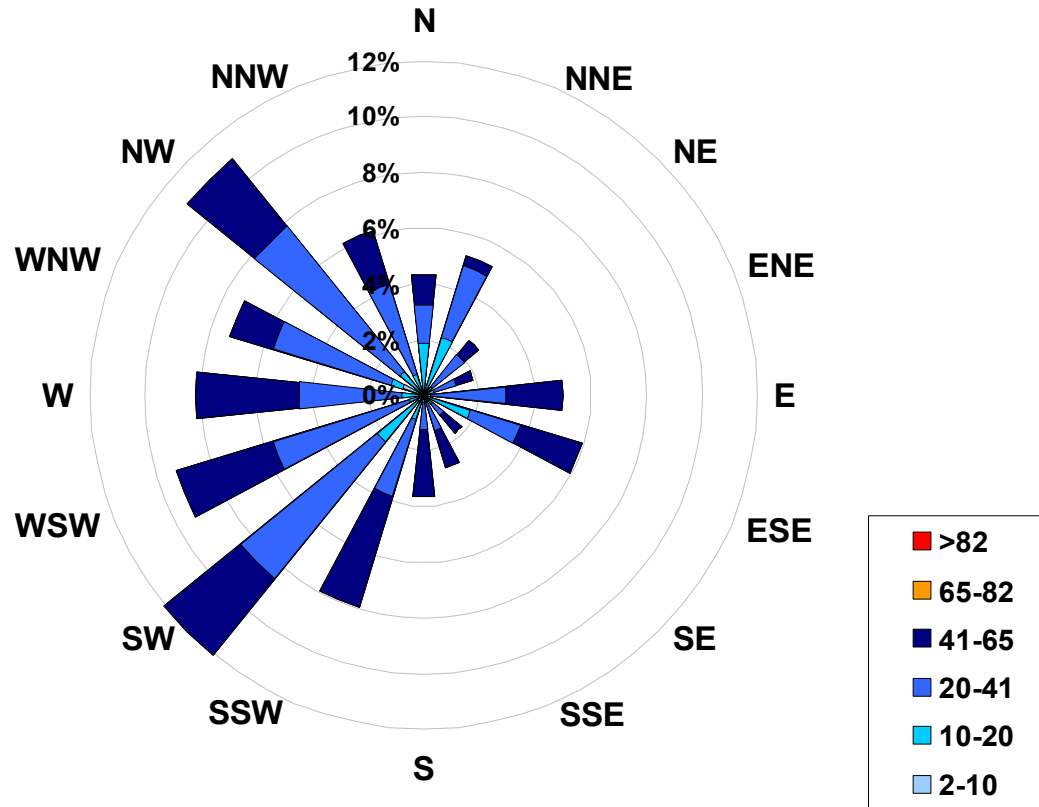


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of O <sub>3</sub> in ppb			
Range		Frequency (hrs)	
2.0	< 10	22	
10	to 20	97	
20	to 41	341	
41	to 65	249	
65	to 82	0	
	> 82	0	
Total Non-Zero Values			709



# PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

## EIGHT HOUR RUNNING AVERAGE TABLE

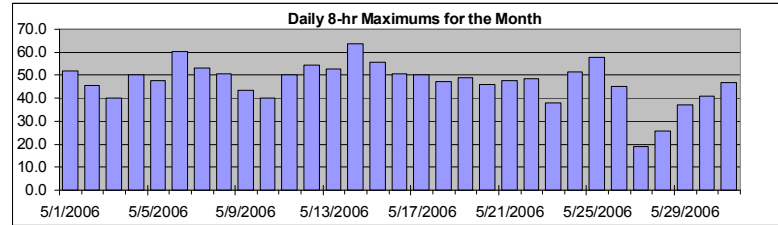
### Ozone (O<sub>3</sub>)

Monitoring Dates: May 1, 2006 to June 1, 2006

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

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	63.5	ppb	14-May	18:00	19:00		

Percentile	99	95	75	50	25	5	1
	59.2	52.5	43.9	35.1	26.3	15.7	9.6



#### Status Flag Characters

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

Day	Mountain Standard Time																							Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-May-06	34	34	34	33	34	33	32	31	30	31	34	36	38	41	44	48	49	51	52	51	51	49	48	47	51.7	
2-May-06	46	44	42	40	39	38	37	35	35	35	35	36	38	39	40	40	39	39	38	38	37	36	35	35	45.7	
3-May-06	34	33	33	33	32	32	32	32	32	32	32	33	33	34	35	36	37	38	39	40	39	38	37	34	39.9	
4-May-06	32	28	24	19	16	14	11	10	12	16	21	28	35	37	43	48	49	50	50	49	47	45	42	39	50.4	
5-May-06	37	36	34	34	34	34	35	36	38	39	41	43	43	45	47	48	47	46	44	40	37	34	32	30	47.6	
6-May-06	28	27	27	28	29	30	30	30	32	35	38	41	44	48	52	56	59	60	60	59	58	54	50	45	60.1	
7-May-06	41	36	34	30	28	29	30	30	32	34	36	40	42	44	47	50	52	53	52	51	49	46	43	41	53.0	
8-May-06	38	37	36	35	34	33	33	32	33	34	35	37	40	43	46	48	49	50	50	50	49	48	46	44	50.5	
9-May-06	43	40	37	35	33	32	32	31	32	33	34	35	35	36	36	36	35	35	35	34	33	33	32	31	43.3	
10-May-06	30	28	26	25	23	21	19	19	19	19	20	20	22	24	27	30	33	36	39	40	39	37	37	32	40.0	
11-May-06	28	24	19	16	13	12	13	14	16	20	24	29	34	39	43	47	50	50	49	47	46	46	45	44	50.1	
12-May-06	42	39	38	37	34	34	30	29	30	32	35	39	42	46	49	52	53	53	53	54	54	54	54	54	54.4	
13-May-06	53	51	49	46	45	40	37	34	33	32	33	35	38	41	44	46	48	50	51	51	50	46	41	52.7		
14-May-06	35	29	22	20	15	11	10	12	15	20	27	34	41	49	55	59	62	63	63	63	61	58	55	51	63.5	
15-May-06	49	46	45	42	39	36	35	33	33	35	37	40	44	48	51	54	55	56	54	52	48	45	45	45	55.8	
16-May-06	46	47	46	46	46	45	42	38	36	35	36	38	40	43	46	49	50	50	50	49	48	46	43	41	50.5	
17-May-06	40	37	34	30	26	22	19	16	15	17	21	26	30	36	41	45	48	50	50	49	45	41	36	33	50.4	
18-May-06	29	26	22	18	17	16	15	15	14	14	16	19	23	29	34	39	43	45	46	47	46	43	40	38	47.1	
19-May-06	36	34	33	32	32	32	32	N	N	N	N	N	N	N	N	N	48	48	49	49	48	47	46	44	48.8	
20-May-06	42	40	38	36	33	31	30	29	29	31	32	35	37	40	42	45	46	46	44	42	41	37	34	30	45.8	
21-May-06	27	25	23	21	20	20	20	20	21	23	26	29	32	36	39	43	46	48	48	47	46	43	41	38	47.8	
22-May-06	36	33	31	29	27	25	23	23	24	25	28	31	35	40	44	47	48	49	48	46	42	39	37	36	48.6	
23-May-06	35	33	32	30	29	26	24	23	22	22	22	24	27	30	33	35	36	37	38	37	37	38	38	36	37.8	
24-May-06	35	33	30	28	24	21	21	20	20	22	25	30	34	38	41	45	48	50	51	52	51	51	49	45	51.6	
25-May-06	41	37	34	33	32	33	33	34	36	38	40	42	44	47	50	53	55	57	58	57	57	55	52	49	57.8	
26-May-06	45	41	35	30	29	25	22	20	17	16	16	16	17	18	18	19	19	20	20	20	19	17	15	12	45.3	
27-May-06	12	10	8	8	7	7	7	9	9	10	11	12	13	15	16	17	17	18	18	18	19	19	19	19	19.1	
28-May-06	19	20	20	21	22	23	23	24	25	25	25	25	25	25	25	25	25	24	25	25	25	26	26	25	25.8	
29-May-06	24	24	24	23	22	21	20	21	22	23	24	26	28	30	32	34	35	37	37	37	36	36	36	34	37.2	
30-May-06	33	31	28	26	24	22	19	18	19	20	22	25	28	32	34	36	38	40	41	40	38	36	33	31	41.0	
31-May-06	28	25	22	20	19	19	19	20	21	22	24	27	30	34	36	39	42	45	47	47	44	40	36	32	46.9	
Hourly Max	52.7	51.3	48.8	46.4	45.8	45.2	41.9	38.0	37.6	39.5	41.3	43.0	44.1	48.5	54.6	59.2	62.5	63.2	63.5	62.7	60.9	58.0	54.7	53.9		



# PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

## HOURLY AVERAGE TABLE

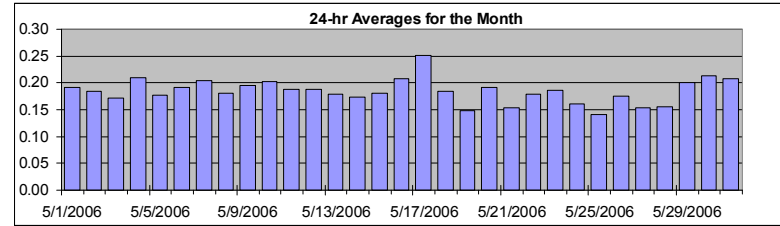
## Carbon Monoxide (CO)

Monitoring Dates: May 1, 2006 to June 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:	0.5 ppm	4-May	6:00	7:00
Maximum 24-hr Value:	0.3 ppm	17-May		

AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.2 ppm	0.2 ppm



### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00				
1-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.23
2-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.18	0.23	
3-May-06	0.1	0.2	0.1	0.1	0.1	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.24	
4-May-06	0.3	0.3	0.2	0.3	0.2	A	0.5	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.51	
5-May-06	0.1	0.1	0.1	0.1	A	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.18	0.32	
6-May-06	0.1	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.19	0.31	
7-May-06	0.4	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.37	
8-May-06	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.23	
9-May-06	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.20	0.25	
10-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.20	0.24	
11-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.19	0.25	
12-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.19	0.26	
13-May-06	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.18	0.24	
14-May-06	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	A	0.1	0.2	0.2	0.2	0.1	0.17	0.30		
15-May-06	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	A	0.2	0.3	0.2	0.2	0.2	0.1	0.18	0.26		
16-May-06	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.21	0.32		
17-May-06	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.3	0.25	0.44		
18-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	C	C	C	A	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.19	0.27		
19-May-06	0.1	0.1	A	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.15	0.18	
20-May-06	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.19	0.27	
21-May-06	0.2	A	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.15	0.29	
22-May-06	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	A	0.2	0.18	0.25	
23-May-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	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.19	0.25	
24-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.1	0.1	0.16	0.22	
25-May-06	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.1	0.1	0.1	0.1	0.14	0.19	
26-May-06	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	A	0.2	0.2	0.2	0.2	0.2	0.18	0.24	
27-May-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	0.2	0.1	0.2	0.2	A	0.1	0.1	0.1	0.1	0.2	0.1	0.15	0.17	
28-May-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.15	0.20	
29-May-06	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.26	
30-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.21	0.32	
31-May-06	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.2	0.2	0.21	0.49	
Hourly Avg	0.18	0.18	0.17	0.17	0.18	0.20	0.23	0.22	0.18	0.17	0.18	0.16	0.16	0.17	0.17	0.16	0.17	0.18	0.19	0.22	0.22	0.22	0.19	0.18				
Hourly Max	0.37	0.28	0.24	0.26	0.30	0.30	0.51	0.49	0.29	0.22	0.24	0.21	0.20	0.25	0.22	0.20	0.20	0.22	0.26	0.40	0.49	0.45	0.35	0.25				



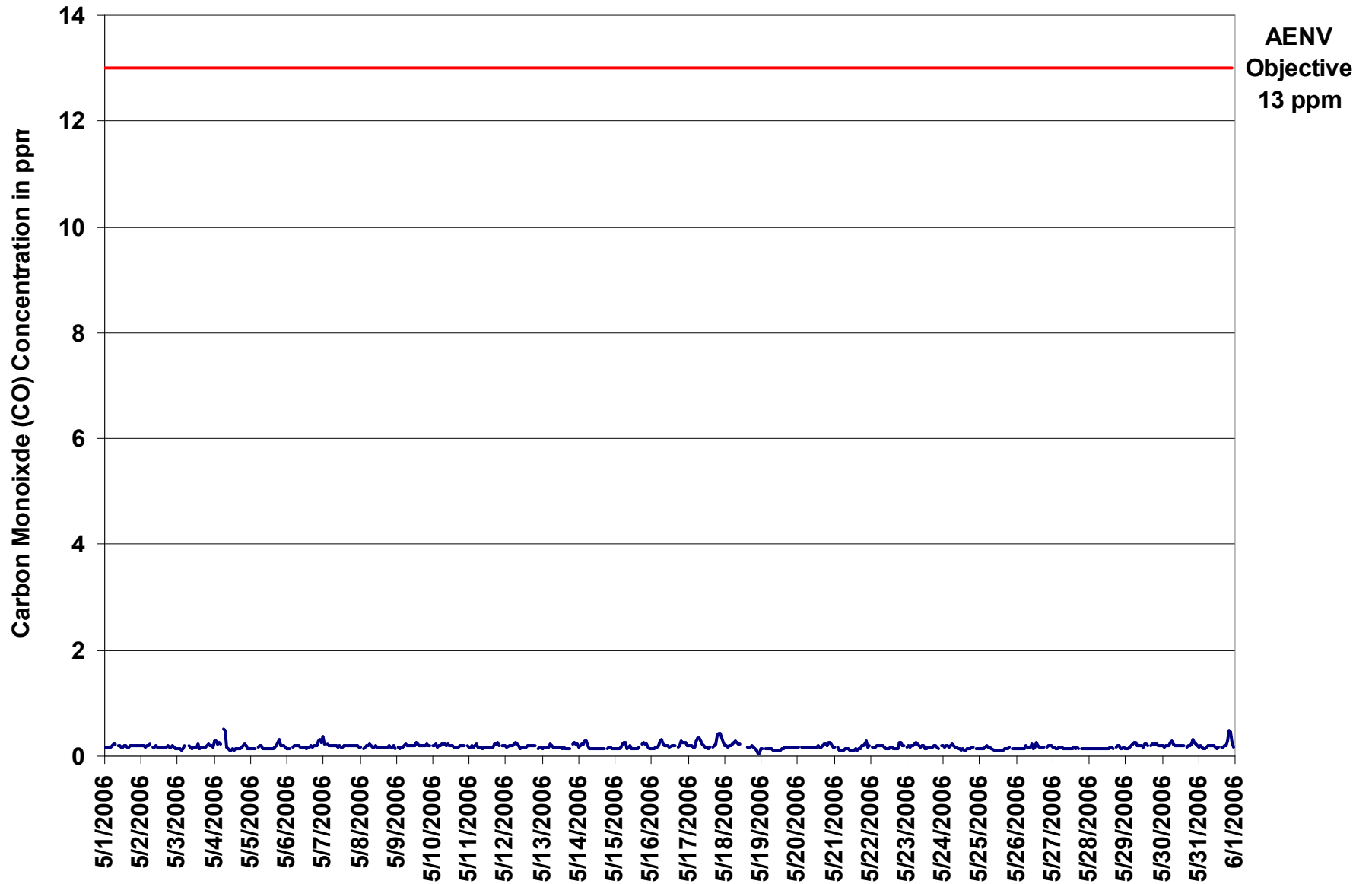


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

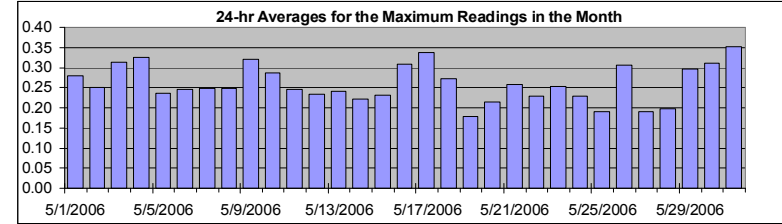
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Carbon Monoxide (CO)**

Monitoring Dates: May 1, 2006 to June 1, 2006

**Summary**

Maximum 1-hr Value:	1.6	ppm	31-May	20:00 21:00
Maximum 24-hr Value:	0.4	ppm	31-May	



AIC Time:	33 hrs	Operational Time:	708 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.8	0.5	0.3	0.2	0.2	0.1	0.1	0.3 ppm	0.2 ppm

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-06	0.2	0.2	0.4	0.2	0.2	0.3	0.4	0.3	A	0.3	0.4	0.2	0.3	0.7	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.28	0.65
2-May-06	0.2	0.2	0.2	0.2	0.3	0.2	0.4	A	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.25	0.44
3-May-06	0.2	0.2	0.2	0.2	0.2	0.5	A	0.3	0.3	0.2	0.4	0.4	0.2	0.7	0.2	0.3	0.4	0.3	0.3	0.4	0.3	0.5	0.5	0.2	0.31	0.70
4-May-06	1.0	0.8	0.6	0.3	0.3	A	0.7	0.7	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.33	1.05
5-May-06	0.2	0.3	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.24	0.50
6-May-06	0.2	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.2	0.25	0.40
7-May-06	0.5	0.3	A	0.3	0.3	0.3	0.2	0.2	0.4	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.25	0.50
8-May-06	0.2	A	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.25	0.39
9-May-06	A	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.3	1.3	0.4	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.2	A	0.32	1.25
10-May-06	0.2	0.2	0.3	0.2	0.2	0.3	0.7	0.4	0.3	0.2	0.4	0.3	0.5	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	A	A	0.2	0.29	0.70
11-May-06	0.2	0.3	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	A	0.2	0.2	0.25	0.40
12-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.2	0.2	0.2	0.23	0.34
13-May-06	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	A	0.3	0.3	0.3	0.3	0.24	0.35
14-May-06	0.2	0.2	0.4	0.3	0.4	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	A	0.2	0.2	0.2	0.1	0.22	0.55	
15-May-06	0.2	0.2	0.1	0.1	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.5	0.3	0.3	0.2	0.1	0.23	0.45	
16-May-06	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.2	0.2	0.2	0.2	0.6	0.3	0.3	A	0.2	0.3	0.4	0.6	0.4	0.4	0.2	0.31	0.65
17-May-06	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.7	0.8	0.8	0.5	0.4	0.34	0.75
18-May-06	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.3	C	C	C	A	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.27	0.45
19-May-06	0.2	0.2	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.40
20-May-06	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.4	0.3	0.2	0.21	0.35
21-May-06	0.2	A	1.5	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	0.2	0.2	0.2	0.2	0.4	0.4	0.2	0.3	0.26	1.52
22-May-06	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	A	0.23	0.40	
23-May-06	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.25	0.45	
24-May-06	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.1	0.1	0.23	0.53
25-May-06	0.1	0.2	0.1	0.1	0.2	0.2	0.4	0.3	0.3	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	A	0.2	0.1	0.1	0.19	0.37
26-May-06	0.1	0.1	0.1	0.1	0.1	0.2	0.9	0.3	0.3	0.2	0.8	0.2	0.2	0.6	0.4	0.2	0.2	0.2	0.2	A	0.4	0.3	0.2	0.2	0.31	0.94
27-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.3	0.1	0.2	0.2	A	0.2	0.1	0.1	0.2	0.1	0.19	0.30
28-May-06	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.3	0.2	0.2	0.2	0.1	0.2	0.20	0.30
29-May-06	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.3	0.2	A	0.3	0.7	0.2	0.3	0.2	0.2	0.2	0.30	0.69
30-May-06	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.6	0.2	0.2	0.3	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.3	0.7	0.3	0.3	0.2	0.31	0.69
31-May-06	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	A	0.2	0.2	0.2	0.3	0.5	1.6	1.4	0.3	0.2	0.35	1.56
Hourly Avg	0.24	0.24	0.28	0.20	0.22	0.28	0.37	0.31	0.25	0.23	0.27	0.22	0.22	0.32	0.23	0.22	0.22	0.22	0.27	0.31	0.34	0.32	0.26	0.22		
Hourly Max	1.05	0.79	1.52	0.35	0.41	0.55	0.94	0.68	0.50	0.35	0.78	0.36	0.49	1.25	0.39	0.35	0.35	0.30	0.69	0.69	1.56	1.36	0.50	0.39		

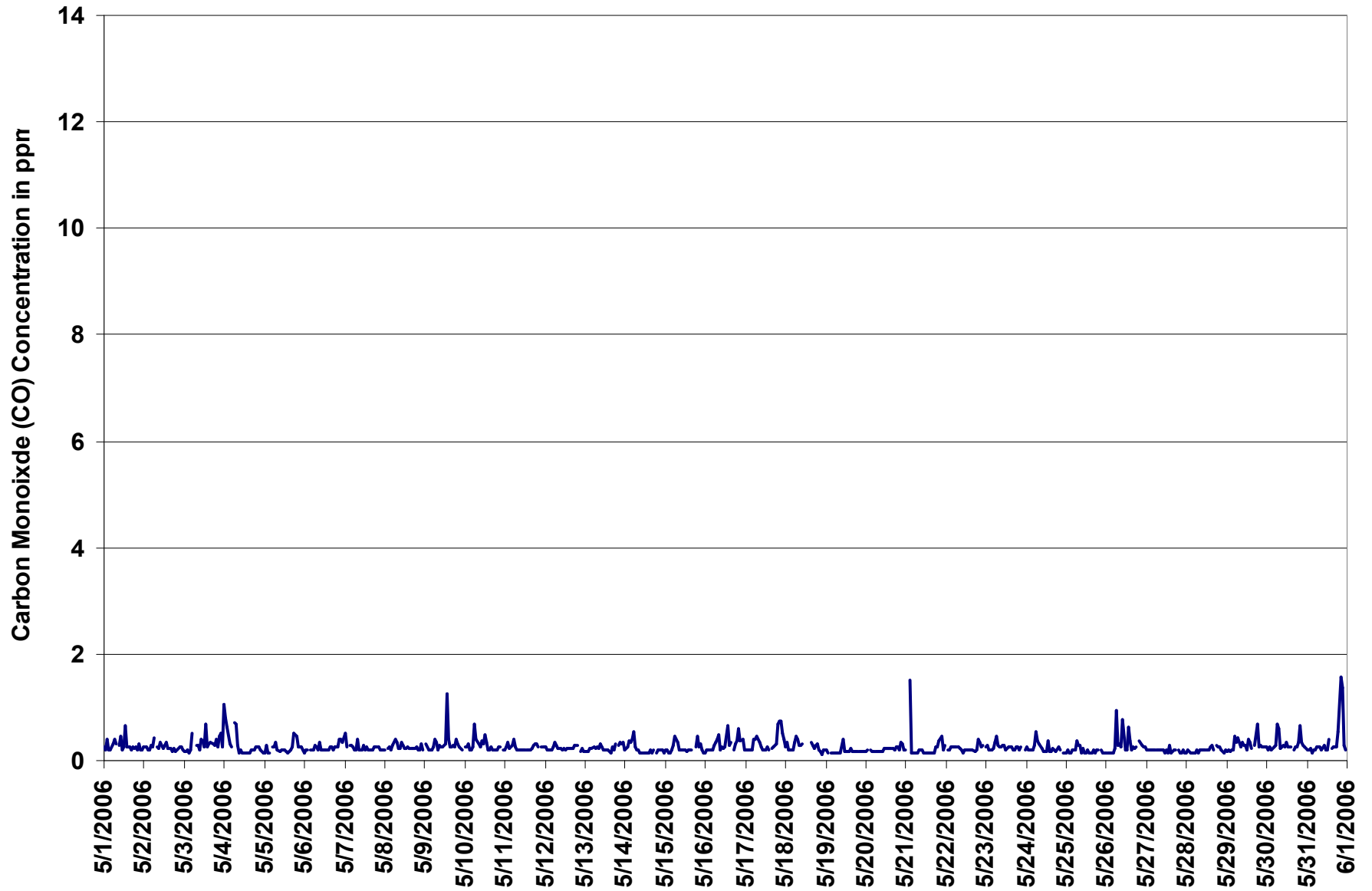
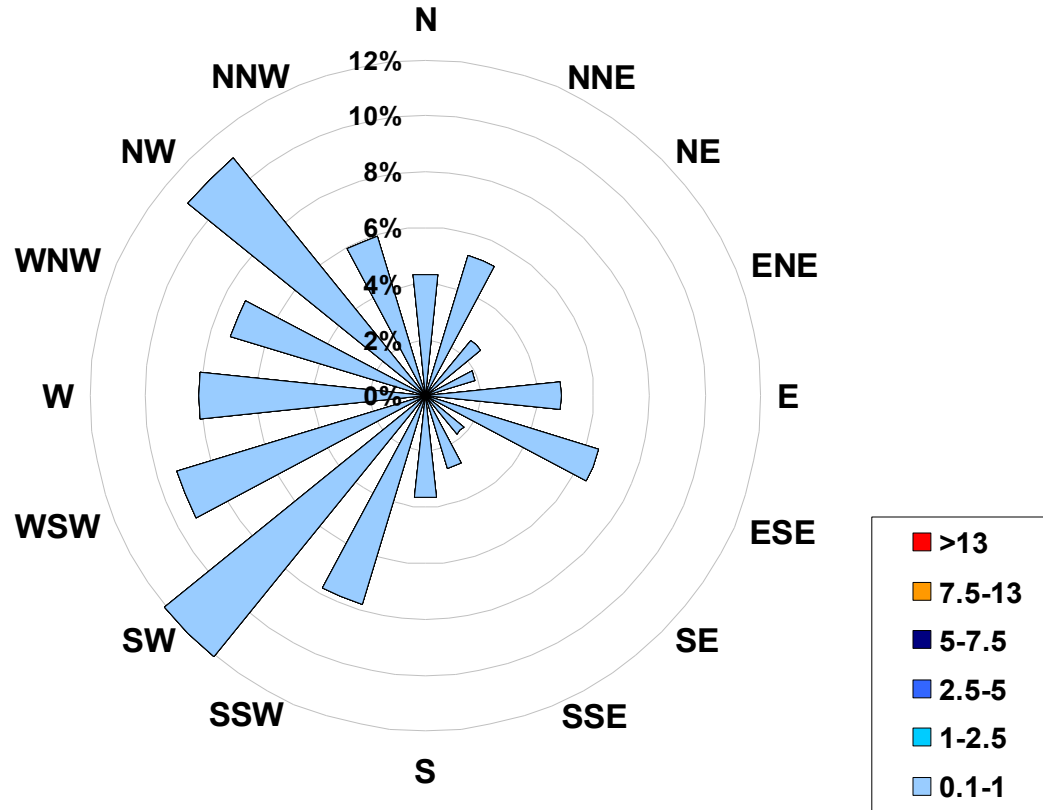


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	< 1		708
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			708



# PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## EIGHT HOUR RUNNING AVERAGE TABLE

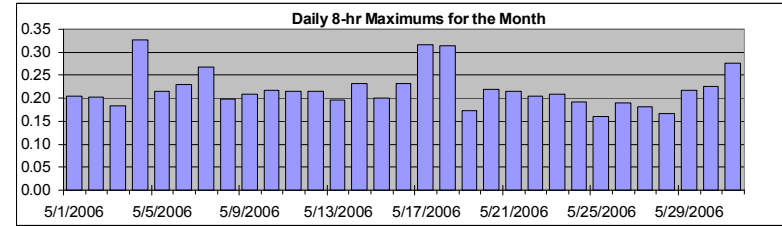
## Carbon Monoxide (CO)

Monitoring Dates: May 1, 2006 to June 1, 2006

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

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	0.3	ppm	4-May	7:00	8:00		

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



### Status Flag Characters

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

Day	Mountain Standard Time																								Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
2-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
3-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
4-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.33
5-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
6-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
7-May-06	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
8-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
9-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
10-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
11-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
12-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
13-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
14-May-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.23
15-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
16-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
17-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.32
18-May-06	0.3	0.3	0.3	0.3	0.3	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	0.1	0.1	0.1	0.31
19-May-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	0.17	
20-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
21-May-06	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	0.2	0.2	0.2	0.2	0.2	0.22
22-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
23-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
24-May-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.19
25-May-06	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.16
26-May-06	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
27-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
28-May-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17
29-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
30-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
31-May-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.28
Hourly Max	0.31	0.31	0.31	0.28	0.27	0.26	0.28	0.33	0.31	0.29	0.28	0.26	0.25	0.24	0.21	0.20	0.20	0.20	0.20	0.21	0.21	0.25	0.29	0.32	0.31		



# PAS - Crescent Heights - Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

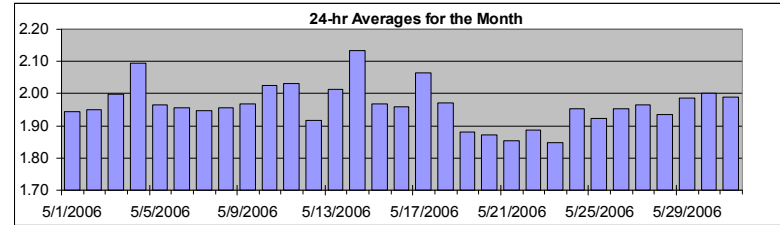
## HOURLY AVERAGE TABLE

## Total Hydrocarbons (THC)

Monitoring Dates: May 1, 2006 to June 1, 2006

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

Maximum 1-hr Average:	2.8	ppm	14-May	4:00 5:00
Maximum 24-hr Value:	2.1	ppm	14-May	



AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.5	2.1	2.0	1.9	1.9	1.8	1.8	2.0 ppm	1.9 ppm

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.01
2-May-06	1.9	1.9	1.9	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.95	1.99
3-May-06	2.0	2.0	1.9	2.0	2.0	2.0	A	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.1	2.3	2.3	2.0	2.07	2.27	
4-May-06	2.3	2.5	2.5	2.5	2.4	A	2.3	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	2.0	2.09	2.50	
5-May-06	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.0	1.9	1.96	2.09	
6-May-06	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.96	2.08		
7-May-06	2.2	2.1	A	2.1	2.0	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	1.9	1.9	1.9	1.9	1.95	2.23	
8-May-06	1.9	A	1.9	1.9	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.96	2.02	
9-May-06	A	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	2.0	1.97	2.04	
10-May-06	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.02	2.14		
11-May-06	2.1	2.1	2.2	2.3	2.4	2.3	2.2	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	1.9	1.9	2.03	2.36	
12-May-06	1.9	1.9	2.0	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	A	1.9	2.0	2.0	1.92	1.96		
13-May-06	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.1	2.1	2.01	2.15		
14-May-06	2.2	2.3	2.8	2.6	2.8	2.7	2.4	2.2	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	1.9	2.13	2.82		
15-May-06	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	2.0	2.0	2.0	1.9	1.9	1.97	2.08		
16-May-06	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.1	2.0	2.1	2.1	2.0	1.96	2.15		
17-May-06	2.0	2.1	2.1	2.1	2.2	2.5	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.1	2.1	2.2	2.1	2.06	2.46		
18-May-06	2.1	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	1.9	1.8	1.9	C	C	C	C	A	1.9	1.9	1.9	1.9	1.97	2.11		
19-May-06	2.0	2.0	A	1.9	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.88	2.04		
20-May-06	1.9	1.9	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.87	2.00		
21-May-06	1.8	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.9	1.85	1.95		
22-May-06	A	1.9	1.9	1.9	2.1	2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	A	1.89	2.17		
23-May-06	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	A	1.9	1.85	1.96		
24-May-06	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	A	2.0	1.95	2.05		
25-May-06	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	1.9	1.9	1.9	1.9	2.1	A	2.0	1.9	1.92	2.08		
26-May-06	2.0	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.1	1.95	2.06		
27-May-06	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.97	2.08	
28-May-06	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	A	1.9	1.9	1.9	2.0	1.9	1.93	2.03		
29-May-06	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	1.9	2.0	1.98	2.09		
30-May-06	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.00	2.17		
31-May-06	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.3	2.2	1.99	2.29		
Hourly Avg	1.99	2.00	2.02	2.02	2.05	2.04	2.03	2.00	1.95	1.94	1.93	1.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.94	1.97	1.99	1.99	1.99			
Hourly Max	2.34	2.47	2.75	2.57	2.82	2.68	2.45	2.18	2.08	2.09	2.10	2.04	2.00	2.00	1.99	1.99	1.98	1.97	1.98	2.08	2.13	2.29	2.27	2.25				

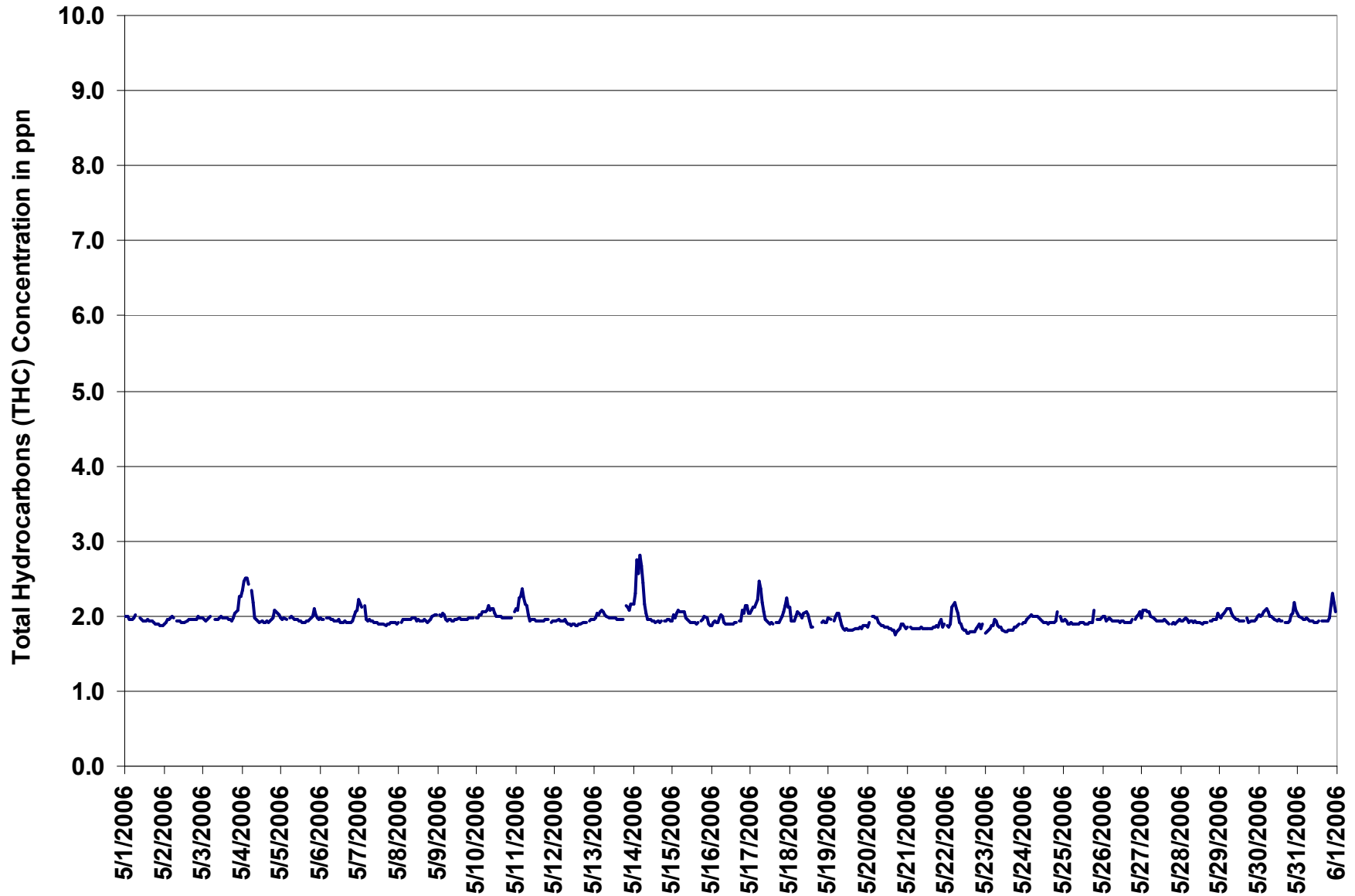


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights  
Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

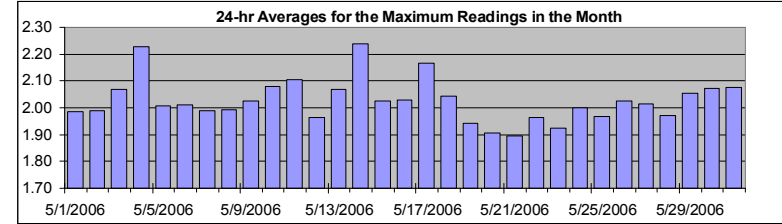
### Total Hydrocarbons (THC)

Monitoring Dates: May 1, 2006 to June 1, 2006

#### Summary

Maximum 1-hr Value:	3.6	ppm	4-May	0:00 1:00
Maximum 24-hr Value:	2.2	ppm	14-May	

AIC Time:	33 hrs	Operational Time:	707 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.8	2.3	2.0	2.0	2.0	1.9	1.8	2.0 ppm	2.0 ppm



#### Status Flag Characters

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

#### Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.98	2.07
2-May-06	1.9	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	1.99	2.09
3-May-06	2.0	2.0	2.0	2.0	2.0	2.2	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.5	2.4	2.1	2.07	2.47
4-May-06	3.6	2.9	2.7	2.6	2.5	A	2.4	2.3	2.0	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.23	3.59
5-May-06	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.1	2.0	2.0	2.0	2.01	2.18
6-May-06	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	1.9	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.1	2.1	2.1	2.2	2.01	2.23
7-May-06	2.4	2.2	A	2.3	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.99	2.36
8-May-06	1.9	A	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.1	2.1	2.1	1.99	2.09
9-May-06	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.03	2.29	
10-May-06	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.1	2.2	2.1	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	A	2.1	2.08	2.27	
11-May-06	2.2	2.2	2.4	2.3	2.4	2.5	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	2.2	2.10	2.48	
12-May-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	1.96	2.03	
13-May-06	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.2	2.3	2.2	2.2	2.07	2.26	
14-May-06	2.2	2.8	2.9	2.9	3.0	3.0	2.6	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.24	3.03	
15-May-06	2.0	2.1	2.0	2.1	2.3	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	2.0	1.9	1.9	A	2.0	2.0	2.0	2.1	1.9	1.9	2.03	2.28	
16-May-06	1.9	1.9	2.0	1.9	1.9	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	A	2.0	2.0	2.2	2.3	2.3	2.1	2.03	2.33	
17-May-06	2.1	2.1	2.2	2.2	2.3	2.7	2.6	2.2	2.2	2.0	2.0	2.0	1.9	2.0	1.9	A	2.0	2.0	2.0	2.2	2.2	2.5	2.4	2.3	2.17	2.68
18-May-06	2.2	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	1.9	C	C	C	C	A	2.0	2.0	2.0	2.04	2.25	
19-May-06	2.1	2.1	A	2.0	2.0	2.1	2.1	2.0	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.13	
20-May-06	1.9	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.90	2.05	
21-May-06	1.9	A	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.89	2.03	
22-May-06	A	2.0	1.9	2.0	2.3	2.5	2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	2.0	1.9	A	1.97	2.45	
23-May-06	1.9	1.9	1.8	1.9	1.9	2.0	2.2	2.0	1.9	1.9	2.3	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.93	2.34	
24-May-06	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.2	A	2.0	2.00	2.23	
25-May-06	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.3	A	2.0	2.0	1.97	2.28	
26-May-06	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.02	2.12
27-May-06	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	1.9	1.9	2.0	2.0	2.01	2.12	
28-May-06	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	2.0	1.9	2.0	2.0	1.9	1.9	2.0	1.9	A	2.0	2.0	2.0	2.0	2.1	1.97	2.09	
29-May-06	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.2	2.0	2.0	2.0	2.0	2.1	2.2	2.06	2.23	
30-May-06	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	A	1.9	1.9	2.0	2.0	2.3	2.2	2.4	2.1	2.07	2.39
31-May-06	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.2	2.8	2.5	2.4	2.1	2.08	2.77
Hourly Avg	2.09	2.08	2.08	2.09	2.11	2.13	2.11	2.07	2.01	1.98	1.99	1.97	1.94	1.97	1.94	1.95	1.95	1.96	1.96	2.00	2.07	2.07	2.07	2.05		
Hourly Max	3.59	2.89	2.92	2.94	2.99	3.03	2.61	2.37	2.16	2.14	2.34	2.23	2.04	2.29	2.02	2.04	2.07	2.23	2.04	2.28	2.77	2.50	2.47	2.37		



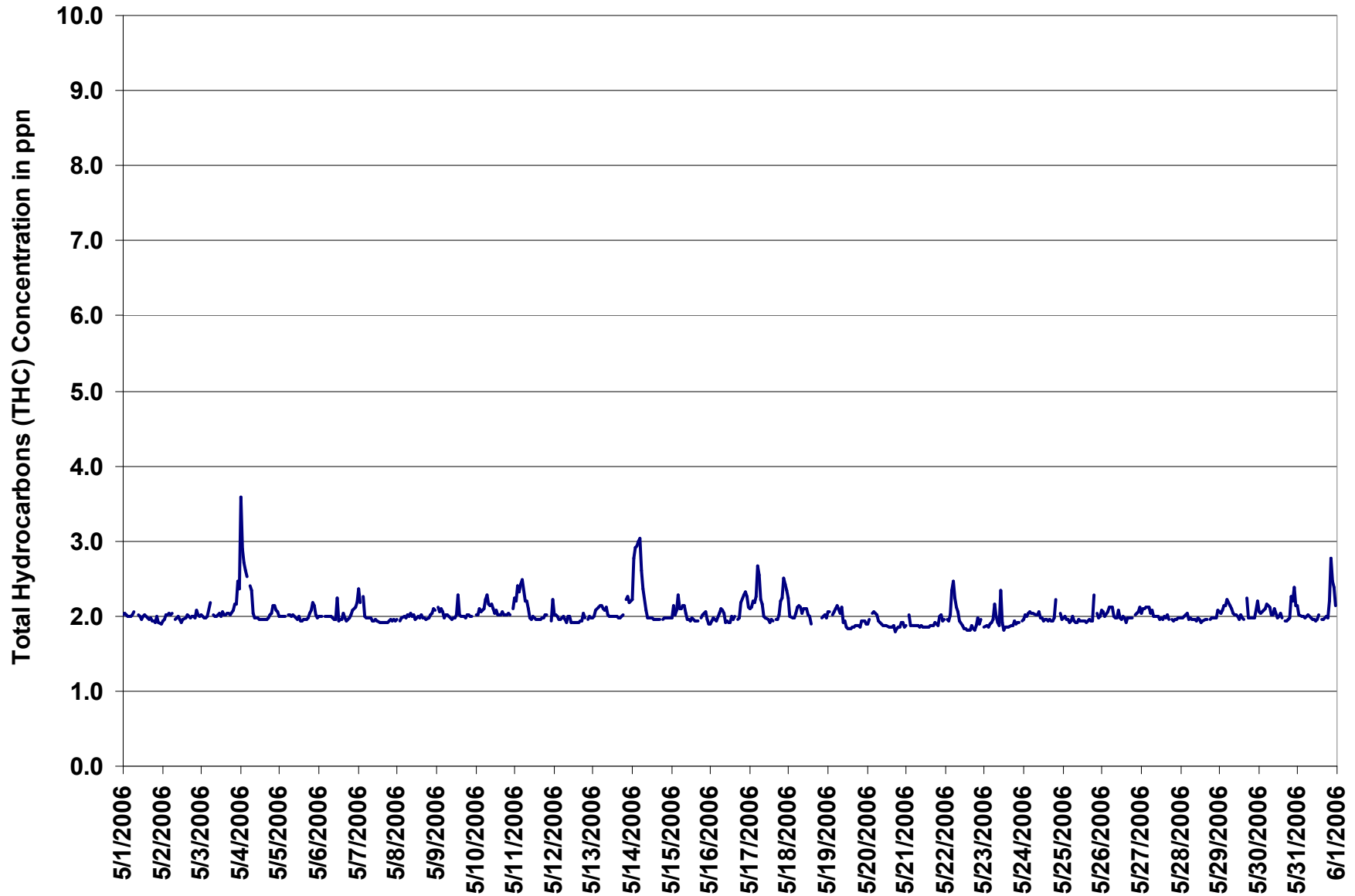
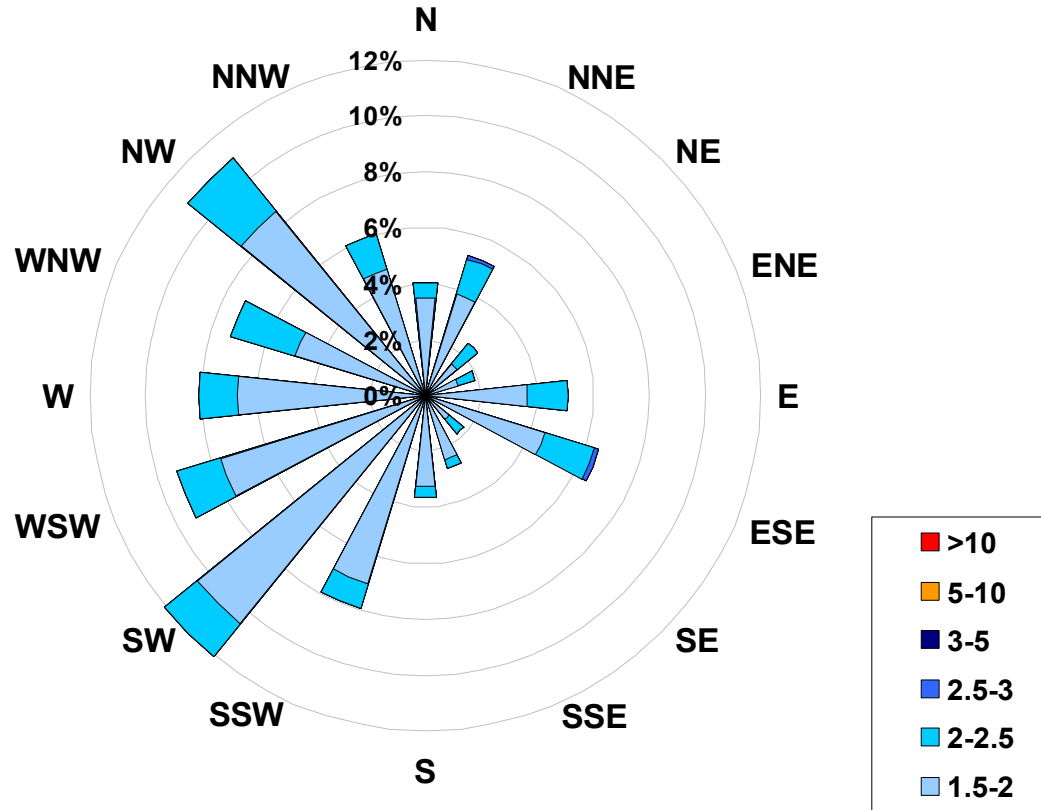


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	< 2		555
2	to 2.5		147
2.5	to 3		5
3	to 5		0
5	to 10		0
	> 10		0
Total Non-Zero Values			707



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

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

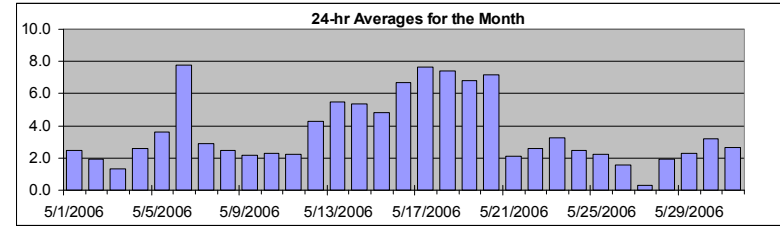
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: May 1, 2006 to June 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:	41.5 $\mu\text{g}/\text{m}^3$ 20-May 10:00 11:00
Maximum 24-hr Value:	7.7 $\mu\text{g}/\text{m}^3$ 6-May

AIC Time:	0 hrs	Operational Time:	741 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	13.3	9.5	4.9
	2.9	1.3	0.0
	0.0	0.0	0.0
Average / Median	3.6		3 $\mu\text{g}/\text{m}^3$
Geomean	3.0		$\mu\text{g}/\text{m}^3$



#### 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																							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
1-May-06	1	1	1	1	0	1	1	2	3	3	3	2	1	2	1	2	3	4	4	7	4	6	3	4	2.5	7.1
2-May-06	5	5	3	2	1	3	3	4	3	3	3	1	1	1	2	1	1	2	1	1	1	0	0	0	1.9	4.8
3-May-06	0	0	0	1	1	1	1	1	1	0	0	0	0	2	1	1	2	2	3	4	3	3	3	3	1.3	3.8
4-May-06	3	2	3	3	2	5	5	5	2	1	0	1	0	1	1	1	1	0	3	5	7	5	4	2	2.6	6.5
5-May-06	3	3	4	4	3	5	6	5	5	3	4	3	3	3	2	2	3	3	4	7	6	2	2	2	3.6	6.9
6-May-06	3	3	6	7	7	9	11	12	9	6	6	7	8	6	7	6	7	6	7	13	11	9	11	9	7.7	13.0
7-May-06	6	6	11	8	3	6	3	3	3	3	3	3	2	1	1	2	2	2	0	0	1	0	0	0	2.9	11.5
8-May-06	2	0	0	2	2	3	2	0	6	4	0	1	0	0	0	6	3	3	1	5	7	4	4	3	2.5	6.8
9-May-06	2	1	2	3	3	3	2	2	1	1	2	1	2	2	2	1	3	4	5	3	4	2	2	2	2.2	4.8
10-May-06	3	3	2	2	2	2	2	3	3	2	3	1	1	2	2	3	4	3	3	5	3	1	0	2	2.3	4.8
11-May-06	2	2	2	1	1	2	1	3	3	0	0	0	1	0	1	1	1	2	4	6	4	6	6	4	2.2	5.7
12-May-06	0	2	4	3	3	6	5	4	4	0	5	5	4	5	4	5	4	5	10	3	3	7	6	6	4.3	10.5
13-May-06	6	7	11	9	7	6	4	3	7	4	2	2	3	3	3	4	5	5	3	5	8	8	7	9	5.5	10.5
14-May-06	8	8	7	6	7	8	10	6	4	0	4	3	3	5	4	5	4	5	4	5	6	6	5	4	5.3	10.4
15-May-06	4	4	5	5	5	7	7	8	5	5	5	0	2	2	4	2	4	5	6	8	12	5	2	3	4.8	11.8
16-May-06	5	5	5	5	6	7	10	12	6	5	6	3	4	4	7	6	3	5	14	11	10	9	7	5	6.7	13.6
17-May-06	6	6	9	7	7	9	11	11	10	7	3	1	1	3	4	3	3	11	13	12	13	13	14	8	7.7	13.5
18-May-06	8	4	7	6	8	9	10	11	13	2	13	8	0	5	4	3	C	C	C	27	4	8	4	1	7.4	27.4
19-May-06	11	3	4	5	5	5	6	7	6	7	3	6	4	5	4	5	20	22	6	7	6	7	6	4	6.8	22.2
20-May-06	5	4	5	5	5	5	6	7	7	10	42	5	6	5	5	5	13	9	6	7	5	6	3	0	7.2	41.5
21-May-06	0	0	0	0	0	1	0	2	1	0	0	0	0	1	1	0	2	4	4	6	6	10	6	4	2.1	10.2
22-May-06	3	2	3	3	3	3	2	3	2	1	2	2	1	3	0	0	0	0	1	3	7	3	7	9	2.6	8.8
23-May-06	1	6	3	5	3	4	5	4	3	1	1	0	0	2	1	0	0	1	3	1	2	4	21	7	3.3	21.4
24-May-06	2	5	2	4	4	3	3	3	2	1	0	1	0	0	2	1	2	3	3	3	4	4	5	6	2.5	5.6
25-May-06	5	4	3	4	3	3	2	1	0	0	0	0	0	0	1	3	3	3	3	4	4	3	1	2	2.2	4.7
26-May-06	2	3	0	1	2	1	2	1	2	2	1	1	4	4	0	1	1	0	1	0	0	1	5	1.6	5.5	
27-May-06	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	0	0.3	1.2
28-May-06	2	1	2	2	3	5	4	4	4	3	3	1	1	1	1	2	2	0	0	0	1	1	0	3	1.9	4.9
29-May-06	2	1	2	2	3	2	2	2	1	1	3	4	3	2	1	2	2	0	2	3	4	5	5	3	2.3	5.2
30-May-06	3	3	4	5	5	8	4	3	4	3	2	2	1	1	2	2	2	3	3	2	5	4	4	2	3.2	7.6
31-May-06	0	0	1	1	2	3	3	4	4	4	3	0	0	0	2	2	2	2	2	2	9	7	6	3	2.6	9.1
Hourly Avg	3.3	3.0	3.6	3.6	3.4	4.4	4.3	4.5	3.9	2.6	3.9	2.0	1.9	2.2	2.3	2.5	3.3	3.8	3.9	5.3	5.2	4.8	4.7	3.8		
Hourly Max	11.3	8.1	11.5	9.5	8.0	9.4	11.5	12.5	12.6	10.4	41.5	7.6	7.7	5.8	7.5	6.0	19.7	22.2	13.6	27.4	13.3	13.3	21.4	9.4		

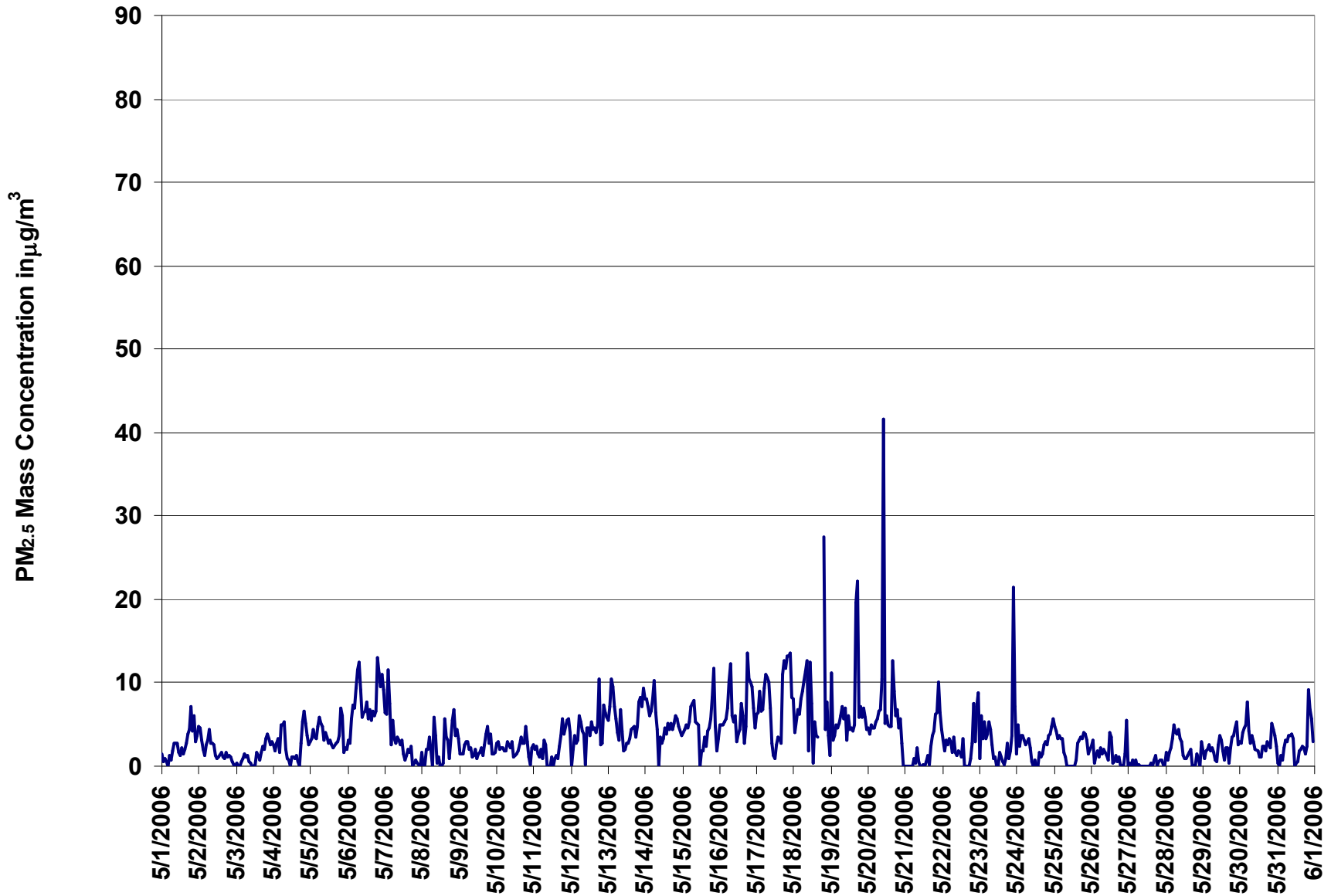


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

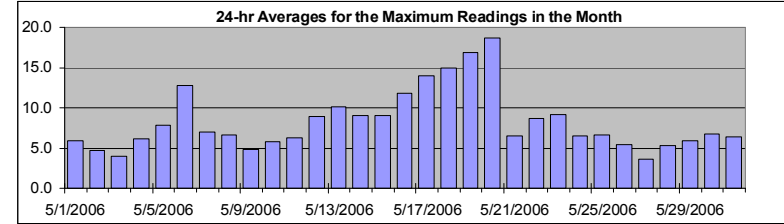
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: May 1, 2006 to June 1, 2006

**Summary**

Maximum 1-hr Average:	123.2	µg/m <sup>3</sup>	20-May	10:00 11:00
Maximum 24-hr Value:	18.7	µg/m <sup>3</sup>	20-May	



AIC Time:	0 hrs	Operational Time:	741 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	27.7	16.2	9.3	6.8	4.9	2.8	1.9	8.2	7 µg/m <sup>3</sup>
									7.6 µg/m <sup>3</sup>

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-06	4	2	3	2	2	3	2	3	6	6	8	5	7	9	5	7	7	7	17	8	10	5	7	5.9	17.4	
2-May-06	8	7	7	5	3	5	6	9	5	6	6	5	3	3	4	3	2	5	3	5	4	5	2	3	4.7	9.3
3-May-06	4	2	3	3	3	5	3	4	3	2	5	3	3	5	4	4	4	5	5	5	6	5	5	5	4.0	6.0
4-May-06	6	4	5	4	3	8	9	9	7	5	7	6	5	7	7	5	4	5	6	8	9	8	6	4	6.2	8.7
5-May-06	4	9	6	6	6	8	8	8	9	8	9	10	10	11	8	8	7	7	8	11	10	4	9	5	7.8	11.3
6-May-06	6	6	10	10	9	13	14	15	16	12	13	11	12	11	19	13	10	11	10	28	17	13	14	11	12.7	28.4
7-May-06	11	9	21	12	5	8	7	6	8	7	9	8	9	6	5	8	6	7	2	3	3	2	3	2	6.9	21.5
8-May-06	6	2	5	5	4	9	4	5	10	8	4	8	4	2	6	13	8	13	4	11	11	6	6	5	6.6	13.0
9-May-06	4	4	3	5	5	4	3	4	4	3	5	5	5	6	6	4	5	7	10	5	7	4	3	4	4.8	10.1
10-May-06	6	5	4	5	6	4	5	6	7	6	7	5	7	6	7	6	7	6	8	10	4	4	2	5	5.8	9.5
11-May-06	5	4	5	4	3	5	5	6	8	6	6	6	8	5	7	5	6	6	8	9	9	8	10	9	6.3	10.5
12-May-06	3	6	7	5	6	16	8	6	8	5	9	9	8	11	9	9	7	9	23	15	6	10	9	8	9.0	22.8
13-May-06	8	10	16	13	10	9	6	6	16	16	6	9	11	9	9	9	9	9	6	10	10	11	11	11	10.1	16.3
14-May-06	10	12	9	8	9	12	17	10	10	5	9	9	7	10	11	9	8	7	7	8	9	7	6	7	9.0	17.1
15-May-06	7	8	6	6	8	13	11	12	9	11	9	7	8	8	10	8	7	8	10	12	16	11	5	6	9.0	15.9
16-May-06	8	7	8	8	9	14	14	16	16	10	13	9	11	9	18	19	6	12	17	16	13	12	15	6	11.9	18.5
17-May-06	9	9	14	10	8	16	16	14	15	18	9	8	4	7	8	9	10	20	20	20	19	27	23	21	13.9	26.6
18-May-06	11	8	10	8	10	12	14	14	17	8	18	12	13	11	17	10	C	C	C	76	9	15	9	8	14.9	75.7
19-May-06	22	8	9	9	8	8	9	10	10	12	6	11	8	8	8	7	96	92	10	11	11	11	10	9	16.9	95.5
20-May-06	10	8	9	9	9	9	11	11	10	91	123	8	11	9	8	8	35	18	10	12	9	10	7	3	18.7	123.2
21-May-06	1	1	1	2	4	10	5	6	5	2	4	4	2	4	6	5	6	10	9	15	13	19	15	8	6.5	19.1
22-May-06	8	5	9	6	7	7	6	9	7	5	7	7	6	11	9	5	5	3	4	9	20	8	22	23	8.7	23.4
23-May-06	6	11	9	9	11	11	11	11	6	8	6	3	4	6	5	5	5	5	8	8	6	9	34	23	9.1	34.2
24-May-06	7	10	5	8	7	7	7	9	6	6	2	5	4	4	6	4	6	6	7	5	9	8	8	10	6.5	9.9
25-May-06	8	9	7	9	8	7	5	6	3	7	5	5	5	2	6	11	7	7	6	9	7	6	8	5	6.6	11.4
26-May-06	6	8	4	3	5	3	5	4	4	5	3	5	10	11	5	5	7	4	5	4	3	2	6	12	5.4	12.0
27-May-06	3	4	3	3	4	5	2	4	2	3	2	3	2	4	4	4	7	6	2	5	5	3	3	4	3.6	7.4
28-May-06	7	3	4	5	6	8	7	6	7	6	6	4	3	4	5	5	5	4	3	3	6	5	7	9	5.3	8.9
29-May-06	7	5	5	5	7	4	4	4	3	5	5	7	7	5	4	9	8	4	6	6	7	7	10	5	5.9	10.2
30-May-06	6	4	6	7	8	18	6	6	6	6	5	6	5	6	7	7	5	5	6	5	11	10	5	5	6.8	17.9
31-May-06	4	3	4	4	4	6	5	6	6	8	7	5	7	5	8	6	6	8	6	5	15	10	9	7	6.4	14.9
Hourly Avg	6.9	6.2	7.0	6.4	6.4	8.7	7.5	8.1	8.1	9.8	10.8	6.6	6.7	6.9	7.8	7.5	10.4	10.5	7.9	11.8	9.4	8.8	9.4	8.1		
Hourly Max	22.2	11.5	21.5	13.4	10.8	17.9	17.1	16.2	17.4	91.4	123.2	12.2	13.1	11.4	19.1	18.5	95.5	92.2	22.8	75.7	19.8	26.6	34.2	23.4		

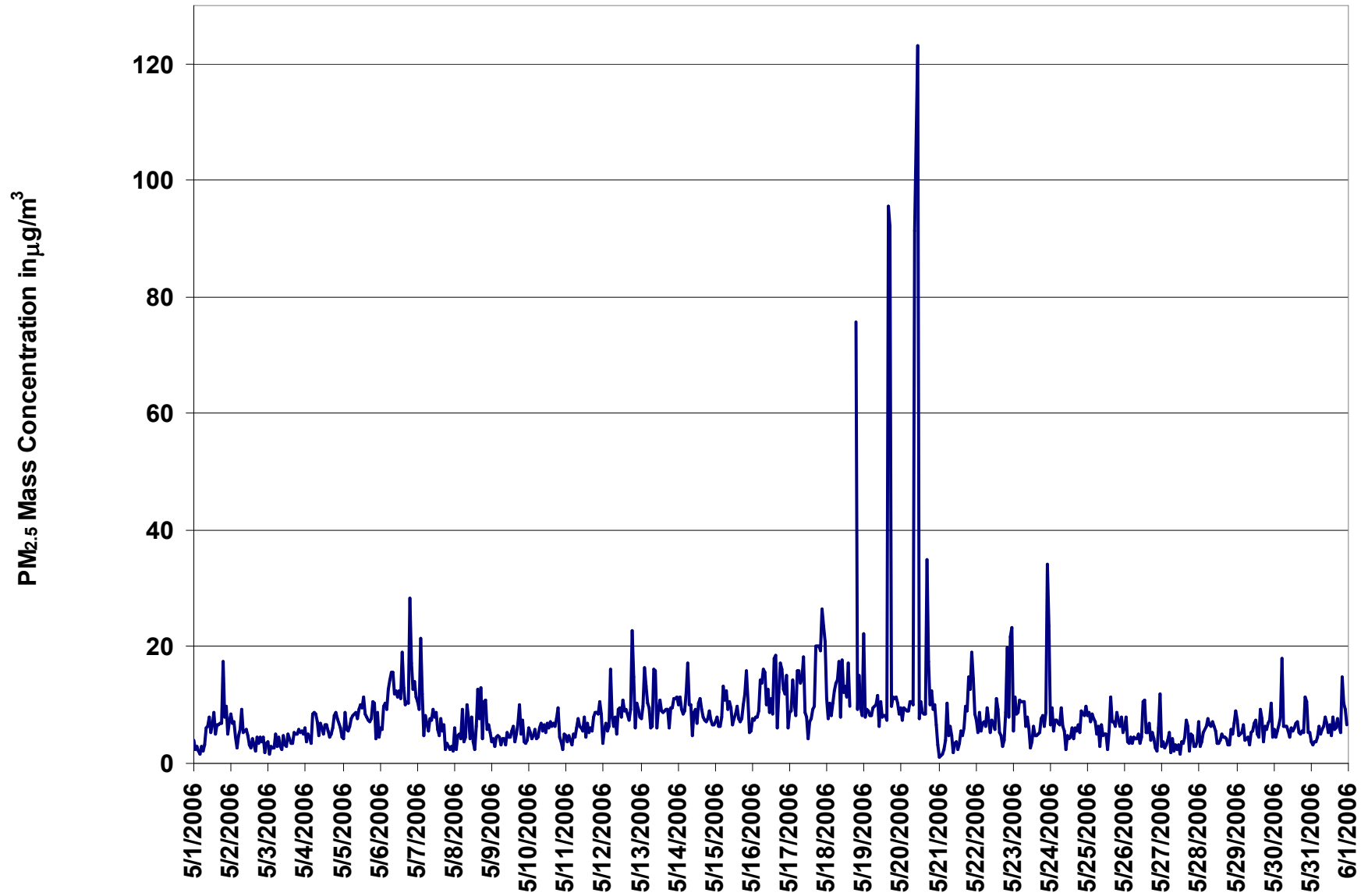
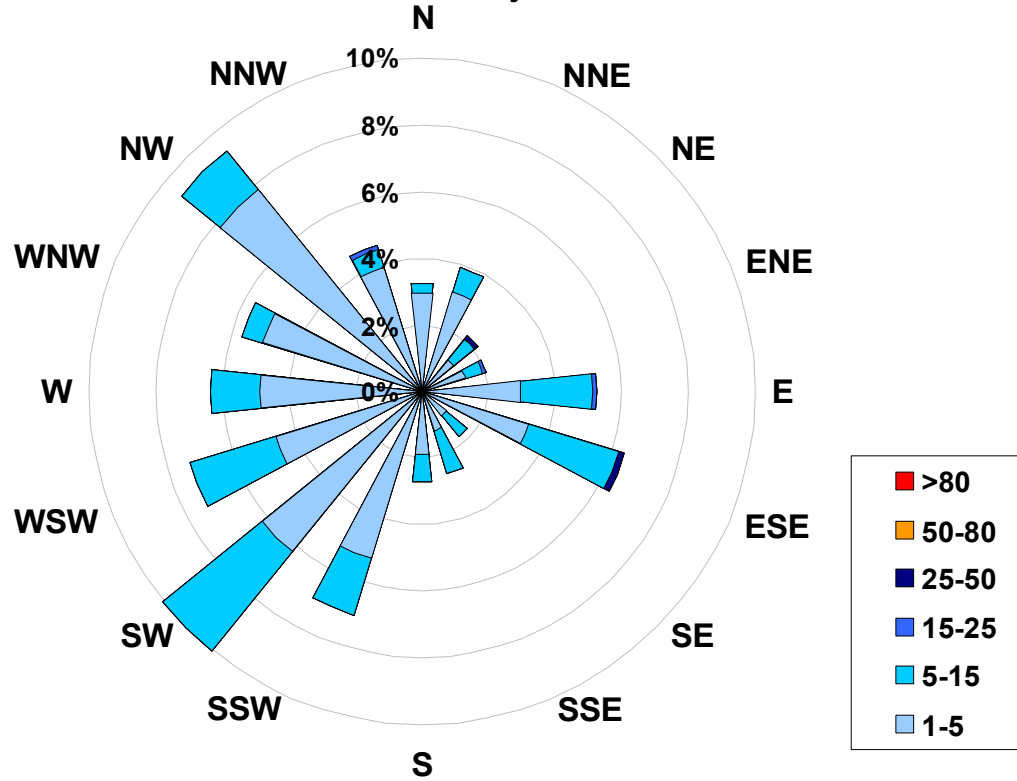


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range		Frequency (hrs)	
1.0	< 5	564	
5	to 15	172	
15	to 25	3	
25	to 50	2	
50	to 80	0	
	> 80	0	
Total Non-Zero Values			741



# PAS - Crescent Heights - Relative Humidity Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

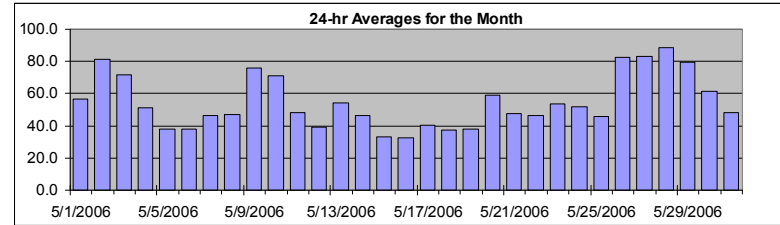
## HOURLY AVERAGE TABLE

## Relative Humidity (RH)

Monitoring Dates: May 1, 2006 to June 1, 2006

### Summary

Maximum 1-hr Average:	91.1	%	26-May	23:00 0:00
Maximum 24-hr Value:	88.3	%	28-May	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	89.9	88.3	75.5	54.7	35.1	20.4	14.2	54.7 %	54.7 %

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-06	80	81	83	81	80	81	79	75	68	61	55	47	40	33	28	27	24	25	30	42	50	58	64	67	56.7	82.5	
2-May-06	76	79	77	77	73	73	69	77	82	84	85	87	85	84	87	89	89	88	89	85	81	79	77	78	81.3	89.4	
3-May-06	78	82	77	77	77	85	82	83	82	84	80	74	71	67	62	61	57	55	56	59	63	64	67	71	71.4	84.8	
4-May-06	74	78	85	90	90	88	76	67	56	47	41	36	33	30	27	25	23	20	20	26	36	47	56	56	51.1	90.4	
5-May-06	56	55	56	57	58	57	49	45	37	29	25	23	23	22	21	21	22	23	25	36	51	46	39	40	38.2	58.5	
6-May-06	49	46	45	49	54	52	52	49	41	27	25	20	20	21	17	17	18	18	21	32	51	57	61	64	37.7	63.7	
7-May-06	67	69	72	74	71	71	70	59	49	41	35	31	29	26	25	25	25	30	32	36	41	46	47	42	46.4	74.3	
8-May-06	48	47	46	52	55	57	56	47	50	57	50	50	42	30	27	31	37	37	36	35	49	59	61	65	46.9	65.5	
9-May-06	64	68	75	78	81	84	81	83	81	85	81	73	70	65	65	62	60	63	74	80	83	86	86	86	75.6	86.4	
10-May-06	87	87	86	87	87	87	85	83	81	78	71	64	58	55	50	46	45	47	47	61	71	79	83	85	71.2	87.4	
11-May-06	84	80	81	83	86	82	73	66	54	39	31	27	25	24	21	21	22	24	27	32	35	35	48	59	48.3	85.9	
12-May-06	56	56	62	63	65	64	61	51	43	29	26	25	25	24	27	26	27	25	35	31	23	27	33	37	39.2	65.1	
13-May-06	42	48	66	77	81	83	81	73	63	56	51	48	44	41	38	35	35	34	36	39	45	52	62	69	54.1	83.0	
14-May-06	75	76	81	81	81	77	67	59	50	32	26	24	22	22	21	23	23	25	27	32	39	47	51	52	46.4	81.3	
15-May-06	49	49	56	61	64	60	53	47	38	29	24	18	14	12	13	13	13	15	17	25	38	36	29	28	33.4	64.1	
16-May-06	30	35	42	45	50	47	44	42	33	28	24	20	18	17	17	18	17	17	25	33	40	47	49	47	32.7	49.8	
17-May-06	50	63	70	75	78	75	63	55	45	36	25	20	16	14	13	13	11	15	23	31	38	44	49	49	40.5	77.7	
18-May-06	52	47	51	54	58	57	54	55	49	33	30	25	20	19	19	18	19	21	31	31	35	39	39	40	37.3	58.0	
19-May-06	50	44	47	48	50	52	50	48	42	35	29	26	23	21	21	20	23	24	25	31	40	47	52	57	37.7	56.5	
20-May-06	58	61	62	59	61	62	60	54	46	42	40	33	35	34	35	35	47	84	88	85	84	86	83	75	58.7	87.6	
21-May-06	75	71	71	71	70	68	64	63	53	43	37	33	30	27	26	23	21	23	28	34	43	48	54	62	47.3	74.6	
22-May-06	63	61	67	69	74	75	67	60	53	46	44	40	36	34	27	23	19	19	20	26	38	42	45	70	46.6	75.5	
23-May-06	69	73	73	75	78	79	81	73	60	49	45	40	37	38	38	37	36	36	40	38	33	35	61	73	53.9	81.0	
24-May-06	71	75	80	83	83	80	76	68	60	50	39	34	32	28	26	26	25	29	31	36	43	49	58	68	52.1	83.3	
25-May-06	73	63	63	68	71	70	63	55	43	36	32	25	23	22	22	24	30	32	35	39	46	51	55	60	45.8	72.8	
26-May-06	66	74	83	84	86	87	86	89	89	91	90	82	75	82	79	73	75	76	78	82	87	89	91	91	82.7	91.1	
27-May-06	90	89	90	90	89	89	88	88	84	79	77	74	69	65	69	71	84	90	86	88	88	86	86	89	83.2	89.9	
28-May-06	89	89	90	90	91	91	90	89	89	89	87	87	88	87	86	88	88	84	83	87	89	89	90	90	88.3	90.8	
29-May-06	89	88	88	88	88	89	88	85	84	81	79	75	76	76	71	70	69	70	68	71	74	77	83	85	79.6	89.1	
30-May-06	85	85	86	87	88	85	79	70	66	60	53	47	43	41	45	43	38	38	36	41	51	66	71	76	61.6	87.8	
31-May-06	71	71	72	72	68	70	65	61	57	50	43	36	27	25	25	25	25	25	25	31	39	47	61	72	48.4	72.1	
Hourly Avg	66.6	67.5	70.4	72.4	73.8	73.4	69.4	65.2	59.0	52.4	47.7	43.4	40.3	38.2	37.1	36.4	37.1	39.1	41.7	46.4	52.3	56.8	60.9	64.6			
Hourly Max	89.9	89.3	89.9	90.0	90.7	90.8	89.7	89.0	89.5	90.5	89.9	87.3	87.8	87.0	87.1	89.3	89.4	89.9	88.6	87.6	89.0	89.4	90.9	91.1			



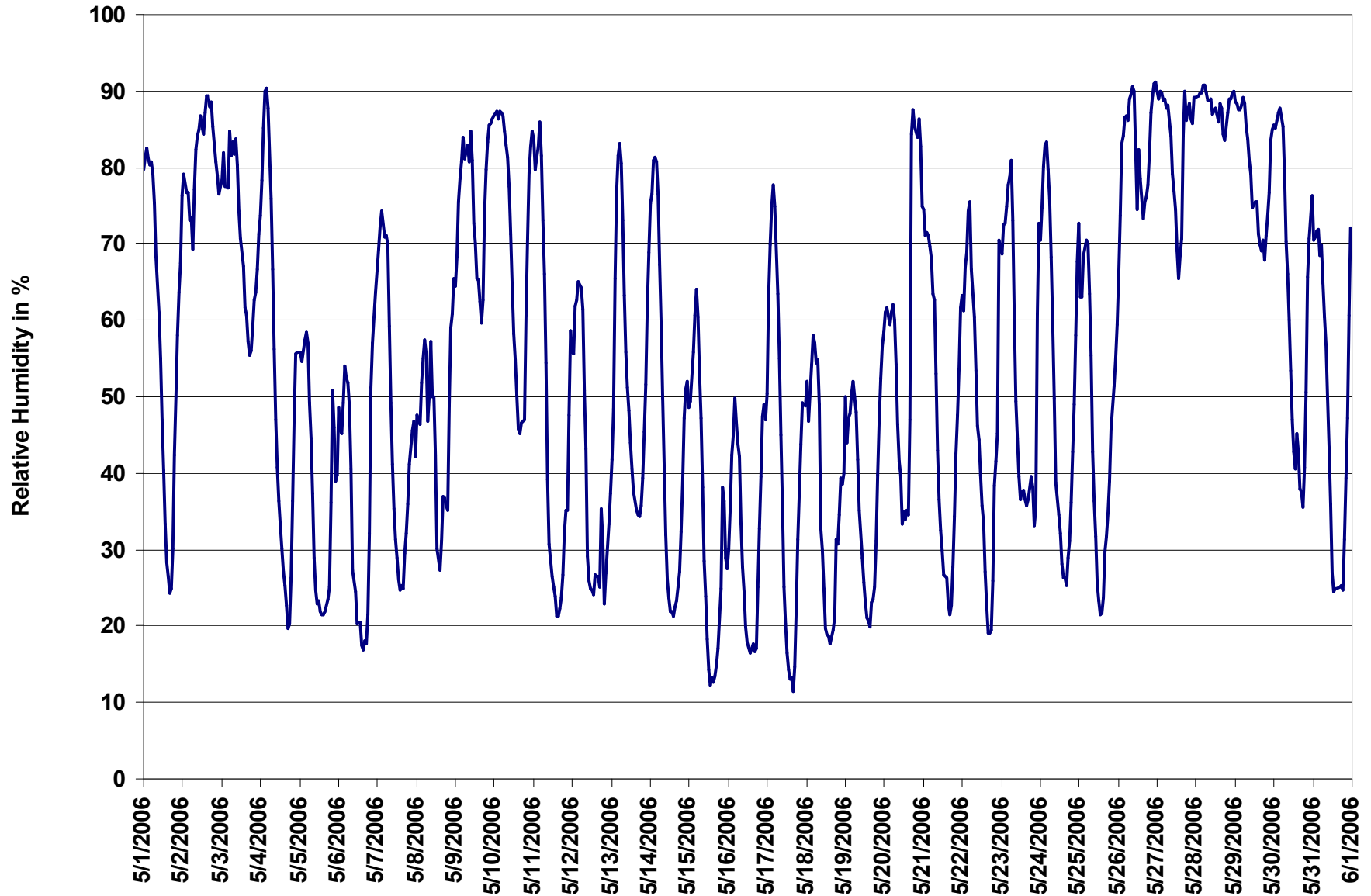


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



# PAS - Crescent Heights - Temperature Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

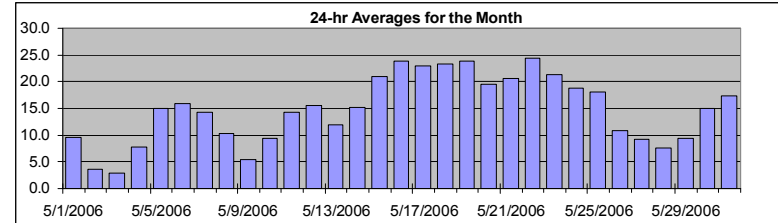
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: May 1, 2006 to June 1, 2006

### Summary

Maximum 1-hr Average:	33.4 °C	22-May	16:00 17:00
Maximum 24-hr Value:	24.4 °C	22-May	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	32.5	29.4	20.2	14.0	8.7	3.4	1.2	14.8 °C	14.0 °C

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-06	5	5	5	5	5	5	5	6	8	10	11	12	13	14	15	15	16	15	14	12	11	10	9	8		9.6	15.5
2-May-06	7	7	6	5	5	5	5	4	3	3	3	2	2	3	2	2	2	3	3	3	4	3	3	3		3.6	7.1
3-May-06	2	2	2	2	1	1	1	1	1	1	1	2	2	4	5	5	6	6	6	5	5	4	4	3		2.9	5.6
4-May-06	3	1	0	-1	-2	-1	1	4	7	9	10	11	12	14	14	15	15	16	15	13	10	8	6	6		7.9	15.5
5-May-06	6	6	6	6	6	6	9	11	14	17	19	21	22	23	23	23	22	22	22	19	15	14	15	14		14.9	22.8
6-May-06	12	12	12	11	10	10	10	12	15	18	19	21	21	21	22	22	22	22	20	18	15	13	12	11		16.0	22.5
7-May-06	10	10	10	10	10	10	10	11	13	16	18	19	19	20	20	20	20	18	17	15	13	12	11	12		14.3	20.3
8-May-06	11	11	11	9	8	8	9	11	12	12	11	11	12	14	14	14	12	12	10	10	9	7	6	5		10.4	14.2
9-May-06	5	4	2	2	3	4	4	4	4	3	5	6	6	7	7	7	8	8	7	7	6	6	6	6		5.4	8.2
10-May-06	6	7	7	6	6	6	6	7	8	8	10	11	13	13	14	15	15	15	14	12	10	8	6	5		9.4	14.9
11-May-06	4	5	4	4	3	5	7	11	15	17	19	20	21	21	22	22	21	20	19	18	17	18	16	14		14.3	22.0
12-May-06	13	12	11	11	11	11	12	14	16	18	19	20	20	20	20	21	20	19	17	16	15	14	12	11		15.5	20.5
13-May-06	9	8	7	8	7	7	8	9	11	12	14	14	15	16	17	17	17	16	15	13	11	9	7		11.9	17.4	
14-May-06	5	5	5	4	4	6	9	12	17	19	21	22	22	23	23	23	23	23	22	19	17	15	13	12		15.2	23.5
15-May-06	13	12	11	10	9	10	13	16	20	24	26	27	28	29	30	30	30	29	28	25	21	20	21	21		20.9	29.7
16-May-06	20	19	16	16	15	16	18	22	25	27	29	30	31	32	32	31	31	30	28	26	23	20	19	18		23.9	32.4
17-May-06	17	14	12	11	9	10	14	18	23	26	29	31	32	33	33	33	33	32	30	27	24	22	19	18		22.9	33.4
18-May-06	18	18	17	16	15	15	16	18	21	24	27	30	31	31	32	31	30	30	27	26	24	21	20	20		23.3	31.7
19-May-06	19	20	18	18	17	17	18	20	24	26	28	30	31	32	31	32	29	29	28	26	23	21	20	18		23.9	31.9
20-May-06	17	16	15	14	13	13	15	18	21	23	26	28	28	29	28	28	24	17	17	17	16	16	16	15		19.6	28.5
21-May-06	15	14	14	13	14	14	16	17	20	22	23	24	25	27	27	27	28	27	26	25	22	20	20	18		20.7	27.8
22-May-06	18	18	17	16	15	15	17	20	22	25	26	29	30	32	33	33	33	33	32	29	26	25	24	19		24.4	33.4
23-May-06	19	18	18	18	17	17	17	19	21	23	24	25	26	26	26	26	26	25	24	23	21	20	19	15		21.4	26.4
24-May-06	15	14	13	12	12	12	13	15	17	19	21	23	24	24	25	25	25	24	24	22	20	18	16	15		18.7	25.2
25-May-06	14	15	15	15	14	14	16	17	19	19	20	21	22	23	24	24	23	22	21	20	18	16	14	14		18.2	23.5
26-May-06	13	13	10	10	10	10	10	10	10	10	10	12	14	13	13	13	12	12	11	9	8	8	8	8		10.9	13.9
27-May-06	8	8	8	8	8	8	8	9	9	9	10	10	11	12	11	12	10	10	10	9	9	9	8	8		9.3	11.7
28-May-06	8	7	7	7	7	7	7	7	7	7	8	8	8	9	9	9	9	8	8	8	7	7	6	6		7.5	8.9
29-May-06	6	6	6	6	6	6	7	7	8	8	9	11	11	11	12	13	13	11	13	12	11	11	10	9		9.3	13.0
30-May-06	9	9	9	8	8	9	11	13	15	16	18	19	19	20	19	20	21	21	22	19	17	14	13	11		15.0	21.6
31-May-06	12	11	10	10	11	10	12	14	16	19	21	22	24	24	24	24	24	24	23	21	19	17	14	11		17.4	24.3
Hourly Avg	10.9	10.5	9.8	9.3	8.9	9.2	10.5	12.1	14.1	15.9	17.2	18.5	19.3	19.9	20.2	20.4	20.1	19.3	18.5	17.0	15.2	13.7	12.8	11.7			
Hourly Max	20.1	19.5	18.4	18.0	17.4	17.0	18.5	21.7	25.0	27.1	29.0	30.5	31.5	32.6	33.4	33.4	33.4	32.8	32.1	29.2	26.1	25.2	24.0	20.8			

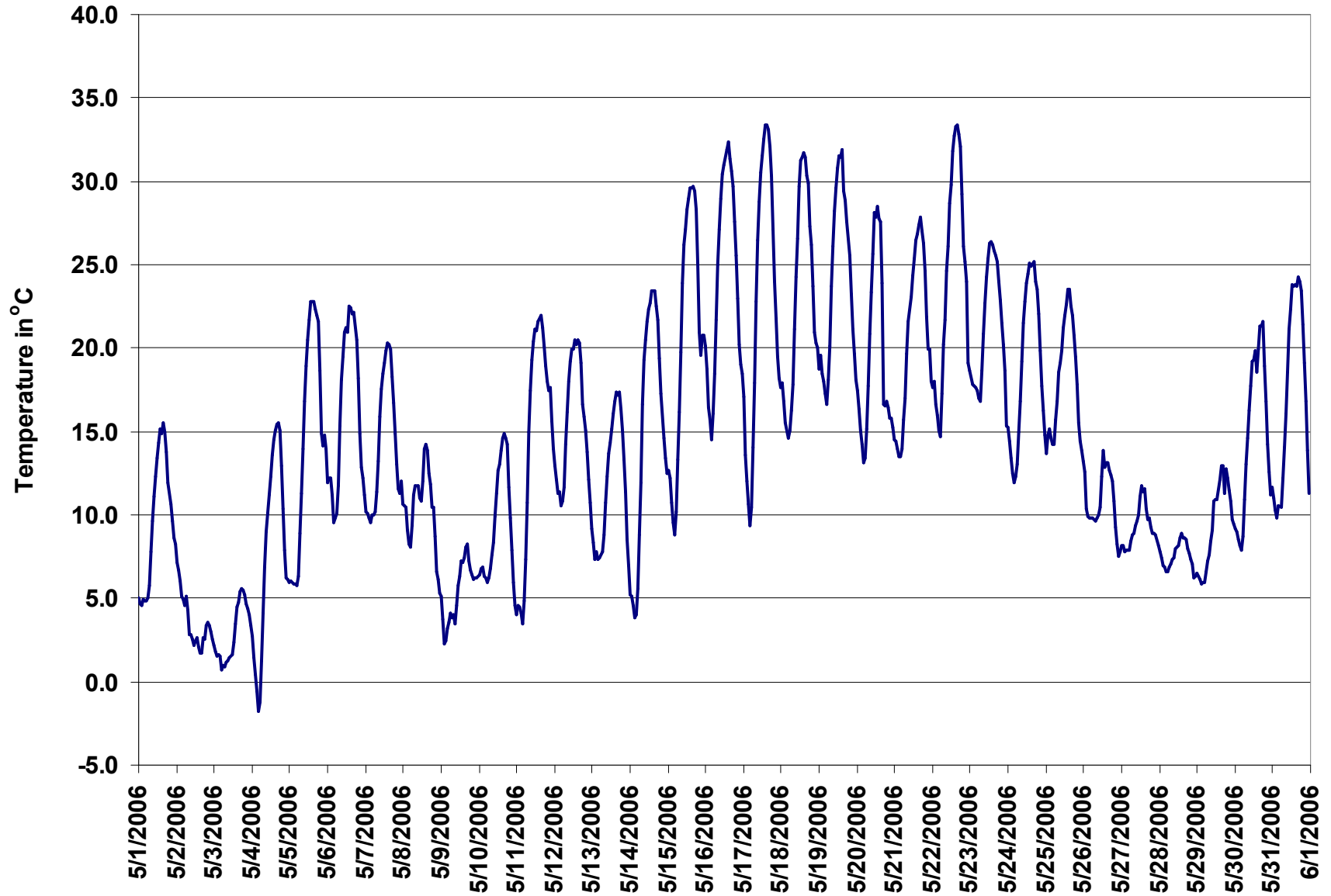


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



# PAS - Crescent Heights - Solar Radiation Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

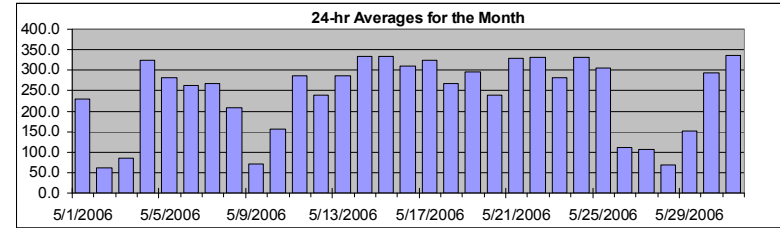
## HOURLY AVERAGE TABLE

## Solar Radiation (SR)

Monitoring Dates: May 1, 2006 to June 1, 2006

### Summary

Maximum 1-hr Average:	932.3	W/m <sup>2</sup>	30-May	11:00 12:00
Maximum 24-hr Value:	336.7	W/m <sup>2</sup>	31-May	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	897.5	843.5	441.0	95.9	0.2	0.0	0.0	242.3 W/m <sup>2</sup>	95.9 W/m <sup>2</sup>

### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	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-May-06	0	0	0	0	0	8	48	138	392	477	674	710	610	594	680	385	493	234	75	7	0	0	0	0	230.2	710.0
2-May-06	0	0	0	0	0	25	59	71	114	133	138	160	164	178	142	100	86	54	26	4	0	0	0	0	60.7	178.2
3-May-06	0	0	0	0	0	29	76	105	199	253	265	141	177	208	246	119	122	73	38	8	0	0	0	0	85.9	264.8
4-May-06	0	0	0	0	1	74	202	384	556	704	810	882	895	860	768	658	503	328	156	23	0	0	0	0	325.2	894.7
5-May-06	0	0	0	0	1	57	207	394	517	697	775	841	826	740	605	447	271	201	148	18	0	0	0	0	281.1	840.7
6-May-06	0	0	0	0	1	32	92	219	360	435	764	869	860	655	705	547	356	294	114	14	0	0	0	0	263.2	869.4
7-May-06	0	0	0	0	1	15	67	204	447	657	766	844	611	716	733	516	475	241	99	37	0	0	0	0	267.8	843.5
8-May-06	0	0	0	0	2	92	179	371	583	423	322	423	381	731	556	383	294	211	51	14	0	0	0	0	209.0	731.2
9-May-06	0	0	0	0	1	19	62	67	102	145	232	240	178	179	151	90	81	77	47	10	0	0	0	0	70.0	240.0
10-May-06	0	0	0	0	1	8	55	86	150	203	466	377	490	303	424	425	342	253	150	27	0	0	0	0	156.6	490.3
11-May-06	0	0	0	0	3	78	204	361	559	675	791	848	898	632	672	578	365	150	44	9	0	0	0	0	286.0	897.5
12-May-06	0	0	0	0	1	27	194	383	547	593	753	806	565	554	489	405	272	120	17	13	0	0	0	0	239.1	806.3
13-May-06	0	0	0	0	3	26	94	144	527	621	843	779	780	737	672	657	450	366	158	40	1	0	0	0	287.4	843.3
14-May-06	0	0	0	0	5	96	240	389	570	713	818	885	899	859	783	661	525	312	189	38	1	0	0	0	332.6	899.4
15-May-06	0	0	0	0	4	82	234	403	568	708	813	881	897	866	788	670	522	351	186	35	1	0	0	0	333.8	897.5
16-May-06	0	0	0	0	5	96	265	406	585	644	777	884	721	749	805	577	493	279	139	27	1	0	0	0	310.6	883.6
17-May-06	0	0	0	0	6	81	236	399	557	698	805	866	888	860	776	607	445	342	184	40	1	0	0	0	324.5	888.3
18-May-06	0	0	0	0	5	73	127	219	380	516	652	803	848	863	753	539	240	211	122	41	1	0	0	0	266.4	862.9
19-May-06	0	0	0	0	8	71	208	300	561	657	799	876	876	807	656	572	230	269	169	35	2	0	0	0	295.6	876.4
20-May-06	0	0	0	0	7	88	253	404	556	560	706	900	717	727	419	349	17	2	9	6	2	0	0	0	238.4	899.9
21-May-06	0	0	0	0	8	108	273	378	593	672	822	888	899	855	714	677	531	240	162	48	3	0	0	0	328.0	898.7
22-May-06	0	0	0	0	10	101	255	404	480	678	727	870	889	858	790	711	565	357	216	29	1	0	0	0	330.9	889.2
23-May-06	0	0	0	0	4	49	141	402	463	603	713	766	831	758	704	538	369	280	92	27	1	0	0	0	280.8	830.9
24-May-06	0	0	0	0	8	79	215	421	586	725	829	893	916	898	774	613	445	284	192	53	2	0	0	0	330.5	916.1
25-May-06	0	0	0	0	7	110	255	357	430	530	657	860	888	886	812	631	417	297	137	39	2	0	0	0	304.8	888.3
26-May-06	0	0	0	0	2	16	19	36	86	103	140	345	328	435	247	298	257	175	150	37	3	0	0	0	111.6	434.7
27-May-06	0	0	0	0	5	50	104	135	171	211	197	262	466	327	220	172	146	52	45	7	0	0	0	0	107.2	466.3
28-May-06	0	0	0	0	3	16	27	64	67	112	172	137	138	227	215	169	128	132	52	12	1	0	0	0	69.8	226.9
29-May-06	0	0	0	0	3	45	99	129	169	231	292	489	386	306	368	440	297	143	185	68	1	0	0	0	152.2	489.2
30-May-06	0	0	0	0	8	102	267	431	573	718	841	932	587	560	243	605	528	390	215	37	6	0	0	0	293.5	932.3
31-May-06	0	0	0	0	15	100	281	438	605	734	836	903	880	779	681	543	578	404	235	62	4	0	0	0	336.7	903.0
Hourly Avg	0.1	0.1	0.1	0.1	4.2	59.8	162.6	278.7	421.1	510.6	619.2	689.0	661.0	635.6	567.4	473.6	349.7	229.7	122.7	27.9	1.2	0.1	0.1	0.1		
Hourly Max	0.3	0.3	0.3	0.2	14.9	109.6	280.6	438.4	605.3	734.0	843.3	932.3	916.1	898.1	811.6	711.1	578.2	403.9	234.8	68.3	5.5	0.3	0.3	0.2		

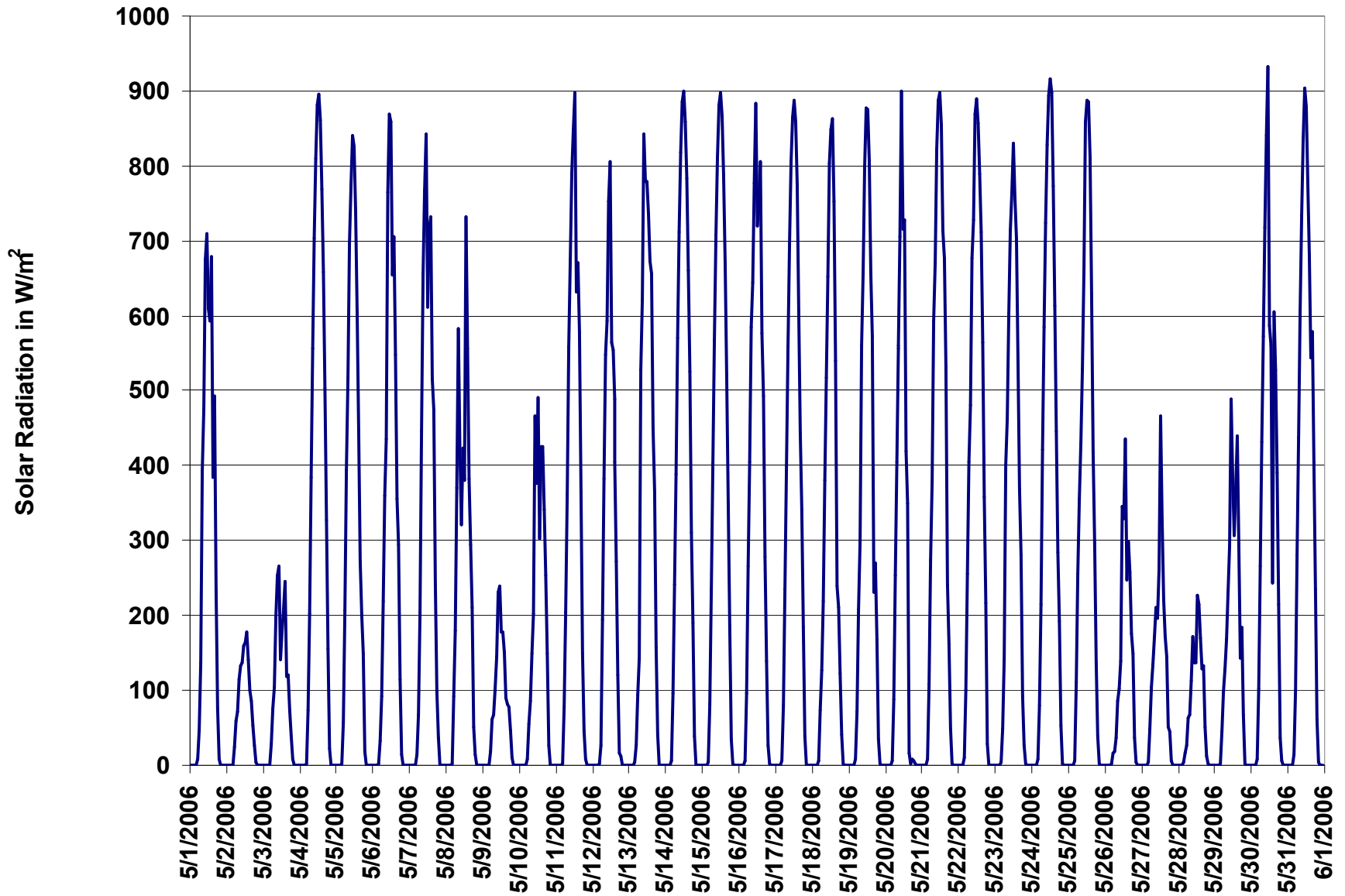


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



# PAS - Crescent Heights - Scalar Wind Speed Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## HOURLY AVERAGE TABLE

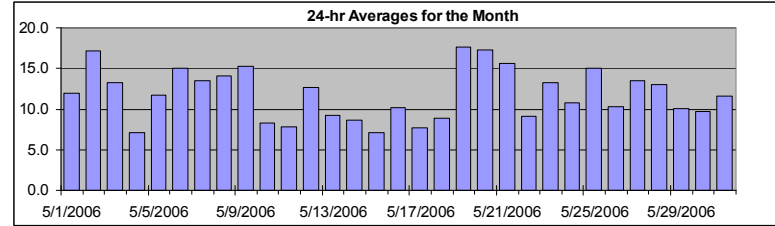
## Wind Speed (WSs)

Monitoring Dates: May 1, 2006 to June 1, 2006

### Summary

Maximum 1-hr Average:	30.1	km/hr	2-May	13:00 14:00
Maximum 24-hr Value:	17.6	km/hr	19-May	

Calm Time:	3 hrs	0% calms	Operational Time:	741 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	25.6	20.5	15.2	11.7	8.0	3.9	2.2	11.8 km/hr



### Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
Hour Start	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-May-06	12	12	13	12	13	12	12	11	10	12	11	14	14	14	14	13	12	11	10	12	10	10	11	10	13	11.9	14.4
2-May-06	11	7	12	16	14	10	13	22	24	20	22	24	27	30	26	17	15	17	13	13	13	14	15	14	17.1	30.1	
3-May-06	13	15	19	15	17	18	17	17	17	17	21	19	17	15	16	13	12	11	10	5	3	3	4	2	13.2	20.6	
4-May-06	2	2	1	2	3	2	2	4	6	7	8	10	11	11	13	13	13	12	9	6	3	6	12	7.1	13.4		
5-May-06	14	16	17	18	12	6	9	14	17	19	17	15	13	11	12	10	8	6	8	7	6	7	10	8	11.7	19.2	
6-May-06	3	12	18	17	16	22	23	16	15	22	23	22	20	20	19	14	11	18	15	12	10	4	4	6	15.1	23.3	
7-May-06	5	2	4	7	5	7	9	14	14	13	10	14	14	17	17	15	23	21	18	19	19	19	18	20	13.5	22.6	
8-May-06	16	17	15	12	12	14	15	17	17	17	20	17	14	16	15	15	12	16	12	9	14	8	6	11	14.0	19.6	
9-May-06	13	14	11	9	11	13	13	16	21	22	19	18	15	15	20	14	16	18	18	14	17	15	14	13	15.3	21.5	
10-May-06	13	13	12	8	10	10	10	10	11	11	8	8	5	5	5	7	3	7	6	10	10	8	7	4	8.3	13.0	
11-May-06	4	2	3	3	3	4	5	6	6	9	9	9	11	10	10	10	11	9	10	10	11	14	11	6	7.8	14.0	
12-May-06	8	7	8	3	8	11	7	16	15	19	20	21	20	16	15	13	8	13	9	12	14	17	14	11	12.6	21.3	
13-May-06	12	12	12	11	11	10	11	12	13	11	11	12	13	11	9	7	7	7	6	5	7	4	5	4	9.3	13.1	
14-May-06	3	1	calm	calm	2	calm	2	3	4	7	10	9	7	9	8	10	13	15	17	15	14	13	12	7	8.7	17.2	
15-May-06	4	6	6	5	5	5	3	4	5	3	4	13	10	11	10	10	8	7	7	4	6	6	13	15	7.1	14.8	
16-May-06	13	10	5	6	3	3	3	6	12	13	15	17	15	11	11	15	16	17	11	7	8	7	6	14	10.2	16.9	
17-May-06	9	5	4	4	3	3	4	3	5	6	13	12	14	13	13	14	11	13	10	6	4	4	5	7	7.7	14.2	
18-May-06	8	11	9	11	10	8	7	8	6	6	6	5	5	9	11	12	10	6	10	8	13	7	11	16	8.9	15.6	
19-May-06	12	15	12	14	16	15	13	14	15	18	19	20	17	14	15	14	23	22	22	17	26	27	22	21	17.6	26.8	
20-May-06	20	17	16	16	15	17	17	21	26	23	20	12	15	16	20	24	27	25	17	11	11	5	6	17	17.2	27.1	
21-May-06	19	23	17	20	19	15	18	21	23	19	15	15	19	19	19	19	14	11	7	9	6	6	12	8	15.6	22.9	
22-May-06	8	7	6	5	7	7	6	6	6	7	12	12	12	9	11	12	10	10	9	6	6	11	16	18	9.1	17.7	
23-May-06	13	8	7	4	7	7	10	15	17	13	11	11	15	18	16	15	13	15	10	12	15	14	28	23	13.2	27.6	
24-May-06	16	7	11	9	9	10	10	12	12	10	11	11	10	12	12	10	7	10	10	10	9	11	16	16	10.8	16.4	
25-May-06	13	16	15	13	19	18	22	16	17	20	20	19	19	17	14	11	10	12	11	10	11	17	12	10	15.0	21.8	
26-May-06	6	12	20	16	12	10	8	10	10	10	9	6	6	9	12	13	13	13	13	12	9	6	5	5	10.2	19.5	
27-May-06	6	6	6	6	7	7	9	14	16	17	16	16	17	18	18	15	16	16	18	18	16	15	15	16	13.5	18.0	
28-May-06	17	14	13	13	13	13	13	14	13	15	16	13	13	13	15	13	15	13	15	11	10	10	10	9	13.0	16.7	
29-May-06	8	8	10	9	7	8	9	10	12	12	14	14	13	11	11	10	14	10	7	8	7	9	9	10	10.0	14.4	
30-May-06	10	12	10	10	9	7	9	10	11	13	15	14	13	12	13	10	10	10	5	4	6	6	6	7	9.7	14.8	
31-May-06	12	12	13	14	16	13	15	18	20	17	13	13	12	11	10	9	11	9	9	6	5	5	7	7	11.6	19.6	
1-hr Average	10.4	10.4	10.9	10.3	10.2	10.1	10.5	12.2	13.4	13.8	14.0	14.0	13.7	13.7	13.7	12.9	12.6	13.0	11.3	10.0	10.4	9.9	10.8	11.3			
Hourly Max	20.1	22.9	19.5	20.3	19.3	21.5	23.3	22.0	25.7	22.5	23.1	24.3	26.6	30.1	26.3	23.6	27.1	25.3	22.2	18.6	25.8	26.8	27.6	22.7			



# PAS - Crescent Heights - Vector Wind Speed Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

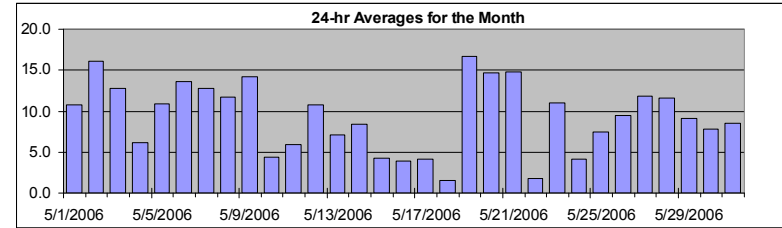
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: May 1, 2006 to June 1, 2006

### Summary

Maximum 1-hr Average:	29.9	km/hr	2-May	13:00 14:00
Maximum 24-hr Value:	16.7	km/hr	19-May	



Calm Time:	4 hrs	1% calms	Operational Time:	740 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	24.6	20.2	14.7	11.2	7.4	3.1	1.8	3.7 km/hr

### Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-06	12	11	13	12	13	12	12	11	9	12	11	13	13	13	14	12	11	10	10	11	8	10	9	12	10.8	13.8
2-May-06	10	7	11	16	14	10	13	21	24	20	22	24	26	30	26	17	15	17	13	13	12	14	15	14	16.1	29.9
3-May-06	13	15	19	15	17	18	17	17	17	16	20	19	17	15	16	13	12	11	10	5	2	3	4	2	12.8	20.3
4-May-06	2	2	1	1	3	2	2	4	6	6	7	9	10	10	12	13	13	13	12	9	5	3	6	12	6.2	12.9
5-May-06	14	16	17	18	12	5	9	13	17	19	16	15	12	10	12	10	8	6	8	7	6	7	9	8	10.8	18.9
6-May-06	2	12	18	17	16	21	23	16	14	22	23	21	20	20	18	14	10	17	15	7	10	3	3	5	13.6	23.3
7-May-06	5	2	4	6	5	7	9	14	13	13	10	14	13	16	15	15	22	21	18	18	19	19	18	20	12.8	22.2
8-May-06	16	17	15	12	12	13	15	16	17	16	19	16	13	16	15	15	12	16	11	9	14	8	6	11	11.8	19.3
9-May-06	13	14	10	9	11	12	13	15	21	21	18	18	14	15	19	14	16	18	18	14	17	14	14	13	14.2	21.4
10-May-06	13	13	12	8	10	10	10	10	11	11	7	7	4	4	4	5	2	5	6	10	10	8	7	4	4.4	12.9
11-May-06	4	2	3	3	3	4	5	5	5	8	7	8	10	9	9	9	10	8	10	10	11	13	10	5	5.9	13.3
12-May-06	8	7	7	2	7	10	6	15	14	19	19	21	19	15	14	12	7	12	8	11	14	17	14	10	10.8	20.6
13-May-06	12	12	12	11	10	10	11	11	13	11	10	11	12	10	8	6	6	6	6	5	6	4	5	4	7.1	12.7
14-May-06	3	1	calm	calm	2	calm	2	3	3	6	9	8	6	7	6	10	13	15	17	15	14	13	12	7	8.4	17.0
15-May-06	3	5	6	5	5	5	3	4	4	calm	2	12	9	9	10	8	7	7	7	4	6	6	13	15	4.2	14.6
16-May-06	13	10	5	5	3	3	3	5	11	13	15	17	14	10	10	15	16	16	11	7	8	7	5	14	3.9	16.5
17-May-06	9	5	4	4	3	2	4	3	5	5	12	11	13	12	12	13	11	12	10	6	4	2	5	7	4.2	13.3
18-May-06	8	11	9	11	10	8	7	8	5	6	5	3	2	8	9	11	7	5	8	7	12	7	11	14	1.6	14.4
19-May-06	4	14	11	14	16	14	12	14	14	18	19	19	17	12	14	12	22	22	22	17	25	27	22	21	16.7	26.5
20-May-06	20	17	16	16	14	16	17	21	26	22	19	11	15	15	19	23	20	25	16	10	11	3	5	16	14.7	25.6
21-May-06	19	23	17	20	19	15	18	20	23	19	14	14	18	19	18	19	13	11	7	9	5	4	12	7	14.8	22.8
22-May-06	6	7	6	1	7	7	6	5	6	7	11	10	11	8	9	11	10	10	9	6	3	3	13	12	1.8	12.9
23-May-06	12	5	6	3	4	6	9	14	17	13	10	10	14	17	16	14	12	14	10	12	15	14	26	22	11.0	25.9
24-May-06	16	5	11	8	9	10	9	11	11	9	10	10	9	10	10	8	5	9	10	9	9	10	16	16	4.2	16.2
25-May-06	13	15	15	13	19	18	22	16	17	19	19	19	18	16	13	8	8	11	11	10	11	17	12	10	7.5	21.6
26-May-06	5	11	19	16	12	9	8	10	10	10	9	6	4	8	12	13	13	13	12	12	9	6	4	5	9.4	19.5
27-May-06	6	6	6	6	7	6	8	14	16	16	16	16	16	17	18	15	15	16	18	18	16	15	15	16	11.9	17.7
28-May-06	17	14	13	13	13	13	13	14	12	15	16	13	12	14	12	15	13	14	11	10	10	10	10	9	11.7	16.6
29-May-06	8	8	10	9	6	8	9	9	12	11	13	14	13	11	10	9	13	10	6	8	7	9	9	10	9.1	13.6
30-May-06	10	12	10	10	9	7	9	10	11	13	14	13	12	12	12	10	8	10	4	3	4	5	6	5	7.8	14.2
31-May-06	12	12	13	13	16	13	15	18	19	17	12	13	10	10	9	8	10	9	8	6	4	4	7	7	8.5	19.3
1-hr Vector	2.0	4.1	4.2	3.6	4.1	4.4	5.0	4.8	5.1	5.6	5.7	6.3	6.1	5.7	5.7	5.1	3.8	3.4	2.1	1.7	2.0	0.9	1.2	1.9		
Hourly Max	20.0	22.8	19.5	20.2	19.2	21.3	23.3	20.7	25.6	22.2	22.9	24.0	26.4	29.9	25.9	22.9	22.2	25.0	22.0	18.4	25.5	26.5	25.9	22.3		



# PAS - Crescent Heights - Wind Direction Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

## HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2006 to June 1, 2006

### Summary


Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	354.3	336.3	288.6	228.4	121.3	19.1	4.8	268 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	24-hour Average	WD Sector
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-May-06	254	248	239	246	260	259	267	272	287	326	321	314	299	286	293	286	297	277	263	265	282	245	251	230	274	W
2-May-06	206	242	325	342	319	294	275	301	314	309	302	304	305	307	311	307	302	311	309	300	304	319	316	312	306	NW
3-May-06	304	306	320	311	319	324	315	333	338	331	336	334	333	345	355	337	336	354	357	0	295	309	343	335	330	NNW
4-May-06	347	4	104	111	118	134	134	131	184	206	223	229	210	204	205	210	209	208	199	193	192	241	228	207	204	SSW
5-May-06	211	208	213	208	202	221	222	221	214	209	213	222	216	198	211	204	195	161	153	137	124	146	203	210	204	SSW
6-May-06	247	223	223	224	234	229	228	233	225	242	236	248	252	248	257	261	264	245	244	326	353	279	249	309	245	WSW
7-May-06	323	253	112	238	232	219	231	217	226	237	233	221	231	226	231	240	234	242	253	240	221	217	223	254	233	SW
8-May-06	247	250	246	212	225	229	231	269	296	319	302	308	309	301	305	278	272	268	262	272	305	314	329	343	278	W
9-May-06	346	329	307	279	274	275	274	300	281	276	283	293	295	315	321	317	323	337	332	315	322	314	318	320	306	NW
10-May-06	324	322	321	307	307	309	312	311	323	310	320	332	285	273	269	331	340	81	91	96	101	117	113	120	328	NNW
11-May-06	117	67	17	30	39	66	80	99	87	108	168	148	163	170	164	175	124	154	136	152	173	197	171	199	148	SSE
12-May-06	108	127	205	194	215	212	217	209	215	235	226	237	224	210	237	225	188	236	260	272	271	266	272	258	231	SW
13-May-06	249	256	297	288	284	275	283	306	318	305	302	316	322	320	309	326	310	345	349	358	34	83	118	118	305	NW
14-May-06	106	23	5	114	19	63	57	40	85	103	106	111	91	96	104	97	104	104	105	98	112	122	120	115	103	ESE
15-May-06	90	31	38	26	18	34	34	35	30	165	109	183	165	173	177	185	167	154	141	116	115	148	169	170	145	SE
16-May-06	173	198	244	233	243	244	229	198	213	223	221	218	219	229	317	325	333	337	338	342	348	356	90	88	259	WSW
17-May-06	99	102	102	106	118	155	176	161	177	182	198	195	200	198	207	209	279	305	324	322	280	198	193	225	206	SSW
18-May-06	209	224	224	231	225	219	230	214	231	313	234	213	275	335	346	352	333	272	356	43	63	84	95	82	276	W
19-May-06	17	72	67	66	73	71	86	91	107	106	111	108	99	94	102	100	74	81	83	75	63	83	101	109	86	E
20-May-06	107	95	100	96	98	98	98	106	106	99	104	162	155	130	126	133	140	188	166	147	111	113	205	203	125	SE
21-May-06	207	212	214	213	222	229	228	231	231	242	249	228	214	203	199	206	203	189	171	164	203	174	199	217	214	SW
22-May-06	212	230	247	336	16	352	350	77	42	28	37	87	77	116	176	169	171	174	177	169	155	345	227	239	160	SSE
23-May-06	336	242	204	115	239	270	225	235	248	282	291	284	267	257	265	276	276	284	284	261	260	264	328	323	275	W
24-May-06	325	293	274	274	280	267	257	271	296	284	267	260	272	263	271	318	329	43	47	62	81	94	104	99	298	WNW
25-May-06	112	231	197	193	208	209	218	223	240	253	249	258	251	245	242	287	321	356	4	12	7	7	13	12	252	WSW
26-May-06	22	350	3	13	29	5	28	5	5	9	4	29	340	323	345	333	334	331	331	343	354	326	286	292	352	N
27-May-06	320	297	306	298	300	299	328	11	10	13	12	12	15	17	6	356	6	35	44	42	38	36	30	32	12	NNE
28-May-06	33	31	29	24	14	20	27	37	42	21	26	17	19	8	355	2	6	8	352	333	326	320	306	287	10	N
29-May-06	299	298	290	288	279	267	288	291	290	285	299	293	301	308	307	308	324	330	267	241	250	253	239	235	288	WNW
30-May-06	245	242	242	237	237	215	226	249	239	244	245	270	290	273	245	252	238	232	261	276	35	25	106	178	247	WSW
31-May-06	223	218	228	231	227	226	223	222	217	214	226	245	251	278	302	279	261	286	300	333	14	100	116	104	237	WSW
Hourly Avg	263	252	263	258	260	257	251	260	266	272	268	262	263	263	272	274	287	288	315	331	360	324	218	231		





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

Station: Crescent Heights  
Station Owner: PAS

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

Monitoring Dates: May 1, 2006 to June 1, 2006

#### Summary


Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	49.3	33.8	17.4	11.1	7.6	5.5	4.2

#### Status Flag Characters

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

#### Day Mountain Standard Time

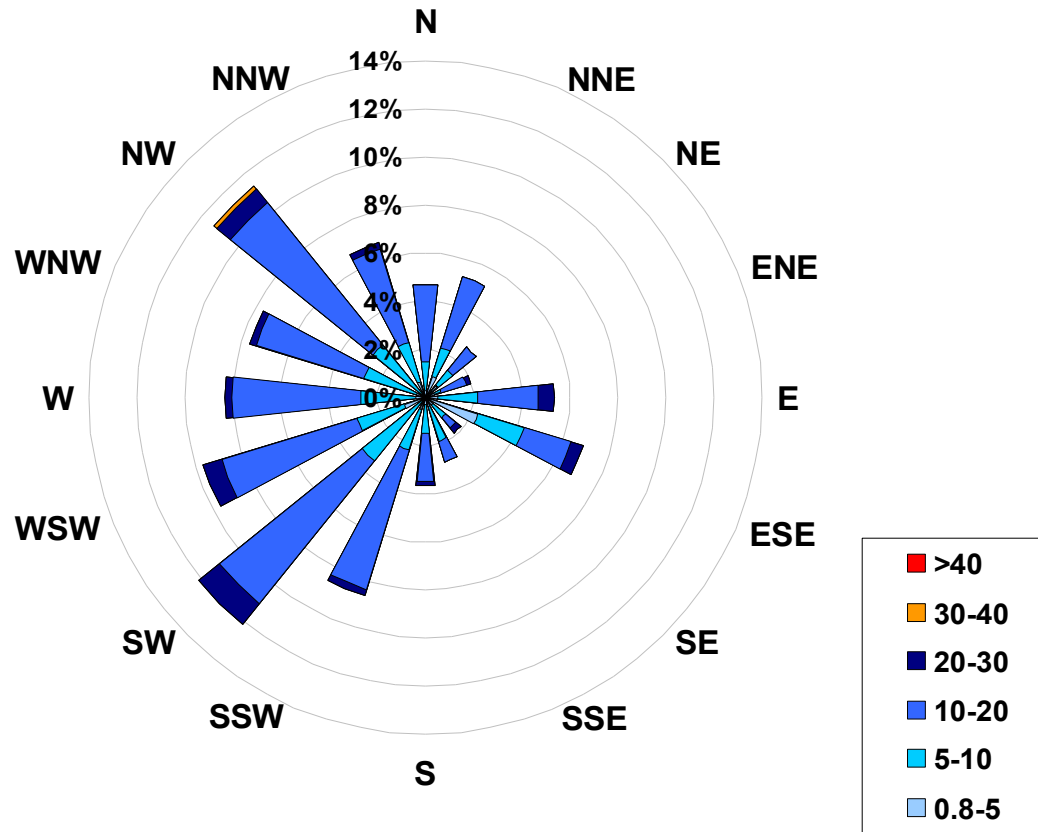
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-May-06	7	7	7	8	7	7	7	8	13	16	17	13	17	17	17	15	16	17	9	10	17	30	12	9
2-May-06	14	16	10	6	7	9	8	10	6	8	8	7	6	6	6	7	8	7	7	8	7	8	7	8
3-May-06	8	8	6	7	6	6	6	10	6	8	8	8	7	7	9	7	8	6	6	6	14	8	6	6
4-May-06	34	8	15	14	9	11	25	20	22	35	36	22	24	23	19	14	13	14	9	5	15	28	11	5
5-May-06	4	3	5	4	6	21	18	12	9	10	13	11	13	20	15	19	17	12	8	8	8	7	18	20
6-May-06	53	10	6	6	5	7	3	5	8	8	7	9	10	9	15	17	16	9	8	21	11	27	34	17
7-May-06	7	41	43	17	26	11	15	7	9	13	23	19	15	16	15	14	11	6	6	6	4	5	7	6
8-May-06	6	6	8	8	11	6	6	9	11	11	8	8	13	17	14	14	12	8	8	15	8	7	9	7
9-May-06	5	6	9	8	9	8	9	9	7	6	8	9	9	9	6	8	6	5	6	6	6	5	6	6
10-May-06	7	6	6	9	8	8	8	7	7	11	21	20	41	36	31	32	61	20	14	6	8	12	15	21
11-May-06	17	16	8	6	9	11	12	12	23	23	32	24	21	27	23	25	14	12	8	11	13	15	12	19
12-May-06	8	16	15	64	30	11	22	8	11	11	12	12	11	15	14	17	23	24	36	26	8	7	7	8
13-May-06	6	7	10	9	9	9	10	9	11	15	20	17	17	21	28	31	26	23	18	8	5	17	8	7
14-May-06	16	19	12	17	9	12	13	16	20	27	23	22	33	31	35	23	12	10	7	6	8	5	6	11
15-May-06	42	18	13	11	11	9	10	11	17	62	52	27	28	23	19	32	28	17	14	8	9	14	11	7
16-May-06	7	8	17	41	19	30	32	22	10	11	11	12	14	40	21	13	10	7	5	8	6	10	24	4
17-May-06	8	18	20	17	13	36	21	29	19	24	16	17	14	17	22	18	15	11	6	7	19	35	14	11
18-May-06	7	11	15	4	6	6	10	7	18	20	25	54	45	29	28	21	25	29	26	14	7	22	16	23
19-May-06	44	11	18	12	6	6	9	11	9	10	10	14	14	25	17	27	12	8	7	9	6	6	6	5
20-May-06	6	7	10	8	9	9	8	8	6	8	10	22	15	13	10	11	19	6	8	15	8	37	48	8
21-May-06	5	5	6	6	6	9	7	7	7	10	13	19	15	17	15	11	19	11	12	9	45	47	15	21
22-May-06	33	23	16	32	7	9	12	25	16	28	22	25	26	32	29	19	19	14	13	12	41	27	33	35
23-May-06	12	24	23	48	33	45	36	10	9	13	16	24	17	10	11	14	14	12	11	11	6	6	10	8
24-May-06	7	30	12	21	12	12	14	14	15	24	21	24	30	29	33	31	50	21	9	6	7	13	9	8
25-May-06	11	17	7	7	6	7	7	9	11	9	11	11	15	18	24	34	36	25	9	5	5	4	4	8
26-May-06	32	24	4	7	13	8	16	7	7	7	9	24	63	19	10	10	9	10	8	7	7	11	22	19
27-May-06	16	16	13	19	15	16	12	7	6	8	7	9	11	10	9	9	11	9	8	8	5	7	6	6
28-May-06	5	6	6	6	5	6	6	6	12	6	7	7	7	7	7	5	4	6	6	7	8	9	10	11
29-May-06	12	11	9	12	16	11	11	13	11	11	14	12	18	17	15	18	10	19	10	11	12	12	12	9
30-May-06	9	7	6	5	5	12	14	16	16	15	15	18	13	14	10	16	36	16	45	31	34	17	17	14
31-May-06	7	9	4	10	9	11	8	8	8	10	15	15	23	21	24	23	22	23	16	7	14	16	8	9

Daily Maximum
29.7
15.6
14.1
36.2
21.2
53.2
43.0
16.9
9.4
61.0
32.2
64.0
31.3
35.0
62.4
40.5
35.7
53.8
43.9
48.3
47.2
40.8
48.4
50.0
36.2
63.3
18.6
11.9
18.6
44.5
24.4

Hourly Max	53	41	43	64	33	45	36	29	23	62	52	54	63	40	35	34	61	29	45	31	45	47	48	35
------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----



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



<b>Calms:</b>	<b>0%</b>
---------------	-----------

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	< 5		70
5	to 10		197
10	to 20		432
20	to 30		41
30	to 40		1
	> 40		0
Total Non-Zero Values			741



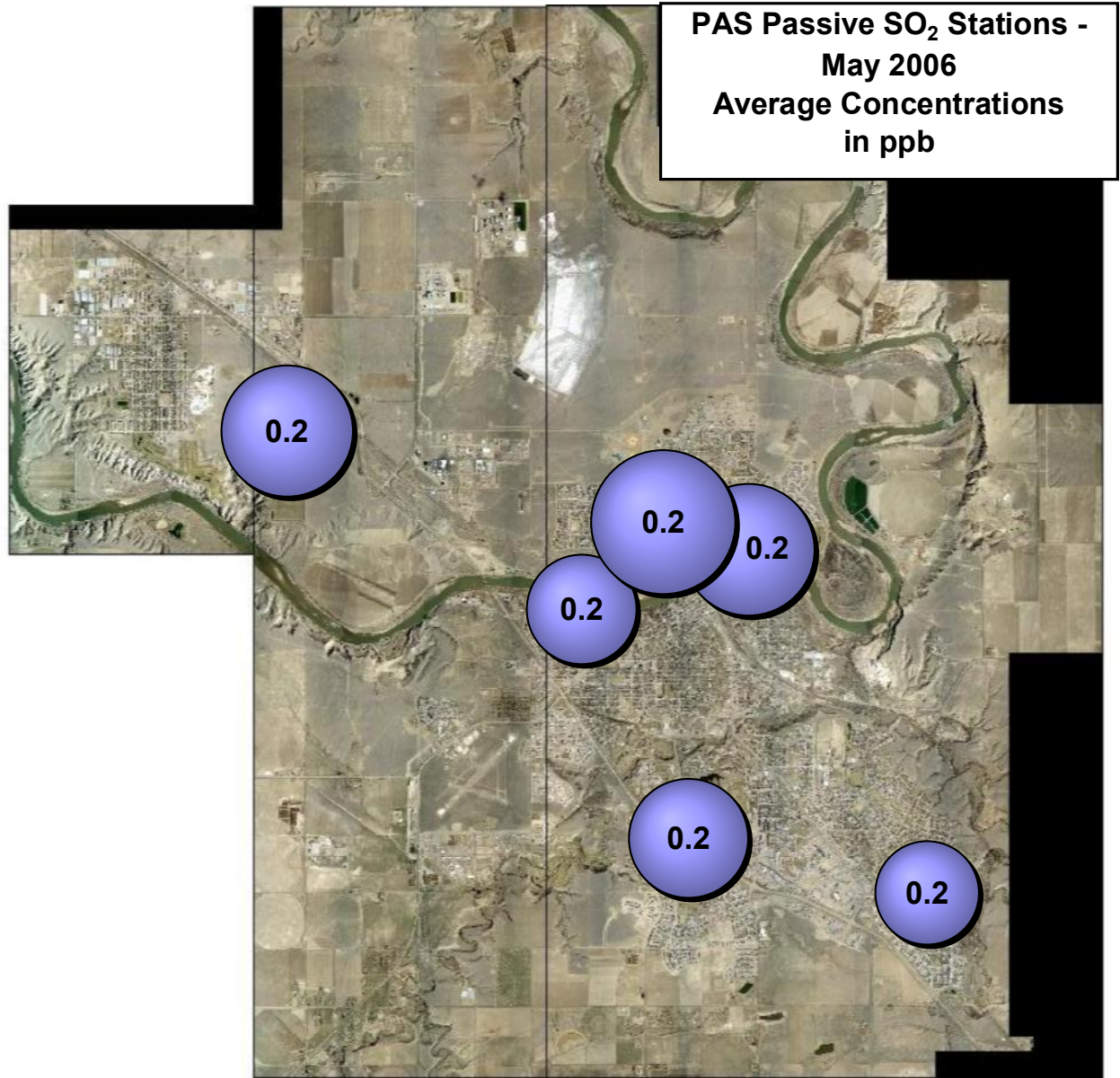
# Passive Monitoring – May 2006

Ambient Air Compliance Network

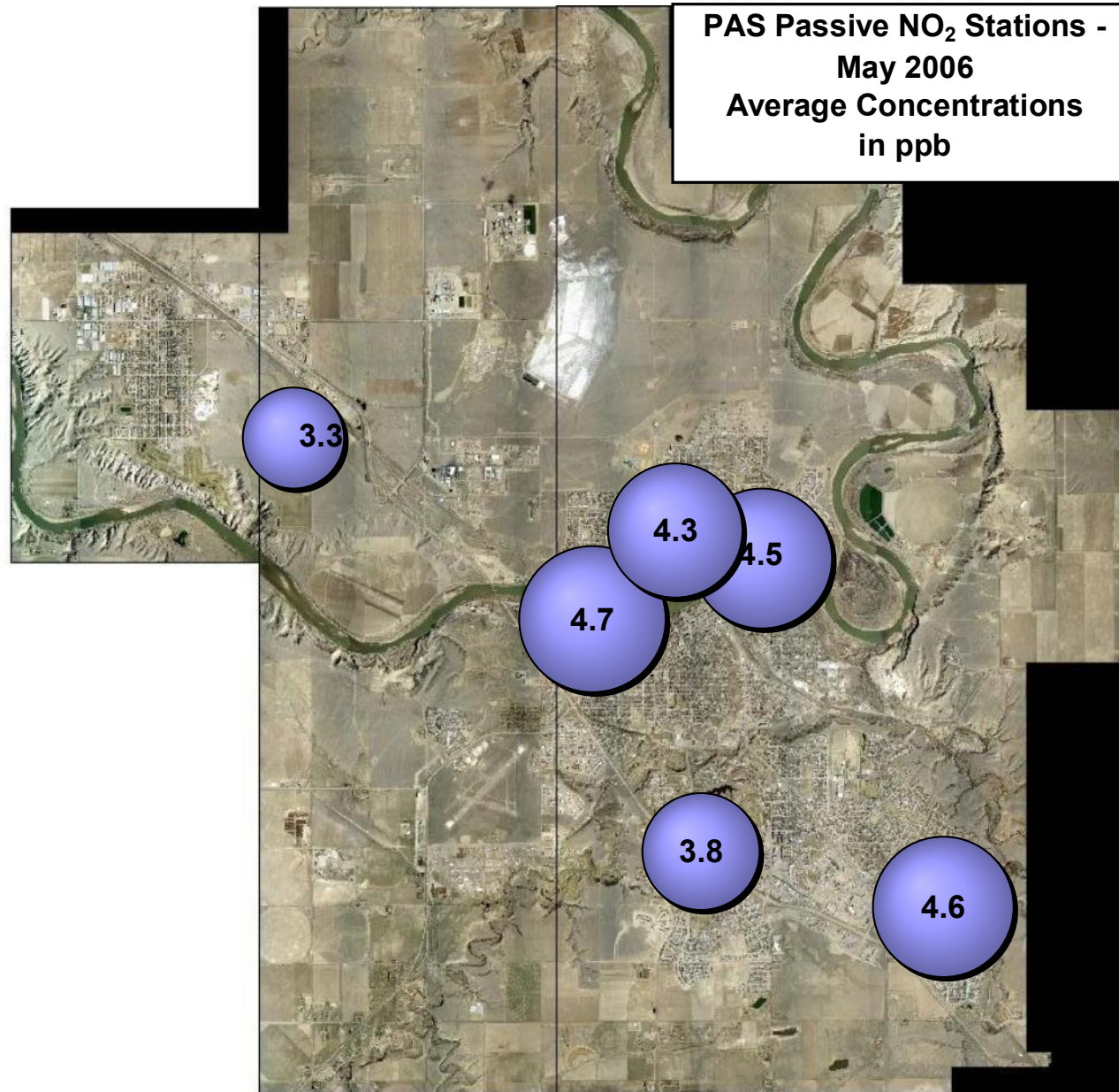
## Palliser Airshed Society - PAS Passive Stations for May 2006

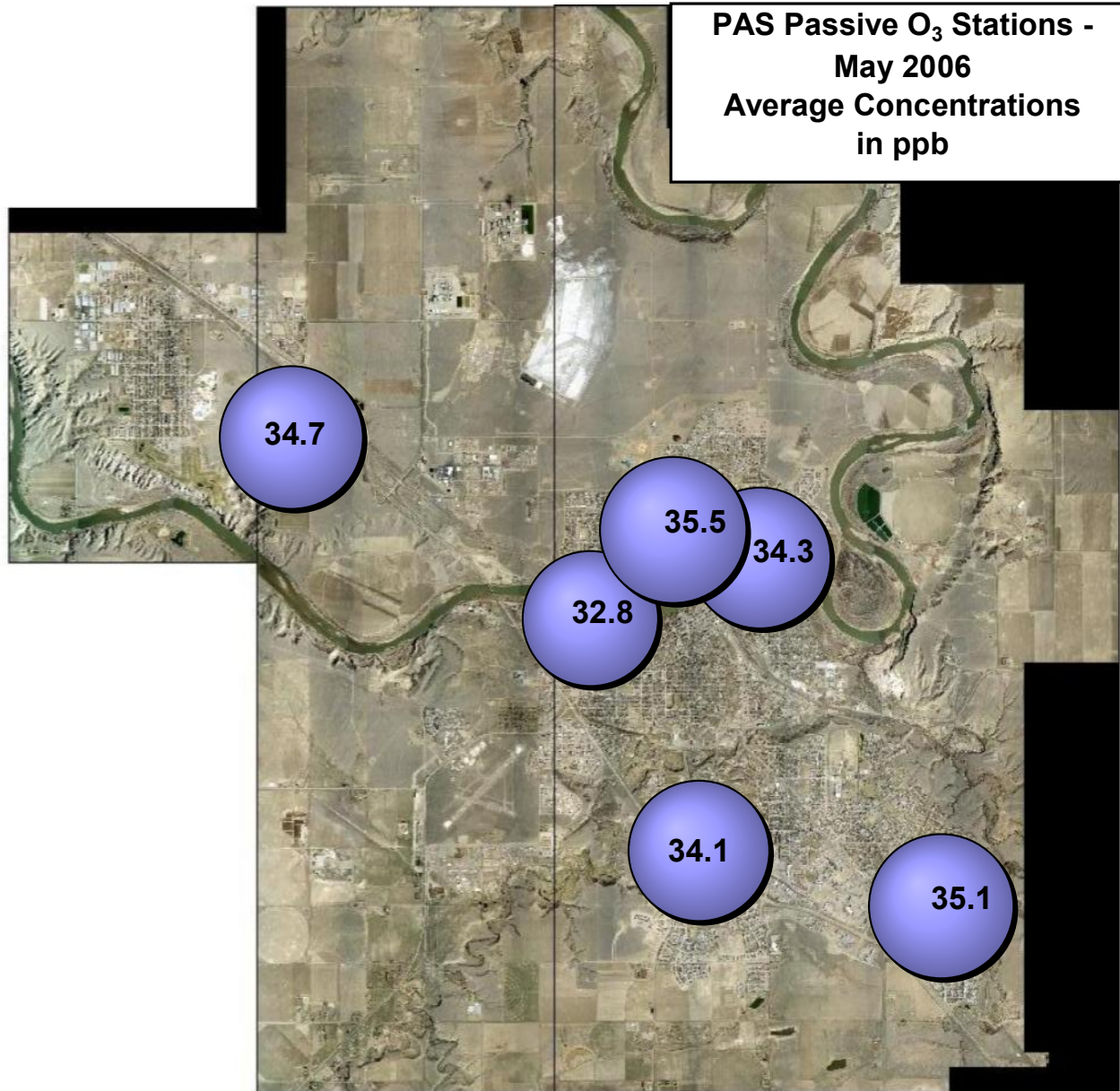
Station Number	Station	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Location		
	Name				Easting	Northing	Elevation
<b>Duplicates</b>							
2a	Ball Park	0.2	33.3	4.3			
2b	Ball Park	0.2	35.3	4.8			
1	Hospital	0.2	32.8	4.7	521648	5542721	698
2	Ball Park	0.2	34.3	4.5	524019	5543686	660
3	Monitoring Station	0.2	35.5	4.3	522812	5544133	714
4	Redcliff	0.2	34.7	3.3	517448	5545608	725
5	Southridge	0.2	34.1	3.8	523172	5539016	721
6	Christian School Park	0.2	35.1	4.6	526577	5538133	709

Stats:							
	<b>Mean</b>	0.2	34.4	4.2			
	<b>Standard Deviation</b>	0.0	0.9	0.6			
	<b>Minimum</b>	0.2			6	Christian School Park	
	<b>Maximum</b>	0.2			3	Monitoring Station	
	<b>Minimum</b>		32.8		1	Hospital	
	<b>Maximum</b>		35.5		3	Monitoring Station	
	<b>Minimum</b>			3.3	4	Redcliff	
	<b>Maximum</b>			4.7	1	Hospital	









# **PAS**

## **May 2006 - Calibration Reports**

**Crescent Heights Station:**

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

# Calibration Report

Parameter 03  
 Air Monitoring Network Palliser Airshed



## Station Information

Calibration Date	May 19, 2006	Previous Calibration	April 12, 2006
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Calibration	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	7:21	End Time (MST)	10:15
Barometric Pressure	21.3 inches Hg	Station Temperature	21.6 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentrator	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.990702	Calculated slope	1.023599
Calculated intercept	-0.663051	Calculated intercept	-4.448011
Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Offset	NA	ppb	-6.1	ppb
Slope	NA		1.068	
Lamp measure	3795.0	mV	4792.7	mV
Lamp Reference	3802.0	mV	4793.6	mV
Pressure	25.1	inches Hg	25.7	inches Hg
Sample Flow	725	ccm	724	ccm
Lamp temp	48	Deg C	37	Deg C

## Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.0	0.0	-2.9	N/A
4991	300.0	294.6	286.9	1.0270
4991	200.0	196.9	198.6	0.9914
4991	100.0	92.9	105.7	0.8788
4991	0.0	0.0	-2.9	0.0000
4991	300.0	290.4	286.9	1.0123
Average Correction Factor				0.9657

Calculated value of As Found Response: 286.4 ppm      Percent Change of As Found: -1.4%

	before calibration		after calibration	
Auto zero	-5.0	ppb	-8.0	ppb
Auto span	356.8	ppb	356.1	ppb

Notes:

Calibration Performed By: LF, TM



## Calibration Summary

Parameter                   O3                    
 Air Monitoring Network                   Palliser Airshed                  

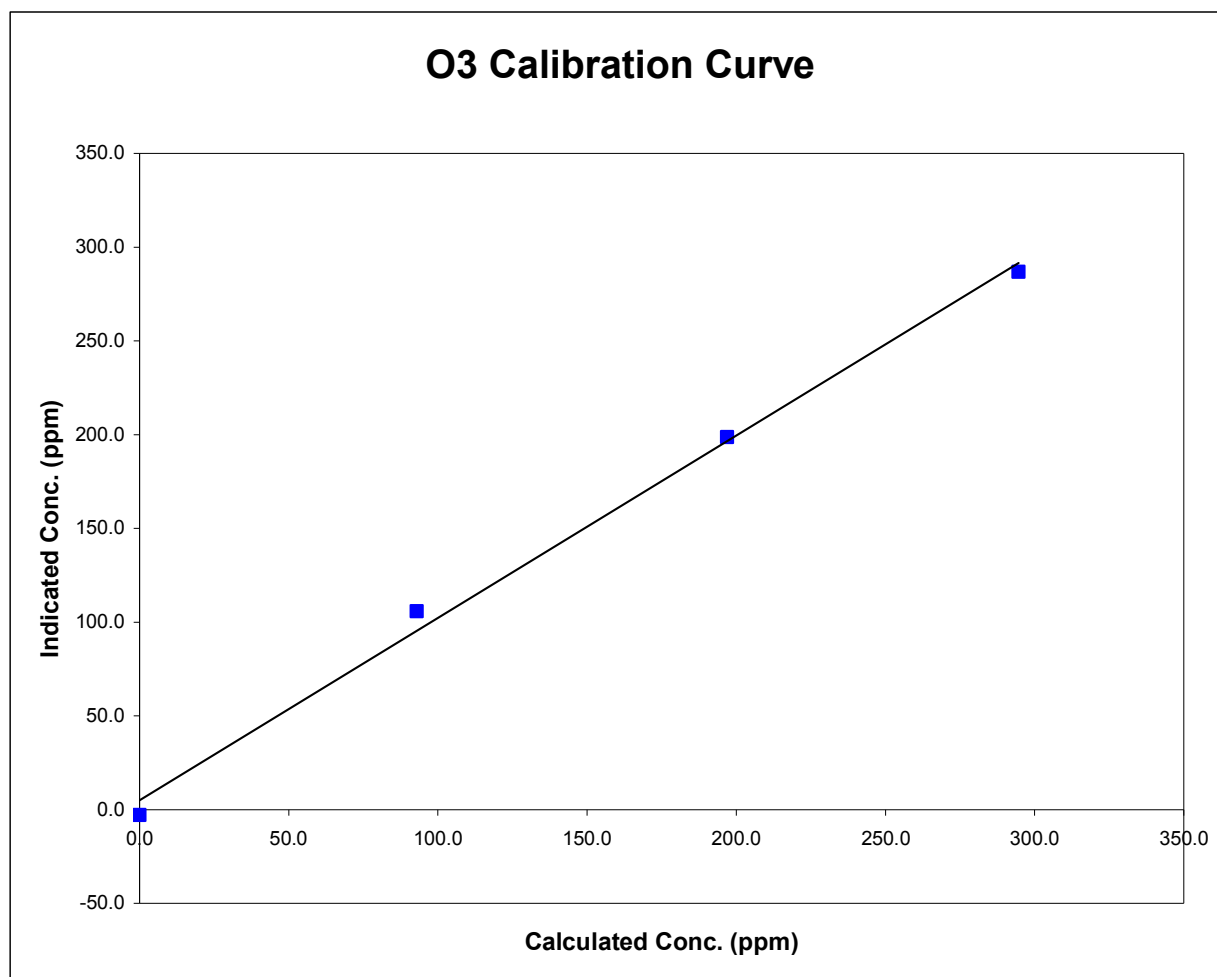


### Station Information

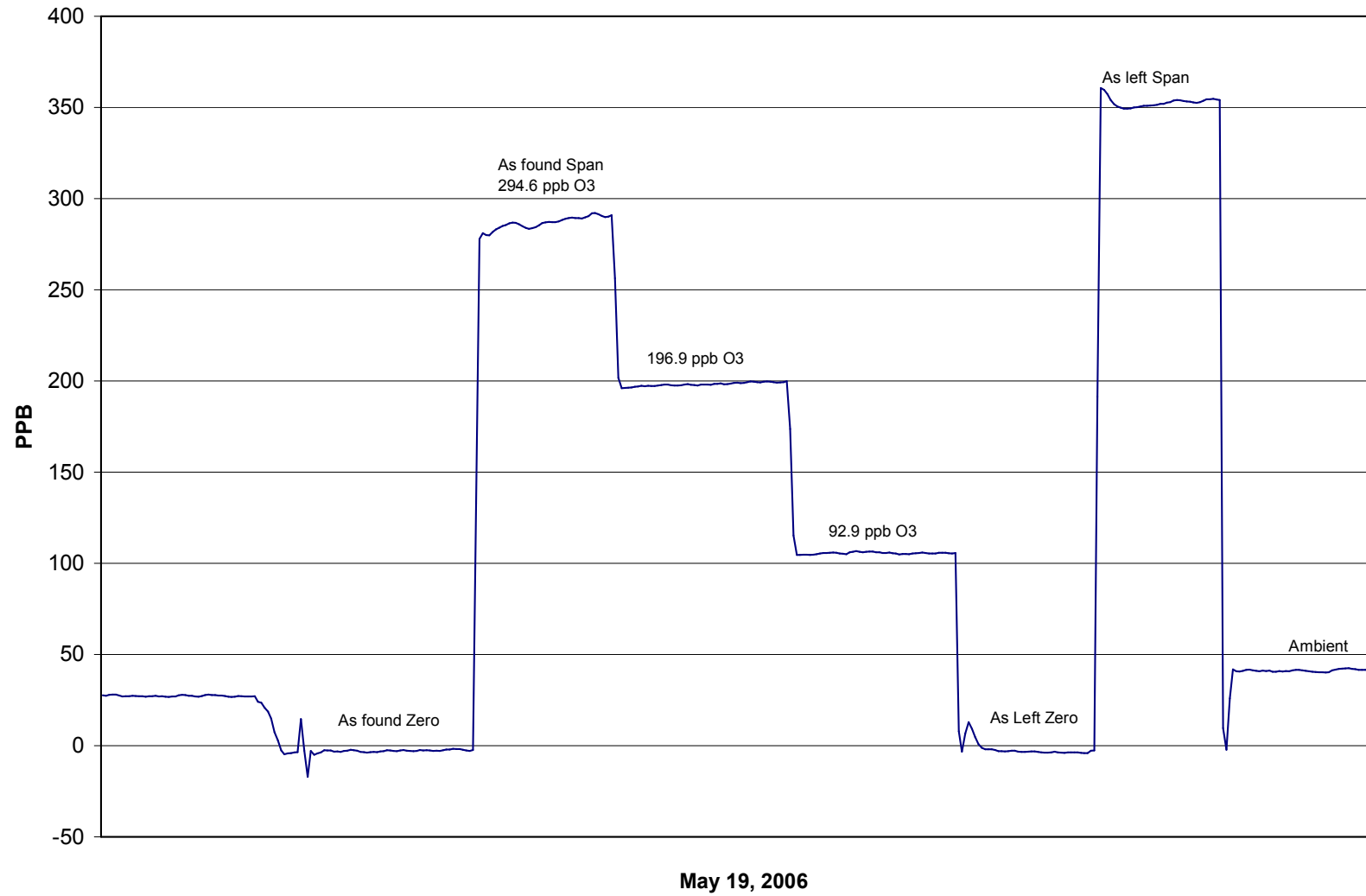
Calibration Date	May 19, 2006	Previous Calibration	April 12, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	7:21	End Time (MST)	10:15
Analyzer make/model	API Model 400E	Analyzer serial #	331

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
294.6	286.9	1.0270	Correlation Coefficient	0.995791
196.9	198.6	0.9914		
92.9	105.7	0.8788		
0.0	-2.9	N/A	Slope	1.023599
			Intercept	-4.448011



### O3 Calibration



# Calibration Report

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



## Station Information

Calibration Date May 18, 2006 Previous Calibration April 12, 2006  
 Station Number 101 Station Location Crescent Heights

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

Start Time (MST) 18:30 End Time (MST) 23:45  
 Barometric Pressure 27.3 inches Hg Station Temperature 20.1 Deg C  
 Calibrator EnviroNics 6100 Serial Number 3474  
 NO Cal Gas Conc 50.5 ppm Cal Gas Expiry Date 22-Nov-06  
 NOx Cal Gas Conc 50.5 ppm Cal Gas Serial # BAL786

## DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO2	NOx	NO
Before	Data Slope	0.995839	0.998654	1.005805
	Data Offset	-0.770339	0.147834	0.459229
After	Data Slope	0.991187	1.002622	1.023582
	Data Offset	-3.129814	-2.083387	1.265392
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	1.085		1.085	
NOx coefficient	1.101		1.101	
Chamber Temp	49.9	Deg C	49.9	Deg C
Cooler Temp	7.0	Deg C	7.0	Deg C
Azero	36.5		36.5	
Perm Temp	40.2	Deg C	40.2	Deg C
Pressure	4.6	inches Hg	4.6	inches Hg
Sample Flow	449.0	ccm	449.0	ccm

Notes: Perm tube replacement. Zero and Span Adjustments performed.

# Calibration Report

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



## Station Information

Calibration Date: May 18, 2006 Station Location: Crescent Heights

## Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor
zero	4991	0.00	0.0	0.0	0.0	-0.6	-1.7	-0.2	N/A	N/A
1	4991	39.85	400.0	400.0	0.0	399.3	389.1	9.3	1.0016	1.0279
2	4991	19.91	200.6	200.6	0.0	204.3	195.5	7.4	0.9822	1.0264
3	4991	9.94	100.3	100.3	0.0	104.5	97.0	5.9	0.9604	1.0345
AFZ	4991	0.00	0.0	0.0	0.0	-0.6	-1.7	-0.2	0.0000	0.0000
AFS	4991	39.85	400.0	400.0	0.0	389.4	387.5	1.2	1.0271	1.0322
Average Correction Factor									0.9814	1.0296

As Found Concentrations NO<sub>x</sub>= 390.2 NO= 389.7 As Found Percent Change NO<sub>x</sub>= -2.4% NO= -2.6%

## GPT Calibration Data

Dilution Flow 4991 ccm Source Gas Flow 39.85 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0	398.3	399.6	-1.3	399.3	389.1	-0.2	N/A	N/A	N/A	N/A
300	400.9	308.0	92.9	401.9	299.7	101.5	0.9974	1.0278	0.9155	109.2%
200	401.5	204.6	196.9	402.6	198.7	203.0	0.9974	1.0300	0.9700	103.1%
100	400.2	105.5	294.6	401.2	101.9	298.0	0.9974	1.0360	0.9885	101.2%
Average Correction Factor							0.9974	1.0313	0.9580	104.5%

## AIC Data

Parameter	Previous calibration				Current calibration			
	NO <sub>x</sub>	NO <sub>2</sub>	NO	ppb	NO <sub>x</sub>	NO <sub>2</sub>	NO	ppb
Auto zero	2.1	-0.7	2.1	ppb	0.4	-1.7	1.3	ppb
Auto span	413.7	404.2	8.6	ppb	361.9	351.4	5.7	ppb

Calibration Performed By: Lenin Flores

## Calibration Summary

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



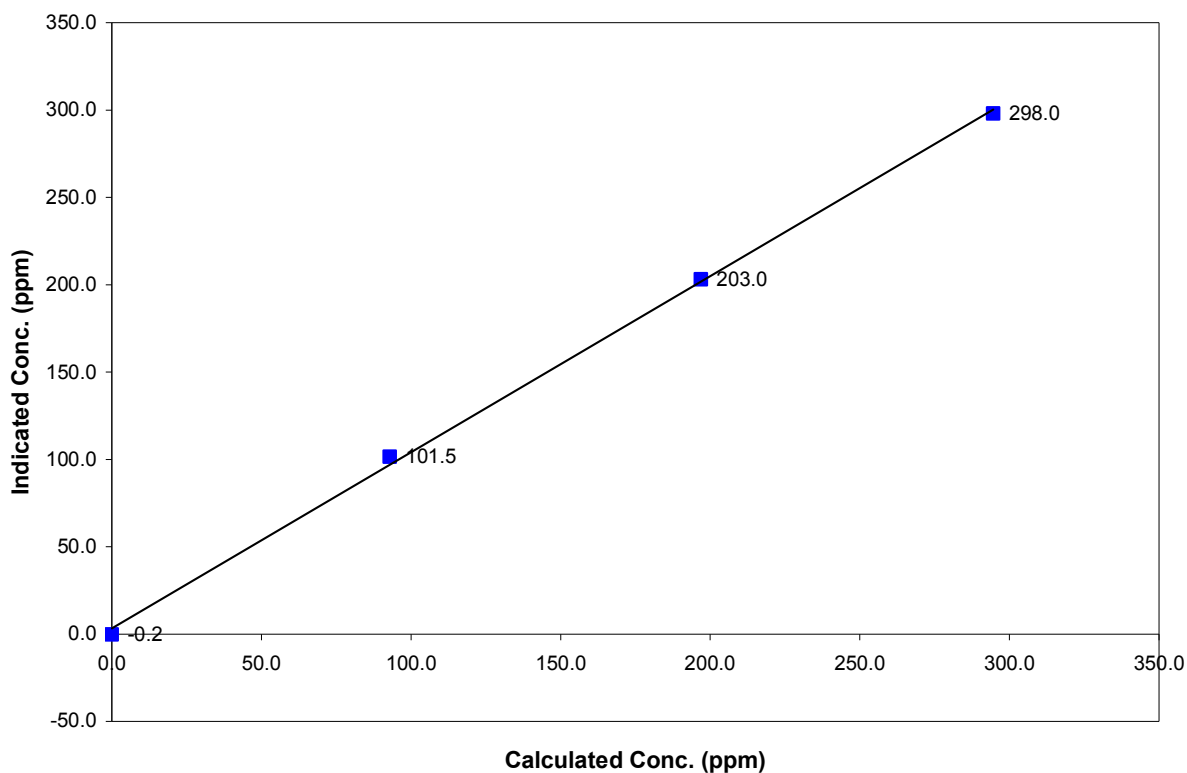
### Station Information

Calibration Date	May 18, 2006	Previous Calibration	April 12, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	18:30	End Time (MST)	23:45
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	0.0000	Correlation Coefficient	0.999204
92.9	101.5	0.9155		
196.9	203.0	0.9700		
294.6	298.0	0.9885		
			Slope	0.991187
			Intercept	-3.129814

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



## Calibration Summary

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



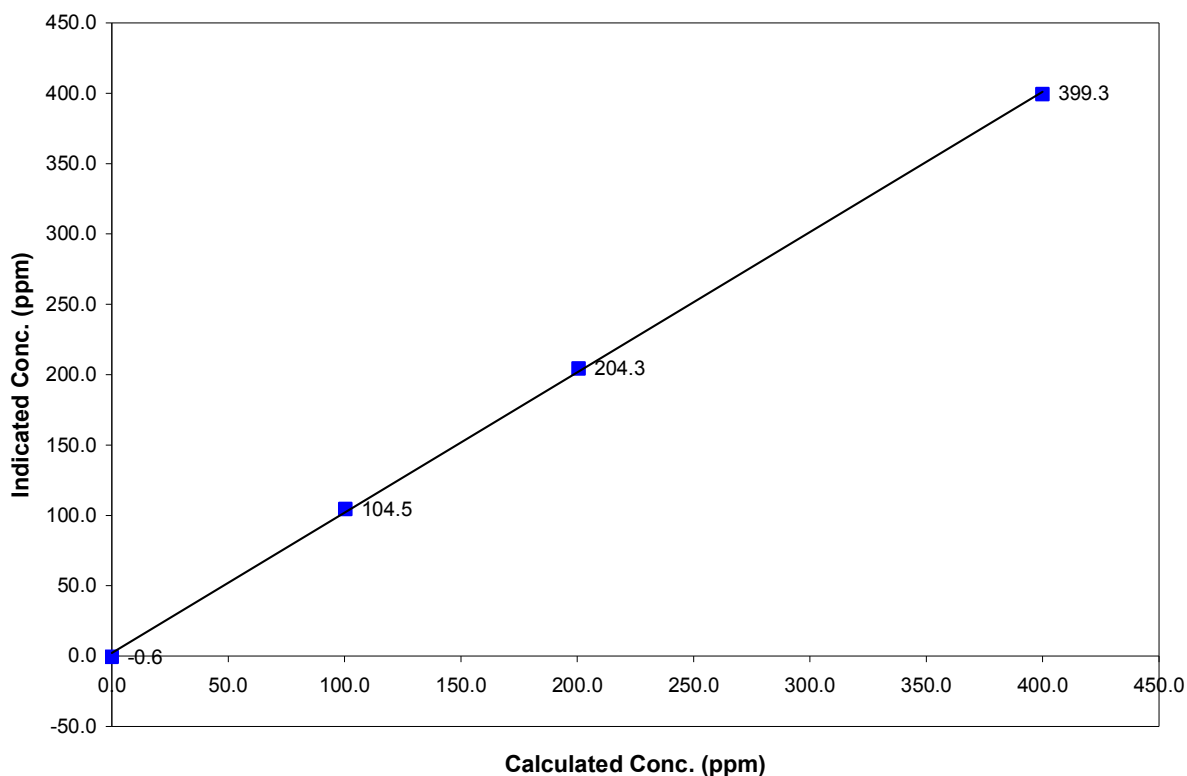
### Station Information

Calibration Date	May 18, 2006	Previous Calibration	April 12, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	18:30	End Time (MST)	23:45
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	-0.6	0.0000	Correlation Coefficient	0.999771
400.0	399.3	1.0016		
200.6	204.3	0.9822	Slope	1.002622
100.3	104.5	0.9604		
			Intercept	-2.083387

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



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed

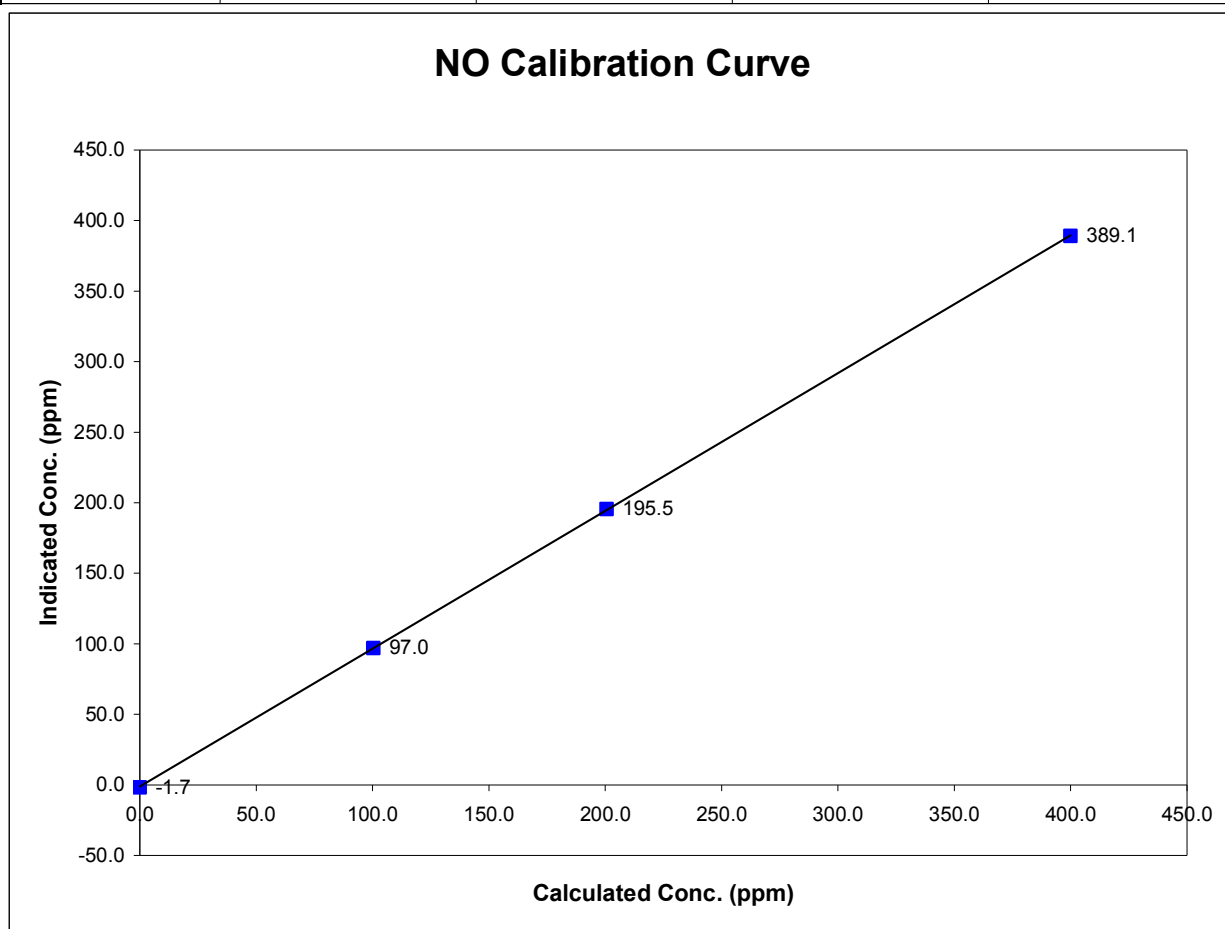


### Station Information

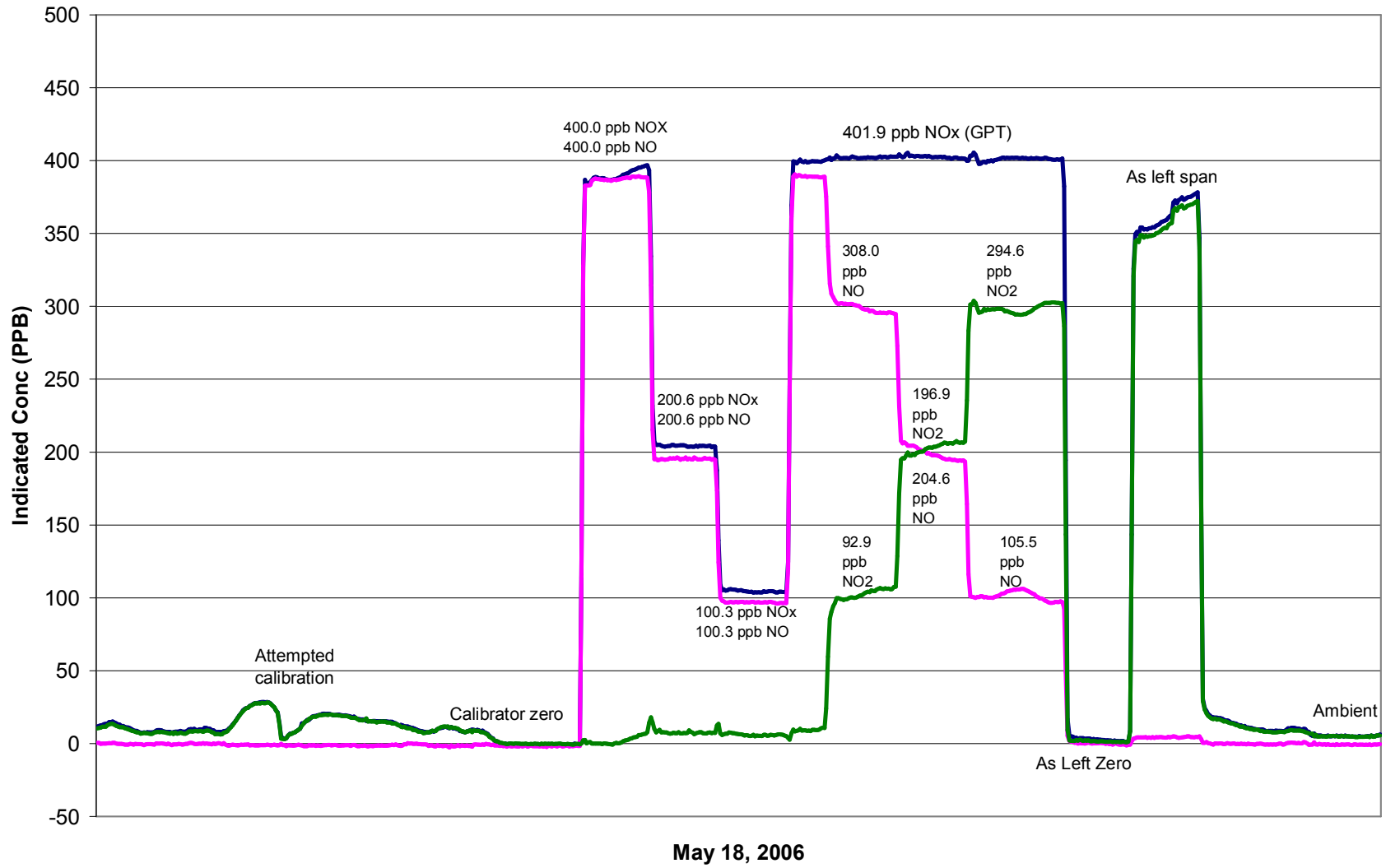
Calibration Date	May 18, 2006	Previous Calibration	April 12, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	18:30	End Time (MST)	23:45
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.7	N/A	Correlation Coefficient	0.999989
400.0	389.1	1.0279		
200.6	195.5	1.0264		
100.3	97.0	1.0345		
			Slope	1.023582
			Intercept	1.265392



## NOx Calibration





# Calibration Report

Parameter THC  
 Air Monitoring Network Palliser Airshed



## Station Information

Calibration Date	May 18, 2006	Previous Calibration	April 12, 2006
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="text"/>
Start Time (MST)	15:13	End Time (MST)	19:28
Barometric Pressure	27.4 inches Hg	Station Temperature	21.3 Deg C
Calibrator	Envionics 6100	Serial Number	3747
Cal Gas Concentration	700 ppm CH <sub>4</sub> / 301 ppm C <sub>3</sub> H <sub>8</sub>	Cal Gas Expiry Date	8/28/2005
Cal Gas 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	1.002885	Calculated slope	1.006772
Calculated intercept	-0.008452	Calculated intercept	0.034868
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	12620	raw	12620	raw
THC zero counts	1557	raw	1557	raw

## Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4992	0.00	0.00	0.00	N/A
4992	79.80	24.04	23.88	1.0065
4992	39.87	12.10	11.90	1.0170
4992	9.95	3.04	2.99	1.0157
zero	0.00	0.00	-0.36	As Found Zero
4992	79.80	24.04	24.00	As Found Span
Average Correction Factor				1.0131

Calculated value of As Found Response: 24.425 ppm      Percent Change of As Found: -1.6%

	before calibration		after calibration	
Auto zero	0.06	ppm	0.04	ppm
Auto span	23.35	ppm	21.53	ppm

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

Calibration Performed By: Lenin Flores

## Calibration Summary

Parameter THC  
 Air Monitoring Network Palliser Airshed

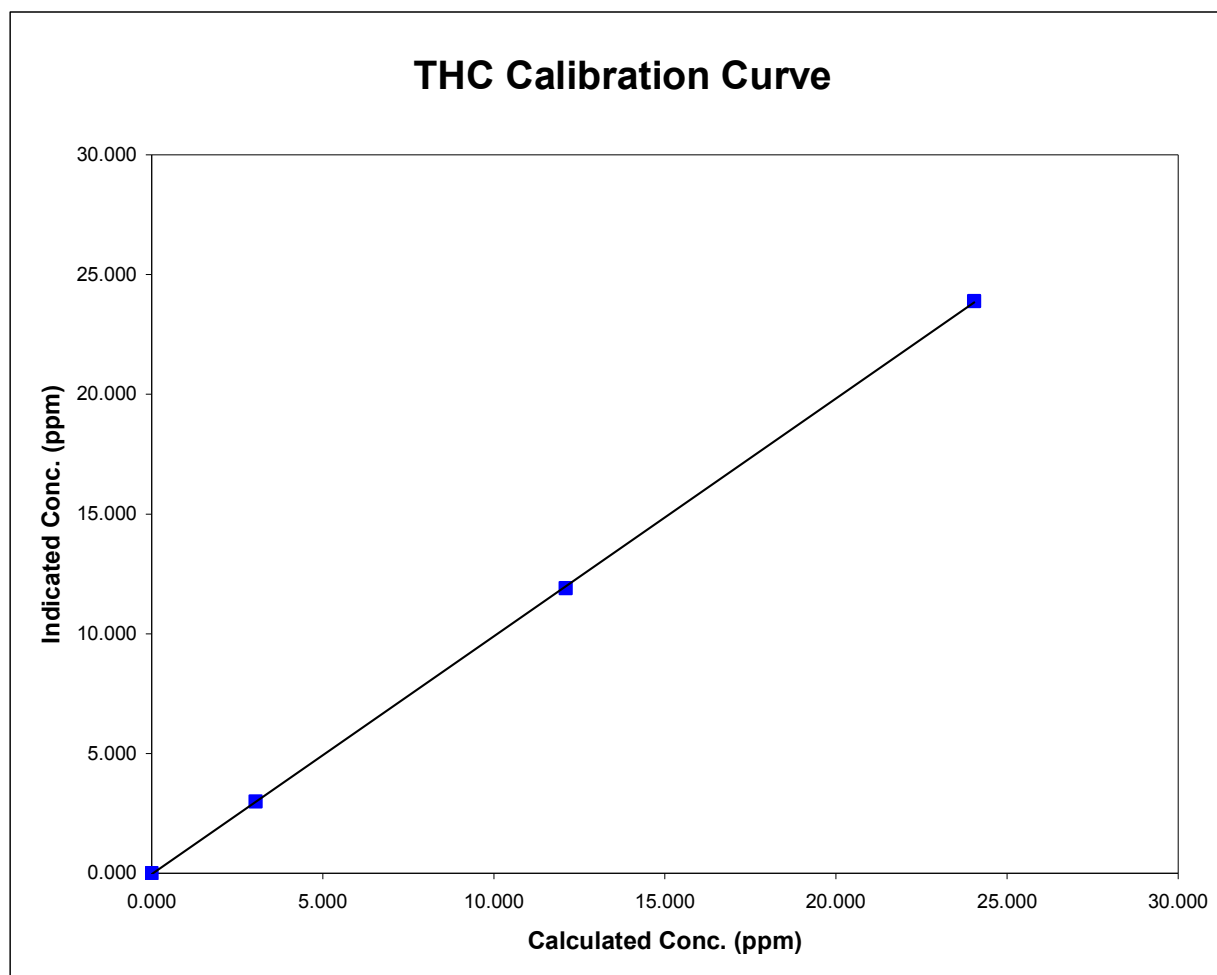


### Station Information

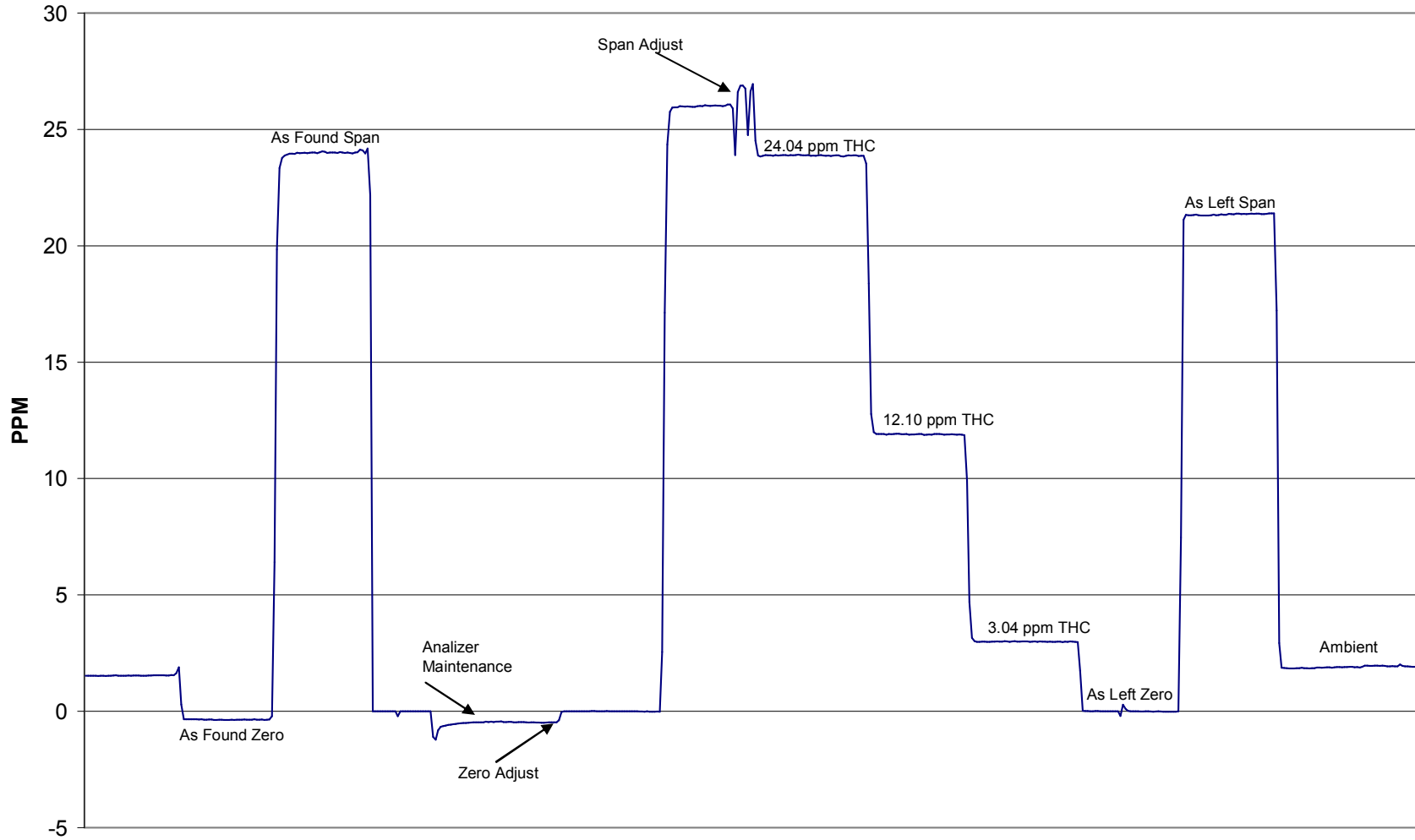
Calibration Date	May 18, 2006	Previous Calibration	April 12, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	15:13	End Time (MST)	19:28
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.002	N/A		
24.037	23.883	1.0065	Correlation Coefficient	0.999969
12.104	11.901	1.0170		
3.040	2.993	1.0157	Slope	1.006772
			Intercept	0.034868



### THC Calibration



May 18, 2006

# Calibration Report



Parameter CO  
 Air Monitoring Network Palliser

### Station Information

Calibration Date	May 18, 2006	Previous Calibration	April 13, 2006
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="text"/>
Start Time (MST)	11:10	End Time (MST)	15:10
Barometric Pressure	27.4 in Hg	Station Temperature	20.5 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
		Cal Gas Cylinder #	BLM002248
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	11
	<u>Before</u>		<u>After</u>
Calculated slope	1.002885	Calculated slope	0.994919
Calculated intercept	0.052431	Calculated intercept	0.025047
Analyzer make	TEI Model 48C	Analyzer serial #	436609887

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.052		1.052	
CO bkg setting	9.112		9.112	
Lamp ratio	1.1315		1.1315	
Lamp intensity	200000	Hz	200000	Hz
Sample Flow	0.998	LPM	0.998	LPM

### Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.00	0.00	N/A
4991	49.84	29.64	29.79	0.9951
4991	19.91	11.91	11.89	1.0018
4991	9.80	5.87	5.89	0.9974
4991	0.00	0.00	0.35	0.0000
4991	49.84	29.64	30.25	0.9799
Average Correction Factor				0.9981

Calculated value of As Found Response: 30.034 ppm      Percent Change of As Found: -1.3%

	before calibration		after calibration	
Auto zero	0.30	ppm	0.02	ppm
Auto span	20.77	ppm	20.23	ppm

Notes: Zero and span adjustments made.

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Calibration Performed By: LeninF\_TravisM

# Calibration Summary

Parameter CO  
 Air Monitoring Network Palliser

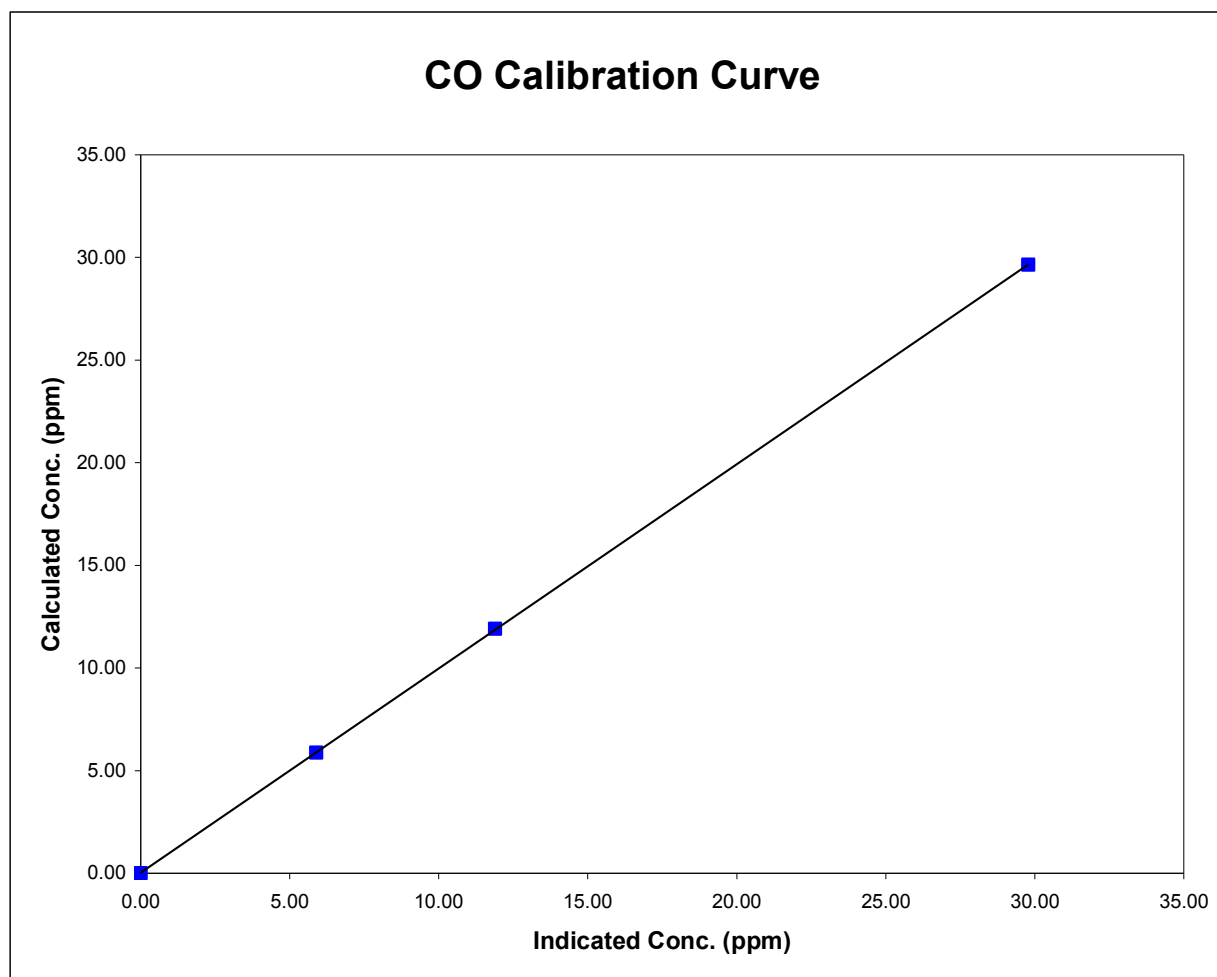


### Station Information

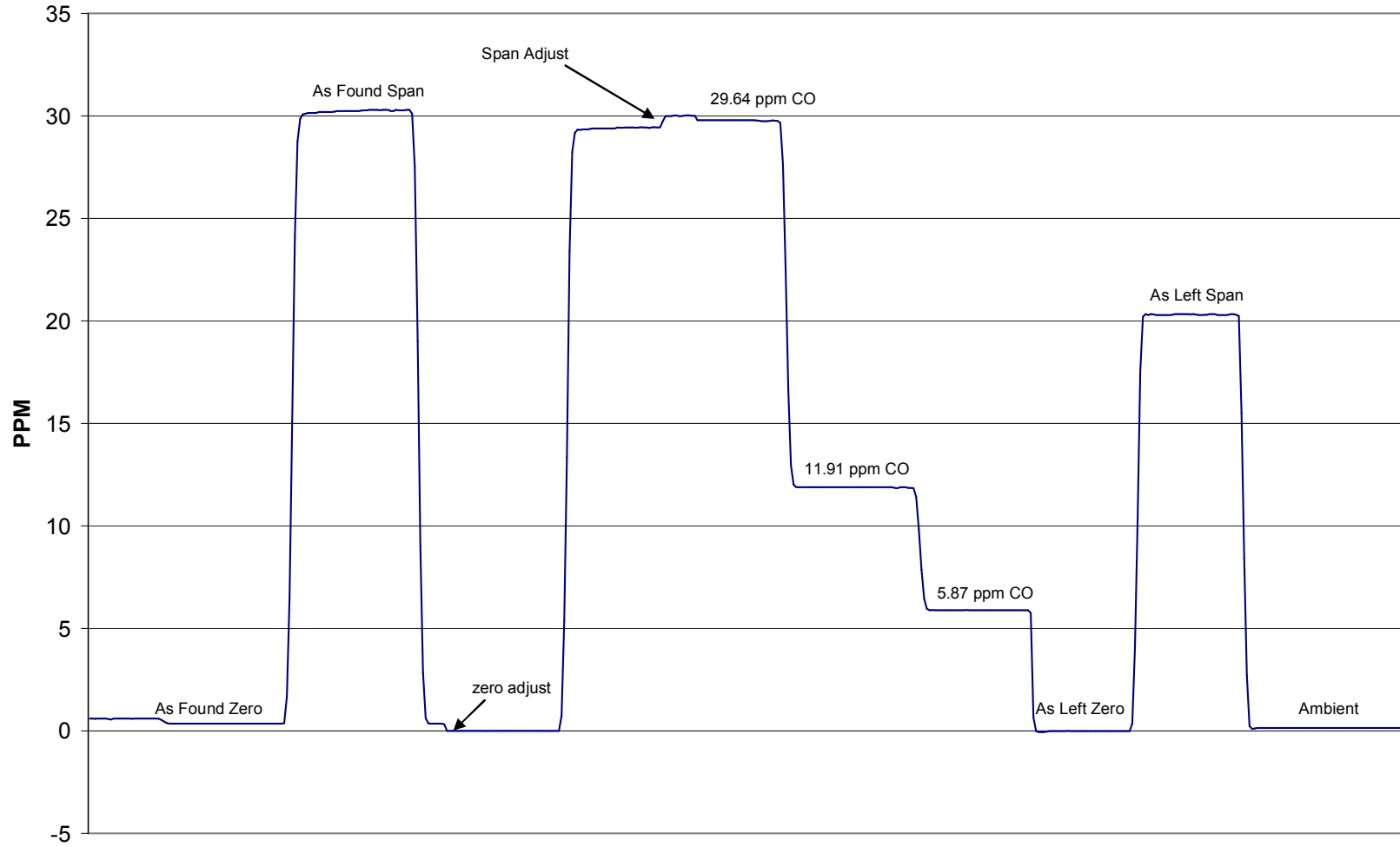
Calibration Date	May 18, 2006	Previous Calibration	April 13, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:10	End Time (MST)	15:10
Analyzer make/model	TEI Model 48C	Analyzer serial #	436609887

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.00	N/A		
29.64	29.79	0.9951	Correlation Coefficient	0.999991
11.91	11.89	1.0018		
5.87	5.89	0.9974	Slope	0.994919
			Intercept	0.025047



### CO Calibration



May 18, 2006

# Calibration Report

Parameter PM2.5  
 Air Monitoring Network Palliser Airshed



## Station Information

Calibration Date	May 18, 2006	Previous Calibration	April 14, 2006
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:08	End Time (MST)	16:30
Barometric Pressure	0.712 ATM	Station Temperature	21.3 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	<u>Before</u>		<u>After</u>
DACS Scale High	450	DACS slope	450
DACS Scale Low	-50	DACS intercept	-50

## Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	46	%	19	%
Ko Factor	12758		12758	
Temperature	14.1	Deg C	14.1	Deg C
Pressure	0.907	ATM	0.907	ATM

## Calibration Data

Parameter	Set Point	TEOM Reading (as found)	Tolerance	TEOM Reading (after adjustments)
zero flow - main	0.0	0.01	0.00	0.02
zero flow - auxillary	0.0	-0.01	0.01	0.03
flow recovery - main	45 - 60 Seconds	40.0	45 - 60 Seconds	30.0
flow recovery - aux	46 - 60 Seconds	40.0	46 - 60 Seconds	35.0
Temperature	measured	4.0	+/- 1.0 Deg C	24.0
Pressure	measured	0.906	+/- 1.5% ΔATM	0.714
Total Flow	16.67 SLPM	16.20		16.60
Auxiliary flow	13.67 SLPM	13.35	+/- 1.0 SLPM	13.60
Main flow	3.0 SLPM	2.870	+/- 0.2 SLPM	3.003
Leak Check - main	0.0	0.02	<0.15 SLPM	0.02
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.03
Ko Factor (w/o filter)	measured	N/A	filter weight (g)	0.11352
Ko Factor (w/ filter)	measured	N/A	% Ko difference	N/A

Notes: Main and Auxiliary flows were low... Adjusted all flows...  
 \_\_\_\_\_  
 \_\_\_\_\_

Calibration Performed By: LF, TM