



Palliser Airshed Society

Ambient Air Monitoring Network Summary

November 2005

Prepared By:
FOCUS
AIR QUALITY MONITORING

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December 14, 2005

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 – November 2005

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

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

- Monthly average concentrations of NO₂ was 8.3 ppb
- Monthly average concentrations for O₃ was 17.3 ppb
- Monthly average concentrations for CO was 0.13 ppm
- Monthly average concentrations for PM_{2.5} was 2.4 ug/m³

Passive Monitoring – Six Stations throughout the PAS zone:

The following are the ranges for November 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 4.4 ppb to 9.3 ppb
- Monthly average concentrations for O₃ passives ranged from 15.9 ppb to 52.5 ppb

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



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AQM Technical Supervisor



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Continuous Monitoring

Ambient Air Monitoring Network

Crescent Heights Station

General Station Issues

There were no general station issues for the month of November

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	Analyzer flagged out of service between 23:00 MST Nov 11 th to 13:00 MST Nov 14 th due to support gas failure. A new cylinder was supplied Nov 14 th .
Carbon Monoxide	TEI	49C	ppm	No operational issues observed.
PM 2.5	R&P TEOM	1400ab	g/m ³	Seven (7) hours were flagged due to excessive baseline drift. No other operational issues observed.
Wind Speed	Met One	010C	kph	One (1) hour was flagged calm. No other 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.



November 2005 Monthly Overall Summary Report Ambient Air Quality Data

Nov-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	5.6	-	-	118.9	Nov-20 22:00	2.9	SSW	17.0	Nov-20	100.0%
NO ₂ (ppb)	212	106	Crescent Heights	8.3	0	0	33.5	Nov-20 17:00	3.6	WNW	13.2	Nov-21	100.0%
NO _x (ppb)			Crescent Heights	13.7	-	-	150.3	Nov-20 22:00	2.9	SSW	29.8	Nov-20	100.0%
O ₃ (ppb)	82		Crescent Heights	17.3	0	-	37.1	Nov-18 08:00	27.5	W	28.8	Nov-10	100.0%
O ₃ (ppb) - 8-hr	65		Crescent Heights		0						34.0	Nov-18	
CO (ppm)	13		Crescent Heights	0.13	0	-	0.9	Nov-01 09:00	1.5	SE	0.3	Nov-01	100.0%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.4	Nov-01	
THC (ppm)			Crescent Heights	2.09	-	-	3.2	Nov-26 12:00	8.2	WNW	2.5	Nov-26	91.4%
PM _{2.5} (µg/m ³)		30 ^a	Crescent Heights	2.4		0	62.9	Nov-18 13:00	39.7	NNW	6.4	Nov-18	99.0%
RH (%)			Crescent Heights	62.7	-	-	-	-	-	-	-	-	100.0%
SR (W/m ²)			Crescent Heights	55.2	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	1.8	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	10.5	-	-	-	Nov-18 13:00	39.5	NNW	25.4	10-Nov	100.0%
WSPD s (km/hr)			Crescent Heights	10.6	-	-	-	Nov-18 13:00	39.7	NNW	25.7	10-Nov	99.9%
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: November 1, 2005 to December 1, 2005

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:	685
Number of 1-hr Fair Readings:	1
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 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-Nov-05	A	10	11	9	9	7	4	4	4	6	6	11	13	15	14	17	18	18	16	16	15	12	9	A
2-Nov-05	11	13	13	11	11	12	13	11	12	12	13	13	13	14	13	11	10	9	7	3	3	5	A	5
3-Nov-05	5	5	3	4	4	4	4	3	5	9	13	16	17	18	17	17	12	6	6	8	6	A	5	5
4-Nov-05	6	11	14	14	11	9	10	9	10	11	12	15	14	14	15	10	12	13	14	14	A	14	13	10
5-Nov-05	12	11	8	8	9	7	5	5	5	5	12	13	15	16	16	15	8	6	10	A	13	11	10	10
6-Nov-05	9	8	6	5	6	5	5	4	6	4	6	6	11	9	9	7	8	9	A	7	5	5	3	5
7-Nov-05	6	8	8	10	10	10	7	5	6	8	11	13	14	15	16	12	11	A	6	10	7	6	8	13
8-Nov-05	13	14	16	12	13	10	8	6	4	5	5	6	7	9	8	9	A	5	6	6	3	7	9	9
9-Nov-05	10	10	10	10	9	9	8	7	9	13	15	16	18	17	18	A	14	14	11	13	15	15	16	16
10-Nov-05	16	16	16	17	16	15	13	12	12	12	14	15	17	17	A	16	14	13	13	13	14	13	13	14
11-Nov-05	13	12	12	13	11	10	6	7	8	8	12	14	15	A	15	14	11	7	6	6	5	4	6	6
12-Nov-05	5	6	4	5	5	5	9	9	8	10	12	12	A	9	11	10	10	9	8	9	6	6	3	4
13-Nov-05	4	4	3	3	3	4	3	3	4	8	12	A	14	14	12	13	15	15	16	16	15	14	10	10
14-Nov-05	7	6	9	11	9	5	4	6	6	11	A	12	11	10	A	11	11	10	A	3	3	10	10	10
15-Nov-05	10	11	A	10	9	8	8	5	5	9	10	11	11	11	11	11	10	9	10	11	11	10	9	9
16-Nov-05	5	3	A	3	4	4	4	4	8	10	11	11	11	10	9	8	9	9	5	8	10	8	11	11
17-Nov-05	10	A	8	8	8	6	4	4	4	6	9	12	15	14	11	9	8	5	6	9	10	13	14	13
18-Nov-05	A	15	15	16	16	18	17	18	19	18	15	12	18	41	22	18	14	14	9	9	9	5	4	A
19-Nov-05	5	5	4	5	8	8	7	9	9	11	13	13	13	12	12	12	9	7	6	10	11	11	A	11
20-Nov-05	10	10	9	8	10	9	8	8	9	11	12	11	11	11	12	11	7	10	10	7	6	A	8	6
21-Nov-05	3	4	4	4	4	4	4	5	5	11	12	10	10	10	9	9	5	6	6	5	A	6	9	9
22-Nov-05	8	8	8	10	8	10	10	8	8	10	11	11	13	12	11	10	5	5	6	A	5	6	6	7
23-Nov-05	8	9	7	9	9	7	4	3	4	6	7	9	9	11	9	8	6	6	A	8	10	9	4	6
24-Nov-05	8	8	8	7	4	5	4	5	5	9	10	11	12	12	10	8	7	A	4	5	5	7	6	8
25-Nov-05	9	10	10	9	10	10	8	5	6	7	10	12	13	16	14	12	A	8	7	5	4	4	4	3
26-Nov-05	4	5	3	3	3	2	1	2	4	2	4	3	4	4	4	A	4	5	4	6	6	5	8	8
27-Nov-05	6	8	9	9	10	10	11	12	12	12	12	12	13	14	A	14	13	13	12	12	12	10	10	10
28-Nov-05	9	10	11	12	12	11	10	8	7	8	13	14	15	A	15	12	6	7	6	6	7	6	6	6
29-Nov-05	4	4	5	4	4	4	3	3	6	6	7	7	A	9	10	11	11	10	10	11	12	9	10	11
30-Nov-05	11	12	11	10	10	5	5	4	5	7	8	A	9	10	12	10	10	8	9	7	5	4	4	5



PAS - Cresent Heights Nitrogen Dioxide Monthly Summary

Station: Cresent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

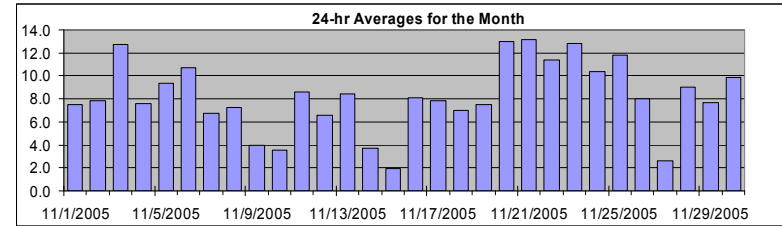
Nitrogen Dioxide (NO₂)

Monitoring Dates: November 1, 2005 to December 1, 2005

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

Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	33.5 ppb 20-Nov 17:00 18:00
Maximum 24-hr Average:	13.2 ppb 21-Nov



AIC Time:	33 hrs	Operational Time:	683 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	27.1	20.5	11.9	6.4	3.4	0.6	0.0	8.3 ppb

Status Flag Characters

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

Day	Mountain Standard Time																								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-Nov-05	A	8	2	4	4	8	16	19	18	21	12	6	6	3	9	7	5	2	1	0	1	2	9	A	7.5	21.3
2-Nov-05	10	5	4	3	3	3	4	8	8	7	4	3	3	5	5	9	9	8	12	14	14	16	A	22	7.9	21.6
3-Nov-05	20	19	13	16	16	15	11	15	13	7	3	2	2	2	6	6	12	26	27	11	13	A	20	23	12.8	26.8
4-Nov-05	15	7	2	2	6	11	7	10	6	3	8	9	10	9	6	15	11	6	4	3	A	5	6	11	7.6	15.5
5-Nov-05	6	7	11	9	6	9	19	22	21	17	3	5	3	3	3	3	15	23	11	A	5	5	5	5	9.4	23.1
6-Nov-05	6	8	11	23	12	20	20	14	8	12	8	7	2	5	5	1	2	4	A	17	20	20	15	6	10.7	22.7
7-Nov-05	4	2	4	1	2	2	8	12	10	7	3	2	2	3	5	9	10	A	18	9	12	14	12	4	6.7	17.9
8-Nov-05	3	5	4	9	6	6	10	10	7	5	3	3	2	1	4	5	A	22	22	17	12	6	3	2	7.2	21.7
9-Nov-05	0	0	0	0	3	5	9	11	10	5	3	1	0	2	1	A	9	7	12	5	3	2	1	1	4.0	12.3
10-Nov-05	0	0	0	1	2	4	8	5	6	6	6	4	2	2	A	5	6	6	5	3	3	2	2	1	3.6	8.5
11-Nov-05	2	1	2	2	5	7	14	10	6	6	4	3	3	A	4	5	11	17	26	25	19	13	6	7	8.6	25.9
12-Nov-05	6	5	7	6	10	13	3	2	3	3	1	A	8	6	5	6	6	6	7	6	10	7	14	16	6.6	16.1
13-Nov-05	16	16	13	11	12	19	14	15	17	13	5	A	6	4	5	2	2	3	3	1	2	2	7	5	8.4	18.5
14-Nov-05	9	8	3	1	2	5	7	6	6	1	A	3	2	2	C	C	C	C	A	3	3	2	2	2	3.7	9.0
15-Nov-05	1	0	A	4	4	4	2	10	9	2	0	0	0	0	0	1	2	3	2	0	0	0	0	0	2.0	10.1
16-Nov-05	5	10	A	14	15	18	18	16	6	2	0	1	0	2	6	7	6	9	20	13	6	9	2	0	8.1	20.3
17-Nov-05	1	A	7	6	6	7	17	16	11	7	2	1	0	6	10	12	12	22	14	8	5	4	3	3	7.8	22.0
18-Nov-05	A	5	4	3	4	1	5	2	2	3	6	12	6	5	2	3	9	7	16	18	14	15	15	A	7.0	17.5
19-Nov-05	14	20	15	9	5	4	6	5	6	6	4	3	3	4	5	5	9	13	15	8	5	4	A	4	7.5	19.8
20-Nov-05	4	4	7	10	5	7	9	10	8	5	4	5	6	6	6	10	19	33	33	28	27	A	32	20	13.0	33.5
21-Nov-05	14	16	16	18	17	17	16	21	20	7	4	4	7	12	10	11	18	15	14	19	A	11	6	7	13.2	20.5
22-Nov-05	10	9	12	6	10	5	7	11	10	8	6	7	5	11	10	12	21	23	16	A	20	15	14	12	11.4	23.1
23-Nov-05	8	5	9	6	4	6	13	14	13	10	7	6	8	6	12	15	27	25	A	26	27	24	14	10	12.8	27.1
24-Nov-05	7	7	6	7	10	10	18	23	22	9	7	4	4	3	5	8	9	A	17	13	12	11	15	10	10.4	22.5
25-Nov-05	7	6	4	5	5	6	12	15	24	16	10	7	7	5	7	7	A	28	25	18	14	17	15	11	11.8	27.7
26-Nov-05	13	11	12	12	11	9	5	6	7	3	3	3	5	5	6	A	13	9	7	7	7	9	10	11	8.0	13.0
27-Nov-05	8	4	2	2	0	0	0	0	0	0	0	0	0	1	A	4	4	4	5	4	4	7	6	6	2.7	7.7
28-Nov-05	6	5	3	3	2	3	4	7	10	8	3	3	2	A	5	9	21	30	26	15	10	12	10	9	9.1	29.6
29-Nov-05	14	16	20	17	15	18	12	13	6	5	5	5	A	5	3	2	2	3	3	2	1	6	4	1	7.7	20.0
30-Nov-05	1	2	3	3	4	14	20	18	13	9	7	A	8	5	4	6	8	13	10	15	20	18	14	13	9.9	20.4
Hourly Avg	7.5	7.4	7.0	7.0	6.8	8.5	10.6	11.5	10.3	7.1	4.6	3.9	3.8	4.5	5.5	6.8	10.3	13.5	13.7	11.0	10.4	9.2	9.4	7.9		
Hourly Max	19.8	19.8	20.0	22.7	17.4	20.3	20.4	22.5	24.5	21.3	12.1	11.8	9.9	12.0	12.1	15.5	27.1	33.5	32.7	28.5	27.0	23.9	32.0	22.6		

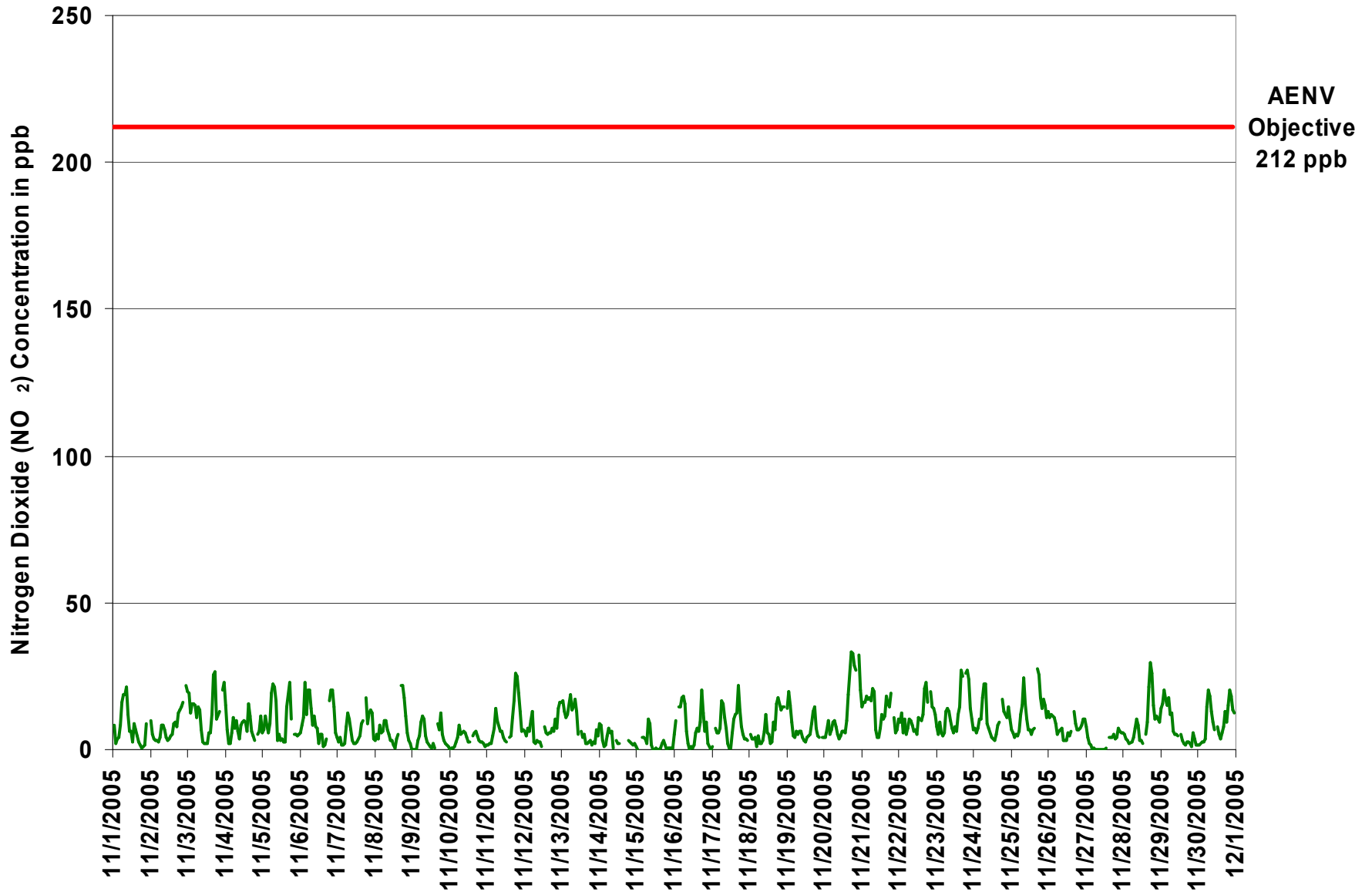


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

HOURLY MAXIMUM TABLE

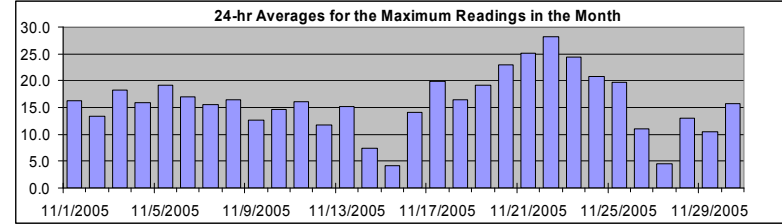
Nitrogen Dioxide (NO₂)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Value:	69.0	ppb	20-Nov	22:00 23:00
Maximum 24-hr Value:	28.3	ppb	22-Nov	

AIC Time:	33 hrs	Operational Time:	683 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	53.7	36.7	22.2	14.2	7.2	2.3	1.1	16.0 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	24:00	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-Nov-05	A	25	8	34	21	18	29	32	23	28	18	12	12	5	16	15	15	5	2	2	3	4	32	A	25	16.3	33.7
2-Nov-05	25	11	6	4	5	4	7	16	11	17	7	6	21	13	9	13	15	11	25	21	16	23	A	25	13.4	25.0	
3-Nov-05	22	23	14	20	24	20	14	17	17	11	3	3	3	4	13	14	20	35	37	18	23	A	37	27	18.2	37.5	
4-Nov-05	24	11	4	3	14	21	15	29	10	5	14	14	24	25	13	29	23	15	10	5	A	7	19	33	16.0	32.7	
5-Nov-05	21	10	16	22	14	26	25	24	24	34	6	11	6	9	7	5	31	31	24	A	9	26	32	29	19.1	33.8	
6-Nov-05	15	20	27	25	19	45	23	22	12	16	10	9	5	8	8	2	3	5	A	21	25	27	24	21	17.0	45.1	
7-Nov-05	9	4	20	4	6	8	24	23	17	10	5	3	3	6	14	11	12	A	33	21	23	34	36	33	15.6	35.6	
8-Nov-05	26	11	9	33	13	9	39	21	13	8	4	10	4	2	13	7	A	32	26	27	26	12	11	21	16.4	39.1	
9-Nov-05	14	1	0	2	21	19	21	14	13	8	7	4	1	22	8	A	13	10	30	18	18	9	23	15	12.7	29.9	
10-Nov-05	1	3	1	2	25	13	21	28	17	30	7	15	15	16	A	11	36	18	24	4	9	22	19	2	14.7	35.9	
11-Nov-05	37	15	24	5	7	10	22	13	10	8	8	4	4	A	7	11	14	29	37	31	24	18	7	24	16.1	37.1	
12-Nov-05	17	6	15	9	15	20	4	5	26	8	8	2	A	12	7	6	8	7	11	11	31	11	19	17	11.8	30.5	
13-Nov-05	18	20	17	21	21	27	18	19	27	20	20	A	10	26	16	3	5	4	5	3	6	3	26	13	15.2	27.0	
14-Nov-05	14	17	7	5	3	12	14	11	13	3	A	6	4	4	C	C	C	C	A	6	3	4	3	5	7.4	16.9	
15-Nov-05	5	3	A	8	6	6	3	19	13	5	1	2	1	2	1	1	5	5	3	2	1	1	2	1	4.2	18.5	
16-Nov-05	15	18	A	17	19	20	26	26	13	6	4	18	1	6	17	13	10	16	27	17	11	18	5	1	14.1	27.1	
17-Nov-05	14	A	13	8	10	15	18	30	22	11	12	3	13	13	45	20	37	34	21	14	20	7	56	21	19.8	56.4	
18-Nov-05	A	8	27	9	13	2	27	4	4	9	15	18	12	22	5	4	34	14	24	21	30	28	35	A	16.5	35.3	
19-Nov-05	18	48	22	12	20	6	16	7	27	18	5	30	4	9	27	22	20	32	31	24	18	14	A	7	19.1	48.2	
20-Nov-05	7	5	24	23	8	9	28	29	15	7	11	12	10	13	7	18	26	42	53	43	38	A	69	33	22.9	69.0	
21-Nov-05	17	26	19	45	25	21	18	27	44	13	5	13	14	35	30	18	26	21	54	28	A	59	8	14	25.1	58.6	
22-Nov-05	15	36	59	12	44	16	26	13	12	20	22	18	12	45	20	29	24	28	53	A	46	56	22	20	28.3	59.1	
23-Nov-05	16	8	21	39	24	8	45	18	18	11	9	8	22	8	18	21	33	29	A	58	49	54	17	23	24.3	58.2	
24-Nov-05	9	46	9	25	16	30	25	32	27	16	16	6	11	8	13	47	12	A	26	27	15	16	30	18	20.9	47.1	
25-Nov-05	9	7	5	12	8	7	19	20	28	40	15	12	16	15	18	15	A	50	35	31	19	30	20	19	19.6	50.5	
26-Nov-05	25	15	17	16	14	18	8	8	9	5	6	5	8	7	7	A	18	10	8	8	9	10	12	12	11.1	24.5	
27-Nov-05	11	5	3	3	1	1	1	2	2	2	0	1	1	2	A	7	7	9	10	5	6	10	9	7	4.6	11.2	
28-Nov-05	8	9	7	5	4	4	7	9	16	13	5	5	3	A	15	13	34	34	29	21	14	18	15	11	13.0	34.4	
29-Nov-05	16	22	22	20	21	20	18	20	8	6	6	A	8	5	4	3	5	4	3	2	11	8	3		10.5	22.3	
30-Nov-05	4	3	4	4	9	20	23	20	17	44	15	A	12	8	5	7	13	17	13	18	23	26	40	15	15.7	44.3	
Hourly Avg	15.3	15.1	15.0	14.9	15.0	15.2	19.4	18.6	16.9	14.3	9.2	9.1	9.1	12.5	13.5	13.5	18.4	20.3	24.2	18.2	18.4	19.9	22.8	16.8			
Hourly Max	36.6	48.2	59.1	44.6	43.9	45.1	45.3	32.0	43.8	44.3	22.1	29.5	23.5	44.8	45.3	47.1	36.8	50.5	53.5	58.2	48.7	58.6	69.0	33.4			

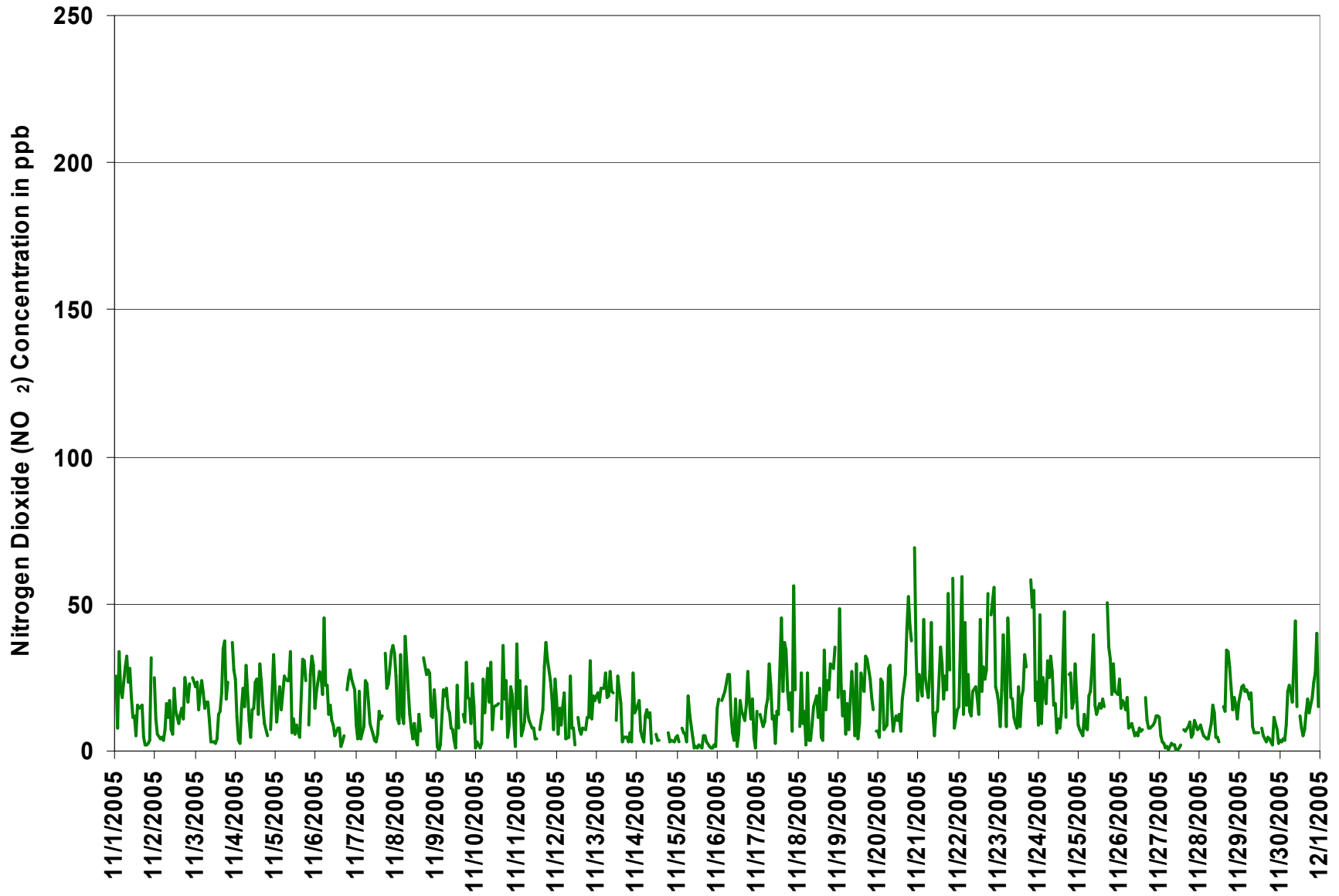
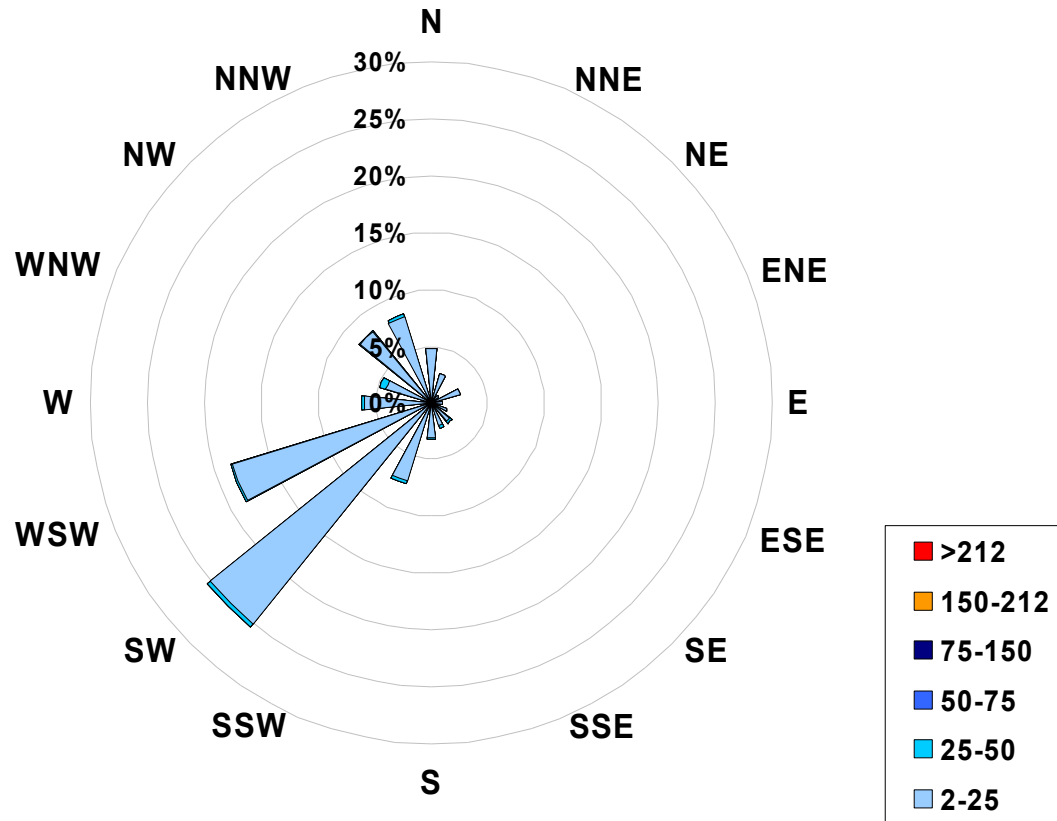


Figure 2. PAS - Crescent Heights Nitrogen Dioxide 1-hr Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of NO ₂ in ppb			Frequency (hrs)
Range			
2.0	<	25	656
25	to	50	18
50	to	75	8
75	to	150	1
150	to	212	0
	>	212	0
Total Non-Zero Values			683



PAS - Cresent Heights Nitric Oxide Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

Monitoring Dates: November 1, 2005 to December 1, 2005

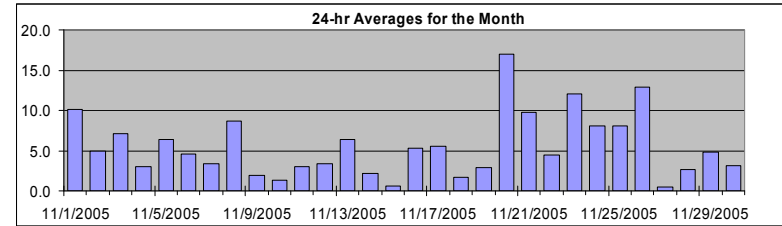
Guideline Limit:

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:						118.9	ppb	20-Nov	22:00	23:00
Maximum 24-hr Average:						17.0	ppb	20-Nov		

AIC Time:		33 hrs				Operational Time:		683 hrs			
Calibration Time:		4 hrs				AMD Operational Uptime:		100.0%			
Percentile		99	95	75	50	25	5	1	Average		
		54.4	19.9	5.5	2.4	1.0	0.2	0.0	5.6 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		
1-Nov-05	A	3	0	8	5	2	17	30	51	70	18	4	3	1	2	1	1	0	0	0	0	0	6	A	10.1	69.6
2-Nov-05	3	1	0	0	0	0	1	2	2	1	1	1	3	2	2	3	2	1	7	5	8	15	A	54	5.0	54.3
3-Nov-05	27	16	4	6	16	9	3	9	11	5	2	2	1	1	3	2	2	5	19	2	5	A	7	8	7.1	26.9
4-Nov-05	2	1	1	0	1	2	1	3	2	2	6	7	7	5	3	8	4	1	1	1	A	1	1	11	3.0	11.1
5-Nov-05	2	1	1	8	2	10	11	19	30	24	2	3	1	2	1	1	7	12	2	A	1	2	4	3	6.4	30.2
6-Nov-05	1	1	7	11	1	14	5	4	2	5	4	4	3	3	3	2	1	0	A	1	7	13	10	4	4.6	13.6
7-Nov-05	1	0	3	0	1	1	5	14	9	6	3	2	2	1	1	2	1	A	3	1	4	8	8	3	3.3	13.9
8-Nov-05	2	1	1	4	1	0	2	4	12	10	11	7	6	4	6	4	A	11	40	49	13	2	5	5	8.7	48.7
9-Nov-05	1	0	0	0	2	6	6	3	4	2	2	1	1	2	1	A	1	1	4	2	1	1	1	1	1.9	5.8
10-Nov-05	0	0	0	0	1	0	2	4	1	2	1	2	1	2	A	1	4	2	2	1	1	1	1	0	1.3	4.3
11-Nov-05	1	2	1	1	1	0	4	3	2	3	2	1	1	A	1	1	1	3	9	19	6	3	1	4	3.1	18.8
12-Nov-05	3	1	2	1	2	3	1	1	3	3	3	2	A	3	3	2	2	1	2	1	3	2	17	17	3.4	16.9
13-Nov-05	23	28	17	8	3	12	4	3	19	9	3	A	2	3	2	1	1	1	1	0	1	1	4	2	6.4	28.0
14-Nov-05	3	2	1	1	1	3	7	6	7	1	A	1	1	1	C	C	C	C	A	0	1	1	1	1	2.2	7.3
15-Nov-05	1	0	A	0	0	0	0	2	3	2	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0.6	3.0
16-Nov-05	1	3	A	5	6	17	26	16	3	3	2	6	3	3	5	5	2	3	8	3	1	1	0	1	5.3	26.3
17-Nov-05	1	A	1	1	0	2	17	16	11	10	4	2	2	5	11	6	11	17	4	1	2	0	2	1	5.6	17.5
18-Nov-05	A	0	1	0	0	0	1	0	0	1	2	1	2	1	2	1	3	1	2	3	5	3	7	A	1.7	7.4
19-Nov-05	1	13	4	1	3	0	2	1	3	3	2	3	2	2	3	4	2	4	8	2	2	2	A	1	2.9	12.5
20-Nov-05	1	0	3	2	0	1	2	6	2	2	2	3	3	3	3	2	3	41	42	48	57	A	119	47	17.0	118.9
21-Nov-05	6	16	12	21	20	18	9	28	20	3	2	2	5	12	6	3	6	4	8	13	A	10	1	1	9.8	28.3
22-Nov-05	2	1	9	1	7	1	2	2	3	5	5	4	3	9	5	4	5	8	7	A	12	7	1	1	4.5	11.9
23-Nov-05	1	0	3	4	2	1	14	6	8	6	6	4	6	4	7	4	11	8	A	56	71	48	2	2	12.0	71.0
24-Nov-05	1	5	1	3	2	4	14	56	46	5	5	3	3	2	3	6	2	A	11	5	2	1	6	1	8.1	55.9
25-Nov-05	1	1	0	1	1	1	3	3	18	9	6	4	4	2	3	3	A	55	21	14	3	14	5	14	8.0	54.7
26-Nov-05	32	3	5	8	4	13	13	24	35	20	21	12	27	19	11	A	10	13	10	6	4	3	2	1	12.9	35.4
27-Nov-05	1	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	0	1	1	0	0	0.5	0.9
28-Nov-05	0	0	0	1	0	0	1	2	4	3	2	2	2	A	2	2	6	15	8	4	2	3	1	1	2.7	14.6
29-Nov-05	3	2	9	12	15	34	5	5	3	2	3	3	A	2	2	1	0	1	1	1	1	2	2	2	4.8	34.1
30-Nov-05	2	1	1	1	1	2	5	4	5	5	6	A	6	4	2	2	2	3	2	2	4	6	6	2	3.2	6.1
Hourly Avg	4.2	3.5	3.1	3.7	3.3	5.2	6.1	9.2	10.7	7.3	4.3	3.2	3.5	3.7	3.4	2.8	3.4	7.8	8.3	8.5	7.8	5.4	7.9	6.7		
Hourly Max	31.7	28.0	17.1	21.2	19.6	34.1	26.3	55.9	50.7	69.6	21.3	12.1	27.3	18.8	10.9	8.5	11.1	54.7	42.2	55.7	71.0	47.9	118.9	54.3		



Station: Cresent Heights
 Station Owner: PAS

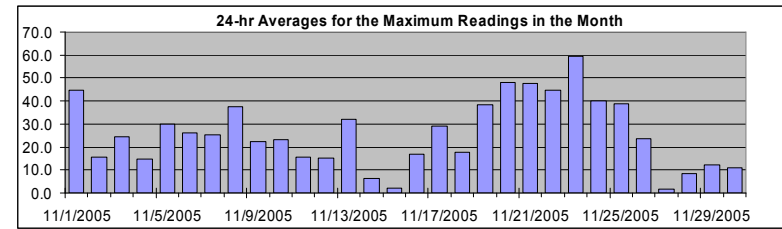
HOURLY MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Value:	322.2	ppb	23-Nov	19:00 20:00
Maximum 24-hr Value:	59.6	ppb	23-Nov	



AIC Time:	33 hrs	Operational Time:	683 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	170.8	106.1	31.9	8.8	2.8	1.0	0.5	25.9 ppb

Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Nov-05	A	72	2	211	58	6	128	129	106	114	43	6	5	2	5	3	3	1	1	1	2	1	85	A	44.7	210.8
2-Nov-05	57	3	1	1	1	1	2	13	4	5	2	3	68	7	5	5	4	1	30	14	16	40	A	76	15.6	76.4
3-Nov-05	37	25	7	18	81	38	7	18	19	8	2	3	2	6	4	3	19	103	5	42	A	101	17	24.6	103.5	
4-Nov-05	8	2	2	2	10	15	16	61	4	3	12	14	17	19	6	46	9	4	2	1	A	2	5	82	14.9	81.7
5-Nov-05	27	2	3	60	11	82	47	34	51	92	4	10	3	6	3	2	65	51	5	A	2	36	62	31	29.9	92.3
6-Nov-05	12	17	123	20	5	120	10	11	4	7	7	5	5	6	5	3	2	2	A	5	31	37	86	73	25.9	122.6
7-Nov-05	5	1	48	1	7	13	45	88	19	8	4	3	3	3	12	3	2	A	27	2	18	102	84	81	25.3	101.7
8-Nov-05	26	2	2	69	2	1	28	14	26	15	15	12	8	7	14	8	A	47	116	75	137	5	171	59	37.4	171.5
9-Nov-05	53	1	2	2	74	51	21	5	12	13	6	2	2	34	6	A	3	2	49	51	31	34	31	30	22.3	74.4
10-Nov-05	0	1	0	1	36	7	9	73	18	49	2	18	14	31	A	4	100	36	37	1	26	24	44	1	23.2	99.7
11-Nov-05	44	46	29	1	1	2	14	5	5	6	4	2	1	A	1	2	4	28	27	49	12	8	2	66	15.7	66.0
12-Nov-05	30	4	43	2	7	10	2	3	87	7	6	3	A	4	4	3	3	2	4	3	42	5	48	25	15.0	86.8
13-Nov-05	53	47	33	163	11	32	15	9	128	25	58	A	4	74	24	2	2	2	1	9	1	3	35	5	31.9	163.2
14-Nov-05	6	8	1	6	1	12	23	17	19	2	A	2	3	3	C	C	C	C	A	0	2	3	2	3	6.3	23.3
15-Nov-05	3	2	A	2	1	1	1	7	5	3	1	8	2	3	2	2	1	1	1	1	1	0	1	1	2.1	8.4
16-Nov-05	11	16	A	10	12	25	67	52	28	11	10	65	4	6	23	8	4	11	16	5	2	3	1	1	17.0	66.7
17-Nov-05	2	A	2	2	1	15	23	40	32	16	13	4	18	39	75	11	125	49	38	3	28	1	100	30	29.1	125.1
18-Nov-05	A	1	33	2	2	1	19	2	5	2	2	9	5	13	6	3	18	2	4	4	132	25	104	A	17.8	132.0
19-Nov-05	3	171	16	3	59	2	25	3	36	31	3	48	3	22	35	67	23	63	134	28	69	36	A	1	38.4	170.6
20-Nov-05	2	1	32	24	2	2	66	60	20	3	14	28	6	7	5	4	21	87	102	97	100	A	313	108	47.9	312.9
21-Nov-05	18	41	36	140	85	50	19	58	60	6	3	17	11	128	56	9	16	8	164	72	A	94	2	4	47.7	163.9
22-Nov-05	9	38	85	2	101	16	20	4	7	52	110	33	12	87	12	30	9	21	114	A	134	128	3	3	44.7	134.1
23-Nov-05	8	13	94	90	79	2	119	26	24	9	9	7	20	5	13	10	20	14	A	322	264	175	6	44	59.6	322.2
24-Nov-05	1	118	5	30	8	74	56	115	80	9	27	4	44	8	17	119	6	A	40	41	3	12	106	4	40.2	118.6
25-Nov-05	1	1	1	13	1	2	10	11	30	72	8	7	10	9	24	47	A	289	49	123	6	64	12	103	38.8	288.8
26-Nov-05	109	12	16	34	13	18	19	50	45	26	35	19	34	30	17	A	13	16	14	8	5	4	5	2	23.6	109.2
27-Nov-05	2	1	1	1	1	1	1	1	1	1	1	2	2	2	A	1	2	2	7	1	2	2	2	1	1.5	7.1
28-Nov-05	2	2	3	2	2	1	1	4	10	4	3	4	3	A	25	3	35	28	18	20	4	14	2	3	8.5	34.7
29-Nov-05	5	8	23	25	46	61	24	12	17	3	3	6	A	3	7	6	2	7	2	2	2	3	13	3	12.4	61.0
30-Nov-05	4	3	2	1	1	3	8	7	8	18	13	A	11	7	4	4	3	5	5	3	11	48	72	7	10.9	72.3
Hourly Avg	19.2	22.7	23.0	31.2	23.9	22.2	28.1	31.1	30.3	20.7	14.5	12.3	11.4	20.3	15.3	15.1	18.4	29.6	41.2	33.8	40.1	32.4	53.4	30.9		
Hourly Max	109.2	170.6	122.6	210.8	100.9	120.0	128.0	128.6	128.0	114.2	110.0	65.4	68.4	128.4	74.9	118.6	125.1	288.8	163.9	322.2	264.2	175.0	312.9	108.0		



PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

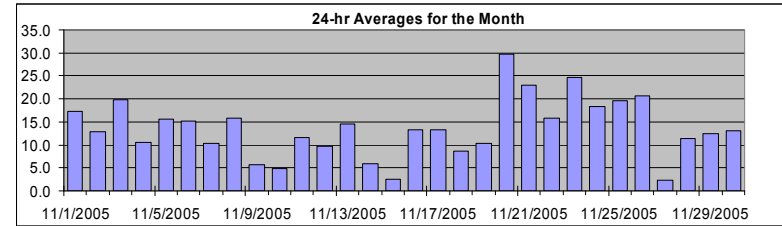
Oxides of Nitrogen (NO_x)

Monitoring Dates: November 1, 2005 to December 1, 2005

Guideline Limit: Alberta Environment:

1-hr	na	ppb
24-hr	na	ppb

Summary			
Maximum 1-hr Average:	150.3	ppb	20-Nov 22:00 23:00
Maximum 24-hr Average:	29.8	ppb	20-Nov



AIC Time:	33 hrs	Operational Time:	683 hrs
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	76.3	39.4	17.3
	50	25	5
	9.3	4.7	1.2
	1	0.0	Average
	13.7 ppb		

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	A	11	2	12	9	10	33	49	70	91	31	10	9	3	10	8	5	2	1	0	1	2	14	A	17.4	91.2
2-Nov-05	13	6	4	3	3	3	5	10	10	9	5	5	6	7	8	12	11	9	19	19	22	31	A	76	12.9	75.9
3-Nov-05	47	35	17	22	31	24	14	23	24	11	4	4	3	3	8	8	14	30	46	12	18	A	27	31	19.8	46.7
4-Nov-05	17	7	3	2	7	13	9	13	8	5	14	16	17	14	9	24	15	8	5	4	A	6	7	23	10.6	23.8
5-Nov-05	8	7	12	16	8	18	30	41	52	40	5	8	4	5	4	3	21	34	13	A	6	8	9	8	15.7	51.7
6-Nov-05	6	9	18	33	13	34	26	18	11	17	12	11	5	9	8	2	3	4	A	18	28	34	25	10	15.3	33.8
7-Nov-05	5	3	7	2	2	3	13	27	20	12	6	4	4	5	7	11	11	A	21	9	17	21	20	6	10.3	26.6
8-Nov-05	5	6	4	12	6	6	12	14	18	15	14	10	7	5	10	10	A	33	62	66	25	8	8	8	15.9	66.4
9-Nov-05	0	0	0	0	5	10	15	14	14	6	4	2	1	4	1	A	10	8	16	8	5	3	2	3	5.8	16.2
10-Nov-05	0	0	1	1	3	5	10	9	7	9	7	6	3	4	A	5	10	8	7	4	3	3	3	1	4.8	10.4
11-Nov-05	2	3	3	3	6	7	18	13	8	10	6	4	3	A	5	5	13	19	35	44	26	16	7	11	11.6	44.0
12-Nov-05	9	5	9	7	12	16	3	3	6	5	5	3	A	11	8	7	7	7	9	7	13	9	31	33	9.8	32.7
13-Nov-05	39	44	30	19	15	30	17	18	37	21	8	A	8	7	7	3	3	3	4	2	3	2	11	6	14.6	44.3
14-Nov-05	12	10	4	1	2	8	15	12	13	2	A	4	3	3	C	C	C	C	A	3	4	4	3	4	5.9	14.6
15-Nov-05	2	0	A	4	4	4	2	13	12	3	1	1	1	1	1	1	2	3	2	0	0	0	0	0	2.6	12.6
16-Nov-05	6	13	A	19	20	34	44	31	9	5	2	6	3	4	10	12	9	12	28	16	7	11	2	1	13.2	44.4
17-Nov-05	2	A	9	6	6	9	34	32	22	17	6	3	3	11	21	17	23	39	17	9	6	4	6	4	13.3	39.1
18-Nov-05	A	5	4	4	4	1	7	3	3	4	7	15	7	7	3	3	12	7	17	20	19	18	22	A	8.7	21.8
19-Nov-05	15	32	19	10	8	5	8	6	9	10	6	6	4	6	7	9	11	17	23	9	7	5	A	5	10.3	32.2
20-Nov-05	5	4	9	11	6	7	11	16	10	7	6	7	9	9	9	12	22	74	74	76	83	A	150	67	29.8	150.3
21-Nov-05	20	32	28	39	37	36	25	49	40	9	6	7	12	24	16	15	24	19	22	32	A	21	6	7	22.9	48.8
22-Nov-05	12	11	22	6	18	6	9	12	14	14	12	11	8	19	14	16	26	31	23	A	31	22	15	13	15.8	31.5
23-Nov-05	9	6	12	10	7	7	27	20	21	16	13	10	14	10	19	19	38	33	A	81	98	72	16	13	24.7	97.5
24-Nov-05	7	13	6	11	12	14	31	78	68	13	13	7	7	5	8	14	11	A	28	17	14	12	20	11	18.3	78.1
25-Nov-05	7	6	4	7	5	7	15	18	42	25	16	10	10	7	10	11	A	82	46	31	16	31	20	24	19.6	81.7
26-Nov-05	44	14	17	20	15	22	18	30	42	23	24	15	33	23	17	A	23	22	17	12	11	11	13	11	20.7	44.5
27-Nov-05	8	3	1	1	0	0	0	0	0	0	0	0	0	0	A	3	4	4	5	3	4	7	6	5	2.3	7.9
28-Nov-05	5	5	3	3	2	2	4	9	14	11	4	5	3	A	7	11	27	44	34	20	13	14	11	10	11.4	44.0
29-Nov-05	17	18	29	29	30	52	17	18	9	7	8	8	A	7	5	3	2	3	3	3	2	7	6	3	12.4	51.6
30-Nov-05	3	3	3	3	5	16	25	22	19	14	12	A	13	9	6	8	10	16	12	17	24	24	19	15	13.1	25.2
Hourly Avg	11.6	10.7	10.0	10.5	10.1	13.6	16.6	20.6	21.0	14.3	8.9	7.0	7.2	8.0	8.8	9.4	13.6	21.2	21.8	19.4	18.1	14.5	17.2	14.6		
Hourly Max	46.7	44.3	29.8	39.5	36.9	51.6	44.4	78.1	69.5	91.2	30.6	15.8	32.7	24.2	20.6	23.8	38.1	81.7	74.4	81.3	97.5	71.7	150.3	75.9		

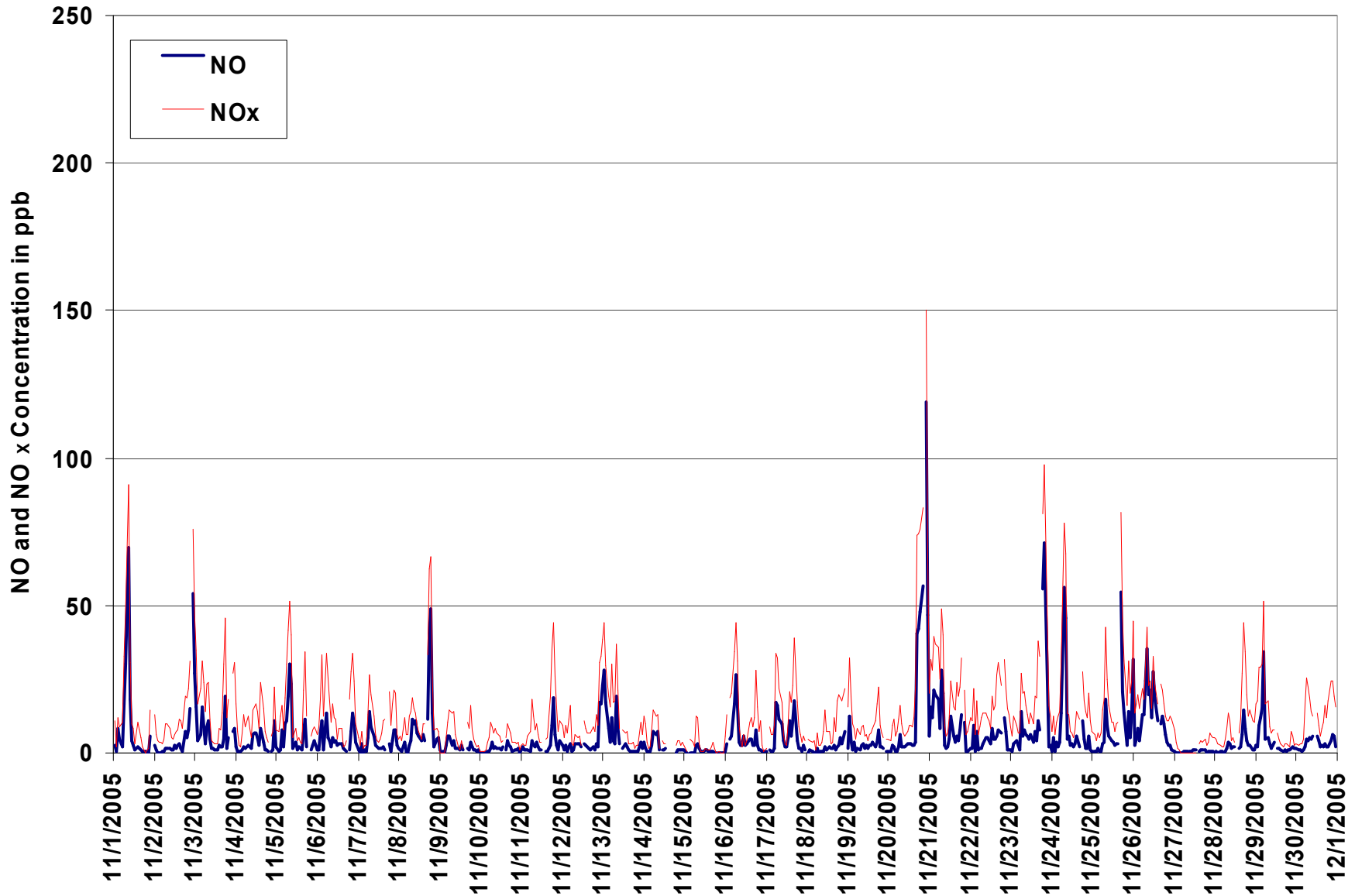


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights
 Station Owner: PAS

HOURLY MAXIMUM TABLE

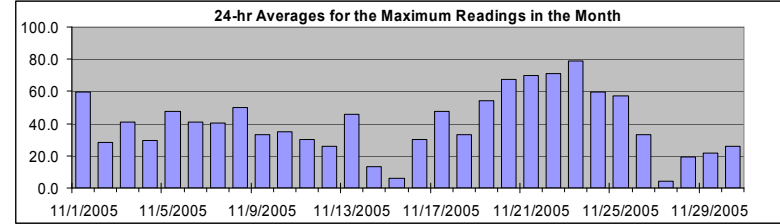
Oxides of Nitrogen (NO_x)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Value:	373.6	ppb	20-Nov	22:00 23:00
Maximum 24-hr Value:	79.2	ppb	23-Nov	

AIC Time:	33 hrs	Operational Time:	683 hrs					
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	212.3	136.8	52.9	23.4	9.7	2.9	1.0	40.2 ppb



Status Flag Characters

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

Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	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-Nov-05	A	94	10	242	78	24	151	158	124	140	60	17	17	7	19	17	18	5	2	2	3	4	114	A	59.4	241.8	
2-Nov-05	82	14	7	4	5	5	8	28	15	22	8	8	89	20	14	16	18	12	55	35	32	62	A	98	28.5	97.9	
3-Nov-05	57	46	21	34	99	59	21	34	35	19	6	5	4	6	19	18	22	53	135	22	59	A	128	41	40.9	135.0	
4-Nov-05	31	13	4	3	24	35	30	90	13	8	24	25	37	41	19	69	33	19	11	7	A	8	24	110	29.6	110.4	
5-Nov-05	46	10	19	74	23	106	67	55	71	123	9	21	8	15	9	5	96	82	29	A	10	60	95	60	47.5	123.5	
6-Nov-05	26	38	142	44	23	149	32	32	17	23	17	14	10	11	13	4	6	A	26	49	60	108	94	94	40.9	149.2	
7-Nov-05	14	6	69	5	12	21	69	110	36	18	10	7	6	8	26	13	14	A	60	23	42	133	114	109	40.2	132.8	
8-Nov-05	52	13	10	88	13	10	67	28	38	23	18	21	12	7	24	14	A	72	137	92	153	15	183	66	50.2	183.0	
9-Nov-05	65	1	1	3	95	69	40	17	22	20	12	5	2	48	13	A	15	11	79	71	39	45	52	43	33.4	95.1	
10-Nov-05	1	4	1	3	55	15	27	86	34	78	9	23	28	40	A	15	132	45	54	6	35	45	64	2	34.8	132.0	
11-Nov-05	80	60	52	6	8	11	35	17	14	12	12	5	5	A	8	13	18	57	56	73	34	24	10	86	30.3	85.6	
12-Nov-05	43	8	57	9	21	29	4	7	111	14	13	4	A	16	10	8	10	9	14	13	72	16	65	42	26.0	111.2	
13-Nov-05	66	65	49	185	31	59	32	28	149	45	77	A	13	100	40	4	6	5	5	11	7	5	57	17	45.9	184.6	
14-Nov-05	20	24	8	10	4	23	38	27	31	4	A	7	5	5	C	C	C	C	A	7	5	6	5	8	13.2	37.7	
15-Nov-05	8	4	A	10	6	6	4	26	17	7	2	11	3	3	3	2	6	6	4	2	1	1	2	1	5.8	25.8	
16-Nov-05	25	33	A	26	30	43	87	77	41	16	13	78	4	12	39	20	14	25	42	21	12	21	5	2	29.9	86.6	
17-Nov-05	15	A	14	9	10	30	40	69	50	26	23	7	30	52	114	30	160	82	59	16	46	8	155	46	47.4	159.7	
18-Nov-05	A	8	60	11	14	2	47	6	9	11	18	23	17	34	10	5	52	15	26	24	149	52	136	A	33.1	148.7	
19-Nov-05	20	218	34	14	79	7	35	9	63	46	7	77	6	31	48	85	41	88	154	53	83	47	A	7	54.5	218.4	
20-Nov-05	8	5	54	47	9	10	86	90	32	9	25	41	16	19	12	21	43	126	143	123	132	A	374	133	67.7	373.6	
21-Nov-05	34	66	53	179	105	68	37	79	99	18	8	30	25	158	80	26	41	29	212	97	A	144	8	18	70.1	211.6	
22-Nov-05	24	74	134	14	145	30	46	17	18	72	122	47	25	124	33	54	33	41	167	A	180	183	24	22	70.8	183.0	
23-Nov-05	24	15	112	128	94	10	164	44	37	19	18	14	40	13	30	31	52	40	A	338	296	216	23	66	79.2	338.0	
24-Nov-05	10	164	15	54	24	104	77	140	104	24	42	10	53	15	27	165	16	A	64	62	17	27	133	20	59.4	164.8	
25-Nov-05	9	8	5	23	8	8	27	30	57	112	23	19	25	23	41	60	A	328	84	155	24	91	31	123	57.0	327.6	
26-Nov-05	133	27	32	49	26	32	25	54	52	30	40	24	40	36	23	A	29	26	20	15	13	14	15	13	33.3	132.6	
27-Nov-05	13	5	3	2	1	1	1	1	1	1	0	0	1	2	A	6	7	8	12	4	5	10	9	7	4.3	12.5	
28-Nov-05	7	8	7	4	4	4	7	13	26	16	7	7	5	A	40	15	58	61	43	33	17	32	17	13	19.3	61.0	
29-Nov-05	22	30	42	43	65	80	42	32	25	9	10	12	A	9	13	10	4	9	5	4	3	14	17	5	21.8	79.6	
30-Nov-05	7	6	5	5	10	24	30	26	25	62	26	A	20	15	8	11	16	22	18	21	34	72	107	21	25.6	107.5	
Hourly Avg	33.6	36.8	36.4	44.2	37.4	35.8	45.8	47.6	45.6	34.2	22.7	20.1	19.6	31.1	27.1	27.3	35.3	47.5	62.6	48.3	55.4	50.5	74.1	45.4			
Hourly Max	132.6	218.4	142.0	241.8	144.7	149.2	163.5	157.9	149.1	139.6	122.1	78.2	88.8	157.7	113.6	164.8	159.7	327.6	211.6	338.0	295.6	215.8	373.6	133.0			

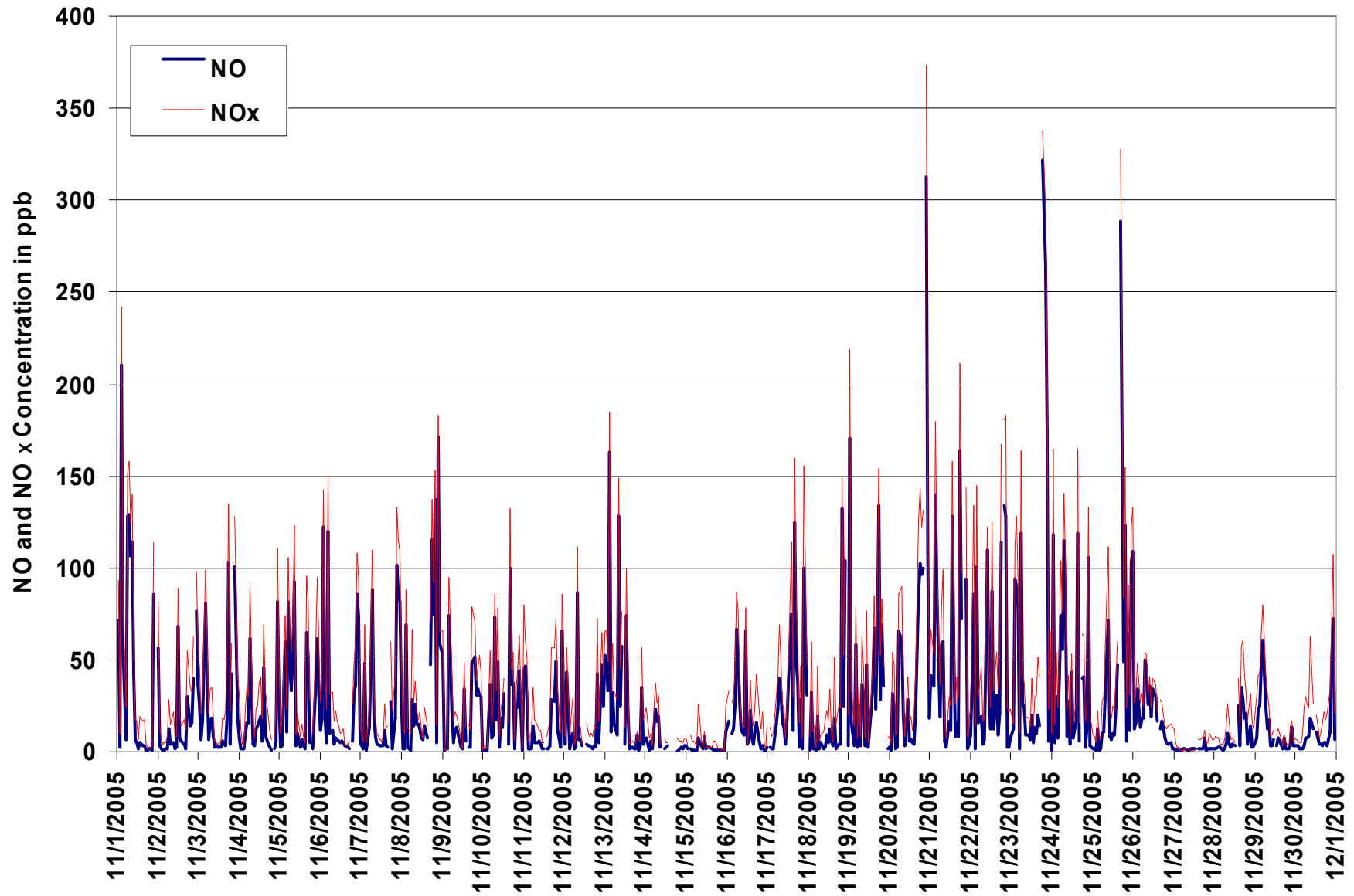


Figure 4. PAS - Crescent Heights Oxides of Nitrogen 1-hr Maximum Value Monthly Trend



PAS - Crescent Heights Ozone Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: November 1, 2005 to December 1, 2005

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

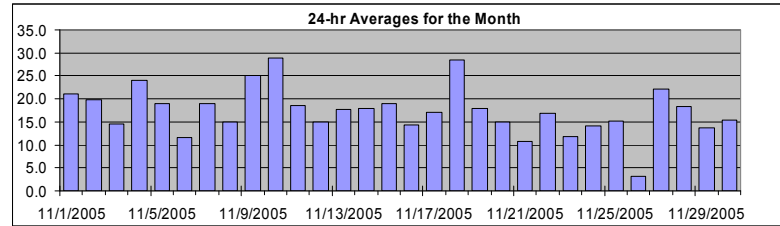
Summary

Number of 1-hr Exceedances: 0

Maximum 1-hr Average: 37.1 ppb 18-Nov 8:00 9:00

Maximum 24-hr Average: 28.8 ppb 10-Nov

AIC Time:	33 hrs							Operational Time:	685 hrs						
Calibration Time:	2 hrs							AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average							
	35.9	31.5	23.5	18.3	10.8	1.6	0.9	17.3 ppb							



Status Flag Characters

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

Day	Mountain Standard Time																								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-Nov-05	A	21	21	18	18	14	6	3	4	4	11	22	25	29	28	33	36	35	32	33	29	24	17	A	21.2	36.1	
2-Nov-05		23	26	25	23	22	25	26	22	24	24	26	25	26	27	27	21	19	19	14	7	4	2	A	1	19.9	27.0
3-Nov-05		1	2	5	4	6	5	8	5	9	18	27	31	33	37	33	33	23	9	6	16	12	A	10	3	14.6	36.8
4-Nov-05		12	21	28	27	21	17	20	19	21	23	24	30	28	28	29	21	24	27	29	28	A	29	25	19	24.0	30.4
5-Nov-05		25	21	16	16	17	15	4	2	3	10	23	26	31	33	33	29	16	7	19	A	26	22	21	21	18.9	32.6
6-Nov-05		18	15	13	2	11	3	4	8	12	9	12	13	22	18	17	14	16	19	A	14	5	4	5	10	11.5	22.2
7-Nov-05		11	15	15	19	19	19	15	10	11	17	21	27	29	30	32	25	23	A	12	20	13	12	16	25	19.0	31.5
8-Nov-05		27	29	32	25	26	20	15	12	7	6	9	10	13	18	16	18	A	5	2	2	7	14	17	17	15.0	31.6
9-Nov-05		20	19	21	19	17	17	15	15	19	26	29	32	35	34	36	A	27	28	21	26	29	30	31	32	25.1	35.9
10-Nov-05		32	31	33	33	32	30	26	25	25	25	27	31	34	34	A	31	29	25	26	26	27	26	26	27	28.8	34.5
11-Nov-05		27	25	25	25	22	19	12	15	17	16	24	28	30	A	31	28	21	14	6	3	5	9	12	12	18.5	30.9
12-Nov-05		11	11	8	11	10	9	18	17	17	20	25	24	A	19	21	21	19	18	16	18	13	12	5	1	14.9	24.6
13-Nov-05		1	2	3	4	7	4	6	6	6	16	24	A	28	28	25	27	30	31	31	32	30	27	20	20	17.7	32.0
14-Nov-05		13	12	17	22	17	9	9	10	12	21	A	23	22	19	21	23	23	20	C	C	A	20	21	20	17.8	23.4
15-Nov-05		20	21	A	19	18	17	17	9	10	17	21	22	21	22	22	22	20	19	20	22	21	19	18	17	19.0	22.2
16-Nov-05		11	6	A	4	2	1	1	8	16	19	21	22	22	21	18	16	19	18	7	15	20	17	22	23	14.3	22.9
17-Nov-05		20	A	15	17	16	11	1	3	7	11	19	24	30	27	21	19	16	7	12	18	20	25	28	27	17.2	29.9
18-Nov-05	A	29	30	32	32	35	34	36	37	36	30	25	36	36	36	36	35	28	28	18	17	19	10	8	A	28.5	37.1
19-Nov-05		9	5	6	10	17	17	15	18	19	22	25	26	25	24	25	25	18	14	12	19	21	22	A	22	18.0	25.7
20-Nov-05		20	20	18	16	20	18	16	15	17	22	24	21	22	23	24	22	15	2	1	2	1	A	1	1	14.9	24.4
21-Nov-05		3	3	1	1	1	1	2	1	7	22	23	21	19	19	19	18	10	11	11	7	A	12	17	18	10.7	23.3
22-Nov-05		15	17	16	21	17	20	20	17	16	19	23	21	26	23	23	19	9	6	12	A	8	13	13	14	16.8	25.7
23-Nov-05		17	18	14	18	17	14	8	6	8	12	15	17	18	22	18	17	6	7	A	1	1	1	6	11	11.9	22.3
24-Nov-05		15	16	15	13	9	10	3	1	4	18	20	23	25	24	21	17	14	A	8	10	11	14	13	16	14.0	24.6
25-Nov-05		19	20	20	19	20	20	16	11	5	14	20	23	26	32	28	25	A	8	5	9	7	4	2	1	15.2	31.6
26-Nov-05		1	7	6	6	6	2	1	1	1	2	3	4	2	3	3	A	1	1	1	1	2	4	6	8	3.1	7.6
27-Nov-05		11	16	18	18	20	20	23	23	23	23	25	24	25	28	A	28	26	26	24	25	24	20	19	19	22.2	28.4
28-Nov-05		18	20	23	24	24	23	19	16	13	16	26	28	30	A	30	24	12	5	5	12	14	12	12	13	18.3	30.5
29-Nov-05		7	6	2	1	2	1	5	7	12	13	13	15	A	18	20	22	21	21	21	21	23	18	21	23	13.6	23.5
30-Nov-05		23	23	22	21	19	10	5	6	9	14	16	A	19	20	24	21	20	16	19	14	7	6	9	10	15.3	23.9
Hourly Avg		15.3	16.5	16.7	16.2	16.2	14.3	12.3	11.5	13.0	17.2	20.9	22.8	25.2	24.9	24.3	23.3	19.3	15.9	14.5	15.5	14.9	15.3	15.0	15.3		
Hourly Max		31.5	31.4	32.8	33.1	31.8	35.1	33.9	36.2	37.1	36.2	30.1	32.3	35.6	36.8	36.0	35.4	36.1	35.4	32.2	32.7	30.2	30.4	31.2	31.5		

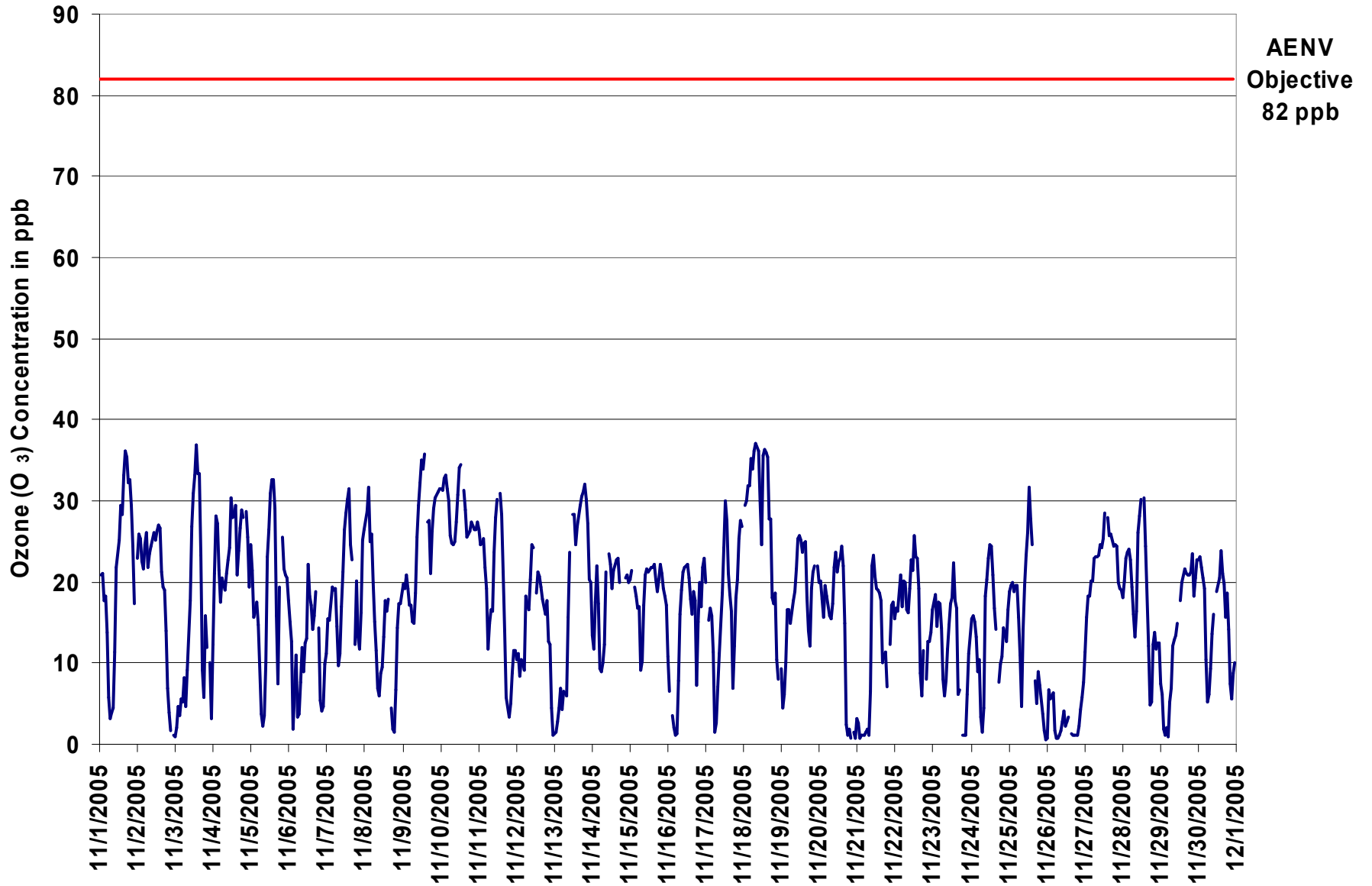


Figure 5. PAS - Cresent Heights Ozone 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

HOURLY MAXIMUM TABLE

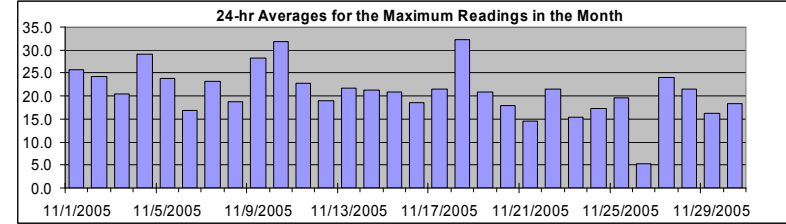
Ozone (O₃)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Value:	43.0	ppb	1-Nov	16:00 17:00
Maximum 24-hr Value:	32.3	ppb	18-Nov	

AIC Time:	33 hrs	Operational Time:	685 hrs					
Calibration Time:	2 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	38.0	35.2	26.6	22.0	15.7	3.2	1.8	21.1 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
1-Nov-05	A	25	25	20	22	24	12	5	6	7	22	28	30	33	37	38	43	38	35	34	32	27	24	A	2	25.7	43.0
2-Nov-05	29	30	28	24	24	29	29	28	30	32	29	28	32	31	32	26	23	23	23	10	12	4	A	2	A	24.2	31.9
3-Nov-05	2	4	12	10	13	11	11	8	14	24	32	33	37	40	38	39	34	19	18	21	19	A	17	14		20.5	39.9
4-Nov-05	19	26	30	30	25	24	25	23	23	26	34	38	36	35	35	30	31	31	32	30	A	31	29	26		29.0	37.6
5-Nov-05	29	25	20	23	21	20	8	11	8	22	25	29	36	36	35	32	27	17	24	A	29	24	25	25		23.9	36.0
6-Nov-05	21	21	20	13	16	8	8	13	16	15	15	16	27	25	20	18	19	26	A	22	11	11	9	16		16.8	26.9
7-Nov-05	14	18	20	21	23	22	18	16	16	21	25	29	30	33	36	29	25	A	19	26	23	17	22	28		23.1	36.0
8-Nov-05	31	35	35	33	31	24	23	17	10	8	10	11	18	19	18	20	A	8	3	3	16	19	20	21		18.8	35.2
9-Nov-05	21	21	23	23	20	21	21	18	25	28	31	35	37	36	38	A	31	31	27	29	32	32	34	34		28.2	37.9
10-Nov-05	34	34	35	35	35	36	36	29	28	28	30	34	36	36	A	33	33	31	28	28	30	28	28	29		31.8	36.2
11-Nov-05	28	27	27	28	25	24	23	19	20	19	28	30	33	A	32	32	25	21	15	10	15	14	14	16		22.7	33.5
12-Nov-05	13	15	13	17	15	19	21	19	21	24	29	28	A	21	23	22	22	20	20	22	16	18	13	3		18.9	29.3
13-Nov-05	2	3	9	10	11	12	12	10	8	25	28	A	30	31	28	29	34	33	34	35	33	30	27	25		21.7	34.8
14-Nov-05	23	15	22	25	23	12	13	14	18	24	A	25	25	23	24	25	25	23	C	C	A	23	23	22		21.4	25.5
15-Nov-05	23	23	A	21	20	19	18	15	20	22	22	22	22	23	23	23	23	20	21	23	23	20	20	18		21.0	23.5
16-Nov-05	17	10	A	7	4	2	6	16	19	21	23	24	24	23	21	27	25	25	17	19	25	24	24	24		18.6	27.3
17-Nov-05	24	A	17	19	20	17	2	5	12	18	22	28	33	32	30	23	23	15	18	23	23	29	30	30		21.5	33.3
18-Nov-05	A	31	31	36	36	37	38	37	38	39	37	33	40	41	37	37	35	32	25	20	26	14	11	A		32.3	41.2
19-Nov-05	12	9	9	15	19	19	17	21	22	25	27	28	27	25	26	27	24	17	16	23	23	A	A	25		20.9	27.7
20-Nov-05	21	21	21	21	21	21	20	19	21	25	26	25	25	26	26	26	21	12	3	6	2	A	3	2		18.0	26.4
21-Nov-05	7	7	3	3	3	3	4	2	17	25	25	23	25	26	22	23	16	15	15	15	A	16	19	21		14.6	25.7
22-Nov-05	20	22	23	24	23	22	23	20	19	23	26	24	30	28	28	26	18	11	18	A	14	16	18	17		21.5	30.0
23-Nov-05	21	21	19	20	19	17	12	8	12	14	17	19	23	24	23	23	14	16	A	3	2	2	11	15		15.4	24.3
24-Nov-05	18	19	16	16	14	13	7	2	12	22	24	26	26	27	24	21	17	A	15	13	14	17	16	19		17.3	26.6
25-Nov-05	21	21	21	21	21	22	21	18	9	19	24	28	30	35	32	29	A	23	15	17	10	9	3	2		19.5	35.2
26-Nov-05	2	13	12	12	11	9	2	2	2	3	4	5	3	4	4	A	3	2	2	2	3	6	8	9		5.4	12.7
27-Nov-05	15	18	19	19	22	22	25	25	25	24	26	26	27	31	A	30	30	29	27	26	26	24	21	20		24.1	31.2
28-Nov-05	20	24	25	25	25	25	22	17	15	23	31	30	33	A	33	29	24	9	8	18	17	14	16	15		21.6	32.8
29-Nov-05	10	10	4	2	6	2	12	14	14	14	16	18	A	21	22	23	23	22	23	23	25	23	24	25		16.3	24.9
30-Nov-05	24	25	23	22	21	14	8	8	12	17	18	A	20	25	26	25	22	20	23	19	15	10	12	12		18.3	26.0
Hourly Avg	18.7	19.7	20.1	19.9	19.7	18.3	16.5	15.4	16.8	21.2	24.3	25.8	28.4	28.2	27.6	27.2	24.6	21.1	19.4	19.2	19.0	18.8	18.5	18.4			
Hourly Max	33.5	34.6	35.2	35.7	35.6	36.9	37.6	37.3	38.1	38.8	36.6	37.6	40.1	41.2	38.0	38.9	43.0	37.9	35.4	34.8	33.2	32.4	33.6	33.8			

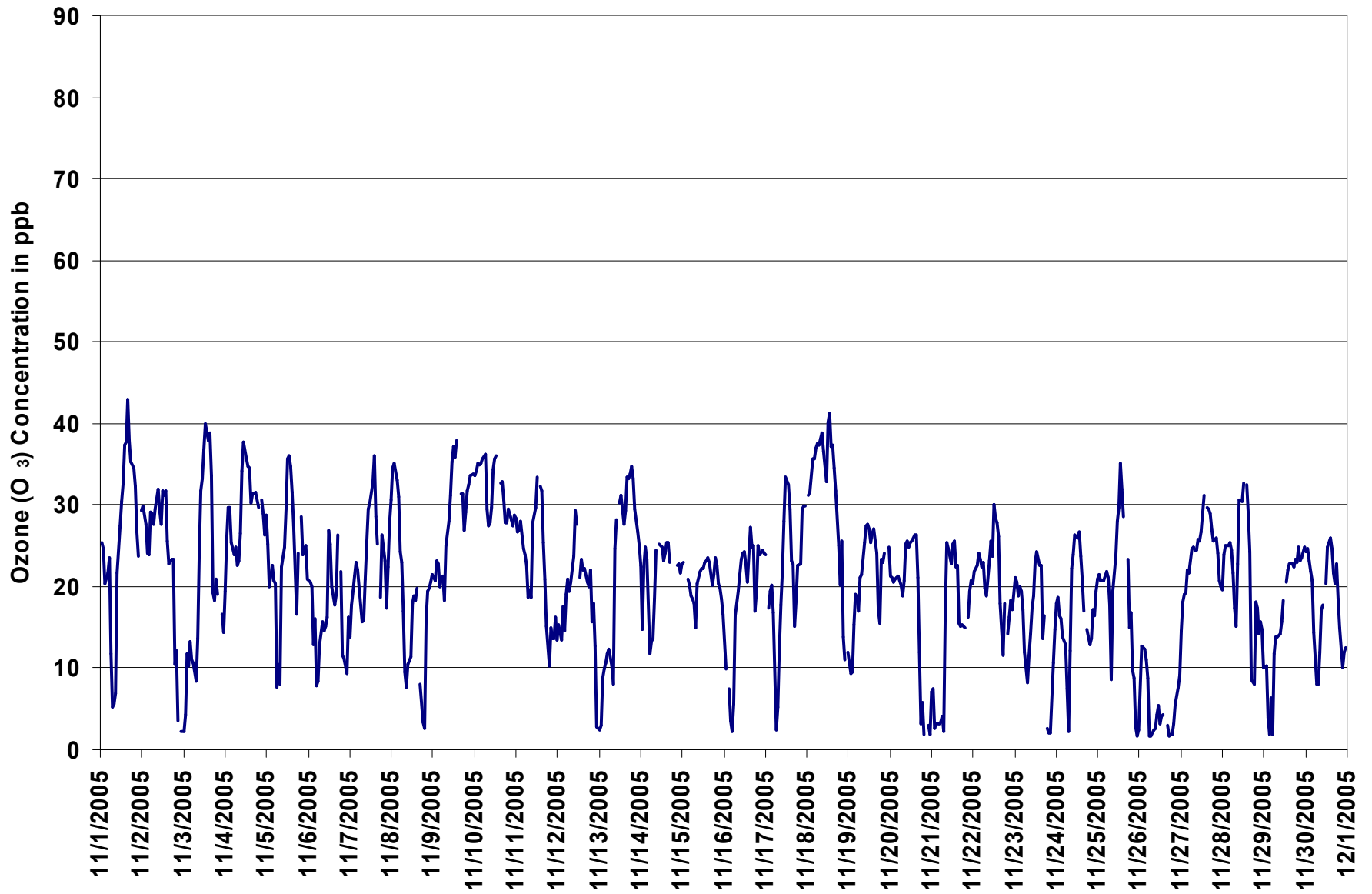
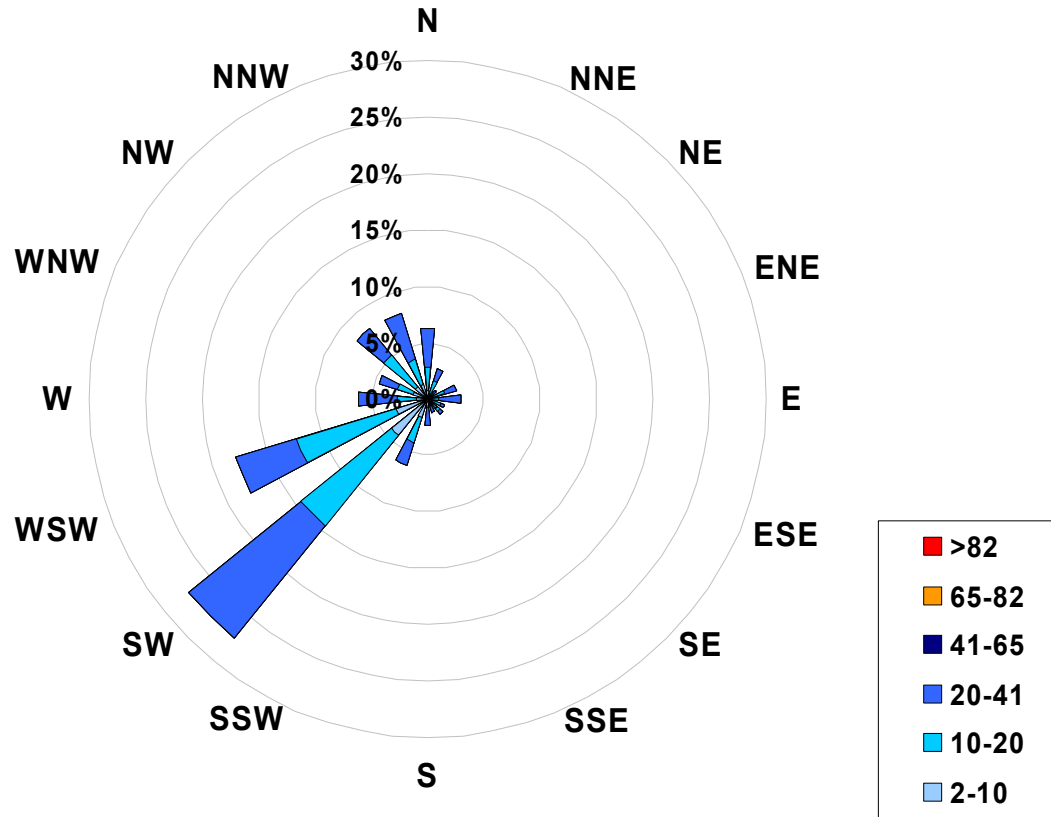


Figure 6. PAS - Crescent Heights Ozone 1-hr Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of O ₃ in ppb Range			Frequency (hrs)
2.0	<	10	159
10	to	20	245
20	to	41	281
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			685



PAS - Cresent Heights Ozone Monthly Summary

Station: Cresent Heights
Station Owner: PAS

EIGHT HOUR RUNNING AVERAGE TABLE

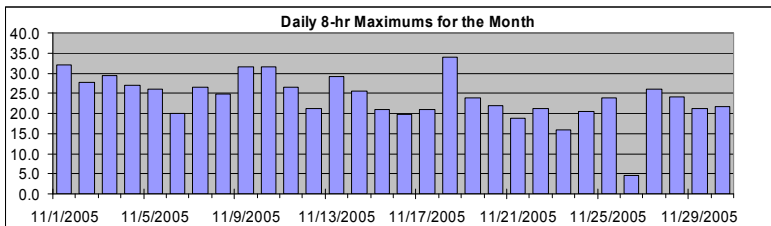
Ozone (O₃)

Monitoring Dates: November 1, 2005 to December 1, 2005

Objective Limit: Alberta Environment: 8-hr 65 ppb

Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	34.0	ppb	18-Nov	10:00	11:00		



Percentile	99	95	75	50	25	5	1
	33.1	29.5	21.7	17.7	12.3	3.9	1.7

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

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Nov-05	11	12	13	13	14	15	15	14	13	11	10	10	11	13	16	20	24	28	30	32	32	31	30	30	32.1
2-Nov-05	28	26	25	24	23	23	24	24	24	24	24	24	25	25	25	25	25	24	22	20	17	14	12	9	27.8
3-Nov-05	7	4	3	3	3	3	4	4	5	7	10	14	17	21	24	28	29	28	26	24	21	19	16	11	29.5
4-Nov-05	10	11	15	16	18	18	19	21	22	22	22	23	24	25	26	26	26	26	27	27	27	27	26	26	27.0
5-Nov-05	26	25	23	22	21	19	17	15	12	10	11	13	14	17	20	24	25	25	24	24	23	22	20	19	26.0
6-Nov-05	19	20	19	17	15	13	11	9	8	8	8	9	10	12	14	15	15	17	17	17	15	13	11	10	20.1
7-Nov-05	10	9	10	11	12	14	15	15	15	16	16	17	18	20	22	24	25	26	25	24	22	19	17	17	26.5
8-Nov-05	18	19	22	22	24	25	25	23	21	18	15	13	11	11	11	12	13	13	12	10	10	9	9	9	24.9
9-Nov-05	10	12	15	17	18	19	18	18	18	19	20	21	23	26	28	30	31	32	30	30	29	28	28	28	31.6
10-Nov-05	29	29	31	31	32	32	31	30	29	28	28	27	28	28	29	30	30	30	30	29	29	27	27	27	31.7
11-Nov-05	26	26	26	26	25	25	23	21	20	19	19	19	20	20	23	25	26	25	23	19	16	15	12	10	26.5
12-Nov-05	9	8	9	10	10	10	11	12	13	14	16	18	19	20	20	21	21	21	20	19	18	17	15	13	21.3
13-Nov-05	10	8	7	5	4	3	4	4	5	7	9	10	13	16	19	22	25	27	28	29	29	29	28	28	29.2
14-Nov-05	26	23	22	20	19	16	15	14	14	15	14	15	15	17	19	20	22	22	22	N	N	N	N	N	25.6
15-Nov-05	N	N	N	N	20	20	19	17	16	15	16	16	17	17	18	20	21	21	21	21	21	21	20	20	21.1
16-Nov-05	18	17	16	14	11	8	6	5	5	7	9	11	14	16	18	19	20	20	18	17	17	16	17	18	19.7
17-Nov-05	18	18	19	19	19	18	15	12	10	10	11	12	13	15	18	20	21	20	20	19	18	17	18	19	20.9
18-Nov-05	20	23	25	27	29	30	31	33	33	34	34	33	34	34	34	34	33	32	30	29	27	24	20	18	34.0
19-Nov-05	16	12	11	10	9	10	11	12	13	15	18	20	21	22	23	24	24	23	21	20	20	20	19	18	23.8
20-Nov-05	19	20	20	20	20	19	19	18	18	18	18	19	20	20	21	22	22	19	16	14	11	10	6	3	22.0
21-Nov-05	2	2	2	2	2	2	2	2	2	4	7	10	12	14	16	18	19	17	16	14	14	13	12	12	18.8
22-Nov-05	13	14	15	17	17	18	18	18	18	18	19	19	20	21	21	21	20	19	17	17	14	13	11	11	21.3
23-Nov-05	12	13	14	14	15	16	15	14	13	12	12	12	12	13	14	16	16	15	15	13	10	7	6	5	15.8
24-Nov-05	6	7	8	10	11	12	12	10	9	9	10	11	13	15	17	19	20	21	19	17	15	14	12	12	20.6
25-Nov-05	13	14	15	16	18	18	19	18	16	15	15	16	17	18	20	21	24	23	21	19	16	12	8	5	23.8
26-Nov-05	4	4	4	4	4	4	4	4	4	3	3	2	2	2	2	3	3	3	2	2	2	2	2	3	4.5
27-Nov-05	4	6	8	10	13	15	17	19	20	21	22	23	23	24	25	25	26	26	26	26	26	25	24	23	26.0
28-Nov-05	22	21	21	21	21	21	21	21	20	20	20	21	22	21	23	24	24	22	19	17	15	14	12	11	24.1
29-Nov-05	10	10	10	8	7	6	5	4	5	5	7	9	9	12	14	16	17	18	20	20	21	21	21	21	21.1
30-Nov-05	21	22	22	22	21	20	18	16	14	13	13	11	11	13	15	18	19	19	20	19	18	16	14	13	21.7

Hourly Max 28.6 29.1 30.5 31.4 31.7 31.6 31.3 32.6 33.2 34.0 34.0 33.1 33.6 33.8 34.0 33.9 32.8 31.7 30.5 31.5 32.1 31.5 30.1 29.7



PAS - Crescent Heights Carbon Monoxide Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

Carbon Monoxide (CO)

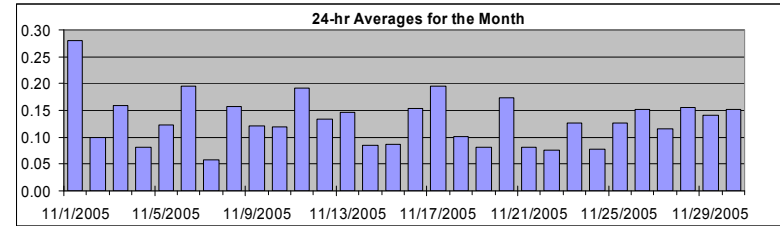
Monitoring Dates: November 1, 2005 to December 1, 2005

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

Summary

Number of 1-hr Exceedances:	0
Maximum 1-hr Average:	0.9 ppm 1-Nov 9:00 10:00
Maximum 24-hr Value:	0.3 ppm 1-Nov

AIC Time:	33 hrs	Operational Time:	684 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.1 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 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-Nov-05	A	0.1	0.0	0.0	0.0	0.1	0.1	0.4	0.8	0.9	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	A	0.28	0.85	
2-Nov-05	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.3	0.2	0.2	0.3	A	0.4	0.10	0.39	
3-Nov-05	0.3	0.2	0.1	0.1	0.2	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.5	0.2	0.2	A	0.2	0.3	0.16	0.46	
4-Nov-05	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.1	0.08	0.17	
5-Nov-05	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.5	0.2	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.2	A	0.1	0.1	0.1	0.1	0.12	0.47	
6-Nov-05	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	A	0.3	0.3	0.4	0.2	0.1	0.19	0.42	
7-Nov-05	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	A	0.2	0.1	0.2	0.1	0.1	0.0	0.06	0.19	
8-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.4	0.6	0.6	0.2	0.1	0.2	0.1	0.16	0.61	
9-Nov-05	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	A	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.31	
10-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.2	0.2	0.1	0.1	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.12	0.27	
11-Nov-05	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	A	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.19	0.33
12-Nov-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.13	0.29	
13-Nov-05	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.29	
14-Nov-05	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	A	C	C	C	A	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.08	0.15	
15-Nov-05	0.1	0.1	A	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09	0.21	
16-Nov-05	0.1	0.1	A	0.1	0.1	0.2	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.15	0.37	
17-Nov-05	0.1	A	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.3	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.20	0.45	
18-Nov-05	A	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	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	A	0.10	0.29	
19-Nov-05	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	A	0.1	0.08	0.20	
20-Nov-05	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.6	0.4	A	0.6	0.3	0.17	0.65	
21-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.0	0.08	0.22	
22-Nov-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	0.1	0.1	0.1	0.2	0.3	0.2	0.2	A	0.2	0.1	0.1	0.1	0.08	0.27	
23-Nov-05	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	A	0.4	0.4	0.3	0.1	0.0	0.13	0.45	
24-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	A	0.2	0.1	0.1	0.1	0.0	0.08	0.33		
25-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.2	0.3	0.2	A	0.7	0.4	0.2	0.2	0.2	0.1	0.1	0.13	0.66	
26-Nov-05	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.15	0.29	
27-Nov-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	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.14	
28-Nov-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	A	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.16	0.34	
29-Nov-05	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.1	0.2	0.2	A	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.33	
30-Nov-05	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.15	0.22		
Hourly Avg	0.10	0.08	0.08	0.07	0.06	0.07	0.10	0.15	0.19	0.13	0.08	0.07	0.10	0.11	0.16	0.16	0.20	0.24	0.22	0.21	0.17	0.15	0.14	0.12			
Hourly Max	0.31	0.27	0.22	0.23	0.21	0.25	0.37	0.36	0.77	0.85	0.24	0.23	0.37	0.38	0.41	0.41	0.45	0.66	0.61	0.65	0.42	0.42	0.59	0.39			

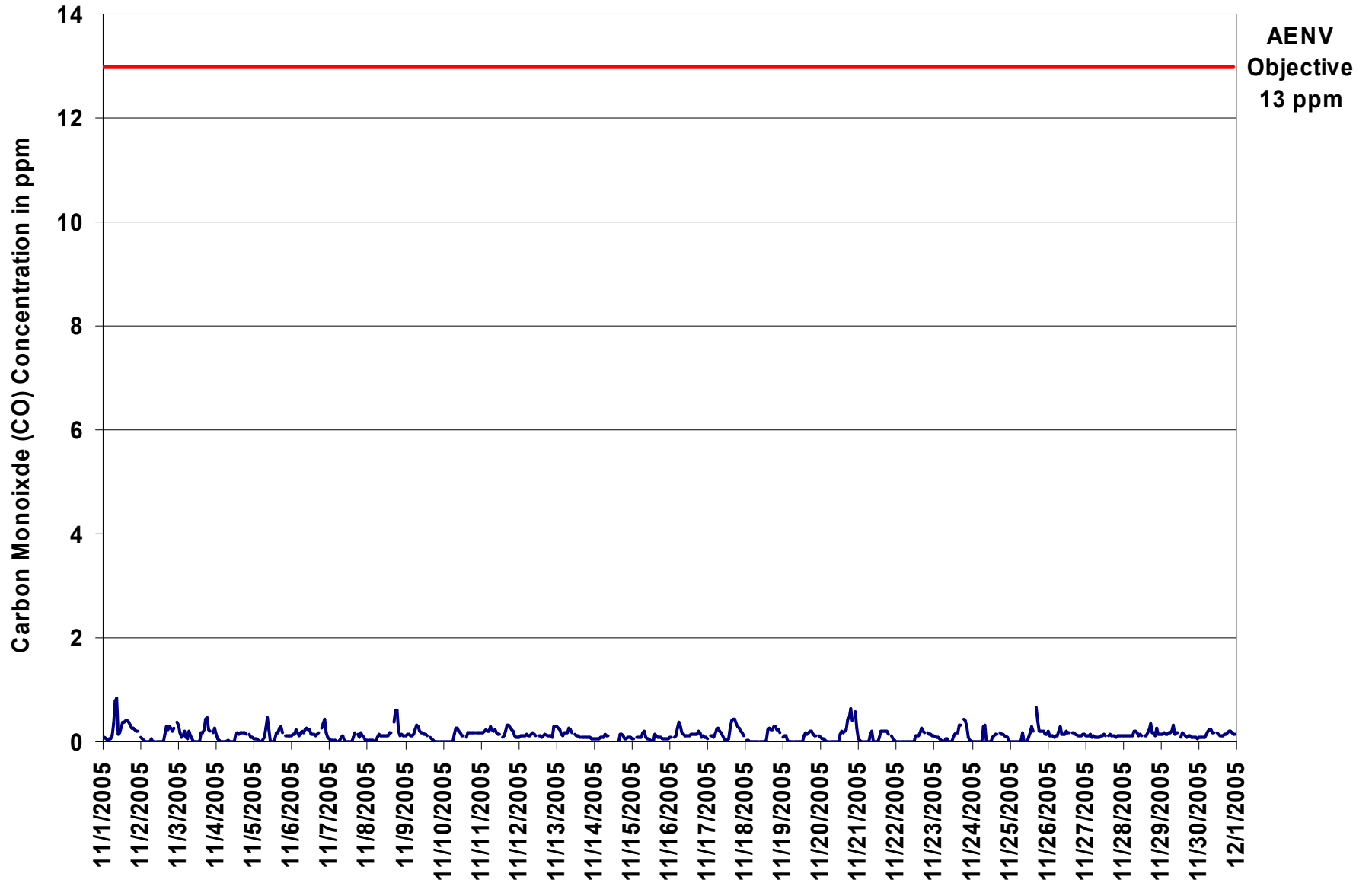


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Cresent Heights
Station Owner: PAS

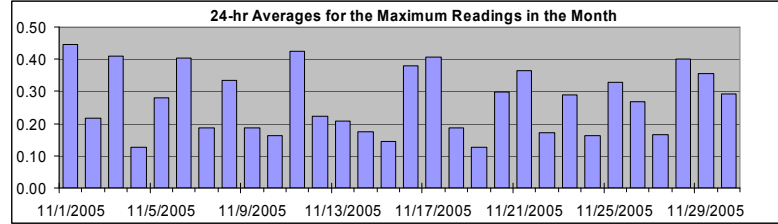
HOURLY MAXIMUM TABLE

Carbon Monoxide (CO)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Value:	4.2	ppm	21-Nov	18:00 19:00
Maximum 24-hr Value:	0.4	ppm	1-Nov	



AIC Time:	33 hrs	Operational Time:	684 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	1.6	0.8	0.3	0.2	0.1	0.0	0.0	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 Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Nov-05	A	0.1	0.3	0.1	0.1	0.2	0.3	1.4	1.2	1.2	0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.3	0.3	0.3	0.2	0.4	A	A	0.45	1.41
2-Nov-05	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.2	0.3	0.8	0.3	0.7	0.4	0.3	0.4	A	0.5	0.22	0.79
3-Nov-05	0.7	0.5	0.3	0.5	1.5	0.2	0.1	1.3	0.3	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.6	0.8	0.4	0.5	A	0.3	0.4	0.41	1.52
4-Nov-05	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	A	0.2	0.1	0.1	0.13	0.25
5-Nov-05	0.2	0.1	0.1	0.1	0.0	0.2	0.3	1.5	0.8	0.6	0.0	0.1	0.0	0.2	0.2	0.4	0.5	0.2	A	A	0.2	0.2	0.2	0.2	0.28	1.53
6-Nov-05	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	1.3	0.4	0.4	0.4	0.2	0.2	0.3	0.2	0.2	A	0.5	0.8	1.7	0.4	0.1	0.2	0.40	1.70
7-Nov-05	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.2	0.2	0.0	0.2	0.0	0.0	0.6	0.3	0.3	A	0.5	0.2	0.5	0.2	0.1	0.1	0.19	0.57
8-Nov-05	0.1	0.0	0.0	0.0	0.1	0.1	0.2	1.2	0.3	0.2	0.2	0.3	0.2	0.3	0.4	0.2	A	0.9	1.2	0.8	0.4	0.2	0.3	0.2	0.34	1.23
9-Nov-05	0.2	0.2	0.1	0.1	0.2	0.3	0.5	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.0	0.19	0.62
10-Nov-05	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.3	0.5	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.45
11-Nov-05	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.2	2.6	0.2	0.2	0.2	A	0.1	0.2	0.5	0.9	0.7	0.7	0.4	0.3	0.2	0.2	0.42	2.56
12-Nov-05	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.8	0.3	0.2	A	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.6	0.3	0.22	0.80
13-Nov-05	0.4	0.4	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	A	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.21	0.40
14-Nov-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	A	C	C	C	A	0.0	0.3	0.4	0.3	0.1	0.2	0.3	0.1	0.1	0.18	0.35
15-Nov-05	0.1	0.1	A	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.32
16-Nov-05	0.1	0.1	A	0.2	0.2	0.6	0.9	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	2.8	0.4	0.3	0.2	0.2	0.1	0.5	0.38	2.75
17-Nov-05	0.1	A	0.1	0.1	0.1	1.8	0.4	0.4	0.5	2.0	0.1	0.0	0.1	0.2	0.4	0.5	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.1	0.41	2.01
18-Nov-05	A	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.4	0.3	0.3	0.4	0.4	0.3	0.5	0.3	A	0.19	0.91
19-Nov-05	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	A	0.1	0.13	0.28
20-Nov-05	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.2	0.4	0.4	0.9	0.8	1.0	0.8	A	0.8	0.5	0.30	1.00
21-Nov-05	0.2	0.1	0.0	0.1	0.0	0.0	0.2	0.3	0.7	0.0	0.0	0.0	0.6	0.2	0.3	0.3	0.3	0.3	4.2	0.3	A	0.2	0.1	0.0	0.36	4.16
22-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.2	0.2	0.2	0.5	0.3	0.4	0.3	0.4	A	0.2	0.2	0.2	0.2	0.17	0.51
23-Nov-05	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.7	0.4	0.0	0.0	0.1	0.2	0.2	0.9	0.3	0.5	0.4	A	0.7	0.6	0.4	0.1	0.1	0.29	0.88
24-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.8	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.3	A	0.3	0.2	0.2	0.5	0.1	0.1	0.16	0.81
25-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.5	0.1	0.0	0.1	0.3	0.3	1.3	0.3	A	1.4	0.7	0.4	0.3	0.7	0.2	0.2	0.33	1.40
26-Nov-05	0.3	0.2	0.4	0.3	0.2	0.4	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.27	0.52
27-Nov-05	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.17	0.25
28-Nov-05	0.1	0.1	0.4	0.2	0.3	0.1	0.3	0.4	0.5	0.2	0.3	0.5	0.2	A	0.6	0.1	0.7	0.6	0.3	0.7	0.3	1.9	0.2	0.3	0.40	1.90
29-Nov-05	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.9	1.1	0.5	0.5	0.5	A	0.1	0.7	0.5	0.5	0.2	0.1	0.1	0.1	0.2	0.3	0.1	0.36	1.12
30-Nov-05	0.2	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.4	0.3	0.8	A	0.2	0.2	0.4	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.29	0.78
Hourly Avg	0.17	0.13	0.14	0.13	0.13	0.19	0.22	0.48	0.41	0.38	0.16	0.16	0.18	0.19	0.38	0.26	0.34	0.50	0.53	0.34	0.29	0.36	0.23	0.19		
Hourly Max	0.71	0.49	0.42	0.48	1.52	1.81	0.87	1.53	1.34	2.56	0.78	0.53	0.60	0.44	1.27	0.56	0.79	2.75	4.16	1.00	0.79	1.90	0.84	0.49		

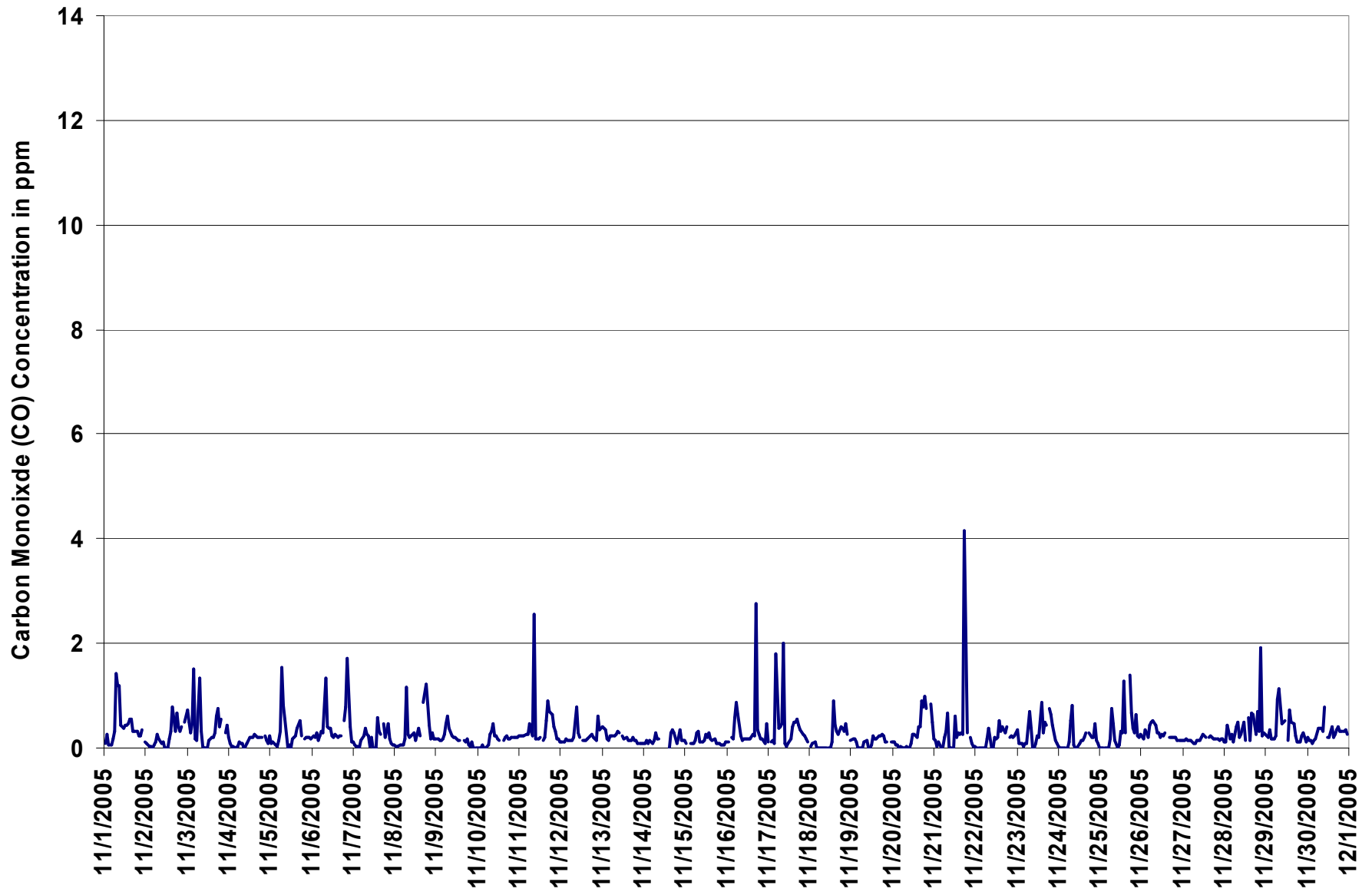
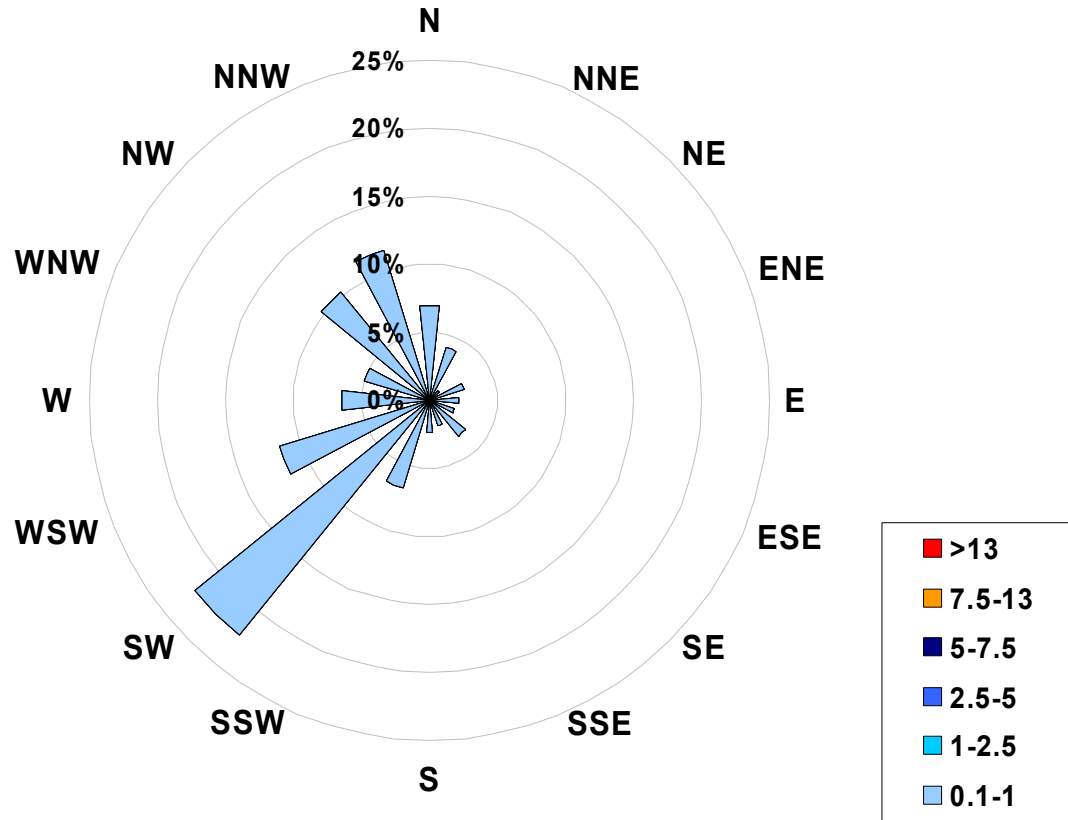


Figure 8. PAS - Crescent Heights Carbon Monoxide 1-hr Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of CO in ppm Range			Frequency (hrs)
0.1	<	1	684
1	to	2.5	0
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			684



PAS - Crescent Heights Carbon Monoxide Monthly Summary

Station: Crescent Heights
Station Owner: PAS

EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

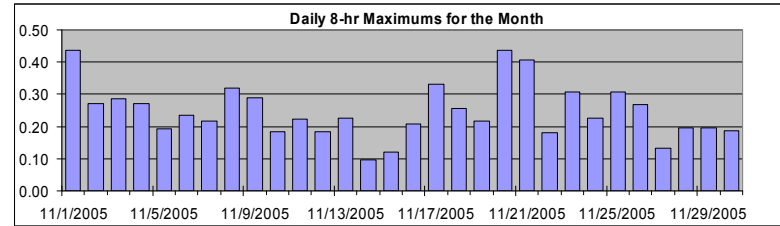
Monitoring Dates: November 1, 2005 to December 1, 2005

Objective Limit: Alberta Environment: 8-hr 5 ppm

Summary

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	0.4	ppm	1-Nov	15:00	16:00		

Percentile	99	95	75	50	25	5	1
	0.4	0.3	0.2	0.1	0.1	0.0	0.0



Status Flag Characters

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

Day Mountain Standard Time

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	Daily Maximum
1-Nov-05	0.4	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.44
2-Nov-05	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.27
3-Nov-05	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.29
4-Nov-05	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.27
5-Nov-05	0.1	0.1	0.1	0.1	0.1	0.0	0.0	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	0.19
6-Nov-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	0.24
7-Nov-05	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.22
8-Nov-05	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.32
9-Nov-05	0.3	0.3	0.2	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	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.29
10-Nov-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.18
11-Nov-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	0.22
12-Nov-05	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	0.1	0.2	0.18
13-Nov-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.22
14-Nov-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N	N	N	N	N	N	N	N	N	N	0.1	0.1	0.1	0.10
15-Nov-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12
16-Nov-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	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.21
17-Nov-05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.33
18-Nov-05	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.26
19-Nov-05	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.22
20-Nov-05	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.44
21-Nov-05	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.41
22-Nov-05	0.1	0.1	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.18
23-Nov-05	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.31
24-Nov-05	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	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	0.23
25-Nov-05	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.31
26-Nov-05	0.3	0.2	0.2	0.2	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	0.1	0.1	0.1	0.27
27-Nov-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.13
28-Nov-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	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.20
29-Nov-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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.20
30-Nov-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	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.19

Hourly Max 0.43 0.39 0.34 0.31 0.27 0.22 0.21 0.22 0.22 0.29 0.30 0.32 0.36 0.40 0.43 0.44 0.39 0.32 0.34 0.35 0.34 0.37 0.43 0.44



PAS - Crescent Heights Total Hydrocarbons Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

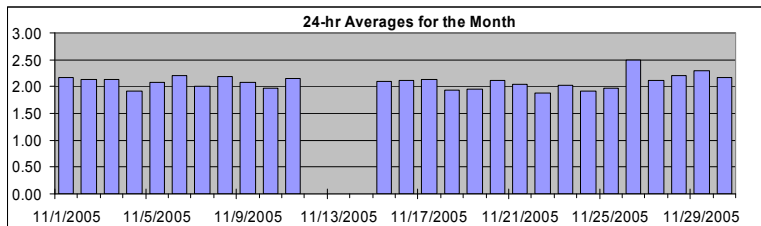
Total Hydrocarbons (THC)

Monitoring Dates: November 1, 2005 to December 1, 2005

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

Maximum 1-hr Average:	3.2	ppm	26-Nov	12:00 13:00
Maximum 24-hr Value:	2.5	ppm	26-Nov	

AIC Time:	30 hrs	Operational Time:	625 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	91.4%					
Percentile	99	95	75	50	25	5	1	Average
	2.8	2.5	2.2	2.1	1.9	1.8	1.8	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	23:00	0:00		
1-Nov-05	A	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.4	2.4	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	A		2.17	2.45	
2-Nov-05	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.2	2.2	2.3	2.3	2.2	2.2	2.2	A	2.4		2.14	2.39	
3-Nov-05	2.5	2.5	2.4	2.4	2.3	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.2	2.0	2.1	A	2.0	2.2		2.12	2.49	
4-Nov-05	2.0	2.0	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9		1.92	2.04	
5-Nov-05	1.9	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.5	2.3	2.0	1.9	1.9	2.0	2.0	2.1	2.2	2.2	2.0	A	2.0	2.0	2.1	2.1		2.08	2.52	
6-Nov-05	2.2	2.2	2.2	2.3	2.3	2.4	2.1	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.3	2.3	2.3	2.2		2.20	2.41	
7-Nov-05	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	1.9	1.9	1.9	1.9	1.9	2.0	2.1	A	2.1	2.0	2.0	2.0	1.9	1.8		2.00	2.15	
8-Nov-05	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	A	2.6	2.8	2.8	2.4	2.2	2.1	2.1		2.19	2.82	
9-Nov-05	2.1	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	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1		2.08	2.14	
10-Nov-05	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.1	2.2	2.1	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9		1.97	2.19	
11-Nov-05	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	A	2.1	2.1	2.1	2.2	2.5	2.4	2.4	2.3	2.2	S		2.15	2.46	
12-Nov-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		N	0.00
13-Nov-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		N	0.00
14-Nov-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1		N	2.39
15-Nov-05	2.1	2.1	A	2.1	2.1	2.2	2.7	2.3	2.4	C	C	C	A	1.8	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.2		2.10	2.73	
16-Nov-05	2.3	2.3	A	2.4	2.4	2.6	2.5	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.1	2.1	2.1	2.1	2.1		2.11	2.63	
17-Nov-05	2.0	A	2.1	2.2	2.1	2.2	2.3	2.3	2.2	2.2	2.0	2.0	2.0	2.0	2.2	2.3	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.0		2.13	2.29	
18-Nov-05	A	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.9	1.9	1.8	1.9	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.1	A		1.93	2.24	
19-Nov-05	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.0	2.0	2.0	2.1	1.9	1.9	1.9	A	1.9		1.95	2.17	
20-Nov-05	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.9	2.0	2.0	2.2	2.2	2.3	2.5	2.6	2.7	2.5	A	2.9	2.9		2.11	2.93	
21-Nov-05	2.4	2.3	2.3	2.2	2.2	2.2	2.1	2.2	2.0	1.9	1.8	1.8	1.8	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9		2.05	2.38	
22-Nov-05	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0		1.89	2.06	
23-Nov-05	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	2.0	2.1	2.0	2.1	2.2	2.2	A	2.5	2.4	2.3	2.0	1.9		2.03	2.50	
24-Nov-05	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.1	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	A	1.9	2.0	2.0	2.0	1.9	1.9		1.92	2.23	
25-Nov-05	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.9	1.8	1.9	1.9	2.0	2.0	A	2.5	2.1	1.9	2.0	2.3	2.4	2.4		1.98	2.45	
26-Nov-05	2.4	2.0	2.0	2.0	2.0	2.4	2.4	2.6	2.7	2.7	2.5	2.4	3.2	2.6	2.6	A	2.8	2.8	2.8	2.7	2.5	2.5	2.4	2.4		2.49	3.15	
27-Nov-05	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	A	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2		2.12	2.29	
28-Nov-05	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.1	2.1	2.1	2.1	A	2.0	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.2		2.21	2.35	
29-Nov-05	2.2	2.3	2.6	2.9	2.8	2.6	2.6	2.4	2.3	2.2	2.4	2.4	A	2.1	2.1	2.0	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.0		2.29	2.93	
30-Nov-05	2.1	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2	A	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2		2.16	2.34	
Hourly Avg	2.09	2.06	2.05	2.07	2.06	2.09	2.11	2.10	2.13	2.08	2.02	2.00	2.04	2.03	2.06	2.06	2.12	2.18	2.18	2.18	2.15	2.12	2.13	2.13				
Hourly Max	2.49	2.46	2.55	2.93	2.84	2.64	2.73	2.56	2.70	2.66	2.50	2.44	3.15	2.61	2.64	2.31	2.76	2.77	2.81	2.82	2.52	2.46	2.88	2.93				

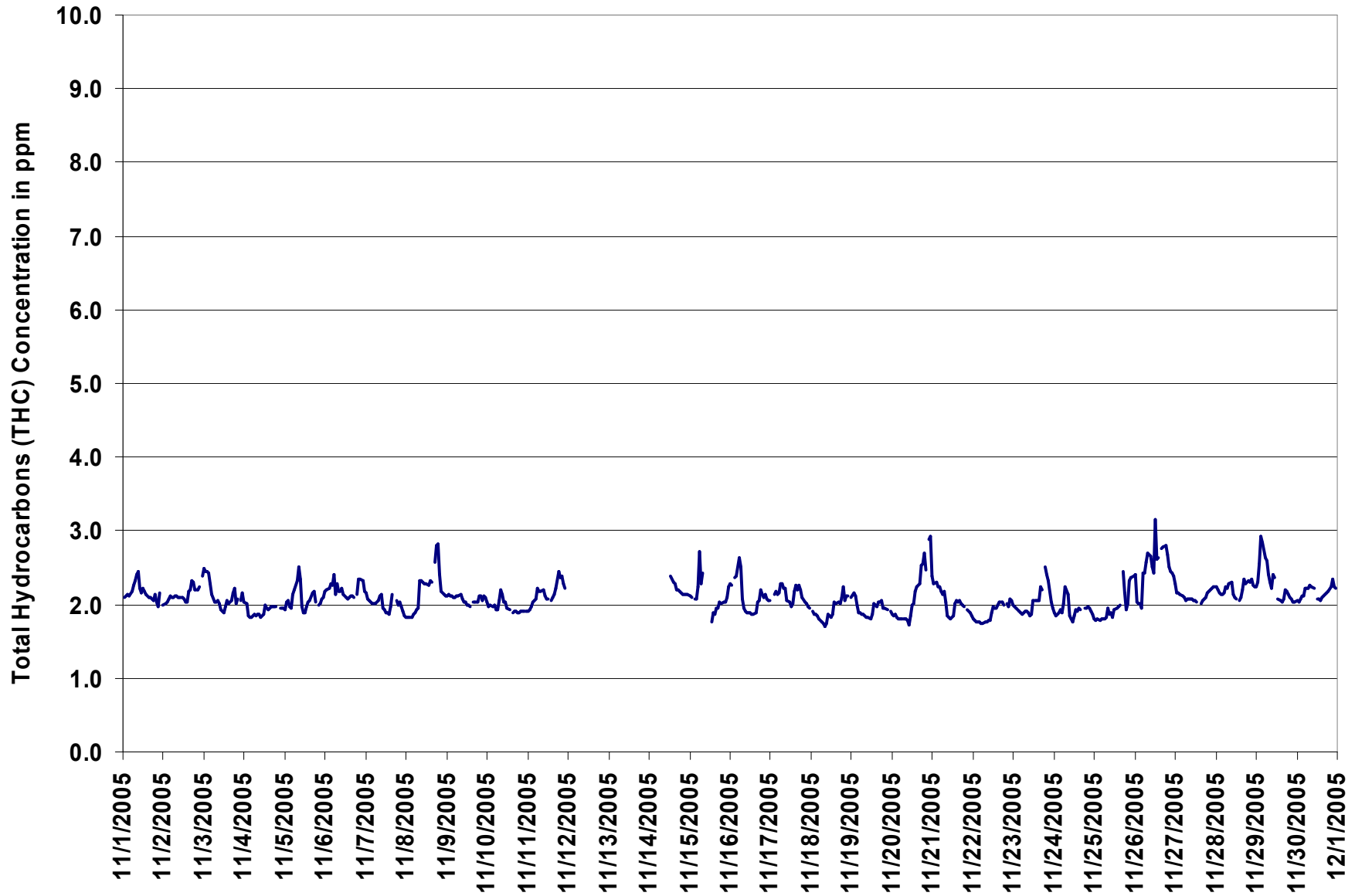


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

HOURLY MAXIMUM TABLE

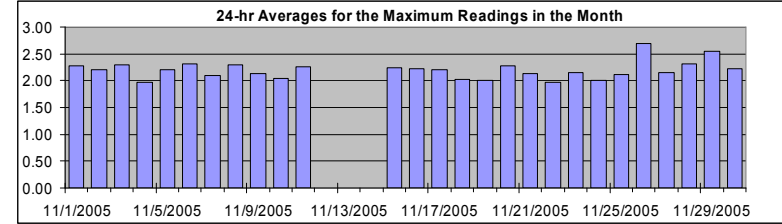
Total Hydrocarbons (THC)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Value:	3.9	ppm	26-Nov	12:00 13:00
Maximum 24-hr Value:	2.7	ppm	26-Nov	

AIC Time:	30 hrs	Operational Time:	625 hrs					
Calibration Time:	3 hrs	AMD Operational Uptime:	91.4%					
Percentile	99	95	75	50	25	5	1	Average
	3.1	2.8	2.3	2.1	2.0	1.8	1.8	2.2 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

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-Nov-05	A	2.2	2.1	2.2	2.2	2.2	2.4	2.4	2.6	2.6	2.4	2.2	2.3	2.3	2.2	2.1	2.2	2.1	2.1	2.3	2.1	2.3	2.5	A	2.4	2.28	2.61
2-Nov-05	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.3	2.3	2.5	2.4	2.3	2.3	2.4	A	2.4	2.20	2.51	
3-Nov-05	3.2	2.8	2.6	2.8	2.6	2.4	2.1	2.4	2.2	2.2	1.9	1.9	1.9	2.1	2.1	2.1	2.1	2.3	2.5	2.1	2.2	A	2.1	2.3	2.30	3.21	
4-Nov-05	2.1	2.3	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.0	1.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	1.97	2.25	
5-Nov-05	2.0	2.1	2.1	2.1	2.0	2.3	2.3	2.9	3.0	2.7	2.1	1.9	2.0	2.1	2.1	2.1	2.3	2.3	2.1	A	2.0	2.1	2.2	2.2	2.21	2.98	
6-Nov-05	2.2	2.3	2.3	2.5	2.4	2.5	2.3	2.5	2.4	2.3	2.4	2.2	2.2	2.1	2.2	2.2	2.2	2.2	A	2.3	2.5	2.6	2.4	2.3	2.32	2.55	
7-Nov-05	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.4	2.3	2.0	2.0	1.9	1.9	2.0	2.1	2.3	A	2.4	2.1	2.2	2.0	2.0	1.9	2.09	2.37	
8-Nov-05	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.4	2.4	2.4	2.3	2.3	2.3	2.4	2.4	A	2.9	3.0	3.0	2.7	2.3	2.2	2.2	2.29	3.03	
9-Nov-05	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	A	2.1	2.1	2.1	2.3	2.2	2.2	2.2	2.2	2.14	2.34	
10-Nov-05	2.2	2.0	2.1	2.0	2.2	2.0	2.0	2.2	2.3	2.2	2.1	2.1	2.0	2.0	A	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.04	2.34	
11-Nov-05	2.0	2.0	2.1	2.1	2.2	2.2	2.6	2.3	2.3	2.2	2.2	2.1	2.1	A	2.1	2.2	2.2	2.3	2.6	2.7	2.5	2.4	2.3	S	2.25	2.74	
12-Nov-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.00
13-Nov-05	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	0.00
14-Nov-05	S	S	S	S	S	S	S	S	S	S	S	S	S	2.5	2.4	2.4	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	N	2.46	
15-Nov-05	2.2	2.4	A	2.1	2.1	2.6	3.3	2.5	2.7	C	C	C	A	1.8	1.9	1.9	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.4	2.24	3.25	
16-Nov-05	2.4	2.7	A	2.5	2.6	3.0	2.7	2.4	2.0	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.1	2.1	2.4	2.2	2.2	2.3	2.1	2.1	2.23	2.95	
17-Nov-05	2.1	A	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.1	2.1	2.0	2.1	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.0	2.0	2.0	2.20	2.34	
18-Nov-05	A	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.8	2.0	2.0	1.9	2.0	2.4	2.1	2.1	2.1	2.3	2.4	2.3	2.2	2.2	A	2.02	2.43	
19-Nov-05	2.1	2.3	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.8	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.2	2.0	2.0	2.0	A	2.0	2.00	2.29	
20-Nov-05	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	2.0	2.0	2.1	2.6	2.7	2.7	3.0	2.9	3.1	2.8	A	3.2	3.1	2.29	3.19	
21-Nov-05	2.6	2.4	2.4	2.5	2.3	2.3	2.3	2.3	2.2	1.9	1.8	1.8	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1	A	2.0	1.9	1.9	2.14	2.62	
22-Nov-05	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	A	2.1	2.0	2.5	2.3	1.98	2.54	
23-Nov-05	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.1	2.0	1.9	1.9	2.0	2.1	2.1	2.3	2.2	2.5	2.3	A	2.7	2.7	3.0	2.2	2.0	2.16	2.99	
24-Nov-05	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.5	2.3	2.0	1.8	1.8	2.0	2.0	1.9	2.0	2.0	A	2.0	2.0	2.0	2.2	2.0	1.9	2.00	2.46	
25-Nov-05	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.2	2.1	2.0	2.1	1.9	2.1	2.1	2.2	2.1	A	3.0	2.4	2.1	2.2	2.5	2.5	2.5	2.11	3.04	
26-Nov-05	2.5	2.2	2.3	2.6	2.5	3.0	2.6	2.8	2.9	2.8	2.7	2.6	3.9	2.7	2.7	A	2.8	2.9	2.9	2.8	2.6	2.5	2.5	2.4	2.70	3.87	
27-Nov-05	2.4	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.2	2.3	2.16	2.37	
28-Nov-05	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.4	2.3	2.2	2.2	2.1	A	2.3	2.1	2.4	2.5	2.4	2.4	2.4	2.8	2.3	2.4	2.32	2.82	
29-Nov-05	2.4	2.4	3.6	3.2	3.0	2.7	2.8	2.8	2.5	2.5	2.7	2.8	A	2.1	2.1	2.3	2.3	2.6	2.5	2.5	2.2	2.1	2.1	2.1	2.54	3.55	
30-Nov-05	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.3	A	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.4	2.4	2.3	2.3	2.23	2.39	
Hourly Avg	2.19	2.15	2.16	2.18	2.15	2.20	2.21	2.26	2.27	2.19	2.11	2.08	2.13	2.10	2.17	2.14	2.22	2.32	2.31	2.32	2.27	2.26	2.24	2.20			
Hourly Max	3.21	2.75	3.55	3.24	2.99	3.00	3.25	2.91	2.98	2.81	2.70	2.84	3.87	2.70	2.69	2.66	2.83	3.04	3.03	3.14	2.76	2.99	3.19	3.14			

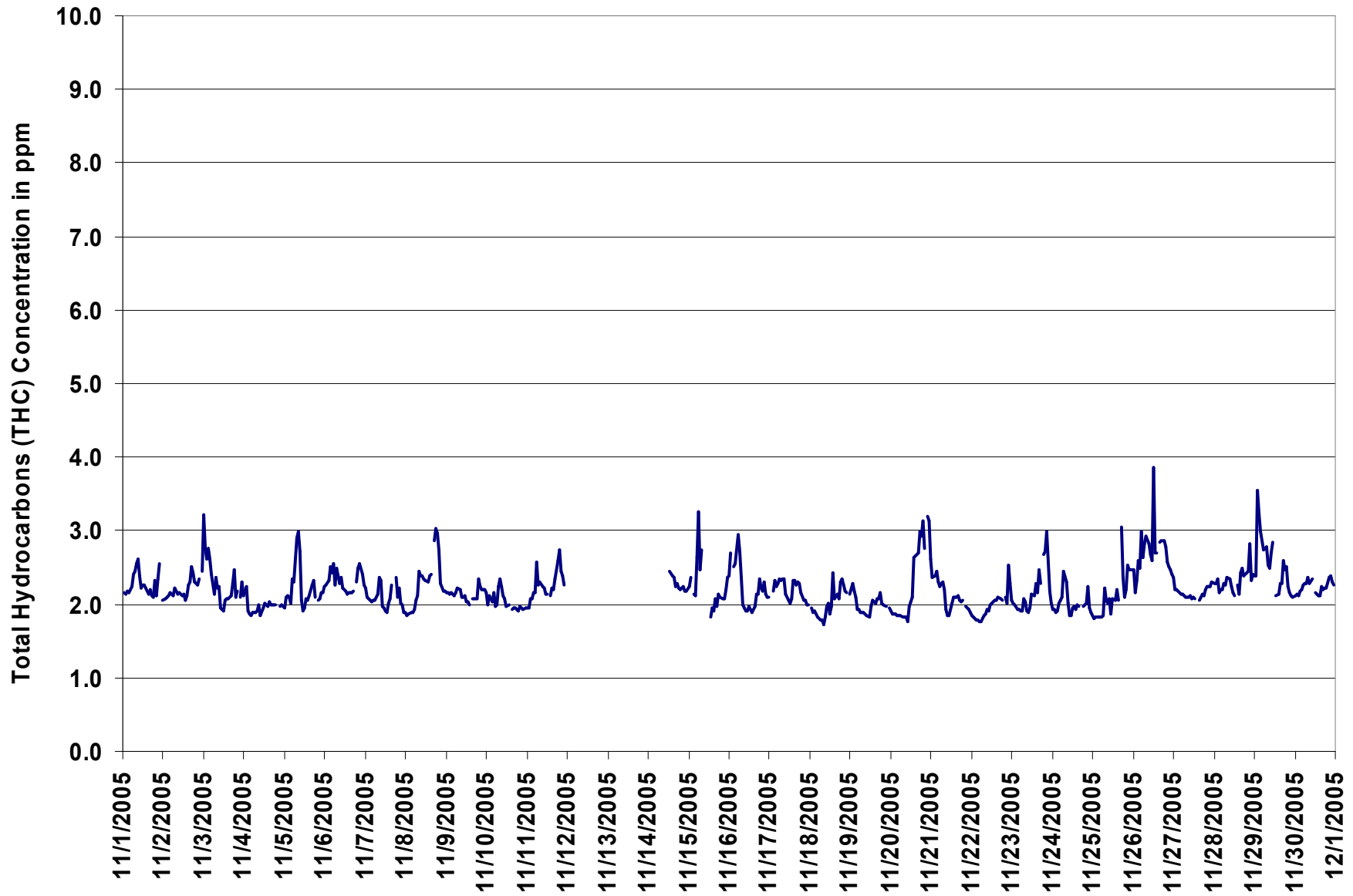
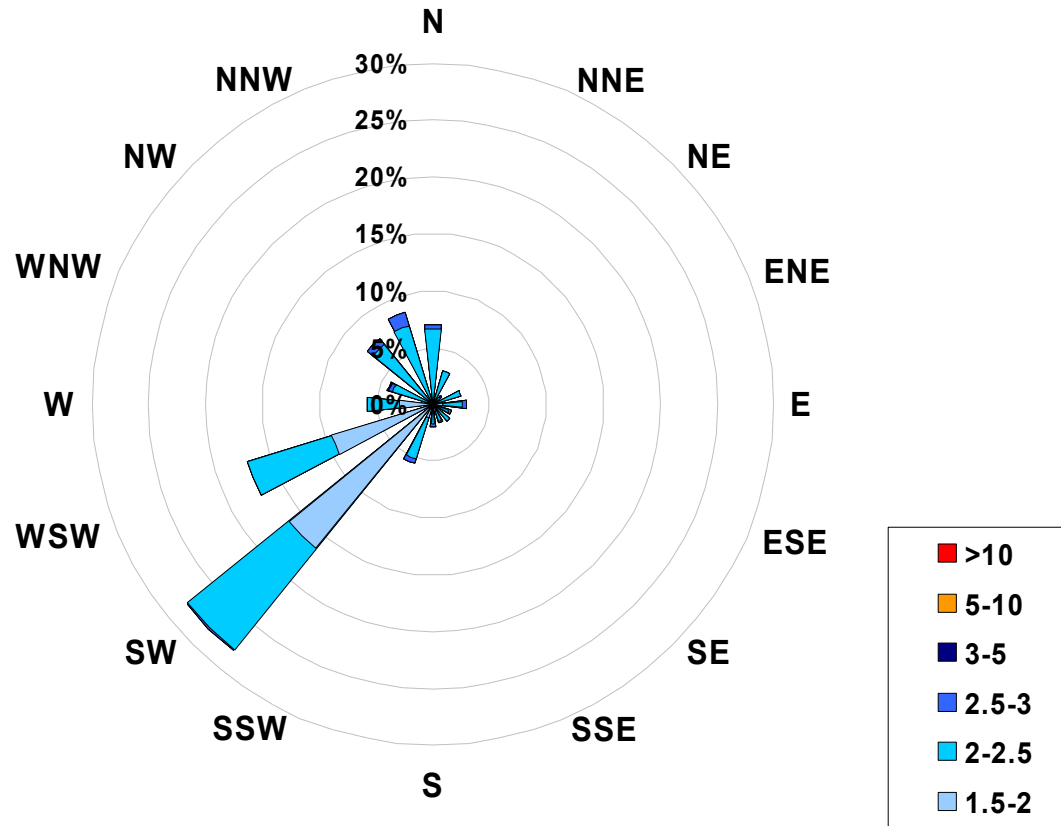


Figure 10. PAS - Crescent Heights Total Hydrocarbons 1-hr Maximum Value Monthly Trend



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



Calms: 0%

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	211
2	to	2.5	384
2.5	to	3	29
3	to	5	1
5	to	10	0
	>	10	0
Total Non-Zero Values			625



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

Station: Crescent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

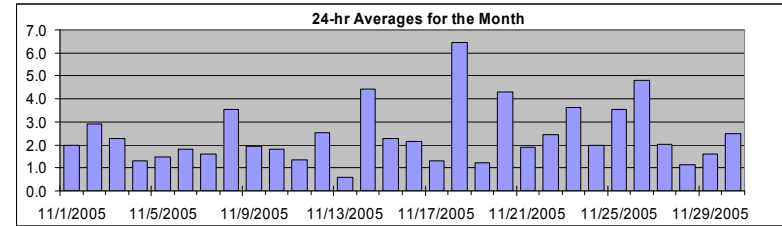
Particulate Matter (PM_{2.5})

Monitoring Dates: November 1, 2005 to December 1, 2005

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

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	62.9 μg/m ³ 18-Nov 13:00 14:00
Maximum 24-hr Value:	6.4 μg/m ³ 18-Nov

AIC Time:	0 hrs	Operational Time:	711 hrs
Calibration Time:	2 hrs	AMD Operational Uptime:	99.0%
Percentile	99 10.7	95 6.5	75 3.3
	50 1.9	25 0.7	5 0.0
	1 0.0	Average	2.4 μg/m ³
		Geommean	2.1 μg/m ³



Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	1	1	2	2	2	1	2	4	5	8	4	0	3	0	0	0	2	0	D	D	D	0	1	4	2.0	7.6
2-Nov-05	2	1	3	1	2	2	3	3	3	3	3	2	1	2	1	7	5	3	2	3	2	6	3	6	2.9	7.2
3-Nov-05	5	2	2	2	3	3	2	2	3	2	0	1	0	0	4	0	3	5	6	4	1	1	1	3	2.3	5.9
4-Nov-05	1	1	0	1	1	2	2	3	2	1	0	0	4	0	0	1	1	2	1	3	2	1	1	1	1.3	4.3
5-Nov-05	1	1	2	2	1	1	3	2	4	4	3	0	0	0	4	0	2	3	1	0	0	0	0	0	1.5	4.5
6-Nov-05	0	0	0	2	1	3	1	1	2	3	2	2	3	1	2	2	2	2	1	2	3	2	4	3	1.8	3.7
7-Nov-05	2	3	1	0	1	1	7	1	1	3	2	0	1	0	0	1	4	2	2	0	1	1	3	2	1.6	6.9
8-Nov-05	1	1	0	1	1	1	1	1	4	6	6	7	7	5	5	4	5	6	8	7	3	2	1	2	3.6	7.6
9-Nov-05	1	1	0	2	0	2	3	2	2	0	0	0	0	1	2	3	4	4	4	2	3	3	3	4	1.9	3.8
10-Nov-05	3	3	3	2	1	1	0	6	2	0	0	D	0	0	0	1	0	3	2	3	3	3	3	3	1.8	6.4
11-Nov-05	3	2	5	0	1	0	0	0	0	1	0	0	0	0	1	2	1	1	4	4	3	2	0	1	1.3	4.6
12-Nov-05	1	0	0	1	1	1	1	2	3	3	1	4	4	5	5	5	5	3	3	2	3	2	3	3	2.5	5.4
13-Nov-05	3	4	2	0	0	2	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.6	3.7
14-Nov-05	1	4	5	3	3	4	5	7	7	4	4	5	7	8	3	6	3	5	4	4	3	4	4	4	4.4	7.6
15-Nov-05	4	3	3	3	3	4	3	5	4	4	4	3	C	C	D	D	0	0	0	D	0	0	0	0	2.3	5.0
16-Nov-05	0	1	0	0	0	1	3	5	0	2	1	2	2	2	3	4	2	4	6	4	4	3	2	1	2.2	5.6
17-Nov-05	0	2	2	2	0	0	1	3	3	3	1	0	0	0	5	4	2	2	1	0	0	0	0	0	1.3	5.3
18-Nov-05	0	0	2	0	0	1	3	2	3	11	7	3	3	63	26	7	3	3	3	3	3	3	2	2	6.4	62.9
19-Nov-05	1	1	1	2	1	0	1	2	2	2	2	1	1	7	1	0	0	1	0	0	1	0	1	1	1.2	6.8
20-Nov-05	1	1	2	1	1	1	2	2	2	3	2	4	6	3	0	2	5	12	12	7	6	12	9	7	4.3	12.3
21-Nov-05	3	1	0	0	1	1	0	2	4	3	2	3	0	7	5	1	2	3	3	2	1	2	1	1	1.9	6.7
22-Nov-05	0	0	1	0	1	0	0	0	1	1	3	5	6	1	2	4	5	4	4	5	5	4	3	3	2.5	5.7
23-Nov-05	1	2	2	0	0	1	4	2	3	3	3	2	7	1	1	1	5	5	4	10	12	11	5	4	3.6	12.2
24-Nov-05	2	2	1	1	2	2	4	3	3	3	2	1	1	6	0	1	2	2	2	2	2	3	2	1	2.0	5.7
25-Nov-05	1	1	1	1	2	3	3	3	6	6	6	3	7	1	1	2	4	9	9	4	2	4	2	3	3.5	9.0
26-Nov-05	4	6	3	3	3	1	2	2	4	2	4	4	5	5	5	5	5	6	5	7	7	6	9	10	4.8	10.2
27-Nov-05	7	5	5	4	3	3	3	3	3	2	1	0	0	0	1	1	0	0	1	1	1	1	1	1	2.0	6.6
28-Nov-05	1	0	1	0	0	1	1	0	1	2	0	0	0	0	0	1	3	5	3	2	1	1	1	1	1.1	4.7
29-Nov-05	1	0	2	2	2	5	2	1	2	2	2	2	0	3	2	2	3	2	0	0	1	1	1	1	1.6	4.7
30-Nov-05	1	1	1	0	1	3	4	4	4	4	3	4	3	3	1	2	3	2	1	0	4	4	4	3	2.5	4.5
Hourly Avg	1.7	1.7	1.7	1.3	1.3	1.7	2.2	2.5	2.9	3.1	2.3	2.1	2.4	4.2	2.7	2.3	2.7	3.2	3.1	2.8	2.6	2.8	2.4	2.5		
Hourly Max	6.6	6.2	4.8	4.2	3.4	4.7	6.9	7.1	6.9	10.8	6.9	7.4	7.3	62.9	26.1	7.2	5.1	11.7	11.9	9.8	12.2	12.3	9.2	10.2		

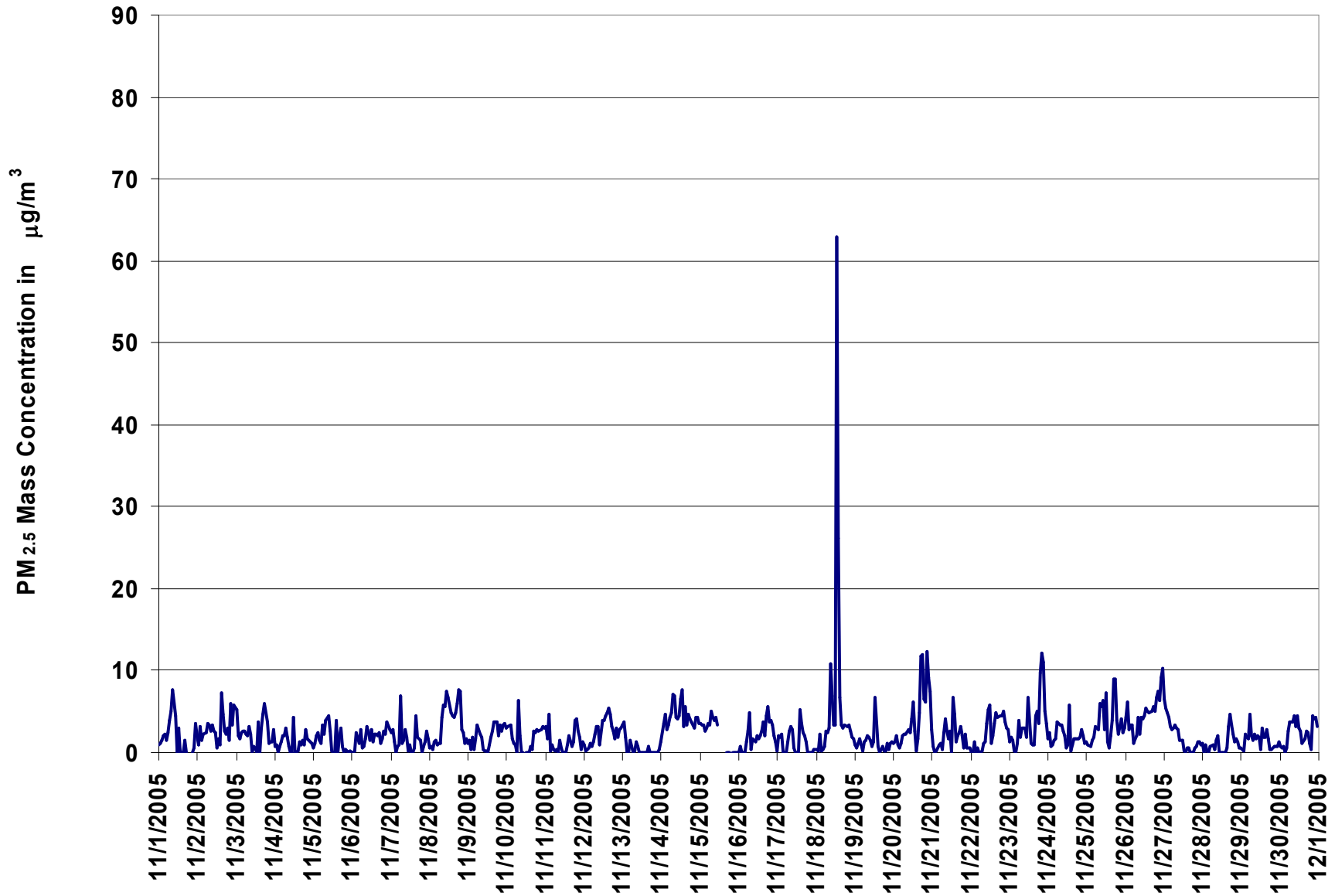


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Cresent Heights
 Station Owner: PAS

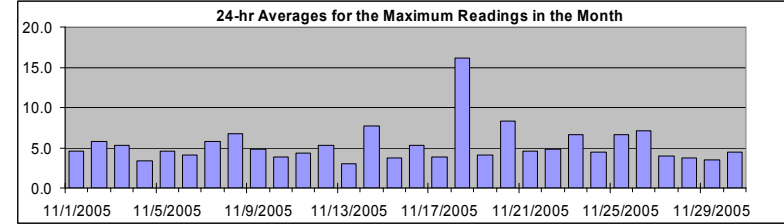
HOURLY MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Average:	94.9	µg/m ³	18-Nov	13:00 14:00
Maximum 24-hr Value:	16.2	µg/m ³	18-Nov	



AIC Time:	0 hrs	Operational Time:	711 hrs						
Calibration Time:	2 hrs	AMD Operational Uptime:	99.0%						
Percentile	99	95	75	50	25	5	1	Average	Geomean
	19.1	10.5	6.3	4.4	3.0	1.6	0.3	5.4 µg/m	5.0 µg/m

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-Nov-05	3	3	3	6	6	4	5	5	9	11	8	3	7	3	1	4	5	0	D	D	D	1	3	8	4.6	10.9	
2-Nov-05	5	4	5	4	5	5	6	5	5	6	5	4	4	5	4	12	9	5	4	5	3	14	6	9	5.7	14.2	
3-Nov-05	7	5	3	5	6	5	7	4	5	6	4	4	4	5	9	2	5	8	10	7	3	4	4	5	5.3	9.6	
4-Nov-05	3	3	2	3	3	4	4	5	4	3	2	2	8	2	3	3	3	4	4	4	3	3	3	3	3.4	8.3	
5-Nov-05	2	3	6	7	3	4	7	5	8	8	6	2	3	7	9	3	5	6	2	2	3	4	3	2	4.6	9.5	
6-Nov-05	0	1	2	4	4	9	3	3	3	6	5	3	7	4	5	5	4	4	4	4	4	5	6	5	4.1	8.9	
7-Nov-05	5	6	3	2	2	3	33	3	5	6	4	4	3	3	6	9	10	6	5	3	4	4	5	6	5.8	32.6	
8-Nov-05	5	4	3	6	4	4	5	6	8	7	10	9	12	8	8	7	7	8	10	9	9	5	3	4	6.8	11.6	
9-Nov-05	4	3	5	6	3	5	8	5	5	4	4	3	1	5	4	5	6	7	7	5	6	5	6	6	4.8	8.2	
10-Nov-05	6	5	5	4	3	2	3	10	6	1	0	D	1	1	2	3	3	5	4	5	5	5	5	5	3.9	9.8	
11-Nov-05	6	5	15	2	3	3	2	4	3	4	3	3	2	2	3	4	3	3	8	9	6	4	3	4	4.3	14.8	
12-Nov-05	4	2	3	4	3	4	4	5	6	8	5	7	7	6	8	9	7	5	6	5	5	4	6	5	5.3	8.7	
13-Nov-05	8	8	5	2	2	4	3	3	4	4	2	0	1	1	2	1	5	3	0	2	2	2	4	4	3.0	8.2	
14-Nov-05	4	6	8	6	7	8	7	11	9	8	7	8	10	10	7	8	6	7	8	7	5	15	6	6	7.7	14.9	
15-Nov-05	6	5	5	4	5	6	5	7	6	6	7	5	C	C	D	D	0	0	0	D	0	2	1	1	3.8	7.2	
16-Nov-05	1	2	2	1	2	4	10	13	5	5	4	9	4	4	5	7	5	9	10	7	7	7	4	3	5.3	13.3	
17-Nov-05	3	5	4	6	2	3	3	7	6	5	4	1	2	2	9	6	6	4	4	3	4	0	3	3	3.8	8.9	
18-Nov-05	2	3	5	3	3	4	9	6	6	38	27	8	59	95	61	12	8	6	6	5	7	8	4	4	16.2	94.9	
19-Nov-05	3	3	3	3	2	3	8	4	5	4	5	3	7	12	4	3	2	3	2	3	4	4	4	3	4.1	11.9	
20-Nov-05	4	4	4	3	4	3	6	6	4	5	5	11	11	7	3	4	8	19	19	11	8	18	16	13	8.3	19.3	
21-Nov-05	6	3	2	5	4	3	2	7	7	4	4	5	5	13	8	3	4	4	5	4	2	7	3	2	4.6	12.9	
22-Nov-05	2	1	6	2	2	1	1	2	3	3	9	10	10	3	3	7	7	6	6	6	9	6	5	4	4.9	10.4	
23-Nov-05	3	4	4	2	1	3	14	4	5	5	5	7	11	3	3	3	8	9	6	15	16	16	6	5	6.6	16.3	
24-Nov-05	4	6	3	3	4	4	11	7	6	5	5	3	7	10	1	3	3	3	4	3	5	4	3	3	4.5	10.6	
25-Nov-05	3	3	2	3	4	5	9	4	8	8	10	8	10	7	2	5	5	18	16	10	5	5	4	5	6.7	17.9	
26-Nov-05	8	9	5	8	6	5	3	3	6	4	6	7	7	6	7	7	6	7	8	9	9	8	12	12	7.1	12.0	
27-Nov-05	9	8	6	6	5	5	5	5	5	5	4	3	2	2	3	4	2	2	1	2	2	3	3	3	4.0	8.7	
28-Nov-05	4	2	3	2	3	2	3	3	3	4	3	2	1	2	1	3	8	8	5	16	3	3	3	3	3.8	16.3	
29-Nov-05	2	2	4	4	4	6	5	3	4	3	4	4	2	5	4	3	5	4	2	2	2	3	2	2	3.5	6.5	
30-Nov-05	2	2	2	1	2	4	5	5	5	6	5	7	6	5	5	5	4	5	3	2	7	6	6	5	4.4	7.3	
Hourly Avg	4.1	4.1	4.3	3.9	3.5	4.2	6.5	5.3	5.4	6.4	5.6	5.0	7.4	8.2	6.6	5.1	5.3	5.9	5.8	5.9	5.0	5.9	4.7	4.8			
Hourly Max	8.7	8.9	14.8	7.5	6.9	8.9	32.6	13.3	9.4	38.1	26.5	10.6	58.8	94.9	60.6	12.3	10.4	19.3	19.2	16.3	15.9	18.5	16.2	13.2			

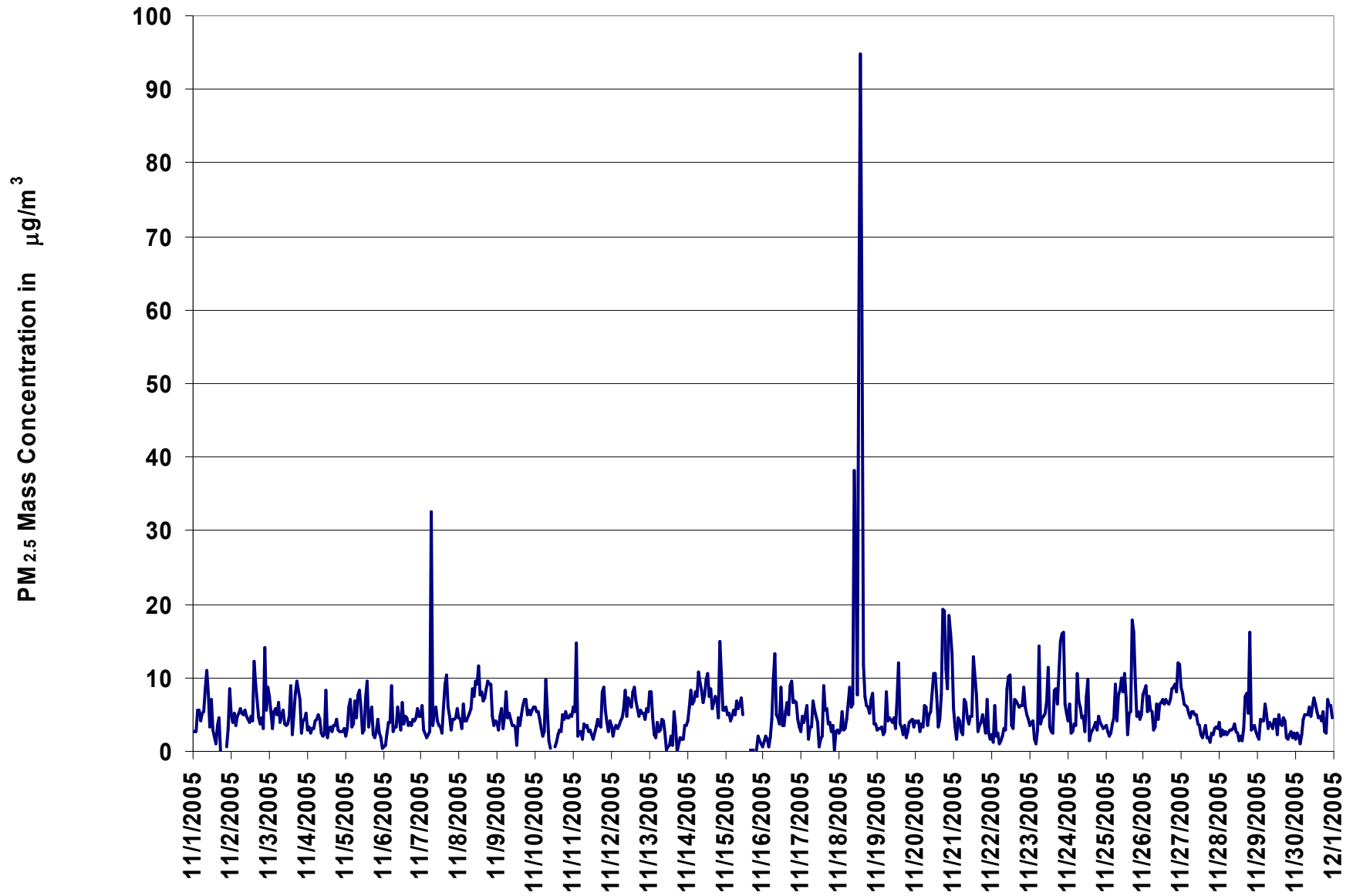
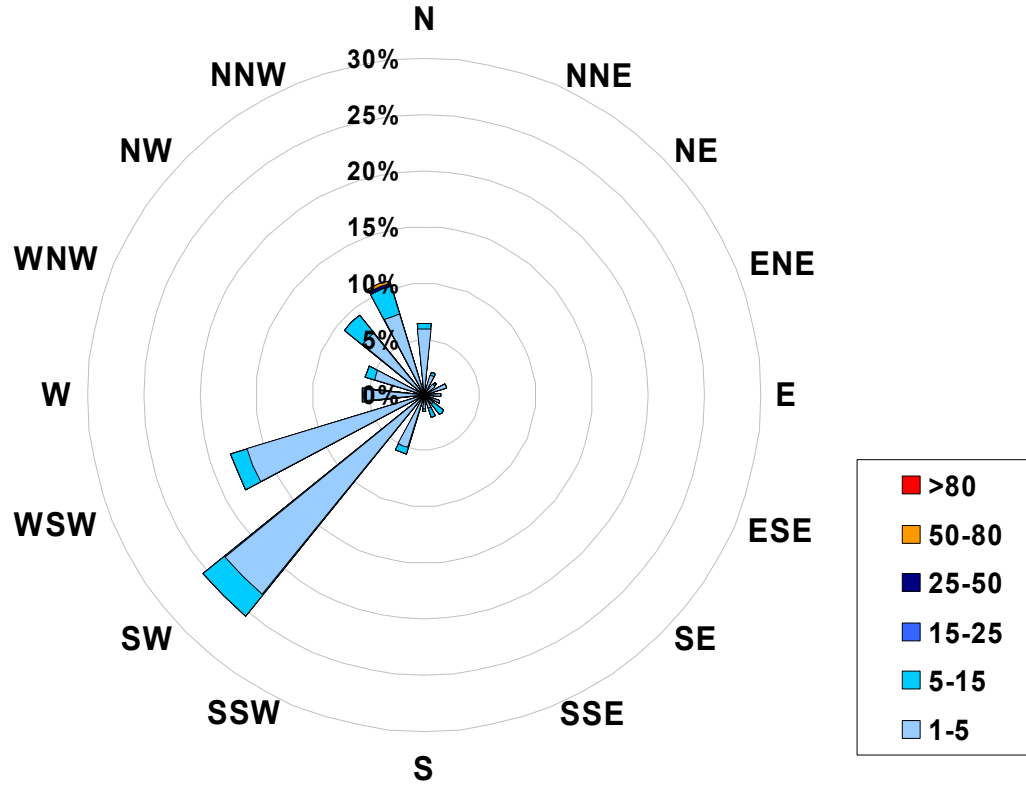


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Maximum Value Monthly Trend



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 November 2005



Calms: 0%

Frequency Distribution of PM _{2.5} in µg/m ³		
Range	Frequency (hrs)	
1.0 < 5	643	
5 to 15	66	
15 to 25	0	
25 to 50	1	
50 to 80	1	
> 80	0	
Total Non-Zero Values	711	



PAS - Cresent Heights Relative Humidity Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

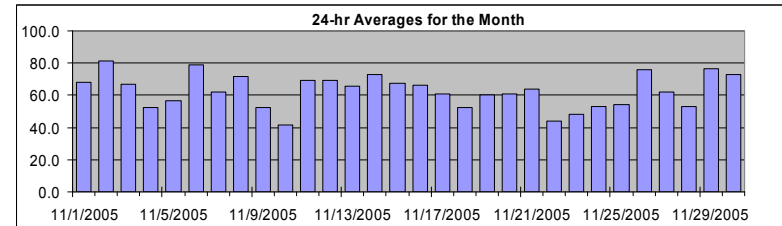
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Average:	90.4	%	14-Nov	3:00 4:00
Maximum 24-hr Value:	81.5	%	2-Nov	



AIC Time:	0 hrs	Operational Time:	720 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	87.0	83.1	75.5	65.2	50.9	35.7	25.2	62.7 %

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																							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	0:00	
1-Nov-05	62	64	66	69	68	68	74	73	71	67	62	51	50	49	49	58	74	84	84	84	83	80	75	74	68.3	84.2
2-Nov-05	82	86	86	87	88	85	85	86	85	84	83	82	80	72	65	66	72	78	79	85	85	84	85	87	81.5	87.5
3-Nov-05	86	82	83	82	79	81	81	82	80	75	59	49	45	39	37	36	43	51	59	73	76	73	72	77	66.6	85.5
4-Nov-05	71	66	59	59	64	64	63	65	65	62	49	36	33	36	37	36	39	41	40	47	52	51	55	62	52.2	71.5
5-Nov-05	60	63	68	70	72	73	76	76	72	65	56	49	41	32	30	35	39	46	47	48	51	58	63	65	56.6	76.4
6-Nov-05	71	71	71	72	71	72	68	70	69	74	86	87	81	81	82	85	84	82	81	83	87	89	89	87	78.9	89.1
7-Nov-05	86	79	76	74	73	73	73	71	70	67	65	56	51	46	39	45	45	48	55	54	57	59	60	72	62.2	85.8
8-Nov-05	74	76	81	83	83	86	88	85	79	81	77	82	73	60	53	46	51	58	65	70	67	66	68	70	71.7	88.2
9-Nov-05	72	72	72	73	72	71	70	68	61	56	50	45	38	33	31	32	38	40	43	45	45	44	44	46	52.5	72.8
10-Nov-05	50	51	49	49	50	50	49	52	51	47	40	33	25	22	24	26	29	34	40	43	44	48	49	50	41.8	51.6
11-Nov-05	51	55	55	70	74	78	79	79	80	78	69	66	60	59	59	60	63	68	69	74	77	79	80	80	69.3	80.4
12-Nov-05	81	82	82	81	77	73	68	71	72	63	50	49	56	56	55	58	64	71	73	72	74	77	78	80	69.2	82.3
13-Nov-05	81	82	83	82	80	79	77	76	73	66	60	52	48	45	47	50	54	68	64	59	60	62	63	65	65.7	82.9
14-Nov-05	69	76	90	90	85	83	82	83	82	78	72	69	68	71	68	67	67	67	66	64	63	65	65	67	73.2	90.4
15-Nov-05	69	69	69	69	68	71	72	72	72	67	61	60	59	56	56	56	61	66	70	71	74	75	76	77	67.3	77.0
16-Nov-05	79	78	76	76	77	75	76	71	67	64	58	53	49	48	48	49	50	61	66	69	71	74	76	76	66.0	78.6
17-Nov-05	78	81	83	81	81	84	85	83	80	73	65	55	44	37	34	34	38	45	50	53	57	51	47	48	61.1	85.2
18-Nov-05	50	46	44	40	40	41	43	43	42	44	65	67	49	41	44	43	48	56	62	61	65	73	76	76	52.4	76.4
19-Nov-05	75	77	79	80	77	75	75	72	69	62	55	50	45	41	40	40	46	52	56	57	58	57	55	58	60.5	79.9
20-Nov-05	63	63	64	65	66	67	69	68	67	60	55	52	47	46	41	42	47	52	60	64	72	76	79	80	61.0	80.1
21-Nov-05	79	80	82	81	81	81	81	80	73	61	58	57	50	41	43	45	48	53	56	55	61	65	63	61	63.9	81.8
22-Nov-05	60	59	57	58	58	57	55	56	55	50	41	37	27	23	22	23	29	34	37	41	43	44	44	46	44.0	60.2
23-Nov-05	50	52	53	53	55	60	63	64	62	54	47	41	32	26	25	24	28	34	39	54	61	61	62	61	48.3	64.2
24-Nov-05	61	62	65	67	70	68	72	74	66	50	44	40	35	32	32	34	39	44	49	52	54	52	52	53	52.7	74.1
25-Nov-05	56	56	58	59	60	60	59	63	61	54	49	45	39	34	34	35	42	48	54	60	67	65	69	76	54.3	76.4
26-Nov-05	76	77	77	78	79	79	82	80	79	80	76	73	72	71	69	68	70	73	75	76	77	78	77	75	75.8	81.6
27-Nov-05	75	73	72	73	73	73	73	73	74	73	71	68	63	53	51	52	51	49	49	50	47	49	51	52	62.0	74.5
28-Nov-05	53	52	51	52	52	54	58	59	59	56	48	45	41	37	37	38	44	48	51	57	63	69	73	75	53.0	75.4
29-Nov-05	78	79	78	78	80	77	80	78	78	77	76	74	70	69	67	67	70	78	80	80	79	80	80	80	76.3	80.2
30-Nov-05	80	80	79	78	77	77	78	77	77	76	76	74	71	66	70	66	65	69	65	62	67	73	75	76	73.0	79.8
Hourly Avg	69.2	69.5	70.2	71.0	70.9	71.1	71.7	71.7	69.6	65.4	60.8	56.5	51.3	47.4	46.3	47.2	51.3	56.6	59.5	62.2	64.5	65.8	66.7	68.4		
Hourly Max	85.8	86.0	89.6	90.4	87.5	86.3	88.2	86.0	84.9	83.8	86.1	86.6	80.7	81.0	82.2	84.7	84.3	83.7	83.7	85.5	87.0	89.1	88.9	87.1		

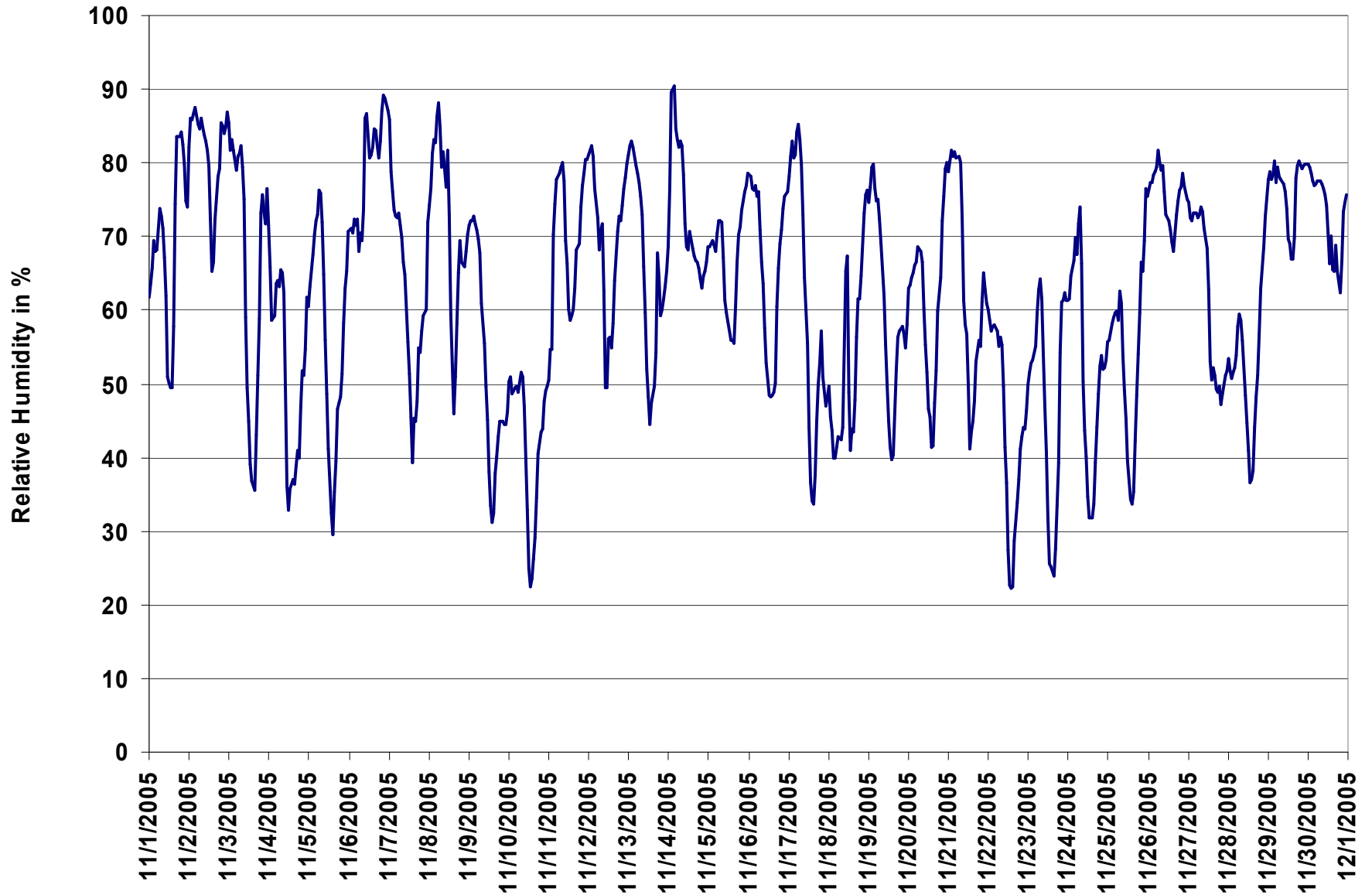


Figure 13. PAS - Cresent Heights Relative Humidity 1-hr Average Monthly Trend



PAS - Cresent Heights Temperature Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

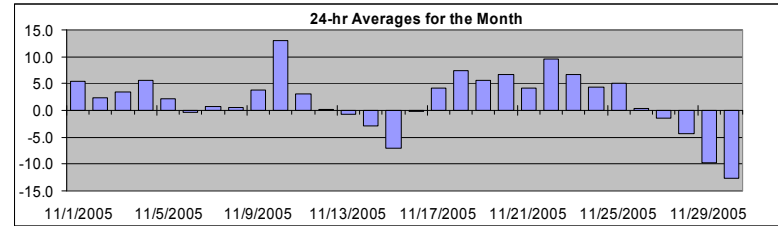
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Average:	19.8 °C	10-Nov	14:00 15:00
Maximum 24-hr Value:	13.0 °C	10-Nov	



AIC Time:	0 hrs	Operational Time:	720 hrs					
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%					
Percentile	99	95	75	50	25	5	1	Average
	17.7	12.6	5.9	1.7	-2.1	-10.0	-13.4	1.8 °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 Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00		
1-Nov-05	4	3	3	3	3	3	1	2	2	4	6	9	10	10	10	9	7	6	5	5	5	5	6	8	5.5	10.4
2-Nov-05	5	2	2	2	1	2	2	2	2	2	3	3	4	5	6	6	4	3	2	0	0	-1	-1	-1	2.4	6.4
3-Nov-05	-1	0	-1	0	1	1	1	0	2	4	6	8	9	10	10	9	8	6	3	2	2	2	1	3.5	9.7	
4-Nov-05	1	3	4	4	3	4	4	4	5	5	8	10	10	9	9	10	8	7	7	5	4	4	3	1	5.6	10.4
5-Nov-05	1	0	-1	-2	-2	-2	-3	-3	-1	2	6	8	8	10	10	8	6	4	3	3	2	0	-1	-1	2.2	9.7
6-Nov-05	-2	-2	-2	-2	-2	-2	-1	-1	0	0	0	0	3	3	2	2	1	1	1	0	-1	-2	-3	-3	-0.4	2.8
7-Nov-05	-4	-3	-3	-2	-3	-3	-3	-4	-3	-1	1	3	4	6	6	5	4	3	2	2	2	2	3	3	0.8	6.1
8-Nov-05	3	3	2	2	2	1	1	0	0	-1	0	-2	0	2	4	5	3	1	-1	-2	-2	-2	-3	0.6	4.8	
9-Nov-05	-3	-3	-3	-3	-3	-3	-2	-1	1	3	5	7	8	9	10	10	8	8	8	7	8	8	8	8	3.9	9.9
10-Nov-05	8	9	10	10	10	11	11	10	10	11	13	15	18	19	20	20	18	16	14	13	13	12	12	11	13.0	19.8
11-Nov-05	11	10	9	3	2	1	0	0	0	1	3	4	5	6	6	6	5	3	2	1	0	-1	-1	-1	3.1	10.9
12-Nov-05	-1	-1	-1	-1	0	0	0	0	0	4	6	5	4	3	4	3	2	-1	-2	-2	-3	-4	-4	-5	0.3	5.9
13-Nov-05	-5	-5	-6	-7	-7	-7	-6	-5	-4	-1	1	2	4	4	4	3	3	2	3	3	3	2	2	0	-0.8	4.0
14-Nov-05	-1	-2	-3	-2	-1	-2	-2	-2	-2	-2	-2	-2	-2	-3	-3	-3	-3	-4	-4	-4	-4	-6	-6	-6	-3.0	-0.8
15-Nov-05	-7	-7	-8	-8	-8	-8	-8	-8	-8	-6	-5	-4	-4	-4	-3	-4	-4	-5	-7	-8	-9	-10	-10	-10	-7.0	-3.2
16-Nov-05	-11	-10	-8	-8	-8	-7	-6	-3	-2	-1	1	4	6	7	7	7	5	4	4	4	4	4	3	3	-0.1	6.8
17-Nov-05	2	1	0	1	1	-1	-1	-1	0	2	4	6	9	10	11	11	9	6	4	4	3	4	5	5	4.1	11.4
18-Nov-05	5	6	7	8	8	8	8	9	10	11	8	8	11	13	12	11	9	7	5	5	4	1	0	-1	7.3	12.6
19-Nov-05	-1	-1	-2	-1	0	0	0	1	2	4	7	9	11	13	15	14	12	9	7	7	7	7	6	5.5	14.7	
20-Nov-05	5	5	6	6	6	6	5	5	6	8	10	12	13	13	14	12	10	9	6	4	2	1	0	-1	6.7	13.7
21-Nov-05	-1	-1	-2	-3	-3	-3	-3	-2	1	5	7	8	11	12	12	11	10	9	7	7	5	4	4	5	4.2	12.1
22-Nov-05	5	5	5	5	5	4	5	4	4	6	10	13	17	19	19	19	16	14	12	10	9	8	8	7	9.5	19.4
23-Nov-05	6	6	5	5	4	2	2	1	2	5	8	11	14	15	16	15	13	10	9	4	3	3	2	2	6.7	15.6
24-Nov-05	2	1	0	-1	-2	-1	-2	-3	-1	4	7	10	12	13	14	13	10	8	6	4	3	3	3	2	4.3	13.6
25-Nov-05	1	1	0	0	0	1	1	0	2	5	7	10	13	15	14	13	10	8	7	5	3	3	1	-1	5.0	14.7
26-Nov-05	0	1	1	1	2	0	-2	-1	-1	-1	0	1	1	2	2	2	1	1	0	0	0	0	0	0	0.3	2.0
27-Nov-05	0	0	0	0	-1	-1	-1	-2	-2	-2	-3	-2	-2	-2	-1	-1	-1	-1	-2	-3	-2	-3	-2	-2	-1.5	0.2
28-Nov-05	-2	-2	-3	-3	-4	-4	-5	-6	-6	-5	-4	-3	-2	-1	-1	-1	-3	-4	-5	-6	-7	-8	-9	-10	-4.4	-1.1
29-Nov-05	-10	-11	-10	-10	-11	-11	-10	-10	-10	-10	-10	-9	-8	-8	-8	-8	-9	-9	-10	-10	-11	-11	-11	-11	-9.8	-7.9
30-Nov-05	-11	-12	-12	-13	-15	-15	-15	-14	-14	-13	-12	-11	-11	-10	-11	-11	-12	-12	-12	-13	-13	-13	-14	-14	-12.6	-10.2
Hourly Avg	0.0	-0.2	-0.3	-0.6	-0.7	-0.9	-1.0	-0.9	-0.2	1.4	3.1	4.4	5.9	6.7	6.9	6.6	5.1	3.6	2.5	1.6	0.9	0.4	0.1	-0.3		
Hourly Max	10.9	9.6	9.5	9.7	10.0	10.8	11.2	10.5	10.4	11.4	13.2	15.4	18.4	19.3	19.8	19.7	18.0	15.6	13.8	12.8	12.8	11.8	11.7	11.4		

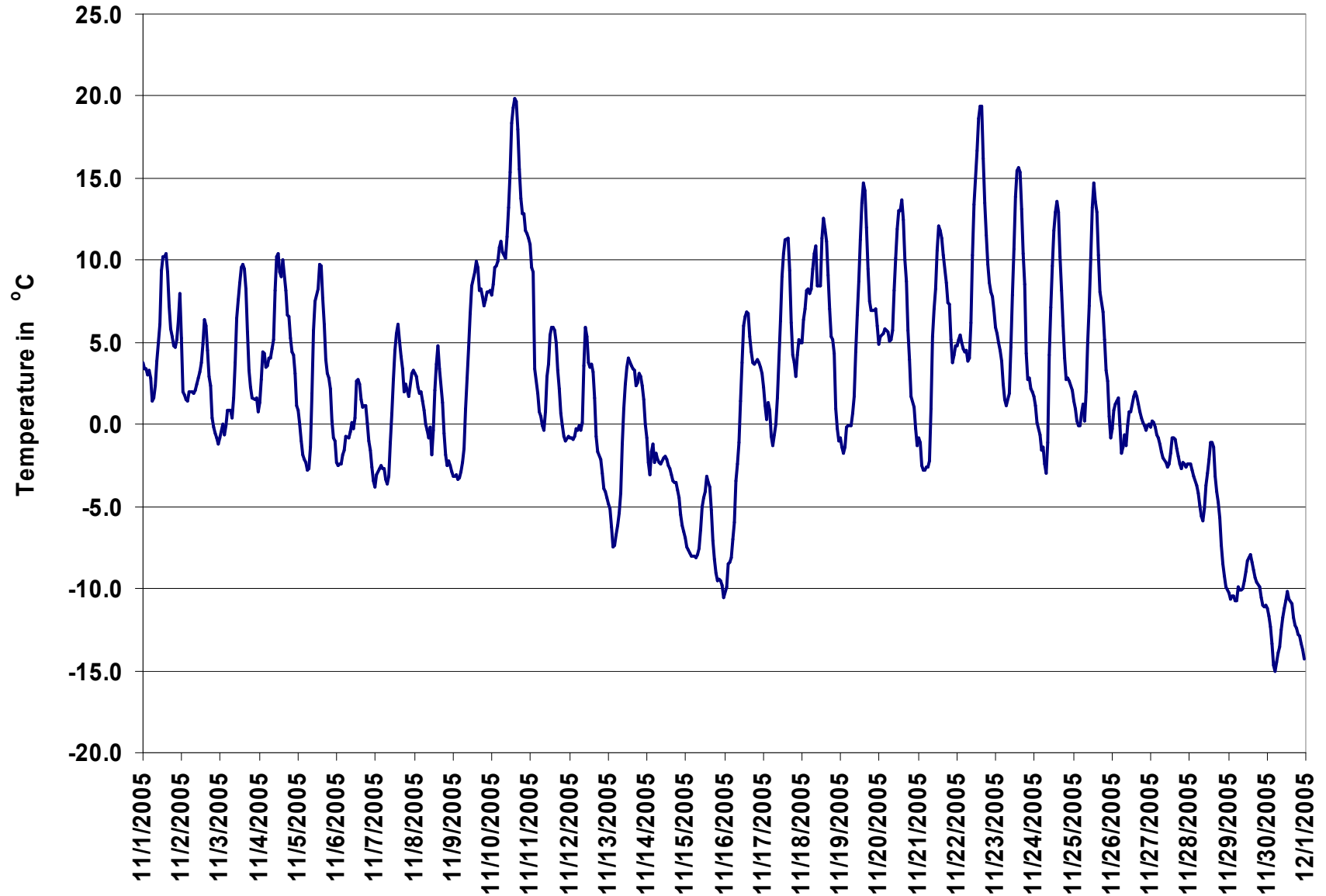


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



PAS - Cresent Heights Solar Radiation Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

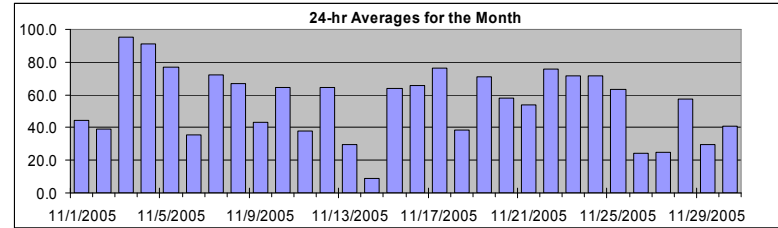
HOURLY AVERAGE TABLE

Solar Radiation (SR)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Average:	588.0	W/m ²	4-Nov	11:00 12:00
Maximum 24-hr Value:	95.0	W/m ²	3-Nov	



AIC Time:	0 hrs	Operational Time:	720 hrs
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%
Percentile	99	95	75
	356.6	294.1	78.6
		0.3	0.0
		0.0	0.0
		0.0	0.0
			Average
			55.2 W/m ²

Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00			0:00
1-Nov-05	0	0	0	0	0	0	0	18	87	136	234	250	167	98	51	23	4	0	0	0	0	0	0	0	0	44.6	249.8
2-Nov-05	0	0	0	0	0	0	0	4	19	51	97	112	145	189	178	111	29	1	0	0	0	0	0	0	39.1	189.1	
3-Nov-05	0	0	0	0	0	0	0	8	123	228	353	404	407	370	172	168	42	1	0	0	0	0	0	0	95.0	407.0	
4-Nov-05	0	0	0	0	0	0	0	16	126	134	408	588	376	149	144	215	33	1	0	0	0	0	0	0	91.3	588.0	
5-Nov-05	0	0	0	0	0	0	0	18	48	194	297	343	283	369	165	103	23	1	0	0	0	0	0	0	76.9	368.6	
6-Nov-05	0	0	0	0	0	0	0	4	40	48	47	71	317	151	104	52	17	0	0	0	0	0	0	0	35.5	316.6	
7-Nov-05	0	0	0	0	0	0	0	8	109	191	245	336	332	244	172	82	15	0	0	0	0	0	0	0	72.3	335.7	
8-Nov-05	0	0	0	0	0	0	0	7	109	89	199	169	332	343	172	152	27	0	0	0	0	0	0	0	66.7	343.2	
9-Nov-05	0	0	0	0	0	0	0	20	69	85	142	221	153	145	128	66	12	0	0	0	0	0	0	0	43.4	220.5	
10-Nov-05	0	0	0	0	0	0	0	5	39	102	137	244	357	309	186	145	24	0	0	0	0	0	0	0	64.6	357.3	
11-Nov-05	0	0	0	0	0	0	0	6	46	101	187	128	162	106	116	49	11	0	0	0	0	0	0	0	38.1	187.4	
12-Nov-05	0	0	0	0	0	0	0	6	35	262	295	332	194	124	135	136	30	0	0	0	0	0	0	0	64.5	331.6	
13-Nov-05	0	0	0	0	0	0	0	6	37	61	93	121	146	148	57	28	5	0	0	0	0	0	0	0	29.3	147.5	
14-Nov-05	0	0	0	0	0	0	0	1	4	17	44	57	38	25	20	10	2	0	0	0	0	0	0	0	9.1	57.4	
15-Nov-05	0	0	0	0	0	0	0	1	21	192	216	247	269	289	157	129	13	0	0	0	0	0	0	0	63.9	288.8	
16-Nov-05	0	0	0	0	0	0	0	3	50	171	284	335	316	213	122	79	8	0	0	0	0	0	0	0	65.9	334.8	
17-Nov-05	0	0	0	0	0	0	0	3	56	193	273	342	344	294	192	117	13	0	0	0	0	0	0	0	76.1	343.8	
18-Nov-05	0	0	0	0	0	0	0	0	10	29	40	67	208	261	187	118	7	0	0	0	0	0	0	0	38.6	260.7	
19-Nov-05	0	0	0	0	0	0	0	4	76	177	225	305	327	300	184	97	15	0	0	0	0	0	0	0	71.2	327.2	
20-Nov-05	0	0	0	0	0	0	0	3	71	188	252	253	159	226	171	61	6	0	0	0	0	0	0	0	57.9	253.4	
21-Nov-05	0	0	0	0	0	0	0	4	56	180	182	226	255	212	122	53	6	0	0	0	0	0	0	0	54.0	255.3	
22-Nov-05	0	0	0	0	0	0	0	1	48	170	269	336	327	300	206	144	20	0	0	0	0	0	0	0	75.9	335.5	
23-Nov-05	0	0	0	0	0	0	0	1	55	180	268	327	325	292	152	110	11	0	0	0	0	0	0	0	71.7	327.1	
24-Nov-05	0	0	0	0	0	0	0	2	51	181	269	328	325	295	155	109	9	0	0	0	0	0	0	0	71.9	327.9	
25-Nov-05	0	0	0	0	0	0	0	6	39	108	232	276	311	281	147	116	7	0	0	0	0	0	0	0	63.5	310.7	
26-Nov-05	0	0	0	0	0	0	0	0	21	78	121	121	95	70	48	24	2	0	0	0	0	0	0	0	24.2	120.7	
27-Nov-05	0	0	0	0	0	0	0	0	5	23	61	109	142	146	77	27	3	0	0	0	0	0	0	0	24.8	146.2	
28-Nov-05	0	0	0	0	0	0	0	0	25	98	163	234	305	294	158	87	7	0	0	0	0	0	0	0	57.2	305.0	
29-Nov-05	0	0	0	0	0	0	0	0	9	45	90	140	161	82	152	25	2	0	0	0	0	0	0	0	29.4	161.4	
30-Nov-05	0	0	0	0	0	0	0	0	26	80	105	170	174	209	143	63	7	0	0	0	0	0	0	0	40.7	209.1	
Hourly Avg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.2	50.3	126.4	194.3	239.7	248.4	217.8	139.2	90.0	13.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
Hourly Max	0.4	0.3	0.3	0.3	0.3	0.3	0.3	19.7	126.0	262.5	407.9	588.0	407.0	369.5	206.2	215.4	42.4	0.7	0.4	0.4	0.4	0.4	0.4	0.5			

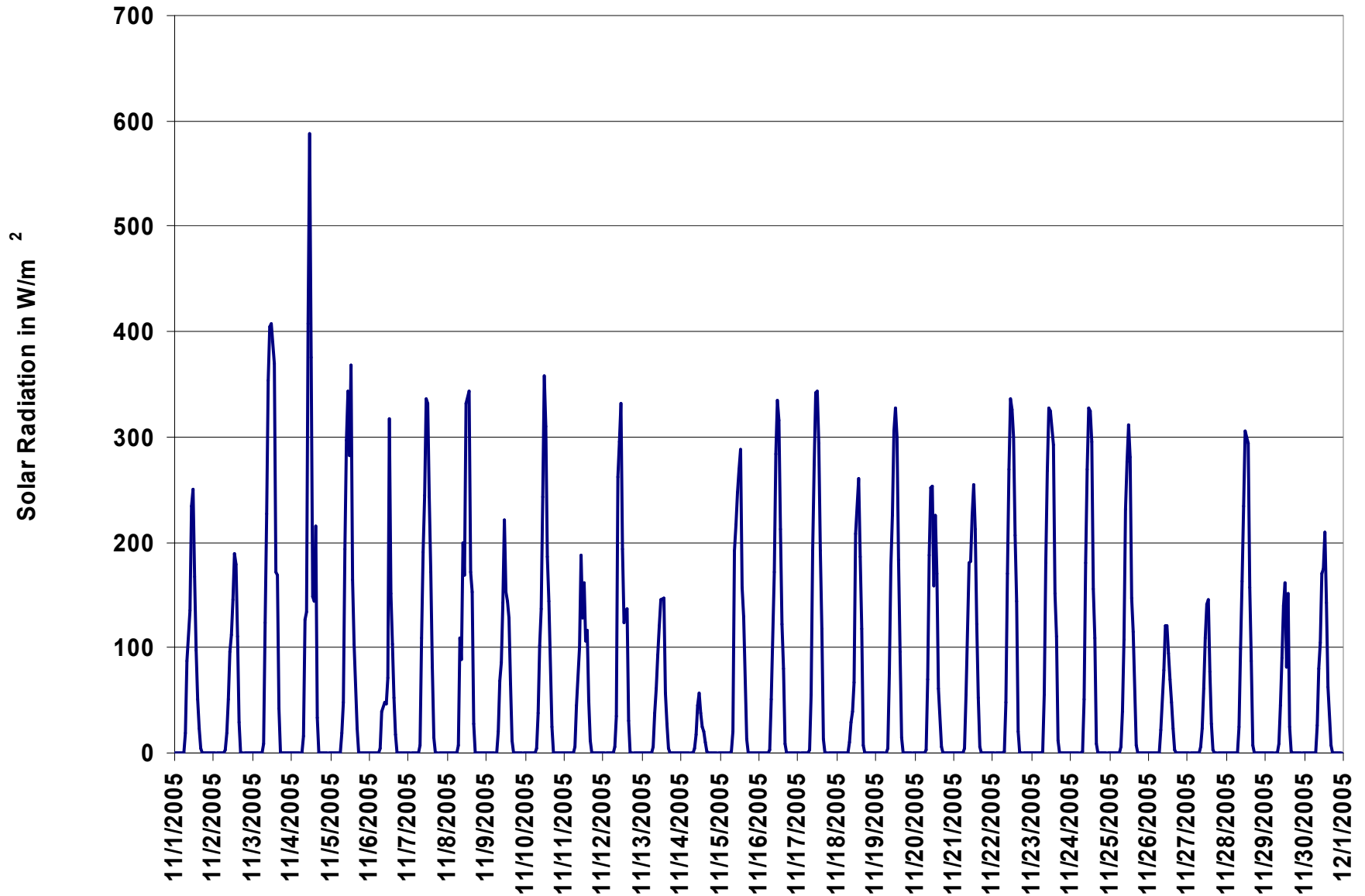


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



PAS - Cresent Heights Scalar Wind Speed Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

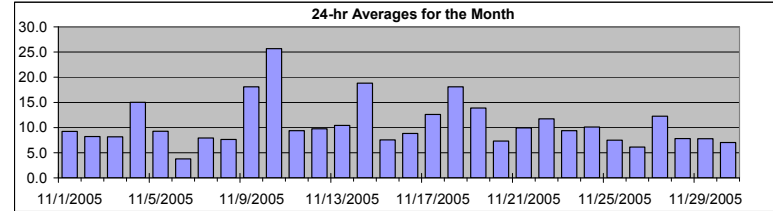
Wind Speed (WSs)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Average:	39.7	km/hr	18-Nov	13:00 14:00
Maximum 24-hr Value:	25.7	km/hr	10-Nov	

Calm Time:	1 hrs	0% calms	Operational Time:	719 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	31.0	24.8	14.2	9.2	5.8	2.4	1.4	10.6 km/hr



Status Flag Characters

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

Day	Mountain Standard Time																								24-hr Scalar Average	Daily Max		
	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-Nov-05	5	8	12	8	9	7	3	5	2	1	4	5	4	6	8	10	10	10	14	21	18	18	11	7	26	9.2	25.6	
2-Nov-05	21	24	17	13	11	10	7	4	3	3	8	9	11	8	5	3	5	7	8	6	6	5	2	2		8.2	24.5	
3-Nov-05	2	5	3	3	4	3	8	5	8	14	20	21	20	18	14	15	5	2	5	5	4	4	3	3		8.2	21.2	
4-Nov-05	5	7	12	14	5	5	17	16	17	19	19	29	25	23	21	18	16	15	17	15	13	15	10	8		15.0	28.6	
5-Nov-05	8	6	4	8	8	5	5	2	3	7	13	15	14	17	16	12	5	5	9	13	12	14	12	10		9.3	17.1	
6-Nov-05	4	3	2	1	3	3	2	7	3	2	4	4	4	4	7	8	10	6	2	2	2	3	1	4	5		3.8	9.5
7-Nov-05	4	11	11	17	13	13	9	6	8	10	8	8	8	5	3	5	6	6	4	7	7	6	8	10		7.9	16.5	
8-Nov-05	5	7	8	6	3	2	2	8	11	10	15	15	12	12	8	7	3	4	3	4	8	10	9	12		7.6	15.2	
9-Nov-05	13	13	13	12	13	8	8	8	17	20	25	34	39	36	30	24	15	14	13	14	15	14	15	19		18.1	39.3	
10-Nov-05	19	25	18	21	20	21	25	22	26	24	24	25	33	33	30	26	26	25	29	27	29	30	28	31		25.7	32.8	
11-Nov-05	28	28	23	17	10	2	7	8	9	9	12	10	9	7	5	4	3	3	5	3	3	7	7	7		9.4	28.1	
12-Nov-05	5	7	4	4	3	3	8	15	14	13	12	13	16	18	21	18	15	10	10	7	6	6	2	3		9.8	21.4	
13-Nov-05	3	4	4	4	5	5	4	4	4	13	12	16	13	13	13	18	18	15	12	16	16	14	10	13		10.4	18.2	
14-Nov-05	13	13	14	14	15	14	23	23	25	28	29	28	28	23	23	25	22	15	15	13	17	13	11	9		18.8	28.5	
15-Nov-05	7	4	1	3	3	4	4	2	5	8	9	9	8	9	10	12	10	11	12	15	12	11	6	6		7.5	14.8	
16-Nov-05	3	1	1	1	2	1	3	9	16	18	17	19	16	13	8	6	11	6	6	10	12	11	9	11		8.8	19.1	
17-Nov-05	9	8	7	8	6	4	5	7	9	11	14	17	21	19	14	10	10	12	14	16	17	18	22	23		12.6	23.0	
18-Nov-05	17	18	20	14	15	20	20	25	28	29	16	11	20	40	34	27	19	11	7	8	9	9	9	6		18.1	39.7	
19-Nov-05	6	4	5	7	15	13	11	15	15	16	17	21	18	14	14	18	13	9	10	16	17	19	19	20		13.9	21.3	
20-Nov-05	15	15	8	6	9	9	7	8	10	11	15	10	8	10	9	4	4	4	2	2	2	3	3	3		7.3	15.0	
21-Nov-05	6	5	5	5	4	3	3	4	10	19	20	14	9	8	7	9	8	11	14	14	15	13	17	14		9.9	20.2	
22-Nov-05	15	14	14	16	17	18	13	14	13	16	14	13	14	11	10	6	6	8	8	10	8	9	6	7		11.7	18.0	
23-Nov-05	10	12	11	14	17	15	11	9	11	10	11	11	8	8	10	7	6	7	6	3	4	5	9	10		9.4	17.4	
24-Nov-05	8	10	11	6	5	8	4	4	10	12	10	14	24	19	16	13	10	8	9	10	10	7	7	8		10.1	23.7	
25-Nov-05	8	8	10	10	10	10	8	8	7	8	10	11	8	8	6	4	4	3	6	10	8	6	6	4		7.5	10.8	
26-Nov-05	3	6	4	5	3	3	4	1	4	7	7	9	8	8	8	9	6	7	7	5	7	9	8	9		6.1	9.4	
27-Nov-05	7	11	14	12	13	13	17	18	17	18	19	15	13	15	16	13	10	9	8	6	7	6	6	8		12.3	19.1	
28-Nov-05	9	11	10	8	8	7	7	8	9	10	10	12	10	10	9	9	6	5	7	8	7	3	2	2		7.8	12.0	
29-Nov-05	2	Calm	1	2	2	1	2	6	7	8	7	8	10	11	13	14	12	11	12	12	12	10	9	8		7.8	13.7	
30-Nov-05	7	8	9	10	12	9	6	6	5	5	5	7	10	10	11	8	7	6	5	2	4	6	6	6		7.0	11.6	
1-hr Average	8.9	10.2	9.2	9.0	8.7	8.0	8.5	9.2	10.9	12.7	13.6	14.5	14.8	14.7	13.3	12.1	9.9	8.8	9.4	10.0	10.3	9.8	9.1	10.0				
Hourly Max	28.1	28.0	22.5	20.6	19.7	21.4	25.1	25.4	27.5	29.0	28.5	34.0	39.3	39.7	34.4	27.4	26.2	24.9	28.5	26.9	28.8	30.0	28.4	31.2				



PAS - Crescent Heights Vector Wind Speed Monthly Summary

Station: Crescent Heights
 Station Owner: PAS

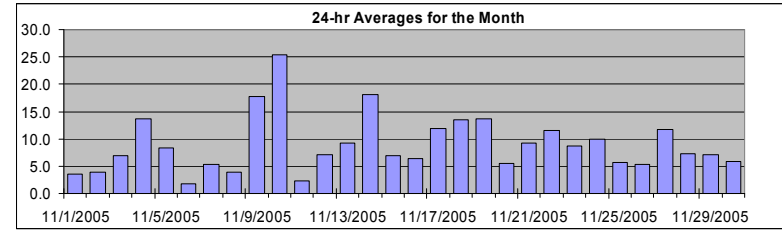
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Maximum 1-hr Average:	39.5	km/hr	18-Nov	13:00 14:00
Maximum 24-hr Value:	25.4	km/hr	10-Nov	



Calm Time:	4 hrs	1% calms	Operational Time:	716 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	31.0	24.6	14.0	8.9	5.6	2.0	1.1	33.8 km/hr

Status Flag Characters

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

Day	Mountain Standard Time																							24-hr Vector Average	Daily Max		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Nov-05	4	8	12	7	9	6	3	5	1	1	4	4	4	6	8	9	9	14	20	18	18	11	6	25	3.5	24.6	
2-Nov-05	21	24	17	13	11	10	7	4	3	3	8	9	11	7	4	2	5	7	7	6	6	5	2	2	4.0	24.1	
3-Nov-05	1	5	3	1	4	2	8	5	8	13	19	21	20	18	14	15	5	2	4	5	4	4	3	2	6.9	21.0	
4-Nov-05	5	6	12	14	5	5	17	16	17	19	19	28	25	23	21	18	15	14	17	15	13	15	10	8	13.7	28.4	
5-Nov-05	8	5	3	8	8	5	5	1	3	6	12	15	14	17	16	12	4	5	9	12	11	14	12	10	8.3	16.7	
6-Nov-05	3	2	2	1	3	1	2	7	2	2	3	4	4	7	8	9	6	2	calm	1	2	1	4	4	1.7	9.4	
7-Nov-05	4	10	11	16	12	13	9	6	8	10	8	8	8	5	1	5	6	5	3	7	7	5	8	10	5.3	16.4	
8-Nov-05	5	7	8	6	3	2	1	8	10	9	15	15	11	12	8	7	3	3	2	4	8	10	9	12	3.9	14.8	
9-Nov-05	13	13	13	12	13	8	7	8	17	20	25	34	39	36	30	24	14	14	13	14	15	14	15	19	17.8	39.1	
10-Nov-05	19	25	17	20	20	21	25	22	26	24	24	25	33	32	29	26	26	25	28	27	29	30	28	31	25.4	32.6	
11-Nov-05	28	28	16	17	10	2	7	8	9	9	12	9	8	7	5	3	3	3	4	2	3	7	7	7	2.4	28.0	
12-Nov-05	5	6	4	4	3	2	8	14	14	13	12	13	16	18	21	18	15	10	9	6	6	5	2	2	7.1	21.3	
13-Nov-05	2	4	4	4	5	5	4	4	4	12	11	16	13	13	13	18	18	15	12	16	16	14	10	13	9.3	18.0	
14-Nov-05	13	13	14	14	15	14	23	23	25	28	28	28	28	23	23	25	22	15	15	13	16	12	11	8	18.2	28.5	
15-Nov-05	6	4	1	3	3	4	4	2	5	8	9	8	8	8	10	11	10	11	12	15	12	10	6	6	6.9	14.8	
16-Nov-05	3	1	calm	1	1	1	1	8	15	18	17	19	16	13	8	5	11	6	5	9	11	10	9	11	6.3	18.9	
17-Nov-05	9	8	6	8	5	4	5	6	9	11	14	17	20	19	14	10	10	12	14	16	17	18	22	23	11.9	22.9	
18-Nov-05	17	18	20	14	15	20	19	25	27	27	16	11	20	40	34	27	19	11	7	8	9	9	9	6	13.6	39.5	
19-Nov-05	6	3	5	7	15	13	10	14	15	16	17	21	18	14	14	18	13	9	10	16	17	19	18	19	13.7	21.2	
20-Nov-05	15	15	7	6	9	9	7	8	10	11	15	9	7	10	8	3	4	4	1	2	2	3	2	3	5.5	15.0	
21-Nov-05	6	5	5	5	4	3	3	4	10	19	20	14	9	8	7	9	8	11	14	14	15	13	17	14	9.3	20.1	
22-Nov-05	15	14	14	15	17	18	13	14	13	16	14	13	14	10	10	6	6	8	8	10	8	9	6	7	11.6	18.0	
23-Nov-05	10	12	11	14	17	15	11	9	11	10	11	11	8	8	10	7	6	7	5	2	3	5	9	10	8.7	17.4	
24-Nov-05	8	10	11	6	5	7	3	4	10	12	10	14	24	19	16	13	10	7	9	10	10	7	7	8	9.9	23.6	
25-Nov-05	8	8	10	10	10	10	8	8	7	7	10	11	7	7	6	4	4	2	6	9	8	5	6	2	5.7	10.6	
26-Nov-05	3	6	4	5	3	2	4	1	4	7	7	9	8	8	8	9	6	6	7	5	7	9	8	8	5.3	8.7	
27-Nov-05	7	11	14	12	13	12	17	18	17	18	19	15	13	15	16	13	10	9	8	6	7	6	6	8	11.7	19.0	
28-Nov-05	9	11	9	8	8	7	7	8	9	10	10	12	10	10	8	9	6	5	7	8	7	3	1	2	7.4	11.8	
29-Nov-05	2	calm	calm	2	2	1	2	6	6	8	7	8	10	10	12	14	11	11	12	12	12	10	9	8	7.2	13.6	
30-Nov-05	7	8	9	10	12	9	6	5	5	5	5	7	9	10	10	7	7	6	5	2	4	6	6	6	5.9	11.6	
1-hr Vector	6.7	7.4	6.2	5.4	5.4	5.5	5.0	5.6	6.8	7.5	7.5	8.7	8.5	7.8	6.5	5.3	3.9	2.8	3.7	4.5	4.9	5.9	6.5	7.2			
Hourly Max	28.0	27.8	20.0	20.5	19.6	21.0	24.7	25.3	27.4	27.7	28.5	33.8	39.1	39.5	34.1	27.3	26.2	24.7	28.4	26.9	28.7	29.9	28.4	31.1			



PAS - Cresent Heights Wind Direction Monthly Summary

Station: Cresent Heights
Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	358.0	344.9	278.5	234.2	206.4	25.8	3.5	255 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-Nov-05	239	239	240	228	237	255	195	224	166	134	117	139	125	117	183	171	60	73	81	99	100	104	222	240	155	SSE
2-Nov-05	258	284	301	299	307	329	334	303	319	261	231	228	231	257	266	357	61	86	108	121	132	143	130	131	277	W
3-Nov-05	12	358	344	205	265	258	226	228	221	208	209	227	220	233	244	240	247	221	147	209	219	188	153	139	225	SW
4-Nov-05	195	197	190	196	205	218	212	218	228	236	255	257	257	260	261	253	259	266	270	268	263	274	269	252	246	WSW
5-Nov-05	249	235	206	249	240	243	212	339	338	234	230	259	273	272	282	314	277	257	253	262	249	229	234	229	255	WSW
6-Nov-05	219	195	196	79	88	230	31	31	347	358	348	359	15	360	358	5	16	355	119	211	341	265	239	230	354	N
7-Nov-05	234	243	245	232	233	234	242	252	241	229	233	230	214	216	206	65	77	94	117	99	125	137	210	204	218	SW
8-Nov-05	191	167	157	158	158	113	172	269	283	288	304	315	316	317	316	308	339	48	154	197	212	227	224	222	265	W
9-Nov-05	221	224	227	237	237	252	249	237	214	211	211	218	218	221	232	235	240	235	236	219	227	221	220	217	225	SW
10-Nov-05	222	241	235	233	227	240	243	230	219	217	217	220	217	224	225	230	225	220	223	220	216	214	219	221	224	SW
11-Nov-05	219	227	261	0	3	69	10	24	24	17	22	33	71	106	62	4	326	327	300	254	246	224	231	243	305	NW
12-Nov-05	193	206	216	236	245	248	248	240	231	240	281	303	317	317	328	321	328	320	324	324	253	255	203	149	287	WNW
13-Nov-05	157	194	180	133	144	166	193	205	201	197	191	196	186	181	174	182	192	179	187	206	209	228	263	276	196	SSW
14-Nov-05	282	302	324	316	322	322	336	331	339	345	348	346	344	343	347	350	347	353	345	350	348	1	341	356	339	NNW
15-Nov-05	0	10	345	38	61	79	93	129	69	77	89	83	74	83	84	99	97	78	96	101	97	104	101	101	86	E
16-Nov-05	116	98	49	10	69	353	218	232	232	234	233	228	226	226	235	287	335	325	273	280	300	298	310	316	259	WSW
17-Nov-05	310	286	267	277	251	199	207	210	233	221	225	222	235	241	245	244	248	240	238	242	237	232	233	235	239	WSW
18-Nov-05	225	234	239	251	258	260	263	271	271	286	316	276	318	341	349	347	336	331	264	281	267	233	234	224	288	WNW
19-Nov-05	233	186	204	232	231	240	237	238	238	237	237	231	224	225	224	221	221	224	221	222	225	230	237	239	230	SW
20-Nov-05	238	237	214	216	226	235	226	234	234	224	230	229	274	311	5	0	320	293	341	344	160	225	194	208	243	WSW
21-Nov-05	207	188	153	153	169	186	200	206	228	224	231	232	246	242	230	238	249	245	238	239	232	240	238	243	229	SW
22-Nov-05	241	241	246	239	238	238	241	238	234	231	229	226	229	243	238	231	227	242	231	231	223	228	205	208	234	SW
23-Nov-05	229	240	234	241	238	238	236	235	237	225	232	229	240	276	278	274	277	274	254	189	124	216	241	237	241	WSW
24-Nov-05	241	234	228	234	221	225	186	175	223	226	224	225	228	229	223	231	252	247	235	234	235	236	229	241	230	SW
25-Nov-05	243	234	228	237	236	233	242	228	223	230	229	237	245	313	347	16	37	134	231	241	246	273	323	343	247	WSW
26-Nov-05	233	239	252	244	245	335	356	313	334	347	347	307	286	285	305	318	331	330	321	314	317	320	326	329	311	NW
27-Nov-05	336	339	348	345	348	343	359	4	359	1	358	2	352	351	344	339	334	332	321	302	313	303	303	309	345	NNW
28-Nov-05	313	330	328	329	333	319	313	313	310	310	319	335	334	327	303	296	298	286	307	353	11	17	9	359	323	NW
29-Nov-05	343	11	5	93	107	122	6	17	15	26	30	39	54	57	64	52	52	39	25	22	15	8	6	1	34	NNE
30-Nov-05	354	351	333	324	323	310	299	306	293	305	301	296	293	306	325	323	342	337	329	322	239	231	232	222	310	NW
Hourly Avg	242	248	251	254	254	255	258	259	254	250	252	251	253	271	280	283	293	277	252	242	238	236	242	242		



PAS - Cresent Heights Standard Deviation of Wind Direction Monthly Summary

Station: Cresent Heights
 Station Owner: PAS

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: November 1, 2005 to December 1, 2005

Summary

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Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	720 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	49.5	29.3	12.6	8.1	6.1	4.2	3.6

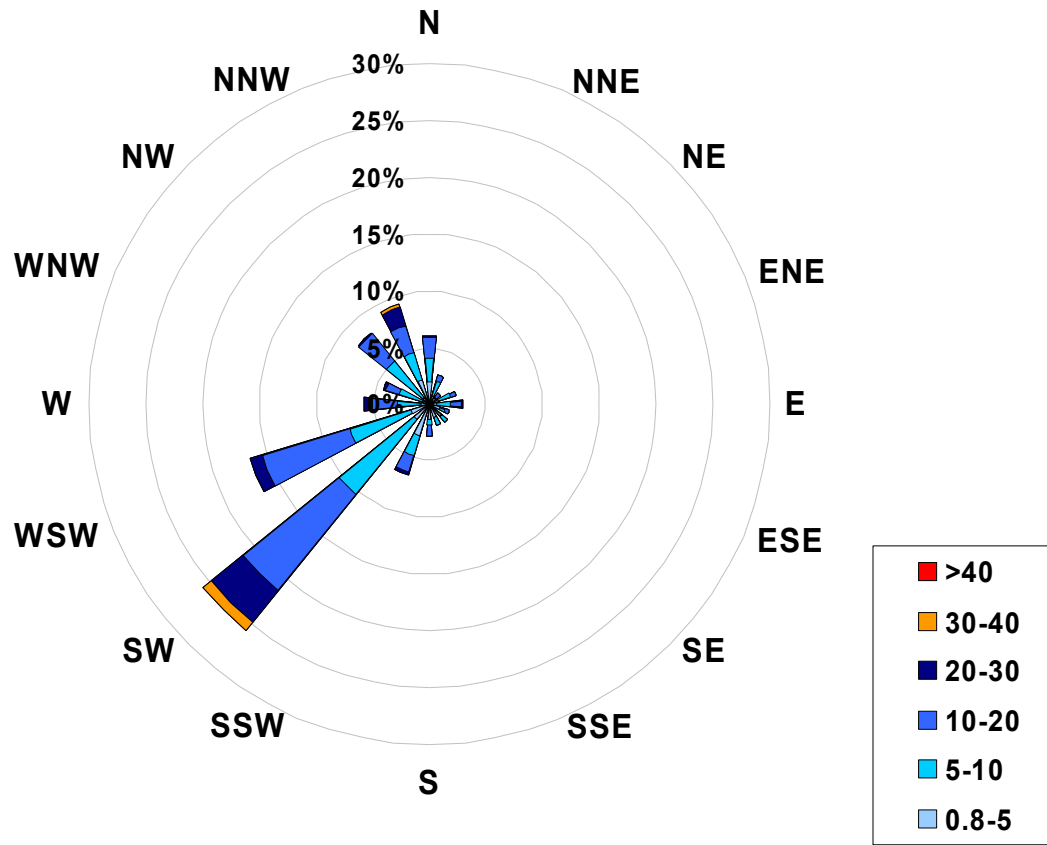
Status Flag Characters	
C Calibration	A AIC - Zero / Span Check
S Instrument out of Service	X Filter Exchange
N No Data	M Equipment Maintenance
D Excessive Instrument Drift	P Power Failure

Day	Mountain Standard Time																							Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00		22:00 23:00
1-Nov-05	11	9	6	8	6	14	28	16	19	31	10	17	17	9	19	15	18	5	5	7	9	9	24	8	30.7
2-Nov-05	6	6	8	8	8	7	11	16	15	25	12	9	8	15	36	29	6	9	8	8	14	10	15	12	35.8
3-Nov-05	19	12	42	27	26	38	10	16	10	7	8	8	10	10	11	8	11	33	28	19	16	18	13	41	41.9
4-Nov-05	18	15	9	6	27	41	5	8	7	7	7	7	7	6	6	8	6	5	6	6	6	6	7	6	40.8
5-Nov-05	6	11	56	11	6	11	8	28	34	36	12	9	9	11	10	7	10	11	6	7	14	9	8	19	56.0
6-Nov-05	21	22	29	40	36	52	36	7	46	30	8	9	29	9	10	8	8	32	50	26	14	28	17	17	51.9
7-Nov-05	12	8	10	5	8	10	8	9	6	7	8	14	13	21	39	10	4	9	19	8	6	9	10	9	38.6
8-Nov-05	18	15	11	10	18	25	40	13	9	13	12	11	14	12	16	12	11	12	17	14	10	10	8	4	40.1
9-Nov-05	6	5	6	8	9	12	11	17	5	5	5	5	4	4	4	4	6	6	6	7	7	10	7	7	16.8
10-Nov-05	6	4	6	4	5	6	6	6	5	4	6	5	6	6	6	5	4	5	5	4	4	4	4	4	6.3
11-Nov-05	5	4	18	5	6	34	8	5	6	9	6	9	13	11	14	15	10	25	18	38	15	9	10	12	37.9
12-Nov-05	22	9	32	27	29	49	19	6	6	7	11	11	9	6	6	7	7	9	8	15	11	9	49	18	49.0
13-Nov-05	23	16	12	15	7	11	15	13	18	5	6	5	8	7	8	6	7	8	9	11	9	6	8	5	23.1
14-Nov-05	6	8	7	6	6	8	5	4	4	4	4	4	5	4	6	5	4	6	7	5	8	12	6	8	12.3
15-Nov-05	12	12	35	17	12	10	10	16	9	9	13	15	16	20	12	10	6	6	7	6	7	6	8	7	35.0
16-Nov-05	10	12	24	23	26	52	52	18	8	7	7	8	7	7	8	17	5	11	10	8	7	8	8	6	52.1
17-Nov-05	7	7	7	8	21	15	8	11	5	6	8	8	7	6	7	7	7	8	8	7	8	7	7	4	20.7
18-Nov-05	4	4	4	6	6	5	6	4	4	6	9	8	9	5	4	4	5	9	9	5	7	6	4	16	15.5
19-Nov-05	8	18	9	5	5	7	5	7	5	7	6	4	6	9	8	5	4	18	4	5	5	13	6	5	17.8
20-Nov-05	4	3	18	28	9	9	15	8	7	7	6	11	11	10	12	14	7	8	61	35	20	15	20	13	60.6
21-Nov-05	11	11	10	10	13	11	18	17	6	6	4	7	11	12	6	7	8	6	5	5	4	5	5	7	17.6
22-Nov-05	5	5	7	6	5	3	6	5	4	4	6	7	7	9	9	12	8	5	7	6	8	5	24	18	23.6
23-Nov-05	4	6	4	6	3	3	5	3	4	6	7	7	13	11	6	7	5	5	10	16	26	21	5	4	26.3
24-Nov-05	6	5	4	16	8	15	16	15	10	7	8	6	4	7	5	5	8	14	9	4	6	7	6	8	16.3
25-Nov-05	8	8	6	5	4	4	9	7	7	6	7	9	18	14	11	9	10	51	15	12	12	12	14	49	51.1
26-Nov-05	28	9	15	16	18	33	9	50	14	7	9	13	12	12	12	10	11	10	15	15	14	8	11	8	49.6
27-Nov-05	10	6	6	6	5	8	5	5	6	6	7	7	8	7	6	6	6	7	8	9	9	9	12	8	11.9
28-Nov-05	7	6	9	8	7	8	8	7	7	8	10	9	16	16	14	9	9	7	10	5	8	18	24	17	24.2
29-Nov-05	6	25	27	25	22	45	21	9	9	8	13	13	13	13	11	9	6	8	7	6	4	5	6	7	45.2
30-Nov-05	7	7	6	5	4	6	10	13	13	12	14	15	11	11	9	9	9	8	7	9	12	16	8	8	16.4

Hourly Max	28	25	56	40	36	52	52	50	46	36	14	17	29	21	39	29	18	51	61	38	26	28	49	49
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1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site for November 2005



Calms: 0%

Frequency Distribution of Wind in km/hr Range			Frequency (hrs)
0.8	<	5	145
5	to	10	254
10	to	20	253
20	to	30	58
30	to	40	9
	>	40	0
Total Non-Zero Values			719



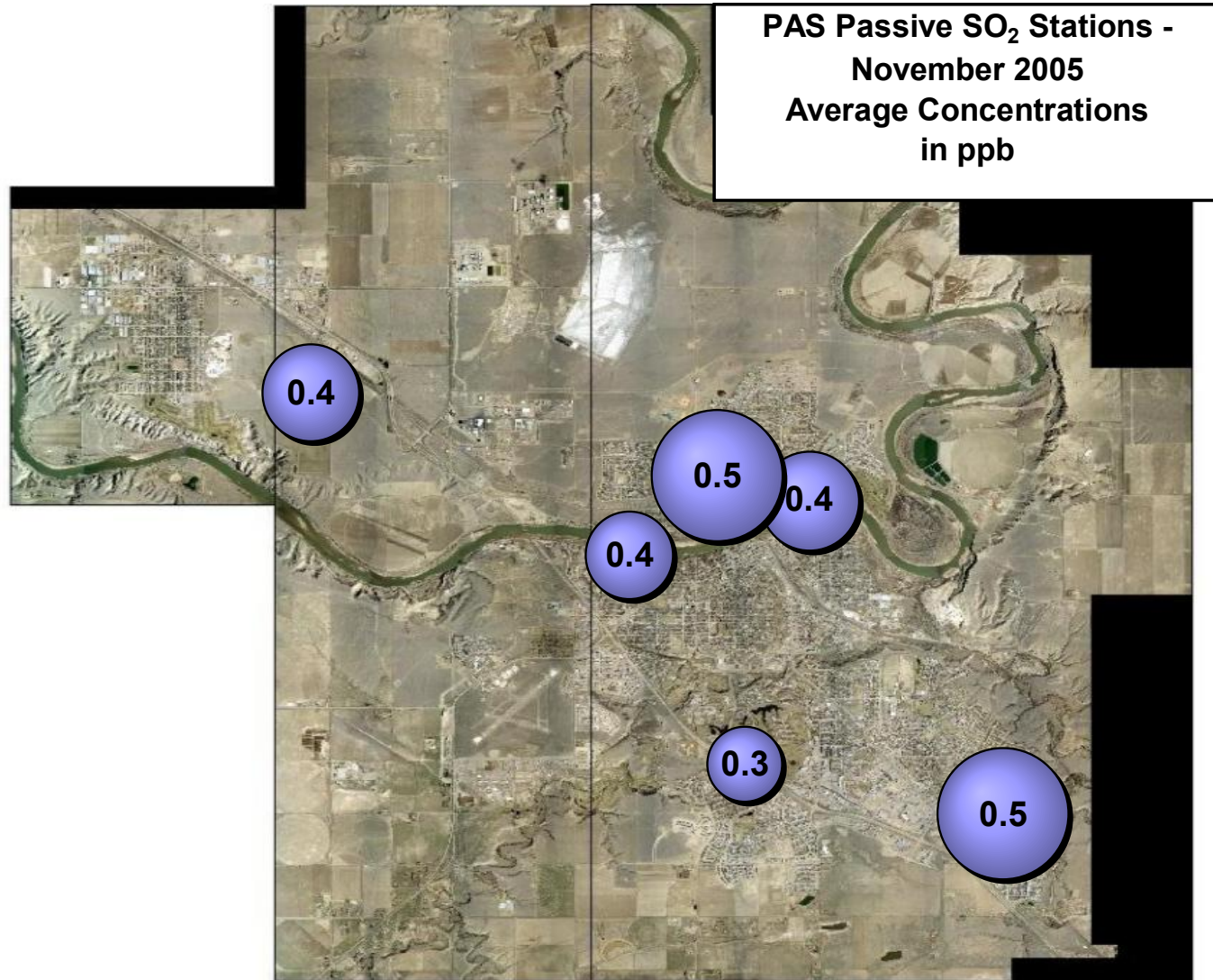
Passive Monitoring – November 2005

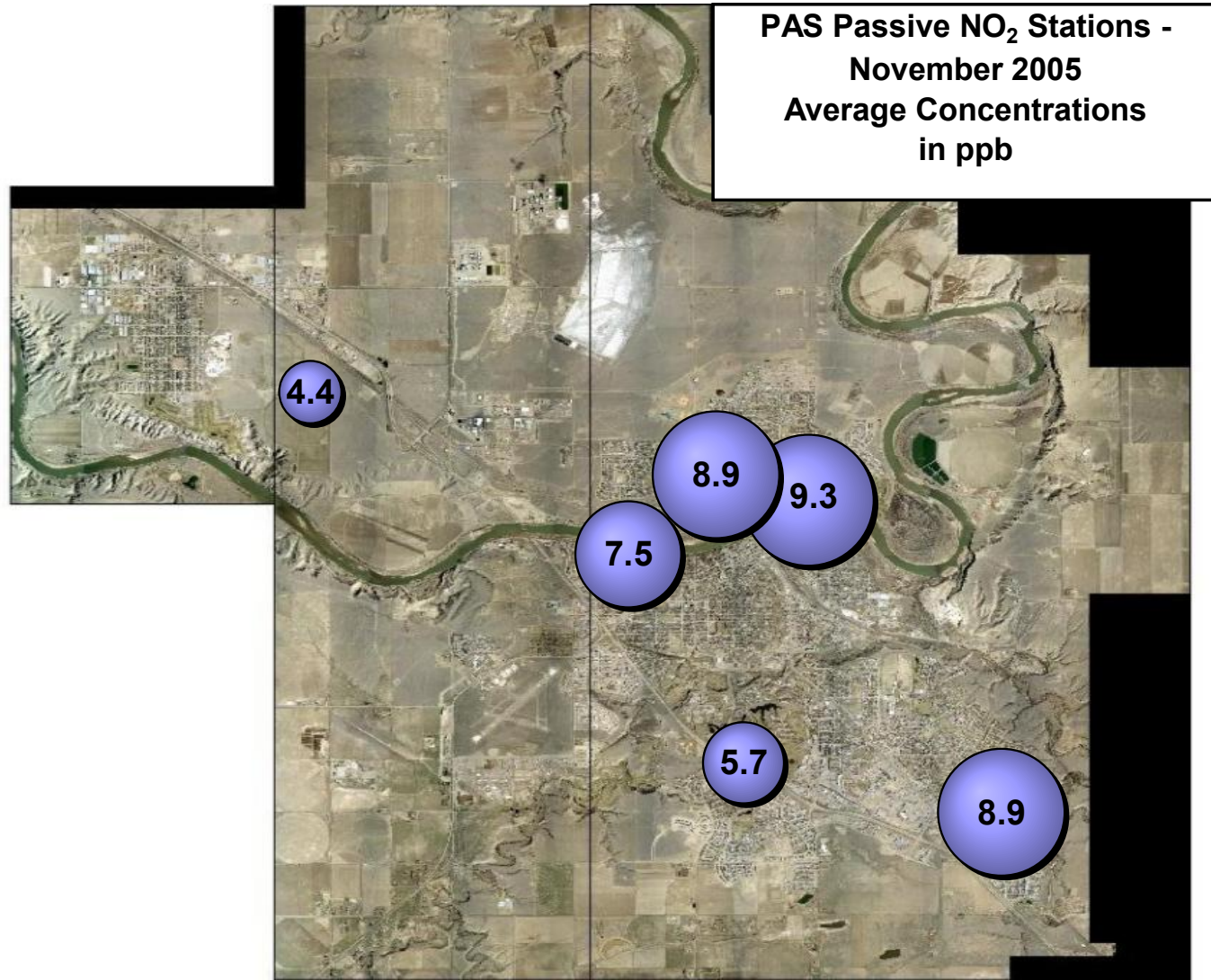
Ambient Air Compliance Network

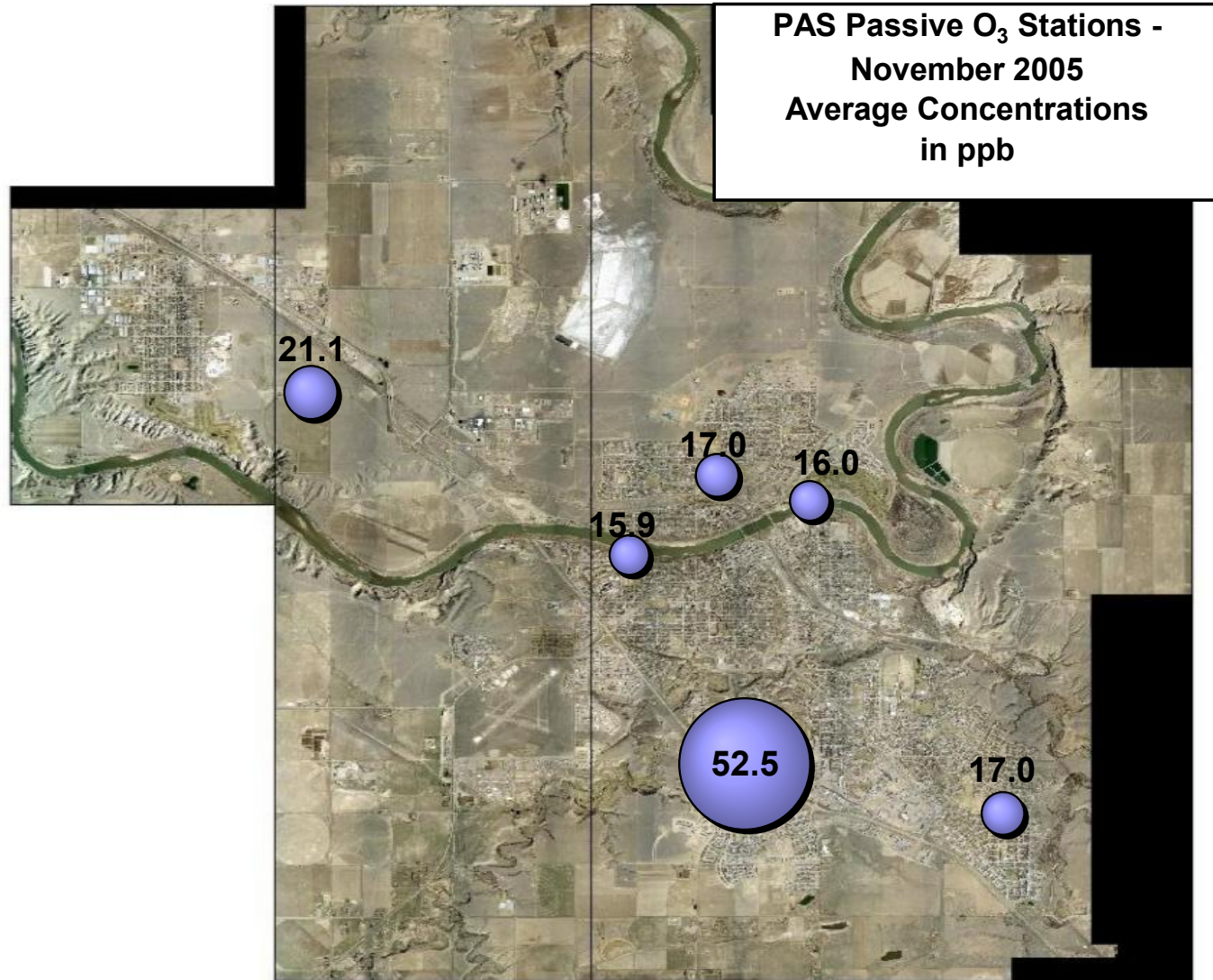


Palliser Airshed Society - PAS Passive Stations for November 2005

Station Number	Station Name	SO ₂ ppb	O ₃ ppb	NO ₂ ppb	Easting	Northing	Elevation
Duplicates							
3a	Monitoring Station	0.6	19.1	8.5			
3b		0.4	14.9	9.4			
1	Hospital	0.4	15.9	7.5	521648	5542721	698
2	Ball Park	0.4	16.0	9.3	524019	5543686	660
3	Monitoring Station	0.5	17.0	8.9	522812	5544133	714
4	Redcliff	0.4	21.1	4.4	517448	5545608	725
5	Southridge	0.3	52.5	5.7	523172	5539016	721
6	Christian School Park	0.5	17.0	8.9	526577	5538133	709
Stats:							
	Mean	0.4	23.2	7.5			
	Standard Deviation	0.1	14.4	2.0			
	Minimum	0.3			5	Southridge	
	Maximum	0.5			3	Monitoring Station	
	Minimum		15.9		1	Hospital	
	Maximum		52.5		5	Southridge	
	Minimum			4.4	4	Redcliff	
	Maximum			9.3	2	Ball Park	







November 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	November 14, 2005	Previous Calibration	October 6, 2005
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	18:05	End Time (MST)	21:00
Barometric Pressure	0.931 ATM	Station Temperature	21.0 Deg C
Calibrator	Enviroics 6100	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	NA
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	0.988921	Calculated slope	0.998763
Calculated intercept	-0.892390	Calculated intercept	0.742300
Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	-5.9	ppb	NA	ppb
coefficient	0.991		NA	
Lamp measure	2670.8	mV	3951.3	mV
Lamp Reference	2672.7	mV	3952.4	mV
Pressure	25.9	inches Hg	25.9	inches Hg
Sample Flow	718	ccm	715	ccm
Lamp temp	58	Deg C	58	Deg C

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	-2.0	N/A
4995	0.00	298.8	297.4	1.0047
4995	0.00	198.6	198.8	0.9987
4995	0.00	102.0	102.9	0.9912
4995	0.00	0.0	-2.0	0.0000
4995	0.00	298.8	282.6	1.0573
Average Correction Factor				0.9982

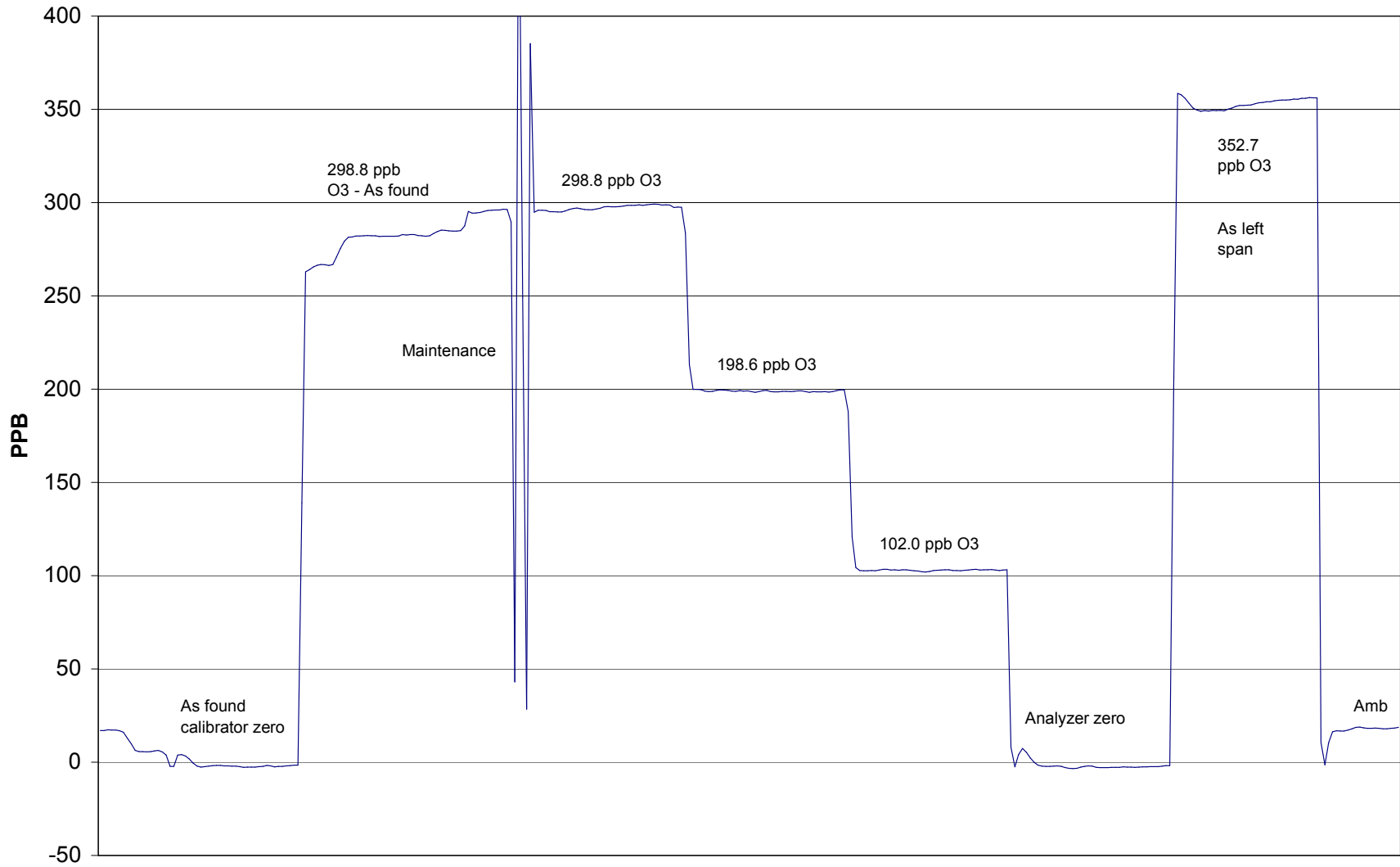
Calculated value of As Found Response: 280.5 ppm Percent Change of As Found: -6.1%

	before calibration		after calibration	
Auto zero	-2.9	ppb	-1.9	ppb
Auto span	341.3	ppb	352.7	ppb

Notes: A span adjustment was made. Lamp was adjusted (originally 2625 mV; now 3950 mV).

Calibration Performed By: Kelly Baragar

O3 Calibration



November 14, 2005

Calibration Report

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



Station Information

Calibration Date November 14, 2005 Previous Calibration October 6, 2005
 Station Number 1 Station Location Crescent Heights

Reason: Routine Installation Removal Other: _____

Start Time (MST) 14:25 End Time (MST) 18:55
 Barometric Pressure 0.931 ATM Station Temperature 20.0 Deg C
 Calibrator Envionics 6100 Serial Number 3016
 NO Cal Gas Conc 49.8 ppm Cal Gas Expiry Date 12-Dec-05
 NOx Cal Gas Conc 49.8 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	0.998148	0.994541	0.991443	0.989775
	-0.340971	-0.363878	2.228556	2.373993
After	Data Slope	0.992166	0.991721	0.994899
	Data Offset	-0.926783	-0.277052	0.370441
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	1.278		1.359	
NOx coefficient	1.240		1.370	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	7.0	Deg C	7.0	Deg C
Azero	34.5		40.0	
Perm Temp	40.1	Deg C	40.0	Deg C
Pressure	4.3	inches Hg	4.3	inches Hg
Sample Flow	450.0	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: November 14, 2005 Station Location: Crescent Heights

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4993	0.00	0.0	0.0	0.0	0.8	0.3	0.4	N/A	N/A
1	4993	39.97	395.5	395.5	0.0	399.7	397.9	1.8	0.9896	0.9939
2	4993	19.97	198.4	198.4	0.0	199.1	197.4	1.5	0.9964	1.0050
3	4993	9.50	94.6	94.6	0.0	95.7	94.9	0.3	0.9879	0.9964
AFZ	4993	0.00	0.0	0.0	0.0	0.8	0.3	0.4	0.0000	0.0000
AFS	4993	39.97	395.5	395.5	0.0	363.2	375.1	-11.7	1.0888	1.0543
								Average Correction Factor	0.9913	0.9985

As Found Concentrations NO_x= 364.7 NO= 377.2 As Found Percent Change NO_x= -7.8% NO= -4.6%

GPT Calibration Data

Dilution Flow 4993 ccm Source Gas Flow 39.97 ccm

O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency	
0	402.9	401.8	1.1	406.5	403.5	0.4	N/A	N/A	N/A	N/A	
350	401.7	102.9	298.8	405.4	103.1	301.6	0.9910	0.9985	0.9905	101.0%	
200	402.6	204.0	198.6	406.3	204.7	201.4	0.9910	0.9967	0.9860	101.4%	
100	402.4	300.4	102.0	406.0	301.6	104.3	0.9910	0.9961	0.9774	102.3%	
							Average Correction Factor	0.9910	0.9971	0.9846	101.6%

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	1.2	0.0	0.3	ppb
Auto span	365.2	357.7	8.3	ppb	415.5	409.1	6.1	ppb

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter NO₂
 Air Monitoring Network Palliser Airshed

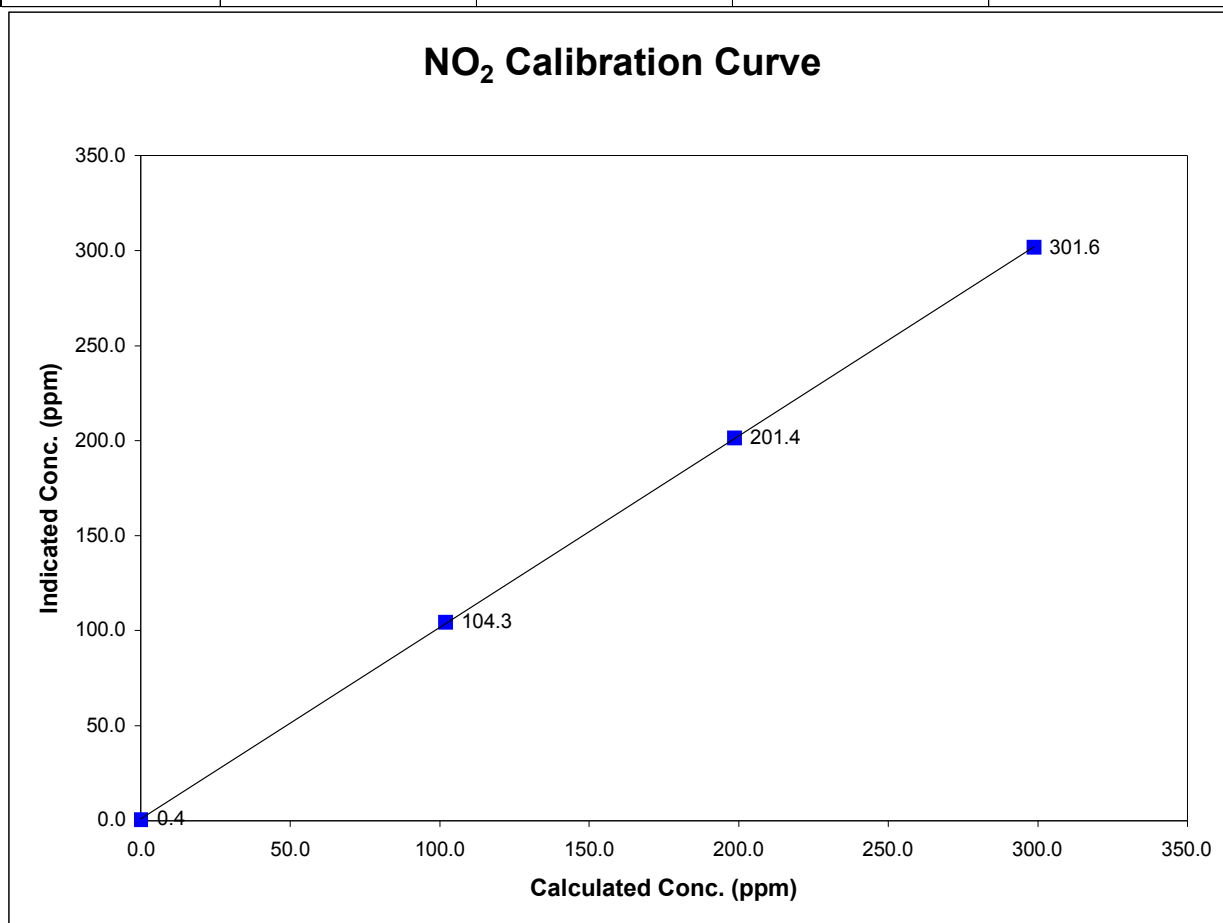


Station Information

Calibration Date	November 14, 2005	Previous Calibration	October 6, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	14:25	End Time (MST)	18:55
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	0.0000		
298.8	301.6	0.9905	Correlation Coefficient	0.999981
198.6	201.4	0.9860		
102.0	104.3	0.9774	Slope	0.992166
			Intercept	-0.926783



Calibration Summary

Parameter NO_x
 Air Monitoring Network Palliser Airshed



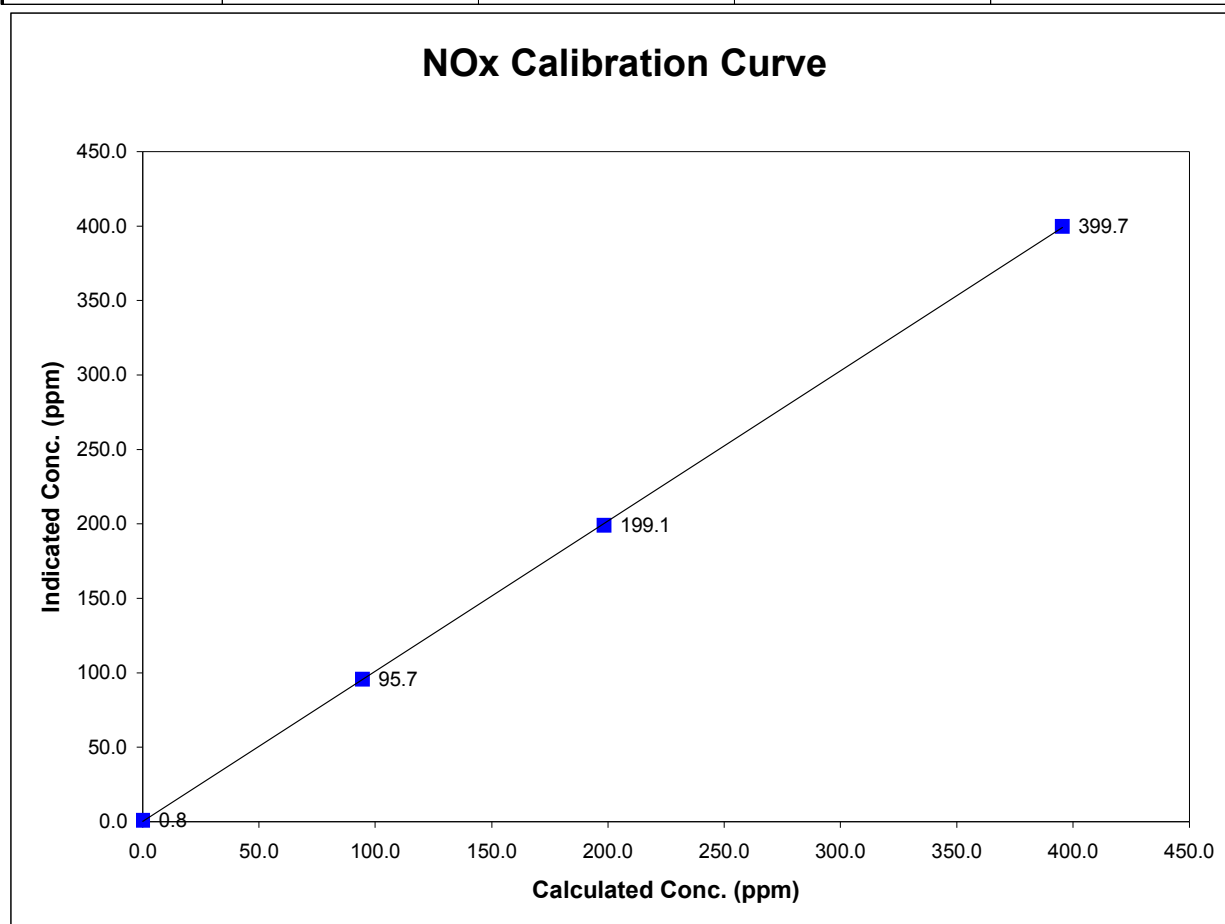
Station Information

Calibration Date	November 14, 2005	Previous Calibration	October 6, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	14:25	End Time (MST)	18:55
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.8	0.0000	Correlation Coefficient	0.999976
395.5	399.7	0.9896		
198.4	199.1	0.9964		
94.6	95.7	0.9879		
			Slope	0.991721
			Intercept	-0.277052

NO_x Calibration Curve



Calibration Summary

Parameter NO
 Air Monitoring Network Palliser Airshed

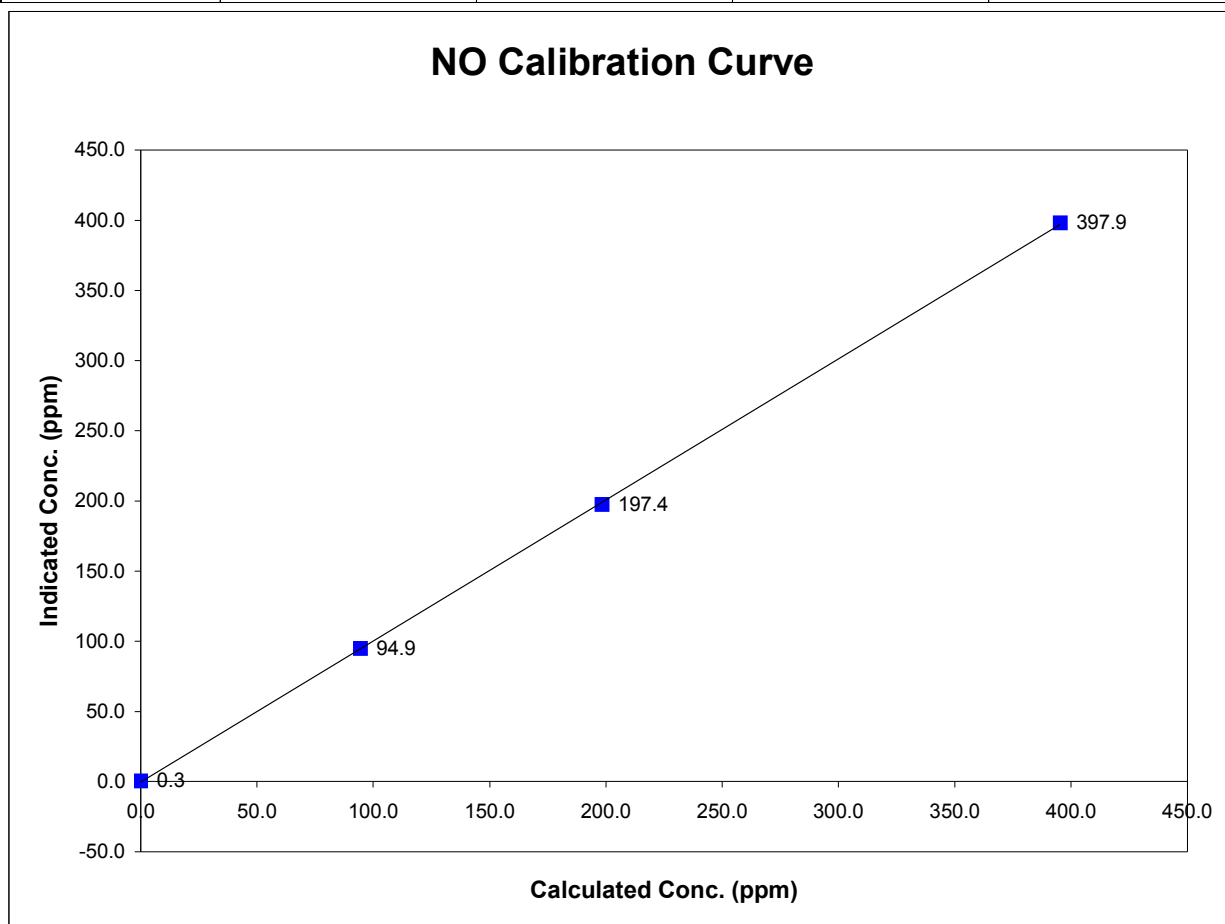


Station Information

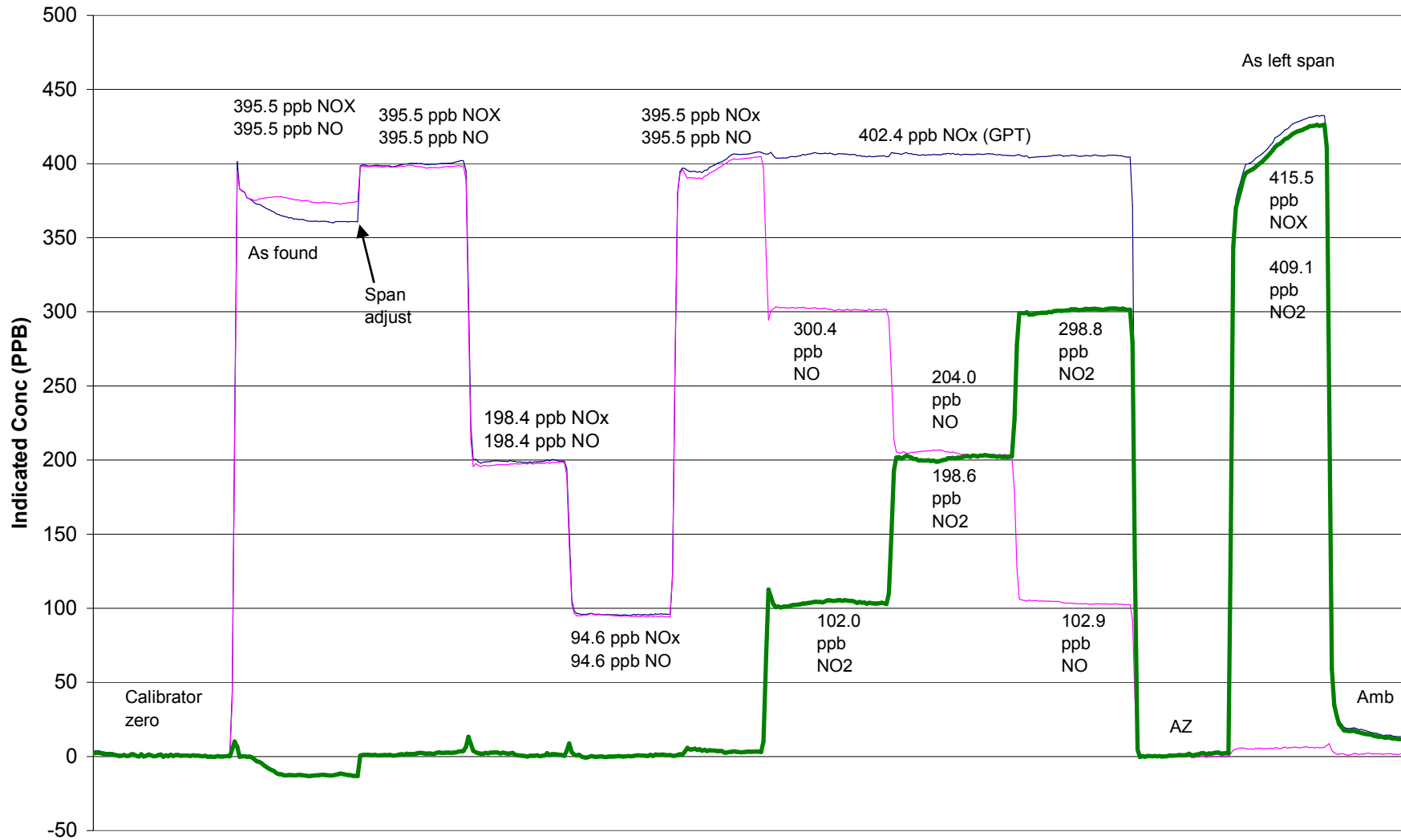
Calibration Date	November 14, 2005	Previous Calibration	October 6, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	14:25	End Time (MST)	18:55
Analyzer make	API Model 200E	Analyzer serial #	219

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
395.5	397.9	0.9939	Correlation Coefficient	0.999957
198.4	197.4	1.0050		
94.6	94.9	0.9964	Slope	0.994899
			Intercept	0.370441



NOx Calibration



November 14, 2005

Calibration Report

Parameter THC
 Air Monitoring Network Palliser Airshed



Station Information

Calibration Date	November 14, 2005	Previous Calibration	October 6, 2005
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:15	End Time (MST)	12:30
Barometric Pressure	0.934 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	700 ppm CH ₄ / 301 ppm C ₃ H ₈	Cal Gas Expiry Date	8/28/2005
Cal Gas CH ₄ equiv	1527.75 ppm	Cal Gas Cylinder #	ALM030358
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Analyzer Range (low)	0		0
Analyzer Range (high)	50		50
Calculated slope	0.999290	Calculated slope	0.998635
Calculated intercept	0.124390	Calculated intercept	0.024513
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	10556	raw	10806	raw
THC zero counts	1639	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)
2994	0.00	0.00	0.00	N/A
2994	39.98	20.13	20.15	0.9991
2994	19.60	9.94	9.90	1.0032
2994	9.50	4.83	4.80	1.0073
zero	0.00	0.00	0.26	As Found Zero
2994	39.98	20.13	20.67	As Found Span
Average Correction Factor				1.0032

Calculated value of As Found Response: 20.527 ppm Percent Change of As Found: -2.0%

	before calibration		after calibration	
Auto zero	0.12	ppm	0.02	ppm
Auto span	24.08	ppm	23.59	ppm

Notes: A zero and span adjustment performed.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter THC
 Air Monitoring Network Palliser Airshed

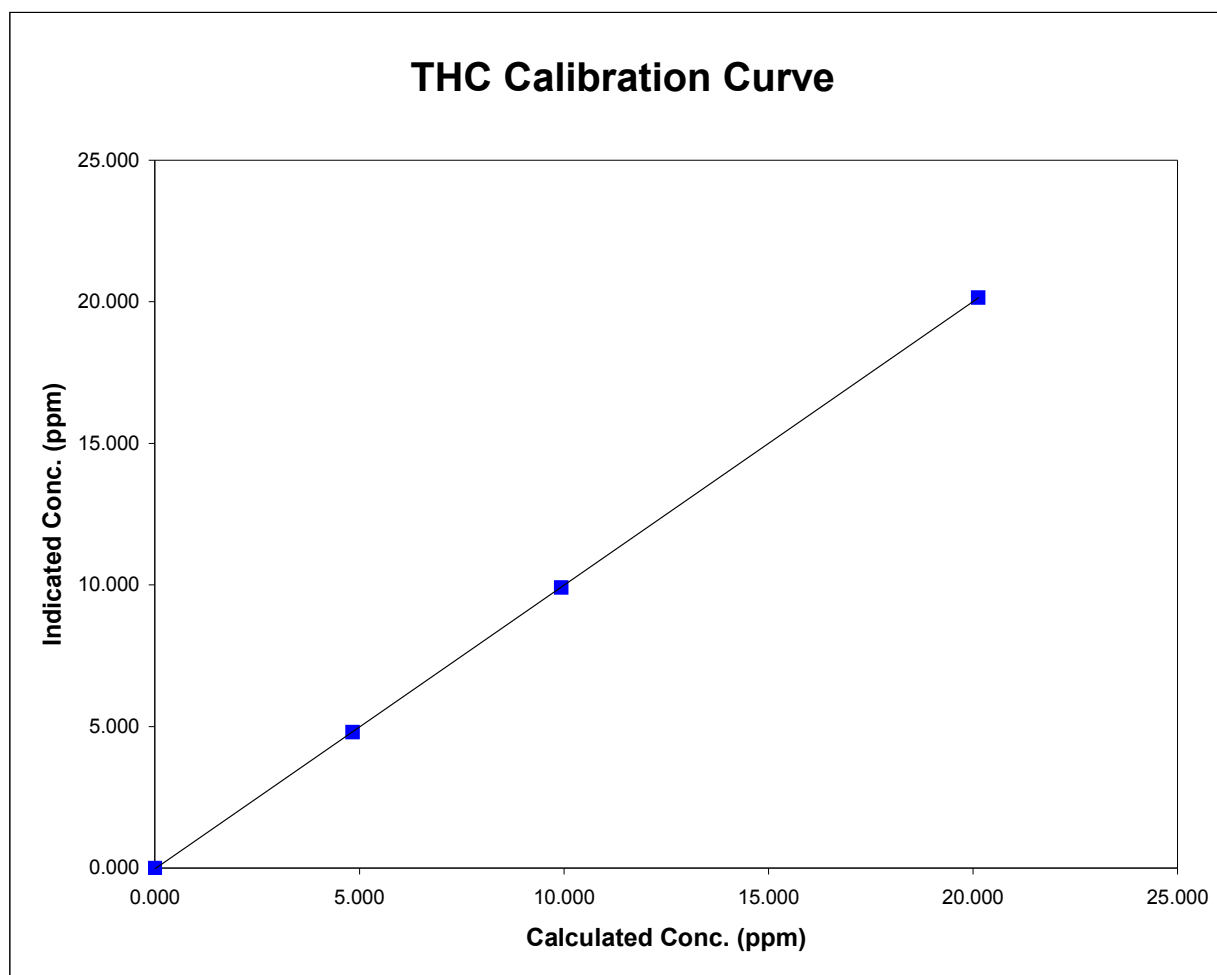


Station Information

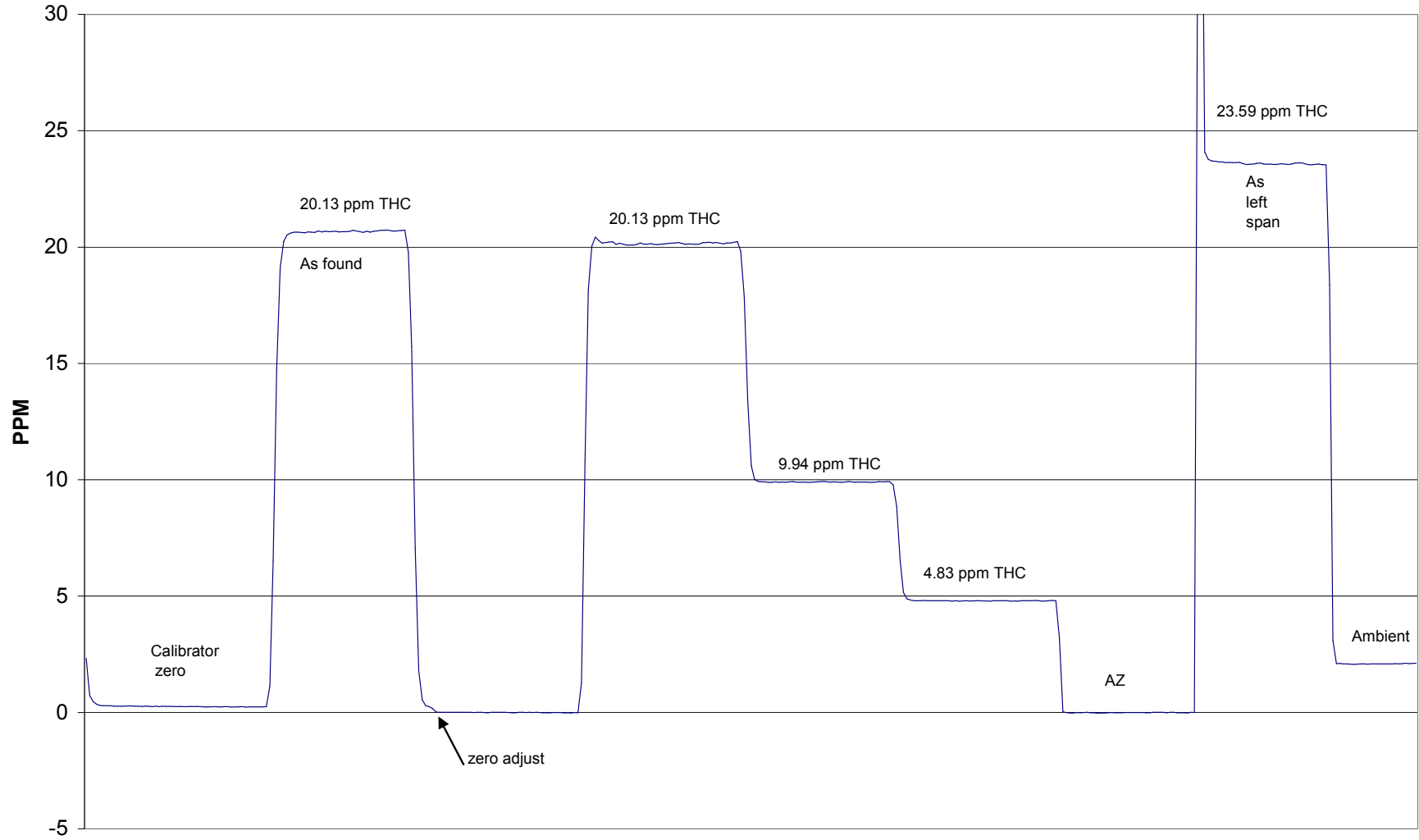
Calibration Date	November 14, 2005	Previous Calibration	October 6, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	9:15	End Time (MST)	12:30
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.001	N/A		
20.132	20.149	0.9991	Correlation Coefficient	0.999993
9.936	9.904	1.0032		
4.832	4.797	1.0073	Slope	0.998635
			Intercept	0.024513



THC Calibration



November 14, 2005

Calibration Report



Parameter CO
 Air Monitoring Network Palliser

Station Information

Calibration Date	November 14, 2005	Previous Calibration	October 5, 2005
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	11:30	End Time (MST)	15:00
Barometric Pressure	0.926 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3016
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
		Cal Gas Cylinder #	BLM002248
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Analyzer Range (low)	0	Calculated slope	0
Analyzer Range (high)	50	Calculated intercept	50
Calculated slope	0.997785	Calculated slope	0.998806
Calculated intercept	0.137927	Calculated intercept	0.095194
Analyzer make	TEI Model 48CLT	Analyzer serial #	436609887

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.052		1.057	
CO bkg setting	6.458		6.927	
Lamp ratio	1.1553		1.1540	
Lamp intensity	199490	Hz	199700	Hz
Sample Flow	0.997	LPM	1.012	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)
4990	0.00	0.00	-0.02	N/A
4990	49.83	29.64	29.62	1.0009
4990	19.53	11.69	11.54	1.0128
4990	9.50	5.70	5.57	1.0229
4990	0.00	0.00	0.55	0.0000
4990	49.83	29.64	30.81	0.9620
Average Correction Factor				1.0122

Calculated value of As Found Response: 30.329 ppm Percent Change of As Found: -2.3%

	before calibration		after calibration	
Auto zero	0.23	ppm	0.12	ppm
Auto span	19.73	ppm	19.68	ppm

Notes: Performed zero and span adjustments.

Calibration Performed By: Kelly Baragar

Calibration Summary

Parameter CO
 Air Monitoring Network Palliser

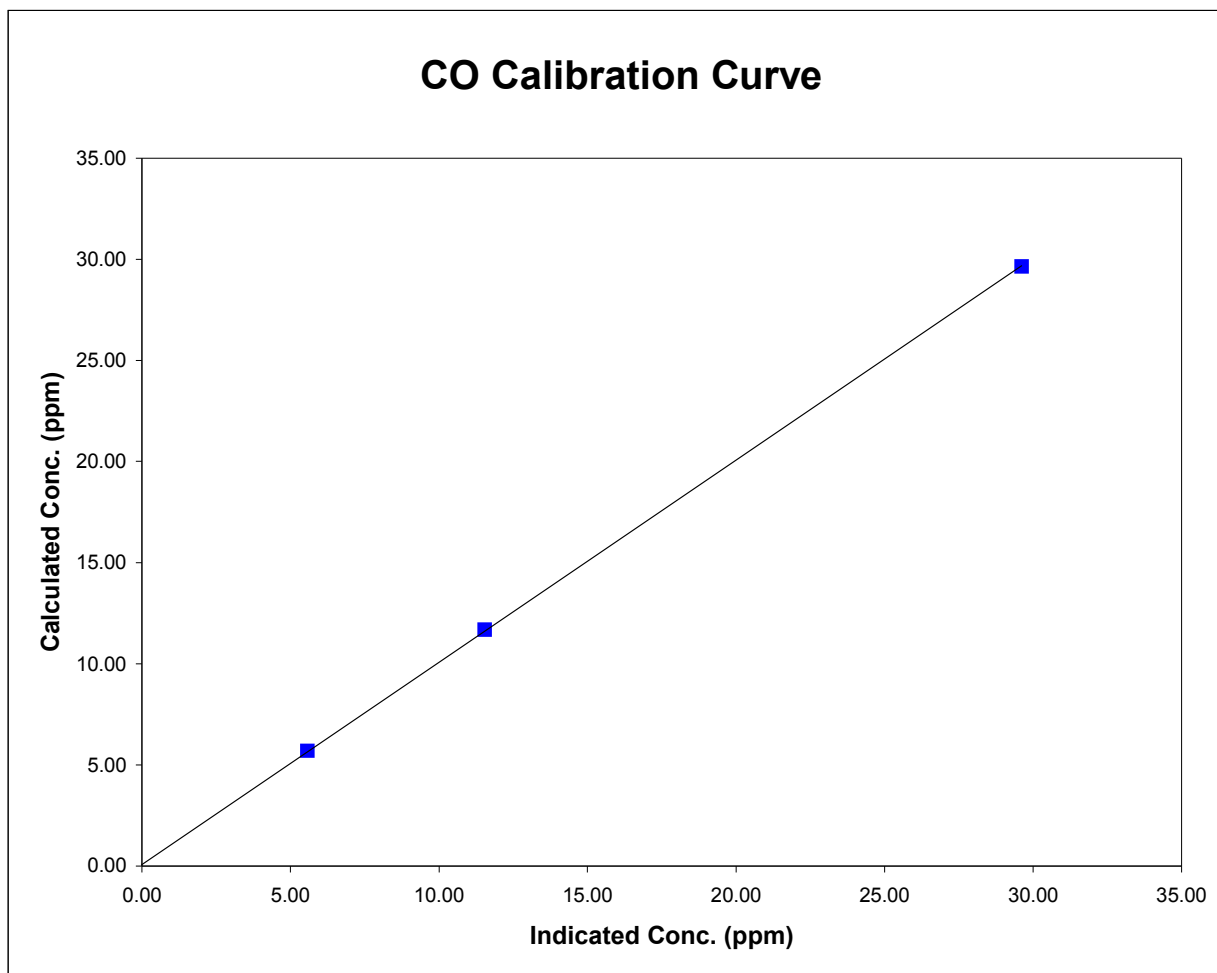


Station Information

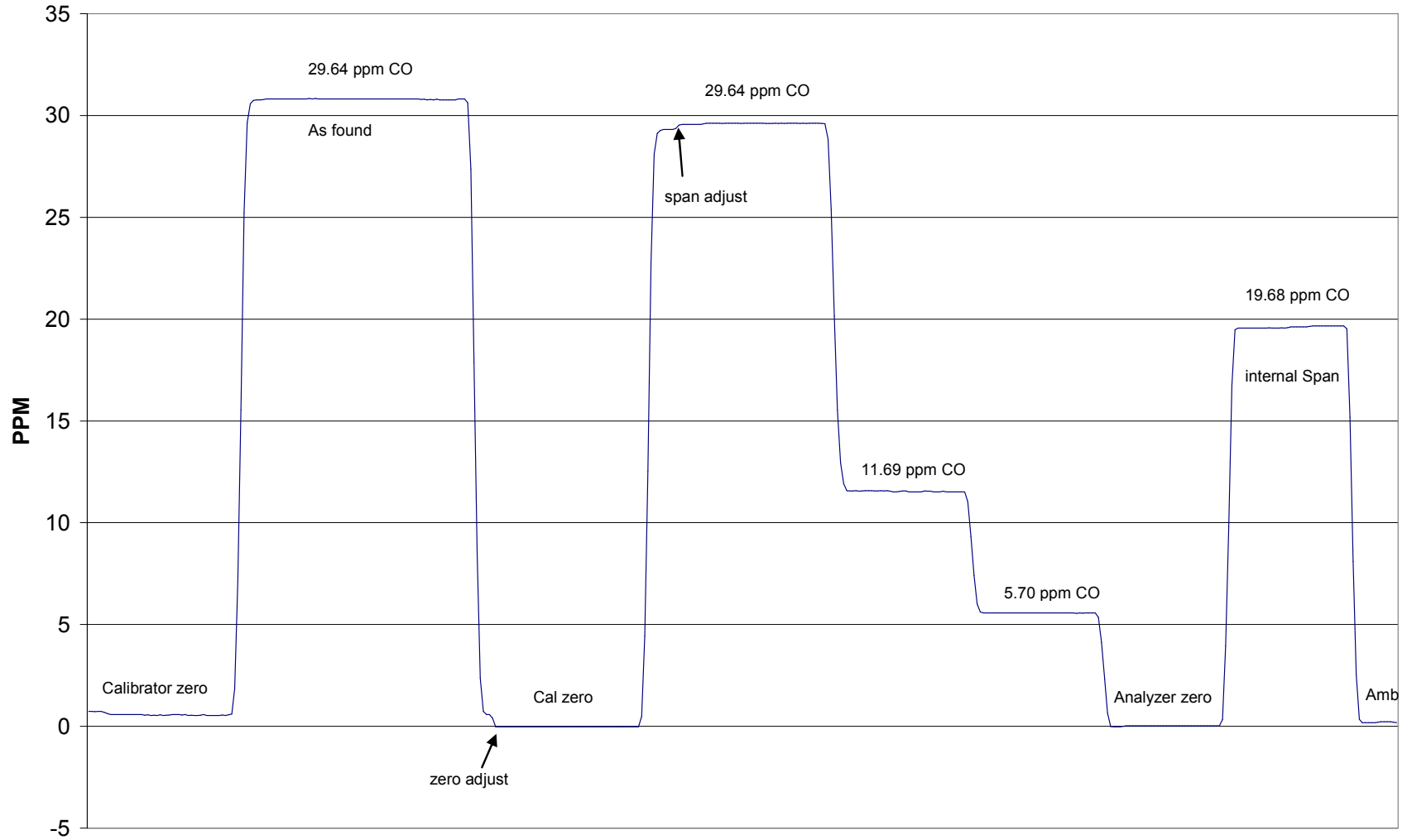
Calibration Date	November 14, 2005	Previous Calibration	October 5, 2005
Station Number	1	Station Location	Crescent Heights
Start Time (MST)	11:30	End Time (MST)	15:00
Analyzer make/model	TEI Model 48CLT	Analyzer serial #	436609887

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.00	-0.02	N/A		
29.64	29.62	1.0009	Correlation Coefficient	0.999975
11.69	11.54	1.0128		
5.70	5.57	1.0229	Slope	0.998806
			Intercept	0.095194



CO Calibration



November 14, 2005

Calibration Report



Parameter PM2.5
 Air Monitoring Network Palliser Airshed

Station Information

Calibration Date	November 14, 2005	Previous Calibration	October 6, 2005
Station Number	1	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:20	End Time (MST)	13:50
Barometric Pressure	0.934 ATM	Station Temperature	19.0 Deg C
Flow Calibrator	BIOS Drycal DCL-MH	Serial Number	101780
DACS make	AP 1000	DACS serial No.	45269
DACS voltage range	0 - 1 V	DACS channel #	15
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	-50.000000	DACS intercept	-50.000000

Analyzer Information

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

	before		after	
Main Flow Set Point	3.000	SLPM	3.000	SLPM
Aux Flow Set Point	16.67	SLPM	16.67	SLPM
Filter Load	33	%	33	%
Ko Factor	12758		12758	
Temperature	-3.7	Deg C	-4.0	Deg C
Pressure	0.933	ATM	0.933	ATM

Calibration Data

Parameter	Set Point	TEOM Reading (as found)	Tolerance	TEOM Reading (after adjustments)
zero flow - main	0.0	0.01	0.00	0.00
zero flow - auxiliary	0.0	0.01	0.01	0.01
flow recovery - main	45 - 60 Seconds	40.0	45 - 60 Seconds	40.0
flow recovery - aux	46 - 60 Seconds	40.0	46 - 60 Seconds	40.0
Temperature	measured	-3.7	+/- 1.0 Deg C	-4.3
Pressure	measured	0.933	+/- 1.5% ΔATM	0.933
Total Flow	16.67 SLPM	17.90		16.70
Main Flow	13.67 SLPM	3.265	+/- 1.0 SLPM	3.000
Auxiliary Flow	3.0 SLPM	14.70	+/- 0.2 SLPM	13.70
Leak Check - main	0.0	0.01	<0.15 SLPM	0.01
Leak Check - aux	0.0	0.03	<0.15 SLPM	0.03
Ko Factor (w/o filter)	measured	NA	filter weight (g)	0.11352
Ko Factor (w/ filter)	measured	NA	% Ko difference	N/A

Notes: Flows were high but all sensor readings within factory specs. Adjusted MFC's and temperature sensor

Calibration Performed By: Kelly Baragar