



Palliser Airshed Society

Ambient Air Monitoring Network Summary

May 2004



TABLE OF CONTENTS

Airshed Zone Association – May PASZA Ambient Air Report	2
CONTINUOUS MONITORING	3
PAS - CRESCENT HEIGHTS OXIDES OF NITROGEN MONTHLY SUMMARY	5
PAS - CRESCENT HEIGHTS OZONE MONTHLY SUMMARY	16
PAS - CRESCENT HEIGHTS TOTAL HYDROCARBON MONTHLY SUMMARY	22
PAS - CRESCENT HEIGHTS PARTICULATE MATTER (LESS THAN 2.5 MICRONS) MONTHLY SUMMARY	26
PAS - CRESCENT HEIGHTS METEOROLOGICAL PARAMETERS MONTHLY SUMMARY	31
PASSIVE MONITORING	41
May 2004 - Calibration Reports	45
Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend	6
Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend	8
Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trends	14
Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trends	15
Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend.....	17
Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend.....	19
Figure 7. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend.....	23
Figure 8. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend.....	25
Figure 9. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend.....	27
Figure 10. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly.....	29
Figure 11. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend.....	32
Figure 12. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend	34
Figure 13. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend	36



Alberta Environment
Enforcement and Monitoring Division
11th Floor, Oxbridge Place
9820 - 106th Street
Edmonton, Alberta, T5K 2J6

Attention: Director of Monitoring and Evaluation

RE: Palliser Airshed Society (PAS) Ambient Air Monitoring Report – May 2004

Enclosed is the PAS Ambient Monitoring Report for the month of **May 2004**.

Continuous Monitoring – Crescent Heights

Included in this report are the; 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 above 90% 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 found during this month of sampling:

- Monthly average concentrations of NO₂ was 5.9 ppb
- Monthly average concentrations for O₃ was 36.4 ppb
- Monthly average concentrations for THC was 1.92 ppm
- Monthly average concentrations for PM_{2.5} was 2.9 µg/m³

Passive Monitoring – Six Stations throughout the PAS zone:

There were no problems from the passives reported from the laboratory or field notes. In addition there were no damaged or missing samples for the month and no exceedences of the Provincial Air Quality guidelines.

- Monthly average concentrations for SO₂ passives ranged from 0.1 ppb to 0.2 ppb
- Monthly average concentrations for NO₂ passives ranged from 3.0 ppb to 7.4 ppb
- Monthly average concentrations for O₃ passives ranged from 33.9 ppb to 39.1 ppb

If you have any questions, please contact the Focus office at 466-6555.

Gary Cross C.E.T.

Kevin McCullum, M.Sc., P.Eng.



CONTINUOUS MONITORING
Ambient Air Compliance Network

May 2004 Monthly Overall Summary Report
Ambient Air Quality Data

May-2004				Palliser Airshed Society			Maximum Recorded Values						Operational Time (%)
Pollutant (units)	Guidelines		Station	Monthly Average	Exceedence		Conc	1-hr		24-hr			
	1-hr	24-hr			1-hr	24-hr		Day	WSPD (km/hr)	WDIR (Sector)	Conc	Day	
NO (ppb)			Crescent Heights	1.9	0	0	59.2	May-01	3.8	NNW	6.9	May-01	98.7%
NO ₂ (ppb)	212	106	Crescent Heights	5.9	0	0	45.8	May-18	4.9	NNW	12.4	May-18	98.7%
NO _x (ppb)			Crescent Heights	7.6	0	0	91.8	May-01	3.8	NNW	18.0	May-18	98.7%
O ₃ (ppb)	82		Crescent Heights	36.4	0	0	66.3	May-17	10.0	SSW	44.3	May-02	98.5%
THC (ppm)			Crescent Heights	1.92	0	0	2.61	May-01	4.3	NW	2.05	May-01	98.5%
PM _{2.5} (µg/m ³)		30 ^a	Crescent Heights	2.9	0	0	12.3	May-18	4.9	NNW	5.5	May-18	98.4%
RH (%)			Crescent Heights	59.8									98.5%
SR (W/m ²)			Crescent Heights	232.6									98.5%
Temp (°C)			Crescent Heights	10.9									98.5%
WSPD v (km/hr)			Crescent Heights	1.0									98.5%
WSPD s (km/hr)			Crescent Heights	12.5									98.5%
WDIR (Deg)			Crescent Heights	E*									98.5%

Note: ^a the 24-hr Canada Wide Standard level is considered as an absolute value
* Wind Direction is the predominate direction for the Month



Continuous Monitoring

Ambient Air Monitoring Network

Crescent Heights Station

General Station Issues

Data is missing for 8 hours on May 1, 3 & 5 due to corrupted firmware on the AP1000 from a power problem in April. The data system was replaced with a new one on May 13.

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational problems observed
Dioxide	Teledyne - API	200E	ppb	No operational problems observed
Total				
Hydrocarbons	Bendix	400A	ppm	No operational problems observed
PM 2.5	R&P TEOM	1400ab	ug/m3	No operational problems observed
Wind Speed	Met One	010C	KPH	No operational problems observed
Wind Direction	Met One	020C	Deg	No operational problems observed
Ambient				
Temperature	Met One	083D	DegC	No operational problems observed
Relative				
Humidity	Met One	083D	%	No operational problems observed
Solar Radiation	Met One	096-1	W/m2	No operational problems observed
Data Acquisition				
System	Titan Logix	AP1000	N/A	The data system was replaced on May 13 from 10:00 to 13:00 resulting in data loss for all parameters.



PAS - CRESCENT HEIGHTS OXIDES OF NITROGEN MONTHLY SUMMARY

Station: Crescent Heights

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004
Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	46 ppb 17-May 23:00 0:00
Maximum 24-hr Average:	12 ppb 18-May

Guideline Limit: Alberta Environment: 1-hr 212 ppb 24-hr 106 ppb

AIC Time:	32 hrs	Operational Time:	696 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	98.7%					
Percentile	99	95	75	50	25	5	1	Average
	28	15	8	4	2	1	1	5.9 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

Day	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	Daily	
			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	Average	Maximum
1-May-04	33	A	18	11	19	23	18	12	15	14	4	2	2	1	1	2	2	2	2	2	2	N	13	8	5	9.5	32.9		
2-May-04	A	4	5	2	2	3	2	2	2	2	2	2	2	3	11	2	2	7	4	3	4	5	11	6	A	3.8	11.3		
3-May-04	7	4	6	11	6	5	4	4	N	3	4	4	3	N	N	N	N	N	2	5	4	8	9	15	5.8	14.8			
4-May-04	14	11	6	A	10	7	4	4	3	2	2	5	3	4	3	6	5	7	10	3	3	2	5	3	5.3	14.2			
5-May-04	2	2	A	6	4	2	3	3	1	2	N	1	1	2	1	1	2	2	2	2	2	2	2	2	2	2.1	6.3		
6-May-04	1	2	3	A	4	3	3	4	3	2	2	3	2	2	2	3	3	4	9	22	15	11	6	4.9	21.6				
7-May-04	6	9	A	8	8	6	9	6	7	14	10	6	4	3	3	2	1	1	2	3	6	6	6	7	5.7	13.8			
8-May-04	6	A	39	20	5	5	7	4	2	4	8	5	6	5	7	10	10	12	10	7	15	3	7	6	8.9	38.8			
9-May-04	A	10	4	4	4	2	2	1	1	1	2	1	1	1	1	2	3	2	1	2	3	4	9	A	2.9	10.5			
10-May-04	5	4	4	8	12	9	3	1	1	1	1	1	1	1	2	2	2	2	1	1	4	3	2	A	3	3.1	11.6		
11-May-04	2	1	1	1	1	2	3	3	2	2	2	2	2	2	1	2	2	2	2	2	6	8	A	6	5	2.6	7.6		
12-May-04	7	5	4	3	3	5	7	5	3	2	2	2	4	10	6	5	5	13	8	5	A	22	10	9	6.1	21.9			
13-May-04	10	12	13	6	6	9	10	7	3	C	M	M	C	C	C	C	C	3	5	7	7	14	11	11	N	13.6			
14-May-04	15	18	10	19	A	24	20	13	19	13	4	3	3	3	4	3	2	4	2	2	3	4	6	11	8.9	23.7			
15-May-04	13	6	4	A	10	4	4	3	4	9	4	3	4	3	3	4	3	3	3	3	6	6	11	9	5.4	12.9			
16-May-04	8	6	A	12	11	5	7	8	4	4	1	1	2	1	2	2	3	4	6	4	4	8	12	4	5.1	12.4			
17-May-04	3	A	11	6	9	9	11	9	5	3	4	6	5	5	4	3	3	2	3	2	6	14	23	46	8.4	45.8			
18-May-04	A	28	31	28	34	33	26	28	20	5	4	2	3	2	2	2	1	1	2	5	6	7	5	A	12.4	33.9			
19-May-04	18	12	8	11	11	10	11	10	9	13	7	4	3	2	2	1	1	1	1	1	2	5	A	14	6.8	17.8			
20-May-04	15	13	8	12	8	16	12	11	15	7	6	4	2	2	2	2	2	2	2	2	2	2	A	5	3	6.7	16.1		
21-May-04	2	2	2	2	2	3	3	4	3	2	3	2	2	2	2	2	2	2	2	3	A	6	4	3	2	2.7	6.1		
22-May-04	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	A	4	3	2	2	3	2.0	4.2		
23-May-04	3	2	2	2	2	2	1	2	1	1	1	1	1	1	1	0	0	1	A	3	3	3	6	7	7	2.2	6.8		
24-May-04	7	9	7	9	7	9	23	14	12	9	7	7	5	5	4	4	A	5	5	12	12	6	3	4	8.0	22.8			
25-May-04	3	3	3	4	8	6	5	4	5	7	3	5	3	3	4	A	10	9	9	9	5	12	4	8	5.7	12.3			
26-May-04	9	7	1	1	3	7	10	6	7	4	4	4	4	3	4	A	7	7	7	6	21	22	8	4	19	7.5	22.0		
27-May-04	9	7	7	8	10	11	11	14	6	4	3	2	2	A	8	5	7	11	27	15	7	11	7	6	8.7	27.4			
28-May-04	5	3	4	5	6	10	10	5	3	2	4	3	A	8	4	4	12	5	4	12	11	13	10	18	7.1	17.9			
29-May-04	14	8	8	8	9	9	5	4	6	5	9	A	6	4	3	4	4	3	7	7	7	5	8	8	6.6	14.2			
30-May-04	4	3	2	2	3	3	5	2	2	2	A	5	4	3	3	3	6	11	9	3	5	8	11	10	4.6	11.3			
31-May-04	6	6	5	8	11	10	9	5	2	A	5	3	2	2	2	1	1	2	2	5	6	10	16	21	6.0	20.7			
Hourly Avg	8.2	7.1	7.8	7.8	7.6	8.1	8.1	6.4	5.6	4.9	4.0	3.1	2.8	3.2	2.8	3.0	4.0	4.4	4.8	5.7	6.6	8.0	7.8	9.3					
Hourly Max	32.9	27.7	38.8	27.6	33.9	33.3	26.4	27.5	20.1	14.5	10.5	7.3	6.5	10.9	7.5	10.1	11.6	12.7	27.4	21.2	22.0	21.9	22.9	45.8					

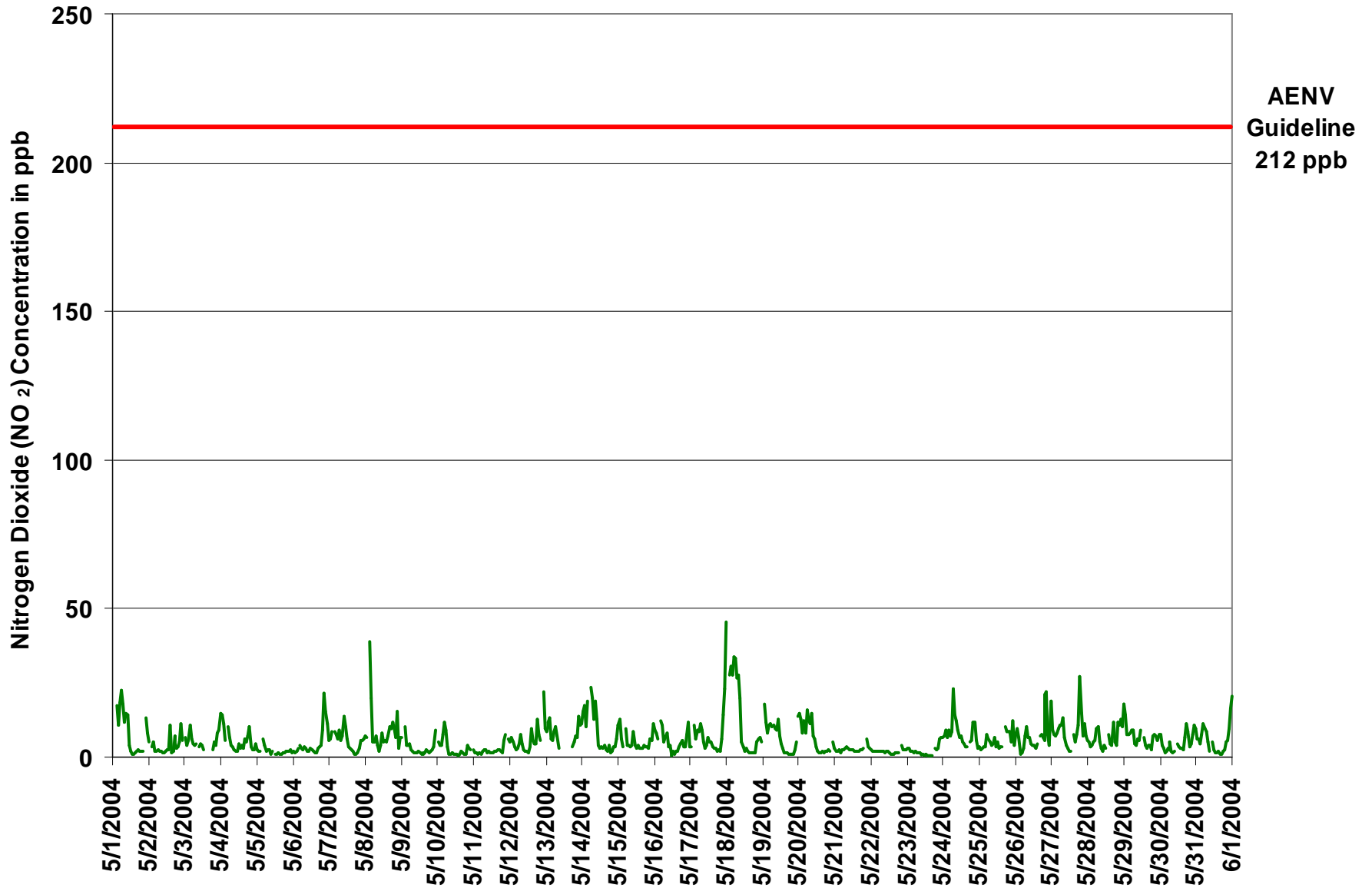


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004
Summary

Maximum 1-hr Value:	75.3	ppb	17-May	23:00 0:00
Maximum 24-hr Value:	26.8	ppb	8-May	

AIC Time:	32 hrs	Operational Time:	696 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	98.7%					
Percentile	99	95	75	50	25	5	1	Average
	54	36	17	9	4	2	2	12.6 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-May-04	43	A	42	15	23	33	26	18	18	30	8	3	2	1	4	4	3	3	4	6	N	23	13	9	15.0	42.9
2-May-04	A	26	31	6	6	32	37	24	20	20	13	11	8	21	3	5	17	15	6	6	8	35	28	A	17.1	36.6
3-May-04	19	7	8	27	9	6	6	7	N	6	12	7	4	N	N	N	N	N	4	10	5	12	14	23	10.3	26.9
4-May-04	21	18	9	A	13	9	15	6	6	12	3	18	6	14	7	28	10	15	35	8	3	11	17	5	12.6	35.4
5-May-04	3	3	A	9	9	4	6	5	2	3	N	2	2	9	2	2	3	3	3	3	4	4	3	3	3.9	9.5
6-May-04	3	3	5	A	7	4	4	6	17	3	3	23	5	4	3	3	22	18	21	34	38	19	20	9	11.9	37.7
7-May-04	8	12	A	11	10	14	14	7	13	18	15	9	6	12	5	5	2	2	3	6	8	12	9	10	9.2	18.5
8-May-04	11	A	48	56	40	44	32	8	4	9	18	34	14	25	18	54	30	31	17	17	33	6	39	31	26.8	55.9
9-May-04	A	22	7	8	9	4	3	2	2	2	4	2	2	2	2	3	4	5	2	3	4	5	23	A	5.5	22.7
10-May-04	9	17	5	22	20	16	6	3	3	3	2	2	2	2	3	5	4	3	3	7	4	3	A	5	6.4	21.6
11-May-04	2	2	2	2	2	4	5	5	2	3	3	2	2	4	4	3	3	3	3	19	14	A	9	8	4.7	19.5
12-May-04	8	7	7	4	4	8	10	8	3	3	4	3	5	20	10	9	10	22	42	8	A	56	15	12	12.1	56.0
13-May-04	28	30	43	8	8	26	13	12	14	C	M	M	C	C	C	C	C	19	9	16	14	31	17	24	N	43.2
14-May-04	20	22	20	26	A	29	39	15	24	16	8	6	16	16	22	9	4	39	3	3	6	7	8	21	16.6	39.2
15-May-04	21	9	9	A	15	6	6	5	6	14	9	6	6	9	6	5	5	5	5	5	13	16	15	12	9.0	21.4
16-May-04	11	9	A	18	14	8	17	12	7	8	2	2	47	3	3	3	5	16	12	8	6	16	25	8	11.2	47.2
17-May-04	21	A	26	13	34	10	32	34	13	6	8	9	10	7	6	6	5	5	6	3	32	27	54	75	19.2	75.3
18-May-04	A	38	37	43	47	46	57	43	22	14	44	4	28	5	3	3	3	2	4	10	12	11	7	A	22.0	56.6
19-May-04	29	35	15	12	14	14	28	19	16	19	14	6	6	2	3	2	2	2	2	2	5	14	A	19	12.2	34.7
20-May-04	17	20	20	24	11	27	21	15	21	12	12	5	3	3	3	3	2	3	3	3	3	A	8	4	10.5	26.7
21-May-04	3	3	3	2	5	5	19	5	5	3	3	4	3	3	3	3	3	3	4	A	10	5	5	3	4.5	19.2
22-May-04	3	3	3	3	3	3	3	3	2	3	3	2	2	2	2	2	2	3	A	8	4	4	4	5	3.1	7.7
23-May-04	5	4	3	4	4	3	2	3	3	2	2	2	2	2	1	1	1	A	6	4	5	9	10	9	3.7	9.7
24-May-04	10	11	10	12	13	25	32	24	15	13	8	9	7	8	5	6	A	8	29	40	19	10	5	49	16.1	48.7
25-May-04	3	36	5	5	41	25	17	5	8	29	6	15	12	11	8	A	18	29	21	26	30	15	16	17.7	40.9	
26-May-04	36	18	2	2	12	26	15	10	24	7	8	6	6	7	A	12	11	10	14	59	48	28	13	28	17.4	59.2
27-May-04	24	15	10	12	11	39	15	21	10	5	16	3	3	A	18	11	15	30	62	23	10	44	15	7	18.2	62.2
28-May-04	7	6	10	27	10	31	30	11	8	11	10	25	A	39	27	14	16	12	7	28	36	27	22	30	19.2	38.5
29-May-04	36	15	25	12	13	20	16	5	10	12	36	A	11	7	5	10	10	4	17	16	12	8	14	14	14.2	36.4
30-May-04	10	9	2	3	10	4	16	3	2	5	A	8	5	5	5	5	16	21	16	8	10	13	15	14	8.9	21.2
31-May-04	10	9	11	22	22	17	16	10	3	A	12	4	2	4	5	5	2	5	8	15	10	24	25	31	11.8	30.6
Hourly Avg	15.1	14.6	14.9	14.5	14.6	17.5	18.0	11.4	10.1	9.9	10.3	8.0	7.9	8.7	6.6	7.9	8.2	11.5	12.3	13.5	13.9	17.6	16.0	17.3		
Hourly Max	42.9	37.6	47.8	55.9	46.7	46.4	56.6	43.4	23.9	29.9	44.4	33.5	47.2	38.5	27.4	53.9	29.8	39.0	62.2	59.2	47.5	56.0	53.5	75.3		

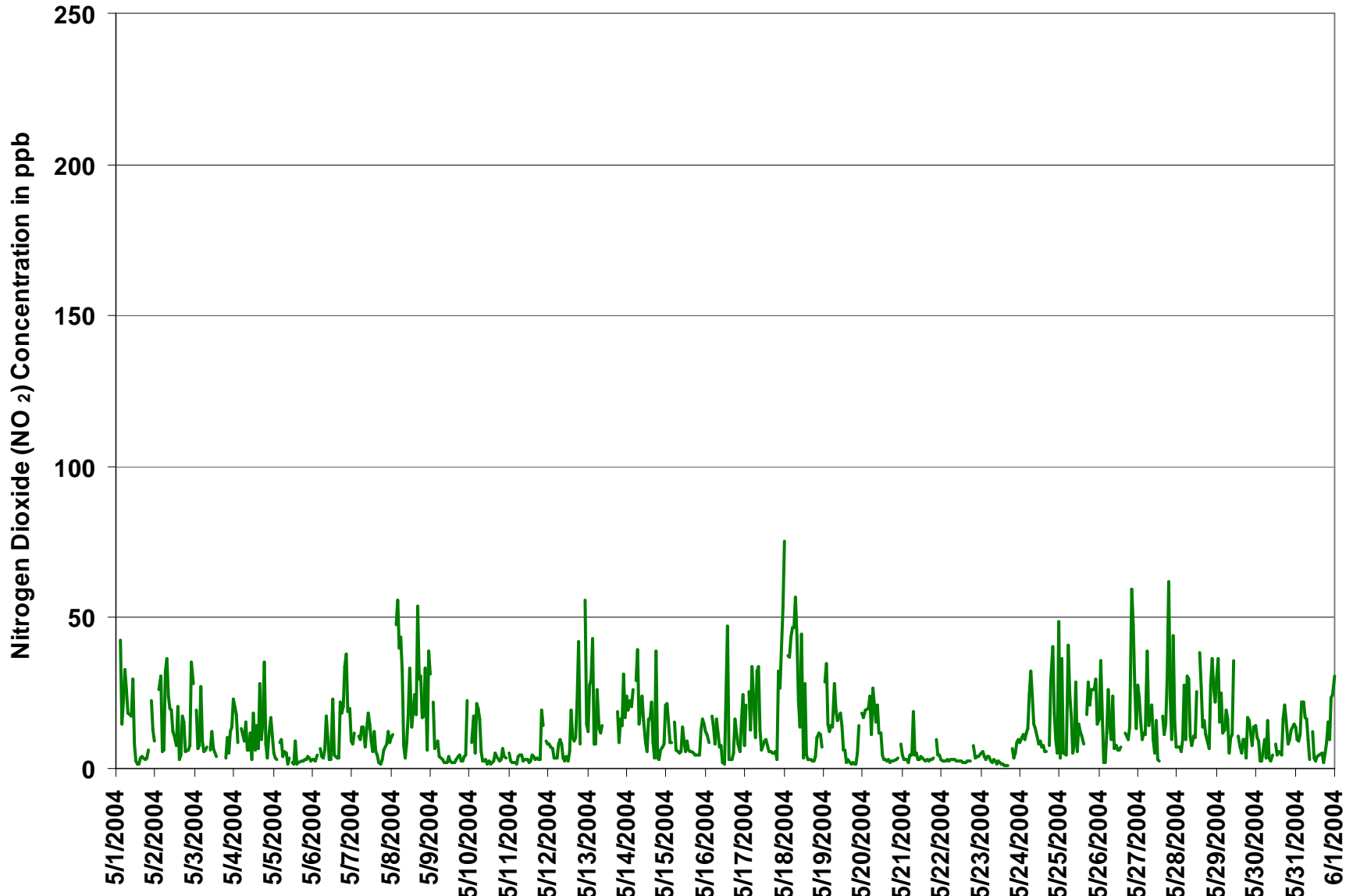
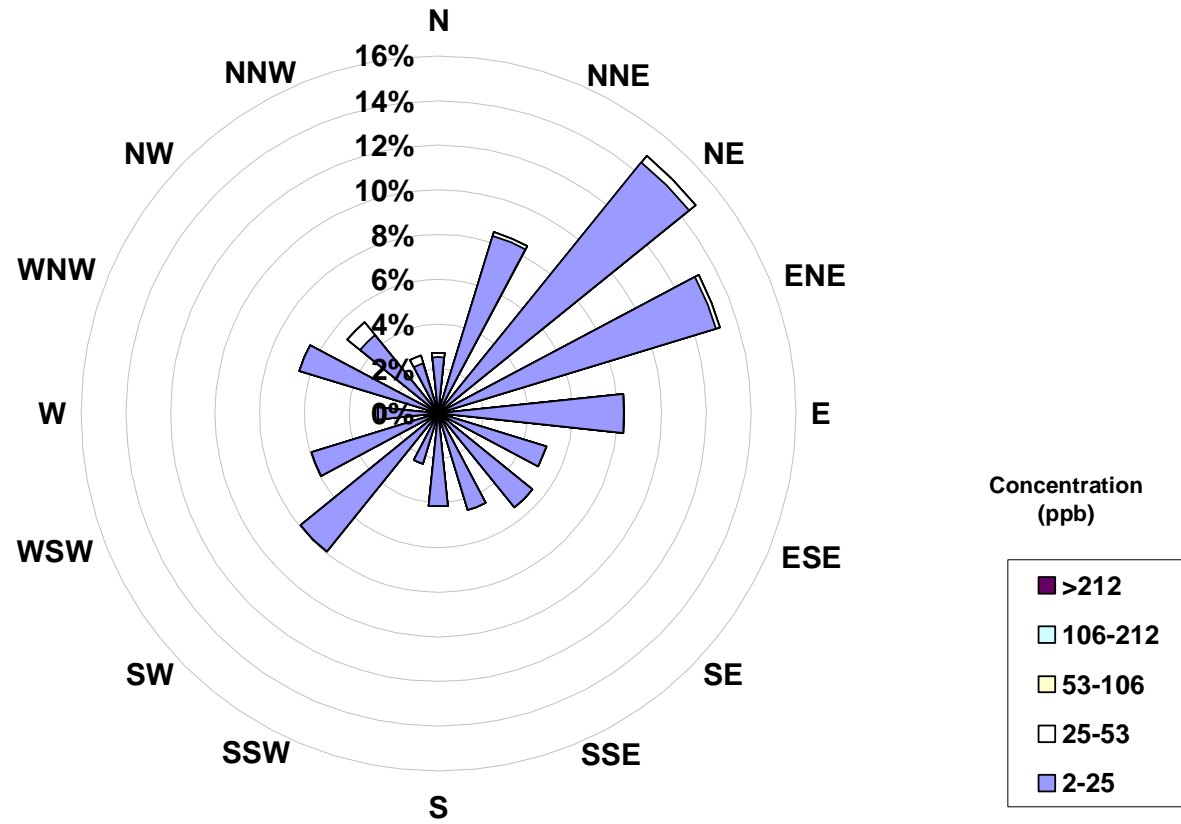


Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend



Concentration Rose for the 1-hr NO₂ Average Concentration Occurrences at the Crescent Heights Site for May 2004



Frequency Distribution of NO ₂ in ppb			
	Range		Frequency (hrs)
0	<	2	142
2	to	25	543
25	to	53	11
53	to	106	0
106	to	212	0
	>	212	0
Total Non-Zero Values			696



Station: Crescent Heights

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	59	ppb	1-May	0:00 1:00
Maximum 24-hr Average:	7	ppb	1-May	

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

AIC Time:	32 hrs							Operational Time:	696 hrs						
Calibration Time:	6 hrs							AMD Operational Uptime:	98.7%						
Percentile	99	95	75	50	25	5	1	Average							
	20	7	2	1	0	0	0	1.9 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

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-04	59	A	6	1	6	22	22	9	11	10	1	0	0	0	0	0	1	0	0	0	N	1	0	0	6.9	59.2	
2-May-04	A	1	0	0	0	0	1	1	1	1	1	1	1	1	3	0	0	1	1	0	0	0	4	0	A	1.0	4.1
3-May-04	0	0	0	0	0	0	1	2	N	1	3	2	1	N	N	N	N	N	1	1	0	1	0	1	0.9	2.5	
4-May-04	1	1	1	A	1	1	1	1	1	1	2	1	3	1	2	1	3	2	2	3	1	0	0	1	1	1.3	2.9
5-May-04	0	0	A	0	0	1	1	1	1	1	1	N	1	1	1	1	1	1	1	1	0	1	0	0	1	0.7	1.4
6-May-04	0	0	1	A	0	0	0	1	1	1	1	1	2	1	1	1	1	2	2	1	1	3	1	1	0	1.0	3.0
7-May-04	1	1	A	0	1	1	4	3	5	13	7	3	1	1	1	1	1	1	0	0	0	0	0	0	0	2.0	12.6
8-May-04	0	A	16	12	2	2	3	2	1	2	3	2	2	2	2	9	5	3	2	1	3	0	2	2	3.4	16.5	
9-May-04	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	A	0.5	1.0	
10-May-04	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	0	A	0	0.7	1.3
11-May-04	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	A	0	1	0.6	1.4
12-May-04	1	1	0	1	1	1	3	2	1	1	1	1	1	2	4	1	1	1	4	6	1	A	8	1	1	1.8	7.8
13-May-04	2	5	9	1	1	4	5	4	2	C	M	M	C	C	C	C	C	C	1	1	1	1	0	1	N	9.3	
14-May-04	1	1	0	5	A	12	15	9	20	7	1	1	2	1	1	1	1	2	1	0	0	0	0	0	0	3.5	20.0
15-May-04	1	1	0	A	0	0	0	1	1	5	2	1	2	1	1	1	1	1	1	1	0	0	0	0	0	0.9	4.6
16-May-04	0	0	A	1	0	0	1	3	2	2	0	0	2	1	1	1	1	1	1	1	1	0	0	0	0	0.8	2.7
17-May-04	1	A	1	0	3	1	6	5	3	1	2	3	2	1	1	1	1	0	1	0	1	0	1	3	46	3.6	45.8
18-May-04	A	5	5	7	12	16	22	38	15	2	1	1	1	1	0	1	1	0	0	0	1	0	0	1	A	5.9	38.1
19-May-04	1	1	0	0	0	1	8	6	9	7	3	1	1	0	1	0	0	0	0	0	0	0	0	A	0	1.8	8.7
20-May-04	0	1	0	2	1	5	3	8	14	3	4	2	1	1	1	1	1	0	0	0	0	0	A	0	0	2.1	13.7
21-May-04	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0.5	0.9
22-May-04	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0.4	0.7
23-May-04	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	A	0	0	0	1	1	1	0.4	1.2
24-May-04	1	1	1	1	1	2	31	9	7	5	3	3	2	1	0	1	1	A	1	1	2	0	0	3	3.3	30.9	
25-May-04	0	1	0	0	9	2	3	3	3	5	2	3	1	2	2	A	3	4	2	2	2	4	1	1	2.4	8.7	
26-May-04	6	1	0	0	1	2	2	2	6	3	2	2	1	2	A	1	2	1	0	12	4	1	0	1	2.3	12.5	
27-May-04	1	1	1	1	2	11	11	16	4	2	2	1	1	A	2	1	2	2	16	1	1	5	0	0	3.7	16.4	
28-May-04	0	0	1	1	1	4	5	2	1	1	2	2	A	3	2	1	2	1	0	1	3	1	0	0	1.5	5.4	
29-May-04	3	1	1	0	0	1	1	2	2	1	6	A	1	1	1	2	1	1	1	1	1	0	1	1	1.4	6.1	
30-May-04	1	0	0	0	1	1	2	1	1	1	A	1	1	1	1	1	3	5	1	1	1	0	0	0	1.1	4.7	
31-May-04	0	0	0	1	2	2	5	3	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.9	5.4	
Hourly Avg		2.9	0.9	1.7	1.3	1.5	3.1	5.2	4.4	3.9	2.8	1.9	1.4	1.1	1.3	1.0	1.1	1.2	1.2	1.4	1.1	0.9	1.1	0.6	2.3		
Hourly Max		59.2	5.3	16.5	12.4	11.7	21.5	30.9	38.1	20.0	12.6	7.0	3.3	2.3	3.7	2.3	8.5	5.0	4.7	16.4	12.5	3.7	7.8	2.8	45.8		



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Maximum 1-hr Value:	333.8	ppb	17-May	23:00 0:00
Maximum 24-hr Value:	27.7	ppb	8-May	

AIC Time:	32 hrs	Operational Time:	696 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	98.7%					
Percentile	99	95	75	50	25	5	1	Average
	111	52	7	2	1	1	1	10.3 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-04	115	A	115	6	19	60	48	20	16	44	3	1	1	1	1	2	2	1	1	1	N	3	1	1	21.0	115.4	
2-May-04	A	36	13	1	2	16	55	24	23	27	29	6	2	7	1	1	5	4	2	1	1	46	5	A	13.9	54.6	
3-May-04	1	1	1	2	1	1	3	3	N	2	7	4	3	N	N	N	N	N	2	8	1	1	1	3	2.5	7.7	
4-May-04	1	1	2	A	2	1	11	3	3	44	2	31	3	13	3	25	4	4	22	2	1	1	3	4	8.0	43.9	
5-May-04	1	1	A	1	1	1	3	3	1	2	N	3	2	12	2	1	2	1	2	1	1	1	1	1	1.9	11.8	
6-May-04	1	1	1	A	1	1	1	2	21	2	2	32	3	2	2	2	47	19	16	19	11	2	3	2	8.3	46.8	
7-May-04	2	3	A	A	2	3	6	5	12	19	11	6	3	4	3	2	1	1	1	1	1	1	1	1	4.1	19.3	
8-May-04	1	A	47	101	54	70	67	3	2	4	9	31	6	19	7	107	41	12	5	2	8	1	19	22	27.7	107.1	
9-May-04	A	1	0	0	1	1	1	1	1	1	2	8	2	1	1	1	2	2	1	1	1	1	9	A	1.7	8.6	
10-May-04	1	22	18	4	1	3	1	1	2	2	1	2	2	1	2	3	2	1	1	1	1	1	A	1	3.2	22.1	
11-May-04	1	1	1	1	1	1	1	2	1	2	2	2	1	4	2	1	1	1	1	3	1	A	1	2	1.5	4.0	
12-May-04	2	2	1	1	1	2	7	4	2	1	2	2	3	9	2	2	3	8	151	1	A	75	2	1	12.4	151.3	
13-May-04	18	92	97	1	2	32	8	8	18	C	M	M	C	C	C	C	C	11	3	3	3	10	1	17	N	96.8	
14-May-04	3	2	2	38	A	28	79	13	30	10	3	1	16	19	17	3	2	38	2	1	1	1	1	2	13.4	78.7	
15-May-04	2	3	1	A	1	1	1	1	2	8	6	3	3	3	2	1	2	1	1	1	2	2	1	1	2.1	8.0	
16-May-04	1	1	A	2	2	1	10	4	3	3	1	1	55	1	1	1	2	5	2	4	2	1	2	1	4.6	55.0	
17-May-04	18	A	17	2	54	1	57	49	11	3	4	4	3	2	2	2	2	1	1	1	23	14	24	334	27.4	333.8	
18-May-04	A	19	14	51	46	39	138	125	19	7	17	3	18	1	1	1	1	1	1	1	1	1	2	A	23.1	138.4	
19-May-04	2	38	15	1	1	4	62	31	30	12	9	3	2	1	2	1	1	1	1	1	1	5	A	1	9.8	62.0	
20-May-04	3	4	3	5	3	17	5	16	30	7	9	3	2	1	1	2	1	1	1	1	1	A	1	1	5.2	30.3	
21-May-04	1	1	1	1	1	1	14	1	2	1	2	1	1	1	1	2	1	1	1	1	A	1	1	1	1.6	13.6	
22-May-04	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.3	
23-May-04	1	1	1	1	1	2	1	1	2	2	1	1	1	1	1	1	1	1	A	1	1	1	2	2	3	1.4	3.2
24-May-04	2	2	1	3	2	34	64	17	9	8	4	5	3	2	1	2	A	1	26	25	2	2	1	65	12.3	64.7	
25-May-04	1	43	1	1	110	31	33	4	5	39	3	9	9	7	4	A	7	32	5	8	60	41	2	2	19.9	109.9	
26-May-04	56	5	1	1	4	55	5	4	92	4	6	3	2	3	A	2	3	2	1	111	40	6	1	1	17.8	111.2	
27-May-04	15	7	1	3	5	105	19	33	9	3	12	2	2	A	4	3	4	8	120	4	3	75	2	1	19.1	119.9	
28-May-04	1	1	11	29	2	50	55	9	10	11	12	46	A	43	72	4	3	2	1	20	45	6	1	2	18.9	71.6	
29-May-04	38	2	34	1	1	3	2	4	5	4	56	A	2	2	2	4	3	1	4	4	2	1	2	2	7.7	55.7	
30-May-04	1	1	1	1	2	2	9	2	2	2	A	2	2	3	2	1	8	12	3	10	3	1	2	1	3.2	11.7	
31-May-04	1	1	2	5	7	8	15	7	2	A	9	1	1	3	2	2	1	1	2	2	4	11	27	9	5.2	27.3	
Hourly Avg	10.3	10.3	14.4	9.5	11.0	18.5	25.2	13.0	12.1	9.5	8.0	7.5	5.3	6.1	5.1	6.5	5.4	6.0	12.6	8.0	7.7	10.8	4.1	17.1			
Hourly Max	114.8	91.7	115.4	100.8	109.9	104.7	138.4	124.5	92.1	44.4	55.7	45.7	55.0	42.5	71.6	107.1	46.8	37.9	151.3	111.2	60.5	75.1	27.3	333.8			



Station: Crescent Heights

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Number of 1-hr Exceedances:	0				
Number of 24-hr Exceedances:	0				
Maximum 1-hr Average:	92	ppb	1-May	0:00 1:00	
Maximum 24-hr Average:	18	ppb	18-May		

Guideline Limit: Alberta Environment: 1-hr na ppm 24-hr na ppm

AIC Time:	32 hrs		Operational Time:		696 hrs			
Calibration Time:	6 hrs		AMD Operational Uptime:		98.7%			
Percentile	99	95	75	50	25	5	1	Average
	45	22	9	5	3	1	1	7.6 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

Day	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	24-hour Average	Daily Maximum
1-May-04	92	A	23	12	25	44	40	21	26	24	5	2	1	1	2	2	3	2	3	2	N	14	8	5	16.4	91.8				
2-May-04	A	5	6	2	2	3	4	3	3	3	4	3	3	14	2	2	8	5	3	4	5	15	6	A	4.8	15.1				
3-May-04	7	4	5	11	6	5	5	6	3	N	4	6	6	3	N	N	N	N	N	2	5	4	8	9	15	6.2	15.2			
4-May-04	14	11	6	A	11	7	5	5	3	4	3	7	4	6	4	8	7	9	13	4	3	3	5	3	6.3	14.1				
5-May-04	2	2	A	6	4	3	4	4	1	3	N	2	1	3	2	2	2	2	2	2	2	2	2	2	2	2.4	6.3			
6-May-04	2	2	3	A	4	3	3	4	4	3	3	5	4	3	2	2	5	5	4	10	24	16	12	6	5.6	24.1				
7-May-04	6	9	A	8	8	7	12	9	12	26	17	9	5	4	3	3	1	1	2	3	6	6	6	7	7.5	26.1				
8-May-04	6	A	55	32	6	7	10	5	3	6	12	7	8	7	9	18	15	15	12	7	17	3	8	8	12.0	54.7				
9-May-04	A	11	4	4	4	2	2	2	2	2	2	2	2	2	2	2	3	3	1	2	3	4	10	A	3.2	10.5				
10-May-04	5	5	4	8	12	10	4	1	2	2	1	1	1	1	2	3	2	1	1	4	3	3	A	3	3.5	11.8				
11-May-04	2	1	1	1	1	2	3	4	2	2	2	2	2	2	3	3	3	3	2	2	6	8	A	6	6	2.9	7.8			
12-May-04	7	6	4	3	3	5	11	7	4	2	3	2	5	13	6	5	6	16	13	6	A	29	10	9	7.7	29.4				
13-May-04	12	17	22	6	6	13	15	11	5	C	M	M	C	C	C	C	5	6	8	8	14	11	12	N	22.1	N				
14-May-04	16	18	10	23	A	36	35	22	39	19	5	3	5	4	5	4	3	6	2	2	3	4	6	11	12.2	39.0				
15-May-04	14	6	4	A	10	4	4	4	5	13	7	4	6	4	4	4	5	4	4	4	7	6	11	9	6.2	13.6				
16-May-04	9	6	A	13	11	5	7	11	5	6	1	1	4	2	2	3	4	5	6	4	4	8	12	4	5.8	12.8				
17-May-04	4	A	12	6	12	9	17	14	8	4	6	9	7	6	4	4	4	2	3	2	7	15	25	91	11.8	91.2				
18-May-04	A	32	36	34	45	49	48	65	35	6	5	2	4	2	2	2	1	1	2	6	6	7	5	A	18.0	65.4				
19-May-04	18	13	8	11	12	11	18	15	18	20	10	6	3	2	2	2	2	1	1	1	1	2	6	A	14	8.4	20.3			
20-May-04	15	13	8	14	9	21	15	19	28	10	10	6	3	2	2	2	2	2	2	3	2	A	6	3	8.6	28.3				
21-May-04	2	2	2	2	3	3	4	4	4	3	3	3	3	2	3	3	3	3	3	3	A	6	4	3	2	3.0	6.3			
22-May-04	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	A	4	2	2	2	3	2.3	4.3			
23-May-04	3	2	2	2	2	2	1	2	1	2	1	1	1	1	1	1	1	A	3	3	3	3	7	8	8	2.4	7.7			
24-May-04	8	10	7	10	8	11	54	23	19	14	10	11	7	6	4	5	A	6	6	13	12	6	3	6	11.2	53.6				
25-May-04	3	4	4	4	16	8	9	7	8	12	5	8	4	5	5	A	13	13	11	10	7	16	5	8	8.0	16.2				
26-May-04	15	8	1	2	3	9	13	9	12	7	6	6	5	6	A	8	9	8	6	34	25	8	4	19	9.7	33.5				
27-May-04	10	8	7	9	12	22	22	30	11	6	5	3	3	A	9	6	9	13	44	16	8	16	7	6	12.2	43.6				
28-May-04	6	4	5	7	6	14	16	7	4	3	5	5	A	10	7	5	13	6	5	13	14	14	11	18	8.6	18.2				
29-May-04	18	8	9	8	9	10	6	7	8	7	15	A	7	5	4	6	5	3	8	8	8	8	8	8	8.0	17.7				
30-May-04	4	3	2	2	4	3	7	3	3	3	A	5	4	4	4	3	9	16	10	4	5	8	11	10	5.6	15.9				
31-May-04	6	6	5	8	13	12	14	8	3	A	6	3	2	2	2	1	1	3	3	6	6	10	17	23	7.0	22.6				
Hourly Avg	10.9	7.8	9.2	8.9	8.9	11.0	13.2	10.7	9.3	7.6	5.8	4.4	3.8	4.3	3.6	3.9	5.0	5.5	6.1	6.6	7.3	8.9	8.2	11.4						
Hourly Max	91.8	31.8	54.7	33.9	45.1	48.8	53.6	65.4	39.0	26.1	17.2	10.5	7.8	14.4	9.4	18.5	14.7	16.2	43.6	33.5	25.3	29.4	25.3	91.2						



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Maximum 1-hr Value:	407.0	ppb	17-May	23:00 0:00
Maximum 24-hr Value:	53.7	ppb	8-May	

AIC Time:	32 hrs	Operational Time:	696 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	98.7%					
Percentile	99	95	75	50	25	5	1	Average
	158	85	23	10	5	3	2	21.8 ppb

Status Flag Characters

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

Day Mountain Standard Time

Day	Hour Start	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-May-04	142	A	158	21	41	89	74	38	33	70	11	3	3	3	2	4	5	4	4	5	6	N	26	13	10	34.6	157.5	
2-May-04	A	61	44	6	8	48	91	49	44	47	39	17	10	27	4	6	21	18	6	7	80	32	A			30.4	91.4	
3-May-04	20	7	7	28	9	6	8	9	N	8	20	9	6	N	N	N	N	N	5	17	5	13	13	25	12.0	27.6		
4-May-04	21	18	8	A	15	10	26	8	7	54	5	47	8	27	9	52	13	18	57	9	4	12	18	8	19.8	57.4		
5-May-04	3	3	A	9	9	5	7	7	2	4	N	3	3	21	3	3	3	3	4	3	5	3	3	3	5.1	20.9		
6-May-04	3	3	5	A	7	4	4	7	33	4	4	54	6	6	4	4	69	37	37	49	46	20	23	10	19.1	68.7		
7-May-04	9	14	A	11	12	19	19	11	24	37	25	14	8	14	7	6	2	2	3	7	8	13	9	11	12.5	37.2		
8-May-04	11	A	94	156	93	114	100	9	4	12	27	65	18	44	24	161	66	42	20	19	41	6	58	50	53.7	161.0		
9-May-04	A	23	6	7	9	5	3	2	3	3	6	10	3	3	3	4	6	6	3	3	4	5	31	A	6.7	30.9		
10-May-04	9	40	22	25	20	19	6	3	4	4	3	3	3	2	4	7	6	3	4	8	4	4	A	5	9.0	39.8		
11-May-04	2	2	2	2	2	4	5	7	3	4	4	4	4	3	8	6	4	4	4	3	22	15	A	10	9	5.6	22.2	
12-May-04	9	8	8	4	5	10	16	12	5	4	6	4	7	28	11	10	14	30	163	8	A	131	16	13	22.7	163.3		
13-May-04	45	121	123	8	9	55	20	19	27	C	M	M	C	C	C	C	29	10	19	17	41	17	27	N		123.2		
14-May-04	20	23	22	63	A	56	112	27	53	25	10	7	30	35	38	12	5	72	5	3	6	7	9	23	28.9	112.2		
15-May-04	23	11	9	A	15	6	6	5	7	22	15	8	12	9	7	6	7	6	6	5	14	18	15	12	10.6	23.4		
16-May-04	11	9	A	19	16	8	26	15	10	11	3	2	102	4	4	4	6	21	14	12	8	16	26	8	15.4	102.2		
17-May-04	35	A	42	14	88	11	85	83	24	9	12	13	13	9	6	7	6	6	7	3	55	35	69	407	45.1	407.0		
18-May-04	A	55	51	94	85	77	186	167	40	21	61	6	46	6	4	4	3	3	4	11	12	12	9	A	43.4	186.5		
19-May-04	29	72	29	13	15	15	83	51	46	29	23	9	7	2	5	3	2	2	2	2	5	20	A	19	20.9	83.1		
20-May-04	19	23	23	28	13	43	26	31	51	17	20	8	5	3	4	5	3	3	3	4	3	A	8	5	15.2	51.2		
21-May-04	3	3	3	2	6	5	32	5	6	4	4	5	4	4	5	4	3	4	4	A	10	5	5	3	5.7	32.4		
22-May-04	3	3	3	3	3	4	3	4	3	3	3	3	3	3	3	3	3	3	A	8	3	4	4	5	3.4	8.3		
23-May-04	5	4	4	4	4	3	2	3	2	2	3	2	2	2	1	1	1	A	7	4	6	10	11	10	4.1	11.1		
24-May-04	11	12	10	13	14	58	95	41	24	21	12	14	9	9	6	8	A	8	49	64	20	11	6	113	27.4	113.0		
25-May-04	3	71	6	6	147	56	50	9	13	62	8	24	22	18	11	A	24	59	26	34	82	69	16	18	36.2	146.9		
26-May-04	89	22	2	2	16	81	20	14	109	11	13	10	9	10	A	13	13	12	15	166	85	33	13	28	34.1	166.4		
27-May-04	33	17	11	14	15	135	33	54	19	7	28	4	4	A	22	14	18	36	181	25	11	108	16	8	35.3	181.1		
28-May-04	7	6	20	57	10	77	85	18	19	22	15	66	A	73	90	17	18	13	7	47	78	29	23	31	36.0	90.5		
29-May-04	75	16	56	13	13	22	18	8	14	16	91	A	12	9	6	14	12	4	21	20	14	8	15	15	21.3	91.3		
30-May-04	11	11	2	3	11	5	24	4	4	7	A	9	6	8	6	6	24	33	18	19	13	13	15	14	11.7	32.7		
31-May-04	10	9	13	27	29	24	31	16	4	A	22	4	3	7	6	7	3	6	11	17	14	35	51	40	16.9	50.8		
Hourly Avg	23.7	23.7	28.0	23.2	24.7	34.6	41.9	23.8	21.2	18.7	17.6	14.7	12.7	14.0	10.9	13.9	12.8	16.7	23.3	20.7	20.6	27.0	19.1	33.2				
Hourly Max	142.5	120.6	157.5	156.2	146.9	135.1	186.5	166.8	109.2	69.8	91.3	66.0	102.2	73.0	90.5	161.0	68.7	71.9	181.1	166.4	84.8	130.5	68.7	407.0				

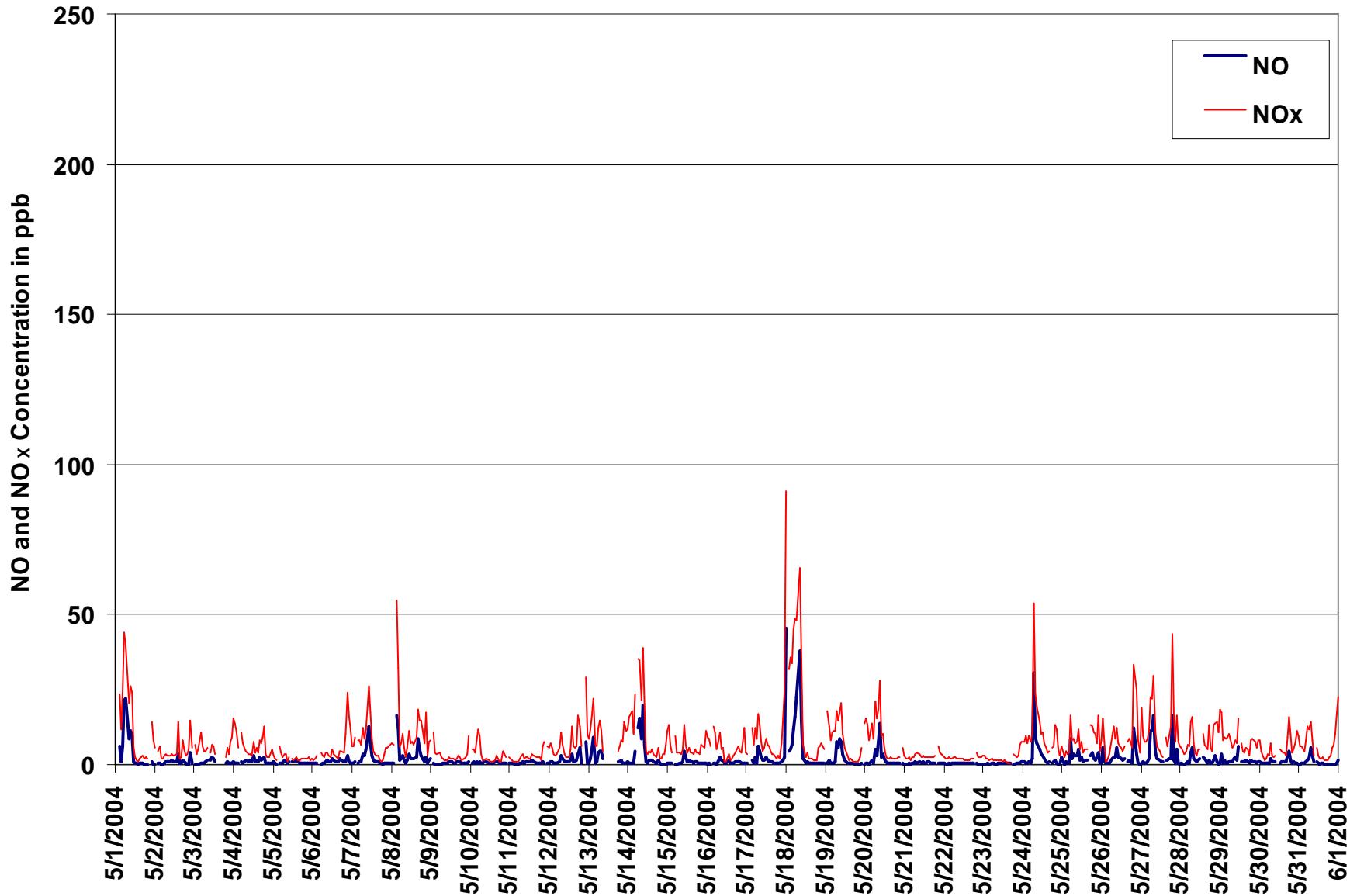


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trends

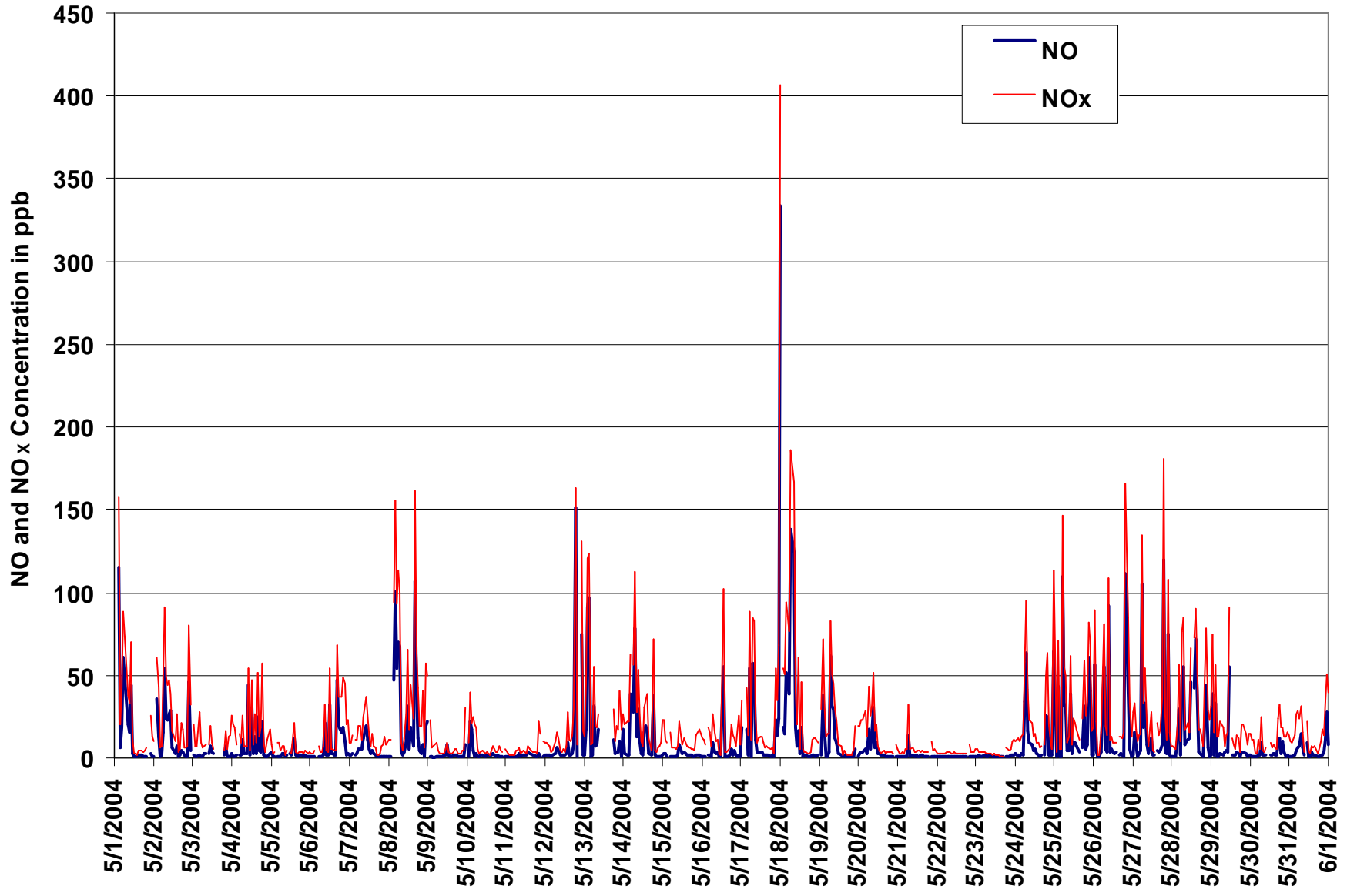


Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trends



PAS - CRESCENT HEIGHTS OZONE MONTHLY SUMMARY

Station: Crescent Heights

HOURLY AVERAGE TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004
Summary

Number of 1-hr Exceedances:	0				
Number of 24-hr Exceedances:	0				
Maximum 1-hr Average:	66	ppb	17-May	17:00	18:00
Maximum 24-hr Average:	44	ppb	2-May		

 Guideline Limit: Alberta Environment: 1-hr 82 ppb 24-hr na ppb

AIC Time:	32 hrs		Operational Time:	692 hrs				
Calibration Time:	9 hrs		AMD Operational Uptime:	98.5%				
Percentile	99	95	75	50	25	5	1	Average
	62	55	44	37	28	14	5	36.4 ppb

Status Flag Characters

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

Day Mountain Standard Time

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-04	2	A	10	14	5	3	9	19	23	35	55	57	55	55	57	58	58	58	57	52	N	26	29	33	35.1	58.4	
2-May-04	A	43	42	47	49	45	43	41	41	42	43	47	47	43	52	54	47	50	49	43	39	31	40	A	44.3	53.7	
3-May-04	45	46	44	36	36	38	42	42	N	39	38	38	42	N	N	N	N	N	50	42	39	29	23	17	38.1	50.1	
4-May-04	16	20	30	A	34	39	44	44	46	48	48	48	53	54	55	51	51	48	46	51	50	49	41	43	43.9	55.2	
5-May-04	41	40	A	34	26	27	29	34	38	37	N	42	42	43	44	44	44	44	44	45	46	44	44	44	39.9	46.3	
6-May-04	44	41	36	A	33	34	34	34	37	40	41	37	40	43	45	45	44	44	44	37	18	18	21	24	36.3	45.3	
7-May-04	23	19	A	19	21	26	18	23	25	22	29	39	48	54	55	55	54	55	53	49	42	36	31	31	35.9	55.4	
8-May-04	29	A	3	27	41	37	29	35	42	42	46	49	52	53	50	48	46	43	41	40	33	45	45	41	39.9	52.5	
9-May-04	A	34	36	34	35	32	29	28	31	35	34	33	37	37	39	41	42	42	43	40	38	36	30	A	35.7	43.1	
10-May-04	34	33	32	27	23	27	33	37	37	37	39	40	41	42	42	44	44	40	40	38	35	34	A	36	36.2	43.5	
11-May-04	37	38	38	38	41	38	36	39	39	41	42	42	44	43	44	44	44	45	45	38	36	A	39	37	40.3	45.1	
12-May-04	35	35	35	37	37	33	35	40	42	44	44	47	44	38	42	45	45	35	42	43	A	23	28	26	38.2	46.6	
13-May-04	24	22	22	28	27	25	25	31	38	C	M	M	M	C	C	C	C	C	C	C	C	C	36	33	29	N	37.5
14-May-04	20	14	18	8	A	3	6	14	15	29	47	52	53	53	53	53	54	50	52	49	46	40	33	20	34.0	54.0	
15-May-04	17	24	37	A	43	42	38	39	40	35	42	46	46	49	49	49	49	51	51	51	47	42	28	23	40.7	51.4	
16-May-04	23	27	A	21	21	30	27	23	33	39	53	59	59	62	63	62	62	61	59	56	51	44	37	44	44.1	62.6	
17-May-04	39	A	25	28	24	21	21	25	33	41	43	46	54	57	60	64	66	66	65	65	58	44	33	5	42.8	66.3	
18-May-04	A	10	5	8	5	6	10	8	18	46	50	56	60	62	61	61	60	59	57	50	42	36	33	A	36.4	61.9	
19-May-04	22	23	23	13	9	11	9	12	13	27	34	47	50	54	52	52	50	50	49	48	43	37	A	21	32.6	54.1	
20-May-04	15	14	19	14	17	9	10	12	14	24	27	33	39	46	47	39	39	40	41	41	35	A	31	33	27.8	47.0	
21-May-04	36	35	35	37	36	36	35	34	33	34	36	39	40	42	40	39	36	33	30	A	28	28	28	27	34.6	42.0	
22-May-04	24	25	24	24	25	25	25	27	30	32	30	30	32	32	34	34	35	33	A	33	33	34	35	34	30.0	34.7	
23-May-04	34	35	34	34	35	36	38	39	41	41	43	44	43	45	45	45	46	A	46	45	43	35	28	27	39.2	45.9	
24-May-04	26	22	24	21	22	22	11	28	34	37	40	41	44	46	47	47	A	51	50	39	33	39	41	39	34.9	51.0	
25-May-04	37	32	27	21	18	20	23	22	29	38	44	45	48	50	49	A	42	40	36	31	30	24	32	29	33.3	50.0	
26-May-04	24	29	34	31	29	25	21	23	25	32	38	42	46	49	A	50	48	48	52	33	28	42	46	27	35.6	51.5	
27-May-04	28	22	15	11	7	8	11	14	30	38	45	50	53	A	57	59	55	47	34	43	41	30	31	29	33.0	59.3	
28-May-04	28	31	31	30	29	24	24	35	38	44	44	50	A	51	53	51	41	46	42	31	32	31	33	24	36.6	52.7	
29-May-04	26	26	24	20	21	30	34	33	37	37	33	A	46	47	47	43	39	36	27	24	24	26	23	23	31.6	47.4	
30-May-04	26	28	29	27	25	23	23	27	31	37	A	39	38	39	41	42	37	33	36	40	33	27	25	24	31.8	42.2	
31-May-04	29	27	27	23	19	20	20	27	33	A	43	45	46	49	49	50	51	50	48	42	36	28	18	11	34.4	50.9	
Hourly Avg	28.0	28.4	27.1	25.3	26.4	25.7	25.6	28.7	32.3	37.0	41.1	44.2	46.3	47.8	49.0	48.8	47.3	46.4	45.8	42.7	37.9	34.2	32.4	28.6			
Hourly Max	44.6	46.2	44.1	47.1	48.6	45.1	43.8	43.9	45.8	47.9	54.5	59.2	59.8	62.3	62.6	64.1	65.5	66.3	65.5	64.5	58.0	48.6	46.2	44.5			

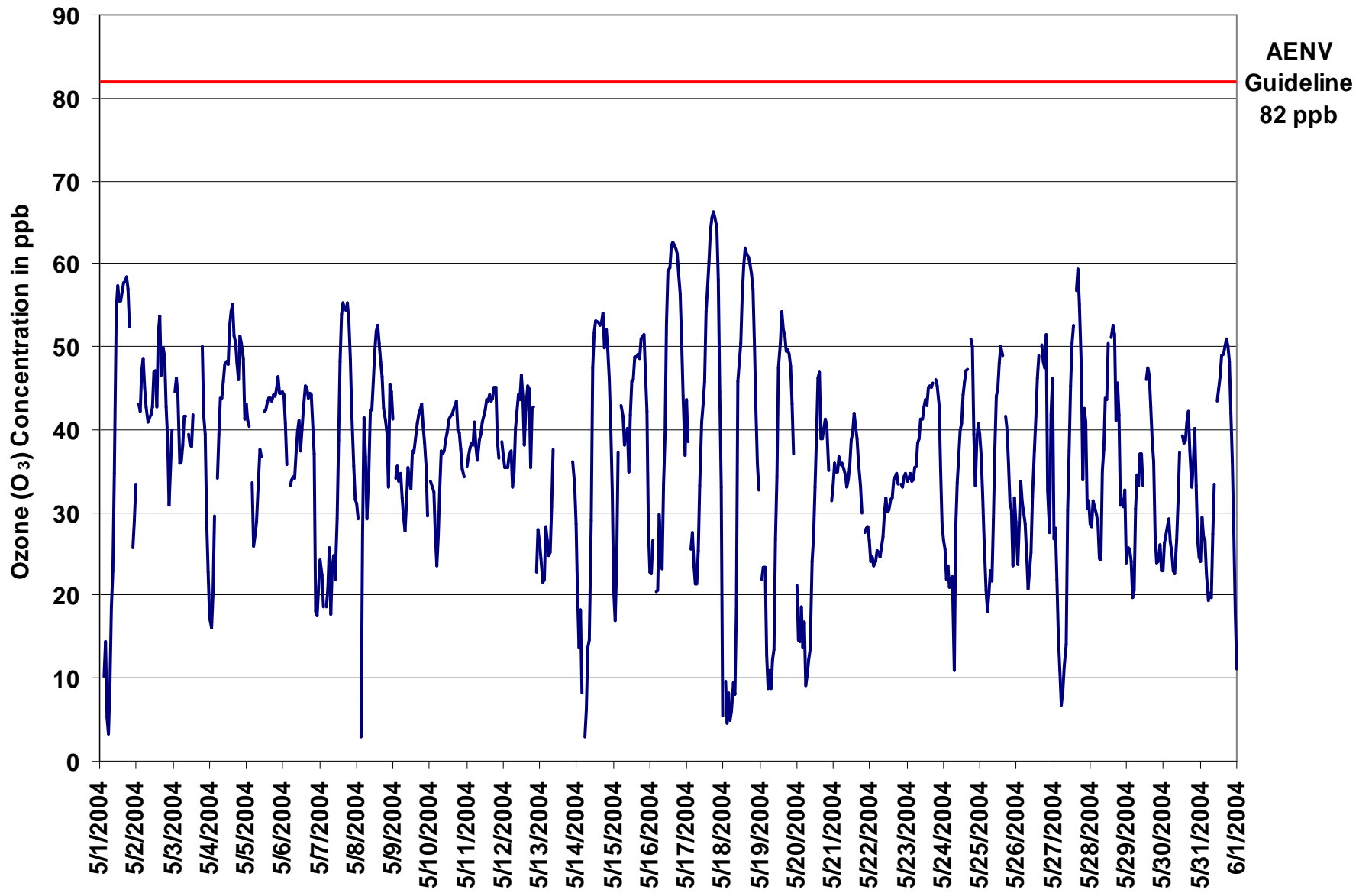


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Maximum 1-hr Value:	68.1	ppb	17-May	17:00 18:00
Maximum 24-hr Value:	48.4	ppb	2-May	

AIC Time:	32 hrs		Operational Time:	692 hrs				
Calibration Time:	9 hrs		AMD Operational Uptime:	98.5%				
Percentile	99	95	75	50	25	5	1	Average
	64	59	49	42	32	20	11	40.7 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-May-04	2	A	16	17	10	9	19	21	31	50	59	60	58	59	60	59	59	60	60	56	N	30	35	40	39.6	60.0
2-May-04	A	46	47	51	52	48	45	43	43	44	45	50	51	52	54	55	55	53	52	47	44	38	47	A	48.4	55.4
3-May-04	49	51	47	42	41	42	46	44	N	42	41	42	44	N	N	N	N	N	61	48	42	37	26	24	42.8	60.9
4-May-04	21	26	35	A	40	45	46	46	49	50	50	54	55	58	58	55	54	54	53	52	51	46	45	45	47.8	57.9
5-May-04	43	42	A	38	29	30	31	38	39	41	N	44	46	45	46	45	45	45	46	48	48	46	46	46	42.2	48.3
6-May-04	47	43	40	A	36	36	36	38	41	43	44	40	43	45	48	47	47	49	47	43	30	20	28	29	39.9	48.9
7-May-04	27	22	A	21	29	31	22	26	29	27	36	44	52	57	58	58	56	57	55	52	47	43	36	35	40.0	57.9
8-May-04	32	A	8	46	46	43	32	42	45	47	53	55	60	57	56	59	56	52	51	44	48	48	51	47	46.8	59.5
9-May-04	A	40	39	39	38	36	33	29	34	39	38	37	41	41	43	44	44	45	45	43	41	38	37	A	39.3	45.4
10-May-04	36	36	36	32	30	34	35	40	39	40	41	41	43	44	44	46	48	42	41	43	37	37	A	38	39.2	47.6
11-May-04	39	39	39	39	43	41	39	41	41	43	43	45	45	45	46	47	46	47	47	45	44	A	42	41	42.9	46.9
12-May-04	37	38	41	41	40	36	39	44	46	46	48	50	48	45	48	49	48	47	49	48	A	34	32	30	42.8	49.5
13-May-04	30	30	30	32	31	28	30	35	43	C	M	M	M	C	C	C	C	C	C	C	C	45	42	38	N	45.3
14-May-04	35	18	21	18	A	10	10	19	24	44	51	55	58	57	55	56	56	54	54	52	50	45	38	29	39.6	57.8
15-May-04	26	29	47	A	48	44	41	42	44	43	50	50	50	51	51	51	51	54	54	53	53	48	31	29	45.2	54.0
16-May-04	26	31	A	25	28	33	34	27	38	47	59	61	62	64	64	64	64	63	63	61	54	51	43	46	48.2	64.1
17-May-04	43	A	32	31	28	25	27	30	39	44	46	52	58	61	64	67	68	68	68	66	64	55	52	21	48.2	68.1
18-May-04	A	22	14	18	16	20	18	16	27	51	54	60	63	63	64	63	62	61	59	56	48	41	36	A	42.3	63.7
19-May-04	29	32	28	19	11	15	12	16	20	35	42	52	53	57	55	54	51	51	51	50	47	39	A	29	36.8	56.6
20-May-04	19	18	23	19	19	18	15	16	25	29	34	36	44	49	50	44	44	43	44	45	38	A	33	35	32.2	49.6
21-May-04	37	37	36	38	38	37	37	37	36	36	39	41	42	44	42	41	38	35	32	A	31	29	31	29	36.7	43.6
22-May-04	25	26	25	25	27	26	26	30	32	33	32	33	33	33	35	36	37	35	A	36	35	37	37	36	31.9	37.4
23-May-04	35	37	35	35	37	39	41	40	44	43	44	45	44	47	47	47	48	A	47	47	46	42	32	30	41.4	47.5
24-May-04	29	26	29	24	26	26	21	38	38	40	43	43	47	50	50	50	A	54	56	49	38	41	44	44	39.4	56.2
25-May-04	38	36	30	24	23	24	26	25	35	43	48	49	52	53	52	A	48	45	42	37	33	36	36	35	37.8	52.9
26-May-04	32	36	36	33	32	30	25	28	30	36	41	46	50	52	A	58	55	54	60	47	43	49	50	36	41.8	59.6
27-May-04	33	26	18	15	9	13	14	21	39	43	50	53	54	A	61	64	61	57	52	51	46	36	37	31	38.5	64.4
28-May-04	30	33	33	32	31	29	28	40	42	49	50	55	A	58	56	55	47	50	48	38	40	38	39	40	41.8	57.6
29-May-04	37	29	28	25	35	37	39	36	43	43	A	A	49	49	49	46	42	38	37	28	27	27	28	28	36.7	49.4
30-May-04	29	31	31	31	28	25	27	28	36	41	A	42	41	44	45	46	42	43	42	43	39	30	29	29	35.7	46.1
31-May-04	32	29	31	26	24	24	25	32	35	A	45	48	49	51	52	52	54	53	52	49	41	33	27	20	38.4	53.7
Hourly Avg	32.2	32.4	31.2	29.9	30.9	30.1	29.6	32.5	36.8	41.8	45.3	47.8	49.5	51.1	51.9	52.1	51.0	50.4	50.7	47.5	43.0	39.5	37.7	34.3		
Hourly Max	49.4	50.7	47.3	51.3	51.9	47.7	45.7	46.3	48.7	50.5	59.4	61.4	62.8	64.0	64.1	67.2	67.7	68.1	67.9	66.1	64.0	55.1	52.2	47.5		

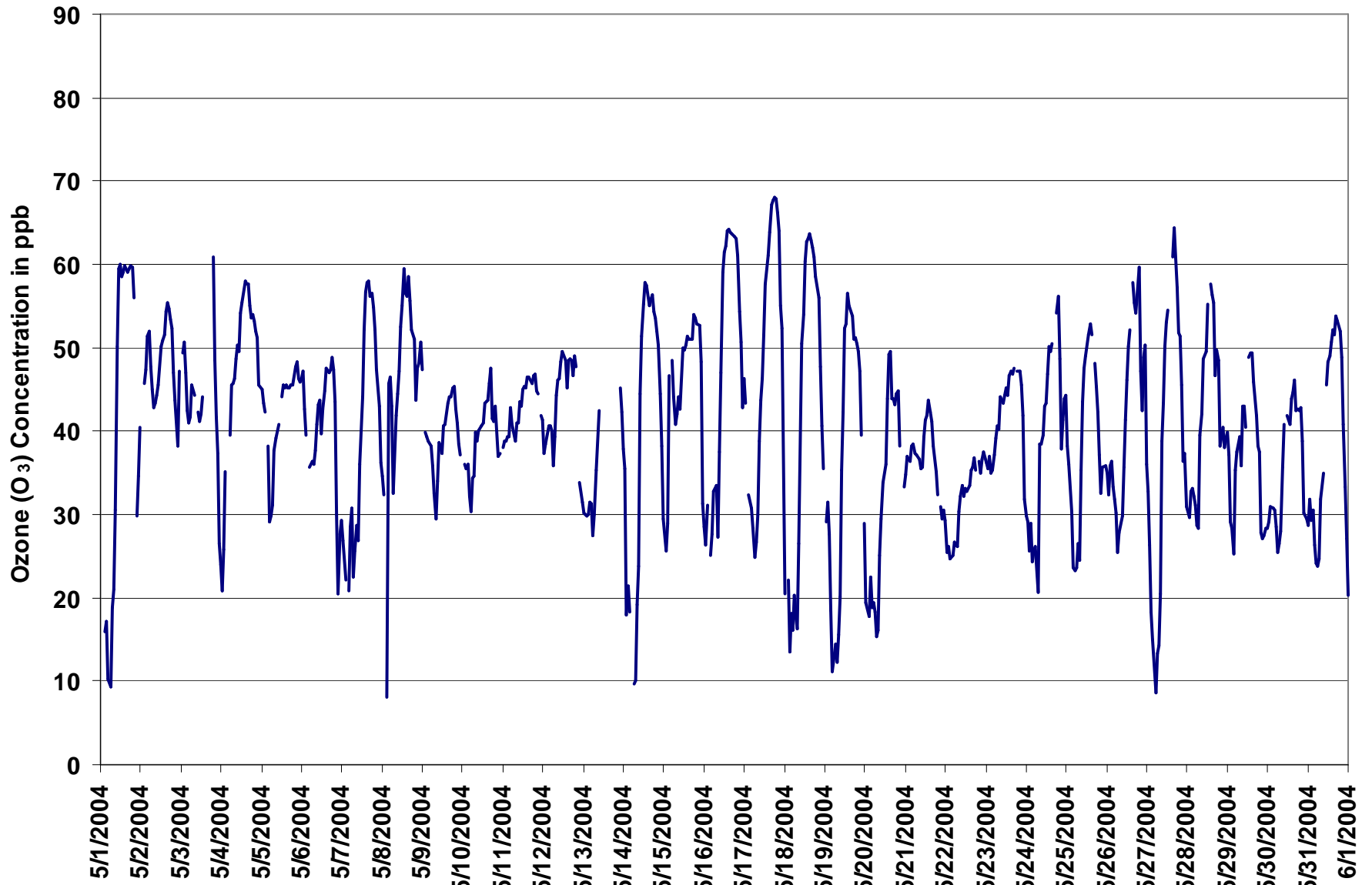


Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend



Station: Crescent Heights

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	62.7	ppb	17-May	20:00	21:00		

Guideline Limit: Canada Wide Standard **8-hr 65 ppb**

Percentile	99	95	75	50	25	5	1
	59.4	51.4	43.1	37.2	29.6	18.1	9.0

Status Flag Characters

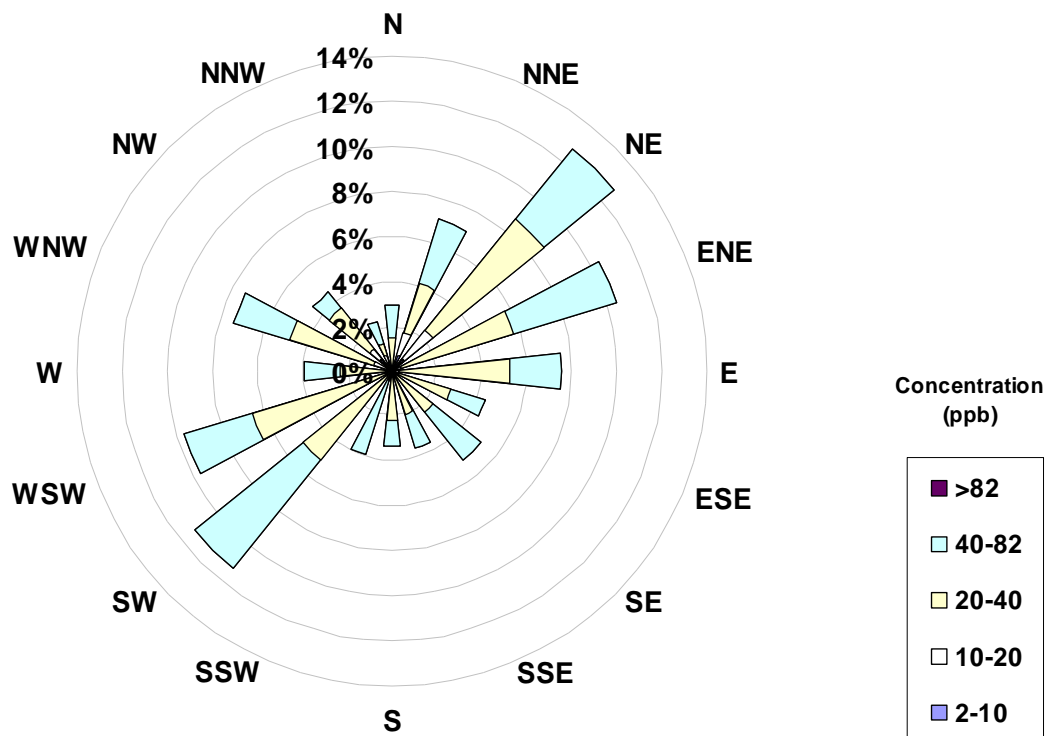
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	24-hour Average	Daily Maximum
1-May-04	1	23	17	12	8	6	6	9	12	15	20	26	32	39	44	49	54	57	57	56	56	52	48	45		31.0	57.0	
2-May-04	N	N	N	N	38	41	43	44	44	44	44	44	44	43	44	46	47	48	48	48	47	45	44	43		44.4	48.4	
3-May-04	42	42	41	40	40	41	41	41	41	40	39	39	40	N	N	N	N	N	N	N	N	N	N	N		N	42.2	
4-May-04	31	30	27	25	24	26	29	32	37	41	43	44	46	48	49	50	51	51	51	51	51	50	48	47		40.9	51.1	
5-May-04	46	45	45	43	39	36	34	33	33	32	32	33	36	38	40	41	42	43	43	44	44	44	44	45		39.8	46.2	
6-May-04	45	44	43	43	41	40	38	37	36	35	36	36	37	38	40	41	42	42	43	43	40	37	34	31		39.3	44.6	
7-May-04	29	25	23	20	21	22	21	21	21	22	23	25	29	32	37	41	45	49	52	53	52	50	47	44		33.4	52.9	
8-May-04	41	39	31	28	28	29	28	29	31	32	38	40	42	44	46	48	48	48	48	47	44	43	43	42		39.0	48.4	
9-May-04	41	40	39	38	38	37	34	32	32	32	32	32	32	33	34	36	37	38	39	40	40	40	39	39		36.6	41.1	
10-May-04	38	36	35	33	31	30	30	31	31	32	33	34	36	38	39	40	41	41	41	41	41	40	39	38		36.1	41.2	
11-May-04	37	37	37	37	37	38	38	38	38	39	39	40	40	41	42	42	43	43	44	43	42	42	42	41		40.0	43.9	
12-May-04	39	38	37	36	37	36	36	36	37	38	39	40	41	42	43	43	44	43	42	42	42	39	37	35		39.2	43.6	
13-May-04	32	30	27	25	25	25	25	25	27	28	N	N	N	N	N	N	N	N	N	N	N	N	N	N		N	31.8	
14-May-04	N	N	N	23	23	18	14	12	11	13	17	24	27	34	39	44	49	52	52	52	51	50	47	43		33.1	52.4	
15-May-04	38	35	33	31	31	31	32	34	38	39	40	41	41	42	43	44	45	47	49	49	49	49	46	43		40.4	49.4	
16-May-04	39	36	34	30	26	24	24	24	26	28	31	36	40	44	49	54	57	60	61	61	59	57	54	52		42.0	60.9	
17-May-04	49	47	42	38	34	31	29	26	25	27	30	32	36	40	45	50	54	57	60	62	63	61	58	50		43.6	62.7	
18-May-04	48	40	31	23	16	10	7	7	9	13	19	25	32	39	45	52	57	59	59	59	57	53	50	48		35.7	59.4	
19-May-04	43	38	33	28	23	19	16	15	14	15	16	20	26	31	36	41	46	49	50	51	50	47	47	42		33.1	50.5	
20-May-04	37	32	28	23	19	15	15	14	14	15	16	18	21	26	30	34	37	39	41	42	41	40	38	37		28.0	41.5	
21-May-04	37	36	35	35	35	35	35	35	35	35	35	35	36	37	37	38	38	38	37	37	35	33	32	30		35.5	38.1	
22-May-04	28	27	26	26	26	25	25	25	26	26	27	28	29	30	31	32	32	33	33	33	33	34	34	34		29.3	34.0	
23-May-04	34	34	34	34	34	34	35	36	36	37	38	40	41	42	43	43	44	44	45	45	45	44	41	39		39.2	45.0	
24-May-04	36	34	31	28	26	24	22	22	23	25	27	29	32	35	40	42	43	45	47	46	45	44	43	42		34.6	46.6	
25-May-04	41	39	36	34	32	29	27	25	24	25	27	30	34	37	41	43	45	45	44	42	40	36	33	33		35.1	45.3	
26-May-04	31	29	29	29	29	29	28	27	27	27	28	29	31	34	36	40	44	46	48	46	44	43	43	40		34.9	47.8	
27-May-04	38	35	30	27	25	21	16	15	15	17	21	25	31	34	41	47	51	52	51	50	48	46	43	39		34.0	52.4	
28-May-04	35	33	33	31	30	29	28	29	30	32	33	36	37	41	45	47	48	48	48	45	43	41	38	35		37.4	48.0	
29-May-04	33	30	28	27	25	25	26	27	28	30	31	32	36	38	40	41	42	42	41	39	36	33	30	28		32.8	41.7	
30-May-04	26	25	26	26	26	26	26	26	27	28	28	29	31	33	36	38	39	39	38	38	38	36	34	32		31.3	39.2	
31-May-04	31	30	29	27	25	24	24	24	24	25	24	27	30	34	38	42	45	48	48	49	48	47	44	40	35		34.9	48.6
Hourly Avg	36.1	34.8	32.4	30.0	28.7	27.6	26.8	26.8	27.5	28.5	30.2	32.4	35.0	37.6	40.6	43.3	45.2	46.4	46.9	46.7	45.6	43.9	42.0	39.7				
Hourly Max	48.7	46.9	45.1	42.9	41.0	41.2	43.2	44.2	43.9	43.7	43.8	43.9	46.2	48.0	49.4	53.9	57.4	60.2	60.9	62.2	62.7	61.1	57.7	51.6				



Concentration Rose for the 1-hr O₃ Average Concentration Occurrences at the Crescent Heights Site for May 2004



Frequency Distribution of O ₃ in ppb			
Range		Frequency (hrs)	
0	< 2	0	0
2	to 10	21	
10	to 20	40	
20	to 40	343	
40	to 82	288	
	> 82	0	
Total Non-Zero Values		692	



PAS - CRESCENT HEIGHTS TOTAL HYDROCARBON MONTHLY SUMMARY

Station: Crescent Heights

HOURLY AVERAGE TABLE

Total HydroCarbons (THC)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	2.6 ppm 1-May 5:00 6:00
Maximum 24-hr Average:	2.0 ppm 1-May

Guideline Limit: Alberta Environment: 1-hr na ppm 24-hr na ppm

AIC Time:	32 hrs	Operational Time:	694 hrs					
Calibration Time:	7 hrs	AMD Operational Uptime:	98.5%					
Percentile	99	95	75	50	25	5	1	Average
	2.3	2.2	2.0	1.9	1.8	1.8	1.7	1.9 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

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-04	2.4	A	2.6	2.3	2.5	2.6	2.3	2.1	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	N	1.8	1.8	1.8	2.05	2.61
2-May-04	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	A	1.75	1.83
3-May-04	1.8	1.8	1.8	1.9	2.0	1.9	1.9	1.9	N	1.9	1.9	1.9	1.9	N	N	N	N	N	1.8	1.9	1.9	2.0	1.9	2.0		1.91	2.03
4-May-04	2.0	2.0	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7		1.77	2.03
5-May-04	1.8	1.9	A	2.0	1.9	1.9	1.9	1.9	1.9	1.8	N	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.86	1.98
6-May-04	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.87	1.93
7-May-04	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.91	2.02
8-May-04	1.8	A	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8		1.83	2.22
9-May-04	A	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A		1.87	1.91
10-May-04	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	A	1.9	1.87	2.00
11-May-04	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	1.8	1.8	1.9	1.9	1.9	1.9	A	1.9	1.9	1.84	1.92
12-May-04	1.9	1.9	1.9	1.9	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	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.93	2.00
13-May-04	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	C	M	M	M	C	C	C	C	C	C	C	2.0	2.1	2.1	2.2	2.1	N	2.15
14-May-04	2.2	2.3	2.2	2.3	A	2.2	2.2	2.2	2.3	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9		2.04	2.26
15-May-04	1.9	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.99	2.05
16-May-04	2.0	2.0	A	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.97	2.15
17-May-04	1.9	A	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	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.3	2.3	2.00	2.34
18-May-04	A	2.1	2.2	2.3	2.2	2.3	2.3	2.4	2.2	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	A		2.03	2.38
19-May-04	1.9	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.01	2.18
20-May-04	2.0	2.0	2.0	2.1	2.2	2.3	2.2	2.1	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.01	2.27
21-May-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.90	1.93
22-May-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.89	1.92
23-May-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.88	2.03
24-May-04	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	A	A	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.01	2.29
25-May-04	2.0	1.9	2.3	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.97	2.31
26-May-04	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	1.85	1.94
27-May-04	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.93	2.17
28-May-04	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.83	1.89
29-May-04	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.90	1.98
30-May-04	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	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	1.88	1.98
31-May-04	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.1	2.3	1.93	2.27
Hourly Avg	1.94	1.94	1.98	1.97	1.98	1.99	1.98	1.96	1.95	1.94	1.93	1.92	1.90	1.89	1.87	1.86	1.85	1.84	1.83	1.84	1.87	1.89	1.91	1.93			
Hourly Max	2.39	2.25	2.61	2.32	2.52	2.61	2.29	2.38	2.26	2.16	2.16	2.18	2.07	2.01	2.00	1.99	1.98	1.97	1.94	1.97	2.06	2.10	2.26	2.34			

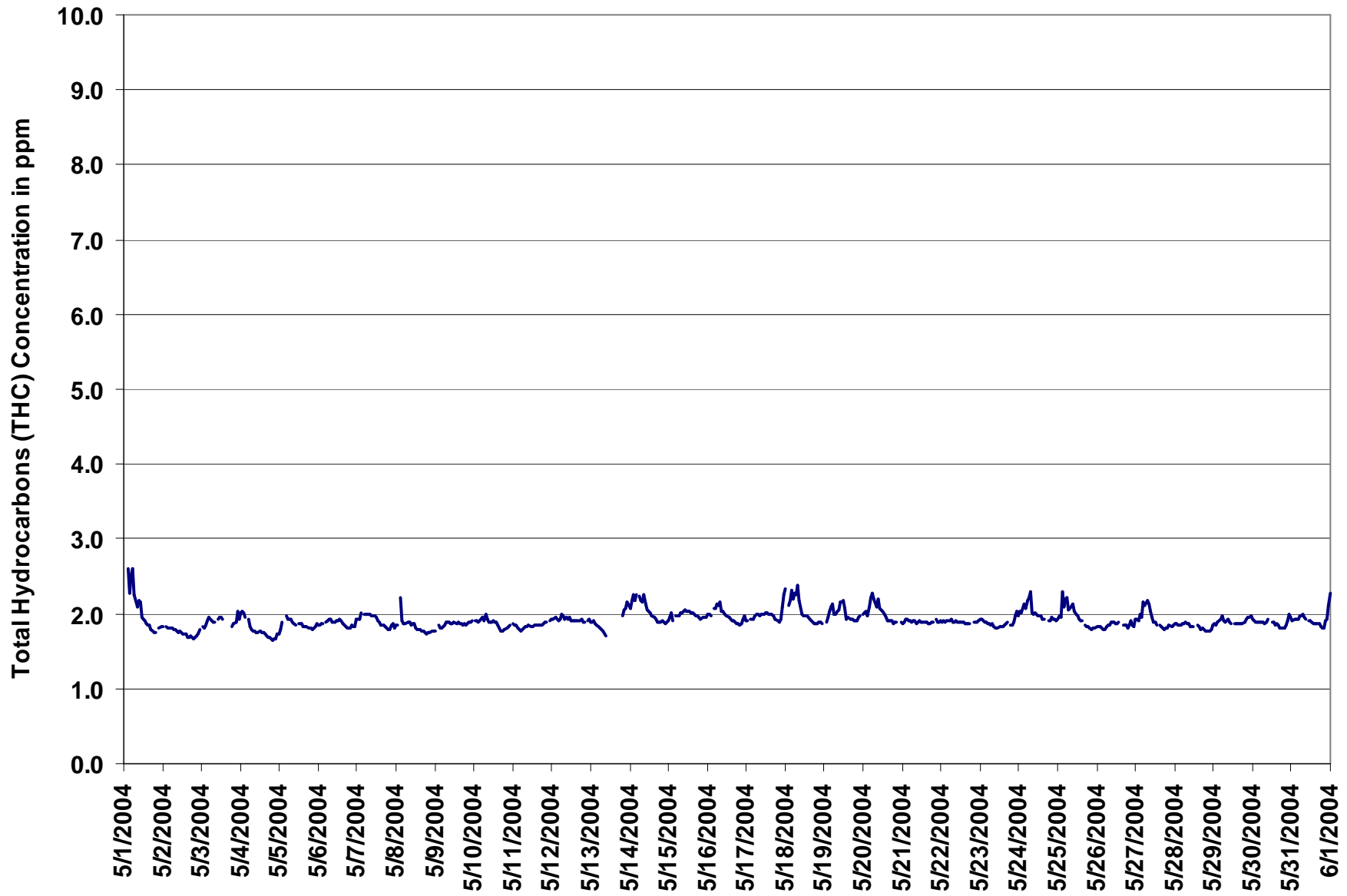


Figure 7. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE**Total HydroCarbons (THC)**

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004
Summary

Maximum 1-hr Value:	3.7	ppm	12-May	6:00 7:00
Maximum 24-hr Value:	2.2	ppm	1-May	

AIC Time:	32 hrs	Operational Time:	694 hrs					
Calibration Time:	7 hrs	AMD Operational Uptime:	98.5%					
Percentile	99	95	75	50	25	5	1	Average
	2.6	2.3	2.0	1.9	1.9	1.8	1.7	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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-May-04	2.6	A	2.8	2.4	3.1	3.1	2.5	2.1	2.2	2.2	2.0	2.0	1.9	1.9	2.0	1.9	1.8	1.8	1.8	1.8	N	1.9	1.9	1.9	2.16	3.09	
2-May-04	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	1.7	1.9	1.8	1.7	1.7	1.7	1.8	1.8	A	1.79	1.90	
3-May-04	1.9	1.9	1.9	1.9	2.1	1.9	1.9	2.0	N	2.0	2.0	2.0	2.0	N	N	N	N	N	2.0	1.9	2.0	2.3	2.0	2.1	1.99	2.27	
4-May-04	2.1	2.1	2.0	A	2.2	1.9	1.8	1.8	1.8	1.8	1.8	2.0	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.83	2.17	
5-May-04	1.9	1.9	A	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	N	1.9	1.9	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.91	2.08	
6-May-04	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.92	2.04	
7-May-04	2.0	2.1	A	2.0	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.9	1.8	1.8	1.9	2.0	1.8	1.9	1.97	2.15	
8-May-04	1.9	A	2.5	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.88	2.47	
9-May-04	A	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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.90	1.94	
10-May-04	2.0	2.0	1.9	1.9	2.0	2.0	2.2	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	A	2.0	1.93	2.17	
11-May-04	1.9	1.9	1.9	1.8	1.8	1.8	1.9	2.4	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	1.9	2.0	1.92	2.45	
12-May-04	2.0	2.0	2.0	2.1	2.0	2.1	3.7	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	2.0	1.9	1.9	A	2.0	2.0	1.9	2.05	3.69	
13-May-04	2.2	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.7	C	M	M	M	C	C	C	C	C	C	C	2.0	2.1	2.1	2.3	2.1	N	2.27
14-May-04	2.3	2.3	2.4	2.3	A	2.3	2.3	2.3	2.3	2.2	2.1	2.2	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.11	2.37	
15-May-04	2.0	2.3	2.0	A	2.2	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.05	2.31	
16-May-04	2.0	2.0	A	2.2	2.2	2.2	2.2	2.3	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.03	2.25	
17-May-04	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.2	2.0	2.0	1.9	1.9	2.2	2.2	2.5	2.5	2.08	2.54	
18-May-04	A	2.2	2.3	2.8	2.3	2.7	2.4	2.5	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	2.13	2.77	
19-May-04	1.9	2.0	2.2	2.2	2.3	2.0	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.0	2.4	2.0	2.0	1.9	1.9	2.0	2.1	2.1	A	2.1	2.10	2.41	
20-May-04	2.1	2.1	2.1	2.2	2.3	2.4	2.3	2.2	2.4	2.3	2.1	2.2	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	2.10	2.39	
21-May-04	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.93	1.96	
22-May-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	1.92	1.97	
23-May-04	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.1	2.3	1.92	2.29	
24-May-04	2.2	2.2	2.3	2.1	2.3	2.4	2.4	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	2.0	2.0	2.0	2.0	1.9	2.1	2.09	2.42	
25-May-04	2.1	2.0	2.6	2.4	2.6	2.4	2.1	2.2	2.7	2.2	2.2	2.0	2.1	2.1	1.9	A	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.9	2.10	2.71	
26-May-04	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	2.2	1.9	1.9	2.0	1.91	2.17	
27-May-04	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	1.9	1.9	1.9	1.9	A	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.99	2.22	
28-May-04	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	2.0	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.88	2.00	
29-May-04	1.9	1.9	1.9	2.0	2.1	2.0	1.9	1.9	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.95	2.10	
30-May-04	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	A	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	2.0	2.0	2.1	2.0	1.94	2.14	
31-May-04	2.0	2.1	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	1.9	1.9	1.8	1.8	2.1	2.0	2.3	2.5	2.00	2.54	
Hourly Avg	2.01	2.00	2.06	2.06	2.09	2.08	2.10	2.04	2.02	2.00	1.97	1.98	1.95	1.95	1.94	1.91	1.89	1.88	1.87	1.89	1.94	1.95	1.98	2.00			
Hourly Max	2.57	2.31	2.83	2.77	3.09	3.09	3.69	2.48	2.71	2.29	2.26	2.26	2.24	2.13	2.41	2.21	2.03	2.01	2.04	2.05	2.18	2.27	2.54	2.54			

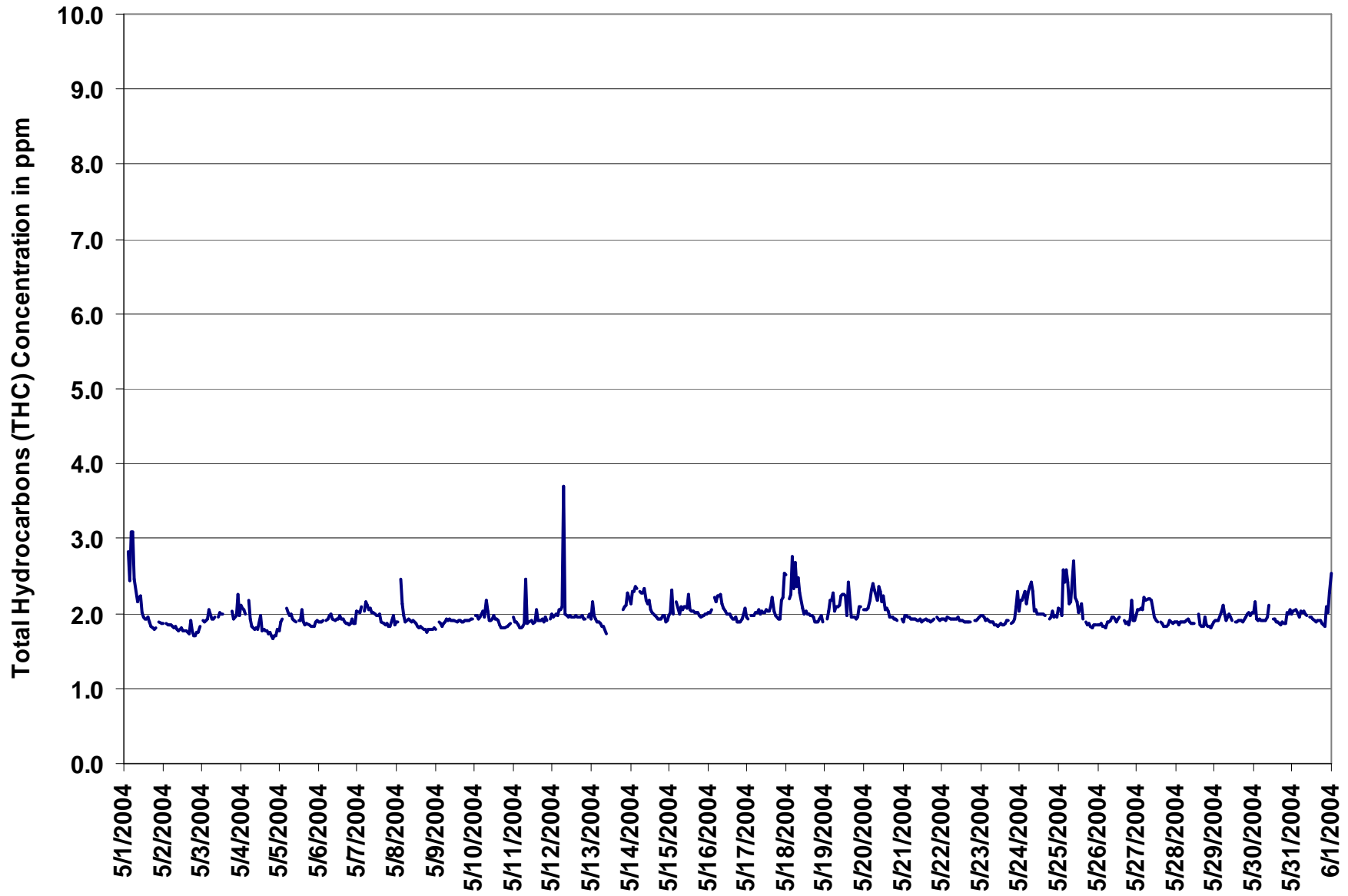


Figure 8. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend



PAS - CRESCENT HEIGHTS PARTICULATE MATTER (LESS THAN 2.5 MICRONS) MONTHLY SUMMARY

Station: Crescent Heights

HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	12.3 $\mu\text{g}/\text{m}^3$ 17-May 23:00 0:00
Maximum 24-hr Average:	5.5 $\mu\text{g}/\text{m}^3$ 18-May

Guideline Limit	Canada Wide Standard	1-hr - $\mu\text{g}/\text{m}^3$	24-hr 30 $\mu\text{g}/\text{m}^3$
(considered as an absolute value)			

AIC Time:	0 hrs	Operational Time:	732 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	98.4%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	9.0	6.8	4.1	2.7	1.5	0.0	0.0	2.9 $\mu\text{g}/\text{m}^3$	2.5 $\mu\text{g}/\text{m}^3$

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

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-04	9	8	4	4	4	7	7	6	6	4	2	3	2	1	2	2	3	2	2	2	N	4	3	3	3	3.9	8.7
2-May-04	1	1	2	2	3	3	5	4	5	6	4	4	4	8	5	4	6	6	6	5	6	5	6	8	8	4.5	8.3
3-May-04	9	9	8	4	3	3	3	2	N	1	1	2	2	N	N	N	N	N	3	5	3	3	3	3	3	3.7	9.3
4-May-04	2	2	1	1	1	0	1	2	2	2	2	1	1	3	2	2	2	2	3	3	5	4	10	5	2.4	10.0	
5-May-04	5	3	6	6	2	2	1	1	1	2	N	1	0	1	0	1	1	1	1	1	3	4	5	4	4	2.5	6.4
6-May-04	4	3	4	3	4	3	3	3	2	1	2	2	1	1	0	1	1	1	1	2	4	4	2	3	2.3	4.4	
7-May-04	2	2	3	3	2	2	5	5	5	5	4	3	1	2	3	3	1	3	3	3	2	4	3	3	2	2.9	5.2
8-May-04	2	3	5	2	2	3	5	4	3	4	5	6	3	2	3	4	4	3	5	3	3	1	4	4	3.5	5.9	
9-May-04	2	4	7	5	2	2	0	1	2	3	2	2	1	2	2	3	2	2	2	2	3	3	4	4	2.6	7.3	
10-May-04	2	2	2	2	3	2	2	1	2	3	2	1	0	1	1	2	5	2	3	7	4	4	3	2	2.4	6.7	
11-May-04	1	0	1	4	4	5	4	5	6	5	6	5	5	5	5	4	3	1	3	4	4	4	3	2	3.8	5.7	
12-May-04	2	2	2	2	2	2	3	3	3	3	4	3	4	4	3	3	3	5	2	3	3	3	1	2	2.8	5.4	
13-May-04	2	2	3	3	3	5	5	5	3	0	M	M	M	2	1	2	2	3	2	5	5	5	4	4	3.3	5.4	
14-May-04	4	4	3	4	3	3	7	6	8	5	2	2	2	3	0	0	1	6	3	4	2	3	2	2	3.2	7.5	
15-May-04	1	4	6	5	6	5	6	5	5	3	2	4	5	3	3	2	2	3	2	3	4	4	7	4	3.9	6.8	
16-May-04	4	3	3	3	2	3	4	5	3	3	1	2	3	3	4	4	5	6	6	8	7	7	7	0	4.1	7.9	
17-May-04	4	4	2	2	2	2	4	4	4	4	4	4	4	5	4	6	5	5	5	5	6	6	8	8	12	4.8	12.3
18-May-04	10	11	9	8	7	8	8	11	9	1	2	1	2	3	3	2	2	4	2	5	6	8	5	4	5.5	11.2	
19-May-04	3	4	3	4	3	3	6	6	7	3	7	4	8	6	8	3	3	3	2	3	4	5	4	5	4.4	7.8	
20-May-04	5	4	3	4	2	4	3	4	7	6	6	3	3	3	5	5	4	4	1	3	3	4	3	2	3.8	6.8	
21-May-04	2	3	3	3	4	4	4	4	3	2	4	3	4	2	2	1	2	3	3	2	1	0	0	0	2.4	4.4	
22-May-04	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
23-May-04	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	1	2	3	2	2	2	2	2	1	1.0	2.7	
24-May-04	1	1	1	1	1	3	6	4	2	3	2	1	1	2	4	4	2	2	2	5	5	2	2	3	2.4	5.6	
25-May-04	2	3	3	3	2	3	4	4	2	2	1	0	0	0	0	0	0	1	4	3	4	4	2	2	2.1	4.2	
26-May-04	2	1	3	2	1	1	0	1	0	0	0	0	0	0	0	2	2	2	4	6	5	2	2	5	1.8	5.7	
27-May-04	2	2	2	1	2	6	6	5	3	1	0	0	0	0	0	1	1	2	3	4	4	5	4	3	2.4	6.2	
28-May-04	2	2	3	2	2	4	4	2	3	0	2	1	3	0	2	2	7	5	4	3	3	2	1	1	2.5	7.2	
29-May-04	0	D	0	3	7	3	2	3	3	3	2	3	0	0	2	1	3	4	10	1	2	1	0	0	2.4	10.2	
30-May-04	0	0	1	1	0	2	1	1	0	0	0	0	0	0	1	3	0	1	3	1	5	2	4	3	1.2	5.0	
31-May-04	2	3	2	2	3	3	3	2	1	0	0	0	0	0	4	1	2	2	3	4	4	4	5	6	2.3	5.5	
Hourly Avg		2.9	2.9	3.0	2.9	2.7	3.2	3.6	3.5	3.4	2.5	2.4	2.1	2.0	2.1	2.4	2.3	2.6	2.9	3.0	3.5	3.8	3.5	3.5	3.1		
Hourly Max		10.1	11.0	9.1	8.1	7.3	8.3	8.5	11.2	8.8	6.2	7.0	5.9	7.7	8.3	7.8	5.3	7.2	6.4	10.2	7.9	6.9	7.9	10.0	12.3		

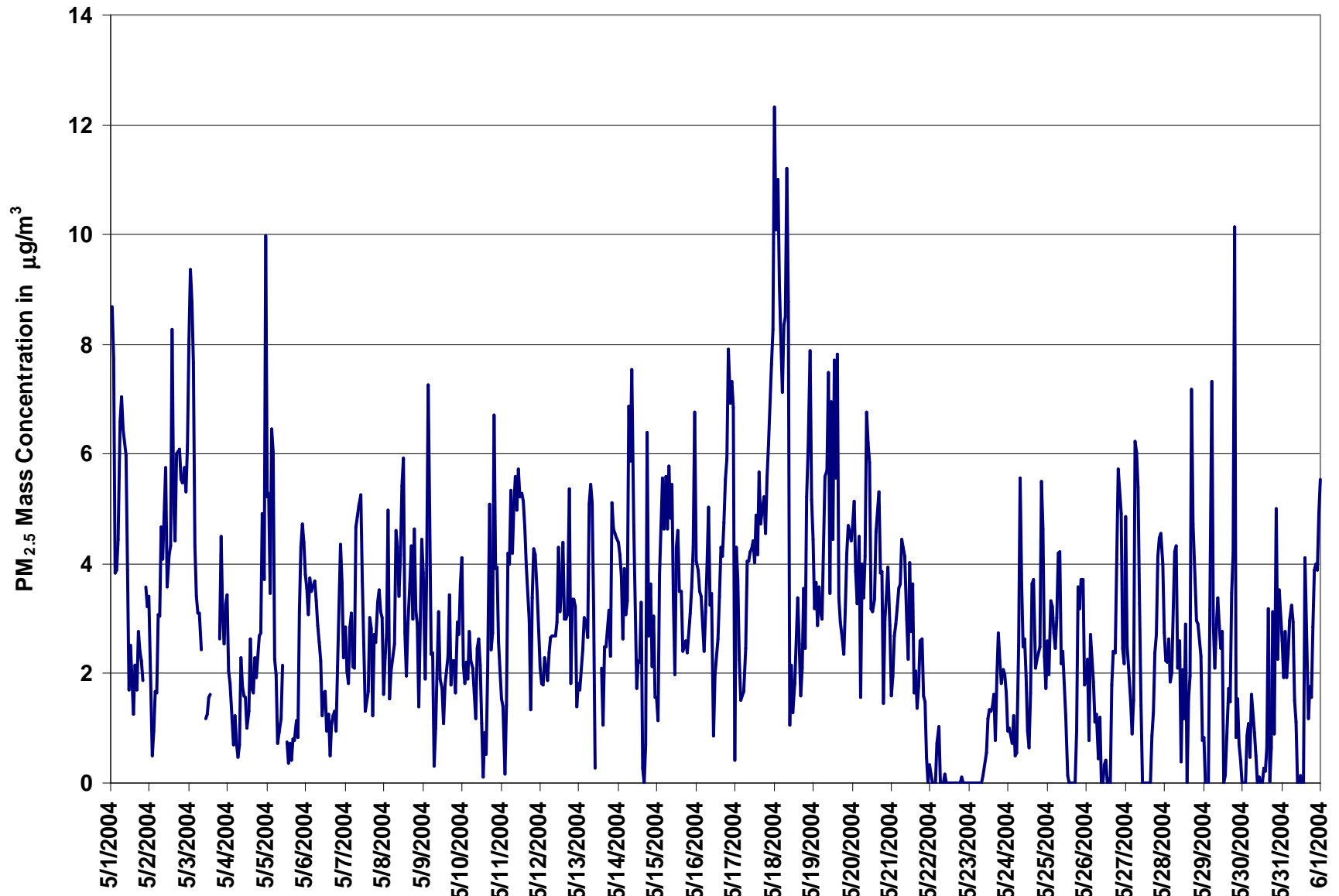


Figure 9. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Maximum 1-hr Value:	32.0	µg/m ³	29-May	18:00 19:00
Maximum 24-hr Value:	10.4	µg/m ³	18-May	

AIC Time:	0 hrs	Operational Time:	733 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	98.5%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	18.7	13.1	7.7	5.8	4.4	2.2	1.1	6.5 µg/m ³	6.2 µg/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

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-04	11	10	6	5	6	9	9	8	9	8	8	8	6	7	8	5	6	5	5	4	N	6	5	6	7.0	11.1	
2-May-04	13	2	5	4	5	5	8	6	8	8	8	8	8	12	8	7	9	10	8	8	9	10	10	11	8.0	13.0	
3-May-04	13	10	10	7	5	6	5	5	N	4	3	4	5	N	N	N	N	N	8	8	5	4	5	5	6.3	13.3	
4-May-04	3	4	2	14	2	2	5	4	4	4	5	6	6	6	5	5	7	4	5	5	7	7	14	10	5.8	14.4	
5-May-04	9	8	10	11	9	7	2	4	4	5	N	3	2	2	3	3	4	4	4	5	7	7	6	6	5.3	11.0	
6-May-04	7	5	7	17	6	5	5	4	5	5	3	4	5	4	5	4	6	5	5	5	7	5	4	5	5.5	16.9	
7-May-04	4	3	5	5	4	5	8	8	9	8	7	7	4	6	8	7	5	6	7	6	5	6	6	4	6.0	9.2	
8-May-04	4	15	7	4	4	5	9	7	8	7	10	11	10	6	8	9	8	6	8	6	8	3	7	7	7.4	14.7	
9-May-04	5	13	15	9	5	6	3	3	4	6	5	4	3	6	5	8	7	5	5	4	6	5	6	7	6.0	14.7	
10-May-04	5	5	4	4	5	5	4	4	4	4	5	5	6	6	4	6	10	6	5	10	6	5	13	3	5.6	12.6	
11-May-04	3	2	4	6	6	8	7	8	7	7	8	8	9	7	7	6	6	4	8	7	6	5	5	4	6.1	8.6	
12-May-04	4	5	4	4	4	4	5	6	5	5	7	8	9	7	6	5	5	14	4	5	16	6	4	3	6.1	15.7	
13-May-04	4	5	6	6	4	10	9	8	6	6	M	M	M	6	5	6	5	15	6	18	10	7	7	6	7.4	18.2	
14-May-04	7	5	5	6	5	7	10	9	9	7	5	6	6	3	4	6	21	7	8	5	5	4	4	4	6.7	20.6	
15-May-04	4	10	13	11	9	7	8	7	7	7	6	9	9	7	8	6	7	5	6	7	6	7	10	6	7.6	13.2	
16-May-04	5	5	7	5	4	5	6	7	6	7	4	4	7	6	7	9	7	8	9	10	20	12	11	14	5	7.7	19.8
17-May-04	7	15	5	3	5	4	10	6	8	8	8	6	10	7	10	9	9	9	8	9	11	12	13	16	8.6	15.7	
18-May-04	13	19	11	11	10	13	14	17	13	7	6	7	6	7	7	6	7	10	6	10	12	12	9	18	10.4	18.6	
19-May-04	6	7	5	5	5	5	11	11	13	9	14	10	11	10	20	9	9	7	7	7	7	6	7	7	8.7	19.5	
20-May-04	7	6	5	6	5	7	6	7	13	11	11	8	7	8	9	11	7	6	5	8	8	18	5	4	7.8	17.7	
21-May-04	4	6	4	5	5	6	7	6	5	5	8	6	7	4	5	4	6	6	5	7	5	3	4	2	5.2	7.9	
22-May-04	2	2	2	2	2	1	0	2	3	1	1	2	1	2	2	1	2	2	11	3	3	3	0	1	2.0	11.0	
23-May-04	1	1	1	1	2	1	2	2	3	3	3	5	4	5	3	4	6	5	4	3	3	3	4	2	3.0	5.9	
24-May-04	3	3	3	2	2	7	10	6	6	6	4	8	5	6	11	9	14	8	10	9	6	4	5	5	6.3	14.0	
25-May-04	4	5	5	4	4	4	6	7	6	5	5	4	3	2	3	16	5	7	6	6	7	7	4	4	5.4	16.1	
26-May-04	5	3	5	5	4	5	3	6	8	4	5	6	5	4	4	10	6	10	22	14	14	6	5	7	7.0	22.4	
27-May-04	7	5	3	2	5	14	9	8	10	6	4	4	4	4	5	7	5	6	7	7	7	7	7	6	6.2	13.5	
28-May-04	4	4	5	4	4	6	7	5	5	5	8	9	9	4	6	7	11	10	10	7	9	9	5	6	6.6	10.8	
29-May-04	4	3	3	9	19	6	5	6	8	9	6	19	6	5	5	5	8	9	32	6	4	3	3	1	7.8	32.0	
30-May-04	2	2	3	4	3	4	3	4	4	1	2	6	6	6	7	11	5	7	14	12	10	5	8	6	5.5	14.0	
31-May-04	4	4	4	5	4	6	5	4	4	3	2	3	4	4	21	5	6	6	8	7	8	5	7	12	5.8	21.3	
Hourly Avg	5.5	6.1	5.6	6.0	5.3	6.1	6.5	6.3	6.8	5.9	5.9	6.6	5.9	5.8	6.9	6.8	6.8	7.5	8.3	7.8	7.7	6.7	6.7	6.1			
Hourly Max	13.3	18.6	14.7	16.9	18.9	13.5	14.3	16.8	13.5	10.9	13.9	18.8	11.1	11.9	21.3	16.1	14.0	20.6	32.0	19.8	15.7	17.7	14.4	18.1			

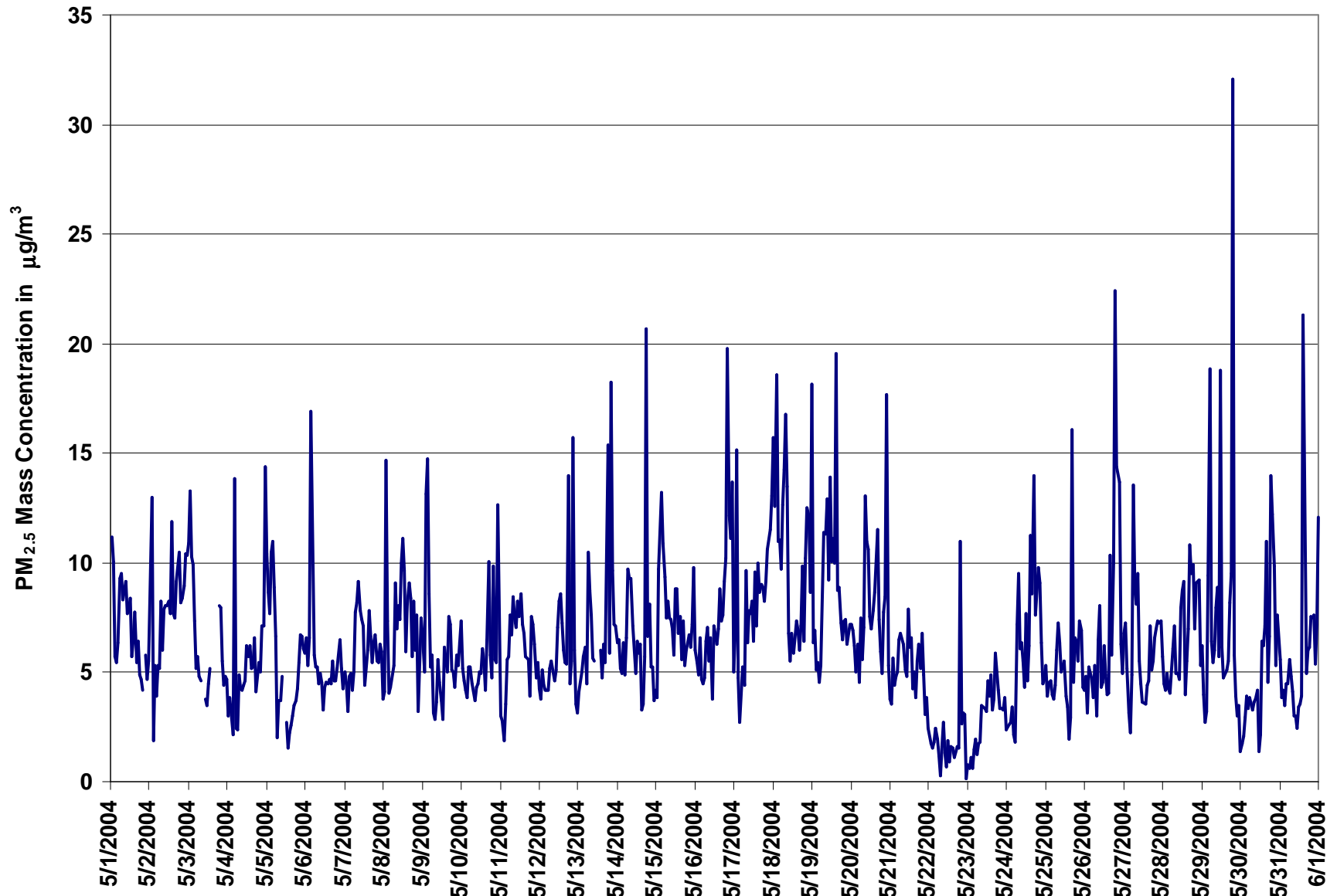
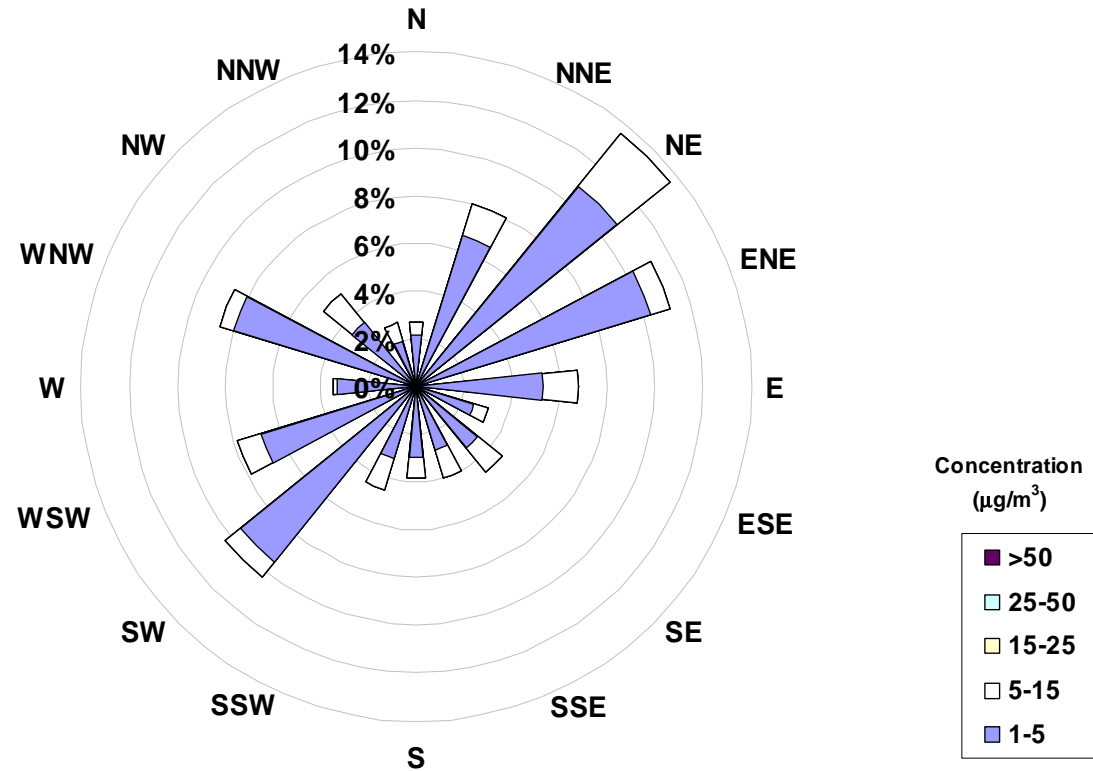


Figure 10. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly



Concentration Rose for the 1-hr PM_{2.5} Average Concentration Occurrences at the Crescent Heights Site for May 2004



Frequency Distribution of PM _{2.5} in µg/m ³			Frequency (hrs)
0	Range		
	<	1	128
1	to	5	500
5	to	15	104
15	to	25	0
25	to	50	0
	>	50	0
Total Non-Zero Values			732



PAS - CRESCENT HEIGHTS METEOROLOGICAL PARAMETERS MONTHLY SUMMARY

Station: Crescent Heights

HOURLY AVERAGE TABLE

Relative Humidity (RH - %)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	94.4 % 22-May 3:00 4:00
Maximum 24-hr Average:	89.5 % 11-May

AIC Time:	0 hrs	Operational Time:	733 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	98.5%					
Percentile	99	95	75	50	25	5	1	Average
	92.6	90.0	81.5	62.7	39.2	23.4	20.2	59.8 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-04	65	68	69	67	72	73	64	55	45	32	22	21	21	20	19	20	20	20	23	28	N	46	51	50	42	73
2-May-04	38	33	33	33	34	36	36	36	32	32	30	23	20	24	22	20	21	21	25	31	34	36	33	38	30	38
3-May-04	45	51	53	54	58	57	55	55	N	53	51	49	48	N	N	N	N	N	35	46	52	59	65	67	53	67
4-May-04	69	70	66	64	62	58	53	50	45	38	34	27	21	20	21	20	20	21	22	21	22	27	58	70	41	70
5-May-04	72	73	76	87	89	91	91	86	81	85	N	69	69	68	68	67	66	66	66	67	69	70	70	68	75	91
6-May-04	70	76	80	83	83	81	79	76	69	60	56	53	48	43	38	35	34	32	31	37	45	52	54	57	57	83
7-May-04	62	65	64	67	67	65	64	58	48	43	38	34	30	26	25	27	29	27	29	34	39	43	49	49	45	67
8-May-04	54	55	59	45	39	42	46	39	32	29	25	29	27	23	21	22	23	23	28	33	34	35	42	52	36	59
9-May-04	54	59	88	92	88	83	85	85	84	86	90	90	85	79	76	83	85	88	88	86	83	85	87	88	83	92
10-May-04	88	89	89	89	89	87	83	73	67	61	59	56	51	47	40	37	38	40	42	44	49	59	75	85	64	89
11-May-04	88	90	91	90	89	91	93	93	92	92	92	91	90	91	89	91	90	82	74	85	88	90	91	91	89	93
12-May-04	92	92	92	93	92	91	87	80	73	68	72	67	71	72	87	85	81	83	85	84	86	88	84	85	83	93
13-May-04	86	86	84	83	82	77	74	71	64	52	M	M	M	41	41	46	55	51	45	45	60	66	74	78	65	86
14-May-04	84	87	87	89	90	91	87	79	71	62	54	45	38	40	38	33	33	52	58	57	61	73	78	82	65	91
15-May-04	80	76	84	89	89	89	88	84	76	66	54	47	43	39	38	39	38	35	35	34	40	50	60	70	60	89
16-May-04	74	72	73	75	77	73	69	66	55	46	33	26	23	22	22	22	22	21	26	31	47	51	55	45	47	77
17-May-04	53	64	67	70	71	74	69	61	54	48	43	38	33	31	32	29	27	27	26	27	31	37	43	55	46	74
18-May-04	66	71	74	75	75	77	69	63	56	41	36	30	26	25	22	23	21	23	25	31	42	55	69	75	49	77
19-May-04	78	81	80	84	86	85	86	80	71	49	48	41	37	32	28	26	24	25	24	26	31	38	44	52	52	86
20-May-04	60	62	64	65	66	70	70	60	58	55	53	47	47	46	50	57	64	67	66	63	70	76	78	81	62	81
21-May-04	81	82	82	82	83	84	86	87	90	87	83	82	82	78	77	76	78	82	86	85	84	83	85	88	83	90
22-May-04	92	93	93	94	93	93	93	91	88	86	86	86	85	84	82	83	84	85	85	87	89	89	89	90	88	94
23-May-04	89	89	89	90	90	90	89	88	87	85	83	78	76	73	73	69	64	65	68	72	76	79	83	85	80	90
24-May-04	87	87	88	89	89	86	78	72	63	55	49	43	37	37	39	44	36	35	33	41	50	50	50	51	58	89
25-May-04	56	62	71	80	82	79	73	71	59	48	43	38	33	28	26	26	24	25	31	36	41	44	47	51	49	82
26-May-04	57	60	69	82	88	89	89	86	68	51	44	41	35	33	30	36	34	34	46	52	56	59	65	70	57	89
27-May-04	75	76	80	83	87	85	78	72	64	57	46	39	32	32	28	26	27	31	31	35	44	52	56	62	54	87
28-May-04	63	63	63	64	66	64	61	53	49	43	42	38	43	38	36	40	53	64	72	77	88	91	89	90	60	91
29-May-04	88	81	74	79	88	85	82	74	69	72	67	62	58	49	51	52	59	69	83	85	85	85	82	81	73	88
30-May-04	79	79	82	82	79	79	74	69	59	49	43	39	37	37	33	39	39	37	43	49	60	66	64	64	58	82
31-May-04	63	69	72	75	74	70	66	58	52	46	36	33	31	27	26	25	25	24	25	31	40	48	57	61	47	75
Hourly Avg	71	73	75	77	78	77	75	70	64	57	52	49	46	43	43	43	44	45	47	50	56	61	65	69		
Hourly Max	92	93	93	94	93	93	93	93	92	92	92	91	90	91	89	91	90	88	88	87	89	91	91	91		

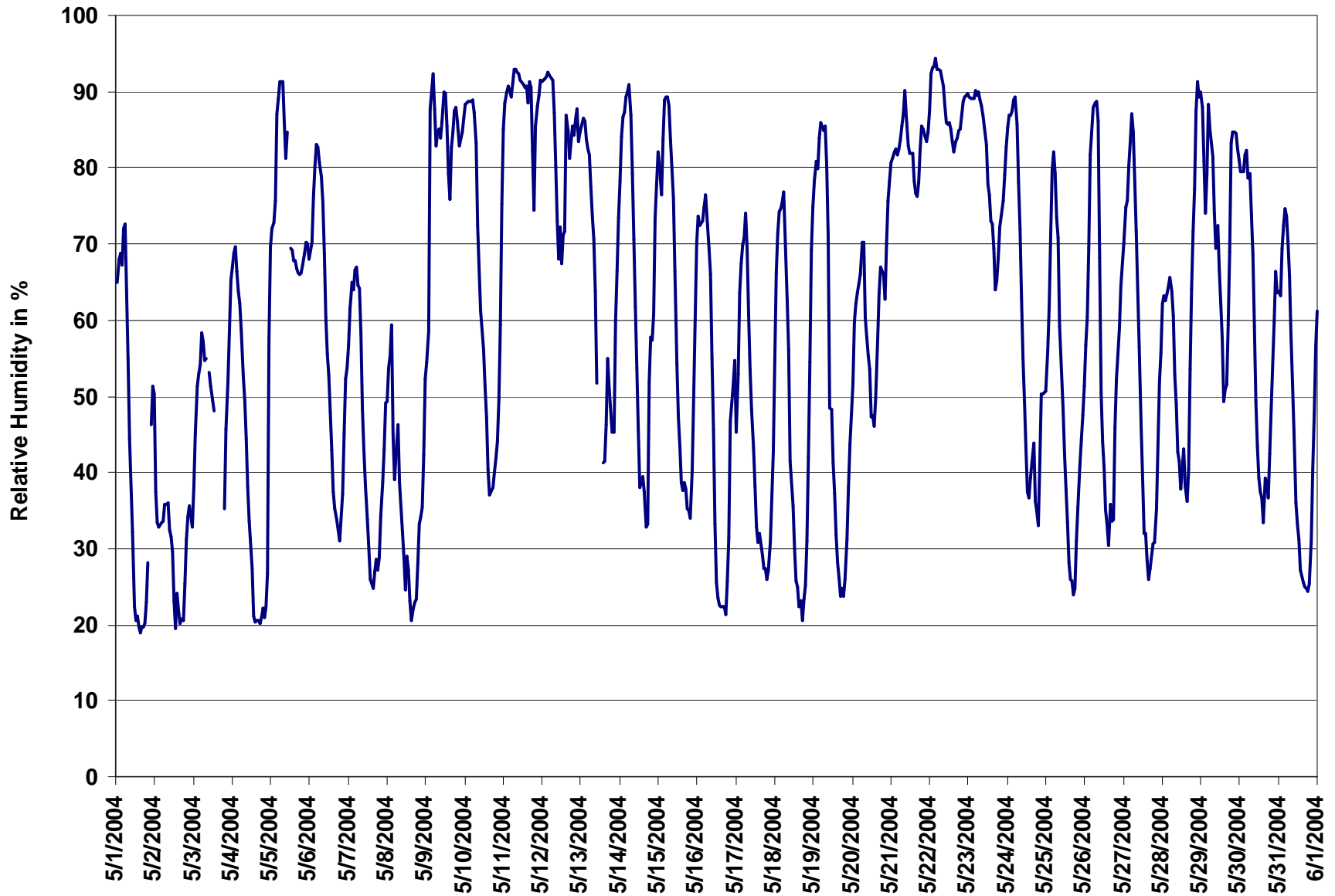


Figure 11. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE

Ambient Temperature (AT - °C)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	26.6 °C 2-May 12:00 13:00
Maximum 24-hr Average:	19.5 °C 2-May

AIC Time:	0 hrs	Operational Time:	733 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	98.5%					
Percentile	99	95	75	50	25	5	1	Average
	24.9	22.0	16.1	10.7	5.4	0.2	-1.2	10.9 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

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-May-04	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-04		3	2	2	1	0	1	3	7	10	14	17	17	18	19	20	20	20	20	18	16	N	10	8	8	11.0	19.8
2-May-04		11	12	12	12	13	13	15	16	19	21	23	26	27	26	25	25	25	26	23	21	20	19	19	18	19.5	26.6
3-May-04		16	15	14	13	11	11	12	12	N	13	13	14	14	N	N	N	N	N	16	14	12	9	7	6	12.3	15.9
4-May-04		6	6	7	8	8	10	13	15	17	19	21	23	24	25	25	25	25	25	24	21	19	18	14	11	17.1	24.9
5-May-04		10	10	9	9	5	1	1	0	0	0	N	1	1	2	2	3	3	3	3	2	2	2	2	2	3.2	10.4
6-May-04		1	1	1	1	1	1	1	2	3	6	8	9	11	13	14	15	16	16	16	13	12	11	11	10	8.0	16.0
7-May-04		9	9	9	8	7	8	8	11	15	17	18	20	21	21	22	22	20	20	20	18	16	14	12	11	14.8	21.9
8-May-04		10	9	9	12	14	13	13	17	19	21	22	22	22	23	24	23	23	22	20	19	17	16	15	13	17.3	23.8
9-May-04		12	12	10	9	9	8	5	3	2	1	0	0	0	0	0	0	-1	-2	-2	-2	-1	-1	-1	-1	2.4	12.2
10-May-04		-1	-1	-1	-1	-1	-1	0	2	4	6	8	9	11	12	14	15	14	13	12	11	10	8	6	5	6.4	15.3
11-May-04		4	3	2	2	1	1	0	0	0	0	0	0	1	0	1	0	0	1	2	1	0	0	0	0	0.9	3.9
12-May-04		0	0	0	0	0	0	1	2	3	4	4	6	5	5	2	3	4	4	3	3	2	2	1	1	2.3	5.9
13-May-04		0	0	-1	-1	-1	0	1	3	6	7	M	M	M	9	10	9	8	9	10	10	7	6	5	4	4.8	10.2
14-May-04		2	1	1	0	0	-1	0	3	6	9	10	12	13	14	14	15	14	11	11	11	10	8	6	5	7.2	14.7
15-May-04		5	6	6	5	5	5	5	5	7	9	10	11	12	13	13	13	13	14	14	14	12	9	7	5	9.0	14.1
16-May-04		4	4	4	4	3	4	5	7	10	13	16	17	18	19	20	20	20	21	19	18	16	15	13	13	12.6	21.4
17-May-04		11	9	8	7	7	6	6	9	12	14	17	19	20	20	19	20	21	21	20	20	18	16	14	12	14.4	20.7
18-May-04		9	8	7	7	7	6	8	11	14	18	19	21	22	23	24	23	24	23	22	21	18	16	14	12	15.7	24.3
19-May-04		12	11	10	9	9	9	9	10	13	17	18	18	20	22	22	22	23	22	22	21	19	17	15	13	15.9	22.7
20-May-04		11	10	10	10	10	9	9	12	13	15	16	17	16	18	17	15	14	13	14	14	12	10	8	8	12.5	17.6
21-May-04		7	7	7	7	7	7	7	7	7	7	8	8	9	9	9	9	9	8	8	7	7	6	6	5	7.4	9.4
22-May-04		5	5	5	4	4	4	5	5	5	5	5	5	5	6	6	5	5	5	5	5	4	4	4	4	4.8	5.7
23-May-04		4	4	4	3	3	4	4	4	4	5	6	7	6	7	7	8	8	8	7	6	6	5	4	3	5.3	8.3
24-May-04		3	2	2	1	1	1	5	7	9	12	12	14	14	14	14	13	15	15	15	13	11	11	10	10	9.3	15.4
25-May-04		9	8	7	6	5	6	8	10	13	15	16	17	18	19	20	21	21	21	20	19	17	17	16	15	14.4	21.2
26-May-04		14	14	13	11	10	10	10	11	15	18	19	20	21	21	22	20	21	20	17	16	15	14	13	12	15.7	21.5
27-May-04		11	10	9	8	7	8	10	13	16	17	19	21	22	22	23	24	23	22	21	20	17	15	14	13	16.1	23.6
28-May-04		12	13	12	12	12	13	14	16	18	20	20	22	20	22	22	21	18	17	16	15	13	12	12	12	16.0	22.2
29-May-04		12	12	11	10	10	10	11	13	14	13	14	15	15	17	17	16	14	13	11	11	10	10	10	9	12.4	16.9
30-May-04		9	9	9	9	9	10	11	12	14	16	17	18	18	18	19	18	18	18	16	15	13	11	12	11	13.7	18.7
31-May-04		11	10	9	9	9	10	12	13	15	16	17	18	18	19	20	20	20	20	20	18	15	13	11	10	14.7	20.1
Hourly Avg		7.5	7.1	6.6	6.3	6.0	6.0	6.8	8.3	10.2	11.8	13.6	14.2	14.8	15.3	15.6	15.4	15.3	14.9	14.2	13.2	11.7	10.4	9.3	8.4		
Hourly Max		15.8	14.6	14.2	13.2	13.6	13.1	14.7	16.9	19.1	20.7	23.2	26.3	26.6	25.5	25.3	25.4	25.2	25.5	23.7	21.4	19.9	19.3	19.2	17.8		

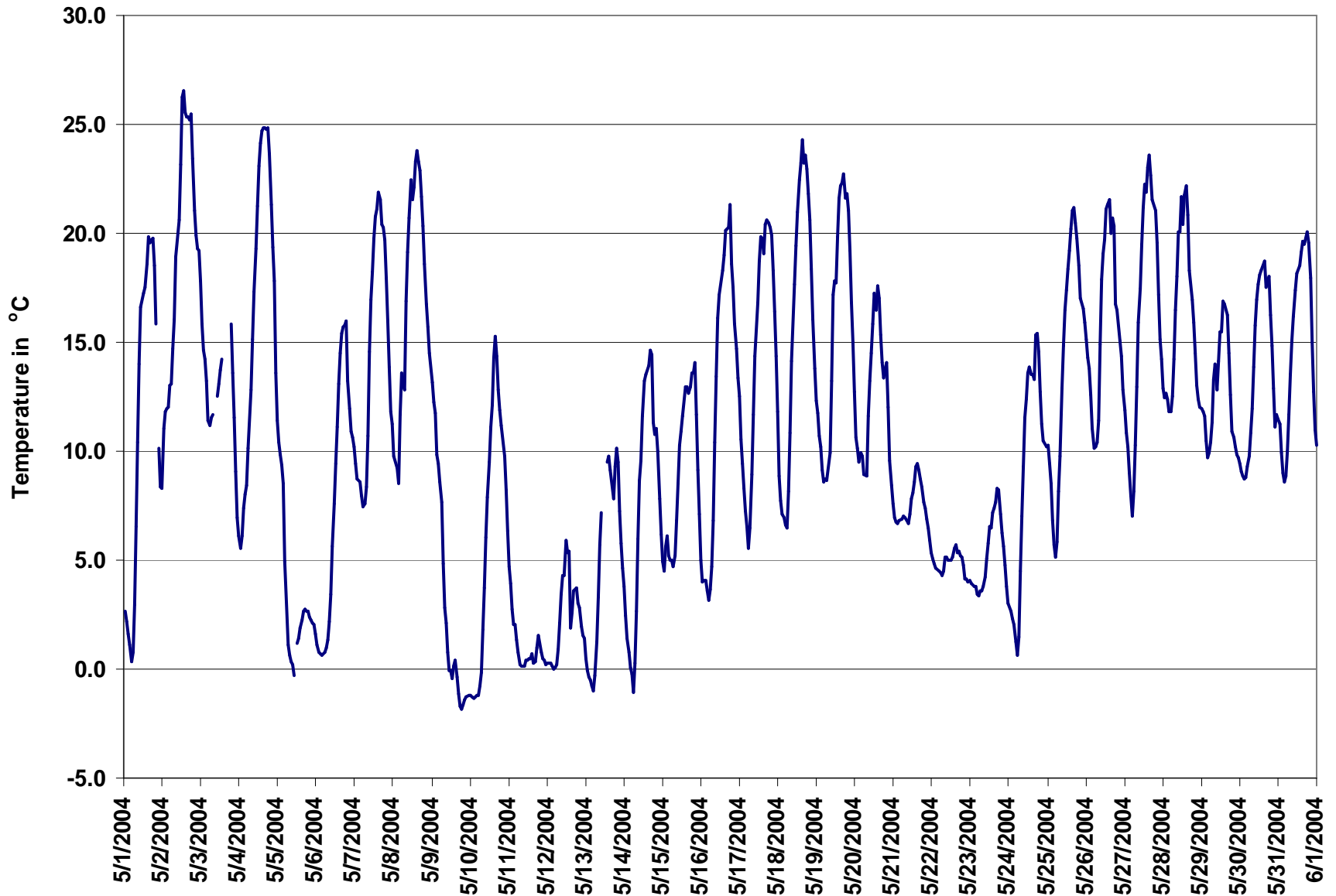


Figure 12. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE**Solar Radiation (SR - W/m²)**

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004**Summary**

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	964.6	W/m ²	18-May	13:00 14:00
Maximum 24-hr Average:	336.7	W/m ²	1-May	

AIC Time:	0 hrs							Operational Time:	733 hrs		
Calibration Time:	0 hrs							AMD Operational Uptime:	98.5%		
Percentile	99	95	75	50	25	5	1	Average			
	901.8	800.2	430.7	84.6	2.4	0.0	0.0	232.6 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

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-04	2	2	2	2	3	48	194	370	544	695	809	878	894	857	777	655	499	327	156	21	N	2	2	2	337	894	
2-May-04	2	2	2	2	3	58	181	270	539	623	791	818	541	424	460	393	267	279	81	18	3	2	2	2	240	818	
3-May-04	3	2	2	2	4	47	129	137	N	450	610	634	537	N	N	N	N	N	154	25	3	2	2	2	153	634	
4-May-04	2	2	2	2	4	62	208	368	470	686	807	742	856	812	710	569	427	357	155	22	3	2	2	2	303	856	
5-May-04	2	2	2	3	3	10	45	93	149	141	N	280	287	274	250	188	119	101	64	14	2	2	2	2	89	287	
6-May-04	2	2	2	2	4	22	61	132	251	535	620	664	662	796	708	506	344	292	157	16	3	2	2	2	241	796	
7-May-04	2	2	2	2	4	42	173	366	550	699	693	835	902	861	787	653	482	338	170	46	3	2	2	2	318	902	
8-May-04	2	2	2	2	4	38	147	392	532	660	631	480	772	806	561	612	547	264	155	34	3	2	3	3	277	806	
9-May-04	2	2	3	3	3	11	26	42	49	71	132	156	155	152	186	169	113	59	31	10	3	2	2	2	58	186	
10-May-04	2	2	2	2	4	24	97	382	567	720	829	883	789	566	795	646	374	153	56	10	3	2	2	3	288	883	
11-May-04	2	2	2	2	3	9	22	58	71	93	169	246	289	197	137	112	129	92	38	10	3	2	2	2	71	289	
12-May-04	2	2	2	2	4	48	152	231	335	319	328	644	502	275	53	147	177	152	108	23	3	2	2	2	147	644	
13-May-04	2	2	2	2	7	83	185	359	447	519	M	M	M	714	734	502	236	487	355	135	45	1	0	0	229	734	
14-May-04	0	0	0	0	0	2	84	240	392	502	446	756	901	887	700	619	472	205	356	151	49	1	0	0	282	901	
15-May-04	0	0	0	0	0	2	61	222	406	550	738	623	726	630	545	363	392	380	280	196	48	1	0	0	257	738	
16-May-04	0	0	0	0	0	4	55	211	372	530	707	744	896	896	872	851	753	620	157	85	52	1	0	0	325	896	
17-May-04	0	0	0	0	0	3	75	221	387	546	710	792	819	686	328	738	646	510	367	209	52	2	0	0	296	819	
18-May-04	0	0	0	0	0	4	79	228	399	569	717	839	887	965	916	701	643	423	251	138	34	2	0	0	325	965	
19-May-04	0	0	0	0	0	2	31	147	382	569	596	458	835	915	810	765	734	366	392	217	54	2	0	0	303	915	
20-May-04	0	0	0	0	0	3	65	238	269	231	420	687	796	711	514	508	428	148	256	151	50	2	0	0	228	796	
21-May-04	0	0	0	0	1	12	24	34	75	103	126	142	208	281	255	180	106	88	40	42	2	0	0	0	72	281	
22-May-04	0	0	0	0	0	8	20	50	65	74	93	140	215	225	187	143	133	66	30	10	0	0	0	0	61	225	
23-May-04	0	0	0	0	0	8	26	65	129	167	218	232	169	408	412	371	436	354	136	54	6	0	0	0	133	436	
24-May-04	0	0	0	0	5	97	263	439	602	719	702	674	614	331	299	416	546	381	162	25	1	0	0	0	262	719	
25-May-04	0	0	0	0	9	102	286	423	596	744	898	929	927	898	759	596	491	246	124	34	1	0	0	0	336	929	
26-May-04	0	0	0	0	1	14	71	176	482	754	723	768	946	765	592	226	367	181	93	65	2	0	0	0	259	946	
27-May-04	0	0	0	0	9	109	263	437	614	714	851	912	888	545	735	703	427	221	205	67	4	0	0	0	321	912	
28-May-04	0	0	0	0	5	92	236	387	557	752	439	685	446	664	466	288	157	257	67	7	0	0	0	0	229	752	
29-May-04	0	0	0	0	2	28	155	431	395	250	469	487	314	508	655	485	138	40	32	8	0	0	0	0	183	655	
30-May-04	0	0	0	0	7	55	119	210	501	738	835	704	527	587	681	364	449	278	99	48	4	0	0	0	259	835	
31-May-04	0	0	0	0	11	100	280	450	603	703	759	716	640	736	713	459	511	391	242	67	3	0	0	0	308	759	
Hourly Avg	1	1	1	1	3	37	123	252	391	498	582	618	631	612	553	464	385	269	160	63	14	1	1	1			
Hourly Max	3	2	3	3	11	109	286	450	614	754	898	929	946	965	916	851	753	620	392	217	54	2	3	3			

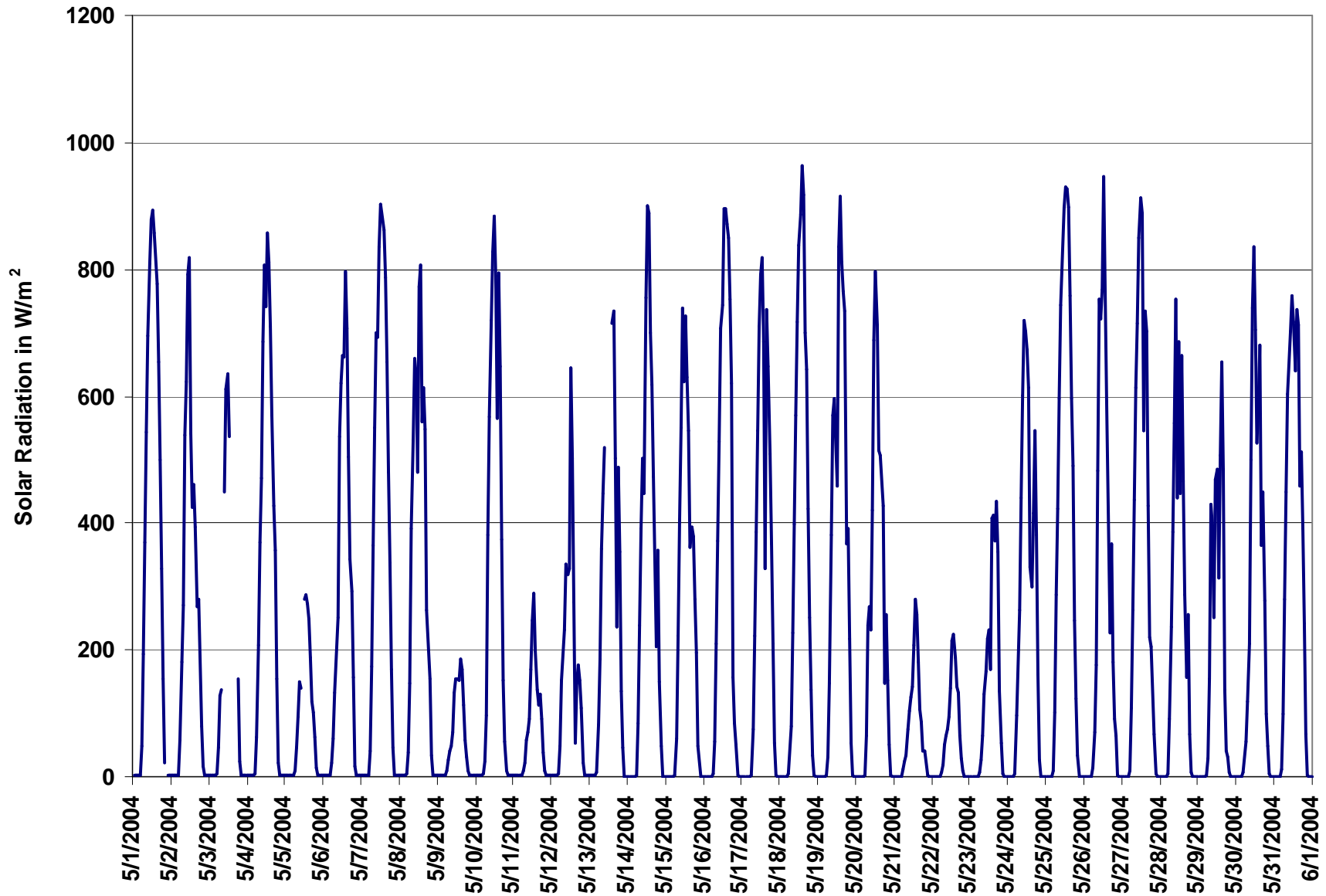


Figure 13. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE

Wind Speed (WS - Km/hr)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Maximum 1-hr Average:	30.2	km/hr	8-May	11:00 12:00
Maximum 24-hr Average:	19.8	km/hr	23-May	

Calm Time:	0 hrs	0% calms	Operational Time:	733 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	98.5%					
Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	28.5	23.5	16.5	11.2	7.6	4.5	3.0	12.5 km/hr	1.0 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

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hr Scalar Average	24-hr Vector Average	Daily Max
1-May-04	4	5	8	6	2	4	6	5	5	4	7	7	11	9	6	8	7	6	12	11	N	11	7	6	6.8	3.3	12.0	
2-May-04	11	17	14	11	10	14	19	21	26	28	26	16	14	20	20	18	16	16	15	11	10	10	20	18	16.7	11.8	27.8	
3-May-04	11	11	12	16	12	15	18	18	N	13	16	16	14	N	N	N	N	N	8	9	9	9	6	5	12.1	8.6	18.2	
4-May-04	6	7	9	6	8	14	24	25	27	29	25	21	24	23	23	23	22	20	18	15	15	16	20	20	18.4	13.3	28.6	
5-May-04	13	10	7	8	28	26	22	23	22	19	N	15	12	11	8	7	8	10	13	13	14	13	14	16	14.5	9.0	28.4	
6-May-04	16	12	11	8	7	5	6	8	8	9	9	8	9	10	10	9	11	10	7	6	7	6	5	7	8.6	4.1	16.3	
7-May-04	10	12	11	7	7	8	9	8	5	7	6	7	9	12	9	12	18	13	12	11	10	9	10	9	9.6	4.6	18.2	
8-May-04	6	3	2	7	12	14	9	11	20	18	20	30	26	24	26	27	29	29	29	26	23	26	24	18	19.1	17.8	30.2	
9-May-04	14	13	8	5	13	18	24	23	20	20	18	19	19	15	15	16	18	13	8	4	3	2	3	7	13.2	2.4	24.4	
10-May-04	9	9	7	5	4	4	9	14	14	11	12	14	13	16	18	15	21	24	19	16	14	15	17	19	13.2	10.8	23.5	
11-May-04	20	21	23	22	27	21	20	18	16	17	17	23	23	23	20	14	18	16	16	5	2	3	6	8	16.6	14.9	26.6	
12-May-04	9	9	10	8	8	8	9	8	8	7	9	7	8	10	7	6	6	10	14	9	4	5	7	5	7.9	1.6	13.7	
13-May-04	7	7	7	6	10	9	7	9	9	10	M	M	M	15	16	19	16	16	9	7	10	6	7	6	9.9	9.1	18.7	
14-May-04	4	5	5	6	5	5	6	5	5	5	9	9	12	15	15	15	11	23	20	11	10	9	9	7	9.3	3.2	22.7	
15-May-04	5	11	19	18	5	8	9	11	9	10	9	9	8	6	6	9	8	7	7	6	6	6	8	6	8.6	4.9	19.2	
16-May-04	6	4	5	5	4	6	6	4	4	5	7	8	7	7	7	8	8	5	5	7	12	4	6	13	6.4	1.7	13.4	
17-May-04	13	16	7	7	11	7	11	9	15	16	10	8	8	8	10	10	12	10	10	8	7	7	5	5	9.7	3.7	16.4	
18-May-04	6	5	3	4	4	4	5	3	5	16	17	10	7	10	9	10	9	8	10	10	8	15	15	10	8.4	4.8	16.9	
19-May-04	8	5	5	4	5	10	8	8	8	8	15	14	17	25	23	19	18	16	16	16	13	11	10	7	12.1	6.1	24.5	
20-May-04	5	5	4	5	7	4	6	4	6	9	12	15	20	19	21	23	20	15	16	20	24	22	19	19	13.3	9.7	24.0	
21-May-04	18	15	15	14	10	13	14	14	15	14	15	14	11	18	18	18	14	11	10	9	11	13	13	14	13.8	13.4	18.2	
22-May-04	12	14	16	17	18	17	16	20	22	21	20	21	23	21	21	22	20	19	18	17	15	14	15	14	18.0	17.7	23.5	
23-May-04	13	14	15	15	15	15	19	23	29	28	29	30	26	27	27	27	26	22	21	17	11	8	9	9	19.8	18.9	29.6	
24-May-04	8	8	7	7	7	4	4	6	7	6	8	6	8	7	6	10	8	9	9	6	5	10	12	15	7.7	3.9	14.5	
25-May-04	20	16	13	12	15	14	15	14	13	13	16	16	16	18	15	17	23	24	20	21	20	17	18	16	16.7	16.0	23.6	
26-May-04	13	19	19	15	13	11	11	18	12	12	13	15	16	15	14	13	10	10	12	7	5	10	5	5	12.1	8.7	18.9	
27-May-04	6	9	11	6	7	11	7	7	8	11	12	16	16	15	19	18	20	16	14	13	14	10	9	8	11.9	11.3	19.8	
28-May-04	8	13	8	8	10	9	10	18	18	19	12	17	16	10	9	7	13	10	13	9	8	6	4	4	10.8	8.3	18.7	
29-May-04	4	8	8	6	8	8	11	14	16	18	18	16	15	20	18	21	17	19	15	15	15	14	14	13	13.8	12.7	20.6	
30-May-04	14	14	14	12	11	12	12	14	19	19	19	20	18	20	18	20	20	17	15	10	10	5	7	8	14.6	13.4	20.4	
31-May-04	10	10	10	10	11	11	12	16	17	20	22	23	21	21	20	19	18	17	16	11	10	8	2	7	14.2	12.7	22.6	
1-hr Scalar	9.9	10.6	10.0	9.2	10.1	10.7	11.8	12.8	13.5	14.3	14.8	14.9	15.0	15.7	15.2	15.3	15.5	14.8	13.8	11.5	10.8	10.3	10.5	10.4				
1-hr Vector	0.9	1.1	1.3	1.3	0.9	2.0	2.0	2.0	2.7	2.8	2.4	2.2	2.8	2.5	1.8	1.8	1.2	1.5	1.4	0.9	0.9	0.3	0.1	0.2				
Hourly Max	20.0	21.0	23.1	22.5	28.4	25.6	24.4	24.7	29.1	28.6	29.2	30.2	26.4	27.5	26.8	27.2	28.7	29.0	28.9	25.7	24.0	26.4	24.3	20.5				



Station: Crescent Heights

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Calm Time:	0 hrs	0% calms	Operational Time:	733 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	98.5%				
Percentile	99	95	75	50	25	5	1	Average
	347.8	310.7	243.7	146.6	60.5	20.2	7.3	98 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

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
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-04	331	355	31	33	142	304	11	37	294	308	311	228	217	213	202	215	258	285	296	290	N	310	303	301	300
2-May-04	345	349	331	347	10	24	19	25	38	42	45	57	96	79	88	91	96	94	91	85	91	87	127	155	58
3-May-04	136	128	124	150	177	175	172	166	N	149	159	148	143	N	N	N	N	N	200	219	255	299	291	299	166
4-May-04	295	303	317	345	39	23	15	16	25	32	37	46	65	72	74	65	70	68	70	86	83	83	81	221	48
5-May-04	221	233	144	121	290	76	278	232	215	228	N	218	222	220	215	234	224	215	220	232	238	232	214	211	224
6-May-04	210	218	218	221	223	232	264	307	300	296	308	317	314	328	25	2	20	19	8	305	305	311	299	216	293
7-May-04	222	223	218	224	222	282	292	240	144	38	86	220	102	129	112	171	222	220	243	241	245	284	286	312	237
8-May-04	293	301	351	21	41	49	53	63	48	62	75	56	67	64	65	77	74	71	74	65	72	57	80	73	65
9-May-04	64	94	140	130	191	139	89	37	45	8	261	69	359	359	109	316	236	249	213	228	203	309	58	44	77
10-May-04	39	41	46	46	20	291	268	285	293	300	282	258	267	277	293	308	295	292	290	305	305	310	298	279	297
11-May-04	264	262	252	253	262	249	236	238	242	246	250	237	225	224	231	233	218	218	238	316	333	131	150	150	241
12-May-04	255	101	146	135	106	78	4	213	168	232	284	293	126	6	307	234	194	70	46	38	44	33	76	61	72
13-May-04	56	57	62	48	53	62	45	27	17	23	M	M	M	29	29	49	51	46	63	71	84	82	88	88	50
14-May-04	30	25	30	30	37	333	20	44	348	318	9	22	31	37	52	47	62	169	208	255	295	291	299	311	9
15-May-04	297	192	180	184	138	129	147	160	164	159	146	152	174	176	227	249	224	236	235	274	287	295	295	289	192
16-May-04	296	265	230	217	245	280	268	224	271	236	273	284	303	39	343	45	71	9	122	171	192	279	339	20	280
17-May-04	38	26	64	61	55	40	57	56	42	51	69	68	113	162	167	168	160	199	179	202	213	199	249	335	81
18-May-04	310	310	306	309	323	17	51	42	28	41	34	44	278	335	294	286	274	275	279	317	11	21	38	59	358
19-May-04	69	56	40	18	18	40	51	57	47	138	164	194	197	211	208	205	204	218	209	201	212	223	256	299	199
20-May-04	310	322	293	177	198	336	302	343	49	151	184	189	189	212	240	286	280	268	249	233	225	223	225	231	234
21-May-04	249	256	237	237	239	230	225	234	233	233	235	245	241	230	240	239	242	262	256	268	258	238	253	252	242
22-May-04	246	252	253	260	254	248	249	257	261	251	254	255	255	249	248	244	246	240	240	251	257	240	232	227	249
23-May-04	220	224	222	225	221	224	223	230	234	232	234	232	237	241	246	257	250	247	241	229	214	184	177	182	232
24-May-04	172	166	171	151	137	134	39	49	43	59	59	14	32	52	347	15	15	7	30	26	4	12	16	31	43
25-May-04	25	39	56	59	55	49	47	53	52	56	59	71	61	55	64	68	57	62	61	63	59	75	81	79	59
26-May-04	79	77	81	83	74	54	38	49	88	134	135	125	110	124	114	130	95	116	16	13	340	180	298	2	93
27-May-04	44	50	58	55	51	45	56	53	34	41	45	40	35	55	51	58	58	62	71	68	50	44	59	82	53
28-May-04	48	35	69	51	39	40	30	25	45	44	15	27	15	360	3	40	339	286	298	307	17	18	4	336	N
29-May-04	356	53	65	75	108	98	82	92	101	88	74	78	100	121	116	110	120	129	112	106	106	111	106	96	101
30-May-04	95	92	88	81	83	78	82	86	98	105	120	122	110	104	108	100	72	85	87	104	172	130	103	122	99
31-May-04	110	90	90	91	96	96	98	124	133	142	140	139	136	138	139	141	141	146	153	149	154	177	276	41	N
Hourly Avg	342	24	135	130	84	53	34	43	43	73	93	123	134	133	122	101	123	149	189	233	206	322	98	239	



Station: Crescent Heights

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

Station Owner: PAS

Monitoring Dates: May 1, 2004 to June 1, 2004

Summary

Determined by the Yamartino 15-min interval calculation

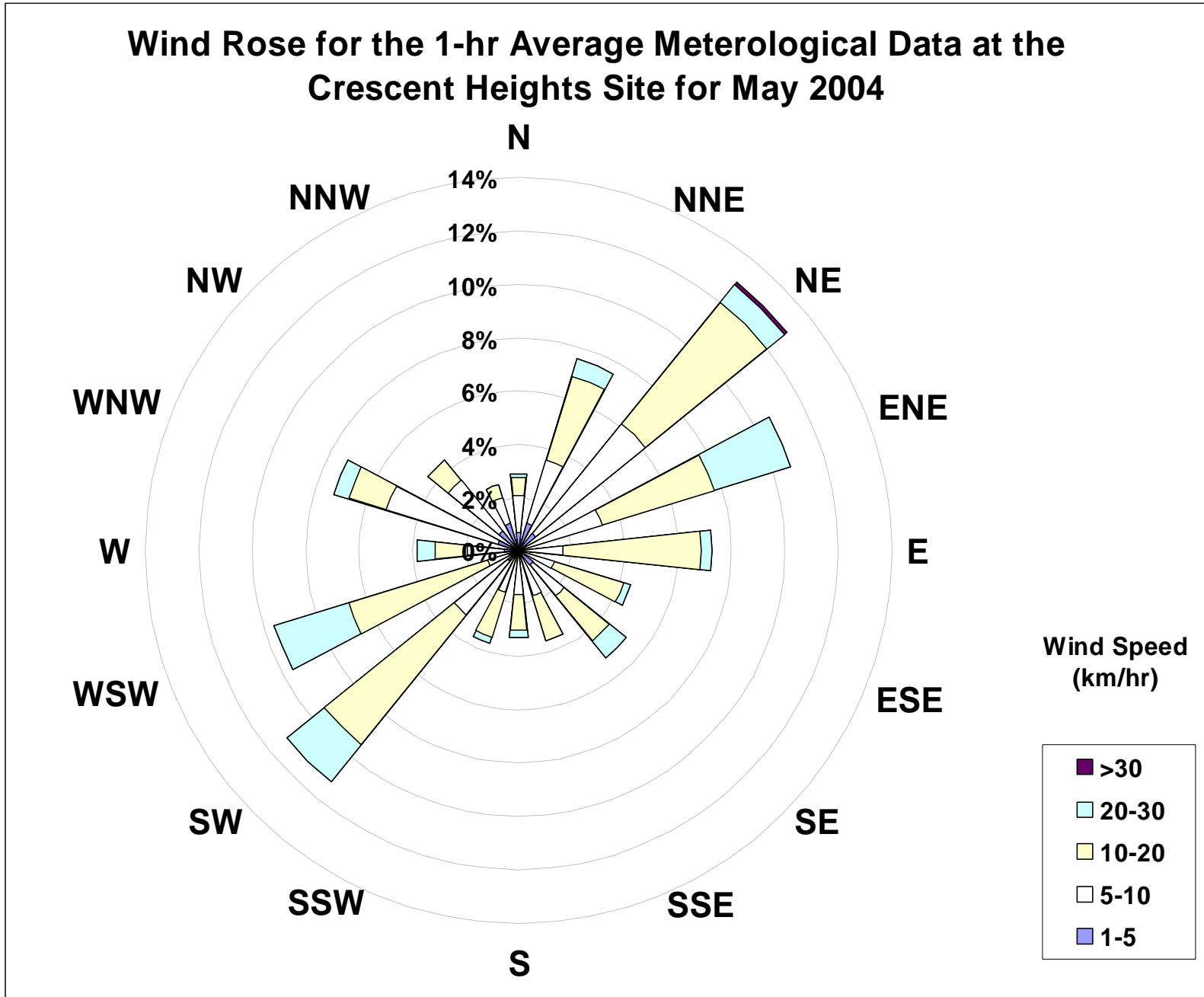
Calm Time:	0 hrs	0% calms	Operational Time:	735 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	98.8%			
Percentile	99	95	75	50	25	5	1
	73.9	56.0	21.2	11.4	7.7	5.6	4.9

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	23:00	0:00	Daily Maximum
1-May-04	13	11	8	8	54	20	15	14	41	41	31	53	32	37	61	59	50	32	11	7	N	8	13	10	61.1		
2-May-04	14	7	14	15	14	9	6	7	8	8	7	15	15	9	8	9	9	8	7	6	7	7	9	6	15.5		
3-May-04	8	7	8	7	6	6	5	0	N	18	13	14	14	N	N	N	N	N	52	8	9	9	8	18	51.7		
4-May-04	7	6	8	15	10	6	6	6	8	9	10	14	12	10	11	10	10	10	7	7	7	7	51	34	50.6		
5-May-04	33	10	51	45	69	66	57	54	24	50	N	46	53	57	52	49	41	32	11	7	6	7	13	17	69.1		
6-May-04	18	8	7	7	8	12	12	16	17	22	26	40	39	37	26	21	25	17	18	10	5	8	17	43	42.9		
7-May-04	71	38	19	43	23	13	7	19	58	37	62	77	65	50	72	82	35	21	12	6	7	11	8	10	81.9		
8-May-04	29	24	69	27	18	11	13	14	7	12	10	10	10	9	9	8	8	6	6	6	7	6	7	6	68.6		
9-May-04	8	28	55	57	46	53	44	63	61	63	67	56	75	87	89	87	47	78	67	45	52	52	17	8	89.4		
10-May-04	7	10	9	28	20	30	11	11	10	22	26	18	26	14	13	18	9	6	5	7	7	8	7	6	29.8		
11-May-04	7	7	5	6	7	6	5	5	6	7	7	7	5	6	8	8	7	14	17	40	43	25	11	55	55.3		
12-May-04	65	59	20	35	48	56	78	59	69	51	53	47	44	27	48	36	55	13	10	8	21	11	11	13	78.2		
13-May-04	12	11	17	10	3	6	12	12	17	24	35	M	14	18	12	10	12	20	18	10	7	10	14	20	35.1		
14-May-04	14	10	28	24	8	12	11	24	37	22	33	20	21	18	17	29	14	10	12	9	9	8	11	11	37.3		
15-May-04	18	10	6	27	11	13	12	17	21	30	27	35	58	57	20	31	35	42	32	12	10	9	8	9	58.5		
16-May-04	17	9	11	22	9	18	16	24	20	49	33	44	53	42	50	60	60	30	32	12	28	18	7	6	60.4		
17-May-04	6	25	8	5	14	7	10	8	9	21	42	47	32	18	45	20	27	19	28	5	4	15	13	8	47.5		
18-May-04	6	8	10	15	15	13	19	16	9	12	52	52	57	39	41	33	29	20	13	9	7	7	10	9	57.3		
19-May-04	18	23	13	9	7	6	9	16	32	13	17	18	10	10	18	16	13	12	7	5	6	21	10	9	31.5		
20-May-04	18	41	22	10	32	12	31	22	13	14	12	12	12	10	9	10	9	8	7	6	5	8	6	6	40.6		
21-May-04	6	9	6	6	9	9	8	9	7	7	9	8	9	8	10	7	11	9	10	8	7	7	6	8	11.0		
22-May-04	8	6	5	8	6	7	8	7	7	9	9	8	7	9	6	7	7	6	6	7	8	8	6	6	9.1		
23-May-04	6	6	6	6	5	6	6	5	5	5	5	5	5	6	7	9	10	10	7	6	7	9	5	8	10.1		
24-May-04	5	5	12	6	19	26	13	15	34	54	52	38	34	64	42	21	27	25	12	15	13	9	8	11	64.2		
25-May-04	5	6	8	9	6	6	8	10	11	14	16	19	15	19	18	14	12	7	7	6	6	6	7	7	19.1		
26-May-04	8	6	5	6	6	8	12	5	15	16	17	15	14	16	17	16	18	14	40	26	30	12	21	25	40.0		
27-May-04	11	13	10	7	9	7	19	23	23	15	20	12	16	12	13	12	10	9	8	6	5	9	16	15	23.1		
28-May-04	44	9	18	19	9	12	12	8	9	10	21	14	11	46	34	20	10	22	8	12	23	17	39	51	50.8		
29-May-04	35	11	10	26	44	14	10	9	11	8	7	12	12	11	11	10	10	8	10	8	9	8	9	8	44.3		
30-May-04	10	8	7	8	9	8	9	9	9	11	11	11	15	13	13	13	8	16	17	21	10	14	14	10	21.2		
31-May-04	9	8	8	7	8	8	8	10	10	11	10	11	11	13	12	10	10	10	7	5	16	16	34	12	33.7		
Hourly Max	71	59	69	57	69	66	78	63	69	63	67	77	75	87	89	87	60	78	67	45	52	52	51	55			





PASSIVE MONITORING

Ambient Air Compliance Network

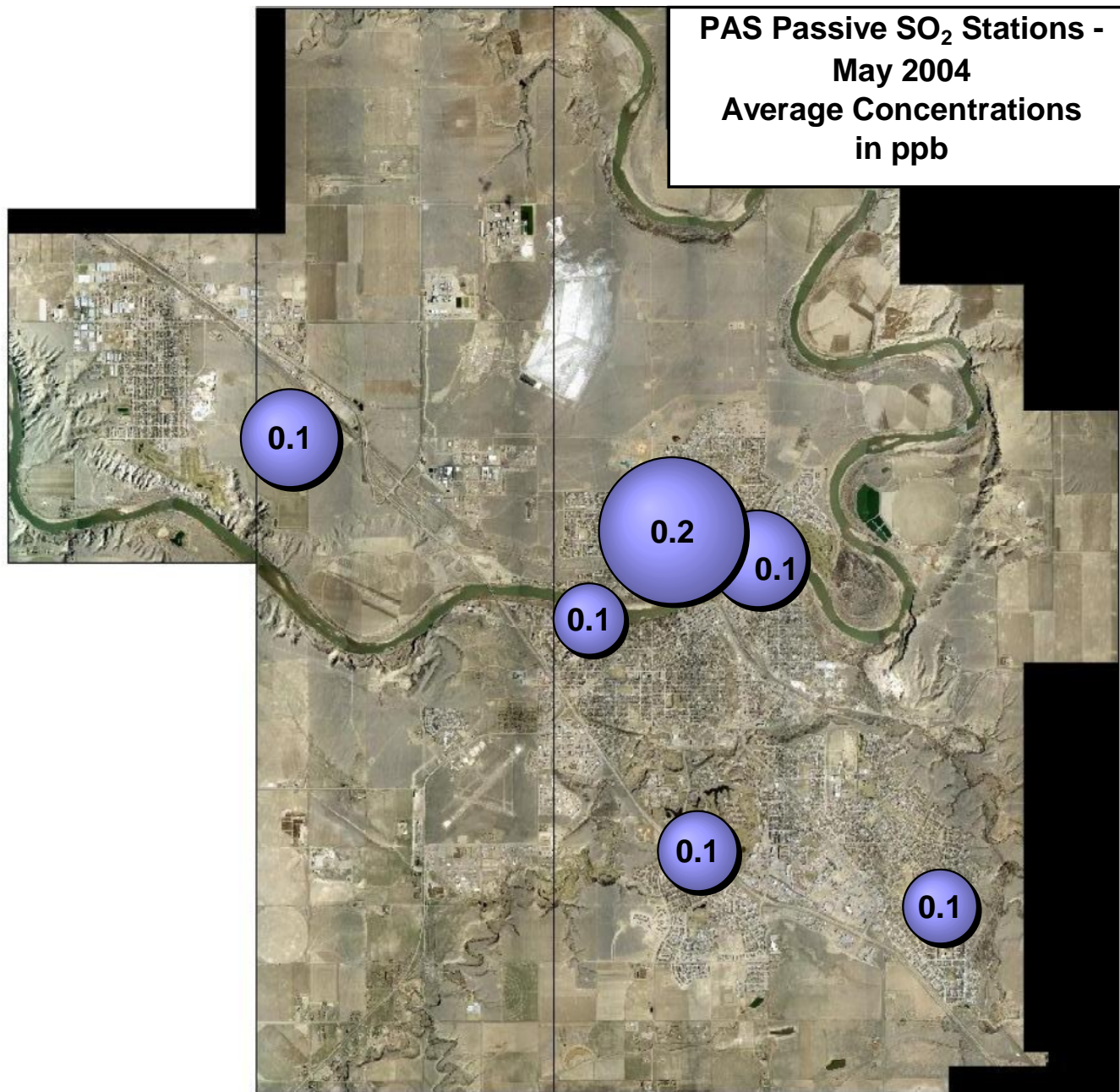
Pallisar Airshed Society - PAS Passive Stations for May 2004

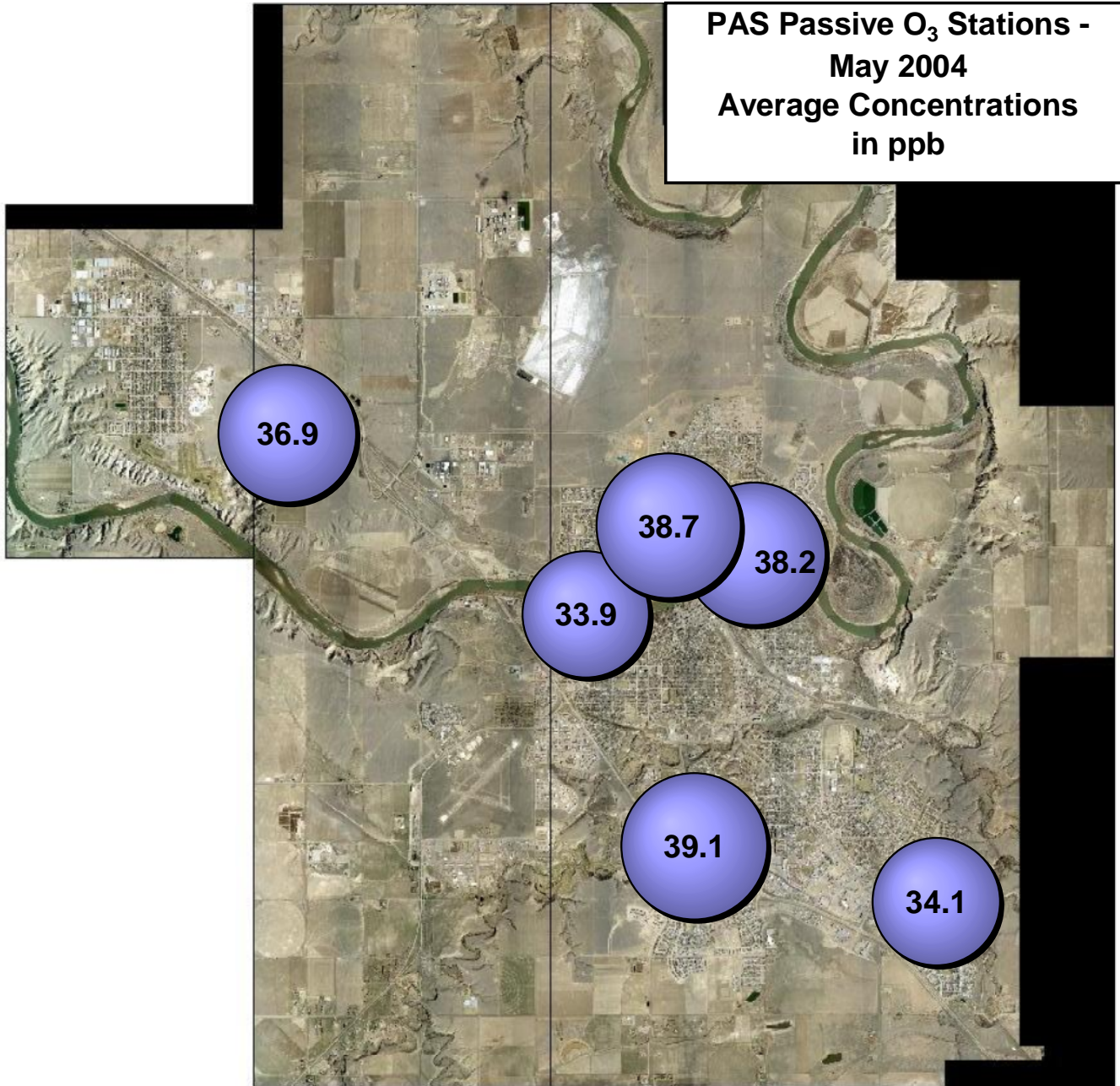
Station Number	Station	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Location		
	Name				Easting	Northing	Elevation
Duplicates							
3a	Monitoring station	0.1	37.7	4.9			
3b		0.2	39.8	10.0			
1	Hospital	0.1	33.9	5.3	521648	5542721	698
2	Ball Park	0.1	38.2	5.4	524019	5543686	660
3	Monitoring Station	0.2	38.7	7.4	522812	5544133	714
4	Redcliff	0.1	36.9	3.0	517448	5545608	725
5	Southridge	0.1	39.1	4.5	523172	5539016	721
6	Christian School Park	0.1	34.1	4.6	526577	5538133	709

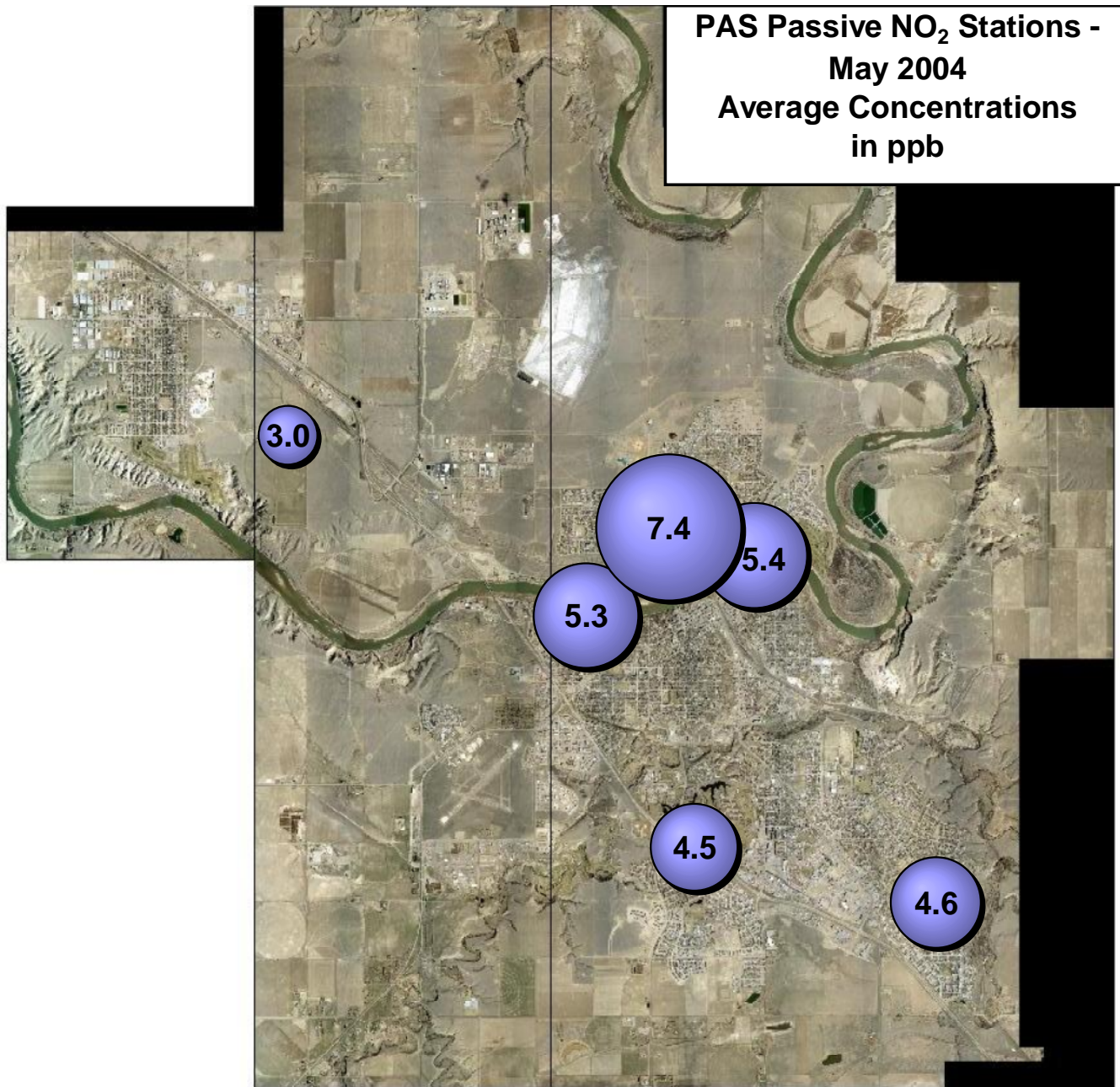
Stats:							
	Mean	0.1	36.8	5.0			
	Standard Deviation	0.0	2.3	1.5			
	Minimum	0.1			1	Hospital	
	Maximum	0.2			3	Monitoring Station	
	Minimum		33.9		1	Hospital	
	Maximum		39.1		5	Southridge	
	Minimum			3.0	4	Redcliff	
	Maximum			7.4	3	Monitoring Station	

Comparison between Continuous and Passive monitoring (passive #3)

	SO ₂	O ₃	NO ₂
PAS Station	-	36.4	7.6
PAS Passive	0.2	38.7	7.4







May 2004 - Calibration Reports

PAS - Crescent Heights Station

O₃, NO_x, NO, NO₂, THC

Calibration Summary



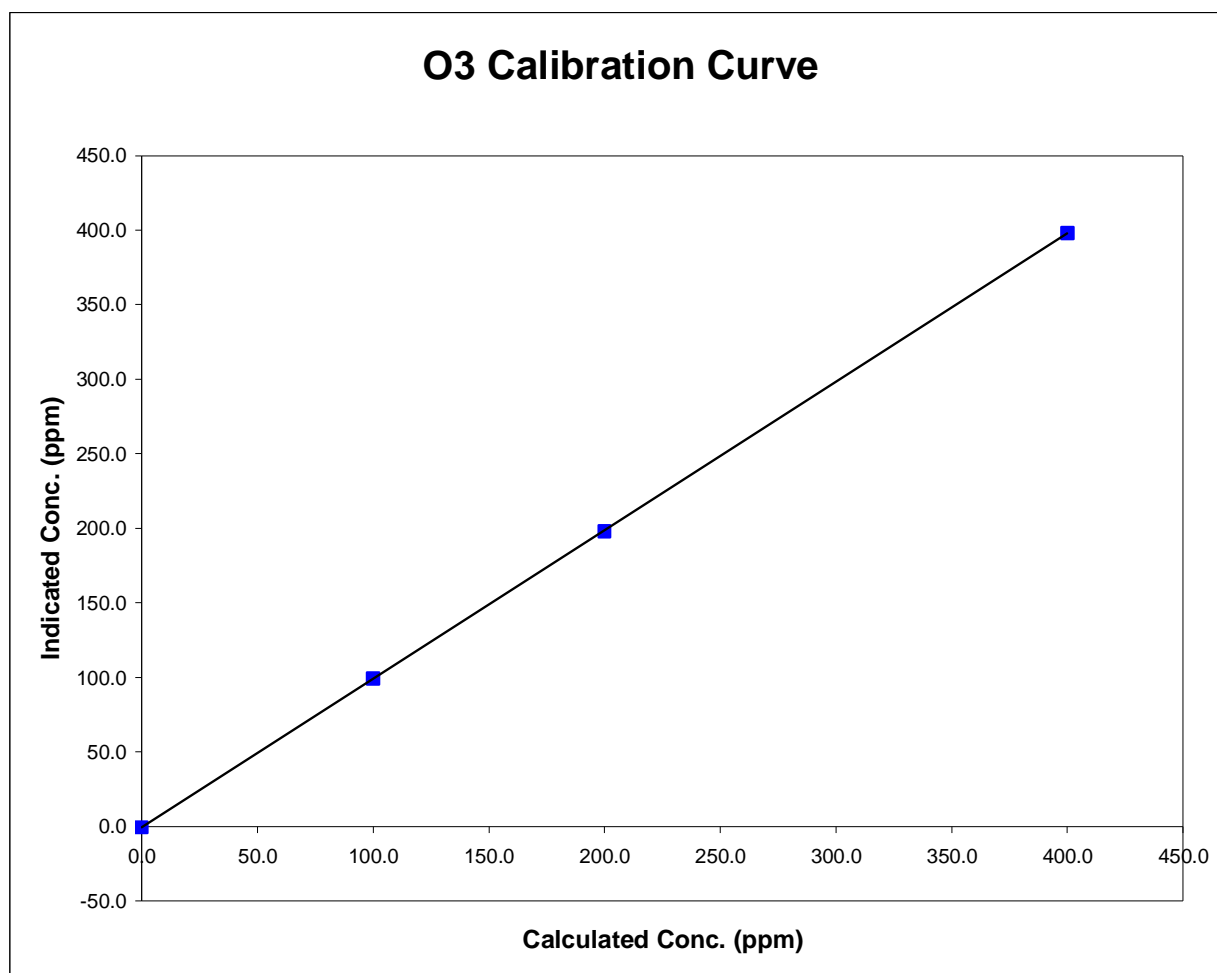
Parameter O3
 Air Monitoring Network Palliser Airshed

Station Information

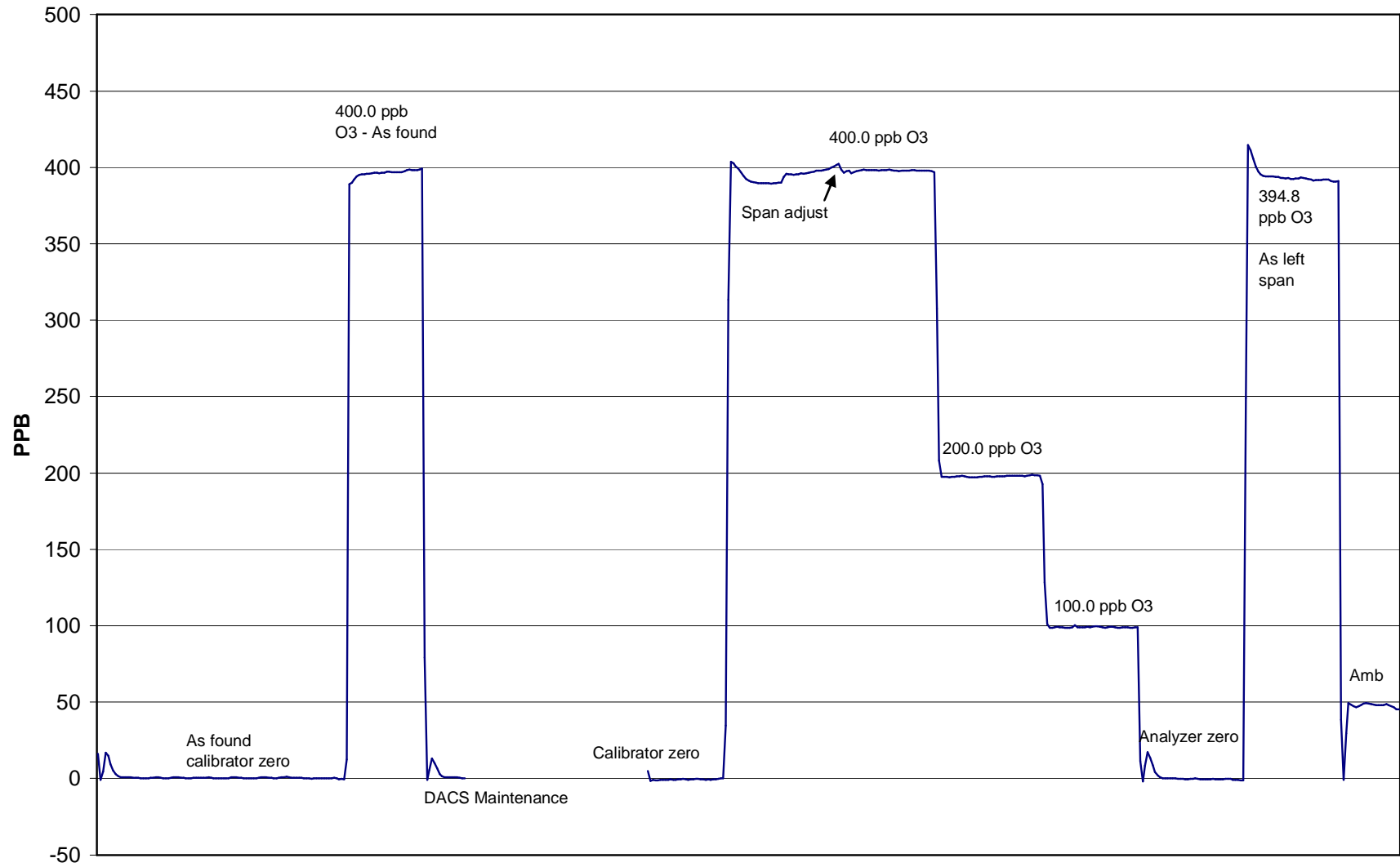
Calibration Date	May 13, 2003	Previous Calibration	April 27, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	9:14	End Time (MST)	19:35
Analyzer make/model	API Model 400E	Analyzer serial #	331

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
400.0	398.1	1.0048		
200.0	197.9	1.0106	Correlation Coefficient	0.999994
100.0	99.1	1.0089		
0.0	-0.7	N/A	Slope	1.003473
			Intercept	0.785202



O3 Calibration



May 13, 2004

Calibration Report

Parameter **NOx-NO-NO₂**
 Air Monitoring Network **Palliser Airshed**



Station Information

Calibration Date May 13, 2004 Previous Calibration April 26, 2004
 Station Number 1 Station Location Crescent Heights

Reason: Routine Installation Removal Other: _____

Start Time (MST) 9:12 End Time (MST) 15:38
 Barometric Pressure 0.919 mmHg Station Temperature 20.5 Deg C
 Calibrator Envionics 6100 Serial Number 3016
 NO Cal Gas Conc 49.8 ppm Cal Gas Expiry Date 12-Dec-05
 NOx Cal Gas Conc 49.9 ppm Cal Gas Serial # ALM011558

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45267

Parameter		NO ₂	NO _x	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.010573	1.002298	1.008464
	Data Offset	-3.364154	-2.825406	-2.221213
After	Data Slope	1.022093	1.010887	1.006476
	Data Offset	-1.901050	-2.487499	-1.519099
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	-2.1	mV	-2.1	mV
NO _x background	-0.7	mV	-0.7	mV
NO coefficient	1.310		1.313	
NO _x coefficient	1.289		1.305	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	7.0	Deg C	7.0	Deg C
Azero	29.2		27.0	
Perm Temp	40.3	Deg C	40.3	Deg C
Pressure	3.7	inches Hg	3.7	inches Hg
Sample Flow	450.0	ccm	458.0	ccm

Notes: As found captured before DACS system was replaced.
Analyzer was span adjusted. No other maintenance performed.

Calibration Report



Parameter **NO_x-NO-NO₂**
 Air Monitoring Network **Palliser Airshed**

Station Information

Calibration Date: **May 13, 2004** Station Location: **Crescent Heights**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	1.9	1.1	1.3	N/A	N/A
1	4993	39.98	396.4	395.6	0.8	394.2	394.2	1.1	1.0056	1.0035
2	4993	19.97	198.8	198.4	0.4	199.7	199.2	1.3	0.9954	0.9959
3	4993	9.97	99.4	99.2	0.2	101.2	100.3	1.1	0.9830	0.9895
AFZ	4993	0.00	0.0	0.0	0.0	2.9	1.8	2.0	0.0000	0.0000
AFS	4993	39.98	396.4	395.6	0.8	392.9	397.2	-2.7	1.0089	0.9960
								Average Correction Factor	0.9947	0.9963

As Found Concentrations NO_x= 387.2 NO= 393.1 As Found Percent Change NO_x= -2.3% NO= -0.6%

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.98 ccm

O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency	
0	398.2	391.3	6.9	394.0	390.3	1.3	N/A	N/A	N/A	N/A	
100	398.2	109.8	288.4	393.8	110.6	283.5	1.0113	0.9927	1.0173	98.3%	
200	398.2	204.9	193.3	395.9	205.1	191.5	1.0057	0.9991	1.0094	99.1%	
350	398.2	301.4	96.8	397.1	301.0	97.1	1.0027	1.0014	0.9969	100.3%	
							Average Correction Factor	1.0066	0.9977	1.0079	99.2%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	2.2	1.1	1.7	ppb	0.0	-1.0	0.4	ppb
Auto span	379.8	374.7	6.1	ppb	383.2	382.1	5.0	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter NO₂
 Air Monitoring Network Palliser Airshed

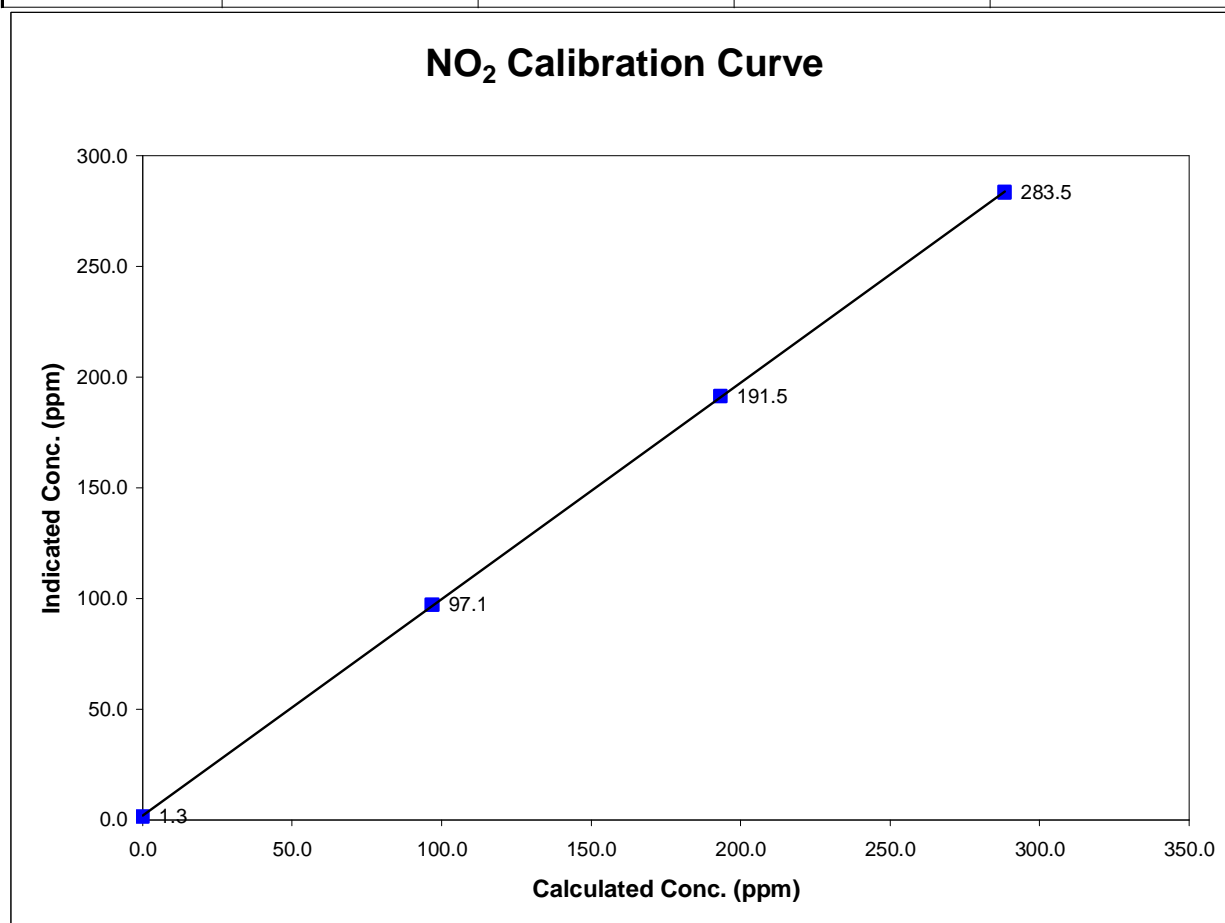
FOCUS INTEC
 Air Quality Monitoring

Station Information

Calibration Date	May 13, 2004	Previous Calibration	April 26, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	9:12	End Time (MST)	15:38
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	1.3	0.0000		
96.8	97.1	0.9969	Correlation Coefficient	0.999975
193.3	191.5	1.0094		
288.4	283.5	1.0173	Slope	1.022093
			Intercept	-1.901050



Calibration Summary



Parameter NO_x
 Air Monitoring Network Palliser Airshed

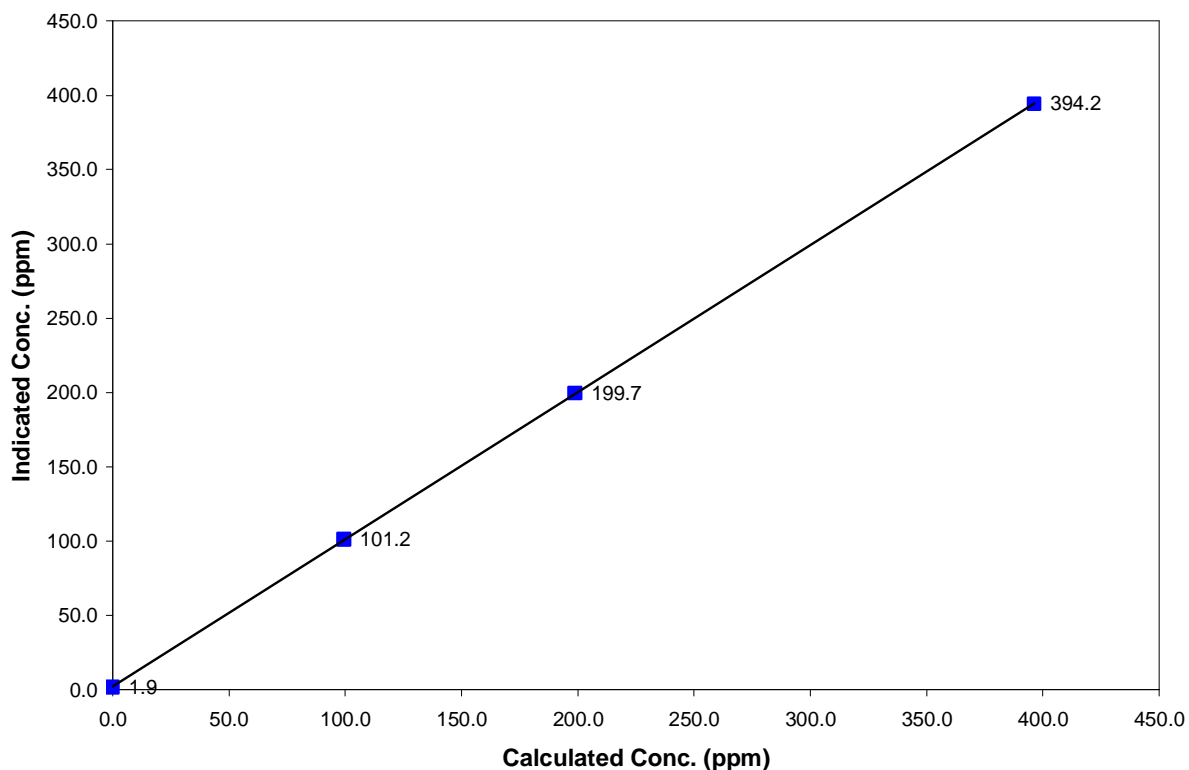
Station Information

Calibration Date	May 13, 2004	Previous Calibration	April 26, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	9:12	End Time (MST)	15:38
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	1.9	0.0000		
396.4	394.2	1.0056	Correlation Coefficient	0.999989
198.8	199.7	0.9954		
99.4	101.2	0.9830	Slope	1.010887
			Intercept	-2.487499

NO_x Calibration Curve



Calibration Summary

Parameter NO
 Air Monitoring Network Palliser Airshed

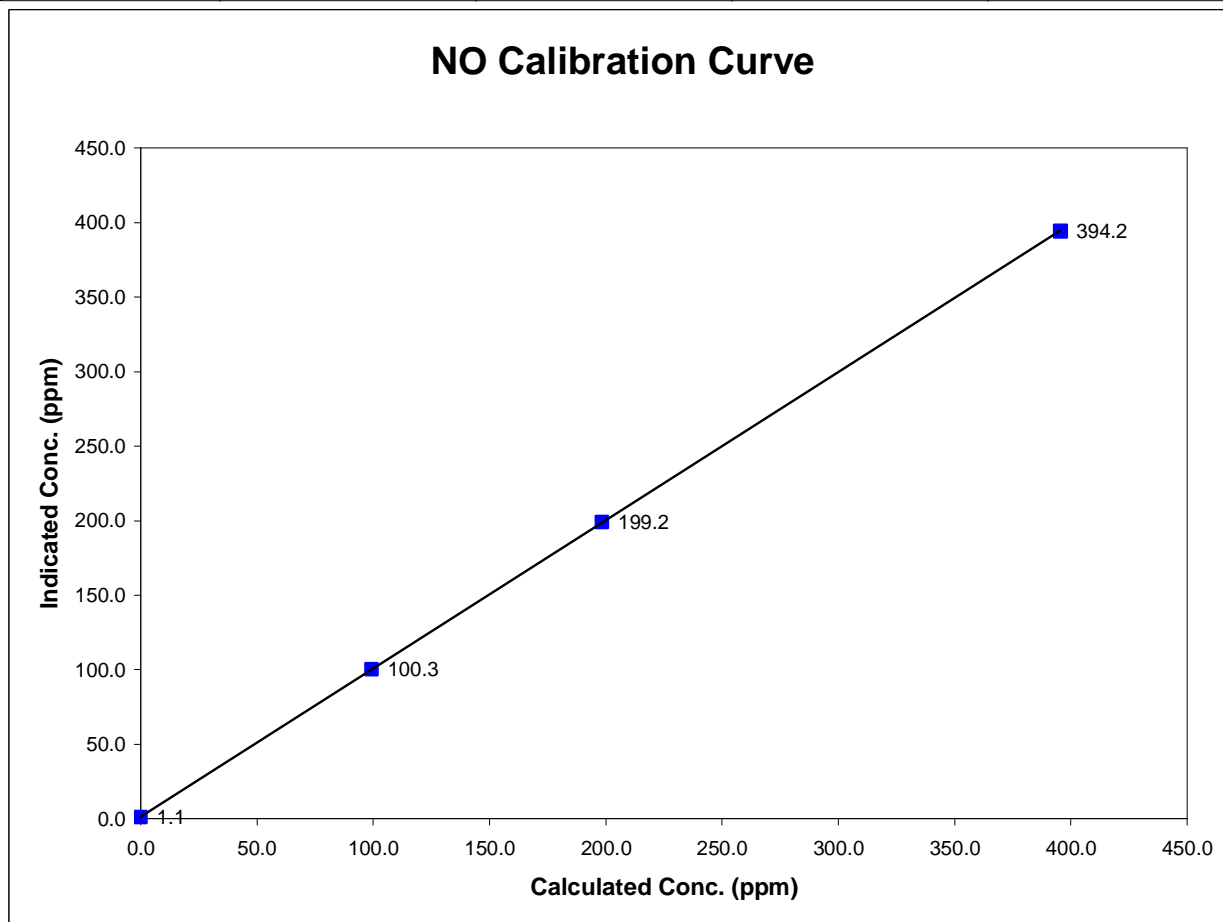


Station Information

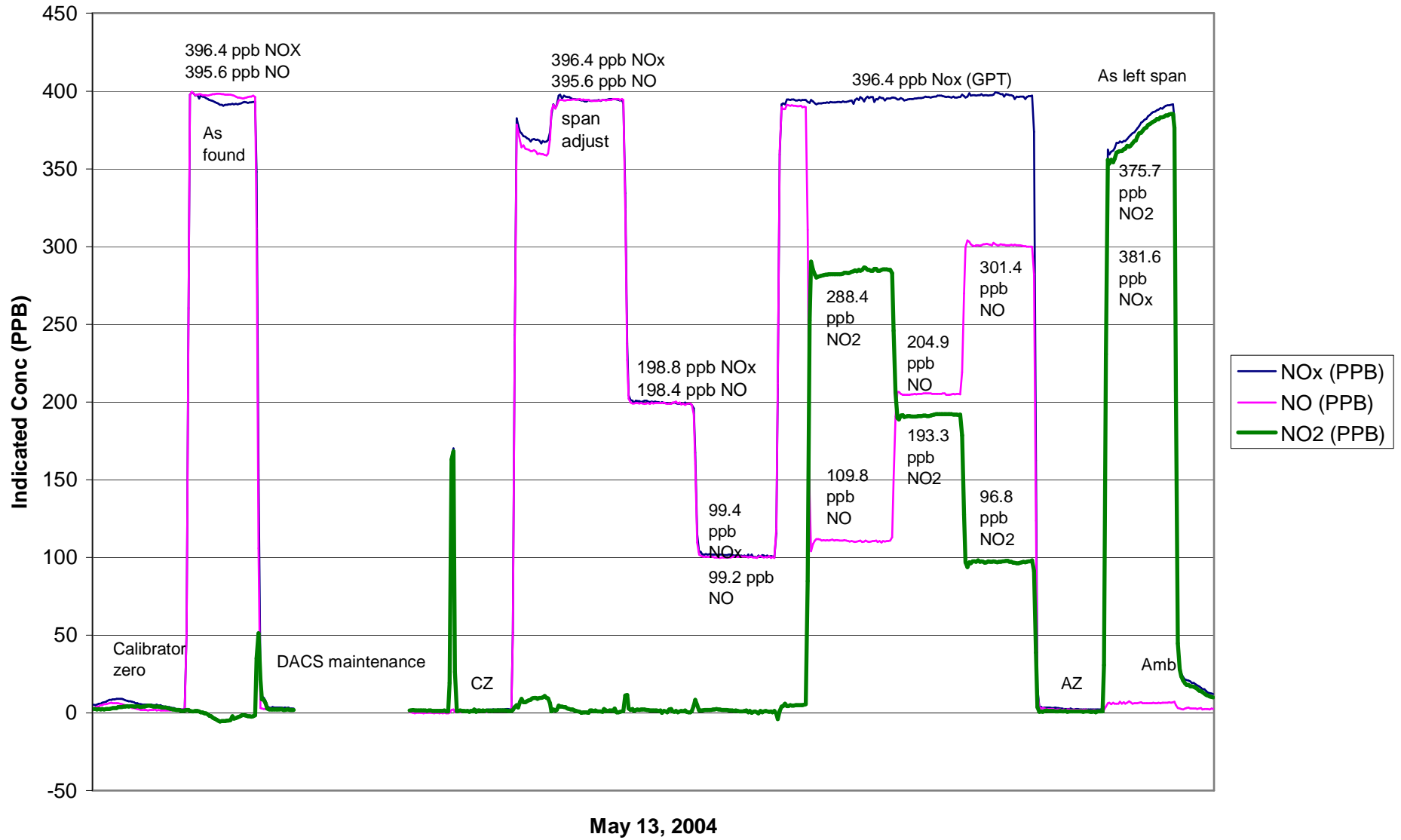
Calibration Date	May 13, 2004	Previous Calibration	April 26, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	9:12	End Time (MST)	15:38
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.1	N/A		
395.6	394.2	1.0035	Correlation Coefficient	0.999992
198.4	199.2	0.9959		
99.2	100.3	0.9895		
			Slope	1.006476
			Intercept	-1.519099



NOx Calibration



Calibration Report



Parameter THC
Air Monitoring Network Palliser Airshed

Station Information

Calibration Date	May 13, 2004	Previous Calibration	April 27, 2004
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)	9:12	End Time (MST)	17:55
Barometric Pressure	0.919 mb	Station Temperature	19.5 Deg C
Calibrator	Envionics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH ₄ / 301 ppm C ₃ H ₈	Cal Gas Expiry Date	8/28/2005
Cal Gas CH ₄ equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.999809	Calculated slope	1.003056
Calculated intercept	-0.014283	Calculated intercept	0.001259
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596

	before		after	
Concentration range	NA	ppm	0 - 50	ppm
THC sample pressure	5.77	PSI	5.85	PSI
THC flame temp	189.0	deg~C	190	deg~C

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)
2994	0.00	0.00	0.00	N/A
2994	39.97	20.13	20.08	1.0023
2994	19.97	10.12	10.04	1.0079
2994	9.98	5.08	5.09	0.9969
		0.00	-0.51	As Found Zero
		21.59	21.03	As Found Span
Average Correction Factor				1.0024

Calculated value of As Found Response: 21.519 ppm Percent Change of As Found: 0.3

	before calibration		after calibration	
Auto zero	0.14	ppm	0.06	ppm
Auto span	21.59	ppm	21.68	ppm

Notes: Analyzer AIC was captured for as found response change before DACS system was replaced.
All analyzer operations appear normal; zero and span adjustments were performed.

Calibration Performed By: Kelly Baragar

Calibration Summary



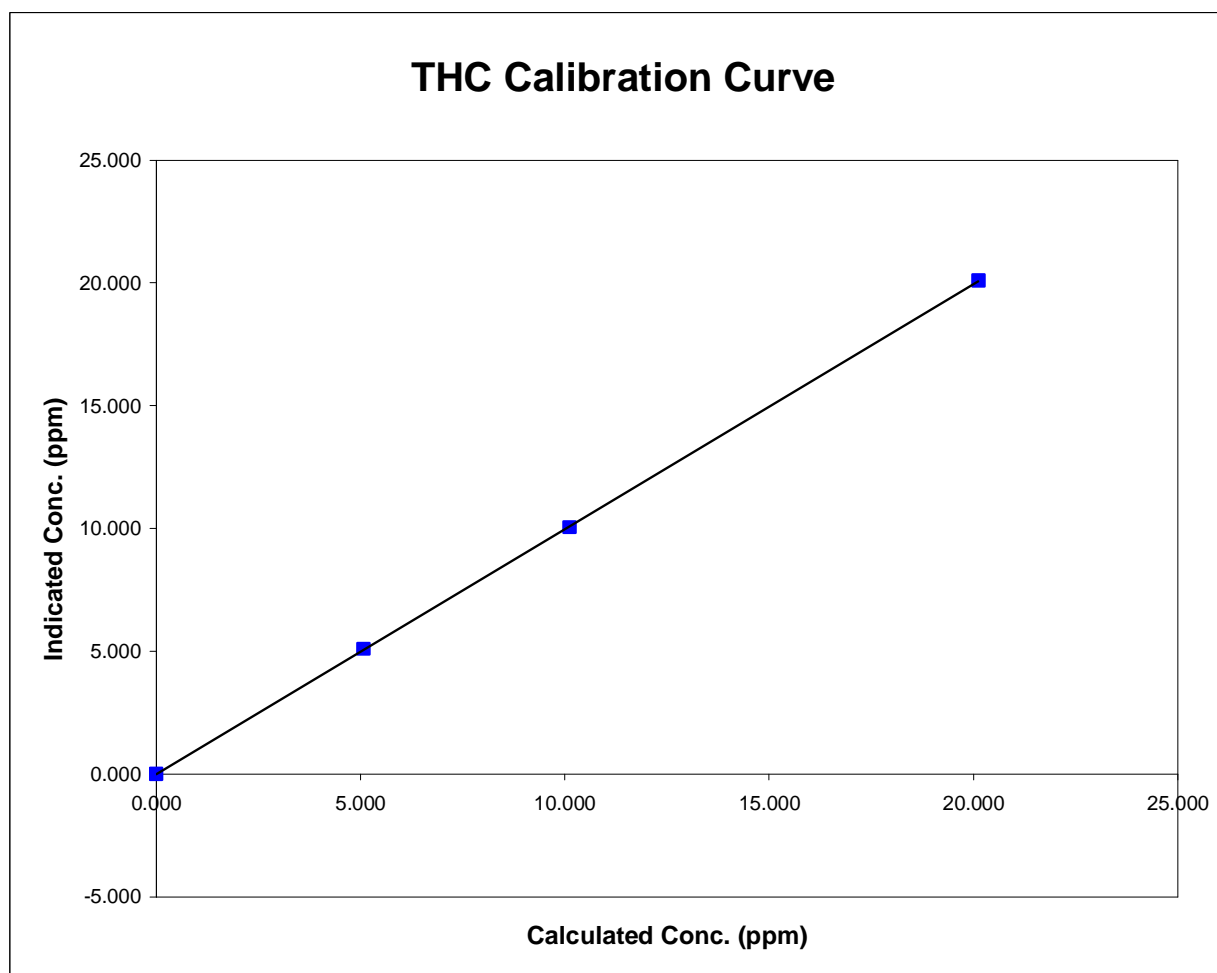
Parameter THC
 Air Monitoring Network Palliser Airshed

Station Information

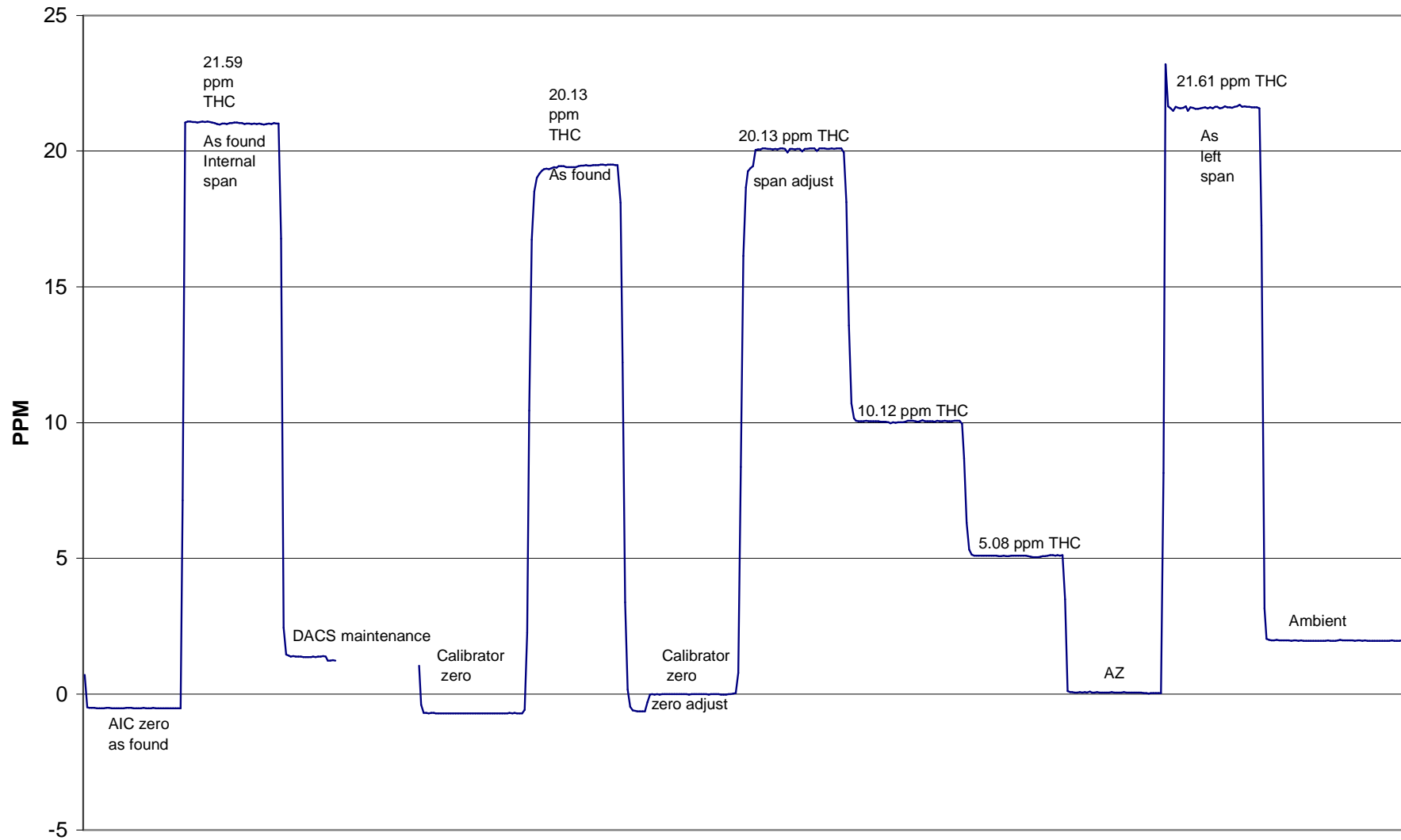
Calibration Date	May 13, 2004	Previous Calibration	April 27, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	9:12	End Time (MST)	17:55
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.002	N/A		
20.127	20.080	1.0023	Correlation Coefficient	0.999984
10.123	10.043	1.0079		
5.076	5.091	0.9969	Slope	1.003056
			Intercept	0.001259



THC Calibration



May 13, 2004