



Palliser Airshed Society

Ambient Air Monitoring Network Summary

December 2005

Prepared By:



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January 19, 2006

Environmental Service Response Centre
Alberta Environment
#111 Twin Atria Building
4999-98 Ave
Edmonton Alberta T6B 2X3

Attention: Director of Monitoring and Evaluation

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

Enclosed is the PAS Ambient Monitoring Report for the month of **December 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 greater than 90% uptime for the month of December. There were no significant events leading to emergency response for the month of December.

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

- Monthly average concentrations of NO₂ was 10.3 ppb
- Monthly average concentrations for O₃ was 17.1 ppb
- Monthly average concentrations for CO was 0.22 ppm
- Monthly average concentrations for PM_{2.5} was 2.3 µg/m³

Passive Monitoring – Six Stations throughout the PAS zone:

The following are the ranges for December 2005 recorded by the six passive stations located throughout the PAS zone.

- Monthly average concentrations for SO₂ passives ranged from 0.3 ppb to 0.5 ppb
- Monthly average concentrations for NO₂ passives ranged from 3.2 ppb to 10.8 ppb
- Monthly average concentrations for O₃ passives ranged from 19.7 ppb to 28.8 ppb

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

Kelly Baragar, C.T.
AQM Technical Supervisor

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AQM Environmental Specialist



Continuous Monitoring

Ambient Air Monitoring Network

Crescent Heights Station

General Station Issues

There were no general station issues for the month of December

Parameter	Make	Model	Units	Notes
Ozone	Teledyne - API	400E	ppb	No operational issues observed.
Nitrogen Dioxide	Teledyne - API	200E	ppb	No operational issues observed.
Total Hydrocarbons	Bendix	400A	ppm	No operational issues observed.
Carbon Monoxide	TEI	49C	ppm	No operational issues observed.
PM 2.5	R&P TEOM	1400ab	g/m ³	No operational issues observed.
Wind Speed	Met One	010C	kph	No operational issues observed.
Wind Direction	Met One	020C	Deg	No operational issues observed.
Ambient Temperature	Met One	083D	DegC	No operational issues observed.
Relative Humidity	Met One	083D	%	No operational issues observed.
Solar Radiation	Met One	096-1	W/m ²	No operational issues observed.
Data Acquisition System	Titan Logix	AP1000		No operational issues observed.



December 2005 Monthly Overall Summary Report

Ambient Air Quality Data

Dec-2005 Palliser Airshed Society						Maximum Recorded Values						Operational Time (%)	
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr			24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc		Day
NO (ppb)			Crescent Heights	6.6	-	-	107.0	Dec-19 23:00	3.0	S	24.9	Dec-07	100.0%
NO ₂ (ppb)	212	106	Crescent Heights	10.3	0	0	39.6	Dec-19 23:00	3.0	S	19.8	Dec-07	100.0%
NO _x (ppb)			Crescent Heights	16.8	-	-	146.6	Dec-19 23:00	3.0	S	44.5	Dec-07	100.0%
O ₃ (ppb)	82		Crescent Heights	17.1	0	-	35.5	Dec-25 19:00	24.0	WSW	28.6	Dec-09	100.0%
O ₃ (ppb) - 8-hr	65		Crescent Heights		0						31.9	Dec-09	
CO (ppm)	13		Crescent Heights	0.22	0	-	1.1	Dec-20 10:00	2.2	SE	0.4	Dec-20	100.0%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.7	Dec-20	
THC (ppm)			Crescent Heights	2.12	-	-	3.1	Dec-20 04:00	3.4	NW	2.4	Dec-06	100.0%
PM _{2.5} (µg/m ³)		30 ^a	Crescent Heights	2.3		0	19.2	Dec-06 00:00	1.9	SSE	7.5	Dec-04	100.0%
RH (%)			Crescent Heights	67.5	-	-	-	-	-	-	-	-	100.0%
SR (W/m ²)			Crescent Heights	38.4	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	-4.5	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	9.7	-	-	-	Dec-25 16:00	35.2	SW	20.9	25-Dec	100.0%
WSPD s (km/hr)			Crescent Heights	9.9	-	-	-	Dec-25 16:00	35.4	SW	21.2	25-Dec	100.0%
WDIR (Deg)			Crescent Heights	N	-	-	-	-	-	-	-	-	100.0%

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



PAS - Crescent Heights

Monthly Summary Tables, Graphs, and Roses



PAS - Cresent Heights AQI Monthly Summary

Station: Cresent Heights
Station Owner: PAS

Air Quality Index (AQI)

Monitoring Dates: December 1, 2005 to January 1, 2006

Alberta's Air Quality Index

Good	1 to 25
Fair	26 to 50
Poor	51 to 100
Very Poor	> 100

Summary

Number of 1-hr Good Readings:	700
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	23:00
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	0:00
1-Dec-05	4	5	7	9	7	5	5	4	6	6	N	6	7	8	9	10	10	7	5	5	8	10	11	11	11
2-Dec-05	11	11	11	12	12	12	12	11	11	N	10	9	10	11	11	11	9	8	6	7	7	8	7	8	8
3-Dec-05	8	7	7	4	4	5	5	5	N	6	5	6	7	7	7	4	4	6	7	8	8	9	9	7	7
4-Dec-05	7	7	6	8	8	7	6	N	7	7	6	6	7	7	7	6	5	7	8	6	6	6	7	9	9
5-Dec-05	8	8	10	8	10	7	N	9	7	8	9	8	10	9	8	9	9	9	5	7	6	6	7	7	7
6-Dec-05	4	4	3	4	4	N	8	8	12	10	6	6	7	7	7	6	8	8	7	8	10	8	6	5	5
7-Dec-05	16	9	6	6	N	11	8	10	9	11	9	6	6	14	14	13	11	11	9	11	9	12	13	14	14
8-Dec-05	15	15	14	N	14	14	13	11	10	10	11	11	12	12	10	8	9	9	10	12	13	14	15	16	16
9-Dec-05	16	16	N	17	16	15	14	14	15	15	15	16	16	15	15	14	11	11	14	14	9	12	14	13	13
10-Dec-05	15	N	15	14	13	13	12	11	12	13	12	14	15	15	14	13	13	15	12	12	16	16	17	15	15
11-Dec-05	N	13	12	13	11	10	9	4	6	8	11	14	13	13	12	10	8	6	5	5	7	4	4	N	N
12-Dec-05	6	6	4	5	7	7	6	6	5	7	10	11	12	12	13	12	11	8	10	6	5	4	N	9	9
13-Dec-05	6	7	13	15	13	12	10	11	10	11	13	13	14	14	14	14	N	N	N	N	N	N	14	14	14
14-Dec-05	14	13	N	13	13	12	12	9	N	N	N	16	N	N	N	8	6	9	6	7	7	8	6	6	6
15-Dec-05	6	7	N	4	6	7	6	7	6	7	14	14	15	15	15	15	15	12	8	5	7	7	6	6	6
16-Dec-05	6	N	5	6	7	9	5	5	5	6	6	7	10	10	10	9	11	12	13	12	11	11	11	10	10
17-Dec-05	N	9	9	9	4	4	7	8	8	9	8	9	10	9	9	8	4	4	4	6	7	7	7	N	N
18-Dec-05	6	6	6	6	6	7	7	5	6	7	10	15	15	16	15	13	10	6	6	9	12	15	N	15	15
19-Dec-05	14	12	12	14	14	12	12	11	9	11	12	13	13	12	13	11	7	8	6	7	8	N	8	11	11
20-Dec-05	8	7	6	7	8	6	6	6	5	6	8	6	7	11	10	7	6	6	9	10	N	9	10	10	10
21-Dec-05	10	10	11	10	13	11	10	11	11	10	11	12	12	12	10	8	6	8	8	N	8	8	8	10	10
22-Dec-05	9	10	10	11	11	11	10	9	9	10	9	10	13	13	14	12	11	12	13	12	12	12	12	11	11
23-Dec-05	10	11	N	12	13	13	8	10	10	10	10	11	11	12	8	10	11	9	15	13	10	10	12	12	12
24-Dec-05	12	N	12	13	13	12	14	13	11	11	12	12	11	12	12	11	10	10	10	10	11	12	12	12	12
25-Dec-05	N	12	12	12	12	13	13	13	12	13	14	14	13	13	15	15	14	14	15	18	15	13	13	N	N
26-Dec-05	14	13	13	12	13	12	13	12	12	11	11	11	12	13	12	10	7	7	4	4	6	6	N	5	5
27-Dec-05	9	10	9	8	8	8	9	8	8	9	10	12	16	15	13	13	13	12	13	13	12	N	11	13	13
28-Dec-05	14	9	11	13	9	8	10	5	5	8	8	10	11	11	9	6	5	6	7	4	N	6	5	5	5
29-Dec-05	5	8	5	6	5	5	4	4	5	8	10	7	8	8	11	6	9	7	5	N	4	3	3	3	3
30-Dec-05	5	6	7	7	7	7	4	5	5	5	5	5	5	9	12	11	11	11	N	11	13	11	10	8	8
31-Dec-05	8	6	9	11	6	9	8	4	3	4	4	5	7	7	4	6	4	N	6	6	3	4	3	4	4



PAS - Cresent Heights Nitrogen Dioxide Monthly Summary

Station: Cresent Heights
Station Owner: PAS

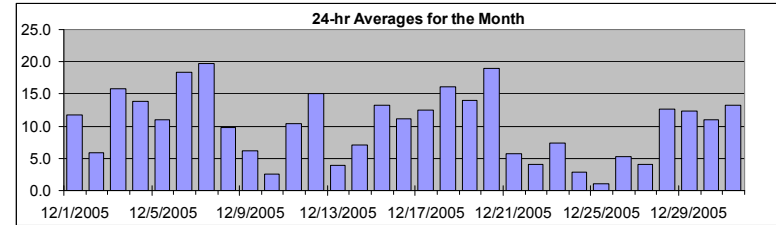
HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2005 to January 1, 2006

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

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	39.6 ppb 19-Dec 23:00 0:00
Maximum 24-hr Average:	19.8 ppb 7-Dec



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	31.2	25.6	15.1	7.9	4.1	1.0	0.3	10.3 ppb	7.9 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-05	14	13	12	9	12	14	15	19	23	22	A	12	10	10	8	6	6	14	20	15	8	5	3	2	11.8	23.4	
2-Dec-05	2	2	2	1	1	1	1	2	3	A	6	9	7	3	6	5	8	10	15	11	11	9	10	9	5.8	15.4	
3-Dec-05	8	10	8	17	16	19	23	22	A	17	11	9	8	8	9	13	19	21	23	21	21	20	20	19	15.8	23.1	
4-Dec-05	19	17	18	18	16	14	13	A	13	8	7	6	6	5	6	8	15	16	22	20	16	17	19	17	13.8	22.1	
5-Dec-05	18	19	20	18	16	11	A	6	7	6	5	7	6	7	8	7	8	9	16	28	11	7	5	7	10.9	27.9	
6-Dec-05	14	15	14	15	16	A	26	26	27	17	10	8	7	8	8	13	21	25	21	25	30	29	25	22	18.3	30.3	
7-Dec-05	32	28	25	27	A	35	29	30	28	23	23	25	23	6	6	9	14	14	21	13	18	12	8	6	19.8	35.0	
8-Dec-05	4	3	3	A	7	5	7	12	12	13	10	10	9	9	15	20	19	18	14	10	10	7	5	4	9.8	20.4	
9-Dec-05	3	3	A	3	2	4	6	7	5	5	6	5	7	8	7	7	15	15	6	5	12	6	2	2	6.2	15.3	
10-Dec-05	0	A	4	4	3	3	3	5	5	3	4	1	1	1	3	4	4	0	5	6	0	0	0	1	2.5	5.7	
11-Dec-05	A	9	7	3	5	6	6	18	11	8	7	5	9	8	8	12	18	20	16	14	8	15	18	A	10.5	19.9	
12-Dec-05	25	24	18	21	12	28	26	15	19	13	8	5	5	7	8	9	10	14	8	16	22	15	A	18	15.0	27.7	
13-Dec-05	12	10	3	1	5	5	8	6	8	6	3	1	0	0	1	1	C	C	C	C	C	A	2	1	3.9	11.8	
14-Dec-05	0	0	A	3	2	4	3	4	4	3	3	3	3	3	6	9	13	9	16	15	15	13	14	14	7.0	16.1	
15-Dec-05	13	12	A	18	12	10	14	13	15	13	5	6	4	4	5	4	6	8	14	21	30	27	25	25	13.3	29.8	
16-Dec-05	26	A	23	13	10	9	15	19	20	20	17	15	7	8	8	7	6	5	4	4	5	5	5	5	11.2	25.6	
17-Dec-05	A	8	6	5	16	19	9	8	8	6	5	3	2	4	7	8	17	16	17	25	27	28	30	A	12.5	29.8	
18-Dec-05	25	25	24	26	23	30	29	22	16	16	14	4	3	3	3	7	14	26	27	15	10	5	A	5	16.1	30.1	
19-Dec-05	6	9	9	6	5	9	8	8	14	11	9	5	4	6	6	10	20	20	24	31	34	A	33	40	14.1	39.6	
20-Dec-05	32	29	26	31	32	25	26	24	22	24	31	24	25	6	6	13	16	15	8	6	A	7	4	3	19.0	32.5	
21-Dec-05	3	2	3	8	1	3	5	6	4	4	6	4	4	5	9	11	15	10	7	A	9	7	6	4	5.8	14.6	
22-Dec-05	4	3	3	2	3	4	4	5	5	5	4	5	5	3	3	8	10	9	4	3	2	2	1	2	4.0	10.1	
23-Dec-05	4	3	A	5	5	3	11	4	6	7	12	11	9	6	13	11	8	13	2	5	12	11	5	2	7.3	13.2	
24-Dec-05	4	A	4	3	2	3	1	3	6	5	4	3	4	4	4	4	3	2	3	2	1	1	1	0	2.9	5.8	
25-Dec-05	A	3	2	1	2	1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	2	2	1	A	1.1	3.1	
26-Dec-05	3	2	1	2	1	2	1	2	2	2	2	3	3	3	4	8	11	10	14	13	8	8	A	17	5.3	17.0	
27-Dec-05	7	3	3	5	2	4	2	5	4	3	4	5	2	4	6	6	4	5	4	3	3	A	6	3	4.1	7.0	
28-Dec-05	2	11	7	4	11	8	6	20	15	6	6	5	4	5	9	16	23	27	25	17	A	25	20	20	12.7	27.1	
29-Dec-05	21	9	15	11	11	20	14	17	13	6	5	13	12	9	5	11	9	11	15	A	16	13	15	14	12.3	20.9	
30-Dec-05	6	4	4	5	4	6	13	12	20	20	21	22	23	13	9	10	11	10	A	9	3	6	7	14	11.0	22.9	
31-Dec-05	14	16	8	4	15	6	6	17	13	16	14	11	6	7	15	11	19	A	25	23	14	15	14	14	13.2	24.5	
Hourly Avg	11.5	10.5	10.1	9.6	9.1	10.3	10.9	11.9	11.6	10.2	8.7	8.0	7.1	5.6	6.8	8.7	12.0	12.8	13.7	13.5	12.8	11.3	10.8	10.4			
Hourly Max	32.5	29.4	26.3	31.2	31.8	35.0	29.0	29.5	28.2	23.5	30.6	25.4	24.7	13.1	15.2	20.4	22.8	27.1	26.6	30.7	33.6	28.9	32.9	39.6			

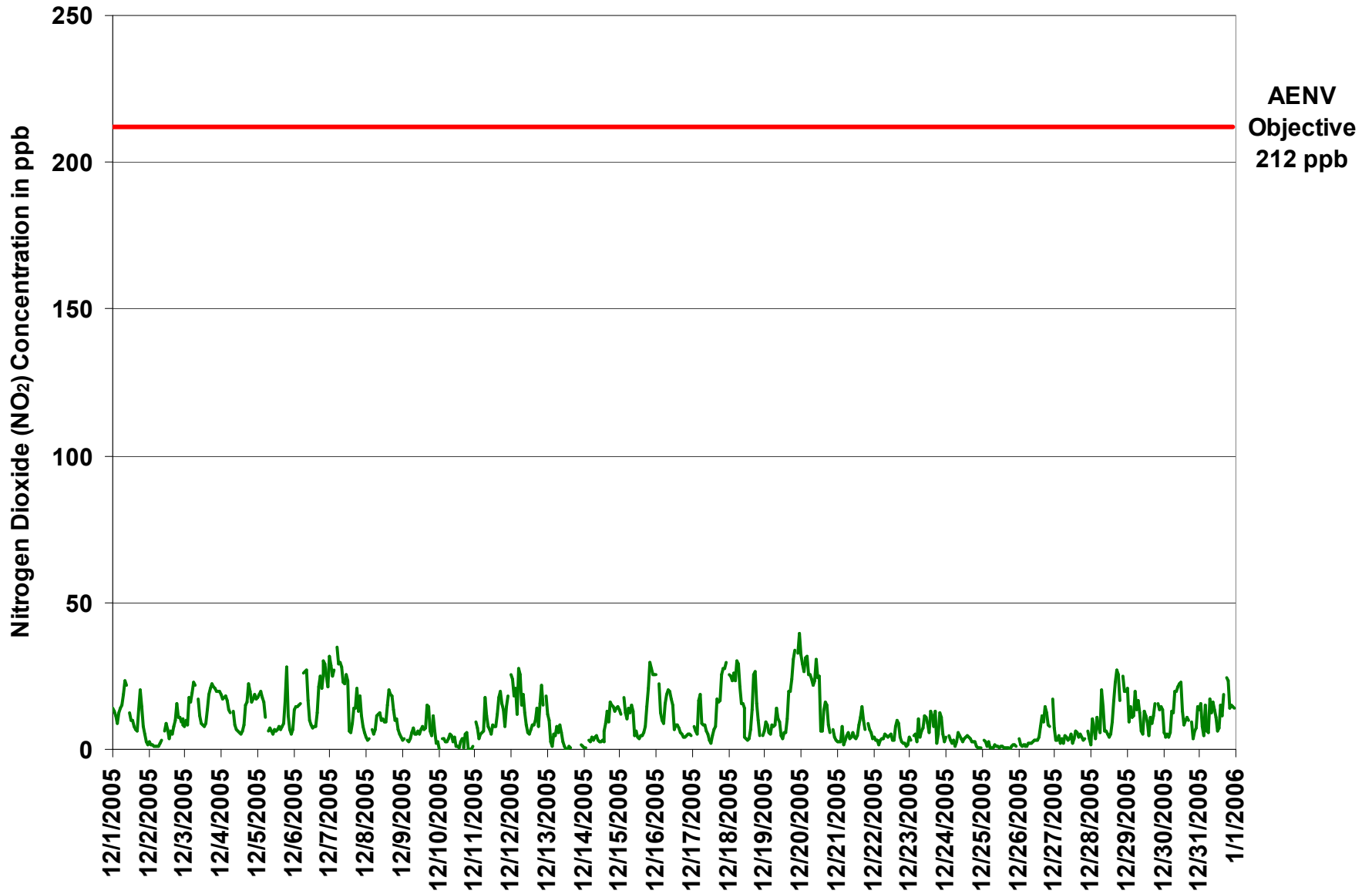


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

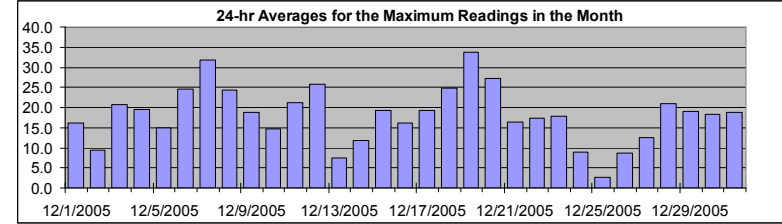
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Value:	84.1	ppb	19-Dec	23:00 0:00
Maximum 24-hr Value:	33.6	ppb	19-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	50.2	39.9	25.3	17.1	8.7	2.4	1.2	18.3 ppb	17.1 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-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-Dec-05	16	17	17	11	16	17	19	26	26	28	A	A	30	11	11	11	9	15	17	26	22	11	10	5	2	16.1	29.9	
2-Dec-05	4	2	3	2	1	1	2	3	5	A	A	9	17	11	8	17	14	10	13	22	18	14	13	15	12	9.4	21.9	
3-Dec-05	11	12	12	21	21	23	25	24	A	38	23	11	13	10	10	26	31	23	28	29	22	21	21	20		20.6	37.8	
4-Dec-05	23	18	19	19	18	21	14	A	22	23	8	13	29	6	33	12	24	21	24	23	20	20	20	19		19.5	32.6	
5-Dec-05	19	20	20	19	18	15	A	8	9	8	6	17	8	12	18	9	11	14	25	35	25	8	8	11		14.9	34.5	
6-Dec-05	18	20	17	17	17	A	45	27	30	29	16	14	18	20	9	20	26	27	33	32	45	34	27	23		24.5	45.2	
7-Dec-05	47	47	27	28	A	53	34	48	39	35	30	30	31	43	12	30	18	24	33	17	26	27	22	31		31.8	52.7	
8-Dec-05	6	6	11	A	21	9	29	36	34	40	18	31	20	15	30	22	24	27	46	25	25	22	24	38		24.4	45.6	
9-Dec-05	18	43	A	5	22	8	15	22	9	16	19	15	21	24	14	20	26	24	7	12	22	30	11	30		18.9	42.7	
10-Dec-05	10	A	9	24	24	24	24	34	7	24	6	2	9	11	21	23	7	2	25	25	2	0	0	27		14.8	33.6	
11-Dec-05	A	16	18	10	17	10	23	23	37	17	38	11	12	13	12	16	35	36	23	37	12	29	23	A		21.3	38.1	
12-Dec-05	32	29	30	24	17	33	52	29	25	21	42	26	9	28	11	22	28	26	12	21	33	19	A	24		25.7	52.4	
13-Dec-05	16	15	5	3	11	7	10	10	11	20	5	2	2	2	8	4	C	C	C	C	C	C	A	4	2		7.6	19.7
14-Dec-05	1	1	A	7	7	10	7	9	9	25	4	4	10	5	18	13	17	13	26	20	18	16	16	17		11.8	26.2	
15-Dec-05	16	14	A	23	14	13	16	15	21	15	11	17	15	6	22	6	7	12	26	33	44	36	31	31		19.2	43.5	
16-Dec-05	29	A	34	25	24	12	22	27	26	23	21	18	9	14	19	10	7	7	6	7	7	6	7	7		16.1	34.0	
17-Dec-05	A	11	10	7	30	32	13	11	12	9	8	5	3	10	46	17	26	19	22	30	35	33	37	A		19.3	45.8	
18-Dec-05	37	36	34	51	31	38	41	25	22	21	20	6	21	4	5	11	21	41	38	34	17	10	A	7		24.8	50.9	
19-Dec-05	25	48	50	9	24	43	12	11	42	14	62	11	6	52	8	40	30	42	37	40	45	A	37	84		33.6	84.1	
20-Dec-05	46	40	38	40	39	29	30	41	34	36	37	27	31	14	9	31	22	31	11	7	A	21	10	5		27.3	46.1	
21-Dec-05	5	4	20	35	9	10	17	24	6	6	33	6	6	30	28	32	37	23	11	A	13	10	7	7		16.5	37.4	
22-Dec-05	6	5	19	4	54	37	7	32	7	8	9	7	10	21	6	41	43	36	12	17	3	25	5	4		17.4	53.8	
23-Dec-05	21	10	A	7	24	8	27	11	10	19	23	19	18	13	21	28	11	28	8	12	29	30	32	4		17.9	32.2	
24-Dec-05	27	A	8	5	24	10	6	5	25	11	19	4	10	6	16	5	5	3	4	3	2	2	2	2		8.8	27.0	
25-Dec-05	A	5	4	3	9	1	1	1	2	3	2	1	2	2	1	2	1	1	1	3	4	4	2	A		2.6	9.2	
26-Dec-05	6	3	2	3	2	3	2	3	4	4	4	4	9	5	6	18	23	11	17	16	16	10	A	29		8.6	28.9	
27-Dec-05	24	4	5	10	3	26	3	23	5	4	17	29	4	18	10	41	6	8	6	9	15	A	8	10		12.6	40.8	
28-Dec-05	3	20	17	12	25	25	10	34	37	9	8	17	13	13	14	22	31	34	36	23	A	30	24	23		20.9	37.4	
29-Dec-05	23	21	29	18	21	22	18	21	21	11	8	17	19	15	10	17	11	14	22	A	32	16	16	34		19.0	34.1	
30-Dec-05	9	5	6	9	7	10	19	42	28	28	37	28	35	23	11	25	19	13	A	20	5	10	11	21		18.3	42.4	
31-Dec-05	17	23	14	8	26	18	8	23	18	23	19	17	8	11	21	15	22	A	34	38	22	16	16	16		18.8	38.0	
Hourly Avg	18.4	17.6	17.7	15.3	19.2	19.0	18.3	21.6	19.5	18.9	18.7	14.8	13.6	15.0	15.4	19.4	19.8	20.4	21.3	21.6	20.1	18.2	15.8	19.2				
Hourly Max	47.1	47.5	50.3	50.9	53.8	52.7	52.4	48.1	42.1	40.2	62.3	31.4	34.5	52.2	45.8	41.5	43.2	41.6	45.6	39.8	45.2	36.0	37.4	84.1				

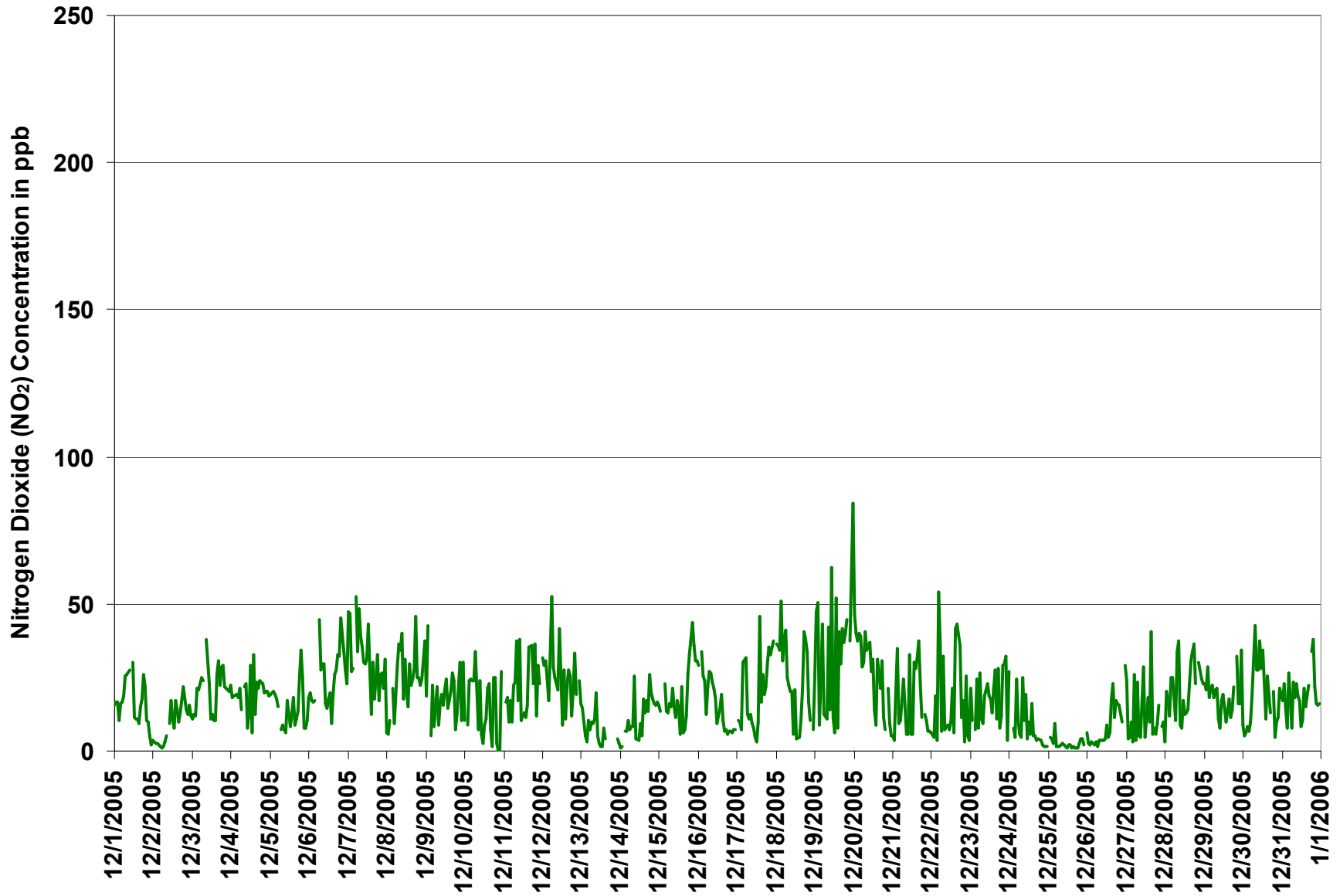
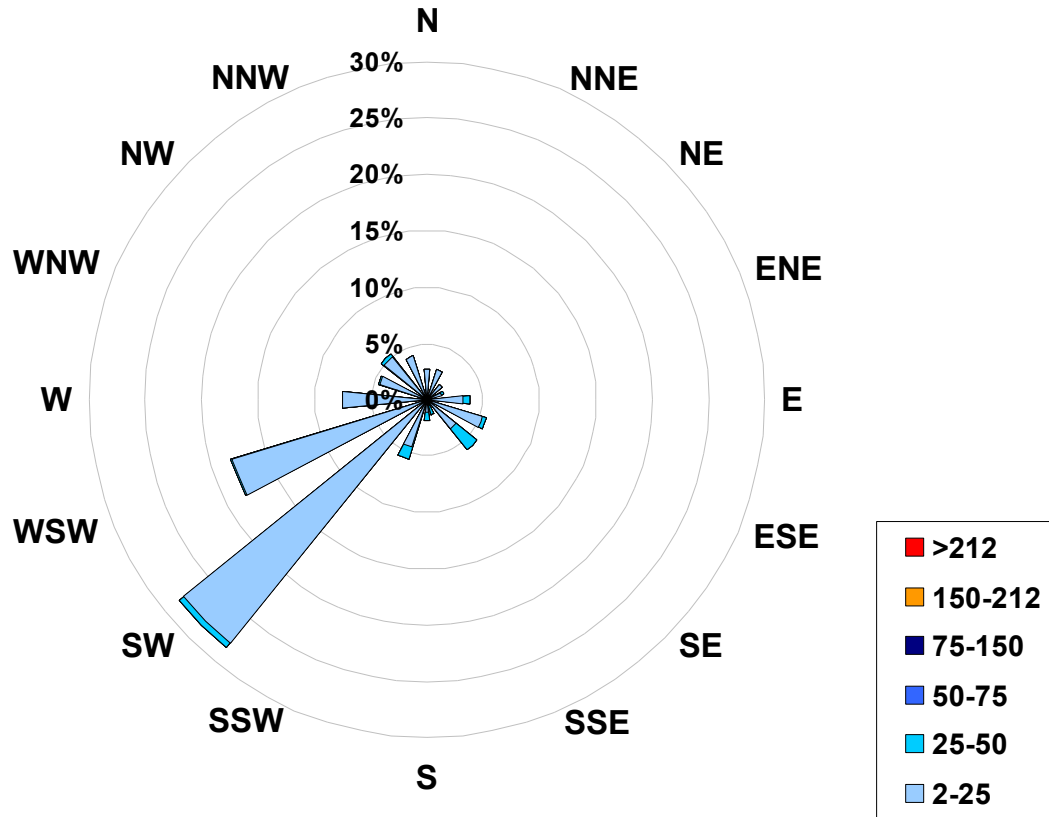


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Crescent Heights Site for December 2005



Calms: 0%

Frequency Distribution of NO ₂ in ppb			Frequency (hrs)
Range			
2.0	< 25		660
25	to 50		32
50	to 75		10
75	to 150		4
150	to 212		0
	> 212		0
Total Non-Zero Values			706



PAS - Cresent Heights Nitric Oxide Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

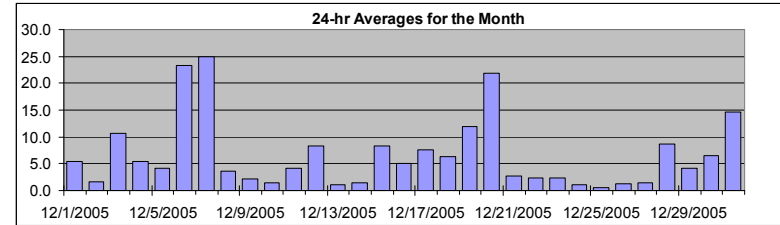
Monitoring Dates: December 1, 2005 to January 1, 2006

Guideline Limit:

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	107.0	ppb	19-Dec	23:00 0:00
Maximum 24-hr Average:	24.9	ppb	7-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	59.1	31.2	5.8	2.4	1.1	0.4	0.2	6.6 ppb	2.4 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	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-Dec-05	2	2	2	2	2	3	4	7	18	29	A	12	10	8	4	2	1	2	6	3	1	2	1	1	5.4	29.0	
2-Dec-05	1	1	1	1	0	0	0	1	1	A	2	4	3	1	4	2	1	1	3	2	2	2	2	3	1.6	4.5	
3-Dec-05	2	2	1	3	3	5	11	8	A	25	17	15	15	12	10	12	12	11	20	18	13	10	11	8	10.6	24.7	
4-Dec-05	8	4	5	7	4	3	2	A	9	7	8	9	8	6	6	4	8	4	5	4	3	4	5	4	5.5	9.4	
5-Dec-05	5	10	11	5	2	1	A	1	1	2	3	5	5	5	8	5	2	1	3	12	3	2	1	1	4.2	11.5	
6-Dec-05	2	3	2	3	3	A	26	45	57	30	16	15	12	11	9	11	18	36	12	43	78	66	28	10	23.4	77.6	
7-Dec-05	35	32	25	43	A	65	36	56	59	37	49	60	45	5	3	3	2	2	7	1	2	3	2	2	24.9	65.5	
8-Dec-05	1	1	1	A	3	1	2	5	6	5	5	8	6	6	9	7	2	2	5	1	3	1	1	2	3.6	8.6	
9-Dec-05	2	1	A	0	1	0	2	2	1	1	4	3	4	3	2	2	3	3	1	1	1	2	6	1	3	2.1	5.8
10-Dec-05	1	A	1	1	1	2	1	2	1	2	2	2	3	2	2	2	1	1	5	1	0	0	0	2	1.5	5.3	
11-Dec-05	A	1	1	1	1	1	3	2	15	3	7	3	3	3	3	2	4	7	4	11	1	9	7	A	4.1	14.8	
12-Dec-05	11	11	4	5	1	19	46	9	8	4	8	3	2	4	2	3	2	6	1	5	20	11	A	4	8.3	45.6	
13-Dec-05	2	1	0	0	0	1	1	1	2	2	1	2	1	1	2	1	C	C	C	C	C	A	1	0	1.1	2.3	
14-Dec-05	0	0	A	0	1	1	1	2	3	1	2	2	2	2	2	2	1	3	2	1	1	1	1	1	1.5	3.2	
15-Dec-05	1	1	A	2	1	2	2	3	5	4	2	6	3	2	3	2	2	2	5	6	49	24	40	26	8.4	49.1	
16-Dec-05	18	A	19	3	3	1	3	4	8	11	11	12	4	4	6	3	1	1	1	0	1	1	1	0	5.1	19.4	
17-Dec-05	A	0	1	0	5	6	0	1	1	3	4	3	2	4	5	3	5	3	4	9	29	26	53	A	7.6	53.4	
18-Dec-05	13	12	7	18	5	10	13	4	3	8	10	2	2	2	2	2	4	10	13	2	1	1	A	0	6.3	18.4	
19-Dec-05	1	3	3	1	1	4	2	2	8	4	9	3	3	5	3	5	5	8	7	21	36	A	33	107	11.9	107.0	
20-Dec-05	41	12	10	24	29	12	16	35	39	53	98	53	52	4	3	9	3	4	1	1	A	2	1	0	21.8	97.9	
21-Dec-05	1	0	2	7	0	1	2	3	1	1	5	2	2	3	3	5	16	3	2	A	1	1	1	0	2.8	16.0	
22-Dec-05	1	0	3	0	3	2	1	3	2	2	3	3	2	3	2	6	9	6	1	2	0	2	0	0	2.4	8.5	
23-Dec-05	3	0	A	0	2	1	5	1	2	2	4	3	3	2	5	4	1	4	1	1	6	4	2	0	2.4	6.2	
24-Dec-05	5	A	0	0	1	1	0	0	3	1	3	1	2	1	1	1	0	1	0	1	0	0	0	0	1.1	4.9	
25-Dec-05	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	1	1	1	A	0.5	1.0	
26-Dec-05	0	0	0	0	0	0	0	1	1	1	1	1	2	1	1	2	2	1	3	2	2	1	A	4	1.2	4.0	
27-Dec-05	2	0	0	1	0	3	1	3	1	1	3	4	1	2	2	3	1	1	1	1	2	A	1	1	1.4	4.0	
28-Dec-05	0	3	1	1	3	2	1	14	9	2	4	4	3	3	4	6	7	24	40	7	A	18	22	20	8.7	40.3	
29-Dec-05	16	1	11	2	2	9	1	4	2	1	1	5	3	3	1	3	1	2	4	A	10	3	5	7	4.2	16.2	
30-Dec-05	1	1	1	1	0	1	3	5	12	27	32	20	25	9	2	2	2	1	A	1	0	1	1	1	6.5	31.9	
31-Dec-05	1	2	1	0	2	0	0	7	5	37	20	8	5	6	13	4	9	A	43	83	19	20	23	26	14.6	82.5	
Hourly Avg	6.3	3.8	4.3	4.5	2.7	5.3	6.2	7.8	9.3	10.2	11.1	8.9	7.5	4.0	4.0	3.9	4.4	5.0	6.9	8.6	10.3	7.9	8.7	8.4			
Hourly Max	40.8	31.6	24.9	43.1	29.5	65.5	45.6	56.4	59.2	53.2	97.9	59.7	51.5	12.2	13.5	12.2	18.3	35.8	43.0	82.5	77.6	65.5	53.4	107.0			



Station: Cresent Heights
 Station Owner: PAS

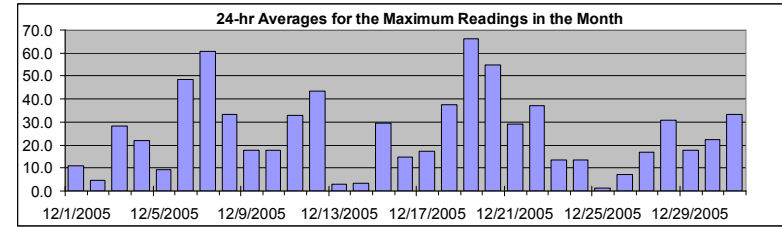
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Value:	388.8	ppb	19-Dec	23:00 0:00
Maximum 24-hr Value:	66.1	ppb	19-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	158.9	101.3	34.1	8.6	2.7	1.1	0.9	25.3 ppb	8.6 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00		
1-Dec-05	4	4	3	4	5	6	6	32	23	54	A	27	12	9	7	5	6	7	11	15	2	3	2	1	10.8	54.0
2-Dec-05	1	1	1	1	1	1	1	1	2	A	3	9	6	4	15	10	2	2	6	12	4	3	11	8	4.5	15.4
3-Dec-05	5	3	3	4	5	8	14	13	A	101	54	18	30	16	13	35	62	40	99	72	17	14	14	10	28.3	101.4
4-Dec-05	37	6	11	9	6	28	3	A	86	37	9	67	62	8	49	9	32	7	10	7	6	8	5	22.1	85.9	
5-Dec-05	9	15	16	11	3	2	A	2	2	2	5	17	7	9	28	10	4	2	7	46	9	4	2	2	9.4	46.4
6-Dec-05	6	8	4	4	4	A	111	63	68	123	40	23	44	18	11	44	34	53	48	102	148	101	42	15	48.3	147.9
7-Dec-05	70	110	38	51	A	129	70	221	112	88	79	73	71	52	6	18	4	17	28	3	4	47	23	84	60.7	221.0
8-Dec-05	1	2	6	A	30	6	43	43	68	61	19	54	17	11	21	10	20	24	145	18	21	26	37	79	33.1	144.7
9-Dec-05	58	40	A	1	16	2	65	18	2	6	16	15	13	13	6	10	7	6	2	7	5	48	3	45	17.6	65.2
10-Dec-05	5	A	2	11	10	14	32	77	2	55	4	3	21	21	30	22	2	2	47	14	1	1	1	29	17.6	76.7
11-Dec-05	A	3	3	3	15	4	54	6	200	16	87	6	5	6	4	4	31	25	10	116	3	111	17	A	33.1	199.6
12-Dec-05	79	18	39	19	2	45	204	139	16	8	93	49	4	70	3	25	26	34	3	9	76	32	A	8	43.4	203.8
13-Dec-05	6	1	1	1	1	1	2	2	3	3	2	3	2	3	14	6	C	C	C	C	C	A	2	1	3.0	13.7
14-Dec-05	1	1	A	1	2	3	3	5	5	3	4	5	6	3	10	4	4	2	9	3	2	2	3	3	3.6	10.2
15-Dec-05	2	2	A	5	2	3	3	5	8	5	4	13	14	4	28	5	4	5	23	47	250	91	88	71	29.7	250.4
16-Dec-05	30	A	61	52	28	2	14	27	16	19	16	18	6	6	21	7	2	3	2	2	3	2	2	1	14.8	60.7
17-Dec-05	A	2	1	1	15	26	1	1	3	5	6	4	3	11	29	24	13	7	12	18	71	50	83	A	17.5	82.6
18-Dec-05	41	39	20	136	23	85	92	13	6	12	18	4	24	3	3	4	126	120	53	8	3	26	A	1	37.3	135.9
19-Dec-05	23	68	110	1	30	78	5	4	101	6	102	25	4	85	5	83	11	52	47	60	174	A	59	389	66.1	388.8
20-Dec-05	97	54	59	73	62	19	37	132	108	159	144	67	82	11	3	64	12	30	3	2	A	34	4	2	54.7	159.2
21-Dec-05	2	1	56	89	3	17	38	51	4	3	82	3	4	63	37	37	122	37	9	A	3	2	2	1	28.9	121.8
22-Dec-05	2	1	46	2	101	102	1	62	15	4	9	6	5	53	3	110	121	79	4	57	1	97	4	2	37.0	121.3
23-Dec-05	40	1	A	1	12	2	22	3	9	10	12	7	8	5	10	23	2	11	2	11	40	38	38	1	13.5	40.0
24-Dec-05	106	A	1	1	60	2	1	1	31	4	61	2	10	3	12	2	2	1	2	1	1	1	1	1	13.5	106.3
25-Dec-05	A	1	1	1	1	1	1	1	1	2	1	2	2	2	2	1	1	1	1	1	2	1	1	A	1.3	2.1
26-Dec-05	1	1	1	1	1	1	1	2	2	2	2	2	13	2	2	9	28	3	5	4	35	3	A	46	7.2	46.1
27-Dec-05	29	1	1	19	2	51	2	45	2	2	48	45	3	23	4	57	2	2	1	6	40	A	3	3	17.0	57.2
28-Dec-05	1	8	5	3	12	11	3	50	90	4	5	19	16	11	17	13	62	61	152	40	A	61	38	29	30.8	152.1
29-Dec-05	24	6	70	8	12	18	2	9	7	2	2	7	7	4	4	17	3	4	20	A	59	11	10	103	17.8	103.5
30-Dec-05	1	2	3	2	2	3	11	94	48	79	95	44	44	35	4	15	18	2	A	6	1	1	3	3	22.5	95.1
31-Dec-05	1	6	6	1	23	3	1	22	11	77	42	14	7	8	31	8	17	A	129	200	42	34	49	34	33.4	200.3
Hourly Avg	24.4	14.5	21.0	17.2	16.4	22.4	28.1	38.1	35.0	31.8	35.4	21.0	17.8	18.3	14.0	22.2	26.0	22.0	30.6	31.6	36.5	30.4	19.7	34.9		
Hourly Max	106.3	110.3	109.6	135.9	100.8	129.0	203.8	221.0	199.6	159.2	144.1	73.1	82.2	84.6	49.5	110.3	125.9	119.8	152.1	200.3	250.4	111.3	88.4	388.8		



PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights
Station Owner: PAS

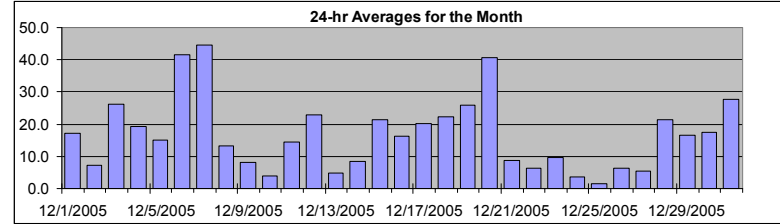
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2005 to January 1, 2006

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

Maximum 1-hr Average:	146.6	ppb	19-Dec	23:00 0:00
Maximum 24-hr Average:	44.5	ppb	7-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	85.7	56.2	20.1	10.7	5.5	1.4	0.4	16.8 ppb	10.7 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	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-Dec-05	16	15	14	11	14	17	19	26	41	51	A	24	19	17	12	9	8	11	18	13	13	11	13	12	17.0	50.5
2-Dec-05	3	2	2	1	1	1	1	2	3	A	8	13	10	5	10	7	8	11	18	13	13	11	13	12	7.3	18.0
3-Dec-05	9	11	10	20	19	24	34	30	A	42	29	24	23	20	18	26	31	31	43	39	34	30	31	27	26.3	42.7
4-Dec-05	27	21	23	25	20	17	14	A	22	15	15	16	13	11	12	13	24	20	27	24	19	20	23	21	19.2	27.3
5-Dec-05	23	29	31	23	18	12	A	7	9	8	8	12	11	12	16	11	10	10	20	39	14	9	6	8	15.1	39.2
6-Dec-05	16	18	17	18	19	A	52	72	83	47	26	23	19	19	17	23	39	60	33	68	107	94	52	32	41.6	107.5
7-Dec-05	66	60	50	70	A	100	64	86	87	60	71	85	68	11	8	12	16	16	27	15	20	14	9	8	44.5	100.0
8-Dec-05	4	4	4	A	9	6	9	17	17	18	15	18	15	16	24	27	21	20	19	11	13	8	6	6	13.4	27.3
9-Dec-05	5	5	A	3	3	4	7	9	6	6	10	8	10	11	9	9	18	17	7	5	14	12	3	5	8.1	18.4
10-Dec-05	0	A	4	5	4	4	5	7	5	4	6	3	3	2	5	5	4	1	10	7	0	0	0	3	3.8	10.2
11-Dec-05	A	10	7	4	6	6	9	20	26	11	14	8	11	10	10	14	21	26	20	24	9	24	25	A	14.3	26.4
12-Dec-05	36	34	22	26	13	47	71	24	27	16	16	9	7	11	10	11	12	20	9	21	41	25	A	22	23.0	70.8
13-Dec-05	14	10	3	1	5	5	9	7	10	7	4	2	1	1	3	2	C	C	C	C	C	A	1	1	4.8	14.0
14-Dec-05	0	1	A	4	3	5	4	6	7	4	5	5	5	4	8	11	16	11	19	17	16	14	16	15	8.5	19.4
15-Dec-05	14	13	A	20	13	12	16	15	20	17	6	12	7	6	8	7	7	10	19	26	79	51	65	51	21.5	79.0
16-Dec-05	43	A	42	16	12	10	18	23	28	31	29	27	10	13	15	10	7	7	5	5	6	6	6	5	16.2	43.0
17-Dec-05	A	9	7	6	21	25	9	9	10	9	9	6	5	8	12	11	22	19	20	34	57	54	83	A	20.2	82.9
18-Dec-05	38	37	30	44	28	40	42	26	19	23	24	6	6	4	5	9	17	35	39	17	11	5	A	5	22.2	44.4
19-Dec-05	7	12	12	6	7	12	9	10	22	15	18	8	6	11	9	15	24	27	30	52	70	A	66	147	25.8	146.6
20-Dec-05	73	40	36	55	61	37	41	59	61	77	129	77	76	10	9	22	19	19	9	7	A	9	5	4	40.7	128.8
21-Dec-05	3	3	5	15	2	4	7	9	5	6	11	6	6	8	12	16	31	13	9	A	10	8	6	4	8.6	30.7
22-Dec-05	5	3	6	2	6	6	4	9	7	6	7	8	8	7	4	14	19	15	5	4	2	4	1	2	6.4	18.6
23-Dec-05	8	4	A	5	7	3	15	5	8	9	16	14	11	7	18	15	9	16	3	6	18	14	6	2	9.6	18.4
24-Dec-05	9	A	4	3	3	3	1	3	8	5	7	4	5	5	5	5	4	3	3	3	1	1	1	0	3.7	8.6
25-Dec-05	A	3	3	1	3	1	0	1	2	2	1	1	2	1	1	1	1	1	0	1	2	2	1	A	1.4	3.2
26-Dec-05	4	2	1	2	1	2	1	2	2	3	3	4	5	4	5	10	14	11	17	14	10	9	A	21	6.4	20.9
27-Dec-05	9	3	3	6	2	7	3	7	5	4	6	9	3	5	8	8	5	6	5	4	5	A	7	4	5.3	9.2
28-Dec-05	2	13	8	4	14	10	7	34	24	8	10	9	7	8	13	22	30	51	66	24	A	43	42	40	21.3	65.6
29-Dec-05	37	11	25	13	13	29	14	20	14	7	6	18	15	12	6	14	10	13	19	A	26	17	19	21	16.5	37.1
30-Dec-05	6	5	4	6	4	6	16	17	31	46	53	43	47	22	10	12	13	10	A	10	3	7	8	16	17.3	53.3
31-Dec-05	14	18	9	5	17	7	6	24	18	53	33	19	11	13	28	15	28	A	67	106	33	35	38	41	27.8	106.0
Hourly Avg	17.6	14.1	14.2	14.0	11.7	15.4	16.9	19.5	20.9	20.4	19.8	16.8	14.4	9.5	10.7	12.5	16.3	17.8	20.5	21.9	22.9	19.1	19.4	18.7		
Hourly Max	73.0	59.7	49.9	69.9	61.0	100.0	70.8	85.7	87.1	76.7	128.8	84.6	76.3	21.7	28.4	27.3	39.5	60.3	67.5	106.0	107.5	94.1	82.9	146.6		

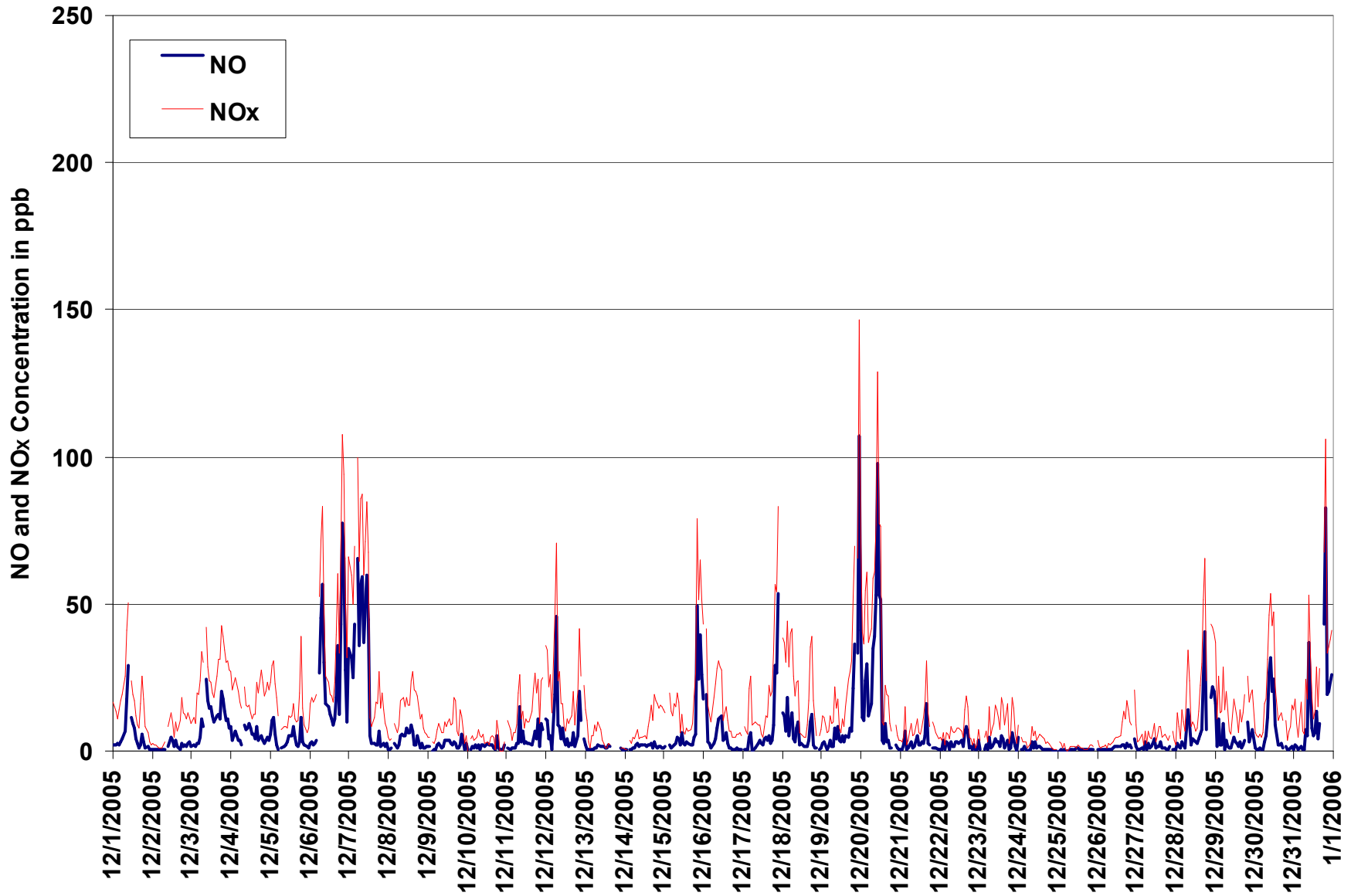


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

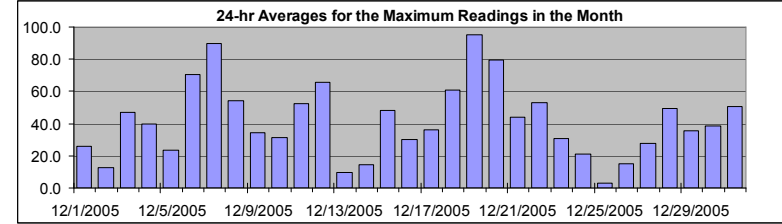
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Value:	448.7	ppb	19-Dec	23:00 0:00
Maximum 24-hr Value:	94.9	ppb	19-Dec	



AIC Time:	33 hrs	Operational Time:	706 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	193.5	133.0	57.4	26.1	11.6	3.1	1.5	41.9 ppb	26.1 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-05	19	19	18	14	20	21	24	52	47	79	A	56	23	19	18	14	21	24	36	36	11	12	6	3	25.7	79.1	
2-Dec-05	4	3	3	2	2	2	2	4	7	A	12	24	17	12	25	22	11	13	27	26	17	14	27	20	12.8	27.3	
3-Dec-05	15	16	15	25	25	31	38	37	A	133	77	28	44	26	23	57	83	62	122	95	39	33	34	30	47.2	133.2	
4-Dec-05	54	23	29	28	24	48	17	A	97	60	16	76	90	14	82	21	51	28	32	28	24	27	27	23	39.9	97.1	
5-Dec-05	29	34	36	30	20	16	A	9	11	9	10	34	15	22	44	18	14	16	31	81	31	12	10	12	23.5	80.8	
6-Dec-05	24	27	21	20	21	A	141	90	96	152	55	33	59	34	20	64	58	79	80	131	179	132	69	37	70.6	179.3	
7-Dec-05	113	147	64	78	A	180	101	259	142	123	107	102	98	94	19	48	21	41	57	20	30	73	45	102	89.7	258.8	
8-Dec-05	7	7	16	A	48	15	69	77	91	99	32	82	34	27	48	32	43	44	179	40	45	48	56	109	54.3	178.8	
9-Dec-05	73	62	A	6	38	11	77	38	11	21	34	31	33	36	21	29	33	29	8	18	27	75	13	74	34.5	76.6	
10-Dec-05	13	A	10	34	32	37	57	110	8	79	9	4	27	32	52	44	10	2	67	38	4	0	0	56	31.5	110.1	
11-Dec-05	A	18	20	10	30	13	73	29	234	33	122	15	16	17	15	19	64	58	32	146	14	134	39	A	52.3	233.9	
12-Dec-05	103	45	58	41	20	76	236	167	40	28	124	74	11	98	12	39	53	58	14	29	108	50	A	31	65.8	235.8	
13-Dec-05	21	15	6	3	11	8	12	11	13	22	7	5	3	3	21	9	C	C	C	C	C	A	3	3	9.7	21.6	
14-Dec-05	1	2	A	7	8	11	7	13	12	28	7	8	15	7	28	16	21	15	34	23	19	17	18	18	14.6	33.9	
15-Dec-05	17	15	A	27	15	15	19	19	29	20	16	27	29	9	50	9	10	16	49	77	293	128	118	102	48.3	292.8	
16-Dec-05	59	A	93	75	47	14	34	52	42	42	36	36	15	20	37	17	9	10	8	8	9	7	8	8	29.9	93.4	
17-Dec-05	A	11	11	8	45	58	13	12	15	14	13	8	5	20	75	34	38	26	32	46	106	81	120	A	36.1	120.4	
18-Dec-05	75	74	54	188	53	123	132	38	28	31	38	10	44	6	6	14	147	150	86	41	19	33	A	8	60.8	187.7	
19-Dec-05	46	104	160	9	54	122	17	13	140	20	133	35	10	126	12	112	38	94	80	96	217	A	96	449	94.9	448.7	
20-Dec-05	138	91	92	112	91	48	66	161	135	194	179	94	107	25	12	93	33	56	14	8	A	56	14	6	79.4	193.8	
21-Dec-05	8	4	76	119	12	28	55	75	9	8	115	9	9	87	66	67	149	61	17	A	14	12	8	7	43.9	148.9	
22-Dec-05	8	6	58	5	156	138	7	94	22	12	17	13	15	74	9	153	163	113	16	67	4	112	9	4	53.1	163.0	
23-Dec-05	61	12	A	8	36	9	49	15	14	28	35	25	26	17	30	50	11	39	9	23	64	67	70	4	30.5	70.1	
24-Dec-05	120	A	8	5	84	12	6	6	54	14	76	6	20	7	28	6	6	4	5	4	3	2	2	2	20.9	120.3	
25-Dec-05	A	5	4	3	9	2	1	1	3	3	3	2	3	3	2	2	1	2	2	3	4	5	3	A	3.1	9.5	
26-Dec-05	7	3	2	4	2	3	2	4	5	4	5	6	22	6	8	24	50	14	21	19	47	13	A	74	15.0	74.4	
27-Dec-05	52	4	5	30	4	73	5	68	6	6	64	67	5	39	14	84	7	9	6	13	53	A	10	13	27.8	84.2	
28-Dec-05	4	28	22	14	35	35	12	80	128	11	13	33	29	20	29	35	91	88	181	63	A	85	58	49	49.6	180.7	
29-Dec-05	45	27	97	25	33	40	20	29	27	13	9	24	26	18	13	34	14	18	40	A	79	25	25	138	35.7	138.0	
30-Dec-05	10	6	8	9	7	11	29	122	72	101	125	73	78	58	14	39	36	13	A	25	5	10	13	24	38.7	125.4	
31-Dec-05	18	28	19	8	49	21	8	45	26	96	60	30	15	18	53	22	39	A	158	228	63	49	63	50	50.6	227.7	
Hourly Avg	40.7	29.9	37.2	31.6	34.4	40.6	44.3	57.6	52.2	49.4	51.6	34.5	30.4	32.1	28.5	39.6	44.2	40.8	49.7	51.1	54.6	46.9	34.4	51.9			
Hourly Max	138.0	146.9	160.5	187.7	155.6	180.0	235.8	258.8	233.9	193.8	179.4	102.4	107.4	125.6	81.6	152.7	163.0	149.6	180.7	227.7	292.8	134.0	120.4	448.7			

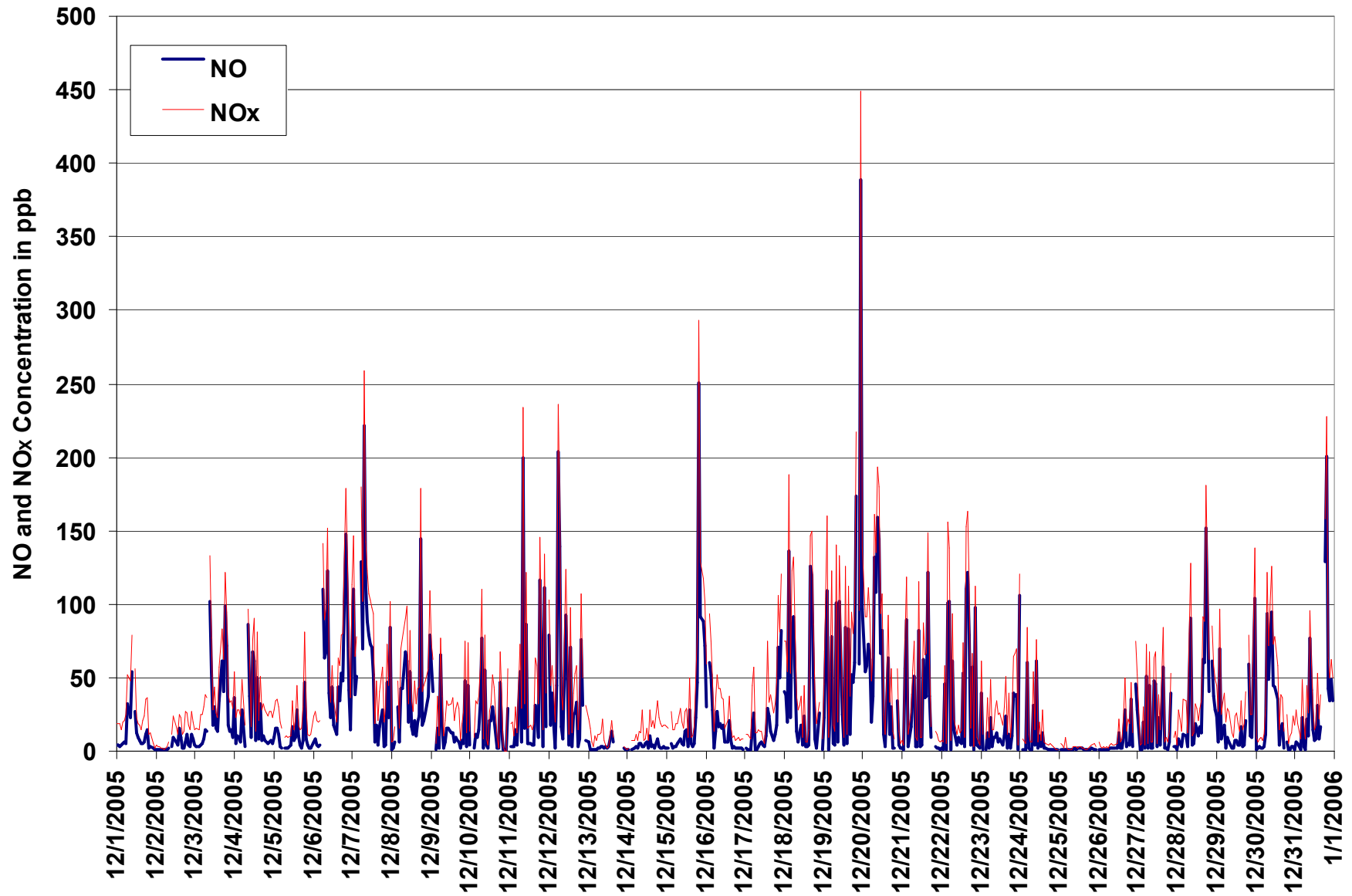


Figure 4. PAS - Cresent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



PAS - Cresent Heights Ozone Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

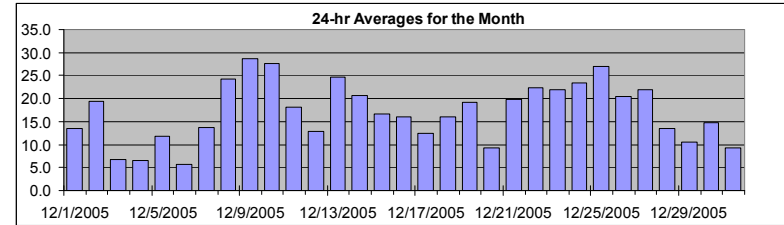
HOURLY AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: December 1, 2005 to January 1, 2006

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

Number of 1-hr Exceedances:		0	
Maximum 1-hr Average:	35.5 ppb	25-Dec 19:00	20:00
Maximum 24-hr Average:	28.6 ppb	9-Dec	



AIC Time:	33 hrs	Operational Time:	709 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	32.4	29.6	24.4
	50	25	5
	18.7	10.3	1.7
	1	1.1	
	Average		Median
	17.1 ppb		18.7 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	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00		
1-Dec-05	8	10	13	17	13	9	9	8	6	7	A	13	15	17	19	20	20	13	6	10	16	20	21	22	13.6	22.4
2-Dec-05	22	22	22	24	24	24	24	22	22	A	20	18	20	22	21	21	18	16	11	15	15	15	13	15	19.4	24.0
3-Dec-05	16	14	15	6	6	4	1	2	A	7	11	13	13	13	13	9	4	2	1	1	1	1	1	6.8	15.9	
4-Dec-05	1	2	1	1	2	5	6	A	7	10	12	13	14	15	14	13	7	6	2	3	5	3	2	3	6.4	14.9
5-Dec-05	2	1	1	2	2	8	A	18	15	16	17	17	20	19	17	18	19	17	10	2	12	12	14	13	11.8	20.4
6-Dec-05	7	7	7	6	5	A	1	1	3	6	11	12	14	14	13	9	3	1	3	2	2	2	1	2	5.8	14.0
7-Dec-05	2	2	1	1	A	2	2	2	3	7	9	10	13	28	28	26	22	21	17	23	19	23	27	28	13.8	28.0
8-Dec-05	30	29	28	A	28	28	26	22	20	20	22	23	24	24	20	16	18	18	21	25	26	27	30	32	24.2	31.7
9-Dec-05	33	33	A	34	32	30	28	28	30	31	31	32	31	30	30	29	21	22	28	28	18	24	27	27	28.6	33.8
10-Dec-05	29	A	30	28	27	27	25	23	23	26	24	28	29	29	28	27	27	30	25	24	31	33	34	30	27.6	34.1
11-Dec-05	A	25	25	26	21	20	19	9	12	16	23	29	25	26	25	21	16	11	10	11	15	9	6	A	18.1	28.7
12-Dec-05	3	3	6	6	13	4	4	12	8	14	19	23	24	24	26	25	21	16	21	11	6	5	A	3	13.0	26.0
13-Dec-05	8	15	25	31	26	24	20	22	20	23	25	26	27	28	29	28	26	26	27	27	26	27	28	27	24.6	30.8
14-Dec-05	27	26	A	26	26	24	25	19	C	C	A	32	33	29	20	15	12	18	12	14	14	15	12	12	20.6	32.6
15-Dec-05	13	14	A	9	12	15	11	14	12	14	27	29	31	30	30	29	24	17	10	5	2	2	1	1	16.6	30.7
16-Dec-05	1	A	4	10	14	18	11	9	7	9	11	13	20	20	20	19	22	23	25	25	23	22	22	21	16.0	25.2
17-Dec-05	A	17	19	19	9	8	14	15	16	17	17	19	20	19	19	16	8	7	8	3	2	2	2	A	12.5	20.1
18-Dec-05	4	3	4	6	5	2	5	7	12	14	20	30	31	31	27	21	11	7	18	24	29	A	29	16.1	31.4	
19-Dec-05	28	25	25	27	27	25	24	22	18	21	24	27	26	25	26	22	14	16	10	5	2	A	1	1	19.2	27.5
20-Dec-05	1	3	4	2	1	3	2	1	2	3	4	6	7	21	20	14	12	13	17	19	A	18	20	21	9.3	21.4
21-Dec-05	20	20	22	21	25	22	20	21	22	20	21	24	24	23	19	17	12	16	17	A	16	16	17	20	19.8	25.5
22-Dec-05	18	20	19	21	23	23	21	19	18	19	18	21	25	26	28	24	22	24	26	25	24	24	24	23	22.3	28.2
23-Dec-05	21	22	A	24	25	26	17	20	21	20	19	21	22	23	17	19	22	17	30	26	20	20	25	25	21.8	29.9
24-Dec-05	24	A	25	25	25	24	28	26	22	22	23	24	24	24	24	22	21	21	20	20	23	24	24	24	23.4	27.7
25-Dec-05	A	24	23	24	24	25	26	25	25	26	27	27	25	27	30	29	29	28	31	36	30	26	26	A	27.0	35.5
26-Dec-05	29	27	26	25	25	25	27	24	25	22	21	22	24	26	25	21	15	14	7	8	12	12	A	10	20.5	28.7
27-Dec-05	18	20	18	16	17	16	19	16	16	18	20	23	31	30	26	25	26	24	27	26	24	A	22	27	21.9	31.3
28-Dec-05	28	19	22	25	18	17	19	6	10	16	17	20	22	19	12	5	2	7	A	3	1	1	1	1	13.6	27.6
29-Dec-05	2	15	9	12	10	3	7	3	10	16	19	13	17	15	22	12	17	14	11	A	5	4	3	5	10.6	21.6
30-Dec-05	11	13	14	14	14	13	7	9	4	6	7	7	8	19	24	23	21	22	A	23	26	21	20	15	14.9	25.8
31-Dec-05	16	12	17	21	11	18	16	5	6	4	8	11	15	14	9	12	5	A	2	1	3	1	1	2	9.2	21.3
Hourly Avg	14.9	15.7	15.8	16.9	17.1	16.4	15.5	14.4	14.3	15.6	18.3	20.1	21.7	23.1	22.3	20.0	17.3	16.5	15.0	15.4	15.4	15.2	15.3	15.7		
Hourly Max	32.5	32.6	30.4	33.8	32.4	30.2	28.4	28.5	30.2	30.6	30.6	32.3	32.6	31.4	30.6	30.4	29.2	30.1	30.6	35.5	31.0	32.9	34.1	31.7		

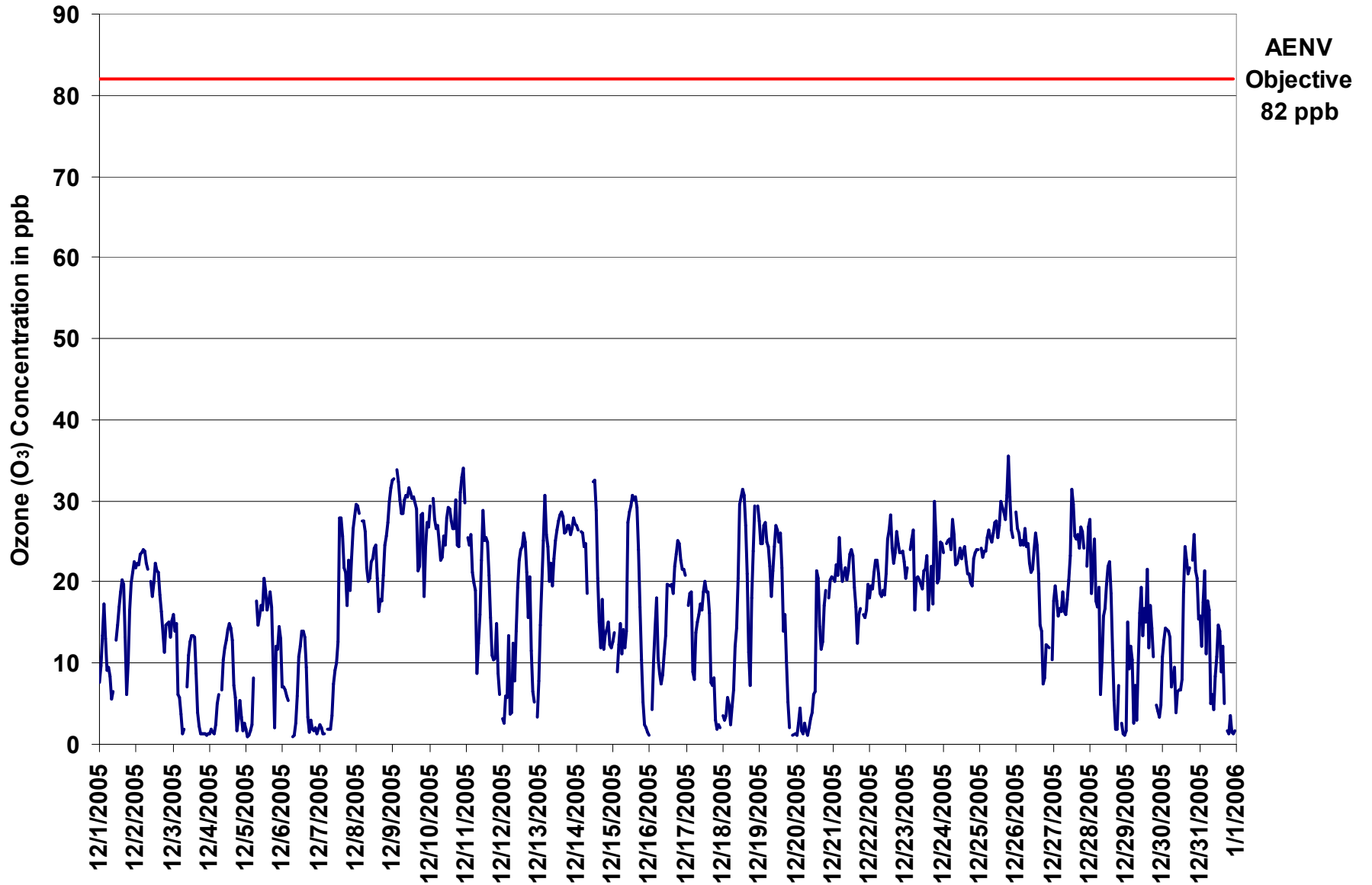


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

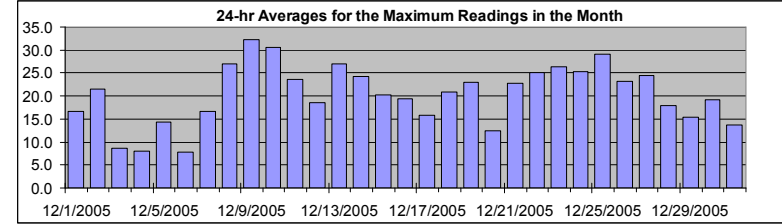
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O₃)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Value:	36.8	ppb	25-Dec	19:00 20:00
Maximum 24-hr Value:	32.3	ppb	9-Dec	



AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	34.5	32.2	27.2	22.0	14.6	3.3	2.0	20.4 ppb	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

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-Dec-05	10	12	17	19	17	11	12	11	11	12	A	15	17	19	21	23	23	17	11	16	21	22	23	23	16.7	23.3
2-Dec-05	24	23	23	25	25	25	25	24	23	A	22	20	22	24	23	23	21	19	18	19	18	18	15	18	21.6	24.9
3-Dec-05	19	17	18	11	8	7	3	3	A	10	12	14	15	15	15	13	6	4	2	2	2	2	2	2	8.7	18.7
4-Dec-05	2	2	2	2	4	7	7	A	10	12	13	14	15	16	16	15	12	9	3	5	7	5	3	4	8.1	16.0
5-Dec-05	4	2	2	4	4	11	A	21	19	19	19	18	24	22	18	20	22	20	18	5	16	13	16	16	14.4	23.7
6-Dec-05	13	9	9	7	8	A	2	2	4	9	12	14	16	15	15	13	8	2	6	3	3	2	2	4	7.8	15.7
7-Dec-05	5	3	2	2	A	3	3	3	6	10	11	12	18	30	29	29	26	27	25	26	25	27	30	30	16.6	30.3
8-Dec-05	31	31	30	A	29	29	28	26	24	24	24	25	26	27	25	19	21	23	26	27	30	30	32	34	27.0	33.7
9-Dec-05	34	34	A	35	34	32	31	32	33	34	33	34	36	36	33	33	29	29	30	31	28	30	30	31	32.3	36.5
10-Dec-05	31	A	32	31	32	31	29	26	26	27	27	31	32	31	30	29	30	32	30	31	34	34	35	34	30.6	35.4
11-Dec-05	A	32	32	31	26	23	24	14	18	20	28	33	32	30	28	25	22	21	16	17	18	15	14	A	23.6	32.8
12-Dec-05	12	7	11	11	19	13	7	18	14	21	22	26	27	27	29	29	25	21	26	21	15	18	A	6	18.6	29.3
13-Dec-05	11	21	27	32	32	28	23	27	23	24	27	28	29	30	31	31	28	28	28	29	28	27	30	29	27.1	32.3
14-Dec-05	28	28	A	28	28	28	28	27	C	C	A	34	34	33	30	17	19	20	20	19	19	18	13	15	24.3	34.1
15-Dec-05	15	15	A	13	15	17	14	17	17	19	32	32	32	33	33	32	32	29	25	20	11	5	5	3	20.2	32.8
16-Dec-05	2	A	12	13	20	21	15	15	15	11	14	18	22	22	22	22	24	26	27	27	25	23	24	24	19.3	27.5
17-Dec-05	A	21	22	21	19	13	17	18	19	20	18	20	21	21	21	19	15	12	13	7	3	6	3	A	15.9	21.9
18-Dec-05	8	6	6	15	9	9	11	11	17	17	29	31	32	33	32	30	25	23	20	25	29	32	A	31	20.9	32.6
19-Dec-05	30	29	27	29	29	29	28	26	23	25	29	29	28	27	29	25	22	24	21	11	4	A	2	3	23.0	29.9
20-Dec-05	3	8	9	7	4	6	5	2	4	5	6	7	16	23	22	19	16	18	19	21	A	20	23	23	12.5	23.0
21-Dec-05	22	22	26	27	28	25	23	24	23	21	24	26	26	26	22	20	18	21	20	A	18	18	19	23	22.7	28.0
22-Dec-05	21	22	21	23	25	25	24	21	20	21	21	24	29	30	31	28	29	29	29	27	26	25	25	24	25.1	30.7
23-Dec-05	23	24	A	29	28	29	25	22	23	24	29	27	27	26	24	23	25	30	32	32	28	26	27	26	26.5	32.0
24-Dec-05	27	A	27	27	27	27	29	27	26	25	26	26	26	26	27	25	23	22	21	21	25	25	25	25	25.4	29.2
25-Dec-05	A	25	24	25	27	27	28	27	26	29	29	29	27	28	34	33	31	29	35	37	36	29	27	A	29.1	36.8
26-Dec-05	31	28	28	26	27	26	29	26	27	23	22	23	27	28	29	27	21	17	13	11	15	14	A	17	23.3	31.0
27-Dec-05	21	21	19	18	18	19	20	18	17	20	23	30	34	33	30	28	29	27	29	29	26	A	25	29	24.5	34.0
28-Dec-05	29	28	27	30	26	23	22	19	15	18	19	22	25	24	24	15	9	7	6	13	A	7	2	2	17.9	30.0
29-Dec-05	5	19	18	17	18	7	10	7	18	22	22	23	23	18	27	16	20	18	17	A	7	6	5	10	15.4	26.6
30-Dec-05	14	14	16	16	16	16	13	16	9	13	11	11	17	26	27	28	26	25	A	27	27	26	27	21	19.2	27.5
31-Dec-05	20	26	24	24	17	21	19	13	9	9	16	14	17	16	14	16	12	A	4	2	10	4	4	3	13.7	26.3
Hourly Avg	17.6	18.9	19.0	20.0	20.7	19.5	18.4	18.1	17.9	18.9	21.4	23.0	24.9	25.6	25.4	23.3	21.5	21.0	19.8	19.3	19.2	18.2	17.5	18.2		
Hourly Max	34.1	34.4	31.9	34.6	34.4	31.6	31.0	31.8	33.1	34.2	33.4	34.5	36.2	36.5	33.6	32.9	31.7	31.9	34.7	36.8	35.7	34.1	35.4	34.5		

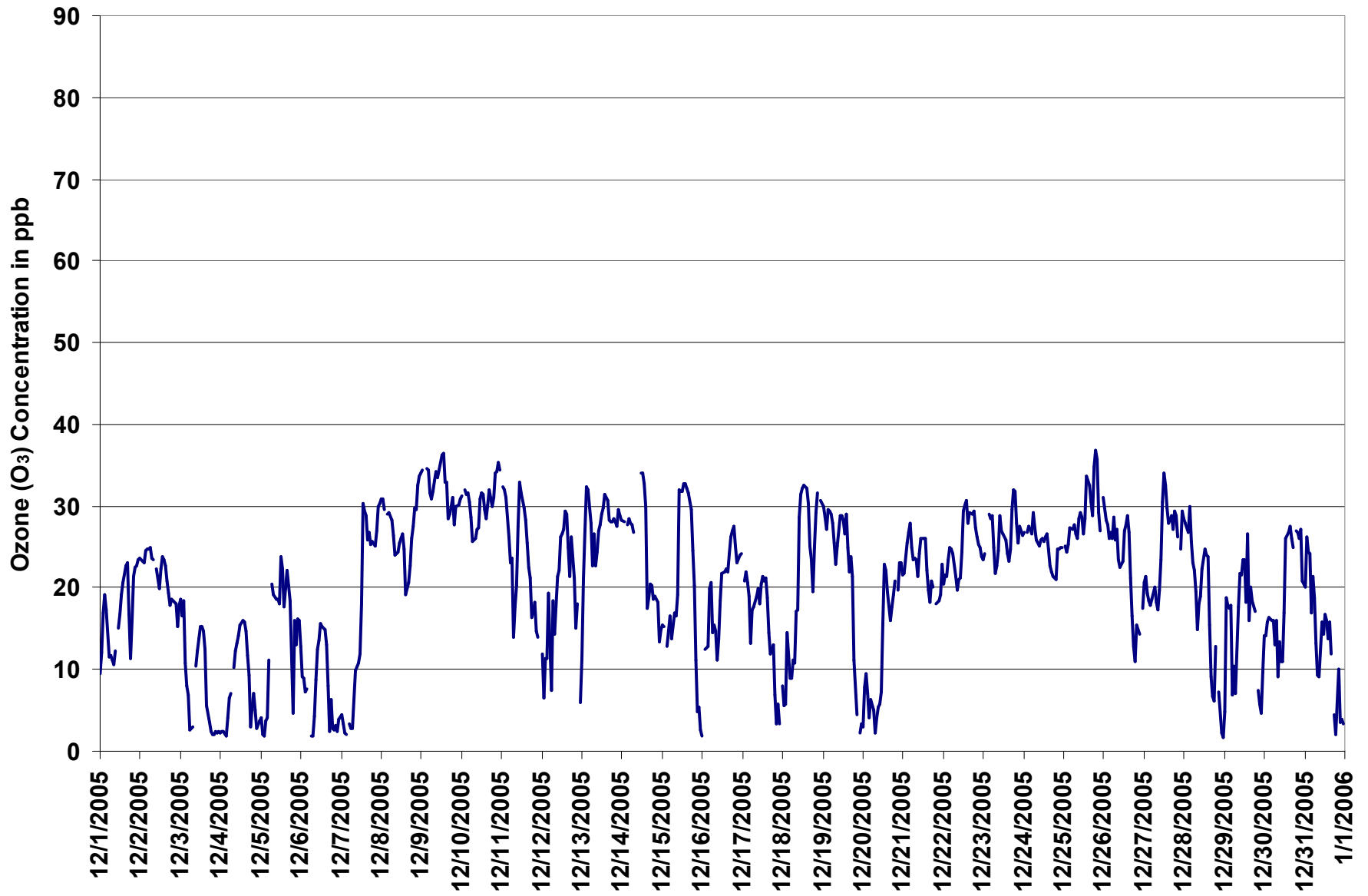
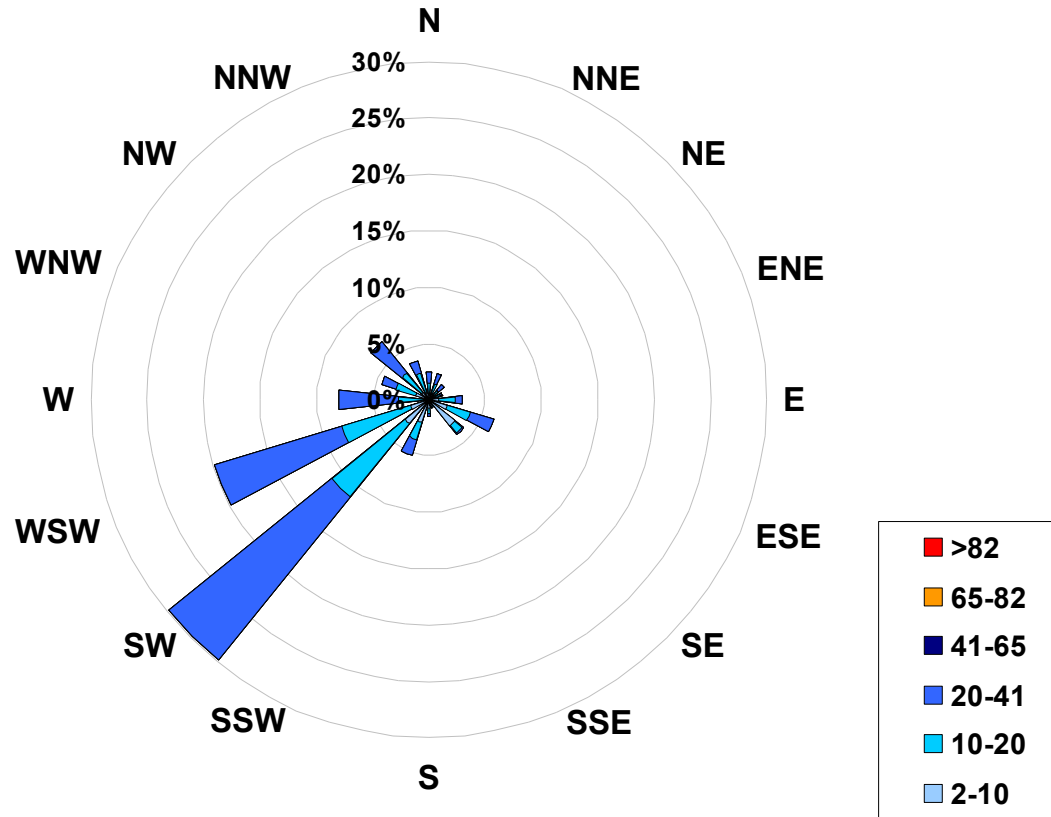


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Ozone (in ppb) Located at the Crescent Heights Site for December 2005



Calms: 0%

Frequency Distribution of O ₃ in ppb			Frequency (hrs)
Range			
2.0	< 10		171
10	to 20		218
20	to 41		320
41	to 65		0
65	to 82		0
	> 82		0
Total Non-Zero Values			709



PAS - Crescent Heights Ozone Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

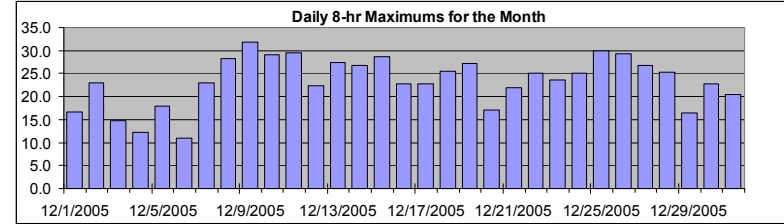
EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: December 1, 2005 to January 1, 2006

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

Number of 8-hr Exceedances:	0		
Maximum 8-hr Average:	31.9 ppb	9-Dec	5:00 6:00



Percentile	99	95	75	50	25	5	1
	30.5	27.9	23.4	18.1	10.4	2.8	1.8

Status Flag Characters

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

Day	Mountain Standard Time																							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		
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-Dec-05	10	10	10	10	10	10	11	11	11	11	10	10	9	9	11	12	14	16	17	15	15	15	16	16	16	16.6
2-Dec-05	16	18	20	21	22	23	23	23	23	23	23	22	21	21	21	21	20	20	19	18	18	17	16	15	15	23.0
3-Dec-05	15	14	15	14	13	11	10	8	7	6	5	6	7	9	10	11	10	10	9	7	6	4	3	2	2	14.7
4-Dec-05	1	1	1	1	2	2	3	3	4	5	6	8	10	11	12	12	12	12	10	9	8	7	5	4	4	12.3
5-Dec-05	3	3	2	2	2	3	3	5	7	9	11	13	16	17	17	17	18	18	17	15	14	13	13	12	12	17.9
6-Dec-05	11	10	9	10	9	9	7	5	4	4	5	6	7	8	9	10	10	10	9	8	6	4	3	2	2	11.0
7-Dec-05	2	2	2	2	2	2	2	2	2	3	4	5	6	9	13	16	18	20	21	22	23	22	22	22	22	22.9
8-Dec-05	23	24	26	26	28	28	28	27	26	25	24	24	23	23	22	21	21	21	21	21	21	21	23	24	24	28.2
9-Dec-05	26	28	29	30	31	32	32	31	31	31	31	30	30	30	30	30	29	28	28	28	28	26	25	25	25	31.9
10-Dec-05	26	26	26	26	28	28	28	27	26	26	25	25	26	26	26	27	27	28	28	28	27	27	28	29	29	29.2
11-Dec-05	30	29	29	29	28	26	24	21	20	18	18	19	19	20	21	22	22	22	20	18	17	15	12	11	11	29.5
12-Dec-05	9	8	7	7	7	6	6	6	7	8	10	12	13	16	19	20	22	22	22	21	19	16	15	12	12	22.4
13-Dec-05	10	10	11	13	16	19	19	21	23	24	24	23	24	24	25	26	27	27	27	27	27	27	27	27	27	27.3
14-Dec-05	27	27	27	27	27	26	26	25	N	N	N	N	N	N	N	N	N	23	21	19	17	15	14	14	14	26.9
15-Dec-05	14	13	13	13	12	12	12	13	12	13	14	17	19	21	23	25	27	29	27	25	22	19	15	11	11	28.7
16-Dec-05	8	6	4	4	5	7	9	10	11	10	11	12	12	12	14	15	17	18	20	22	22	22	22	23	23	22.8
17-Dec-05	23	22	21	20	18	16	15	14	15	15	14	14	16	17	18	18	17	16	14	12	10	8	6	5	5	22.9
18-Dec-05	4	3	3	3	4	4	4	4	5	7	9	12	15	19	22	24	26	25	24	22	21	21	20	20	20	25.6
19-Dec-05	21	23	25	27	27	27	26	25	24	24	24	24	24	24	24	24	23	23	21	18	15	14	10	7	7	27.2
20-Dec-05	5	3	3	2	2	2	2	2	2	2	2	3	3	6	8	10	11	12	14	15	17	16	16	17	17	17.1
21-Dec-05	18	19	20	20	21	21	21	22	22	22	22	22	22	22	22	21	20	20	19	18	17	16	16	16	16	22.0
22-Dec-05	17	17	18	18	19	20	20	20	20	20	20	20	21	21	22	23	23	24	25	25	25	25	24	24	24	25.1
23-Dec-05	24	23	23	23	23	23	22	22	22	22	22	21	21	20	20	20	20	20	21	22	22	21	22	23	23	23.6
24-Dec-05	23	24	23	23	24	25	25	25	25	25	24	24	24	24	24	23	23	23	22	22	22	22	22	22	22	25.2
25-Dec-05	22	23	23	24	24	24	24	25	25	25	25	26	26	26	27	27	28	28	28	29	30	30	29	29	29	29.9
26-Dec-05	29	29	28	27	26	26	26	26	25	25	24	24	24	24	24	23	22	21	19	17	16	14	13	11	11	29.3
27-Dec-05	12	13	14	15	16	16	17	17	17	17	17	17	18	20	22	23	24	25	26	26	27	26	25	25	25	26.9
28-Dec-05	25	25	24	24	23	22	22	19	17	17	16	15	16	17	16	17	17	15	13	11	10	7	5	3	3	25.4
29-Dec-05	2	4	5	6	7	7	7	8	9	9	10	10	11	13	14	16	16	16	15	15	14	12	9	8	8	16.4
30-Dec-05	8	7	8	9	10	11	11	12	11	10	9	8	8	8	11	12	14	16	18	20	22	23	22	21	21	22.8
31-Dec-05	20	19	19	19	17	16	16	15	13	12	11	10	10	10	9	10	10	11	10	8	7	5	4	2	2	20.5

Hourly Max	29.5	29.1	29.2	30.5	31.5	31.9	31.7	31.2	30.9	30.6	30.6	30.3	30.1	30.1	30.4	30.5	29.4	28.7	28.3	29.3	29.9	29.8	29.3	29.3	29.3
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PAS - Cresent Heights Carbon Monoxide Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

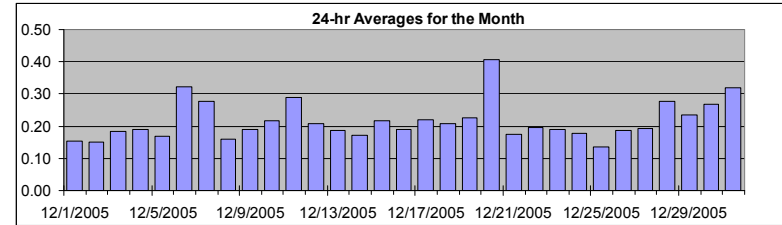
HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

Monitoring Dates: December 1, 2005 to January 1, 2006

Objective Limit: Alberta Environment: 1-hr 13 ppm 24-hr na ppm
 Summary

Number of 1-hr Exceedances:	0		
Maximum 1-hr Average:	1.1 ppm	20-Dec	10:00 11:00
Maximum 24-hr Value:	0.4 ppm	20-Dec	



AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.7	0.5	0.2	0.2	0.2	0.1	0.1	0.2 ppm	0.2 ppm

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-05	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.4	A	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.15	0.49
2-Dec-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.15	0.31
3-Dec-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.18	0.29
4-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.19	0.25
5-Dec-05	0.2	0.3	0.2	0.2	0.2	0.2	A	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.17	0.32
6-Dec-05	0.1	0.1	0.1	0.1	0.1	A	0.3	0.6	0.7	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.3	0.5	0.6	0.9	0.3	0.2	0.32	0.94	
7-Dec-05	0.3	0.2	0.2	0.2	A	0.3	0.3	0.5	0.7	0.5	0.5	0.5	0.5	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.28	0.70	
8-Dec-05	0.1	0.1	0.1	A	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.16	0.26	
9-Dec-05	0.1	0.1	A	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.19	0.30	
10-Dec-05	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.29	
11-Dec-05	A	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.1	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.3	0.3	0.3	A	0.29	0.55	
12-Dec-05	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.21	0.38	
13-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.23	
14-Dec-05	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	C	C	A	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.25	
15-Dec-05	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.22	0.34	
16-Dec-05	0.2	A	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.19	0.31	
17-Dec-05	A	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	1.0	A	0.22	1.02	
18-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	A	0.1	0.21	0.34	
19-Dec-05	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.5	0.4	A	0.3	0.5	0.23	0.51	
20-Dec-05	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.9	0.8	0.7	1.1	0.7	0.6	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	A	0.2	0.2	0.41	1.09	
21-Dec-05	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.18	0.24	
22-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.23	
23-Dec-05	0.2	0.2	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.27	
24-Dec-05	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.21	
25-Dec-05	A	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.14	0.15	
26-Dec-05	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	A	0.2	0.19	0.26	
27-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.19	0.24	
28-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.5	0.3	A	0.5	0.4	0.4	0.28	0.61	
29-Dec-05	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	A	0.3	0.2	0.3	0.2	0.24	0.30	
30-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.6	0.3	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.27	0.58	
31-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.4	0.3	0.5	A	0.5	0.6	0.4	0.5	0.4	0.4	0.32	0.59	
Hourly Avg	0.17	0.16	0.16	0.17	0.16	0.18	0.20	0.27	0.28	0.26	0.24	0.23	0.23	0.20	0.22	0.21	0.24	0.24	0.23	0.23	0.22	0.24	0.23	0.21			
Hourly Max	0.29	0.25	0.25	0.34	0.38	0.33	0.44	0.91	0.75	0.73	1.09	0.71	0.63	0.46	0.49	0.51	0.50	0.61	0.53	0.59	0.56	0.94	1.02	0.51			

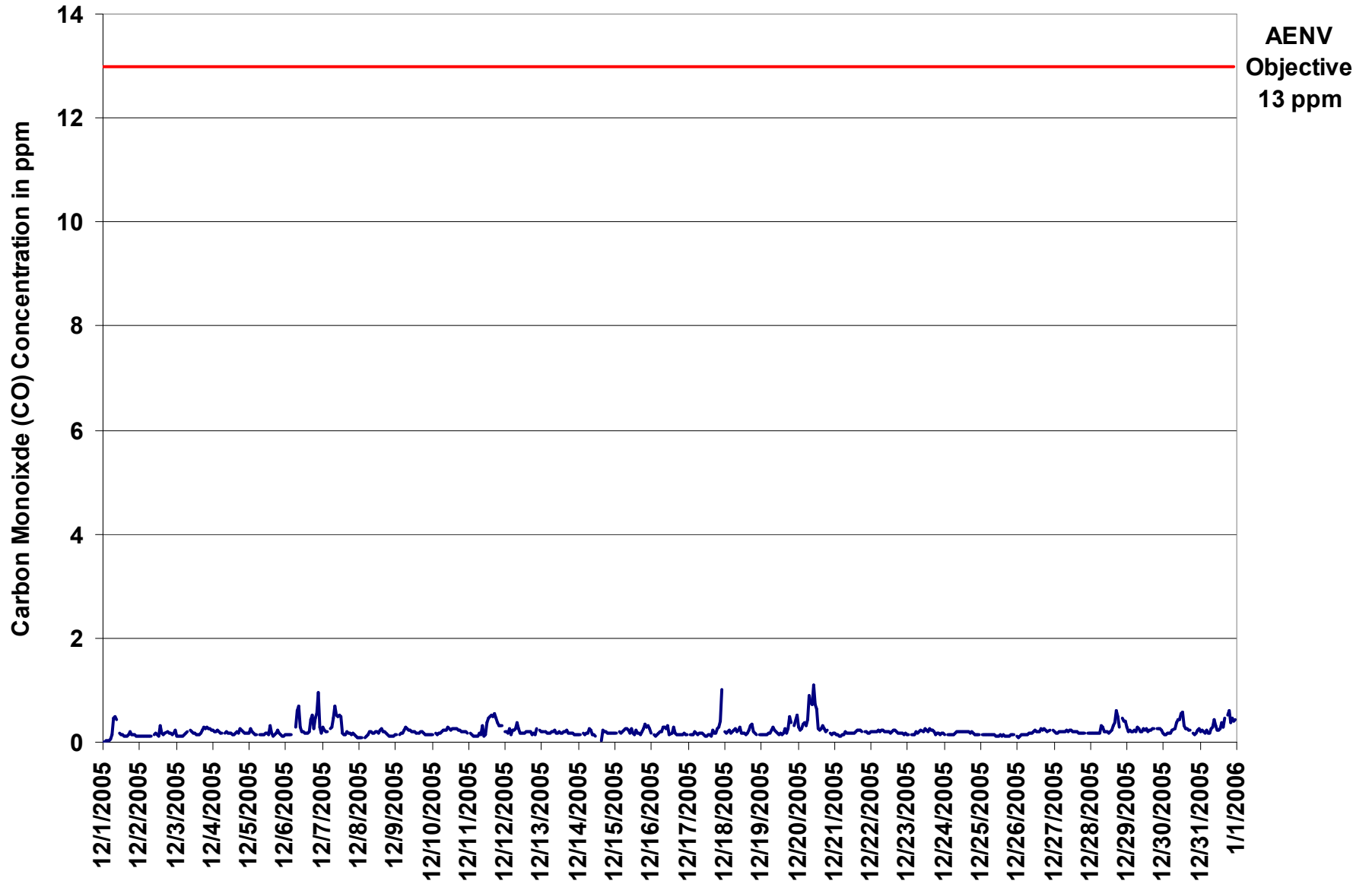


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

INSTANTANEOUS (30 Second) MAXIMUM TABLE

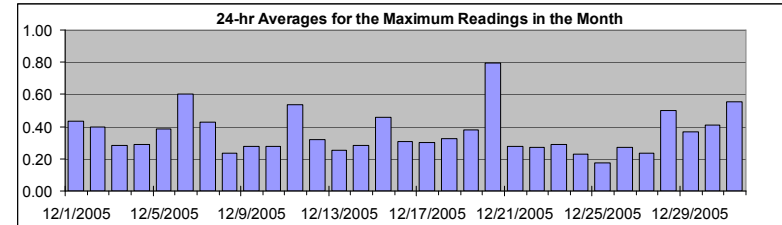
Carbon Monoxide (CO)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Value:	5.0	ppm	1-Dec	7:00 8:00
Maximum 24-hr Value:	0.8	ppm	20-Dec	

AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.7	0.8	0.4	0.3	0.2	0.1	0.1	0.4 ppm	0.3 ppm



Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	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-Dec-05	0.0	0.0	0.0	0.1	0.0	0.1	0.4	5.0	0.9	0.5	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.43	4.96
2-Dec-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.2	0.2	0.2	0.2	0.4	2.1	0.6	0.2	0.6	0.4	0.5	0.6	0.4	1.0	0.6	0.40	2.12
3-Dec-05	0.2	0.2	0.1	0.1	0.2	0.2	0.4	0.5	A	0.4	0.3	0.3	0.4	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.28	0.52
4-Dec-05	0.3	0.3	0.2	0.3	0.2	0.2	0.2	A	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	1.0	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.29	1.00
5-Dec-05	0.2	0.5	0.4	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.6	0.5	0.5	2.1	0.6	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.1	0.39	2.09	
6-Dec-05	0.1	0.2	0.2	0.2	0.2	A	0.5	0.8	1.0	0.4	0.2	0.4	0.2	0.3	0.2	0.4	2.8	0.7	0.6	0.7	0.7	2.2	0.4	0.2	0.60	2.75	
7-Dec-05	0.4	0.3	0.2	0.2	A	0.3	0.4	0.8	1.3	0.7	0.7	0.6	0.7	0.4	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.43	1.35	
8-Dec-05	0.2	0.1	0.1	A	0.1	0.2	0.2	0.4	0.3	0.2	0.3	0.6	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.24	0.58	
9-Dec-05	0.1	0.2	A	0.2	0.2	0.2	0.3	1.0	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.28	1.02	
10-Dec-05	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.28	0.43	
11-Dec-05	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	3.3	0.2	0.3	0.5	0.5	0.6	0.7	0.8	0.9	0.5	0.4	0.4	0.2	A	0.53	3.26	
12-Dec-05	0.2	0.3	0.2	0.8	0.2	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3	A	0.3	0.32	0.77	
13-Dec-05	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.2	0.3	0.4	0.3	0.2	0.5	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.25	0.46	
14-Dec-05	0.2	0.2	A	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.2	0.5	C	C	A	0.4	0.5	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.28	0.54	
15-Dec-05	0.2	0.2	A	0.2	0.2	0.4	0.3	0.4	0.5	0.5	0.3	1.0	0.3	0.3	1.3	0.4	0.5	0.2	0.4	0.6	0.6	0.7	0.5	0.5	0.46	1.29	
16-Dec-05	0.3	A	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.3	0.3	1.0	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31	0.99	
17-Dec-05	A	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.9	1.3	A	0.30	1.31	
18-Dec-05	0.3	0.3	0.3	0.4	0.2	0.2	0.3	0.5	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.7	0.4	0.7	0.2	A	0.2	0.33	0.73	
19-Dec-05	0.1	0.2	0.2	0.2	0.2	0.5	0.2	0.4	0.4	0.3	0.3	0.2	0.3	0.4	0.2	0.2	0.5	0.3	0.6	0.9	0.7	A	0.5	0.7	0.38	0.93	
20-Dec-05	0.5	0.3	0.5	0.7	0.5	0.7	0.9	4.7	1.7	1.3	1.5	0.9	0.8	0.6	0.3	0.5	0.4	0.3	0.2	0.4	A	0.2	0.2	0.2	0.80	4.71	
21-Dec-05	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.5	0.6	0.2	0.2	0.4	0.4	0.3	0.2	0.3	0.3	0.3	0.4	A	0.3	0.3	0.2	0.2	0.28	0.55	
22-Dec-05	0.3	0.2	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.27	0.39	
23-Dec-05	0.2	0.2	A	0.1	0.2	0.2	0.3	0.2	0.3	0.6	0.3	0.6	0.3	0.5	0.6	0.3	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.29	0.57	
24-Dec-05	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.35	
25-Dec-05	A	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.17	0.27	
26-Dec-05	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.6	0.2	0.3	0.3	0.5	0.6	0.4	0.4	0.3	0.3	A	0.3	0.27	0.59	
27-Dec-05	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.23	0.29	
28-Dec-05	0.4	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.7	0.3	0.3	0.4	0.2	0.2	0.8	0.5	1.2	1.1	0.9	0.7	A	0.8	0.6	0.6	0.50	1.19	
29-Dec-05	0.3	0.2	0.5	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.6	0.3	0.3	0.4	0.5	A	0.6	0.4	0.3	0.4	0.37	0.63	
30-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.7	0.6	0.9	0.8	0.7	0.3	0.7	0.3	0.3	A	0.3	0.2	0.3	0.5	0.4	0.41	0.93	
31-Dec-05	0.2	0.3	0.3	0.2	0.4	0.2	0.2	0.5	0.6	1.2	0.6	0.3	0.2	0.3	0.8	0.4	0.7	A	1.0	1.2	0.8	1.0	0.7	0.6	0.55	1.19	
Hourly Avg	0.23	0.21	0.22	0.22	0.20	0.25	0.30	0.69	0.47	0.51	0.34	0.40	0.34	0.32	0.50	0.35	0.48	0.38	0.38	0.39	0.34	0.39	0.35	0.29			
Hourly Max	0.52	0.51	0.47	0.77	0.54	0.72	0.90	4.96	1.71	3.26	1.46	0.96	0.83	0.72	2.12	0.70	2.75	1.05	0.95	1.18	0.80	2.19	1.31	0.71			

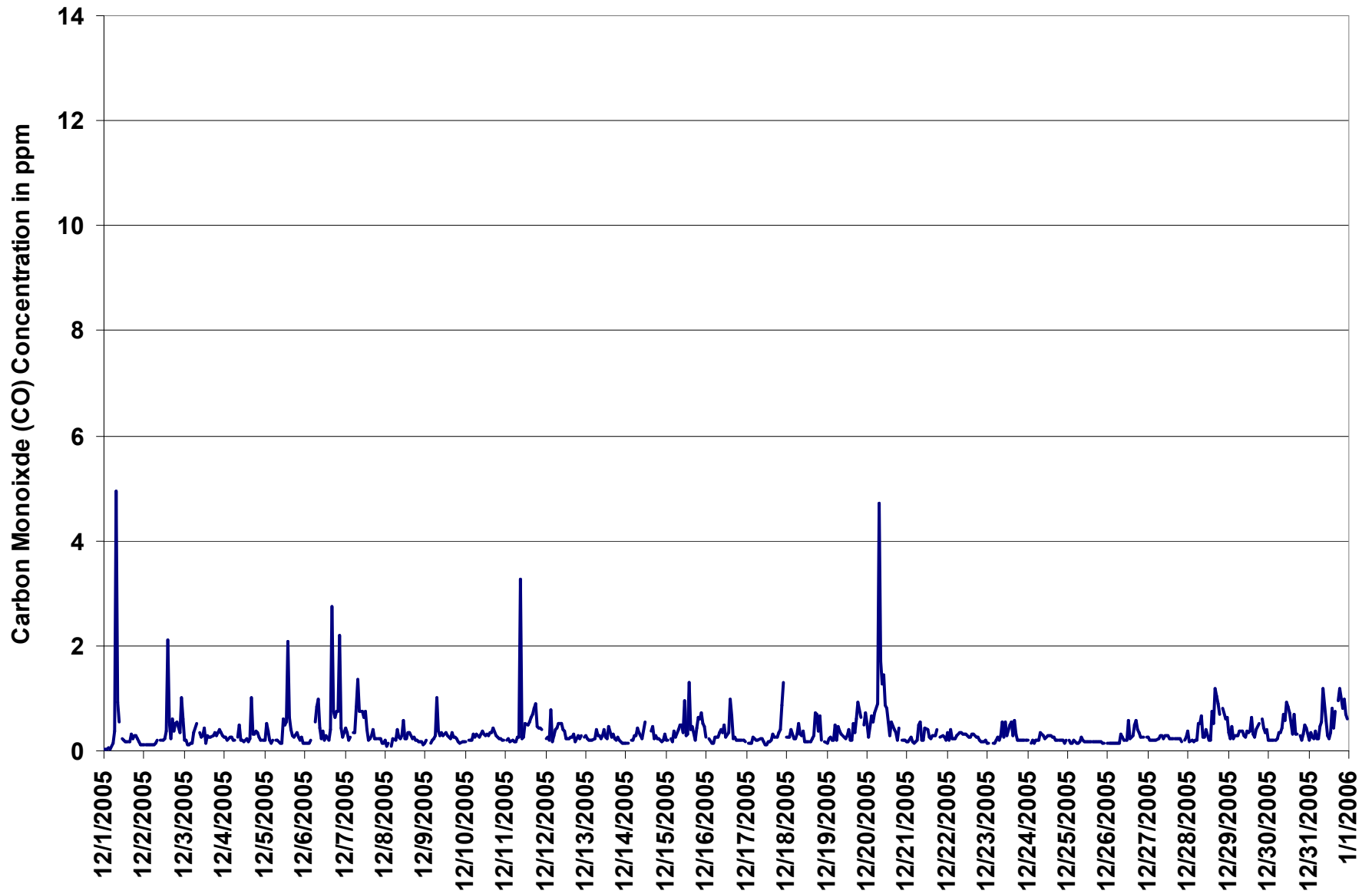
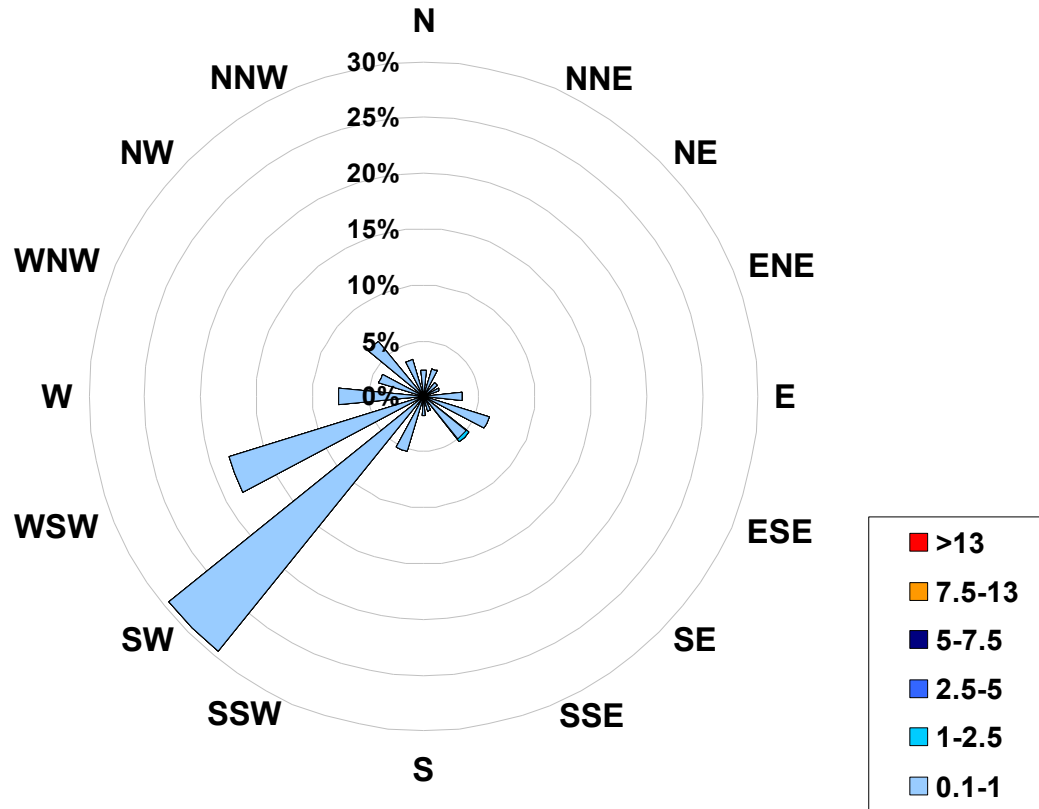


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located at the Crescent Heights Site for December 2005



Calms: 0%

Frequency Distribution of CO in ppm			
Range			Frequency (hrs)
0.1	<	1	707
1	to	2.5	2
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			709



PAS - Crescent Heights Carbon Monoxide Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

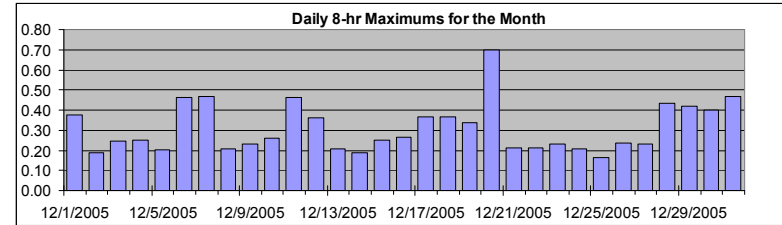
EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

Monitoring Dates: December 1, 2005 to January 1, 2006

Objective Limit: Alberta Environment: 8-hr 5 ppm
 Summary

Number of 8-hr Exceedances:	0					
Maximum 8-hr Average:	0.7	ppm	20-Dec	12:00	13:00	



Percentile	99	95	75	50	25	5	1
	0.5	0.4	0.2	0.2	0.2	0.1	0.1

Status Flag Characters

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

Day	Mountain Standard Time																							Daily Maximum	
Hour Start	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-Dec-05	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.38
2-Dec-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
3-Dec-05	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
4-Dec-05	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
5-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
6-Dec-05	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.46
7-Dec-05	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.47
8-Dec-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
9-Dec-05	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
10-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.26
11-Dec-05	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.46
12-Dec-05	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.36
13-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
14-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.19
15-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
16-Dec-05	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
17-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.36
18-Dec-05	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.37
19-Dec-05	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.34
20-Dec-05	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.70
21-Dec-05	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
22-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
23-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
24-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
25-Dec-05	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17
26-Dec-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
27-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
28-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.43
29-Dec-05	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.42
30-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.40
31-Dec-05	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.47

Hourly Max	0.44	0.40	0.39	0.36	0.34	0.33	0.35	0.40	0.45	0.52	0.62	0.67	0.70	0.69	0.67	0.59	0.53	0.47	0.43	0.46	0.46	0.45	0.46	0.47
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PAS - Crescent Heights Total Hydrocarbons Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

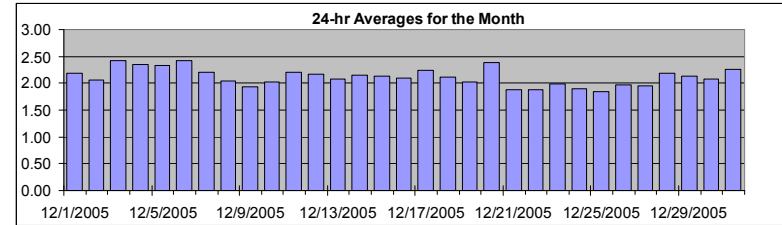
HOURLY AVERAGE TABLE

Total Hydrocarbons (THC)

Monitoring Dates: December 1, 2005 to January 1, 2006

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

Maximum 1-hr Average:	3.1	ppm	20-Dec	4:00 5:00
Maximum 24-hr Value:	2.4	ppm	6-Dec	



AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.9	2.6	2.2	2.1	1.9	1.9	1.8	2.1 ppm	2.1 ppm

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-05	2.1	2.1	2.2	2.1	2.1	2.3	2.3	2.3	2.4	2.4	A	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.3	2.1	2.1	2.0	2.1	2.1	2.1	2.18	2.41
2-Dec-05	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.06	2.24
3-Dec-05	2.1	2.2	2.2	2.2	2.5	2.4	2.4	2.4	A	2.5	2.6	2.5	2.4	2.4	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.6	2.5	2.42	2.59	
4-Dec-05	2.6	2.5	2.5	2.5	2.5	2.4	2.3	A	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.5	2.5	2.6	2.35	2.56	
5-Dec-05	2.9	2.8	2.5	2.7	2.9	2.5	A	2.2	2.3	2.3	2.3	2.2	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.3	2.2	2.2	2.2	2.42	2.79	
6-Dec-05	2.3	2.8	2.3	2.3	2.3	A	2.4	2.6	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.6	2.6	2.5	2.4	2.20	2.69	
7-Dec-05	2.4	2.4	2.3	2.2	A	2.4	2.4	2.5	2.7	2.5	2.6	2.6	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	2.05	2.19	
8-Dec-05	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.93	2.02
9-Dec-05	2.0	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.03	2.12
10-Dec-05	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.21	2.38
11-Dec-05	A	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.3	2.2	2.2	2.2	2.3	A	2.17	2.77	
12-Dec-05	2.2	2.2	2.2	2.2	2.5	2.8	2.4	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	A	2.7	2.08	2.49	
13-Dec-05	2.5	2.3	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.15	2.42
14-Dec-05	2.0	2.0	A	2.1	2.0	2.1	2.1	2.1	2.1	2.3	C	C	A	2.4	2.2	2.1	2.2	2.1	2.2	2.1	2.2	2.2	2.3	2.3	2.15	2.42	
15-Dec-05	2.3	2.2	A	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.3	2.2	2.3	2.14	2.35	
16-Dec-05	2.2	A	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.10	2.28	
17-Dec-05	A	2.2	2.2	2.2	2.4	2.4	2.5	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.5	A	2.24	2.52	
18-Dec-05	2.3	2.3	2.4	2.3	2.3	2.2	2.3	2.6	2.4	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	1.9	1.9	A	1.9	2.12	2.60	
19-Dec-05	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.1	2.2	2.4	A	2.2	2.5	2.03	2.50	
20-Dec-05	2.4	2.4	2.7	3.0	3.1	2.7	2.7	2.8	2.9	2.9	2.9	2.7	2.5	1.9	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.39	3.05	
21-Dec-05	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.89	1.97	
22-Dec-05	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.94	
23-Dec-05	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.98	2.07	
24-Dec-05	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.90	1.95	
25-Dec-05	A	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	A	1.85	1.91	
26-Dec-05	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	A	2.1	1.97	2.09	
27-Dec-05	2.0	1.9	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.95	2.00	
28-Dec-05	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.3	2.4	2.3	A	2.8	2.9	2.8	2.18	2.90		
29-Dec-05	2.5	2.0	2.1	2.0	2.0	2.2	2.2	2.4	2.0	2.0	2.0	2.1	1.9	2.0	1.9	2.0	2.1	2.0	2.1	A	2.3	2.4	2.3	2.4	2.12	2.52	
30-Dec-05	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.3	2.1	1.9	1.9	1.9	1.9	A	1.9	1.9	2.1	2.1	2.0	2.08	2.28	
31-Dec-05	2.0	2.1	2.1	1.9	2.2	2.2	2.3	2.4	2.5	2.5	2.2	2.0	2.0	2.0	2.0	2.0	2.3	A	2.4	2.5	2.3	2.6	2.6	2.7	2.26	2.71	
Hourly Avg	2.16	2.14	2.13	2.12	2.16	2.14	2.14	2.16	2.16	2.17	2.12	2.09	2.07	2.04	2.03	2.04	2.06	2.06	2.10	2.11	2.12	2.17	2.19	2.18			
Hourly Max	2.87	2.79	2.73	3.01	3.05	2.77	2.66	2.83	2.89	2.91	2.91	2.68	2.52	2.42	2.33	2.39	2.42	2.44	2.52	2.52	2.58	2.82	2.90	2.80			

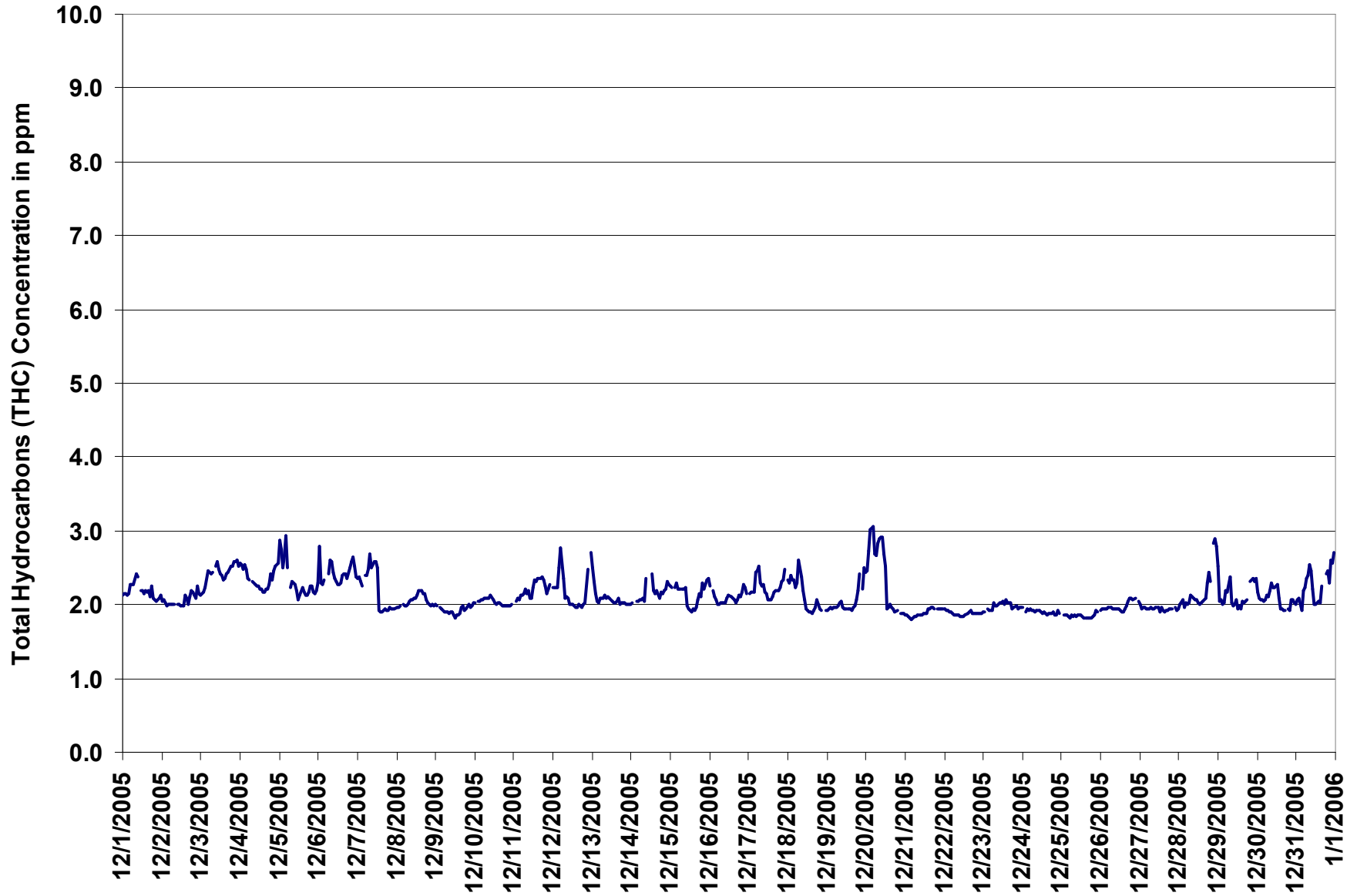


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

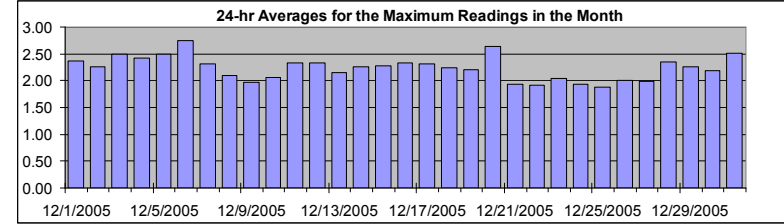
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Hydrocarbons (THC)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Value:	5.3	ppm	6-Dec	1:00 2:00
Maximum 24-hr Value:	2.8	ppm	6-Dec	



AIC Time:	33 hrs	Operational Time:	709 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.5	2.9	2.4	2.1	2.0	1.9	1.8	2.2 ppm	2.1 ppm

Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-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-Dec-05	2.2	2.2	2.2	2.2	2.2	2.3	2.3	3.6	3.3	2.5	A	A	2.3	2.3	2.5	2.3	2.4	2.5	2.2	2.4	2.2	2.1	2.2	2.2	2.2	2.37	3.55
2-Dec-05	2.2	2.2	2.0	2.0	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	3.1	2.4	2.0	2.6	2.4	2.8	2.4	2.2	2.5	2.5	2.5	2.25	3.08
3-Dec-05	2.2	2.2	2.2	2.4	2.5	2.5	2.5	2.5	A	2.6	2.7	2.5	2.6	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.6	2.6	2.50	2.69
4-Dec-05	2.6	2.6	2.5	2.6	2.6	2.4	2.4	A	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.6	2.3	2.3	2.6	2.5	2.6	2.6	2.6	2.6	2.43	2.63
5-Dec-05	3.2	3.1	2.6	2.9	3.2	2.8	A	2.4	2.4	2.5	2.3	2.3	2.2	2.3	2.6	2.5	2.2	2.2	2.2	2.4	2.4	2.2	2.2	2.2	2.2	2.50	3.24
6-Dec-05	3.8	5.3	2.3	2.3	2.4	A	2.6	2.8	2.8	2.5	2.4	2.4	2.3	2.4	2.3	2.7	3.5	2.5	2.5	2.7	2.7	2.9	2.6	2.6	2.6	2.75	5.28
7-Dec-05	2.6	2.5	2.4	2.3	A	2.5	2.5	2.7	2.9	2.6	2.8	2.7	2.8	2.3	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.32	2.87
8-Dec-05	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.3	2.2	2.2	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.10	2.27
9-Dec-05	2.0	2.0	A	2.0	2.0	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.12
10-Dec-05	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.06	2.17
11-Dec-05	A	2.1	2.2	2.1	2.2	2.2	2.2	2.4	2.2	2.8	2.2	2.2	2.3	2.4	2.4	2.4	2.5	2.6	2.5	2.4	2.2	2.5	2.5	A	2.34	2.79	
12-Dec-05	2.3	2.3	2.3	2.5	3.6	3.3	2.6	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.7	A	2.8	2.33	3.57	
13-Dec-05	2.6	2.5	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.15	2.61
14-Dec-05	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.4	C	C	A	2.5	3.0	2.2	2.4	2.1	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.26	3.02
15-Dec-05	2.3	2.3	A	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.1	2.1	2.0	2.0	2.2	2.0	2.0	2.4	2.4	2.3	2.6	2.4	2.6	2.5	2.5	2.28	2.60
16-Dec-05	2.3	A	2.3	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.6	2.4	2.5	2.4	2.3	2.3	2.3	2.5	2.5	2.6	2.8	2.6	2.5	2.5	2.33	2.76
17-Dec-05	A	2.2	2.2	2.2	2.6	2.5	2.6	2.4	2.4	2.4	2.3	2.3	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.6	A	2.32	2.61	
18-Dec-05	2.7	2.4	2.5	2.5	2.5	2.3	2.4	2.8	2.6	2.3	2.2	2.0	2.0	1.9	1.9	1.9	2.0	2.1	2.2	2.1	2.0	2.0	A	2.0	2.24	2.82	
19-Dec-05	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.2	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.2	2.5	2.6	A	2.4	4.2	2.20	4.25	
20-Dec-05	2.9	2.7	3.2	3.3	3.6	3.0	3.1	3.9	3.0	3.1	3.2	2.8	2.7	2.1	2.0	2.1	2.1	2.0	1.9	2.0	A	1.9	2.0	1.9	1.9	2.63	3.95
21-Dec-05	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	2.0	1.9	1.9	1.9	2.0	1.9	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.93	2.07
22-Dec-05	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.92	2.03
23-Dec-05	1.9	1.9	A	2.0	1.9	2.0	2.2	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.05	2.41
24-Dec-05	2.0	A	1.9	2.0	1.9	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.94	2.07
25-Dec-05	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.9	A	1.88	1.96	
26-Dec-05	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.1	2.2	2.1	2.1	2.1	A	2.1	2.01	2.18	
27-Dec-05	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.99	2.13	
28-Dec-05	2.0	2.1	3.0	2.0	2.1	2.0	2.1	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.3	2.5	2.9	2.5	A	3.1	3.1	3.2	2.36	3.18	
29-Dec-05	2.7	2.3	2.2	2.1	2.3	2.3	2.4	2.5	2.2	2.0	2.1	2.5	2.0	2.0	2.1	2.1	2.1	2.2	A	A	2.4	2.4	2.3	2.5	2.26	2.72	
30-Dec-05	2.3	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.5	2.3	2.3	2.5	2.3	2.0	2.1	2.0	2.0	A	2.0	1.9	2.2	2.3	2.2	2.2	2.18	2.52
31-Dec-05	2.0	2.2	2.4	2.0	2.5	2.5	2.8	2.8	2.9	2.9	2.7	2.1	2.1	2.1	2.2	2.1	2.7	A	2.7	2.8	2.5	3.0	3.1	2.9	2.51	3.08	
Hourly Avg	2.32	2.32	2.24	2.20	2.29	2.24	2.24	2.33	2.28	2.28	2.21	2.19	2.15	2.13	2.19	2.14	2.20	2.17	2.20	2.24	2.22	2.29	2.31	2.35			
Hourly Max	3.84	5.28	3.15	3.35	3.57	3.28	3.06	3.95	3.28	3.14	3.17	2.85	2.81	2.54	3.08	2.68	3.53	2.60	2.87	2.82	2.66	3.07	3.08	4.25			

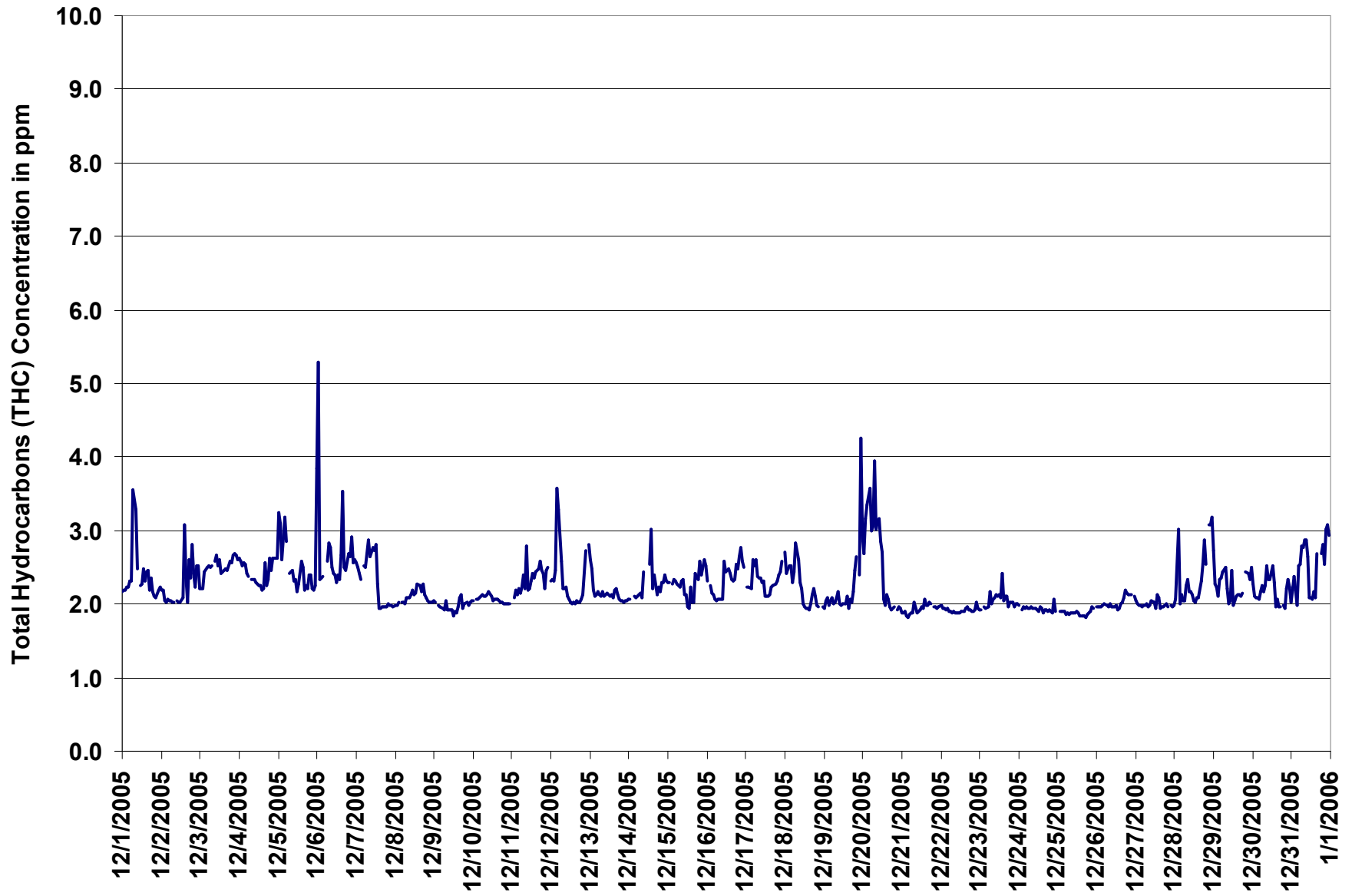
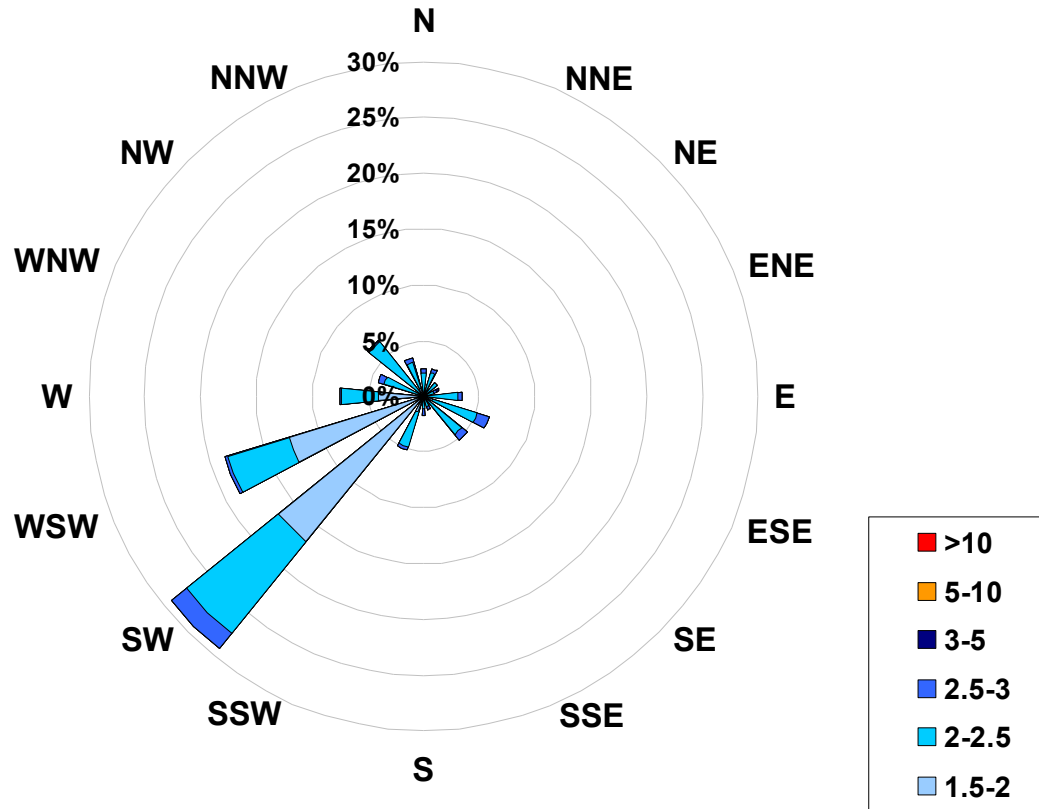


Figure 10. PAS - Cresent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)
Located at the Crescent Heights Site for December 2005**



Calms: 0%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	267
2	to	2.5	390
2.5	to	3	50
3	to	5	2
5	to	10	0
	>	10	0
Total Non-Zero Values			709



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

Station: Cresent Heights
 Station Owner: PAS

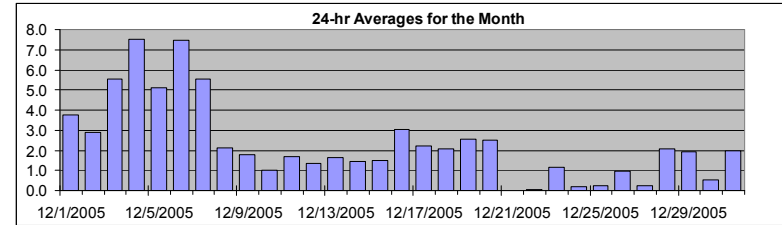
HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2005 to January 1, 2006

Draft Objective Limit: Alberta Environment: 1-hr - $\mu\text{g}/\text{m}^3$ 24-hr 30 $\mu\text{g}/\text{m}^3$
 Summary

Number of 24-hr Exceedances (draft):	0		
Maximum 1-hr Average:	19.2 $\mu\text{g}/\text{m}^3$	7-Dec	0:00 1:00
Maximum 24-hr Value:	7.5 $\mu\text{g}/\text{m}^3$	4-Dec	



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 / Median	Geomean	
	12.0	8.6	3.3	1.3	0.0	0.0	0.0	2.3	2 $\mu\text{g}/\text{m}^3$	1.4 $\mu\text{g}/\text{m}^3$

Status Flag Characters

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

Day	Mountain Standard Time																								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-Dec-05	3	4	2	1	3	3	3	5	6	7	6	4	6	4	3	2	3	4	4	4	4	4	3	4	3	3.8	7.0
2-Dec-05	1	2	4	2	3	2	2	2	3	4	4	3	3	3	3	2	3	4	4	4	4	3	4	3	2.9	4.2	
3-Dec-05	2	2	3	3	2	4	4	4	6	7	6	4	3	4	3	5	5	7	9	9	10	11	11	9	5.5	10.8	
4-Dec-05	8	8	7	10	10	8	7	7	9	8	8	6	5	4	5	5	6	8	9	8	7	8	9	11	7.5	10.6	
5-Dec-05	9	9	12	10	12	8	2	1	3	3	3	7	5	3	5	5	3	2	2	4	6	4	3	2	5.1	12.2	
6-Dec-05	2	4	4	4	5	5	10	10	14	12	7	6	8	7	7	7	10	9	8	9	12	9	6	3	7.5	14.5	
7-Dec-05	19	11	5	6	6	14	9	12	11	13	11	7	5	0	0	0	0	0	1	1	1	0	0	0	5.5	19.2	
8-Dec-05	0	1	1	1	2	2	3	4	3	6	5	10	3	3	2	2	1	0	1	0	0	0	0	0	2.1	10.1	
9-Dec-05	0	0	0	0	1	0	2	3	4	1	2	2	3	4	4	4	3	2	2	2	0	1	1	1	1.8	4.3	
10-Dec-05	0	1	1	0	2	1	2	1	1	1	1	0	0	2	2	2	1	0	1	0	0	1	1	2	1.0	2.3	
11-Dec-05	1	3	1	1	1	1	4	3	3	4	2	1	3	6	1	3	0	1	0	0	0	0	0	0	1.7	6.3	
12-Dec-05	0	1	1	0	0	2	3	1	1	1	1	0	0	0	0	1	1	0	0	0	0	2	6	11	1.3	11.3	
13-Dec-05	8	2	2	3	1	0	0	0	1	2	2	3	2	1	1	2	2	0	1	1	0	1	4	2	1.6	7.8	
14-Dec-05	1	1	1	0	2	2	4	3	3	3	1	0	1	0	2	3	2	0	0	0	0	1	2	1.4	4.3		
15-Dec-05	1	1	1	1	2	2	2	3	3	3	0	0	0	0	0	0	0	0	0	2	3	4	4	2	1.5	4.5	
16-Dec-05	2	4	5	7	6	2	4	6	5	7	7	7	3	1	0	1	1	1	1	1	1	1	1	0	3.0	7.5	
17-Dec-05	0	1	1	0	3	4	1	1	2	2	1	0	0	0	2	2	2	1	1	5	5	6	7	5	2.2	7.4	
18-Dec-05	4	4	3	7	4	2	3	2	3	7	1	0	0	0	0	1	1	4	2	1	1	0	1	0	2.1	7.3	
19-Dec-05	1	1	1	0	0	1	2	1	2	3	3	2	1	3	0	1	2	1	3	5	5	5	4	14	2.5	13.7	
20-Dec-05	5	3	3	3	3	2	1	2	6	6	9	7	8	1	0	0	0	0	0	0	0	1	0	0	2.5	9.4	
21-Dec-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4	
22-Dec-05	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7	
23-Dec-05	0	1	1	0	1	1	2	1	3	3	4	2	1	1	2	2	2	0	0	1	0	0	0	0	1.1	4.5	
24-Dec-05	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0.2	1.8	
25-Dec-05	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	2	0	0	0	0.2	1.6	
26-Dec-05	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	3	2	2	3	3	3	1	1	1.0	3.0	
27-Dec-05	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0.2	1.1	
28-Dec-05	0	1	2	1	0	0	0	2	3	0	0	0	0	0	0	2	2	6	8	2	3	8	4	3	2.1	8.5	
29-Dec-05	2	2	2	2	1	1	1	0	1	1	1	1	1	2	2	5	4	4	3	3	2	1	2	1	1.9	5.0	
30-Dec-05	0	0	0	0	0	0	0	1	1	4	1	3	3	0	0	0	0	0	0	0	0	0	0	1	0.6	3.7	
31-Dec-05	0	1	0	0	0	0	0	0	0	5	3	1	1	1	3	3	1	2	5	7	2	2	4	4	2.0	7.4	
Hourly Avg	2.3	2.1	2.1	2.1	2.3	2.2	2.3	2.5	3.1	3.7	3.0	2.5	2.2	1.6	1.7	2.0	2.0	1.9	2.2	2.3	2.3	2.4	2.5	2.6			
Hourly Max	19.2	10.8	12.2	9.6	11.7	13.8	9.9	11.7	14.5	12.7	11.1	10.1	8.1	7.2	7.0	6.7	10.0	9.4	9.4	9.5	12.1	10.8	10.6	13.7			

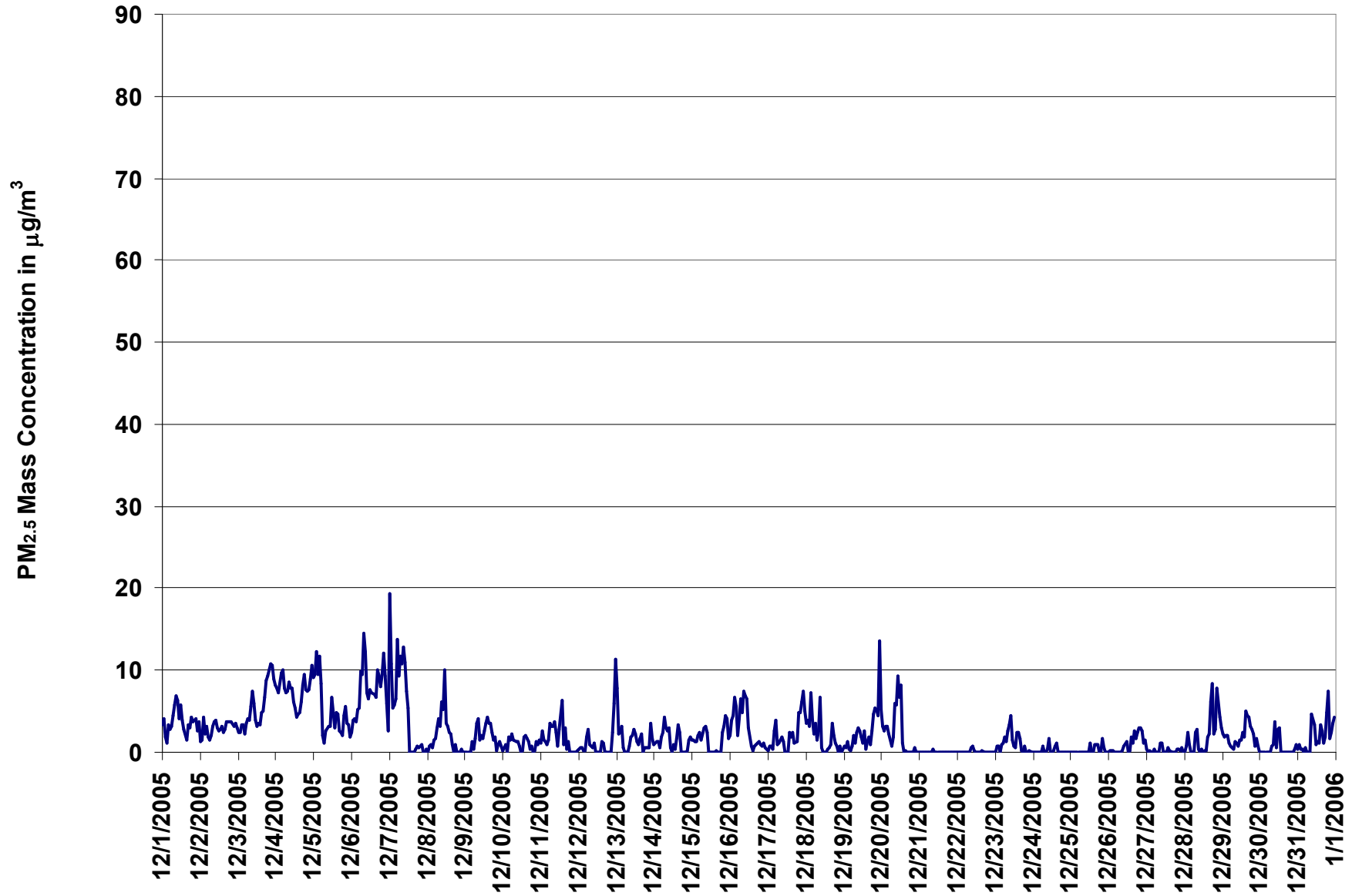


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

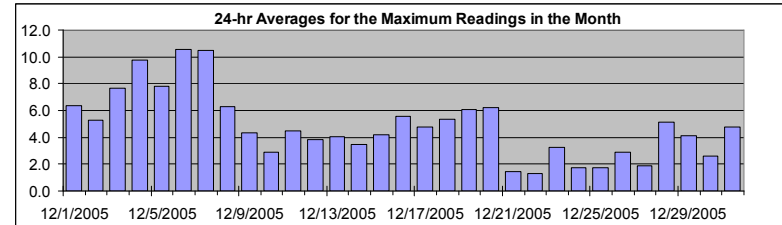
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Average:	41.0	µg/m ³	8-Dec	11:00 12:00
Maximum 24-hr Value:	10.6	µg/m ³	6-Dec	



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 / Median	Geomean
	22.1	11.9	6.4	3.7	2.0	0.5	0.0	4.9	5 µg/m ³
									4.2 µg/m ³

Status Flag Characters

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

Day Mountain Standard Time

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	24:00	24-hour Average	Daily Maximum
1-Dec-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	6.4	10.0	
2-Dec-05		5	6	5	3	5	5	5	7	7	10	8	6	8	7	8	5	4	6	7	7	7	7	9	7	5	5.3	9.5
3-Dec-05		5	5	7	5	5	5	4	5	6	5	7	5	5	4	9	4	4	5	5	5	6	5	5	5	7.6	13.4	
4-Dec-05		4	5	5	5	3	5	6	5	9	11	10	6	5	7	5	7	7	8	10	11	12	12	13	11	9.8	12.1	
5-Dec-05		11	12	14	12	16	12	8	4	6	7	6	10	9	5	7	7	6	4	3	6	10	5	5	4	7.8	15.7	
6-Dec-05		5	5	6	6	7	8	24	12	18	15	10	9	9	10	10	9	12	11	10	14	17	11	10	5	10.6	24.3	
7-Dec-05		37	25	8	7	8	27	15	28	13	16	21	17	9	1	0	1	1	2	2	2	2	1	2	3	10.5	37.0	
8-Dec-05		3	2	3	3	6	4	6	13	5	8	8	41	7	6	4	5	3	2	11	3	0	2	4	2	6.3	41.0	
9-Dec-05		2	1	1	2	5	3	3	7	9	4	6	5	6	7	7	5	6	4	5	5	3	3	3	2	4.4	9.5	
10-Dec-05		2	2	2	1	3	3	6	4	3	4	3	2	2	3	4	3	3	2	2	1	3	4	2	4	2.9	6.1	
11-Dec-05		3	4	5	3	2	3	15	10	7	5	4	5	2	8	8	3	5	3	4	2	1	2	2	2	4.5	14.7	
12-Dec-05		3	3	3	1	2	5	11	6	2	3	9	0	1	2	2	3	2	2	2	1	0	6	9	13	3.9	13.3	
13-Dec-05		12	5	5	5	3	3	1	1	2	4	3	5	4	3	3	3	5	2	3	3	3	2	11	5	4.0	11.9	
14-Dec-05		4	5	3	3	3	5	6	6	5	5	2	2	3	6	4	5	6	0	1	2	0	2	3	3	3.5	6.3	
15-Dec-05		3	2	3	3	3	5	2	6	5	5	4	1	1	2	2	3	2	1	2	8	11	11	8	7	4.2	11.4	
16-Dec-05		5	10	6	8	8	5	7	11	9	11	9	10	6	3	3	2	2	2	3	2	3	3	2	2	5.6	11.1	
17-Dec-05		2	3	3	2	7	10	3	3	5	4	3	2	2	3	4	3	5	3	3	7	11	10	9	8	4.8	10.6	
18-Dec-05		6	8	8	15	13	7	9	3	6	9	10	1	1	1	2	3	2	7	6	4	2	1	2	1	5.3	14.8	
19-Dec-05		2	3	3	2	2	2	7	3	4	5	5	4	3	6	3	4	5	3	6	10	10	11	8	35	6.1	35.1	
20-Dec-05		23	5	8	5	10	7	5	6	8	9	13	10	14	11	0	4	1	1	1	0	0	2	2	1	6.2	22.7	
21-Dec-05		2	2	4	1	1	0	2	0	1	2	2	2	1	1	1	3	3	1	0	1	1	0	2	2	1.4	3.9	
22-Dec-05		0	0	1	0	1	0	0	2	1	2	3	1	2	2	3	2	3	1	0	1	1	1	1	2	1.3	3.1	
23-Dec-05		2	2	3	1	2	2	4	4	4	5	8	5	3	2	5	4	5	5	1	3	2	1	3	2	3.3	8.0	
24-Dec-05		2	2	1	1	1	4	5	2	2	3	4	2	0	2	3	3	2	2	1	1	0	1	0	0	1.8	4.6	
25-Dec-05		0	1	1	0	1	0	1	0	0	2	0	2	3	2	1	5	5	6	0	1	4	4	1	1	1.7	5.9	
26-Dec-05		2	2	2	2	1	0	2	1	2	2	3	3	2	2	7	3	4	4	4	5	6	5	3	3	2.9	6.9	
27-Dec-05		2	2	1	1	2	2	1	2	1	3	2	1	2	2	4	4	2	1	1	1	2	2	3	1	1.9	4.2	
28-Dec-05		2	3	4	4	2	2	0	6	5	3	3	3	1	2	3	5	5	10	14	5	7	19	10	5	5.1	18.7	
29-Dec-05		3	5	4	4	2	3	2	3	3	2	3	4	3	4	3	7	7	9	5	5	5	2	4	4	4.1	8.7	
30-Dec-05		0	0	0	0	0	0	1	14	4	6	4	6	6	3	2	2	2	1	2	0	0	1	3	3	2.6	13.7	
31-Dec-05		3	4	4	3	2	2	0	2	2	7	8	3	4	3	6	5	3	4	10	13	7	4	5	10	4.7	12.5	
Hourly Avg		5.3	4.6	4.3	3.9	4.5	4.8	5.6	6.0	5.3	6.0	6.2	5.8	4.4	4.2	4.1	4.2	4.2	4.0	4.4	4.6	4.7	4.9	5.0	5.3			
Hourly Max		37.0	25.5	14.4	14.8	15.7	26.8	24.3	27.9	18.4	16.3	21.2	41.0	14.1	11.3	10.0	9.0	11.8	11.0	14.1	14.0	17.4	18.7	13.4	35.1			

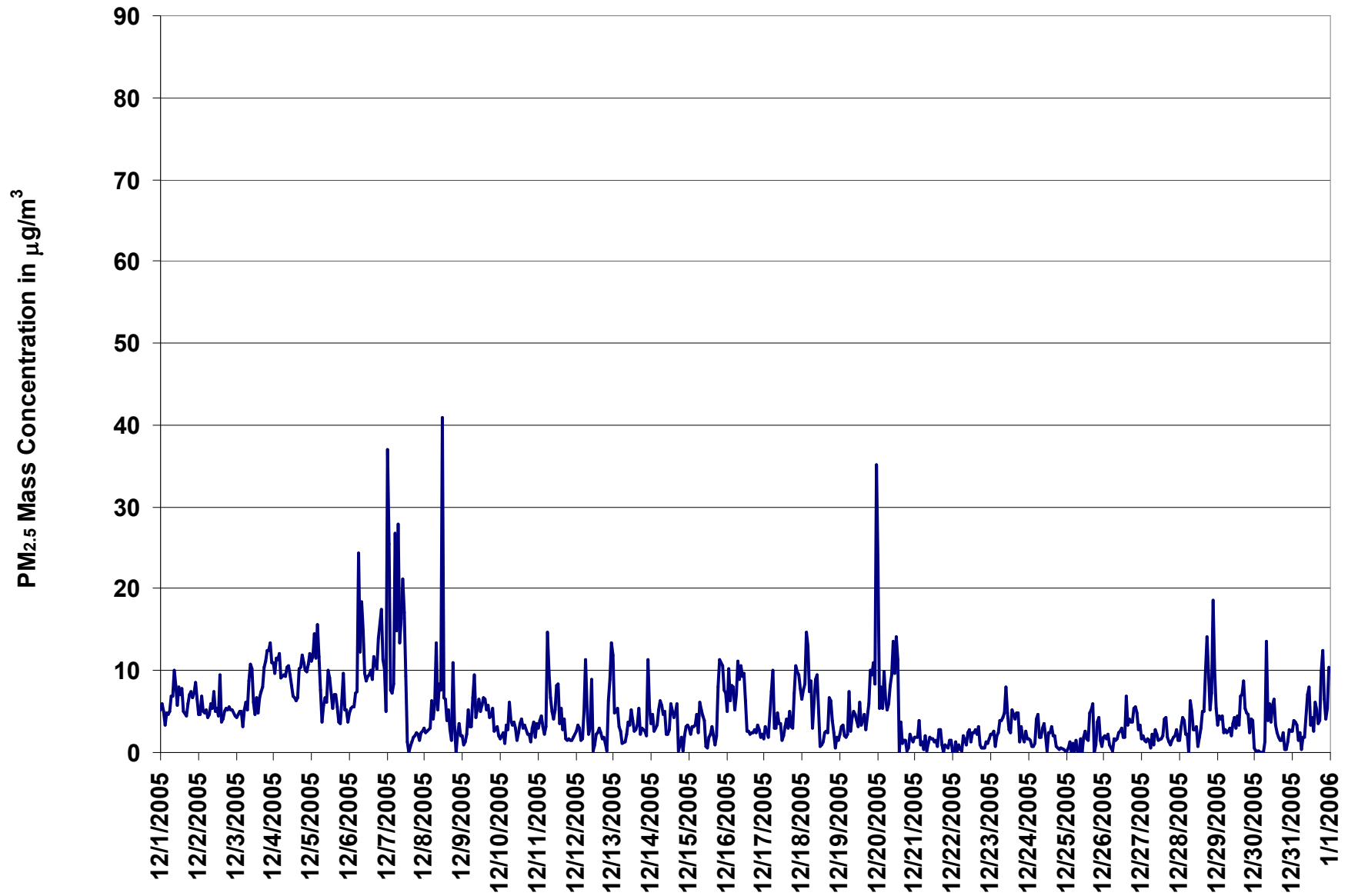
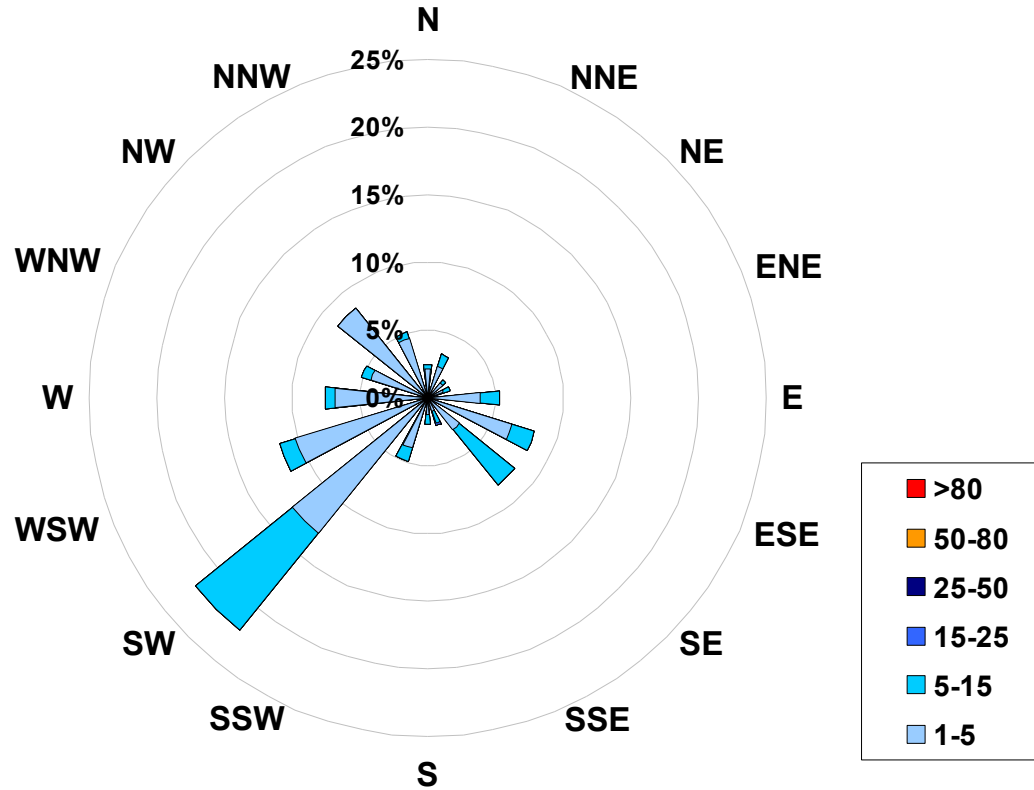


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Crescent Heights Site for December 2005



Calms:	0%
---------------	-----------

Frequency Distribution of PM _{2.5} in µg/m ³			Frequency (hrs)
Range			
1.0	<	5	638
5	to	15	105
15	to	25	1
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			744



PAS - Crescent Heights Relative Humidity Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

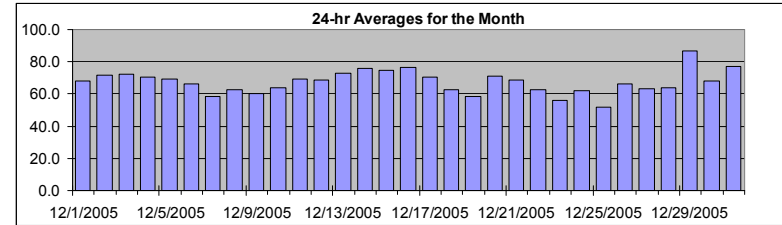
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Average:	92.1	%	29-Dec	9:00 10:00
Maximum 24-hr Value:	86.8	%	29-Dec	



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	Median
	89.2	83.5	74.1	67.9	61.6	50.9	42.2	67.5 %	67.9 %

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Dec-05	76	77	73	69	70	72	73	72	72	70	68	66	65	62	63	58	63	65	70	67	67	64	65	66	68.1	76.7	
2-Dec-05	66	65	69	70	71	70	67	65	64	66	70	67	71	71	73	75	76	77	78	78	78	78	78	78	71.6	78.0	
3-Dec-05	78	78	77	77	76	75	76	74	74	72	71	70	67	66	64	65	70	73	74	73	73	72	72	73	72.5	78.1	
4-Dec-05	73	73	72	72	72	72	72	72	71	69	67	67	65	64	64	65	68	69	73	74	73	74	76	75	70.5	75.6	
5-Dec-05	72	71	72	72	73	74	73	64	63	62	63	63	71	71	70	68	66	72	74	75	74	72	68	65	69.5	74.7	
6-Dec-05	65	65	65	65	67	69	70	69	68	66	64	62	62	60	62	63	69	71	70	71	70	69	67	66	66.5	71.4	
7-Dec-05	67	66	65	65	66	66	66	66	67	71	70	62	52	45	46	45	47	50	52	51	54	55	53	53	58.3	70.8	
8-Dec-05	51	51	53	53	53	55	57	61	66	67	67	67	65	65	65	68	72	73	74	71	64	64	62	60	62.7	74.0	
9-Dec-05	58	58	57	58	63	68	67	64	62	61	57	57	57	53	58	59	57	57	59	59	70	65	64	63	60.4	69.8	
10-Dec-05	64	62	62	63	64	65	66	67	67	66	66	65	64	65	66	67	65	63	66	63	60	58	57	60	63.8	66.7	
11-Dec-05	62	64	67	69	75	75	74	77	77	74	63	54	54	56	56	57	63	70	74	77	78	81	82	84	69.2	83.9	
12-Dec-05	84	83	82	80	77	76	76	68	68	65	61	58	56	52	49	52	57	62	64	66	69	78	80	87	68.6	87.3	
13-Dec-05	88	77	75	85	88	81	74	70	69	68	67	71	74	73	67	67	67	66	67	68	66	71	83		72.9	88.1	
14-Dec-05	83	86	84	82	82	81	83	85	80	78	75	71	69	71	72	73	74	72	71	68	66	67	71	74	75.8	85.9	
15-Dec-05	72	73	74	75	75	74	74	73	73	73	71	71	70	71	72	72	73	75	78	80	82	80	79	76	74.5	81.7	
16-Dec-05	76	76	76	77	78	77	77	77	76	76	76	77	78	78	78	77	77	77	77	76	76	76	75	75	76.7	78.0	
17-Dec-05	74	74	74	74	73	73	74	74	74	73	69	67	63	59	58	63	69	73	71	71	71	72	74	73	70.5	74.5	
18-Dec-05	72	71	71	72	73	74	73	74	72	64	59	55	55	53	51	52	56	58	65	62	59	56	55	56	62.8	73.7	
19-Dec-05	58	59	60	59	58	57	58	60	59	53	49	48	51	51	50	52	57	57	62	66	72	71	72	72	58.7	72.0	
20-Dec-05	70	69	70	72	75	76	77	77	77	77	71	65	62	62	62	64	67	70	72	74	75	76	75	72	70.9	77.4	
21-Dec-05	73	73	69	61	62	67	69	66	68	67	64	62	60	58	62	65	68	70	73	76	78	79	79	76	68.6	79.4	
22-Dec-05	77	76	77	74	70	69	72	71	72	70	67	56	50	47	42	44	49	51	55	60	64	63	62	64	62.6	77.3	
23-Dec-05	65	65	63	64	58	55	59	63	57	53	52	50	48	48	47	48	48	53	51	55	59	59	60	63	55.9	64.7	
24-Dec-05	63	61	62	62	63	65	66	68	69	68	64	58	59	55	53	59	64	63	62	65	61	61	60	61	62.2	68.7	
25-Dec-05	63	64	64	64	59	57	54	55	53	48	42	40	39	36	36	42	47	53	52	45	52	60	63	57	51.8	64.4	
26-Dec-05	60	66	67	69	70	72	68	69	68	70	68	62	56	49	50	52	58	65	70	72	74	77	76	75	66.0	76.6	
27-Dec-05	75	75	76	77	78	79	77	79	79	74	66	55	42	41	44	51	51	52	51	55	61	64	66	55	63.5	79.3	
28-Dec-05	52	50	53	58	60	66	65	69	71	68	62	58	53	52	54	55	61	65	71	74	75	77	79	80	63.7	80.1	
29-Dec-05	79	78	83	87	89	91	91	92	92	92	91	88	86	86	86	87	86	88	89	87	84	83	84	84	86.8	92.1	
30-Dec-05	82	79	77	77	78	77	78	76	77	69	68	72	70	61	56	54	57	58	59	62	61	64	63	61	68.2	81.8	
31-Dec-05	61	64	67	71	74	80	83	86	86	79	73	76	71	66	67	67	74	81	86	88	88	89	90	89	77.2	89.6	
Hourly Avg	69.6	69.3	69.6	70.1	70.6	71.2	71.3	71.1	70.7	68.5	65.6	63.2	61.4	59.6	59.5	61.0	63.9	66.1	68.1	68.6	69.6	69.9	70.1	70.3			
Hourly Max	87.6	85.9	84.3	86.8	88.8	90.5	91.4	91.8	92.0	92.1	91.1	87.8	86.2	86.3	86.2	86.8	86.5	87.8	89.2	87.8	88.1	88.5	89.6	89.2			

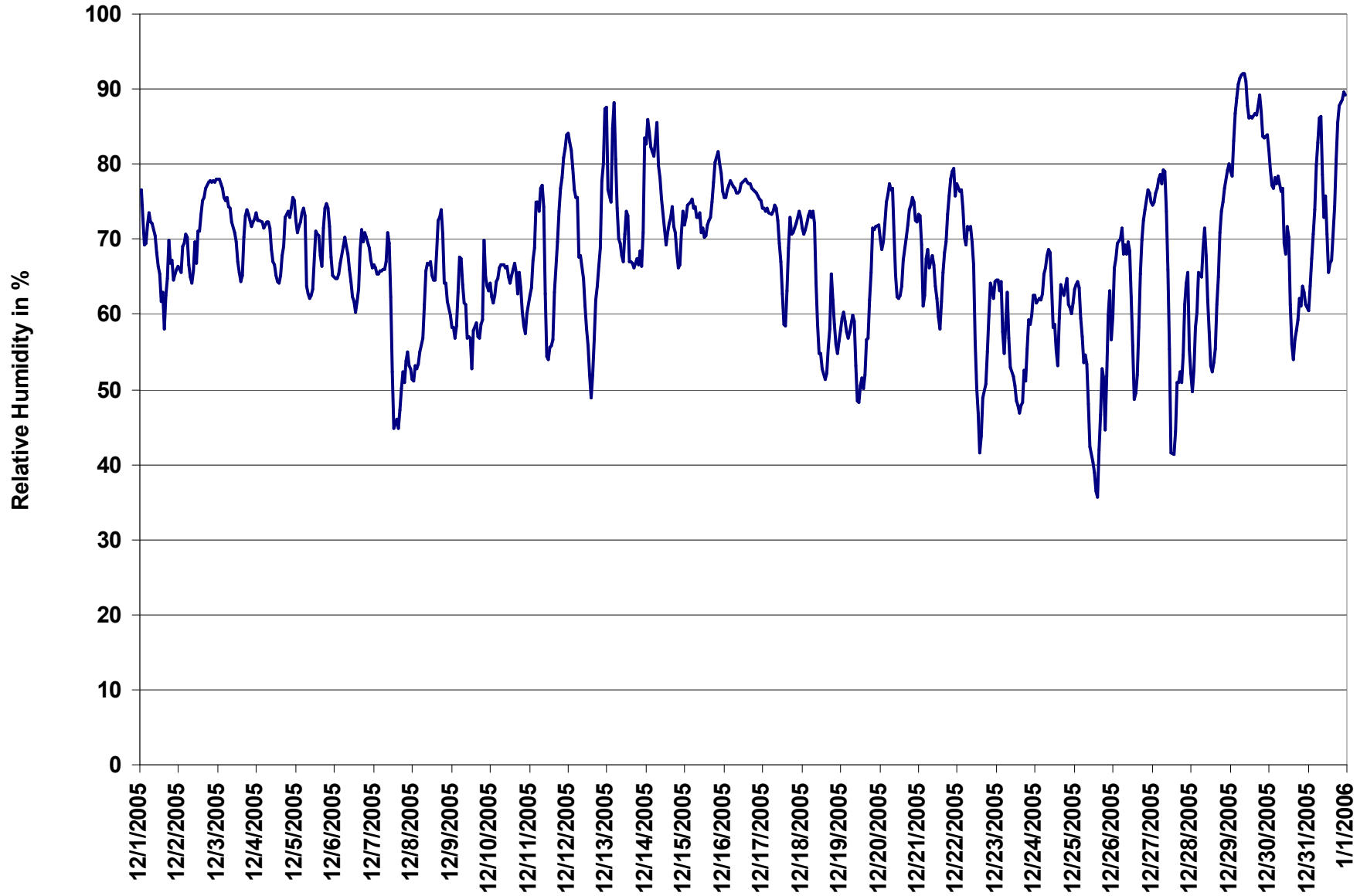


Figure 13. PAS - Cresent Heights Relative Humidity 1-hr Average Monthly Trend



PAS - Crescent Heights Temperature Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

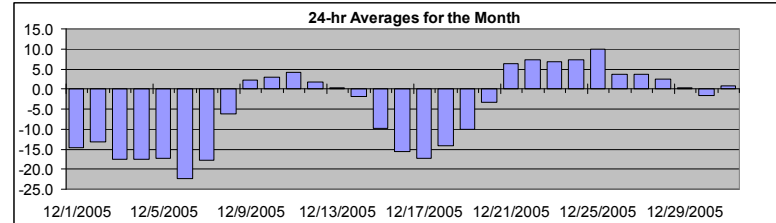
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Average:	15.6 °C	25-Dec	14:00 15:00
Maximum 24-hr Value:	10.0 °C	25-Dec	



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	Median
	-11.8	9.3	3.8	-0.9	-13.8	-20.5	-26.7	-4.5 °C	-0.9 °C

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00			
1-Dec-05	-15	-14	-14	-14	-14	-14	-15	-15	-15	-15	-14	-13	-13	-12	-12	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-15	-14.6	-12.4
2-Dec-05	-15	-14	-14	-14	-14	-14	-14	-14	-14	-13	-12	-11	-12	-11	-12	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13.1	-11.2
3-Dec-05	-13	-14	-14	-14	-16	-17	-18	-19	-19	-19	-19	-18	-17	-16	-16	-15	-16	-18	-19	-20	-21	-21	-22	-21	-20	-17.5	-13.3	
4-Dec-05	-19	-19	-19	-20	-20	-20	-19	-20	-20	-19	-18	-16	-15	-14	-14	-15	-16	-16	-16	-16	-16	-17	-19	-19	-19	-17.5	-14.0	
5-Dec-05	-21	-23	-21	-20	-19	-18	-17	-16	-17	-17	-16	-15	-14	-15	-16	-16	-17	-17	-17	-17	-16	-16	-17	-18	-18	-17.4	-14.2	
6-Dec-05	-20	-21	-22	-22	-22	-23	-23	-25	-25	-24	-22	-21	-20	-19	-19	-19	-20	-21	-22	-23	-25	-25	-26	-27	-27	-22.3	-18.6	
7-Dec-05	-27	-27	-27	-28	-27	-27	-27	-27	-26	-20	-17	-13	-11	-9	-9	-9	-11	-12	-13	-12	-12	-13	-12	-12	-12	-17.8	-8.6	
8-Dec-05	-12	-12	-12	-12	-12	-11	-10	-9	-10	-7	-6	-4	-2	-1	0	0	-2	-3	-5	-5	-4	-4	-3	-2	-2	-6.1	0.3	
9-Dec-05	-1	-1	0	0	0	-1	0	1	2	2	3	4	4	5	5	5	5	5	5	5	5	2	1	1	0	2.2	5.5	
10-Dec-05	0	0	0	0	-1	0	1	1	1	2	2	3	3	4	5	5	5	6	5	6	6	7	7	6	6	3.0	6.9	
11-Dec-05	6	6	5	4	2	2	2	1	2	3	6	9	9	9	9	9	7	5	3	2	2	0	0	-1	4.2	8.9		
12-Dec-05	-2	-2	-2	-1	-1	-1	-1	1	1	2	3	4	5	6	7	7	6	4	4	3	2	-1	-1	-2	1.7	7.0		
13-Dec-05	-2	-1	0	0	0	0	0	0	-1	-1	0	0	1	1	2	2	2	1	1	1	1	1	1	-1	0.4	2.0		
14-Dec-05	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-1	-1	-1	0	0	0	0	-1	-2	-3	-4	-5	-7	-8	-1.9	0.1		
15-Dec-05	-7	-8	-8	-9	-9	-9	-9	-8	-7	-7	-7	-8	-8	-8	-8	-9	-9	-11	-12	-13	-14	-14	-15	-17	-9.8	-6.6		
16-Dec-05	-18	-17	-17	-16	-15	-15	-16	-16	-17	-16	-15	-14	-13	-13	-13	-14	-15	-16	-16	-16	-16	-17	-17	-17	-17	-15.6	-13.0	
17-Dec-05	-17	-17	-18	-18	-19	-19	-19	-18	-18	-17	-16	-15	-14	-13	-13	-13	-15	-17	-18	-19	-20	-20	-20	-20	-20	-17.3	-12.6	
18-Dec-05	-21	-21	-22	-21	-20	-19	-18	-19	-18	-15	-11	-9	-9	-8	-8	-8	-10	-11	-13	-13	-12	-12	-11	-11	-11	-14.1	-8.2	
19-Dec-05	-11	-12	-12	-12	-12	-12	-12	-13	-13	-11	-8	-7	-6	-4	-3	-4	-6	-7	-9	-11	-13	-13	-15	-14	-14	-10.0	-3.3	
20-Dec-05	-14	-12	-12	-12	-11	-11	-11	-13	-13	-10	-6	-3	0	5	5	4	4	4	3	3	3	4	5	5	5	-3.4	5.4	
21-Dec-05	5	6	7	9	9	7	7	7	6	6	8	8	9	10	9	8	6	6	4	4	3	3	3	4	6.4	9.7		
22-Dec-05	4	4	4	5	7	7	6	6	5	6	7	10	11	12	13	12	9	9	8	7	6	6	6	6	7.4	13.4		
23-Dec-05	6	6	7	6	8	8	6	5	6	7	8	9	10	10	10	9	9	7	6	5	4	4	4	3	6.8	9.6		
24-Dec-05	3	4	4	4	4	4	4	4	4	4	6	9	9	10	12	11	10	10	10	9	11	11	11	10	7.4	11.8		
25-Dec-05	9	9	8	9	9	10	10	9	9	10	11	12	14	15	16	14	12	10	10	10	8	6	5	6	10.0	15.6		
26-Dec-05	5	3	3	2	2	2	3	2	3	3	3	6	7	9	9	7	6	4	2	2	2	1	1	1	3.6	8.8		
27-Dec-05	2	2	1	2	1	1	1	1	0	2	4	6	9	9	8	6	6	5	5	4	3	3	2	5	3.7	9.2		
28-Dec-05	5	6	5	5	4	2	1	0	-1	0	2	3	5	5	5	5	3	2	1	1	1	1	0	0	2.5	5.6		
29-Dec-05	0	1	1	1	1	1	0	0	0	1	1	2	2	2	2	1	1	0	-1	-1	-1	-3	-4	-4	0.2	2.2		
30-Dec-05	-4	-4	-5	-5	-5	-6	-6	-6	-6	-3	-2	-2	0	3	3	3	2	1	0	0	0	0	1	1	-1.7	3.0		
31-Dec-05	2	2	1	2	1	0	-1	-2	-3	0	2	2	4	6	5	5	3	2	0	-1	-2	-3	-4	-4	0.7	5.7		
Hourly Avg	-6.1	-6.2	-6.2	-6.1	-6.2	-6.3	-6.3	-6.6	-6.6	-5.4	-3.9	-2.6	-1.6	-0.7	-0.7	-1.2	-2.2	-3.2	-4.1	-4.5	-4.9	-5.3	-5.6	-5.7				
Hourly Max	9.0	8.7	8.5	8.8	9.5	9.8	10.3	9.3	8.9	9.6	10.9	11.9	13.7	15.1	15.6	13.9	12.1	10.4	10.2	9.9	10.6	10.7	10.7	9.9				

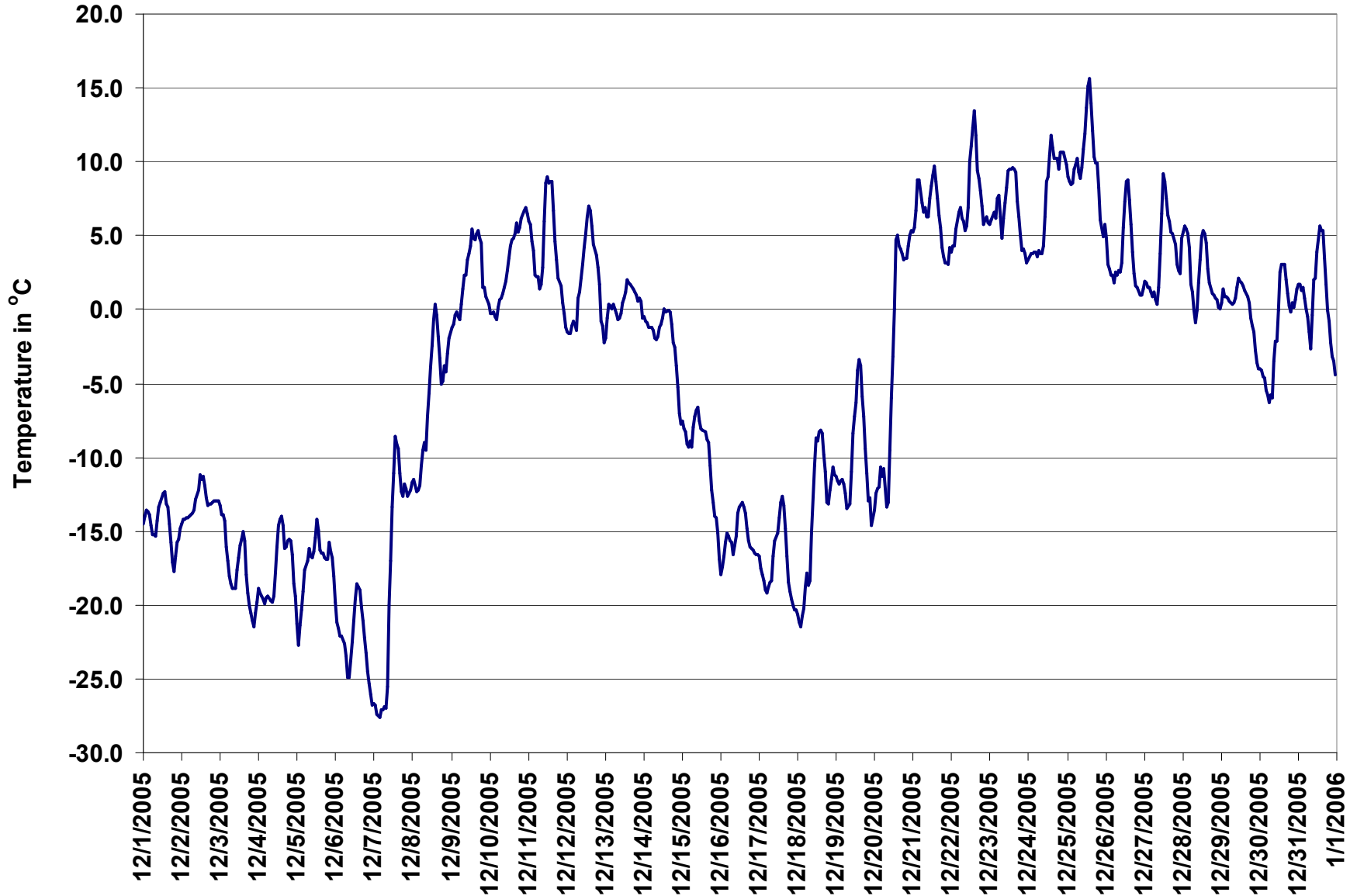


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend

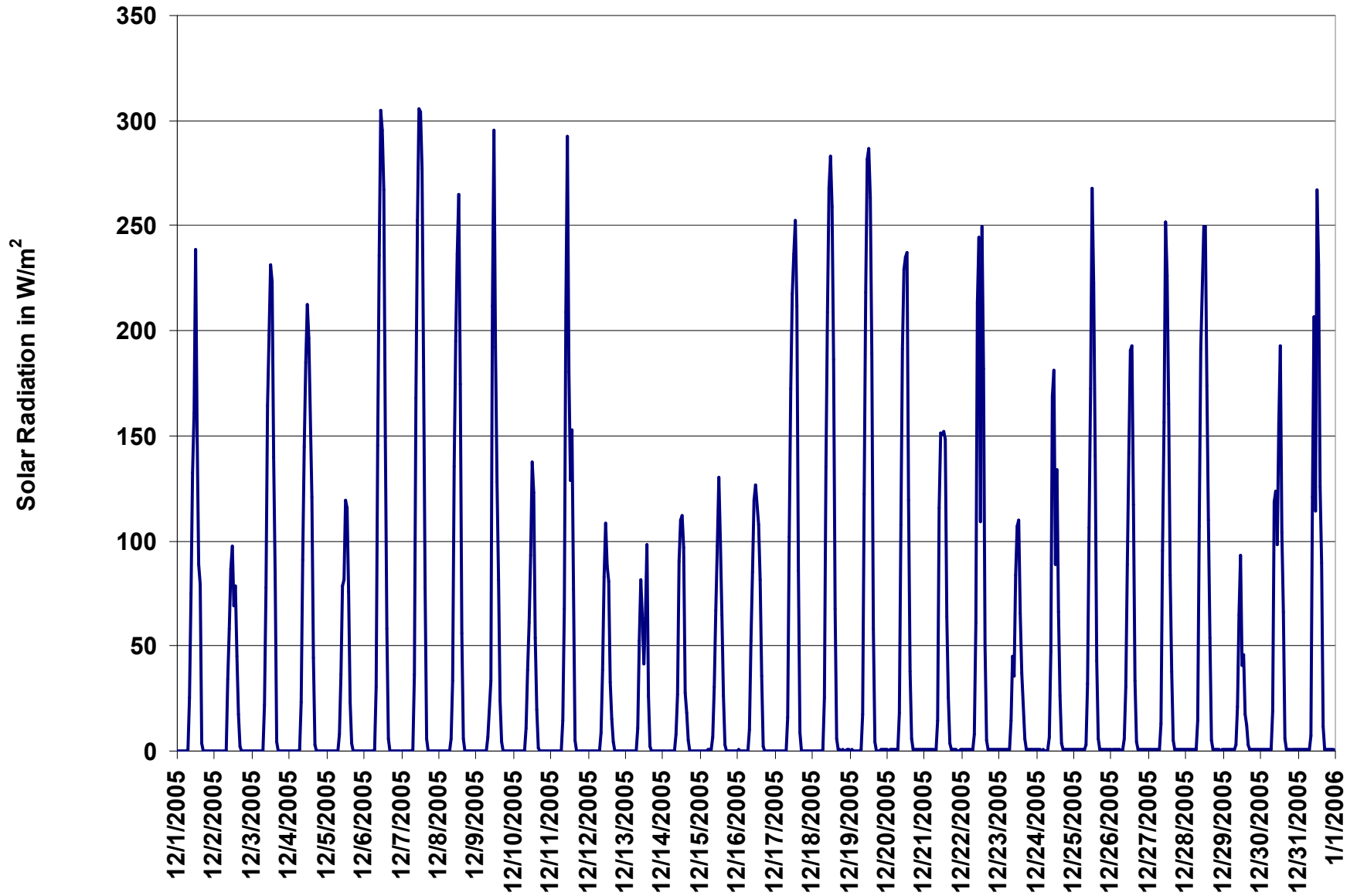


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



PAS - Crescent Heights Scalar Wind Speed Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

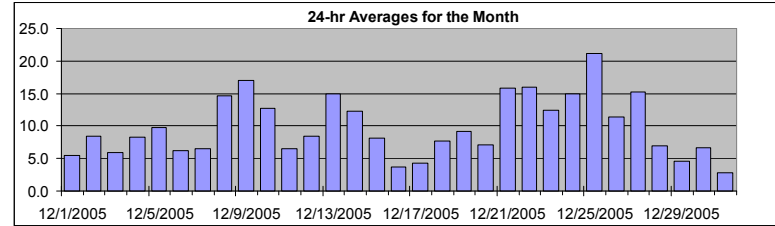
Wind Speed (WSs)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Average:	35.4	km/hr	25-Dec	16:00 17:00
Maximum 24-hr Value:	21.2	km/hr	25-Dec	

Calm Time:	1 hrs	0% calms	Operational Time:	743 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	27.0	19.9	14.2	9.3	4.8	2.0	1.3	9.9 km/hr



Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
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-Dec-05	6	3	5	3	3	5	4	3	2	1	3	6	3	7	9	8	6	5	7	5	9	10	10	5.4	10.4		
2-Dec-05	11	16	16	20	15	18	17	16	13	7	3	2	5	3	6	7	4	2	3	3	2	3	5	5	8.4	19.9	
3-Dec-05	5	4	4	6	7	5	3	3	3	5	8	8	11	10	7	7	7	8	6	6	6	5	5	6	5.9	10.6	
4-Dec-05	6	9	9	8	9	10	10	9	12	11	10	10	10	12	12	10	7	3	3	4	7	7	7	5	8.3	12.2	
5-Dec-05	4	2	3	4	3	5	7	12	15	15	11	10	16	18	18	15	11	4	3	6	12	14	15	11	9.8	18.0	
6-Dec-05	11	10	11	9	6	4	3	2	5	6	8	8	9	11	8	4	4	4	5	4	4	4	5	5	6.2	11.3	
7-Dec-05	2	4	4	2	4	3	3	2	3	2	1	1	4	14	15	13	12	7	8	7	5	8	10	20	6.5	19.9	
8-Dec-05	19	22	18	17	17	17	18	15	13	12	12	10	10	10	8	8	12	10	12	9	16	20	22	25	14.7	25.4	
9-Dec-05	25	27	30	27	20	22	17	14	19	16	17	14	13	19	14	15	14	13	12	13	10	11	13	13	17.0	29.5	
10-Dec-05	13	13	11	8	9	9	9	10	12	12	14	15	18	18	16	14	12	13	12	14	14	15	14	11	12.8	18.4	
11-Dec-05	8	6	5	7	6	8	7	5	7	6	8	8	10	8	6	5	5	4	7	7	9	7	5	4	6.6	10.2	
12-Dec-05	3	4	4	3	3	5	5	11	9	10	13	14	11	14	13	13	8	8	12	7	9	5	9	11	8.5	14.3	
13-Dec-05	8	14	16	15	10	14	13	14	15	15	16	18	18	16	17	14	14	13	16	18	16	16	18	15	15.0	18.3	
14-Dec-05	15	16	13	14	14	14	13	16	19	15	18	16	17	15	8	6	4	6	7	9	14	16	8	3	12.2	18.6	
15-Dec-05	7	5	4	7	7	10	12	10	7	8	14	14	12	14	13	11	8	7	5	3	calm	3	2	4	8.2	14.2	
16-Dec-05	2	2	4	4	4	4	1	2	2	1	1	1	5	4	4	7	6	6	6	3	5	5	4	5	3.8	6.7	
17-Dec-05	5	3	5	5	3	1	2	3	6	5	5	8	6	6	6	5	2	6	6	3	4	3	2	4	4.3	8.2	
18-Dec-05	3	4	2	2	2	2	2	2	3	2	7	12	21	20	15	9	6	4	4	11	10	13	15	15	7.8	20.7	
19-Dec-05	14	7	10	10	11	8	11	13	8	8	12	16	15	15	12	10	6	8	3	4	4	5	5	3	9.1	15.5	
20-Dec-05	5	3	2	1	3	5	6	4	3	2	2	2	5	13	11	7	8	11	9	9	12	12	16	20	7.2	20.3	
21-Dec-05	16	16	14	20	20	20	18	17	22	12	12	15	19	16	14	14	14	17	14	13	12	13	19	16	15.9	22.1	
22-Dec-05	10	8	12	15	18	15	17	21	16	15	16	12	16	17	16	13	11	10	15	23	23	24	25	13	15.9	25.0	
23-Dec-05	10	11	12	12	16	14	14	14	18	16	13	12	11	11	12	11	8	10	15	13	11	10	9	15	12.4	17.8	
24-Dec-05	20	16	16	8	15	8	15	11	13	12	13	13	13	12	12	13	12	14	10	9	22	24	29	28	14.9	29.5	
25-Dec-05	25	26	13	14	15	22	26	17	12	16	27	24	14	21	28	32	35	29	27	24	15	13	17	18	21.2	35.4	
26-Dec-05	17	16	17	18	19	15	18	15	16	19	14	11	11	9	10	7	5	6	4	4	8	6	5	6	11.5	19.0	
27-Dec-05	11	11	10	12	14	16	19	14	15	18	18	13	19	15	16	20	16	14	16	16	16	17	15	15	15.2	19.5	
28-Dec-05	15	18	15	10	11	9	8	5	9	13	8	10	8	7	4	1	2	1	3	4	1	2	2	2	7.0	18.3	
29-Dec-05	3	5	2	2	1	1	2	2	3	2	2	3	4	6	9	7	6	4	7	7	8	9	8	7	4.6	8.9	
30-Dec-05	11	12	10	10	10	7	5	7	5	4	2	2	2	8	8	5	11	7	7	7	8	6	3	2	6.7	11.8	
31-Dec-05	3	2	3	3	2	3	3	2	6	1	3	2	3	3	2	2	5	5	2	3	5	3	3	1	2.9	5.8	
1-hr Average	10.1	10.2	9.6	9.5	9.7	9.7	10.0	9.4	10.0	9.3	10.0	10.1	11.0	11.9	11.2	10.0	9.1	8.3	8.5	8.7	9.7	10.0	10.5	10.3			
Hourly Max	25.5	26.8	29.5	26.7	20.1	22.4	26.5	21.0	22.1	18.6	26.6	23.7	20.7	20.6	28.1	31.5	35.4	29.3	27.2	24.0	23.4	24.2	29.5	28.0			



PAS - Cresent Heights Vector Wind Speed Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

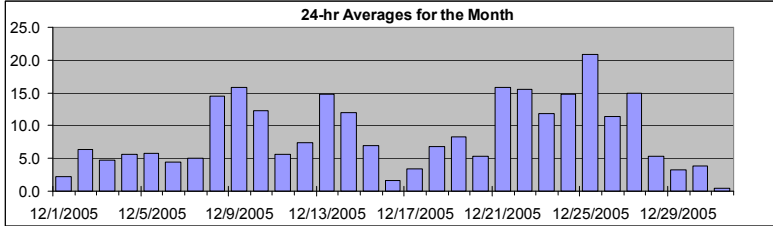
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Maximum 1-hr Average:	35.2	km/hr	25-Dec	16:00 17:00
Maximum 24-hr Value:	20.9	km/hr	25-Dec	



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	AverageV
	26.8	19.8	14.1	9.2	4.6	1.8	1.2	36.5 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	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-Dec-05	6	3	5	3	3	5	3	3	2	calm	2	6	6	2	6	9	7	6	5	7	5	9	10	10	2.2	10.2	
2-Dec-05	11	16	16	20	15	18	17	16	13	7	3	1	5	3	5	6	4	2	3	3	2	3	5	4	6.4	19.8	
3-Dec-05	5	4	4	6	7	5	3	3	3	5	8	8	10	10	7	6	7	8	6	6	6	5	4	6	4.7	10.5	
4-Dec-05	6	9	9	8	9	10	10	9	12	11	10	10	10	12	11	10	7	3	2	4	7	7	6	5	5.7	12.1	
5-Dec-05	4	2	2	4	3	5	7	11	15	15	11	10	16	18	18	15	11	3	3	6	11	14	15	11	5.7	17.8	
6-Dec-05	10	9	11	9	6	2	2	2	5	6	8	8	9	11	8	4	4	4	5	4	4	3	5	5	4.4	11.2	
7-Dec-05	2	3	4	2	4	3	3	2	3	2	1	1	4	14	15	13	12	6	8	6	5	8	10	20	5.0	19.8	
8-Dec-05	19	22	17	17	16	17	18	14	13	12	12	10	10	10	7	8	12	10	12	9	16	19	22	25	14.5	25.3	
9-Dec-05	25	27	29	27	20	22	17	14	17	16	17	14	13	19	14	15	14	13	12	12	10	11	13	12	15.9	29.4	
10-Dec-05	13	13	11	8	9	9	9	10	12	12	14	14	18	18	16	14	12	13	12	14	14	15	14	10	12.3	18.3	
11-Dec-05	8	4	4	7	6	7	7	4	7	6	8	8	10	8	6	5	4	4	7	7	9	7	5	4	5.7	10.1	
12-Dec-05	3	4	3	2	3	4	4	11	9	10	13	14	11	14	13	13	8	8	11	7	8	5	8	11	7.4	14.1	
13-Dec-05	7	13	16	15	10	14	13	14	15	15	16	18	18	16	17	14	14	13	16	18	16	16	18	14	14.8	18.3	
14-Dec-05	15	16	12	14	14	14	13	16	18	15	18	16	16	14	8	5	3	6	7	9	14	16	8	2	12.0	18.5	
15-Dec-05	7	5	4	7	7	10	12	10	7	7	14	14	12	14	13	11	8	7	5	2	calm	3	1	4	7.0	14.0	
16-Dec-05	2	2	4	4	4	4	1	2	2	1	1	1	calm	5	4	4	7	6	6	5	2	5	4	5	1.7	6.6	
17-Dec-05	5	3	5	5	3	1	2	3	5	5	4	8	6	6	6	5	1	5	6	2	4	3	calm	4	3.4	7.9	
18-Dec-05	3	4	2	2	2	2	2	3	2	6	12	21	20	15	9	6	3	2	11	10	13	15	15	6.8	20.6		
19-Dec-05	14	7	10	10	11	8	11	13	8	8	12	15	15	15	12	10	6	7	3	4	4	4	5	2	8.3	15.3	
20-Dec-05	5	3	2	1	3	5	5	3	2	2	2	2	4	13	11	7	8	11	9	9	12	11	16	20	5.4	20.1	
21-Dec-05	16	16	13	19	20	19	18	17	22	12	12	15	19	16	14	14	14	16	14	13	12	13	18	16	15.8	21.9	
22-Dec-05	10	8	12	14	18	15	16	21	16	15	15	12	16	17	16	13	11	10	14	23	23	24	25	12	15.5	24.8	
23-Dec-05	10	10	11	11	16	14	14	14	18	16	13	12	10	11	12	10	8	10	15	13	10	10	8	15	11.8	17.7	
24-Dec-05	20	16	16	8	14	8	15	11	12	12	13	13	13	12	12	12	11	14	10	9	22	24	29	28	14.7	29.4	
25-Dec-05	25	26	12	14	15	21	26	17	11	15	26	24	14	20	28	31	35	29	27	24	14	13	16	18	20.9	35.2	
26-Dec-05	17	16	16	18	19	15	18	15	16	19	14	11	10	9	10	6	5	6	4	4	7	6	5	6	11.3	18.9	
27-Dec-05	10	11	10	11	14	16	19	13	15	18	18	13	19	15	15	19	16	14	16	16	16	17	15	15	15.0	19.4	
28-Dec-05	14	18	15	10	11	9	8	3	9	13	8	10	8	6	4	1	2	1	2	4	1	2	1	2	5.3	18.2	
29-Dec-05	3	5	2	2	1	1	2	2	3	2	2	2	4	6	8	7	6	4	7	7	8	9	8	7	3.2	8.9	
30-Dec-05	11	12	10	10	10	7	5	7	5	3	2	2	1	8	8	2	11	7	7	6	8	6	2	2	3.8	11.6	
31-Dec-05	2	calm	2	2	2	3	3	calm	6	calm	3	1	2	3	1	1	4	4	1	3	4	3	3	calm	0.4	5.7	
1-hr Vector	7.2	7.0	6.2	6.1	6.6	6.5	6.6	5.7	5.9	6.2	6.4	6.6	7.4	7.7	7.1	6.4	5.7	5.5	5.9	6.1	6.4	6.3	6.8	6.9			
Hourly Max	25.2	26.7	29.4	26.6	19.9	22.4	26.3	20.8	21.9	18.5	26.5	23.5	20.6	20.4	27.9	31.3	35.2	29.2	26.9	23.9	23.4	24.2	29.4	27.9			



PAS - Cresent Heights Wind Direction Monthly Summary

Station: Cresent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	351.8	324.4	254.3	232.6	197.6	57.9	13.6	244 deg

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	WD Sector	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
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-Dec-05	241	257	338	349	298	335	321	323	336	127	138	209	196	36	100	90	99	111	121	116	102	121	105	103	106	ESE	
2-Dec-05	85	104	119	116	113	110	115	116	117	130	117	133	198	92	33	42	58	47	7	353	345	328	343	357	102	ESE	
3-Dec-05	346	329	311	310	316	318	309	309	259	243	233	237	230	235	242	223	229	236	222	232	218	222	216	233	250	WSW	
4-Dec-05	226	228	237	236	228	226	226	234	235	234	232	229	218	225	218	231	242	227	91	26	24	39	59	67	230	SW	
5-Dec-05	104	122	101	101	100	111	101	88	93	95	87	27	3	6	359	1	14	17	247	225	337	333	335	320	26	NNE	
6-Dec-05	300	292	311	301	283	233	218	199	233	233	228	236	234	234	233	222	212	216	242	200	176	166	123	131	244	WSW	
7-Dec-05	155	127	127	125	133	148	142	131	126	130	118	148	189	204	208	211	219	244	237	248	268	232	236	232	210	SSW	
8-Dec-05	230	238	252	246	245	244	239	241	225	234	236	232	220	232	213	221	233	242	238	236	246	235	231	228	236	SW	
9-Dec-05	227	227	223	224	232	229	228	237	247	272	265	235	260	279	271	273	279	276	270	268	247	262	259	264	248	WSW	
10-Dec-05	265	268	271	262	254	253	231	235	226	223	221	227	226	234	236	234	243	257	250	241	259	265	267	261	245	WSW	
11-Dec-05	256	249	251	258	215	237	241	192	229	237	242	271	280	296	301	289	264	222	246	230	226	209	196	154	245	WSW	
12-Dec-05	162	172	151	202	177	191	202	232	217	228	238	238	240	233	221	230	241	261	245	268	264	299	278	288	237	WSW	
13-Dec-05	264	298	318	319	294	295	297	301	294	304	310	315	315	314	313	315	318	306	303	308	305	308	314	306	307	NW	
14-Dec-05	311	321	330	350	340	334	332	331	333	319	327	320	323	325	313	317	300	306	303	303	316	321	321	273	324	NW	
15-Dec-05	298	315	301	296	321	318	317	316	311	327	347	356	340	346	345	356	355	17	9	54	208	254	202	123	335	NNW	
16-Dec-05	152	167	231	236	222	211	205	124	112	125	115	15	29	27	9	19	13	15	40	53	8	28	28	55	33	NNE	
17-Dec-05	62	72	65	80	110	130	111	80	75	121	104	109	108	128	205	233	150	118	122	93	134	136	132	125	112	ESE	
18-Dec-05	130	125	130	133	129	190	193	130	121	129	205	216	215	218	212	222	207	211	199	237	227	223	234	236	213	SSW	
19-Dec-05	234	227	227	238	235	228	233	230	231	228	228	239	236	233	226	236	271	249	221	173	132	165	126	181	228	SW	
20-Dec-05	136	100	121	70	306	286	315	330	128	140	131	122	216	229	229	242	227	228	245	241	245	237	230	227	232	SW	
21-Dec-05	233	241	226	245	239	229	230	236	230	258	244	241	234	233	226	232	237	226	239	245	244	238	229	228	235	SW	
22-Dec-05	236	273	235	217	211	214	229	224	230	239	229	232	247	240	236	244	248	253	235	219	222	228	233	256	232	SW	
23-Dec-05	250	255	220	243	269	274	285	276	280	280	285	291	280	268	281	275	268	253	265	250	243	250	229	235	264	W	
24-Dec-05	233	239	234	260	232	246	236	254	247	247	240	235	234	220	225	220	231	238	246	251	228	229	223	223	234	SW	
25-Dec-05	228	233	255	244	237	226	221	232	246	228	213	220	216	217	228	223	224	221	228	242	227	236	239	238	228	SW	
26-Dec-05	238	240	241	239	234	242	235	246	242	239	236	223	237	231	227	255	242	235	216	214	236	215	233	222	236	WSW	
27-Dec-05	229	243	242	244	241	235	229	233	240	238	230	224	232	226	225	220	229	216	215	222	233	238	238	263	232	SW	
28-Dec-05	263	281	279	268	278	254	270	236	212	233	217	213	220	231	216	180	177	99	101	91	71	360	353	261	250	WSW	
29-Dec-05	294	258	240	256	210	100	122	130	101	107	116	234	264	279	310	284	299	266	234	243	248	240	240	225	254	WSW	
30-Dec-05	240	242	239	245	230	222	204	211	207	107	135	15	85	137	145	207	170	171	119	113	102	61	92	69	189	S	
31-Dec-05	133	296	249	249	51	120	118	49	347	264	331	342	77	126	107	312	41	32	153	218	242	27	251	15	9	N	
Hourly Avg	241	249	248	249	244	241	239	242	241	244	242	245	246	245	244	247	245	243	241	241	247	248	244	240			



PAS - Cresent Heights Standard Deviation of Wind Direction Monthly Summary

Station: Cresent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: December 1, 2005 to January 1, 2006

Summary

Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	44.7	29.9	12.7	8.4	6.1	4.4	3.7

Status Flag Characters

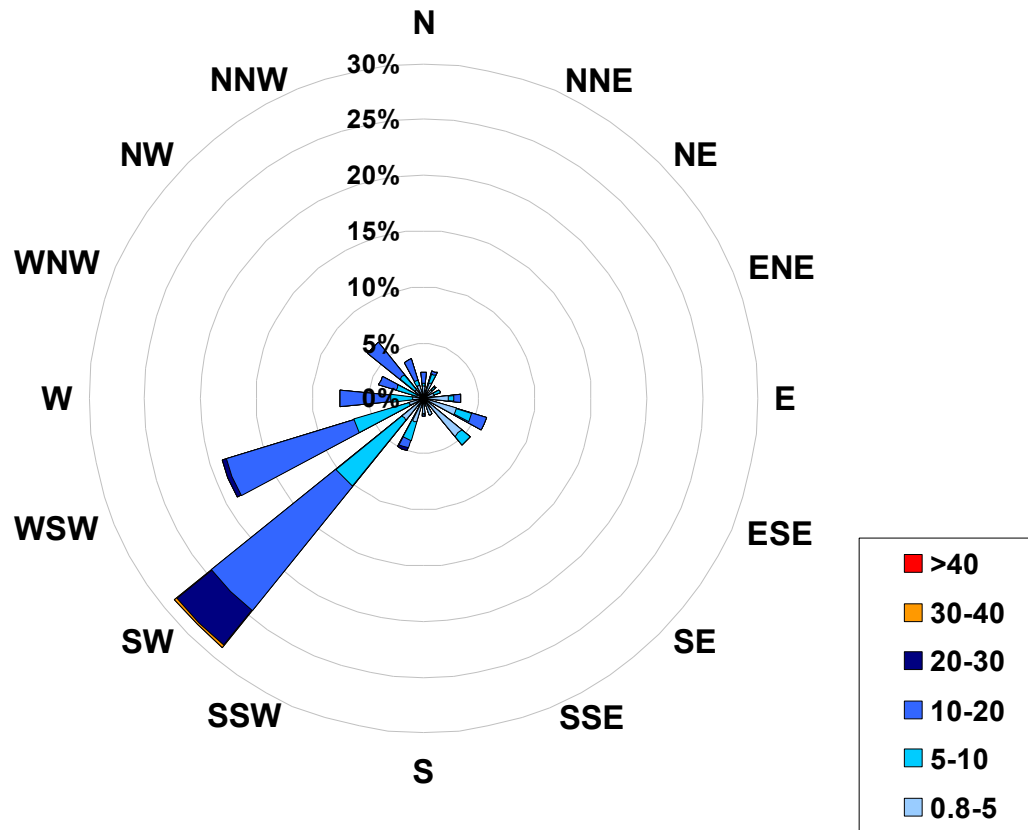
C	Calibration	A	AIC - Zero / Span Check
S	Instrument out of Service	X	Filter Exchange
N	No Data	M	Equipment Maintenance
D	Excessive Instrument Drift	P	Power Failure

Day	Mountain Standard Time																								Daily Maximum
Hour Start	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-Dec-05	8	15	12	20	16	12	12	10	16	38	33	20	19	30	27	10	13	7	12	11	20	9	11	10	38.0
2-Dec-05	10	7	6	6	7	5	6	5	6	9	23	26	22	20	11	7	5	12	13	9	9	12	9	8	25.5
3-Dec-05	6	6	10	8	5	11	13	13	14	7	6	10	9	8	13	13	9	4	4	5	6	6	7	8	13.6
4-Dec-05	8	5	4	4	5	5	5	6	4	4	7	8	9	6	7	10	10	24	13	11	8	6	7	5	23.5
5-Dec-05	13	20	19	12	20	11	9	9	6	7	12	12	5	6	4	5	7	15	11	8	20	6	6	8	20.2
6-Dec-05	7	10	7	9	12	44	37	25	6	4	8	7	9	7	13	15	10	7	6	9	10	9	5	9	44.5
7-Dec-05	13	9	5	12	7	14	9	12	8	14	11	40	18	9	8	14	8	14	11	11	16	11	10	10	39.9
8-Dec-05	7	5	7	6	7	6	5	13	8	4	4	6	7	6	9	9	7	10	7	15	10	5	4	4	15.1
9-Dec-05	4	4	10	5	7	11	6	9	8	6	7	8	7	5	6	5	5	10	5	7	7	5	5	6	10.7
10-Dec-05	5	5	5	8	7	6	4	4	5	11	6	9	5	5	4	4	6	5	10	7	10	6	10	8	11.2
11-Dec-05	11	38	31	18	17	8	18	26	9	9	11	14	7	10	10	9	8	11	12	6	6	14	15	14	38.3
12-Dec-05	22	15	13	34	24	21	31	4	5	7	4	9	10	6	8	14	11	11	9	12	8	16	7	12	34.1
13-Dec-05	18	21	6	7	8	7	7	8	8	9	8	6	6	6	7	6	7	8	7	7	8	7	5	7	21.3
14-Dec-05	6	5	9	8	6	7	7	5	5	6	6	6	7	7	11	12	15	11	8	8	7	4	16	24	24.1
15-Dec-05	16	17	20	11	9	6	5	7	11	9	8	7	8	7	8	9	9	8	6	12	50	21	28	8	49.6
16-Dec-05	16	17	8	11	16	13	30	25	28	35	42	10	11	10	9	14	10	15	24	14	10	12	10		41.9
17-Dec-05	7	11	7	9	11	17	18	9	11	13	17	10	19	13	16	13	16	6	5	29	12	13	44	18	43.8
18-Dec-05	7	14	23	13	29	15	24	25	11	45	7	8	12	7	8	15	12	39	41	6	13	8	6	6	45.1
19-Dec-05	7	11	7	7	12	15	10	5	15	10	6	9	8	6	8	7	14	10	19	12	10	12	7	19	19.5
20-Dec-05	9	22	52	40	20	12	14	20	19	21	27	19	28	5	6	8	8	7	8	9	6	9	8	6	51.7
21-Dec-05	5	6	13	8	6	5	7	9	8	9	8	5	5	5	6	7	6	5	5	6	6	5	4	8	12.5
22-Dec-05	8	12	11	8	5	11	20	7	7	7	5	13	7	6	5	6	7	8	8	4	4	4	5	10	19.8
23-Dec-05	11	10	7	7	5	5	6	5	5	5	10	11	7	6	5	5	6	7	5	6	9	6	12	8	12.5
24-Dec-05	6	7	8	14	7	14	13	11	7	7	5	6	6	6	6	7	10	7	9	10	4	4	4	4	14.2
25-Dec-05	6	5	10	6	9	8	5	8	11	9	5	5	7	5	5	6	5	4	5	6	12	12	6	4	12.3
26-Dec-05	6	4	6	4	4	6	5	7	6	4	7	7	7	12	8	10	8	8	13	9	7	6	10	9	13.5
27-Dec-05	7	7	5	5	4	5	4	6	4	4	4	9	6	8	6	4	6	6	5	6	11	4	5	6	11.2
28-Dec-05	6	5	5	7	10	10	5	32	11	5	9	10	14	9	12	36	21	33	22	18	48	22	44	43	47.7
29-Dec-05	14	12	17	16	49	17	8	7	11	11	21	32	14	10	9	11	17	17	9	5	5	3	4	11	48.9
30-Dec-05	5	8	9	8	5	17	8	10	6	13	12	21	18	8	26	22	10	13	18	11	8	13	42	30	42.4
31-Dec-05	23	45	28	28	20	13	8	36	6	52	35	28	28	28	34	36	17	44	38	17	18	21	26	55	54.8

Hourly Max 23 45 52 40 49 44 37 36 28 52 35 42 28 30 34 36 21 44 41 29 50 22 44 55



1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site for December 2005



Calms: 0%

Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	199
5	to	10	194
10	to	20	315
20	to	30	33
30	to	40	2
	>	40	0
Total Non-Zero Values			743



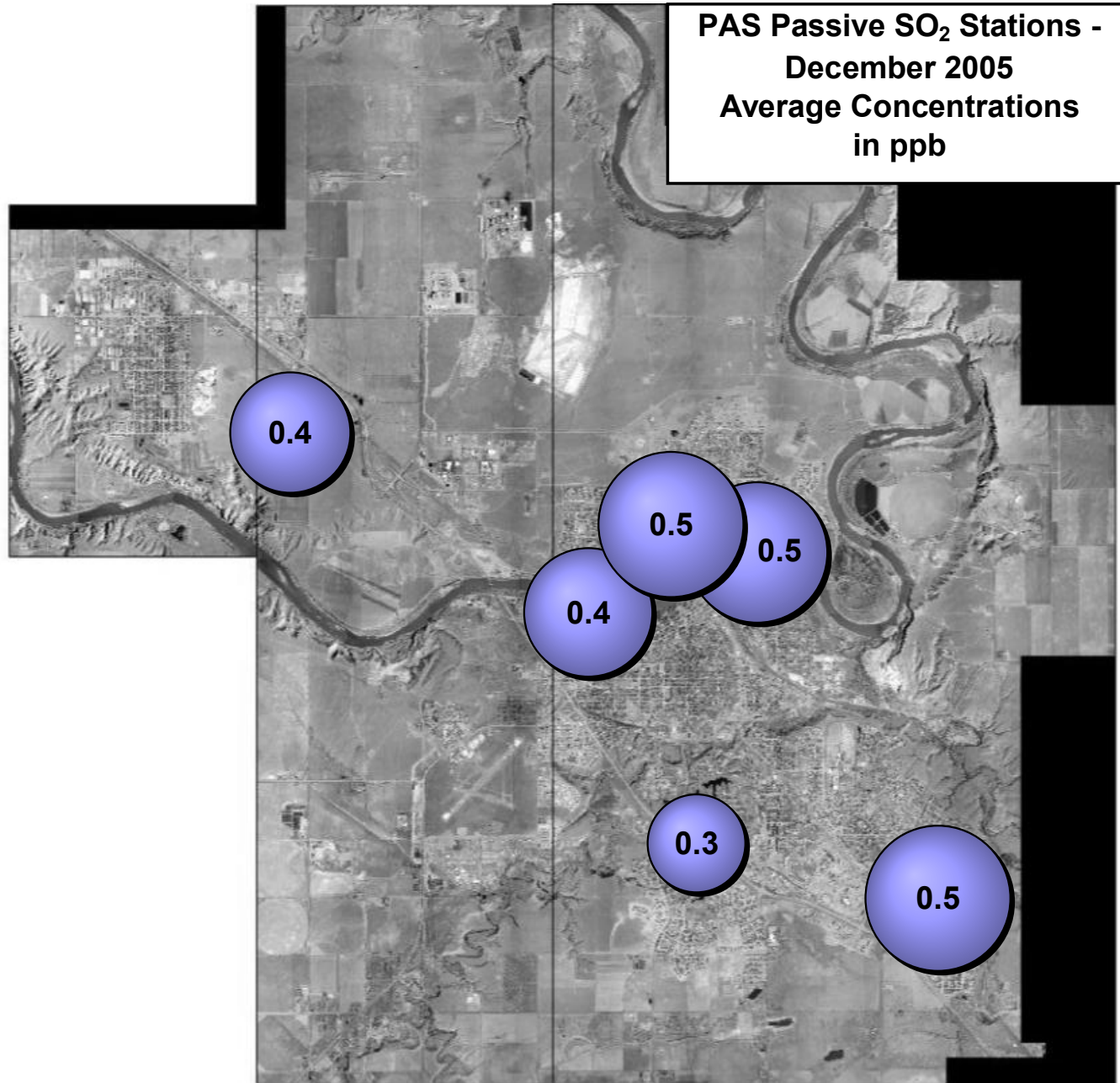
Passive Monitoring – December 2005

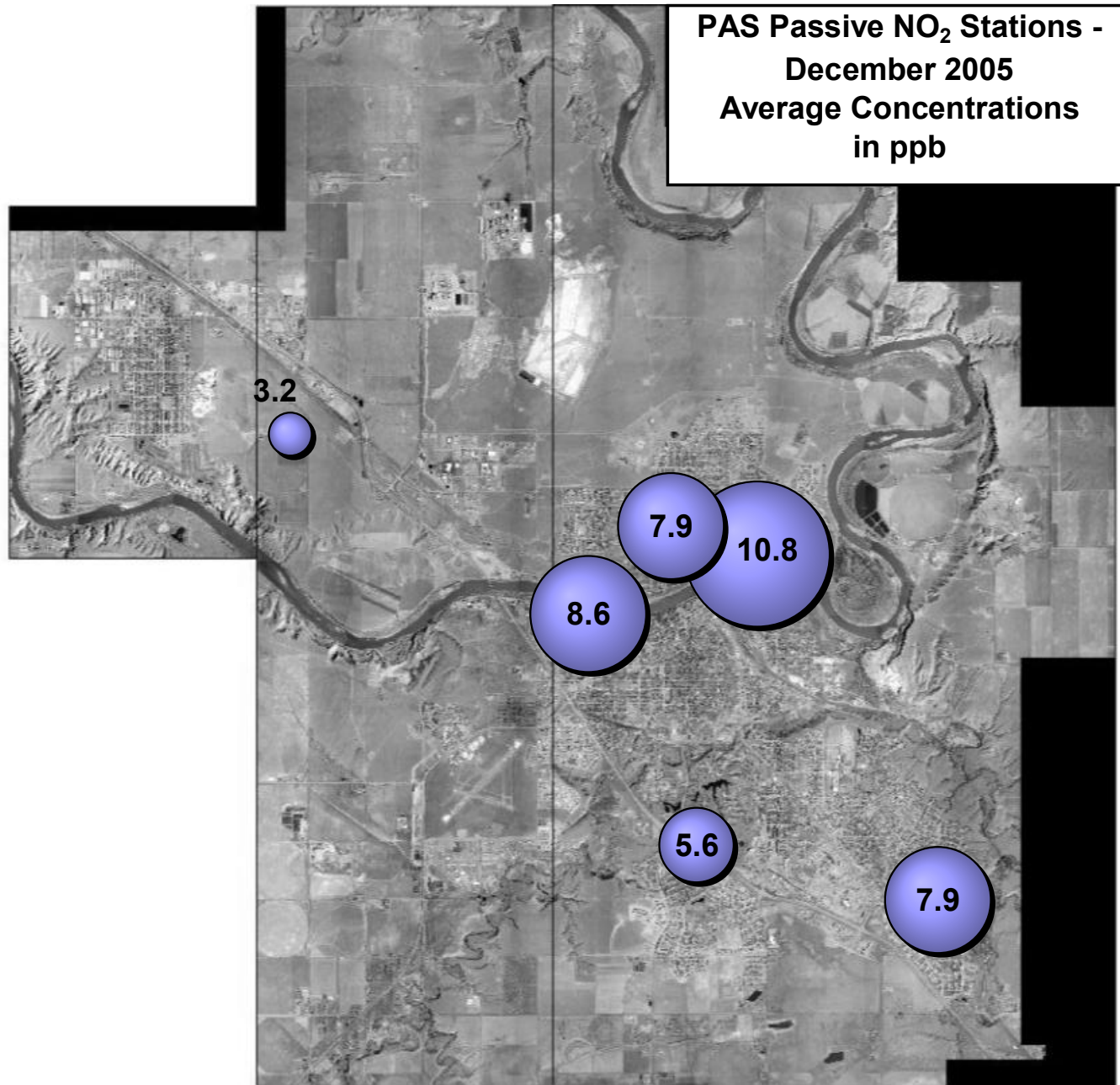
Ambient Air Compliance Network

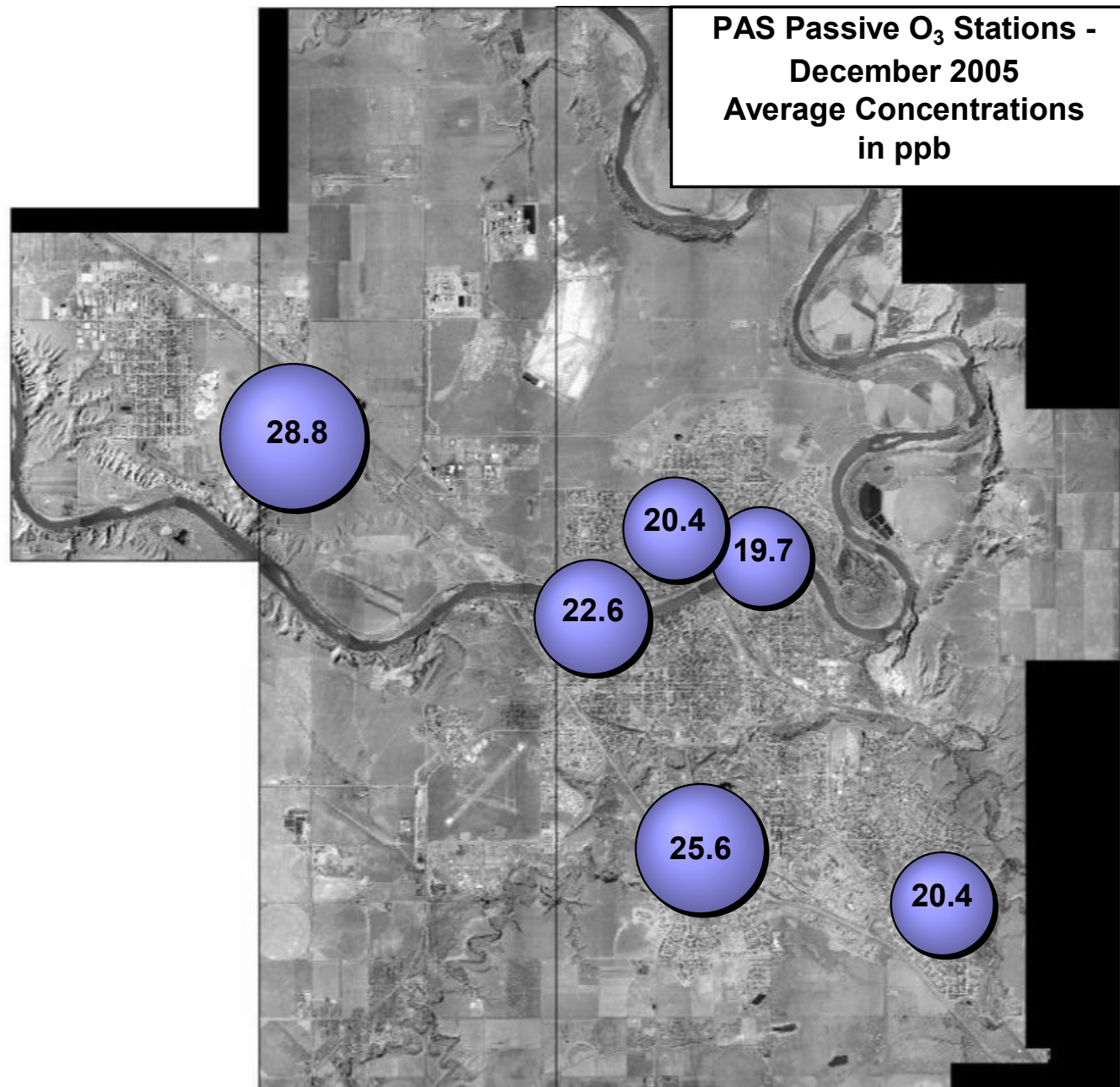


Palliser Airshed Society - PAS Passive Stations for December 2005

Station Number	Station Name	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Easting	Northing	Elevation
Duplicates							
3a	Monitoring Station	0.5	20.5	8.1			
3b		0.5	20.2	7.7			
1	Hospital	0.4	22.6	8.6	521648	5542721	698
2	Ball Park	0.5	19.7	10.8	524019	5543686	660
3	Monitoring Station	0.5	20.4	7.9	522812	5544133	714
4	Redcliff	0.4	28.8	3.2	517448	5545608	725
5	Southridge	0.3	25.6	5.6	523172	5539016	721
6	Christian School Park	0.5	20.4	7.9	526577	5538133	709
Stats:							
	Mean	0.4	22.9	7.3			
	Standard Deviation	0.1	3.6	2.6			
	Minimum	0.3			5	Southridge	
	Maximum	0.5			3	Monitoring Station	
	Minimum		19.7		2	Ball Park	
	Maximum		28.8		4	Redcliff	
	Minimum			3.2	4	Redcliff	
	Maximum			10.8	2	Ball Park	







December 2005 - Calibration Reports

PAS - Crescent Heights Station:

O₃, NO_x, NO, NO₂, THC, CO, PM_{2.5}, and Wind Speed / Wind Direction

Calibration Report

Parameter 03
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	December 14, 2005	Previous Calibration	November 14, 2005
Station Number	101	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)	7:30	End Time (MST)	10:45
Barometric Pressure	702.2 mm Hg	Station Temperature	23.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.998763	Calculated slope	1.000892
Calculated intercept	0.742300	Calculated intercept	1.604495
Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Offset	-6.1	ppb	NA	ppb
Slope	1.023		NA	
Lamp measure	3926.8	mV	3951.3	mV
Lamp Reference	3919.2	mV	3952.4	mV
Pressure	26.0	inches Hg	25.9	inches Hg
Sample Flow	734	ccm	715	ccm
Lamp temp	58	Deg C	58	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.0	-1.1	N/A
4995	300.0	292.8	292.3	1.0017
4995	200.0	199.1	195.1	1.0205
4995	100.0	102.0	100.6	1.0136
4995	0.0	0.0	-1.1	0.0000
4995	300.0	292.8	278.4	1.0519
Average Correction Factor				1.0119

Calculated value of As Found Response: 279.8 ppm Percent Change of As Found: -4.4%

	before calibration		after calibration	
Auto zero	-2.3	ppb	-1.3	ppb
Auto span	352.5	ppb	335.3	ppb

Notes: A span adjustment was made.

Calibration Performed By: Gary Cross

Calibration Summary

Parameter O3
 Air Monitoring Network Palliser Airshed

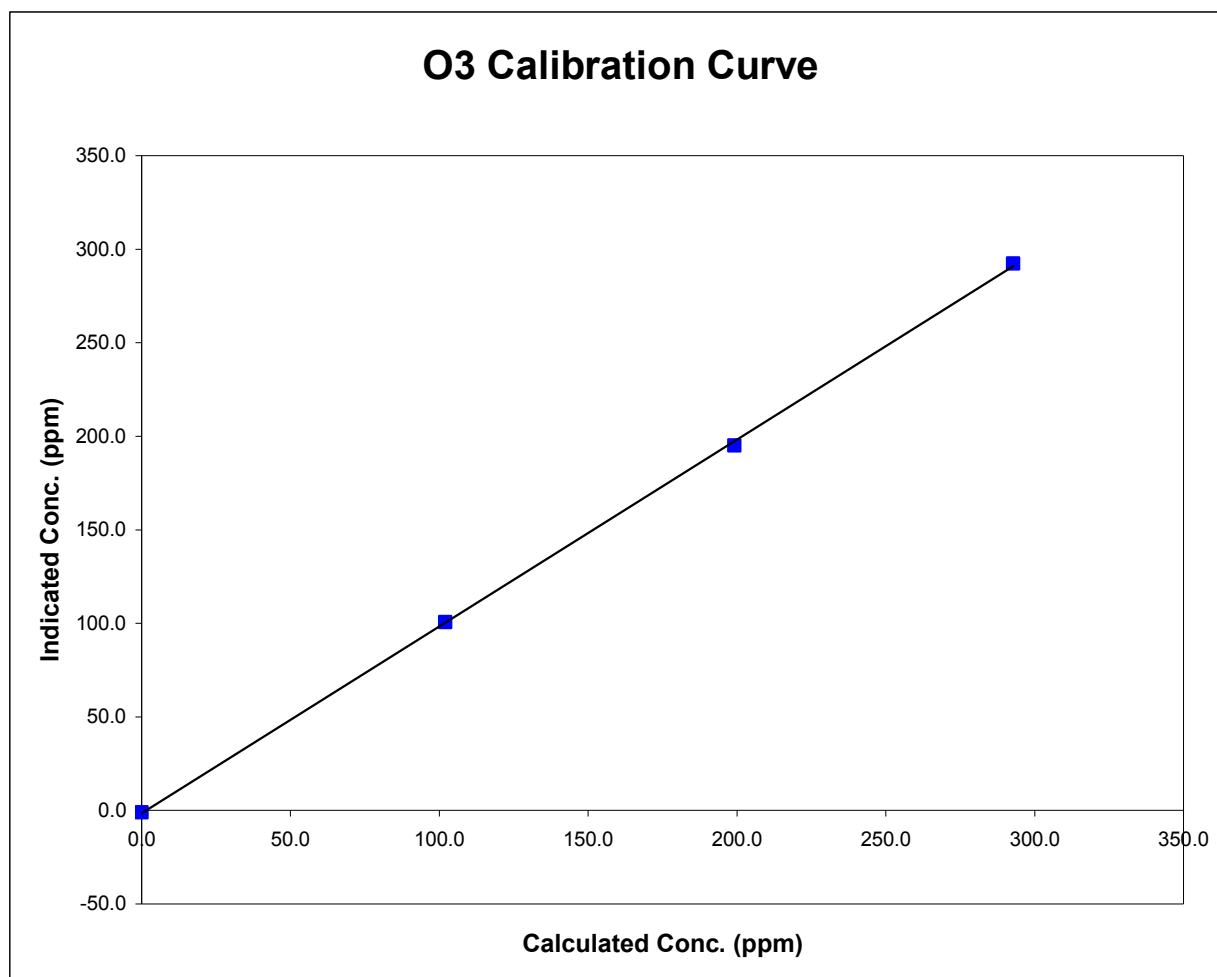


Station Information

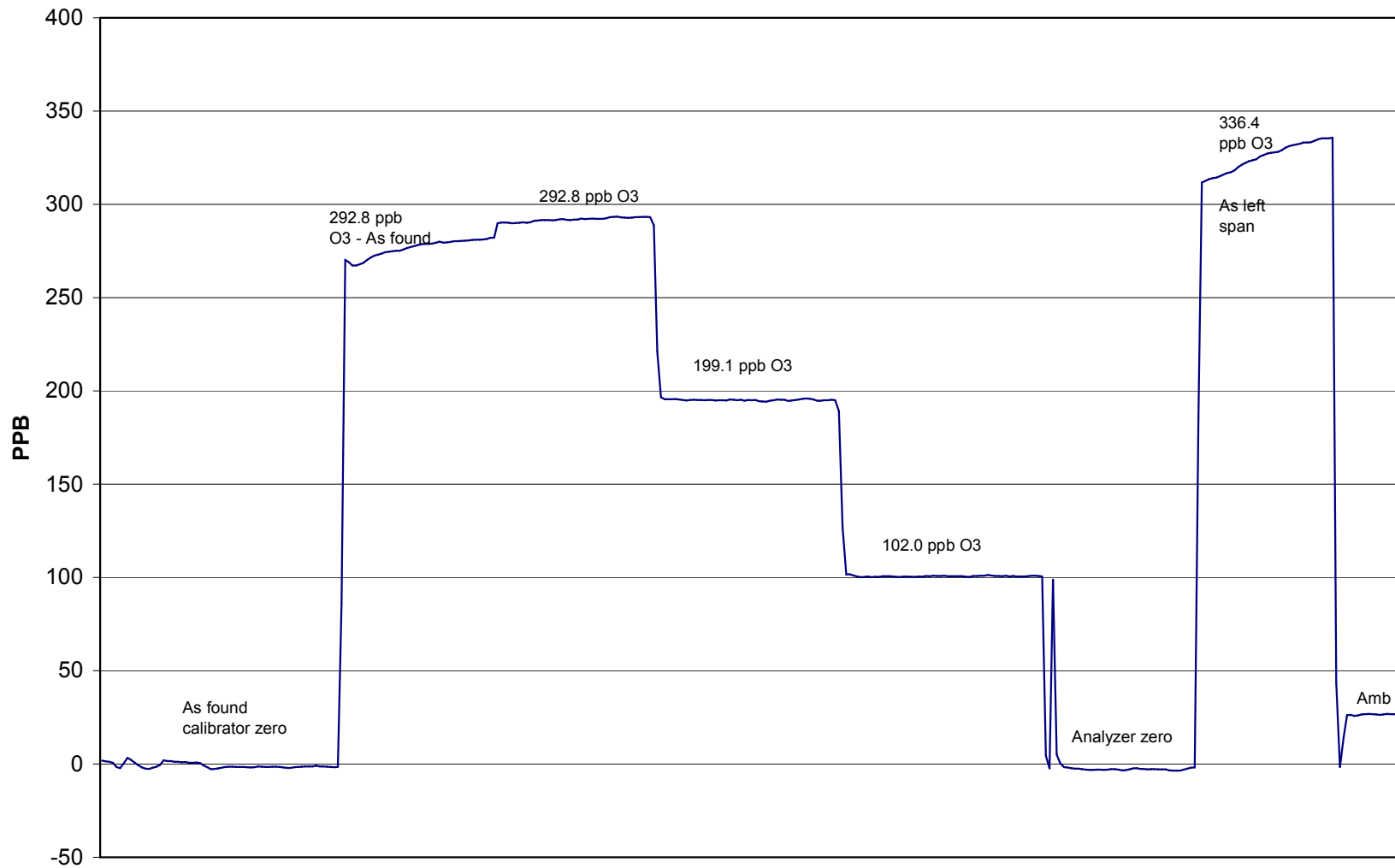
Calibration Date	December 14, 2005	Previous Calibration	November 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	7:30	End Time (MST)	10:45
Analyzer make/model	API Model 400E	Analyzer serial #	331

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
292.8	292.3	1.0017	Correlation Coefficient	0.999848
199.1	195.1	1.0205		
102.0	100.6	1.0136		
0.0	-1.1	N/A	Slope	1.000892
			Intercept	1.604495



O3 Calibration



December 14, 2005

Calibration Report

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



Station Information

Calibration Date December 13, 2005 Previous Calibration November 14, 2005
 Station Number 101 Station Location Crescent Heights

Reason: Routine Installation Removal Other: _____

Start Time (MST) 16:00 End Time (MST) 21:30
 Barometric Pressure 695.4 mm Hg Station Temperature 23.0 Deg C
 Calibrator EnviroNics 6100 Serial Number 3474
 NO Cal Gas Conc 49.8 ppm Cal Gas Expiry Date 12-Dec-05
 NOx Cal Gas Conc 49.8 ppm Cal Gas Serial # ALM011558

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO2	NOx	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	0.992166	0.991721	0.994899
	Data Offset	-0.926783	-0.277052	0.370441
After	Data Slope	1.002150	1.000726	0.996216
	Data Offset	0.333390	1.262377	1.411938
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	-1.2	mV	-1.2	mV
NOx background	1.1	mV	1.1	mV
NO coefficient	1.359		1.374	
NOx coefficient	1.370		1.373	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	7.3	Deg C	7.3	Deg C
Azero	42.8		40.0	
Perm Temp	40.0	Deg C	40.0	Deg C
Pressure	4.2	inches Hg	4.3	inches Hg
Sample Flow	445.0	ccm	450.0	ccm

Notes: Analyzer was span adjusted.

Calibration Report

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



Station Information

Calibration Date: December 13, 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	4985	0.00	0.0	0.0	0.0	0.0	-0.4	0.0	N/A	N/A
1	4985	39.80	394.5	394.5	0.0	393.6	395.2	-1.1	1.0021	0.9981
2	4985	19.77	196.7	196.7	0.0	194.3	195.0	-1.0	1.0126	1.0087
3	4985	9.50	94.7	94.7	0.0	92.5	92.9	-0.7	1.0240	1.0191
AFZ	4985	0.00	0.0	0.0	0.0	0.0	-0.4	0.0	0.0000	0.0000
AFS	4985	39.80	394.5	394.5	0.0	387.5	384.2	3.6	1.0179	1.0267
Average Correction Factor									1.0129	1.0086

As Found Concentrations NO_x= 387.3 NO= 384.9 As Found Percent Change NO_x= -1.8% NO= -2.4%

GPT Calibration Data

Dilution Flow 4985 ccm Source Gas Flow 39.80 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	395.9	396.0	-0.1	394.3	396.0	0.0	N/A	N/A	N/A	N/A
300	396.0	103.1	292.8	394.4	102.1	292.0	1.0039	1.0100	1.0027	99.7%
200	398.4	199.3	199.1	396.8	198.6	198.3	1.0039	1.0033	1.0039	99.6%
100	398.8	296.8	102.0	397.2	296.5	101.0	1.0039	1.0010	1.0100	99.0%
Average Correction Factor							1.0039	1.0048	1.0055	99.5%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	3.7	-0.2	3.5	ppb	2.5	1.8	0.7	ppb
Auto span	365.2	357.7	8.3	ppb	437.0	430.3	7.5	ppb

Calibration Performed By: Gary Cross

Calibration Summary

Parameter NO₂
 Air Monitoring Network Palliser Airshed

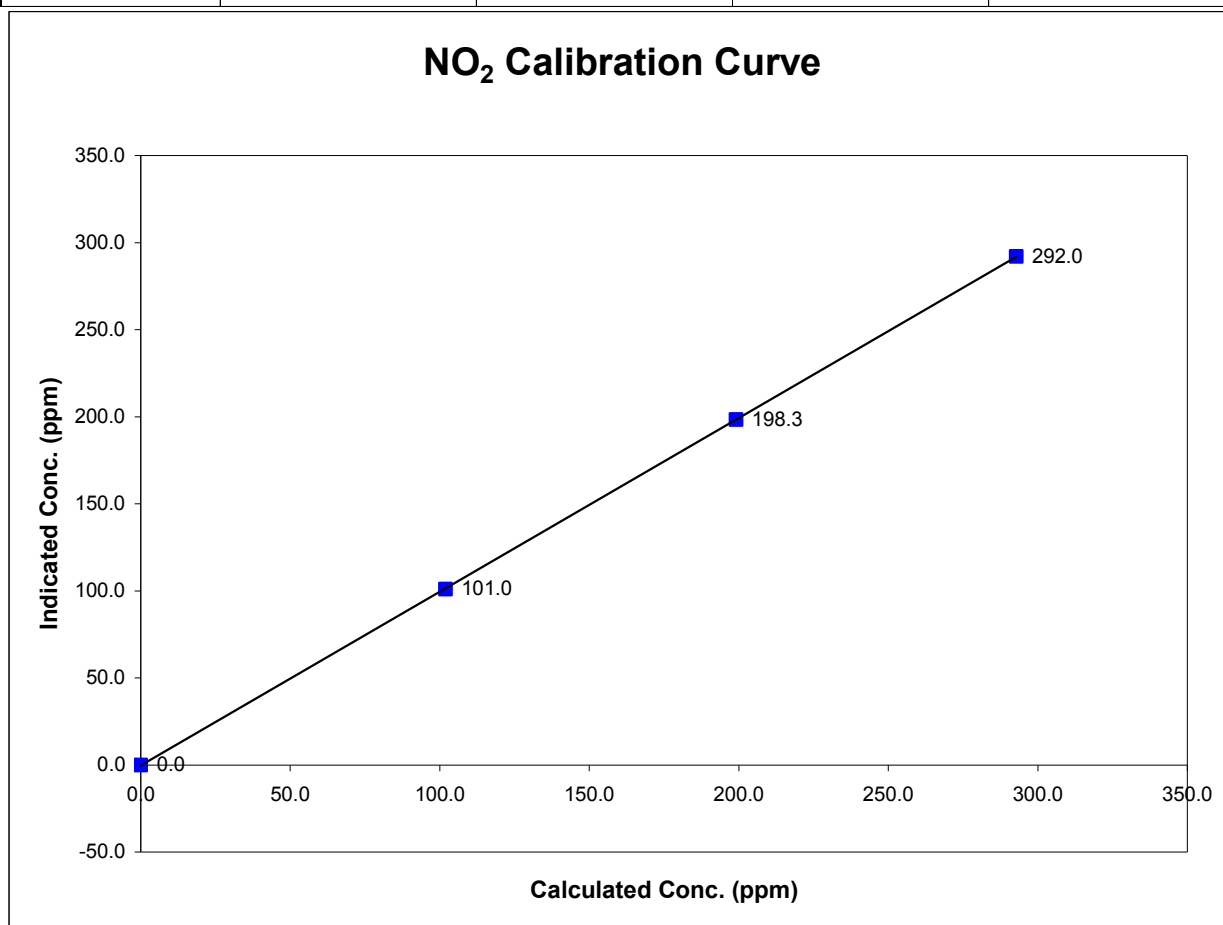


Station Information

Calibration Date	December 13, 2005	Previous Calibration	November 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	16:00	End Time (MST)	21:30
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	0.0	0.0000		
292.8	292.0	1.0027	Correlation Coefficient	0.999993
199.1	198.3	1.0039		
102.0	101.0	1.0100	Slope	1.002150
			Intercept	0.333390



Calibration Summary

Parameter NO_x
 Air Monitoring Network Palliser Airshed



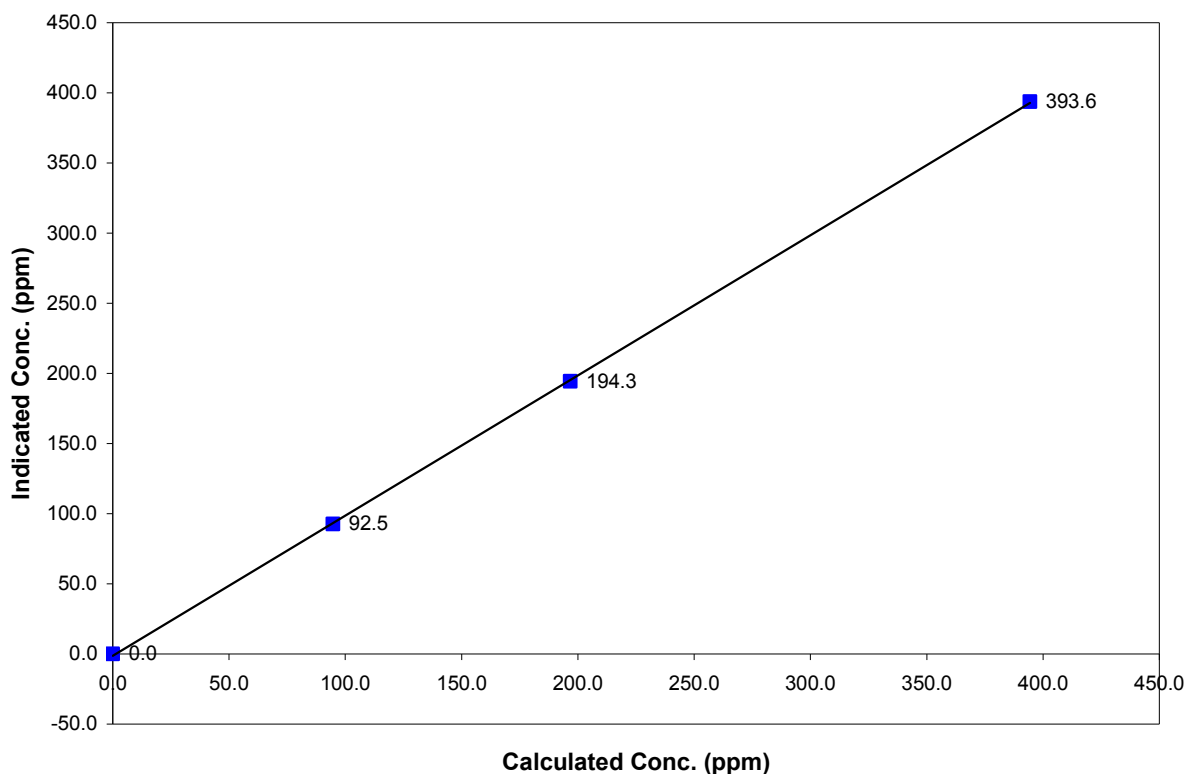
Station Information

Calibration Date	December 13, 2005	Previous Calibration	November 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	16:00	End Time (MST)	21:30
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	0.0	0.0000		
394.5	393.6	1.0021	Correlation Coefficient	0.999954
196.7	194.3	1.0126		
94.7	92.5	1.0240	Slope	1.000726
			Intercept	1.262377

NO_x Calibration Curve



Calibration Summary

Parameter NO
 Air Monitoring Network Palliser Airshed

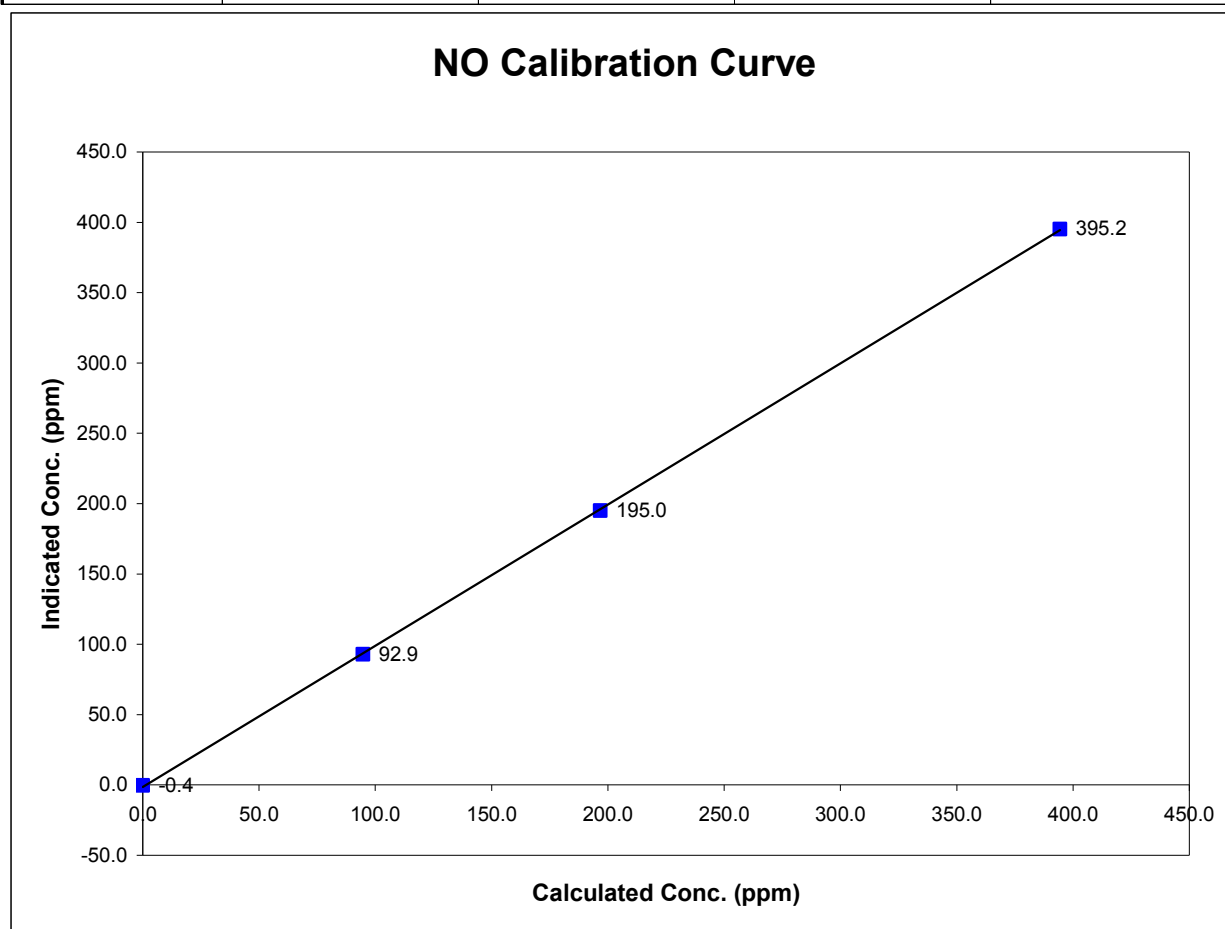


Station Information

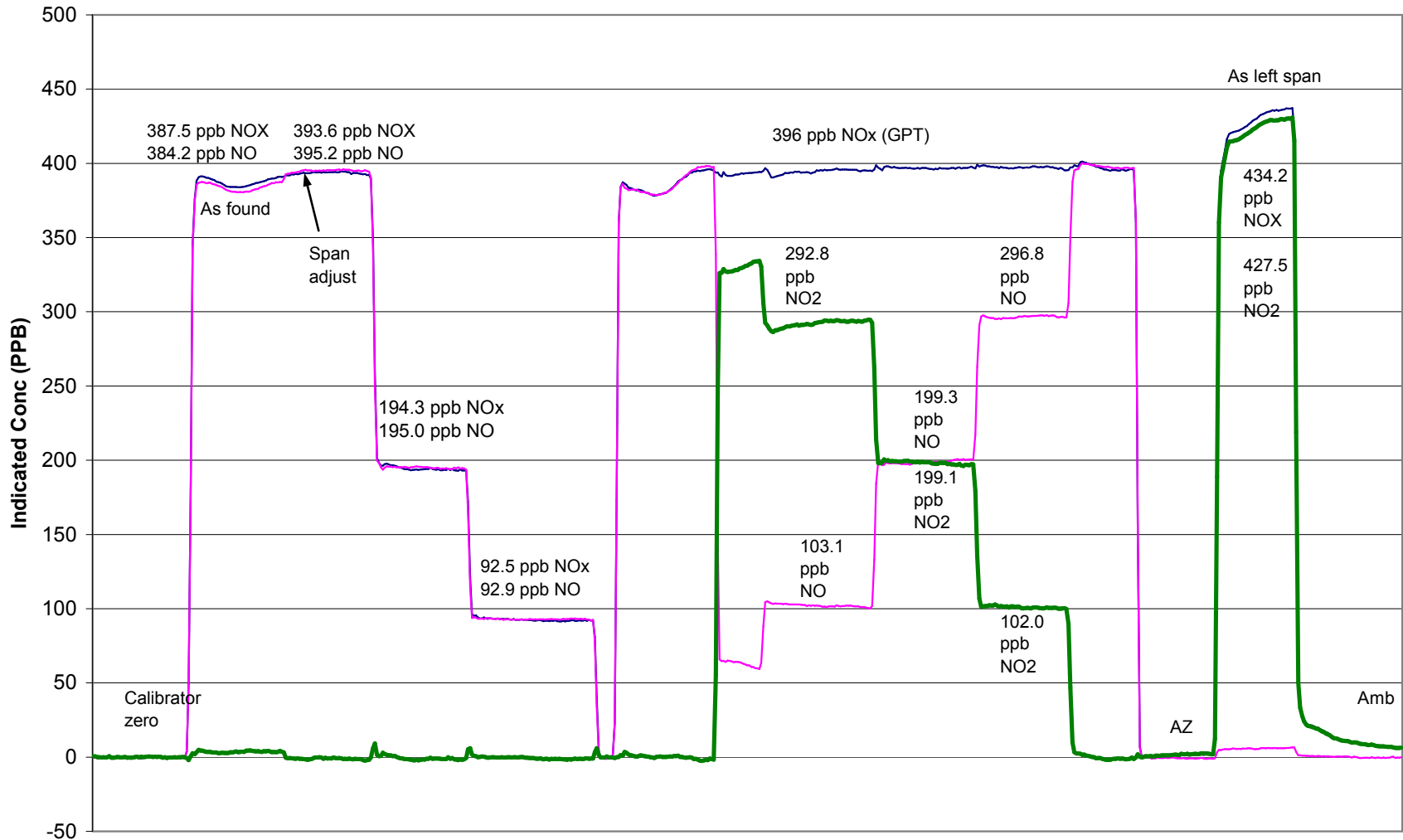
Calibration Date	December 13, 2005	Previous Calibration	November 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	16:00	End Time (MST)	21:30
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A		
394.5	395.2	0.9981	Correlation Coefficient	0.999964
196.7	195.0	1.0087		
94.7	92.9	1.0191		
			Slope	0.996216
			Intercept	1.411938



NOx Calibration



December 13, 2005

Calibration Report

Parameter THC
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	December 14, 2005	Previous Calibration	November 14, 2005
Station Number	101	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)	9:00	End Time (MST)	12:30
Barometric Pressure	702.2 mm Hg	Station Temperature	23.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	700 ppm CH ₄ / 301 ppm C ₃ H ₈	Cal Gas Expiry Date	8/28/2005
Cal Gas CH ₄ equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
Calculated slope	0.998635	Calculated slope	0.967423
Calculated intercept	0.024513	Calculated intercept	0.353393
Analyzer make	TEI model 51C-LT	Analyzer serial #	407505596

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
THC sample pressure	5.75	PSI	5.75	PSI
THC span counts	10806	raw	10806	raw
THC zero counts	1732	raw	1732	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)
2993	0.00	0.00	-0.38	N/A
2993	39.98	20.14	20.45	0.9849
2993	19.60	9.94	9.91	1.0032
2993	9.50	4.83	4.65	1.0396
zero	0.00	0.00	-0.38	As Found Zero
2993	39.98	20.14	20.45	As Found Span
Average Correction Factor				1.0092

Calculated value of As Found Response: 20.822 ppm Percent Change of As Found: -3.4%

	before calibration		after calibration	
Auto zero	0.02	ppm	-0.01	ppm
Auto span	23.59	ppm	23.26	ppm

Notes: no adjustments were made

Calibration Performed By: Gary Cross

Calibration Summary

Parameter THC
 Air Monitoring Network Palliser Airshed

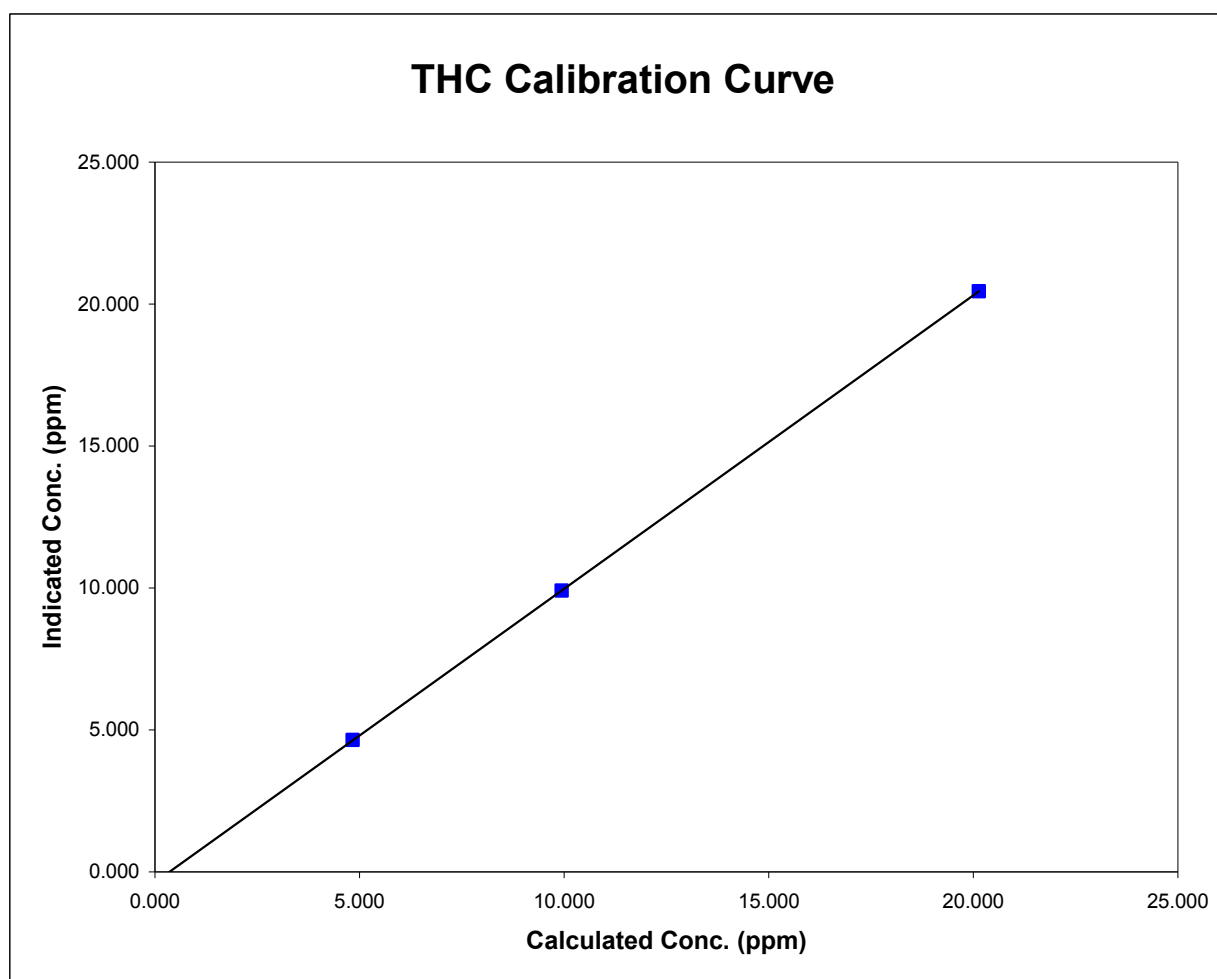


Station Information

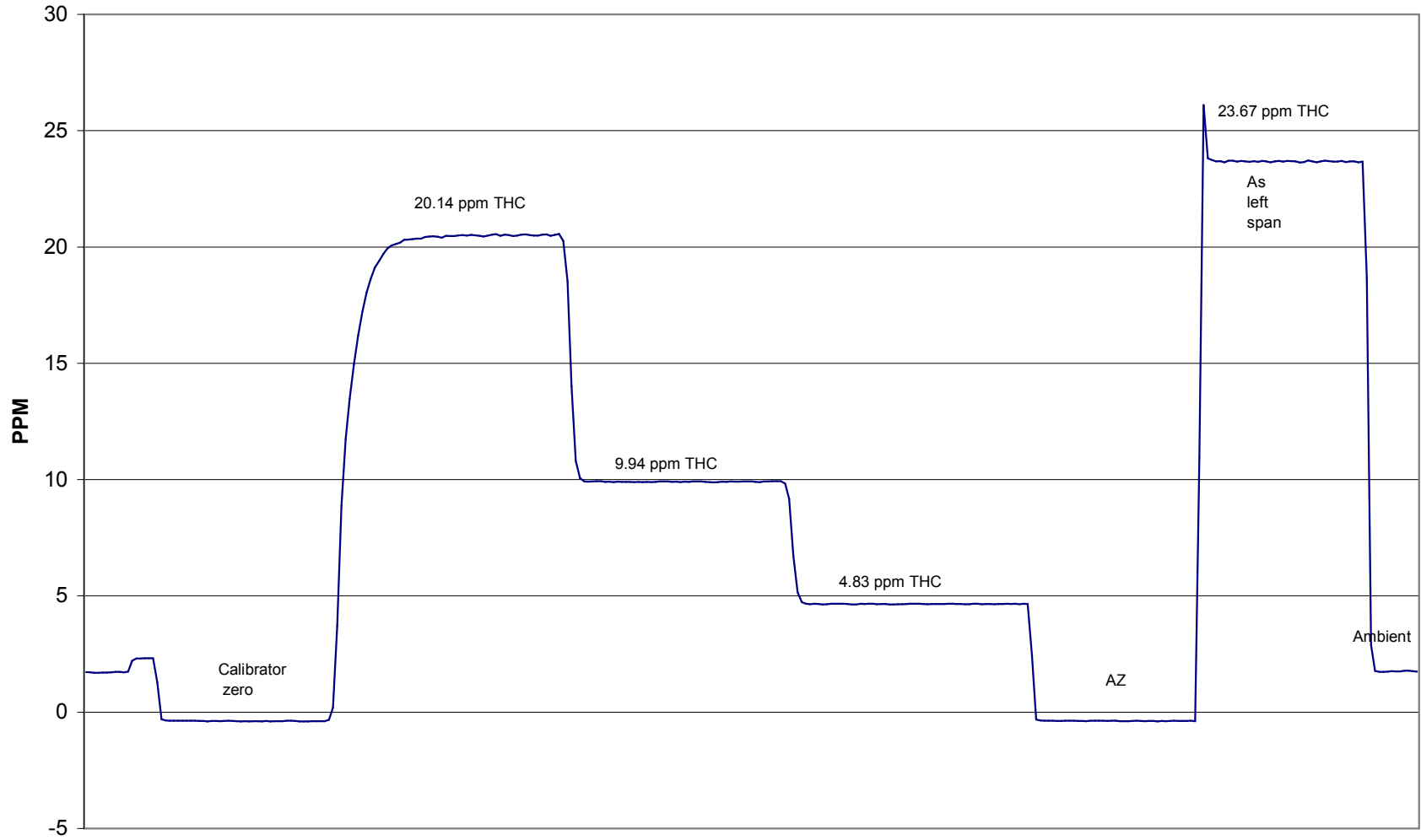
Calibration Date	December 14, 2005	Previous Calibration	November 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	9:00	End Time (MST)	12:30
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.379	N/A		
20.138	20.448	0.9849	Correlation Coefficient	0.999998
9.940	9.908	1.0032		
4.834	4.650	1.0396	Slope	0.967423
			Intercept	0.353393



THC Calibration



December 14, 2005

Calibration Report



Parameter CO
 Air Monitoring Network Palliser

Station Information

Calibration Date	December 14, 2005	Previous Calibration	November 14, 2005
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="text"/>
Start Time (MST)	11:40	End Time (MST)	14:40
Barometric Pressure	702.2 mm Hg	Station Temperature	23.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
		Cal Gas Cylinder #	BLM002248
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	11
	Before		After
Calculated slope	0.998806	Calculated slope	1.011177
Calculated intercept	0.095194	Calculated intercept	-0.246325
Analyzer make	TEI Model 48CLT	Analyzer serial #	436609887

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.057		1.057	
CO bkg setting	6.969		6.927	
Lamp ratio	1.1530		1.1540	
Lamp intensity	199490	Hz	199080	Hz
Sample Flow	1.008	LPM	1.008	LPM

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4984	0.00	0.00	0.37	N/A
4984	49.65	29.57	29.54	1.0009
4984	19.86	11.90	11.91	0.9995
4984	9.92	5.96	6.06	0.9826
4984	0.00	0.00	0.37	0.0000
4984	49.83	29.68	30.56	0.9711
Average Correction Factor				0.9943

Calculated value of As Found Response: 30.256 ppm Percent Change of As Found: -1.9%

	before calibration		after calibration	
Auto zero	0.29	ppm	0.32	ppm
Auto span	19.74	ppm	19.96	ppm

Notes: _____

Calibration Performed By: Gary Cross

Calibration Summary

Parameter CO
 Air Monitoring Network Palliser

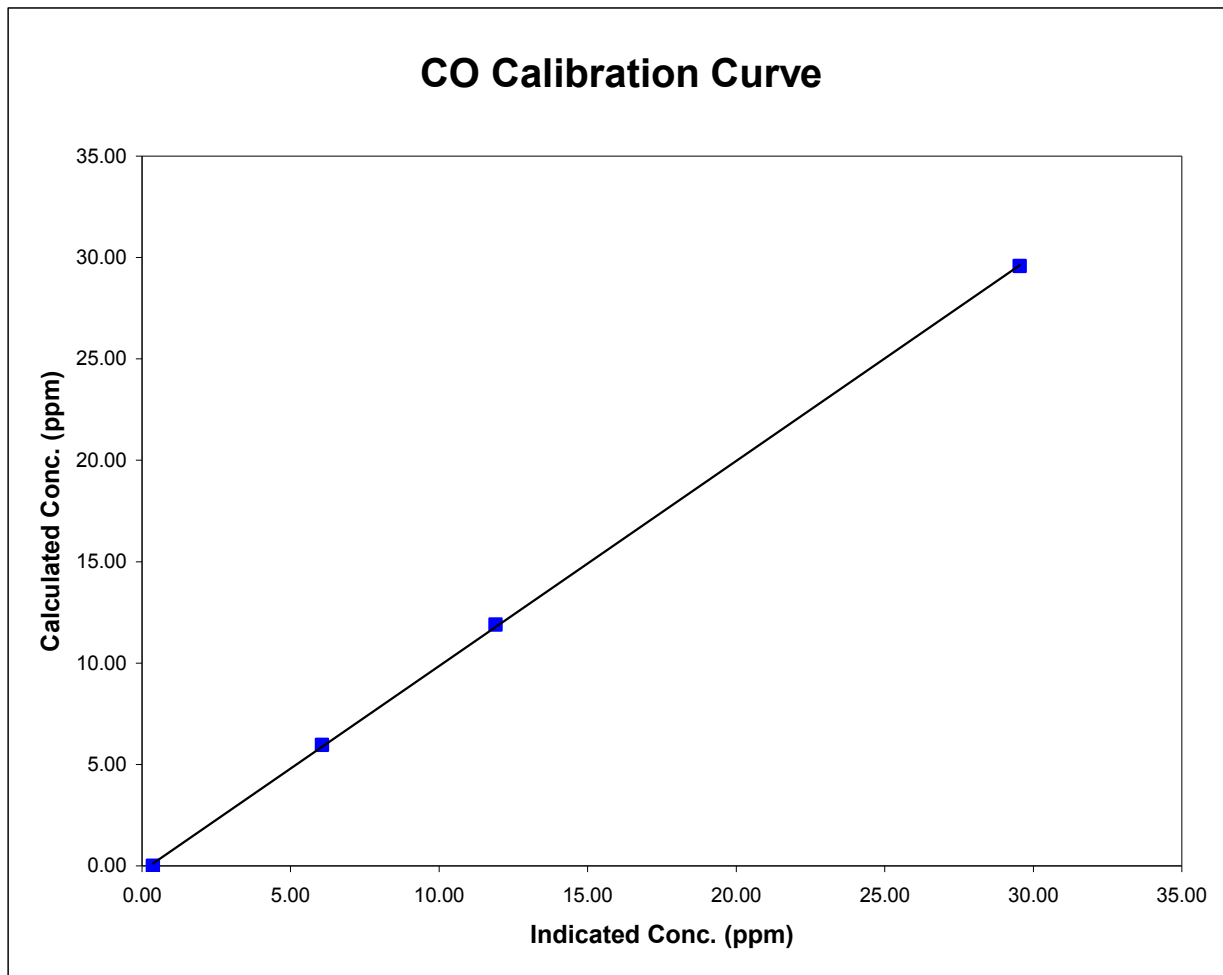


Station Information

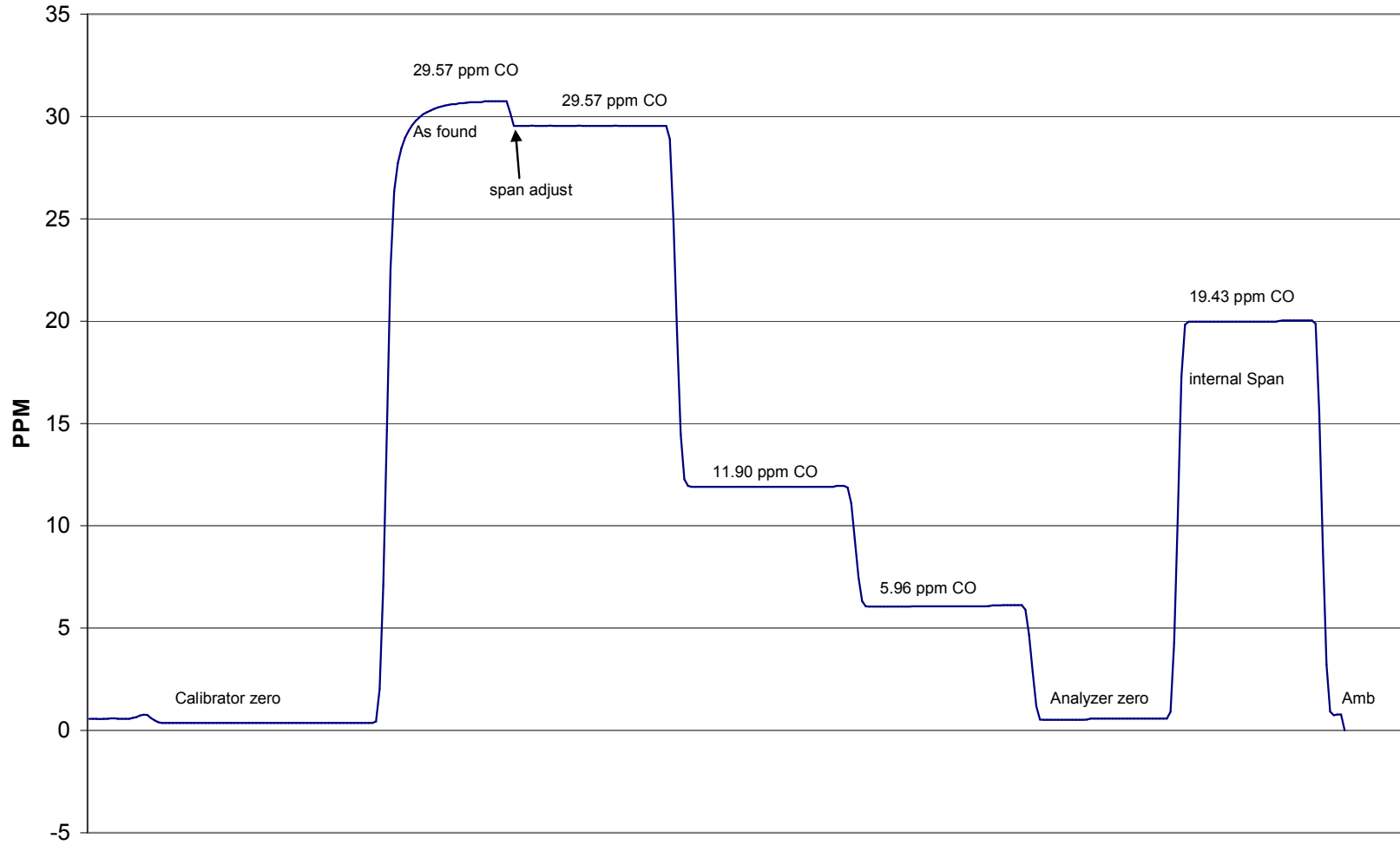
Calibration Date	December 14, 2005	Previous Calibration	November 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:40	End Time (MST)	14:40
Analyzer make/model	TEI Model 48CLT	Analyzer serial #	436609887

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	0.37	N/A		
29.57	29.54	1.0009	Correlation Coefficient	0.999928
11.90	11.91	0.9995		
5.96	6.06	0.9826	Slope	1.011177
			Intercept	-0.246325



CO Calibration



December 14, 2005