



Palliser Airshed Society

Ambient Air Monitoring Network Summary

January 2005

Prepared By:
FOCUS
AIR QUALITY MONITORING

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

Attention: Director of Monitoring and Evaluation

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

Enclosed is the PAS Ambient Monitoring Report for the month of **January 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 98% uptime for the month of January. There were no significant events leading to emergency response for the month of January.

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

- Monthly average concentrations of NO₂ was 13.4 ppb
- Monthly average concentrations for O₃ was 18.3 ppb
- Monthly average concentrations for THC was 2.26 ppm
- Monthly average concentrations for PM_{2.5} was 3.7 µg/m³

Passive Monitoring – Six Stations throughout the PAS zone:

The following are the ranges for December 2004 to January 2005 recorded by the six passive stations located throughout the PAS zone:

- Monthly average concentrations for SO₂ passives ranged from 0.4 ppb to 0.8 ppb
- Monthly average concentrations for NO₂ passives ranged from 3.8 ppb to 12.7 ppb
- Monthly average concentrations for O₃ passives ranged from 18.0 ppb to 32.5 ppb

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

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AQM Technical Manager

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January 2005 Monthly Overall Summary Report

Ambient Air Quality Data

Jan-2005		Palliser Airshed Society				Maximum Recorded Values						Operational Time (%)	
Pollutant (units)	Guidelines		Station	Monthly Average	Exceedence		1-hr				24-hr		
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc		Day
NO (ppb)			Crescent Heights	10.4	0	0	147.1	Jan-25	3.5	SW	30.2	Jan-04	100.0%
NO ₂ (ppb)	212	106	Crescent Heights	13.4	0	0	44.9	Jan-11	3.4	S	24.9	Jan-10	100.0%
NO _x (ppb)			Crescent Heights	23.6	0	0	181.0	Jan-25	3.5	SW	53.8	Jan-04	100.0%
O ₃ (ppb)	82		Crescent Heights	18.3	0	0	41.3	Jan-05	16.4	SSW	29.4	Jan-12	100.0%
THC (ppm)			Crescent Heights	2.26	0	0	4.10	Jan-03	2.3	WSW	2.90	Jan-04	100.0%
PM _{2.5} (µg/m ³)		30 ^a	Crescent Heights	3.7	0	0	24.8	Jan-04	4.4	ENE	14.8	Jan-04	98.7%
RH (%)			Crescent Heights	68.8									100.0%
SR (W/m ²)			Crescent Heights	56.6									100.0%
Temp (°C)			Crescent Heights	-10.0									100.0%
WSPD v (km/hr)			Crescent Heights	4.4									100.0%
WSPD s (km/hr)			Crescent Heights	9.4									100.0%
WDIR (Deg)			Crescent Heights	WSW*									100.0%

Note: ^a the 24-hr Canada Wide Standard level is considered as an absolute value

* Wind Direction is the predominate direction for the Month



Continuous Monitoring

Ambient Air Monitoring Network

Crescent Heights Station

General Station Issues

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

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	No operational problems observed
PM 2.5	R&P TEOM	1400ab	$\mu\text{g}/\text{m}^3$	Eight hours of data was removed due to excessive drift
Wind Speed	Met One	010C	kph	No operational problems observed
Wind Direction	Met One	020C	Deg	No operational problems observed
Ambient Temperature	Met One	083D	DegC	No operational problems observed
Relative Humidity	Met One	083D	%	No operational problems observed
Solar Radiation	Met One	096-1	W/m^2	No operational problems observed
Data Acquisition System	Titan Logix	AP1000		No operational problems observed



PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	45 ppb 11-Jan 21:00 22:00
Maximum 24-hr Average:	25 ppb 10-Jan

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

AIC Time:	34 hrs	Operational Time:	704 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	40	32	20	10	5	2	1	13.4 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	6	7	3	A	3	2	1	1	1	0	0	0	0	0	5	8	19	19	32	32	29	31	33	20	11.0	32.8
2-Jan-05	22	31	A	31	13	14	14	14	13	10	6	5	5	6	18	16	20	24	25	28	24	28	24	26	18.2	30.8
3-Jan-05	30	A	13	13	10	12	17	23	20	15	12	10	8	13	12	12	20	24	27	21	23	27	31	30	18.3	30.8
4-Jan-05	A	32	28	27	25	25	27	26	26	17	11	16	17	15	15	19	26	27	29	28	27	30	31	A	23.9	32.4
5-Jan-05	30	30	28	29	28	35	34	33	42	32	18	11	2	2	2	4	8	7	6	3	2	5	A	7	17.3	42.2
6-Jan-05	3	4	2	2	2	12	5	8	10	8	7	9	10	9	12	10	5	3	4	5	A	9	6	6	6.7	12.5
7-Jan-05	2	3	4	5	11	16	10	11	19	14	17	14	5	5	4	5	5	6	6	10	A	12	10	5	8.6	19.0
8-Jan-05	5	4	2	3	3	2	3	3	5	10	7	9	6	7	11	15	22	30	25	A	19	27	32	26	12.0	32.2
9-Jan-05	21	26	32	30	24	23	24	21	25	18	15	14	14	10	7	16	18	21	A	9	9	12	16	26	18.7	31.7
10-Jan-05	27	31	32	30	29	30	25	23	28	28	16	8	6	7	7	10	20	A	33	33	33	35	35	41	24.9	41.3
11-Jan-05	40	36	21	14	6	4	7	13	20	21	10	16	11	9	9	17	A	40	39	40	38	45	32	8	21.6	44.9
12-Jan-05	3	5	12	18	12	5	6	6	6	5	4	4	5	5	8	A	10	10	9	9	9	7	9	9	7.7	17.8
13-Jan-05	14	24	24	23	17	31	27	37	41	32	16	11	6	5	A	9	12	15	12	16	14	16	20	15	19.0	41.1
14-Jan-05	15	16	15	11	11	12	13	16	18	13	10	6	5	A	6	8	13	11	13	12	9	5	7	6	11.1	18.2
15-Jan-05	12	22	23	12	25	27	31	31	27	25	15	14	A	7	7	8	11	14	11	11	11	20	42	35	19.2	42.3
16-Jan-05	38	31	38	28	24	32	17	18	20	13	13	A	14	16	17	16	27	29	34	22	24	19	27	25	23.4	38.2
17-Jan-05	24	31	36	38	41	38	37	36	37	38	A	19	5	4	3	3	5	4	2	2	2	2	4	4	18.1	40.8
18-Jan-05	12	13	0	3	7	14	18	20	22	A	C	C	C	C	C	C	A	37	29	16	22	22	24	19	N	37.1
19-Jan-05	5	1	1	0	1	2	3	5	5	A	18	14	15	6	20	18	21	22	9	5	4	9	10	3	8.6	22.3
20-Jan-05	8	2	13	18	20	13	5	11	A	9	8	6	4	7	9	9	7	7	5	6	9	7	9	9	8.7	19.8
21-Jan-05	6	4	3	2	2	3	3	A	7	4	5	2	2	2	2	3	4	4	3	2	2	3	2	2	3.1	6.7
22-Jan-05	3	4	8	10	10	12	A	14	3	3	3	2	2	2	3	3	4	6	5	5	5	5	5	4	5.3	13.6
23-Jan-05	4	4	8	3	3	A	9	6	5	6	4	4	11	9	13	13	19	29	26	16	15	10	8	6	10.0	28.7
24-Jan-05	5	2	5	3	A	6	5	7	7	7	6	3	4	11	11	5	4	12	3	3	11	23	27	22	8.3	26.8
25-Jan-05	25	26	21	A	23	27	22	29	26	29	34	20	14	16	23	14	10	7	5	3	2	2	3	4	16.7	34.4
26-Jan-05	2	3	A	4	4	5	4	9	9	4	4	5	4	5	8	17	17	26	31	23	17	22	22	26	11.8	31.0
27-Jan-05	24	A	22	19	19	12	16	16	13	11	6	4	4	2	3	4	5	6	7	5	8	9	17	14	10.7	23.6
28-Jan-05	A	21	21	22	22	22	21	16	17	11	11	8	6	6	6	5	5	6	4	4	9	7	7	A	11.6	22.2
29-Jan-05	19	19	15	17	21	22	13	6	4	4	3	3	3	2	2	2	3	4	4	6	4	4	A	6	8.0	22.2
30-Jan-05	3	5	2	4	4	6	8	8	10	12	12	7	9	4	4	6	12	21	21	19	22	A	15	14	9.9	21.7
31-Jan-05	4	3	5	6	6	3	4	6	7	4	3	4	4	3	3	11	7	9	9	14	A	5	9	7	5.9	13.5
Hourly Avg	14.3	15.2	15.1	14.7	14.1	15.6	14.2	15.8	16.4	13.9	10.1	8.6	6.8	6.9	8.6	10.0	12.6	16.1	15.6	13.6	14.1	15.5	17.9	14.6		
Hourly Max	40.5	36.5	38.2	38.3	40.8	38.3	37.1	37.3	42.2	38.3	34.4	19.6	16.6	16.3	23.1	18.6	26.8	39.6	39.2	39.7	38.2	44.9	42.3	41.3		

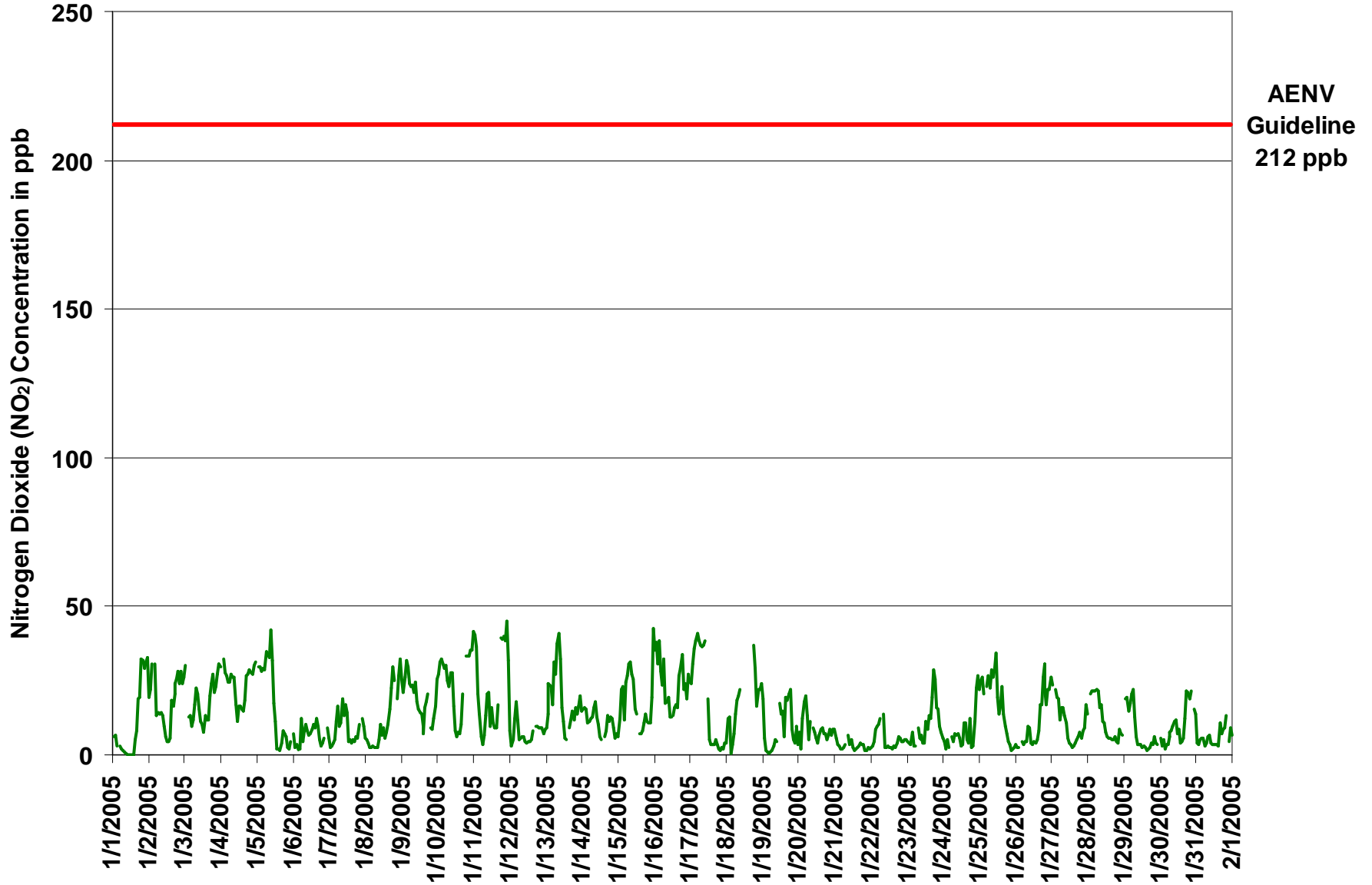


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Maximum 1-hr Value:	87.5	ppb	11-Jan	21:00 22:00
Maximum 24-hr Value:	36.5	ppb	10-Jan	

AIC Time:	34 hrs	Operational Time:	704 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	60	46	31	19	9	4	2	21.7 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								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-Jan-05	8	9	8	A	7	3	2	2	2	2	0	0	0	1	9	15	31	30	36	37	32	34	46	28	14.9	45.9	
2-Jan-05	29	38	A	42	17	24	22	17	36	24	9	12	13	9	28	18	26	28	28	47	27	35	28	35	25.8	47.5	
3-Jan-05	32	A	22	18	16	22	40	37	25	21	14	13	17	22	16	15	27	29	37	25	27	33	45	41	25.8	44.6	
4-Jan-05	A	55	31	28	28	30	30	31	31	23	16	29	13	20	24	29	37	35	30	29	28	32	34	A	29.6	55.2	
5-Jan-05	34	32	32	32	31	38	46	43	60	38	30	20	5	4	3	17	26	10	9	5	3	60	A	12	25.6	60.2	
6-Jan-05	4	7	10	3	4	40	27	19	30	19	10	9	15	19	11	15	14	7	5	6	9	A	13	11	13.4	39.9	
7-Jan-05	5	5	11	8	18	21	14	16	32	19	31	18	8	7	6	7	8	9	8	15	A	16	11	8	13.2	32.2	
8-Jan-05	7	6	4	5	5	4	4	5	12	13	9	14	8	12	13	23	30	34	30	A	30	53	54	42	18.0	53.6	
9-Jan-05	27	32	37	33	27	32	28	25	28	30	28	24	31	19	16	21	23	24	A	18	11	20	25	28	25.5	36.6	
10-Jan-05	30	40	36	33	40	46	41	28	33	68	31	16	19	32	14	32	29	A	41	45	39	47	47	52	36.5	67.7	
11-Jan-05	46	44	39	20	14	6	33	41	29	28	23	32	21	29	31	23	A	46	46	50	41	87	45	17	34.4	87.5	
12-Jan-05	4	35	25	23	19	8	9	13	15	8	7	7	12	15	17	A	13	11	11	11	12	9	11	10	13.3	35.3	
13-Jan-05	17	33	28	29	20	40	32	42	46	38	29	27	11	7	A	18	21	28	21	65	16	40	29	27	28.9	65.4	
14-Jan-05	18	19	38	13	15	14	29	26	22	25	15	9	19	A	9	40	24	15	16	15	14	9	41	26	20.4	40.6	
15-Jan-05	35	31	31	34	42	35	35	47	41	44	29	29	A	9	9	12	14	40	13	13	23	43	53	43	30.7	52.6	
16-Jan-05	57	56	74	41	37	41	28	26	44	33	16	A	21	18	19	19	31	32	39	37	34	24	33	31	34.3	73.6	
17-Jan-05	32	34	37	43	46	41	40	39	43	49	A	52	12	5	12	10	23	11	3	2	28	10	37	24	27.5	52.5	
18-Jan-05	26	24	5	23	16	19	22	28	36	A	C	C	C	C	C	A	52	37	34	27	34	39	23	N	51.7		
19-Jan-05	13	3	14	1	1	4	6	13	21	A	C	29	24	38	8	54	34	27	29	16	25	23	25	22	19	19.6	53.8
20-Jan-05	60	3	25	21	22	18	7	19	A	12	9	7	5	13	16	11	10	9	7	8	11	8	11	13	14.2	60.0	
21-Jan-05	8	8	6	4	3	4	5	A	14	6	8	5	3	3	4	5	6	5	5	3	3	3	3	5	5.1	13.9	
22-Jan-05	5	7	15	14	15	19	A	28	18	3	20	3	19	3	18	3	6	7	7	7	19	7	7	7	11.1	27.8	
23-Jan-05	6	13	15	5	7	A	34	8	13	23	26	9	36	12	19	16	34	31	33	22	33	14	21	24	19.7	35.8	
24-Jan-05	17	6	16	8	A	15	7	22	8	26	27	5	5	19	28	8	6	31	4	10	20	35	37	40	17.4	39.9	
25-Jan-05	28	31	31	A	61	68	35	59	36	45	46	31	17	31	32	22	14	10	6	5	4	8	4	5	27.4	68.3	
26-Jan-05	3	4	A	6	5	6	7	24	12	9	5	8	8	6	17	19	23	37	37	28	20	26	53	40	17.6	53.5	
27-Jan-05	56	A	26	22	45	55	21	37	21	25	19	7	14	4	4	6	8	10	18	24	45	38	31	17	24.1	56.0	
28-Jan-05	A	23	22	23	27	25	33	18	21	13	14	9	7	7	6	6	7	7	7	5	17	10	9	A	14.3	33.4	
29-Jan-05	24	35	19	28	53	31	24	9	5	5	13	16	11	28	3	4	4	23	6	19	12	14	A	23	17.8	53.4	
30-Jan-05	5	28	3	19	5	27	12	18	19	21	14	14	26	5	6	8	17	39	34	25	26	A	21	54	19.4	54.1	
31-Jan-05	13	5	32	15	27	4	6	25	26	6	4	57	18	18	5	51	29	17	17	46	A	6	18	28	20.6	57.4	
Hourly Avg	22.4	22.9	23.9	20.5	22.4	24.6	22.7	25.4	25.8	23.4	18.4	17.5	15.2	13.3	15.5	17.5	19.5	23.3	20.2	22.7	21.8	27.0	28.5	25.3			
Hourly Max	60.0	55.9	73.6	42.6	61.1	68.3	45.9	59.1	60.2	67.7	46.4	57.4	38.0	31.9	53.8	51.5	36.9	51.7	46.3	65.4	45.1	87.5	53.6	54.1			

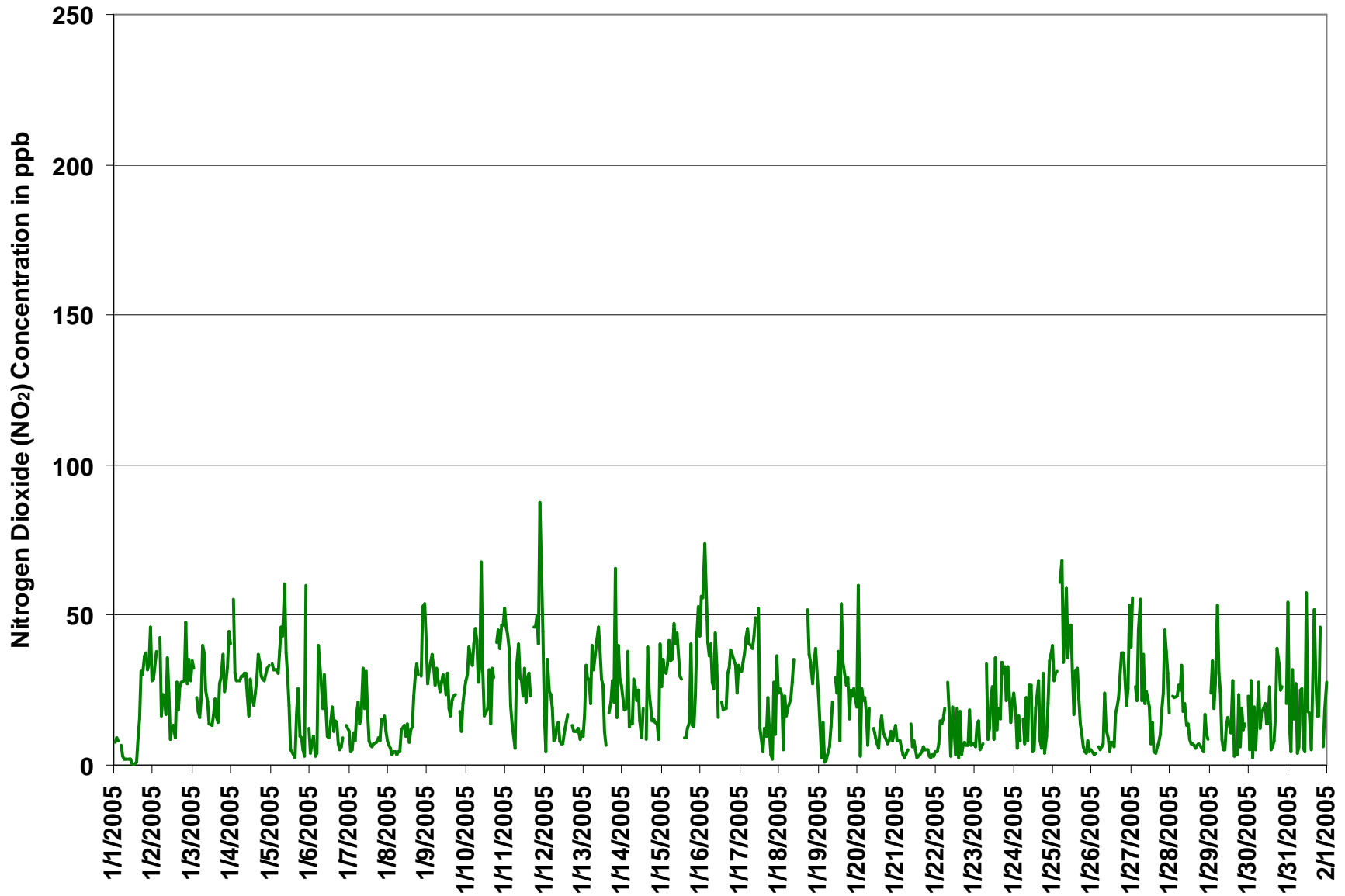
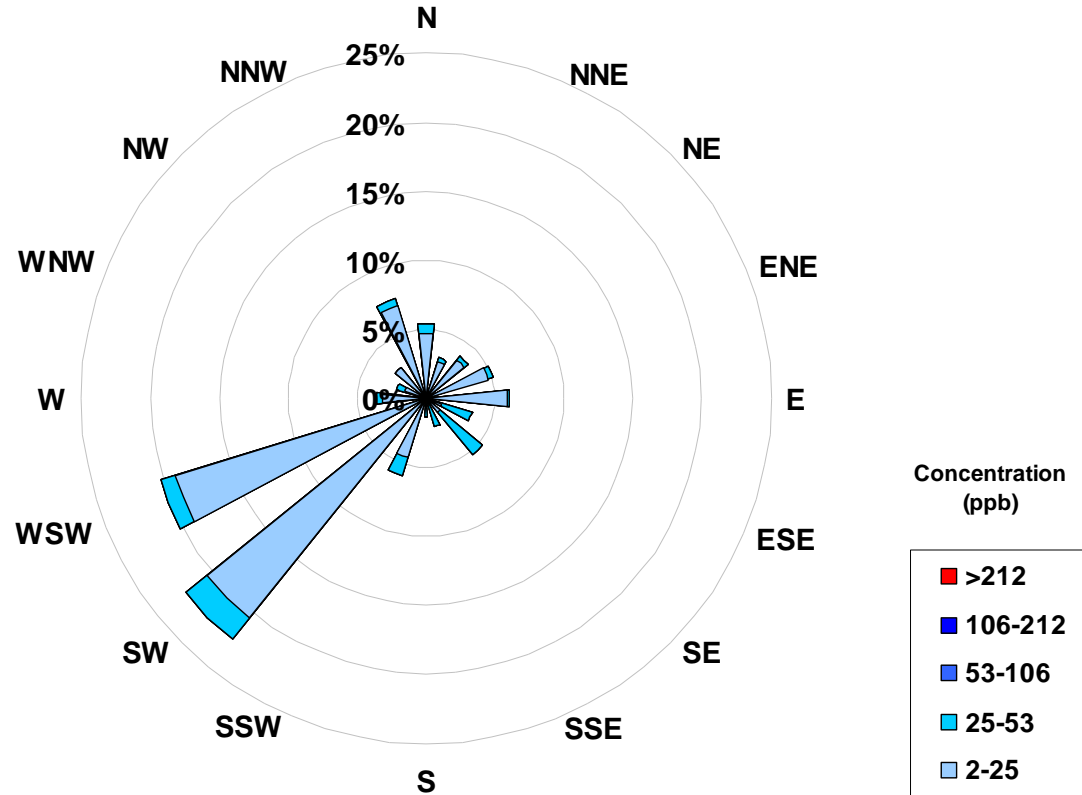


Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend



Concentration Rose for the 1-hr NO₂ Average Concentration Occurrences at the Crescent Heights Site for January 2005



Frequency Distribution of NO ₂ in ppb			
Range		Frequency (hrs)	
0	< 2	29	
2	to 25	560	
25	to 53	115	
53	to 106	0	
106	to 212	0	
	> 212	0	
Total Non-Zero Values			704

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



Station: Crescent Heights

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	147	ppb	25-Jan	10:00 11:00
Maximum 24-hr Average:	30	ppb	4-Jan	

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

AIC Time:	34 hrs	Operational Time:	704 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	74	46	12	4	1	0	0	10.4 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Jan-05	1	0	0	A	0	0	0	0	0	0	0	0	1	1	5	5	7	3	24	40	16	18	45	3	7.3	44.8
2-Jan-05	2	25	A	29	2	3	4	3	5	9	6	6	8	8	35	17	10	9	16	34	5	21	17	25	13.0	35.4
3-Jan-05	49	A	3	2	2	2	16	17	14	18	17	18	13	25	16	10	12	16	32	6	13	33	64	42	19.2	64.3
4-Jan-05	A	52	27	13	16	21	23	22	32	19	18	36	38	31	23	18	38	23	36	32	25	57	63	A	30.2	63.2
5-Jan-05	25	25	19	21	21	40	32	23	96	42	17	11	2	1	1	2	2	1	1	0	0	3	A	1	16.8	96.0
6-Jan-05	0	0	1	1	1	15	2	3	4	4	3	4	5	6	3	4	2	1	1	1	1	A	1	1	2.8	15.3
7-Jan-05	1	1	1	1	1	1	2	3	6	5	18	12	3	3	2	1	0	0	0	1	A	1	1	0	2.7	17.5
8-Jan-05	0	0	0	0	0	0	0	0	1	4	5	7	6	6	8	8	6	9	4	A	3	19	16	10	5.0	19.2
9-Jan-05	5	7	19	15	5	12	5	3	10	20	29	24	27	12	6	13	6	2	A	1	1	1	2	6	10.0	28.7
10-Jan-05	16	37	37	45	59	47	17	11	35	67	29	13	11	10	7	7	A	35	32	29	35	25	56	29.0	67.3	
11-Jan-05	48	19	4	2	1	1	4	7	7	16	9	24	11	10	6	9	A	33	45	33	21	74	16	1	17.4	74.1
12-Jan-05	0	3	2	4	2	1	2	3	3	2	2	3	3	4	6	A	2	2	2	2	1	1	1	1	2.3	6.0
13-Jan-05	1	4	3	4	2	8	2	19	65	51	23	17	7	5	A	6	4	5	3	3	2	5	3	4	10.7	64.9
14-Jan-05	1	2	4	1	1	1	4	5	6	9	11	7	6	A	5	5	5	2	2	1	1	1	5	1	3.8	10.5
15-Jan-05	2	4	4	2	5	3	11	17	17	44	22	21	A	6	6	5	3	4	1	1	1	12	48	14	11.0	47.5
16-Jan-05	29	9	29	5	4	15	1	1	12	7	12	A	12	17	13	9	13	6	16	4	5	1	5	4	9.9	28.7
17-Jan-05	4	11	33	56	65	53	36	34	50	64	A	13	2	1	1	2	1	1	0	0	1	0	3	2	18.9	65.5
18-Jan-05	4	4	0	1	0	1	2	6	11	A	C	C	C	C	C	C	A	83	49	8	12	12	24	7	N	83.2
19-Jan-05	1	0	1	0	0	0	1	2	3	A	16	17	26	7	45	33	49	48	2	1	1	4	4	1	11.5	48.8
20-Jan-05	4	0	6	5	8	2	2	3	A	4	6	5	3	4	5	4	1	1	1	1	1	2	3	2	3.1	7.7
21-Jan-05	1	1	1	1	1	1	2	A	4	2	4	3	2	2	2	2	1	0	0	0	0	0	0	0	1.3	4.0
22-Jan-05	0	0	1	1	1	2	2	A	5	1	1	4	2	3	1	3	1	1	1	1	1	2	1	1	1.6	4.9
23-Jan-05	1	1	1	0	0	A	14	1	2	4	4	2	10	5	6	4	13	19	20	3	14	1	3	2	5.6	19.7
24-Jan-05	2	0	1	0	A	1	1	2	1	4	4	2	2	5	4	1	1	2	0	1	1	3	6	7	2.2	6.5
25-Jan-05	8	7	6	A	10	56	18	98	95	78	147	35	8	9	14	5	1	1	0	0	0	0	0	0	26.1	147.1
26-Jan-05	0	1	A	1	0	1	1	3	3	2	3	4	3	4	6	12	5	8	41	25	7	51	49	83	13.7	83.3
27-Jan-05	62	A	28	26	30	5	13	16	8	12	5	3	3	2	2	3	2	2	5	5	10	4	13	2	11.3	62.4
28-Jan-05	A	8	14	22	43	48	46	19	46	13	8	3	3	2	2	1	1	1	0	0	1	1	1	A	12.9	48.4
29-Jan-05	11	9	7	13	14	14	7	1	1	2	3	3	2	2	1	2	1	3	2	6	2	2	A	2	4.7	14.1
30-Jan-05	1	3	1	4	0	3	1	1	2	5	5	4	8	2	2	1	2	8	7	3	9	A	2	7	3.5	9.0
31-Jan-05	2	0	3	1	3	1	1	2	3	1	1	3	2	2	1	7	3	2	2	14	A	1	2	1	2.6	14.5
Hourly Avg	9.7	8.1	8.8	9.4	10.0	12.0	8.9	11.0	18.1	17.6	14.8	10.4	7.9	6.7	8.2	6.8	7.0	9.9	11.7	8.7	6.5	12.6	14.6	9.9		
Hourly Max	62.4	52.3	37.4	56.4	65.5	56.2	46.1	98.4	96.0	78.4	147.1	35.7	38.0	31.0	45.2	32.7	48.8	83.2	48.7	39.6	29.4	74.1	64.3	83.3		



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Maximum 1-hr Value:	505.0	ppb	25-Jan	5:00 6:00
Maximum 24-hr Value:	101.6	ppb	25-Jan	

AIC Time:	34 hrs	Operational Time:	704 hrs					
Calibration Time:	6 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	222	129	47	15	3	1	1	34.2 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	2	2	1	A	1	1	1	1	1	1	1	1	1	1	9	12	30	24	52	62	25	33	130	6	17.2	130.3	
2-Jan-05	7	58	A	83	7	22	38	5	36	87	7	25	33	29	74	25	17	18	27	169	13	35	51	74	40.9	168.9	
3-Jan-05	60	A	9	3	24	42	150	38	75	44	23	22	49	50	30	14	29	37	170	11	26	51	161	91	52.4	169.5	
4-Jan-05	A	141	54	18	25	38	39	45	41	29	34	58	61	43	42	47	93	84	57	47	34	75	81	A	53.8	140.5	
5-Jan-05	36	35	40	29	29	52	70	85	184	60	36	29	4	2	2	40	34	2	3	1	2	77	A	3	37.2	184.5	
6-Jan-05	2	1	20	2	2	85	23	24	49	25	7	6	10	40	4	6	5	4	4	3	3	A	2	2	14.2	85.2	
7-Jan-05	2	2	13	2	2	3	3	7	26	7	48	17	5	4	3	2	2	1	2	2	A	2	2	2	6.9	48.3	
8-Jan-05	2	1	2	2	1	2	1	1	9	7	8	12	8	10	9	15	10	15	8	A	8	152	68	152	21.9	151.8	
9-Jan-05	18	13	46	28	9	59	8	5	19	139	106	78	87	18	14	28	11	6	A	3	2	3	8	11	31.3	139.4	
10-Jan-05	36	65	57	67	117	114	121	29	73	154	95	41	82	60	13	46	18	A	62	67	62	78	78	111	71.6	153.9	
11-Jan-05	83	42	14	7	2	1	57	42	19	30	44	76	26	85	31	12	A	79	107	83	34	270	57	3	52.3	270.0	
12-Jan-05	1	68	6	7	5	2	3	7	17	4	4	6	8	15	17	A	3	5	3	3	2	2	2	2	8.4	67.8	
13-Jan-05	2	7	6	8	4	15	5	37	88	65	59	62	13	7	A	42	37	31	6	19	6	65	10	41	27.5	87.8	
14-Jan-05	2	4	86	2	2	3	37	35	10	67	18	11	30	A	10	52	22	3	3	2	3	2	147	36	25.5	146.9	
15-Jan-05	39	9	8	95	85	8	23	47	42	180	61	55	A	8	8	16	6	46	3	3	14	149	97	47	45.7	179.7	
16-Jan-05	90	75	118	16	38	38	4	2	109	43	19	A	26	20	17	20	23	8	37	24	17	4	10	10	33.4	118.2	
17-Jan-05	15	21	39	85	87	70	50	53	91	129	A	60	8	2	10	55	34	14	2	1	29	10	81	43	43.0	129.0	
18-Jan-05	30	9	1	14	1	3	4	30	63	A	C	C	C	C	C	C	A	128	104	55	24	62	192	14	N	191.9	
19-Jan-05	2	1	41	1	1	1	3	7	61	A	43	68	142	11	243	83	90	161	7	11	11	19	16	6	44.7	242.6	
20-Jan-05	92	1	17	13	13	5	4	15	A	5	9	6	5	7	15	6	4	1	1	1	2	2	4	4	3	10.3	92.5
21-Jan-05	2	2	1	2	1	2	3	A	11	5	6	6	4	3	4	5	3	1	1	1	1	1	1	1	1	2.9	11.3
22-Jan-05	1	1	1	3	5	4	A	25	22	2	59	3	35	2	46	2	2	2	2	2	2	24	2	3	1	10.8	58.9
23-Jan-05	1	4	4	1	1	A	243	3	17	26	71	7	79	8	22	5	68	26	61	9	141	6	28	27	37.4	243.5	
24-Jan-05	33	1	13	2	A	5	1	38	2	53	50	3	3	9	12	2	2	6	1	1	2	25	27	69	15.7	69.5	
25-Jan-05	23	16	31	A	360	505	108	440	161	221	222	88	11	61	62	13	4	1	1	1	1	3	2	1	101.6	505.0	
26-Jan-05	1	2	A	2	2	2	2	38	6	4	4	5	5	6	16	16	9	16	95	67	20	86	216	189	35.2	216.3	
27-Jan-05	257	A	46	46	145	87	29	190	32	148	48	5	32	4	3	5	3	4	51	73	162	73	56	3	65.3	257.0	
28-Jan-05	A	16	20	29	82	62	111	33	88	20	25	3	3	3	3	2	2	1	1	1	14	2	2	A	23.8	111.0	
29-Jan-05	40	53	10	54	71	57	53	2	2	4	32	30	18	15	2	4	2	70	13	55	25	21	A	55	29.9	70.7	
30-Jan-05	2	39	1	65	1	54	2	5	5	24	7	11	44	2	2	2	3	47	45	7	33	A	9	131	23.5	130.9	
31-Jan-05	55	1	83	18	78	1	4	31	55	2	2	59	28	25	3	102	66	10	3	121	A	2	4	29	34.0	120.8	
Hourly Avg	32.2	23.8	27.1	24.2	40.1	44.7	40.0	44.0	47.2	54.7	39.6	29.4	29.7	19.0	25.0	23.5	21.7	28.4	31.0	30.2	25.6	45.2	53.3	40.1			
Hourly Max	257.0	140.5	118.2	95.4	359.7	505.0	243.5	440.3	184.5	220.7	222.3	87.9	142.1	85.5	242.6	101.9	93.1	161.3	169.5	168.9	162.3	270.0	216.3	189.2			



Station: Crescent Heights

HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary				
Number of 1-hr Exceedances:	0			
Number of 24-hr Exceedances:	0			
Maximum 1-hr Average:	181	ppb	25-Jan	10:00 11:00
Maximum 24-hr Average:	54	ppb	4-Jan	

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

AIC Time:	34 hrs							Operational Time:	704 hrs						
Calibration Time:	6 hrs							AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average							
	107	72	32	14	7	3	1	23.6 ppb							

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
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-Jan-05	7	7	3	A	4	2	1	1	0	0	0	0	0	0	10	13	26	22	56	71	45	49	77	22	18.2	77.3
2-Jan-05	24	55	A	60	15	18	18	17	19	19	12	11	13	14	54	33	30	32	41	62	29	50	40	51	31.1	62.0
3-Jan-05	79	A	15	15	11	14	33	40	34	33	28	28	20	39	28	22	31	40	59	26	36	60	95	71	37.3	94.6
4-Jan-05	A	84	55	39	40	46	49	48	58	36	29	52	55	46	38	37	64	50	65	60	52	87	94	A	53.8	94.2
5-Jan-05	55	55	47	50	49	74	66	55	138	74	35	22	4	3	3	6	10	8	7	3	2	8	A	8	33.9	138.0
6-Jan-05	3	4	3	2	2	27	7	11	14	12	10	11	14	17	12	16	12	6	4	5	7	A	10	6	9.4	27.2
7-Jan-05	3	3	5	6	12	17	11	13	25	18	34	26	7	8	6	6	5	6	6	11	A	13	10	6	11.2	34.3
8-Jan-05	5	4	3	3	3	3	3	3	6	15	11	17	11	14	18	24	29	39	30	A	22	46	48	36	16.9	48.4
9-Jan-05	26	33	51	44	28	35	28	24	35	37	44	39	41	21	14	29	24	23	A	10	9	13	18	32	28.6	51.0
10-Jan-05	42	68	69	75	89	77	41	34	63	95	45	21	17	18	14	18	28	A	68	65	63	70	60	97	53.8	97.2
11-Jan-05	88	56	24	16	7	4	11	20	27	37	18	40	22	20	15	25	A	72	84	73	58	119	47	9	38.8	118.5
12-Jan-05	3	8	14	21	14	6	7	9	10	7	6	7	8	9	14	A	12	12	10	11	11	8	9	10	9.9	21.2
13-Jan-05	15	28	27	26	19	39	29	56	106	83	39	28	13	10	A	15	16	20	14	19	16	21	23	18	29.6	105.8
14-Jan-05	16	18	19	11	12	14	16	21	24	22	21	13	11	A	11	13	19	13	15	14	11	6	12	7	14.7	24.5
15-Jan-05	14	26	27	14	29	29	42	48	44	69	37	34	A	13	13	13	14	17	13	12	12	32	90	49	30.0	89.6
16-Jan-05	66	39	67	33	28	47	19	19	32	20	24	A	26	33	30	24	40	35	49	26	29	20	31	29	33.2	66.7
17-Jan-05	28	42	69	94	106	91	72	70	86	102	A	32	7	5	4	5	6	4	2	2	3	3	7	6	36.9	106.0
18-Jan-05	16	17	1	5	8	15	21	26	33	A	C	C	C	C	C	C	A	120	78	24	34	34	48	26	N	120.1
19-Jan-05	6	1	2	0	1	2	4	7	7	A	34	31	41	13	65	51	69	70	11	6	5	13	13	4	19.9	70.5
20-Jan-05	11	2	18	23	27	15	7	14	A	13	14	11	7	11	13	13	9	8	6	7	10	9	11	11	11.8	27.4
21-Jan-05	6	4	4	3	3	4	5	A	11	6	9	5	3	4	5	5	5	4	4	1	2	3	2	2	4.3	10.7
22-Jan-05	3	4	9	11	13	14	A	18	3	4	7	4	4	5	3	5	4	5	7	6	5	6	6	5	6.7	18.4
23-Jan-05	4	4	9	3	3	A	23	6	6	10	8	6	21	14	20	16	32	48	45	19	29	11	10	7	15.5	47.7
24-Jan-05	7	2	6	3	A	7	5	9	8	11	9	5	6	15	14	6	5	14	3	4	12	26	33	28	10.4	32.6
25-Jan-05	34	33	27	A	33	80	40	127	121	107	181	55	22	25	37	18	11	8	5	4	2	2	3	4	42.6	181.0
26-Jan-05	3	3	A	5	4	5	5	12	12	6	6	8	7	9	15	29	22	34	72	48	24	73	71	109	25.3	108.9
27-Jan-05	86	A	49	46	49	17	29	32	21	23	10	7	6	4	5	7	7	8	13	11	18	13	30	16	22.0	85.8
28-Jan-05	A	29	35	44	64	70	67	35	63	25	19	10	9	8	8	6	6	7	5	4	10	8	7	A	24.6	70.5
29-Jan-05	30	29	22	30	35	36	20	7	5	6	7	5	5	4	3	4	4	7	5	12	6	5	A	8	12.8	36.2
30-Jan-05	4	9	2	7	4	9	9	9	12	16	17	12	16	5	6	7	14	30	28	22	31	A	18	21	13.4	30.7
31-Jan-05	6	4	8	7	9	3	5	8	9	5	4	6	5	5	4	18	11	10	10	28	A	5	10	8	8.2	27.8
Hourly Avg	23.8	23.1	23.7	24.0	24.0	27.3	23.1	26.7	34.5	31.4	24.8	18.9	14.6	13.4	16.7	16.7	19.4	25.8	27.1	22.1	20.4	28.0	32.3	24.4		
Hourly Max	88.4	84.3	69.5	94.4	106.0	90.8	72.3	126.7	138.0	107.0	181.0	54.7	54.6	46.5	64.8	50.9	69.2	120.1	84.4	72.6	62.7	118.5	94.6	108.9		



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Maximum 1-hr Value:	502.4	ppb	25-Jan	5:00 6:00
Maximum 24-hr Value:	121.9	ppb	25-Jan	

AIC Time:	34 hrs							Operational Time:	704 hrs						
Calibration Time:	6 hrs							AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average							
	269	164	76	36	13	4	2	53.8 ppb							

Status Flag Characters

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

Day Mountain Standard Time

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	9	10	8	A	7	3	2	2	2	2	1	0	1	1	2	17	27	60	51	80	99	56	67	175	33	31.0	174.7
2-Jan-05	35	96	A	124	23	46	60	22	70	105	17	38	44	36	102	42	43	44	54	214	40	68	68	106	65.0	213.9	
3-Jan-05	90	A	32	20	37	62	170	66	98	64	37	34	66	71	45	26	55	66	189	34	53	81	196	123	74.7	196.5	
4-Jan-05	A	190	83	46	53	66	68	72	71	52	50	86	84	63	66	67	128	119	87	76	61	106	114	A	82.1	189.5	
5-Jan-05	66	65	71	60	60	89	116	121	238	97	64	43	9	5	4	57	60	12	12	5	4	136	A	13	61.2	237.5	
6-Jan-05	4	7	27	4	4	126	49	43	76	43	16	15	23	54	15	21	17	9	7	8	11	A	14	12	26.3	125.8	
7-Jan-05	5	6	23	8	19	22	16	21	56	26	79	35	13	10	7	8	8	10	9	16	A	18	12	8	19.0	79.3	
8-Jan-05	7	6	5	5	5	4	4	5	20	20	17	24	15	21	20	37	40	48	37	A	37	197	121	193	38.7	197.3	
9-Jan-05	44	43	78	59	34	90	35	27	45	165	129	101	114	33	30	50	28	29	A	20	12	21	33	39	54.8	164.9	
10-Jan-05	65	101	92	98	149	151	156	57	104	221	126	57	94	92	28	73	44	A	98	107	101	123	124	161	105.3	221.4	
11-Jan-05	127	83	52	22	16	7	75	80	46	57	66	107	46	111	58	33	A	117	144	124	74	307	92	19	81.0	307.4	
12-Jan-05	5	103	30	29	24	10	12	19	30	12	12	12	19	29	31	A	16	15	14	13	14	10	12	11	21.0	103.4	
13-Jan-05	18	40	33	35	24	54	36	76	134	103	81	83	24	13	A	57	53	59	27	84	20	98	38	62	54.4	133.7	
14-Jan-05	20	22	119	14	16	15	66	60	31	93	33	20	48	A	18	92	44	17	18	17	16	11	180	61	44.8	180.3	
15-Jan-05	74	39	36	129	127	42	58	86	78	213	90	83	A	16	17	28	19	85	16	16	37	184	145	89	74.2	213.0	
16-Jan-05	137	126	178	57	70	77	32	28	152	75	34	A	47	38	35	35	54	40	75	60	49	27	42	39	65.5	178.5	
17-Jan-05	45	54	76	124	131	110	88	91	135	172	A	103	21	6	22	62	57	26	5	3	55	18	116	62	68.8	171.7	
18-Jan-05	55	33	7	37	18	22	25	56	94	A	C	C	C	C	C	C	A	180	133	83	51	95	224	36	N	223.5	
19-Jan-05	15	3	52	1	2	4	9	18	71	A	72	86	159	19	294	108	115	185	22	35	33	43	29	26	61.0	293.9	
20-Jan-05	143	4	38	34	35	22	10	34	A	17	18	13	10	18	32	16	11	10	8	10	14	12	14	16	23.4	143.5	
21-Jan-05	9	10	7	4	3	5	8	A	23	10	14	11	6	6	8	9	6	6	5	3	3	3	3	5	7.3	23.1	
22-Jan-05	5	8	16	15	18	22	A	51	39	4	78	5	42	4	59	5	8	9	8	8	42	7	9	8	20.4	77.8	
23-Jan-05	7	16	18	5	8	A	270	10	29	49	90	15	115	18	38	21	98	55	86	30	161	20	46	48	54.5	270.3	
24-Jan-05	47	6	29	10	A	19	8	59	10	76	77	7	8	28	40	10	7	37	5	11	21	52	61	102	31.7	102.3	
25-Jan-05	50	46	61	A	402	502	130	495	191	247	262	116	26	87	91	35	16	11	7	5	4	9	5	6	121.9	502.4	
26-Jan-05	4	4	A	7	6	7	7	60	17	13	8	13	13	12	33	36	30	54	127	95	39	106	269	224	51.5	269.1	
27-Jan-05	312	A	70	65	169	130	49	227	53	166	61	11	47	6	6	11	11	14	69	97	207	108	81	20	86.6	311.8	
28-Jan-05	A	38	42	51	108	86	139	48	107	34	39	12	10	10	9	7	8	8	7	5	30	11	10	A	37.3	139.4	
29-Jan-05	60	88	29	77	123	87	77	10	6	9	38	43	28	44	4	6	5	86	17	73	32	31	A	78	45.7	123.1	
30-Jan-05	5	68	3	75	5	77	14	23	24	39	20	24	70	7	8	11	18	82	72	31	58	A	29	184	41.2	184.5	
31-Jan-05	67	5	111	30	99	4	10	52	81	7	6	117	45	39	7	153	95	19	20	161	A	7	22	56	52.7	161.4	
Hourly Avg	52.8	45.6	49.2	43.0	59.9	65.4	60.0	67.3	71.1	75.5	56.3	45.4	43.0	30.9	39.5	39.4	39.8	50.1	48.6	51.5	45.9	68.2	78.8	63.4			
Hourly Max	311.8	189.5	178.5	128.7	402.2	502.4	270.3	495.2	237.5	246.6	262.2	116.6	159.2	110.5	293.9	153.3	127.7	185.3	189.5	213.9	207.0	307.4	269.1	224.2			

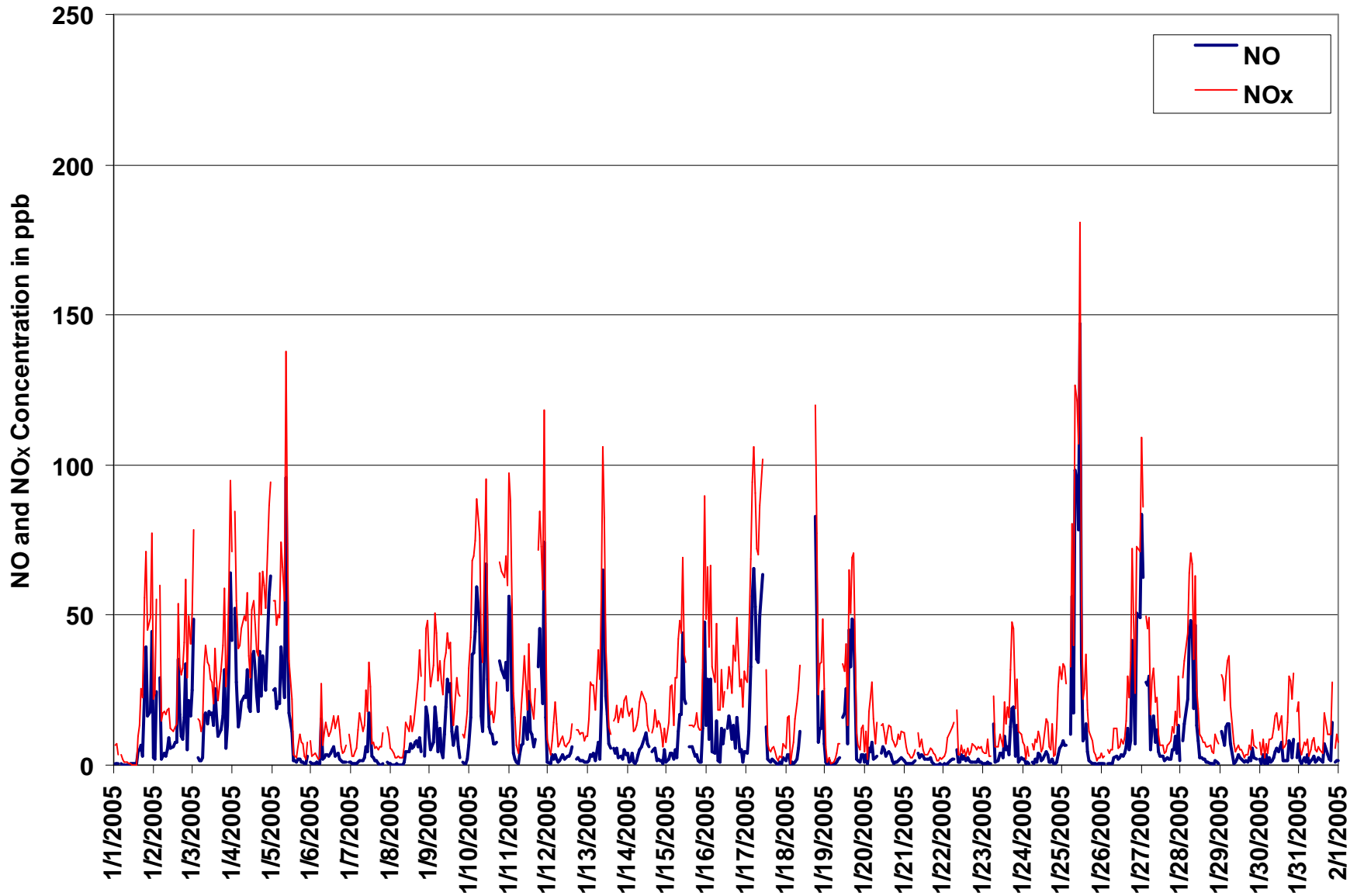


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trends

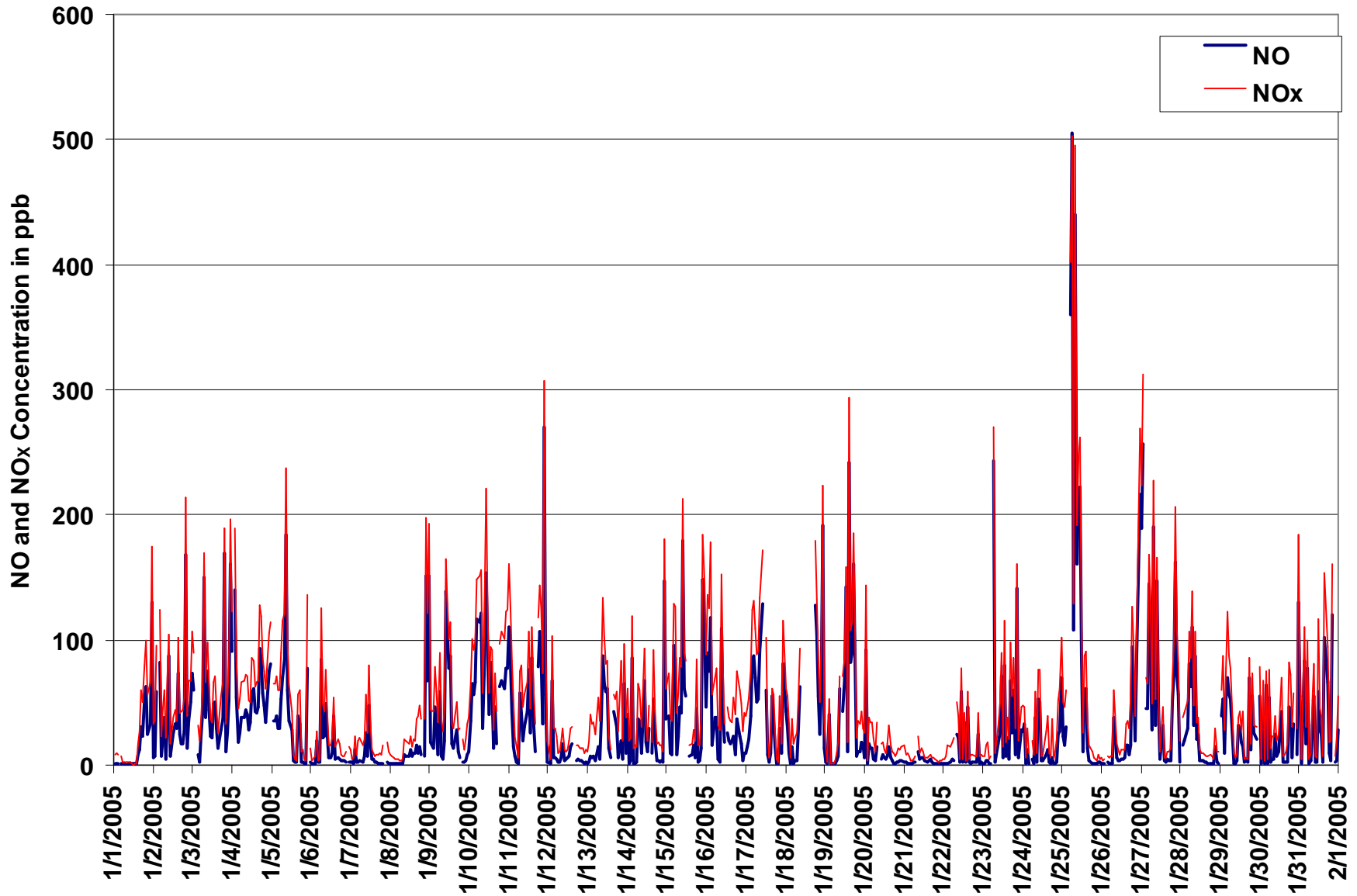


Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trends



PAS - Crescent Heights Ozone Monthly Summary

Station: Crescent Heights

HOURLY AVERAGE TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	41 ppb 5-Jan 13:00 14:00
Maximum 24-hr Average:	29 ppb 12-Jan

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

AIC Time:	35 hrs	Operational Time:	708 hrs					
Calibration Time:	1 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	40	34	26	19	9	2	1	18.3 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Jan-05	2	20	28	A	31	31	30	30	30	32	32	33	33	33	26	24	16	13	3	2	2	3	2	12	20.4	33.1	
2-Jan-05	9	2	A	4	12	10	10	9	12	15	19	21	22	22	13	12	8	5	4	4	4	3	3	3	9.8	22.0	
3-Jan-05	3	A	15	13	15	13	9	5	5	10	15	17	20	16	18	16	9	5	3	8	5	3	3	3	10.0	19.9	
4-Jan-05	A	3	3	3	4	3	3	3	5	11	16	16	17	18	16	12	5	4	4	3	3	4	4	A	7.3	17.6	
5-Jan-05	3	3	4	3	4	4	5	4	6	11	24	32	40	41	40	36	31	32	32	36	36	33	A	33	21.4	41.3	
6-Jan-05	36	34	37	35	34	25	31	27	26	28	30	29	28	29	28	24	25	27	27	27	25	A	25	31	29.1	36.6	
7-Jan-05	35	34	33	31	25	21	26	25	16	22	20	23	33	32	33	32	32	30	29	24	A	23	25	29	27.5	34.5	
8-Jan-05	30	32	33	33	33	33	33	32	30	26	29	28	31	30	27	22	15	8	11	A	17	8	4	8	24.0	33.3	
9-Jan-05	11	6	2	2	7	7	7	8	6	13	15	16	18	23	25	16	12	9	A	21	20	16	12	3	11.9	24.8	
10-Jan-05	3	3	2	2	2	2	4	5	4	9	16	22	24	25	26	24	15	A	4	2	4	4	4	3	9.1	26.0	
11-Jan-05	4	7	22	27	34	35	32	25	17	17	28	23	29	32	32	25	A	4	3	3	2	2	13	34	19.5	35.3	
12-Jan-05	38	36	24	12	17	25	26	26	28	32	34	34	35	35	33	A	32	31	30	30	29	30	29	28	29.4	38.3	
13-Jan-05	24	14	13	14	19	8	9	3	4	10	20	25	30	31	A	29	24	22	23	19	21	18	15	19	17.9	31.0	
14-Jan-05	17	17	17	22	20	20	21	18	16	22	26	29	30	A	31	29	24	26	25	26	28	33	30	31	24.3	32.8	
15-Jan-05	25	17	15	24	13	10	6	7	9	13	22	25	A	31	30	29	26	23	26	26	27	18	4	4	18.7	31.4	
16-Jan-05	4	8	7	11	16	8	20	19	19	26	25	A	27	25	24	22	10	8	4	15	11	14	8	9	14.8	27.4	
17-Jan-05	8	4	2	2	3	3	3	3	4	7	A	30	40	40	40	40	39	40	41	41	39	38	35	35	23.4	40.8	
18-Jan-05	26	25	35	30	23	16	12	8	8	A	16	20	22	22	22	15	C	A	A	9	3	3	2	5	16.1	35.0	
19-Jan-05	18	23	24	25	24	22	21	18	18	A	10	12	12	14	6	3	2	3	17	20	24	21	20	24	16.6	24.6	
20-Jan-05	23	25	11	3	4	9	19	13	A	18	18	18	19	17	16	15	15	14	15	13	11	12	10	13	14.5	24.8	
21-Jan-05	20	22	25	27	28	27	27	A	23	23	21	23	25	27	28	27	26	25	26	27	26	24	24	24	25.0	28.2	
22-Jan-05	23	22	18	16	15	13	A	15	23	23	23	25	27	27	25	25	22	20	20	21	21	20	19	20	21.0	26.7	
23-Jan-05	20	20	16	20	19	A	15	15	15	16	19	20	18	20	17	16	9	2	6	9	9	13	17	20	15.3	20.5	
24-Jan-05	20	22	22	25	A	23	25	22	23	23	29	33	34	31	32	36	37	31	39	37	24	12	8	10	26.0	39.1	
25-Jan-05	3	3	7	A	8	2	3	1	2	3	3	7	13	14	8	18	20	23	26	26	28	28	26	23	12.9	28.4	
26-Jan-05	22	22	A	21	19	19	20	15	14	18	18	17	19	20	20	12	11	4	1	2	5	1	2	1	13.2	22.3	
27-Jan-05	1	A	1	2	3	9	5	5	9	13	18	22	25	26	25	22	19	15	12	13	11	10	8	9	12.4	26.3	
28-Jan-05	A	3	1	1	1	1	1	1	1	2	3	8	14	16	16	15	17	17	14	14	15	11	13	13	A	8.9	16.6
29-Jan-05	3	4	5	2	4	4	12	17	19	21	22	25	25	27	27	25	23	20	17	15	19	20	A	24	16.5	27.2	
30-Jan-05	25	23	24	22	22	20	20	19	18	17	18	24	30	39	38	35	27	15	13	10	4	A	12	19	21.5	39.0	
31-Jan-05	27	27	26	24	25	29	28	26	26	30	31	31	30	31	33	27	28	27	29	23	A	31	25	25	27.8	32.7	
Hourly Avg	16.6	16.5	16.3	15.7	16.1	15.1	16.0	14.2	14.6	17.6	20.9	23.3	25.7	26.5	25.1	22.9	20.0	17.2	17.3	17.6	16.2	15.9	13.9	17.3			
Hourly Max	38.3	35.7	36.6	35.3	33.8	35.3	32.8	32.4	30.5	32.1	33.9	34.5	40.4	41.3	40.2	40.3	39.1	40.0	40.8	40.6	39.5	38.3	35.3	34.7			

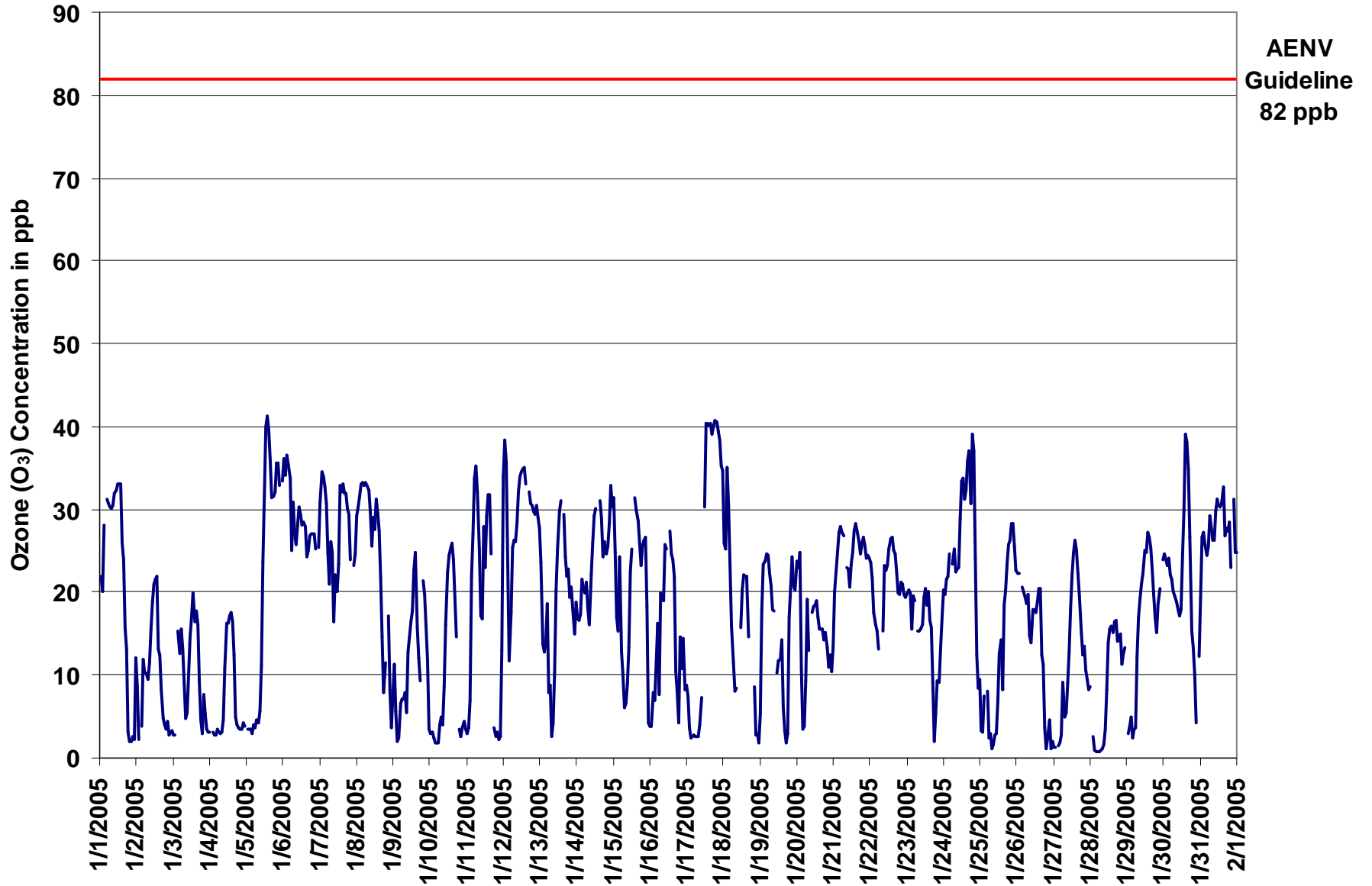


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Maximum 1-hr Value:	42.7	ppb	5-Jan	13:00 14:00
Maximum 24-hr Value:	32.6	ppb	12-Jan	

AIC Time:	35 hrs	Operational Time:	708 hrs					
Calibration Time:	1 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	42	37	29	23	15	4	2	22.0 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 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-Jan-05	23	22	33	A	32	32	31	32	32	33	33	34	34	34	32	30	27	21	6	3	4	4	6	20	24.3	34.1
2-Jan-05	13	5	A	14	15	12	13	11	15	18	20	22	23	23	21	14	15	7	8	5	9	4	6	3	12.9	23.3
3-Jan-05	4	A	19	19	18	18	14	11	8	13	17	19	22	21	21	19	14	11	6	12	15	5	4	4	13.7	21.6
4-Jan-05	A	4	4	4	6	4	4	4	7	14	18	18	18	19	19	14	8	5	5	4	4	5	5	A	8.8	19.2
5-Jan-05	4	4	5	4	8	6	7	7	8	15	29	38	42	43	42	39	34	34	34	37	37	36	A	37	23.9	42.7
6-Jan-05	38	36	38	38	35	34	34	31	29	30	33	31	31	32	30	27	28	29	28	29	28	A	29	35	32.0	37.8
7-Jan-05	36	35	35	33	29	25	31	28	24	27	29	29	35	35	35	35	34	33	32	28	A	25	28	32	31.1	36.1
8-Jan-05	32	34	35	35	34	34	34	34	32	30	31	31	33	34	30	29	21	13	20	A	26	16	12	14	27.9	34.7
9-Jan-05	19	14	4	7	10	14	13	13	8	18	18	22	21	26	28	24	16	12	A	24	24	18	16	5	16.2	27.6
10-Jan-05	6	6	3	3	3	2	7	8	7	15	20	25	26	28	28	28	24	A	12	4	10	12	6	7	12.6	28.1
11-Jan-05	19	17	32	35	37	37	36	33	24	25	31	31	32	36	34	32	A	8	4	8	4	5	27	39	25.4	38.7
12-Jan-05	40	40	36	15	25	27	29	30	34	35	36	36	36	37	35	A	33	33	33	33	32	33	31	30	32.6	39.9
13-Jan-05	27	24	16	20	22	21	14	5	7	15	25	29	32	32	A	31	29	27	29	23	23	24	19	22	22.4	32.3
14-Jan-05	21	20	23	23	23	22	24	24	22	27	29	32	32	A	32	31	28	28	29	29	33	35	35	34	27.6	35.0
15-Jan-05	30	25	22	30	20	18	15	18	22	21	28	33	A	33	32	31	29	27	28	29	29	29	11	7	24.7	32.7
16-Jan-05	11	13	14	23	25	19	22	23	27	30	31	A	32	27	28	27	17	11	10	20	22	19	14	13	20.8	31.9
17-Jan-05	13	11	3	3	4	4	3	3	7	11	A	40	42	41	42	41	42	42	42	42	41	41	39	39	26.0	42.5
18-Jan-05	37	37	36	35	29	25	15	14	16	A	20	24	25	25	25	25	C	A	A	15	7	6	8	15	22.0	37.2
19-Jan-05	22	25	25	26	26	24	23	22	20	A	17	17	16	17	15	6	3	11	21	24	27	27	28	27	20.3	28.3
20-Jan-05	29	26	24	6	8	20	20	19	A	20	20	20	20	19	18	18	17	16	16	15	13	14	12	19	17.8	29.2
21-Jan-05	23	26	27	30	30	29	28	A	25	25	23	25	27	29	30	29	29	26	27	28	27	25	25	25	26.8	29.9
22-Jan-05	26	23	20	18	18	18	A	25	25	24	26	27	29	28	27	26	24	22	22	23	23	22	22	23	23.4	28.8
23-Jan-05	22	23	20	21	21	A	19	19	18	19	22	23	24	23	23	19	17	7	12	13	14	19	22	24	19.2	23.7
24-Jan-05	23	23	27	27	A	27	28	27	26	27	34	35	37	38	40	38	39	41	41	40	34	21	16	19	30.7	40.9
25-Jan-05	10	9	15	A	17	11	8	2	3	5	4	12	15	21	12	25	26	26	27	28	30	31	27	25	16.9	31.4
26-Jan-05	25	24	A	23	21	22	22	19	17	19	19	19	20	23	26	15	18	7	2	8	9	2	6	2	16.0	26.0
27-Jan-05	3	A	4	6	12	15	9	11	15	17	21	24	28	28	27	25	22	19	16	16	13	13	13	12	16.1	27.8
28-Jan-05	A	6	2	2	2	2	2	2	3	6	15	16	18	18	17	20	19	16	16	17	17	16	15	A	11.2	19.8
29-Jan-05	8	8	10	7	14	8	17	20	21	24	25	28	28	30	29	27	25	23	19	19	21	23	A	26	19.9	29.6
30-Jan-05	27	26	25	24	23	22	24	23	21	21	23	28	38	41	40	39	35	25	22	17	8	A	19	29	26.2	40.5
31-Jan-05	29	28	29	26	28	31	31	29	30	32	33	33	32	34	34	34	32	33	34	33	A	33	30	28	31.1	34.4
Hourly Avg	21.3	20.5	20.2	19.2	19.9	19.4	19.2	18.2	18.4	21.2	24.3	26.6	28.2	29.1	28.4	26.6	24.4	21.1	20.7	20.8	20.1	19.4	18.4	21.2		
Hourly Max	39.9	39.6	37.8	37.7	37.1	37.2	36.0	33.8	33.8	34.8	35.9	39.9	42.5	42.7	41.5	41.5	41.8	41.7	42.0	42.1	41.0	40.5	39.2	39.2		

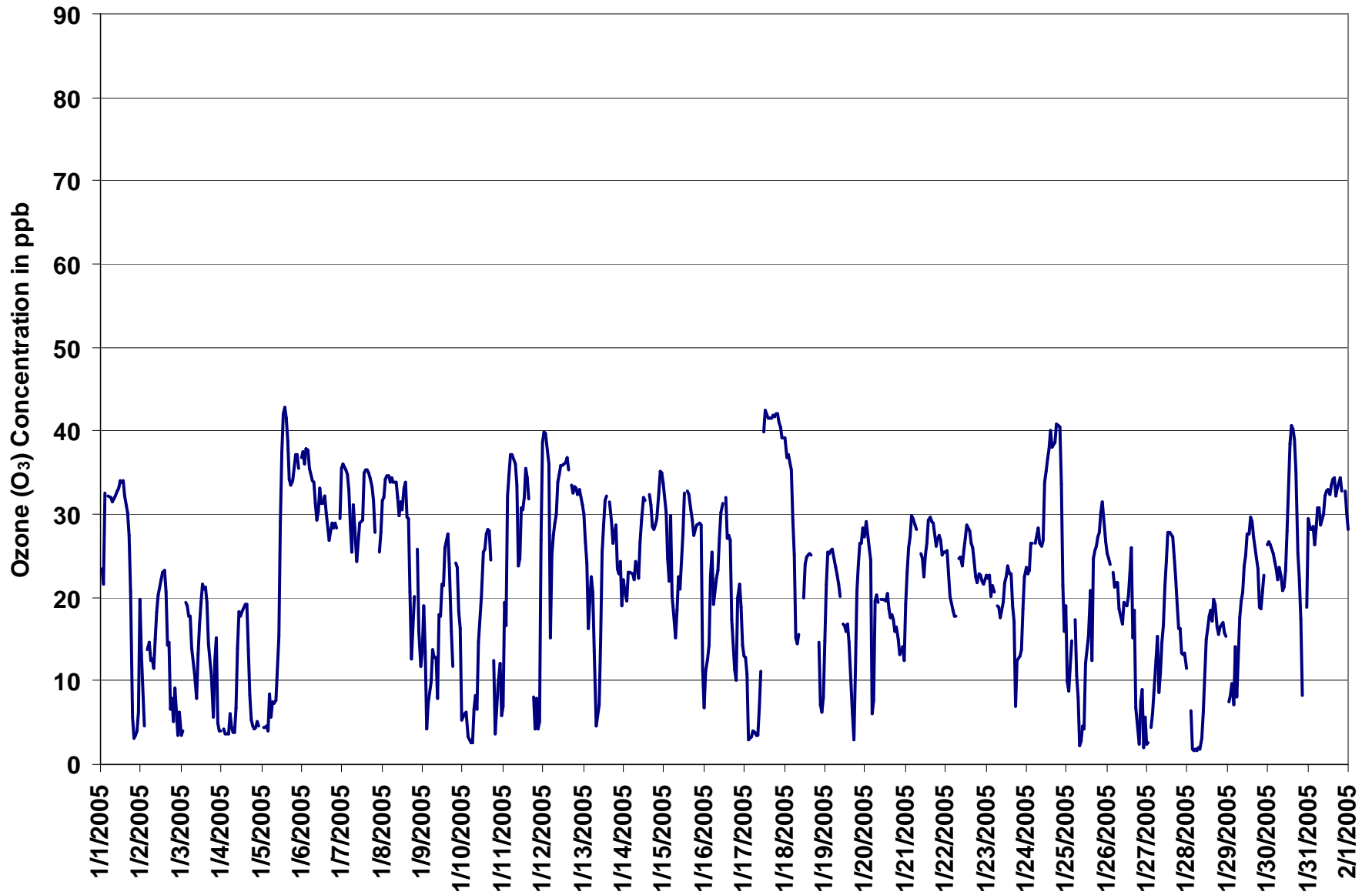


Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend



Station: Crescent Heights

EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	40.2	ppb	17-Jan	19:00	20:00		

Guideline Limit: Canada Wide Standard 8-hr 65 ppb

Percentile	99	95	75	50	25	5	1
	36.6	32.3	25.4	18.4	11.2	3.7	2.2

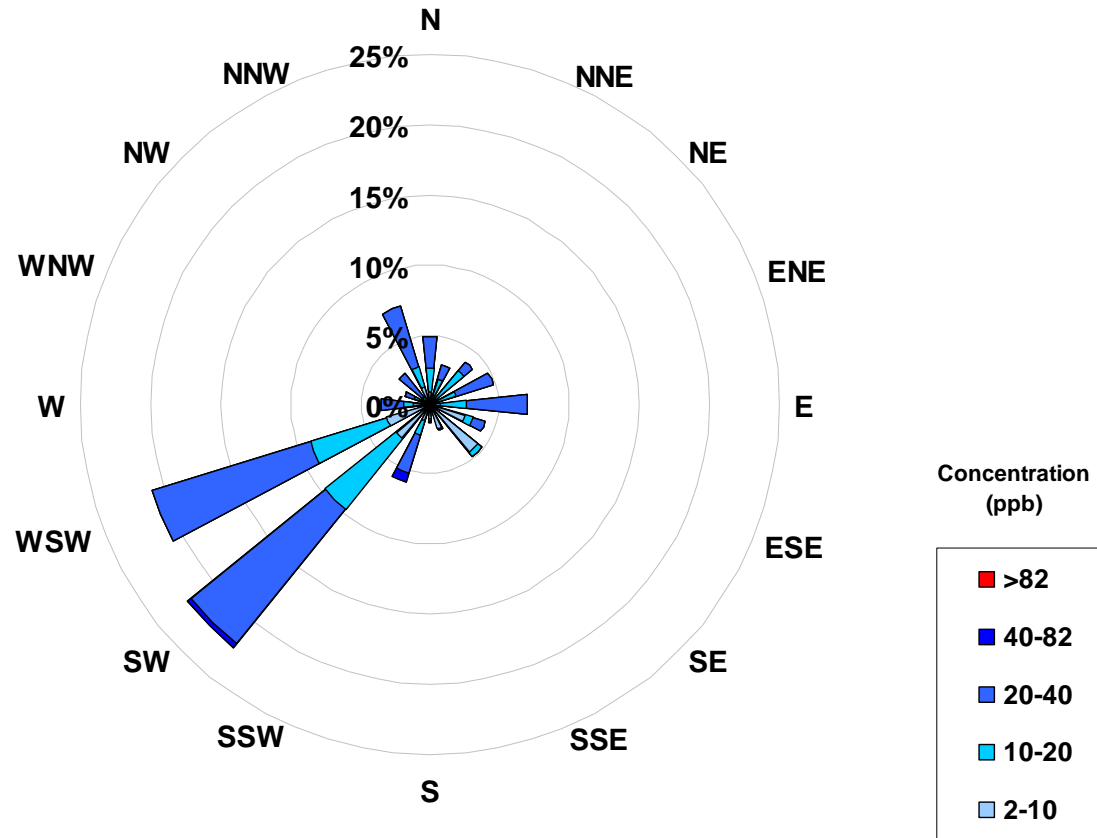
Status Flag Characters

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
1-Jan-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			
1-Jan-05		22	21	23	24	25	26	26	27	29	30	31	31	31	32	31	30	29	26	23	19	15	11	8	7	24.1	31.8	
2-Jan-05		6	4	5	5	6	7	8	8	10	11	14	15	16	17	17	17	15	13	11	9	7	5	4	10.0	17.0		
3-Jan-05		4	3	5	6	8	9	10	10	11	11	11	12	12	13	15	15	14	13	12	10	8	7	5	9.8	15.1		
4-Jan-05		4	4	4	3	3	3	3	3	4	6	8	9	11	13	14	14	13	12	10	8	7	5	4	7.0	14.0		
5-Jan-05		4	4	4	4	4	4	4	4	5	8	11	16	20	25	29	32	34	35	36	35	34	34	33	17.5	35.9		
6-Jan-05		34	34	35	35	35	33	33	32	31	30	30	29	28	29	28	28	28	27	27	26	26	26	27	29.9	34.9		
7-Jan-05		28	29	30	30	30	29	29	29	26	25	23	22	23	25	26	26	28	29	31	31	30	29	28	27	27.8	30.7	
8-Jan-05		27	27	28	29	30	31	32	32	32	31	30	30	30	29	28	26	24	21	21	19	15	12	10	26.1	32.4		
9-Jan-05		10	9	8	7	6	6	6	6	6	8	10	11	13	15	16	17	17	17	18	18	17	15	13	11.5	17.9		
10-Jan-05		12	11	10	8	5	4	3	3	4	5	8	11	14	16	19	20	22	20	17	14	11	8	5	10.5	21.8		
11-Jan-05		3	4	6	9	13	17	20	23	25	26	27	26	26	25	25	26	25	21	18	14	10	7	9	18.0	26.9		
12-Jan-05		12	16	19	20	22	25	27	26	24	24	25	28	30	31	32	33	34	33	33	32	31	31	30	30	27.1	33.6	
13-Jan-05		29	27	25	23	21	18	16	13	10	10	11	12	14	16	18	21	24	26	26	26	24	22	21	20	19.7	28.9	
14-Jan-05		19	19	18	18	18	18	19	19	20	21	22	23	23	25	26	27	28	28	28	27	27	28	28	28	22.8	27.9	
15-Jan-05		28	27	26	26	24	21	18	15	13	12	13	13	16	20	23	25	27	27	27	27	26	22	19	21.1	28.0		
16-Jan-05		16	15	12	10	9	8	10	12	14	16	18	19	21	23	24	24	23	20	17	17	15	14	12	10	15.7	24.0	
17-Jan-05		10	9	9	7	6	5	4	3	3	3	3	7	13	18	24	29	34	39	39	40	40	40	39	39	19.3	40.2	
18-Jan-05		37	35	34	33	31	28	25	22	20	19	16	15	15	17	18	N	N	N	N	N	N	N	N	N	N	36.9	
19-Jan-05		N	9	11	13	15	18	20	22	22	22	20	18	15	13	11	8	8	9	10	11	12	14	16	14.4	21.8		
20-Jan-05		19	22	21	19	16	15	15	13	12	11	12	14	16	17	17	17	17	16	16	15	14	13	13	13	15.8	21.8	
21-Jan-05		14	15	16	18	20	22	24	25	26	26	25	25	24	24	24	25	25	25	26	26	26	26	25	25	23.2	26.5	
22-Jan-05		25	24	23	22	21	19	19	17	17	18	18	20	21	23	23	25	25	24	24	23	23	22	21	20	21.6	24.8	
23-Jan-05		20	20	20	19	19	19	19	18	17	17	17	17	17	18	18	18	17	15	13	12	11	10	10	11	16.3	20.1	
24-Jan-05		12	14	17	18	20	21	22	23	23	23	24	26	27	28	28	30	32	33	34	35	33	31	28	25	25.3	34.6	
25-Jan-05		21	17	13	10	7	6	5	4	4	4	3	4	4	6	6	8	11	13	16	19	21	22	25	25	11.4	25.1	
26-Jan-05		25	25	25	24	23	22	21	20	19	18	18	17	17	18	18	17	17	15	13	11	10	7	5	3	17.0	25.3	
27-Jan-05		2	2	2	2	2	3	3	4	5	6	8	11	13	15	18	20	21	22	21	20	18	16	14	12	10.8	21.6	
28-Jan-05		11	9	8	6	4	3	2	1	1	1	2	4	6	8	9	11	13	15	15	15	15	14	14	14	8.5	15.4	
29-Jan-05		12	10	9	7	6	5	5	6	8	10	13	15	18	21	23	24	24	24	24	22	22	21	20	20	15.4	24.4	
30-Jan-05		20	20	21	22	23	22	22	22	21	20	19	20	21	23	25	27	28	28	28	28	26	23	20	17	14	22.3	28.5
31-Jan-05		14	16	18	20	23	24	26	27	27	27	28	28	29	29	30	30	30	30	29	28	28	28	27	27	25.9	30.0	
Hourly Avg		16.7	16.3	16.2	16.1	16.0	15.9	16.0	15.8	15.6	15.8	16.3	17.2	18.4	19.8	21.0	22.1	22.9	23.0	22.4	21.7	20.6	19.3	18.0	17.2			
Hourly Max		36.9	35.0	34.9	34.9	34.6	33.5	33.2	32.4	32.3	31.6	31.1	31.3	31.5	31.8	32.2	33.1	34.0	38.7	38.9	40.2	40.1	39.8	39.2	38.5			



Concentration Rose for the 1-hr O₃ Average Concentration Occurrences at the Crescent Heights Site for January 2005



Frequency Distribution of O ₃ in ppb			
Range		Frequency (hrs)	
0	< 2	21	
2	to 10	167	
10	to 20	185	
20	to 40	328	
40	to 82	7	
	> 82	0	
Total Non-Zero Values			708

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



PAS - Crescent Heights Total Hydrocarbon Monthly Summary

Station: Crescent Heights

HOURLY AVERAGE TABLE

Total HydroCarbons (THC)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	4.1 ppm 3-Jan 0:00 1:00
Maximum 24-hr Average:	2.9 ppm 4-Jan

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

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
	3.2	3.0	2.5	2.2	2.0	1.7	1.7	2.26 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	2.3	2.3	2.2	A	2.1	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.3	2.7	2.4	2.5	2.7	2.8	2.8	2.5	2.7	2.6	2.35	2.80	
2-Jan-05	2.8	2.9	A	3.1	2.6	2.7	2.6	2.5	2.5	2.5	2.4	2.5	2.4	2.4	2.6	2.6	2.5	2.4	2.4	2.4	2.4	2.8	3.0	3.2	2.62	3.16	
3-Jan-05	4.1	A	2.3	2.5	2.6	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.5	2.6	2.7	2.7	2.7	2.9	2.9	2.9	2.70	4.10	
4-Jan-05	A	2.9	2.7	2.7	3.0	2.9	2.9	3.2	3.1	3.0	2.8	2.7	2.8	3.1	3.2	3.1	2.9	2.7	2.8	2.8	2.8	2.7	2.9	A	2.90	3.18	
5-Jan-05	3.0	2.9	2.9	3.1	3.1	3.0	3.0	2.6	3.2	2.7	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	A	2.0	2.47	3.22	
6-Jan-05	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.2	2.1	2.1	2.1	2.1	A	2.2	2.1	2.03	2.25	
7-Jan-05	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.5	2.5	2.4	2.3	2.3	2.4	2.4	A	2.5	2.4	2.3	2.32	2.52	
8-Jan-05	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.4	2.5	2.5	2.5	A	2.5	2.8	2.9	2.7	2.29	2.88	
9-Jan-05	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.9	3.0	3.0	3.0	2.9	2.9	2.7	2.6	3.0	3.1	2.6	A	2.4	2.5	2.6	2.7	2.8	2.79	3.13	
10-Jan-05	2.8	3.1	3.5	3.1	3.2	3.0	3.1	2.9	3.1	3.2	2.8	2.5	2.5	2.3	2.3	2.3	2.3	2.4	A	2.5	2.4	2.5	2.5	2.4	2.8	2.75	3.55
11-Jan-05	2.7	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.2	2.3	2.2	2.2	2.3	2.2	2.2	2.2	A	2.9	2.9	2.4	2.3	2.5	2.1	1.9	2.27	2.93	
12-Jan-05	1.8	1.8	2.2	2.5	2.5	2.3	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.13	2.51	
13-Jan-05	2.3	2.4	2.5	2.5	2.6	3.0	3.0	2.9	2.9	2.9	2.5	2.5	2.2	2.2	A	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.3	2.45	2.99	
14-Jan-05	2.5	2.4	2.4	2.3	2.3	2.4	2.3	2.3	2.5	2.4	2.3	2.2	2.2	A	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.26	2.50	
15-Jan-05	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.3	2.2	A	2.2	2.4	2.4	2.3	2.4	2.3	2.3	2.3	2.5	2.7	2.5	2.34	2.71	
16-Jan-05	2.4	2.4	2.5	2.4	2.5	2.6	2.4	2.4	2.5	2.5	2.6	A	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.6	2.7	2.8	2.9	2.9	2.59	2.92	
17-Jan-05	2.9	3.1	3.2	3.2	3.4	3.3	3.1	2.8	2.8	2.7	A	2.1	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	2.36	3.43	
18-Jan-05	1.7	1.7	1.7	1.8	1.9	2.0	2.1	2.1	2.1	A	C	C	C	C	2.1	2.1	2.1	2.4	2.4	2.1	2.1	2.0	2.0	2.0	2.03	2.43	
19-Jan-05	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	1.9	1.9	2.0	1.9	2.1	2.3	2.6	2.3	1.7	1.7	1.6	1.6	1.6	1.6	1.83	2.59	
20-Jan-05	1.6	1.7	2.0	2.2	2.3	2.2	2.1	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.0	2.0	2.0	2.1	2.0	2.08	2.31	
21-Jan-05	2.0	1.9	2.0	2.1	2.1	2.2	2.4	A	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.25	2.39	
22-Jan-05	2.4	2.4	2.4	2.4	2.3	2.3	A	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.9	1.8	1.9	1.9	2.02	2.43	
23-Jan-05	1.9	1.9	1.9	1.9	1.8	A	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.9	2.0	2.2	2.1	1.9	2.0	2.0	2.0	1.8	1.8	1.88	2.16	
24-Jan-05	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.7	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.9	2.0	2.0	1.76	2.01	
25-Jan-05	2.2	2.3	2.4	A	2.3	2.3	2.6	2.8	2.7	2.6	3.2	2.4	2.1	2.2	2.2	2.1	2.1	2.0	2.1	2.0	2.0	1.9	2.0	2.1	2.28	3.21	
26-Jan-05	2.1	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	2.0	2.1	2.4	2.2	2.1	2.2	2.3	2.5	2.11	2.47	
27-Jan-05	2.3	A	2.7	2.5	2.1	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.9	1.9	1.8	1.9	1.9	2.0	1.92	2.66	
28-Jan-05	A	2.2	2.4	2.5	2.8	2.8	2.9	2.8	3.0	2.6	2.3	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.36	2.97	
29-Jan-05	2.4	2.3	2.5	2.5	2.5	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	A	1.8	2.02	2.53	
30-Jan-05	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.1	2.1	2.2	2.1	2.0	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.2	A	2.1	2.0	1.99	2.23	
31-Jan-05	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.8	A	1.8	1.8	1.9	1.80	1.91	
Hourly Avg	2.29	2.26	2.31	2.34	2.37	2.35	2.32	2.30	2.34	2.33	2.25	2.18	2.15	2.17	2.19	2.22	2.22	2.23	2.21	2.18	2.20	2.24	2.28	2.24			
Hourly Max	4.10	3.13	3.55	3.20	3.43	3.32	3.10	3.17	3.22	3.19	3.21	2.91	2.88	3.08	3.18	3.11	3.13	2.93	2.92	2.82	2.80	2.86	3.03	3.16			

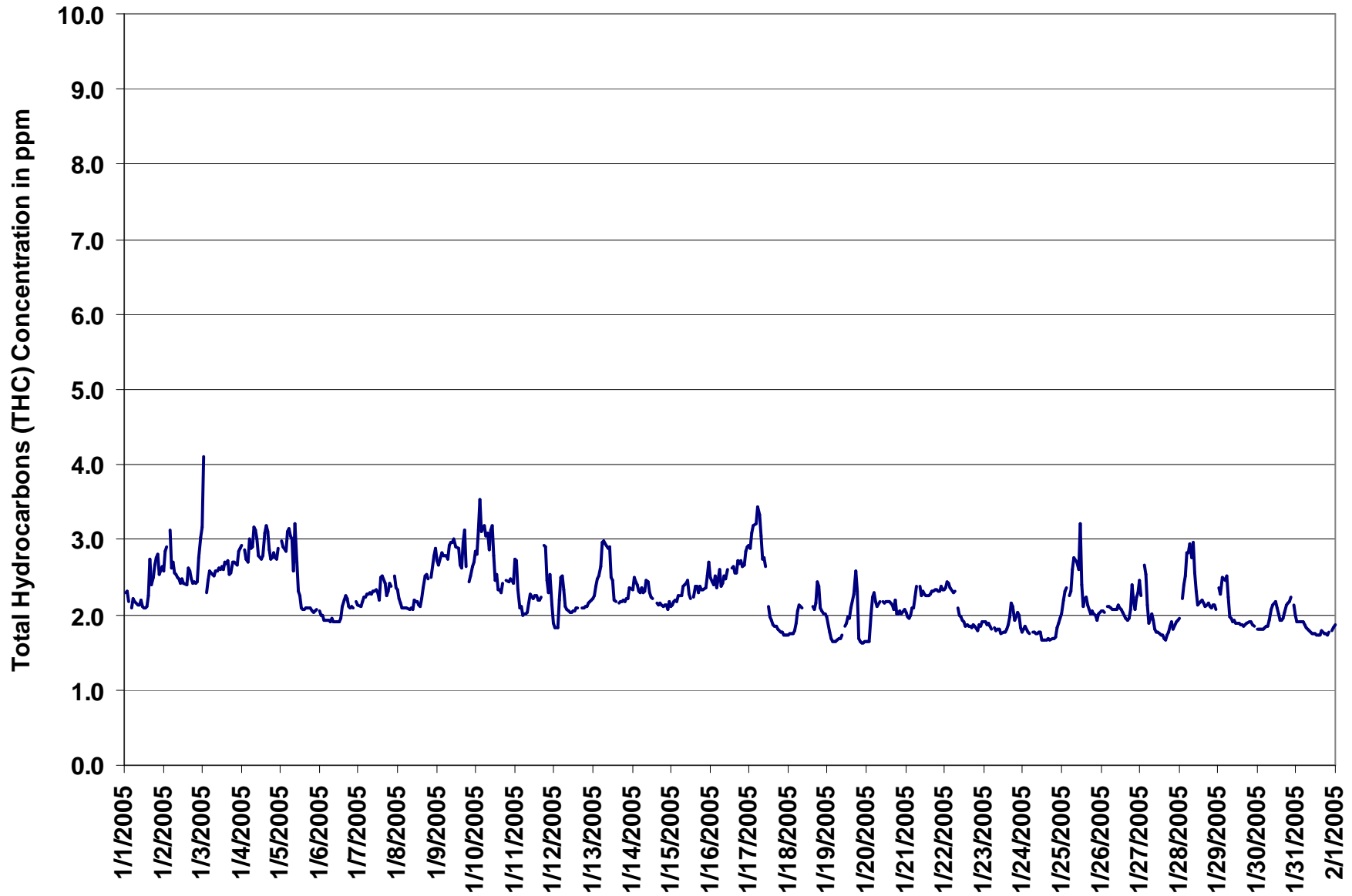


Figure 7. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Total HydroCarbons (THC)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Maximum 1-hr Value:	6.2	ppm	3-Jan	0:00 1:00
Maximum 24-hr Value:	3.1	ppm	4-Jan	

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
	3.9	3.3	2.7	2.3	2.1	1.8	1.7	2.4 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 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-Jan-05	2.4	2.3	2.3	A	2.1	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.6	3.8	2.9	2.7	2.9	2.9	2.9	2.6	2.8	2.9	2.54	3.85	
2-Jan-05	2.9	3.1	A	3.3	2.8	2.9	2.6	2.6	2.6	2.5	2.6	2.6	2.5	2.7	2.7	2.5	2.5	2.5	2.5	2.5	2.5	3.1	3.2	3.6	2.76	3.61	
3-Jan-05	6.2	A	2.3	2.6	2.7	2.7	2.6	2.7	2.6	2.7	2.7	2.9	2.9	2.9	2.9	2.8	2.7	3.3	2.8	2.8	3.4	3.1	3.0	2.97	6.19		
4-Jan-05	A	3.0	2.9	2.9	3.3	3.1	3.1	3.4	3.2	3.4	3.1	2.9	2.9	3.5	3.5	3.5	3.1	3.1	2.8	3.0	3.0	2.8	3.1	A	3.11	3.54	
5-Jan-05	3.3	3.2	3.2	3.9	3.6	3.2	3.3	3.1	4.0	3.0	2.6	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.71	3.96	
6-Jan-05	2.0	2.1	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.2	2.3	2.3	2.3	2.2	2.1	2.1	2.2	A	2.2	2.2	2.09	2.34	
7-Jan-05	2.2	2.3	2.4	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.4	2.4	2.3	2.7	2.7	2.7	2.5	2.5	2.6	2.4	A	2.6	2.4	2.4	2.44	2.73	
8-Jan-05	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.3	2.3	2.2	2.2	2.3	2.4	2.6	2.6	2.6	A	2.6	3.0	3.1	2.9	2.38	3.06	
9-Jan-05	2.8	2.9	2.9	2.9	2.9	2.9	2.8	3.0	3.1	3.2	3.2	3.0	3.0	2.8	2.7	3.3	3.4	2.8	A	2.5	2.6	2.7	2.9	3.2	2.93	3.36	
10-Jan-05	3.0	3.6	4.9	3.2	3.6	3.3	3.6	3.2	3.7	3.7	2.9	2.6	2.7	2.4	2.5	2.4	2.5	A	2.7	2.7	2.7	2.6	2.9	3.3	3.07	4.93	
11-Jan-05	3.2	2.6	2.4	2.2	2.1	2.0	2.1	2.1	2.5	2.5	2.3	2.3	2.3	2.3	2.3	2.4	A	3.5	3.5	3.4	2.7	2.9	2.5	2.0	2.53	3.50	
12-Jan-05	1.8	1.9	2.6	2.6	2.7	2.4	2.2	2.1	2.3	2.1	2.1	2.2	2.1	2.3	2.2	A	2.2	2.4	2.2	2.2	2.2	2.2	2.2	2.3	2.24	2.66	
13-Jan-05	2.3	2.5	2.6	2.8	3.0	3.0	3.1	3.1	3.0	3.1	2.8	2.6	2.2	2.2	A	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.5	2.4	2.57	3.14	
14-Jan-05	2.6	2.5	2.4	2.4	2.3	2.5	2.4	2.4	2.6	2.6	2.4	2.3	2.3	A	2.2	2.6	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.35	2.62
15-Jan-05	2.2	2.3	2.3	2.3	2.4	2.3	2.6	2.6	3.1	2.6	2.4	2.3	A	2.3	2.6	2.6	2.4	2.5	2.4	2.4	2.4	2.7	3.2	2.6	2.49	3.17	
16-Jan-05	2.5	2.6	2.7	2.6	2.7	2.9	2.5	2.6	2.8	2.7	2.8	A	2.8	2.8	2.7	2.7	3.0	2.8	2.9	2.8	2.8	3.2	3.2	3.2	2.80	3.22	
17-Jan-05	3.1	4.4	3.5	3.7	3.5	3.6	3.4	2.8	2.9	3.0	A	2.4	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	2.54	4.38	
18-Jan-05	1.8	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.2	A	C	C	C	C	2.6	2.4	2.3	2.6	2.5	2.4	2.2	2.1	2.0	2.1	2.16	2.63	
19-Jan-05	1.9	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.7	A	3.0	2.0	2.2	2.1	2.3	2.9	3.0	3.3	1.9	1.7	1.7	1.7	1.7	1.7	2.03	3.27	
20-Jan-05	1.7	1.7	2.4	2.4	2.5	2.3	2.1	2.3	A	2.3	2.2	2.2	2.3	2.3	2.4	2.4	2.1	2.5	2.1	2.1	2.1	2.1	2.2	2.2	2.21	2.47	
21-Jan-05	2.1	2.0	2.1	2.2	2.1	2.4	2.5	A	2.5	2.3	2.7	2.3	2.3	2.3	2.7	2.5	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.35	2.69	
22-Jan-05	2.4	2.6	2.5	2.5	2.4	2.5	A	2.4	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.10	2.56	
23-Jan-05	2.0	2.0	2.0	2.0	1.9	A	1.9	1.8	1.9	1.9	1.8	1.8	1.9	1.9	2.0	2.1	2.6	2.3	2.1	2.1	2.2	2.1	2.0	1.8	1.99	2.55	
24-Jan-05	2.0	2.1	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.9	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	2.0	2.1	2.1	1.83	2.10	
25-Jan-05	2.3	2.5	2.8	A	2.5	2.5	2.8	2.9	2.9	2.9	3.7	2.9	2.2	2.3	2.3	2.4	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.47	3.70	
26-Jan-05	2.1	2.1	A	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	1.9	2.0	2.8	3.0	2.3	2.2	2.4	2.9	2.7	2.28	2.99	
27-Jan-05	2.4	A	3.0	3.0	2.5	2.0	2.3	2.1	1.9	1.9	1.8	1.8	1.8	2.2	2.0	1.7	1.8	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.08	3.02	
28-Jan-05	A	2.4	2.6	2.7	4.4	3.8	3.4	3.4	3.3	3.0	2.5	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.3	2.2	2.1	A	2.62	4.36
29-Jan-05	2.8	2.6	3.0	4.7	4.1	2.6	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	1.9	2.29	4.74	
30-Jan-05	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.0	2.2	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.1	2.4	2.2	2.2	2.3	A	2.2	2.1	2.06	2.40	
31-Jan-05	2.0	1.9	1.9	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.2	2.2	1.9	1.8	1.8	A	1.8	1.9	1.9	1.88	2.20	
Hourly Avg	2.48	2.44	2.52	2.57	2.60	2.51	2.46	2.44	2.52	2.50	2.43	2.29	2.23	2.28	2.33	2.43	2.36	2.41	2.36	2.30	2.30	2.37	2.44	2.39			
Hourly Max	6.19	4.38	4.93	4.74	4.36	3.75	3.64	3.42	3.96	3.67	3.70	3.01	2.98	3.47	3.52	3.85	3.36	3.50	3.46	3.41	3.00	3.40	3.22	3.61			

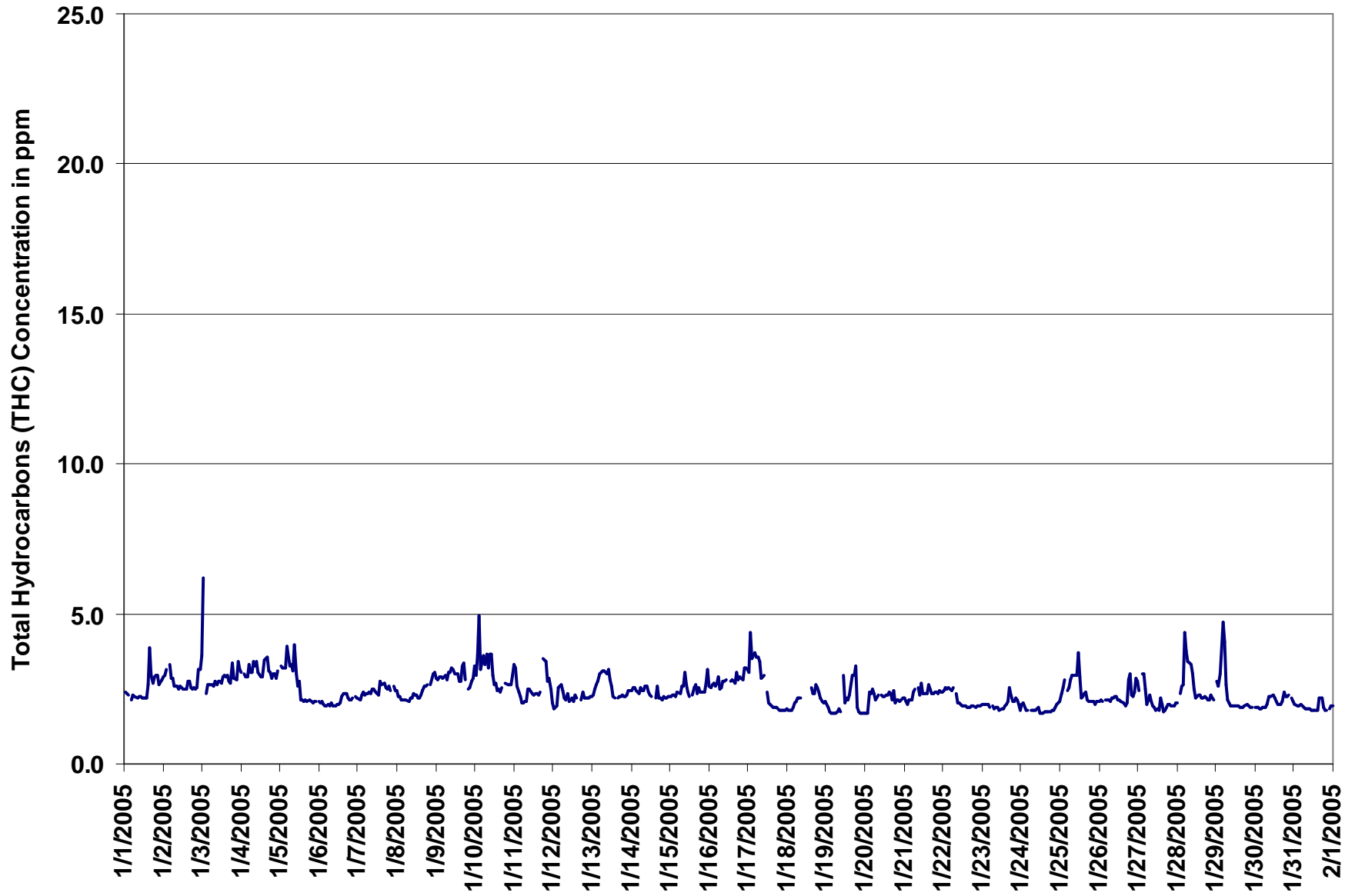


Figure 8. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend



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

Station: Crescent Heights

HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	24.8 µg/m ³ 4-Jan 13:00 14:00
Maximum 24-hr Average:	14.8 µg/m ³ 4-Jan

Guideline Limit	Canada Wide Standard	1-hr - µg/m ³	24-hr 30 µg/m ³
(considered as an absolute value)			

AIC Time:	0 hrs	Operational Time:	734 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	98.7%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	18.8	12.8	5.0	2.4	0.6	0.0	0.0	3.7 µg/m ³	2.7 µg/m ³

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
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-Jan-05	3	3	1	0	1	1	1	1	1	1	1	1	0	1	2	2	3	3	7	8	6	10	6	3	2.7	9.6
2-Jan-05	4	8	11	9	5	8	10	7	8	7	8	6	3	4	8	5	4	4	5	7	3	9	9	9	6.7	10.6
3-Jan-05	9	5	2	6	11	9	13	13	10	11	12	10	8	8	8	8	8	8	11	9	11	13	17	15	9.9	17.1
4-Jan-05	16	13	9	6	11	17	10	12	14	16	20	22	21	25	22	19	22	15	15	12	5	12	14	8	14.8	24.8
5-Jan-05	6	5	4	4	7	15	15	3	13	14	2	0	D	D	D	0	0	0	0	0	0	0	0	0	4.2	15.1
6-Jan-05	0	0	2	1	1	3	5	2	2	4	4	3	5	7	7	7	4	2	3	3	3	1	1	1	3.1	7.1
7-Jan-05	0	0	0	0	1	2	0	0	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.1
8-Jan-05	0	0	0	0	0	0	0	2	0	2	1	0	0	2	2	4	3	4	2	1	2	2	4	5	1.5	5.4
9-Jan-05	3	4	6	4	3	3	3	2	5	5	3	3	3	2	2	8	6	5	7	1	2	5	5	5	3.9	8.4
10-Jan-05	4	17	13	10	10	9	9	6	11	19	14	6	8	6	2	3	3	2	2	5	5	7	5	8	7.6	18.8
11-Jan-05	5	4	0	0	0	0	1	0	1	5	2	4	2	2	3	2	2	7	7	5	3	9	7	0	2.8	9.3
12-Jan-05	0	1	3	12	11	7	6	5	5	6	7	4	4	3	4	4	3	4	3	3	2	2	2	2	4.3	12.5
13-Jan-05	2	3	3	3	3	12	6	9	16	16	5	1	1	1	2	2	2	2	2	2	3	3	5	5	4.6	16.0
14-Jan-05	4	5	6	5	6	6	6	5	6	7	6	3	3	3	3	3	2	2	2	1	1	1	1	0	3.6	6.8
15-Jan-05	0	2	2	1	2	5	5	6	7	12	4	4	3	4	5	5	3	3	3	2	2	2	10	3	4.0	11.5
16-Jan-05	5	3	10	1	1	2	0	0	2	2	2	1	1	2	2	3	3	4	4	6	4	4	6	4	3.0	9.8
17-Jan-05	3	4	7	7	9	8	7	4	5	9	11	5	0	D	12	0	0	0	5	9	D	0	D	0	5.1	11.7
18-Jan-05	0	0	0	2	1	2	3	3	2	4	1	0	1	X	X	4	2	4	4	4	0	0	0	0	1.5	4.4
19-Jan-05	0	0	0	0	0	0	1	0	0	0	2	3	3	0	8	0	2	3	0	0	0	0	0	0	0.9	7.8
20-Jan-05	1	0	D	3	5	5	4	3	4	5	6	6	7	5	5	5	5	6	6	8	11	16	17	13	6.4	17.0
21-Jan-05	18	17	15	8	7	5	5	7	7	7	8	4	4	3	2	3	3	3	2	3	1	1	3	1	5.6	18.0
22-Jan-05	0	0	1	0	1	0	3	8	2	3	5	2	2	2	1	2	2	2	1	1	1	2	2	2	1.9	7.5
23-Jan-05	1	2	1	1	1	0	5	1	1	3	2	2	2	2	1	2	0	2	3	0	2	1	1	0	1.6	5.0
24-Jan-05	0	0	0	0	0	0	0	0	0	1	2	0	0	D	0	0	0	0	2	4	2	4	3	3	1.0	4.0
25-Jan-05	2	2	2	4	2	4	2	9	6	7	16	4	0	0	2	1	1	0	0	0	0	0	1	0	2.8	16.2
26-Jan-05	0	0	0	0	0	0	0	1	1	1	2	0	1	0	0	1	0	3	4	4	0	3	3	5	1.2	5.2
27-Jan-05	4	23	2	2	3	2	2	2	2	2	2	2	1	1	1	1	1	0	0	0	1	2	4	3	2.6	22.6
28-Jan-05	4	3	4	3	3	3	5	4	7	6	6	4	4	3	3	3	3	3	2	0	0	0	0	1	3.1	6.5
29-Jan-05	0	2	0	0	1	2	10	1	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0.9	9.7
30-Jan-05	0	0	0	0	0	1	2	2	2	4	5	5	1	0	0	1	3	4	3	0	0	0	0	0	1.4	5.0
31-Jan-05	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	2	2	0	1	4	2	1	2	2	0.8	3.8
Hourly Avg	3.1	4.0	3.5	3.0	3.4	4.3	4.5	3.8	4.6	5.9	5.2	3.5	3.0	3.2	3.7	3.2	3.1	3.1	3.4	3.3	2.4	3.6	4.3	3.2		
Hourly Max	18.0	22.6	15.0	12.5	11.3	17.2	15.1	13.1	15.8	18.8	20.0	21.7	21.2	24.8	21.5	18.6	22.3	14.8	14.7	11.6	11.0	16.3	17.1	15.3		

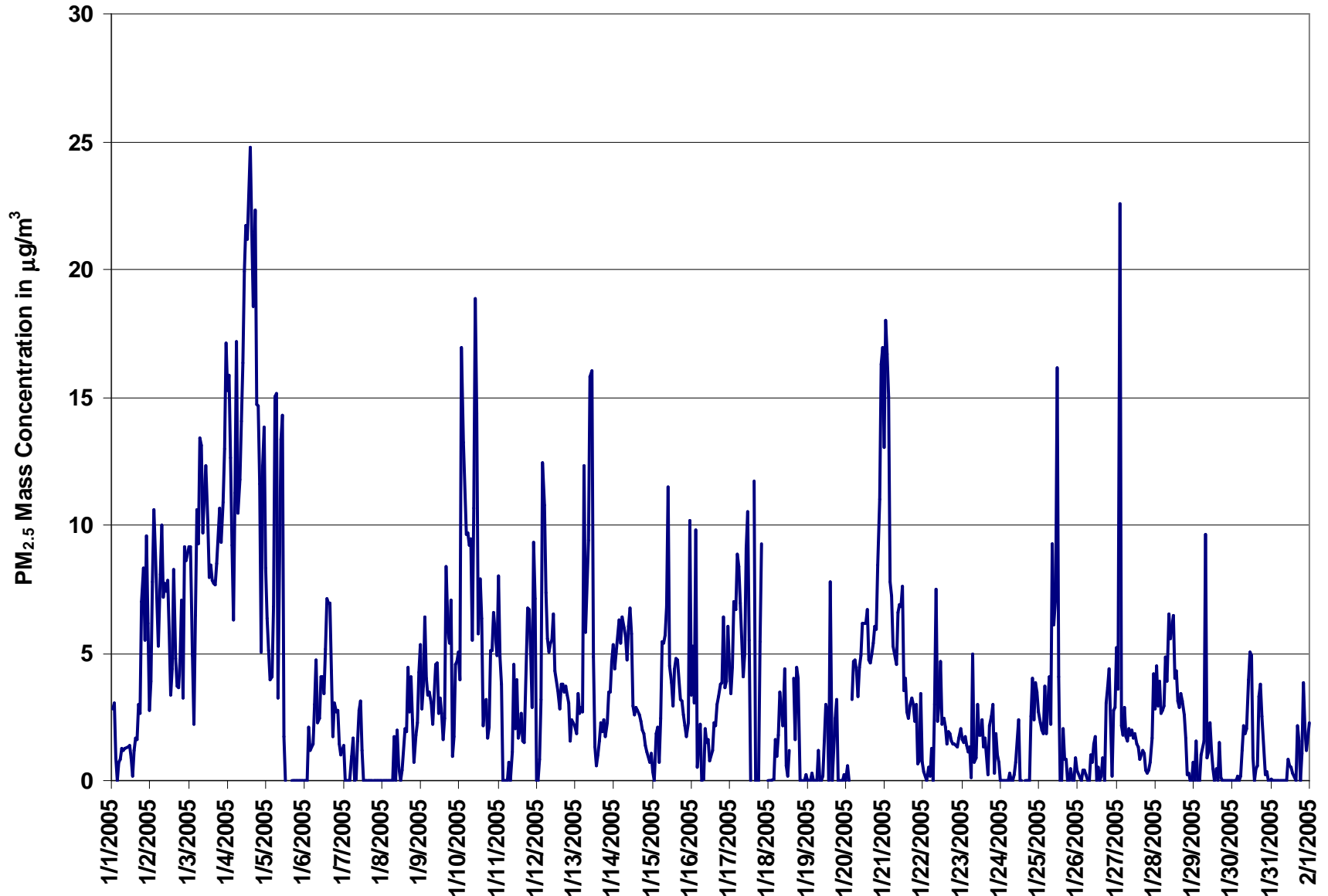


Figure 9. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Maximum 1-hr Value:	72.4	µg/m ³	10-Jan	1:00 2:00
Maximum 24-hr Value:	21.8	µg/m ³	4-Jan	

AIC Time:	0 hrs	Operational Time:	734 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	98.7%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	33.9	21.5	10.8	7.3	5.0	2.9	1.8	9.1 µg/m ³	8.4 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

Day	Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Jan-05	7	9	5	3	4	6	5	5	6	6	5	6	5	5	5	8	8	12	15	9	20	11	9	9	7.5	20.0	
2-Jan-05	9	16	16	17	12	14	20	11	13	12	12	11	10	7	13	12	9	7	9	17	7	16	15	16	12.6	19.8	
3-Jan-05	14	13	7	15	16	14	20	24	14	15	17	17	13	13	11	14	13	12	17	13	16	20	23	21	15.5	23.7	
4-Jan-05	22	20	17	10	22	22	18	18	19	23	24	28	30	34	29	25	30	30	19	18	12	20	19	13	21.8	33.9	
5-Jan-05	9	10	10	8	18	21	29	15	22	20	14	4	D	D	D	2	4	1	4	3	3	3	4	3	9.9	28.9	
6-Jan-05	4	4	6	5	5	6	15	8	6	8	9	7	10	14	11	11	8	7	6	8	7	5	6	6	7.7	15.4	
7-Jan-05	4	5	4	4	7	8	3	5	8	6	8	7	4	3	3	4	4	4	4	4	4	3	2	3	4	4.6	8.4
8-Jan-05	3	3	9	5	5	7	5	13	7	7	10	9	5	7	7	9	8	8	7	6	9	10	8	14	7.5	14.1	
9-Jan-05	7	10	11	10	8	9	8	7	10	9	7	8	9	7	8	17	12	9	14	7	7	10	10	9	9.4	17.2	
10-Jan-05	10	72	40	16	14	15	18	12	16	28	19	17	14	15	6	8	6	6	6	14	12	17	13	15	17.0	72.4	
11-Jan-05	10	9	4	5	5	3	6	3	8	13	8	9	6	9	9	6	8	12	15	14	10	21	19	2	8.9	21.0	
12-Jan-05	5	5	13	19	16	15	12	13	10	11	11	10	7	7	8	8	8	8	9	8	6	6	7	7	9.5	18.5	
13-Jan-05	7	9	7	8	7	23	11	16	25	22	12	8	7	5	7	7	6	7	7	7	8	10	9	10	10.2	25.0	
14-Jan-05	9	11	12	10	10	10	13	9	12	12	14	8	8	8	9	7	8	7	6	6	5	7	5	7	5	8.7	13.9
15-Jan-05	4	6	7	6	7	14	10	12	14	17	11	10	10	8	10	9	7	9	7	6	6	7	19	11	9.4	19.2	
16-Jan-05	19	18	28	9	4	9	5	6	11	11	6	7	6	10	8	9	9	9	9	9	13	8	11	12	10	10.3	27.9
17-Jan-05	9	10	11	12	15	14	15	10	13	22	21	12	4	D	62	11	6	4	59	58	D	2	D	6	18.1	62.0	
18-Jan-05	5	4	5	7	5	8	9	9	7	9	5	7	5	X	X	9	6	10	10	4	6	3	6	4	6.4	9.5	
19-Jan-05	3	2	3	3	3	3	5	4	3	4	5	11	8	2	25	8	10	7	6	1	4	3	4	5	5.6	25.1	
20-Jan-05	5	3	D	8	10	9	9	8	9	9	10	11	12	11	9	10	10	10	9	14	16	23	22	18	11.1	22.6	
21-Jan-05	23	22	21	13	11	10	9	11	11	13	13	8	9	6	8	8	8	8	8	8	8	5	7	8	6	10.6	22.9
22-Jan-05	7	5	6	5	5	4	12	16	7	8	9	7	6	7	5	5	5	5	7	5	6	6	5	6	6.7	16.3	
23-Jan-05	5	6	6	5	6	6	22	5	6	7	5	5	6	7	5	5	10	8	7	5	5	5	5	3	6.5	22.2	
24-Jan-05	1	1	4	2	3	4	4	4	2	4	5	7	2	3	D	4	6	3	5	8	14	8	7	6	4.9	14.3	
25-Jan-05	7	6	6	7	6	11	6	34	11	14	23	17	3	4	6	7	4	3	4	4	4	3	5	6	4	8.3	33.9
26-Jan-05	3	3	3	4	3	4	4	4	5	5	5	5	4	4	4	6	4	12	8	9	4	6	7	12	5.4	12.4	
27-Jan-05	10	54	7	6	6	7	6	6	6	7	5	6	6	5	4	4	5	4	3	4	4	4	5	9	7	7.7	53.8
28-Jan-05	9	7	7	6	6	8	9	8	11	12	11	9	9	9	6	7	7	6	5	4	4	4	3	4	7.1	12.0	
29-Jan-05	5	7	4	3	6	7	37	5	6	6	4	5	3	3	3	4	2	3	2	3	3	2	2	2	5.3	37.0	
30-Jan-05	1	2	3	3	4	5	6	7	5	8	10	10	6	2	4	4	7	11	9	4	3	2	4	3	5.1	11.2	
31-Jan-05	2	2	1	2	3	3	2	2	3	3	4	3	4	4	3	7	6	3	5	8	5	6	6	8	4.0	8.0	
Hourly Avg	7.7	11.4	9.5	7.6	8.2	9.6	11.4	9.9	9.9	11.3	10.4	9.2	7.8	8.1	10.1	8.2	7.8	7.9	9.7	9.8	6.9	8.7	9.3	8.1			
Hourly Max	22.9	72.4	40.1	18.5	22.0	22.8	37.0	33.9	25.0	27.8	24.3	27.9	30.1	33.9	62.0	24.7	29.8	30.4	59.5	57.7	16.0	22.6	23.5	21.5			

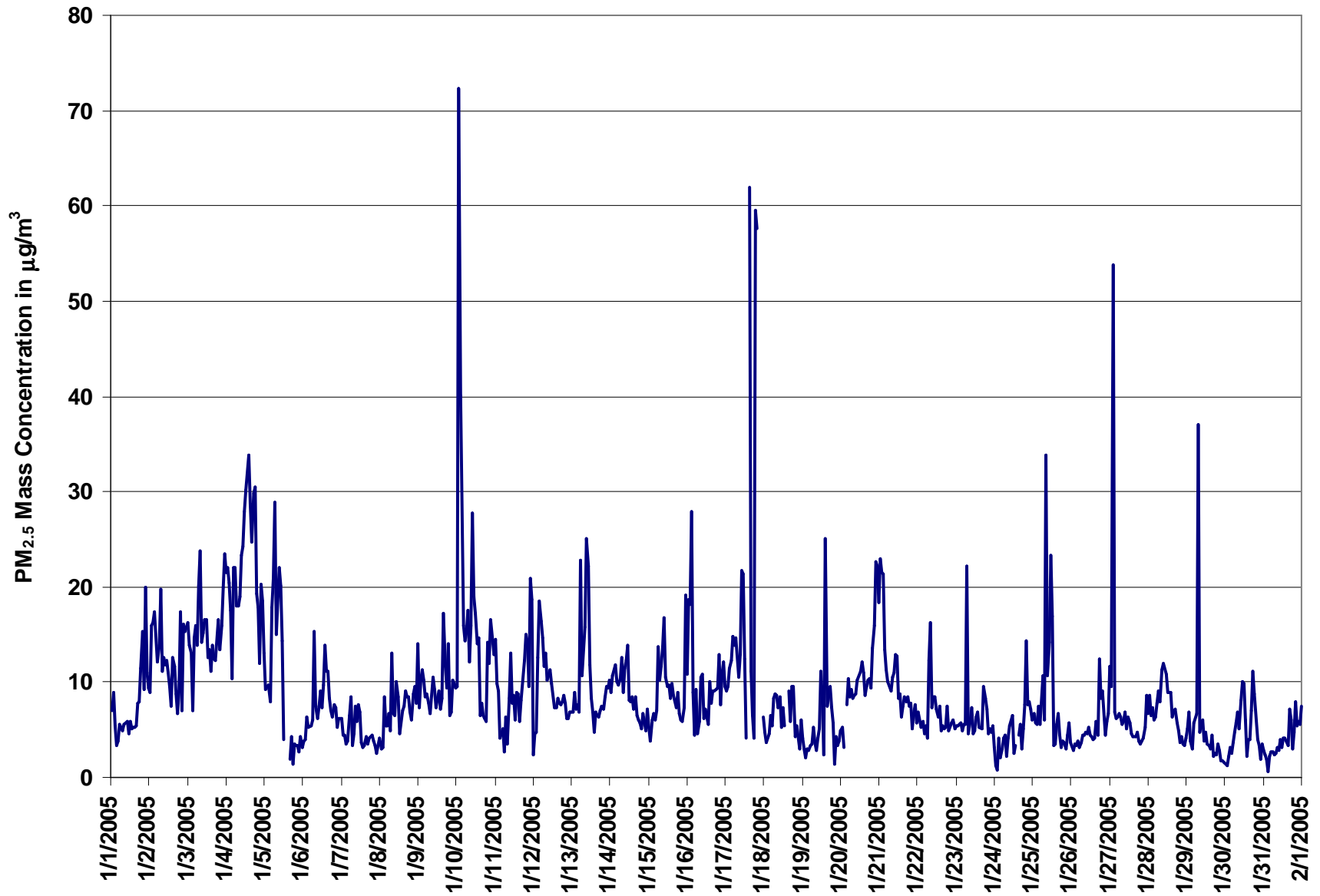
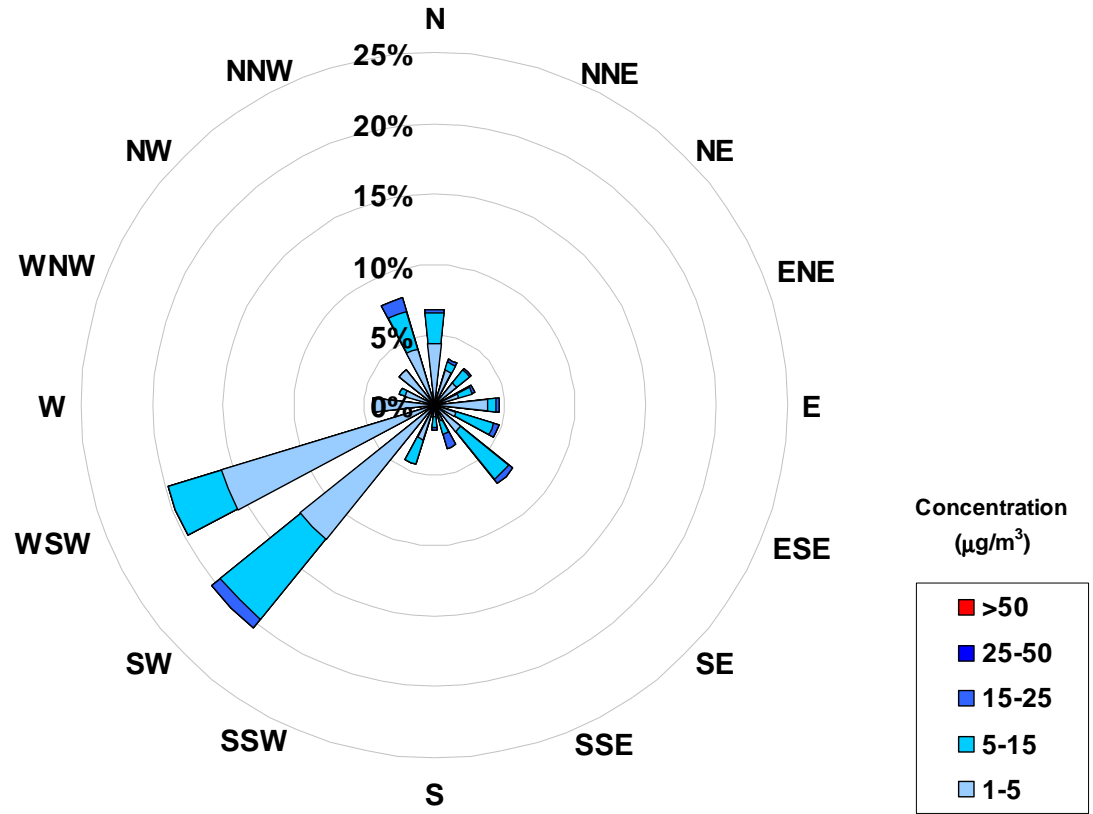


Figure 10. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly



Concentration Rose for the 1-hr PM_{2.5} Average Concentration Occurrences at the Crescent Heights Site for January 2005



Frequency Distribution of PM _{2.5} in µg/m ³			
Range			Frequency (hrs)
0	<	1	218
1	to	5	331
5	to	15	160
15	to	25	25
25	to	50	0
	>	50	0
Total Non-Zero Values			734

Calms	
Range	
µg/m ³	
1-5	0.0%
5-15	0.0%
15-25	0.0%
25-50	0.0%
>50	0.0%



PAS - Crescent Heights Meteorological Parameters Monthly Summary

Station: Crescent Heights

HOURLY AVERAGE TABLE

Relative Humidity (RH - %)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	93.2 % 28-Jan 18:00 19:00
Maximum 24-hr Average:	90.0 % 28-Jan

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
	91.9	87.0	74.6	68.8	62.6	52.0	43.9	68.8 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	75	75	74	74	74	75	75	75	75	74	73	69	68	66	65	71	74	75	73	72	72	73	72	72	72	75
2-Jan-05	72	72	72	71	68	68	67	68	68	68	68	66	63	58	57	60	67	70	71	70	70	70	69	69	68	72
3-Jan-05	69	69	68	68	67	67	66	67	67	65	60	57	55	55	56	60	66	69	73	73	74	71	70	69	66	74
4-Jan-05	68	67	66	65	65	64	64	64	65	65	66	66	67	65	64	67	67	66	65	64	63	64	63	63	65	68
5-Jan-05	62	63	62	62	62	63	63	65	67	73	72	64	57	55	56	57	59	59	61	60	59	60	58	56	61	73
6-Jan-05	53	59	57	61	64	66	67	67	67	64	64	65	67	68	80	84	85	83	81	80	79	78	79	79	71	85
7-Jan-05	76	77	77	77	78	76	77	77	78	75	69	64	64	68	70	72	74	76	76	76	76	77	77	77	74	78
8-Jan-05	76	77	77	77	77	77	78	77	77	76	74	73	71	69	68	71	72	73	74	74	74	74	72	71	74	78
9-Jan-05	73	72	73	73	73	72	72	72	72	71	71	71	69	70	71	71	71	71	69	69	68	68	68	68	71	73
10-Jan-05	67	66	66	65	66	65	65	65	66	67	69	70	68	64	63	62	66	71	72	73	74	74	73	74	68	74
11-Jan-05	74	72	72	73	70	70	70	69	71	66	60	57	57	58	60	58	64	74	77	75	74	75	69	65	68	77
12-Jan-05	61	61	67	72	71	69	66	66	67	69	68	64	63	62	63	62	63	63	62	60	60	60	62	63	64	72
13-Jan-05	64	64	64	63	63	64	63	63	63	63	62	61	58	55	56	57	59	61	60	62	63	63	63	62	62	64
14-Jan-05	62	62	61	61	60	59	58	58	59	56	52	51	51	51	52	51	52	52	50	46	44	42	44	46	53	62
15-Jan-05	50	53	58	56	61	63	64	62	62	60	51	49	49	47	48	50	55	56	56	55	55	58	65	65	56	65
16-Jan-05	65	63	63	62	59	60	56	55	54	53	48	43	44	45	49	56	59	61	62	64	66	68	67	69	58	69
17-Jan-05	69	71	73	75	74	72	70	73	73	74	71	66	60	61	62	61	63	66	69	70	70	71	70	68	69	75
18-Jan-05	63	65	68	71	79	77	78	82	81	79	80	77	76	76	76	76	80	85	87	87	89	90	87	81	79	90
19-Jan-05	77	75	74	74	73	73	69	69	70	73	72	71	66	69	70	75	80	78	70	67	63	59	60	64	70	80
20-Jan-05	58	68	74	82	82	82	81	81	82	80	73	72	71	73	76	79	81	83	85	86	87	87	87	86	79	87
21-Jan-05	85	84	84	79	77	80	78	76	76	72	73	69	65	60	58	59	63	66	67	68	69	70	69	69	71	85
22-Jan-05	68	69	69	70	71	72	75	73	70	69	64	62	60	59	59	59	63	65	67	65	65	65	66	67	66	75
23-Jan-05	69	72	75	77	78	79	80	81	81	73	69	65	60	56	60	66	71	72	72	79	80	80	79	74	73	81
24-Jan-05	75	75	71	70	68	69	66	67	68	68	58	52	51	40	40	45	44	41	41	44	59	61	66	71	59	75
25-Jan-05	75	72	71	79	72	74	75	81	79	73	75	72	67	61	64	64	67	72	75	77	77	76	78	80	73	81
26-Jan-05	80	79	81	83	85	86	85	86	86	80	73	71	67	56	55	56	60	67	72	78	83	87	87	89	76	89
27-Jan-05	89	89	89	86	85	84	84	82	77	71	69	62	59	57	59	62	66	71	74	77	80	82	79	80	76	89
28-Jan-05	82	84	86	88	90	91	91	89	89	89	90	92	92	93	93	93	93	93	93	93	91	89	88	88	90	93
29-Jan-05	88	89	87	87	89	88	83	82	80	74	69	64	64	57	59	58	64	70	76	75	74	70	67	67	74	89
30-Jan-05	70	71	73	74	74	73	68	62	66	67	69	66	59	52	51	52	56	64	72	78	82	84	80	71	68	84
31-Jan-05	67	65	63	65	63	60	61	61	60	56	53	53	54	54	52	52	58	54	48	49	52	54	54	59	57	67
Hourly Avg	70	71	71	72	72	72	71	71	71	70	67	65	63	61	62	63	67	69	69	70	71	71	71	70		
Hourly Max	89	89	89	88	90	91	91	89	89	89	90	92	92	93	93	93	93	93	93	93	91	90	88	89		

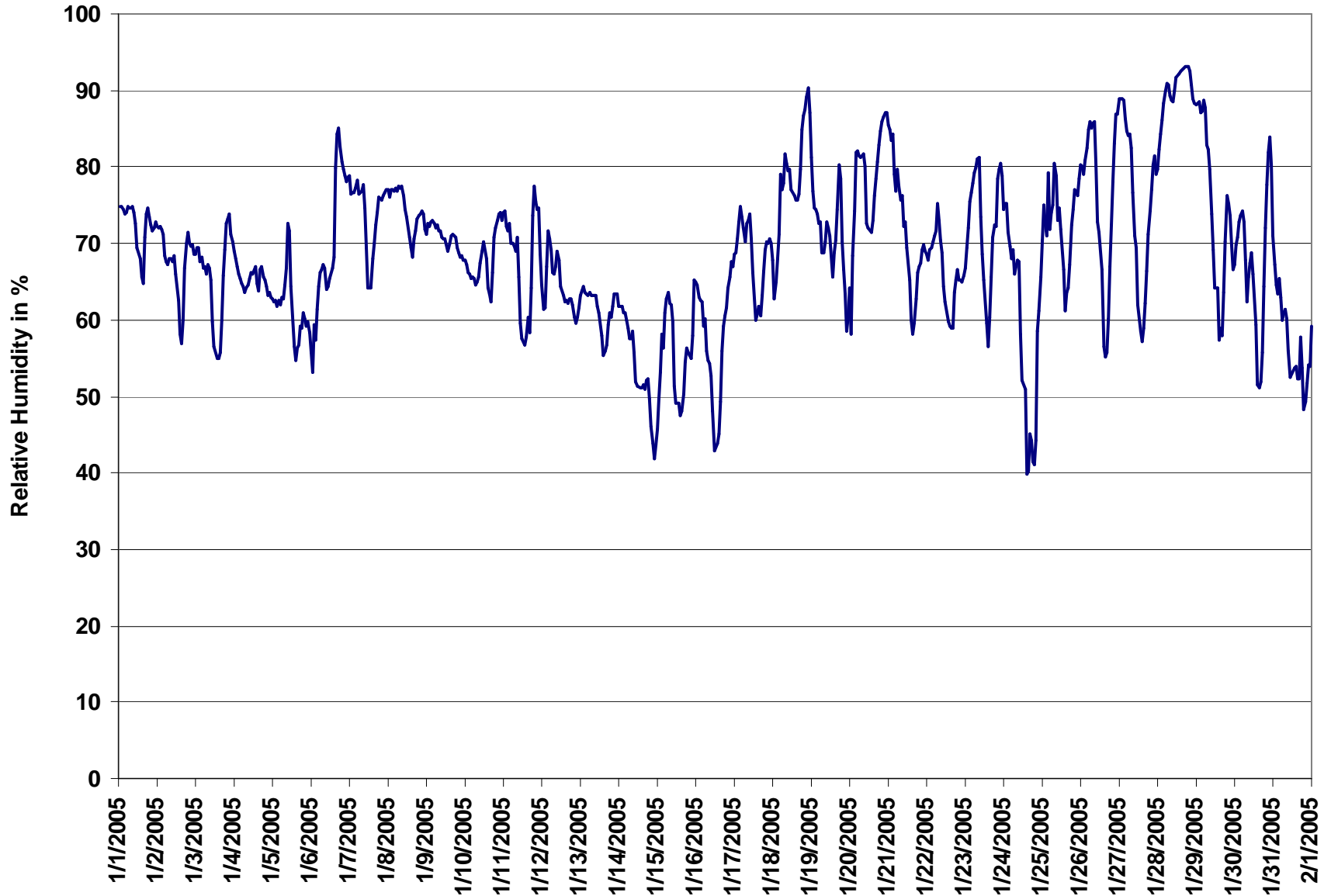


Figure 11. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE

Ambient Temperature (AT - °C)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	15.9 °C 24-Jan 13:00 14:00
Maximum 24-hr Average:	9.2 °C 24-Jan

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
	12.5	8.2	2.3	-11.5	-21.7	-29.4	-31.6	-10.0 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
1-Jan-05	-17	-17	-17	-17	-17	-17	-17	-17	-17	-16	-16	-15	-15	-15	-15	-17	-19	-21	-21	-22	-22	-21	-20	-21	-17.8	-14.6	
2-Jan-05	-22	-22	-22	-23	-25	-26	-26	-26	-25	-24	-22	-20	-19	-18	-18	-20	-22	-24	-25	-25	-26	-26	-26	-26	-23.2	-17.6	
3-Jan-05	-24	-21	-22	-23	-23	-22	-22	-22	-22	-21	-19	-17	-16	-15	-15	-16	-18	-20	-21	-22	-23	-24	-25	-26	-20.7	-15.1	
4-Jan-05	-27	-28	-28	-29	-29	-29	-30	-29	-28	-27	-25	-23	-22	-23	-24	-25	-26	-28	-28	-29	-30	-30	-30	-31	-27.5	-22.3	
5-Jan-05	-31	-31	-32	-31	-32	-31	-31	-29	-27	-20	-14	-12	-10	-9	-9	-10	-11	-11	-11	-10	-10	-10	-10	-10	-18.3	-8.5	
6-Jan-05	-9	-11	-9	-10	-12	-12	-12	-12	-11	-8	-7	-6	-4	-4	-6	-6	-6	-8	-10	-10	-10	-11	-13	-12	-9.1	-3.8	
7-Jan-05	-12	-13	-14	-15	-15	-14	-14	-15	-16	-15	-12	-12	-12	-13	-13	-14	-14	-14	-15	-15	-15	-15	-15	-14	-14.0	-11.6	
8-Jan-05	-14	-14	-14	-14	-14	-14	-14	-14	-15	-15	-15	-15	-15	-15	-15	-17	-18	-18	-17	-17	-18	-21	-23	-23	-16.3	-14.1	
9-Jan-05	-22	-21	-21	-21	-21	-21	-21	-21	-22	-21	-21	-20	-20	-20	-19	-21	-22	-23	-24	-25	-25	-25	-26	-26	-22.0	-18.7	
10-Jan-05	-27	-27	-28	-28	-28	-28	-29	-28	-28	-25	-22	-20	-18	-17	-16	-15	-16	-18	-20	-21	-22	-22	-22	-21	-22.7	-15.1	
11-Jan-05	-19	-14	-12	-11	-10	-11	-11	-13	-15	-15	-13	-12	-12	-11	-12	-11	-13	-16	-18	-19	-19	-18	-11	-8	-13.4	-7.9	
12-Jan-05	-6	-6	-10	-17	-18	-20	-20	-20	-20	-21	-22	-22	-23	-23	-24	-24	-25	-25	-25	-26	-26	-27	-27	-28	-21.0	-6.4	
13-Jan-05	-28	-28	-29	-30	-30	-30	-30	-30	-31	-29	-27	-26	-26	-24	-25	-25	-26	-27	-27	-28	-29	-30	-31	-31	-28.2	-24.3	
14-Jan-05	-32	-32	-33	-32	-32	-31	-31	-31	-32	-30	-29	-28	-27	-26	-26	-25	-26	-26	-26	-26	-25	-24	-24	-25	-26	-28.2	-24.1
15-Jan-05	-27	-28	-29	-29	-30	-31	-31	-32	-31	-28	-26	-24	-23	-22	-22	-23	-24	-24	-24	-24	-24	-24	-25	-26	-28	-26.4	-21.6
16-Jan-05	-28	-28	-28	-28	-26	-26	-25	-24	-23	-22	-22	-18	-18	-18	-18	-20	-21	-20	-19	-19	-19	-18	-18	-18	-21.9	-17.5	
17-Jan-05	-18	-18	-18	-19	-19	-19	-19	-17	-16	-11	-5	0	4	4	5	5	5	5	5	5	5	5	5	6	-4.9	5.9	
18-Jan-05	7	7	6	5	4	3	3	2	3	4	3	4	4	5	5	5	4	3	2	1	1	1	2	4	3.7	7.1	
19-Jan-05	5	6	6	6	7	6	8	8	8	7	7	8	9	9	9	7	5	6	8	8	9	10	10	8	7.4	9.9	
20-Jan-05	10	7	3	-2	-4	-4	-6	-7	-8	-7	-4	-2	-1	-1	-1	-2	-1	-1	-2	-3	-3	-3	-3	-4	-2.1	10.2	
21-Jan-05	-6	-6	-7	-8	-9	-10	-11	-11	-11	-11	-12	-12	-12	-13	-13	-14	-15	-16	-17	-17	-17	-17	-16	-16	-12.4	-6.1	
22-Jan-05	-16	-16	-15	-14	-14	-13	-11	-5	-3	-2	1	2	4	5	6	6	4	4	3	4	3	3	3	3	-2.3	5.9	
23-Jan-05	3	3	3	4	4	4	3	3	4	7	8	10	12	14	12	11	9	9	9	7	7	6	7	7	6.9	13.5	
24-Jan-05	7	6	6	7	6	6	7	6	6	7	11	13	14	16	15	13	13	13	13	12	8	7	6	4	9.2	15.9	
25-Jan-05	3	3	3	1	2	2	2	0	1	2	3	4	5	6	5	5	5	3	2	1	1	1	1	1	2.5	5.8	
26-Jan-05	1	1	0	0	0	-1	-1	-2	-2	0	2	2	3	6	6	7	5	3	2	1	-1	-1	-1	-2	1.1	6.6	
27-Jan-05	-2	-2	-3	-2	-1	-1	-1	0	1	3	4	7	9	9	9	9	8	6	4	3	2	2	2	2	2.8	9.5	
28-Jan-05	1	0	-1	-2	-2	-3	-3	-4	-4	-2	-1	-1	0	0	0	0	0	-1	-1	-1	-1	-2	-2	-2	-1.3	0.5	
29-Jan-05	-3	-2	-3	-3	-3	-2	0	0	0	3	4	6	5	8	7	8	6	4	2	2	2	2	2	2	2.0	8.1	
30-Jan-05	1	1	0	0	0	0	2	3	1	1	2	5	7	8	8	7	6	4	2	1	-1	-1	-1	1	2.4	7.8	
31-Jan-05	2	2	2	2	3	4	4	5	5	7	8	9	9	10	10	9	8	8	9	8	8	7	7	5	6.3	9.6	
Hourly Avg	-11.3	-11.3	-11.8	-12.4	-12.5	-12.6	-12.5	-12.4	-12.1	-10.7	-9.0	-7.6	-6.6	-6.0	-6.2	-6.8	-7.9	-8.8	-9.3	-9.8	-10.3	-10.6	-10.6	-10.6			
Hourly Max	10.2	7.4	6.4	6.6	6.5	6.3	7.9	7.8	7.6	7.1	10.8	12.9	13.8	15.9	14.8	13.2	12.6	12.6	12.5	12.1	9.1	9.9	9.7	8.1			

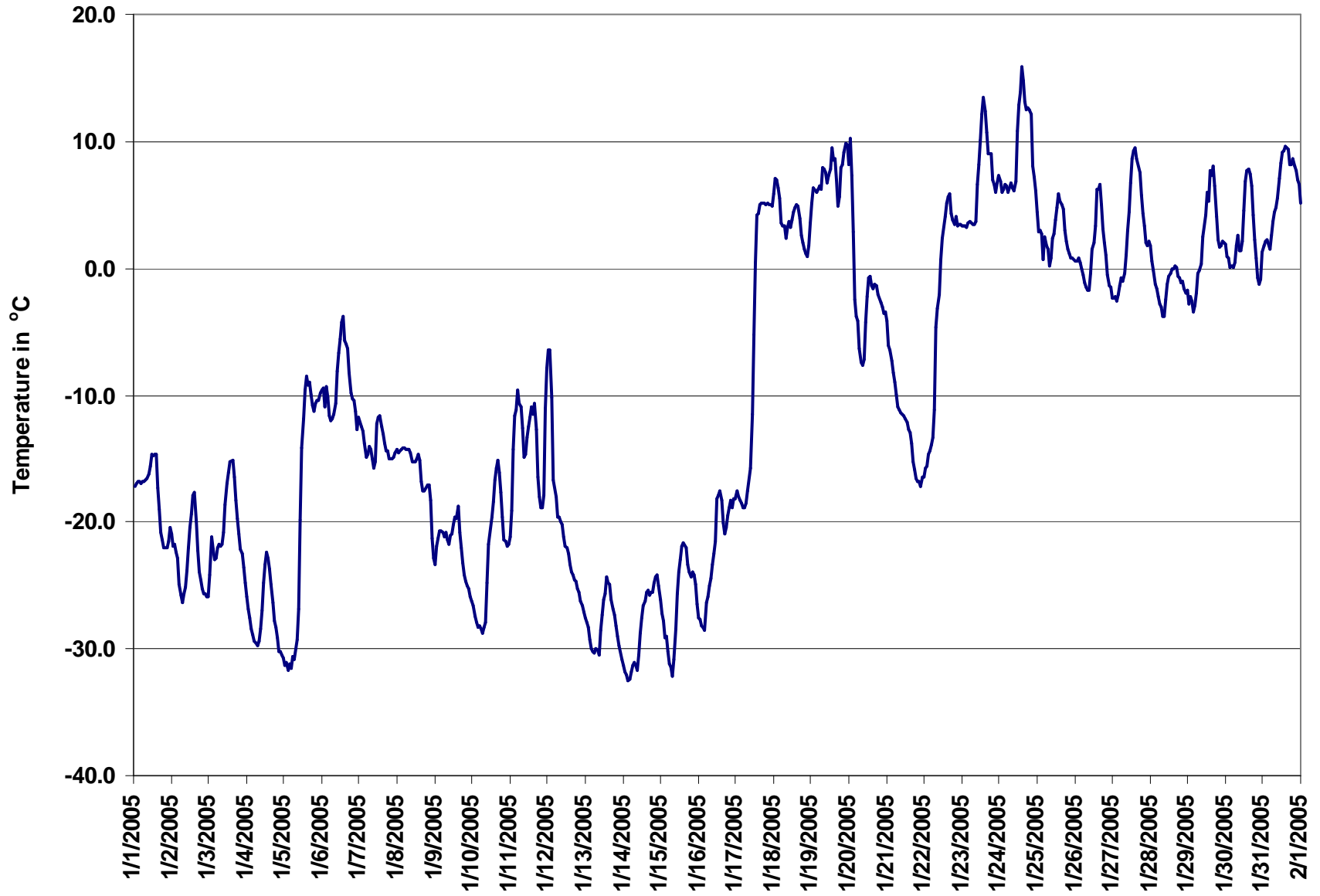


Figure 12. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend

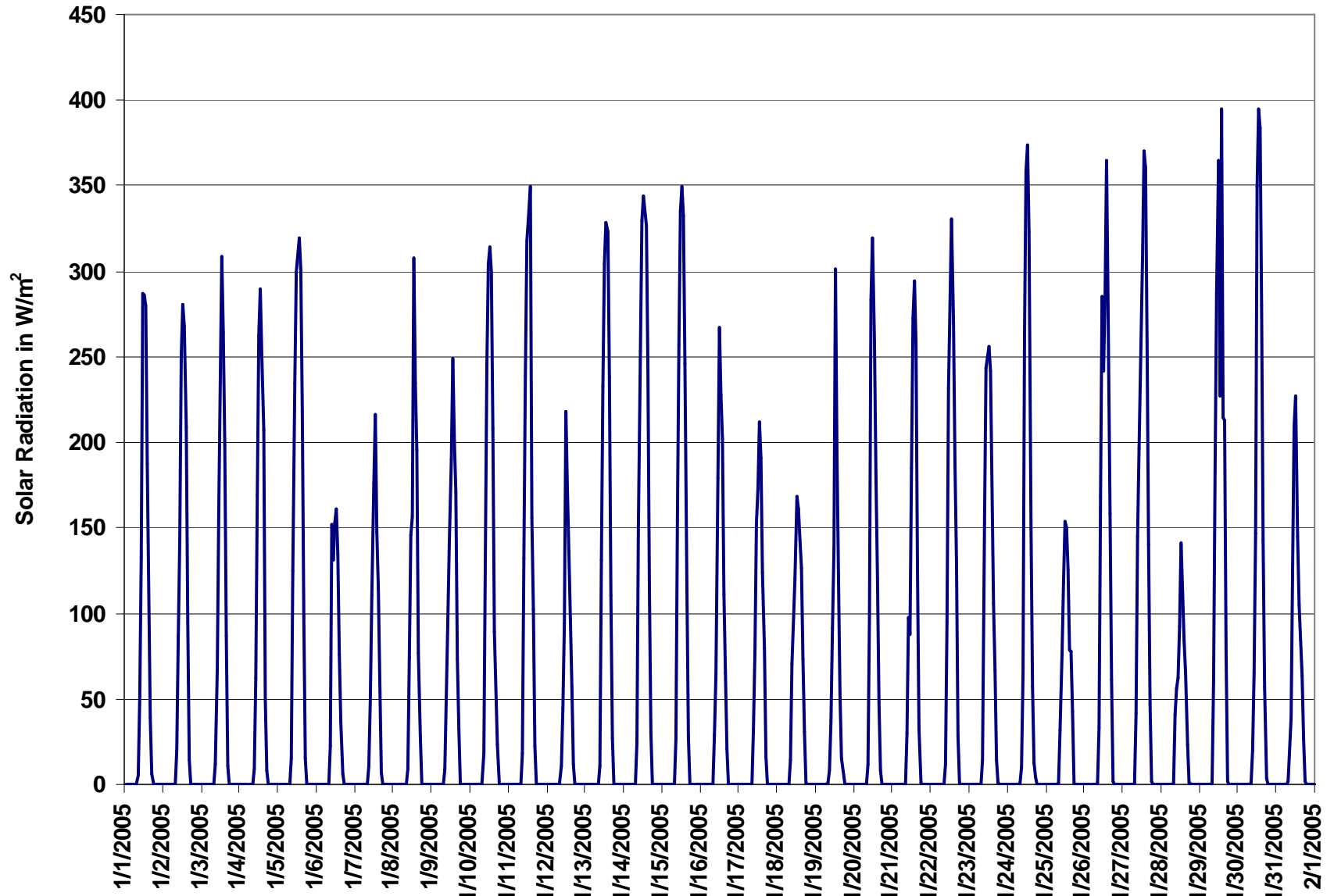


Figure 13. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



Station: Crescent Heights

HOURLY AVERAGE TABLE

Wind Speed (WSv - km/hr)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005
Summary

Maximum 1-hr Average:	38.5	km/hr	17-Jan	17:00 18:00
Maximum 24-hr Average:	17.0	km/hr	17-Jan	

Calm Time:	8 hrs	1% calms	Operational Time:	736 hrs					
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	AverageS	AverageV
	28.9	22.3	13.2	7.9	4.0	1.7	1.2	9.4 km/hr	4.4 km/hr

Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Vector Average	Daily Max
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	5	4	8	11	12	8	9	8	10	11	11	12	10	8	5	4	4	2	1	2	2	1	1	3	5.4	12.0
2-Jan-05	1	1	Calm	4	8	8	10	10	8	8	8	11	9	5	4	6	4	4	4	3	2	1	3	3	3.7	11.4
3-Jan-05	2	8	7	6	10	5	4	4	3	4	3	5	8	5	6	9	5	4	4	6	4	2	1	2	4.6	9.9
4-Jan-05	1	2	2	2	3	Calm	2	1	2	3	2	3	2	4	4	4	3	3	3	3	5	1	3	2	2.1	4.5
5-Jan-05	2	2	5	2	3	1	3	2	1	5	9	15	21	16	22	17	17	18	15	14	18	13	16	14	9.7	21.8
6-Jan-05	22	24	23	24	21	16	20	14	19	17	13	11	9	15	10	7	11	20	22	18	17	13	13	17	9.7	24.2
7-Jan-05	16	13	12	6	3	7	9	8	2	4	1	1	3	5	6	8	8	6	6	6	7	10	9	11	4.4	15.6
8-Jan-05	12	13	14	12	13	12	10	8	7	7	9	8	7	8	7	7	6	6	7	6	7	6	6	7	2.9	14.2
9-Jan-05	5	5	3	3	4	3	4	3	Calm	3	3	2	4	5	3	3	4	4	4	10	8	5	3	Calm	0.8	9.8
10-Jan-05	1	2	Calm	Calm	1	Calm	8	4	1	4	4	10	14	13	12	10	7	6	5	4	5	4	4	2	3.6	13.6
11-Jan-05	5	8	6	8	11	10	14	11	5	6	6	6	7	10	9	4	4	3	2	4	4	3	10	12	5.8	14.4
12-Jan-05	14	12	21	20	24	18	18	20	19	25	27	24	24	21	15	13	10	13	8	7	8	6	4	4	14.6	26.6
13-Jan-05	5	6	5	5	2	2	1	2	2	3	6	8	11	10	12	15	12	13	11	9	8	8	9	13	5.8	15.3
14-Jan-05	10	9	9	12	16	14	13	12	11	10	12	14	15	17	16	16	13	15	23	25	21	15	11	11	14.1	25.5
15-Jan-05	7	6	5	7	3	2	4	4	5	4	7	9	11	11	12	13	13	11	12	14	11	8	4	4	7.0	13.5
16-Jan-05	5	3	2	3	5	3	6	5	4	3	3	1	2	2	3	5	4	4	2	3	3	2	2	3	2.2	6.2
17-Jan-05	1	2	1	1	4	2	5	5	4	6	11	16	27	34	38	38	37	39	38	33	27	24	14	27	17.0	38.5
18-Jan-05	26	24	20	14	6	9	8	5	5	7	11	11	8	7	8	6	3	2	4	4	4	3	4	6	6.7	25.6
19-Jan-05	19	25	20	15	12	10	16	17	23	15	7	5	4	4	3	4	4	7	14	12	17	16	17	16	11.2	24.7
20-Jan-05	16	10	8	10	7	9	11	14	11	5	4	4	4	5	6	7	6	7	10	5	7	9	6	12	5.5	16.0
21-Jan-05	15	14	16	18	18	17	17	14	15	16	12	14	13	11	12	12	12	12	10	13	13	13	10	11	10.0	18.5
22-Jan-05	9	6	2	5	5	4	6	14	15	10	12	13	17	14	11	12	11	19	19	11	8	10	11	11	8.2	19.3
23-Jan-05	11	14	13	16	15	13	13	10	12	10	11	7	5	3	3	3	3	4	6	7	8	7	12	14	8.4	16.4
24-Jan-05	12	13	13	8	16	10	15	22	20	24	16	24	22	20	19	18	17	14	19	17	8	3	4	4	14.2	24.4
25-Jan-05	4	5	5	4	4	4	4	3	1	2	3	6	4	2	4	6	8	9	11	13	12	10	13	9	2.0	12.7
26-Jan-05	11	9	10	10	8	9	6	5	7	5	3	4	2	2	3	2	4	2	1	5	2	Calm	3	3	3.2	11.0
27-Jan-05	1	1	3	4	3	6	6	10	9	11	15	12	16	18	19	20	16	16	15	15	13	8	4	4	9.7	19.5
28-Jan-05	4	3	1	1	2	2	5	7	2	3	8	11	10	9	11	13	11	9	11	9	4	9	7	2	5.0	12.8
29-Jan-05	3	3	5	3	2	4	7	6	9	14	14	20	19	21	23	22	21	16	15	11	14	15	14	18	11.7	22.5
30-Jan-05	14	14	14	14	12	11	6	9	13	5	7	9	12	11	12	7	4	3	6	4	4	3	5	8	6.4	14.3
31-Jan-05	11	17	15	11	17	23	23	24	23	24	28	30	25	24	20	17	15	15	17	12	12	13	10	6	16.9	29.6
1-hr Vector	4.2	5.0	3.9	3.4	3.5	3.4	3.9	3.7	4.0	4.7	5.4	6.5	6.7	5.6	5.7	4.9	4.1	4.2	5.0	4.3	3.8	3.3	3.3	4.2		
Hourly Max	25.6	24.7	22.6	24.0	23.6	22.8	23.4	23.6	23.4	24.7	27.8	29.6	27.3	34.2	38.2	38.0	37.5	38.5	38.1	32.6	27.0	24.3	17.1	27.0		



Station: Crescent Heights

HOURLY AVERAGE TABLE

Wind Direction (WD - Degrees)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Calm Time:	8 hrs	1% calms	Operational Time:	736 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	356.9	345.2	246.3	228.6	128.0	40.5	4.7	241 deg

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-05	49	59	64	65	73	87	101	101	103	95	105	107	103	101	170	26	15	88	28	127	134	199	284	358	88	
2-Jan-05	126	182	Calm	209	234	233	243	243	232	227	231	233	231	241	129	124	134	130	140	140	119	6	50	132	213	
3-Jan-05	242	254	237	227	234	240	249	241	234	241	234	226	238	258	234	236	253	250	234	240	237	344	176	158	239	
4-Jan-05	161	160	121	122	160	Calm	116	111	116	124	117	215	335	76	56	86	112	110	114	119	126	106	138	128	117	
5-Jan-05	114	155	130	0	142	159	147	126	229	210	211	217	199	199	197	204	224	222	231	220	207	206	201	217	207	
6-Jan-05	223	231	224	238	235	246	240	243	240	239	240	232	238	5	20	4	351	350	348	346	329	324	315	336	274	
7-Jan-05	346	347	343	346	261	318	345	2	325	331	252	70	92	94	98	98	89	93	92	66	40	47	60	82	32	
8-Jan-05	71	80	74	71	72	71	72	85	43	351	356	336	331	297	296	292	284	284	293	296	256	249	210	231	21	
9-Jan-05	270	150	201	261	265	257	327	336	Calm	250	243	233	252	240	228	77	59	97	131	107	107	84	109	Calm	165	
10-Jan-05	43	146	Calm	Calm	228	Calm	353	336	155	216	213	232	225	231	238	231	215	198	157	143	130	138	128	43	214	
11-Jan-05	220	221	255	252	264	246	247	254	264	244	255	253	233	238	243	266	165	101	126	144	24	183	245	232	241	
12-Jan-05	237	239	320	332	326	333	327	334	329	329	328	329	328	327	326	325	320	325	327	324	324	314	311	309	323	
13-Jan-05	327	323	333	347	37	131	127	116	147	234	242	234	242	233	231	227	231	246	254	246	242	241	224	236	243	
14-Jan-05	237	239	227	232	234	235	234	238	237	226	221	227	225	223	232	237	250	246	238	232	240	244	228	224	234	
15-Jan-05	218	199	179	215	149	129	229	199	245	224	251	244	233	237	234	228	240	241	242	240	234	213	175	130	226	
16-Jan-05	141	123	148	71	56	73	44	49	53	50	13	102	343	354	22	354	352	351	337	330	96	72	341	19	41	
17-Jan-05	12	175	289	173	121	121	128	151	130	200	225	220	211	211	212	209	209	214	221	219	226	235	230	229	215	
18-Jan-05	256	257	264	280	285	286	274	253	254	222	238	226	239	232	230	211	139	134	57	99	129	136	205	224	248	
19-Jan-05	211	216	239	244	249	258	250	240	227	235	235	233	355	64	140	26	226	223	232	244	229	239	232	243	235	
20-Jan-05	251	212	338	348	4	346	359	348	352	355	358	44	13	356	21	24	46	74	56	56	35	18	357	346	2	
21-Jan-05	344	337	339	348	350	353	360	359	0	8	1	18	32	45	59	65	75	76	90	95	97	99	95	95	28	
22-Jan-05	97	94	55	353	358	358	258	223	204	210	204	223	232	233	240	228	241	236	229	245	254	244	243	229	230	
23-Jan-05	243	243	239	237	241	240	239	224	237	239	227	202	260	28	281	30	110	191	191	225	227	233	231	237	234	
24-Jan-05	242	242	242	258	241	239	235	229	235	235	225	229	233	250	258	238	239	259	269	279	332	258	265	257	245	
25-Jan-05	238	232	258	242	273	239	247	192	227	242	222	218	225	192	91	35	54	64	89	84	104	98	63	64	100	
26-Jan-05	100	81	93	90	73	49	65	40	51	55	48	26	18	344	328	218	50	9	260	273	256	Calm	207	142	66	
27-Jan-05	152	328	1	220	234	238	221	218	227	238	231	238	229	229	229	226	232	241	243	240	237	236	274	269	234	
28-Jan-05	276	285	301	198	296	13	353	5	74	86	108	102	89	93	89	91	88	85	95	99	82	70	65	63	82	
29-Jan-05	337	290	322	324	270	223	251	228	229	219	230	224	226	226	223	220	222	225	231	239	234	239	240	229	231	
30-Jan-05	241	243	242	235	239	240	235	336	350	325	229	236	294	320	311	306	281	214	222	216	212	211	238	206	260	
31-Jan-05	216	208	195	194	200	204	208	212	220	222	218	222	227	233	242	249	242	257	256	246	246	261	281	250	226	
Hourly Avg	242	235	260	267	259	261	261	257	248	245	237	232	238	241	235	230	229	235	235	233	230	235	233	235		



Station: Crescent Heights

STANDARD DEVIATION TABLE

Wind Direction (WD - Degrees)

Station Owner: PAS

Monitoring Dates: January 1, 2005 to February 1, 2005

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	8 hrs	1% calms	Operational Time:	736 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	60.3	42.4	15.0	9.6	6.6	4.1	3.3

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

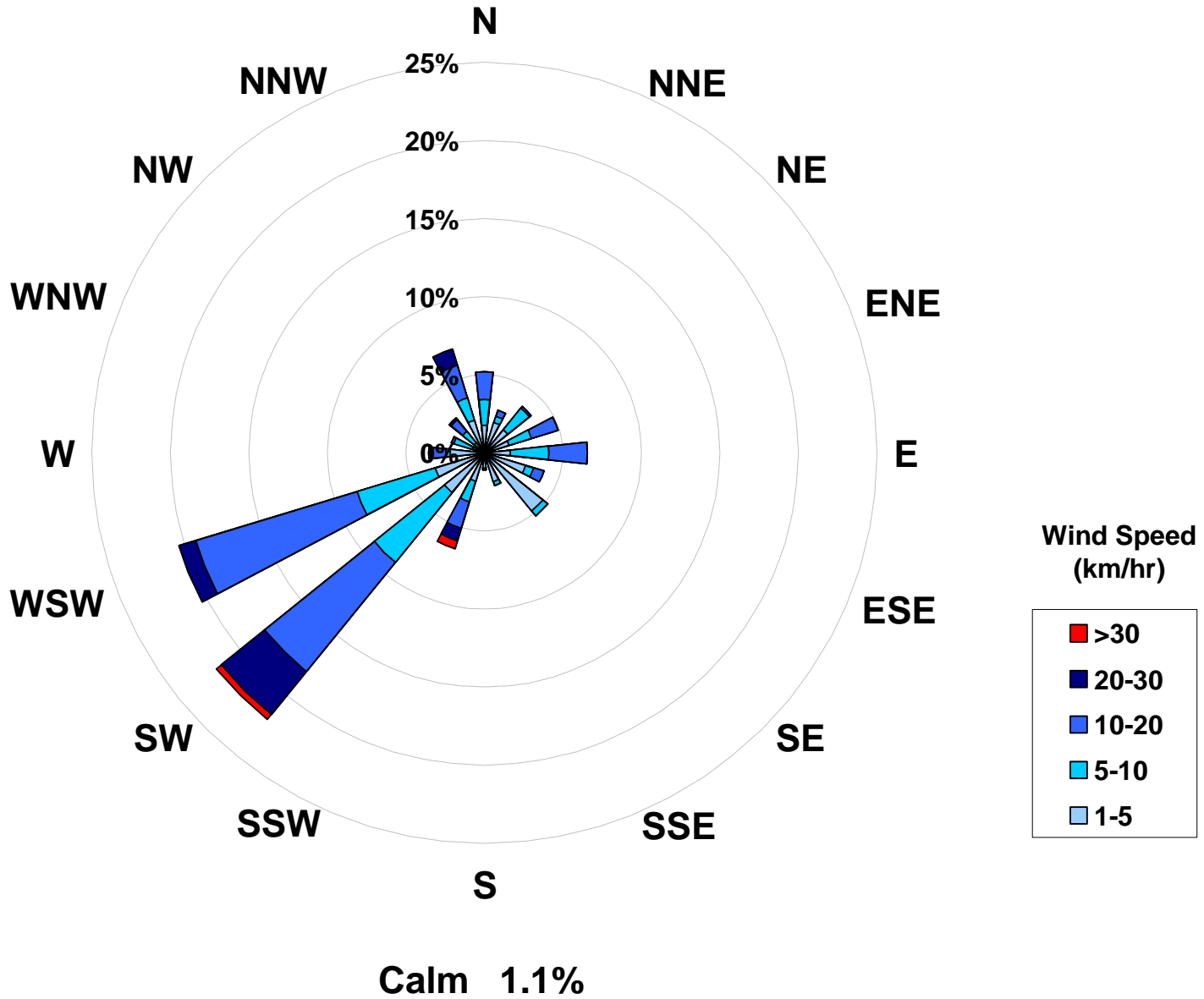
Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Jan-05	10	12	9	7	6	9	8	9	7	7	8	9	10	10	24	21	8	20	26	12	12	31	45	20	45.0
2-Jan-05	16	43	Calm	14	6	5	4	6	5	9	10	8	10	15	21	5	6	11	8	13	32	34	38	34	43.1
3-Jan-05	41	7	7	11	4	15	13	14	13	12	20	14	11	13	11	6	12	9	6	6	14	60	57	21	59.9
4-Jan-05	41	18	7	11	10	Calm	15	24	14	8	12	24	27	15	13	17	11	12	12	10	6	47	8	21	47.0
5-Jan-05	26	37	8	31	17	62	12	53	51	11	6	6	7	12	6	8	6	6	5	7	8	10	7	13	62.3
6-Jan-05	5	4	5	5	7	8	6	6	4	4	8	8	12	14	8	8	6	4	4	4	5	5	5	5	14.4
7-Jan-05	3	3	6	25	15	10	6	15	45	33	63	64	21	10	9	6	7	6	9	8	6	5	6	7	63.7
8-Jan-05	7	6	5	7	6	5	6	14	7	4	5	8	9	12	15	11	13	9	10	10	7	20	14	9	20.0
9-Jan-05	47	53	46	27	20	13	14	35	Calm	16	15	27	19	15	38	23	7	11	8	5	7	11	11	Calm	52.7
10-Jan-05	36	11	Calm	Calm	27	Calm	4	26	46	13	8	6	7	6	7	8	12	12	17	14	11	20	30	64	63.7
11-Jan-05	35	13	15	15	11	13	7	10	13	13	11	15	14	7	8	21	18	26	62	24	31	40	17	8	61.7
12-Jan-05	6	12	10	6	7	7	10	9	8	6	4	5	5	4	7	7	10	7	16	13	8	13	17	11	16.5
13-Jan-05	8	12	11	26	29	48	26	15	19	20	10	10	7	13	9	6	5	10	7	6	5	4	6	2	48.3
14-Jan-05	3	5	5	3	3	5	5	4	3	4	5	7	8	6	7	5	7	6	4	4	6	7	7	6	8.0
15-Jan-05	11	10	9	9	20	21	23	37	15	13	12	7	7	9	7	7	5	6	5	5	5	7	15	10	36.8
16-Jan-05	9	13	23	9	14	18	7	10	10	7	13	39	30	16	38	8	9	16	32	26	39	29	47	24	47.2
17-Jan-05	61	31	56	40	9	27	9	11	17	15	14	13	5	5	4	4	4	4	4	4	5	4	11	10	60.5
18-Jan-05	7	4	4	12	14	8	9	12	14	12	4	8	8	10	9	15	28	33	11	20	13	44	16	13	44.3
19-Jan-05	14	5	8	8	10	8	6	8	5	7	16	30	28	19	11	24	66	42	7	9	7	13	10	7	66.2
20-Jan-05	10	10	13	4	7	8	6	5	10	11	15	17	46	48	13	8	13	13	10	10	12	10	7	4	47.6
21-Jan-05	5	7	7	6	5	5	5	6	6	7	8	11	15	13	8	7	6	7	7	7	7	7	8	11	15.1
22-Jan-05	10	15	32	19	26	26	46	15	9	14	17	16	9	13	15	12	12	6	4	11	13	8	7	10	45.8
23-Jan-05	8	6	4	4	5	4	6	7	5	6	7	30	27	49	43	29	30	13	14	5	7	10	8	7	49.2
24-Jan-05	9	7	10	14	8	16	10	6	7	4	8	4	6	6	6	4	6	9	6	17	32	47	7	26	47.4
25-Jan-05	31	12	41	34	14	14	10	38	15	12	11	7	11	21	12	7	6	7	6	6	8	9	7	8	40.7
26-Jan-05	7	8	9	10	9	7	10	6	7	11	14	16	43	40	36	39	13	15	12	11	15	Calm	18	14	42.9
27-Jan-05	25	32	51	67	35	17	38	11	8	8	3	11	9	8	8	5	9	10	6	4	4	11	28	10	67.4
28-Jan-05	11	25	27	17	19	58	8	4	16	20	11	9	12	13	9	7	9	9	7	9	22	6	7	57	58.3
29-Jan-05	45	30	11	14	46	18	18	37	10	9	8	9	6	13	5	6	5	7	13	13	7	7	8	5	46.5
30-Jan-05	5	6	5	4	4	4	13	54	7	24	13	12	15	12	10	11	13	20	10	7	9	9	10	8	54.1
31-Jan-05	13	4	6	4	3	4	5	7	6	5	4	4	5	5	6	5	6	8	6	8	8	6	35	18	35.3

Hourly Max	61	53	56	67	46	62	46	54	51	33	63	64	46	49	43	39	66	42	62	26	39	60	57	64
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Wind Rose for the 1-hr Average Meterological Data at the Crescent Heights Site for January 2005





Passive Monitoring – December 2004 & January 2005

Ambient Air Compliance Network

Palliser Airshed Society - PAS Passive Stations for December 2004

Station Number	Station	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Location		
	Name				Easting	Northing	Elevation
Duplicates							
3a	Redcliff	0.7	22.7	7.1			
3b		0.8	23.6	6.6			
1	Hospital	0.5	20.7	8.4	521648	5542721	698
2	Ball Park	0.5	18.0	9.5	524019	5543686	660
3	Monitoring Station	0.7	23.2	6.9	522812	5544133	714
4	Redcliff	0.6	26.2	3.8	517448	5545608	725
5	Southridge	0.4	25.7	5.8	523172	5539016	721
6	Christian School Park	0.7	23.2	6.9	526577	5538133	709

Stats:							
	Mean	0.6	22.8	6.9			
	Standard Deviation	0.1	3.4	2.2			
	Minimum	0.4			5	Southridge	
	Maximum	0.7			3	Monitoring Station	
	Minimum		18.0		2	Ball Park	
	Maximum		26.2		4	Redcliff	
	Minimum			3.8	4	Redcliff	
	Maximum			9.5	2	Ball Park	

Comparison between Continuous and Passive monitoring (passive #3)

	SO ₂	O ₃	NO ₂
PAS Station	-	18.5	9.7
PAS Passive	0.7	23.2	6.9



Palliser Airshed Society - PAS Passive Stations for January 2005

Station Number	Station Name	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Easting	Northing	Elevation
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Duplicates

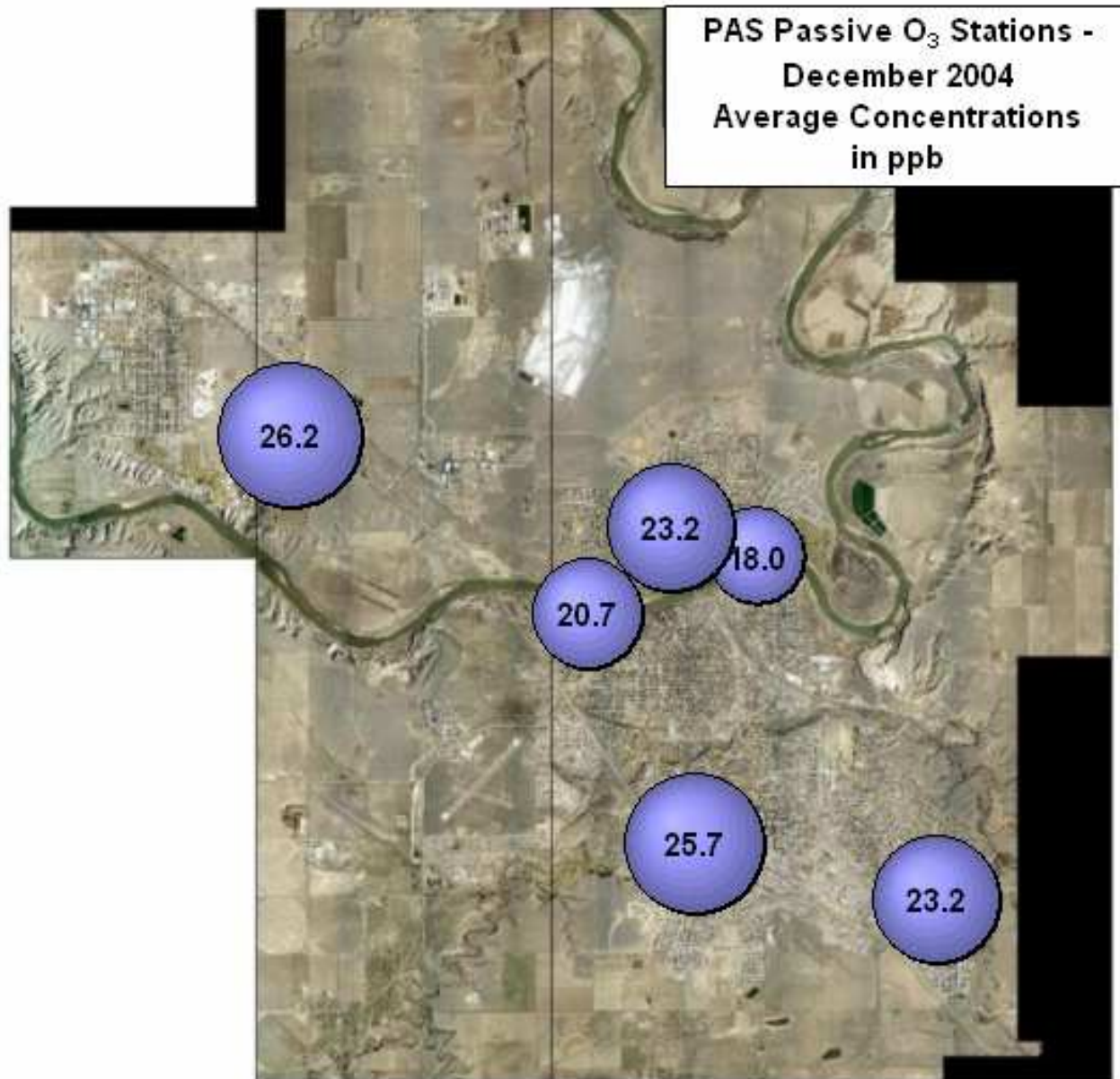
4a	Redcliff	0.7	33.0	5.3			
4b		0.9	29.8	8.9			

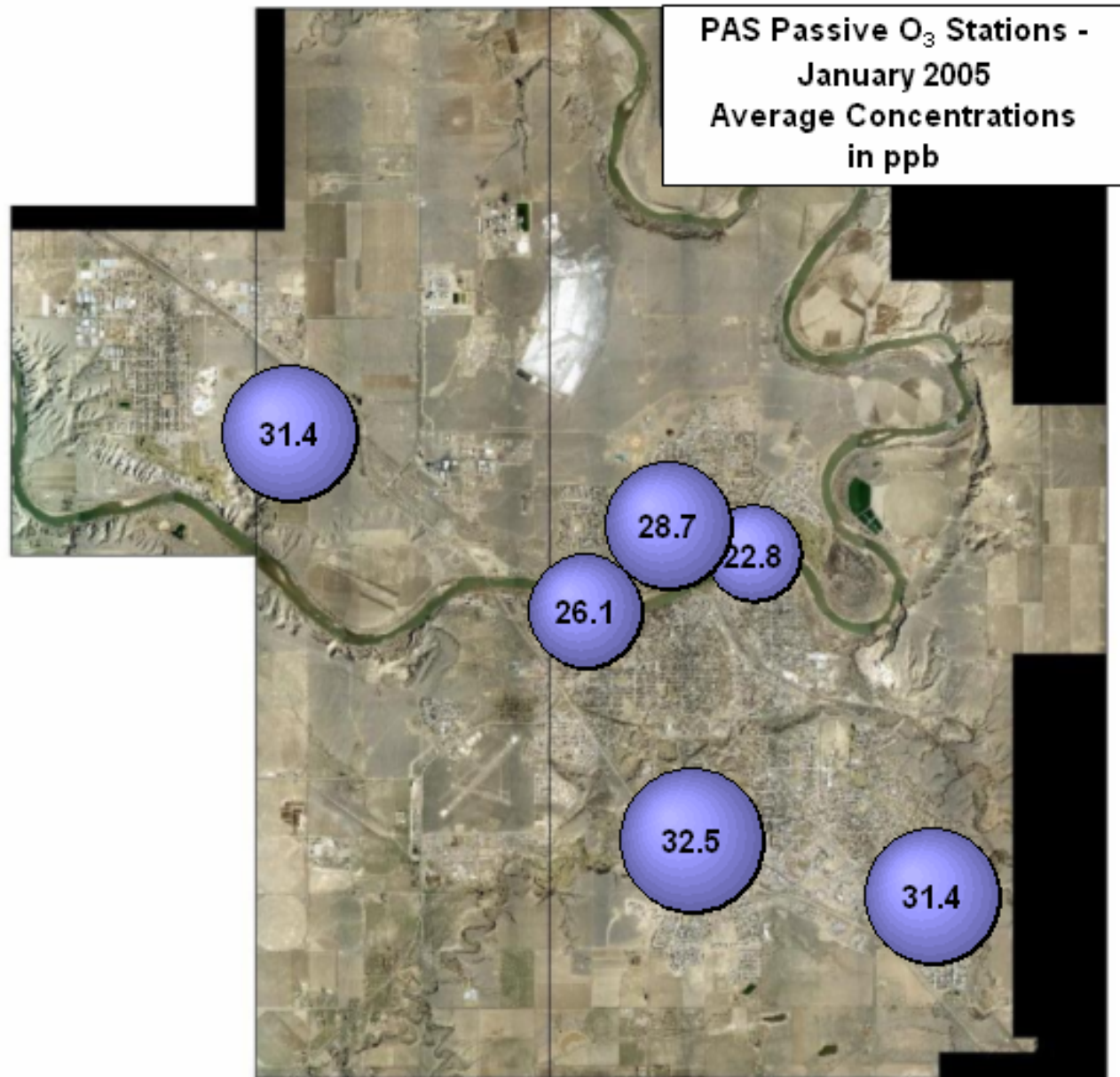
1	Hospital	0.6	26.1	11.3	521648	5542721	698
2	Ball Park	0.7	22.8	12.7	524019	5543686	660
3	Monitoring Station	0.8	28.7	9.6	522812	5544133	714
4	Redcliff	0.8	31.4	7.1	517448	5545608	725
5	Southridge	0.5	32.5	7.8	523172	5539016	721
6	Christian School Park	0.8	31.4	7.1	526577	5538133	709

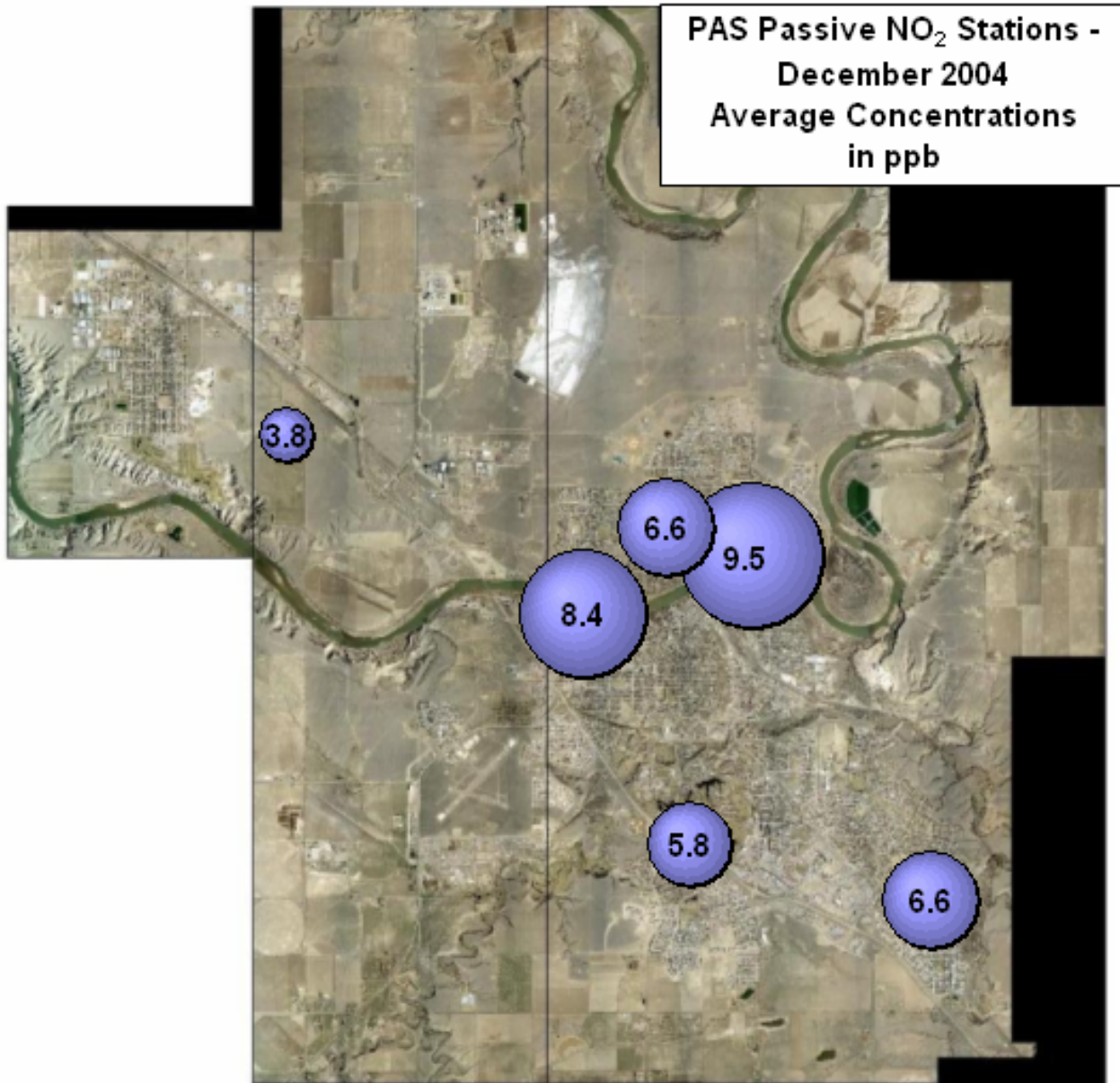
Stats:							
Mean	0.7	28.3	9.7				
Standard Deviation	0.1	4.0	2.3				
Minimum	0.5			5		Southridge	
Maximum	0.8			3		Monitoring Station	
Minimum		22.8		2		Ball Park	
Maximum		32.5		5		Southridge	
Minimum			7.1	4		Redcliff	
Maximum			12.7	2		Ball Park	

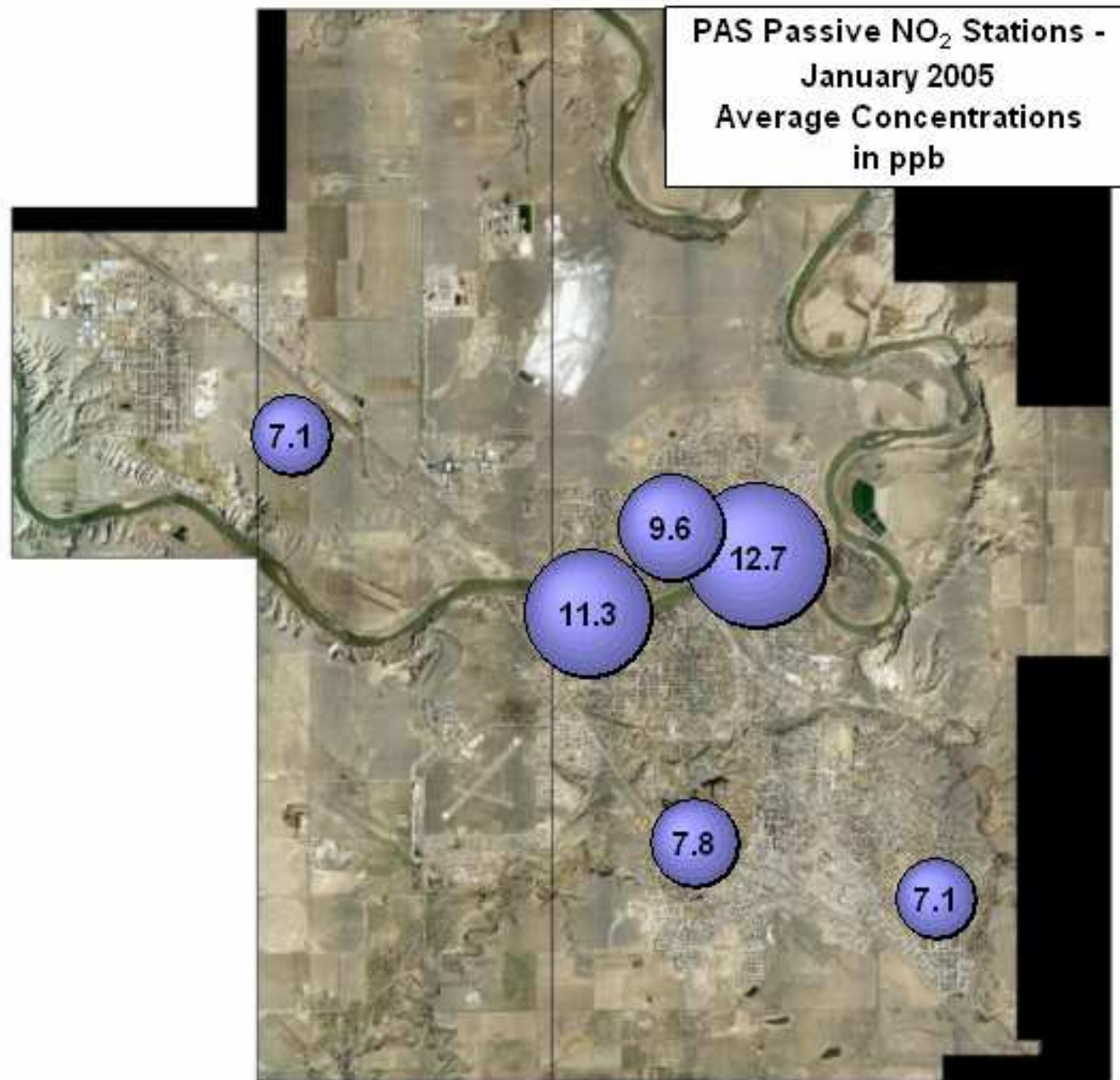
Comparison between Continuous and Passive monitoring (passive #4)

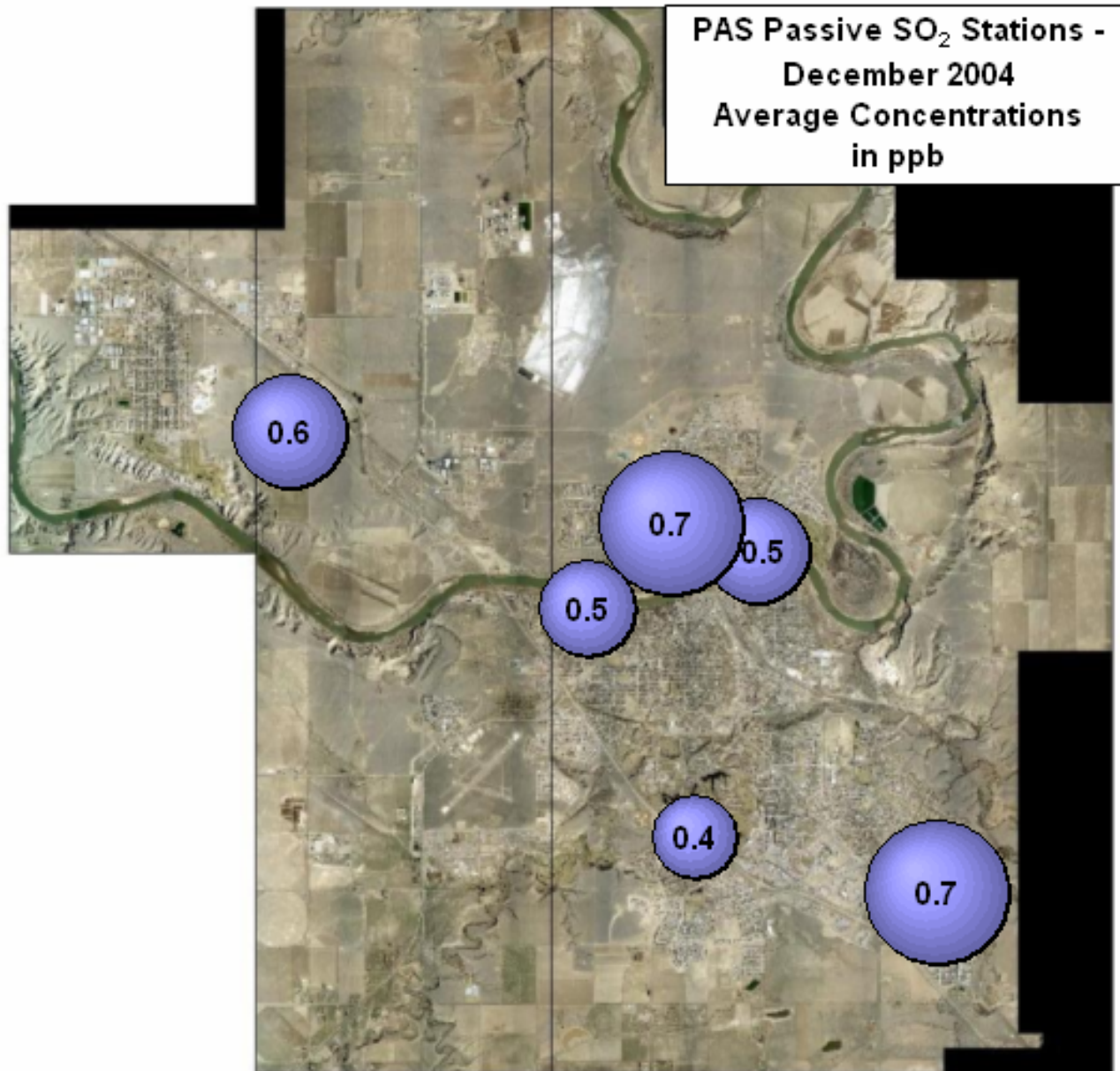
	SO ₂	O ₃	NO ₂
PAS Station	-	18.0	13.6
PAS Passive	0.8	28.7	9.6

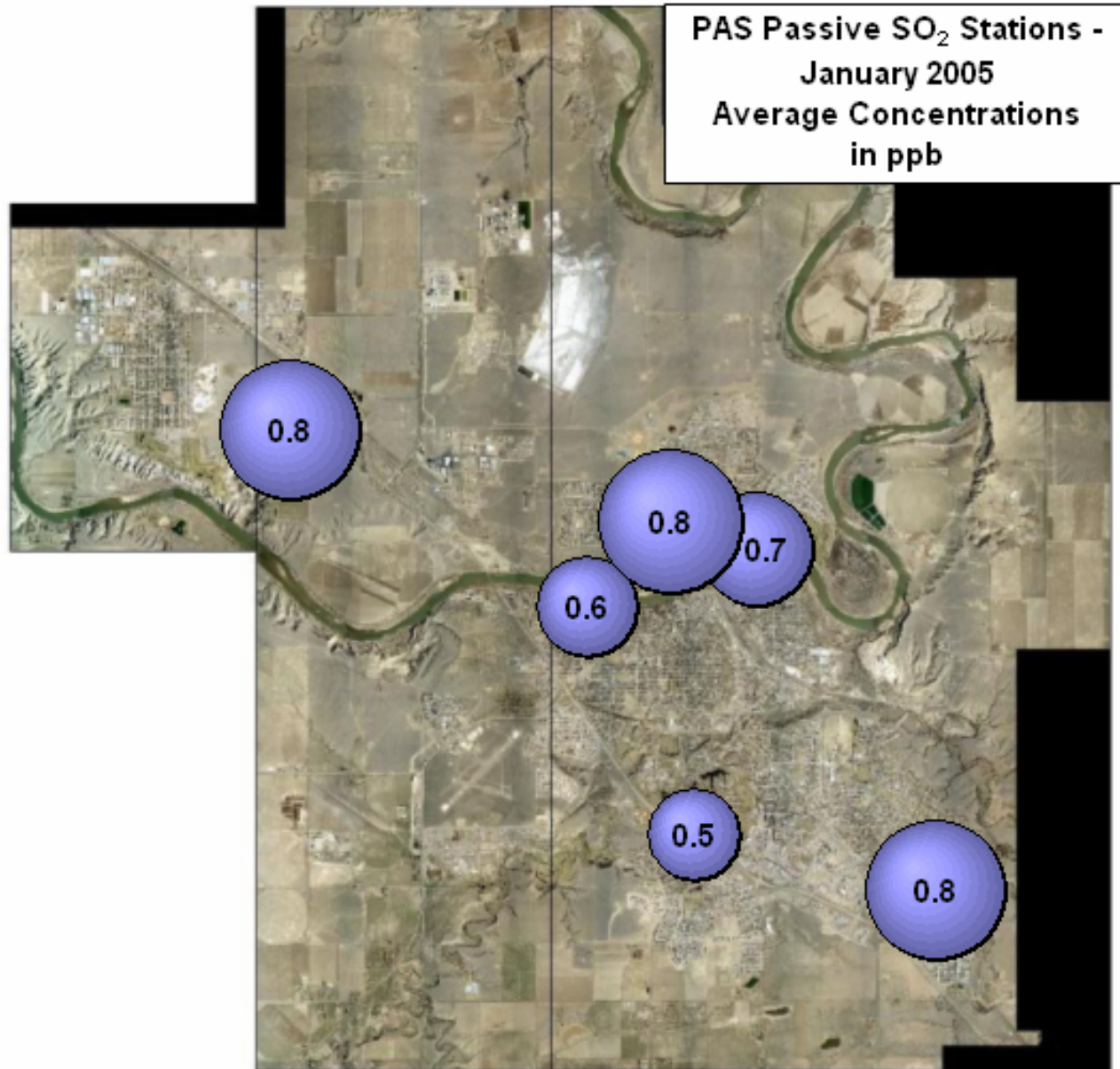












January 2005 - Calibration Reports

PAS - Crescent Heights Station

O₃, NO_x, NO, NO₂, THC, PM_{2.5}

Calibration Report

Parameter 03
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	January 18, 2005	Previous Calibration	December 7, 2004
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:00	End Time (MST)	18:25
Barometric Pressure	0.917 ATM	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentrator	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	NA
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.001757	Calculated slope	0.998950
Calculated intercept	2.775979	Calculated intercept	1.684468
Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	-1.4	ppb	-1.4	ppb
coefficient	1.147		1.147	
Lamp measure	3085	mV	3085	mV
Lamp Reference	3087	mV	3087	mV
Pressure	25.6	inches Hg	25.6	inches Hg
Sample Flow	715	ccm	715	ccm
Lamp temp	52	Deg C	52	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	-1.4	N/A
4995	0.00	289.8	289.0	1.0026
4995	0.00	166.3	163.5	1.0169
4995	0.00	84.4	83.1	1.0152
4995	0.00	0.0	-1.4	0.0000
4995	0.00	289.8	289.0	1.0026
Average Correction Factor				1.0116

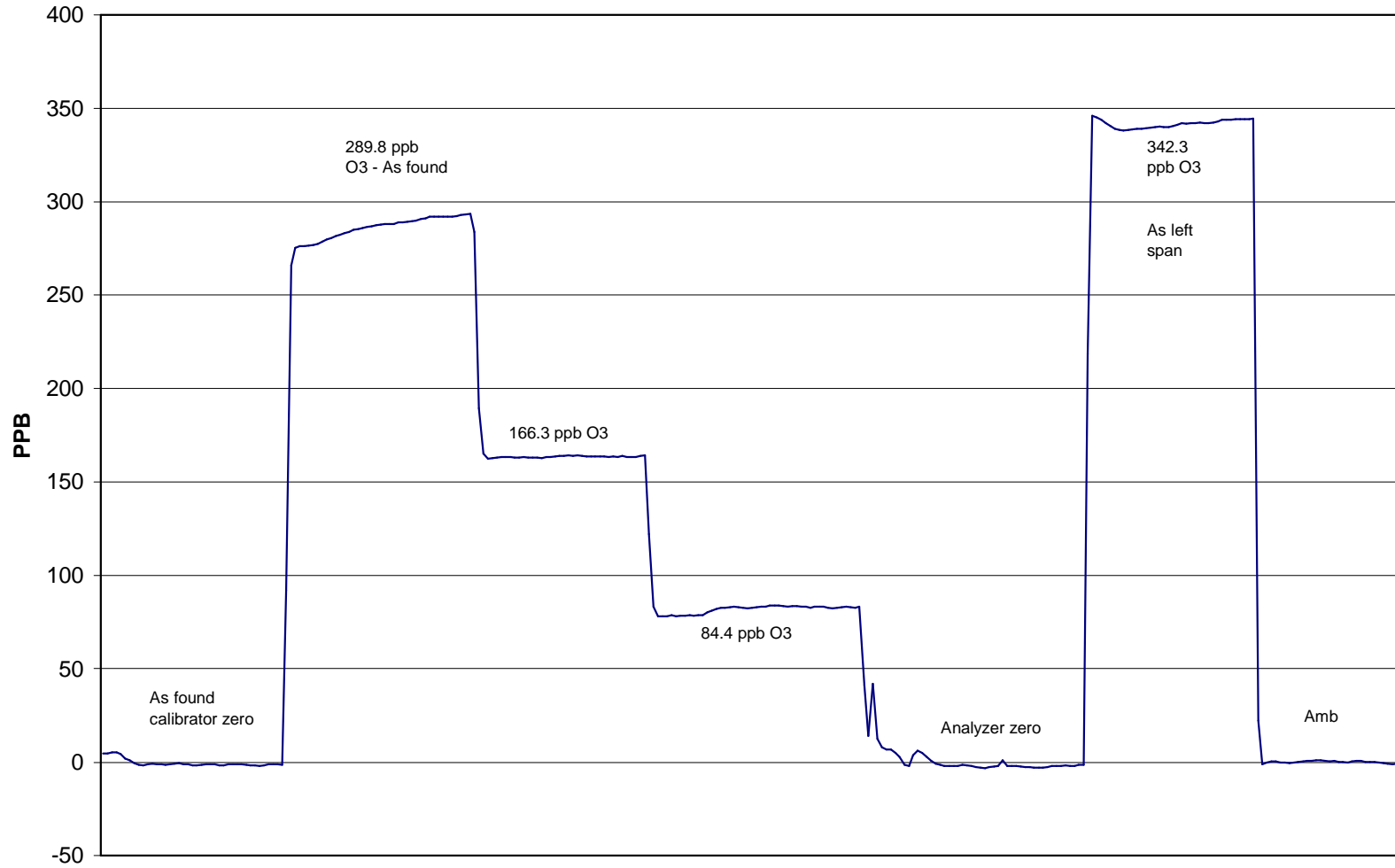
Calculated value of As Found Response: 293.7 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	0.3	ppb	-0.5	ppb
Auto span	344.7	ppb	342.3	ppb

Notes: No adjustments performed. Analyzer operating normally.

Calibration Performed By: Kelly Baragar

O3 Calibration



January 18, 2004

Calibration Report

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



Station Information

Calibration Date January 18, 2005 Previous Calibration December 7, 2004
 Station Number 1 Station Location Crescent Heights

Reason: Routine Installation Removal Other: _____

Start Time (MST) 12:40 End Time (MST) 16:55
 Barometric Pressure 0.917 ATM Station Temperature 20.5 Deg C
 Calibrator Envionics 6100 Serial Number 3016
 NO Cal Gas Conc 49.8 ppm Cal Gas Expiry Date 12-Dec-05
 NOx Cal Gas Conc 49.9 ppm Cal Gas Serial # ALM011558

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO ₂	NO _x	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.009649	1.005522	1.006146
	Data Offset	-1.721916	-0.865434	-0.307147
After	Data Slope	0.998739	1.005356	1.009629
	Data Offset	-0.203274	0.275329	0.247564
Channel #		8	6	7
Voltage Range		0 - 1 VDC	0 - 1 VDC	0 - 1 VDC

Analyzer Information

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

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	0.1	mV	0.1	mV
NO _x background	2.3	mV	2.3	mV
NO coefficient	1.548		1.647	
NO _x coefficient	1.551		1.651	
Chamber Temp	49.9	Deg C	50.0	Deg C
Cooler Temp	7.1	Deg C	7.2	Deg C
Azero	30.5		32.5	
Perm Temp	40.0	Deg C	40.1	Deg C
Pressure	3.5	inches Hg	3.6	inches Hg
Sample Flow	435.0	ccm	450.0	ccm

Notes: Analyzer was span adjusted. All test functions are within normal factory specs.
Replaced Purafil and activated carbon within zero air supply to resolve zero air drift. Calibrator zero now appears stable and accurate.

Calibration Report

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



Station Information

Calibration Date: January 18, 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	0.2	-0.1	0.6	N/A	N/A	
1	4993	39.97	396.3	395.5	0.8	394.2	391.6	3.4	1.0052	1.0099	
2	4993	19.97	198.8	198.4	0.4	197.0	196.1	1.2	1.0090	1.0118	
3	4993	9.97	99.4	99.2	0.2	98.2	97.9	0.4	1.0123	1.0135	
AFZ	4993	0.00	0.0	0.0	0.0	0.2	-0.1	0.6	0.0000	0.0000	
AFS	4993	39.97	396.3	395.5	0.8	374.6	374.1	1.2	1.0579	1.0572	
									Average Correction Factor	1.0088	1.0117

As Found Concentrations NO_x= 373.5 NO= 373.9 As Found Percent Change NO_x= -5.8% NO= -5.5%

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	398.2	400.3	-2.2	398.6	396.3	0.6	N/A	N/A	N/A	N/A	
350	398.2	108.3	289.8	397.5	107.0	290.6	1.0017	1.0119	0.9974	100.3%	
200	398.2	231.9	166.3	395.5	229.4	166.6	1.0067	1.0107	0.9982	100.2%	
100	398.2	313.7	84.4	394.3	310.5	84.3	1.0099	1.0104	1.0019	99.8%	
							Average Correction Factor	1.0061	1.0110	0.9992	100.1%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	2.8	0.3	1.5	ppb	0.4	0.0	0.0	ppb
Auto span	453.0	444.4	9.5	ppb	474.5	463.0	8.3	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter NO₂
 Air Monitoring Network Palliser Airshed

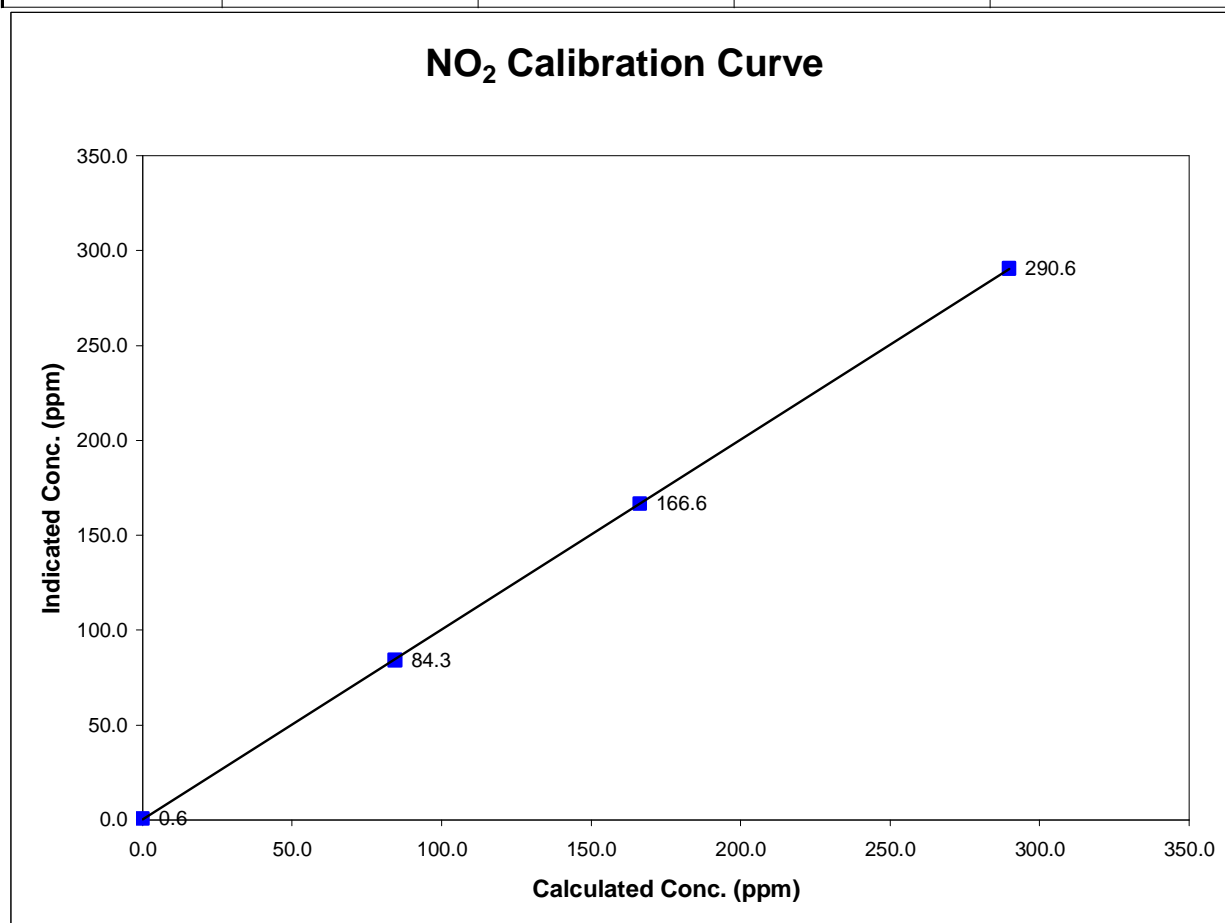


Station Information

Calibration Date	January 18, 2005	Previous Calibration	December 7, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	12:40	End Time (MST)	16:55
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	0.0000		
84.4	84.3	1.0019	Correlation Coefficient	0.999991
166.3	166.6	0.9982		
289.8	290.6	0.9974	Slope	0.998739
			Intercept	-0.203274



Calibration Summary

Parameter NO_x
 Air Monitoring Network Palliser Airshed



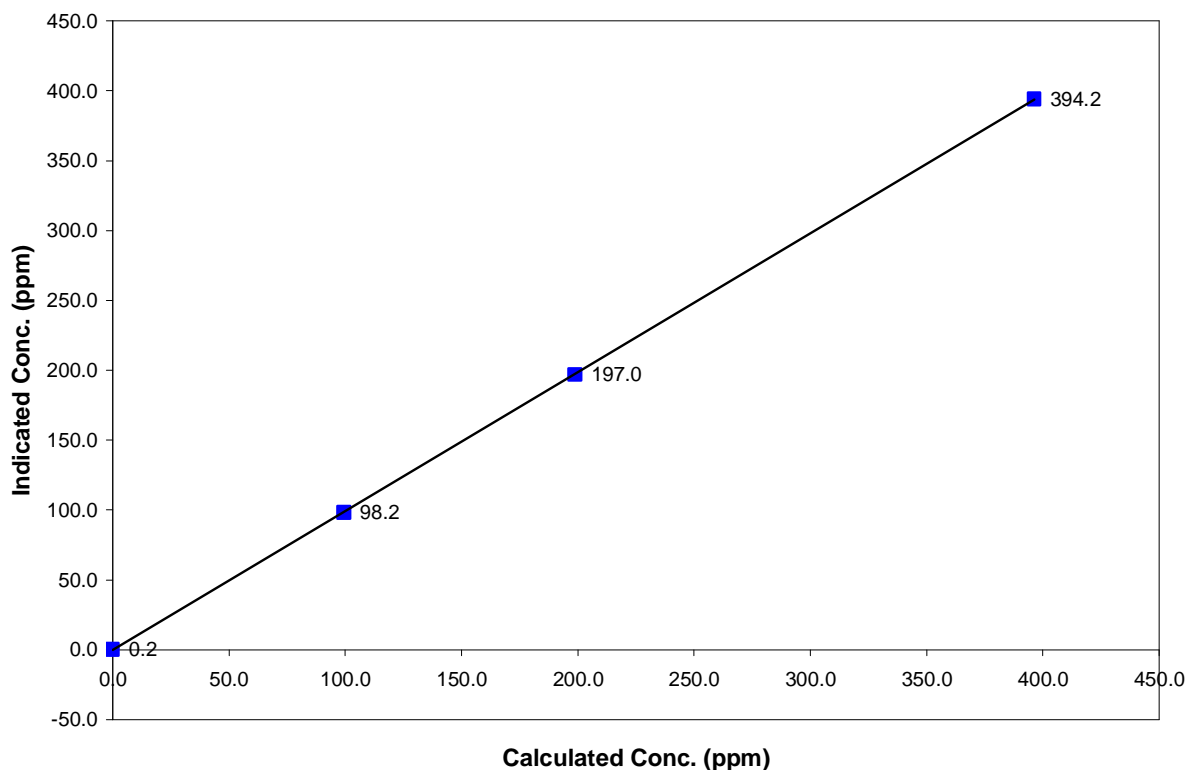
Station Information

Calibration Date	January 18, 2005	Previous Calibration	December 7, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	12:40	End Time (MST)	16:55
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	0.0000	Correlation Coefficient	0.999991
396.3	394.2	1.0052		
198.8	197.0	1.0090		
99.4	98.2	1.0123		
			Slope	1.005356
			Intercept	0.275329

NO_x Calibration Curve



Calibration Summary

Parameter NO
 Air Monitoring Network Palliser Airshed

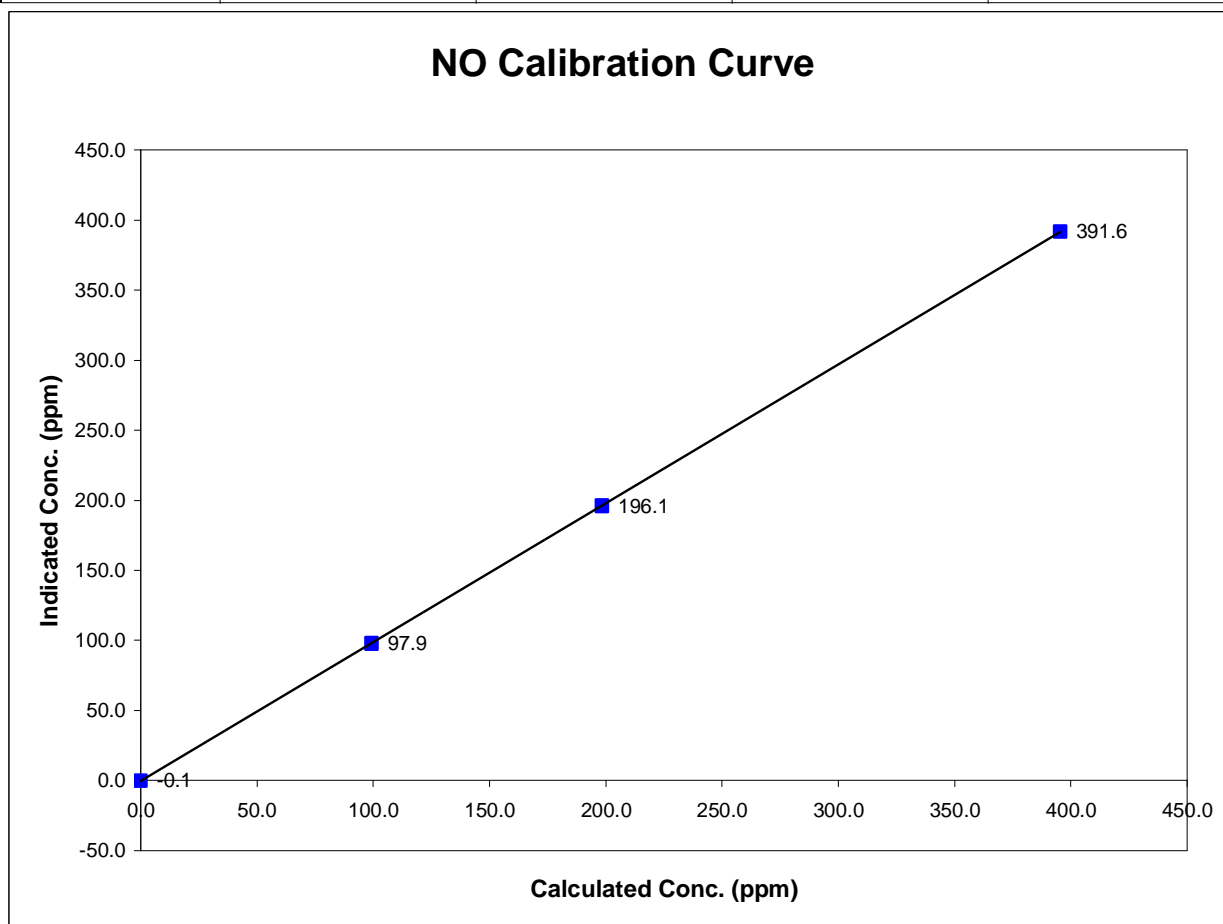


Station Information

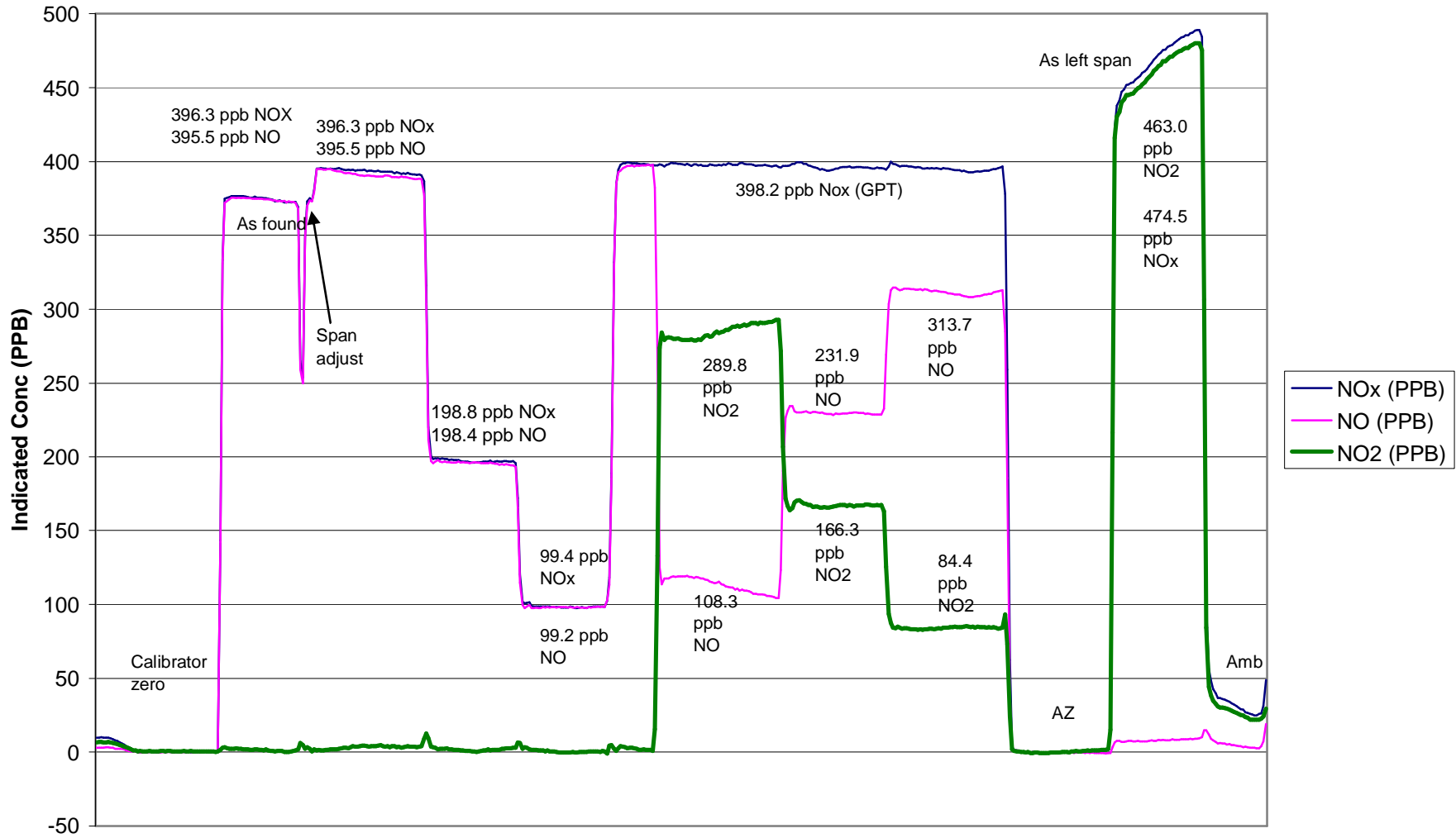
Calibration Date	January 18, 2005	Previous Calibration	December 7, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	12:40	End Time (MST)	16:55
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
395.5	391.6	1.0099	Correlation Coefficient	0.999999
198.4	196.1	1.0118		
99.2	97.9	1.0135	Slope	1.009629
			Intercept	0.247564



NOx Calibration



January 18, 2004

Calibration Report

Parameter THC
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	January 18, 2005	Previous Calibration	December 7, 2004
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:50	End Time (MST)	13:50
Barometric Pressure	0.917 ATM	Station Temperature	20.5 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH ₄ / 301 ppm C ₃ H ₈	Cal Gas Expiry Date	8/28/2005
Cal Gas CH ₄ equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS slope	0.005000	DACS slope	0.005000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.016260	Calculated slope	1.005134
Calculated intercept	0.143493	Calculated intercept	-0.059267
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	10818	raw	10818	raw
THC zero counts	1711	raw	1711	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	0.10	N/A
2994	39.98	20.13	20.14	0.9997
2994	19.98	10.13	10.03	1.0096
2994	9.97	5.07	5.11	0.9918
zero	0.00	0.00	0.03	As Found Zero
2994	39.98	20.13	20.26	As Found Span
Average Correction Factor				1.0004

Calculated value of As Found Response: 20.706 ppm Percent Change of As Found: -2.9%

	before calibration		after calibration	
Auto zero	0.06	ppm	-0.07	ppm
Auto span	22.78	ppm	22.82	ppm

Notes: Maintenance performed on external zero air supply system post as found capture.
No adjustments required; all analyzer test functions normal.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter THC
 Air Monitoring Network Palliser Airshed

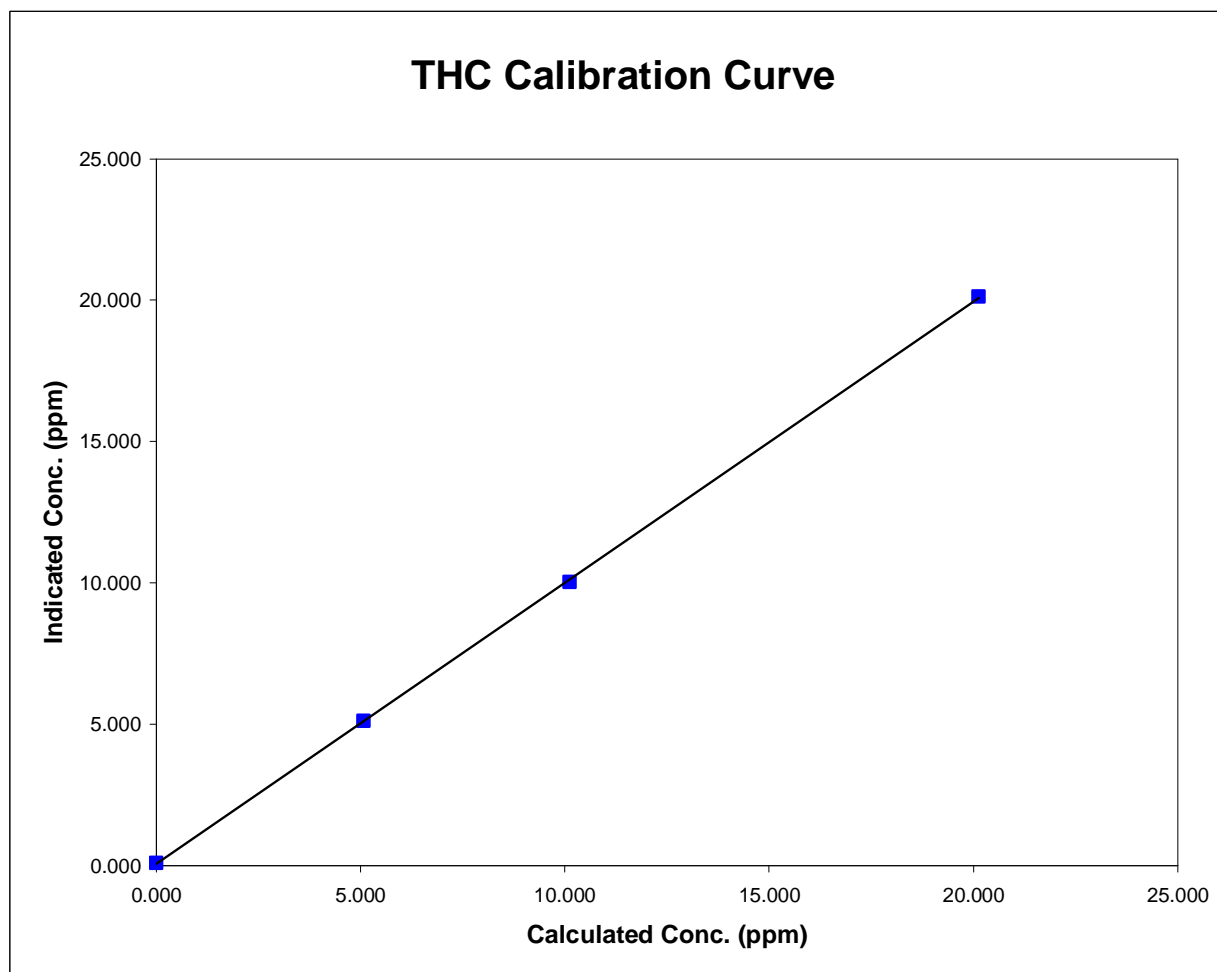


Station Information

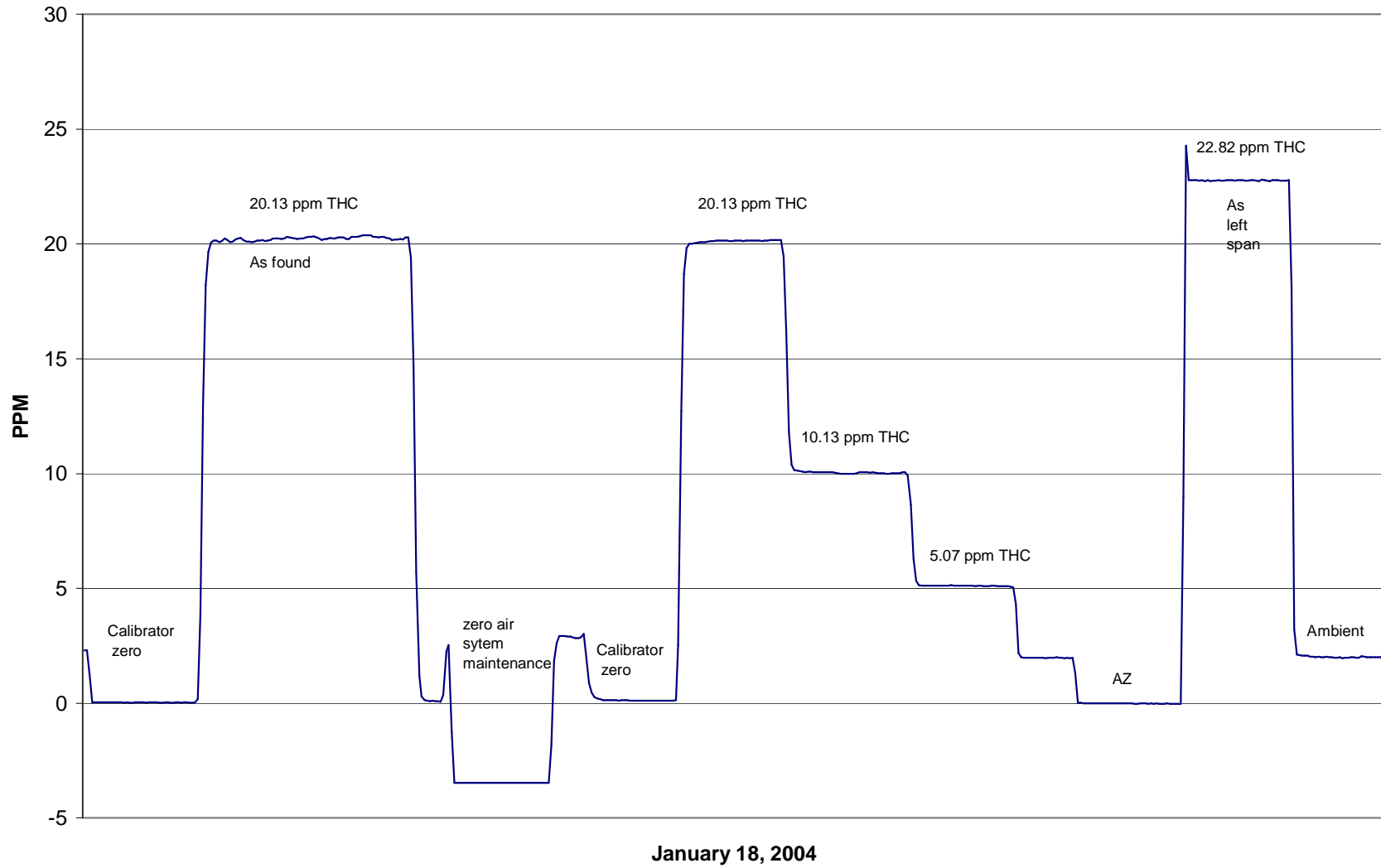
Calibration Date	January 18, 2005	Previous Calibration	December 7, 2004
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	9:50	End Time (MST)	13:50
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.105	N/A		
20.132	20.137	0.9997	Correlation Coefficient	0.999930
10.128	10.031	1.0096		
5.071	5.113	0.9918	Slope	1.005134
			Intercept	-0.059267



THC Calibration



Calibration Report



Parameter PM2.5
 Air Monitoring Network Palliser Airshed

Station Information

Calibration Date	January 18, 2004	Previous Calibration	December 7, 2004
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>
Start Time (MST)	13:45	End Time (MST)	14:15
Barometric Pressure	0.917 ATM	Station Temperature	20.5 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	Before		After
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	44	%	42	%
Ko Factor	12758		12758	
Temperature	4.1	Deg C	4.1	Deg C
Pressure	0.923	ATM	0.923	ATM

Calibration Data

Parameter	Set Point	Indicated Reading (measured externally)	Tolerance	TEOM Reading
zero flow - main	0.0	0.00		0.07
zero flow - auxillary	0.0	0.00		0.08
flow recovery - main	45 - 60 Seconds	NA	45 - 60 Seconds	NA
flow recovery - aux	46 - 60 Seconds	NA	46 - 60 Seconds	NA
Temperature	measured	5.0	+/- 1.0 Deg C	4.1
Pressure	measured	0.917	+/- 1.5% ΔATM	0.923
Total Flow	16.67 SLPM	NA		NA
Main Flow	13.67 SLPM	14.45	+/- 1.0 SLPM	13.95
Auxillary Flow	3.0 SLPM	3.180	+/- 0.2 SLPM	3.060
Leak Check - main	0.0	0.00	<0.15 SLPM	0.05
Leak Check - aux	0.0	0.00	<0.15 SLPM	0.11
Ko Factor (w/o filter)	measured	NA	filter weight (g)	NA
Ko Factor (w/ filter)	measured	NA	% Ko difference	N/A

Notes: Performed leak test and flow audit. Unable to determine total flow as main connector unavailable.
Measured flows at main unit. Flows slightly high; performed software cal to bring flows down slightly.
All other aspects of analyzer appear normal.

Calibration Performed By: Kelly Baragar