



Palliser Airshed Society

Ambient Air Monitoring Network Summary

October 2004



TABLE OF CONTENTS

Airshed Zone Association – October PAS Ambient Air Summary Report	3
PAS - Crescent Heights Ozone Monthly Summary.....	16
PAS - Crescent Heights Total Hydrocarbon Monthly Summary.....	22
PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Monthly Summary	26
PAS - Crescent Heights Meteorological Parameters Monthly Summary	31
Passive Monitoring.....	41
October 2004 - Calibration Reports	46
Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend.....	6
Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend.....	8
Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trends	14
Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trends	15
Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend.....	17
Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend.....	19
Figure 7. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend	23
Figure 8. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend	25
Figure 9. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend.....	27
Figure 10. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly	29
Figure 11. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend.....	32
Figure 12. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend.....	34
Figure 13. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend.....	36



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

Attention: Director of Monitoring and Evaluation

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

Enclosed is the PAS Ambient Monitoring Report for the month of **October 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 October. There were no significant events leading to emergency response for the month of October.

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

- Monthly average concentrations of NO₂ was 8.3 ppb
- Monthly average concentrations for O₃ was 19.4 ppb
- Monthly average concentrations for THC was 2.00 ppm
- Monthly average concentrations for PM_{2.5} was 3.3 µg/m³

Passive Monitoring – Six Stations throughout the PAS zone:

The following are the ranges recorded by the six passive stations located throughout the PAS zone:

- Monthly average concentrations for SO₂ passives ranged from 0.2 ppb to 0.4 ppb
- Monthly average concentrations for NO₂ passives ranged from 3.9 ppb to 12.3 ppb
- Monthly average concentrations for O₃ passives ranged from 18.6 ppb to 23.8 ppb

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

Gary Cross, C.E.T.
AQM Technical Manager

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



October 2004 Monthly Overall Summary Report

Ambient Air Quality Data

Oct-2004 Palliser Airshed Society						Maximum Recorded Values						Operational Time (%)	
Pollutant (units)	Guidelines		Station	Monthly Average	Exceedence		1-hr				24-hr		
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc		Day
NO (ppb)			Crescent Heights	4.8	0	0	137.8	Oct-27	2.2	NE	32.5	Oct-27	99.5%
NO ₂ (ppb)	212	106	Crescent Heights	8.3	0	0	33.0	Oct-29	5.9	SE	15.6	Oct-27	99.5%
NO _x (ppb)			Crescent Heights	13.1	0	0	166.3	Oct-27	2.2	NE	47.9	Oct-27	99.5%
O ₃ (ppb)	82		Crescent Heights	19.4	0	0	42.0	Oct-08	24.2	SSW	32.5	Oct-06	99.5%
THC (ppm)			Crescent Heights	2.00	0	0	2.94	Oct-27	3.6	ESE	2.34	Oct-27	94.2%
PM _{2.5} (µg/m ³)		30 ^a	Crescent Heights	3.3	0	0	32.3	Oct-04	6.4	SW	6.4	Oct-29	99.2%
RH (%)			Crescent Heights	63.2									99.9%
SR (W/m ²)			Crescent Heights	96.9									99.9%
Temp (°C)			Crescent Heights	6.5									99.9%
WSPD v (km/hr)			Crescent Heights	5.4									99.9%
WSPD s (km/hr)			Crescent Heights	11.2									99.9%
WDIR (Deg)			Crescent Heights	SW*									99.9%

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

On October 16 (6:00) there was a communications failure and data was lost for the hour
 THC hydrogen cylinder ran out and was replaced shortly after during calibration
 No other unusual activities were noted during station operation for the month of October

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	3 hours lost to incorrect zero / span settings
Nitrogen Dioxide	Teledyne - API	200E	ppb	3 hours lost to incorrect zero / span settings
Total Hydrocarbons	Bendix	400A	ppm	39 hours of data was removed due to the hydrogen cylinder running out on October 19 (22:00) and was replaced during the calibration on October 21, 2004. 3 additional hours lost to incorrect zero / span settings
PM 2.5	R&P TEOM	1400ab	$\mu\text{g}/\text{m}^3$	No operational problems observed
Wind Speed	Met One	010C	kph	No operational problems observed
Wind Direction	Met One	020C	Deg	No operational problems observed
Ambient Temperature	Met One	083D	DegC	No operational problems observed
Relative Humidity	Met One	083D	%	No operational problems observed
Solar Radiation	Met One	096-1	W/m^2	No operational problems observed
Data Acquisition System	Titan Logix	AP1000		1 hour of lost communications was noted on October 16, 2004



PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Station: Crescent Heights

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	33 ppb 29-Oct 17:00 18:00
Maximum 24-hr Average:	16 ppb 27-Oct

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

AIC Time:	33 hrs	Operational Time:	702 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.5%					
Percentile	99	95	75	50	25	5	1	Average
	29	22	11	7	4	1	1	8.3 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-Oct-04	14	11	10	9	8	A	22	14	10	4	3	3	3	3	4	4	13	28	29	21	19	10	13	11.2	28.6		
2-Oct-04	5	4	3	4	A	19	11	10	4	4	8	7	5	3	5	5	9	22	19	25	24	22	16	10.4	25.4		
3-Oct-04	18	21	20	A	12	9	7	5	3	3	1	1	1	1	1	1	2	2	5	8	13	11	12	6.9	21.1		
4-Oct-04	18	18	A	27	25	23	21	11	11	8	3	3	3	3	3	6	13	11	15	13	11	7	7	11.3	26.7		
5-Oct-04	4	A	8	8	9	10	11	13	10	5	4	3	3	3	4	7	14	13	9	8	5	8	7	7.4	14.1		
6-Oct-04	A	9	4	4	7	7	11	11	6	4	2	6	11	11	4	3	3	4	4	7	4	5	A	6.0	11.3		
7-Oct-04	10	9	6	6	7	14	17	15	11	9	7	5	7	6	6	4	4	7	16	27	30	30	A	26	12.2	30.5	
8-Oct-04	25	24	18	16	16	19	13	18	13	7	3	3	4	3	3	4	4	6	6	5	8	A	11	7	10.3	25.2	
9-Oct-04	8	6	6	7	3	3	4	4	4	4	4	3	5	5	8	9	11	11	10	9	A	11	10	11	6.8	11.4	
10-Oct-04	8	7	5	5	5	8	9	5	4	2	2	2	2	2	2	2	5	9	9	A	16	10	8	4	5.7	16.1	
11-Oct-04	5	5	4	5	6	9	8	6	4	2	2	6	4	4	3	4	9	18	A	23	10	8	7	5	6.8	23.5	
12-Oct-04	5	5	5	7	11	17	14	16	11	7	5	1	1	2	2	2	3	A	13	11	13	16	18	17	8.9	18.3	
13-Oct-04	19	14	9	12	15	14	11	14	15	18	7	5	3	4	6	9	A	18	14	15	8	4	4	8	10.7	19.2	
14-Oct-04	11	7	6	5	10	2	15	27	19	17	13	11	7	4	5	A	18	10	9	9	10	9	7	10	10.5	27.4	
15-Oct-04	8	7	7	8	5	7	13	16	9	3	2	4	6	8	A	11	7	5	4	3	2	2	5	3	6.4	16.3	
16-Oct-04	2	4	2	3	3	N	3	2	1	4	4	1	1	A	10	7	4	6	6	5	7	6	5	3	4.1	9.9	
17-Oct-04	1	1	1	1	1	1	1	1	5	5	3	2	A	5	5	3	9	10	4	3	3	1	2	2	3.1	10.4	
18-Oct-04	3	3	5	6	6	6	7	10	7	8	7	8	7	A	13	7	6	8	11	11	10	9	8	9	8	7.6	12.9
19-Oct-04	8	7	6	5	5	6	9	13	11	4	A	7	5	7	6	4	3	3	3	1	2	2	1	0	5.2	13.1	
20-Oct-04	1	1	0	0	0	1	1	2	1	A	4	2	2	2	1	1	5	5	3	2	3	3	4	3	2.1	5.2	
21-Oct-04	3	4	4	4	6	4	6	7	A	9	5	C	C	C	C	C	4	9	9	5	13	9	3	3	5.8	12.9	
22-Oct-04	3	1	2	A	2	2	4	9	9	3	3	3	3	5	4	3	6	7	6	5	4	4	2	2	4.0	9.5	
23-Oct-04	5	N	A	8	5	6	7	6	4	5	6	8	8	9	10	13	11	10	13	6	9	13	N	8.0	13.5		
24-Oct-04	6	A	13	7	6	9	7	5	4	3	4	4	5	4	4	7	15	16	20	9	9	6	N	7	7.8	20.1	
25-Oct-04	A	5	6	6	6	8	12	13	9	7	2	1	2	2	2	2	10	32	30	14	9	11	12	6	9.1	32.2	
26-Oct-04	8	8	11	A	20	17	25	24	12	4	4	4	4	6	4	5	10	30	17	14	16	12	16	11	12.2	30.0	
27-Oct-04	10	15	A	25	17	22	17	15	14	7	5	5	2	3	3	5	10	22	28	24	25	29	29	27	15.6	29.4	
28-Oct-04	24	A	23	18	13	17	17	9	9	10	11	8	9	8	9	4	5	6	5	8	20	23	18	12	12.5	24.4	
29-Oct-04	A	17	14	14	14	12	14	15	13	10	9	9	9	8	10	6	14	33	28	20	15	8	4	A	13.5	33.0	
30-Oct-04	6	3	2	2	3	4	4	7	5	4	4	2	2	5	8	7	17	7	6	5	5	3	A	9	5.2	17.5	
31-Oct-04	6	8	5	7	7	8	9	8	7	7	8	6	2	3	4	5	12	10	19	21	14	A	23	16	9.3	22.9	
Hourly Avg	8.8	8.3	7.3	8.1	8.5	9.8	10.7	10.6	8.1	6.2	5.0	4.2	4.3	4.7	5.0	4.9	7.9	11.8	12.2	11.5	11.4	10.4	9.9	9.2			
Hourly Max	25.2	23.6	23.1	26.7	25.1	22.6	24.5	27.4	18.9	17.7	13.5	10.7	12.9	10.8	11.3	11.1	18.3	33.0	30.2	28.6	29.6	30.5	29.4	27.2			

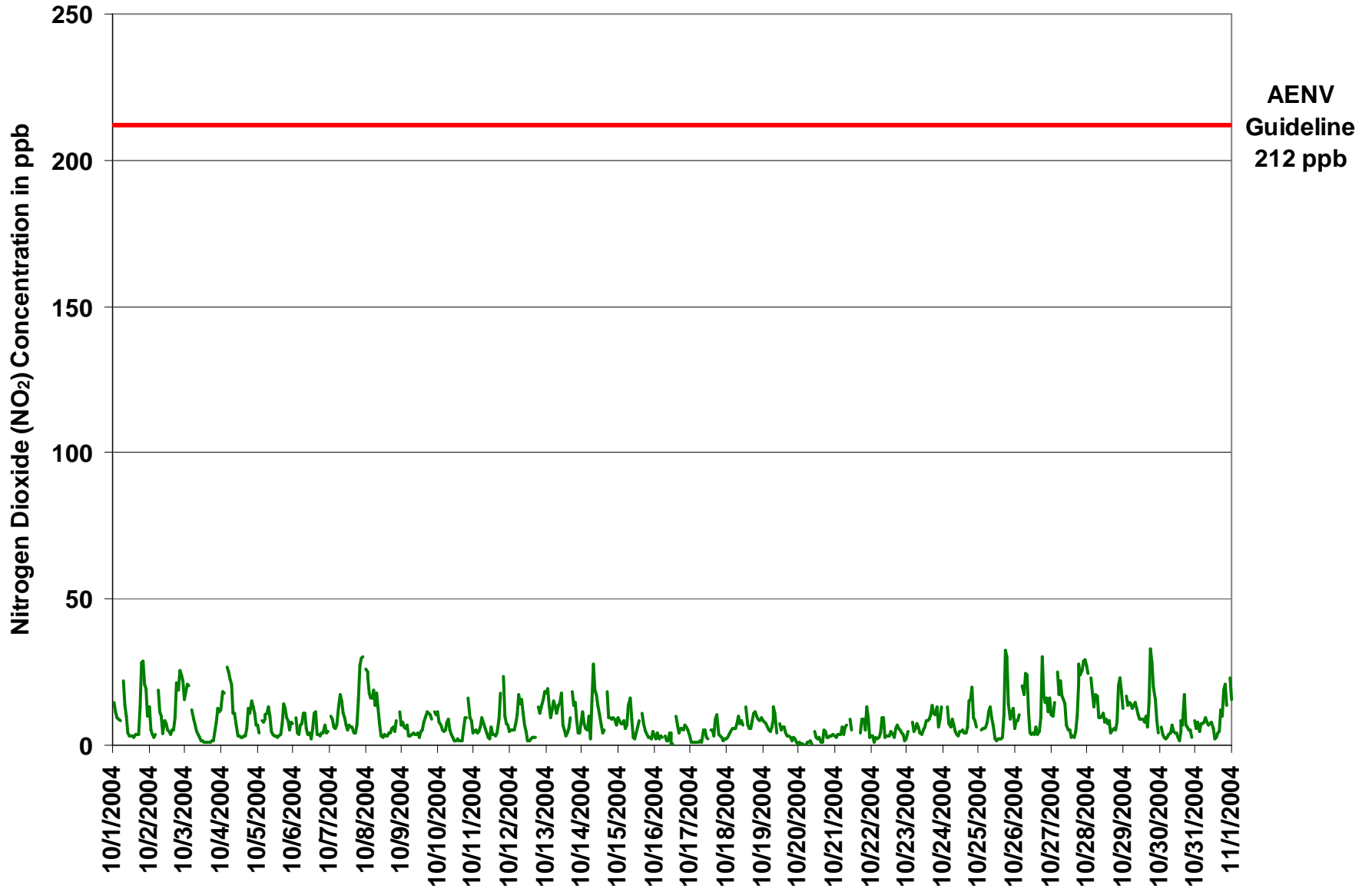


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Maximum 1-hr Value:	74.8	ppb	13-Oct	3:00 4:00
Maximum 24-hr Value:	25.6	ppb	27-Oct	

AIC Time:	33 hrs	Operational Time:	702 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.5%					
Percentile	99	95	75	50	25	5	1	Average
	57	40	24	14	7	3	1	17.1 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-Oct-04	27	39	14	26	25	A	25	21	18	6	5	4	15	17	33	17	6	21	36	35	27	25	14	42	21.6	42.3
2-Oct-04	48	17	4	6	A	28	26	26	6	5	34	10	8	7	6	8	9	34	34	46	31	41	24	24	21.0	48.3
3-Oct-04	27	23	22	A	21	10	9	8	4	3	2	2	2	2	2	1	2	3	3	17	13	23	14	20	10.1	26.8
4-Oct-04	22	28	A	30	41	50	29	21	13	18	4	18	13	22	5	5	9	18	18	27	20	49	25	36	22.8	50.3
5-Oct-04	6	A	14	33	32	31	15	27	11	8	14	10	4	3	4	6	12	66	38	13	28	6	31	19	18.8	66.3
6-Oct-04	A	22	5	5	28	16	42	46	9	6	16	4	12	22	15	32	18	5	40	48	54	5	15	A	21.0	54.1
7-Oct-04	30	33	13	11	8	30	28	28	18	13	11	11	13	12	13	11	6	12	22	39	39	49	A	31	20.9	48.8
8-Oct-04	51	28	23	22	20	32	19	24	16	18	4	24	17	24	14	38	5	11	8	6	39	A	35	9	21.2	50.8
9-Oct-04	24	11	29	52	5	5	19	39	5	14	58	4	36	31	18	19	19	14	13	11	A	27	43	33	23.0	57.6
10-Oct-04	12	22	16	7	14	21	34	7	13	12	3	2	27	27	19	5	14	12	13	A	23	15	31	6	15.5	34.2
11-Oct-04	11	7	8	6	26	17	13	18	7	4	10	33	5	11	9	8	19	31	A	36	15	41	25	6	16.0	41.3
12-Oct-04	33	28	6	10	13	21	21	20	16	10	10	2	2	3	4	4	4	A	19	15	16	18	20	21	13.8	33.3
13-Oct-04	25	18	26	75	27	15	14	17	17	21	20	64	4	18	9	12	A	35	29	20	22	6	11	15	22.6	74.8
14-Oct-04	16	11	7	9	19	5	31	41	27	28	18	22	11	10	9	A	24	12	11	17	16	19	9	15	16.7	41.3
15-Oct-04	12	8	12	14	8	14	24	21	12	4	3	5	9	9	A	14	10	6	6	4	4	3	8	6	9.5	24.2
16-Oct-04	5	8	4	22	4	N	8	4	4	10	9	1	20	A	14	8	11	17	13	7	12	9	11	10	9.5	22.2
17-Oct-04	2	1	2	1	2	2	2	2	19	25	4	3	A	10	26	18	35	29	4	4	3	2	3	3	8.8	35.0
18-Oct-04	4	4	7	6	7	8	14	18	9	33	11	A	18	9	7	8	21	27	18	12	13	12	13	10	12.6	33.1
19-Oct-04	9	9	7	8	6	8	24	34	40	5	A	11	8	10	8	7	5	6	4	3	4	3	3	1	9.7	40.2
20-Oct-04	2	1	1	1	1	3	2	3	2	A	9	4	3	13	2	7	26	14	5	4	5	5	5	4	5.2	26.3
21-Oct-04	4	6	5	6	7	6	8	23	A	14	6	C	C	C	C	C	17	13	17	8	16	16	4	5	10.1	23.1
22-Oct-04	6	2	4	A	3	4	13	13	13	7	57	33	19	17	49	5	10	8	8	9	8	6	4	5	13.2	57.3
23-Oct-04	33	N	A	18	15	25	11	9	6	6	10	8	34	10	17	13	31	16	24	20	15	13	26	N	17.1	33.7
24-Oct-04	10	A	15	25	26	11	36	19	7	6	7	6	8	6	6	10	31	25	37	17	15	9	N	22	16.1	36.6
25-Oct-04	A	8	19	28	18	31	17	33	12	33	5	3	23	14	11	5	31	43	40	17	11	20	19	11	19.7	42.8
26-Oct-04	13	16	13	A	26	23	62	35	24	6	10	19	6	47	7	8	18	35	27	25	29	16	21	15	21.8	62.3
27-Oct-04	13	37	A	32	21	48	21	18	21	8	12	20	7	36	4	17	32	40	32	30	34	40	36	31	25.6	48.0
28-Oct-04	29	A	27	60	23	42	24	14	12	12	34	9	11	10	15	15	7	11	8	12	37	31	25	17	21.1	60.0
29-Oct-04	A	28	16	22	28	18	15	31	16	29	10	18	28	17	23	13	33	40	33	35	60	20	11	A	24.8	59.7
30-Oct-04	37	5	5	3	14	16	17	10	10	23	26	24	10	20	28	15	33	39	27	27	17	4	A	14	18.5	39.1
31-Oct-04	7	16	6	11	34	12	12	29	20	22	23	20	4	17	23	7	22	14	28	30	19	A	36	26	19.0	35.7
Hourly Avg	18.4	16.2	11.8	19.7	17.3	19.0	20.5	21.2	13.6	13.7	14.9	13.7	13.0	15.7	13.8	11.6	17.3	21.9	20.6	19.8	21.5	18.4	18.5	16.2		
Hourly Max	50.8	38.5	28.9	74.8	41.4	50.3	62.3	45.6	40.2	33.1	57.6	63.6	36.0	46.9	48.6	38.2	35.0	66.3	40.4	48.4	59.7	49.1	42.9	42.3		

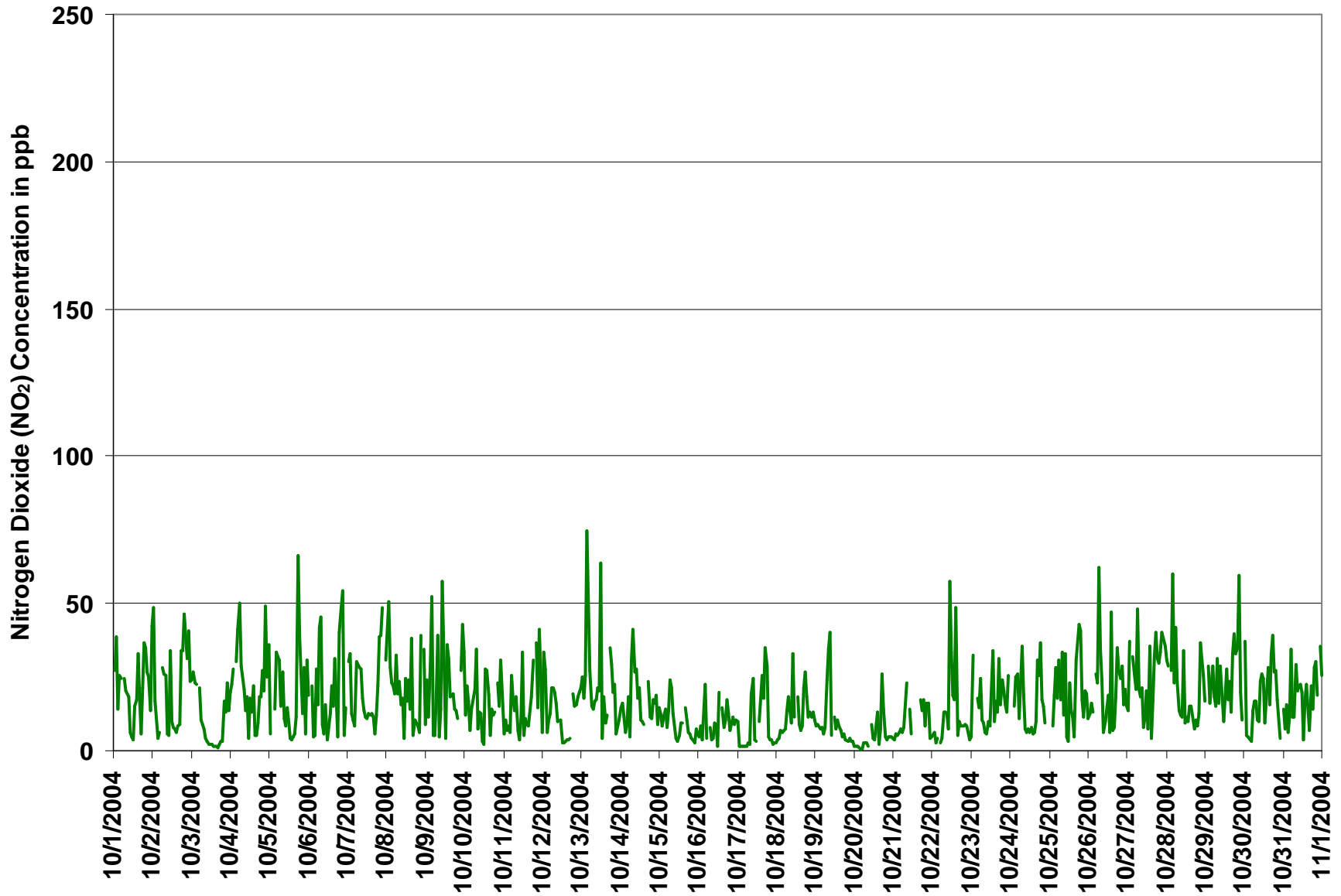
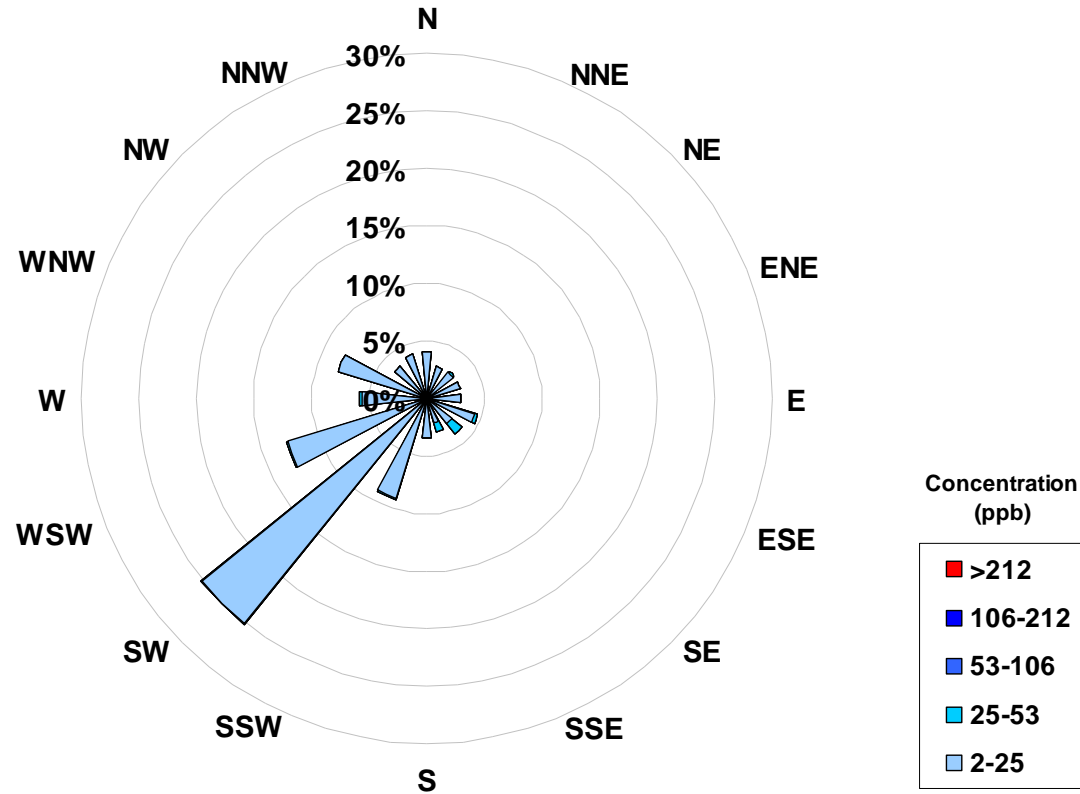


Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend



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



Frequency Distribution of NO ₂ in ppb			
Range		Frequency (hrs)	
0	< 2	55	
2	to 25	626	
25	to 53	21	
53	to 106	0	
106	to 212	0	
	> 212	0	
Total Non-Zero Values			702

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



Station: Crescent Heights

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	138	ppb	27-Oct	22:00 23:00
Maximum 24-hr Average:	32	ppb	27-Oct	

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

AIC Time:	33 hrs							Operational Time:	702 hrs	
Calibration Time:	5 hrs							AMD Operational Uptime:	99.5%	
Percentile	99	95	75	50	25	5	1	Average		
	52	17	4	2	1	0	0	4.8 ppb		

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-04	7	7	1	8	3	A	6	6	5	2	1	1	2	1	3	2	1	2	12	7	3	4	1	5	4.0	11.7
2-Oct-04	6	1	0	0	A	6	5	6	3	4	9	6	2	2	1	2	1	1	3	6	21	13	14	9	5.4	21.0
3-Oct-04	14	22	22	A	0	1	1	2	2	1	1	1	1	0	0	0	0	0	0	1	1	6	1	2	3.4	22.3
4-Oct-04	5	9	A	39	70	37	16	6	7	6	1	2	2	2	1	1	1	1	1	2	2	6	3	6	9.8	69.7
5-Oct-04	0	A	0	4	3	5	4	13	8	3	3	2	1	1	1	1	8	4	0	2	0	1	2	3.0	13.1	
6-Oct-04	A	1	0	0	3	1	2	2	1	2	2	1	2	5	5	3	1	1	2	2	5	0	1	A	1.9	4.9
7-Oct-04	2	4	1	0	1	9	5	7	4	3	4	3	3	3	2	1	2	1	8	18	46	A	7	5.9	46.2	
8-Oct-04	30	14	4	3	1	8	2	9	7	3	1	2	1	2	1	1	1	0	0	6	A	1	0	4.3	29.6	
9-Oct-04	2	0	2	9	0	0	1	3	1	1	4	1	4	3	2	2	3	1	1	0	A	1	5	2	2.1	8.7
10-Oct-04	1	2	1	0	1	4	6	1	2	2	2	1	1	2	1	1	2	1	0	A	3	1	3	0	1.7	6.5
11-Oct-04	0	0	1	0	3	4	2	3	2	1	2	6	2	2	1	1	2	3	A	3	1	3	4	0	2.0	6.4
12-Oct-04	3	3	0	0	1	5	6	8	5	3	3	1	1	2	1	1	1	A	1	1	1	1	3	3	2.2	7.6
13-Oct-04	33	5	7	6	15	6	4	20	22	20	4	4	1	3	2	2	A	5	5	4	3	0	0	3	7.5	32.7
14-Oct-04	3	1	0	0	2	0	2	14	4	4	4	3	1	1	1	A	2	1	1	1	0	1	0	1	2.1	13.5
15-Oct-04	0	0	1	1	1	1	6	17	6	1	1	2	4	4	A	2	0	0	0	0	0	0	1	0	2.1	16.8
16-Oct-04	0	1	0	1	0	N	2	1	1	3	2	2	2	A	2	2	1	2	1	1	2	1	2	1	1.5	2.8
17-Oct-04	0	0	0	0	0	1	1	1	5	3	1	1	A	1	4	3	9	9	1	0	0	0	0	0	1.9	9.0
18-Oct-04	0	0	1	1	1	1	4	9	5	10	5	A	19	6	4	4	5	6	4	3	4	2	2	1	4.2	19.2
19-Oct-04	1	1	1	1	1	2	5	15	17	2	A	2	2	3	3	2	1	1	0	0	1	0	0	0	2.7	17.4
20-Oct-04	0	0	0	0	0	0	0	1	1	A	1	1	1	2	1	1	7	4	0	1	0	1	0	0	1.0	6.6
21-Oct-04	0	1	1	1	1	1	2	3	A	2	2	C	C	C	C	C	4	4	3	1	2	1	0	0	1.5	3.9
22-Oct-04	0	0	0	A	0	1	3	7	13	3	6	4	3	4	4	2	2	2	2	2	2	2	1	2	2.9	13.1
23-Oct-04	3	N	A	1	1	3	2	1	2	2	4	9	12	8	6	4	6	3	4	5	1	1	1	N	3.7	12.3
24-Oct-04	1	A	1	2	2	2	5	3	2	4	7	7	8	4	3	3	5	3	16	2	1	1	N	4	4.0	15.5
25-Oct-04	A	0	5	3	2	5	3	6	5	7	2	1	2	1	1	1	3	11	10	1	0	1	1	0	3.1	10.7
26-Oct-04	0	1	1	A	4	3	16	34	9	2	2	2	1	4	1	1	1	5	2	1	3	1	4	1	4.3	33.5
27-Oct-04	2	5	A	38	24	60	47	52	49	11	7	6	2	3	1	2	3	8	20	20	57	95	138	96	32.5	137.8
28-Oct-04	87	A	29	16	14	26	27	7	13	19	34	10	7	5	6	2	2	1	0	0	13	15	4	4	14.9	87.3
29-Oct-04	A	6	2	16	9	8	13	36	24	16	10	9	6	3	4	2	3	11	5	3	3	2	2	A	8.8	36.0
30-Oct-04	1	0	0	0	1	1	2	2	1	2	2	1	1	2	4	4	7	4	2	1	1	0	A	0	1.8	6.5
31-Oct-04	0	0	0	0	2	1	1	3	3	5	6	3	1	1	1	1	1	0	2	4	1	A	6	2	2.0	5.9
Hourly Avg	7.2	3.3	3.0	5.4	5.6	6.9	6.5	9.6	7.6	5.0	4.4	3.2	3.3	2.8	2.5	1.9	2.6	3.3	3.4	2.7	5.3	7.2	7.1	5.4		
Hourly Max	87.3	22.3	29.3	38.7	69.7	59.9	47.1	52.4	49.4	20.0	34.3	10.0	19.2	8.4	5.6	4.2	9.0	11.0	20.4	20.2	57.0	94.9	137.8	95.8		



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Maximum 1-hr Value:	322.9	ppb	4-Oct	5:00 6:00
Maximum 24-hr Value:	73.8	ppb	27-Oct	

AIC Time:	33 hrs	Operational Time:	702 hrs					
Calibration Time:	5 hrs	AMD Operational Uptime:	99.5%					
Percentile	99	95	75	50	25	5	1	Average
	191	96	31	8	2	1	1	23.9 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-04	40	127	4	59	70	A	17	30	22	3	2	2	28	28	111	26	2	12	45	21	28	11	3	108	34.8	127.1
2-Oct-04	172	18	1	2	A	19	31	30	4	5	51	8	6	4	2	3	2	12	12	61	49	58	25	36	26.6	171.9
3-Oct-04	51	39	40	A	2	2	3	3	3	2	1	1	1	1	1	1	1	1	1	5	2	43	1	7	9.2	50.6
4-Oct-04	16	41	A	52	244	323	50	56	11	24	2	23	16	31	2	2	3	2	2	21	4	82	47	95	50.0	322.9
5-Oct-04	2	A	1	83	77	99	17	100	9	8	50	19	3	2	2	3	165	66	2	34	1	31	15	34.3	164.8	
6-Oct-04	A	13	1	1	71	2	41	26	2	30	16	2	6	11	8	66	16	1	72	94	111	1	2	A	26.9	110.6
7-Oct-04	58	39	12	1	3	56	21	43	9	5	9	8	7	5	9	7	2	3	3	31	100	223	A	12	29.0	223.3
8-Oct-04	223	47	10	9	2	44	6	17	9	26	2	39	9	32	14	24	1	3	1	1	151	A	49	1	31.3	222.9
9-Oct-04	23	3	56	145	2	1	37	83	1	14	110	2	90	45	15	6	10	3	1	1	A	18	85	45	34.6	144.9
10-Oct-04	34	57	33	1	18	38	119	2	13	29	31	1	34	69	31	2	23	2	1	A	28	4	69	1	27.9	118.7
11-Oct-04	3	1	5	1	44	25	13	81	5	2	8	93	3	8	4	3	5	7	A	7	2	101	55	1	20.7	100.7
12-Oct-04	59	73	1	1	3	13	22	15	8	7	7	2	2	5	4	2	2	A	2	2	2	2	5	11	10.8	73.0
13-Oct-04	60	19	76	126	90	11	13	55	49	34	31	97	2	34	3	4	A	51	111	26	20	1	3	7	40.1	126.2
14-Oct-04	11	3	2	1	6	1	8	43	10	22	6	22	2	2	2	A	4	3	1	1	1	3	1	3	6.9	43.4
15-Oct-04	1	1	2	2	1	3	28	30	9	3	2	4	6	6	A	3	2	1	1	1	1	1	1	1	4.7	30.0
16-Oct-04	1	1	1	30	2	N	9	2	4	5	4	3	28	A	4	3	8	17	3	2	5	4	5	4	6.5	30.4
17-Oct-04	1	1	1	1	1	1	1	1	24	20	2	3	A	14	28	31	40	29	1	1	1	1	1	1	8.9	40.4
18-Oct-04	1	1	1	1	1	2	20	24	8	35	17	A	58	13	6	7	20	18	10	5	12	7	7	2	12.0	57.7
19-Oct-04	2	2	2	1	1	3	23	46	77	3	A	3	3	18	7	22	2	2	1	1	2	1	2	1	9.8	77.4
20-Oct-04	1	1	1	1	1	1	1	1	1	A	2	2	3	30	2	9	42	19	1	1	1	1	1	1	5.3	41.9
21-Oct-04	1	1	3	1	2	1	4	14	A	3	3	C	C	C	C	C	27	8	8	2	6	5	1	1	5.0	27.0
22-Oct-04	1	1	1	A	1	2	20	16	19	8	135	57	17	32	67	4	4	4	4	3	4	3	2	3	17.7	135.2
23-Oct-04	41	N	A	2	13	37	31	3	3	4	8	16	23	18	16	13	14	9	26	25	13	2	2	N	15.1	41.1
24-Oct-04	2	A	2	65	29	6	73	58	5	8	15	10	13	7	5	6	36	11	81	4	3	2	N	52	22.4	81.0
25-Oct-04	A	2	104	66	39	77	8	57	9	139	4	3	29	14	20	1	38	35	37	3	1	4	3	1	30.2	139.4
26-Oct-04	1	3	3	A	8	5	43	85	30	3	5	43	3	67	3	2	3	11	6	13	35	4	8	4	16.8	85.3
27-Oct-04	3	72	A	56	41	260	73	78	102	15	18	35	15	48	2	21	20	131	37	47	122	199	191	111	73.8	260.0
28-Oct-04	119	A	47	151	129	260	88	17	20	69	80	18	11	9	12	16	4	3	1	1	72	47	8	12	52.0	260.0
29-Oct-04	A	79	4	56	61	52	23	122	37	65	15	45	38	12	17	4	34	28	14	16	48	18	41	A	37.7	122.1
30-Oct-04	34	1	1	1	18	36	30	4	4	45	22	19	15	20	22	25	21	60	25	11	5	2	A	1	18.4	60.4
31-Oct-04	1	1	1	2	62	3	3	36	20	49	38	25	2	20	14	2	3	1	8	10	3	A	28	10	14.8	61.8
Hourly Avg	34.3	23.9	14.8	32.9	34.7	47.7	28.2	38.1	17.6	22.9	23.2	20.9	16.2	20.7	14.9	11.0	13.0	21.8	19.4	14.0	28.8	29.3	24.1	19.5		
Hourly Max	222.9	127.1	103.8	151.4	244.0	322.9	118.7	122.1	102.2	139.4	135.2	96.5	89.7	69.4	110.7	66.0	41.9	164.8	110.8	94.4	150.6	223.3	191.2	111.0		



Station: Crescent Heights

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0				
Number of 24-hr Exceedances:	0				
Maximum 1-hr Average:	166	ppb	27-Oct	22:00	23:00
Maximum 24-hr Average:	48	ppb	27-Oct		

Guideline Limit: Alberta Environment:

1-hr	na	ppm	24-hr	na	ppm
------	----	-----	-------	----	-----

AIC Time:	33 hrs							Operational Time:	702 hrs						
Calibration Time:	5 hrs							AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average							
	76	38	15	9	5	2	1	13.1 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-Oct-04	21	18	11	17	11	A	28	20	15	6	5	4	5	4	7	5	15	40	36	24	23	11	18	15.2	39.8	
2-Oct-04	11	5	3	4	A	25	16	16	7	8	18	13	7	7	4	7	7	11	25	25	46	37	37	24	15.8	46.3
3-Oct-04	32	43	42	A	12	9	8	7	5	4	2	2	2	2	1	1	2	2	2	6	9	18	12	14	10.3	43.5
4-Oct-04	23	26	A	65	95	59	37	17	18	13	5	5	4	4	5	4	7	14	12	17	15	17	10	13	21.1	94.5
5-Oct-04	4	A	9	12	12	15	15	26	18	8	6	5	4	4	4	5	9	22	16	10	11	6	9	9	10.4	26.1
6-Oct-04	A	11	4	4	10	8	13	13	7	6	6	3	8	15	16	7	4	4	6	6	12	4	5	A	7.8	15.9
7-Oct-04	12	13	7	6	8	22	22	15	13	11	8	3	8	9	9	5	5	9	17	35	48	76	A	33	18.0	76.4
8-Oct-04	55	38	21	19	17	27	15	27	19	10	4	5	5	5	4	6	5	6	6	5	15	A	13	7	14.4	54.6
9-Oct-04	9	6	7	16	4	3	5	7	4	5	8	3	8	8	10	11	14	13	11	9	A	13	15	14	8.9	15.5
10-Oct-04	9	9	6	5	6	12	15	7	6	5	3	2	3	4	3	2	7	10	10	A	19	11	11	5	7.4	18.9
11-Oct-04	5	5	5	5	9	13	9	8	6	4	4	13	6	6	4	5	11	21	A	26	11	11	10	5	8.8	26.0
12-Oct-04	8	9	6	8	12	22	20	23	16	9	8	3	2	4	4	3	4	A	14	12	15	17	21	21	11.2	23.3
13-Oct-04	52	19	16	19	30	20	15	34	36	38	11	9	5	7	8	12	A	23	18	18	11	4	5	11	18.2	51.9
14-Oct-04	15	8	6	6	12	2	17	41	23	22	17	14	8	5	6	A	21	10	10	10	10	10	7	11	12.6	40.8
15-Oct-04	9	7	8	9	6	7	19	33	15	4	4	6	10	12	A	13	8	5	4	3	3	2	5	3	8.5	33.1
16-Oct-04	2	5	2	4	3	N	7	4	4	8	8	3	4	A	12	8	6	8	7	6	9	8	7	4	5.8	12.2
17-Oct-04	1	1	1	1	1	1	2	2	10	8	4	3	A	6	9	6	18	19	4	3	3	2	2	2	4.8	19.2
18-Oct-04	3	4	5	6	6	7	11	19	12	18	12	A	32	13	10	10	13	16	15	14	13	11	11	9	11.7	32.0
19-Oct-04	9	8	7	6	6	8	14	28	28	6	A	9	7	10	9	6	4	3	3	1	3	3	1	1	7.9	28.4
20-Oct-04	1	1	1	0	0	1	1	2	1	A	5	4	3	4	2	2	12	8	3	3	4	4	4	3	3.0	11.7
21-Oct-04	3	4	4	4	7	4	8	9	A	11	7	C	C	C	C	C	8	13	12	6	16	10	3	4	7.4	15.6
22-Oct-04	4	1	3	A	3	3	7	17	23	6	9	8	6	9	8	5	8	9	8	8	6	5	3	4	7.0	22.7
23-Oct-04	8	N	A	8	5	9	9	8	6	6	9	15	20	17	15	14	19	14	14	18	7	10	14	N	11.7	20.4
24-Oct-04	7	A	14	10	8	11	12	7	6	7	12	11	13	8	8	10	20	19	36	11	10	7	N	12	11.8	35.6
25-Oct-04	A	6	11	9	8	14	14	19	15	14	4	3	3	3	3	3	13	43	40	15	9	12	13	6	12.2	42.8
26-Oct-04	9	9	12	A	25	20	40	57	20	6	6	6	5	10	5	6	11	35	19	16	19	13	20	12	16.5	57.3
27-Oct-04	12	20	A	63	42	81	63	68	63	18	12	11	4	6	4	7	12	30	48	44	82	123	166	123	47.9	166.3
28-Oct-04	111	A	52	33	27	43	44	17	22	29	45	18	16	13	14	5	7	7	6	8	33	38	23	16	27.3	111.3
29-Oct-04	A	23	16	30	23	20	26	51	37	26	19	18	15	11	14	8	18	44	33	23	19	10	6	A	22.2	50.6
30-Oct-04	7	4	3	2	3	5	6	9	6	6	6	4	3	7	13	11	24	11	8	7	6	3	A	9	6.9	23.9
31-Oct-04	6	8	5	8	10	9	11	11	10	13	14	9	3	4	5	6	13	10	21	24	15	A	29	18	11.3	28.8
Hourly Avg	16.0	11.6	10.3	13.5	14.0	16.7	17.2	20.2	15.8	11.2	9.3	7.4	7.6	7.4	7.5	6.7	10.4	15.1	15.6	14.2	16.6	17.5	16.9	14.5		
Hourly Max	111.3	43.5	52.2	65.3	94.5	81.2	63.5	67.6	63.1	37.8	45.3	17.9	32.0	16.6	15.9	14.4	23.9	44.0	48.1	44.2	82.1	122.9	166.3	122.6		



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Maximum 1-hr Value:	369.7	ppb	4-Oct	5:00 6:00
Maximum 24-hr Value:	96.7	ppb	27-Oct	

AIC Time:	33 hrs							Operational Time:	702 hrs						
Calibration Time:	5 hrs							AMD Operational Uptime:	99.5%						
Percentile	99	95	75	50	25	5	1	Average							
	230	126	52	23	10	4	2	39.3 ppb							

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-04	63	165	16	79	94	A	42	51	39	9	7	6	43	42	132	38	7	33	75	54	53	35	15	151	54.4	164.8
2-Oct-04	218	31	5	8	A	47	50	57	9	10	84	18	14	10	9	11	11	46	46	104	78	99	47	57	46.5	218.0
3-Oct-04	68	61	61	A	23	11	11	10	7	5	3	3	3	2	2	2	3	3	4	22	15	65	15	26	18.5	68.4
4-Oct-04	38	67	A	82	260	370	73	76	24	42	7	40	29	51	7	7	12	20	20	47	24	119	72	131	70.3	369.7
5-Oct-04	8	A	14	102	109	119	32	126	19	16	53	29	7	5	6	7	13	230	97	13	59	7	61	32	50.7	230.3
6-Oct-04	A	34	5	6	98	18	71	72	11	34	32	5	18	32	24	92	31	5	111	143	129	6	16	A	45.1	142.5
7-Oct-04	85	68	25	12	10	84	48	70	26	18	20	19	20	15	19	18	8	14	24	69	135	255	A	42	48.0	255.5
8-Oct-04	246	75	31	31	21	75	23	41	24	39	6	65	26	49	28	55	6	13	9	7	186	A	74	9	49.5	245.7
9-Oct-04	44	14	84	197	5	5	47	121	6	28	167	5	126	69	34	24	29	17	14	11	A	43	123	78	56.2	196.7
10-Oct-04	46	74	49	7	29	59	145	8	27	41	32	3	61	96	50	7	36	14	14	A	45	19	98	6	42.1	145.4
11-Oct-04	13	7	13	6	69	38	26	100	12	5	16	126	8	19	12	11	24	37	A	42	16	143	76	6	35.9	142.8
12-Oct-04	86	100	7	11	14	34	43	34	24	17	17	4	3	8	6	6	6	A	20	16	17	20	25	31	23.9	99.5
13-Oct-04	85	37	96	200	112	26	27	70	65	55	43	160	6	52	13	16	A	85	140	42	41	6	14	21	61.4	200.2
14-Oct-04	27	14	8	10	24	5	38	76	36	47	23	36	13	12	11	A	28	16	12	18	17	21	9	17	22.3	75.5
15-Oct-04	13	9	14	16	9	16	52	51	21	7	5	9	15	15	A	17	12	7	7	4	4	3	8	6	13.8	51.7
16-Oct-04	5	10	4	52	5	N	17	7	8	15	14	4	49	A	17	11	17	34	15	8	16	13	15	13	15.8	52.3
17-Oct-04	2	2	2	2	2	2	3	3	36	45	5	5	A	24	54	45	72	53	5	4	4	2	3	3	16.4	71.7
18-Oct-04	4	4	7	7	7	9	26	38	17	68	26	A	73	21	12	15	40	46	27	16	24	18	19	12	23.3	72.8
19-Oct-04	10	10	9	9	7	10	43	70	97	8	A	14	10	27	15	25	7	8	4	3	5	4	4	2	17.2	96.7
20-Oct-04	2	1	1	1	1	3	3	4	2	A	10	6	6	39	4	16	67	26	5	5	5	5	5	4	9.6	67.0
21-Oct-04	4	7	7	7	8	7	11	25	A	17	8	C	C	C	C	C	41	20	25	10	21	21	4	5	13.6	41.0
22-Oct-04	7	3	4	A	3	6	32	29	32	16	192	84	36	42	116	8	13	11	11	12	10	9	5	7	29.9	191.9
23-Oct-04	72	N	A	20	27	59	36	11	8	8	18	25	47	27	33	24	40	22	50	43	28	15	27	N	30.5	71.8
24-Oct-04	10	A	18	86	55	16	101	77	11	15	23	16	20	12	11	14	65	35	101	21	18	10	N	73	36.8	101.4
25-Oct-04	A	9	119	90	57	108	24	89	21	171	9	5	51	25	31	5	67	76	76	20	11	24	22	11	48.8	171.1
26-Oct-04	13	19	15	A	33	27	97	113	54	10	15	61	10	103	9	9	21	45	32	38	64	19	28	17	37.0	113.1
27-Oct-04	16	85	A	87	59	304	91	96	123	22	30	56	20	83	6	32	52	169	68	77	154	237	222	138	96.7	303.7
28-Oct-04	146	A	73	186	151	292	107	30	32	74	93	26	22	18	27	31	11	13	9	12	101	77	31	28	69.2	291.6
29-Oct-04	A	99	20	77	89	70	37	153	53	88	25	62	55	29	38	17	63	67	46	50	108	31	52	A	60.4	152.9
30-Oct-04	71	5	5	4	31	41	43	13	13	68	48	43	25	40	46	41	54	97	42	38	22	6	A	15	35.3	96.6
31-Oct-04	7	16	7	12	96	15	15	60	41	68	60	44	5	37	37	9	26	14	36	38	20	A	64	35	33.1	95.7
Hourly Avg	50.3	37.9	25.7	50.3	50.3	64.7	45.6	57.4	29.9	35.5	36.3	33.8	28.2	34.6	27.8	21.2	29.3	42.5	38.2	32.9	47.7	46.0	41.2	34.9		
Hourly Max	245.7	164.8	118.9	200.2	259.7	369.7	145.4	152.9	122.6	171.1	191.9	160.3	126.0	102.5	132.5	92.2	71.7	230.3	139.7	142.5	186.5	255.5	221.5	150.6		

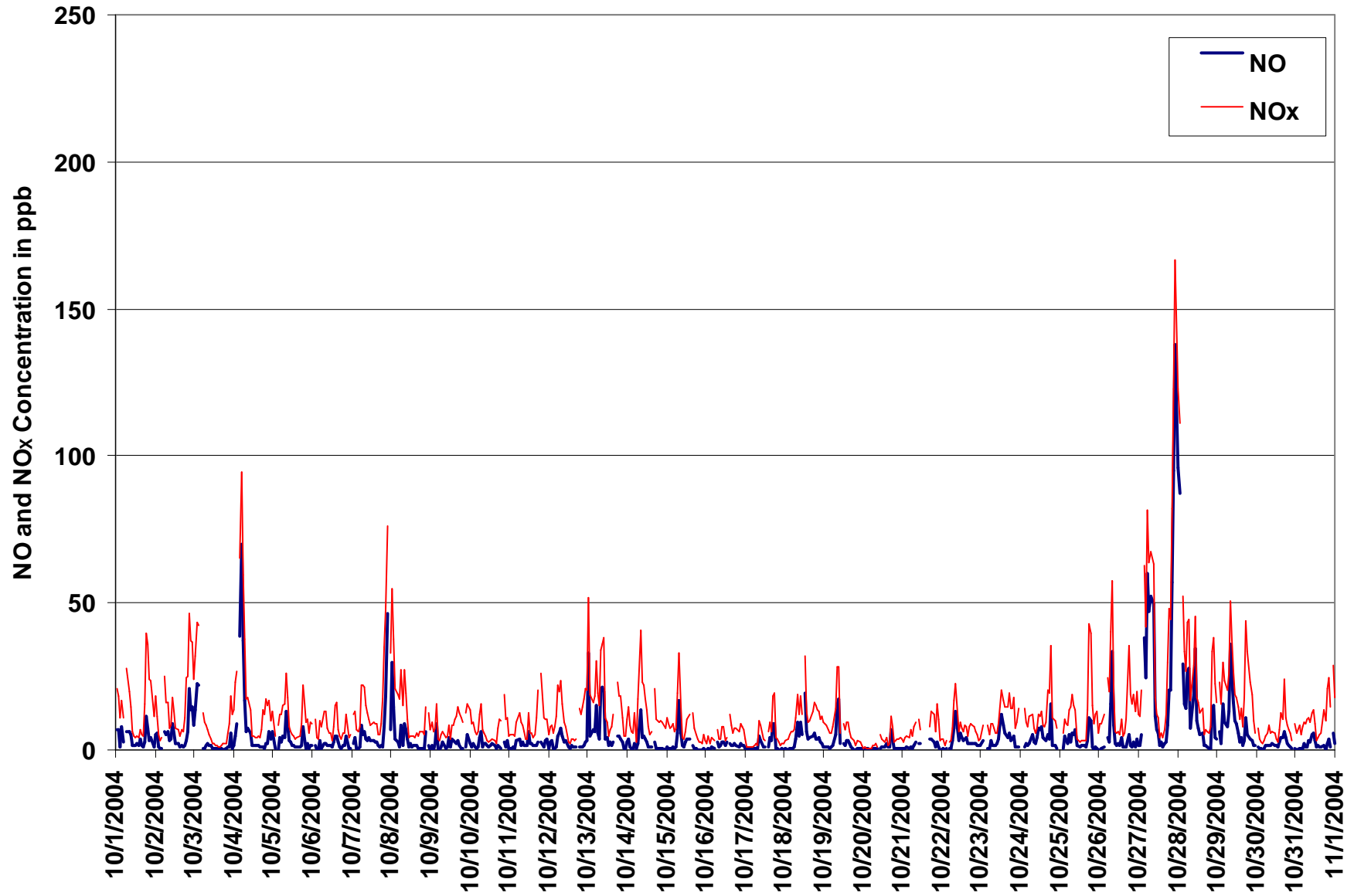


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trends

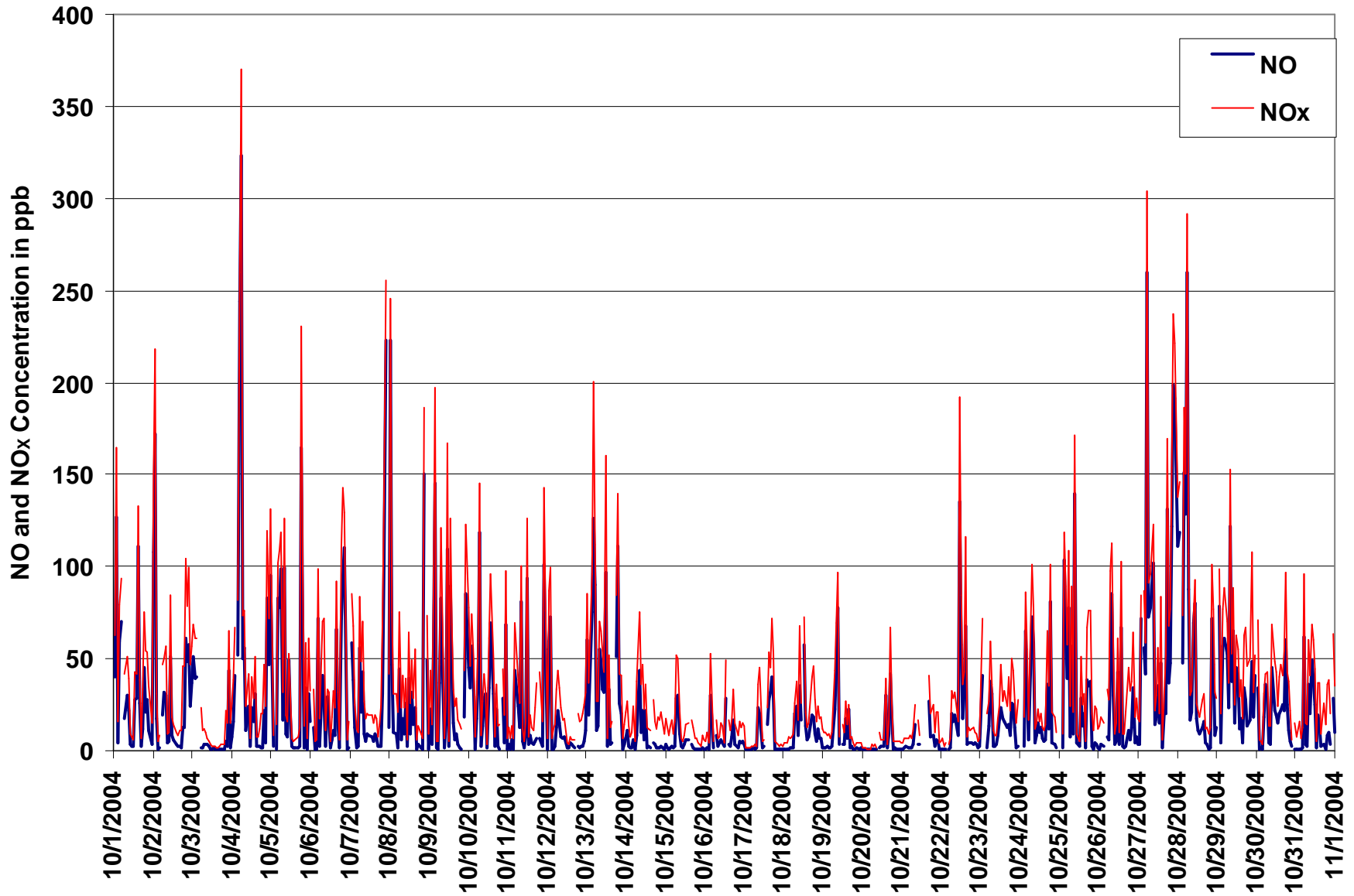


Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trends



PAS - Crescent Heights Ozone Monthly Summary

Station: Crescent Heights

HOURLY AVERAGE TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	42 ppb 8-Oct 11:00 12:00
Maximum 24-hr Average:	33 ppb 6-Oct

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

AIC Time:	33 hrs	Operational Time:	703 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	99.5%					
Percentile	99	95	75	50	25	5	1	Average
	40	36	27	19	12	3	1	19.4 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start 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-Oct-04	2	11	9	11	11	A	7	15	22	30	30	31	33	33	33	33	23	8	3	5	8	17	13	18.3	33.4		
2-Oct-04	20	20	20	18	A	9	12	11	15	16	19	22	31	34	38	37	36	30	17	16	6	3	2	6	19.0	38.0	
3-Oct-04	2	1	3	A	13	11	11	13	16	19	23	25	27	29	32	33	33	31	28	23	16	11	10	10	18.2	33.2	
4-Oct-04	3	4	A	1	2	2	4	12	15	25	32	35	35	35	36	37	34	25	23	15	17	20	18	16	19.4	37.3	
5-Oct-04	17	A	19	16	14	11	9	8	13	23	27	30	32	36	40	41	37	28	25	24	23	24	22	26	23.7	41.1	
6-Oct-04	A	33	37	37	35	33	30	32	36	37	39	40	37	30	29	34	32	30	28	27	23	27	29	A	32.5	39.7	
7-Oct-04	25	22	20	19	18	15	10	12	15	18	25	32	34	36	36	40	38	33	23	9	4	2	A	3	21.3	39.6	
8-Oct-04	4	2	8	9	11	11	15	11	19	31	40	42	40	42	41	40	39	35	33	34	28	A	27	26	25.5	42.0	
9-Oct-04	24	27	29	29	32	33	33	34	34	36	37	35	37	37	32	26	19	17	19	24	A	28	26	20	29.1	37.2	
10-Oct-04	18	15	16	16	16	14	13	14	19	24	25	27	32	34	35	35	32	26	23	A	12	17	17	20	21.8	35.5	
11-Oct-04	17	17	18	18	18	14	16	18	21	25	25	25	30	32	35	36	30	20	A	11	17	16	19	18	21.7	36.2	
12-Oct-04	17	16	15	12	9	5	9	8	14	19	24	33	34	31	32	34	34	A	24	17	12	8	5	5	18.2	33.8	
13-Oct-04	1	3	6	4	2	2	4	5	7	9	24	26	25	23	23	22	A	14	13	9	18	19	19	14	12.6	25.9	
14-Oct-04	10	13	14	14	15	32	18	7	14	15	19	25	28	34	33	A	20	24	21	20	19	18	18	13	19.3	34.2	
15-Oct-04	13	11	14	14	18	15	9	7	15	22	24	25	23	24	A	28	28	29	29	28	29	28	24	28	21.1	29.0	
16-Oct-04	31	29	30	28	27	N	23	21	20	18	19	21	17	A	14	17	18	17	14	14	15	16	16	19	20.2	30.6	
17-Oct-04	23	22	22	22	22	21	21	21	20	19	19	19	A	20	19	20	17	15	16	16	16	17	15	15	19.0	22.7	
18-Oct-04	13	12	9	8	8	8	7	5	5	5	6	A	5	8	10	11	9	8	5	7	7	6	6	8	7.6	13.4	
19-Oct-04	7	8	9	11	12	10	10	11	14	17	A	20	21	19	19	21	22	23	23	24	22	22	23	22	16.9	23.6	
20-Oct-04	21	21	20	19	19	17	15	15	17	A	16	17	17	17	18	19	16	14	14	13	13	13	11	11	16.2	20.9	
21-Oct-04	11	9	10	8	6	9	8	8	A	12	15	16	18	18	20	22	C	C	C	C	11	16	20	19	13.6	22.3	
22-Oct-04	19	21	19	A	18	17	14	9	10	22	26	28	30	31	36	35	29	26	24	23	23	24	30	31	23.7	35.7	
23-Oct-04	26	N	A	30	24	21	22	22	25	24	19	15	12	17	18	15	11	12	12	11	22	18	13	N	18.4	29.7	
24-Oct-04	19	A	9	13	12	7	14	16	18	16	13	14	15	19	21	22	15	13	9	19	17	16	N	17	15.2	21.7	
25-Oct-04	A	19	17	17	16	15	13	12	17	24	28	33	37	39	39	39	31	9	7	18	22	19	18	23	22.3	39.5	
26-Oct-04	21	19	15	A	7	10	4	5	16	25	31	37	38	36	38	38	32	12	22	21	16	16	9	11	20.9	38.3	
27-Oct-04	10	6	A	1	1	1	1	2	4	8	13	16	23	26	29	27	23	11	3	2	2	2	2	2	9.4	29.0	
28-Oct-04	2	A	2	2	4	3	3	3	7	5	4	4	7	8	12	14	23	21	19	21	18	7	4	5	6	8.8	22.6
29-Oct-04	A	3	4	4	2	3	2	1	3	7	11	15	22	35	34	36	25	6	6	12	14	19	24	A	13.0	35.6	
30-Oct-04	30	30	33	32	31	30	30	28	31	32	35	39	41	39	36	36	25	31	29	30	26	28	A	25	31.5	41.1	
31-Oct-04	28	25	27	19	16	15	16	18	17	17	20	24	33	31	34	33	26	26	15	11	13	A	7	10	20.9	33.6	
Hourly Avg	15.5	15.5	16.2	15.4	14.6	13.6	13.0	13.2	16.6	19.9	22.9	25.8	27.1	28.6	29.2	29.6	26.4	21.0	18.4	17.3	15.8	16.0	16.0	15.6			
Hourly Max	30.6	33.0	36.5	36.9	34.7	33.5	33.0	34.1	36.3	36.5	39.6	42.0	41.1	41.5	41.2	41.1	39.4	34.8	32.7	33.9	29.0	27.9	30.0	31.0			

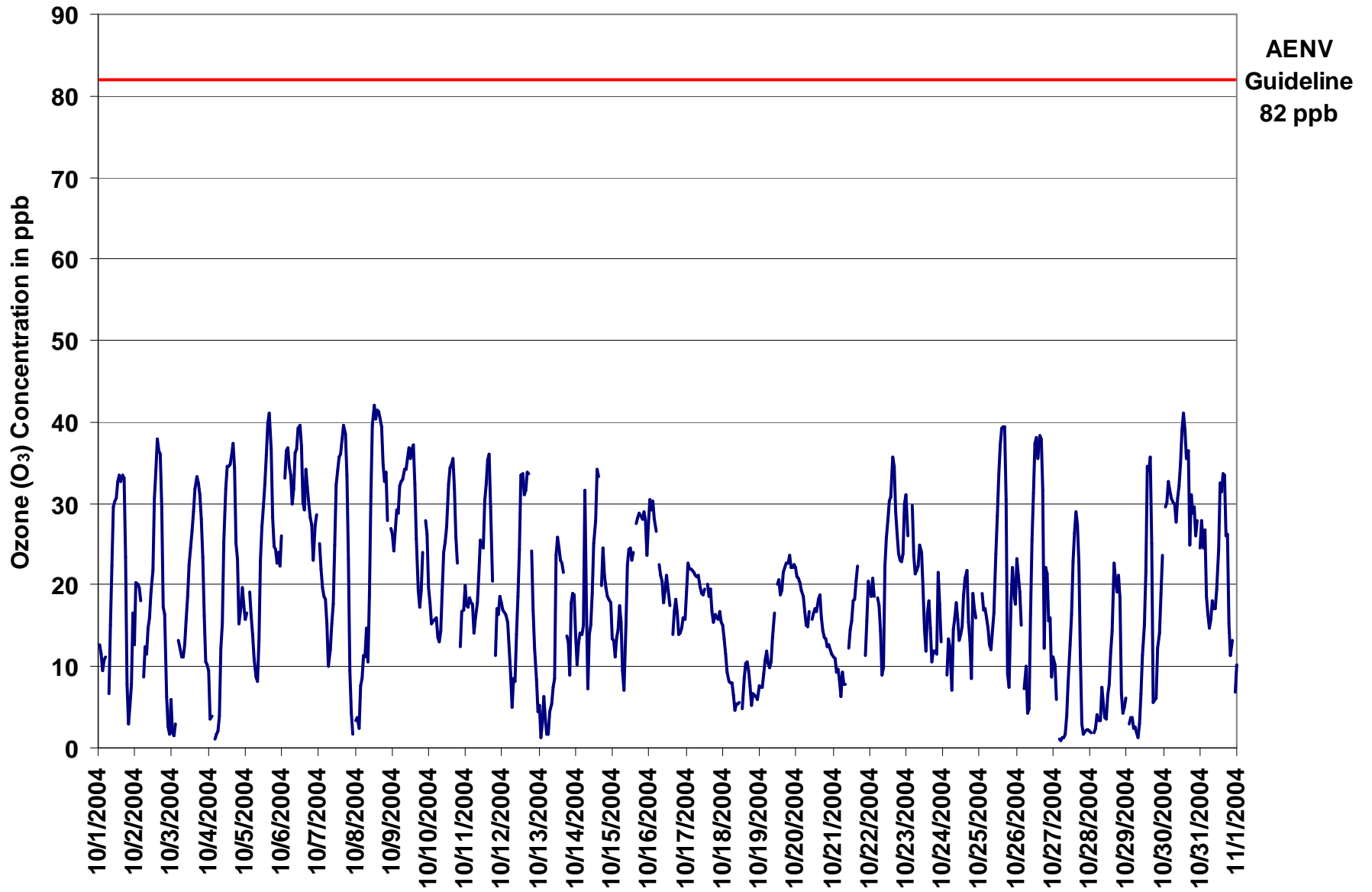


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004
SummaryMaximum 1-hr Value: 44.7 ppb 8-Oct 11:00 12:00
Maximum 24-hr Value: 36.1 ppb 6-OctAIC Time: 33 hrs Operational Time: 703 hrs
Calibration Time: 4 hrs AMD Operational Uptime: 99.5%
Percentile 99 95 75 50 25 5 1 Average
43 40 31 22 17 6 3 23.1 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																							24-hour	Daily		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Average	Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Oct-04	18	19	13	14	15	A	13	19	27	33	31	33	35	35	35	37	35	32	18	6	8	14	21	16	22.9	36.5	
2-Oct-04	23	22	21	21	A	17	17	16	17	18	23	25	35	38	40	40	39	37	25	22	21	6	3	11	23.3	40.3	
3-Oct-04	6	4	9	A	15	13	15	14	17	22	24	26	28	31	34	34	34	34	29	29	20	17	13	14	21.0	34.3	
4-Oct-04	8	8	A	3	4	4	11	17	20	32	34	37	36	37	38	39	39	33	28	21	24	23	20	19	23.4	38.9	
5-Oct-04	18	A	21	20	17	15	13	14	16	28	29	32	35	39	42	44	42	34	31	29	28	26	26	32	27.4	43.6	
6-Oct-04	A	37	38	40	39	39	33	36	39	39	42	41	42	39	36	38	35	32	30	30	28	29	34	A	36.1	42.2	
7-Oct-04	30	27	24	20	20	24	17	17	20	22	30	38	37	42	40	43	41	38	29	28	15	7	A	9	27.0	43.1	
8-Oct-04	7	6	15	16	19	19	20	18	23	39	41	45	43	44	43	44	42	38	35	35	35	A	31	29	29.9	44.7	
9-Oct-04	28	30	35	34	34	35	35	36	36	41	42	38	43	42	39	35	24	20	23	30	A	32	31	25	33.4	42.7	
10-Oct-04	23	19	18	18	19	17	17	17	23	27	27	30	35	36	38	37	37	29	26	A	17	21	22	24	25.1	37.5	
11-Oct-04	21	19	20	20	20	21	21	20	25	28	26	28	35	35	39	40	36	32	A	19	21	18	21	21	25.5	39.7	
12-Oct-04	19	19	17	15	13	10	15	16	19	20	31	36	36	34	34	36	36	A	28	24	17	11	8	10	21.9	36.3	
13-Oct-04	4	7	9	6	3	3	7	10	14	13	27	28	28	26	25	25	A	19	16	14	22	20	21	20	16.0	28.2	
14-Oct-04	17	16	16	15	26	35	31	24	23	24	24	33	33	39	40	A	28	27	24	23	21	22	22	19	25.2	39.5	
15-Oct-04	19	13	17	20	21	18	14	17	21	26	27	26	25	26	A	31	31	30	31	29	31	29	27	31	24.3	31.4	
16-Oct-04	32	32	31	31	28	N	26	23	24	22	24	24	20	A	16	21	20	19	18	18	19	19	21	23	23.3	32.4	
17-Oct-04	24	24	24	24	23	22	24	23	23	22	21	21	A	22	21	22	19	19	18	17	17	18	17	16	20.9	24.1	
18-Oct-04	15	12	11	9	10	10	10	8	7	8	7	A	8	12	12	12	12	11	9	11	11	9	9	9	10.0	14.9	
19-Oct-04	10	10	13	13	13	13	12	17	18	18	A	23	23	23	23	24	24	24	24	24	25	24	23	24	23	19.4	25.1
20-Oct-04	22	22	22	20	19	18	17	17	18	A	17	19	19	18	20	20	19	17	15	15	14	14	13	12	17.8	22.3	
21-Oct-04	12	11	12	9	8	11	11	10	A	15	17	19	20	21	23	24	C	C	C	C	16	20	23	21	15.9	23.8	
22-Oct-04	22	22	21	A	19	19	17	12	18	26	29	31	33	37	39	39	33	29	26	26	25	31	31	34	27.0	39.4	
23-Oct-04	33	N	A	34	28	24	27	26	27	27	22	19	16	22	22	18	16	14	17	16	25	22	22	N	22.7	34.0	
24-Oct-04	23	A	11	17	17	14	18	17	22	19	16	16	20	21	23	25	23	21	19	27	22	22	N	22	19.7	27.2	
25-Oct-04	A	20	20	19	18	18	17	16	19	29	30	37	41	41	43	41	40	24	18	23	23	24	23	27	26.6	42.8	
26-Oct-04	24	27	22	A	15	14	9	13	23	30	37	40	41	40	41	41	39	20	31	28	22	20	14	14	26.3	41.3	
27-Oct-04	15	9	A	2	2	4	3	3	7	11	16	23	25	29	30	30	29	20	10	3	3	3	3	4	12.3	30.3	
28-Oct-04	3	A	5	5	6	10	12	12	8	5	6	8	10	16	21	25	23	22	24	23	16	9	10	10	12.5	24.6	
29-Oct-04	A	5	6	6	5	4	6	2	6	10	15	19	27	40	41	39	34	14	11	20	18	23	27	A	17.1	40.7	
30-Oct-04	31	33	34	34	32	32	31	33	35	37	43	43	43	43	41	41	39	35	34	34	30	29	A	28	34.9	43.2	
31-Oct-04	30	28	28	23	19	18	20	22	20	20	24	31	36	34	38	35	34	30	26	25	17	A	18	19	25.9	37.8	
Hourly Avg	19.2	18.6	19.0	18.1	17.6	17.2	17.4	17.5	20.4	23.6	26.0	29.0	30.2	32.1	32.6	32.6	31.2	26.1	23.2	22.4	20.3	19.3	19.8	19.4			
Hourly Max	33.3	36.8	38.1	39.6	39.2	39.1	35.3	36.4	38.5	40.8	42.2	44.7	43.3	44.1	43.0	43.9	42.3	38.2	34.9	35.5	35.4	32.3	33.8	34.4			

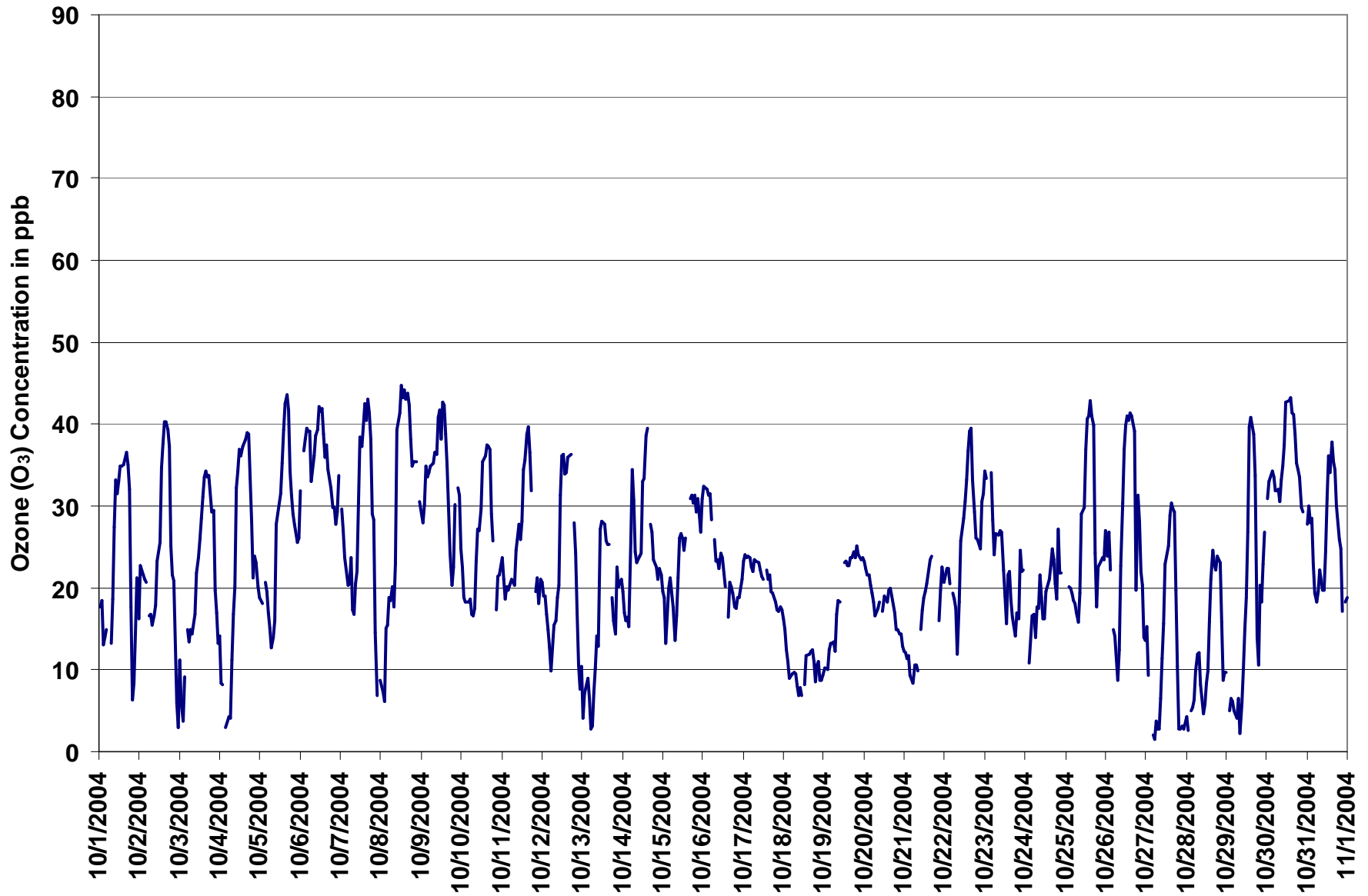


Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend



Station: Crescent Heights

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	39.9	ppb	8-Oct	17:00	18:00		

Guideline Limit: Canada Wide Standard 8-hr 65 ppb

Percentile	99	95	75	50	25	5	1
	35.8	33.6	26.0	18.1	14.2	4.6	2.6

Status Flag Characters

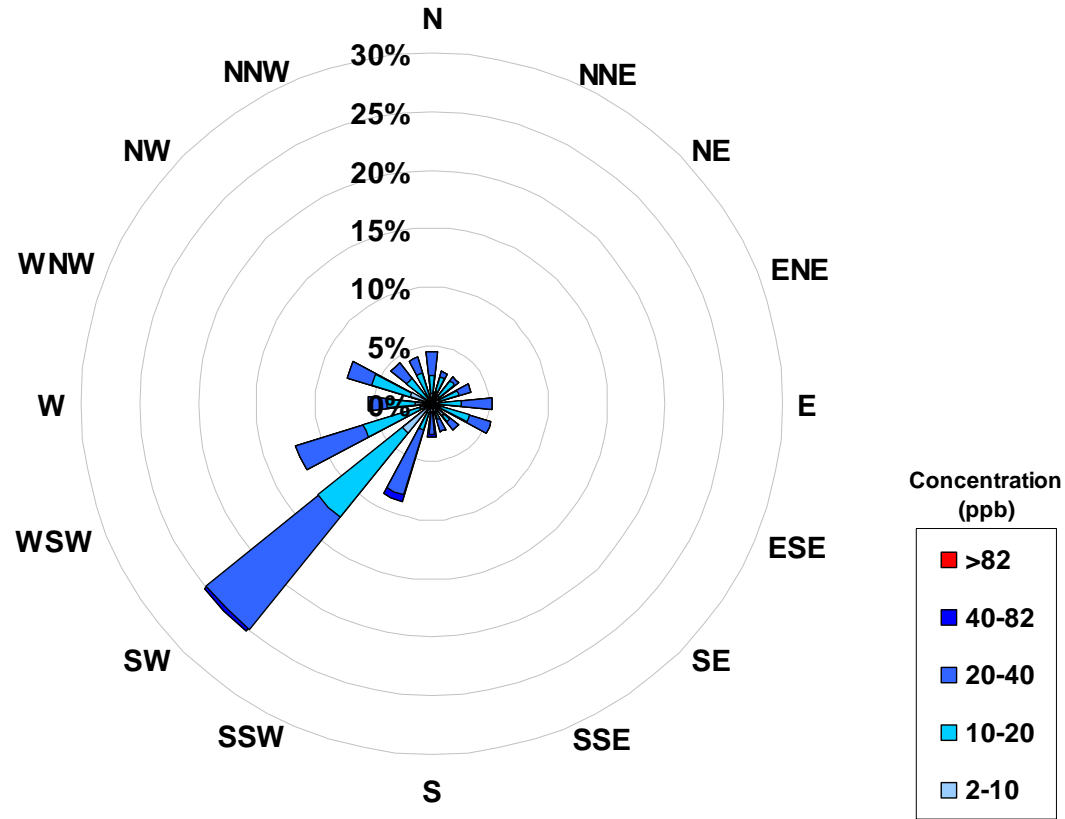
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Oct-04	13	20	18	16	14	13	11	11	12	15	18	21	24	25	28	31	32	31	28	25	22	18	16	14	19.9	32.0	
2-Oct-04	12	12	13	15	16	17	16	16	15	14	14	15	17	20	23	26	29	31	30	30	27	23	18	14	19.3	30.7	
3-Oct-04	10	7	5	3	4	5	7	8	10	12	15	16	18	20	23	25	27	29	30	29	28	26	23	20	16.7	29.6	
4-Oct-04	17	13	11	8	6	5	4	4	6	9	12	16	20	24	28	31	34	34	32	30	28	26	24	21	18.3	33.6	
5-Oct-04	19	18	17	17	17	16	15	13	13	14	15	17	19	22	26	30	33	34	34	33	32	30	28	26	22.4	33.8	
6-Oct-04	25	25	27	29	30	32	33	34	34	35	35	35	36	35	35	35	35	34	33	31	29	29	29	28	31.7	35.5	
7-Oct-04	27	26	25	23	23	21	18	18	16	16	16	18	20	23	26	29	32	34	34	31	28	23	21	16	23.6	34.3	
8-Oct-04	11	7	5	4	5	7	8	9	11	14	18	22	26	30	33	37	39	40	39	38	36	36	34	32	22.5	39.9	
9-Oct-04	30	28	28	27	28	28	29	30	31	32	33	34	35	35	35	34	32	30	28	26	25	24	23	22	29.6	35.4	
10-Oct-04	22	21	21	20	19	18	16	15	15	17	18	19	21	24	26	29	31	31	31	31	28	26	23	21	22.6	31.0	
11-Oct-04	19	18	17	17	18	17	17	17	18	19	19	20	22	24	27	29	30	29	30	28	26	24	21	19	21.8	29.8	
12-Oct-04	17	16	16	16	15	14	13	11	11	11	13	15	18	22	24	28	30	32	32	29	26	23	19	15	19.5	31.7	
13-Oct-04	10	9	7	6	4	3	3	3	4	5	7	10	13	15	18	20	21	22	21	18	17	17	16	15	11.9	22.2	
14-Oct-04	14	14	14	15	15	16	16	15	16	16	17	18	20	20	22	24	25	26	27	26	25	22	20	19	19.3	26.6	
15-Oct-04	18	17	16	15	15	15	14	13	13	14	16	17	18	19	20	23	25	26	26	27	28	28	28	28	19.9	28.3	
16-Oct-04	28	28	28	28	28	28	28	27	25	24	22	21	20	20	19	18	18	18	17	16	15	16	16	16	21.8	28.3	
17-Oct-04	17	17	18	19	20	21	21	22	21	21	21	20	20	20	20	19	19	18	18	18	17	17	17	16	19.0	21.7	
18-Oct-04	16	15	14	13	12	11	10	9	8	7	6	6	6	6	6	7	8	8	8	8	8	8	7	7	9.0	15.6	
19-Oct-04	7	7	7	8	8	9	9	10	10	12	12	13	15	16	17	19	20	21	21	21	22	22	22	22	14.5	22.5	
20-Oct-04	22	22	22	21	21	20	19	18	18	17	17	16	16	16	17	17	17	17	16	16	15	15	14	13	17.7	22.3	
21-Oct-04	13	12	11	11	10	10	9	9	8	9	9	11	12	13	15	17	17	N	N	N	N	N	N	N	N	N	17.3
22-Oct-04	N	N	18	18	19	19	18	17	15	16	17	18	20	21	24	27	30	30	30	29	28	27	27	26	22.4	30.1	
23-Oct-04	26	26	N	N	N	N	N	N	N	24	23	22	20	19	19	18	16	15	14	13	15	15	14	14	N	25.9	
24-Oct-04	15	N	N	N	N	N	N	N	13	13	13	14	14	16	16	17	17	16	16	17	17	16	16	15	15.3	17.1	
25-Oct-04	N	N	N	N	N	N	16	16	16	16	18	20	22	25	29	32	34	32	29	28	26	23	20	18	23.4	33.9	
26-Oct-04	17	18	19	20	18	16	14	12	11	12	14	17	21	24	28	33	34	33	32	30	27	24	21	17	21.4	34.5	
27-Oct-04	15	14	13	10	8	6	5	3	2	3	4	6	9	12	15	18	21	21	20	18	15	12	9	6	10.9	21.1	
28-Oct-04	3	2	2	2	2	3	3	3	4	4	4	5	5	6	8	9	11	13	16	17	17	16	15	13	7.6	17.0	
29-Oct-04	12	9	7	5	4	4	3	3	3	3	4	6	8	12	16	20	23	23	22	22	21	19	18	15	11.7	23.0	
30-Oct-04	16	19	23	26	28	30	31	30	30	31	31	32	33	34	35	36	35	35	34	33	31	30	29	28	30.1	36.1	
31-Oct-04																									N	0.0	
Hourly Avg	16.7	16.4	15.7	15.3	15.1	14.9	14.5	14.1	14.2	15.1	16.1	17.3	18.9	20.6	22.6	24.7	25.9	26.3	25.8	24.8	23.4	21.9	20.3	18.5			
Hourly Max	29.5	28.4	28.3	28.8	30.5	31.8	32.9	33.8	34.1	34.5	34.9	35.2	35.5	35.4	35.3	36.8	39.4	39.9	39.1	38.0	36.5	35.8	33.7	31.7			



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



Frequency Distribution of O ₃ in ppb			
Range		Frequency (hrs)	
0	< 2	19	
2	to 10	117	
10	to 20	262	
20	to 40	298	
40	to 82	7	
	> 82	0	
Total Non-Zero Values			703

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

Station: Crescent Heights **HOURLY AVERAGE TABLE** Total HydroCarbons (THC)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	2.9	ppm	27-Oct	4:00 5:00
Maximum 24-hr Average:	2.3	ppm	27-Oct	

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

AIC Time:	31 hrs	Operational Time:	664 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	94.2%					
Percentile	99	95	75	50	25	5	1	Average
	2.7	2.4	2.1	2.0	1.9	1.8	1.6	2.00 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Oct-04	2.1	2.2	2.2	2.1	2.1	A	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.0	2.0	1.9	2.0	1.97	2.17		
2-Oct-04	1.9	1.9	1.9	1.9	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.9	1.9	2.3	2.2	2.4	2.3	2.00	2.37		
3-Oct-04	2.3	2.4	2.5	A	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.10	2.52		
4-Oct-04	2.4	2.3	A	2.4	2.3	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.98	2.43	
5-Oct-04	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.97	
6-Oct-04	A	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.83	1.88	
7-Oct-04	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.1	2.2	2.1	2.2	A	2.3	1.97	2.26	
8-Oct-04	2.2	2.5	2.2	2.1	2.1	2.0	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	A	1.9	1.9	1.97	2.50	
9-Oct-04	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	2.0	2.0	2.0	2.0	A	1.9	1.9	2.0	1.83	2.04	
10-Oct-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	1.96	2.03	
11-Oct-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	1.9	1.9	1.9	1.93	2.04	
12-Oct-04	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.1	2.1	2.3	2.5	2.5	2.01	2.52	
13-Oct-04	2.6	2.5	2.2	2.2	2.2	2.2	2.2	2.5	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.8	1.8	1.8	1.8	2.06	2.59	
14-Oct-04	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.94	2.03	
15-Oct-04	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.1	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.97	2.23
16-Oct-04	1.8	1.8	1.8	1.8	1.8	N	1.6	1.6	1.7	1.8	1.7	1.6	1.6	A	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.84	2.00	
17-Oct-04	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	2.0	2.0	2.1	2.1	1.9	2.0	2.1	1.98	2.15	
18-Oct-04	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.03	2.10	
19-Oct-04	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	A	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	D	D	D	D	2.02	2.10	
20-Oct-04	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	N	0.00	
21-Oct-04	D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	2.1	2.1	2.1	2.2	2.1	2.0	1.9	N	2.18	
22-Oct-04	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.68	1.95	
23-Oct-04	1.6	N	A	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.1	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.1	N	2.09	2.29	
24-Oct-04	2.4	A	2.1	2.1	2.1	2.2	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.4	2.0	2.0	2.0	N	2.0	2.13	2.41	
25-Oct-04	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.0	2.0	2.1	2.1	2.0	2.00	2.16	
26-Oct-04	2.0	2.2	2.2	A	2.3	2.1	2.3	2.4	2.2	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.3	2.9	2.13	2.90	
27-Oct-04	2.4	2.3	A	2.8	2.9	2.7	2.8	2.6	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.3	2.3	2.5	2.6	2.7	2.34	2.94	
28-Oct-04	2.8	A	2.6	2.2	2.1	2.1	2.2	2.0	2.5	2.8	2.7	2.5	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.27	2.77	
29-Oct-04	A	2.3	2.3	2.3	2.4	2.3	2.4	2.5	2.5	2.5	2.5	2.3	2.2	2.0	2.0	2.0	2.1	2.3	2.2	2.1	2.1	2.0	2.0	A	2.24	2.52	
30-Oct-04	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	A	2.1	1.87	2.13	
31-Oct-04	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	A	2.3	2.4	2.07	2.41	
Hourly Avg	2.07	2.06	2.05	2.05	2.06	2.04	2.04	2.05	2.02	2.00	1.98	1.95	1.94	1.93	1.92	1.91	1.93	1.97	2.01	2.01	2.01	2.01	2.03	2.09			
Hourly Max	2.76	2.50	2.64	2.83	2.94	2.66	2.84	2.59	2.52	2.77	2.70	2.45	2.30	2.31	2.22	2.22	2.25	2.28	2.37	2.26	2.34	2.45	2.63	2.90			

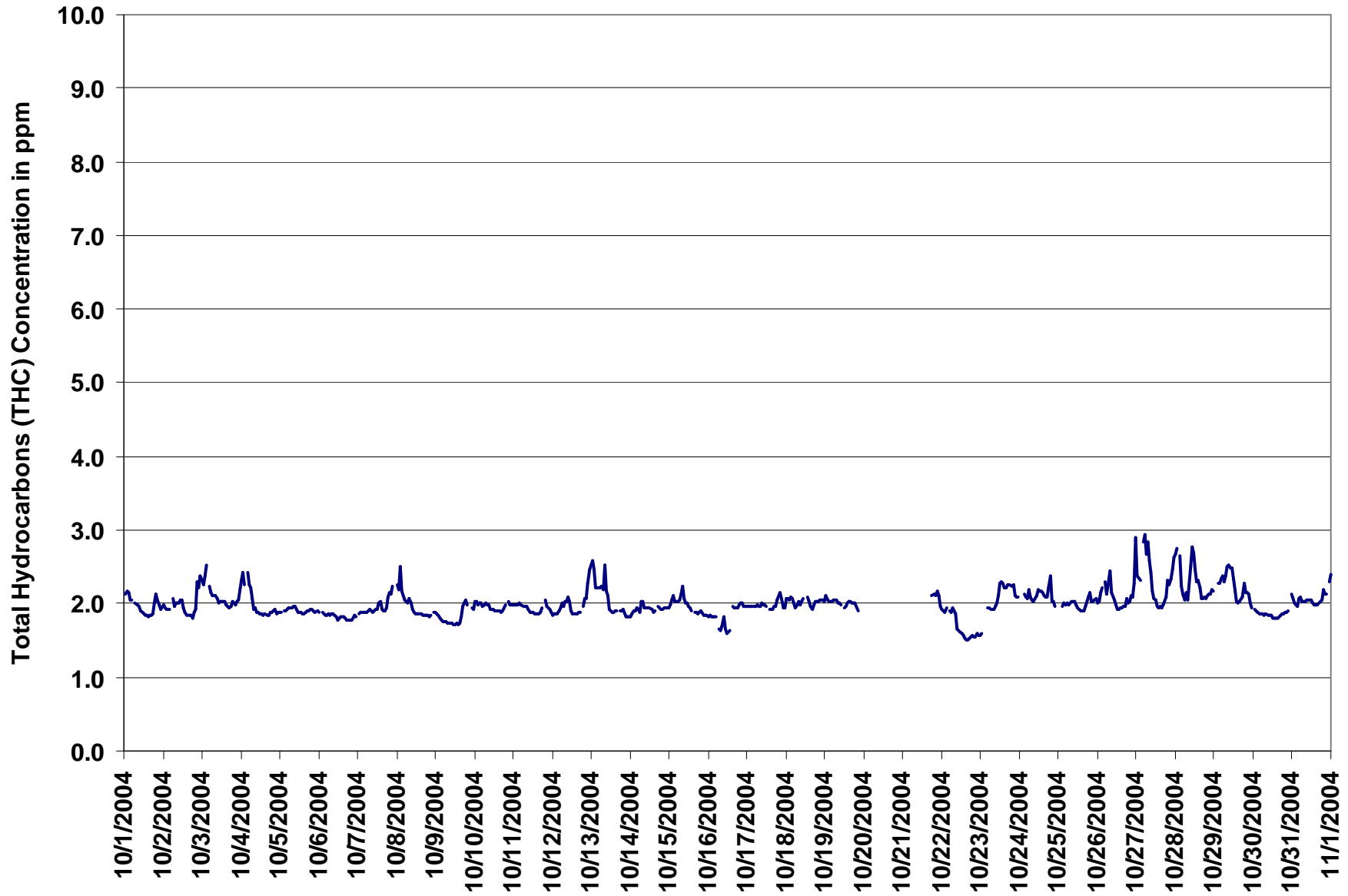


Figure 7. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004 Summary

Summary table with 4 columns: Value, Unit, Date, Time. Rows for Maximum 1-hr Value and Maximum 24-hr Value.

Performance summary table with 4 columns: Metric, Value, Unit, Percentage. Rows for AIC Time, Calibration Time, and Percentile.

Status Flag Characters

Legend table with 2 columns: Character, Description. Rows for C, S, N, D and A, X, M, P.

Day Mountain Standard Time

Main data table with 27 columns (Day, Hour Start, Hour End, 24 hourly values, 24-hour Average, Daily Maximum) and 32 rows (31 days of October 2004 plus summary rows).

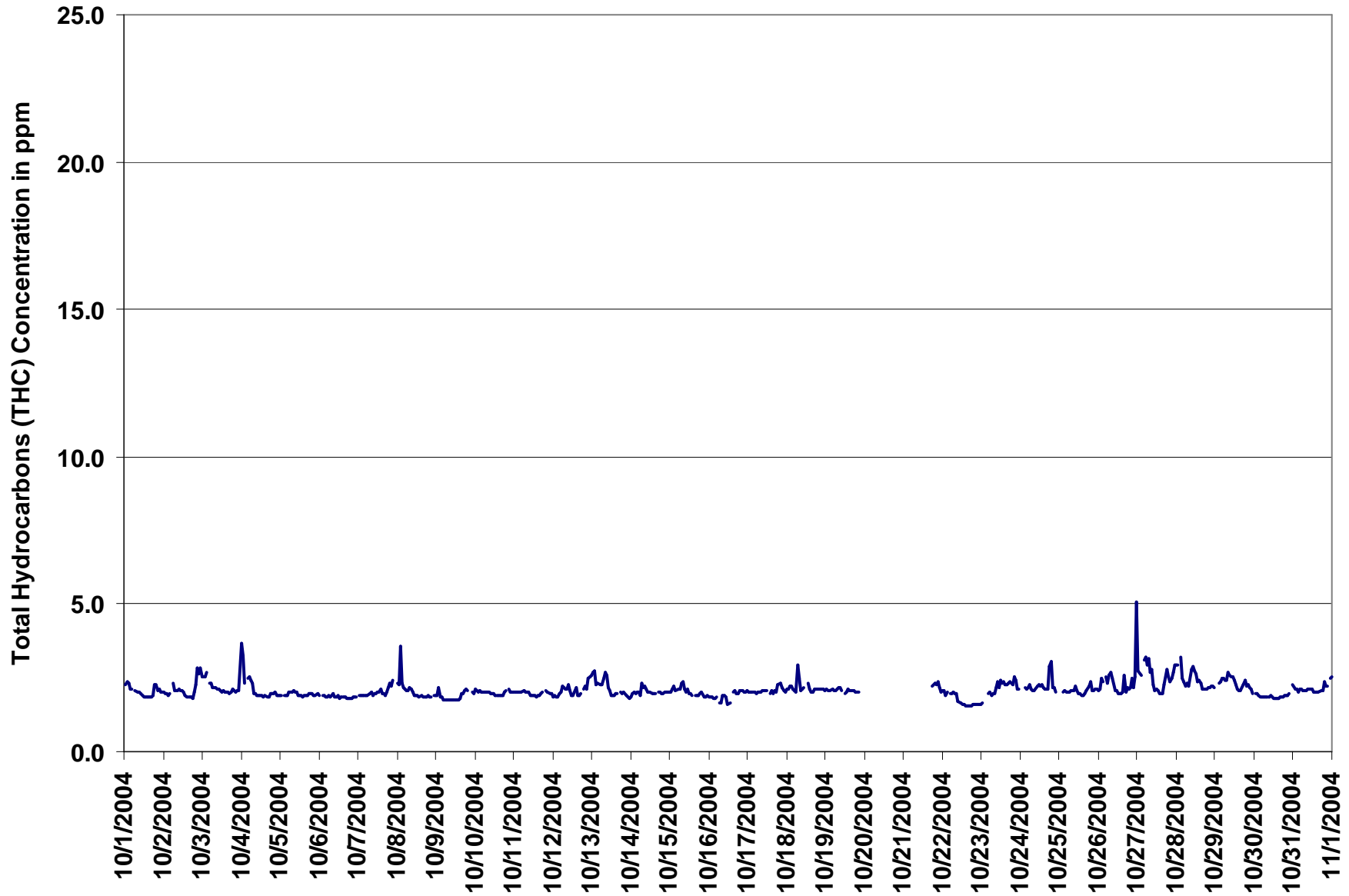


Figure 8. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend



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

Station: Crescent Heights

HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	32.3 $\mu\text{g}/\text{m}^3$ 4-Oct 5:00 6:00
Maximum 24-hr Average:	6.4 $\mu\text{g}/\text{m}^3$ 29-Oct

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

AIC Time:	0 hrs	Operational Time:	733 hrs
Calibration Time:	5 hrs	AMD Operational Uptime:	99.2%
Percentile	99	95	75
	11.4	8.5	4.8
	50	25	5
	2.8	1.3	0.0
	1	0.0	0.0
Average	3.3 $\mu\text{g}/\text{m}^3$		
Geomean	2.9 $\mu\text{g}/\text{m}^3$		

Status Flag Characters

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

Day Mountain Standard Time

Day	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Oct-04	4	1	0	0	0	0	0	0	2	3	2	0	0	1	0	2	0	3	5	8	4	4	3	3	1.8	7.8
2-Oct-04	3	2	3	3	5	3	6	6	6	5	2	5	2	1	1	2	3	3	6	6	12	12	11	9	4.8	11.8
3-Oct-04	9	10	8	5	5	4	1	1	2	1	1	0	0	0	D	0	0	0	0	0	0	1	1	0	2.1	10.2
4-Oct-04	1	2	2	3	6	32	3	3	6	4	2	3	1	1	2	2	1	3	5	5	4	4	4	5	4.4	32.3
5-Oct-04	5	6	5	5	5	6	5	7	9	5	4	5	4	1	0	1	5	7	6	4	7	6	6	6	5.0	8.5
6-Oct-04	5	6	7	6	6	6	5	6	7	10	9	6	6	5	3	3	6	5	3	4	2	0	2	2	5.0	10.0
7-Oct-04	4	3	2	3	3	5	5	5	4	2	2	6	0	11	1	1	3	2	6	12	14	12	8	5.0	13.8	
8-Oct-04	10	6	3	2	1	4	2	5	5	0	0	0	2	1	1	1	2	3	3	1	2	3	2	2	2.4	9.5
9-Oct-04	2	1	0	1	2	1	1	4	4	4	6	8	8	7	9	8	9	9	8	7	3	2	2	3	4.6	9.5
10-Oct-04	1	2	1	0	0	10	1	1	4	2	2	1	D	0	0	0	0	1	2	9	3	2	2	0	1.8	9.6
11-Oct-04	1	1	0	1	0	2	1	1	3	2	3	2	0	0	0	1	2	2	5	10	5	4	3	2	2.1	9.8
12-Oct-04	3	2	2	3	2	2	3	5	5	3	5	4	6	9	0	0	0	0	3	6	2	0	2	3	2.9	8.6
13-Oct-04	4	1	0	0	1	0	3	1	4	9	5	3	2	3	1	2	7	8	9	10	5	2	2	4	3.6	9.6
14-Oct-04	5	7	4	2	0	D	2	4	4	5	3	0	0	D	0	4	4	2	5	0	3	4	4	3	3.0	6.6
15-Oct-04	4	0	D	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.6
16-Oct-04	0	0	0	4	3	N	1	2	2	3	4	2	3	2	0	0	0	1	2	3	2	3	3	1	1.8	4.4
17-Oct-04	4	5	5	3	3	4	5	5	8	8	6	5	5	5	5	7	7	5	3	3	2	3	2	2	4.7	8.1
18-Oct-04	2	3	2	3	3	2	2	2	1	2	1	1	3	1	0	2	3	4	4	5	5	6	6	5	2.9	5.7
19-Oct-04	4	3	4	3	4	5	5	5	7	5	5	4	4	5	6	3	5	5	4	4	4	2	3	2	4.3	7.1
20-Oct-04	4	4	3	2	1	2	2	2	3	2	2	1	1	0	1	1	1	2	2	0	1	0	1	0	1.5	4.2
21-Oct-04	1	1	0	2	2	2	2	3	2	2	2	3	1	3	C	C	C	C	C	0	0	0	0	0	1.3	2.7
22-Oct-04	0	0	0	1	2	2	1	3	3	0	0	0	0	1	1	1	1	1	1	1	1	0	1	1	0.9	3.3
23-Oct-04	2	2	2	2	2	2	2	2	3	1	7	7	9	9	10	8	7	7	5	4	3	6	6	9	4.8	9.8
24-Oct-04	6	4	4	3	1	6	3	4	3	3	7	6	5	3	3	2	3	4	4	2	1	0	0	1	3.2	6.7
25-Oct-04	0	0	1	1	1	1	2	4	3	3	2	1	1	0	1	2	3	5	8	3	3	3	3	2	2.2	7.7
26-Oct-04	2	2	2	2	2	3	4	7	4	4	2	2	1	2	3	1	3	5	4	5	3	2	3	2	3.0	6.9
27-Oct-04	2	3	5	4	4	6	5	7	7	3	4	4	0	1	2	2	3	4	5	6	8	10	11	9	4.7	11.3
28-Oct-04	8	6	6	3	5	4	6	4	5	6	7	4	4	3	3	3	4	4	4	5	8	12	8	0	5.0	11.6
29-Oct-04	5	6	5	7	5	5	7	9	11	11	11	8	5	3	3	5	7	8	7	5	4	6	6	6	6.4	11.2
30-Oct-04	6	5	5	4	3	3	4	4	4	3	3	1	2	3	1	3	4	2	4	3	3	2	6	10	3.7	9.8
31-Oct-04	3	4	1	2	1	2	2	4	3	4	3	2	0	1	1	1	1	2	3	3	2	4	3	4	2.3	4.3
Hourly Avg	3.5	3.2	2.7	2.6	2.5	4.3	2.9	3.8	4.4	3.8	3.6	2.9	2.8	2.4	2.4	2.3	3.0	3.7	4.1	4.1	3.7	3.8	3.8	3.3		
Hourly Max	9.5	10.2	7.9	7.0	6.5	32.3	6.6	8.5	10.9	10.5	11.2	8.4	9.0	9.4	11.4	8.1	8.9	9.5	9.0	9.8	11.8	13.8	12.2	9.8		

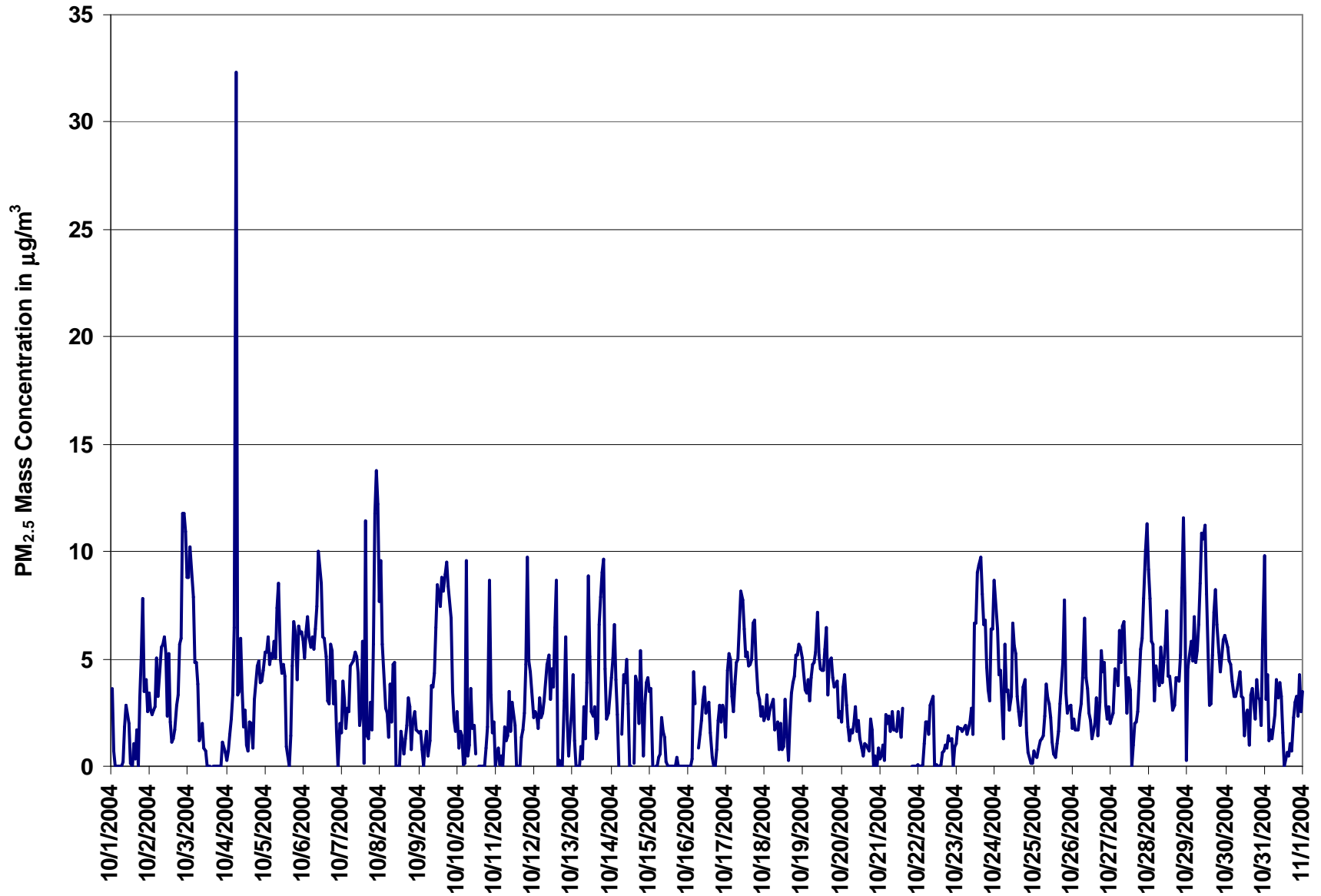


Figure 9. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Maximum 1-hr Value:	149.1	µg/m ³	4-Oct	5:00 6:00
Maximum 24-hr Value:	12.4	µg/m ³	4-Oct	

AIC Time:	0 hrs	Operational Time:	733 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	20.1	14.5	8.8	6.2	4.3	2.3	1.2	7.2 µg/m ³	6.8 µg/m ³

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Oct-04	16	5	2	3	4	4	3	2	6	7	4	2	4	4	5	5	4	6	8	10	6	6	5	5	5.3	15.8
2-Oct-04	5	4	4	4	9	6	12	7	10	9	9	8	6	4	5	4	7	5	9	9	18	16	13	12	8.2	17.8
3-Oct-04	12	12	12	6	7	7	4	3	4	5	2	3	2	2	D	3	2	2	2	1	2	3	2	2	4.4	12.3
4-Oct-04	2	4	4	5	12	149	6	6	10	8	5	6	5	4	6	6	7	6	7	8	10	8	6	9	12.4	149.1
5-Oct-04	7	19	7	7	7	11	8	9	12	10	6	9	7	7	6	5	8	9	10	7	12	8	9	8	8.6	18.6
6-Oct-04	9	9	9	8	10	8	9	9	10	17	14	11	12	12	8	9	9	7	5	7	5	2	4	3	8.6	16.7
7-Oct-04	6	5	4	5	5	16	9	8	8	8	8	6	9	10	57	5	4	8	4	11	15	19	15	12	10.9	57.3
8-Oct-04	18	8	6	5	4	9	7	9	9	7	3	5	6	4	4	4	6	5	6	3	6	5	5	4	6.1	17.9
9-Oct-04	4	2	2	7	7	2	3	11	8	8	10	11	12	11	15	11	12	15	12	10	5	4	4	7	8.1	14.9
10-Oct-04	5	4	4	3	2	47	3	2	6	6	4	3	D	4	2	4	4	3	6	24	6	3	5	1	6.5	46.8
11-Oct-04	5	3	2	2	1	8	6	3	5	5	5	5	3	4	3	5	5	5	8	13	7	7	6	4	5.0	12.8
12-Oct-04	5	4	3	7	4	5	8	7	7	7	7	8	22	14	5	5	4	2	8	9	6	2	6	7	6.8	22.0
13-Oct-04	7	5	4	1	5	4	6	6	7	17	12	7	5	6	7	5	20	10	11	12	10	5	6	10	7.8	20.3
14-Oct-04	16	15	9	8	1	D	8	13	12	15	8	6	9	D	11	16	9	10	8	2	7	7	7	5	9.3	16.1
15-Oct-04	5	4	D	1	3	5	3	4	3	3	4	1	2	6	2	3	4	2	3	1	0	0	1	2	2.7	5.6
16-Oct-04	0	1	3	9	32	N	4	5	5	8	9	7	5	6	3	2	6	5	6	8	6	7	7	5	6.4	31.6
17-Oct-04	7	8	9	7	6	6	9	7	11	11	10	8	18	8	6	7	8	10	7	6	5	5	5	5	7.9	18.3
18-Oct-04	6	6	4	6	5	4	4	3	3	5	3	3	7	7	3	5	6	7	7	7	7	8	8	8	5.6	8.0
19-Oct-04	5	6	6	7	7	7	7	8	13	9	18	9	9	9	10	7	8	7	7	6	6	4	6	4	7.8	18.0
20-Oct-04	8	9	6	5	3	3	4	5	4	12	4	5	5	3	3	4	2	6	6	1	4	3	4	2	4.6	12.5
21-Oct-04	3	3	2	7	4	5	3	6	4	3	5	5	5	6	C	C	C	C	C	1	3	2	1	3	3.8	6.6
22-Oct-04	2	2	3	15	4	5	4	6	6	3	3	3	2	2	3	3	3	3	3	2	3	1	3	4	3.6	15.0
23-Oct-04	4	5	5	8	4	6	5	5	6	4	10	9	12	13	12	10	9	10	8	8	8	13	14	12	8.4	14.0
24-Oct-04	11	7	10	6	5	10	7	9	6	9	10	8	9	5	4	4	5	7	7	4	5	4	4	5	6.7	10.9
25-Oct-04	4	4	4	4	5	4	6	7	7	9	5	5	3	3	3	4	6	9	12	5	4	6	6	6	5.4	12.1
26-Oct-04	6	4	5	4	5	7	8	15	8	6	5	4	7	8	8	5	7	9	7	8	4	4	5	6	6.6	14.5
27-Oct-04	6	6	23	9	9	12	8	14	14	7	8	8	4	5	7	6	5	7	9	9	11	15	15	14	9.6	22.9
28-Oct-04	14	10	13	7	9	11	10	9	10	10	10	11	8	8	5	6	8	9	9	9	13	16	16	4	9.8	15.8
29-Oct-04	10	10	9	10	8	9	10	12	15	14	16	12	10	9	8	8	12	12	9	9	6	13	13	10	10.7	16.2
30-Oct-04	9	9	11	11	8	7	7	9	7	7	8	6	8	20	7	17	12	6	7	6	5	5	13	13	9.0	19.5
31-Oct-04	9	12	4	5	6	6	5	10	6	9	6	4	3	2	5	4	3	5	5	6	5	8	7	6	6.0	12.2
Hourly Avg	7.3	6.7	6.2	6.2	6.5	13.3	6.3	7.4	7.9	8.3	7.6	6.5	7.3	6.8	7.6	6.1	6.9	6.9	7.2	7.2	6.8	6.8	7.2	6.4		
Hourly Max	17.9	18.6	22.9	15.0	31.6	149.1	12.0	14.5	15.1	17.5	18.0	12.0	22.0	19.5	57.3	16.5	20.3	14.7	12.1	24.4	17.8	19.4	15.6	13.8		

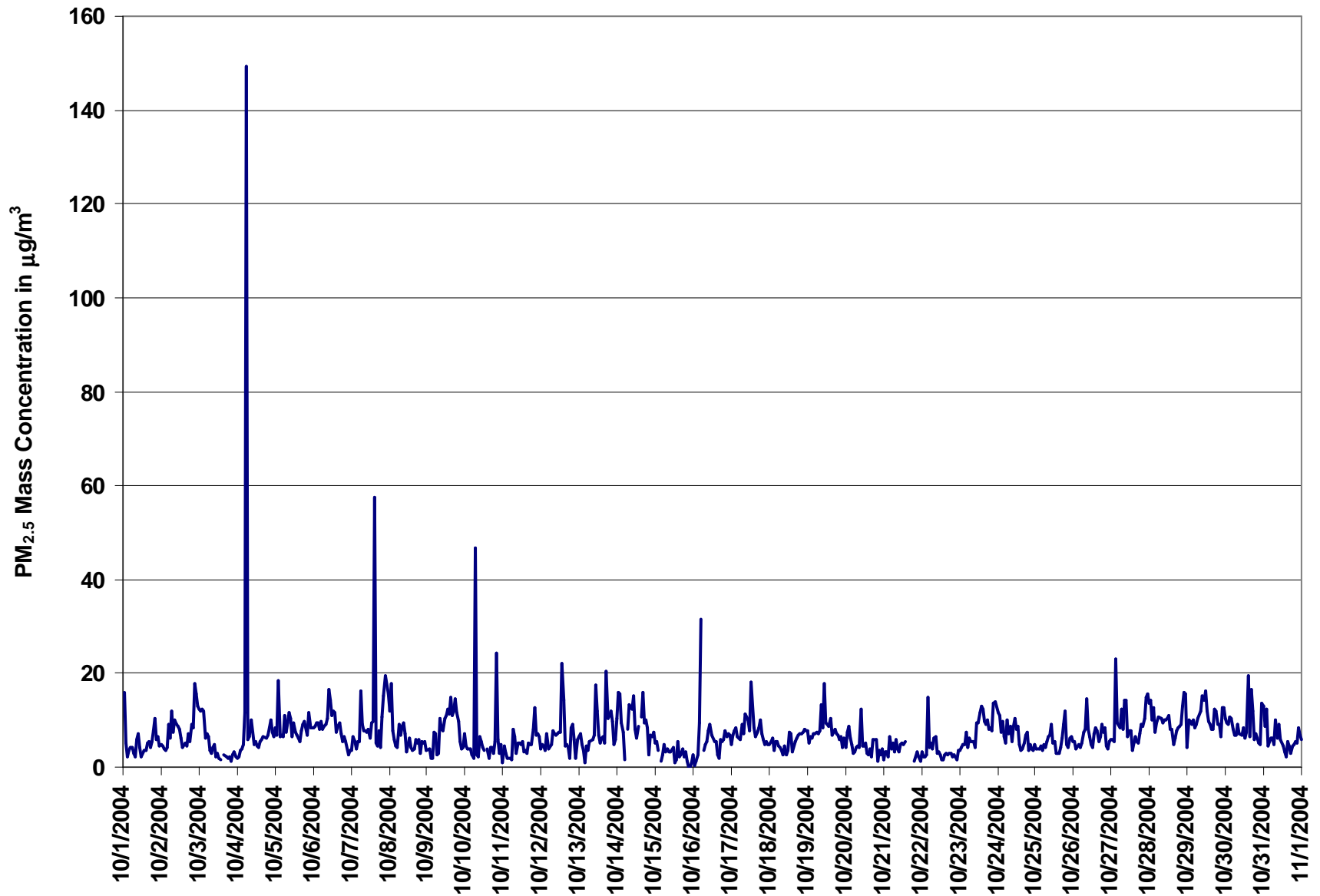
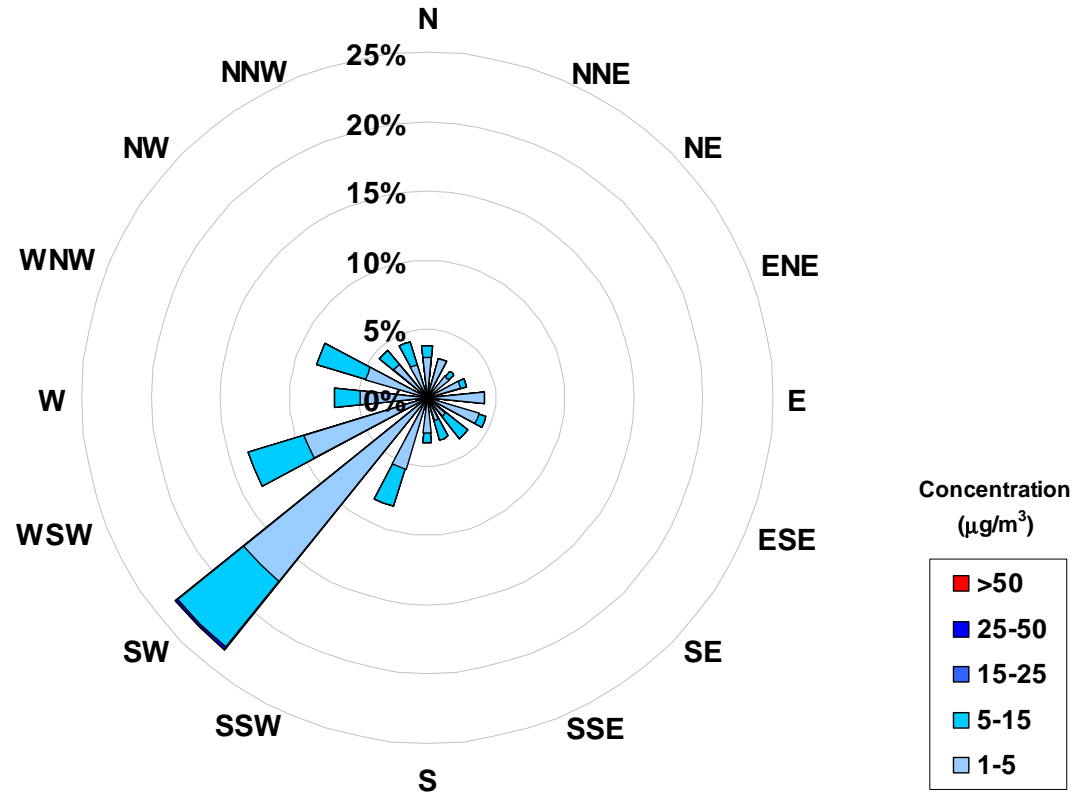


Figure 10. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly



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



Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
0	<	1	150
1	to	5	416
5	to	15	166
15	to	25	0
25	to	50	1
	>	50	0
Total Non-Zero Values			733

Calms	
Range µg/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

Station: Crescent Heights

HOURLY AVERAGE TABLE

Relative Humidity (RH - %)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	92.5	%	28-Oct	23:00 0:00
Maximum 24-hr Average:	88.5	%	28-Oct	

AIC Time:	0 hrs	Operational Time:	743 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	90.8	88.3	80.6	65.9	49.1	27.7	22.0	63.2 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-04	62	68	70	72	72	70	67	57	50	45	43	40	34	32	30	28	26	30	38	46	56	55	55	61	50	72
2-Oct-04	58	60	61	64	71	69	68	66	62	54	40	36	30	27	24	23	23	28	34	39	50	57	64	68	49	71
3-Oct-04	72	73	72	73	79	85	86	83	78	72	66	59	53	48	42	38	37	41	47	51	59	64	67	69	63	86
4-Oct-04	72	74	77	75	72	72	70	65	57	44	37	33	30	27	25	24	22	27	35	42	44	45	52	56	49	77
5-Oct-04	60	60	60	63	66	68	68	65	56	45	38	32	27	22	17	15	16	21	29	34	37	40	44	47	43	68
6-Oct-04	48	45	42	42	42	43	44	39	35	34	28	27	27	30	31	32	39	44	48	51	57	53	51	51	41	57
7-Oct-04	58	62	66	68	67	63	66	67	64	61	51	45	40	36	27	24	24	30	34	41	48	55	62	66	51	68
8-Oct-04	69	71	69	70	66	65	67	64	52	35	24	22	23	22	21	21	22	29	34	34	38	40	42	47	44	71
9-Oct-04	49	47	42	39	38	36	34	32	32	27	25	28	29	28	32	36	42	49	54	58	64	67	71	77	43	77
10-Oct-04	82	84	86	86	82	75	73	73	65	55	49	43	33	28	27	26	26	33	36	46	51	53	57	57	55	86
11-Oct-04	62	67	67	68	66	68	69	63	56	49	46	39	32	30	27	27	32	35	41	48	54	59	61	65	51	69
12-Oct-04	67	68	69	71	72	69	67	62	56	55	41	47	49	58	61	56	52	51	58	73	77	79	81	81	64	81
13-Oct-04	87	88	89	90	88	88	88	83	74	66	57	52	52	49	45	41	41	44	48	51	45	49	48	50	63	90
14-Oct-04	52	62	61	62	56	54	58	62	66	68	70	63	61	48	50	59	62	65	75	76	78	83	85	86	65	86
15-Oct-04	86	85	76	70	67	65	68	68	63	62	58	53	51	49	47	46	49	51	53	56	59	58	60	61	61	86
16-Oct-04	58	56	58	69	75	N	81	83	81	79	81	81	83	85	78	75	75	76	75	78	80	83	84	83	76	85
17-Oct-04	81	81	81	81	81	81	81	81	81	82	80	78	77	76	77	79	84	87	88	88	86	85	85	86	82	88
18-Oct-04	86	87	87	88	89	89	89	90	89	90	91	88	86	84	81	80	80	81	83	83	82	83	83	84	86	91
19-Oct-04	83	83	84	84	83	83	84	84	83	83	80	77	76	74	73	73	75	75	77	78	76	77	78	80	79	84
20-Oct-04	81	83	85	83	82	82	82	81	80	78	79	81	82	82	80	79	80	82	85	84	84	85	85	85	82	85
21-Oct-04	85	85	86	87	87	87	87	90	85	83	81	78	76	77	78	74	72	77	80	80	80	81	86	87	82	90
22-Oct-04	87	85	85	86	86	86	87	88	80	68	61	57	53	52	46	48	53	59	65	66	70	71	63	61	69	88
23-Oct-04	64	63	54	56	69	71	72	70	66	67	66	66	72	67	72	75	76	79	81	83	84	85	85	84	72	85
24-Oct-04	83	84	86	85	85	85	76	74	69	71	80	77	70	60	54	46	46	54	57	58	64	68	72	69	70	86
25-Oct-04	70	73	74	74	74	72	70	68	62	53	48	40	34	30	29	29	31	38	46	54	58	61	65	66	55	74
26-Oct-04	64	65	70	65	73	71	73	71	64	56	44	36	37	41	38	37	41	48	54	63	69	74	79	82	59	82
27-Oct-04	84	87	89	90	90	90	90	88	83	77	66	61	56	50	47	46	48	56	65	73	78	79	83	86	73	90
28-Oct-04	86	87	87	88	89	86	85	80	83	89	89	90	90	87	87	90	91	91	91	92	91	91	92	92	89	92
29-Oct-04	92	91	91	90	89	90	89	88	85	79	73	68	61	51	45	43	47	57	64	65	65	66	62	56	71	92
30-Oct-04	51	54	52	55	56	55	56	56	54	52	48	46	38	32	33	33	35	40	43	47	55	58	67	82	50	82
31-Oct-04	83	84	86	88	87	85	84	82	82	78	70	62	53	54	52	57	55	62	67	70	75	76	77	81	73	88
Hourly Avg	72	73	73	74	74	74	73	72	68	63	59	55	52	49	48	47	48	53	58	61	65	67	69	71		
Hourly Max	92	91	91	90	90	90	90	90	89	90	91	90	90	87	87	90	91	91	91	92	91	91	92	92		

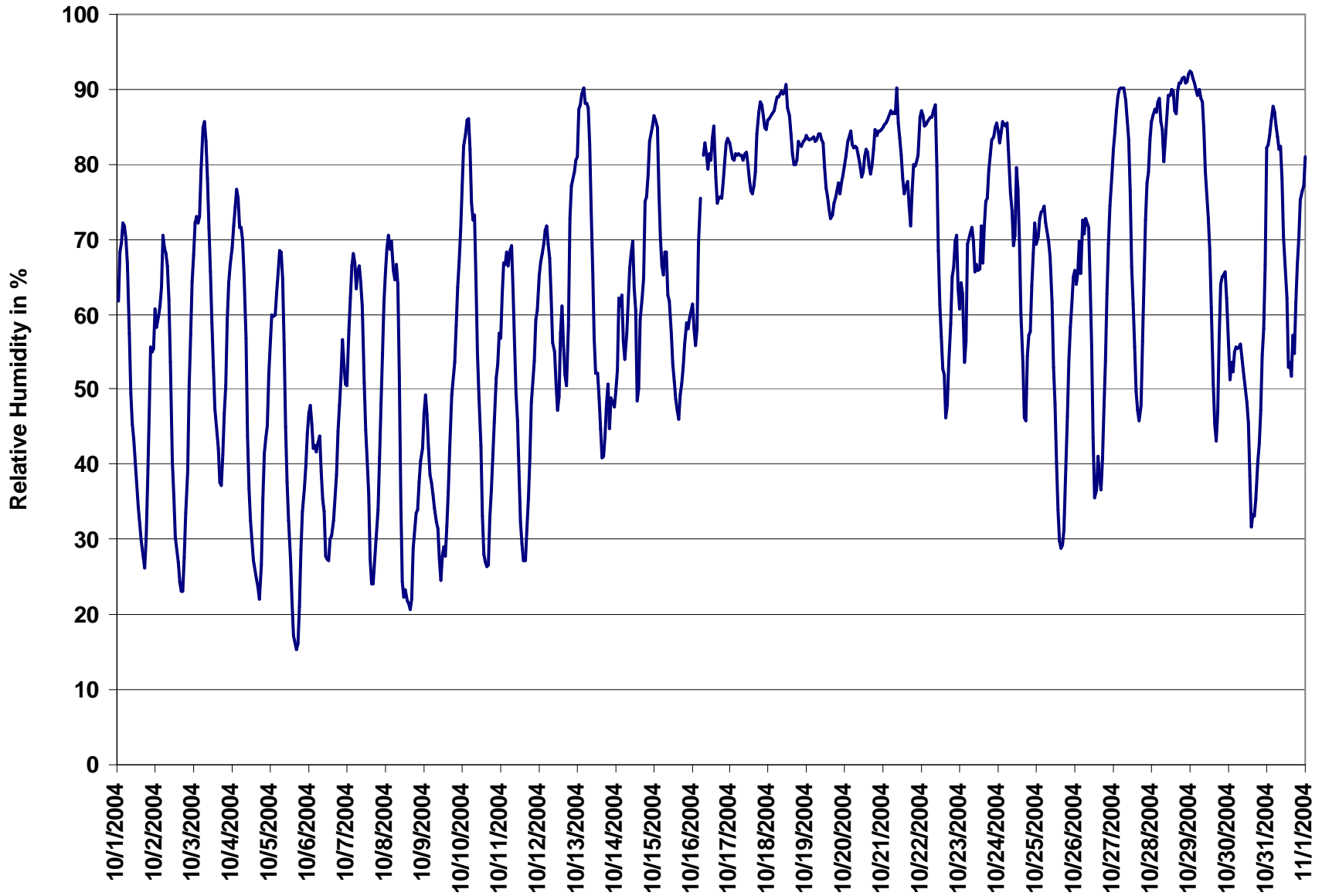


Figure 11. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE

Ambient Temperature (AT - °C)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	25.9 °C 5-Oct 15:00 16:00
Maximum 24-hr Average:	17.5 °C 6-Oct

AIC Time:	0 hrs	Operational Time:	743 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	24.5	20.8	11.8	5.3	0.1	-3.0	-4.3	6.5 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Oct-04	-3	-3	-4	-5	-5	-5	-4	-2	2	6	8	10	12	13	14	15	16	14	11	9	6	6	6	5	5.1	15.6
2-Oct-04	6	5	5	5	3	4	4	6	8	11	14	17	20	21	22	22	20	17	15	12	10	8	7	11.8	22.2	
3-Oct-04	6	5	5	5	5	4	3	3	4	6	8	9	10	12	12	13	12	11	9	8	5	3	3	2	6.8	12.5
4-Oct-04	2	1	1	1	3	4	5	7	11	16	19	21	22	23	24	24	25	22	18	15	14	13	10	10	12.8	24.5
5-Oct-04	9	10	9	9	8	7	6	7	11	15	18	20	23	25	25	26	26	23	19	16	14	13	12	12	15.0	25.9
6-Oct-04	12	12	13	13	13	13	13	15	17	19	23	24	25	24	24	23	21	20	18	17	16	15	15	15	17.5	24.9
7-Oct-04	13	12	10	10	10	11	11	11	12	13	15	17	18	19	19	19	18	16	14	11	9	8	6	5	12.9	19.3
8-Oct-04	4	4	4	4	5	5	5	6	10	16	20	21	21	23	24	25	24	22	20	19	17	16	15	14	14.3	24.6
9-Oct-04	13	14	15	16	17	17	18	19	19	22	24	24	24	25	23	21	18	16	13	11	10	9	8	6	16.8	25.0
10-Oct-04	5	4	3	3	3	4	4	3	6	10	13	15	17	18	18	18	15	13	10	8	7	7	6	9.6	18.1	
11-Oct-04	5	4	4	4	4	4	4	5	8	11	13	16	19	20	21	20	19	17	15	13	11	10	10	9	11.1	20.6
12-Oct-04	9	9	8	8	7	7	8	9	11	11	13	15	15	14	12	13	13	12	10	8	7	5	4	3	9.7	15.3
13-Oct-04	2	1	1	0	-1	-1	0	1	4	8	13	14	15	16	17	18	18	18	17	16	18	17	17	16	10.2	18.4
14-Oct-04	16	15	15	15	16	14	13	12	12	12	12	13	13	13	13	12	12	11	10	10	9	9	8	8	12.2	15.8
15-Oct-04	8	8	7	6	6	5	4	4	5	6	8	9	10	10	10	10	9	8	8	7	6	5	5	6	7.1	10.3
16-Oct-04	6	7	7	6	6	N	5	5	6	6	7	7	7	6	6	5	5	4	4	3	2	1	0	-1	4.7	7.4
17-Oct-04	-2	-3	-4	-4	-4	-4	-5	-5	-5	-4	-4	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3.3	-2.3
18-Oct-04	-2	-2	-2	-2	-1	-1	0	0	0	1	1	2	2	3	3	3	3	2	2	1	1	1	1	0	0.6	2.9
19-Oct-04	0	-1	-1	-1	-2	-2	-2	-2	-2	-3	-3	-3	-2	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-2.3	0.0
20-Oct-04	-3	-3	-3	-3	-3	-3	-2	-2	-2	-1	-1	0	0	1	2	2	1	1	1	0	0	0	0	0	-0.7	1.7
21-Oct-04	0	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	-3	-2	-3	-3	-0.8	0.2
22-Oct-04	-2	-2	-2	-2	-2	-2	-2	-2	2	6	8	9	10	10	11	11	10	8	7	6	5	4	5	5	4.2	11.3
23-Oct-04	4	4	5	5	2	2	3	3	4	4	4	4	3	4	3	3	3	2	2	1	1	0	0	0	2.8	5.5
24-Oct-04	0	-1	-2	-2	-3	-3	-2	-1	0	0	-1	0	1	4	5	7	6	4	2	2	0	-1	-2	-2	0.6	7.0
25-Oct-04	-2	-3	-3	-3	-3	-3	-3	-2	0	3	5	8	9	10	10	11	10	7	4	2	1	0	-1	-1	2.2	10.5
26-Oct-04	-1	-1	-2	-1	-3	-2	-2	-2	1	5	10	12	13	12	14	14	12	10	9	6	4	3	2	0	4.8	13.9
27-Oct-04	0	-1	-1	-2	-3	-3	-3	-4	-1	2	6	9	11	12	13	14	13	9	7	5	3	2	1	0	3.7	13.5
28-Oct-04	0	-1	-1	-1	0	1	0	-1	-2	-3	-2	-1	0	1	2	2	2	2	2	1	1	1	0	-1	0.1	2.1
29-Oct-04	-2	-3	-3	-4	-4	-3	-2	-1	0	2	5	7	9	10	11	11	10	7	4	3	3	3	4	5	3.0	10.9
30-Oct-04	6	6	7	6	6	6	6	6	7	8	10	11	13	14	13	12	10	9	8	7	5	4	3	2	7.7	14.1
31-Oct-04	2	1	0	-2	-3	-3	-3	-2	-2	0	3	5	7	7	6	6	5	3	2	0	-2	-2	-3	-3	0.9	6.7
Hourly Avg	3.5	3.1	3.0	2.8	2.5	2.4	2.6	3.1	4.8	6.8	8.6	10.1	11.1	11.8	12.0	12.1	11.4	9.8	8.2	6.9	5.8	5.0	4.4	3.9		
Hourly Max	15.7	14.5	15.3	16.3	16.9	17.4	17.9	18.6	19.4	22.2	23.7	24.2	24.9	25.0	25.5	25.9	25.6	22.8	19.7	19.2	18.2	16.5	16.7	16.2		

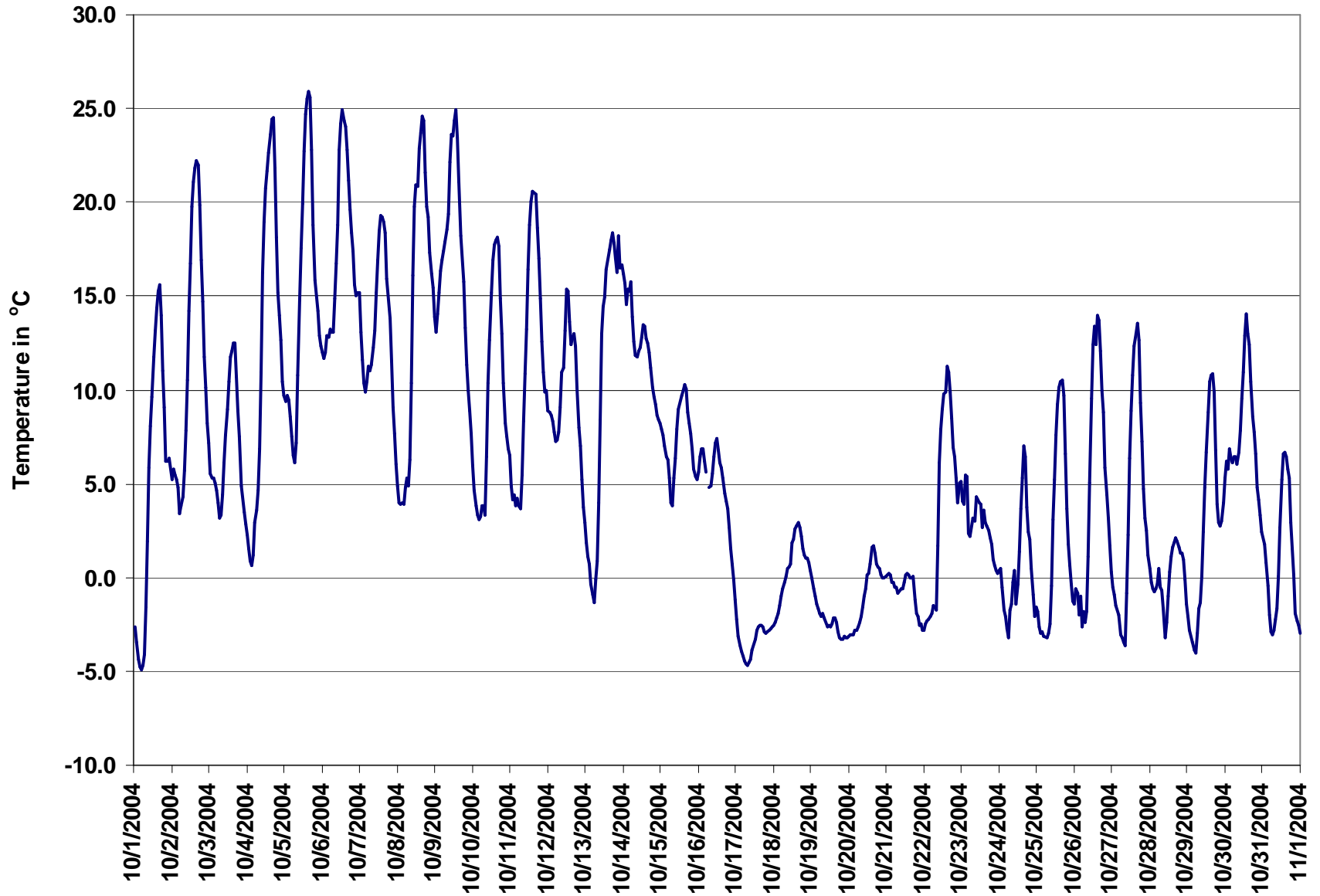


Figure 12. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE

Solar Radiation (SR - W/m²)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	614.3 W/m ² 1-Oct 11:00 12:00
Maximum 24-hr Average:	176.8 W/m ² 1-Oct

AIC Time:	0 hrs	Operational Time:	743 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	Average
	578.9	466.9	128.9	0.3	0.1	0.0	-0.1	96.9 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-04	0	0	0	0	0	0	15	144	298	440	548	614	609	581	372	364	214	43	1	0	0	0	0	0	177	614
2-Oct-04	0	0	0	0	0	0	13	133	284	419	527	596	592	556	364	351	202	44	1	0	0	0	0	0	170	596
3-Oct-04	0	0	0	0	0	0	11	111	265	392	449	563	576	551	345	340	183	34	1	0	0	0	0	0	159	576
4-Oct-04	0	0	0	0	0	0	10	126	276	415	524	594	567	556	331	344	195	28	1	0	0	0	0	0	165	594
5-Oct-04	0	0	0	0	0	0	9	124	276	415	522	586	585	556	344	342	191	24	0	0	0	0	0	0	166	586
6-Oct-04	0	0	0	0	0	0	8	122	224	371	482	458	529	308	303	143	47	25	0	0	0	0	0	0	126	529
7-Oct-04	0	0	0	0	0	0	2	34	89	131	481	550	548	519	329	322	169	11	0	0	0	0	0	0	133	550
8-Oct-04	0	0	0	0	0	0	7	116	244	373	486	468	291	446	297	310	172	11	0	0	0	0	0	0	134	486
9-Oct-04	0	0	0	0	0	0	4	44	105	346	423	478	460	430	187	76	78	28	0	0	0	0	0	0	111	478
10-Oct-04	0	0	0	0	0	0	2	22	220	386	489	551	550	519	330	308	161	11	0	0	0	0	0	0	148	551
11-Oct-04	0	0	0	0	0	0	5	91	193	276	435	458	504	426	350	235	80	11	0	0	0	0	0	0	128	504
12-Oct-04	0	0	0	0	0	0	4	48	157	171	371	530	381	296	90	128	43	8	0	0	0	0	0	0	93	530
13-Oct-04	0	0	0	0	0	0	3	48	161	221	217	315	246	220	124	86	55	5	0	0	0	0	0	0	71	315
14-Oct-04	0	0	0	0	0	0	1	11	35	44	68	100	131	96	92	81	22	3	0	0	0	0	0	0	28	131
15-Oct-04	0	0	0	0	0	0	2	77	223	353	456	501	401	294	292	160	34	4	0	0	0	0	0	0	117	501
16-Oct-04	0	0	0	0	0	N	0	21	35	78	86	61	64	52	58	43	24	5	0	0	0	0	0	0	23	86
17-Oct-04	0	0	0	0	0	0	0	8	28	55	66	99	85	84	57	52	32	2	0	0	0	0	0	0	24	99
18-Oct-04	0	0	0	0	0	0	0	7	18	49	32	90	125	126	88	72	22	3	0	0	0	0	0	0	26	126
19-Oct-04	0	0	0	0	0	0	0	4	19	39	69	85	87	80	59	50	16	1	0	0	0	0	0	0	21	87
20-Oct-04	0	0	0	0	0	0	0	15	73	68	83	147	92	127	202	130	19	1	0	0	0	0	0	0	40	202
21-Oct-04	0	0	0	0	0	0	0	8	24	47	78	93	87	80	110	93	79	5	0	0	0	0	0	0	29	110
22-Oct-04	0	0	0	0	0	0	1	26	187	307	405	300	237	218	230	114	40	3	0	0	0	0	0	0	86	405
23-Oct-04	0	0	0	0	0	0	1	30	116	130	279	428	416	339	199	72	18	1	0	0	0	0	0	0	85	428
24-Oct-04	0	0	0	0	0	0	1	47	188	292	404	533	467	436	222	223	79	2	0	0	0	0	0	0	121	533
25-Oct-04	0	0	0	0	0	0	1	45	185	312	413	472	466	434	223	221	78	2	0	0	0	0	0	0	119	472
26-Oct-04	0	0	0	0	0	0	0	41	165	308	399	455	398	199	243	199	51	2	0	0	0	0	0	0	103	455
27-Oct-04	0	0	0	0	0	0	0	38	185	298	391	448	443	410	201	204	68	2	0	0	0	0	0	0	112	448
28-Oct-04	0	0	0	0	0	0	0	38	115	86	154	120	102	107	86	58	18	1	0	0	0	0	0	0	37	154
29-Oct-04	0	0	0	0	0	0	0	23	147	261	365	426	420	386	199	188	56	1	0	0	0	0	0	0	103	426
30-Oct-04	0	0	0	0	0	0	0	25	126	137	188	350	431	396	197	189	53	1	0	0	0	0	0	0	87	431
31-Oct-04	0	0	0	0	0	0	0	13	61	158	280	229	232	181	130	108	50	1	0	0	0	0	0	0	60	280
Hourly Avg	0	0	0	0	0	0	3	53	152	238	328	377	359	323	215	181	82	10	0	0	0	0	0	0		
Hourly Max	0	0	0	0	0	0	15	144	298	440	548	614	609	581	372	364	214	44	1	0	0	0	0	0		

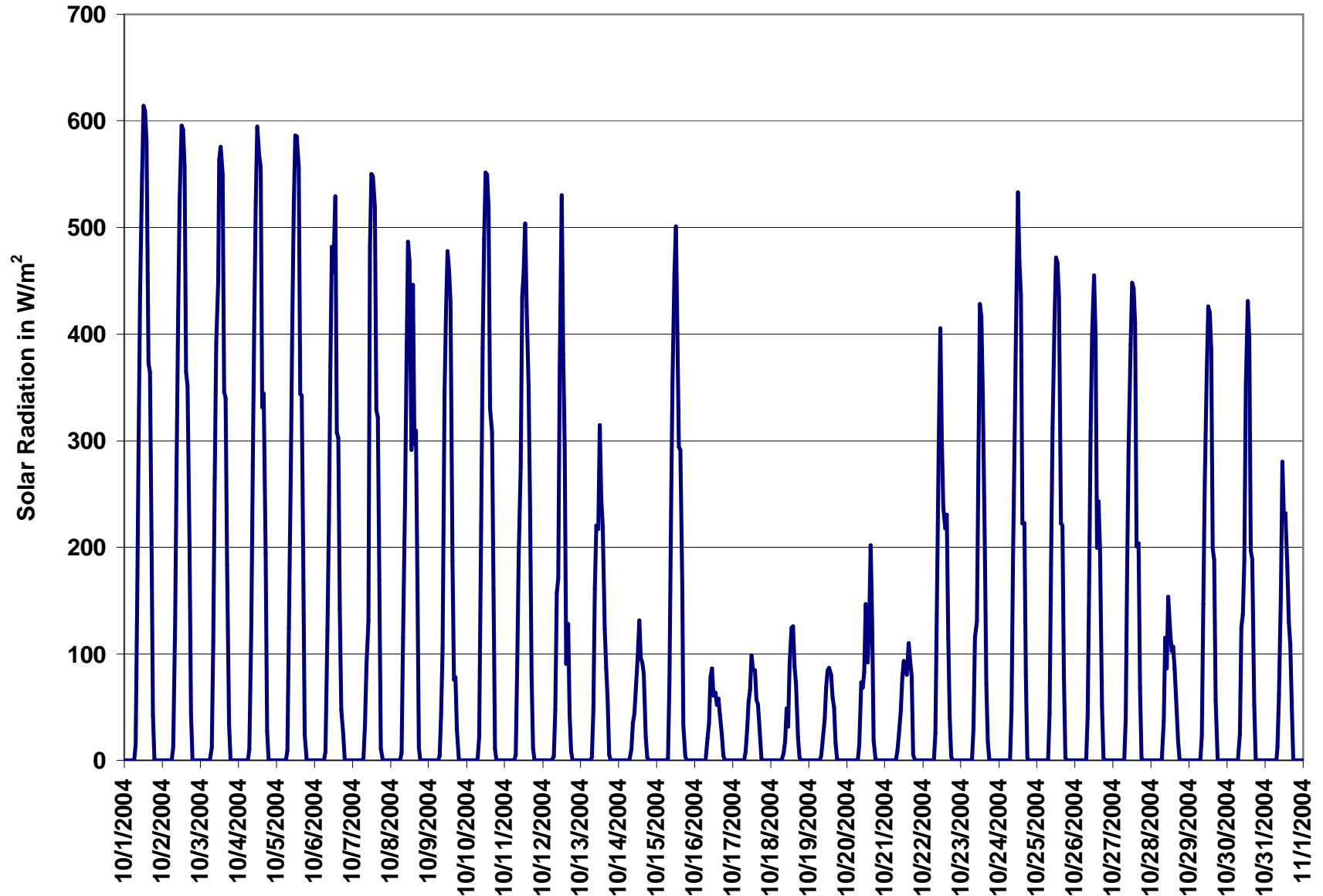


Figure 13. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE

Wind Speed (WSv - km/hr)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004
Summary

Maximum 1-hr Average:	39.5	km/hr	30-Oct	12:00 13:00
Maximum 24-hr Average:	23.2	km/hr	30-Oct	

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%					
Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	31.4	23.9	13.6	10.1	6.8	4.5	2.4	11.2 km/hr	5.4 km/hr

Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-04	6	7	8	7	10	7	6	11	14	21	26	24	21	20	17	14	14	6	2	6	5	6	8	7	10.8	25.7
2-Oct-04	15	13	12	10	5	10	9	12	16	15	14	13	13	13	14	11	8	6	5	3	4	3	4	3	8.9	16.1
3-Oct-04	5	2	5	6	7	7	8	11	14	12	11	9	10	9	10	10	11	10	13	11	8	7	4	3	6.6	13.8
4-Oct-04	2	1	1	2	6	6	12	11	7	18	24	24	22	21	18	11	9	7	8	5	10	12	12	13	10.4	23.9
5-Oct-04	12	12	14	11	9	10	10	10	11	16	15	16	14	16	16	15	13	10	10	9	12	13	7	8	11.4	16.3
6-Oct-04	9	9	14	13	15	14	21	21	27	27	29	32	30	24	23	31	33	29	27	21	13	15	17	18	20.5	33.3
7-Oct-04	12	8	6	8	13	10	10	9	9	7	9	8	8	13	15	15	11	9	8	5	5	5	5	5	4.4	15.4
8-Oct-04	4	4	6	6	5	6	8	8	6	15	20	24	20	20	21	17	14	13	11	14	11	13	12	8	11.4	24.2
9-Oct-04	6	8	10	8	13	16	18	20	19	23	26	19	18	17	13	18	15	10	13	12	11	8	9	8	11.4	26.1
10-Oct-04	6	11	9	10	13	10	11	11	14	15	17	13	15	16	16	15	12	6	7	7	7	11	10	11	11.2	16.6
11-Oct-04	6	3	8	5	10	6	10	13	14	22	19	13	11	13	16	12	8	7	5	8	11	12	14	12	10.2	21.6
12-Oct-04	11	9	9	8	5	4	7	7	11	12	14	24	27	27	18	17	14	13	9	10	9	6	5	5	8.8	26.7
13-Oct-04	5	5	7	5	6	5	4	5	5	6	19	24	22	21	17	15	12	12	12	8	13	13	16	15	9.1	24.3
14-Oct-04	12	13	14	12	15	12	4	7	7	8	10	13	11	14	16	15	13	13	14	13	12	11	10	10	10.6	16.0
15-Oct-04	9	9	9	11	13	14	8	5	6	6	6	6	6	6	7	7	8	13	15	16	19	16	8	10	3.9	19.1
16-Oct-04	12	14	10	13	10	N	15	9	6	5	14	20	21	15	12	12	11	9	11	12	14	16	16	18	5.1	21.0
17-Oct-04	16	17	16	17	19	16	15	14	12	11	7	7	6	7	6	7	8	7	6	7	8	9	10	11	7.2	19.1
18-Oct-04	11	7	7	7	7	8	7	6	6	6	3	2	5	7	6	6	5	6	6	7	8	11	9	9	2.8	10.7
19-Oct-04	10	10	11	11	10	9	8	8	12	14	12	11	9	7	9	11	9	8	6	6	5	9	10	11	6.1	14.2
20-Oct-04	11	12	13	14	14	10	10	12	11	10	8	7	7	8	11	9	11	11	9	9	10	8	7	5	9.2	13.9
21-Oct-04	7	7	11	10	8	9	9	11	11	11	10	10	9	10	11	12	11	8	9	9	7	5	5	5	8.3	11.5
22-Oct-04	7	9	11	13	13	9	9	8	9	21	27	27	27	24	26	23	20	18	18	17	16	15	13	14	11.7	27.4
23-Oct-04	12	11	11	12	12	18	19	16	21	16	13	16	14	13	15	12	13	11	7	5	7	5	5	6	9.2	21.3
24-Oct-04	4	7	8	10	6	9	11	14	13	12	12	10	8	7	6	5	3	5	8	11	12	13	11	13	5.5	13.5
25-Oct-04	16	15	12	11	14	14	13	14	11	17	18	19	21	19	15	14	9	4	7	9	5	6	6	4	10.5	21.2
26-Oct-04	5	6	6	6	5	7	5	6	9	9	10	15	11	13	12	12	9	9	10	4	6	6	6	8	3.8	14.5
27-Oct-04	5	2	2	2	4	4	5	5	9	6	5	7	11	11	9	7	4	3	5	5	4	4	2	2	3.1	11.3
28-Oct-04	3	5	6	5	6	6	7	9	9	7	7	9	7	7	9	6	7	6	5	3	5	7	7	6	2.9	9.1
29-Oct-04	7	6	6	7	8	8	8	7	8	8	8	11	10	10	11	12	8	6	6	6	11	18	22	24	9.1	24.3
30-Oct-04	25	26	32	32	32	31	29	23	23	24	26	31	39	31	33	31	24	24	21	15	13	12	12	13	23.2	39.5
31-Oct-04	10	8	8	8	9	10	10	11	12	7	7	7	12	13	10	8	5	5	6	6	6	4	6	8	5.0	12.9
1-hr Vector	4.0	4.1	3.9	3.9	4.4	4.2	5.3	5.4	6.0	7.4	8.8	9.5	10.1	9.0	7.9	6.8	4.4	2.5	2.8	3.0	3.3	4.5	4.9	4.3		
Hourly Max	25.3	26.4	31.7	32.0	32.0	31.0	29.0	23.1	27.5	26.7	28.7	32.2	39.5	31.1	32.5	31.4	33.3	28.8	27.3	21.4	19.1	18.3	22.4	24.3		



Station: Crescent Heights

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004
 Summary

Calm Time: 0 hrs	0% calms	Operational Time: 743 hrs
Calibration Time: 0 hrs		AMD Operational Uptime: 99.9%
Percentile	99 95 75 50 25 5 1	Average
	353.8 333.7 250.5 222.1 139.2 30.3 3.1	235 deg

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Oct-04	256	230	231	229	229	230	217	220	220	217	222	223	219	214	217	215	223	158	117	136	231	227	215		219	
2-Oct-04	231	235	238	229	199	223	228	227	229	224	240	242	277	295	293	282	290	272	274	250	203	205	266	238		248
3-Oct-04	108	179	2	22	38	15	3	8	25	58	87	84	90	100	89	92	105	88	84	107	119	121	123	125		75
4-Oct-04	121	90	101	250	222	218	225	239	223	212	214	214	217	211	208	188	186	180	211	224	231	240	239	233		216
5-Oct-04	242	235	237	241	238	233	230	225	224	217	220	214	219	220	213	207	214	194	197	228	243	244	301	262		226
6-Oct-04	282	256	236	243	232	233	217	213	206	217	221	236	246	247	250	231	226	226	218	222	230	244	258	263		232
7-Oct-04	239	245	234	238	237	242	233	237	238	254	296	344	304	313	331	341	342	3	36	128	143	164	178	143		276
8-Oct-04	160	174	171	199	228	237	249	236	241	201	189	196	201	195	191	190	180	183	188	199	202	213	219	241		200
9-Oct-04	245	229	227	220	205	196	194	194	197	205	223	234	242	252	278	283	285	292	292	294	298	285	256	231		238
10-Oct-04	213	222	223	228	234	238	227	223	222	219	218	208	220	217	220	232	241	251	243	211	224	232	231	217		225
11-Oct-04	228	240	197	214	200	254	207	204	218	222	226	246	252	243	241	250	262	263	244	225	213	234	231	234		230
12-Oct-04	228	226	237	239	220	302	266	277	296	315	347	352	353	355	354	350	352	341	321	310	321	332	314	301		325
13-Oct-04	172	216	203	173	157	121	100	105	134	176	207	219	229	221	220	221	235	237	239	229	259	265	273	278		224
14-Oct-04	277	282	305	312	332	30	347	272	265	267	276	301	297	309	298	288	282	289	292	300	297	285	286	280		296
15-Oct-04	290	312	348	344	352	2	356	354	7	39	21	358	155	183	160	130	106	114	101	110	118	115	143	100		73
16-Oct-04	110	141	122	146	166	N	147	125	65	354	210	230	233	268	301	299	308	316	294	293	285	285	278	298		251
17-Oct-04	307	315	315	312	322	323	335	340	342	344	341	357	337	6	26	36	54	43	46	70	96	99	94	93		351
18-Oct-04	87	90	61	58	59	43	11	5	343	0	12	184	229	240	269	255	266	283	305	292	289	291	297	297		325
19-Oct-04	287	285	297	304	308	309	294	337	348	349	345	346	328	332	333	10	32	57	62	95	86	40	77	96		348
20-Oct-04	108	106	100	111	108	112	97	104	100	98	97	113	76	68	87	68	44	69	96	56	50	72	88	60		89
21-Oct-04	76	35	21	31	42	37	26	26	28	17	30	22	12	358	6	12	25	3	1	26	36	67	73	89		26
22-Oct-04	112	97	102	103	102	104	109	123	152	200	205	209	211	206	218	224	219	217	218	220	237	239	250	254		202
23-Oct-04	237	245	254	244	230	219	215	237	231	241	266	278	287	291	300	310	325	322	320	338	2	6	226	204		262
24-Oct-04	167	108	117	128	147	221	243	236	239	275	319	295	297	269	236	173	109	87	204	246	230	229	232	229		232
25-Oct-04	233	236	228	227	231	230	228	232	231	217	224	225	220	220	215	220	206	149	134	149	124	128	122	101		216
26-Oct-04	77	58	54	67	24	45	36	56	60	60	92	156	161	168	178	181	171	163	155	85	32	29	334	347		106
27-Oct-04	354	33	175	140	123	151	141	129	211	217	224	208	217	218	218	230	229	117	119	137	128	158	49	279		191
28-Oct-04	126	129	138	187	229	258	254	264	277	291	269	314	279	313	340	3	8	88	72	156	240	243	267	236		274
29-Oct-04	218	225	221	226	230	239	247	229	230	219	218	213	206	225	245	235	201	132	126	248	201	215	205	208		217
30-Oct-04	206	206	212	211	211	212	212	214	220	226	220	227	234	244	242	245	254	238	248	261	260	266	305	314		230
31-Oct-04	319	265	260	232	219	231	229	240	237	240	235	241	231	227	196	170	138	108	134	132	120	166	329	66		N
Hourly Avg	231	229	230	226	225	236	225	228	232	229	228	235	239	243	245	246	248	234	221	224	230	238	249	246		



Station: Crescent Heights

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

Station Owner: PAS

Monitoring Dates: October 1, 2004 to November 1, 2004

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	743 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	99.9%			
Percentile	99	95	75	50	25	5	1
	49.2	30.7	14.8	9.7	7.3	5.1	4.4

Status Flag Characters

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

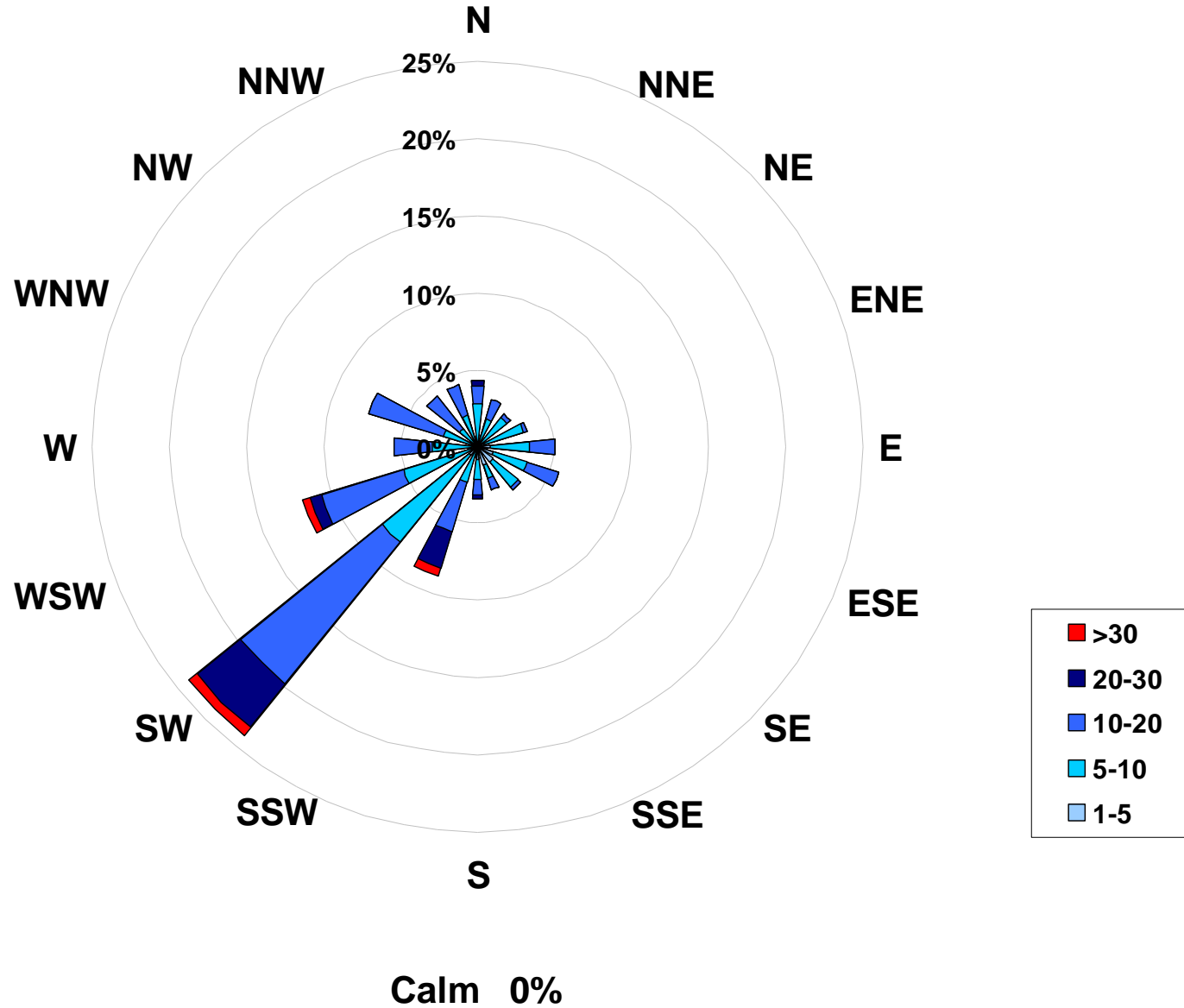
Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00	Daily Maximum
1-Oct-04	16	5	8	17	10	11	18	9	7	8	8	11	11	10	12	12	9	15	41	4	14	10	9	9	9	40.5	
2-Oct-04	4	5	6	12	15	8	21	12	6	9	13	11	14	14	14	10	14	6	5	40	29	14	25	61	61	60.9	
3-Oct-04	21	61	42	8	12	10	8	5	9	14	17	24	29	29	21	21	18	7	4	6	7	18	12	20	20	61.0	
4-Oct-04	27	55	31	41	8	8	4	6	23	11	7	8	8	10	10	13	12	10	23	28	5	8	6	5	5	54.7	
5-Oct-04	5	7	4	6	7	6	7	5	6	7	9	11	12	10	10	10	7	6	9	16	11	13	25	24	24	24.6	
6-Oct-04	21	27	16	14	12	14	7	6	6	5	7	8	6	7	7	6	4	4	5	5	5	6	7	5	5	27.0	
7-Oct-04	8	39	28	8	6	8	9	11	10	18	22	26	25	15	13	10	10	4	6	15	14	12	20	17	17	39.5	
8-Oct-04	16	17	16	16	17	11	10	8	15	10	8	8	10	10	9	9	9	8	8	9	10	5	5	16	16	17.4	
9-Oct-04	14	8	13	23	9	6	4	5	6	6	7	8	10	11	15	7	10	10	9	10	10	11	7	10	10	22.9	
10-Oct-04	15	7	9	6	7	9	6	8	8	9	8	13	15	16	13	14	10	9	6	9	8	9	12	9	9	15.6	
11-Oct-04	23	50	9	23	11	30	19	7	9	6	8	12	15	15	8	14	7	7	9	8	7	7	6	6	6	50.5	
12-Oct-04	5	5	8	7	12	49	22	23	11	9	13	9	7	5	6	7	7	6	7	7	36	13	22	36	36	49.1	
13-Oct-04	16	15	8	17	17	8	11	13	12	11	9	7	6	7	6	9	6	6	7	12	6	6	6	6	6	17.2	
14-Oct-04	10	11	8	8	9	10	31	40	9	16	7	9	9	10	10	7	8	7	7	8	9	8	9	9	9	40.1	
15-Oct-04	10	11	8	7	7	5	7	10	16	33	35	53	47	31	33	26	9	4	9	6	6	5	11	16	16	53.1	
16-Oct-04	15	12	14	17	26	N	7	10	20	22	18	6	5	16	10	11	11	10	10	11	8	7	8	9	9	26.2	
17-Oct-04	8	7	9	8	6	7	7	7	9	10	14	17	26	16	15	15	10	10	7	9	8	7	7	6	6	25.6	
18-Oct-04	7	11	8	7	11	9	9	9	7	8	18	24	13	11	15	14	16	11	11	13	10	10	11	11	11	24.0	
19-Oct-04	10	8	10	12	13	11	16	13	9	6	7	15	17	18	14	11	20	20	39	19	52	10	9	12	12	51.8	
20-Oct-04	9	14	9	7	6	9	9	8	8	10	11	13	16	12	14	14	8	9	8	10	9	10	10	13	13	15.9	
21-Oct-04	8	12	9	14	14	9	8	7	9	8	10	14	13	10	7	9	9	6	6	7	9	17	12	12	12	17.2	
22-Oct-04	8	9	7	7	5	7	5	8	8	8	7	8	8	8	7	6	5	5	5	5	5	5	6	6	6	8.7	
23-Oct-04	7	12	9	10	12	6	6	12	7	8	11	9	12	12	10	11	8	10	12	17	25	41	44	19	19	44.5	
24-Oct-04	31	10	9	7	17	16	10	7	8	16	13	21	21	28	29	43	22	7	16	13	6	9	8	9	9	42.9	
25-Oct-04	7	6	7	11	8	6	11	5	8	8	8	10	10	13	13	14	9	21	8	6	10	7	12	16	16	21.2	
26-Oct-04	9	11	11	17	10	5	16	16	6	8	20	14	20	12	20	16	10	7	7	38	12	23	23	5	5	37.9	
27-Oct-04	27	31	34	28	25	10	10	9	10	19	33	23	14	15	22	26	15	20	9	24	49	27	42	30	30	49.3	
28-Oct-04	53	41	14	39	20	19	17	10	12	19	19	15	18	15	12	15	15	21	45	39	24	16	11	12	12	52.6	
29-Oct-04	13	10	8	8	7	7	7	8	8	13	16	14	18	27	16	11	7	8	32	21	9	5	5	4	4	32.4	
30-Oct-04	5	5	5	5	4	4	4	4	5	5	6	7	6	6	9	7	7	6	5	6	6	6	7	11	8	8	10.8
31-Oct-04	16	12	9	9	8	6	5	8	9	10	9	18	8	9	12	10	15	13	8	10	6	24	29	18	18	29.4	

Hourly Max	53	61	42	41	26	49	31	40	23	33	35	53	47	31	33	43	22	21	45	40	52	41	44	61	61
------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----



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





Passive Monitoring

Ambient Air Compliance Network



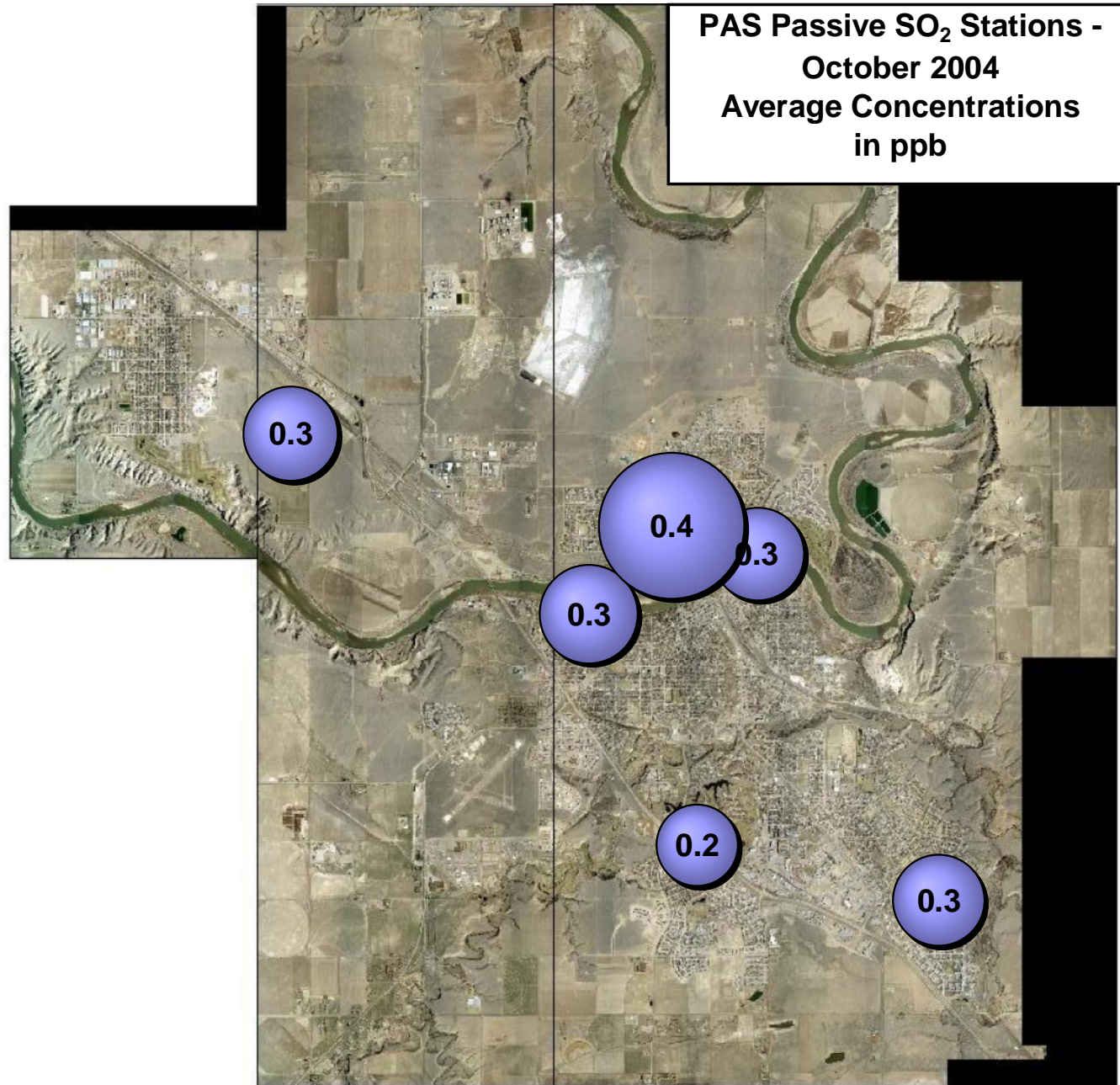
Pallisar Airshed Society - PAS Passive Stations for October 2004

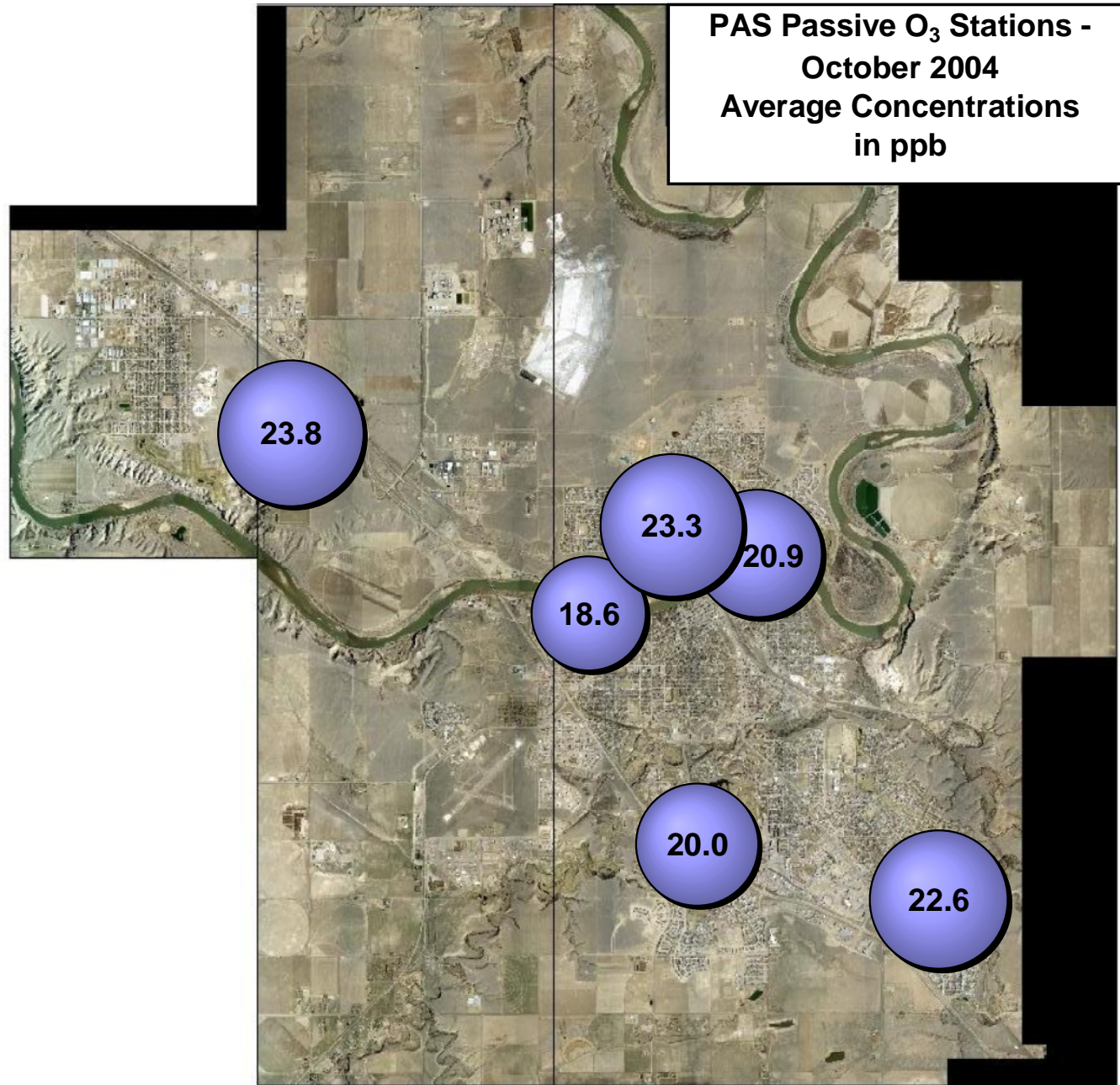
Station Number	Station	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Location		
	Name				Easting	Northing	Elevation
Duplicates							
6a	Redcliff	0.3	23.8	7.4			
6b	Redcliff	0.2	21.5	8.4			
1	Hospital	0.3	18.6	8.3	521648	5542721	698
2	Ball Park	0.3	20.9	12.3	524019	5543686	660
3	Monitoring Station	0.4	23.3	7.2	522812	5544133	714
4	Redcliff	0.3	23.8	3.9	517448	5545608	725
5	Southridge	0.2	20.0	4.8	523172	5539016	721
6	Christian School Park	0.3	22.6	7.9	526577	5538133	709

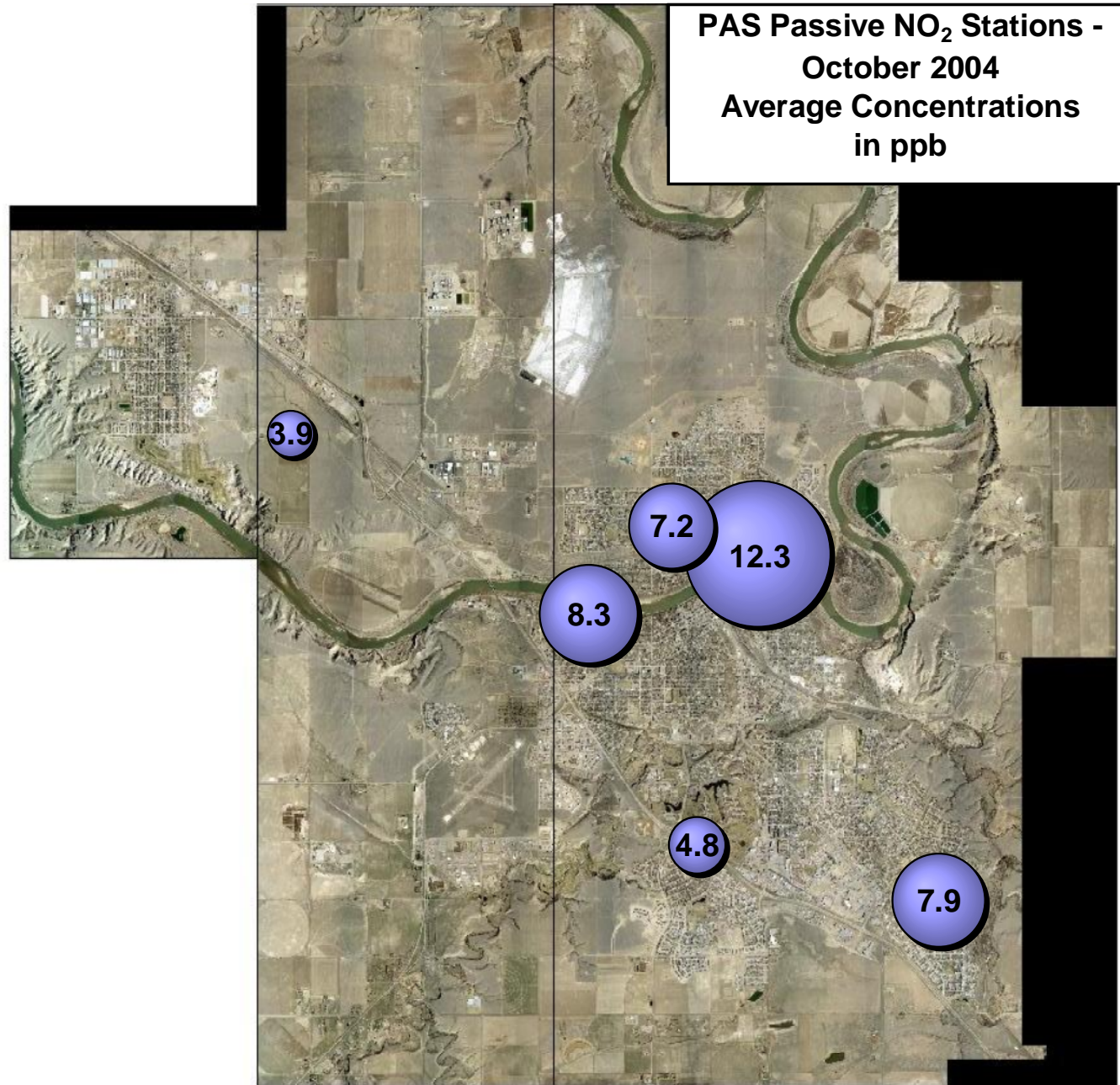
Stats:							
	Mean	0.3	21.5	7.4			
	Standard Deviation	0.1	2.0	2.9			
	Minimum	0.2			5	Southridge	
	Maximum	0.4			3	Monitoring Station	
	Minimum		18.6		1	Hospital	
	Maximum		23.8		4	Redcliff	
	Minimum			3.9	4	Redcliff	
	Maximum			12.3	2	Ball Park	

Comparison between Continuous and Passive monitoring (passive #3)

	SO ₂	O ₃	NO ₂
PAS Station	-	19.3	8.3
PAS Passive	0.4	23.3	7.2







October 2004 - Calibration Reports

PAS - Crescent Heights Station

O₃, NO_x, NO, NO₂, THC, PM_{2.5}

Calibration Report

Parameter 03
Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	October 21, 2003	Previous Calibration	September 9, 2003
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:15	End Time (MST)	19:07
Barometric Pressure	0.924 mb	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentrator	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	NA
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.993769	Calculated slope	1.006244
Calculated intercept	1.068433	Calculated intercept	2.850651
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	1.032		1.055	
Lamp measure	3295	mV	3163.3	mV
Lamp Reference	3296	mV	3166.2	mV
Pressure	25.6	inches Hg	25.7	inches Hg
Sample Flow	718	ccm	718	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	-1.2	N/A
4995	0.00	320.9	317.5	1.0106
4995	0.00	185.4	179.3	1.0340
4995	0.00	92.9	88.5	1.0494
4995	0.00	0.0	-1.2	0.0000
4995	0.00	313.3	305.2	1.0265
Average Correction Factor				1.0313

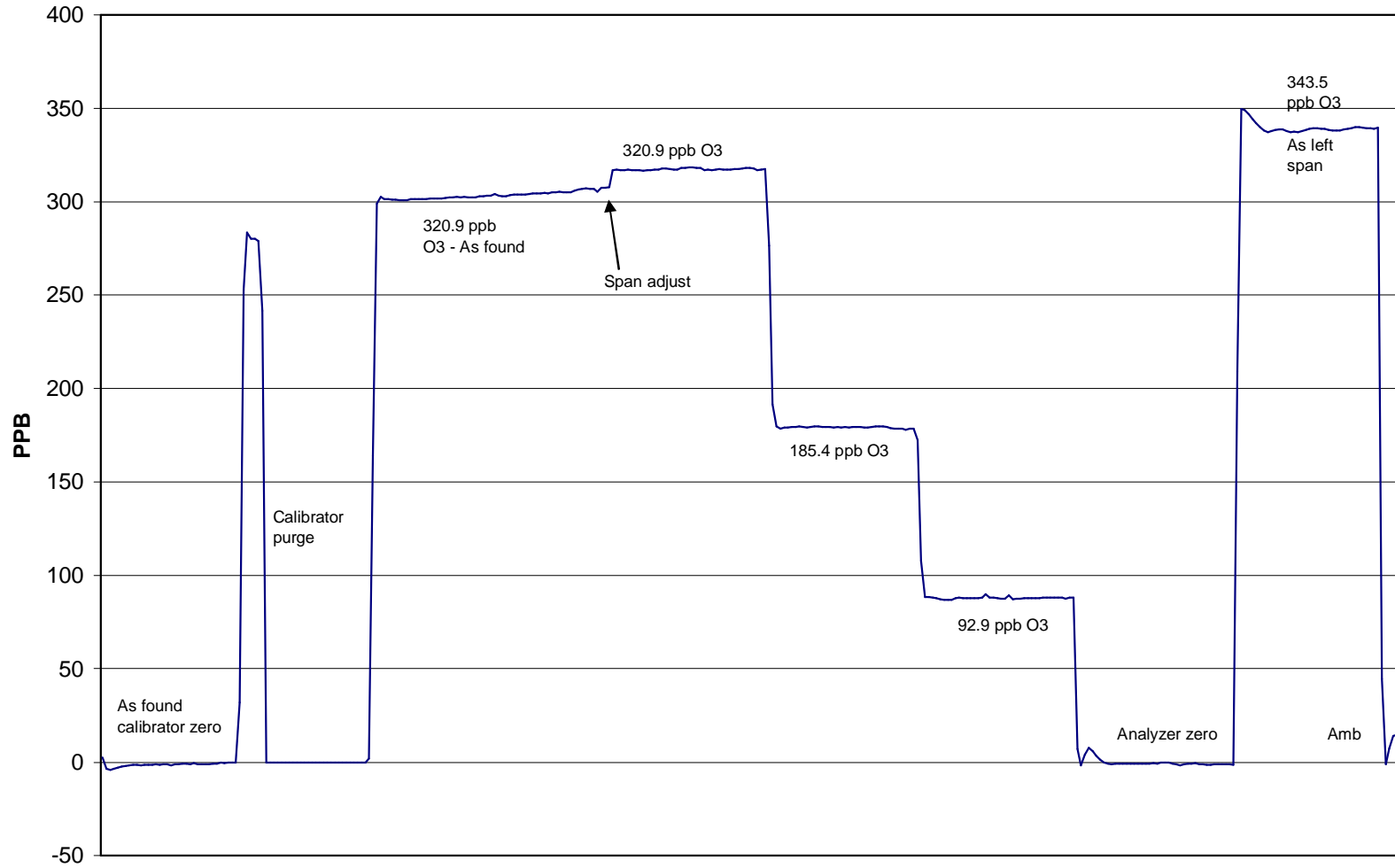
Calculated value of As Found Response: 305.6 ppm Percent Change of As Found: -2.5%

	before calibration		after calibration	
Auto zero	0.2	ppb	1.9	ppb
Auto span	344.5	ppb	343.5	ppb

Notes: Analyzer was span adjusted; no other maintenance required.
O3 calibration points generated via GPT portion of the NOX calibration.

Calibration Performed By: Kelly Baragar

O3 Calibration



October 21, 2004

Calibration Report

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



Station Information

Calibration Date October 21, 2004 Previous Calibration September 9, 2004
 Station Number 1 Station Location Crescent Heights

Reason: Routine Installation Removal Other: _____

Start Time (MST) 11:10 End Time (MST) 15:26
 Barometric Pressure 0.924 ATM Station Temperature 21.5 Deg C
 Calibrator Envionics 6100 Serial Number 3016
 NO Cal Gas Conc 49.8 ppm Cal Gas Expiry Date 12-Dec-05
 NOx Cal Gas Conc 49.9 ppm Cal Gas Serial # ALM011558

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO ₂	NO _x	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.007182	1.004673	1.008166
	Data Offset	-2.920462	-2.538178	-0.949848
After	Data Slope	1.004681	1.006497	1.012842
	Data Offset	-1.701707	-1.456555	-0.153379
Channel #		8	6	7
Voltage Range		0 - 1 VDC	0 - 1 VDC	0 - 1 VDC

Analyzer Information

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

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	-2.1	mV	-2.1	mV
NO _x background	-0.7	mV	-0.7	mV
NO coefficient	1.322		1.446	
NO _x coefficient	1.324		1.449	
Chamber Temp	49.9	Deg C	49.9	Deg C
Cooler Temp	7.1	Deg C	7.0	Deg C
Azero	33.1		30.1	
Perm Temp	40.3	Deg C	40.3	Deg C
Pressure	3.6	inches Hg	3.6	inches Hg
Sample Flow	458.0	ccm	446.0	ccm

Notes: Analyzer was span adjusted. All test functions are within normal factory specs.

Calibration Report

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



Station Information

Calibration Date: October 21, 2004 Station Location: Crescent Heights

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	2.2	1.5	1.0	N/A	N/A
1	4993	39.97	396.3	395.5	0.8	395.6	391.3	5.4	1.0018	1.0108
2	4993	19.97	198.8	198.4	0.4	198.5	195.4	3.5	1.0017	1.0151
3	4993	9.97	99.4	99.2	0.2	99.6	96.7	3.2	0.9982	1.0259
AFZ	4993	0.00	0.0	0.0	0.0	2.2	1.5	1.0	0.0000	0.0000
AFS	4993	39.97	396.3	395.5	0.8	371.1	362.7	9.4	1.0680	1.0905
Average Correction Factor									1.0005	1.0173

As Found Concentrations NO_x= 366.3 NO= 360.2 As Found Percent Change NO_x= -7.6% NO= -8.9%

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O3 Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	396.2	398.9	-2.8	396.3	394.0	1.0	N/A	N/A	N/A	N/A
350	396.2	75.3	320.9	394.1	74.5	320.0	1.0052	1.0108	1.0028	99.7%
200	396.2	210.8	185.4	395.7	208.2	188.2	1.0013	1.0121	0.9853	101.5%
100	396.2	303.3	92.9	395.4	299.6	94.0	1.0019	1.0123	0.9885	101.2%
Average Correction Factor							1.0028	1.0117	0.9922	100.8%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO	ppb	NO _x	NO ₂	NO	ppb
Auto zero	0.4	-1.5	0.7	ppb	1.4	-0.1	1.4	ppb
Auto span	375.0	368.9	6.2	ppb	423.6	415.6	7.5	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter NO₂
 Air Monitoring Network Palliser Airshed

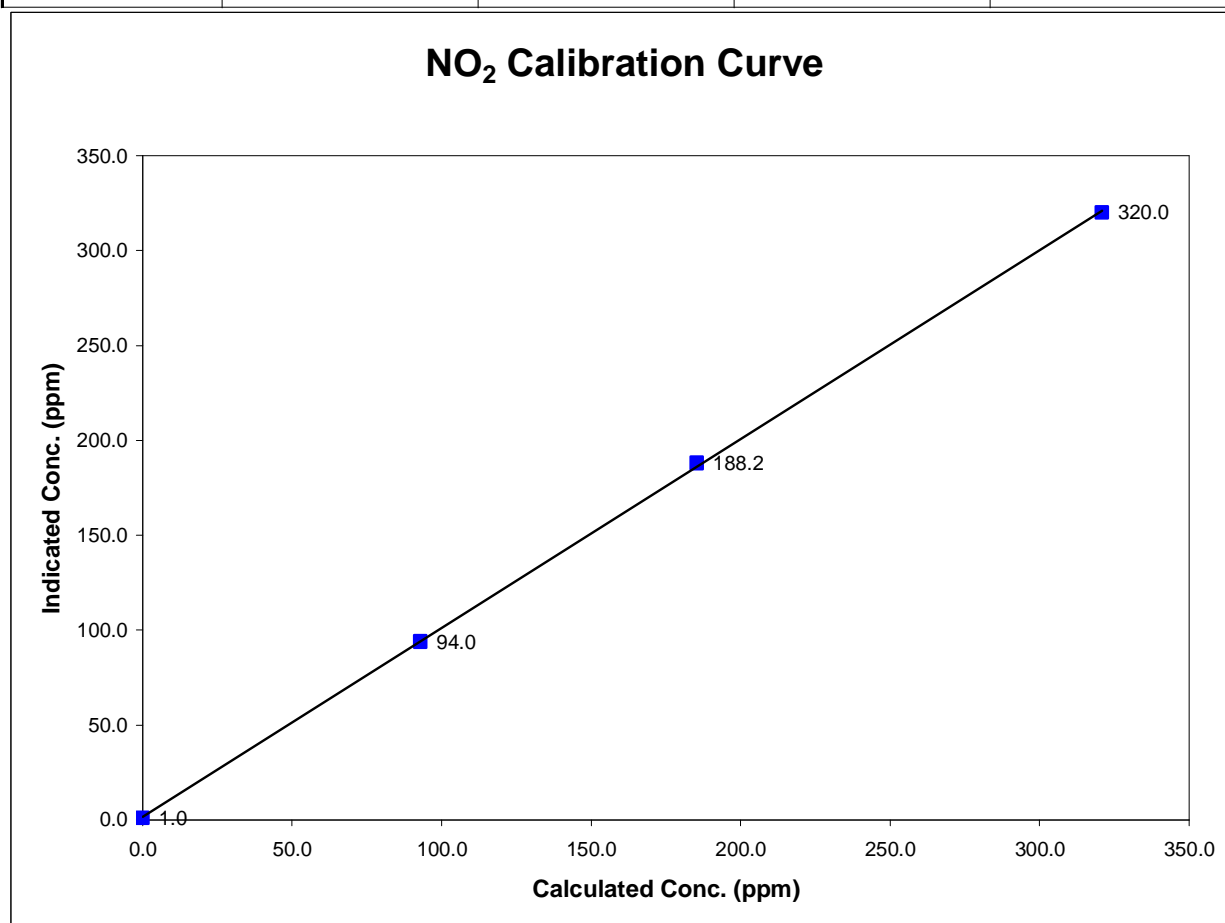


Station Information

Calibration Date	October 21, 2004	Previous Calibration	September 9, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	11:10	End Time (MST)	15:26
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		
92.9	94.0	0.9885	Correlation Coefficient	0.999903
185.4	188.2	0.9853		
320.9	320.0	1.0028	Slope	1.004681
			Intercept	-1.701707



Calibration Summary

Parameter NO_x
 Air Monitoring Network Palliser Airshed



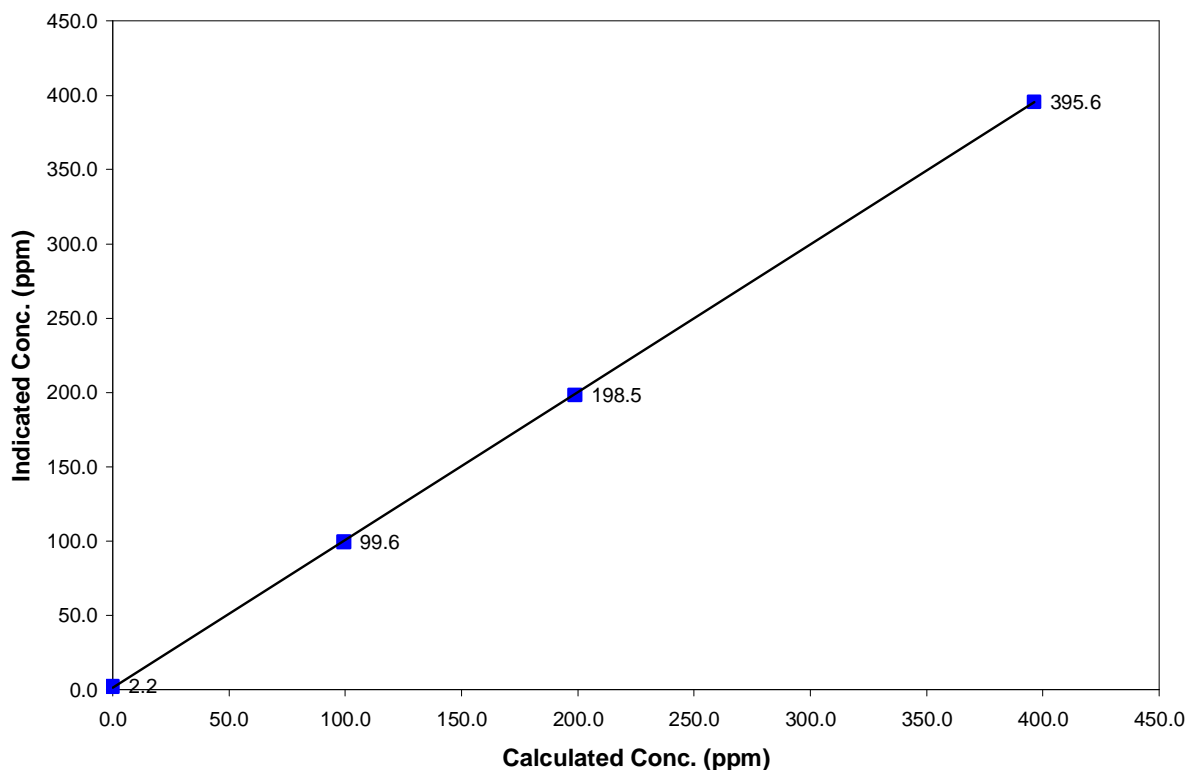
Station Information

Calibration Date	October 21, 2004	Previous Calibration	September 9, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	11:10	End Time (MST)	15:26
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	2.2	0.0000	Correlation Coefficient	0.999984
396.3	395.6	1.0018		
198.8	198.5	1.0017		
99.4	99.6	0.9982		
			Slope	1.006497
			Intercept	-1.456555

NO_x Calibration Curve



Calibration Summary

Parameter NO
 Air Monitoring Network Palliser Airshed

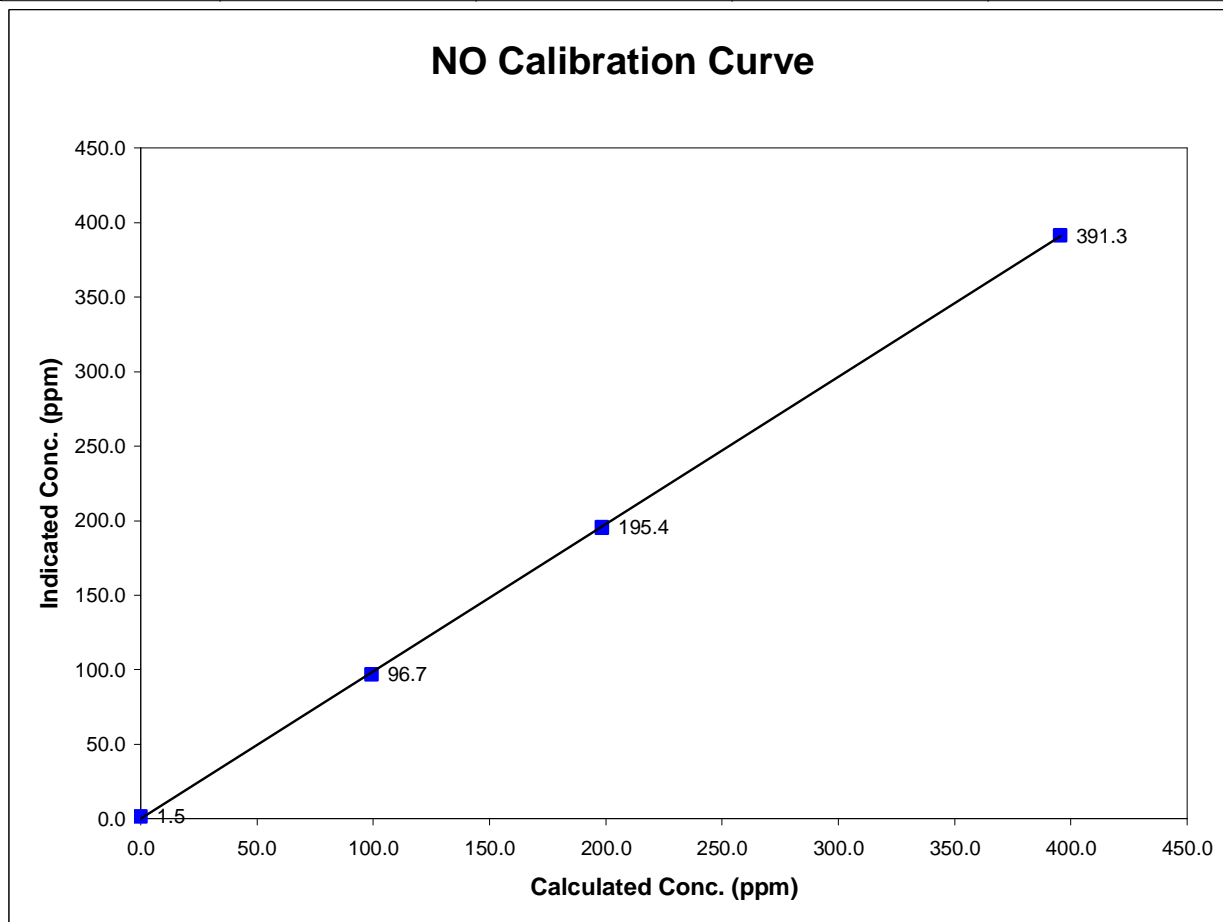


Station Information

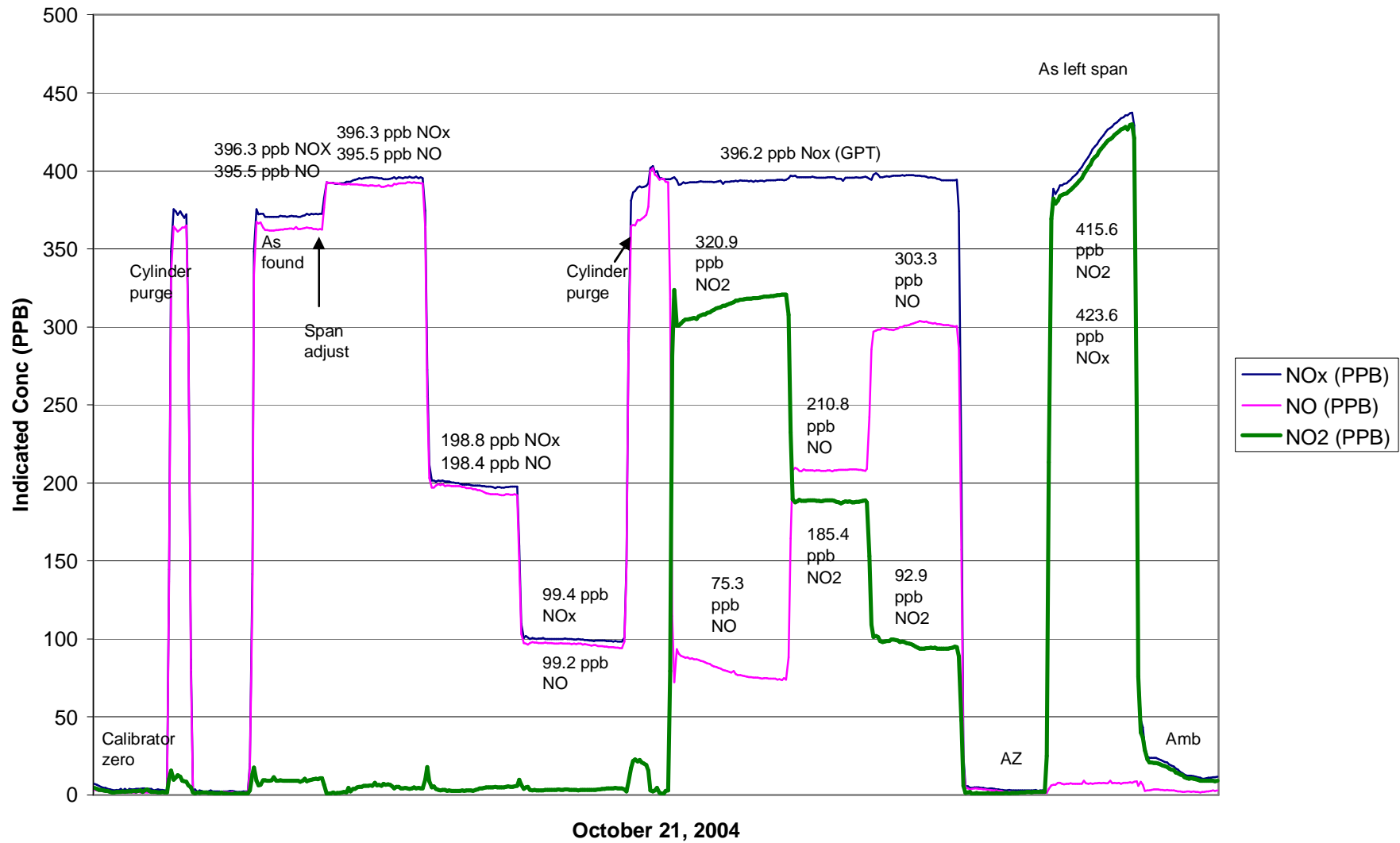
Calibration Date	October 21, 2004	Previous Calibration	September 9, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	11:10	End Time (MST)	15:26
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	1.5	N/A		
395.5	391.3	1.0108	Correlation Coefficient	0.999946
198.4	195.4	1.0151		
99.2	96.7	1.0259	Slope	1.012842
			Intercept	-0.153379



NOx Calibration



Calibration Report

Parameter THC
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	October 21, 2004	Previous Calibration	September 9, 2004
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	14:26	End Time (MST)	16:59
Barometric Pressure	0.924 mb	Station Temperature	21.5 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH ₄ / 301 ppm C ₃ H ₈	Cal Gas Expiry Date	8/28/2005
Cal Gas CH ₄ equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.016436	Calculated slope	1.019245
Calculated intercept	0.055606	Calculated intercept	-0.001021
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.73	PSI	5.75	PSI
THC span counts	11353	raw	11019	raw
THC zero counts	1846	raw	1846	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	19.78	1.0180
2994	19.98	10.13	9.89	1.0243
2994	9.97	5.07	4.98	1.0173
zero	0.00	0.00	0.02	As Found Zero
2994	39.98	20.13	19.31	As Found Span
Average Correction Factor				1.0199

Calculated value of As Found Response: 19.661 ppm Percent Change of As Found: 2.3%

	before calibration		after calibration	
Auto zero	0.05	ppm	-0.01	ppm
Auto span	22.21	ppm	22.49	ppm

Notes: Analyzer was span adjusted. All test parameters holding steady.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter THC
 Air Monitoring Network Palliser Airshed

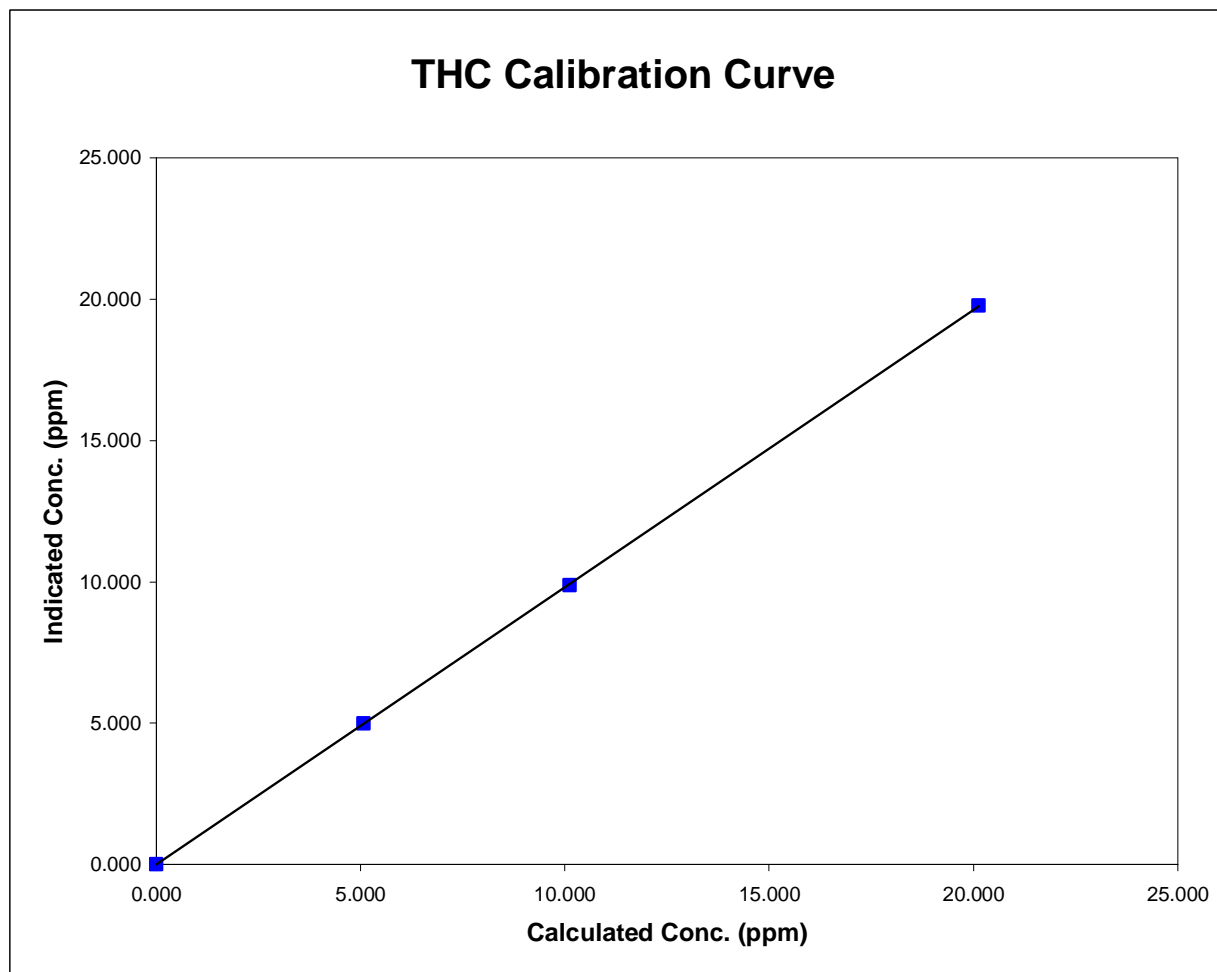


Station Information

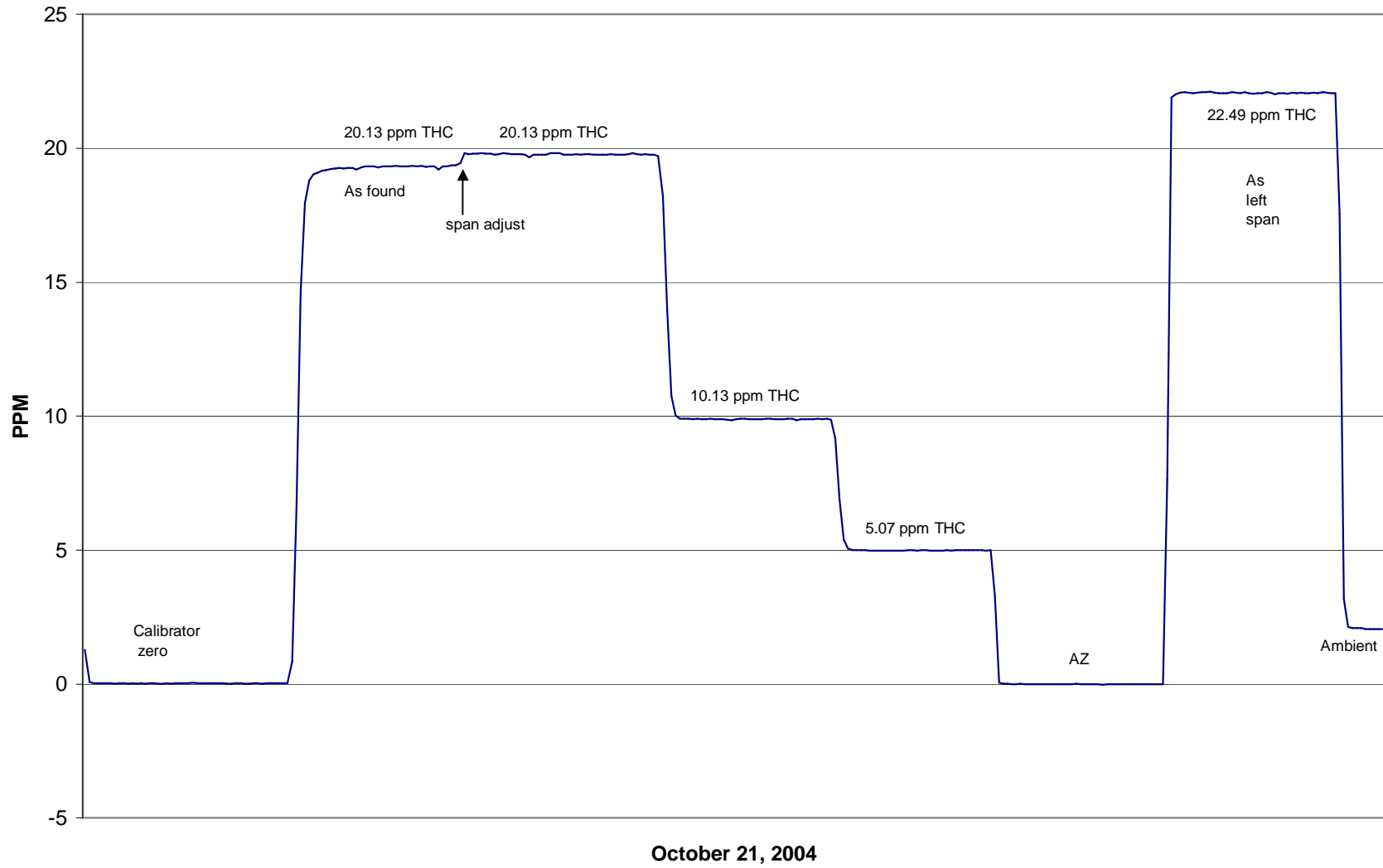
Calibration Date	October 21, 2004	Previous Calibration	September 9, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	14:26	End Time (MST)	16:59
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.020	N/A		
20.132	19.776	1.0180	Correlation Coefficient	0.999984
10.128	9.887	1.0243		
5.071	4.984	1.0173	Slope	1.019245
			Intercept	-0.001021



THC Calibration



Calibration Report



Parameter PM2.5
 Air Monitoring Network Palliser Airshed

Station Information

Calibration Date	October 21, 2004	Previous Calibration	September 9, 2004
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	14:05	End Time (MST)	
Barometric Pressure	0.917 inches Hg	Station Temperature	21.0 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	53	%	21	%
Ko Factor	12758		12758	
Temperature	-1.0	Deg C	-1.0	Deg C
Pressure	0.917	ATM	0.917	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	25 sec	45 - 60 Seconds	NA
flow recovery - aux	46 - 60 Seconds	45 sec	46 - 60 Seconds	45 sec
Temperature	measured	-1.0	+/- 1.0 Deg C	-1.0
Pressure	measured	0.917	+/- 1.5% ΔATM	0.917
Total Flow	16.67 SLPM	16.80		16.80
Main Flow	13.67 SLPM	14.20	+/- 1.0 SLPM	14.00
Auxillary Flow	3.0 SLPM	3.150	+/- 0.2 SLPM	3.050
Leak Check - main	0.0	0.05	<0.15 SLPM	0.05
Leak Check - aux	0.0	0.09	<0.15 SLPM	0.09
Ko Factor (w/o filter)	measured	328.734	filter weight (g)	0.11352
Ko Factor (w/ filter)	measured	234.378	% Ko difference	0.6%

Notes: Performed leak test, flow audit, KO confirmation, and flow calibration.
Total flow measured fine at 16.7 L/min; however individually measured flows were out of specs. Adjust flows slightly down, calibration will be performed with pressure transducer next month.

Calibration Performed By: Kelly Baragar