



# Palliser Airshed Society

## Ambient Air Monitoring Network Summary

**April 2007**

Prepared By:



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### TABLE OF CONTENTS

|   |    |
|---|----|
| Airshed Zone Association – April 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.....                          | 13 |
| PAS - Crescent Heights - Ozone Monthly Summary.....                                       | 18 |
| PAS - Crescent Heights - Ozone Eight-Hour Running Average Summary .....                   | 23 |
| PAS - Crescent Heights - Carbon Monoxide Monthly Summary .....                            | 24 |
| PAS - Crescent Heights - Carbon Monoxide Eight-Hour Running Average 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 – April 2007 .....   | 51 |
| April 2007 - 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.....  | 14 |
| 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 Monthly 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 |



May 29, 2007

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Environmental Service Response Centre  
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**Attention: Director of Monitoring and Evaluation**

**RE: Palliser Airshed Society (PAS) Ambient Air Monitoring Report – April 2007**

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Enclosed is the PAS Ambient Monitoring Report for the month of **April 2007**.

**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 uptime of all instruments was 90% or greater for the month of April.

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

- Monthly average concentrations of NO<sub>2</sub> was 5.0 ppb
- Monthly average concentrations for O<sub>3</sub> was 32.1 ppb
- Monthly average concentrations for CO was 0.19 ppm
- Monthly average concentrations for THC was 2.01 ppm
- Monthly average concentrations for PM<sub>2.5</sub> was 3.4 µg/m<sup>3</sup>

The Air Quality Index (AQI) recorded 651 hours of Good readings and 31 hours of Fair readings for the month of April.

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

The O<sub>3</sub> passive sample from the Southridge site was damaged and no results are available for the sample. The passive sample analyses were performed by MAXXAM Analytics Inc. The following are the ranges for April 2007 recorded by the six passive stations located throughout the PAS zone.

- ◆ Average concentrations for SO<sub>2</sub> passives ranged from 0.2 to 0.3 ppb with a mean of 0.3 ppb.
- ◆ Average concentrations for NO<sub>2</sub> passives ranged from 2.9 to 5.1 ppb with a mean of 4.2 ppb.
- ◆ Average concentrations for O<sub>3</sub> passives ranged from 30.3 to 38.9 ppb with a mean of 35.2 ppb.

Focus added the NO<sub>2</sub> and SO<sub>2</sub> Provincial Annual Objectives to the passive figures to provide a quick comparison for the reader of the ambient data and the objective.

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

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# Continuous Monitoring

## Ambient Air Monitoring Network

### Crescent Heights Station

#### General Station Issues

Calibrations were performed on April 25<sup>th</sup> (NO<sub>x</sub>) and April 26<sup>th</sup> (THC, CO, O<sub>3</sub> and TEOM). On April 14<sup>th</sup> at 22:00 there was a power bump which resulted in one (1) hour of invalid data for all parameters.

| 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 | µg/m <sup>3</sup> | No operational issues observed. |
| Wind Speed              | Met One        | 010C   | kph               | No operational issues observed. |
| Wind Direction          | Met One        | 020C   | Deg               | No operational issues observed. |
| Ambient Temperature     | Met One        | 083D   | DegC              | No operational issues observed. |
| Relative Humidity       | Met One        | 083D   | %                 | No operational issues observed. |
| Solar Radiation         | Met One        | 096-1  | W/m <sup>2</sup>  | No operational issues observed. |
| Data Acquisition System | Titan Logix    | AP1000 |                   | No operational issues observed. |



## April 2007 Monthly Overall Summary Report Ambient Air Quality Data

| Apr-2007                               |            | Palliser Airshed Society |                  |                 |            |       | Maximum Recorded Values |              |              |               |      |        | Operational Time (%) |
|--|------------|--------------------------|------------------|-----------------|------------|-------|-------------------------|--------------|--------------|---------------|------|--------|----------------------|
| Pollutant (units)                      | Objectives |                          | Station          | Monthly Average | Exceedence |       | Conc                    | 1-hr         |              | 24-hr / 8-hr  |      | Day    |                      |
|  | 1-hr       | 24-hr                    |                  |                 | 1-hr       | 24-hr |                         | Day          | WSPD (km/hr) | WDIR (Sector) | Conc |        |                      |
| NO (ppb)                               |            |                          | Crescent Heights | 1.7             | -          | -     | 37.6                    | Apr-04 07:00 | 4.3          | E             | 3.7  | Apr-04 | 99.9%                |
| NO <sub>2</sub> (ppb)                  | 212        | 106                      | Crescent Heights | 5.0             | 0          | 0     | 26.9                    | Apr-21 22:00 | 4.2          | ESE           | 8.3  | Apr-12 | 99.9%                |
| NO <sub>x</sub> (ppb)                  |            |                          | Crescent Heights | 6.4             | -          | -     | 57.3                    | Apr-04 07:00 | 4.3          | E             | 10.3 | Apr-09 | 99.9%                |
| O <sub>3</sub> (ppb)                   | 82         |                          | Crescent Heights | 32.1            | 0          | -     | 60.0                    | Apr-28 10:00 | 26.4         | W             | 47.7 | Apr-29 | 99.9%                |
| O <sub>3</sub> (ppb) - 8-hr            | 65         |                          | Crescent Heights |                 | 0          |       |                         |              |              |               | 57.4 | Apr-28 |                      |
| CO (ppm)                               | 13         |                          | Crescent Heights | 0.19            | 0          | -     | 0.7                     | Apr-04 07:00 | 4.3          | E             | 0.2  | Apr-04 | 99.9%                |
| CO (ppm) - 8-hr                        | 5          |                          | Crescent Heights |                 | 0          |       |                         |              |              |               | 0.3  | Apr-04 |                      |
| THC (ppm)                              |            |                          | Crescent Heights | 2.01            | -          | -     | 2.7                     | Apr-22 03:00 | 3.2          | N             | 2.1  | Apr-04 | 99.9%                |
| PM <sub>2.5</sub> (µg/m <sup>3</sup> ) |            | 30 <sup>a</sup>          | Crescent Heights | 3.4             |            | 0     | 12.8                    | Apr-04 07:00 | 4.3          | E             | 6.6  | Apr-03 | 99.9%                |
| RH (%)                                 |            |                          | Crescent Heights | 62.1            | -          | -     | -                       | -            | -            | -             | -    | -      | 99.9%                |
| SR (W/m <sup>2</sup> )                 |            |                          | Crescent Heights | 185.0           | -          | -     | -                       | -            | -            | -             | -    | -      | 99.9%                |
| Temp (°C)                              |            |                          | Crescent Heights | 5.9             | -          | -     | -                       | -            | -            | -             | -    | -      | 99.9%                |
| WSPD v (km/hr)                         |            |                          | Crescent Heights | 11.4            | -          | -     | 29.7                    | Apr-16 17:00 | 29.7         | S             | 17.9 | Apr-16 | 99.9%                |
| WSPD s (km/hr)                         |            |                          | Crescent Heights | 11.8            | -          | -     | 29.9                    | Apr-16 17:00 | 29.9         | S             | 18.6 | Apr-28 | 99.9%                |
| WDIR (Deg)                             |            |                          | Crescent Heights | WSW             | -          | -     | -                       | -            | -            | -             | -    | -      | 99.9%                |

Note: <sup>a</sup> the draft 24-hr Alberta Ambient Air Quality Objectives



# **PAS - Crescent Heights**

## **Monthly Summary Tables, Graphs, and Roses**



# PAS - Crescent Heights - AQI Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

## Air Quality Index (AQI)

Monitoring Dates: April 1, 2007 to May 1, 2007

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:      | 651 |
| Number of 1-hr Fair Readings:      | 31  |
| 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

| Day       | 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-Apr-07  | N    | 18   | 19   | 19   | 16   | 15   | 12   | 13   | 15   | 16   | 16    | 17    | 18    | 18    | 18    | 17    | 17    | 15    | 13    | 13    | 12    | 13    | N     | N     |      |
| 2-Apr-07  | 14   | 14   | 13   | 14   | 13   | 12   | 13   | 12   | 12   | 11   | 10    | 11    | 11    | 12    | 13    | 13    | 15    | 16    | 16    | 16    | 16    | 16    | 17    | N     | 15   |
| 3-Apr-07  | 15   | 14   | 15   | 15   | 14   | 12   | 12   | 12   | 12   | 11   | 11    | 12    | 13    | 14    | 14    | 14    | 14    | 13    | 8     | 10    | 10    | N     | N     | 14    | 13   |
| 4-Apr-07  | 12   | 13   | 13   | 13   | 11   | 7    | 8    | 11   | 10   | 12   | 13    | 15    | 18    | 18    | 18    | 18    | 18    | 17    | 16    | 15    | N     | 15    | 15    | 12    |      |
| 5-Apr-07  | 12   | 11   | 11   | 11   | 10   | 10   | 9    | 9    | 10   | 10   | 12    | 13    | 14    | 14    | 15    | 16    | 18    | 18    | 18    | N     | 17    | 16    | 15    | 15    |      |
| 6-Apr-07  | 15   | 13   | 13   | 12   | 7    | 5    | 10   | 12   | 17   | 19   | 20    | 21    | 21    | 21    | 21    | 21    | 20    | 21    | N     | 19    | 16    | 12    | 13    | 14    |      |
| 7-Apr-07  | 14   | 13   | 16   | 16   | 14   | 13   | 13   | 16   | 18   | 19   | 20    | 22    | 22    | 21    | 22    | 22    | 21    | N     | 19    | 16    | 17    | 19    | 20    | 20    |      |
| 8-Apr-07  | 18   | 13   | 17   | 17   | 18   | 14   | 11   | 10   | 12   | 18   | 20    | 22    | 24    | 25    | 25    | 24    | N     | 24    | 21    | 20    | 12    | 10    | 13    | 9     |      |
| 9-Apr-07  | 8    | 7    | 10   | 5    | 9    | 8    | 9    | 11   | 11   | 16   | 16    | 18    | 18    | 18    | 18    | N     | 14    | 13    | 15    | 15    | 15    | 13    | 13    | 14    |      |
| 10-Apr-07 | 11   | 10   | 9    | 9    | 7    | 7    | 7    | 8    | 11   | 14   | 16    | 17    | 18    | 19    | N     | 19    | 18    | 19    | 18    | 18    | 18    | 17    | 15    | 14    |      |
| 11-Apr-07 | 14   | 16   | 17   | 17   | 15   | 13   | 14   | 16   | 20   | 20   | 18    | 18    | 18    | N     | 22    | 23    | 22    | 22    | 20    | 18    | 16    | 13    | 13    | 12    |      |
| 12-Apr-07 | 11   | 8    | 10   | 12   | 11   | 8    | 8    | 11   | 16   | 19   | 20    | 21    | N     | 22    | 21    | 22    | 22    | 24    | 23    | 18    | 13    | 9     | 6     | 7     |      |
| 13-Apr-07 | 13   | 13   | 15   | 15   | 15   | 13   | 12   | 13   | 14   | 17   | 19    | N     | 24    | 25    | 25    | 26    | 26    | 24    | 22    | 19    | 15    | 12    | 11    | 11    |      |
| 14-Apr-07 | 11   | 11   | 10   | 11   | 13   | 12   | 10   | 13   | 16   | 18   | N     | 20    | 21    | 21    | 22    | 22    | 21    | 21    | 19    | 15    | 11    | 9     | N     | 13    |      |
| 15-Apr-07 | 16   | 15   | 14   | 17   | 14   | 15   | 14   | 19   | 18   | N    | 14    | 17    | 21    | 24    | 24    | 25    | 25    | 25    | 24    | 20    | 19    | 17    | 14    | 8     |      |
| 16-Apr-07 | 9    | 10   | 8    | 7    | 7    | 4    | 4    | 7    | N    | 22   | 24    | 23    | 23    | 23    | 23    | 24    | 24    | 24    | 23    | 23    | 22    | 20    | 18    | 19    |      |
| 17-Apr-07 | 18   | 16   | 16   | 16   | 16   | 14   | 11   | N    | 17   | 15   | 15    | 11    | 20    | 23    | 23    | 23    | 23    | 23    | 21    | 18    | 20    | 17    | 16    | 10    |      |
| 18-Apr-07 | 11   | 9    | 10   | 13   | 10   | 5    | N    | 5    | 4    | 5    | 11    | 14    | 15    | 14    | 16    | 16    | 16    | 14    | 12    | 13    | 13    | 13    | 13    | 13    |      |
| 19-Apr-07 | 12   | 15   | 15   | 13   | 15   | N    | 13   | 15   | 15   | 15   | 14    | 10    | 10    | 11    | 12    | 12    | 11    | 10    | 9     | 8     | 6     | 8     | 6     | 6     |      |
| 20-Apr-07 | 7    | 7    | 8    | 9    | N    | 8    | 7    | 7    | 8    | 9    | 8     | 9     | 9     | 11    | 11    | 13    | 13    | 16    | 17    | 14    | 16    | 15    | 15    | 14    |      |
| 21-Apr-07 | 14   | 14   | 12   | N    | 12   | 12   | 11   | 11   | 11   | 12   | 12    | 14    | 15    | 16    | 15    | 18    | 19    | 19    | 17    | 14    | 11    | 7     | 6     | 4     |      |
| 22-Apr-07 | 4    | 4    | N    | 4    | 4    | 5    | 4    | 9    | 16   | 16   | 18    | 18    | 20    | 23    | 24    | 25    | 25    | 25    | 24    | 21    | 20    | 16    | 14    | 12    |      |
| 23-Apr-07 | 11   | N    | 12   | 13   | 13   | 10   | 9    | 9    | 10   | 13   | 15    | 17    | 21    | 23    | 23    | 23    | 22    | 22    | 22    | 21    | 19    | 18    | 18    | 15    |      |
| 24-Apr-07 | N    | 9    | 4    | 5    | 4    | 3    | 4    | 7    | 11   | 18   | 22    | 23    | 22    | 23    | 23    | 24    | 24    | 23    | 21    | 19    | 17    | 17    | 16    | N     |      |
| 25-Apr-07 | 15   | 14   | 12   | 12   | 11   | 10   | 9    | 11   | 12   | 12   | 18    | 20    | 21    | 22    | 24    | 24    | 24    | 23    | 21    | 17    | 21    | 18    | 16    | 15    |      |
| 26-Apr-07 | 15   | 15   | N    | 14   | 12   | 9    | 8    | 2    | 4    | 4    | 2     | 22    | 26    | 29    | N     | N     | N     | N     | N     | 21    | 19    | 20    | 18    | 17    |      |
| 27-Apr-07 | 18   | 17   | N    | 18   | 18   | 18   | 16   | 17   | 21   | 22   | 24    | 26    | 28    | 30    | 32    | 32    | 29    | 26    | 26    | 23    | 20    | 19    | 20    | 18    |      |
| 28-Apr-07 | 17   | N    | 16   | 16   | 18   | 20   | 20   | 22   | 25   | 32   | 33    | 30    | 32    | 31    | 31    | 31    | 29    | 29    | 29    | 25    | 22    | 21    | 21    | 20    |      |
| 29-Apr-07 | N    | 18   | 17   | 20   | 21   | 20   | 20   | 23   | 27   | 28   | 28    | 26    | 26    | 25    | 26    | 24    | 25    | 27    | 33    | 30    | 24    | 23    | 22    | N     |      |
| 30-Apr-07 | 20   | 20   | 19   | 18   | 17   | 17   | 18   | 15   | 20   | 21   | 20    | 20    | 20    | 21    | 21    | 21    | 23    | 23    | 23    | 23    | 22    | 16    | N     | 17    |      |



# PAS - Crescent Heights - Nitrogen Dioxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

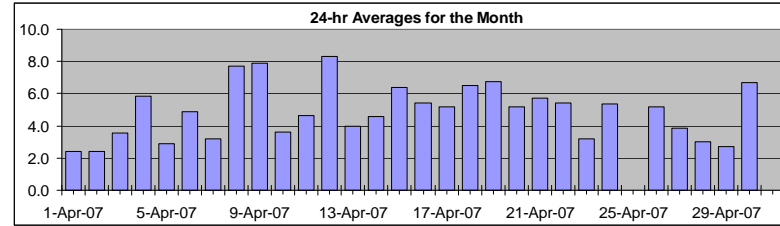
## HOURLY AVERAGE TABLE

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

Monitoring Dates: April 1, 2007 to May 1, 2007

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:        | 26.9 | ppb | 21-Apr | 22:00 | 23:00 |
| Maximum 24-hr Average:       | 8.3  | ppb | 12-Apr |       |       |



|                   |        |                         |         |     |     |     |     |         |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 680 hrs |     |     |     |     |         |         |
| Calibration Time: | 6 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |         |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average | Median  |
|                   | 18.2   | 12.6                    | 6.6     | 3.8 | 2.3 | 1.0 | 0.4 | 5.0 ppb | 3.8 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 |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 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-Apr-07   | A                      | 5    | 3    | 3    | 3    | 4    | 7    | 4    | 2    | 2    | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 3     | 3     | 2     | 1     | 1     | A     |                 | 2.4           | 7.4  |
| 2-Apr-07   | 3                      | 2    | 2    | 2    | 3    | 5    | 4    | 6    | 3    | 3    | 4     | 1     | 2     | 3     | 2     | 2     | 1     | 1     | 1     | 1     | 1     | 1     | A     | 3     |                 | 2.4           | 5.9  |
| 3-Apr-07   | 1                      | 1    | 1    | 1    | 1    | 3    | 3    | 2    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 5     | 15    | 12    | 11    | A     | 7     | 9     |                 | 3.5           | 14.9 |
| 4-Apr-07   | 8                      | 8    | 6    | 6    | 11   | 16   | 18   | 20   | 9    | 5    | 4     | 2     | 0     | 1     | 1     | 1     | 1     | 2     | 2     | 2     | A     | 4     | 3     | 2     |                 | 5.9           | 19.9 |
| 5-Apr-07   | 3                      | 3    | 3    | 2    | 3    | 3    | 5    | 6    | 3    | 2    | 1     | 2     | 2     | 3     | 3     | 2     | 2     | 1     | 2     | A     | 5     | 4     | 4     | 3     |                 | 2.9           | 5.8  |
| 6-Apr-07   | 3                      | 4    | 4    | 4    | 11   | 15   | 9    | 9    | 3    | 0    | 0     | 1     | 1     | 1     | 0     | 1     | 3     | 1     | A     | 5     | 6     | 13    | 11    | 6     |                 | 4.9           | 15.3 |
| 7-Apr-07   | 3                      | 4    | 0    | 0    | 2    | 5    | 6    | 3    | 2    | 3    | 2     | 1     | 1     | 1     | 1     | 2     | 2     | A     | 7     | 11    | 7     | 4     | 3     | 2     |                 | 3.2           | 10.6 |
| 8-Apr-07   | 6                      | 16   | 8    | 5    | 4    | 9    | 9    | 9    | 12   | 7    | 4     | 3     | 2     | 3     | 1     | 2     | A     | 5     | 9     | 6     | 17    | 16    | 10    | 15    |                 | 7.7           | 16.7 |
| 9-Apr-07   | 11                     | 15   | 10   | 18   | 10   | 11   | 9    | 7    | 9    | 6    | 7     | 7     | 6     | 4     | 4     | A     | 9     | 9     | 7     | 4     | 5     | 5     | 3     | 5     |                 | 7.9           | 17.7 |
| 10-Apr-07  | 4                      | 3    | 3    | 3    | 7    | 8    | 7    | 4    | 3    | 3    | 2     | 2     | 2     | 1     | A     | 4     | 3     | 2     | 3     | 2     | 2     | 4     | 5     | 5     |                 | 3.6           | 7.9  |
| 11-Apr-07  | 5                      | 2    | 2    | 2    | 4    | 7    | 6    | 3    | 2    | 2    | 4     | 5     | 5     | A     | 4     | 3     | 3     | 2     | 3     | 6     | 9     | 11    | 8     | 7     |                 | 4.7           | 10.8 |
| 12-Apr-07  | 8                      | 13   | 9    | 5    | 7    | 11   | 12   | 9    | 3    | 3    | 2     | 1     | A     | 5     | 5     | 4     | 5     | 5     | 5     | 9     | 12    | 17    | 21    | 18    |                 | 8.3           | 21.4 |
| 13-Apr-07  | 6                      | 5    | 2    | 4    | 3    | 4    | 4    | 2    | 2    | 3    | 3     | A     | 5     | 3     | 3     | 2     | 3     | 3     | 3     | 5     | 7     | 7     | 7     | 4     |                 | 4.0           | 7.1  |
| 14-Apr-07  | 3                      | 3    | 4    | 3    | 2    | 5    | 7    | 4    | 2    | 2    | A     | 4     | 4     | 3     | 2     | 3     | 4     | 4     | 5     | 7     | 11    | 13    | P     | 5     |                 | 4.5           | 13.4 |
| 15-Apr-07  | 3                      | 6    | 6    | 3    | 7    | 4    | 8    | 4    | 5    | A    | 10    | 7     | 5     | 2     | 2     | 2     | 2     | 2     | 3     | 9     | 10    | 9     | 15    | 23    |                 | 6.4           | 22.8 |
| 16-Apr-07  | 13                     | 7    | 7    | 8    | 9    | 16   | 17   | 12   | A    | 4    | 3     | 3     | 3     | 2     | 3     | 2     | 2     | 1     | 3     | 2     | 2     | 2     | 3     | 2     |                 | 5.4           | 16.6 |
| 17-Apr-07  | 2                      | 3    | 3    | 2    | 3    | 8    | 12   | A    | 7    | 6    | 9     | 16    | 5     | 2     | 3     | 2     | 2     | 3     | 4     | 5     | 3     | 4     | 3     | 13    |                 | 5.2           | 15.8 |
| 18-Apr-07  | 10                     | 13   | 10   | 3    | 7    | 13   | A    | 18   | 13   | 12   | 6     | 3     | 3     | 4     | 3     | 3     | 3     | 3     | 6     | 4     | 3     | 3     | 3     | 3     |                 | 6.5           | 18.2 |
| 19-Apr-07  | 4                      | 2    | 2    | 6    | 3    | A    | 9    | 5    | 4    | 4    | 5     | 11    | 10    | 8     | 6     | 5     | 6     | 7     | 8     | 9     | 11    | 8     | 11    | 11    |                 | 6.7           | 11.4 |
| 20-Apr-07  | 7                      | 8    | 5    | 3    | A    | 8    | 8    | 7    | 5    | 4    | 5     | 5     | 4     | 4     | 5     | 5     | 8     | 4     | 3     | 7     | 3     | 3     | 3     | 5     |                 | 5.2           | 8.5  |
| 21-Apr-07  | 3                      | 3    | 7    | A    | 7    | 4    | 5    | 5    | 4    | 3    | 2     | 2     | 2     | 2     | 4     | 2     | 1     | 1     | 3     | 3     | 9     | 16    | 27    | 17    |                 | 5.7           | 26.9 |
| 22-Apr-07  | 18                     | 17   | A    | 19   | 16   | 14   | 11   | 7    | 1    | 1    | 2     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 4     | 1     | 3     | 4     | 3     |                 | 5.4           | 18.6 |
| 23-Apr-07  | 4                      | A    | 7    | 3    | 2    | 7    | 7    | 8    | 5    | 3    | 4     | 3     | 1     | 2     | 3     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 3     |                 | 3.2           | 7.8  |
| 24-Apr-07  | A                      | 10   | 11   | 8    | 10   | 11   | 12   | 8    | 4    | 2    | 3     | 2     | 2     | 2     | 3     | 3     | 2     | 3     | 5     | 5     | 4     | 4     | 3     | A     |                 | 5.3           | 11.6 |
| 25-Apr-07  | 5                      | 4    | 6    | 5    | 6    | 8    | 11   | 8    | 6    | 7    | 4     | 2     | 4     | C     | C     | C     | C     | C     | C     | A     | 7     | 10    | 10    | 8     |                 | N             | 11.4 |
| 26-Apr-07  | 5                      | 3    | A    | 6    | 7    | 7    | 10   | 10   | 5    | 6    | 6     | 4     | 4     | 3     | 4     | 3     | 5     | 3     | 7     | 5     | 6     | 2     | 5     | 3     |                 | 5.2           | 10.2 |
| 27-Apr-07  | 2                      | 2    | A    | 7    | 5    | 5    | 7    | 6    | 3    | 2    | 2     | 1     | 2     | 4     | 2     | 4     | 4     | 2     | 6     | 6     | 5     | 4     | 4     |       | 3.9             | 6.9           |      |
| 28-Apr-07  | 5                      | A    | 6    | 5    | 3    | 4    | 3    | 3    | 2    | 2    | 1     | 3     | 2     | 2     | 2     | 2     | 2     | 1     | 1     | 2     | 4     | 6     | 4     | 4     |                 | 3.0           | 5.8  |
| 29-Apr-07  | A                      | 8    | 7    | 4    | 2    | 2    | 2    | 1    | 1    | 1    | 2     | 3     | 3     | 3     | 2     | 2     | 2     | 2     | 2     | 3     | 4     | 2     | 2     | A     |                 | 2.7           | 7.8  |
| 30-Apr-07  | 5                      | 3    | 3    | 5    | 5    | 9    | 7    | 10   | 5    | 3    | 5     | 7     | 9     | 8     | 8     | 9     | 9     | 9     | 8     | 7     | 4     | 9     | A     | 9     |                 | 6.7           | 10.4 |
| Hourly Avg | 5.7                    | 6.3  | 5.1  | 5.0  | 5.6  | 7.7  | 8.1  | 6.8  | 4.3  | 3.6  | 3.6   | 3.6   | 3.0   | 2.7   | 2.9   | 2.5   | 3.3   | 3.1   | 4.3   | 5.3   | 5.9   | 6.5   | 6.8   | 7.2   |                 |               |      |
| Hourly Max | 18.3                   | 16.6 | 11.4 | 18.6 | 15.7 | 16.4 | 18.3 | 19.9 | 12.6 | 12.1 | 9.8   | 15.8  | 10.2  | 8.2   | 8.4   | 9.1   | 9.1   | 9.3   | 14.9  | 11.6  | 16.7  | 17.3  | 26.9  | 22.8  |                 |               |      |

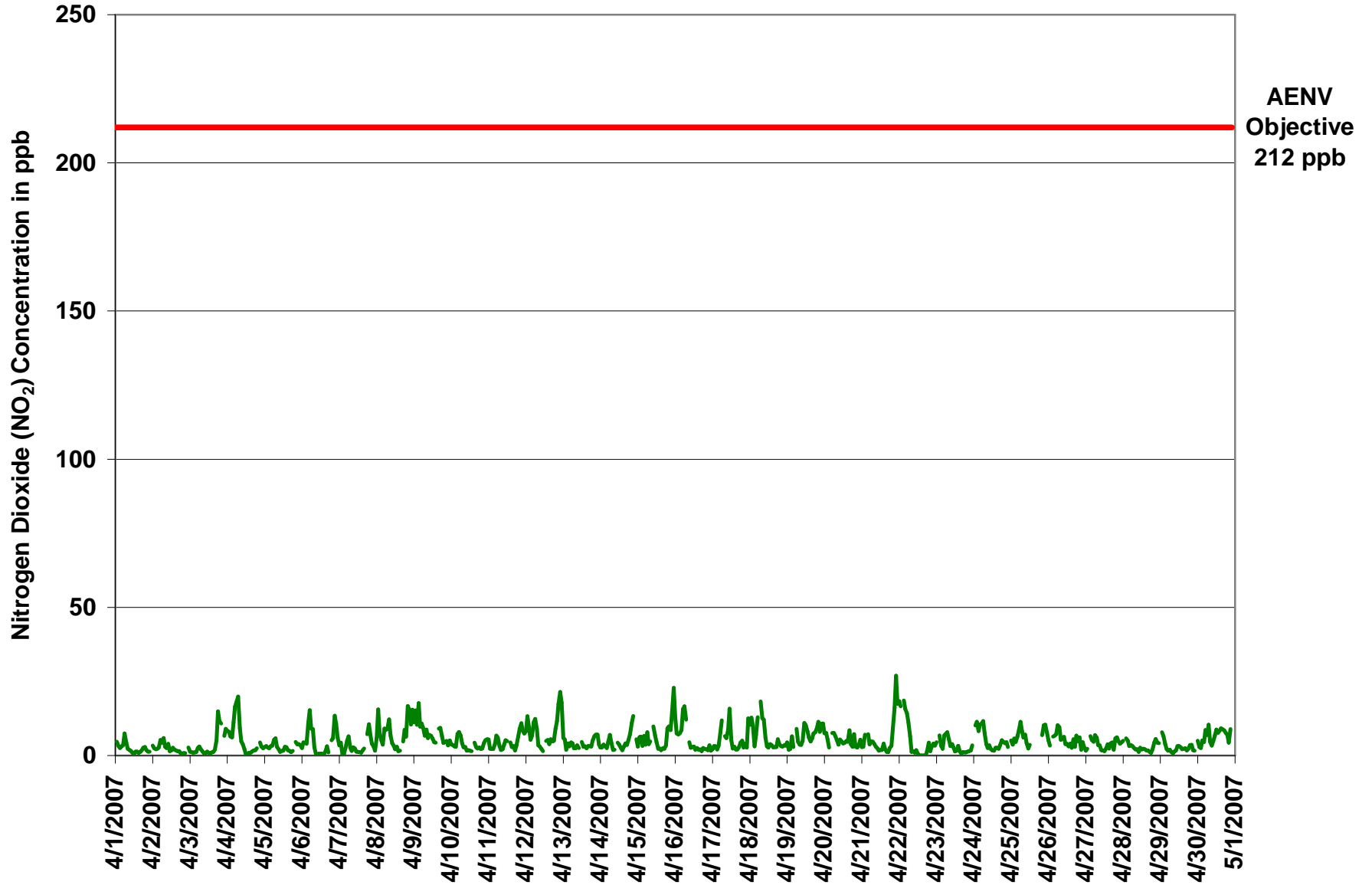


Figure 1. PAS - Crescent Heights Nitrogen Dioxide 1-hr Average Monthly Trend





Station: Crescent Heights  
 Station Owner: PAS

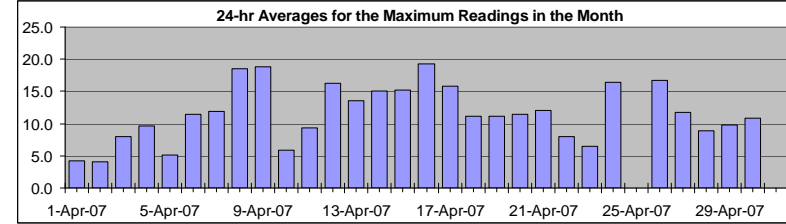
### INSTANTANEOUS (30 Second) MAXIMUM TABLE

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

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                      |      |     |        |             |
|----------------------|------|-----|--------|-------------|
| Maximum 1-hr Value:  | 52.7 | ppb | 8-Apr  | 13:00 14:00 |
| Maximum 24-hr Value: | 19.3 | ppb | 16-Apr |             |



|                   |        |                         |         |     |     |     |     |          |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|----------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 680 hrs |     |     |     |     |          |         |
| Calibration Time: | 6 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |          |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average  | Median  |
|                   | 42.5   | 32.6                    | 16.0    | 8.3 | 4.2 | 2.1 | 1.2 | 11.7 ppb | 8.3 ppb |

**Status Flag Characters**

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

**Day Mountain Standard Time**

| Hour Start<br>Hour End | 0:00<br>1:00 | 1:00<br>2:00 | 2:00<br>3:00 | 3:00<br>4:00 | 4:00<br>5:00 | 5:00<br>6:00 | 6:00<br>7:00 | 7:00<br>8:00 | 8:00<br>9:00 | 9:00<br>10:00 | 10:00<br>11:00 | 11:00<br>12:00 | 12:00<br>13:00 | 13:00<br>14:00 | 14:00<br>15:00 | 15:00<br>16:00 | 16:00<br>17:00 | 17:00<br>18:00 | 18:00<br>19:00 | 19:00<br>20:00 | 20:00<br>21:00 | 21:00<br>22:00 | 22:00<br>23:00 | 23:00<br>0:00 | 24-hour<br>Average | Daily<br>Maximum |  |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|--|
| 1-Apr-07               | A            | 8            | 5            | 4            | 5            | 5            | 11           | 9            | 5            | 3             | 3              | 4              | 1              | 2              | 3              | 2              | 4              | 4              | 5              | 4              | 2              | 3              | A              | 4.3           | 11.3               |                  |  |
| 2-Apr-07               | 7            | 3            | 3            | 3            | 4            | 9            | 8            | 8            | 5            | 4             | 6              | 3              | 3              | 6              | 3              | 3              | 2              | 2              | 1              | 2              | 2              | A              | 6              | 4.1           | 8.9                |                  |  |
| 3-Apr-07               | 3            | 2            | 2            | 2            | 2            | 4            | 6            | 4            | 2            | 2             | 2              | 15             | 2              | 1              | 7              | 2              | 5              | 12             | 23             | 19             | 24             | A              | 27             | 14            | 7.9                | 27.1             |  |
| 4-Apr-07               | 10           | 25           | 16           | 9            | 15           | 24           | 22           | 25           | 23           | 7             | 6              | 4              | 1              | 2              | 4              | 2              | 2              | 3              | 3              | 3              | A              | 8              | 4              | 4             | 9.6                | 25.3             |  |
| 5-Apr-07               | 4            | 4            | 4            | 5            | 6            | 5            | 8            | 10           | 5            | 3             | 3              | 4              | 3              | 6              | 10             | 3              | 3              | 2              | 3              | A              | 11             | 6              | 7              | 4             | 5.1                | 10.5             |  |
| 6-Apr-07               | 8            | 7            | 10           | 8            | 19           | 23           | 13           | 12           | 7            | 1             | 1              | 2              | 1              | 2              | 1              | 11             | 39             | 3              | A              | 8              | 8              | 52             | 17             | 8             | 11.5               | 52.2             |  |
| 7-Apr-07               | 6            | 10           | 1            | 2            | 4            | 11           | 10           | 7            | 3            | 19            | 3              | 3              | 3              | 16             | 2              | 23             | 48             | A              | 27             | 31             | 13             | 13             | 13             | 3             | 11.8               | 48.1             |  |
| 8-Apr-07               | 51           | 38           | 29           | 9            | 7            | 16           | 18           | 17           | 19           | 10            | 6              | 7              | 4              | 53             | 2              | 4              | A              | 7              | 18             | 13             | 26             | 29             | 14             | 31            | 18.5               | 52.7             |  |
| 9-Apr-07               | 18           | 18           | 20           | 30           | 16           | 19           | 19           | 11           | 12           | 9             | 11             | 12             | 26             | 8              | 6              | A              | 12             | 36             | 33             | 24             | 28             | 29             | 7              | 30            | 18.8               | 36.3             |  |
| 10-Apr-07              | 6            | 5            | 5            | 4            | 16           | 13           | 10           | 7            | 4            | 5             | 3              | 3              | 2              | 3              | A              | 7              | 4              | 3              | 4              | 3              | 4              | 7              | 8              | 8             | 5.8                | 16.3             |  |
| 11-Apr-07              | 9            | 4            | 4            | 5            | 6            | 11           | 10           | 5            | 4            | 5             | 6              | 6              | 6              | A              | 8              | 10             | 17             | 3              | 26             | 23             | 12             | 14             | 11             | 10            | 9.4                | 25.5             |  |
| 12-Apr-07              | 14           | 16           | 15           | 11           | 9            | 26           | 31           | 12           | 5            | 23            | 18             | 3              | A              | 8              | 7              | 8              | 9              | 10             | 28             | 13             | 17             | 28             | 27             | 33            | 16.3               | 32.6             |  |
| 13-Apr-07              | 26           | 23           | 4            | 12           | 7            | 16           | 8            | 4            | 15           | 7             | 30             | A              | 7              | 4              | 7              | 4              | 35             | 26             | 5              | 29             | 9              | 10             | 18             | 7             | 13.6               | 35.4             |  |
| 14-Apr-07              | 5            | 5            | 7            | 11           | 4            | 10           | 33           | 20           | 4            | 21            | A              | 8              | 9              | 5              | 3              | 44             | 6              | 7              | 13             | 20             | 17             | 42             | P              | 36            | 15.0               | 43.6             |  |
| 15-Apr-07              | 5            | 33           | 22           | 17           | 18           | 8            | 19           | 8            | 14           | A             | 14             | 13             | 12             | 4              | 4              | 4              | 4              | 8              | 15             | 38             | 14             | 42             | 29             | 29            | 15.2               | 42.2             |  |
| 16-Apr-07              | 37           | 9            | 28           | 10           | 27           | 36           | 24           | 15           | A            | 8             | 20             | 17             | 33             | 29             | 23             | 3              | 3              | 2              | 24             | 3              | 13             | 22             | 31             | 26            | 19.3               | 37.0             |  |
| 17-Apr-07              | 21           | 14           | 32           | 4            | 5            | 37           | 32           | A            | 11           | 13            | 13             | 29             | 9              | 3              | 49             | 20             | 4              | 6              | 8              | 7              | 5              | 11             | 4              | 27            | 15.8               | 49.4             |  |
| 18-Apr-07              | 29           | 16           | 18           | 5            | 10           | 19           | A            | 21           | 17           | 16            | 14             | 4              | 4              | 6              | 6              | 6              | 4              | 6              | 16             | 5              | 5              | 8              | 8              | 12            | 11.1               | 29.1             |  |
| 19-Apr-07              | 13           | 3            | 9            | 31           | 9            | A            | 12           | 9            | 5            | 6             | 12             | 14             | 15             | 11             | 10             | 6              | 7              | 11             | 11             | 14             | 14             | 11             | 13             | 13            | 11.2               | 30.8             |  |
| 20-Apr-07              | 9            | 17           | 11           | 3            | A            | 10           | 16           | 9            | 6            | 5             | 11             | 18             | 5              | 6              | 6              | 8              | 32             | 8              | 4              | 33             | 15             | 6              | 6              | 19            | 11.4               | 32.5             |  |
| 21-Apr-07              | 4            | 33           | 28           | A            | 16           | 5            | 16           | 13           | 10           | 5             | 5              | 3              | 3              | 3              | 10             | 6              | 2              | 2              | 5              | 5              | 16             | 31             | 36             | 22            | 12.1               | 36.2             |  |
| 22-Apr-07              | 34           | 18           | A            | 24           | 17           | 16           | 14           | 10           | 3            | 3             | 2              | 3              | 2              | 1              | 1              | 1              | 0              | 1              | 4              | 11             | 2              | 5              | 6              | 6             | 7.9                | 34.5             |  |
| 23-Apr-07              | 6            | A            | 12           | 5            | 3            | 12           | 14           | 16           | 9            | 5             | 5              | 5              | 3              | 21             | 6              | 3              | 1              | 2              | 2              | 2              | 3              | 4              | 3              | 7             | 6.5                | 21.1             |  |
| 24-Apr-07              | A            | 18           | 18           | 10           | 14           | 15           | 14           | 14           | 6            | 21            | 40             | 22             | 12             | 3              | 16             | 7              | 3              | 6              | 30             | 37             | 20             | 29             | 7              | A             | 16.4               | 40.1             |  |
| 25-Apr-07              | 9            | 5            | 8            | 37           | 14           | 21           | 27           | 12           | 7            | 30            | 7              | 4              | 5              | C              | C              | C              | C              | C              | C              | A              | 14             | 24             | 16             | 15            | N                  | 37.2             |  |
| 26-Apr-07              | 27           | 6            | A            | 35           | 9            | 14           | 17           | 16           | 7            | 8             | 9              | 6              | 5              | 5              | 14             | 5              | 39             | 4              | 36             | 47             | 32             | 3              | 31             | 8             | 16.7               | 46.5             |  |
| 27-Apr-07              | 2            | 4            | A            | 13           | 20           | 9            | 12           | 11           | 6            | 7             | 4              | 3              | 3              | 6              | 34             | 3              | 24             | 31             | 4              | 20             | 24             | 8              | 6              | 13            | 11.7               | 33.7             |  |
| 28-Apr-07              | 22           | A            | 9            | 26           | 26           | 26           | 5            | 11           | 4            | 4             | 3              | 6              | 4              | 6              | 4              | 4              | 6              | 3              | 3              | 6              | 7              | 10             | 6              | 8             | 9.0                | 26.2             |  |
| 29-Apr-07              | A            | 14           | 11           | 6            | 3            | 3            | 3            | 3            | 1            | 3             | 4              | 42             | 18             | 28             | 3              | 3              | 35             | 4              | 5              | 15             | 6              | 3              | 3              | A             | 9.8                | 42.2             |  |
| 30-Apr-07              | 9            | 4            | 4            | 10           | 8            | 19           | 12           | 13           | 7            | 7             | 7              | 30             | 11             | 9              | 11             | 12             | 12             | 11             | 10             | 10             | 7              | 15             | A              | 12            | 10.8               | 29.7             |  |
| Hourly Avg             | 14.6         | 13.0         | 12.4         | 12.2         | 11.0         | 15.2         | 15.3         | 11.5         | 7.7          | 8.9           | 9.3            | 10.0           | 7.4            | 9.2            | 9.4            | 7.5            | 12.9           | 7.9            | 12.7           | 15.1           | 13.7           | 15.3           | 13.8           | 15.2          |                    |                  |  |
| Hourly Max             | 50.8         | 38.0         | 32.4         | 37.2         | 26.7         | 37.4         | 33.0         | 25.2         | 22.7         | 30.0          | 40.1           | 42.2           | 33.2           | 52.7           | 49.4           | 43.6           | 48.1           | 36.3           | 36.1           | 46.5           | 38.5           | 52.2           | 42.2           | 35.9          |                    |                  |  |

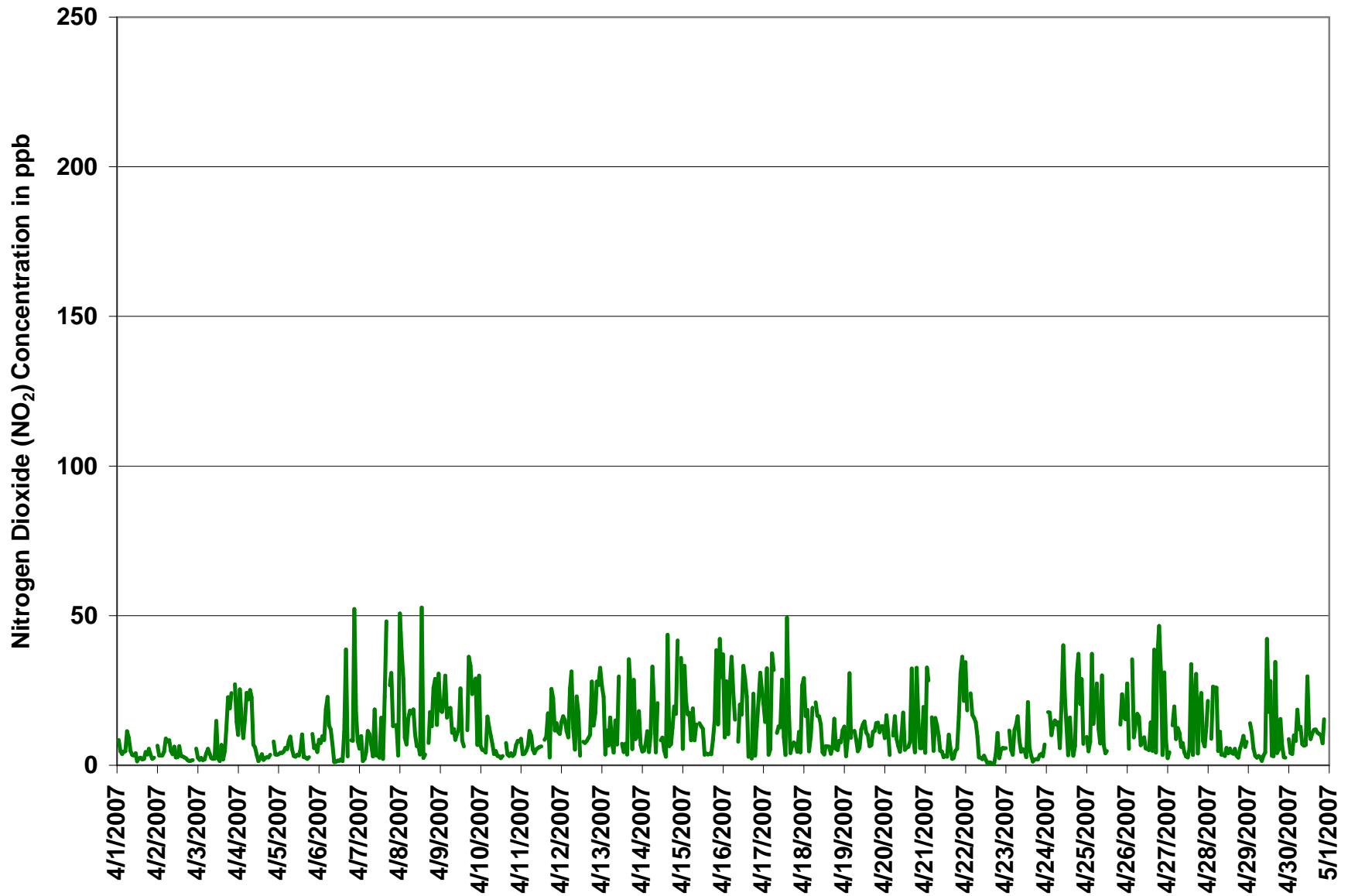
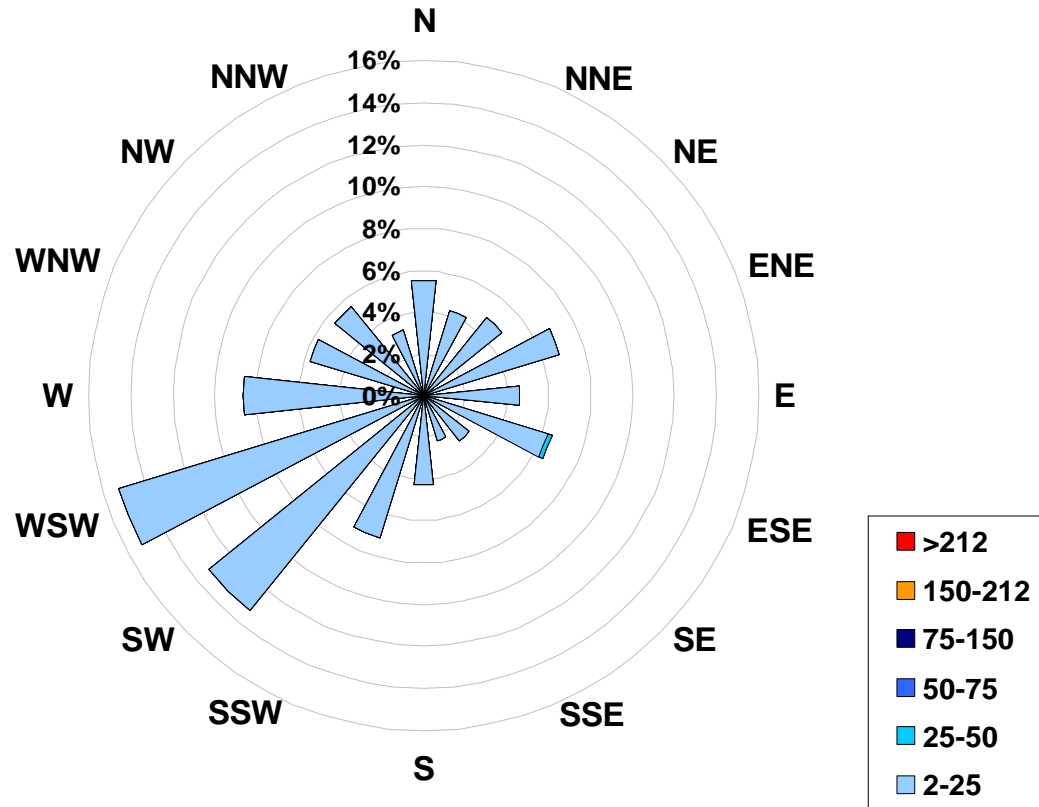


Figure 2. PAS - Crescent Heights Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

| Frequency Distribution of NO <sub>2</sub> in ppb |        |  | Frequency (hrs) |
|--|--------|--|-----------------|
| Range  |        |  |                 |
| 2.0  | < 25   |  | 679             |
| 25   | to 50  |  | 1               |
| 50   | to 75  |  | 0               |
| 75   | to 150 |  | 0               |
| 150  | to 212 |  | 0               |
|  | > 212  |  | 0               |
| Total Non-Zero Values                            |        |  | 680             |



# PAS - Crescent Heights - Nitric Oxide Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

## HOURLY AVERAGE TABLE

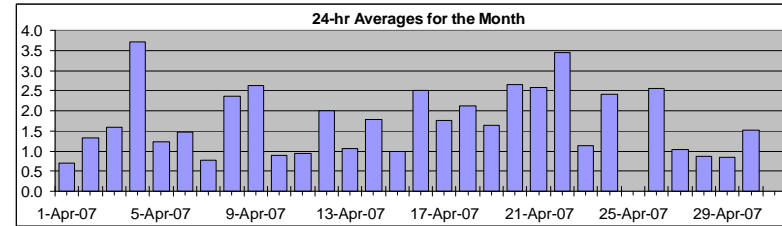
## Nitric Oxide (NO)

Monitoring Dates: April 1, 2007 to May 1, 2007

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

|                        |      |     |       |           |
|------------------------|------|-----|-------|-----------|
| Maximum 1-hr Average:  | 37.6 | ppb | 4-Apr | 7:00 8:00 |
| Maximum 24-hr Average: | 3.7  | ppb | 4-Apr |           |

|                   |        |                         |         |     |     |     |     |         |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 680 hrs |     |     |     |     |         |         |
| Calibration Time: | 6 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |         |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average | Median  |
|                   | 13.1   | 5.8                     | 2.0     | 1.0 | 0.5 | 0.2 | 0.1 | 1.7 ppb | 1.0 ppb |



### Status Flag Characters

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

| Day        | Mountain Standard Time |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 24-hour Average | Daily Maximum |      |      |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|------|------|
| Hour Start | 0:00                   | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00            |               |      |      |
| 1-Apr-07   | A                      | 1    | 1    | 0    | 0    | 1    | 1    | 2    | 2    | 1    | 1     | 1     | 0     | 1     | 1     | 0     | 0     | 0     | 1     | 0     | 0     | 1     | 0     | A     |                 | 0.7           | 1.7  |      |
| 2-Apr-07   | 1                      | 1    | 1    | 1    | 1    | 2    | 3    | 4    | 2    | 2    | 3     | 2     | 1     | 2     | 2     | 1     | 1     | 1     | 1     | 0     | 0     | 0     | A     | 1     |                 | 1.3           | 3.9  |      |
| 3-Apr-07   | 0                      | 0    | 1    | 0    | 0    | 1    | 1    | 2    | 2    | 2    | 3     | 3     | 2     | 2     | 2     | 2     | 2     | 3     | 1     | 3     | A     | 1     | 1     | 1     |                 | 1.6           | 3.4  |      |
| 4-Apr-07   | 0                      | 2    | 1    | 0    | 0    | 1    | 12   | 38   | 13   | 6    | 5     | 2     | 0     | 1     | 1     | 1     | 1     | 0     | 0     | A     | 1     | 0     | 0     | 0     |                 | 3.7           | 37.6 |      |
| 5-Apr-07   | 1                      | 1    | 1    | 1    | 0    | 1    | 2    | 5    | 3    | 2    | 1     | 1     | 1     | 3     | 3     | 1     | 1     | 0     | 0     | A     | 1     | 0     | 1     | 0     |                 | 1.2           | 4.7  |      |
| 6-Apr-07   | 0                      | 0    | 0    | 0    | 1    | 2    | 2    | 6    | 2    | 0    | 1     | 1     | 1     | 0     | 0     | 1     | 4     | 0     | A     | 0     | 0     | 9     | 0     | 0     |                 | 1.5           | 9.4  |      |
| 7-Apr-07   | 0                      | 0    | 0    | 0    | 0    | 0    | 2    | 1    | 1    | 2    | 2     | 1     | 1     | 1     | 1     | 1     | 2     | A     | 1     | 1     | 0     | 0     | 0     | 0     |                 | 0.8           | 2.4  |      |
| 8-Apr-07   | 5                      | 2    | 1    | 0    | 0    | 1    | 3    | 7    | 12   | 5    | 3     | 2     | 1     | 2     | 1     | 1     | A     | 1     | 1     | 1     | 1     | 3     | 1     | 2     |                 | 2.4           | 11.9 |      |
| 9-Apr-07   | 3                      | 2    | 1    | 4    | 0    | 1    | 2    | 3    | 5    | 3    | 3     | 3     | 3     | 2     | 1     | A     | 2     | 5     | 6     | 2     | 2     | 3     | 1     | 2     |                 | 2.6           | 5.5  |      |
| 10-Apr-07  | 0                      | 0    | 0    | 1    | 3    | 2    | 2    | 2    | 2    | 1    | 0     | 0     | 0     | 0     | A     | 1     | 1     | 0     | 0     | 0     | 0     | 0     | 2     | 2     |                 | 0.9           | 2.8  |      |
| 11-Apr-07  | 1                      | 0    | 0    | 0    | 1    | 2    | 2    | 1    | 0    | 0    | 2     | 2     | 2     | A     | 1     | 1     | 1     | 0     | 1     | 1     | 0     | 1     | 0     | 0     |                 | 0.9           | 2.1  |      |
| 12-Apr-07  | 0                      | 2    | 1    | 0    | 0    | 6    | 5    | 4    | 2    | 3    | 1     | 1     | A     | 1     | 2     | 1     | 2     | 1     | 1     | 1     | 1     | 1     | 3     | 6     |                 | 2.0           | 6.3  |      |
| 13-Apr-07  | 1                      | 1    | 0    | 1    | 0    | 1    | 1    | 1    | 2    | 2    | 3     | A     | 1     | 1     | 1     | 1     | 1     | 1     | 0     | 2     | 1     | 1     | 2     | 1     |                 | 1.1           | 2.5  |      |
| 14-Apr-07  | 1                      | 0    | 0    | 1    | 0    | 1    | 8    | 3    | 1    | 2    | A     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 8     | P     | 2     |                 | 1.8           | 8.3  |      |
| 15-Apr-07  | 0                      | 3    | 1    | 0    | 1    | 0    | 1    | 1    | 1    | A    | 3     | 2     | 2     | 1     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 0     | 3     | 1               |               | 1.0  | 2.9  |
| 16-Apr-07  | 4                      | 0    | 3    | 1    | 2    | 6    | 17   | 10   | A    | 0    | 1     | 1     | 2     | 1     | 1     | 0     | 0     | 0     | 0     | 1     | 0     | 0     | 1     | 4     | 1               |               | 2.5  | 16.5 |
| 17-Apr-07  | 1                      | 1    | 2    | 0    | 1    | 2    | 7    | A    | 2    | 1    | 2     | 8     | 2     | 1     | 3     | 1     | 0     | 1     | 1     | 1     | 1     | 0     | 0     | 4     |                 | 1.8           | 8.5  |      |
| 18-Apr-07  | 2                      | 1    | 1    | 0    | 1    | 3    | A    | 11   | 6    | 6    | 3     | 2     | 1     | 3     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0     | 0     | 1     | 1               |               | 2.1  | 10.9 |
| 19-Apr-07  | 1                      | 0    | 1    | 6    | 0    | A    | 1    | 1    | 1    | 1    | 1     | 3     | 3     | 3     | 3     | 1     | 2     | 2     | 1     | 1     | 2     | 1     | 1     | 1     |                 | 1.6           | 5.8  |      |
| 20-Apr-07  | 1                      | 2    | 1    | 1    | A    | 2    | 4    | 3    | 3    | 3    | 6     | 4     | 3     | 3     | 3     | 3     | 6     | 1     | 1     | 6     | 1     | 1     | 1     | 2     |                 | 2.6           | 6.3  |      |
| 21-Apr-07  | 0                      | 3    | 4    | A    | 2    | 1    | 2    | 2    | 2    | 1    | 2     | 1     | 1     | 1     | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 6     | 23    | 2     |                 | 2.6           | 22.9 |      |
| 22-Apr-07  | 16                     | 4    | A    | 19   | 15   | 12   | 6    | 2    | 0    | 0    | 0     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |                 | 3.4           | 19.5 |      |
| 23-Apr-07  | 1                      | A    | 1    | 0    | 0    | 1    | 2    | 4    | 4    | 2    | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 1     |                 | 1.1           | 4.2  |      |
| 24-Apr-07  | A                      | 1    | 1    | 1    | 1    | 3    | 14   | 10   | 3    | 1    | 3     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 4     | 2     | 2     | 0     | A     |                 | 2.4           | 14.3 |      |
| 25-Apr-07  | 0                      | 0    | 0    | 4    | 1    | 4    | 6    | 3    | 2    | 4    | 3     | 1     | 1     | C     | C     | C     | C     | C     | C     | A     | 0     | 1     | 0     | 1     | N               |               | 6.4  |      |
| 26-Apr-07  | 1                      | 1    | A    | 6    | 1    | 2    | 6    | 6    | 4    | 4    | 4     | 2     | 2     | 2     | 2     | 1     | 3     | 1     | 2     | 2     | 3     | 0     | 2     | 1     |                 | 2.6           | 6.4  |      |
| 27-Apr-07  | 0                      | 0    | A    | 1    | 1    | 1    | 3    | 2    | 2    | 1    | 1     | 1     | 1     | 1     | 1     | 2     | 1     | 2     | 2     | 0     | 1     | 2     | 0     | 0     | 1               |               | 1.0  | 2.5  |
| 28-Apr-07  | 2                      | A    | 0    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0     | 0     | 1     | 1     | 1     | 1     |                 | 0.9           | 1.9  |      |
| 29-Apr-07  | A                      | 1    | 1    | 1    | 0    | 0    | 1    | 0    | 1    | 1    | 1     | 3     | 1     | 2     | 1     | 1     | 3     | 1     | 0     | 0     | 0     | 1     | 0     | A     |                 | 0.8           | 3.0  |      |
| 30-Apr-07  | 1                      | 0    | 0    | 0    | 0    | 1    | 1    | 2    | 1    | 1    | 2     | 3     | 4     | 4     | 4     | 4     | 3     | 2     | 1     | 0     | 0     | 0     | A     | 1     |                 | 1.5           | 4.2  |      |
| Hourly Avg | 1.6                    | 1.0  | 0.9  | 1.8  | 1.3  | 2.1  | 4.1  | 4.7  | 2.7  | 2.1  | 2.1   | 1.9   | 1.4   | 1.4   | 1.4   | 1.0   | 1.5   | 0.9   | 1.0   | 1.1   | 0.9   | 1.5   | 1.9   | 1.2   |                 |               |      |      |
| Hourly Max | 15.7                   | 4.0  | 4.2  | 19.5 | 14.7 | 12.1 | 16.5 | 37.6 | 12.8 | 6.4  | 5.8   | 8.5   | 4.2   | 3.7   | 3.8   | 3.6   | 6.3   | 4.8   | 5.5   | 6.0   | 2.8   | 9.4   | 22.9  | 6.3   |                 |               |      |      |



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

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

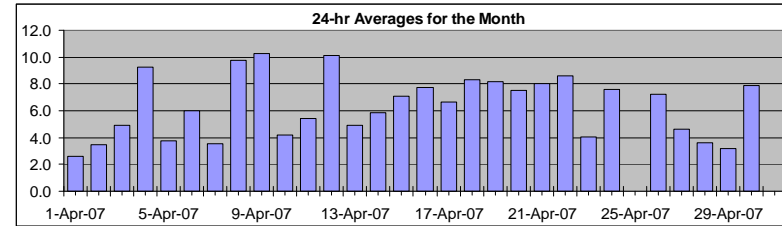
### Oxides of Nitrogen (NO<sub>x</sub>)

Monitoring Dates: April 1, 2007 to May 1, 2007

Guideline Limit: Alberta Environment: 

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

|                        |      |     |       |      |      |
|------------------------|------|-----|-------|------|------|
| Summary                |      |     |       |      |      |
| Maximum 1-hr Average:  | 57.3 | ppb | 4-Apr | 7:00 | 8:00 |
| Maximum 24-hr Average: | 10.3 | ppb | 9-Apr |      |      |



|                   |        |                         |         |     |     |     |     |         |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 680 hrs |     |     |     |     |         |         |
| Calibration Time: | 6 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |         |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average | Median  |
|                   | 29.2   | 17.3                    | 8.4     | 4.6 | 2.8 | 1.2 | 0.2 | 6.4 ppb | 4.6 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 |                 |               |
| 1-Apr-07   | A                      | 5    | 3    | 2    | 3    | 4    | 8    | 5    | 4    | 3    | 2    | 1     | 0     | 1     | 1     | 1     | 1     | 2     | 3     | 3     | 2     | 2     | 1     | A     | 2.6             | 8.2           |
| 2-Apr-07   | 4                      | 3    | 2    | 3    | 3    | 7    | 7    | 9    | 5    | 4    | 7    | 3     | 3     | 5     | 3     | 2     | 2     | 2     | 1     | 1     | 1     | 1     | A     | 3     | 3.4             | 9.4           |
| 3-Apr-07   | 2                      | 1    | 1    | 1    | 1    | 3    | 4    | 4    | 3    | 3    | 3    | 4     | 3     | 2     | 3     | 3     | 3     | 7     | 18    | 13    | 13    | A     | 8     | 10    | 4.9             | 18.1          |
| 4-Apr-07   | 9                      | 9    | 7    | 6    | 11   | 17   | 30   | 47   | 22   | 10   | 8    | 4     | 1     | 1     | 1     | 1     | 2     | 2     | 3     | A     | 5     | 3     | 2     | 2     | 9.3             | 57.3          |
| 5-Apr-07   | 3                      | 4    | 3    | 3    | 3    | 4    | 7    | 10   | 6    | 4    | 2    | 2     | 3     | 5     | 5     | 2     | 2     | 1     | 2     | A     | 5     | 4     | 4     | 4     | 3.8             | 10.2          |
| 6-Apr-07   | 2                      | 4    | 4    | 4    | 12   | 17   | 11   | 14   | 5    | 0    | 1    | 1     | 1     | 1     | 0     | 2     | 7     | 1     | A     | 5     | 6     | 22    | 11    | 6     | 6.0             | 22.4          |
| 7-Apr-07   | 3                      | 4    | 0    | 0    | 2    | 5    | 8    | 3    | 2    | 5    | 4    | 2     | 2     | 2     | 1     | 2     | 3     | A     | 8     | 11    | 7     | 4     | 3     | 1     | 3.5             | 10.8          |
| 8-Apr-07   | 11                     | 17   | 8    | 5    | 3    | 10   | 12   | 16   | 24   | 11   | 7    | 5     | 3     | 5     | 2     | 2     | A     | 5     | 10    | 7     | 17    | 18    | 11    | 17    | 9.8             | 24.0          |
| 9-Apr-07   | 14                     | 17   | 11   | 21   | 10   | 12   | 11   | 10   | 14   | 9    | 10   | 9     | 8     | 6     | 6     | A     | 11    | 14    | 12    | 7     | 6     | 7     | 4     | 7     | 10.3            | 21.1          |
| 10-Apr-07  | 4                      | 4    | 3    | 3    | 10   | 10   | 9    | 6    | 4    | 3    | 2    | 2     | 2     | 1     | A     | 5     | 3     | 2     | 3     | 2     | 2     | 4     | 7     | 7     | 4.2             | 9.9           |
| 11-Apr-07  | 6                      | 2    | 2    | 2    | 4    | 9    | 8    | 4    | 2    | 3    | 5    | 7     | 7     | A     | 5     | 4     | 4     | 2     | 4     | 7     | 9     | 11    | 9     | 7     | 5.4             | 11.4          |
| 12-Apr-07  | 8                      | 15   | 10   | 5    | 7    | 17   | 17   | 13   | 5    | 6    | 3    | 2     | A     | 6     | 7     | 5     | 7     | 5     | 6     | 10    | 12    | 18    | 24    | 24    | 10.1            | 24.3          |
| 13-Apr-07  | 7                      | 6    | 2    | 5    | 3    | 5    | 5    | 4    | 4    | 5    | 5    | A     | 5     | 4     | 4     | 3     | 4     | 4     | 3     | 7     | 8     | 9     | 4     | 4     | 4.9             | 9.1           |
| 14-Apr-07  | 3                      | 3    | 4    | 4    | 3    | 5    | 15   | 7    | 3    | 3    | A    | 5     | 4     | 3     | 2     | 4     | 5     | 4     | 6     | 8     | 12    | 21    | P     | 7     | 5.9             | 20.5          |
| 15-Apr-07  | 3                      | 9    | 7    | 3    | 7    | 4    | 8    | 4    | 5    | A    | 13   | 9     | 6     | 3     | 3     | 2     | 2     | 2     | 3     | 9     | 11    | 9     | 17    | 24    | 7.1             | 24.0          |
| 16-Apr-07  | 17                     | 7    | 10   | 8    | 11   | 22   | 33   | 22   | A    | 5    | 3    | 4     | 5     | 2     | 4     | 2     | 2     | 2     | 4     | 2     | 2     | 3     | 7     | 2     | 7.7             | 33.0          |
| 17-Apr-07  | 3                      | 4    | 5    | 2    | 4    | 10   | 18   | A    | 8    | 7    | 10   | 24    | 7     | 3     | 5     | 3     | 2     | 3     | 5     | 5     | 3     | 4     | 3     | 16    | 6.6             | 23.9          |
| 18-Apr-07  | 12                     | 13   | 11   | 3    | 7    | 16   | A    | 29   | 18   | 18   | 9    | 4     | 4     | 6     | 4     | 3     | 4     | 3     | 6     | 4     | 3     | 3     | 4     | 4     | 8.3             | 28.9          |
| 19-Apr-07  | 5                      | 2    | 3    | 12   | 3    | A    | 10   | 5    | 4    | 4    | 6    | 13    | 13    | 11    | 8     | 6     | 7     | 9     | 9     | 10    | 13    | 9     | 12    | 12    | 8.1             | 13.2          |
| 20-Apr-07  | 9                      | 9    | 7    | 3    | A    | 10   | 11   | 10   | 8    | 6    | 11   | 9     | 7     | 7     | 7     | 7     | 15    | 5     | 3     | 13    | 4     | 3     | 4     | 7     | 7.5             | 14.5          |
| 21-Apr-07  | 3                      | 6    | 11   | A    | 9    | 4    | 7    | 6    | 6    | 4    | 4    | 3     | 3     | 2     | 5     | 3     | 2     | 1     | 3     | 4     | 10    | 22    | 49    | 19    | 8.0             | 49.5          |
| 22-Apr-07  | 34                     | 20   | A    | 38   | 30   | 26   | 17   | 8    | 1    | 2    | 1    | 2     | 1     | 0     | 0     | 0     | 0     | 0     | 1     | 4     | 1     | 3     | 4     | 3     | 8.6             | 37.8          |
| 23-Apr-07  | 5                      | A    | 7    | 3    | 2    | 7    | 9    | 12   | 9    | 5    | 5    | 4     | 2     | 2     | 4     | 2     | 1     | 1     | 1     | 1     | 2     | 2     | 2     | 4     | 4.0             | 11.8          |
| 24-Apr-07  | A                      | 11   | 12   | 9    | 12   | 13   | 26   | 17   | 6    | 3    | 6    | 3     | 2     | 2     | 4     | 3     | 3     | 4     | 7     | 8     | 6     | 7     | 3     | A     | 7.6             | 25.8          |
| 25-Apr-07  | 5                      | 4    | 6    | 8    | 8    | 12   | 18   | 11   | 8    | 11   | 7    | 3     | 5     | C     | C     | C     | C     | C     | C     | A     | 7     | 11    | 11    | 8     | N               | 17.6          |
| 26-Apr-07  | 6                      | 4    | A    | 12   | 8    | 9    | 16   | 15   | 8    | 9    | 10   | 6     | 5     | 4     | 6     | 3     | 8     | 3     | 9     | 7     | 9     | 2     | 6     | 3     | 7.3             | 15.7          |
| 27-Apr-07  | 2                      | 2    | A    | 7    | 6    | 5    | 9    | 8    | 5    | 4    | 2    | 2     | 2     | 3     | 5     | 3     | 5     | 6     | 2     | 7     | 7     | 5     | 4     | 5     | 4.6             | 9.1           |
| 28-Apr-07  | 7                      | A    | 6    | 7    | 4    | 4    | 4    | 3    | 3    | 3    | 2    | 3     | 3     | 3     | 3     | 2     | 2     | 2     | 1     | 2     | 5     | 6     | 5     | 4     | 3.6             | 6.8           |
| 29-Apr-07  | A                      | 8    | 7    | 4    | 2    | 2    | 2    | 1    | 1    | 1    | 2    | 6     | 4     | 4     | 2     | 3     | 5     | 2     | 2     | 4     | 4     | 2     | 1     | A     | 3.2             | 8.4           |
| 30-Apr-07  | 5                      | 3    | 2    | 5    | 4    | 9    | 8    | 12   | 5    | 4    | 6    | 10    | 13    | 11    | 12    | 12    | 11    | 10    | 8     | 7     | 4     | 9     | A     | 9     | 7.8             | 12.6          |
| Hourly Avg | 7.0                    | 7.0  | 5.7  | 6.5  | 6.6  | 9.6  | 12.0 | 11.3 | 6.8  | 5.4  | 5.4  | 5.2   | 4.2   | 3.8   | 4.0   | 3.2   | 4.4   | 3.8   | 5.0   | 6.1   | 6.5   | 7.7   | 8.3   | 8.2   |                 |               |
| Hourly Max | 33.7                   | 20.2 | 12.2 | 37.8 | 30.1 | 26.1 | 33.0 | 57.3 | 24.0 | 18.3 | 12.6 | 23.9  | 12.9  | 11.1  | 11.8  | 12.4  | 14.5  | 13.9  | 18.1  | 12.9  | 17.3  | 22.4  | 49.5  | 24.1  |                 |               |

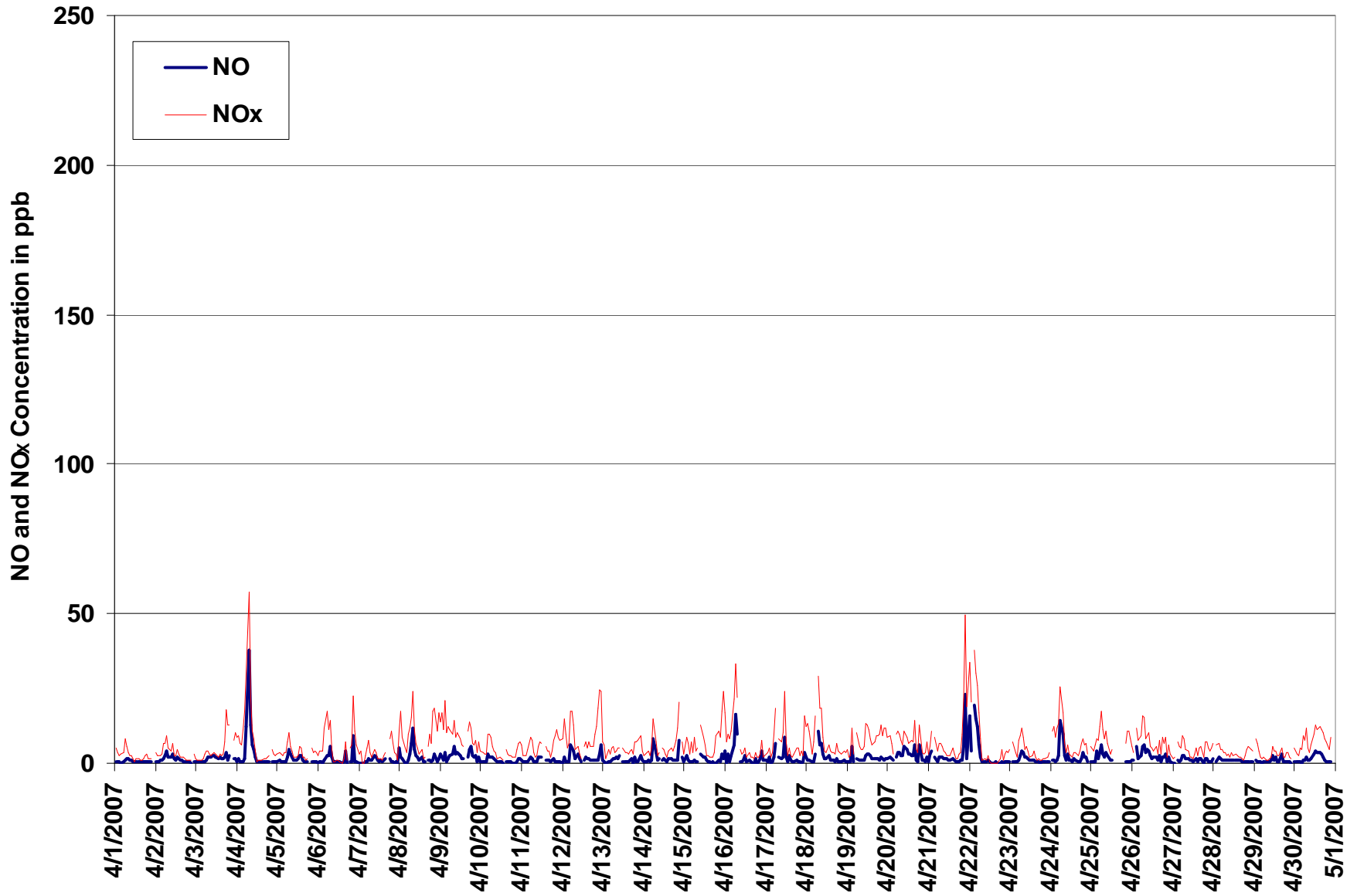


Figure 3. PAS - Crescent Heights Oxides of Nitrogen 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

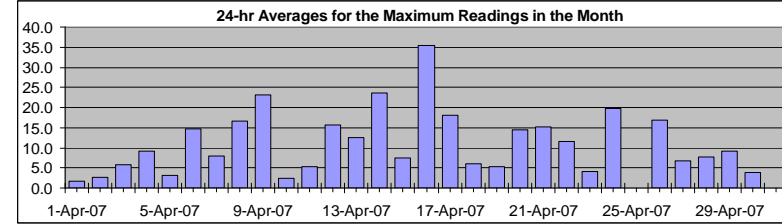
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

**Nitric Oxide (NO)**

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                      |       |     |        |             |
|----------------------|-------|-----|--------|-------------|
| Maximum 1-hr Value:  | 175.6 | ppb | 6-Apr  | 21:00 22:00 |
| Maximum 24-hr Value: | 35.5  | ppb | 16-Apr |             |



|                   |        |                         |         |     |     |     |     |          |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|----------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 680 hrs |     |     |     |     |          |         |
| Calibration Time: | 6 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |          |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average  | Median  |
|                   | 124.1  | 57.7                    | 7.3     | 2.7 | 1.5 | 1.0 | 0.7 | 11.4 ppb | 2.7 ppb |

**Status Flag Characters**

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

**Day Mountain Standard Time**

| 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-Apr-07   | A     | 2     | 2    | 2     | 1    | 1    | 2     | 3    | 3    | 2     | 3     | 2     | 1     | 2     | 2     | 1     | 1     | 2     | 1     | 1     | 1     | 1     | 1     | A     | 1     | 1.7             | 3.4           |
| 2-Apr-07   | 2     | 1     | 2    | 2     | 2    | 3    | 6     | 6    | 3    | 3     | 7     | 3     | 2     | 6     | 3     | 2     | 2     | 1     | 1     | 1     | 1     | 1     | A     | 1     | 2.7   | 7.2             |               |
| 3-Apr-07   | 2     | 1     | 1    | 1     | 1    | 2    | 2     | 4    | 3    | 3     | 4     | 7     | 4     | 3     | 12    | 3     | 5     | 5     | 7     | 3     | 19    | A     | 36    | 5     | 5.7   | 35.9            |               |
| 4-Apr-07   | 1     | 20    | 4    | 1     | 1    | 5    | 34    | 61   | 44   | 10    | 8     | 4     | 1     | 2     | 3     | 2     | 1     | 1     | 1     | 1     | A     | 1     | 1     | 1     | 9.2   | 61.2            |               |
| 5-Apr-07   | 1     | 2     | 1    | 2     | 2    | 1    | 4     | 7    | 5    | 3     | 2     | 3     | 3     | 7     | 15    | 2     | 2     | 1     | 1     | A     | 2     | 1     | 2     | 1     | 3.1   | 15.2            |               |
| 6-Apr-07   | 1     | 1     | 1    | 1     | 1    | 4    | 9     | 6    | 9    | 5     | 1     | 2     | 2     | 1     | 2     | 1     | 9     | 100   | 1     | A     | 2     | 2     | 176   | 1     | 14.7  | 175.6           |               |
| 7-Apr-07   | 2     | 1     | 1    | 1     | 1    | 3    | 3     | 3    | 2    | 19    | 3     | 3     | 2     | 16    | 1     | 23    | 52    | A     | 29    | 12    | 1     | 2     | 2     | 1     | 7.9   | 51.6            |               |
| 8-Apr-07   | 147   | 13    | 21   | 1     | 2    | 4    | 14    | 18   | 23   | 9     | 5     | 3     | 3     | 62    | 1     | 2     | A     | 2     | 2     | 1     | 2     | 28    | 1     | 18    | 16.6  | 147.4           |               |
| 9-Apr-07   | 25    | 4     | 5    | 34    | 1    | 8    | 7     | 5    | 9    | 6     | 6     | 6     | 26    | 4     | 3     | A     | 4     | 62    | 126   | 42    | 36    | 74    | 3     | 37    | 23.1  | 126.2           |               |
| 10-Apr-07  | 2     | 1     | 1    | 2     | 10   | 5    | 6     | 3    | 3    | 2     | 1     | 1     | 1     | 1     | A     | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 4     | 3     | 2.4   | 9.9             |               |
| 11-Apr-07  | 3     | 1     | 2    | 1     | 3    | 5    | 4     | 2    | 2    | 2     | 3     | 3     | 3     | A     | 6     | 6     | 15    | 1     | 28    | 23    | 1     | 3     | 1     | 2     | 5.3   | 27.9            |               |
| 12-Apr-07  | 1     | 6     | 2    | 1     | 1    | 69   | 44    | 7    | 2    | 57    | 19    | 3     | A     | 3     | 5     | 4     | 3     | 3     | 11    | 3     | 9     | 4     | 10    | 93    | 15.6  | 93.5            |               |
| 13-Apr-07  | 33    | 16    | 0    | 4     | 2    | 12   | 4     | 2    | 23   | 4     | 56    | A     | 2     | 2     | 2     | 1     | 17    | 31    | 2     | 45    | 1     | 2     | 24    | 2     | 12.6  | 56.3            |               |
| 14-Apr-07  | 3     | 2     | 4    | 35    | 3    | 7    | 131   | 29   | 3    | 34    | A     | 3     | 5     | 2     | 1     | 39    | 3     | 2     | 2     | 4     | 2     | 149   | P     | 55    | 23.5  | 149.5           |               |
| 15-Apr-07  | 1     | 61    | 3    | 1     | 2    | 1    | 4     | 2    | 2    | A     | 5     | 6     | 5     | 2     | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 17    | 1     | 37    | 13    | 7.4             | 61.3          |
| 16-Apr-07  | 75    | 1     | 73   | 4     | 86   | 63   | 124   | 14   | A    | 2     | 18    | 16    | 51    | 16    | 31    | 1     | 1     | 1     | 50    | 1     | 15    | 59    | 81    | 33    | 35.5  | 123.6           |               |
| 17-Apr-07  | 30    | 5     | 77   | 1     | 1    | 48   | 58    | A    | 4    | 3     | 3     | 54    | 3     | 2     | 71    | 11    | 2     | 1     | 2     | 1     | 1     | 1     | 1     | 32    | 18.0  | 77.0            |               |
| 18-Apr-07  | 33    | 2     | 3    | 1     | 1    | 9    | A     | 18   | 10   | 10    | 19    | 2     | 3     | 5     | 3     | 3     | 2     | 2     | 4     | 2     | 2     | 1     | 2     | 2     | 6.0   | 32.7            |               |
| 19-Apr-07  | 3     | 1     | 3    | 58    | 1    | A    | 2     | 2    | 2    | 3     | 3     | 4     | 6     | 6     | 5     | 2     | 3     | 3     | 3     | 2     | 3     | 3     | 2     | 2     | 5.3   | 57.6            |               |
| 20-Apr-07  | 2     | 9     | 4    | 2     | A    | 4    | 23    | 7    | 4    | 5     | 14    | 48    | 6     | 6     | 4     | 6     | 82    | 12    | 2     | 52    | 24    | 3     | 1     | 15    | 14.5  | 82.2            |               |
| 21-Apr-07  | 1     | 103   | 50   | A     | 13   | 1    | 12    | 17   | 7    | 2     | 4     | 2     | 3     | 2     | 4     | 3     | 2     | 2     | 1     | 2     | 3     | 50    | 61    | 4     | 15.2  | 103.1           |               |
| 22-Apr-07  | 132   | 11    | A    | 32    | 29   | 25   | 12    | 4    | 1    | 1     | 1     | 2     | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 11.5  | 132.2           |               |
| 23-Apr-07  | 1     | A     | 2    | 1     | 1    | 3    | 4     | 21   | 6    | 3     | 3     | 3     | 2     | 30    | 2     | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 4.1   | 29.8            |               |
| 24-Apr-07  | A     | 2     | 2    | 2     | 4    | 6    | 27    | 29   | 4    | 16    | 79    | 19    | 14    | 2     | 11    | 4     | 2     | 2     | 23    | 66    | 68    | 51    | 2     | A     | 19.7  | 79.0            |               |
| 25-Apr-07  | 1     | 1     | 2    | 131   | 6    | 50   | 49    | 6    | 3    | 42    | 5     | 2     | 2     | C     | C     | C     | C     | C     | C     | A     | 1     | 4     | 2     | 2     | N     | 130.6           |               |
| 26-Apr-07  | 14    | 2     | A    | 104   | 3    | 7    | 15    | 12   | 5    | 6     | 7     | 5     | 2     | 3     | 13    | 3     | 34    | 2     | 35    | 64    | 25    | 1     | 23    | 3     | 16.9  | 104.2           |               |
| 27-Apr-07  | 1     | 1     | A    | 2     | 4    | 2    | 6     | 5    | 3    | 4     | 2     | 2     | 2     | 3     | 24    | 1     | 11    | 21    | 2     | 5     | 48    | 2     | 2     | 5     | 6.8   | 47.7            |               |
| 28-Apr-07  | 21    | A     | 1    | 39    | 49   | 22   | 2     | 10   | 2    | 2     | 1     | 2     | 2     | 2     | 2     | 2     | 3     | 3     | 2     | 3     | 3     | 2     | 2     | 2     | 7.7   | 49.0            |               |
| 29-Apr-07  | A     | 2     | 1    | 2     | 1    | 1    | 1     | 1    | 1    | 2     | 2     | 54    | 18    | 35    | 2     | 2     | 68    | 1     | 1     | 2     | 1     | 1     | 1     | A     | 9.1   | 67.9            |               |
| 30-Apr-07  | 2     | 1     | 1    | 1     | 1    | 5    | 2     | 3    | 3    | 3     | 3     | 23    | 6     | 4     | 5     | 5     | 5     | 4     | 3     | 3     | 3     | 2     | A     | 1     | 3.9   | 23.3            |               |
| Hourly Avg | 20.0  | 9.8   | 10.0 | 16.2  | 8.2  | 13.1 | 21.0  | 10.7 | 6.5  | 9.0   | 10.0  | 9.9   | 6.3   | 8.2   | 8.4   | 5.1   | 15.1  | 6.1   | 12.3  | 12.4  | 10.1  | 21.6  | 11.4  | 12.5  |       |                 |               |
| Hourly Max | 147.4 | 103.1 | 77.0 | 130.6 | 86.2 | 68.6 | 131.3 | 61.2 | 44.2 | 56.7  | 79.0  | 54.3  | 51.5  | 62.1  | 70.7  | 38.6  | 100.3 | 61.5  | 126.2 | 66.2  | 67.8  | 175.6 | 81.5  | 93.5  |       |                 |               |



Station: Crescent Heights  
 Station Owner: PAS

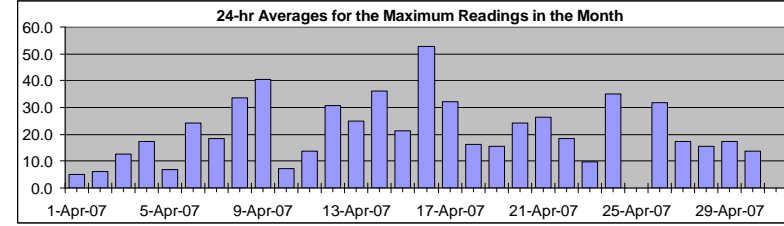
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                      |       |     |        |             |
|----------------------|-------|-----|--------|-------------|
| Maximum 1-hr Value:  | 215.8 | ppb | 6-Apr  | 21:00 22:00 |
| Maximum 24-hr Value: | 52.8  | ppb | 16-Apr |             |



|                   |        |                         |         |      |     |     |     |          |          |
|-------------------|--------|-------------------------|---------|------|-----|-----|-----|----------|----------|
| AIC Time:         | 33 hrs | Operational Time:       | 680 hrs |      |     |     |     |          |          |
| Calibration Time: | 6 hrs  | AMD Operational Uptime: | 99.9%   |      |     |     |     |          |          |
| Percentile        | 99     | 95                      | 75      | 50   | 25  | 5   | 1   | Average  | Median   |
|                   | 146.5  | 85.5                    | 22.8    | 10.2 | 5.0 | 2.4 | 1.4 | 21.8 ppb | 10.2 ppb |

**Status Flag Characters**

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

**Day Mountain Standard Time**

| Hour Start<br>Hour End | 0:00<br>1:00 | 1:00<br>2:00 | 2:00<br>3:00 | 3:00<br>4:00 | 4:00<br>5:00 | 5:00<br>6:00 | 6:00<br>7:00 | 7:00<br>8:00 | 8:00<br>9:00 | 9:00<br>10:00 | 10:00<br>11:00 | 11:00<br>12:00 | 12:00<br>13:00 | 13:00<br>14:00 | 14:00<br>15:00 | 15:00<br>16:00 | 16:00<br>17:00 | 17:00<br>18:00 | 18:00<br>19:00 | 19:00<br>20:00 | 20:00<br>21:00 | 21:00<br>22:00 | 22:00<br>23:00 | 23:00<br>0:00 | 24-hour<br>Average | Daily<br>Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Apr-07               | A            | 10           | 5            | 4            | 5            | 5            | 12           | 10           | 7            | 4             | 5              | 6              | 1              | 3              | 3              | 2              | 2              | 5              | 4              | 5              | 4              | 3              | 3              | A             | 4.9                | 12.5             |
| 2-Apr-07               | 7            | 3            | 4            | 4            | 6            | 11           | 13           | 13           | 7            | 6             | 13             | 4              | 5              | 12             | 6              | 4              | 4              | 3              | 2              | 2              | 2              | 2              | A              | 6             | 6.1                | 13.4             |
| 3-Apr-07               | 3            | 2            | 2            | 2            | 2            | 5            | 6            | 7            | 5            | 5             | 6              | 21             | 5              | 4              | 18             | 4              | 7              | 16             | 28             | 21             | 40             | A              | 63             | 18            | 12.7               | 62.9             |
| 4-Apr-07               | 10           | 36           | 21           | 9            | 16           | 26           | 56           | 85           | 63           | 17            | 13             | 7              | 2              | 4              | 4              | 2              | 2              | 3              | 3              | 4              | A              | 8              | 4              | 4             | 17.3               | 85.5             |
| 5-Apr-07               | 4            | 5            | 4            | 5            | 6            | 7            | 12           | 16           | 10           | 5             | 4              | 4              | 5              | 12             | 23             | 3              | 3              | 2              | 3              | A              | 11             | 6              | 7              | 5             | 7.0                | 22.8             |
| 6-Apr-07               | 9            | 7            | 10           | 8            | 23           | 31           | 17           | 20           | 12           | 2             | 2              | 2              | 2              | 3              | 2              | 20             | 129            | 3              | A              | 8              | 9              | 216            | 18             | 8             | 24.3               | 215.8            |
| 7-Apr-07               | 6            | 10           | 1            | 1            | 5            | 14           | 12           | 9            | 4            | 34            | 5              | 4              | 3              | 32             | 2              | 45             | 99             | A              | 55             | 42             | 13             | 14             | 15             | 3             | 18.6               | 99.2             |
| 8-Apr-07               | 188          | 46           | 50           | 9            | 7            | 16           | 31           | 35           | 41           | 19            | 11             | 9              | 6              | 115            | 3              | 5              | A              | 9              | 18             | 13             | 25             | 53             | 15             | 47            | 33.5               | 188.5            |
| 9-Apr-07               | 40           | 21           | 25           | 62           | 16           | 26           | 25           | 16           | 19           | 13            | 15             | 18             | 52             | 12             | 9              | A              | 15             | 95             | 158            | 56             | 63             | 100            | 10             | 67            | 40.6               | 158.0            |
| 10-Apr-07              | 7            | 6            | 5            | 4            | 26           | 17           | 15           | 9            | 6            | 6             | 3              | 4              | 3              | 3              | A              | 8              | 4              | 4              | 4              | 3              | 3              | 7              | 10             | 10            | 7.3                | 25.6             |
| 11-Apr-07              | 11           | 4            | 4            | 6            | 8            | 15           | 11           | 6            | 4            | 6             | 8              | 9              | 9              | A              | 14             | 15             | 33             | 3              | 53             | 46             | 13             | 16             | 12             | 11            | 13.8               | 53.4             |
| 12-Apr-07              | 14           | 21           | 16           | 12           | 10           | 93           | 74           | 18           | 7            | 79            | 32             | 5              | A              | 9              | 10             | 10             | 12             | 13             | 39             | 15             | 25             | 30             | 37             | 124           | 30.7               | 124.1            |
| 13-Apr-07              | 60           | 39           | 3            | 15           | 7            | 28           | 11           | 6            | 38           | 10            | 78             | A              | 9              | 6              | 9              | 5              | 53             | 47             | 6              | 73             | 10             | 10             | 37             | 9             | 24.8               | 77.6             |
| 14-Apr-07              | 5            | 5            | 9            | 45           | 6            | 16           | 156          | 48           | 5            | 54            | A              | 8              | 13             | 7              | 3              | 82             | 8              | 9              | 13             | 23             | 18             | 175            | P              | 90            | 36.3               | 175.2            |
| 15-Apr-07              | 6            | 89           | 23           | 18           | 19           | 8            | 20           | 9            | 15           | A             | 17             | 19             | 17             | 5              | 5              | 4              | 4              | 3              | 8              | 15             | 55             | 14             | 78             | 42            | 21.5               | 88.8             |
| 16-Apr-07              | 109          | 9            | 97           | 14           | 113          | 86           | 144          | 28           | A            | 8             | 38             | 32             | 80             | 44             | 54             | 4              | 4              | 2              | 73             | 4              | 21             | 82             | 112            | 56            | 52.8               | 143.8            |
| 17-Apr-07              | 43           | 20           | 97           | 3            | 6            | 85           | 91           | A            | 14           | 16            | 16             | 82             | 12             | 4              | 113            | 29             | 5              | 7              | 9              | 7              | 4              | 12             | 4              | 58            | 32.1               | 113.3            |
| 18-Apr-07              | 61           | 17           | 21           | 5            | 10           | 27           | A            | 38           | 26           | 25            | 31             | 6              | 6              | 11             | 8              | 8              | 5              | 6              | 19             | 7              | 6              | 8              | 8              | 14            | 16.3               | 61.4             |
| 19-Apr-07              | 15           | 3            | 10           | 85           | 10           | A            | 13           | 10           | 6            | 8             | 14             | 16             | 19             | 15             | 15             | 8              | 9              | 14             | 14             | 15             | 17             | 12             | 14             | 15            | 15.6               | 85.3             |
| 20-Apr-07              | 10           | 25           | 14           | 5            | A            | 12           | 38           | 15           | 9            | 8             | 25             | 65             | 11             | 11             | 9              | 12             | 103            | 17             | 5              | 82             | 36             | 8              | 7              | 32            | 24.3               | 102.7            |
| 21-Apr-07              | 4            | 135          | 71           | A            | 27           | 6            | 27           | 28           | 16           | 6             | 7              | 4              | 4              | 4              | 14             | 8              | 3              | 4              | 5              | 7              | 19             | 80             | 97             | 25            | 26.2               | 134.8            |
| 22-Apr-07              | 166          | 28           | A            | 52           | 45           | 40           | 27           | 13           | 3            | 3             | 2              | 4              | 2              | 1              | 1              | 1              | 1              | 1              | 4              | 11             | 2              | 5              | 6              | 6             | 18.4               | 165.7            |
| 23-Apr-07              | 6            | A            | 12           | 5            | 3            | 14           | 17           | 37           | 13           | 7             | 8              | 7              | 4              | 51             | 7              | 4              | 2              | 2              | 2              | 2              | 4              | 4              | 3              | 7             | 9.7                | 50.6             |
| 24-Apr-07              | A            | 19           | 19           | 11           | 17           | 19           | 40           | 43           | 9            | 36            | 119            | 41             | 23             | 4              | 27             | 10             | 4              | 8              | 52             | 100            | 86             | 79             | 9              | A             | 35.2               | 118.5            |
| 25-Apr-07              | 11           | 5            | 9            | 161          | 19           | 65           | 75           | 18           | 10           | 69            | 11             | 5              | 6              | C              | C              | C              | C              | C              | C              | A              | 14             | 25             | 16             | 16            | N                  | 160.9            |
| 26-Apr-07              | 41           | 6            | A            | 132          | 11           | 20           | 32           | 28           | 10           | 12            | 15             | 8              | 7              | 7              | 26             | 6              | 69             | 5              | 63             | 111            | 57             | 4              | 54             | 10            | 31.9               | 132.0            |
| 27-Apr-07              | 3            | 5            | A            | 15           | 24           | 10           | 17           | 16           | 8            | 10            | 5              | 4              | 3              | 8              | 55             | 4              | 35             | 51             | 4              | 24             | 69             | 8              | 7              | 17            | 17.5               | 69.1             |
| 28-Apr-07              | 41           | A            | 10           | 62           | 74           | 47           | 5            | 20           | 5            | 5             | 4              | 8              | 5              | 7              | 5              | 4              | 6              | 4              | 3              | 6              | 8              | 10             | 7              | 9             | 15.5               | 74.1             |
| 29-Apr-07              | A            | 15           | 11           | 6            | 3            | 2            | 3            | 2            | 2            | 4             | 5              | 95             | 36             | 61             | 4              | 4              | 85             | 4              | 5              | 17             | 6              | 3              | 2              | A             | 17.2               | 94.7             |
| 30-Apr-07              | 10           | 5            | 3            | 10           | 8            | 23           | 13           | 15           | 9            | 9             | 9              | 50             | 16             | 12             | 15             | 17             | 16             | 13             | 12             | 11             | 8              | 16             | A              | 13            | 13.6               | 49.8             |
| Hourly Avg             | 33.0         | 21.3         | 20.7         | 26.6         | 18.3         | 26.6         | 35.0         | 21.3         | 13.3         | 16.8          | 18.0           | 18.7           | 12.6           | 16.7           | 16.6           | 11.7           | 25.8           | 12.7           | 23.8           | 26.1           | 22.4           | 34.9           | 24.2           | 26.7          |                    |                  |
| Hourly Max             | 188.5        | 134.8        | 97.4         | 160.9        | 112.9        | 92.5         | 156.3        | 85.5         | 63.2         | 79.1          | 118.5          | 94.7           | 79.8           | 115.1          | 113.3          | 81.8           | 129.1          | 95.5           | 158.0          | 111.5          | 85.5           | 215.8          | 111.6          | 124.1         |                    |                  |



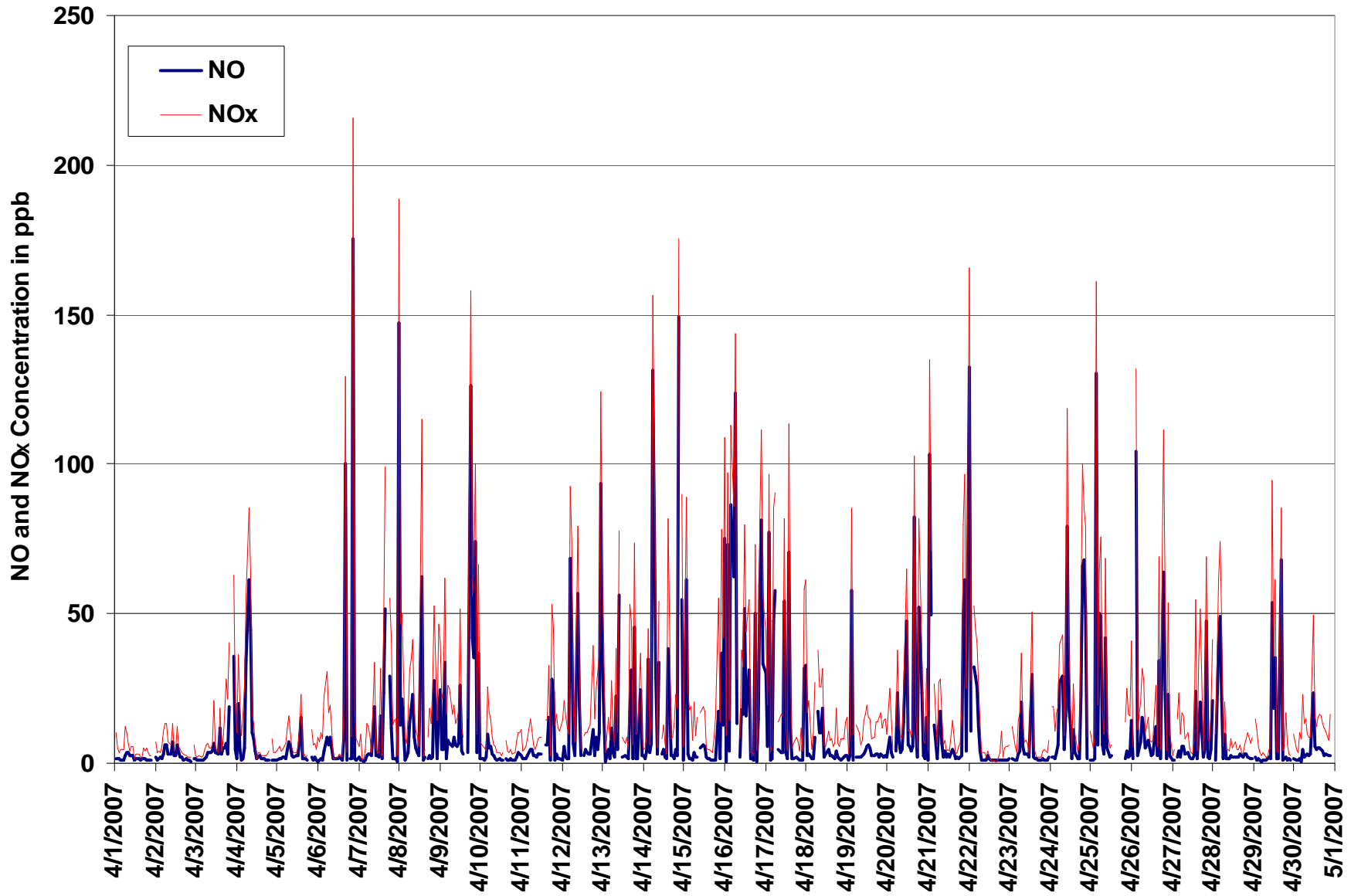


Figure 4. PAS - Crescent Heights Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend



# PAS - Crescent Heights - Ozone Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

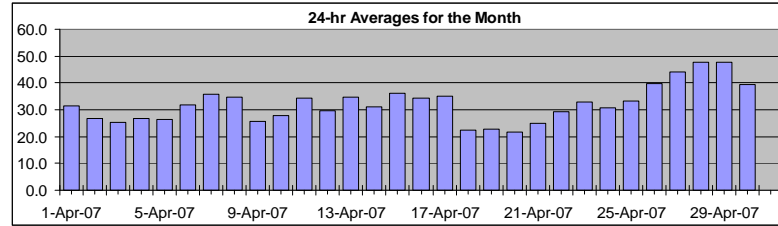
## HOURLY AVERAGE TABLE

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

Monitoring Dates: April 1, 2007 to May 1, 2007

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

|                             |      |     |        |             |
|-----------------------------|------|-----|--------|-------------|
| Number of 1-hr Exceedances: | 0    |     |        |             |
| Maximum 1-hr Average:       | 60.0 | ppb | 28-Apr | 10:00 11:00 |
| Maximum 24-hr Average:      | 47.7 | ppb | 29-Apr |             |



|                   |        |                         |         |      |      |      |     |          |          |
|-------------------|--------|-------------------------|---------|------|------|------|-----|----------|----------|
| AIC Time:         | 33 hrs | Operational Time:       | 683 hrs |      |      |      |     |          |          |
| Calibration Time: | 3 hrs  | AMD Operational Uptime: | 99.9%   |      |      |      |     |          |          |
| Percentile        | 99     | 95                      | 75      | 50   | 25   | 5    | 1   | Average  | Median   |
|                   | 57.1   | 50.8                    | 40.7    | 31.6 | 24.2 | 14.1 | 6.1 | 32.1 ppb | 31.6 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 | 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-Apr-07   | A                      | 37   | 38   | 37   | 32   | 29   | 24   | 26   | 30   | 31   | 32    | 34    | 35    | 36    | 36    | 35    | 35    | 35    | 31    | 26    | 26    | 24    | 26    | A     |                 | 31.6          | 37.6 |  |
| 2-Apr-07   | 27                     | 27   | 27   | 28   | 26   | 24   | 26   | 24   | 25   | 23   | 20    | 22    | 22    | 24    | 25    | 27    | 30    | 31    | 33    | 32    | 33    | 34    | A     | 30    |                 | 26.8          | 33.7 |  |
| 3-Apr-07   | 29                     | 29   | 29   | 30   | 29   | 24   | 23   | 25   | 25   | 23   | 22    | 23    | 25    | 27    | 28    | 29    | 28    | 25    | 17    | 20    | A     | 28    | 26    |       | 25.5            | 29.8          |      |  |
| 4-Apr-07   | 25                     | 26   | 27   | 27   | 22   | 13   | 9    | 9    | 20   | 24   | 25    | 30    | 36    | 36    | 36    | 35    | 36    | 34    | 33    | 30    | A     | 31    | 29    | 25    |                 | 26.8          | 36.4 |  |
| 5-Apr-07   | 23                     | 22   | 22   | 22   | 20   | 19   | 17   | 18   | 20   | 21   | 24    | 26    | 28    | 28    | 29    | 32    | 36    | 36    | 36    | A     | 33    | 32    | 31    | 30    |                 | 26.3          | 36.1 |  |
| 6-Apr-07   | 30                     | 27   | 26   | 24   | 14   | 10   | 20   | 24   | 34   | 38   | 40    | 42    | 42    | 43    | 43    | 42    | 41    | 42    | A     | 37    | 33    | 23    | 26    | 28    |                 | 31.7          | 42.7 |  |
| 7-Apr-07   | 28                     | 26   | 31   | 32   | 29   | 26   | 27   | 32   | 35   | 38   | 40    | 43    | 43    | 43    | 44    | 43    | 42    | A     | 38    | 33    | 35    | 37    | 40    | 40    |                 | 35.9          | 43.7 |  |
| 8-Apr-07   | 37                     | 26   | 35   | 34   | 35   | 28   | 23   | 21   | 24   | 36   | 41    | 45    | 48    | 49    | 50    | 49    | A     | 48    | 41    | 41    | 25    | 21    | 25    | 17    |                 | 34.7          | 50.4 |  |
| 9-Apr-07   | 16                     | 13   | 20   | 10   | 17   | 16   | 17   | 21   | 22   | 32   | 33    | 35    | 36    | 37    | 36    | A     | 28    | 26    | 30    | 31    | 30    | 27    | 27    | 27    |                 | 25.5          | 36.5 |  |
| 10-Apr-07  | 23                     | 20   | 19   | 19   | 14   | 15   | 14   | 16   | 22   | 27   | 33    | 34    | 36    | 37    | A     | 37    | 37    | 37    | 36    | 36    | 36    | 33    | 30    | 28    |                 | 27.7          | 37.5 |  |
| 11-Apr-07  | 28                     | 33   | 34   | 33   | 30   | 26   | 27   | 33   | 39   | 39   | 36    | 36    | 37    | A     | 44    | 45    | 44    | 43    | 40    | 35    | 31    | 27    | 26    | 24    |                 | 34.3          | 45.1 |  |
| 12-Apr-07  | 22                     | 15   | 19   | 24   | 22   | 17   | 16   | 22   | 33   | 37   | 40    | 42    | A     | 44    | 42    | 45    | 44    | 48    | 46    | 36    | 27    | 19    | 12    | 14    |                 | 29.8          | 47.7 |  |
| 13-Apr-07  | 26                     | 26   | 31   | 29   | 29   | 26   | 24   | 26   | 29   | 34   | 38    | A     | 49    | 49    | 50    | 51    | 51    | 48    | 44    | 37    | 29    | 24    | 22    | 22    |                 | 34.6          | 51.3 |  |
| 14-Apr-07  | 22                     | 21   | 21   | 22   | 26   | 24   | 20   | 27   | 32   | 35   | A     | 41    | 41    | 43    | 44    | 43    | 42    | 42    | 38    | 31    | 22    | 18    | P     | 27    |                 | 31.0          | 44.3 |  |
| 15-Apr-07  | 32                     | 29   | 28   | 34   | 28   | 30   | 29   | 37   | 36   | A    | 28    | 34    | 41    | 47    | 48    | 50    | 49    | 50    | 47    | 40    | 38    | 34    | 29    | 15    |                 | 36.3          | 50.3 |  |
| 16-Apr-07  | 19                     | 19   | 17   | 15   | 14   | 8    | 7    | 15   | A    | 45   | 48    | 46    | 46    | 47    | 47    | 48    | 49    | 49    | 47    | 45    | 43    | 41    | 36    | 37    |                 | 34.2          | 48.8 |  |
| 17-Apr-07  | 35                     | 32   | 32   | 33   | 32   | 27   | 22   | A    | 34   | 31   | 30    | 23    | 39    | 46    | 47    | 47    | 47    | 46    | 41    | 37    | 40    | 33    | 31    | 20    |                 | 35.0          | 47.0 |  |
| 18-Apr-07  | 22                     | 17   | 20   | 26   | 20   | 10   | A    | 5    | 7    | 11   | 23    | 28    | 29    | 27    | 31    | 32    | 31    | 29    | 24    | 25    | 25    | 26    | 25    | 25    |                 | 22.5          | 31.9 |  |
| 19-Apr-07  | 25                     | 29   | 30   | 26   | 30   | A    | 26   | 29   | 30   | 29   | 27    | 20    | 20    | 22    | 24    | 24    | 22    | 20    | 19    | 16    | 13    | 15    | 13    | 12    |                 | 22.7          | 30.3 |  |
| 20-Apr-07  | 14                     | 13   | 16   | 17   | A    | 15   | 14   | 15   | 16   | 17   | 17    | 18    | 18    | 22    | 23    | 26    | 27    | 32    | 33    | 28    | 31    | 31    | 29    | 27    |                 | 21.7          | 33.2 |  |
| 21-Apr-07  | 28                     | 27   | 23   | A    | 23   | 23   | 22   | 21   | 23   | 24   | 25    | 27    | 30    | 32    | 31    | 35    | 38    | 38    | 33    | 28    | 21    | 14    | 2     | 7     |                 | 25.0          | 38.1 |  |
| 22-Apr-07  | 3                      | 2    | A    | 1    | 1    | 2    | 7    | 19   | 32   | 35   | 37    | 41    | 47    | 48    | 49    | 50    | 50    | 47    | 43    | 41    | 33    | 27    | 24    |       | 29.1            | 50.4          |      |  |
| 23-Apr-07  | 22                     | A    | 24   | 25   | 26   | 19   | 17   | 17   | 20   | 26   | 30    | 34    | 42    | 47    | 46    | 46    | 45    | 43    | 43    | 41    | 38    | 36    | 37    | 31    |                 | 32.9          | 46.9 |  |
| 24-Apr-07  | A                      | 18   | 9    | 10   | 8    | 7    | 6    | 13   | 21   | 36   | 44    | 46    | 45    | 46    | 46    | 48    | 48    | 45    | 41    | 38    | 34    | 33    | 32    | A     |                 | 30.6          | 48.2 |  |
| 25-Apr-07  | 29                     | 28   | 24   | 25   | 22   | 19   | 18   | 21   | 24   | 25   | 35    | 41    | 42    | 45    | 47    | 47    | 47    | 47    | 42    | 33    | 42    | 35    | 31    | 30    |                 | 33.4          | 47.4 |  |
| 26-Apr-07  | 31                     | 30   | A    | 28   | 23   | 19   | 17   | C    | C    | C    | A     | 44    | 51    | 55    | 55    | 56    | 54    | 54    | 45    | 42    | 38    | 39    | 36    | 35    |                 | 39.6          | 55.9 |  |
| 27-Apr-07  | 35                     | 34   | A    | 36   | 36   | 36   | 31   | 34   | 41   | 44   | 49    | 51    | 53    | 55    | 58    | 58    | 55    | 51    | 51    | 45    | 40    | 39    | 39    | 37    |                 | 44.0          | 58.4 |  |
| 28-Apr-07  | 34                     | A    | 32   | 32   | 36   | 40   | 41   | 44   | 50   | 58   | 60    | 57    | 59    | 57    | 57    | 57    | 55    | 55    | 55    | 51    | 45    | 42    | 42    | 41    |                 | 47.7          | 60.0 |  |
| 29-Apr-07  | A                      | 36   | 35   | 39   | 41   | 41   | 41   | 46   | 52   | 54   | 54    | 52    | 51    | 50    | 51    | 49    | 50    | 52    | 59    | 56    | 48    | 47    | 45    | A     |                 | 47.7          | 59.2 |  |
| 30-Apr-07  | 40                     | 41   | 39   | 36   | 35   | 33   | 35   | 29   | 39   | 42   | 40    | 40    | 40    | 41    | 42    | 43    | 45    | 46    | 46    | 45    | 43    | 32    | A     | 34    |                 | 39.5          | 46.4 |  |
| Hourly Avg | 26.1                   | 25.1 | 26.1 | 25.9 | 24.9 | 21.6 | 21.4 | 23.9 | 29.1 | 32.6 | 34.6  | 36.2  | 38.8  | 40.8  | 41.6  | 42.4  | 41.6  | 41.5  | 39.2  | 35.8  | 33.2  | 30.3  | 28.7  | 26.4  |                 |               |      |  |
| Hourly Max | 40.4                   | 40.7 | 38.9 | 39.4 | 41.2 | 40.8 | 40.8 | 46.0 | 52.1 | 58.1 | 60.0  | 56.5  | 58.8  | 57.1  | 58.0  | 58.4  | 55.2  | 55.4  | 59.2  | 55.8  | 48.1  | 46.8  | 44.8  | 40.7  |                 |               |      |  |

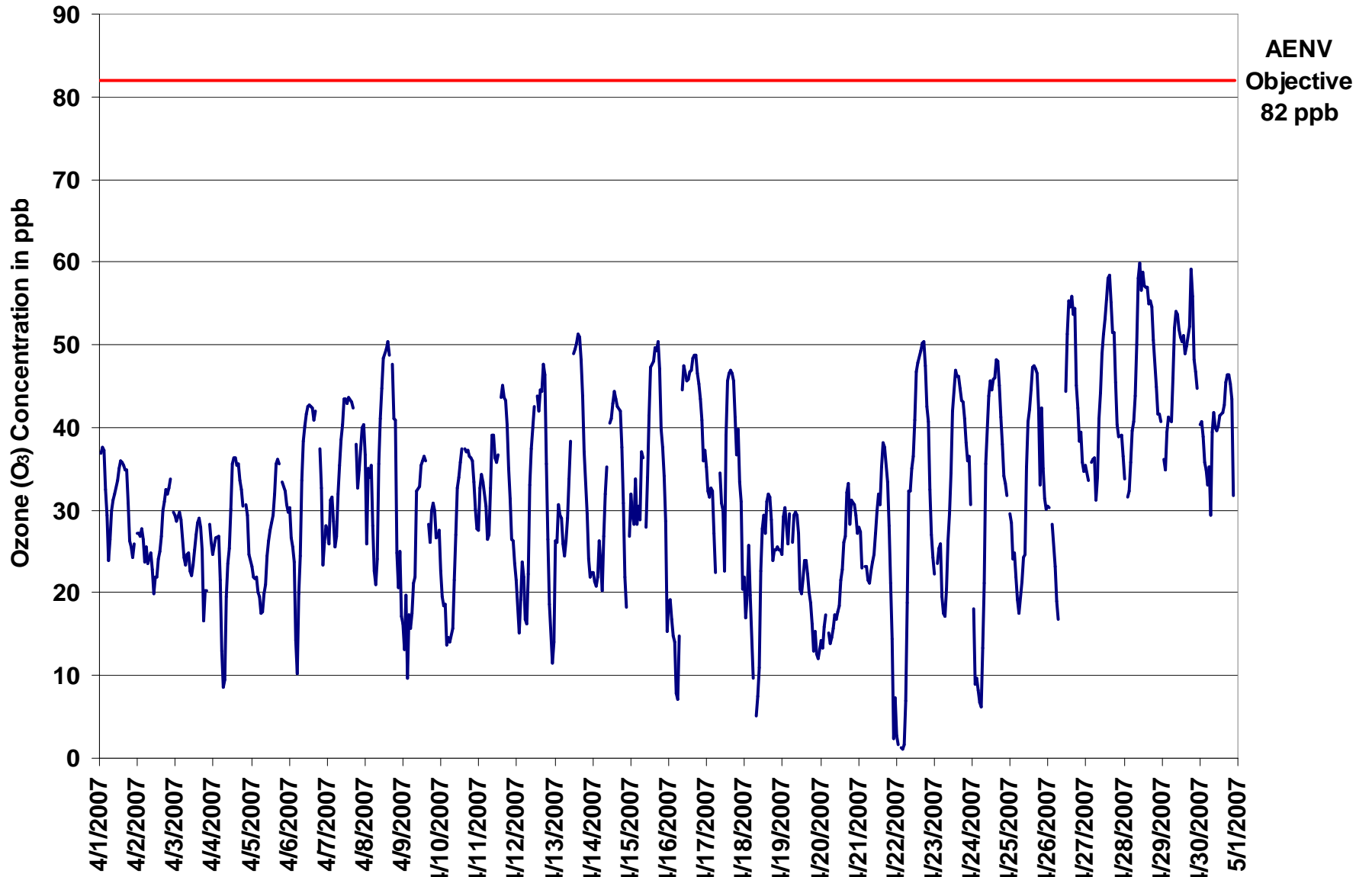


Figure 5. PAS - Crescent Heights Ozone 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

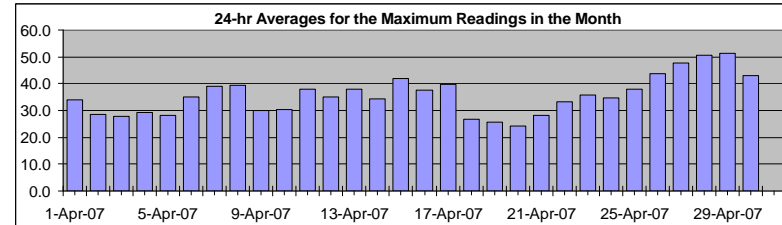
**Ozone (O<sub>3</sub>)**

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                      |      |     |        |             |
|----------------------|------|-----|--------|-------------|
| Maximum 1-hr Value:  | 62.8 | ppb | 29-Apr | 18:00 19:00 |
| Maximum 24-hr Value: | 51.2 | ppb | 29-Apr |             |

|                   |        |                         |         |      |      |      |     |          |          |
|-------------------|--------|-------------------------|---------|------|------|------|-----|----------|----------|
| AIC Time:         | 33 hrs | Operational Time:       | 683 hrs |      |      |      |     |          |          |
| Calibration Time: | 3 hrs  | AMD Operational Uptime: | 99.9%   |      |      |      |     |          |          |
| Percentile        | 99     | 95                      | 75      | 50   | 25   | 5    | 1   | Average  | Median   |
|                   | 59.9   | 53.5                    | 43.6    | 35.0 | 27.5 | 18.1 | 9.7 | 35.5 ppb | 35.0 ppb |



**Status Flag Characters**

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

**Day Mountain Standard Time**

| Hour Start<br>Hour End | 0:00<br>1:00 | 1:00<br>2:00 | 2:00<br>3:00 | 3:00<br>4:00 | 4:00<br>5:00 | 5:00<br>6:00 | 6:00<br>7:00 | 7:00<br>8:00 | 8:00<br>9:00 | 9:00<br>10:00 | 10:00<br>11:00 | 11:00<br>12:00 | 12:00<br>13:00 | 13:00<br>14:00 | 14:00<br>15:00 | 15:00<br>16:00 | 16:00<br>17:00 | 17:00<br>18:00 | 18:00<br>19:00 | 19:00<br>20:00 | 20:00<br>21:00 | 21:00<br>22:00 | 22:00<br>23:00 | 23:00<br>0:00 | 24-hour<br>Average | Daily<br>Maximum |      |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|------|
| 1-Apr-07               | A            | 39           | 41           | 40           | 35           | 32           | 27           | 30           | 32           | 33            | 35             | 36             | 37             | 37             | 37             | 37             | 36             | 37             | 35             | 29             | 28             | 27             | 28             | A             | 34.0               | 40.5             |      |
| 2-Apr-07               | A            | 29           | 28           | 28           | 29           | 28           | 27           | 28           | 26           | 26            | 25             | 22             | 23             | 24             | 25             | 27             | 29             | 33             | 34             | 35             | 34             | 34             | 35             | A             | 31                 | 28.7             | 34.9 |
| 3-Apr-07               | 30           | 30           | 31           | 31           | 30           | 27           | 25           | 26           | 26           | 24            | 24             | 25             | 27             | 28             | 30             | 30             | 29             | 29             | 23             | 24             | 27             | A              | 31             | 30            | 27.8               | 31.2             |      |
| 4-Apr-07               | 27           | 29           | 30           | 29           | 26           | 17           | 13           | 15           | 25           | 26            | 27             | 36             | 37             | 37             | 37             | 37             | 37             | 37             | 34             | 32             | A              | 32             | 31             | 26            | 29.4               | 37.5             |      |
| 5-Apr-07               | 25           | 23           | 23           | 23           | 21           | 21           | 20           | 20           | 21           | 23            | 26             | 28             | 28             | 30             | 32             | 34             | 38             | 38             | A              | A              | 36             | 34             | 32             | 31            | 28.1               | 37.8             |      |
| 6-Apr-07               | 33           | 29           | 28           | 28           | 22           | 13           | 25           | 29           | 37           | 41            | 42             | 43             | 44             | 44             | 44             | 45             | 45             | 44             | A              | 40             | 36             | 32             | 30             | 30            | 34.9               | 44.7             |      |
| 7-Apr-07               | 30           | 30           | 33           | 33           | 32           | 29           | 29           | 35           | 40           | 41            | 43             | 45             | 46             | 45             | 46             | 46             | 45             | A              | 42             | 38             | 41             | 41             | 42             | 42            | 38.9               | 46.2             |      |
| 8-Apr-07               | 42           | 35           | 39           | 40           | 39           | 37           | 27           | 26           | 35           | 41            | 43             | 48             | 50             | 52             | 52             | 51             | A              | 50             | 48             | 45             | 32             | 27             | 28             | 25            | 39.6               | 51.8             |      |
| 9-Apr-07               | 20           | 18           | 27           | 21           | 21           | 22           | 24           | 25           | 27           | 38            | 37             | 39             | 40             | 39             | 39             | A              | 30             | 32             | 34             | 34             | 32             | 31             | 29             | 31            | 30.0               | 40.3             |      |
| 10-Apr-07              | 28           | 21           | 20           | 20           | 18           | 18           | 18           | 19           | 24           | 31            | 34             | 36             | 37             | 39             | A              | 39             | 38             | 39             | 39             | 39             | 38             | 36             | 35             | 31            | 30.3               | 38.9             |      |
| 11-Apr-07              | 33           | 35           | 37           | 37           | 33           | 31           | 32           | 36           | 42           | 41            | 40             | 38             | 39             | A              | 45             | 47             | 46             | 45             | 43             | 42             | 35             | 34             | 30             | 27            | 37.8               | 46.7             |      |
| 12-Apr-07              | 25           | 19           | 23           | 26           | 25           | 24           | 22           | 28           | 37           | 41            | 43             | 45             | A              | 46             | 45             | 49             | 48             | 53             | 53             | 42             | 34             | 29             | 20             | 25            | 34.9               | 53.3             |      |
| 13-Apr-07              | 30           | 29           | 33           | 33           | 35           | 30           | 27           | 28           | 32           | 37            | 42             | A              | 51             | 51             | 53             | 53             | 53             | 51             | 47             | 41             | 37             | 27             | 28             | 25            | 38.0               | 53.2             |      |
| 14-Apr-07              | 25           | 23           | 22           | 25           | 29           | 26           | 25           | 31           | 34           | 39            | A              | 43             | 43             | 46             | 46             | 46             | 46             | 45             | 41             | 38             | 25             | 29             | P              | 30            | 34.4               | 46.4             |      |
| 15-Apr-07              | 39           | 38           | 34           | 37           | 35           | 33           | 36           | 40           | 40           | A             | 33             | 37             | 49             | 49             | 51             | 51             | 51             | 53             | 52             | 50             | 44             | 41             | 40             | 28            | 41.8               | 52.7             |      |
| 16-Apr-07              | 26           | 24           | 21           | 20           | 17           | 14           | 12           | 18           | A            | 47            | 50             | 49             | 48             | 49             | 49             | 50             | 52             | 50             | 50             | 47             | 45             | 44             | 40             | 39            | 37.4               | 51.9             |      |
| 17-Apr-07              | 37           | 36           | 34           | 34           | 35           | 33           | 30           | A            | 40           | 35            | 34             | 34             | 46             | 49             | 50             | 50             | 49             | 48             | 46             | 39             | 44             | 44             | 34             | 34            | 39.7               | 49.7             |      |
| 18-Apr-07              | 28           | 23           | 26           | 28           | 26           | 19           | A            | 11           | 10           | 20            | 28             | 31             | 31             | 33             | 34             | 34             | 33             | 33             | 28             | 27             | 27             | 28             | 27             | 28            | 26.7               | 34.3             |      |
| 19-Apr-07              | 29           | 31           | 33           | 31           | 32           | A            | 30           | 31           | 32           | 31            | 32             | 24             | 23             | 25             | 27             | 26             | 24             | 24             | 21             | 20             | 17             | 17             | 15             | 15            | 25.7               | 32.5             |      |
| 20-Apr-07              | 16           | 17           | 18           | 18           | A            | 18           | 16           | 17           | 18           | 19            | 19             | 19             | 20             | 23             | 25             | 30             | 31             | 35             | 35             | 35             | 33             | 33             | 31             | 30            | 24.1               | 34.9             |      |
| 21-Apr-07              | 30           | 29           | 28           | A            | 26           | 25           | 24           | 24           | 25           | 25            | 27             | 30             | 33             | 34             | 35             | 38             | 40             | 40             | 37             | 32             | 27             | 22             | 6              | 14            | 28.3               | 40.2             |      |
| 22-Apr-07              | 9            | 5            | A            | 5            | 4            | 3            | 21           | 30           | 34           | 36            | 37             | 40             | 46             | 49             | 50             | 51             | 52             | 52             | 50             | 46             | 44             | 37             | 32             | 28            | 33.1               | 52.5             |      |
| 23-Apr-07              | 25           | A            | 25           | 27           | 28           | 24           | 22           | 21           | 24           | 30            | 32             | 39             | 47             | 49             | 48             | 48             | 47             | 45             | 45             | 44             | 41             | 38             | 40             | 34            | 35.8               | 48.7             |      |
| 24-Apr-07              | A            | 26           | 12           | 15           | 11           | 9            | 13           | 19           | 29           | 42            | 49             | 48             | 46             | 48             | 48             | 52             | 50             | 48             | 45             | 42             | 38             | 37             | 36             | A             | 34.7               | 51.7             |      |
| 25-Apr-07              | 32           | 31           | 27           | 28           | 27           | 23           | 25           | 26           | 27           | 29            | 41             | 43             | 45             | 49             | 50             | 50             | 50             | 50             | 48             | 46             | 49             | 44             | 36             | 35            | 37.9               | 50.3             |      |
| 26-Apr-07              | 35           | 33           | A            | 32           | 27           | 24           | 24           | C            | C            | C             | A              | 50             | 56             | 57             | 58             | 58             | 58             | 57             | 53             | 46             | 44             | 42             | 40             | 37            | 43.8               | 58.5             |      |
| 27-Apr-07              | 37           | 36           | A            | 38           | 39           | 38           | 39           | 40           | 45           | 49            | 51             | 53             | 55             | 59             | 61             | 60             | 60             | 56             | 54             | 52             | 49             | 41             | 42             | 39            | 47.6               | 60.8             |      |
| 28-Apr-07              | 39           | A            | 34           | 35           | 40           | 42           | 44           | 47           | 55           | 60            | 62             | 60             | 61             | 60             | 59             | 59             | 58             | 57             | 56             | 55             | 48             | 46             | 43             | 45            | 50.6               | 62.0             |      |
| 29-Apr-07              | A            | 42           | 42           | 42           | 44           | 43           | 43           | 51           | 56           | 56            | 56             | 55             | 54             | 54             | 54             | 51             | 53             | 59             | 63             | 62             | 51             | 49             | 46             | A             | 51.2               | 62.8             |      |
| 30-Apr-07              | 43           | 43           | 40           | 39           | 37           | 39           | 40           | 39           | 44           | 45            | 45             | 42             | 42             | 43             | 43             | 45             | 48             | 49             | 49             | 49             | 48             | 39             | A              | 38            | 43.1               | 49.3             |      |
| Hourly Avg             | 29.7         | 28.7         | 29.2         | 29.2         | 28.4         | 25.5         | 26.2         | 28.1         | 32.8         | 35.9          | 37.6           | 39.3           | 41.6           | 43.1           | 43.9           | 44.6           | 44.2           | 44.5           | 42.9           | 40.3           | 37.4           | 35.0           | 32.4           | 30.6          |                    |                  |      |
| Hourly Max             | 42.6         | 43.1         | 42.2         | 41.7         | 43.8         | 42.8         | 43.7         | 51.1         | 55.8         | 60.0          | 62.0           | 59.7           | 61.4           | 59.8           | 60.8           | 60.4           | 59.7           | 59.1           | 62.8           | 61.9           | 51.4           | 49.2           | 45.9           | 44.6          |                    |                  |      |

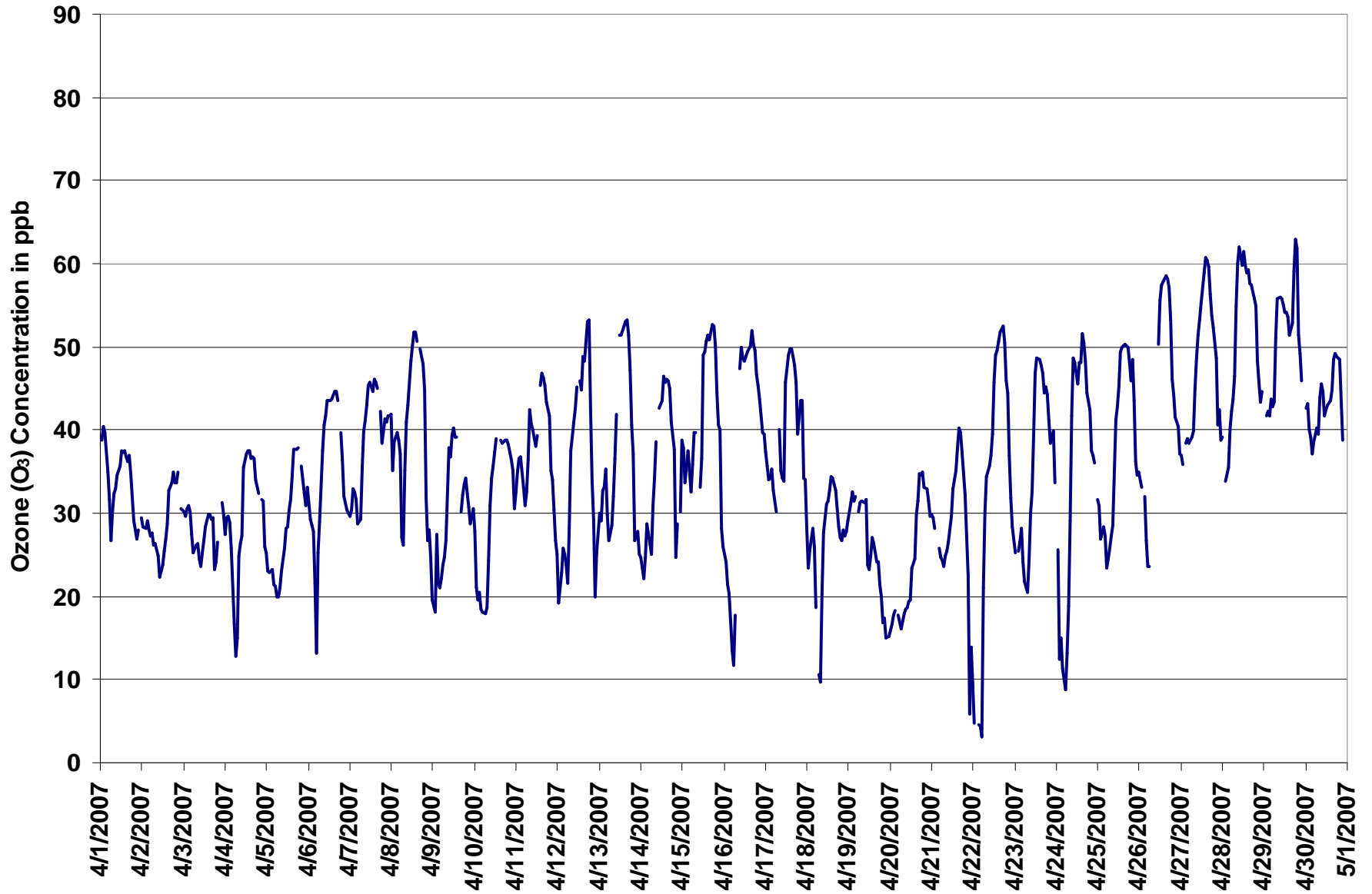
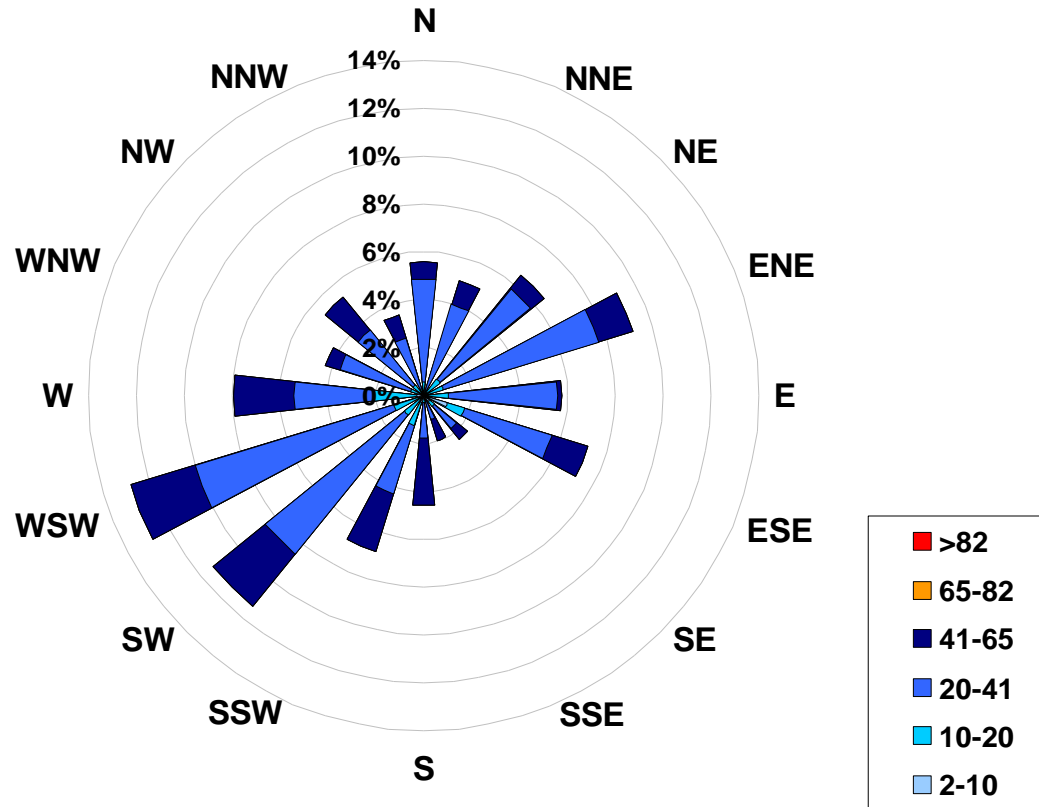


Figure 6. PAS - Crescent Heights Ozone Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

| Frequency Distribution of O <sub>3</sub> in ppb |       |                 |     |
|---|-------|-----------------|-----|
| Range   |       | Frequency (hrs) |     |
| 2.0   | < 10  | 21              |     |
| 10  | to 20 | 74              |     |
| 20  | to 41 | 425             |     |
| 41  | to 65 | 163             |     |
| 65  | to 82 | 0               |     |
|   | > 82  | 0               |     |
| Total Non-Zero Values                           |       |                 | 683 |



## PAS - Crescent Heights - Ozone Eight-Hour Running Average Summary

Station: Crescent Heights  
 Station Owner: PAS

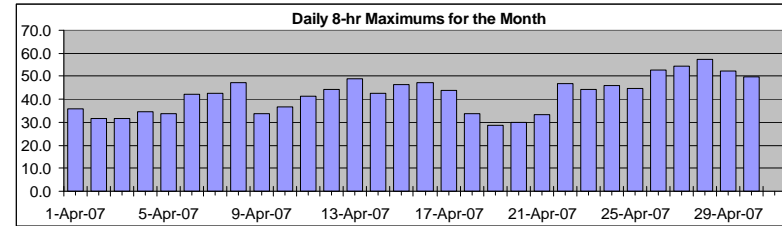
### EIGHT HOUR RUNNING AVERAGE TABLE

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

Monitoring Dates: April 1, 2007 to May 1, 2007

Objective Limit: Alberta Environment: 8-hr 65 ppb

|                             |          |        |             |
|-----------------------------|----------|--------|-------------|
| Number of 8-hr Exceedances: |          | 0      |             |
| Maximum 8-hr Average:       | 57.4 ppb | 28-Apr | 16:00 17:00 |



|            |      |      |      |      |      |      |  |
|------------|------|------|------|------|------|------|--|
| Percentile |      |      |      |      |      |      |  |
| 99         | 95   | 75   | 50   | 25   | 5    | 1    |  |
| 54.0       | 48.5 | 39.2 | 31.2 | 25.3 | 16.3 | 11.2 |  |

**Status Flag Characters**

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

| Day        | Mountain Standard Time |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       | 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 | 0:00 |      |
| 1-Apr-07   | 36                     | 35   | 35   | 35   | 35   | 34   | 33   | 32   | 32   | 31   | 30    | 30    | 30    | 31    | 33    | 34    | 34    | 35    | 35    | 34    | 32    | 31    | 30    | 29            |          | 36.0 |      |
| 2-Apr-07   | 28                     | 27   | 26   | 26   | 27   | 26   | 26   | 26   | 26   | 25   | 24    | 24    | 23    | 23    | 23    | 23    | 24    | 25    | 27    | 28    | 29    | 30    | 31    | 32            |          | 31.7 |      |
| 3-Apr-07   | 32                     | 31   | 31   | 30   | 30   | 29   | 28   | 27   | 27   | 26   | 25    | 24    | 24    | 24    | 25    | 25    | 26    | 26    | 25    | 25    | 24    | 24    | 24    | 24            |          | 31.6 |      |
| 4-Apr-07   | 23                     | 23   | 25   | 26   | 26   | 24   | 22   | 20   | 19   | 19   | 18    | 19    | 21    | 24    | 27    | 30    | 32    | 34    | 34    | 34    | 34    | 34    | 34    | 33            | 31       |      | 34.5 |
| 5-Apr-07   | 29                     | 28   | 26   | 25   | 24   | 23   | 21   | 20   | 20   | 20   | 20    | 21    | 22    | 23    | 24    | 26    | 28    | 30    | 31    | 32    | 33    | 33    | 34    | 33            |          | 33.7 |      |
| 6-Apr-07   | 33                     | 31   | 30   | 29   | 27   | 24   | 23   | 22   | 22   | 24   | 26    | 28    | 31    | 35    | 38    | 40    | 41    | 42    | 42    | 41    | 40    | 37    | 35    | 33            |          | 42.1 |      |
| 7-Apr-07   | 31                     | 29   | 29   | 28   | 28   | 28   | 28   | 29   | 30   | 31   | 32    | 34    | 36    | 38    | 40    | 41    | 42    | 43    | 42    | 41    | 40    | 39    | 38    | 38            |          | 42.7 |      |
| 8-Apr-07   | 37                     | 36   | 35   | 36   | 36   | 34   | 32   | 30   | 28   | 29   | 30    | 32    | 33    | 36    | 39    | 43    | 45    | 47    | 47    | 47    | 43    | 39    | 36    | 31            |          | 47.2 |      |
| 9-Apr-07   | 29                     | 25   | 22   | 18   | 17   | 17   | 16   | 16   | 17   | 19   | 21    | 24    | 27    | 29    | 32    | 33    | 34    | 33    | 33    | 32    | 31    | 30    | 28    | 28            |          | 33.9 |      |
| 10-Apr-07  | 28                     | 27   | 25   | 24   | 22   | 20   | 19   | 17   | 17   | 18   | 20    | 22    | 24    | 27    | 29    | 32    | 34    | 36    | 36    | 37    | 37    | 36    | 35    | 34            |          | 36.8 |      |
| 11-Apr-07  | 33                     | 33   | 32   | 32   | 31   | 30   | 30   | 31   | 32   | 33   | 33    | 33    | 34    | 35    | 38    | 39    | 40    | 41    | 41    | 41    | 40    | 39    | 36    | 34            |          | 41.2 |      |
| 12-Apr-07  | 31                     | 27   | 25   | 23   | 22   | 21   | 20   | 20   | 21   | 24   | 26    | 29    | 30    | 34    | 37    | 40    | 42    | 44    | 44    | 44    | 41    | 38    | 34    | 31            |          | 44.5 |      |
| 13-Apr-07  | 28                     | 26   | 24   | 23   | 23   | 24   | 26   | 27   | 28   | 29   | 30    | 30    | 32    | 36    | 39    | 43    | 46    | 48    | 49    | 47    | 45    | 42    | 38    | 35            |          | 49.0 |      |
| 14-Apr-07  | 31                     | 28   | 25   | 23   | 23   | 23   | 22   | 23   | 24   | 26   | 27    | 29    | 31    | 34    | 38    | 40    | 41    | 42    | 42    | 41    | 38    | 35    | 34    | 31            |          | 42.4 |      |
| 15-Apr-07  | 30                     | 28   | 27   | 27   | 28   | 30   | 30   | 31   | 32   | 32   | 32    | 32    | 34    | 36    | 39    | 41    | 42    | 43    | 46    | 47    | 46    | 44    | 42    | 38            |          | 46.6 |      |
| 16-Apr-07  | 34                     | 30   | 26   | 23   | 20   | 17   | 14   | 14   | 14   | 17   | 22    | 26    | 30    | 36    | 42    | 47    | 47    | 47    | 47    | 47    | 47    | 46    | 45    | 43            |          | 47.3 |      |
| 17-Apr-07  | 42                     | 40   | 38   | 36   | 35   | 33   | 31   | 31   | 30   | 30   | 29    | 30    | 32    | 36    | 37    | 39    | 40    | 42    | 44    | 44    | 44    | 42    | 40    | 37            |          | 43.6 |      |
| 18-Apr-07  | 34                     | 30   | 27   | 26   | 24   | 21   | 19   | 17   | 15   | 14   | 14    | 15    | 16    | 19    | 20    | 24    | 27    | 29    | 29    | 29    | 28    | 28    | 27    | 26            |          | 33.8 |      |
| 19-Apr-07  | 25                     | 26   | 26   | 26   | 27   | 27   | 27   | 28   | 29   | 29   | 28    | 27    | 26    | 25    | 25    | 25    | 24    | 22    | 21    | 21    | 20    | 19    | 18    | 16            |          | 28.6 |      |
| 20-Apr-07  | 15                     | 14   | 14   | 14   | 14   | 14   | 15   | 15   | 15   | 16   | 16    | 16    | 16    | 17    | 18    | 20    | 21    | 23    | 25    | 26    | 28    | 29    | 30    | 30            |          | 29.9 |      |
| 21-Apr-07  | 30                     | 29   | 28   | 28   | 27   | 26   | 25   | 24   | 23   | 23   | 23    | 23    | 24    | 25    | 27    | 28    | 30    | 32    | 33    | 33    | 32    | 30    | 26    | 23            |          | 33.1 |      |
| 22-Apr-07  | 18                     | 14   | 11   | 7    | 4    | 3    | 3    | 5    | 9    | 13   | 16    | 21    | 26    | 31    | 36    | 40    | 42    | 45    | 46    | 47    | 47    | 45    | 43    | 39            |          | 46.9 |      |
| 23-Apr-07  | 36                     | 34   | 30   | 28   | 26   | 24   | 23   | 22   | 21   | 22   | 23    | 24    | 26    | 29    | 33    | 37    | 40    | 42    | 43    | 44    | 44    | 44    | 42    | 41            | 39       |      | 44.2 |
| 24-Apr-07  | 38                     | 35   | 30   | 25   | 21   | 17   | 13   | 10   | 12   | 14   | 18    | 23    | 27    | 32    | 37    | 41    | 45    | 46    | 46    | 45    | 43    | 42    | 40    | 39            |          | 45.9 |      |
| 25-Apr-07  | 36                     | 34   | 31   | 29   | 28   | 26   | 24   | 23   | 23   | 22   | 24    | 26    | 28    | 31    | 35    | 38    | 41    | 44    | 45    | 44    | 44    | 43    | 41    | 39            |          | 44.8 |      |
| 26-Apr-07  | 36                     | 34   | 33   | 33   | 30   | 28   | 25   | N    | N    | N    | N     | N     | N     | N     | N     | N     | N     | 53    | 52    | 52    | 50    | 48    | 46    | 43            |          | 52.8 |      |
| 27-Apr-07  | 41                     | 38   | 37   | 36   | 36   | 35   | 35   | 35   | 35   | 37   | 38    | 40    | 43    | 45    | 48    | 51    | 53    | 54    | 54    | 54    | 52    | 50    | 48    | 45            |          | 54.3 |      |
| 28-Apr-07  | 42                     | 41   | 38   | 36   | 35   | 36   | 36   | 37   | 39   | 41   | 45    | 48    | 51    | 53    | 55    | 57    | 57    | 57    | 56    | 56    | 54    | 52    | 50    | 48            |          | 57.4 |      |
| 29-Apr-07  | 47                     | 44   | 41   | 40   | 39   | 39   | 39   | 40   | 41   | 44   | 46    | 48    | 49    | 50    | 51    | 52    | 51    | 51    | 52    | 52    | 52    | 52    | 51    | 51            |          | 52.3 |      |
| 30-Apr-07  | 50                     | 48   | 45   | 42   | 40   | 38   | 37   | 36   | 36   | 36   | 36    | 37    | 37    | 38    | 39    | 41    | 42    | 42    | 43    | 44    | 44    | 43    | 43    | 42            |          | 49.6 |      |

Hourly Max 49.6 48.0 45.1 42.2 40.3 39.2 39.1 39.9 41.4 43.6 46.0 48.1 50.9 53.1 55.2 56.8 57.4 57.1 56.4 55.7 53.9 52.0 50.7 51.0



# PAS - Crescent Heights - Carbon Monoxide Monthly Summary

Station: Crescent Heights  
Station Owner: PAS

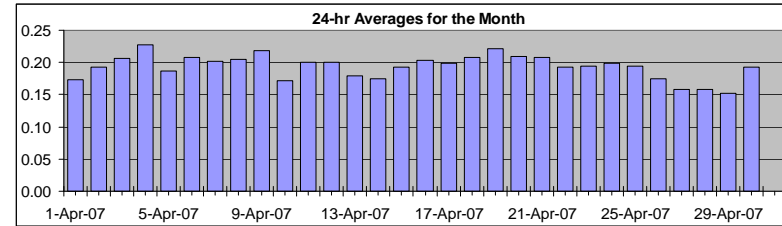
## HOURLY AVERAGE TABLE

## Carbon Monoxide (CO)

Monitoring Dates: April 1, 2007 to May 1, 2007

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

|                             |     |     |       |      |      |  |
|-----------------------------|-----|-----|-------|------|------|--|
| Number of 1-hr Exceedances: | 0   |     |       |      |      |  |
| Maximum 1-hr Average:       | 0.7 | ppm | 4-Apr | 7:00 | 8:00 |  |
| Maximum 24-hr Value:        | 0.2 | ppm | 4-Apr |      |      |  |



|                   |        |                         |         |     |     |     |     |         |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 683 hrs |     |     |     |     |         |         |
| Calibration Time: | 3 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |         |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average | Median  |
|                   | 0.3    | 0.3                     | 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 | 0:00            |               |      |
| 1-Apr-07   | 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   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A               | 0.17          | 0.20 |
| 2-Apr-07   | 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   | 0.4   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.1             | 0.19          | 0.39 |
| 3-Apr-07   | 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   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.21            | 0.26          |      |
| 4-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.4  | 0.7  | 0.3  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | 0.2   | A     | 0.1   | 0.2   | 0.1   | 0.23            | 0.68          |      |
| 5-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.19            | 0.25          |      |
| 6-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.3  | 0.3  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.21            | 0.29          |      |
| 7-Apr-07   | 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   | 0.1   | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.20            | 0.26          |      |
| 8-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.3  | 0.3  | 0.2   | 0.2   | 0.2   | 0.1   | 0.1   | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.20            | 0.28          |      |
| 9-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.2  | 0.3  | 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   | 0.22            | 0.28          |      |
| 10-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.17            | 0.22          |      |
| 11-Apr-07  | 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   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.20            | 0.28          |      |
| 12-Apr-07  | 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   | A     | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.20            | 0.31          |      |
| 13-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.18            | 0.22          |      |
| 14-Apr-07  | 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   | 0.2   | 0.2   | 0.2   | 0.2   | P     | 0.2             | 0.17          | 0.24 |
| 15-Apr-07  | 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   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.19            | 0.28          |      |
| 16-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.4  | 0.3  | 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   | 0.20            | 0.38          |      |
| 17-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | A    | 0.2  | 0.2  | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.20            | 0.31          |      |
| 18-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | A    | 0.3  | 0.3  | 0.3  | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.21            | 0.34          |      |
| 19-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | A    | 0.2  | 0.2  | 0.2  | 0.2  | 0.3   | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.22            | 0.27          |      |
| 20-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | A    | 0.2  | 0.2  | 0.3  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.21            | 0.27          |      |
| 21-Apr-07  | 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   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.3   | 0.3             | 0.21          | 0.32 |
| 22-Apr-07  | 0.3                    | 0.2  | A    | 0.3  | 0.2  | 0.2  | 0.2  | 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   | 0.19            | 0.27          |      |
| 23-Apr-07  | 0.2                    | A    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.19            | 0.26          |      |
| 24-Apr-07  | 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   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.20            | 0.35          |      |
| 25-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.19            | 0.25          |      |
| 26-Apr-07  | 0.2                    | 0.2  | A    | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | C     | C     | C     | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.17            | 0.24          |      |
| 27-Apr-07  | 0.2                    | 0.1  | A    | 0.1  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.16            | 0.20          |      |
| 28-Apr-07  | 0.2                    | A    | 0.1  | 0.1  | 0.1  | 0.2  | 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   | 0.16            | 0.20          |      |
| 29-Apr-07  | A                      | 0.1  | 0.2  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.15            | 0.19          |      |
| 30-Apr-07  | 0.1                    | 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   | 0.2   | A     | 0.1   | 0.19            | 0.24          |      |
| Hourly Avg | 0.18                   | 0.18 | 0.18 | 0.19 | 0.19 | 0.21 | 0.24 | 0.25 | 0.21 | 0.20 | 0.20  | 0.19  | 0.18  | 0.19  | 0.18  | 0.17  | 0.18  | 0.18  | 0.18  | 0.19  | 0.20  | 0.19  | 0.19  | 0.19  |                 |               |      |
| Hourly Max | 0.27                   | 0.23 | 0.21 | 0.26 | 0.27 | 0.28 | 0.45 | 0.68 | 0.32 | 0.25 | 0.26  | 0.31  | 0.27  | 0.39  | 0.23  | 0.21  | 0.25  | 0.23  | 0.24  | 0.25  | 0.28  | 0.29  | 0.32  | 0.28  |                 |               |      |



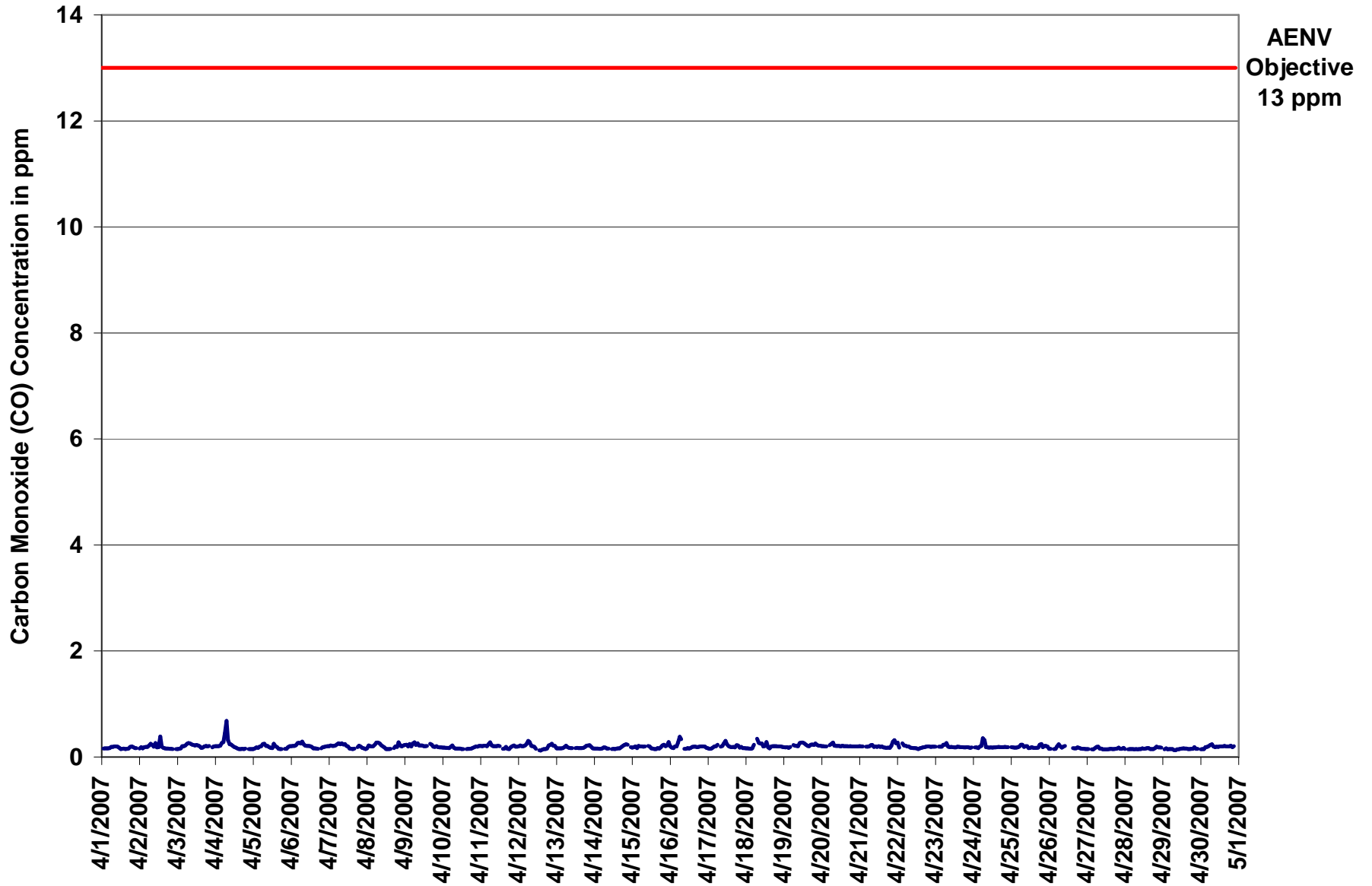


Figure 7. PAS - Crescent Heights Carbon Monoxide 1-hr Average Monthly Trend



Station: Cresent Heights  
 Station Owner: PAS

**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

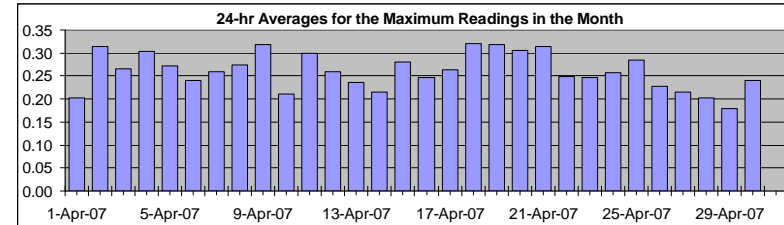
**Carbon Monoxide (CO)**

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                      |     |     |        |             |
|----------------------|-----|-----|--------|-------------|
| Maximum 1-hr Value:  | 1.7 | ppm | 2-Apr  | 13:00 14:00 |
| Maximum 24-hr Value: | 0.3 | ppm | 18-Apr |             |

|                   |        |                         |         |     |     |     |     |         |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 683 hrs |     |     |     |     |         |         |
| Calibration Time: | 3 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |         |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average | Median  |
|                   | 0.7    | 0.5                     | 0.3     | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 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**

| 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-Apr-07   | A    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2             | 0.20          | 0.25 |
| 2-Apr-07   | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.4  | 0.3  | 0.5   | 0.3   | 0.6   | 0.2   | 0.3   | 1.7   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2             | 0.31          | 1.71 |
| 3-Apr-07   | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.4  | 0.4   | 0.3   | 0.4   | 0.3   | 0.4   | 0.3   | 0.4   | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.3   | A     | 0.2   | 0.2             | 0.27          | 0.39 |
| 4-Apr-07   | 0.3  | 0.2  | 0.2  | 0.3  | 0.4  | 0.4  | 0.7  | 0.9  | 0.6  | 0.3   | 0.4   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.2             | 0.30          | 0.91 |
| 5-Apr-07   | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.5  | 0.3  | 0.3  | 0.4   | 0.2   | 0.3   | 0.3   | 0.8   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.2             | 0.27          | 0.85 |
| 6-Apr-07   | 0.2  | 0.3  | 0.2  | 0.3  | 0.3  | 0.3  | 0.3  | 0.4  | 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   | 0.2   | 0.2   | 0.2             | 0.24          | 0.36 |
| 7-Apr-07   | 0.2  | 0.3  | 0.2  | 0.2  | 0.3  | 0.5  | 0.3  | 0.3  | 0.3  | 0.3   | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.3   | A     | 0.2   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.26            | 0.46          |      |
| 8-Apr-07   | 0.2  | 0.3  | 0.3  | 0.2  | 0.2  | 0.3  | 0.6  | 0.5  | 0.3  | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.3   | 0.4   | 0.3   | 0.2   | 0.3   | 0.27            | 0.58          |      |
| 9-Apr-07   | 0.7  | 0.3  | 0.2  | 0.5  | 0.2  | 0.6  | 0.6  | 0.3  | 0.4  | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | A     | 0.3   | 0.3   | 0.3   | 0.2   | 0.3   | 0.3   | 0.2   | 0.2   | 0.32            | 0.71          |      |
| 10-Apr-07  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.4             | 0.21          | 0.45 |
| 11-Apr-07  | 0.3  | 0.3  | 0.4  | 0.5  | 0.2  | 0.6  | 0.7  | 0.3  | 0.3  | 0.2   | 0.3   | 0.3   | 0.3   | 0.2   | A     | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.4   | 0.2   | 0.2   | 0.2   | 0.2             | 0.30          | 0.69 |
| 12-Apr-07  | 0.2  | 0.5  | 0.3  | 0.2  | 0.3  | 0.4  | 0.4  | 0.4  | 0.3  | 0.2   | 0.2   | 0.2   | A     | 0.1   | 0.1   | 0.3   | 0.2   | 0.3   | 0.2   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3             | 0.26          | 0.45 |
| 13-Apr-07  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.3  | 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   | 0.3   | 0.5   | 0.4   | 0.2             | 0.24          | 0.49 |
| 14-Apr-07  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.2   | A     | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | P     | 0.2             | 0.22          | 0.30 |
| 15-Apr-07  | 0.2  | 0.3  | 0.2  | 0.3  | 0.4  | 0.3  | 0.3  | 0.3  | 0.3  | A     | 0.3   | 0.2   | 0.2   | 0.4   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.4   | 0.3   | 0.6   | 0.3   | 0.4             | 0.28          | 0.60 |
| 16-Apr-07  | 0.3  | 0.2  | 0.2  | 0.3  | 0.3  | 0.5  | 0.5  | 0.4  | 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             | 0.25          | 0.49 |
| 17-Apr-07  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | A    | 0.2  | 0.4   | 0.4   | 0.4   | 0.3   | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.3   | 0.3   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2             | 0.26          | 0.43 |
| 18-Apr-07  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.4  | A    | 0.6  | 0.4  | 0.3   | 0.6   | 0.4   | 0.5   | 0.8   | 0.3   | 0.2   | 0.4   | 0.3   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2             | 0.32          | 0.84 |
| 19-Apr-07  | 0.2  | 0.3  | 0.2  | 0.2  | 0.2  | A    | 0.3  | 0.3  | 0.3  | 0.3   | 0.9   | 0.5   | 0.4   | 0.4   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3             | 0.32          | 0.89 |
| 20-Apr-07  | 0.3  | 0.2  | 0.2  | 0.2  | A    | 0.4  | 0.4  | 0.9  | 0.2  | 0.3   | 0.3   | 0.3   | 0.2   | 0.4   | 0.2   | 0.3   | 0.2   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2             | 0.31          | 0.91 |
| 21-Apr-07  | 0.4  | 0.2  | 0.2  | A    | 0.2  | 0.2  | 0.3  | 0.4  | 0.5  | 0.2   | 0.3   | 0.3   | 0.5   | 0.2   | 0.3   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.4   | 0.5   | 0.5   | 0.4   | 0.4             | 0.32          | 0.51 |
| 22-Apr-07  | 0.5  | 0.2  | A    | 0.7  | 0.3  | 0.3  | 0.3  | 0.3  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2             | 0.25          | 0.66 |
| 23-Apr-07  | 0.2  | A    | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.4  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.4   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2             | 0.25          | 0.43 |
| 24-Apr-07  | A    | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.5  | 0.7  | 0.2  | 0.2   | 0.2   | 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             | 0.26          | 0.68 |
| 25-Apr-07  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.5  | 0.3  | 0.2  | 0.5   | 0.4   | 0.2   | 0.2   | 0.4   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.4   | 0.5   | 0.2   | 0.3   | 0.3   | A               | 0.29          | 0.51 |
| 26-Apr-07  | 0.2  | 0.2  | A    | 0.2  | 0.2  | 0.3  | 0.3  | 0.3  | 0.2  | 0.2   | 0.3   | C     | C     | C     | A     | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2             | 0.23          | 0.35 |
| 27-Apr-07  | 0.2  | 0.2  | A    | 0.1  | 0.1  | 0.3  | 0.3  | 0.3  | 0.2  | 0.2   | 0.1   | 0.2   | 0.1   | 0.1   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.3             | 0.21          | 0.35 |
| 28-Apr-07  | 0.2  | A    | 0.1  | 0.2  | 0.1  | 0.3  | 0.1  | 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   | 0.3   | 0.2   | 0.2   | 0.2             | 0.20          | 0.28 |
| 29-Apr-07  | A    | 0.1  | 0.2  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | A     | 0.1             | 0.18          | 0.20 |
| 30-Apr-07  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.3  | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.3   | 0.3   | A     | 0.1             | 0.24          | 0.35 |
| Hourly Avg | 0.24 | 0.23 | 0.21 | 0.24 | 0.22 | 0.32 | 0.37 | 0.37 | 0.29 | 0.26  | 0.30  | 0.25  | 0.25  | 0.34  | 0.25  | 0.22  | 0.23  | 0.22  | 0.24  | 0.26  | 0.26  | 0.26  | 0.23  | 0.23  |                 |               |      |
| Hourly Max | 0.71 | 0.45 | 0.39 | 0.66 | 0.36 | 0.57 | 0.71 | 0.91 | 0.56 | 0.51  | 0.89  | 0.49  | 0.48  | 1.71  | 0.43  | 0.31  | 0.40  | 0.30  | 0.42  | 0.50  | 0.60  | 0.51  | 0.46  | 0.45  |                 |               |      |

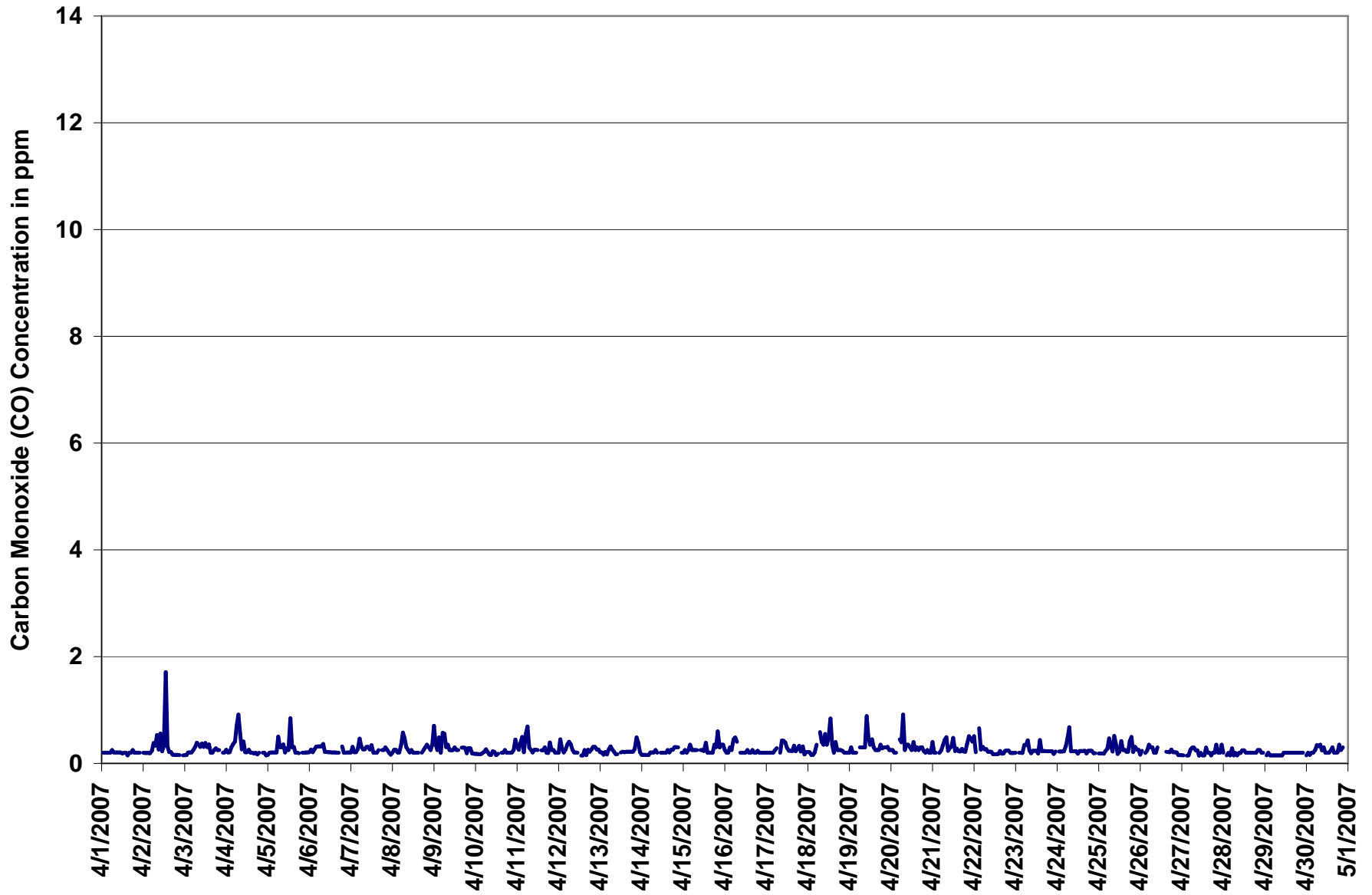
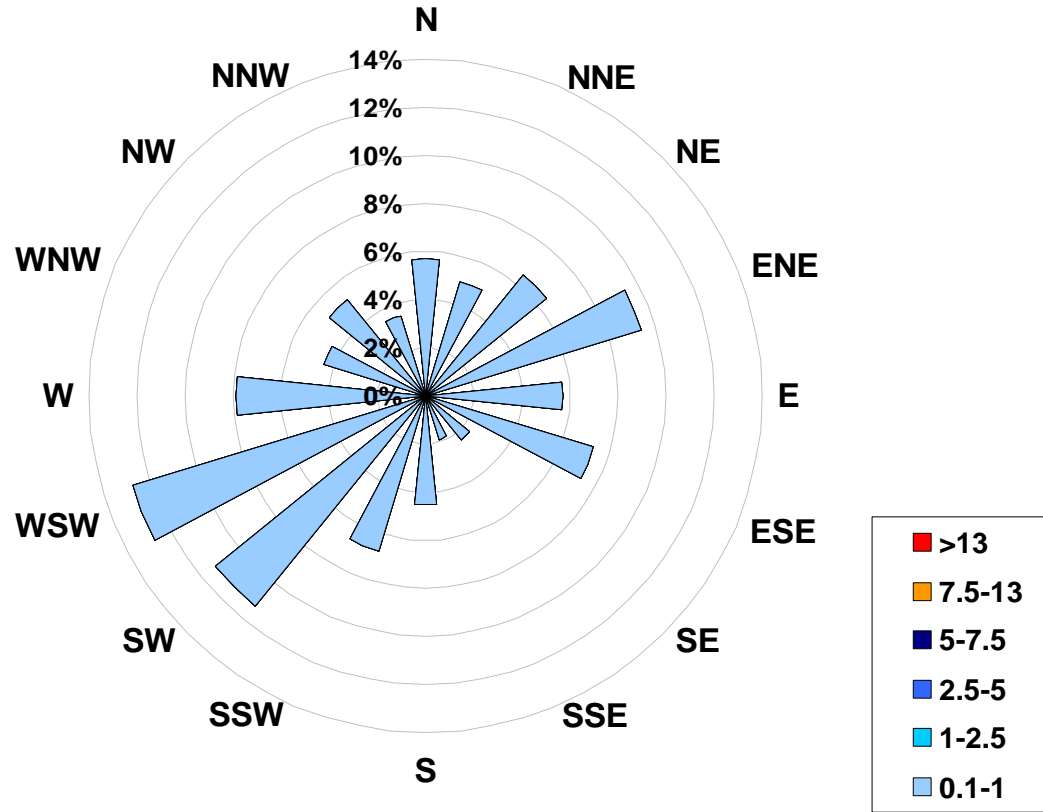


Figure 8. PAS - Crescent Heights Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

| Frequency Distribution of CO in ppm |    |     |                 |
|-------------------------------------|----|-----|-----------------|
| Range                               |    |     | Frequency (hrs) |
| 0.1                                 | <  | 1   | 683             |
| 1                                   | to | 2.5 | 0               |
| 2.5                                 | to | 5   | 0               |
| 5                                   | to | 7.5 | 0               |
| 7.5                                 | to | 13  | 0               |
|                                     | >  | 13  | 0               |
| Total Non-Zero Values               |    |     | 683             |



## PAS - Crescent Heights - Carbon Monoxide Eight-Hour Running Average Summary

Station: Crescent Heights  
 Station Owner: PAS

### EIGHT HOUR RUNNING AVERAGE TABLE

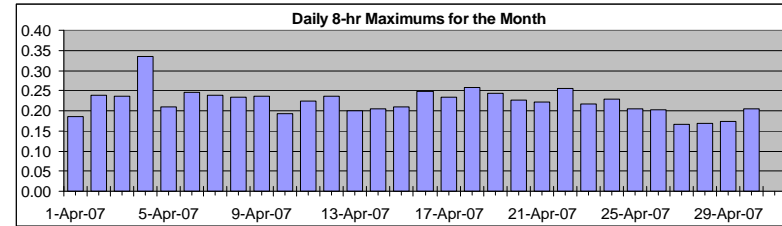
### Carbon Monoxide (CO)

Monitoring Dates: April 1, 2007 to May 1, 2007

Objective Limit: Alberta Environment: 8-hr 5 ppm

|                             |         |       |             |
|-----------------------------|---------|-------|-------------|
| Number of 8-hr Exceedances: |         | 0     |             |
| Maximum 8-hr Average:       | 0.3 ppm | 4-Apr | 10:00 11:00 |

|            |     |     |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|-----|-----|
| Percentile |     |     |     |     |     |     |     |
|            | 99  | 95  | 75  | 50  | 25  | 5   | 1   |
|            | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 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         | 0:00 |      |
| 1-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.19 |
| 2-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.24 |
| 3-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.24 |
| 4-Apr-07   | 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   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.33 |
| 5-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.21 |
| 6-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 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-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.24 |
| 8-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 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-Apr-07   | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.24 |
| 10-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.19 |
| 11-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.22 |
| 12-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.24 |
| 13-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.20 |
| 14-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.21 |
| 15-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.21 |
| 16-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.25 |
| 17-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 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-Apr-07  | 0.2                    | 0.2  | 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   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.26 |
| 19-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.24 |
| 20-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.23 |
| 21-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.22 |
| 22-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.3  | 0.3  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.26 |
| 23-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.22 |
| 24-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.23 |
| 25-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.20 |
| 26-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | N     | N     | N     | N     | N     | N     | N     | N     | N     | N     | 0.2           | 0.2  | 0.20 |
| 27-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.17 |
| 28-Apr-07  | 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   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.17 |
| 29-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.1  | 0.1  | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.17 |
| 30-Apr-07  | 0.2                    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2           | 0.2  | 0.21 |

Hourly Max    0.23   0.23   0.24   0.25   0.26   0.24   0.25   0.31   0.33   0.33   0.33   0.33   0.32   0.31   0.28   0.24   0.24   0.24   0.24   0.24   0.23   0.23   0.23   0.23   0.23



# PAS - Crescent Heights - Total Hydrocarbons Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

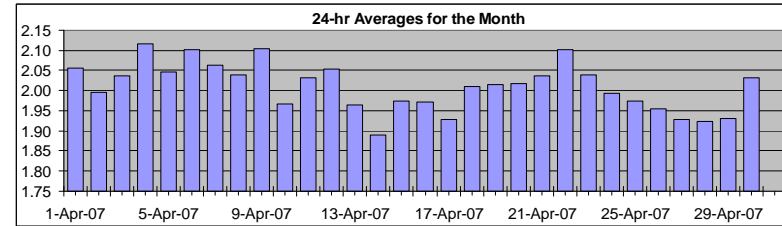
## HOURLY AVERAGE TABLE

## Total Hydrocarbons (THC)

Monitoring Dates: April 1, 2007 to May 1, 2007

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

|                       |     |     |        |           |
|-----------------------|-----|-----|--------|-----------|
| Maximum 1-hr Average: | 2.7 | ppm | 22-Apr | 3:00 4:00 |
| Maximum 24-hr Value:  | 2.1 | ppm | 4-Apr  |           |



|                   |        |                         |         |     |     |     |     |         |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 683 hrs |     |     |     |     |         |         |
| Calibration Time: | 3 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |         |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average | Median  |
|                   | 2.4    | 2.2                     | 2.1     | 2.0 | 1.9 | 1.9 | 1.8 | 2.0 ppm | 2.0 ppm |

### Status Flag Characters

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

| Day        | Mountain Standard Time |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 24-hour Average | Daily Maximum |      |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|------|
| Hour Start | 0:00                   | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00            |               |      |
| 1-Apr-07   | A                      | 2.0  | 2.0  | 2.0  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.1   | 2.0   | 2.1   | 2.1   | 2.0   | 2.0   | 2.0   | A     | 2.0             | 2.06          | 2.13 |
| 2-Apr-07   | 2.0                    | 2.0  | 2.0  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.0   | 1.9   | 1.9   | 2.0   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.0   | A     | 2.0   | 2.00            | 2.11          |      |
| 3-Apr-07   | 2.0                    | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.1  | 2.1  | 2.1  | 2.1  | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | A     | 2.1   | 2.3   | 2.04            | 2.26          |      |
| 4-Apr-07   | 2.2                    | 2.2  | 2.2  | 2.4  | 2.3  | 2.2  | 2.3  | 2.4  | 2.5  | 2.2  | 2.1   | 2.0   | 2.0   | 2.0   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.0   | A     | 2.0   | 2.0   | 2.0   | 2.12            | 2.49          |      |
| 5-Apr-07   | 2.0                    | 2.0  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | A     | 2.1   | 2.1   | 2.1   | 2.1   | 2.05            | 2.12          |      |
| 6-Apr-07   | 2.2                    | 2.2  | 2.2  | 2.3  | 2.3  | 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   | 2.1   | 2.1   | 2.10            | 2.28          |      |
| 7-Apr-07   | 2.1                    | 2.1  | 2.1  | 2.3  | 2.3  | 2.2  | 2.3  | 2.2  | 2.2  | 2.0  | 2.0   | 2.0   | 2.0   | 1.9   | 1.9   | 1.9   | 2.0   | A     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.06            | 2.30          |      |
| 8-Apr-07   | 2.0                    | 2.0  | 2.0  | 2.1  | 2.1  | 2.1  | 2.3  | 2.2  | 2.1  | 2.0  | 2.0   | 1.9   | 1.9   | 2.0   | 1.9   | 1.9   | A     | 1.9   | 2.0   | 2.0   | 2.1   | 2.0   | 2.0   | 2.3   | 2.04            | 2.26          |      |
| 9-Apr-07   | 2.6                    | 2.5  | 2.3  | 2.4  | 2.2  | 2.3  | 2.4  | 2.3  | 2.2  | 2.1  | 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   | 2.10            | 2.56          |      |
| 10-Apr-07  | 1.9                    | 1.9  | 1.9  | 1.9  | 2.0  | 2.0  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9   | 1.9   | 1.9   | 2.0   | A     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.1   | 2.1   | 2.1   | 2.1   | 1.97            | 2.10          |      |
| 11-Apr-07  | 2.1                    | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.0  | 2.0  | 2.0   | 2.0   | 2.0   | A     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.1   | 2.1   | 2.03            | 2.12          |      |
| 12-Apr-07  | 2.1                    | 2.2  | 2.2  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.0  | 2.0  | 2.0   | 2.0   | 2.0   | A     | 1.9   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.2   | 2.1   | 2.1             | 2.05          | 2.23 |
| 13-Apr-07  | 2.0                    | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 1.9  | 1.9  | 2.0   | A     | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.0   | 2.0   | 2.0   | 1.96            | 2.05          |      |
| 14-Apr-07  | 1.9                    | 2.0  | 1.9  | 2.0  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | A     | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.9   | 1.9   | 1.9   | P     | 1.9   | 1.89            | 1.96          |      |
| 15-Apr-07  | 1.9                    | 1.9  | 1.9  | 1.9  | 2.0  | 2.0  | 2.0  | 1.9  | 1.9  | A    | 2.0   | 2.0   | 2.0   | 1.9   | 1.9   | 1.9   | 2.0   | 1.9   | 2.0   | 2.0   | 2.0   | 2.0   | 2.2   | 2.2   | 1.98            | 2.19          |      |
| 16-Apr-07  | 2.3                    | 2.2  | 2.1  | 2.1  | 2.1  | 2.1  | 2.2  | 2.1  | A    | 1.9  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.9   | 1.97            | 2.25          |      |
| 17-Apr-07  | 1.9                    | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 2.0  | A    | 1.9  | 1.9  | 1.9   | 2.0   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 1.9   | 2.0   | 1.9   | 2.0   | 2.0   | 1.93            | 1.97          |      |
| 18-Apr-07  | 2.0                    | 2.0  | 2.0  | 2.0  | 2.0  | 2.1  | A    | 2.3  | 2.3  | 2.2  | 2.1   | 2.0   | 2.0   | 2.0   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.0   | 2.0   | 2.01            | 2.26          |      |
| 19-Apr-07  | 2.0                    | 2.0  | 2.0  | 2.0  | 2.0  | A    | 2.0  | 2.0  | 2.0  | 2.0  | 2.0   | 2.0   | 2.1   | 2.1   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.1   | 2.0   | 2.0   | 2.1   | 2.02            | 2.08          |      |
| 20-Apr-07  | 2.0                    | 2.0  | 2.0  | 2.0  | A    | 2.0  | 2.0  | 2.1  | 2.0  | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.02            | 2.05          |      |
| 21-Apr-07  | 2.0                    | 2.0  | 2.0  | A    | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 1.9   | 1.9   | 2.0   | 2.0   | 2.2   | 2.2   | 2.2   | 2.3   | 2.04            | 2.25          |      |
| 22-Apr-07  | 2.3                    | 2.1  | A    | 2.7  | 2.6  | 2.5  | 2.2  | 2.2  | 2.0  | 2.0  | 2.0   | 2.0   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.0   | 2.0   | 2.0   | 2.1   | 2.1   | 2.10            | 2.67          |      |
| 23-Apr-07  | 2.1                    | A    | 2.1  | 2.1  | 2.1  | 2.2  | 2.1  | 2.2  | 2.2  | 2.1  | 2.1   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.04            | 2.18          |      |
| 24-Apr-07  | A                      | 2.2  | 2.2  | 2.1  | 2.1  | 2.1  | 2.2  | 2.1  | 2.1  | 1.9  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | A     | 1.99            | 2.19          |      |
| 25-Apr-07  | 1.9                    | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0   | 2.0   | 2.0   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 1.9   | 2.0   | 2.0   | 1.97            | 2.02          |      |
| 26-Apr-07  | 2.0                    | 2.0  | A    | 1.9  | 2.0  | 2.0  | 2.2  | 2.0  | 2.0  | C    | C     | C     | A     | 1.9   | 2.0   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.96            | 2.17          |      |
| 27-Apr-07  | 1.9                    | 1.9  | A    | 1.9  | 1.9  | 1.9  | 2.0  | 2.0  | 2.0  | 2.0  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.93            | 1.97          |      |
| 28-Apr-07  | 1.9                    | A    | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.1   | 2.0   | 2.1   | 1.92            | 2.10          |      |
| 29-Apr-07  | A                      | 2.0  | 2.1  | 2.1  | 2.1  | 2.0  | 2.0  | 2.0  | 1.9  | 1.9  | 1.9   | 1.9   | 1.9   | 1.9   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.9   | 1.9   | 2.0   | A     | 1.93            | 2.11          |      |
| 30-Apr-07  | 2.0                    | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.1  | 2.0  | 2.1  | 2.1   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.1   | 2.0   | A     | 2.0   | 2.03            | 2.10          |      |
| Hourly Avg | 2.05                   | 2.05 | 2.05 | 2.09 | 2.08 | 2.09 | 2.09 | 2.08 | 2.05 | 2.02 | 2.00  | 1.98  | 1.96  | 1.95  | 1.94  | 1.94  | 1.94  | 1.94  | 1.94  | 1.95  | 1.97  | 1.99  | 2.00  | 2.01  | 2.04            |               |      |
| Hourly Max | 2.56                   | 2.48 | 2.33 | 2.67 | 2.63 | 2.54 | 2.38 | 2.36 | 2.49 | 2.22 | 2.14  | 2.06  | 2.08  | 2.05  | 2.03  | 2.03  | 2.06  | 2.05  | 2.13  | 2.10  | 2.18  | 2.25  | 2.21  | 2.26  |                 |               |      |

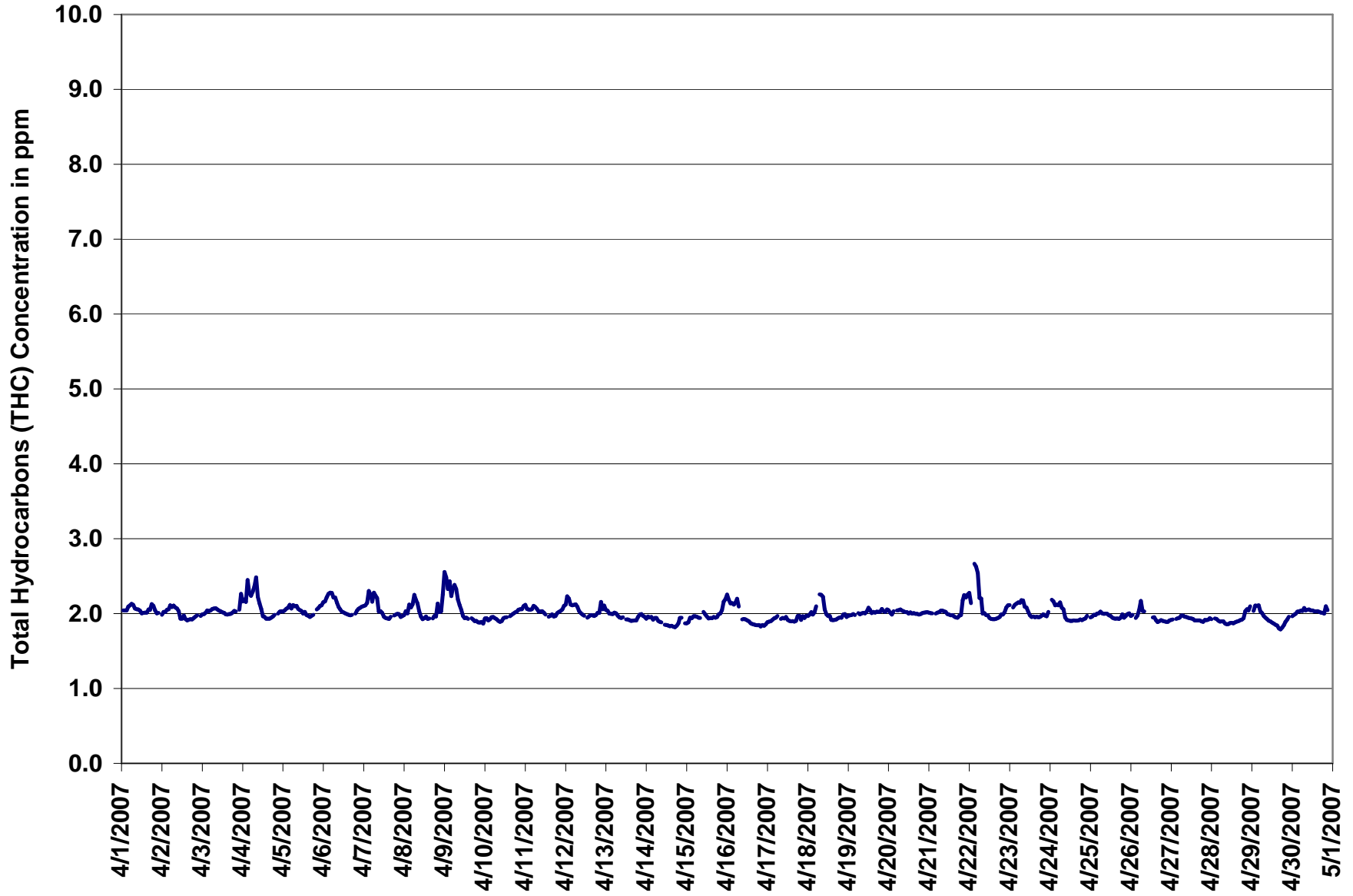


Figure 9. PAS - Crescent Heights Total Hydrocarbons 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

### INSTANTANEOUS (30 Second) MAXIMUM TABLE

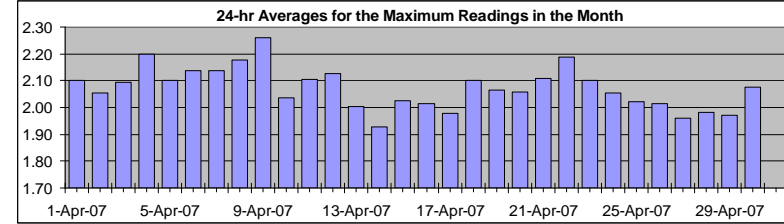
### Total Hydrocarbons (THC)

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                      |     |     |       |           |
|----------------------|-----|-----|-------|-----------|
| Maximum 1-hr Value:  | 3.4 | ppm | 8-Apr | 6:00 7:00 |
| Maximum 24-hr Value: | 2.3 | ppm | 9-Apr |           |

|                   |        |                         |         |     |     |     |     |         |         |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time:         | 33 hrs | Operational Time:       | 683 hrs |     |     |     |     |         |         |
| Calibration Time: | 3 hrs  | AMD Operational Uptime: | 99.9%   |     |     |     |     |         |         |
| Percentile        | 99     | 95                      | 75      | 50  | 25  | 5   | 1   | Average | Median  |
|                   | 2.7    | 2.4                     | 2.1     | 2.0 | 2.0 | 1.9 | 1.9 | 2.1 ppm | 2.0 ppm |



**Status Flag Characters**

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

**Day Mountain Standard Time**

| Hour Start<br>Hour End | 0:00<br>1:00 | 1:00<br>2:00 | 2:00<br>3:00 | 3:00<br>4:00 | 4:00<br>5:00 | 5:00<br>6:00 | 6:00<br>7:00 | 7:00<br>8:00 | 8:00<br>9:00 | 9:00<br>10:00 | 10:00<br>11:00 | 11:00<br>12:00 | 12:00<br>13:00 | 13:00<br>14:00 | 14:00<br>15:00 | 15:00<br>16:00 | 16:00<br>17:00 | 17:00<br>18:00 | 18:00<br>19:00 | 19:00<br>20:00 | 20:00<br>21:00 | 21:00<br>22:00 | 22:00<br>23:00 | 23:00<br>0:00 | 24-hour<br>Average | Daily<br>Maximum |      |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|------|
| 1-Apr-07               | A            | 2.1          | 2.1          | 2.1          | 2.1          | 2.1          | 2.2          | 2.2          | 2.1          | 2.1           | 2.1            | 2.1            | 2.0            | 2.0            | 2.0            | 2.0            | 2.1            | 2.1            | 2.3            | 2.2            | 2.1            | 2.1            | 2.0            | A             | 2.10               | 2.31             |      |
| 2-Apr-07               | 2.0          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1          | 2.2          | 2.2          | 2.1          | 2.1           | 2.1            | 2.0            | 2.0            | 2.4            | 2.0            | 1.9            | 1.9            | 1.9            | 2.0            | 2.0            | 2.0            | A              | 2.0            | 2.05          | 2.42               |                  |      |
| 3-Apr-07               | 2.0          | 2.0          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1           | 2.1            | 2.1            | 2.1            | 2.1            | 2.1            | 2.0            | 2.0            | 2.0            | 2.1            | 2.1            | 2.1            | A              | 2.2            | 2.09          | 2.34               |                  |      |
| 4-Apr-07               | 2.3          | 2.4          | 2.3          | 2.6          | 2.4          | 2.3          | 2.4          | 2.6          | 2.7          | 2.3           | 2.2            | 2.2            | 2.0            | 2.0            | 1.9            | 1.9            | 2.0            | 2.0            | 2.0            | 2.0            | A              | 2.0            | 2.1            | 2.0           | 2.20               | 2.69             |      |
| 5-Apr-07               | 2.0          | 2.1          | 2.1          | 2.1          | 2.2          | 2.1          | 2.2          | 2.1          | 2.2          | 2.2           | 2.1            | 2.1            | 2.0            | 2.3            | 2.1            | 2.0            | 2.0            | 2.0            | A              | 2.1            | 2.1            | 2.1            | 2.1            | 2.1           | 2.10               | 2.25             |      |
| 6-Apr-07               | 2.2          | 2.2          | 2.3          | 2.3          | 2.3          | 2.3          | 2.3          | 2.3          | 2.2          | 2.1           | 2.1            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | A              | 2.0            | 2.0            | 2.1            | 2.1            | 2.1            | 2.1           | 2.14               | 2.32             |      |
| 7-Apr-07               | 2.1          | 2.2          | 2.3          | 2.4          | 2.5          | 2.3          | 2.4          | 2.3          | 2.4          | 2.1           | 2.1            | 2.1            | 2.0            | 2.0            | 2.0            | 1.9            | 2.0            | A              | 2.0            | 2.0            | 2.1            | 2.1            | 2.0            | 2.0           | 2.14               | 2.47             |      |
| 8-Apr-07               | 2.0          | 2.1          | 2.0          | 2.3          | 2.3          | 2.2          | 3.4          | 2.4          | 2.2          | 2.1           | 2.0            | 2.0            | 2.0            | 2.0            | 1.9            | 2.0            | A              | 2.0            | 2.0            | 2.0            | 2.2            | 2.2            | 2.3            | 2.5           | 2.18               | 3.42             |      |
| 9-Apr-07               | 3.0          | 2.7          | 2.7          | 2.9          | 2.6          | 2.6          | 2.9          | 2.5          | 2.4          | 2.3           | 2.1            | 2.1            | 2.0            | 2.0            | 2.0            | A              | 2.0            | 2.0            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9           | 2.26               | 2.99             |      |
| 10-Apr-07              | 2.0          | 2.0          | 1.9          | 1.9          | 2.0          | 2.0          | 2.0          | 2.0          | 1.9          | 1.9           | 1.9            | 2.0            | 2.0            | A              | 2.0            | 2.0            | 2.1            | 2.2            | 2.1            | 2.1            | 2.2            | 2.1            | 2.3            | 2.04          | 2.31               |                  |      |
| 11-Apr-07              | 2.2          | 2.1          | 2.2          | 2.2          | 2.1          | 2.3          | 2.4          | 2.1          | 2.1          | 2.1           | 2.1            | 2.0            | 2.0            | A              | 2.0            | 2.0            | 2.1            | 2.0            | 2.0            | 2.0            | 2.1            | 2.1            | 2.2            | 2.11          | 2.36               |                  |      |
| 12-Apr-07              | 2.2          | 2.3          | 2.3          | 2.2          | 2.1          | 2.2          | 2.2          | 2.1          | 2.1          | 2.0           | 2.0            | 2.0            | A              | 2.0            | 2.0            | 2.1            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.6            | 2.2            | 2.1           | 2.13               | 2.60             |      |
| 13-Apr-07              | 2.1          | 2.1          | 2.0          | 2.1          | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          | 2.0           | 2.0            | A              | 2.0            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 2.0            | 2.1            | 2.0            | 2.0            | 2.1            | 2.0           | 2.00               | 2.13             |      |
| 14-Apr-07              | 2.0          | 2.0          | 2.0          | 2.0          | 1.9          | 2.0          | 2.0          | 1.9          | 1.9          | 1.9           | A              | 1.9            | 1.9            | 1.9            | 1.8            | 1.9            | 1.8            | 1.8            | 1.9            | 2.0            | 2.0            | 2.0            | P              | 1.9           | 1.93               | 2.02             |      |
| 15-Apr-07              | 1.9          | 1.9          | 2.0          | 2.0          | 2.0          | 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            | 2.0            | 2.0            | 2.1            | 2.1            | 2.3            | 2.3           | 2.02               | 2.32             |      |
| 16-Apr-07              | 2.3          | 2.3          | 2.2          | 2.2          | 2.2          | 2.2          | 2.3          | 2.1          | A            | 2.0           | 2.0            | 2.0            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.8            | 1.9            | 1.9            | 1.9           | 2.02               | 2.33             |      |
| 17-Apr-07              | 1.9          | 1.9          | 1.9          | 2.0          | 2.0          | 2.0          | 2.0          | A            | 2.0          | 2.0           | 2.0            | 2.1            | 2.0            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 2.1            | 2.1            | 1.9            | 2.1            | 2.0            | 2.0           | 1.98               | 2.14             |      |
| 18-Apr-07              | 2.0          | 2.1          | 2.1          | 2.0          | 2.1          | 2.2          | A            | 2.4          | 2.3          | 2.4           | 2.2            | 2.2            | 2.1            | 2.2            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.1            | 2.1            | 2.0           | 2.10               | 2.41             |      |
| 19-Apr-07              | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          | A            | 2.0          | 2.0          | 2.0          | 2.0           | 2.1            | 2.1            | 2.2            | 2.3            | 2.1            | 2.0            | 2.0            | 2.1            | 2.1            | 2.1            | 2.1            | 2.1            | 2.0            | 2.1           | 2.06               | 2.28             |      |
| 20-Apr-07              | 2.1          | 2.1          | 2.0          | 2.1          | A            | 2.1          | 2.1          | 2.2          | 2.1          | 2.1           | 2.0            | 2.0            | 2.0            | 2.1            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0           | 2.06               | 2.21             |      |
| 21-Apr-07              | 2.0          | 2.0          | 2.0          | A            | 2.0          | 2.0          | 2.1          | 2.1          | 2.1          | 2.0           | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.6            | 2.4            | 2.3            | 2.4           | 2.11               | 2.65             |      |
| 22-Apr-07              | 2.5          | 2.3          | A            | 3.1          | 2.8          | 2.7          | 2.3          | 2.4          | 2.1          | 2.0           | 2.0            | 2.0            | 2.0            | 1.9            | 1.9            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.1            | 2.1            | 2.2           | 2.19               | 3.11             |      |
| 23-Apr-07              | 2.2          | A            | 2.1          | 2.2          | 2.2          | 2.3          | 2.2          | 2.3          | 2.2          | 2.1           | 2.1            | 2.1            | 2.0            | 2.0            | 2.2            | 2.0            | 2.0            | 2.0            | 2.0            | 2.1            | 2.0            | 2.0            | 2.0            | 2.1           | 2.10               | 2.31             |      |
| 24-Apr-07              | A            | 2.4          | 2.3          | 2.2          | 2.2          | 2.2          | 2.3          | 2.2          | 2.1          | 2.1           | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 2.0            | 1.9            | 2.0            | 1.9            | 2.0            | 2.0            | 2.1            | A             | 2.05               | 2.42             |      |
| 25-Apr-07              | 2.0          | 2.0          | 2.0          | 2.0          | 2.1          | 2.0          | 2.1          | 2.0          | 2.0          | 2.0           | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.0            | 2.1            | 2.1            | 2.0            | 2.0            | 2.1            | 2.0           | 2.02               | 2.09             |      |
| 26-Apr-07              | 2.0          | 2.1          | A            | 2.0          | 2.0          | 2.1          | 2.3          | 2.1          | 2.1          | C             | C              | C              | A              | 2.0            | 2.0            | 2.2            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9           | 2.02               | 2.26             |      |
| 27-Apr-07              | 1.9          | 2.0          | A            | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          | 2.0           | 2.0            | 2.0            | 2.0            | 2.0            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 2.0            | 1.9            | 1.9            | 2.0           | 1.96               | 2.05             |      |
| 28-Apr-07              | 2.0          | A            | 2.0          | 1.9          | 1.9          | 1.9          | 1.9          | 1.9          | 1.9          | 1.9           | 2.0            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 2.0            | 2.0            | 2.0            | 2.4            | 2.2            | 2.1            | 2.2           | 1.98               | 2.37             |      |
| 29-Apr-07              | A            | 2.1          | 2.2          | 2.1          | 2.2          | 2.1          | 2.0          | 2.0          | 2.0          | 2.0           | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.9            | 1.8            | 1.8            | 1.8            | 1.9            | 1.9            | 2.0            | A              | 2.1           | 1.97               | 2.25             |      |
| 30-Apr-07              | 2.0          | 2.0          | 2.0          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1          | 2.1           | 2.1            | 2.1            | 2.1            | 2.1            | 2.1            | 2.1            | 2.1            | 2.1            | 2.0            | 2.0            | 2.1            | 2.3            | 2.1            | A             | 2.1                | 2.07             | 2.26 |
| Hourly Avg             | 2.12         | 2.12         | 2.12         | 2.18         | 2.15         | 2.16         | 2.21         | 2.17         | 2.12         | 2.07          | 2.05           | 2.02           | 2.00           | 2.02           | 1.98           | 1.98           | 1.97           | 1.97           | 2.00           | 2.02           | 2.06           | 2.08           | 2.08           | 2.10          |                    |                  |      |
| Hourly Max             | 2.99         | 2.75         | 2.69         | 3.11         | 2.76         | 2.69         | 3.42         | 2.59         | 2.69         | 2.39          | 2.24           | 2.18           | 2.18           | 2.42           | 2.20           | 2.23           | 2.09           | 2.15           | 2.31           | 2.16           | 2.65           | 2.60           | 2.32           | 2.47          |                    |                  |      |



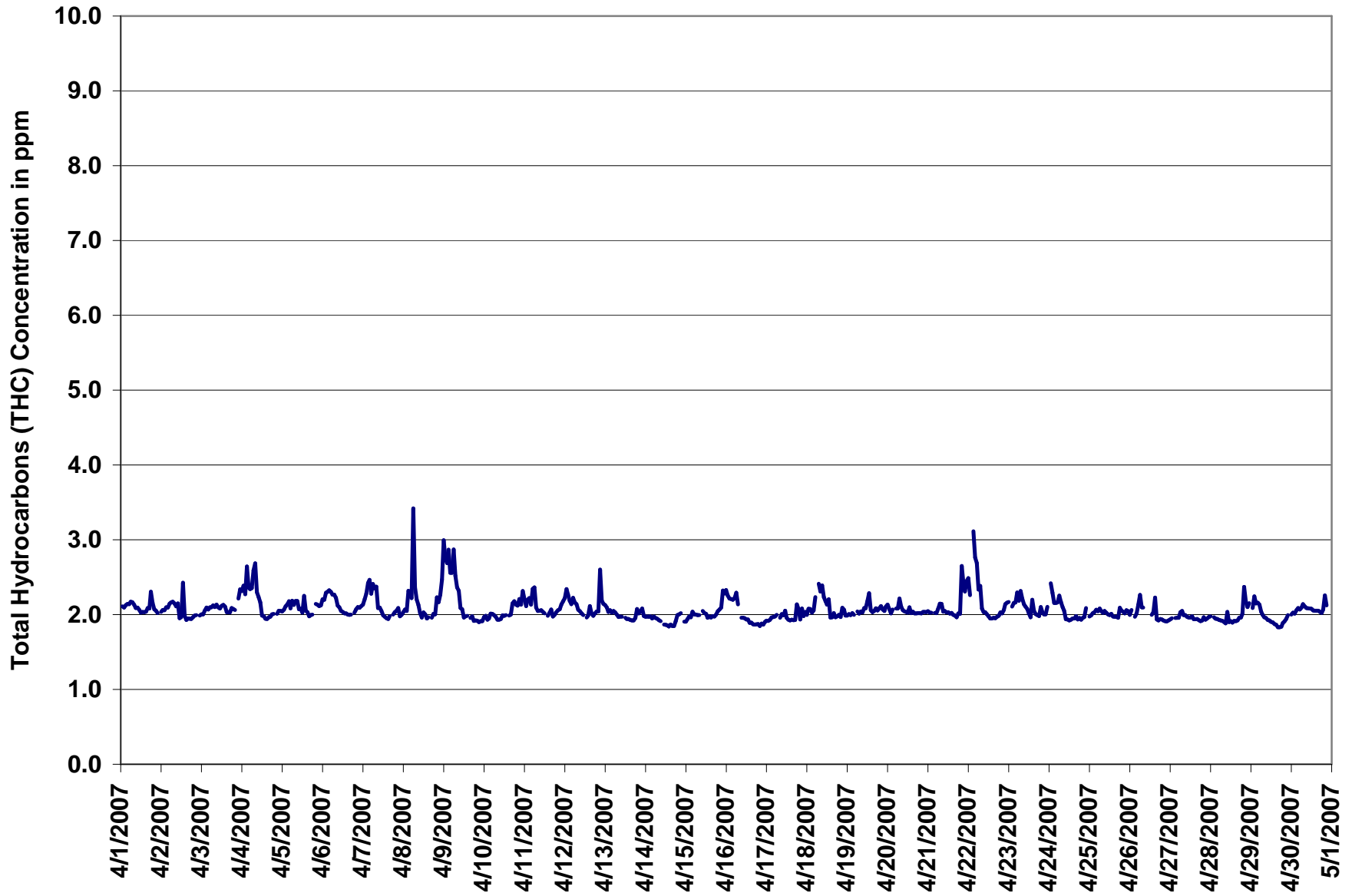
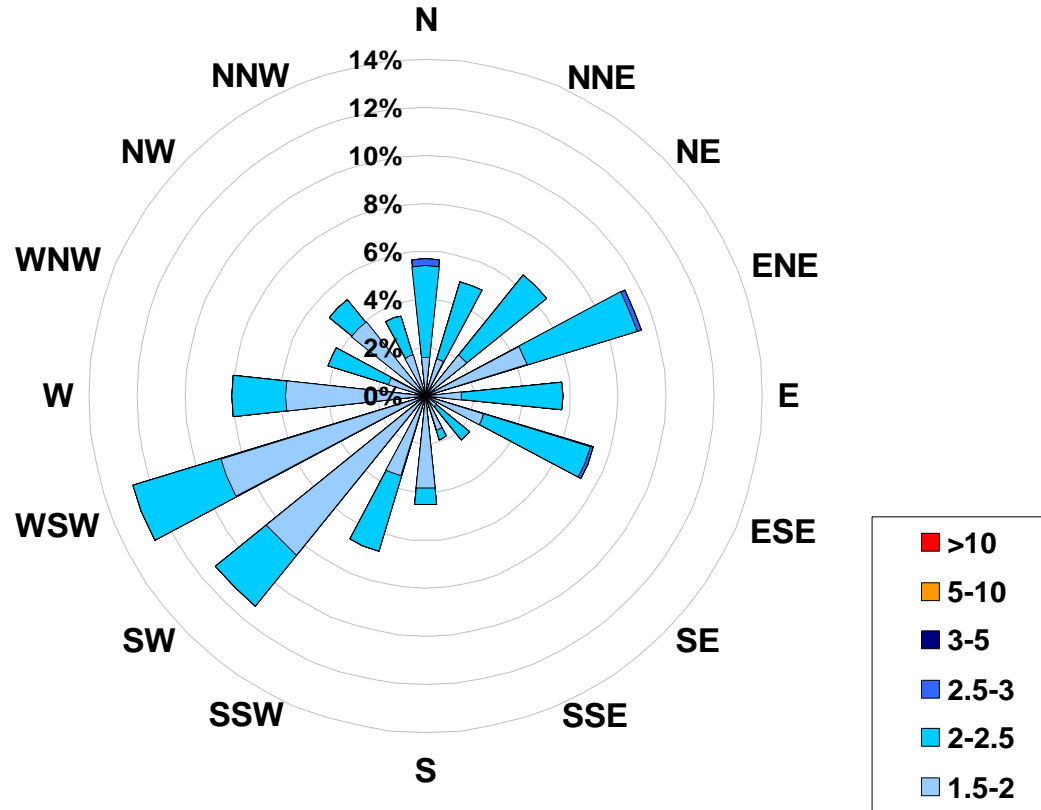


Figure 10. PAS - Crescent Heights Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

| Frequency Distribution of THC in ppm |    |     | Frequency (hrs) |
|--------------------------------------|----|-----|-----------------|
| Range                                |    |     |                 |
| 1.5                                  | <  | 2   | 367             |
| 2                                    | to | 2.5 | 312             |
| 2.5                                  | to | 3   | 4               |
| 3                                    | to | 5   | 0               |
| 5                                    | to | 10  | 0               |
|                                      | >  | 10  | 0               |
| Total Non-Zero Values                |    |     | 683             |



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

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

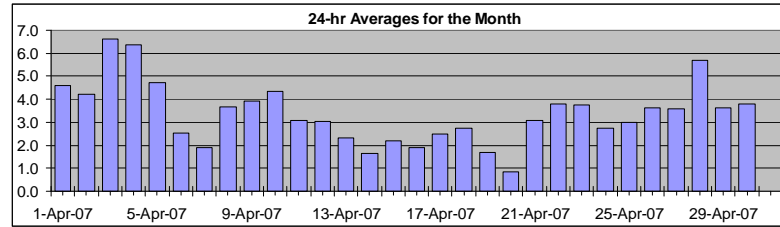
### Particulate Matter (PM<sub>2.5</sub>)

Monitoring Dates: April 1, 2007 to May 1, 2007

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:                | 12.8 µg/m <sup>3</sup> 4-Apr 7:00 8:00 |
| Maximum 24-hr Value:                 | 6.6 µg/m <sup>3</sup> 3-Apr            |

|                   |       |                         |         |     |     |     |     |                         |                       |
|-------------------|-------|-------------------------|---------|-----|-----|-----|-----|-------------------------|-----------------------|
| AIC Time:         | 0 hrs | Operational Time:       | 714 hrs |     |     |     |     |                         |                       |
| Calibration Time: | 5 hrs | AMD Operational Uptime: | 99.9%   |     |     |     |     |                         |                       |
| Percentile        | 99    | 95                      | 75      | 50  | 25  | 5   | 1   | Average / Median        | Geomean               |
|                   | 9.8   | 7.2                     | 4.7     | 3.3 | 1.8 | 0.1 | 0.0 | 3.4 3 µg/m <sup>3</sup> | 3.1 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             | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |                 |               | 23:00 |
| 1-Apr-07   | 7                      | 7    | 5    | 5    | 4    | 3    | 3    | 2    | 3    | 3    | 2    | 4     | 4     | 4     | 5     | 6     | 7     | 7     | 9     | 6     | 5     | 5     | 3     | 2     | 4.6             | 9.0           |       |
| 2-Apr-07   | 3                      | 4    | 4    | 5    | 5    | 5    | 4    | 3    | 3    | 4    | 3    | 2     | 3     | 4     | 5     | 6     | 5     | 5     | 5     | 5     | 6     | 5     | 5     | 5     | 4.2             | 5.7           |       |
| 3-Apr-07   | 6                      | 6    | 5    | 5    | 6    | 6    | 6    | 6    | 6    | 7    | 7    | 7     | 7     | 6     | 5     | 6     | 6     | 7     | 8     | 9     | 9     | 8     | 8     | 7     | 6.6             | 8.8           |       |
| 4-Apr-07   | 8                      | 8    | 7    | 7    | 7    | 8    | 9    | 13   | 9    | 8    | 5    | 4     | 4     | 4     | 6     | 5     | 5     | 6     | 5     | 6     | 5     | 4     | 5     | 5     | 6.4             | 12.8          |       |
| 5-Apr-07   | 6                      | 6    | 6    | 4    | 5    | 5    | 5    | 5    | 5    | 6    | 5    | 5     | 5     | 6     | 5     | 5     | 3     | 4     | 3     | 5     | 5     | 4     | 4     | 4     | 4.7             | 6.1           |       |
| 6-Apr-07   | 4                      | 4    | 3    | 3    | 2    | 3    | 4    | 3    | 3    | 2    | 2    | 2     | 2     | 2     | 2     | 3     | 2     | 2     | 1     | 1     | 3     | 4     | 2     | 2     | 2.5             | 3.8           |       |
| 7-Apr-07   | 2                      | 2    | 2    | 2    | 2    | 2    | 3    | 2    | 2    | 2    | 1    | 1     | 2     | 1     | 1     | 2     | 3     | 2     | 2     | 2     | 3     | 1     | 2     | 2     | 1.9             | 3.3           |       |
| 8-Apr-07   | 2                      | 4    | 3    | 3    | 2    | 3    | 3    | 3    | 4    | 3    | 3    | 1     | 4     | 5     | 4     | 4     | 4     | 3     | 4     | 3     | 8     | 6     | 4     | 5     | 3.7             | 8.2           |       |
| 9-Apr-07   | 4                      | 3    | 4    | 4    | 3    | 3    | 4    | 3    | 5    | 5    | 6    | 5     | 5     | 5     | 8     | 6     | 3     | 3     | 2     | 3     | 4     | 2     | 2     | 3     | 3.9             | 7.5           |       |
| 10-Apr-07  | 2                      | 1    | 0    | 0    | 0    | 0    | 2    | 2    | 3    | 7    | 7    | 7     | 7     | 9     | 8     | 8     | 7     | 6     | 5     | 6     | 5     | 4     | 5     | 4     | 4.4             | 8.8           |       |
| 11-Apr-07  | 4                      | 4    | 3    | 3    | 4    | 4    | 3    | 3    | 2    | 3    | 3    | 2     | 3     | 3     | 2     | 3     | 2     | 1     | 3     | 4     | 4     | 4     | 4     | 4     | 3.1             | 4.1           |       |
| 12-Apr-07  | 4                      | 3    | 3    | 2    | 3    | 4    | 5    | 5    | 4    | 4    | 4    | 3     | 2     | 0     | 0     | 0     | 2     | 0     | 5     | 5     | 4     | 4     | 3     | 3.1   | 5.0             |               |       |
| 13-Apr-07  | 1                      | 1    | 1    | 2    | 2    | 3    | 3    | 3    | 3    | 4    | 4    | 2     | 1     | 2     | 2     | 1     | 1     | 3     | 2     | 4     | 4     | 3     | 2     | 2     | 2.3             | 4.0           |       |
| 14-Apr-07  | 1                      | 1    | 1    | 1    | 1    | 2    | 2    | 1    | 1    | 1    | 1    | 0     | 0     | 0     | 0     | 1     | 1     | 2     | 2     | 4     | 6     | 5     | P 3   | 1.6   | 6.4             |               |       |
| 15-Apr-07  | 1                      | 2    | 4    | 1    | 3    | 2    | 3    | 3    | 2    | 3    | 2    | 0     | 0     | 0     | 0     | 1     | 2     | 1     | 2     | 4     | 5     | 3     | 3     | 4     | 2.2             | 5.2           |       |
| 16-Apr-07  | 4                      | 2    | 2    | 2    | 2    | 4    | 5    | 5    | 1    | 0    | 1    | 1     | 0     | 1     | 1     | 0     | 1     | 1     | 2     | 3     | 3     | 3     | 2     | 1     | 1.9             | 4.9           |       |
| 17-Apr-07  | 2                      | 3    | 3    | 3    | 3    | 4    | 5    | 5    | 4    | 5    | 6    | 6     | 2     | 1     | 0     | 0     | 1     | 1     | 1     | 1     | 1     | 0     | 1     | 2     | 3               | 2.5           | 6.2   |
| 18-Apr-07  | 2                      | 1    | 1    | 1    | 3    | 3    | 6    | 6    | 5    | 2    | 0    | 2     | 1     | 2     | 3     | 3     | 4     | 5     | 5     | 3     | 2     | 4     | 1     | 1     | 2.8             | 5.7           |       |
| 19-Apr-07  | 2                      | 3    | 6    | 4    | 3    | 5    | 2    | 2    | 1    | 1    | 2    | 2     | 1     | 2     | 0     | 0     | 0     | 2     | 0     | 1     | 2     | 0     | 0     | 1     | 1.7             | 6.0           |       |
| 20-Apr-07  | 0                      | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0     | 0     | 1     | 0     | 2     | 2     | 1     | 2     | 2     | 2     | 1     | 1     | 2     | 0.8             | 2.2           |       |
| 21-Apr-07  | 1                      | 2    | 3    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 1    | 2     | 2     | 3     | 4     | 5     | 4     | 4     | 2     | 4     | 5     | 4     | 6     | 4     | 3.1             | 6.4           |       |
| 22-Apr-07  | 5                      | 3    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 3    | 2    | 2     | 0     | 1     | 2     | 3     | 3     | 4     | 5     | 6     | 7     | 5     | 4     | 4     | 3.8             | 6.5           |       |
| 23-Apr-07  | 5                      | 4    | 4    | 3    | 4    | 5    | 5    | 5    | 5    | 5    | 3    | 5     | 3     | 2     | 2     | 5     | 5     | 5     | 3     | 3     | 4     | 4     | 3     | 2     | 3.8             | 5.1           |       |
| 24-Apr-07  | 2                      | 1    | 3    | 2    | 3    | 3    | 5    | 4    | 3    | 1    | 1    | 2     | 2     | 0     | 0     | 3     | 4     | 3     | 3     | 3     | 5     | 4     | 4     | 4     | 2.7             | 5.3           |       |
| 25-Apr-07  | 5                      | 4    | 3    | 3    | 3    | 3    | 5    | 4    | 4    | 4    | 1    | 0     | 1     | 2     | 5     | 1     | 1     | 1     | 2     | 4     | 5     | 4     | 4     | 3     | 3.0             | 4.9           |       |
| 26-Apr-07  | 0                      | 0    | 0    | 3    | 1    | 2    | 6    | 1    | 4    | 5    | 2    | 2     | 2     | 2     | C     | C     | C     | C     | C     | 12    | 11    | 7     | 5     | 4     | 3.6             | 12.1          |       |
| 27-Apr-07  | 4                      | 4    | 4    | 3    | 4    | 4    | 5    | 4    | 2    | 2    | 2    | 1     | 2     | 2     | 2     | 3     | 5     | 5     | 4     | 5     | 5     | 5     | 5     | 5     | 3.6             | 5.4           |       |
| 28-Apr-07  | 4                      | 3    | 5    | 6    | 8    | 11   | 10   | 9    | 8    | 10   | 10   | 10    | 10    | 8     | 5     | 5     | 4     | 4     | 3     | 1     | 3     | 3     | 3     | 3     | 5.7             | 10.9          |       |
| 29-Apr-07  | 3                      | 2    | 3    | 1    | 1    | 1    | 1    | 0    | 0    | 0    | 1    | 2     | 3     | 4     | 5     | 4     | 5     | 5     | 9     | 9     | 10    | 7     | 6     | 5     | 3.6             | 9.6           |       |
| 30-Apr-07  | 4                      | 3    | 3    | 3    | 3    | 3    | 5    | 5    | 2    | 3    | 4    | 4     | 4     | 4     | 4     | 4     | 4     | 5     | 5     | 3     | 4     | 5     | 4     | 3     | 3.8             | 5.3           |       |
| Hourly Avg | 3.2                    | 3.0  | 3.2  | 3.0  | 3.1  | 3.6  | 4.2  | 3.8  | 3.2  | 3.4  | 3.2  | 2.8   | 2.6   | 2.8   | 3.0   | 3.2   | 3.3   | 3.2   | 3.7   | 4.3   | 4.7   | 4.1   | 3.5   | 3.4   |                 |               |       |
| Hourly Max | 8.1                    | 7.9  | 7.0  | 6.7  | 8.2  | 10.9 | 9.9  | 12.8 | 8.9  | 9.9  | 9.8  | 9.8   | 7.7   | 8.8   | 8.4   | 7.6   | 7.4   | 6.9   | 9.0   | 12.1  | 10.9  | 8.3   | 7.7   | 7.5   |                 |               |       |

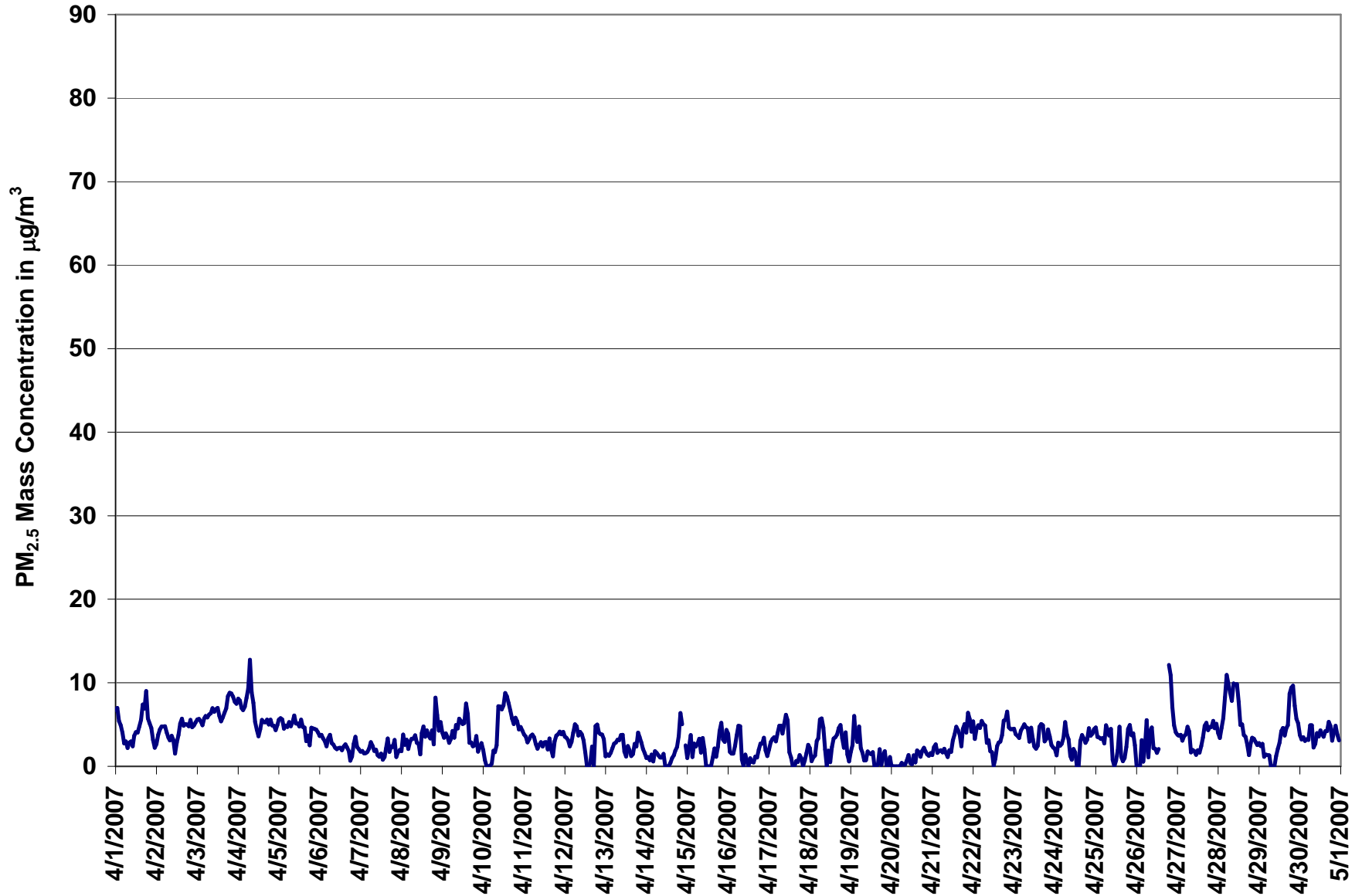


Figure 11. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend



Station: Crescent Heights  
 Station Owner: PAS

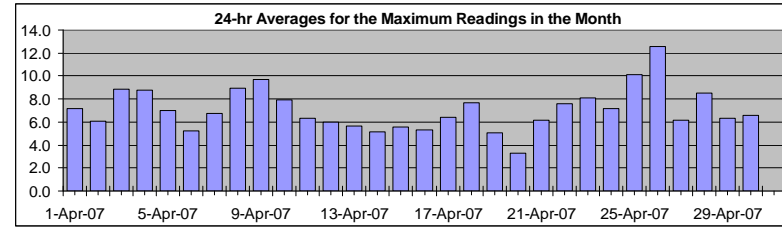
**INSTANTANEOUS (30 Second) MAXIMUM TABLE**

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

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                       |      |                   |        |             |
|-----------------------|------|-------------------|--------|-------------|
| Maximum 1-hr Average: | 22.2 | µg/m <sup>3</sup> | 26-Apr | 19:00 20:00 |
| Maximum 24-hr Value:  | 12.6 | µg/m <sup>3</sup> | 26-Apr |             |



|                   |       |                         |         |     |     |     |     |                  |                       |
|-------------------|-------|-------------------------|---------|-----|-----|-----|-----|------------------|-----------------------|
| AIC Time:         | 0 hrs | Operational Time:       | 714 hrs |     |     |     |     |                  |                       |
| Calibration Time: | 5 hrs | AMD Operational Uptime: | 99.9%   |     |     |     |     |                  |                       |
| Percentile        | 99    | 95                      | 75      | 50  | 25  | 5   | 1   | Average / Median | Geomean               |
|                   | 17.4  | 12.9                    | 8.4     | 6.6 | 4.9 | 3.0 | 1.8 | 7.0              | 7 µg/m <sup>3</sup>   |
|                   |       |                         |         |     |     |     |     |                  | 6.8 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-Apr-07   | 9    | 9    | 7    | 7    | 8    | 4    | 5    | 4    | 7    | 5     | 4     | 5     | 6     | 6     | 7     | 15    | 9     | 17    | 9     | 7     | 6     | 5     | 4     | 7.2   | 17.0            |               |
| 2-Apr-07   | 5    | 6    | 6    | 8    | 7    | 7    | 6    | 5    | 5    | 5     | 5     | 3     | 5     | 6     | 7     | 7     | 6     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 6.1             | 7.5           |
| 3-Apr-07   | 8    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 9    | 9     | 10    | 9     | 9     | 9     | 7     | 8     | 8     | 10    | 10    | 12    | 11    | 11    | 10    | 9     | 8.8             | 11.9          |
| 4-Apr-07   | 10   | 10   | 9    | 9    | 9    | 11   | 11   | 16   | 13   | 12    | 8     | 8     | 6     | 7     | 8     | 7     | 7     | 8     | 8     | 7     | 7     | 8     | 6     | 7     | 8.8             | 16.0          |
| 5-Apr-07   | 8    | 8    | 7    | 7    | 7    | 7    | 8    | 6    | 7    | 8     | 8     | 7     | 8     | 8     | 8     | 7     | 5     | 6     | 5     | 7     | 7     | 6     | 7     | 6     | 7.0             | 8.5           |
| 6-Apr-07   | 5    | 5    | 5    | 6    | 5    | 5    | 8    | 9    | 5    | 5     | 3     | 4     | 6     | 4     | 4     | 5     | 6     | 4     | 4     | 4     | 5     | 8     | 5     | 4     | 5.2             | 8.9           |
| 7-Apr-07   | 5    | 4    | 4    | 4    | 4    | 4    | 5    | 6    | 4    | 5     | 6     | 7     | 4     | 4     | 4     | 13    | 12    | 14    | 12    | 13    | 14    | 4     | 5     | 4     | 6.7             | 13.6          |
| 8-Apr-07   | 5    | 7    | 5    | 5    | 5    | 5    | 5    | 5    | 7    | 5     | 5     | 5     | 12    | 12    | 12    | 14    | 13    | 12    | 12    | 13    | 20    | 12    | 8     | 8     | 8.9             | 20.2          |
| 9-Apr-07   | 7    | 6    | 7    | 5    | 5    | 7    | 7    | 7    | 8    | 7     | 10    | 13    | 13    | 12    | 14    | 17    | 11    | 12    | 14    | 10    | 11    | 13    | 10    | 8     | 9.7             | 17.5          |
| 10-Apr-07  | 7    | 10   | 2    | 6    | 5    | 2    | 5    | 5    | 7    | 9     | 10    | 9     | 13    | 12    | 11    | 10    | 9     | 9     | 7     | 8     | 8     | 10    | 10    | 8     | 7.9             | 12.8          |
| 11-Apr-07  | 10   | 7    | 6    | 5    | 5    | 6    | 7    | 6    | 5    | 4     | 7     | 4     | 5     | 6     | 4     | 13    | 9     | 3     | 9     | 6     | 5     | 6     | 6     | 6     | 6.3             | 13.2          |
| 12-Apr-07  | 5    | 5    | 5    | 5    | 4    | 7    | 8    | 8    | 7    | 7     | 6     | 6     | 4     | 3     | 4     | 4     | 7     | 4     | 11    | 9     | 8     | 5     | 6     | 6     | 6.0             | 10.6          |
| 13-Apr-07  | 3    | 4    | 4    | 4    | 4    | 4    | 5    | 6    | 6    | 7     | 7     | 7     | 6     | 6     | 6     | 5     | 5     | 8     | 6     | 8     | 7     | 7     | 8     | 5     | 5.7             | 8.3           |
| 14-Apr-07  | 3    | 5    | 2    | 5    | 2    | 6    | 5    | 4    | 4    | 4     | 4     | 3     | 3     | 4     | 4     | 4     | 5     | 6     | 5     | 8     | 13    | 12    | P     | 5     | 5.1             | 13.2          |
| 15-Apr-07  | 8    | 7    | 7    | 5    | 6    | 5    | 5    | 6    | 4    | 7     | 4     | 2     | 1     | 2     | 2     | 5     | 6     | 5     | 6     | 8     | 9     | 9     | 6     | 8     | 5.6             | 9.3           |
| 16-Apr-07  | 7    | 4    | 4    | 3    | 4    | 7    | 10   | 6    | 6    | 1     | 5     | 4     | 3     | 4     | 3     | 4     | 5     | 5     | 7     | 8     | 8     | 8     | 7     | 5     | 5.3             | 9.6           |
| 17-Apr-07  | 8    | 7    | 6    | 6    | 6    | 8    | 10   | 9    | 7    | 11    | 8     | 12    | 4     | 5     | 3     | 4     | 5     | 5     | 6     | 4     | 4     | 4     | 6     | 8     | 6.4             | 12.0          |
| 18-Apr-07  | 4    | 4    | 5    | 6    | 7    | 8    | 9    | 9    | 8    | 4     | 3     | 5     | 9     | 9     | 6     | 8     | 9     | 13    | 10    | 9     | 7     | 19    | 6     | 6     | 7.7             | 18.7          |
| 19-Apr-07  | 6    | 6    | 9    | 7    | 5    | 10   | 6    | 5    | 4    | 4     | 6     | 6     | 4     | 5     | 3     | 3     | 5     | 6     | 3     | 3     | 5     | 2     | 2     | 5     | 5.0             | 10.2          |
| 20-Apr-07  | 3    | 2    | 2    | 3    | 2    | 2    | 2    | 2    | 2    | 3     | 4     | 3     | 3     | 6     | 3     | 5     | 5     | 3     | 3     | 4     | 4     | 3     | 3     | 5     | 3.3             | 5.8           |
| 21-Apr-07  | 4    | 5    | 5    | 5    | 4    | 5    | 3    | 5    | 3    | 3     | 5     | 4     | 6     | 8     | 7     | 7     | 7     | 9     | 9     | 8     | 10    | 11    | 10    | 6     | 6.2             | 10.7          |
| 22-Apr-07  | 13   | 6    | 7    | 8    | 7    | 8    | 9    | 7    | 6    | 7     | 5     | 5     | 5     | 4     | 5     | 6     | 7     | 8     | 11    | 11    | 11    | 11    | 8     | 7     | 7.6             | 12.9          |
| 23-Apr-07  | 8    | 8    | 8    | 6    | 9    | 10   | 8    | 9    | 9    | 7     | 8     | 6     | 7     | 7     | 7     | 10    | 9     | 6     | 7     | 10    | 10    | 10    | 8     | 8     | 8.1             | 10.0          |
| 24-Apr-07  | 5    | 4    | 6    | 5    | 5    | 6    | 8    | 8    | 7    | 6     | 4     | 5     | 7     | 4     | 2     | 17    | 11    | 9     | 8     | 8     | 10    | 9     | 10    | 8     | 7.2             | 17.1          |
| 25-Apr-07  | 10   | 8    | 7    | 10   | 10   | 6    | 11   | 9    | 10   | 10    | 6     | 4     | 5     | 15    | 17    | 7     | 6     | 7     | 13    | 13    | 19    | 14    | 13    | 15    | 10.2            | 19.0          |
| 26-Apr-07  | 16   | 15   | 14   | 19   | 16   | 10   | 18   | 9    | 10   | 11    | 9     | 9     | 10    | 8     | C     | C     | C     | C     | C     | 22    | 19    | 10    | 8     | 6     | 12.6            | 22.2          |
| 27-Apr-07  | 6    | 5    | 6    | 5    | 5    | 6    | 8    | 7    | 4    | 5     | 5     | 4     | 4     | 5     | 5     | 7     | 7     | 8     | 8     | 7     | 8     | 8     | 7     | 7     | 6.2             | 8.4           |
| 28-Apr-07  | 6    | 6    | 7    | 10   | 11   | 15   | 12   | 12   | 10   | 13    | 13    | 12    | 11    | 8     | 9     | 6     | 6     | 5     | 4     | 6     | 6     | 7     | 5     | 6     | 8.5             | 14.5          |
| 29-Apr-07  | 5    | 7    | 7    | 3    | 3    | 3    | 3    | 1    | 3    | 1     | 4     | 6     | 6     | 7     | 8     | 6     | 6     | 8     | 13    | 11    | 12    | 11    | 9     | 9     | 6.4             | 12.6          |
| 30-Apr-07  | 7    | 6    | 5    | 6    | 5    | 5    | 9    | 9    | 4    | 4     | 7     | 6     | 6     | 8     | 7     | 8     | 8     | 8     | 8     | 5     | 6     | 8     | 7     | 5     | 6.6             | 8.8           |
| Hourly Avg | 6.9  | 6.4  | 6.1  | 6.2  | 6.1  | 6.5  | 7.4  | 7.0  | 6.3  | 6.3   | 6.3   | 6.2   | 6.4   | 6.8   | 6.5   | 7.6   | 7.7   | 7.6   | 8.4   | 8.5   | 9.2   | 8.6   | 7.2   | 6.7   |                 |               |
| Hourly Max | 16.3 | 14.6 | 14.1 | 19.2 | 15.8 | 14.5 | 17.9 | 16.0 | 12.6 | 13.2  | 12.5  | 12.9  | 12.8  | 15.2  | 16.8  | 17.5  | 15.0  | 13.6  | 17.0  | 22.2  | 20.2  | 18.7  | 13.3  | 14.8  |                 |               |

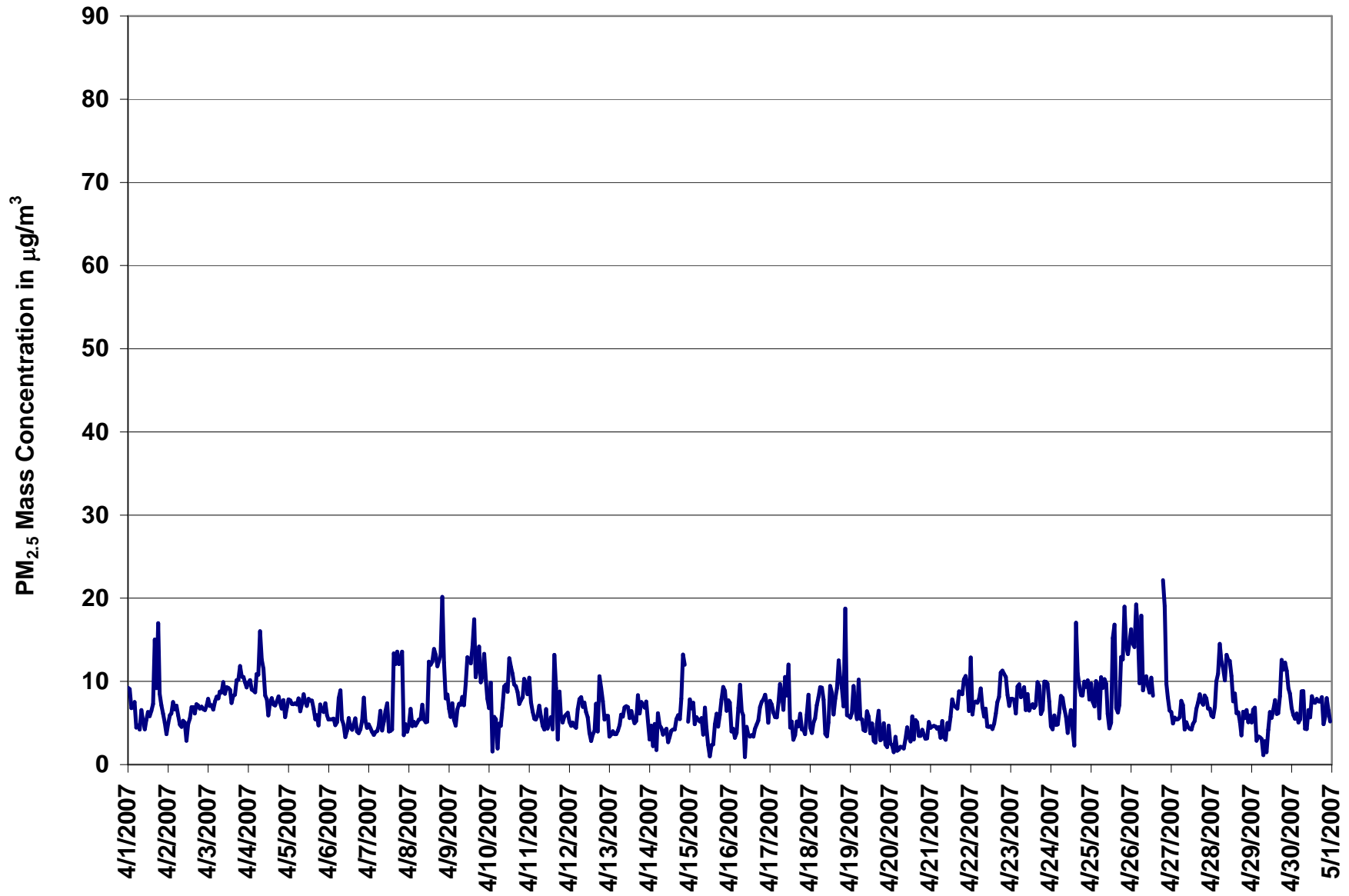
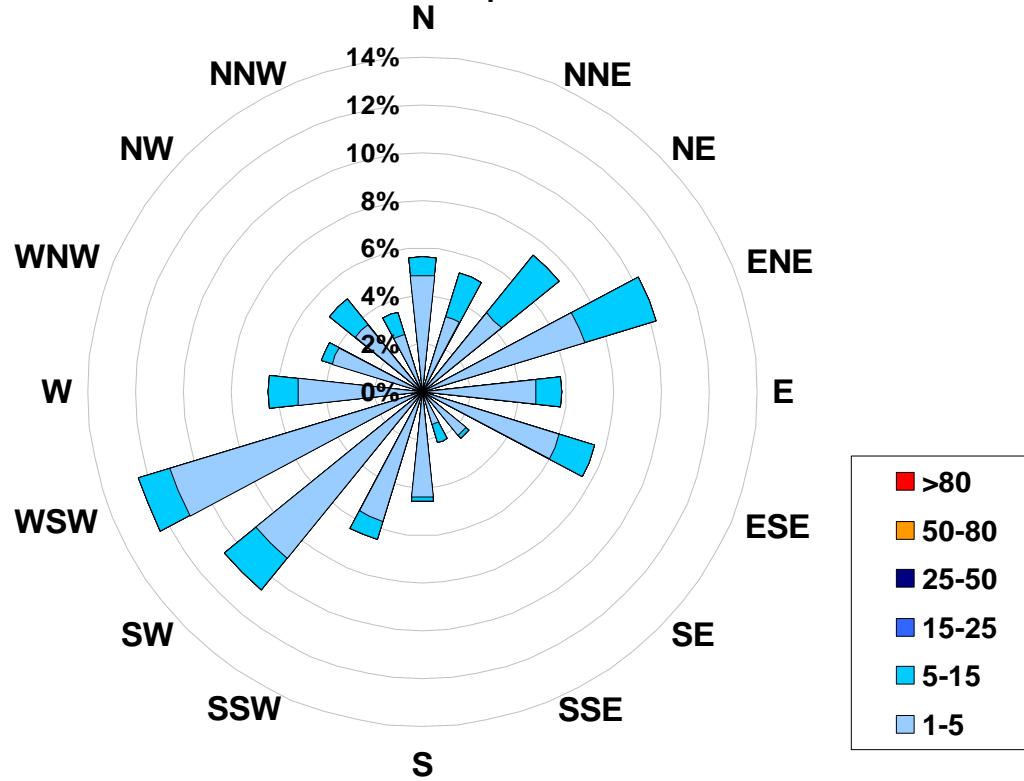


Figure 12. PAS - Crescent Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend



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



**Calms: 0%**

| Frequency Distribution of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$ |       |                 |     |
|---|-------|-----------------|-----|
| Range   |       | Frequency (hrs) |     |
| 1.0   | < 5   | 582             |     |
| 5   | to 15 | 132             |     |
| 15  | to 25 | 0               |     |
| 25  | to 50 | 0               |     |
| 50  | to 80 | 0               |     |
|   | > 80  | 0               |     |
| Total Non-Zero Values   |       |                 | 714 |



# PAS - Crescent Heights - Relative Humidity Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

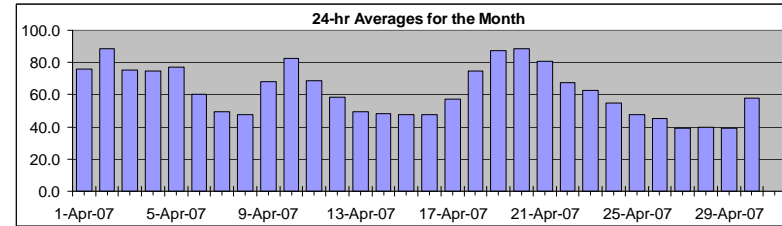
## HOURLY AVERAGE TABLE

## Relative Humidity (RH)

Monitoring Dates: April 1, 2007 to May 1, 2007

### Summary

|                       |        |        |           |
|-----------------------|--------|--------|-----------|
| Maximum 1-hr Average: | 91.7 % | 24-Apr | 5:00 6:00 |
| Maximum 24-hr Value:  | 88.7 % | 2-Apr  |           |



|                   |       |                         |         |      |      |      |      |         |        |
|-------------------|-------|-------------------------|---------|------|------|------|------|---------|--------|
| AIC Time:         | 0 hrs | Operational Time:       | 719 hrs |      |      |      |      |         |        |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 99.9%   |      |      |      |      |         |        |
| Percentile        | 99    | 95                      | 75      | 50   | 25   | 5    | 1    | Average | Median |
|                   | 90.7  | 89.6                    | 80.3    | 64.5 | 45.9 | 27.0 | 22.4 | 62.1 %  | 64.5 % |

### Status Flag Characters

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

| Day        | Mountain Standard Time |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       | 24-hour Average | Daily Maximum |      |      |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|------|------|
| Hour Start | 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-Apr-07   | 73                     | 73   | 73   | 75   | 73   | 71   | 75   | 78   | 77   | 77   | 73    | 71    | 69    | 69    | 69    | 68    | 69    | 70    | 80    | 86    | 88    | 89    | 88    | 89              | 89            | 76.0 | 89.0 |
| 2-Apr-07   | 90                     | 90   | 90   | 89   | 90   | 89   | 89   | 88   | 88   | 89   | 89    | 85    | 85    | 88    | 89    | 90    | 91    | 91    | 91    | 89    | 88    | 87    | 87    | 86              | 86            | 88.7 | 90.9 |
| 3-Apr-07   | 86                     | 86   | 84   | 84   | 83   | 83   | 82   | 80   | 78   | 73   | 68    | 66    | 65    | 63    | 63    | 63    | 67    | 70    | 75    | 77    | 79    | 78    | 77    | 79              | 79            | 75.3 | 85.9 |
| 4-Apr-07   | 80                     | 81   | 81   | 80   | 81   | 84   | 83   | 77   | 70   | 63   | 64    | 61    | 59    | 61    | 63    | 66    | 69    | 74    | 78    | 82    | 85    | 85    | 86    | 86              | 86            | 74.9 | 86.2 |
| 5-Apr-07   | 86                     | 86   | 85   | 85   | 85   | 85   | 84   | 81   | 78   | 77   | 75    | 71    | 71    | 74    | 82    | 85    | 79    | 74    | 67    | 65    | 67    | 67    | 68    | 70              | 70            | 76.9 | 85.6 |
| 6-Apr-07   | 71                     | 75   | 77   | 79   | 81   | 81   | 76   | 64   | 58   | 53   | 51    | 47    | 43    | 41    | 44    | 43    | 44    | 47    | 54    | 57    | 62    | 66    | 65    | 67              | 67            | 60.2 | 81.3 |
| 7-Apr-07   | 69                     | 68   | 66   | 64   | 65   | 66   | 60   | 55   | 50   | 38   | 40    | 36    | 36    | 38    | 37    | 36    | 39    | 40    | 45    | 48    | 49    | 49    | 47    | 49              | 49            | 49.6 | 68.9 |
| 8-Apr-07   | 50                     | 53   | 55   | 58   | 59   | 61   | 62   | 58   | 48   | 41   | 39    | 32    | 31    | 28    | 30    | 34    | 36    | 34    | 37    | 46    | 56    | 64    | 65    | 69              | 69            | 47.7 | 69.4 |
| 9-Apr-07   | 73                     | 74   | 72   | 74   | 75   | 76   | 72   | 66   | 60   | 47   | 46    | 45    | 45    | 47    | 56    | 78    | 75    | 71    | 66    | 72    | 78    | 85    | 88    | 88              | 88            | 67.8 | 88.1 |
| 10-Apr-07  | 86                     | 87   | 88   | 90   | 90   | 90   | 91   | 90   | 90   | 89   | 84    | 82    | 78    | 76    | 76    | 75    | 76    | 74    | 72    | 73    | 75    | 80    | 81    | 80              | 80            | 82.3 | 91.0 |
| 11-Apr-07  | 80                     | 80   | 80   | 80   | 81   | 83   | 81   | 75   | 65   | 60   | 60    | 58    | 56    | 60    | 58    | 57    | 57    | 55    | 62    | 68    | 72    | 75    | 74    | 78              | 78            | 68.9 | 82.6 |
| 12-Apr-07  | 79                     | 82   | 82   | 80   | 81   | 81   | 78   | 73   | 67   | 62   | 59    | 56    | 50    | 40    | 31    | 28    | 26    | 20    | 29    | 46    | 57    | 61    | 66    | 69              | 69            | 58.5 | 81.8 |
| 13-Apr-07  | 66                     | 66   | 63   | 62   | 62   | 65   | 64   | 62   | 56   | 48   | 43    | 36    | 28    | 30    | 30    | 28    | 27    | 29    | 37    | 45    | 52    | 61    | 64    | 66              | 66            | 49.6 | 66.2 |
| 14-Apr-07  | 68                     | 69   | 70   | 70   | 65   | 65   | 65   | 57   | 50   | 45   | 41    | 35    | 32    | 28    | 27    | 27    | 27    | 29    | 35    | 43    | 53    | 54    | P     | 54              | 54            | 48.4 | 70.4 |
| 15-Apr-07  | 52                     | 53   | 62   | 61   | 67   | 69   | 63   | 63   | 62   | 65   | 60    | 48    | 32    | 23    | 22    | 22    | 25    | 25    | 27    | 33    | 39    | 48    | 52    | 61              | 61            | 47.4 | 68.6 |
| 16-Apr-07  | 69                     | 74   | 77   | 79   | 82   | 82   | 76   | 65   | 50   | 34   | 31    | 30    | 27    | 27    | 28    | 28    | 28    | 26    | 30    | 35    | 39    | 42    | 46    | 43              | 43            | 47.7 | 81.8 |
| 17-Apr-07  | 42                     | 47   | 52   | 56   | 59   | 61   | 59   | 54   | 48   | 54   | 74    | 80    | 70    | 61    | 52    | 48    | 49    | 46    | 52    | 58    | 58    | 62    | 65    | 64              | 64            | 57.2 | 80.4 |
| 18-Apr-07  | 65                     | 66   | 63   | 58   | 61   | 67   | 76   | 85   | 88   | 87   | 87    | 85    | 84    | 79    | 61    | 58    | 59    | 67    | 80    | 83    | 83    | 81    | 84    | 87              | 87            | 74.7 | 87.6 |
| 19-Apr-07  | 87                     | 86   | 85   | 85   | 85   | 85   | 85   | 84   | 84   | 87   | 87    | 89    | 90    | 90    | 88    | 87    | 88    | 89    | 89    | 90    | 90    | 91    | 90    | 90              | 90            | 87.4 | 90.6 |
| 20-Apr-07  | 90                     | 90   | 90   | 90   | 90   | 91   | 91   | 90   | 89   | 89   | 88    | 87    | 87    | 86    | 87    | 87    | 88    | 88    | 87    | 87    | 88    | 88    | 88    | 87              | 87            | 88.5 | 90.9 |
| 21-Apr-07  | 87                     | 86   | 87   | 86   | 87   | 88   | 89   | 89   | 89   | 88   | 86    | 83    | 80    | 76    | 73    | 67    | 62    | 58    | 64    | 75    | 80    | 84    | 88    | 89              | 89            | 80.9 | 89.4 |
| 22-Apr-07  | 90                     | 90   | 91   | 91   | 91   | 91   | 89   | 87   | 84   | 82   | 73    | 62    | 50    | 41    | 40    | 38    | 37    | 38    | 43    | 49    | 56    | 63    | 69    | 73              | 73            | 67.3 | 90.8 |
| 23-Apr-07  | 75                     | 75   | 74   | 73   | 74   | 76   | 74   | 71   | 67   | 59   | 52    | 47    | 42    | 36    | 34    | 42    | 52    | 57    | 59    | 64    | 69    | 76    | 77    | 81              | 81            | 62.7 | 81.3 |
| 24-Apr-07  | 85                     | 88   | 90   | 90   | 91   | 92   | 84   | 76   | 68   | 53   | 41    | 38    | 36    | 28    | 24    | 21    | 21    | 25    | 30    | 36    | 43    | 45    | 51    | 55              | 55            | 54.8 | 91.7 |
| 25-Apr-07  | 59                     | 61   | 65   | 65   | 65   | 64   | 61   | 59   | 55   | 51   | 38    | 33    | 31    | 29    | 27    | 26    | 27    | 29    | 31    | 37    | 48    | 59    | 63    | 65              | 65            | 47.8 | 65.1 |
| 26-Apr-07  | 59                     | 60   | 59   | 61   | 69   | 74   | 73   | 56   | 54   | 50   | 46    | 39    | 32    | 31    | 29    | 26    | 22    | 21    | 26    | 31    | 36    | 41    | 43    | 47              | 47            | 45.3 | 74.3 |
| 27-Apr-07  | 49                     | 53   | 56   | 51   | 52   | 53   | 55   | 50   | 40   | 34   | 30    | 26    | 25    | 23    | 22    | 22    | 24    | 26    | 29    | 34    | 40    | 44    | 46    | 51              | 51            | 39.0 | 55.9 |
| 28-Apr-07  | 55                     | 56   | 59   | 58   | 55   | 48   | 44   | 39   | 33   | 25   | 25    | 27    | 29    | 29    | 32    | 31    | 31    | 31    | 32    | 36    | 41    | 44    | 46    | 47              | 47            | 39.6 | 59.4 |
| 29-Apr-07  | 52                     | 52   | 50   | 45   | 45   | 47   | 46   | 38   | 30   | 27   | 26    | 26    | 27    | 28    | 30    | 32    | 32    | 28    | 21    | 28    | 48    | 59    | 62    | 70              | 70            | 39.4 | 70.1 |
| 30-Apr-07  | 75                     | 79   | 80   | 79   | 79   | 76   | 73   | 75   | 70   | 67   | 63    | 56    | 52    | 47    | 40    | 33    | 30    | 31    | 32    | 36    | 43    | 53    | 58    | 59              | 59            | 57.7 | 79.5 |
| Hourly Avg | 71.6                   | 72.8 | 73.5 | 73.4 | 74.1 | 74.8 | 73.3 | 69.4 | 64.9 | 60.5 | 57.9  | 54.6  | 51.4  | 49.2  | 48.1  | 48.2  | 48.6  | 48.7  | 52.0  | 56.9  | 62.1  | 66.0  | 68.5  | 70.0            | 70.0          |      |      |
| Hourly Max | 90.2                   | 90.4 | 90.6 | 90.6 | 91.4 | 91.7 | 91.0 | 90.2 | 90.4 | 88.9 | 88.8  | 88.7  | 89.6  | 89.9  | 88.9  | 90.3  | 90.8  | 90.9  | 90.7  | 89.7  | 89.9  | 90.6  | 90.1  | 90.2            | 90.2          |      |      |



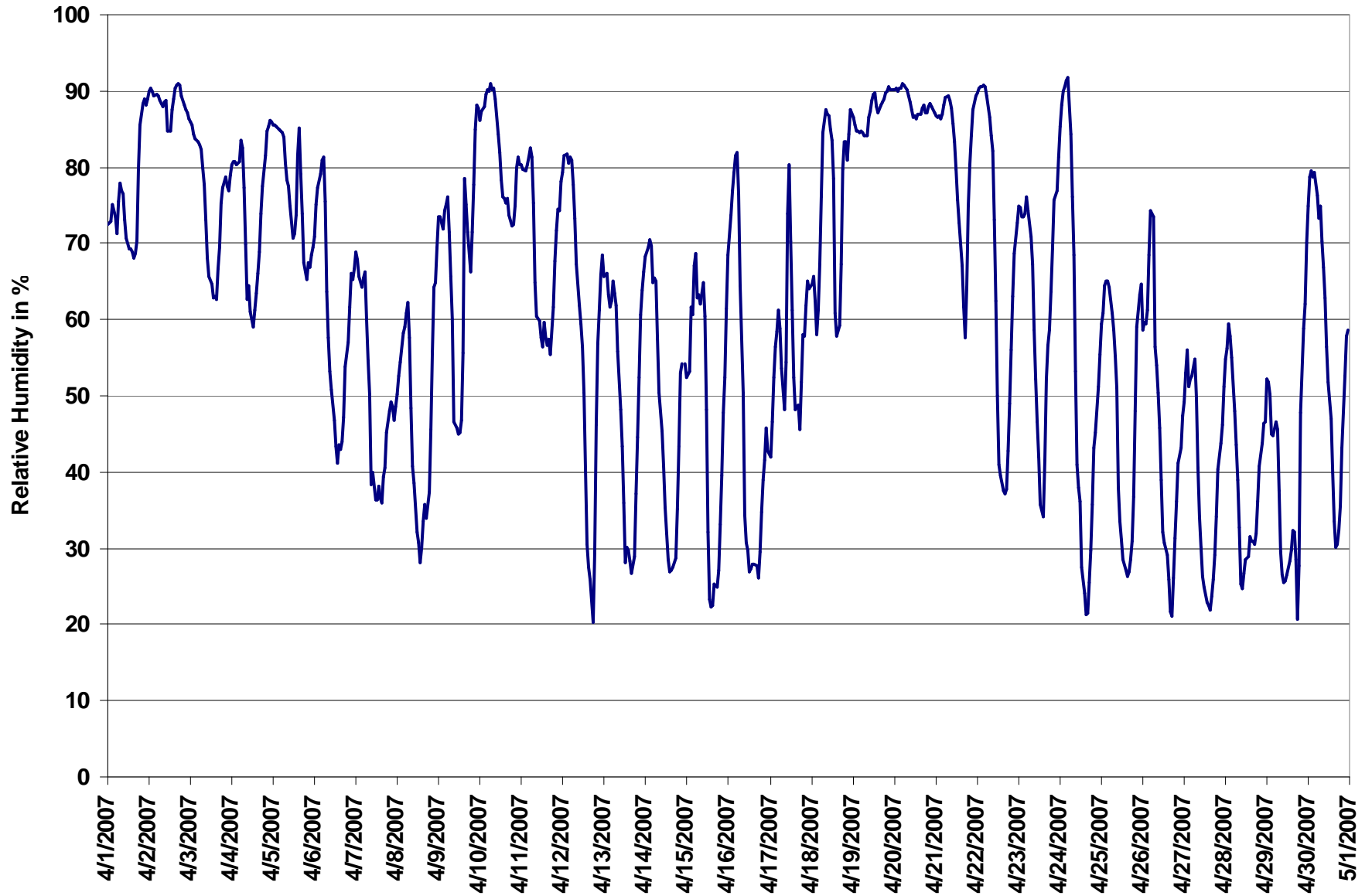


Figure 13. PAS - Crescent Heights Relative Humidity 1-hr Average Monthly Trend



# PAS - Crescent Heights - Temperature Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

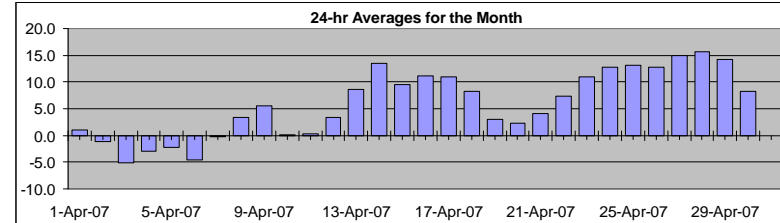
## HOURLY AVERAGE TABLE

## Ambient Temperature (T)

Monitoring Dates: April 1, 2007 to May 1, 2007

### Summary

|                       |         |        |             |
|-----------------------|---------|--------|-------------|
| Maximum 1-hr Average: | 22.1 °C | 28-Apr | 11:00 12:00 |
| Maximum 24-hr Value:  | 15.6 °C | 28-Apr |             |



|                   |       |                         |         |     |     |      |      |         |        |
|-------------------|-------|-------------------------|---------|-----|-----|------|------|---------|--------|
| AIC Time:         | 0 hrs | Operational Time:       | 719 hrs |     |     |      |      |         |        |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 99.9%   |     |     |      |      |         |        |
| Percentile        | 99    | 95                      | 75      | 50  | 25  | 5    | 1    | Average | Median |
|                   | 21.5  | 18.9                    | 11.3    | 5.3 | 0.5 | -5.8 | -8.3 | 5.9 °C  | 5.3 °C |

### Status Flag Characters

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

| Day        | Mountain Standard Time |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 24-hour Average | Daily Maximum |  |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|--|
| Hour Start | 0:00                   | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00            |               |  |
| 1-Apr-07   | 1                      | 1    | 1    | 0    | 0    | 0    | -1   | -1   | 0    | 0    | 1     | 2     | 2     | 2     | 3     | 3     | 3     | 3     | 2     | 1     | 1     | 1     | 1     | 0     | 1.1             | 3.1           |  |
| 2-Apr-07   | 0                      | -1   | -1   | -1   | -1   | -2   | -2   | -2   | -1   | -1   | 0     | 1     | 1     | 1     | 1     | 0     | 0     | 0     | -1    | -2    | -3    | -4    | -4    | -5    | -1.1            | 1.2           |  |
| 3-Apr-07   | -5                     | -5   | -6   | -7   | -7   | -8   | -8   | -8   | -7   | -6   | -4    | -3    | -2    | -2    | -2    | -1    | -2    | -3    | -4    | -5    | -5    | -6    | -6    | -7    | -5.1            | -1.3          |  |
| 4-Apr-07   | -7                     | -7   | -7   | -7   | -7   | -8   | -8   | -8   | -7   | -5   | -2    | -1    | 1     | 1     | 1     | 1     | 0     | 0     | -1    | -1    | -1    | -1    | -2    | -2    | -3.0            | 0.9           |  |
| 5-Apr-07   | -2                     | -3   | -3   | -3   | -4   | -4   | -4   | -3   | -2   | -2   | 0     | 1     | 1     | 1     | 0     | 0     | -1    | -1    | -2    | -3    | -4    | -5    | -5    | -7    | -2.3            | 1.2           |  |
| 6-Apr-07   | -8                     | -9   | -10  | -10  | -12  | -13  | -12  | -8   | -6   | -4   | -2    | 1     | 1     | 2     | 1     | 2     | 1     | 0     | -1    | -3    | -4    | -6    | -6    | -7    | -4.6            | 1.6           |  |
| 7-Apr-07   | -7                     | -7   | -7   | -7   | -7   | -8   | -6   | -4   | -2   | 3    | 2     | 4     | 6     | 5     | 6     | 6     | 5     | 4     | 3     | 2     | 1     | 1     | 0     | -0.2  | 6.0             |               |  |
| 8-Apr-07   | -1                     | -2   | -2   | -3   | -4   | -4   | -3   | -2   | 2    | 4    | 6     | 8     | 9     | 10    | 10    | 10    | 10    | 10    | 8     | 6     | 4     | 3     | 2     | 1     | 3.4             | 10.3          |  |
| 9-Apr-07   | 0                      | 0    | 0    | -1   | -1   | -1   | 0    | 3    | 5    | 9    | 10    | 11    | 12    | 12    | 11    | 8     | 8     | 8     | 8     | 7     | 6     | 6     | 6     | 5     | 5.5             | 11.6          |  |
| 10-Apr-07  | 5                      | 4    | 2    | 1    | 1    | 1    | 2    | 2    | 1    | 0    | -1    | -1    | -1    | -1    | -1    | -1    | -1    | -1    | -1    | -1    | -2    | -2    | -2    | -2    | 0.1             | 5.0           |  |
| 11-Apr-07  | -2                     | -2   | -2   | -2   | -2   | -2   | -2   | -2   | 0    | 0    | 2     | 2     | 3     | 3     | 4     | 4     | 3     | 3     | 2     | 1     | 0     | -1    | -1    | -1    | 0.2             | 3.7           |  |
| 12-Apr-07  | -2                     | -3   | -3   | -3   | -3   | -3   | -2   | -1   | 2    | 4    | 5     | 7     | 8     | 9     | 10    | 10    | 10    | 10    | 9     | 7     | 4     | 3     | 2     | 1     | 3.4             | 10.4          |  |
| 13-Apr-07  | 1                      | 2    | 2    | 2    | 2    | 2    | 3    | 4    | 7    | 10   | 11    | 13    | 14    | 14    | 15    | 16    | 16    | 15    | 14    | 12    | 9     | 7     | 7     | 6     | 8.5             | 15.9          |  |
| 14-Apr-07  | 5                      | 5    | 5    | 5    | 6    | 6    | 6    | 10   | 13   | 15   | 17    | 19    | 20    | 21    | 22    | 22    | 22    | 21    | 18    | 16    | 13    | 12    | P     | 11    | 13.4            | 21.9          |  |
| 15-Apr-07  | 11                     | 11   | 8    | 6    | 5    | 5    | 6    | 7    | 7    | 8    | 8     | 10    | 13    | 14    | 14    | 14    | 13    | 13    | 13    | 11    | 10    | 8     | 6     | 5     | 9.5             | 13.9          |  |
| 16-Apr-07  | 3                      | 2    | 1    | 0    | 0    | 1    | 2    | 5    | 10   | 13   | 15    | 15    | 16    | 17    | 18    | 19    | 19    | 19    | 17    | 16    | 15    | 15    | 14    | 14    | 11.1            | 19.0          |  |
| 17-Apr-07  | 12                     | 10   | 8    | 8    | 7    | 6    | 7    | 10   | 12   | 10   | 9     | 9     | 11    | 13    | 14    | 15    | 15    | 16    | 14    | 12    | 11    | 10    | 9     | 9     | 10.9            | 15.9          |  |
| 18-Apr-07  | 9                      | 9    | 8    | 8    | 7    | 7    | 6    | 6    | 6    | 6    | 7     | 7     | 8     | 10    | 13    | 14    | 13    | 12    | 9     | 8     | 7     | 6     | 6     | 4     | 8.2             | 13.7          |  |
| 19-Apr-07  | 4                      | 4    | 4    | 4    | 3    | 3    | 3    | 3    | 3    | 3    | 3     | 2     | 2     | 2     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3.1             | 4.1           |  |
| 20-Apr-07  | 3                      | 3    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 3    | 3     | 3     | 3     | 3     | 3     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2.3             | 3.4           |  |
| 21-Apr-07  | 2                      | 2    | 2    | 2    | 2    | 2    | 1    | 2    | 2    | 2    | 3     | 4     | 5     | 6     | 7     | 9     | 10    | 10    | 8     | 6     | 4     | 3     | 2     | 1     | 4.1             | 9.9           |  |
| 22-Apr-07  | 0                      | 0    | -1   | -1   | -1   | 0    | 1    | 3    | 4    | 5    | 7     | 10    | 13    | 14    | 16    | 16    | 16    | 16    | 14    | 12    | 11    | 9     | 8     | 7     | 7.4             | 16.1          |  |
| 23-Apr-07  | 7                      | 7    | 7    | 7    | 7    | 6    | 7    | 8    | 10   | 12   | 14    | 16    | 17    | 19    | 19    | 17    | 15    | 14    | 12    | 11    | 10    | 9     | 8     | 7     | 11.0            | 18.9          |  |
| 24-Apr-07  | 6                      | 4    | 3    | 2    | 1    | 2    | 4    | 8    | 12   | 17   | 19    | 20    | 20    | 21    | 22    | 22    | 21    | 19    | 18    | 16    | 14    | 14    | 12    | 11    | 12.8            | 22.1          |  |
| 25-Apr-07  | 10                     | 9    | 8    | 7    | 7    | 8    | 9    | 10   | 12   | 14   | 17    | 17    | 18    | 18    | 19    | 18    | 17    | 17    | 16    | 15    | 14    | 12    | 11    | 10    | 13.1            | 18.9          |  |
| 26-Apr-07  | 10                     | 9    | 10   | 9    | 7    | 6    | 7    | 10   | 11   | 13   | 15    | 16    | 17    | 17    | 17    | 18    | 18    | 18    | 16    | 15    | 13    | 12    | 11    | 10    | 12.8            | 18.2          |  |
| 27-Apr-07  | 10                     | 9    | 8    | 9    | 9    | 9    | 9    | 12   | 14   | 16   | 18    | 19    | 20    | 20    | 21    | 21    | 21    | 21    | 19    | 17    | 15    | 14    | 13    | 12    | 14.9            | 21.4          |  |
| 28-Apr-07  | 11                     | 11   | 10   | 10   | 11   | 12   | 14   | 16   | 18   | 21   | 21    | 22    | 22    | 22    | 21    | 21    | 19    | 18    | 17    | 15    | 13    | 11    | 10    | 10    | 15.6            | 22.1          |  |
| 29-Apr-07  | 8                      | 8    | 8    | 9    | 9    | 9    | 10   | 12   | 14   | 17   | 19    | 19    | 19    | 19    | 19    | 19    | 21    | 22    | 21    | 19    | 14    | 11    | 9     | 8     | 14.3            | 21.6          |  |
| 30-Apr-07  | 6                      | 4    | 4    | 4    | 4    | 5    | 5    | 5    | 5    | 5    | 7     | 9     | 10    | 12    | 13    | 15    | 15    | 15    | 13    | 12    | 10    | 7     | 6     | 6     | 8.2             | 14.9          |  |
| Hourly Avg | 3.0                    | 2.4  | 2.0  | 1.7  | 1.4  | 1.2  | 1.8  | 3.3  | 4.9  | 6.6  | 7.7   | 8.9   | 9.6   | 10.3  | 10.6  | 10.7  | 10.4  | 10.1  | 9.0   | 7.5   | 6.2   | 5.2   | 4.2   | 3.8   |                 |               |  |
| Hourly Max | 12.4                   | 10.7 | 9.9  | 10.5 | 10.9 | 12.2 | 13.6 | 15.8 | 18.5 | 20.9 | 21.5  | 22.1  | 21.5  | 21.9  | 21.8  | 22.1  | 21.9  | 21.6  | 20.8  | 18.8  | 15.4  | 15.1  | 14.0  | 13.5  |                 |               |  |

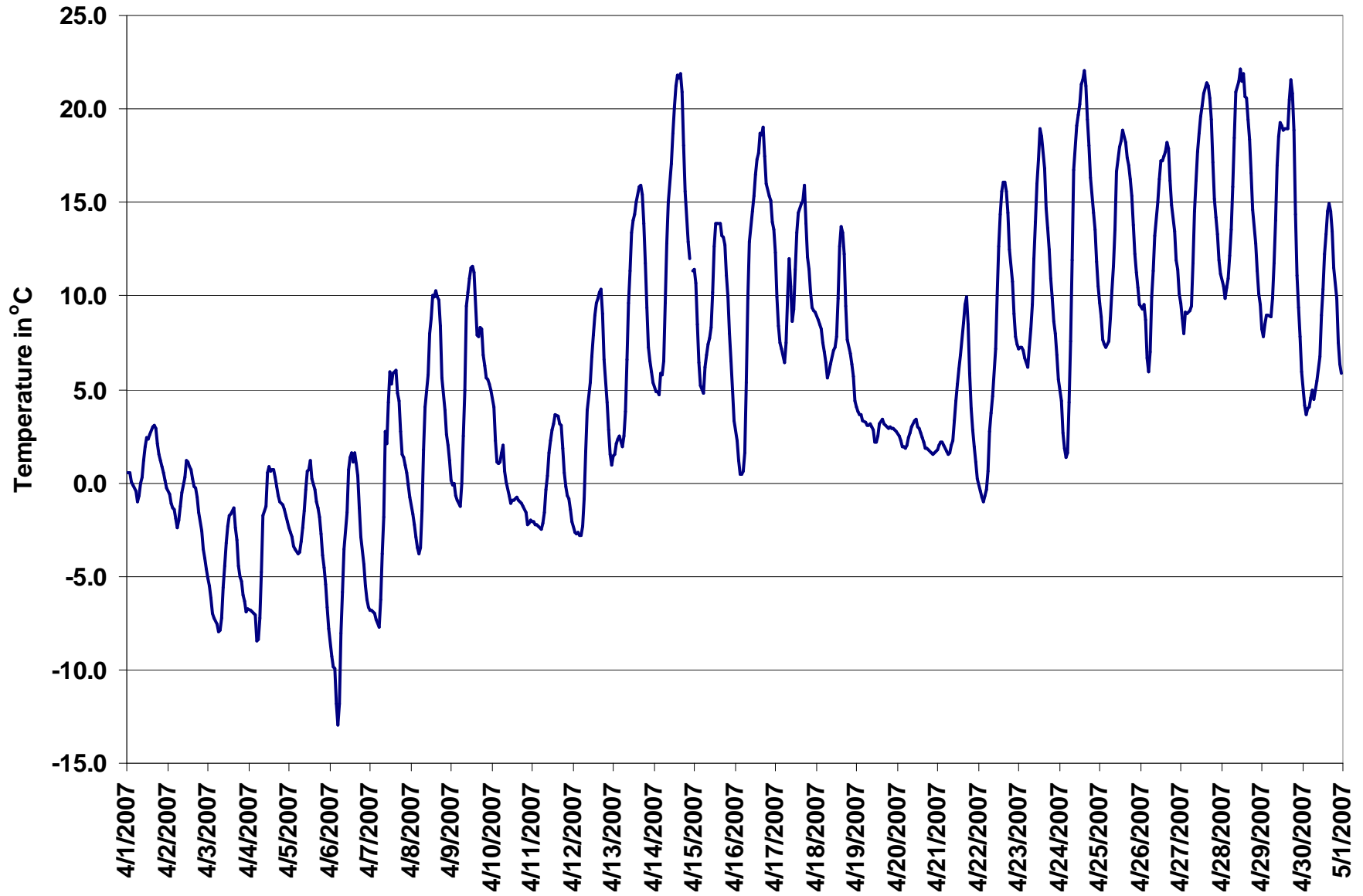


Figure 14. PAS - Crescent Heights Temperature 1-hr Average Monthly Trend



# PAS - Crescent Heights - Solar Radiation Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

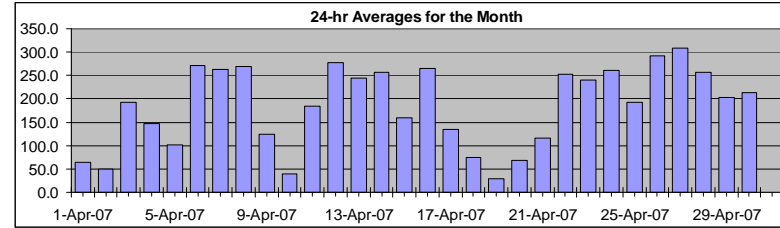
## HOURLY AVERAGE TABLE

## Solar Radiation (SR)

Monitoring Dates: April 1, 2007 to May 1, 2007

### Summary

|                       |       |                  |        |             |
|-----------------------|-------|------------------|--------|-------------|
| Maximum 1-hr Average: | 931.0 | W/m <sup>2</sup> | 27-Apr | 12:00 13:00 |
| Maximum 24-hr Value:  | 309.2 | W/m <sup>2</sup> | 27-Apr |             |



|                   |       |                         |         |      |     |     |     |                        |                       |
|-------------------|-------|-------------------------|---------|------|-----|-----|-----|------------------------|-----------------------|
| AIC Time:         | 0 hrs | Operational Time:       | 719 hrs |      |     |     |     |                        |                       |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 99.9%   |      |     |     |     |                        |                       |
| Percentile        | 99    | 95                      | 75      | 50   | 25  | 5   | 1   | Average                | Median                |
|                   | 849.4 | 766.9                   | 296.0   | 41.4 | 0.0 | 0.0 | 0.0 | 185.0 W/m <sup>2</sup> | 41.4 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<br>Hour End | 0:00<br>1:00           | 1:00<br>2:00 | 2:00<br>3:00 | 3:00<br>4:00 | 4:00<br>5:00 | 5:00<br>6:00 | 6:00<br>7:00 | 7:00<br>8:00 | 8:00<br>9:00 | 9:00<br>10:00 | 10:00<br>11:00 | 11:00<br>12:00 | 12:00<br>13:00 | 13:00<br>14:00 | 14:00<br>15:00 | 15:00<br>16:00 | 16:00<br>17:00 | 17:00<br>18:00 | 18:00<br>19:00 | 19:00<br>20:00 | 20:00<br>21:00 | 21:00<br>22:00 | 22:00<br>23:00 | 23:00<br>0:00 |                 |               |
| 1-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 0            | 11           | 86           | 159          | 125           | 206            | 258            | 165            | 102            | 114            | 136            | 104            | 43             | 10             | 0              | 0              | 0              | 0              | 0             | 63.3            | 257.9         |
| 2-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 0            | 20           | 80           | 113          | 98            | 102            | 222            | 158            | 150            | 118            | 78             | 50             | 20             | 5              | 0              | 0              | 0              | 0              | 0             | 50.6            | 222.0         |
| 3-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 0            | 33           | 100          | 208          | 515           | 576            | 519            | 551            | 646            | 619            | 476            | 237            | 120            | 22             | 0              | 0              | 0              | 0              | 0             | 192.7           | 645.6         |
| 4-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 1            | 77           | 164          | 291          | 439           | 444            | 429            | 483            | 420            | 349            | 251            | 122            | 60             | 18             | 0              | 0              | 0              | 0              | 0             | 147.8           | 482.9         |
| 5-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 1            | 34           | 161          | 224          | 264           | 289            | 250            | 239            | 320            | 240            | 169            | 135            | 64             | 21             | 1              | 0              | 0              | 0              | 0             | 100.5           | 319.5         |
| 6-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 3            | 80           | 230          | 425          | 597           | 739            | 817            | 850            | 816            | 718            | 571            | 402            | 219            | 57             | 1              | 0              | 0              | 0              | 0             | 271.7           | 850.0         |
| 7-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 5            | 90           | 200          | 318          | 577           | 731            | 839            | 882            | 812            | 731            | 580            | 308            | 188            | 49             | 1              | 0              | 0              | 0              | 0             | 262.9           | 881.8         |
| 8-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 3            | 87           | 260          | 449          | 608           | 727            | 785            | 824            | 801            | 638            | 559            | 431            | 213            | 58             | 1              | 0              | 0              | 0              | 0             | 268.5           | 823.8         |
| 9-Apr-07               | 0                      | 0            | 0            | 0            | 0            | 3            | 113          | 175          | 299          | 489           | 387            | 406            | 278            | 306            | 210            | 122            | 122            | 75             | 13             | 0              | 0              | 0              | 0              | 0             | 124.9           | 489.2         |
| 10-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 1            | 13           | 41           | 77           | 111           | 95             | 110            | 122            | 107            | 95             | 79             | 54             | 25             | 9              | 0              | 0              | 0              | 0              | 0             | 39.1            | 121.8         |
| 11-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 6            | 76           | 139          | 266          | 205           | 515            | 396            | 397            | 530            | 732            | 581            | 319            | 203            | 56             | 2              | 0              | 0              | 0              | 0             | 184.3           | 732.4         |
| 12-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 7            | 72           | 179          | 386          | 614           | 748            | 818            | 844            | 823            | 763            | 615            | 446            | 252            | 77             | 2              | 0              | 0              | 0              | 0             | 277.0           | 844.4         |
| 13-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 9            | 118          | 258          | 462          | 627           | 739            | 657            | 576            | 532            | 549            | 604            | 429            | 240            | 78             | 2              | 0              | 0              | 0              | 0             | 244.9           | 738.5         |
| 14-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 10           | 109          | 217          | 453          | 436           | 590            | 687            | 752            | 777            | 702            | 568            | 410            | 169            | 35             | 1              | 0              | 0              | P              | 0             | 257.2           | 776.7         |
| 15-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 4            | 34           | 94           | 160          | 231           | 350            | 714            | 769            | 562            | 452            | 187            | 147            | 78             | 2              | 0              | 0              | 0              | 0              | 0             | 159.0           | 768.5         |
| 16-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 10           | 118          | 300          | 478          | 641           | 735            | 748            | 821            | 798            | 517            | 593            | 285            | 261            | 65             | 3              | 0              | 0              | 0              | 0             | 265.5           | 821.2         |
| 17-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 14           | 140          | 212          | 318          | 92            | 82             | 202            | 408            | 465            | 455            | 306            | 255            | 235            | 40             | 3              | 0              | 0              | 0              | 0             | 134.5           | 464.7         |
| 18-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 2            | 11           | 34           | 46           | 58            | 107            | 168            | 199            | 287            | 187            | 296            | 214            | 125            | 52             | 3              | 0              | 0              | 0              | 0             | 74.5            | 296.0         |
| 19-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 2            | 16           | 30           | 38           | 56            | 50             | 38             | 61             | 92             | 140            | 85             | 61             | 25             | 11             | 1              | 0              | 0              | 0              | 0             | 29.5            | 140.4         |
| 20-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 3            | 24           | 59           | 95           | 171           | 210            | 164            | 174            | 250            | 179            | 118            | 95             | 56             | 21             | 2              | 0              | 0              | 0              | 0             | 67.6            | 249.8         |
| 21-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 9            | 46           | 47           | 116          | 126           | 244            | 260            | 323            | 234            | 228            | 391            | 366            | 278            | 105            | 6              | 0              | 0              | 0              | 0             | 115.8           | 390.8         |
| 22-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 5            | 40           | 110          | 177          | 305           | 767            | 846            | 866            | 828            | 745            | 622            | 441            | 241            | 86             | 8              | 0              | 0              | 0              | 0             | 253.6           | 865.6         |
| 23-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 17           | 138          | 209          | 391          | 460           | 426            | 702            | 785            | 810            | 527            | 523            | 407            | 273            | 105            | 8              | 0              | 0              | 0              | 0             | 240.8           | 810.5         |
| 24-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 25           | 156          | 329          | 506          | 662           | 773            | 816            | 750            | 736            | 547            | 410            | 339            | 130            | 63             | 10             | 0              | 0              | 0              | 0             | 260.5           | 815.9         |
| 25-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 17           | 68           | 138          | 190          | 335           | 781            | 805            | 537            | 595            | 559            | 318            | 150            | 93             | 26             | 3              | 0              | 0              | 0              | 0             | 192.3           | 805.0         |
| 26-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 10           | 132          | 341          | 523          | 695           | 793            | 881            | 774            | 796            | 673            | 575            | 476            | 242            | 63             | 9              | 0              | 0              | 0              | 0             | 291.0           | 881.5         |
| 27-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 24           | 134          | 343          | 531          | 656           | 783            | 879            | 931            | 862            | 765            | 629            | 471            | 291            | 113            | 10             | 0              | 0              | 0              | 0             | 309.2           | 931.0         |
| 28-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 44           | 182          | 296          | 478          | 688           | 659            | 741            | 637            | 676            | 450            | 550            | 353            | 287            | 125            | 15             | 0              | 0              | 0              | 0             | 257.5           | 741.2         |
| 29-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 18           | 137          | 354          | 521          | 637           | 571            | 654            | 414            | 283            | 201            | 259            | 428            | 279            | 82             | 12             | 0              | 0              | 0              | 0             | 202.1           | 653.6         |
| 30-Apr-07              | 0                      | 0            | 0            | 0            | 0            | 15           | 35           | 47           | 106          | 151           | 257            | 560            | 792            | 859            | 774            | 628            | 482            | 296            | 123            | 13             | 0              | 0              | 0              | 0             | 214.1           | 858.6         |
| Hourly Avg             | 0.0                    | 0.0          | 0.0          | 0.0          | 0.0          | 8.9          | 78.0         | 172.4        | 291.2        | 386.7         | 478.5          | 533.6          | 543.5          | 549.3          | 469.6          | 404.7          | 286.0          | 171.7          | 55.5           | 4.0            | 0.0            | 0.0            | 0.0            | 0.0           |                 |               |
| Hourly Max             | 0.2                    | 0.2          | 0.2          | 0.1          | 0.4          | 43.7         | 181.6        | 353.6        | 531.0        | 695.2         | 793.1          | 881.5          | 931.0          | 862.0          | 774.2          | 629.2          | 482.2          | 296.0          | 125.0          | 15.1           | 0.3            | 0.2            | 0.3            | 0.2           |                 |               |

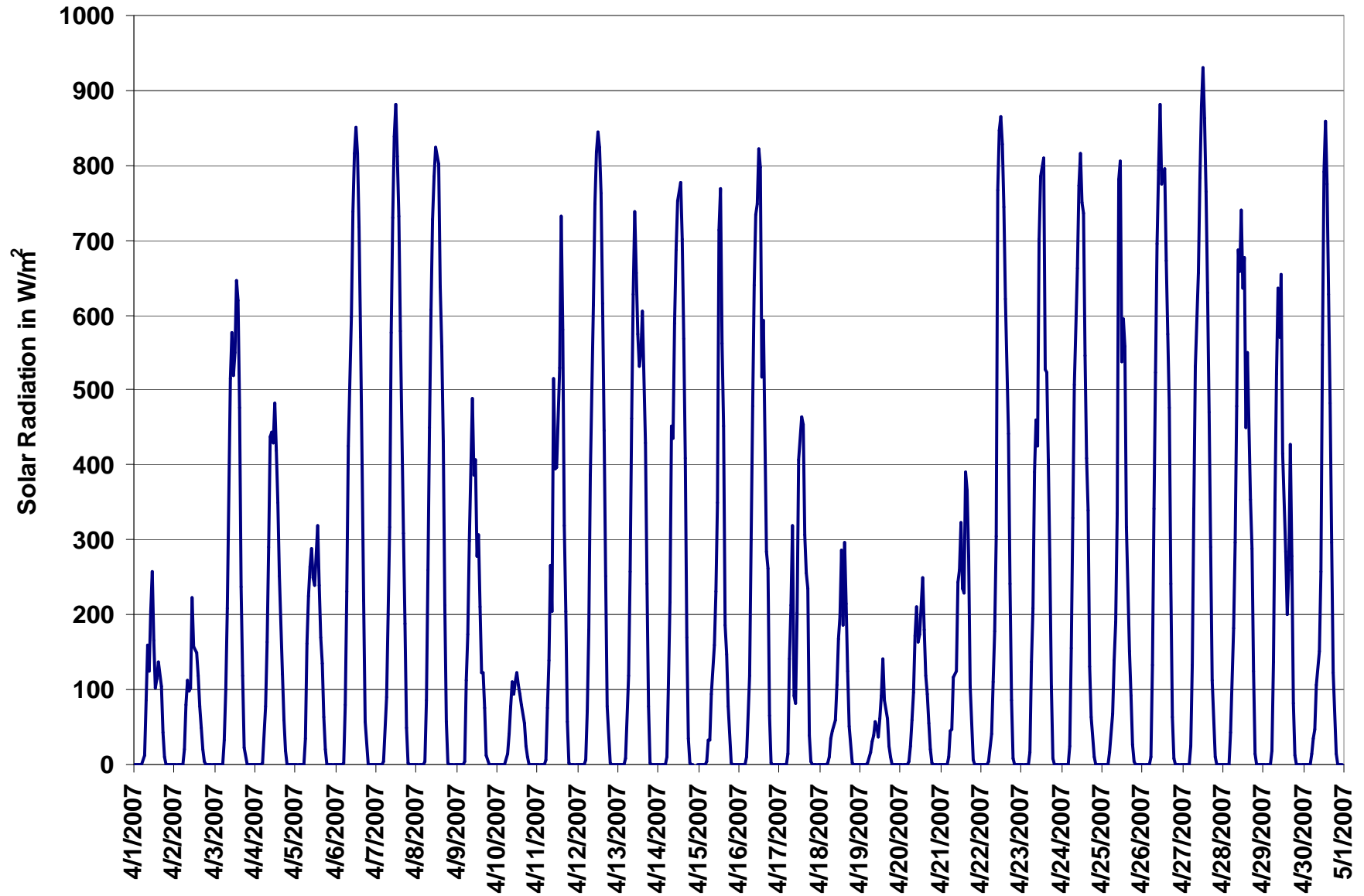


Figure 15. PAS - Crescent Heights Solar Radiation 1-hr Average Monthly Trend



## PAS - Crescent Heights - Scalar Wind Speed Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

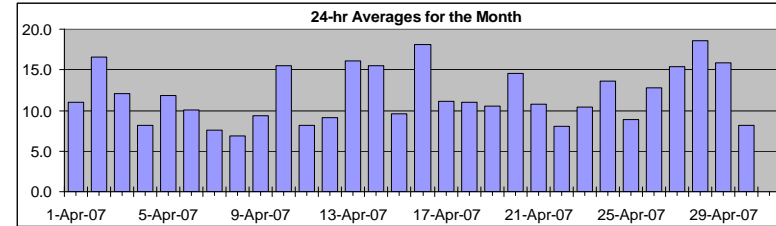
### Wind Speed (WSs)

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                       |      |       |        |             |
|-----------------------|------|-------|--------|-------------|
| Maximum 1-hr Average: | 29.9 | km/hr | 16-Apr | 17:00 18:00 |
| Maximum 24-hr Value:  | 18.6 | km/hr | 28-Apr |             |

|                   |       |          |                         |         |     |     |     |            |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|------------|
| Calm Time:        | 0 hrs | 0% calms | Operational Time:       | 719 hrs |     |     |     |            |
| Calibration Time: | 0 hrs |          | AMD Operational Uptime: | 99.9%   |     |     |     |            |
| Percentile        | 99    | 95       | 75                      | 50      | 25  | 5   | 1   | AverageS   |
|                   | 26.4  | 22.7     | 15.1                    | 10.9    | 7.5 | 4.5 | 3.3 | 11.8 km/hr |



**Status Flag Characters**

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

| Day          | Mountain Standard Time |              |              |              |              |              |              |              |              |              |               |                |                |                |                |                |                |                |                |                |                |                |                | 24-hr<br>Scalar<br>Average | Daily<br>Max |                |               |
|--------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------|--------------|----------------|---------------|
|              | Hour Start<br>Hour End | 0:00<br>1:00 | 1:00<br>2:00 | 2:00<br>3:00 | 3:00<br>4:00 | 4:00<br>5:00 | 5:00<br>6:00 | 6:00<br>7:00 | 7:00<br>8:00 | 8:00<br>9:00 | 9:00<br>10:00 | 10:00<br>11:00 | 11:00<br>12:00 | 12:00<br>13:00 | 13:00<br>14:00 | 14:00<br>15:00 | 15:00<br>16:00 | 16:00<br>17:00 | 17:00<br>18:00 | 18:00<br>19:00 | 19:00<br>20:00 | 20:00<br>21:00 | 21:00<br>22:00 |                            |              | 22:00<br>23:00 | 23:00<br>0:00 |
| 1-Apr-07     | 10                     | 11           | 11           | 11           | 9            | 11           | 13           | 14           | 15           | 13           | 11            | 10             | 8              | 9              | 8              | 8              | 9              | 9              | 12             | 11             | 8              | 13             | 15             | 14                         | 11.0         | 14.7           |               |
| 2-Apr-07     | 13                     | 12           | 14           | 16           | 15           | 15           | 18           | 17           | 16           | 14           | 12            | 17             | 15             | 14             | 15             | 16             | 18             | 16             | 17             | 21             | 22             | 23             | 20             | 22                         | 16.6         | 23.1           |               |
| 3-Apr-07     | 19                     | 18           | 21           | 20           | 19           | 19           | 16           | 15           | 13           | 14           | 12            | 10             | 9              | 10             | 10             | 8              | 8              | 7              | 7              | 6              | 7              | 8              | 7              | 6                          | 12.1         | 21.0           |               |
| 4-Apr-07     | 4                      | 6            | 5            | 5            | 2            | 5            | 5            | 4            | 5            | 5            | 7             | 7              | 10             | 12             | 13             | 12             | 12             | 11             | 10             | 10             | 11             | 13             | 13             | 8.2                        | 13.0         |                |               |
| 5-Apr-07     | 12                     | 11           | 11           | 11           | 8            | 9            | 8            | 10           | 9            | 11           | 10            | 5              | 6              | 7              | 11             | 14             | 21             | 20             | 17             | 13             | 15             | 15             | 17             | 15                         | 11.9         | 20.9           |               |
| 6-Apr-07     | 11                     | 12           | 12           | 10           | 6            | 7            | 7            | 4            | 6            | 7            | 8             | 9              | 12             | 14             | 15             | 13             | 14             | 13             | 15             | 11             | 12             | 8              | 9              | 8                          | 10.1         | 15.0           |               |
| 7-Apr-07     | 9                      | 9            | 9            | 9            | 8            | 8            | 5            | 5            | 3            | 3            | 7             | 6              | 8              | 11             | 9              | 9              | 11             | 9              | 7              | 4              | 6              | 7              | 10             | 9                          | 7.5          | 10.8           |               |
| 8-Apr-07     | 8                      | 5            | 7            | 7            | 4            | 6            | 4            | 4            | 4            | 6            | 7             | 7              | 8              | 8              | 10             | 11             | 13             | 9              | 8              | 6              | 6              | 6              | 4              | 6                          | 6.9          | 12.7           |               |
| 9-Apr-07     | 6                      | 4            | 6            | 4            | 5            | 5            | 7            | 5            | 4            | 4            | 5             | 11             | 10             | 10             | 9              | 11             | 13             | 9              | 15             | 19             | 19             | 13             | 15             | 17                         | 9.4          | 19.3           |               |
| 10-Apr-07    | 13                     | 15           | 15           | 15           | 15           | 13           | 9            | 18           | 18           | 22           | 24            | 23             | 24             | 24             | 23             | 20             | 17             | 15             | 13             | 12             | 11             | 6              | 7              | 8                          | 15.5         | 24.3           |               |
| 11-Apr-07    | 8                      | 8            | 9            | 7            | 8            | 7            | 6            | 5            | 5            | 4            | 6             | 5              | 6              | 10             | 12             | 13             | 12             | 14             | 13             | 9              | 7              | 7              | 8              | 7                          | 8.2          | 13.7           |               |
| 12-Apr-07    | 5                      | 3            | 4            | 5            | 4            | 6            | 9            | 8            | 13           | 18           | 18            | 18             | 15             | 14             | 13             | 11             | 8              | 8              | 7              | 7              | 7              | 6              | 6              | 8                          | 9.1          | 18.4           |               |
| 13-Apr-07    | 9                      | 10           | 12           | 12           | 21           | 17           | 18           | 21           | 17           | 15           | 17            | 16             | 19             | 19             | 20             | 22             | 23             | 22             | 17             | 16             | 10             | 6              | 9              | 16                         | 16.0         | 23.2           |               |
| 14-Apr-07    | 17                     | 13           | 9            | 12           | 16           | 14           | 13           | 16           | 20           | 24           | 23            | 22             | 21             | 20             | 23             | 21             | 14             | 16             | 10             | 7              | 7              | P              | 11             | 11.5                       | 24.1         |                |               |
| 15-Apr-07    | 13                     | 11           | 11           | 15           | 12           | 7            | 10           | 10           | 13           | 11           | 10            | 10             | 9              | 11             | 13             | 11             | 10             | 8              | 7              | 7              | 6              | 6              | 3              | 4                          | 9.5          | 14.7           |               |
| 16-Apr-07    | 7                      | 6            | 6            | 6            | 8            | 7            | 6            | 6            | 11           | 17           | 24            | 26             | 25             | 25             | 25             | 25             | 28             | 30             | 25             | 22             | 24             | 27             | 24             | 23                         | 18.1         | 29.9           |               |
| 17-Apr-07    | 20                     | 15           | 14           | 12           | 13           | 11           | 12           | 11           | 14           | 15           | 9             | 6              | 7              | 14             | 15             | 13             | 7              | 5              | 8              | 10             | 13             | 9              | 7              | 8                          | 11.2         | 20.2           |               |
| 18-Apr-07    | 5                      | 4            | 7            | 7            | 3            | 6            | 6            | 6            | 7            | 12           | 20            | 20             | 20             | 16             | 15             | 11             | 13             | 14             | 16             | 14             | 9              | 9              | 11             | 11                         | 11.0         | 20.4           |               |
| 19-Apr-07    | 11                     | 11           | 13           | 13           | 13           | 11           | 12           | 13           | 13           | 13           | 9             | 8              | 9              | 9              | 12             | 12             | 12             | 10             | 8              | 7              | 7              | 8              | 8              | 8                          | 10.5         | 13.5           |               |
| 20-Apr-07    | 9                      | 9            | 12           | 11           | 9            | 9            | 10           | 12           | 14           | 17           | 18            | 16             | 20             | 19             | 19             | 20             | 17             | 17             | 16             | 15             | 17             | 18             | 13             | 12                         | 14.6         | 20.4           |               |
| 21-Apr-07    | 13                     | 15           | 11           | 11           | 11           | 11           | 11           | 11           | 11           | 11           | 12            | 13             | 14             | 14             | 13             | 11             | 11             | 12             | 11             | 11             | 11             | 7              | 5              | 4                          | 4            | 10.7           | 14.8          |
| 22-Apr-07    | 4                      | 2            | 4            | 3            | 3            | 4            | 4            | 6            | 10           | 7            | 9             | 11             | 12             | 10             | 10             | 9              | 9              | 10             | 11             | 12             | 13             | 10             | 11             | 9                          | 8.1          | 12.8           |               |
| 23-Apr-07    | 10                     | 11           | 11           | 11           | 7            | 4            | 5            | 5            | 7            | 6            | 5             | 6              | 8              | 8              | 8              | 24             | 28             | 24             | 15             | 10             | 9              | 9              | 11             | 7                          | 10.4         | 27.6           |               |
| 24-Apr-07    | 7                      | 5            | 6            | 7            | 5            | 4            | 3            | 5            | 6            | 10           | 18            | 24             | 23             | 24             | 21             | 21             | 19             | 19             | 19             | 19             | 22             | 20             | 17             | 12                         | 9            | 13.6           | 24.2          |
| 25-Apr-07    | 16                     | 17           | 9            | 10           | 8            | 11           | 10           | 11           | 10           | 6            | 6             | 8              | 7              | 8              | 10             | 9              | 7              | 6              | 4              | 8              | 14             | 6              | 5              | 9                          | 8.9          | 16.5           |               |
| 26-Apr-07    | 11                     | 9            | 14           | 17           | 6            | 9            | 8            | 8            | 11           | 10           | 14            | 14             | 14             | 16             | 14             | 12             | 12             | 9              | 14             | 19             | 20             | 16             | 15             | 14                         | 12.8         | 20.1           |               |
| 27-Apr-07    | 15                     | 12           | 13           | 15           | 16           | 13           | 12           | 11           | 15           | 15           | 13            | 19             | 20             | 19             | 18             | 20             | 21             | 21             | 18             | 17             | 14             | 13             | 11             | 9                          | 15.4         | 21.0           |               |
| 28-Apr-07    | 17                     | 19           | 15           | 17           | 25           | 29           | 24           | 24           | 29           | 29           | 26            | 18             | 18             | 14             | 16             | 18             | 20             | 21             | 19             | 11             | 9              | 9              | 10             | 9                          | 18.6         | 29.1           |               |
| 29-Apr-07    | 6                      | 6            | 8            | 10           | 11           | 11           | 12           | 21           | 23           | 18           | 18            | 19             | 17             | 16             | 16             | 18             | 24             | 25             | 21             | 19             | 14             | 12             | 18             | 17                         | 15.8         | 24.8           |               |
| 30-Apr-07    | 15                     | 12           | 7            | 8            | 7            | 8            | 10           | 11           | 9            | 8            | 6             | 6              | 7              | 7              | 6              | 6              | 5              | 6              | 7              | 9              | 9              | 7              | 8              | 11                         | 8.1          | 14.6           |               |
| 1-hr Average | 10.7                   | 10.1         | 10.3         | 10.6         | 9.9          | 10.0         | 9.8          | 10.7         | 11.8         | 12.2         | 12.8          | 13.0           | 13.4           | 13.6           | 13.9           | 14.2           | 14.5           | 13.7           | 12.9           | 12.1           | 11.8           | 10.6           | 10.6           | 10.8                       |              |                |               |
| Hourly Max   | 20.2                   | 19.2         | 21.0         | 20.5         | 25.1         | 28.6         | 24.1         | 24.0         | 29.0         | 29.1         | 26.4          | 26.1           | 24.8           | 25.1           | 25.0           | 24.8           | 28.0           | 29.9           | 25.1           | 22.0           | 24.4           | 26.8           | 23.5           | 23.3                       |              |                |               |



# PAS - Crescent Heights - Vector Wind Speed Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

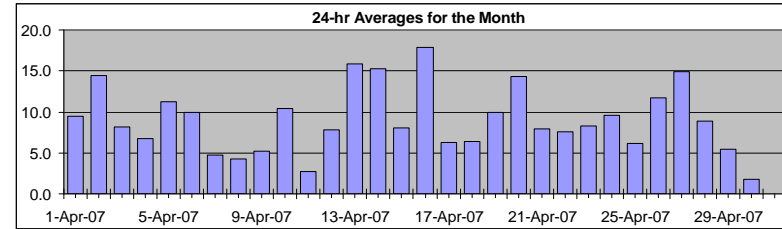
## HOURLY AVERAGE TABLE

## Wind Speed (WSv)

Monitoring Dates: April 1, 2007 to May 1, 2007

### Summary

|                       |      |       |        |             |
|-----------------------|------|-------|--------|-------------|
| Maximum 1-hr Average: | 29.7 | km/hr | 16-Apr | 17:00 18:00 |
| Maximum 24-hr Value:  | 17.9 | km/hr | 16-Apr |             |



|                   |       |          |                         |         |     |     |     |           |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time:        | 1 hrs | 0% calms | Operational Time:       | 718 hrs |     |     |     |           |
| Calibration Time: | 0 hrs |          | AMD Operational Uptime: | 99.9%   |     |     |     |           |
| Percentile        | 99    | 95       | 75                      | 50      | 25  | 5   | 1   | AverageV  |
|                   | 26.1  | 22.5     | 14.9                    | 10.6    | 6.9 | 3.6 | 2.1 | 5.6 km/hr |

### Status Flag Characters

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

| Day         | Mountain Standard Time |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 24-hr Vector Average | Daily Max |      |
|-------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|------|
| Hour Start  | 0:00                   | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00  | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00                |           |      |
| Hour End    | 1:00                   | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00                 |           |      |
| 1-Apr-07    | 10                     | 11   | 11   | 11   | 9    | 11   | 13   | 14   | 14   | 13    | 10    | 9     | 7     | 9     | 8     | 8     | 9     | 8     | 12    | 11    | 8     | 13    | 15    | 14                   | 9.4       | 14.6 |
| 2-Apr-07    | 13                     | 12   | 14   | 16   | 15   | 15   | 18   | 17   | 15   | 14    | 11    | 17    | 15    | 14    | 15    | 16    | 17    | 16    | 17    | 21    | 21    | 23    | 20    | 22                   | 14.4      | 23.0 |
| 3-Apr-07    | 19                     | 18   | 21   | 20   | 19   | 19   | 16   | 15   | 13   | 14    | 12    | 9     | 9     | 9     | 10    | 8     | 7     | 7     | 7     | 6     | 6     | 8     | 7     | 5                    | 8.1       | 20.9 |
| 4-Apr-07    | 3                      | 6    | 5    | 4    | 1    | 4    | 5    | 4    | 5    | 4     | 6     | 7     | 10    | 12    | 13    | 12    | 11    | 12    | 10    | 10    | 10    | 11    | 12    | 13                   | 6.7       | 13.0 |
| 5-Apr-07    | 12                     | 11   | 11   | 11   | 8    | 9    | 8    | 10   | 9    | 10    | 10    | 5     | 5     | 6     | 10    | 14    | 21    | 19    | 17    | 13    | 15    | 15    | 17    | 15                   | 11.2      | 20.8 |
| 6-Apr-07    | 11                     | 12   | 12   | 10   | 6    | 7    | 7    | 4    | 6    | 7     | 8     | 8     | 11    | 14    | 14    | 13    | 13    | 13    | 15    | 11    | 12    | 8     | 9     | 8                    | 9.9       | 14.9 |
| 7-Apr-07    | 9                      | 9    | 9    | 9    | 8    | 7    | 4    | 5    | 3    | 2     | 6     | 3     | 7     | 8     | 6     | 8     | 10    | 9     | 6     | 3     | 5     | 6     | 9     | 9                    | 4.7       | 9.8  |
| 8-Apr-07    | 8                      | 5    | 7    | 5    | 4    | 6    | 4    | 1    | 3    | 5     | 6     | 6     | 5     | 5     | 9     | 10    | 12    | 9     | 7     | 6     | 6     | 6     | 4     | 6                    | 4.3       | 12.1 |
| 9-Apr-07    | 6                      | 4    | 5    | 4    | 5    | 4    | 7    | 5    | 3    | 2     | 11    | 9     | 10    | 8     | 10    | 12    | 6     | 14    | 19    | 19    | 13    | 15    | 16    | 5.3                  | 19.1      |      |
| 10-Apr-07   | 13                     | 15   | 15   | 15   | 15   | 13   | 8    | 17   | 18   | 22    | 24    | 23    | 24    | 22    | 20    | 17    | 15    | 14    | 13    | 12    | 11    | 6     | 7     | 8                    | 10.4      | 24.2 |
| 11-Apr-07   | 8                      | 8    | 8    | 7    | 8    | 7    | 6    | 5    | 4    | 2     | 5     | 3     | 2     | 9     | 12    | 12    | 11    | 13    | 13    | 9     | 7     | 7     | 7     | 6                    | 2.7       | 13.4 |
| 12-Apr-07   | 3                      | 2    | 3    | 5    | 3    | 6    | 9    | 8    | 13   | 18    | 18    | 17    | 15    | 14    | 12    | 10    | 7     | 7     | 6     | 7     | 6     | 5     | 6     | 7                    | 7.8       | 18.2 |
| 13-Apr-07   | 9                      | 10   | 11   | 12   | 21   | 17   | 18   | 21   | 17   | 15    | 17    | 16    | 18    | 18    | 20    | 22    | 23    | 22    | 17    | 16    | 9     | 6     | 8     | 16                   | 15.9      | 22.7 |
| 14-Apr-07   | 17                     | 13   | 9    | 11   | 16   | 14   | 13   | 15   | 20   | 24    | 22    | 22    | 21    | 20    | 23    | 21    | 13    | 15    | 10    | 6     | 7     | 6     | P     | 11                   | 15.3      | 23.8 |
| 15-Apr-07   | 12                     | 10   | 10   | 15   | 12   | 7    | 10   | 10   | 13   | 10    | 10    | 9     | 4     | 9     | 12    | 9     | 9     | 7     | 7     | 7     | 6     | 5     | 3     | 4                    | 8.1       | 14.6 |
| 16-Apr-07   | 6                      | 6    | 6    | 6    | 8    | 7    | 6    | 6    | 11   | 17    | 24    | 26    | 24    | 25    | 24    | 24    | 28    | 30    | 25    | 22    | 24    | 26    | 23    | 23                   | 17.9      | 29.7 |
| 17-Apr-07   | 20                     | 14   | 14   | 12   | 13   | 11   | 12   | 11   | 13   | 14    | 8     | 3     | 6     | 14    | 15    | 12    | 7     | 3     | 8     | 10    | 12    | 8     | 6     | 8                    | 6.3       | 19.9 |
| 18-Apr-07   | 3                      | 3    | 6    | 6    | calm | 4    | 5    | 6    | 6    | 11    | 20    | 20    | 20    | 16    | 15    | 11    | 13    | 14    | 16    | 13    | 9     | 6     | 10    | 11                   | 6.3       | 20.3 |
| 19-Apr-07   | 11                     | 11   | 13   | 13   | 13   | 11   | 12   | 13   | 13   | 13    | 8     | 7     | 9     | 8     | 11    | 12    | 12    | 10    | 8     | 7     | 6     | 8     | 8     | 8                    | 9.9       | 13.2 |
| 20-Apr-07   | 8                      | 9    | 12   | 11   | 9    | 9    | 10   | 12   | 14   | 17    | 18    | 16    | 20    | 19    | 19    | 20    | 17    | 17    | 16    | 15    | 17    | 18    | 13    | 12                   | 14.3      | 20.3 |
| 21-Apr-07   | 13                     | 15   | 11   | 11   | 11   | 11   | 11   | 11   | 11   | 12    | 13    | 14    | 14    | 13    | 10    | 11    | 11    | 10    | 11    | 11    | 7     | 4     | 4     | 3                    | 8.0       | 14.7 |
| 22-Apr-07   | 3                      | 2    | 2    | 3    | 2    | 4    | 4    | 6    | 10   | 7     | 8     | 10    | 11    | 9     | 8     | 8     | 8     | 10    | 11    | 12    | 13    | 10    | 11    | 9                    | 7.6       | 12.7 |
| 23-Apr-07   | 9                      | 11   | 11   | 11   | 7    | 4    | 5    | 4    | 6    | 6     | 3     | 4     | 6     | 7     | 5     | 24    | 27    | 23    | 14    | 10    | 9     | 9     | 11    | 6                    | 8.2       | 27.3 |
| 24-Apr-07   | 7                      | 4    | 6    | 7    | 4    | 4    | 3    | 5    | 6    | 9     | 17    | 24    | 23    | 24    | 21    | 20    | 19    | 18    | 18    | 21    | 20    | 17    | 12    | 9                    | 9.6       | 23.6 |
| 25-Apr-07   | 15                     | 16   | 9    | 10   | 7    | 11   | 9    | 10   | 10   | 4     | 5     | 6     | 5     | 7     | 8     | 9     | 7     | 6     | 4     | 7     | 14    | 5     | 4     | 8                    | 6.1       | 16.4 |
| 26-Apr-07   | 11                     | 9    | 14   | 17   | 6    | 9    | 8    | 7    | 11   | 9     | 13    | 13    | 13    | 15    | 13    | 10    | 11    | 8     | 14    | 18    | 20    | 16    | 15    | 14                   | 11.7      | 19.8 |
| 27-Apr-07   | 15                     | 12   | 12   | 15   | 16   | 13   | 11   | 11   | 15   | 14    | 11    | 18    | 19    | 18    | 17    | 19    | 21    | 20    | 18    | 16    | 14    | 13    | 11    | 8                    | 14.9      | 20.6 |
| 28-Apr-07   | 16                     | 19   | 15   | 17   | 25   | 28   | 24   | 24   | 29   | 29    | 26    | 18    | 17    | 13    | 15    | 17    | 20    | 21    | 19    | 11    | 9     | 8     | 9     | 8                    | 8.9       | 28.7 |
| 29-Apr-07   | 6                      | 6    | 7    | 10   | 10   | 11   | 12   | 21   | 22   | 18    | 17    | 19    | 16    | 15    | 16    | 18    | 24    | 23    | 21    | 19    | 13    | 11    | 18    | 17                   | 5.5       | 24.0 |
| 30-Apr-07   | 14                     | 12   | 7    | 8    | 7    | 8    | 9    | 10   | 9    | 8     | 5     | 3     | 3     | 4     | 3     | 4     | 2     | 4     | 7     | 9     | 9     | 7     | 8     | 11                   | 1.7       | 14.5 |
| 1-hr Vector | 2.8                    | 2.3  | 2.4  | 2.6  | 2.9  | 3.2  | 2.9  | 2.4  | 3.1  | 3.3   | 3.9   | 2.9   | 2.8   | 3.5   | 3.7   | 3.1   | 2.6   | 2.3   | 1.3   | 1.3   | 1.4   | 1.0   | 1.2   | 1.3                  |           |      |
| Hourly Max  | 19.9                   | 19.1 | 20.9 | 20.4 | 25.0 | 28.5 | 24.0 | 23.8 | 28.7 | 28.6  | 26.2  | 25.6  | 24.1  | 24.6  | 24.3  | 24.3  | 27.6  | 29.7  | 25.0  | 21.9  | 24.2  | 26.2  | 23.4  | 23.2                 |           |      |



## PAS - Crescent Heights - Wind Direction Monthly Summary

Station: Crescent Heights  
 Station Owner: PAS

### HOURLY AVERAGE TABLE

**Wind Direction (WD)**

Monitoring Dates: April 1, 2007 to May 1, 2007

**Summary**

|                   |       |          |                         |         |      |      |     |         |
|-------------------|-------|----------|-------------------------|---------|------|------|-----|---------|
| Calm Time:        | 0 hrs | 0% calms | Operational Time:       | 719 hrs |      |      |     |         |
| Calibration Time: | 0 hrs |          | AMD Operational Uptime: | 99.9%   |      |      |     |         |
| Percentile        | 99    | 95       | 75                      | 50      | 25   | 5    | 1   | Average |
|                   | 357.7 | 330.8    | 256.3                   | 208.8   | 82.9 | 19.5 | 4.4 | 252 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<br>Hour End | 0:00<br>1:00 | 1:00<br>2:00 | 2:00<br>3:00 | 3:00<br>4:00 | 4:00<br>5:00 | 5:00<br>6:00 | 6:00<br>7:00 | 7:00<br>8:00 | 8:00<br>9:00 | 9:00<br>10:00 | 10:00<br>11:00 | 11:00<br>12:00 | 12:00<br>13:00 | 13:00<br>14:00 | 14:00<br>15:00 | 15:00<br>16:00 | 16:00<br>17:00 | 17:00<br>18:00 | 18:00<br>19:00 | 19:00<br>20:00 | 20:00<br>21:00 | 21:00<br>22:00 | 22:00<br>23:00 |                 |           |
| 1-Apr-07   | 347                    | 345          | 346          | 339          | 330          | 327          | 331          | 347          | 352          | 350          | 4             | 31             | 20             | 9              | 29             | 40             | 44             | 39             | 35             | 47             | 50             | 51             | 62             | 48             | 13              | NNE       |
| 2-Apr-07   | 39                     | 21           | 11           | 12           | 8            | 358          | 360          | 359          | 356          | 355          | 4             | 56             | 57             | 62             | 67             | 66             | 67             | 69             | 67             | 62             | 67             | 69             | 70             | 68             | 42              | NE        |
| 3-Apr-07   | 67                     | 61           | 46           | 42           | 44           | 52           | 41           | 30           | 21           | 16           | 13            | 5              | 353            | 338            | 341            | 323            | 329            | 315            | 309            | 301            | 268            | 239            | 230            | 215            | 20              | NNE       |
| 4-Apr-07   | 205                    | 196          | 208          | 229          | 55           | 108          | 112          | 98           | 104          | 91           | 71            | 88             | 89             | 77             | 81             | 80             | 75             | 79             | 68             | 52             | 60             | 71             | 80             | 75             | 83              | E         |
| 5-Apr-07   | 66                     | 72           | 77           | 78           | 61           | 66           | 66           | 59           | 46           | 57           | 90            | 83             | 52             | 358            | 358            | 36             | 51             | 58             | 61             | 57             | 61             | 63             | 72             | 74             | 60              | ENE       |
| 6-Apr-07   | 97                     | 111          | 95           | 102          | 118          | 126          | 118          | 119          | 97           | 98           | 104           | 114            | 133            | 121            | 112            | 122            | 132            | 119            | 114            | 120            | 124            | 139            | 127            | 118            | 116             | ESE       |
| 7-Apr-07   | 104                    | 103          | 88           | 89           | 69           | 44           | 55           | 85           | 44           | 13           | 355           | 19             | 171            | 184            | 152            | 177            | 189            | 162            | 178            | 152            | 112            | 109            | 121            | 121            | 119             | ESE       |
| 8-Apr-07   | 187                    | 169          | 199          | 171          | 119          | 25           | 2            | 327          | 222          | 219          | 209           | 169            | 134            | 133            | 185            | 175            | 174            | 178            | 153            | 104            | 118            | 122            | 99             | 359            | 162             | SSE       |
| 9-Apr-07   | 11                     | 45           | 98           | 46           | 64           | 84           | 82           | 80           | 80           | 109          | 168           | 158            | 155            | 143            | 175            | 158            | 152            | 169            | 181            | 204            | 220            | 233            | 241            | 245            | 176             | S         |
| 10-Apr-07  | 260                    | 263          | 267          | 271          | 279          | 288          | 313          | 10           | 12           | 34           | 32            | 40             | 40             | 43             | 41             | 24             | 25             | 19             | 19             | 26             | 34             | 11             | 358            | 357            | 8               | N         |
| 11-Apr-07  | 13                     | 18           | 11           | 15           | 10           | 5            | 9            | 41           | 64           | 138          | 225           | 134            | 236            | 255            | 252            | 248            | 230            | 210            | 209            | 213            | 198            | 201            | 213            | 241            | 244             | WSW       |
| 12-Apr-07  | 233                    | 347          | 198          | 200          | 199          | 231          | 226          | 224          | 224          | 232          | 227           | 226            | 239            | 238            | 257            | 266            | 261            | 230            | 202            | 170            | 144            | 150            | 140            | 212            | 225             | SW        |
| 13-Apr-07  | 200                    | 217          | 237          | 236          | 228          | 236          | 238          | 230          | 232          | 239          | 234           | 229            | 233            | 230            | 236            | 229            | 227            | 232            | 232            | 217            | 220            | 251            | 247            | 233            | 231             | SW        |
| 14-Apr-07  | 239                    | 239          | 247          | 241          | 227          | 235          | 237          | 237          | 237          | 232          | 227           | 236            | 234            | 228            | 220            | 222            | 242            | 251            | 273            | 255            | 225            | 227            | P              | 233            | 235             | SW        |
| 15-Apr-07  | 249                    | 250          | 306          | 319          | 320          | 313          | 337          | 319          | 321          | 292          | 278           | 269            | 318            | 335            | 344            | 338            | 308            | 313            | 327            | 307            | 262            | 340            | 3              | 180            | 308             | NW        |
| 16-Apr-07  | 204                    | 203          | 197          | 185          | 210          | 203          | 206          | 209          | 209          | 194          | 199           | 204            | 190            | 195            | 191            | 183            | 188            | 188            | 186            | 182            | 185            | 205            | 205            | 209            | 195             | SSW       |
| 17-Apr-07  | 216                    | 237          | 232          | 225          | 228          | 238          | 232          | 222          | 230          | 236          | 274           | 167            | 182            | 206            | 215            | 222            | 245            | 5              | 47             | 54             | 64             | 85             | 93             | 109            | 218             | SW        |
| 18-Apr-07  | 173                    | 91           | 215          | 208          | 236          | 304          | 209          | 281          | 262          | 329          | 359           | 2              | 3              | 7              | 52             | 26             | 342            | 317            | 301            | 296            | 281            | 278            | 251            | 269            | 323             | NW        |
| 19-Apr-07  | 269                    | 264          | 269          | 254          | 272          | 269          | 288          | 316          | 322          | 322          | 307           | 292            | 283            | 296            | 300            | 301            | 303            | 296            | 305            | 294            | 273            | 276            | 294            | 279            | 290             | WNW       |
| 20-Apr-07  | 277                    | 274          | 274          | 275          | 267          | 244          | 242          | 234          | 233          | 237          | 238           | 244            | 243            | 256            | 251            | 245            | 250            | 255            | 255            | 256            | 240            | 238            | 247            | 255            | 250             | WSW       |
| 21-Apr-07  | 249                    | 241          | 256          | 259          | 251          | 253          | 262          | 251          | 256          | 260          | 261           | 258            | 272            | 273            | 288            | 309            | 317            | 314            | 349            | 3              | 14             | 46             | 123            | 72             | 276             | W         |
| 22-Apr-07  | 108                    | 71           | 56           | 4            | 72           | 109          | 106          | 93           | 102          | 96           | 60            | 56             | 55             | 57             | 77             | 54             | 64             | 57             | 57             | 51             | 57             | 65             | 74             | 57             | 67              | ENE       |
| 23-Apr-07  | 29                     | 47           | 80           | 90           | 88           | 56           | 70           | 39           | 42           | 55           | 72            | 88             | 109            | 116            | 343            | 357            | 13             | 33             | 68             | 96             | 92             | 103            | 101            | 67             | 56              | NE        |
| 24-Apr-07  | 53                     | 86           | 128          | 117          | 130          | 111          | 107          | 109          | 113          | 115          | 204           | 203            | 201            | 210            | 208            | 212            | 264            | 257            | 240            | 223            | 227            | 241            | 245            | 253            | 213             | SSW       |
| 25-Apr-07  | 239                    | 235          | 255          | 238          | 239          | 240          | 237          | 232          | 231          | 225          | 30            | 74             | 163            | 275            | 264            | 267            | 325            | 332            | 340            | 296            | 274            | 295            | 118            | 231            | 253             | WSW       |
| 26-Apr-07  | 227                    | 233          | 229          | 229          | 250          | 261          | 259          | 294          | 281          | 288          | 301           | 304            | 294            | 295            | 279            | 275            | 265            | 271            | 237            | 241            | 251            | 262            | 256            | 254            | 263             | W         |
| 27-Apr-07  | 259                    | 251          | 250          | 271          | 275          | 271          | 237          | 245          | 275          | 276          | 258           | 236            | 231            | 241            | 256            | 252            | 250            | 258            | 264            | 260            | 235            | 258            | 242            | 251            | 254             | WSW       |
| 28-Apr-07  | 232                    | 211          | 223          | 213          | 217          | 227          | 230          | 226          | 228          | 249          | 262           | 282            | 305            | 306            | 325            | 350            | 358            | 7              | 19             | 20             | 21             | 39             | 32             | 45             | 269             | W         |
| 29-Apr-07  | 69                     | 77           | 90           | 85           | 74           | 93           | 110          | 111          | 114          | 123          | 173           | 170            | 164            | 174            | 184            | 182            | 193            | 213            | 262            | 282            | 308            | 310            | 317            | 316            | 169             | S         |
| 30-Apr-07  | 315                    | 314          | 300          | 292          | 284          | 285          | 299          | 300          | 312          | 315          | 298           | 203            | 57             | 128            | 207            | 158            | 120            | 71             | 68             | 56             | 77             | 110            | 112            | 108            | 335             | NNW       |
| Hourly Avg | 248                    | 246          | 256          | 257          | 262          | 269          | 267          | 281          | 270          | 268          | 261           | 225            | 224            | 235            | 242            | 249            | 264            | 268            | 276            | 262            | 206            | 207            | 157            | 225            |                 |           |





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

Station: Crescent Heights  
Station Owner: PAS

## HOURLY AVERAGE TABLE

### Wind Direction (WD)

Monitoring Dates: April 1, 2007 to May 1, 2007

### Summary

|  |
|--|
|  |
|  |

Determined by the Yamartino 15-min interval calculation

|                   |       |          |                         |         |     |     |     |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|
| Calm Time:        | 0 hrs | 0% calms | Operational Time:       | 719 hrs |     |     |     |
| Calibration Time: | 0 hrs |          | AMD Operational Uptime: | 99.9%   |     |     |     |
| Percentile        | 99    | 95       | 75                      | 50      | 25  | 5   | 1   |
|                   | 54.4  | 40.8     | 15.9                    | 10.4    | 7.0 | 5.0 | 3.9 |

### 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           |

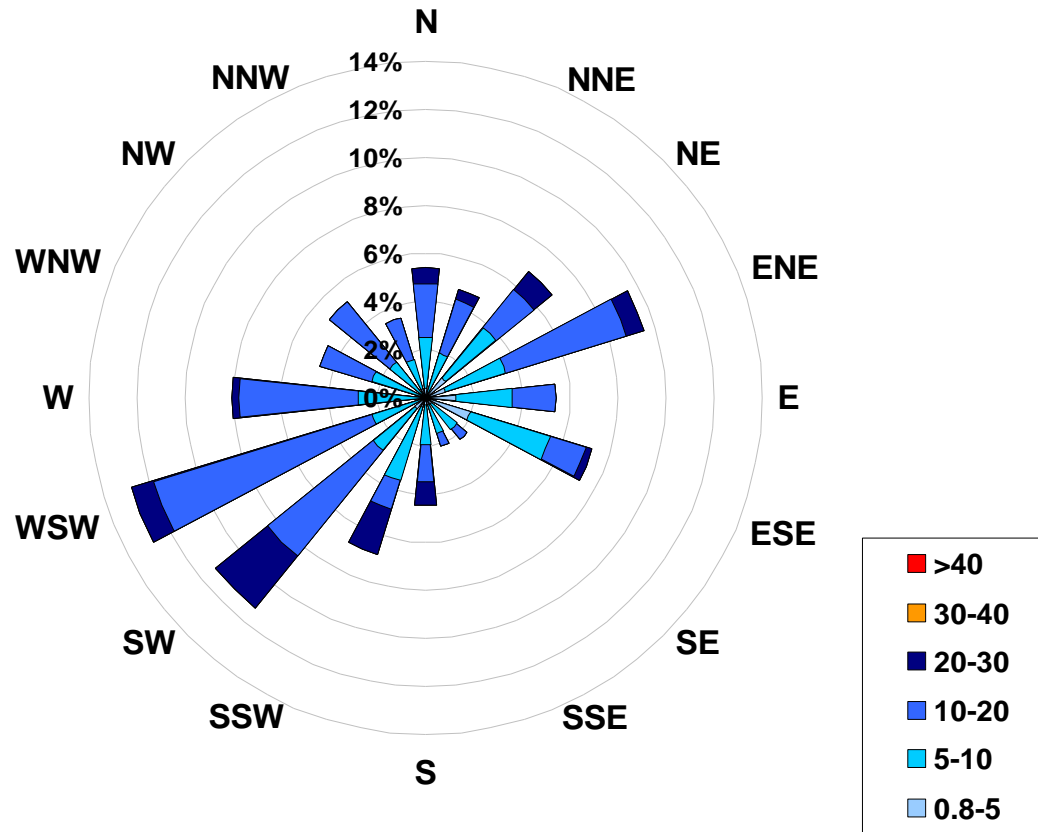
### Day Mountain Standard Time

| 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 |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| 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-Apr-07   | 6    | 5    | 4    | 8    | 10   | 7    | 6    | 6    | 7    | 7     | 14    | 18    | 22    | 11    | 12    | 19    | 12    | 14    | 7     | 7     | 9     | 6     | 7     | 6     | 6     | 21.6          |
| 2-Apr-07   | 7    | 5    | 4    | 4    | 4    | 4    | 3    | 3    | 4    | 5     | 12    | 6     | 6     | 7     | 7     | 7     | 5     | 6     | 6     | 6     | 5     | 4     | 6     | 6     | 6     | 12.5          |
| 3-Apr-07   | 7    | 6    | 6    | 4    | 5    | 5    | 6    | 8    | 6    | 8     | 10    | 14    | 10    | 12    | 12    | 19    | 14    | 16    | 11    | 17    | 12    | 11    | 19    | 32    | 31.7  |               |
| 4-Apr-07   | 35   | 14   | 11   | 34   | 50   | 11   | 9    | 9    | 10   | 20    | 20    | 18    | 12    | 11    | 9     | 10    | 8     | 7     | 6     | 5     | 6     | 5     | 7     | 5     | 5     | 50.5          |
| 5-Apr-07   | 6    | 7    | 7    | 8    | 9    | 8    | 11   | 9    | 8    | 13    | 10    | 18    | 20    | 18    | 9     | 7     | 5     | 6     | 7     | 6     | 6     | 6     | 5     | 6     | 6     | 19.9          |
| 6-Apr-07   | 12   | 8    | 6    | 9    | 16   | 11   | 6    | 26   | 12   | 16    | 17    | 25    | 18    | 13    | 13    | 15    | 15    | 12    | 5     | 6     | 6     | 5     | 15    | 8     | 7     | 25.6          |
| 7-Apr-07   | 7    | 8    | 6    | 6    | 7    | 8    | 13   | 12   | 16   | 48    | 21    | 29    | 39    | 29    | 38    | 25    | 24    | 13    | 26    | 44    | 32    | 16    | 11    | 24    | 47.8  |               |
| 8-Apr-07   | 15   | 27   | 18   | 18   | 36   | 26   | 11   | 52   | 55   | 36    | 34    | 47    | 36    | 32    | 25    | 19    | 16    | 11    | 12    | 7     | 8     | 9     | 16    | 13    | 55.4  |               |
| 9-Apr-07   | 8    | 13   | 11   | 13   | 13   | 17   | 14   | 24   | 46   | 37    | 41    | 11    | 17    | 14    | 23    | 12    | 11    | 28    | 8     | 6     | 5     | 10    | 8     | 7     | 45.9  |               |
| 10-Apr-07  | 7    | 8    | 7    | 6    | 5    | 7    | 11   | 4    | 5    | 7     | 5     | 7     | 7     | 8     | 7     | 6     | 9     | 7     | 8     | 7     | 10    | 6     | 5     | 5     | 5     | 11.5          |
| 11-Apr-07  | 5    | 9    | 5    | 9    | 5    | 6    | 10   | 14   | 28   | 50    | 55    | 57    | 50    | 24    | 15    | 16    | 16    | 10    | 10    | 7     | 6     | 5     | 7     | 22    | 56.6  |               |
| 12-Apr-07  | 27   | 21   | 52   | 12   | 45   | 9    | 7    | 10   | 10   | 7     | 8     | 12    | 15    | 16    | 18    | 19    | 25    | 31    | 15    | 11    | 18    | 13    | 8     | 16    | 51.7  |               |
| 13-Apr-07  | 7    | 6    | 18   | 16   | 7    | 9    | 5    | 4    | 6    | 13    | 11    | 12    | 14    | 12    | 11    | 13    | 11    | 8     | 5     | 5     | 9     | 36    | 21    | 5     | 36.4  |               |
| 14-Apr-07  | 6    | 9    | 13   | 9    | 6    | 8    | 9    | 9    | 11   | 8     | 10    | 10    | 11    | 14    | 13    | 12    | 14    | 10    | 7     | 16    | 12    | 26    | P     | 9     | 25.9  |               |
| 15-Apr-07  | 16   | 17   | 13   | 4    | 8    | 10   | 10   | 10   | 8    | 9     | 14    | 21    | 47    | 34    | 19    | 26    | 17    | 15    | 13    | 14    | 18    | 18    | 26    | 41    | 47.2  |               |
| 16-Apr-07  | 13   | 7    | 8    | 10   | 7    | 7    | 8    | 25   | 14   | 13    | 13    | 11    | 13    | 11    | 12    | 12    | 9     | 7     | 6     | 6     | 7     | 8     | 6     | 5     | 25.4  |               |
| 17-Apr-07  | 6    | 8    | 7    | 12   | 8    | 14   | 8    | 11   | 11   | 10    | 14    | 54    | 21    | 11    | 11    | 12    | 23    | 30    | 9     | 4     | 5     | 11    | 11    | 9     | 54.2  |               |
| 18-Apr-07  | 42   | 36   | 37   | 45   | 58   | 29   | 22   | 15   | 24   | 10    | 4     | 4     | 5     | 13    | 10    | 13    | 7     | 7     | 10    | 9     | 14    | 29    | 11    | 8     | 58.2  |               |
| 19-Apr-07  | 9    | 10   | 9    | 8    | 8    | 9    | 10   | 8    | 9    | 8     | 12    | 10    | 11    | 12    | 10    | 9     | 10    | 11    | 11    | 11    | 11    | 11    | 11    | 10    | 10    | 12.4          |
| 20-Apr-07  | 10   | 10   | 8    | 10   | 9    | 9    | 7    | 6    | 6    | 5     | 7     | 8     | 6     | 6     | 7     | 7     | 8     | 7     | 6     | 7     | 5     | 7     | 8     | 9     | 9     | 10.4          |
| 21-Apr-07  | 8    | 7    | 9    | 8    | 10   | 8    | 7    | 8    | 8    | 7     | 7     | 8     | 9     | 10    | 15    | 16    | 13    | 13    | 7     | 2     | 17    | 19    | 20    | 14    | 19.6  |               |
| 22-Apr-07  | 45   | 43   | 53   | 26   | 32   | 14   | 19   | 15   | 11   | 19    | 23    | 17    | 24    | 26    | 27    | 30    | 24    | 13    | 7     | 4     | 3     | 6     | 4     | 6     | 52.5  |               |
| 23-Apr-07  | 8    | 6    | 5    | 6    | 12   | 20   | 13   | 17   | 17   | 20    | 46    | 45    | 49    | 30    | 53    | 6     | 6     | 7     | 9     | 10    | 12    | 12    | 8     | 21    | 53.3  |               |
| 24-Apr-07  | 8    | 19   | 10   | 11   | 18   | 15   | 28   | 16   | 14   | 13    | 23    | 12    | 13    | 11    | 10    | 13    | 9     | 6     | 7     | 6     | 5     | 6     | 11    | 16    | 28.0  |               |
| 25-Apr-07  | 8    | 6    | 8    | 12   | 33   | 6    | 14   | 11   | 9    | 48    | 42    | 41    | 59    | 33    | 34    | 21    | 19    | 13    | 11    | 10    | 7     | 22    | 22    | 14    | 58.8  |               |
| 26-Apr-07  | 7    | 17   | 6    | 6    | 16   | 7    | 12   | 27   | 14   | 22    | 12    | 17    | 16    | 14    | 16    | 27    | 22    | 24    | 8     | 6     | 7     | 5     | 6     | 5     | 27.4  |               |
| 27-Apr-07  | 5    | 7    | 8    | 5    | 5    | 5    | 9    | 11   | 8    | 11    | 23    | 15    | 15    | 16    | 14    | 13    | 10    | 7     | 7     | 7     | 9     | 7     | 15    | 23    | 23.4  |               |
| 28-Apr-07  | 8    | 5    | 8    | 11   | 4    | 4    | 4    | 6    | 6    | 8     | 7     | 17    | 14    | 19    | 13    | 11    | 8     | 8     | 7     | 11    | 16    | 17    | 17    | 11    | 18.8  |               |
| 29-Apr-07  | 10   | 14   | 13   | 7    | 7    | 6    | 8    | 7    | 12   | 14    | 9     | 9     | 12    | 9     | 9     | 10    | 11    | 5     | 6     | 7     | 7     | 7     | 5     | 6     | 14.4  |               |
| 30-Apr-07  | 8    | 8    | 15   | 15   | 13   | 12   | 11   | 11   | 17   | 19    | 38    | 54    | 36    | 54    | 68    | 49    | 68    | 45    | 18    | 7     | 8     | 11    | 10    | 8     | 68.5  |               |

|            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| Hourly Max | 45 | 43 | 53 | 45 | 58 | 29 | 28 | 52 | 55 | 50 | 55 | 57 | 59 | 54 | 68 | 49 | 68 | 45 | 26 | 44 | 32 | 36 | 26 | 41 |  |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|



**1-hr Average Wind Rose (in km/hr) Located at the Crescent Heights Site  
for April 2006**



**Calms: 0%**

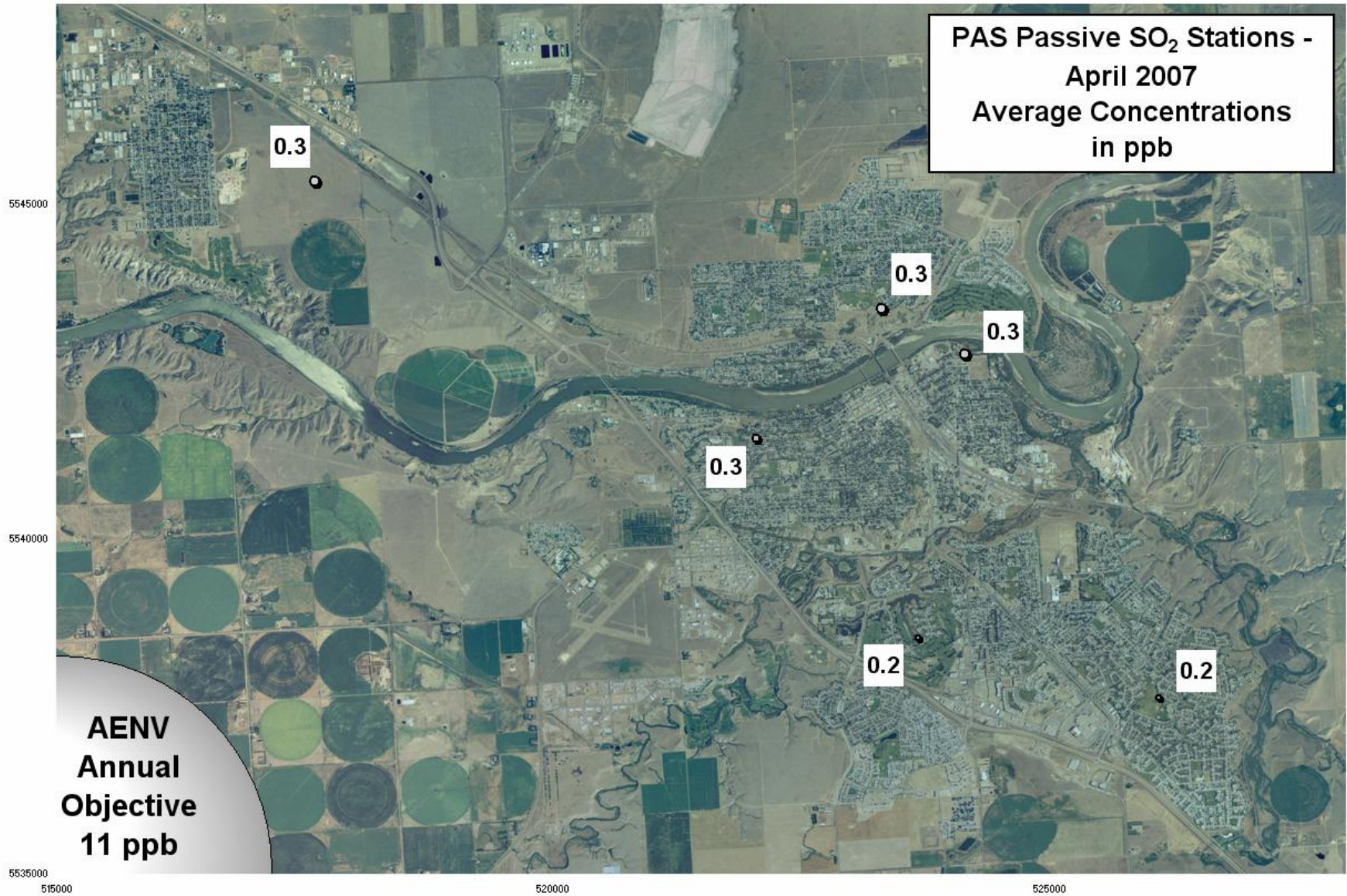
| Frequency Distribution of Wind in km/hr |    |    |                 |
|---|----|----|-----------------|
| Range                                   |    |    | Frequency (hrs) |
| 0.8                                     | <  | 5  | 57              |
| 5                                       | to | 10 | 255             |
| 10                                      | to | 20 | 335             |
| 20                                      | to | 30 | 72              |
| 30                                      | to | 40 | 0               |
|   | >  | 40 | 0               |
| Total Non-Zero Values                   |    |    | 719             |



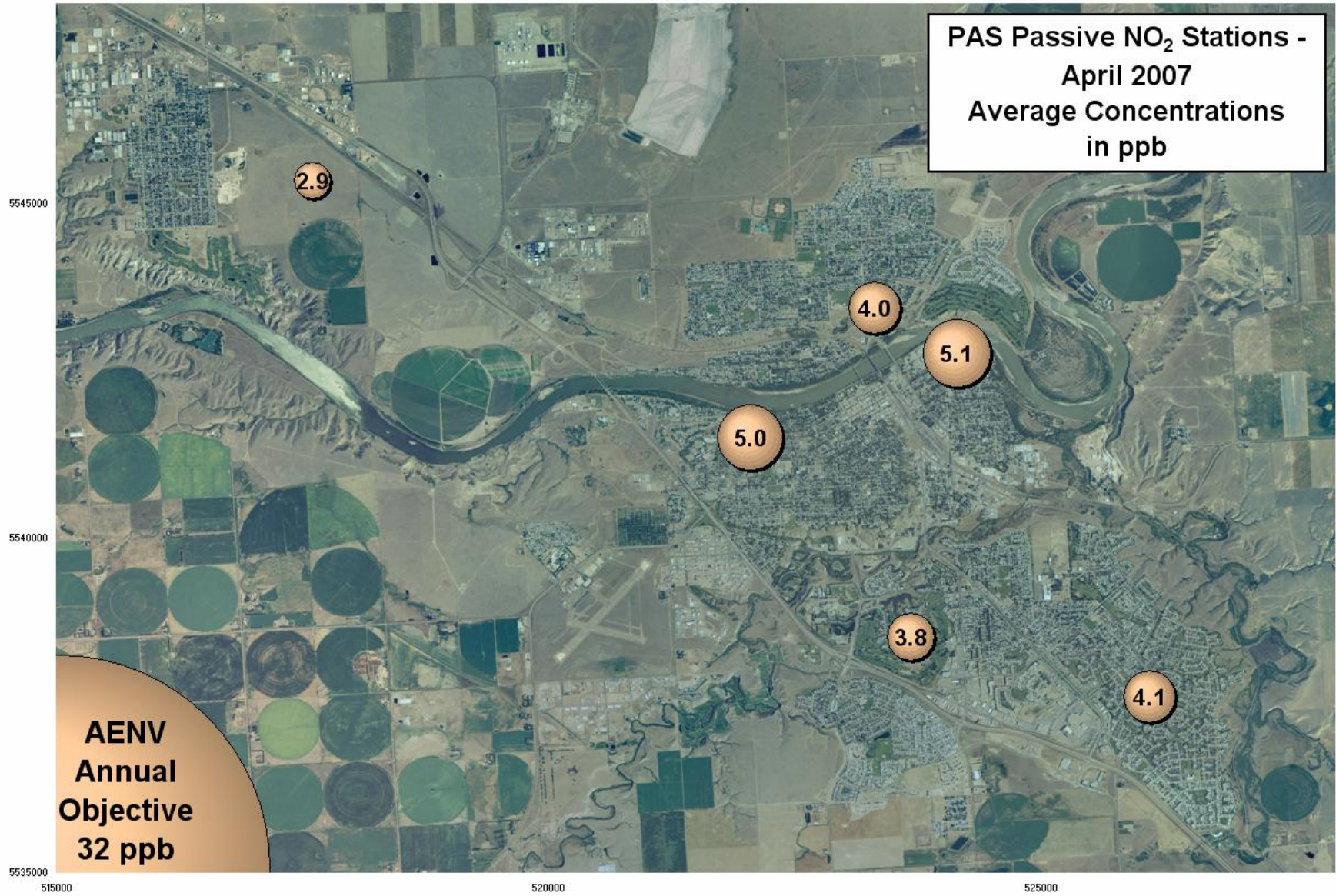
## Passive Monitoring – April 2007

| Station Number    | Station Name          | SO <sub>2</sub><br>ppb | O <sub>3</sub><br>ppb | NO <sub>2</sub><br>ppb | Easting | Northing | Elevation |
|-------------------|-----------------------|------------------------|-----------------------|------------------------|---------|----------|-----------|
| <b>Duplicates</b> |                       |                        |                       |                        |         |          |           |
| 1a                | Hospital              | 0.3                    | 31.8                  | 5.1                    |         |          |           |
| 1b                | Hospital              | 0.2                    | 35.2                  | 4.9                    |         |          |           |
| 1                 | Hospital              | 0.3                    | 33.5                  | 5.0                    | 521648  | 5542721  | 698       |
| 2                 | Ball Park             | 0.3                    | 30.3                  | 5.1                    | 524019  | 5543686  | 660       |
| 3                 | Monitoring Station    | 0.3                    | 38.9                  | 4.0                    | 522812  | 5544133  | 714       |
| 4                 | Redcliff              | 0.3                    | 37.1                  | 2.9                    | 517448  | 5545608  | 725       |
| 5                 | Southridge            | 0.2                    | N/A                   | 3.8                    | 523172  | 5539016  | 721       |
| 6                 | Christian School Park | 0.2                    | 36.4                  | 4.1                    | 526577  | 5538133  | 709       |

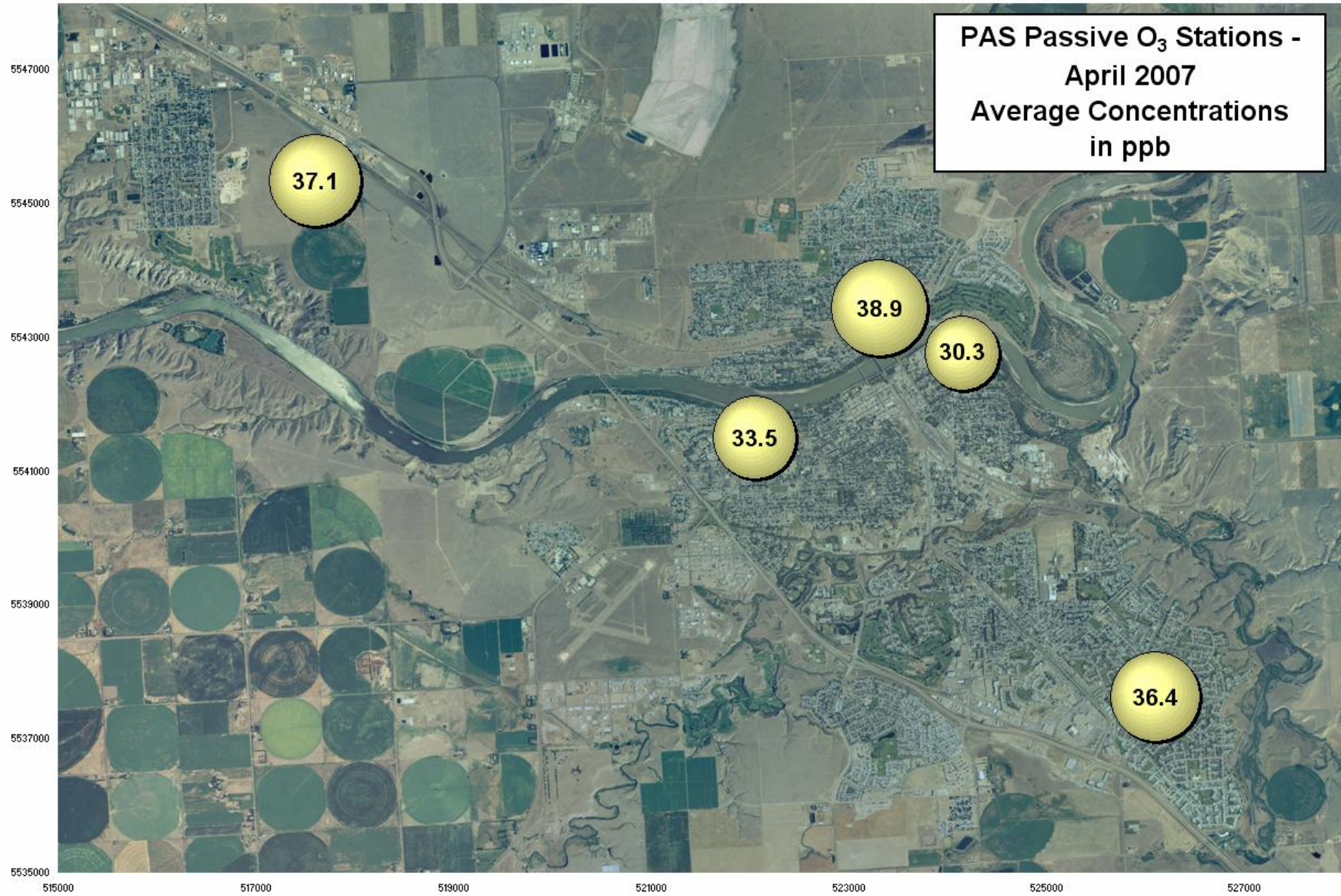
|                           |            |             |            |          |                              |  |  |
|---------------------------|------------|-------------|------------|----------|------------------------------|--|--|
| Stats:                    |            |             |            |          |                              |  |  |
| <b>Mean</b>               | <b>0.3</b> | <b>35.2</b> | <b>4.2</b> |          |                              |  |  |
| <b>Standard Deviation</b> | <b>0.0</b> | <b>3.4</b>  | <b>0.8</b> |          |                              |  |  |
| <b>Minimum</b>            | <b>0.2</b> |             |            | <b>6</b> | <b>Christian School Park</b> |  |  |
| <b>Maximum</b>            | <b>0.3</b> |             |            | <b>3</b> | <b>Monitoring Station</b>    |  |  |
| <b>Minimum</b>            |            | <b>30.3</b> |            | <b>2</b> | <b>Ball Park</b>             |  |  |
| <b>Maximum</b>            |            | <b>38.9</b> |            | <b>3</b> | <b>Monitoring Station</b>    |  |  |
| <b>Minimum</b>            |            |             | <b>2.9</b> | <b>4</b> | <b>Redcliff</b>              |  |  |
| <b>Maximum</b>            |            |             | <b>5.1</b> | <b>2</b> | <b>Ball Park</b>             |  |  |











# **Palliser Airshed Society**

## **April 2007 - Calibration Reports**

**Crescent Heights Station: O<sub>3</sub>, NO<sub>x</sub>, NO, NO<sub>2</sub>, THC, CO and PM<sub>2.5</sub>**

## Calibration Report

Parameter 03  
Air Monitoring Network Palliser Airshed



### Station Information

|                      |   |   |                                  |
|----------------------|---|---|----------------------------------|
| Calibration Date     | April 26, 2007                              | Previous Calibration                            | March 29, 2007                   |
| Station Number       | 101   | Station Location                                | Crescent Heights                 |
| Reason:              | <input checked="" type="checkbox"/> Routine | <input checked="" type="checkbox"/> Calibration | <input type="checkbox"/> Removal |
|                      |   |   | <input type="checkbox"/> Other:  |
| Start Time (MST)     | 7:30  | End Time (MST)                                  | 10:24                            |
| Barometric Pressure  | 27.3 inches Hg                              | Station Temperature                             | 22.0 Deg C                       |
| Calibrator           | Envionics 6100                              | Serial Number                                   | 3474                             |
| Cal Gas Concentrator | 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>                     |
| Calculated slope     | 1.046982                                    | Calculated slope                                | 1.144083                         |
| Calculated intercept | -0.137321                                   | Calculated intercept                            | 0.679030                         |
| Analyzer make        | API Model 400E                              | Analyzer serial #                               | 331                              |

|                     | before  |           | after   |           |
|---------------------|---------|-----------|---------|-----------|
| Concentration range | 0 - 500 | ppb       | 0 - 500 | ppb       |
| Offset              | -9.7    | ppb       | -9.7    | ppb       |
| Slope               | 0.946   |           | 0.946   |           |
| Lamp measure        | 4833.3  | mV        | 4783.8  | mV        |
| Lamp Reference      | 4834.2  | mV        | 4784.8  | mV        |
| Pressure            | 26.5    | inches Hg | 25.9    | inches Hg |
| Sample Flow         | 680     | ccm       | 670     | ccm       |
| Sample temp         | 39.8    | Deg C     | 39.8    | 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) |
|---------------------------------|-----------------|-------------------------------------|------------------------------------|---------------------------|
| 4988                            | 0.0             | 0.0                                 | -3.7                               | N/A                       |
| 4988                            | 300.0           | 297.9                               | 256.6                              | 1.1611                    |
| 4988                            | 200.0           | 200.5                               | 177.2                              | 1.1316                    |
| 4988                            | 100.0           | 105.6                               | 95.5                               | 1.1054                    |
| 4988                            | 0.0             | 0.0                                 | -3.7                               | 0.0000                    |
| 4988                            | 300.0           | 297.9                               | 256.6                              | 1.1611                    |
| Average Correction Factor       |                 |                                     |                                    | 1.1327                    |

Calculated value of As Found Response: 272.4 ppm      Percent Change of As Found: -8.6%

|           | before calibration |     | after calibration |     |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -2.9               | ppb | -3.2              | ppb |
| Auto span | 367.1              | ppb | 401.1             | ppb |

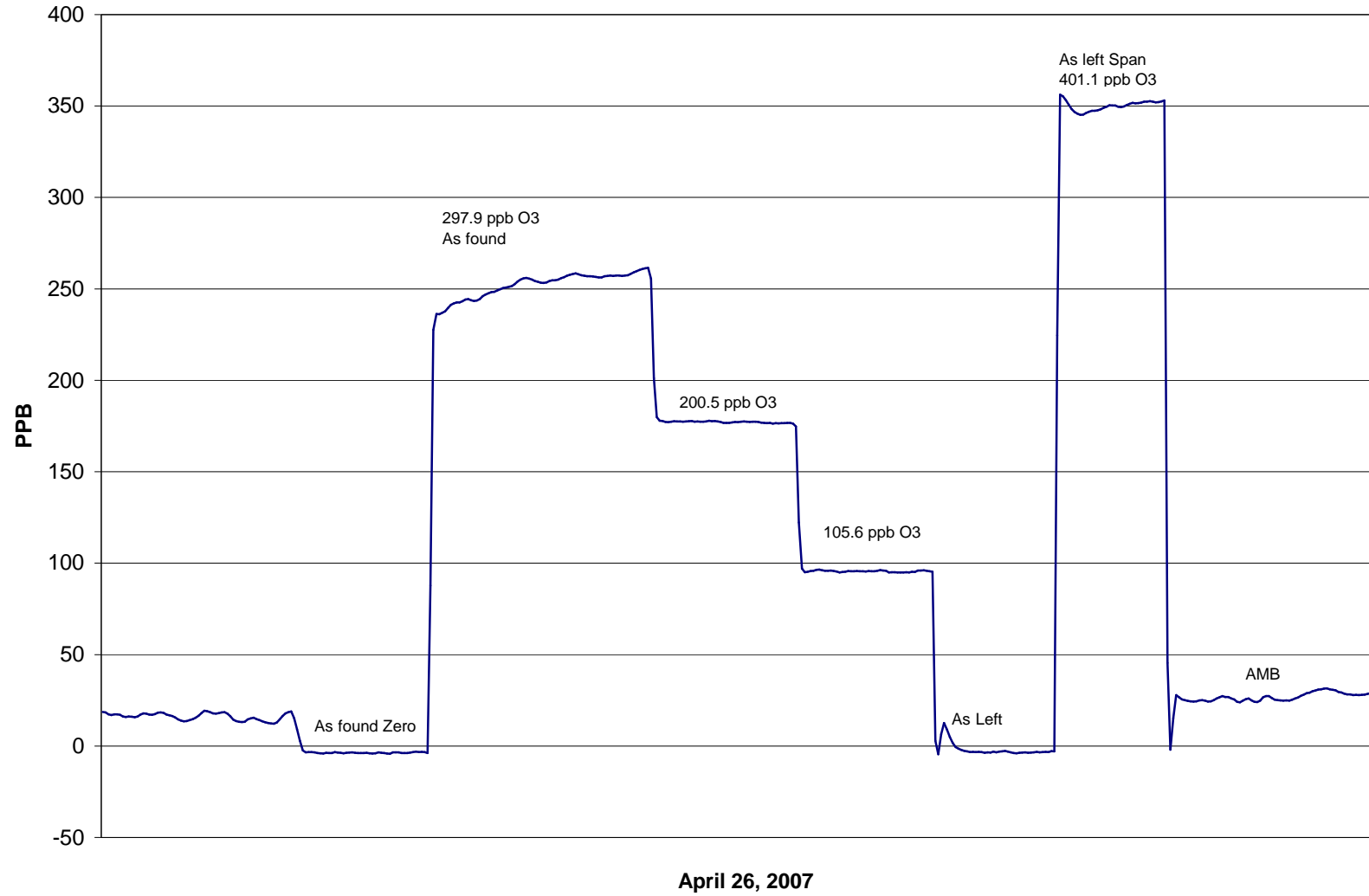
Notes: What we thought was a regulator problem for NOX may have in fact been a problem with the O3 generator in the calibrator. Due to this, no adjustments were made this month.

Calibration Performed By: Travis Mehrer





O3 Calibration - April 26



# Calibration Report

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



## Station Information

Calibration Date April 25, 2007 Previous Calibration March 29, 2007  
 Station Number 101 Station Location Crescent Heights

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

Start Time (MST) 13:30 End Time (MST) 19:22  
 Barometric Pressure 27.3 inches Hg Station Temperature 22.0 Deg C  
 Calibrator EnviroNics 6100 Serial Number 3474  
 NO Cal Gas Conc 49.9 ppm Cal Gas Expiry Date 5-Dec-07  
 NOx Cal Gas Conc 49.9 ppm Cal Gas Serial # LL-50114

## DACS Information

DACS make FOCUS AP1000 DACS serial No. 45270

| Parameter     |             | NO2       | NOx       | NO        |
|---------------|-------------|-----------|-----------|-----------|
| Before        | Data Slope  | 1.003130  | 1.003459  | 1.003039  |
|               | Data Offset | 0.055699  | -1.671455 | -0.077559 |
| After         | Data Slope  | 1.005495  | 1.006425  | 1.007662  |
|               | Data Offset | 1.578695  | 3.038605  | 3.338809  |
| Channel #     |             | 8         | 6         | 7         |
| Voltage Range |             | 0 - 1 VDC | 0 - 1 VDC | 0 - 1 VDC |

## Analyzer Information

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

| Test Point          | before  |           | after   |           |
|---------------------|---------|-----------|---------|-----------|
| Concentration range | 0 - 500 | ppb       | 0 - 500 | ppb       |
| NO background       | 0.3     | mV        | 0.3     | mV        |
| NOx background      | 1.7     | mV        | 1.7     | mV        |
| NO coefficient      | 1.938   |           | 2.045   |           |
| NOx coefficient     | 1.941   |           | 2.093   |           |
| Chamber Temp        | 50.0    | Deg C     | 50.0    | Deg C     |
| Cooler Temp         | 7.1     | Deg C     | 7.1     | Deg C     |
| Azero               | 41.3    |           | 41.5    |           |
| Perm Temp           | 40.0    | Deg C     | 40.0    | Deg C     |
| Pressure            | 4.1     | inches Hg | 4.1     | inches Hg |
| Sample Flow         | 464.0   | ccm       | 455.0   | ccm       |

Notes: Span was adjusted. Noticed several strange things happening. First 3 points dropped over time.  
GPT also behaved strange. After talking to Kelly, we decided this was caused by the regulator  
which has stainless steel body, but chromed/brass pieces, or the O3 generator on the calibrator.

# Calibration Report

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



## Station Information

Calibration Date: **April 25, 2007**

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                      | 4988                     | 0.00                       | 0.0                                   | 0.0                      | 0.0                                   | -2.8                                 | -2.7                    | -2.1                                 | N/A                               | N/A                  |
| 1                         | 4988                     | 39.84                      | 395.4                                 | 395.4                    | 0.0                                   | 389.8                                | 389.4                   | -1.1                                 | 1.0143                            | 1.0153               |
| 2                         | 4988                     | 19.91                      | 198.4                                 | 198.4                    | 0.0                                   | 194.4                                | 193.1                   | -0.7                                 | 1.0205                            | 1.0276               |
| 3                         | 4988                     | 9.94                       | 99.2                                  | 99.2                     | 0.0                                   | 95.1                                 | 94.6                    | -1.5                                 | 1.0430                            | 1.0484               |
| AFZ                       | 4988                     | 0.00                       | 0.0                                   | 0.0                      | 0.0                                   | -2.8                                 | -2.7                    | -2.1                                 | 0.0000                            | 0.0000               |
| AFS                       | 4988                     | 39.84                      | 395.4                                 | 395.4                    | 0.0                                   | 363.6                                | 372.4                   | -10.4                                | 1.0876                            | 1.0619               |
| Average Correction Factor |                          |                            |                                       |                          |                                       |                                      |                         |                                      | 1.0259                            | 1.0304               |

As Found Concentrations

NO<sub>x</sub>= 364.8

NO= 375.0

As Found Percent Change NO<sub>x</sub>= -7.8%

NO= -5.2%

## GPT Calibration Data

Dilution Flow 4988 ccm Source Gas Flow 39.84 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                             | 394.1                                 | 390.7                    | 3.5                                   | 388.6                                | 384.4                   | -2.1                                 | N/A                               | N/A                  | N/A                               | N/A                  |
| 300                           | 397.0                                 | 301.1                    | 95.9                                  | 391.5                                | 295.5                   | 94.3                                 | 1.0142                            | 1.0190               | 1.0169                            | 98.3%                |
| 200                           | 398.1                                 | 227.8                    | 170.3                                 | 392.6                                | 222.8                   | 168.3                                | 1.0142                            | 1.0226               | 1.0121                            | 98.8%                |
| 100                           | 399.2                                 | 115.0                    | 284.2                                 | 393.6                                | 110.8                   | 280.6                                | 1.0141                            | 1.0378               | 1.0127                            | 98.7%                |
| Average Correction Factor     |                                       |                          |                                       |                                      |                         |                                      | 1.0142                            | 1.0265               | 1.0139                            | 98.6%                |

## 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 | 0.2                  | 0.6             | -0.3 | ppb | 0.8                 | -0.9            | 1.3  | ppb |
| Auto span | 468.6                | 460.9           | 8.2  | ppb | 494.6               | 483.9           | 10.7 | ppb |

Calibration Performed By: Travis Mehrer

## Calibration Summary

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

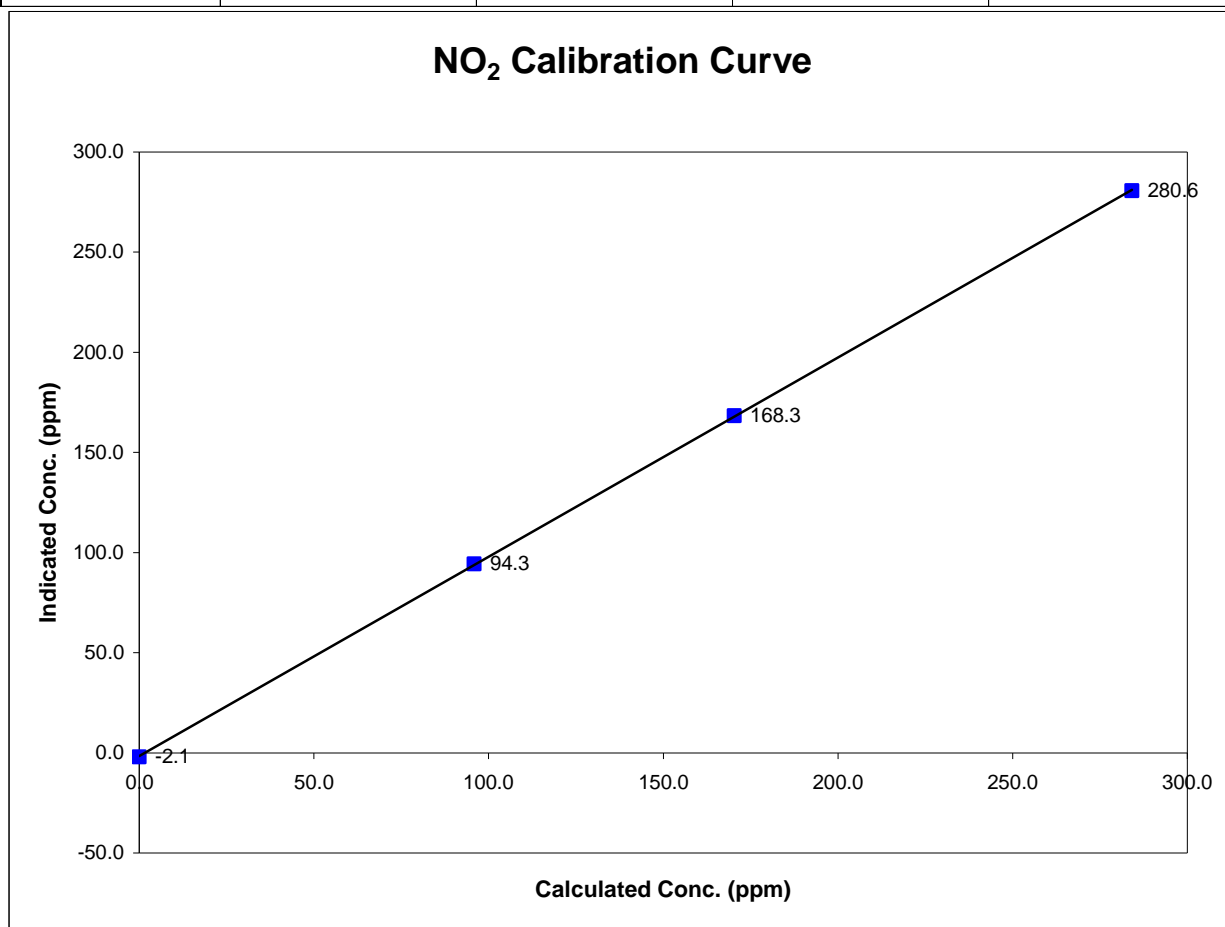


### Station Information

|                  |                |                      |                  |
|------------------|----------------|----------------------|------------------|
| Calibration Date | April 25, 2007 | Previous Calibration | March 29, 2007   |
| Station Number   | 101            | Station Location     | Crescent Heights |
| Start Time (MST) | 13:30          | End Time (MST)       | 19:22            |
| 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                        | -2.1                               | 0.0000                    |                         |          |
| 95.9                       | 94.3                               | 1.0169                    | Correlation Coefficient | 0.999978 |
| 170.3                      | 168.3                              | 1.0121                    |                         |          |
| 284.2                      | 280.6                              | 1.0127                    | Slope                   | 1.005495 |
|                            |                                    |                           | Intercept               | 1.578695 |



## Calibration Summary

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

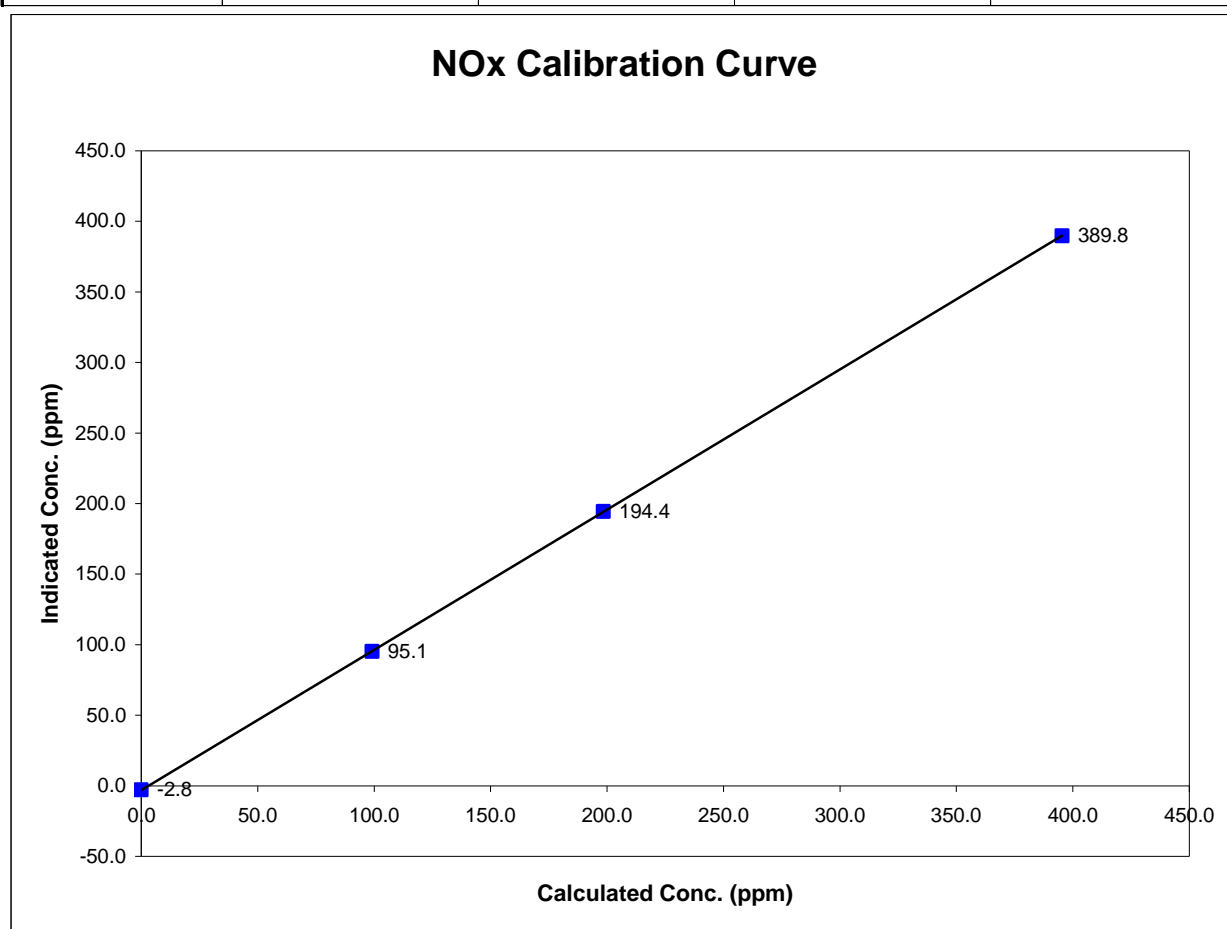


### Station Information

|                  |                |                      |                  |
|------------------|----------------|----------------------|------------------|
| Calibration Date | April 25, 2007 | Previous Calibration | March 29, 2007   |
| Station Number   | 101            | Station Location     | Crescent Heights |
| Start Time (MST) | 13:30          | End Time (MST)       | 19:22            |
| 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                        | -2.8                               | 0.0000                    | Correlation Coefficient | 0.999996 |
| 395.4                      | 389.8                              | 1.0143                    |                         |          |
| 198.4                      | 194.4                              | 1.0205                    | Slope                   | 1.006425 |
| 99.2                       | 95.1                               | 1.0430                    |                         |          |
|                            |                                    |                           | Intercept               | 3.038605 |



## Calibration Summary

Parameter NO  
 Air Monitoring Network Palliser Airshed

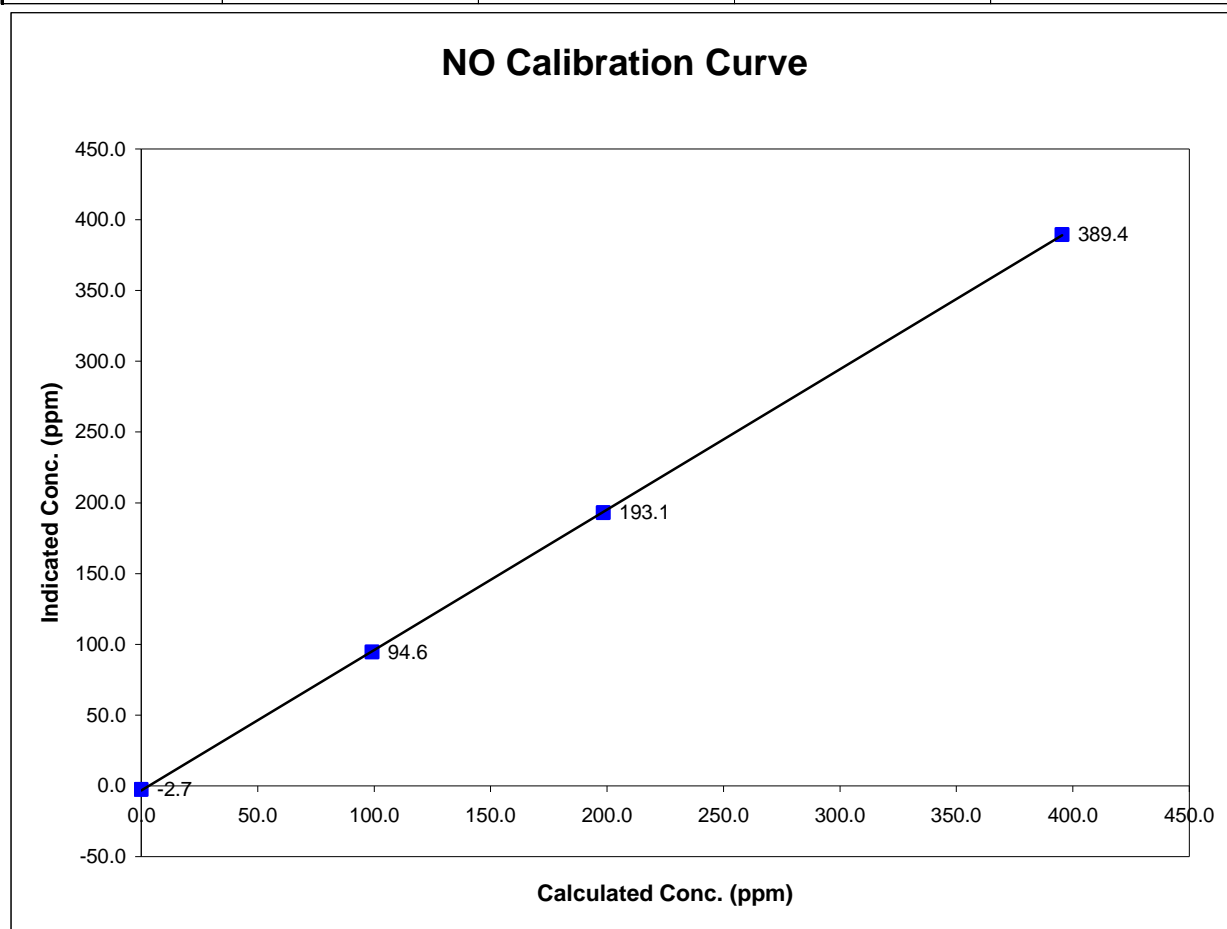


### Station Information

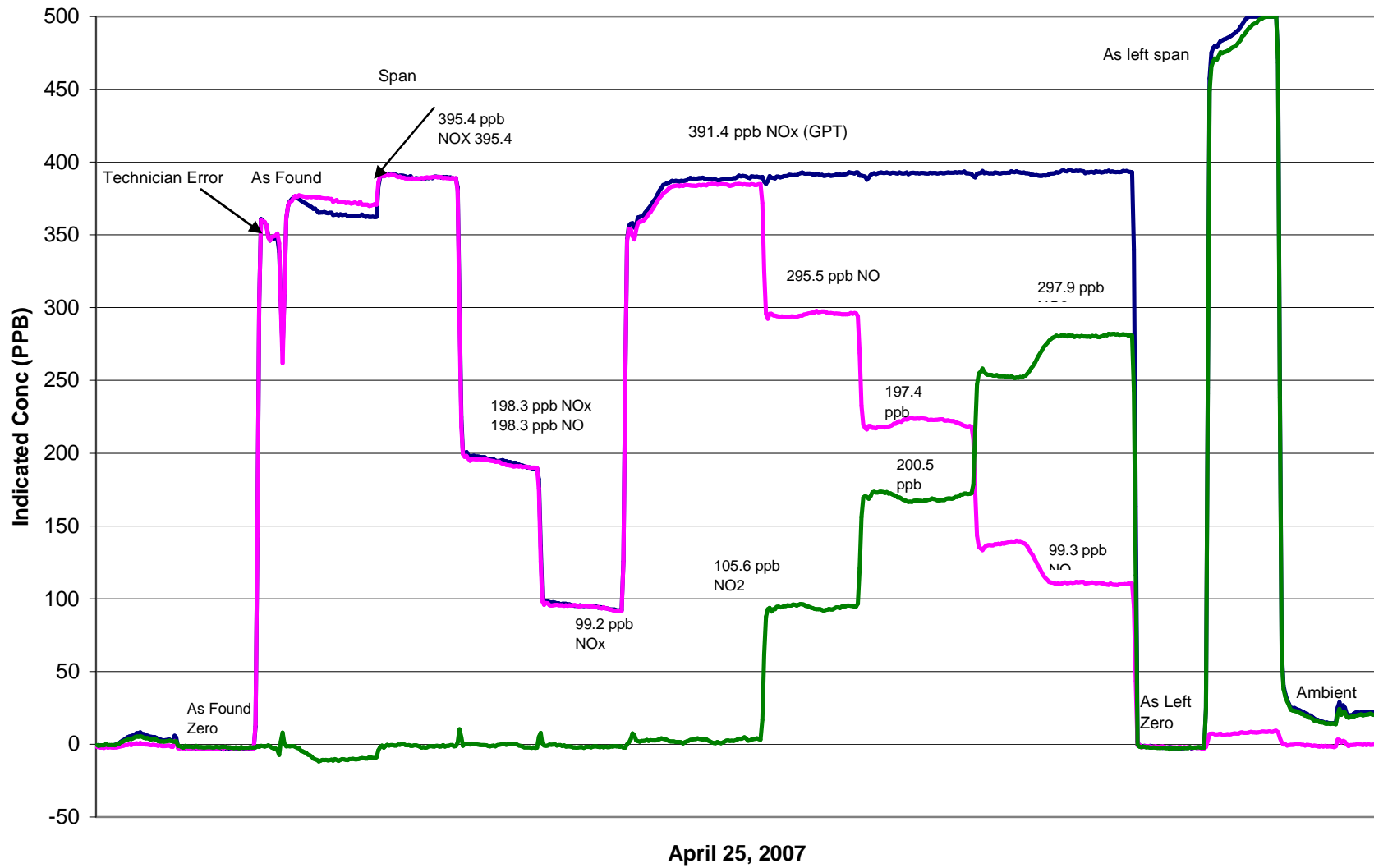
|                  |                |                      |                  |
|------------------|----------------|----------------------|------------------|
| Calibration Date | April 25, 2007 | Previous Calibration | March 29, 2007   |
| Station Number   | 101            | Station Location     | Crescent Heights |
| Start Time (MST) | 13:30          | End Time (MST)       | 19:22            |
| 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                        | -2.7                               | N/A                       | Correlation Coefficient | 0.999987 |
| 395.4                      | 389.4                              | 1.0153                    |                         |          |
| 198.4                      | 193.1                              | 1.0276                    |                         |          |
| 99.2                       | 94.6                               | 1.0484                    |                         |          |
|                            |                                    |                           | Slope                   | 1.007662 |
|                            |                                    |                           | Intercept               | 3.338809 |



## NO<sub>x</sub> - NO - NO<sub>2</sub> Calibration





# Calibration Report

Parameter THC  
 Air Monitoring Network Palliser Airshed



## Station Information

|                               |   |                                  |                                  |
|-------------------------------|---|----------------------------------|----------------------------------|
| Calibration Date              | April 26, 2007  | Previous Calibration             | March 28, 2007                   |
| Station Number                | 101   | Station Location                 | Crescent Heights                 |
| Reason:                       | <input checked="" type="checkbox"/> Routine                     | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
|                               |   |                                  | <input type="checkbox"/> Other:  |
| Start Time (MST)              | 9:23  | End Time (MST)                   | 12:07                            |
| Barometric Pressure           | 27.3 inches Hg  | Station Temperature              | 22.0 Deg C                       |
| Calibrator                    | Envionics 6100  | Serial Number                    | 3747                             |
| Cal Gas Concentration         | 700 ppm CH <sub>4</sub> / 301 ppm C <sub>3</sub> H <sub>8</sub> | Cal Gas Expiry Date              | 8/28/2005                        |
| Cal Gas CH <sub>4</sub> equiv | 1527.75 ppm   | Cal Gas Cylinder #               | ALM030358                        |
| DACS make                     | Focus AP1000  | DACS serial No.                  | 45270                            |
| DACS voltage range            | 0 - 10 volt   | DACS channel #                   | 9                                |
|                               | <b>Before</b>   |                                  | <b>After</b>                     |
| Calculated slope              | 0.994388  | Calculated slope                 | 0.989355                         |
| Calculated intercept          | -0.154165   | Calculated intercept             | 0.102238                         |
| Analyzer make                 | TEI model 51C-LT  | Analyzer serial #                | 407505596                        |

|                     | before |       | after  |       |
|---------------------|--------|-------|--------|-------|
| Concentration range | 0 - 50 | ppm   | 0 - 50 | ppm   |
| THC sample pressure | 5.75   | PSI   | 5.75   | PSI   |
| THC span counts     | 12605  | raw   | 12605  | raw   |
| THC zero counts     | 1370   | raw   | 1370   | raw   |
| V Bias              | -326   | Volts | -326   | Volts |

## 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4988                            | 0.00                          | 0.00                                | -0.08                              | N/A                       |
| 4988                            | 79.73                         | 24.04                               | 24.23                              | 0.9918                    |
| 4988                            | 39.84                         | 12.10                               | 12.04                              | 1.0055                    |
| 4988                            | 9.94                          | 3.04                                | 2.99                               | 1.0141                    |
| zero                            | 0.00                          | 0.00                                | -0.08                              | As Found Zero             |
| 4988                            | 79.77                         | 24.05                               | 24.23                              | As Found Span             |
| Average Correction Factor       |                               |                                     |                                    | 1.0038                    |

Calculated value of As Found Response: 24.025 ppm      Percent Change of As Found: 0.1%

|           | before calibration |     | after calibration |     |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.07               | ppm | -0.01             | ppm |
| Auto span | 20.82              | ppm | 20.92             | ppm |

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Calibration Performed By: Travis Mehrer

## Calibration Summary

Parameter THC  
 Air Monitoring Network Palliser Airshed

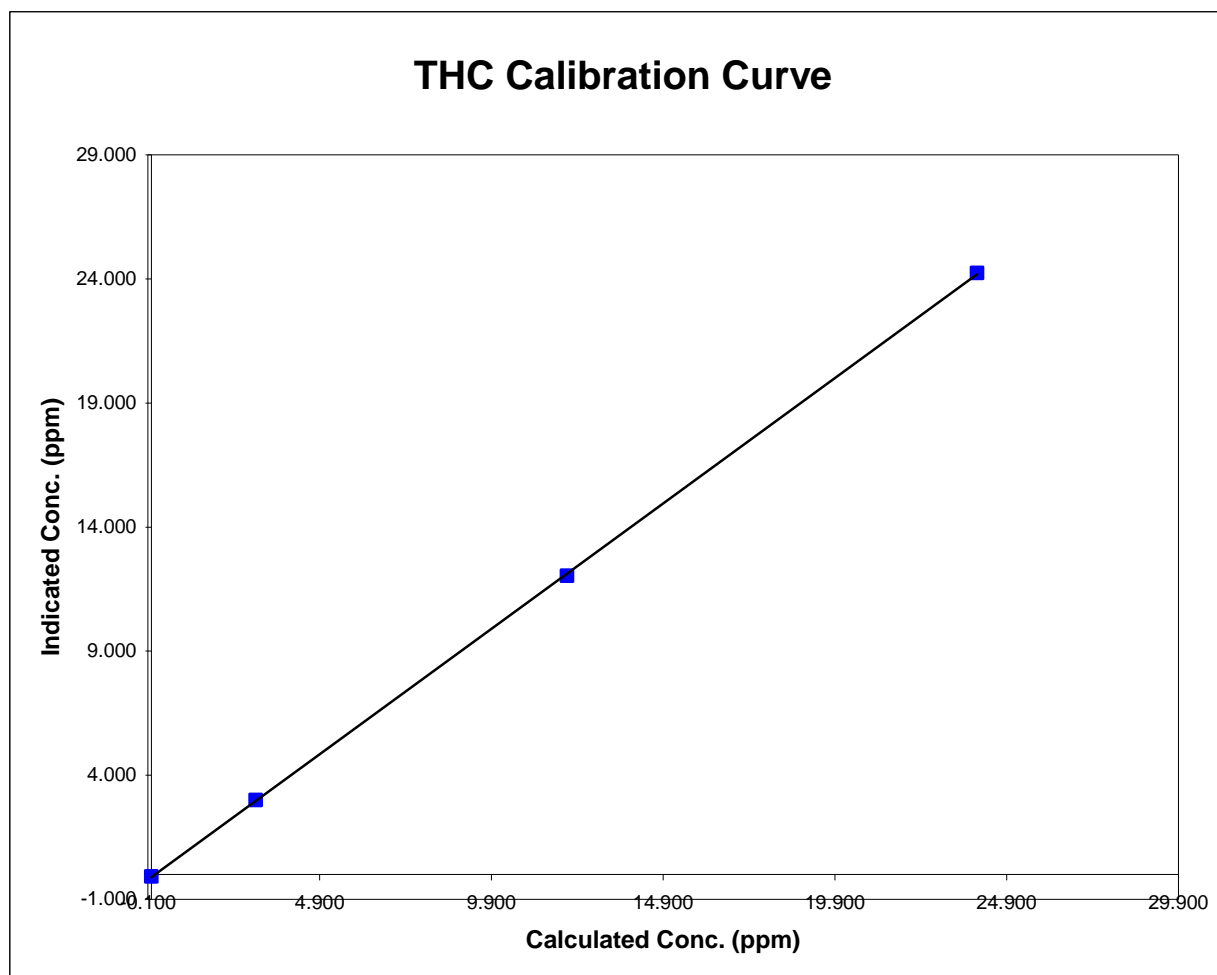


### Station Information

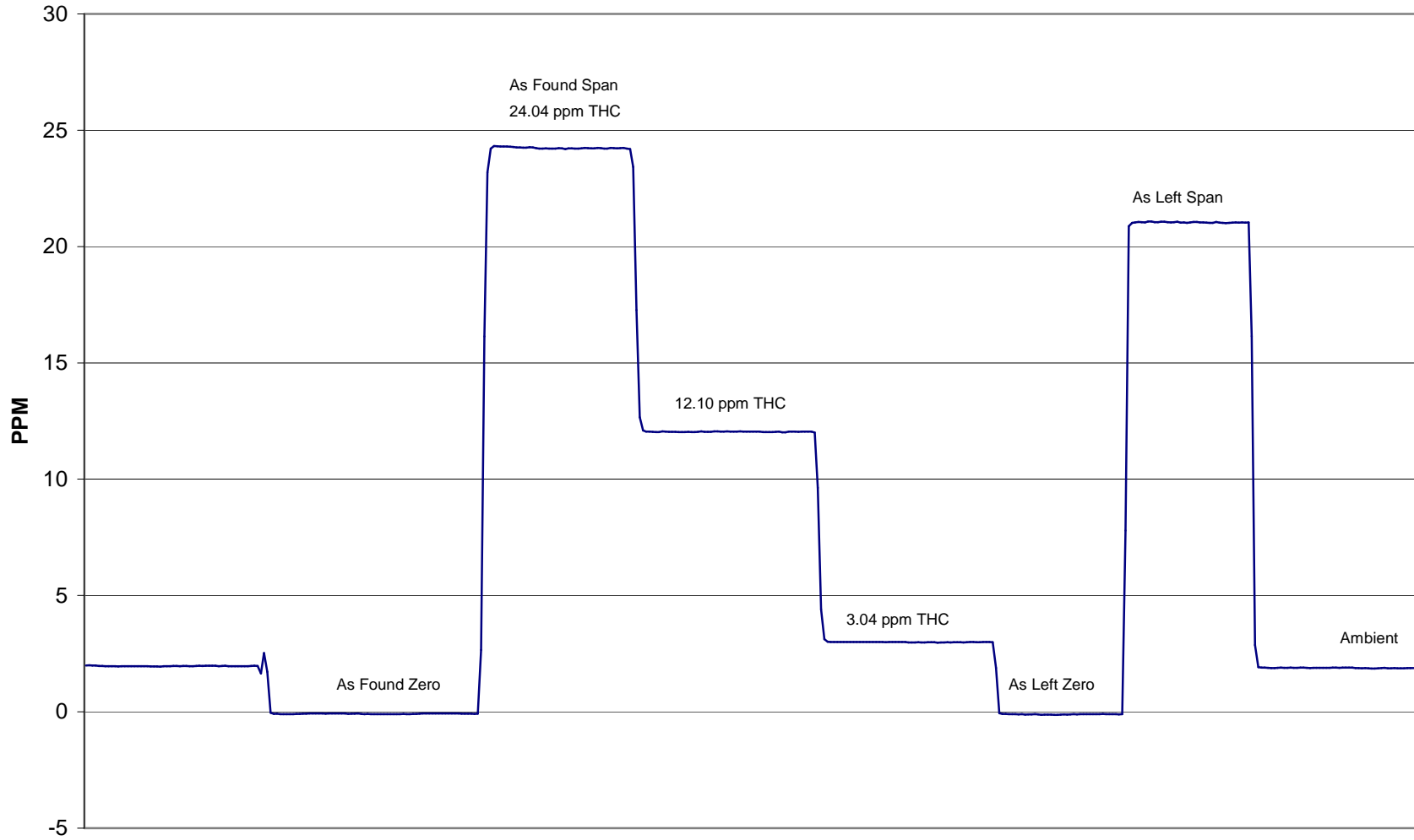
|                     |                  |                      |                  |
|---------------------|------------------|----------------------|------------------|
| Calibration Date    | April 26, 2007   | Previous Calibration | March 28, 2007   |
| Station Number      | 101              | Station Location     | Crescent Heights |
| Start Time (MST)    | 9:23             | End Time (MST)       | 12:07            |
| 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                               | -0.082                             | N/A                       |                         |          |
| 24.037                              | 24.234                             | 0.9918                    | Correlation Coefficient | 0.999967 |
| 12.105                              | 12.039                             | 1.0055                    |                         |          |
| 3.037                               | 2.995                              | 1.0141                    | Slope                   | 0.989355 |
|                                     |                                    |                           | Intercept               | 0.102238 |



### THC Calibration



April 26, 2007

# Calibration Report



Parameter CO  
 Air Monitoring Network Palliser

## Station Information

|                      |   |                                  |                                  |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date     | April 26, 2007                              | Previous Calibration             | March 28, 2007                   |
| 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)     | 11:20                                       | End Time (MST)                   | 10:05                            |
| Barometric Pressure  | 27.32 in Hg                                 | Station Temperature              | 22.0 Deg C                       |
| Calibrator           | Envionics 6100                              | Serial Number                    | 3474                             |
| Cal Gas Conc         | 2998 ppm                                    | Cal Gas Expiry Date              | 3/14/2008                        |
|                      |   | Cal Gas Cylinder #               | BLM002248                        |
| DACS make            | Focus AP1000                                | DACS serial No.                  | 45270                            |
| DACS voltage range   | 0 - 1 volt                                  | DACS channel #                   | 11                               |
|                      | <u>Before</u>                               |                                  | <u>After</u>                     |
| Calculated slope     | 1.002882                                    | Calculated slope                 | 0.999723                         |
| Calculated intercept | -0.043852                                   | Calculated intercept             | -0.217297                        |
| Analyzer make        | TEI Model 48C                               | Analyzer serial #                | 436609887                        |

|                     | before   |     | after    |     |
|---------------------|----------|-----|----------|-----|
| Concentration range | 0 - 50   | ppm | 0 - 50   | ppm |
| CO coefficient      | 1.080    |     | 1.080    |     |
| CO bkg setting      | 0.677    |     | 0.677    |     |
| Lamp ratio          | 1.143362 |     | 1.143362 |     |
| Lamp intensity      | 199510   | Hz  | 199510   | Hz  |
| Sample Flow         | 1.015    | LPM | 1.015    | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989                            | 0.00                          | 0.00                                | 0.14                               | N/A                       |
| 4989                            | 49.83                         | 29.65                               | 29.84                              | 0.9934                    |
| 4989                            | 19.91                         | 11.92                               | 12.17                              | 0.9791                    |
| 4989                            | 9.93                          | 5.95                                | 6.24                               | 0.9540                    |
|                                 |                               |                                     |                                    |                           |
| 4989                            | 0.00                          | 0.00                                | 0.14                               | 0.0000                    |
| 4989                            | 49.87                         | 29.67                               | 29.84                              | 0.9941                    |
| Average Correction Factor       |                               |                                     |                                    | 0.9755                    |

Calculated value of As Found Response: 29.742 ppm      Percent Change of As Found: -0.2%

|           | before calibration |     | after calibration |     |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.06              | ppm | -0.04             | ppm |
| Auto span | 20.65              | ppm | 20.81             | ppm |

Notes: No adjustments made.

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Calibration Performed By: Travis Mehrer

# Calibration Summary

Parameter CO  
 Air Monitoring Network Palliser

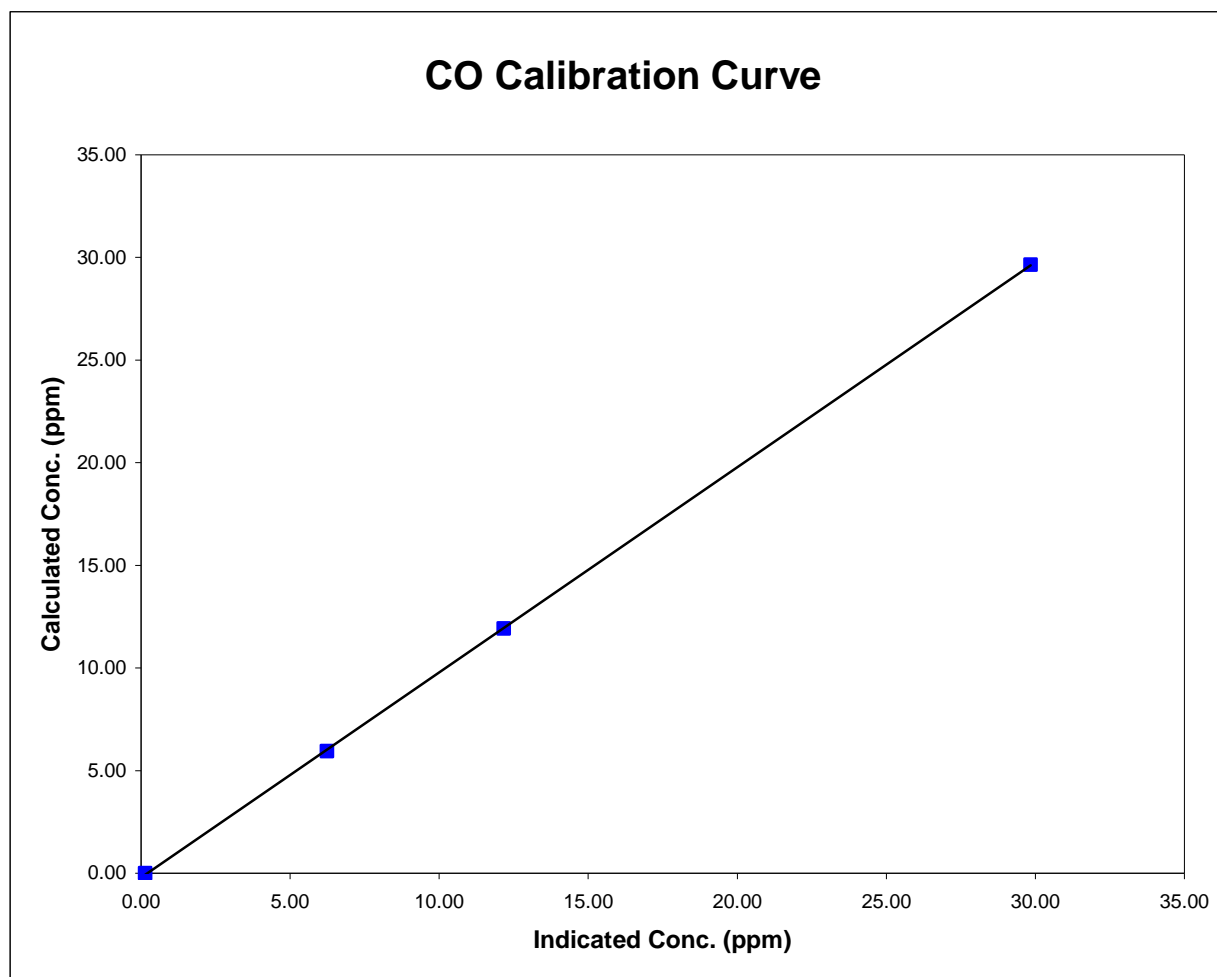


### Station Information

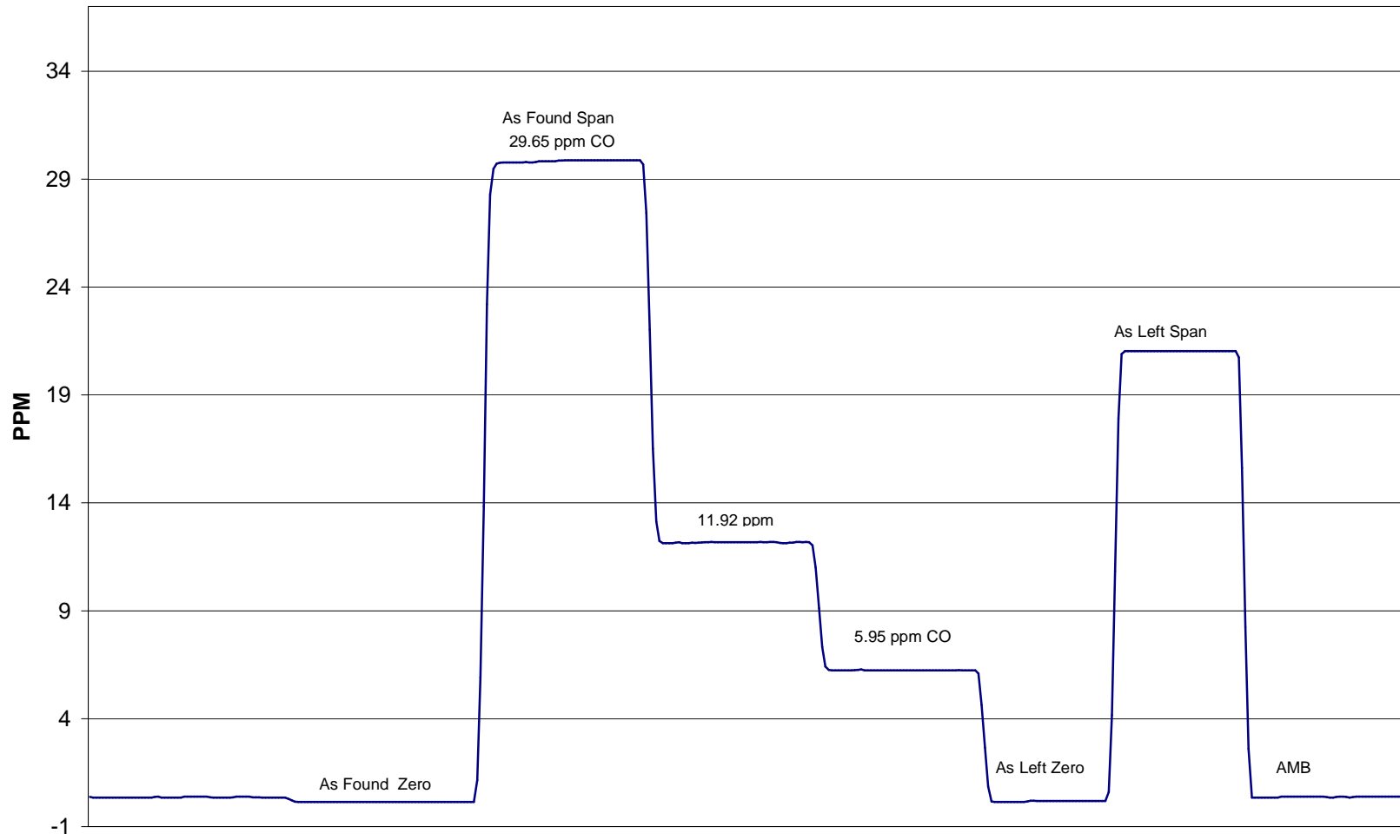
|                     |                |                      |                  |
|---------------------|----------------|----------------------|------------------|
| Calibration Date    | April 26, 2007 | Previous Calibration | March 28, 2007   |
| Station Number      | 101            | Station Location     | Crescent Heights |
| Start Time (MST)    | 11:20          | End Time (MST)       | 10:05            |
| Analyzer make/model | TEI Model 48C  | 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                       |                         |           |
| 29.65                               | 29.84                              | 0.9934                    | Correlation Coefficient | 0.999976  |
| 11.92                               | 12.17                              | 0.9791                    |                         |           |
| 5.95                                | 6.24                               | 0.9540                    | Slope                   | 0.999723  |
|                                     |                                    |                           | Intercept               | -0.217297 |



**CO Calibration**



April 26, 2007

# Calibration Report

Parameter PM2.5  
 Air Monitoring Network Palliser Airshed



## Station Information

|                     |   |                                  |                                  |
|---------------------|---|----------------------------------|----------------------------------|
| Calibration Date    | April 26, 2007                              | Previous Calibration             | March 29, 2007                   |
| Station Number      | 1   | Station Location                 | Crescent Heights                 |
| Reason:             | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
|                     |   |                                  | <input type="checkbox"/> Other:  |
| Start Time (MST)    | 8:52  | End Time (MST)                   | 15:20                            |
| Barometric Pressure | 0.913 ATM                                   | Station Temperature              | 20.0 Deg C                       |
| Flow Calibrator     | BIOS Drycal DCL-MH                          | Serial Number                    | 101780                           |
| DACS make           | AP 1000                                     | DACS serial No.                  | 45269                            |
| DACS voltage range  | 0 - 1 V                                     | DACS channel #                   | 15                               |
|                     | Before                                      |                                  | After                            |
| DACS Scale High     | 450   | DACS slope                       | 450                              |
| DACS Scale Low      | -50   | DACS intercept                   | -50                              |

## Analyzer Information

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

|                     | before |       | after |       |
|---------------------|--------|-------|-------|-------|
| Main Flow Set Point | 3.000  | SLPM  | 2.990 | SLPM  |
| Aux Flow Set Point  | 13.66  | SLPM  | 13.65 | SLPM  |
| Filter Load         | 38%    | %     | 18%   | %     |
| Ko Factor           | NA     |       | NA    |       |
| Temperature         | 12.1   | Deg C | 12.1  | Deg C |
| Pressure            | 0.914  | ATM   | 0.914 | ATM   |

## Calibration Data

| Parameter              | Set Point       | TEOM Reading (as found) | Tolerance         | TEOM Reading (after adjustments) |
|------------------------|-----------------|-------------------------|-------------------|----------------------------------|
| zero flow - main       | 0.0             | 0.01                    | 0.00              | 0.00                             |
| zero flow - auxillary  | 0.0             | 0.00                    | 0.01              | 0.00                             |
| flow recovery - main   | 45 - 60 Seconds | 35.0                    | 45 - 60 Seconds   | 35.0                             |
| flow recovery - aux    | 46 - 60 Seconds | 40.0                    | 46 - 60 Seconds   | 41.0                             |
| Temperature            | measured        | 18.1                    | +/- 1.0 Deg C     | 18.1                             |
| Pressure               | measured        | 0.914                   | +/- 1.5% ΔATM     | 0.914                            |
| Total Flow             | 16.67 SLPM      | 16.31                   |                   | 15.94                            |
| Auxiliary flow         | 13.67 SLPM      | 13.40                   | +/- 1.0 SLPM      | 13.10                            |
| Main flow              | 3.0 SLPM        | 3.097                   | +/- 0.2 SLPM      | 3.020                            |
| Leak Check - main      | 0.0             | 0.00                    | <0.15 SLPM        | 0.01                             |
| Leak Check - aux       | 0.0             | -0.01                   | <0.15 SLPM        | -0.01                            |
| Ko Factor (w/o filter) | measured        | NA                      | filter weight (g) | NA                               |
| Ko Factor (w/ filter)  | measured        | NA                      | % Ko difference   | NA                               |

Notes: Auxiliary flow was adjusted...  
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Calibration Performed By: Travis Mehrer