



Palliser Airshed Society

Ambient Air Monitoring Network Summary

May 2005

Prepared By:
FOCUS
AIR QUALITY MONITORING

TABLE OF CONTENTS

Airshed Zone Association – May PAS Ambient Air Summary Report.....	3
PAS - Cresent Heights Nitrogen Dioxide Monthly Summary.....	5
PAS - Cresent Heights Nitric Oxide Monthly Summary	10
PAS - Cresent Heights Oxides of Nitrogen Monthly Summary	12
PAS - Cresent Heights Ozone Monthly Summary	16
PAS - Cresent Heights Ozone Monthly Summary	21
PAS - Cresent Heights Total Hydrocarbons Monthly Summary.....	22
PAS - Cresent Heights Particulate Matter (less than 2.5 microns) Monthly Summary	27
PAS - Cresent Heights Relative Humidity Monthly Summary	32
PAS - Cresent Heights Temperature Monthly Summary.....	34
PAS - Cresent Heights Solar Radiation Monthly Summary	36
PAS - Cresent Heights Scalar Wind Speed Monthly Summary	38
PAS - Cresent Heights Vector Wind Speed Monthly Summary.....	39
PAS - Cresent Heights Wind Direction Monthly Summary	40
PAS - Cresent Heights Standard Deviation of Wind Direction Monthly Summary.....	41
Passive Monitoring – May 2005	43
May 2005 - Calibration Reports.....	48
Figure 1. PAS - Cresent Heights Nitrogen Dioxide 1-hr Average Monthly Trend	6
Figure 2. PAS - Cresent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend.....	8
Figure 3. PAS - Cresent Heights Oxides of Nitrogen 1-hr Average Monthly Trend	13
Figure 4. PAS - Cresent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trend	15
Figure 5. PAS - Cresent Heights Ozone 1-hr Average Monthly Trend	17
Figure 6. PAS - Cresent Heights Ozone 1-hr Maximum Value Monthly Trend.....	19
Figure 7. PAS - Cresent Heights Total Hydrocarbons 1-hr Average Monthly Trend.....	23
Figure 8. PAS - Cresent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend	25
Figure 9. PAS - Cresent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend	28
Figure 10. PAS - Cresent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend.....	30
Figure 11. PAS - Cresent Heights Relative Humidity 1-hr Average Monthly Trend.....	33
Figure 12. PAS - Cresent Heights Temperature 1-hr Average Monthly Trend.....	35
Figure 13. PAS - Cresent Heights Solar Radiation 1-hr Average Monthly Trend	37



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

Attention: Director of Monitoring and Evaluation

RE: Palliser Airshed Society (PAS) Ambient Air Monitoring Report – May 2005

Enclosed is the PAS Ambient Monitoring Report for the month of **May 2005**.

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

Continuous Monitoring – Crescent Heights

Included in this report are; monthly sampling table, detailed hourly average reports and multipoint calibration reports of all instruments. The measured ambient air quality was within the Provincial and Federal guidelines with no exceedences recorded. Operational time of all instruments was above 90% uptime for the month of May. There were no significant events leading to emergency response for the month of May.

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

- Monthly average concentrations of NO₂ was 6.0 ppb
- Monthly average concentrations for O₃ was 33.2 ppb
- Monthly average concentrations for THC was 2.0 ppm
- Monthly average concentrations for CO was 0.2 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 for May 2005 recorded by the six passive stations located throughout the PAS zone:

- Monthly average concentrations for SO₂ passives ranged from 0.4 ppb to 0.6 ppb
- Monthly average concentrations for NO₂ passives ranged from 3.5 ppb to 7.1 ppb
- Monthly average concentrations for O₃ passives ranged from 18.4 ppb to 23.3 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



May 2005 Monthly Overall Summary Report Ambient Air Quality Data

May-2005 Palliser Airshed Society				Maximum Recorded Values								Operational Time (%)	
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr			24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc		Day
SO ₂ (ppb)	172	57	Crescent Heights										
NO (ppb)			Crescent Heights	2.4	-	-	56.1	May-27 05:00	calm	N	11.4	May-02	100.0%
NO ₂ (ppb)	212	106	Crescent Heights	6.0	0	0	36.7	May-27 00:00	calm	N	12.1	May-04	100.0%
NO _x (ppb)			Crescent Heights	8.2	-	-	79.8	May-27 05:00	calm	N	22.7	May-02	100.0%
O ₃ (ppb)	82		Crescent Heights	33.2	0	-	60.3	May-12 10:00	8.1	S	47.7	May-12	100.0%
O ₃ (ppb) - 8-hr	65		Crescent Heights		0						58.5	May-12	
CO (ppm)	13		Crescent Heights	0.20	0	-	0.9	May-03 06:00	calm	N	0.3	May-31	99.9%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.5	May-31	
THC (ppm)			Crescent Heights	2.00	-	-	2.9	May-27 04:00	1.0	Calm	2.2	May-27	92.1%
PM _{2.5} (µg/m ³)		30 ^a	Crescent Heights	3.3		0	13.7	May-28 04:00	2.0	SW	6.7	May-07	92.9%
RH (%)			Crescent Heights	47.5	-	-	-	-	-	-	-	-	100.0%
SR (W/m ²)			Crescent Heights	270.4	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	13.2	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	10.4	-	-	-	May-19 09:00	34.4	SW	19.6	19-May	100.0%
WSPD s (km/hr)			Crescent Heights	10.0	-	-	-	May-19 09:00	34.1	SW	18.9	19-May	100.0%
WDIR (Deg)			Crescent Heights	N	-	-	-	-	-	-	-	-	100.0%

Note: ^a the draft 1-hr Alberta Ambient Air Quality Objectives
 * Wind Direction is the predominate direction for the Month



Continuous Monitoring

Ambient Air Monitoring Network

Crescent Heights Station

General Station Issues

No general issues to report

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational problems observed
Nitrogen Dioxide	Teledyne - API	200E	ppb	No operational problems observed
Total Hydrocarbons	Bendix	400A	ppm	59 hours were lost between May 11 and May 13, 2005 due to a plugged flow restrictor. The part was cleaned and the instrument recalibrated.
Carbon Monoxide	TEI	49C	ppm	One hour was lost due to excessive drift
PM 2.5	R&P TEOM	1400ab	$\mu\text{g}/\text{m}^3$	Intermittent problem with the flow controllers resulted in 53 hours of excessive drift from May 9 to 13, 2005. Flow controllers will be replaced when received from Environment Canada
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	Slight baseline drift indicates a value of 1 during the night time periods.
Data Acquisition System	Titan Logix	AP1000		No operational problems observed



PAS - Crescent Heights Nitrogen Dioxide Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

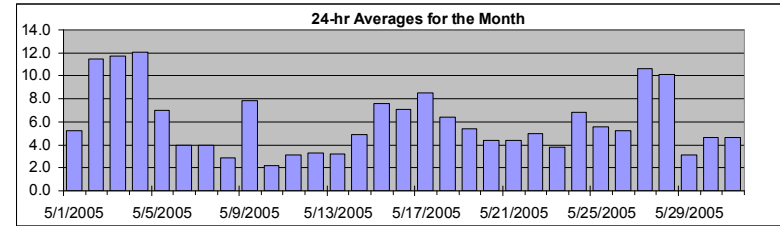
HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: May 1, 2005 to June 1, 2005

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

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	36.7	ppb	28-May	0:00 1:00
Maximum 24-hr Average:	12.1	ppb	4-May	



AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	28.0	17.8	7.4	4.3	2.3	1.0	0.6	6.0 ppb

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00
1-May-05	A	6	5	4	8	8	9	5	5	4	4	2	1	3	4	3	2	2	3	4	7	10	18	A	5.2	17.8
2-May-05	29	25	22	20	15	16	18	19	14	6	6	7	5	4	4	4	5	5	5	3	5	13	A	13	11.5	28.7
3-May-05	11	11	18	16	29	25	28	25	9	2	3	2	2	2	4	5	9	8	11	6	4	A	20	19	11.8	29.2
4-May-05	27	7	4	21	30	23	16	13	6	4	3	C	C	C	C	A	8	4	4	8	11	10	12	18	12.1	29.7
5-May-05	14	15	A	13	16	11	14	12	5	3	2	3	2	2	3	2	4	9	7	7	6	3	4	2	7.0	16.3
6-May-05	1	A	5	2	2	3	5	5	6	4	6	5	3	3	4	3	2	2	3	4	4	4	5	9	4.0	9.4
7-May-05	A	14	12	8	7	7	5	3	3	3	2	2	2	2	2	2	2	2	2	3	2	2	2	A	4.0	13.5
8-May-05	8	4	4	3	3	3	3	3	3	1	1	1	1	1	2	1	1	1	1	2	2	2	A	14	2.8	14.0
9-May-05	9	8	16	18	16	21	19	9	6	4	2	1	1	1	1	1	1	2	2	5	7	9	18	11	7.8	20.7
10-May-05	10	9	A	6	3	2	2	2	1	1	1	1	0	1	1	1	1	1	1	1	1	1	3	2	2.2	9.7
11-May-05	4	A	4	2	3	4	5	8	4	3	2	2	1	2	3	1	2	2	2	4	4	5	2	2	3.1	7.6
12-May-05	A	5	4	4	3	8	10	7	3	2	1	2	1	3	2	2	1	2	2	2	3	3	2	A	3.3	10.3
13-May-05	8	4	2	2	4	5	7	7	5	2	1	1	1	1	1	0	0	0	1	2	7	2	5	9	3.2	9.2
14-May-05	6	5	A	16	17	11	7	4	2	3	4	2	3	1	2	2	4	3	4	3	2	3	6	4	4.9	17.1
15-May-05	6	A	8	6	5	4	4	3	3	5	5	5	3	3	2	4	4	3	6	7	24	21	22	21	7.6	23.8
16-May-05	A	12	8	11	11	18	17	16	5	3	2	2	2	3	2	2	2	4	8	10	9	4	4	A	7.1	18.1
17-May-05	6	6	5	7	10	11	12	17	7	10	10	7	6	5	6	6	6	7	5	7	10	12	A	18	8.5	17.6
18-May-05	15	10	7	5	6	8	8	8	5	4	3	4	3	3	5	3	4	4	6	8	8	A	13	7	6.4	15.3
19-May-05	6	5	6	5	5	8	6	6	3	2	7	5	4	4	4	4	10	4	4	3	A	7	9	6	5.4	9.5
20-May-05	7	5	4	3	7	6	6	4	4	2	2	4	5	2	3	2	5	3	5	A	9	6	6	3	4.4	9.0
21-May-05	5	5	2	2	5	5	5	8	5	2	2	2	1	2	2	1	2	2	A	13	16	5	5	6	4.4	16.2
22-May-05	6	5	4	4	8	6	8	11	3	1	1	1	1	1	2	2	6	A	10	10	8	8	4	5	5.0	10.8
23-May-05	4	2	6	1	5	6	4	3	4	2	4	2	2	2	2	2	A	7	4	3	4	4	8	6	3.8	8.5
24-May-05	5	3	3	10	6	9	7	4	5	4	4	3	4	4	4	A	9	9	9	15	14	10	8	9	6.9	15.0
25-May-05	10	8	5	10	12	10	7	5	3	3	2	2	1	2	A	7	4	5	2	3	6	7	9	5	5.6	12.1
26-May-05	8	7	7	7	6	8	4	3	2	1	2	1	2	A	7	4	3	4	3	3	5	7	13	11	5.2	13.5
27-May-05	11	11	17	28	28	24	23	17	9	5	7	3	A	8	4	4	3	3	2	4	3	7	7	17	10.6	28.5
28-May-05	37	33	15	25	24	19	20	18	9	3	1	A	6	3	2	2	2	3	3	2	1	2	1	3	10.1	36.7
29-May-05	3	3	3	4	6	5	3	1	1	1	A	5	2	2	1	1	1	1	1	1	4	7	7	11	3.1	10.6
30-May-05	5	8	9	4	7	6	8	6	1	A	5	3	2	2	2	3	2	5	10	4	7	2	2	1	4.6	9.6
31-May-05	3	6	6	7	6	8	8	7	A	7	5	3	4	2	2	2	1	1	2	9	9	5	2	3	4.6	9.2
Hourly Avg	9.7	8.6	7.5	8.9	10.1	10.0	9.6	8.3	4.8	3.2	3.4	2.8	2.5	2.5	2.8	2.6	3.5	3.5	4.2	5.1	6.7	6.4	7.8	8.7		
Hourly Max	36.7	32.7	22.0	28.5	29.7	25.4	28.5	24.7	14.2	9.8	10.2	6.8	6.2	7.6	6.7	6.8	9.5	9.2	10.5	15.0	23.8	20.9	21.7	20.6		

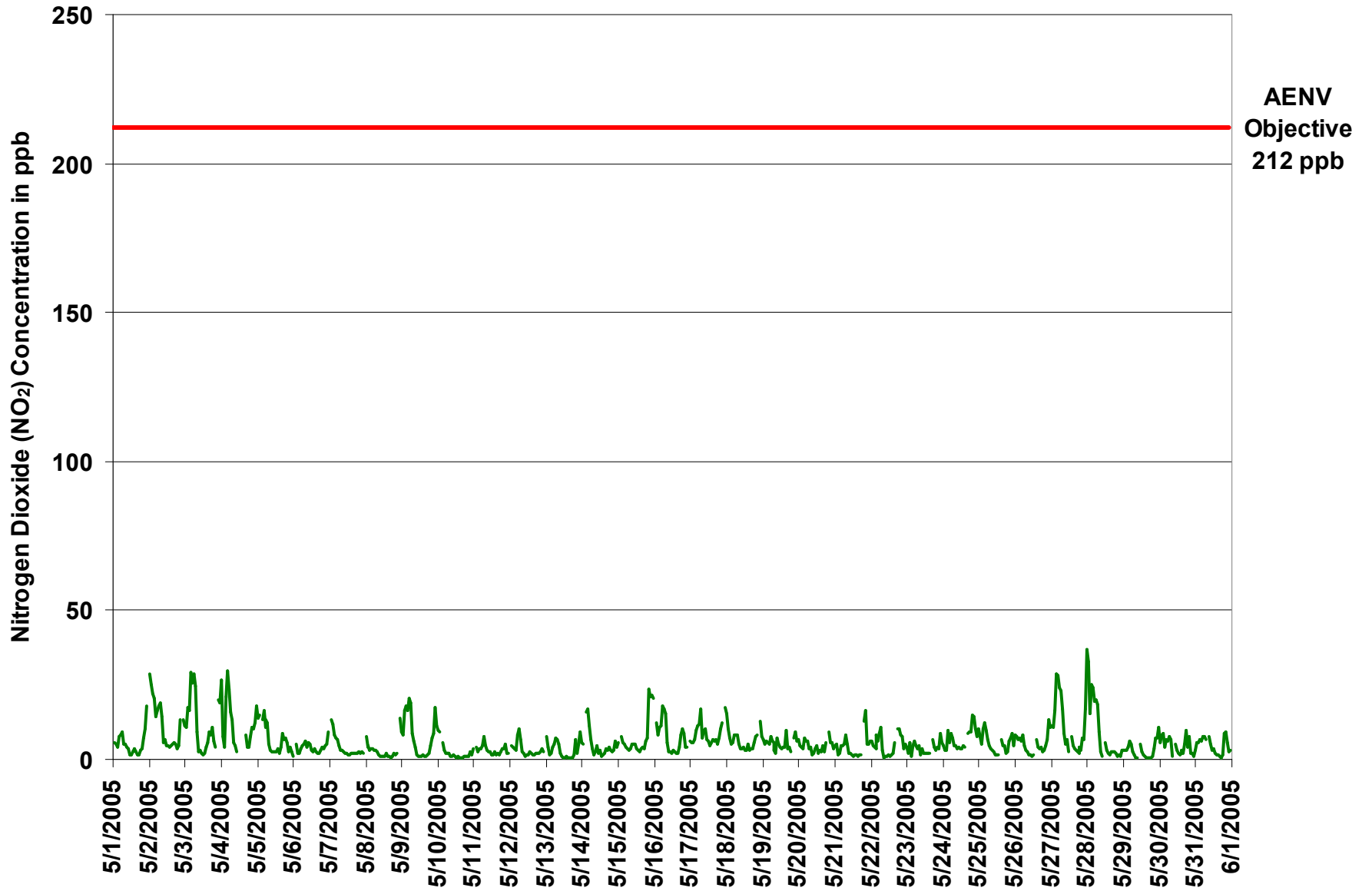


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

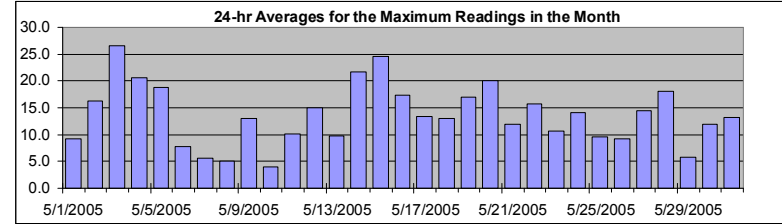
HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Value:	83.9	ppb	20-May	12:00 13:00
Maximum 24-hr Value:	26.6	ppb	3-May	



AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	57.6	40.6	18.9	9.3	4.4	2.0	1.4	13.6 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00			
1-May-05	A	9	7	6	20	10	12	7	9	7	6	3	3	6	6	5	3	3	5	6	9	29	32	A	18	9.2	31.9
2-May-05	A	32	30	24	25	16	18	22	21	16	12	23	18	6	6	20	6	6	7	6	15	20	A	18	16.2	31.8	
3-May-05	13	14	29	26	34	34	32	32	23	11	16	4	17	3	26	58	60	38	47	10	5	A	45	35	26.6	59.6	
4-May-05	58	17	7	49	41	36	25	19	10	6	4	C	C	C	C	A	11	8	8	14	15	21	21	24	20.7	57.5	
5-May-05	16	33	A	25	22	20	22	25	8	5	18	21	26	4	5	4	10	29	11	19	10	5	40	51	18.7	51.0	
6-May-05	3	A	13	4	3	14	12	9	12	7	10	11	6	5	7	5	4	4	5	9	9	7	8	13	7.7	14.0	
7-May-05	A	18	14	12	9	9	9	4	5	4	4	2	2	3	3	3	3	3	3	4	3	4	3	A	5.6	18.2	
8-May-05	13	8	7	4	5	5	4	4	4	4	2	2	2	2	4	2	2	2	2	4	3	6	A	27	5.1	27.1	
9-May-05	12	13	34	34	22	30	25	12	7	6	4	3	2	4	2	2	2	3	3	7	11	25	28	19	13.0	34.4	
10-May-05	12	13	A	10	4	4	3	4	2	2	3	2	1	12	2	1	1	2	2	2	3	5	2	4	4.0	13.1	
11-May-05	6	A	8	3	6	6	9	11	9	16	4	12	4	37	42	22	4	4	5	5	6	8	4	4	10.2	41.5	
12-May-05	A	9	60	26	5	28	23	44	11	19	2	5	3	20	4	4	3	22	3	4	4	5	25	A	15.0	59.9	
13-May-05	56	45	3	4	6	7	26	9	7	6	2	1	1	4	2	1	1	1	2	6	11	8	13	13	9.7	55.9	
14-May-05	8	8	A	23	43	28	37	5	4	23	21	9	34	2	15	8	67	43	26	18	3	25	44	5	21.8	66.7	
15-May-05	21	A	13	34	45	25	25	14	8	7	40	23	5	6	4	18	24	12	42	18	60	44	38	37	24.5	59.8	
16-May-05	A	29	10	17	20	38	41	21	14	3	26	16	6	22	4	5	3	10	26	15	13	12	30	A	17.3	40.5	
17-May-05	9	10	7	10	11	15	17	23	11	20	16	13	10	7	12	9	16	12	8	12	13	24	A	25	13.4	24.7	
18-May-05	17	16	11	7	7	24	34	11	7	5	5	7	6	4	29	11	6	9	16	26	14	A	15	9	12.9	34.1	
19-May-05	7	8	35	7	7	18	8	22	4	4	44	34	14	6	32	10	34	9	10	5	A	11	27	34	16.9	43.6	
20-May-05	10	9	8	5	25	23	13	6	6	3	3	23	84	29	48	5	47	4	51	A	27	14	9	8	20.0	83.9	
21-May-05	7	10	3	2	32	15	10	11	10	3	4	3	2	3	2	2	4	3	A	33	51	13	11	40	12.0	51.5	
22-May-05	43	8	17	7	34	8	21	18	22	1	15	13	21	2	3	4	25	A	18	15	33	19	9	8	15.8	43.1	
23-May-05	6	3	22	3	14	31	16	9	24	4	28	6	5	5	4	4	A	12	8	4	9	6	11	9	10.7	30.7	
24-May-05	9	4	6	17	13	18	9	5	6	6	14	10	6	15	8	A	12	32	21	42	25	18	13	12	14.0	42.2	
25-May-05	17	16	10	20	19	11	9	6	5	5	5	3	2	3	A	12	8	12	3	4	12	13	14	11	9.6	20.0	
26-May-05	16	14	10	9	8	19	10	5	6	2	3	3	3	A	17	7	6	10	4	5	8	9	22	15	9.2	22.3	
27-May-05	15	13	26	32	30	32	28	23	19	9	9	5	A	10	7	8	6	4	3	7	5	10	10	23	14.5	32.1	
28-May-05	60	44	28	46	60	50	34	21	16	4	2	A	10	5	3	2	4	5	5	4	2	3	2	5	18.1	59.7	
29-May-05	5	4	5	5	10	7	4	2	1	2	A	10	3	3	2	2	2	2	2	3	9	10	9	31	5.7	31.2	
30-May-05	11	14	17	6	16	9	10	12	3	A	12	4	8	20	4	20	4	8	21	11	34	4	25	2	11.9	34.1	
31-May-05	6	43	26	14	18	14	11	11	A	33	8	4	5	3	3	3	2	2	4	43	24	13	4	9	13.1	43.0	
Hourly Avg	18.1	16.5	16.4	15.9	19.4	19.5	18.1	13.7	9.6	7.9	11.7	9.3	10.3	8.7	10.6	8.8	12.7	10.4	12.4	12.1	14.8	13.4	18.5	18.2			
Hourly Max	59.7	44.6	59.9	49.1	59.6	49.8	40.5	43.8	23.6	33.2	43.6	34.3	83.9	36.7	48.4	57.6	66.7	43.3	51.0	43.0	59.8	44.1	45.2	51.0			

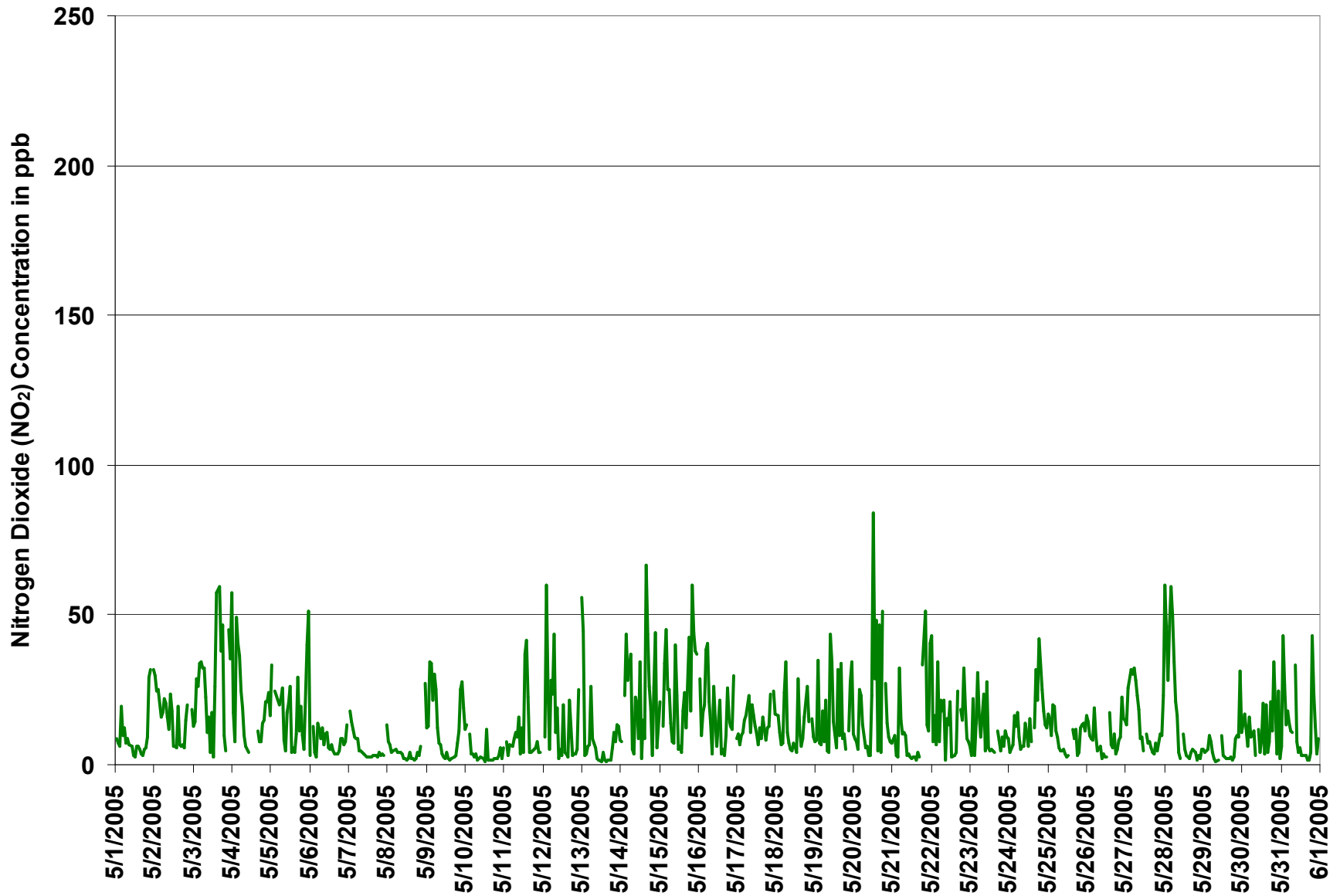
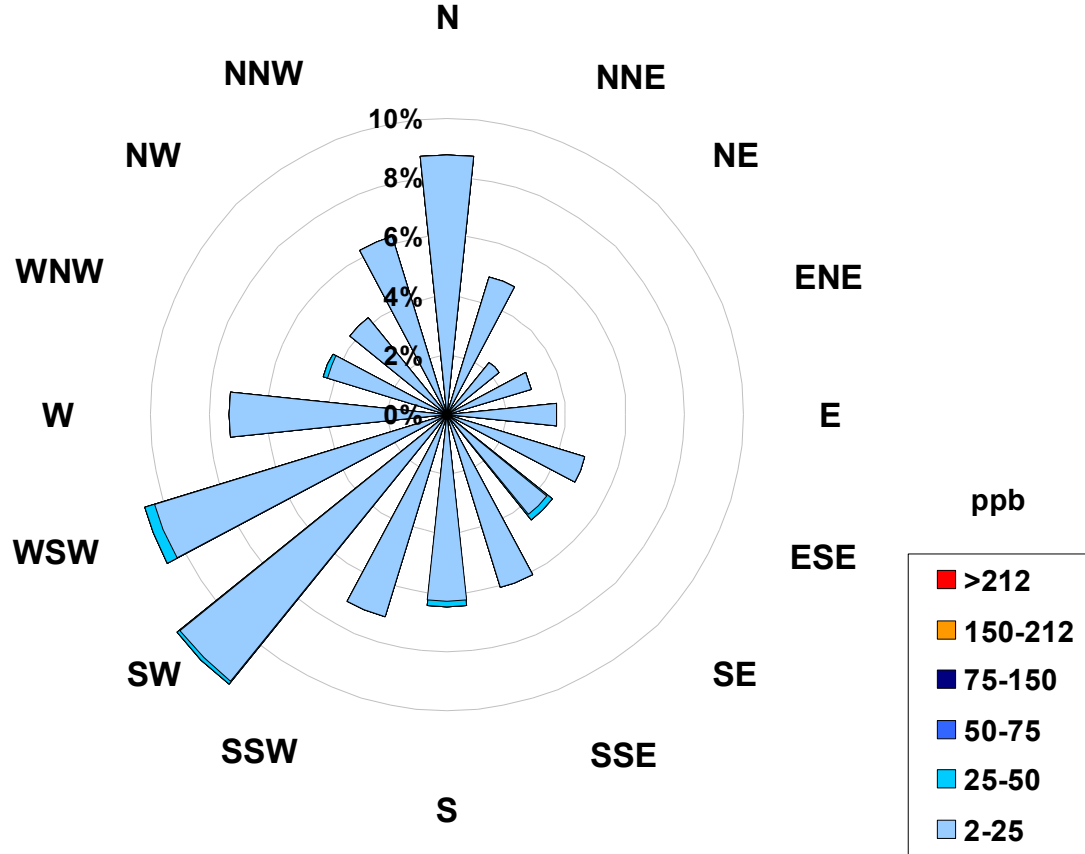


Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend



Concentration Rose for the 1-hr Nitrogen Dioxide Average Concentration Occurrences at the Crescent Heights Site for May 2005



Calms:	3%
---------------	-----------

Frequency Distribution of NO ₂ in ppb			
Range		Frequency (hrs)	
2.0	< 25	694	
25	to 50	11	
50	to 75	2	
75	to 150	0	
150	to 212	0	
	> 212	0	
Total Non-Zero Values			707



PAS - Cresent Heights Nitric Oxide Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

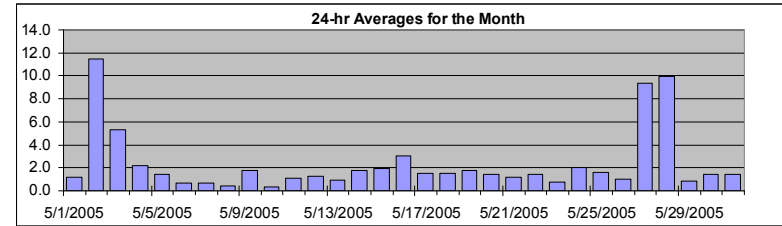
Monitoring Dates: May 1, 2005 to June 1, 2005

Guideline Limit:

1-hr	na	ppb	24-hr	na	ppb
------	----	-----	-------	----	-----

 Summary

Maximum 1-hr Average:	56.1	ppb	27-May	5:00 6:00
Maximum 24-hr Average:	11.4	ppb	2-May	



AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	33.6	6.0	1.9	0.8	0.5	0.2	0.0	2.4 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																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-May-05	A	1	1	1	1	1	2	1	3	2	2	1	1	1	1	1	1	0	1	0	0	2	4	A	1.2	3.6
2-May-05	27	20	18	21	8	30	48	47	16	5	4	5	3	2	2	2	2	1	1	0	0	1	A	1	11.4	47.9
3-May-05	1	1	1	1	12	14	34	23	5	1	1	1	1	1	3	5	6	2	3	1	0	A	5	2	5.3	33.7
4-May-05	11	0	0	4	4	4	5	5	1	1	1	C	C	C	C	A	2	0	0	0	0	0	0	0	2.2	10.7
5-May-05	0	2	A	1	1	1	4	6	2	1	1	1	1	1	1	1	1	2	1	0	0	0	4	1	1.4	5.5
6-May-05	0	A	0	0	0	0	0	1	2	1	2	2	1	1	1	1	1	1	1	1	1	0	1	1	0.7	2.0
7-May-05	A	1	2	1	1	2	1	1	1	1	1	1	1	1	0	1	0	0	0	1	0	0	0	A	0.7	1.8
8-May-05	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	1.0
9-May-05	0	0	4	1	1	11	14	2	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1.8	14.4
10-May-05	1	0	A	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	0.9
11-May-05	0	A	0	0	0	0	2	4	2	2	1	2	1	2	2	1	1	1	1	1	0	1	0	0	1.1	4.4
12-May-05	A	1	2	3	0	4	3	4	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	A	1.2	3.7
13-May-05	2	3	0	0	0	0	4	3	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.9	4.2
14-May-05	0	0	A	1	11	4	4	1	1	2	2	1	3	0	1	1	3	1	2	1	0	0	3	0	1.8	10.6
15-May-05	2	A	0	2	3	2	1	2	2	2	3	2	1	1	1	1	1	1	2	1	4	4	3	4	2.0	4.2
16-May-05	A	3	1	1	2	16	16	11	3	1	1	1	1	2	1	1	1	1	2	1	1	0	2	A	3.0	15.9
17-May-05	0	0	0	0	0	1	2	5	2	3	4	3	2	1	1	2	2	2	1	0	0	1	A	1	1.5	4.6
18-May-05	0	0	0	0	0	4	6	6	2	1	1	2	1	1	2	1	1	1	1	1	1	A	1	0	1.5	6.4
19-May-05	0	0	3	0	0	2	1	6	1	1	5	3	2	1	3	1	4	1	1	0	A	0	2	3	1.8	5.6
20-May-05	0	0	0	0	2	2	3	2	2	1	1	3	4	1	2	1	2	1	3	A	2	0	1	0	1.4	3.6
21-May-05	0	0	0	0	2	1	2	3	2	1	1	1	1	1	1	1	1	0	A	1	4	1	1	3	1.2	4.2
22-May-05	3	1	1	1	5	1	3	5	2	0	1	1	1	1	1	1	2	A	1	1	1	1	0	0	1.4	5.1
23-May-05	0	0	1	0	0	2	2	1	3	1	2	1	1	0	1	0	A	1	1	0	0	0	0	0	0.8	2.5
24-May-05	0	0	0	1	1	2	2	2	2	2	3	2	2	2	2	A	1	2	2	11	4	2	0	0	2.0	11.1
25-May-05	1	2	1	4	3	3	4	3	2	2	1	1	1	1	A	1	1	1	1	1	1	1	0	0	1.6	3.8
26-May-05	1	0	0	0	1	2	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	2.4
27-May-05	1	1	3	17	40	56	52	22	5	3	3	1	A	2	1	1	1	1	1	1	1	0	1	1	9.3	56.1
28-May-05	31	37	3	46	23	26	32	18	6	1	0	A	1	0	1	0	1	1	1	1	1	0	0	0	10.0	45.6
29-May-05	0	0	0	0	1	3	2	1	1	1	A	1	1	1	1	0	1	1	0	0	1	0	0	3	0.9	3.3
30-May-05	0	1	1	0	1	2	5	5	1	A	1	1	1	1	1	2	1	2	3	1	2	0	2	0	1.5	5.5
31-May-05	0	3	2	1	1	2	4	4	A	3	2	1	2	1	1	1	1	0	0	3	2	0	0	0	1.4	4.2
Hourly Avg	3.1	2.8	1.7	3.5	4.0	6.5	8.5	6.3	2.4	1.4	1.6	1.3	1.1	1.0	1.1	0.9	1.3	0.9	1.0	0.9	0.6	1.2	0.9			
Hourly Max	31.0	37.4	17.7	45.6	40.2	56.1	52.0	46.6	15.9	4.8	4.8	5.0	3.6	2.4	3.1	4.6	6.0	2.5	3.2	11.1	4.2	3.8	5.5	3.6		



Station: Crescent Heights
 Station Owner: PAS

HOURLY MAXIMUM TABLE

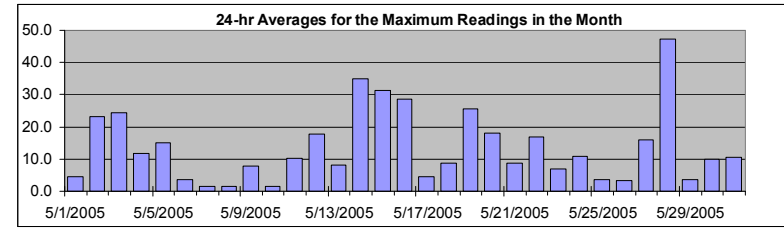
Nitric Oxide (NO)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Value:	282.4	ppb	28-May	3:00 4:00
Maximum 24-hr Value:	47.2	ppb	28-May	

AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	111.0	66.2	11.5	2.2	1.3	0.8	0.6	13.6 ppb



Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-05	A	2	2	1	17	2	3	3	6	3	3	2	2	3	2	2	2	2	2	1	1	19	19	A	4.6	19.4
2-May-05	50	48	34	42	19	43	83	63	21	11	25	58	4	4	3	18	3	2	1	1	1	2	A	2	23.3	82.9
3-May-05	1	1	4	2	36	36	53	50	19	13	9	2	12	1	29	86	63	47	45	2	1	A	35	12	24.3	85.6
4-May-05	90	1	2	38	32	9	19	13	2	2	2	C	C	C	C	A	3	1	1	1	2	1	2	1	11.8	90.5
5-May-05	1	16	A	4	2	1	13	18	3	1	11	32	37	2	2	2	3	22	2	9	2	1	104	55	14.9	104.2
6-May-05	1	A	13	2	1	13	4	3	4	2	5	5	3	3	3	2	1	1	1	2	7	2	2	2	3.6	13.4
7-May-05	A	2	4	2	2	4	3	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1.6	3.6
8-May-05	2	8	1	1	1	2	1	2	2	2	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1.5	8.2
9-May-05	1	1	32	29	3	43	39	4	2	2	1	1	1	2	1	1	1	1	1	1	2	12	6	1	7.8	42.7
10-May-05	2	1	A	2	1	1	1	2	1	1	2	1	1	12	1	1	1	1	1	1	1	1	1	1	1.6	11.7
11-May-05	1	A	1	1	1	1	5	7	5	28	2	31	2	88	38	12	2	2	1	1	1	2	1	1	10.1	88.5
12-May-05	A	7	60	83	1	52	17	62	6	28	1	2	2	10	2	2	1	28	1	1	1	1	21	A	17.7	83.3
13-May-05	51	58	1	1	1	1	58	5	4	3	1	1	1	3	1	1	1	1	1	1	1	0	1	1	8.3	58.4
14-May-05	1	1	A	3	116	74	88	2	2	57	16	13	88	1	22	14	87	50	31	23	1	22	89	1	34.8	115.8
15-May-05	21	A	1	59	112	80	40	31	6	4	45	12	2	2	2	15	11	9	27	2	83	32	54	70	31.3	111.9
16-May-05	A	74	3	6	9	111	178	23	8	2	23	43	3	32	1	2	1	2	32	2	1	1	73	A	28.6	177.9
17-May-05	1	1	1	1	1	2	4	10	3	18	11	8	3	2	4	4	17	3	2	1	1	3	A	4	4.6	18.2
18-May-05	1	1	1	1	1	42	68	9	5	3	2	3	2	2	2	6	2	2	9	11	9	A	2	1	8.8	67.9
19-May-05	1	1	96	2	1	54	2	106	2	2	64	38	17	2	67	3	20	2	3	2	A	1	13	91	25.7	106.1
20-May-05	1	1	1	1	21	50	7	3	3	2	2	39	46	33	49	2	56	1	68	A	28	1	1	1	18.1	67.8
21-May-05	1	1	1	1	20	4	4	5	5	2	2	1	1	1	1	1	2	1	A	3	61	1	2	82	8.8	81.7
22-May-05	71	3	18	3	95	1	20	11	22	1	45	16	43	2	1	2	15	A	2	1	14	2	1	1	16.9	94.7
23-May-05	1	1	14	1	1	20	45	5	24	2	32	3	2	1	1	1	A	3	2	1	1	1	1	0	7.0	44.6
24-May-05	1	1	1	4	2	8	5	3	3	3	12	7	3	16	4	A	2	52	7	102	9	5	3	1	10.9	101.6
25-May-05	4	6	3	11	10	5	5	4	3	3	4	3	2	2	A	3	3	3	2	1	3	3	1	1	3.6	11.4
26-May-05	2	1	1	1	1	10	4	4	3	1	6	2	2	A	3	2	2	5	2	1	2	2	16	2	3.3	15.5
27-May-05	2	1	7	44	56	85	62	52	22	4	5	2	A	4	4	3	2	2	2	1	1	1	1	1	15.9	84.9
28-May-05	182	157	26	282	65	214	98	21	16	3	1	A	2	2	1	1	2	3	2	2	1	1	1	1	47.2	282.4
29-May-05	1	1	1	1	2	5	4	2	1	1	A	2	1	2	1	1	1	2	1	1	1	1	1	45	3.5	45.5
30-May-05	1	5	6	1	3	5	8	10	2	A	17	2	9	34	2	17	2	3	11	4	43	1	40	1	9.8	43.0
31-May-05	1	51	31	2	4	5	7	6	A	62	2	2	2	2	2	1	1	1	1	45	8	1	1	1	10.4	61.8
Hourly Avg	18.2	16.1	13.1	20.4	20.5	31.7	30.6	17.4	6.9	8.8	11.8	11.5	10.2	9.3	9.4	7.1	10.2	8.6	8.7	7.6	9.6	4.2	17.5	14.2		
Hourly Max	181.6	156.8	96.3	282.4	115.8	214.4	177.9	106.1	24.3	61.8	63.6	58.2	88.4	88.5	67.0	85.6	87.0	52.0	67.8	101.6	83.3	32.0	104.2	91.4		



PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

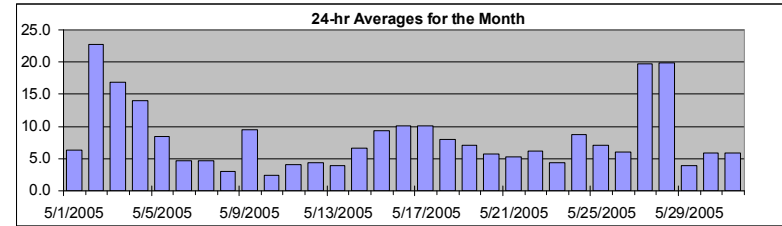
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: May 1, 2005 to June 1, 2005

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

Maximum 1-hr Average:				79.8	ppb	27-May	5:00 6:00
Maximum 24-hr Average:				22.7	ppb	2-May	



AIC Time:	33 hrs	Operational Time:	707 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	65.2	25.0	9.1
	5.4	2.9	1.1
	0.7	Average	
	8.2 ppb		

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		
1-May-05	A	6	6	5	9	9	11	7	7	6	5	2	2	4	5	3	2	2	3	4	7	12	21	A	6.3	21.3
2-May-05	56	45	39	42	22	47	66	65	30	11	9	11	7	6	6	6	6	6	6	4	5	14	A	14	22.7	65.5
3-May-05	12	11	19	17	41	39	62	47	14	3	4	2	2	2	7	10	15	11	13	7	4	A	25	21	16.9	61.9
4-May-05	37	8	4	24	34	27	21	19	7	6	3	C	C	C	C	A	8	4	4	7	11	10	13	18	14.1	37.1
5-May-05	14	17	A	14	17	12	18	18	7	4	3	4	4	3	4	3	5	11	8	8	6	3	8	3	8.4	18.0
6-May-05	1	A	6	2	2	4	5	6	8	5	8	7	4	3	5	3	3	3	4	5	4	5	6	10	4.7	10.1
7-May-05	A	14	13	9	8	9	6	4	4	3	3	2	2	2	2	3	3	2	2	3	2	3	2	A	4.6	14.4
8-May-05	9	5	5	3	4	4	3	4	3	2	1	1	1	1	2	1	1	1	1	2	2	2	A	14	3.1	14.4
9-May-05	9	8	20	19	17	31	33	11	8	5	2	1	1	1	1	1	1	2	2	5	7	9	19	12	9.5	33.5
10-May-05	10	9	A	6	3	3	2	3	1	1	2	1	1	2	1	1	1	1	1	1	1	1	3	2	2.4	10.2
11-May-05	4	A	4	3	4	4	7	12	7	5	3	4	2	4	4	2	2	2	3	4	4	6	2	2	4.1	12.0
12-May-05	A	5	6	6	3	12	14	10	3	3	2	2	2	3	2	2	2	3	2	2	3	3	3	A	4.3	13.6
13-May-05	10	7	2	2	4	6	11	10	7	2	1	1	1	2	1	1	0	0	1	2	7	2	5	10	3.9	11.5
14-May-05	6	5	A	17	28	15	10	5	2	5	6	2	6	1	2	2	6	4	6	4	2	3	9	4	6.6	27.7
15-May-05	7	A	8	8	8	6	5	5	5	7	8	7	4	4	3	5	5	4	8	8	28	25	24	24	9.4	27.9
16-May-05	A	15	9	12	13	34	32	26	8	4	3	3	3	5	3	3	3	5	10	11	9	5	6	A	10.1	34.0
17-May-05	7	6	6	7	10	13	14	22	9	13	15	10	8	6	7	9	8	9	6	8	11	13	A	18	10.1	21.6
18-May-05	16	11	8	5	6	12	14	15	7	5	5	6	4	4	8	4	5	4	7	9	9	A	14	8	8.0	15.8
19-May-05	7	6	9	6	6	10	7	11	4	3	12	8	5	5	7	5	13	5	5	3	A	8	11	9	7.1	13.1
20-May-05	7	5	4	4	9	8	8	5	5	2	2	6	8	3	5	3	7	3	8	A	11	6	6	4	5.7	10.9
21-May-05	5	5	2	2	6	6	7	11	7	3	3	2	2	2	2	1	2	2	A	14	20	6	5	8	5.3	20.2
22-May-05	8	5	5	4	13	7	12	16	4	1	2	2	3	2	2	3	8	A	11	11	9	8	4	5	6.2	15.8
23-May-05	4	2	7	1	5	8	6	4	7	2	6	3	2	2	2	2	A	8	4	3	5	4	9	6	4.4	8.6
24-May-05	5	3	3	11	6	11	9	6	7	5	7	5	5	6	6	A	10	12	11	26	18	12	8	9	8.7	26.1
25-May-05	11	10	6	14	15	13	10	8	5	5	3	2	2	3	A	8	6	6	3	3	7	8	9	5	7.0	15.3
26-May-05	9	8	7	7	7	10	6	5	4	2	3	1	2	A	8	5	4	5	3	3	5	7	15	11	6.0	14.9
27-May-05	12	11	19	46	68	80	75	39	14	8	10	4	A	9	6	4	4	3	3	4	3	7	7	18	19.7	79.8
28-May-05	68	70	18	70	47	46	52	36	15	4	1	A	6	3	2	2	3	3	4	2	1	2	1	3	19.9	70.5
29-May-05	3	3	3	4	7	8	5	3	1	1	A	6	3	2	1	1	1	1	1	1	4	8	8	14	3.8	13.9
30-May-05	6	9	10	4	7	8	13	11	2	A	6	4	3	3	3	5	3	7	13	5	9	2	4	1	5.9	13.3
31-May-05	3	8	7	8	7	10	12	10	A	10	6	4	5	3	2	2	1	1	2	11	11	5	2	3	5.8	11.8
Hourly Avg	12.8	11.4	9.1	12.3	14.0	16.4	18.0	14.6	7.1	4.5	4.9	4.0	3.4	3.3	3.8	3.4	4.5	4.3	5.1	5.9	7.5	6.8	8.9	9.5		
Hourly Max	67.6	69.9	39.5	70.5	68.1	79.8	74.7	65.4	29.9	13.1	14.5	11.3	7.9	9.1	7.7	9.7	15.2	11.5	13.0	26.1	27.9	24.8	25.1	24.2		

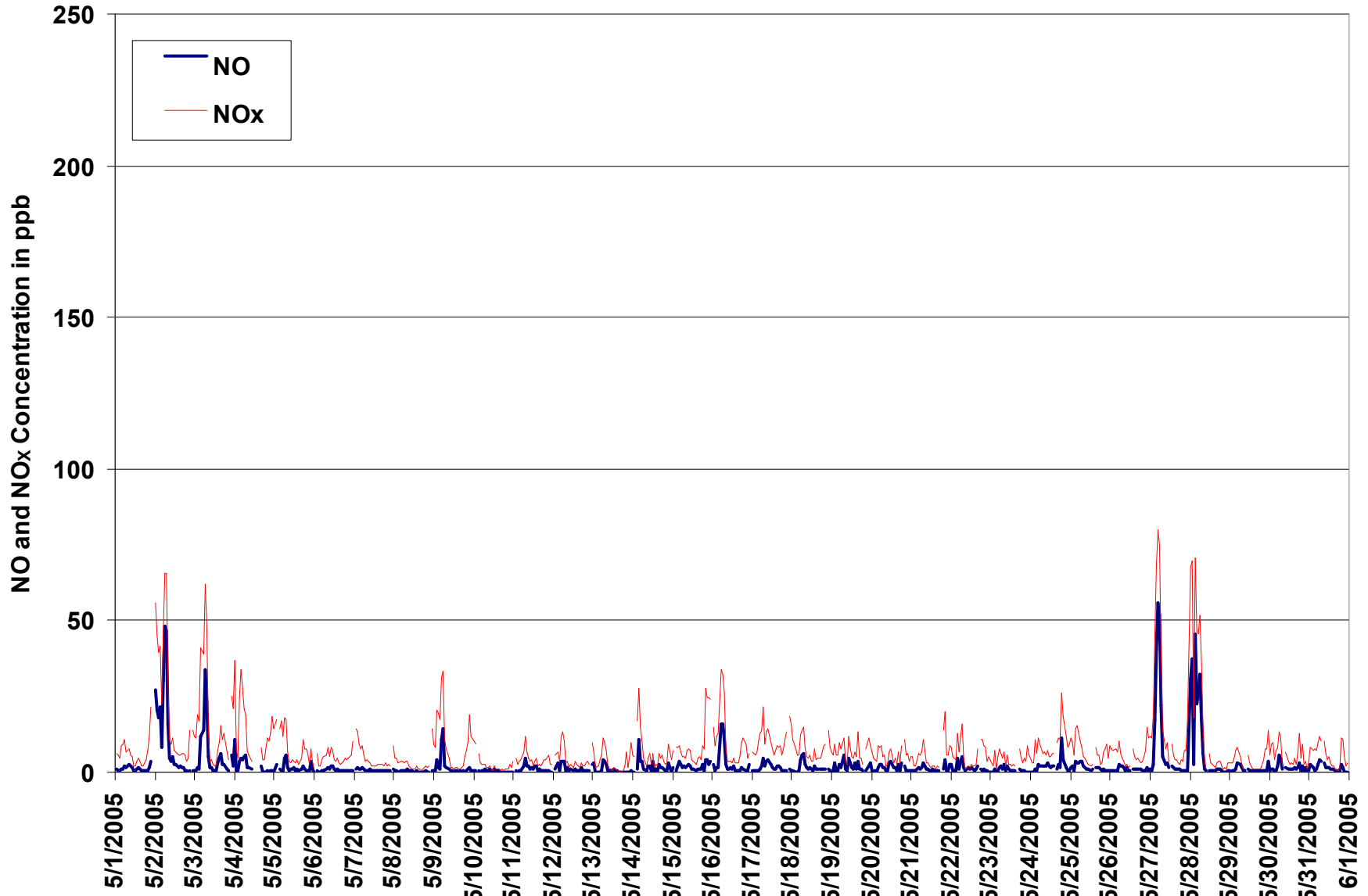


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

HOURLY MAXIMUM TABLE

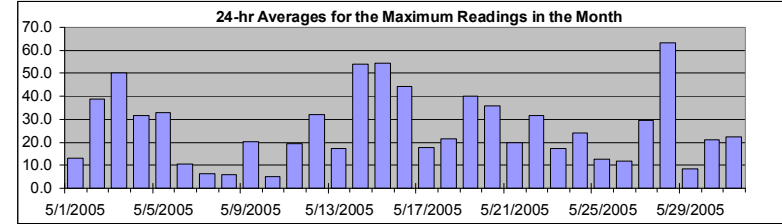
Oxides of Nitrogen (NO_x)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Value:	323.4	ppb	28-May	3:00 4:00
Maximum 24-hr Value:	63.3	ppb	28-May	

AIC Time:	33 hrs	Operational Time:	707 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	145.9	105.2	29.5	11.1	5.4	2.3	1.7	26.2 ppb



Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum	
1-May-05	A	10	9	7	37	11	15	9	14	9	9	4	4	8	8	7	4	3	5	6	9	46	50	A	19	12.9	49.9
2-May-05	79	77	59	67	34	60	103	81	36	22	48	75	9	9	8	37	8	8	8	6	15	21	A	A	19	38.7	102.9
3-May-05	14	15	32	27	69	70	82	78	41	24	25	5	30	4	56	143	122	85	91	11	5	A	73	47	50.0	143.3	
4-May-05	146	18	9	85	73	45	42	27	11	8	6	C	C	C	C	A	12	9	8	15	16	22	21	25	31.4	146.0	
5-May-05	17	48	A	28	24	21	35	44	11	5	28	49	63	7	6	5	12	47	13	28	10	5	144	107	33.0	143.9	
6-May-05	3	A	A	24	4	3	27	16	11	16	8	14	15	8	6	9	5	4	6	11	15	8	10	14	10.5	27.3	
7-May-05	A	20	17	13	10	11	11	5	5	5	5	3	3	3	3	3	4	4	3	5	3	4	4	A	6.5	19.6	
8-May-05	14	15	7	4	5	6	5	5	5	5	2	2	2	2	5	3	2	2	2	4	3	6	A	28	5.8	28.2	
9-May-05	13	14	66	62	25	72	64	17	9	8	4	3	2	6	3	2	2	3	3	8	13	37	33	19	20.3	72.4	
10-May-05	13	14	A	12	4	4	4	6	2	3	3	3	2	23	2	2	1	2	2	3	2	4	5	2	5.1	23.2	
11-May-05	6	A	9	3	7	7	13	17	14	36	5	39	6	126	79	34	5	6	6	6	6	9	4	4	4	19.5	125.5
12-May-05	A	15	120	109	6	78	40	102	17	47	2	7	5	30	5	5	3	50	4	4	4	5	45	A	32.0	120.2	
13-May-05	106	102	3	4	6	7	85	13	10	7	3	2	2	7	2	2	1	1	2	6	11	8	14	14	17.3	106.0	
14-May-05	9	7	A	26	136	102	124	6	5	77	35	22	124	3	35	19	154	91	55	33	4	47	125	6	54.2	153.7	
15-May-05	42	A	13	91	148	104	64	45	14	11	85	35	7	5	25	35	17	70	18	143	76	89	107	54.3	148.2		
16-May-05	A	103	12	23	30	144	210	44	21	5	48	59	8	53	5	6	4	11	51	17	14	13	96	A	44.3	209.7	
17-May-05	10	11	7	10	12	17	21	33	13	38	27	20	13	8	16	13	32	15	10	13	13	26	A	26	17.6	38.3	
18-May-05	17	17	11	8	8	67	102	19	11	7	7	10	8	6	51	18	8	11	25	37	20	A	16	10	21.5	101.8	
19-May-05	8	8	132	9	8	71	9	117	6	5	106	73	30	8	80	12	53	10	13	5	A	12	39	114	40.3	131.6	
20-May-05	11	9	8	5	43	66	19	9	8	4	4	62	130	57	97	6	96	5	102	A	46	14	10	8	35.6	129.8	
21-May-05	7	10	3	3	52	18	14	15	14	4	5	3	2	3	3	2	5	3	A	36	111	14	13	117	19.9	116.6	
22-May-05	113	10	32	9	124	9	41	29	42	2	56	27	64	4	4	6	39	A	20	16	45	21	9	8	31.6	124.3	
23-May-05	6	3	36	3	14	48	58	14	48	6	59	9	6	6	5	5	A	15	10	6	10	6	12	10	17.1	59.0	
24-May-05	9	4	6	20	14	25	14	7	9	9	25	17	9	27	11	A	14	75	28	142	33	22	16	13	23.9	141.9	
25-May-05	20	21	13	31	29	16	14	10	7	6	8	5	4	4	A	13	12	15	4	4	14	15	15	12	12.7	31.1	
26-May-05	18	15	10	9	9	29	13	8	9	3	7	4	4	A	20	8	7	15	5	5	10	10	34	17	11.7	34.2	
27-May-05	17	14	32	73	84	117	89	74	38	13	14	7	A	13	10	10	7	5	4	8	5	11	11	24	29.5	116.7	
28-May-05	223	201	53	323	124	263	127	42	32	6	2	A	11	6	4	3	5	8	6	6	2	3	2	5	63.3	323.4	
29-May-05	4	4	5	5	11	12	7	4	2	2	A	11	4	4	2	2	2	4	2	3	10	10	10	76	8.5	75.8	
30-May-05	11	19	21	6	18	14	18	21	5	A	27	6	18	55	5	36	6	10	29	15	76	4	62	2	21.1	76.4	
31-May-05	6	93	48	15	21	16	18	16	A	95	10	5	7	4	4	4	2	2	4	88	31	12	3	9	22.4	95.1	
Hourly Avg	34.9	32.1	28.4	35.3	38.2	50.2	47.6	29.8	15.9	16.0	22.7	20.1	20.1	17.2	18.7	15.0	22.0	17.8	19.7	18.8	23.3	16.9	34.5	31.1			
Hourly Max	222.7	200.5	131.6	323.4	148.2	263.4	209.7	116.7	47.7	95.1	105.6	75.3	129.8	125.5	97.3	143.3	153.7	91.4	102.2	141.9	142.6	75.9	143.9	116.6			

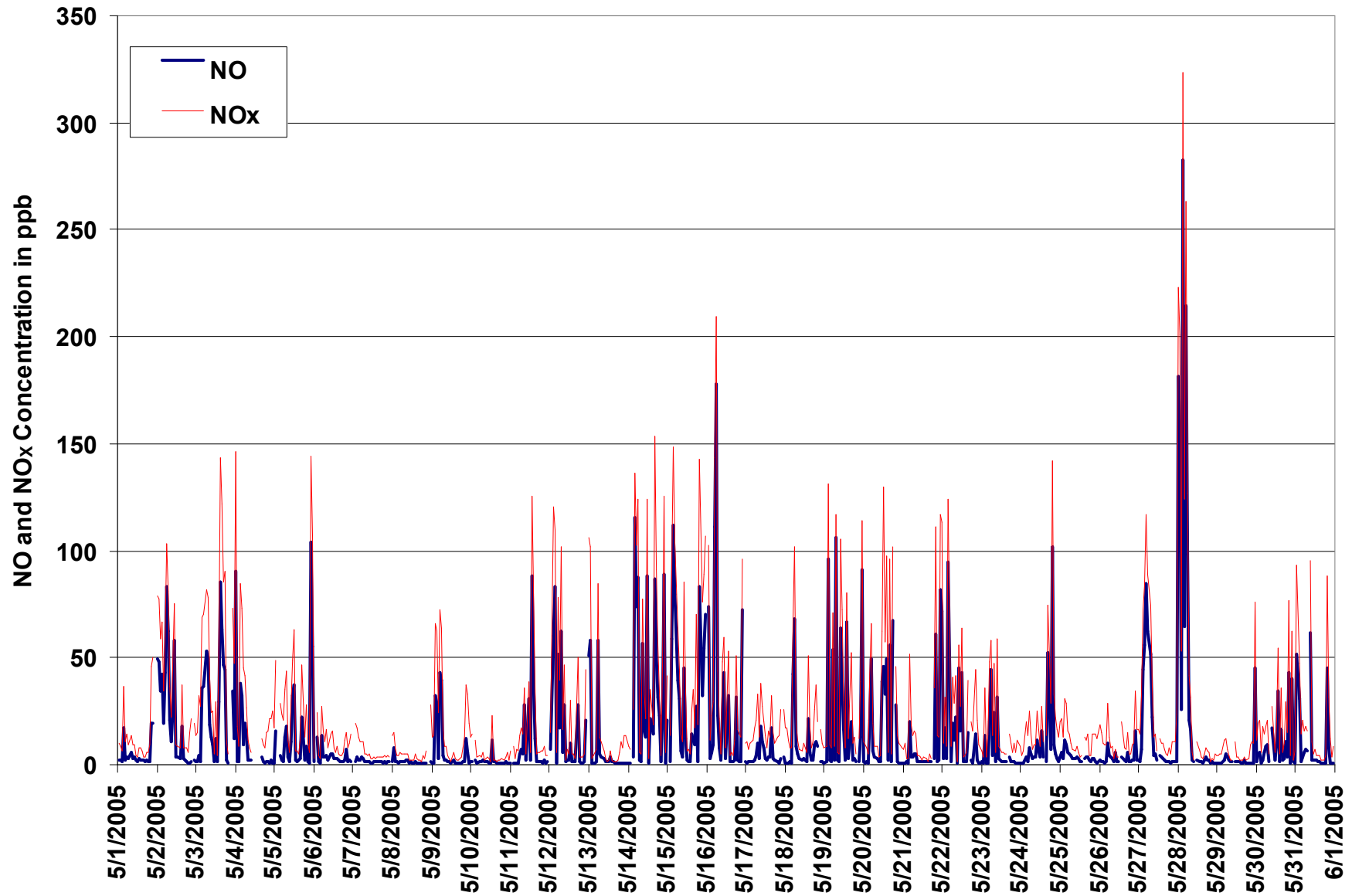


Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trend



PAS - Cresnet Heights Ozone Monthly Summary

Station: Cresnet Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

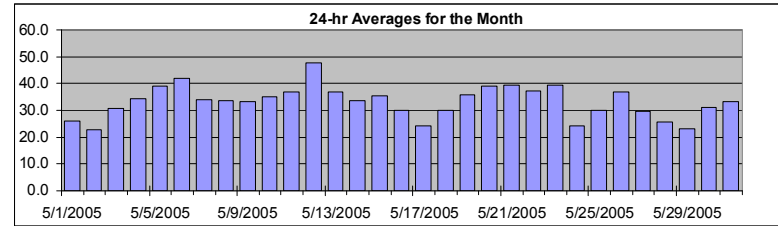
Ozone (O₃)

Monitoring Dates: May 1, 2005 to June 1, 2005

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

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	60.3	ppb	12-May	10:00 11:00
Maximum 24-hr Average:	47.7	ppb	12-May	

AIC Time:	33 hrs		Operational Time:	709 hrs				
Calibration Time:	2 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	56.6	51.2	43.6	34.3	23.9	11.6	1.4	33.2 ppb



Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-05	A	26	24	24	20	18	18	22	24	26	27	29	30	30	31	33	34	34	34	33	27	21	11	A	26.2	34.2
2-May-05	1	1	1	1	1	1	3	7	17	29	33	32	34	36	39	41	41	41	41	42	39	24	A	19	22.9	42.3
3-May-05	18	18	12	13	3	5	8	16	34	47	48	50	49	48	48	46	41	42	37	39	38	A	26	22	30.7	49.9
4-May-05	14	30	34	18	10	15	19	23	34	35	46	51	52	53	52	51	50	51	C	C	A	41	27	17	34.4	53.2
5-May-05	19	20	A	23	16	23	22	28	42	51	53	52	52	51	50	50	48	45	44	40	37	41	42	48	39.0	52.8
6-May-05	48	A	46	46	44	41	40	38	32	38	40	42	45	47	48	51	52	52	50	45	41	31	29	22	42.1	52.4
7-May-05	A	16	13	13	14	13	16	28	35	38	42	42	45	47	48	48	48	47	42	40	39	38	34	A	33.8	47.7
8-May-05	24	24	24	24	22	21	21	22	22	24	31	39	46	46	47	48	46	47	47	43	40	40	A	25	33.6	47.7
9-May-05	27	25	15	11	13	7	9	22	27	35	43	46	49	51	51	52	52	51	50	44	39	34	21	25	33.3	51.9
10-May-05	25	25	A	26	26	26	27	27	30	32	31	34	37	39	41	44	46	46	48	46	43	41	33	33	35.1	47.9
11-May-05	31	A	32	31	28	27	26	25	35	37	39	43	44	45	43	44	46	48	46	41	37	33	34	33	36.9	47.6
12-May-05	A	34	31	30	30	24	30	49	59	60	60	59	59	58	57	57	56	54	53	51	47	43	47	A	47.7	60.3
13-May-05	47	45	41	39	34	30	24	24	30	33	35	38	38	42	43	46	47	46	44	41	34	34	26	21	36.7	47.1
14-May-05	24	24	A	15	11	16	21	24	32	38	40	45	43	44	45	45	44	44	43	43	41	36	30	29	33.7	45.2
15-May-05	23	A	25	26	25	26	27	26	30	32	36	41	47	53	56	56	54	54	55	52	29	20	13	11	35.5	56.3
16-May-05	A	19	19	15	15	8	11	18	34	39	41	43	43	42	42	41	41	38	32	28	26	32	30	A	29.9	43.3
17-May-05	32	27	29	24	16	12	12	11	15	16	14	24	28	31	30	30	32	33	37	34	28	23	A	14	24.1	36.7
18-May-05	14	18	18	21	20	17	16	16	27	35	37	39	45	48	45	45	45	46	43	33	25	A	17	19	30.0	48.1
19-May-05	18	19	20	19	18	19	27	28	42	46	43	46	47	47	46	48	48	51	46	44	A	38	36	31	35.9	50.6
20-May-05	26	29	32	29	24	25	26	33	38	42	44	45	47	50	50	50	49	50	47	A	42	37	36	44	39.0	50.5
21-May-05	39	36	36	34	31	32	33	33	39	45	47	47	47	48	49	48	47	48	A	42	32	33	30	27	39.4	49.1
22-May-05	22	22	24	25	20	21	21	23	38	42	42	41	42	42	46	48	50	A	51	51	50	45	48	42	37.2	51.4
23-May-05	39	37	35	44	40	35	31	36	38	43	43	47	47	47	49	50	A	48	43	38	33	30	25	27	39.3	49.9
24-May-05	25	24	23	17	20	18	21	23	24	25	25	29	34	35	35	A	35	28	29	20	18	18	18	16	24.4	35.2
25-May-05	16	15	19	12	12	13	17	21	28	35	38	40	41	41	A	43	44	44	45	45	36	32	28	29	30.2	45.4
26-May-05	25	27	25	22	23	22	30	33	38	41	40	43	47	A	48	50	52	51	52	50	42	36	27	26	36.8	51.9
27-May-05	22	20	11	1	1	3	5	16	29	35	37	43	A	47	46	49	48	48	47	42	40	36	36	21	29.7	48.7
28-May-05	4	2	14	2	1	4	8	15	29	39	44	A	44	44	45	44	42	39	37	34	31	27	24	19	25.8	44.8
29-May-05	16	13	11	9	6	7	12	16	23	27	A	30	31	31	33	34	35	36	36	36	31	21	19	20	23.2	36.2
30-May-05	23	20	20	21	15	15	16	23	31	A	35	36	38	39	40	39	41	39	36	39	32	37	40	38	31.0	40.9
31-May-05	33	30	29	26	21	18	21	29	A	40	39	41	40	40	40	40	40	40	39	34	32	32	33	28	33.3	41.1
Hourly Avg	24.3	23.1	23.7	21.3	18.7	18.2	19.8	24.4	31.7	36.9	39.2	41.3	43.1	44.1	44.8	45.7	45.1	44.7	43.2	40.3	35.5	32.8	29.2	26.1		
Hourly Max	48.0	44.6	45.9	45.5	43.7	41.2	40.4	49.1	58.6	59.9	60.3	59.0	59.2	57.8	56.7	56.9	56.1	54.2	55.0	51.9	50.2	44.7	47.7	47.5		

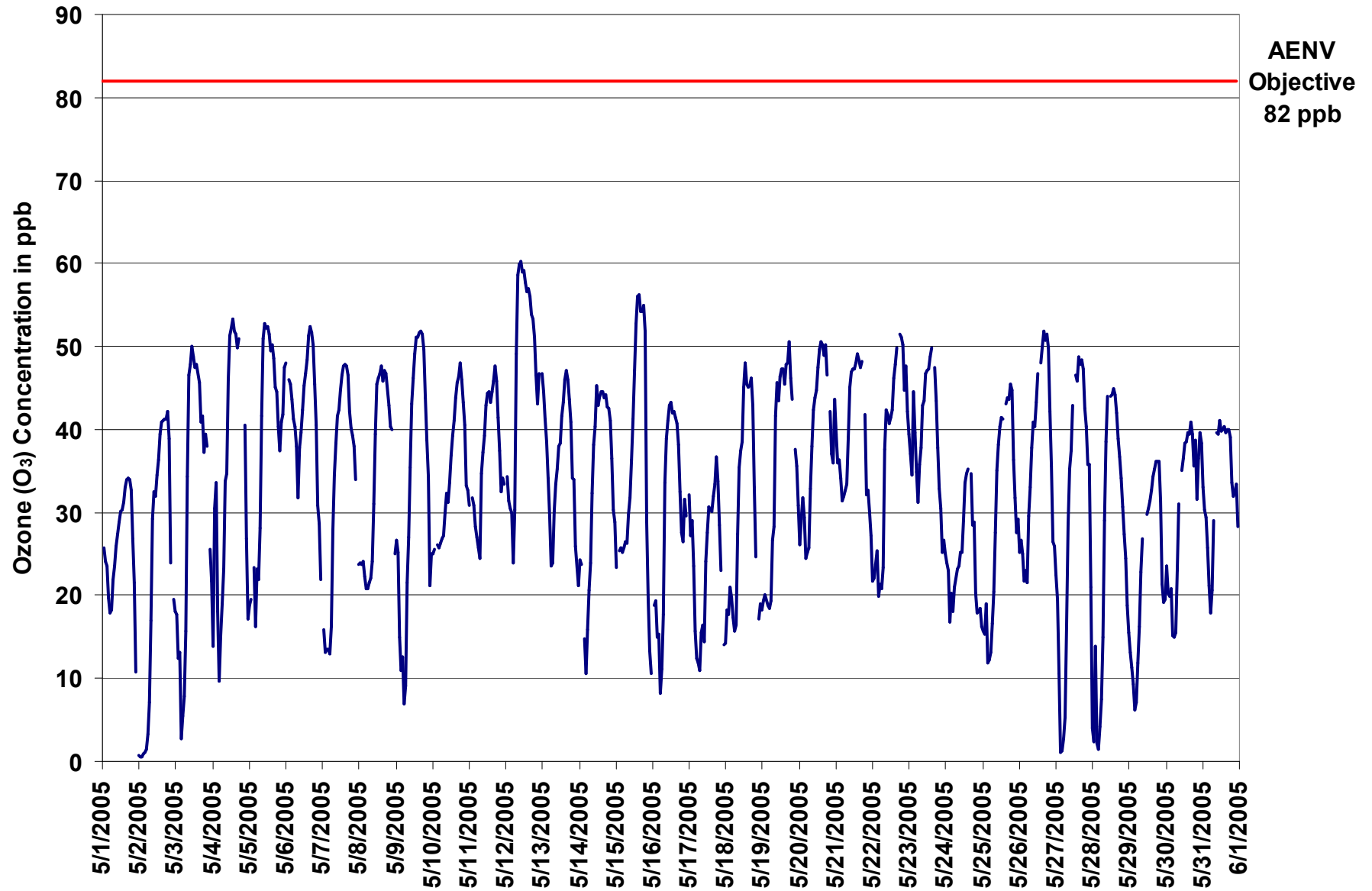


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

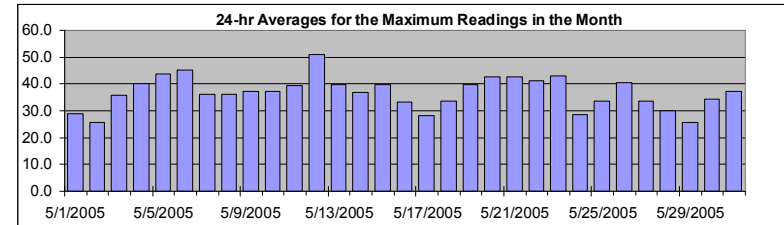
HOURLY MAXIMUM TABLE

Ozone (O₃)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Value:	67.4	ppb	15-May	18:00 19:00
Maximum 24-hr Value:	51.0	ppb	12-May	



AIC Time:	33 hrs	Operational Time:	709 hrs					
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	60.7	53.8	46.4	38.2	27.9	16.3	2.7	36.8 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-05	A	28	26	25	23	20	20	24	26	29	30	31	32	33	35	35	36	36	36	36	30	28	19	A	28.9	35.9
2-May-05	2	1	1	3	3	3	5	15	22	35	34	34	37	39	42	43	43	42	43	44	44	36	A	22	25.8	43.9
3-May-05	20	21	20	24	9	8	13	21	42	51	50	52	52	49	52	50	48	49	44	42	41	A	34	31	35.7	52.1
4-May-05	22	37	37	29	16	28	25	32	39	42	53	54	55	56	54	54	53	53	C	C	A	47	33	21	40.0	56.4
5-May-05	27	32	A	30	20	29	28	41	48	55	56	55	55	54	52	53	51	50	49	45	41	44	48	49	43.9	55.7
6-May-05	49	A	48	47	45	43	43	45	40	41	43	46	47	49	52	53	54	53	53	50	45	34	30	27	45.1	53.8
7-May-05	A	18	15	16	16	15	21	33	38	41	44	44	47	48	49	49	49	48	46	42	40	39	37	A	36.2	49.1
8-May-05	26	26	26	25	24	22	22	23	24	28	38	45	47	48	49	50	49	48	48	47	42	42	A	31	36.1	49.5
9-May-05	31	29	24	14	18	13	18	25	32	39	46	49	51	53	53	53	53	53	52	48	44	39	28	30	37.3	53.4
10-May-05	28	30	A	28	27	28	28	30	33	33	33	36	39	41	42	46	47	48	49	49	45	44	39	35	37.2	49.4
11-May-05	33	A	33	33	31	29	29	28	39	40	43	46	46	46	46	46	48	49	49	44	39	35	36	36	39.3	49.5
12-May-05	A	36	34	33	33	28	41	60	63	62	62	62	61	61	59	59	59	56	56	53	50	45	49	A	51.0	63.1
13-May-05	51	48	46	40	38	33	27	29	33	35	37	39	41	43	46	48	49	49	45	44	37	36	31	26	39.7	51.4
14-May-05	27	26	A	19	17	23	24	28	39	41	44	47	47	46	46	46	46	47	45	45	44	39	34	31	36.9	46.8
15-May-05	28	A	28	29	27	27	28	28	33	35	40	45	50	55	58	58	58	58	67	65	39	24	20	16	39.8	67.4
16-May-05	A	23	21	19	20	17	14	22	39	41	43	45	45	44	44	44	43	42	39	31	31	35	33	A	33.4	45.3
17-May-05	35	31	32	30	20	17	17	19	18	20	19	29	31	34	34	34	37	37	40	38	30	30	A	18	28.3	40.2
18-May-05	19	24	21	23	23	20	18	20	33	37	40	43	49	50	49	48	48	49	48	44	29	A	22	20	33.7	50.0
19-May-05	21	22	22	22	20	26	30	38	48	47	49	49	51	50	49	50	56	54	50	47	A	40	40	35	39.8	56.3
20-May-05	31	33	33	33	28	28	29	39	41	44	46	48	51	52	53	52	53	52	52	A	49	41	45	48	42.6	53.1
21-May-05	43	39	38	37	35	35	36	38	45	47	49	49	49	50	51	52	49	52	A	47	44	34	35	32	42.7	51.7
22-May-05	27	25	26	28	24	24	25	34	45	44	43	42	44	44	51	52	56	A	57	56	54	49	51	46	41.2	57.1
23-May-05	42	38	40	46	47	42	39	41	44	45	46	49	49	49	51	55	A	52	45	44	36	34	29	29	43.0	54.7
24-May-05	28	25	25	23	23	23	24	25	26	28	29	32	37	38	38	A	37	33	36	30	29	25	21	20	28.4	38.2
25-May-05	22	20	22	19	18	15	19	23	32	41	41	42	43	43	A	46	47	47	48	48	41	36	30	33	33.7	48.1
26-May-05	32	30	29	23	26	26	32	37	41	42	42	47	48	A	50	55	55	54	54	52	47	40	36	30	40.3	54.8
27-May-05	26	24	21	2	2	5	7	26	34	40	43	45	A	50	48	51	50	50	49	47	42	38	39	34	33.6	51.3
28-May-05	18	11	20	13	3	6	13	20	38	44	45	A	45	46	46	45	44	42	38	37	32	30	27	23	29.9	46.1
29-May-05	17	14	13	11	10	10	15	21	27	29	A	31	32	33	34	36	37	38	38	38	35	24	22	27	25.7	37.8
30-May-05	27	25	23	22	20	17	19	30	33	A	38	39	40	41	42	42	43	43	42	42	36	40	42	41	34.2	43.1
31-May-05	38	36	36	33	28	20	24	39	A	43	42	44	42	42	42	41	41	41	41	39	36	37	36	32	37.1	43.8
Hourly Avg	28.5	26.9	27.1	25.1	22.3	22.0	23.6	30.0	36.5	40.0	42.3	43.9	45.5	46.2	47.2	48.3	47.9	47.5	46.8	44.6	39.7	36.8	33.7	30.4		
Hourly Max	51.4	48.5	48.2	47.0	46.7	43.4	43.2	59.8	63.1	62.3	62.4	61.8	61.2	60.8	58.8	59.2	58.5	57.8	67.4	64.9	53.8	49.5	50.7	49.3		

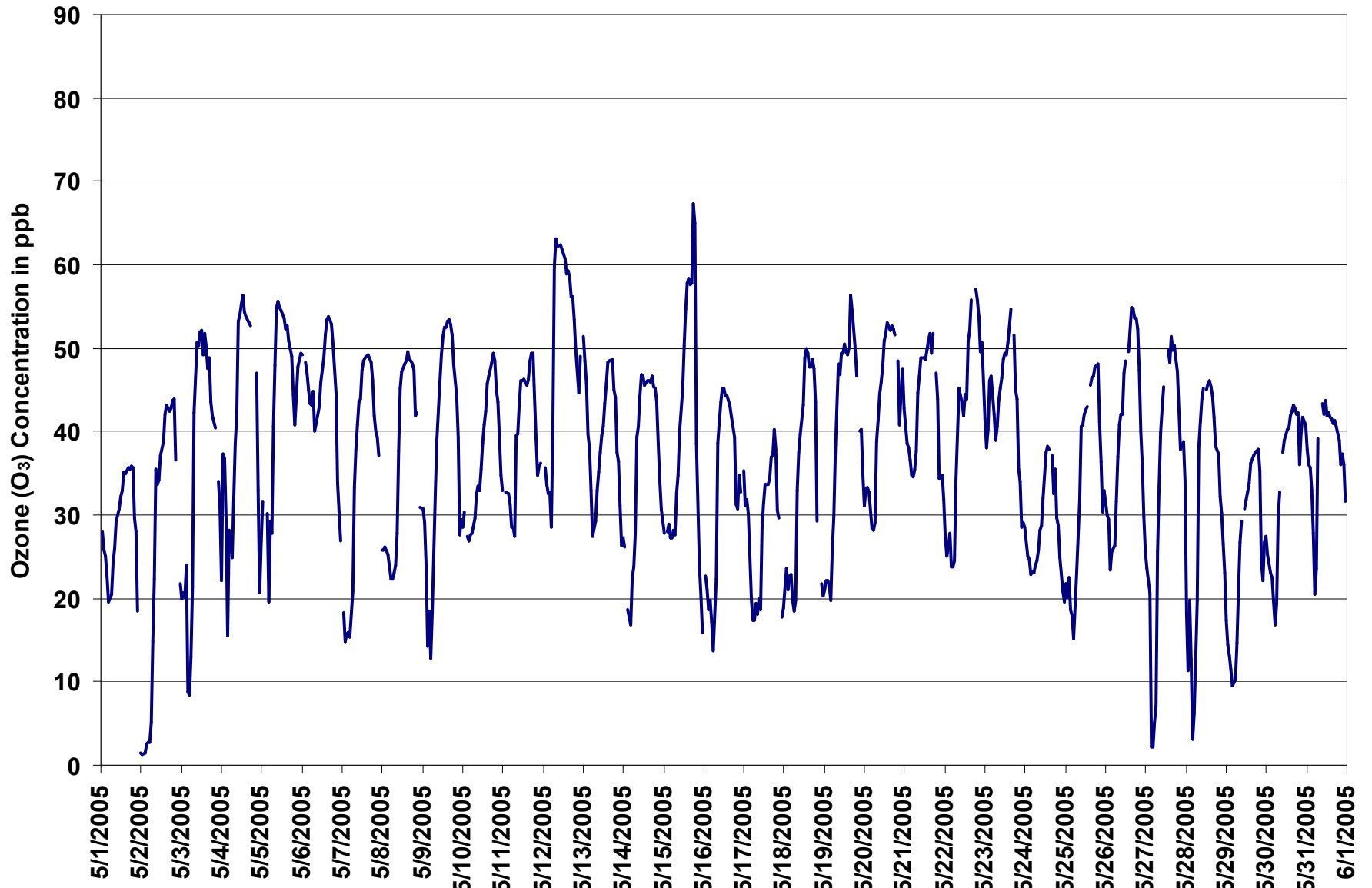
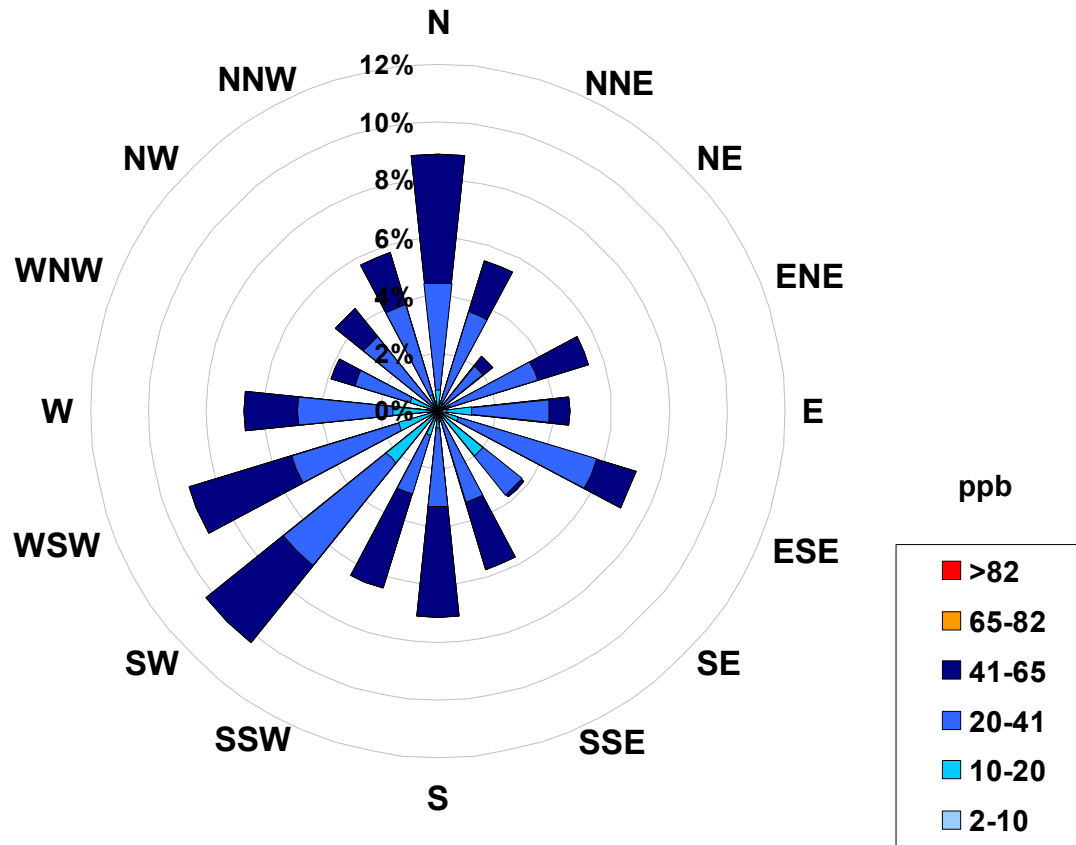


Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend



Concentration Rose for the 1-hr Ozone Average Concentration Occurrences at the Crescent Heights Site for May 2005



Calms:	3%
---------------	-----------

Frequency Distribution of O ₃ in ppb			
Range		Frequency (hrs)	
2.0	< 10		28
10	to 20		94
20	to 41		352
41	to 65		235
65	to 82		0
	> 82		0
Total Non-Zero Values			709



PAS - Cresnet Heights Ozone Monthly Summary

Station: Cresnet Heights
 Station Owner: PAS

EIGHT HOUR RUNNING AVERAGE TABLE

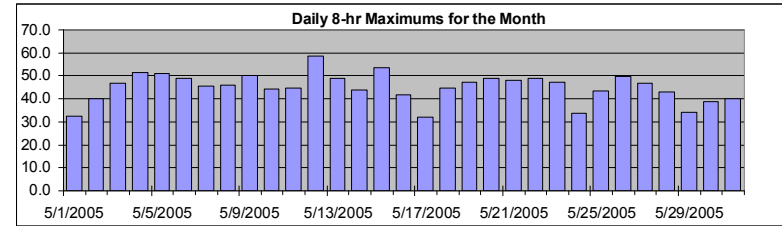
Ozone (O₃)

Monitoring Dates: May 1, 2005 to June 1, 2005

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

Number of 8-hr Exceedances:	0		
Maximum 8-hr Average:	58.5 ppb	12-May	15:00 16:00

Percentile	99	95	75	50	25	5	1
	53.8	48.5	41.8	33.6	25.0	15.1	8.0



Status Flag Characters

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

Day	Mountain Standard Time																							Daily Maximum	
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	
1-May-05	11	12	14	15	16	18	20	22	22	22	23	24	26	27	29	30	31	32	32	32	31	28	28	32.4	
2-May-05	23	18	13	9	5	2	1	2	4	8	12	15	20	24	29	33	36	37	38	40	40	39	39	35	40.2
3-May-05	32	29	25	21	15	13	12	12	14	17	22	26	32	37	42	46	47	46	45	44	42	38	35	46.9	
4-May-05	31	29	29	26	22	21	20	20	23	23	25	29	34	39	43	47	49	51	52	N	N	N	N	51.5	
5-May-05	N	N	N	N	23	21	20	22	25	29	32	36	40	44	47	50	51	50	49	48	46	45	44	43	51.0
6-May-05	43	43	43	44	45	45	45	43	41	41	40	39	40	40	41	43	45	47	49	49	48	46	44	40	48.9
7-May-05	38	33	28	23	20	17	15	16	18	21	25	28	32	37	40	43	45	46	46	45	45	44	42	41	45.7
8-May-05	38	34	32	29	27	25	23	23	22	23	25	28	31	35	38	41	44	46	46	45	45	44	41	41	46.1
9-May-05	38	35	31	26	22	17	16	16	16	17	21	25	30	35	41	44	47	49	50	50	49	47	43	39	50.3
10-May-05	36	33	31	28	26	25	26	26	27	28	28	29	31	32	34	36	38	40	42	43	44	44	43	42	44.3
11-May-05	40	39	37	35	33	31	30	28	29	30	31	32	34	37	39	41	43	44	45	45	44	42	41	40	44.9
12-May-05	39	37	35	33	32	31	31	33	36	39	43	46	50	54	58	59	58	57	57	56	54	52	51	50	58.5
13-May-05	49	47	46	44	42	40	37	35	33	32	31	31	32	33	35	38	40	42	43	43	43	42	40	37	48.8
14-May-05	34	31	29	25	22	19	19	19	20	22	25	28	32	36	39	41	43	44	44	44	43	42	41	39	44.0
15-May-05	36	35	33	30	28	26	26	25	26	27	28	30	33	36	40	44	47	50	52	53	51	47	42	36	53.4
16-May-05	33	28	23	18	16	14	14	15	17	20	23	26	30	34	38	41	42	41	40	38	36	35	34	32	41.5
17-May-05	31	30	29	29	27	24	22	20	18	17	15	15	17	19	21	24	26	28	31	32	32	31	31	29	31.9
18-May-05	26	24	21	20	18	17	17	18	19	21	24	26	29	33	37	40	43	44	45	44	41	40	36	33	44.6
19-May-05	29	25	22	20	19	19	20	21	24	27	30	34	37	41	43	46	46	47	47	47	47	46	44	42	47.4
20-May-05	39	36	34	32	31	29	28	28	30	31	33	35	38	41	44	46	47	48	49	49	48	47	44	44	49.1
21-May-05	42	40	39	38	37	36	36	34	34	36	37	38	40	42	45	46	47	48	48	47	45	43	40	37	47.9
22-May-05	33	30	29	27	25	24	23	22	24	27	29	31	34	36	40	43	44	44	46	47	48	49	49	48	49.0
23-May-05	47	45	43	43	41	40	38	37	37	38	39	39	40	42	44	46	47	47	47	46	44	42	38	35	47.3
24-May-05	34	31	28	25	24	22	22	21	21	21	22	23	25	27	29	30	31	32	32	31	29	26	24	23	33.6
25-May-05	20	19	18	17	16	15	15	16	17	20	22	25	29	33	35	38	40	42	43	43	43	41	40	38	43.3
26-May-05	35	33	31	28	26	25	25	26	27	29	31	34	37	39	41	44	46	47	49	50	49	47	45	42	49.8
27-May-05	38	34	29	23	18	14	11	10	11	13	16	21	24	30	36	41	44	45	47	47	46	45	43	40	46.8
28-May-05	34	29	24	19	15	11	7	6	9	14	18	20	26	32	37	41	43	43	42	41	39	37	35	32	43.1
29-May-05	28	25	22	19	16	13	12	11	12	14	14	17	21	24	27	30	32	33	33	34	34	33	31	29	34.2
30-May-05	28	26	24	22	20	19	19	19	20	20	22	24	28	31	35	37	38	38	39	39	38	38	38	38	38.8
31-May-05	37	35	35	33	32	29	27	26	25	26	28	30	33	36	38	40	40	40	40	39	38	37	36	35	40.0

Hourly Max 48.8 47.5 45.7 44.0 44.8 44.8 44.6 43.3 40.9 40.5 42.8 46.4 50.0 54.3 57.6 58.5 58.2 57.5 56.6 55.6 54.0 52.2 51.0 50.1



PAS - Crescent Heights Total Hydrocarbons Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

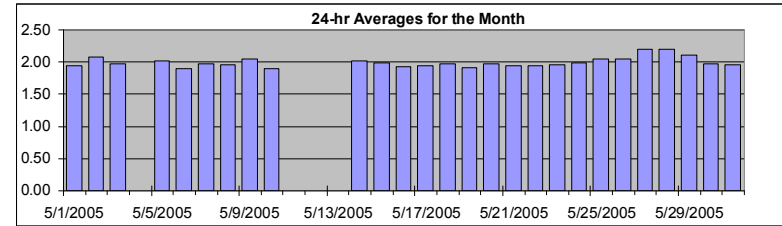
HOURLY AVERAGE TABLE

Total Hydrocarbons (THC)

Monitoring Dates: May 1, 2005 to June 1, 2005

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

Maximum 1-hr Average:	2.9	ppm	27-May	4:00 5:00
Maximum 24-hr Value:	2.2	ppm	27-May	



AIC Time:	33 hrs	Operational Time:	640 hrs					
Calibration Time:	12 hrs	AMD Operational Uptime:	92.1%					
Percentile	99	95	75	50	25	5	1	Average
	2.5	2.3	2.0	2.0	1.9	1.9	1.8	2.0 ppm

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00	0:00		
1-May-05	A	1.9	1.9	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	1.8	1.8	1.9	2.0	2.0	2.0	A	A	1.94	2.04	
2-May-05	2.2	2.4	2.4	2.2	2.3	2.3	2.4	2.2	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.07	2.42	
3-May-05	2.0	2.0	2.1	2.3	2.3	2.2	2.4	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.9	1.97	2.40		
4-May-05	2.0	2.0	1.9	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	C	C	C	C	C	C	A	A	1.9	N	2.20		
5-May-05	2.0	2.1	A	2.1	2.2	2.1	2.2	2.3	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.02	2.30	
6-May-05	1.9	A	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.89	1.97		
7-May-05	A	2.3	2.1	2.3	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	A	1.97	2.28	
8-May-05	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	1.95	2.06	
9-May-05	1.9	2.0	2.2	2.5	2.3	2.3	2.5	2.4	2.2	2.0	1.9	1.9	1.7	1.7	1.8	1.8	1.7	1.8	1.8	1.9	2.0	1.9	2.3	2.4	2.05	2.50		
10-May-05	2.2	2.1	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.90	2.20	
11-May-05	1.9	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1.88
12-May-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
13-May-05	N	N	N	N	N	N	N	N	N	N	N	N	N	C	C	C	C	C	A	D	2.1	2.1	2.1	2.1	N	N	2.08	
14-May-05	2.0	2.0	A	2.1	2.1	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.01	2.22	
15-May-05	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.1	2.1	2.2	2.2	1.99	2.19	
16-May-05	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.93	2.08	
17-May-05	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	A	2.1	1.95	2.11	
18-May-05	2.1	2.1	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	1.9	1.9	1.9	A	2.0	1.9	1.97	2.12	
19-May-05	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.91	1.95	
20-May-05	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	1.97	2.01	
21-May-05	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.94	2.00	
22-May-05	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	A	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.03	
23-May-05	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.01	
24-May-05	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	1.99	2.04	
25-May-05	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.05	2.14	
26-May-05	2.1	2.0	2.2	2.3	2.2	2.2	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.04	2.34	
27-May-05	2.4	2.6	2.6	2.6	2.9	2.5	2.5	2.3	2.2	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.2	2.2	2.20	2.86	
28-May-05	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.3	2.2	2.1	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.19	2.53	
29-May-05	2.3	2.3	2.3	2.4	2.5	2.5	2.4	2.3	2.2	2.1	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.11	2.50	
30-May-05	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	A	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.97	2.06	
31-May-05	1.9	2.0	2.0	2.1	2.2	2.1	2.0	2.0	A	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	1.95	2.17	
Hourly Avg	2.03	2.07	2.06	2.10	2.11	2.10	2.11	2.06	2.01	1.97	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.96	1.97	1.99	2.02				
Hourly Max	2.41	2.55	2.65	2.56	2.86	2.53	2.53	2.39	2.25	2.11	2.08	2.04	2.03	2.01	2.03	2.06	2.06	2.07	2.08	2.10	2.11	2.13	2.27	2.40				

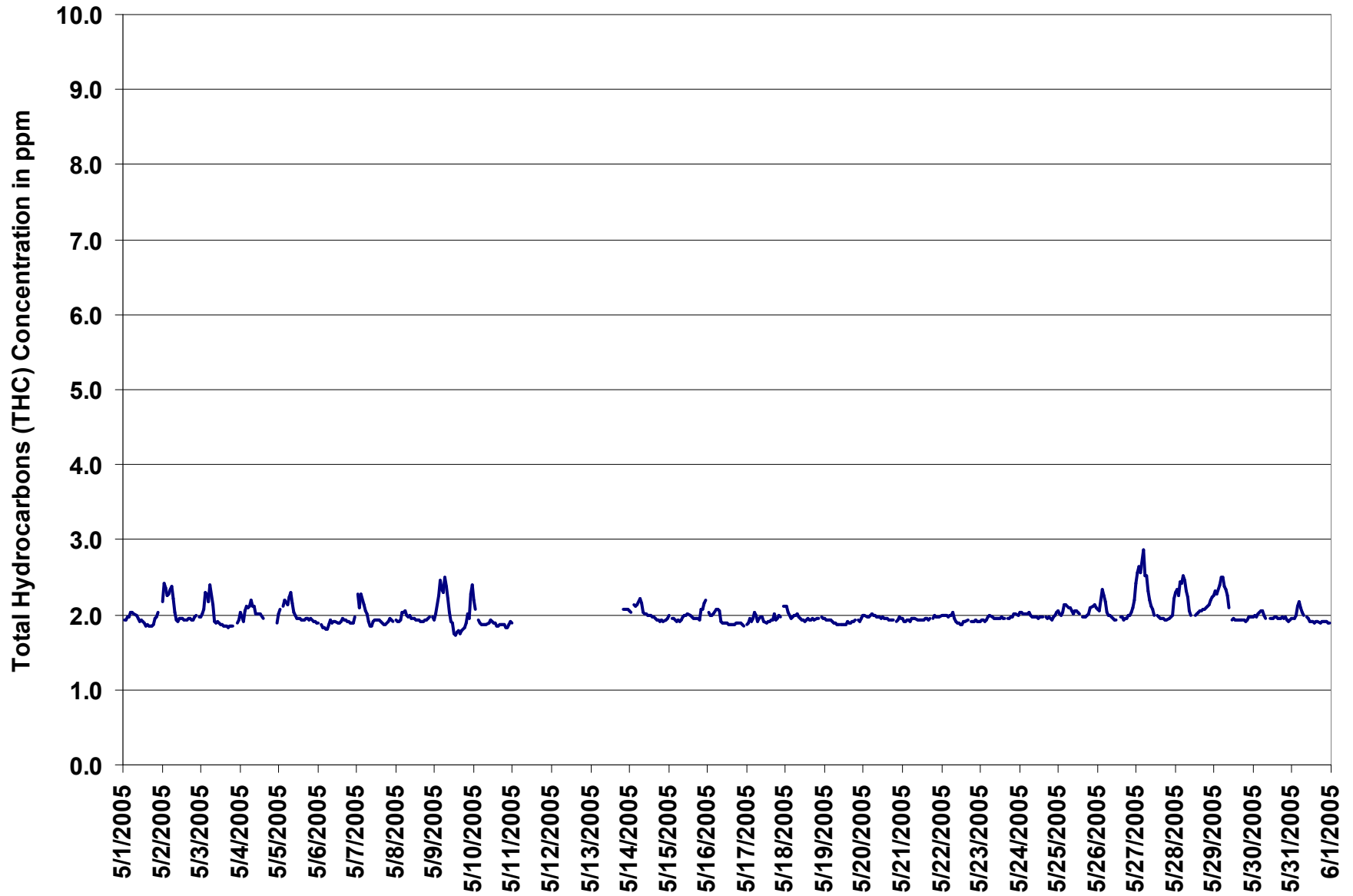


Figure 7. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

HOURLY MAXIMUM TABLE

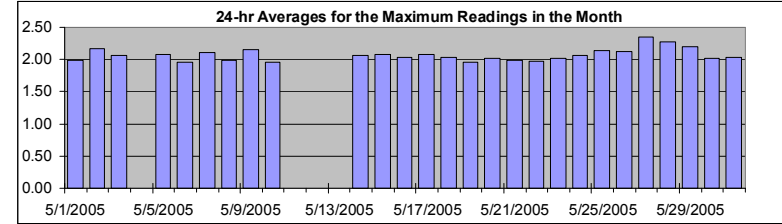
Total Hydrocarbons (THC)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Value:	3.4	ppm	27-May	2:00 3:00
Maximum 24-hr Value:	2.3	ppm	27-May	

AIC Time:	33 hrs	Operational Time:	640 hrs					
Calibration Time:	12 hrs	AMD Operational Uptime:	92.1%					
Percentile	99	95	75	50	25	5	1	Average
	2.9	2.5	2.1	2.0	2.0	1.9	1.9	2.1 ppm



Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-May-05	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.2	A	1.98	2.15	
2-May-05	2.3	2.9	2.8	2.3	2.3	2.4	2.5	2.3	2.1	2.0	1.9	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.1	2.1	2.1	A	2.0	2.16	2.91	
3-May-05	2.0	2.0	2.2	2.4	2.5	2.3	2.8	2.4	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	A	1.9	2.1	2.06	2.81	
4-May-05	2.2	2.1	2.0	2.1	2.2	2.2	2.3	2.3	2.2	2.3	2.1	2.0	2.1	2.1	2.0	C	C	C	C	C	C	A	A	1.9	N	2.31
5-May-05	2.1	2.2	A	2.3	2.3	2.2	2.3	2.4	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	2.08	2.38
6-May-05	1.9	A	1.9	1.9	1.8	1.9	1.8	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.2	1.9	2.0	1.9	2.2	1.95	2.20	
7-May-05	A	3.0	2.1	3.3	2.6	2.2	2.1	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	A	2.11	3.35	
8-May-05	2.0	1.9	1.9	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	A	2.0	1.99	2.11	
9-May-05	2.0	2.2	2.3	2.6	2.5	2.4	2.7	2.6	2.3	2.1	2.0	2.0	1.8	1.9	1.8	1.8	1.8	1.9	2.0	2.1	2.0	2.5	2.6	2.16	2.75	
10-May-05	2.3	2.2	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.96	2.35	
11-May-05	1.9	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1.93
12-May-05	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.00
13-May-05	N	N	N	N	N	N	N	N	N	N	N	N	C	C	C	C	C	A	D	2.2	2.2	2.2	2.1	N	2.21	
14-May-05	2.1	2.1	A	2.2	2.2	2.2	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.37
15-May-05	2.1	A	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.8	2.1	2.4	2.3	2.07	2.75
16-May-05	A	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.0	1.9	2.1	2.3	2.2	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	A	2.04	2.32	
17-May-05	1.9	2.0	2.2	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	3.1	2.0	2.0	2.1	2.0	A	2.2	2.07	3.11	
18-May-05	2.2	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	A	2.0	2.0	2.03	2.20
19-May-05	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	2.0	2.1	1.9	1.9	2.0	2.1	A	2.0	2.0	2.0	1.96	2.08	
20-May-05	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.0	2.0	2.0	2.02	2.08	
21-May-05	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.0	1.99	2.08	
22-May-05	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	1.9	1.9	2.0	1.9	1.9	1.98	2.14
23-May-05	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.02	2.14
24-May-05	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.3	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.06	2.34
25-May-05	2.2	2.0	2.1	2.1	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	A	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.2	2.2	2.14	2.34
26-May-05	2.2	2.1	2.4	2.4	2.4	2.3	2.1	2.0	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.13	2.43
27-May-05	2.6	3.3	3.4	2.6	3.2	2.6	2.6	2.5	2.2	2.2	2.2	2.0	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.3	2.35	3.40
28-May-05	2.5	2.5	2.4	2.6	2.5	2.6	2.5	2.4	2.4	2.2	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.28	2.62
29-May-05	2.3	2.5	2.3	2.6	2.7	2.5	2.4	2.3	2.3	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.19	2.69
30-May-05	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.02	2.13
31-May-05	2.0	2.0	2.1	2.4	2.3	2.3	2.1	2.0	A	2.3	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	2.0	2.03	2.37
Hourly Avg	2.11	2.21	2.18	2.22	2.21	2.19	2.20	2.15	2.08	2.05	2.02	2.00	1.98	1.99	1.97	1.96	1.96	2.01	1.98	2.00	2.05	2.04	2.07	2.10		
Hourly Max	2.58	3.28	3.40	3.35	3.16	2.65	2.81	2.63	2.36	2.31	2.18	2.32	2.20	2.34	2.06	2.11	2.11	3.11	2.13	2.19	2.75	2.34	2.52	2.57		

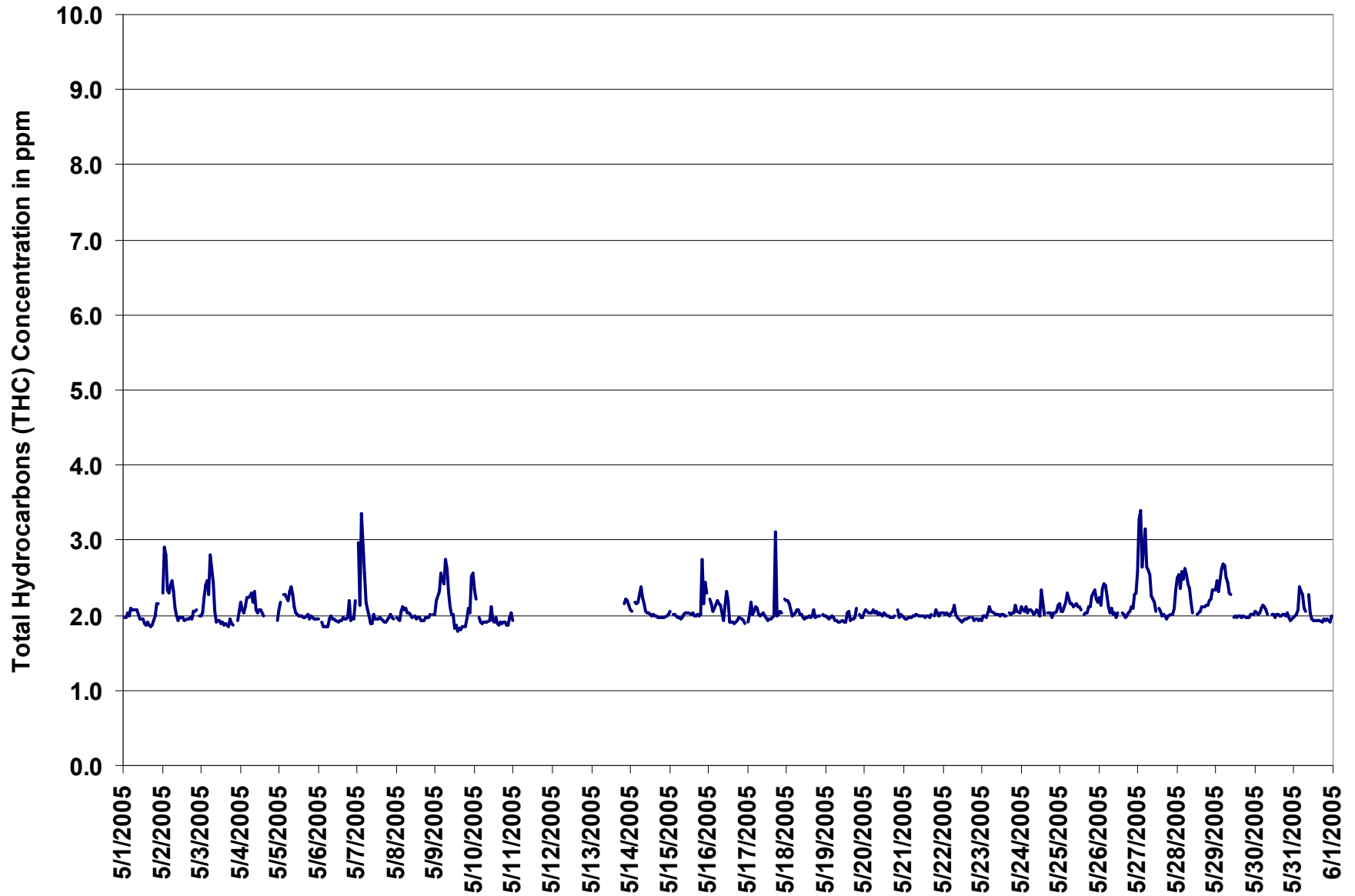
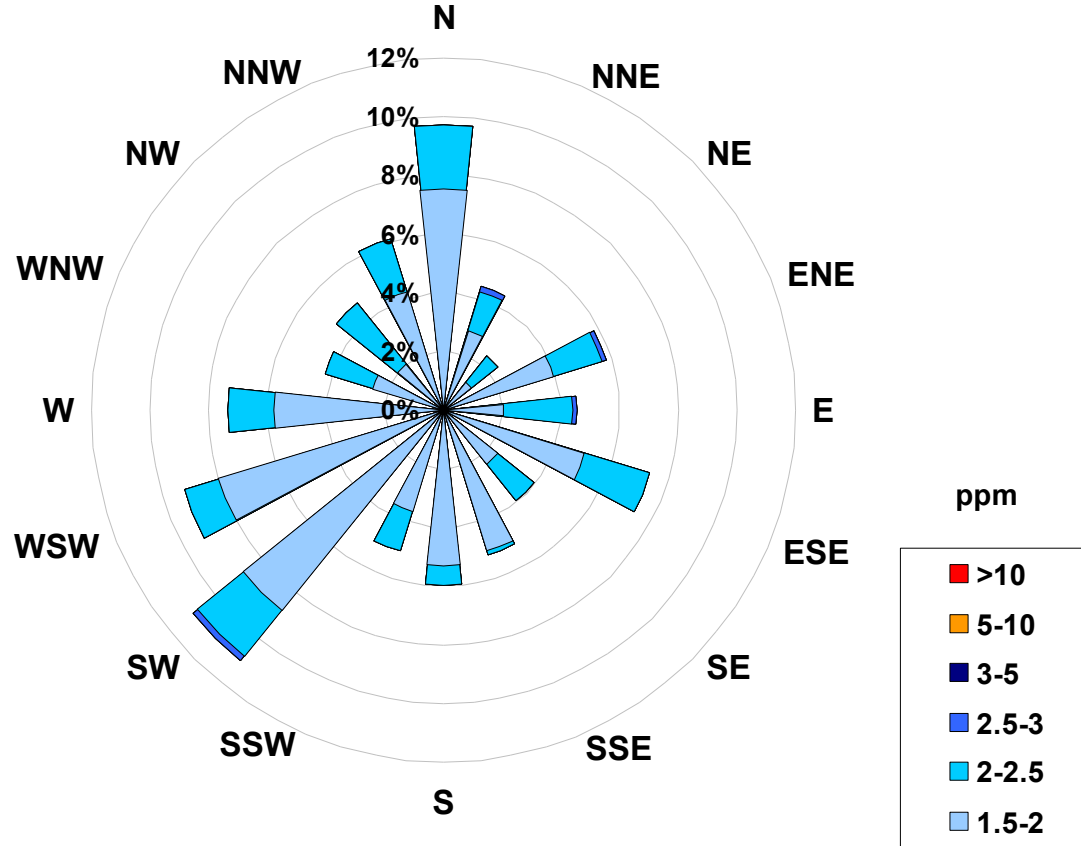


Figure 8. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend



**Concentration Rose for the 1-hr Total Hydrocarbons Average
Concentration Occurrences at the Crescent Heights Site for May 2005**



Calms: 3%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	449
2	to	2.5	182
2.5	to	3	9
3	to	5	0
5	to	10	0
	>	10	0
Total Non-Zero Values			640



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

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

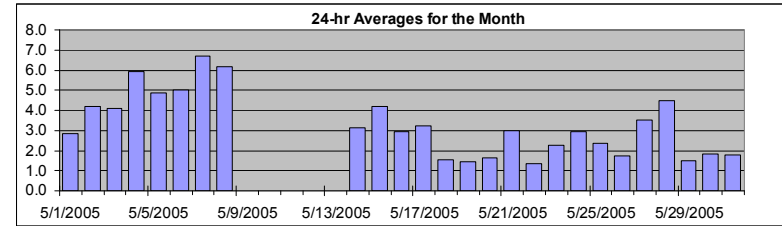
Particulate Matter (PM_{2.5})

Monitoring Dates: May 1, 2005 to June 1, 2005

Draft Objective Limit: Alberta Environment: 1-hr - μg/m³ 24-hr 30 μg/m³
 Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	13.7 μg/m ³ 28-May 4:00 5:00
Maximum 24-hr Value:	6.7 μg/m ³ 7-May

AIC Time:	0 hrs	Operational Time:	685 hrs
Calibration Time:	6 hrs	AMD Operational Uptime:	92.9%
Percentile	99	95	75
	9.1	7.6	4.7
	2.8	1.5	0.0
	5	1	0.0
	Average	3.3 μg/m ³	
	Geomean	2.9 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																							24-hour Average	Daily Maximum			
	Hour Start	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	0:00	
1-May-05	0:00	1	1	2	2	2	3	4	3	2	1	1	0	0	2	3	3	3	3	4	5	6	4	5	7	2.8	7.3	
2-May-05	1:00	6	6	5	5	4	7	9	9	5	2	4	4	3	3	2	2	3	3	3	2	3	7	3	3	4.2	8.6	
3-May-05	2:00	3	3	3	2	4	5	6	6	2	1	2	1	2	3	3	4	7	7	6	8	6	4	5	5	4.1	8.0	
4-May-05	3:00	7	5	4	6	6	7	6	7	6	7	7	8	9	9	2	4	4	4	4	5	7	5	6	7	5.9	9.1	
5-May-05	4:00	5	5	6	5	5	6	6	7	6	4	4	4	5	4	4	3	4	5	5	5	5	4	4	7	4.9	7.3	
6-May-05	5:00	5	4	4	4	5	6	5	5	6	2	3	3	4	4	5	5	5	6	7	7	7	7	4	7	5.0	7.4	
7-May-05	6:00	6	5	4	5	5	5	5	8	9	9	8	7	3	7	8	8	9	9	9	8	8	6	6	5	6.7	9.3	
8-May-05	7:00	4	4	5	5	6	6	6	6	6	7	5	6	5	7	8	9	9	7	6	6	6	7	6	7	6.2	9.0	
9-May-05	8:00	6	6	6	7	D	D	D	10	9	9	7	5	6	C	C	C	C	C	1	7	8	6	7	6	N	10.4	
10-May-05	9:00	7	7	6	3	4	2	D	D	D	D	D	D	1	1	1	1	2	2	2	3	3	D	D	D	N	7.2	
11-May-05	10:00	D	D	D	D	D	D	D	D	D	D	D	2	2	2	1	2	1	1	3	3	2	2	D	D	N	3.2	
12-May-05	11:00	D	D	D	D	D	D	D	D	D	D	D	1	1	1	2	3	2	2	3	3	3	D	D	D	N	3.0	
13-May-05	12:00	D	D	D	D	D	D	D	D	D	D	D	D	D	0	0	0	0	0	1	1	2	2	3	3	N	2.6	
14-May-05	13:00	1	2	2	2	3	3	2	3	2	2	2	3	5	4	3	3	3	3	3	4	6	5	5	3	3.1	6.4	
15-May-05	14:00	4	4	3	2	2	3	2	2	3	4	5	5	5	4	4	4	3	4	3	5	8	7	8	9	4.2	8.8	
16-May-05	15:00	4	4	4	4	4	7	6	8	4	1	1	0	0	0	0	0	0	0	2	3	4	5	4	4	2.9	7.9	
17-May-05	16:00	2	3	2	2	2	4	4	4	9	12	5	2	3	2	2	3	3	1	1	2	2	2	3	3	3.2	12.0	
18-May-05	17:00	3	2	0	0	0	2	3	4	2	1	2	2	0	0	D	0	0	0	1	1	3	2	2	2	1	1.5	4.2
19-May-05	18:00	2	0	1	1	1	0	2	1	0	1	1	0	1	0	1	1	1	3	3	3	4	2	2	3	1.4	3.6	
20-May-05	19:00	2	2	2	2	3	2	3	2	0	0	0	0	0	0	0	2	2	1	4	4	3	5	0	1	1.6	5.3	
21-May-05	20:00	1	1	3	3	3	3	5	5	4	3	3	1	1	4	4	5	2	2	2	2	6	4	3	2	3.0	6.3	
22-May-05	21:00	2	1	1	0	2	1	2	3	0	1	2	1	0	0	0	0	0	2	1	1	3	5	2	3	1.3	5.1	
23-May-05	22:00	2	1	4	8	3	5	3	2	0	0	0	0	0	0	0	0	1	6	4	6	3	1	2	2	2.3	7.6	
24-May-05	23:00	1	2	2	2	3	2	3	2	3	2	4	0	3	3	3	3	3	5	7	4	4	4	2	3	3.0	6.6	
25-May-05	0:00	3	1	1	1	2	3	3	4	3	0	2	2	2	1	0	1	2	3	7	4	4	3	3	3	2.4	6.9	
26-May-05	1:00	4	3	2	2	3	2	1	2	0	1	1	0	0	1	1	0	0	1	1	2	4	3	3	3	1.7	4.1	
27-May-05	2:00	3	4	6	5	6	8	10	6	5	2	1	0	0	0	1	2	2	1	2	2	3	3	4	6	3.5	10.3	
28-May-05	3:00	9	9	4	6	14	8	10	6	4	3	2	2	2	2	3	4	5	4	3	2	2	2	1	2	4.5	13.7	
29-May-05	4:00	1	1	0	1	2	4	5	5	2	0	1	1	1	0	0	0	1	0	1	0	1	3	3	3	1.5	5.2	
30-May-05	5:00	3	1	2	1	3	4	5	5	0	1	0	1	1	1	1	1	1	1	1	1	2	4	2	2	1.8	4.6	
31-May-05	6:00	2	2	2	1	2	3	4	4	2	4	3	3	2	3	3	1	1	0	0	1	1	0	0	0	1.8	4.2	
Hourly Avg		3.5	3.2	3.1	3.1	3.6	4.0	4.9	4.6	3.4	2.9	2.6	2.2	2.1	2.5	2.2	2.4	2.7	2.8	3.2	3.6	4.2	3.9	3.6	4.0			
Hourly Max		9.0	9.0	6.2	7.6	13.7	8.4	10.4	8.6	9.0	12.0	8.3	8.5	9.1	8.5	8.1	8.5	9.0	8.7	8.6	8.0	8.2	7.2	8.2	8.8			

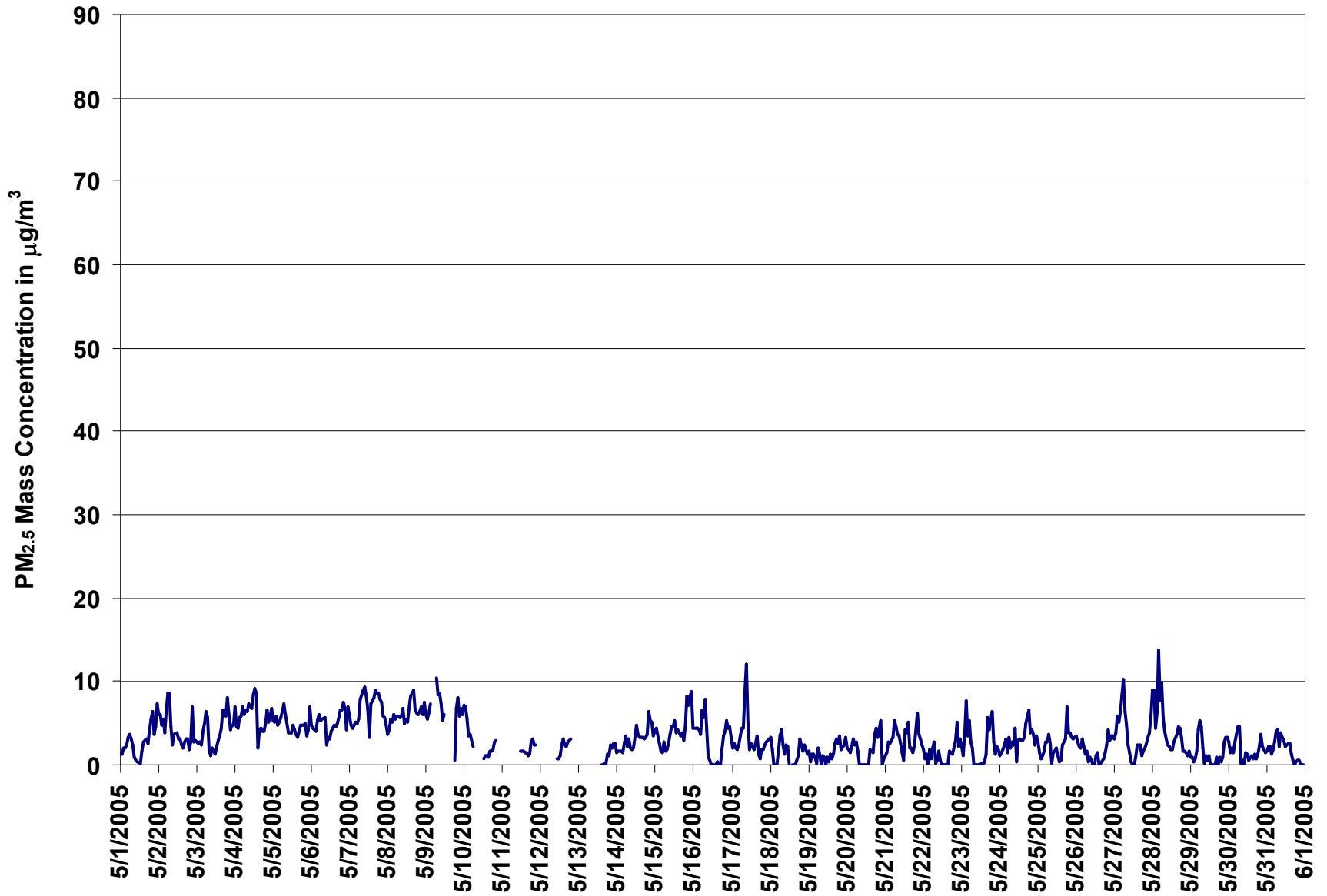


Figure 9. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

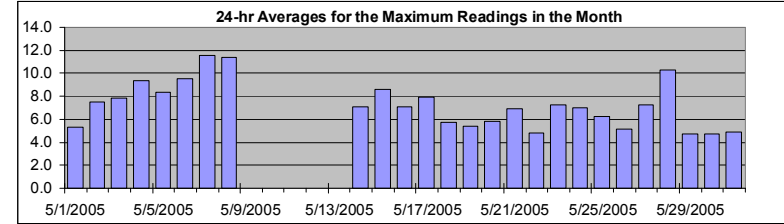
HOURLY MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Average:	41.6	µg/m ³	28-May	4:00 5:00
Maximum 24-hr Value:	11.5	µg/m ³	7-May	



AIC Time:	0 hrs	Operational Time:	685 hrs						
Calibration Time:	6 hrs	AMD Operational Uptime:	92.9%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	16.4	13.1	8.9	6.5	4.9	3.3	2.3	7.2 µg/m ³	7.0 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																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-May-05	4	4	5	5	5	6	8	5	5	3	3	3	2	4	5	5	6	5	6	8	9	6	8	10	5.3	9.7
2-May-05	8	9	7	8	6	10	12	11	7	5	7	10	8	8	7	6	6	6	7	5	7	9	5	4	7.5	11.6
3-May-05	5	4	6	4	9	10	11	9	7	6	7	5	7	7	7	9	9	11	8	12	9	9	7	9	7.8	11.9
4-May-05	13	7	6	9	9	12	8	9	9	11	10	13	12	12	6	7	8	7	8	9	12	8	9	10	9.4	13.5
5-May-05	7	8	9	7	8	8	9	11	11	9	8	8	9	8	7	8	8	8	7	8	8	7	8	11	8.4	11.2
6-May-05	8	9	8	8	9	10	10	14	11	8	9	7	7	9	9	8	9	10	10	10	12	12	9	13	9.5	13.9
7-May-05	10	9	8	9	9	10	10	13	13	13	12	12	8	13	12	13	14	15	13	15	12	13	10	9	11.5	15.4
8-May-05	8	9	10	10	10	11	10	10	10	13	11	11	11	13	14	14	15	12	11	10	12	12	13	14	11.4	15.3
9-May-05	10	9	11	12	D	D	17	15	14	12	9	11	C	C	C	C	C	C	4	19	13	12	10	10	N	19.3
10-May-05	12	11	10	7	6	5	D	D	D	D	D	D	3	5	4	5	4	7	7	6	5	D	D	D	N	11.6
11-May-05	D	D	D	D	D	D	D	D	D	D	D	D	6	4	5	6	6	5	6	4	5	D	D	D	N	5.9
12-May-05	D	D	D	D	D	D	D	D	D	D	4	3	5	6	8	5	5	6	6	6	D	D	D	D	N	7.6
13-May-05	D	D	D	D	D	D	D	D	D	D	D	D	D	D	3	4	4	4	6	4	5	6	6	6	N	6.4
14-May-05	4	4	4	4	5	9	8	6	5	4	5	7	9	8	7	7	8	6	7	11	15	11	9	7	7.1	15.3
15-May-05	8	10	6	5	5	12	6	5	5	8	9	8	10	8	9	7	7	9	9	9	13	15	15	13	8.6	15.0
16-May-05	8	8	9	8	7	10	11	12	11	4	4	3	2	4	4	4	3	4	7	7	7	11	9	10	7.1	11.9
17-May-05	8	6	6	7	6	7	8	9	16	17	13	7	7	6	6	7	7	7	5	7	6	7	9	8	8.0	16.6
18-May-05	8	6	5	2	3	5	10	8	7	6	6	6	6	D	5	4	4	4	5	9	5	6	8	6	5.7	10.0
19-May-05	6	4	7	5	4	5	5	4	4	4	4	2	6	4	5	5	5	6	7	5	6	6	9	8	5.4	9.2
20-May-05	6	5	5	6	6	6	8	6	3	3	3	2	5	5	3	8	6	5	8	11	9	13	4	5	5.8	12.8
21-May-05	5	4	6	6	6	6	8	8	6	6	7	5	4	7	9	11	6	6	7	6	13	9	7	8	6.9	12.8
22-May-05	5	3	4	3	4	4	6	7	5	5	5	5	3	3	4	5	2	6	6	4	6	8	5	7	4.8	8.1
23-May-05	5	5	11	12	9	16	6	8	4	3	4	4	4	4	4	5	7	16	15	12	6	4	5	5	7.3	16.3
24-May-05	4	4	6	6	8	5	6	6	7	7	9	3	7	6	7	9	7	13	12	7	8	8	6	8	7.0	12.9
25-May-05	6	5	6	4	4	5	6	6	6	4	5	6	6	4	5	5	5	12	16	7	6	8	6	6	6.3	16.0
26-May-05	8	6	6	5	6	5	5	4	4	4	3	4	3	5	5	4	5	5	4	6	8	6	5	8	5.1	8.0
27-May-05	6	7	12	7	10	12	13	12	9	7	5	5	2	4	5	6	5	6	5	4	7	8	7	10	7.2	13.2
28-May-05	17	15	8	14	42	18	28	10	10	7	5	6	6	5	6	7	8	9	5	4	4	4	4	4	10.3	41.6
29-May-05	4	3	2	3	4	7	10	7	7	3	5	4	5	3	2	3	5	2	4	4	4	7	7	6	4.7	9.9
30-May-05	5	5	4	4	5	6	7	9	3	3	4	5	4	4	5	4	5	3	4	5	7	5	4	4	4.8	9.3
31-May-05	4	5	4	5	5	5	9	9	6	7	6	7	5	6	5	5	3	3	4	4	3	2	2	3	4.9	8.9
Hourly Avg	7.3	6.6	6.9	6.6	7.9	8.3	9.4	8.6	7.6	6.8	6.6	6.2	5.8	6.2	6.0	6.6	6.4	7.3	7.4	7.8	8.0	8.1	7.5	7.9		
Hourly Max	17.1	15.5	12.1	14.1	41.6	17.6	28.0	14.7	16.2	16.6	13.1	13.5	11.7	12.7	13.6	14.0	15.3	16.2	16.0	19.3	15.3	14.5	15.0	13.7		

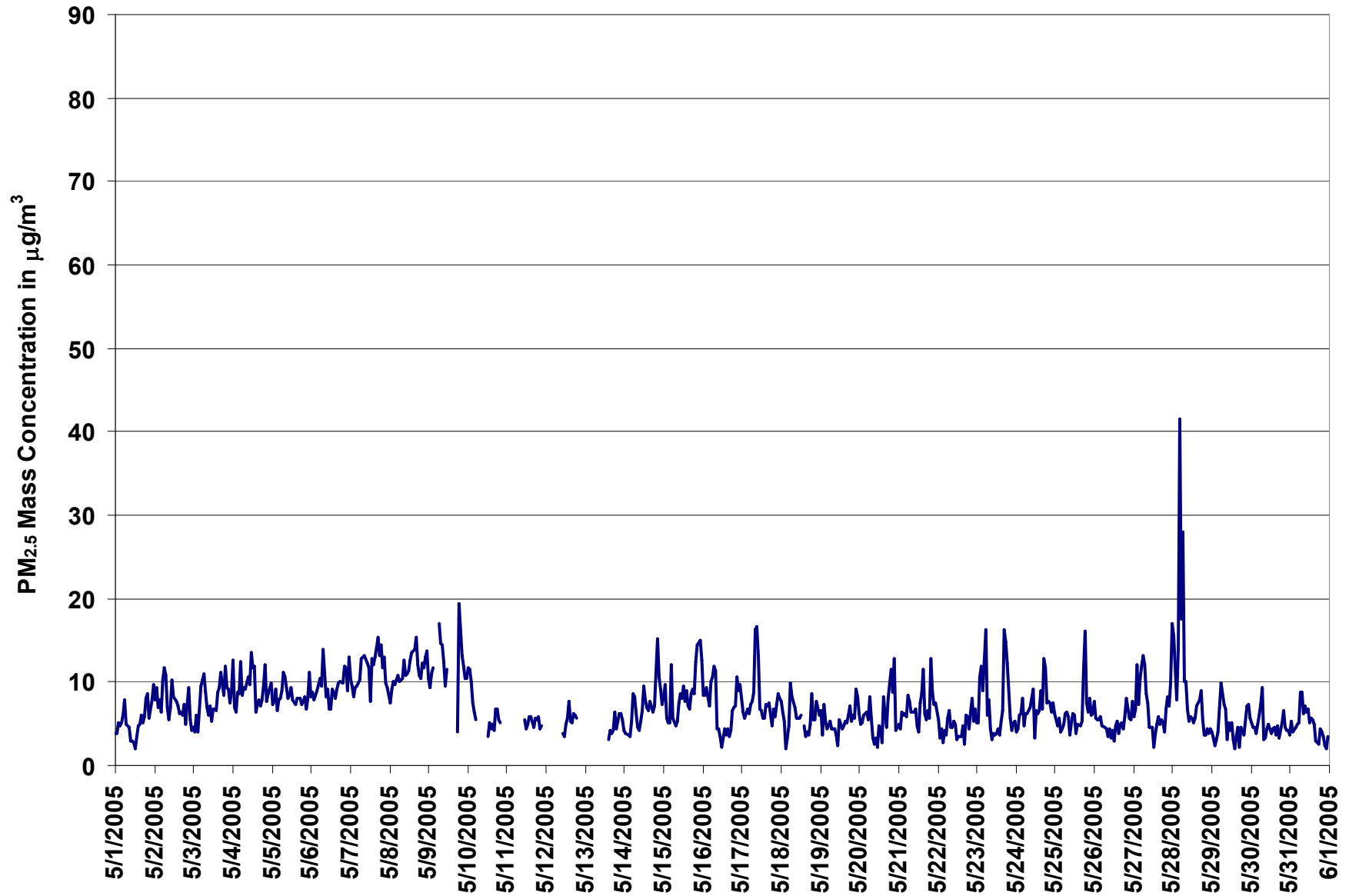
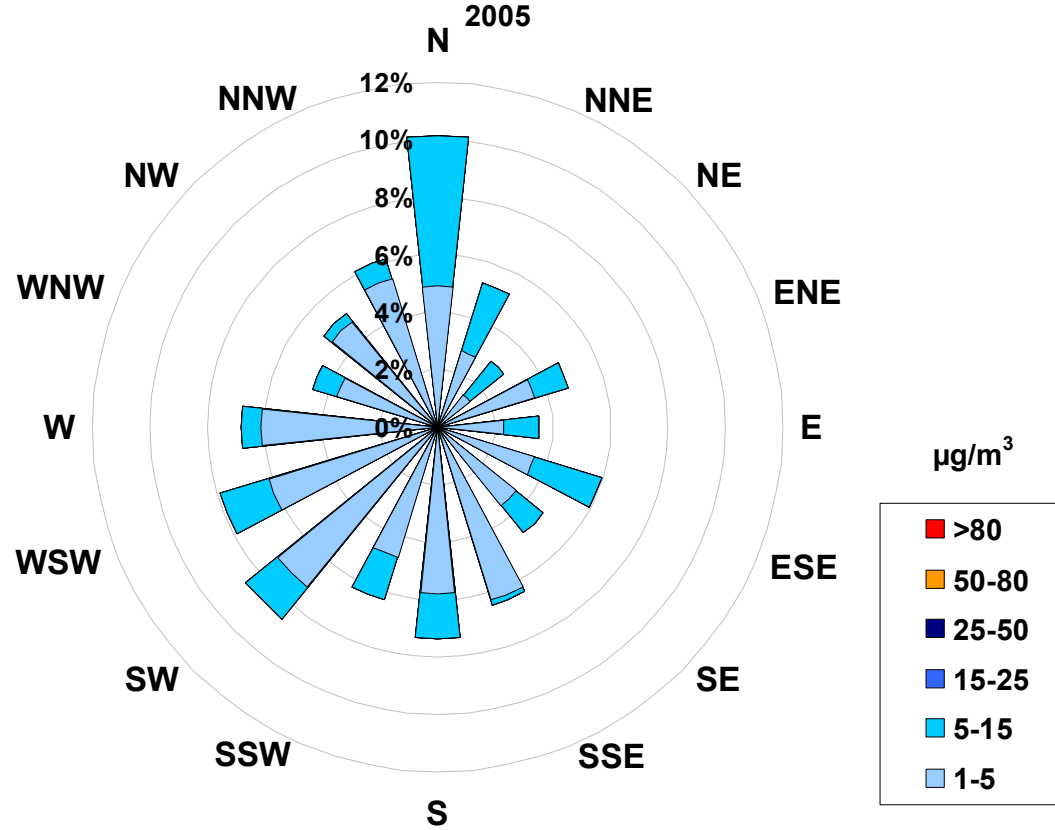


Figure 10. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend



**Concentration Rose for the 1-hr Particulate Matter (less than 2.5 microns)
Average Concentration Occurrences at the Crescent Heights Site for May**



Calms: 3%

Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
1.0	<	5	533
5	to	15	152
15	to	25	0
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			685



PAS - Cresent Heights Relative Humidity Monthly Summary

Station: Cresent Heights
Station Owner: PAS

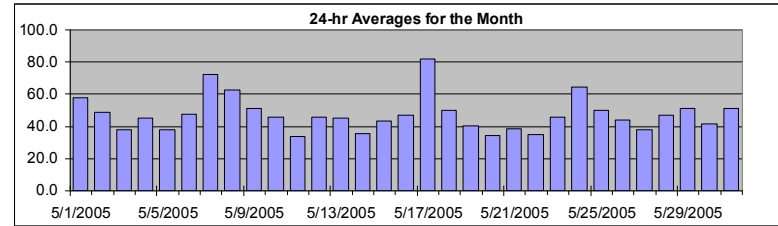
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Average:	92.3 %	7-May	4:00 5:00
Maximum 24-hr Value:	81.8 %	17-May	



AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	91.2	80.0	61.4	46.5	31.6	20.3	15.8	47.5 %

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-May-05	68	70	71	72	73	74	72	70	65	58	53	53	48	44	43	42	43	44	44	46	51	57	62	67	57.9	73.7
2-May-05	72	75	78	78	80	78	67	56	48	40	38	37	33	32	29	28	27	27	28	31	34	43	52	58	48.7	80.3
3-May-05	63	65	66	66	69	64	51	38	28	20	17	15	14	17	15	16	20	23	25	30	39	46	48	52	37.8	69.1
4-May-05	57	56	59	64	64	64	60	55	50	52	41	37	35	35	35	31	30	29	29	32	35	38	45	54	45.3	64.2
5-May-05	59	57	57	60	66	60	53	44	34	24	21	21	21	23	25	24	25	25	28	33	39	39	37	34	37.8	65.5
6-May-05	33	34	35	38	44	50	54	58	65	54	43	38	37	34	34	37	37	38	42	49	59	74	76	80	47.6	80.4
7-May-05	87	90	91	91	92	91	91	92	85	78	67	61	55	53	52	53	53	54	60	63	66	68	71	74	72.5	92.3
8-May-05	78	79	79	79	81	82	82	78	73	66	58	53	47	47	45	43	44	45	46	52	55	59	64	68	62.6	82.2
9-May-05	68	70	74	74	74	78	74	69	64	55	45	42	37	33	33	31	29	29	32	37	40	44	50	54	51.5	77.5
10-May-05	55	56	58	62	66	67	66	65	62	59	61	57	47	39	35	27	23	21	19	21	25	29	35	39	45.7	67.1
11-May-05	42	43	43	46	49	50	46	39	32	33	32	26	23	21	20	19	17	15	17	24	31	39	46	50	33.5	50.1
12-May-05	52	52	57	58	57	61	58	51	45	41	36	31	27	29	33	32	32	33	37	46	53	60	61	56	45.8	61.5
13-May-05	59	62	63	64	68	68	64	54	53	60	60	51	42	32	24	21	19	18	21	25	30	35	40	45	44.9	68.3
14-May-05	47	51	54	58	56	51	50	45	35	25	22	22	24	23	21	21	21	21	23	26	32	38	44	48	35.8	57.7
15-May-05	53	58	61	65	66	63	60	56	49	44	40	37	33	29	25	25	24	25	24	26	37	40	45	50	43.2	65.5
16-May-05	52	55	58	64	66	66	60	54	47	43	38	35	32	31	30	29	29	30	34	40	44	51	62	74	46.8	74.1
17-May-05	85	91	88	90	92	92	91	90	89	88	88	86	88	85	81	77	71	65	60	63	69	74	76	82	81.8	91.9
18-May-05	81	82	76	71	72	72	71	67	58	52	47	46	39	27	25	24	22	22	24	32	40	44	53	55	50.2	82.4
19-May-05	60	63	65	67	70	67	61	57	42	35	32	26	23	22	21	20	18	19	21	25	33	36	37	45	40.2	70.1
20-May-05	50	52	50	54	59	57	51	42	33	28	23	19	15	12	12	16	20	21	25	33	39	38	40	39	34.6	58.9
21-May-05	43	49	52	55	57	60	60	56	49	43	37	30	25	24	24	27	27	25	22	20	26	35	40	43	38.6	59.8
22-May-05	49	52	54	52	56	54	50	42	32	28	29	29	26	26	23	20	17	19	22	22	24	30	33	44	34.7	55.6
23-May-05	51	54	53	67	80	80	75	58	47	38	32	25	22	22	18	20	16	23	38	48	54	59	62	64	46.1	80.0
24-May-05	69	73	76	81	80	79	77	71	64	60	60	51	47	44	41	42	47	55	66	71	72	77	76	74	64.7	81.1
25-May-05	73	75	73	74	75	74	71	68	60	48	44	40	37	33	30	27	25	27	29	32	40	46	50	56	50.2	75.3
26-May-05	59	60	61	67	69	68	64	60	53	49	45	42	37	34	30	27	22	20	17	22	28	33	39	43	43.8	68.9
27-May-05	49	54	63	69	72	63	55	51	47	42	35	30	24	19	18	18	19	17	18	22	27	30	32	43	38.2	71.6
28-May-05	48	57	59	65	67	64	54	43	35	33	28	28	28	27	27	34	40	45	47	51	57	61	64	68	47.1	68.0
29-May-05	73	76	81	83	85	79	71	65	55	47	44	38	35	33	30	28	28	28	29	33	38	47	52	54	51.4	85.5
30-May-05	58	60	63	69	72	66	57	47	40	37	31	28	26	24	24	23	22	23	23	27	36	43	46	51	41.5	72.3
31-May-05	57	60	62	67	69	66	59	49	43	44	43	39	38	41	42	43	47	48	47	48	50	54	58	64	51.5	69.5
Hourly Avg	59.6	62.3	63.9	66.8	69.2	67.9	63.8	57.8	51.1	46.0	41.6	37.8	34.4	32.1	30.5	29.8	29.5	30.2	32.2	36.4	42.1	47.3	51.6	55.7		
Hourly Max	86.9	90.7	91.4	91.5	92.3	91.9	91.5	91.6	89.3	88.0	88.2	86.0	88.2	85.5	81.3	76.6	71.0	65.2	66.3	71.4	72.5	77.2	76.4	81.6		

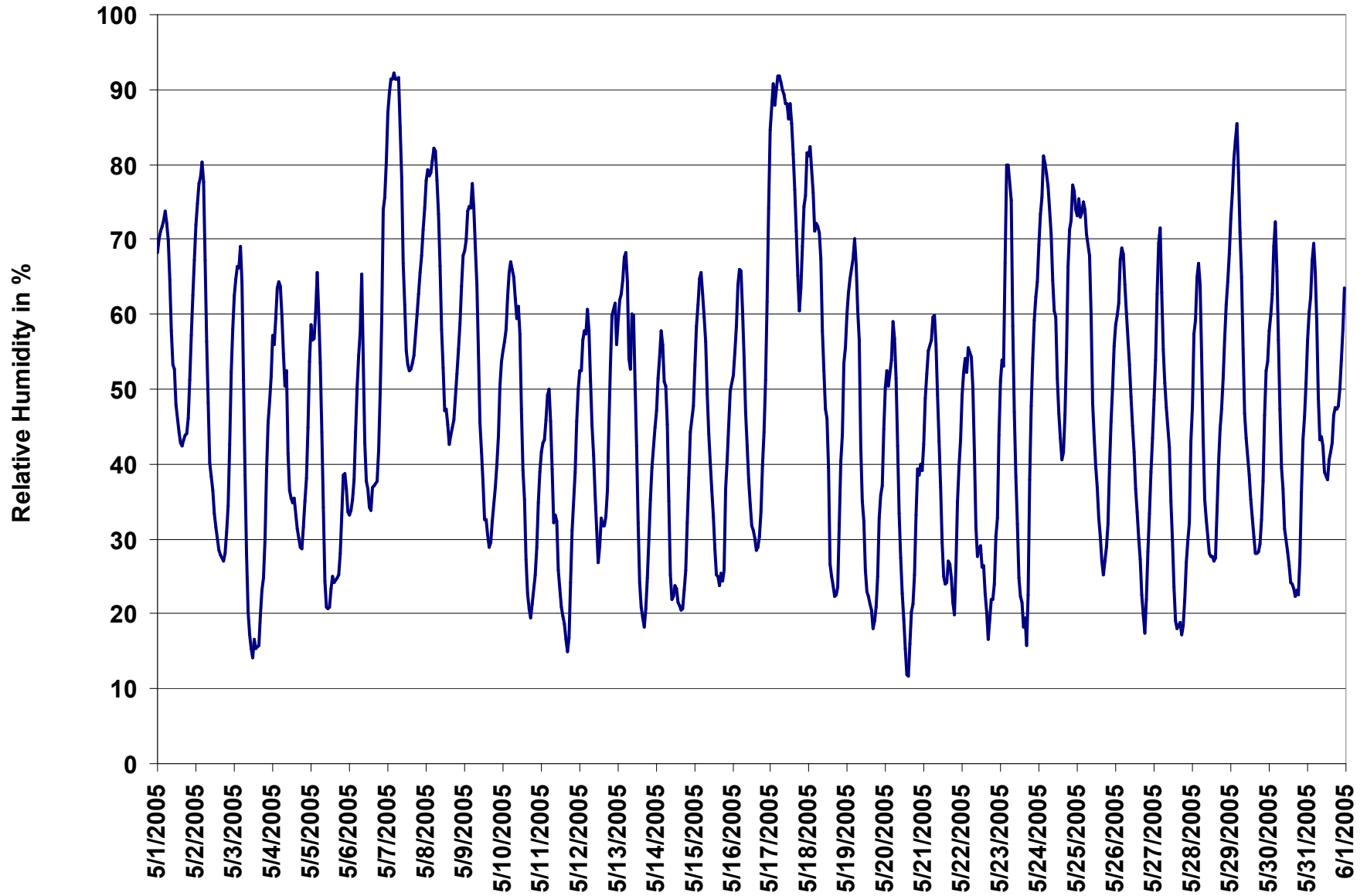


Figure 11. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



PAS - Crescent Heights Temperature Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

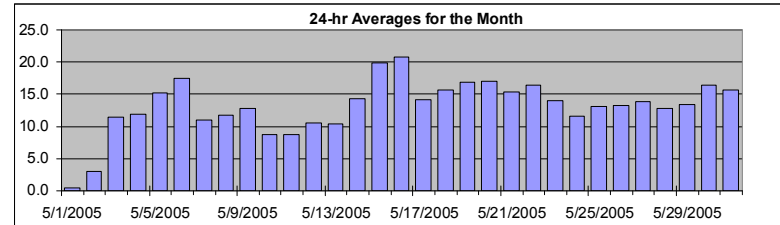
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Average:	27.8	°C	16-May	15:00 16:00
Maximum 24-hr Value:	20.7	°C	16-May	



AIC Time:	0 hrs	Operational Time:	744 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	26.5	23.1	17.8
			13.7
			8.8
			1.3
			-2.6
			Average
			13.2 °C

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00			22:00	23:00	23:00
1-May-05	Hour End	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-May-05		-2	-2	-2	-2	-2	-2	-2	-1	0	1	2	1	3	3	4	4	4	4	4	3	3	1	0	-2	-3	0.5	3.9
2-May-05		-4	-5	-6	-6	-7	-7	-3	1	3	6	7	8	9	10	11	11	11	11	10	8	6	3	1	-1	3.1	10.9	
3-May-05		-1	-2	-2	-2	-2	-1	3	8	12	15	16	17	19	20	21	22	20	20	19	18	15	14	13	12	11.4	22.0	
4-May-05		10	9	8	7	7	7	8	9	10	11	14	16	16	17	17	18	18	17	17	15	13	10	8	6	12.0	17.8	
5-May-05		4	5	5	4	3	4	8	12	16	19	21	22	22	23	23	23	23	23	21	19	17	16	16	17	15.2	23.1	
6-May-05		17	17	17	16	15	15	15	15	15	17	19	21	21	23	24	22	22	21	20	18	16	14	12	11	17.5	23.6	
7-May-05		10	9	8	7	6	6	6	6	8	9	12	14	15	15	16	16	15	15	14	13	12	11	11	10	11.0	15.6	
8-May-05		9	9	9	9	9	8	8	9	10	12	14	15	16	15	16	16	16	15	14	13	12	11	10	9	11.8	15.9	
9-May-05		9	9	8	8	8	8	9	10	12	13	15	16	16	17	17	17	17	17	16	15	14	13	12	11	10	12.8	17.4
10-May-05		10	10	10	8	8	7	8	8	8	8	7	8	11	11	12	13	12	12	11	9	7	6	4	2	8.7	12.7	
11-May-05		1	1	0	-1	-2	-2	0	4	9	11	13	14	15	16	17	17	18	17	16	13	11	8	7	6	8.8	17.6	
12-May-05		6	6	5	4	4	4	6	9	12	13	15	16	17	17	17	17	16	16	14	11	9	7	6	6	10.6	17.5	
13-May-05		7	7	7	7	6	6	8	12	13	13	14	14	15	15	15	15	15	14	13	11	9	7	5	3	10.3	14.8	
14-May-05		3	1	1	0	1	3	5	7	12	16	19	20	22	23	24	24	24	24	22	21	20	18	17	16	14.2	24.1	
15-May-05		15	15	15	13	13	13	14	15	18	20	22	23	25	26	27	27	27	27	26	26	24	21	19	18	16	19.9	27.2
16-May-05		16	15	15	13	12	13	14	18	21	22	24	25	27	27	27	28	27	27	25	23	22	21	19	17	20.7	27.8	
17-May-05		15	15	15	15	14	15	15	16	15	15	14	13	12	12	13	14	15	16	16	15	14	12	12	11	14.2	16.5	
18-May-05		11	11	9	7	6	6	8	10	14	15	17	19	20	21	22	23	23	23	23	21	19	17	14	14	15.6	23.1	
19-May-05		13	12	12	12	11	11	13	14	17	19	21	22	23	23	23	22	22	21	20	18	16	14	14	12	16.9	23.1	
20-May-05		10	10	11	10	9	9	12	15	17	19	20	21	23	24	24	24	23	23	21	20	18	17	16	14	17.0	24.3	
21-May-05		13	12	11	11	10	10	11	12	15	16	18	19	19	20	20	20	19	19	20	19	16	15	14	12	15.4	20.1	
22-May-05		10	9	8	8	8	8	10	15	18	19	21	22	23	23	23	24	23	21	20	19	17	15	15	13	16.4	23.6	
23-May-05		11	10	11	10	8	8	10	13	15	16	18	19	19	19	20	19	20	19	16	14	12	10	10	10	14.0	20.3	
24-May-05		9	8	8	8	8	9	9	11	12	12	13	14	15	15	16	16	15	14	12	11	11	10	10	10	11.5	16.0	
25-May-05		10	9	8	8	7	8	9	11	13	15	15	16	17	18	18	19	19	18	18	16	13	12	10	10	13.2	18.9	
26-May-05		10	10	9	8	7	8	9	10	11	13	14	15	17	18	19	19	20	20	19	18	15	12	10	9	13.3	19.7	
27-May-05		7	6	5	3	3	5	8	11	13	15	17	18	20	21	21	21	22	22	21	19	16	14	13	10	13.9	22.1	
28-May-05		8	7	7	4	4	6	9	12	15	16	17	18	19	19	20	19	19	17	16	14	12	10	10	9	12.8	19.8	
29-May-05		8	7	6	5	4	6	8	10	14	15	16	18	19	20	20	20	20	20	19	18	16	12	10	10	13.4	20.4	
30-May-05		10	9	8	7	6	8	11	15	17	19	20	22	22	23	23	23	24	22	22	20	18	15	14	13	16.3	23.6	
31-May-05		12	11	11	9	8	9	12	16	18	18	19	21	21	21	21	21	20	18	18	18	17	16	15	14	12	15.7	21.4
Hourly Avg		8.6	8.0	7.6	6.8	6.2	6.7	8.4	10.7	12.9	14.4	15.9	17.0	17.9	18.5	19.0	19.1	18.9	18.4	17.5	15.9	14.0	12.3	10.9	9.9			
Hourly Max		16.8	16.6	16.5	16.1	15.2	15.0	15.5	17.8	21.2	22.5	24.2	25.4	26.5	26.6	27.1	27.8	27.3	26.5	25.6	23.7	21.9	20.7	18.6	17.0			

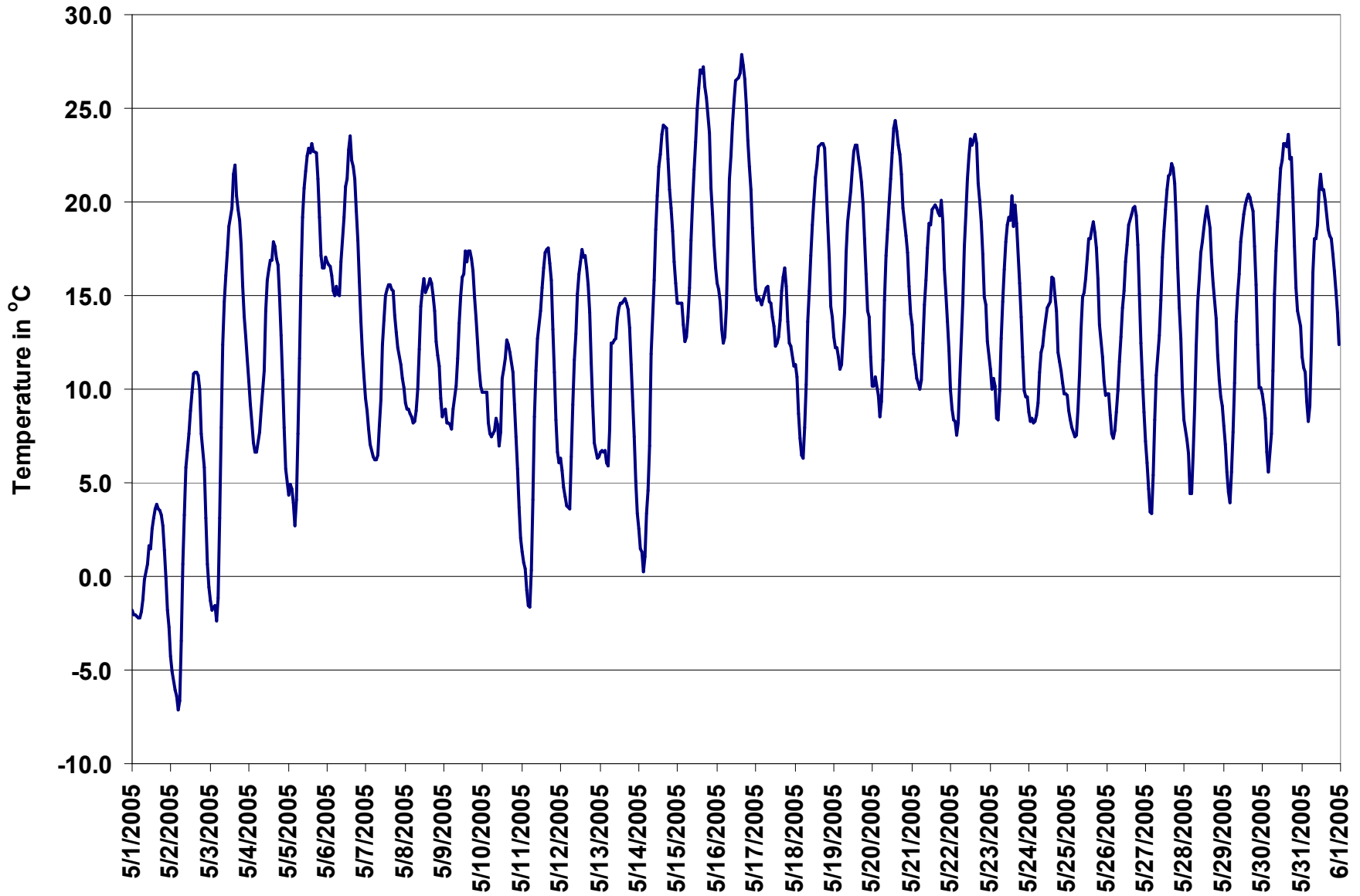


Figure 12. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



PAS - Cresent Heights Solar Radiation Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

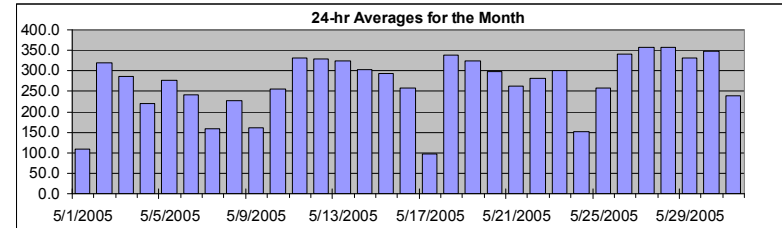
HOURLY AVERAGE TABLE

Solar Radiation (SR)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Average:	1018.0	W/m ²	29-May	12:00 13:00
Maximum 24-hr Value:	357.2	W/m ²	27-May	



AIC Time:	0 hrs	Operational Time:	744 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	912.5	853.5	522.3	123.2	0.9	0.8	0.8	270.4 W/m ²

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-May-05	1	1	1	1	1	12	45	102	216	230	287	224	303	301	311	234	163	120	64	19	1	1	1	1	109.9	310.8	
2-May-05	1	1	1	1	2	39	193	370	544	696	806	879	894	854	774	651	493	322	150	21	1	1	1	1	320.6	894.3	
3-May-05	1	1	1	1	2	53	203	377	549	702	810	870	878	729	815	551	173	121	53	7	1	1	1	1	287.4	877.5	
4-May-05	1	1	1	1	2	45	159	267	174	384	790	765	608	527	485	460	272	171	118	25	1	1	1	1	219.1	789.8	
5-May-05	1	1	1	1	3	74	185	354	523	650	754	744	864	726	477	513	364	291	123	18	1	1	1	1	277.9	864.5	
6-May-05	1	1	1	1	1	16	69	121	280	331	592	802	691	667	797	475	497	279	118	28	1	1	1	1	240.4	801.9	
7-May-05	1	1	1	1	3	42	69	53	120	223	678	538	528	480	383	249	151	170	100	20	1	1	1	1	158.9	678.0	
8-May-05	1	1	1	1	1	9	48	128	266	631	813	774	657	392	398	430	453	279	156	25	1	1	1	1	227.9	813.3	
9-May-05	1	1	1	1	2	22	97	159	256	404	531	476	295	434	297	299	278	177	87	25	1	1	1	1	160.3	531.4	
10-May-05	1	1	1	1	3	52	192	233	459	655	453	504	796	522	510	686	514	347	179	35	2	1	1	1	256.2	796.3	
11-May-05	1	1	1	1	5	80	219	385	570	678	771	885	905	875	797	676	521	359	184	38	2	1	1	1	331.5	904.8	
12-May-05	1	1	1	1	4	76	230	391	571	706	798	875	889	870	724	686	522	349	184	37	2	1	1	1	330.0	888.7	
13-May-05	1	1	1	1	3	32	203	395	502	736	615	900	903	867	794	684	536	366	195	35	1	1	1	1	323.9	903.5	
14-May-05	1	1	1	1	5	64	118	244	551	692	789	824	849	833	772	609	474	362	76	14	1	1	1	1	303.5	848.7	
15-May-05	1	1	1	1	4	79	230	392	536	680	682	656	774	816	693	559	487	232	202	41	2	1	1	1	294.6	816.1	
16-May-05	1	1	1	1	6	68	196	352	541	680	797	820	720	471	440	482	310	176	82	19	1	1	1	1	257.0	820.0	
17-May-05	1	1	1	1	2	43	41	35	91	85	87	192	140	199	150	322	383	286	204	61	2	1	1	1	97.1	383.4	
18-May-05	1	1	1	1	3	87	242	357	565	691	817	912	902	895	807	675	534	370	209	23	2	1	1	1	337.4	912.3	
19-May-05	1	1	1	1	8	65	166	275	506	734	830	900	915	877	743	575	557	381	215	46	3	1	1	1	325.1	915.4	
20-May-05	1	1	1	1	10	100	260	424	554	728	832	910	931	793	604	426	273	181	75	24	2	1	1	1	297.2	930.9	
21-May-05	1	1	1	1	4	28	147	332	545	684	806	857	442	599	517	557	309	227	198	59	2	1	1	1	263.4	857.5	
22-May-05	1	1	1	1	10	65	150	318	543	726	831	673	814	554	490	644	582	189	118	37	4	1	1	1	281.5	830.6	
23-May-05	1	1	1	1	3	51	272	378	586	748	854	877	745	568	760	324	420	368	228	42	4	1	1	1	301.4	877.2	
24-May-05	1	1	1	1	2	40	124	286	232	319	474	462	321	309	504	275	130	83	47	13	2	1	1	1	151.3	504.3	
25-May-05	1	1	1	1	7	98	256	444	595	557	437	460	580	708	493	540	461	270	210	56	4	1	1	1	257.6	708.1	
26-May-05	1	1	1	1	12	111	263	432	605	735	842	924	842	737	728	687	568	401	237	63	4	1	1	1	341.5	924.1	
27-May-05	1	1	1	1	12	116	271	441	604	744	847	914	930	901	826	709	561	387	234	64	4	1	1	1	357.2	930.1	
28-May-05	1	1	1	1	13	121	278	449	612	751	854	913	928	888	832	640	595	389	233	62	5	1	1	1	357.0	927.8	
29-May-05	1	1	1	1	14	116	270	438	579	619	640	784	1018	735	736	726	540	405	239	65	5	1	1	1	330.6	1018.0	
30-May-05	1	1	1	1	14	122	277	444	606	760	850	907	860	904	738	584	618	322	250	69	5	1	1	1	347.3	906.7	
31-May-05	1	1	1	1	13	120	273	410	513	375	481	718	602	533	583	469	290	203	102	41	5	1	1	1	239.0	717.9	
Hourly Avg	0.9	0.9	0.9	0.9	5.6	66.0	185.4	315.7	464.2	591.5	691.9	740.0	726.6	663.4	612.2	528.9	420.4	276.9	157.1	36.6	2.4	0.9	0.9	0.9			
Hourly Max	1.0	1.0	1.0	0.9	14.1	122.3	277.9	448.6	611.9	759.6	854.1	924.1	###	903.9	831.6	726.2	618.1	405.3	249.6	68.5	5.3	0.9	1.0	1.0			

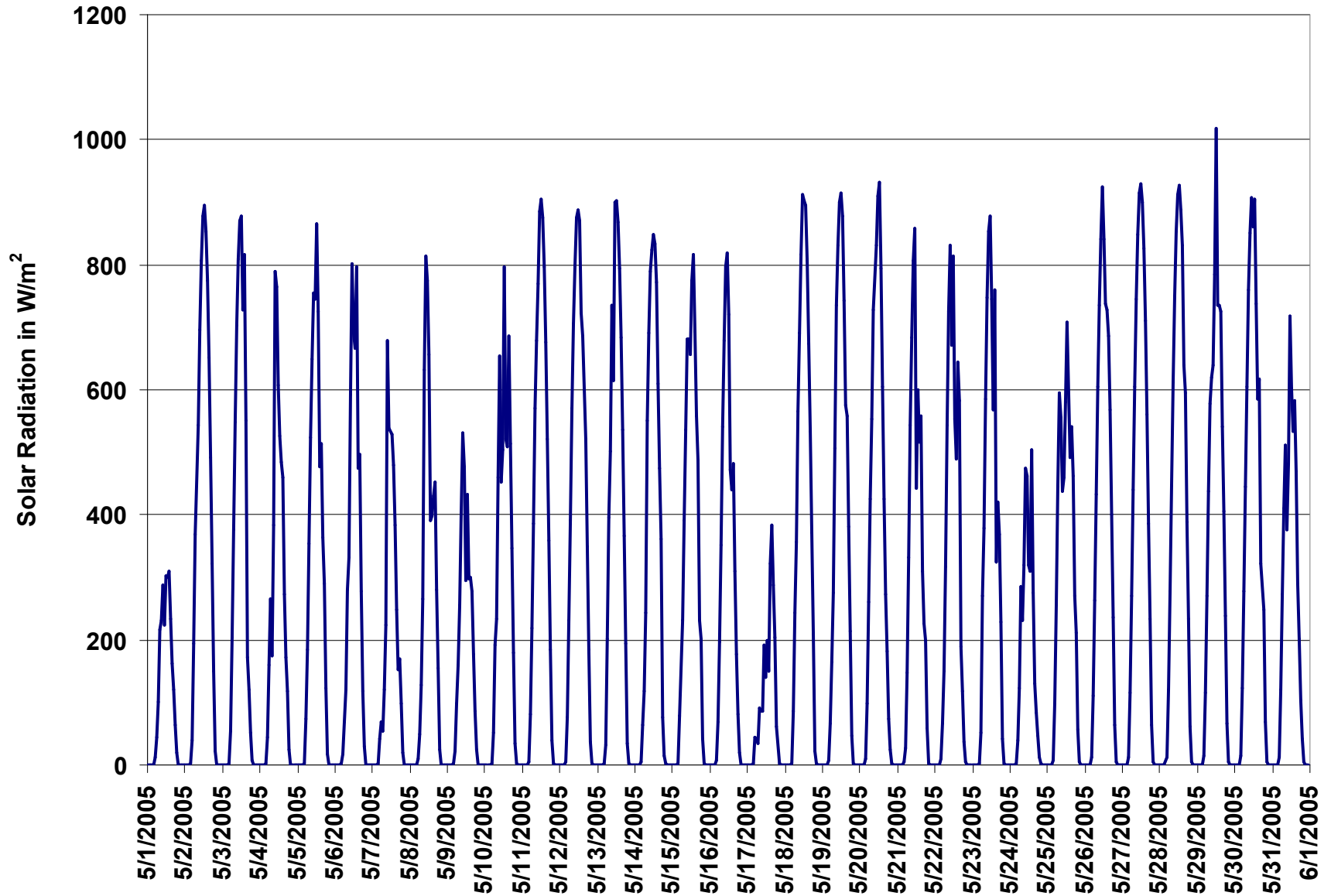


Figure 13. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



PAS - Cresent Heights Scalar Wind Speed Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

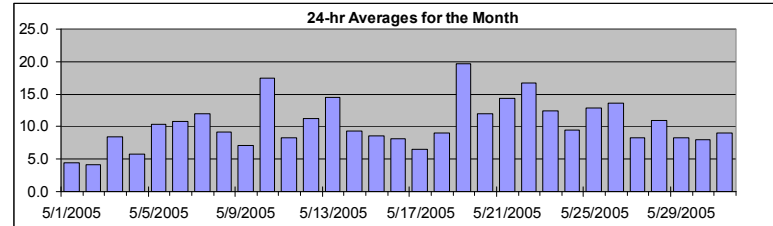
Wind Speed (WSs)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Average:	34.4	km/hr	19-May	9:00 10:00
Maximum 24-hr Value:	19.6	km/hr	19-May	

Calm Time:	22 hrs	3% calms	Operational Time:	722 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average S
	28.2	21.8	14.0	10.0	5.5	2.3	1.2	10.4 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 Scalar Average	Daily Max		
	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00			22:00	23:00
1-May-05	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	4.5	6.9
2-May-05	5	6	5	6	7	6	5	3	5	2	4	4	4	4	5	5	6	4	5	6	4	4	7	6	6	4.1	7.0
3-May-05	5	1	2	2	calm	calm	calm	2	7	10	10	13	13	13	15	14	13	7	6	16	15	8	3	3	8.4	15.9	
4-May-05	3	7	7	2	3	5	5	5	7	4	7	7	8	9	9	6	7	8	7	5	6	5	3	3	5.7	9.0	
5-May-05	3	4	5	3	3	4	1	1	4	7	11	11	13	13	13	13	15	16	17	14	14	16	19	28	10.3	27.7	
6-May-05	26	23	21	18	17	14	7	8	6	4	3	6	5	4	5	12	14	13	10	9	9	10	9	6	10.7	25.5	
7-May-05	2	4	6	5	5	4	10	7	9	10	12	12	16	16	16	15	16	19	20	20	18	16	14	14	12.0	20.2	
8-May-05	11	11	15	12	6	8	6	6	4	6	7	9	10	11	10	11	14	14	12	12	12	8	3	2	9.1	14.5	
9-May-05	1	2	calm	calm	calm	calm	1	4	5	7	10	12	10	7	13	9	11	12	11	7	6	4	calm	2	7.1	12.7	
10-May-05	5	9	14	8	12	14	19	21	22	27	26	24	24	24	23	23	23	20	18	16	16	15	10	6	17.5	27.1	
11-May-05	8	16	18	12	7	7	6	2	3	5	8	9	9	7	9	9	9	10	8	9	9	11	4	4	8.3	17.8	
12-May-05	12	16	12	10	10	8	4	6	7	9	8	9	9	9	11	9	11	13	16	18	16	15	16	14	11.2	17.8	
13-May-05	18	17	16	14	13	15	12	6	14	21	17	20	21	19	18	18	17	15	13	11	8	8	8	8	14.5	21.3	
14-May-05	9	5	5	3	2	calm	2	3	6	3	4	10	12	13	15	13	15	16	13	15	16	19	12	4	9.4	19.0	
15-May-05	calm	10	10	12	13	12	15	14	14	13	12	10	6	6	5	6	5	5	13	3	2	4	3	1	8.5	15.5	
16-May-05	4	6	4	5	5	1	1	4	13	18	15	11	9	7	5	6	7	6	7	7	10	12	18	15	8.1	18.2	
17-May-05	3	5	4	4	2	calm	3	4	8	8	12	12	11	10	11	10	9	10	8	6	4	3	2	1	6.5	12.2	
18-May-05	2	4	9	11	11	11	9	7	9	10	13	11	12	11	12	11	10	8	5	7	10	8	9	8	9.0	12.8	
19-May-05	4	9	9	12	12	10	20	20	30	34	29	30	28	29	29	23	25	23	23	18	13	16	14	12	19.6	34.4	
20-May-05	9	6	8	12	11	12	10	13	12	16	15	13	12	11	11	14	13	14	17	15	10	10	11	12	12.0	17.2	
21-May-05	13	16	16	15	16	17	16	17	18	20	18	19	19	19	20	17	13	10	4	4	6	11	10	13	14.4	19.9	
22-May-05	13	11	9	11	10	7	2	2	14	29	27	25	25	24	24	23	23	21	19	19	13	11	20	19	16.7	29.0	
23-May-05	16	15	11	24	13	3	10	11	13	12	11	15	15	14	13	13	13	19	22	15	7	3	4	6	12.4	23.9	
24-May-05	6	8	7	5	9	9	10	12	11	13	11	12	12	14	11	11	5	7	11	10	13	9	6	5	9.5	14.3	
25-May-05	8	9	9	11	11	9	9	10	12	14	16	18	17	19	19	20	22	21	23	14	6	4	5	4	12.9	22.6	
26-May-05	6	7	10	10	11	11	18	18	19	23	22	21	16	14	14	18	19	18	19	14	8	4	3	3	13.6	23.2	
27-May-05	calm	calm	2	calm	1	calm	calm	2	2	5	5	8	11	12	13	14	13	14	16	12	9	7	4	calm	8.3	16.0	
28-May-05	calm	1	1	2	2	calm	2	3	7	12	13	15	13	14	14	16	20	19	17	16	14	14	14	11	10.9	20.4	
29-May-05	9	8	7	4	3	2	3	7	11	10	11	12	12	11	11	11	10	12	11	11	9	5	4	3	8.3	12.1	
30-May-05	2	3	3	2	4	3	3	6	10	10	11	10	10	11	11	8	10	8	8	9	12	14	12	9	7.9	13.6	
31-May-05	6	5	4	3	4	3	2	5	11	10	11	12	12	16	17	16	17	15	14	9	9	8	5	3	9.0	17.5	
1-hr Average	7.5	8.1	8.5	8.3	7.7	7.9	7.5	7.6	10.2	12.1	12.4	13.0	12.9	12.8	13.1	12.8	13.2	13.0	12.9	11.3	10.0	9.2	8.6	7.6			
Hourly Max	25.5	22.5	20.8	23.9	17.3	17.0	19.6	21.2	30.2	34.4	29.3	29.6	28.4	28.9	28.7	23.0	25.0	22.5	23.2	19.5	18.3	19.0	20.2	27.7			



PAS - Cresent Heights Vector Wind Speed Monthly Summary

Station: Cresent Heights
Station Owner: PAS

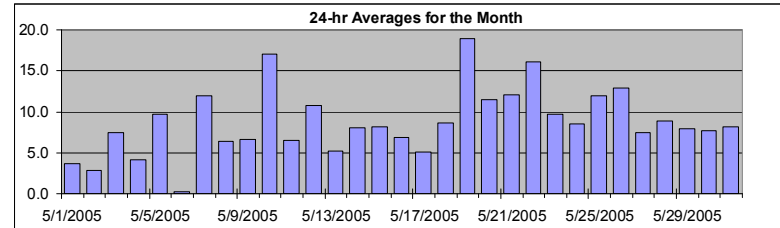
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Maximum 1-hr Average:	34.1	km/hr	19-May	9:00 10:00
Maximum 24-hr Value:	18.9	km/hr	19-May	



Calm Time:	21 hrs	3% calms	Operational Time:	723 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	27.9	21.5	13.5	9.6	5.1	1.9	1.1	2.8 km/hr

Status Flag Characters

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

Day	Mountain Standard Time																							24-hr 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	0:00		
1-May-05	5	6	5	6	7	6	5	3	4	2	3	3	4	4	4	4	4	6	5	4	4	2	2	2	2	3.6	6.8
2-May-05	1	calm	calm	3	2	2	calm	calm	2	2	2	3	2	2	2	3	5	3	5	6	4	4	7	6	2.9	6.9	
3-May-05	5	1	2	2	calm	calm	calm	1	6	10	10	12	12	12	13	12	12	6	6	16	15	5	3	1	7.4	15.8	
4-May-05	2	7	6	1	3	4	5	4	7	4	6	7	7	8	9	5	6	7	7	5	6	4	3	3	4.1	8.6	
5-May-05	3	3	3	3	3	4	1	1	4	6	10	10	12	12	12	13	15	16	17	14	14	15	18	28	9.7	27.6	
6-May-05	25	22	21	18	17	13	5	5	6	3	2	6	3	2	3	11	14	12	10	8	9	10	9	6	0.2	25.4	
7-May-05	2	4	6	5	5	4	9	7	9	9	12	12	15	16	16	15	16	19	20	19	18	16	14	14	11.9	20.2	
8-May-05	11	11	14	12	6	8	6	6	4	5	6	8	10	10	9	10	14	14	12	11	12	8	3	2	6.3	14.5	
9-May-05	calm	2	1	calm	calm	calm	1	4	5	7	10	11	10	7	12	8	11	12	10	7	6	4	1	2	6.7	12.3	
10-May-05	5	9	13	7	11	14	18	21	22	27	25	23	23	24	23	22	22	20	18	16	16	15	10	6	17.0	26.8	
11-May-05	8	16	18	12	7	7	6	2	2	3	7	8	8	6	8	8	8	9	8	9	9	10	4	4	6.5	17.7	
12-May-05	12	15	12	10	9	8	4	6	7	8	7	8	8	7	10	9	10	12	16	18	16	15	16	14	10.8	17.6	
13-May-05	18	17	15	14	12	15	11	3	14	21	17	20	20	19	18	17	16	15	12	11	8	8	8	8	5.2	20.9	
14-May-05	9	5	5	2	1	calm	2	3	5	2	3	9	11	13	14	12	15	15	13	15	16	19	12	4	8.0	18.9	
15-May-05	calm	10	10	12	13	12	15	14	14	13	11	10	5	5	2	5	5	4	13	3	2	4	3	1	8.1	15.3	
16-May-05	3	6	4	5	4	1	1	4	13	18	14	10	8	6	4	5	6	6	7	7	10	11	18	15	6.9	17.9	
17-May-05	3	5	4	4	2	calm	3	3	8	8	11	12	11	10	10	10	9	9	8	6	4	3	2	1	5.1	12.1	
18-May-05	2	4	9	11	11	11	9	7	8	9	12	10	11	10	11	10	10	7	5	6	9	7	9	8	8.7	12.3	
19-May-05	4	8	9	11	12	10	19	20	30	34	29	29	28	28	28	22	25	22	23	18	13	16	14	12	18.9	34.1	
20-May-05	8	6	7	12	11	12	9	13	12	16	15	12	11	10	10	10	13	13	14	17	14	9	10	11	12	11.4	16.9
21-May-05	13	16	16	15	15	17	16	16	18	20	18	19	19	18	19	15	12	10	3	4	6	11	10	12	12.0	19.5	
22-May-05	13	11	9	11	10	6	2	2	13	29	26	24	25	24	24	22	23	21	19	19	13	11	20	18	16.1	28.7	
23-May-05	16	14	10	24	13	3	9	10	13	12	11	14	14	13	13	11	12	16	22	15	6	3	4	6	9.7	23.6	
24-May-05	6	7	7	5	9	9	10	12	11	12	10	11	11	14	11	10	5	6	9	10	13	9	6	5	8.6	14.0	
25-May-05	8	8	9	11	11	9	9	10	12	13	15	17	17	19	19	20	21	20	22	14	6	3	5	4	11.9	22.4	
26-May-05	6	6	10	10	11	11	18	18	19	23	22	20	15	13	14	17	18	18	19	14	8	4	2	3	12.9	22.9	
27-May-05	calm	calm	1	calm	1	calm	calm	2	1	4	3	7	11	11	12	13	12	13	16	12	9	7	4	calm	7.4	15.8	
28-May-05	1	1	1	1	2	1	2	calm	7	11	13	14	12	12	13	15	20	19	17	16	14	14	11	8.8	19.8		
29-May-05	9	8	7	4	2	2	2	7	11	10	10	11	11	10	10	11	10	12	11	11	9	5	4	2	7.9	11.5	
30-May-05	2	3	3	2	4	3	3	5	9	9	9	9	10	10	10	8	9	7	8	9	12	14	12	9	7.7	13.5	
31-May-05	6	5	3	2	3	3	2	4	10	9	10	12	11	16	17	16	17	15	14	9	9	8	5	3	8.2	17.3	
1-hr Vector	3.3	2.5	1.9	3.0	3.1	3.2	2.4	1.9	2.4	2.6	2.4	2.3	1.9	1.9	1.9	1.5	1.5	1.8	1.4	0.7	1.4	1.7	3.0	3.2			
Hourly Max	25.4	22.4	20.7	23.6	17.2	16.9	19.4	20.7	29.9	34.1	29.0	29.1	28.0	28.4	28.0	22.5	24.7	22.3	23.0	19.4	18.3	18.9	19.9	27.6			



PAS - Cresent Heights Wind Direction Monthly Summary

Station: Cresent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Calm Time:	22 hrs	3% calms	Operational Time:	722 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	357.8	348.2	261.9	202.3	109.3	13.7	1.4	249 deg

Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	WD Sector	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-May-05	324	319	328	334	332	337	331	323	346	360	332	340	291	336	343	326	15	14	8	21	51	76	139	189	344	NNW
2-May-05	171	27	calm	207	220	197	calm	calm	210	149	151	168	56	191	1	108	108	90	109	102	100	125	113	128	125	SE
3-May-05	136	135	96	100	calm	calm	calm	214	184	189	185	185	191	198	195	207	238	258	223	212	204	222	262	277	203	SSW
4-May-05	252	352	16	178	295	273	282	327	347	2	21	353	317	340	340	320	327	17	11	27	37	65	133	117	349	N
5-May-05	109	101	141	96	132	104	99	109	122	144	151	163	166	163	168	177	161	152	152	139	128	127	152	167	151	SSE
6-May-05	166	168	170	174	176	176	176	17	15	341	298	302	299	228	352	359	357	356	357	2	1	354	357	11	144	SE
7-May-05	10	359	1	358	1	344	352	13	4	353	358	359	3	6	4	358	356	1	1	11	15	12	11	11	4	N
8-May-05	3	5	10	15	12	13	24	56	79	97	103	94	99	114	123	94	114	111	104	117	118	120	180	120	82	E
9-May-05	65	72	calm	calm	calm	calm	23	45	39	63	70	66	78	90	66	88	56	47	34	23	38	38	calm	356	57	ENE
10-May-05	4	10	34	42	62	77	74	69	59	57	56	70	73	60	63	61	62	60	70	66	66	68	88	82	62	ENE
11-May-05	89	88	97	113	87	96	114	125	119	160	182	165	150	162	197	187	185	184	182	177	173	161	169	183	146	SE
12-May-05	193	196	207	211	224	229	199	194	198	195	174	169	150	168	190	186	207	208	209	207	204	207	206	208	199	SSW
13-May-05	219	215	230	239	245	238	238	316	13	23	30	14	17	16	17	29	25	30	46	53	54	75	110	122	14	NNE
14-May-05	123	122	106	130	146	calm	90	58	99	153	213	193	180	187	190	183	170	170	173	179	211	204	216	215	179	S
15-May-05	calm	199	197	199	206	215	222	216	221	243	239	235	256	232	273	251	249	246	218	215	229	232	210	191	224	SW
16-May-05	202	227	240	238	235	174	196	208	215	215	222	219	223	188	200	183	190	174	156	133	127	136	196	209	198	SSW
17-May-05	242	45	57	2	24	calm	129	224	258	253	276	277	271	276	275	283	272	287	300	297	280	281	295	231	280	W
18-May-05	252	269	233	237	238	236	227	216	209	214	232	261	255	250	255	230	260	261	251	218	233	253	225	235	239	WSW
19-May-05	252	207	214	222	216	208	220	227	229	233	240	242	243	242	237	260	262	265	263	262	250	241	258	240	241	WSW
20-May-05	235	227	239	241	243	241	247	240	248	223	225	227	222	223	199	201	207	217	209	190	209	260	250	232	226	SW
21-May-05	236	257	266	263	265	275	278	282	292	303	298	304	313	314	327	349	355	7	347	272	256	267	251	232	291	WNW
22-May-05	223	234	224	222	230	235	203	203	219	221	213	219	231	230	238	245	256	259	257	257	249	251	255	250	237	WSW
23-May-05	237	229	268	319	336	243	225	269	271	266	264	255	262	277	258	239	274	296	352	359	330	301	277	304	281	W
24-May-05	307	309	304	272	271	282	295	314	323	325	321	316	331	336	341	320	296	250	288	255	280	277	275	271	302	WNW
25-May-05	284	276	272	278	284	290	313	314	308	306	315	318	317	321	321	330	336	341	351	354	356	349	309	303	319	NW
26-May-05	270	278	314	318	323	331	348	347	345	351	357	5	353	337	325	335	349	350	353	354	357	356	337	343	343	NNW
27-May-05	calm	calm	67	calm	224	calm	calm	131	29	50	342	326	0	346	346	341	335	339	5	10	18	30	28	calm	357	N
28-May-05	calm	241	250	144	228	calm	222	299	1	17	14	18	25	27	21	37	59	67	71	79	88	85	86	82	51	NE
29-May-05	92	85	103	86	95	68	50	69	112	113	106	98	110	109	106	102	105	102	111	113	119	137	137	185	105	ESE
30-May-05	163	160	133	119	110	109	139	164	180	178	173	154	162	165	145	169	156	170	147	164	168	171	175	174	163	SSE
31-May-05	161	185	182	68	87	126	121	157	183	169	150	147	147	124	119	119	112	111	118	159	148	121	114	109	134	SE
Hourly Avg	212	220	231	248	250	246	259	285	268	255	257	265	273	269	286	299	325	346	8	130	162	173	203	207		



PAS - Cresent Heights Standard Deviation of Wind Direction Monthly Summary

Station: Cresent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: May 1, 2005 to June 1, 2005

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	22 hrs	3% calms	Operational Time:	722 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	55.2	36.1	17.7	11.1	7.9	5.2	3.8

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

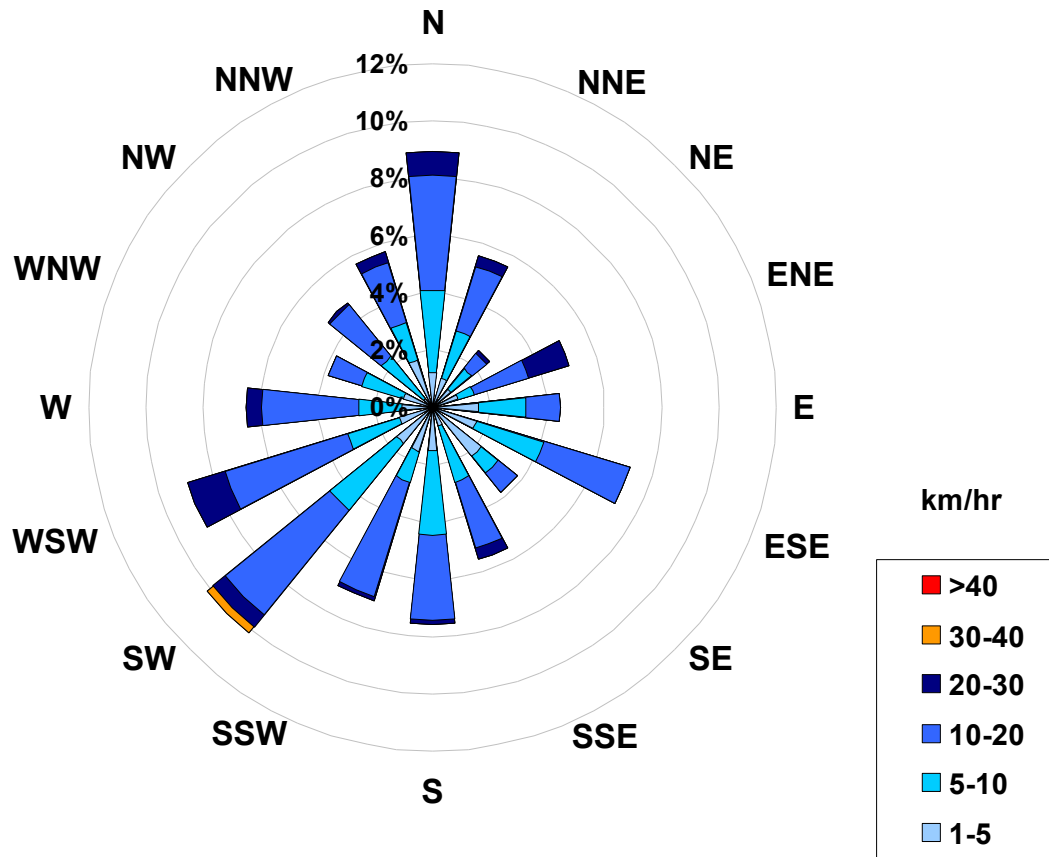
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-May-05	9	10	10	8	7	6	10	16	15	41	45	40	33	29	34	31	28	18	11	10	8	15	7	8	
2-May-05	12	18	calm	8	4	6	calm	calm	36	47	52	53	44	60	76	39	36	47	17	9	12	13	9	6	
3-May-05	10	16	9	21	calm	calm	calm	33	18	14	18	17	16	20	21	15	10	32	11	6	6	48	15	35	
4-May-05	21	7	19	20	14	17	11	16	9	17	22	23	30	32	16	34	20	15	9	4	7	12	7	7	
5-May-05	8	17	27	21	8	10	56	18	18	23	22	16	17	15	14	11	11	7	5	5	6	9	4		
6-May-05	5	5	6	6	6	7	22	34	13	39	46	21	45	66	53	12	10	10	5	3	3	4	3	8	
7-May-05	20	4	4	4	5	8	7	11	10	11	12	9	9	9	8	7	7	6	4	5	5	5	4	4	
8-May-05	4	4	4	6	9	9	9	12	21	26	31	27	18	17	16	16	11	10	9	7	6	11	17	9	
9-May-05	29	16	calm	calm	calm	calm	19	11	13	17	14	18	18	26	12	24	14	12	8	5	6	4	calm	31	
10-May-05	27	6	11	25	10	8	8	7	9	8	9	10	12	11	10	10	9	9	7	5	6	5	21	9	
11-May-05	13	5	5	5	10	7	10	24	38	31	24	27	30	47	35	26	21	16	12	8	8	9	30	21	
12-May-05	9	8	6	8	10	8	12	19	20	23	30	32	25	33	15	20	17	12	11	7	7	6	5	7	
13-May-05	8	7	7	9	9	5	6	35	11	10	14	12	11	12	11	13	11	14	10	4	7	12	11	7	
14-May-05	13	15	10	27	18	calm	17	13	16	47	44	20	17	14	17	13	8	9	8	10	9	6	7	17	
15-May-05	calm	6	7	5	6	8	7	8	11	12	15	15	36	42	68	46	30	30	16	13	13	7	19	24	
16-May-05	13	9	10	6	13	12	18	12	14	9	11	20	23	25	43	31	21	18	11	7	7	9	10	9	
17-May-05	38	21	16	13	41	calm	12	22	10	9	9	7	9	10	8	11	16	14	11	11	8	10	21	35	
18-May-05	16	12	8	6	5	6	7	9	16	18	15	20	15	20	24	25	14	23	14	15	7	11	8	11	
19-May-05	30	31	9	7	7	8	6	5	6	7	9	10	9	9	12	10	8	7	6	5	7	6	8	10	
20-May-05	8	12	10	6	7	6	9	8	14	12	15	19	25	44	24	14	15	9	8	8	21	9	10	9	
21-May-05	10	6	5	5	6	6	7	9	10	10	13	14	10	10	10	9	14	17	19	10	7	6	6	11	
22-May-05	5	4	6	6	6	10	24	17	17	8	10	10	11	8	9	8	6	7	7	5	8	6	6	7	
23-May-05	6	7	9	6	12	45	10	18	12	14	19	21	15	11	15	22	21	14	5	6	11	26	13	10	
24-May-05	10	10	10	13	8	9	9	12	9	14	15	12	9	14	16	15	32	11	10	6	10	8	11		
25-May-05	10	10	8	8	8	11	13	12	13	12	11	10	12	12	12	9	10	9	6	5	4	10	10	12	
26-May-05	7	9	6	6	5	6	5	7	9	8	10	12	15	13	18	16	11	10	6	5	5	13	10	15	
27-May-05	calm	calm	12	calm	11	calm	calm	36	56	40	58	34	20	19	17	19	18	13	7	5	5	4	7	calm	
28-May-05	calm	36	30	48	11	calm	27	67	20	12	16	16	24	27	20	18	12	11	10	8	5	5	5	8	
29-May-05	8	8	8	12	14	11	14	17	15	19	20	25	18	23	21	21	21	16	11	7	9	9	9	16	
30-May-05	20	14	13	7	9	17	21	22	16	22	22	22	23	22	21	21	24	17	18	11	8	7	8	8	
31-May-05	13	18	49	26	11	18	16	21	13	15	16	16	19	9	10	12	7	6	8	15	9	6	7	10	

Daily Maximum
44.6
75.7
48.1
33.8
56.1
65.6
19.9
31.4
31.0
27.4
47.5
32.9
35.1
46.5
68.0
43.0
41.2
25.2
31.2
44.0
19.3
24.4
45.0
31.6
12.6
18.1
57.8
67.3
24.8
24.0
48.7

Hourly Max	38	36	49	48	41	45	56	67	56	47	58	53	45	66	76	46	36	47	19	15	21	48	30	35
------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----



Wind Rose for the 1-hr Average Data at the Crescent Heights Site for May 2005



Calms: 3%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
1.0	< 5		153
5	to 10		208
10	to 20		311
20	to 30		48
30	to 40		2
	> 40		0
Total Non-Zero Values			722



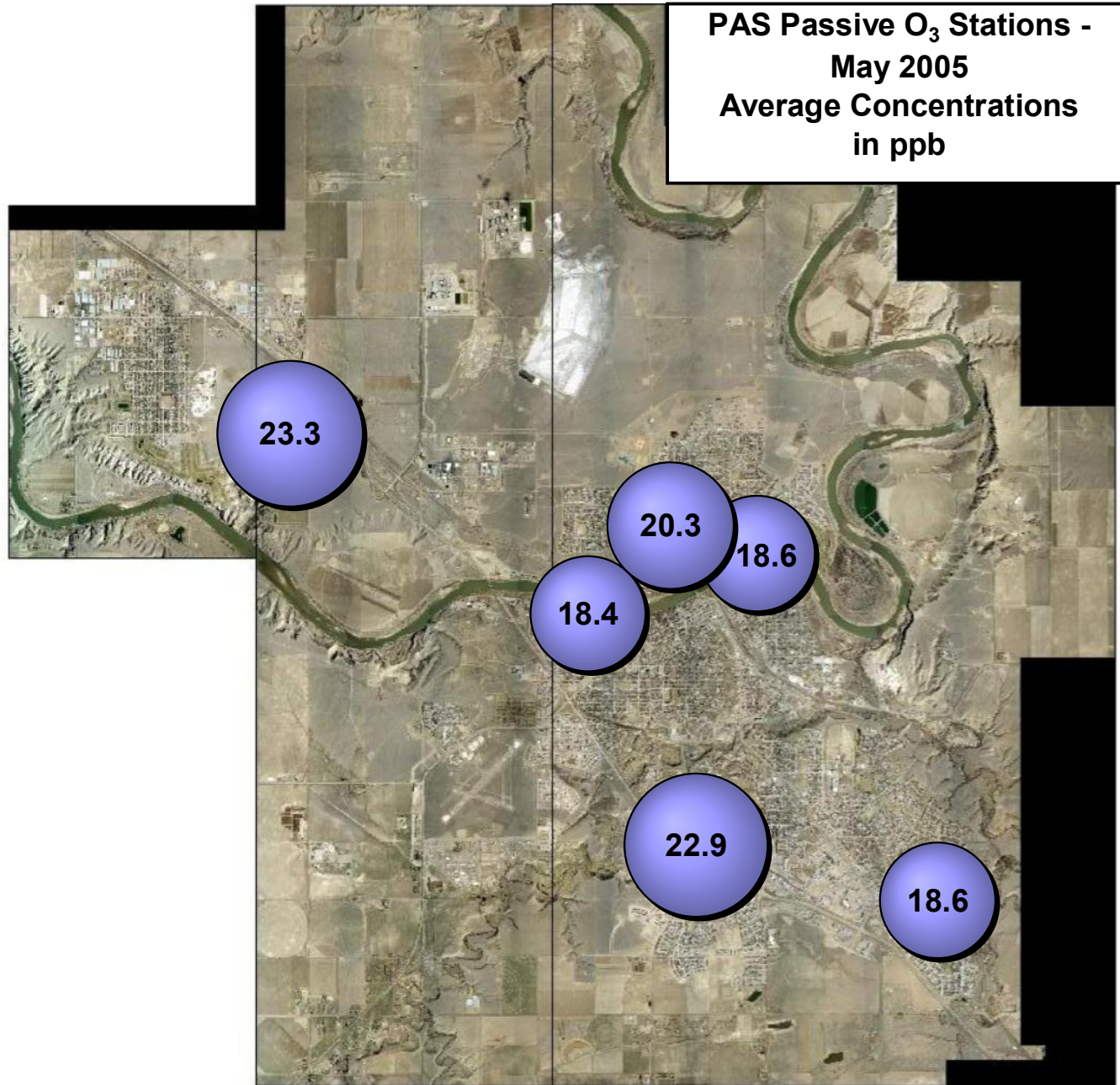
Passive Monitoring – May 2005

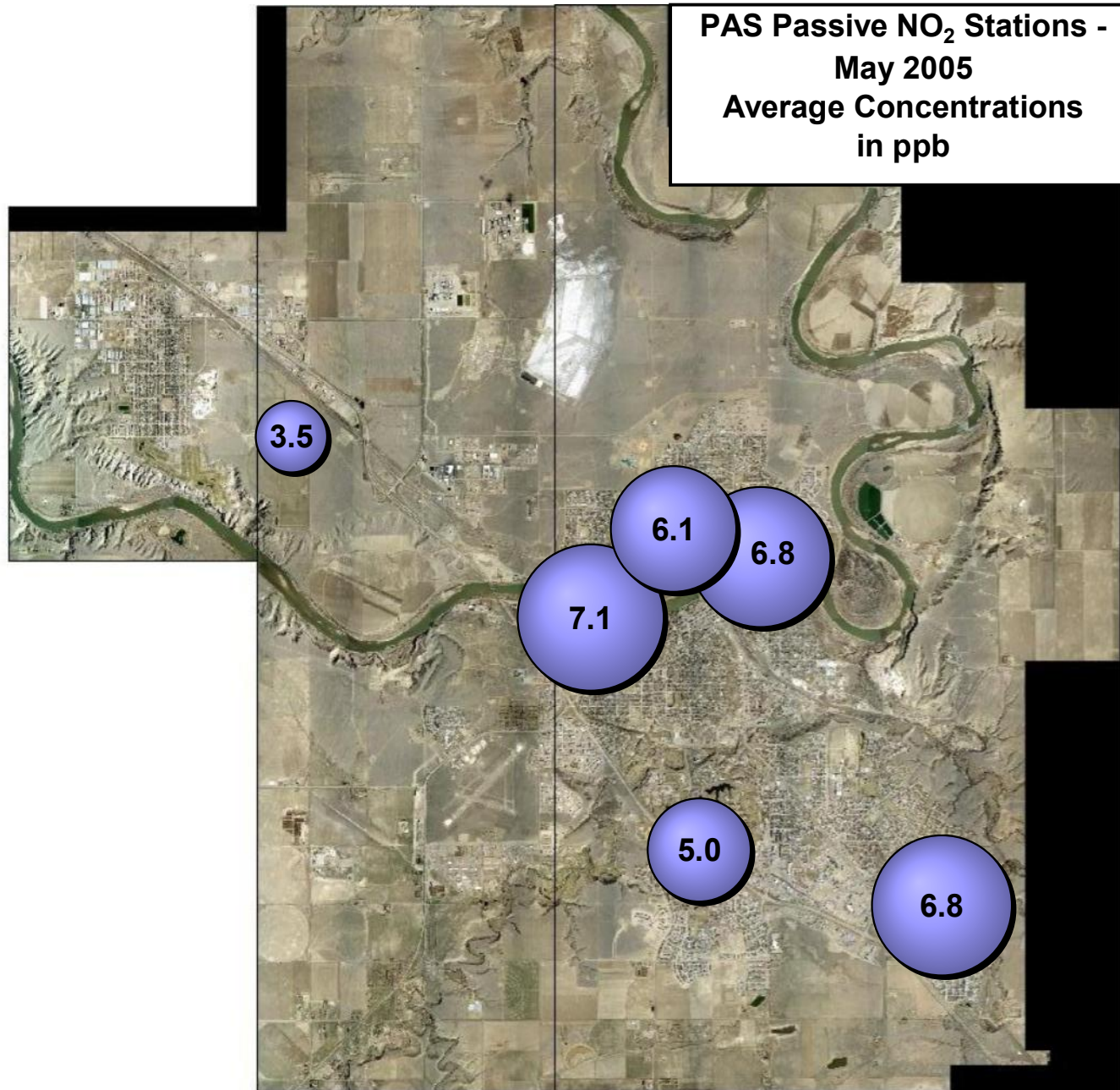
Ambient Air Compliance Network

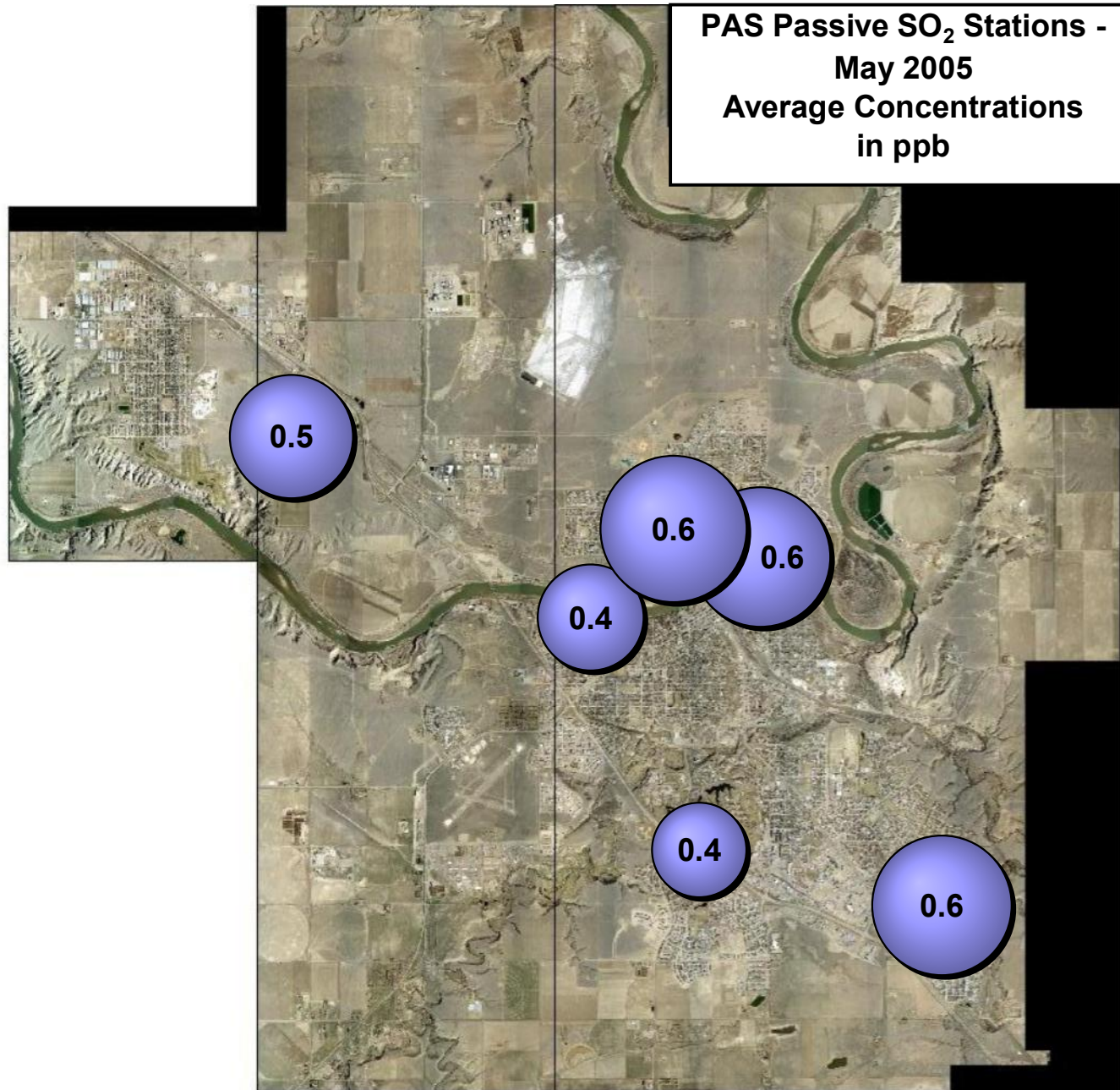


Palliser Airshed Society - PAS Passive Stations for May 2005

Station Number	Station Name	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Easting	Northing	Elevation																																																																
Duplicates																																																																							
2a	Ball Park	0.5	16.1	8.0																																																																			
2b		0.7	21.0	5.7																																																																			
1	Hospital	0.4	18.4	7.1	521648	5542721	698																																																																
2	Ball Park	0.6	18.6	6.8	524019	5543686	660																																																																
3	Monitoring Station	0.6	20.3	6.1	522812	5544133	714																																																																
4	Redcliff	0.5	23.3	3.5	517448	5545608	725																																																																
5	Southridge	0.4	22.9	5.0	523172	5539016	721																																																																
6	Christian School Park	0.6	18.6	6.8	526577	5538133	709																																																																
Stats: <table style="width: 100%; margin-top: 10px;"> <tr> <td style="text-align: center;">Mean</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">20.7</td> <td style="text-align: center;">5.7</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Standard Deviation</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">2.3</td> <td style="text-align: center;">1.5</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Minimum</td> <td style="text-align: center;">0.4</td> <td></td> <td></td> <td style="text-align: center;">5</td> <td colspan="3" style="text-align: center;">Southridge</td> </tr> <tr> <td style="text-align: center;">Maximum</td> <td style="text-align: center;">0.6</td> <td></td> <td></td> <td style="text-align: center;">3</td> <td colspan="3" style="text-align: center;">Monitoring Station</td> </tr> <tr> <td style="text-align: center;">Minimum</td> <td></td> <td style="text-align: center;">18.4</td> <td></td> <td style="text-align: center;">1</td> <td colspan="3" style="text-align: center;">Hospital</td> </tr> <tr> <td style="text-align: center;">Maximum</td> <td></td> <td style="text-align: center;">23.3</td> <td></td> <td style="text-align: center;">4</td> <td colspan="3" style="text-align: center;">Redcliff</td> </tr> <tr> <td style="text-align: center;">Minimum</td> <td></td> <td></td> <td style="text-align: center;">3.5</td> <td style="text-align: center;">4</td> <td colspan="3" style="text-align: center;">Redcliff</td> </tr> <tr> <td style="text-align: center;">Maximum</td> <td></td> <td></td> <td style="text-align: center;">7.1</td> <td style="text-align: center;">1</td> <td colspan="3" style="text-align: center;">Hospital</td> </tr> </table>								Mean	0.5	20.7	5.7					Standard Deviation	0.1	2.3	1.5					Minimum	0.4			5	Southridge			Maximum	0.6			3	Monitoring Station			Minimum		18.4		1	Hospital			Maximum		23.3		4	Redcliff			Minimum			3.5	4	Redcliff			Maximum			7.1	1	Hospital		
Mean	0.5	20.7	5.7																																																																				
Standard Deviation	0.1	2.3	1.5																																																																				
Minimum	0.4			5	Southridge																																																																		
Maximum	0.6			3	Monitoring Station																																																																		
Minimum		18.4		1	Hospital																																																																		
Maximum		23.3		4	Redcliff																																																																		
Minimum			3.5	4	Redcliff																																																																		
Maximum			7.1	1	Hospital																																																																		







May 2005 - Calibration Reports

PAS - Crescent Heights Station O₃, NO_x, NO, NO₂, THC, CO and PM_{2.5}

Calibration Report

Parameter 03
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
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)	18:25	End Time (MST)	20:50
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 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	0.978367	Calculated slope	1.014775
Calculated intercept	-2.915832	Calculated intercept	2.150261
Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	-2.4	ppb	-2.4	ppb
coefficient	1.149		1.149	
Lamp measure	2889	mV	2790	mV
Lamp Reference	2890	mV	2791	mV
Pressure	25.9	inches Hg	25.9	inches Hg
Sample Flow	725	ccm	725	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	-2.4	N/A
4995	0.00	320.2	313.4	1.0216
4995	0.00	183.6	178.5	1.0284
4995	0.00	92.4	89.5	1.0328
4995	0.00	0.0	-2.4	0.0000
4995	0.00	320.2	313.4	1.0216
Average Correction Factor				1.0276

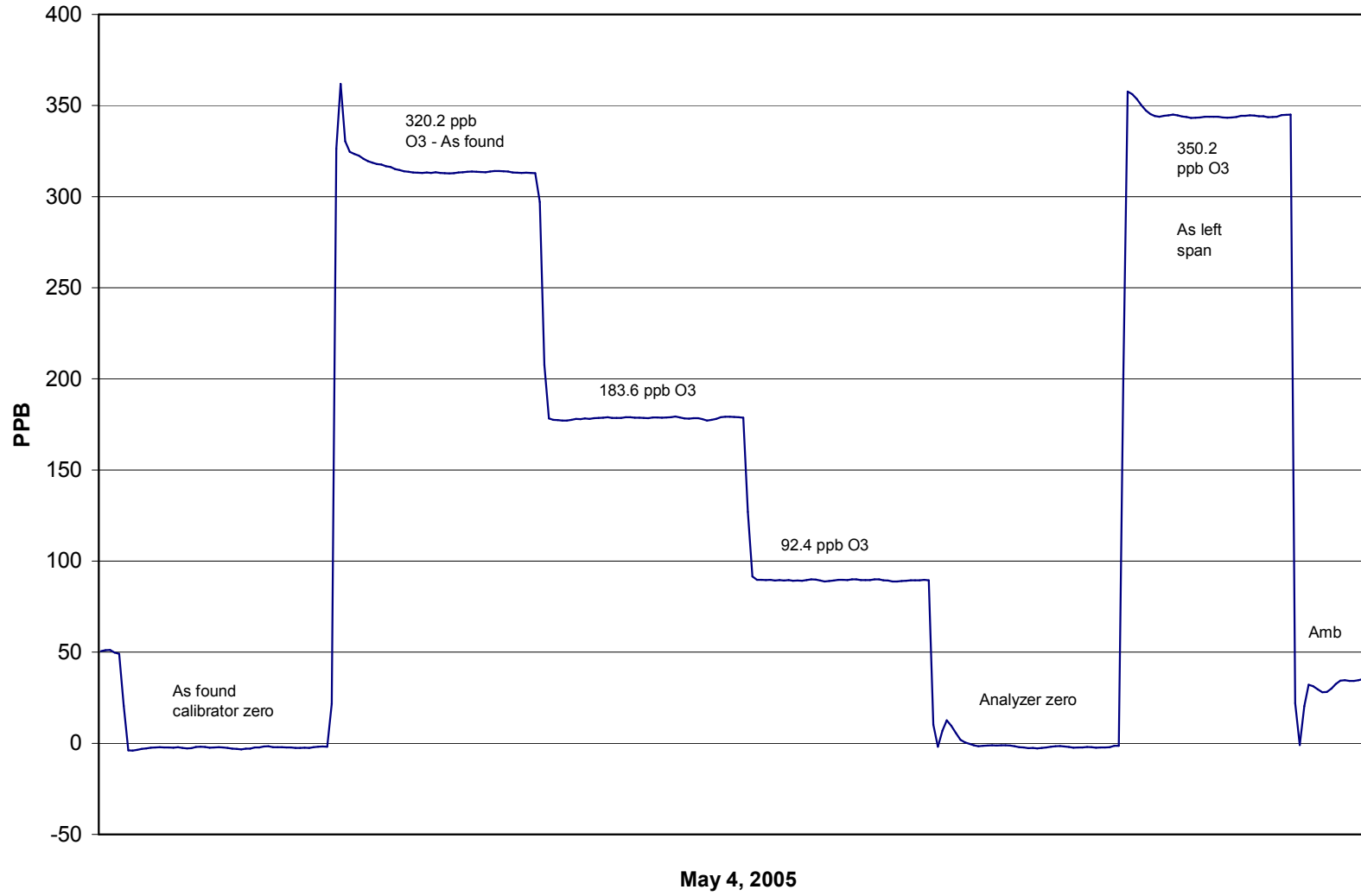
Calculated value of As Found Response: 306.1 ppm Percent Change of As Found: -4.4%

	before calibration		after calibration	
Auto zero	-4.8	ppb	0.1	ppb
Auto span	340.0	ppb	351.2	ppb

Notes: No adjustments performed.

Calibration Performed By: Kelly Baragar

O3 Calibration



Calibration Report

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



Station Information

Calibration Date May 4, 2005 Previous Calibration April 5, 2005
 Station Number 1 Station Location Crescent Heights

Reason: Routine Installation Removal Other: _____

Start Time (MST) 11:15 End Time (MST) 15:45
 Barometric Pressure 0.924 ATM Station Temperature 19.5 Deg C
 Calibrator Envionics 6100 Serial Number 3016
 NO Cal Gas Conc 50.5 ppm Cal Gas Expiry Date 12-Dec-05
 NOx Cal Gas Conc 50.5 ppm Cal Gas Serial # ALM011558

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO2	NOx	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.000728	1.002682	1.004669
	Data Offset	-1.022826	-1.268487	-2.065648
After	Data Slope	0.999737	1.003711	1.004541
	Data Offset	-0.184826	-1.081129	-0.751125
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	
		ppb		ppb
Concentration range	0 - 500		0 - 500	
NO background	0.7	mV	0.6	mV
NOx background	4.1	mV	1.2	mV
NO coefficient	1.770		1.848	
NOx coefficient	1.791		1.868	
Chamber Temp	49.9	Deg C	49.9	Deg C
Cooler Temp	7.1	Deg C	7.1	Deg C
Azero	32.1		32.0	
Perm Temp	40.1	Deg C	40.0	Deg C
Pressure	3.6	inches Hg	3.5	inches Hg
Sample Flow	453.0	ccm	456.0	ccm

Notes: Analyzer was zero and span adjusted.

Calibration Report

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



Station Information

Calibration Date: **May 4, 2005** 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	0.3	0.1	0.4	N/A	N/A
1	4993	39.97	401.1	401.1	0.0	400.0	399.6	1.1	1.0025	1.0036
2	4993	19.97	201.2	201.2	0.0	202.5	201.5	1.3	0.9933	0.9982
3	4993	9.97	100.6	100.6	0.0	101.7	101.4	0.3	0.9898	0.9923
AFZ	4993	0.00	0.0	0.0	0.0	-1.9	-0.4	-1.4	0.0000	0.0000
AFS	4993	39.97	401.1	401.1	0.0	383.1	384.6	-0.8	1.0470	1.0428
								Average Correction Factor	0.9952	0.9980

As Found Concentrations **NO_x= 383.7** **NO= 382.9** As Found Percent Change **NO_x= -4.3%** **NO= -4.5%**

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency	
0	405.4	397.5	7.9	399.2	396.5	0.4	N/A	N/A	N/A	N/A	
350	405.4	85.2	320.2	406.1	85.6	320.5	0.9984	0.9958	0.9991	100.1%	
200	405.4	221.8	183.6	405.0	221.5	184.0	1.0010	1.0012	0.9979	100.2%	
100	405.4	313.0	92.4	403.9	312.3	92.2	1.0038	1.0021	1.0019	99.8%	
							Average Correction Factor	1.0010	0.9997	0.9996	100.0%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	-1.1	-0.8	-0.8	ppb	-1.1	0.1	-1.0	ppb
Auto span	456.7	447.5	8.1	ppb	485.0	475.7	8.5	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter NO₂
 Air Monitoring Network Palliser Airshed

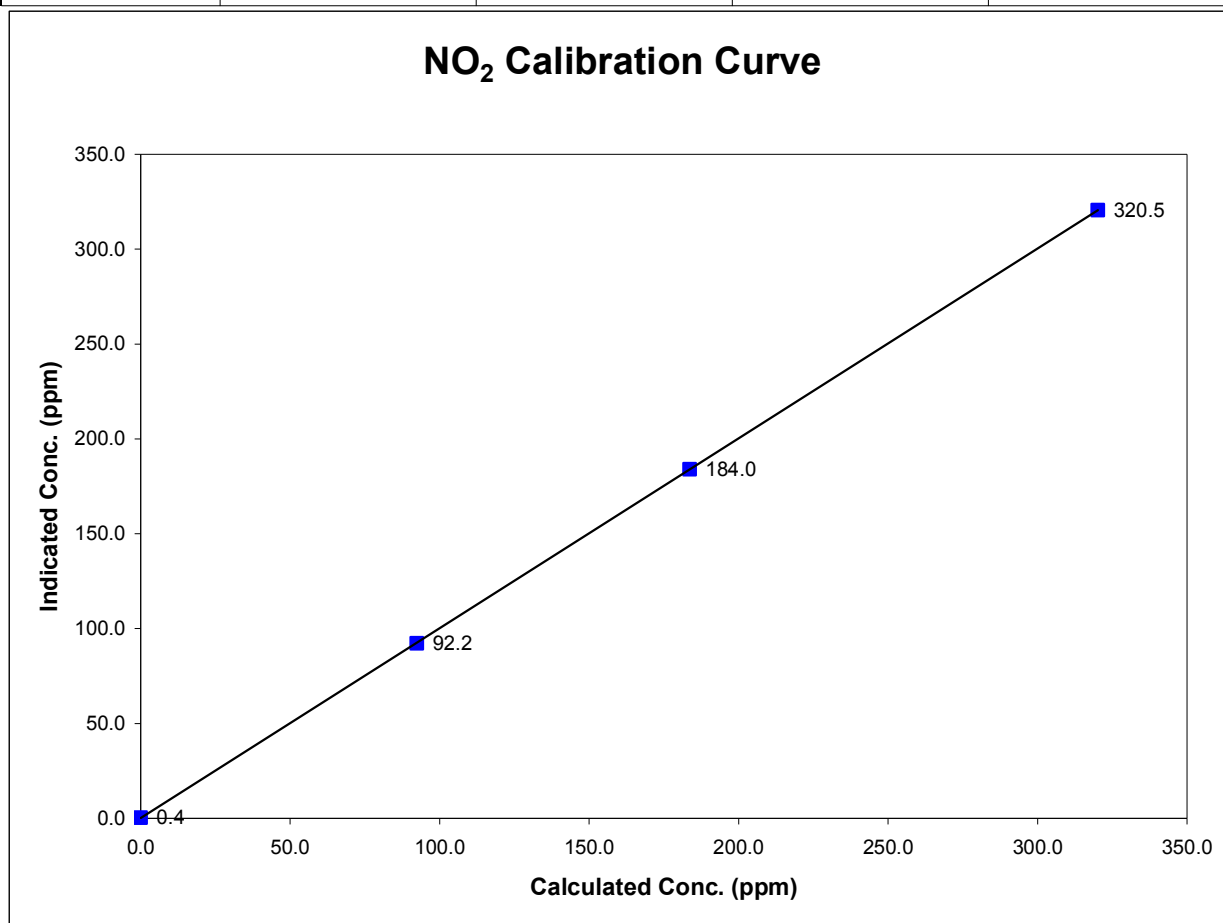


Station Information

Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	11:15	End Time (MST)	15:45
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	0.0000	Correlation Coefficient	0.999996
92.4	92.2	1.0019		
183.6	184.0	0.9979		
320.2	320.5	0.9991		
			Slope	0.999737
			Intercept	-0.184826



Calibration Summary

Parameter NO_xAir Monitoring Network Palliser Airshed

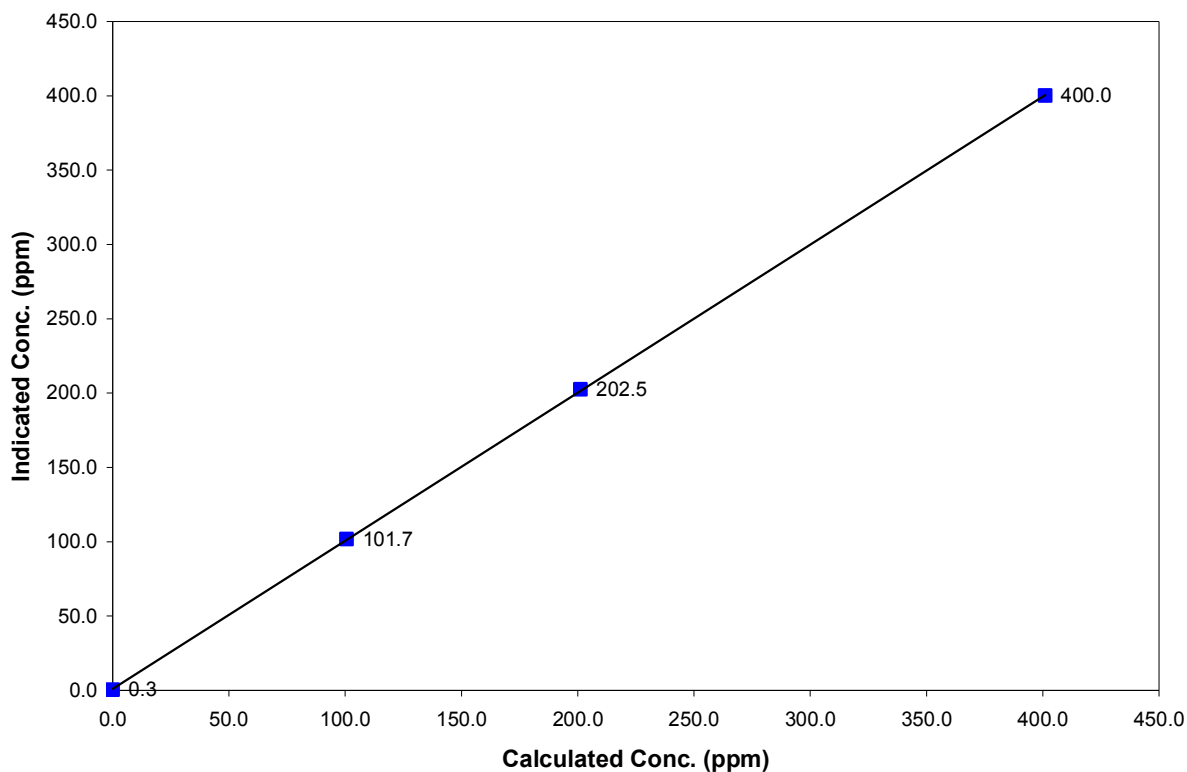
Station Information

Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	11:15	End Time (MST)	15:45
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	0.0000	Correlation Coefficient	0.999976
401.1	400.0	1.0025		
201.2	202.5	0.9933		
100.6	101.7	0.9898		
			Slope	1.003711
			Intercept	-1.081129

NO_x Calibration Curve



Calibration Summary

Parameter NO
 Air Monitoring Network Palliser Airshed

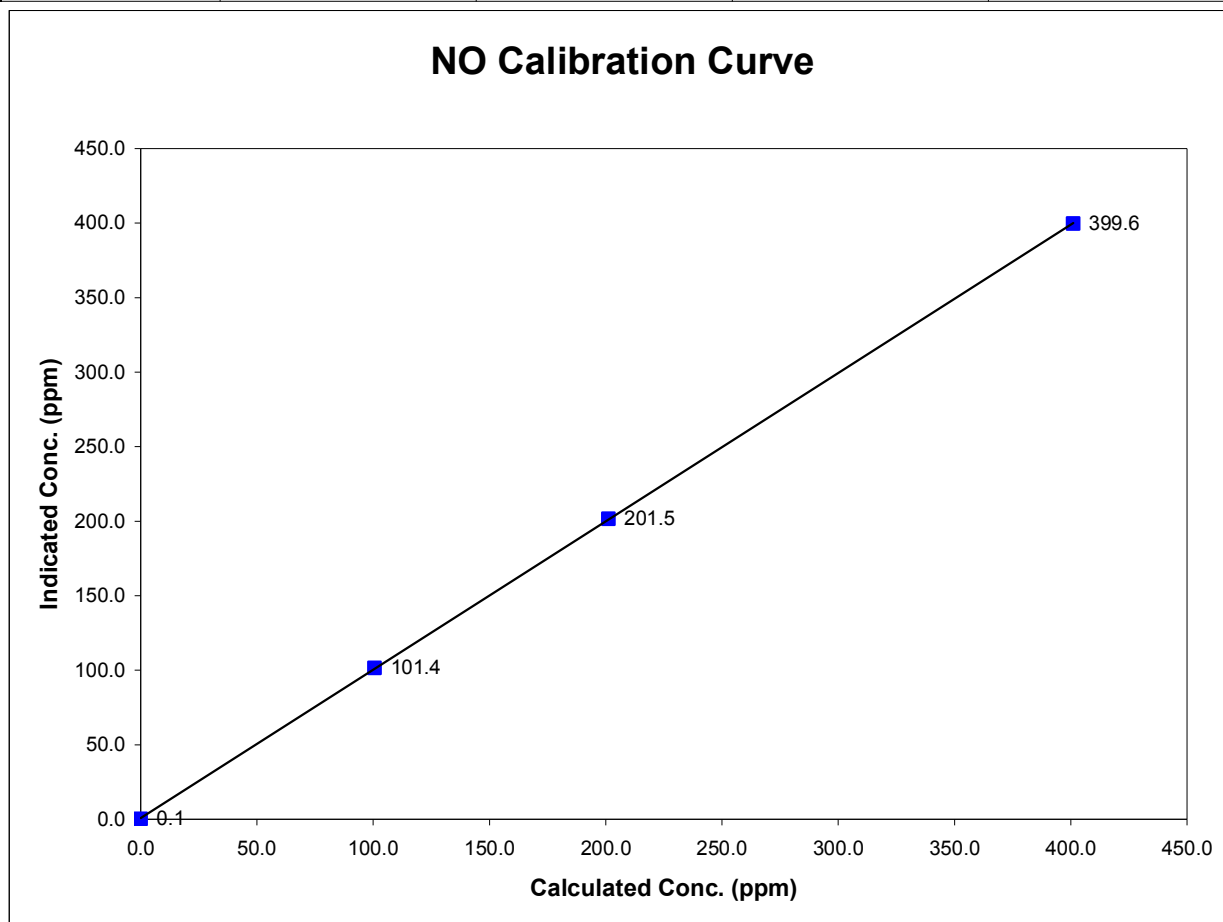


Station Information

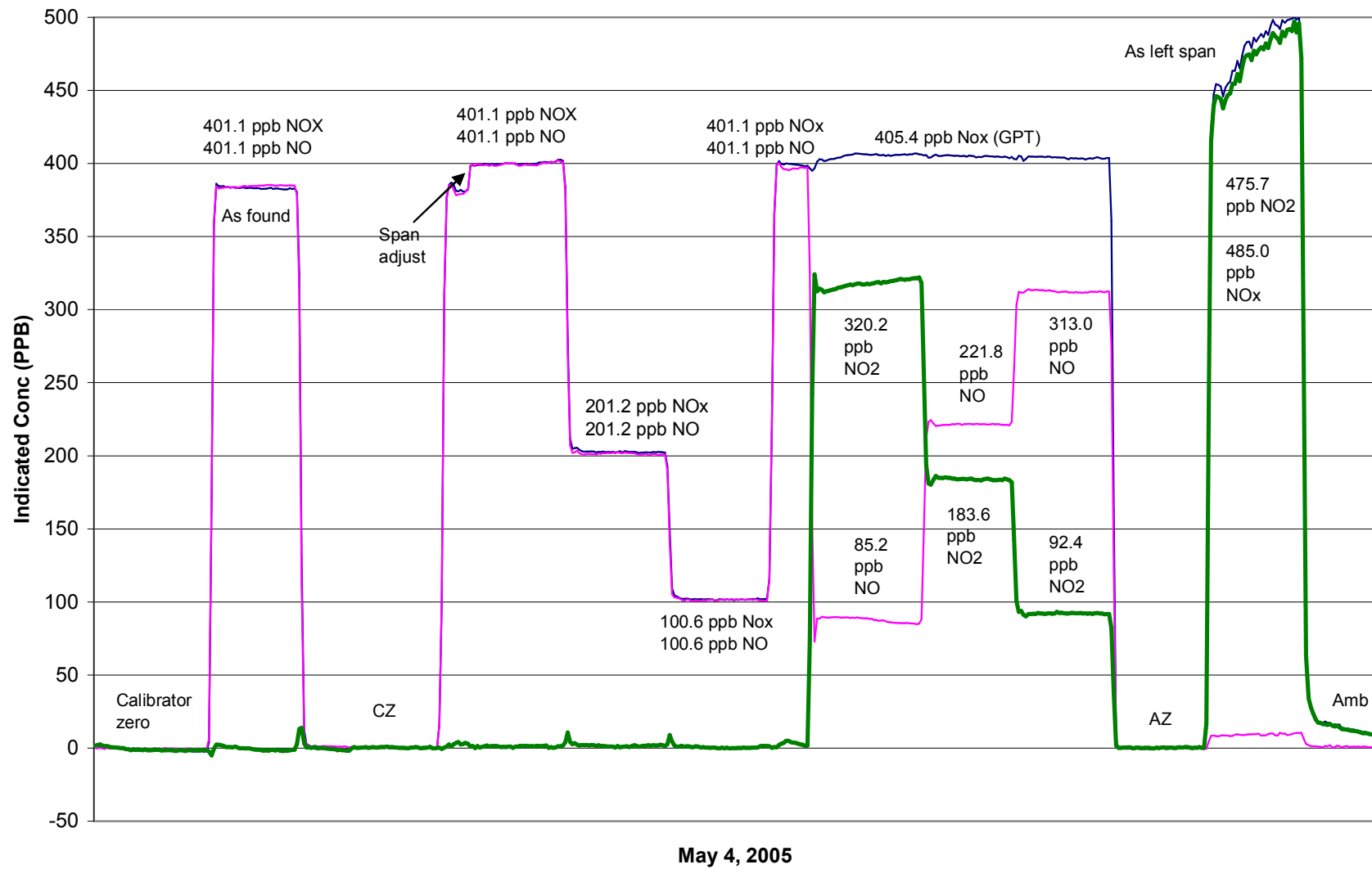
Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	11:15	End Time (MST)	15:45
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
401.1	399.6	1.0036	Correlation Coefficient	0.999988
201.2	201.5	0.9982		
100.6	101.4	0.9923	Slope	1.004541
			Intercept	-0.751125



NOx Calibration



Calibration Report

Parameter THC
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
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)	14:50	End Time (MST)	22:30
Barometric Pressure	0.924 ATM	Station Temperature	20.0 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
	Before		After
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.000536	Calculated slope	1.001504
Calculated intercept	0.009655	Calculated intercept	-0.016345
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.74	PSI	5.74	PSI
THC span counts	10690	raw	8771	raw
THC zero counts	1711	raw	2203	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	0.00	N/A
2994	39.98	20.13	20.12	1.0005
2994	19.98	10.13	10.10	1.0032
2994	9.97	5.07	5.13	0.9892
zero	0.00	0.00	0.15	As Found Zero
2994	39.98	20.13	18.77	As Found Span
Average Correction Factor				0.9976

Calculated value of As Found Response: 18.639 ppm Percent Change of As Found: 7.4%

	before calibration		after calibration	
Auto zero	-0.01	ppm	-0.01	ppm
Auto span	21.52	ppm	20.41	ppm

Notes: Post as found calibration points internal pump was rebuilt. Analyzer was zero and span adjusted.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter THC
 Air Monitoring Network Palliser Airshed

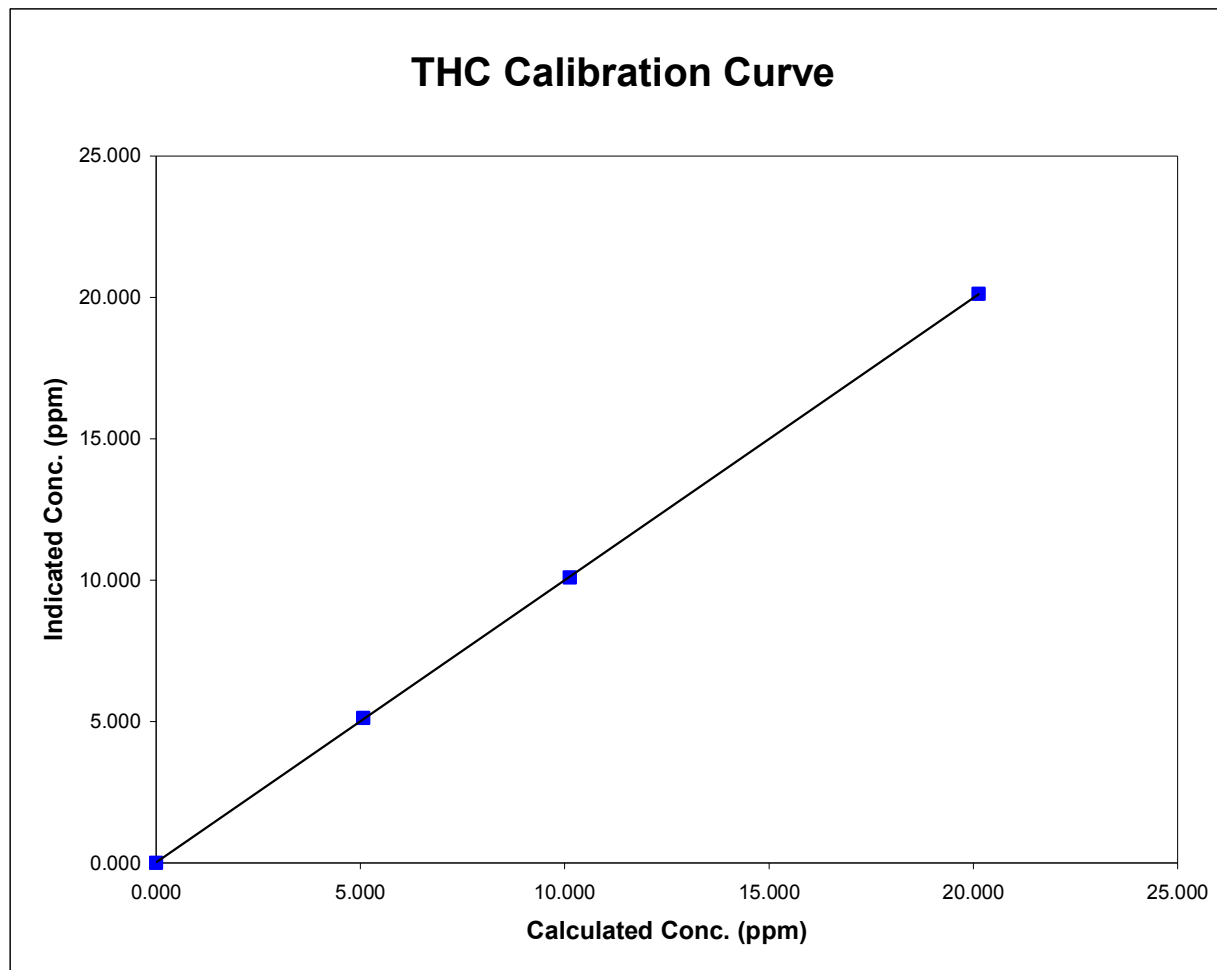


Station Information

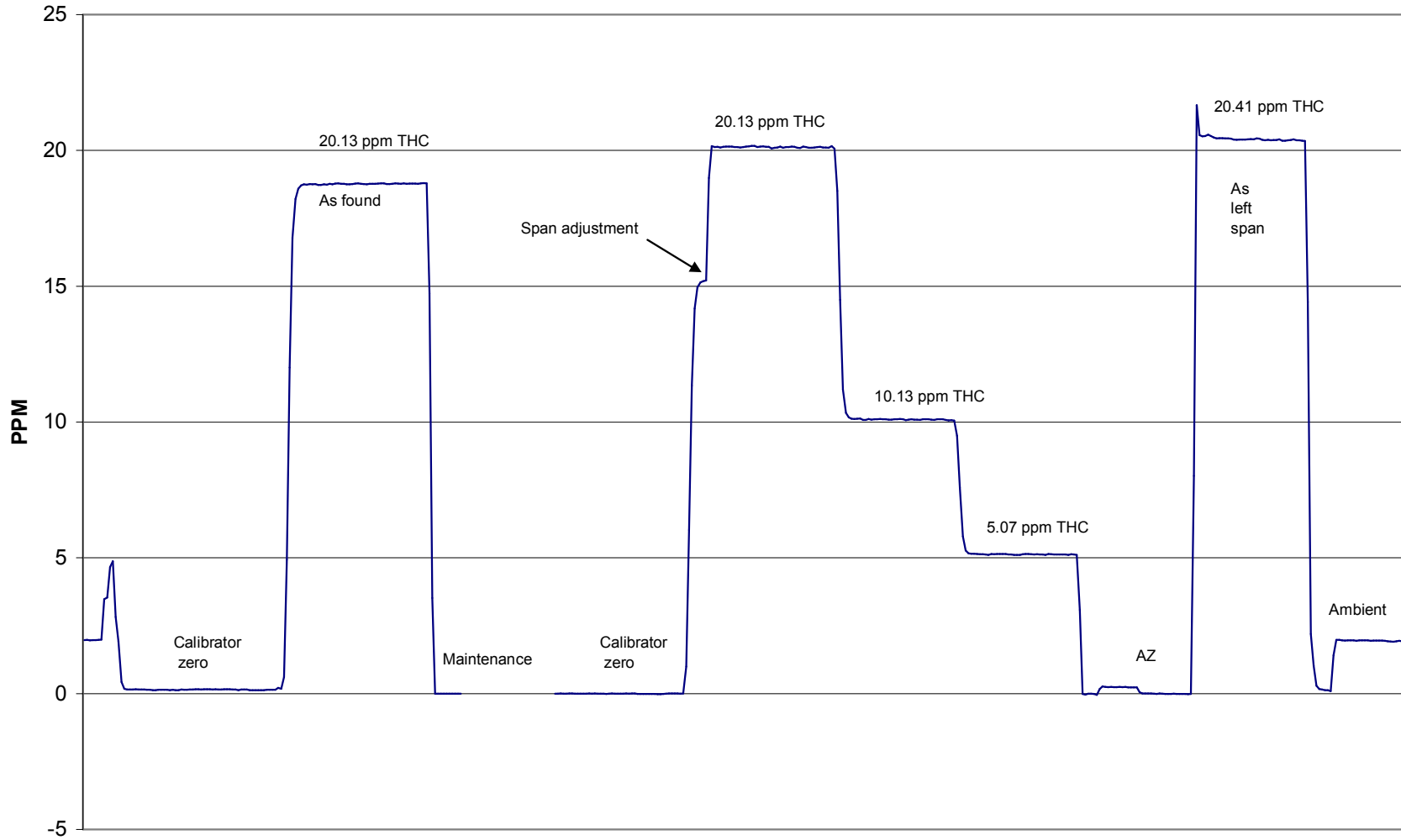
Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	14:50	End Time (MST)	22:30
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.002	N/A		
20.132	20.123	1.0005	Correlation Coefficient	0.999984
10.128	10.095	1.0032		
5.071	5.126	0.9892	Slope	1.001504
			Intercept	-0.016345



THC Calibration



May 4, 2005

Calibration Report

Parameter THC
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	May 13, 2005	Previous Calibration	May 4, 2005
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)	12:05	End Time (MST)	18:55
Barometric Pressure	0.929 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH ₄ / 301 ppm C ₃ H ₈	Cal Gas Expiry Date	8/28/2005
Cal Gas CH4 equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.001504	Calculated slope	1.000024
Calculated intercept	-0.016345	Calculated intercept	0.008562
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	9.9	PSI	5.74	PSI
THC span counts	8771	raw	10713	raw
THC zero counts	2203	raw	1784	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	0.01	N/A
2994	39.98	20.13	20.15	0.9992
2994	19.98	10.13	10.06	1.0067
2994	9.97	5.07	5.08	0.9988
zero	0.00	0.00	1.95	As Found Zero
2994	39.98	20.13	40.17	As Found Span
Average Correction Factor				1.0016

Calculated value of As Found Response: 38.259 ppm Percent Change of As Found: -90.0%

	before calibration		after calibration	
Auto zero	-0.01	ppm	0.00	ppm
Auto span	20.41	ppm	21.87	ppm

Notes: Large as found capture indicates failure within sample stream. Replaced restrictive fitting upstream and removed restrictive problem downstream. Rebuilt pump to eliminate vibration. Analyzer operation appears good after repairs. Zero and span adjustments made.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter THC
 Air Monitoring Network Palliser Airshed

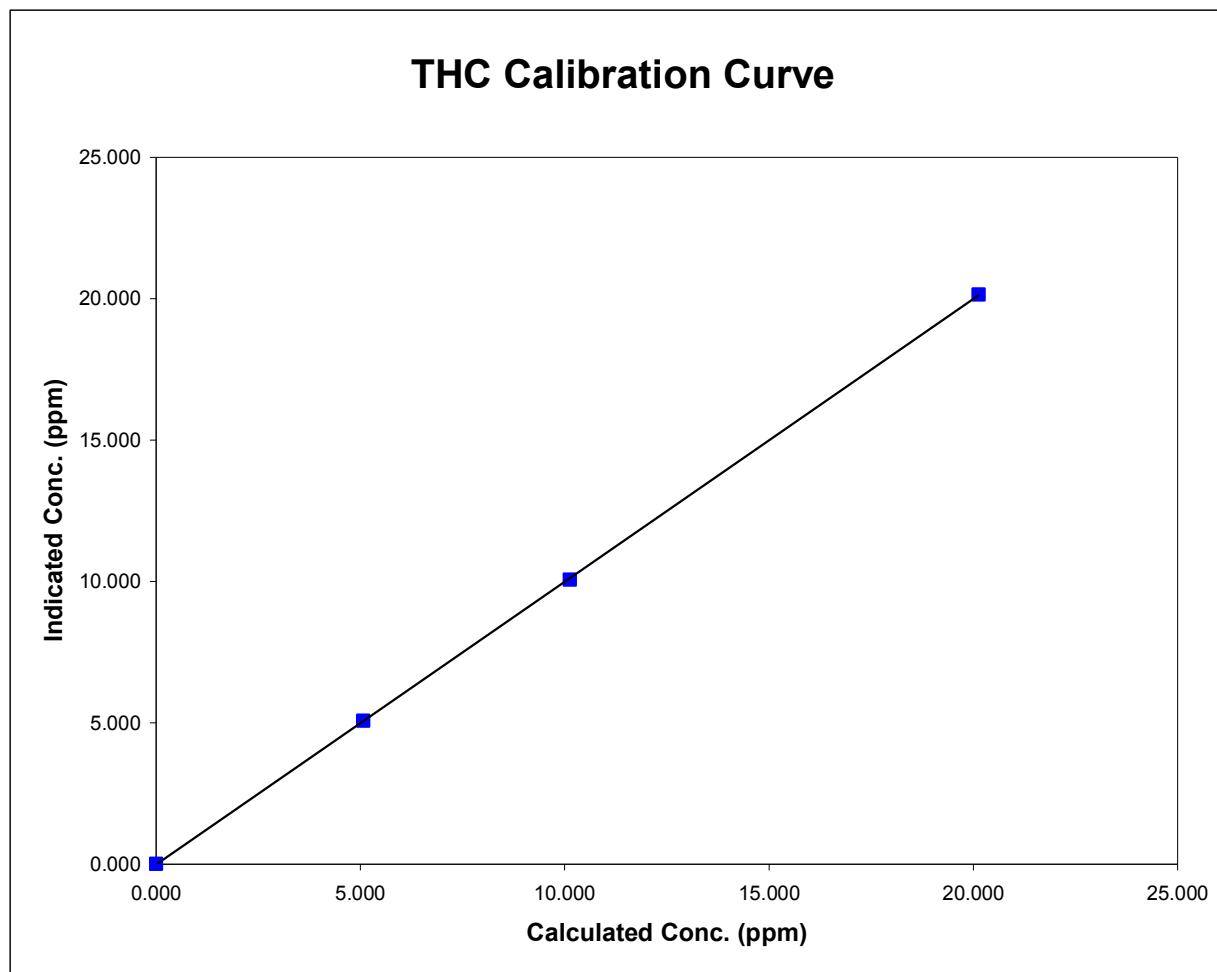


Station Information

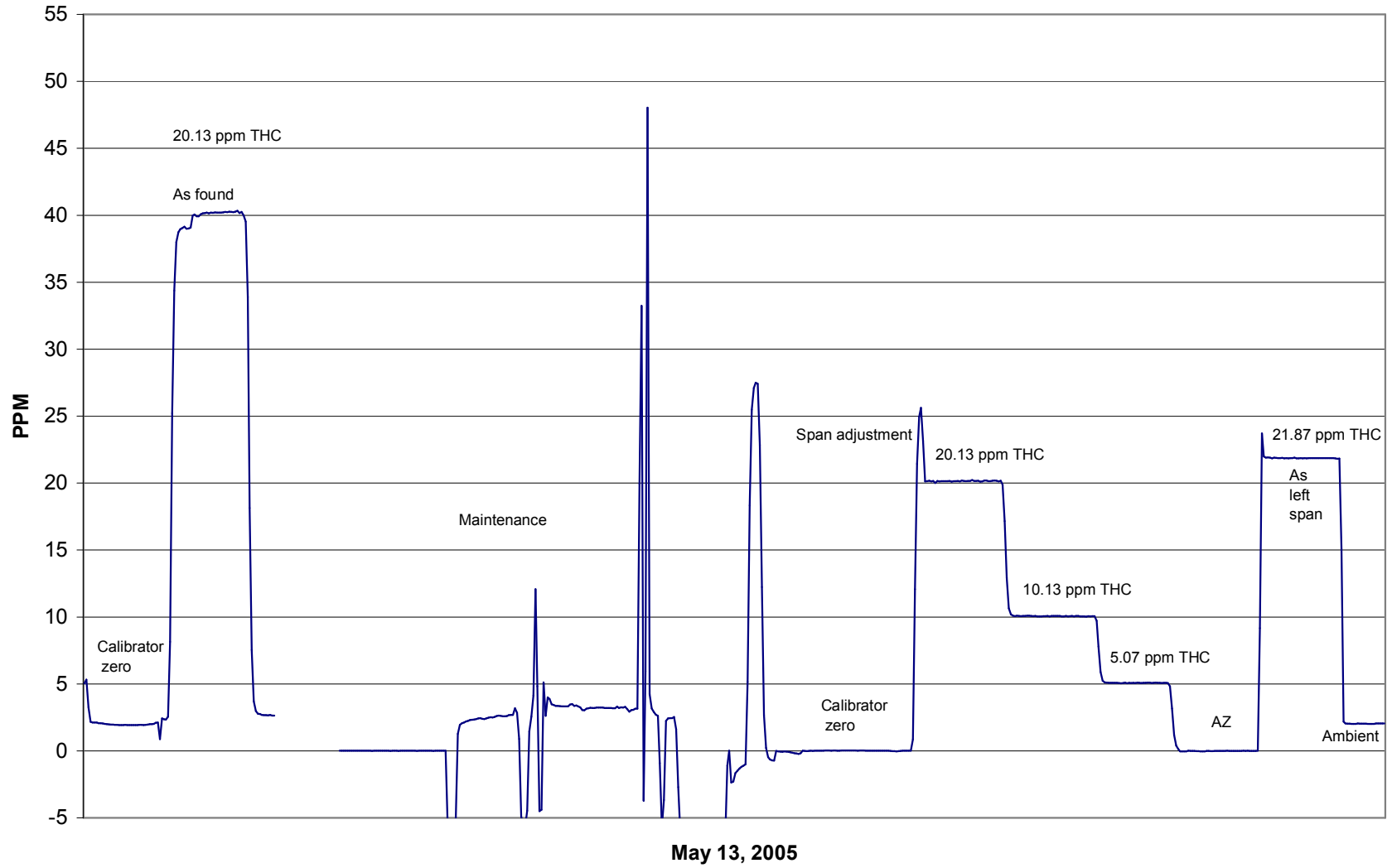
Calibration Date	May 13, 2005	Previous Calibration	May 4, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	12:05	End Time (MST)	18:55
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.010	N/A		
20.132	20.148	0.9992	Correlation Coefficient	0.999979
10.128	10.060	1.0067		
5.071	5.076	0.9988	Slope	1.000024
			Intercept	0.008562



THC Calibration



Calibration Report



Parameter CO
 Air Monitoring Network Palliser

Station Information

Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
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)	15:50	End Time (MST)	19:15
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3016
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
		Cal Gas Cylinder #	BLM002248
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 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	1.003685	Calculated slope	0.999499
Calculated intercept	0.507728	Calculated intercept	0.564476
Analyzer make	TEI Model 48CLT	Analyzer serial #	436609887

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.026		1.045	
CO bkg setting	3.134		4.108	
Lamp ratio	1.1612		1.1598	
Lamp intensity	199700	Hz	199903	Hz
Sample Flow	0.998	LPM	1.104	LPM

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4993	0.00	0.00	-0.49	N/A
4993	49.97	29.71	29.20	1.0172
4993	19.96	11.94	11.26	1.0598
4993	9.97	5.97	5.41	1.1051
4993	0.00	0.00	0.41	0.0000
4993	39.97	23.81	24.51	0.9713
Average Correction Factor				1.0607

Calculated value of As Found Response: 24.699 ppm Percent Change of As Found: -3.7%

	before calibration		after calibration	
Auto zero	0.01	ppm	0.02	ppm
Auto span	20.01	ppm	20.27	ppm

Notes: A zero and span adjustment were performed for installation.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter CO
Air Monitoring Network Palliser

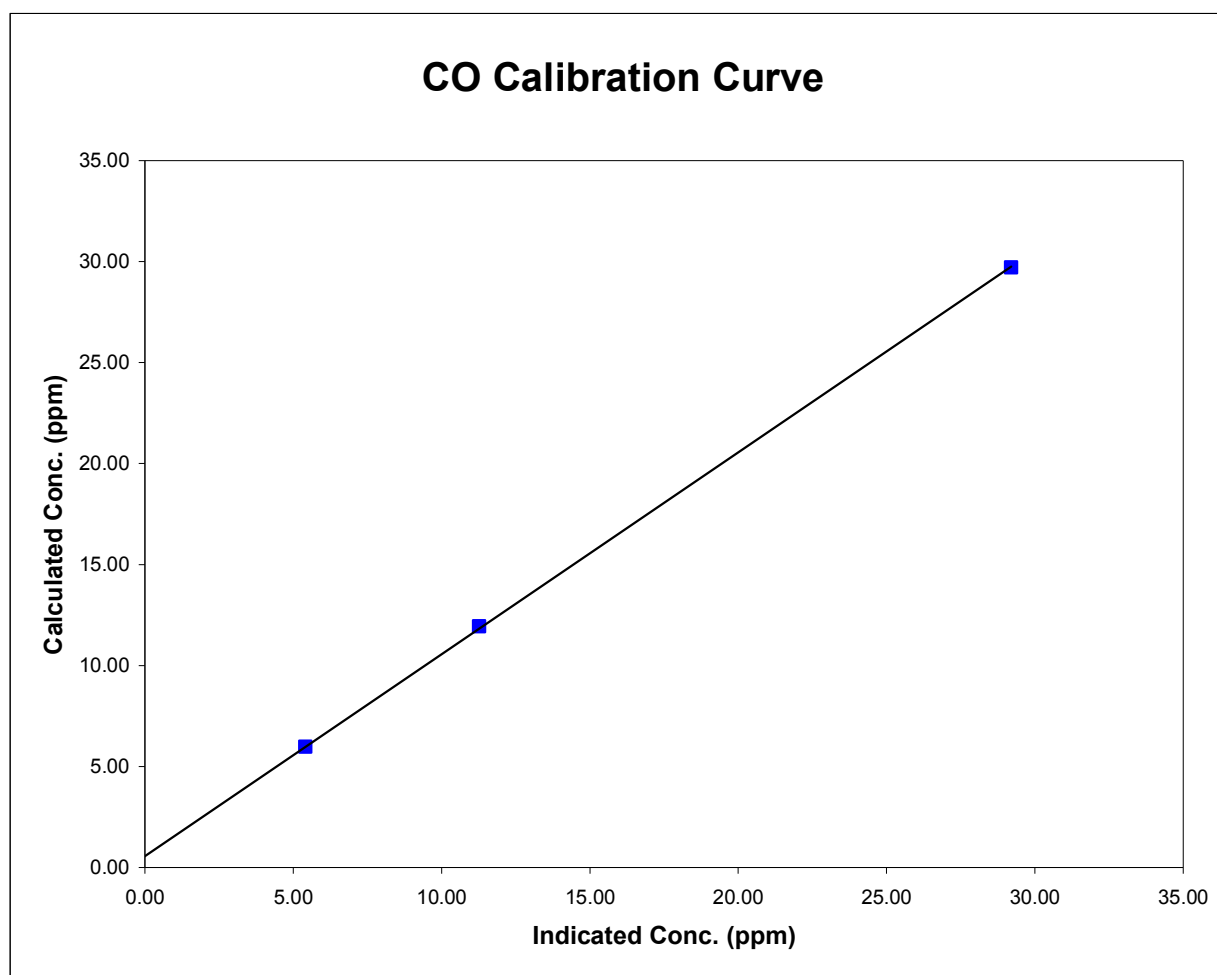


Station Information

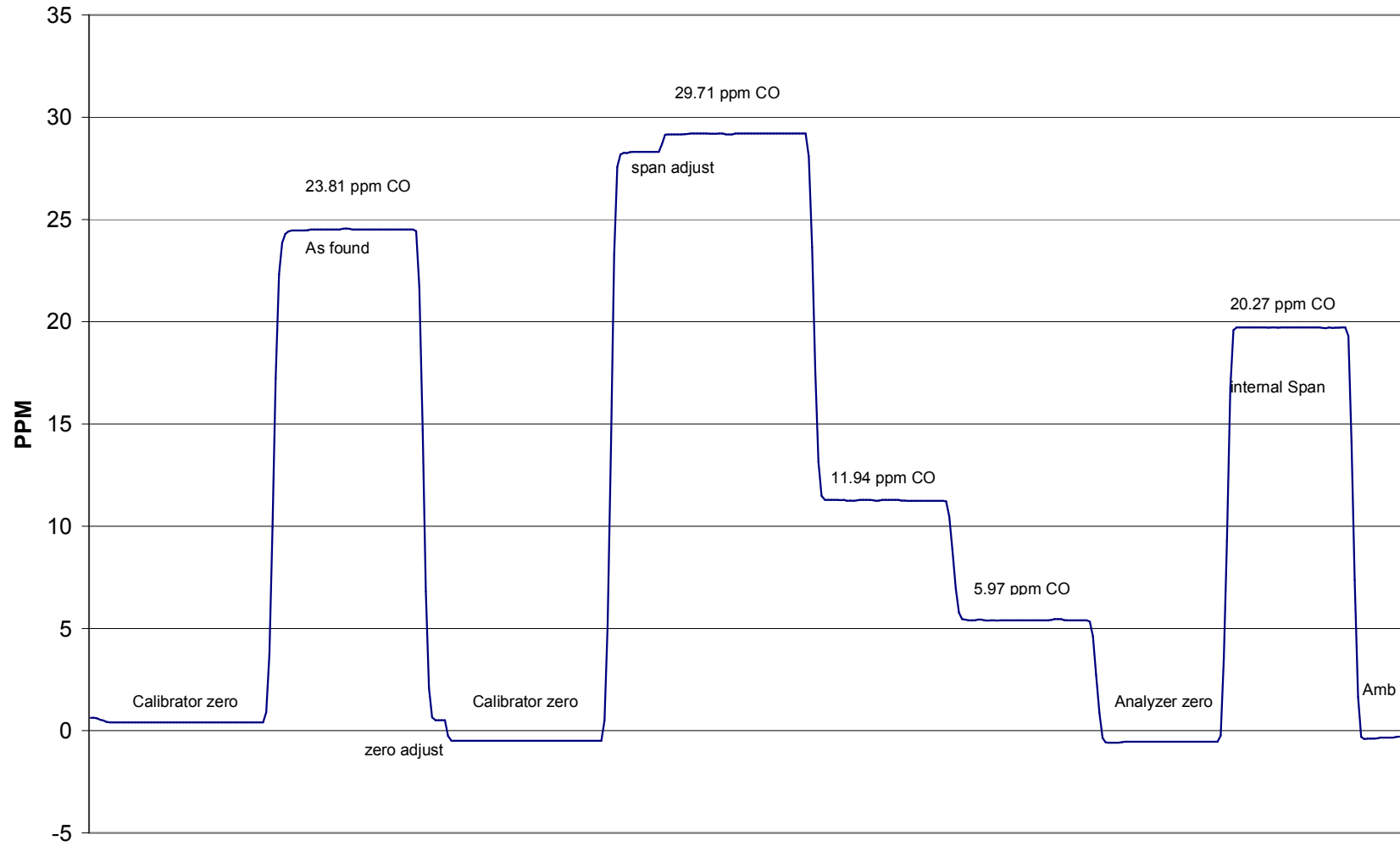
Calibration Date	May 4, 2005	Previous Calibration	April 5, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	15:50	End Time (MST)	19:15
Analyzer make/model	TEI Model 48CLT	Analyzer serial #	436609887

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.490	N/A		
29.707	29.204	1.0172	Correlation Coefficient	0.999957
11.937	11.263	1.0598		
5.974	5.406	1.1051	Slope	0.999499
			Intercept	0.564476



CO Calibration



May 4, 2005

Calibration Report



Parameter PM2.5
 Air Monitoring Network Palliser Airshed

Station Information

Calibration Date	May 9, 2005	Previous Calibration	April 28, 2005
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)	11:30	End Time (MST)	17:30
Barometric Pressure	0.921 ATM	Station Temperature	20.0 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
	<u>Before</u>		<u>After</u>
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	24	%	17	%
Ko Factor	12758		12758	
Temperature	17.5	Deg C	17.5	Deg C
Pressure	0.920	ATM	0.920	ATM

Calibration Data

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.0		0.09
zero flow - auxillary	0.0	0.0		0.17
flow recovery - main	45 - 60 Seconds	45.0	45 - 60 Seconds	45.0
flow recovery - aux	46 - 60 Seconds	45.0	46 - 60 Seconds	45.0
Temperature	measured	17.5	+/- 1.0 Deg C	17.5
Pressure	measured	0.921	+/- 1.5% ΔATM	0.920
Total Flow	16.67 SLPM	16.00		16.70
Main Flow	13.67 SLPM	2.850	+/- 1.0 SLPM	3.000
Auxillary Flow	3.0 SLPM	13.20	+/- 0.2 SLPM	13.75
Leak Check - main	0.0	0.00	<0.15 SLPM	0.09
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.17
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	N/A

Notes: Analyzer pegging full scale; problem appears with the auxiliary flow. Removed, examined, and cleaned entire flow path. Vacuum from pump noted at 19.0" Hg; no 44 stroke rebuild kits available so added second 607 pump downstream to increase vacuum to 21.0" Hg. Analog and hardware calcs done.

Calibration Performed By: Kelly Baragar