Palliser Airshed Society

Ambient Air Monitoring Network Summary

June 2004

Prepared By:

FOCUS
AIR QUALITY MONITORING

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Palliser Airshed Society

July 28, 2004

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 – June 2004

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

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

Continuous Monitoring – Crescent Heights

Included in this report are 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 June. There were no significant events leading to emergency response for the month of June.

The following is a summary of the monthly averages found during this month of sampling:

- Monthly average concentrations of NO_2 was 5.8 ppb
- Monthly average concentrations for O_3 was 30.5 ppb
- Monthly average concentrations for THC was 1.88 ppm
- Monthly average concentrations for $PM_{2.5}$ was 3.0 $\mu g/m^3$

Passive Monitoring – Six Stations throughout the PAS zone:

The sampler shelter(s) were found removed from the sampling station in Redcliff. As a result some of the samplers were not included in the final dataset. There was no exceedences of the Provincial Air Quality guidelines.

The following is a summary of the monthly averages found during this month of sampling:

- Monthly average concentrations for SO_2 passives ranged from 0.1 ppb to 0.2 ppb
- Monthly average concentrations for NO_2 passives ranged from 3.0 ppb to 7.4 ppb
- Monthly average concentrations for O_3 passives ranged from 33.9 ppb to 39.1 ppb

If you have any questions, please contact the Focus office at (780) 466-6555.

Gary Cross C.E.T.

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

June 2004 Monthly Overall Summary Report

Ambient Air Quality Data

Jun-2004	Palliser Airshed Society						Maximum Recorded Values						
							1-hr				24-hr		
Pollutant	**Guidelines**		**Station**	**Monthly**	**Exceedence**		Conc	Day	WSPD	WDIR	Conc	Day	**Operational**
(units)	1-hr	24-hr		**Average**	1-hr	24-hr			(km/hr)	(Sector)			**Time (%)**
NO (**ppb**)			Crescent Heights	2.0	0	0	33.3	Jun-21	5.1	ENE	6.2	Jun-19	100.0%
NO_2 (**ppb**)	212	106	Crescent Heights	5.8	0	0	35.8	Jun-03	3.7	NW	11.1	Jun-19	100.0%
NO_X (**ppb**)			Crescent Heights	7.7	0	0	57.9	Jun-21	5.1	ENE	17.1	Jun-19	100.0%
O_3 (**ppb**)	82		Crescent Heights	30.5	0	0	69.5	Jun-04	5.8	SSW	45.7	Jun-29	100.0%
THC (**ppm**)			Crescent Heights	1.88	0	0	2.92	Jun-24	4.9	E	2.00	Jun-04	100.0%
$PM_{2.5}$ (**µg/m^3**)		30 [a]	Crescent Heights	3.0	0	0	22.5	Jun-05	18.8	ENE	5.9	Jun-22	98.5%
RH (**%**)			Crescent Heights	58.6									100.0%
SR (**W/m^2**)			Crescent Heights	265.9									100.0%
Temp (**^{o}C**)			Crescent Heights	16.1									100.0%
WSPD v (km/hr)			Crescent Heights	1.6									100.0%
WSPD s (km/hr)			Crescent Heights	10.0									100.0%
WDIR (Deg)			Crescent Heights	SSE*									100.0%

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

No unusual activities were noted during station operation for the month of June.

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	No operational problems observed

PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO_2)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	36	ppb	03-Jun	22:00 23:00
Maximum 24-hr Average:	11	ppb	19-Jun	

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

AIC Time:	31 hrs	Operational Time:	684 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	25	17	8	4	2	0	0	5.8 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	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-Jun-04	19	20	15	10	15	16	18	13	A	6	2	0	0	0	0	1	2	1	5	4	9	7	5	3	7.4	19.7
2-Jun-04	2	0	0	3	5	11	7	A	4	3	0	0	0	2	2	2	4	2	3	4	13	12	16	16	4.8	16.1
3-Jun-04	30	14	5	4	8	19	A	7	3	1	0	0	0	0	0	0	3	2	3	2	15	33	36	23	9.1	35.8
4-Jun-04	22	21	17	13	11	A	14	13	18	12	13	3	1	5	3	1	1	0	1	3	6	10	7	11	9.0	21.8
5-Jun-04	9	4	5	4	A	10	5	2	1	1	1	1	1	2	4	3	4	3	8	9	8	6	10	11	4.9	10.7
6-Jun-04	2	3	3	A	7	5	4	4	3	5	3	1	1	2	1	2	1	5	1	2	13	17	1	1	3.8	16.8
7-Jun-04	3	3	A	5	3	4	4	3	1	0	0	1	3	2	0	0	0	0	0	0	3	6	9	9	2.6	8.9
8-Jun-04	8	A	18	12	12	12	7	9	2	0	0	0	0	C	C	C	C	C	0	0	0	6	8	7	5.6	18.0
9-Jun-04	17	A	14	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	4	1	2.4	17.4
10-Jun-04	A	5	2	3	3	6	8	5	3	2	6	4	6	5	4	4	3	2	3	4	4	3	2	A	4.0	8.0
11-Jun-04	5	4	5	4	5	10	7	5	3	3	3	3	2	4	2	3	3	6	2	3	2	2	A	7	3.9	9.7
12-Jun-04	2	2	2	3	6	4	4	1	1	1	4	3	2	1	1	2	2	1	0	1	3	A	22	26	4.2	26.3
13-Jun-04	25	20	14	12	9	10	3	2	2	1	6	5	3	2	3	2	3	2	2	2	A	5	5	3	6.1	24.5
14-Jun-04	9	10	6	3	4	4	11	10	7	3	3	4	4	4	7	4	8	4	2	A	8	4	1	4	5.5	11.4
15-Jun-04	2	3	5	12	3	3	6	8	8	5	3	3	3	1	1	1	3	5	A	7	11	7	12	12	5.4	12.4
16-Jun-04	9	9	6	5	13	13	8	8	4	6	5	5	4	2	1	2	7	A	4	3	3	2	6	5	5.6	13.0
17-Jun-04	5	4	6	6	8	3	3	4	3	3	1	1	1	1	1	1	A	4	2	2	5	8	18	18	4.7	18.3
18-Jun-04	17	14	21	19	16	13	11	12	13	1	1	1	1	1	1	A	3	2	1	2	4	5	7	7	7.5	21.4
19-Jun-04	11	20	22	18	18	17	17	11	4	2	1	2	2	1	A	5	3	6	6	5	11	35	27	12	11.1	34.9
20-Jun-04	6	4	4	10	10	4	3	3	4	3	1	1	1	A	4	2	3	3	2	3	5	5	11	12	4.4	11.7
21-Jun-04	8	10	11	12	12	12	8	8	6	4	1	1	A	5	3	3	4	5	3	6	13	25	5	5	7.4	24.7
22-Jun-04	4	5	2	4	5	8	6	6	4	3	3	A	6	3	3	3	4	3	3	4	7	14	11	8	5.2	14.0
23-Jun-04	14	16	15	14	13	13	9	5	3	1	A	5	2	3	2	3	6	3	2	5	7	16	7	11	7.6	16.1
24-Jun-04	9	13	8	13	11	9	13	8	4	A	7	4	2	1	1	1	0	1	0	2	7	18	18	18	7.5	18.5
25-Jun-04	17	14	15	13	17	13	9	13	A	17	15	10	4	2	1	0	0	0	0	1	1	3	6	6	7.7	17.0
26-Jun-04	6	6	7	9	12	17	18	A	11	6	1	0	1	0	0	0	0	1	0	0	2	5	8	11	5.2	17.6
27-Jun-04	9	14	11	9	12	9	A	4	1	0	0	0	0	0	0	0	1	0	0	3	4	7	7	5	4.2	13.5
28-Jun-04	7	3	1	5	8	A	11	7	4	2	0	0	0	1	1	0	3	1	3	1	1	6	16	11	4.0	16.2
29-Jun-04	4	1	4	8	A	17	10	8	6	7	11	3	5	3	2	2	1	1	0	1	2	1	2	3	4.6	16.6
30-Jun-04	8	7	7	A	10	11	15	12	7	6	9	8	4	2	1	4	7	6	9	3	16	18	14	14	8.6	17.6
																									N	0.0
Hourly Avg	10.0	8.9	8.7	8.5	9.2	9.8	8.6	6.8	4.7	3.5	3.5	2.4	2.1	2.0	1.9	1.8	2.9	2.5	2.3	2.9	6.4	10.1	10.4	9.6		
Hourly Max	29.6	21.5	22.2	18.9	17.8	19.2	18.0	13.3	17.9	16.9	14.8	9.7	6.3	5.2	7.3	4.9	7.8	6.1	9.0	8.9	15.7	34.9	35.8	26.3		

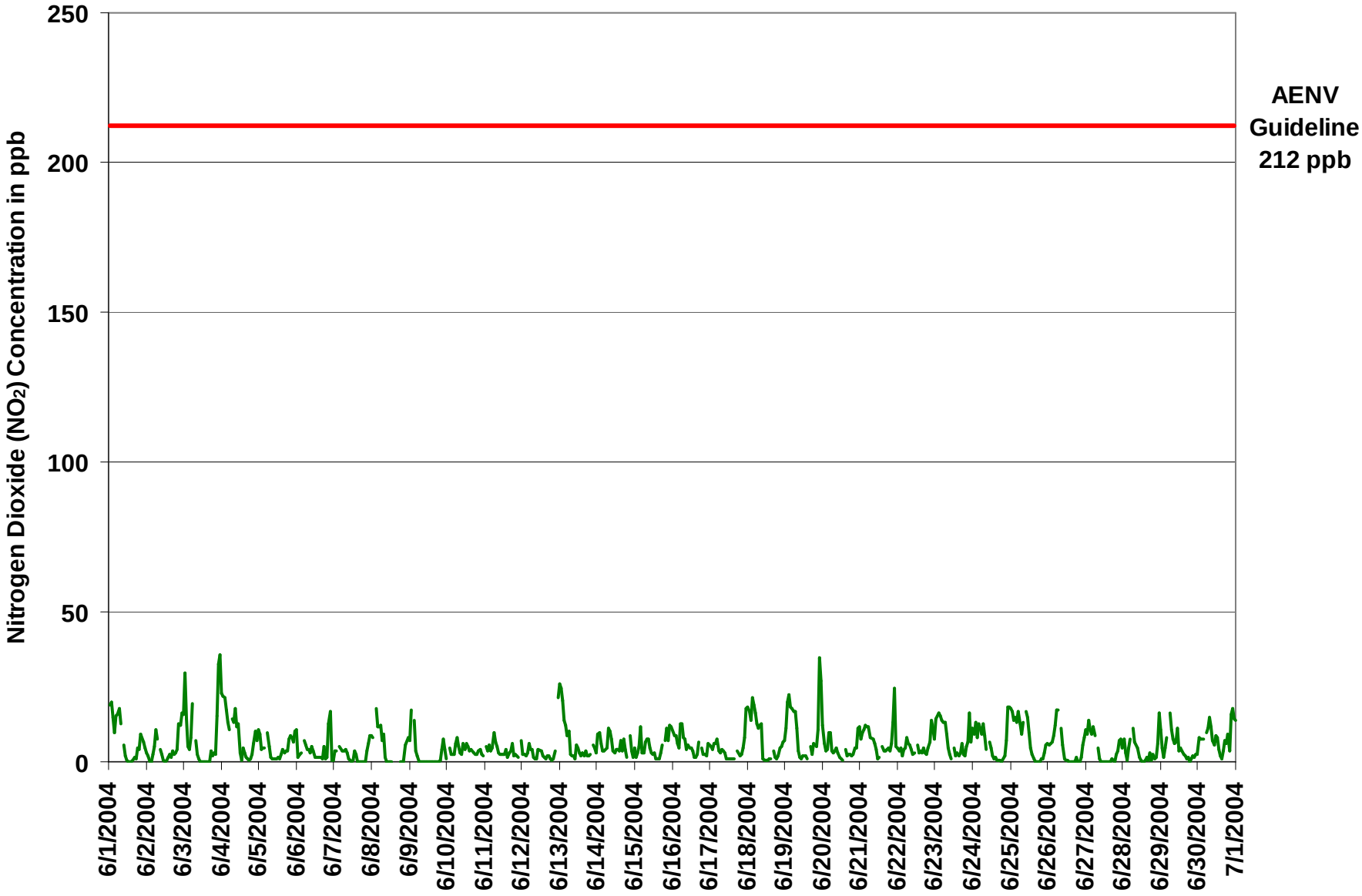


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO_2)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Maximum 1-hr Value:	77.1	ppb	01-Jun	2:00 3:00
Maximum 24-hr Value:	20.2	ppb	19-Jun	

AIC Time:	31 hrs	Operational Time:	684 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	45	32	16	9	4	1	0	11.5 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-Jun-04	36	26	77	12	29	21	25	17	A	12	3	1	0	1	2	2	17	3	29	7	13	9	7	6	15.3	77.1
2-Jun-04	5	0	1	35	8	46	19	A	8	27	6	1	3	5	8	4	22	8	11	7	34	32	40	32	15.7	45.8
3-Jun-04	37	20	14	6	27	33	A	13	4	1	1	0	1	1	0	0	10	12	12	9	29	54	42	39	15.9	54.1
4-Jun-04	26	26	32	19	13	A	18	17	22	21	19	7	2	26	11	4	3	2	2	6	12	28	13	18	15.1	32.1
5-Jun-04	14	7	17	8	A	16	10	3	2	2	3	3	2	5	16	6	20	9	22	12	14	8	16	19	10.2	22.2
6-Jun-04	4	5	7	A	12	22	21	25	5	22	7	4	24	35	26	3	2	23	2	3	20	35	5	16	14.2	35.5
7-Jun-04	15	10	A	9	6	7	7	5	2	1	1	2	11	12	2	0	0	0	0	1	12	17	13	14	6.5	17.5
8-Jun-04	13	A	45	14	16	16	13	25	5	1	0	0	7	C	C	C	C	C	2	0	4	11	12	17	11.1	44.7
9-Jun-04	21	A	19	10	4	2	1	1	0	0	0	2	2	1	0	0	1	1	0	1	10	19	8	2	4.5	20.7
10-Jun-04	A	7	3	5	4	12	11	10	5	7	9	8	17	15	5	7	6	4	4	6	6	4	3	A	7.2	16.6
11-Jun-04	8	5	10	4	13	12	9	16	4	4	4	4	3	9	4	10	9	10	3	4	3	3	A	12	7.0	15.8
12-Jun-04	4	5	3	7	16	6	7	3	4	2	9	8	5	6	1	4	6	4	2	2	6	A	33	30	7.5	33.2
13-Jun-04	27	23	21	20	12	19	5	4	4	3	15	7	6	6	5	18	5	3	6	4	A	8	8	4	10.1	27.2
14-Jun-04	48	18	14	8	14	8	22	14	14	6	4	7	6	17	33	8	10	10	3	A	18	7	3	14	13.3	47.6
15-Jun-04	3	12	18	22	12	9	9	10	14	7	4	5	22	2	2	2	9	9	A	10	22	15	24	15	11.3	23.5
16-Jun-04	11	27	18	6	50	17	16	20	7	10	11	9	9	4	3	7	10	A	8	4	5	5	9	8	11.9	50.1
17-Jun-04	7	5	8	8	9	8	5	16	8	9	2	2	1	3	7	2	A	7	3	3	8	19	24	23	8.2	23.9
18-Jun-04	23	18	23	23	21	14	15	16	16	4	2	1	2	2	3	A	6	2	2	3	7	12	11	12	10.4	23.3
19-Jun-04	13	23	36	31	21	22	24	34	33	5	3	17	7	7	A	9	5	22	11	12	16	48	40	26	20.2	47.5
20-Jun-04	23	4	12	29	32	6	4	9	8	5	3	1	1	A	8	3	6	7	5	4	13	8	28	29	10.8	31.7
21-Jun-04	9	15	25	27	32	15	11	10	10	8	2	3	A	8	5	6	6	9	6	8	21	50	27	12	14.1	50.4
22-Jun-04	7	14	4	8	10	10	10	9	9	5	5	A	11	4	5	9	13	7	5	9	15	20	35	10	10.2	35.5
23-Jun-04	22	18	18	15	15	23	12	6	5	2	A	8	3	6	5	5	10	4	4	8	10	27	11	17	11.0	26.7
24-Jun-04	33	43	11	34	13	23	32	12	8	A	12	7	5	4	5	3	3	3	1	10	14	40	28	25	15.9	42.6
25-Jun-04	25	22	21	30	22	17	14	19	A	26	17	16	7	5	3	1	0	2	1	4	2	8	16	12	12.6	30.3
26-Jun-04	8	12	13	12	15	24	22	A	14	7	4	2	4	0	0	0	0	18	2	1	3	12	10	16	8.7	24.1
27-Jun-04	16	18	13	12	14	11	A	10	3	1	2	1	35	1	1	0	20	14	1	5	6	10	12	7	9.2	34.8
28-Jun-04	13	4	2	8	9	A	20	17	6	21	3	1	2	2	21	12	23	2	8	2	9	11	29	31	11.1	31.3
29-Jun-04	9	2	7	22	A	20	15	10	8	9	16	5	23	17	3	4	3	3	1	2	3	3	3	4	8.3	22.8
30-Jun-04	12	13	18	A	17	27	29	25	11	9	13	14	6	5	2	8	14	24	27	7	31	23	28	20	16.7	31.4
																									N	0.0
Hourly Avg	16.9	14.4	17.6	15.9	16.5	16.6	14.6	13.4	8.5	8.1	6.2	5.0	7.8	7.5	6.7	4.9	8.6	7.9	6.3	5.4	12.6	18.9	18.6	16.9		
Hourly Max	47.6	42.6	77.1	35.0	50.1	45.8	32.2	33.6	32.8	26.8	18.6	16.5	34.8	35.5	32.7	18.2	23.0	24.5	29.0	12.3	34.0	54.1	42.1	39.4		

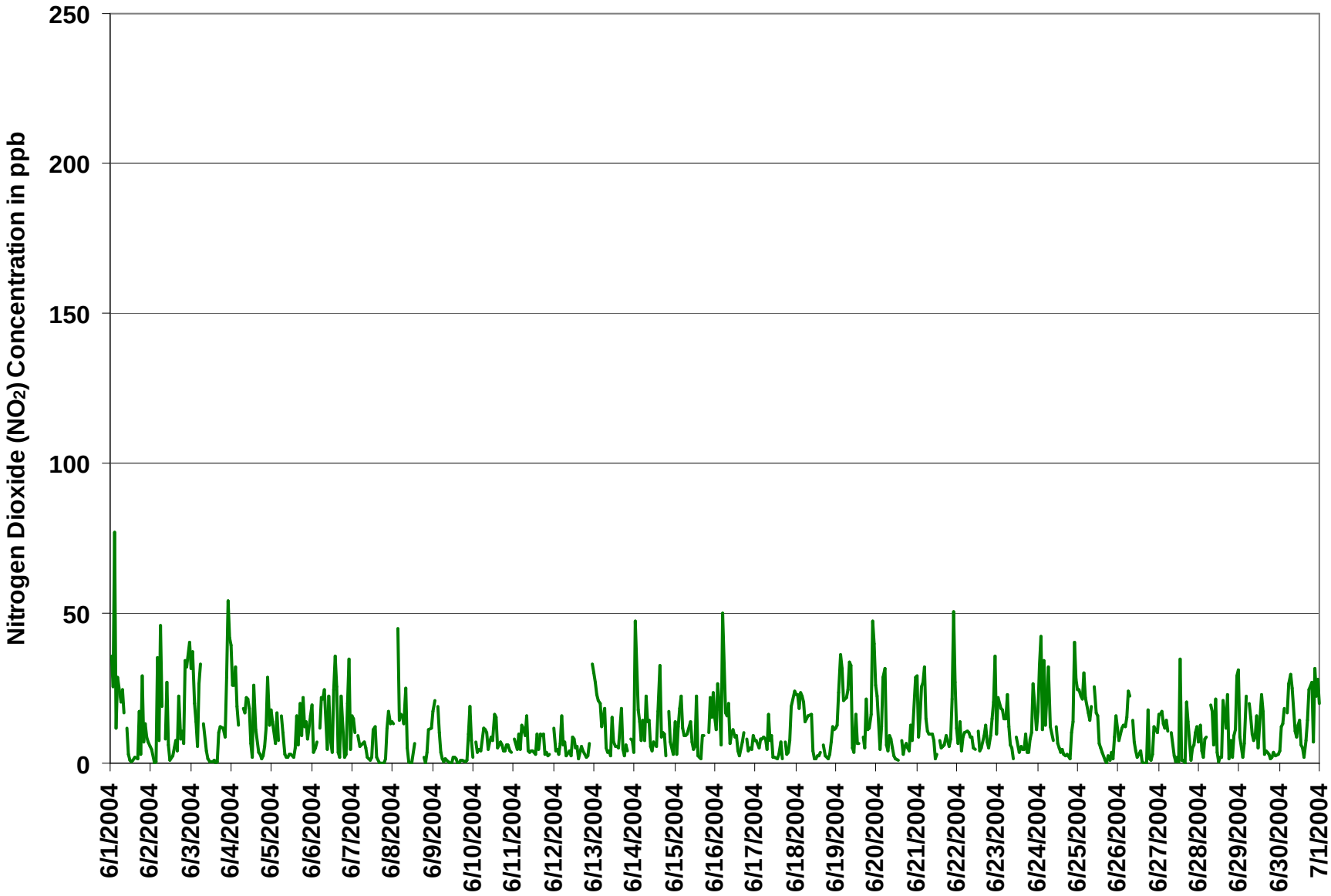
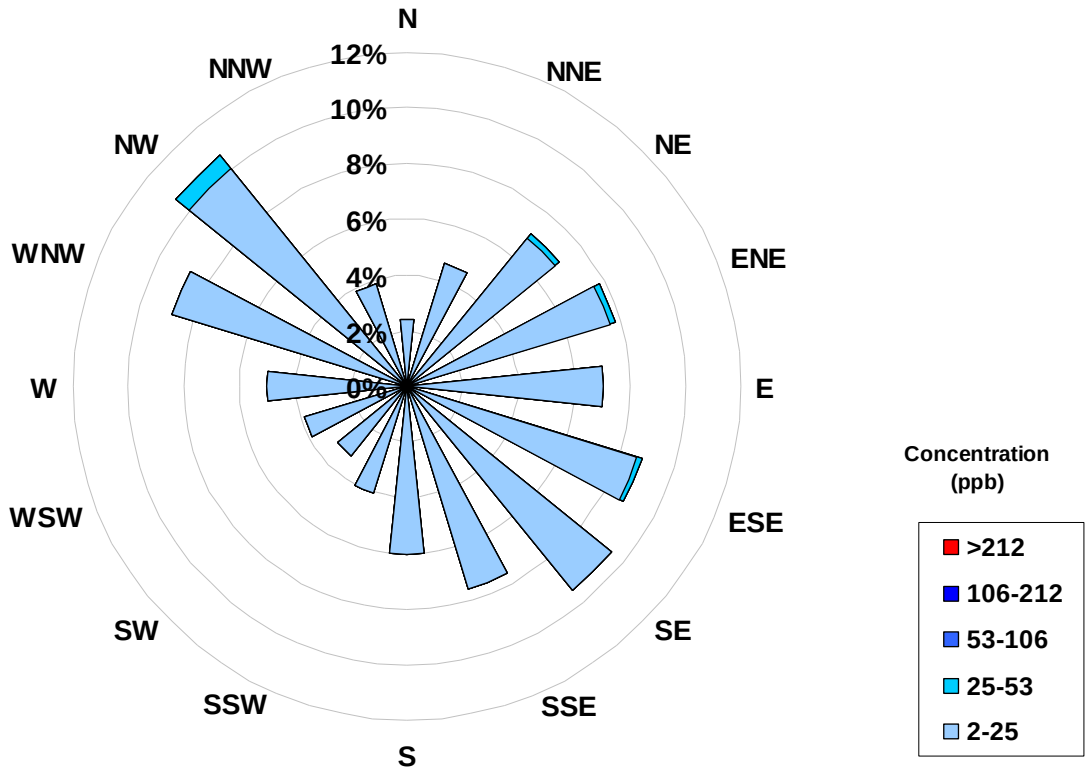


Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend

Concentration Rose for the 1-hr NO_2 Average Concentration Occurrences at the Crescent Heights Site for June 2004



Frequency Distribution of NO_2 in ppb			
Range			Frequency (hrs)
0	<	2	184
2	to	25	494
25	to	53	6
53	to	106	0
106	to	212	0
	>	212	0
Total Non-Zero Values			684

Calms	
Range	
ppb	
2-25	0.0%
25-53	0.0%
53-106	0.0%
106-212	0.0%
>212	0.0%

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	33	ppb	21-Jun	21:00 22:00
Maximum 24-hr Average:	6	ppb	19-Jun	

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

AIC Time:	31 hrs			Operational Time:			684 hrs	
Calibration Time:	5 hrs			AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	Average
	21	10	2	1	0	0	0	2.0 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / 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-Jun-04	10	7	14	0	11	13	29	16	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.3	29.0
2-Jun-04	0	0	0	1	0	9	3	A	0	1	0	0	0	0	1	0	1	0	0	0	2	1	3	0	1.0	8.6
3-Jun-04	1	0	0	0	1	11	A	2	0	0	0	0	0	0	0	0	1	0	0	0	0	3	3	1	1.0	11.1
4-Jun-04	4	3	7	1	2	A	12	13	12	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9	12.8
5-Jun-04	0	0	0	0	A	1	1	0	0	0	1	1	0	1	2	1	1	1	1	0	0	0	0	1	0.6	1.9
6-Jun-04	0	0	0	A	0	1	1	1	0	2	2	1	1	2	2	1	0	1	0	0	2	4	0	0	1.0	3.9
7-Jun-04	1	0	A	0	0	1	1	2	0	0	1	1	3	4	1	1	1	1	0	1	1	2	1	1	1.0	3.6
8-Jun-04	0	A	9	2	5	23	16	22	3	0	0	0	1	C	C	C	C	C	0	0	0	0	0	1	4.5	22.9
9-Jun-04	10	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	9.7
10-Jun-04	A	0	0	0	0	0	1	2	1	1	3	2	4	3	1	1	1	1	1	1	1	1	1	A	1.2	3.8
11-Jun-04	0	0	1	0	1	3	3	2	1	1	2	2	1	2	1	1	1	1	1	1	1	0	A	1	1.2	2.9
12-Jun-04	0	0	0	0	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	5	17	1.8	17.0
13-Jun-04	23	11	5	3	1	12	0	1	1	1	4	3	2	1	1	1	1	1	0	0	A	0	0	0	3.3	23.3
14-Jun-04	3	1	1	0	2	2	12	9	6	2	2	3	1	2	3	1	3	2	0	A	1	0	0	0	2.4	11.8
15-Jun-04	0	0	1	1	0	0	2	2	3	3	2	2	2	1	1	1	2	2	A	1	2	1	2	0	1.4	3.3
16-Jun-04	0	2	1	1	10	8	7	6	3	3	2	3	2	1	1	1	2	A	1	0	1	0	1	0	2.4	10.1
17-Jun-04	0	0	1	1	1	1	2	3	2	1	1	0	0	0	0	0	A	0	0	0	0	0	1	2	0.8	2.7
18-Jun-04	2	1	16	4	2	7	10	11	11	1	0	0	0	1	1	A	0	0	0	0	1	0	0	0	3.0	16.1
19-Jun-04	0	10	21	6	18	19	20	12	2	1	0	1	1	0	A	1	0	2	1	0	1	15	3	6	6.2	21.4
20-Jun-04	4	0	0	6	5	1	1	2	3	2	1	0	0	A	1	0	1	1	0	1	0	0	0	0	1.3	6.5
21-Jun-04	0	0	1	2	3	3	3	4	4	2	1	1	A	1	1	1	1	1	1	1	0	33	0	0	2.8	33.3
22-Jun-04	0	0	0	0	0	1	2	2	1	1	1	A	1	1	1	1	1	1	1	0	0	1	2	1	0.8	2.0
23-Jun-04	3	7	17	5	10	20	9	3	1	0	A	0	0	1	0	1	1	0	0	0	0	1	0	0	3.6	20.0
24-Jun-04	5	5	1	12	3	6	28	8	3	A	1	1	0	0	0	0	0	0	0	0	0	4	1	1	3.4	27.6
25-Jun-04	7	3	6	5	8	8	7	8	A	12	6	5	1	0	0	0	0	0	0	0	0	0	0	0	3.3	12.3
26-Jun-04	0	0	0	0	0	18	21	A	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	21.1
27-Jun-04	0	0	0	0	2	4	A	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0.4	3.8
28-Jun-04	0	0	0	0	1	A	4	4	2	1	1	0	1	1	2	1	2	1	1	0	0	1	2	3	1.2	4.4
29-Jun-04	0	0	0	4	A	5	5	4	3	3	5	1	2	2	1	1	0	0	0	0	0	0	0	0	1.6	5.1
30-Jun-04	0	0	0	A	0	1	2	3	1	1	1	2	1	1	0	0	1	1	3	0	1	1	3	1	1.0	2.8
																									N	0.0
Hourly Avg	2.6	1.9	3.6	2.0	3.0	6.3	7.3	5.0	2.5	1.8	1.5	1.1	0.9	0.9	0.7	0.5	0.8	0.7	0.4	0.3	0.6	2.3	1.0	1.3		
Hourly Max	23.3	10.7	21.4	12.2	18.0	22.9	29.0	21.6	11.7	12.3	6.1	4.8	3.8	3.6	3.1	1.3	2.6	2.2	2.7	1.1	2.5	33.3	5.0	17.0		

Station: Crescent Heights

Station Owner: PAS

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

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

Summary

Maximum 1-hr Value:	245.7	ppb	01-Jun	2:00 3:00
Maximum 24-hr Value:	27.5	ppb	24-Jun	

AIC Time:	31 hrs	Operational Time:	684 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	124	42	7	2	1	0	0	9.9 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 / 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-Jun-04	71	61	246	0	52	23	59	39	A	3	0	0	0	0	0	0	8	0	16	0	0	0	0	0	25.1	245.7
2-Jun-04	0	0	1	60	0	126	17	A	1	35	8	0	2	2	3	1	13	2	2	0	31	17	29	1	15.2	125.7
3-Jun-04	3	2	0	0	13	37	A	4	1	0	0	0	0	0	0	0	9	3	2	0	4	29	10	12	5.8	37.3
4-Jun-04	11	9	127	10	7	A	18	22	16	14	11	2	0	6	2	0	0	0	0	1	1	1	1	1	11.3	127.2
5-Jun-04	1	1	1	1	A	3	2	1	1	1	1	1	1	2	32	2	7	3	3	1	1	1	1	3	3.1	32.2
6-Jun-04	1	1	1	A	1	21	58	29	1	18	3	3	25	60	37	1	1	8	1	1	4	42	1	21	14.7	60.4
7-Jun-04	21	3	A	0	0	1	6	4	1	1	1	1	6	19	3	1	1	1	1	1	17	9	2	2	4.5	20.9
8-Jun-04	1	A	81	7	32	41	35	108	5	2	0	0	9	C	C	C	C	C	0	0	0	0	0	11	18.4	108.3
9-Jun-04	22	A	1	0	0	0	1	1	1	1	0	1	1	1	0	0	1	1	1	0	1	1	1	1	1.6	21.7
10-Jun-04	A	1	0	1	1	1	3	4	2	3	6	5	12	9	2	3	2	1	1	3	1	1	1	A	2.9	11.6
11-Jun-04	1	1	1	1	3	5	4	19	2	2	6	4	2	5	2	2	3	2	1	1	1	1	A	3	3.1	18.9
12-Jun-04	1	1	1	1	4	1	1	1	1	2	5	4	3	4	1	2	3	3	2	1	2	A	33	36	5.0	35.9
13-Jun-04	39	26	26	27	4	48	1	1	2	2	20	5	3	3	3	19	2	1	2	1	A	1	1	1	10.3	48.3
14-Jun-04	78	19	5	1	50	7	27	12	13	4	3	5	3	15	29	7	4	4	1	A	1	1	1	1	12.6	78.1
15-Jun-04	0	1	4	3	1	3	3	3	6	5	4	5	14	3	2	1	5	5	A	1	6	2	37	1	5.0	36.6
16-Jun-04	1	27	5	2	203	42	17	32	5	6	7	5	6	5	1	2	5	A	2	2	5	2	2	1	16.7	202.9
17-Jun-04	1	3	2	2	3	2	3	15	4	9	1	1	1	2	3	1	A	1	1	1	1	2	4	5	2.9	15.3
18-Jun-04	7	3	25	14	4	13	19	15	16	2	1	1	1	2	1	A	1	1	1	1	2	1	1	1	5.7	24.6
19-Jun-04	1	18	63	22	33	39	38	117	40	3	1	16	4	4	A	2	2	14	2	1	1	40	15	55	23.1	116.6
20-Jun-04	107	0	15	73	125	4	2	5	5	3	1	1	1	A	1	1	2	3	1	1	1	1	1	1	15.6	124.9
21-Jun-04	1	1	7	28	23	6	12	6	8	5	2	2	A	3	1	2	2	3	2	2	1	239	9	4	15.9	238.8
22-Jun-04	0	1	1	1	1	3	4	3	3	2	2	A	2	3	2	3	4	3	1	1	10	2	44	2	4.3	43.5
23-Jun-04	14	15	36	10	17	63	17	4	3	1	A	1	1	2	2	1	2	1	1	1	2	3	1	1	8.6	62.7
24-Jun-04	76	63	7	124	7	76	189	12	6	A	4	2	2	1	1	1	0	1	0	0	0	45	11	7	27.5	188.7
25-Jun-04	29	20	17	35	33	15	15	13	A	18	14	9	2	1	0	0	0	0	0	0	0	0	0	6	9.9	35.3
26-Jun-04	0	1	0	0	2	30	40	A	9	5	3	0	1	0	0	0	0	8	0	0	0	0	0	0	4.3	40.4
27-Jun-04	1	2	2	0	4	7	A	2	0	0	1	1	62	1	1	0	18	5	1	1	1	1	1	0	4.8	62.0
28-Jun-04	1	0	1	1	1	A	7	15	3	13	3	1	2	1	43	24	31	1	1	1	2	2	5	30	8.4	43.3
29-Jun-04	1	1	1	27	A	8	8	5	4	4	8	2	16	12	1	1	1	1	1	1	1	1	1	1	4.6	27.4
30-Jun-04	1	8	1	A	1	8	17	12	2	1	3	4	1	2	1	1	2	20	39	1	3	2	53	4	8.1	53.3
																									N	0.0
Hourly Avg	16.9	10.2	23.4	16.1	22.3	22.6	22.3	18.1	5.7	5.7	4.1	2.8	6.3	6.0	6.3	2.8	4.5	3.4	2.9	0.9	3.5	15.4	9.0	7.2		
Hourly Max	107.5	62.5	245.7	123.7	202.9	125.7	188.7	116.6	40.1	34.9	19.9	16.2	62.0	60.4	43.3	24.2	31.0	19.9	39.4	2.5	31.3	238.8	53.3	55.0		

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	58	ppb	21-Jun	21:00 22:00
Maximum 24-hr Average:	17	ppb	19-Jun	

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

AIC Time:	31 hrs			Operational Time:			684 hrs	
Calibration Time:	5 hrs			AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	Average
	39	26	10	5	2	0	0	7.7 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 / 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-Jun-04	29	27	29	8	26	28	47	28	A	6	1	0	0	0	0	0	1	0	4	3	8	6	4	2	11.2	47.1
2-Jun-04	1	0	0	3	5	19	11	A	4	4	0	0	0	2	3	1	5	3	3	4	15	13	19	15	5.6	19.1
3-Jun-04	30	14	5	4	9	30	A	9	3	1	0	0	0	0	0	0	4	2	3	2	15	35	38	24	9.9	38.2
4-Jun-04	26	25	25	14	12	A	26	26	29	17	18	3	0	5	3	1	1	0	1	3	6	10	7	11	11.6	29.4
5-Jun-04	9	4	5	5	A	11	6	2	1	1	2	2	1	3	6	4	4	4	8	9	8	7	10	11	5.4	11.2
6-Jun-04	1	2	3	A	7	6	6	5	3	7	5	2	2	4	3	2	1	6	1	2	14	20	1	1	4.6	20.4
7-Jun-04	4	4	A	5	3	4	5	4	1	0	1	1	6	6	1	0	0	0	0	0	4	8	10	9	3.3	9.6
8-Jun-04	8	A	27	14	16	35	23	31	4	0	0	0	0	C	C	C	C	C	0	0	0	5	7	7	9.9	35.0
9-Jun-04	27	A	14	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	4	1	2.6	27.0
10-Jun-04	A	5	2	3	3	6	9	7	4	3	9	6	10	8	5	5	4	3	3	5	5	3	3	A	5.0	9.9
11-Jun-04	6	4	6	4	5	13	10	7	4	4	4	4	3	6	3	4	4	7	3	3	2	2	A	8	5.1	12.6
12-Jun-04	3	3	2	3	7	5	5	2	2	2	6	6	3	3	1	3	3	2	1	2	4	A	27	43	5.9	43.1
13-Jun-04	48	31	19	16	9	22	3	3	3	2	10	8	5	3	4	3	5	2	3	3	A	5	5	3	9.3	47.8
14-Jun-04	12	10	7	4	5	6	23	19	14	6	4	7	5	5	10	4	10	6	2	A	9	3	1	4	7.7	23.2
15-Jun-04	2	3	5	13	4	3	8	10	11	7	5	5	6	2	2	2	5	7	A	8	13	8	14	12	6.7	14.4
16-Jun-04	9	10	7	5	23	20	15	14	7	8	7	7	6	3	2	3	9	A	5	3	3	2	6	6	7.9	23.0
17-Jun-04	5	4	7	7	9	4	5	7	5	4	2	1	1	1	1	1	A	4	2	2	4	8	19	21	5.4	20.6
18-Jun-04	18	15	37	23	18	20	21	23	24	2	1	1	1	1	2	A	3	2	1	2	5	5	7	7	10.4	37.5
19-Jun-04	12	30	44	25	36	35	37	24	6	2	1	3	2	1	A	6	3	8	7	6	11	49	30	17	17.1	49.3
20-Jun-04	10	4	4	16	14	5	4	5	7	5	2	1	1	A	4	2	4	4	2	3	5	5	11	12	5.6	16.0
21-Jun-04	8	10	12	14	14	15	12	12	10	6	2	2	A	6	4	4	5	6	4	6	13	58	5	5	10.1	57.9
22-Jun-04	3	5	2	4	5	9	8	7	5	3	4	A	6	4	4	4	6	4	3	5	7	15	13	8	5.8	14.6
23-Jun-04	17	23	33	19	23	33	18	7	3	1	A	5	2	4	2	3	7	3	2	6	7	17	6	11	11.1	33.2
24-Jun-04	14	18	9	25	14	16	40	16	7	A	8	5	2	1	1	0	0	0	0	1	7	22	19	19	10.7	40.4
25-Jun-04	24	17	21	18	25	21	16	21	A	29	21	14	5	3	0	0	0	0	0	0	0	2	5	5	10.7	29.2
26-Jun-04	5	5	6	8	13	35	39	A	16	9	1	0	0	0	0	0	0	1	0	0	1	5	8	10	7.0	38.7
27-Jun-04	9	14	11	9	13	13	A	5	1	0	0	0	1	0	0	0	2	0	0	3	4	7	8	5	4.5	13.6
28-Jun-04	7	3	1	5	8	A	16	11	7	2	1	0	1	1	3	1	5	1	3	1	2	6	18	14	5.1	17.5
29-Jun-04	5	1	5	12	A	21	15	11	9	10	16	4	6	5	3	2	1	2	0	1	2	1	2	3	6.0	21.1
30-Jun-04	8	8	8	A	10	13	17	14	8	6	10	10	5	3	1	4	8	7	12	4	16	18	17	14	9.5	18.1
																									N	0.0
Hourly Avg	12.4	10.7	12.2	10.3	12.1	16.0	15.9	11.8	7.1	5.2	4.8	3.4	2.8	2.8	2.5	2.1	3.5	3.0	2.5	2.9	6.7	12.2	11.1	10.6		
Hourly Max	47.8	31.0	43.6	25.2	35.8	35.5	47.1	30.7	29.4	29.2	20.8	14.4	9.9	7.9	10.4	5.5	10.3	8.0	11.5	9.1	16.5	57.9	38.2	43.1		

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Maximum 1-hr Value:	317.5	ppb	01-Jun	2:00 3:00
Maximum 24-hr Value:	42.0	ppb	24-Jun	

AIC Time:	31 hrs	Operational Time:	684 hrs	
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%	

Percentile	99	95	75	50	25	5	1	Average
	153	70	24	11	5	1	0	20.5 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-Jun-04	102	80	317	11	78	43	81	55	A	14	2	0	0	0	1	1	25	2	45	6	13	8	6	5	38.9	317.5
2-Jun-04	4	0	1	95	7	167	36	A	9	52	12	0	3	6	10	5	35	9	12	7	52	49	68	32	29.2	167.5
3-Jun-04	39	22	14	5	37	68	A	16	5	1	1	0	0	1	0	0	17	16	13	8	32	80	51	51	20.8	79.5
4-Jun-04	36	35	154	28	19	A	33	39	37	35	29	8	2	32	12	3	3	1	2	5	12	29	13	18	25.4	154.1
5-Jun-04	14	7	17	8	A	18	12	3	2	2	4	4	3	6	48	8	27	12	24	13	14	8	16	21	12.6	48.3
6-Jun-04	3	5	7	A	12	42	79	53	5	40	10	6	49	84	61	5	2	30	2	3	23	76	5	34	27.7	84.1
7-Jun-04	31	12	A	9	5	7	13	8	2	1	2	3	16	29	5	1	1	1	0	2	29	26	15	15	10.2	31.5
8-Jun-04	14	A	125	19	45	55	49	128	10	2	0	0	15	C	C	C	C	C	1	0	2	11	11	28	28.6	128.3
9-Jun-04	42	A	19	10	3	1	1	2	1	0	0	3	2	2	0	0	1	1	0	1	10	20	8	2	5.6	41.7
10-Jun-04	A	7	3	5	4	13	13	14	6	10	13	12	28	24	7	9	8	5	5	7	7	5	4	A	9.7	27.8
11-Jun-04	8	5	11	5	15	14	13	33	6	6	9	8	5	14	7	12	12	12	4	4	3	4	A	13	9.7	33.2
12-Jun-04	5	6	3	7	20	7	8	4	5	3	13	12	8	10	2	5	8	7	3	3	8	A	66	64	12.0	65.5
13-Jun-04	62	47	47	47	14	67	6	5	5	4	35	10	8	9	8	33	6	3	8	5	A	9	8	4	19.5	66.7
14-Jun-04	118	32	19	9	60	15	46	26	27	10	6	11	7	32	62	11	14	13	3	A	18	8	3	14	24.5	118.0
15-Jun-04	3	13	22	25	12	12	11	12	19	12	8	9	26	6	3	3	14	13	A	11	28	18	54	16	15.3	53.8
16-Jun-04	11	53	23	7	227	56	32	52	12	15	18	14	15	9	3	9	14	A	9	5	9	6	10	7	26.9	227.0
17-Jun-04	8	7	10	10	11	9	8	30	11	13	3	2	2	5	10	2	A	8	3	4	8	19	27	27	10.3	30.2
18-Jun-04	29	21	48	37	23	27	33	31	31	6	2	2	3	4	5	A	6	2	2	4	10	13	12	12	15.7	47.7
19-Jun-04	14	41	91	49	54	60	61	148	71	8	4	30	11	10	A	10	7	36	13	13	18	87	53	73	41.8	148.0
20-Jun-04	126	5	28	102	152	9	5	14	13	7	3	2	2	A	8	3	7	9	6	5	13	8	29	30	25.5	152.3
21-Jun-04	9	15	31	54	53	21	19	16	17	12	3	4	A	8	6	7	8	11	6	9	21	284	36	16	29.0	284.0
22-Jun-04	7	15	4	8	10	12	14	11	11	7	6	A	12	6	7	12	16	10	6	9	17	21	74	12	13.4	73.7
23-Jun-04	36	32	53	24	31	79	29	9	7	2	A	9	4	7	5	5	11	4	4	9	10	29	12	17	18.7	79.4
24-Jun-04	104	107	18	158	19	92	209	23	13	A	15	8	6	5	5	3	3	3	2	10	13	83	37	30	42.0	209.3
25-Jun-04	54	42	38	65	55	28	28	31	A	39	26	23	8	6	4	0	0	2	0	3	1	8	15	16	21.4	65.0
26-Jun-04	7	12	12	12	16	53	63	A	21	12	7	2	4	0	0	0	0	26	1	0	3	12	9	16	12.4	62.7
27-Jun-04	17	19	15	12	18	17	A	11	2	0	3	1	87	1	1	0	38	18	1	5	6	11	13	7	13.2	87.2
28-Jun-04	13	4	2	9	9	A	27	33	9	34	6	1	3	3	64	36	54	2	8	2	11	12	33	59	18.9	64.2
29-Jun-04	9	2	8	49	A	23	23	14	12	12	24	6	38	29	3	5	4	4	2	2	3	3	3	4	12.3	49.3
30-Jun-04	12	15	20	A	17	35	46	36	13	10	16	17	8	6	2	8	16	45	64	7	34	24	80	23	24.0	80.5
																									N	0.0
Hourly Avg	32.4	23.6	40.0	31.4	36.8	37.6	35.7	30.7	13.6	12.7	9.6	7.2	12.9	12.6	12.5	7.0	12.7	10.9	8.6	5.6	14.8	33.3	26.5	23.0		
Hourly Max	126.1	106.8	317.5	158.2	227.0	167.5	209.3	148.0	70.5	51.5	35.0	29.8	87.2	84.1	64.2	35.6	54.1	44.6	64.0	12.8	52.5	284.0	80.5	73.1		

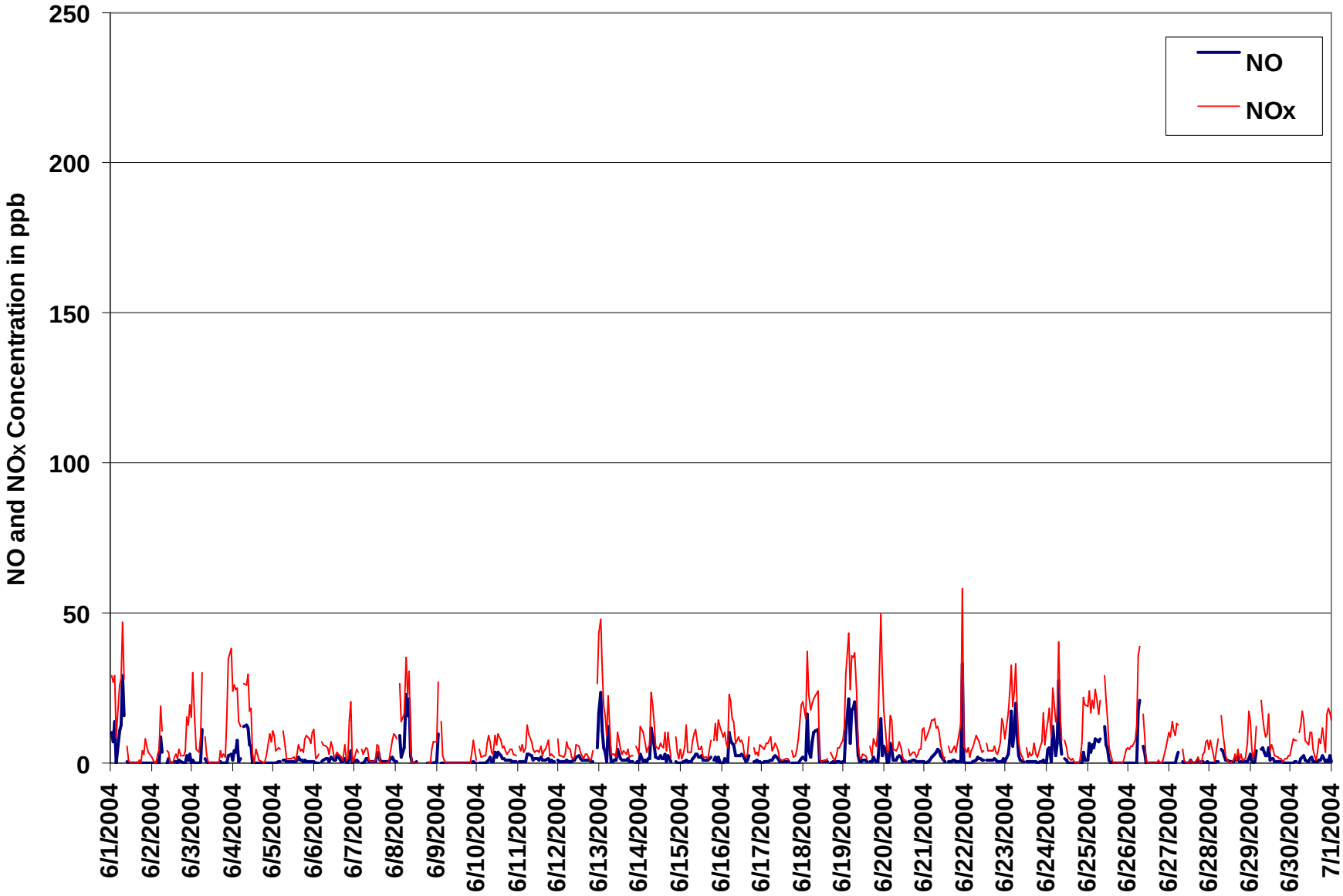


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trends

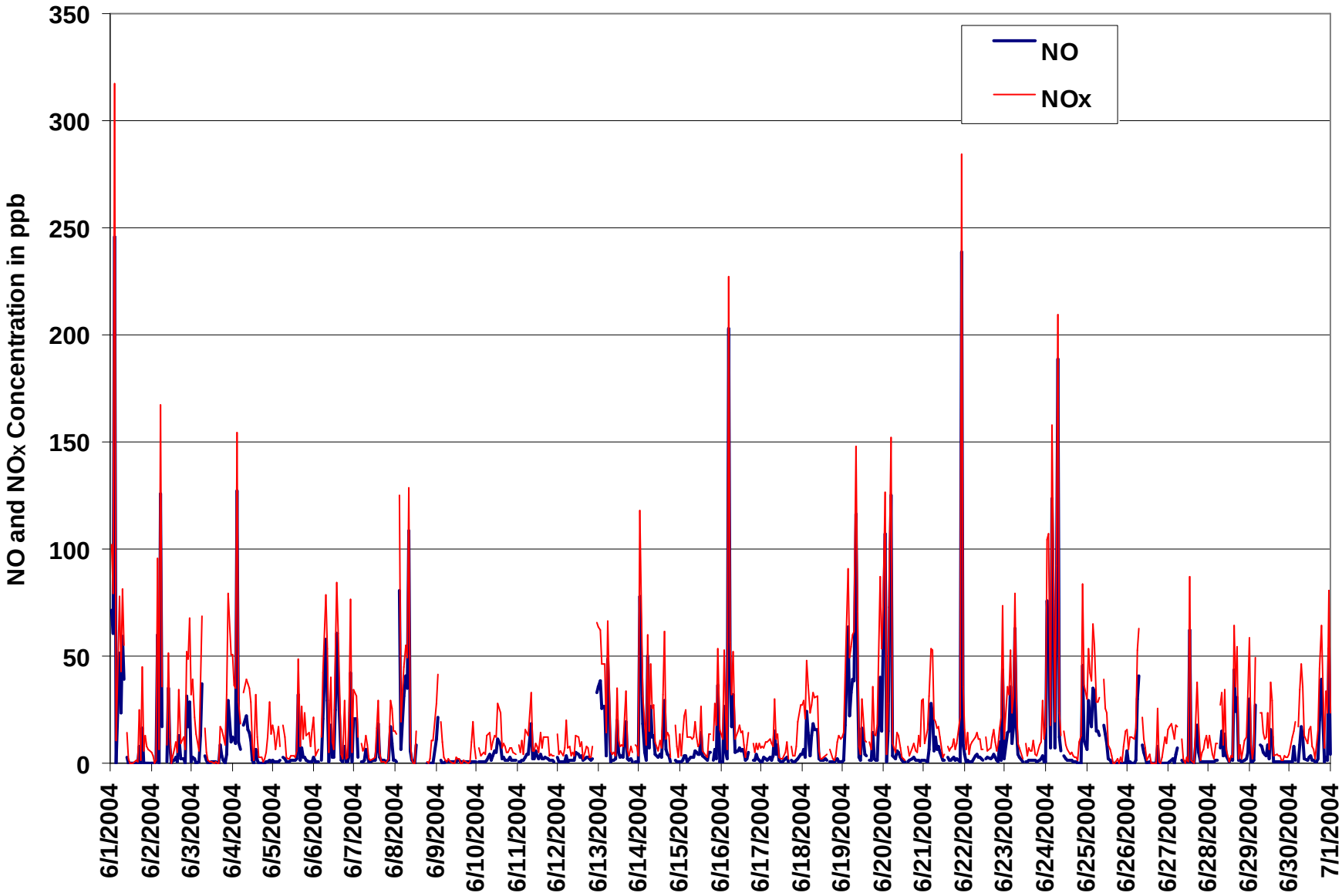


Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trends

PAS - Crescent Heights Ozone Monthly Summary

HOURLY AVERAGE TABLE

Ozone (O_3)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	70	ppb	04-Jun	16:00 17:00
Maximum 24-hr Average:	46	ppb	29-Jun	

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

AIC Time:	31 hrs			Operational Time:			686 hrs		
Calibration Time:	3 hrs			AMD Operational Uptime:			100.0%		
Percentile	99	95	75	50	25	5	1	Average	
	67	55	41	31	20	5	0	30.5	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-Jun-04	2	3	7	6	3	2	3	11	A	35	40	44	48	48	50	50	49	49	43	41	28	23	23	27	27.7	50.3
2-Jun-04	37	44	40	33	25	18	21	A	39	45	49	50	50	49	50	54	55	57	56	52	36	36	31	26	41.4	56.8
3-Jun-04	9	20	34	35	27	12	A	33	38	45	50	53	55	55	56	58	57	58	56	55	37	19	7	8	38.2	57.9
4-Jun-04	3	1	3	6	7	A	8	14	20	32	36	62	68	65	67	69	70	69	66	60	50	43	34	24	38.2	69.5
5-Jun-04	25	36	37	33	A	35	42	49	48	49	55	58	57	53	50	50	48	46	38	30	28	28	21	18	40.6	58.1
6-Jun-04	35	31	35	A	22	21	20	24	31	30	34	43	44	43	42	43	46	41	43	39	27	23	38	37	34.4	46.0
7-Jun-04	32	27	A	36	32	15	18	27	39	42	43	37	28	27	37	40	42	42	43	39	31	26	19	16	32.1	43.1
8-Jun-04	13	A	1	3	3	3	7	12	25	37	40	42	41	43	44	44	44	C	C	C	34	24	15	11	24.3	44.4
9-Jun-04	1	A	4	13	15	17	17	21	25	31	32	30	30	30	32	34	36	38	37	37	32	28	30	35	26.3	37.6
10-Jun-04	A	33	33	27	26	21	18	20	25	24	22	31	30	30	30	30	35	37	32	27	25	25	26	A	27.5	36.7
11-Jun-04	22	21	20	18	14	9	14	20	20	23	25	26	26	27	35	36	33	30	35	33	32	29	A	23	24.8	35.6
12-Jun-04	28	26	28	25	15	16	18	28	29	28	25	27	29	31	33	35	35	38	38	35	28	A	9	0	26.4	38.2
13-Jun-04	0	1	3	2	6	6	19	21	20	24	21	24	32	36	37	38	38	41	40	37	A	33	31	35	23.6	40.8
14-Jun-04	27	18	13	18	16	14	8	12	22	26	30	31	37	39	37	46	37	39	41	A	38	46	46	40	29.7	46.5
15-Jun-04	39	37	29	21	31	27	21	20	17	22	28	29	29	33	31	29	27	26	A	27	18	24	15	15	25.9	39.2
16-Jun-04	20	18	17	15	8	8	14	17	28	30	31	31	34	36	35	26	23	A	32	30	28	31	25	23	24.4	36.4
17-Jun-04	20	19	15	12	8	17	19	27	33	36	40	41	41	41	42	44	A	44	43	41	34	26	9	8	28.7	43.9
18-Jun-04	6	6	0	2	6	7	12	16	21	40	44	45	47	48	48	A	47	47	46	42	36	33	21	15	27.6	48.0
19-Jun-04	8	0	0	2	0	3	9	22	33	41	45	43	43	44	A	45	45	43	44	44	35	8	11	16	25.3	45.0
20-Jun-04	17	19	19	12	12	17	17	16	19	24	41	41	40	A	41	41	41	41	42	39	35	34	26	28	28.8	42.1
21-Jun-04	25	21	21	20	20	15	22	23	27	33	37	37	A	41	45	46	46	45	46	38	26	11	37	37	31.2	46.0
22-Jun-04	38	32	40	33	31	25	28	35	37	41	43	A	42	41	39	41	39	41	41	34	30	18	15	15	33.9	43.2
23-Jun-04	6	0	0	0	0	1	6	19	35	41	A	41	41	38	39	36	29	32	34	27	22	14	19	14	21.5	41.5
24-Jun-04	16	11	11	6	3	6	6	15	21	A	37	39	43	44	45	46	47	46	46	43	36	23	16	8	26.7	47.4
25-Jun-04	7	8	5	8	3	6	13	9	A	20	25	33	43	51	56	57	59	59	56	47	45	38	30	26	30.7	59.1
26-Jun-04	22	21	18	15	11	4	9	A	21	25	40	45	40	46	47	50	50	46	50	48	42	29	20	15	31.0	50.0
27-Jun-04	14	8	10	10	5	9	A	29	34	41	43	45	46	47	47	48	47	49	47	43	33	21	19	23	31.2	48.9
28-Jun-04	23	28	31	22	15	A	21	28	35	47	49	50	48	49	50	51	50	54	51	48	40	29	18	25	37.4	54.1
29-Jun-04	33	41	31	24	A	12	20	30	37	43	42	55	56	60	66	67	68	64	58	52	48	50	49	45	45.7	67.6
30-Jun-04	35	33	29	A	29	24	21	27	32	32	26	25	34	43	48	44	35	36	32	38	21	13	15	19	30.0	48.3
																									N	0.0
Hourly Avg	19.4	20.0	18.4	16.3	14.0	13.2	16.2	22.3	28.9	34.0	37.0	39.9	41.5	42.7	44.0	44.8	44.1	44.8	44.1	40.2	33.0	27.1	23.2	21.7		
Hourly Max	39.2	43.7	40.1	36.3	31.8	35.0	41.8	49.2	48.0	48.6	55.4	61.8	68.0	65.5	67.3	69.4	69.5	68.5	66.5	59.7	50.4	49.9	49.1	45.1		

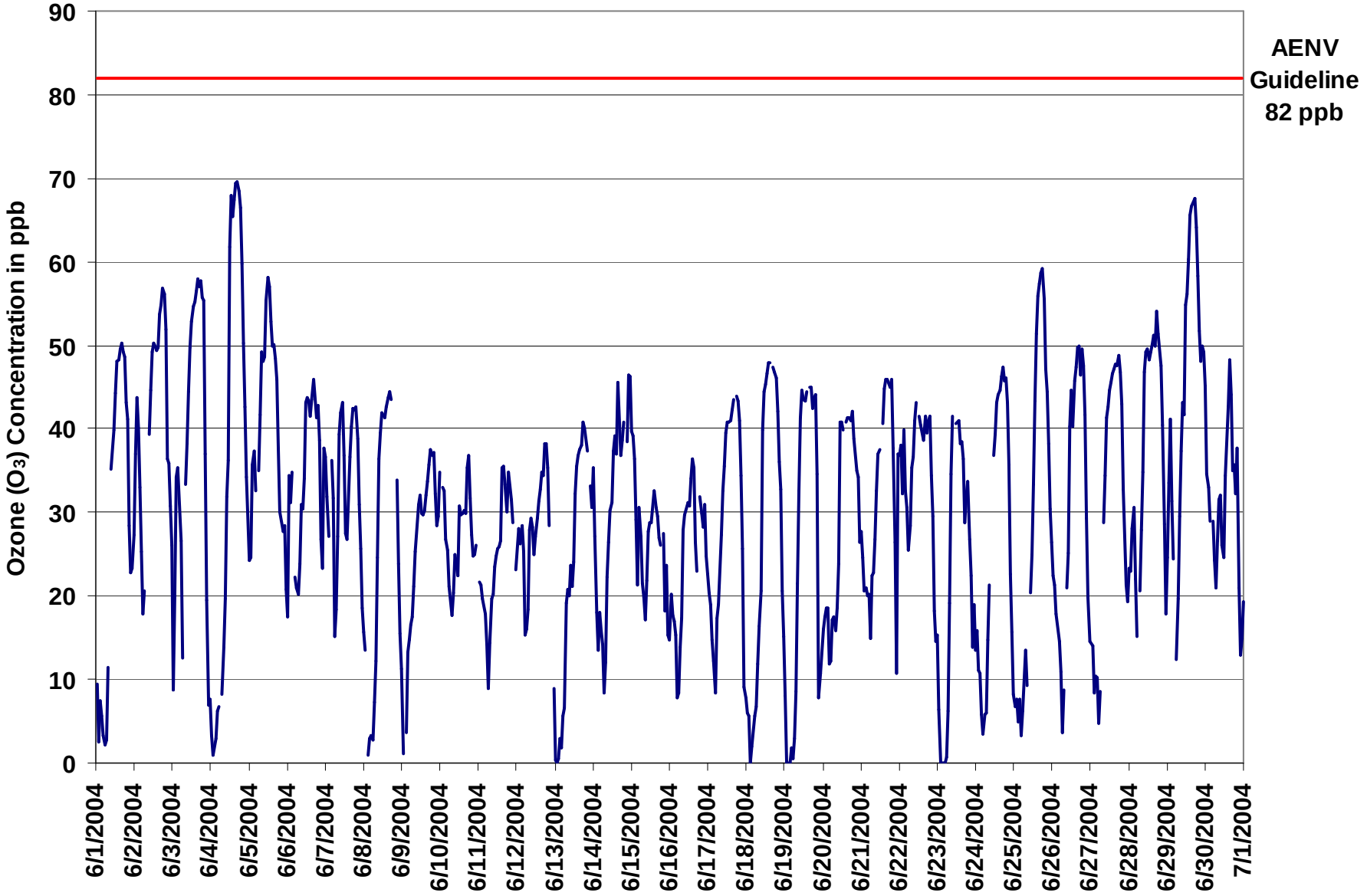


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend

Station: Crescent Heights

Station Owner: PAS

HOURLY MAXIMUM TABLE

Ozone (O_3)

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

Summary

Maximum 1-hr Value:	73.3	ppb	04-Jun	16:00 17:00
Maximum 24-hr Value:	50.8	ppb	29-Jun	

AIC Time:	31 hrs	Operational Time:	686 hrs
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	70	57	46	37	25	10	4	35.2 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-04	20	11	12	9	8	6	5	17	A	40	44	47	49	50	52	53	53	52	49	46	39	26	27	31	32.5	53.2
2-Jun-04	43	46	42	38	31	23	25	A	44	50	51	52	52	52	52	57	60	61	60	56	48	44	38	35	46.1	60.8
3-Jun-04	23	28	43	37	35	25	A	38	43	47	56	54	56	56	60	60	61	62	61	60	51	43	24	14	45.1	61.6
4-Jun-04	13	6	10	12	11	A	11	25	22	39	51	70	70	70	71	73	73	71	70	65	56	54	40	32	44.1	73.3
5-Jun-04	35	43	43	40	A	46	47	51	50	52	58	60	59	56	54	53	51	49	46	35	31	32	27	33	45.7	59.9
6-Jun-04	41	37	39	A	25	24	23	30	35	36	40	45	47	46	44	48	48	47	46	41	39	36	40	40	38.9	48.4
7-Jun-04	37	32	A	38	37	22	25	36	43	47	47	41	40	31	40	43	45	45	45	42	36	31	25	19	36.8	46.8
8-Jun-04	20	A	3	9	6	5	11	28	33	39	42	43	44	45	46	46	46	C	C	C	36	33	18	16	28.4	46.4
9-Jun-04	6	A	8	19	17	18	21	23	29	35	35	32	32	32	34	35	38	39	38	39	39	35	36	37	29.3	38.9
10-Jun-04	A	35	34	32	29	28	23	25	28	27	30	36	37	33	35	35	38	39	37	31	29	28	29	A	31.6	38.6
11-Jun-04	23	24	23	21	19	11	18	23	23	26	28	28	29	32	39	39	37	36	38	36	34	31	A	27	27.9	39.1
12-Jun-04	31	30	31	32	24	21	23	35	33	33	31	32	33	35	36	39	38	42	41	39	34	A	20	5	31.2	41.6
13-Jun-04	7	7	10	3	10	15	23	24	25	25	25	32	37	39	40	40	42	43	42	40	A	37	37	37	27.8	42.8
14-Jun-04	37	27	17	21	18	17	15	22	31	31	34	37	42	43	46	51	41	43	45	A	48	50	49	46	35.3	50.6
15-Jun-04	42	42	35	30	33	31	25	22	20	29	31	33	33	36	34	33	30	30	A	31	27	28	27	20	30.5	41.6
16-Jun-04	25	24	20	17	15	13	17	22	36	36	37	34	38	38	39	29	30	A	35	33	31	33	31	25	28.6	38.6
17-Jun-04	23	21	18	15	11	22	23	38	40	38	42	43	43	43	46	46	A	45	45	44	40	35	21	16	33.0	46.1
18-Jun-04	9	10	3	8	13	10	21	22	32	45	46	47	49	50	50	A	49	48	47	46	41	37	23	19	31.5	50.3
19-Jun-04	11	7	4	7	8	6	16	31	40	45	46	47	46	46	A	47	47	48	49	51	42	28	25	23	31.4	51.2
20-Jun-04	23	21	23	18	19	19	20	19	23	33	48	47	43	A	44	44	44	43	45	42	39	38	31	32	32.9	48.3
21-Jun-04	29	23	30	30	28	26	26	28	32	38	40	40	A	43	49	49	50	50	50	44	37	25	44	41	37.0	49.7
22-Jun-04	41	40	42	40	35	29	35	40	40	44	46	A	44	43	42	45	43	44	44	41	34	24	18	17	37.9	46.5
23-Jun-04	17	5	0	1	0	4	13	25	42	43	A	43	43	42	41	40	35	35	36	33	26	24	20	21	25.6	43.0
24-Jun-04	20	20	14	11	8	9	15	19	25	A	42	41	46	46	47	48	50	48	48	47	42	36	20	20	31.4	50.5
25-Jun-04	16	16	12	14	7	9	19	13	A	31	27	41	47	55	58	59	60	63	60	52	47	45	38	32	35.8	63.2
26-Jun-04	27	27	22	18	15	8	22	A	25	32	47	48	44	48	50	52	52	51	52	49	46	36	24	17	35.3	51.8
27-Jun-04	19	13	16	16	8	13	A	32	40	43	45	46	50	48	49	50	50	51	50	47	40	27	25	25	35.0	51.1
28-Jun-04	30	30	33	29	19	A	26	33	44	52	51	52	51	53	53	53	54	55	56	50	47	38	31	31	42.3	56.5
29-Jun-04	39	43	41	43	A	15	25	37	42	46	53	57	59	67	70	70	71	70	60	55	53	51	51	49	50.8	70.5
30-Jun-04	42	38	37	A	32	30	28	32	36	36	30	29	38	50	50	48	46	42	41	41	39	18	24	32	36.5	50.2
																									N	0.0
Hourly Avg	25.8	25.3	22.8	21.7	18.5	18.0	21.4	28.3	34.1	38.5	41.6	43.4	44.9	45.8	47.3	47.7	47.7	48.2	47.8	44.1	39.7	34.6	29.7	27.4		
Hourly Max	43.1	45.6	42.9	42.9	37.0	46.2	47.3	50.9	50.0	52.4	58.2	69.5	69.7	69.9	71.1	72.8	73.3	70.6	70.3	64.8	56.2	53.5	50.6	49.3		

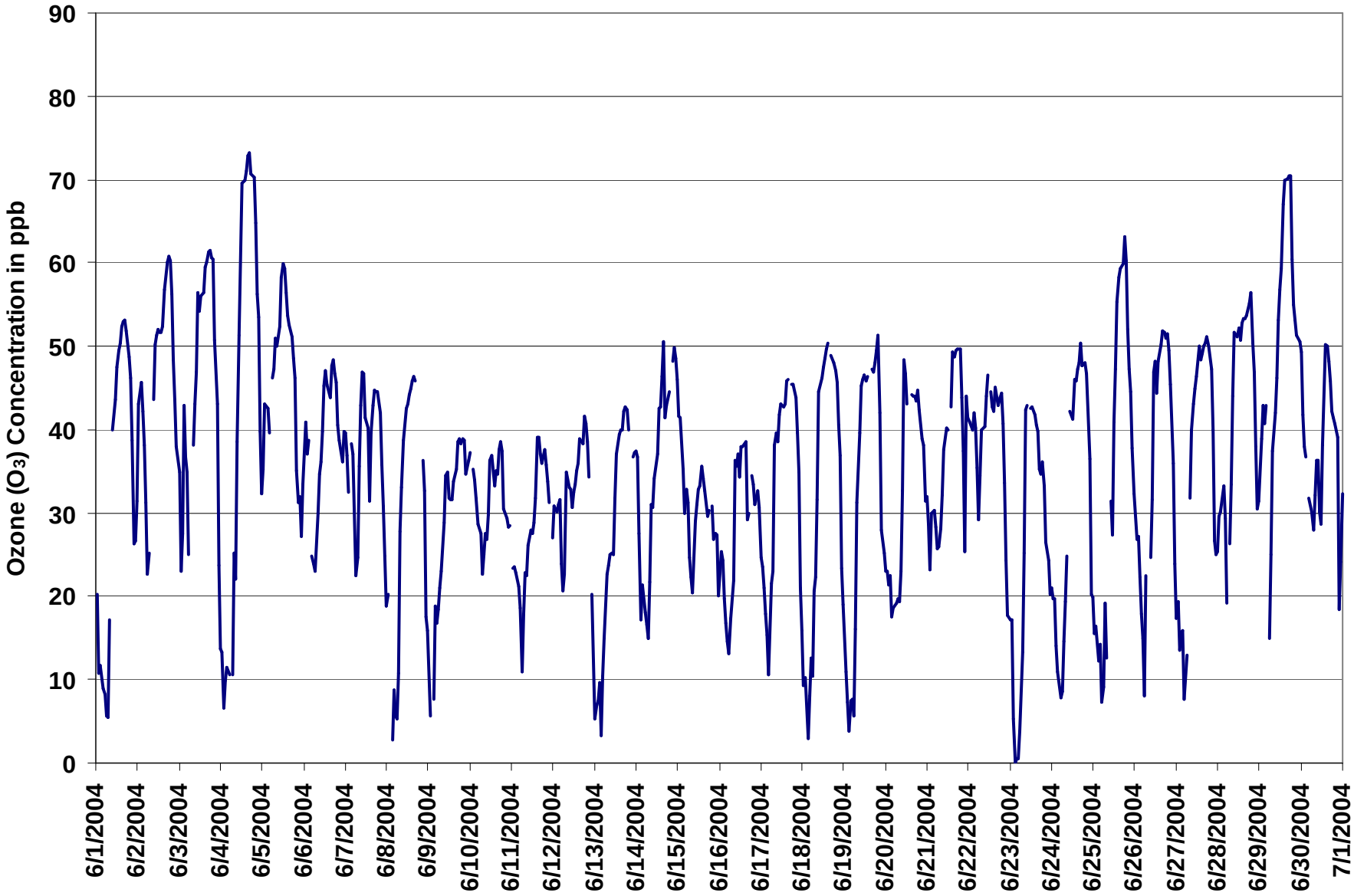


Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend

Station: Crescent Heights

Station Owner: PAS

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O_3)

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

Summary

Number of 8-hr Exceedances:	2			
Maximum 8-hr Average:	67.1	ppb	04-Jun	18:00 19:00

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

Percentile	99	95	75	50	25	5	1
	60.2	51.2	38.5	30.9	23.2	8.8	5.0

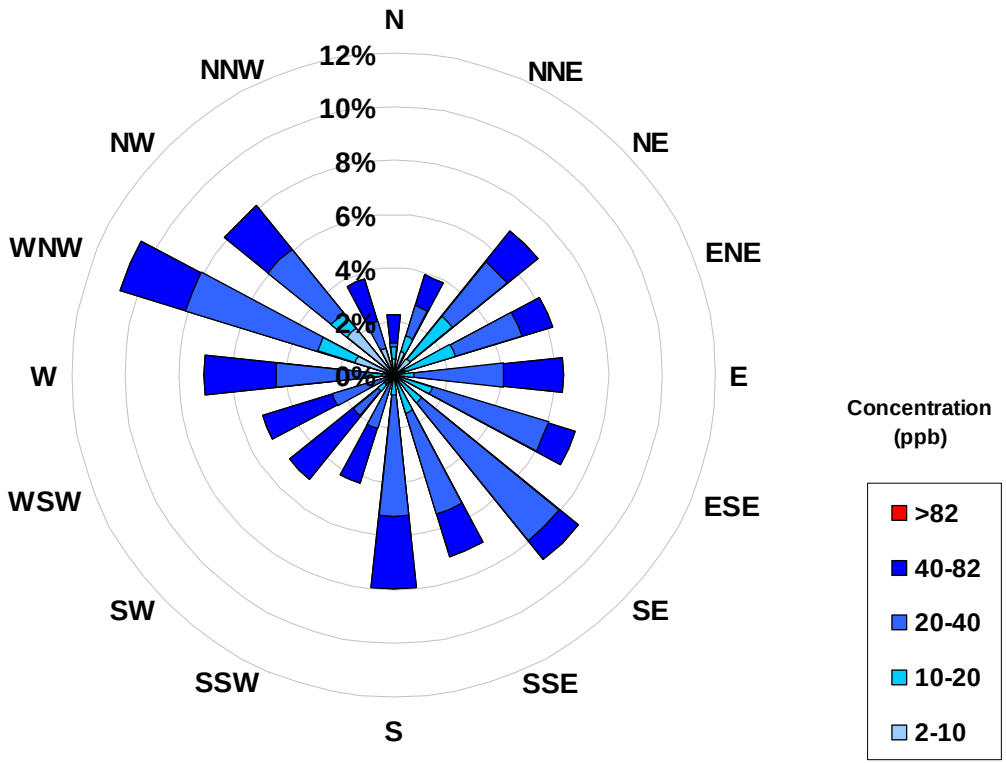
Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-04	9	24	19	15	11	7	6	6	5	10	14	20	26	33	40	45	46	47	48	47	45	42	38	35	26.6	47.7
2-Jun-04	34	33	33	32	32	31	31	31	31	32	33	35	39	43	48	48	50	52	53	53	51	49	47	44	40.2	52.8
3-Jun-04	38	33	30	28	27	24	23	24	29	32	34	37	41	47	48	51	54	55	56	56	54	50	43	37	39.7	56.3
4-Jun-04	30	23	17	11	7	5	5	6	8	13	18	25	34	38	46	52	59	63	67	67	65	62	58	52	34.6	67.1
5-Jun-04	46	42	39	35	33	32	33	37	40	42	44	48	49	51	52	52	53	52	50	46	43	40	36	32	42.9	52.5
6-Jun-04	30	28	28	28	27	26	26	27	26	26	26	28	31	34	36	39	41	42	43	43	40	38	38	37	32.9	43.2
7-Jun-04	35	33	32	31	32	31	28	27	28	30	32	32	31	33	35	37	37	37	37	37	38	37	35	32	33.2	37.6
8-Jun-04	28	27	21	15	11	8	7	6	8	11	16	21	26	31	35	39	42	42	N	N	N	N	N	N	21.9	42.4
9-Jun-04	N	N	N	15	12	11	11	13	16	18	21	24	25	27	29	31	32	33	33	34	34	34	34	34	24.8	34.5
10-Jun-04	34	33	33	31	30	29	27	25	25	24	23	23	24	25	26	28	29	31	32	31	31	30	30	30	28.5	33.8
11-Jun-04	28	25	24	22	21	19	17	17	17	17	18	19	20	23	25	27	29	30	31	32	33	33	32	31	24.5	32.8
12-Jun-04	30	29	28	27	25	23	23	23	23	24	23	23	25	27	29	30	30	32	33	34	34	35	31	26	27.9	34.6
13-Jun-04	21	16	11	6	3	3	5	7	10	13	15	18	21	25	27	29	31	33	36	37	38	38	37	36	21.4	38.0
14-Jun-04	35	32	28	25	24	22	19	16	15	16	18	20	23	26	29	34	35	37	38	39	39	41	42	41	28.9	41.8
15-Jun-04	41	41	39	37	36	34	31	28	25	24	23	24	24	25	26	27	28	29	29	29	27	26	24	22	29.2	41.4
16-Jun-04	21	20	19	18	16	15	14	15	16	17	19	21	24	28	30	31	31	31	31	31	30	29	28	27	23.4	31.5
17-Jun-04	27	26	24	22	19	17	17	17	19	21	24	28	32	35	37	39	40	42	42	42	41	39	34	29	29.8	42.2
18-Jun-04	26	22	16	11	8	5	6	7	9	13	18	24	29	34	39	42	46	47	47	46	45	43	39	36	27.4	46.9
19-Jun-04	31	25	19	14	10	6	5	5	8	14	19	24	30	35	39	42	44	44	44	44	43	38	34	31	27.0	44.0
20-Jun-04	27	24	21	17	14	15	16	16	16	17	20	23	27	28	32	35	38	41	41	41	40	39	38	36	27.6	41.1
21-Jun-04	34	31	29	26	24	22	21	21	21	23	25	27	28	31	35	38	41	42	44	44	42	38	37	36	31.5	43.7
22-Jun-04	35	33	32	32	32	34	33	33	33	34	34	34	36	38	40	40	41	41	41	40	38	36	33	29	35.4	40.8
23-Jun-04	25	20	15	11	7	5	4	4	8	13	15	20	26	32	36	39	38	37	36	34	32	29	27	24	22.3	38.7
24-Jun-04	22	20	17	14	12	11	9	9	10	10	13	18	24	29	35	39	43	43	45	45	44	41	38	33	26.0	45.1
25-Jun-04	28	23	18	14	10	8	7	7	7	9	12	16	22	28	34	41	43	48	52	54	54	52	49	45	28.4	53.7
26-Jun-04	40	36	31	27	23	18	16	14	14	15	18	22	26	32	38	39	43	46	47	47	47	45	42	37	31.8	47.3
27-Jun-04	33	28	23	19	14	11	10	12	15	20	24	29	35	41	41	44	45	46	47	47	45	42	38	35	31.1	46.9
28-Jun-04	32	30	28	25	23	23	23	24	26	28	31	35	40	41	44	47	49	50	50	50	49	47	43	39	36.5	50.4
29-Jun-04	37	36	33	30	29	26	27	27	28	28	30	34	37	43	49	53	57	60	62	61	60	59	57	54	42.4	61.7
30-Jun-04	50	46	43	41	39	35	31	28	28	28	27	27	28	30	33	35	36	36	37	39	37	33	29	26	34.3	50.1
																									N	0.0
Hourly Avg	31.4	29.0	25.8	22.6	20.3	18.6	17.6	17.8	18.8	20.6	23.0	26.0	29.4	33.0	36.4	39.2	41.0	42.3	43.1	43.2	42.1	40.1	37.6	34.7		
Hourly Max	50.1	46.2	42.6	41.3	38.5	34.9	33.0	36.6	40.0	41.8	44.4	48.0	49.1	51.4	52.4	53.2	58.7	63.3	67.1	66.8	64.6	61.7	57.6	54.2		

Concentration Rose for the 1-hr O_3 Average Concentration Occurrences at the Crescent Heights Site for June 2004



Frequency Distribution of O_3 in ppb			
Range			Frequency (hrs)
0	<	2	17
2	to	10	59
10	to	20	95
20	to	40	313
40	to	82	202
	>	82	0
Total Non-Zero Values			686

Calms	
Range	
ppb	
2-10	0.0%
10-20	0.0%
20-40	0.0%
40-82	0.0%
>82	0.0%

PAS - Crescent Heights Total Hydrocarbon Monthly Summary

HOURLY AVERAGE TABLE

Total HydroCarbons (THC)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	2.9	ppm	23-Jun	23:00 0:00
Maximum 24-hr Average:	2.0	ppm	04-Jun	

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

AIC Time:	31 hrs				Operational Time:			684 hrs																	
Calibration Time:	5 hrs				AMD Operational Uptime:			100.0%																	
Percentile	99	95	75	50	25	5	1	Average																	
	2.4	2.1	1.9	1.8	1.8	1.7	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 / 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-Jun-04	2.0	2.1	1.9	2.0	1.9	2.0	2.1	2.0	A	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.87	2.10
2-Jun-04	1.8	1.8	1.8	1.8	1.8	1.9	1.9	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	1.8	1.9	2.0	2.1	1.82	2.07
3-Jun-04	2.1	2.0	2.0	2.0	2.1	2.2	A	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.9	2.0	2.2	2.0	1.91	2.18
4-Jun-04	2.0	2.1	2.2	2.1	2.0	A	2.2	2.3	2.3	2.2	2.1	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.00	2.34
5-Jun-04	1.9	1.9	2.0	2.0	A	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.84	2.02
6-Jun-04	1.7	1.7	1.7	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	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.75	1.81
7-Jun-04	1.7	1.8	A	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	1.85	2.03
8-Jun-04	2.7	A	2.3	2.3	2.1	2.1	2.0	1.9	1.9	1.8	C	C	C	C	C	1.9	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	1.99	2.74
9-Jun-04	1.9	A	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.84	2.04
10-Jun-04	A	1.8	1.9	1.8	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.80	1.91
11-Jun-04	1.8	1.9	1.8	1.8	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	1.8	1.8	1.8	1.8	A	1.8	1.82	1.91
12-Jun-04	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	2.0	2.1	1.83	2.10
13-Jun-04	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.8	1.8	1.87	2.17
14-Jun-04	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.82	1.89
15-Jun-04	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.9	1.9	1.82	1.94
16-Jun-04	1.9	2.0	2.1	2.0	2.0	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.9	1.9	1.9	2.0	1.92	2.16
17-Jun-04	1.9	2.0	2.1	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	A	1.8	1.8	1.8	1.9	2.0	1.9	2.0	1.93	2.15
18-Jun-04	1.9	2.0	2.1	2.1	2.1	2.3	2.3	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.94	2.34
19-Jun-04	1.9	2.0	2.4	2.2	2.4	2.4	2.3	2.1	1.9	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.96	2.40
20-Jun-04	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.7	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.81	1.94
21-Jun-04	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.0	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.7	1.7	1.7	2.0	1.8	1.8	1.8	1.87	2.06
22-Jun-04	1.7	1.8	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	2.0	1.9	2.6	2.2	1.83	2.61
23-Jun-04	2.1	2.1	2.0	2.1	2.2	2.1	2.1	2.0	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	2.9	1.98	2.92
24-Jun-04	1.9	2.0	2.0	2.1	2.1	2.0	2.0	2.0	1.9	A	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	2.0	2.1	1.92	2.11
25-Jun-04	2.1	2.1	2.1	2.0	2.0	2.0	1.9	2.0	A	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.91	2.13
26-Jun-04	2.0	2.0	2.1	2.2	2.4	2.3	2.2	A	2.2	2.1	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	1.8	1.96	2.38
27-Jun-04	1.9	2.0	2.1	2.3	2.4	2.4	A	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.91	2.44
28-Jun-04	1.8	1.8	1.8	2.0	2.1	A	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.84	2.14
29-Jun-04	1.9	1.8	1.9	2.1	A	2.2	2.1	2.0	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	1.85	2.18
30-Jun-04	1.9	1.9	1.9	A	1.9	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.8	1.9	1.8	1.8	1.9	1.87	1.96
																									N	0.00
Hourly Avg	1.94	1.93	1.97	1.99	2.00	2.02	1.98	1.93	1.89	1.86	1.85	1.83	1.81	1.81	1.80	1.80	1.79	1.78	1.77	1.79	1.84	1.85	1.90	1.94		
Hourly Max	2.74	2.14	2.40	2.28	2.44	2.39	2.34	2.34	2.29	2.16	2.10	1.94	1.90	1.87	1.85	1.89	1.90	1.83	1.84	1.88	2.03	2.02	2.61	2.92		

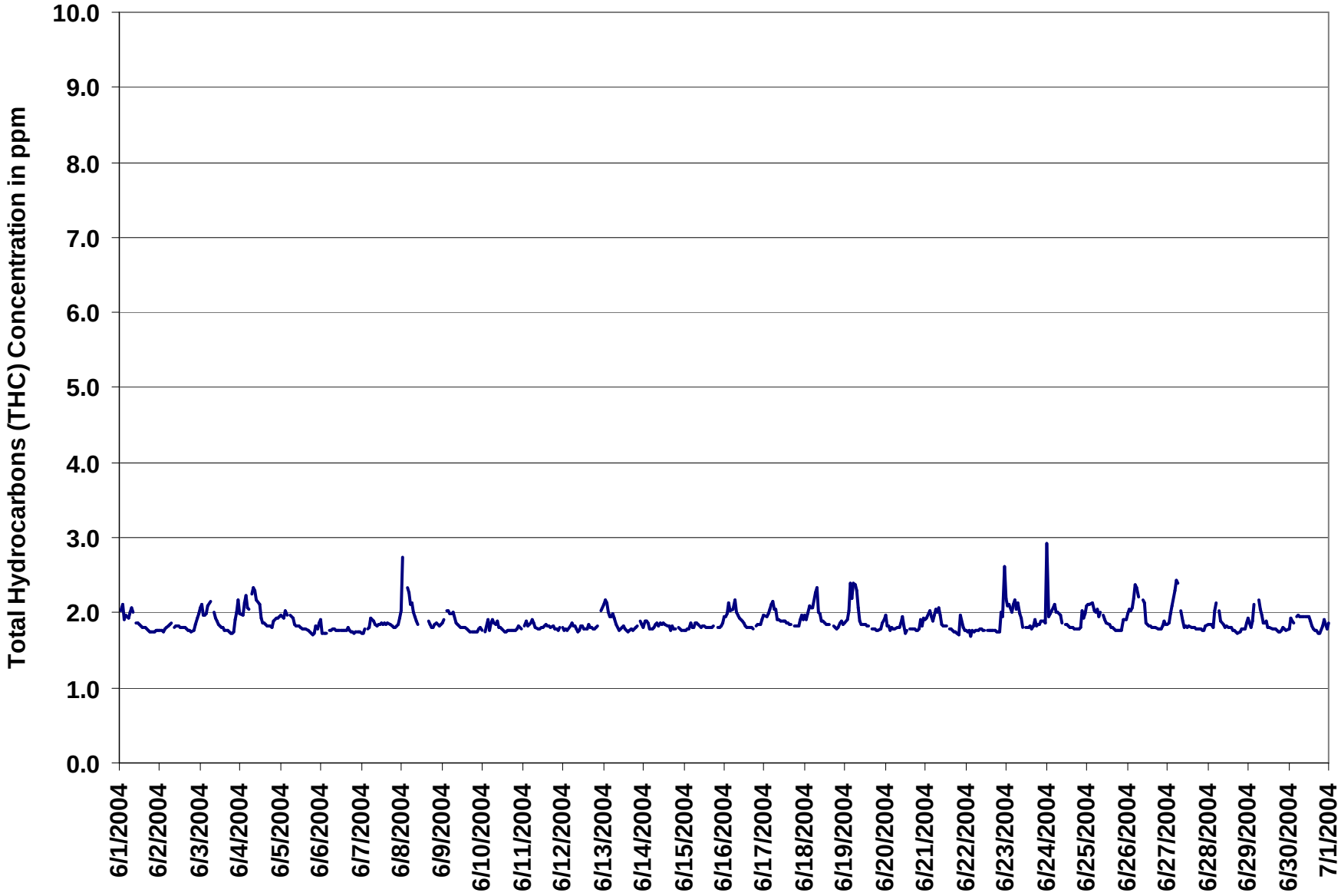


Figure 7. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend

Station: Crescent Heights

Station Owner: PAS

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

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

Summary

Maximum 1-hr Value:	7.9	ppm	23-Jun	23:00 0:00
Maximum 24-hr Value:	2.3	ppm	23-Jun	

AIC Time:	31 hrs	Operational Time:	684 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	3.0	2.4	2.0	1.9	1.8	1.8	1.8	2.0 ppm

Status Flag Characters

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

Day **Mountain Standard Time**

Hour Start / Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jun-04	2.2	2.2	2.0	2.0	2.0	2.0	2.1	2.1	A	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	1.91	2.22
2-Jun-04	1.8	1.8	1.9	1.8	1.8	1.9	1.9	A	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.1	2.3	2.3	1.89	2.30
3-Jun-04	3.4	2.2	2.2	2.0	2.2	2.3	A	2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	3.1	2.4	2.4	2.1	2.12	3.43
4-Jun-04	2.1	2.2	3.0	2.2	2.1	A	2.3	2.4	2.4	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.12	3.02
5-Jun-04	2.0	2.0	2.1	2.1	A	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	2.0	2.1	1.91	2.10
6-Jun-04	1.8	1.7	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	2.0	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.79	1.98
7-Jun-04	1.8	1.8	A	1.8	1.9	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.1	2.3	1.92	2.32
8-Jun-04	3.4	A	2.4	2.4	2.2	2.2	2.1	2.0	1.9	1.9	C	C	C	C	C	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2.08	3.35
9-Jun-04	2.0	A	2.4	2.2	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.90	2.36
10-Jun-04	A	1.8	2.1	1.8	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	A	1.86	2.08
11-Jun-04	1.9	2.0	1.9	1.9	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.8	1.9	A	1.9	1.87	1.98
12-Jun-04	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.2	1.8	1.8	1.8	1.8	1.9	2.2	A	2.4	2.2	1.92	2.44
13-Jun-04	2.4	2.5	2.1	2.0	2.0	2.1	2.0	1.9	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	A	2.0	1.9	1.9	1.95	2.46
14-Jun-04	2.0	2.0	2.0	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	A	1.9	1.8	1.8	1.8	1.88	2.01
15-Jun-04	1.8	1.8	1.8	1.9	1.8	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	A	1.9	1.8	1.9	2.0	2.0	1.87	2.00
16-Jun-04	2.0	2.1	2.4	2.3	2.1	2.3	2.1	2.0	2.2	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.1	2.01	2.35
17-Jun-04	2.0	2.0	2.1	2.2	2.2	2.2	2.5	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	A	1.9	1.8	2.0	2.1	2.1	2.0	2.1	2.02	2.47
18-Jun-04	1.9	2.0	2.1	2.1	2.2	2.4	2.5	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.9	1.9	2.0	1.9	1.9	2.00	2.53
19-Jun-04	2.0	2.1	3.7	2.5	2.9	2.5	2.4	2.2	2.0	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.1	2.2	2.13	3.67
20-Jun-04	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.9	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	2.5	1.9	2.0	1.9	1.89	2.51
21-Jun-04	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.0	1.9	1.9	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.8	1.9	1.9	2.0	1.98	2.80
22-Jun-04	1.8	1.9	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.3	2.2	3.3	2.7	1.97	3.30
23-Jun-04	2.4	2.4	2.0	2.5	2.3	2.2	2.2	2.1	2.1	1.9	A	1.8	1.8	1.9	1.8	1.9	2.0	1.9	1.9	1.9	2.1	2.0	1.9	7.9	2.30	7.94
24-Jun-04	2.0	2.0	2.1	2.2	2.2	2.1	2.1	2.0	1.9	A	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	2.0	3.5	2.9	2.1	2.2	2.08	3.47
25-Jun-04	2.2	2.2	2.2	2.1	2.1	2.2	2.0	2.1	A	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0	2.1	1.98	2.25
26-Jun-04	2.1	2.1	2.1	2.4	2.6	2.5	2.3	A	2.2	2.3	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.9	1.9	2.04	2.56
27-Jun-04	1.9	2.1	2.3	2.4	2.5	2.5	A	2.2	1.9	1.8	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.97	2.52
28-Jun-04	1.9	1.9	1.9	2.1	2.7	A	2.1	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.9	2.0	1.91	2.66
29-Jun-04	1.9	1.9	2.0	2.4	A	2.4	2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.93	2.40
30-Jun-04	2.0	2.0	1.9	A	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	1.8	2.2	1.96	2.25
																									N	0.00
Hourly Avg	2.08	2.02	2.13	2.09	2.12	2.12	2.07	2.01	1.96	1.91	1.90	1.87	1.86	1.86	1.84	1.84	1.83	1.81	1.81	1.87	2.07	1.99	2.02	2.24		
Hourly Max	3.43	2.46	3.67	2.54	2.88	2.53	2.53	2.40	2.35	2.33	2.24	2.01	2.00	2.02	2.18	1.98	1.97	1.89	1.87	2.05	3.47	2.94	3.30	7.94		

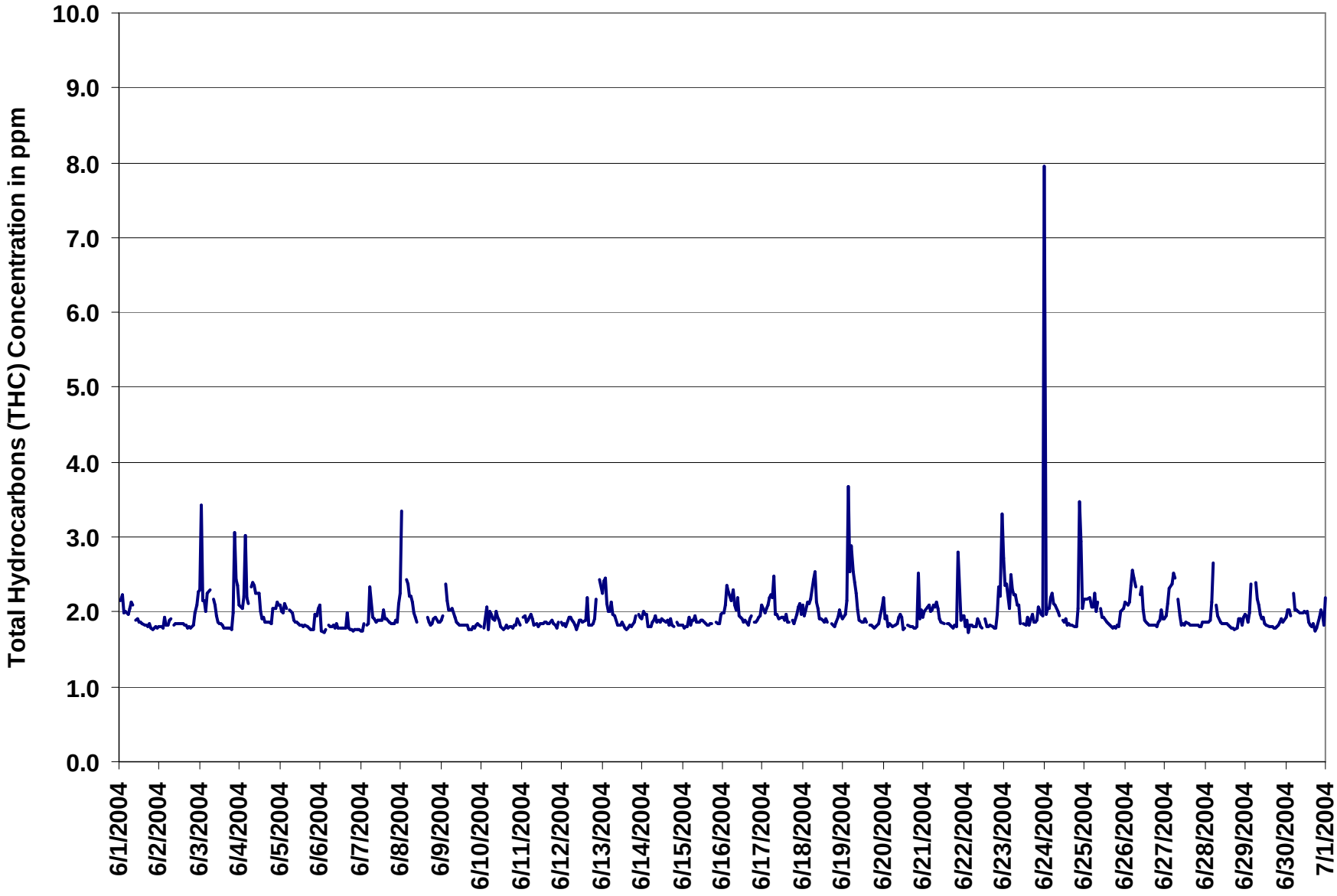


Figure 8. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend

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

HOURLY AVERAGE TABLE

Particulate Matter ($PM_{2.5}$)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	22.5	µg/m³	05-Jun	18:00 19:00
Maximum 24-hr Average:	5.9	µg/m³	22-Jun	

Guideline Limit — Canada Wide Standard (considered as an absolute value): 1-hr - µg/m³; 24-hr 30 µg/m³

AIC Time:	0 hrs			Operational Time:				708 hrs	
Calibration Time:	1 hrs			AMD Operational Uptime:				98.5%	
Percentile	99	95	75	50	25	5	1	Average	Geomean
	11.6	7.8	4.4	2.4	1.1	0.0	0.0	3.0 µg/m³	2.7 µg/m³

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-Jun-04	6	6	4	4	4	6	8	5	4	1	2	2	0	1	1	2	2	2	2	3	6	5	2	2	3.4	8.3
2-Jun-04	0	2	3	3	3	6	4	3	2	1	1	1	2	2	1	3	4	3	4	4	8	5	6	6	3.1	7.8
3-Jun-04	7	6	2	2	4	6	5	5	3	2	1	2	1	2	1	2	2	3	3	3	7	8	13	11	4.2	12.7
4-Jun-04	7	6	5	5	4	6	10	7	9	6	5	0	3	3	3	4	2	4	5	5	7	8	11	10	5.6	10.7
5-Jun-04	5	1	2	5	5	5	6	5	7	5	0	0	5	4	4	4	4	7	23	9	3	1	6	3	4.9	22.5
6-Jun-04	D	D	0	0	2	1	0	0	0	0	0	D	D	D	0	8	1	1	0	0	0	0	D	0	0.7	8.4
7-Jun-04	0	3	1	2	2	2	2	3	2	1	3	3	7	2	D	0	0	3	3	6	5	5	5	4	2.8	7.4
8-Jun-04	5	6	6	4	3	5	6	6	2	0	0	1	1	0	1	0	0	2	C	0	2	3	3	0	2.5	6.2
9-Jun-04	2	2	2	1	0	2	2	2	0	0	3	3	2	2	1	1	0	1	1	2	5	5	4	3	2.0	5.3
10-Jun-04	3	2	0	3	1	2	3	2	3	1	3	2	2	2	3	2	1	2	4	4	4	2	1	2	2.3	4.1
11-Jun-04	1	0	0	0	0	1	1	1	1	0	0	1	1	2	0	2	2	4	6	6	4	3	2	3	1.7	6.3
12-Jun-04	0	0	0	3	3	2	2	0	0	2	1	3	1	2	0	0	0	0	2	2	2	2	4	4	1.6	4.4
13-Jun-04	7	4	2	1	2	3	1	2	2	2	2	2	0	0	0	1	2	3	1	4	0	3	0	0	1.8	6.6
14-Jun-04	0	2	0	0	0	1	4	5	1	3	3	1	0	0	3	0	3	2	2	1	0	0	0	1	1.4	5.4
15-Jun-04	0	0	1	2	0	2	2	1	2	0	0	1	1	2	4	2	2	2	2	3	4	1	2	2	1.6	4.1
16-Jun-04	1	2	1	2	4	4	5	4	2	2	2	2	0	0	3	2	5	2	1	2	1	0	1	0	1.9	4.8
17-Jun-04	1	0	0	1	2	1	2	0	2	0	0	0	2	3	0	1	1	0	2	2	2	4	4	3	1.5	3.9
18-Jun-04	2	2	3	2	2	5	4	4	4	0	0	0	0	0	0	0	1	0	1	2	4	4	4	3	2.0	5.1
19-Jun-04	2	3	2	1	3	3	4	3	1	D	0	0	1	0	0	0	0	0	0	2	2	3	4	5	1.7	5.1
20-Jun-04	2	1	0	1	1	2	2	3	3	5	8	5	2	1	0	0	0	0	2	2	4	3	3	5	2.4	7.6
21-Jun-04	4	2	3	4	3	6	6	5	5	0	0	0	1	1	2	2	1	2	3	5	6	9	10	12	3.8	12.5
22-Jun-04	10	6	8	10	4	5	5	5	8	5	6	3	2	8	7	5	0	5	6	7	7	9	6	6	5.9	9.7
23-Jun-04	9	7	7	9	4	8	8	0	D	0	1	1	1	6	2	5	6	3	1	6	3	2	2	2	4.0	8.9
24-Jun-04	1	2	1	3	1	5	7	5	4	0	1	3	1	2	3	3	3	4	3	3	5	7	9	7	3.5	9.2
25-Jun-04	7	5	4	4	5	7	7	8	3	5	6	4	4	1	2	4	2	5	3	5	3	6	6	9	4.9	8.6
26-Jun-04	7	4	5	3	4	12	12	5	4	4	D	0	3	0	2	1	2	3	3	3	7	7	7	7	4.5	12.0
27-Jun-04	6	5	5	4	4	6	4	3	2	D	0	0	0	2	2	2	0	0	3	1	4	4	1	0	2.5	6.0
28-Jun-04	0	0	0	2	1	2	3	3	1	0	0	1	3	2	4	3	2	3	4	6	7	10	4	3	2.7	9.8
29-Jun-04	0	0	3	7	5	5	5	2	3	4	4	2	5	3	3	5	3	6	5	7	8	4	1	5	3.9	8.5
30-Jun-04	2	3	12	7	8	7	8	6	6	6	11	12	4	1	0	3	13	6	2	0	7	10	1	0	5.6	13.0
																									N	0.0
Hourly Avg	3.3	2.9	2.8	3.1	2.9	4.2	4.6	3.5	3.0	2.0	2.2	1.9	1.9	1.9	1.8	2.1	2.1	2.6	3.4	3.6	4.3	4.4	4.2	3.9		
Hourly Max	9.6	6.8	11.8	9.7	8.4	12.0	11.6	8.1	9.4	6.5	11.5	11.8	7.4	8.0	7.1	8.4	13.0	6.8	22.5	9.3	8.5	10.0	12.7	12.5		

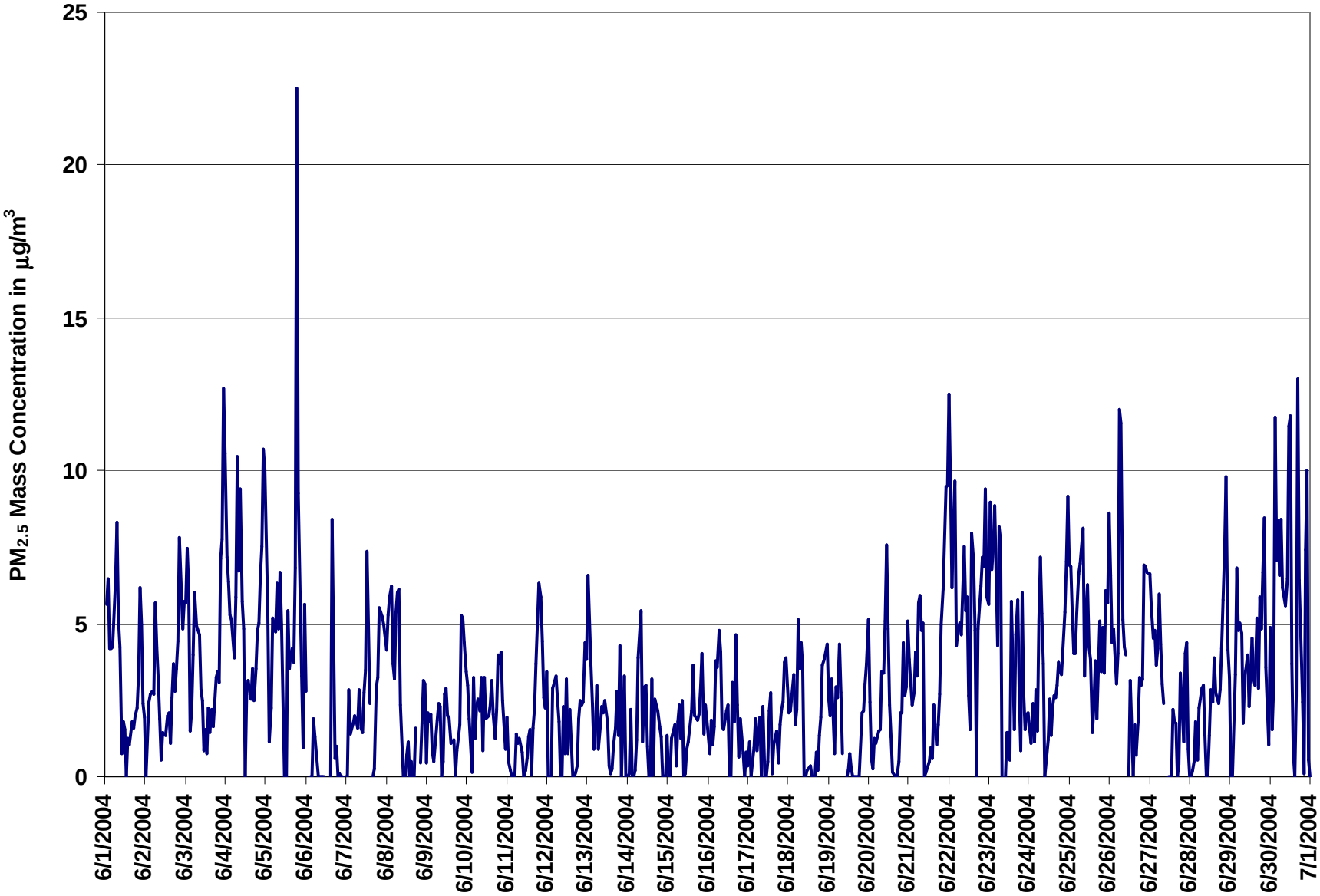


Figure 9. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Crescent Heights

Station Owner: PAS

HOURLY MAXIMUM TABLE

Particulate Matter ($PM_{2.5}$)

Monitoring Dates: **June 1, 2004** to **July 1, 2004**

Summary

Maximum 1-hr Value:	52.6	µg/m³	05-Jun	18:00 19:00
Maximum 24-hr Value:	15.1	µg/m³	30-Jun	

AIC Time:	0 hrs	Operational Time:	719 hrs
Calibration Time:	1 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average	Geomean
	26.8	15.2	9.7	6.8	4.9	2.5	0.4	7.8 µg/m³	7.5 µg/m³

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-Jun-04	10	11	8	6	8	9	10	9	14	4	6	6	4	8	5	6	7	6	5	7	9	8	5	4	7.3	14.3
2-Jun-04	2	6	5	4	5	13	7	6	9	7	6	6	7	7	5	6	9	6	7	7	11	11	19	16	7.8	18.9
3-Jun-04	10	9	14	4	8	12	8	9	8	8	5	7	7	6	6	6	7	6	7	6	12	17	26	15	9.2	25.7
4-Jun-04	10	10	9	9	7	10	15	13	15	12	13	3	8	7	6	10	8	9	8	9	10	16	15	16	10.3	15.9
5-Jun-04	12	11	15	10	10	12	12	10	10	10	5	7	11	8	9	8	7	14	53	22	8	6	9	9	12.1	52.6
6-Jun-04	0	0	4	4	5	4	3	6	1	5	5	1	0	1	1	27	7	6	8	3	3	1	0	0	4.0	27.5
7-Jun-04	0	9	14	4	5	4	7	6	4	5	10	11	16	8	3	7	6	7	7	9	7	7	7	6	7.1	16.5
8-Jun-04	9	15	10	6	5	9	8	10	7	4	11	5	12	2	8	4	3	6	C	8	5	6	5	2	6.9	14.5
9-Jun-04	5	3	4	5	3	4	4	6	3	4	7	5	5	7	4	4	3	5	5	5	8	10	11	10	5.4	11.5
10-Jun-04	7	6	4	6	5	6	8	5	7	7	9	5	6	7	7	5	6	5	8	6	8	8	5	5	6.4	9.2
11-Jun-04	4	2	2	1	2	4	3	4	3	3	4	3	4	5	3	6	5	6	9	9	7	4	14	9	4.8	14.0
12-Jun-04	3	1	3	5	7	6	4	5	3	8	4	11	7	9	5	4	4	3	4	6	5	14	8	6	5.6	14.0
13-Jun-04	10	9	6	4	4	6	3	5	7	8	6	10	6	7	4	6	5	9	7	12	4	13	5	1	6.6	12.9
14-Jun-04	3	5	1	0	2	4	10	10	6	6	8	7	9	16	8	9	7	14	11	6	14	4	4	4	7.0	16.1
15-Jun-04	2	3	5	4	3	4	5	4	7	3	4	10	16	7	9	6	5	3	15	6	6	4	6	5	6.0	16.3
16-Jun-04	4	4	3	4	9	6	8	8	8	9	8	6	5	3	8	10	14	12	5	5	4	2	2	2	6.2	14.3
17-Jun-04	3	2	2	3	6	5	4	3	8	4	4	5	10	8	3	5	9	5	6	7	5	8	6	6	5.2	10.1
18-Jun-04	4	5	6	4	5	8	6	10	8	3	5	4	4	6	5	5	6	6	5	5	7	9	8	4	5.8	9.9
19-Jun-04	3	7	5	4	6	7	8	7	5	2	5	6	4	6	4	5	3	3	2	10	5	5	9	12	5.5	11.9
20-Jun-04	5	2	3	3	6	3	5	8	7	11	16	9	7	6	7	5	5	5	6	5	6	5	5	7	6.0	16.1
21-Jun-04	5	5	6	8	7	9	8	9	10	5	4	4	3	5	7	5	3	7	7	8	11	15	19	19	7.9	18.8
22-Jun-04	13	9	11	12	8	8	8	11	11	10	10	12	14	32	22	17	13	9	10	13	10	14	10	8	12.3	31.9
23-Jun-04	14	9	10	13	9	12	13	6	3	5	13	7	7	10	7	10	9	6	9	11	5	4	4	5	8.5	14.2
24-Jun-04	5	7	4	7	4	13	11	9	11	5	10	9	7	8	8	8	8	9	8	7	14	13	12	14	8.7	14.0
25-Jun-04	11	10	7	7	7	11	11	12	14	12	14	11	11	9	10	9	5	10	8	8	11	13	13	17	10.4	16.6
26-Jun-04	16	9	10	8	8	15	15	17	10	10	0	12	14	8	9	5	10	9	6	8	10	9	10	9	9.9	16.5
27-Jun-04	9	10	7	7	6	10	20	8	10	4	7	12	9	6	5	7	6	5	11	7	8	6	5	3	7.8	19.6
28-Jun-04	1	2	3	6	4	15	10	10	7	5	6	8	9	7	9	7	7	9	10	11	17	16	8	7	8.1	17.3
29-Jun-04	4	6	10	30	9	8	12	8	10	9	12	9	11	8	7	10	10	14	16	14	15	12	5	7	10.6	29.5
30-Jun-04	5	14	30	30	15	11	11	11	11	14	21	23	11	14	6	6	27	15	19	9	15	27	6	10	15.1	29.9
																									N	0.0
Hourly Avg	6.3	6.7	7.4	7.3	6.3	8.3	8.6	8.1	7.9	6.8	8.0	7.9	8.1	7.9	6.5	7.6	7.5	7.5	9.7	8.3	8.8	9.5	8.7	8.0		
Hourly Max	16.2	14.5	29.7	29.9	14.9	15.2	19.6	16.5	15.3	14.3	21.4	23.2	16.5	31.9	21.9	27.5	27.1	15.1	52.6	21.7	17.3	27.0	25.7	18.8		

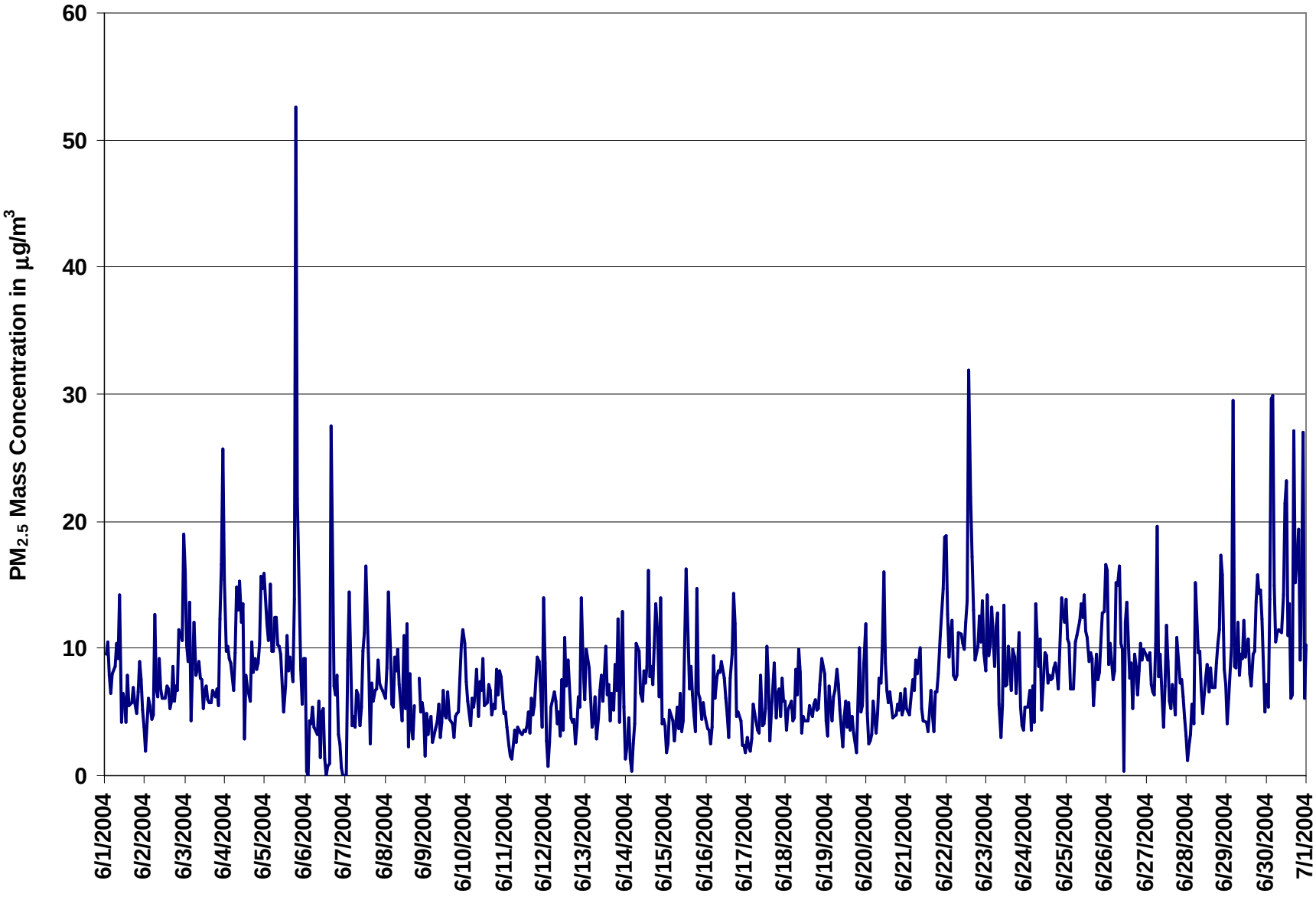
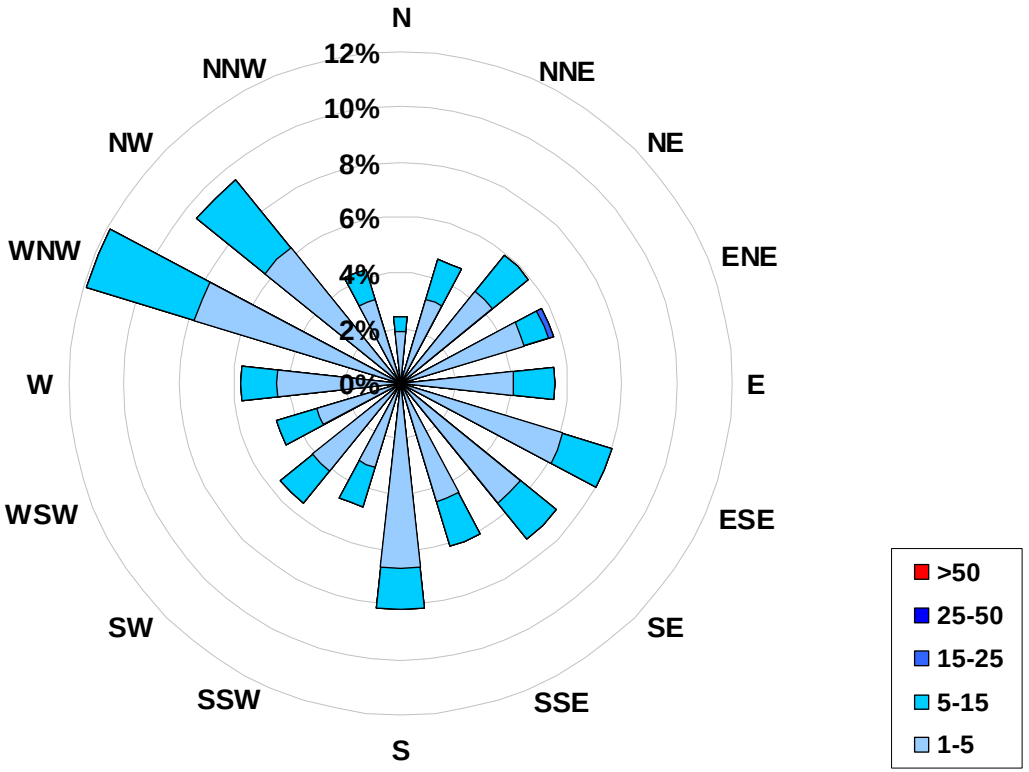


Figure 10. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly

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



Frequency Distribution of $PM_{2.5}$ in $\mu g/m^3$			
Range			Frequency (hrs)
0	<	1	169
1	to	5	393
5	to	15	145
15	to	25	1
25	to	50	0
	>	50	0
Total Non-Zero Values			708

Calms	
Range $\mu g/m^3$	
1-5	0.0%
5-15	0.0%
15-25	0.0%
25-50	0.0%
>50	0.0%

PAS - Crescent Heights Meteorological Parameters Monthly Summary

HOURLY AVERAGE TABLE

Relative Humidity (RH - %)

Station: Crescent Heights

Station Owner: PAS

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	93.5	%	12-Jun	3:00 4:00
Maximum 24-hr Average:	77.9	%	12-Jun	

AIC Time:	0 hrs		Operational Time:				720 hrs	
Calibration Time:	0 hrs		AMD Operational Uptime:				100.0%	
Percentile	99	95	75	50	25	5	1	Average
	91.2	88.6	77.1	60.7	39.9	24.7	21.7	58.6 ppb

Status Flag Characters

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

Day **Mountain Standard Time**

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

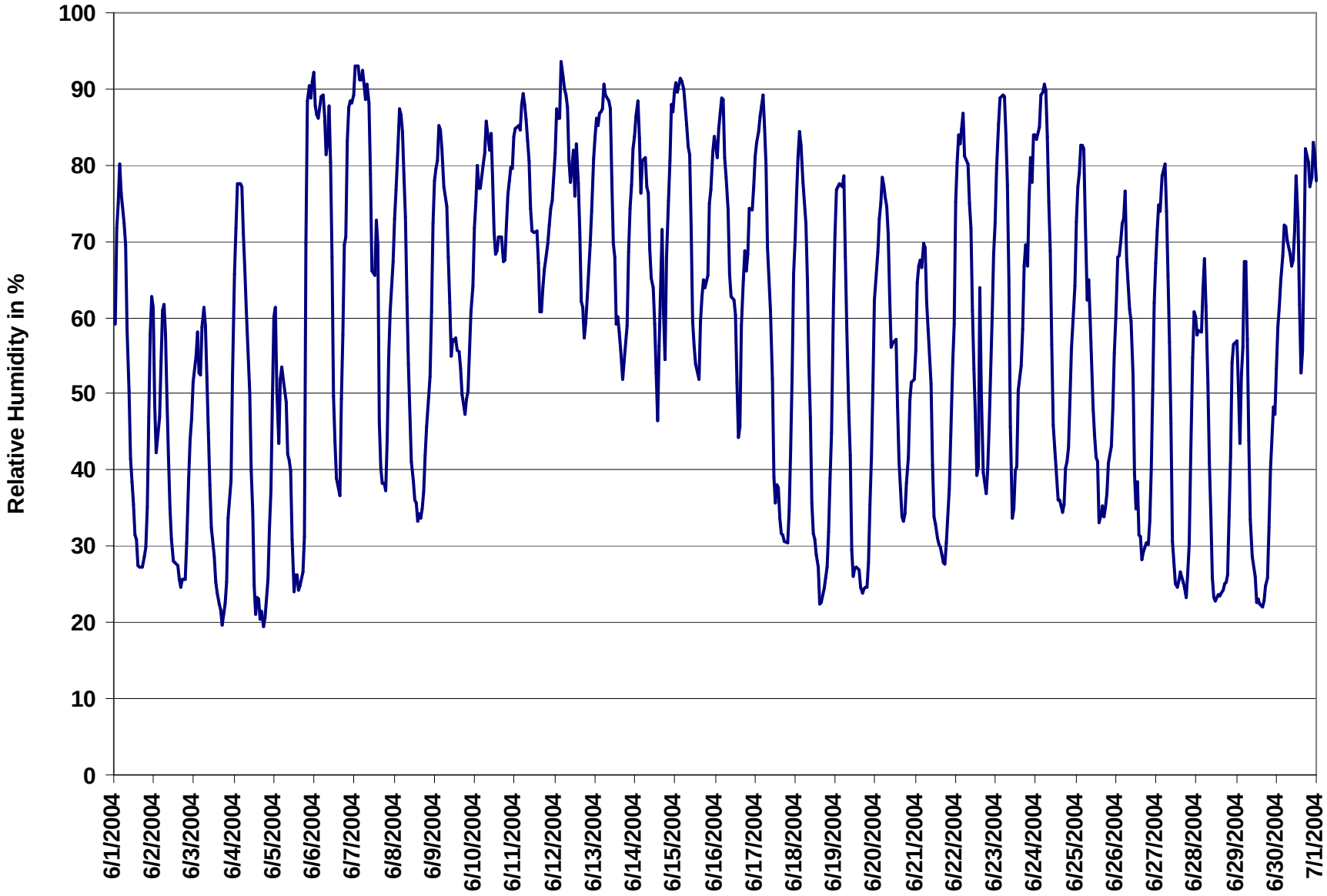


Figure 11. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend

Station: Crescent Heights

Station Owner: PAS

HOURLY AVERAGE TABLE

Ambient Temperature (AT - ℃)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	32.3	°C	29-Jun	15:00 16:00
Maximum 24-hr Average:	24.7	°C	29-Jun	

AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	30.6	27.7	19.7	15.4	11.9	7.4	5.6	16.1 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-Jun-04	10	9	7	6	7	8	10	13	16	18	19	20	21	22	23	23	23	21	21	20	17	15	13	12	15.6	23.2
2-Jun-04	15	16	15	13	11	12	14	17	19	21	22	23	24	25	25	25	25	24	24	22	20	18	17	15	19.2	25.2
3-Jun-04	15	15	15	14	13	13	14	17	20	23	25	26	26	28	28	29	28	28	28	26	23	21	18	15	21.1	28.7
4-Jun-04	14	13	12	12	12	13	16	17	21	24	27	28	29	28	28	29	28	29	29	26	23	22	18	16	21.4	29.3
5-Jun-04	15	16	17	14	15	16	19	22	24	26	28	30	30	30	31	31	29	28	19	16	16	16	16	15	21.6	31.1
6-Jun-04	15	15	15	14	14	15	15	13	12	13	17	18	19	20	20	19	16	14	13	11	11	10	9	9	14.5	19.7
7-Jun-04	9	10	10	10	10	11	11	11	11	12	14	14	14	14	17	17	17	16	16	14	12	11	9	8	12.3	16.8
8-Jun-04	7	6	5	4	4	6	8	11	14	15	15	16	17	18	17	17	17	17	16	15	14	12	10	8	12.0	17.7
9-Jun-04	7	7	7	7	7	9	10	12	13	15	15	16	16	17	17	18	19	20	19	19	18	17	17	15	14.1	19.6
10-Jun-04	14	13	13	13	12	12	12	13	13	12	14	16	17	17	16	16	17	17	16	15	14	14	13	13	14.3	16.8
11-Jun-04	12	12	12	11	10	11	11	11	12	13	13	14	14	15	16	16	15	15	15	14	13	13	13	12	13.0	16.1
12-Jun-04	11	11	11	10	11	11	11	10	12	12	12	14	12	14	15	16	16	16	15	14	12	11	10	9	12.3	15.8
13-Jun-04	9	10	9	9	9	9	10	11	11	14	15	16	17	17	18	19	20	19	18	16	14	14	12	11	13.7	19.6
14-Jun-04	10	10	10	10	9	9	11	13	15	16	17	18	18	19	16	11	15	16	13	12	10	7	7	8	12.6	19.1
15-Jun-04	8	7	8	8	8	8	9	10	10	12	14	15	15	16	15	14	14	14	14	14	13	11	11	10	11.6	16.2
16-Jun-04	9	8	8	7	7	9	11	12	14	15	16	17	19	19	19	15	15	15	14	13	10	9	8	8	12.5	19.4
17-Jun-04	8	7	6	6	6	7	8	10	12	12	13	14	14	15	16	16	16	16	16	15	13	11	8	7	11.3	16.1
18-Jun-04	6	4	4	4	4	7	9	12	15	17	17	18	19	19	20	20	20	20	19	18	16	14	11	9	13.4	20.0
19-Jun-04	7	7	7	6	6	9	11	15	17	20	21	21	22	22	22	22	23	22	22	20	18	16	14	12	15.8	22.6
20-Jun-04	10	9	9	9	8	9	10	11	14	17	18	18	19	20	20	20	20	20	19	18	16	16	15	15	15.1	20.3
21-Jun-04	13	12	12	12	11	12	14	16	18	20	21	22	23	23	24	25	25	25	24	22	20	18	17	15	18.5	24.7
22-Jun-04	14	14	13	13	13	14	15	16	17	20	21	23	24	23	18	22	23	24	23	21	19	18	15	14	18.3	23.7
23-Jun-04	13	12	11	11	10	11	13	15	18	19	20	18	17	15	15	15	14	13	13	12	11	11	9	9	13.6	20.0
24-Jun-04	9	8	7	7	6	7	10	13	15	17	19	19	21	21	22	22	22	20	21	20	18	16	15	13	15.4	22.4
25-Jun-04	12	11	10	9	9	12	15	15	16	20	21	23	23	25	24	23	24	23	22	21	19	18	16	16	17.8	25.2
26-Jun-04	15	14	13	12	12	13	16	17	17	19	21	21	21	23	23	23	23	22	22	21	19	16	13	12	17.8	23.4
27-Jun-04	11	10	10	9	9	11	14	17	21	23	24	25	25	26	26	27	27	27	26	24	20	17	15	14	19.0	27.0
28-Jun-04	13	12	13	12	12	13	17	21	24	26	27	28	29	29	30	30	30	30	29	27	24	21	20	18	22.3	30.2
29-Jun-04	18	19	17	17	14	14	18	21	25	28	30	31	32	32	32	32	31	31	31	28	25	23	22	21	24.7	32.3
30-Jun-04	19	18	18	18	17	17	18	19	19	20	19	19	20	23	25	23	22	19	20	20	20	19	19	19	19.6	25.0
																									N	0.0
Hourly Avg	11.6	11.2	10.7	10.2	9.9	11.0	12.7	14.4	16.2	18.0	19.3	20.1	20.6	21.1	21.2	21.2	21.1	20.7	19.8	18.4	16.6	15.1	13.7	12.5		
Hourly Max	18.7	19.4	18.1	18.2	17.1	17.3	18.6	22.1	24.6	27.7	29.9	31.2	31.6	31.6	31.5	32.3	31.4	30.6	30.5	28.1	25.5	22.8	22.3	20.8		

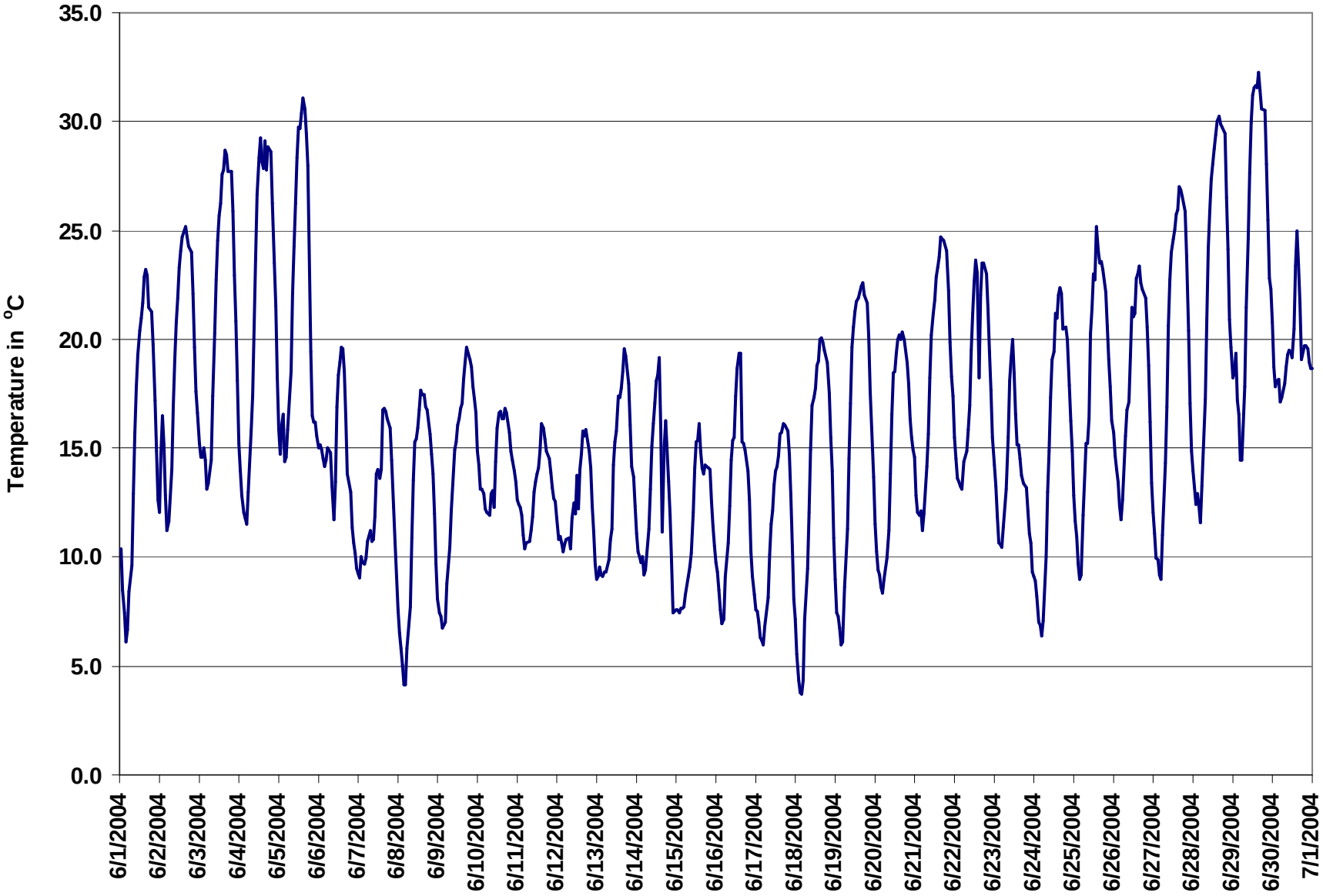


Figure 12. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend

Station: Crescent Heights

Station Owner: PAS

HOURLY AVERAGE TABLE

Solar Radiation (SR - W/m^2)

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

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	956.4	W/m^2	08-Jun	13:00 14:00
Maximum 24-hr Average:	373.7	W/m^2	19-Jun	

AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%

Percentile	99	95	75	50	25	5	1	Average
	922.7	853.2	505.3	121.9	0.0	0.0	0.0	265.9 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 / 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-Jun-04	0	0	0	0	15	82	159	425	605	746	851	925	878	748	834	760	582	280	212	79	5	0	0	0	341	925
2-Jun-04	0	0	0	0	11	121	268	441	604	745	849	917	923	906	830	683	571	401	235	62	6	0	0	0	357	923
3-Jun-04	0	0	0	0	13	119	267	436	603	739	833	878	925	905	744	775	600	382	263	82	6	0	0	0	357	925
4-Jun-04	0	0	0	0	12	127	259	347	512	612	780	881	845	511	420	472	206	394	226	64	5	0	0	0	278	881
5-Jun-04	0	0	0	0	19	120	237	413	495	634	738	898	879	718	655	602	269	73	1	0	0	0	0	0	281	898
6-Jun-04	0	0	0	0	3	23	27	31	47	310	651	823	860	789	569	569	388	126	64	14	0	0	0	0	221	860
7-Jun-04	0	0	0	0	2	14	32	49	86	287	503	382	479	658	812	618	577	403	258	77	6	0	0	0	218	812
8-Jun-04	0	0	0	0	21	134	291	463	599	788	844	882	890	956	878	658	350	308	97	32	5	0	0	0	341	956
9-Jun-04	0	0	0	0	21	159	252	222	232	492	356	371	278	421	303	496	416	289	87	15	0	0	0	0	184	496
10-Jun-04	0	0	0	0	1	9	51	205	115	90	445	462	583	428	248	208	248	192	77	24	2	0	0	0	141	583
11-Jun-04	0	0	0	0	7	60	129	100	120	159	163	133	141	200	322	150	85	70	57	14	2	0	0	0	80	322
12-Jun-04	0	0	0	0	1	18	36	50	226	202	186	421	290	395	404	302	285	365	165	62	6	0	0	0	142	421
13-Jun-04	0	0	0	0	2	13	95	122	196	541	410	539	616	629	397	538	505	360	99	23	4	0	0	0	212	629
14-Jun-04	0	0	0	0	13	56	190	281	546	566	799	884	555	628	253	55	450	379	133	41	2	0	0	0	243	884
15-Jun-04	0	0	0	0	4	54	76	80	151	311	483	654	546	843	531	382	304	211	117	69	5	0	0	0	201	843
16-Jun-04	0	0	0	0	21	131	262	335	545	441	413	779	760	745	575	135	194	279	101	52	7	0	0	0	241	779
17-Jun-04	0	0	0	0	9	120	286	436	650	472	775	784	600	636	761	514	520	428	262	95	7	0	0	0	306	784
18-Jun-04	0	0	0	0	19	131	285	453	616	753	900	887	956	922	856	744	599	434	270	97	7	0	0	0	372	956
19-Jun-04	0	0	0	0	20	135	291	461	624	766	870	935	950	920	852	740	597	436	268	98	6	0	0	0	374	950
20-Jun-04	0	0	0	0	9	53	103	192	320	582	619	529	771	779	751	557	506	341	170	69	9	0	0	0	265	779
21-Jun-04	0	0	0	0	14	123	281	437	611	751	856	860	835	766	731	726	545	399	225	76	5	0	0	0	343	860
22-Jun-04	0	0	0	0	22	120	259	228	502	671	772	893	798	610	336	474	541	421	245	75	10	0	0	0	291	893
23-Jun-04	0	0	0	0	10	87	212	397	529	677	770	417	279	191	338	176	75	88	60	13	1	0	0	0	180	770
24-Jun-04	0	0	0	0	16	53	266	425	589	729	827	676	806	546	749	662	502	182	214	88	9	0	0	0	306	827
25-Jun-04	0	0	0	0	16	130	337	152	204	695	409	794	619	902	581	552	489	300	151	62	8	0	0	0	267	902
26-Jun-04	0	0	0	0	17	108	252	368	509	732	599	508	733	852	853	690	330	244	201	82	10	0	0	0	295	853
27-Jun-04	0	0	0	0	16	125	279	450	614	756	814	866	869	775	735	801	626	446	269	90	7	0	0	0	356	869
28-Jun-04	0	0	0	0	15	120	269	436	596	737	838	916	930	901	832	729	615	467	242	49	15	0	0	0	363	930
29-Jun-04	0	0	0	0	12	109	263	428	585	729	836	788	779	912	554	659	371	340	285	80	6	0	0	0	322	912
30-Jun-04	0	0	0	0	5	36	73	134	153	92	123	181	231	568	417	80	50	87	86	29	2	0	0	0	98	568
																									N	0
Hourly Avg	0	0	0	0	12	90	203	300	426	560	644	695	687	692	604	517	413	304	171	57	5	0	0	0		
Hourly Max	0	0	0	0	22	159	337	463	650	788	900	935	956	956	878	801	626	467	285	98	15	0	0	0		

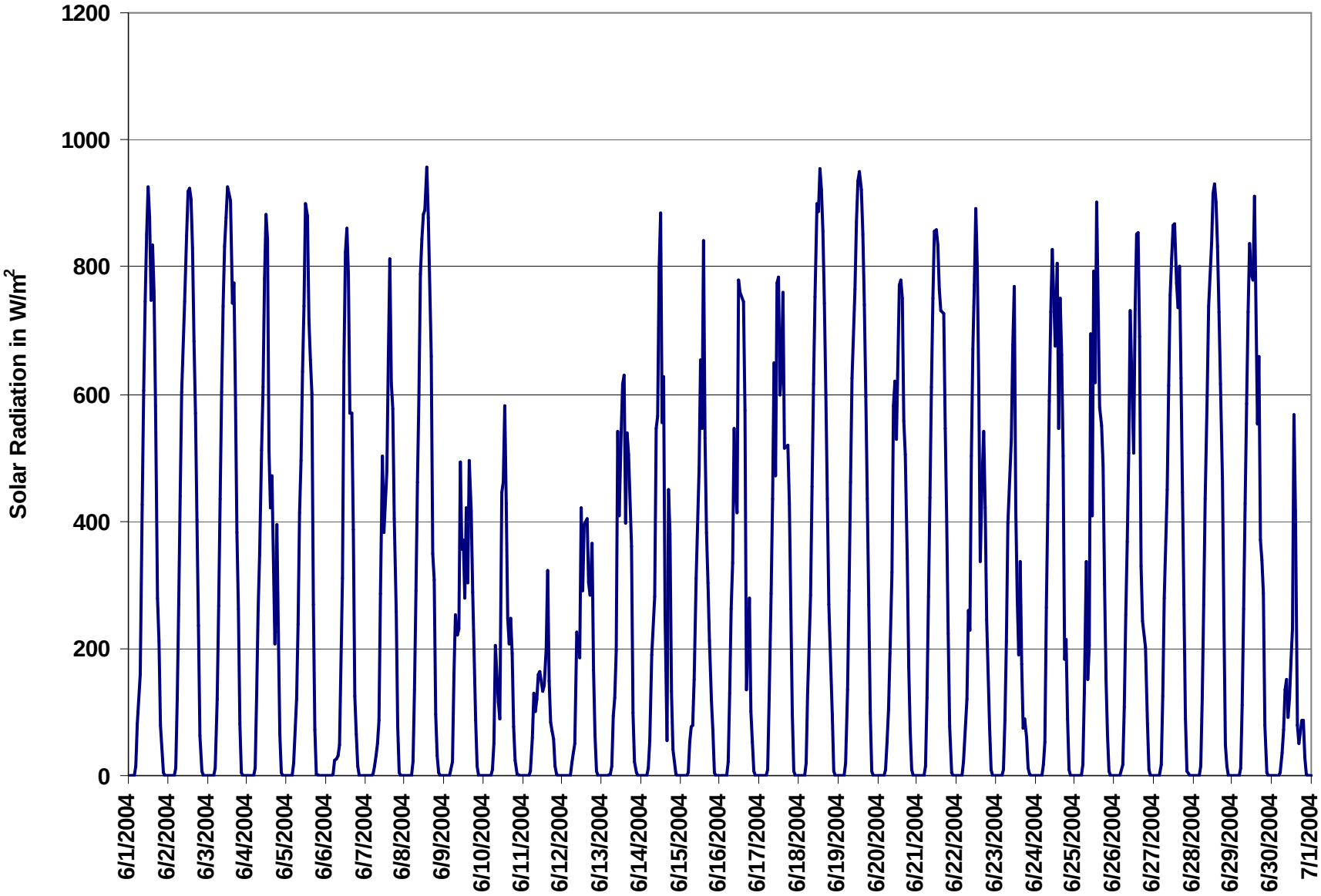


Figure 13. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend

Station: Crescent Heights

HOURLY AVERAGE TABLE

Wind Speed (WS - Km/hr)

Station Owner: PAS

Monitoring Dates: **June 1, 2004** to **July 1, 2004**

Summary

Maximum 1-hr Average:	38.6	km/hr	06-Jun	14:00 15:00
Maximum 24-hr Average:	19.2	km/hr	06-Jun	

Calm Time:	0 hrs	**0%** calms			Operational Time:			720 hrs	
Calibration Time:	0 hrs				AMD Operational Uptime:			100.0%	
Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	27.3	21.2	12.7	8.8	5.9	3.6	3.0	10.0 km/hr	1.6 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 / 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-hr Scalar Average	24-hr Vector Average	Daily Max
1-Jun-04	4	4	6	6	5	4	3	4	6	6	7	7	9	7	8	8	9	8	9	9	9	8	8	6	6.7	4.8	9.4
2-Jun-04	12	18	15	10	9	9	9	9	12	10	9	9	9	12	13	11	12	10	8	7	7	9	7	5	10.1	6.1	17.5
3-Jun-04	4	5	11	7	5	5	12	12	10	10	12	11	11	9	7	7	8	7	5	4	4	4	4	6	7.6	4.1	12.4
4-Jun-04	4	3	4	6	6	3	4	3	5	4	5	7	6	7	7	5	6	5	5	8	8	7	7	6	5.4	1.7	8.1
5-Jun-04	7	10	12	11	12	12	13	16	16	19	21	23	26	18	17	19	19	15	19	7	8	8	4	9	14.2	11.5	26.4
6-Jun-04	13	9	5	7	15	14	15	16	11	5	9	28	32	36	39	24	19	19	19	14	20	23	33	37	19.2	16.5	38.6
7-Jun-04	32	22	15	15	12	13	16	21	23	25	26	21	22	20	25	25	28	24	21	13	7	8	6	5	18.5	16.1	31.5
8-Jun-04	3	4	6	5	5	4	7	4	5	7	10	15	14	15	15	12	10	12	13	13	11	10	6	5	8.7	6.7	14.9
9-Jun-04	4	4	4	7	8	7	11	10	13	18	15	17	19	20	20	21	22	22	19	15	9	7	8	11	13.0	12.3	21.8
10-Jun-04	11	11	7	9	6	4	3	5	6	11	9	11	11	11	9	8	9	13	14	11	9	10	13	12	9.2	2.5	14.5
11-Jun-04	10	11	11	9	10	11	13	14	15	15	15	17	15	18	17	16	15	17	15	15	13	10	10	14	13.6	13.1	17.6
12-Jun-04	13	11	12	10	12	12	11	13	14	13	12	13	11	16	15	16	18	19	16	10	7	5	3	3	11.9	10.4	19.1
13-Jun-04	3	4	4	4	4	5	7	8	8	6	5	5	8	11	7	8	6	6	7	11	10	7	13	10	7.0	3.2	12.5
14-Jun-04	6	6	9	11	10	10	7	6	11	11	9	10	10	11	22	22	10	16	18	13	16	20	22	12	12.5	8.4	22.5
15-Jun-04	13	14	13	13	14	15	13	12	11	11	9	12	18	21	21	20	16	13	12	11	8	8	5	4	12.7	11.7	20.7
16-Jun-04	5	5	6	4	3	5	9	8	7	10	11	14	13	16	18	20	10	23	22	21	23	11	5	4	11.4	6.4	23.0
17-Jun-04	6	6	5	5	5	8	6	6	9	12	16	15	15	12	14	11	11	11	10	7	6	6	5	5	8.9	6.6	16.2
18-Jun-04	5	4	3	4	3	3	3	3	5	6	10	11	10	11	9	8	8	8	9	10	9	9	6	7	6.8	5.0	11.1
19-Jun-04	5	5	5	5	3	3	3	5	8	6	6	8	8	10	10	10	8	10	10	8	7	7	7	11	7.0	4.8	11.4
20-Jun-04	10	13	19	14	12	14	15	13	9	10	18	22	25	22	22	24	21	21	20	13	8	9	9	10	15.5	9.1	24.6
21-Jun-04	9	5	7	7	5	5	5	8	9	15	15	13	12	11	12	11	13	13	10	7	5	5	12	7	9.2	6.7	14.8
22-Jun-04	12	10	9	6	6	4	9	10	13	12	13	15	15	20	14	9	18	18	16	10	6	7	7	5	11.1	8.5	19.8
23-Jun-04	4	4	4	4	4	5	7	8	12	18	17	19	18	17	14	16	14	14	9	7	6	7	5	5	9.9	6.8	18.8
24-Jun-04	5	5	3	6	6	8	6	6	8	6	6	6	6	5	6	7	8	9	9	4	3	4	5	5	6.0	2.2	9.0
25-Jun-04	5	6	5	5	4	3	3	4	4	5	3	6	7	7	8	11	9	9	12	10	9	8	5	5	6.3	3.2	11.5
26-Jun-04	5	4	4	6	4	4	3	5	7	9	9	16	18	13	13	8	9	6	9	9	8	7	6	6	7.8	5.6	18.2
27-Jun-04	5	5	4	2	3	3	5	6	7	11	10	10	8	10	9	8	8	8	7	8	10	7	5	5	6.8	4.6	11.1
28-Jun-04	7	5	5	4	5	6	4	6	6	12	10	11	10	11	11	8	8	7	5	9	9	6	6	5	7.3	2.4	11.7
29-Jun-04	6	8	3	5	6	7	4	4	4	5	6	5	9	9	6	7	5	8	10	13	13	15	14	12	7.7	3.6	15.3
30-Jun-04	4	4	8	9	5	3	4	7	6	6	4	6	7	10	15	13	13	9	5	6	4	6	6	7	6.9	2.7	15.3
																									N	N	0.0
1-hr Scalar	7.7	7.5	7.4	7.2	6.9	7.0	7.8	8.4	9.3	10.5	10.9	12.7	13.4	13.8	14.0	13.1	12.4	12.6	12.1	10.1	9.0	8.6	8.4	8.2			
1-hr Vector	2.1	1.9	1.6	1.7	2.1	1.9	1.3	1.2	1.1	1.8	1.9	1.3	2.4	2.4	3.0	3.8	4.0	5.3	5.7	5.0	3.0	1.8	1.2	0.7			
Hourly Max	31.5	21.7	19.1	14.9	14.8	14.9	16.1	20.6	23.3	24.9	25.6	27.5	31.7	36.1	38.6	25.2	27.9	23.9	22.0	21.3	23.0	23.2	33.4	37.4			

Station: Crescent Heights

Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

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

Summary

Calm Time:	0 hrs	**0%** calms				Operational Time:																			720 hrs
Calibration Time:	0 hrs					AMD Operational Uptime:																			100.0%
Percentile	99	95	75	50	25	5	1	Average																	
	348.1	326.2	279.7	176.2	106.6	30.4	8.3	157 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 / 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
1-Jun-04	340	296	315	301	336	304	20	19	21	276	286	272	219	314	333	308	328	343	318	308	311	310	310	314	314
2-Jun-04	345	360	13	29	55	58	54	58	44	32	51	22	48	54	61	82	86	91	122	138	168	182	204	302	51
3-Jun-04	306	236	245	242	267	226	230	248	265	265	270	263	228	266	246	281	76	92	60	66	140	117	309	296	255
4-Jun-04	344	316	347	40	27	32	273	58	34	136	12	360	216	293	289	323	199	224	180	205	238	268	287	298	296
5-Jun-04	290	278	277	288	274	283	285	286	286	290	292	299	295	314	326	328	319	308	66	20	251	208	310	302	297
6-Jun-04	308	321	332	56	46	38	27	38	48	78	22	52	53	47	54	90	91	79	94	87	72	71	59	55	57
7-Jun-04	64	130	141	134	124	146	157	164	169	173	181	171	160	148	171	170	171	171	178	181	176	181	169	148	159
8-Jun-04	91	110	34	6	6	307	297	301	294	274	240	240	280	298	272	272	285	280	285	271	286	308	290	305	286
9-Jun-04	326	308	277	262	264	257	270	291	286	293	285	298	293	292	284	280	290	288	280	282	306	347	302	289	288
10-Jun-04	284	301	265	298	262	164	139	273	280	273	31	45	61	88	94	98	143	176	189	179	157	172	164	155	172
11-Jun-04	141	141	141	130	122	110	119	125	131	133	137	136	134	158	140	142	149	154	140	143	134	120	123	144	136
12-Jun-04	131	121	119	113	107	117	118	124	134	128	114	114	120	137	143	149	154	162	175	177	184	200	269	317	137
13-Jun-04	26	296	312	304	285	235	277	300	289	299	148	187	171	188	138	44	90	180	208	204	248	235	205	253	236
14-Jun-04	328	14	77	59	61	61	73	86	64	99	140	136	96	81	85	131	106	149	185	200	124	135	147	112	113
15-Jun-04	91	89	93	103	94	96	111	113	96	100	126	123	136	129	137	133	113	108	113	108	88	88	45	8	110
16-Jun-04	93	38	15	354	20	29	48	69	126	75	77	62	102	127	130	130	106	175	179	185	194	207	176	164	134
17-Jun-04	154	156	147	134	128	158	146	165	172	170	179	179	180	198	188	191	208	212	203	232	260	290	301	330	187
18-Jun-04	306	305	318	305	293	286	293	323	319	295	272	273	291	261	310	295	242	244	222	222	229	256	283	299	272
19-Jun-04	308	351	342	348	3	329	24	31	47	46	41	21	66	84	98	90	90	68	72	75	75	77	54	50	54
20-Jun-04	48	47	46	57	63	50	48	57	115	197	207	183	175	171	170	167	160	163	163	164	138	120	122	123	138
21-Jun-04	137	135	79	54	56	290	136	121	122	171	178	167	130	125	132	115	111	111	93	75	102	65	188	137	128
22-Jun-04	113	85	80	120	94	56	75	113	112	112	93	88	93	139	188	173	155	153	164	159	124	163	155	196	126
23-Jun-04	298	299	285	231	326	181	230	281	270	264	270	248	254	232	249	239	226	202	197	165	122	119	125	81	241
24-Jun-04	77	60	48	63	49	52	49	39	43	59	149	148	157	166	165	121	150	191	223	249	81	41	39	337	83
25-Jun-04	10	7	324	317	308	314	316	51	22	310	315	335	326	331	199	219	224	210	234	236	247	258	270	249	266
26-Jun-04	258	321	179	148	166	313	14	172	195	224	255	225	231	261	233	237	236	285	246	246	246	280	293	307	242
27-Jun-04	288	300	188	228	198	223	282	261	283	277	308	296	231	294	330	358	1	16	328	311	312	315	325	321	303
28-Jun-04	305	305	236	180	171	172	201	279	343	13	360	9	341	323	342	13	120	205	84	215	261	288	21	34	N
29-Jun-04	52	53	117	203	172	163	187	218	219	345	4	27	325	182	232	287	255	221	247	247	211	204	205	202	218
30-Jun-04	306	291	96	133	161	109	67	189	239	267	328	279	238	256	276	296	8	16	288	262	306	300	357	337	292
																									N
Hourly Avg	35	29	57	72	72	86	86	111	124	214	211	185	175	165	157	159	154	168	178	196	196	182	162	12	

Station: Crescent Heights

Station Owner: PAS

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

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

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	**0%** calms	Operational Time: 711 hrs
Calibration Time:	0 hrs		AMD Operational Uptime: 98.8%

Percentile	99	95	75	50	25	5	1
	74.6	56.4	21.7	11.7	7.7	5.6	4.9

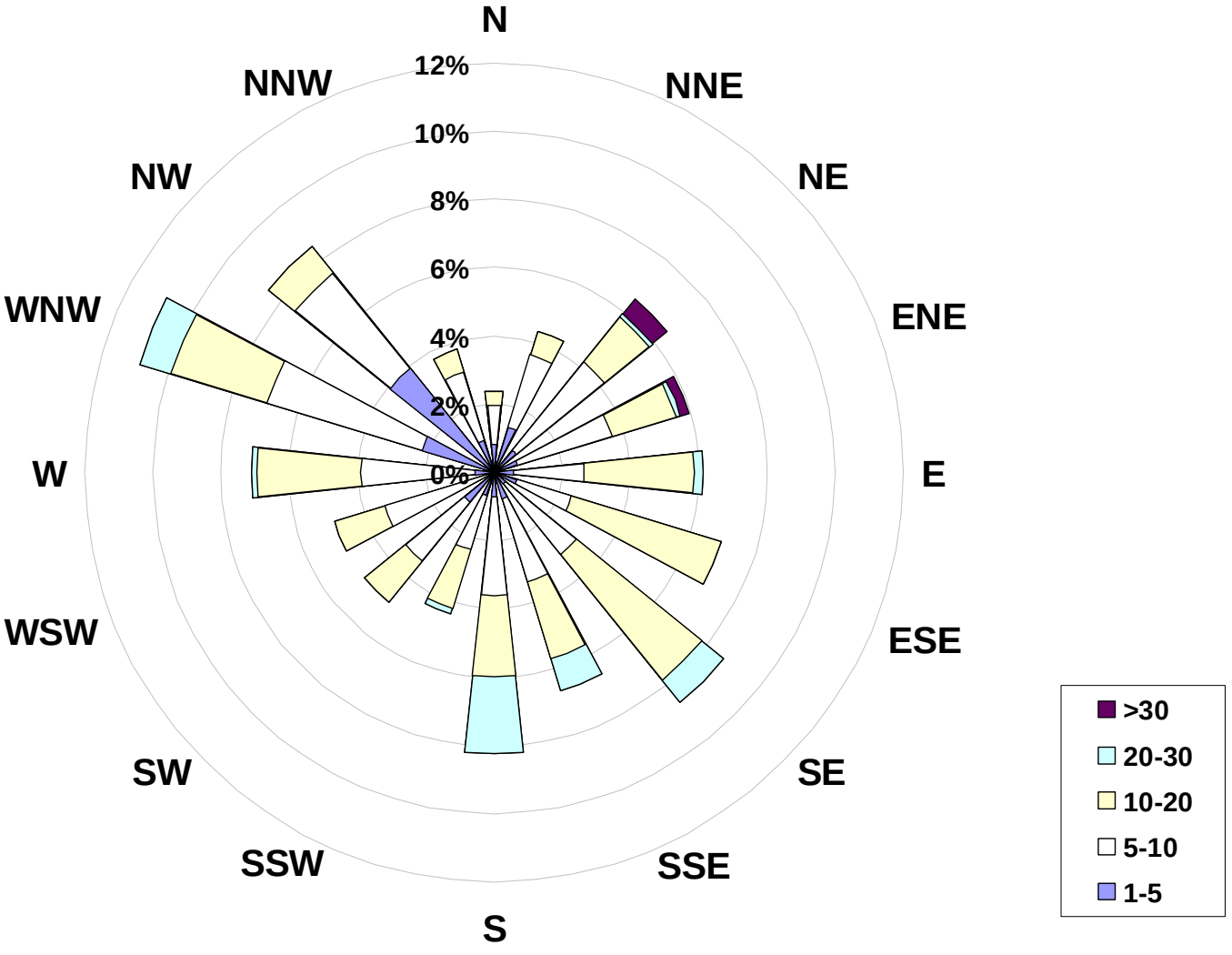
Status Flag Characters

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 / 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	Daily Maximum
1-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-04	6	6	6	6	5	6	6	5	5	5	5	5	6	7	7	9	10	10	7	6	7	9	5	8	10.1
24-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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-Jun-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
																									0.0
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	

Wind Rose for the 1-hr Average Meterological Data at the Crescent Heights Site for June 2004



Calm 0%

PAS - Crescent Heights Passive Monitoring Monthly Summary

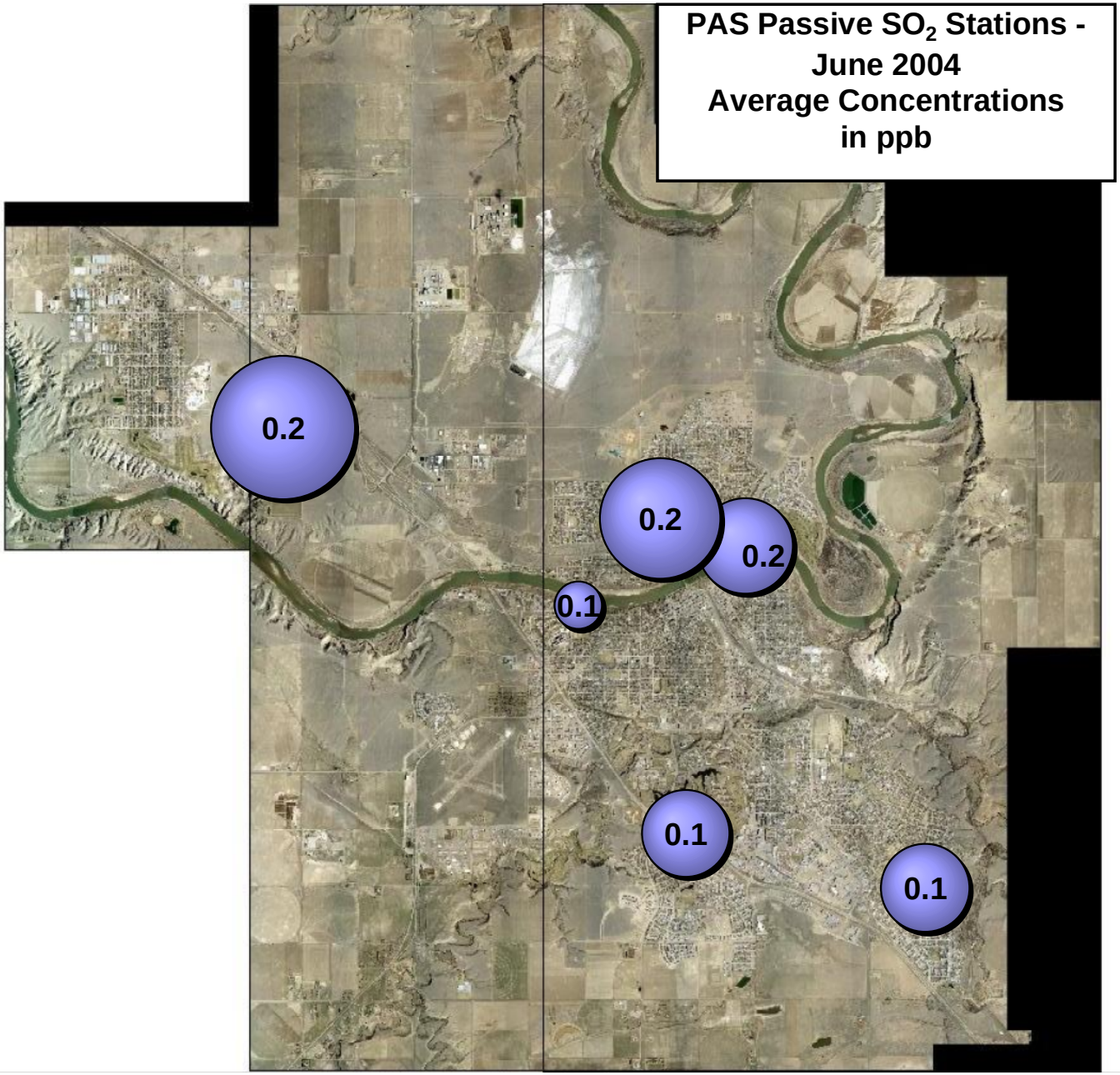
Ambient Air Compliance Network

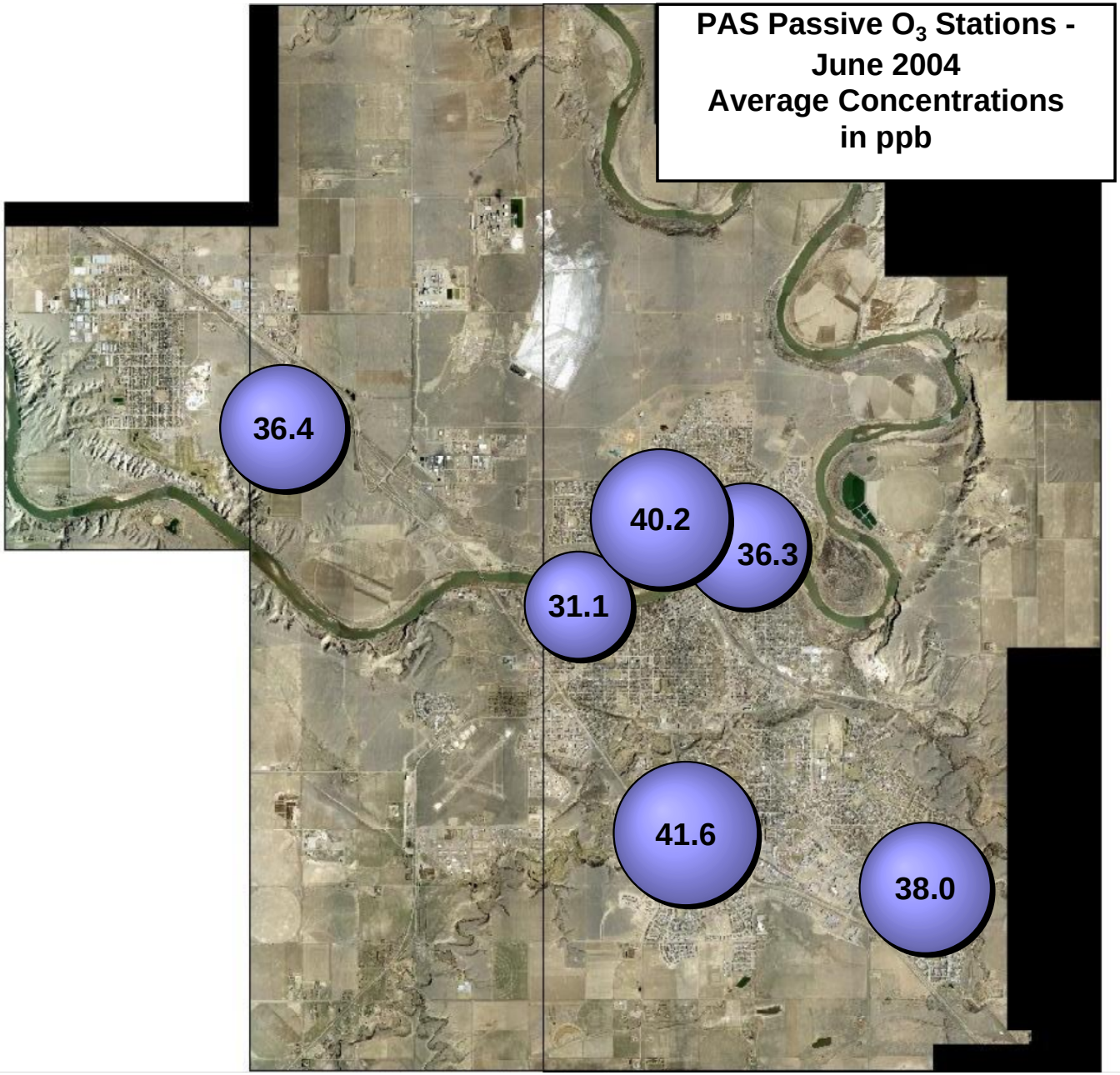
Pallisar Airshed Society - PAS Passive Stations for June 2004

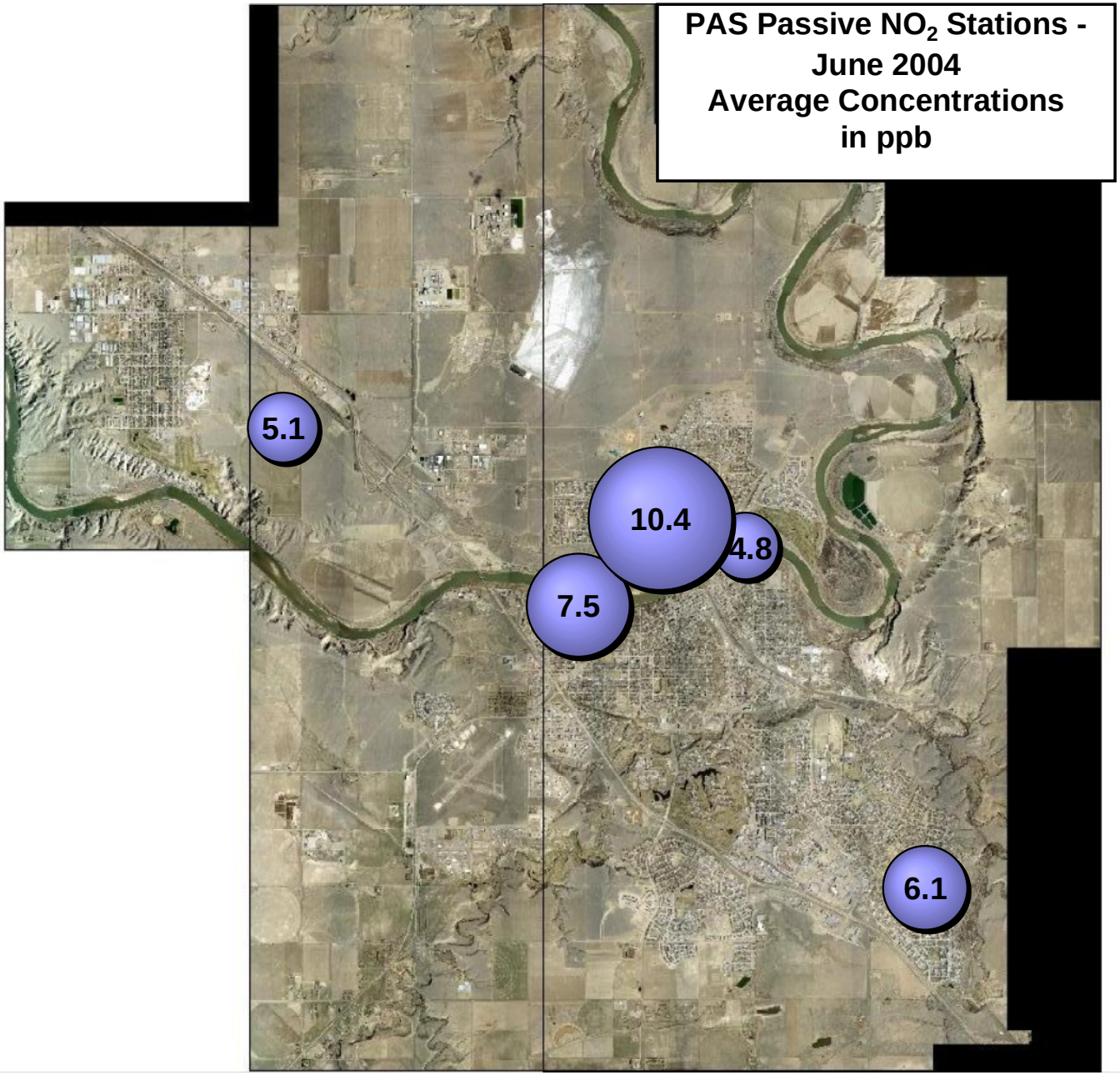
Station Number	Station Name	SO_2 ppb	O_3 ppb	NO_2 ppb	Location Easting	Northing	Elevtion
Duplicates							
4a	Monitoring station	**0.3**	**NA**	**NA**			
4b		**0.1**	**33.0**	**4.6**			
1	Hospital	**0.1**	**31.1**	**7.5**	521648	5542721	698
2	Ball Park	**0.2**	**36.3**	**4.8**	524019	5543686	660
3	Monitoring Station	**0.2**	**40.2**	**10.4**	522812	5544133	714
4	Redcliff	**0.2**	**36.4**	**5.1**	517448	5545608	725
5	Southridge	**0.1**	**41.6**	**NA**	523172	5539016	721
6	Christian School Park	**0.1**	**38.0**	**6.1**	526577	5538133	709
Stats:							
	Mean	**0.2**	**37.3**	**6.8**			
	Standard Deviation	**0.1**	**3.7**	**2.3**			
	Minimum	**0.1**			**1**	**Hospital**	
	Maximum	**0.2**			**4**	**Redcliff**	
	Minimum		**31.1**		**1**	**Hospital**	
	Maximum		**41.6**		**5**	**Southridge**	
	Minimum			**4.8**	**2**	**Ball Park**	
	Maximum			**10.4**	**3**	**Monitoring Station**	

Comparison between Continuous and Passive monitoring (passive #3)

	SO_2	O_3	NO_2
PAS Station	**-**	**30.5**	**5.8**
PAS Passive	**0.2**	**40.2**	**10.4**


PAS Passive SO_2 Stations - June 2004
Average Concentrations in ppb
0.2
0.2
0.2
0.1
0.1
0.1


PAS Passive O_3 Stations -
June 2004
Average Concentrations
in ppb
36.4
40.2
36.3
31.1
41.6
38.0


PAS Passive NO_2 Stations -
June 2004
Average Concentrations
in ppb
5.1
10.4
4.8
7.5
6.1

June 2004 - Calibration Reports

PAS - Crescent Heights Station **O_3, NO_x, NO, NO_2, THC**

Calibration Report

Parameter **O3**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 8, 2003	Previous Calibration	May 13, 2003
Station Number	1	Station Location	Crescent Heights

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	17:25	End Time (MST)	20:00
Barometric Pressure	0.919 mb	Station Temperature	20.5 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	Focus AP1000	DACS serial No.	NA
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
DACS slope	0.050	DACS slope	0.050
DACS intercept	0.000	DACS intercept	0.000
Calculated slope	1.003473	Calculated slope	1.002628
Calculated intercept	0.785202	Calculated intercept	1.077390

Analyzer make: API Model 400E — Analyzer serial #: 331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	-1.3	ppb	-1.3	ppb
coefficient	1.083		1.071	
Lamp measure	3663.6	mV	3613.9	mV
Lamp Reference	3669.1	mV	3617.3	mV
Pressure	25.2	inches Hg	26.4	inches Hg
Sample Flow	694	ccm	723	ccm
Lamp temp	52	Deg C	52	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)
4995	0.00	0.0	0.0	N/A
4995	0.00	400.0	398.5	1.0038
4995	0.00	200.0	197.7	1.0119
4995	0.00	100.0	97.7	1.0235
4995	0.00	0.0	0.0	0.0000
4995	0.00	400.0	383.9	1.0420
			Average Correction Factor	1.0131

Calculated value of As Found Response: 386.0 ppm Percent Change of As Found: -3.5%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.8	ppb
Auto span	394.8	ppb	399.3	ppb

Notes: Analyzer was span adjusted. All test functions normal.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **O3**

Air Monitoring Network **Palliser Airshed**

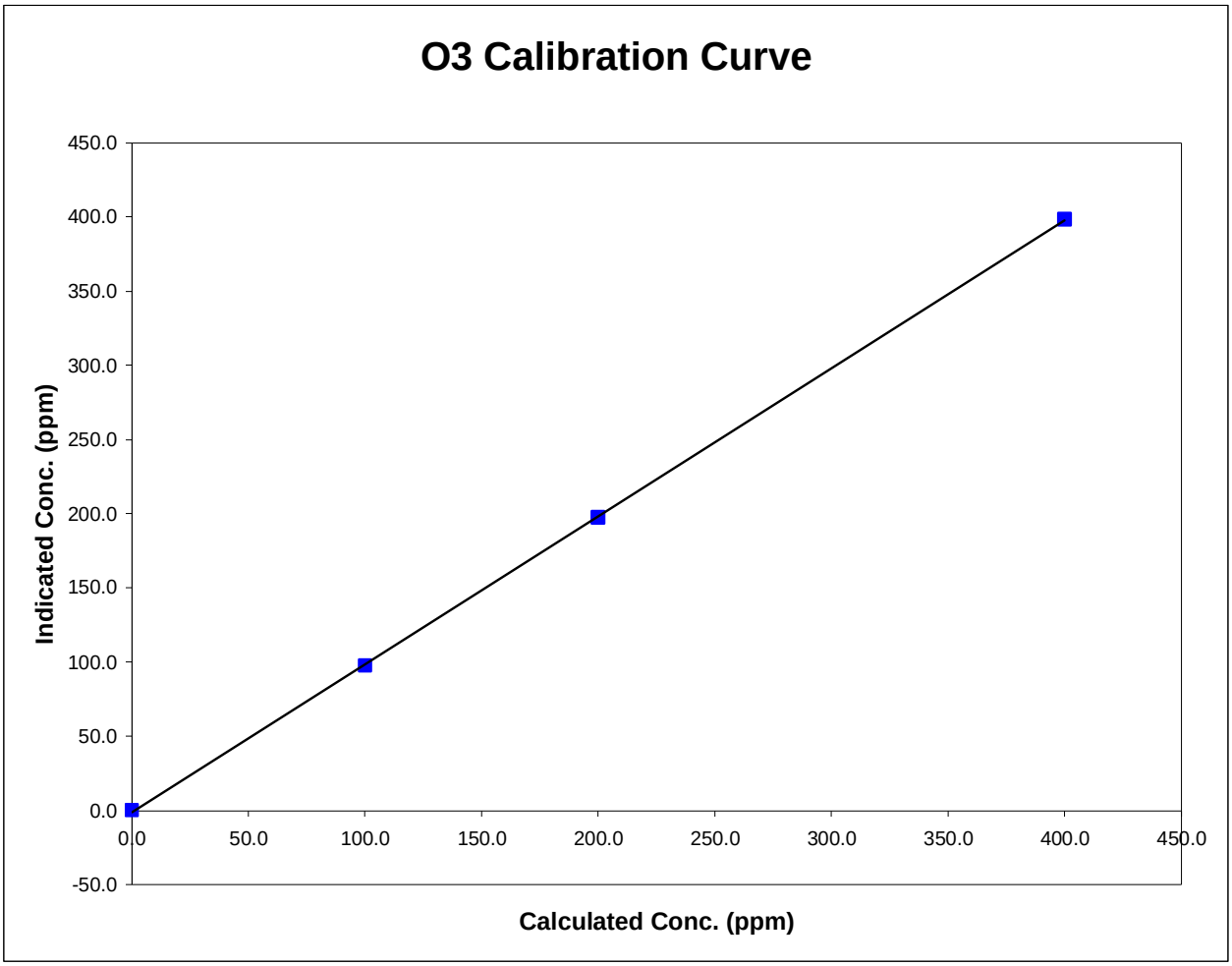
FOCUS AIR QUALITY MONITORING

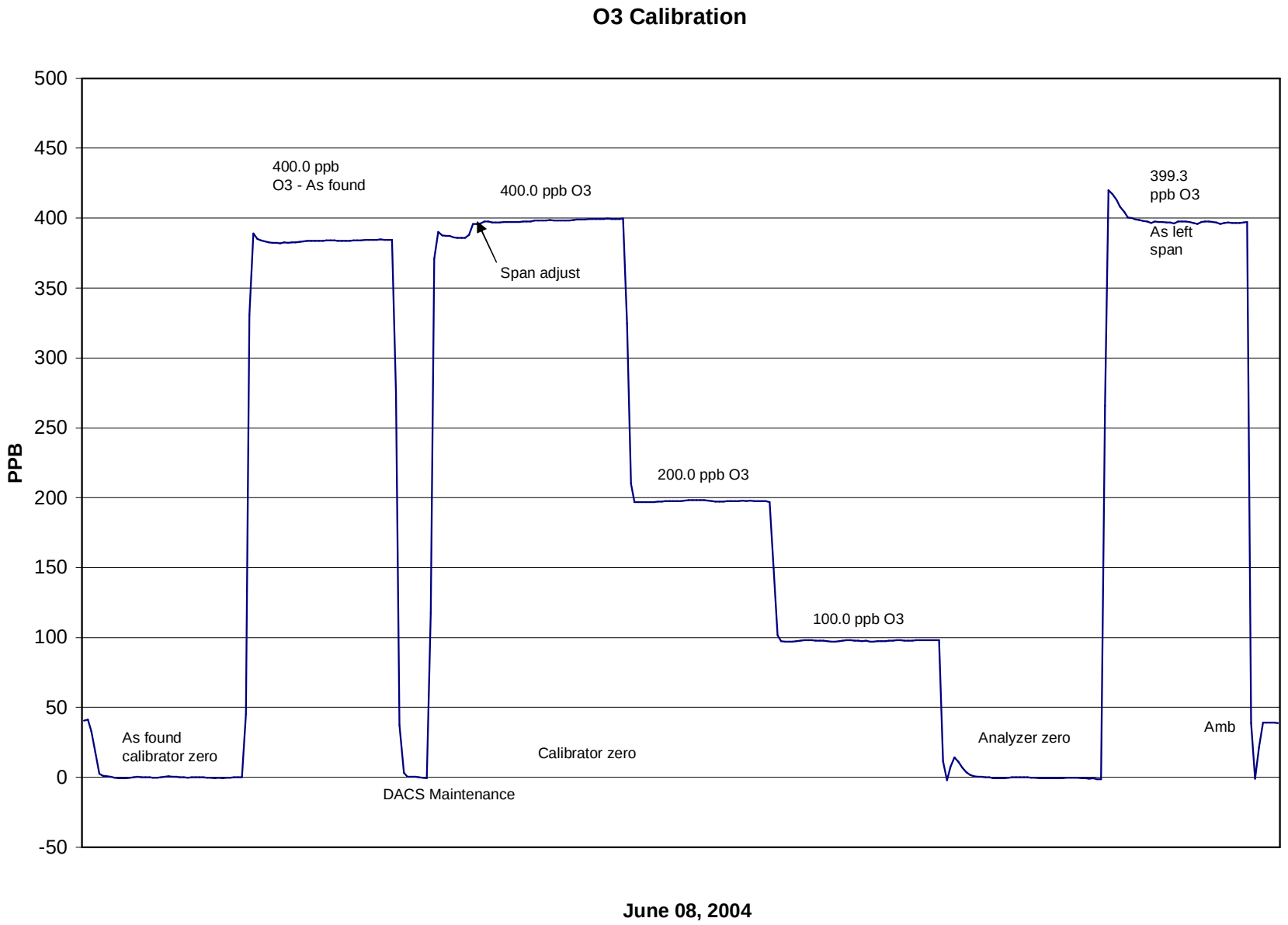
Station Information

Calibration Date	June 8, 2003	Previous Calibration	May 13, 2003
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	17:25	End Time (MST)	20:00
Analyzer make/model	API Model 400E	Analyzer serial #	331

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
400.0	398.5	1.0038		
200.0	197.7	1.0119	Correlation Coefficient	0.999965
100.0	97.7	1.0235		
0.0	0.0	N/A	Slope	1.002628
			Intercept	1.077390




O3 Calibration
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
400.0 ppb
O3 - As found
400.0 ppb O3
Span adjust
399.3
ppb O3
As left
span
200.0 ppb O3
100.0 ppb O3
As found
calibrator zero
DACS Maintenance
Calibrator zero
Analyzer zero
Amb
June 08, 2004

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 8, 2004	Previous Calibration	May 13, 2004
Station Number	1	Station Location	Crescent Heights

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	13:30		End Time (MST)	18:10	
Barometric Pressure	0.919	mmHg	Station Temperature	20.5	Deg C
Calibrator	Environics 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.	45270

Parameter		NO2	NOx	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	1.022093	1.010887	1.006476
	Data Offset	-1.901050	-2.487499	-1.519099
After	Data Slope	1.011947	1.007904	1.006934
	Data Offset	-0.875978	-1.427434	-1.077981
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
NOx background	-0.7	mV	-0.7	mV
NO coefficient	1.310		1.313	
NOx 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: Analyzer was span adjusted. No other maintenance performed.

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 8, 2004 Station Location: Crescent Heights

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	1.8	1.3	1.0	N/A	N/A
1	4993	39.98	396.4	395.6	0.8	395.0	394.3	1.7	1.0035	1.0032
2	4993	19.97	198.8	198.4	0.4	198.1	197.2	1.6	1.0037	1.0062
3	4993	9.97	99.4	99.2	0.2	100.0	100.0	0.4	0.9946	0.9929
AFZ	4993	0.00	0.0	0.0	0.0	1.8	1.3	1.0	0.0000	0.0000
AFS	4993	39.98	396.4	395.6	0.8	389.0	390.5	-0.5	1.0190	1.0131
							Average Correction Factor		1.0006	1.0008

As Found Concentrations NO_X= 384.7 NO= 387.7 As Found Percent Change NO_X= -2.9% NO= -2.0%

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.98 ccm

O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	397.3	391.7	5.5	393.5	390.1	1.0	N/A	N/A	N/A	N/A
300	397.3	133.1	264.2	394.4	133.2	261.7	1.0074	0.9988	1.0094	99.1%
200	397.3	218.8	178.5	395.5	218.3	177.9	1.0047	1.0020	1.0038	99.6%
100	397.3	307.4	89.9	394.6	306.3	89.2	1.0067	1.0034	1.0082	99.2%
					Average Correction Factor		1.0063	1.0014	1.0071	99.3%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.0	-1.0	0.4	ppb	0.2	-0.4	0.3	ppb
Auto span	383.2	382.1	5.0	ppb	378.5	374.6	5.3	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **Palliser Airshed**

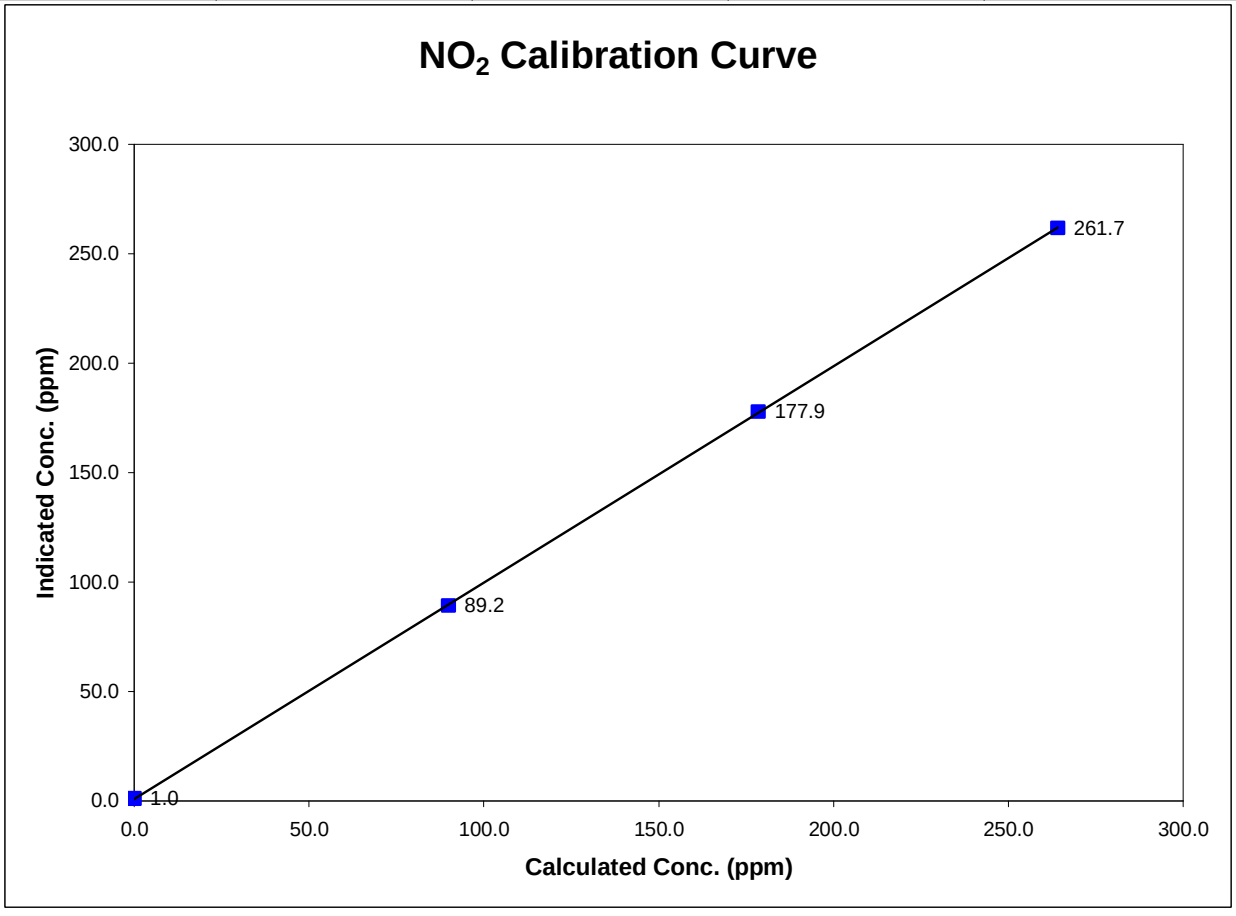
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 8, 2004	Previous Calibration	May 13, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	13:30	End Time (MST)	18:10
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	1.0	0.0000		
89.9	89.2	1.0082	Correlation Coefficient	0.999982
178.5	177.9	1.0038		
264.2	261.7	1.0094	Slope	1.011947
			Intercept	-0.875978



Calibration Summary

Parameter NO_x

Air Monitoring Network **Palliser Airshed**

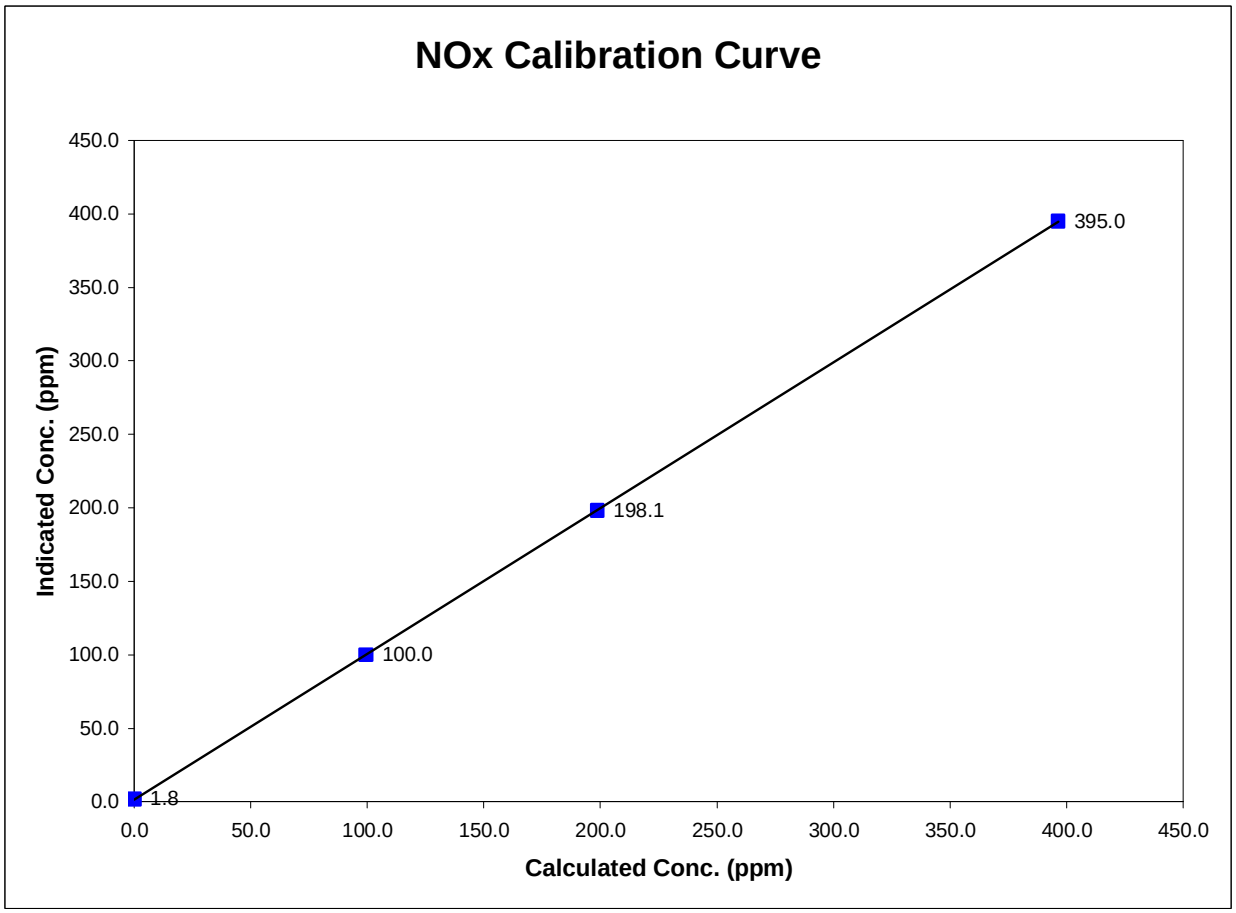
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 8, 2004	Previous Calibration	May 13, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	13:30	End Time (MST)	18:10
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	1.8	0.0000		
396.4	395.0	1.0035	Correlation Coefficient	0.999993
198.8	198.1	1.0037		
99.4	100.0	0.9946	Slope	1.007904
			Intercept	-1.427434



Calibration Summary

Parameter **NO**

Air Monitoring Network **Palliser Airshed**

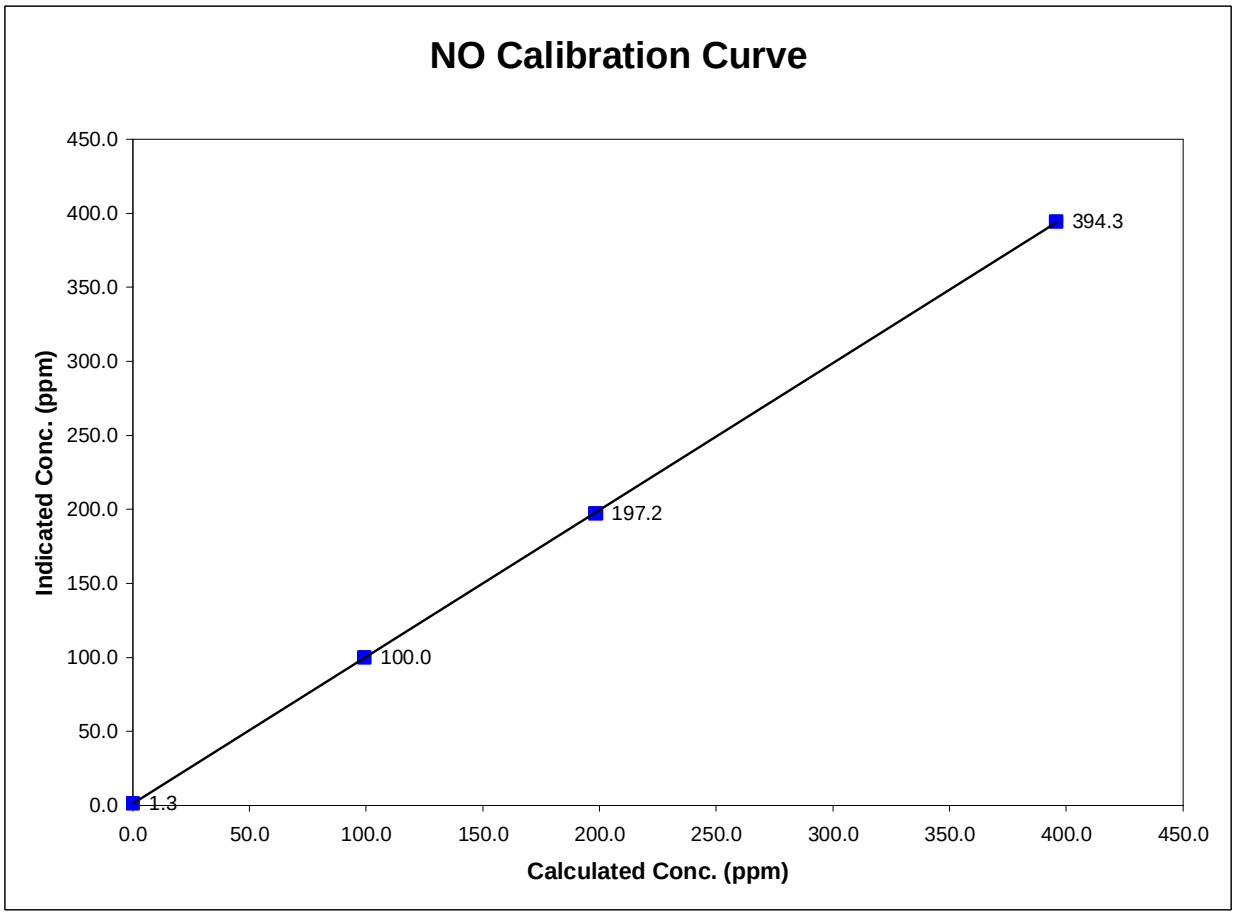
FOCUS AIR QUALITY MONITORING

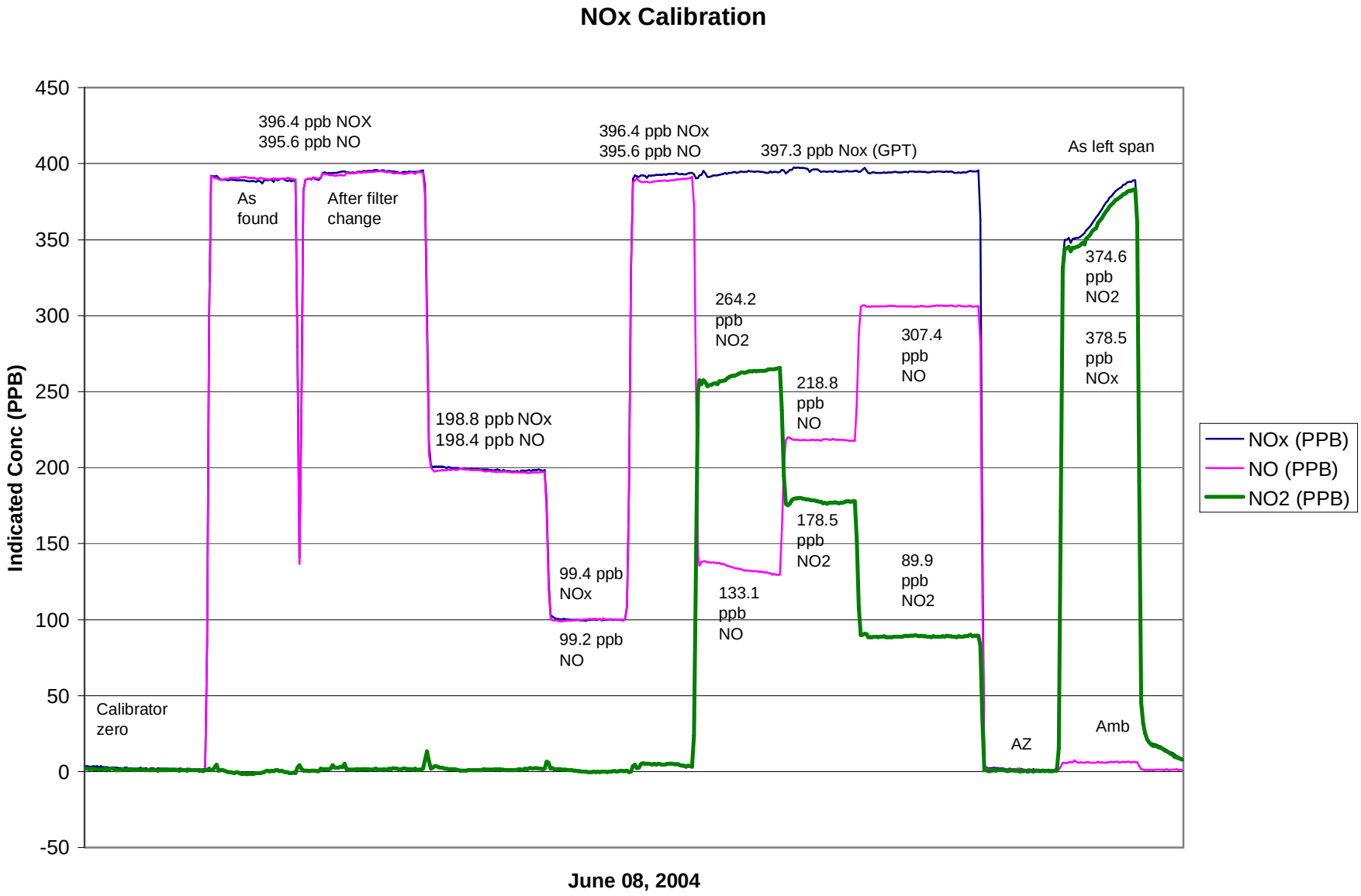
Station Information

Calibration Date	June 8, 2004	Previous Calibration	May 13, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	13:30	End Time (MST)	18:10
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	N/A		
395.6	394.3	1.0032	Correlation Coefficient	0.999986
198.4	197.2	1.0062		
99.2	100.0	0.9929	Slope	1.006934
			Intercept	-1.077981




NOx Calibration
Indicated Conc (PPB)
450
400
350
300
250
200
150
100
50
0
-50
June 08, 2004
396.4 ppb NOX
395.6 ppb NO
As found
After filter change
198.8 ppb NOx
198.4 ppb NO
99.4 ppb NOx
99.2 ppb NO
396.4 ppb NOx
395.6 ppb NO
264.2 ppb NO2
133.1 ppb NO
397.3 ppb Nox (GPT)
218.8 ppb NO
178.5 ppb NO2
307.4 ppb NO
89.9 ppb NO2
As left span
374.6 ppb NO2
378.5 ppb NOx
Calibrator zero
AZ
Amb
NOx (PPB)
NO (PPB)
NO2 (PPB)

Calibration Report

Parameter **THC**

Air Monitoring Network **Palliser Airshed**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 8, 2004	Previous Calibration	May 13, 2004
Station Number	1	Station Location	Crescent Heights

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	10:00	End Time (MST)	14:15
Barometric Pressure	0.919 mb	Station Temperature	19.5 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH_4 / 301 ppm C_3H_8	Cal Gas Expiry Date	28/08/2005
Cal Gas CH4 equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.003056	Calculated slope	1.003229
Calculated intercept	0.001259	Calculated intercept	0.021029

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 span counts	NA	raw	NA	raw
THC zero counts	NA	raw	NA	raw

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
2994	0.00	0.00	0.02	N/A
2994	39.98	20.13	20.08	1.0024
2994	19.97	10.12	9.99	1.0130
2994	9.98	5.08	5.04	1.0074
zero	0.00	0.00	-0.16	As Found Zero
2994	39.98	20.13	20.29	As Found Span
			Average Correction Factor	1.0076

Calculated value of As Found Response: 20.519 ppm Percent Change of As Found: -1.9

	before calibration		after calibration	
Auto zero	0.06	ppm	0.03	ppm
Auto span	21.68	ppm	21.49	ppm

Notes: Analyzer as found captured; zero sub-system maintenance performed (replaced internal scrubbers).
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**

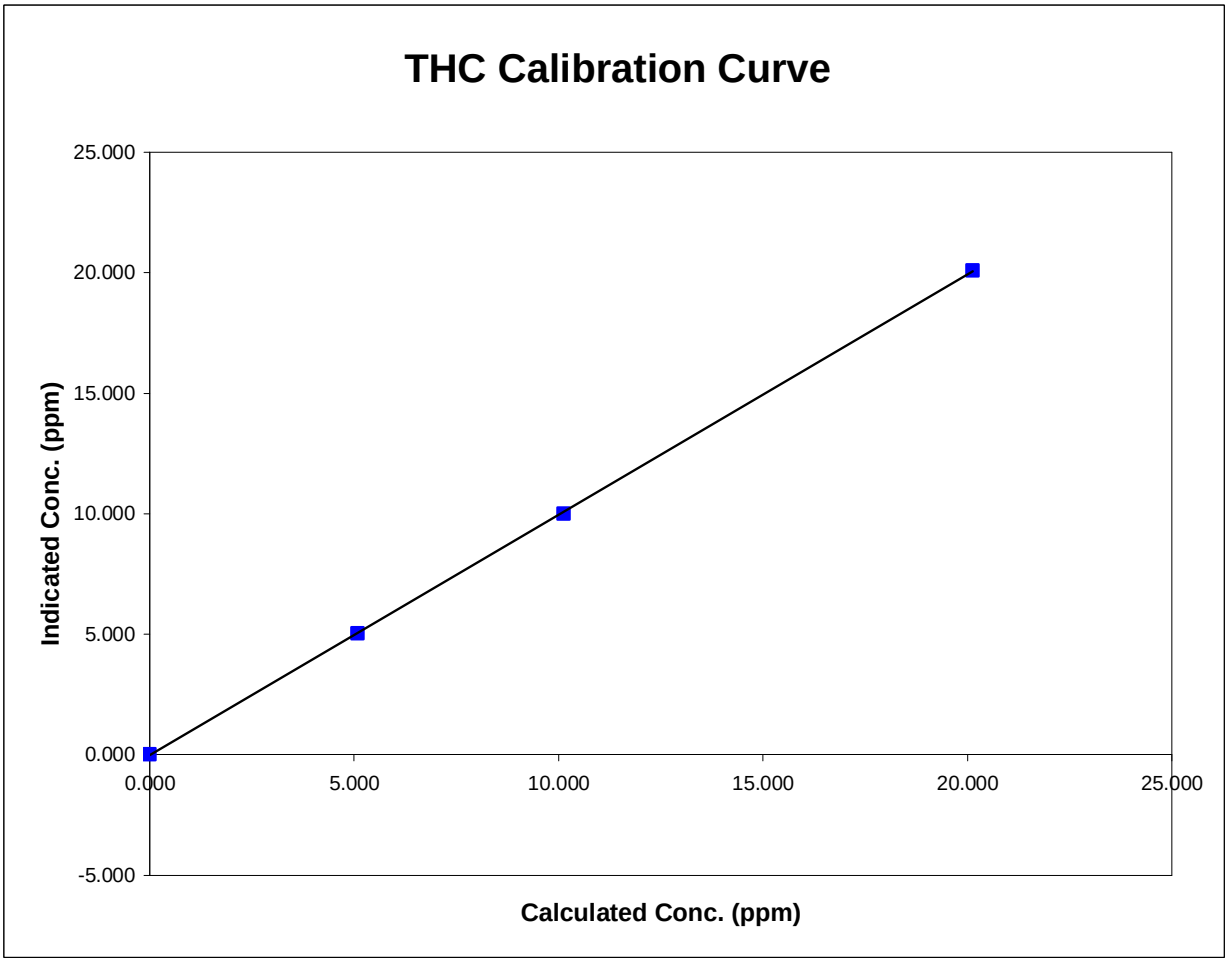
FOCUS AIR QUALITY MONITORING

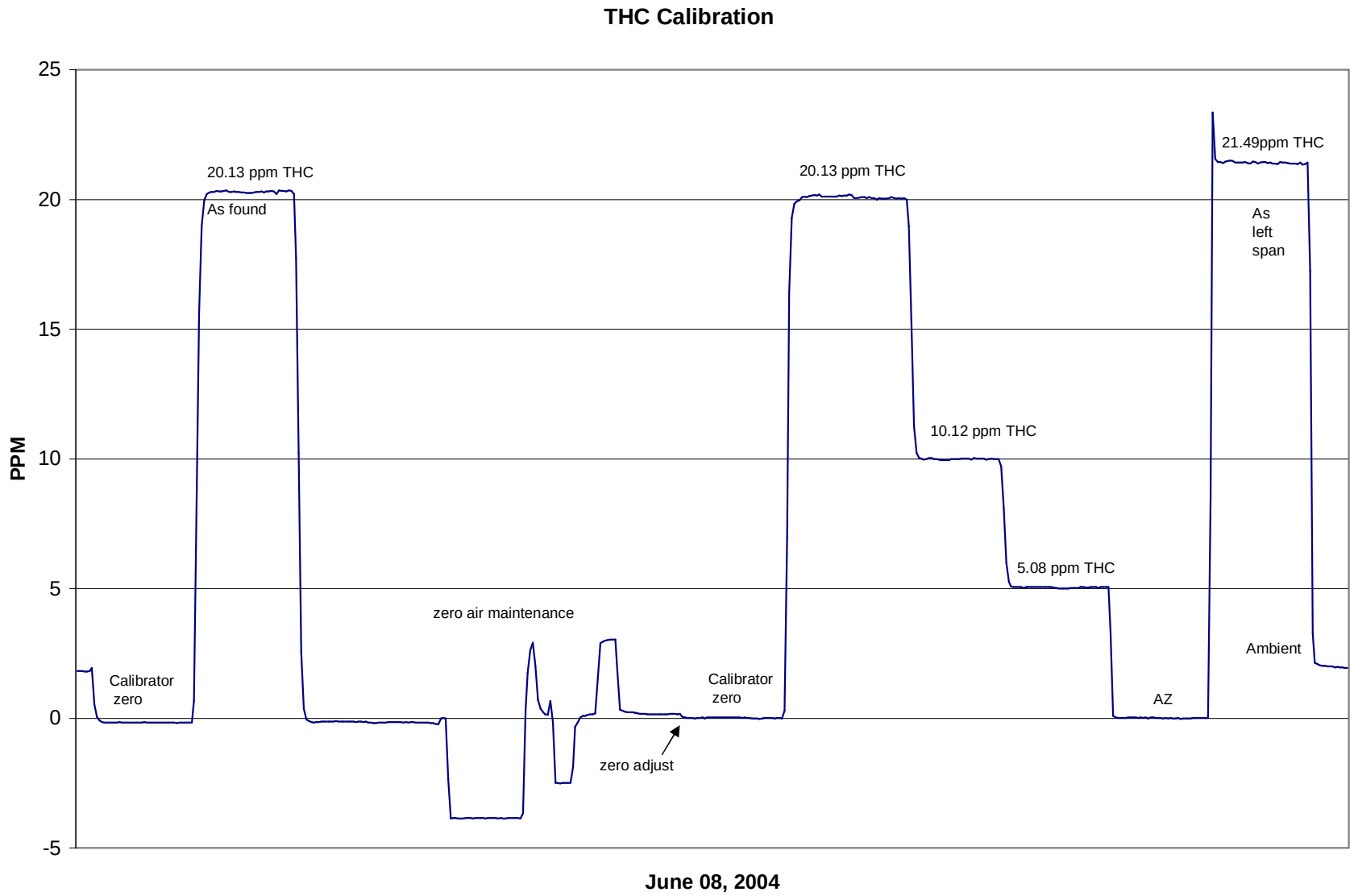
Station Information

Calibration Date	June 8, 2004	Previous Calibration	May 13, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	10:00	End Time (MST)	14:15
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	0.017	N/A		
20.132	20.084	1.0024	Correlation Coefficient	0.999961
10.123	9.993	1.0130		
5.076	5.038	1.0074	Slope	1.003229
			Intercept	0.021029




THC Calibration
PPM
25
20
15
10
5
0
-5
20.13 ppm THC
As found
20.13 ppm THC
10.12 ppm THC
5.08 ppm THC
21.49ppm THC
As
left
span
Ambient
AZ
Calibrator
zero
zero air maintenance
zero adjust
Calibrator
zero
June 08, 2004

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **PM2.5**

Air Monitoring Network **Palliser Airhsed**

Station Information

Calibration Date	June 8, 2004	Previous Calibration	NA
Station Number	1	Station Location	Muskoseepi Park

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	18:10	End Time (MST)	18:35
Barometric Pressure	0.918 inches Hg	Station Temperature	18.5 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	Before		After
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	21	%	21	%
Ko Factor	NA		NA	
Temperature	15.9	Deg C	15.9	Deg C
Pressure	0.918	ATM	0.918	ATM

Calibration Data

Parameter	Set Point	Indicated Reading	Tolerance	New Reading
zero flow - main	0.0	0.08		0.08
zero flow - auxillary	0.0	0.09		0.09
flow recovery - main	45 - 60 Seconds	>45	45 - 60 Seconds	>45
flow recovery - aux	46 - 60 Seconds	>45	46 - 60 Seconds	>45
Temperature	measured	15.9	+/- 1.0 Deg C	15.9000
Pressure	measured	0.918	+/- 1.5% Δ_{ATM}	0.918
Total Flow	16.67 SLPM	16.85		16.85
Main Flow	13.67 SLPM	13.70	+/- 1.0 SLPM	13.70
Auxillary Flow	3.0 SLPM	3.050	+/- 0.2 SLPM	3.050
Leak Check - main	0.0	0.03	<0.15 SLPM	0.03
Leak Check - aux	0.0	0.10	<0.15 SLPM	0.10
Ko Factor	measured	NA		NA

Notes: Performed pump restart, leak checks, and flow audits. Unit appears OK on all counts

Calibration Performed By: Kelly Baragar