



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

January 2006

Prepared By:



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### TABLE OF CONTENTS

Airshed Zone Association – January PAS Ambient Air Summary Report .....	4
PAS - Crescent Heights AQI Monthly Summary .....	6
PAS - Crescent Heights Nitrogen Dioxide Monthly Summary .....	7
PAS - Crescent Heights Nitric Oxide Monthly Summary .....	12
PAS - Crescent Heights Oxides of Nitrogen Monthly Summary .....	14
PAS - Crescent Heights Ozone Monthly Summary .....	18
PAS - Crescent Heights Ozone Monthly Summary .....	23
PAS - Crescent Heights Carbon Monoxide Monthly Summary .....	24
PAS - Crescent Heights Carbon Monoxide Monthly Summary .....	29
PAS - Crescent Heights Total Hydrocarbons Monthly Summary .....	30
PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Monthly Summary .....	35
PAS - Crescent Heights Relative Humidity Monthly Summary .....	40
PAS - Crescent Heights Temperature Monthly Summary .....	42
PAS - Crescent Heights Solar Radiation Monthly Summary .....	44
PAS - Crescent Heights Scalar Wind Speed Monthly Summary .....	46
PAS - Crescent Heights Vector Wind Speed Monthly Summary .....	47
PAS - Crescent Heights Wind Direction Monthly Summary .....	48
PAS - Crescent Heights Standard Deviation of Wind Direction Monthly Summary .....	49
Passive Monitoring – January 2006 .....	51
January 2006 - Calibration Reports .....	55

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### Table of Figures

Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend .....	8
Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend ...	10
Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend .....	15
Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend	17
Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend .....	19
Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend .....	21
Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend .....	25
Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend .	27
Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend .....	31
Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Trend .....	33
Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend .....	36
Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend .....	38
Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend .....	41
Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend .....	43
Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend .....	45



February 24, 2006

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

**Attention: Director of Monitoring and Evaluation**

**RE: Palliser Airshed Society (PAS) Ambient Air Monitoring Report – January 2006**

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Enclosed is the PAS Ambient Monitoring Report for the month of **January 2006**.

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 99% uptime for the month of January. There were no significant events leading to emergency response for the month of January.

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

- Monthly average concentrations of NO<sub>2</sub> was 9.8 ppb
- Monthly average concentrations for O<sub>3</sub> was 17.5 ppb
- Monthly average concentrations for CO was 0.23 ppm
- Monthly average concentrations for THC was 2.1 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 1.8 µg/m<sup>3</sup>

**Passive Monitoring – Six Stations throughout the PAS zone:**

The following are the ranges for January 2006 recorded by the six passive stations located throughout the PAS zone.

- Monthly average concentrations for SO<sub>2</sub> passives ranged from 0.2 ppb to 0.4 ppb
- Monthly average concentrations for NO<sub>2</sub> passives ranged from 3.2 ppb to 9.1 ppb
- Monthly average concentrations for O<sub>3</sub> passives ranged from 19.0 ppb to 26.7 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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AQM Environmental Specialist



# Continuous Monitoring

## Ambient Air Monitoring Network

### Crescent Heights Station

#### General Station Issues

There were no general station issues for the month of January

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



## January 2005 Monthly Overall Summary Report Ambient Air Quality Data

Jan-2006 Palliser Airshed Society						Maximum Recorded Values						Operational Time (%)	
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr			24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	WSPD (km/hr)	WDIR (Sector)	Conc		Day
SO <sub>2</sub> (ppb)	172	57	Crescent Heights										
NO (ppb)			Crescent Heights	5.1	-	-	82.0	Jan-23 19:00	1.5	WSW	17.0	Jan-20	100.0%
NO <sub>2</sub> (ppb)	212	106	Crescent Heights	9.8	0	0	40.1	Jan-23 19:00	1.5	WSW	18.8	Jan-20	100.0%
NO <sub>x</sub> (ppb)			Crescent Heights	14.8	-	-	122.2	Jan-23 19:00	1.5	WSW	35.7	Jan-20	100.0%
O <sub>3</sub> (ppb)	82		Crescent Heights	17.5	0	-	35.1	Jan-26 12:00	27.4	WSW	27.8	Jan-09	100.0%
O <sub>3</sub> (ppb) - 8-hr	65		Crescent Heights		0						32.2	Jan-26	
CO (ppm)	13		Crescent Heights	0.23	0	-	1.1	Jan-23 19:00	1.5	WSW	0.3	Jan-10	100.0%
CO (ppm) - 8-hr	5		Crescent Heights		0						0.5	Jan-23	
THC (ppm)			Crescent Heights	2.10	-	-	3.1	Jan-20 12:00	1.9	E	2.6	Jan-20	99.9%
TRS (ppb)			Crescent Heights										
H <sub>2</sub> S (ppb)	10	3	Crescent Heights										
PM <sub>2.5</sub> (µg/m <sup>3</sup> )		30 <sup>a</sup>	Crescent Heights	1.8		0	17.3	Jan-31 03:00	6.9	WNW	6.1	Jan-19	99.2%
RH (%)			Crescent Heights	70.0	-	-	-	-	-	-	-	-	100.0%
SR (W/m <sup>2</sup> )			Crescent Heights	47.2	-	-	-	-	-	-	-	-	100.0%
Temp (°C)			Crescent Heights	0.1	-	-	-	-	-	-	-	-	100.0%
WSPD v (km/hr)			Crescent Heights	9.6	-	-	-	Jan-05 11:00	35.2	SW	22.7	9-Jan	100.0%
WSPD s (km/hr)			Crescent Heights	9.8	-	-	-	Jan-05 11:00	35.3	SW	23.1	9-Jan	100.0%
WDIR (Deg)			Crescent Heights	N	-	-	-	-	-	-	-	-	100.0%

Note: <sup>a</sup> 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: January 1, 2006 to February 1, 2006

Alberta's Air Quality Index

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

Summary

Number of 1-hr Good Readings:	692
Number of 1-hr Fair Readings:	0
Number of 1-hr Poor Readings:	0
Number of 1-hr Very Poor Readings:	0

Status Flag Characters

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

Day	Mountain Standard Time																								
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	
1-Jan-06	3	2	2	2	1	1	2	3	2	2	4	6	9	10	10	10	N	8	11	11	11	12	12	12	
2-Jan-06	12	10	8	9	12	12	12	12	12	13	12	12	12	11	11	N	9	7	5	5	5	6	8	5	5
3-Jan-06	7	6	8	8	4	6	4	4	3	3	5	6	7	10	N	9	4	6	6	4	6	8	9	10	
4-Jan-06	10	10	9	10	12	10	8	7	5	5	5	7	9	N	9	8	5	5	7	7	5	4	4	5	
5-Jan-06	5	9	9	8	7	8	5	5	N	N	N	14	14	13	12	13	12	13	13	12	10	12	13	12	
6-Jan-06	12	10	N	12	12	12	9	7	4	6	7	8	6	9	9	7	6	6	11	11	11	12	11	12	
7-Jan-06	11	N	12	10	10	10	9	7	6	5	6	7	6	7	9	7	6	5	9	8	7	7	6	5	
8-Jan-06	N	11	11	11	12	11	10	9	10	10	10	9	9	8	10	9	8	5	4	7	9	9	11	N	
9-Jan-06	13	14	14	14	15	14	15	14	14	14	15	N	N	N	N	N	N	N	N	N	14	13	11	10	
10-Jan-06	9	11	N	11	11	8	9	6	7	5	5	N	N	N	N	N	13	9	10	11	10	11	9	6	
11-Jan-06	5	3	N	4	3	2	2	3	3	2	2	4	7	8	7	7	4	4	4	4	4	5	6	6	
12-Jan-06	7	N	6	7	7	9	9	9	7	8	9	9	10	11	10	10	7	5	5	6	6	6	6	6	
13-Jan-06	N	6	6	7	9	10	7	7	8	12	14	14	14	13	11	8	8	8	7	8	9	9	9	N	
14-Jan-06	9	9	9	9	8	8	7	7	6	7	7	8	9	9	9	8	4	4	3	3	2	3	N	5	
15-Jan-06	5	6	6	6	7	8	8	8	8	7	6	6	6	7	6	8	8	6	7	7	7	N	8	8	
16-Jan-06	7	8	6	7	8	6	6	7	4	7	11	12	12	14	14	13	10	6	7	11	N	11	11	12	
17-Jan-06	10	6	7	6	13	14	N	14	13	13	13	14	15	13	16	13	13	12	12	N	10	12	12	12	
18-Jan-06	11	11	11	9	7	8	5	5	6	6	8	11	11	11	11	8	5	5	N	6	6	7	5	9	
19-Jan-06	10	8	9	9	9	8	7	7	8	9	8	7	9	8	9	8	7	N	7	6	6	7	5	5	
20-Jan-06	8	5	5	11	11	6	6	6	5	7	6	5	5	7	9	4	N	6	5	4	5	4	4	8	
21-Jan-06	10	10	11	11	11	9	10	9	9	7	8	10	10	11	12	N	10	7	8	7	7	12	8	6	
22-Jan-06	5	5	5	5	8	8	10	12	12	13	14	14	16	15	N	12	11	13	13	13	14	12	14	14	
23-Jan-06	13	15	16	16	16	16	16	16	16	16	16	16	16	N	10	12	12	9	8	10	7	16	17	11	
24-Jan-06	8	6	9	7	7	9	6	7	7	5	5	10	N	10	11	11	10	7	8	8	7	5	7	10	
25-Jan-06	11	10	10	11	13	13	10	10	8	11	13	N	16	15	16	15	9	6	7	10	10	12	11	14	
26-Jan-06	16	14	13	13	13	11	11	11	10	12	N	16	18	15	17	17	16	15	14	10	12	12	12	13	
27-Jan-06	12	12	11	11	12	10	11	10	9	N	11	12	14	14	14	12	8	9	11	12	13	12	12	12	
28-Jan-06	11	12	11	10	11	12	11	11	N	9	10	15	15	14	14	14	15	16	15	14	13	14	13	14	
29-Jan-06	13	12	12	15	10	8	7	N	5	5	5	7	10	13	16	17	15	10	7	10	11	12	12	13	
30-Jan-06	15	14	N	16	16	16	N	15	15	15	15	15	15	14	14	14	15	11	12	12	14	9	8	8	
31-Jan-06	6	7	13	14	10	N	8	11	11	8	6	13	13	15	13	13	8	8	10	N	12	13	N	15	



### PAS - Cresent Heights Nitrogen Dioxide Monthly Summary

Station: Cresent Heights  
Station Owner: PAS

#### HOURLY AVERAGE TABLE

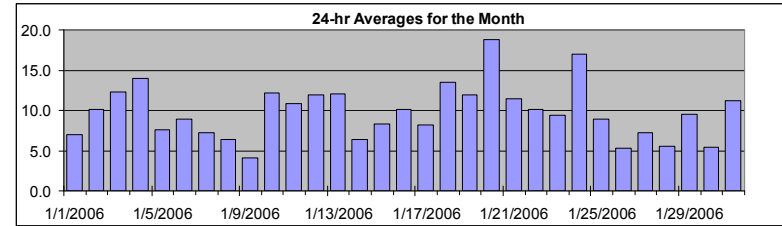
#### Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: January 1, 2006 to February 1, 2006

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

##### Summary

Number of 1-hr Exceedances:	0
Number of 24-hr Exceedances:	0
Maximum 1-hr Average:	40.1 ppb 23-Jan 19:00 20:00
Maximum 24-hr Average:	18.8 ppb 20-Jan



AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	29.2	23.7	13.0	7.6	4.9	2.9	1.7	9.8 ppb	7.6 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	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-Jan-06	11	10	10	9	6	6	7	9	10	10	12	7	3	3	3	4	A	10	6	5	6	4	4	5		7.0	12.2
2-Jan-06	4	6	10	12	6	6	5	5	4	4	4	4	4	6	7	A	12	13	17	22	22	24	15	21		10.1	23.6
3-Jan-06	8	12	7	8	15	11	13	16	15	13	10	12	10	6	A	12	18	26	26	17	13	7	6	5		12.3	26.0
4-Jan-06	4	3	6	6	3	6	9	12	20	20	22	11	6	A	12	15	19	22	31	28	19	14	14	20		14.0	30.9
5-Jan-06	21	6	5	10	12	8	17	21	C	C	6	3	3	4	4	5	7	4	3	3	11	4	4	5		7.6	21.2
6-Jan-06	7	9	A	8	4	6	11	13	16	16	12	7	11	9	10	12	14	16	6	5	5	4	3	3		8.9	16.1
7-Jan-06	3	A	6	6	3	3	7	9	11	8	7	7	9	9	7	10	11	13	6	6	8	6	6	5		7.2	13.1
8-Jan-06	A	4	4	3	2	4	7	9	7	4	4	5	5	4	4	6	9	19	17	9	5	7	3	A		6.4	19.0
9-Jan-06	4	2	1	1	1	3	3	4	6	4	3	C	C	C	C	C	A	7	3	4	3	4	9	9		4.1	9.2
10-Jan-06	9	4	A	6	5	9	26	26	27	20	12	23	25	23	6	4	3	8	6	4	5	5	9	13		12.2	27.4
11-Jan-06	14	11	A	15	11	9	8	11	13	9	9	7	6	5	6	8	12	15	16	17	16	12	10	9		10.8	17.0
12-Jan-06	6	A	10	7	8	7	8	9	11	9	6	8	7	5	6	7	9	14	19	24	25	20	23	25		11.9	24.9
13-Jan-06	A	24	19	16	12	12	20	28	21	11	8	5	6	6	8	13	14	12	10	8	5	4	3	A		12.0	27.6
14-Jan-06	6	5	3	3	2	2	4	5	6	6	5	5	4	5	5	6	16	18	13	11	6	5	A	7		6.3	17.7
15-Jan-06	8	5	4	4	4	3	3	3	3	5	5	4	5	6	8	11	15	15	15	17	16	A	17	18		8.3	18.3
16-Jan-06	14	9	12	11	10	15	13	12	17	13	7	5	6	5	5	7	10	17	16	7	A	9	7	5		10.1	17.2
17-Jan-06	8	17	17	17	6	6	9	6	5	4	4	6	5	11	3	8	8	10	8	A	11	7	6	5		8.2	17.2
18-Jan-06	5	5	7	11	14	7	15	16	15	11	10	8	7	6	8	13	21	23	A	27	27	28	17	10		13.5	27.7
19-Jan-06	9	10	9	5	5	5	8	9	8	5	9	12	5	9	8	10	13	A	29	22	20	27	15	21		11.9	29.0
20-Jan-06	21	19	23	25	27	25	26	24	21	20	19	15	14	13	13	13	A	23	21	15	14	17	15	8		18.8	27.0
21-Jan-06	6	5	5	3	4	8	6	8	7	6	5	5	7	4	3	A	8	15	34	30	25	23	20	25		11.4	34.2
22-Jan-06	23	22	22	22	13	14	8	5	5	3	3	4	6	A	15	15	8	7	7	4	10	6	7		10.2	23.0	
23-Jan-06	10	4	3	2	1	2	2	2	2	2	3	3	A	15	9	10	16	33	40	31	3	3	17		9.4	40.1	
24-Jan-06	32	25	14	19	20	14	27	29	29	20	21	8	A	10	8	8	13	18	14	12	11	20	13	8		17.0	31.5
25-Jan-06	5	6	9	7	3	4	9	11	16	8	7	A	6	8	5	7	17	23	18	11	8	5	8	5		8.9	23.2
26-Jan-06	3	4	5	4	3	6	7	5	10	6	A	5	4	8	3	3	4	5	4	10	8	7	6	4		5.4	9.6
27-Jan-06	4	5	4	3	3	7	6	10	10	A	11	7	5	5	6	11	18	16	10	8	4	5	4	4		7.2	17.6
28-Jan-06	5	4	5	4	4	4	7	8	A	13	16	5	7	6	4	4	5	3	4	4	4	4	5	3		5.5	15.5
29-Jan-06	5	3	5	2	11	14	13	A	16	11	10	8	8	7	4	5	8	18	29	11	9	8	6	6		9.5	29.2
30-Jan-06	3	5	5	2	1	1	A	6	5	6	5	4	3	5	5	5	4	12	10	7	5	10	10	4		5.5	11.7
31-Jan-06	6	17	18	18	17	A	20	19	17	15	11	6	5	4	8	9	18	17	11	6	7	4	4	2		11.2	19.5
Hourly Avg	9.1	9.0	8.9	8.7	7.6	7.6	10.8	11.5	12.2	9.9	8.8	7.3	6.7	7.0	6.6	8.7	11.8	14.5	14.8	13.2	11.7	10.2	9.0	9.7			
Hourly Max	31.5	25.3	22.9	25.3	27.0	25.4	26.7	28.6	29.1	20.1	22.0	22.6	24.7	23.2	15.0	15.2	20.8	25.9	34.2	40.1	30.6	27.7	23.1	24.9			

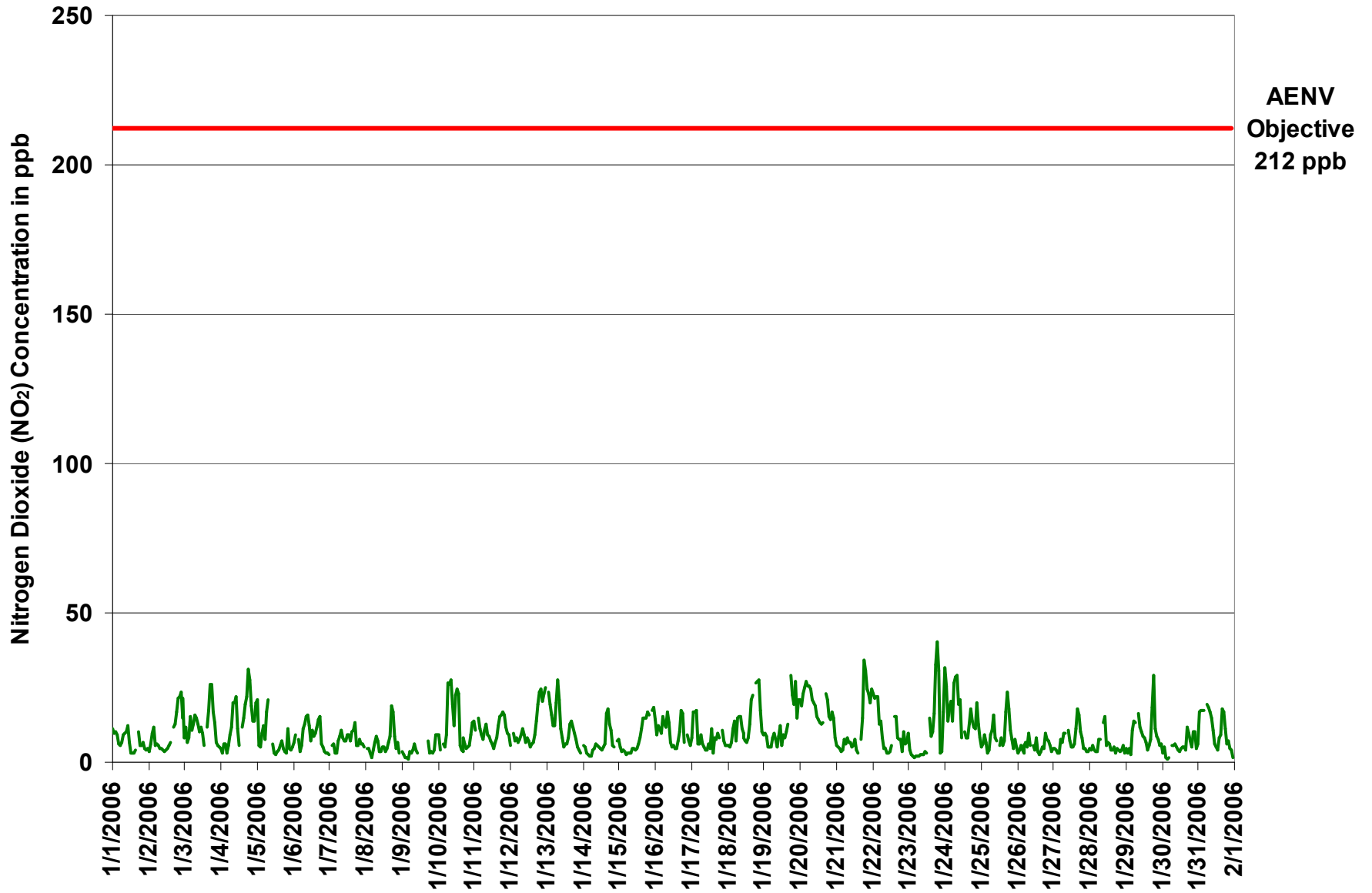


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend





Station: Cresent Heights  
Station Owner: PAS

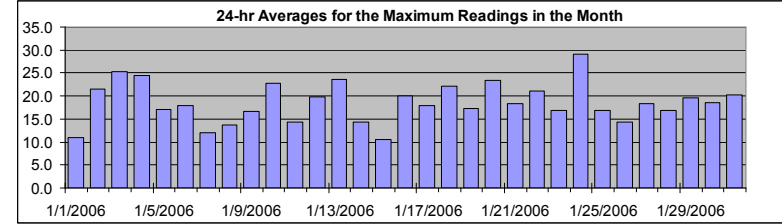
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

### Nitrogen Dioxide (NO<sub>2</sub>)

Monitoring Dates: January 1, 2006 to February 1, 2006

#### Summary

Maximum 1-hr Value:	65.1	ppb	29-Jan	18:00 19:00
Maximum 24-hr Value:	29.0	ppb	24-Jan	



AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	55.0	40.6	25.7	16.6	9.1	4.7	3.1	18.6 ppb	16.6 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	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-Jan-06	15	11	11	10	8	8	11	10	11	12	19	14	5	5	4	8	A	15	10	27	10	6	6	11	10.9	27.5	
2-Jan-06	8	9	31	30	9	15	37	19	6	5	9	7	6	18	39	A	18	20	20	40	35	43	29	41	21.6	43.4	
3-Jan-06	20	19	12	11	40	22	25	25	29	23	13	17	33	31	A	19	28	40	32	63	25	11	7	39	25.2	62.7	
4-Jan-06	22	4	17	18	6	11	34	28	23	26	30	58	9	A	18	26	28	29	46	35	28	17	17	33	24.4	57.5	
5-Jan-06	30	9	23	39	23	13	25	41	C	C	10	4	4	23	22	28	18	6	5	4	22	8	6	13	17.1	41.2	
6-Jan-06	14	29	A	13	6	11	36	28	31	20	21	11	15	39	12	19	26	21	14	7	7	5	5	22	18.0	39.4	
7-Jan-06	5	A	24	25	4	4	19	19	14	13	10	9	13	13	9	14	15	16	7	8	10	8	8	6	11.9	25.4	
8-Jan-06	A	8	7	6	3	23	10	15	12	5	5	7	32	5	6	11	30	28	24	17	6	33	11	A	13.8	33.4	
9-Jan-06	6	5	10	2	2	31	14	15	46	28	16	C	C	C	C	C	A	38	8	8	6	13	36	16	16.6	45.8	
10-Jan-06	23	11	A	8	8	18	61	38	38	32	21	33	32	28	9	7	8	16	27	6	25	25	19	28	22.7	61.1	
11-Jan-06	20	12	A	18	13	12	9	18	14	11	10	9	10	6	14	14	16	20	19	20	21	17	12	15	14.3	20.7	
12-Jan-06	8	A	14	10	10	10	12	19	18	29	8	10	11	6	13	9	28	30	23	29	50	21	32	53	19.8	53.4	
13-Jan-06	A	32	26	22	19	19	34	42	46	56	22	8	46	7	10	17	26	19	15	12	7	26	7	A	23.6	56.3	
14-Jan-06	26	18	13	16	4	3	17	20	14	13	9	9	6	24	25	11	20	24	15	13	9	11	A	9	14.4	26.4	
15-Jan-06	12	9	6	6	5	3	5	4	4	6	6	5	6	7	11	14	17	16	17	19	20	A	22	22	10.5	22.3	
16-Jan-06	17	11	22	17	15	25	32	38	20	21	11	6	37	13	9	10	14	27	44	32	A	13	19	11	20.1	43.6	
17-Jan-06	21	41	34	23	22	13	19	8	10	5	6	11	11	25	8	29	17	17	27	A	13	22	23	8	18.0	41.0	
18-Jan-06	24	27	35	21	29	9	19	27	18	15	13	24	9	9	10	20	25	29	A	33	42	31	29	13	22.2	41.5	
19-Jan-06	13	14	15	7	9	10	12	15	11	7	12	15	10	10	14	16	25	A	33	33	28	44	19	24	17.2	44.3	
20-Jan-06	33	36	27	28	35	29	29	26	24	22	21	19	17	16	28	19	A	25	23	20	18	19	17	11	23.5	36.2	
21-Jan-06	7	8	6	5	8	11	8	31	9	23	7	7	18	7	4	A	12	45	39	38	28	42	26	34	18.4	45.3	
22-Jan-06	28	23	26	26	22	18	30	12	13	23	4	5	22	25	A	20	38	12	12	26	5	37	19	39	21.1	38.9	
23-Jan-06	28	7	10	9	2	7	6	6	7	3	4	9	10	A	22	12	19	37	45	48	49	5	4	43	16.9	49.0	
24-Jan-06	48	41	27	40	28	22	35	45	41	30	24	19	A	49	11	23	17	38	22	20	31	26	19	12	29.0	49.5	
25-Jan-06	10	10	18	12	6	7	24	24	28	14	14	A	9	10	22	11	27	32	28	29	12	11	23	8	16.9	32.4	
26-Jan-06	5	6	10	7	5	39	20	8	12	8	A	7	6	31	10	4	5	15	7	13	56	29	23	5	14.4	56.3	
27-Jan-06	16	36	37	5	11	32	22	22	31	A	29	21	19	11	7	17	22	24	14	21	6	7	8	5	18.4	36.8	
28-Jan-06	31	6	24	5	4	6	28	20	A	18	28	20	39	16	6	5	16	4	45	32	6	8	12	8	16.9	45.2	
29-Jan-06	7	21	25	5	28	19	19	A	18	15	12	11	11	20	6	8	21	24	65	22	12	42	8	30	19.6	65.1	
30-Jan-06	6	27	35	3	2	6	A	25	7	51	55	16	6	6	43	15	11	15	28	22	9	17	18	6	18.6	55.1	
31-Jan-06	11	18	18	18	20	A	24	29	26	37	15	9	7	5	56	14	36	28	22	9	12	22	24	4	20.2	56.4	
Hourly Avg	17.7	17.5	20.0	15.0	13.1	15.2	22.5	22.5	20.1	19.8	15.5	13.8	15.7	16.7	16.1	14.9	20.8	23.7	24.5	23.5	20.3	20.7	16.9	19.7			
Hourly Max	48.0	41.0	36.8	39.9	39.5	39.3	61.1	45.3	46.2	56.3	55.1	57.5	45.7	49.5	56.4	29.0	38.4	45.3	65.1	62.7	56.3	44.3	35.9	53.4			

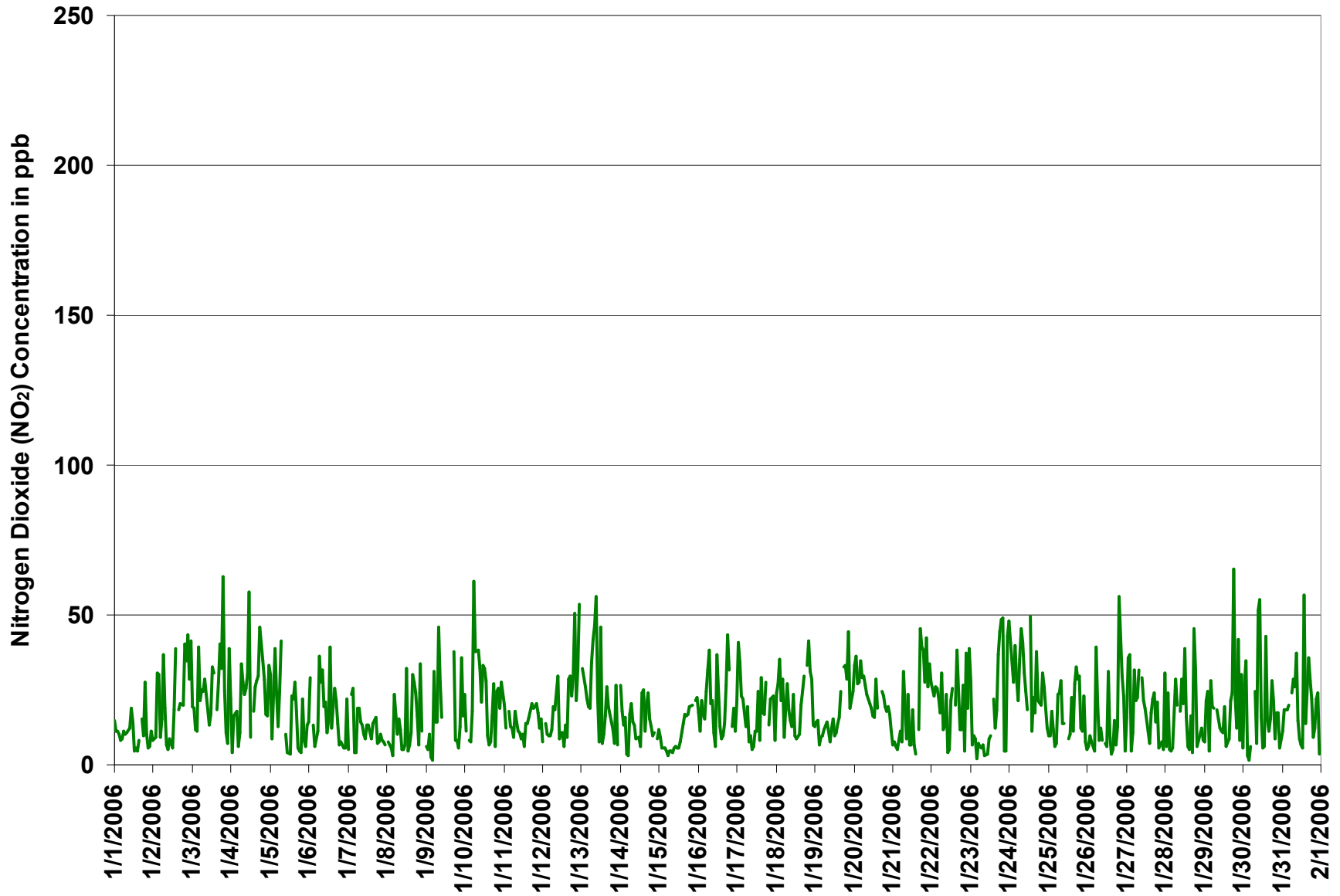
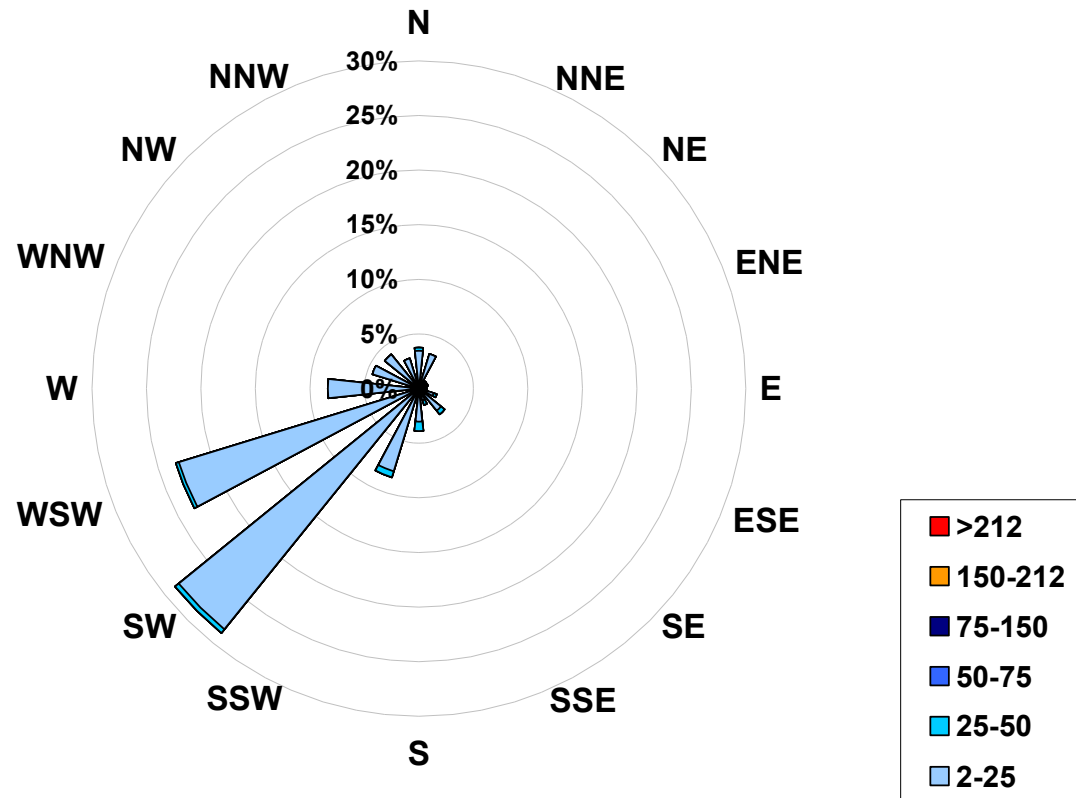


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Crescent Heights Site for January 2006**



**Calms: 0%**

Frequency Distribution of NO <sub>2</sub> in ppb			
Range			Frequency (hrs)
2.0	<	25	678
25	to	50	22
50	to	75	3
75	to	150	2
150	to	212	0
	>	212	0
Total Non-Zero Values			705



### PAS - Cresent Heights Nitric Oxide Monthly Summary

Station: Cresent Heights  
 Station Owner: PAS

#### HOURLY AVERAGE TABLE

#### Nitric Oxide (NO)

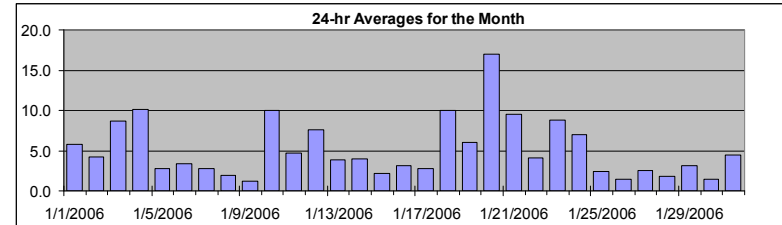
Monitoring Dates: January 1, 2006 to February 1, 2006

Guideline Limit: 

1-hr	na	ppb	24-hr	na	ppb
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 Summary

Maximum 1-hr Average:	82.0	ppb	23-Jan	19:00 20:00
Maximum 24-hr Average:	17.0	ppb	20-Jan	



AIC Time:	32 hrs	Operational Time:	705 hrs							
Calibration Time:	7 hrs	AMD Operational Uptime:	100.0%							
Percentile	99	95	75	50	25	1	5	1	Average	Median
	47.6	18.7	5.2	2.6	1.1	0.4	0.2		5.1 ppb	2.6 ppb

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00			22:00 23:00
1-Jan-06	10	6	14	7	2	2	3	7	9	19	33	7	2	2	2	1	A	2	0	2	1	1	0	1	5.7	32.8
2-Jan-06	1	1	4	4	1	1	3	2	1	1	1	2	2	3	4	A	2	3	2	15	15	15	3	13	4.2	15.1
3-Jan-06	1	1	1	1	10	3	9	9	10	6	5	12	12	4	A	3	7	48	40	9	3	1	1	2	8.6	47.7
4-Jan-06	2	0	2	4	1	1	3	6	7	9	17	6	4	A	4	5	7	9	81	45	8	3	2	7	10.1	81.5
5-Jan-06	7	1	3	8	4	1	6	9	C	C	0	1	2	2	3	3	4	2	1	1	3	1	1	1	2.8	8.5
6-Jan-06	1	3	A	1	0	0	6	3	13	5	6	3	6	5	3	3	6	4	1	1	1	1	1	2	3.3	12.5
7-Jan-06	1	A	2	3	1	1	2	2	2	4	5	6	8	6	3	3	2	3	2	2	2	1	2	1	2.8	8.4
8-Jan-06	A	1	1	1	0	2	1	1	1	1	1	2	4	2	2	2	3	7	3	4	1	4	1	A	1.9	7.3
9-Jan-06	0	1	1	0	0	3	2	2	2	2	2	C	C	C	C	C	A	3	0	0	1	1	2	1	1.2	3.3
10-Jan-06	4	0	A	0	0	1	45	17	27	15	3	38	36	26	1	1	1	2	2	1	3	3	2	3	9.9	44.8
11-Jan-06	2	3	A	6	3	2	3	7	14	9	11	6	3	2	5	3	4	6	4	4	4	3	2	3	4.7	14.4
12-Jan-06	1	A	1	1	1	1	2	3	4	5	3	4	4	3	3	3	6	5	5	18	26	15	30	31	7.6	30.6
13-Jan-06	A	6	3	1	1	1	5	9	11	6	4	3	4	3	3	4	8	4	2	2	1	2	1	A	3.8	10.9
14-Jan-06	4	3	2	1	0	1	3	3	4	4	5	4	3	8	5	3	7	11	8	8	2	2	A	1	4.0	11.0
15-Jan-06	2	1	1	1	1	1	1	1	1	2	2	2	3	4	4	6	4	2	2	3	2	A	3	4	2.2	6.1
16-Jan-06	1	1	5	1	1	2	6	3	5	6	4	3	5	3	2	3	2	6	6	2	A	1	1	1	3.1	6.3
17-Jan-06	1	13	5	1	1	1	2	1	2	2	2	4	3	8	1	4	1	2	4	A	1	1	2	0	2.7	12.8
18-Jan-06	1	2	5	1	5	1	4	5	6	5	7	6	5	4	4	5	8	12	A	24	53	61	7	1	10.0	60.6
19-Jan-06	1	2	2	1	1	1	1	2	2	2	6	11	3	4	3	5	5	A	16	15	7	35	4	9	6.0	34.8
20-Jan-06	18	9	21	41	42	25	20	13	11	32	35	28	22	15	11	15	A	11	7	3	3	4	3	2	17.0	41.8
21-Jan-06	2	1	1	1	1	1	1	5	2	5	4	5	10	4	2	A	1	12	50	49	19	15	7	22	9.5	50.0
22-Jan-06	16	11	11	8	3	1	3	1	2	3	2	3	3	5	A	6	4	1	1	1	0	4	1	4	4.0	16.3
23-Jan-06	3	0	1	1	0	0	1	1	1	1	1	2	2	A	6	2	2	2	25	82	65	0	0	4	8.7	82.0
24-Jan-06	17	5	0	6	2	0	7	12	28	17	23	5	A	7	3	4	3	9	3	2	3	4	1	1	7.0	28.4
25-Jan-06	1	1	1	1	1	1	3	2	5	2	3	A	2	3	3	2	5	5	4	7	1	1	4	0	2.4	6.8
26-Jan-06	0	0	0	0	0	3	3	1	2	2	A	1	1	5	1	1	1	1	0	1	3	2	1	0	1.4	5.3
27-Jan-06	1	5	3	0	0	8	1	5	4	A	4	3	3	2	2	3	4	2	1	1	1	1	1	0	2.5	7.9
28-Jan-06	2	0	2	1	0	1	3	1	A	4	8	2	3	2	1	1	2	1	3	1	1	1	1	0	1.8	8.0
29-Jan-06	0	0	2	1	2	1	2	A	6	9	10	7	6	4	1	1	1	1	13	1	0	2	0	1	3.2	12.9
30-Jan-06	0	2	2	0	0	1	A	1	1	3	4	2	1	1	3	2	1	1	2	2	1	1	1	1	1.4	4.3
31-Jan-06	1	2	4	3	6	A	6	15	11	14	8	3	3	2	6	3	6	3	1	1	1	1	2	0	4.4	14.9
Hourly Avg	3.4	2.8	3.5	3.4	2.9	2.3	5.2	4.9	6.7	6.7	7.4	6.2	5.7	5.0	3.3	3.5	3.8	5.9	9.7	10.2	7.7	6.2	2.9	4.0		
Hourly Max	17.7	12.8	20.7	41.2	41.8	25.1	44.8	17.0	28.4	32.1	34.7	38.3	35.7	26.2	10.7	15.4	8.3	47.7	81.5	82.0	64.8	60.6	29.6	30.6		



Station: Cresent Heights  
 Station Owner: PAS

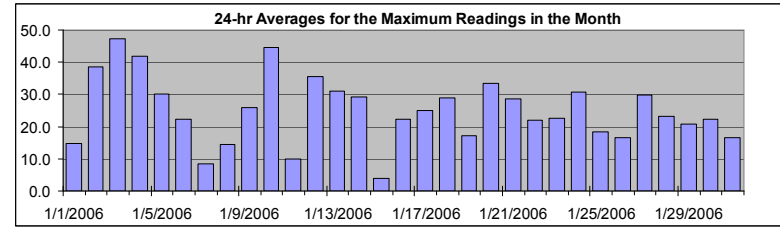
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitric Oxide (NO)**

Monitoring Dates: January 1, 2006 to February 1, 2006

**Summary**

Maximum 1-hr Value:	274.2	ppb	10-Jan	6:00 7:00
Maximum 24-hr Value:	47.3	ppb	3-Jan	



AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	168.6	95.6	32.9	9.1	3.0	1.4	0.9	25.0 ppb	9.1 ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jan-06	23	12	21	14	5	7	28	9	13	32	48	32	4	4	3	2	A	4	2	65	5	2	2	4	14.8	65.4
2-Jan-06	4	4	42	91	2	6	66	62	2	1	7	3	3	27	68	A	3	10	5	169	45	96	25	147	38.7	168.7
3-Jan-06	5	2	2	3	144	9	65	32	135	25	8	29	55	19	A	8	19	149	111	148	41	3	2	76	47.3	148.8
4-Jan-06	49	1	34	31	3	3	85	96	30	20	49	57	8	A	8	12	21	37	263	68	48	7	5	33	42.0	262.6
5-Jan-06	24	3	83	194	37	3	27	108	C	C	1	2	2	14	52	68	25	2	2	2	5	2	2	2	30.1	194.4
6-Jan-06	2	40	A	22	1	1	62	28	117	9	29	6	11	84	5	8	32	9	3	2	2	2	11	25	22.2	117.0
7-Jan-06	2	A	33	39	1	1	21	6	4	7	9	9	13	13	4	4	4	5	3	3	4	3	2	3	8.4	38.5
8-Jan-06	A	2	2	2	1	19	2	2	2	2	2	3	27	3	3	55	68	9	19	2	71	19	A	14.5	71.5	
9-Jan-06	1	3	13	1	1	39	41	44	72	32	55	C	C	C	C	C	A	69	1	1	4	10	77	3	25.9	77.5
10-Jan-06	25	2	A	1	2	18	274	87	59	74	21	165	82	72	2	2	8	9	28	3	24	39	4	21	44.6	274.2
11-Jan-06	5	6	A	9	4	5	5	30	20	16	14	10	5	4	17	6	8	10	6	8	7	6	3	26	9.9	29.5
12-Jan-06	2	A	20	2	6	2	4	11	22	62	9	6	8	4	16	5	101	50	10	37	100	20	115	205	35.5	205.4
13-Jan-06	A	17	10	2	2	2	36	69	81	97	34	4	56	5	4	7	170	26	5	4	2	33	14	A	30.9	169.7
14-Jan-06	141	25	49	25	2	1	47	41	18	11	9	9	5	81	51	20	14	66	12	16	5	20	A	2	29.3	141.3
15-Jan-06	3	2	2	1	1	1	1	3	2	3	3	3	4	5	7	7	6	5	4	4	5	A	7	9	3.9	9.2
16-Jan-06	2	15	30	2	6	26	95	29	10	14	14	4	62	23	4	5	4	26	67	55	A	2	17	2	22.4	95.0
17-Jan-06	12	206	20	5	2	3	20	3	5	3	4	7	7	34	4	59	5	4	68	A	3	27	73	2	25.1	206.4
18-Jan-06	20	36	66	4	32	3	10	69	9	8	9	34	8	6	6	9	14	35	A	47	127	76	36	3	29.0	126.6
19-Jan-06	3	3	4	1	3	3	3	16	5	4	9	14	5	6	7	9	21	A	46	43	38	126	8	14	17.1	126.4
20-Jan-06	64	90	41	70	91	42	35	21	21	42	39	39	27	21	43	27	A	20	10	6	5	6	5	4	33.5	90.6
21-Jan-06	2	3	2	2	3	4	2	33	3	40	6	7	44	7	3	A	3	98	97	86	35	80	49	49	28.6	98.4
22-Jan-06	27	19	26	13	11	3	56	6	7	45	3	4	35	29	A	10	18	2	2	29	1	83	3	76	22.1	83.5
23-Jan-06	28	1	3	3	1	2	2	2	7	1	9	6	7	A	12	3	6	44	73	151	137	0	1	18	22.5	150.6
24-Jan-06	57	22	3	26	3	1	20	54	87	34	29	17	A	109	5	50	5	65	47	7	43	15	4	3	30.6	108.8
25-Jan-06	2	3	4	3	1	1	26	17	21	4	12	A	3	5	26	4	76	22	28	96	17	9	44	2	18.5	95.6
26-Jan-06	1	1	1	1	1	98	27	2	4	3	A	3	3	38	5	2	7	4	2	2	106	42	28	2	16.6	106.0
27-Jan-06	16	169	74	1	8	123	28	28	53	A	31	17	62	9	4	16	5	4	3	15	1	2	12	1	29.7	169.3
28-Jan-06	47	1	59	2	1	2	33	13	A	7	45	36	51	15	2	2	48	2	95	62	2	2	2	1	23.1	95.5
29-Jan-06	1	23	61	1	13	4	5	A	9	12	16	10	9	39	3	2	8	3	166	18	2	41	2	33	20.9	166.2
30-Jan-06	1	22	32	2	1	42	A	29	2	108	94	27	3	2	61	5	2	3	41	23	1	5	4	2	22.3	108.2
31-Jan-06	2	5	5	5	13	A	13	51	21	64	12	5	5	4	56	6	35	9	3	2	2	25	36	1	16.5	63.7
Hourly Avg	19.7	25.5	26.6	18.7	13.0	15.8	38.0	33.3	28.9	26.9	21.0	19.6	21.3	24.3	17.2	12.9	25.8	28.7	40.4	39.7	27.4	28.6	20.4	26.4		
Hourly Max	141.3	206.4	82.8	194.4	144.5	122.5	274.2	107.7	134.8	108.2	94.3	165.3	82.3	108.8	68.0	67.6	169.7	148.8	262.6	168.7	137.2	126.4	114.8	205.4		



### PAS - Crescent Heights Oxides of Nitrogen Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

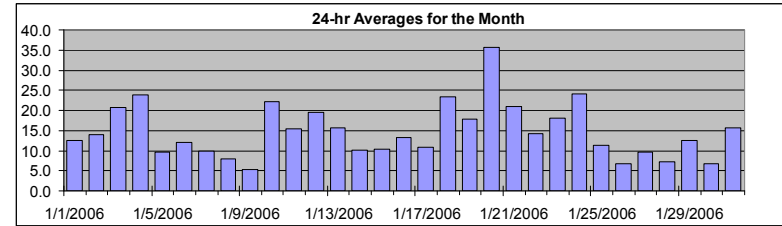
#### HOURLY AVERAGE TABLE

#### Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: January 1, 2006 to February 1, 2006

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

Maximum 1-hr Average:	122.2	ppb	23-Jan	19:00 20:00
Maximum 24-hr Average:	35.7	ppb	20-Jan	



AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	73.6	43.2	18.1	10.3	6.3	3.4	2.1	14.8 ppb	10.3 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	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-Jan-06	21	15	24	16	8	8	9	15	19	29	45	13	4	4	5	5	A	11	6	7	7	5	4	5	12.4	44.9	
2-Jan-06	4	7	14	15	6	7	9	7	5	5	5	5	6	8	10	A	13	16	19	36	36	38	17	34	14.1	38.5	
3-Jan-06	9	12	7	9	25	14	22	24	25	19	16	24	21	9	A	15	24	74	66	26	17	8	6	7	20.8	73.6	
4-Jan-06	7	3	8	9	3	6	12	17	27	28	39	17	9	A	16	19	27	31	113	72	27	16	15	26	23.9	112.5	
5-Jan-06	28	6	8	18	16	8	22	29	C	C	4	2	2	4	5	7	10	5	3	3	13	5	4	6	9.5	29.4	
6-Jan-06	7	12	A	8	4	6	17	16	28	21	19	10	16	14	13	15	20	20	7	6	6	4	4	4	12.1	28.0	
7-Jan-06	4	A	7	9	3	4	9	11	13	12	13	13	18	15	10	13	13	16	7	7	9	7	7	6	9.8	17.5	
8-Jan-06	A	5	5	3	2	6	7	9	8	4	4	6	9	5	6	8	11	26	20	12	6	10	4	A	8.1	26.2	
9-Jan-06	4	3	2	2	1	6	4	5	8	6	5	C	C	C	C	C	A	11	3	4	4	5	11	10	5.2	11.4	
10-Jan-06	13	4	A	6	5	10	71	43	54	35	15	61	60	49	6	5	4	10	8	5	8	8	11	16	22.1	71.0	
11-Jan-06	16	14	A	20	14	12	10	17	27	18	20	13	9	7	11	11	17	21	20	21	19	15	11	13	15.5	27.0	
12-Jan-06	7	A	11	8	9	8	10	12	16	14	10	12	11	7	9	10	15	19	25	41	50	35	53	55	19.4	55.1	
13-Jan-06	A	29	22	17	13	13	24	37	32	17	12	8	10	9	11	17	21	16	11	9	6	6	4	A	15.6	36.7	
14-Jan-06	9	8	5	3	2	2	6	7	10	9	10	8	7	13	10	9	23	29	21	18	8	7	A	8	10.2	28.5	
15-Jan-06	9	6	4	5	4	3	4	4	4	7	6	6	8	9	12	17	19	17	17	19	18	A	20	22	10.5	22.0	
16-Jan-06	16	10	17	12	11	18	19	15	22	20	10	8	11	8	7	10	12	23	22	8	A	10	8	6	13.2	22.8	
17-Jan-06	9	30	22	19	6	7	11	7	7	6	6	10	7	19	4	13	9	11	12	A	12	8	8	6	10.9	29.7	
18-Jan-06	6	7	11	13	19	8	18	21	21	16	17	14	12	10	12	18	29	34	A	51	80	88	24	12	23.5	88.0	
19-Jan-06	11	12	10	6	6	6	9	11	10	7	14	23	9	13	11	15	17	A	45	37	27	62	19	30	17.8	62.1	
20-Jan-06	38	28	43	66	69	50	45	37	32	52	54	43	37	28	23	29	A	34	27	18	17	21	18	11	35.7	68.6	
21-Jan-06	7	6	6	4	4	9	7	13	8	11	10	10	17	8	5	A	9	27	84	79	44	38	27	47	20.8	84.1	
22-Jan-06	39	33	33	29	16	15	11	6	7	8	5	6	6	10	A	21	19	9	8	9	4	14	7	11	14.2	39.2	
23-Jan-06	12	4	3	3	1	2	3	3	3	3	3	5	5	A	21	11	12	18	57	122	96	3	3	21	18.1	122.2	
24-Jan-06	48	30	14	24	22	14	34	40	58	37	44	14	A	17	12	12	16	27	17	14	14	24	14	9	24.1	57.6	
25-Jan-06	6	7	10	8	4	4	12	13	21	10	10	A	7	11	8	9	22	28	21	18	9	6	12	5	11.4	27.9	
26-Jan-06	3	4	6	4	3	9	10	6	11	7	A	7	5	13	5	3	4	6	5	11	11	9	7	4	6.7	13.3	
27-Jan-06	5	10	7	3	4	15	8	15	13	A	15	10	8	7	9	14	21	18	11	9	5	5	4	4	9.7	21.4	
28-Jan-06	7	4	7	4	4	4	10	9	A	17	23	7	10	8	5	5	7	3	8	5	4	4	6	3	7.2	23.5	
29-Jan-06	5	3	6	3	13	15	15	A	22	20	20	16	14	10	5	6	9	19	42	12	9	9	6	7	12.5	42.0	
30-Jan-06	3	6	7	2	1	2	A	7	6	9	9	6	5	6	8	7	5	13	12	9	6	11	11	5	6.8	12.9	
31-Jan-06	7	19	21	20	23	A	25	33	28	29	18	9	9	6	14	12	23	20	12	7	8	6	6	4	15.7	33.5	
Hourly Avg	12.3	11.7	12.2	11.9	10.4	9.7	15.8	16.3	18.8	16.5	16.1	13.3	12.1	11.8	9.8	12.0	15.5	20.4	24.4	23.3	19.3	16.3	11.8	13.7			
Hourly Max	48.2	32.7	43.5	66.4	68.6	50.3	71.0	42.7	57.6	51.9	53.9	60.8	60.2	49.3	23.5	28.8	29.0	73.6	112.5	122.2	95.6	88.0	52.5	55.1			

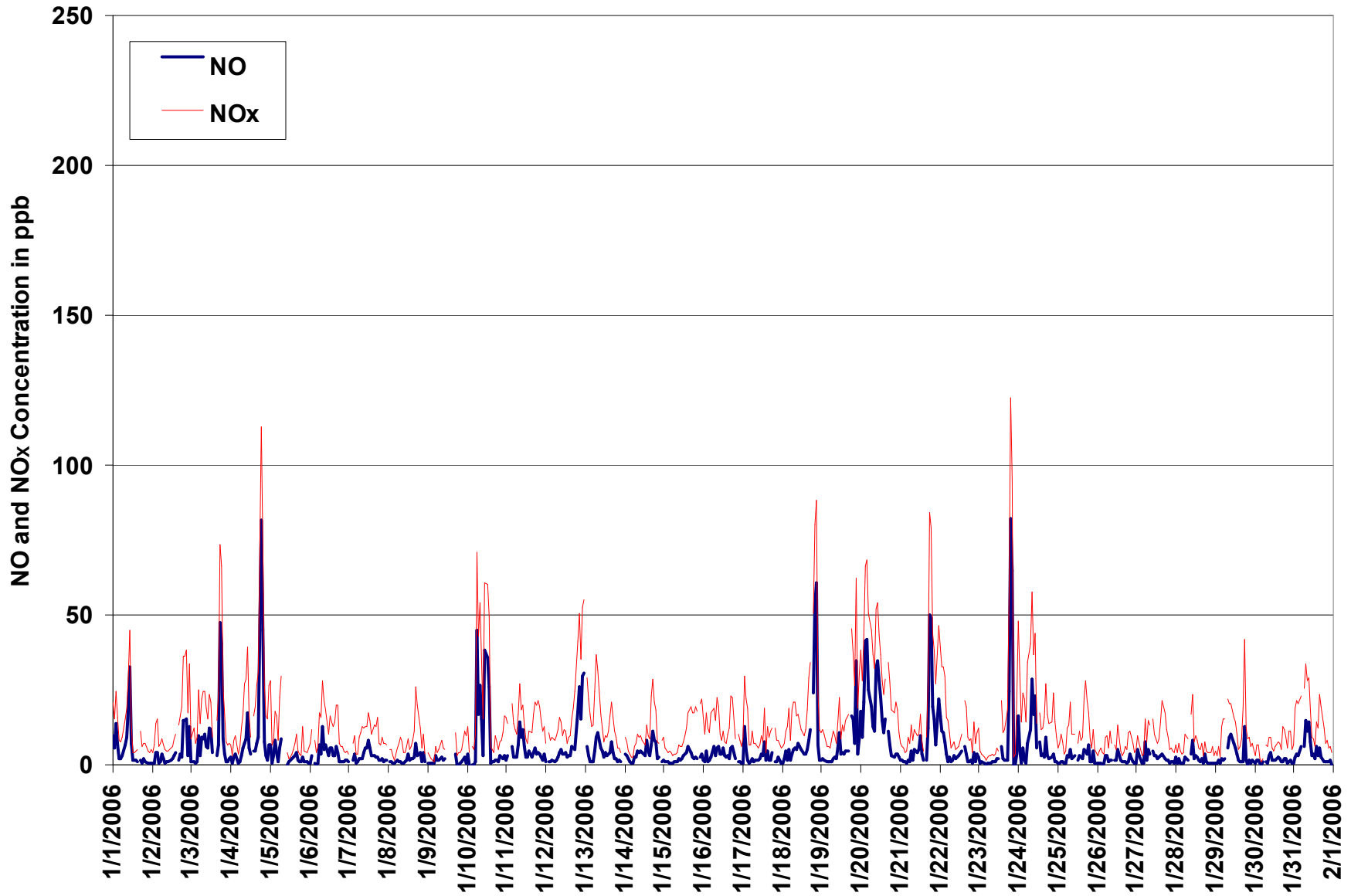


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

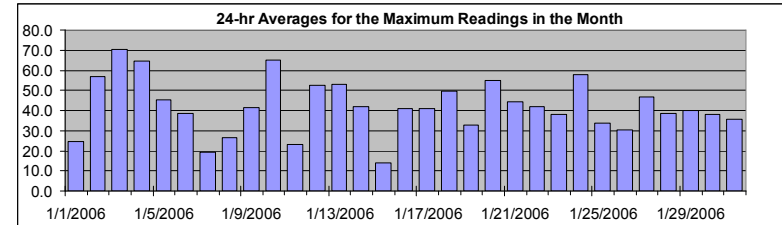
**Oxides of Nitrogen (NO<sub>x</sub>)**

Monitoring Dates: January 1, 2006 to February 1, 2006

**Summary**

Maximum 1-hr Value:	321.7	ppb	10-Jan	6:00 7:00
Maximum 24-hr Value:	70.4	ppb	3-Jan	

AIC Time:	32 hrs	Operational Time:	705 hrs						
Calibration Time:	7 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	205.5	127.4	57.4	24.8	12.6	6.0	3.5	42.0 ppb	24.8 ppb



**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-06	37	22	32	24	12	13	37	19	23	43	65	43	8	8	6	10	A	18	11	93	14	6	6	14	24.6	92.8
2-Jan-06	11	12	73	111	11	22	98	81	8	6	16	9	8	45	88	A	21	30	24	198	76	128	48	183	56.8	198.2
3-Jan-06	25	20	12	14	169	31	87	56	157	48	20	45	89	48	A	25	45	181	137	211	65	13	9	114	70.4	210.7
4-Jan-06	70	4	47	48	7	13	119	121	54	44	77	115	17	A	26	37	49	66	308	99	64	24	19	63	64.8	308.3
5-Jan-06	53	12	108	229	58	16	51	146	C	C	9	3	4	36	71	90	39	7	5	5	25	9	7	13	45.3	229.2
6-Jan-06	14	69	A	32	6	12	94	55	140	27	49	16	26	121	16	26	54	29	17	7	9	7	16	47	38.7	139.8
7-Jan-06	6	A	51	60	4	5	38	24	17	20	20	17	26	26	12	17	18	20	10	10	13	10	10	8	19.3	59.7
8-Jan-06	A	9	8	6	4	43	12	16	13	6	6	8	51	7	10	14	84	88	32	35	8	96	30	A	26.6	96.0
9-Jan-06	7	6	23	2	2	65	54	57	117	60	71	C	C	C	C	C	A	107	8	9	9	21	113	18	41.6	117.4
10-Jan-06	49	14	A	8	9	36	322	123	96	104	41	187	105	95	11	8	15	25	50	9	49	64	23	49	64.9	321.7
11-Jan-06	24	17	A	26	17	16	14	41	33	26	24	18	15	10	29	19	24	29	24	27	27	24	14	40	23.3	41.3
12-Jan-06	9	A	30	11	12	11	16	30	36	83	17	16	19	9	28	14	129	70	29	66	150	41	146	238	52.6	237.8
13-Jan-06	A	49	33	23	20	20	71	100	127	153	57	11	102	11	14	24	191	43	17	15	8	59	20	A	53.0	190.7
14-Jan-06	164	41	60	41	4	4	61	61	32	25	17	18	11	105	70	27	31	86	26	27	15	31	A	11	42.0	164.2
15-Jan-06	13	11	6	6	5	4	6	7	5	9	9	8	10	12	17	20	23	21	21	23	25	A	29	31	13.9	31.4
16-Jan-06	19	23	45	19	21	51	111	67	29	35	24	10	100	34	13	14	17	53	110	83	A	14	36	13	40.9	111.2
17-Jan-06	32	237	54	28	24	16	37	9	15	8	10	18	19	58	12	71	21	21	90	A	15	49	94	8	41.1	237.4
18-Jan-06	43	63	96	25	60	11	27	96	27	21	22	57	18	14	15	30	38	61	A	81	159	104	63	15	49.8	159.4
19-Jan-06	16	17	18	7	12	13	14	27	15	11	22	29	14	16	21	24	36	A	78	76	65	161	26	38	32.8	161.0
20-Jan-06	96	124	60	98	119	71	65	46	40	62	58	57	43	36	64	45	A	44	32	25	23	25	21	14	55.1	124.4
21-Jan-06	9	10	8	5	11	14	9	64	11	54	12	13	63	14	6	A	14	139	135	120	62	101	69	81	44.5	138.9
22-Jan-06	55	42	52	38	32	20	87	18	19	66	6	9	56	54	A	30	50	13	13	55	5	110	21	108	41.8	110.2
23-Jan-06	54	7	13	11	2	8	7	7	13	4	11	14	17	A	34	14	24	81	112	192	178	5	5	61	38.0	192.0
24-Jan-06	102	63	31	66	31	22	55	86	120	64	53	36	A	159	16	64	22	94	66	28	74	41	22	14	57.7	159.0
25-Jan-06	12	12	23	15	7	9	48	40	46	18	25	A	11	14	41	15	97	55	57	112	28	20	66	9	33.8	112.2
26-Jan-06	5	6	10	8	5	137	44	9	14	10	A	8	9	69	15	5	11	19	8	14	163	68	50	6	30.2	162.5
27-Jan-06	31	206	101	6	19	153	50	48	85	A	60	29	76	21	11	33	26	28	16	36	7	9	20	6	46.7	205.8
28-Jan-06	78	6	83	7	5	6	56	32	A	25	71	56	72	28	9	6	62	5	141	95	8	10	13	9	38.5	141.0
29-Jan-06	8	44	84	5	41	23	22	A	26	26	28	21	19	58	8	10	29	27	232	39	13	81	9	63	39.8	231.7
30-Jan-06	5	48	64	5	2	48	A	48	8	161	98	44	7	8	104	20	13	17	69	42	10	22	21	6	37.9	160.6
31-Jan-06	13	22	23	22	31	A	31	78	46	89	26	12	11	8	112	20	71	38	24	10	15	47	59	6	35.5	112.4
Hourly Avg	36.6	42.0	44.6	32.5	24.6	30.3	58.1	53.7	47.3	45.0	34.0	32.0	35.3	40.2	31.4	26.2	44.8	50.4	63.4	61.5	46.0	46.5	36.2	44.3		
Hourly Max	164.2	237.4	107.7	229.2	168.8	153.1	321.7	145.7	156.5	160.6	97.6	187.3	104.9	159.0	112.4	90.4	190.7	180.9	308.3	210.7	178.1	161.0	146.1	237.8		



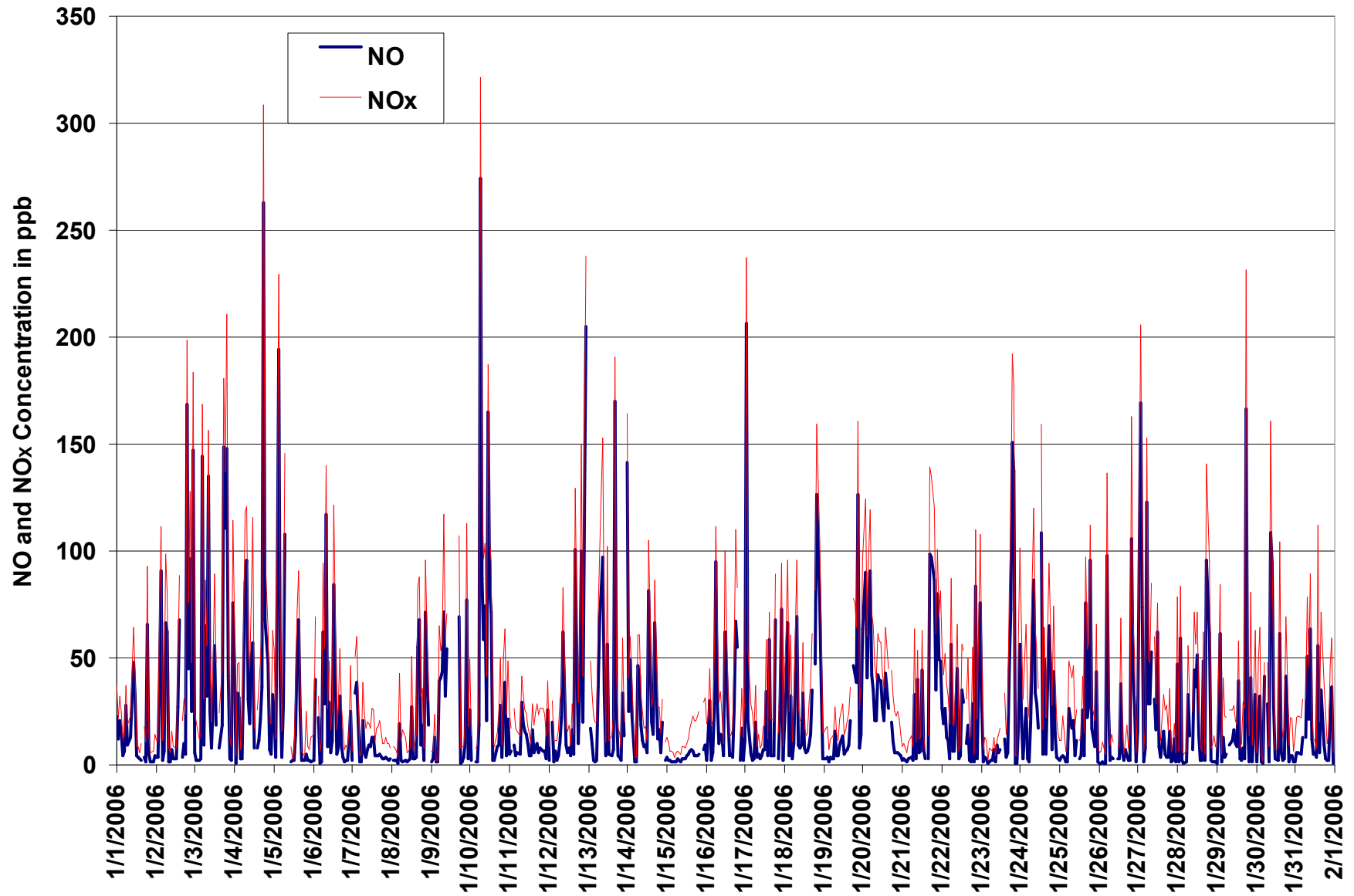


Figure 4. PAS - Cresent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



### PAS - Cresnet Heights Ozone Monthly Summary

Station: Cresnet Heights  
Station Owner: PAS

#### HOURLY AVERAGE TABLE

#### Ozone (O<sub>3</sub>)

Monitoring Dates: January 1, 2006 to February 1, 2006

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

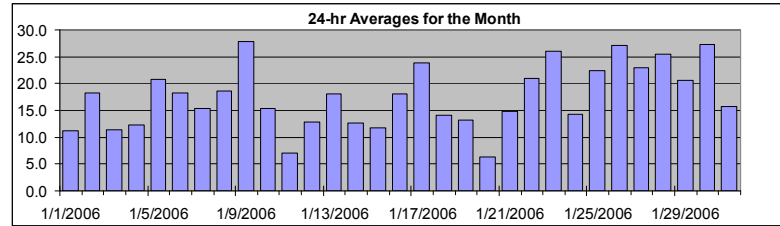
#### Summary

Number of 1-hr Exceedances: 0

Maximum 1-hr Average: 35.1 ppb 26-Jan 12:00 13:00

Maximum 24-hr Average: 27.8 ppb 9-Jan

AIC Time:	32 hrs							Operational Time:	709 hrs				
Calibration Time:	3 hrs							AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average	Median				
	32.5	30.5	23.9	18.2	11.7	1.6	0.6	17.5 ppb	18.2 ppb				



#### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-06	1	1	0	0	2	2	2	1	1	1	2	12	17	20	21	19	A	17	22	22	21	23	24	23	11.1	24.4
2-Jan-06	24	20	17	18	24	24	24	24	24	24	25	25	24	22	21	A	18	15	10	8	7	5	10	5	18.2	25.2
3-Jan-06	15	12	16	15	8	13	9	6	5	7	9	11	14	19	A	18	7	2	1	9	11	17	18	19	11.3	19.5
4-Jan-06	21	21	18	21	23	20	17	13	6	7	7	14	18	A	19	17	9	4	1	1	4	7	8	7	12.3	23.1
5-Jan-06	8	18	18	15	14	17	10	9	12	25	29	28	27	26	24	25	24	25	25	25	19	24	25	24	20.7	28.9
6-Jan-06	23	21	A	23	24	23	18	13	9	11	14	16	13	19	18	15	12	13	21	21	22	23	22	23	18.2	23.8
7-Jan-06	23	A	24	20	21	21	18	14	13	10	12	13	12	15	17	14	13	10	18	17	14	14	11	11	15.4	23.8
8-Jan-06	A	22	22	23	24	22	20	18	19	21	20	18	18	17	19	19	17	10	9	14	18	18	21	A	18.5	24.0
9-Jan-06	26	27	29	28	29	29	29	29	27	28	29	30	31	31	31	28	C	C	C	A	27	26	22	19	27.8	31.1
10-Jan-06	18	22	A	23	22	16	4	3	2	6	11	4	3	9	25	26	27	19	20	21	20	21	18	13	15.3	26.9
11-Jan-06	9	2	A	0	1	3	5	2	1	3	3	8	14	17	14	13	9	7	7	6	7	10	11	11	7.1	16.6
12-Jan-06	15	A	12	15	14	19	19	17	15	16	17	18	20	22	21	19	13	8	4	2	1	1	2	2	12.7	22.0
13-Jan-06	A	7	11	15	19	19	14	10	16	25	27	29	28	26	22	17	15	15	16	17	17	18	A	18.1	28.9	
14-Jan-06	18	17	18	17	17	16	15	15	12	14	14	17	17	17	17	15	6	3	2	1	4	6	A	10	12.6	18.0
15-Jan-06	9	12	12	12	14	16	17	17	15	13	12	13	13	13	12	7	7	11	10	8	9	A	9	8	11.7	16.7
16-Jan-06	13	15	11	13	16	11	11	13	8	14	22	24	25	27	28	25	21	13	14	21	A	22	23	24	18.0	28.2
17-Jan-06	20	12	14	12	27	28	25	28	25	25	27	27	30	25	32	27	25	24	24	A	21	23	24	24	23.9	32.3
18-Jan-06	23	23	22	18	14	16	9	10	11	12	15	22	22	23	23	16	7	5	A	2	1	1	11	18	14.1	22.6
19-Jan-06	20	17	17	18	17	17	14	14	16	18	15	13	18	17	18	17	13	A	2	6	6	2	7	2	13.1	20.2
20-Jan-06	3	4	2	1	1	1	1	1	4	6	9	10	10	14	18	8	A	2	2	9	10	6	8	15	6.3	17.5
21-Jan-06	20	21	21	23	22	18	20	18	17	15	16	21	20	22	24	A	21	14	1	1	1	1	2	1	14.8	23.6
22-Jan-06	1	1	1	3	16	16	21	24	24	26	28	29	31	30	A	24	21	26	26	27	29	24	29	28	21.0	31.1
23-Jan-06	27	30	31	32	33	32	31	32	32	31	32	31	31	A	21	23	23	18	7	2	9	32	34	23	26.0	33.9
24-Jan-06	9	12	18	14	13	18	7	7	5	11	10	19	A	20	22	23	20	14	15	16	15	5	13	19	14.2	22.6
25-Jan-06	21	20	19	21	26	25	21	19	15	22	25	A	33	31	33	29	18	12	14	19	20	23	21	27	22.4	32.9
26-Jan-06	31	28	27	27	25	23	23	22	20	25	A	32	35	31	34	33	31	30	28	20	24	23	24	26	27.0	35.1
27-Jan-06	25	24	23	23	23	20	22	20	19	A	22	25	27	29	28	23	17	18	22	25	25	24	24	23	23.0	28.8
28-Jan-06	22	24	22	21	22	23	22	22	A	17	19	30	30	29	29	29	29	31	30	28	25	27	26	28	25.5	31.1
29-Jan-06	26	25	23	30	20	15	13	A	4	8	10	15	19	26	32	33	31	19	7	19	23	23	25	26	20.6	33.3
30-Jan-06	29	29	29	32	32	32	A	31	30	29	30	30	28	29	28	30	23	24	25	27	18	17	15	27.4	32.5	
31-Jan-06	12	2	1	1	3	A	3	2	4	6	13	25	26	29	25	25	16	17	21	24	24	27	26	30	15.7	30.0
Hourly Avg	17.6	16.8	17.1	17.2	18.3	18.5	15.4	15.1	13.7	15.9	17.5	20.3	21.9	22.5	23.3	21.2	17.9	14.6	13.9	14.3	15.4	16.5	17.8	17.5		
Hourly Max	31.1	30.3	31.4	32.5	32.6	32.5	31.5	32.3	31.7	31.3	31.9	31.7	35.1	31.1	33.6	33.3	31.5	31.1	29.7	28.0	28.8	32.1	33.9	30.0		

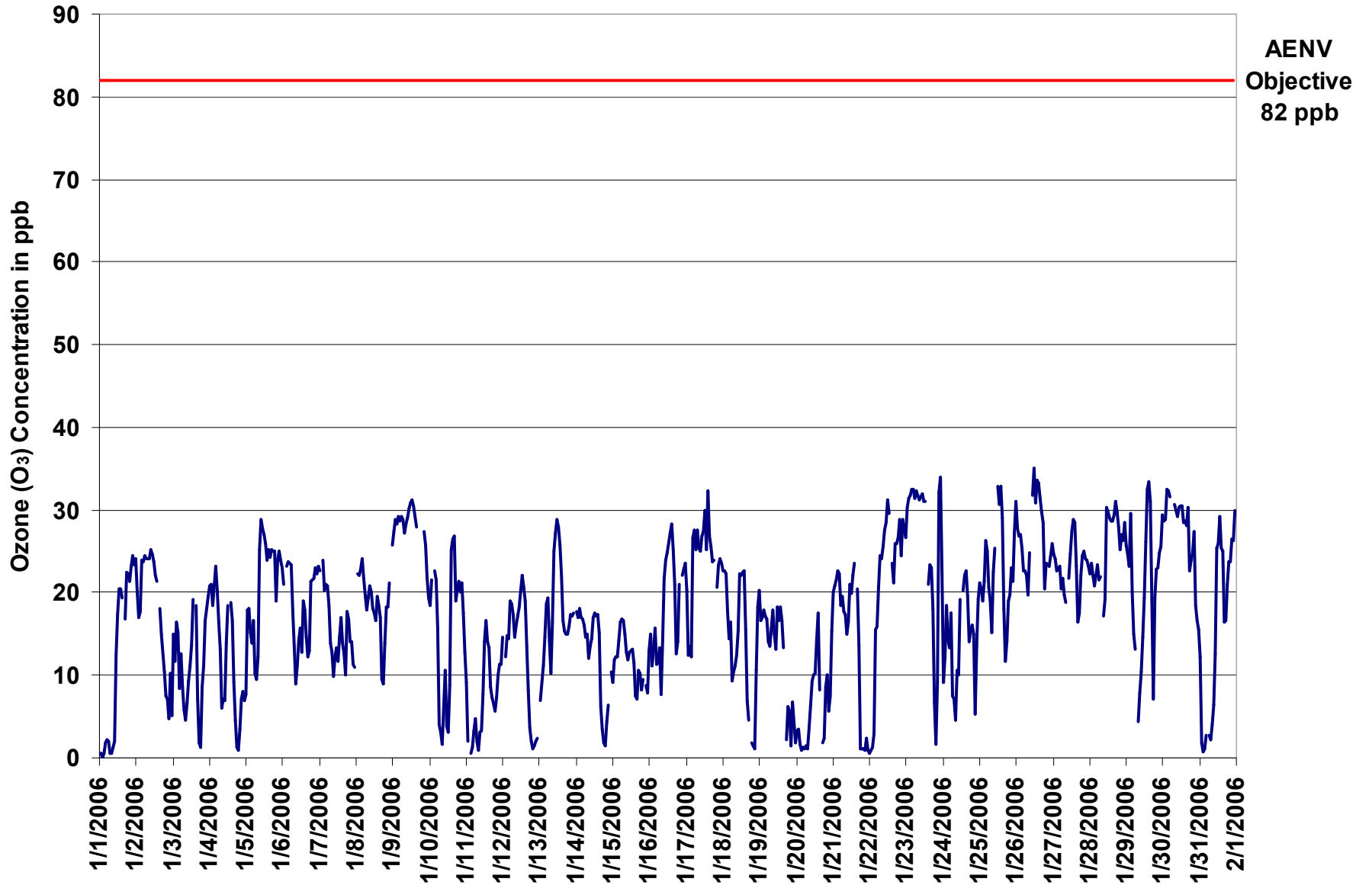


Figure 5. PAS - Cresent Heights Ozone 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

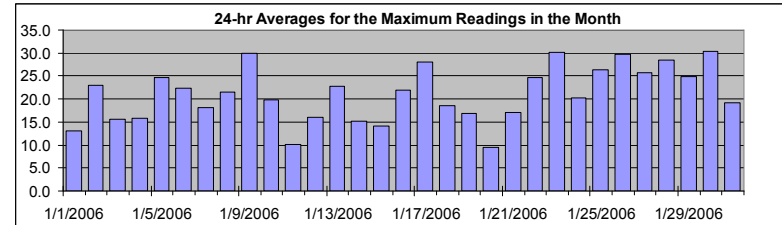
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Ozone (O<sub>3</sub>)**

Monitoring Dates: January 1, 2006 to February 1, 2006

**Summary**

Maximum 1-hr Value:	37.0	ppb	26-Jan	12:00 13:00
Maximum 24-hr Value:	30.4	ppb	30-Jan	



AIC Time:	32 hrs	Operational Time:	709 hrs						
Calibration Time:	3 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	35.4	32.9	27.0	22.3	16.4	3.6	1.9	21.1 ppb	22.3 ppb

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	24-hour Average	Daily Maximum
1-Jan-06	1	2	1	2	4	4	3	2	1	2	4	17	20	22	22	A	20	25	25	24	25	27	25	13.1	27.1	
2-Jan-06	28	23	22	24	27	27	27	28	26	26	27	28	25	25	25	A	25	25	14	15	18	12	19	12	23.0	28.2
3-Jan-06	19	18	21	18	18	17	17	12	7	10	13	15	17	22	A	23	14	4	3	14	16	20	20	22	15.6	22.9
4-Jan-06	23	22	22	24	25	22	19	16	12	12	10	17	22	A	21	20	15	10	3	2	6	11	13	15	15.8	24.7
5-Jan-06	17	20	21	19	22	22	18	17	22	28	30	30	29	28	25	27	27	27	27	26	26	28	28	24.7	30.3	
6-Jan-06	28	26	A	25	25	27	25	18	16	18	20	18	16	22	22	20	20	21	24	24	24	25	25	25	22.4	27.7
7-Jan-06	24	A	26	24	22	23	25	17	15	12	14	15	14	18	19	17	16	17	20	18	17	17	13	13	18.2	26.3
8-Jan-06	A	24	24	25	25	25	24	23	24	23	23	20	19	18	22	21	20	16	13	17	22	21	24	A	21.5	25.3
9-Jan-06	27	30	30	29	30	31	30	31	30	30	31	31	32	33	32	31	C	C	C	A	30	29	27	25	30.0	32.7
10-Jan-06	23	24	A	25	24	22	12	11	4	11	14	8	6	23	27	31	30	24	23	24	23	24	18	19.8	31.2	
11-Jan-06	15	7	A	1	2	5	7	4	3	5	5	15	17	18	16	16	12	13	9	9	10	13	14	15	10.1	18.5
12-Jan-06	17	A	14	17	20	21	21	19	21	20	22	26	24	24	21	19	14	7	5	2	5	5	6	16.1	25.7	
13-Jan-06	A	14	20	20	25	24	23	18	26	29	30	30	30	28	25	20	22	18	19	19	19	19	19	A	22.7	30.4
14-Jan-06	20	20	20	19	18	17	16	17	15	17	16	20	19	20	20	19	10	11	3	3	7	9	A	13	15.2	20.4
15-Jan-06	13	14	14	14	16	18	18	19	17	14	13	14	14	17	16	10	10	12	12	12	12	A	13	15	14.2	18.6
16-Jan-06	18	19	16	18	18	16	14	17	12	20	25	26	27	29	30	29	26	19	23	25	A	25	26	25	21.9	30.0
17-Jan-06	24	22	24	19	32	32	29	29	28	27	29	32	34	31	34	33	29	30	28	A	23	26	26	25	28.1	34.0
18-Jan-06	24	25	26	24	23	20	15	14	16	16	19	26	25	25	24	24	11	9	A	7	6	2	22	23	18.5	26.4
19-Jan-06	26	21	21	21	19	19	17	15	19	19	18	20	21	22	23	19	A	6	12	11	6	11	4	16.9	25.9	
20-Jan-06	9	7	6	2	2	2	3	2	6	9	11	13	14	20	21	13	A	3	4	16	16	9	12	18	9.6	20.7
21-Jan-06	21	23	24	24	25	21	22	21	19	18	19	23	23	24	25	A	24	20	2	3	2	3	5	2	17.0	25.0
22-Jan-06	1	2	3	11	22	21	26	26	27	28	30	30	34	34	A	30	26	29	29	31	31	30	32	33	24.7	33.9
23-Jan-06	31	32	34	33	34	34	33	34	33	32	33	33	33	A	27	26	28	26	19	3	29	35	35	35	30.1	35.4
24-Jan-06	22	22	26	23	21	22	19	17	10	16	13	23	A	24	24	25	23	21	19	24	22	8	17	25	20.2	25.6
25-Jan-06	25	23	24	24	28	27	25	22	21	27	28	A	35	34	36	32	27	19	21	25	23	25	27	30	26.5	35.8
26-Jan-06	32	31	30	29	28	25	26	25	24	28	A	36	37	35	35	35	34	33	31	24	26	26	26	27	29.8	37.0
27-Jan-06	26	28	24	25	25	24	24	23	21	A	26	28	30	32	30	29	22	21	25	26	27	26	25	25	25.7	32.0
28-Jan-06	24	26	24	23	24	25	28	25	A	22	31	33	33	32	31	30	32	33	32	31	27	30	31	31	28.5	32.8
29-Jan-06	28	27	30	31	28	20	19	A	6	11	13	17	23	31	35	36	36	29	18	26	29	25	27	28	24.9	35.6
30-Jan-06	32	32	32	34	33	33	A	33	32	31	33	32	32	30	31	32	35	28	28	28	34	26	22	17	30.4	34.8
31-Jan-06	15	5	2	2	7	A	5	4	6	8	18	29	30	31	29	28	26	24	26	27	29	28	29	32	19.1	32.0
Hourly Avg	21.2	20.3	20.7	20.4	21.7	21.6	19.7	18.7	17.2	19.0	20.5	23.4	24.5	25.9	25.9	25.0	22.7	19.8	17.8	18.0	19.7	19.6	21.4	21.2		
Hourly Max	32.3	32.4	33.8	33.9	33.9	33.8	33.0	33.6	33.0	32.2	33.0	36.3	37.0	35.3	35.8	35.6	35.6	32.7	32.0	31.0	34.4	35.4	35.1	35.4		

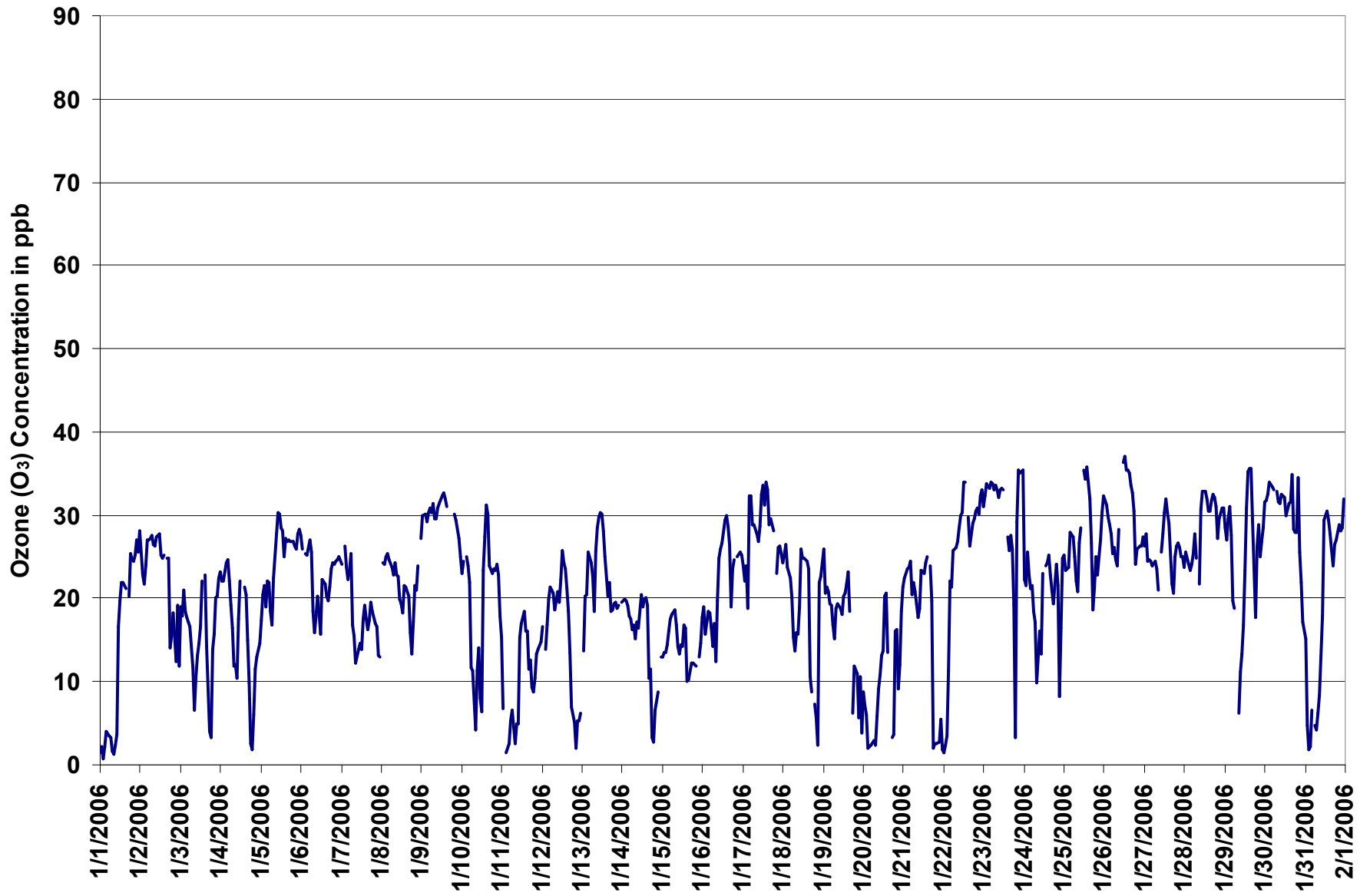
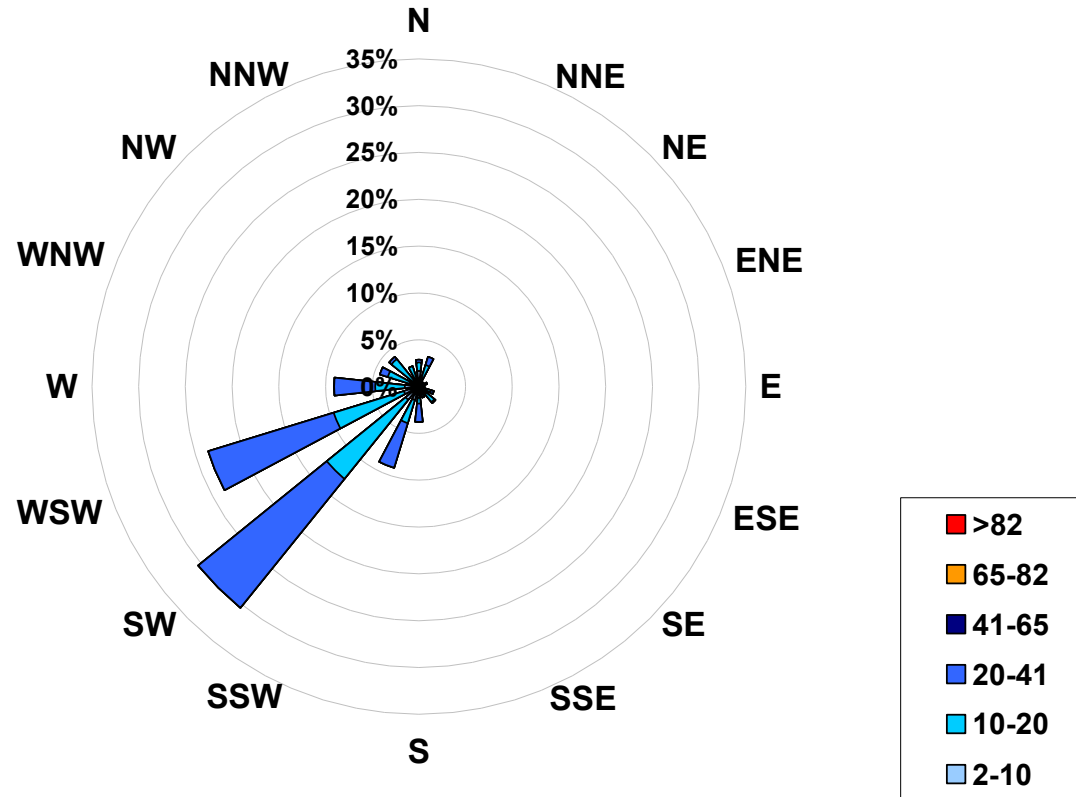


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Ozone (in ppb) Located at the Crescent Heights Site for January 2006**



<b>Calms:</b>	<b>0%</b>
---------------	-----------

Frequency Distribution of O <sub>3</sub> in ppb			
Range			Frequency (hrs)
2.0	<	10	146
10	to	20	253
20	to	41	310
41	to	65	0
65	to	82	0
	>	82	0
Total Non-Zero Values			709



### PAS - Cresent Heights Ozone Monthly Summary

Station: Cresent Heights  
 Station Owner: PAS

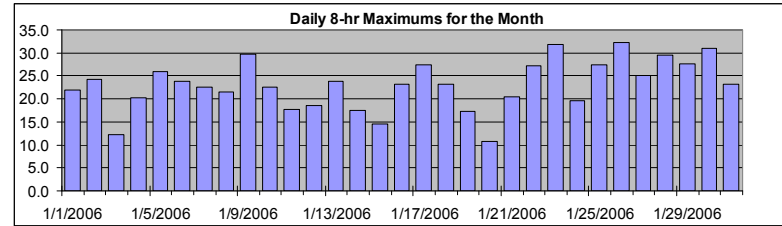
#### EIGHT HOUR RUNNING AVERAGE TABLE

#### Ozone (O<sub>3</sub>)

Monitoring Dates: January 1, 2006 to February 1, 2006

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

Number of 8-hr Exceedances:	0						
Maximum 8-hr Average:	32.2	ppb	26-Jan	17:00	18:00		



Percentile	99	95	75	50	25	5	1
	31.5	28.8	22.8	17.4	12.0	4.3	1.8

**Status Flag Characters**

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

**Day Mountain Standard Time**

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-Jan-06	9	8	6	4	3	3	2	1	1	1	1	3	5	7	9	12	13	16	18	20	20	21	21	22	22.0
2-Jan-06	22	23	22	21	22	22	22	22	22	22	23	24	24	24	24	24	23	21	19	17	14	12	10	10	24.3
3-Jan-06	9	9	10	11	11	12	12	12	10	10	9	8	9	10	10	12	12	12	10	10	10	9	10	10	12.2
4-Jan-06	12	15	17	18	20	20	20	19	17	16	14	13	13	12	12	13	13	13	12	10	8	8	6	5	20.2
5-Jan-06	5	7	9	11	12	13	13	14	14	15	16	18	20	21	23	25	26	26	26	25	24	24	24	24	26.0
6-Jan-06	24	23	23	23	23	23	22	21	19	17	17	16	15	14	14	14	15	15	16	17	18	18	19	20	23.8
7-Jan-06	21	22	23	22	22	22	21	20	19	18	16	15	14	13	13	13	13	13	14	14	15	14	14	13	22.6
8-Jan-06	14	15	16	17	18	19	21	22	21	21	21	20	19	19	19	19	19	17	16	15	15	15	16	15	21.5
9-Jan-06	17	19	22	24	26	27	28	28	28	29	29	29	29	29	30	29	30	N	N	N	N	N	N	N	29.7
10-Jan-06	N	N	N	22	22	20	18	15	13	11	11	8	6	5	8	11	14	15	17	19	21	23	22	20	22.6
11-Jan-06	18	16	15	12	9	7	5	3	2	2	2	3	5	7	8	9	10	11	11	11	10	9	9	8	17.7
12-Jan-06	9	10	10	12	13	14	15	16	16	16	16	17	18	18	18	18	18	17	16	14	11	9	6	4	18.5
13-Jan-06	3	3	4	6	8	11	12	14	14	16	18	20	21	22	23	24	24	22	21	19	18	17	16	16	23.7
14-Jan-06	17	17	17	17	17	17	17	17	16	15	15	15	15	15	15	16	15	14	12	10	8	7	6	5	17.4
15-Jan-06	5	7	8	10	11	12	13	14	14	15	14	15	14	14	13	12	11	11	11	10	10	9	9	9	14.6
16-Jan-06	10	10	10	11	12	12	12	13	12	12	14	15	16	18	20	22	23	23	22	22	21	21	20	20	23.3
17-Jan-06	19	19	19	18	19	20	20	21	21	23	25	26	27	27	27	27	27	27	27	27	25	25	24	24	27.4
18-Jan-06	23	23	23	22	21	20	19	17	16	14	13	14	15	16	17	18	17	16	17	14	11	8	6	6	23.1
19-Jan-06	8	10	11	13	15	17	17	17	16	16	16	16	16	16	16	16	16	16	14	13	11	9	7	5	17.3
20-Jan-06	4	4	4	3	3	3	2	2	2	2	3	4	5	7	9	10	11	10	9	9	9	8	6	7	10.8
21-Jan-06	9	11	14	15	17	19	20	20	20	19	19	18	18	19	19	19	20	20	17	15	12	9	6	5	20.4
22-Jan-06	3	1	1	1	3	5	7	10	13	16	20	23	25	26	27	27	27	27	27	26	26	25	26	26	27.3
23-Jan-06	27	27	28	29	29	30	31	31	32	32	32	32	32	32	30	29	28	26	22	18	15	17	19	18	31.9
24-Jan-06	17	16	17	19	20	18	14	12	12	12	11	11	11	11	13	16	18	18	19	19	18	16	15	15	19.5
25-Jan-06	15	16	16	17	18	21	22	22	21	21	22	22	23	24	25	27	27	26	24	24	22	21	20	19	27.3
26-Jan-06	21	23	25	25	26	26	26	26	24	24	23	24	26	27	28	30	32	32	32	30	29	28	27	26	32.2
27-Jan-06	25	24	24	24	24	23	23	22	22	21	21	21	22	23	24	25	24	24	24	24	23	23	22	22	25.0
28-Jan-06	23	24	24	23	23	23	22	22	22	21	21	22	23	24	25	26	27	28	30	29	29	29	28	28	29.6
29-Jan-06	28	27	26	26	26	24	22	22	19	16	14	12	12	14	16	19	22	23	23	23	24	24	23	22	27.7
30-Jan-06	21	23	25	27	28	29	30	31	31	31	31	31	30	30	30	29	29	29	28	27	27	26	24	22	30.9
31-Jan-06	20	18	15	12	9	7	5	3	2	3	5	8	11	14	16	19	21	22	23	23	23	22	22	23	23.1

Hourly Max 27.7 27.5 28.1 28.8 29.2 30.2 30.6 31.1 31.8 31.9 31.9 31.8 31.7 31.5 30.0 29.9 31.6 32.2 31.8 30.4 28.9 28.5 28.2 28.2



### PAS - Crescent Heights Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

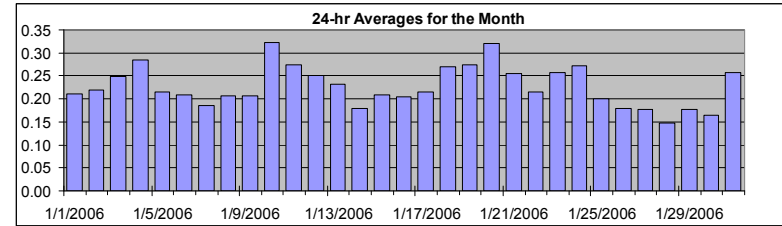
#### HOURLY AVERAGE TABLE

#### Carbon Monoxide (CO)

Monitoring Dates: January 1, 2006 to February 1, 2006

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

Number of 1-hr Exceedances:	0			
Maximum 1-hr Average:	1.1	ppm	23-Jan	19:00 20:00
Maximum 24-hr Value:	0.3	ppm	10-Jan	



AIC Time:	32 hrs	Operational Time:	708 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	0.7	0.4	0.2	0.2	0.2	0.1	0.1	0.2 ppm	0.2 ppm

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum			
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00			23:00	24:00	
1-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.38
2-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.22	0.30	
3-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	A	0.2	0.3	0.6	0.6	0.2	0.2	0.2	0.1	0.2	0.25	0.62	
4-Jan-06	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.2	0.2	A	0.2	0.2	0.3	0.3	0.9	0.7	0.3	0.2	0.2	0.2	0.28	0.87	
5-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.50	
6-Jan-06	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.30	
7-Jan-06	0.2	A	0.1	0.2	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	0.19	0.22	
8-Jan-06	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	A	0.21	0.30	
9-Jan-06	0.2	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	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.26	
10-Jan-06	0.2	0.2	A	0.2	0.2	0.2	0.3	0.8	0.9	0.7	0.4	C	C	C	C	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32	0.92		
11-Jan-06	0.2	0.2	A	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.27	0.43		
12-Jan-06	0.2	A	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.25	0.40		
13-Jan-06	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	A	0.23	0.39		
14-Jan-06	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	A	0.2	0.18	0.31	
15-Jan-06	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	A	0.2	0.21	0.27		
16-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	A	0.2	0.2	0.20	0.32		
17-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.2	0.2	0.21	0.26		
18-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.4	0.4	0.7	0.3	0.27	0.67		
19-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	A	0.5	0.4	0.3	0.5	0.3	0.27	0.48		
20-Jan-06	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.6	0.5	0.4	0.4	0.3	0.3	0.4	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.32	0.58		
21-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	A	0.2	0.3	0.6	0.7	0.4	0.4	0.3	0.4	0.26	0.70	
22-Jan-06	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.22	0.33		
23-Jan-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	A	0.2	0.2	0.2	0.3	0.6	1.1	0.9	0.2	0.1	0.2	0.26	1.13		
24-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.4	0.4	0.2	A	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.27	0.71		
25-Jan-06	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.20	0.41		
26-Jan-06	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.24		
27-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.18	0.27		
28-Jan-06	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.28	
29-Jan-06	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.18	0.38		
30-Jan-06	0.1	0.1	0.1	0.1	0.1	0.1	A	0.2	0.2	0.2	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	0.16	0.24		
31-Jan-06	0.2	0.2	0.2	0.2	0.2	A	0.3	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.26	0.56		
Hourly Avg	0.19	0.18	0.17	0.18	0.18	0.18	0.21	0.29	0.31	0.27	0.25	0.22	0.21	0.20	0.20	0.22	0.24	0.27	0.30	0.28	0.24	0.23	0.20	0.19				
Hourly Max	0.33	0.28	0.28	0.36	0.38	0.34	0.35	0.82	0.92	0.70	0.55	0.42	0.37	0.31	0.33	0.43	0.32	0.58	0.87	1.13	0.85	0.67	0.40	0.37				



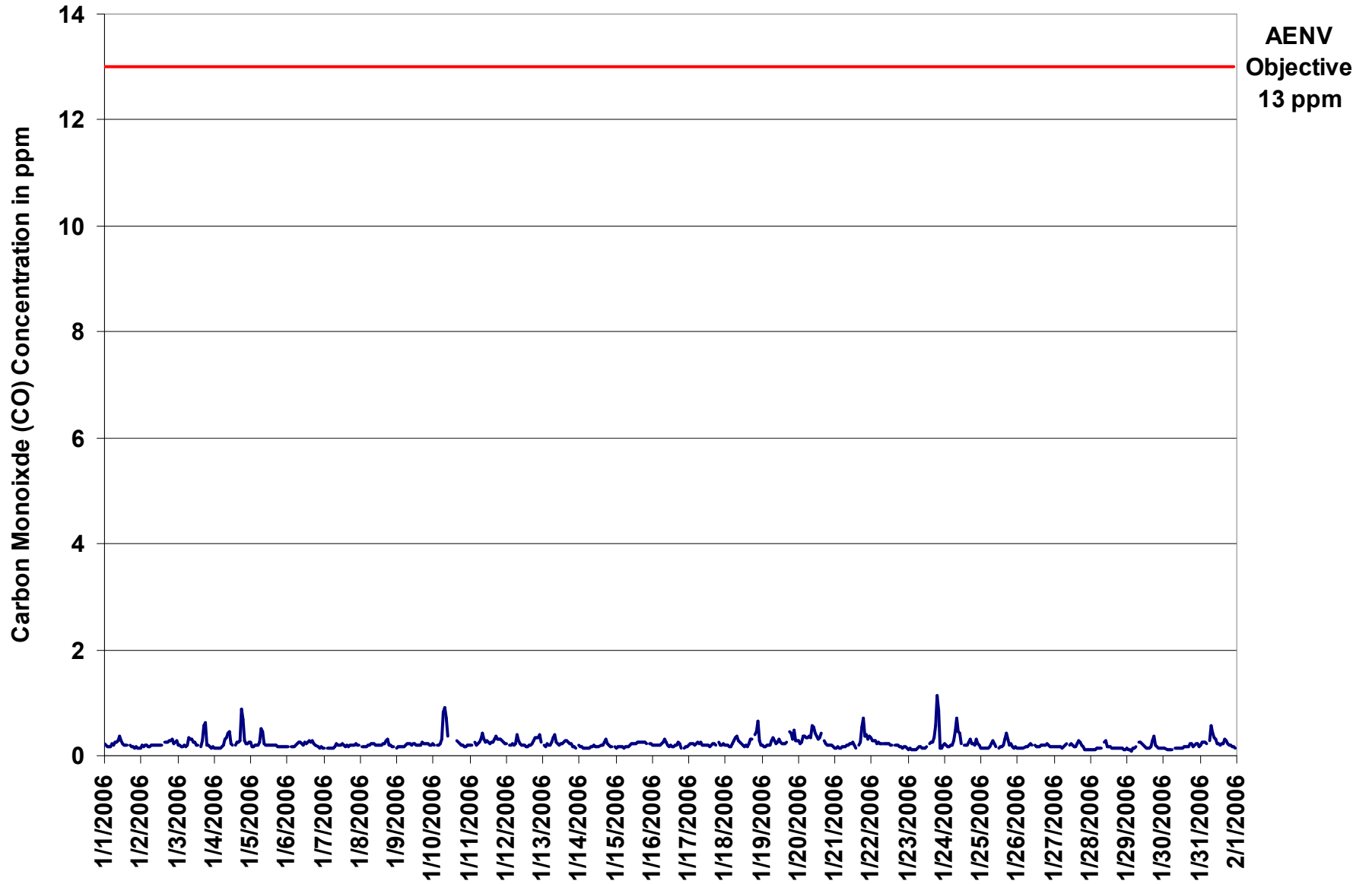


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

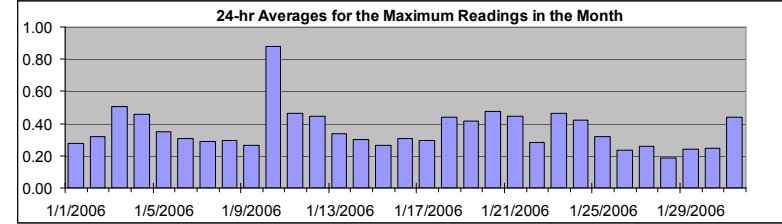
**Carbon Monoxide (CO)**

Monitoring Dates: January 1, 2006 to February 1, 2006

**Summary**

Maximum 1-hr Value:	6.9	ppm	10-Jan	7:00 8:00
Maximum 24-hr Value:	0.9	ppm	10-Jan	

AIC Time:	32 hrs	Operational Time:	708 hrs						
Calibration Time:	4 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	1.8	0.9	0.4	0.3	0.2	0.2	0.1	0.4 ppm	0.3 ppm



**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-06	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.3	0.4	A	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.28	0.46
2-Jan-06	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	A	0.7	0.3	0.3	0.3	0.5	0.4	0.3	0.5	0.32	0.74
3-Jan-06	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.8	1.0	1.8	0.5	0.3	0.3	0.2	A	0.4	0.6	1.6	1.3	0.3	0.2	0.2	0.2	0.2	0.51	1.81
4-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.7	0.4	0.7	0.9	0.4	0.3	A	0.3	0.4	0.4	0.4	1.4	1.0	0.4	0.3	0.2	0.3	0.46	1.70
5-Jan-06	0.3	0.2	0.2	0.4	0.2	0.2	0.4	2.0	0.9	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.35	2.04
6-Jan-06	0.2	0.2	A	0.2	0.2	0.2	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.6	0.4	0.5	0.3	0.3	0.2	0.2	0.4	0.2	0.31	0.55
7-Jan-06	0.2	A	0.2	0.4	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.8	0.3	0.3	0.3	0.2	0.29	0.76
8-Jan-06	A	0.2	0.2	0.3	0.3	0.2	0.2	0.4	0.3	0.9	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.2	A	0.30	0.91
9-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.2	0.26	0.48
10-Jan-06	0.3	0.2	A	0.2	0.2	0.3	0.6	6.9	1.5	2.4	0.9	C	C	C	C	A	0.3	0.4	0.2	0.4	0.2	0.2	0.3	0.3	0.88	6.91
11-Jan-06	0.3	0.3	A	0.3	0.2	0.3	0.4	1.3	0.6	0.5	0.3	0.7	0.4	0.3	0.7	0.4	0.4	0.9	0.4	0.6	0.3	0.3	0.3	0.2	0.46	1.31
12-Jan-06	0.3	A	0.5	0.2	0.7	0.3	0.5	2.1	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.44	2.10
13-Jan-06	A	0.2	0.2	0.2	0.3	0.3	0.9	0.5	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.2	0.2	0.2	A	0.33	0.86	
14-Jan-06	0.3	0.2	0.2	0.4	0.1	0.1	0.2	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.6	0.4	0.7	0.3	0.3	0.4	0.2	A	0.2	0.30	0.71
15-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	A	0.2	0.3	0.26	0.39
16-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.9	0.2	0.2	A	0.2	0.2	0.2	0.31	0.91
17-Jan-06	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.4	0.2	0.2	0.3	0.2	0.3	0.2	0.4	0.2	A	0.3	0.2	0.3	0.2	0.29	0.47
18-Jan-06	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.7	0.4	0.4	0.3	0.2	0.3	0.2	0.5	0.4	0.5	A	0.7	1.1	1.1	0.6	0.4	0.44	1.13
19-Jan-06	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.9	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	A	0.7	0.8	0.5	1.2	0.4	0.4	0.42	1.23
20-Jan-06	0.4	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.7	0.6	0.5	0.5	0.4	1.1	1.3	A	0.9	0.3	0.2	0.2	0.3	0.2	0.2	0.48	1.28
21-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.2	0.2	A	0.3	0.6	0.7	3.2	0.5	0.5	0.4	0.5	0.44	3.22
22-Jan-06	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.4	0.3	0.3	A	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.29	0.42
23-Jan-06	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	A	0.5	0.7	0.4	1.4	0.9	1.9	1.6	0.2	0.2	0.3	0.46	1.93
24-Jan-06	0.3	0.2	0.2	0.2	0.2	0.2	0.4	1.5	1.2	0.7	0.6	0.4	A	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.4	0.3	0.2	0.42	1.53
25-Jan-06	0.2	0.2	0.1	0.2	0.1	0.1	0.5	0.5	0.4	0.5	0.2	A	0.2	0.2	0.2	0.3	0.5	1.0	0.6	0.3	0.3	0.2	0.2	0.3	0.32	0.97
26-Jan-06	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	A	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.23	0.34
27-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	A	0.3	0.4	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.26	0.45
28-Jan-06	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.19	0.45
29-Jan-06	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.3	0.4	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.4	0.6	0.3	0.2	0.2	0.1	0.2	0.24	0.65
30-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.4	0.3	0.2	0.3	0.6	0.2	0.25	0.60
31-Jan-06	0.2	0.3	0.3	0.2	0.2	A	0.5	2.2	1.1	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.44	2.20
Hourly Avg	0.24	0.21	0.22	0.23	0.24	0.23	0.34	0.88	0.52	0.51	0.37	0.30	0.28	0.26	0.31	0.37	0.35	0.54	0.43	0.52	0.36	0.32	0.28	0.26		
Hourly Max	0.44	0.32	0.51	0.39	0.72	0.38	0.86	6.91	1.52	2.37	0.92	0.68	0.47	0.41	1.10	1.28	0.74	1.56	1.37	3.22	1.57	1.23	0.63	0.54		

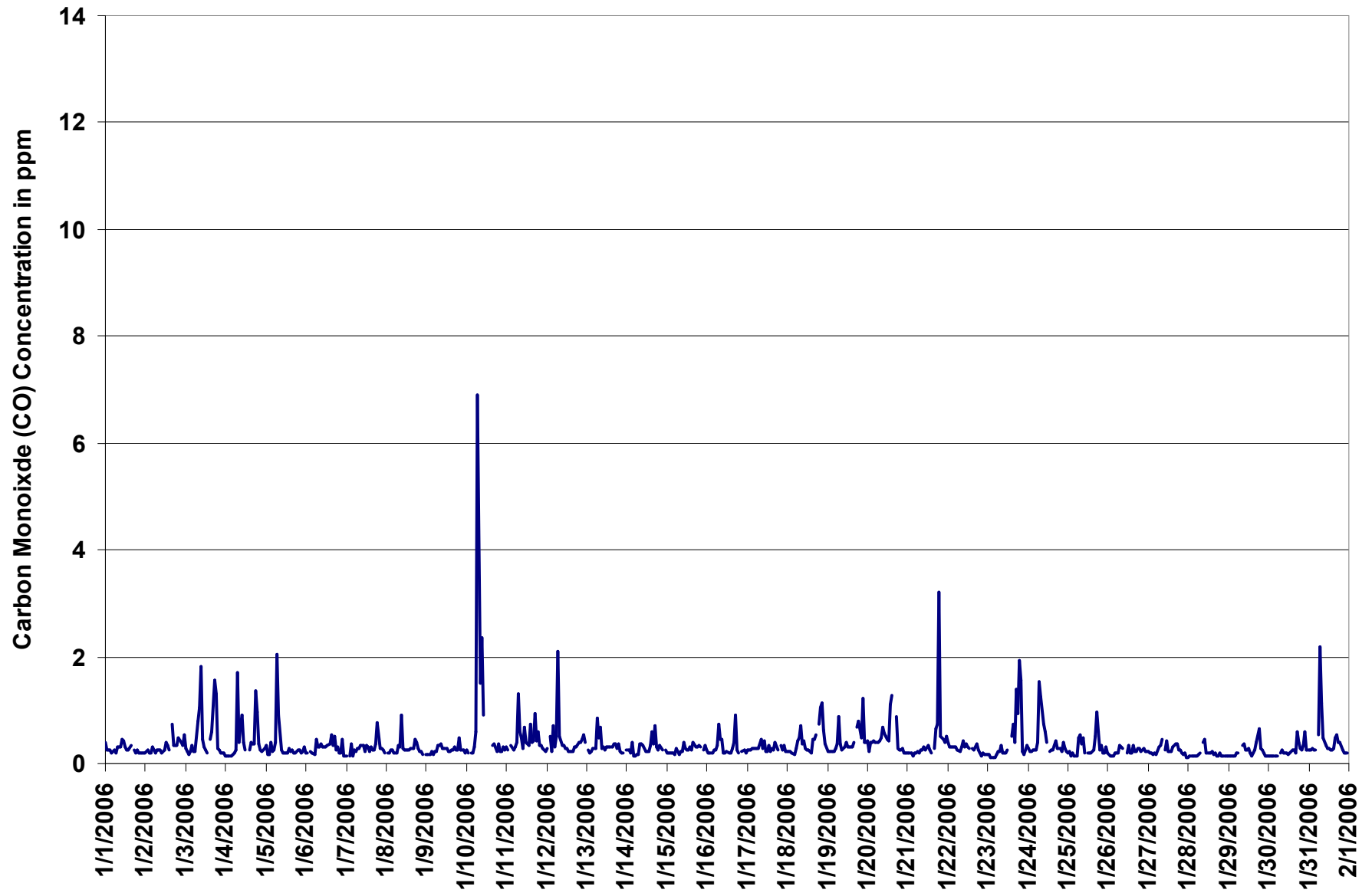
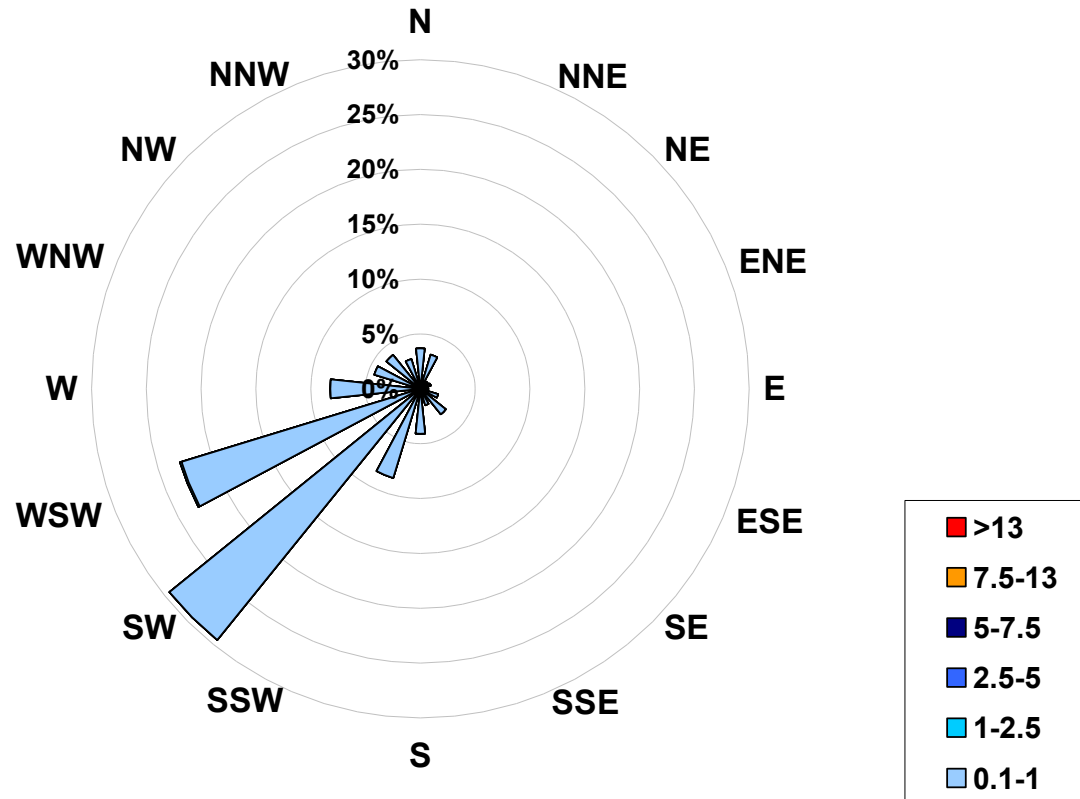


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located at the Crescent Heights Site for January 2006**



**Calms: 0%**

Frequency Distribution of CO in ppm			Frequency (hrs)
Range			
0.1	<	1	707
1	to	2.5	1
2.5	to	5	0
5	to	7.5	0
7.5	to	13	0
	>	13	0
Total Non-Zero Values			708



### PAS - Crescent Heights Carbon Monoxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

#### EIGHT HOUR RUNNING AVERAGE TABLE

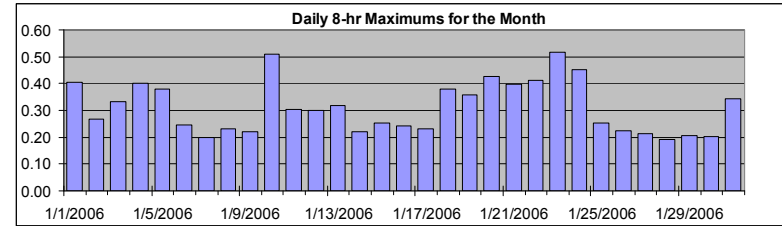
#### Carbon Monoxide (CO)

Monitoring Dates: January 1, 2006 to February 1, 2006

Objective Limit: Alberta Environment: 8-hr 5 ppm

Number of 8-hr Exceedances:	0					
Maximum 8-hr Average:	0.5	ppm	23-Jan	20:00	21:00	

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



**Status Flag Characters**

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

Day	Mountain Standard Time																							Daily Maximum																									
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Jan-06	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.41																							
2-Jan-06	0.2	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	0.3	0.3	0.3	0.27																						
3-Jan-06	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33																							
4-Jan-06	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.40																							
5-Jan-06	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.38																							
6-Jan-06	0.2	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	0.2	0.25																							
7-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20																							
8-Jan-06	0.2	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	0.2	0.23																							
9-Jan-06	0.2	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	0.2	0.22																							
10-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	N	N	N	N	N	N	N	N	N	N	0.2	0.2	0.51																								
11-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30																							
12-Jan-06	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.30																							
13-Jan-06	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32																							
14-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	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																							
15-Jan-06	0.2	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	0.3	0.3	0.2	0.25																							
16-Jan-06	0.2	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	0.2	0.24																							
17-Jan-06	0.2	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	0.2	0.23																							
18-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.38																							
19-Jan-06	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.36																							
20-Jan-06	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.43																							
21-Jan-06	0.2	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	0.3	0.3	0.3	0.4	0.4	0.4	0.40																								
22-Jan-06	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.41																							
23-Jan-06	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	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.52																							
24-Jan-06	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.45																							
25-Jan-06	0.2	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	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.25																							
26-Jan-06	0.2	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	0.2	0.22																							
27-Jan-06	0.2	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	0.2	0.21																							
28-Jan-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.19																							
29-Jan-06	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20																							
30-Jan-06	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20																							
31-Jan-06	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34																							
Hourly Max	0.45	0.43	0.38	0.35	0.33	0.30	0.31	0.32	0.41	0.48	0.47	0.51	0.41	0.41	0.41	0.42	0.43	0.39	0.34	0.42	0.52	0.47	0.46	0.45																									



### PAS - Crescent Heights Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

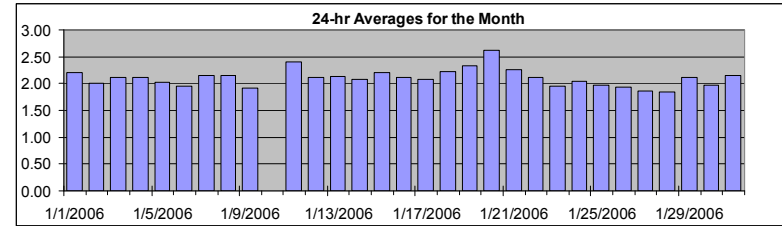
#### HOURLY AVERAGE TABLE

#### Total Hydrocarbons (THC)

Monitoring Dates: January 1, 2006 to February 1, 2006

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

Maximum 1-hr Average:	3.1	ppm	20-Jan	12:00 13:00
Maximum 24-hr Value:	2.6	ppm	20-Jan	



AIC Time:	33 hrs	Operational Time:	705 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	2.8	2.5	2.2	2.0	1.9	1.8	1.7	2.1 ppm	2.0 ppm

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum																								
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
1-Jan-06	2.6	2.5	2.5	2.5	2.2	2.4	2.4	2.4	2.4	2.4	2.4	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.20	2.61																						
2-Jan-06	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.1	2.01	2.16																						
3-Jan-06	2.0	2.1	2.0	2.0	2.2	2.0	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.0	A	2.0	2.2	2.4	2.4	2.4	2.2	2.1	2.0	2.0	2.0	2.11	2.37																						
4-Jan-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.0	2.0	A	2.0	2.1	2.1	2.1	2.5	2.5	2.3	2.2	2.2	2.3	2.3	2.11	2.49																						
5-Jan-06	2.3	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.03	2.29																						
6-Jan-06	1.9	1.9	A	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.01																						
7-Jan-06	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.16	2.55																						
8-Jan-06	A	2.2	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.2	2.1	2.0	2.0	2.0	A	2.14	2.29																							
9-Jan-06	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.94																						
10-Jan-06	2.0	1.9	A	1.9	1.9	2.0	2.0	2.2	C	C	C	A	2.3	2.2	1.9	M	C	C	A	2.0	2.0	2.0	2.0	2.1	N	2.30																							
11-Jan-06	2.2	2.5	A	2.8	2.6	2.6	2.5	2.4	2.5	2.6	2.5	2.4	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.3	2.2	2.3	2.40	2.84																							
12-Jan-06	2.2	A	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.3	2.11	2.39																							
13-Jan-06	A	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	1.9	1.9	1.9	A	2.13	2.35																							
14-Jan-06	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.4	2.4	2.3	A	2.1	2.07	2.40																							
15-Jan-06	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.4	2.3	2.3	2.4	2.3	2.2	2.2	2.2	2.2	A	2.1	2.2	2.20	2.38																							
16-Jan-06	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.12	2.28																						
17-Jan-06	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.08	2.30																							
18-Jan-06	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	A	2.4	2.4	2.7	2.6	2.3	2.23	2.66																							
19-Jan-06	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.1	2.1	A	2.2	2.6	2.5	2.8	2.6	2.7	2.34	2.77																							
20-Jan-06	2.9	2.6	2.6	2.9	2.9	2.8	2.6	2.7	2.8	3.0	3.0	2.9	3.1	2.6	2.3	2.5	A	2.4	2.4	2.3	2.2	2.3	2.2	2.1	2.61	3.08																							
21-Jan-06	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.1	A	2.2	2.1	2.3	2.5	2.5	2.7	2.5	2.7	2.26	2.68																						
22-Jan-06	2.7	2.6	2.6	2.7	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.0	A	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.11	2.74																							
23-Jan-06	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	A	2.1	2.1	2.2	2.3	2.6	2.8	2.5	1.9	1.9	2.0	1.95	2.81																							
24-Jan-06	2.1	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.4	2.3	2.2	2.0	A	1.9	1.8	1.8	1.9	2.0	2.0	1.9	1.9	2.0	2.0	1.9	2.04	2.42																							
25-Jan-06	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.2	1.98	2.21																							
26-Jan-06	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.94	2.00																							
27-Jan-06	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.85	1.98																							
28-Jan-06	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	A	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.85	2.01																						
29-Jan-06	1.8	1.8	1.9	1.9	2.0	2.1	2.1	A	2.5	2.5	2.4	2.4	2.2	2.1	2.0	2.1	2.1	2.1	2.3	2.1	2.0	2.0	2.0	2.0	2.11	2.49																							
30-Jan-06	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	1.97	2.12																							
31-Jan-06	2.1	2.3	2.3	2.3	2.3	A	2.4	2.5	2.5	2.5	2.4	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.15	2.48																							
Hourly Avg	2.09	2.10	2.09	2.13	2.11	2.10	2.12	2.13	2.17	2.18	2.17	2.12	2.11	2.06	2.03	2.04	2.05	2.07	2.10	2.12	2.09	2.09	2.07	2.09																									
Hourly Max	2.95	2.62	2.65	2.86	2.89	2.85	2.65	2.73	2.80	3.01	2.96	2.94	3.08	2.56	2.28	2.55	2.33	2.37	2.55	2.81	2.54	2.77	2.59	2.71																									

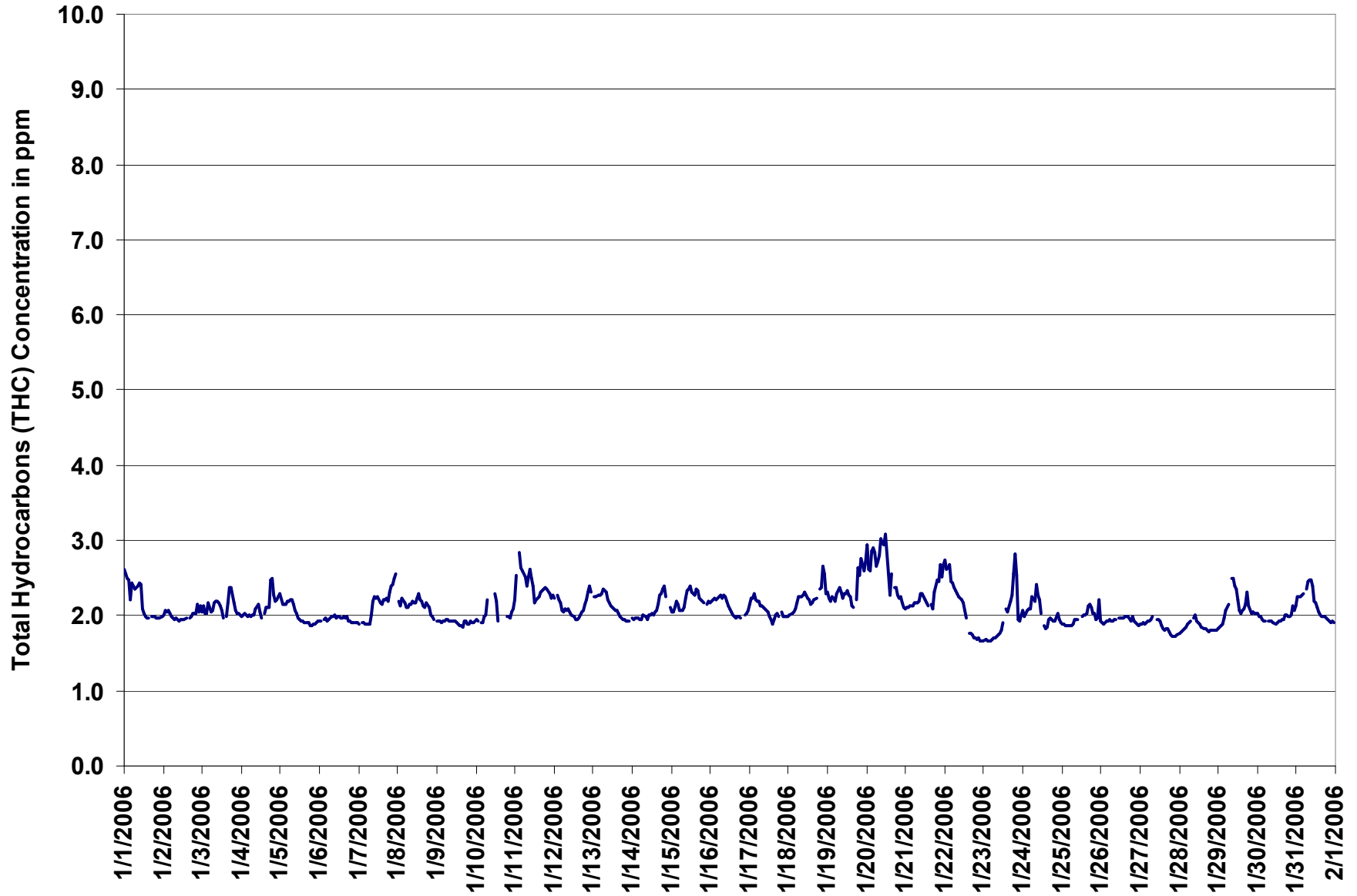


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

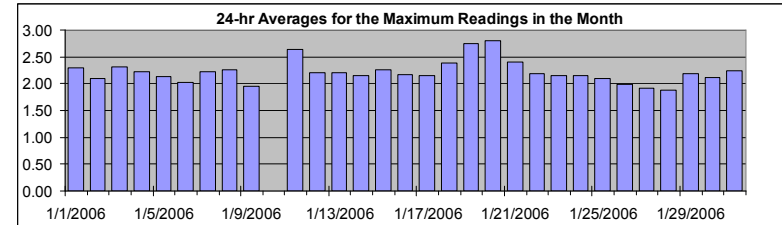
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Total Hydrocarbons (THC)**

Monitoring Dates: January 1, 2006 to February 1, 2006

**Summary**

Maximum 1-hr Value:	5.3	ppm	23-Jan	19:00 20:00
Maximum 24-hr Value:	2.8	ppm	20-Jan	



AIC Time:	33 hrs	Operational Time:	705 hrs						
Calibration Time:	5 hrs	AMD Operational Uptime:	99.9%						
Percentile	99	95	75	50	25	5	1	Average	Median
	3.5	2.8	2.3	2.1	2.0	1.9	1.7	2.2 ppm	2.1 ppm

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	24-hour Average	Daily Maximum
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Jan-06	2.9	2.8	2.6	2.6	2.3	2.6	2.5	2.4	2.5	2.5	2.5	2.4	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.29	2.92
2-Jan-06	2.1	2.1	2.1	2.1	2.2	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.2	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.09	2.33
3-Jan-06	2.1	3.6	2.1	2.1	2.4	2.1	2.1	2.3	2.3	2.6	2.2	2.3	2.1	2.0	A	2.1	2.3	2.8	2.8	2.4	2.2	2.1	2.1	2.0	2.31	3.56	
4-Jan-06	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.4	2.1	2.2	2.5	2.2	2.0	A	2.1	2.2	2.2	2.2	2.8	2.6	2.4	2.3	2.2	2.4	2.22	2.82	
5-Jan-06	2.4	2.2	2.2	2.2	2.3	2.4	3.1	2.5	2.4	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.13	3.07	
6-Jan-06	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.2	2.0	2.0	1.9	1.9	2.0	1.9	2.02	2.22
7-Jan-06	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.22	2.62	
8-Jan-06	A	2.4	2.4	2.7	2.6	2.1	2.1	2.2	2.2	2.5	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	A	2.26	2.73	
9-Jan-06	2.0	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	1.9	2.0	1.95	1.98	
10-Jan-06	2.1	2.0	A	1.9	2.1	2.1	2.1	4.4	C	C	C	A	2.6	2.4	2.0	M	C	C	A	2.1	2.0	2.0	2.3	2.4	N	4.38	
11-Jan-06	2.6	2.7	A	3.2	3.4	3.3	3.3	2.7	2.9	3.1	2.6	2.6	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.64	3.36	
12-Jan-06	2.3	A	2.3	2.2	2.5	2.1	2.1	2.6	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.4	2.5	2.4	2.21	2.61	
13-Jan-06	A	2.4	2.4	2.3	2.3	2.4	2.5	2.5	2.6	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	A	2.21	2.57	
14-Jan-06	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.7	2.4	2.5	2.5	2.3	A	2.2	2.15	2.67	
15-Jan-06	2.1	2.1	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.2	2.3	A	2.2	2.3	2.26	2.43	
16-Jan-06	2.2	2.3	2.3	2.3	2.2	2.3	2.3	2.5	2.3	2.3	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	A	2.0	2.1	2.1	2.18	2.46	
17-Jan-06	2.2	2.3	2.3	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	2.0	2.1	2.1	2.0	A	2.1	2.0	2.1	2.0	2.15	2.42	
18-Jan-06	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.3	A	2.4	2.6	3.5	3.1	3.2	2.39	3.53	
19-Jan-06	2.7	2.3	2.5	2.5	2.6	2.5	2.7	3.4	2.7	2.4	2.3	2.4	2.6	2.5	2.3	2.2	2.2	A	2.3	4.6	2.7	3.6	3.7	3.3	2.75	4.65	
20-Jan-06	3.4	3.0	2.7	3.0	3.0	3.0	2.7	2.8	3.0	3.2	3.1	3.1	3.2	2.9	2.7	2.9	A	2.6	2.5	2.4	2.3	2.4	2.2	2.2	2.79	3.37	
21-Jan-06	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.2	A	3.1	2.4	2.5	3.2	2.7	2.8	2.6	2.8	2.41	3.16	
22-Jan-06	2.8	2.7	2.7	2.7	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.1	2.0	A	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	2.18	2.82	
23-Jan-06	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	2.0	A	2.1	2.2	2.5	2.6	2.7	5.3	3.2	2.1	2.0	2.1	2.15	5.26	
24-Jan-06	2.1	2.1	2.1	2.2	2.2	2.2	2.4	2.6	2.6	2.6	2.3	2.2	A	2.0	1.8	1.9	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.15	2.62	
25-Jan-06	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.0	A	2.0	2.1	2.1	2.1	2.2	2.4	2.3	2.1	2.1	2.0	2.0	3.5	2.11	3.54	
26-Jan-06	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	1.9	1.98	2.07	
27-Jan-06	1.9	2.1	2.0	1.9	1.9	1.9	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.8	1.8	1.7	1.7	1.8	1.8	1.91	2.06	
28-Jan-06	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.88	2.08	
29-Jan-06	1.9	1.9	1.9	1.9	2.0	2.2	2.3	A	2.6	2.6	2.4	2.4	2.4	2.1	2.1	2.1	2.2	2.7	2.3	2.1	2.1	2.1	2.1	2.1	2.19	2.70	
30-Jan-06	2.1	2.0	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	4.1	2.1	2.11	4.13	
31-Jan-06	2.2	2.3	2.3	2.3	2.4	A	2.4	2.8	2.7	2.5	2.5	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.23	2.78	
Hourly Avg	2.20	2.24	2.18	2.21	2.23	2.19	2.24	2.36	2.28	2.31	2.24	2.21	2.18	2.14	2.10	2.11	2.16	2.19	2.21	2.36	2.19	2.20	2.25	2.25			
Hourly Max	3.37	3.56	2.73	3.22	3.36	3.27	3.26	4.38	2.98	3.25	3.10	3.13	3.20	2.87	2.68	2.88	3.08	2.80	2.82	5.26	3.23	3.56	4.13	3.54			



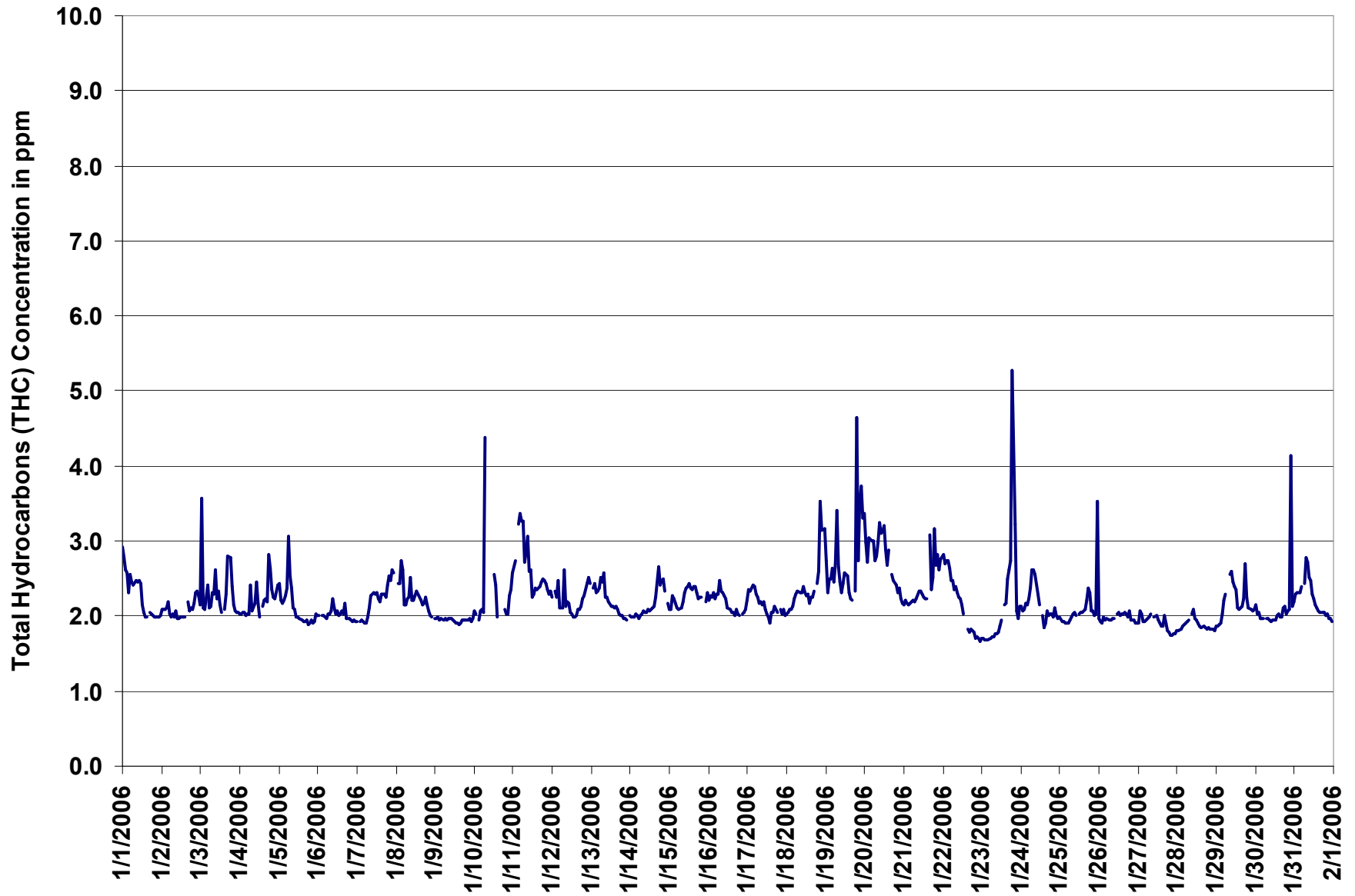
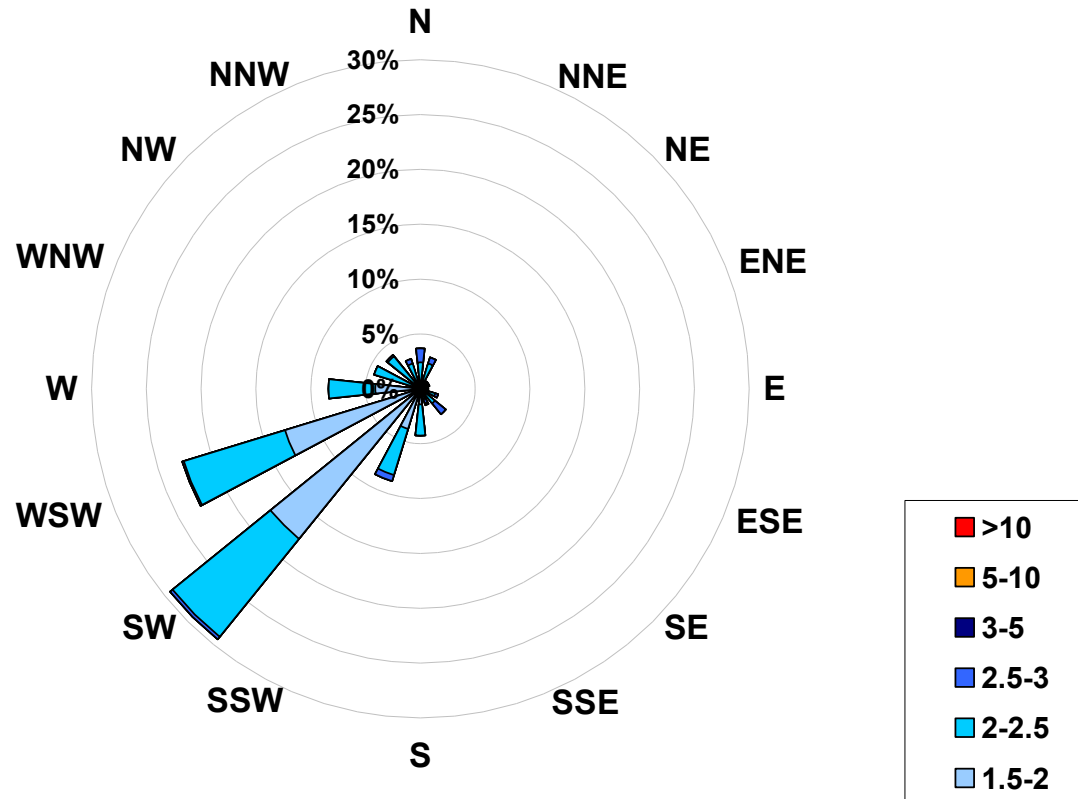


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Total Hydrocarbons (in ppm) Located at the Crescent Heights Site for January 2006**



**Calms: 0%**

Frequency Distribution of THC in ppm			Frequency (hrs)
Range			
1.5	<	2	288
2	to	2.5	373
2.5	to	3	42
3	to	5	2
5	to	10	0
	>	10	0
Total Non-Zero Values			705



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

Station: Crescent Heights  
 Station Owner: PAS

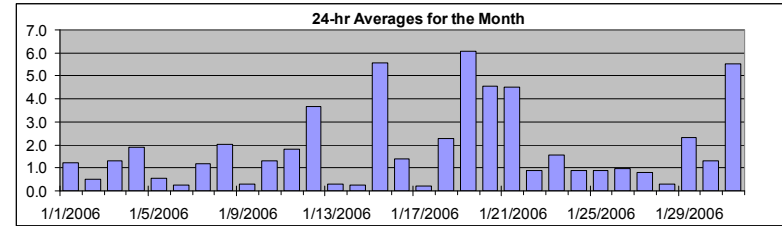
### HOURLY AVERAGE TABLE

### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: January 1, 2006 to February 1, 2006

Draft Objective Limit: Alberta Environment: 1-hr - μg/m<sup>3</sup> 24-hr 30 μg/m<sup>3</sup>  
 Summary

Number of 24-hr Exceedances (draft):	0
Maximum 1-hr Average:	17.3 μg/m <sup>3</sup> 31-Jan 3:00 4:00
Maximum 24-hr Value:	6.1 μg/m <sup>3</sup> 19-Jan



AIC Time:	0 hrs							Operational Time:	738 hrs		
Calibration Time:	0 hrs							AMD Operational Uptime:	99.2%		
Percentile	99	95	75	50	25	5	1	Average / Median		Geomean	
	11.9	7.7	2.6	0.7	0.0	0.0	0.0	1.8	2 μg/m <sup>3</sup>	1.2 μg/m <sup>3</sup>	

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
	Hour Start Hour End	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00			23:00 0:00
1-Jan-06	4	0	0	0	1	2	2	4	2	3	5	3	1	1	0	1	0	0	0	0	0	0	0	0	0	1.2	4.9
2-Jan-06	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	2	2	0	0	3	0	0	0	2	0.5	2.5	
3-Jan-06	0	0	0	0	0	0	3	2	2	3	2	2	2	2	1	1	3	3	4	0	0	0	0	1.3	3.9		
4-Jan-06	0	0	0	1	1	2	2	3	3	4	2	0	0	3	3	4	2	6	3	1	1	0	1	1.9	6.3		
5-Jan-06	1	0	0	0	0	0	0	0	0	D	D	0	0	1	2	0	0	2	0	2	0	1	2	0.6	2.5		
6-Jan-06	0	0	0	1	0	0	0	1	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	2.0		
7-Jan-06	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	3	3	4	2	2	2	2	2	1.2	4.3		
8-Jan-06	3	1	2	2	1	2	2	3	2	5	5	3	4	3	1	3	1	1	2	2	0	0	0	2.0	4.7		
9-Jan-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	2	1	0	0	1	0	0.3	2.4		
10-Jan-06	0	0	0	0	0	0	11	0	1	1	4	10	2	1	0	0	0	1	0	0	0	0	0	1.3	11.2		
11-Jan-06	0	0	0	0	0	0	0	0	2	2	1	2	2	3	2	2	2	2	4	3	5	4	4	1.8	4.6		
12-Jan-06	4	5	3	2	3	3	3	3	4	5	4	3	2	4	3	2	3	6	1	2	5	8	6	3.7	7.8		
13-Jan-06	1	1	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0.3	1.4		
14-Jan-06	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	2	1	0.2	1.7		
15-Jan-06	0	1	0	1	3	2	2	4	7	9	6	3	3	5	8	10	10	7	9	8	8	8	9	5.6	10.1		
16-Jan-06	8	6	7	4	1	2	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	8.1		
17-Jan-06	0	0	0	0	3	0	D	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	2.9		
18-Jan-06	0	0	0	0	0	0	0	2	2	3	2	0	1	1	1	4	5	4	3	4	7	7	3	2.3	7.1		
19-Jan-06	1	1	2	3	5	5	5	6	7	8	8	8	6	10	8	6	6	8	8	7	7	8	6	6.1	10.2		
20-Jan-06	9	4	5	14	13	7	4	2	4	8	8	4	3	0	0	1	2	2	1	2	1	3	5	4.6	13.8		
21-Jan-06	2	4	4	3	4	4	4	5	3	7	6	3	2	2	3	0	0	1	7	6	9	15	9	4.5	14.8		
22-Jan-06	6	4	3	2	2	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.9	5.7		
23-Jan-06	0	0	0	0	0	0	1	0	2	1	0	1	3	2	3	2	0	2	4	7	5	2	0	1.6	7.1		
24-Jan-06	0	1	0	0	0	0	0	1	3	3	4	4	1	1	2	1	0	0	0	0	0	0	0	0.9	4.3		
25-Jan-06	0	0	0	0	0	0	1	0	1	0	0	0	0	1	3	0	3	5	5	0	2	0	0	0.9	5.3		
26-Jan-06	0	1	0	1	1	0	1	1	2	3	2	0	0	0	0	2	2	1	2	3	1	0	1	1.0	3.3		
27-Jan-06	0	0	0	0	0	0	0	1	0	0	1	1	0	1	1	4	3	3	1	0	0	1	0	0.8	4.0		
28-Jan-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	2	0	0.3	2.1		
29-Jan-06	0	0	0	0	3	3	5	7	6	6	5	4	1	0	0	0	2	4	9	2	1	0	0	2.3	8.9		
30-Jan-06	0	0	D	0	0	0	0	1	2	2	1	1	0	1	1	2	2	3	2	3	5	5	0	1.3	5.2		
31-Jan-06	2	9	16	17	12	11	10	13	14	10	8	0	0	0	0	0	0	0	0	D	0	D	0	5.5	17.3		
Hourly Avg	1.4	1.2	1.4	1.7	1.7	1.4	2.1	1.9	2.4	2.8	2.6	2.0	1.2	1.3	1.5	1.7	1.8	2.1	2.4	2.1	1.9	2.2	1.6	1.4			
Hourly Max	9.4	8.5	15.9	17.3	12.7	11.2	11.2	13.0	13.6	10.1	8.2	10.2	6.0	10.2	8.3	10.1	9.9	8.5	8.9	8.5	8.6	14.8	9.3	9.5			

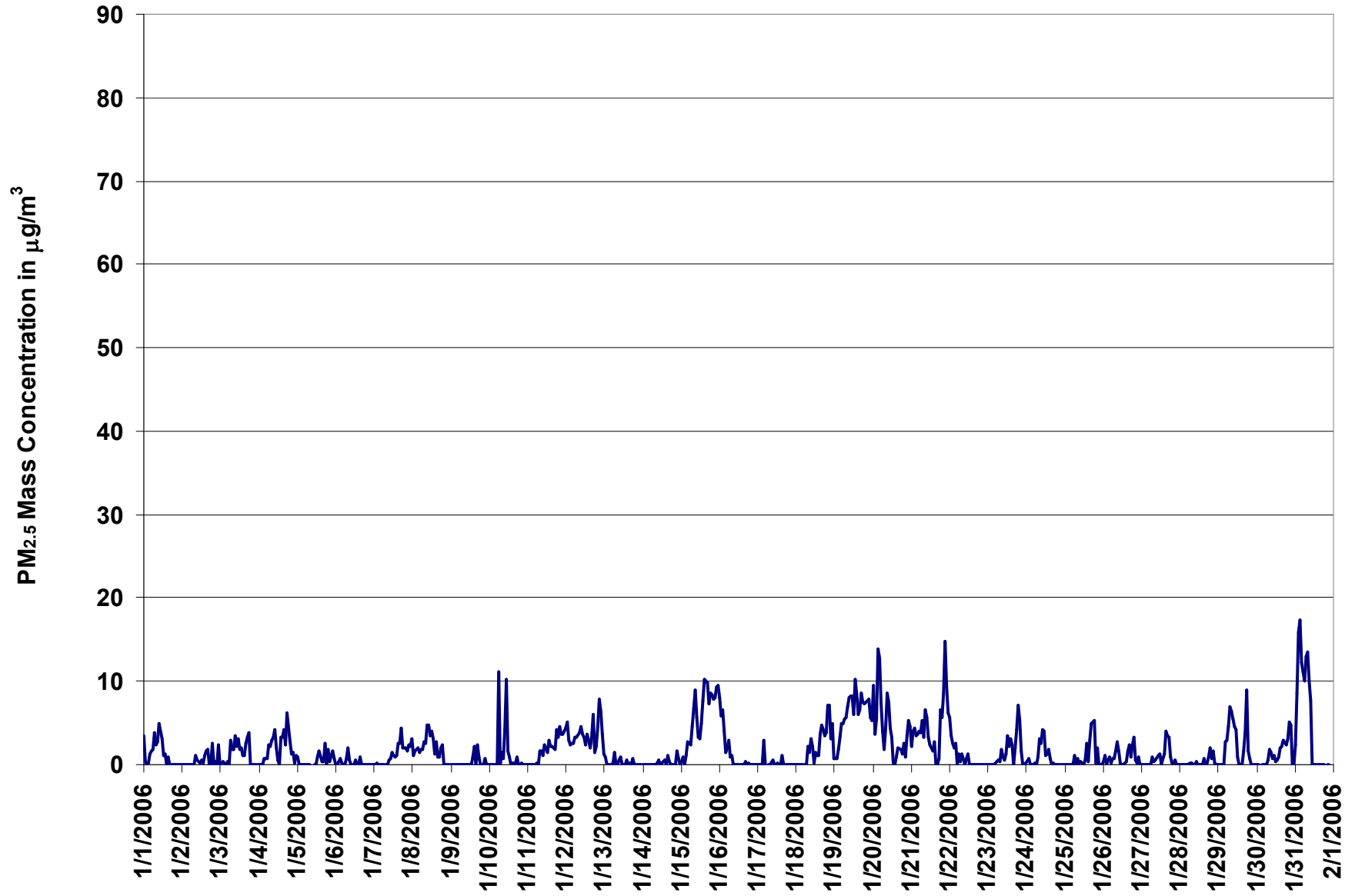


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

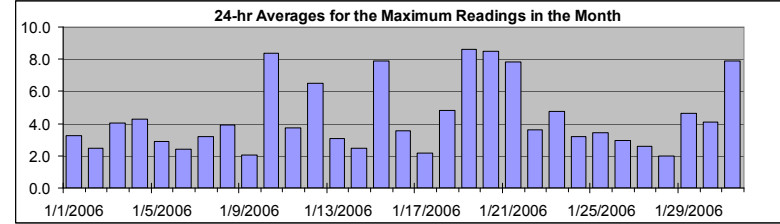
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Particulate Matter (PM<sub>2.5</sub>)**

Monitoring Dates: January 1, 2006 to February 1, 2006

**Summary**

Maximum 1-hr Average:	54.2	µg/m <sup>3</sup>	10-Jan	6:00 7:00
Maximum 24-hr Value:	8.6	µg/m <sup>3</sup>	19-Jan	



AIC Time:	0 hrs	Operational Time:	738 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	99.2%						
Percentile	99	95	75	50	25	5	1	Average / Median	Geomean
	19.0	11.4	5.7	3.3	1.6	0.3	0.0	4.4	4 µg/m <sup>3</sup>
									3.9 µg/m <sup>3</sup>

**Status Flag Characters**

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

**Day Mountain Standard Time**

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum	
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Jan-06	14	2	1	3	3	3	3	7	4	5	8	7	4	4	4	2	1	0	0	0	1	1	0	0	3.3	13.9	
2-Jan-06	0	1	2	1	2	1	1	2	2	2	2	2	2	3	3	4	4	2	2	9	2	1	1	9	2.5	8.8	
3-Jan-06	2	3	2	2	6	2	13	4	5	6	4	6	4	4	2	4	6	9	8	1	2	2	1	1	4.1	13.0	
4-Jan-06	0	1	3	3	2	2	9	4	4	5	7	4	3	2	6	6	7	5	10	5	4	3	1	5	4.3	10.1	
5-Jan-06	3	0	0	2	1	1	1	9	2	D	D	2	2	1	5	4	3	3	6	2	5	3	3	5	3	2.9	9.2
6-Jan-06	3	2	2	4	2	3	5	4	6	3	2	2	5	3	3	2	4	2	0	0	0	0	0	0	2.4	5.6	
7-Jan-06	0	1	1	3	2	0	5	1	1	4	5	4	4	3	4	5	5	6	4	4	3	3	3	4	3.2	6.5	
8-Jan-06	5	3	3	4	3	5	3	5	5	7	6	5	7	5	3	4	3	3	7	7	0	1	0	0	3.9	7.3	
9-Jan-06	0	0	0	0	0	0	1	1	1	1	1	1	1	2	5	6	4	8	4	2	2	4	2	2	2.1	8.4	
10-Jan-06	2	1	2	2	1	1	54	13	5	5	35	44	6	7	4	3	3	4	1	2	2	1	2	4	8.4	54.2	
11-Jan-06	1	0	2	1	3	0	4	2	4	4	4	6	4	6	4	4	4	4	6	5	7	5	5	6	3.8	6.8	
12-Jan-06	6	7	6	4	4	4	5	5	6	8	7	6	5	6	5	5	5	10	4	10	9	10	10	9	6.5	10.3	
13-Jan-06	6	3	1	3	2	4	7	5	2	2	7	6	6	2	3	1	3	1	2	1	1	0	1	2	3.1	6.8	
14-Jan-06	1	0	2	1	1	1	4	1	2	2	2	3	4	2	2	1	4	3	0	0	1	4	8	7	2.5	8.0	
15-Jan-06	2	4	2	4	4	5	5	6	11	12	8	5	5	10	11	12	11	9	11	10	9	11	11	11	7.9	12.4	
16-Jan-06	11	8	8	8	4	4	11	3	2	2	2	1	4	2	2	3	3	1	2	0	0	1	1	0	3.5	11.0	
17-Jan-06	2	5	1	1	12	2	D	0	2	2	3	4	2	1	0	4	0	2	2	1	2	2	0	0	2.2	11.7	
18-Jan-06	1	1	2	1	2	1	2	5	3	4	6	2	4	4	2	6	7	7	5	7	14	11	6	10	4.8	14.1	
19-Jan-06	2	2	4	5	7	9	7	8	9	10	12	11	10	13	10	9	9	10	10	12	11	12	8	7	8.6	12.5	
20-Jan-06	19	6	8	22	17	12	6	4	10	14	12	18	8	5	3	4	4	4	3	4	4	5	7	6	8.5	22.5	
21-Jan-06	4	6	6	5	5	5	6	8	5	8	8	5	7	4	5	3	2	10	9	10	21	21	15	10	7.8	21.4	
22-Jan-06	10	5	7	6	8	1	10	11	6	1	3	3	2	1	2	1	1	0	1	1	1	6	1	0	3.6	10.5	
23-Jan-06	1	2	2	2	3	3	3	2	7	3	3	3	8	5	6	5	4	6	10	10	12	6	1	6	4.8	11.7	
24-Jan-06	3	5	4	4	1	3	1	7	6	5	8	7	3	4	4	4	1	3	1	1	1	1	0	0	3.2	7.6	
25-Jan-06	1	0	1	0	2	1	7	0	3	2	4	3	3	4	6	5	6	11	9	3	4	2	3	5	3.5	11.5	
26-Jan-06	4	3	3	4	3	2	3	2	3	4	4	3	2	3	2	3	4	3	5	5	2	2	2	0	3.0	5.5	
27-Jan-06	2	5	1	1	1	2	1	3	1	2	3	3	3	3	4	6	5	6	3	1	1	2	1	1	2.6	5.8	
28-Jan-06	1	1	1	1	0	0	4	6	1	1	3	0	2	2	2	0	3	4	5	3	3	2	1	2.0	5.5		
29-Jan-06	1	1	2	2	7	6	8	10	9	7	6	7	7	1	0	1	4	8	13	5	2	1	2	1	4.6	13.2	
30-Jan-06	1	1	D	0	1	0	3	3	3	4	3	3	2	2	6	8	4	6	4	10	11	7	7	5	4.1	11.4	
31-Jan-06	6	14	18	21	17	15	12	17	16	12	10	5	2	3	1	1	1	0	1	D	0	0	D	0	7.9	21.4	
Hourly Avg	3.7	3.0	3.3	3.8	4.1	3.1	6.7	5.1	4.7	4.9	6.2	6.0	4.2	3.9	3.8	4.2	4.0	4.9	4.6	4.6	4.4	4.2	3.6	3.8			
Hourly Max	19.5	13.8	18.1	22.5	16.9	14.9	54.2	17.0	15.9	14.3	35.5	44.1	9.8	12.5	11.0	12.4	11.4	11.5	13.2	12.5	21.4	20.8	14.9	10.9			

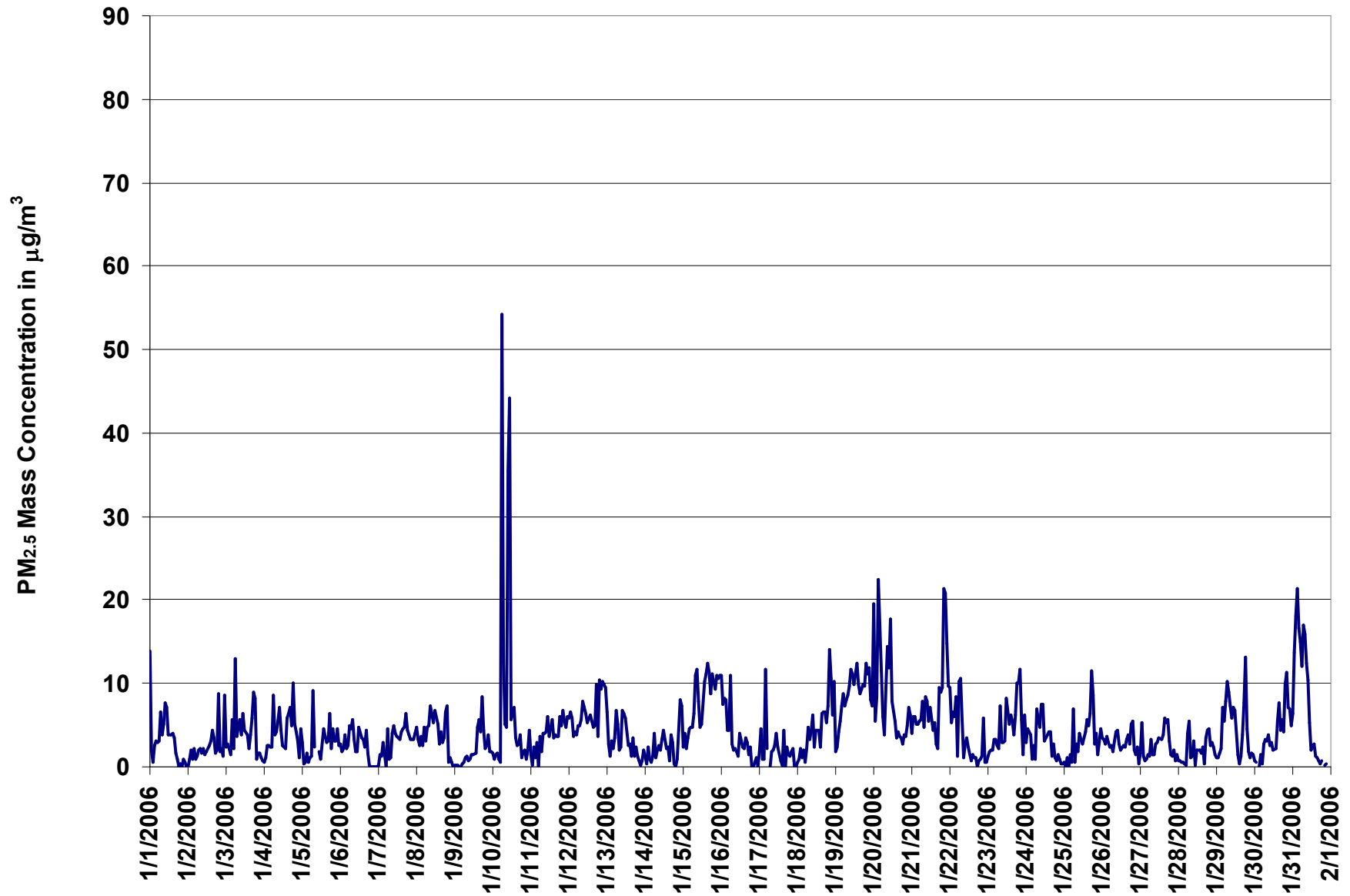
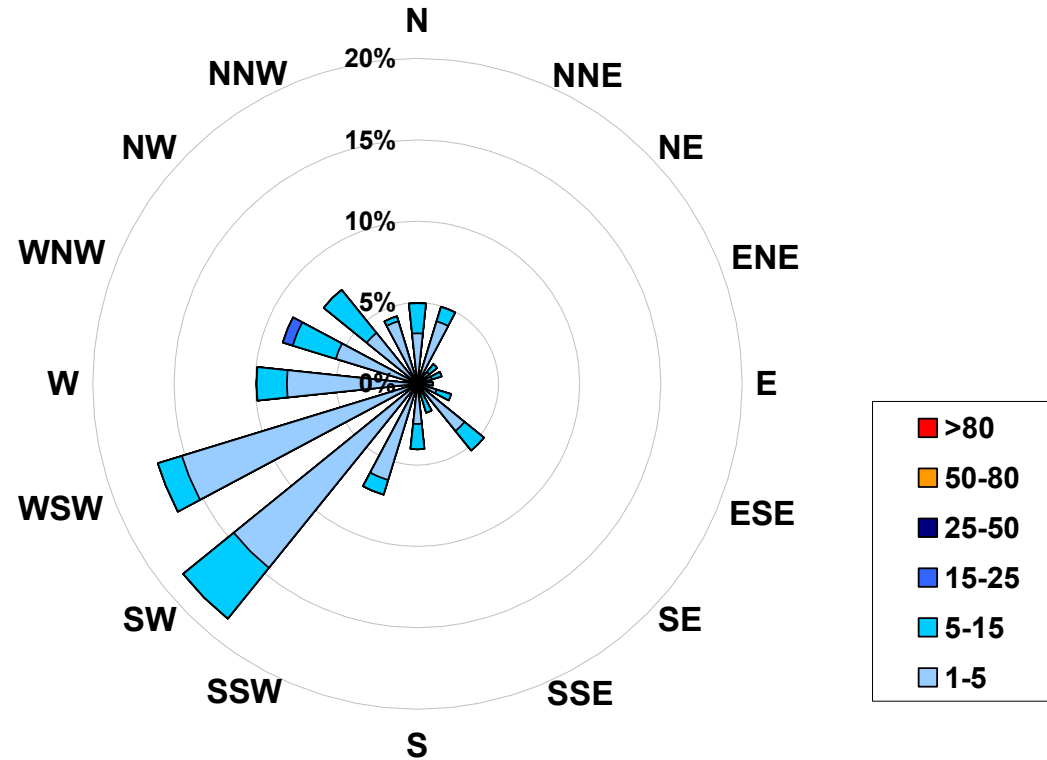


Figure 12. PAS - Cresent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



**1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Crescent Heights Site for January 2006**



**Calms: 0%**

Frequency Distribution of PM <sub>2.5</sub> in µg/m <sup>3</sup>			
Range			Frequency (hrs)
1.0	<	5	658
5	to	15	78
15	to	25	2
25	to	50	0
50	to	80	0
	>	80	0
Total Non-Zero Values			738



### PAS - Crescent Heights Relative Humidity Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

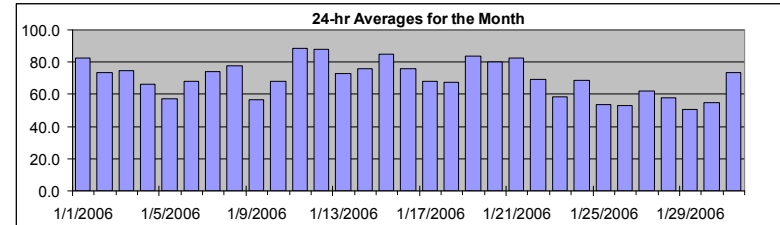
#### HOURLY AVERAGE TABLE

#### Relative Humidity (RH)

Monitoring Dates: January 1, 2006 to February 1, 2006

#### Summary

Maximum 1-hr Average:	90.9	%	12-Jan	8:00 9:00
Maximum 24-hr Value:	88.5	%	11-Jan	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	90.3	88.9	81.4	70.9	61.8	46.9	37.2	70.0 %	70.9 %

#### Status Flag Characters

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

Day	Mountain Standard Time																							24-hour Average	Daily Maximum		
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-06	88	87	87	87	87	87	88	89	89	90	91	91	89	85	76	74	79	79	74	76	76	74	72	72		82.8	90.8
2-Jan-06	71	75	75	73	71	69	68	67	67	67	65	63	65	67	68	71	75	79	85	85	83	86	84	84		73.5	85.6
3-Jan-06	82	82	79	78	80	78	79	79	80	79	76	71	66	63	60	59	70	78	81	76	74	75	75	74		74.7	82.3
4-Jan-06	71	72	71	68	66	67	71	74	74	71	67	68	61	49	50	47	55	63	70	70	72	74	72	68		66.3	74.5
5-Jan-06	70	71	71	72	71	70	66	63	56	45	38	42	43	46	53	51	51	51	54	56	59	61	60	58		57.5	71.6
6-Jan-06	59	61	63	63	65	65	69	72	74	72	69	71	73	67	65	67	70	69	66	68	69	70	73	73		68.1	74.2
7-Jan-06	73	70	69	72	73	73	71	78	77	79	73	69	68	66	65	69	73	77	78	79	80	80	83	84		74.1	83.7
8-Jan-06	84	85	85	86	87	88	87	85	83	82	82	83	76	72	66	65	68	74	79	77	73	71	69	66		78.0	87.8
9-Jan-06	66	62	61	64	63	61	59	57	55	55	54	52	50	49	49	52	54	51	50	50	59	62	64	67		56.9	67.2
10-Jan-06	70	71	71	69	70	73	75	74	74	73	70	72	72	61	56	55	52	62	66	67	70	68	69	73		68.0	75.2
11-Jan-06	77	87	89	89	90	89	89	89	90	90	90	89	89	89	89	89	90	90	89	88	88	87	88	89		88.5	90.5
12-Jan-06	90	90	90	90	89	88	89	90	91	90	89	89	89	88	88	88	88	87	86	85	83	83	82	83		87.8	90.9
13-Jan-06	84	84	85	86	86	85	83	74	66	63	62	61	61	61	63	66	66	70	72	71	74	75	75	75		72.8	86.2
14-Jan-06	74	74	74	77	78	79	79	76	77	72	67	64	64	62	64	68	70	74	82	86	89	91	90	89		75.9	90.5
15-Jan-06	89	89	88	87	88	89	88	88	87	85	83	81	80	80	80	81	84	85	84	85	85	86	86	86		85.0	89.1
16-Jan-06	86	86	86	85	83	83	83	83	83	78	71	72	71	66	62	63	68	73	73	73	73	71	71	73		75.7	85.9
17-Jan-06	74	75	74	75	83	90	80	69	72	71	64	59	54	52	49	52	58	61	63	68	72	72	71	72		67.9	89.5
18-Jan-06	73	72	70	69	71	71	70	68	68	70	62	54	52	52	52	58	64	68	72	73	73	75	73	88		67.4	87.8
19-Jan-06	90	90	89	87	85	85	84	83	82	82	77	76	80	81	79	81	82	82	84	85	87	86	84	83		83.5	90.3
20-Jan-06	82	81	81	80	80	81	81	80	80	81	82	80	78	72	69	77	79	81	83	84	83	82	83	83		80.1	84.1
21-Jan-06	83	84	84	85	85	84	84	84	84	84	84	85	83	81	82	82	80	84	84	83	80	78	77	77		82.4	84.7
22-Jan-06	76	76	77	79	82	82	79	73	68	67	66	66	59	58	60	62	65	69	68	68	69	67	64	64		69.3	82.0
23-Jan-06	65	65	60	59	59	56	57	56	57	57	53	51	51	52	53	54	51	54	59	68	67	67	63	64		58.2	67.6
24-Jan-06	69	68	73	73	71	72	76	74	75	71	67	67	64	62	59	57	58	64	67	69	72	79	76	71		68.9	79.0
25-Jan-06	69	70	66	65	60	60	60	58	58	54	46	43	37	34	37	40	44	49	56	56	60	58	57	50		53.7	69.8
26-Jan-06	46	53	53	55	59	62	61	64	63	56	54	49	41	37	35	35	38	42	49	63	64	65	66	66		53.1	66.3
27-Jan-06	68	69	71	72	72	70	68	69	70	67	62	56	51	48	46	47	51	55	55	56	62	65	67	69		61.9	72.3
28-Jan-06	71	69	70	72	70	67	65	67	69	67	57	46	43	45	47	50	50	47	47	51	57	56	57	55		58.1	72.3
29-Jan-06	58	63	63	48	47	52	58	66	71	67	62	55	47	38	32	26	27	35	46	49	50	54	53	53		50.9	70.9
30-Jan-06	52	51	50	47	50	51	53	52	51	51	49	48	49	47	46	43	38	46	52	58	73	86	87	83		54.6	87.1
31-Jan-06	82	80	79	82	87	85	84	84	84	83	82	83	72	62	63	60	65	65	66	67	65	63	64	62		73.7	87.0
Hourly Avg	73.9	74.5	74.4	73.9	74.4	74.5	74.2	73.7	73.5	71.6	68.3	66.4	63.7	61.1	60.1	61.0	63.4	66.5	69.0	70.6	72.2	73.0	72.7	72.6			
Hourly Max	90.3	90.2	89.8	89.5	89.6	89.5	89.1	90.2	90.9	90.5	90.8	90.7	89.3	88.7	88.7	89.3	90.3	89.9	88.7	88.1	88.8	90.5	90.2	89.1			



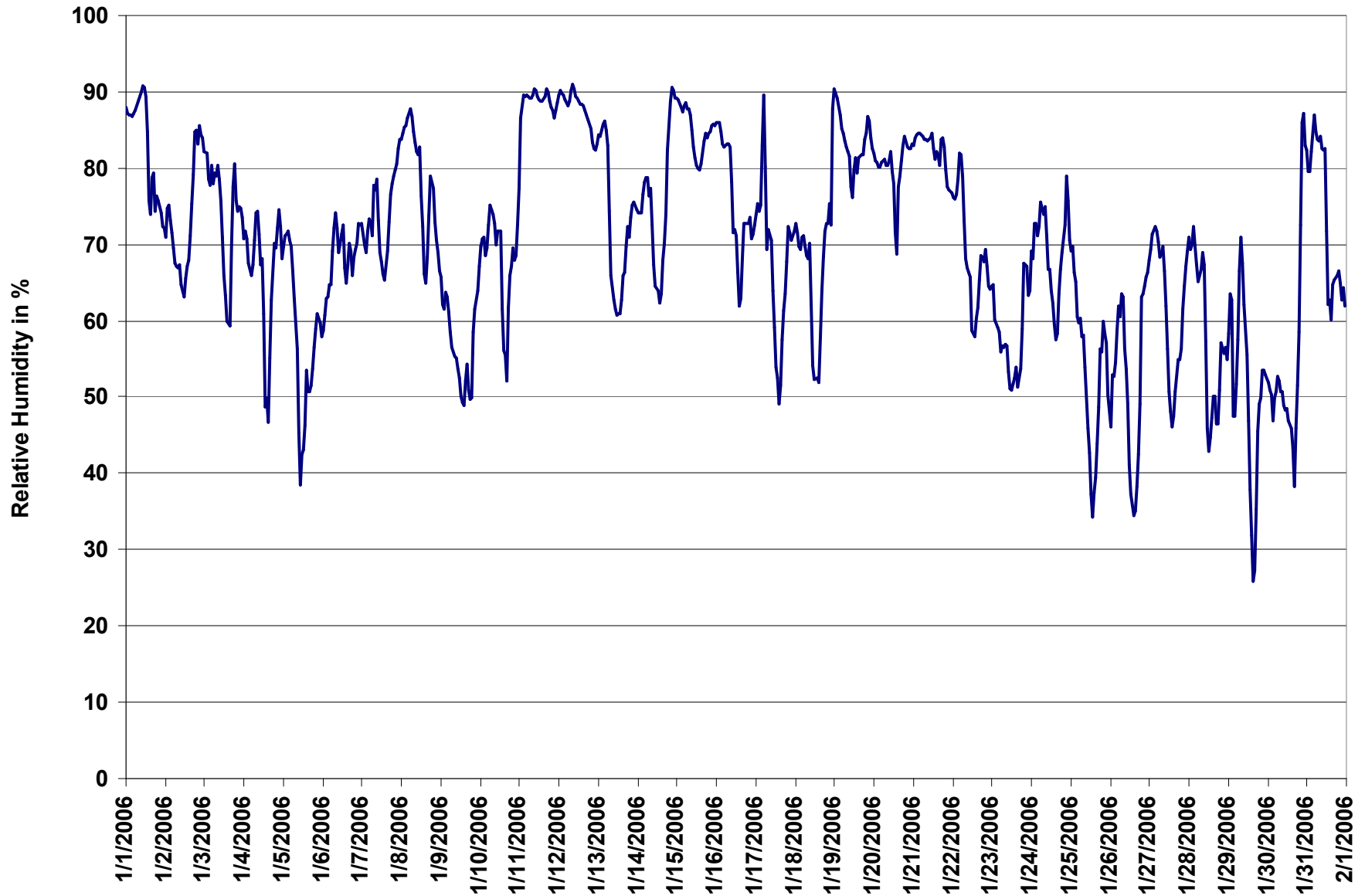


Figure 13. PAS - Cresent Heights Relative Humidity 1-hr Average Monthly Trend



### PAS - Cresent Heights Temperature Monthly Summary

Station: Cresent Heights  
 Station Owner: PAS

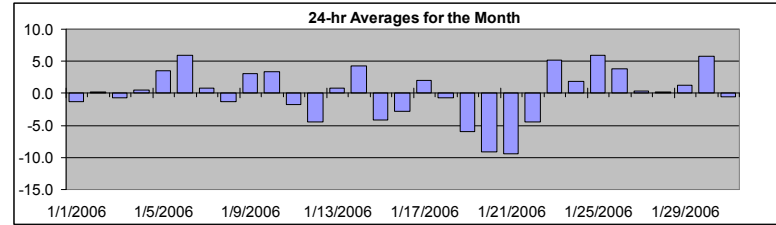
#### HOURLY AVERAGE TABLE

#### Ambient Temperature (T)

Monitoring Dates: January 1, 2006 to February 1, 2006

#### Summary

Maximum 1-hr Average:	13.3 °C	25-Jan	14:00 15:00
Maximum 24-hr Value:	6.0 °C	6-Jan	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	10.5	7.9	3.8	0.2	-3.0	-8.7	-13.9	0.1 °C	0.2 °C

#### Status Flag Characters

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

#### Day Mountain Standard Time

Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-hour Average	Daily Maximum
1-Jan-06	-5	-6	-6	-6	-6	-6	-5	-4	-3	-3	-1	1	2	3	5	5	3	1	1	0	0	0	0	0	-1.3	4.6
2-Jan-06	-1	-2	-2	-1	-1	0	0	0	0	1	2	3	3	3	3	3	2	2	0	-1	0	-2	-2	-3	0.2	3.4
3-Jan-06	-3	-3	-2	-1	-2	-2	-3	-3	-4	-3	-2	1	3	4	5	5	2	0	0	-1	-2	-2	-2	-2	-0.7	5.5
4-Jan-06	-2	-3	-3	-2	-1	-1	-1	0	0	1	2	3	4	6	5	6	5	2	0	-1	-2	-2	-3	-2	0.4	6.1
5-Jan-06	-2	-2	-3	-3	-3	-2	-1	0	2	5	6	6	6	6	6	8	8	8	7	7	7	6	7	7	3.6	8.1
6-Jan-06	7	6	6	6	6	7	6	5	4	5	6	5	6	7	7	7	7	6	7	6	6	5	4	4	6.0	7.4
7-Jan-06	4	5	5	4	4	4	4	3	2	-1	-1	0	1	1	1	0	-1	-1	-2	-2	-2	-3	-3	0.9	4.9	
8-Jan-06	-3	-3	-3	-3	-4	-4	-4	-3	-3	-3	-2	-2	0	1	2	2	1	0	-1	0	1	0	0	0	-1.3	2.4
9-Jan-06	0	1	1	1	0	1	1	1	2	2	3	4	5	6	6	6	5	6	6	6	4	3	3	2	3.1	6.3
10-Jan-06	1	1	1	1	1	0	0	0	1	2	2	3	4	7	8	9	9	6	5	4	4	4	4	3	3.3	9.3
11-Jan-06	1	-3	-4	-3	-3	-4	-4	-4	-3	-2	-2	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1.7	1.1
12-Jan-06	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-3	-2	-2	-2	-3	-4	-6	-6	-7	-8	-10	-11	-11	-11	-4.4	-1.6
13-Jan-06	-10	-9	-8	-7	-6	-4	-2	-1	0	2	3	4	5	6	6	5	6	5	4	5	4	4	4	5	0.8	5.7
14-Jan-06	5	5	5	4	4	4	3	4	3	4	6	7	8	9	9	8	7	6	4	2	-1	-2	-2	-2	4.2	9.2
15-Jan-06	-2	-2	-2	-3	-4	-5	-5	-5	-5	-6	-6	-5	-5	-5	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-4.1	-2.0
16-Jan-06	-3	-3	-3	-3	-3	-3	-4	-5	-6	-5	-4	-2	-1	0	1	1	0	-2	-2	-3	-4	-4	-4	-5	-2.7	1.4
17-Jan-06	-5	-4	-4	-3	-1	0	1	2	1	2	4	6	8	8	8	7	5	4	3	2	1	1	0	0	2.0	8.2
18-Jan-06	-1	-1	-1	-1	-2	-3	-4	-4	-3	-3	-1	1	2	3	3	2	1	0	0	-1	-1	-1	-1	-2	-0.7	2.9
19-Jan-06	-2	-2	-3	-5	-6	-7	-7	-7	-8	-7	-6	-5	-7	-6	-4	-5	-5	-5	-5	-6	-7	-8	-10	-11	-6.0	-1.7
20-Jan-06	-11	-12	-13	-14	-14	-13	-12	-13	-13	-10	-8	-6	-5	-3	-3	-6	-7	-8	-8	-7	-7	-8	-9	-8	-9.1	-3.0
21-Jan-06	-9	-9	-8	-9	-9	-9	-9	-9	-9	-9	-8	-6	-4	-6	-6	-7	-8	-10	-11	-12	-14	-16	-16	-17	-9.5	-4.3
22-Jan-06	-18	-18	-17	-15	-11	-10	-9	-8	-6	-5	-4	-2	1	2	3	3	2	0	0	0	0	2	3	3	-4.4	2.9
23-Jan-06	3	3	4	5	5	5	5	5	5	6	7	8	9	9	9	9	8	6	4	3	2	1	1	0	5.1	9.4
24-Jan-06	-2	-2	-3	-3	-3	-4	-4	-4	-4	-2	1	5	7	8	9	10	9	7	5	4	3	1	2	3	1.8	9.7
25-Jan-06	3	3	3	3	3	3	3	3	3	4	7	9	11	13	13	13	10	8	5	5	4	4	3	4	5.9	13.3
26-Jan-06	5	4	4	4	3	2	2	1	1	4	5	7	8	8	8	8	6	5	3	1	1	1	0	0	3.8	8.2
27-Jan-06	-1	-1	-2	-2	-2	-2	-2	-2	-2	-1	0	2	4	5	6	5	4	3	2	1	0	-1	-2	-2	0.3	5.5
28-Jan-06	-3	-3	-3	-4	-4	-4	-4	-4	-3	-2	1	3	3	3	3	3	3	4	4	4	2	3	3	2	0.2	4.1
29-Jan-06	1	0	-1	1	1	0	0	-2	-3	-2	-1	1	3	6	7	7	6	3	1	1	1	0	1	1	1.3	7.2
30-Jan-06	1	1	1	2	2	2	3	4	6	7	8	9	10	11	11	12	13	10	8	7	6	4	3	0	5.8	12.9
31-Jan-06	-2	-3	-3	-3	-3	-4	-4	-4	-3	-1	0	1	2	3	3	4	3	2	0	0	0	1	0	1	-0.5	4.1
Hourly Avg	-1.7	-2.1	-2.2	-2.1	-2.0	-1.9	-1.9	-1.8	-1.6	-0.8	0.5	1.8	2.9	3.8	4.1	3.9	3.1	1.8	0.9	0.4	-0.3	-0.7	-1.0	-1.2		
Hourly Max	6.7	6.3	6.2	6.4	6.4	7.0	6.0	5.4	5.6	6.5	7.9	9.3	11.5	13.0	13.3	12.7	12.9	10.1	8.2	6.9	6.7	6.5	6.9	7.2		

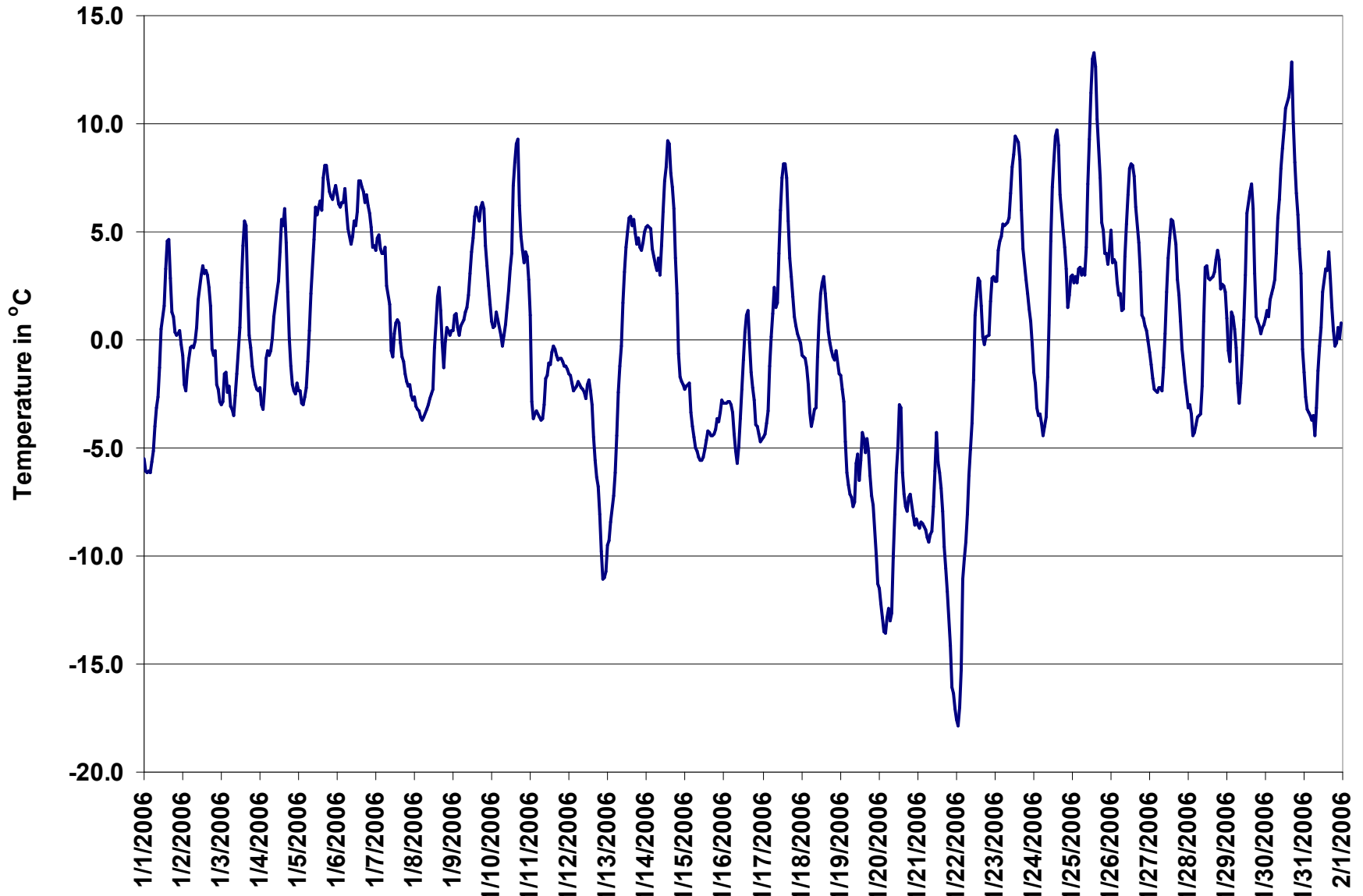


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



### PAS - Cresent Heights Solar Radiation Monthly Summary

Station: Cresent Heights  
Station Owner: PAS

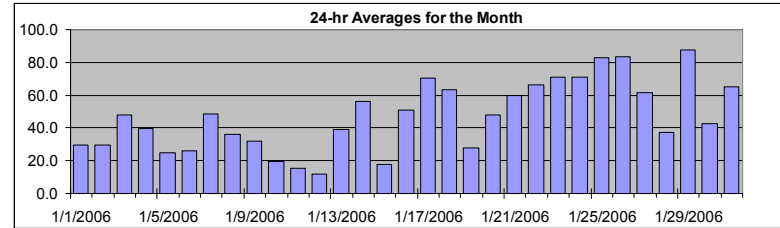
#### HOURLY AVERAGE TABLE

#### Solar Radiation (SR)

Monitoring Dates: January 1, 2006 to February 1, 2006

#### Summary

Maximum 1-hr Average:	380.1	W/m <sup>2</sup>	29-Jan	12:00 13:00
Maximum 24-hr Value:	87.8	W/m <sup>2</sup>	29-Jan	



AIC Time:	0 hrs	Operational Time:	744 hrs						
Calibration Time:	0 hrs	AMD Operational Uptime:	100.0%						
Percentile	99	95	75	50	25	5	1	Average	Median
	355.6	256.3	55.3	0.5	0.5	0.4	0.1	47.2 W/m <sup>2</sup>	0.5 W/m <sup>2</sup>

#### Status Flag Characters

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

Day	Mountain Standard Time																								24-hour Average	Daily Maximum	
Hour Start	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00		
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00			
1-Jan-06	0	0	0	0	0	0	0	0	2	12	24	64	128	197	183	79	8	1	0	0	0	0	0	0	0	29.4	197.3
2-Jan-06	0	0	0	0	0	0	0	1	7	39	83	181	139	104	79	56	10	0	0	0	0	0	0	0	0	29.3	181.4
3-Jan-06	0	0	0	0	0	0	0	0	3	25	69	220	289	246	198	86	12	1	0	0	0	0	0	0	0	48.1	289.1
4-Jan-06	0	0	0	0	0	0	0	0	7	46	95	134	203	214	151	86	13	1	0	0	0	0	0	0	0	39.8	214.2
5-Jan-06	0	0	0	0	0	0	0	1	6	29	88	132	133	91	58	44	9	0	0	0	0	0	0	0	0	24.9	133.3
6-Jan-06	0	0	0	0	0	0	0	0	8	61	109	101	132	108	61	29	5	0	0	0	0	0	0	0	0	25.9	131.9
7-Jan-06	0	0	0	0	0	0	0	0	7	52	178	259	230	211	177	41	6	0	0	0	0	0	0	0	0	48.7	259.1
8-Jan-06	0	0	0	0	0	0	0	0	7	40	69	96	238	165	161	75	15	0	0	0	0	0	0	0	0	36.4	238.2
9-Jan-06	0	0	0	0	0	0	0	0	6	45	71	91	142	233	121	49	7	0	0	0	0	0	0	0	0	32.2	232.8
10-Jan-06	0	0	0	0	0	0	0	0	3	14	36	47	64	143	55	65	30	1	0	0	0	0	0	0	0	19.3	143.0
11-Jan-06	0	0	0	0	0	0	0	0	6	47	72	41	40	71	55	31	5	0	0	0	0	0	0	0	0	15.6	71.8
12-Jan-06	0	0	0	0	0	0	0	0	4	21	42	41	50	52	38	27	6	0	0	0	0	0	0	0	0	12.0	51.7
13-Jan-06	0	0	0	0	0	0	0	0	7	67	139	181	183	163	97	67	28	1	0	0	0	0	0	0	0	39.1	183.2
14-Jan-06	0	0	0	0	0	0	0	0	12	129	222	263	256	256	145	55	10	1	0	0	0	0	0	0	0	56.5	262.6
15-Jan-06	0	0	0	0	0	0	0	0	2	9	27	56	94	97	75	49	6	1	0	0	0	0	0	0	0	17.6	97.2
16-Jan-06	0	0	0	0	0	0	0	1	8	90	174	230	239	219	159	72	25	1	0	0	0	0	0	0	0	51.0	239.2
17-Jan-06	0	0	0	0	0	0	0	1	13	98	209	320	336	320	239	111	30	1	0	0	0	0	0	0	0	70.2	335.7
18-Jan-06	0	0	0	0	0	0	0	0	12	85	227	322	305	282	200	57	16	1	0	0	0	0	0	0	0	63.1	321.6
19-Jan-06	0	0	0	0	0	0	0	1	13	71	132	116	90	69	81	61	20	1	0	0	0	0	0	0	0	27.5	131.7
20-Jan-06	0	0	0	0	0	0	0	1	18	108	233	231	158	174	141	67	19	1	0	0	0	0	0	0	0	48.2	233.3
21-Jan-06	0	0	0	0	0	0	0	0	7	68	148	241	348	247	198	124	43	1	0	0	0	0	0	0	0	59.6	347.7
22-Jan-06	0	0	0	0	0	0	0	1	21	59	212	335	294	254	228	127	45	1	0	0	0	0	0	0	0	66.0	335.0
23-Jan-06	0	0	0	0	0	0	0	0	15	75	169	361	338	315	209	158	54	1	0	0	0	0	0	0	0	70.9	361.1
24-Jan-06	0	0	0	0	0	0	0	1	32	146	236	281	296	290	227	143	46	1	0	0	0	0	0	0	0	71.0	295.7
25-Jan-06	0	0	0	0	0	0	0	1	20	127	274	357	374	352	276	160	47	2	0	0	0	0	0	0	0	83.1	374.1
26-Jan-06	0	0	0	0	0	0	0	1	33	161	233	342	369	354	281	166	52	2	0	0	0	0	0	0	0	83.3	368.8
27-Jan-06	0	0	0	0	0	0	0	2	29	79	154	265	248	315	252	84	46	2	0	0	0	0	0	0	0	61.8	314.9
28-Jan-06	0	0	0	0	0	0	0	2	41	92	143	179	107	104	122	77	23	2	0	0	0	0	0	0	0	37.4	179.2
29-Jan-06	0	0	0	0	0	0	0	1	38	169	276	359	380	371	289	151	67	2	0	0	0	0	0	0	0	87.8	380.1
30-Jan-06	0	0	0	0	0	0	0	0	18	72	118	143	153	157	115	131	109	7	0	0	0	0	0	0	0	42.9	157.2
31-Jan-06	0	0	0	0	0	0	0	1	21	76	135	274	365	339	166	153	27	3	0	0	0	0	0	0	0	65.1	365.3
Hourly Avg	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	13.7	71.3	141.9	202.0	216.8	210.2	156.0	86.5	27.1	1.1	0.5	0.5	0.5	0.5	0.5	0.4			
Hourly Max	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.8	40.8	168.8	275.7	361.1	380.1	371.1	289.3	165.7	109.1	6.6	0.5	0.5	0.5	0.5	0.5	0.5			

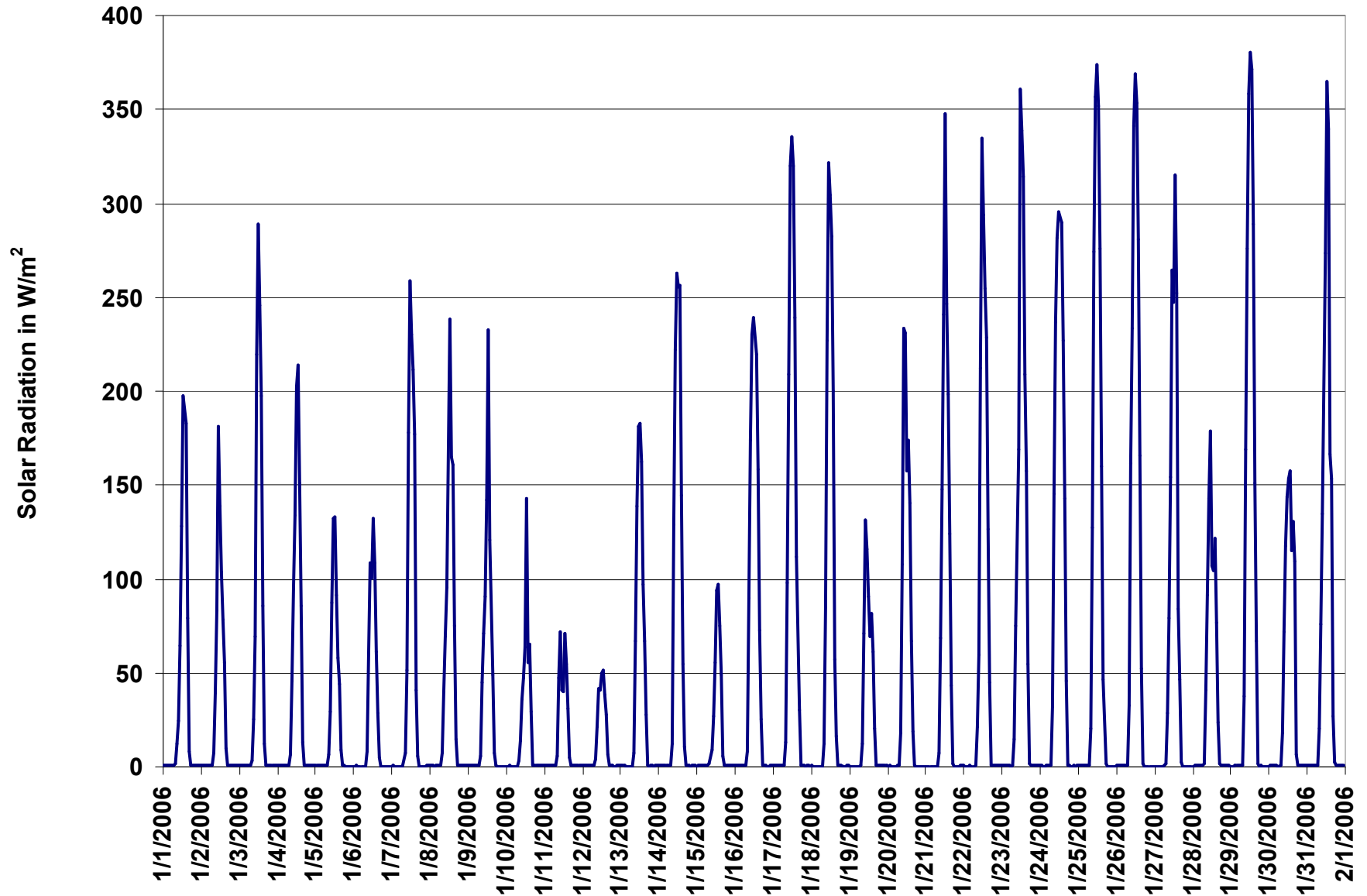


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



## PAS - Cresent Heights Scalar Wind Speed Monthly Summary

Station: Cresent Heights  
 Station Owner: PAS

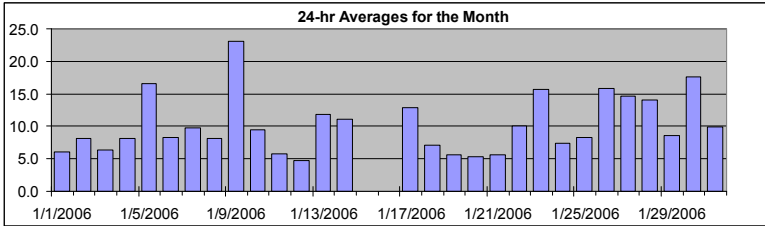
### HOURLY AVERAGE TABLE

### Wind Speed (WSs)

Monitoring Dates: January 1, 2006 to February 1, 2006

**Summary**

Maximum 1-hr Average:	35.3	km/hr	5-Jan	11:00 12:00
Maximum 24-hr Value:	23.1	km/hr	9-Jan	



Calm Time:	0 hrs	0% calms	Operational Time:	707 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	95.0%				
Percentile	99	95	75	50	25	5	1	AverageS
	29.7	25.3	13.4	8.6	5.2	2.3	1.5	10.2 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-Jan-06	5	3	2	3	3	3	2	2	1	1	2	6	11	7	8	11	6	8	12	13	14	9	9	6	6.1	13.9	
2-Jan-06	7	6	4	5	5	9	12	15	12	11	14	11	12	8	15	6	6	8	5	4	5	6	4	5	8.2	15.5	
3-Jan-06	7	4	6	3	5	7	5	4	4	5	5	5	5	7	8	6	4	1	6	8	8	11	11	14	6.3	13.8	
4-Jan-06	17	16	13	12	15	11	10	7	4	3	3	5	6	14	11	10	7	4	2	4	7	7	4	4	8.2	17.1	
5-Jan-06	5	9	9	9	9	7	3	4	7	18	29	35	35	35	29	24	25	24	21	15	16	13	8	6	16.5	35.3	
6-Jan-06	7	5	8	6	11	12	10	9	6	5	5	6	8	12	5	4	6	8	14	9	11	11	9	12	8.3	13.9	
7-Jan-06	10	19	15	12	13	15	10	8	7	11	12	7	9	11	11	9	10	6	8	7	5	5	7	6	9.7	19.2	
8-Jan-06	6	7	6	4	4	5	2	1	3	5	6	7	7	9	9	8	9	4	5	14	19	20	13	21	8.1	20.5	
9-Jan-06	23	29	27	25	30	28	30	29	26	23	26	29	35	34	29	25	18	17	14	17	14	8	8	8	23.1	35.3	
10-Jan-06	5	9	12	12	11	5	1	2	2	6	5	2	2	8	25	25	20	10	12	11	13	14	6	5	9.4	25.0	
11-Jan-06	6	9	7	3	2	4	7	10	3	5	9	10	10	10	7	5	4	5	3	4	5	5	3	4	5.8	10.0	
12-Jan-06	3	3	3	2	3	4	4	4	7	10	7	4	6	8	9	8	6	3	2	3	3	4	3	3	4.7	10.5	
13-Jan-06	3	3	3	2	2	3	5	6	12	14	21	27	27	24	16	9	13	9	8	9	14	13	18	22	11.8	26.8	
14-Jan-06	18	12	21	15	15	14	14	16	8	10	9	12	10	11	8	8	5	5	6	8	13	9	8	12	11.0	20.6	
15-Jan-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0
16-Jan-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	10	10	10	9	7	8	14	10	13	11	10	N	14.2
17-Jan-06	7	7	5	3	15	6	12	23	16	17	17	21	21	16	16	14	14	13	15	12	12	11	9	6	12.9	23.3	
18-Jan-06	8	9	8	7	7	7	7	9	7	7	7	9	9	10	9	5	4	5	3	4	2	5	13	9	7.1	12.6	
19-Jan-06	8	7	10	11	7	6	5	4	8	4	2	5	10	5	3	8	8	3	2	5	4	4	6	2	5.6	10.8	
20-Jan-06	2	2	3	2	2	2	3	3	4	2	3	3	2	1	4	8	6	10	11	11	11	13	11	11	5.4	12.7	
21-Jan-06	11	8	4	2	3	6	8	10	8	9	8	6	4	8	9	8	5	3	1	3	5	3	2	1	5.6	11.0	
22-Jan-06	2	2	2	2	7	3	7	11	12	16	13	12	11	10	10	8	8	12	15	12	14	16	20	18	10.1	20.3	
23-Jan-06	17	16	22	25	26	28	26	25	26	25	24	23	22	13	11	7	4	3	3	1	8	9	6	3	15.6	28.1	
24-Jan-06	3	2	4	4	3	2	4	4	3	6	6	13	16	15	16	13	11	11	10	10	8	2	4	8	7.4	15.7	
25-Jan-06	5	7	6	6	9	13	8	8	5	7	8	14	14	12	13	10	7	4	4	6	4	12	10	8	8.3	14.0	
26-Jan-06	10	11	13	18	16	12	16	14	7	12	23	27	27	26	26	21	18	16	13	8	9	9	11	15	15.8	27.4	
27-Jan-06	15	15	16	16	17	16	15	17	17	16	11	7	18	17	15	9	9	11	14	13	14	16	19	19	14.6	19.0	
28-Jan-06	16	15	18	14	15	17	11	11	6	6	9	13	12	12	14	14	18	24	23	19	15	13	12	10	14.0	24.5	
29-Jan-06	8	12	10	15	14	11	13	8	7	8	8	9	10	7	7	5	5	2	4	6	3	9	12	11	8.6	14.9	
30-Jan-06	12	10	11	16	20	21	27	26	32	28	27	25	26	25	26	15	12	5	10	11	9	5	10	16	17.7	31.7	
31-Jan-06	8	13	6	7	6	3	6	5	8	7	10	14	14	15	10	9	5	8	11	14	8	16	16	20	10.0	20.1	
1-hr Average	8.7	9.4	9.6	9.0	10.2	9.7	9.8	10.2	9.2	10.3	11.2	12.7	13.7	13.3	13.0	10.8	9.4	8.4	8.9	9.1	9.4	9.7	9.4	9.9			
Hourly Max	22.6	29.5	27.1	25.3	29.8	28.4	29.7	28.9	31.7	28.2	29.2	35.3	35.3	34.7	29.4	25.3	25.2	24.5	23.2	19.1	19.2	20.2	20.3	21.8			



### PAS - Cresent Heights Vector Wind Speed Monthly Summary

Station: Cresent Heights  
Station Owner: PAS

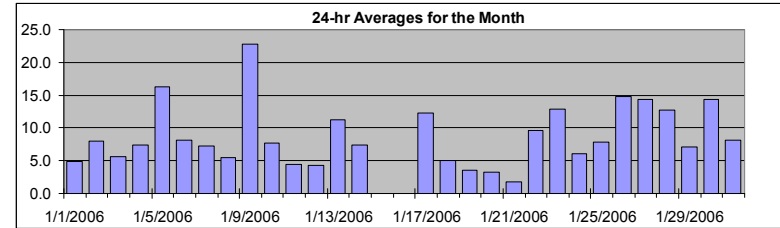
#### HOURLY AVERAGE TABLE

#### Wind Speed (WSv)

Monitoring Dates: January 1, 2006 to February 1, 2006

#### Summary

Maximum 1-hr Average:	35.2	km/hr	5-Jan	11:00 12:00
Maximum 24-hr Value:	22.7	km/hr	9-Jan	



Calm Time:	6 hrs	1% calms	Operational Time:	701 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	95.0%				
Percentile	99	95	75	50	25	5	1	AverageV
	29.6	25.2	13.3	8.5	4.9	1.9	1.2	43.0 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-Jan-06	5	2	2	3	3	3	1	calm	1	1	1	6	11	6	8	11	6	7	12	13	14	8	9	6		4.9	13.8	
2-Jan-06	6	6	3	5	3	9	12	15	12	11	13	10	12	8	15	5	5	8	4	4	4	5	4	5		8.0	15.3	
3-Jan-06	7	4	6	3	4	7	5	4	4	5	5	5	4	7	8	6	4	1	6	8	7	11	11	14		5.7	13.8	
4-Jan-06	17	16	13	11	15	11	10	7	4	3	2	5	6	14	11	10	7	3	2	3	7	7	4	3		7.4	17.0	
5-Jan-06	4	9	9	9	9	7	2	4	7	18	29	35	35	35	29	24	25	24	21	15	16	13	7	4		16.2	35.2	
6-Jan-06	7	5	8	6	11	12	10	9	5	3	5	6	7	12	5	4	6	8	14	8	11	10	9	12		8.1	13.7	
7-Jan-06	10	19	15	12	13	15	10	7	6	11	11	7	8	10	11	9	10	6	8	7	5	5	7	6		7.2	19.1	
8-Jan-06	6	7	5	3	3	4	2	1	1	5	5	7	7	8	9	8	8	4	4	14	19	20	12	20		5.5	20.4	
9-Jan-06	22	29	27	25	30	28	30	29	26	23	26	29	35	34	29	25	18	17	14	17	13	8	8	8		22.7	35.1	
10-Jan-06	5	9	12	12	11	5	1	2	2	5	5	calm	1	8	25	25	20	10	12	11	13	14	4	5		7.7	24.8	
11-Jan-06	6	9	7	2	1	4	7	10	3	5	9	10	9	10	7	4	4	5	3	4	5	4	3	4		4.5	9.9	
12-Jan-06	3	3	3	2	3	4	4	3	6	10	6	4	6	8	9	8	6	3	2	2	2	4	3	3		4.2	10.3	
13-Jan-06	3	3	3	2	2	3	4	6	11	14	21	27	27	24	15	9	13	9	7	8	14	13	18	22		11.2	26.8	
14-Jan-06	18	12	20	14	15	14	14	15	8	10	9	11	9	11	7	7	3	5	6	8	13	8	7	12		7.3	20.4	
15-Jan-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		N	0.0
16-Jan-06	N	N	N	N	N	N	N	N	N	N	N	N	N	N	10	10	10	9	7	8	14	10	13	11	10		N	14.1
17-Jan-06	7	6	5	2	15	6	12	23	16	17	17	20	21	16	16	14	13	12	15	12	12	11	9	6		12.2	23.0	
18-Jan-06	8	9	8	7	7	7	7	8	7	7	6	9	8	9	9	5	4	5	3	4	1	4	12	9		5.0	12.4	
19-Jan-06	8	7	10	11	7	5	4	4	8	3	1	calm	9	5	2	8	8	calm	1	5	2	2	5	2		3.6	10.7	
20-Jan-06	2	2	3	1	2	2	3	3	4	2	3	3	2	1	4	8	6	10	11	10	11	13	11	11		3.2	12.7	
21-Jan-06	11	8	3	2	2	5	8	10	8	8	8	5	4	8	9	8	5	3	calm	2	5	3	2	1		1.8	10.9	
22-Jan-06	2	2	2	2	6	3	7	10	11	16	13	12	10	10	10	8	7	12	14	11	14	15	20	18		9.6	20.2	
23-Jan-06	17	16	22	25	26	28	25	25	25	25	24	23	21	13	11	7	4	3	2	1	7	9	5	3		12.8	28.0	
24-Jan-06	3	2	4	3	2	2	4	calm	2	5	5	13	15	15	16	13	11	10	10	10	8	1	3	8		6.0	15.7	
25-Jan-06	4	7	6	6	9	12	7	8	5	7	8	14	14	11	13	9	6	3	2	5	3	12	10	8		7.9	13.7	
26-Jan-06	10	10	13	18	16	12	16	14	7	12	23	27	27	26	26	21	18	16	12	7	8	9	11	15		14.8	27.3	
27-Jan-06	15	15	16	16	17	16	15	17	17	16	11	7	18	17	14	9	9	11	14	13	13	15	19	18		14.3	18.9	
28-Jan-06	16	15	18	14	15	17	11	11	6	5	9	12	11	12	14	14	18	24	23	19	15	13	11	10		12.6	24.4	
29-Jan-06	8	12	10	15	14	11	13	8	7	8	7	9	10	6	7	5	4	1	3	6	3	9	12	11		7.0	14.8	
30-Jan-06	11	10	11	15	19	21	27	26	32	28	26	25	25	25	26	15	12	5	9	11	8	4	9	16		14.3	31.6	
31-Jan-06	7	12	6	7	5	3	6	5	8	7	10	14	14	15	10	9	5	8	11	14	8	15	16	20		8.1	20.0	
1-hr Vector	5.5	5.9	6.5	6.3	7.6	7.2	7.5	7.8	6.8	7.5	8.3	10.4	10.8	10.6	10.2	8.0	6.8	6.4	6.5	6.9	6.9	6.6	5.9	6.1				
Hourly Max	22.4	29.4	27.0	25.1	29.7	28.3	29.6	28.8	31.6	28.1	29.1	35.2	35.1	34.6	29.3	25.2	25.2	24.4	22.9	18.9	19.2	20.1	20.2	21.8				



### PAS - Cresent Heights Wind Direction Monthly Summary

Station: Cresent Heights  
Station Owner: PAS

#### HOURLY AVERAGE TABLE

#### Wind Direction (WD)

Monitoring Dates: January 1, 2006 to February 1, 2006

#### Summary


Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs				
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%				
Percentile	99	95	75	50	25	5	1	Average
	354.6	325.8	254.9	232.2	212.0	38.7	7.6	237 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	24-hour Average	WD Sector
Hour End	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00		
1-Jan-06	0	325	346	353	344	337	338	244	133	111	214	247	238	239	238	227	263	237	239	242	235	255	223	237	247	WSW
2-Jan-06	229	228	231	243	269	240	233	229	237	239	234	232	223	245	222	258	260	227	230	239	240	196	248	212	234	SW
3-Jan-06	245	204	258	282	197	270	259	258	234	249	259	280	241	226	253	273	341	170	225	238	221	224	225	230	242	WSW
4-Jan-06	235	240	228	244	234	237	236	241	239	193	161	240	250	281	280	284	273	251	183	187	216	224	211	179	241	WSW
5-Jan-06	179	224	233	225	213	214	247	226	211	213	215	217	222	220	225	223	224	230	238	250	251	224	224	237	224	SW
6-Jan-06	254	224	233	231	231	232	228	229	250	285	240	225	222	217	269	251	248	252	230	245	238	244	256	237	238	WSW
7-Jan-06	258	233	238	249	238	239	257	251	325	335	333	302	286	293	312	299	327	322	357	352	346	343	336	333	288	WNW
8-Jan-06	343	9	354	32	77	128	133	342	265	224	216	212	218	224	216	224	201	158	180	229	224	234	242	226	225	SW
9-Jan-06	222	216	219	225	220	222	223	220	218	222	223	220	214	219	217	219	232	239	243	244	241	253	254	249	224	SW
10-Jan-06	251	243	241	241	220	207	196	103	66	34	32	270	182	200	213	225	234	243	244	242	242	232	295	291	234	SW
11-Jan-06	326	347	360	20	83	29	2	6	39	18	357	321	303	318	312	296	276	279	279	272	285	280	266	250	327	NNW
12-Jan-06	260	249	244	259	255	254	266	242	228	215	238	252	255	231	209	215	219	222	133	144	217	224	187	206	228	SW
13-Jan-06	201	181	187	172	119	126	184	200	205	210	210	207	211	211	216	216	219	232	262	259	226	228	219	213	214	SW
14-Jan-06	216	229	215	224	221	227	231	227	256	251	274	248	261	241	257	253	286	346	4	357	350	344	351	350	254	WSW
15-Jan-06	3	330	320	313	322	320	328	310	312	314	317	314	308	305	306	316	318	320	307	271	291	294	284	291	311	NW
16-Jan-06	293	253	270	256	256	229	225	228	215	218	222	226	223	229	225	220	232	232	244	229	241	238	236	223	233	SW
17-Jan-06	218	217	202	204	202	189	200	217	242	243	236	242	263	257	257	223	242	241	228	232	231	222	226	219	232	SW
18-Jan-06	219	223	240	254	266	257	236	236	246	245	264	243	250	266	247	235	235	251	261	235	220	39	23	10	254	WSW
19-Jan-06	16	359	14	26	19	48	38	31	21	68	107	316	31	68	118	127	135	221	173	8	205	8	355	9	34	NE
20-Jan-06	142	141	165	168	167	198	197	132	136	153	124	111	98	60	31	357	353	359	15	32	18	8	7	11	28	NNE
21-Jan-06	16	19	26	78	179	206	224	227	224	231	226	202	156	106	109	113	63	108	177	245	234	223	217	141	182	S
22-Jan-06	128	131	146	196	239	248	229	236	250	239	240	238	259	258	249	253	230	229	230	226	243	242	261	255	242	WSW
23-Jan-06	238	235	259	266	269	271	270	269	269	270	270	272	286	293	291	319	15	100	143	237	7	46	51	99	273	W
24-Jan-06	121	139	119	158	165	142	153	127	99	144	191	233	234	229	228	223	222	229	222	218	228	152	209	206	210	SSW
25-Jan-06	232	238	240	260	259	248	242	215	234	264	252	241	245	262	237	222	207	218	272	240	290	233	238	280	244	WSW
26-Jan-06	264	294	279	240	235	229	229	223	249	231	228	229	246	258	264	269	270	270	262	201	206	241	230	235	247	WSW
27-Jan-06	232	228	227	232	231	240	245	235	233	238	242	258	215	218	213	201	207	211	216	229	237	237	236	240	230	SW
28-Jan-06	243	243	240	234	226	229	238	236	254	205	181	181	178	182	185	182	194	200	207	217	237	243	256	269	218	SW
29-Jan-06	233	231	242	273	289	291	284	299	295	274	275	240	240	269	292	301	257	246	172	226	243	197	193	195	255	WSW
30-Jan-06	191	180	175	179	190	186	194	199	207	208	208	211	206	211	213	241	259	229	225	248	313	302	333	352	211	SSW
31-Jan-06	319	331	304	295	300	282	264	249	234	221	218	212	219	224	222	217	228	231	232	239	233	203	204	207	233	SW
Hourly Avg	242	240	239	242	234	235	235	232	237	235	234	233	234	235	234	234	238	236	235	240	245	240	247	244		





### PAS - Cresent Heights Standard Deviation of Wind Direction Monthly Summary

Station: Cresent Heights  
Station Owner: PAS

#### HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2006 to February 1, 2006

#### Summary


Determined by the Yamartino 15-min interval calculation

Calm Time:	0 hrs	0% calms	Operational Time:	744 hrs			
Calibration Time:	0 hrs		AMD Operational Uptime:	100.0%			
Percentile	99	95	75	50	25	5	1
	44.6	31.0	14.9	9.6	6.6	4.4	3.5

#### Status Flag Characters

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

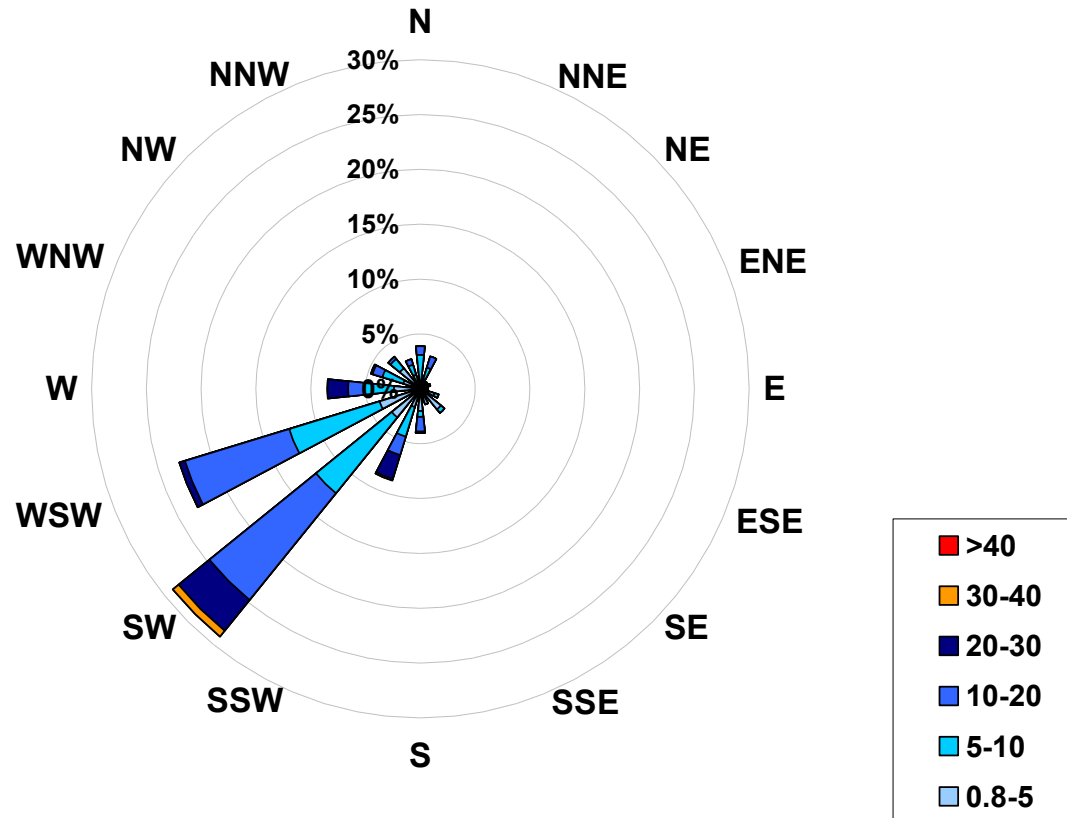
#### Day Mountain Standard Time

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	Daily Maximum
1-Jan-06	9	17	27	19	23	13	27	56	16	36	25	16	10	14	13	11	13	13	8	5	6	17	23	17	17	55.6
2-Jan-06	22	16	20	10	35	18	9	6	12	17	8	23	9	11	6	24	20	11	9	16	18	17	16	17	17	34.9
3-Jan-06	15	33	14	14	23	9	11	11	9	11	12	16	18	13	9	12	21	31	11	12	16	10	8	5	5	33.2
4-Jan-06	4	4	5	7	5	5	4	11	8	21	29	13	12	7	7	7	6	9	24	12	8	6	14	14	14	28.6
5-Jan-06	19	10	7	10	9	9	30	46	34	7	5	4	4	3	3	4	4	4	5	7	5	11	17	42	42	46.0
6-Jan-06	23	16	10	12	15	15	9	10	18	36	19	12	14	12	13	28	16	12	8	11	9	9	11	10	10	35.8
7-Jan-06	9	7	6	8	5	5	8	16	13	10	8	16	15	10	12	12	7	15	8	10	8	10	5	6	6	16.3
8-Jan-06	11	15	15	27	36	16	45	35	20	15	25	19	15	10	9	7	7	14	16	8	4	5	11	6	6	44.5
9-Jan-06	6	4	4	4	5	5	4	4	5	5	6	5	5	5	5	5	5	6	7	6	7	10	13	17	17	17.3
10-Jan-06	23	8	6	5	7	17	44	27	25	10	7	43	42	9	5	5	4	10	8	9	6	6	30	30	30	43.8
11-Jan-06	11	6	8	20	53	16	7	10	33	14	6	8	9	8	10	14	16	11	15	12	9	8	12	10	10	53.4
12-Jan-06	11	9	14	11	10	12	9	12	8	8	12	14	12	11	11	17	15	34	42	15	17	4	15	8	8	42.4
13-Jan-06	12	11	10	19	11	7	15	11	8	5	5	3	4	11	5	12	6	10	12	15	5	5	5	3	3	18.9
14-Jan-06	11	10	6	6	4	6	6	6	16	15	11	9	9	7	9	8	37	26	7	4	5	9	20	10	10	37.3
15-Jan-06	7	11	9	11	7	9	8	8	8	10	8	7	10	10	11	8	8	7	19	14	11	11	14	20	20	20.5
16-Jan-06	15	9	19	13	15	18	7	13	7	8	9	9	10	9	10	9	5	10	13	6	5	5	6	6	6	18.7
17-Jan-06	7	17	28	30	6	14	10	5	9	6	7	8	5	7	6	8	8	6	7	7	5	7	6	8	8	30.0
18-Jan-06	13	13	12	12	12	8	11	12	7	11	15	15	14	14	11	18	17	11	16	13	39	22	6	6	6	39.1
19-Jan-06	6	7	7	7	12	20	14	14	9	13	45	33	9	11	18	12	13	30	30	28	18	39	8	30	30	44.7
20-Jan-06	16	29	22	31	36	23	14	10	9	16	7	8	14	19	8	4	7	4	3	6	8	4	6	5	5	36.2
21-Jan-06	8	10	21	40	30	16	11	7	14	14	9	25	21	13	10	9	11	19	48	35	6	8	15	13	13	48.3
22-Jan-06	13	12	9	16	15	31	14	11	10	5	10	6	7	5	9	8	10	11	9	9	6	8	5	5	5	31.0
23-Jan-06	5	7	4	5	4	4	4	4	4	4	5	5	8	9	8	9	12	12	31	47	29	8	8	20	20	46.7
24-Jan-06	16	14	11	19	18	17	10	34	21	15	24	5	5	5	5	6	8	9	8	8	13	48	42	7	7	48.5
25-Jan-06	40	11	15	13	8	7	19	19	30	15	18	9	11	10	8	9	18	56	40	33	40	7	13	14	14	56.4
26-Jan-06	12	10	10	5	7	8	7	9	16	15	5	6	6	5	5	6	5	4	7	9	9	5	5	4	4	16.0
27-Jan-06	4	3	3	4	4	5	6	4	3	5	9	12	8	7	7	8	8	6	5	8	8	6	6	4	4	12.2
28-Jan-06	4	6	4	5	5	5	11	10	12	19	8	8	9	7	7	7	8	5	5	6	6	7	8	7	7	18.8
29-Jan-06	7	5	12	6	7	7	7	16	10	9	17	19	14	21	15	20	18	15	17	19	37	17	4	5	5	37.4
30-Jan-06	7	7	8	7	7	6	5	5	5	5	5	6	6	6	5	9	11	24	15	10	10	21	12	8	8	23.5
31-Jan-06	15	9	12	14	16	20	11	10	7	11	7	9	8	7	7	8	14	11	14	6	16	7	5	5	5	20.4

Hourly Max	40	33	28	40	53	31	45	56	34	36	45	43	42	21	18	28	37	56	48	47	40	48	42	42	42	42
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### 1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site for January 2006



**Calms: 0%**

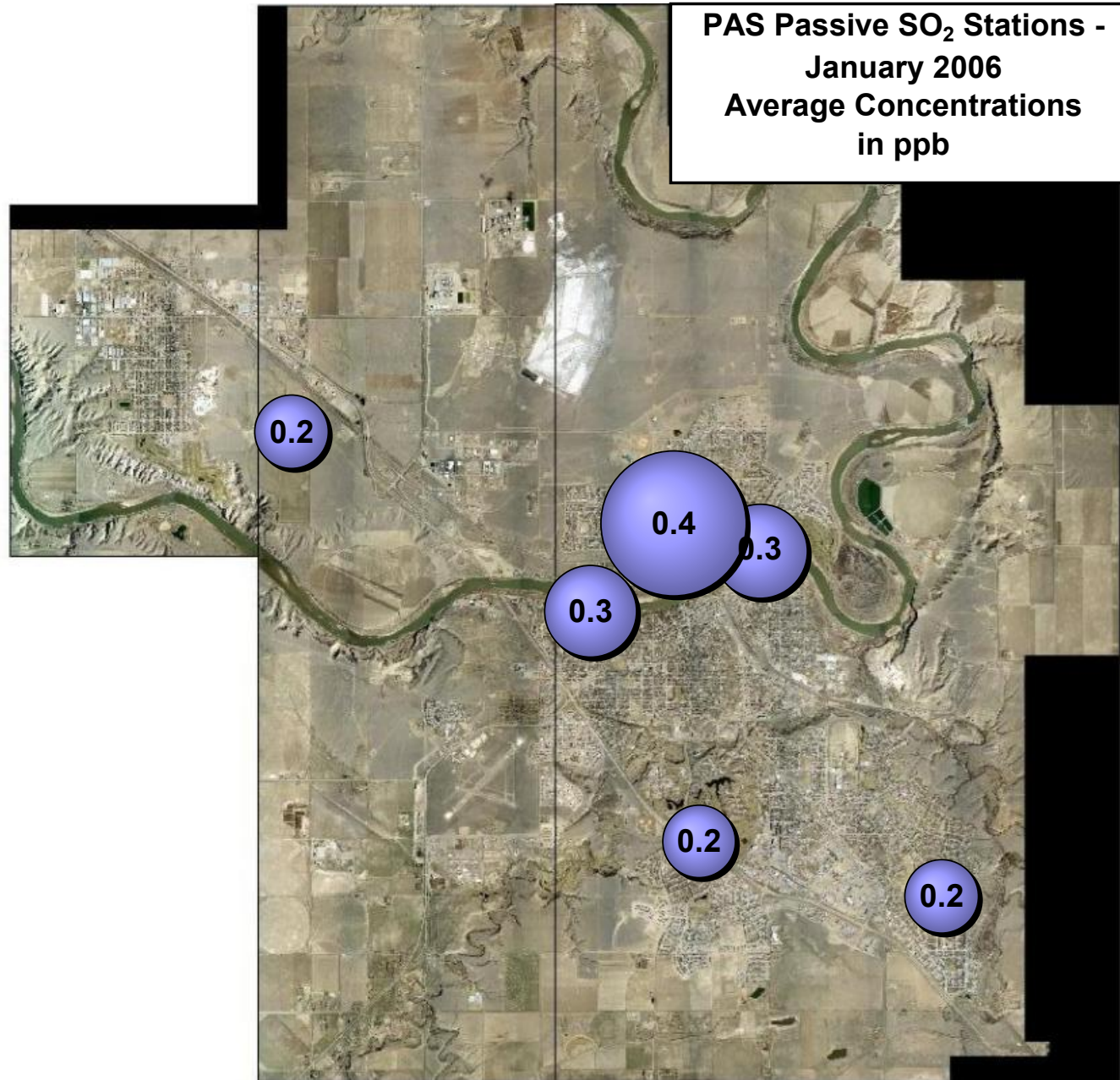
Frequency Distribution of Wind in km/hr			Frequency (hrs)
Range			
0.8	<	5	167
5	to	10	242
10	to	20	228
20	to	30	64
30	to	40	6
	>	40	0
Total Non-Zero Values			707

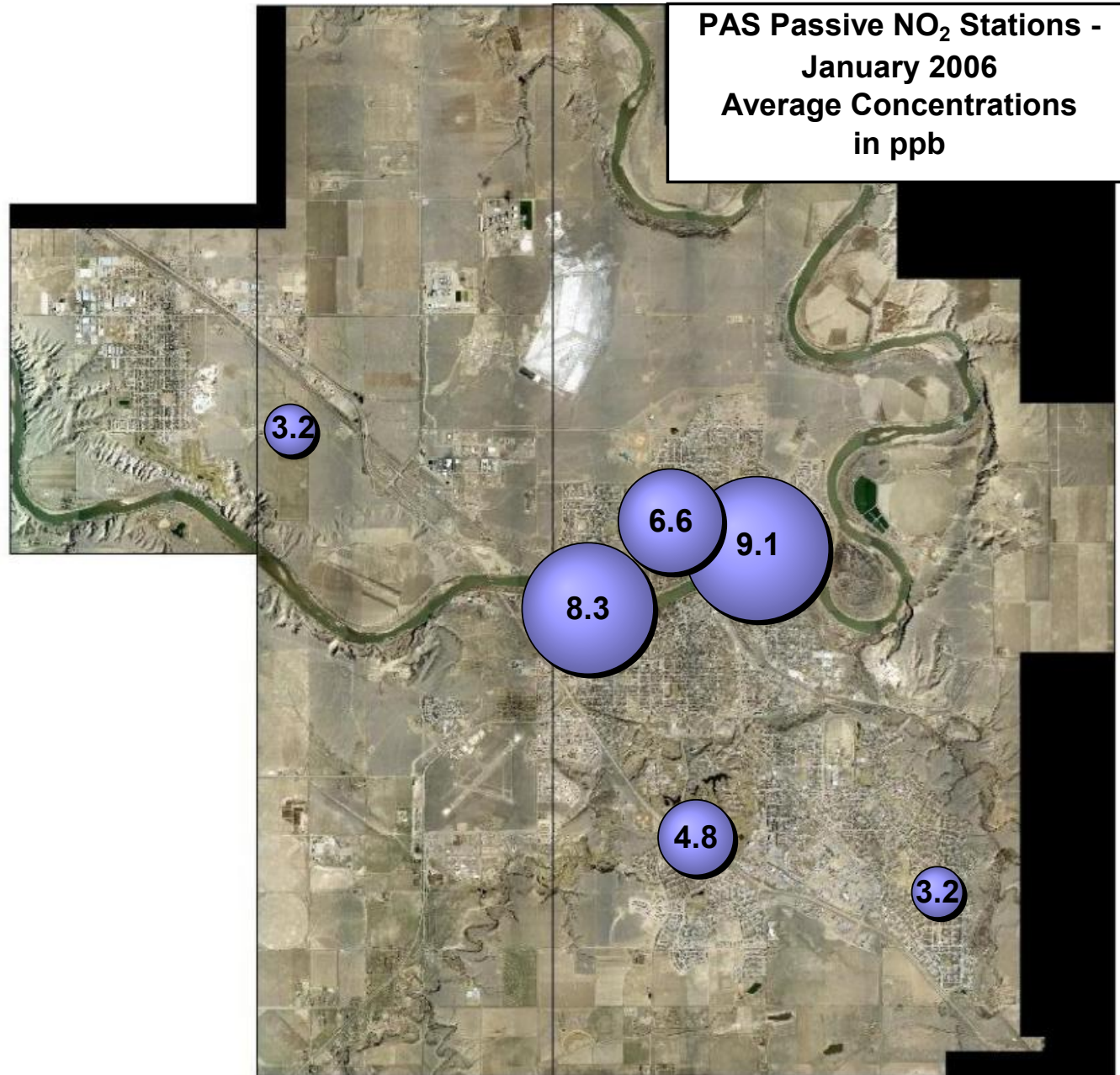


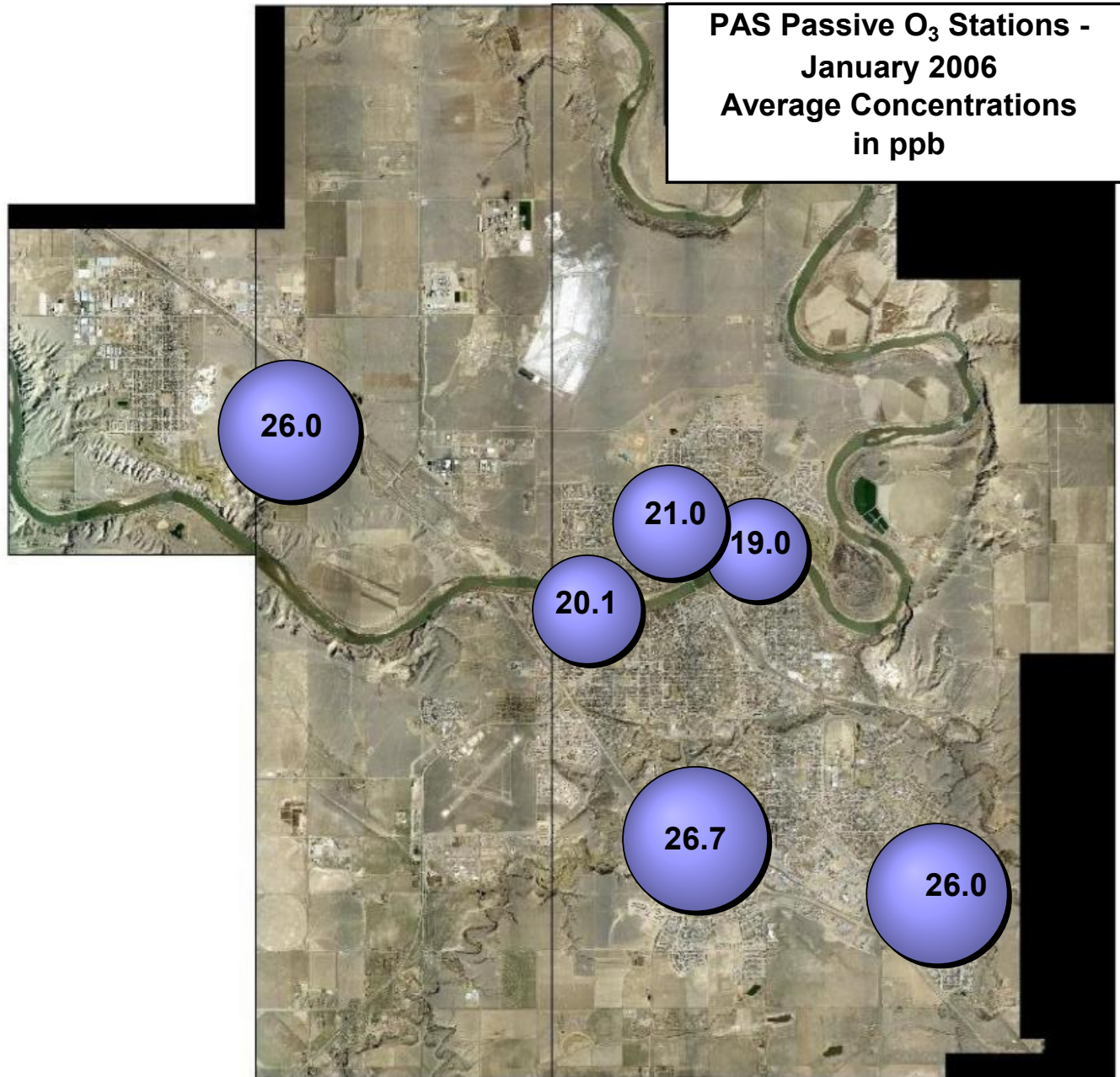
# Passive Monitoring – January 2006

## Ambient Air Compliance Network

Station Number	Station	SO <sub>2</sub> ppb	O <sub>3</sub> ppb	NO <sub>2</sub> ppb	Location		
	Name				Easting	Northing	Elevation
<b>Duplicates</b>							
4a	Monitoring Station	0.2	25.8	3.2			
4b	Monitoring Station	0.2	26.2	3.3			
1	Hospital	0.3	20.1	8.3	521648	5542721	698
2	Ball Park	0.3	19.0	9.1	524019	5543686	660
3	Monitoring Station	0.4	21.0	6.6	522812	5544133	714
4	Redcliff	0.2	26.0	3.2	517448	5545608	725
5	Southridge	0.2	26.7	4.8	523172	5539016	721
6	Christian School Park	0.2	26.0	3.2	526577	5538133	709
Stats:							
	<b>Mean</b>	<b>0.3</b>	<b>23.1</b>	<b>5.9</b>			
	<b>Standard Deviation</b>	<b>0.1</b>	<b>3.5</b>	<b>2.5</b>			
	<b>Minimum</b>	<b>0.2</b>			<b>5</b>	<b>Southridge</b>	
	<b>Maximum</b>	<b>0.4</b>			<b>3</b>	<b>Monitoring Station</b>	
	<b>Minimum</b>		<b>19.0</b>		<b>2</b>	<b>Ball Park</b>	
	<b>Maximum</b>		<b>26.7</b>		<b>5</b>	<b>Southridge</b>	
	<b>Minimum</b>			<b>3.2</b>	<b>4</b>	<b>Redcliff</b>	
	<b>Maximum</b>			<b>9.1</b>	<b>2</b>	<b>Ball Park</b>	







# **January 2006 - Calibration Reports**

**PAS - Crescent Heights Station:**

**O<sub>3</sub>, NO<sub>x</sub>, NO, NO<sub>2</sub>, THC, CO, PM<sub>2.5</sub>, and Wind Speed / Wind Direction**

# Calibration Report

Parameter 03  
 Air Monitoring Network Palliser Airshed



## Station Information

Calibration Date	January 9, 2006	Previous Calibration	December 14, 2005
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	16:20	End Time (MST)	19:45
Barometric Pressure	27.3 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Envionics 6100	Serial Number	2977
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS slope	0.050000	DACS slope	0.050000
DACS intercept	0.000000	DACS intercept	0.000000
Calculated slope	1.000892	Calculated slope	0.983304
Calculated intercept	1.604495	Calculated intercept	5.082159
Analyzer make	API Model 400E	Analyzer serial #	331

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Offset	NA	ppb	-6.9	ppb
Slope	NA		1.086	
Lamp measure	3951.3	mV	3888.3	mV
Lamp Reference	3952.4	mV	3888.4	mV
Pressure	25.9	inches Hg	25.3	inches Hg
Sample Flow	715	ccm	715	ccm
Lamp temp	58	Deg C	58	Deg C

## Calibration Data

Dilution air flow rate (cc/min)	Ozone Set Point	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.0	-4.3	N/A
4995	300.0	279.6	280.8	0.9956
4995	200.0	190.5	186.1	1.0239
4995	100.0	95.5	92.0	1.0384
4995	0.0	0.0	-4.3	0.0000
4995	300.0	279.6	252.4	1.1080
Average Correction Factor				1.0193

Calculated value of As Found Response: 258.5 ppm      Percent Change of As Found: -7.5%

	before calibration		after calibration	
Auto zero	-2.3	ppb	0.8	ppb
Auto span	352.5	ppb	346.4	ppb

Notes: A span adjustment was made. Calculated O3 conc derived from NOX GPT calibration.

Calibration Performed By: Kelly Baragar



## Calibration Summary

Parameter **O3**

Air Monitoring Network **Palliser Airshed**

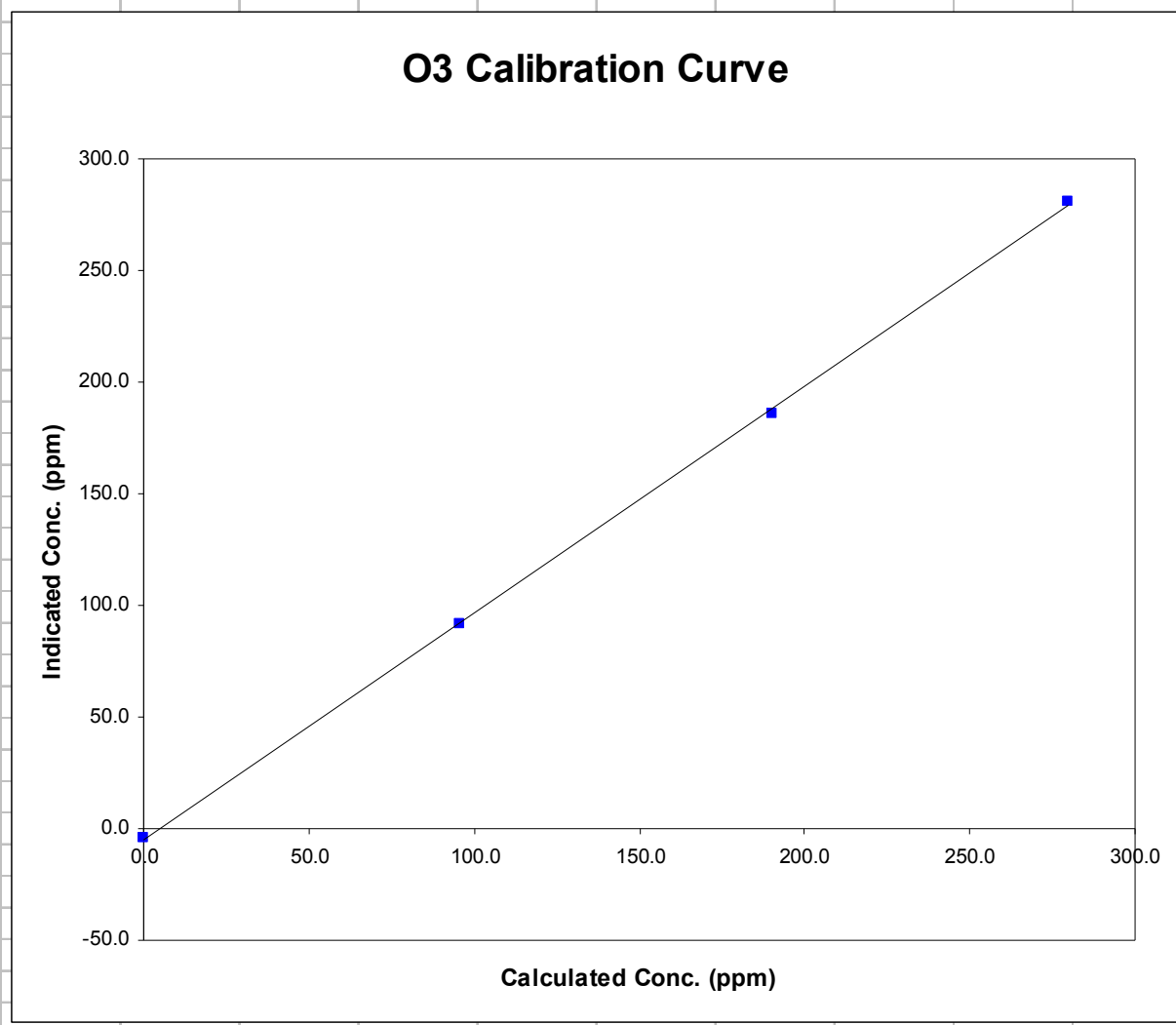


### Station Information

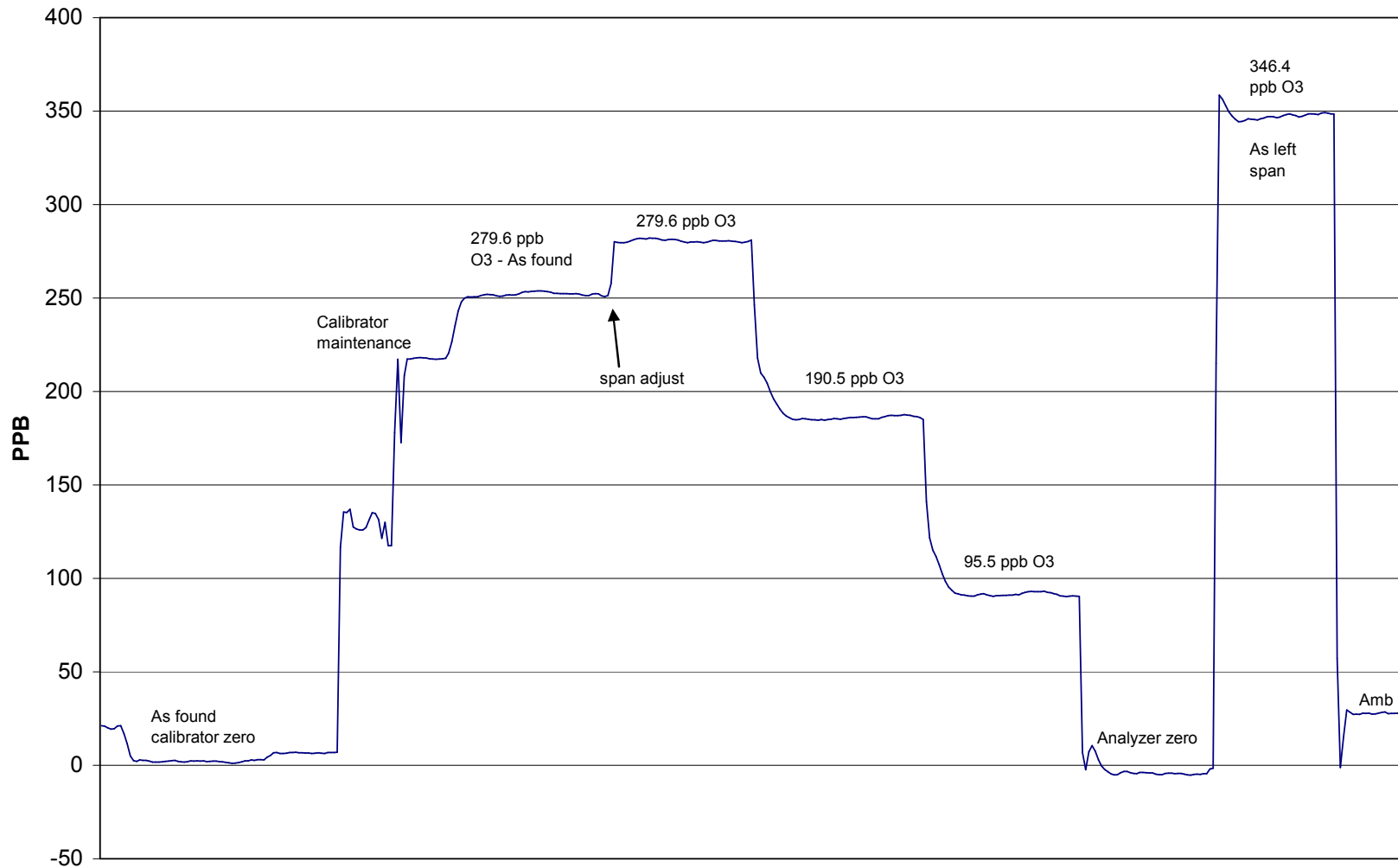
Calibration Date	January 9, 2006	Previous Calibration	December 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	16:20	End Time (MST)	19:45
Analyzer make/model	API Model 400E	Analyzer serial #	331

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (lc)	Correction factor (Cc/lc)	Statistical Evaluation	
279.6	280.8	0.9956	Correlation Coefficient	0.999784
190.5	186.1	1.0239		
95.5	92.0	1.0384		
0.0	-4.3	N/A		
			Slope	0.983304
			Intercept	5.082159



### O3 Calibration



January 9, 2006

# Calibration Report

Parameter **NOx-NO-NO<sub>2</sub>**  
 Air Monitoring Network **Palliser Airshed**



## Station Information

Calibration Date January 5, 2006 Previous Calibration December 13, 2005  
 Station Number 101 Station Location Crescent Heights

Reason:  Routine  Installation  Removal  Other: \_\_\_\_\_

Start Time (MST) 8:15 End Time (MST) 10:30  
 Barometric Pressure 27.7 inches Hg Station Temperature 23.0 Deg C  
 Calibrator EnviroNics 6103 Serial Number 2977  
 NO Cal Gas Conc 49.8 ppm Cal Gas Expiry Date 12-Dec-05  
 NOx Cal Gas Conc 49.8 ppm Cal Gas Serial # ALM011558

## DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

Parameter		NO2	NOx	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.002150	1.000726	0.996216
	Data Offset	0.333390	1.262377	1.411938
After	Data Slope	1.002150	1.003319	0.999859
	Data Offset	0.333390	0.257519	1.933726
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	1.424		1.374	
NOx coefficient	1.435		1.373	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	7.1	Deg C	7.3	Deg C
Azero	38.7		40.0	
Perm Temp	40.0	Deg C	40.0	Deg C
Pressure	4.1	inches Hg	4.3	inches Hg
Sample Flow	435.0	ccm	450.0	ccm

Notes: Analyzer was span adjusted. Unable to finish calibration; cal was completed Jan 9th.

# Calibration Report

Parameter **NO<sub>x</sub>-NO-NO<sub>2</sub>**  
 Air Monitoring Network **Palliser Airshed**



## Station Information

Calibration Date: **January 5, 2006** Station Location: **Crescent Heights**

## Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	
zero	4985	0.00	0.0	0.0	0.0	-0.3	-1.9	-0.3	N/A	N/A	
1	4985	39.94	395.8	395.8	0.0	394.3	394.0	-1.4	1.0040	1.0048	
2											
3											
AFZ	4985	0.00	0.0	0.0	0.0	-0.3	-1.9	-0.3	0.0000	0.0000	
AFS	4985	39.80	394.5	394.5	0.0	377.6	381.9	-6.0	1.0447	1.0328	
									Average Correction Factor	1.0040	1.0048

As Found Concentrations **NO<sub>x</sub>= 379.1** **NO= 385.3** As Found Percent Change **NO<sub>x</sub>= -3.9%** **NO= -2.3%**

## GPT Calibration Data

Dilution Flow 4985 ccm Source Gas Flow 39.80 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency
0										
300										
200										
100										
							Average Correction Factor			

## AIC Data

Parameter	Previous calibration			Current calibration		
	NO <sub>x</sub>	NO <sub>2</sub>	NO	NO <sub>x</sub>	NO <sub>2</sub>	NO
Auto zero				ppb		ppb
Auto span				ppb		ppb

Calibration Performed By: Kelly Baragar

## Calibration Summary

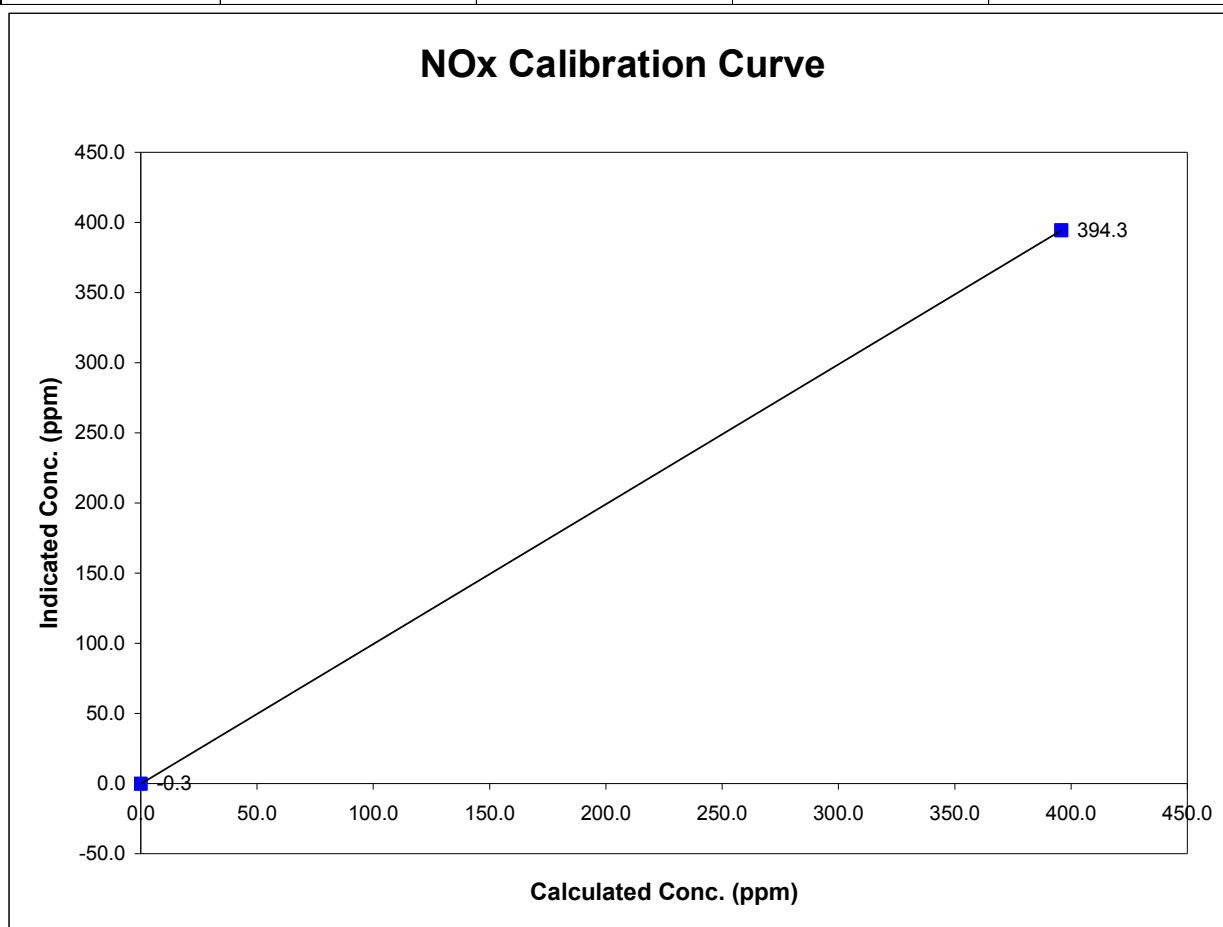
Parameter NO<sub>x</sub>Air Monitoring Network Palliser Airshed

### Station Information

Calibration Date	January 5, 2006	Previous Calibration	December 13, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:15	End Time (MST)	10:30
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	0.0000		
395.8	394.3	1.0040	Correlation Coefficient	1.000000
			Slope	1.003319
			Intercept	0.257519



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed



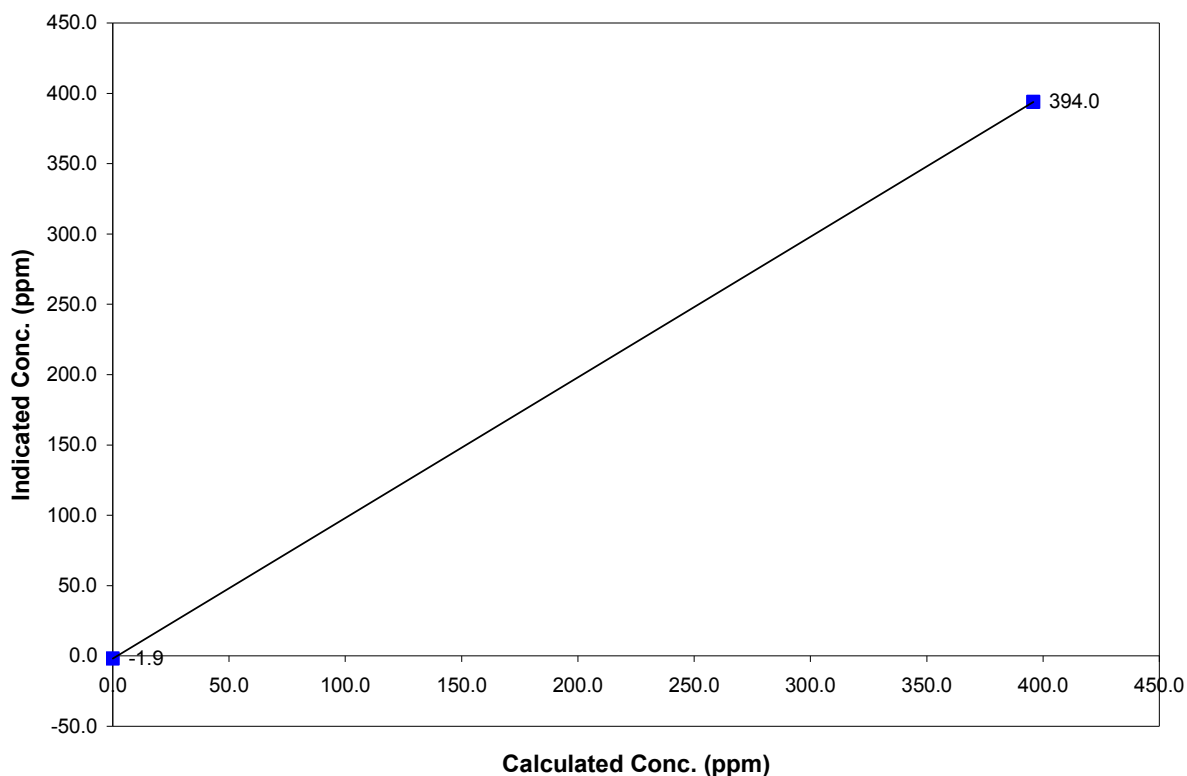
### Station Information

Calibration Date	January 5, 2006	Previous Calibration	December 13, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:15	End Time (MST)	10:30
Analyzer make	API Model 200E	Analyzer serial #	219

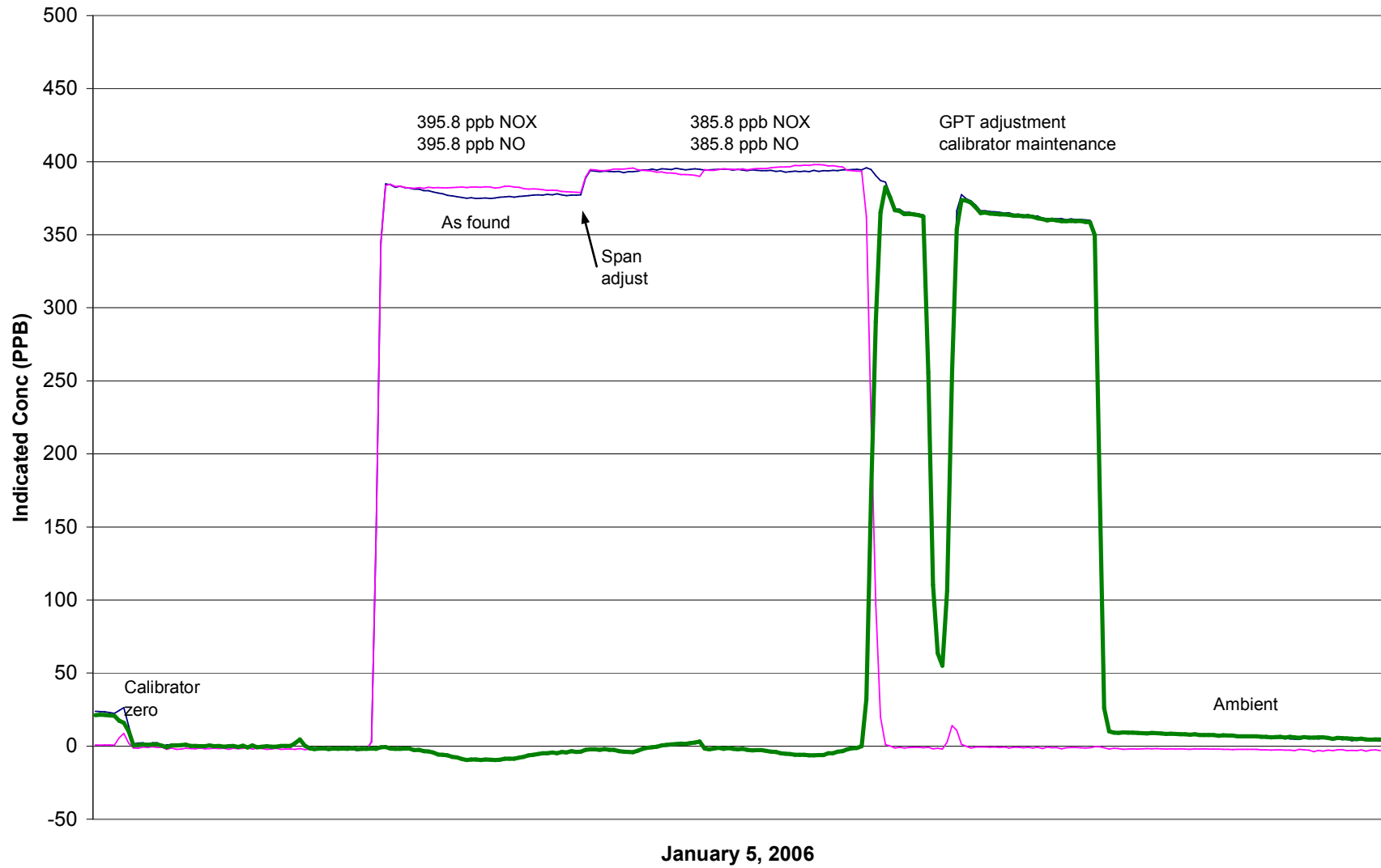
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.9	N/A		
395.8	394.0	1.0048	Correlation Coefficient	1.000000
			Slope	0.999859
			Intercept	1.933726

### NO Calibration Curve



## NOx Calibration



# Calibration Report

Parameter **NOx-NO-NO<sub>2</sub>**  
 Air Monitoring Network **Palliser Airshed**



## Station Information

Calibration Date	<u>January 9, 2006</u>	Previous Calibration	<u>January 5, 2006</u>
Station Number	<u>101</u>	Station Location	<u>Crescent Heights</u>
Reason:	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Installation <input type="checkbox"/> Removal <input type="checkbox"/> Other: _____		
Start Time (MST)	<u>11:05</u>	End Time (MST)	<u>17:00</u>
Barometric Pressure	<u>27.3</u> inches Hg	Station Temperature	<u>21.0</u> Deg C
Calibrator	<u>Envionics 6103</u>	Serial Number	<u>2977</u>
NO Cal Gas Conc	<u>49.8</u> ppm	Cal Gas Expiry Date	<u>12-Dec-05</u>
NOx Cal Gas Conc	<u>49.8</u> ppm	Cal Gas Serial #	<u>ALM011558</u>

## DACS Information

DACS make	<u>FOCUS AP1000</u>	DACS serial No.	<u>45270</u>
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Parameter		NO2	NOx	NO
Before	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
After	DACS slope	0.050000	0.050000	0.050000
	DACS offset	0.000000	0.000000	0.000000
Before	Data Slope	1.002150	1.003319	0.999859
	Data Offset	0.333390	0.257519	1.933726
After	Data Slope	0.992999	0.995544	0.995970
	Data Offset	0.155645	0.134307	2.272189
Channel #		8	6	7
Voltage Range		0 - 1 VDC	0 - 1 VDC	0 - 1 VDC

## Analyzer Information

Analyzer make/model	<u>API Model 200E</u>	Analyzer serial #	<u>219</u>
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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	1.424		1.424	
NOx coefficient	1.435		1.435	
Chamber Temp	50.0	Deg C	50.0	Deg C
Cooler Temp	7.1	Deg C	7.1	Deg C
Azero	38.7		38.7	
Perm Temp	40.0	Deg C	40.0	Deg C
Pressure	4.1	inches Hg	4.1	inches Hg
Sample Flow	435.0	ccm	435.0	ccm

Notes: No adjustments or maintenance performed.  
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 \_\_\_\_\_



# Calibration Report



Parameter **NO<sub>x</sub>-NO-NO<sub>2</sub>**  
 Air Monitoring Network **Palliser Airshed**

## Station Information

Calibration Date: January 9, 2006 Station Location: Crescent Heights

## Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor
zero	4985	0.00	0.0	0.0	0.0	-0.6	-0.8	-0.7	N/A	N/A
1	4985	39.94	395.8	395.8	0.0	396.8	395.8	0.4	0.9975	1.0001
2	4985	19.95	198.5	198.5	0.0	200.7	196.5	2.5	0.9891	1.0104
3	4985	9.95	99.2	99.2	0.0	99.2	95.8	1.4	0.9996	1.0359
AFZ	4985	0.00	0.0	0.0	0.0	-0.6	-0.8	-0.7	0.0000	0.0000
AFS	4985	39.80	394.5	394.5	0.0	396.8	395.8	0.4	0.9941	0.9966
								Average Correction Factor	0.9954	1.0155

As Found Concentrations NO<sub>x</sub>= 397.7 NO= 398.6 As Found Percent Change NO<sub>x</sub>= 0.8% NO= 1.0%

## GPT Calibration Data

Dilution Flow 4985 ccm Source Gas Flow 39.80 ccm

O <sub>3</sub> Setpoint (ppb)	Calculated NO <sub>x</sub> conc (ppb)	Calculated NO conc (ppb)	Calculated NO <sub>2</sub> conc (ppb)	Indicated NO <sub>x</sub> conc (ppb)	Indicated NO conc (ppb)	Indicated NO <sub>2</sub> conc (ppb)	NO <sub>x</sub> Correction factor	NO Correction factor	NO <sub>2</sub> Correction factor	Converter Efficiency	
0	399.6	397.3	2.3	401.2	396.6	-0.7	N/A	N/A	N/A	N/A	
300	395.4	115.8	279.6	397.0	114.0	281.0	0.9959	1.0159	0.9950	100.5%	
200	397.5	207.0	190.5	399.2	205.5	192.0	0.9959	1.0070	0.9924	100.8%	
100	398.4	302.9	95.5	400.0	301.8	96.7	0.9959	1.0035	0.9877	101.2%	
							Average Correction Factor	0.9959	1.0088	0.9917	100.8%

## AIC Data

Parameter	Previous calibration				Current calibration			
	NO <sub>x</sub>	NO <sub>2</sub>	NO		NO <sub>x</sub>	NO <sub>2</sub>	NO	
Auto zero	2.5	1.8	0.7	ppb	2.3	1.7	2.8	ppb
Auto span	437.0	430.3	7.5	ppb	428.6	421.4	8.2	ppb

Calibration Performed By: Kelly Baragar

## Calibration Summary

Parameter NO<sub>2</sub>  
 Air Monitoring Network Palliser Airshed

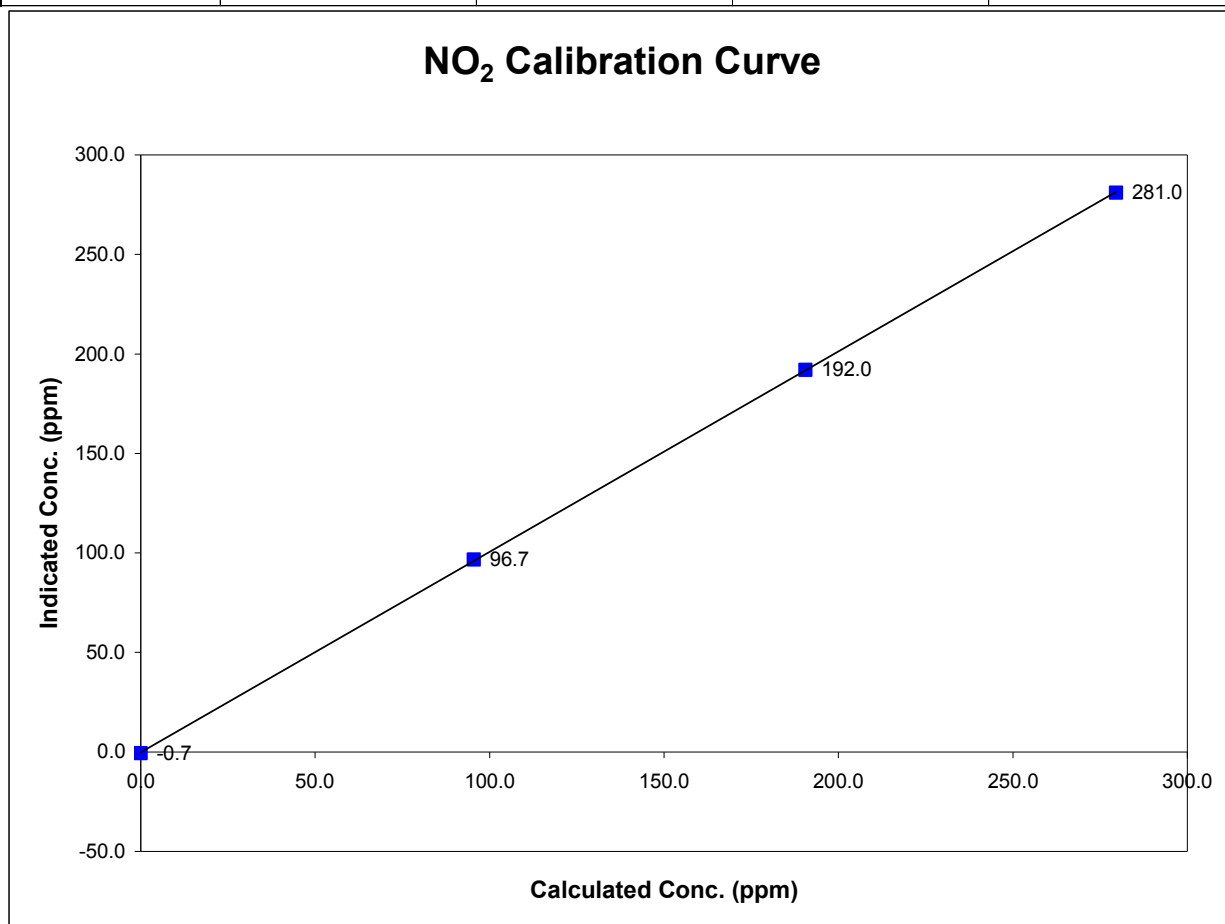


### Station Information

Calibration Date	January 9, 2006	Previous Calibration	January 5, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:05	End Time (MST)	17:00
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	-0.7	0.0000		
279.6	281.0	0.9950	Correlation Coefficient	0.999978
190.5	192.0	0.9924		
95.5	96.7	0.9877	Slope	0.992999
			Intercept	0.155645



## Calibration Summary

Parameter NO<sub>x</sub>  
 Air Monitoring Network Palliser Airshed



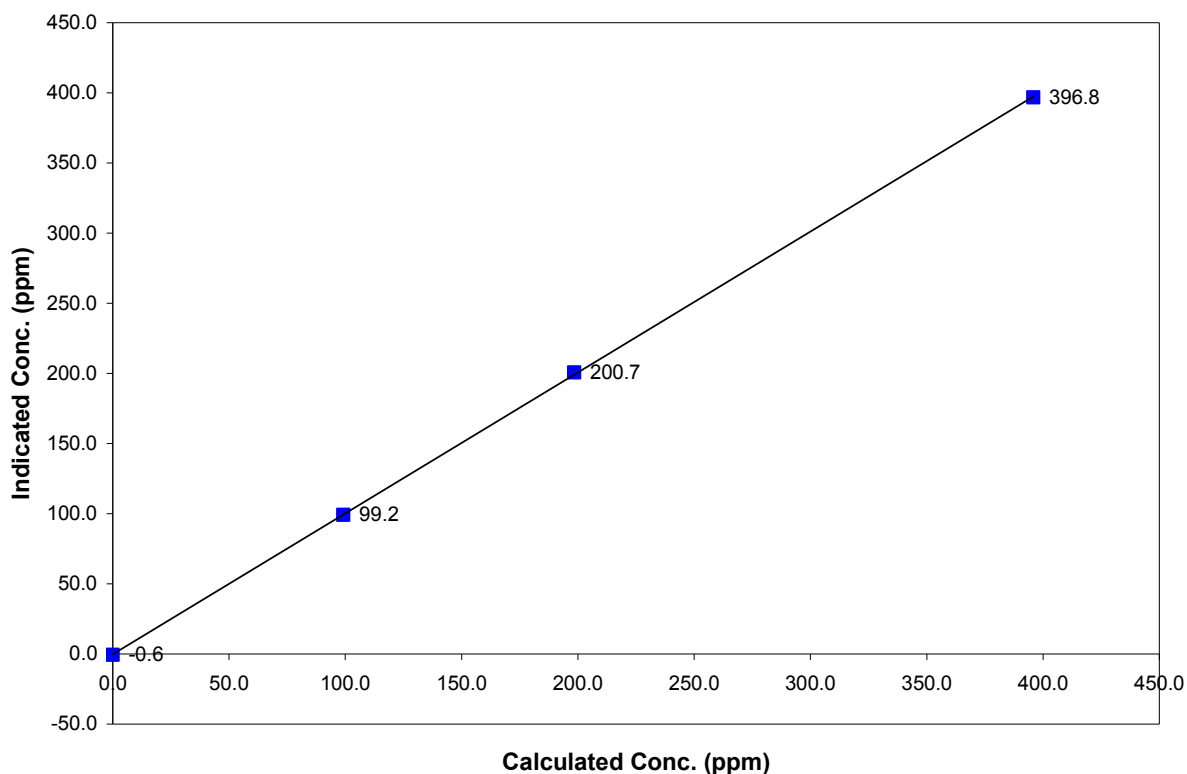
### Station Information

Calibration Date	January 9, 2006	Previous Calibration	January 5, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:05	End Time (MST)	17:00
Analyzer make	API Model 200E	Analyzer serial #	219

### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.6	0.0000	Correlation Coefficient	0.999968
395.8	396.8	0.9975		
198.5	200.7	0.9891	Slope	0.995544
99.2	99.2	0.9996		
			Intercept	0.134307

### NO<sub>x</sub> Calibration Curve



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed



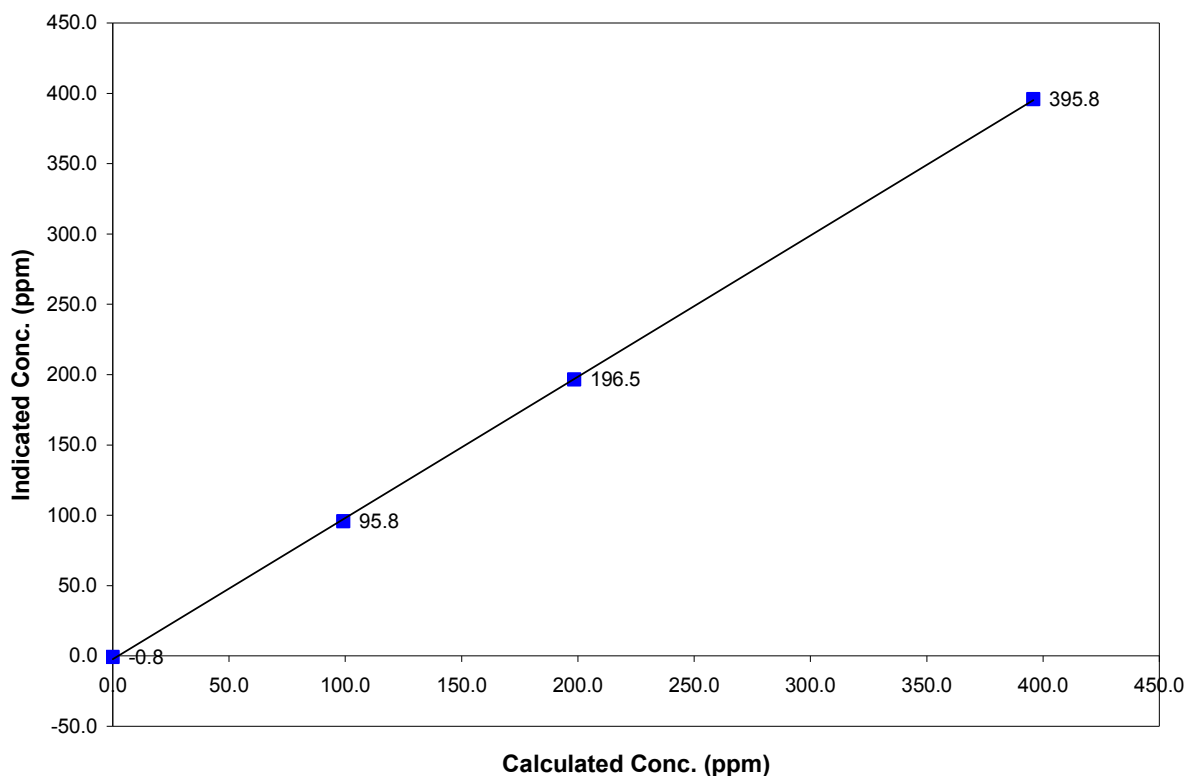
### Station Information

Calibration Date	January 9, 2006	Previous Calibration	January 5, 2006
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:05	End Time (MST)	17:00
Analyzer make	API Model 200E	Analyzer serial #	219

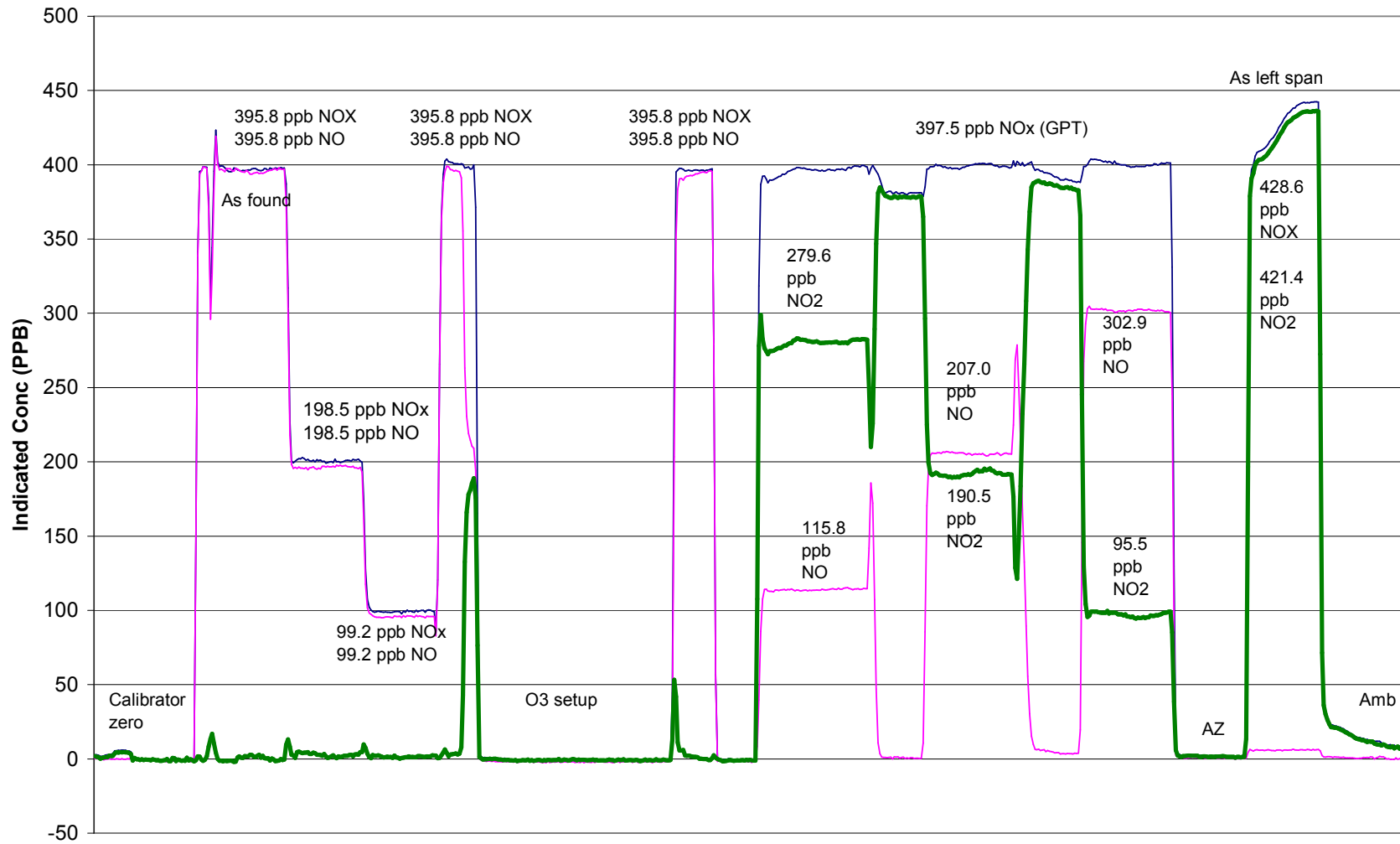
### Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.8	N/A	Correlation Coefficient	0.999938
395.8	395.8	1.0001		
198.5	196.5	1.0104		
99.2	95.8	1.0359		
			Slope	0.995970
			Intercept	2.272189

### NO Calibration Curve



## NOx Calibration



January 9, 2006

## Calibration Summary

Parameter THC  
 Air Monitoring Network Palliser Airshed

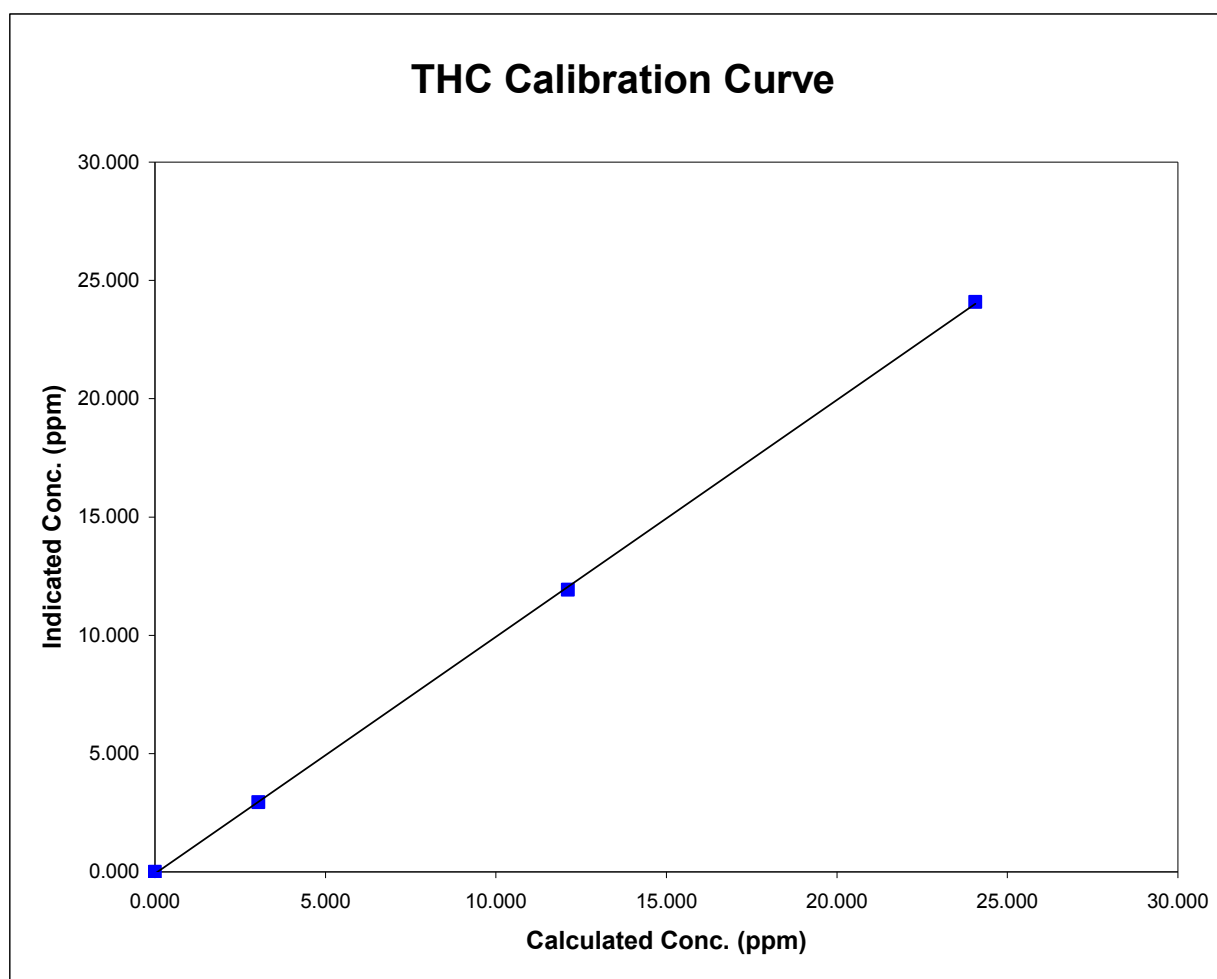


### Station Information

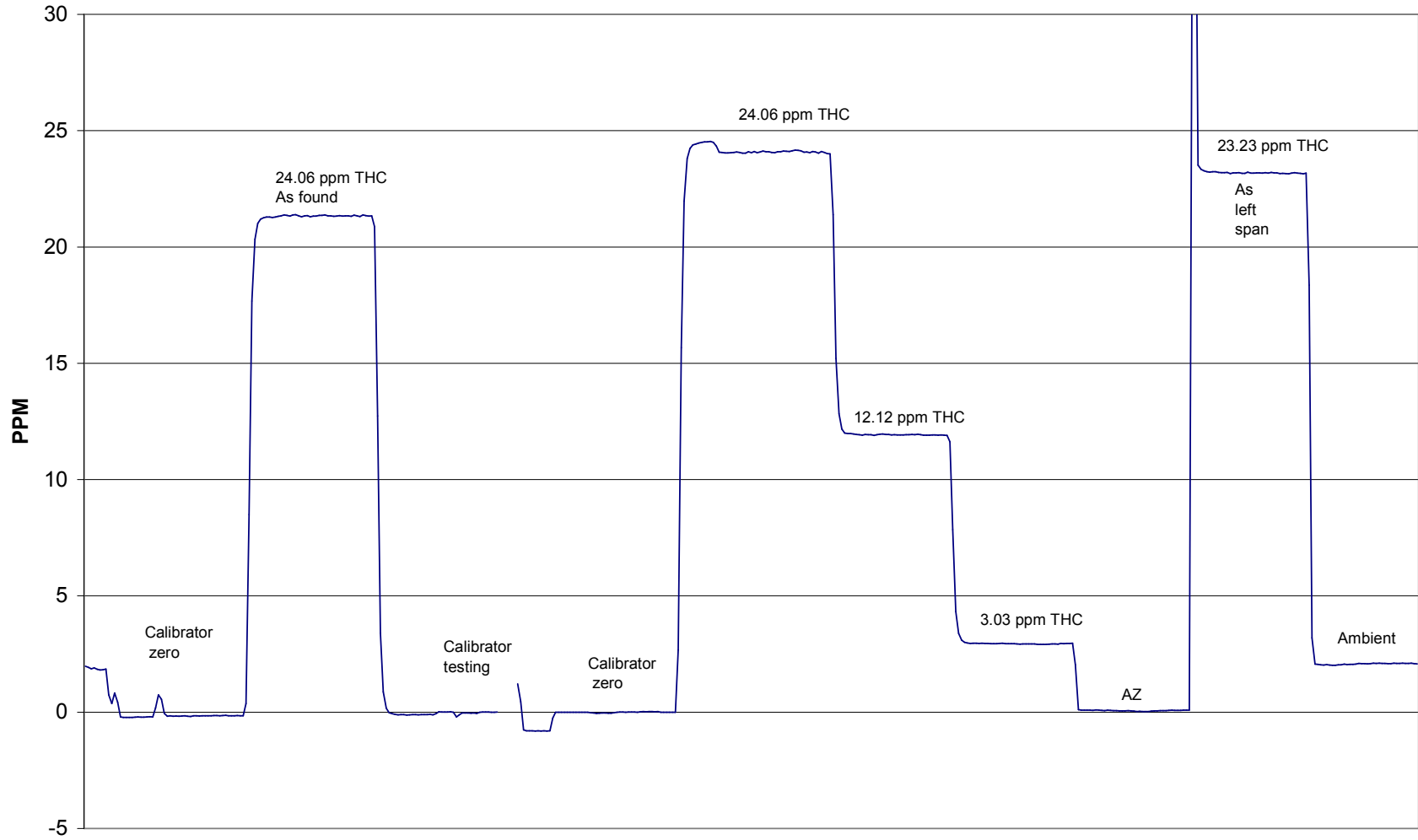
Calibration Date	January 10, 2006	Previous Calibration	December 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	8:15	End Time (MST)	18:30
Analyzer make/model	TEI model 51C-LT	Analyzer serial #	407505596

### Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.002	N/A		
24.059	24.082	0.9991	Correlation Coefficient	0.999926
12.116	11.931	1.0155		
3.034	2.939	1.0323	Slope	0.998334
			Intercept	0.081018



### THC Calibration



January 10, 2006

# Calibration Report



Parameter CO  
 Air Monitoring Network Palliser

## Station Information

Calibration Date	January 10, 2006	Previous Calibration	December 14, 2005
Station Number	101	Station Location	Crescent Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="text"/>
Start Time (MST)	11:00	End Time (MST)	15:25
Barometric Pressure	26.9 in Hg	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	2977
Cal Gas Conc	2998 ppm	Cal Gas Expiry Date	3/14/2008
		Cal Gas Cylinder #	BLM002248
DACS make	Focus AP1000	DACS serial No.	45270
DACS voltage range	0 - 1 volt	DACS channel #	11
	Before		After
Calculated slope	1.014790	Calculated slope	0.993577
Calculated intercept	-0.245988	Calculated intercept	0.248470
Analyzer make	TEI Model 48CLT	Analyzer serial #	436609887

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO coefficient	1.057		1.060	
CO bkg setting	6.927		8.287	
Lamp ratio	1.1540		1.1427	
Lamp intensity	199080	Hz	200000	Hz
Sample Flow	1.008	LPM	0.991	LPM

## Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4984	0.00	0.00	-0.14	N/A
4995	49.94	29.68	29.68	0.9999
4995	19.98	11.94	11.64	1.0266
4995	9.98	5.98	5.73	1.0438
4984	0.00	0.00	1.09	0.0000
4984	49.83	29.68	27.80	1.0676
Average Correction Factor				1.0234

Calculated value of As Found Response: 26.856 ppm      Percent Change of As Found: 9.5%

	before calibration		after calibration	
Auto zero	0.32	ppm	0.11	ppm
Auto span	20.04	ppm	19.61	ppm

Notes: Analyzer was zero and span adjusted.  
CO scrubber temperature was increased for station zero air supply.

Calibration Performed By: Kelly Baragar



# Calibration Summary

Parameter CO  
 Air Monitoring Network Palliser

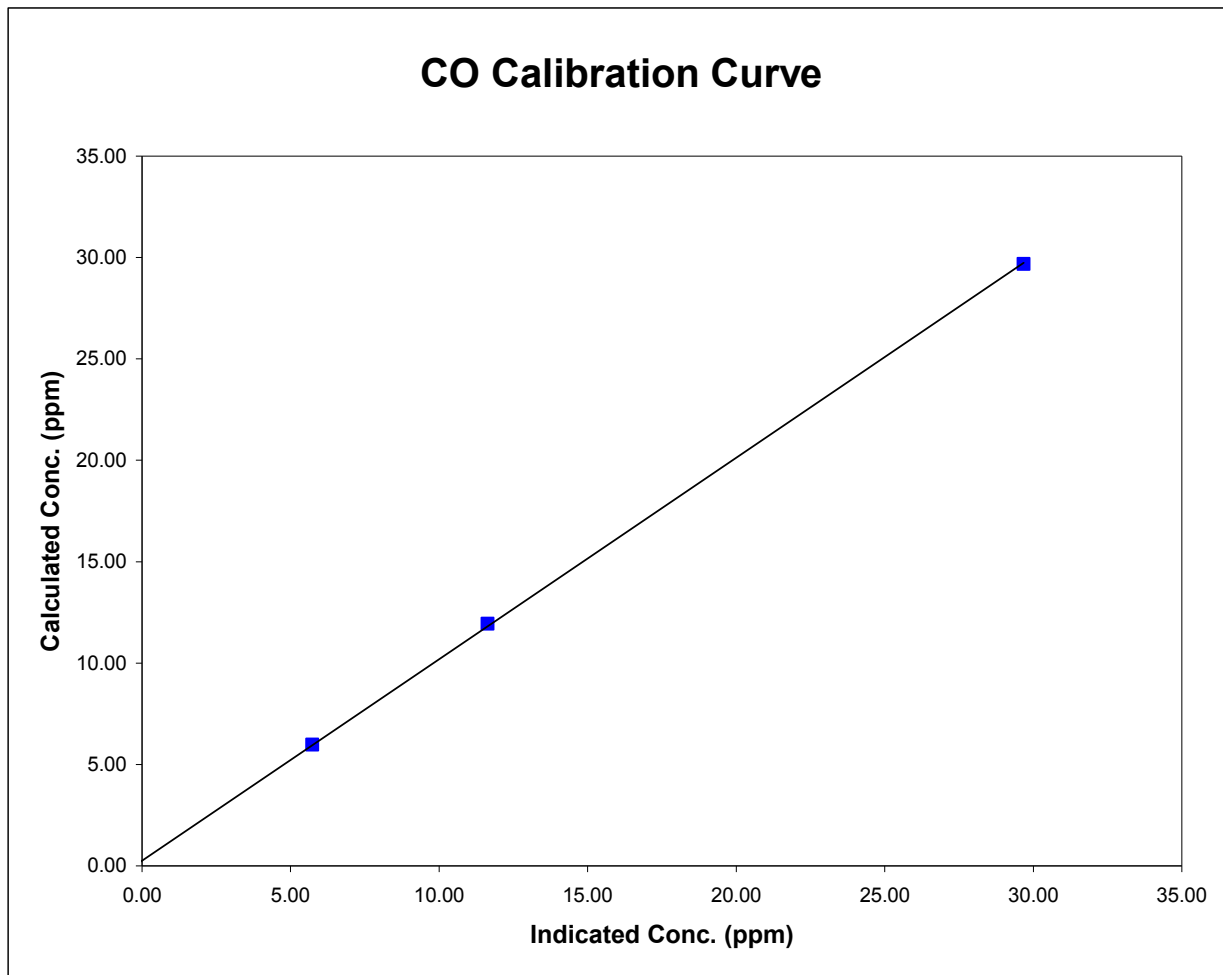


### Station Information

Calibration Date	January 10, 2006	Previous Calibration	December 14, 2005
Station Number	101	Station Location	Crescent Heights
Start Time (MST)	11:00	End Time (MST)	15:25
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	-0.14	N/A		
29.68	29.68	0.9999	Correlation Coefficient	0.999926
11.94	11.64	1.0266		
5.98	5.73	1.0438	Slope	0.993577
			Intercept	0.248470



### CO Calibration

